Initial PET Performance Evaluation of a Preclinical Insert for PET/MRI with Digital SiPM Technology

Supplemental data

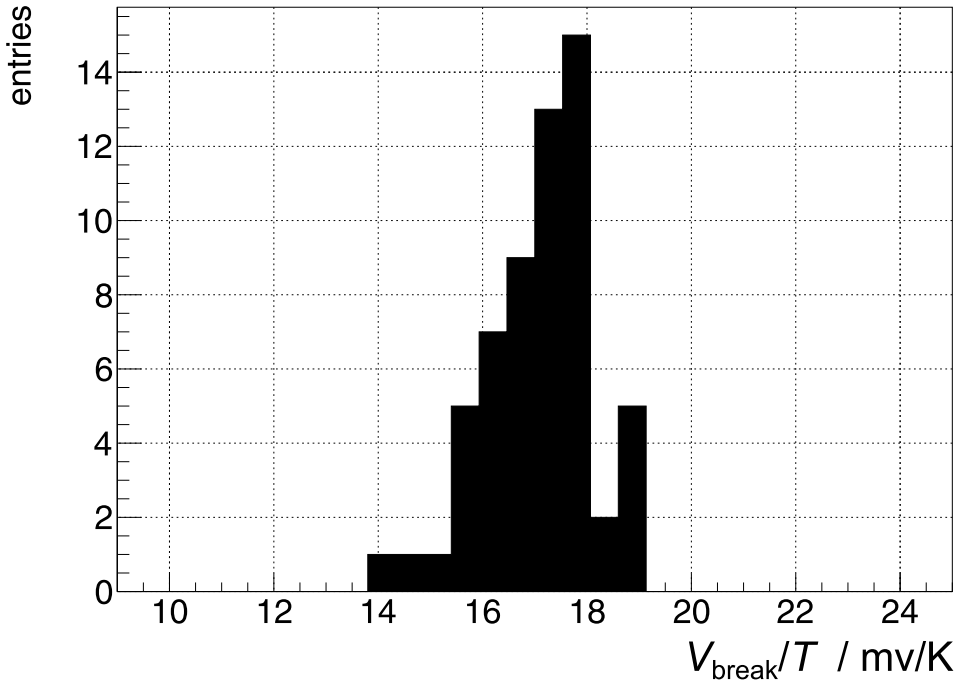

Figure S1. Histogram of the dependence of the breakdown voltage on temperature of all tiles of the system, except for one tile with a faulty temperature sensor.

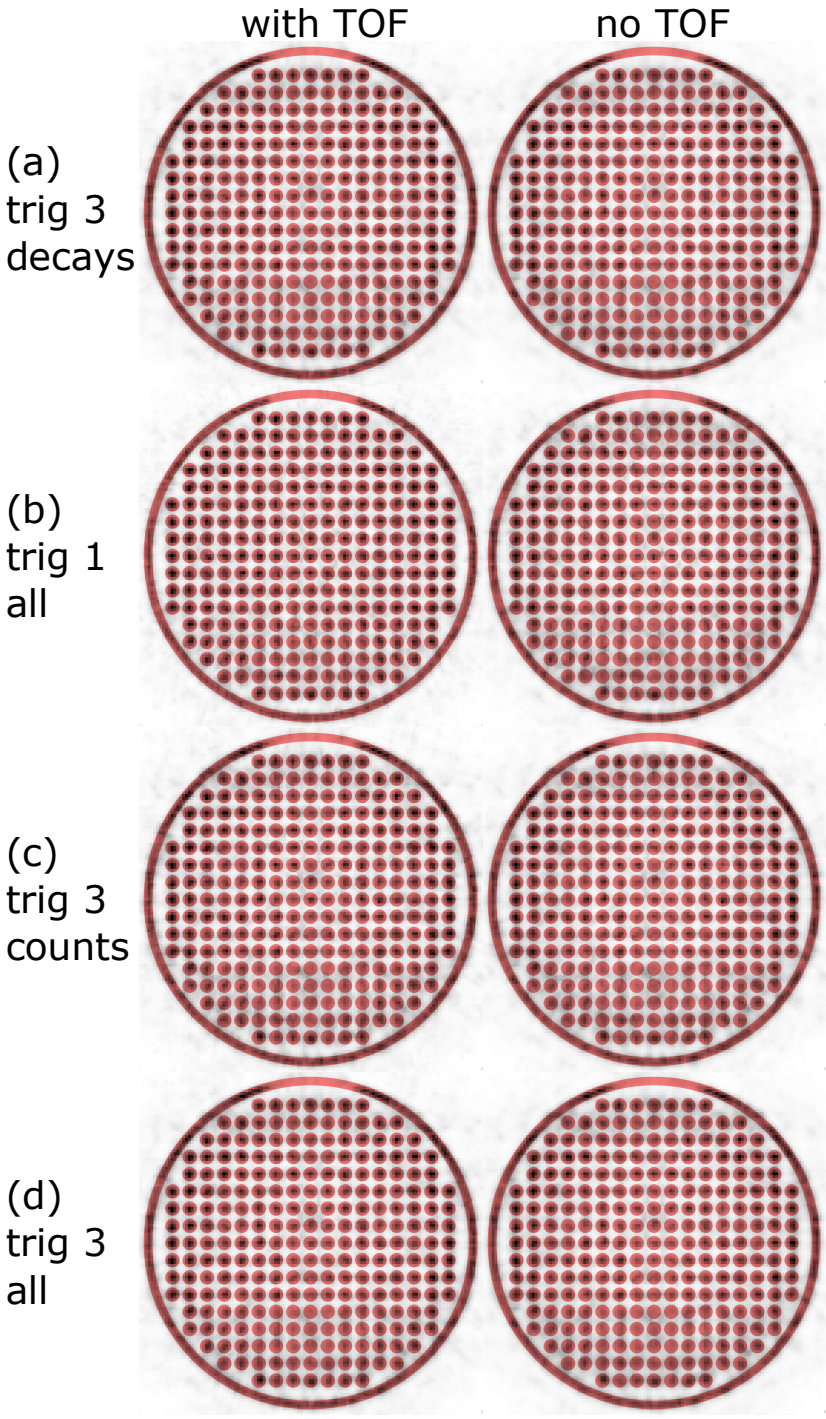

Figure S2. Transversal slices through the reconstructed rabbit-sized phantom as shown in **??**. The signal region used for the signal-to-background evaluation is indicated in transparent red.

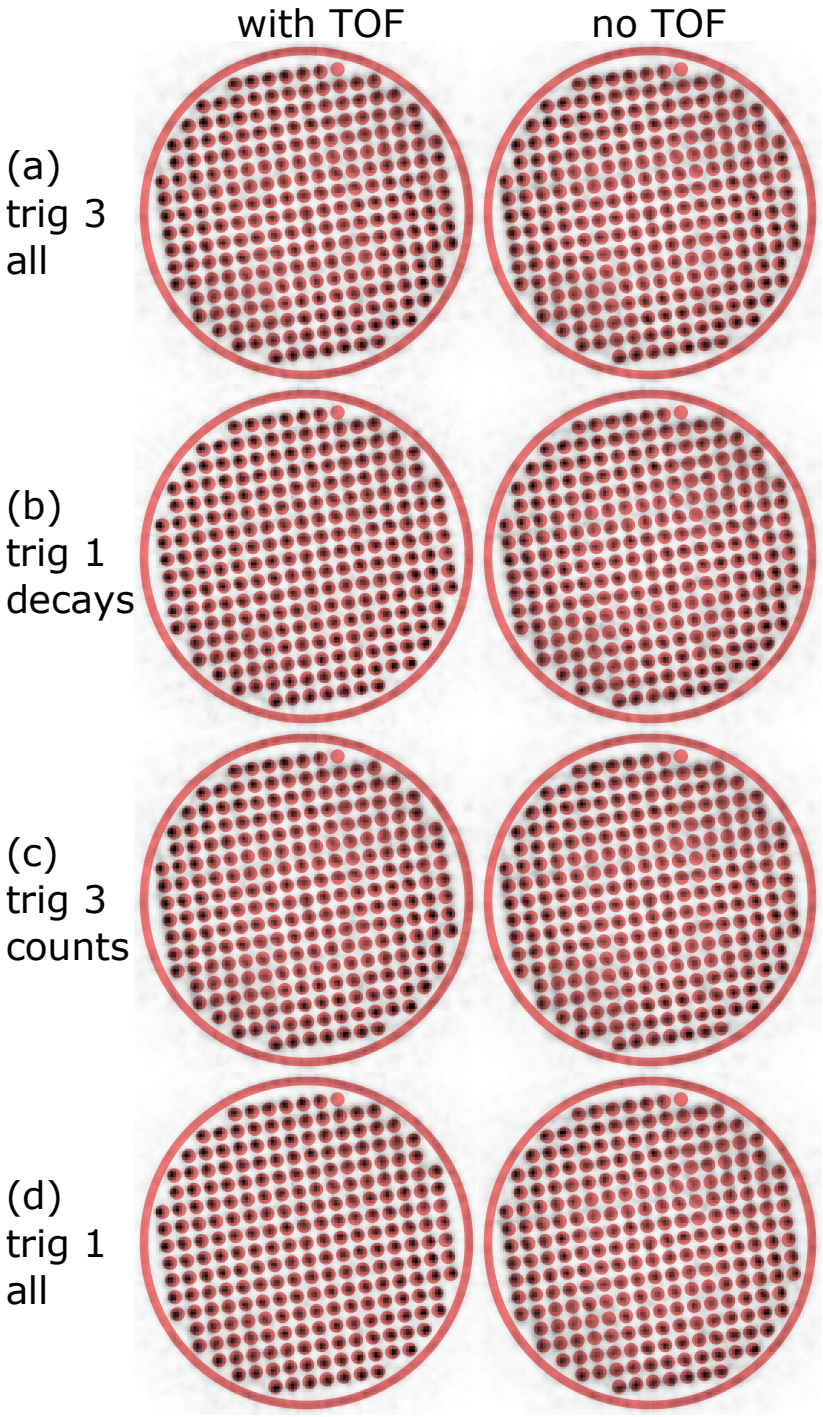

Figure S3. Transversal slices through the reconstructed rabbit-sized phantom measured in the tilted position as shown in **??**. The signal region used for the signal-to-background evaluation is indicated in transparent red.

Table S1: All measurements performed with the 5 ^{22}Na point like sources (distribution and activities listed in **??** and constant V_{bias}. A measurement id is used to identify a specific measurement (meas.). The measurement parameters: cooling temperature (T_{C}), overvoltage (V_{ov}), trigger scheme (trig), validation scheme (val) and the used energy window (EW) are stated for each evaluation of a measurement. The energy resolution and CRT are stated as FWHM and the sensitivity is calculated from the ratio of the prompt rate and the activity of the point sources corrected for the branching ratio of the ^{22}Na β^+ decay of 0.906 .

meas.	T_{C}	system T_{op}	V_{ov}	trig	val	EW	$\Delta E/E$	CRT	sens.
1	−5 °C	4.48 ± 1.45 °C	2.5 V	1	17ph	NE	12.45 %	258 ps	0.66 %
2	−5 °C	4.48 ± 1.45 °C	2.5 V	1	17ph	WE	12.47 %	282 ps	1.43 %
3	−5 °C	4.62 ± 1.47 °C	2.8 V	1	17ph	NE	12.74 %	259 ps	0.56 %
4	−5 °C	4.62 ± 1.47 °C	2.8 V	1	17ph	WE	12.75 %	286 ps	1.27 %
5	−5 °C	4.73 ± 1.48 °C	2.9 V	1	17ph	NE	13.86 %	262 ps	0.48 %
6	−5 °C	4.73 ± 1.48 °C	2.9 V	1	17ph	WE	13.92 %	295 ps	1.21 %
7	−5 °C	3.28 ± 1.17 °C	2.5 V	2	17ph	NE	12.39 %	432 ps	1.13 %
8	−5 °C	3.28 ± 1.17 °C	2.5 V	2	17ph	WE	12.40 %	481 ps	2.38 %
9	−5 °C	3.28 ± 1.16 °C	2.5 V	2	37ph	NE	12.40 %	429 ps	1.03 %
10	−5 °C	3.28 ± 1.16 °C	2.5 V	2	37ph	WE	12.42 %	472 ps	1.99 %
11	−5 °C	3.21 ± 1.15 °C	2.5 V	2	52ph	NE	12.35 %	454 ps	0.78 %
12	−5 °C	3.21 ± 1.15 °C	2.5 V	2	52ph	WE	12.36 %	489 ps	1.36 %
13	−5 °C	3.35 ± 1.21 °C	2.8 V	2	17ph	NE	12.32 %	418 ps	1.10 %
14	−5 °C	3.35 ± 1.21 °C	2.8 V	2	17ph	WE	12.34 %	467 ps	2.32 %
15	−5 °C	3.41 ± 1.20 °C	2.9 V	2	17ph	NE	12.31 %	415 ps	1.07 %
16	−5 °C	3.41 ± 1.20 °C	2.9 V	2	17ph	WE	12.33 %	463 ps	2.27 %
17	−5 °C	3.53 ± 1.16 °C	3 V	2	17ph	NE	14.10 %	416 ps	0.93 %
18	−5 °C	3.53 ± 1.16 °C	3 V	2	17ph	WE	14.10 %	467 ps	2.20 %
19	−5 °C	3.34 ± 1.18 °C	2.5 V	3	17ph	NE	12.39 %	538 ps	1.14 %
20	−5 °C	3.34 ± 1.18 °C	2.5 V	3	17ph	WE	12.41 %	598 ps	2.38 %
21	−5 °C	3.17 ± 1.15 °C	2.5 V	4	17ph	NE	12.50 %	1241 ps	1.16 %
22	−5 °C	3.17 ± 1.15 °C	2.5 V	4	17ph	WE	12.55 %	1394 ps	2.43 %
23	5 °C	13.41 ± 1.32 °C	2.5 V	1	17ph	NE	12.81 %	272 ps	0.54 %
24	5 °C	13.41 ± 1.32 °C	2.5 V	1	17ph	WE	12.72 %	298 ps	0.80 %
25	5 °C	11.67 ± 1.05 °C	2.5 V	2	17ph	NE	12.52 %	440 ps	1.10 %
26	5 °C	11.67 ± 1.05 °C	2.5 V	2	17ph	WE	12.56 %	490 ps	2.31 %
27	5 °C	11.67 ± 1.06 °C	2.5 V	2	37ph	NE	12.55 %	437 ps	0.97 %
28	5 °C	11.67 ± 1.06 °C	2.5 V	2	37ph	WE	12.57 %	480 ps	1.87 %
29	5 °C	11.67 ± 1.06 °C	2.5 V	2	52ph	NE	12.58 %	436 ps	0.73 %
30	5 °C	11.67 ± 1.06 °C	2.5 V	2	52ph	WE	12.59 %	476 ps	1.32 %
31	5 °C	11.67 ± 1.06 °C	2.5 V	3	17ph	NE	12.65 %	552 ps	1.20 %
32	5 °C	11.67 ± 1.06 °C	2.5 V	3	17ph	WE	12.57 %	605 ps	2.33 %
33	5 °C	11.51 ± 1.03 °C	2.5 V	4	17ph	NE	12.74 %	1268 ps	1.23 %
34	5 °C	11.51 ± 1.03 °C	2.5 V	4	17ph	WE	12.70 %	1399 ps	2.39 %
35	15 °C	21.03 ± 1.06 °C	2.5 V	2	17ph	NE	12.75 %	450 ps	1.00 %

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Table S1 – continued from previous page

meas.	T_C	system T_{op}	V_{ov}	trig	val	EW	$\Delta E/E$	CRT	sens.
36	15 °C	21.03 ± 1.06 °C	2.5 V	2	17ph	WE	12.75 %	499 ps	2.08 %
37	15 °C	21.30 ± 1.10 °C	2.5 V	2	37ph	NE	12.74 %	451 ps	0.84 %
38	15 °C	21.30 ± 1.10 °C	2.5 V	2	37ph	WE	12.78 %	497 ps	1.60 %
39	15 °C	21.28 ± 1.10 °C	2.5 V	2	52ph	NE	12.81 %	450 ps	0.61 %
40	15 °C	21.28 ± 1.10 °C	2.5 V	2	52ph	WE	12.82 %	492 ps	1.08 %
41	15 °C	21.18 ± 1.09 °C	2.8 V	2	17ph	NE	12.63 %	442 ps	0.92 %
42	15 °C	21.18 ± 1.09 °C	2.8 V	2	17ph	WE	12.65 %	497 ps	1.94 %
43	15 °C	21.40 ± 1.13 °C	2.8 V	2	37ph	NE	12.64 %	436 ps	0.86 %
44	15 °C	21.40 ± 1.13 °C	2.8 V	2	37ph	WE	12.66 %	484 ps	1.67 %
45	15 °C	21.36 ± 1.11 °C	2.8 V	2	52ph	NE	12.68 %	434 ps	0.67 %
46	15 °C	21.36 ± 1.11 °C	2.8 V	2	52ph	WE	12.71 %	476 ps	1.22 %
47	15 °C	21.24 ± 1.10 °C	2.9 V	2	17ph	NE	12.62 %	440 ps	0.90 %
48	15 °C	21.24 ± 1.10 °C	2.9 V	2	17ph	WE	12.64 %	495 ps	1.90 %
49	15 °C	21.41 ± 1.13 °C	2.9 V	2	37ph	NE	12.63 %	435 ps	0.86 %
50	15 °C	21.41 ± 1.13 °C	2.9 V	2	37ph	WE	12.65 %	482 ps	1.68 %
51	15 °C	21.40 ± 1.12 °C	2.9 V	2	52ph	NE	12.64 %	430 ps	0.69 %
52	15 °C	21.40 ± 1.12 °C	2.9 V	2	52ph	WE	12.66 %	472 ps	1.26 %
53	15 °C	21.31 ± 1.12 °C	3 V	2	17ph	NE	12.60 %	439 ps	0.87 %
54	15 °C	21.31 ± 1.12 °C	3 V	2	17ph	WE	12.62 %	495 ps	1.85 %
55	15 °C	21.47 ± 1.14 °C	3 V	2	37ph	NE	12.60 %	433 ps	0.85 %
56	15 °C	21.47 ± 1.14 °C	3 V	2	37ph	WE	12.62 %	481 ps	1.68 %
57	15 °C	21.47 ± 1.13 °C	3 V	2	52ph	NE	12.62 %	425 ps	0.70 %
58	15 °C	21.47 ± 1.13 °C	3 V	2	52ph	WE	12.64 %	470 ps	1.29 %
59	15 °C	21.22 ± 1.07 °C	2.5 V	3	17ph	NE	12.74 %	562 ps	1.02 %
60	15 °C	21.22 ± 1.07 °C	2.5 V	3	17ph	WE	12.76 %	632 ps	2.14 %
61	15 °C	21.25 ± 1.07 °C	2.8 V	3	17ph	NE	12.64 %	544 ps	0.99 %
62	15 °C	21.25 ± 1.07 °C	2.8 V	3	17ph	WE	12.67 %	613 ps	2.09 %
63	15 °C	21.29 ± 1.08 °C	2.9 V	3	17ph	NE	12.62 %	540 ps	0.97 %
64	15 °C	21.29 ± 1.08 °C	2.9 V	3	17ph	WE	12.65 %	608 ps	2.06 %
65	15 °C	21.33 ± 1.09 °C	3 V	3	17ph	NE	12.60 %	537 ps	0.95 %
66	15 °C	21.33 ± 1.09 °C	3 V	3	17ph	WE	12.62 %	604 ps	2.02 %
67	15 °C	20.60 ± 0.95 °C	2.5 V	4	17ph	NE	12.85 %	1300 ps	1.11 %
68	15 °C	20.60 ± 0.95 °C	2.5 V	4	17ph	WE	12.88 %	1469 ps	2.34 %
69	15 °C	20.66 ± 0.97 °C	2.8 V	4	17ph	NE	12.75 %	1234 ps	1.12 %
70	15 °C	20.66 ± 0.97 °C	2.8 V	4	17ph	WE	12.78 %	1399 ps	2.36 %
71	15 °C	20.73 ± 0.99 °C	2.9 V	4	17ph	NE	12.73 %	1214 ps	1.12 %
72	15 °C	20.73 ± 0.99 °C	2.9 V	4	17ph	WE	12.76 %	1375 ps	2.37 %
73	15 °C	20.79 ± 0.99 °C	3 V	4	17ph	NE	12.69 %	1189 ps	1.11 %
74	15 °C	20.79 ± 0.99 °C	3 V	4	17ph	WE	12.72 %	1344 ps	2.36 %

Table S2: All measurements performed with the 5 ^{22}Na point like sources (distribution and activities listed in **??** and constant V_{ov}. A measurement id is used to identify a specific measurement (meas.). The measurement parameters: cooling temperature (T_C), system operating temperature (T_{op}), overvoltage (V_{ov}), trigger scheme (trig), validation scheme (val) and the used energy window (EW) are stated for each evaluation of a measurement. The energy resolution and CRT are stated as FWHM and the sensitivity is calculated from the ratio of the prompt rate and the activity of the point sources corrected for the branching ratio of the ^{22}Na β^+ decay of 0.906

meas.	T_C	system T_{op}	V_{ov}	trig	val	EW	$\Delta E/E$	CRT	sens.
1	−5 °C	4.86 ± 1.42 °C	2.5 V	1	17ph	NE	12.62 %	262 ps	0.65 %
2	−5 °C	4.86 ± 1.42 °C	2.5 V	1	17ph	WE	12.62 %	288 ps	1.40 %
3	−5 °C	4.18 ± 1.27 °C	2.5 V	3	17ph	NE	12.57 %	576 ps	1.03 %
4	−5 °C	4.18 ± 1.27 °C	2.5 V	3	17ph	WE	12.57 %	638 ps	2.15 %
5	−5 °C	3.98 ± 1.24 °C	2.5 V	4	17ph	NE	12.69 %	1336 ps	1.04 %
6	−5 °C	3.98 ± 1.24 °C	2.5 V	4	17ph	WE	12.71 %	1496 ps	2.18 %
7	0 °C	9.24 ± 1.44 °C	2.5 V	1	17ph	NE	12.69 %	267 ps	0.51 %
8	0 °C	9.24 ± 1.44 °C	2.5 V	1	17ph	WE	12.69 %	294 ps	1.11 %
9	0 °C	8.00 ± 1.12 °C	2.5 V	3	17ph	NE	12.62 %	576 ps	1.02 %
10	0 °C	8.00 ± 1.12 °C	2.5 V	3	17ph	WE	12.62 %	637 ps	2.14 %
11	0 °C	7.92 ± 1.11 °C	2.5 V	4	17ph	NE	12.74 %	1334 ps	1.04 %
12	0 °C	7.92 ± 1.11 °C	2.5 V	4	17ph	WE	12.76 %	1495 ps	2.17 %
13	5 °C	13.77 ± 1.35 °C	2.5 V	1	17ph	NE	12.77 %	307 ps	0.34 %
14	5 °C	13.77 ± 1.35 °C	2.5 V	1	17ph	WE	12.77 %	340 ps	0.76 %
15	5 °C	11.82 ± 0.97 °C	2.5 V	3	17ph	NE	12.66 %	575 ps	1.01 %
16	5 °C	11.82 ± 0.97 °C	2.5 V	3	17ph	WE	12.67 %	637 ps	2.12 %
17	5 °C	11.85 ± 0.99 °C	2.5 V	4	17ph	NE	12.79 %	1332 ps	1.04 %
18	5 °C	11.85 ± 0.99 °C	2.5 V	4	17ph	WE	12.80 %	1491 ps	2.17 %
19	10 °C	16.27 ± 0.95 °C	2.5 V	4	17ph	NE	12.84 %	1326 ps	1.03 %
20	10 °C	16.27 ± 0.95 °C	2.5 V	4	17ph	WE	12.86 %	1488 ps	2.16 %
21	15 °C	20.49 ± 0.85 °C	2.5 V	3	17ph	NE	12.72 %	563 ps	0.94 %
22	15 °C	20.49 ± 0.85 °C	2.5 V	3	17ph	WE	12.72 %	625 ps	2.00 %
23	15 °C	20.56 ± 0.88 °C	2.5 V	4	17ph	NE	12.84 %	1280 ps	1.02 %
24	15 °C	20.56 ± 0.88 °C	2.5 V	4	17ph	WE	12.85 %	1435 ps	2.16 %

Table S3: All measurements performed with the mouse-sized scatter phantom. A measurement id is used to identify a specific measurement (meas.). The measurement parameters: source activity (activity), system operating temperature (T_{op}) for a cooling temperature of $T_{\mathrm{C}} = 0\,^{\circ}\mathrm{C}$, trigger scheme (trig), validation scheme (val) and the used energy window (EW) are stated for each evaluation of a measurement. The energy resolution and CRT are stated as FWHM. The prompt rate (prompts), random fraction (randoms), scatter fraction (scatter), trues sensitivity (sens) and NECR are evaluated following the NEMA NU4 standard.

meas.	activity	system T_{op}	trig	val	EW	$\Delta E/E$	CRT	prompts	randoms	scatter	sens	NECR
1	102.60 MBq	$9.23 \pm 1.35\,^{\circ}\mathrm{C}$	3	28ph	NE	13.60 %	566 ps	136.18 kcps	2.92 %	9.79 %	0.12 %	105.04 kcps
2	102.60 MBq	$9.23 \pm 1.35\,^{\circ}\mathrm{C}$	3	28ph	WE	13.64 %	618 ps	276.03 kcps	3.74 %	16.66 %	0.22 %	179.88 kcps
3	96.37 MBq	$9.00 \pm 1.32\,^{\circ}\mathrm{C}$	3	52ph	NE	13.46 %	560 ps	187.82 kcps	3.58 %	9.48 %	0.17 %	144.06 kcps
4	96.37 MBq	$9.00 \pm 1.32\,^{\circ}\mathrm{C}$	3	52ph	WE	13.48 %	600 ps	342.48 kcps	4.30 %	15.59 %	0.29 %	226.48 kcps
5	92.40 MBq	$8.98 \pm 1.32\,^{\circ}\mathrm{C}$	3	37ph	NE	13.44 %	561 ps	170.55 kcps	3.15 %	8.10 %	0.16 %	135.79 kcps
6	92.40 MBq	$8.98 \pm 1.32\,^{\circ}\mathrm{C}$	3	37ph	WE	13.50 %	609 ps	329.22 kcps	3.97 %	16.09 %	0.29 %	216.54 kcps
7	88.96 MBq	$8.97 \pm 1.32\,^{\circ}\mathrm{C}$	3	28ph	NE	13.43 %	563 ps	137.80 kcps	2.78 %	9.13 %	0.14 %	108.11 kcps
8	88.96 MBq	$8.97 \pm 1.32\,^{\circ}\mathrm{C}$	3	28ph	WE	13.46 %	615 ps	278.19 kcps	3.71 %	20.39 %	0.24 %	165.98 kcps
9	83.16 MBq	$9.23 \pm 1.36\,^{\circ}\mathrm{C}$	2	28ph	NE	13.48 %	451 ps	135.51 kcps	2.29 %	8.41 %	0.15 %	108.97 kcps
10	83.16 MBq	$9.23 \pm 1.36\,^{\circ}\mathrm{C}$	2	28ph	WE	13.50 %	495 ps	269.84 kcps	2.97 %	17.45 %	0.26 %	174.93 kcps
11	77.32 MBq	$8.77 \pm 1.28\,^{\circ}\mathrm{C}$	3	52ph	NE	13.25 %	556 ps	194.38 kcps	2.84 %	7.49 %	0.23 %	157.70 kcps
12	77.32 MBq	$8.77 \pm 1.28\,^{\circ}\mathrm{C}$	3	52ph	WE	13.27 %	595 ps	347.76 kcps	3.40 %	14.11 %	0.37 %	241.72 kcps
13	75.04 MBq	$8.65 \pm 1.26\,^{\circ}\mathrm{C}$	3	37ph	NE	13.24 %	557 ps	179.94 kcps	2.70 %	7.88 %	0.22 %	145.19 kcps
14	75.04 MBq	$8.65 \pm 1.26\,^{\circ}\mathrm{C}$	3	37ph	WE	13.26 %	602 ps	340.96 kcps	3.38 %	15.79 %	0.37 %	228.12 kcps
15	73.51 MBq	$8.69 \pm 1.26\,^{\circ}\mathrm{C}$	2	28ph	NE	13.24 %	449 ps	149.02 kcps	2.15 %	9.04 %	0.18 %	118.51 kcps
16	73.51 MBq	$8.69 \pm 1.26\,^{\circ}\mathrm{C}$	2	28ph	WE	13.27 %	491 ps	296.33 kcps	2.78 %	18.02 %	0.32 %	190.14 kcps
17	70.70 MBq	$8.79 \pm 1.29\,^{\circ}\mathrm{C}$	2	37ph	NE	13.21 %	447 ps	192.42 kcps	2.16 %	7.61 %	0.25 %	157.74 kcps

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Table S3 – continued from previous page

meas.	activity	system T_{op}	trig	val	EW	$\Delta E/E$	CRT	prompts	randoms	scatter	sens	NECR
18	70.70 MBq	8.79 ± 1.29 °C	2	37ph	WE	13.24 %	485 ps	363.07 kcps	2.68 %	15.75 %	0.42 %	246.12 kcps
19	67.99 MBq	8.69 ± 1.27 °C	3	28ph	NE	13.18 %	557 ps	157.13 kcps	2.37 %	7.82 %	0.21 %	127.71 kcps
20	67.99 MBq	8.69 ± 1.27 °C	3	28ph	WE	13.21 %	608 ps	308.95 kcps	3.07 %	16.90 %	0.37 %	202.56 kcps
21	66.38 MBq	8.60 ± 1.26 °C	3	52ph	NE	13.08 %	551 ps	216.94 kcps	2.42 %	7.78 %	0.29 %	176.36 kcps
22	66.38 MBq	8.60 ± 1.26 °C	3	52ph	WE	13.09 %	591 ps	382.48 kcps	2.86 %	13.71 %	0.48 %	270.85 kcps
23	64.23 MBq	8.56 ± 1.25 °C	3	37ph	NE	13.10 %	555 ps	204.15 kcps	2.33 %	7.51 %	0.29 %	167.19 kcps
24	64.23 MBq	8.56 ± 1.25 °C	3	37ph	WE	13.13 %	599 ps	382.91 kcps	2.87 %	15.09 %	0.49 %	262.72 kcps
25	62.17 MBq	8.62 ± 1.25 °C	2	28ph	NE	13.11 %	447 ps	171.67 kcps	1.88 %	8.42 %	0.25 %	139.03 kcps
26	62.17 MBq	8.62 ± 1.25 °C	2	28ph	WE	13.14 %	488 ps	336.41 kcps	2.39 %	16.73 %	0.44 %	224.05 kcps
27	59.08 MBq	8.55 ± 1.24 °C	2	37ph	NE	13.04 %	444 ps	221.02 kcps	1.78 %	6.98 %	0.34 %	184.96 kcps
28	59.08 MBq	8.55 ± 1.24 °C	2	37ph	WE	13.06 %	481 ps	412.23 kcps	2.20 %	15.18 %	0.58 %	285.56 kcps
29	56.76 MBq	8.59 ± 1.25 °C	2	52ph	NE	12.98 %	440 ps	229.72 kcps	1.67 %	6.18 %	0.37 %	195.92 kcps
30	56.76 MBq	8.59 ± 1.25 °C	2	52ph	WE	13.00 %	473 ps	401.07 kcps	2.00 %	14.13 %	0.60 %	285.64 kcps
31	55.02 MBq	8.48 ± 1.23 °C	3	28ph	NE	13.02 %	554 ps	185.37 kcps	1.98 %	7.67 %	0.31 %	152.28 kcps
32	55.02 MBq	8.48 ± 1.23 °C	3	28ph	WE	13.05 %	602 ps	359.67 kcps	2.52 %	16.38 %	0.54 %	240.95 kcps
33	52.85 MBq	8.34 ± 1.21 °C	3	37ph	NE	12.95 %	551 ps	235.52 kcps	1.86 %	6.43 %	0.41 %	199.06 kcps
34	52.85 MBq	8.34 ± 1.21 °C	3	37ph	WE	12.97 %	594 ps	435.97 kcps	2.30 %	14.90 %	0.69 %	303.46 kcps
35	51.24 MBq	8.29 ± 1.20 °C	3	52ph	NE	12.89 %	545 ps	233.09 kcps	1.75 %	6.21 %	0.42 %	198.34 kcps
36	51.24 MBq	8.29 ± 1.20 °C	3	52ph	WE	12.90 %	582 ps	406.00 kcps	2.11 %	14.27 %	0.67 %	287.71 kcps
37	48.90 MBq	8.42 ± 1.22 °C	2	28ph	NE	12.96 %	443 ps	205.72 kcps	1.47 %	6.89 %	0.39 %	173.49 kcps
38	48.90 MBq	8.42 ± 1.22 °C	2	28ph	WE	12.98 %	484 ps	396.89 kcps	1.87 %	16.80 %	0.66 %	266.24 kcps
39	47.72 MBq	8.37 ± 1.21 °C	2	37ph	NE	12.87 %	441 ps	247.20 kcps	1.40 %	6.66 %	0.48 %	209.80 kcps
40	47.72 MBq	8.37 ± 1.21 °C	2	37ph	WE	12.91 %	477 ps	454.80 kcps	1.71 %	15.10 %	0.80 %	318.34 kcps
41	46.13 MBq	8.34 ± 1.21 °C	2	52ph	NE	12.82 %	438 ps	222.72 kcps	1.32 %	6.30 %	0.45 %	190.73 kcps
42	46.13 MBq	8.34 ± 1.21 °C	2	52ph	WE	12.84 %	471 ps	385.62 kcps	1.56 %	13.40 %	0.71 %	281.45 kcps
43	43.91 MBq	8.38 ± 1.21 °C	2	17ph	NE	12.90 %	443 ps	146.90 kcps	1.32 %	7.19 %	0.31 %	123.44 kcps
44	43.91 MBq	8.38 ± 1.21 °C	2	17ph	WE	12.92 %	486 ps	291.54 kcps	1.73 %	17.31 %	0.54 %	193.66 kcps

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Table S3 – continued from previous page

meas.	activity	system T_{op}	trig	val	EW	$\Delta E/E$	CRT	prompts	randoms	scatter	sens	NECR
45	41.28 MBq	8.29 ± 1.20 °C	3	28ph	NE	12.82 %	551 ps	226.03 kcps	1.44 %	6.78 %	0.50 %	191.21 kcps
46	41.28 MBq	8.29 ± 1.20 °C	3	28ph	WE	12.84 %	596 ps	429.92 kcps	1.81 %	15.73 %	0.86 %	296.06 kcps
47	39.46 MBq	8.23 ± 1.18 °C	3	37ph	NE	12.76 %	545 ps	250.26 kcps	1.32 %	6.33 %	0.59 %	214.18 kcps
48	39.46 MBq	8.23 ± 1.18 °C	3	37ph	WE	12.78 %	589 ps	456.30 kcps	1.61 %	14.84 %	0.97 %	321.89 kcps
49	38.37 MBq	8.17 ± 1.17 °C	3	52ph	NE	12.73 %	542 ps	197.36 kcps	1.29 %	6.26 %	0.48 %	169.24 kcps
50	38.37 MBq	8.17 ± 1.17 °C	3	52ph	WE	12.75 %	579 ps	339.67 kcps	1.53 %	13.20 %	0.76 %	249.16 kcps
51	36.74 MBq	9.37 ± 1.36 °C	1	17ph	NE	13.00 %	274 ps	83.50 kcps	1.52 %	6.38 %	0.21 %	71.12 kcps
52	36.74 MBq	9.37 ± 1.36 °C	1	17ph	WE	13.02 %	295 ps	167.90 kcps	1.95 %	17.29 %	0.37 %	111.18 kcps
53	34.77 MBq	8.52 ± 1.28 °C	2	28ph	NE	12.76 %	440 ps	236.51 kcps	0.98 %	6.44 %	0.63 %	203.22 kcps
54	34.77 MBq	8.52 ± 1.28 °C	2	28ph	WE	12.78 %	479 ps	445.86 kcps	1.23 %	16.12 %	1.06 %	307.22 kcps
55	33.51 MBq	8.26 ± 1.21 °C	2	37ph	NE	12.69 %	437 ps	225.77 kcps	0.95 %	7.63 %	0.62 %	189.28 kcps
56	33.51 MBq	8.26 ± 1.21 °C	2	37ph	WE	12.71 %	474 ps	409.27 kcps	1.14 %	14.96 %	1.03 %	290.29 kcps
57	32.46 MBq	8.16 ± 1.19 °C	2	52ph	NE	12.69 %	436 ps	172.74 kcps	0.91 %	6.09 %	0.50 %	149.74 kcps
58	32.46 MBq	8.16 ± 1.19 °C	2	52ph	WE	12.70 %	467 ps	295.73 kcps	1.08 %	13.40 %	0.78 %	217.63 kcps
59	31.41 MBq	8.16 ± 1.17 °C	2	17ph	NE	12.71 %	440 ps	184.16 kcps	0.92 %	6.58 %	0.54 %	157.97 kcps
60	31.41 MBq	8.16 ± 1.17 °C	2	17ph	WE	12.73 %	482 ps	358.45 kcps	1.19 %	17.96 %	0.93 %	236.57 kcps
61	29.79 MBq	8.09 ± 1.16 °C	3	28ph	NE	12.66 %	544 ps	222.62 kcps	0.98 %	6.49 %	0.69 %	191.12 kcps
62	29.79 MBq	8.09 ± 1.16 °C	3	28ph	WE	12.67 %	591 ps	418.93 kcps	1.22 %	15.40 %	1.18 %	293.64 kcps
63	29.06 MBq	8.03 ± 1.15 °C	3	37ph	NE	12.62 %	543 ps	203.13 kcps	0.96 %	6.46 %	0.65 %	174.56 kcps
64	29.06 MBq	8.03 ± 1.15 °C	3	37ph	WE	12.64 %	584 ps	367.40 kcps	1.16 %	14.57 %	1.07 %	262.84 kcps
65	28.24 MBq	8.01 ± 1.14 °C	3	52ph	NE	12.61 %	540 ps	155.82 kcps	0.94 %	6.03 %	0.51 %	135.18 kcps
66	28.24 MBq	8.01 ± 1.14 °C	3	52ph	WE	12.63 %	577 ps	265.96 kcps	1.13 %	13.85 %	0.80 %	193.59 kcps
67	27.13 MBq	9.12 ± 1.32 °C	1	17ph	NE	12.84 %	271 ps	89.82 kcps	1.06 %	6.15 %	0.31 %	77.54 kcps
68	27.13 MBq	9.12 ± 1.32 °C	1	17ph	WE	12.85 %	292 ps	178.30 kcps	1.36 %	16.86 %	0.54 %	120.46 kcps
69	26.16 MBq	9.44 ± 1.42 °C	1	28ph	NE	12.83 %	271 ps	96.26 kcps	0.89 %	6.01 %	0.34 %	83.61 kcps
70	26.16 MBq	9.44 ± 1.42 °C	1	28ph	WE	12.84 %	290 ps	183.02 kcps	1.12 %	15.80 %	0.58 %	127.31 kcps
71	23.63 MBq	8.05 ± 1.16 °C	2	28ph	NE	12.58 %	438 ps	185.62 kcps	0.66 %	8.01 %	0.72 %	155.15 kcps

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Table S3 – continued from previous page

meas.	activity	system T_{op}	trig	val	EW	$\Delta E/E$	CRT	prompts	randoms	scatter	sens	NECR
72	23.63 MBq	8.05 ± 1.16 °C	2	28ph	WE	12.59 %	477 ps	347.87 kcps	0.81 %	15.38 %	1.24 %	245.69 kcps
73	22.16 MBq	8.03 ± 1.15 °C	2	37ph	NE	12.55 %	437 ps	162.77 kcps	0.61 %	6.30 %	0.68 %	141.28 kcps
74	22.16 MBq	8.03 ± 1.15 °C	2	37ph	WE	12.59 %	472 ps	292.57 kcps	0.74 %	14.67 %	1.12 %	210.32 kcps
75	21.36 MBq	8.03 ± 1.15 °C	2	17ph	NE	12.57 %	437 ps	171.76 kcps	0.59 %	6.38 %	0.75 %	148.87 kcps
76	21.36 MBq	8.03 ± 1.15 °C	2	17ph	WE	12.59 %	479 ps	330.28 kcps	0.75 %	16.12 %	1.29 %	229.42 kcps
77	20.60 MBq	7.95 ± 1.14 °C	3	28ph	NE	12.56 %	542 ps	166.22 kcps	0.67 %	6.52 %	0.75 %	143.42 kcps
78	20.60 MBq	7.95 ± 1.14 °C	3	28ph	WE	12.57 %	588 ps	310.16 kcps	0.84 %	15.30 %	1.27 %	219.35 kcps
79	19.55 MBq	7.95 ± 1.14 °C	3	37ph	NE	12.52 %	542 ps	146.88 kcps	0.64 %	6.22 %	0.70 %	127.63 kcps
80	19.55 MBq	7.95 ± 1.14 °C	3	37ph	WE	12.53 %	582 ps	263.01 kcps	0.79 %	14.86 %	1.14 %	188.10 kcps
81	19.18 MBq	7.87 ± 1.12 °C	3	52ph	NE	12.52 %	539 ps	112.74 kcps	0.63 %	5.88 %	0.55 %	98.68 kcps
82	19.18 MBq	7.87 ± 1.12 °C	3	52ph	WE	12.53 %	575 ps	190.69 kcps	0.76 %	13.10 %	0.86 %	142.09 kcps
83	18.05 MBq	9.26 ± 1.40 °C	1	17ph	NE	12.72 %	270 ps	66.78 kcps	0.70 %	6.15 %	0.34 %	58.05 kcps
84	18.05 MBq	9.26 ± 1.40 °C	1	17ph	WE	12.75 %	291 ps	131.03 kcps	0.90 %	16.58 %	0.60 %	89.81 kcps
85	17.52 MBq	9.32 ± 1.45 °C	1	28ph	NE	12.71 %	269 ps	70.73 kcps	0.59 %	6.00 %	0.38 %	61.80 kcps
86	17.52 MBq	9.32 ± 1.45 °C	1	28ph	WE	12.73 %	288 ps	133.32 kcps	0.74 %	15.97 %	0.64 %	92.96 kcps
87	13.11 MBq	7.80 ± 1.11 °C	3	28ph	NE	12.44 %	540 ps	112.35 kcps	0.43 %	6.33 %	0.80 %	97.79 kcps
88	13.11 MBq	7.80 ± 1.11 °C	3	28ph	WE	12.48 %	586 ps	208.40 kcps	0.54 %	15.46 %	1.34 %	147.60 kcps
89	12.76 MBq	7.79 ± 1.10 °C	3	37ph	NE	12.45 %	539 ps	100.80 kcps	0.42 %	6.19 %	0.74 %	88.02 kcps
90	12.76 MBq	7.79 ± 1.10 °C	3	37ph	WE	12.47 %	581 ps	179.70 kcps	0.52 %	14.83 %	1.19 %	129.19 kcps
91	12.42 MBq	7.75 ± 1.09 °C	3	52ph	NE	12.45 %	537 ps	76.50 kcps	0.41 %	5.95 %	0.58 %	67.14 kcps
92	12.42 MBq	7.75 ± 1.09 °C	3	52ph	WE	12.46 %	574 ps	128.81 kcps	0.50 %	13.35 %	0.90 %	95.89 kcps
93	11.90 MBq	7.80 ± 1.10 °C	2	17ph	NE	12.44 %	436 ps	104.38 kcps	0.33 %	6.32 %	0.82 %	91.03 kcps
94	11.90 MBq	7.80 ± 1.10 °C	2	17ph	WE	12.45 %	477 ps	199.32 kcps	0.42 %	16.07 %	1.40 %	139.41 kcps
95	11.22 MBq	7.81 ± 1.11 °C	2	28ph	NE	12.43 %	435 ps	97.47 kcps	0.31 %	6.25 %	0.81 %	85.17 kcps
96	11.22 MBq	7.81 ± 1.11 °C	2	28ph	WE	12.45 %	473 ps	180.91 kcps	0.39 %	15.33 %	1.36 %	128.83 kcps
97	10.71 MBq	8.71 ± 1.28 °C	1	17ph	NE	12.57 %	268 ps	44.42 kcps	0.40 %	6.12 %	0.39 %	38.86 kcps
98	10.71 MBq	8.71 ± 1.28 °C	1	17ph	WE	12.56 %	289 ps	86.84 kcps	0.53 %	17.11 %	0.67 %	59.15 kcps

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Table S3 – continued from previous page

meas.	activity	system T_{op}	trig	val	EW	$\Delta E/E$	CRT	prompts	randoms	scatter	sens	NECR
99	10.48 MBq	8.91 ± 1.35 °C	1	28ph	NE	12.55 %	268 ps	46.37 kcps	0.35 %	6.19 %	0.41 %	40.54 kcps
100	10.48 MBq	8.91 ± 1.35 °C	1	28ph	WE	12.56 %	287 ps	86.98 kcps	0.44 %	15.58 %	0.70 %	61.52 kcps
101	9.17 MBq	7.83 ± 1.12 °C	3	28ph	NE	12.41 %	540 ps	80.93 kcps	0.30 %	6.18 %	0.83 %	70.84 kcps
102	9.17 MBq	7.83 ± 1.12 °C	3	28ph	WE	12.42 %	586 ps	149.43 kcps	0.39 %	15.58 %	1.37 %	105.80 kcps
103	8.82 MBq	7.75 ± 1.11 °C	3	37ph	NE	12.40 %	539 ps	71.63 kcps	0.29 %	6.08 %	0.76 %	62.84 kcps
104	8.82 MBq	7.75 ± 1.11 °C	3	37ph	WE	12.42 %	581 ps	127.11 kcps	0.37 %	14.75 %	1.23 %	91.80 kcps
105	8.59 MBq	7.70 ± 1.10 °C	3	52ph	NE	12.39 %	537 ps	54.36 kcps	0.29 %	5.87 %	0.59 %	47.91 kcps
106	8.59 MBq	7.70 ± 1.10 °C	3	52ph	WE	12.40 %	574 ps	91.15 kcps	0.36 %	14.05 %	0.91 %	66.93 kcps
107	8.32 MBq	7.74 ± 1.10 °C	2	17ph	NE	12.39 %	435 ps	74.71 kcps	0.23 %	6.20 %	0.84 %	65.44 kcps
108	8.32 MBq	7.74 ± 1.10 °C	2	17ph	WE	12.41 %	476 ps	142.21 kcps	0.30 %	16.31 %	1.43 %	99.09 kcps
109	7.87 MBq	7.74 ± 1.10 °C	2	28ph	NE	12.35 %	435 ps	70.10 kcps	0.22 %	6.28 %	0.83 %	61.31 kcps
110	7.87 MBq	7.74 ± 1.10 °C	2	28ph	WE	12.37 %	473 ps	129.66 kcps	0.28 %	15.57 %	1.39 %	91.99 kcps
111	6.53 MBq	9.86 ± 1.39 °C	1	17ph	NE	12.61 %	267 ps	26.13 kcps	0.27 %	6.02 %	0.37 %	22.96 kcps
112	6.53 MBq	9.86 ± 1.39 °C	1	17ph	WE	12.63 %	289 ps	50.49 kcps	0.35 %	16.94 %	0.64 %	34.63 kcps
113	6.38 MBq	9.39 ± 1.47 °C	1	28ph	NE	12.58 %	268 ps	28.56 kcps	0.22 %	5.68 %	0.42 %	25.30 kcps
114	6.38 MBq	9.39 ± 1.47 °C	1	28ph	WE	12.60 %	286 ps	53.13 kcps	0.29 %	15.54 %	0.70 %	37.72 kcps
115	6.17 MBq	8.11 ± 1.26 °C	3	28ph	NE	12.39 %	540 ps	56.04 kcps	0.21 %	6.05 %	0.85 %	49.27 kcps
116	6.17 MBq	8.11 ± 1.26 °C	3	28ph	WE	12.40 %	585 ps	102.65 kcps	0.27 %	15.61 %	1.40 %	72.78 kcps
117	6.03 MBq	7.90 ± 1.18 °C	3	37ph	NE	12.36 %	539 ps	50.01 kcps	0.20 %	5.93 %	0.78 %	44.09 kcps
118	6.03 MBq	7.90 ± 1.18 °C	3	37ph	WE	12.38 %	580 ps	88.34 kcps	0.26 %	15.80 %	1.23 %	62.34 kcps
119	5.86 MBq	7.79 ± 1.14 °C	3	52ph	NE	12.36 %	536 ps	37.75 kcps	0.20 %	5.83 %	0.61 %	33.35 kcps
120	5.86 MBq	7.79 ± 1.14 °C	3	52ph	WE	12.38 %	572 ps	62.93 kcps	0.25 %	13.10 %	0.93 %	47.31 kcps
121	5.63 MBq	7.77 ± 1.11 °C	2	17ph	NE	12.37 %	436 ps	52.15 kcps	0.16 %	6.25 %	0.87 %	45.70 kcps
122	5.63 MBq	7.77 ± 1.11 °C	2	17ph	WE	12.38 %	476 ps	98.84 kcps	0.21 %	15.91 %	1.47 %	69.64 kcps
123	5.49 MBq	7.74 ± 1.10 °C	2	28ph	NE	12.34 %	435 ps	49.72 kcps	0.16 %	6.27 %	0.85 %	43.55 kcps
124	5.49 MBq	7.74 ± 1.10 °C	2	28ph	WE	12.35 %	473 ps	91.81 kcps	0.20 %	15.33 %	1.41 %	65.59 kcps
125	4.81 MBq	9.07 ± 1.41 °C	1	17ph	NE	12.52 %	268 ps	20.71 kcps	0.19 %	5.91 %	0.40 %	18.27 kcps

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Table S3 – continued from previous page

meas.	activity	system T_{op}	trig	val	EW	$\Delta E/E$	CRT	prompts	randoms	scatter	sens	NECR
126	4.81 MBq	9.07 ± 1.41 °C	1	17ph	WE	12.53 %	288 ps	40.02 kcps	0.26 %	16.44 %	0.69 %	27.82 kcps
127	4.65 MBq	9.11 ± 1.44 °C	1	28ph	NE	12.52 %	268 ps	21.56 kcps	0.16 %	5.84 %	0.44 %	19.06 kcps
128	4.65 MBq	9.11 ± 1.44 °C	1	28ph	WE	12.52 %	286 ps	40.07 kcps	0.22 %	15.76 %	0.72 %	28.33 kcps
129	3.63 MBq	7.22 ± 1.00 °C	3	28ph	NE	12.37 %	539 ps	33.13 kcps	0.13 %	6.23 %	0.85 %	29.06 kcps
130	3.63 MBq	7.22 ± 1.00 °C	3	28ph	WE	12.39 %	584 ps	61.73 kcps	0.17 %	15.34 %	1.44 %	44.12 kcps
131	3.55 MBq	7.46 ± 1.03 °C	3	37ph	NE	12.39 %	538 ps	29.71 kcps	0.13 %	6.09 %	0.79 %	26.14 kcps
132	3.55 MBq	7.46 ± 1.03 °C	3	37ph	WE	12.40 %	580 ps	53.02 kcps	0.17 %	14.93 %	1.27 %	38.26 kcps
133	3.34 MBq	7.65 ± 1.08 °C	3	52ph	NE	12.39 %	536 ps	21.78 kcps	0.12 %	5.95 %	0.61 %	19.23 kcps
134	3.34 MBq	7.65 ± 1.08 °C	3	52ph	WE	12.41 %	573 ps	36.51 kcps	0.16 %	14.28 %	0.94 %	26.75 kcps
135	3.21 MBq	7.68 ± 1.09 °C	2	17ph	NE	12.40 %	435 ps	29.89 kcps	0.10 %	6.10 %	0.87 %	26.31 kcps
136	3.21 MBq	7.68 ± 1.09 °C	2	17ph	WE	12.41 %	477 ps	56.77 kcps	0.13 %	15.81 %	1.49 %	40.14 kcps
137	3.03 MBq	7.67 ± 1.09 °C	2	28ph	NE	12.40 %	433 ps	27.99 kcps	0.09 %	6.10 %	0.87 %	24.63 kcps
138	3.03 MBq	7.67 ± 1.09 °C	2	28ph	WE	12.41 %	473 ps	51.70 kcps	0.13 %	15.48 %	1.44 %	36.85 kcps
139	2.78 MBq	9.05 ± 1.43 °C	1	17ph	NE	12.56 %	267 ps	12.28 kcps	0.12 %	6.13 %	0.41 %	10.80 kcps
140	2.78 MBq	9.05 ± 1.43 °C	1	17ph	WE	12.57 %	288 ps	23.70 kcps	0.17 %	16.76 %	0.71 %	16.38 kcps
141	2.63 MBq	9.13 ± 1.47 °C	1	28ph	NE	12.54 %	267 ps	12.36 kcps	0.10 %	5.68 %	0.44 %	10.98 kcps
142	2.63 MBq	9.13 ± 1.47 °C	1	28ph	WE	12.55 %	286 ps	22.98 kcps	0.14 %	15.43 %	0.74 %	16.40 kcps
143	2.43 MBq	7.92 ± 1.20 °C	3	28ph	NE	12.40 %	539 ps	22.59 kcps	0.09 %	6.03 %	0.87 %	19.91 kcps
144	2.43 MBq	7.92 ± 1.20 °C	3	28ph	WE	12.42 %	587 ps	41.50 kcps	0.13 %	15.71 %	1.44 %	29.42 kcps
145	2.35 MBq	7.74 ± 1.14 °C	3	37ph	NE	12.39 %	538 ps	19.94 kcps	0.09 %	6.02 %	0.80 %	17.58 kcps
146	2.35 MBq	7.74 ± 1.14 °C	3	37ph	WE	12.41 %	581 ps	35.25 kcps	0.12 %	14.58 %	1.28 %	25.66 kcps
147	2.23 MBq	7.68 ± 1.11 °C	3	52ph	NE	12.39 %	536 ps	14.67 kcps	0.09 %	5.95 %	0.62 %	12.95 kcps
148	2.23 MBq	7.68 ± 1.11 °C	3	52ph	WE	12.42 %	574 ps	24.53 kcps	0.12 %	13.48 %	0.95 %	18.33 kcps
149	2.15 MBq	7.66 ± 1.10 °C	2	17ph	NE	12.38 %	435 ps	20.51 kcps	0.07 %	6.06 %	0.90 %	18.07 kcps
150	2.15 MBq	7.66 ± 1.10 °C	2	17ph	WE	12.40 %	477 ps	38.92 kcps	0.10 %	16.04 %	1.52 %	27.39 kcps
151	2.08 MBq	7.67 ± 1.10 °C	2	28ph	NE	12.37 %	434 ps	19.30 kcps	0.07 %	6.18 %	0.87 %	16.96 kcps
152	2.08 MBq	7.67 ± 1.10 °C	2	28ph	WE	12.39 %	474 ps	35.63 kcps	0.10 %	15.34 %	1.45 %	25.49 kcps

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Table S3 – continued from previous page

meas.	activity	system T_{op}	trig	val	EW	$\Delta E/E$	CRT	prompts	randoms	scatter	sens	NECR
153	1.85 MBq	9.12 ± 1.46 °C	1	17ph	NE	12.53 %	266 ps	8.20 kcps	0.08 %	5.78 %	0.42 %	7.27 kcps
154	1.85 MBq	9.12 ± 1.46 °C	1	17ph	WE	12.56 %	288 ps	15.84 kcps	0.13 %	16.79 %	0.71 %	10.94 kcps
155	1.59 MBq	9.12 ± 1.48 °C	1	28ph	NE	12.49 %	266 ps	7.55 kcps	0.07 %	5.79 %	0.45 %	6.69 kcps
156	1.59 MBq	9.12 ± 1.48 °C	1	28ph	WE	12.51 %	285 ps	14.02 kcps	0.10 %	15.92 %	0.74 %	9.89 kcps
157	1.50 MBq	7.83 ± 1.19 °C	3	28ph	NE	12.38 %	539 ps	13.95 kcps	0.06 %	6.05 %	0.87 %	12.30 kcps
158	1.50 MBq	7.83 ± 1.19 °C	3	28ph	WE	12.41 %	589 ps	25.72 kcps	0.10 %	15.40 %	1.45 %	18.38 kcps
159	1.41 MBq	7.70 ± 1.11 °C	3	37ph	NE	12.36 %	537 ps	12.03 kcps	0.06 %	5.93 %	0.80 %	10.63 kcps
160	1.41 MBq	7.70 ± 1.11 °C	3	37ph	WE	12.41 %	582 ps	21.31 kcps	0.09 %	14.72 %	1.28 %	15.47 kcps
161	1.36 MBq	7.65 ± 1.10 °C	3	52ph	NE	12.37 %	537 ps	8.91 kcps	0.06 %	5.84 %	0.62 %	7.89 kcps
162	1.36 MBq	7.65 ± 1.10 °C	3	52ph	WE	12.38 %	577 ps	14.92 kcps	0.09 %	13.77 %	0.95 %	11.07 kcps
163	1.03 MBq	7.67 ± 1.10 °C	2	17ph	NE	12.37 %	434 ps	9.84 kcps	0.04 %	6.04 %	0.90 %	8.68 kcps
164	1.03 MBq	7.67 ± 1.10 °C	2	17ph	WE	12.39 %	479 ps	18.73 kcps	0.07 %	16.12 %	1.52 %	13.16 kcps
165	0.99 MBq	7.66 ± 1.10 °C	3	28ph	NE	12.36 %	434 ps	9.28 kcps	0.05 %	6.15 %	0.88 %	8.16 kcps
166	0.99 MBq	7.66 ± 1.10 °C	3	28ph	WE	12.40 %	475 ps	17.31 kcps	0.08 %	15.91 %	1.47 %	12.23 kcps
167	0.92 MBq	8.86 ± 1.37 °C	1	17ph	NE	12.52 %	266 ps	4.18 kcps	0.05 %	6.02 %	0.43 %	3.69 kcps
168	0.92 MBq	8.86 ± 1.37 °C	1	17ph	WE	12.53 %	287 ps	8.09 kcps	0.09 %	16.32 %	0.73 %	5.65 kcps
169	0.88 MBq	9.00 ± 1.44 °C	1	28ph	NE	12.53 %	267 ps	4.23 kcps	0.04 %	6.00 %	0.45 %	3.73 kcps
170	0.88 MBq	9.00 ± 1.44 °C	1	28ph	WE	12.54 %	285 ps	7.86 kcps	0.08 %	15.86 %	0.75 %	5.56 kcps
171	0.80 MBq	7.79 ± 1.15 °C	3	28ph	NE	12.36 %	539 ps	7.46 kcps	0.04 %	6.10 %	0.88 %	6.57 kcps
172	0.80 MBq	7.79 ± 1.15 °C	3	28ph	WE	12.40 %	592 ps	13.77 kcps	0.07 %	15.72 %	1.45 %	9.77 kcps
173	0.75 MBq	7.68 ± 1.11 °C	3	37ph	NE	12.34 %	537 ps	6.44 kcps	0.04 %	5.98 %	0.80 %	5.69 kcps
174	0.75 MBq	7.68 ± 1.11 °C	3	37ph	WE	12.43 %	586 ps	11.45 kcps	0.07 %	16.19 %	1.27 %	8.03 kcps
175	0.72 MBq	7.64 ± 1.09 °C	3	52ph	NE	12.37 %	536 ps	4.74 kcps	0.04 %	5.90 %	0.62 %	4.19 kcps
176	0.72 MBq	7.64 ± 1.09 °C	3	52ph	WE	12.42 %	579 ps	7.95 kcps	0.07 %	15.62 %	0.93 %	5.65 kcps
177	0.68 MBq	7.66 ± 1.10 °C	2	17ph	NE	12.35 %	433 ps	6.50 kcps	0.03 %	6.66 %	0.89 %	5.66 kcps
178	0.68 MBq	7.66 ± 1.10 °C	2	17ph	WE	12.39 %	480 ps	12.38 kcps	0.06 %	16.48 %	1.53 %	8.63 kcps
179	0.64 MBq	7.66 ± 1.09 °C	2	28ph	NE	12.34 %	434 ps	6.02 kcps	0.03 %	6.21 %	0.87 %	5.29 kcps

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Table S3 – continued from previous page

meas.	activity	system T_{op}	trig	val	EW	$\Delta E/E$	CRT	prompts	randoms	scatter	sens	NECR
180	0.64 MBq	7.66 ± 1.09 °C	2	28ph	WE	12.42 %	479 ps	11.17 kcps	0.06 %	15.69 %	1.46 %	7.93 kcps
181	0.61 MBq	7.58 ± 1.08 °C	3	28ph	NE	12.36 %	540 ps	5.70 kcps	0.04 %	6.24 %	0.87 %	5.01 kcps
182	0.61 MBq	7.58 ± 1.08 °C	3	28ph	WE	12.41 %	597 ps	10.60 kcps	0.07 %	16.18 %	1.46 %	7.44 kcps
183	0.58 MBq	7.63 ± 1.08 °C	3	37ph	NE	12.33 %	536 ps	4.95 kcps	0.04 %	5.94 %	0.80 %	4.38 kcps
184	0.58 MBq	7.63 ± 1.08 °C	3	37ph	WE	12.39 %	588 ps	8.85 kcps	0.07 %	15.17 %	1.29 %	6.36 kcps
185	0.55 MBq	7.63 ± 1.09 °C	3	52ph	NE	12.37 %	535 ps	3.61 kcps	0.04 %	5.77 %	0.62 %	3.21 kcps
186	0.55 MBq	7.63 ± 1.09 °C	3	52ph	WE	12.43 %	578 ps	6.08 kcps	0.07 %	14.01 %	0.95 %	4.49 kcps