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Content

Abstract

EURADOS Working Group 2 (WG2) has developed a system for a self-sustained programme of regular intercomparisons. Four intercomparisons for whole body dosemeters (IC2008, IC 2010, IC2012 and IC2012$_n$) and one for extremity dosemeters (IC2009) have now been carried out. The number of participating systems has increased significantly from 62 in 2008 to 88 in 2012.

IC2012 was carried out by an organization group (OG) composed of Andrew McWhan and Wioletta Dobrzynska (Cavendish Nuclear Limited, co-ordinator and co-ordinating laboratory), Tom Grimbergen (NRG), Ana Maria Romero (CIEMAT), Hannes Stadtmann (Seibersdorf Laboratories) and Markus Figel (Helmholtz Zentrum München).

There were 74 participating institutes from 30 countries (8 from outside of the EU) with 88 dosimetry systems. However, one participant decided to withdraw after hearing about the problems with some of the irradiations (see below). Participants' systems included 59 TLD, 12 Film, 11 OSL and 5 dosemeter systems based on other techniques (Other), i.e. radio photoluminescence (RPL), direct ion storage (DIS) or active personal dosemeters (APD). As with IC2010, there were a sufficient number of OSL systems for them to be included as a separate category in the analysis. A total of 2288 dosemeters were received and re-labelled, 1760 of which were then irradiated and processed. All irradiations were carried out by GAEC (Greek Atomic Energy Commission, Greece). Their irradiation laboratory is accredited to EN ISO/IEC 17025 as required by the protocol developed by the OG.

Unfortunately, two significant technical problems were experienced with IC2012:

i) All dosemeters were x-rayed in transit (by air freight) between Berkeley and the irradiation laboratory.

To avoid the possibility of further transit x-ray, the dosemeters were returned from the irradiation laboratory to Berkeley overland in a van hired exclusively for this consignment.

ii) An intermittent technical malfunction of the x-ray system resulted in errors with some of the x-ray and mixed field irradiations.

During routine maintenance of the laboratory equipment at the end of the intercomparison (carried out after all the dosemeters had been returned to the participants) the irradiation laboratory identified a problem with the shutter mechanism of their x-ray set. It was concluded that this would have impaired the reliability of the N-40 and the mixed field Cs137+N150 45° irradiations. The problem, which was intermittent, produced non-uniform fields for some of the irradiations. The problem was not detected during the routine daily laboratory QA checks because the test chamber was located in a zone of the field which was not affected by the fault. After detailed analysis by OG, all of these suspect irradiations were excluded from IC2012 and they were not included in any of the participants' certificates. All participants were offered substitute irradiations, outside of IC2012, completely free of charge.

Out of the total of 87 systems, 69 reported both $H_p(10)$ and $H_p(0.07)$ with 18 IMS reporting $H_p(10)$ results only. The results show that 90% of all the systems fulfil the general performance criteria from ISO14146, where 10% outliers per system are permitted. In total, 79% of all single results are

within the trumpet curve used as acceptance criteria. The median of all response values was very close to unity.

These results were presented at the participants' meeting held at AM2013 in Barcelona.

The high number of participants confirms that there continues to be a substantial demand for international intercomparison exercises, particularly in Europe, and that these are of significant operational value for Individual Monitoring Services (IMS).

Following the success of the previous intercomparisons, a further intercomparison for whole body dosemeters for photon fields was scheduled for 2014.

1 Introduction

EURADOS working groups on Harmonisation of Individual Monitoring in Europe (1997-2000 [1,2], 2001-2004 [3] have shown that intercomparison exercises (ICs) are a fundamental prerequisite for harmonisation of individual monitoring services (IMS). Consequently, these EURADOS working groups recommended periodic performance tests or IC exercises within the European Union (EU) to assist the objective of harmonisation. It was believed that ICs would stimulate IMS to improve the quality of their results, provide information on IMS quality throughout the EU and assist harmonisation of IMS quality control standards. Further support was provided by the response to questionnaires sent to IMS, in EU and non EU countries, which showed very strong interest in participating in the proposed programme of periodic ICs.

Consequently, in 2005-2006 EURADOS started to investigate the possibility of organizing a programme of self-sustained ICs. Based on the collected evidence, it was later decided to organize the first IC, IC2008, within the framework of EURADOS.

Participation in regular ICs is now specifically recommended in the new European Commission's *Technical Recommendations for Monitoring Individuals Occupationally Exposed to External Radiation* [4]. Participation is also being considered as an essential criterion for IMS approval by some authorities. At the same time, a growing number of IMS are also working towards formal accreditation for EN ISO/IEC 17025 [5] which in itself requires participation in regular inter laboratory comparisons.

EURADOS WG2 has now successfully carried out four intercomparisons for whole body dosemeters (IC2008, IC 2010, IC2012 and IC2012$_n$) and one for extremity dosemeters (IC2009) [6,7,8]. These exercises were performed without any external funding with all costs being covered by the participants' fees.

This report describes the set-up of the IC2012 project and gives an extended overview of the results.

2 Outline of the EURADOS Intercomparison 2012 project

2.1 Organization Group

The organizational structure for the EURADOS programme for self-sustained ICs for IMS, was laid down in the report of Working Group 2 (WG2) Subgroup 2 which was presented to the EURADOS Council at the Annual Meeting (AM2007) [9]. This WG2 report provided extensive plans for a self-sustained IC programme including detailed proposals for organization and financial arrangements. This plan was introduced with IC2008 and has been essentially kept unaltered for all subsequent intercomparisons.

For each IC an Organization Group (OG) is appointed by EURADOS Council. This group prepares, manages and controls all planning and operational details of the ICs. This includes all materials and data transfer between the participating IMS and the irradiation laboratories that will perform the irradiations. For operational efficiency, the OG is limited to a relatively small number of persons which also assists control of confidentiality as the information is handled by the minimum number of persons required for the task.

For IC2012 the OG was formed by the authors of this report with Babcock International Group acting as the coordinating institute. The IC coordinator was responsible for exchanging of data and information as well as the handling of the dosemeters.

2.2 Scope

IC2012 was set up for whole body dosemeters in photon fields.

As with IC2008 and IC2010, the option was included for IMs to report both $H_p(10)$ and $H_p(0.07)$ or just $H_p(10)$. The IC was aimed at specifically for dosemeter systems already in routine use for individual monitoring of exposed workers but IMs could also apply to participate with novel systems.

2.3 Project set-up and phases

As for previous intercomparisons, four main phases can be defined for IC2012, i.e.:

1) *preparation*
2) *announcement and registration*
3) *execution*
4) *reporting*

In the *preparation* phase the OG developed a proposal by defining the scope, establishing the irradiation plan (radiation qualities and dose range) and setting the budget and provisional timetable. The OG then contacted suitably accredited (ISO 17025 accreditation) irradiation laboratories for quotes, based on an outline of the proposed irradiation and the number of expected participants. As EURADOS is a non-profit making organisation, the intercomparison fee is based on a careful prediction of total costs. This includes a prediction of the minimum number of participants required to balance income and expenditure. When the quotes had been received

and the budget finalised, the OG presented the proposal to the EURADOS Council for formal approval.

The Secondary Standard Dosimetry Laboratory (SSDL) of Greek Atomic Energy Commission (GAEC) was selected as the irradiation laboratory for IC2012.

Terms and conditions for the participants were then established with limits set for maximum and minimum number of participants. The EURADOS Council approved the budget and gave formal approval to the OG to proceed with IC2012. The formal announcement was made at the EURADOS Annual Meeting (AM2012) held at IAEA, Vienna, 6-10 February 2012.

During the second phase, *announcement and registration,* the IC exercise was announced on the EURADOS website and by direct e-mailing of the announcement to all IMS on the OG mailing list which includes all previous EURADOS intercomparison participants. The announcement included information about the type of intercomparison, the dose ranges, energies and angles of irradiation and the schedule.

To clarify the scope of the IC to the candidate participants, the following information was given in the *announcement and application* phase:

Irradiations, restricted to photons, will be carried out in an accredited or primary standard European irradiation facility in terms of $H_p(10)$ and $H_p(0.07)$ in the following ranges:

1. Energy: 30 keV to 1.3 MeV
2. Dose: 0.2 mSv to 1 Sv
3. Angle of incidence: $\pm$ 60°

The information was provided in advance to enable potential participants to decide if this IC would be suitable for their dosimetry systems.

Those interested in participating were invited to complete an application form (which included terms and conditions). The application form could be downloaded from the EURADOS website. Once the minimum number of participants (as set by the budget) had been reached, EURADOS Council gave formal approval to proceed and the selected irradiation laboratory was notified.

The *execution* phase commenced with the coordinator sending all participants a confirmation of participation and a set of instructions as well as the corresponding invoice. All participants were requested to prepare their dosemeters in accordance with their standard procedures and to supply the identification codes of the dosemeters using the electronic form sent by the coordinator. Each participant was required to prepare 26 dosemeters in total (20 dosemeters for irradiation, 6 background/ spares).

The participants were required to dispatch the dosemeters to the coordinating laboratory, in accordance with the guidelines, before the set deadline. The coordinating laboratory received and registered the dosemeters and added organization labels to all 2288 dosemeters received. These labels showed the identification number, as provided by the participant, and a code to be used by the irradiation laboratory. This code consisted of a "system number" identifying the dosemeter system and a number corresponding to a radiation quality, angle and dose range combination from the irradiation plan. Figure 1 shows an example of dosemeter with label added by the coordinator.

Figure 1: Example of a dosemeter with the label added by the coordinator. "S50" is the code to identify the dosimetry system (note: for presentation of the results, a different code was used). "1" is the code to identify a specific radiation quality, angle and dose range combination from the irradiation plan. 34940 is the participant's own identification number.

The dosemeters were forwarded to GAEC in three crates (Figure 2). OG was well aware of the possibility of security x-ray in transit and as a precaution the coordinator placed two electronic dosemeters (Thermo Fisher EPD) in each crate to monitor any doses received. One of these EPDs was placed at each end of the three crates. As a further precaution, before the crates were dispatched by air freight, specific arrangements were made with the courier to avoid the risk of security irradiation in transit.

Figure 2: Three crates ready for dispatch

On arrival at GAEC the EPDs were inspected and, unfortunately, it was immediately obvious that each crate, and consequently every one of the participants' dosemeters, had been x-rayed in transit between Berkeley and the Irradiation laboratory (Table 1).

Table 1: Transit doses

	Right	Middle	Left
Crate 1	0.074 mSv	0.088 mSv	0.082 mSv
Crate 2	0.153 mSv	0.154 mSv	0.125 mSv
Crate 3	0.149 mSv	0.180 mSv	0.188 mSv

The coordinator made immediate enquiries with the courier to determine why the specific arrangements to reduce the risk of transit irradiation had failed but, for obvious reasons, security arrangements are never revealed. However, the courier did make the comment that, contrary to the re-assurance received by the coordinator, all airfreight is now certain to be x-rayed, possibly at each stage of the journey.

The transit doses within each crate were of a similar value. However, confidence in the accuracy of the recorded transit dose was not considered to be sufficient to facilitate a simple and reliable subtraction for correction purposes for the lower doses in the irradiation plan. It was also considered likely that there would be further x-ray inspection on returning the dosemeters to the participants.

OG took two immediate steps:

1) The irradiation plan was updated to reduce the consequences of the transit dose with the lower doses increased significantly (e.g. the lowest dose changed from 1mSv to 5mSv) – see section 2.4 for details.

2) To avoid the possibility of further transit irradiation problems, arrangements were made to return the dosemeters from the irradiation laboratory to Berkeley overland and a courier van was contracted specifically for this trip. There were no other goods in the van for this trip.

At this stage, the participants were not informed of the transit irradiations.

When the dosemeters were returned to the coordinator, the organization labels were removed and the dosemeters returned to the intercomparison participants for evaluation along with instructions on reporting their results including an Excel-sheet for digital transfer of the results.

It was at this stage, after the dosemeters had been returned to the participants, that a second problem was discovered. During routine maintenance procedures following the intercomparison irradiations, GAEC identified a problem with the reliability of the shutter mechanism of their x-ray set. However, from their laboratory records, they were able to confirm that only the N-40 and the mixed field Cs137+N150 45° irradiations would have been affected. The problem, which was intermittent, produced non-uniform fields for some of the irradiations. Unfortunately, the problem was not detected during the routine daily laboratory QA checks because the irradiation laboratory test chamber was located in a part of the field which was not affected by the faulty shutter.

OG immediately informed all participants by email of the transit irradiation and the x-ray problems. The email gave the specific doses recorded on the EPDs for the crate which contained the participants' dosemeters.

Many, but not all, of the participants observed some irregularity with these x-ray results and one participant decided to withdraw from the intercomparison. All other participants continued to proceed and provided their results in accordance with the IC instructions.

After the coordination laboratory had received the participants' results, the response values R were calculated by combining the results from the participants and the irradiation laboratories.

R was calculated for each dosemeter by dividing the participant's result $H_{\mathrm{p,\,participant}}$ by the reference dose values given by the irradiation laboratory $H_{\mathrm{p,\,reference}}$ according with equation (1).

$$R = \frac{H_{\mathrm{p,\,participant}}}{H_{\mathrm{p,reference}}} \qquad (1)$$

The calculated response values were reported back to all participants, with a request to check and either confirm or comment on the results. Note that as a general rule, the OG only accepts changes to the results, when it is proven, that there has been an error by the OG or by the irradiation laboratory.

The OG team met in Barcelona at the start of AM 2013 to review all the comments and analyse all the results in detail. Although some of the participant results were satisfactory for all irradiations, the OG concluded, that the N-40 and the mixed field Cs137+N150 45° irradiations had to be excluded from all certificates.

In the *reporting phase*, the first task was to prepare the "Certificates of Participation", which were signed by the coordinator and the chairperson of EURADOS. These certificates were issued to participants at the "Participants' Meeting" during AM2013 in Barcelona.

Figure 3: Participants meeting agenda

At the meeting (Figure 3), the OG presented detailed information on the irradiation qualities, radiation doses, response values, overall uncertainties and the technical problems encountered during IC2012. The participants, who were present, received their Certificate of Participation (without the results for N-40 and the mixed field Cs137+N150 45° irradiations) and their irradiation certificate provided by GAEC. They also had the opportunity to discuss the results among the OG, GAEC representative and other participants.

GAEC offered all participants substitute N-40 and mixed field Cs137+N150 45° irradiations. These were to be carried out directly by GAEC in a "blind trial" completely outside of the IC2012 administration.

The presentations given at the meeting are available for downloading at the EURADOS website. The participants who did not attend the meeting received their Certificates of Participation by post.

The first two phases were completed within one year. The main milestones in the time schedule are summarized in **Appendix A: Time schedule**.

2.4 Irradiation plan

Photon irradiation qualities were selected by OG from ISO4037 [10], including S-Co, S-Cs, N-40, N-60 and N-150. The irradiation plan details were confidential and only known by the OG and the irradiating laboratory. The irradiation laboratory was asked to vary the actual values around the nominal values (±20%) given in the irradiation plan, in order to prevent participants, who were participating with two or more dosimetry systems, from guessing doses by comparing the results between their systems.

Table 2 summarizes the original plan for each dosimetry system. The coordinator, along with the other OG members, decided to update the irradiation plan due to high doses in transit and all the lower doses were increased significantly, e.g. the lowest dose changed from 1mSv to 5mSv (Table 3).

Table 2: Original irradiation plan for the EURADOS 2012ph intercomparison for whole body dosemeters.

Quality	Nominal $H_p(10)$ (mSv)	Number of dosemeters	Dosemeter IDs
S-Cs	5	4	1,2,3,4
S-Cs/N-150 45°	(3+2)	2	5,6
S-Co	500	2	7,8
S-Co	50	2	9,10
S-Co	1	2	11,12
S-Co	5	2	13,14
N-60 0°	3	2	15,16
N-60 60°	3	2	17, 18
N-40 0°	3	2	19, 20
	Total:	20 dosemeters (22 irradiations)	
Background and transit control		2	25, 26
Spare		4	21, 22, 23, 24

Table 3: Corrected irradiation plan for the EURADOS 2012ph intercomparison for whole body dosemeters.

Quality	Nominal $H_p(10)$ (mSv)	Number of dosemeters	Dosemeter IDs
S-Cs	7	4	1,2,3,4
S-Cs/N-150 45°	(4+3)	2	5,6
S-Co	500	2	7,8
S-Co	50	2	9,10
S-Co	5	2	11,12
S-Co	7	2	13,14
N-60 0°	6	2	15,16
N-60 60°	6	2	17, 18
N-40 0°	6	2	19, 20
	Total:	20 dosemeters (22 irradiations)	
Background and transit control		2	25, 26
Spare		4	21, 22, 23, 24

2.5 Participants

A total of 74 IMs from 30 countries (including 3 services outside the Europe and 8 outside the EU) participated with 88 dosimetry systems (59 TLD, 12 Films, 11 OSL and 5 dosemeter systems based on other techniques (Other), i.e. radiophoto luminescence (RPL), direct ion storage (DIS) or active personal dosemeters (APD)).

Results were received for 87 dosimetry systems, as one of the participants withdrew after hearing about the problems with reliability of some of the irradiations.

Table 4 shows the number of institutes and dosimetry systems from the different countries. A complete list of the participating IMS is shown in**Appendix B: List of participants**.

Table 4: Number of participating services and systems per country

Country	Institutes	Total number of institutes	Systems	Total number of systems
Italy Belgium Spain UK	16 8 6 5	35	19 9 6 6	40
Germany Turkey Switzerland Czech Republic Portugal	3 3 3 3 3	15	5 5 4 3 3	20
Austria, Finland, France, Sweden	2 from each country	8	1 from each service except Austria(2 systems)	10
Argentina, Croatia, Denmark, Estonia, Greece, Hungary, Israel, Luxembourg, Netherlands, Norway, Poland, Romania, Serbia, Slovenia, Ukraine, USA	1 from each country	16	1 from each service except Hungary and Netherlands (2 systems)	18

Table 5 shows the number of systems per dosemeter type including information on the type of detector. The most common dosemeter type was TLD with 44% of the TLD participants using LiF: Mg,Ti detectors. 69 of the 87 systems submitted results for both $H_p(10)$ and $H_p(o.07)$ and the remaining 18 systems only reported $H_p(10)$.

Table 5: Number of systems per dosemeter type and type of detector and dose quantity

Type/detector	systems	% of all	% of type
TLD	**59**	**68%**	
LiF:Mg,Ti	26	30%	44%
LiF:Mg,Cu,P	14	16%	24%
$Li2B4O_7$:Cu/$CaSO_4$	8	9%	14%
?	5	6%	8%
LiF	2	2%	3%
LiF/Li_2B4O_7	2	2%	3%
$CaSO_4$:Dy/PTFE	1	1%	2%
$Al2O_3$:C	1	1%	2%
Film	**12**	**14%**	
Agfa	6	7%	50%
?	3	3%	25%
FOMA	2	2%	17%
Kodak	1	1%	8%
OSL	**11**	**13%**	
Al_2O_3:C	8	9%	73%
BeO	2	2%	18%
?	1	1%	9%
other	**5**	**6%**	
EPD	2	2%	40%
RPL	2	2%	40%
DIS1	1	1%	20%
All	**87**	**100%**	

type	$H_p(10)$ and $H_p(0.07)$	$H_p(10)$	All
TLD	50	9	59
Film	5	7	12
OSL	9	2	11
other	5	0	5
All	**69**	**18**	**87**

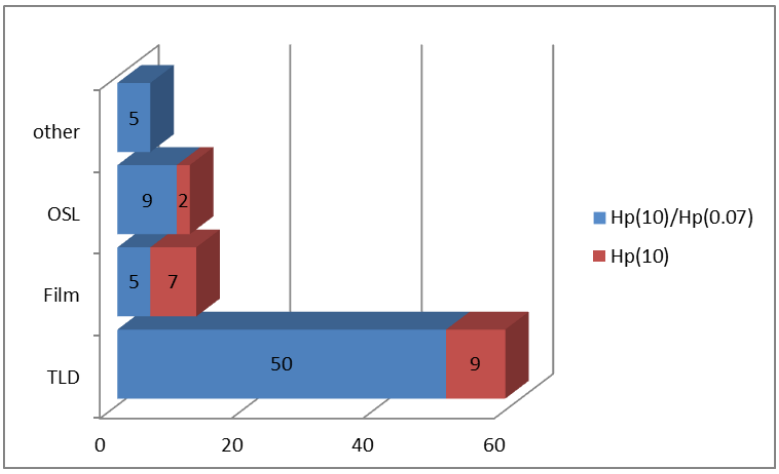

Figure 4: Summary of all systems showing type of detector and dose quantity

Table 6: Reference radiation qualities given by the participants

reference qualiy	TLD	Film	OSL	other	All
Cs-137	37	3	8	4	52
Cs-137/N300	1				1
Cs-137/N60		1			1
Co-60	9	3			12
35keV		2			2
N-80	1				1
W300	1				1
not reported	10	3	3	1	17
All	**59**	**12**	**11**	**5**	**87**

Table 6 summarizes the reference radiation qualities. Cs-137 was the most popular source used for calibration.

2.6 Intercomparison procedure compared to ISO14146

IC2012 was set up to meet the standard ISO *14146 "Criteria and performance limits for the periodic evaluation of processors of personal dosemeters"* [11] and compliance was reached for the following items:

- Quantities measured
- Standard test conditions
- Maximum accumulated photon radiation background
- Radiation qualities and angles
- Dose range
- Evaluation sample size
- Number of background and spare dosemeters
- Evaluation procedure
- Evaluation sequence

However on some items it was impossible to fulfil the ISO14146 requirements. The main deviations from the standard were:

- The "evaluating organization" **did not** send a representative *to select the dosemeters and to observe that no special effort is made in processing them, to ensure that the processing of the evaluation dosemeters is carried out in exactly the same way as for the processor's normal customers*

- No "qualification body" involved (for approving dosimetry services)

- *The qualification body shall deem competent each processor which is able to show compliance with the performance limits...*
- *The qualification body shall provide the processor with a certificate which specifies at least the dosimetry system and the period of validity.*

Obviously it is impossible to comply with ISO14146 because an IC deviates from a performance test in a few fundamental and practical aspects.

- In an IC, there are many participants and the organizer is not able to visit all these participants.
- The performance test should be tailored to the specifications of the dosimetry system tested, which may or may not be controlled by national requirements. In an international IC the participating systems may cover a wide range of systems with different specifications for dose and energy ranges covered.
- For the participants it is very difficult to avoid deviating from routine procedures, e.g. because:

  - the dosemeters have to be sent to a foreign address,
  - the time period the dosemeters leave the service deviates from what is normal,
  - the results have to be prevented from being transferred to registries of radiation workers,
  - the method for the background correction may differ from normal practice.

Since EURADOS cannot play the role as "qualification body", the participants have the responsibility for making their participation in the IC a useful exercise for their IMS, for example for supporting their accreditation process. The participants should record (for their own use) all deviations from routine procedures, and should be able to justify these deviations to their accreditation organization and explain any impact on the results. Therefore it is in the interest of the participants, to restrict these deviations from normal practice to the minimum.

For these reasons, EURADOS does not provide the participants with any assessment of the individual results, but only with the ratio between the measured dose and the conventional true value. However, for the analysis of the global results, the performance limits according to ISO 14146, commonly known as "trumpet curves", were adopted:

$$\frac{1}{F}\left(1-\frac{2H_0}{H_0+H_c}\right) \le R \le F\left(1+\frac{H_0}{2H_0+H_c}\right) \qquad (2)$$

Where $F = 1.5$, H_c is the conventional true value and H_0 is the "lower limit of the dose range for which the system has been approved". For this IC H_0 was not tailored to each individual participant. Instead, a value of 0.085mSv was chosen for H_0 for all participants, assuming a "lower limit of the dose range" of 1 mSv in a year and an issuing frequency of 12 per year.

The standard ISO 14146 allows a maximum of one-tenth of the dosemeters irradiated to exceed the above limits, but for the analysis of the global results in this report any result exceeding these limits was considered as an outlier.

2.7 Execution of the irradiations

All irradiations were performed by the SSDL at GAEC (Greek Atomic Energy Commission, Greece), accredited according to ISO 17025 by the Hellenic Accreditation Council.

A total of 2288 dosemeters were received and re-labelled, 1760 of which were then irradiated according to the corrected irradiation (see section 2.4 - Irradiation plan)

All irradiations were performed on the appropriate ISO slab-phantom recommended by the standard. 85% of the dosemeters were irradiated one by one because of the large size of some of the dosemeters. At the request of the coordinator, the irradiation laboratory varied the actual doses around the nominal values given in the irradiation plan by as much as ±20%. Table 7 and Table 8 show a summary of the actual doses imparted for the different radiation qualities, for $H_p(10)$ and $H_p(0.07)$, respectively. The postfix (L, S, M, and H) for the Co radiation qualities means Low, Small, Medium and High dose.

Personal dose equivalent was obtained using the X-ray and gamma radiation qualities. For dose equivalent quantities, calibration conditions were created according to the ISO 4037 standard set. Suitable conversion coefficients were taken from ISO 4037 (Figure 5).

$h_{Pk}(10;S,\alpha)$ & $h_{Pk}(10;N,\alpha)$ (Sv/Gy)

RADIATION QUALITY	ANGLE OF INCIDENCE		
	0°	45°	60°
S-Cs	1,21	-	-
S-Co	1,15	-	-
N-60	1,65	-	1,27
N-150	-	1,61	-
N-40	1,17	-	-

Table 33 & Table 30 ISO/DIS 4037-3:1996

$h_{Pk}(0,07;S,\alpha)$ & $h_{Pk}(0,07;N,\alpha)$ (Sv/Gy)

RADIATION QUALITY	ANGLE OF INCIDENCE		
	0°	45°	
S-Cs	1,00	-	-
S-Co	1,00	-	-
N-60	1,55	-	1,42
N-150	-	1,58	-
N-40	1,27	-	-

Table A.6 ISO/DIS 4037-3:1996 &

Figure 5: Conversion factors used by GAEC

Room 1

Room 2

Figure 6: Irradiation set up

Table 7: Summary of the actual radiation qualities and doses imparted, $H_p(10)$.

Radiation	Quality	$H_p(10)$ dose (mSv)		
		mean	min	max
wrong irradiations	N40	5.7	5.3	6.0
	S-Cs/N150/45°	6.3	5.6	7.0
X-ray	N60	5.6	5.3	6.0
	N60/60°	5.6	5.3	6.0
Gamma	S-Cs	6.5	5.8	7.0
	S-Co-L	4.8	4.4	5.1
	S-Co-S	6.6	5.8	7.0
	S-Co-M	47.8	44.1	52.2
	S-Co-H	466	420	507

Table 8: Summary of the actual radiation qualities and doses imparted, $H_p(0.07)$.

Radiation	Quality	$H_p(0.07)$ dose (mSv)		
		mean	min	max
wrong irradiations	N40	6.2	5.9	6.5
	S-Cs/N150/45°	6.2	5.6	7.6
X-ray	N60	5.3	5.0	5.6
	N60/60°	6.3	5.9	6.7
Gamma	S-Cs	6.5	5.8	7.0
	S-Co-L	4.8	4.4	5.1
	S-Co-S	6.6	5.8	7.0
	S-Co-M	47.8	44.1	52.2
	S-Co-H	466	420	507

The laboratory reported the irradiation data to the coordinating laboratory by means of irradiation certificates (**Appendix D: Example irradiation certificate**).

After the dosemeters had been returned to the participants, the irradiation laboratory identified that there was a problem with the reliability of the N-40 and the mixed field Cs137+N150 45° irradiations. This was traced to an intermittent malfunction of the X-ray equipment, which was not detected during the routine daily laboratory QA checks (Figure 8).

Figure 7: Shutter Problem

Consequently, these irradiations were excluded from the certificates and all participants were offered substitute irradiations, free of charge. The dose values were unknown to the participants at the time of evaluation, but the participants were aware of the irradiation plan: 2 - N40, 2 -mixed Cs 137 / N150, 2 - Cs 137, 4 -spare, 2 –transit, 12 dosemeters in total. The results of this "blind trial" have not been used in this EURADOS report.

2.8 Background and transit dose control

For each dosimetry system two dosemeters were reserved as "background and transit dose control" dosemeters to allow for background and transfer dose corrections. In addition, four dosemeters were assigned as "spare" dosemeters to be used by the irradiation laboratory in case of damage or errors with the irradiations. Only a few spare dosemeters had to be used for this purpose.

The dosemeters were sent in three crates to the irradiation facility. Each crate contained two active personal dosemeters (Thermo Fisher EPD) to monitor any doses received between the coordinator and irradiation laboratory. As a further precaution, before the crates were dispatched (by air freight), specific arrangements were made with the courier to avoid the risk of security irradiation in transit.

On arrival at GAEC the EPDs were inspected and, unfortunately, it was immediately obvious that each crate, and consequently every one of the participants' dosemeters, had been x-rayed in transit between Berkeley and the irradiation laboratory (see Table 1 and section2.3)

The organizer provided the participants with the identification codes of the unused "background and transit dose control" dosemeters. The mean values per system for all of these non-irradiated dosemeters are shown in Figure 8.

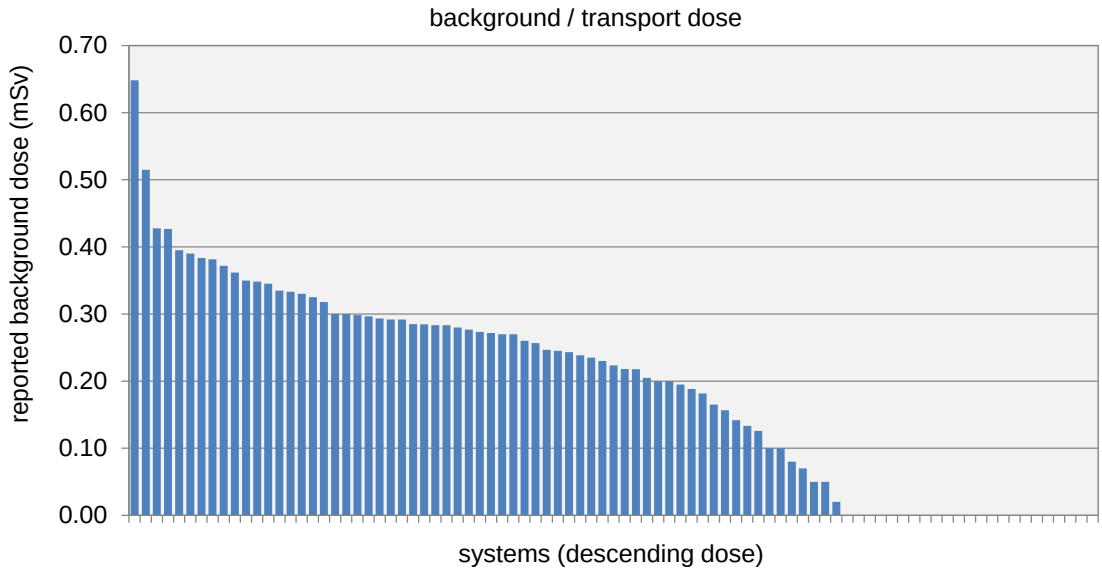

Figure 8: Reported background doses

2.9 Confidentiality of the data and the results

The data processed by the OG had to be treated confidentially for two specific reasons.

Firstly, the IC was designed to be a blind test for all the participants. This meant that all participants were to report their results without knowing the details of the irradiation plan, in particular the dose values. The dose values were reported to the participants only *after* the coordinator had received the dose values evaluated by ***all*** participants. At the time of application for the IC, only the ranges of dose, energies and angles were known to the participants. Direct communication between participants and irradiation laboratory was not allowed and the coordinator transferred all necessary information. It was known, that some IMS would participate with more than one dosimetry system and it was also considered that some IMS might have access to results of other participants. In order to prevent these participants guessing dose values by combining results, the irradiation plan was executed in a random order for each participant. In addition, the irradiation laboratory varied the dose values in the irradiation plan within specified ranges from participant to participant, rather than using fixed dose values for each radiation quality.

Secondly, the individual results are the property of the participants only and thus have to be kept confidential. To assure this confidentiality, the coordinator separated all information which could possibly lead to the identity of the participants from the published results. In the overviews of the results, the participating dosimetry systems are only referenced by a randomized code. All participants' certificates contained "Reporting number used in publications" known only to the participant and the coordinator. However, once participants have received their certificates, OG has no influence on the use that participants make of their own results.

In accordance with established IC procedures, all members of the OG signed confidentiality agreement for IC2012 – see Appendix C.

During the IC exercises significant quantities of data had to be exchanged. In order to assure data integrity it was decided to use parallel data streams. All official results were reported on signed papers. In parallel, data was exchanged in electronic formats for efficient processing and to prevent typographic errors. In case of any ambiguity, the data on the signed papers was taken as "true".

2.10 EURADOS Certificates of Participation and Participants Meeting

EURADOS is not accredited for the evaluation of IMS and consequently, the results issued by EURADOS itself cannot be regarded as an official test report. As an alternative, the established protocol is to report back the results to the individual participants in the form of a "Certificate of Participation", with the irradiation reports of the accredited irradiation laboratories as an annex.

These certificates consist of two pages. The front page shows the certificate number, the reporting number, the details of the participant, the description of the systems given by the participant and a summary of the IC procedure. The front page was signed by both the EURADOS chairperson and the IC coordinator. The second page shows the actual results for each dosemeter, irradiation quality, value of $H_p(10)$ reported by the participant, value of $H_p(10)$reported by the irradiation laboratory, and the ratio of these two values. In addition, the same three quantities for $H_p(0.07)$

were reported for the participants who chose to report $H_p(0.07)$ values. In the Certificates, no performance limits were indicated, because these might differ from participant to participant (see **Appendix E: Example "Certificate of Participation"**).

The next step was to prepare a participants meeting, coinciding with the EURADOS 2013 Annual Meeting (AM2013) held in Barcelona, to show and discuss the results among the OG and the participants. At this meeting the participants received their Certificate of Participation including information on the irradiation qualities, doses imparted, response values and overall uncertainties. See section 2.3 – *reporting phase* – for more details. The participants who were not able to attend the meeting received their certificates by mail.

3 Results and Discussion

3.1 Review of the comments received from participants

After sending the draft results to the participants, several comments were received regarding N-40 and mixed field irradiations.

One of the participants withdrew, as a result of problems with the precision of some of the irradiations.

The OG team met in Barcelona at the start of AM 2013 to review all the comments and to analyse all of the results in detail. Although some of the participant's results were satisfactory for all irradiations, OG concluded that the N-40 and the mixed field Cs137+N150 45° irradiations had to be excluded from all certificates.

3.2 Basic statistical results

The response R was calculated for each dosemeter by dividing the participant's result, $H_{p,\,participant}$ by the reference dose values (given by irradiation laboratory) $H_{p,\,reference}$, according with equation (1), see section 2.3.

Table shows the total number of values reported, together with estimates for the central value of the distribution of response values (arithmetic mean, median value) and measures for the spread in the response values (standard deviation, 5th, 25th, 50th, 75th and 95th percentiles).

Table 9: Total number of values reported, and some statistical quantities indicating the central values and spread of the results.

Test	**Response *R***	
	$H_p(10)$	$H_p(0.07)$
number of valid values	**(1392)**	**(1104)**
σ-	0.73	0.71
mean	**0.98**	**0.97**
σ+	1.23	1.23
min	0.07	0.01
5.0%	0.68	0.60
25.0%	0.86	0.84
median (50%)	**0.97**	**0.96**
75.0%	1.07	1.08
95.0%	1.33	1.30
max	5.57	5.51

Results for $H_p(10)$ were reported for all dosemeters, while for $H_p(0.07)$ there were no reported results for about 21% of the systems. For both $H_p(10)$ and $H_p(0.07)$, the estimates of the central values (medians) were all close to unity. The spread in the values for $H_p(10)$ and that for $H_p(0.07)$ are very similar.

From the percentiles the 90 % coverage intervals of all responses for all participants together can be derived: this was approximately 0.7 – 1.5.

3.3 Distribution of response values

Figure 9 shows the frequency distributions and the cumulative distributions of all response values. For $H_p(10)$, values ranged from 0.07 to 5.57 (outside the range of the figure), while for $H_p(0.07)$ the values ranged from 0.01 to 5.51 (outside the range of the figure).

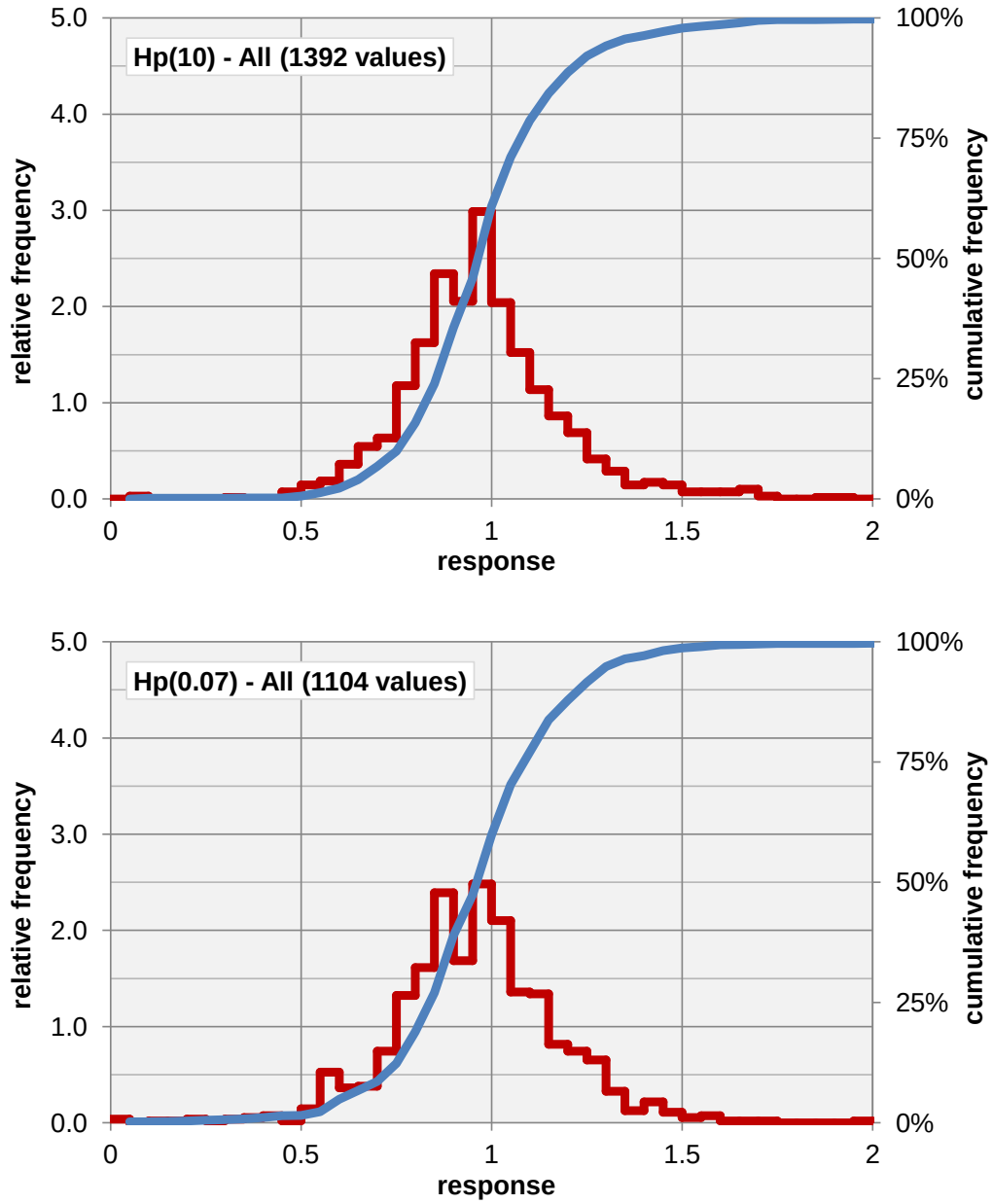

Figure 9: Frequency distributions and the cumulative distributions of all response values. Top: $H_p(10)$; bottom: $H_p(0.07)$. Some values were out of the range of the x-axis.

Figure 10 shows the same results, but subdivided per type of system.

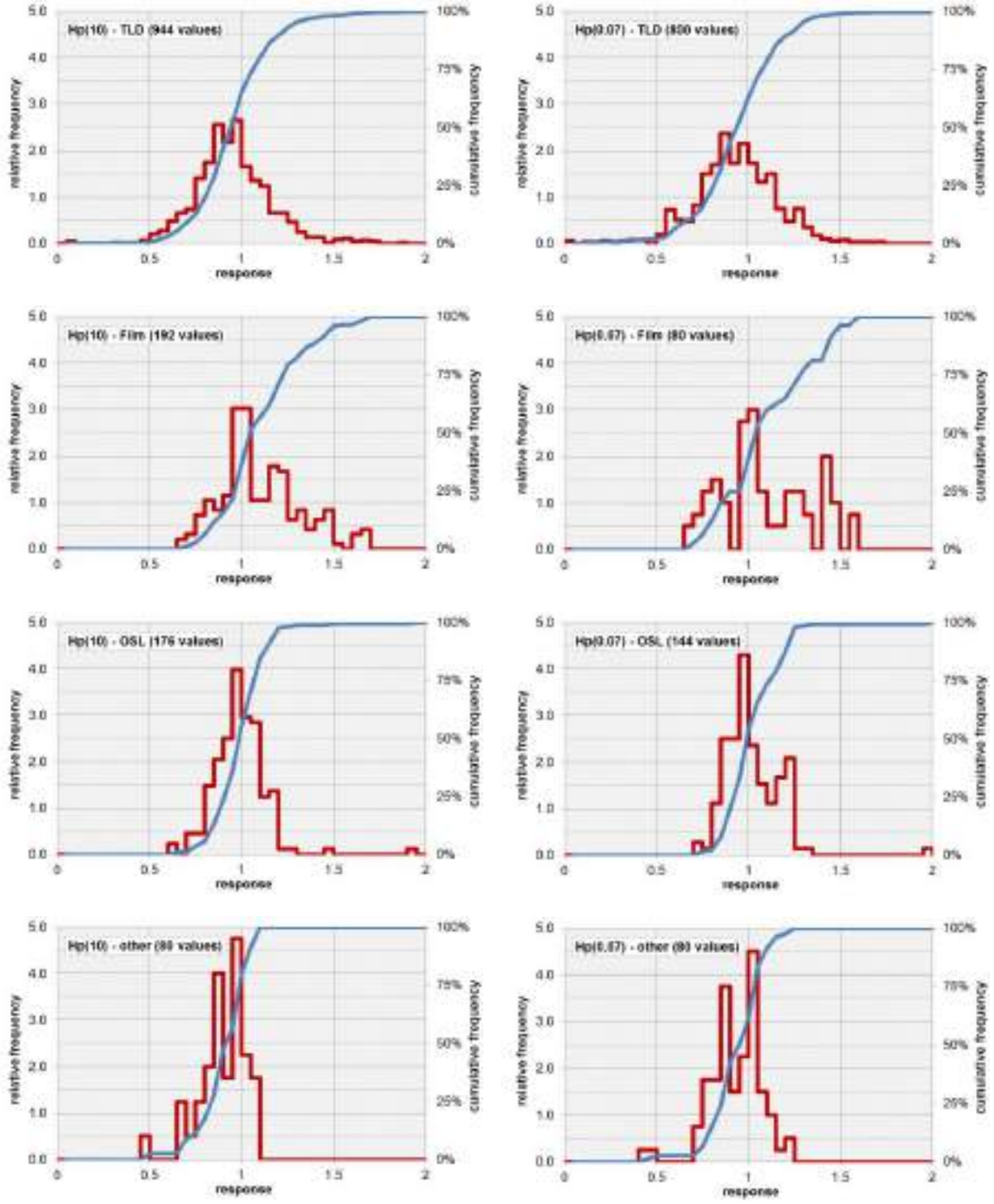

Figure 10: Frequency distributions and the cumulative distributions of all response value. From top to bottom: different types of dosimetry systems. Left: $H_p(10)$; right: $H_p(0.07)$. Some values were out of the range of the x and y-axis.

3.4 Response values per radiation quality

Figure 11 and Figure 12 show the response values for the different radiation qualities. The distribution of $H_p(10)$ and $H_p(0.07)$ results is expressed in the diagrams by the median value (diamond), the 50% range (box), the 90% range (bar) and the maximum and minimum values (dots).

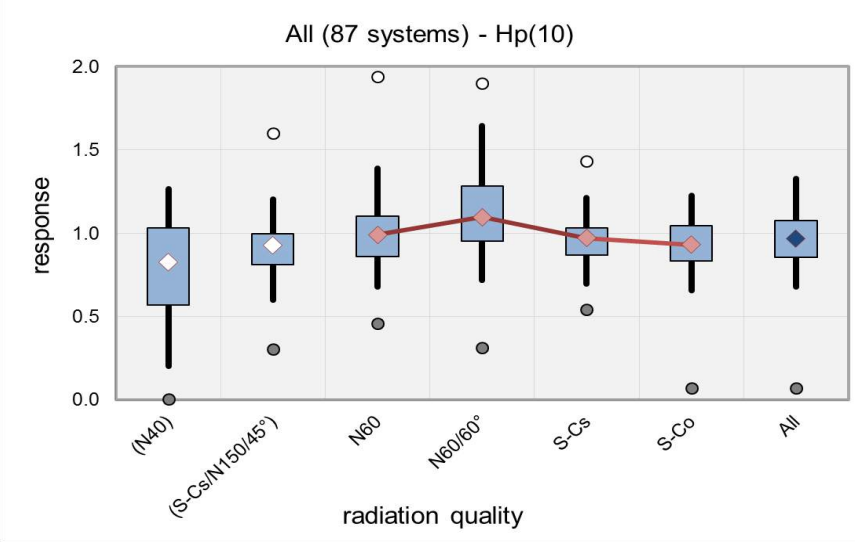

Figure 11: Distributions of all $H_p(10)$ response values for different radiation qualities. Diamond (Median), Box (50% range), bar (90% range), Dots (minimum, maximum). The maximum response value for S-Co is off scale (R=5.57). The qualities in brackets are not included in the "All" distribution.

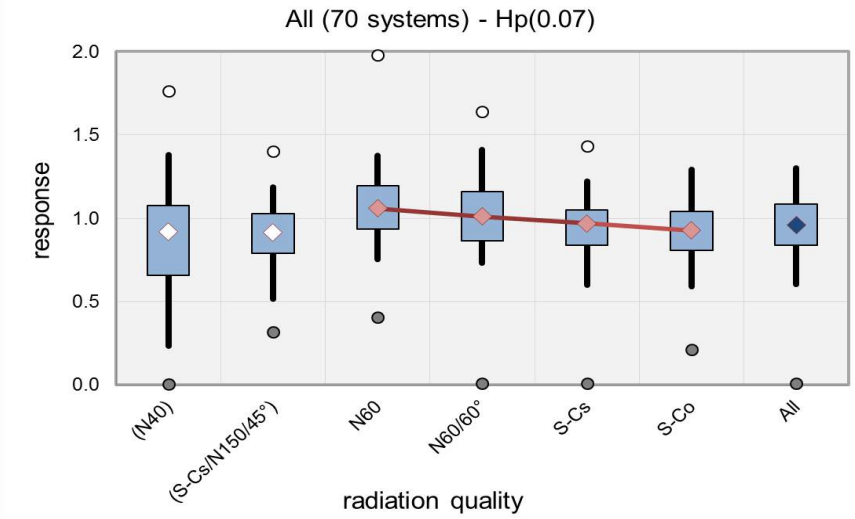

Figure 12: Distributions of all $H_p(0,07)$ response values for different radiation qualities. Diamond (Median), Box (50% range), bar (90% range), Dots (minimum, maximum). The maximum response value for S-Co is off scale (R=5.51). The qualities in brackets are not included in the "All" distribution.

Figure 11 summarises the results for the dose quantity $H_p(10)$ for the different irradiation categories for all systems. The median of all response values of all systems for all radiations (furthest right bar in the diagram) is close to 1. For all, the 90% bar shows that the response values for $H_p(10)$ are well within an acceptable range (0.7 to 1.5). N60/60º is slightly above the trend with a median of 1.1. Figure 12 shows the results for the dose quantity $H_p(0.07)$. It can be observed that in this case N60/60º is in line with the trend.

Figure 13 shows the same results, but subdivided per type of system. TLD and film systems both show an over response for N60/60º for $H_p(10)$. OSL and Other show a small spread and almost no bias for the energy range tested, although both show a slight under response for N60/60º for $H_p(0.07)$.

Both TLDs and films show a slightly wider range of extremes than OSL and Other. However comparing the 50% boxes of both types (TLD and film) gives quite similar results. These results show that the performance of good film dosemeters is compatible with the performance of good TLD's. For all of the qualities including mixed fields, the TLDs and films show good results, although a few outliers can be seen in these graphs.

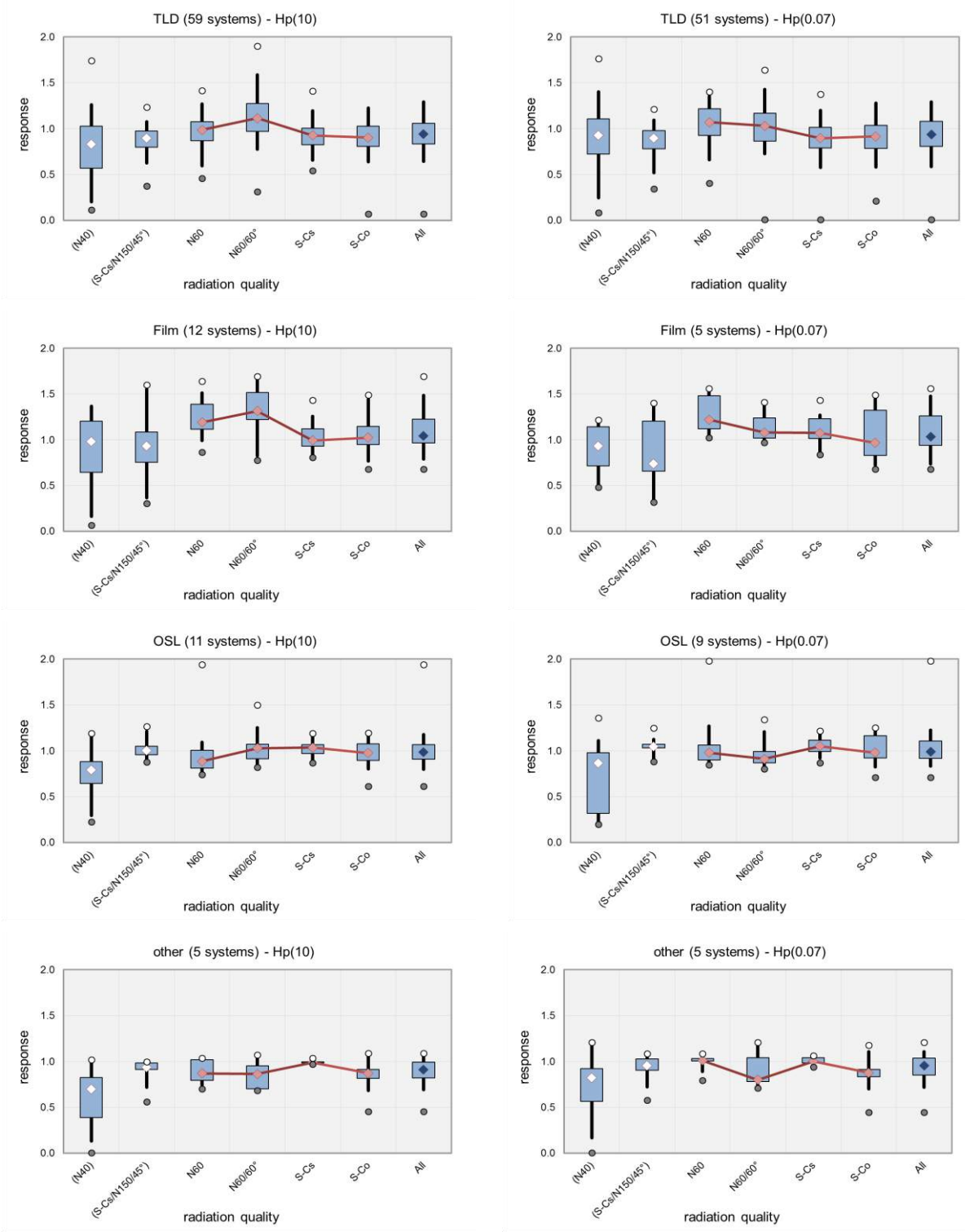

Figure 13: Distributions of all response values for different systems. From top to bottom: different types of dosimetry systems. Left: $H_p(10)$; right: $H_p(0.07)$.

3.5 Response values for different TLD detector materials

Three different detectors material combinations for TLDs were grouped in Figure 14.

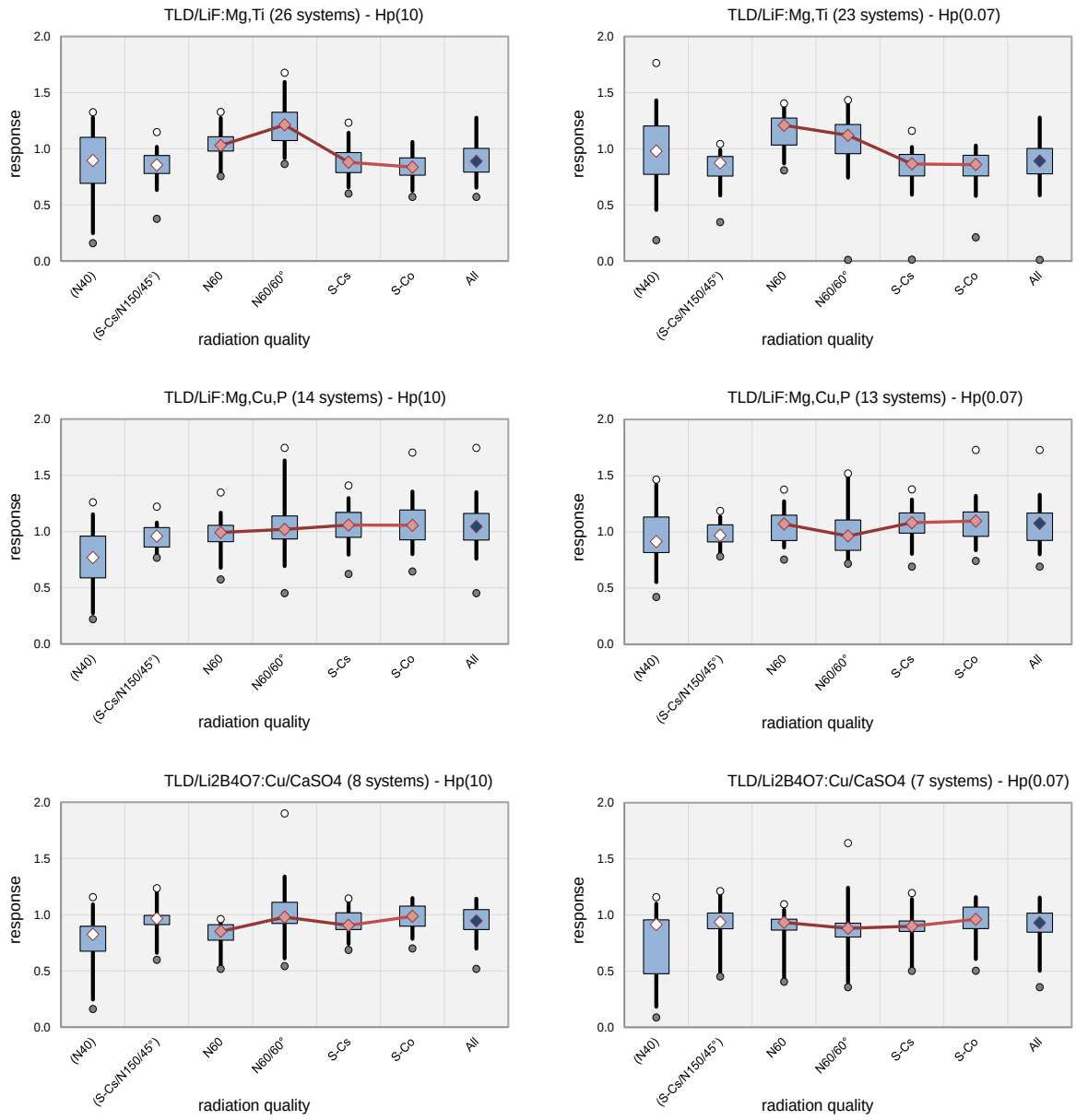

Figure 14: Comparison of the Response distributions for different TLD materials.

The responses of all the systems are satisfactory. 26 out of a total of 59 TLD systems used LiF: Mg,Ti, which, although satisfactory, do show a noticeable over response for low energy photons.

14 systems used the higher sensitivity material LiF:Mg,Cu,P. For this material, both, the energy response for the reference direction, as well as the spread of the individual response values, are

superior to LiF:Mg,Ti. For these LiF:Mg,Cu,P systems the response is very close to unity for all the radiation qualities. 9 systems used $Li_2B_4O_7/CaSO_4$: Tm dosemeters. The response is also good for all qualities, although it can be seen, that there is a slight under response with $\underline{H}_p(10)$ for N60 photons. Interestingly, the response for N60/60º does not show this effect. However, the spread of the individual response values for these $Li_2B_4O_7/CaSO_4$: Tm systems is slightly higher than that for the LiF:Mg,Ti and LiF:Mg,Cu,P systems.

3.6 Reproducibility

To investigate the reproducibility of the IC results for all pairs of irradiation, the coefficient of variation (CV) was calculated as the ratio of the standard deviation to the mean value of the two values. The relative frequency (histogram) and the cumulative frequency of the calculated values for all reported results are shown in Figure 15. For $H_p(10)$, it can be seen, that approximately 75% of the reported values fall below 5% of CV. The CV was larger than 20% for only about 5% of the reported results. Similar conclusions can be made for $H_p(0.07)$.

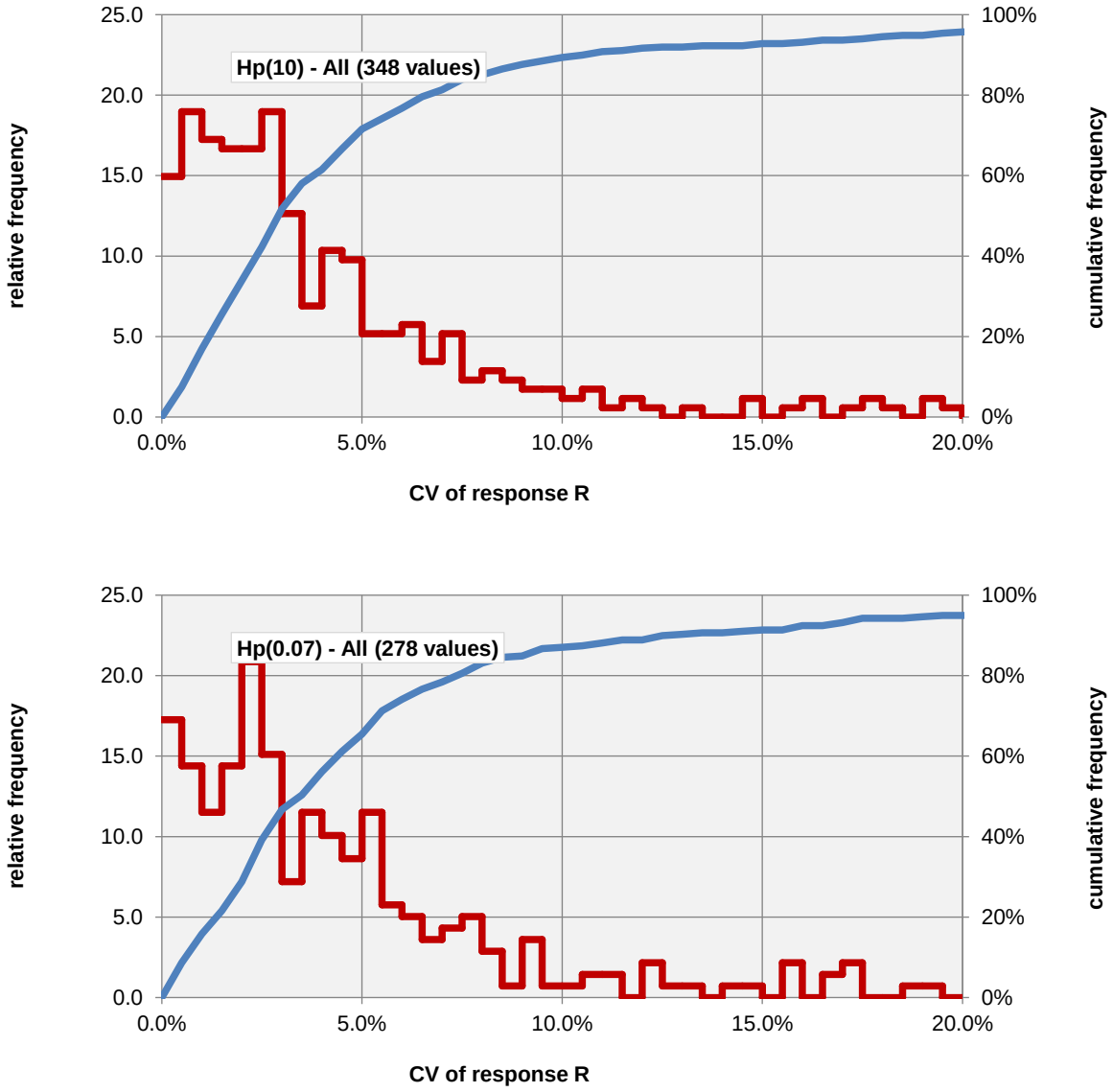

Figure 15: Distributions of coefficient of variation (CV) values for paired irradiations. Relative frequency (red histogram, left axis) and the cumulative frequency (blue, right axis). Values for $H_p(10)$ (top) and for $H_p(0.07)$ (bottom). About 5 % of all response values are off scale (CV>20%).

3.7 Linearity

One of the aims of the irradiation plan was to test the linearity of the systems by varying the dose through a range from 5 mSv to 500 mSv without varying any other parameter, such as beam quality or irradiation angle. The quality chosen for this test was S-Co (Paragraph 2.4).

The distribution of the mean response values and the ratio for different responses are given in Figure 16. The mean linearity for all these TLD systems is good within the tested range. However it can be seen the mean response is just below 1, which can be attributed to the fact the majority of the systems are calibrated with Cs-137.

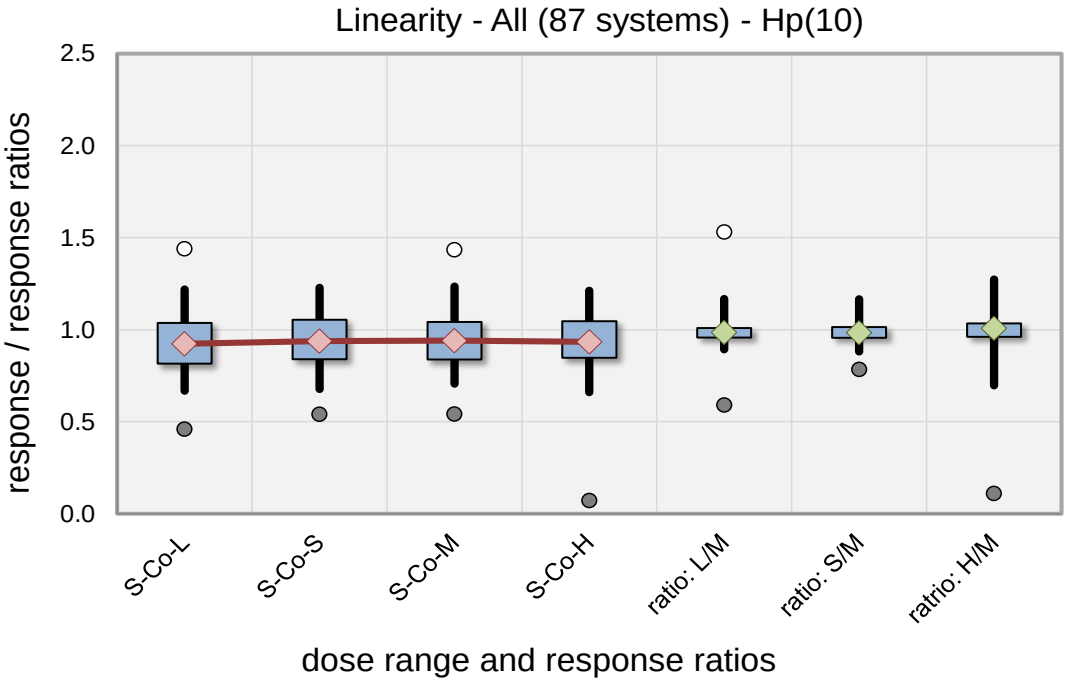

Figure 16: Distribution of the mean response values for S-Co irradiations for different doses (L...low, S...small, M...medium, H...high dose) and the distribution for different mean response ratios.

3.8 Angular response

The mean for all systems for N60/60º is slightly higher than N60/0º.

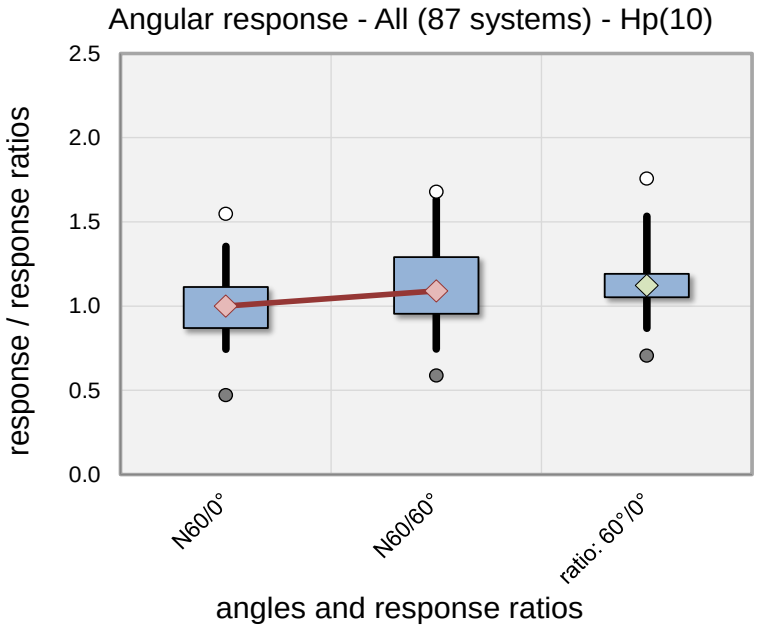

Figure 17 : Distribution of the mean response for different angles at quality N60 and the distribution for the corresponding mean response ratios.

3.9 Response values as a function of reference doses

Figure 18 displays all response values for $H_p(10)$ as a function of reference dose. The distribution of response values were subdivided by type of dosimetry system (film, TLD, OSL, Other). The dashed lines represent the trumpet curves. The outliers represent 5% of the total numbers of reported values for $H_p(10)$ and 9% for $H_p(0,07)$.

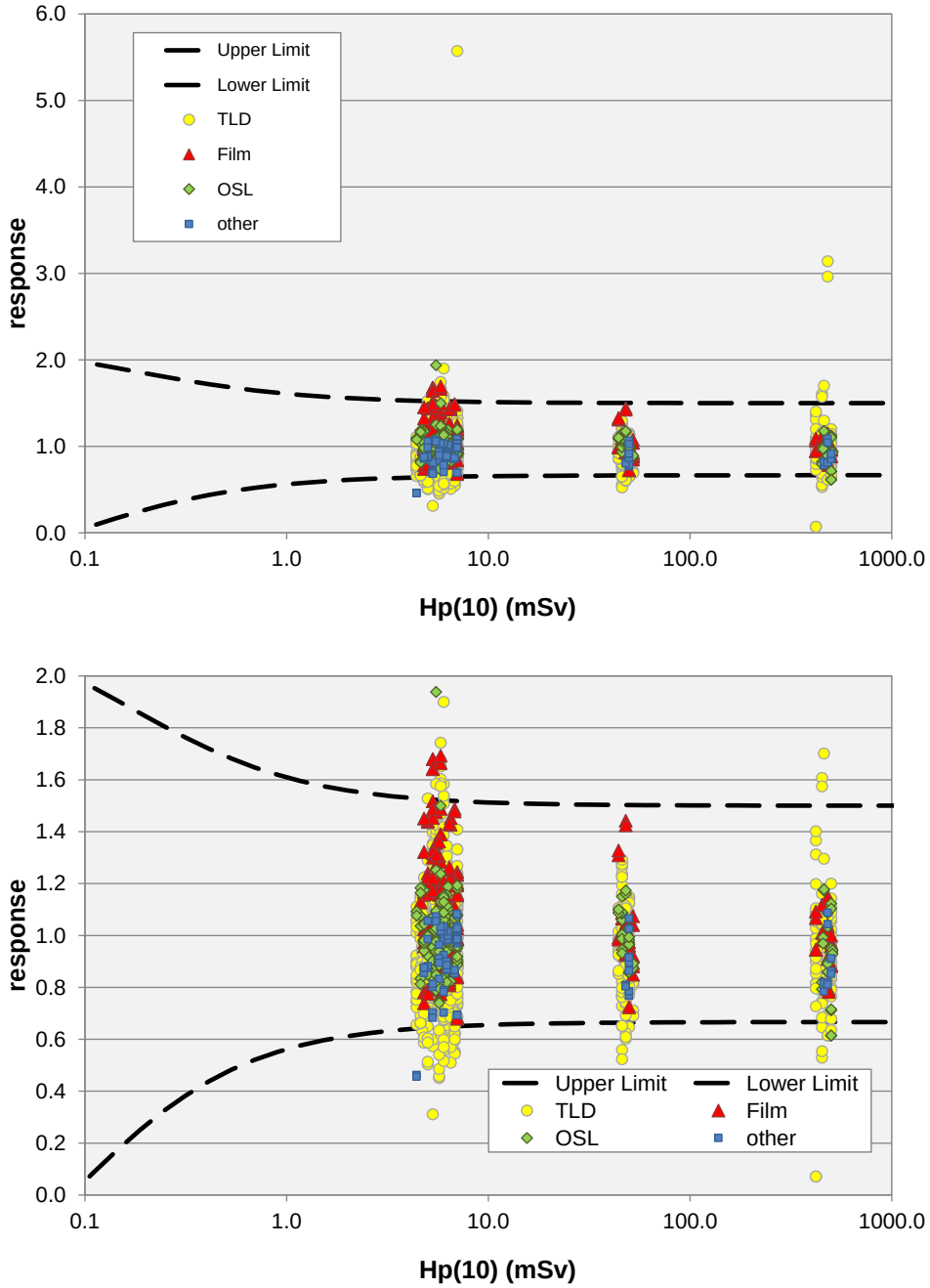

Figure 18 : Response values for $H_p(10)$ with different response axis ranges (top and bottom) as a function of reference dose. The dashed lines represent the trumpet curves according to equation (2), with F=1.5 and H_0=0.085 mSv. Outliers, defined as those values not falling within the trumpet curves, represent 6 % of the total numbers of reported values for $H_p(10)$.

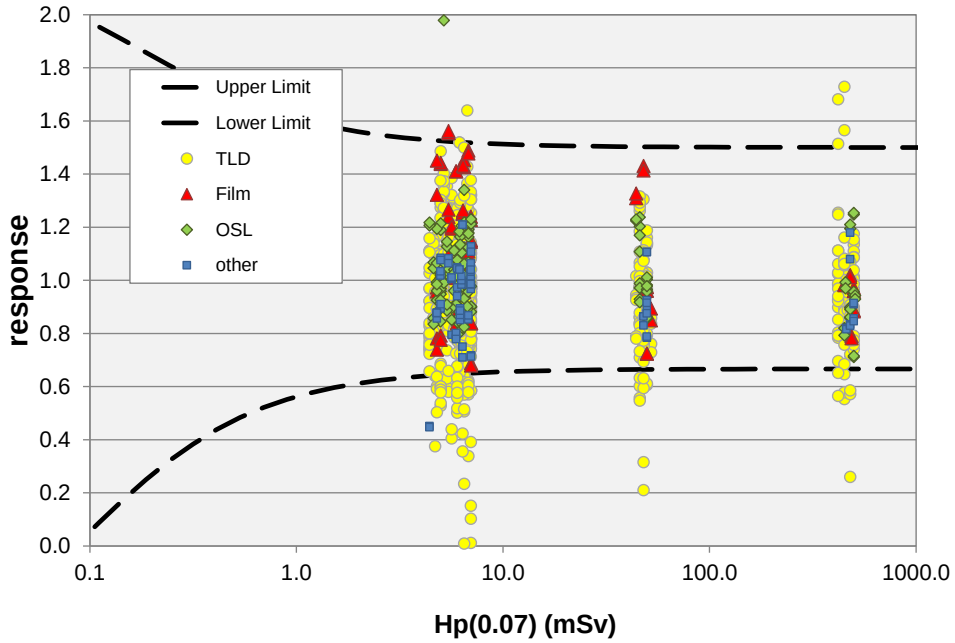

Figure 19 : Response values for $H_p(0.07)$ as a function of reference dose. The dashed lines represent the trumpet curves according to equation (2), with F=1.5 and H_0=0.085 mSv. Outliers, defined as those values not falling within the trumpet curves, represent 9 % of the total numbers of reported values for $H_p(0.07)$.

3.10 Outliers

Categorising all response values out of the trumpet curves as outliers, Table 9 and Table 10 represent the relative number of outliers per radiation quality and type of dosimetry system.

Table 9: Relative number of outliers per radiation quality and type of dosimetry system, for $H_p(10)$.

Outliers / Trumpet						
Quantity	**Quality**	**TLD**	**Film**	**OSL**	**other**	**All**
$H_p(10)$	N60	8%	4%	5%	0%	6%[a]
	N60/60°	14%	25%	0%	0%	13%
	S-Cs	4%	0%	0%	0%	3%
	S-Co	8%	0%	3%	5%	6%
	All	8%	4%	2%	3%	6%

Table 10: Relative number of outliers per radiation quality and type of dosimetry system, for $H_p(0.07)$.

Outliers / Trumpet						
Quantity	**Quality**	**TLD**	**Film**	**OSL**	**other**	**All**
$H_p(0.07)$	N60	5%	30%	6%	0%	6%
	N60/60°	5%	0%	0%	0%	4%
	S-Cs	12%	0%	0%	0%	9%
	S-Co	15%	0%	0%	5%	12%
	All	12%	4%	1%	3%	9%

3.11 Results for individual systems

Results presented in this section are for individual systems using the Reporting number described in section 2.9.

Response values for each individual system are shown in Figure 20. The majority of the systems show very satisfactory results.

It can be observed, that most of the outliers are actually associated with a small number of systems and, although some of the systems do show a distinct bias, that most of them show a satisfactory spread of results.

It can also be observed that TLD systems are the most numerous.

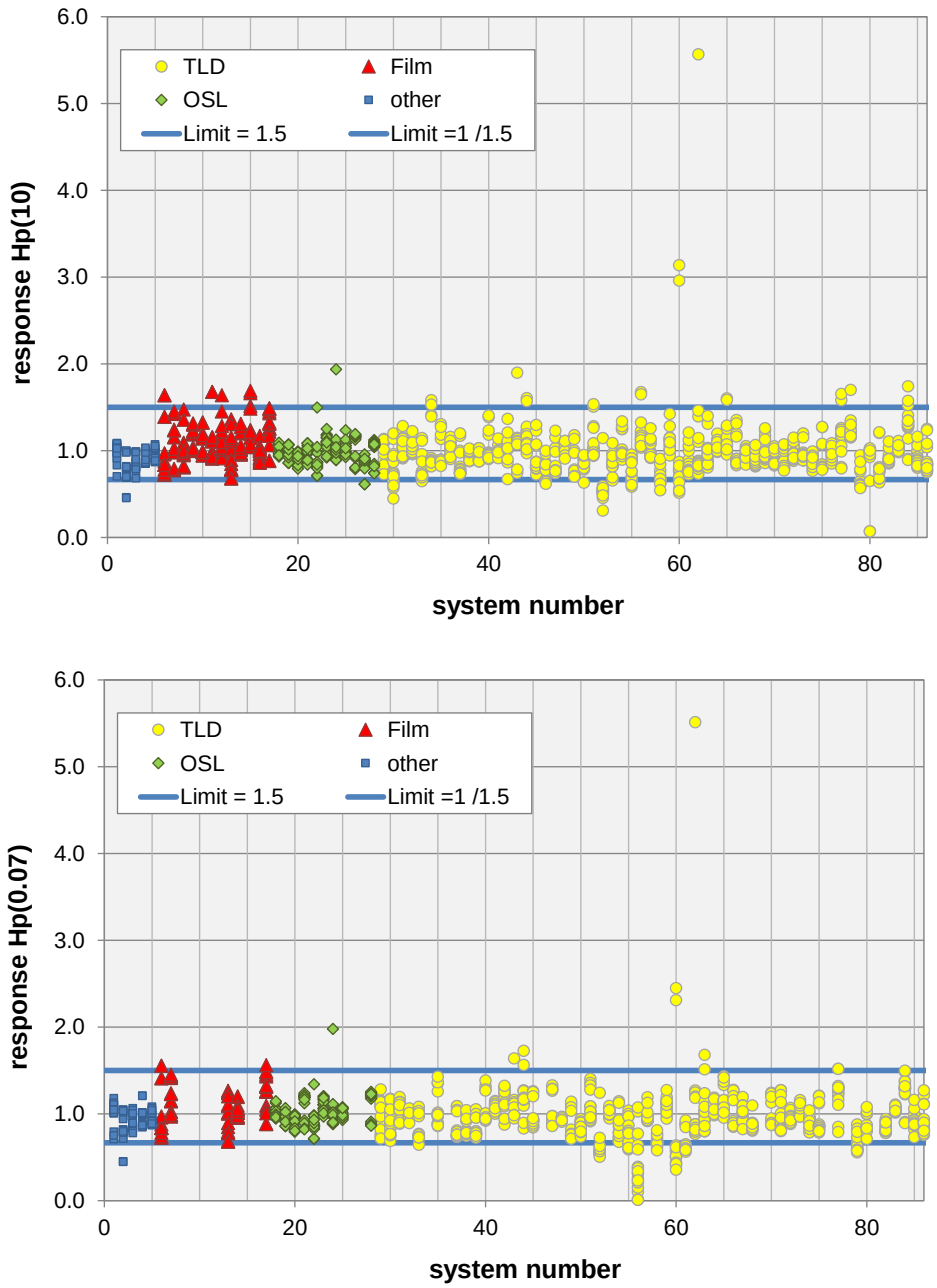

Figure 20: Response values for $H_p(10)$ (top) and $H_p(0.07)$ (bottom) for each individual participant system. Film, TLD, OSL and "other" systems are represented by triangles, circles, diamonds and squares respectively.

For each participating system a separate datasheet was prepared, summarizing all the results and the underlying data. Data for $H_p(10)$ and $H_p(0.07)$ (if any) are presented in separate sheets. Each sheet shows the data reported by irradiation laboratory and by the participant, together with the response value calculated from these values, for each irradiation separately. In addition, data has been combined for the radiation qualities. Some statistical quantities are given as well. Also, two figures have been added: one showing the response values in the trumpet curve, and one showing response values for the different radiation qualities.

These sheets have been prepared primarily, to enable the participants to analyze their own results and to compare these with the results of the other participants. The individual results will not be analyzed in further detail in this report. The datasheets for all participants can be looked up in Appendix F:
Datasheets with results for individual participants.

4 Conclusions

EURADOS Working Group 2 has developed a system for self-sustained intercomparisons for individual monitoring services for external radiation. IC2012 for whole body dosemeters was carried out in 2012 with 88 participating dosimetry systems. Most of the participating IMS were from within the EU. It has now been established, that the IC results can assist all participants to demonstrate compliance with their own quality management system, compare their results with those from other participants and, if appropriate, develop action plans for any identified system improvement requirements.

As with IC2008 and IC2010, the IMS participants showed a very satisfactory performance.

The results show, that 90% of all systems fulfil the general performance criteria specified in ISO 14146 with only 6% outliers from the total reported values (10% outliers per system permitted). Some TLD systems have shown greater deviations than in the IC 2008, while film performance has improved.

The median of all response values was again very close to unity. This finding confirms that, in general, the calibration procedures, especially the traceability to standard dosimetry laboratories, meets the required standards without any significant bias. However, the results also show, that there is still scope for a number of services to improve the quality of their systems by refining their calibration procedures (a number of systems were identified, which showed both general over or under response for all tested radiation qualities). But, in total, 79% of all results are within the trumpet curve used for the acceptance criteria test.

The high number of participating IMS (70) with 85 different systems confirms again, that there is an established demand for internationally organized ICs. Therefore, it is planned to continue this programme of EURADOS ICs.

5 References

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6 Figures and tables

Appendix A: Time schedule

Realized time Schedule:

April 2012	**Announcement - Call for participants**
29 June 2012	**Deadline for IMS sending Application Forms**
6 July 2012	**Deadline for IMS receiving confirmation of participation and guidelines**
3 August 2012	**Deadline for IMS sending dosemeters to OG**
September/October 2012	**Irradiations**
9 November 2012	**Deadline for IMS Receiving dosemeters for readout**
30 November 2012	**Deadline for IMS sending dosemeters results to OG**
21 January 2013	**Deadline for OG sending and confirming results from IMS**
February 2013	**IMS receiving Certificates of Participation** **Participant Meeting**

Appendix B: List of participants

(Participants sorted alphabetically by country and institute)

INSTITUTION	COUNTRY	NUMBER OF SYSTEMS
Autoridad Regulatoria Nuclear	Argentina	1
IAEA, Department of Nuclear Safety and Security	Austria	2
Seibersdorf Labor GmbH - Dosimetry Service	Austria	2
AV-Controlatom	Belgium	2
Belgoprocess	Belgium	1
Department of Dosimetry University of Ghent	Belgium	1
SCK-CEN Belgian Nuclear Research Centre	Belgium	1
Service de Contrôle Physique U.L.B.	Belgium	1
Service de Radioprotection, Universite Catholique de Louvain	Belgium	1
U.Z. gasthuisberg Leuven (PDUZL)	Belgium	1
University of Liege, SUCPR	Belgium	1
Ruder Boskovic Institute	Croatia	1
CSOD - Celostatni sluzba osobni dozimetrie, s.r.o.	Czech Republic	1
National Radiation Protection Institute	Czech Republic	1
VF, a.s.	Czech Republic	1
Personal Dosimetry Laboratory	Denmark	1
Environmental Board Radiation Safety Department	Estonia	1
Doseco Oy	Finland	1
Fortum, Loviisa Nuclear Power Plant	Finland	1
CNRS/Institut de Physique Nucléaire d'Orsay Service de dosimétrie	France	1
IIRSN - nstitute de Radioprotection et de Surete Nucleaire	France	1
Helmholtz-Zentrum München	Germany	3
LPS - Landesanstalt fur Personendosimetrie und Strahlenschutzausbildung	Germany	1
Materialprüfungsamt Nordrhein-Westfalen MPA-NRW	Germany	1
Greek Atomic Energy Commission	Greece	1
Hungarian Academy Of Sciences	Hungary	2
SNRC Personal Dosimetry Lab	Israel	1

Centro Italiano Radioprotezione di Ialenti Anna	Italy	1
ENEA	Italy	1
EUROPEAN COMMISSION - JOINT RESEARCH CENTRE - Nuclear decommissioning Unit - Radiation Protection Sector - Dosimetry Service	Italy	1
Fisica Sanitaria – Ospedale di Circolo e Fondazione Macchi	Italy	1
Fisica Sanitaria AOU Careggi	Italy	1
IRCSS A.O. S.Martino-IST	Italy	1
L.B. Servizi per le Aziende s.r.l.	Italy	2
Laboratorio di Dosimetria Servizio di Fisica Sanitaria Azienda ULSS 12 Veneziana	Italy	1
Ospedale Niguarda	Italy	1
Servizio di Dosimetria - Dipartimento di Energia - CESNEF Politecnico do Milano	Italy	1
Servizio Dosimetrico ASL Cesena	Italy	1
Servzio aziendale di Fisica Sanitaria Ospedale di Bolzano	Italy	1
Siena University Hospital – Health Physics Unit	Italy	1
Sogin Area Disattivazione Caorso	Italy	1
Tecnorad s.r.l.	Italy	2
X-Gammaguard	Italy	2
Division de la Radioprotection	Luxembourg	1
Norwegian Radiation Protection Authority	Norway	1
LADIS	Poland	1
ITN-UPSR	Portugal	1
MedicalConsult, S.A.	Portugal	1
PLURIRAD Lda.	Portugal	1
DOZIMED S.R.L.	Romania	1
Vinca	Serbia	1
ZVD	Slovenia	1
C.N.Santa Maria De Garona	Spain	1
Centro Nacional de Dosimetría	Spain	1
Ciemat External Dosimetry Service	Spain	1
Gestisa Dosimetria	Spain	1
INFOCITEC S.A.	Spain	1
Laboratorio de Dosimetria del Centro Nacional de Sanidad	Spain	1

Ambiental		
Landauer Nordic AB	Sweden	1
Ringhals AB	Sweden	1
Dosilab	Switzerland	1
Institut de radiophysique	Switzerland	1
Paul Scherrer Institute	Switzerland	2
NRG - Radiation & Environment	The Netherlands	2
Epsilon Landauer Dosemetry Technologies Ind.Trd.Inc.	Turkey	1
RADKOR	Turkey	1
Turkish Atomic Energy Authority (TAEK)	Turkey	3
AWE Aldermaston	UK	1
Berkeley ADS	UK	1
Landauer Europe	UK	2
Sellafield Ltd.	UK	1
UK Health Protection Agency	UK	1
Radiation Protection Institute, ATS Ukraine	Ukraine	1
Mirion Technologies	USA	1

Appendix C: Confidentiality clause template

European Radiation Dosimetry Group EURADOS

CONFIDENTIALITY UNDERTAKING FOR INTERCOMPARISON ORGANIZATION GROUP MEMBERS

1. I hereby undertake, as part of the terms and conditions of my participation in the Organization Group (OG) of IC2012 - to be performed by EURADOS, not to disclose at any time during or after my participation any confidential information which may come to my knowledge in connection with my activity, including any commercial, technological or industrial secrets to which I have had access in the course of my work and involvement in the ***Organization Group for IC2012*** to any person, or organization not authorized to receive such information.

2. I further undertake that I shall:

a. restrict any use I make of such information, both within and outside the OG, to the proper execution of the organisation, analysis, and reporting of the intercomparison;

b. refrain from any unauthorized use of such information to my private advantage or to that of any third party.

3. I undertake that, at all times following the termination of my involvement within the OG2012, I shall not use, disclose or disseminate any of the information referred to in paragraph 1 above. I also undertake to take no action that may lead to such information being disclosed or exploited to the detriment of EURADOS, of a EURADOS Voting Member or a natural or legal person of such Member, or of a participant to the EURADOS inter-comparisons exercises.

4. I understand:

that a breach of my obligation not to disclose confidential information without appropriate authorization may result in the initiation of legal proceedings against me, and that, the EURADOS Chairperson may exclude me from EURADOS activities.

Date and Place: _____

Signature: _____

Printed name: _____

Institution: _____

Address: _____

Appendix D: Example irradiation certificate

HELLENIC REPUBLIC
MINISTRY OF EDUCATION & RELIGIOUS AFFAIRS, CULTURE AND SPORTS
GENERAL SECRETARIAT FOR RESEARCH & TECHNOLOGY

ΕΣΥΔ
Calibrations
Cert. No 116(3)

GAEC
GREEK ATOMIC ENERGY COMMISSION
IONIZING RADIATION CALIBRATION LABORATORY (IRCL)
Affiliated to the Hellenic Metrology Institute

IRRADIATION CERTIFICATE No: DOS /1260-XX/12
Number of Pages: 2
Date of Issue: 21/01/2013

The following personnel dosimeters from:	**EURADOS INTERCOMPARISON PROGRAM** System No: XX

have been calibrated at the ***Ionizing Radiation Calibration Laboratory of Greek Atomic Energy Commission:***

Personal Dosimeters (PD):	**Whole body**
Dosemeter Identification:	
Detection Principle:	

Irradiation Period:	**From 29/09/2012 up to 22/10/2012**

The Kair reference values have been obtained using the reference/transfer ionization chamber PTW W-32002-LS01 (S/N 69), the NE2571 (SN:3108) and electrometer PTW UNIDOS 10002 (S/N 20314). The LS01 chamber was calibrated in PTB for S-Cs, ISO –Narrow Series on 14-03-2011 (PTB, Cal. Cert. No 60031-11/6.25-18/11K). Both NE2571 chamber and electrometer were calibrated at BIPM for S-Co on 10-05-2011 (BIPM, Cal. Cert. No 54).
The irradiation conditions are in accordance to ISO 4037/1-2-3-4 and IEC 61006.

Irradiation conditions

Phantom:	ISO water phantom, (30x30x15) cm^3	
Source to PD Distance:	150-300 cm, depending on required Kair rate	
Kair Rate:	S-Cs:143,5 μGy/min (at 200 cm) N-60: 373,3 μGy/min (at 200 cm)	S-Co-60: 55,82 mGy/min (at 300 cm) S-Co-60: 2,31 mGy/min (at 300 cm with lead block)
Field Size:	S-Cs: Circular, with diameter of 55,6 cm (at 200 cm) S-Co-60: Rectangular (30x30) cm^2 (at 300 cm) x-rays: Circular with diameter 26,8 cm	
Build up PMMA:	S-Cs: (0,2 x 30x30) cm^3 S-Co-60: (0,4 x 30x30) cm^3	
Reference point of PD:	Back face of the dosemeters	
Rotation axis:	Around the vertical axis of the PD which is parallel to the coronal axis of the person who wears it.	

GAEC-IRCL-Cal. Cert. No: DOS /1260-XX/12 Page 2 of 2

Environmental conditions during irradiations:

Temperature	Pressure	Relative Humidity
≈ 20,0 °C	≈ 984,0 hPa	≈ 30 %

Irradiation Data

# Dosemeter	Date	Quality[3]	Hp(10)[2] mSv	U %[1]	Hp(0,07)[2] mSv	U %[1]
SXX-01	29/09/12	S-Cs	7,00	4,9	7,00	4,9
SXX-02	29/09/12	S-Cs	7,00	4,9	7,00	4,9
SXX-03	29/09/12	S-Cs	7,00	4,9	7,00	4,9
SXX-04	29/09/12	S-Cs	7,00	4,9	7,00	4,9
SXX-07	08/10/12	S-Co	480	4,9	480	4,9
SXX-08	08/10/12	S-Co	480	4,9	480	4,9
SXX-09	08/10/12	S-Co	47,9	4,9	47,9	4,9
SXX-10	08/10/12	S-Co	47,9	4,9	47,9	4,9
SXX-11	09/10/12	S-Co	5,00	4,9	5,00	4,9
SXX-12	09/10/12	S-Co	5,00	4,9	5,00	4,9
SXX-13	10/10/12	S-Co	6,21	4,9	6,21	4,9
SXX-14	10/10/12	S-Co	6,21	4,9	6,21	4,9
SXX-15	17/10/12	N60-0o	6,00	5,1	5,64	5,1
SXX-16	17/10/12	N60-0o	6,00	5,1	5,64	5,1
SXX-17	22/10/12	N60-60o	5,30	5,3	5,93	5,3
SXX-18	22/10/12	N60-60o	5,30	5,3	5,93	5,3

[1] U= uncertainty 95% confidence level (k=2)

[2] The conversion coefficients $h_{p,k}(10;N,a)$, $h_{p,k}(0,07;N,a)$, $h_{p,k}(10;S,a)$ from ISO 4037-3. The conversion coefficient, $h_{p,k}(0,07;S,a)$ from Radiation Protection 73 Report EUR 14852 EN.

[3] For Irradiations at 60°: Irradiations performed at +60°.

Not irradiated dosemeters: **SXX-21, SXX-22, SXX-23.**

Irradiations performed by:

Boziari A., Medical Physicist
Koumpouli E., Technician
Hourdakis C.J., Medical Physicist

Assignment of the GAEC's President

C.J. Hourdakis
Scientific Responsible of the IRCL

ΕΣΥΔ
Calibrations
Cert. No 116(3)

This certificate is issued in according with the requirements of ISO 17025. It provides traceability of measurements to recognized national standards laboratories. The HIRCL/GAEC is a member of the IAEA/WHO Secondary Standard Dosimetry Laboratory Network.
This certificate may not be reproduced other than in full, except with the prior written approval of the HIRCL/GAEC.

Appendix E: Example "Certificate of Participation"

European Radiation Dosimetry Group — EURADOS

European Radiation Dosimetry Group e.V. • Bundesallee 100 • D-38116 Braunschweig | *Certificate of Participation EURADOS- 2012-Sxx*

Certificate of Participation

for the EURADOS Intercomparison 2012 (IC2012) for whole body dosemeters

Certificate number:	EURADOS- 2012-Sxx
Number of pages:	2
Date of Issue:	07 February 2013
Participating institute:	Example certificate
Dosimetry system:	Example certificate
Reporting ID number used in publications:	XX
Intercomparison procedure:	The EURADOS Intercomparison 2012 for whole body dosemeters was managed and co-ordinated on behalf of EURADOS by the WG2 Intercomparison Organization Group (OG). The OG established the irradiation plan and announced the intercomparison, including the range limits of the doses and radiation qualities, in February 2012. Participants were asked to indicate details of the dosemeter reference point on the application form. After completing the application procedures the participant sent its dosemeters, in accordance with the OG instructions, to the OG Coordinator (July/August 2012). The Coordinator relabeled the dosemeters according to the table given on page 2, and sent all dosemeters, along with the instructions to the irradiation laboratory. The laboratory irradiated the dosemeters according to the irradiation plan and then sent all the dosemeters back to the coordinator (October 2012). The Coordinator then returned the dosemeters to the participant for assessment and indicated which dosemeters were not irradiated. The participant was instructed to follow normal routine procedures as far as possible. The participant then sent the results of the dosemeter readings to the coordinator (December 2012). After receipt of the participant results, the coordinator sent the irradiation data to the participant. After the dosemeters had been returned to the participants, the irradiation laboratory identified a problem with the reliability of the N-40 and the mixed field (S-Cs/N150-45°) irradiations. Consequently, these irradiations have been excluded from all of the participants' IC2012 certificates.
Number of participants	75 Institutes participated in IC2012 with a total of 88 systems
Irradiation data:	See the certificate of the irradiation laboratory No: DOS/1260-16/12(attached to this certificate)
Participant results:	See the attached report of the participant
Intercomparison results:	See the table on page 2 of this certificate

On behalf of the intercomparison Organization Group:

Andrew McWhan
Coordinator

On behalf of EURADOS

Helmut Schuhmacher
Chairperson

Page 1 of 2

European Radiation Dosimetry Group

EURADOS

European Radiation Dosimetry Group e.V. • Bundesallee 100 • D-38116 Braunschweig | *Certificate of Participation EURADOS- 2012-Sxx*

Result of the intercomparison:

			Hp(10)			Hp(0.07)		
Dosemeter id coordinator	**Dosemeter id participant**	**Quality**	**Participant's value (mSv)**	**Reference value (mSv)**	**Ratio**	**Participant's value (mSv)**	**Reference value (mSv)**	**Ratio**
25	2	NIR						
3	3	S-Cs 0°	6.00	6.00	1.00	6.27	6.00	1.05
16	4	N-60 0°	4.31	5.30	0.81	5.15	4.98	1.03
21	5	NIR						
7	8	S-Co 0°	361.21	460	0.79	377.01	460	0.82
18	9	N-60 60°	3.71	5.30	0.70	4.72	5.93	0.80
26	10	NIR						
10	11	S-Co 0°	39.03	49.7	0.79	39.16	49.7	0.79
13	12	S-Co 0°	4.87	7.01	0.69	5.03	7.01	0.72
11	13	S-Co 0°	2.04	4.41	0.46	1.99	4.41	0.45
23	14	NIR						
1	15	S-Cs 0°	5.98	6.00	1.00	6.29	6.00	1.05
9	16	S-Co 0°	38.22	49.7	0.77	38.94	49.7	0.78
22	17	NIR						
15	18	N-60 0°	4.25	5.30	0.80	5.07	4.98	1.02
14	19	S-Co 0°	4.86	7.01	0.69	5.00	7.01	0.71
8	20	S-Co 0°	376.71	460	0.82	375.06	460	0.82
12	22	S-Co 0°	2.01	4.41	0.46	1.97	4.41	0.45
2	23	S-Cs 0°	5.95	6.00	0.99	5.84	6.00	0.97
4	24	S-Cs 0°	5.87	6.00	0.98	5.64	6.00	0.94
17	25	N-60 60°	3.67	5.30	0.69	4.65	5.93	0.78
24	26	NIR						

Notes:
NIR: Not IRadiated
WIR: Wrong IRadiated

Page 2 of 2

Appendix F: Datasheets with results for individual participants

In this annex all individual results are given for all participating systems for the dose quantity $H_p(10)$ and $H_p(0.07)$. Since some systems were not designed to measure $H_p(0.07)$ these systems are missing in this part of the annex.

For the non-irradiated and any wrongly irradiated dosemeters the following terms were used:

NIR not irradiated dosemeter (available for background and transport dose correction by the monitoring service)

WIR wrongly irradiated dosemeter (wrongly irradiated by the irradiating laboratory).

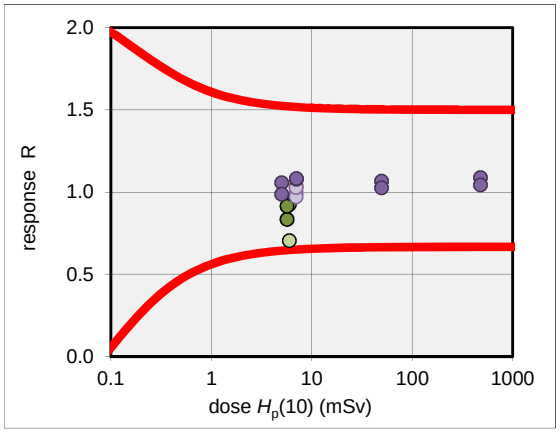
These results were not included in the data sheets.

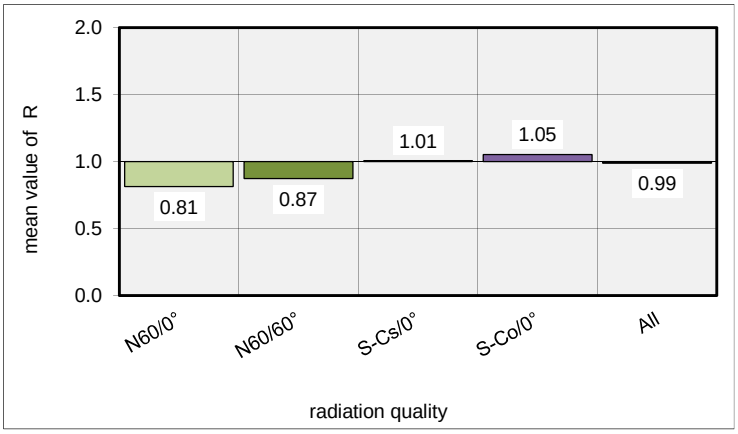
Reporting number 1: (other) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	1	6.00	5.6	0.93	OK
		2	6.00	4.2	0.70	OK
	N60/60°	3	5.70	4.8	0.83	OK
		10	5.70	5.2	0.91	OK
gamma	S-Cs/0°	16	7.00	7.3	1.04	OK
		17	7.00	7.0	1.00	OK
		18	7.00	6.8	0.97	OK
		19	7.00	7.2	1.03	OK
	S-Co/0°	11	5.00	5.3	1.06	OK
		12	5.00	4.9	0.99	OK
		13	7.01	7.6	1.08	OK
		14	7.01	7.6	1.08	OK
		8	49.70	53.0	1.07	OK
		9	49.70	51.0	1.03	OK
		4	480.00	522.0	1.09	OK
		5	480.00	501.0	1.04	OK
	NIR	15				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.81**	0.81	0.93	0.70	19%
N60/60°	2	**0.87**	0.87	0.91	0.83	6%
S-Cs/0°	4	**1.01**	1.01	1.04	0.97	3%
S-Co/0°	8	**1.06**	1.05	1.09	0.99	3%
All	**16**	**1.03**	**0.99**	**1.09**	**0.70**	**10%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

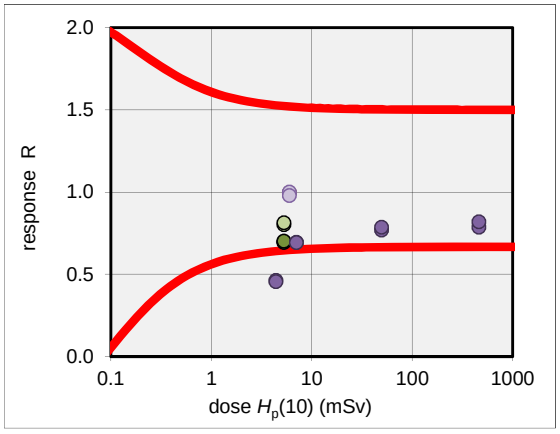
trumpet curve parameter: 1.5 / 0.085 mSv

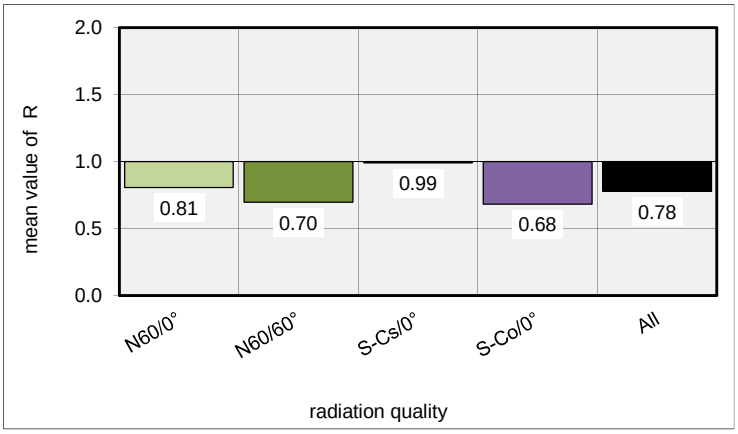
Reporting number 2: (other) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	4.3	0.80	OK
		16	5.30	4.3	0.81	OK
	N60/60°	17	5.30	3.7	0.69	OK
		18	5.30	3.7	0.70	OK
gamma	S-Cs/0°	1	6.00	6.0	1.00	OK
		2	6.00	6.0	0.99	OK
		3	6.00	6.0	1.00	OK
		4	6.00	5.9	0.98	OK
	S-Co/0°	11	4.41	2.0	0.46	outlier
		12	4.41	2.0	0.46	outlier
		13	7.01	4.9	0.69	OK
		14	7.01	4.9	0.69	OK
		9	49.70	38.2	0.77	OK
		10	49.70	39.0	0.79	OK
		7	460.00	361.2	0.79	OK
		8	460.00	376.7	0.82	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.81**	0.81	0.81	0.80	1%
N60/60°	2	**0.70**	0.70	0.70	0.69	1%
S-Cs/0°	4	**0.99**	0.99	1.00	0.98	1%
S-Co/0°	8	**0.73**	0.68	0.82	0.46	21%
All	**16**	**0.79**	**0.78**	**1.00**	**0.46**	**21%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

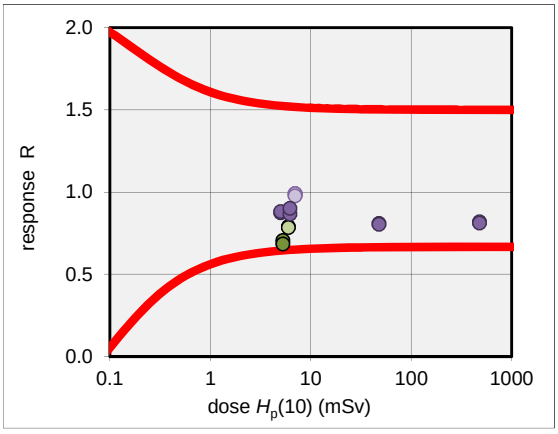
trumpet curve parameter: 1.5 / 0.085 mSv

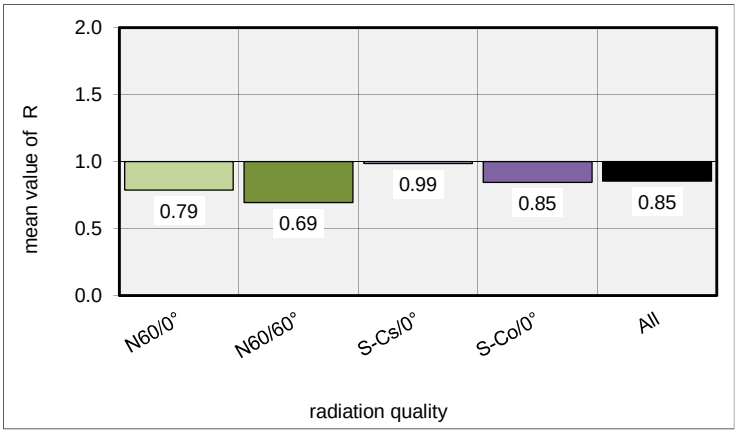
Reporting number 3: (other) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	6.00	4.7	0.79	OK
		16	6.00	4.7	0.78	OK
	N60/60°	17	5.30	3.7	0.70	OK
		18	5.30	3.6	0.68	OK
gamma	S-Cs/0°	1	7.00	6.9	0.98	OK
		2	7.00	6.9	0.99	OK
		3	7.00	6.9	0.99	OK
		4	7.00	6.8	0.98	OK
	S-Co/0°	11	5.00	4.4	0.87	OK
		12	5.00	4.4	0.88	OK
		13	6.21	5.4	0.87	OK
		14	6.21	5.6	0.90	OK
		9	47.90	38.8	0.81	OK
		10	47.90	38.5	0.80	OK
		7	480.00	393.0	0.82	OK
		8	480.00	389.5	0.81	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	0				
	NIR	0				
	NIR	0				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.79**	0.79	0.79	0.78	1%
N60/60°	2	**0.69**	0.69	0.70	0.68	2%
S-Cs/0°	4	**0.99**	0.99	0.99	0.98	1%
S-Co/0°	8	**0.84**	0.85	0.90	0.80	5%
All	**16**	**0.84**	**0.85**	**0.99**	**0.68**	**11%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

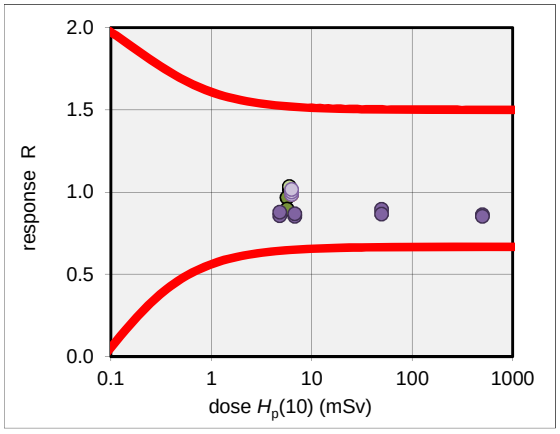
trumpet curve parameter: 1.5 / 0.085 mSv

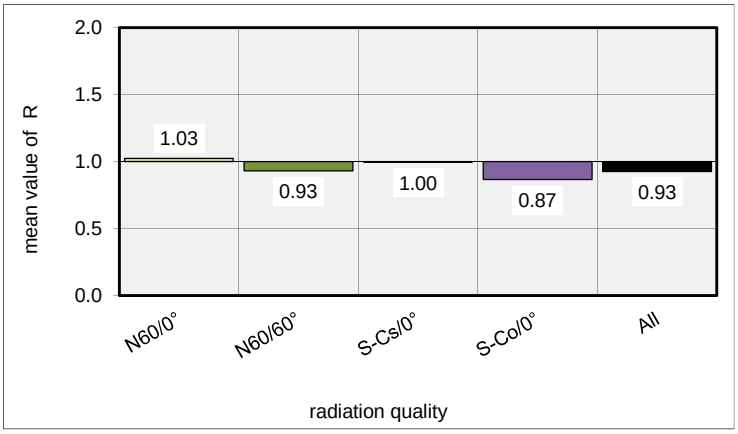
Reporting number 4: (other) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	6.00	6.1	1.02	OK
		17	6.00	6.2	1.03	OK
	N60/60°	18	5.70	5.5	0.96	OK
		19	5.70	5.1	0.89	OK
gamma	S-Cs/0°	6	6.30	6.2	0.98	OK
		7	6.30	6.2	0.98	OK
		8	6.30	6.3	1.00	OK
		9	6.30	6.4	1.02	OK
	S-Co/0°	12	4.79	4.1	0.86	OK
		13	4.79	4.2	0.88	OK
		14	6.80	5.8	0.85	OK
		15	6.80	5.9	0.87	OK
		10	49.70	44.5	0.90	OK
		11	49.70	43.0	0.87	OK
		3	500.00	431.0	0.86	OK
		4	500.00	426.0	0.85	OK
	NIR	5				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.03**	1.03	1.03	1.02	1%
N60/60°	2	**0.93**	0.93	0.96	0.89	5%
S-Cs/0°	4	**0.99**	1.00	1.02	0.98	2%
S-Co/0°	8	**0.86**	0.87	0.90	0.85	2%
All	**16**	**0.90**	**0.93**	**1.03**	**0.85**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

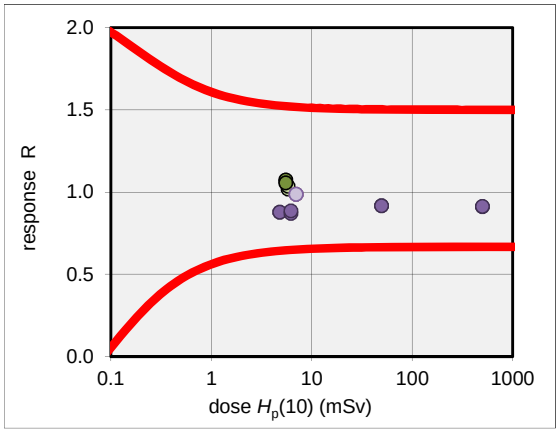
trumpet curve parameter: 1.5 / 0.085 mSv

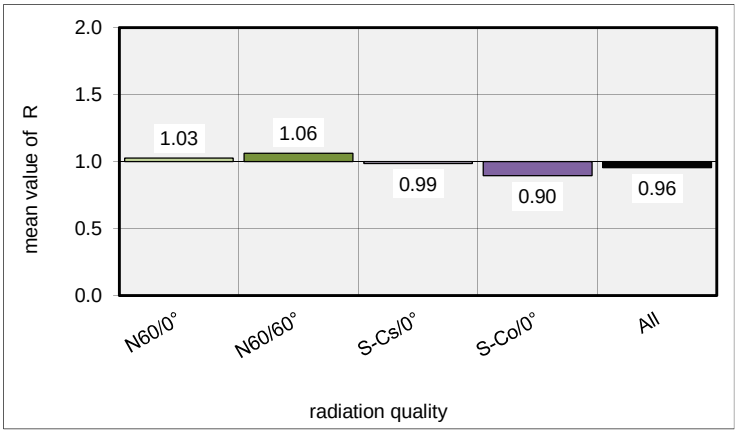
Reporting number 5: (other) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	5.9	1.02	OK
		16	5.80	6.0	1.03	OK
	N60/60°	17	5.50	5.9	1.07	OK
		18	5.50	5.8	1.05	OK
gamma	S-Cs/0°	1	7.00	6.9	0.99	OK
		2	7.00	6.9	0.99	OK
		3	7.00	6.9	0.99	OK
		4	7.00	6.9	0.99	OK
	S-Co/0°	11	4.79	4.2	0.88	OK
		12	4.79	4.2	0.88	OK
		13	6.21	5.4	0.87	OK
		14	6.21	5.5	0.89	OK
		9	49.70	45.5	0.92	OK
		10	49.70	45.5	0.92	OK
		7	500.00	455.0	0.91	OK
		8	500.00	456.0	0.91	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.03**	1.03	1.03	1.02	1%
N60/60°	2	**1.06**	1.06	1.07	1.05	1%
S-Cs/0°	4	**0.99**	0.99	0.99	0.99	0%
S-Co/0°	8	**0.90**	0.90	0.92	0.87	2%
All	**16**	**0.95**	**0.96**	**1.07**	**0.87**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

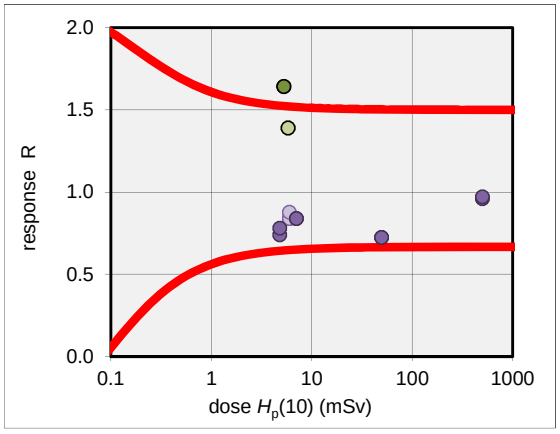
trumpet curve parameter: 1.5 / 0.085 mSv

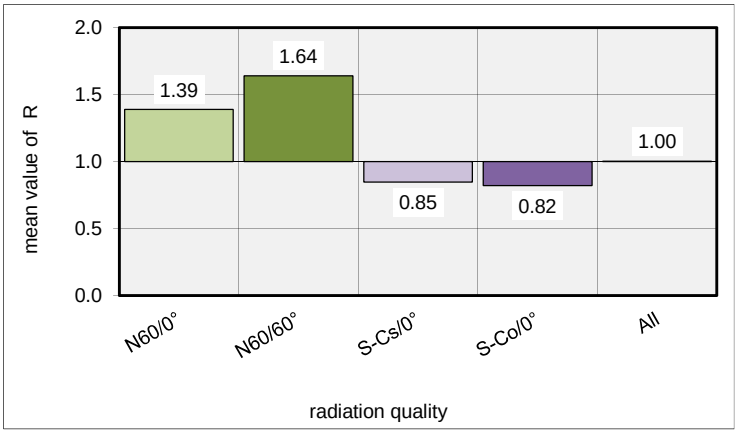
Reporting number 6: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	8.1	1.39	OK
		16	5.80	8.1	1.39	OK
	N60/60°	17	5.30	8.7	1.64	outlier
		18	5.30	8.7	1.64	outlier
gamma	S-Cs/0°	1	6.00	5.0	0.84	OK
		2	6.00	5.0	0.84	OK
		3	6.00	5.0	0.84	OK
		4	6.00	5.3	0.88	OK
	S-Co/0°	11	4.79	3.5	0.74	OK
		12	4.79	3.7	0.78	OK
		13	7.01	5.9	0.84	OK
		14	7.01	5.9	0.84	OK
		9	49.70	36.0	0.72	OK
		10	49.70	36.0	0.72	OK
		7	500.00	479.7	0.96	OK
		8	500.00	485.6	0.97	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.39**	1.39	1.39	1.39	0%
N60/60°	2	**1.64**	1.64	1.64	1.64	0%
S-Cs/0°	4	**0.84**	0.85	0.88	0.84	2%
S-Co/0°	8	**0.81**	0.82	0.97	0.72	12%
All	**16**	**0.84**	**1.00**	**1.64**	**0.72**	**32%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

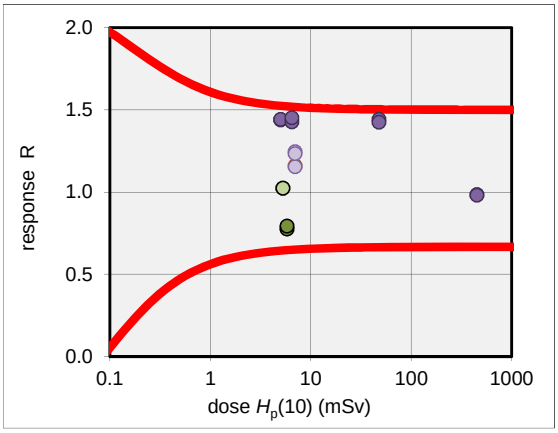
trumpet curve parameter: 1.5 / 0.085 mSv

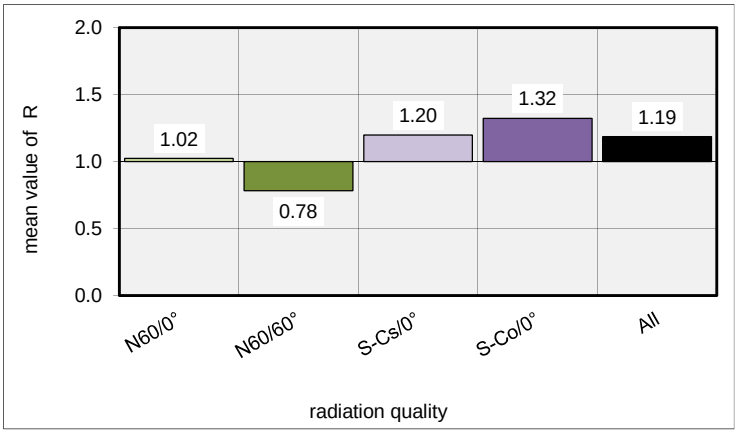
Reporting number 7: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	5.4	1.02	OK
		16	5.30	5.4	1.02	OK
	N60/60°	17	5.80	4.5	0.77	OK
		18	5.80	4.6	0.79	OK
gamma	S-Cs/0°	1	7.00	8.1	1.16	OK
		2	7.00	8.1	1.15	OK
		3	7.00	8.7	1.25	OK
		4	7.00	8.6	1.23	OK
	S-Co/0°	11	5.00	7.2	1.44	OK
		12	5.00	7.2	1.44	OK
		13	6.49	9.3	1.43	OK
		14	6.49	9.4	1.45	OK
		9	47.90	69.1	1.44	OK
		10	47.90	68.3	1.43	OK
		7	450.00	442.9	0.98	OK
		8	450.00	441.6	0.98	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.02**	1.02	1.02	1.02	0%
N60/60°	2	**0.78**	0.78	0.79	0.77	2%
S-Cs/0°	4	**1.20**	1.20	1.25	1.15	4%
S-Co/0°	8	**1.43**	1.32	1.45	0.98	16%
All	**16**	**1.20**	**1.19**	**1.45**	**0.77**	**20%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

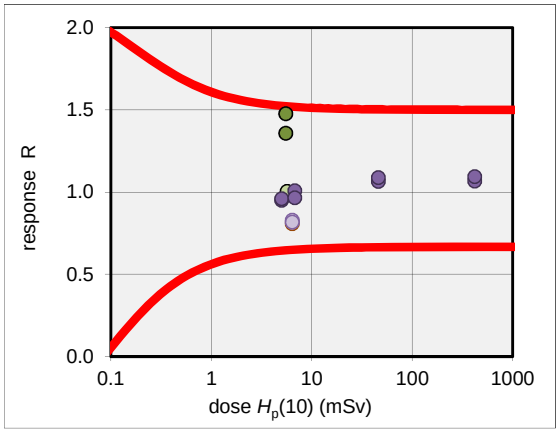
trumpet curve parameter: 1.5 / 0.085 mSv

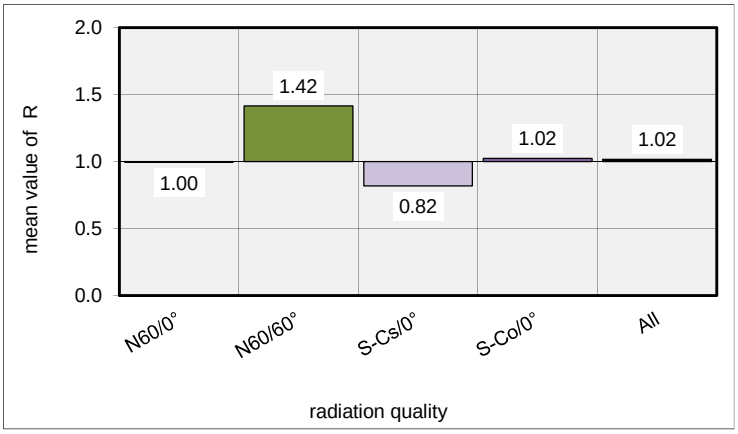
Reporting number 8: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.70	5.6	0.99	OK
		16	5.70	5.7	1.00	OK
	N60/60°	17	5.50	8.1	1.47	OK
		18	5.50	7.5	1.36	OK
gamma	S-Cs/0°	1	6.40	5.2	0.81	OK
		2	6.40	5.2	0.82	OK
		3	6.40	5.3	0.83	OK
		4	6.40	5.2	0.82	OK
	S-Co/0°	11	5.00	4.8	0.95	OK
		12	5.00	4.8	0.96	OK
		13	6.80	6.9	1.01	OK
		14	6.80	6.6	0.96	OK
		9	46.00	49.0	1.07	OK
		10	46.00	50.0	1.09	OK
		7	420.00	448.0	1.07	OK
		8	420.00	459.0	1.09	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.00**	1.00	1.00	0.99	1%
N60/60°	2	**1.42**	1.42	1.47	1.36	6%
S-Cs/0°	4	**0.82**	0.82	0.83	0.81	1%
S-Co/0°	8	**1.04**	1.02	1.09	0.95	6%
All	**16**	**1.00**	**1.02**	**1.47**	**0.81**	**18%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

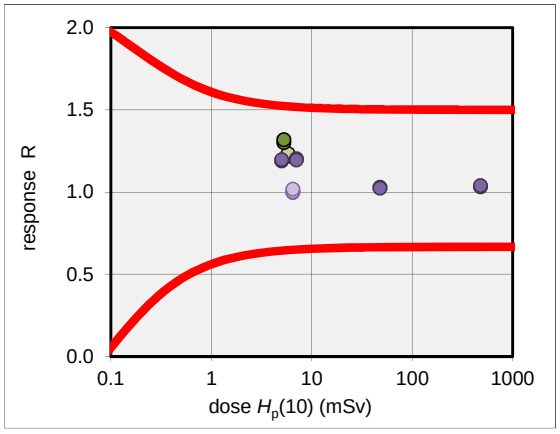
trumpet curve parameter: 1.5 / 0.085 mSv

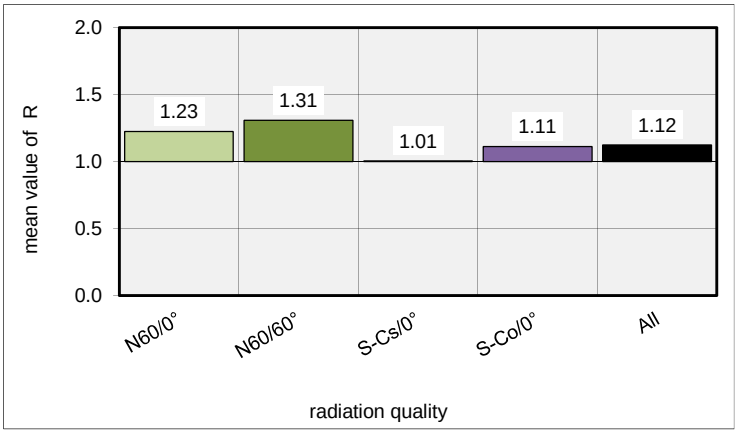
Reporting number 9: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	7.1	1.22	OK
		16	5.80	7.2	1.23	OK
	N60/60°	17	5.30	6.9	1.30	OK
		18	5.30	7.0	1.32	OK
gamma	S-Cs/0°	1	6.50	6.5	1.01	OK
		2	6.50	6.5	1.00	OK
		3	6.50	6.5	1.00	OK
		4	6.50	6.6	1.02	OK
	S-Co/0°	9	5.00	5.9	1.19	OK
		10	5.00	6.0	1.20	OK
		11	7.01	8.4	1.20	OK
		12	7.01	8.4	1.19	OK
		13	47.90	49.3	1.03	OK
		14	47.90	49.0	1.02	OK
		7	480.00	495.4	1.03	OK
		8	480.00	498.9	1.04	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.23**	1.23	1.23	1.22	1%
N60/60°	2	**1.31**	1.31	1.32	1.30	1%
S-Cs/0°	4	**1.00**	1.01	1.02	1.00	1%
S-Co/0°	8	**1.11**	1.11	1.20	1.02	8%
All	**16**	**1.11**	**1.12**	**1.32**	**1.00**	**10%**

outliers: 0 of 16 **Fraction of outliers: 0%**





Results: IC2012

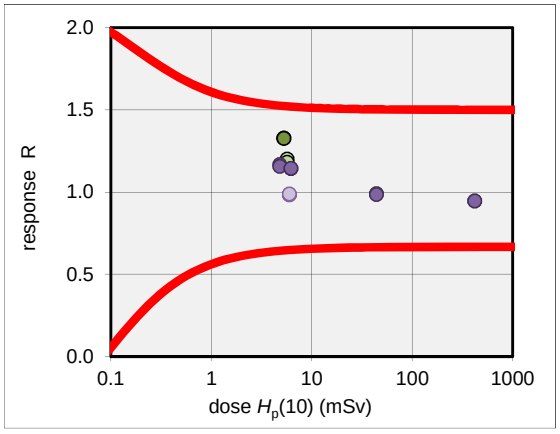
trumpet curve parameter: 1.5 / 0.085 mSv

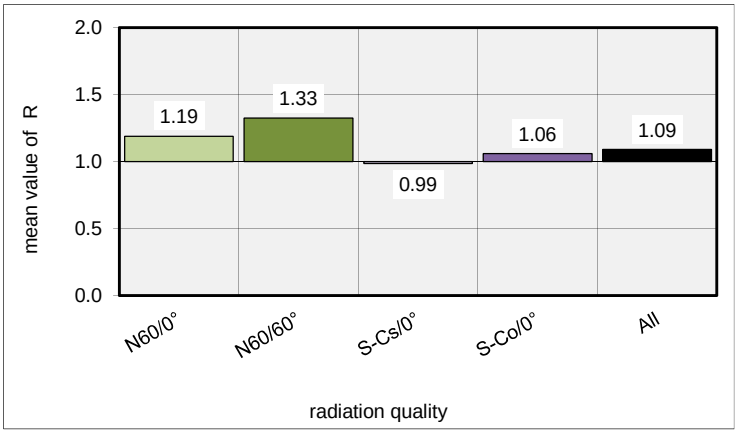
Reporting number 10: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.70	6.8	1.20	OK
		17	5.70	6.7	1.18	OK
	N60/60°	18	5.30	7.0	1.33	OK
		19	5.30	7.0	1.32	OK
gamma	S-Cs/0°	11	6.00	5.9	0.99	OK
		12	6.00	5.9	0.98	OK
		14	6.00	5.9	0.99	OK
		15	6.00	5.9	0.99	OK
	S-Co/0°	3	4.79	5.6	1.17	OK
		6	4.79	5.5	1.16	OK
		10	6.21	7.1	1.14	OK
		13	6.21	7.1	1.14	OK
		7	44.10	43.7	0.99	OK
		8	44.10	43.4	0.99	OK
		4	420.00	397.0	0.95	OK
		5	420.00	396.9	0.94	OK
	NIR	9				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.19**	1.19	1.20	1.18	1%
N60/60°	2	**1.33**	1.33	1.33	1.32	0%
S-Cs/0°	4	**0.99**	0.99	0.99	0.98	0%
S-Co/0°	8	**1.07**	1.06	1.17	0.94	10%
All	**16**	**1.07**	**1.09**	**1.33**	**0.94**	**12%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

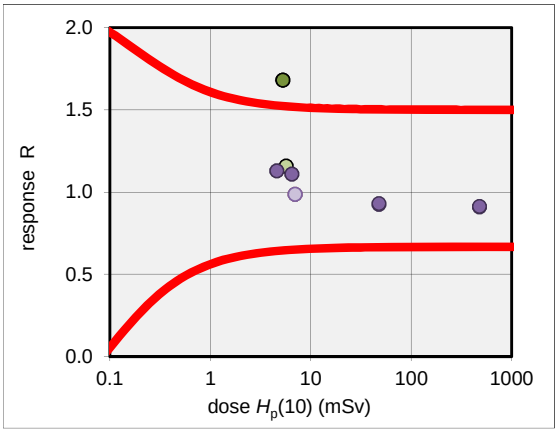
trumpet curve parameter: 1.5 / 0.085 mSv

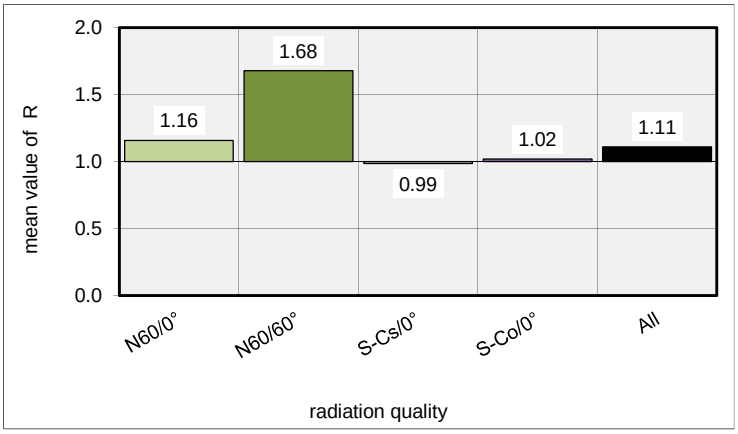
Reporting number 11: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.70	6.6	1.16	OK
		16	5.70	6.6	1.16	OK
	N60/60°	17	5.30	8.9	1.68	outlier
		18	5.30	8.9	1.68	outlier
gamma	S-Cs/0°	1	7.00	6.9	0.99	OK
		2	7.00	6.9	0.99	OK
		3	7.00	6.9	0.99	OK
		4	7.00	6.9	0.99	OK
	S-Co/0°	11	4.61	5.2	1.13	OK
		12	4.61	5.2	1.13	OK
		13	6.49	7.2	1.11	OK
		14	6.49	7.2	1.11	OK
		9	47.90	44.3	0.92	OK
		10	47.90	44.5	0.93	OK
		7	480.00	436.5	0.91	OK
		8	480.00	437.6	0.91	OK
	NIR	5				
	NIR	19				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.16**	1.16	1.16	1.16	0%
N60/60°	2	**1.68**	1.68	1.68	1.68	0%
S-Cs/0°	4	**0.99**	0.99	0.99	0.99	0%
S-Co/0°	8	**1.02**	1.02	1.13	0.91	11%
All	**16**	**1.05**	**1.11**	**1.68**	**0.91**	**22%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

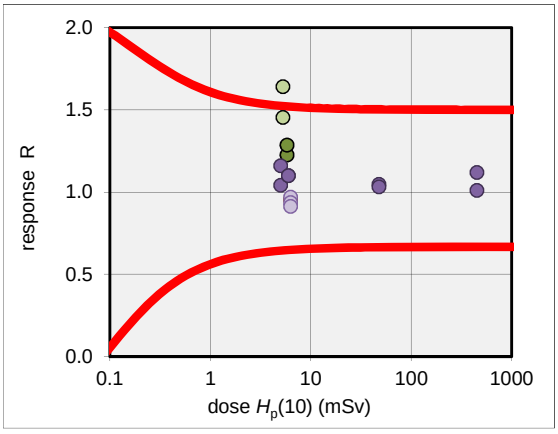
trumpet curve parameter: 1.5 / 0.085 mSv

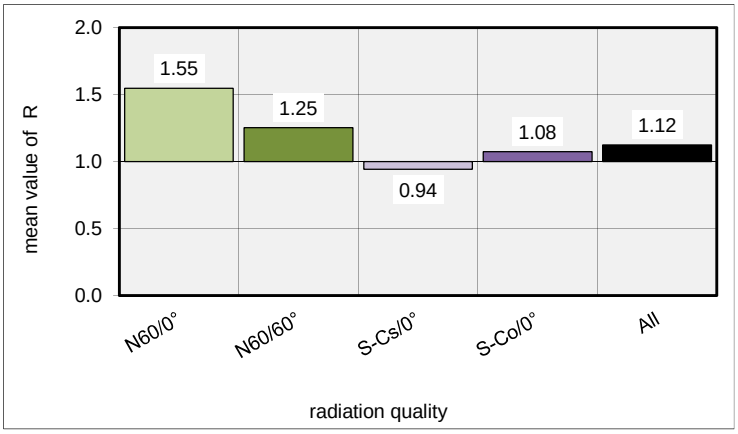
Reporting number 12: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	7.7	1.45	OK
		16	5.30	8.7	1.64	outlier
	N60/60°	17	5.80	7.1	1.22	OK
		18	5.80	7.5	1.28	OK
gamma	S-Cs/0°	1	6.30	6.0	0.95	OK
		2	6.30	6.1	0.97	OK
		3	6.30	5.9	0.94	OK
		4	6.30	5.8	0.91	OK
	S-Co/0°	11	5.00	5.2	1.04	OK
		12	5.00	5.8	1.16	OK
		13	6.00	6.6	1.10	OK
		14	6.00	6.6	1.10	OK
		9	47.90	50.1	1.05	OK
		10	47.90	49.4	1.03	OK
		7	450.00	503.2	1.12	OK
		8	450.00	454.2	1.01	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.55**	1.55	1.64	1.45	9%
N60/60°	2	**1.25**	1.25	1.28	1.22	3%
S-Cs/0°	4	**0.94**	0.94	0.97	0.91	3%
S-Co/0°	8	**1.07**	1.08	1.16	1.01	5%
All	**16**	**1.07**	**1.12**	**1.64**	**0.91**	**18%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

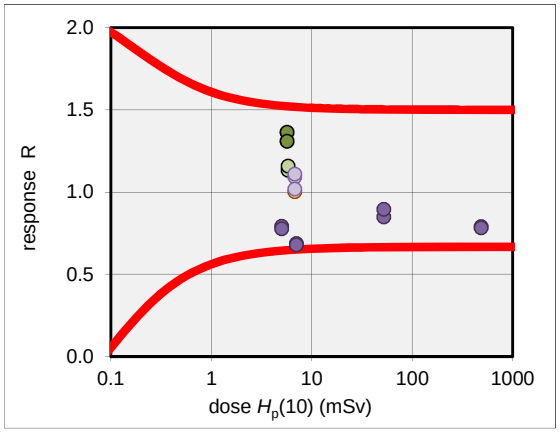
trumpet curve parameter: 1.5 / 0.085 mSv

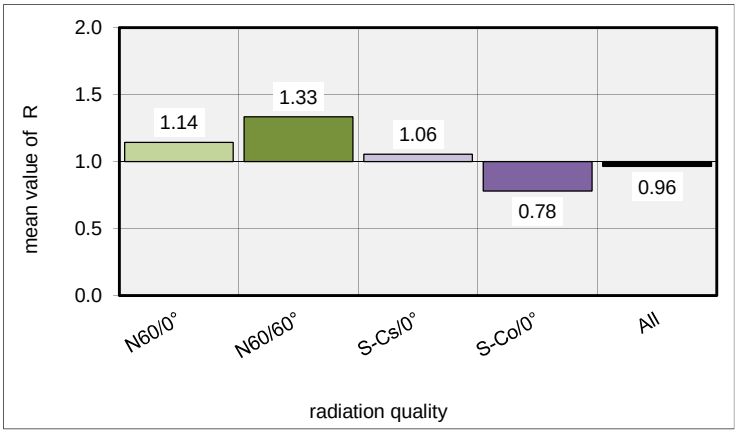
Reporting number 13: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	6.6	1.13	OK
		16	5.80	6.7	1.16	OK
	N60/60°	17	5.70	7.8	1.36	OK
		18	5.70	7.5	1.31	OK
gamma	S-Cs/0°	1	6.80	6.8	1.00	OK
		2	6.80	7.4	1.09	OK
		3	6.80	6.9	1.02	OK
		4	6.80	7.5	1.11	OK
	S-Co/0°	11	5.00	4.0	0.79	OK
		12	5.00	3.9	0.78	OK
		13	7.01	4.8	0.69	OK
		14	7.01	4.8	0.68	OK
		9	52.00	44.2	0.85	OK
		10	52.00	46.5	0.89	OK
		7	487.00	385.0	0.79	OK
		8	487.00	381.0	0.78	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.14**	1.14	1.16	1.13	1%
N60/60°	2	**1.33**	1.33	1.36	1.31	3%
S-Cs/0°	4	**1.05**	1.06	1.11	1.00	5%
S-Co/0°	8	**0.79**	0.78	0.89	0.68	9%
All	**16**	**0.95**	**0.96**	**1.36**	**0.68**	**22%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

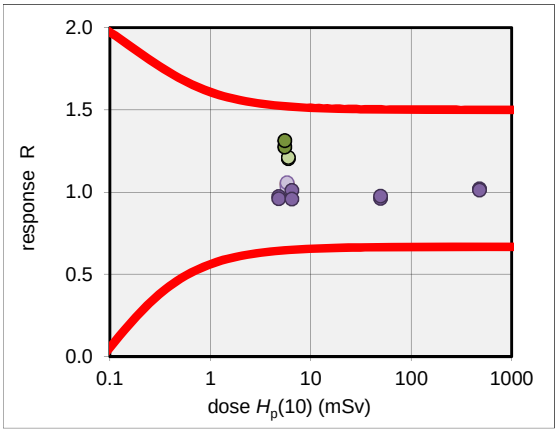
trumpet curve parameter: 1.5 / 0.085 mSv

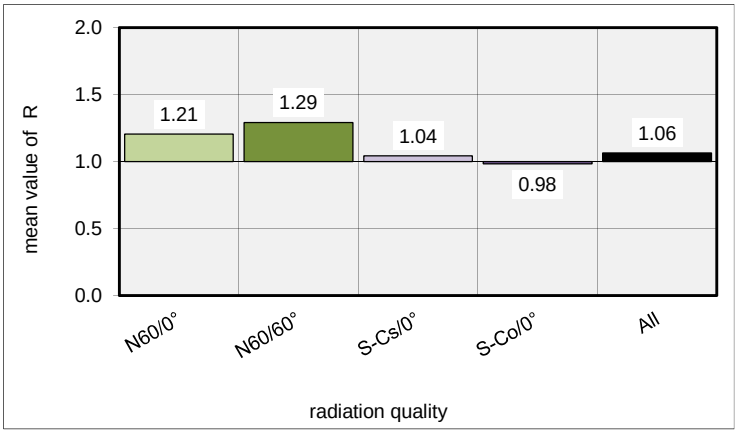
Reporting number 14: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	11	6.00	7.2	1.20	OK
		12	6.00	7.3	1.21	OK
	N60/60°	13	5.50	7.0	1.27	OK
		14	5.50	7.2	1.31	OK
gamma	S-Cs/0°	16	5.80	6.1	1.05	OK
		17	5.80	6.0	1.04	OK
		18	5.80	5.9	1.02	OK
		19	5.80	6.1	1.06	OK
	S-Co/0°	3	4.79	4.7	0.97	OK
		4	4.79	4.6	0.96	OK
		5	6.49	6.6	1.01	OK
		8	6.49	6.2	0.96	OK
		9	49.70	47.8	0.96	OK
		10	49.70	48.5	0.98	OK
		6	480.00	489.2	1.02	OK
		7	480.00	485.6	1.01	OK
	NIR	15				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.21**	1.21	1.21	1.20	0%
N60/60°	2	**1.29**	1.29	1.31	1.27	2%
S-Cs/0°	4	**1.04**	1.04	1.06	1.02	1%
S-Co/0°	8	**0.97**	0.98	1.02	0.96	3%
All	**16**	**1.02**	**1.06**	**1.31**	**0.96**	**11%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

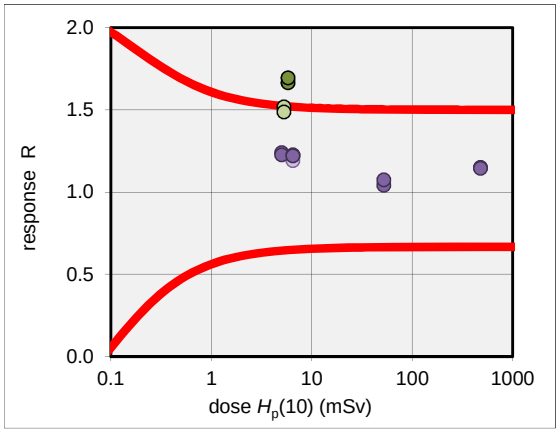
trumpet curve parameter: 1.5 / 0.085 mSv

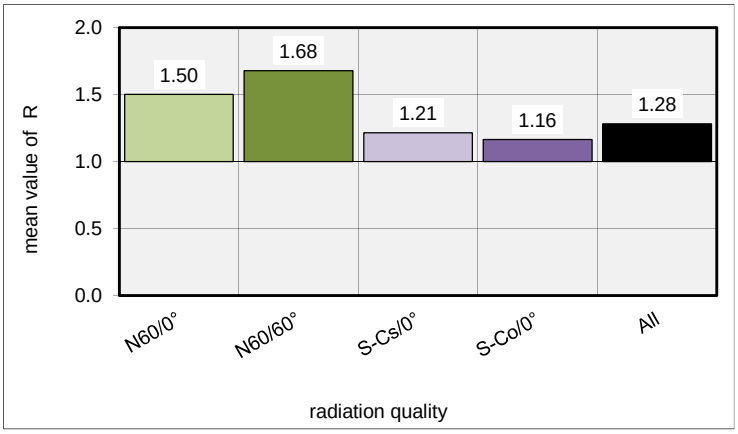
Reporting number 15: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	8.0	1.52	OK
		16	5.30	7.9	1.49	OK
	N60/60°	17	5.80	9.6	1.66	outlier
		18	5.80	9.8	1.69	outlier
gamma	S-Cs/0°	1	6.50	8.0	1.22	OK
		2	6.50	8.0	1.22	OK
		3	6.50	7.7	1.19	OK
		4	6.50	7.9	1.22	OK
	S-Co/0°	11	5.00	6.2	1.24	OK
		12	5.00	6.1	1.23	OK
		13	6.49	8.0	1.23	OK
		14	6.49	7.9	1.22	OK
		9	52.00	54.1	1.04	OK
		10	52.00	55.9	1.07	OK
		7	480.00	552.2	1.15	OK
		8	480.00	548.8	1.14	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.50**	1.50	1.52	1.49	1%
N60/60°	2	**1.68**	1.68	1.69	1.66	1%
S-Cs/0°	4	**1.22**	1.21	1.22	1.19	1%
S-Co/0°	8	**1.18**	1.16	1.24	1.04	6%
All	**16**	**1.22**	**1.28**	**1.69**	**1.04**	**15%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

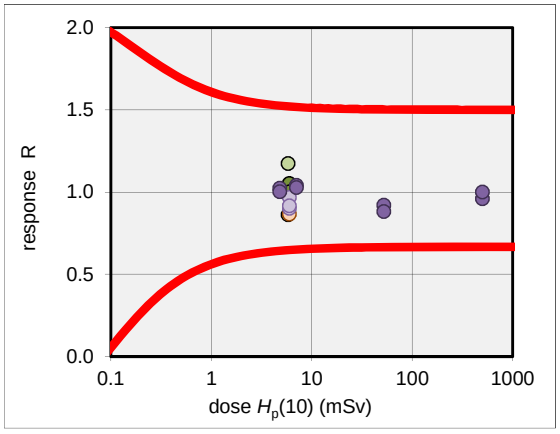
trumpet curve parameter: 1.5 / 0.085 mSv

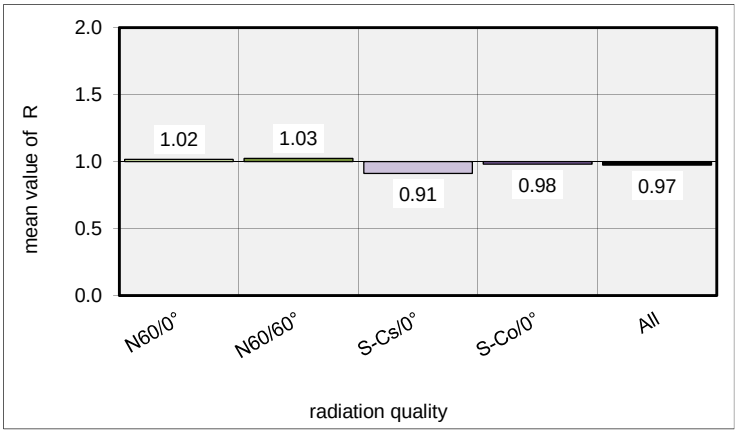
Reporting number 16: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.80	5.0	0.86	OK
		18	5.80	6.8	1.17	OK
	N60/60°	19	6.00	6.3	1.05	OK
		20	6.00	6.0	1.00	OK
gamma	S-Cs/0°	1	6.00	5.2	0.87	OK
		2	6.00	5.8	0.97	OK
		3	6.00	5.4	0.90	OK
		4	6.00	5.5	0.92	OK
	S-Co/0°	11	4.79	4.9	1.02	OK
		12	4.79	4.8	1.00	OK
		13	7.01	7.3	1.04	OK
		14	7.01	7.2	1.03	OK
		9	52.20	48.0	0.92	OK
		10	52.20	46.0	0.88	OK
		7	500.00	480.0	0.96	OK
		8	500.00	500.0	1.00	OK
	NIR	15				
	NIR	16				
	WIR	5				
	WIR	6				
	WIR	23				
	WIR	24				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.02**	1.02	1.17	0.86	22%
N60/60°	2	**1.03**	1.03	1.05	1.00	3%
S-Cs/0°	4	**0.91**	0.91	0.97	0.87	5%
S-Co/0°	8	**1.00**	0.98	1.04	0.88	6%
All	**16**	**0.98**	**0.97**	**1.17**	**0.86**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

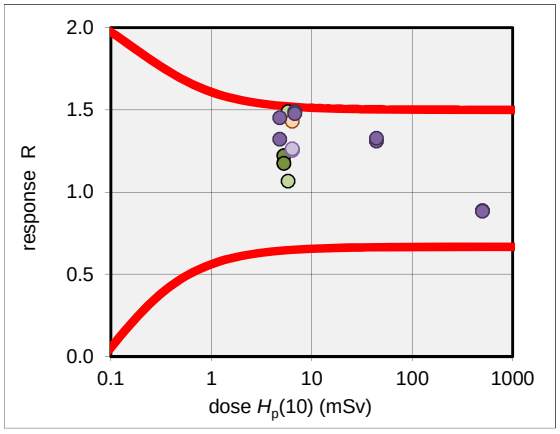
trumpet curve parameter: 1.5 / 0.085 mSv

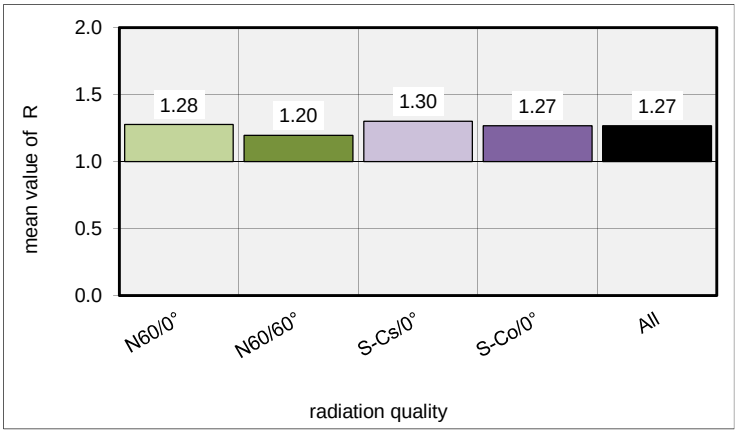
Reporting number 17: (Film) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.80	8.6	1.49	OK
		18	5.80	6.2	1.07	OK
	N60/60°	19	5.30	6.5	1.22	OK
		20	5.30	6.2	1.17	OK
gamma	S-Cs/0°	1	6.40	9.2	1.43	OK
		2	6.40	8.1	1.26	OK
		3	6.40	8.0	1.25	OK
		4	6.40	8.1	1.26	OK
	S-Co/0°	11	4.79	7.0	1.45	OK
		12	4.79	6.3	1.32	OK
		13	6.80	10.1	1.49	OK
		14	6.80	10.1	1.48	OK
		9	44.10	57.8	1.31	OK
		10	44.10	58.5	1.33	OK
		7	500.00	443.7	0.89	OK
		8	500.00	441.4	0.88	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.28**	1.28	1.49	1.07	23%
N60/60°	2	**1.20**	1.20	1.22	1.17	3%
S-Cs/0°	4	**1.26**	1.30	1.43	1.25	7%
S-Co/0°	8	**1.32**	1.27	1.49	0.88	19%
All	**16**	**1.29**	**1.27**	**1.49**	**0.88**	**15%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

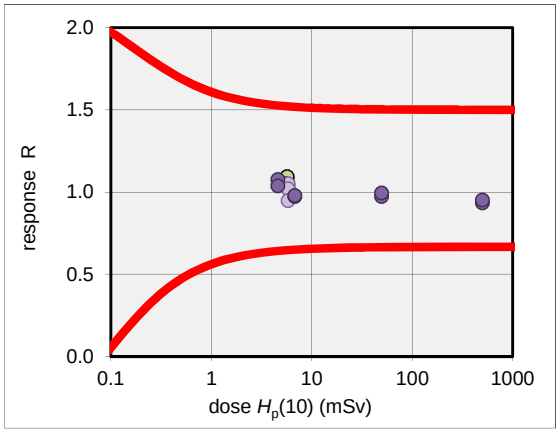
trumpet curve parameter: 1.5 / 0.085 mSv

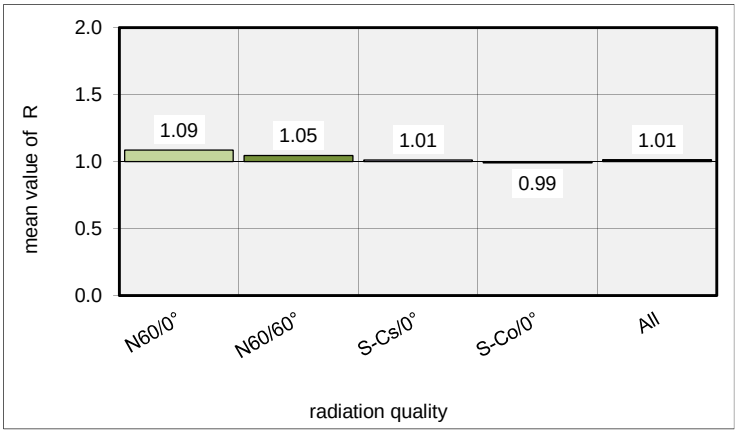
Reporting number 18: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	13	5.70	6.2	1.08	OK
		14	5.70	6.2	1.09	OK
	N60/60°	16	5.50	5.7	1.04	OK
		17	5.50	5.8	1.05	OK
gamma	S-Cs/0°	5	5.80	6.0	1.04	OK
		10	5.80	6.1	1.05	OK
		15	5.80	5.9	1.02	OK
		19	5.80	5.5	0.95	OK
	S-Co/0°	8	4.61	5.0	1.08	OK
		9	4.61	4.8	1.04	OK
		11	6.80	6.6	0.97	OK
		12	6.80	6.7	0.98	OK
		6	49.70	48.3	0.97	OK
		7	49.70	49.4	0.99	OK
		3	500.00	466.8	0.93	OK
		4	500.00	475.4	0.95	OK
	NIR	18				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.09**	1.09	1.09	1.08	1%
N60/60°	2	**1.05**	1.05	1.05	1.04	0%
S-Cs/0°	4	**1.03**	1.01	1.05	0.95	4%
S-Co/0°	8	**0.98**	0.99	1.08	0.93	5%
All	**16**	**1.03**	**1.01**	**1.09**	**0.93**	**5%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

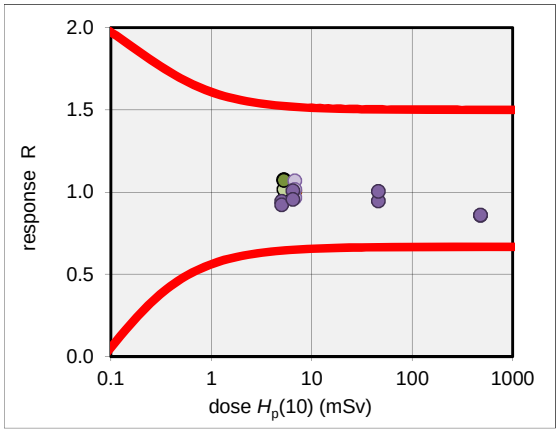
trumpet curve parameter: 1.5 / 0.085 mSv

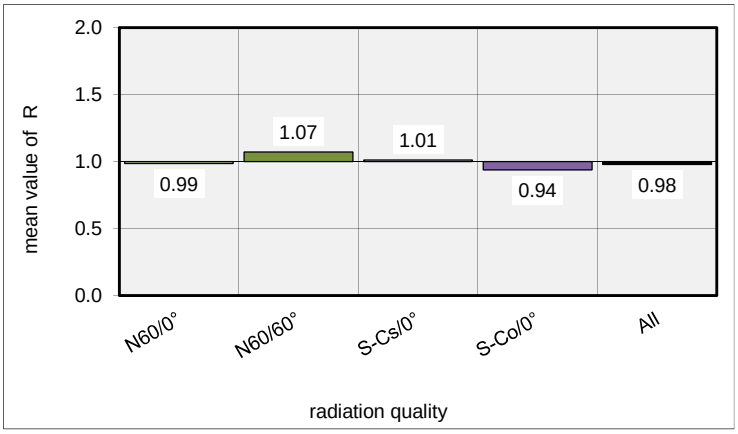
Reporting number 19: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	5.1	0.96	OK
		16	5.30	5.4	1.02	OK
	N60/60°	17	5.30	5.7	1.07	OK
		18	5.30	5.7	1.07	OK
gamma	S-Cs/0°	1	6.80	6.8	1.00	OK
		2	6.80	6.6	0.96	OK
		3	6.80	7.3	1.07	OK
		4	6.80	6.9	1.02	OK
	S-Co/0°	11	5.00	4.7	0.94	OK
		12	5.00	4.6	0.92	OK
		13	6.49	6.5	1.01	OK
		14	6.49	6.2	0.96	OK
		9	46.00	43.5	0.95	OK
		10	46.00	46.2	1.00	OK
		7	480.00	412.1	0.86	OK
		8	480.00	413.2	0.86	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.99**	0.99	1.02	0.96	4%
N60/60°	2	**1.07**	1.07	1.07	1.07	0%
S-Cs/0°	4	**1.01**	1.01	1.07	0.96	4%
S-Co/0°	8	**0.94**	0.94	1.01	0.86	6%
All	**16**	**0.98**	**0.98**	**1.07**	**0.86**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

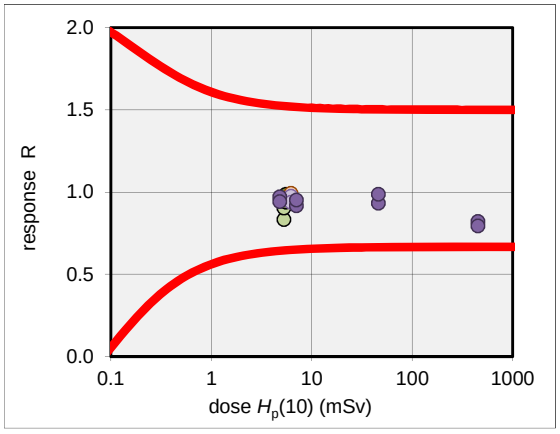
trumpet curve parameter: 1.5 / 0.085 mSv

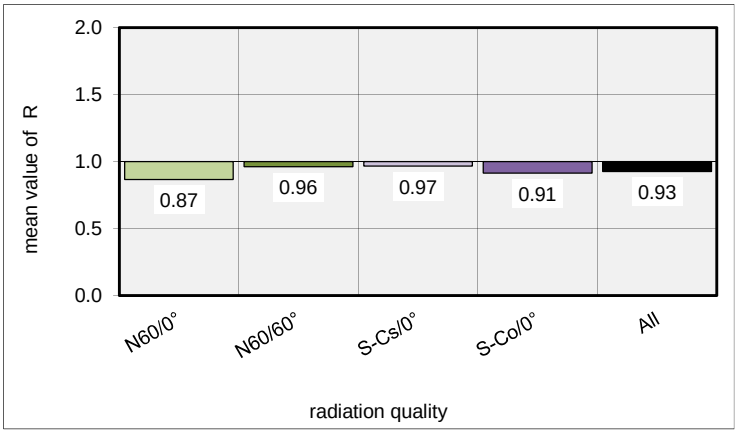
Reporting number 20: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	4.4	0.83	OK
		16	5.30	4.8	0.90	OK
	N60/60°	17	5.50	5.4	0.98	OK
		18	5.50	5.2	0.94	OK
gamma	S-Cs/0°	1	6.20	6.2	0.99	OK
		2	6.20	6.0	0.96	OK
		3	6.20	6.0	0.97	OK
		4	6.20	5.8	0.94	OK
	S-Co/0°	11	4.79	4.7	0.97	OK
		12	4.79	4.5	0.94	OK
		13	7.01	6.4	0.92	OK
		14	7.01	6.7	0.95	OK
		9	46.00	42.9	0.93	OK
		10	46.00	45.4	0.99	OK
		7	450.00	369.0	0.82	OK
		8	450.00	357.0	0.79	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.87**	0.87	0.90	0.83	6%
N60/60°	2	**0.96**	0.96	0.98	0.94	3%
S-Cs/0°	4	**0.97**	0.97	0.99	0.94	2%
S-Co/0°	8	**0.94**	0.91	0.99	0.79	8%
All	**16**	**0.94**	**0.93**	**0.99**	**0.79**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

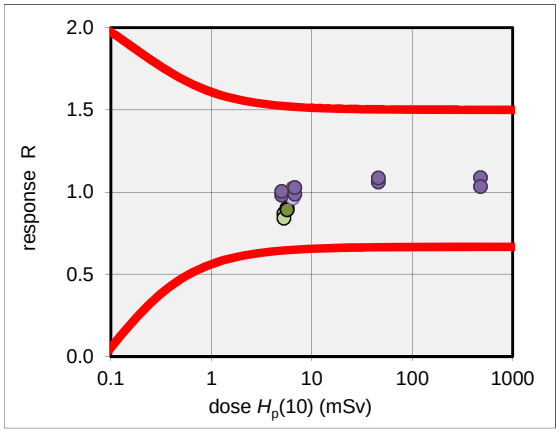
trumpet curve parameter: 1.5 / 0.085 mSv

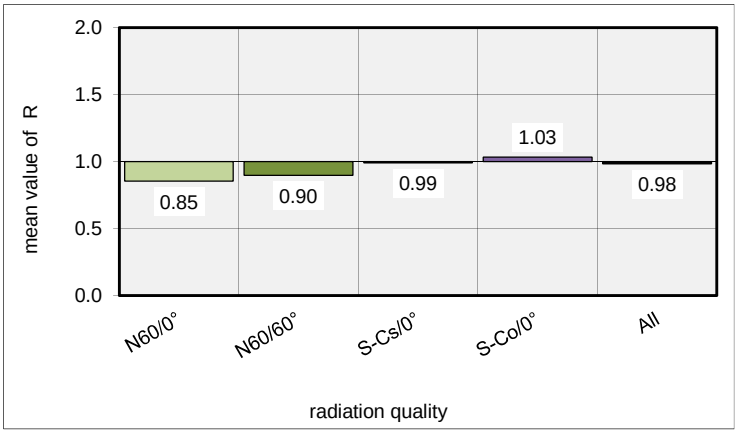
Reporting number 21: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.30	4.6	0.87	OK
		17	5.30	4.5	0.84	OK
	N60/60°	18	5.70	5.1	0.90	OK
		19	5.70	5.1	0.89	OK
gamma	S-Cs/0°	6	6.50	6.7	1.02	OK
		7	6.50	6.4	0.98	OK
		8	6.50	6.5	1.00	OK
		9	6.50	6.3	0.96	OK
	S-Co/0°	12	5.00	4.9	0.98	OK
		13	5.00	5.0	1.00	OK
		14	6.80	6.7	0.99	OK
		15	6.80	7.0	1.03	OK
		10	46.00	48.8	1.06	OK
		11	46.00	49.9	1.08	OK
		3	480.00	522.0	1.09	OK
		4	480.00	496.4	1.03	OK
	NIR	5				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.85**	0.85	0.87	0.84	2%
N60/60°	2	**0.90**	0.90	0.90	0.89	1%
S-Cs/0°	4	**0.99**	0.99	1.02	0.96	3%
S-Co/0°	8	**1.03**	1.03	1.09	0.98	4%
All	**16**	**0.99**	**0.98**	**1.09**	**0.84**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

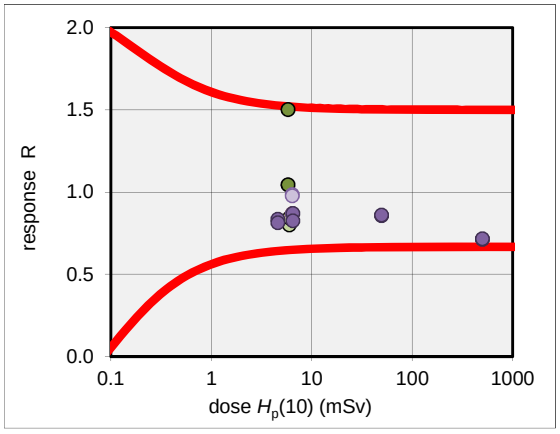
trumpet curve parameter: 1.5 / 0.085 mSv

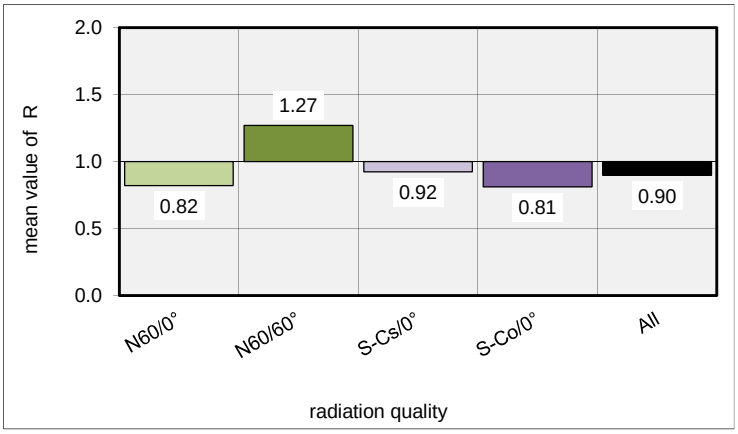
Reporting number 22: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	6.00	4.8	0.80	OK
		16	6.00	5.1	0.84	OK
	N60/60°	17	5.80	8.7	1.50	OK
		18	5.80	6.1	1.04	OK
gamma	S-Cs/0°	7	6.40	5.6	0.87	OK
		8	6.40	6.3	0.98	OK
		9	6.40	6.3	0.98	OK
		10	6.40	5.6	0.87	OK
	S-Co/0°	11	4.61	3.9	0.84	OK
		12	4.61	3.8	0.81	OK
		13	6.49	5.7	0.87	OK
		14	6.49	5.4	0.82	OK
		3	49.70	42.6	0.86	OK
		4	49.70	42.8	0.86	OK
		5	500.00	355.7	0.71	OK
		6	500.00	357.9	0.72	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.82**	0.82	0.84	0.80	4%
N60/60°	2	**1.27**	1.27	1.50	1.04	25%
S-Cs/0°	4	**0.92**	0.92	0.98	0.87	7%
S-Co/0°	8	**0.83**	0.81	0.87	0.71	8%
All	**16**	**0.86**	**0.90**	**1.50**	**0.71**	**20%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

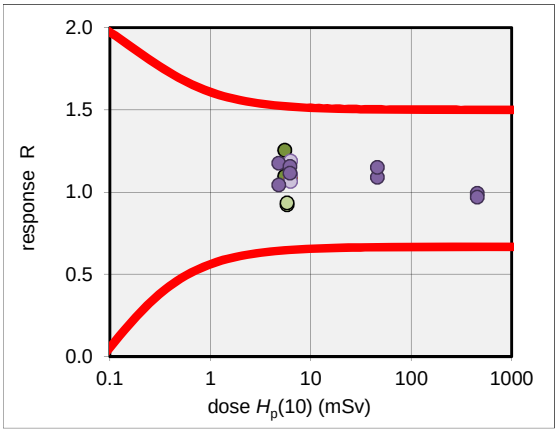
trumpet curve parameter: 1.5 / 0.085 mSv

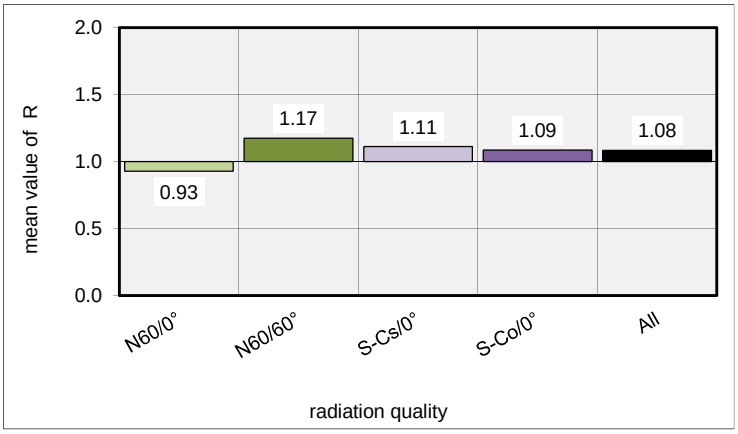
Reporting number 23: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	5.4	0.92	OK
		16	5.80	5.4	0.93	OK
	N60/60°	17	5.50	6.0	1.09	OK
		18	5.50	6.9	1.25	OK
gamma	S-Cs/0°	1	6.30	6.9	1.09	OK
		2	6.30	7.0	1.10	OK
		3	6.30	7.5	1.19	OK
		4	6.30	6.7	1.06	OK
	S-Co/0°	11	4.79	5.6	1.18	OK
		12	4.79	5.0	1.04	OK
		13	6.21	7.2	1.16	OK
		14	6.21	6.9	1.11	OK
		9	46.00	50.1	1.09	OK
		10	46.00	52.9	1.15	OK
		7	456.00	452.8	0.99	OK
		8	456.00	442.3	0.97	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.93**	0.93	0.93	0.92	1%
N60/60°	2	**1.17**	1.17	1.25	1.09	10%
S-Cs/0°	4	**1.10**	1.11	1.19	1.06	5%
S-Co/0°	8	**1.10**	1.09	1.18	0.97	7%
All	**16**	**1.09**	**1.08**	**1.25**	**0.92**	**9%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

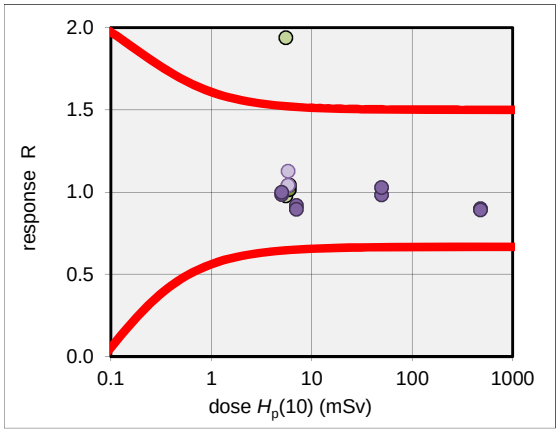
trumpet curve parameter: 1.5 / 0.085 mSv

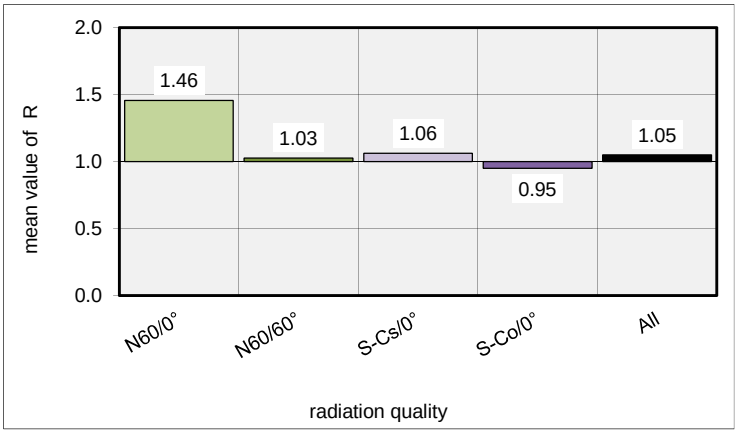
Reporting number 24: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	5.4	0.98	OK
		16	5.50	10.7	1.94	outlier
	N60/60°	17	6.00	6.1	1.01	OK
		18	6.00	6.3	1.04	OK
gamma	S-Cs/0°	1	5.80	6.0	1.04	OK
		2	5.80	6.0	1.04	OK
		3	5.80	6.0	1.04	OK
		4	5.80	6.5	1.13	OK
	S-Co/0°	11	5.00	4.9	0.98	OK
		12	5.00	5.0	1.00	OK
		13	7.01	6.4	0.92	OK
		14	7.01	6.3	0.89	OK
		9	49.70	48.9	0.98	OK
		10	49.70	51.1	1.03	OK
		7	480.00	431.0	0.90	OK
		8	480.00	428.0	0.89	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.46**	1.46	1.94	0.98	47%
N60/60°	2	**1.03**	1.03	1.04	1.01	2%
S-Cs/0°	4	**1.04**	1.06	1.13	1.04	4%
S-Co/0°	8	**0.95**	0.95	1.03	0.89	6%
All	**16**	**1.01**	**1.05**	**1.94**	**0.89**	**23%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

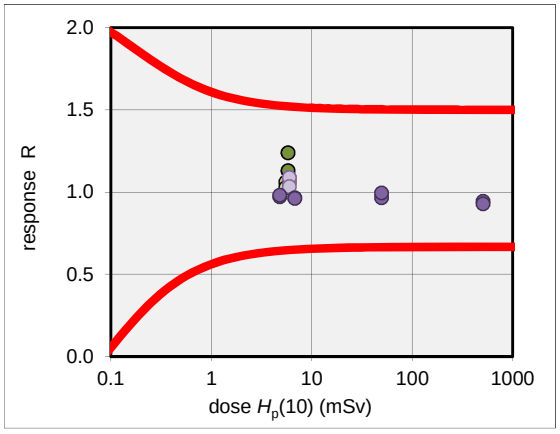
trumpet curve parameter: 1.5 / 0.085 mSv

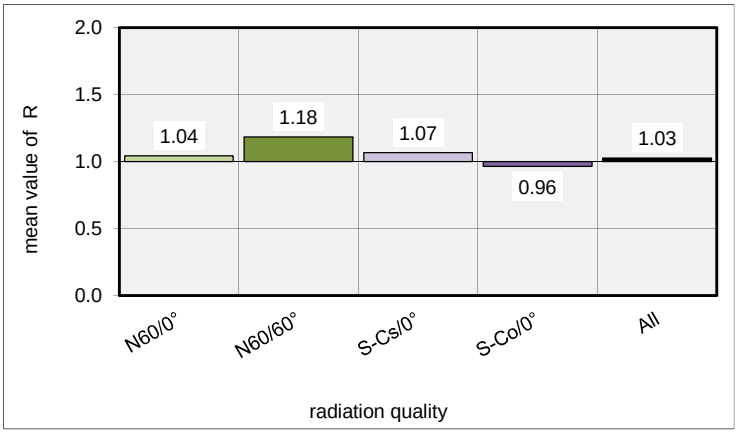
Reporting number 25: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.50	5.8	1.06	OK
		21	5.50	5.7	1.03	OK
	N60/60°	19	5.80	7.2	1.24	OK
		20	5.80	6.6	1.13	OK
gamma	S-Cs/0°	1	6.00	6.4	1.06	OK
		2	6.00	6.5	1.09	OK
		3	6.00	6.5	1.09	OK
		4	6.00	6.2	1.03	OK
	S-Co/0°	9	4.79	4.7	0.97	OK
		10	4.79	4.7	0.98	OK
		14	6.80	6.6	0.96	OK
		16	6.80	6.5	0.96	OK
		11	49.70	48.0	0.97	OK
		12	49.70	49.4	0.99	OK
		7	507.00	478.0	0.94	OK
		8	507.00	471.0	0.93	OK
	NIR	13				
	NIR	15				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	18				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.04**	1.04	1.06	1.03	2%
N60/60°	2	**1.18**	1.18	1.24	1.13	6%
S-Cs/0°	4	**1.07**	1.07	1.09	1.03	2%
S-Co/0°	8	**0.97**	0.96	0.99	0.93	2%
All	**16**	**1.01**	**1.03**	**1.24**	**0.93**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

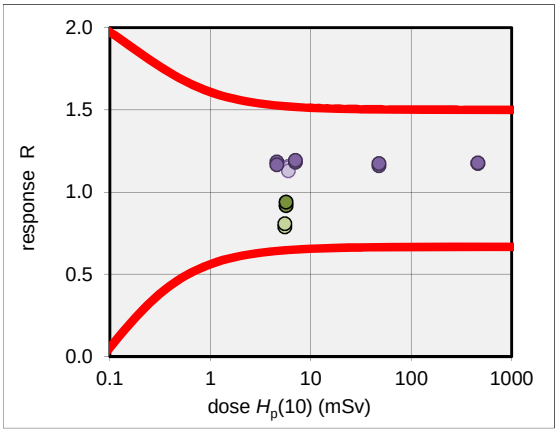
trumpet curve parameter: 1.5 / 0.085 mSv

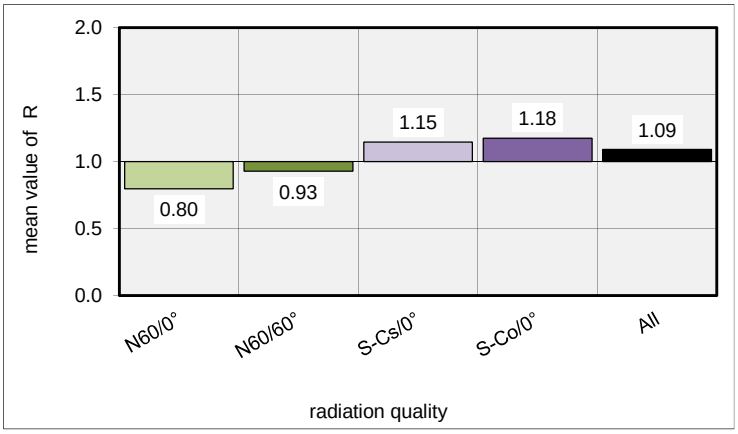
Reporting number 26: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	4.3	0.79	OK
		16	5.50	4.4	0.81	OK
	N60/60°	17	5.70	5.2	0.92	OK
		18	5.70	5.3	0.94	OK
gamma	S-Cs/0°	5	6.00	6.9	1.15	OK
		6	6.00	6.9	1.16	OK
		7	6.00	6.9	1.15	OK
		8	6.00	6.8	1.13	OK
	S-Co/0°	11	4.61	5.5	1.18	OK
		12	4.61	5.4	1.16	OK
		13	7.01	8.3	1.18	OK
		14	7.01	8.4	1.19	OK
		9	47.90	55.6	1.16	OK
		10	47.90	56.2	1.17	OK
		3	460.00	539.7	1.17	OK
		4	460.00	541.9	1.18	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.80**	0.80	0.81	0.79	2%
N60/60°	2	**0.93**	0.93	0.94	0.92	2%
S-Cs/0°	4	**1.15**	1.15	1.16	1.13	1%
S-Co/0°	8	**1.18**	1.18	1.19	1.16	1%
All	**16**	**1.16**	**1.09**	**1.19**	**0.79**	**13%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

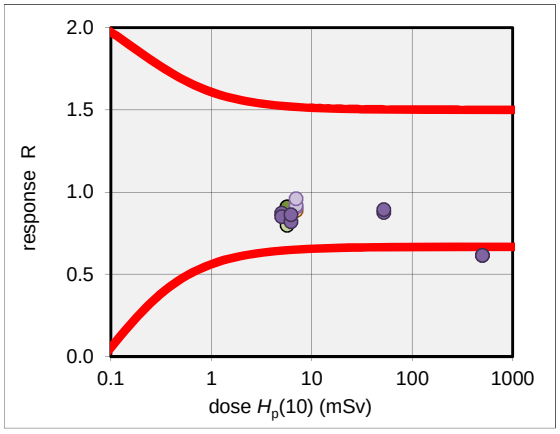
trumpet curve parameter: 1.5 / 0.085 mSv

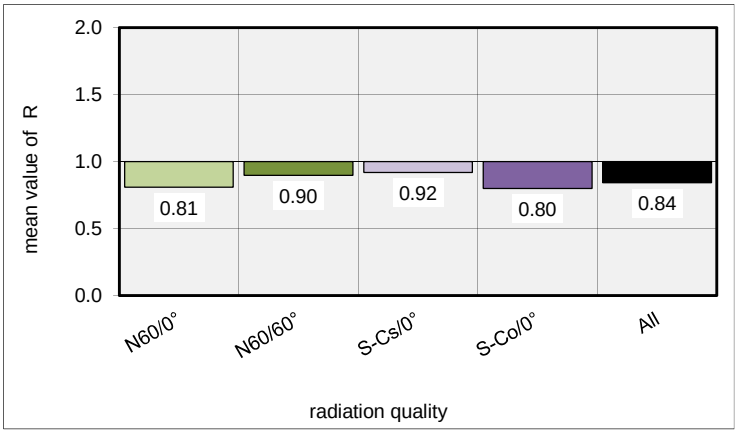
Reporting number 27: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.70	4.7	0.82	OK
		18	5.70	4.6	0.80	OK
	N60/60°	19	5.70	5.1	0.89	OK
		20	5.70	5.2	0.91	OK
gamma	S-Cs/0°	1	7.00	6.2	0.89	OK
		2	7.00	6.3	0.91	OK
		3	7.00	6.4	0.92	OK
		4	7.00	6.7	0.96	OK
	S-Co/0°	9	5.00	4.4	0.87	OK
		10	5.00	4.3	0.85	OK
		13	6.21	5.1	0.82	OK
		14	6.21	5.4	0.86	OK
		11	52.20	45.7	0.88	OK
		12	52.20	46.6	0.89	OK
		7	500.00	307.3	0.61	outlier
		8	500.00	307.6	0.62	outlier
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.81**	0.81	0.82	0.80	2%
N60/60°	2	**0.90**	0.90	0.91	0.89	2%
S-Cs/0°	4	**0.91**	0.92	0.96	0.89	3%
S-Co/0°	8	**0.86**	0.80	0.89	0.61	15%
All	**16**	**0.87**	**0.84**	**0.96**	**0.61**	**12%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

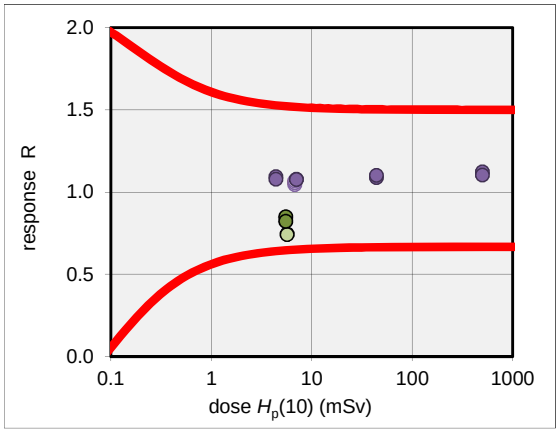
trumpet curve parameter: 1.5 / 0.085 mSv

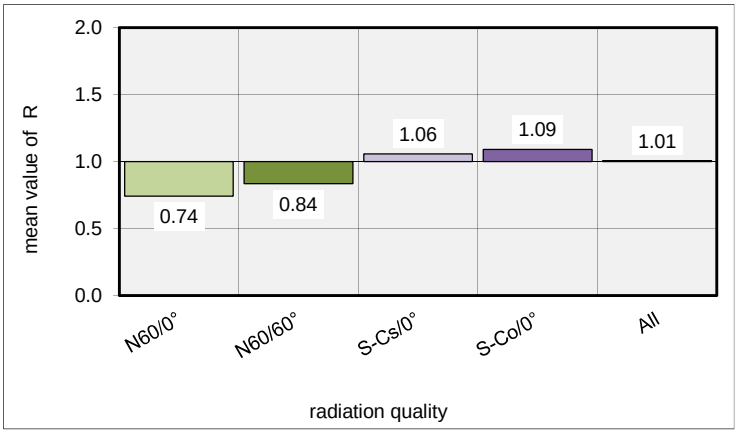
Reporting number 28: (OSL) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.70	4.3	0.75	OK
		16	5.70	4.2	0.74	OK
	N60/60°	17	5.50	4.7	0.85	OK
		18	5.50	4.5	0.82	OK
gamma	S-Cs/0°	1	6.80	7.2	1.06	OK
		2	6.80	7.1	1.04	OK
		3	6.80	7.2	1.06	OK
		4	6.80	7.3	1.07	OK
	S-Co/0°	11	4.41	4.8	1.09	OK
		12	4.41	4.8	1.08	OK
		13	7.01	7.6	1.08	OK
		14	7.01	7.5	1.08	OK
		9	44.10	47.9	1.09	OK
		10	44.10	48.5	1.10	OK
		7	500.00	561.7	1.12	OK
		8	500.00	551.7	1.10	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.74**	0.74	0.75	0.74	1%
N60/60°	2	**0.84**	0.84	0.85	0.82	2%
S-Cs/0°	4	**1.06**	1.06	1.07	1.04	1%
S-Co/0°	8	**1.09**	1.09	1.12	1.08	2%
All	**16**	**1.07**	**1.01**	**1.12**	**0.74**	**13%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

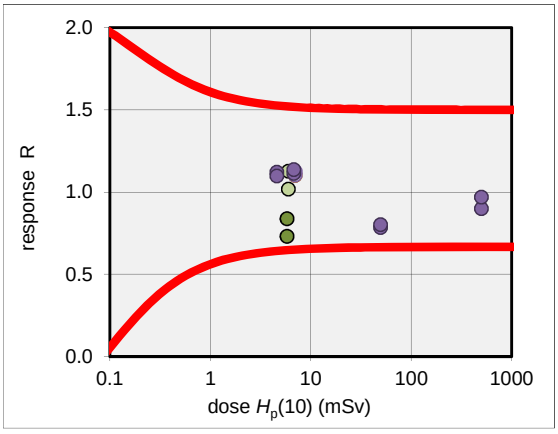
trumpet curve parameter: 1.5 / 0.085 mSv

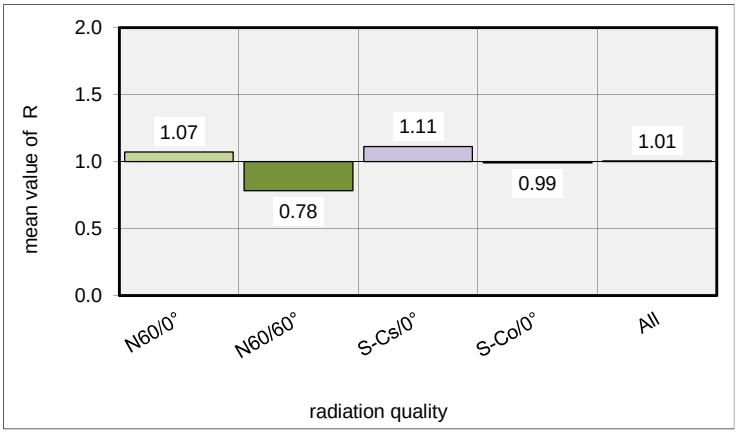
Reporting number 29: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	6.00	6.8	1.13	OK
		18	6.00	6.1	1.02	OK
	N60/60°	19	5.80	4.9	0.84	OK
		20	5.80	4.2	0.73	OK
gamma	S-Cs/0°	1	7.00	7.7	1.10	OK
		2	7.00	7.7	1.10	OK
		3	7.00	7.9	1.13	OK
		4	7.00	7.9	1.12	OK
	S-Co/0°	13	4.61	5.2	1.12	OK
		14	4.61	5.1	1.10	OK
		15	6.80	7.6	1.11	OK
		16	6.80	7.7	1.14	OK
		11	49.70	39.0	0.78	OK
		12	49.70	39.8	0.80	OK
		9	500.00	449.0	0.90	OK
		10	500.00	484.0	0.97	OK
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	7				
	WIR	8				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.07**	1.07	1.13	1.02	7%
N60/60°	2	**0.78**	0.78	0.84	0.73	10%
S-Cs/0°	4	**1.11**	1.11	1.13	1.10	1%
S-Co/0°	8	**1.03**	0.99	1.14	0.78	15%
All	**16**	**1.10**	**1.01**	**1.14**	**0.73**	**15%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

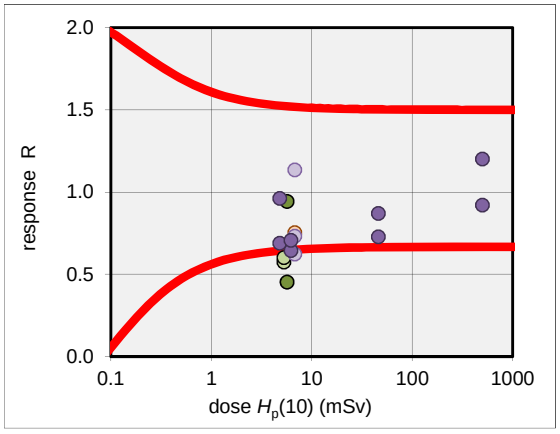
trumpet curve parameter: 1.5 / 0.085 mSv

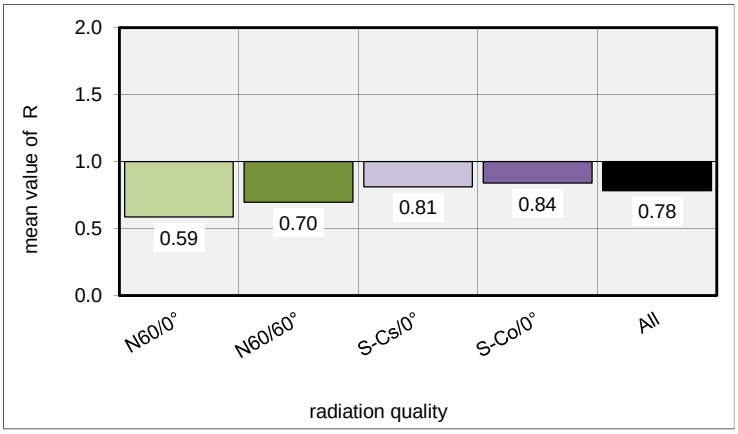
Reporting number 30: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	3.0	0.57	outlier
		16	5.30	3.2	0.60	outlier
	N60/60°	17	5.70	5.4	0.94	OK
		18	5.70	2.6	0.45	outlier
gamma	S-Cs/0°	1	6.80	5.1	0.75	OK
		2	6.80	7.7	1.14	OK
		3	6.80	5.0	0.73	OK
		4	6.80	4.2	0.62	outlier
	S-Co/0°	11	4.79	4.6	0.96	OK
		12	4.79	3.3	0.69	OK
		13	6.21	4.0	0.64	outlier
		14	6.21	4.4	0.71	OK
		9	46.00	33.5	0.73	OK
		10	46.00	40.0	0.87	OK
		7	500.00	459.8	0.92	OK
		8	500.00	600.1	1.20	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.59**	0.59	0.60	0.57	3%
N60/60°	2	**0.70**	0.70	0.94	0.45	50%
S-Cs/0°	4	**0.74**	0.81	1.14	0.62	28%
S-Co/0°	8	**0.80**	0.84	1.20	0.64	22%
All	**16**	**0.73**	**0.78**	**1.20**	**0.45**	**26%**

outliers: 5 of 16 Fraction of outliers: 31%





Results: IC2012

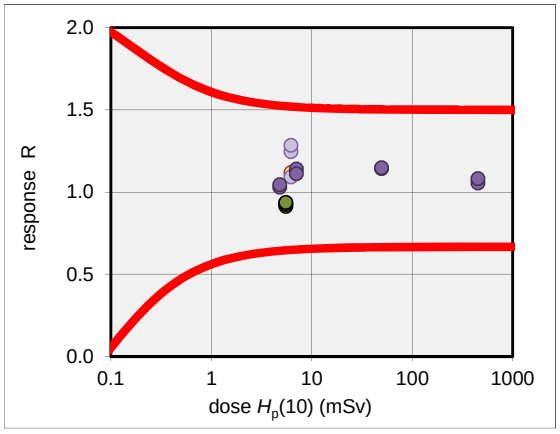
trumpet curve parameter: 1.5 / 0.085 mSv

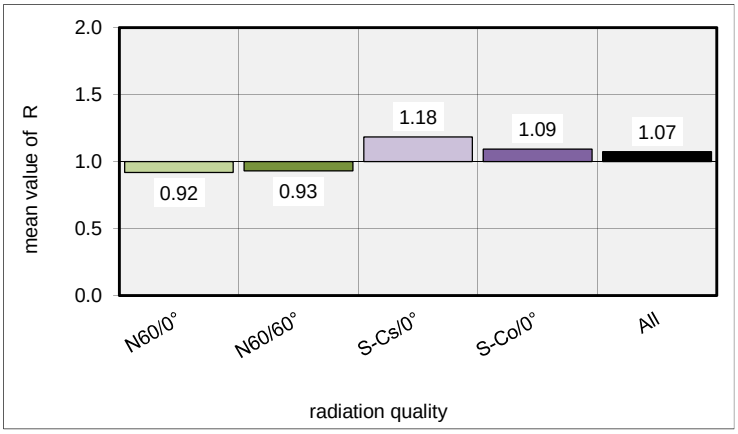
Reporting number 31: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	5.0	0.91	OK
		16	5.50	5.1	0.92	OK
	N60/60°	17	5.50	5.1	0.93	OK
		18	5.50	5.1	0.94	OK
gamma	S-Cs/0°	1	6.20	6.9	1.12	OK
		2	6.20	7.7	1.25	OK
		3	6.20	8.0	1.28	OK
		4	6.20	6.8	1.09	OK
	S-Co/0°	11	4.79	4.9	1.03	OK
		12	4.79	5.0	1.04	OK
		13	7.01	8.0	1.14	OK
		14	7.01	7.8	1.11	OK
		9	49.70	56.7	1.14	OK
		10	49.70	57.1	1.15	OK
		7	450.00	474.9	1.06	OK
		8	450.00	486.5	1.08	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.92**	0.92	0.92	0.91	1%
N60/60°	2	**0.93**	0.93	0.94	0.93	1%
S-Cs/0°	4	**1.18**	1.18	1.28	1.09	8%
S-Co/0°	8	**1.10**	1.09	1.15	1.03	4%
All	**16**	**1.09**	**1.07**	**1.28**	**0.91**	**10%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

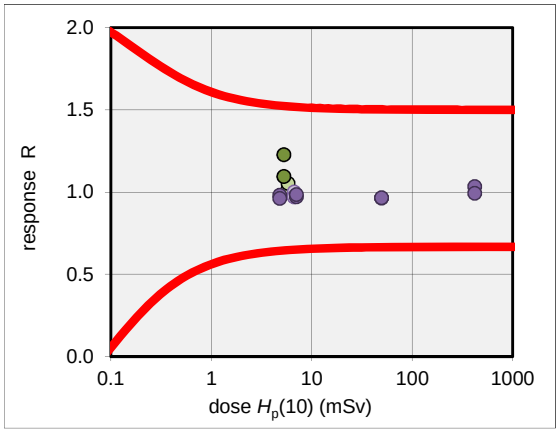
trumpet curve parameter: 1.5 / 0.085 mSv

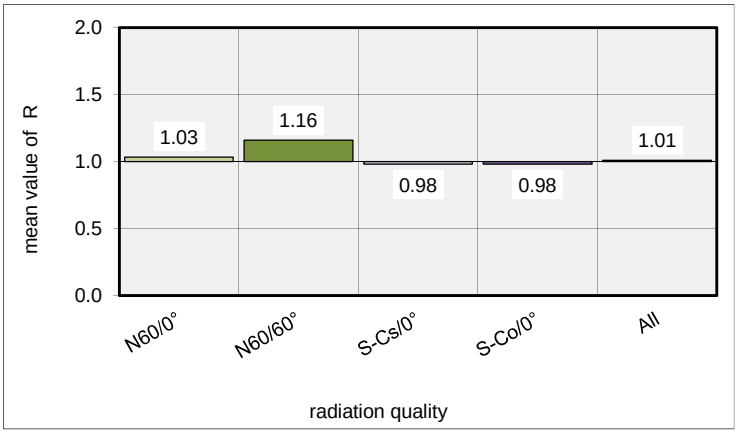
Reporting number 32: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	5.9	1.02	OK
		16	5.80	6.1	1.05	OK
	N60/60°	17	5.30	5.8	1.09	OK
		18	5.30	6.5	1.23	OK
gamma	S-Cs/0°	1	6.70	6.6	0.99	OK
		2	6.70	6.7	1.00	OK
		3	6.70	6.5	0.97	OK
		4	6.70	6.5	0.97	OK
	S-Co/0°	11	4.79	4.7	0.98	OK
		12	4.79	4.6	0.96	OK
		13	7.01	6.8	0.97	OK
		14	7.01	6.9	0.98	OK
		9	49.70	47.9	0.96	OK
		10	49.70	48.0	0.97	OK
		7	420.00	434.0	1.03	OK
		8	420.00	416.7	0.99	OK
	NIR	21				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	6				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.03**	1.03	1.05	1.02	2%
N60/60°	2	**1.16**	1.16	1.23	1.09	8%
S-Cs/0°	4	**0.98**	0.98	1.00	0.97	1%
S-Co/0°	8	**0.98**	0.98	1.03	0.96	2%
All	**16**	**0.98**	**1.01**	**1.23**	**0.96**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

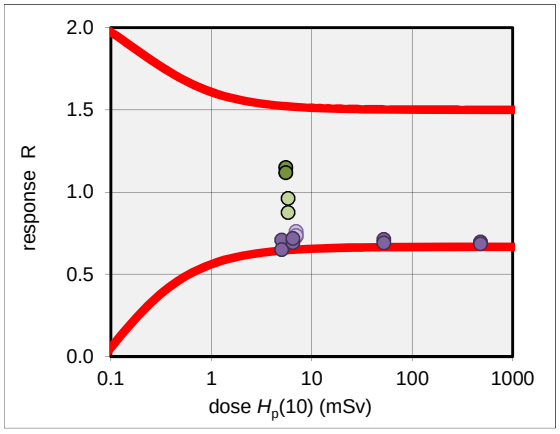
trumpet curve parameter: 1.5 / 0.085 mSv

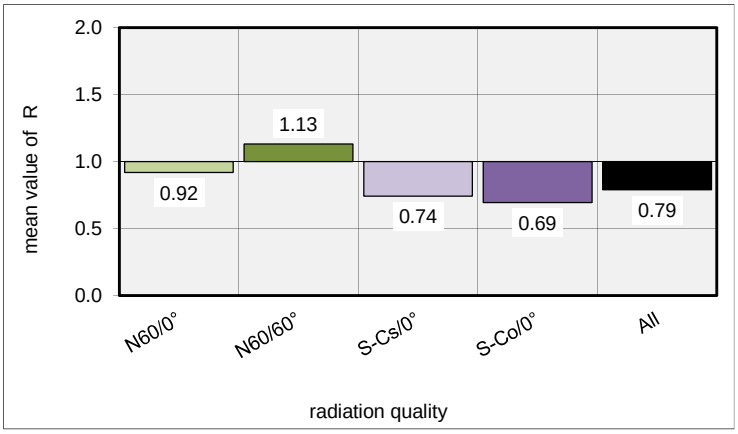
Reporting number 33: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.80	5.6	0.96	OK
		18	5.80	5.1	0.88	OK
	N60/60°	19	5.50	6.3	1.15	OK
		20	5.50	6.1	1.12	OK
gamma	S-Cs/0°	1	7.00	5.1	0.73	OK
		2	7.00	5.2	0.75	OK
		3	7.00	5.3	0.76	OK
		4	7.00	5.2	0.74	OK
	S-Co/0°	13	5.00	3.5	0.71	OK
		14	5.00	3.3	0.65	OK
		15	6.49	4.5	0.69	OK
		16	6.49	4.7	0.72	OK
		11	52.20	37.1	0.71	OK
		12	52.20	36.1	0.69	OK
		9	480.00	334.0	0.70	OK
		10	480.00	328.9	0.69	OK
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	7				
	WIR	8				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.92**	0.92	0.96	0.88	7%
N60/60°	2	**1.13**	1.13	1.15	1.12	2%
S-Cs/0°	4	**0.74**	0.74	0.76	0.73	2%
S-Co/0°	8	**0.69**	0.69	0.72	0.65	3%
All	**16**	**0.72**	**0.79**	**1.15**	**0.65**	**20%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

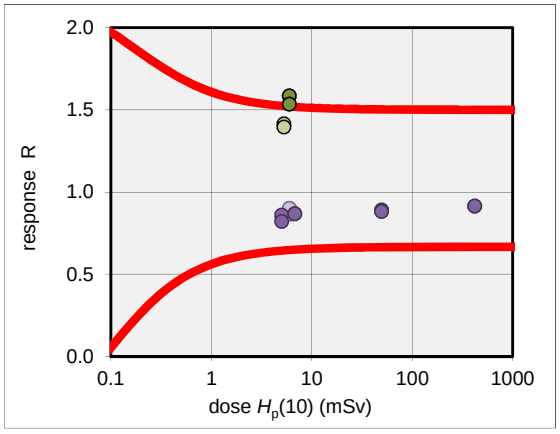
trumpet curve parameter: 1.5 / 0.085 mSv

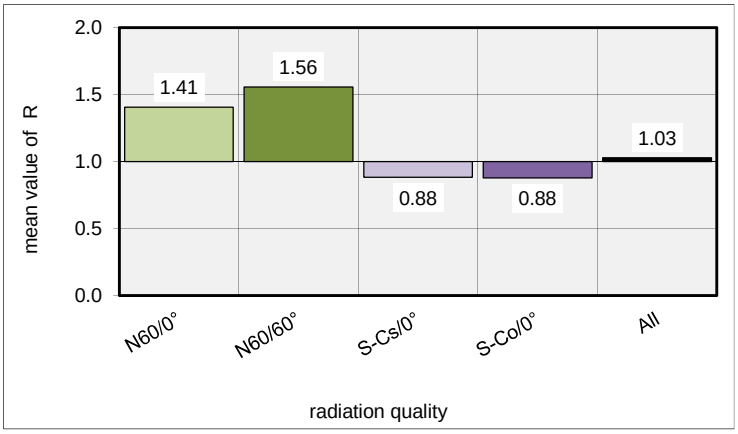
Reporting number 34: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	7.5	1.42	OK
		16	5.30	7.4	1.40	OK
	N60/60°	17	6.00	9.5	1.58	outlier
		18	6.00	9.2	1.53	outlier
gamma	S-Cs/0°	1	6.00	5.4	0.90	OK
		2	6.00	5.2	0.87	OK
		3	6.00	5.2	0.87	OK
		4	6.00	5.4	0.90	OK
	S-Co/0°	11	5.00	4.3	0.86	OK
		12	5.00	4.1	0.82	OK
		13	6.80	5.9	0.87	OK
		14	6.80	5.9	0.87	OK
		9	49.70	44.3	0.89	OK
		10	49.70	43.8	0.88	OK
		7	420.00	384.3	0.92	OK
		8	420.00	384.3	0.92	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.41**	1.41	1.42	1.40	1%
N60/60°	2	**1.56**	1.56	1.58	1.53	2%
S-Cs/0°	4	**0.88**	0.88	0.90	0.87	2%
S-Co/0°	8	**0.87**	0.88	0.92	0.82	4%
All	**16**	**0.90**	**1.03**	**1.58**	**0.82**	**27%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

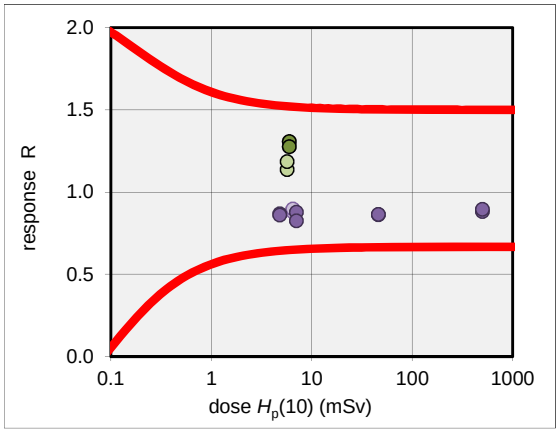
trumpet curve parameter: 1.5 / 0.085 mSv

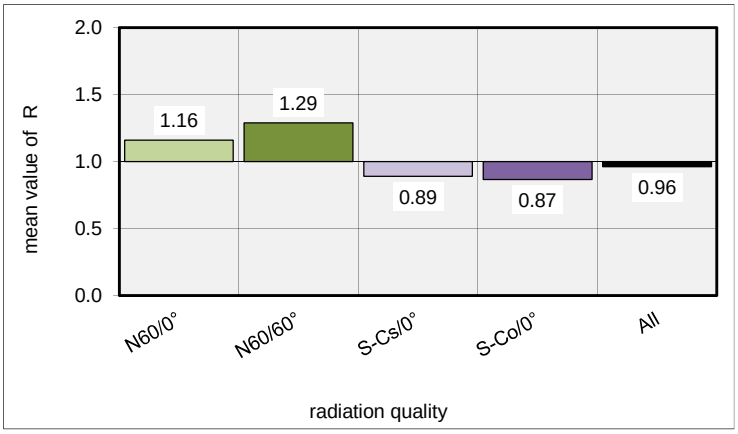
Reporting number 35: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.70	6.5	1.14	OK
		16	5.70	6.8	1.18	OK
	N60/60°	17	6.00	7.8	1.31	OK
		18	6.00	7.7	1.28	OK
gamma	S-Cs/0°	1	6.50	5.8	0.89	OK
		2	6.50	5.8	0.89	OK
		3	6.50	5.7	0.88	OK
		4	6.50	5.8	0.90	OK
	S-Co/0°	11	4.79	4.2	0.87	OK
		12	4.79	4.1	0.86	OK
		13	7.01	6.2	0.88	OK
		14	7.01	5.8	0.82	OK
		9	46.00	39.7	0.86	OK
		10	46.00	39.7	0.86	OK
		7	500.00	440.2	0.88	OK
		8	500.00	447.9	0.90	OK
	NIR	19				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.16**	1.16	1.18	1.14	3%
N60/60°	2	**1.29**	1.29	1.31	1.28	2%
S-Cs/0°	4	**0.89**	0.89	0.90	0.88	1%
S-Co/0°	8	**0.87**	0.87	0.90	0.82	2%
All	**16**	**0.88**	**0.96**	**1.31**	**0.82**	**17%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

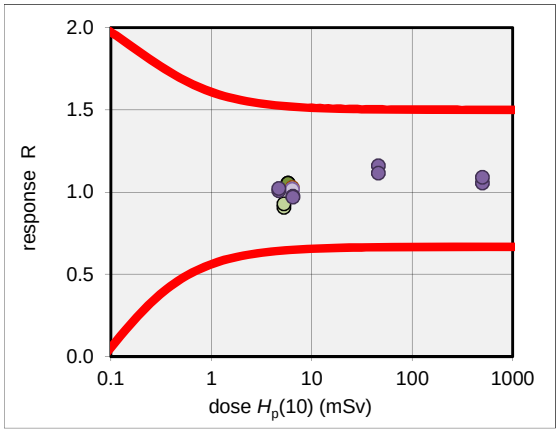
trumpet curve parameter: 1.5 / 0.085 mSv

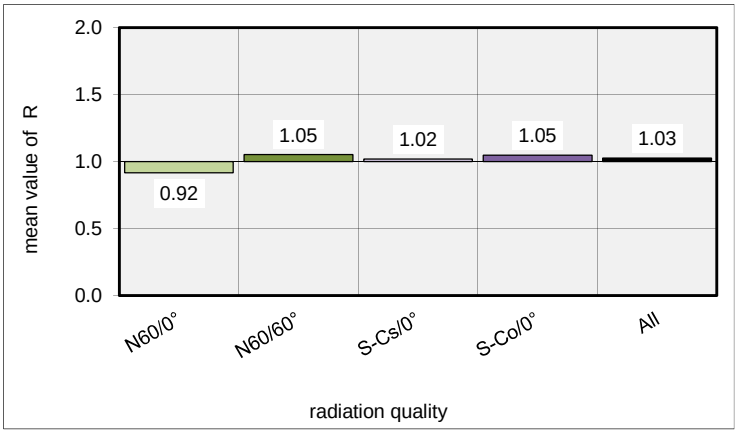
Reporting number 36: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	4.8	0.91	OK
		16	5.30	4.9	0.93	OK
	N60/60°	17	5.80	6.1	1.05	OK
		18	5.80	6.1	1.05	OK
gamma	S-Cs/0°	1	6.40	6.6	1.03	OK
		2	6.40	6.5	1.02	OK
		3	6.40	6.5	1.02	OK
		4	6.40	6.5	1.02	OK
	S-Co/0°	11	4.69	4.7	1.01	OK
		12	4.69	4.8	1.02	OK
		13	6.49	6.3	0.97	OK
		14	6.49	6.3	0.97	OK
		9	46.00	53.4	1.16	OK
		10	46.00	51.3	1.12	OK
		7	500.00	527.7	1.06	OK
		8	500.00	544.8	1.09	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.92**	0.92	0.93	0.91	2%
N60/60°	2	**1.05**	1.05	1.05	1.05	0%
S-Cs/0°	4	**1.02**	1.02	1.03	1.02	0%
S-Co/0°	8	**1.04**	1.05	1.16	0.97	7%
All	**16**	**1.02**	**1.03**	**1.16**	**0.91**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

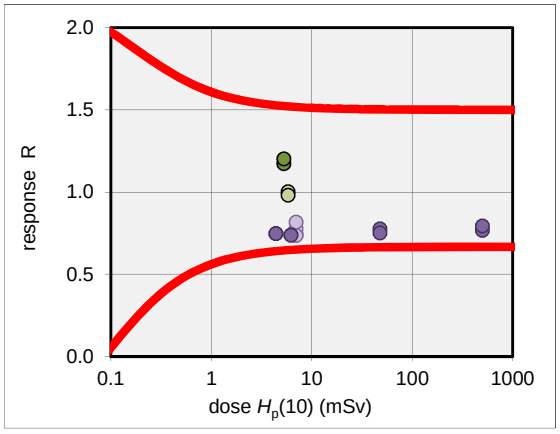
trumpet curve parameter: 1.5 / 0.085 mSv

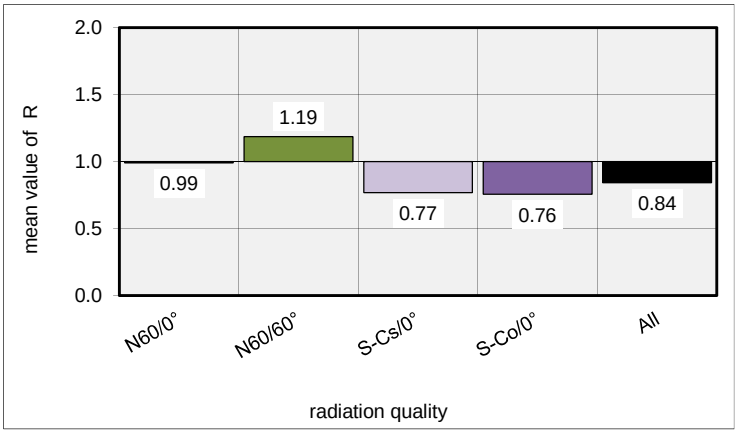
Reporting number 37: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	5.8	1.00	OK
		16	5.80	5.7	0.98	OK
	N60/60°	17	5.30	6.2	1.17	OK
		18	5.30	6.4	1.20	OK
gamma	S-Cs/0°	1	7.00	5.2	0.74	OK
		2	7.00	5.4	0.78	OK
		3	7.00	5.7	0.82	OK
		4	7.00	5.2	0.74	OK
	S-Co/0°	11	4.41	3.3	0.75	OK
		12	4.41	3.3	0.75	OK
		13	6.21	4.6	0.74	OK
		14	6.21	4.6	0.74	OK
		9	47.90	37.2	0.78	OK
		10	47.90	36.0	0.75	OK
		7	500.00	383.0	0.77	OK
		8	500.00	396.5	0.79	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.99**	0.99	1.00	0.98	2%
N60/60°	2	**1.19**	1.19	1.20	1.17	2%
S-Cs/0°	4	**0.76**	0.77	0.82	0.74	5%
S-Co/0°	8	**0.75**	0.76	0.79	0.74	3%
All	**16**	**0.77**	**0.84**	**1.20**	**0.74**	**19%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

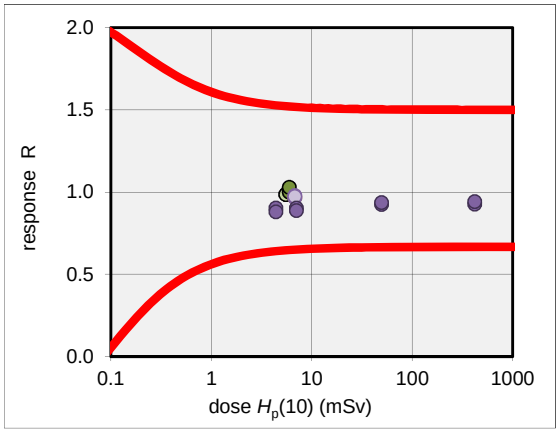
trumpet curve parameter: 1.5 / 0.085 mSv

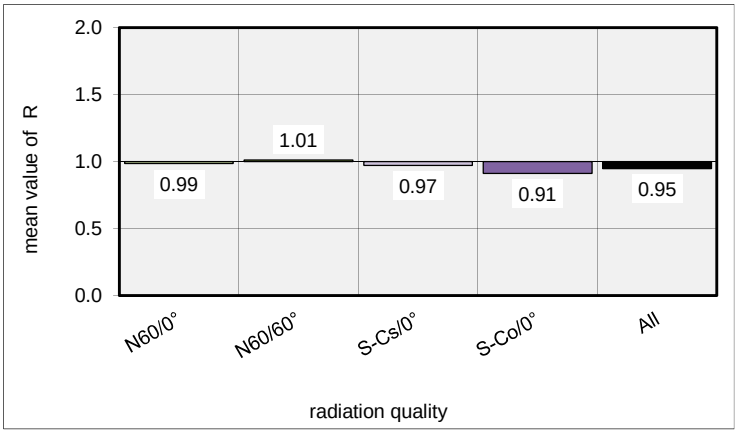
Reporting number 38: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	5.4	0.99	OK
		16	5.50	5.4	0.98	OK
	N60/60°	17	6.00	6.0	1.00	OK
		18	6.00	6.2	1.03	OK
gamma	S-Cs/0°	1	6.80	6.6	0.97	OK
		2	6.80	6.7	0.98	OK
		3	6.80	6.6	0.96	OK
		4	6.80	6.6	0.97	OK
	S-Co/0°	11	4.41	4.0	0.90	OK
		12	4.41	3.9	0.88	OK
		13	7.01	6.3	0.90	OK
		14	7.01	6.2	0.89	OK
		9	49.70	45.9	0.92	OK
		10	49.70	46.5	0.94	OK
		7	420.00	388.7	0.93	OK
		8	420.00	395.6	0.94	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.99**	0.99	0.99	0.98	0%
N60/60°	2	**1.01**	1.01	1.03	1.00	2%
S-Cs/0°	4	**0.97**	0.97	0.98	0.96	1%
S-Co/0°	8	**0.91**	0.91	0.94	0.88	2%
All	**16**	**0.95**	**0.95**	**1.03**	**0.88**	**5%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

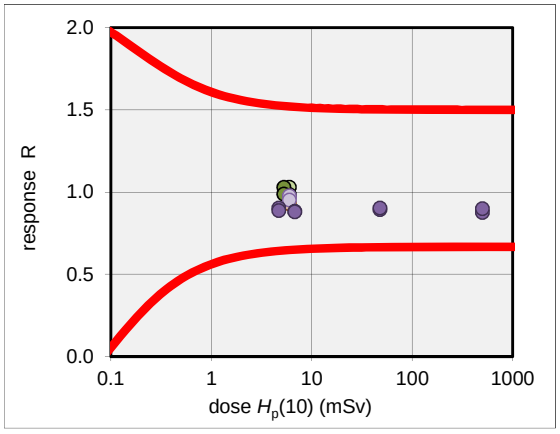
trumpet curve parameter: 1.5 / 0.085 mSv

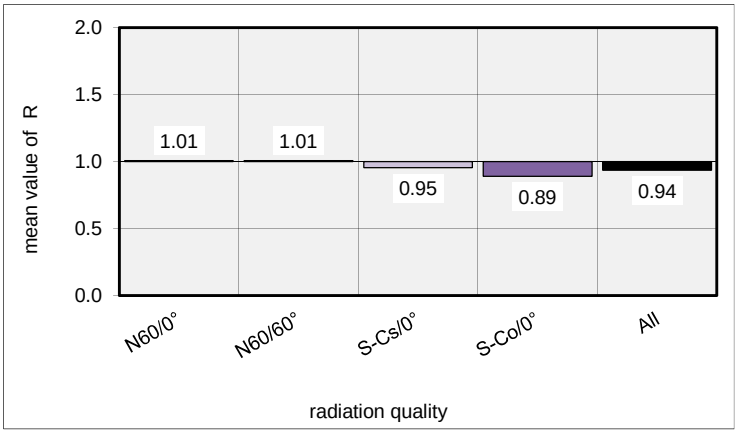
Reporting number 39: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	6.00	6.2	1.03	OK
		16	6.00	5.9	0.99	OK
	N60/60°	17	5.30	5.5	1.03	OK
		18	5.30	5.2	0.99	OK
gamma	S-Cs/0°	1	6.00	5.6	0.93	OK
		2	6.00	5.8	0.96	OK
		3	6.00	5.9	0.98	OK
		4	6.00	5.7	0.95	OK
	S-Co/0°	11	4.69	4.2	0.90	OK
		12	4.69	4.2	0.89	OK
		13	6.80	6.0	0.88	OK
		14	6.80	6.0	0.88	OK
		9	47.90	42.8	0.89	OK
		10	47.90	43.2	0.90	OK
		7	500.00	438.0	0.88	OK
		8	500.00	449.4	0.90	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.01**	1.01	1.03	0.99	3%
N60/60°	2	**1.01**	1.01	1.03	0.99	3%
S-Cs/0°	4	**0.96**	0.95	0.98	0.93	2%
S-Co/0°	8	**0.89**	0.89	0.90	0.88	1%
All	**16**	**0.92**	**0.94**	**1.03**	**0.88**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

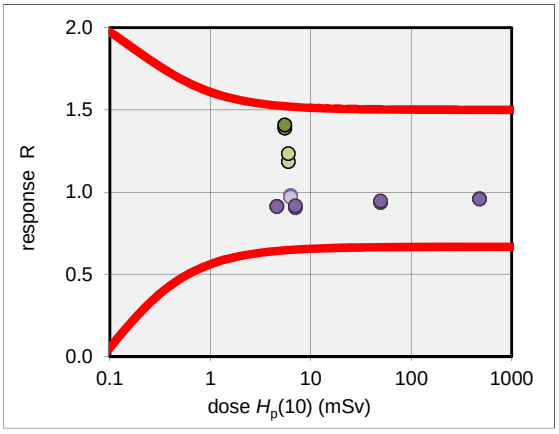
trumpet curve parameter: 1.5 / 0.085 mSv

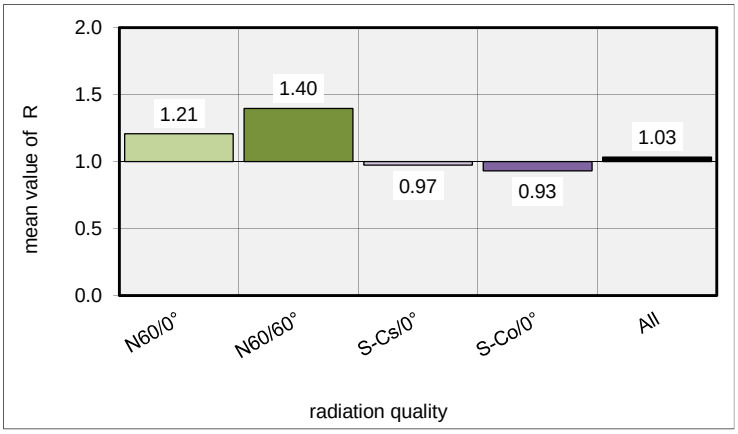
Reporting number 40: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	6.00	7.1	1.19	OK
		16	6.00	7.4	1.23	OK
	N60/60°	17	5.50	7.6	1.39	OK
		18	5.50	7.7	1.41	OK
gamma	S-Cs/0°	1	6.30	6.1	0.97	OK
		2	6.30	6.2	0.98	OK
		3	6.30	6.2	0.98	OK
		4	6.30	6.1	0.97	OK
	S-Co/0°	11	4.61	4.2	0.91	OK
		12	4.61	4.2	0.91	OK
		13	7.01	6.3	0.90	OK
		14	7.01	6.4	0.92	OK
		9	49.70	46.5	0.94	OK
		10	49.70	47.0	0.94	OK
		7	480.00	460.3	0.96	OK
		8	480.00	459.2	0.96	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.21**	1.21	1.23	1.19	3%
N60/60°	2	**1.40**	1.40	1.41	1.39	1%
S-Cs/0°	4	**0.97**	0.97	0.98	0.97	0%
S-Co/0°	8	**0.93**	0.93	0.96	0.90	2%
All	**16**	**0.96**	**1.03**	**1.41**	**0.90**	**16%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

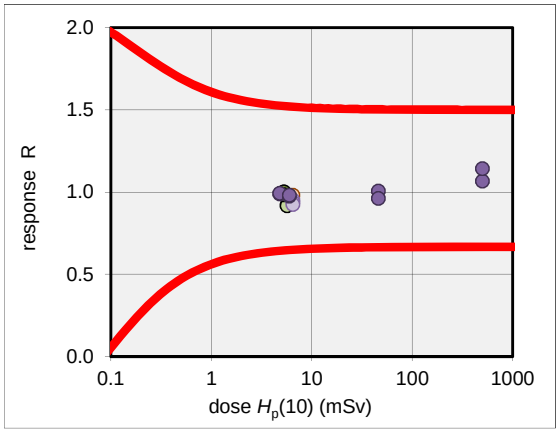
trumpet curve parameter: 1.5 / 0.085 mSv

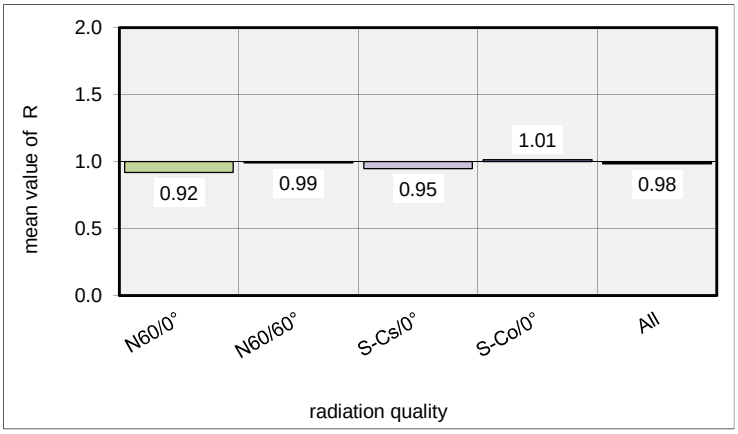
Reporting number 41: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.70	5.3	0.92	OK
		16	5.70	5.2	0.92	OK
	N60/60°	17	5.30	5.3	1.00	OK
		18	5.30	5.2	0.98	OK
gamma	S-Cs/0°	1	6.50	6.4	0.98	OK
		2	6.50	6.2	0.95	OK
		3	6.50	6.1	0.94	OK
		4	6.50	6.0	0.92	OK
	S-Co/0°	11	4.79	4.7	0.99	OK
		12	4.79	4.8	0.99	OK
		13	6.00	5.9	0.98	OK
		14	6.00	5.9	0.98	OK
		9	46.00	46.3	1.01	OK
		10	46.00	44.2	0.96	OK
		7	500.00	533.5	1.07	OK
		8	500.00	571.4	1.14	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.92**	0.92	0.92	0.92	0%
N60/60°	2	**0.99**	0.99	1.00	0.98	1%
S-Cs/0°	4	**0.94**	0.95	0.98	0.92	3%
S-Co/0°	8	**0.99**	1.01	1.14	0.96	6%
All	**16**	**0.98**	**0.98**	**1.14**	**0.92**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

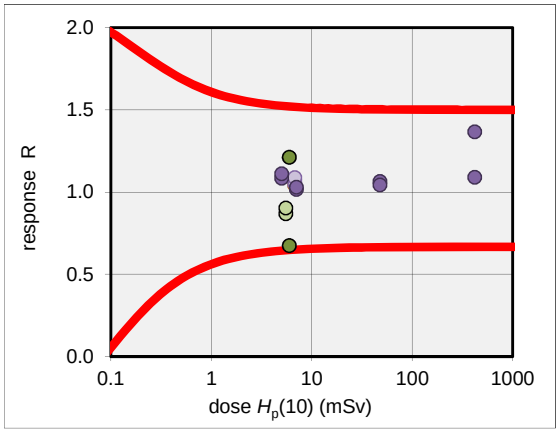
trumpet curve parameter: 1.5 / 0.085 mSv

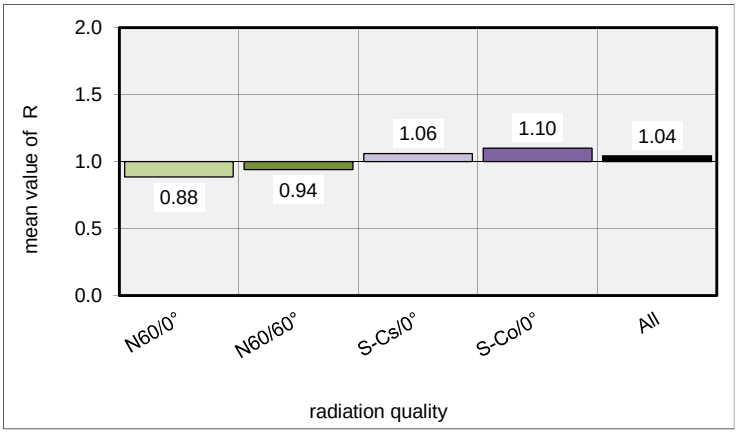
Reporting number 42: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	4.8	0.87	OK
		16	5.50	5.0	0.90	OK
	N60/60°	17	6.00	4.0	0.67	OK
		18	6.00	7.3	1.21	OK
gamma	S-Cs/0°	1	6.80	7.1	1.04	OK
		2	6.80	7.3	1.07	OK
		3	6.80	7.1	1.05	OK
		4	6.80	7.4	1.09	OK
	S-Co/0°	11	5.00	5.4	1.08	OK
		12	5.00	5.6	1.11	OK
		13	7.01	7.1	1.02	OK
		14	7.01	7.2	1.03	OK
		9	47.90	51.0	1.06	OK
		10	47.90	50.0	1.04	OK
		7	420.00	574.0	1.37	OK
		8	420.00	458.0	1.09	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.88**	0.88	0.90	0.87	3%
N60/60°	2	**0.94**	0.94	1.21	0.67	40%
S-Cs/0°	4	**1.06**	1.06	1.09	1.04	2%
S-Co/0°	8	**1.07**	1.10	1.37	1.02	10%
All	**16**	**1.06**	**1.04**	**1.37**	**0.67**	**14%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

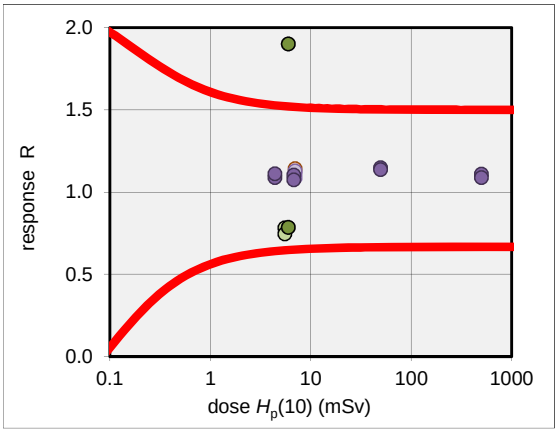
trumpet curve parameter: 1.5 / 0.085 mSv

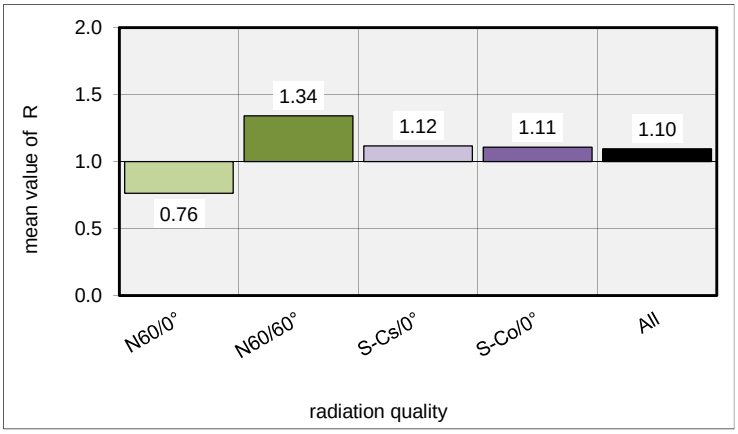
Reporting number 43: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	4.3	0.78	OK
		16	5.50	4.1	0.75	OK
	N60/60°	17	6.00	11.4	1.90	outlier
		18	6.00	4.7	0.78	OK
gamma	S-Cs/0°	1	7.00	8.0	1.14	OK
		2	7.00	7.6	1.09	OK
		3	7.00	7.8	1.11	OK
		4	7.00	7.9	1.13	OK
	S-Co/0°	11	4.41	4.8	1.09	OK
		12	4.41	4.9	1.11	OK
		13	6.80	7.5	1.10	OK
		14	6.80	7.3	1.07	OK
		9	49.70	57.1	1.15	OK
		10	49.70	56.5	1.14	OK
		7	500.00	555.0	1.11	OK
		8	500.00	544.0	1.09	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.76**	0.76	0.78	0.75	3%
N60/60°	2	**1.34**	1.34	1.90	0.78	59%
S-Cs/0°	4	**1.12**	1.12	1.14	1.09	2%
S-Co/0°	8	**1.11**	1.11	1.15	1.07	2%
All	**16**	**1.11**	**1.10**	**1.90**	**0.75**	**23%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

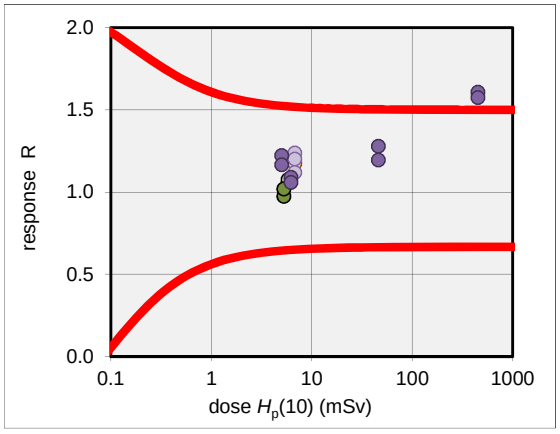
trumpet curve parameter: 1.5 / 0.085 mSv

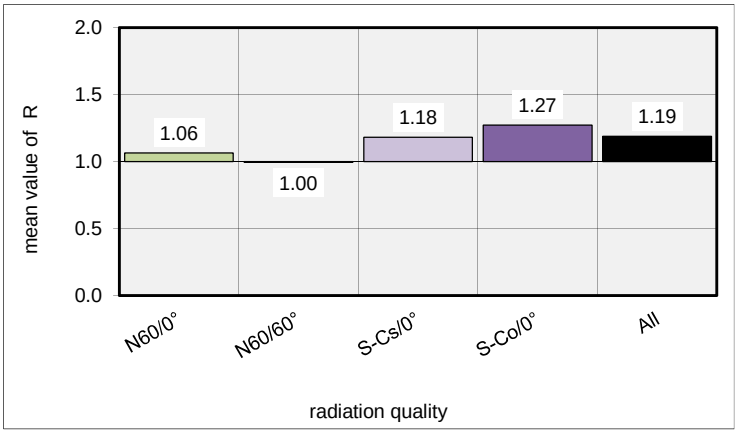
Reporting number 44: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	6.1	1.05	OK
		16	5.80	6.2	1.08	OK
	N60/60°	17	5.30	5.2	0.97	OK
		18	5.30	5.4	1.02	OK
gamma	S-Cs/0°	5	6.80	8.0	1.17	OK
		6	6.80	8.4	1.24	OK
		7	6.80	8.2	1.20	OK
		8	6.80	7.6	1.12	OK
	S-Co/0°	9	5.00	6.1	1.22	OK
		12	5.00	5.8	1.17	OK
		13	6.21	6.8	1.09	OK
		14	6.21	6.6	1.06	OK
		10	46.00	58.8	1.28	OK
		11	46.00	54.9	1.19	OK
		3	450.00	723.2	1.61	outlier
		4	450.00	708.6	1.57	outlier
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.06**	1.06	1.08	1.05	1%
N60/60°	2	**1.00**	1.00	1.02	0.97	3%
S-Cs/0°	4	**1.19**	1.18	1.24	1.12	4%
S-Co/0°	8	**1.21**	1.27	1.61	1.06	16%
All	**16**	**1.17**	**1.19**	**1.61**	**0.97**	**15%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

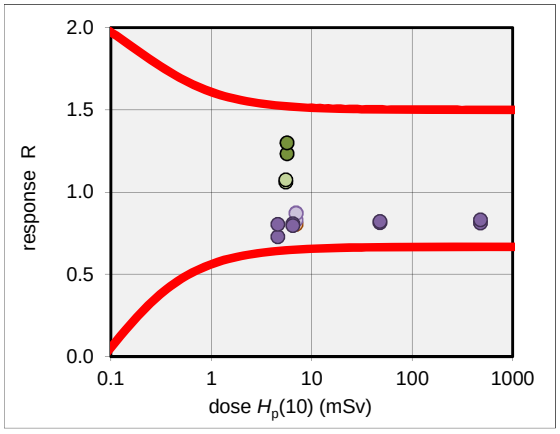
trumpet curve parameter: 1.5 / 0.085 mSv

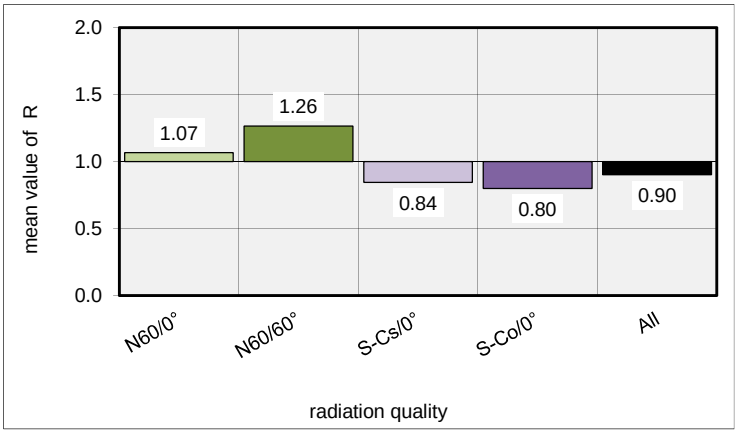
Reporting number 45: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	5.8	1.06	OK
		16	5.50	5.9	1.07	OK
	N60/60°	17	5.70	7.0	1.23	OK
		18	5.70	7.4	1.30	OK
gamma	S-Cs/0°	11	7.00	5.6	0.80	OK
		12	7.00	5.8	0.83	OK
		13	7.00	6.1	0.87	OK
		14	7.00	6.1	0.87	OK
	S-Co/0°	3	4.61	3.4	0.73	OK
		4	4.61	3.7	0.80	OK
		9	6.49	5.2	0.81	OK
		10	6.49	5.2	0.80	OK
		7	47.90	38.9	0.81	OK
		8	47.90	39.3	0.82	OK
		1	480.00	389.1	0.81	OK
		2	480.00	398.3	0.83	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.07**	1.07	1.07	1.06	1%
N60/60°	2	**1.26**	1.26	1.30	1.23	4%
S-Cs/0°	4	**0.85**	0.84	0.87	0.80	4%
S-Co/0°	8	**0.81**	0.80	0.83	0.73	4%
All	**16**	**0.82**	**0.90**	**1.30**	**0.73**	**19%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

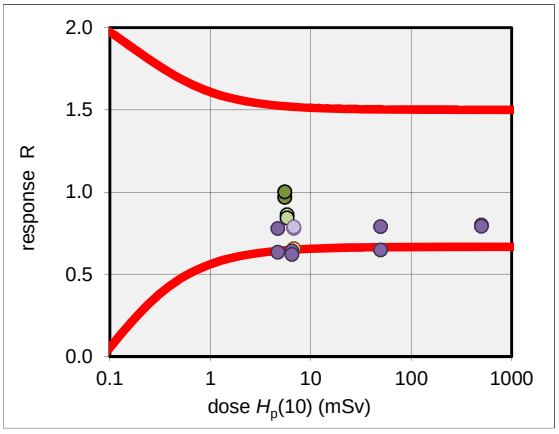
trumpet curve parameter: 1.5 / 0.085 mSv

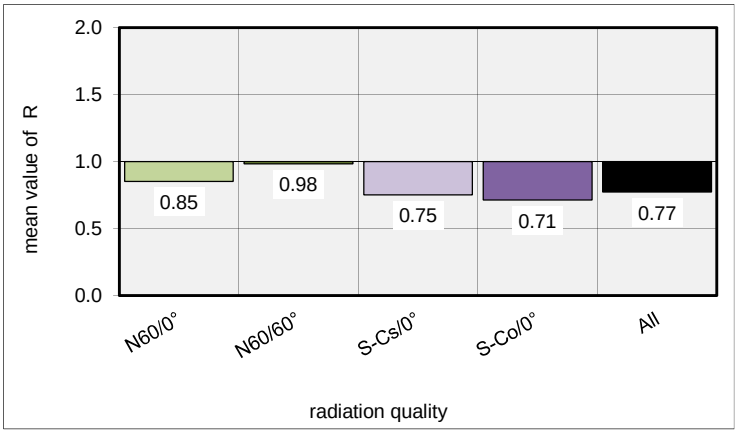
Reporting number 46: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	5.0	0.86	OK
		16	5.80	4.9	0.84	OK
	N60/60°	17	5.50	5.3	0.97	OK
		18	5.50	5.5	1.00	OK
gamma	S-Cs/0°	1	6.80	4.5	0.65	OK
		2	6.80	5.3	0.78	OK
		3	6.80	5.3	0.78	OK
		4	6.80	5.4	0.79	OK
	S-Co/0°	11	4.69	3.7	0.78	OK
		12	4.69	3.0	0.63	outlier
		13	6.49	4.2	0.64	outlier
		14	6.49	4.0	0.62	outlier
		9	49.70	39.2	0.79	OK
		10	49.70	32.2	0.65	outlier
		7	500.00	399.8	0.80	OK
		8	500.00	395.9	0.79	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.85**	0.85	0.86	0.84	2%
N60/60°	2	**0.98**	0.98	1.00	0.97	2%
S-Cs/0°	4	**0.78**	0.75	0.79	0.65	9%
S-Co/0°	8	**0.71**	0.71	0.80	0.62	12%
All	**16**	**0.78**	**0.77**	**1.00**	**0.62**	**15%**

outliers: 4 of 16 Fraction of outliers: 25%





Results: IC2012

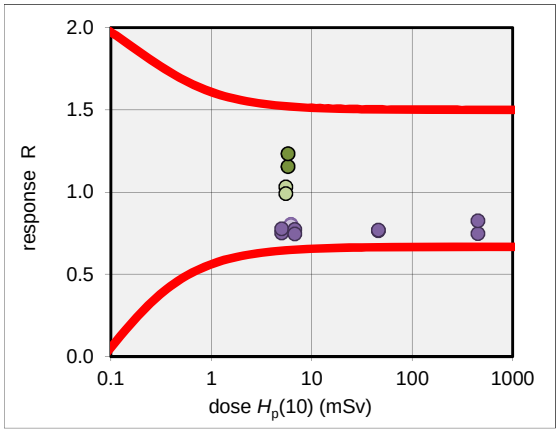
trumpet curve parameter: 1.5 / 0.085 mSv

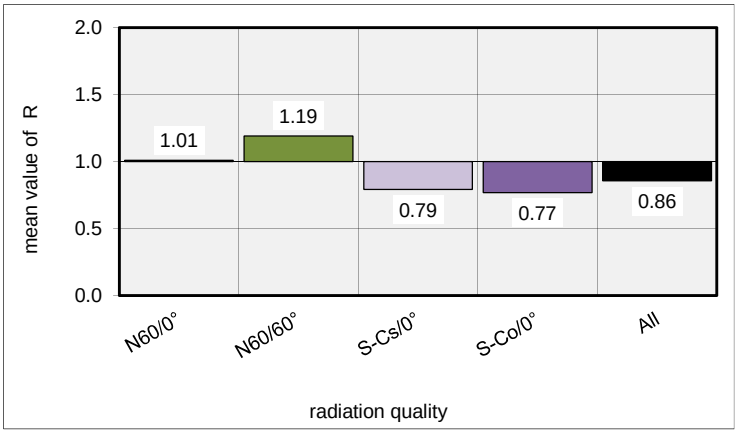
Reporting number 47: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.50	5.7	1.03	OK
		18	5.50	5.5	0.99	OK
	N60/60°	19	5.80	6.7	1.15	OK
		20	5.80	7.1	1.23	OK
gamma	S-Cs/0°	1	6.20	4.9	0.79	OK
		2	6.20	4.8	0.78	OK
		3	6.20	5.0	0.80	OK
		4	6.20	4.9	0.80	OK
	S-Co/0°	10	5.00	3.8	0.75	OK
		11	5.00	3.9	0.78	OK
		12	6.80	5.3	0.77	OK
		13	6.80	5.1	0.74	OK
		15	46.00	35.2	0.77	OK
		16	46.00	35.4	0.77	OK
		7	450.00	336.2	0.75	OK
		8	450.00	371.6	0.83	OK
	NIR	9				
	NIR	14				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.01**	1.01	1.03	0.99	3%
N60/60°	2	**1.19**	1.19	1.23	1.15	5%
S-Cs/0°	4	**0.79**	0.79	0.80	0.78	1%
S-Co/0°	8	**0.77**	0.77	0.83	0.74	3%
All	**16**	**0.79**	**0.86**	**1.23**	**0.74**	**18%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

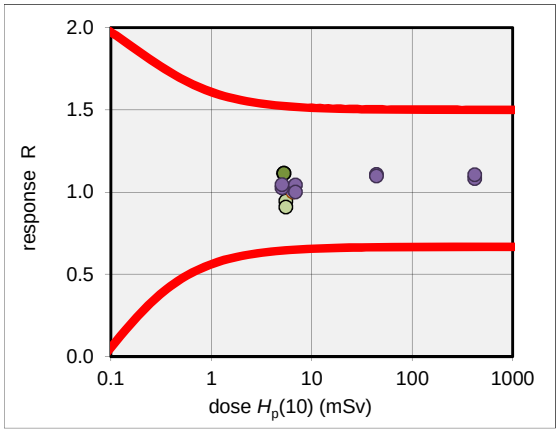
trumpet curve parameter: 1.5 / 0.085 mSv

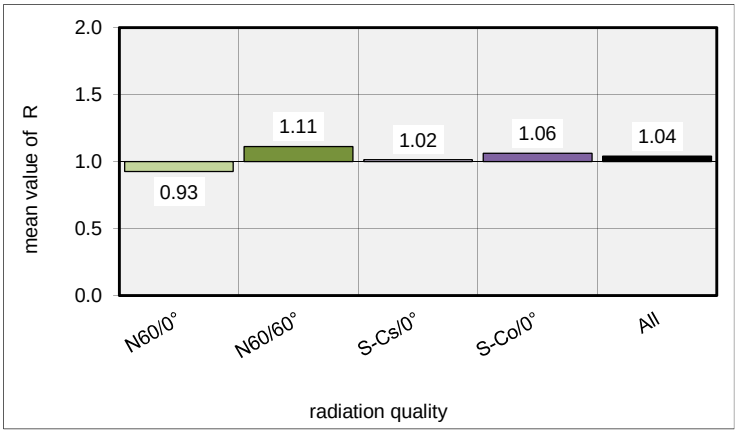
Reporting number 48: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	5.2	0.95	OK
		16	5.50	5.0	0.91	OK
	N60/60°	17	5.30	5.9	1.11	OK
		18	5.30	5.9	1.11	OK
gamma	S-Cs/0°	1	6.50	6.5	1.00	OK
		2	6.50	6.6	1.02	OK
		3	6.50	6.6	1.02	OK
		4	6.50	6.7	1.03	OK
	S-Co/0°	11	5.07	5.2	1.03	OK
		12	5.07	5.3	1.05	OK
		13	6.90	7.2	1.04	OK
		14	6.90	6.9	1.00	OK
		9	44.10	48.8	1.11	OK
		10	44.10	48.4	1.10	OK
		7	420.00	454.7	1.08	OK
		8	420.00	464.3	1.11	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.93**	0.93	0.95	0.91	3%
N60/60°	2	**1.11**	1.11	1.11	1.11	0%
S-Cs/0°	4	**1.02**	1.02	1.03	1.00	1%
S-Co/0°	8	**1.06**	1.06	1.11	1.00	4%
All	**16**	**1.04**	**1.04**	**1.11**	**0.91**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

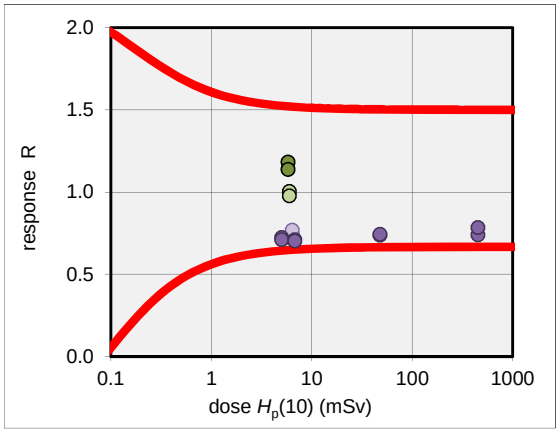
trumpet curve parameter: 1.5 / 0.085 mSv

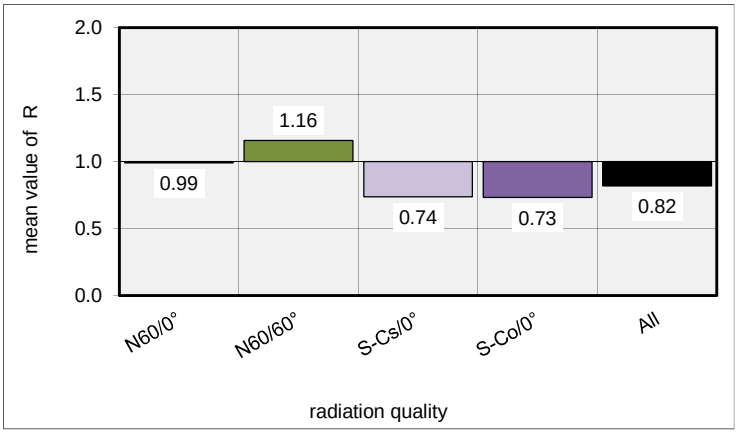
Reporting number 49: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	6.00	6.0	1.00	OK
		16	6.00	5.9	0.98	OK
	N60/60°	17	5.80	6.9	1.18	OK
		18	5.80	6.6	1.14	OK
gamma	S-Cs/0°	9	6.40	4.6	0.72	OK
		10	6.40	4.8	0.74	OK
		11	6.40	4.6	0.71	OK
		12	6.40	4.9	0.77	OK
	S-Co/0°	3	5.00	3.6	0.72	OK
		4	5.00	3.6	0.71	OK
		13	6.80	4.8	0.71	OK
		14	6.80	4.8	0.70	OK
		5	47.90	35.3	0.74	OK
		6	47.90	35.6	0.74	OK
		7	450.00	332.5	0.74	OK
		8	450.00	352.8	0.78	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.99**	0.99	1.00	0.98	2%
N60/60°	2	**1.16**	1.16	1.18	1.14	3%
S-Cs/0°	4	**0.73**	0.74	0.77	0.71	3%
S-Co/0°	8	**0.73**	0.73	0.78	0.70	4%
All	**16**	**0.74**	**0.82**	**1.18**	**0.70**	**20%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

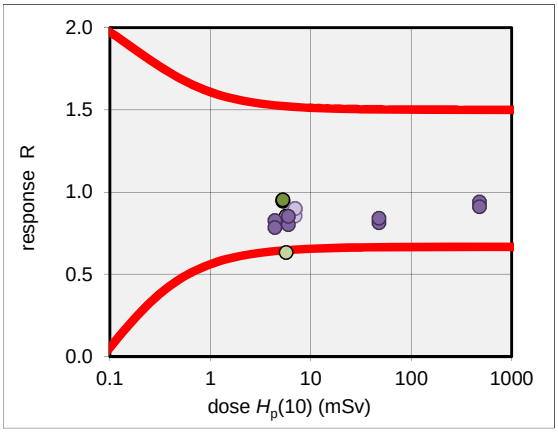
trumpet curve parameter: 1.5 / 0.085 mSv

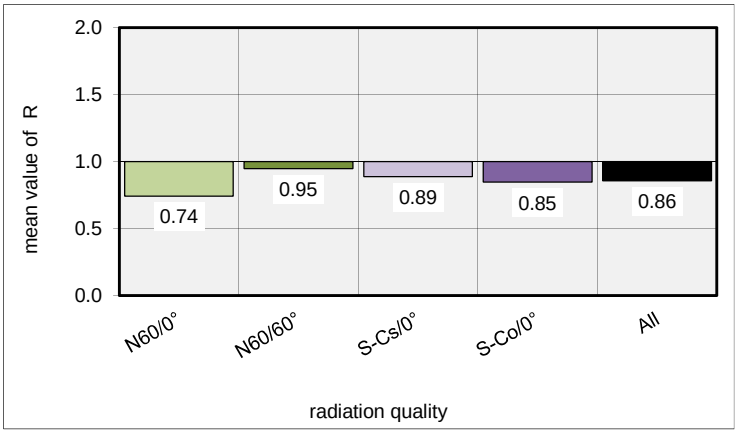
Reporting number 50: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.70	4.9	0.85	OK
		16	5.70	3.6	0.63	outlier
	N60/60°	17	5.30	5.0	0.94	OK
		18	5.30	5.0	0.95	OK
gamma	S-Cs/0°	6	7.00	6.3	0.90	OK
		7	7.00	6.0	0.85	OK
		8	7.00	6.3	0.90	OK
		9	7.00	6.3	0.90	OK
	S-Co/0°	5	4.41	3.7	0.83	OK
		10	4.41	3.5	0.78	OK
		13	6.00	4.8	0.80	OK
		14	6.00	5.1	0.85	OK
		11	47.90	38.9	0.81	OK
		12	47.90	40.3	0.84	OK
		3	480.00	451.5	0.94	OK
		4	480.00	437.4	0.91	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.74**	0.74	0.85	0.63	21%
N60/60°	2	**0.95**	0.95	0.95	0.94	1%
S-Cs/0°	4	**0.90**	0.89	0.90	0.85	3%
S-Co/0°	8	**0.83**	0.85	0.94	0.78	6%
All	**16**	**0.85**	**0.86**	**0.95**	**0.63**	**9%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

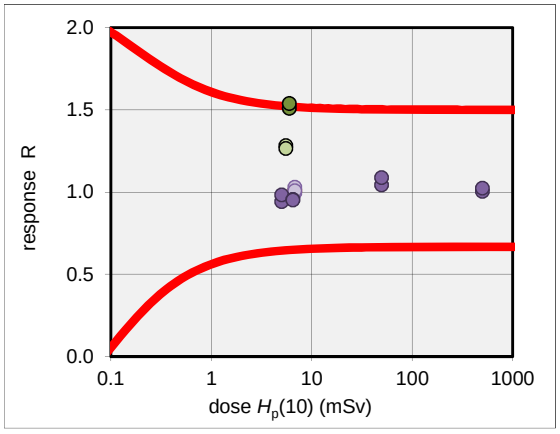
trumpet curve parameter: 1.5 / 0.085 mSv

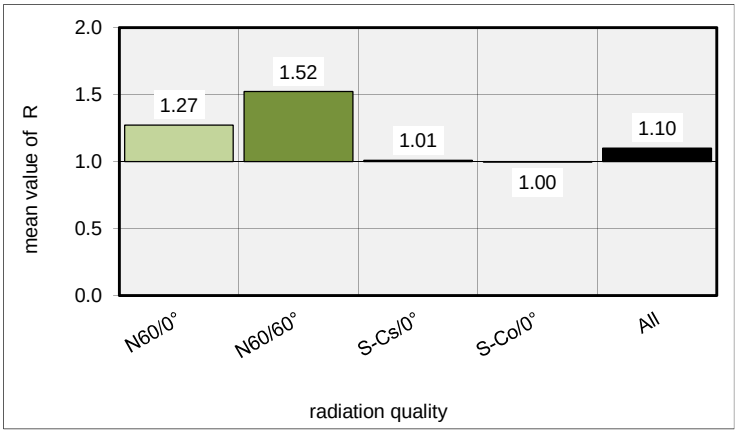
Reporting number 51: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.50	7.1	1.28	OK
		17	5.50	7.0	1.27	OK
	N60/60°	18	6.00	9.1	1.51	OK
		19	6.00	9.2	1.54	outlier
gamma	S-Cs/0°	6	6.80	6.9	1.01	OK
		7	6.80	7.0	1.03	OK
		8	6.80	6.8	0.99	OK
		9	6.80	6.9	1.01	OK
	S-Co/0°	12	5.00	4.7	0.94	OK
		13	5.00	4.9	0.98	OK
		14	6.49	6.2	0.96	OK
		15	6.49	6.2	0.95	OK
		10	49.70	51.8	1.04	OK
		11	49.70	54.1	1.09	OK
		3	500.00	501.8	1.00	OK
		4	500.00	511.8	1.02	OK
	NIR	5				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.27**	1.27	1.28	1.27	1%
N60/60°	2	**1.52**	1.52	1.54	1.51	1%
S-Cs/0°	4	**1.01**	1.01	1.03	0.99	1%
S-Co/0°	8	**0.99**	1.00	1.09	0.94	5%
All	**16**	**1.02**	**1.10**	**1.54**	**0.94**	**17%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

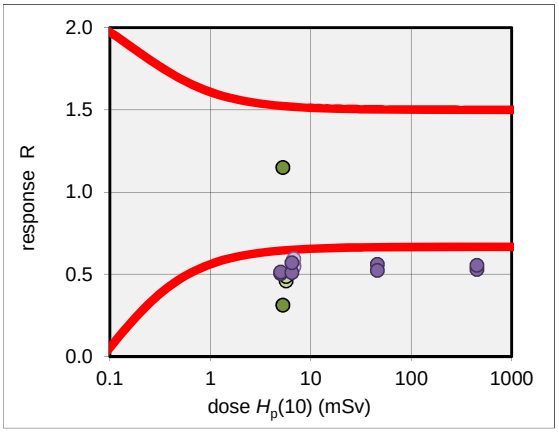
trumpet curve parameter: 1.5 / 0.085 mSv

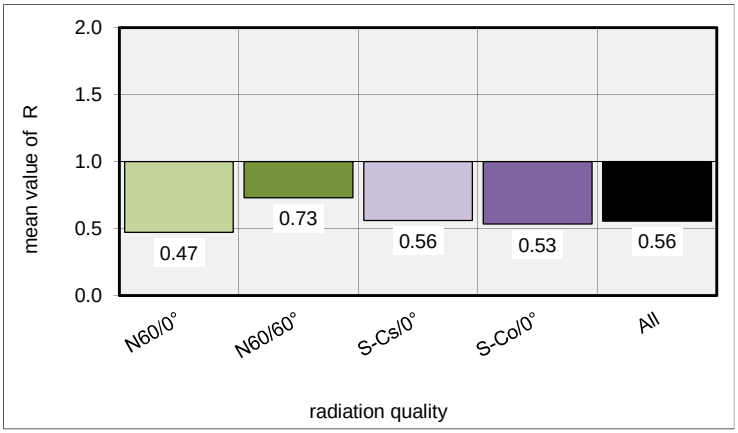
Reporting number 52: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.70	2.6	0.46	outlier
		16	5.70	2.8	0.49	outlier
	N60/60°	17	5.30	6.1	1.15	OK
		18	5.30	1.7	0.31	outlier
gamma	S-Cs/0°	9	6.80	3.8	0.55	outlier
		10	6.80	3.7	0.55	outlier
		11	6.80	4.0	0.59	outlier
		12	6.80	3.7	0.54	outlier
	S-Co/0°	7	5.00	2.5	0.50	outlier
		8	5.00	2.6	0.51	outlier
		13	6.49	3.3	0.51	outlier
		14	6.49	3.7	0.57	outlier
		5	46.00	25.7	0.56	outlier
		6	46.00	24.1	0.52	outlier
		3	450.00	238.3	0.53	outlier
		4	450.00	249.4	0.55	outlier
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.47**	0.47	0.49	0.46	4%
N60/60°	2	**0.73**	0.73	1.15	0.31	81%
S-Cs/0°	4	**0.55**	0.56	0.59	0.54	4%
S-Co/0°	8	**0.53**	0.53	0.57	0.50	5%
All	**16**	**0.54**	**0.56**	**1.15**	**0.31**	**31%**

outliers: 15 of 16 Fraction of outliers: 94%





Results: IC2012

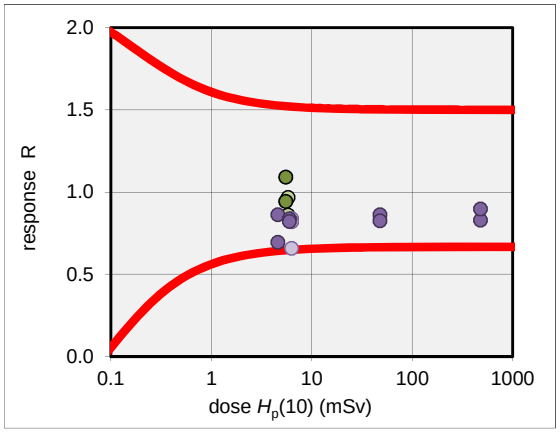
trumpet curve parameter: 1.5 / 0.085 mSv

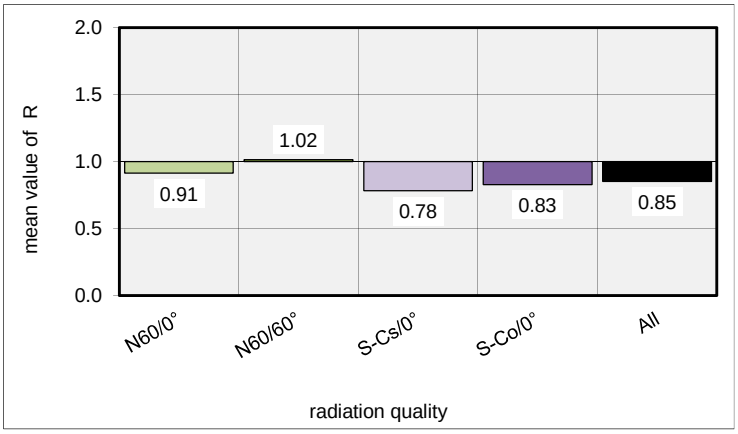
Reporting number 53: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.80	5.6	0.97	OK
		17	5.80	5.0	0.86	OK
	N60/60°	18	5.50	6.0	1.09	OK
		19	5.50	5.2	0.94	OK
gamma	S-Cs/0°	1	6.30	5.2	0.82	OK
		2	6.30	5.3	0.84	OK
		3	6.30	4.1	0.66	OK
		4	6.30	5.2	0.82	OK
	S-Co/0°	12	4.61	4.0	0.86	OK
		13	4.61	3.2	0.69	OK
		14	6.00	5.0	0.84	OK
		15	6.00	4.9	0.82	OK
		10	47.90	41.2	0.86	OK
		11	47.90	39.5	0.83	OK
		7	480.00	397.6	0.83	OK
		8	480.00	430.7	0.90	OK
	NIR	9				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.91**	0.91	0.97	0.86	8%
N60/60°	2	**1.02**	1.02	1.09	0.94	10%
S-Cs/0°	4	**0.82**	0.78	0.84	0.66	11%
S-Co/0°	8	**0.83**	0.83	0.90	0.69	7%
All	**16**	**0.84**	**0.85**	**1.09**	**0.66**	**12%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

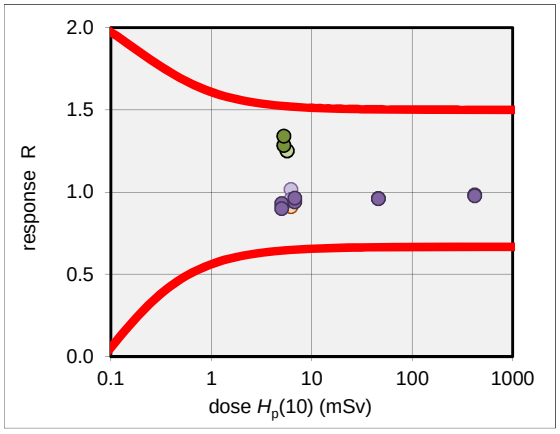
trumpet curve parameter: 1.5 / 0.085 mSv

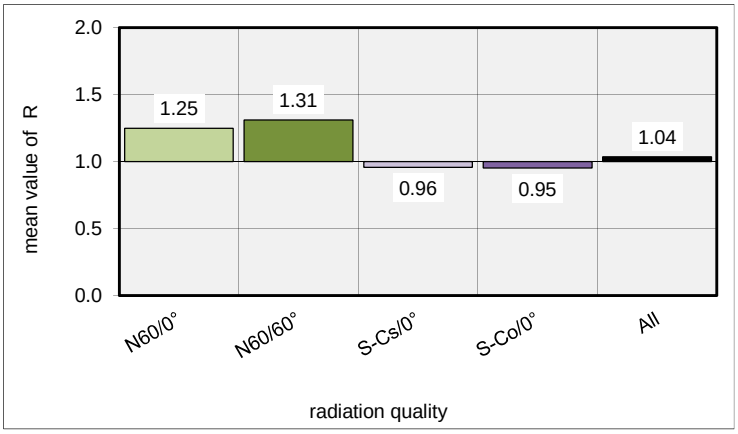
Reporting number 54: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.70	7.1	1.25	OK
		16	5.70	7.1	1.25	OK
	N60/60°	17	5.30	6.8	1.28	OK
		18	5.30	7.1	1.34	OK
gamma	S-Cs/0°	1	6.20	5.6	0.91	OK
		2	6.20	5.9	0.95	OK
		3	6.20	6.3	1.02	OK
		4	6.20	5.9	0.95	OK
	S-Co/0°	11	5.00	4.7	0.93	OK
		12	5.00	4.5	0.90	OK
		13	6.80	6.4	0.94	OK
		14	6.80	6.6	0.96	OK
		9	46.00	44.2	0.96	OK
		10	46.00	44.2	0.96	OK
		7	420.00	412.7	0.98	OK
		8	420.00	410.6	0.98	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.25**	1.25	1.25	1.25	0%
N60/60°	2	**1.31**	1.31	1.34	1.28	3%
S-Cs/0°	4	**0.95**	0.96	1.02	0.91	5%
S-Co/0°	8	**0.96**	0.95	0.98	0.90	3%
All	**16**	**0.96**	**1.04**	**1.34**	**0.90**	**15%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

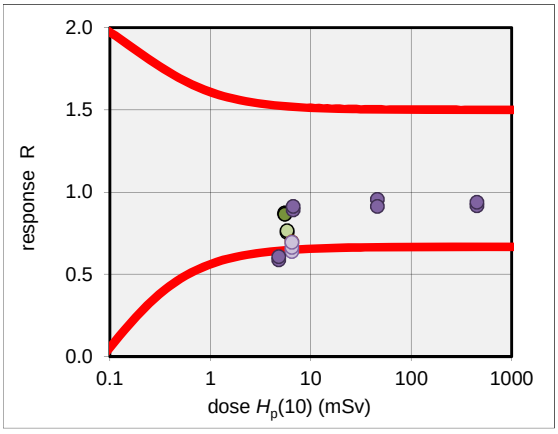
trumpet curve parameter: 1.5 / 0.085 mSv

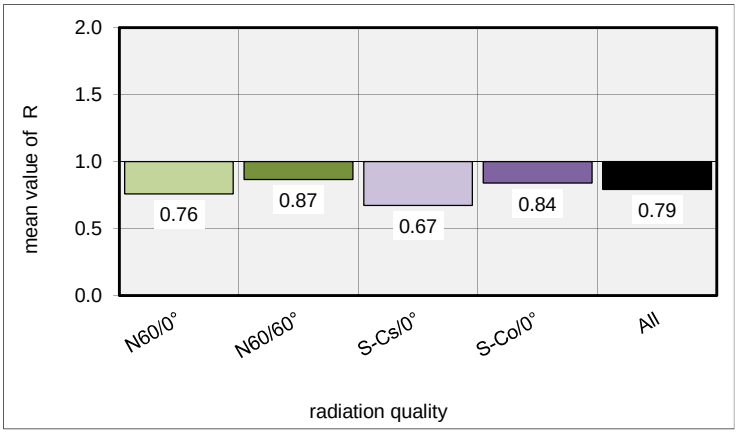
Reporting number 55: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	4.4	0.76	OK
		16	5.80	4.4	0.76	OK
	N60/60°	17	5.50	4.8	0.87	OK
		18	5.50	4.8	0.86	OK
gamma	S-Cs/0°	1	6.50	4.5	0.70	OK
		2	6.50	4.2	0.64	outlier
		3	6.50	4.3	0.66	OK
		4	6.50	4.5	0.69	OK
	S-Co/0°	11	4.79	2.8	0.59	outlier
		12	4.79	2.9	0.61	outlier
		13	6.67	5.9	0.89	OK
		14	6.67	6.1	0.91	OK
		9	46.00	44.0	0.96	OK
		10	46.00	42.0	0.91	OK
		7	450.00	412.1	0.92	OK
		8	450.00	422.2	0.94	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.76**	0.76	0.76	0.76	1%
N60/60°	2	**0.87**	0.87	0.87	0.86	1%
S-Cs/0°	4	**0.68**	0.67	0.70	0.64	4%
S-Co/0°	8	**0.91**	0.84	0.96	0.59	18%
All	**16**	**0.81**	**0.79**	**0.96**	**0.59**	**16%**

outliers: 3 of 16 Fraction of outliers: 19%





Results: IC2012

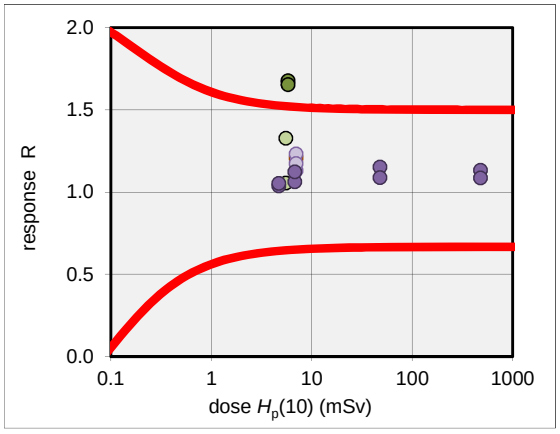
trumpet curve parameter: 1.5 / 0.085 mSv

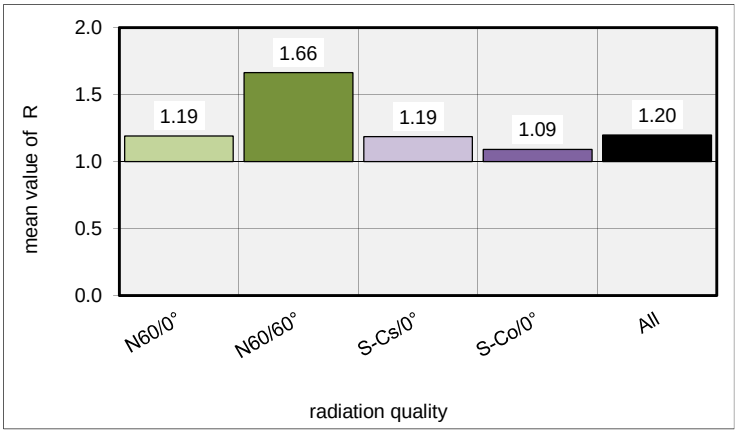
Reporting number 56: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.50	7.3	1.33	OK
		17	5.50	5.8	1.05	OK
	N60/60°	18	5.80	9.7	1.68	outlier
		19	5.80	9.6	1.65	outlier
gamma	S-Cs/0°	6	7.00	8.4	1.21	OK
		7	7.00	7.9	1.13	OK
		8	7.00	8.6	1.23	OK
		9	7.00	8.2	1.17	OK
	S-Co/0°	12	4.69	4.9	1.04	OK
		13	4.69	4.9	1.05	OK
		14	6.80	7.2	1.06	OK
		15	6.80	7.6	1.12	OK
		10	47.90	55.2	1.15	OK
		11	47.90	52.1	1.09	OK
		3	480.00	543.9	1.13	OK
		4	480.00	520.8	1.09	OK
	NIR	5				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.19**	1.19	1.33	1.05	16%
N60/60°	2	**1.66**	1.66	1.68	1.65	1%
S-Cs/0°	4	**1.19**	1.19	1.23	1.13	4%
S-Co/0°	8	**1.09**	1.09	1.15	1.04	4%
All	**16**	**1.13**	**1.20**	**1.68**	**1.04**	**16%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

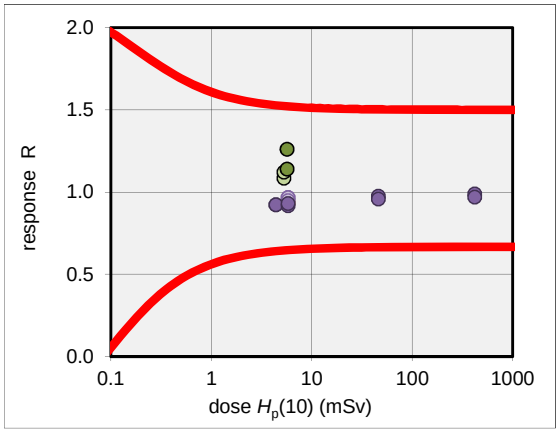
trumpet curve parameter: 1.5 / 0.085 mSv

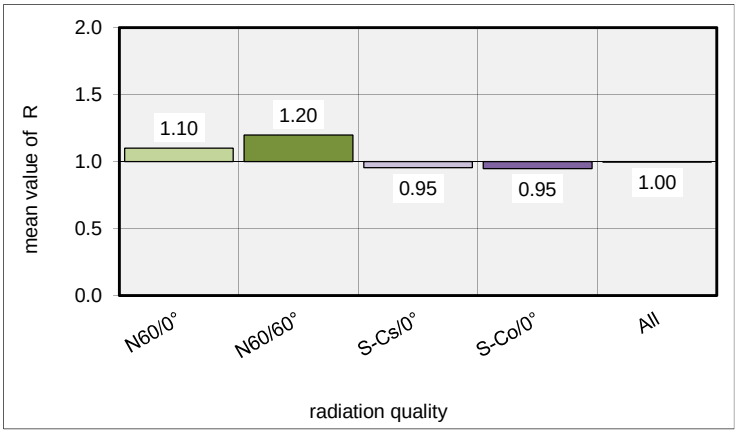
Reporting number 57: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	5.7	1.08	OK
		16	5.30	5.9	1.12	OK
	N60/60°	21	5.70	6.5	1.14	OK
		22	5.70	7.2	1.26	OK
gamma	S-Cs/0°	1	5.80	5.4	0.93	OK
		2	5.80	5.6	0.97	OK
		3	5.80	5.6	0.97	OK
		4	5.80	5.5	0.95	OK
	S-Co/0°	11	4.41	4.1	0.92	OK
		12	4.41	4.1	0.92	OK
		13	5.80	5.3	0.92	OK
		14	5.80	5.4	0.93	OK
		9	46.00	44.8	0.97	OK
		10	46.00	44.0	0.96	OK
		7	420.00	415.0	0.99	OK
		8	420.00	407.0	0.97	OK
	NIR	17				
	NIR	18				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.10**	1.10	1.12	1.08	2%
N60/60°	2	**1.20**	1.20	1.26	1.14	7%
S-Cs/0°	4	**0.96**	0.95	0.97	0.93	2%
S-Co/0°	8	**0.94**	0.95	0.99	0.92	3%
All	**16**	**0.97**	**1.00**	**1.26**	**0.92**	**10%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

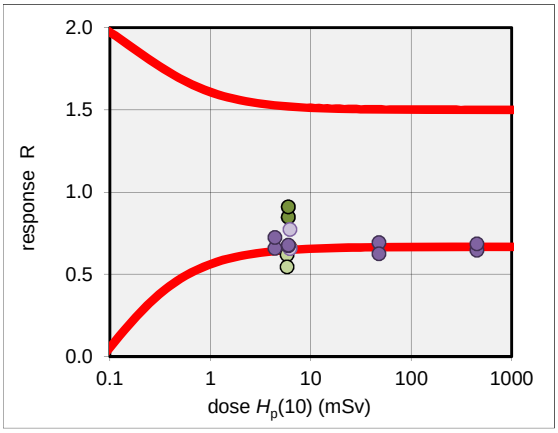
trumpet curve parameter: 1.5 / 0.085 mSv

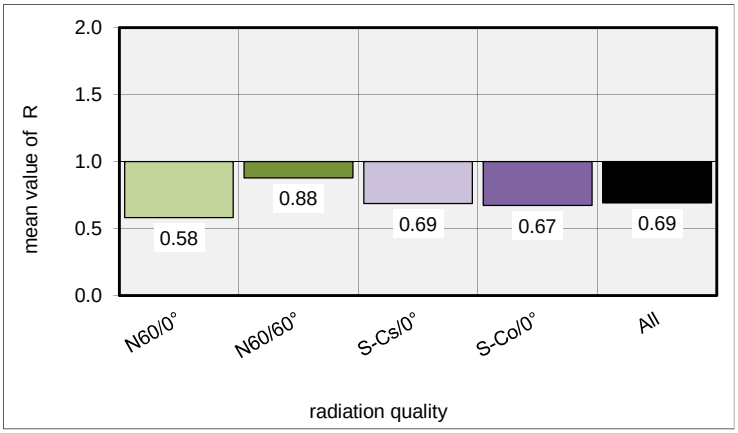
Reporting number 58: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	3.6	0.62	outlier
		16	5.80	3.2	0.54	outlier
	N60/60°	17	6.00	5.1	0.85	OK
		18	6.00	5.5	0.91	OK
gamma	S-Cs/0°	1	6.20	4.1	0.67	OK
		2	6.20	4.1	0.66	OK
		3	6.20	4.8	0.77	OK
		4	6.20	4.1	0.65	OK
	S-Co/0°	11	4.41	2.9	0.66	OK
		12	4.41	3.2	0.72	OK
		13	6.00	4.0	0.67	OK
		14	6.00	4.1	0.68	OK
		9	47.90	33.2	0.69	OK
		10	47.90	29.9	0.62	outlier
		7	450.00	291.0	0.65	outlier
		8	450.00	308.0	0.68	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.58**	0.58	0.62	0.54	9%
N60/60°	2	**0.88**	0.88	0.91	0.85	5%
S-Cs/0°	4	**0.66**	0.69	0.77	0.65	8%
S-Co/0°	8	**0.68**	0.67	0.72	0.62	5%
All	**16**	**0.67**	**0.69**	**0.91**	**0.54**	**13%**

outliers: 4 of 16 Fraction of outliers: 25%





Results: IC2012

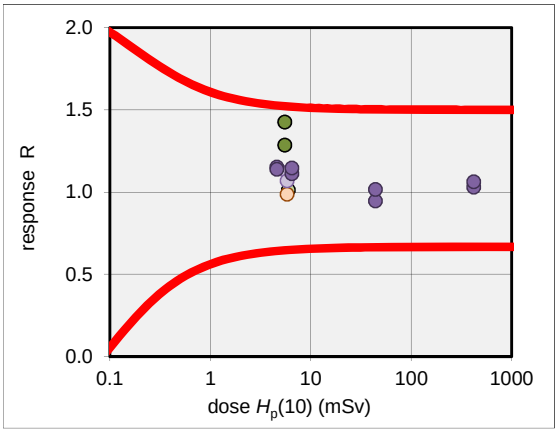
trumpet curve parameter: 1.5 / 0.085 mSv

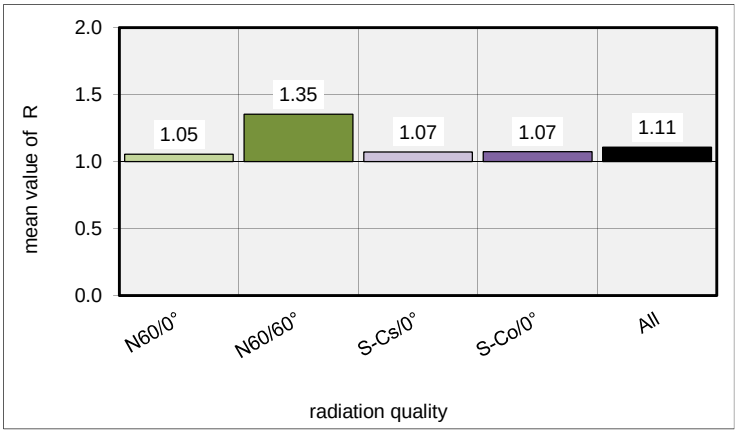
Reporting number 59: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	6.00	6.1	1.01	OK
		16	6.00	6.6	1.10	OK
	N60/60°	17	5.50	7.8	1.43	OK
		18	5.50	7.1	1.28	OK
gamma	S-Cs/0°	1	5.80	5.7	0.99	OK
		2	5.80	6.5	1.12	OK
		3	5.80	6.5	1.12	OK
		4	5.80	6.2	1.07	OK
	S-Co/0°	11	4.61	5.3	1.15	OK
		12	4.61	5.3	1.14	OK
		13	6.49	7.2	1.11	OK
		14	6.49	7.4	1.15	OK
		9	44.10	41.7	0.95	OK
		10	44.10	44.8	1.02	OK
		7	420.00	432.0	1.03	OK
		8	420.00	446.0	1.06	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.05**	1.05	1.10	1.01	6%
N60/60°	2	**1.35**	1.35	1.43	1.28	7%
S-Cs/0°	4	**1.09**	1.07	1.12	0.99	6%
S-Co/0°	8	**1.09**	1.07	1.15	0.95	7%
All	**16**	**1.10**	**1.11**	**1.43**	**0.95**	**11%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

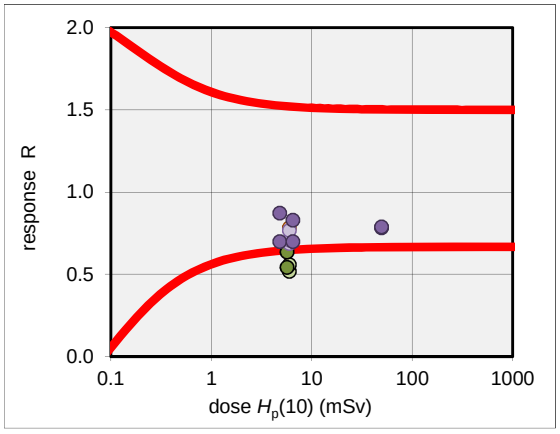
trumpet curve parameter: 1.5 / 0.085 mSv

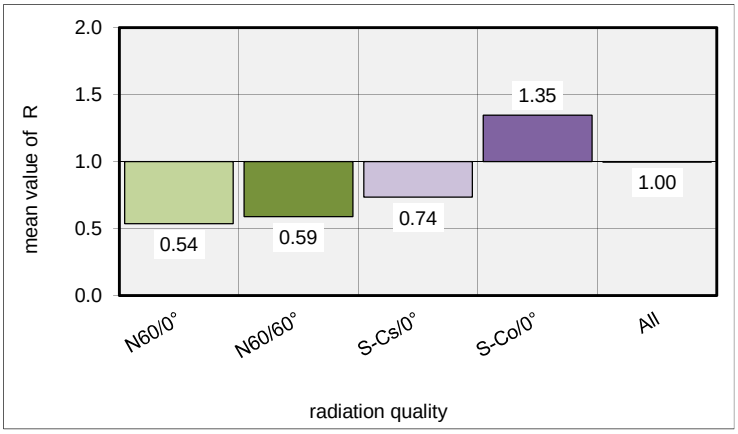
Reporting number 60: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	6.00	3.1	0.52	outlier
		16	6.00	3.3	0.56	outlier
	N60/60°	17	5.70	3.6	0.63	outlier
		18	5.70	3.1	0.54	outlier
gamma	S-Cs/0°	1	6.00	4.7	0.78	OK
		2	6.00	4.1	0.69	OK
		3	6.00	4.2	0.71	OK
		4	6.00	4.6	0.77	OK
	S-Co/0°	11	4.79	4.2	0.87	OK
		12	4.79	3.3	0.70	OK
		13	6.49	4.5	0.70	OK
		14	6.49	5.4	0.83	OK
		9	49.70	38.8	0.78	OK
		10	49.70	39.2	0.79	OK
		7	480.00	1421.8	2.96	outlier
		8	480.00	1506.9	3.14	outlier
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.54**	0.54	0.56	0.52	5%
N60/60°	2	**0.59**	0.59	0.63	0.54	11%
S-Cs/0°	4	**0.74**	0.74	0.78	0.69	6%
S-Co/0°	8	**0.81**	1.35	3.14	0.70	78%
All	**16**	**0.74**	**1.00**	**3.14**	**0.52**	**81%**

outliers: 6 of 16 Fraction of outliers: 38%





Results: IC2012 2 points outside diagramme (> 2)

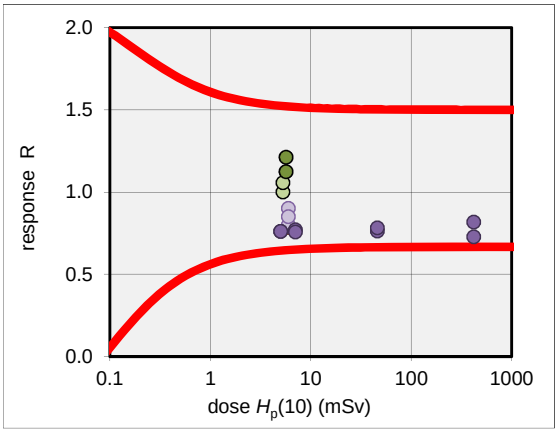
trumpet curve parameter: 1.5 / 0.085 mSv

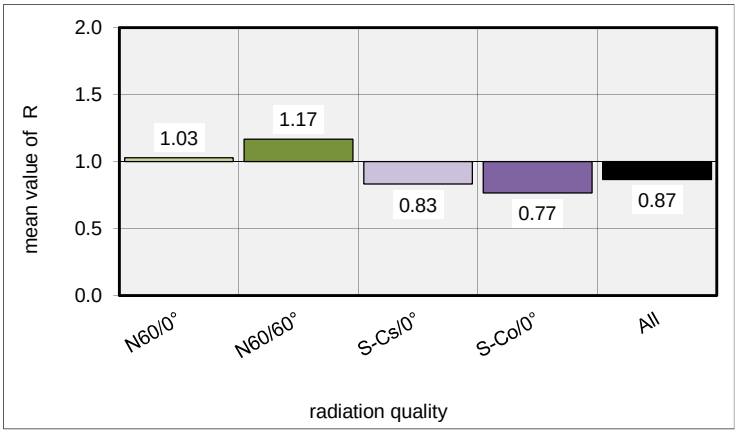
Reporting number 61: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	5.3	1.00	OK
		16	5.30	5.6	1.06	OK
	N60/60°	17	5.70	6.4	1.12	OK
		18	5.70	6.9	1.21	OK
gamma	S-Cs/0°	1	6.00	4.7	0.78	OK
		2	6.00	5.4	0.90	OK
		3	6.00	4.8	0.80	OK
		4	6.00	5.1	0.85	OK
	S-Co/0°	11	5.00	3.8	0.76	OK
		12	5.00	3.8	0.76	OK
		13	7.01	5.4	0.77	OK
		14	7.01	5.3	0.76	OK
		9	46.00	35.1	0.76	OK
		10	46.00	36.0	0.78	OK
		7	420.00	305.7	0.73	OK
		8	420.00	342.8	0.82	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.03**	1.03	1.06	1.00	4%
N60/60°	2	**1.17**	1.17	1.21	1.12	5%
S-Cs/0°	4	**0.83**	0.83	0.90	0.78	6%
S-Co/0°	8	**0.76**	0.77	0.82	0.73	3%
All	**16**	**0.79**	**0.87**	**1.21**	**0.73**	**17%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

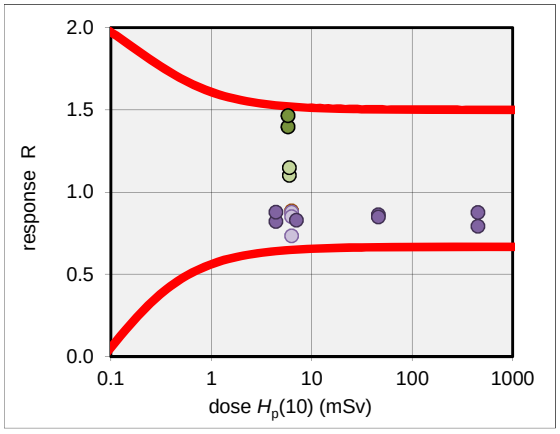
trumpet curve parameter: 1.5 / 0.085 mSv

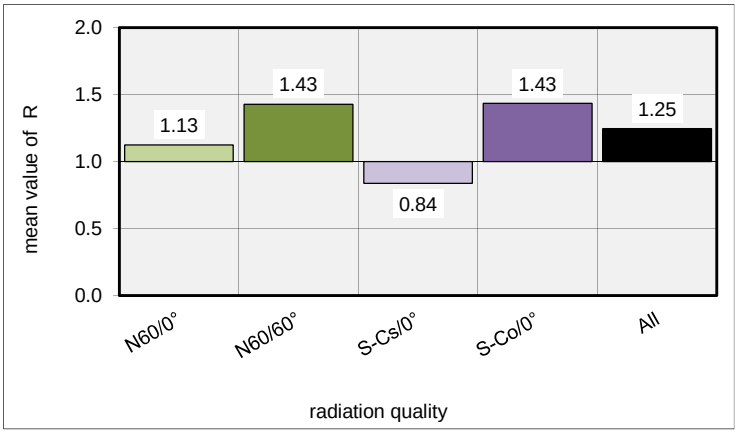
Reporting number 62: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	6.00	6.6	1.10	OK
		16	6.00	6.9	1.15	OK
	N60/60°	17	5.80	8.1	1.40	OK
		18	5.80	8.5	1.46	OK
gamma	S-Cs/0°	1	6.30	5.6	0.88	OK
		2	6.30	5.5	0.88	OK
		3	6.30	5.4	0.85	OK
		4	6.30	4.6	0.73	OK
	S-Co/0°	9	4.41	3.6	0.82	OK
		10	4.41	3.9	0.88	OK
		13	7.01	39.0	5.57	outlier
		14	7.01	5.8	0.83	OK
		11	46.00	39.7	0.86	OK
		12	46.00	39.0	0.85	OK
		7	450.00	356.1	0.79	OK
		8	450.00	393.8	0.88	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.13**	1.13	1.15	1.10	3%
N60/60°	2	**1.43**	1.43	1.46	1.40	3%
S-Cs/0°	4	**0.86**	0.84	0.88	0.73	8%
S-Co/0°	8	**0.86**	1.43	5.57	0.79	117%
All	**16**	**0.88**	**1.25**	**5.57**	**0.73**	**94%**

outliers: 1 of 16 Fraction of outliers: 6%





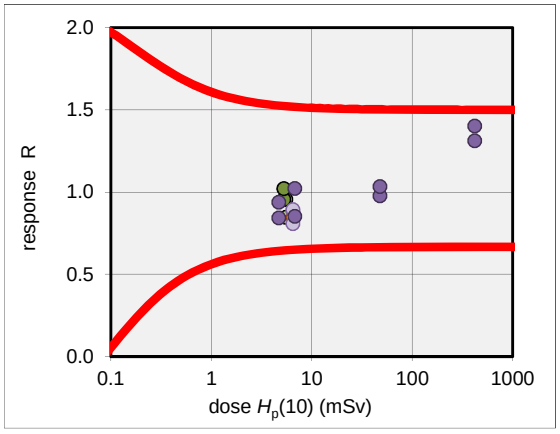
Results: IC2012 1 point outside diagramme (> 2) trumpet curve parameter: 1.5 / 0.085 mSv

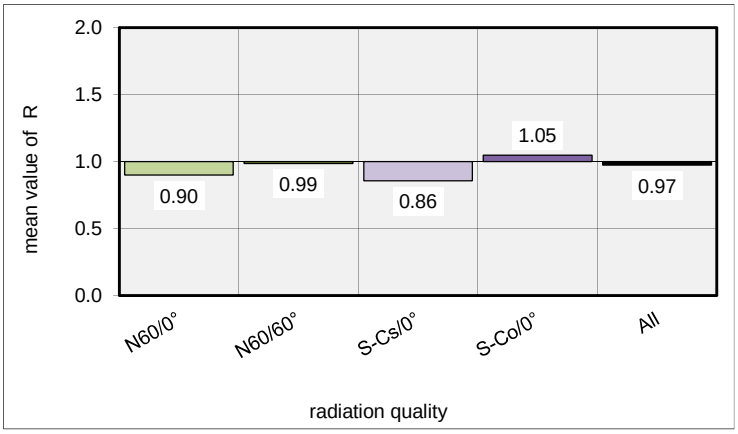
Reporting number 63: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	4.7	0.85	OK
		16	5.50	5.3	0.95	OK
	N60/60°	17	5.30	5.1	0.95	OK
		18	5.30	5.4	1.02	OK
gamma	S-Cs/0°	1	6.50	5.5	0.85	OK
		2	6.50	5.3	0.81	OK
		3	6.50	5.8	0.88	OK
		4	6.50	5.8	0.89	OK
	S-Co/0°	11	4.69	4.0	0.84	OK
		12	4.69	4.4	0.94	OK
		13	6.80	5.8	0.85	OK
		14	6.80	7.0	1.02	OK
		9	47.90	46.8	0.98	OK
		10	47.90	49.5	1.03	OK
		7	420.00	551.2	1.31	OK
		8	420.00	588.8	1.40	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.90**	0.90	0.95	0.85	9%
N60/60°	2	**0.99**	0.99	1.02	0.95	5%
S-Cs/0°	4	**0.87**	0.86	0.89	0.81	5%
S-Co/0°	8	**1.00**	1.05	1.40	0.84	20%
All	**16**	**0.95**	**0.97**	**1.40**	**0.81**	**17%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

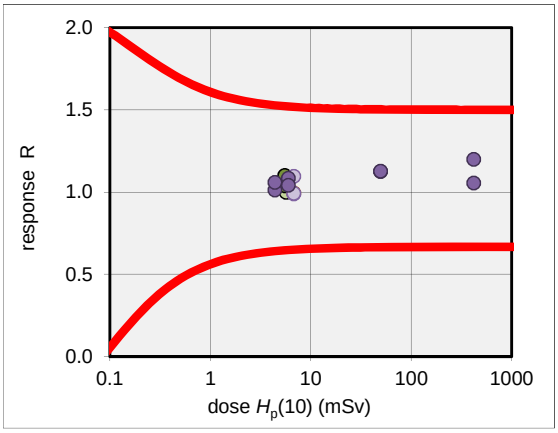
trumpet curve parameter: 1.5 / 0.085 mSv

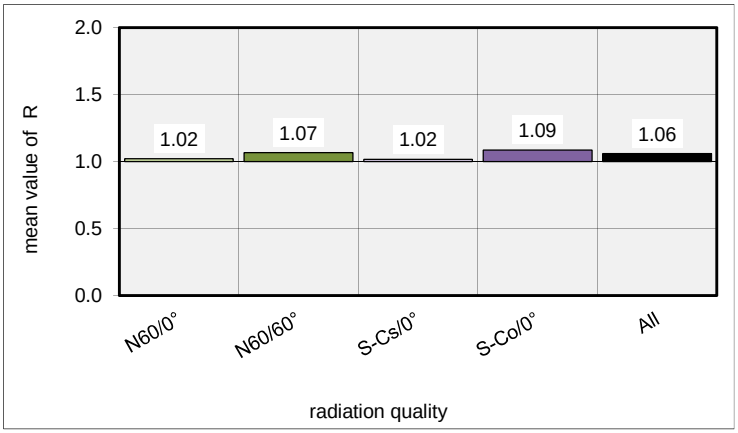
Reporting number 64: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.70	5.7	1.00	OK
		18	5.70	6.0	1.05	OK
	N60/60°	19	5.50	6.1	1.10	OK
		20	5.50	5.7	1.04	OK
gamma	S-Cs/0°	13	6.80	6.8	0.99	OK
		14	6.80	6.7	0.99	OK
		15	6.80	7.5	1.10	OK
		16	6.80	6.8	0.99	OK
	S-Co/0°	6	4.41	4.5	1.01	OK
		7	4.41	4.7	1.06	OK
		5	6.00	6.5	1.08	OK
		8	6.00	6.3	1.04	OK
		9	49.70	55.9	1.12	OK
		10	49.70	56.0	1.13	OK
		3	420.00	443.3	1.06	OK
		4	420.00	503.6	1.20	OK
	NIR	11				
	NIR	12				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.02**	1.02	1.05	1.00	3%
N60/60°	2	**1.07**	1.07	1.10	1.04	4%
S-Cs/0°	4	**0.99**	1.02	1.10	0.99	5%
S-Co/0°	8	**1.07**	1.09	1.20	1.01	5%
All	**16**	**1.05**	**1.06**	**1.20**	**0.99**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

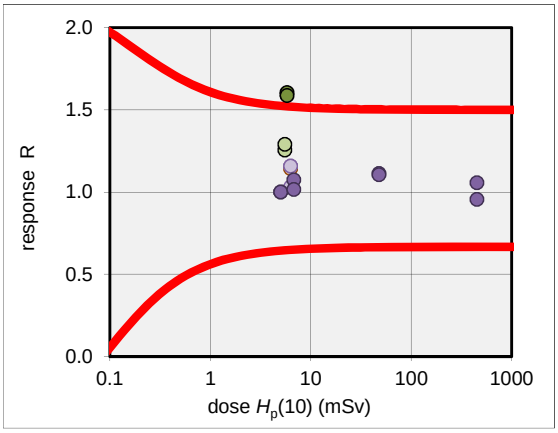
trumpet curve parameter: 1.5 / 0.085 mSv

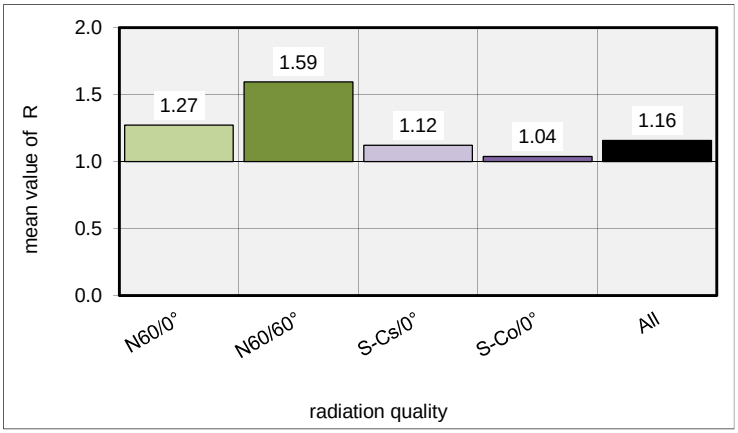
Reporting number 65: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.50	6.9	1.25	OK
		17	5.50	7.1	1.29	OK
	N60/60°	18	5.80	9.3	1.60	outlier
		19	5.80	9.2	1.59	outlier
gamma	S-Cs/0°	9	6.30	7.2	1.14	OK
		10	6.30	6.5	1.03	OK
		11	6.30	7.3	1.16	OK
		12	6.30	7.3	1.16	OK
	S-Co/0°	3	5.00	5.0	1.00	OK
		4	5.00	5.0	1.00	OK
		14	6.80	7.3	1.07	OK
		15	6.80	6.9	1.01	OK
		1	47.90	53.3	1.11	OK
		2	47.90	52.9	1.10	OK
		7	450.00	429.9	0.96	OK
		8	450.00	475.5	1.06	OK
	NIR	13				
	NIR	20				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.27**	1.27	1.29	1.25	2%
N60/60°	2	**1.59**	1.59	1.60	1.59	1%
S-Cs/0°	4	**1.15**	1.12	1.16	1.03	5%
S-Co/0°	8	**1.04**	1.04	1.11	0.96	5%
All	**16**	**1.11**	**1.16**	**1.60**	**0.96**	**17%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

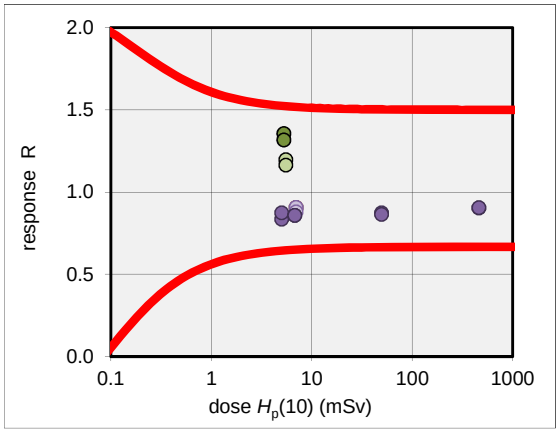
trumpet curve parameter: 1.5 / 0.085 mSv

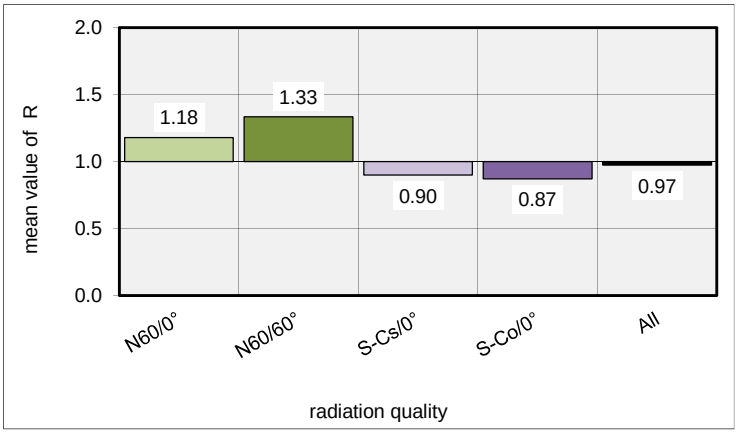
Reporting number 66: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	6.6	1.20	OK
		16	5.50	6.4	1.16	OK
	N60/60°	17	5.30	7.2	1.35	OK
		18	5.30	7.0	1.32	OK
gamma	S-Cs/0°	9	7.00	6.3	0.91	OK
		10	7.00	6.3	0.90	OK
		11	7.00	6.3	0.91	OK
		12	7.00	6.2	0.88	OK
	S-Co/0°	3	5.00	4.2	0.83	OK
		4	5.00	4.4	0.87	OK
		13	6.80	5.8	0.86	OK
		14	6.80	5.8	0.86	OK
		1	49.70	43.5	0.87	OK
		2	49.70	42.9	0.86	OK
		7	460.00	414.9	0.90	OK
		8	460.00	415.9	0.90	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.18**	1.18	1.20	1.16	2%
N60/60°	2	**1.33**	1.33	1.35	1.32	2%
S-Cs/0°	4	**0.91**	0.90	0.91	0.88	1%
S-Co/0°	8	**0.87**	0.87	0.90	0.83	3%
All	**16**	**0.90**	**0.97**	**1.35**	**0.83**	**18%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

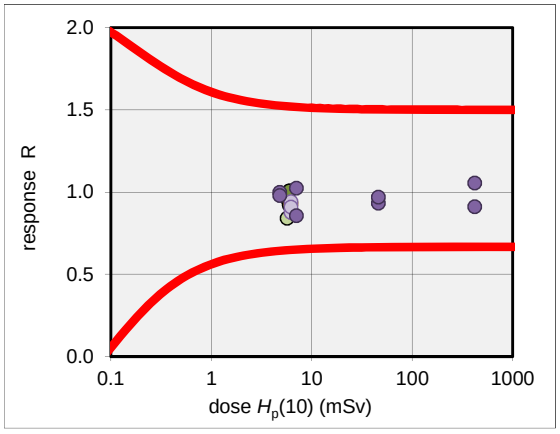
trumpet curve parameter: 1.5 / 0.085 mSv

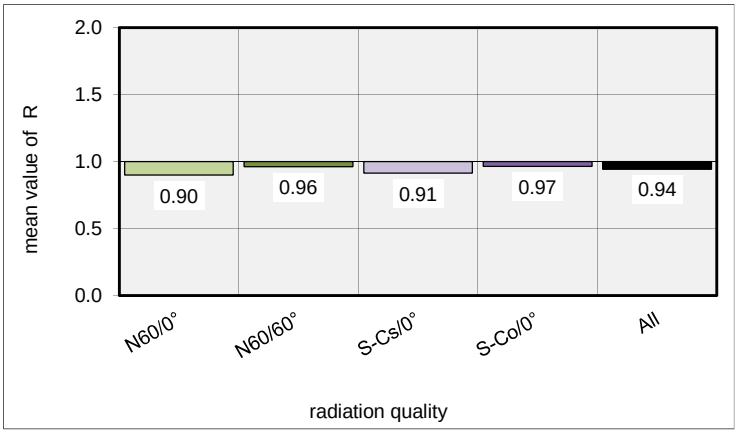
Reporting number 67: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.70	4.8	0.84	OK
		16	5.70	5.5	0.96	OK
	N60/60°	17	6.00	5.5	0.92	OK
		18	6.00	6.0	1.01	OK
gamma	S-Cs/0°	1	6.20	5.8	0.93	OK
		2	6.20	5.4	0.88	OK
		3	6.20	5.8	0.94	OK
		4	6.20	5.6	0.91	OK
	S-Co/0°	11	4.79	4.8	1.00	OK
		12	4.79	4.7	0.98	OK
		13	7.01	7.2	1.02	OK
		14	7.01	6.0	0.86	OK
		9	46.00	42.9	0.93	OK
		10	46.00	44.5	0.97	OK
		7	420.00	382.5	0.91	OK
		8	420.00	443.2	1.06	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.90**	0.90	0.96	0.84	9%
N60/60°	2	**0.96**	0.96	1.01	0.92	6%
S-Cs/0°	4	**0.92**	0.91	0.94	0.88	3%
S-Co/0°	8	**0.97**	0.97	1.06	0.86	7%
All	**16**	**0.94**	**0.94**	**1.06**	**0.84**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

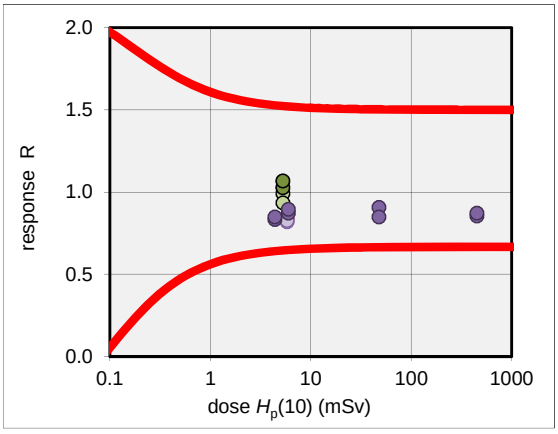
trumpet curve parameter: 1.5 / 0.085 mSv

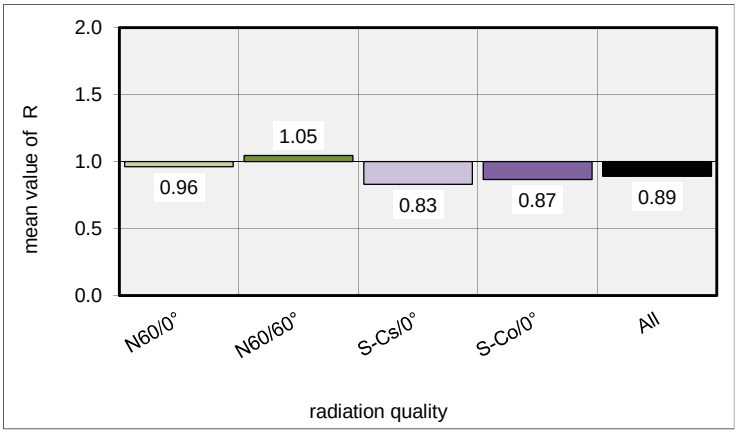
Reporting number 68: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.30	5.3	0.99	OK
		16	5.30	5.0	0.93	OK
	N60/60°	17	5.30	5.4	1.02	OK
		18	5.30	5.7	1.07	OK
gamma	S-Cs/0°	1	5.80	4.9	0.84	OK
		2	5.80	4.8	0.82	OK
		4	5.80	4.8	0.83	OK
		5	5.80	4.8	0.83	OK
	S-Co/0°	11	4.41	3.7	0.83	OK
		12	4.41	3.7	0.85	OK
		13	6.00	5.2	0.87	OK
		14	6.00	5.4	0.90	OK
		9	47.90	43.5	0.91	OK
		10	47.90	40.6	0.85	OK
		7	450.00	384.6	0.85	OK
		8	450.00	392.3	0.87	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.96**	0.96	0.99	0.93	4%
N60/60°	2	**1.05**	1.05	1.07	1.02	3%
S-Cs/0°	4	**0.83**	0.83	0.84	0.82	1%
S-Co/0°	8	**0.86**	0.87	0.91	0.83	3%
All	**16**	**0.86**	**0.89**	**1.07**	**0.82**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

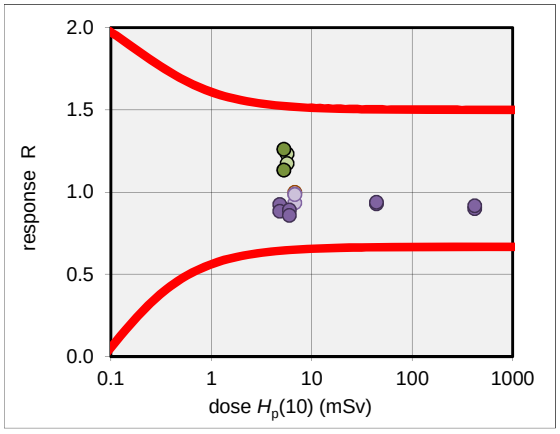
trumpet curve parameter: 1.5 / 0.085 mSv

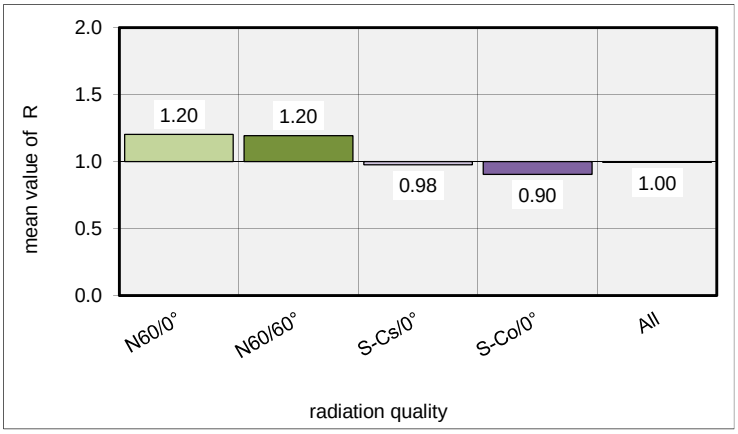
Reporting number 69: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.70	7.0	1.23	OK
		18	5.70	6.7	1.17	OK
	N60/60°	19	5.30	6.0	1.13	OK
		20	5.30	6.7	1.26	OK
gamma	S-Cs/0°	13	6.80	6.8	1.00	OK
		14	6.80	6.7	0.99	OK
		15	6.80	6.3	0.93	OK
		16	6.80	6.7	0.98	OK
	S-Co/0°	1	4.79	4.4	0.92	OK
		2	4.79	4.2	0.88	OK
		3	6.00	5.3	0.89	OK
		4	6.00	5.1	0.86	OK
		9	44.10	41.0	0.93	OK
		10	44.10	41.4	0.94	OK
		7	420.00	377.7	0.90	OK
		8	420.00	384.7	0.92	OK
	NIR	11				
	NIR	12				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.20**	1.20	1.23	1.17	3%
N60/60°	2	**1.20**	1.20	1.26	1.13	8%
S-Cs/0°	4	**0.99**	0.98	1.00	0.93	3%
S-Co/0°	8	**0.91**	0.90	0.94	0.86	3%
All	**16**	**0.94**	**1.00**	**1.26**	**0.86**	**13%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

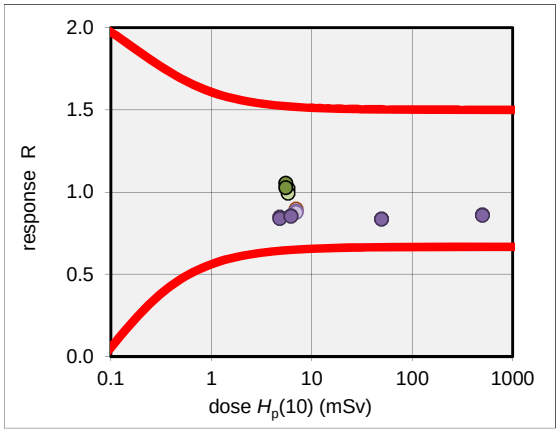
trumpet curve parameter: 1.5 / 0.085 mSv

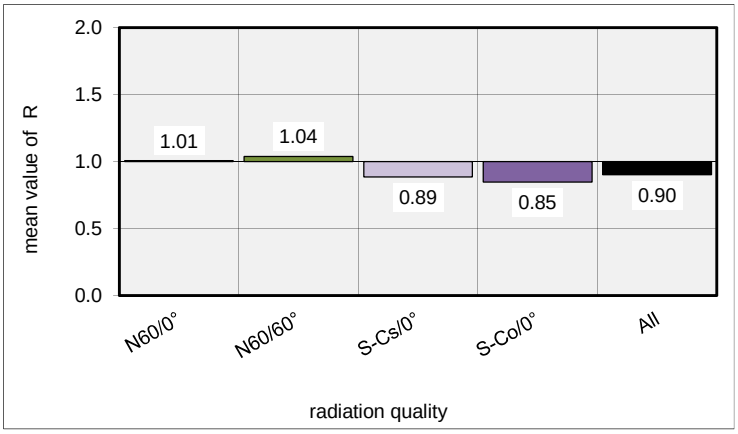
Reporting number 70: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	5.9	1.02	OK
		16	5.80	5.8	0.99	OK
	N60/60°	17	5.50	5.8	1.05	OK
		18	5.50	5.6	1.03	OK
gamma	S-Cs/0°	1	7.00	6.3	0.90	OK
		2	7.00	6.2	0.89	OK
		3	7.00	6.2	0.88	OK
		4	7.00	6.1	0.88	OK
	S-Co/0°	11	4.79	4.1	0.85	OK
		12	4.79	4.0	0.84	OK
		13	6.21	5.3	0.86	OK
		14	6.21	5.3	0.85	OK
		9	49.70	41.6	0.84	OK
		10	49.70	41.5	0.83	OK
		7	500.00	430.7	0.86	OK
		8	500.00	429.0	0.86	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.01**	1.01	1.02	0.99	2%
N60/60°	2	**1.04**	1.04	1.05	1.03	2%
S-Cs/0°	4	**0.88**	0.89	0.90	0.88	1%
S-Co/0°	8	**0.85**	0.85	0.86	0.83	1%
All	**16**	**0.87**	**0.90**	**1.05**	**0.83**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

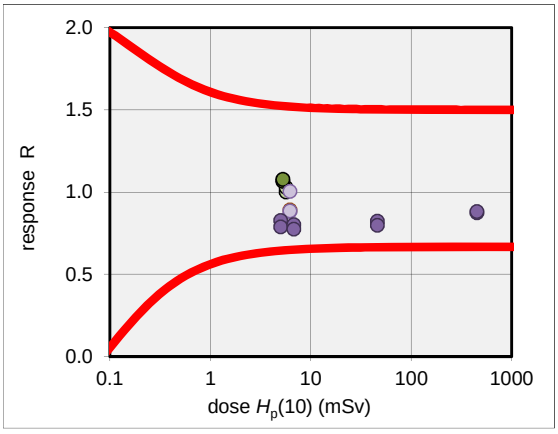
trumpet curve parameter: 1.5 / 0.085 mSv

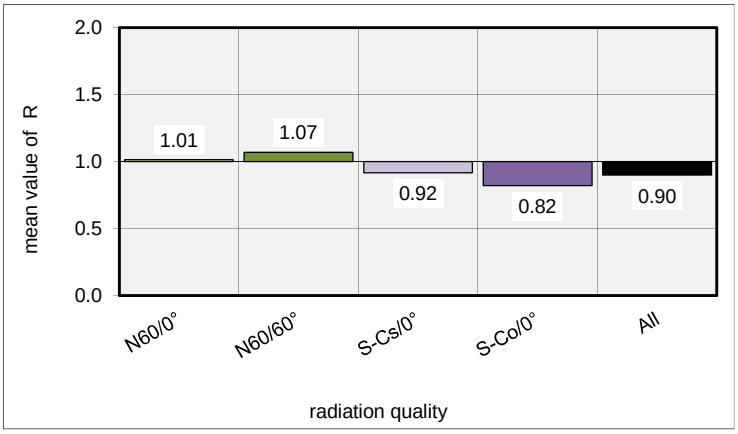
Reporting number 71: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	18	5.70	5.7	1.00	OK
		19	5.70	5.9	1.03	OK
	N60/60°	20	5.30	5.6	1.06	OK
		21	5.30	5.7	1.08	OK
gamma	S-Cs/0°	1	6.20	5.5	0.89	OK
		2	6.20	5.5	0.88	OK
		3	6.20	6.2	1.00	OK
		4	6.20	5.5	0.89	OK
	S-Co/0°	11	5.00	4.1	0.83	OK
		12	5.00	3.9	0.79	OK
		13	6.80	5.5	0.80	OK
		14	6.80	5.3	0.77	OK
		9	46.00	37.9	0.82	OK
		10	46.00	36.7	0.80	OK
		7	450.00	393.0	0.87	OK
		8	450.00	396.4	0.88	OK
	NIR	15				
	NIR	16				
	NIR	17				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.01**	1.01	1.03	1.00	2%
N60/60°	2	**1.07**	1.07	1.08	1.06	1%
S-Cs/0°	4	**0.89**	0.92	1.00	0.88	6%
S-Co/0°	8	**0.81**	0.82	0.88	0.77	5%
All	**16**	**0.88**	**0.90**	**1.08**	**0.77**	**11%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

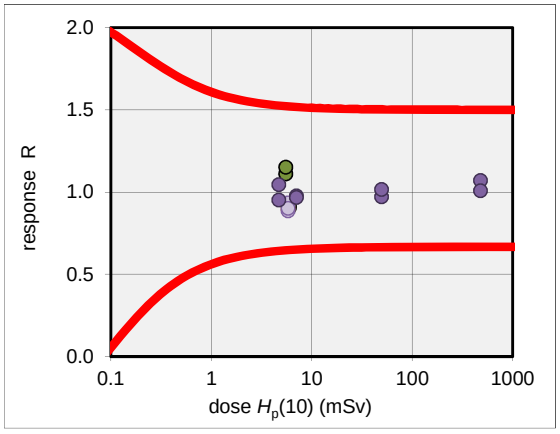
trumpet curve parameter: 1.5 / 0.085 mSv

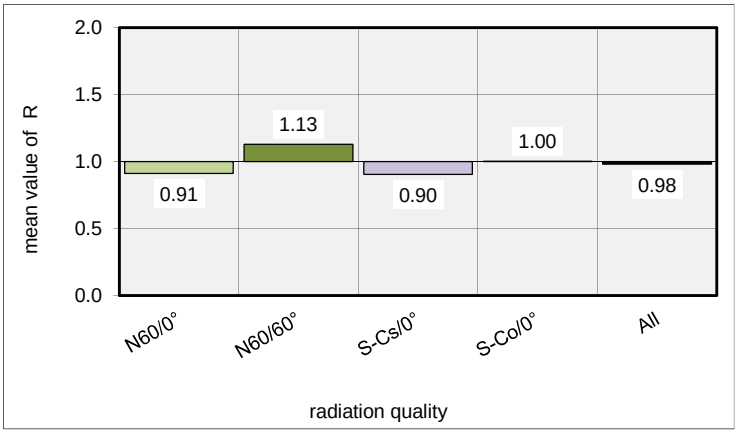
Reporting number 72: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	6.00	5.4	0.91	OK
		18	6.00	5.5	0.92	OK
	N60/60°	19	5.50	6.1	1.11	OK
		20	5.50	6.3	1.15	OK
gamma	S-Cs/0°	1	5.80	5.2	0.90	OK
		2	5.80	5.4	0.93	OK
		3	5.80	5.1	0.88	OK
		4	5.80	5.2	0.90	OK
	S-Co/0°	11	4.69	4.5	0.95	OK
		12	4.69	4.9	1.04	OK
		13	7.01	6.9	0.98	OK
		14	7.01	6.8	0.97	OK
		9	49.70	48.2	0.97	OK
		10	49.70	50.5	1.02	OK
		7	480.00	513.4	1.07	OK
		8	480.00	483.4	1.01	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.91**	0.91	0.92	0.91	1%
N60/60°	2	**1.13**	1.13	1.15	1.11	3%
S-Cs/0°	4	**0.90**	0.90	0.93	0.88	2%
S-Co/0°	8	**0.99**	1.00	1.07	0.95	4%
All	**16**	**0.97**	**0.98**	**1.15**	**0.88**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

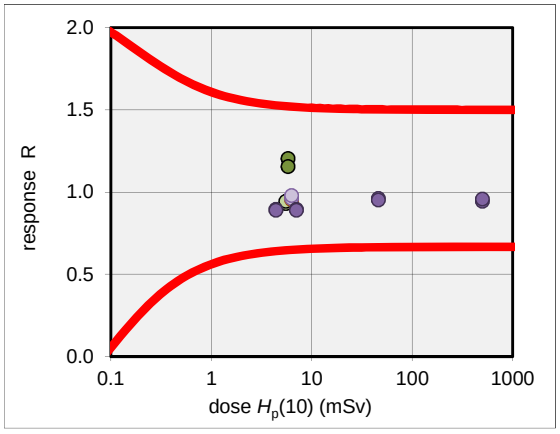
trumpet curve parameter: 1.5 / 0.085 mSv

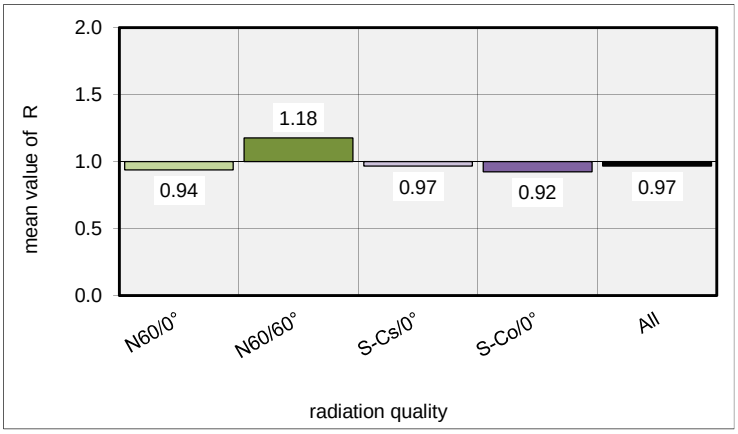
Reporting number 73: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	5.1	0.93	OK
		16	5.50	5.2	0.94	OK
	N60/60°	17	5.80	7.0	1.20	OK
		18	5.80	6.7	1.15	OK
gamma	S-Cs/0°	1	6.30	6.0	0.95	OK
		2	6.30	6.1	0.97	OK
		3	6.30	6.1	0.96	OK
		4	6.30	6.2	0.98	OK
	S-Co/0°	11	4.41	4.0	0.90	OK
		12	4.41	3.9	0.89	OK
		13	7.01	6.3	0.90	OK
		14	7.01	6.2	0.89	OK
		9	46.00	44.2	0.96	OK
		10	46.00	43.8	0.95	OK
		7	500.00	472.1	0.94	OK
		8	500.00	478.2	0.96	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.94**	0.94	0.94	0.93	1%
N60/60°	2	**1.18**	1.18	1.20	1.15	3%
S-Cs/0°	4	**0.97**	0.97	0.98	0.95	1%
S-Co/0°	8	**0.92**	0.92	0.96	0.89	4%
All	**16**	**0.95**	**0.97**	**1.20**	**0.89**	**9%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

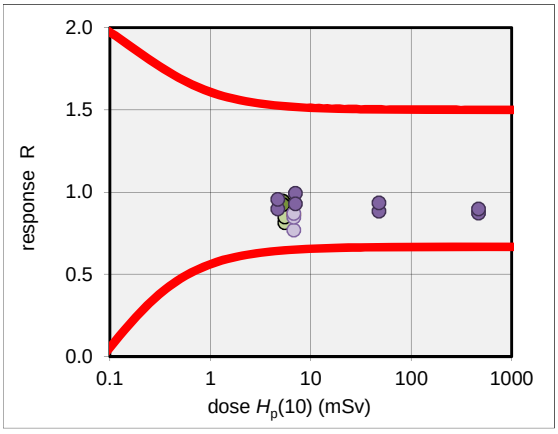
trumpet curve parameter: 1.5 / 0.085 mSv

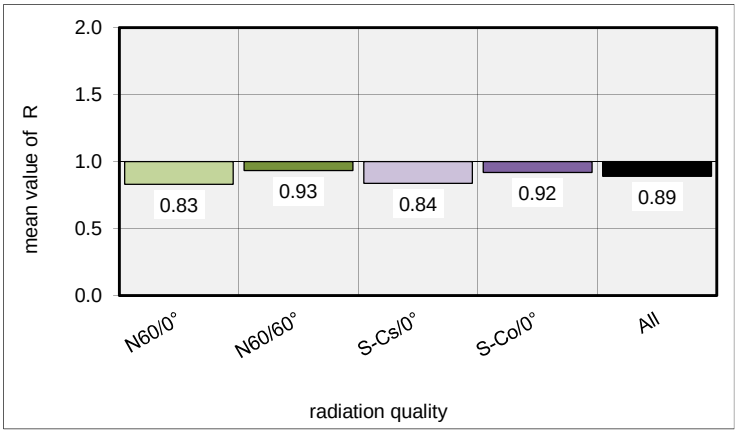
Reporting number 74: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	4.5	0.81	OK
		16	5.50	4.7	0.85	OK
	N60/60°	17	5.30	5.0	0.94	OK
		19	5.30	4.9	0.92	OK
gamma	S-Cs/0°	1	6.80	5.9	0.86	OK
		2	6.80	5.2	0.77	OK
		3	6.80	5.8	0.85	OK
		4	6.80	5.9	0.87	OK
	S-Co/0°	11	4.69	4.2	0.90	OK
		12	4.69	4.5	0.96	OK
		13	7.01	7.0	0.99	OK
		14	7.01	6.5	0.93	OK
		9	47.90	42.3	0.88	OK
		10	47.90	44.7	0.93	OK
		7	467.00	407.0	0.87	OK
		8	467.00	419.2	0.90	OK
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	18				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.83**	0.83	0.85	0.81	3%
N60/60°	2	**0.93**	0.93	0.94	0.92	2%
S-Cs/0°	4	**0.86**	0.84	0.87	0.77	6%
S-Co/0°	8	**0.91**	0.92	0.99	0.87	4%
All	**16**	**0.89**	**0.89**	**0.99**	**0.77**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

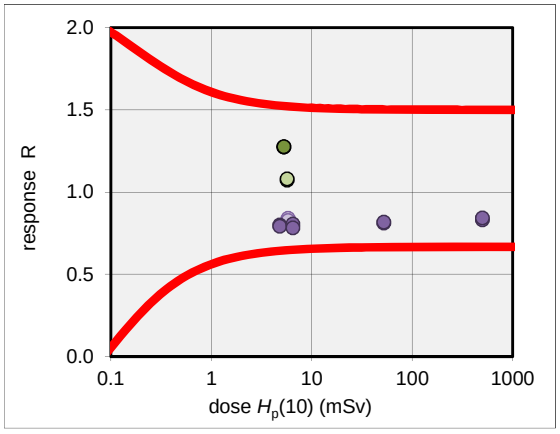
trumpet curve parameter: 1.5 / 0.085 mSv

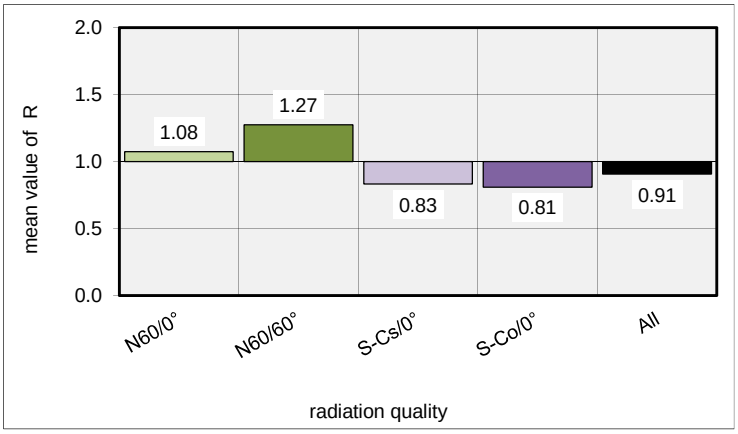
Reporting number 75: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.70	6.1	1.07	OK
		18	5.70	6.2	1.08	OK
	N60/60°	19	5.30	6.8	1.27	OK
		20	5.30	6.8	1.28	OK
gamma	S-Cs/0°	1	5.80	4.8	0.83	OK
		2	5.80	4.8	0.83	OK
		3	5.80	4.9	0.84	OK
		4	5.80	4.8	0.83	OK
	S-Co/0°	11	4.79	3.8	0.80	OK
		12	4.79	3.8	0.79	OK
		13	6.49	5.2	0.81	OK
		14	6.49	5.1	0.78	OK
		9	52.20	42.3	0.81	OK
		10	52.20	42.7	0.82	OK
		7	500.00	415.6	0.83	OK
		8	500.00	421.0	0.84	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.08**	1.08	1.08	1.07	0%
N60/60°	2	**1.27**	1.27	1.28	1.27	0%
S-Cs/0°	4	**0.83**	0.83	0.84	0.83	1%
S-Co/0°	8	**0.81**	0.81	0.84	0.78	2%
All	**16**	**0.83**	**0.91**	**1.28**	**0.78**	**19%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

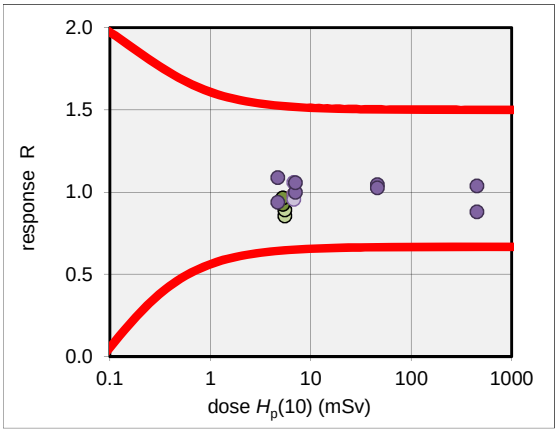
trumpet curve parameter: 1.5 / 0.085 mSv

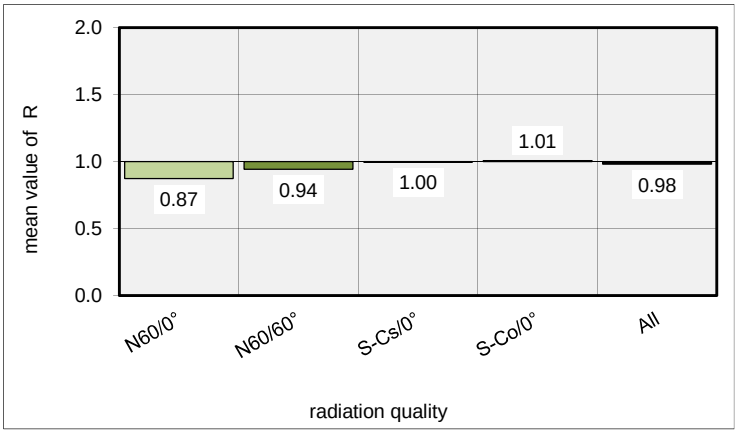
Reporting number 76: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	4.7	0.85	OK
		16	5.50	4.9	0.89	OK
	N60/60°	17	5.30	4.9	0.92	OK
		18	5.30	5.1	0.96	OK
gamma	S-Cs/0°	1	6.80	6.7	0.99	OK
		2	6.80	7.2	1.06	OK
		3	6.80	6.7	0.99	OK
		4	6.80	6.5	0.96	OK
	S-Co/0°	11	4.69	5.1	1.09	OK
		12	4.69	4.4	0.94	OK
		13	7.01	7.0	1.00	OK
		14	7.01	7.4	1.06	OK
		9	46.00	48.1	1.05	OK
		10	46.00	47.2	1.03	OK
		7	450.00	467.0	1.04	OK
		8	450.00	396.0	0.88	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.87**	0.87	0.89	0.85	3%
N60/60°	2	**0.94**	0.94	0.96	0.92	3%
S-Cs/0°	4	**0.99**	1.00	1.06	0.96	4%
S-Co/0°	8	**1.03**	1.01	1.09	0.88	7%
All	**16**	**0.99**	**0.98**	**1.09**	**0.85**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

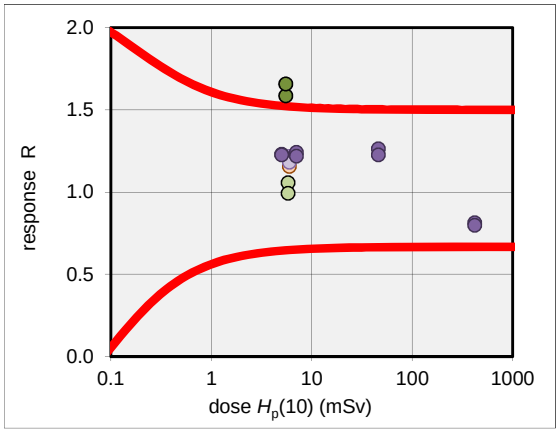
trumpet curve parameter: 1.5 / 0.085 mSv

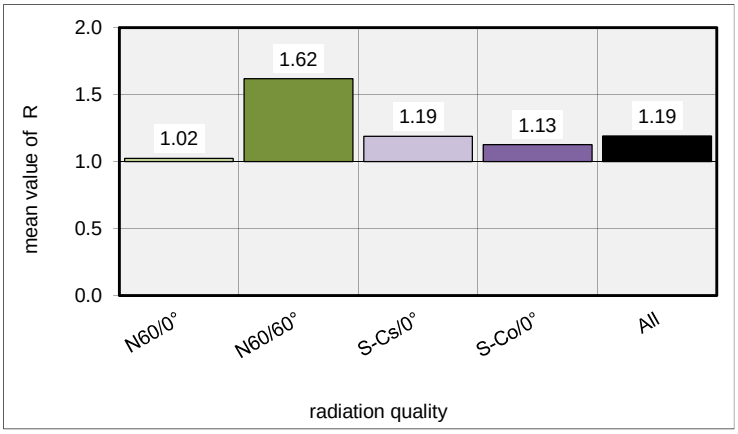
Reporting number 77: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.80	6.1	1.06	OK
		17	5.80	5.8	0.99	OK
	N60/60°	18	5.50	8.7	1.58	outlier
		19	5.50	9.1	1.66	outlier
gamma	S-Cs/0°	1	6.00	6.9	1.16	OK
		2	6.00	7.3	1.22	OK
		3	6.00	7.2	1.21	OK
		4	6.00	7.1	1.18	OK
	S-Co/0°	11	5.00	6.2	1.23	OK
		12	5.00	6.1	1.23	OK
		14	7.01	8.7	1.24	OK
		15	7.01	8.5	1.22	OK
		9	46.00	58.1	1.26	OK
		10	46.00	56.4	1.23	OK
		7	420.00	341.5	0.81	OK
		8	420.00	334.6	0.80	OK
	NIR	13				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.02**	1.02	1.06	0.99	5%
N60/60°	2	**1.62**	1.62	1.66	1.58	3%
S-Cs/0°	4	**1.19**	1.19	1.22	1.16	2%
S-Co/0°	8	**1.23**	1.13	1.26	0.80	18%
All	**16**	**1.22**	**1.19**	**1.66**	**0.80**	**19%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

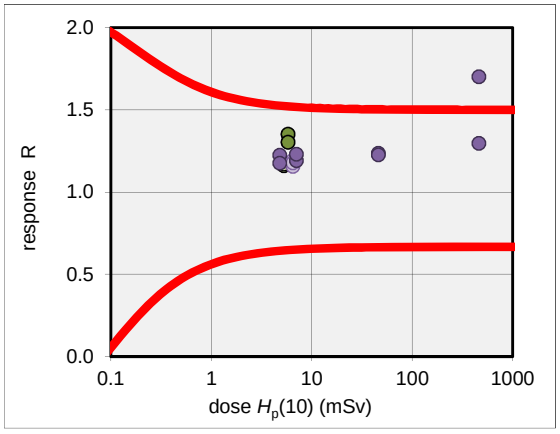
trumpet curve parameter: 1.5 / 0.085 mSv

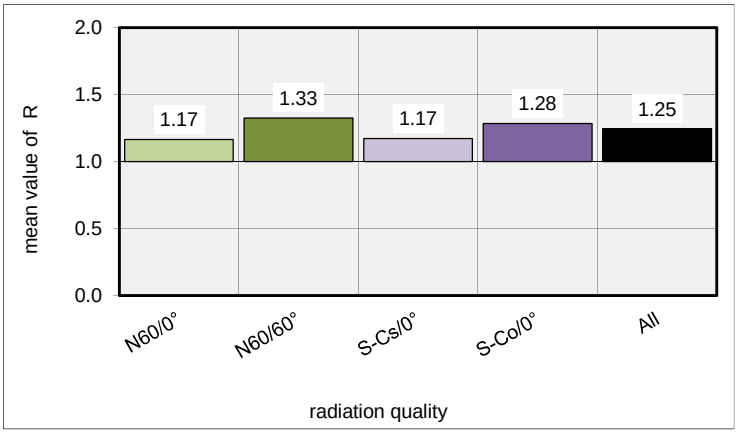
Reporting number 78: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.30	6.2	1.16	OK
		18	5.30	6.2	1.17	OK
	N60/60°	19	5.80	7.8	1.35	OK
		20	5.80	7.6	1.30	OK
gamma	S-Cs/0°	1	6.50	7.6	1.17	OK
		2	6.50	7.8	1.19	OK
		3	6.50	7.5	1.16	OK
		4	6.50	7.7	1.18	OK
	S-Co/0°	11	4.79	5.9	1.22	OK
		12	4.79	5.6	1.18	OK
		13	7.01	8.4	1.19	OK
		14	7.01	8.6	1.23	OK
		9	46.00	56.9	1.24	OK
		10	46.00	56.4	1.23	OK
		7	460.00	782.6	1.70	outlier
		8	460.00	596.2	1.30	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.17**	1.17	1.17	1.16	1%
N60/60°	2	**1.33**	1.33	1.35	1.30	3%
S-Cs/0°	4	**1.17**	1.17	1.19	1.16	1%
S-Co/0°	8	**1.23**	1.28	1.70	1.18	13%
All	**16**	**1.21**	**1.25**	**1.70**	**1.16**	**11%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

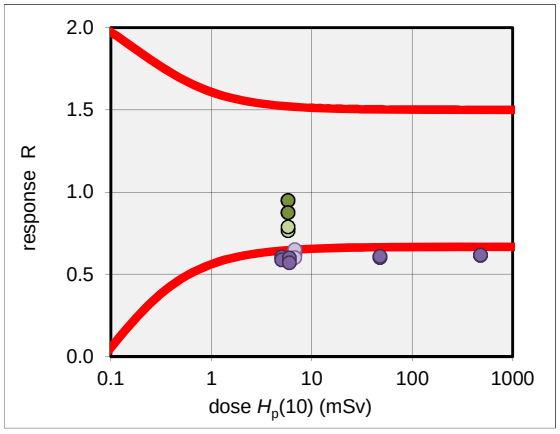
trumpet curve parameter: 1.5 / 0.085 mSv

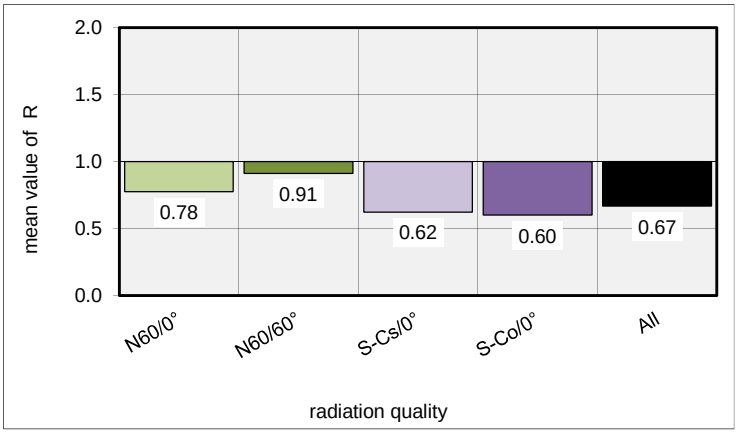
Reporting number 79: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.80	4.4	0.76	OK
		16	5.80	4.6	0.79	OK
	N60/60°	17	5.80	5.5	0.95	OK
		18	5.80	5.1	0.87	OK
gamma	S-Cs/0°	1	6.80	4.3	0.63	outlier
		2	6.80	4.2	0.62	outlier
		3	6.80	4.4	0.65	outlier
		4	6.80	4.1	0.60	outlier
	S-Co/0°	11	5.00	3.0	0.60	outlier
		12	5.00	2.9	0.59	outlier
		13	6.00	3.6	0.60	outlier
		14	6.00	3.4	0.57	outlier
		9	47.90	28.8	0.60	outlier
		10	47.90	29.2	0.61	outlier
		7	480.00	294.7	0.61	outlier
		8	480.00	295.6	0.62	outlier
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.78**	0.78	0.79	0.76	2%
N60/60°	2	**0.91**	0.91	0.95	0.87	6%
S-Cs/0°	4	**0.62**	0.62	0.65	0.60	3%
S-Co/0°	8	**0.60**	0.60	0.62	0.57	3%
All	**16**	**0.61**	**0.67**	**0.95**	**0.57**	**17%**

outliers: 12 of 16 Fraction of outliers: 75%





Results: IC2012

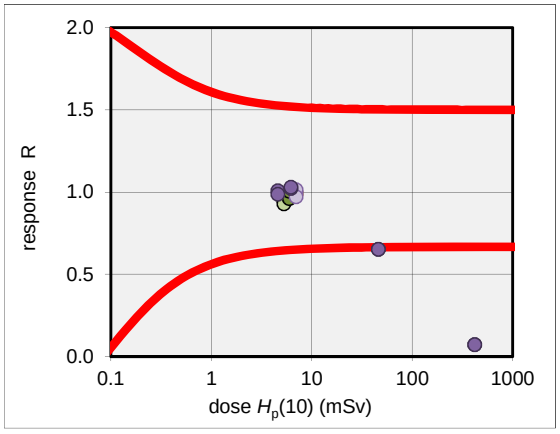
trumpet curve parameter: 1.5 / 0.085 mSv

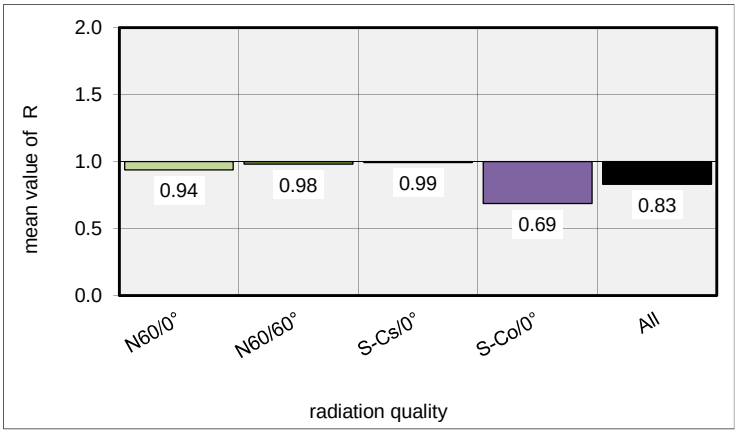
Reporting number 80: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.30	5.0	0.95	OK
		18	5.30	4.9	0.93	OK
	N60/60°	19	6.00	5.8	0.96	OK
		20	6.00	6.0	1.00	OK
gamma	S-Cs/0°	1	7.00	6.9	0.99	OK
		2	7.00	7.0	1.00	OK
		3	7.00	7.1	1.01	OK
		4	7.00	6.8	0.97	OK
	S-Co/0°	11	4.61	4.7	1.01	OK
		12	4.61	4.6	0.99	OK
		13	6.21	6.3	1.02	OK
		14	6.21	6.4	1.03	OK
		9	46.00	30.0	0.65	outlier
		10	46.00	30.0	0.65	outlier
		7	420.00	30.0	0.07	outlier
		8	420.00	30.0	0.07	outlier
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.94**	0.94	0.95	0.93	1%
N60/60°	2	**0.98**	0.98	1.00	0.96	3%
S-Cs/0°	4	**0.99**	0.99	1.01	0.97	2%
S-Co/0°	8	**0.82**	0.69	1.03	0.07	60%
All	**16**	**0.98**	**0.83**	**1.03**	**0.07**	**38%**

outliers: 4 of 16 Fraction of outliers: 25%





Results: IC2012

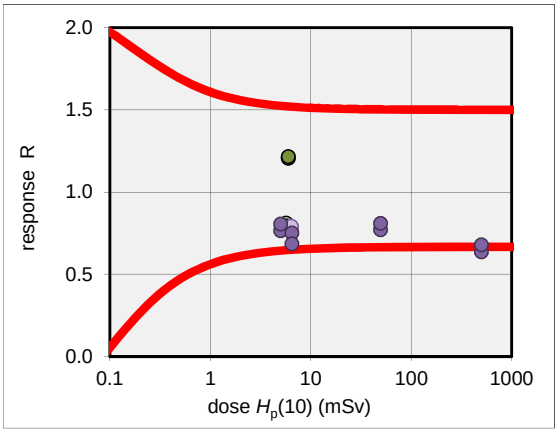
trumpet curve parameter: 1.5 / 0.085 mSv

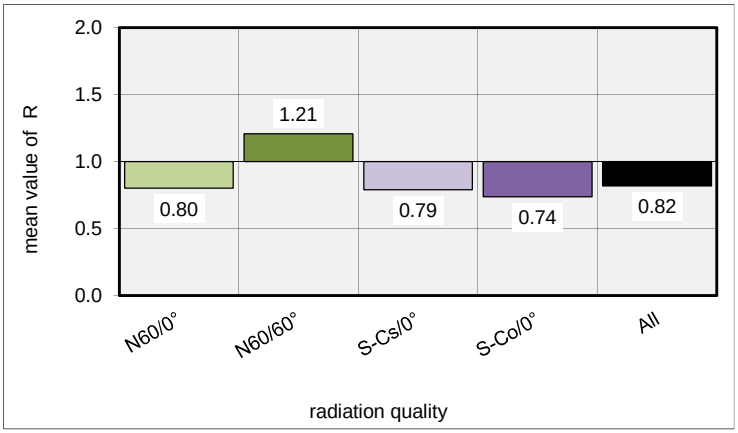
Reporting number 81: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.70	4.6	0.81	OK
		18	5.70	4.5	0.79	OK
	N60/60°	19	6.00	7.2	1.21	OK
		20	6.00	7.3	1.21	OK
gamma	S-Cs/0°	1	6.40	5.0	0.79	OK
		2	6.40	5.1	0.79	OK
		3	6.40	5.1	0.79	OK
		4	6.40	5.1	0.79	OK
	S-Co/0°	11	5.00	3.8	0.76	OK
		12	5.00	4.0	0.81	OK
		13	6.49	4.9	0.75	OK
		14	6.49	4.4	0.68	OK
		9	49.70	38.3	0.77	OK
		10	49.70	40.2	0.81	OK
		5	500.00	317.6	0.64	outlier
		6	500.00	339.5	0.68	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.80**	0.80	0.81	0.79	2%
N60/60°	2	**1.21**	1.21	1.21	1.21	0%
S-Cs/0°	4	**0.79**	0.79	0.79	0.79	0%
S-Co/0°	8	**0.76**	0.74	0.81	0.64	9%
All	**16**	**0.79**	**0.82**	**1.21**	**0.64**	**20%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

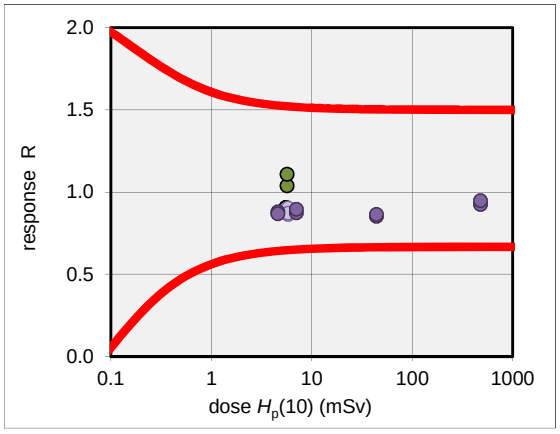
trumpet curve parameter: 1.5 / 0.085 mSv

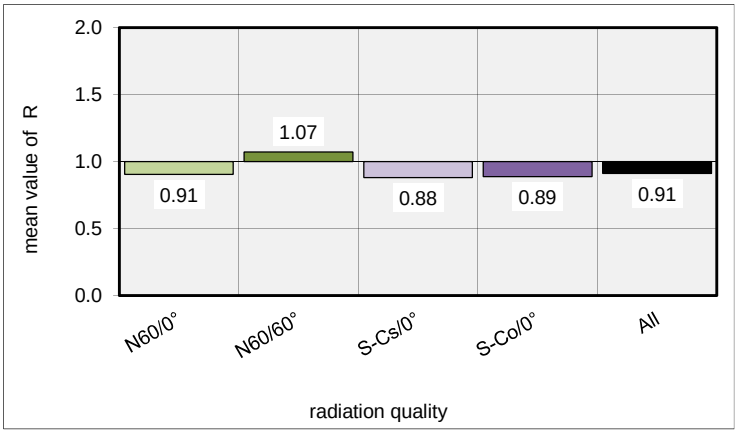
Reporting number 82: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.50	5.0	0.91	OK
		18	5.50	5.0	0.90	OK
	N60/60°	19	5.70	5.9	1.04	OK
		20	5.70	6.3	1.11	OK
gamma	S-Cs/0°	1	5.80	5.2	0.89	OK
		2	5.80	5.0	0.86	OK
		3	5.80	5.2	0.90	OK
		4	5.80	5.1	0.87	OK
	S-Co/0°	13	4.61	4.1	0.88	OK
		14	4.61	4.0	0.87	OK
		15	7.01	6.1	0.87	OK
		16	7.01	6.3	0.89	OK
		9	44.10	37.6	0.85	OK
		10	44.10	38.1	0.86	OK
		7	480.00	444.0	0.93	OK
		8	480.00	455.0	0.95	OK
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	11				
	WIR	12				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.91**	0.91	0.91	0.90	0%
N60/60°	2	**1.07**	1.07	1.11	1.04	5%
S-Cs/0°	4	**0.88**	0.88	0.90	0.86	2%
S-Co/0°	8	**0.88**	0.89	0.95	0.85	4%
All	**16**	**0.89**	**0.91**	**1.11**	**0.85**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

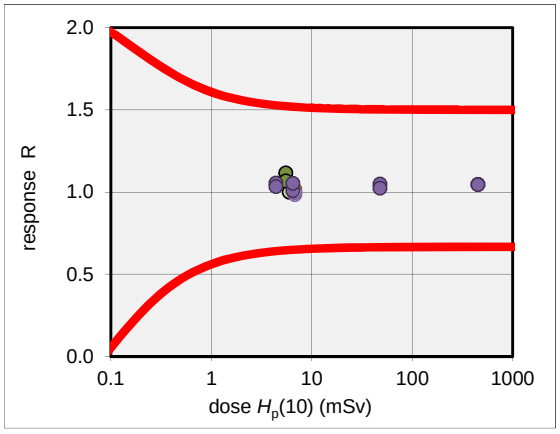
trumpet curve parameter: 1.5 / 0.085 mSv

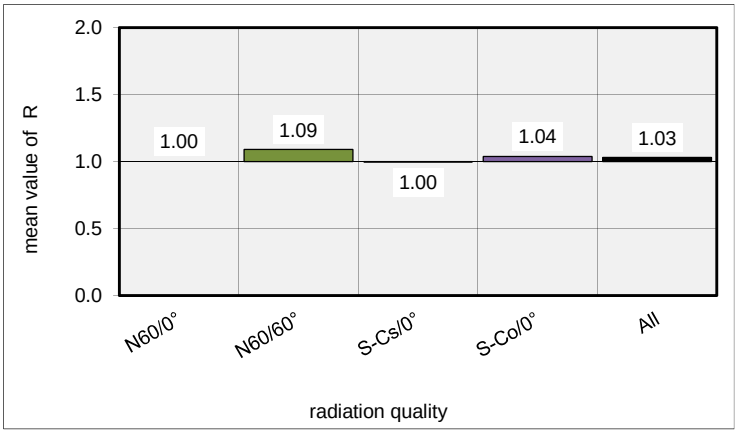
Reporting number 83: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	6.00	6.0	1.00	OK
		18	6.00	6.0	1.00	OK
	N60/60°	19	5.50	6.1	1.11	OK
		20	5.50	5.9	1.07	OK
gamma	S-Cs/0°	1	6.80	6.9	1.02	OK
		2	6.80	6.7	0.99	OK
		3	6.80	6.8	1.00	OK
		4	6.80	6.8	1.00	OK
	S-Co/0°	11	4.41	4.7	1.05	OK
		12	4.41	4.6	1.03	OK
		13	6.49	6.5	1.01	OK
		14	6.49	6.8	1.05	OK
		9	47.90	50.2	1.05	OK
		10	47.90	49.0	1.02	OK
		7	450.00	471.0	1.05	OK
		8	450.00	470.0	1.04	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.00**	1.00	1.00	1.00	0%
N60/60°	2	**1.09**	1.09	1.11	1.07	3%
S-Cs/0°	4	**1.00**	1.00	1.02	0.99	1%
S-Co/0°	8	**1.05**	1.04	1.05	1.01	2%
All	**16**	**1.03**	**1.03**	**1.11**	**0.99**	**3%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

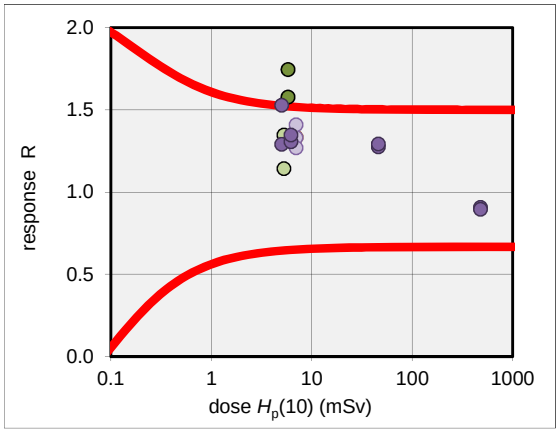
trumpet curve parameter: 1.5 / 0.085 mSv

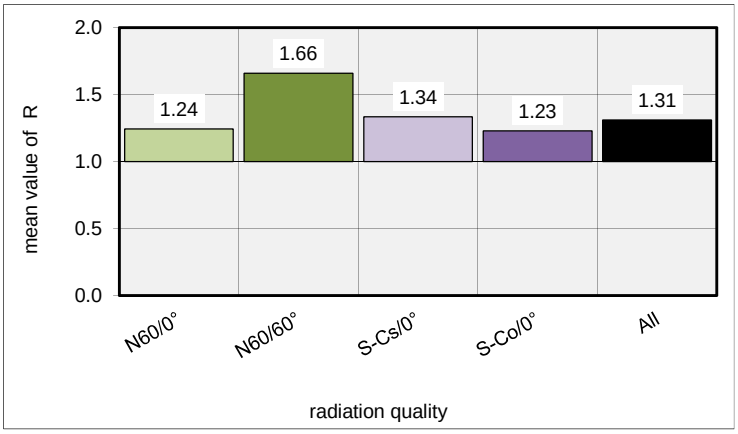
Reporting number 84: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.30	6.1	1.14	OK
		18	5.30	7.1	1.35	OK
	N60/60°	19	5.80	9.1	1.58	outlier
		20	5.80	10.1	1.74	outlier
gamma	S-Cs/0°	1	7.00	9.3	1.33	OK
		2	7.00	9.3	1.33	OK
		3	7.00	9.9	1.41	OK
		4	7.00	8.9	1.27	OK
	S-Co/0°	11	5.00	7.6	1.53	outlier
		12	5.00	6.5	1.29	OK
		13	6.21	8.1	1.31	OK
		14	6.21	8.4	1.35	OK
		9	46.00	58.7	1.28	OK
		10	46.00	59.5	1.29	OK
		7	480.00	435.5	0.91	OK
		8	480.00	429.6	0.90	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.24**	1.24	1.35	1.14	12%
N60/60°	2	**1.66**	1.66	1.74	1.58	7%
S-Cs/0°	4	**1.33**	1.34	1.41	1.27	4%
S-Co/0°	8	**1.29**	1.23	1.53	0.90	18%
All	**16**	**1.32**	**1.31**	**1.74**	**0.90**	**16%**

outliers: 3 of 16 Fraction of outliers: 19%





Results: IC2012

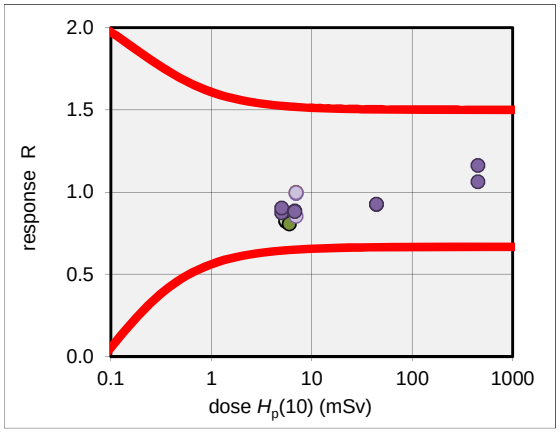
trumpet curve parameter: 1.5 / 0.085 mSv

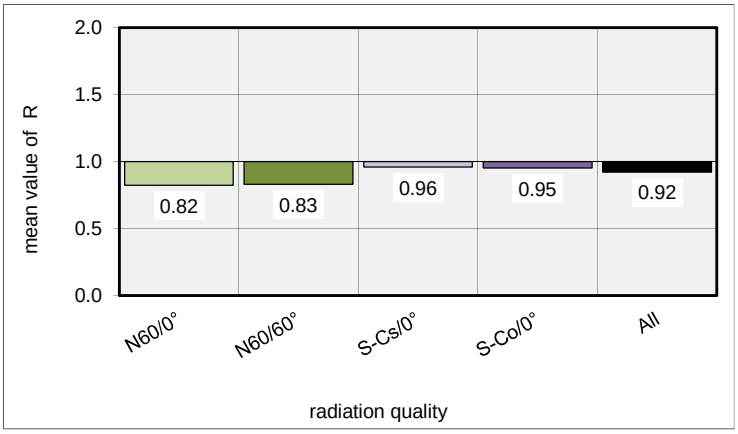
Reporting number 85: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.50	4.5	0.82	OK
		18	5.50	4.6	0.83	OK
	N60/60°	15	6.00	5.1	0.86	OK
		16	6.00	4.8	0.81	OK
gamma	S-Cs/0°	1	7.00	7.0	1.00	OK
		2	7.00	6.9	0.99	OK
		3	7.00	7.0	1.00	OK
		4	7.00	6.0	0.85	OK
	S-Co/0°	11	5.00	4.4	0.87	OK
		12	5.00	4.5	0.90	OK
		13	6.80	6.0	0.89	OK
		14	6.80	6.0	0.88	OK
		9	44.10	40.7	0.92	OK
		10	44.10	40.9	0.93	OK
		7	450.00	477.7	1.06	OK
		8	450.00	522.4	1.16	OK
	NIR	19				
	NIR	20				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.82**	0.82	0.83	0.82	1%
N60/60°	2	**0.83**	0.83	0.86	0.81	4%
S-Cs/0°	4	**0.99**	0.96	1.00	0.85	7%
S-Co/0°	8	**0.91**	0.95	1.16	0.87	11%
All	**16**	**0.89**	**0.92**	**1.16**	**0.81**	**10%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

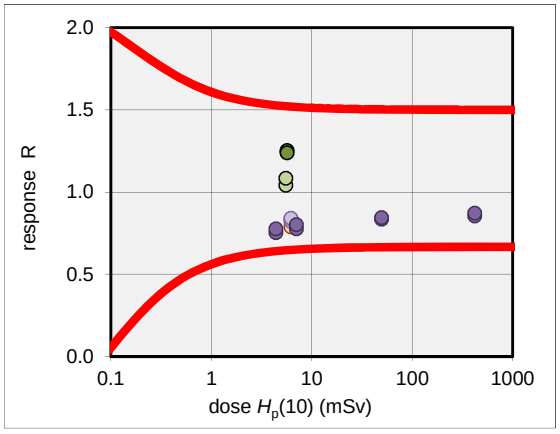
trumpet curve parameter: 1.5 / 0.085 mSv

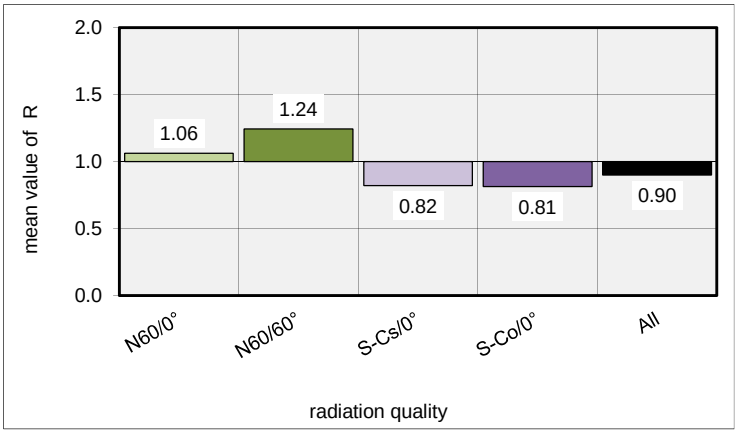
Reporting number 86: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.50	5.7	1.04	OK
		18	5.50	6.0	1.08	OK
	N60/60°	19	5.70	7.1	1.25	OK
		20	5.70	7.1	1.24	OK
gamma	S-Cs/0°	1	6.20	4.9	0.79	OK
		2	6.20	5.1	0.82	OK
		3	6.20	5.2	0.84	OK
		4	6.20	5.2	0.84	OK
	S-Co/0°	11	4.41	3.3	0.75	OK
		12	4.41	3.4	0.78	OK
		13	7.01	5.4	0.78	OK
		14	7.01	5.6	0.80	OK
		9	49.70	41.5	0.84	OK
		10	49.70	42.0	0.85	OK
		7	420.00	359.0	0.85	OK
		8	420.00	366.0	0.87	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.06**	1.06	1.08	1.04	3%
N60/60°	2	**1.24**	1.24	1.25	1.24	1%
S-Cs/0°	4	**0.83**	0.82	0.84	0.79	3%
S-Co/0°	8	**0.82**	0.81	0.87	0.75	5%
All	**16**	**0.84**	**0.90**	**1.25**	**0.75**	**18%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

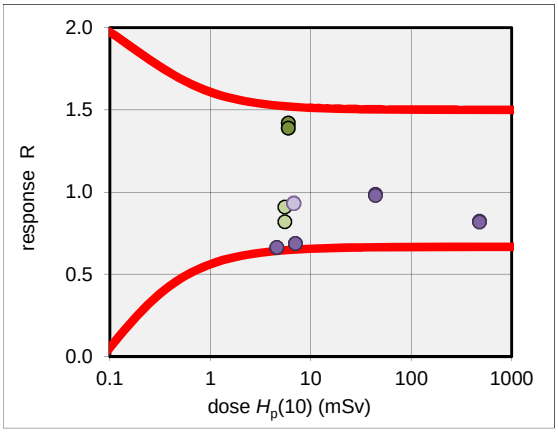
trumpet curve parameter: 1.5 / 0.085 mSv

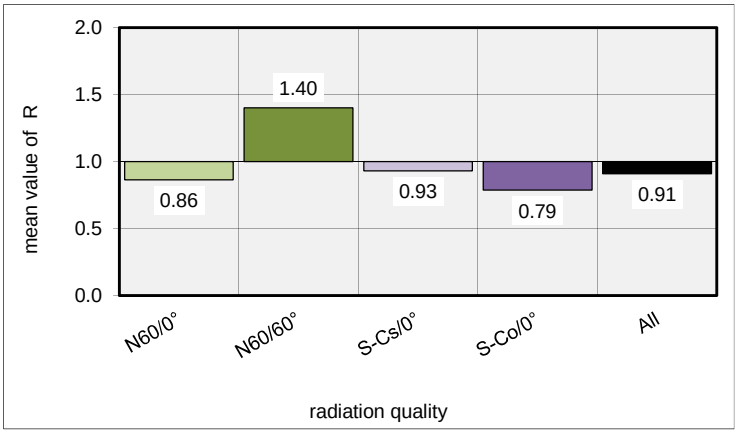
Reporting number 87: (TLD) for dose quantity Hp(10)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.50	4.5	0.82	OK
		16	5.50	5.0	0.91	OK
	N60/60°	17	6.00	8.5	1.42	OK
		18	6.00	8.3	1.39	OK
gamma	S-Cs/0°	1	6.80	6.3	0.93	OK
		2	6.80	6.4	0.93	OK
		3	6.80	6.3	0.93	OK
		4	6.80	6.3	0.93	OK
	S-Co/0°	11	4.61	3.1	0.66	OK
		12	4.61	3.1	0.66	OK
		13	7.01	4.8	0.69	OK
		14	7.01	4.8	0.69	OK
		9	44.10	43.5	0.99	OK
		10	44.10	43.2	0.98	OK
		7	480.00	395.1	0.82	OK
		8	480.00	392.3	0.82	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.86**	0.86	0.91	0.82	7%
N60/60°	2	**1.40**	1.40	1.42	1.39	2%
S-Cs/0°	4	**0.93**	0.93	0.93	0.93	0%
S-Co/0°	8	**0.75**	0.79	0.99	0.66	17%
All	**16**	**0.92**	**0.91**	**1.42**	**0.66**	**24%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

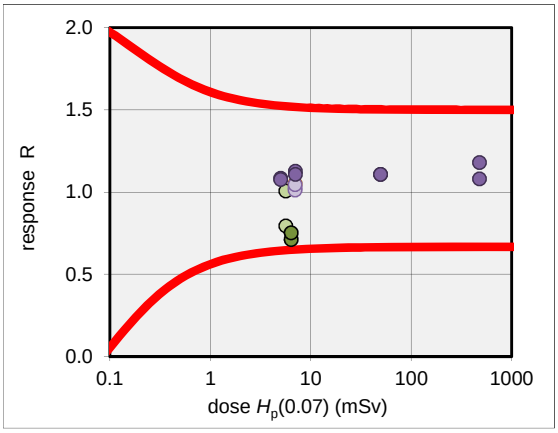
trumpet curve parameter: 1.5 / 0.085 mSv

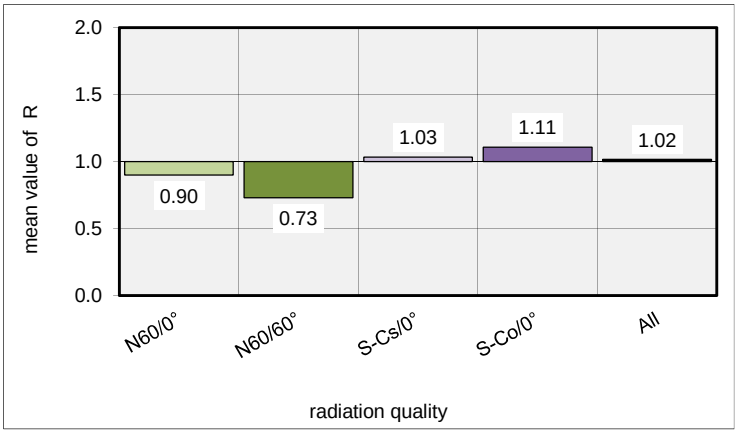
Reporting number 1: (other) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	1	5.64	5.7	1.01	OK
		2	5.64	4.5	0.79	OK
	N60/60°	3	6.37	4.5	0.71	OK
		10	6.37	4.8	0.75	OK
gamma	S-Cs/0°	16	7.00	7.4	1.05	OK
		17	7.00	7.2	1.02	OK
		18	7.00	7.1	1.01	OK
		19	7.00	7.3	1.05	OK
	S-Co/0°	11	5.00	5.4	1.08	OK
		12	5.00	5.4	1.08	OK
		13	7.01	7.9	1.13	OK
		14	7.01	7.8	1.11	OK
		8	49.70	55.0	1.11	OK
		9	49.70	55.0	1.11	OK
		4	480.00	566.0	1.18	OK
		5	480.00	518.0	1.08	OK
	NIR	15				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.90**	0.90	1.01	0.79	17%
N60/60°	2	**0.73**	0.73	0.75	0.71	4%
S-Cs/0°	4	**1.04**	1.03	1.05	1.01	2%
S-Co/0°	8	**1.11**	1.11	1.18	1.08	3%
All	**16**	**1.06**	**1.02**	**1.18**	**0.71**	**14%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

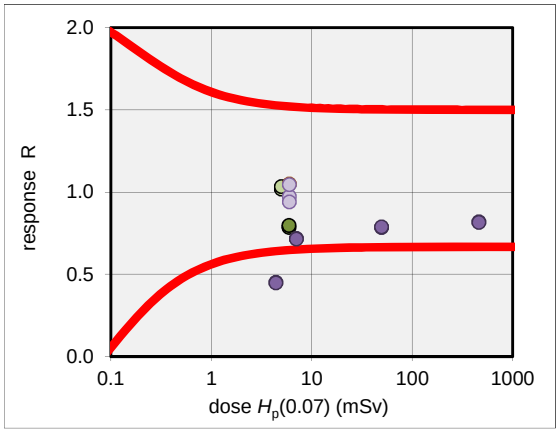
trumpet curve parameter: 1.5 / 0.085 mSv

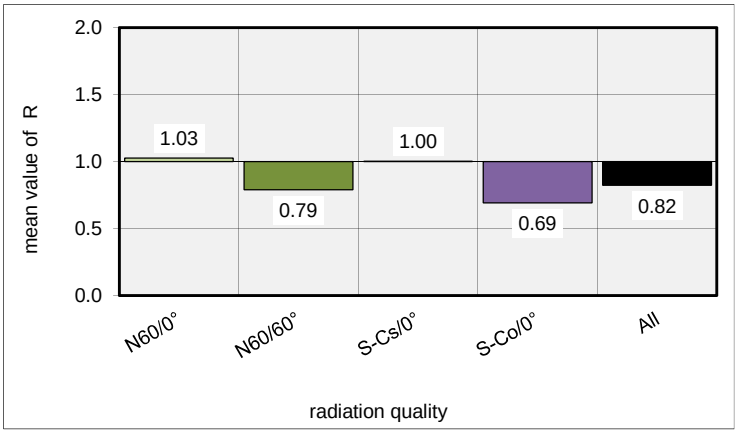
Reporting number 2: (other) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	4.98	5.1	1.02	OK
		16	4.98	5.2	1.03	OK
	N60/60°	17	5.93	4.7	0.78	OK
		18	5.93	4.7	0.80	OK
gamma	S-Cs/0°	1	6.00	6.3	1.05	OK
		2	6.00	5.8	0.97	OK
		3	6.00	6.3	1.05	OK
		4	6.00	5.6	0.94	OK
	S-Co/0°	11	4.41	2.0	0.45	outlier
		12	4.41	2.0	0.45	outlier
		13	7.01	5.0	0.72	OK
		14	7.01	5.0	0.71	OK
		9	49.70	38.9	0.78	OK
		10	49.70	39.2	0.79	OK
		7	460.00	377.0	0.82	OK
		8	460.00	375.1	0.82	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.03**	1.03	1.03	1.02	1%
N60/60°	2	**0.79**	0.79	0.80	0.78	1%
S-Cs/0°	4	**1.01**	1.00	1.05	0.94	5%
S-Co/0°	8	**0.75**	0.69	0.82	0.45	22%
All	**16**	**0.81**	**0.82**	**1.05**	**0.45**	**23%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

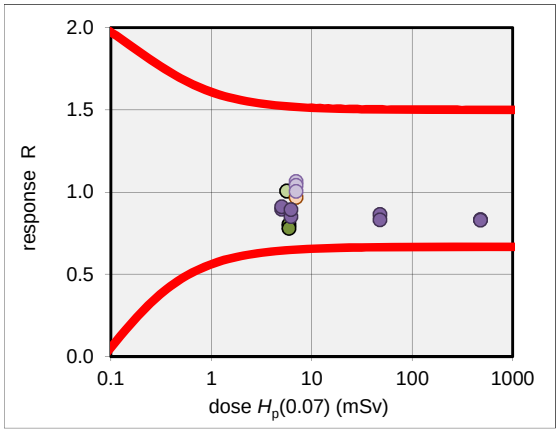
trumpet curve parameter: 1.5 / 0.085 mSv

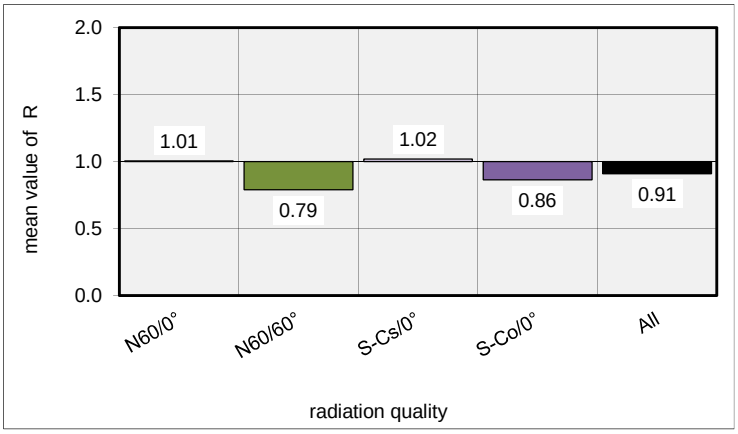
Reporting number 3: (other) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.64	5.7	1.01	OK
		16	5.64	5.7	1.01	OK
	N60/60°	17	5.93	4.8	0.80	OK
		18	5.93	4.6	0.78	OK
gamma	S-Cs/0°	1	7.00	6.8	0.97	OK
		2	7.00	7.5	1.06	OK
		3	7.00	7.3	1.04	OK
		4	7.00	7.0	1.00	OK
	S-Co/0°	11	5.00	4.5	0.89	OK
		12	5.00	4.6	0.91	OK
		13	6.21	5.3	0.85	OK
		14	6.21	5.6	0.89	OK
		9	47.90	41.4	0.86	OK
		10	47.90	39.8	0.83	OK
		7	480.00	400.1	0.83	OK
		8	480.00	397.9	0.83	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	0				
	NIR	0				
	NIR	0				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.01**	1.01	1.01	1.01	0%
N60/60°	2	**0.79**	0.79	0.80	0.78	2%
S-Cs/0°	4	**1.02**	1.02	1.06	0.97	4%
S-Co/0°	8	**0.86**	0.86	0.91	0.83	4%
All	**16**	**0.89**	**0.91**	**1.06**	**0.78**	**10%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

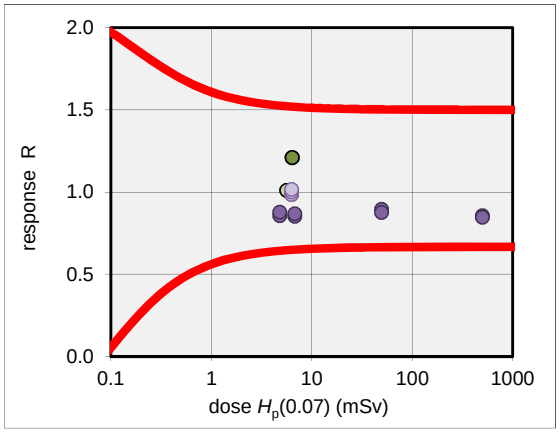
trumpet curve parameter: 1.5 / 0.085 mSv

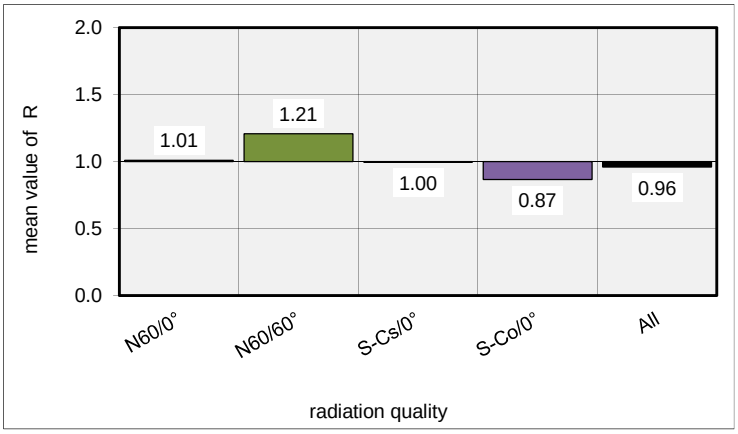
Reporting number 4: (other) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.64	5.7	1.01	OK
		17	5.64	5.7	1.01	OK
	N60/60°	18	6.37	7.7	1.21	OK
		19	6.37	7.7	1.21	OK
gamma	S-Cs/0°	6	6.30	6.2	0.98	OK
		7	6.30	6.2	0.98	OK
		8	6.30	6.3	1.00	OK
		9	6.30	6.4	1.02	OK
	S-Co/0°	12	4.79	4.1	0.86	OK
		13	4.79	4.2	0.88	OK
		14	6.80	5.8	0.85	OK
		15	6.80	5.9	0.87	OK
		10	49.70	44.5	0.90	OK
		11	49.70	43.5	0.88	OK
		3	500.00	428.0	0.86	OK
		4	500.00	423.0	0.85	OK
	NIR	5				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.01**	1.01	1.01	1.01	0%
N60/60°	2	**1.21**	1.21	1.21	1.21	0%
S-Cs/0°	4	**0.99**	1.00	1.02	0.98	2%
S-Co/0°	8	**0.86**	0.87	0.90	0.85	2%
All	**16**	**0.94**	**0.96**	**1.21**	**0.85**	**12%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

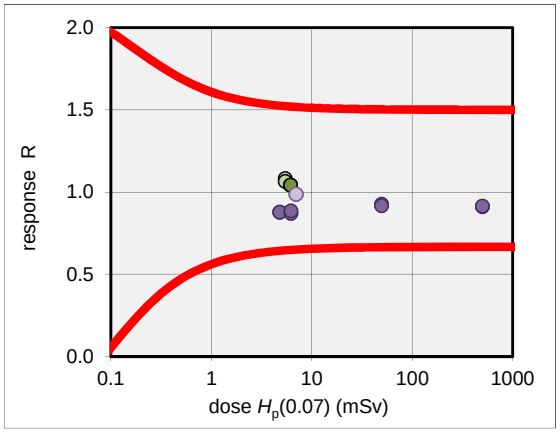
trumpet curve parameter: 1.5 / 0.085 mSv

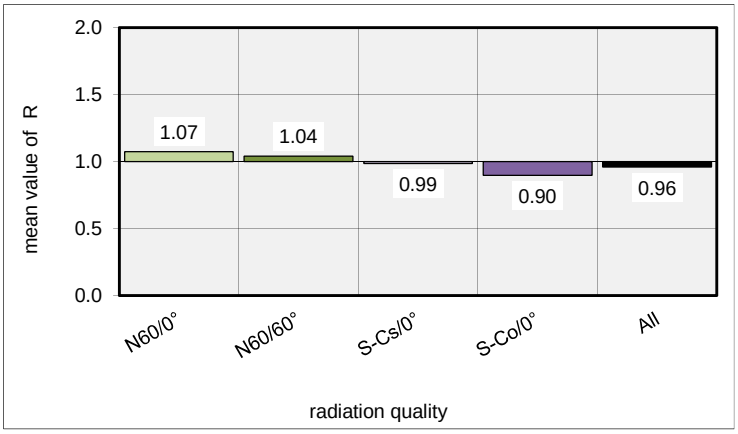
Reporting number 5: (other) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	5.9	1.08	OK
		16	5.45	5.8	1.06	OK
	N60/60°	17	6.15	6.4	1.04	OK
		18	6.15	6.4	1.04	OK
gamma	S-Cs/0°	1	7.00	6.9	0.99	OK
		2	7.00	6.9	0.99	OK
		3	7.00	6.9	0.99	OK
		4	7.00	6.9	0.99	OK
	S-Co/0°	11	4.79	4.2	0.88	OK
		12	4.79	4.2	0.88	OK
		13	6.21	5.4	0.87	OK
		14	6.21	5.5	0.89	OK
		9	49.70	46.0	0.93	OK
		10	49.70	45.5	0.92	OK
		7	500.00	455.0	0.91	OK
		8	500.00	457.0	0.91	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.07**	1.07	1.08	1.06	1%
N60/60°	2	**1.04**	1.04	1.04	1.04	0%
S-Cs/0°	4	**0.99**	0.99	0.99	0.99	0%
S-Co/0°	8	**0.90**	0.90	0.93	0.87	2%
All	**16**	**0.96**	**0.96**	**1.08**	**0.87**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

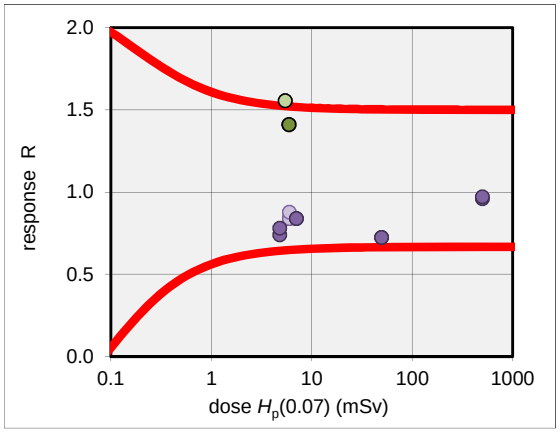
trumpet curve parameter: 1.5 / 0.085 mSv

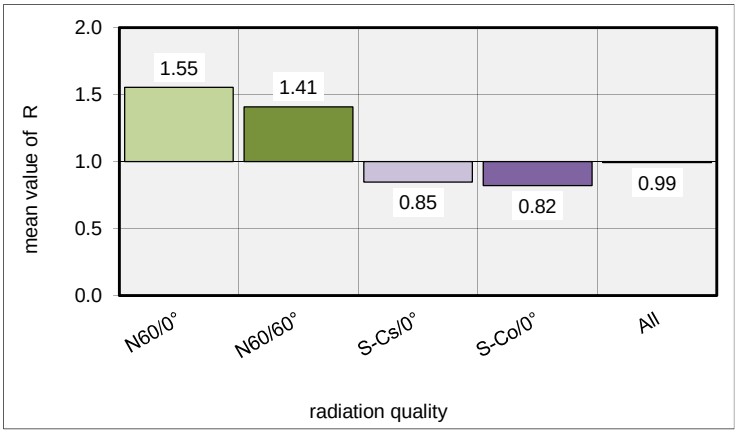
Reporting number 6: (Film) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	8.5	1.55	outlier
		16	5.45	8.5	1.55	outlier
	N60/60°	17	5.93	8.4	1.41	OK
		18	5.93	8.4	1.41	OK
gamma	S-Cs/0°	1	6.00	5.0	0.84	OK
		2	6.00	5.0	0.84	OK
		3	6.00	5.0	0.84	OK
		4	6.00	5.3	0.88	OK
	S-Co/0°	11	4.79	3.5	0.74	OK
		12	4.79	3.7	0.78	OK
		13	7.01	5.9	0.84	OK
		14	7.01	5.9	0.84	OK
		9	49.70	36.0	0.72	OK
		10	49.70	36.0	0.72	OK
		7	500.00	479.7	0.96	OK
		8	500.00	485.6	0.97	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.55**	1.55	1.55	1.55	0%
N60/60°	2	**1.41**	1.41	1.41	1.41	0%
S-Cs/0°	4	**0.84**	0.85	0.88	0.84	2%
S-Co/0°	8	**0.81**	0.82	0.97	0.72	12%
All	**16**	**0.84**	**0.99**	**1.55**	**0.72**	**30%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

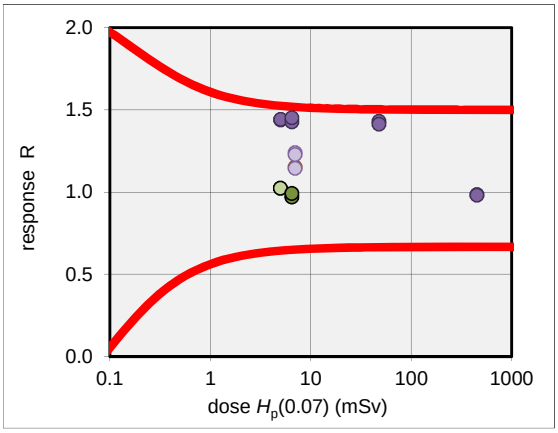
trumpet curve parameter: 1.5 / 0.085 mSv

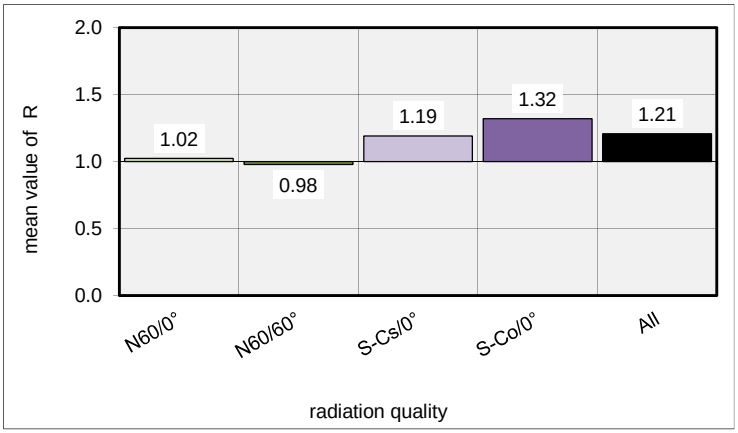
Reporting number 7: (Film) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	4.98	5.1	1.02	OK
		16	4.98	5.1	1.02	OK
	N60/60°	17	6.49	6.3	0.97	OK
		18	6.49	6.4	0.99	OK
gamma	S-Cs/0°	1	7.00	8.1	1.15	OK
		2	7.00	8.0	1.14	OK
		3	7.00	8.7	1.24	OK
		4	7.00	8.6	1.23	OK
	S-Co/0°	11	5.00	7.2	1.44	OK
		12	5.00	7.2	1.44	OK
		13	6.49	9.3	1.43	OK
		14	6.49	9.4	1.45	OK
		9	47.90	68.5	1.43	OK
		10	47.90	67.7	1.41	OK
		7	450.00	442.9	0.98	OK
		8	450.00	441.6	0.98	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.02**	1.02	1.02	1.02	0%
N60/60°	2	**0.98**	0.98	0.99	0.97	2%
S-Cs/0°	4	**1.19**	1.19	1.24	1.14	4%
S-Co/0°	8	**1.43**	1.32	1.45	0.98	16%
All	**16**	**1.19**	**1.21**	**1.45**	**0.97**	**16%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

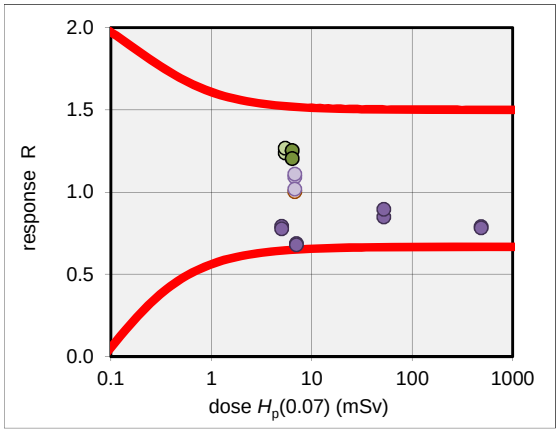
trumpet curve parameter: 1.5 / 0.085 mSv

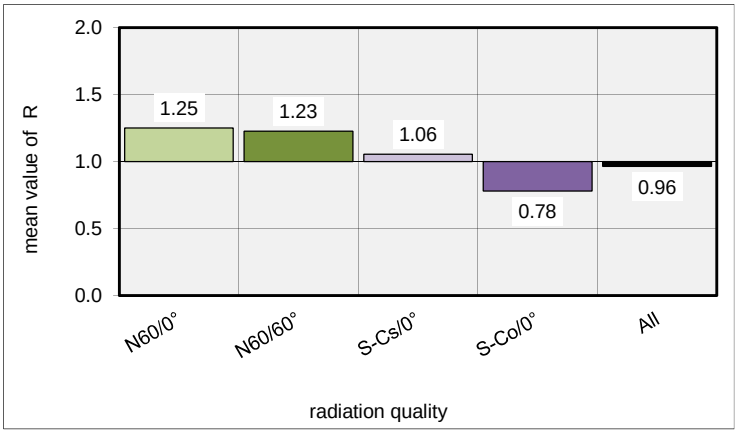
Reporting number 13: (Film) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	6.8	1.24	OK
		16	5.45	6.9	1.27	OK
	N60/60°	17	6.37	8.0	1.25	OK
		18	6.37	7.7	1.20	OK
gamma	S-Cs/0°	1	6.80	6.8	1.00	OK
		2	6.80	7.4	1.09	OK
		3	6.80	6.9	1.02	OK
		4	6.80	7.5	1.11	OK
	S-Co/0°	11	5.00	4.0	0.79	OK
		12	5.00	3.9	0.78	OK
		13	7.01	4.8	0.69	OK
		14	7.01	4.8	0.68	OK
		9	52.00	44.2	0.85	OK
		10	52.00	46.5	0.89	OK
		7	487.00	385.0	0.79	OK
		8	487.00	381.0	0.78	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.25**	1.25	1.27	1.24	2%
N60/60°	2	**1.23**	1.23	1.25	1.20	3%
S-Cs/0°	4	**1.05**	1.06	1.11	1.00	5%
S-Co/0°	8	**0.79**	0.78	0.89	0.68	9%
All	**16**	**0.95**	**0.96**	**1.27**	**0.68**	**22%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

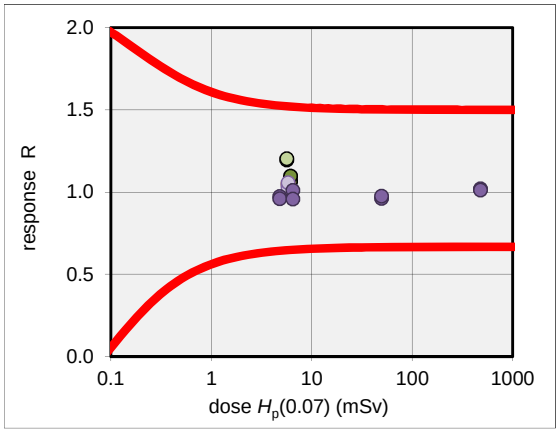
trumpet curve parameter: 1.5 / 0.085 mSv

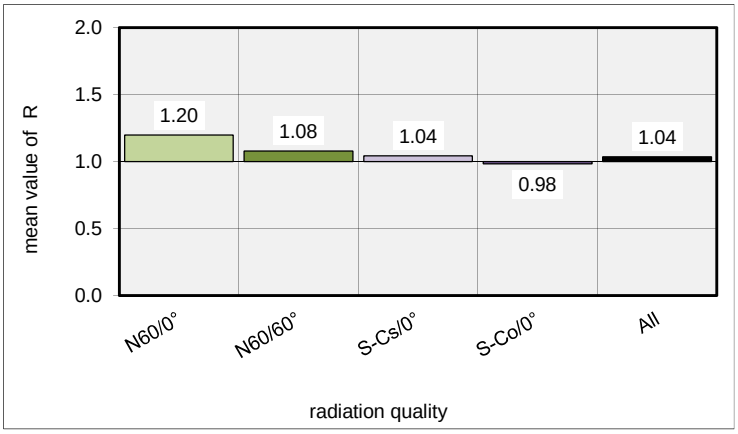
Reporting number 14: (Film) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	11	5.64	6.7	1.20	OK
		12	5.64	6.8	1.20	OK
	N60/60°	13	6.15	6.5	1.06	OK
		14	6.15	6.7	1.10	OK
gamma	S-Cs/0°	16	5.80	6.1	1.05	OK
		17	5.80	6.0	1.04	OK
		18	5.80	5.9	1.02	OK
		19	5.80	6.1	1.06	OK
	S-Co/0°	3	4.79	4.7	0.97	OK
		4	4.79	4.6	0.96	OK
		5	6.49	6.6	1.01	OK
		8	6.49	6.2	0.96	OK
		9	49.70	47.8	0.96	OK
		10	49.70	48.5	0.98	OK
		6	480.00	489.2	1.02	OK
		7	480.00	485.6	1.01	OK
	NIR	15				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.20**	1.20	1.20	1.20	0%
N60/60°	2	**1.08**	1.08	1.10	1.06	2%
S-Cs/0°	4	**1.04**	1.04	1.06	1.02	1%
S-Co/0°	8	**0.97**	0.98	1.02	0.96	3%
All	**16**	**1.02**	**1.04**	**1.20**	**0.96**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

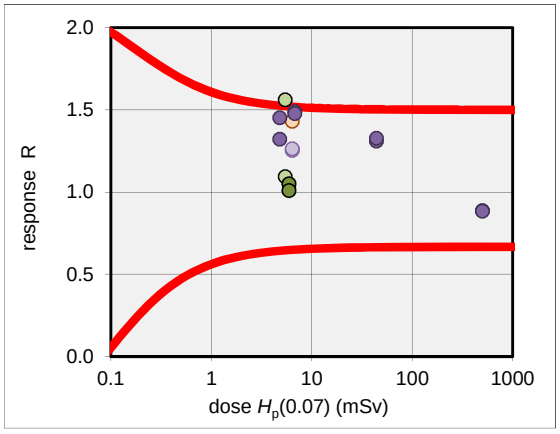
trumpet curve parameter: 1.5 / 0.085 mSv

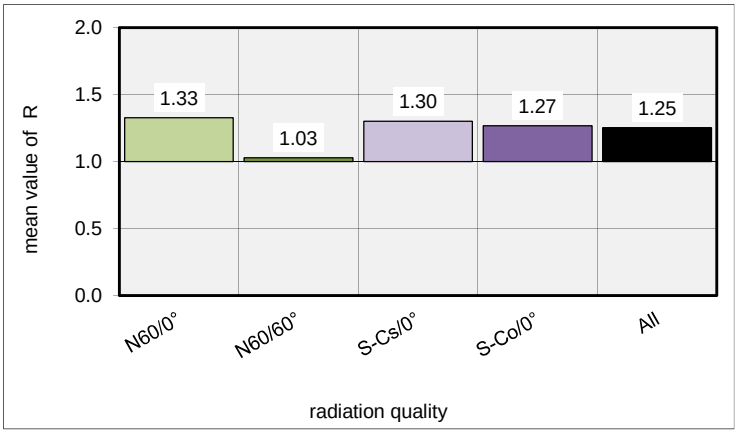
Reporting number 17: (Film) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.45	8.5	1.56	outlier
		18	5.45	6.0	1.09	OK
	N60/60°	19	5.93	6.2	1.05	OK
		20	5.93	6.0	1.01	OK
gamma	S-Cs/0°	1	6.40	9.2	1.43	OK
		2	6.40	8.1	1.26	OK
		3	6.40	8.0	1.25	OK
		4	6.40	8.1	1.26	OK
	S-Co/0°	11	4.79	7.0	1.45	OK
		12	4.79	6.3	1.32	OK
		13	6.80	10.1	1.49	OK
		14	6.80	10.1	1.48	OK
		9	44.10	57.8	1.31	OK
		10	44.10	58.5	1.33	OK
		7	500.00	443.7	0.89	OK
		8	500.00	441.4	0.88	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.33**	1.33	1.56	1.09	25%
N60/60°	2	**1.03**	1.03	1.05	1.01	3%
S-Cs/0°	4	**1.26**	1.30	1.43	1.25	7%
S-Co/0°	8	**1.32**	1.27	1.49	0.88	19%
All	**16**	**1.29**	**1.25**	**1.56**	**0.88**	**17%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

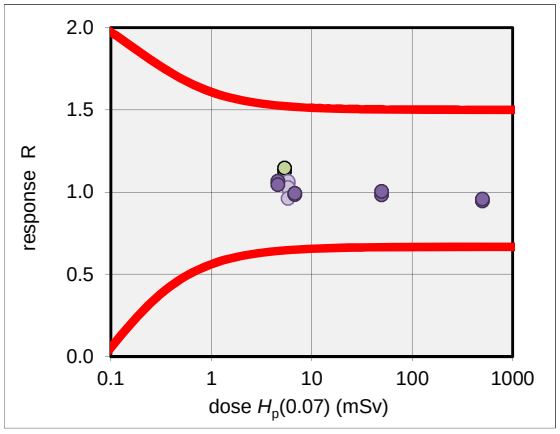
trumpet curve parameter: 1.5 / 0.085 mSv

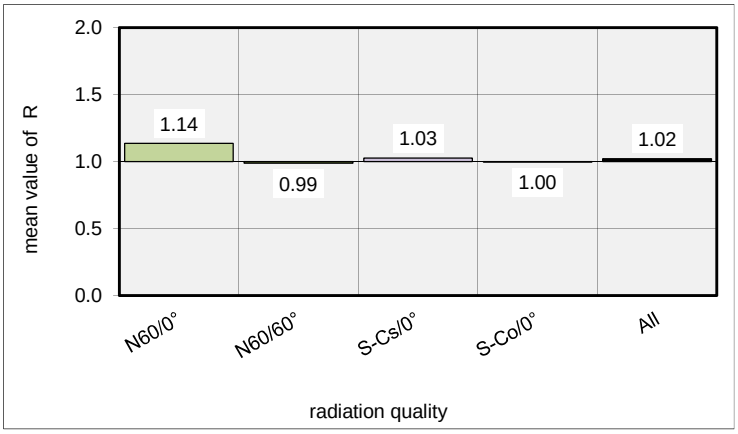
Reporting number 18: (OSL) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	13	5.36	6.0	1.13	OK
		14	5.36	6.1	1.15	OK
	N60/60°	16	6.15	6.1	0.99	OK
		17	6.15	6.1	0.99	OK
gamma	S-Cs/0°	5	5.80	6.1	1.05	OK
		10	5.80	6.2	1.06	OK
		15	5.80	6.0	1.03	OK
		19	5.80	5.6	0.96	OK
	S-Co/0°	8	4.61	4.9	1.07	OK
		9	4.61	4.8	1.05	OK
		11	6.80	6.7	0.99	OK
		12	6.80	6.8	0.99	OK
		6	49.70	48.8	0.98	OK
		7	49.70	49.9	1.00	OK
		3	500.00	472.8	0.95	OK
		4	500.00	478.8	0.96	OK
	NIR	18				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.14**	1.14	1.15	1.13	1%
N60/60°	2	**0.99**	0.99	0.99	0.99	0%
S-Cs/0°	4	**1.04**	1.03	1.06	0.96	5%
S-Co/0°	8	**0.99**	1.00	1.07	0.95	4%
All	**16**	**1.00**	**1.02**	**1.15**	**0.95**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

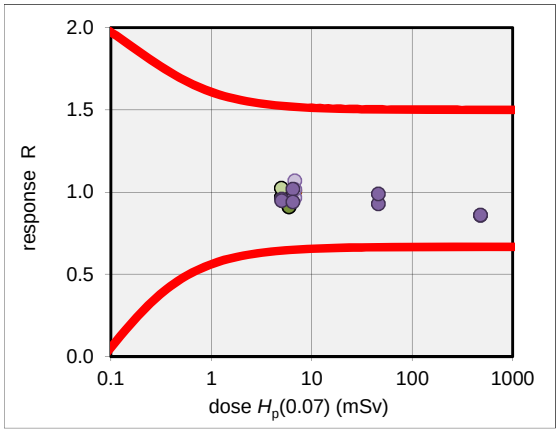
trumpet curve parameter: 1.5 / 0.085 mSv

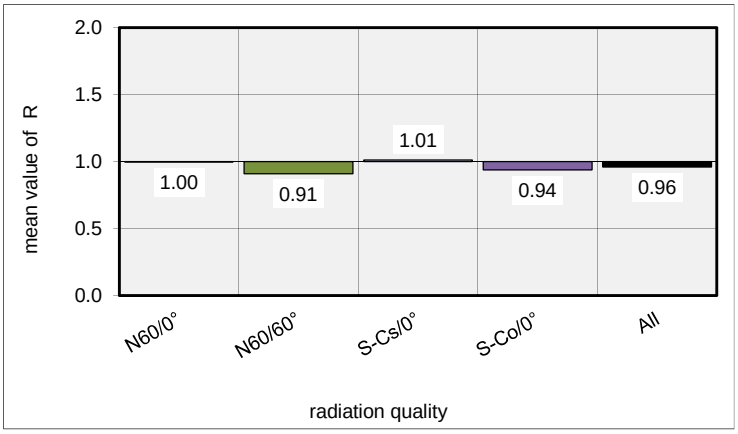
Reporting number 19: (OSL) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	4.98	4.8	0.97	OK
		16	4.98	5.1	1.02	OK
	N60/60°	17	5.93	5.4	0.91	OK
		18	5.93	5.4	0.91	OK
gamma	S-Cs/0°	1	6.80	6.8	1.00	OK
		2	6.80	6.6	0.96	OK
		3	6.80	7.3	1.07	OK
		4	6.80	6.9	1.02	OK
	S-Co/0°	11	5.00	4.8	0.96	OK
		12	5.00	4.7	0.95	OK
		13	6.49	6.6	1.02	OK
		14	6.49	6.1	0.94	OK
		9	46.00	42.7	0.93	OK
		10	46.00	45.5	0.99	OK
		7	480.00	412.1	0.86	OK
		8	480.00	413.2	0.86	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.00**	1.00	1.02	0.97	4%
N60/60°	2	**0.91**	0.91	0.91	0.91	0%
S-Cs/0°	4	**1.01**	1.01	1.07	0.96	4%
S-Co/0°	8	**0.94**	0.94	1.02	0.86	6%
All	**16**	**0.96**	**0.96**	**1.07**	**0.86**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

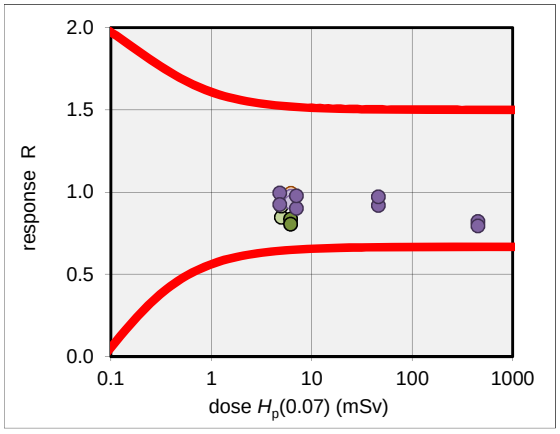
trumpet curve parameter: 1.5 / 0.085 mSv

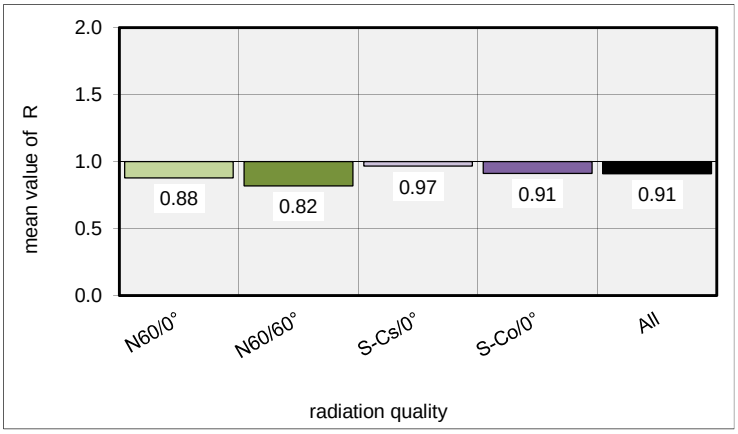
Reporting number 20: (OSL) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	4.98	4.2	0.85	OK
		16	4.98	4.6	0.91	OK
	N60/60°	17	6.15	5.1	0.83	OK
		18	6.15	4.9	0.80	OK
gamma	S-Cs/0°	1	6.20	6.2	0.99	OK
		2	6.20	6.0	0.96	OK
		3	6.20	6.0	0.97	OK
		4	6.20	5.8	0.94	OK
	S-Co/0°	11	4.79	4.8	0.99	OK
		12	4.79	4.4	0.92	OK
		13	7.01	6.3	0.90	OK
		14	7.01	6.9	0.98	OK
		9	46.00	42.2	0.92	OK
		10	46.00	44.7	0.97	OK
		7	450.00	369.0	0.82	OK
		8	450.00	357.0	0.79	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.88**	0.88	0.91	0.85	5%
N60/60°	2	**0.82**	0.82	0.83	0.80	3%
S-Cs/0°	4	**0.97**	0.97	0.99	0.94	2%
S-Co/0°	8	**0.92**	0.91	0.99	0.79	8%
All	**16**	**0.92**	**0.91**	**0.99**	**0.79**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

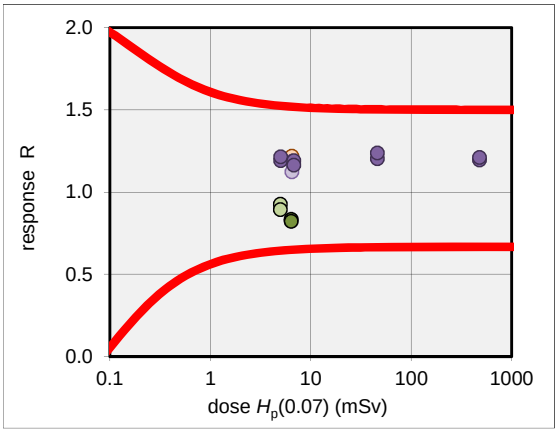
trumpet curve parameter: 1.5 / 0.085 mSv

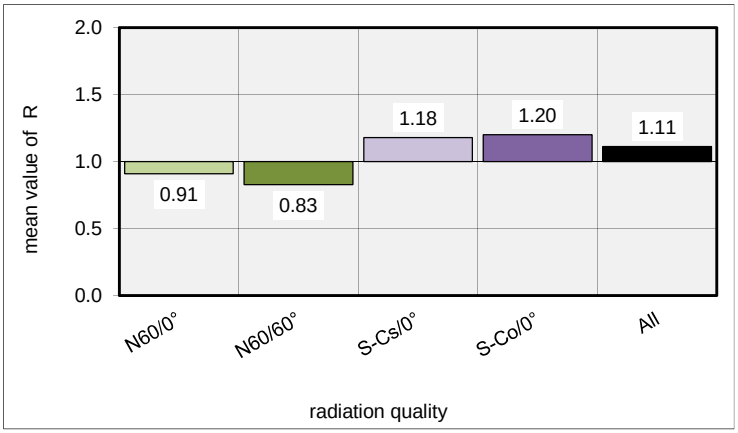
Reporting number 21: (OSL) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	4.98	4.6	0.93	OK
		17	4.98	4.5	0.89	OK
	N60/60°	18	6.37	5.3	0.83	OK
		19	6.37	5.2	0.82	OK
gamma	S-Cs/0°	6	6.50	7.9	1.22	OK
		7	6.50	7.3	1.12	OK
		8	6.50	7.7	1.18	OK
		9	6.50	7.7	1.19	OK
	S-Co/0°	12	5.00	6.0	1.19	OK
		13	5.00	6.1	1.21	OK
		14	6.80	8.1	1.19	OK
		15	6.80	7.9	1.16	OK
		10	46.00	55.3	1.20	OK
		11	46.00	56.9	1.24	OK
		3	480.00	573.6	1.20	OK
		4	480.00	580.6	1.21	OK
	NIR	5				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.91**	0.91	0.93	0.89	2%
N60/60°	2	**0.83**	0.83	0.83	0.82	1%
S-Cs/0°	4	**1.19**	1.18	1.22	1.12	3%
S-Co/0°	8	**1.20**	1.20	1.24	1.16	2%
All	**16**	**1.19**	**1.11**	**1.24**	**0.82**	**13%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

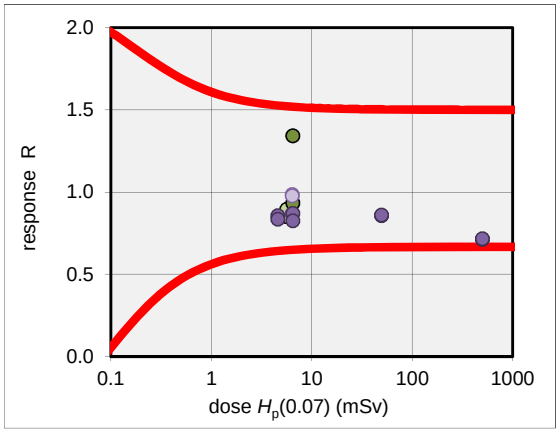
trumpet curve parameter: 1.5 / 0.085 mSv

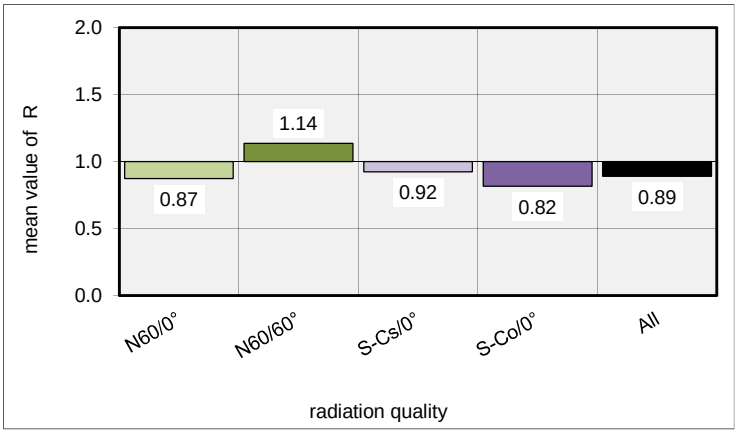
Reporting number 22: (OSL) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.64	4.8	0.85	OK
		16	5.64	5.1	0.90	OK
	N60/60°	17	6.49	8.7	1.34	OK
		18	6.49	6.1	0.93	OK
gamma	S-Cs/0°	7	6.40	5.6	0.87	OK
		8	6.40	6.3	0.98	OK
		9	6.40	6.3	0.98	OK
		10	6.40	5.6	0.87	OK
	S-Co/0°	11	4.61	4.0	0.86	OK
		12	4.61	3.9	0.84	OK
		13	6.49	5.7	0.87	OK
		14	6.49	5.4	0.82	OK
		3	49.70	42.6	0.86	OK
		4	49.70	42.8	0.86	OK
		5	500.00	355.7	0.71	OK
		6	500.00	357.9	0.72	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.87**	0.87	0.90	0.85	4%
N60/60°	2	**1.14**	1.14	1.34	0.93	25%
S-Cs/0°	4	**0.92**	0.92	0.98	0.87	7%
S-Co/0°	8	**0.85**	0.82	0.87	0.71	8%
All	**16**	**0.86**	**0.89**	**1.34**	**0.71**	**16%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

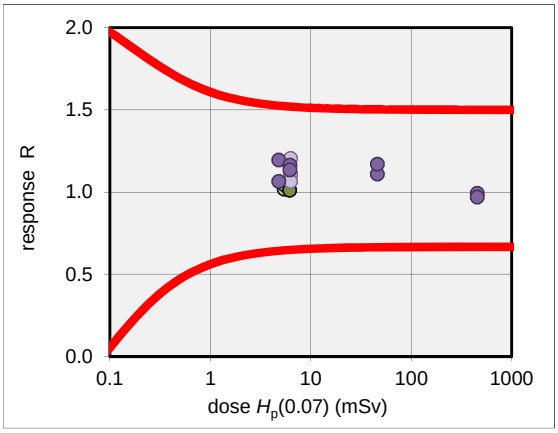
trumpet curve parameter: 1.5 / 0.085 mSv

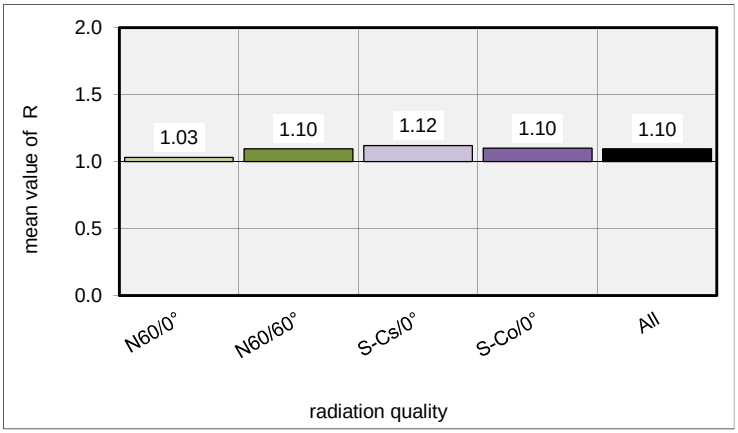
Reporting number 23: (OSL) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	5.6	1.02	OK
		16	5.45	5.7	1.04	OK
	N60/60°	17	6.15	6.2	1.01	OK
		18	6.15	7.3	1.18	OK
gamma	S-Cs/0°	1	6.30	7.0	1.11	OK
		2	6.30	7.0	1.10	OK
		3	6.30	7.6	1.20	OK
		4	6.30	6.7	1.06	OK
	S-Co/0°	11	4.79	5.7	1.19	OK
		12	4.79	5.1	1.06	OK
		13	6.21	7.2	1.16	OK
		14	6.21	7.1	1.14	OK
		9	46.00	51.0	1.11	OK
		10	46.00	53.8	1.17	OK
		7	456.00	452.8	0.99	OK
		8	456.00	442.3	0.97	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.03**	1.03	1.04	1.02	2%
N60/60°	2	**1.10**	1.10	1.18	1.01	11%
S-Cs/0°	4	**1.11**	1.12	1.20	1.06	5%
S-Co/0°	8	**1.12**	1.10	1.19	0.97	8%
All	**16**	**1.11**	**1.10**	**1.20**	**0.97**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

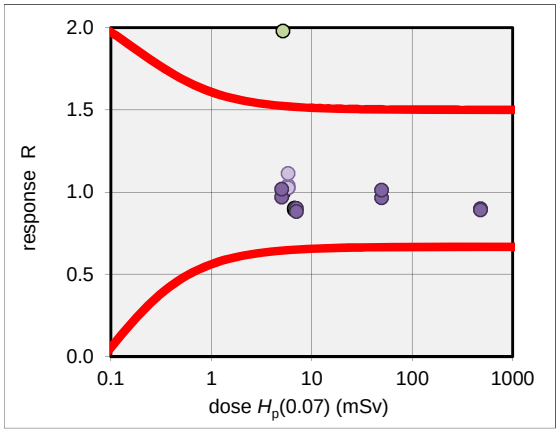
trumpet curve parameter: 1.5 / 0.085 mSv

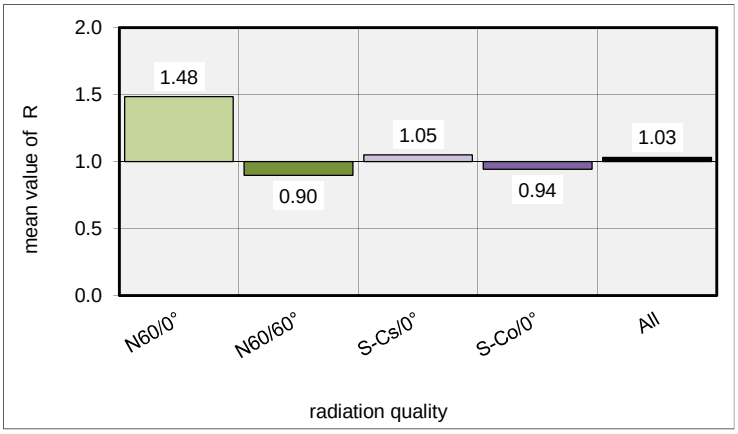
Reporting number 24: (OSL) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.17	5.1	0.99	OK
		16	5.17	10.2	1.98	outlier
	N60/60°	17	6.71	6.0	0.89	OK
		18	6.71	6.1	0.90	OK
gamma	S-Cs/0°	1	5.80	6.0	1.03	OK
		2	5.80	6.0	1.04	OK
		3	5.80	6.0	1.03	OK
		4	5.80	6.5	1.11	OK
	S-Co/0°	11	5.00	4.8	0.97	OK
		12	5.00	5.1	1.02	OK
		13	7.01	6.3	0.90	OK
		14	7.01	6.2	0.88	OK
		9	49.70	48.0	0.97	OK
		10	49.70	50.2	1.01	OK
		7	480.00	431.0	0.90	OK
		8	480.00	428.0	0.89	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.48**	1.48	1.98	0.99	47%
N60/60°	2	**0.90**	0.90	0.90	0.89	1%
S-Cs/0°	4	**1.03**	1.05	1.11	1.03	4%
S-Co/0°	8	**0.93**	0.94	1.02	0.88	6%
All	**16**	**0.98**	**1.03**	**1.98**	**0.88**	**25%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

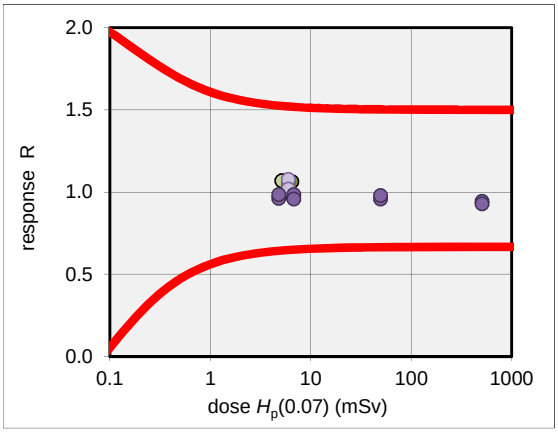
trumpet curve parameter: 1.5 / 0.085 mSv

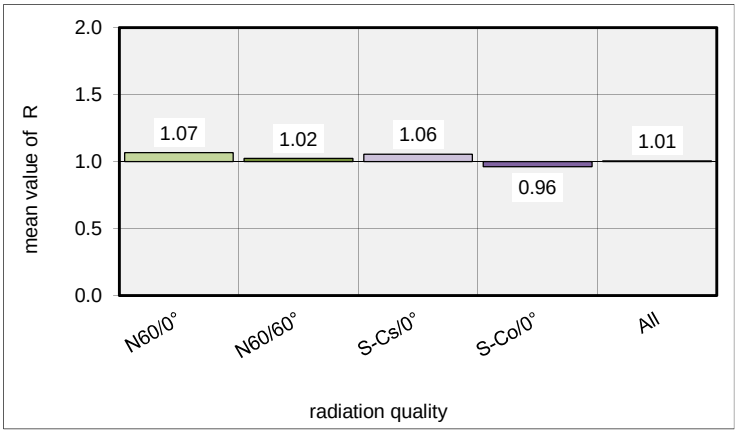
Reporting number 25: (OSL) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.17	5.5	1.07	OK
		21	5.17	5.5	1.07	OK
	N60/60°	19	6.49	6.9	1.06	OK
		20	6.49	6.4	0.98	OK
gamma	S-Cs/0°	1	6.00	6.3	1.05	OK
		2	6.00	6.5	1.08	OK
		3	6.00	6.5	1.08	OK
		4	6.00	6.1	1.02	OK
	S-Co/0°	9	4.79	4.6	0.96	OK
		10	4.79	4.7	0.99	OK
		14	6.80	6.7	0.99	OK
		16	6.80	6.5	0.96	OK
		11	49.70	47.6	0.96	OK
		12	49.70	48.6	0.98	OK
		7	507.00	478.0	0.94	OK
		8	507.00	471.0	0.93	OK
	NIR	13				
	NIR	15				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	18				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.07**	1.07	1.07	1.07	0%
N60/60°	2	**1.02**	1.02	1.06	0.98	5%
S-Cs/0°	4	**1.06**	1.06	1.08	1.02	3%
S-Co/0°	8	**0.96**	0.96	0.99	0.93	2%
All	**16**	**0.99**	**1.01**	**1.08**	**0.93**	**5%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

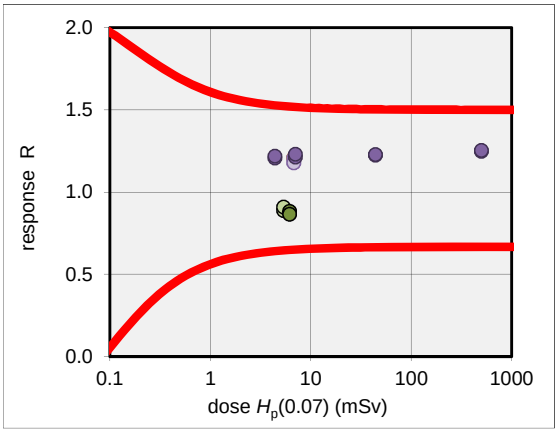
trumpet curve parameter: 1.5 / 0.085 mSv

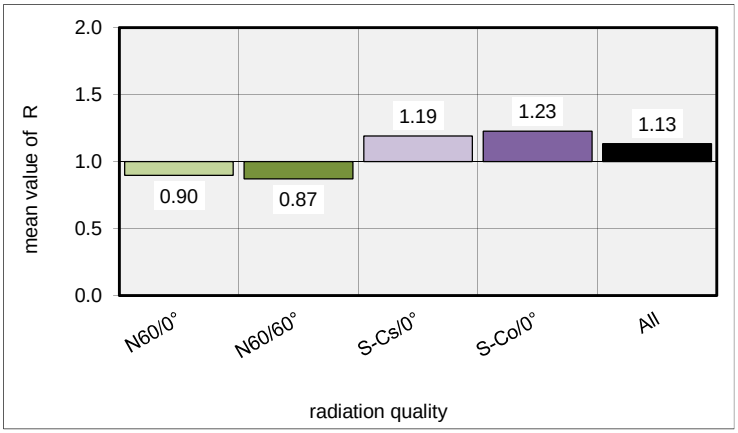
Reporting number 28: (OSL) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.36	4.8	0.89	OK
		16	5.36	4.9	0.91	OK
	N60/60°	17	6.15	5.4	0.88	OK
		18	6.15	5.3	0.86	OK
gamma	S-Cs/0°	1	6.80	8.2	1.21	OK
		2	6.80	8.2	1.21	OK
		3	6.80	8.0	1.18	OK
		4	6.80	8.0	1.18	OK
	S-Co/0°	11	4.41	5.3	1.21	OK
		12	4.41	5.4	1.22	OK
		13	7.01	8.5	1.21	OK
		14	7.01	8.6	1.23	OK
		9	44.10	54.0	1.22	OK
		10	44.10	54.2	1.23	OK
		7	500.00	623.7	1.25	OK
		8	500.00	626.7	1.25	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.90**	0.90	0.91	0.89	2%
N60/60°	2	**0.87**	0.87	0.88	0.86	1%
S-Cs/0°	4	**1.19**	1.19	1.21	1.18	1%
S-Co/0°	8	**1.23**	1.23	1.25	1.21	1%
All	**16**	**1.21**	**1.13**	**1.25**	**0.86**	**13%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

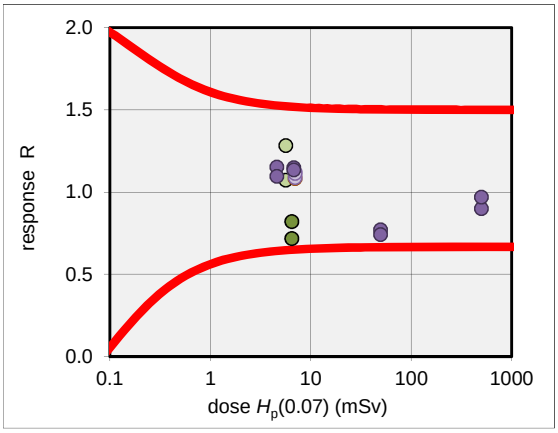
trumpet curve parameter: 1.5 / 0.085 mSv

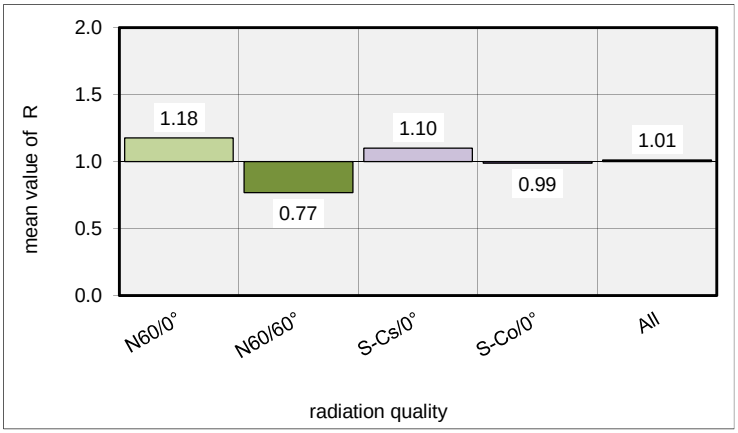
Reporting number 29: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.64	7.2	1.28	OK
		18	5.64	6.1	1.07	OK
	N60/60°	19	6.49	5.3	0.82	OK
		20	6.49	4.7	0.72	OK
gamma	S-Cs/0°	1	7.00	7.6	1.08	OK
		2	7.00	7.6	1.09	OK
		3	7.00	7.9	1.12	OK
		4	7.00	7.8	1.11	OK
	S-Co/0°	13	4.61	5.3	1.15	OK
		14	4.61	5.1	1.10	OK
		15	6.80	7.8	1.15	OK
		16	6.80	7.7	1.14	OK
		11	49.70	38.3	0.77	OK
		12	49.70	36.8	0.74	OK
		9	500.00	449.0	0.90	OK
		10	500.00	484.0	0.97	OK
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	7				
	WIR	8				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.18**	1.18	1.28	1.07	13%
N60/60°	2	**0.77**	0.77	0.82	0.72	10%
S-Cs/0°	4	**1.10**	1.10	1.12	1.08	2%
S-Co/0°	8	**1.03**	0.99	1.15	0.74	17%
All	**16**	**1.09**	**1.01**	**1.28**	**0.72**	**17%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

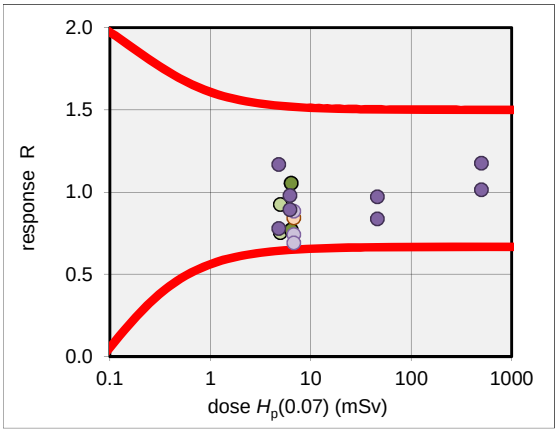
trumpet curve parameter: 1.5 / 0.085 mSv

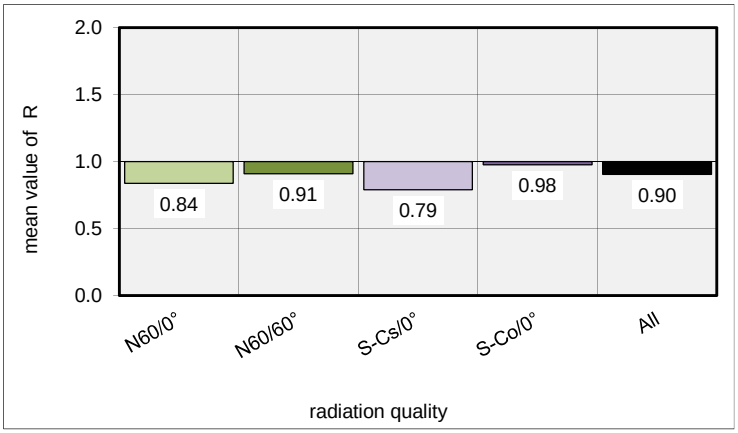
Reporting number 30: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	4.98	3.8	0.75	OK
		16	4.98	4.6	0.92	OK
	N60/60°	17	6.37	6.7	1.05	OK
		18	6.37	4.9	0.77	OK
gamma	S-Cs/0°	1	6.80	5.7	0.84	OK
		2	6.80	6.0	0.88	OK
		3	6.80	5.0	0.74	OK
		4	6.80	4.7	0.69	OK
	S-Co/0°	11	4.79	5.6	1.17	OK
		12	4.79	3.7	0.78	OK
		13	6.21	5.5	0.89	OK
		14	6.21	6.1	0.98	OK
		9	46.00	38.5	0.84	OK
		10	46.00	44.7	0.97	OK
		7	500.00	587.6	1.18	OK
		8	500.00	507.2	1.01	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.84**	0.84	0.92	0.75	14%
N60/60°	2	**0.91**	0.91	1.05	0.77	22%
S-Cs/0°	4	**0.79**	0.79	0.88	0.69	11%
S-Co/0°	8	**0.97**	0.98	1.18	0.78	15%
All	**16**	**0.89**	**0.90**	**1.18**	**0.69**	**16%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

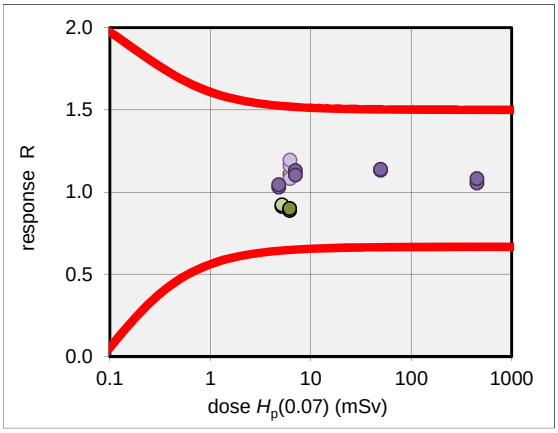
trumpet curve parameter: 1.5 / 0.085 mSv

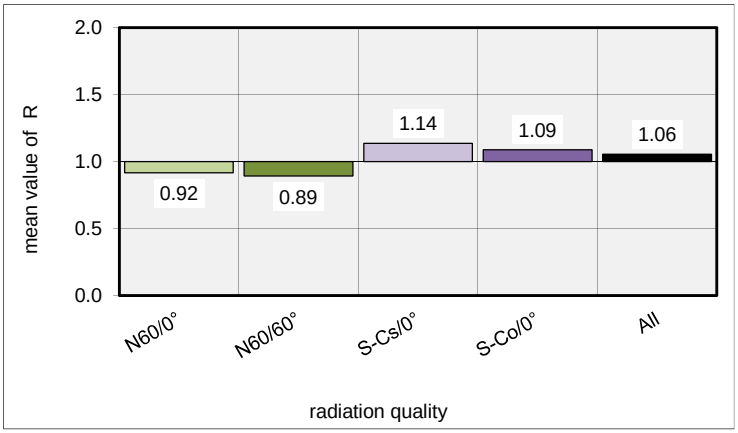
Reporting number 31: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.17	4.7	0.91	OK
		16	5.17	4.8	0.92	OK
	N60/60°	17	6.15	5.5	0.89	OK
		18	6.15	5.5	0.90	OK
gamma	S-Cs/0°	1	6.20	6.9	1.11	OK
		2	6.20	7.2	1.16	OK
		3	6.20	7.4	1.20	OK
		4	6.20	6.7	1.08	OK
	S-Co/0°	11	4.79	4.9	1.03	OK
		12	4.79	5.0	1.04	OK
		13	7.01	7.9	1.13	OK
		14	7.01	7.7	1.10	OK
		9	49.70	56.3	1.13	OK
		10	49.70	56.6	1.14	OK
		7	450.00	474.9	1.06	OK
		8	450.00	486.5	1.08	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.92**	0.92	0.92	0.91	1%
N60/60°	2	**0.89**	0.89	0.90	0.89	1%
S-Cs/0°	4	**1.13**	1.14	1.20	1.08	4%
S-Co/0°	8	**1.09**	1.09	1.14	1.03	4%
All	**16**	**1.08**	**1.06**	**1.20**	**0.89**	**9%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

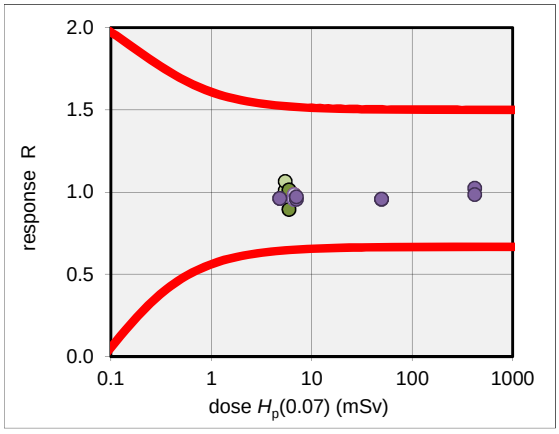
trumpet curve parameter: 1.5 / 0.085 mSv

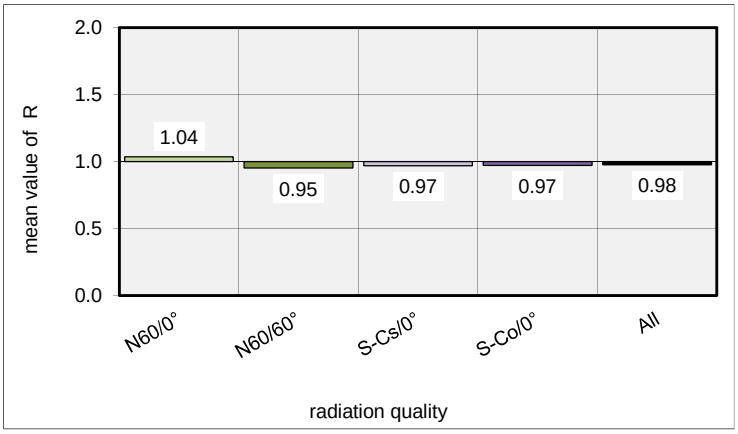
Reporting number 32: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	5.5	1.01	OK
		16	5.45	5.8	1.06	OK
	N60/60°	17	5.93	5.3	0.89	OK
		18	5.93	6.0	1.01	OK
gamma	S-Cs/0°	1	6.70	6.6	0.99	OK
		2	6.70	6.6	0.99	OK
		3	6.70	6.4	0.96	OK
		4	6.70	6.4	0.96	OK
	S-Co/0°	11	4.79	4.6	0.96	OK
		12	4.79	4.6	0.96	OK
		13	7.01	6.7	0.96	OK
		14	7.01	6.8	0.97	OK
		9	49.70	47.5	0.96	OK
		10	49.70	47.6	0.96	OK
		7	420.00	430.2	1.02	OK
		8	420.00	413.1	0.98	OK
	NIR	21				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	6				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.04**	1.04	1.06	1.01	4%
N60/60°	2	**0.95**	0.95	1.01	0.89	9%
S-Cs/0°	4	**0.97**	0.97	0.99	0.96	2%
S-Co/0°	8	**0.96**	0.97	1.02	0.96	2%
All	**16**	**0.97**	**0.98**	**1.06**	**0.89**	**4%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

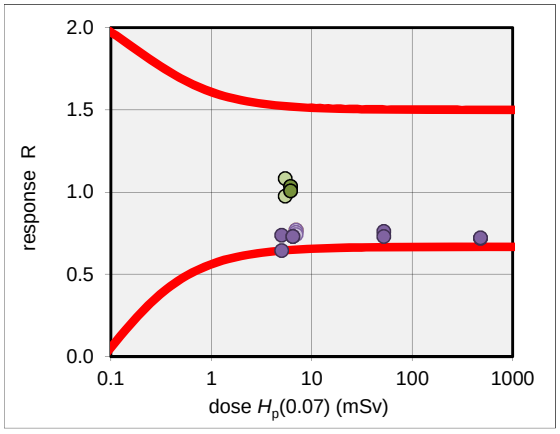
trumpet curve parameter: 1.5 / 0.085 mSv

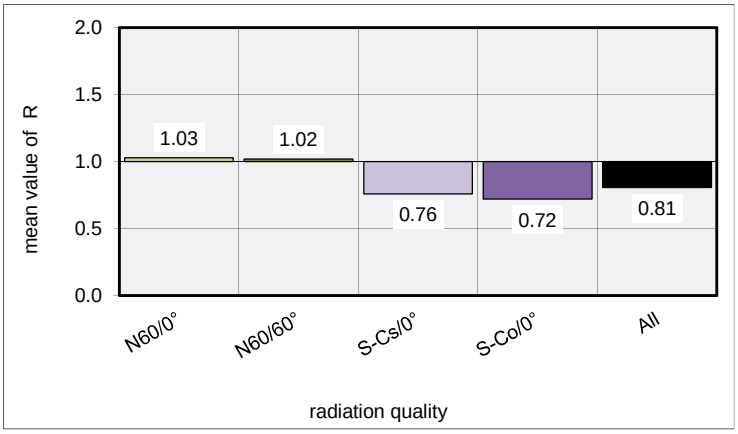
Reporting number 33: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.45	5.9	1.08	OK
		18	5.45	5.3	0.97	OK
	N60/60°	19	6.15	6.4	1.03	OK
		20	6.15	6.2	1.01	OK
gamma	S-Cs/0°	1	7.00	5.4	0.77	OK
		2	7.00	5.4	0.77	OK
		3	7.00	5.3	0.75	OK
		4	7.00	5.2	0.74	OK
	S-Co/0°	13	5.00	3.7	0.74	OK
		14	5.00	3.2	0.64	outlier
		15	6.49	4.7	0.73	OK
		16	6.49	4.7	0.73	OK
		11	52.20	39.7	0.76	OK
		12	52.20	38.0	0.73	OK
		9	480.00	344.6	0.72	OK
		10	480.00	346.1	0.72	OK
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	7				
	WIR	8				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.03**	1.03	1.08	0.97	7%
N60/60°	2	**1.02**	1.02	1.03	1.01	2%
S-Cs/0°	4	**0.76**	0.76	0.77	0.74	2%
S-Co/0°	8	**0.73**	0.72	0.76	0.64	5%
All	**16**	**0.75**	**0.81**	**1.08**	**0.64**	**17%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

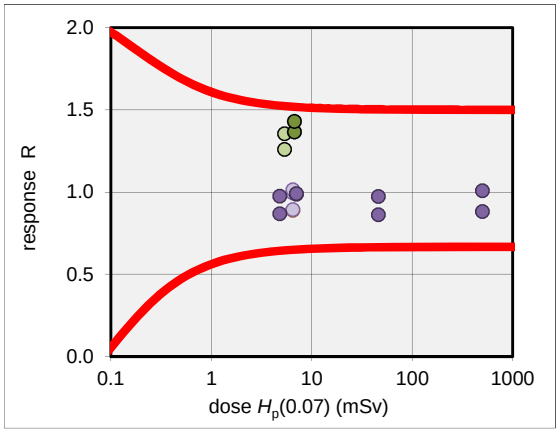
trumpet curve parameter: 1.5 / 0.085 mSv

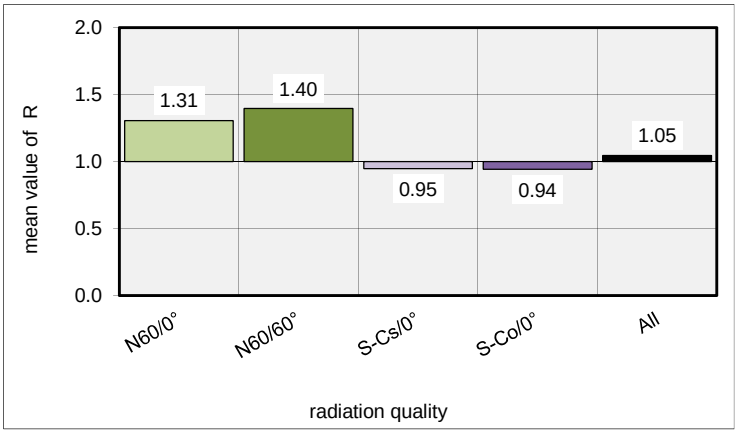
Reporting number 35: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.36	7.3	1.35	OK
		16	5.36	6.8	1.26	OK
	N60/60°	17	6.71	9.2	1.37	OK
		18	6.71	9.6	1.43	OK
gamma	S-Cs/0°	1	6.50	5.8	0.89	OK
		2	6.50	5.8	0.89	OK
		3	6.50	6.5	0.99	OK
		4	6.50	6.6	1.01	OK
	S-Co/0°	11	4.79	4.2	0.87	OK
		12	4.79	4.7	0.97	OK
		13	7.01	6.9	0.99	OK
		14	7.01	6.9	0.99	OK
		9	46.00	39.7	0.86	OK
		10	46.00	44.7	0.97	OK
		7	500.00	440.2	0.88	OK
		8	500.00	503.6	1.01	OK
	NIR	19				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.31**	1.31	1.35	1.26	5%
N60/60°	2	**1.40**	1.40	1.43	1.37	3%
S-Cs/0°	4	**0.94**	0.95	1.01	0.89	7%
S-Co/0°	8	**0.97**	0.94	1.01	0.86	6%
All	**16**	**0.99**	**1.05**	**1.43**	**0.86**	**18%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

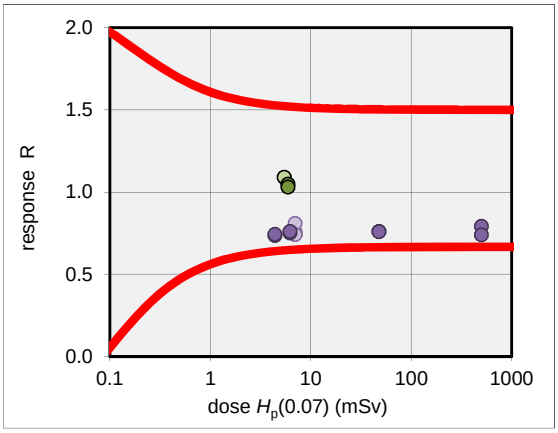
trumpet curve parameter: 1.5 / 0.085 mSv

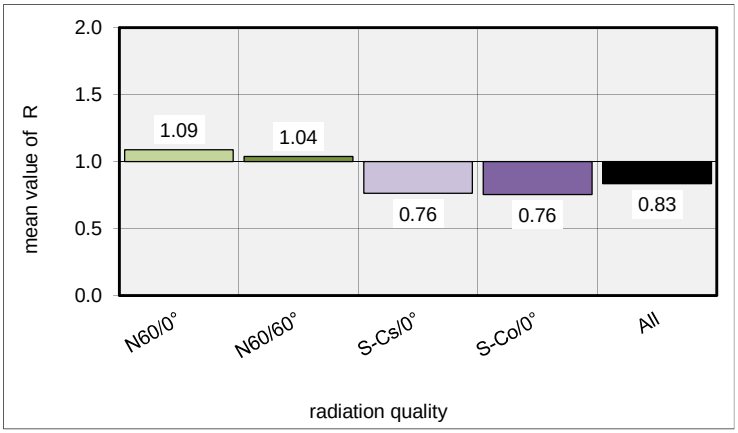
Reporting number 37: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	5.9	1.09	OK
		16	5.45	5.9	1.09	OK
	N60/60°	17	5.93	6.2	1.05	OK
		18	5.93	6.1	1.03	OK
gamma	S-Cs/0°	1	7.00	5.2	0.75	OK
		2	7.00	5.3	0.76	OK
		3	7.00	5.7	0.81	OK
		4	7.00	5.2	0.74	OK
	S-Co/0°	11	4.41	3.2	0.74	OK
		12	4.41	3.3	0.74	OK
		13	6.21	4.7	0.75	OK
		14	6.21	4.7	0.76	OK
		9	47.90	36.4	0.76	OK
		10	47.90	36.3	0.76	OK
		7	500.00	395.9	0.79	OK
		8	500.00	369.9	0.74	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.09**	1.09	1.09	1.09	0%
N60/60°	2	**1.04**	1.04	1.05	1.03	1%
S-Cs/0°	4	**0.75**	0.76	0.81	0.74	4%
S-Co/0°	8	**0.75**	0.76	0.79	0.74	2%
All	**16**	**0.76**	**0.83**	**1.09**	**0.74**	**17%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

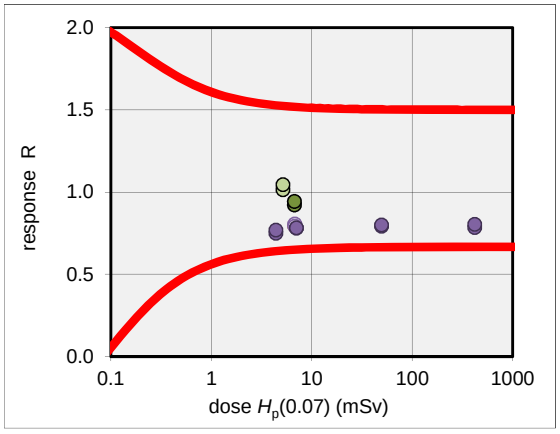
trumpet curve parameter: 1.5 / 0.085 mSv

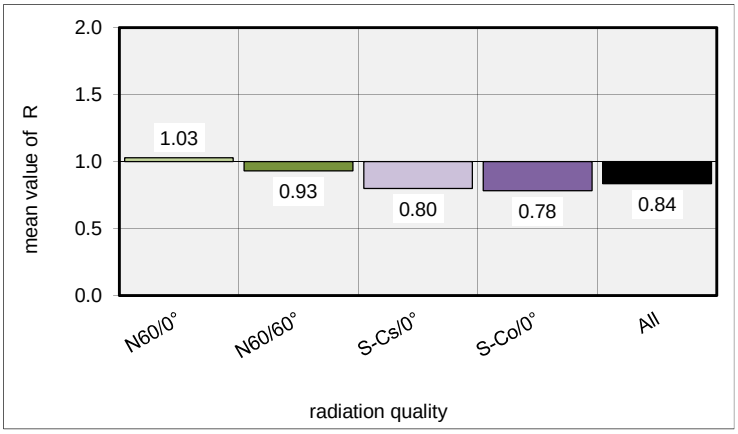
Reporting number 38: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.17	5.2	1.01	OK
		16	5.17	5.4	1.04	OK
	N60/60°	17	6.71	6.2	0.92	OK
		18	6.71	6.3	0.94	OK
gamma	S-Cs/0°	1	6.80	5.4	0.79	OK
		2	6.80	5.5	0.80	OK
		3	6.80	5.5	0.81	OK
		4	6.80	5.4	0.79	OK
	S-Co/0°	11	4.41	3.3	0.75	OK
		12	4.41	3.4	0.77	OK
		13	7.01	5.5	0.78	OK
		14	7.01	5.5	0.78	OK
		9	49.70	39.4	0.79	OK
		10	49.70	39.8	0.80	OK
		7	420.00	329.2	0.78	OK
		8	420.00	337.7	0.80	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.03**	1.03	1.04	1.01	2%
N60/60°	2	**0.93**	0.93	0.94	0.92	2%
S-Cs/0°	4	**0.80**	0.80	0.81	0.79	1%
S-Co/0°	8	**0.78**	0.78	0.80	0.75	2%
All	**16**	**0.80**	**0.84**	**1.04**	**0.75**	**11%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

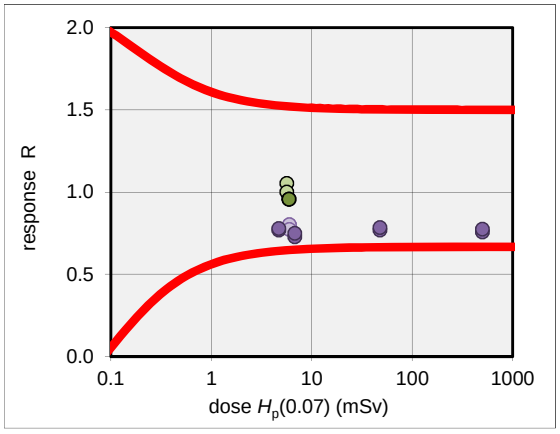
trumpet curve parameter: 1.5 / 0.085 mSv

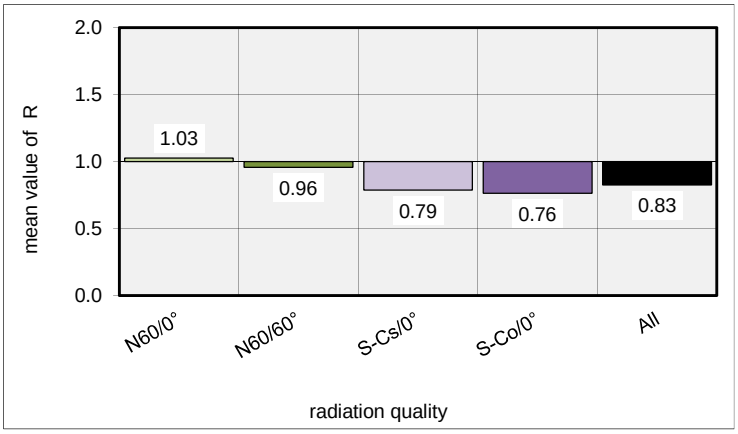
Reporting number 39: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.64	5.9	1.05	OK
		16	5.64	5.6	1.00	OK
	N60/60°	17	5.93	5.7	0.96	OK
		18	5.93	5.7	0.96	OK
gamma	S-Cs/0°	1	6.00	4.7	0.78	OK
		2	6.00	4.8	0.80	OK
		3	6.00	4.8	0.80	OK
		4	6.00	4.6	0.77	OK
	S-Co/0°	11	4.69	3.6	0.77	OK
		12	4.69	3.7	0.78	OK
		13	6.80	5.0	0.73	OK
		14	6.80	5.1	0.75	OK
		9	47.90	36.8	0.77	OK
		10	47.90	37.5	0.78	OK
		7	500.00	378.3	0.76	OK
		8	500.00	387.3	0.77	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.03**	1.03	1.05	1.00	4%
N60/60°	2	**0.96**	0.96	0.96	0.96	0%
S-Cs/0°	4	**0.79**	0.79	0.80	0.77	2%
S-Co/0°	8	**0.77**	0.76	0.78	0.73	2%
All	**16**	**0.78**	**0.83**	**1.05**	**0.73**	**12%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

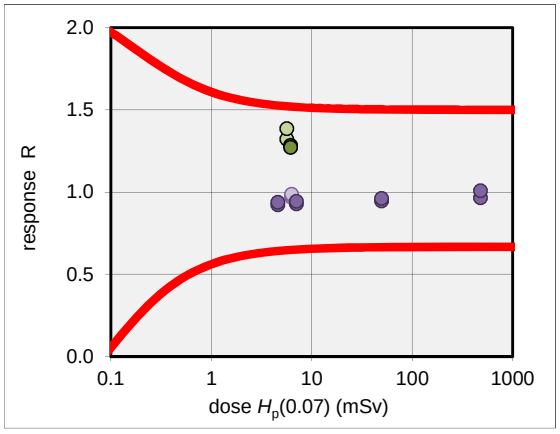
trumpet curve parameter: 1.5 / 0.085 mSv

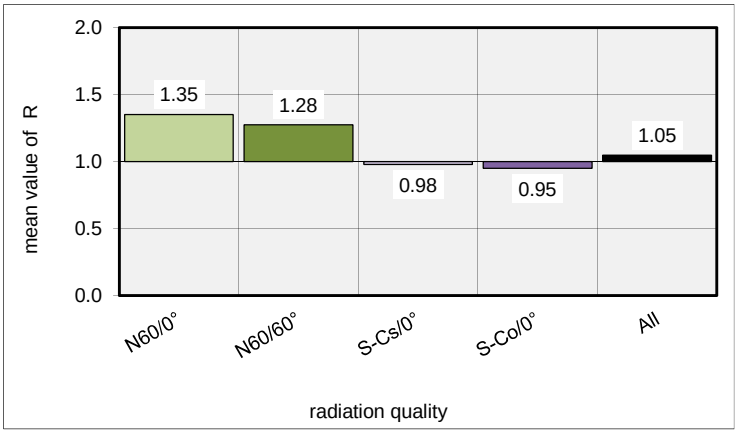
Reporting number 40: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.64	7.5	1.32	OK
		16	5.64	7.8	1.38	OK
	N60/60°	17	6.15	7.9	1.28	OK
		18	6.15	7.8	1.27	OK
gamma	S-Cs/0°	1	6.30	6.2	0.98	OK
		2	6.30	6.1	0.97	OK
		3	6.30	6.2	0.98	OK
		4	6.30	6.2	0.99	OK
	S-Co/0°	11	4.61	4.3	0.92	OK
		12	4.61	4.3	0.94	OK
		13	7.01	6.5	0.93	OK
		14	7.01	6.6	0.94	OK
		9	49.70	47.0	0.95	OK
		10	49.70	47.8	0.96	OK
		7	480.00	463.1	0.96	OK
		8	480.00	483.6	1.01	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.35**	1.35	1.38	1.32	3%
N60/60°	2	**1.28**	1.28	1.28	1.27	1%
S-Cs/0°	4	**0.98**	0.98	0.99	0.97	1%
S-Co/0°	8	**0.95**	0.95	1.01	0.92	3%
All	**16**	**0.97**	**1.05**	**1.38**	**0.92**	**15%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

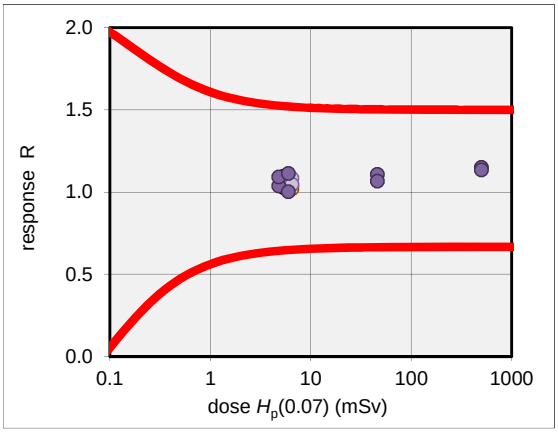
trumpet curve parameter: 1.5 / 0.085 mSv

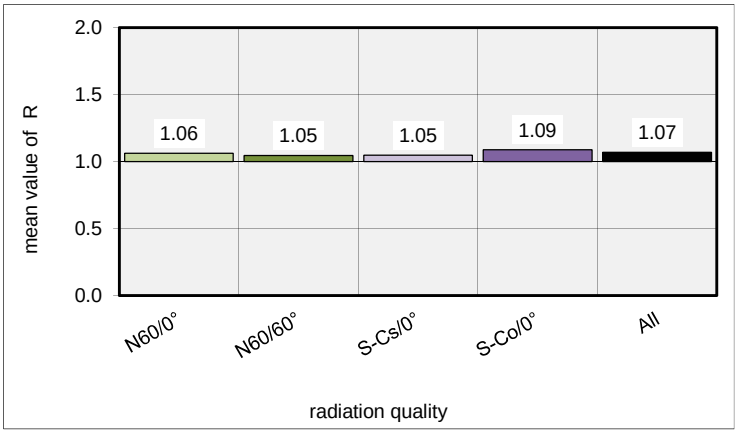
Reporting number 41: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.36	5.5	1.03	OK
		16	5.36	5.9	1.10	OK
	N60/60°	17	5.93	6.1	1.03	OK
		18	5.93	6.3	1.06	OK
gamma	S-Cs/0°	1	6.50	6.6	1.02	OK
		2	6.50	7.0	1.08	OK
		3	6.50	6.8	1.04	OK
		4	6.50	6.8	1.05	OK
	S-Co/0°	11	4.79	5.0	1.04	OK
		12	4.79	5.2	1.09	OK
		13	6.00	6.7	1.11	OK
		14	6.00	6.0	1.00	OK
		9	46.00	51.0	1.11	OK
		10	46.00	49.1	1.07	OK
		7	500.00	574.9	1.15	OK
		8	500.00	567.6	1.14	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.06**	1.06	1.10	1.03	4%
N60/60°	2	**1.05**	1.05	1.06	1.03	2%
S-Cs/0°	4	**1.04**	1.05	1.08	1.02	2%
S-Co/0°	8	**1.10**	1.09	1.15	1.00	5%
All	**16**	**1.07**	**1.07**	**1.15**	**1.00**	**4%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

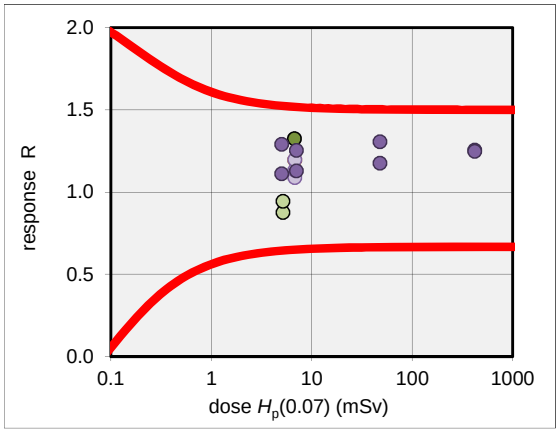
trumpet curve parameter: 1.5 / 0.085 mSv

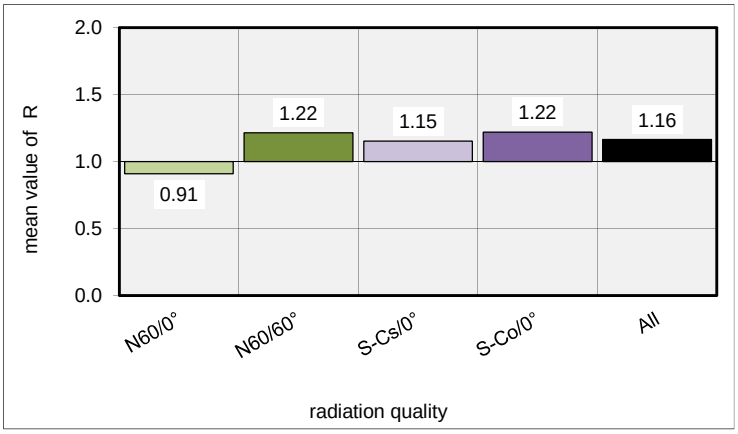
Reporting number 42: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.17	4.5	0.88	OK
		16	5.17	4.9	0.94	OK
	N60/60°	17	6.71	8.9	1.32	OK
		18	6.71	7.4	1.11	OK
gamma	S-Cs/0°	1	6.80	8.1	1.20	OK
		2	6.80	7.4	1.09	OK
		3	6.80	7.7	1.13	OK
		4	6.80	8.1	1.20	OK
	S-Co/0°	11	5.00	6.5	1.29	OK
		12	5.00	5.6	1.11	OK
		13	7.01	8.8	1.25	OK
		14	7.01	7.9	1.13	OK
		9	47.90	56.3	1.18	OK
		10	47.90	62.5	1.30	OK
		7	420.00	527.0	1.25	OK
		8	420.00	524.0	1.25	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.91**	0.91	0.94	0.88	5%
N60/60°	2	**1.22**	1.22	1.32	1.11	12%
S-Cs/0°	4	**1.16**	1.15	1.20	1.09	5%
S-Co/0°	8	**1.25**	1.22	1.30	1.11	6%
All	**16**	**1.19**	**1.16**	**1.32**	**0.88**	**11%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

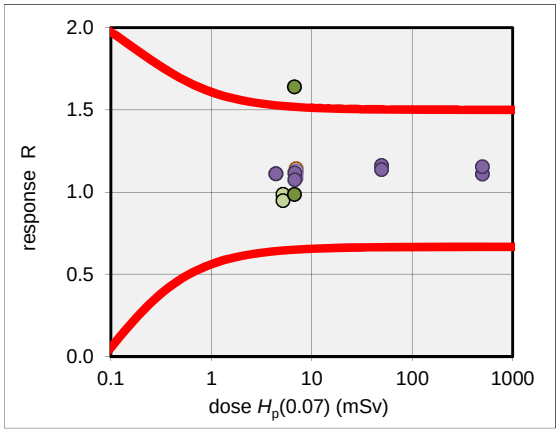
trumpet curve parameter: 1.5 / 0.085 mSv

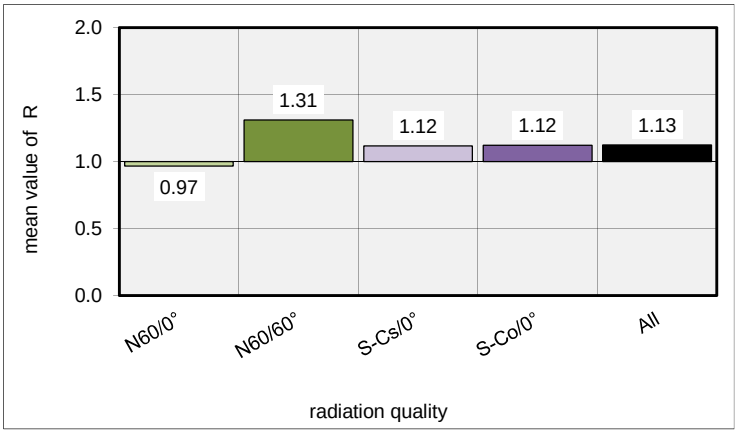
Reporting number 43: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.17	5.1	0.99	OK
		16	5.17	4.9	0.95	OK
	N60/60°	17	6.71	11.0	1.64	outlier
		18	6.71	6.6	0.98	OK
gamma	S-Cs/0°	1	7.00	8.0	1.14	OK
		2	7.00	7.6	1.09	OK
		3	7.00	7.8	1.11	OK
		4	7.00	7.9	1.13	OK
	S-Co/0°	11	4.41	4.9	1.11	OK
		12	4.41	4.9	1.11	OK
		13	6.80	7.6	1.12	OK
		14	6.80	7.3	1.07	OK
		9	49.70	57.7	1.16	OK
		10	49.70	56.5	1.14	OK
		7	500.00	555.0	1.11	OK
		8	500.00	576.9	1.15	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.97**	0.97	0.99	0.95	3%
N60/60°	2	**1.31**	1.31	1.64	0.98	35%
S-Cs/0°	4	**1.12**	1.12	1.14	1.09	2%
S-Co/0°	8	**1.11**	1.12	1.16	1.07	2%
All	**16**	**1.11**	**1.13**	**1.64**	**0.95**	**13%**

outliers: 1 of 16 Fraction of outliers: 6%





Results: IC2012

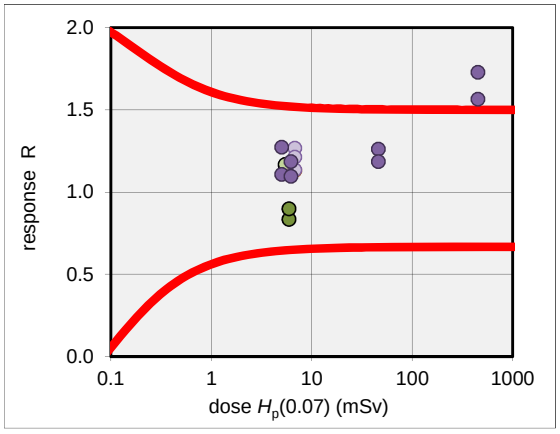
trumpet curve parameter: 1.5 / 0.085 mSv

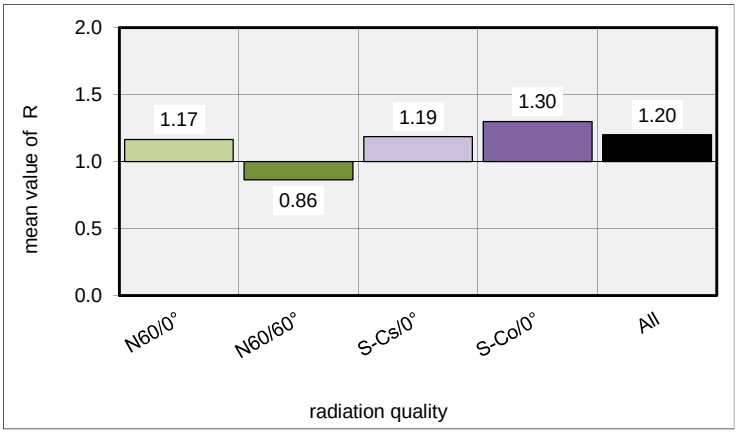
Reporting number 44: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	6.3	1.16	OK
		16	5.45	6.4	1.17	OK
	N60/60°	17	5.93	4.9	0.83	OK
		18	5.93	5.3	0.90	OK
gamma	S-Cs/0°	5	6.80	7.7	1.13	OK
		6	6.80	8.6	1.27	OK
		7	6.80	8.2	1.21	OK
		8	6.80	7.7	1.14	OK
	S-Co/0°	9	5.00	6.4	1.27	OK
		12	5.00	5.5	1.11	OK
		13	6.21	7.4	1.19	OK
		14	6.21	6.8	1.10	OK
		10	46.00	58.0	1.26	OK
		11	46.00	54.5	1.18	OK
		3	450.00	777.7	1.73	outlier
		4	450.00	704.2	1.56	outlier
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.17**	1.17	1.17	1.16	0%
N60/60°	2	**0.86**	0.86	0.90	0.83	5%
S-Cs/0°	4	**1.17**	1.19	1.27	1.13	5%
S-Co/0°	8	**1.22**	1.30	1.73	1.10	17%
All	**16**	**1.18**	**1.20**	**1.73**	**0.83**	**18%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

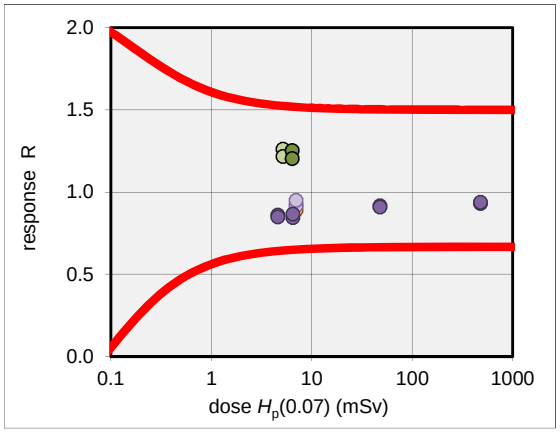
trumpet curve parameter: 1.5 / 0.085 mSv

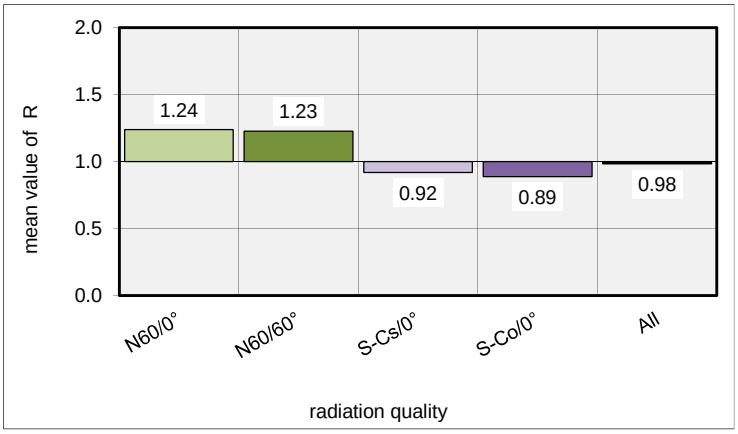
Reporting number 45: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.17	6.5	1.26	OK
		16	5.17	6.3	1.22	OK
	N60/60°	17	6.37	8.0	1.25	OK
		18	6.37	7.7	1.20	OK
gamma	S-Cs/0°	11	7.00	6.2	0.89	OK
		12	7.00	6.5	0.92	OK
		13	7.00	6.4	0.92	OK
		14	7.00	6.7	0.95	OK
	S-Co/0°	3	4.61	4.0	0.86	OK
		4	4.61	3.9	0.85	OK
		9	6.49	5.5	0.84	OK
		10	6.49	5.6	0.87	OK
		7	47.90	43.9	0.92	OK
		8	47.90	43.5	0.91	OK
		1	480.00	446.4	0.93	OK
		2	480.00	449.8	0.94	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.24**	1.24	1.26	1.22	3%
N60/60°	2	**1.23**	1.23	1.25	1.20	3%
S-Cs/0°	4	**0.92**	0.92	0.95	0.89	3%
S-Co/0°	8	**0.89**	0.89	0.94	0.84	4%
All	**16**	**0.92**	**0.98**	**1.26**	**0.84**	**16%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

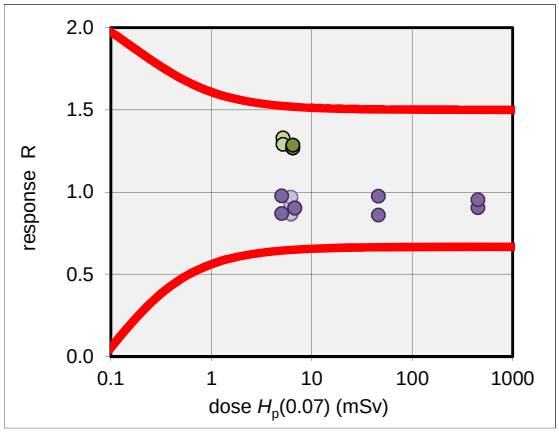
trumpet curve parameter: 1.5 / 0.085 mSv

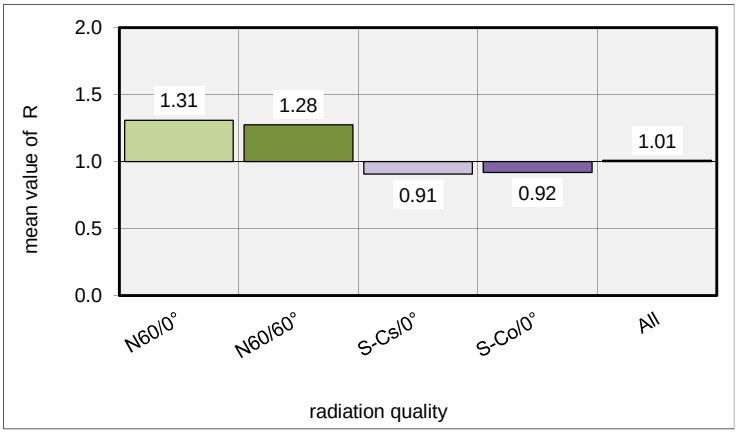
Reporting number 47: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.17	6.9	1.33	OK
		18	5.17	6.7	1.29	OK
	N60/60°	19	6.49	8.2	1.27	OK
		20	6.49	8.3	1.29	OK
gamma	S-Cs/0°	1	6.20	5.4	0.87	OK
		2	6.20	5.7	0.92	OK
		3	6.20	5.4	0.87	OK
		4	6.20	6.0	0.97	OK
	S-Co/0°	10	5.00	4.9	0.98	OK
		11	5.00	4.4	0.87	OK
		12	6.80	6.1	0.90	OK
		13	6.80	6.1	0.90	OK
		15	46.00	44.8	0.97	OK
		16	46.00	39.6	0.86	OK
		7	450.00	407.5	0.91	OK
		8	450.00	429.3	0.95	OK
	NIR	9				
	NIR	14				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.31**	1.31	1.33	1.29	2%
N60/60°	2	**1.28**	1.28	1.29	1.27	1%
S-Cs/0°	4	**0.90**	0.91	0.97	0.87	5%
S-Co/0°	8	**0.90**	0.92	0.98	0.86	5%
All	**16**	**0.94**	**1.01**	**1.33**	**0.86**	**17%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

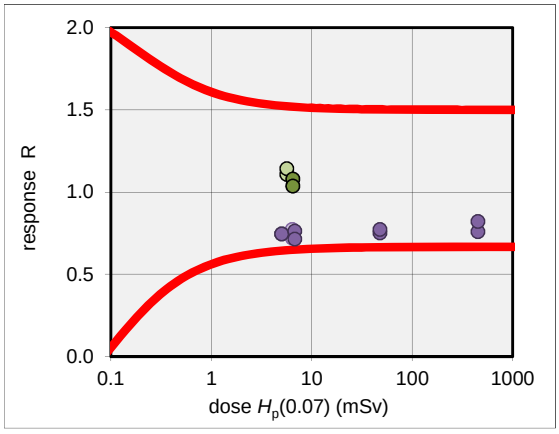
trumpet curve parameter: 1.5 / 0.085 mSv

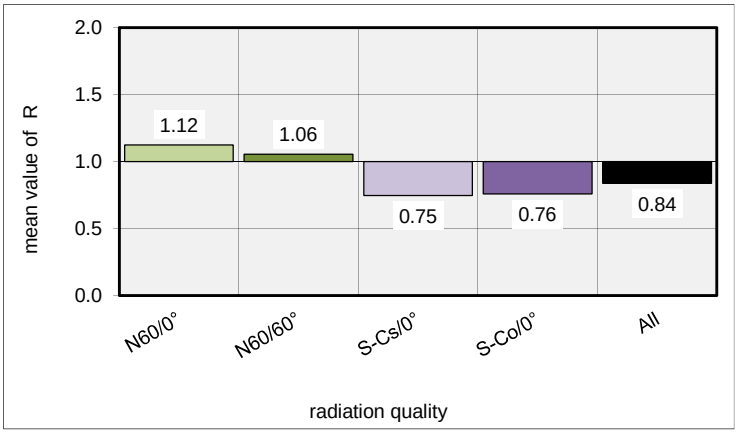
Reporting number 49: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.64	6.2	1.11	OK
		16	5.64	6.4	1.14	OK
	N60/60°	17	6.49	7.0	1.08	OK
		18	6.49	6.7	1.04	OK
gamma	S-Cs/0°	9	6.40	4.7	0.74	OK
		10	6.40	4.8	0.75	OK
		11	6.40	4.6	0.72	OK
		12	6.40	4.9	0.77	OK
	S-Co/0°	3	5.00	3.7	0.75	OK
		4	5.00	3.7	0.75	OK
		13	6.80	5.2	0.76	OK
		14	6.80	4.9	0.71	OK
		5	47.90	36.0	0.75	OK
		6	47.90	37.0	0.77	OK
		7	450.00	341.0	0.76	OK
		8	450.00	369.4	0.82	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.12**	1.12	1.14	1.11	2%
N60/60°	2	**1.06**	1.06	1.08	1.04	3%
S-Cs/0°	4	**0.75**	0.75	0.77	0.72	3%
S-Co/0°	8	**0.75**	0.76	0.82	0.71	4%
All	**16**	**0.76**	**0.84**	**1.14**	**0.71**	**18%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

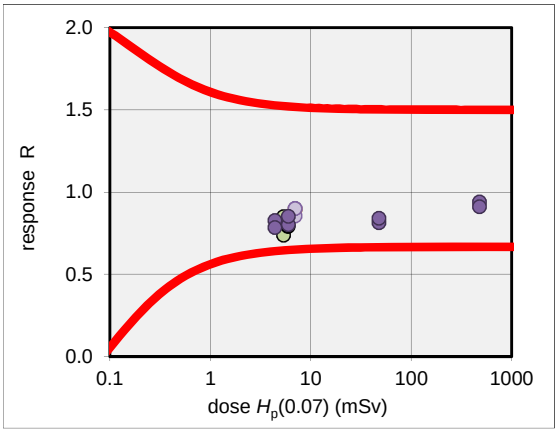
trumpet curve parameter: 1.5 / 0.085 mSv

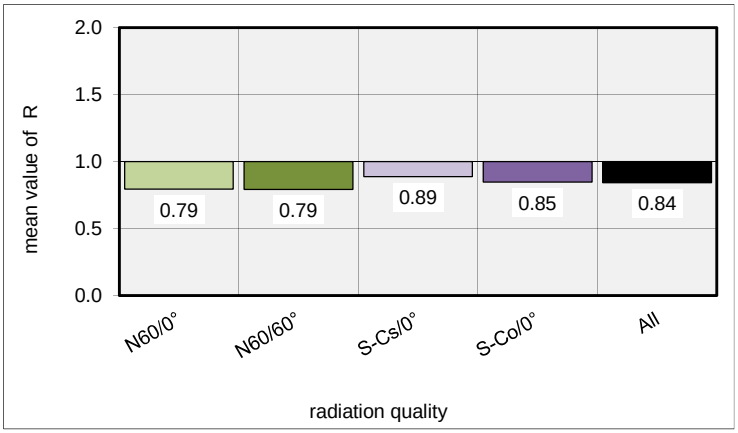
Reporting number 50: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.36	4.6	0.85	OK
		16	5.36	4.0	0.74	OK
	N60/60°	17	5.93	4.7	0.79	OK
		18	5.93	4.7	0.80	OK
gamma	S-Cs/0°	6	7.00	6.3	0.90	OK
		7	7.00	6.0	0.85	OK
		8	7.00	6.3	0.90	OK
		9	7.00	6.3	0.90	OK
	S-Co/0°	5	4.41	3.7	0.83	OK
		10	4.41	3.5	0.78	OK
		13	6.00	4.8	0.80	OK
		14	6.00	5.1	0.85	OK
		11	47.90	38.9	0.81	OK
		12	47.90	40.3	0.84	OK
		3	480.00	451.5	0.94	OK
		4	480.00	437.4	0.91	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.79**	0.79	0.85	0.74	10%
N60/60°	2	**0.79**	0.79	0.80	0.79	1%
S-Cs/0°	4	**0.90**	0.89	0.90	0.85	3%
S-Co/0°	8	**0.83**	0.85	0.94	0.78	6%
All	**16**	**0.85**	**0.84**	**0.94**	**0.74**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

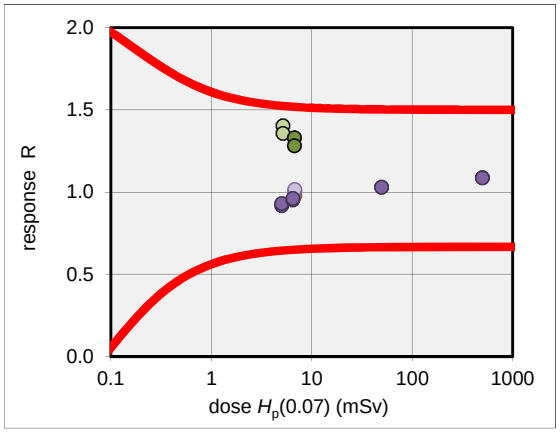
trumpet curve parameter: 1.5 / 0.085 mSv

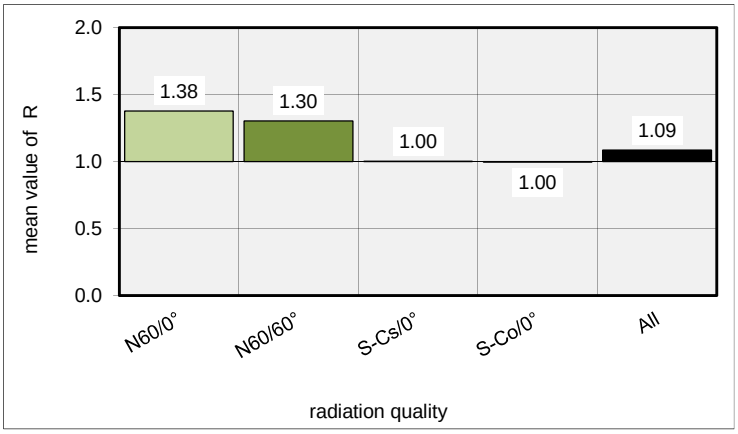
Reporting number 51: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.17	7.3	1.40	OK
		17	5.17	7.0	1.36	OK
	N60/60°	18	6.71	8.9	1.33	OK
		19	6.71	8.6	1.28	OK
gamma	S-Cs/0°	6	6.80	6.7	0.98	OK
		7	6.80	6.9	1.01	OK
		8	6.80	6.8	1.00	OK
		9	6.80	6.9	1.01	OK
	S-Co/0°	12	5.00	4.6	0.92	OK
		13	5.00	4.7	0.93	OK
		14	6.49	6.2	0.95	OK
		15	6.49	6.2	0.96	OK
		10	49.70	51.1	1.03	OK
		11	49.70	51.1	1.03	OK
		3	500.00	543.8	1.09	OK
		4	500.00	543.0	1.09	OK
	NIR	5				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.38**	1.38	1.40	1.36	2%
N60/60°	2	**1.30**	1.30	1.33	1.28	3%
S-Cs/0°	4	**1.01**	1.00	1.01	0.98	2%
S-Co/0°	8	**0.99**	1.00	1.09	0.92	7%
All	**16**	**1.02**	**1.09**	**1.40**	**0.92**	**15%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

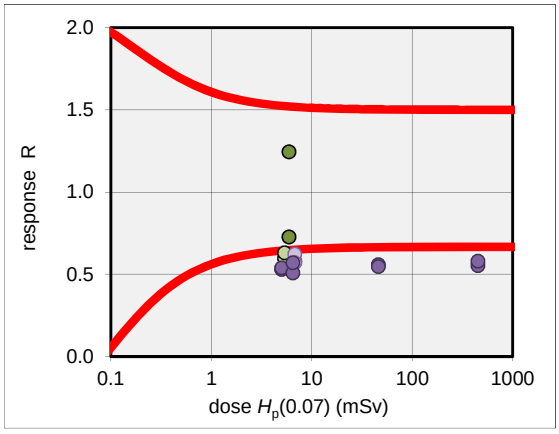
trumpet curve parameter: 1.5 / 0.085 mSv

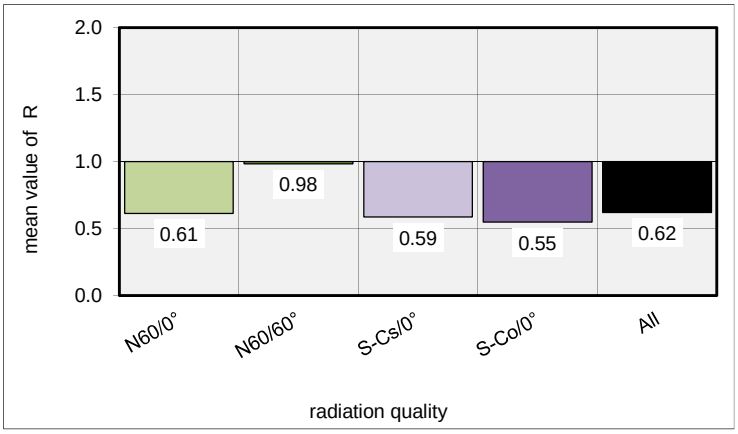
Reporting number 52: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.36	3.2	0.60	outlier
		16	5.36	3.4	0.63	outlier
	N60/60°	17	5.93	7.4	1.24	OK
		18	5.93	4.3	0.73	OK
gamma	S-Cs/0°	9	6.80	4.0	0.58	outlier
		10	6.80	3.9	0.58	outlier
		11	6.80	4.2	0.62	outlier
		12	6.80	3.9	0.57	outlier
	S-Co/0°	7	5.00	2.6	0.53	outlier
		8	5.00	2.7	0.54	outlier
		13	6.49	3.3	0.51	outlier
		14	6.49	3.7	0.57	outlier
		5	46.00	25.6	0.56	outlier
		6	46.00	25.2	0.55	outlier
		3	450.00	248.7	0.55	outlier
		4	450.00	260.4	0.58	outlier
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.61**	0.61	0.63	0.60	4%
N60/60°	2	**0.98**	0.98	1.24	0.73	37%
S-Cs/0°	4	**0.58**	0.59	0.62	0.57	4%
S-Co/0°	8	**0.55**	0.55	0.58	0.51	4%
All	**16**	**0.57**	**0.62**	**1.24**	**0.51**	**28%**

outliers: 14 of 16 Fraction of outliers: 88%





Results: IC2012

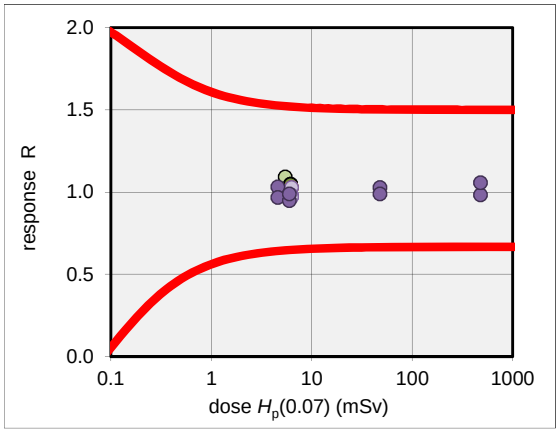
trumpet curve parameter: 1.5 / 0.085 mSv

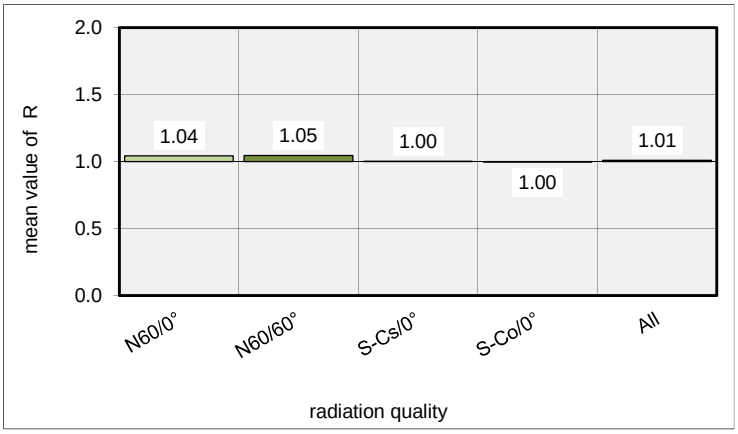
Reporting number 53: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.45	6.0	1.09	OK
		17	5.45	5.4	1.00	OK
	N60/60°	18	6.15	6.4	1.05	OK
		19	6.15	6.4	1.04	OK
gamma	S-Cs/0°	1	6.30	6.5	1.03	OK
		2	6.30	6.5	1.03	OK
		3	6.30	6.2	0.98	OK
		4	6.30	6.1	0.97	OK
	S-Co/0°	12	4.61	4.8	1.03	OK
		13	4.61	4.5	0.97	OK
		14	6.00	5.7	0.95	OK
		15	6.00	5.9	0.99	OK
		10	47.90	49.2	1.03	OK
		11	47.90	47.3	0.99	OK
		7	480.00	471.5	0.98	OK
		8	480.00	507.5	1.06	OK
	NIR	9				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.04**	1.04	1.09	1.00	6%
N60/60°	2	**1.05**	1.05	1.05	1.04	0%
S-Cs/0°	4	**1.00**	1.00	1.03	0.97	3%
S-Co/0°	8	**0.99**	1.00	1.06	0.95	4%
All	**16**	**1.01**	**1.01**	**1.09**	**0.95**	**4%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

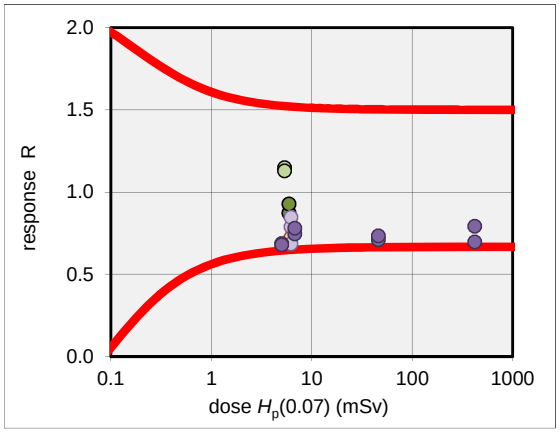
trumpet curve parameter: 1.5 / 0.085 mSv

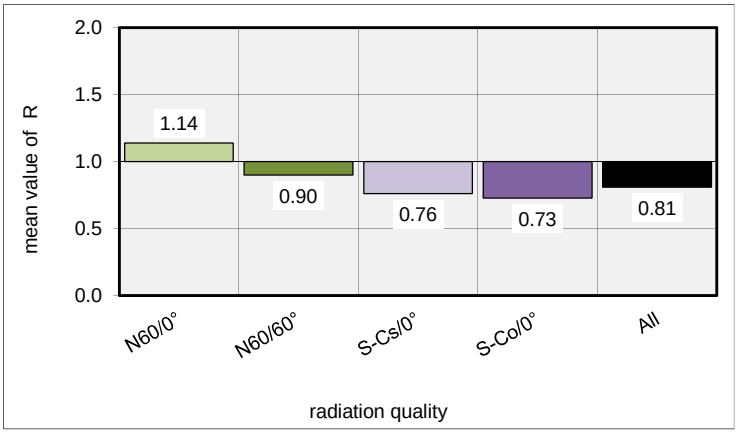
Reporting number 54: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.36	6.2	1.15	OK
		16	5.36	6.1	1.13	OK
	N60/60°	17	5.93	5.2	0.87	OK
		18	5.93	5.5	0.93	OK
gamma	S-Cs/0°	1	6.20	4.5	0.72	OK
		2	6.20	4.9	0.79	OK
		3	6.20	5.3	0.85	OK
		4	6.20	4.3	0.69	OK
	S-Co/0°	11	5.00	3.4	0.69	OK
		12	5.00	3.4	0.68	OK
		13	6.80	5.1	0.75	OK
		14	6.80	5.3	0.78	OK
		9	46.00	32.7	0.71	OK
		10	46.00	33.7	0.73	OK
		7	420.00	332.6	0.79	OK
		8	420.00	292.3	0.70	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.14**	1.14	1.15	1.13	1%
N60/60°	2	**0.90**	0.90	0.93	0.87	4%
S-Cs/0°	4	**0.76**	0.76	0.85	0.69	9%
S-Co/0°	8	**0.72**	0.73	0.79	0.68	6%
All	**16**	**0.76**	**0.81**	**1.15**	**0.68**	**18%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

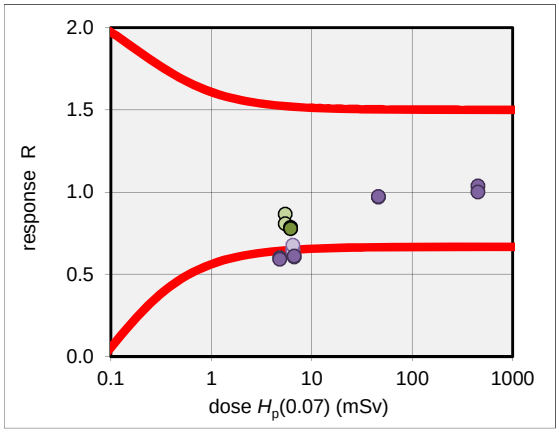
trumpet curve parameter: 1.5 / 0.085 mSv

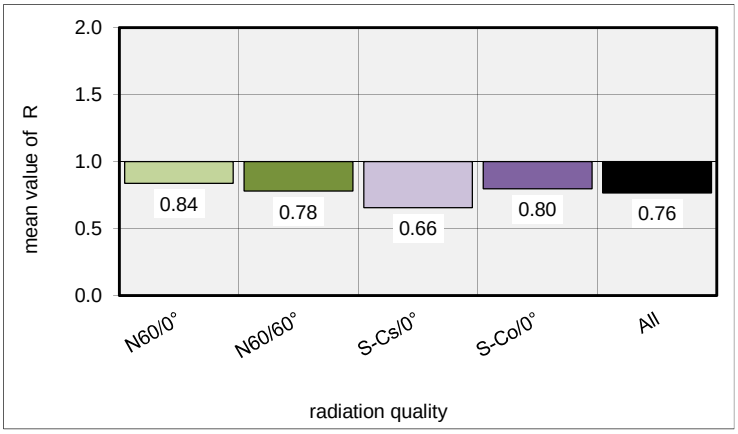
Reporting number 55: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	4.7	0.87	OK
		16	5.45	4.4	0.81	OK
	N60/60°	17	6.15	4.8	0.78	OK
		18	6.15	4.8	0.78	OK
gamma	S-Cs/0°	1	6.50	4.2	0.65	OK
		2	6.50	4.2	0.65	OK
		3	6.50	4.2	0.64	outlier
		4	6.50	4.4	0.68	OK
	S-Co/0°	11	4.79	2.9	0.60	outlier
		12	4.79	2.8	0.59	outlier
		13	6.67	4.0	0.60	outlier
		14	6.67	4.1	0.61	outlier
		9	46.00	44.5	0.97	OK
		10	46.00	44.7	0.97	OK
		7	450.00	466.9	1.04	OK
		8	450.00	450.3	1.00	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.84**	0.84	0.87	0.81	5%
N60/60°	2	**0.78**	0.78	0.78	0.78	1%
S-Cs/0°	4	**0.65**	0.66	0.68	0.64	2%
S-Co/0°	8	**0.79**	0.80	1.04	0.59	26%
All	**16**	**0.73**	**0.76**	**1.04**	**0.59**	**21%**

outliers: 5 of 16 Fraction of outliers: 31%





Results: IC2012

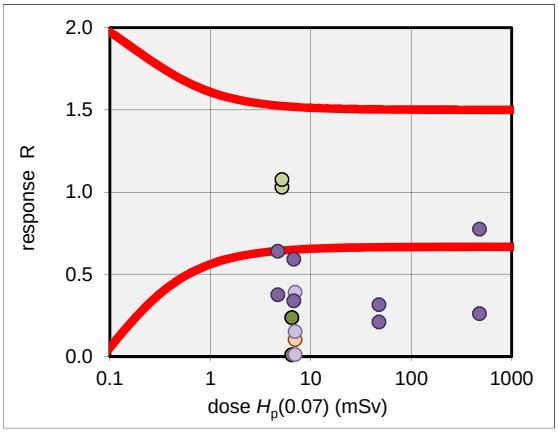
trumpet curve parameter: 1.5 / 0.085 mSv

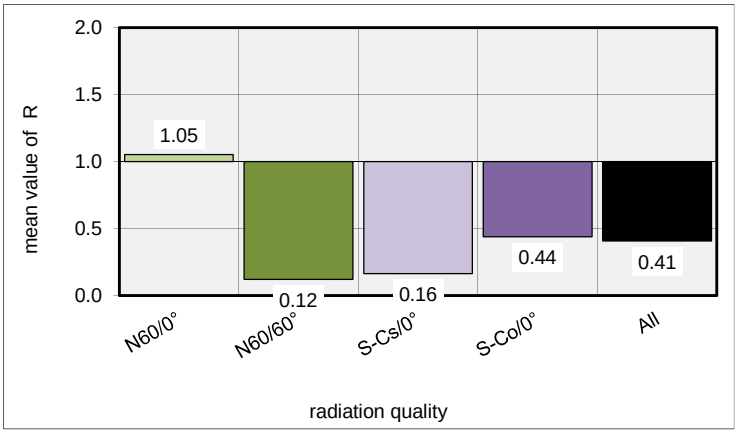
Reporting number 56: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.17	5.3	1.03	OK
		17	5.17	5.6	1.08	OK
	N60/60°	18	6.49	0.1	0.01	outlier
		19	6.49	1.5	0.23	outlier
gamma	S-Cs/0°	6	7.00	0.7	0.10	outlier
		7	7.00	2.7	0.39	outlier
		8	7.00	0.1	0.01	outlier
		9	7.00	1.1	0.15	outlier
	S-Co/0°	12	4.69	3.0	0.64	outlier
		13	4.69	1.8	0.38	outlier
		14	6.80	4.0	0.59	outlier
		15	6.80	2.3	0.34	outlier
		10	47.90	15.1	0.32	outlier
		11	47.90	10.1	0.21	outlier
		3	480.00	124.6	0.26	outlier
		4	480.00	371.2	0.77	OK
	NIR	5				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.05**	1.05	1.08	1.03	3%
N60/60°	2	**0.12**	0.12	0.23	0.01	131%
S-Cs/0°	4	**0.13**	0.16	0.39	0.01	99%
S-Co/0°	8	**0.36**	0.44	0.77	0.21	46%
All	**16**	**0.33**	**0.41**	**1.08**	**0.01**	**81%**

outliers: 13 of 16 Fraction of outliers: 81%





Results: IC2012

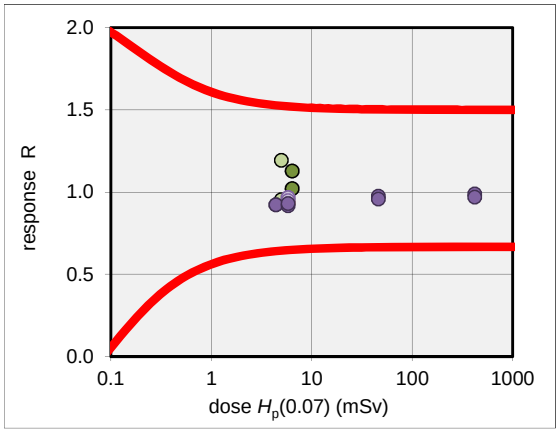
trumpet curve parameter: 1.5 / 0.085 mSv

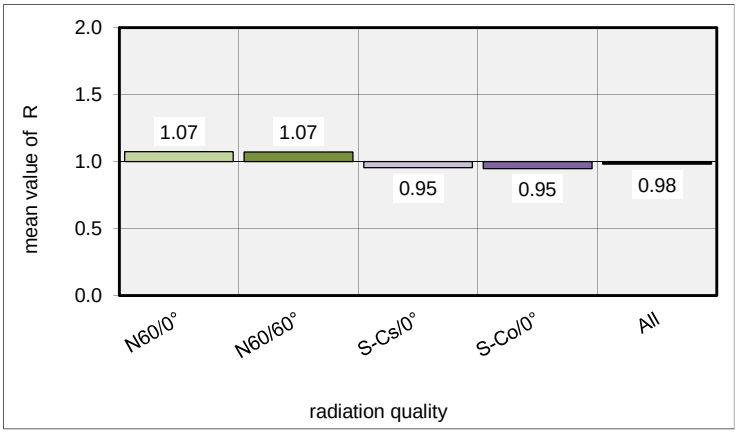
Reporting number 57: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	4.98	4.8	0.95	OK
		16	4.98	5.9	1.19	OK
	N60/60°	21	6.37	6.5	1.02	OK
		22	6.37	7.2	1.13	OK
gamma	S-Cs/0°	1	5.80	5.4	0.93	OK
		2	5.80	5.6	0.97	OK
		3	5.80	5.6	0.97	OK
		4	5.80	5.5	0.95	OK
	S-Co/0°	11	4.41	4.1	0.92	OK
		12	4.41	4.1	0.92	OK
		13	5.80	5.3	0.92	OK
		14	5.80	5.4	0.93	OK
		9	46.00	44.8	0.97	OK
		10	46.00	44.0	0.96	OK
		7	420.00	415.0	0.99	OK
		8	420.00	407.0	0.97	OK
	NIR	17				
	NIR	18				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.07**	1.07	1.19	0.95	16%
N60/60°	2	**1.07**	1.07	1.13	1.02	7%
S-Cs/0°	4	**0.96**	0.95	0.97	0.93	2%
S-Co/0°	8	**0.94**	0.95	0.99	0.92	3%
All	**16**	**0.96**	**0.98**	**1.19**	**0.92**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

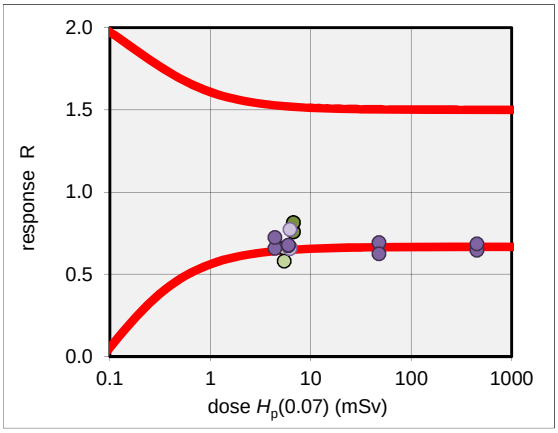
trumpet curve parameter: 1.5 / 0.085 mSv

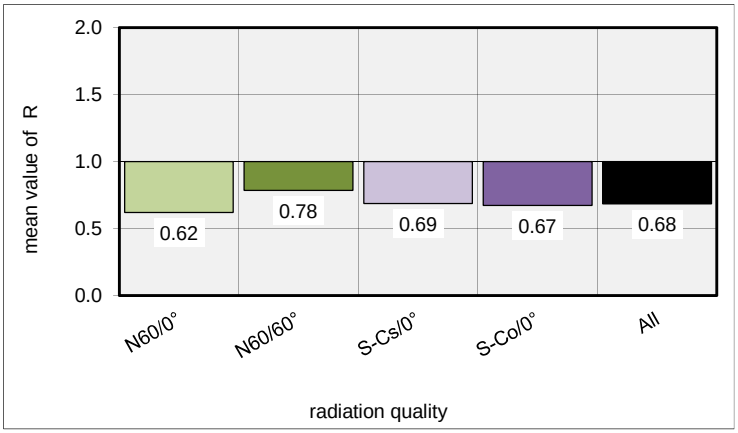
Reporting number 58: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	3.6	0.66	OK
		16	5.45	3.2	0.58	outlier
	N60/60°	17	6.71	5.1	0.76	OK
		18	6.71	5.5	0.81	OK
gamma	S-Cs/0°	1	6.20	4.1	0.67	OK
		2	6.20	4.1	0.66	OK
		3	6.20	4.8	0.77	OK
		4	6.20	4.1	0.65	OK
	S-Co/0°	11	4.41	2.9	0.66	OK
		12	4.41	3.2	0.72	OK
		13	6.00	4.0	0.67	OK
		14	6.00	4.1	0.68	OK
		9	47.90	33.2	0.69	OK
		10	47.90	29.9	0.62	outlier
		7	450.00	291.0	0.65	outlier
		8	450.00	308.0	0.68	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.62**	0.62	0.66	0.58	9%
N60/60°	2	**0.78**	0.78	0.81	0.76	5%
S-Cs/0°	4	**0.66**	0.69	0.77	0.65	8%
S-Co/0°	8	**0.68**	0.67	0.72	0.62	5%
All	**16**	**0.67**	**0.68**	**0.81**	**0.58**	**8%**

outliers: 3 of 16 Fraction of outliers: 19%





Results: IC2012

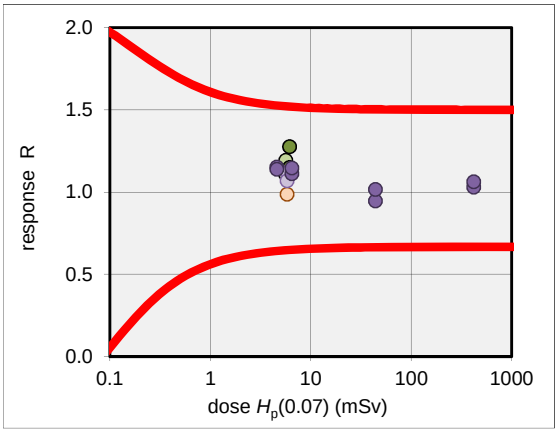
trumpet curve parameter: 1.5 / 0.085 mSv

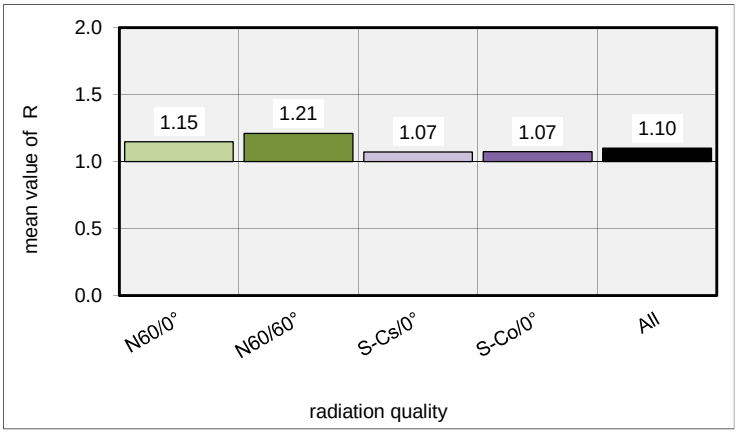
Reporting number 59: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.64	6.2	1.10	OK
		16	5.64	6.7	1.19	OK
	N60/60°	17	6.15	7.8	1.27	OK
		18	6.15	7.1	1.15	OK
gamma	S-Cs/0°	1	5.80	5.7	0.99	OK
		2	5.80	6.5	1.12	OK
		3	5.80	6.5	1.12	OK
		4	5.80	6.2	1.07	OK
	S-Co/0°	11	4.61	5.3	1.15	OK
		12	4.61	5.3	1.14	OK
		13	6.49	7.2	1.11	OK
		14	6.49	7.4	1.15	OK
		9	44.10	41.7	0.95	OK
		10	44.10	44.8	1.02	OK
		7	420.00	432.0	1.03	OK
		8	420.00	446.0	1.06	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.15**	1.15	1.19	1.10	5%
N60/60°	2	**1.21**	1.21	1.27	1.15	7%
S-Cs/0°	4	**1.09**	1.07	1.12	0.99	6%
S-Co/0°	8	**1.09**	1.07	1.15	0.95	7%
All	**16**	**1.11**	**1.10**	**1.27**	**0.95**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

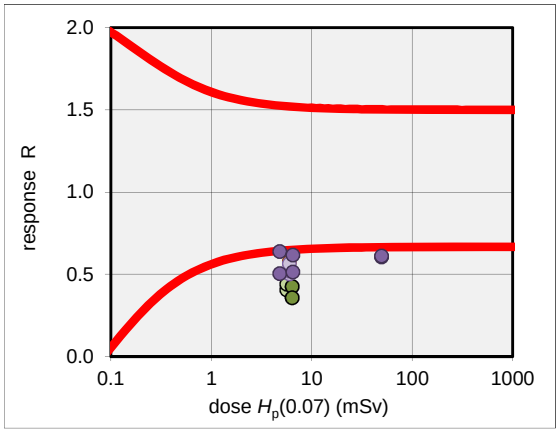
trumpet curve parameter: 1.5 / 0.085 mSv

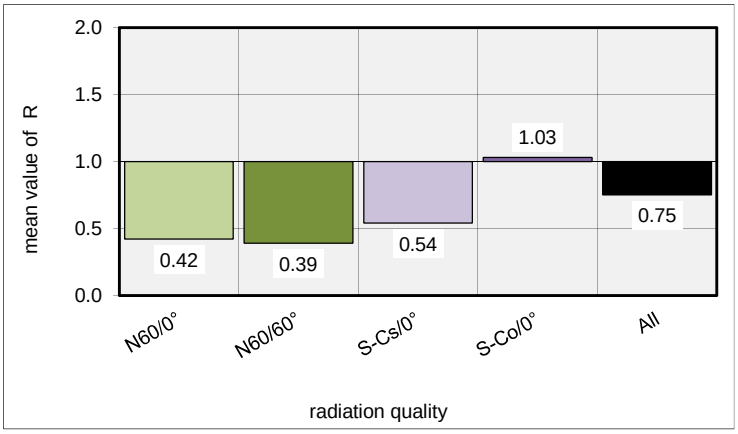
Reporting number 60: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.64	2.3	0.40	outlier
		16	5.64	2.5	0.44	outlier
	N60/60°	17	6.37	2.7	0.42	outlier
		18	6.37	2.3	0.36	outlier
gamma	S-Cs/0°	1	6.00	3.5	0.58	outlier
		2	6.00	3.0	0.50	outlier
		3	6.00	3.1	0.52	outlier
		4	6.00	3.4	0.56	outlier
	S-Co/0°	11	4.79	3.1	0.64	outlier
		12	4.79	2.4	0.50	outlier
		13	6.49	3.3	0.51	outlier
		14	6.49	4.0	0.62	outlier
		9	49.70	30.1	0.61	outlier
		10	49.70	30.4	0.61	outlier
		7	480.00	1109.5	2.31	outlier
		8	480.00	1175.9	2.45	outlier
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.42**	0.42	0.44	0.40	6%
N60/60°	2	**0.39**	0.39	0.42	0.36	12%
S-Cs/0°	4	**0.54**	0.54	0.58	0.50	7%
S-Co/0°	8	**0.61**	1.03	2.45	0.50	81%
All	**16**	**0.54**	**0.75**	**2.45**	**0.36**	**85%**

outliers: 16 of 16 Fraction of outliers: 100%





Results: IC2012 2 points outside diagramme (> 2)

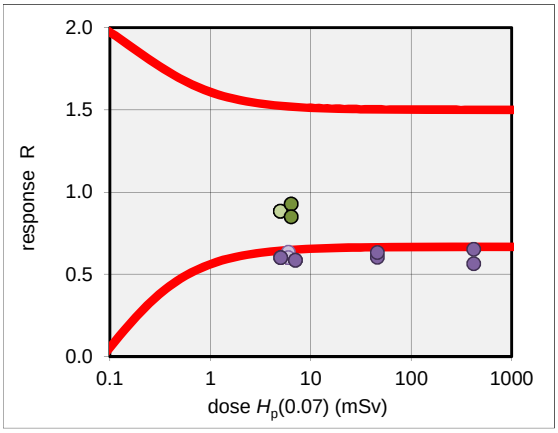
trumpet curve parameter: 1.5 / 0.085 mSv

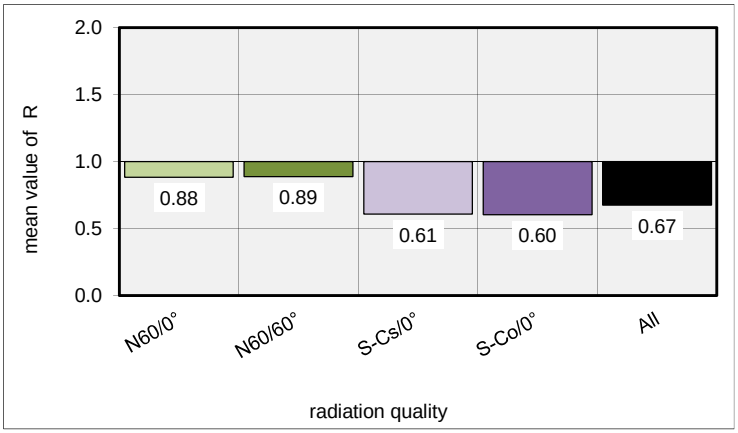
Reporting number 61: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	4.98	4.4	0.88	OK
		16	4.98	4.4	0.88	OK
	N60/60°	17	6.37	5.9	0.93	OK
		18	6.37	5.4	0.85	OK
gamma	S-Cs/0°	1	6.00	3.6	0.60	outlier
		2	6.00	3.6	0.60	outlier
		3	6.00	3.8	0.63	outlier
		4	6.00	3.6	0.60	outlier
	S-Co/0°	11	5.00	3.0	0.60	outlier
		12	5.00	3.0	0.60	outlier
		13	7.01	4.1	0.58	outlier
		14	7.01	4.1	0.58	outlier
		9	46.00	27.7	0.60	outlier
		10	46.00	29.1	0.63	outlier
		7	420.00	237.2	0.56	outlier
		8	420.00	273.5	0.65	outlier
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.88**	0.88	0.88	0.88	0%
N60/60°	2	**0.89**	0.89	0.93	0.85	6%
S-Cs/0°	4	**0.60**	0.61	0.63	0.60	3%
S-Co/0°	8	**0.60**	0.60	0.65	0.56	5%
All	**16**	**0.60**	**0.67**	**0.93**	**0.56**	**19%**

outliers: 12 of 16 Fraction of outliers: 75%





Results: IC2012

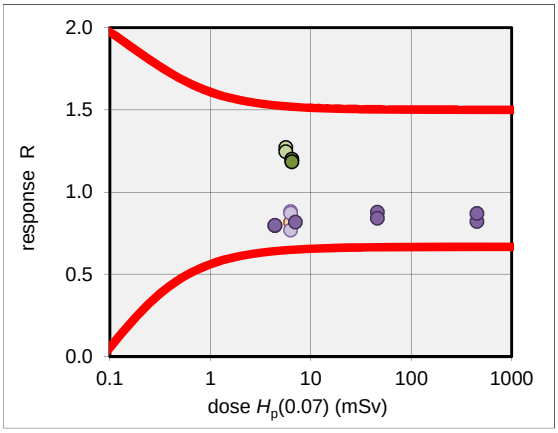
trumpet curve parameter: 1.5 / 0.085 mSv

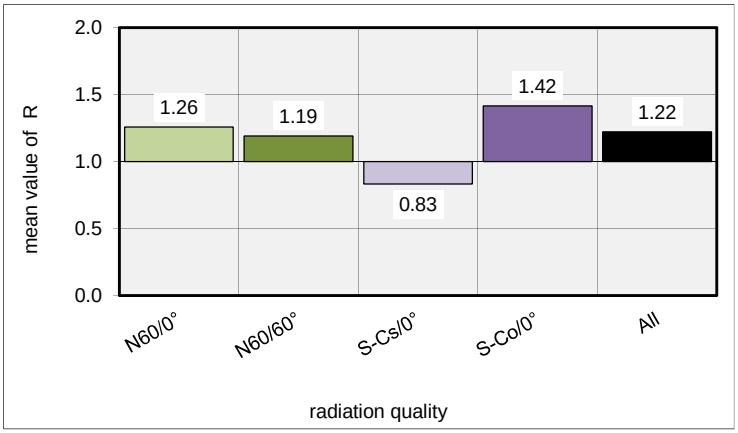
Reporting number 62: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.64	7.2	1.27	OK
		16	5.64	7.0	1.25	OK
	N60/60°	17	6.49	7.8	1.20	OK
		18	6.49	7.7	1.18	OK
gamma	S-Cs/0°	1	6.30	5.1	0.81	OK
		2	6.30	5.6	0.88	OK
		3	6.30	5.5	0.87	OK
		4	6.30	4.8	0.77	OK
	S-Co/0°	9	4.41	3.5	0.80	OK
		10	4.41	3.5	0.80	OK
		13	7.01	38.7	5.51	outlier
		14	7.01	5.7	0.82	OK
		11	46.00	40.4	0.88	OK
		12	46.00	38.7	0.84	OK
		7	450.00	369.7	0.82	OK
		8	450.00	391.0	0.87	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.26**	1.26	1.27	1.25	1%
N60/60°	2	**1.19**	1.19	1.20	1.18	1%
S-Cs/0°	4	**0.84**	0.83	0.88	0.77	6%
S-Co/0°	8	**0.83**	1.42	5.51	0.80	117%
All	**16**	**0.87**	**1.22**	**5.51**	**0.77**	**95%**

outliers: 1 of 16 Fraction of outliers: 6%





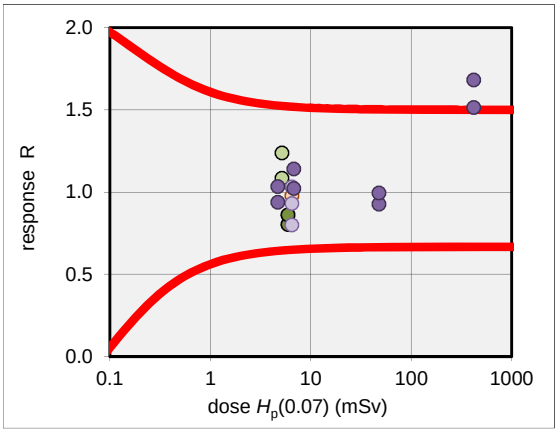
Results: IC2012 1 point outside diagramme (> 2) trumpet curve parameter: 1.5 / 0.085 mSv

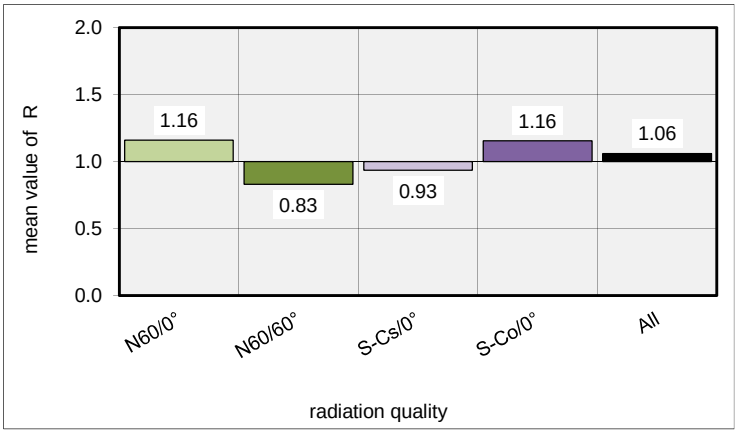
Reporting number 63: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.17	5.6	1.08	OK
		16	5.17	6.4	1.24	OK
	N60/60°	17	5.93	4.8	0.80	OK
		18	5.93	5.1	0.86	OK
gamma	S-Cs/0°	1	6.50	6.4	0.98	OK
		2	6.50	6.1	0.93	OK
		3	6.50	5.2	0.80	OK
		4	6.50	6.7	1.03	OK
	S-Co/0°	11	4.69	4.4	0.94	OK
		12	4.69	4.9	1.03	OK
		13	6.80	7.0	1.02	OK
		14	6.80	7.8	1.14	OK
		9	47.90	44.4	0.93	OK
		10	47.90	47.7	0.99	OK
		7	420.00	635.8	1.51	outlier
		8	420.00	706.0	1.68	outlier
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.16**	1.16	1.24	1.08	9%
N60/60°	2	**0.83**	0.83	0.86	0.80	5%
S-Cs/0°	4	**0.95**	0.93	1.03	0.80	11%
S-Co/0°	8	**1.03**	1.16	1.68	0.93	25%
All	**16**	**1.01**	**1.06**	**1.68**	**0.80**	**23%**

outliers: 2 of 16 Fraction of outliers: 13%





Results: IC2012

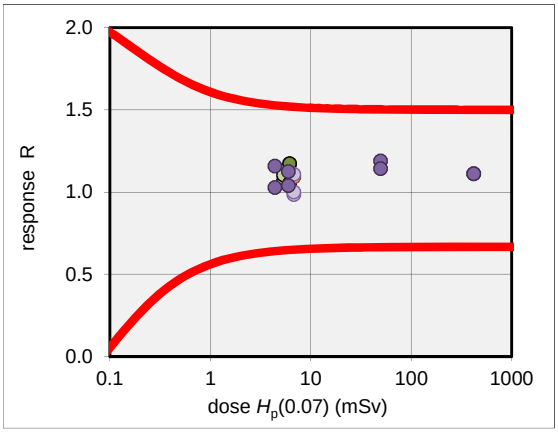
trumpet curve parameter: 1.5 / 0.085 mSv

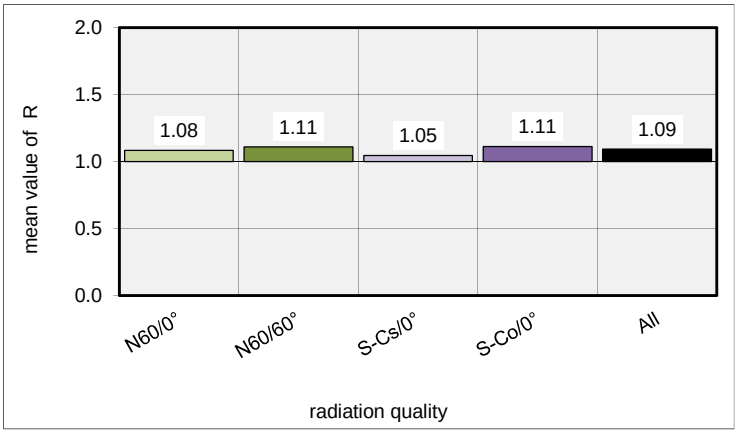
Reporting number 64: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.36	5.7	1.07	OK
		18	5.36	5.9	1.10	OK
	N60/60°	19	6.15	7.2	1.17	OK
		20	6.15	6.5	1.05	OK
gamma	S-Cs/0°	13	6.80	7.4	1.09	OK
		14	6.80	6.7	0.98	OK
		15	6.80	7.5	1.11	OK
		16	6.80	6.8	1.00	OK
	S-Co/0°	6	4.41	4.5	1.03	OK
		7	4.41	5.1	1.16	OK
		5	6.00	6.8	1.13	OK
		8	6.00	6.2	1.04	OK
		9	49.70	59.1	1.19	OK
		10	49.70	56.8	1.14	OK
		3	420.00	466.6	1.11	OK
		4	420.00	467.0	1.11	OK
	NIR	11				
	NIR	12				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.08**	1.08	1.10	1.07	2%
N60/60°	2	**1.11**	1.11	1.17	1.05	8%
S-Cs/0°	4	**1.05**	1.05	1.11	0.98	6%
S-Co/0°	8	**1.12**	1.11	1.19	1.03	5%
All	**16**	**1.10**	**1.09**	**1.19**	**0.98**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

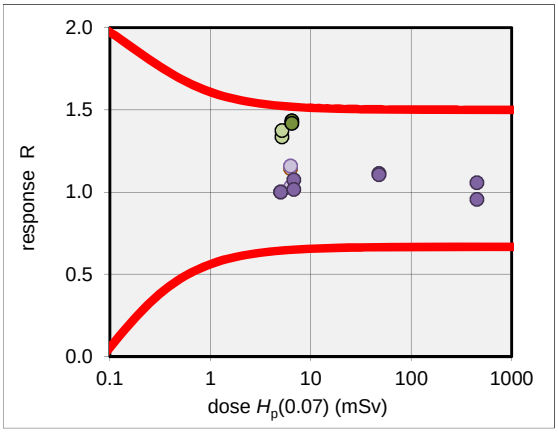
trumpet curve parameter: 1.5 / 0.085 mSv

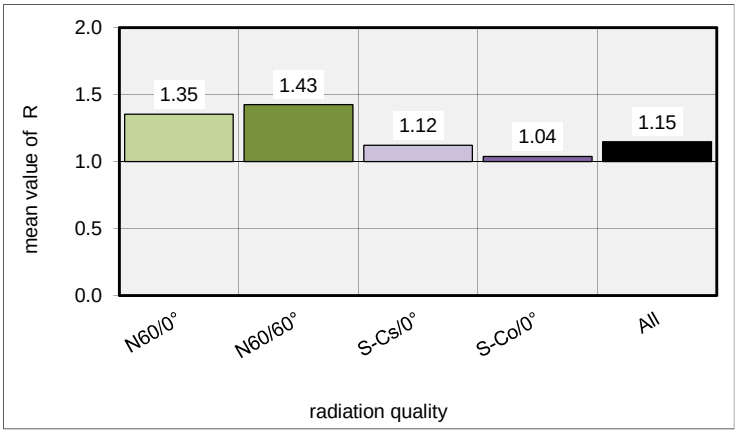
Reporting number 65: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.17	6.9	1.33	OK
		17	5.17	7.1	1.37	OK
	N60/60°	18	6.49	9.3	1.43	OK
		19	6.49	9.2	1.42	OK
gamma	S-Cs/0°	9	6.30	7.2	1.14	OK
		10	6.30	6.5	1.03	OK
		11	6.30	7.3	1.16	OK
		12	6.30	7.3	1.16	OK
	S-Co/0°	3	5.00	5.0	1.00	OK
		4	5.00	5.0	1.00	OK
		14	6.80	7.3	1.07	OK
		15	6.80	6.9	1.01	OK
		1	47.90	53.3	1.11	OK
		2	47.90	52.9	1.10	OK
		7	450.00	429.9	0.96	OK
		8	450.00	475.5	1.06	OK
	NIR	13				
	NIR	20				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.35**	1.35	1.37	1.33	2%
N60/60°	2	**1.43**	1.43	1.43	1.42	1%
S-Cs/0°	4	**1.15**	1.12	1.16	1.03	5%
S-Co/0°	8	**1.04**	1.04	1.11	0.96	5%
All	**16**	**1.11**	**1.15**	**1.43**	**0.96**	**14%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

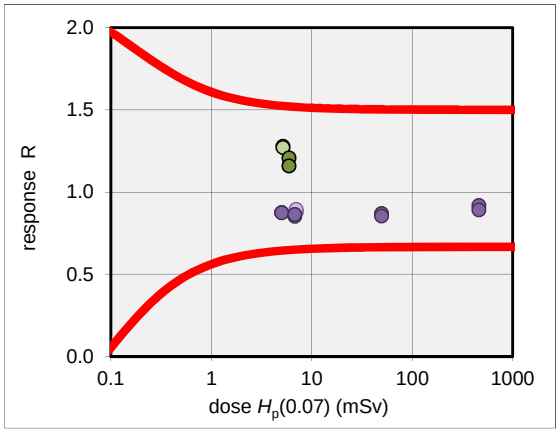
trumpet curve parameter: 1.5 / 0.085 mSv

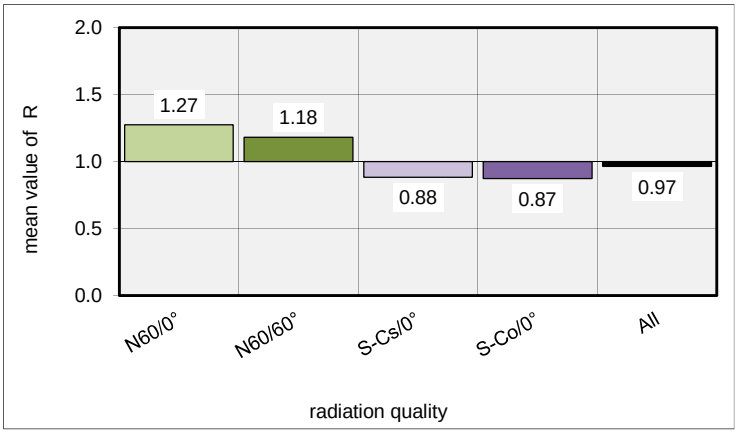
Reporting number 66: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.17	6.6	1.28	OK
		16	5.17	6.6	1.27	OK
	N60/60°	17	5.93	7.2	1.21	OK
		18	5.93	6.9	1.16	OK
gamma	S-Cs/0°	9	7.00	6.2	0.88	OK
		10	7.00	6.2	0.89	OK
		11	7.00	6.1	0.88	OK
		12	7.00	6.3	0.89	OK
	S-Co/0°	3	5.00	4.4	0.88	OK
		4	5.00	4.4	0.87	OK
		13	6.80	5.8	0.85	OK
		14	6.80	5.9	0.86	OK
		1	49.70	43.2	0.87	OK
		2	49.70	42.4	0.85	OK
		7	460.00	422.1	0.92	OK
		8	460.00	409.5	0.89	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.27**	1.27	1.28	1.27	0%
N60/60°	2	**1.18**	1.18	1.21	1.16	3%
S-Cs/0°	4	**0.88**	0.88	0.89	0.88	1%
S-Co/0°	8	**0.87**	0.87	0.92	0.85	2%
All	**16**	**0.88**	**0.97**	**1.28**	**0.85**	**17%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

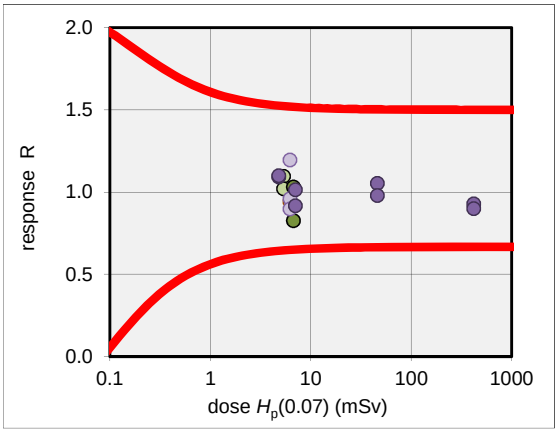
trumpet curve parameter: 1.5 / 0.085 mSv

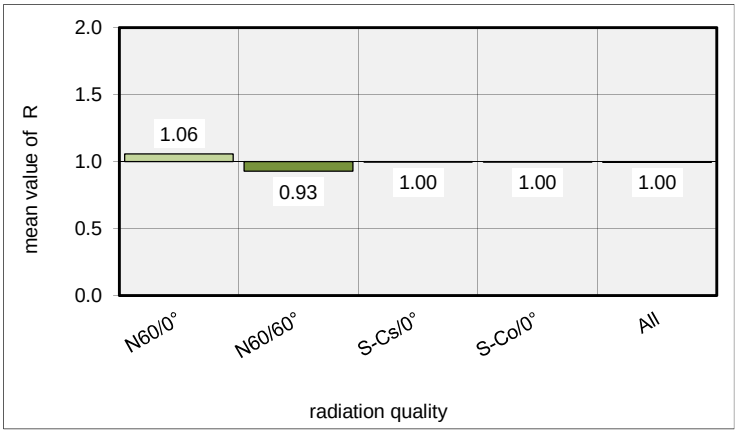
Reporting number 67: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.36	5.9	1.10	OK
		16	5.36	5.5	1.02	OK
	N60/60°	17	6.71	5.5	0.83	OK
		18	6.71	6.9	1.03	OK
gamma	S-Cs/0°	1	6.20	5.8	0.94	OK
		2	6.20	6.0	0.96	OK
		3	6.20	5.6	0.90	OK
		4	6.20	7.4	1.20	OK
	S-Co/0°	11	4.79	5.2	1.09	OK
		12	4.79	5.3	1.10	OK
		13	7.01	6.4	0.92	OK
		14	7.01	7.1	1.01	OK
		9	46.00	48.4	1.05	OK
		10	46.00	45.0	0.98	OK
		7	420.00	389.6	0.93	OK
		8	420.00	377.3	0.90	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.06**	1.06	1.10	1.02	5%
N60/60°	2	**0.93**	0.93	1.03	0.83	16%
S-Cs/0°	4	**0.95**	1.00	1.20	0.90	13%
S-Co/0°	8	**1.00**	1.00	1.10	0.90	8%
All	**16**	**1.00**	**1.00**	**1.20**	**0.83**	**10%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

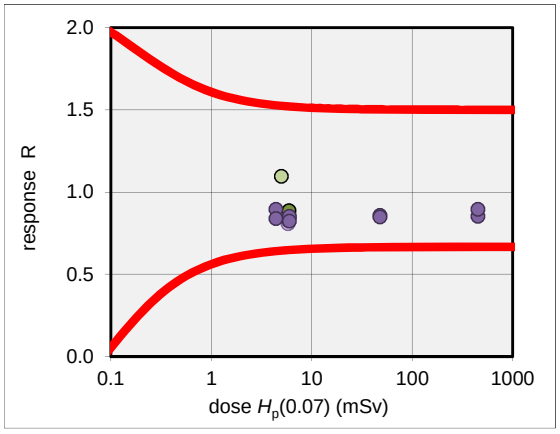
trumpet curve parameter: 1.5 / 0.085 mSv

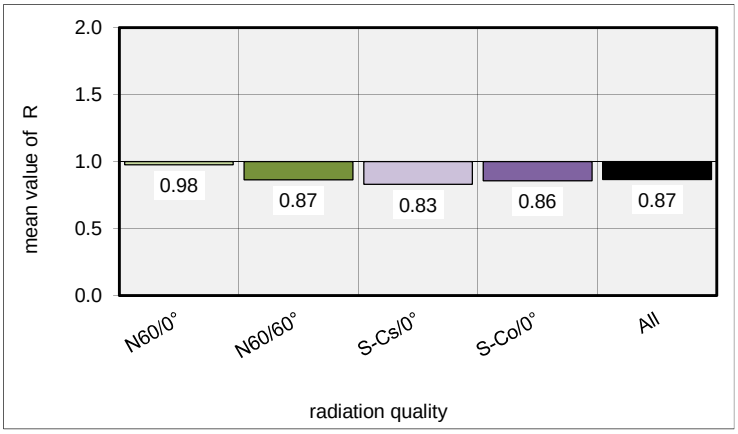
Reporting number 68: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	4.98	5.5	1.10	OK
		16	4.98	4.3	0.86	OK
	N60/60°	17	5.93	5.0	0.84	OK
		18	5.93	5.3	0.89	OK
gamma	S-Cs/0°	1	5.80	4.9	0.84	OK
		2	5.80	4.9	0.84	OK
		4	5.80	4.7	0.81	OK
		5	5.80	4.8	0.83	OK
	S-Co/0°	11	4.41	4.0	0.90	OK
		12	4.41	3.7	0.84	OK
		13	6.00	5.1	0.85	OK
		14	6.00	4.9	0.82	OK
		9	47.90	41.1	0.86	OK
		10	47.90	40.6	0.85	OK
		7	450.00	383.6	0.85	OK
		8	450.00	402.4	0.89	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.98**	0.98	1.10	0.86	17%
N60/60°	2	**0.87**	0.87	0.89	0.84	3%
S-Cs/0°	4	**0.83**	0.83	0.84	0.81	2%
S-Co/0°	8	**0.85**	0.86	0.90	0.82	3%
All	**16**	**0.85**	**0.87**	**1.10**	**0.81**	**8%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

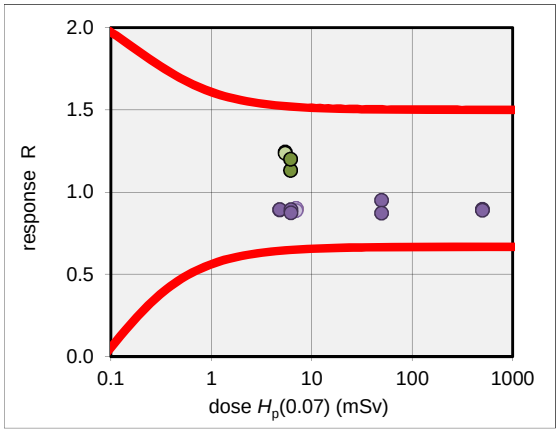
trumpet curve parameter: 1.5 / 0.085 mSv

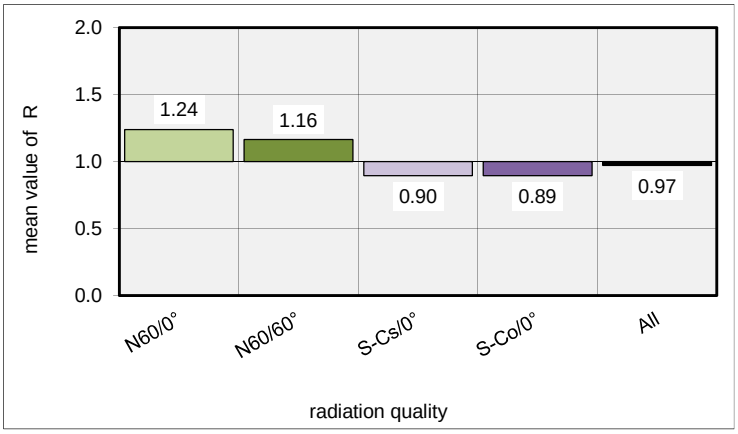
Reporting number 70: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	6.8	1.24	OK
		16	5.45	6.7	1.23	OK
	N60/60°	17	6.15	7.0	1.13	OK
		18	6.15	7.4	1.20	OK
gamma	S-Cs/0°	1	7.00	6.3	0.90	OK
		2	7.00	6.3	0.90	OK
		3	7.00	6.3	0.90	OK
		4	7.00	6.2	0.89	OK
	S-Co/0°	11	4.79	4.3	0.89	OK
		12	4.79	4.3	0.89	OK
		13	6.21	5.5	0.89	OK
		14	6.21	5.4	0.87	OK
		9	49.70	47.2	0.95	OK
		10	49.70	43.3	0.87	OK
		7	500.00	447.3	0.89	OK
		8	500.00	444.6	0.89	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.24**	1.24	1.24	1.23	1%
N60/60°	2	**1.16**	1.16	1.20	1.13	4%
S-Cs/0°	4	**0.90**	0.90	0.90	0.89	1%
S-Co/0°	8	**0.89**	0.89	0.95	0.87	3%
All	**16**	**0.90**	**0.97**	**1.24**	**0.87**	**14%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

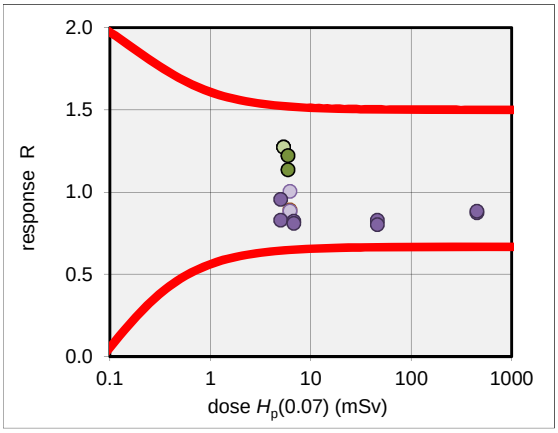
trumpet curve parameter: 1.5 / 0.085 mSv

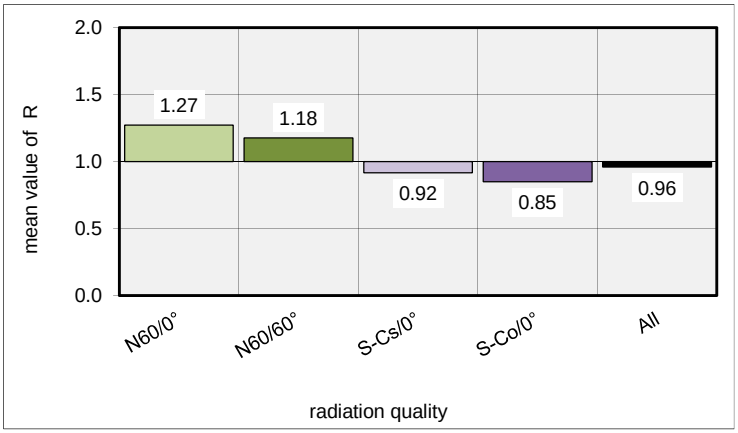
Reporting number 71: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	18	5.36	6.8	1.27	OK
		19	5.36	6.8	1.27	OK
	N60/60°	20	5.93	7.2	1.22	OK
		21	5.93	6.7	1.13	OK
gamma	S-Cs/0°	1	6.20	5.5	0.89	OK
		2	6.20	5.5	0.88	OK
		3	6.20	6.2	1.00	OK
		4	6.20	5.5	0.89	OK
	S-Co/0°	11	5.00	4.1	0.83	OK
		12	5.00	4.8	0.96	OK
		13	6.80	5.6	0.82	OK
		14	6.80	5.5	0.81	OK
		9	46.00	38.2	0.83	OK
		10	46.00	36.9	0.80	OK
		7	450.00	393.0	0.87	OK
		8	450.00	397.0	0.88	OK
	NIR	15				
	NIR	16				
	NIR	17				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.27**	1.27	1.27	1.27	0%
N60/60°	2	**1.18**	1.18	1.22	1.13	5%
S-Cs/0°	4	**0.89**	0.92	1.00	0.88	6%
S-Co/0°	8	**0.83**	0.85	0.96	0.80	6%
All	**16**	**0.88**	**0.96**	**1.27**	**0.80**	**18%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

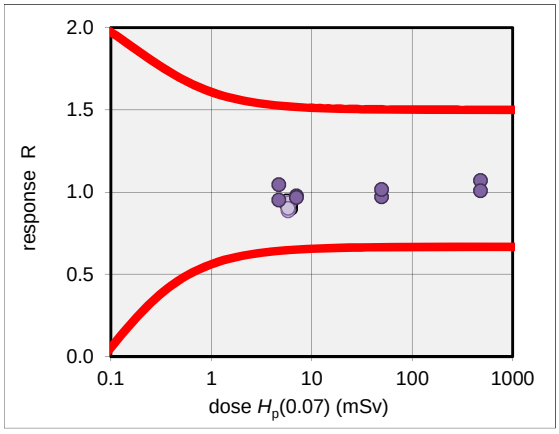
trumpet curve parameter: 1.5 / 0.085 mSv

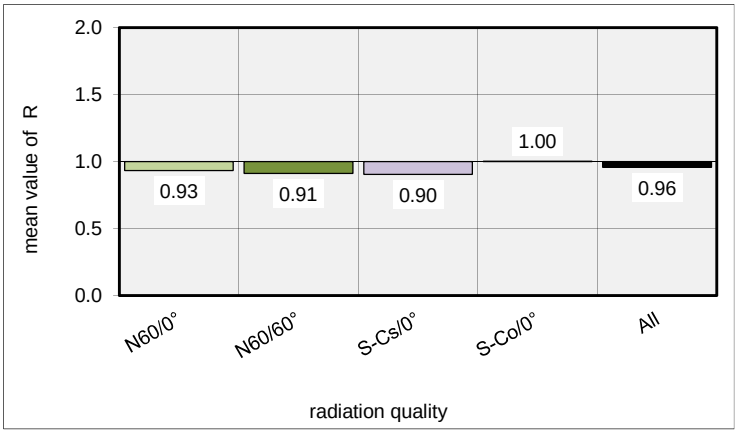
Reporting number 72: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.64	5.2	0.92	OK
		18	5.64	5.3	0.95	OK
	N60/60°	19	6.15	5.5	0.90	OK
		20	6.15	5.7	0.93	OK
gamma	S-Cs/0°	1	5.80	5.2	0.90	OK
		2	5.80	5.4	0.93	OK
		3	5.80	5.1	0.88	OK
		4	5.80	5.2	0.90	OK
	S-Co/0°	11	4.69	4.5	0.95	OK
		12	4.69	4.9	1.04	OK
		13	7.01	6.9	0.98	OK
		14	7.01	6.8	0.97	OK
		9	49.70	48.2	0.97	OK
		10	49.70	50.5	1.02	OK
		7	480.00	513.4	1.07	OK
		8	480.00	483.4	1.01	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.93**	0.93	0.95	0.92	2%
N60/60°	2	**0.91**	0.91	0.93	0.90	2%
S-Cs/0°	4	**0.90**	0.90	0.93	0.88	2%
S-Co/0°	8	**0.99**	1.00	1.07	0.95	4%
All	**16**	**0.95**	**0.96**	**1.07**	**0.88**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

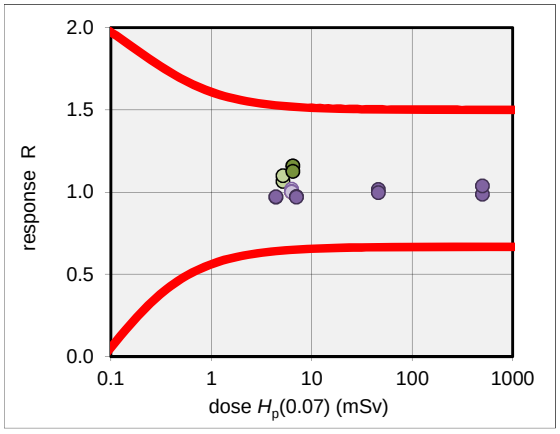
trumpet curve parameter: 1.5 / 0.085 mSv

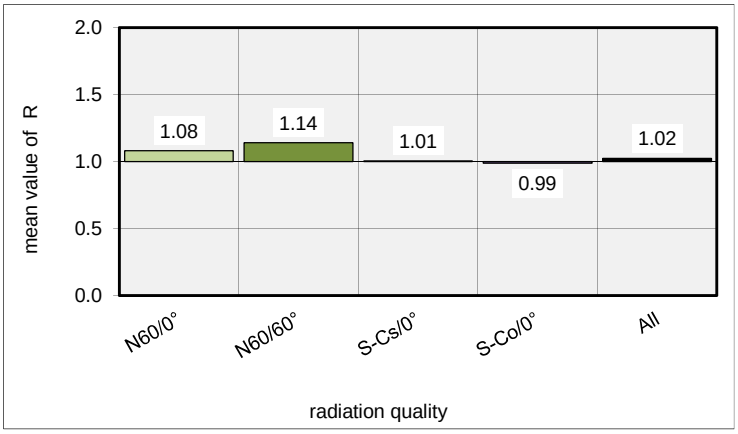
Reporting number 73: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.17	5.5	1.06	OK
		16	5.17	5.7	1.10	OK
	N60/60°	17	6.49	7.5	1.16	OK
		18	6.49	7.3	1.12	OK
gamma	S-Cs/0°	1	6.30	6.3	1.00	OK
		2	6.30	6.4	1.02	OK
		3	6.30	6.3	1.00	OK
		4	6.30	6.3	1.00	OK
	S-Co/0°	11	4.41	4.3	0.97	OK
		12	4.41	4.3	0.97	OK
		13	7.01	6.8	0.97	OK
		14	7.01	6.8	0.97	OK
		9	46.00	46.7	1.02	OK
		10	46.00	45.8	1.00	OK
		7	500.00	493.2	0.99	OK
		8	500.00	518.9	1.04	OK
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.08**	1.08	1.10	1.06	2%
N60/60°	2	**1.14**	1.14	1.16	1.12	2%
S-Cs/0°	4	**1.00**	1.01	1.02	1.00	1%
S-Co/0°	8	**0.98**	0.99	1.04	0.97	3%
All	**16**	**1.00**	**1.02**	**1.16**	**0.97**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

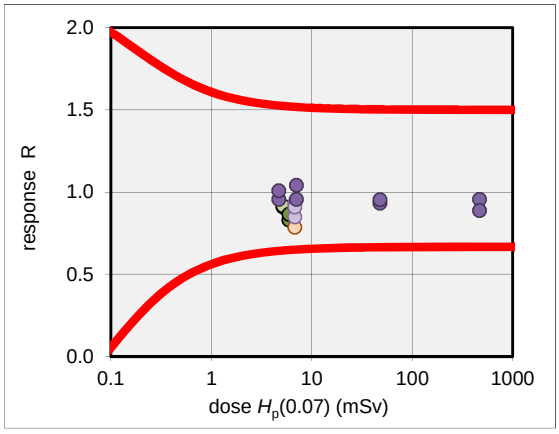
trumpet curve parameter: 1.5 / 0.085 mSv

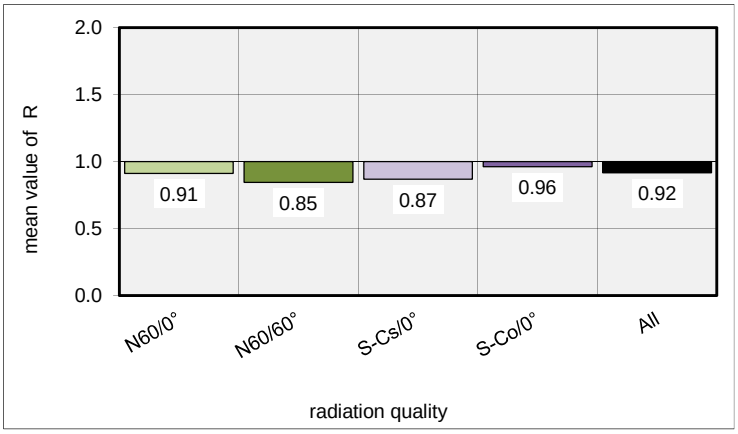
Reporting number 74: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.17	4.7	0.91	OK
		16	5.17	4.7	0.92	OK
	N60/60°	17	5.93	4.9	0.83	OK
		19	5.93	5.1	0.86	OK
gamma	S-Cs/0°	1	6.80	5.4	0.79	OK
		2	6.80	5.8	0.85	OK
		3	6.80	6.4	0.93	OK
		4	6.80	6.2	0.91	OK
	S-Co/0°	11	4.69	4.5	0.96	OK
		12	4.69	4.7	1.01	OK
		13	7.01	6.7	0.95	OK
		14	7.01	7.3	1.04	OK
		9	47.90	44.7	0.93	OK
		10	47.90	45.7	0.95	OK
		7	467.00	445.9	0.95	OK
		8	467.00	414.4	0.89	OK
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	18				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.91**	0.91	0.92	0.91	1%
N60/60°	2	**0.85**	0.85	0.86	0.83	3%
S-Cs/0°	4	**0.88**	0.87	0.93	0.79	8%
S-Co/0°	8	**0.95**	0.96	1.04	0.89	5%
All	**16**	**0.92**	**0.92**	**1.04**	**0.79**	**7%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

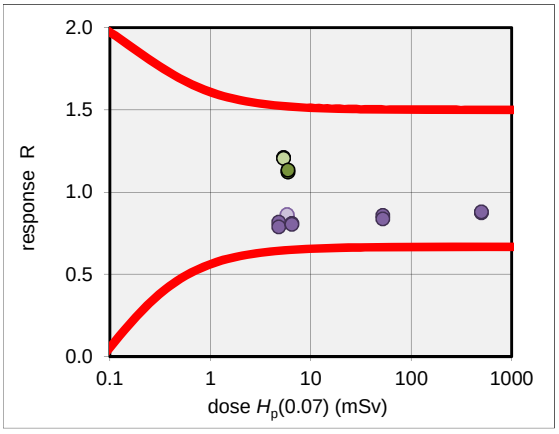
trumpet curve parameter: 1.5 / 0.085 mSv

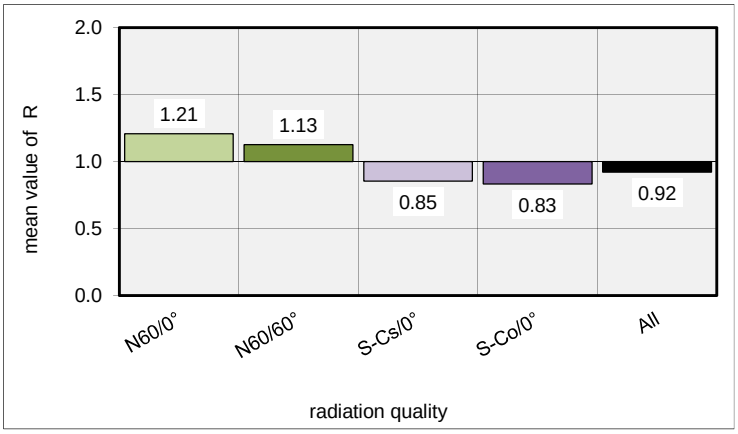
Reporting number 75: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.36	6.5	1.21	OK
		18	5.36	6.5	1.21	OK
	N60/60°	19	5.93	6.7	1.12	OK
		20	5.93	6.7	1.13	OK
gamma	S-Cs/0°	1	5.80	4.9	0.85	OK
		2	5.80	4.9	0.85	OK
		3	5.80	5.0	0.86	OK
		4	5.80	5.0	0.86	OK
	S-Co/0°	11	4.79	3.9	0.82	OK
		12	4.79	3.8	0.79	OK
		13	6.49	5.3	0.81	OK
		14	6.49	5.2	0.80	OK
		9	52.20	44.8	0.86	OK
		10	52.20	43.7	0.84	OK
		7	500.00	436.5	0.87	OK
		8	500.00	439.9	0.88	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.21**	1.21	1.21	1.21	0%
N60/60°	2	**1.13**	1.13	1.13	1.12	1%
S-Cs/0°	4	**0.86**	0.85	0.86	0.85	1%
S-Co/0°	8	**0.83**	0.83	0.88	0.79	4%
All	**16**	**0.86**	**0.92**	**1.21**	**0.79**	**16%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

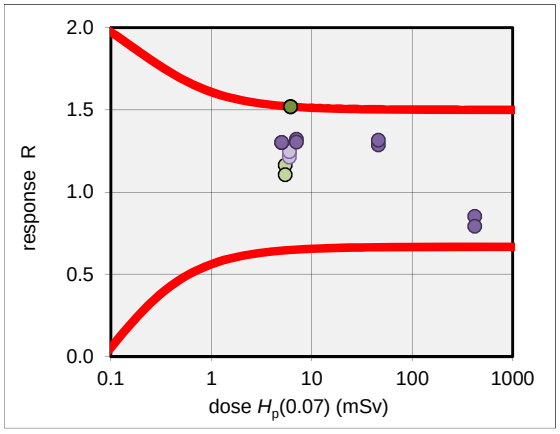
trumpet curve parameter: 1.5 / 0.085 mSv

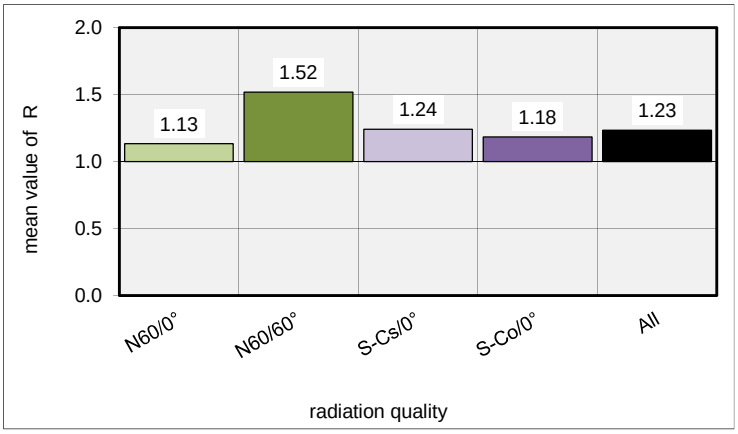
Reporting number 77: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	16	5.45	6.3	1.16	OK
		17	5.45	6.0	1.10	OK
	N60/60°	18	6.15	9.3	1.52	OK
		19	6.15	9.3	1.52	OK
gamma	S-Cs/0°	1	6.00	7.5	1.24	OK
		2	6.00	7.3	1.21	OK
		3	6.00	7.6	1.27	OK
		4	6.00	7.5	1.25	OK
	S-Co/0°	11	5.00	6.5	1.30	OK
		12	5.00	6.5	1.30	OK
		14	7.01	9.3	1.32	OK
		15	7.01	9.1	1.30	OK
		9	46.00	59.2	1.29	OK
		10	46.00	60.5	1.32	OK
		7	420.00	357.8	0.85	OK
		8	420.00	332.6	0.79	OK
	NIR	13				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.13**	1.13	1.16	1.10	4%
N60/60°	2	**1.52**	1.52	1.52	1.52	0%
S-Cs/0°	4	**1.24**	1.24	1.27	1.21	2%
S-Co/0°	8	**1.30**	1.18	1.32	0.79	19%
All	**16**	**1.28**	**1.23**	**1.52**	**0.79**	**16%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

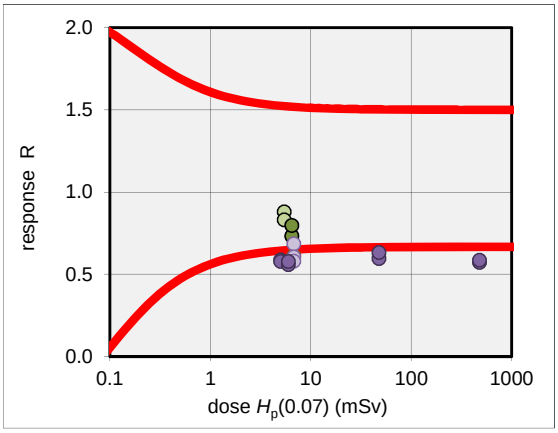
trumpet curve parameter: 1.5 / 0.085 mSv

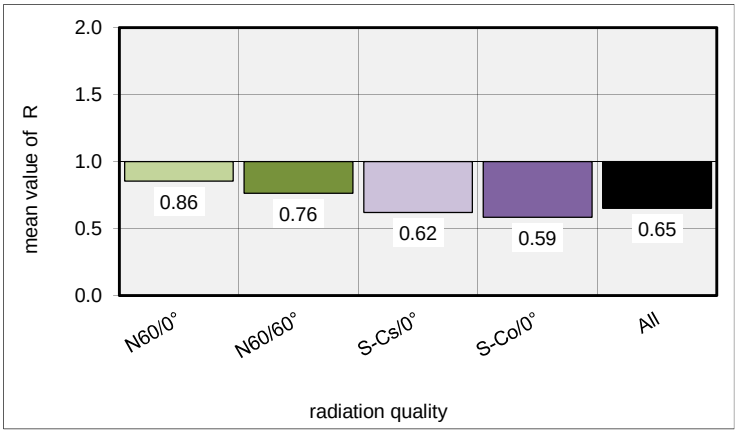
Reporting number 79: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	15	5.45	4.8	0.88	OK
		16	5.45	4.5	0.83	OK
	N60/60°	17	6.49	4.8	0.73	OK
		18	6.49	5.2	0.80	OK
gamma	S-Cs/0°	1	6.80	4.2	0.61	outlier
		2	6.80	4.7	0.68	OK
		3	6.80	4.1	0.60	outlier
		4	6.80	3.9	0.58	outlier
	S-Co/0°	11	5.00	2.9	0.59	outlier
		12	5.00	2.9	0.58	outlier
		13	6.00	3.4	0.56	outlier
		14	6.00	3.5	0.58	outlier
		9	47.90	28.5	0.59	outlier
		10	47.90	30.3	0.63	outlier
		7	480.00	274.3	0.57	outlier
		8	480.00	281.1	0.59	outlier
	NIR	21				
	NIR	22				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.86**	0.86	0.88	0.83	4%
N60/60°	2	**0.76**	0.76	0.80	0.73	6%
S-Cs/0°	4	**0.61**	0.62	0.68	0.58	7%
S-Co/0°	8	**0.58**	0.59	0.63	0.56	4%
All	**16**	**0.60**	**0.65**	**0.88**	**0.56**	**16%**

outliers: 11 of 16 Fraction of outliers: 69%





Results: IC2012

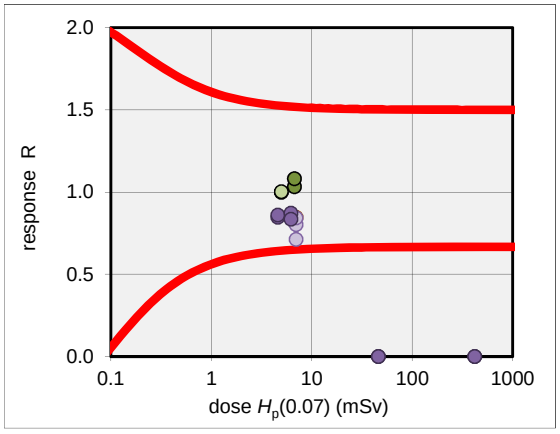
trumpet curve parameter: 1.5 / 0.085 mSv

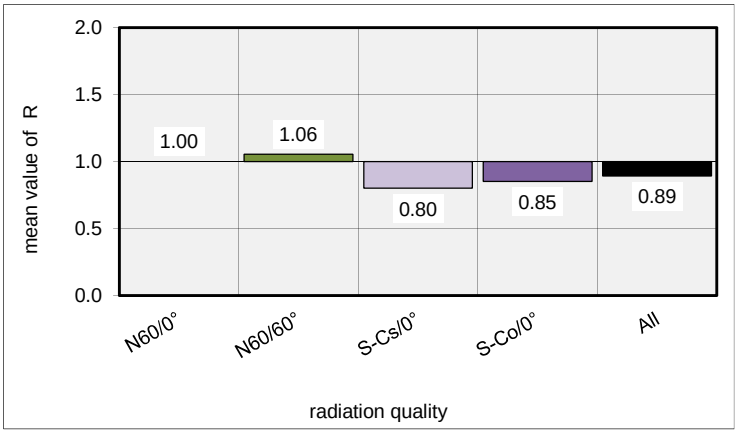
Reporting number 80: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	4.98	5.0	1.00	OK
		18	4.98	5.0	1.00	OK
	N60/60°	19	6.71	6.9	1.03	OK
		20	6.71	7.2	1.08	OK
gamma	S-Cs/0°	1	7.00	5.9	0.85	OK
		2	7.00	5.6	0.80	OK
		3	7.00	5.9	0.84	OK
		4	7.00	5.0	0.71	OK
	S-Co/0°	11	4.61	3.9	0.85	OK
		12	4.61	4.0	0.86	OK
		13	6.21	5.4	0.87	OK
		14	6.21	5.2	0.83	OK
		9	46.00	(Leer)		outlier
		10	46.00	(Leer)		outlier
		7	420.00	(Leer)		outlier
		8	420.00	(Leer)		outlier
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.00**	1.00	1.00	1.00	0%
N60/60°	2	**1.06**	1.06	1.08	1.03	3%
S-Cs/0°	4	**0.82**	0.80	0.85	0.71	8%
S-Co/0°	4	**0.85**	0.85	0.87	0.83	2%
All	**12**	**0.85**	**0.89**	**1.08**	**0.71**	**12%**

outliers: 4 of 16 Fraction of outliers: 25%





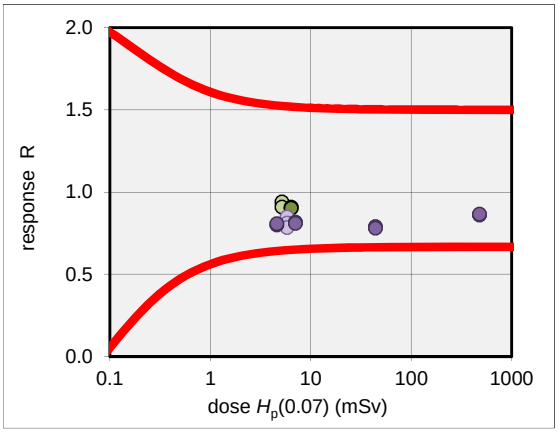
Results: IC2012 4 points outside diagramme (> 2) trumpet curve parameter: 1.5 / 0.085 mSv

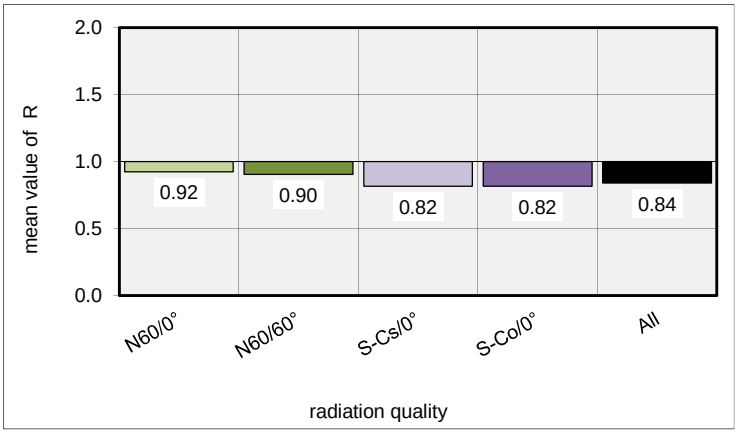
Reporting number 82: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.17	4.9	0.94	OK
		18	5.17	4.7	0.91	OK
	N60/60°	19	6.37	5.8	0.91	OK
		20	6.37	5.7	0.90	OK
gamma	S-Cs/0°	1	5.80	4.7	0.82	OK
		2	5.80	4.9	0.85	OK
		3	5.80	4.7	0.81	OK
		4	5.80	4.6	0.78	OK
	S-Co/0°	13	4.61	3.7	0.80	OK
		14	4.61	3.7	0.81	OK
		15	7.01	5.7	0.82	OK
		16	7.01	5.7	0.81	OK
		9	44.10	34.8	0.79	OK
		10	44.10	34.4	0.78	OK
		7	480.00	413.0	0.86	OK
		8	480.00	416.0	0.87	OK
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				
	WIR	11				
	WIR	12				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.92**	0.92	0.94	0.91	2%
N60/60°	2	**0.90**	0.90	0.91	0.90	0%
S-Cs/0°	4	**0.81**	0.82	0.85	0.78	3%
S-Co/0°	8	**0.81**	0.82	0.87	0.78	4%
All	**16**	**0.82**	**0.84**	**0.94**	**0.78**	**6%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

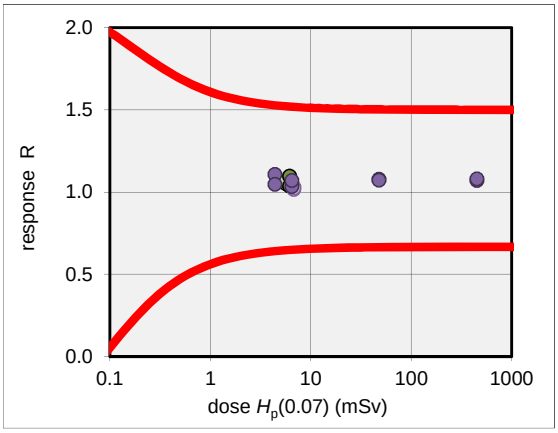
trumpet curve parameter: 1.5 / 0.085 mSv

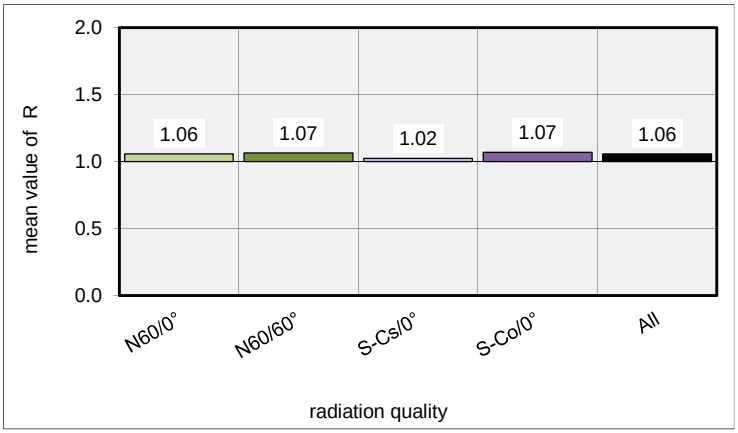
Reporting number 83: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.64	5.9	1.05	OK
		18	5.64	6.0	1.07	OK
	N60/60°	19	6.15	6.7	1.10	OK
		20	6.15	6.4	1.04	OK
gamma	S-Cs/0°	1	6.80	7.0	1.03	OK
		2	6.80	6.9	1.01	OK
		3	6.80	7.0	1.03	OK
		4	6.80	7.0	1.02	OK
	S-Co/0°	11	4.41	4.9	1.11	OK
		12	4.41	4.6	1.05	OK
		13	6.49	6.7	1.03	OK
		14	6.49	6.9	1.07	OK
		9	47.90	51.6	1.08	OK
		10	47.90	51.4	1.07	OK
		7	450.00	482.0	1.07	OK
		8	450.00	486.0	1.08	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.06**	1.06	1.07	1.05	1%
N60/60°	2	**1.07**	1.07	1.10	1.04	4%
S-Cs/0°	4	**1.03**	1.02	1.03	1.01	1%
S-Co/0°	8	**1.07**	1.07	1.11	1.03	2%
All	**16**	**1.06**	**1.06**	**1.11**	**1.01**	**3%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

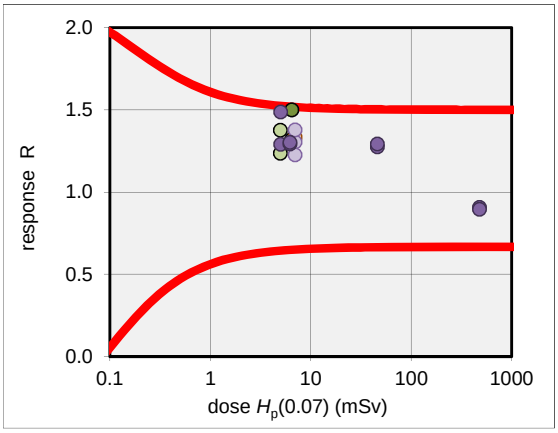
trumpet curve parameter: 1.5 / 0.085 mSv

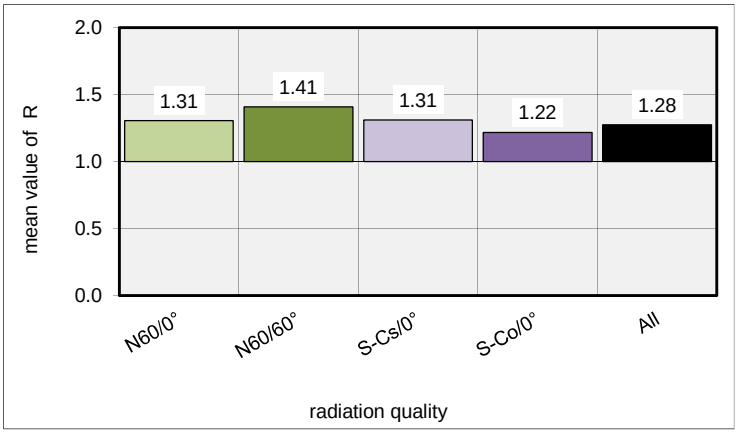
Reporting number 84: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	4.98	6.2	1.23	OK
		18	4.98	6.9	1.38	OK
	N60/60°	19	6.49	8.6	1.32	OK
		20	6.49	9.7	1.50	OK
gamma	S-Cs/0°	1	7.00	9.3	1.33	OK
		2	7.00	9.1	1.30	OK
		3	7.00	9.6	1.38	OK
		4	7.00	8.6	1.23	OK
	S-Co/0°	11	5.00	7.4	1.49	OK
		12	5.00	6.5	1.29	OK
		13	6.21	8.0	1.29	OK
		14	6.21	8.1	1.30	OK
		9	46.00	58.7	1.28	OK
		10	46.00	59.5	1.29	OK
		7	480.00	435.5	0.91	OK
		8	480.00	429.6	0.90	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.31**	1.31	1.38	1.23	8%
N60/60°	2	**1.41**	1.41	1.50	1.32	9%
S-Cs/0°	4	**1.32**	1.31	1.38	1.23	5%
S-Co/0°	8	**1.29**	1.22	1.49	0.90	17%
All	**16**	**1.30**	**1.28**	**1.50**	**0.90**	**13%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

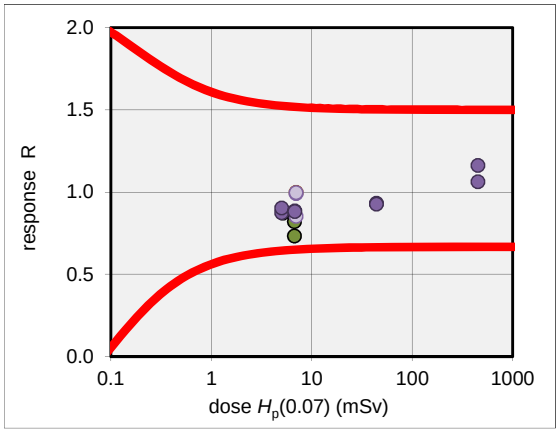
trumpet curve parameter: 1.5 / 0.085 mSv

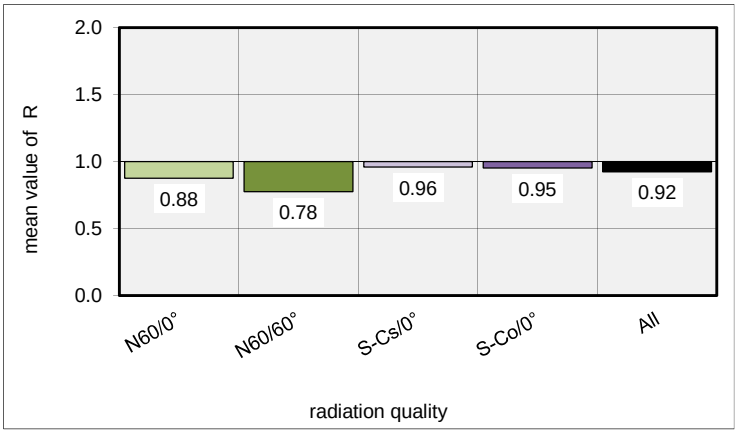
Reporting number 85: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.17	4.5	0.87	OK
		18	5.17	4.6	0.88	OK
	N60/60°	15	6.71	5.5	0.82	OK
		16	6.71	4.9	0.73	OK
gamma	S-Cs/0°	1	7.00	7.0	1.00	OK
		2	7.00	6.9	0.99	OK
		3	7.00	7.0	1.00	OK
		4	7.00	6.0	0.85	OK
	S-Co/0°	11	5.00	4.4	0.87	OK
		12	5.00	4.5	0.90	OK
		13	6.80	6.0	0.89	OK
		14	6.80	6.0	0.88	OK
		9	44.10	41.1	0.93	OK
		10	44.10	40.9	0.93	OK
		7	450.00	477.7	1.06	OK
		8	450.00	522.4	1.16	OK
	NIR	19				
	NIR	20				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**0.88**	0.88	0.88	0.87	1%
N60/60°	2	**0.78**	0.78	0.82	0.73	8%
S-Cs/0°	4	**0.99**	0.96	1.00	0.85	7%
S-Co/0°	8	**0.91**	0.95	1.16	0.87	11%
All	**16**	**0.89**	**0.92**	**1.16**	**0.73**	**11%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

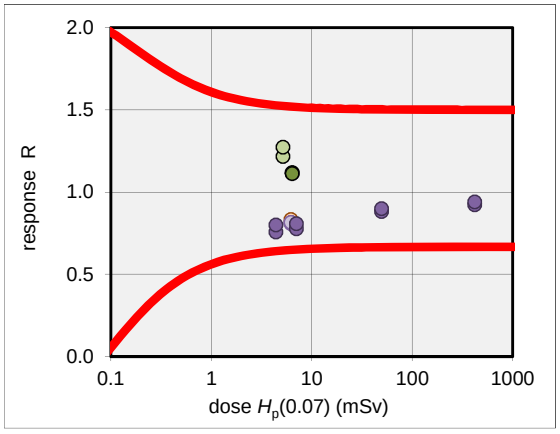
trumpet curve parameter: 1.5 / 0.085 mSv

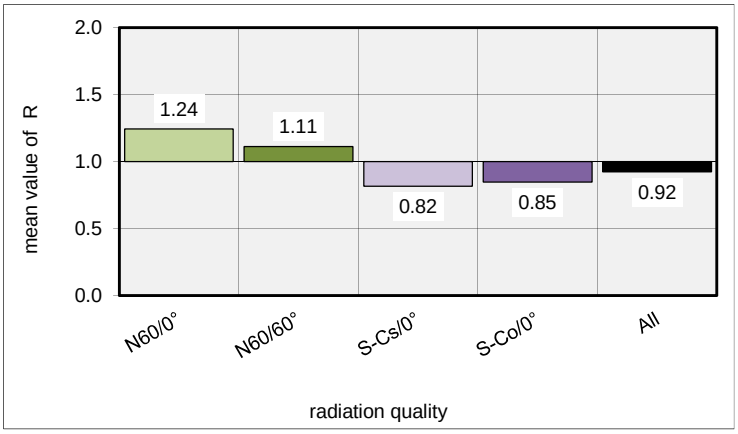
Reporting number 86: (TLD) for dose quantity Hp(0.07)

true values reported by the irradiating laboratory				values reported by participant	results	
radiation quality		dosemeter ID (coordinator)	dose $H_p(10)$ mSv	dose $H_p(10)$ mSv	response R (reported/true)	
x-ray	N60/0°	17	5.17	6.3	1.22	OK
		18	5.17	6.6	1.27	OK
	N60/60°	19	6.37	7.1	1.12	OK
		20	6.37	7.1	1.11	OK
gamma	S-Cs/0°	1	6.20	5.2	0.83	OK
		2	6.20	5.0	0.81	OK
		3	6.20	5.1	0.81	OK
		4	6.20	5.1	0.81	OK
	S-Co/0°	11	4.41	3.3	0.76	OK
		12	4.41	3.5	0.80	OK
		13	7.01	5.4	0.78	OK
		14	7.01	5.7	0.81	OK
		9	49.70	43.8	0.88	OK
		10	49.70	44.7	0.90	OK
		7	420.00	387.0	0.92	OK
		8	420.00	395.0	0.94	OK
	NIR	15				
	NIR	16				
	NIR	23				
	NIR	24				
	NIR	25				
	NIR	26				

radiation quality	number of values	median (R)	mean (R)	maximum (R)	minimum (R)	coefficient of variation (R)
N60/0°	2	**1.24**	1.24	1.27	1.22	3%
N60/60°	2	**1.11**	1.11	1.12	1.11	0%
S-Cs/0°	4	**0.81**	0.82	0.83	0.81	1%
S-Co/0°	8	**0.84**	0.85	0.94	0.76	8%
All	**16**	**0.86**	**0.92**	**1.27**	**0.76**	**18%**

outliers: 0 of 16 Fraction of outliers: 0%





Results: IC2012

trumpet curve parameter: 1.5 / 0.085 mSv