DEKRA Testing and Certification (Suzhou) Co., Ltd.
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098

Test report No:
2430820R-RF-US-P03V01

SAR TEST REPORT

Product Name	Argo
Trademark	DIGILENS ARGO
Model and /or type reference	A1810-00001
FCC ID	2BFKL810-00001
Applicant´s name / address	Digilens. 1276 Hammerwood Ave Sunnyvale C.A 94089.
Test method requested, standard	FCC 47CFR §2.1093 IEEE Std 1528-2013 IEC TR 63170:2018 ANSI C95.1:2019 RSS-102 Measurement (SAR):2021 BS EN IEC/IEEE 62209-1528:2021
Maximum SAR & Power Density	1g SAR: **0.73** W/kg 4cm^2 Power Density: **9.64** W/m^2
Simultaneous Transmission SAR	1g SAR: **1.40** W/kg
Verdict Summary	IN COMPLIANCE
Tested by (name / position & signature)	Tim Cao / Project Manager Tim Cao
Approved by (name / position & signature)	Jack Zhang / Manager Jack Zhang
Date of issue	2024-10-29
Report Version	V1.1
Report template No.	Template_FCC SAR-RF-V1.0

INDEX

Page

COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.
In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

IMPORTANT: No parts of this report may be reproduced or quoted out of context, in any form or by any means, except in full, without the previous written permission of DEKRA.

GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Jul. 04, 2024
Date (start test)	Aug. 20, 2024
Date (finish test)	Oct. 29, 2024

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. This test report cannot be used partially or in full for publicity and/or promotional purposes without previous written permission of DEKRA.

ENVIRONMENTAL CONDITIONS

The climatic conditions during the tests are within the limits specified by the manufacturer for the operation of the EUT and the test equipment. The climatic conditions during the tests were within the following limits:

Ambient temperature	18 °C – 25 °C
Relative Humidity air	30% - 60%

If explicitly required in the basic standard or applied product / product family standard the climatic values are recorded and documented separately in this test report.

POSSIBLE TEST CASE VERDICTS

Test case does not apply to test object	N/A
Test object does meet requirement	P (Pass) / PASS
Test object does not meet requirement	F (Fail) / FAIL
Not measured	N/M

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
2430820R-RF-US-P03V01	V1.0	Initial issue of report.	2024-10-10
2430820R-RF-US-P03V01	V1.1	Added Face-Down Phantom's System Check, (Test Report No.: 2430820R-RF-US-P03V01 V1.1 will replace Test Report No.: 2430820R-RF-US-P03V01 V1.0, and Test Report.: 2430820R-RF-US-P03V01 V1.0 has been discontinued.)	2024-10-29

REMARKS AND COMMENTS

1. The equipment under test (EUT) does meet the essential requirements of the stated standard(s)/test(s).
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with FCC 47 CFR§2.1093, IEEE Std 1528-2013, IEC TR 63170:2018, ANSI C95.1:2019, RSS-102 Measurement (SAR):2021.; BS EN IEC/IEEE 62209-1528:2021.
3. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, It is not necessary to account the uncertainty associated with the measurement result.
4. The test results presented in this report relate only to the object tested.
5. The test report shall not be reproduced without the written approval of DEKRA Testing and Certification (Suzhou) Co., Ltd.
6. This report will not be used for social proof function in China market.
7. DEKRA declines any responsibility with the following test data provided by customer that may affect the validity of result:
    - Chapter 1.1 General Description of the Item(s);
    - Chapter 1.2 Antenna Information.
    - Chapter 1.3 Antenna location diagram.
    - Chapter 1.4 Date Rate
    - Chapter 1.3 Channel List.

1 General Information

1.1 General Description of the Item(s)

Product Name.....:	Argo
Model No. .....:	A1810-00001
Trademark.....:	DIGILENS ARGO™
FCC ID.....:	2BFKL810-00001
Hardware Version.....:	Argo PVT
Software Version.....:	B1.0001.2112
Manufacturer.....:	Digilens.
Manufacturer Address.....:	1276 Hammerwood Ave Sunnyvale C.A 94089.
Factory.....:	Goertek Inc.
Factory address .....:	No.268 Dongfang Road High-Tech Industrial Development District, Weifang

Wireless specification.....:	WIFI 2.4G
Operating frequency range(s)..... :	2412~2462MHz
Wireless specifiction.....:	WIFI 5G
Frequency Range.....:	U-NII-1: 5150 MHz to 5250 MHz
	U-NII-2A: 5250 MHz to 5350 MHz
	U-NII-2C: 5470 MHz to 5725 MHz
	U-NII-3: 5725 MHz to 5850 MHz
Channel Bandwidth .....:	802.11a 20 MHz
Modulation technology.....:	OFDM, OFDMA
Wireless specification.....:	WIFI 6E
Type of Modulation.....:	OFDM-BPSK, QPSK, 16QAM, 64QAM, 256QAM, 1024QAM
Frequency Range .....:	U-NII-5: 5925 MHz to 6425 MHz
	U-NII-6: 6425 MHz to 6525 MHz
	U-NII-7: 6525 MHz to 6875 MHz
	U-NII-8: 6875 MHz to 7125 MHz
Number of Channels .....:	Refer to Clause 1.5
Date Rate .....:	Refer to Clause 1.4
Wireless specification.....:	Bluetooth (BR/EDR)
Operating frequency range(s)	2402~2480MHz
Type of Modulation.....:	GFSK

PHYs	☒	GFSK	☒	Pi/4 DQPSK	☒	8DPSK
Data Rate.....:	☒	1Mbit/s	☒	2Mbit/s	☒	3Mbit/s
Number of channels .....:	Refer to Clause 1.5					
Wireless specification.....:	Bluetooth (LE)					
Operating frequency range(s)	2402~2480MHz					
Type of Modulation.....:	GFSK					
PHYs .....:	☒	LE 1M	☒	LE 2M	☒	LE Coded S=2/8
Data Rate.....:	☒	1Mbit/s	☒	2Mbit/s	☒	500/125 Kbit/s
Number of channels .....:	Refer to Clause 1.5					

Rated power supply..... :	Voltage and Frequency	
	☐	AC: 220 - 240 V, 50/60 Hz
	☐	AC: 100 - 240 V, 50/60 Hz
	☒	DC: 5 Vdc
	☐	Poe:
	☒	Battery: 3.87 Vdc , 800 mAh
Mounting position ..... :	☐	Tabletop equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment
	☒	Hand-held/Portable equipment
	☐	Other:

1.2 Antenna Information

Antenna model / type number.....:	Ebony-G Antenna			
Antenna serial number.....:	F-0Y-SV-0318-001-00			
Antenna Delivery .....:	☒	1TX + 1RX		
	☒	2TX + 2RX		
	☐	Others: ……		
Antenna technology.....:	☒	SISO		
	☒	MIMO	☒	CDD
			☐	Beam-forming
Antenna Type .....:	☐	External	☐	Dipole
			☐	Sectorized
	☒	Internal	☐	Ceramic Chip
			☐	PIFA
			☒	FPC
			☐	Others……..

1.3 Antenna location diagram

1.4 Date Rate

IEEE 802.11b

Modulation	Data Rate(Mb/s)
DSSS	1
DSSS	2
CCK	5.5
CCK	11

IEEE 802.11g

Modulation	R	Data Rate(Mb/s)
BPSK	1/2	6
BPSK	3/4	9
QPSK	1/2	12
QPSK	3/4	18
16-QAM	1/2	24
16-QAM	3/4	36
64-QAM	2/3	48
64-QAM	3/4	54

IEEE 802.11n

Spatial streames	MCS Index	Modulation	R	Data Rate(Mb/s)			
				800ns GI		400ns GI	
				20MHz	40MHz	20MHz	40MHz
1	0	BPSK	1/2	6.5	13.5	7.2	15.0
1	1	QPSK	1/2	13.0	27.0	14.4	30.0
1	2	QPSK	3/4	19.5	40.5	21.7	45.0
1	3	16-QAM	1/2	26.0	54.0	28.9	60.0
1	4	16-QAM	3/4	39.0	81.0	43.3	90.0
1	5	64-QAM	2/3	52.0	108.0	57.8	120.0
1	6	64-QAM	3/4	58.5	121.5	65.0	135.0
1	7	64-QAM	5/6	65.0	135.0	72.2	150.0

2	8	BPSK	1/2	13	27	14.4	30
2	9	QPSK	1/2	26	54	28.8	60
2	10	QPSK	3/4	39	81	43.4	90
2	11	16-QAM	1/2	52	108	57.8	120
2	12	16-QAM	3/4	78	162	86.6	180
2	13	64-QAM	2/3	104	216	115.6	240
2	14	64-QAM	3/4	117	243	130	270
2	15	64-QAM	5/6	130	270	144.4	300

IEEE 802.11a

Modulation	R	Data Rate(Mb/s)
BPSK	1/2	6
BPSK	3/4	9
QPSK	1/2	12
QPSK	3/4	18
16-QAM	1/2	24
16-QAM	3/4	36
64-QAM	2/3	48
64-QAM	3/4	54

IEEE 802.11n/ac

Spatial streames	MCS Index	Modulation	R	Data Rate(Mb/s)					
				400ns GI			800ns GI		
				20MHz	40MHz	80MHz	20MHz	40MHz	80MHz
1	0	BPSK	1/2	7.2	15	32.5	6.5	13.5	29.3
1	1	QPSK	1/2	14.4	30	65	13	27	58.5
1	2	QPSK	3/4	21.7	45	97.5	19.5	40.5	87.8
1	3	16-QAM	1/2	28.9	60	130	26	54	117
1	4	16-QAM	3/4	43.3	90	195	39	81	175.5
1	5	64-QAM	2/3	57.8	120	260	52	108	234
1	6	64-QAM	3/4	65	135	292.5	58.5	121.5	263.3
1	7	64-QAM	5/6	72.2	150	325	65	135	292.5

1	8	256QAM	3/4	86.7	180	390	78	162	351
1	9	256QAM	5/6	N/A	200	433.3	N/A	180	390
2	0	BPSK	1/2	14.4	30	65	13	27	58.6
2	1	QPSK	1/2	28.8	60	130	26	54	117
2	2	QPSK	3/4	43.4	90	195	39	81	175.6
2	3	16-QAM	1/2	57.8	120	260	52	108	234
2	4	16-QAM	3/4	86.6	180	390	78	162	351
2	5	64-QAM	2/3	115.6	240	520	104	216	468
2	6	64-QAM	3/4	130	270	585	117	243	526.6
2	7	64-QAM	5/6	144.4	300	650	130	270	585
2	8	256QAM	3/4	173.4	360	780	156	324	702
2	9	256QAM	5/6	N/A	400	866.6	N/A	360	780

IEEE 802.11ax

Spatial streames	MCS Index	Modulation	R	Data Rate(Mb/s)											
				800ns GI				1600ns GI				3200ns GI			
				20MHz	40MHz	80MHz	160MHz	20MHz	40MHz	80MHz	160MHz	20MHz	40MHz	80MHz	160MHz
1	0	BPSK	1/2	8.6	17.2	36	72.1	8.1	16.3	34	68.1	7.3	14.6	30.6	61.3
1	1	QPSK	1/2	17.2	34.4	72.1	144.1	16.3	32.5	68.1	136.1	14.6	29.3	61.3	122.5
1	2	QPSK	3/4	25.8	51.6	108.1	216.2	24.4	48.8	102.1	204.2	21.9	43.9	91.9	183.8
1	3	16-QAM	1/2	34.4	68.8	144.1	288.2	32.5	65	136.1	272.2	29.3	58.5	122.5	245
1	4	16-QAM	3/4	51.6	103.2	216.2	432.4	48.8	97.5	204.2	408.3	43.9	87.8	183.8	367.5
1	5	64-QAM	2/3	68.8	137.6	288.2	576.5	65	130	272.2	544.4	58.5	117	245	490
1	6	64-QAM	3/4	77.4	154.9	324.3	648.5	73.1	146.3	306.3	612.5	65.8	131.6	275.6	551.3
1	7	64-QAM	5/6	86	172.1	360.3	720.6	81.3	162.5	340.3	680.6	73.1	146.3	306.3	612.5
1	8	256QAM	3/4	103.2	206.5	432.4	864.7	97.5	195	408.3	816.7	87.8	175.5	367.5	735
1	9	256QAM	5/6	114.7	229.4	480.4	960.8	108.3	216.7	453.7	907.4	97.5	195	408.3	816.7
1	10	1024QAM	3/4	129	258.1	540.4	1080.9	121.9	243.8	510.4	1020.8	109.7	219.4	459.4	918.8
1	11	1024QAM	5/6	143.4	286.8	600.5	1201	135.4	270.8	567.1	1134.3	121.9	243.8	510.4	1020.8
2	0	BPSK	1/2	17.2	34.4	72	144.2	16.2	32.6	68	136.2	14.6	29.2	61.2	122.6
2	1	QPSK	1/2	34.4	68.8	144.2	288.2	32.6	65	136.2	272.2	29.2	58.6	122.6	245
2	2	QPSK	3/4	51.6	103.2	216.2	432.4	48.8	97.6	204.2	408.4	43.8	87.8	183.8	367.6
2	3	16-QAM	1/2	68.8	137.6	288.2	576.4	65	130	272.2	544.4	58.6	117	245	490
2	4	16-QAM	3/4	103.2	206.4	432.4	864.8	97.6	195	408.4	816.6	87.8	175.6	367.6	735
2	5	64-QAM	2/3	137.6	275.2	576.4	1153	130	260	544.4	1088.8	117	234	490	980
2	6	64-QAM	3/4	154.8	309.8	648.6	1297	146.2	292.6	612.6	1225	131.6	263.2	551.2	1102.6
2	7	64-QAM	5/6	172	344.2	720.6	1441.2	162.6	325	680.6	1361.2	146.2	292.6	612.6	1225

2	8	256QAM	3/4	206.4	413	864.8	1729.4	195	390	816.6	1633.4	175.6	351	735	1470
2	9	256QAM	5/6	229.4	458.8	960.8	1921.6	216.6	433.4	907.4	1814.8	195	390	816.6	1633.4
2	10	1024QAM	3/4	258	516.2	1080.8	2161.8	243.8	487.6	1020.8	2041.6	219.4	438.8	918.8	1837.6
2	11	1024QAM	5/6	286.8	573.6	1201	2402	270.8	541.6	1134.2	2268.6	243.8	487.6	1020.8	2041.6

Symbol	Explanation
R	Code rate
GI	guard interval

Note: We have evaluated low/mid/high data rate, the blue font is the highest power data rate.

1.5 Channel List

IEEE 802.11b/g & IEEE 802.11n/ac/ax (20MHz) Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	2412 MHz	2	2417 MHz	3	2422 MHz	4	2427 MHz
5	2432 MHz	6	2437 MHz	7	2442 MHz	8	2447 MHz
9	2452 MHz	10	2457 MHz	11	2462 MHz	-	-

IEEE 802.11n/ac/ax (40MHz)Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	2422 MHz	4	2427 MHz	5	2432 MHz	6	2437 MHz
7	2442 MHz	8	2447 MHz	9	2452 MHz	-	-

Bluetooth Working Frequency of Each Channel: (For FHSS)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2403 MHz	02	2404 MHz	03	2405 MHz
04	2406 MHz	05	2407 MHz	06	2408 MHz	07	2409 MHz
08	2410 MHz	09	2411 MHz	10	2412 MHz	11	2413 MHz
12	2414 MHz	13	2415 MHz	14	2416 MHz	15	2417 MHz
16	2418 MHz	17	2419 MHz	18	2420 MHz	19	2421 MHz
20	2422 MHz	21	2423 MHz	22	2424 MHz	23	2425 MHz
24	2426 MHz	25	2427 MHz	26	2428 MHz	27	2429 MHz
28	2430 MHz	29	2431 MHz	30	2432 MHz	31	2433 MHz
32	2434 MHz	33	2435 MHz	34	2436 MHz	35	2437 MHz
36	2438 MHz	37	2439 MHz	38	2440 MHz	39	2441 MHz
40	2442 MHz	41	2443 MHz	42	2444 MHz	43	2445 MHz
44	2446 MHz	45	2447 MHz	46	2448 MHz	47	2449 MHz
48	2450 MHz	49	2451 MHz	50	2452 MHz	51	2453 MHz
52	2454 MHz	53	2455 MHz	54	2456 MHz	55	2457 MHz
56	2458 MHz	57	2459 MHz	58	2460 MHz	59	2461 MHz
60	2462 MHz	61	2463 MHz	62	2464 MHz	63	2465 MHz
64	2466 MHz	65	2467 MHz	66	2468 MHz	67	2469 MHz

68	2470 MHz	69	2471 MHz	70	2472 MHz	71	2473 MHz
72	2474 MHz	73	2475 MHz	74	2476 MHz	75	2477 MHz
76	2478 MHz	77	2479 MHz	78	2480 MHz	N/A	N/A

Bluetooth Working Frequency of Each Channel: (For LE)							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
00	2402 MHz	01	2404 MHz	02	2406 MHz	03	2408 MHz
04	2410 MHz	05	2412 MHz	06	2414 MHz	07	2416 MHz
08	2418 MHz	09	2420 MHz	10	2422 MHz	11	2424 MHz
12	2426 MHz	13	2428 MHz	14	2430 MHz	15	2432 MHz
16	2434 MHz	17	2436 MHz	18	2438 MHz	19	2440 MHz
20	2442 MHz	21	2444 MHz	22	2446 MHz	23	2448 MHz
24	2450 MHz	25	2452 MHz	26	2454 MHz	27	2456 MHz
28	2458 MHz	29	2460 MHz	30	2462 MHz	31	2464 MHz
32	2466 MHz	33	2468 MHz	34	2470 MHz	35	2472 MHz
36	2474 MHz	37	2476 MHz	38	2478 MHz	39	2480 MHz

802.11a/n/ac/ax(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
36	5180 MHz	40	5200 MHz	44	5220 MHz	48	5240 MHz
52	5260 MHz	56	5280 MHz	60	5300 MHz	64	5320 MHz
100	5500 MHz	104	5520 MHz	108	5540 MHz	112	5550 MHz
116	5580 MHz	120	5600 MHz	124	5620 MHz	128	5640 MHz
132	5660 MHz	136	5680 MHz	140	5700 MHz	149	5745 MHz
153	5765 MHz	157	5785 MHz	161	5805 MHz	165	5825 MHz
802.11n/ac/ax(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz	54	5270 MHz	62	5310 MHz
102	5510 MHz	110	5550 MHz	118	5590 MHz	126	5630 MHz
134	5670 MHz	151	5755 MHz	159	5795 MHz	N/A	N/A
802.11ac/ax(80MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
42	5210 MHz	58	5290 MHz	106	5530MHz	122	5610 MHz
138	5690 MHz	155	5775 MHz	N/A	N/A	N/A	N/A
802.11ac/ax(160MHz) Working Frequency of Each Channel:							

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
50	5250 MHz	114	5570 MHz	N/A	N/A	N/A	N/A

U-NII 5:

802.11ax(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
1	5955 MHz	5	5975 MHz	9	5995 MHz	13	6015 MHz
17	6035 MHz	21	6055 MHz	25	6075 MHz	29	6095 MHz
33	6115 MHz	37	6135 MHz	41	6155 MHz	45	6175 MHz
49	6195 MHz	53	6215 MHz	57	6235 MHz	61	6255 MHz
65	6275 MHz	69	6295 MHz	73	6315 MHz	77	6335 MHz
81	6355 MHz	85	6375 MHz	89	6395 MHz	93	6415 MHz
802.11ax(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
3	5965 MHz	11	6005 MHz	19	6045 MHz	27	6085 MHz
35	6125 MHz	43	6165 MHz	51	6205 MHz	59	6245 MHz
67	6285 MHz	75	6325 MHz	83	6365 MHz	81	6405 MHz
802.11ax(80MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
7	5985 MHz	23	6065 MHz	39	6145 MHz	55	6225 MHz
71	6305 MHz	87	6385 MHz	N/A	N/A	N/A	N/A
802.11ax(160MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
15	6025 MHz	47	6185 MHz	79	6345 MHz	N/A	N/A

U-NII 6:

802.11n/ac/ax(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
97	6435 MHz	101	6455 MHz	105	6475 MHz	109	6495 MHz
113	6515 MHz	N/A	N/A	N/A	N/A	N/A	N/A
802.11n/ac/ax(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
99	6465 MHz	107	6485 MHz	115	6525 MHz	N/A	N/A
802.11ac/ax(80MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
109	6465 MHz	119	6545 MHz	N/A	N/A	N/A	N/A
802.11ac/ax(160MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
111	6505 MHz	N/A	N/A	N/A	N/A	N/A	N/A

Note: The blue form are channels crossing U-NII 6 and U-NII 7.

U-NII 7:

802.11n/ac/ax(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
117	6535 MHz	121	6555 MHz	125	6575 MHz	129	6595 MHz
133	6615 MHz	137	6635 MHz	141	6655 MHz	145	6675 MHz
149	6695 MHz	153	6715 MHz	157	6735 MHz	161	6755 MHz
165	6775 MHz	169	6795 MHz	173	6815 MHz	177	6835 MHz
181	6855 MHz	185	6875 MHz	N/A	N/A	N/A	N/A
802.11n/ac/ax(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
115	6525 MHz	123	6565 MHz	131	6605 MHz	139	6645 MHz
147	6685 MHz	155	6725 MHz	163	6765 MHz	171	6805 MHz
179	6845 MHz	187	6885 MHz	N/A	N/A	N/A	N/A
802.11ac/ax(80MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
119	6545 MHz	135	6625 MHz	151	6705 MHz	167	6785 MHz
183	6865 MHz	N/A	N/A	N/A	N/A	N/A	N/A
802.11ac/ax(160MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
111	6505 MHz	143	6665 MHz	175	6825 MHz	N/A	N/A

Note: The blue form are channels crossing U-NII 6 and U-NII 7; The orange form are channels crossing U-NII 7 and U-NII 8.

U-NII 8:

802.11n/ac/ax(20MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
185	6875 MHz	189	6895 MHz	193	6915 MHz	197	6935 MHz
201	6955 MHz	205	6975 MHz	209	6995 MHz	213	7015 MHz
217	7035 MHz	221	7055 MHz	225	7075 MHz	229	7095 MHz
233	7115 MHz	N/A	N/A	N/A	N/A	N/A	N/A
802.11n/ac/ax(40MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
187	6885 MHz	195	6925 MHz	203	6965 MHz	211	7005 MHz
219	7045 MHz	227	7085 MHz	N/A	N/A	N/A	N/A
802.11ac/ax(80MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
183	6865 MHz	199	6945 MHz	215	7025 MHz	N/A	N/A
802.11ac/ax(160MHz) Working Frequency of Each Channel:							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
175	6825 MHz	207	6985 MHz	N/A	N/A	N/A	N/A

Note: The orange form are channels crossing U-NII 7 and U-NII 8.

Note: The general description of the Item(s), antenna information, data rate and channel list in clause 1 are provided and confirmed by the client.

1.6 Power setting in test

	Mode	Channel	Frequency (MHz)	Power Setting Ant 1	Power Setting Ant 2	Power Setting Ant 1+2
2.4GHz WLAN	802.11b 1Mbps	1	2412	18.00	19.00	N/A
		6	2437	13.00	13.00	
		11	2462	18.00	19.00	
	802.11g 6Mbps	1	2412	18.00	19.00	
		6	2437	18.00	18.00	
		11	2462	18.00	18.00	
	802.11n-HT20 MCS0	1	2412	17.00	17.00	17.00
		6	2437	17.00	17.00	17.00
		11	2462	17.00	17.00	17.00
	802.11n-HT40 MCS0	3	2422	14.00	14.00	14.00
		6	2437	14.00	14.00	14.00
		9	2452	14.00	14.00	14.00
	802.11ac-HE20 MCS0	1	2412	17.00	17.00	17.00
		6	2437	17.00	17.00	17.00
		11	2462	17.00	17.00	17.00
	802.11ac-HE40 MCS0	3	2422	14.00	14.00	14.00
		6	2437	14.00	14.00	14.00
		9	2452	14.00	14.00	14.00
	802.11ax-HE20 MCS0	1	2412	16.00	16.00	16.00
		6	2437	16.00	16.00	16.00
		11	2462	16.00	16.00	16.00
	802.11ax-HE40 MCS0	3	2422	14.00	14.00	14.00
		6	2437	14.00	14.00	14.00
		9	2452	14.00	14.00	14.00
5GHz WLAN	Mode	Channel	Frequency (MHz)	Power Setting Ant 1	Power Setting Ant 2	Power Setting Ant 1+2
	802.11a 6Mbps	36	5180	22.00	18.00	N/A
		44	5220	22.00	18.00	
		48	5240	22.00	18.00	

		52	5260	22.00	18.00	
		60	5300	22.00	18.00	
		64	5320	19.00	18.00	
		100	5500	19.00	19.00	
		116	5580	19.00	19.00	
		140	5700	19.00	19.00	
		149	5745	20.00	19.00	
		157	5785	20.00	19.00	
		165	5825	20.00	19.00	
	802.11n-HT20 MCS0	36	5180	20.00	19.00	19.00
		44	5220	20.00	20.00	19.00
		48	5240	20.00	18.00	18.00
		52	5260	20.00	19.00	18.00
		60	5300	20.00	19.00	18.00
		64	5320	19.00	18.00	18.00
		100	5500	19.00	19.00	19.00
		116	5580	19.00	19.00	19.00
		140	5700	19.00	19.00	18.00
		149	5745	20.00	19.00	17.00
		157	5785	20.00	19.00	16.00
		165	5825	20.00	19.00	16.00
	802.11n-HT40 MCS0	38	5190	19.00	19.00	19.00
		46	5230	20.00	18.00	18.00
		54	5270	20.00	19.00	18.00
		62	5310	17.00	17.00	17.00
		102	5510	18.00	18.00	18.00
		118	5590	20.00	19.00	18.00
		134	5670	20.00	20.00	19.00
		151	5755	20.00	19.00	19.00
		159	5795	20.00	19.00	19.00
	802.11ac-VHT20 MCS0	36	5180	20.00	20.00	19.00
		44	5220	20.00	20.00	19.00
		48	5240	20.00	18.00	18.00
		52	5260	20.00	19.00	18.00
		60	5300	20.00	19.00	18.00

		64	5320	19.00	18.00	18.00
		100	5500	20.00	19.00	19.00
		116	5580	20.00	19.00	19.00
		140	5700	20.00	21.00	18.00
		149	5745	20.00	19.00	17.00
		157	5785	20.00	19.00	16.00
		165	5825	20.00	19.00	16.00
	802.11ac-VHT40 MCS0	38	5190	19.00	19.00	19.00
		46	5230	20.00	18.00	18.00
		54	5270	20.00	19.00	18.00
		62	5310	17.00	17.00	17.00
		102	5510	18.00	18.00	18.00
		118	5590	20.00	19.00	18.00
		134	5670	20.00	20.00	19.00
		151	5755	20.00	19.00	19.00
		159	5795	20.00	19.00	19.00
	802.11ac-VHT80 MCS0	42	5210	17.00	17.00	18.00
		58	5290	17.00	17.00	18.00
		106	5530	16.00	16.00	16.00
		112	5610	20.00	19.00	19.00
		155	5775	20.00	19.00	19.00
	802.11ac-VHT160 MCS0	50	5250	16.00	16.00	16.00
		114	5570	16.00	16.00	16.00
	802.11ax-HE20 MCS0	36	5180	20.00	19.00	19.00
		44	5220	20.00	20.00	19.00
		48	5240	20.00	18.00	18.00
		52	5260	20.00	19.00	18.00
		60	5300	20.00	19.00	18.00
		64	5320	19.00	18.00	18.00
		100	5500	20.00	19.00	19.00
		116	5580	20.00	19.00	19.00
		140	5700	21.00	21.00	18.00
		149	5745	20.00	19.00	17.00
		157	5785	20.00	19.00	16.00
		165	5825	16.00	19.00	16.00

	802.11ax-HE40 MCS0	38	5190	19.00	19.00	19.00
		46	5230	20.00	18.00	18.00
		54	5270	20.00	19.00	18.00
		62	5310	17.00	17.00	17.00
		102	5510	18.00	18.00	18.00
		118	5590	20.00	19.00	18.00
		134	5670	20.00	20.00	19.00
		151	5755	20.00	19.00	19.00
		159	5795	20.00	19.00	19.00
	802.11ax-HE80 MCS0	42	5210	17.00	17.00	17.00
		58	5290	17.00	17.00	17.00
		106	5530	16.00	16.00	16.00
		112	5610	20.00	19.00	19.00
		155	5775	20.00	19.00	19.00
	802.11ax-HE160 MCS0	50	5250	16.00	16.00	16.00
		114	5570	16.00	16.00	16.00
WiFi 6E	Mode	Channel	Frequency (MHz)	Power Setting Ant 1	Power Setting Ant 2	Power Setting Ant 1+2
	802.11ax-HE20 MCS0	1	5955	10.00	8.00	7.00
		45	6175	8.00	7.00	5.00
		93	6415	9.00	10.00	7.00
		97	6435	8.00	9.00	6.00
		105	6475	9.00	10.00	7.00
		113	6515	9.00	10.00	7.00
		117	6535	9.00	10.00	7.00
		149	6695	8.00	10.00	5.00
		181	6855	7.00	3.00	1.00
		185	6875	5.00	2.00	1.00
		189	6895	6.00	3.00	1.00
		209	6995	6.00	4.00	1.00
		233	7115	7.00	7.00	4.00
	802.11ax-HE40 MCS0	3	5965	13.00	11.00	9.00
		43	6165	11.00	10.00	7.00
		91	6405	12.00	13.00	9.00
		99	6445	11.00	12.00	9.00

		107	6485	12.00	13.00	9.00
		115	6525	12.00	13.00	9.00
		123	6565	11.00	13.00	9.00
		147	6685	10.00	12.00	8.00
		179	6845	9.00	5.00	4.00
		187	6885	7.00	4.00	3.00
		198	6925	7.00	4.00	3.00
		203	6965	7.00	4.00	3.00
		227	7085	8.00	8.00	5.00
	802.11ax-HE80 MCS0	7	5985	13.00	11.00	9.00
		39	6145	11.00	10.00	8.00
		87	6385	12.00	11.00	9.00
		103	6465	12.00	12.00	9.00
		119	6545	12.00	13.00	9.00
		135	6625	11.00	13.00	9.00
		151	6705	10.00	11.00	7.00
		167	6785	10.00	8.00	6.00
		183	6865	8.00	5.00	4.00
		199	6945	7.00	4.00	3.00
		215	7025	8.00	5.00	4.00
	802.11ax-HE160 MCS0	15	6025	12.00	11.00	8.00
		47	6185	11.00	10.00	8.00
		79	6345	12.00	11.00	8.00
		111	6505	12.00	13.00	9.00
		143	6665	10.00	12.00	8.00
		175	6825	9.00	6.00	4.00
		207	6985	8.00	5.00	4.00

Mode	Channel	Frequency (MHz)	Power Setting
BR / EDR	CH 00	2402	11.00
	CH 39	2441	11.00
	CH 78	2480	11.00

Mode	Channel	Frequency (MHz)	Power Setting
LE	CH 00	2402	Default

	CH 19	2440	Default
	CH 39	2480	Default

2 INTRODUCTION

2.1 SAR Definition

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dw) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (p).The equation description is as below:

$$SAR = \frac{d}{dt}\left(\frac{dW}{dm}\right) = \frac{d}{dt}\left(\frac{dW}{\rho dv}\right)$$

SAR measurement can be related to the electrical field in the tissue by

$$SAR = \frac{\sigma |E|^2}{\rho}$$

Where:

σ= conductivity of the tissue (S/m)

p= mass density of the tissue (kg/m3)

E = RMS electric field strength (V/m)

SAR is expressed in units of Watts per kilogram (W/kg).

2.2 Power Density Definition

The power density for an electromagnetic field represents the rate of energy transfer per unit area. The local power density (i.e. Poynting vector) at a given spatial point is deduced from electromagnetic fields by the following formula:

$$S = \frac{1}{2}\mathrm{Re}\{E \times H^*\} \cdot \vec{n}$$

Where: E is the complex electric field peak phasor and H is the complex conjugate magnetic field peak phasor.

The spatial-average power density distribution on the evaluation surface is determined per the IEC TR 63170. The spatial area, Ais specified by the applicable exposure limit or regulatory requirements. The circular shape was used.

$$S_{av} = \frac{1}{2A}\Re\left(\int E \times H^* \cdot \hat{n} dA\right)$$

2.3 RF Exposure Limits

Table 1 Safety Limits for Controlled / Uncontrolled Environment Exposure

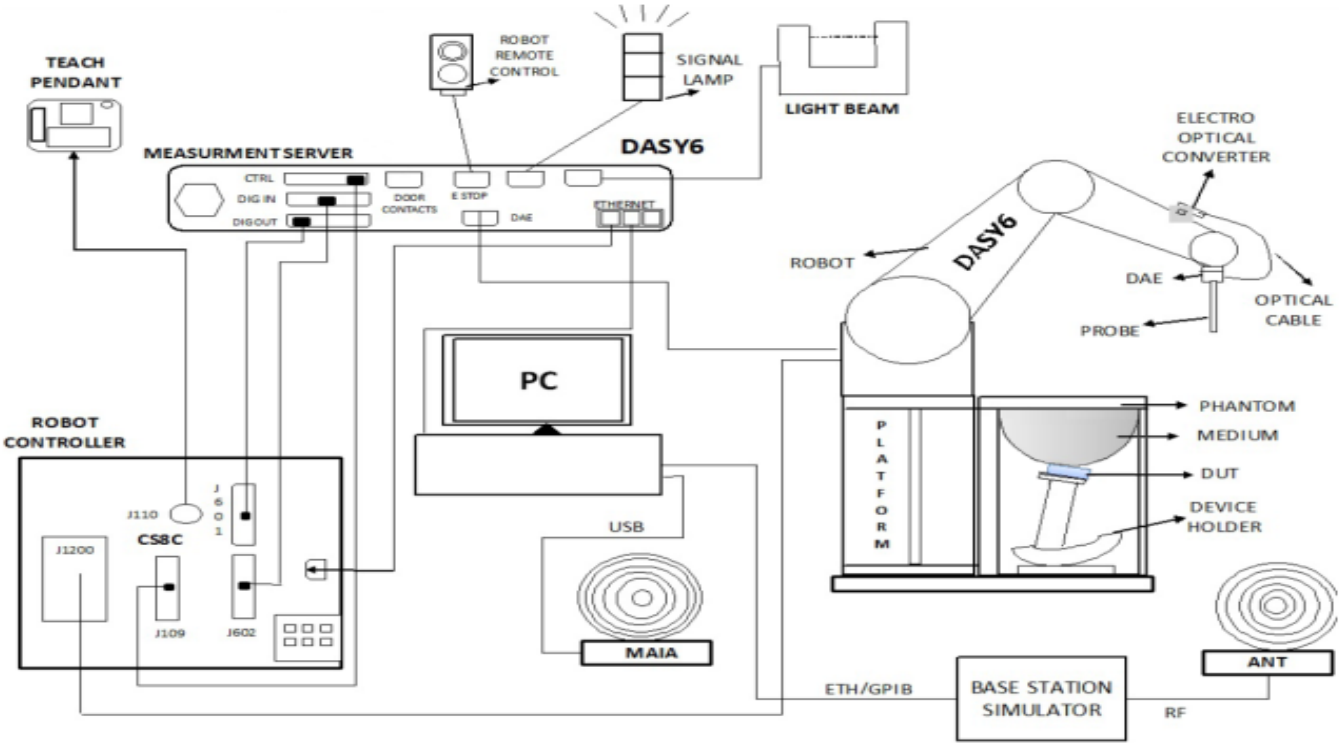
SAR Exposure Limit		
	General Population / Uncontrolled Exposure [1] (W/kg)	Occupational / Controlled Exposure [2] (W/kg)
Spatial Peak SAR [3] (head or Body)	1.60	8.00
Spatial Peak SAR [4] (Whole Body)	0.08	0.40
Spatial Peak SAR [5] (Hands / Feet / Ankle / Wrist)	4.00	20.00
Power Density Exposure Limit (1,500 - 100,000 MHz)		
	General Population / Uncontrolled Exposure (mW/cm^2) [6]	Occupational / Controlled Exposure (mW/cm^2)
Power Density (S)	1.0	5.0

Notes:

1. **General Population / Uncontrolled Environments** are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.
2. **Occupational / Controlled Environments** are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation).
3. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
4. The Spatial Average value of the SAR averaged over the whole body.
5. The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
6. 1 mW/cm^2 = 10 W/m^2,

3 SAR MEASUREMENT SYSTEM

3.1 DASY6 SAR System Description

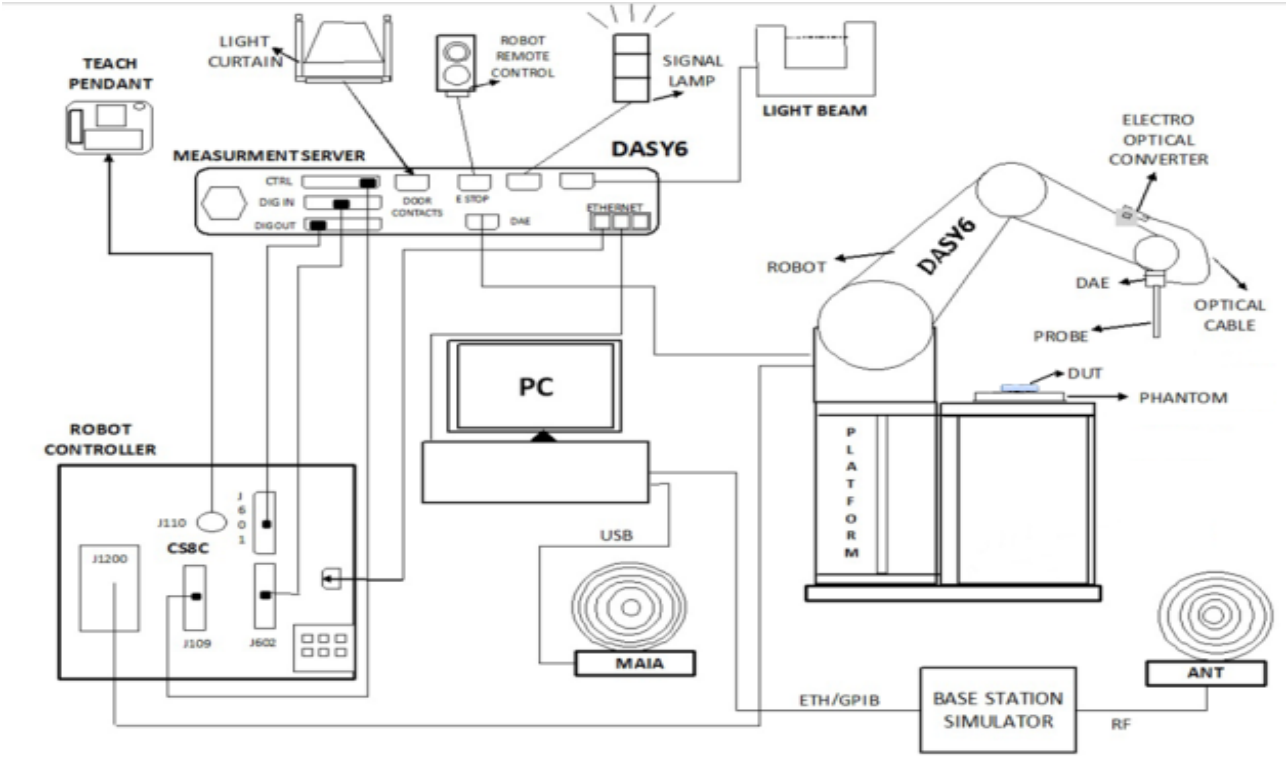


The DASY6 system for performing compliance tests consists of the following items:
1. A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
3. The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
4. The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
5. A computer running Windows 11 and the DASY6 software.
6. Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
7. The phantom, the device holder and other accessories according to the targeted measurement.

3.2 DASY6 Power Density System Description

DASY6 system

Power density measurements for mmWave frequencies were performed using SPEAG DASY6 with cDASY6 5G module. The DASY6 included a high precision robotics system (Staubli), robot controller, desktop computer, near-field probe, probe alignment sensor, and the 5G phantom cover.



EUmmWVx probe:

The EUmmWVx probe is based on the pseudo-vector probe design, which not only measures the field magnitude but also derives its polarization ellipse. The design entails two small0.8mm dipole sensors mechanically protected by high-density foam, printed on both sides of a0.9mm wide and 0.12mm thick glass substrate. The body of the probe is specifically constructed to minimize distortion by the scattered fields. The probe consist of two sensors with different angles (1 and 2) arranged in the same plane in the probe axis. Three or more measurements of the two sensors are taken for different probe rotational angles to derive the amplitude and polarization information. The probe design allows measurements at distances as small as 2mm from the sensors to the surface of the device under test (DuT). The typical sensor to probe tip distance is 1.5 mm. The exact distance is calibrated.2. A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted.

2.1.1. Applications

Predefined procedures and evaluations for automated compliance testing with all worldwide standards, e.g., IEC/IEEE 62209-1528, EN 50360, EN 50383, EN62311 and others.

2.1.2. Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures points and step size follow as below. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution. The measure settings are referred to KDB 865664 D01v01r04:

			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 mm ± 1 mm	½·δ·ln(2) mm ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx_{Area}, Δy_{Area}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	Graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$ mm	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details. * When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB Publication 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

2.1.4. Uncertainty of Inter-/Extrapolation and Averaging

In order to evaluate the uncertainty of the interpolation, extrapolation and averaged SAR calculation algorithms of the Postprocessor, DASY6 allows the generation of measurement grids which are artificially predefined by analytically based test functions. Therefore, the grids of area scans and zoom scans can be filled with uncertainty test data, according to the SAR benchmark functions of IEC/IEEE 62209-1528.The three analytical functions shown in equations as below are used to describe the possible range of the expected SAR distributions for the tested handsets. The field gradients are covered by the spatially flat distribution f1, the spatially steep distribution f3 and f2 accounts for H-field cancellation on the phantom/tissue surface.

$$f_1(x,y,z) = Ae^{-\frac{z}{2a}}\cos^2\left(\frac{\pi}{2}\frac{\sqrt{x'^2+y'^2}}{5a}\right)$$

$$f_2(x,y,z) = Ae^{-\frac{z}{a}}\frac{a^2}{a^2+x'^2}\left(3-e^{-\frac{2z}{a}}\right)\cos^2\left(\frac{\pi}{2}\frac{y'}{3a}\right)$$

$$f_3(x,y,z) = A\frac{a^2}{\frac{a^2}{4}+x'^2+y'^2}\left(e^{-\frac{2z}{a}}+\frac{a^2}{2(a+2z)^2}\right)$$

3.3 DASY6 E-Field Probe

The SAR measurement is conducted with the dosimetric probe manufactured by SPEAG. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency.
SPEAG conducts the probe calibration in compliance with international and national standards (e.g. IEC/IEEE 62209-1528, etc.) under ISO 17025. The calibration data are in Appendix D.

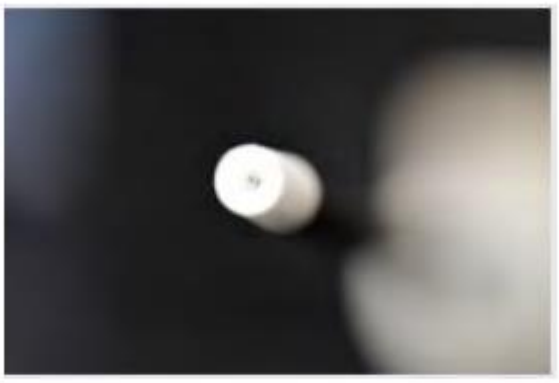
Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Frequency	4 MHz to 10 GHz Linearity: ± 0.2 dB (30 MHz to 10 GHz)
Directivity	±0.1 dB in TSL (rotation around probe axis) ±0.3 dB in TSL (rotation normal to probe axis)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Calibration	ISO/IEC 17025 calibration service available

EX3DV4 E-Field Probe

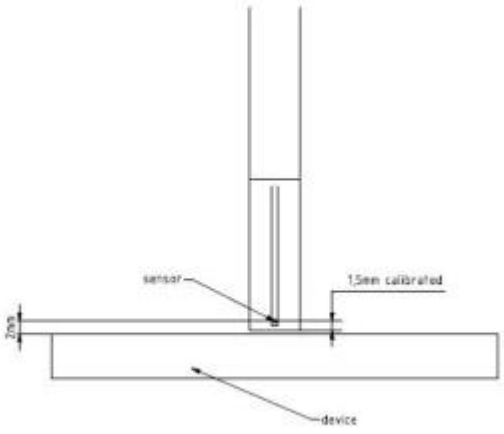
Probe setup on robot

The EUmmWV3 probe is based on the pseudo-vector probe design, which not only measures the field magnitude but also derives its polarization ellipse. This probe concept also has the advantage that the sensor angle errors or distortions of the field by the substrate can be largely nullified by calibration. This is particularly important as, at these very high frequencies, field distortions by the substrate are dependent on the wavelength. It has two dipoles optimally arranged to obtain pseudo-vector information. It has minimum 3 measurements/point, 120° rotated around probe axis. Sensors (0.8 mm length) printed on glass substrate protected by high density foam. Low perturbation of the measured field. Requires positioner which can do accurate probe rotation.

Frequency Range	750 MHz - 110 GHz
Dynamic Range	< 20 V/m - 10'000 V/m with PRE-10 (min < 50 V/m - 3000 V/m)
Position Precision	< 0.2 mm
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: encapsulation 8 mm (internal sensor < 1mm) Distance from probe tip to dipole centers: < 2 mm Sensor displacement to probe's calibration point: < 0.3 mm
Applications	Electric field measurements of 5G devices and other mm-wave transmitters operating above 10 GHz in <2 mm distance from device (free-space) Power density, magnetic field, and far-field analysis using total field reconstruction (cDASY6 5G or ICEy-mmW module required)
compatibility	cDASY6 + 5G-Module SW1.0 and higher



E-Field mm-Wave Probe



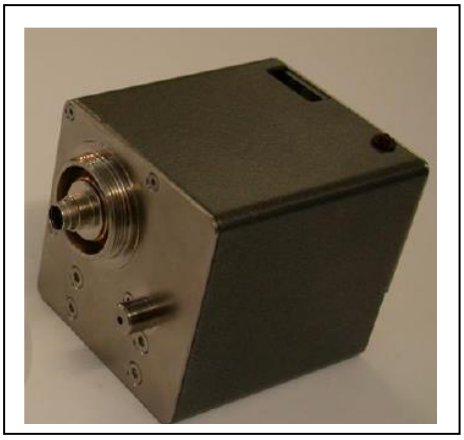
Sensor to DUT Surface

3.4 Boundary Detection Unit and Probe Mounting Device

The DASY probes use a precise connector and an additional holder for the probe, consisting of a plastic tube and a flexible silicon ring to center the probe. The connector at the DAE is flexibly mounted and held in the default position with magnets and springs. Two switching systems in the connector mount detect frontal and lateral probe collisions and trigger the necessary software response.

3.5 DATA Acquisition Electronics (DAE) and Measurement Server

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit.
Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.
The input impedance of the DAE4 is 200M Ohm; the inputs are symmetrical and floating. Common mode rejection is above 80dB.



The DASY6 measurement server is based on a PC/104 CPU board with a 400MHz intel ULV Celeron, 128MB chipdisk and 128MB RAM. The necessary circuits for communication with the DAE electronics box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY6 I/O board, which is directly connected to the PC/104 bus of the CPU board.

3.6 Robot

The DASY6 system uses the high precision robots TX60 XL type out of the newer series from Stäubli SA (France). For the 6-axis controller DASY6 system, the CS8C robot controller version from Stäubli is used.

The XL robot series have many features that are important for our application:

- High precision (repeatability 0.02 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)
- 6-axis controller

3.7 Light Beam Unit

The light beam switch allows automatic "tooling" of the probe. During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip.

The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.

3.8 Device Holder

The DASY6 device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR).
Thus the device needs no repositioning when changing the angles.
The DASY6 device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity εr =3 and loss tangent δ = 0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the mounting device in place of the phone positioned. The extension is fully compatible with the SAM Twin and ELI phantoms.

The DASY6 device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity εr =3 and loss tangent δ = 0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

3.9 SAM Twin Phantom

SAM Twin Phantom

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region where shell thickness increases to 6mm). It has three measurement areas:

- Left head
- Right head
- Flat phantom

The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

ELI Phantom

The SAM phantom is a fiberglass shell phantom with 2mm shell thickness. It has one measurement areas:

- ELI phantom

The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

4 TISSUE SIMULATING LIQUID

4.1 The composition of the tissue simulating liquid

Simulate 600MHz~10000MHz liquid, manufactured by SPEAG

Table F.1 – Suggested recipes for achieving target dielectric properties, 30 MHz to 900 MHz

Frequency (MHz)	30	50		144		450		835	900	
Recipe source number	3	3	2	2	3	2	4	2	2	4
Ingredients (% by weight)										
De-ionized water	48,30	48,30	53,53	55,12	48,30	48,53	56	50,36	50,31	56
Tween 20			44,70	43,31		49,51		48,39	48,34	
Oxidized mineral oil							44			44
Diethylenglycol monohexylether										
Triton X-100										
Diacetin	50,00	50,00			50,00					
DGBE										
NaCl	1,60	1,60	1,77	1,57	1,60	1,96		1,25	1,35	
Additives and salt	0,10	0,10			0,10					
Measured temperature dependence										
Temp. (°C)			21	21		21	20	21	21	20
$\varepsilon_{\text{liquid temp. unc.}}$ (%)	0,8	0,1			0,1	0,1		0,04	0,04	
$\sigma_{\text{liquid temp. unc.}}$ (%)	2,8	2,8			2,6	4,2		1,6	1,6	

Table F.2 – Suggested recipes for achieving target dielectric properties, 1 800 MHz to 10 000 MHz

Frequency (MHz)	1 800		2 450	4 000	5 000	5 200	5 800	6 000	8 000	10 000
Recipe source number	2	4	4	4	4	1	1	4	5	5
Ingredients (% by weight)										
De-ionized water	54,23	56	56	56	56	65,53	65,53	56	67,8	66,0
Tween	45,27								31,1	33,0
Oxidized mineral oil		44	44	44	44			44		
Diethylenglycol monohexylether						17,24	17,24			
Triton X-100						17,24	17,24			
Diacetin										
DGBE										
NaCl	0,50									
Additives and salt										
Measured temperature dependence										
Temp. (°C)	21	20	20	20	20	22	22	20	20	20
$\varepsilon_{\text{liquid temp. unc.}}$ (%)	0,4					1,7	1,8			
$\sigma_{\text{liquid temp. unc.}}$ (%)	2,3					2,7	2,6			

NOTE 1 Multiple columns under a single frequency indicate optional recipes.

NOTE 2 Recipe source numbers: 1 verified by different labs, 2 Reference [59], 3 developed by IT'IS Foundation, 4 developed by IT'IS Foundation, 5 Reference [60].

NOTE 3 The values of $\varepsilon_{\text{liquid temp. unc.}}$ and $\sigma_{\text{liquid temp. unc.}}$ are liquid temperature uncertainties described in O.9.6, based on measurements of the applicable liquid recipes given above. These are not part of the original publications but have been subsequently developed by the project team.

NOTE 4 The recipes at 8 000 MHz and 10 000 MHz are sufficiently broadband that they cover the frequency range of 6 000 MHz to 10 000 MHz within a tolerance of ±10 % for permittivity and conductivity.

4.2 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using DASY6 Dielectric Probe Kit and Agilent Vector Network Analyzer E5071C

Head Tissue Simulant Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε_r	σ [s/m]	
2450 MHz	Reference result ± 5% window	39.2 37.24 to 41.16	1.80 1.71 to 1.89	N/A
	25-08-2024	38.55	1.86	22.5
2450 MHz	Reference result ± 5% window	39.2 37.24 to 41.16	1.80 1.71 to 1.89	N/A
	29-10-2024	41.0	1.82	22.5
5250 MHz	Reference result ± 5% window	35.9 34.11 to 37.70	4.71 4.47 to 4.95	N/A
	26-08-2024	36.38	4.60	22.5
5600 MHz	Reference result ± 5% window	35.5 33.73 to 37.28	5.07 4.82 to 5.32	N/A
	27-08-2024	35.81	4.99	22.5
5750 MHz	Reference result ± 5% window	35.4 33.63 to 37.17	5.22 4.96 to 5.48	N/A
	28-08-2024	35.55	5.17	22.5
5800 MHz	Reference result ± 5% window	35.3 33.84 to 37.07	5.27 5.01 to 5.53	N/A
	29-10-2024	35.30	5.23	22.5
6500 MHz	Reference result ± 5% window	34.5 32.78 to 36.23	6.07 5.77 to 6.37	N/A
	29-08-2024	34.0	6.08	22.5

Head Tissue Simulant Measurement							
Frequency [MHz]	Dielectric Parameters						Tissue Temp. [°C]
	Conductivity σ	Permittivity ε_r	Conductivity Target σ	Permittivity Target ε_r	Delta (σ) %	Delta (ε_r) %	
2412	1.82	38.82	1.77	39.27	2.82	-1.22	22.5
2437	1.84	38.76	1.79	39.22	2.79	-1.12	22.5
2462	1.85	38.72	1.81	39.18	2.21	-1.22	22.5
2402	1.79	38.85	1.76	39.29	1.70	-1.15	22.5
2441	1.85	38.78	1.79	39.22	3.35	-1.07	22.5
2480	1.89	38.72	1.83	39.15	3.28	-1.22	22.5
5260	4.75	35.48	4.72	35.94	0.64	-1.17	22.5
5270	4.76	35.47	4.73	35.93	0.63	-1.20	22.5
5300	4.79	35.44	4.76	35.90	0.63	-1.28	22.5
5310	4.81	35.43	4.77	35.89	0.84	-1.31	22.5
5320	4.85	35.42	4.78	35.87	1.46	-1.34	22.5
5500	5.01	35.19	4.97	35.63	0.80	-1.15	22.5
5510	5.04	35.16	4.98	35.62	1.20	-1.24	22.5
5580	5.10	35.07	5.05	35.53	0.99	-1.21	22.5
5590	5.11	35.04	5.06	35.51	0.99	-1.30	22.5
5670	5.18	34.99	5.14	35.43	0.78	-1.16	22.5
5700	5.21	34.97	5.17	35.40	0.77	-1.21	22.5
5660	5.17	34.98	5.13	35.44	0.78	-1.19	22.5
5670	5.18	35.00	5.14	35.43	0.78	-1.13	22.5
5745	5.26	34.91	5.22	35.36	0.77	-1.38	22.5
5775	5.28	34.86	5.25	35.33	0.57	-1.25	22.5
5785	5.29	34.87	5.26	35.32	0.57	-1.22	22.5
5795	5.32	34.84	5.27	35.31	0.95	-1.30	22.5
5825	5.35	34.82	5.30	35.28	0.94	-1.36	22.5
6025	5.56	35.08	5.51	35.07	0.91	-0.06	22.5
6185	5.76	34.83	5.70	34.88	1.05	-0.20	22.5
6345	5.91	34.67	5.89	34.69	0.34	-0.09	22.5
6505	6.12	34.39	6.08	34.49	0.66	-0.32	22.5
6665	6.29	34.27	6.26	34.30	0.48	-0.09	22.5
6825	6.48	34.12	6.45	34.11	0.47	0.06	22.5
6985	6.65	33.95	6.63	33.92	0.30	0.15	22.5

Note:

1. The delta (ε_r) and (σ) are within ±5%, delta SAR value was not calculated in this report.
2. As per IEC/IEEE 62209-1528 Annex F, the SAR correction factor is given by:

   $\Delta SAR = c_\varepsilon \Delta\varepsilon_r + c_\sigma \Delta\sigma$

   For the1g average SAR Cε and Cσ are given by:

   Cε = -7.854x10^-4f^3 + 9.402x10^-3f^2 – 2.742x10^-2f – 0.2026

   Cσ = 9.804x10^-3f^3 – 8.661x10^-2f^2 + 2.981x10^-2f + 0.7829

   Where f is the frequency in GHz.

Head Tissue Simulant Measurement						
Frequency [MHz]	Dielectric Parameters					Tissue Temp. [°C]
	Delta (σ) %	Delta (ε_r) %	Cσ	Cε	Delta SAR%	
2412	2.82	-1.22	0.49	-0.23	1.65	22.5
2437	2.79	-1.12	0.48	-0.22	1.60	22.5
2462	2.21	-1.22	0.48	-0.22	1.33	22.5
2402	1.70	-1.15	0.49	-0.23	1.09	22.5
2441	3.35	-1.07	0.48	-0.22	1.86	22.5
2480	3.28	-1.22	0.47	-0.22	1.83	22.5
5260	0.64	-1.17	-0.03	-0.20	0.22	22.5
5270	0.63	-1.20	-0.03	-0.20	0.22	22.5
5300	0.63	-1.28	-0.03	-0.20	0.24	22.5
5310	0.84	-1.31	-0.03	-0.20	0.24	22.5
5320	1.46	-1.34	-0.03	-0.20	0.22	22.5
5500	0.80	-1.15	-0.04	-0.20	0.20	22.5
5510	1.20	-1.24	-0.04	-0.20	0.20	22.5
5580	0.99	-1.21	-0.04	-0.20	0.20	22.5
5590	0.99	-1.30	-0.04	-0.20	0.21	22.5
5670	0.78	-1.16	-0.05	-0.20	0.20	22.5
5700	0.77	-1.21	-0.05	-0.20	0.21	22.5
5660	0.78	-1.19	-0.05	-0.20	0.20	22.5
5670	0.78	-1.13	-0.05	-0.20	0.19	22.5
5745	0.77	-1.38	-0.05	-0.20	0.24	22.5
5775	0.57	-1.25	-0.05	-0.20	0.22	22.5
5785	0.57	-1.22	-0.05	-0.20	0.22	22.5
5795	0.95	-1.30	-0.04	-0.20	0.22	22.5
5825	0.94	-1.36	-0.04	-0.20	0.23	22.5
6025	0.91	-0.06	0.75	-0.22	0.70	22.5
6185	1.05	-0.20	0.75	-0.22	0.84	22.5
6345	0.34	-0.09	0.75	-0.22	0.27	22.5
6505	0.66	-0.32	0.60	-0.23	0.47	22.5
6665	0.48	-0.09	0.60	-0.23	0.31	22.5
6825	0.47	0.06	0.59	-0.23	0.26	22.5
6985	0.30	0.15	0.60	-0.23	0.15	22.5

Note: The ΔSAR refers to the percent change in SAR relative to the percent change in dielectric properties versus the target values. A negative ΔSAR would translate to a lower measured SAR value than what would be measured if using dielectric properties equal to the target values. A positive ΔSAR would translate to a higher measured SAR value than what would be measured if using dielectric properties equal to the target values. SAR correction shall not be made when the ΔSAR has a positive sign to provide a conservative SAR value. The SAR is only corrected when ΔSAR has a negative sign.

4.3 Tissue Dielectric Parameters for Head Phantoms

The head tissue dielectric parameters recommended by the IEC/IEEE 62209-1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in IEC/IEEE 62209-1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in IEC/IEEE 62209-1528.

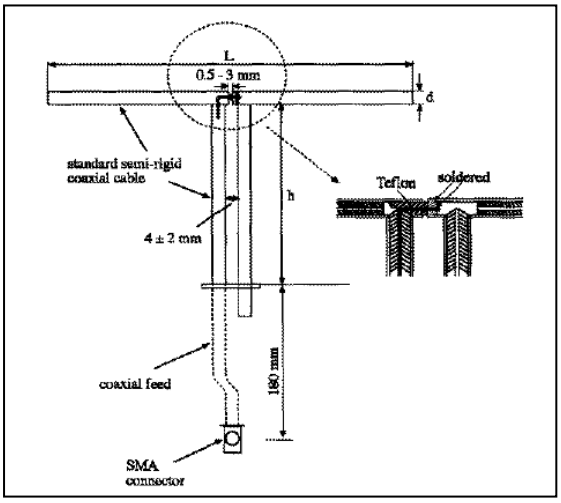
Target Frequency	Head	
(MHz)	Relative Permittivity (ε_r)	Conductivity (σ)
150	52.30	0.76
300	45.30	0.87
450	43.50	0.87
750	41.90	0.89
835	41.50	0.90
900	41.50	0.97
915	41.50	0.98
1450	40.50	1.20
1610	40.30	1.29
1800 – 2000	40.00	1.40
2450	39.20	1.80
2600	39.00	1.96
3000	38.50	2.40
5800	35.30	5.07
6000	35.01	5.48
6500	34.50	6.07
7000	33.90	6.65

(ε_r = relative permittivity, σ = conductivity and ρ = 1000 kg/m^3)

5 SAR MEASUREMENT PROCEDURE

5.1 SAR System Validation

4.1.1. Validation Dipoles



The dipoles used is based on the IEC/IEEE 62209-1528 standard, and is complied with mechanical and electrical specifications in line with the requirements of both IEEE and FCC Supplement C. the table below provides details for the mechanical and electrical specifications for the dipoles.

Frequency	L (mm)	h (mm)	d (mm)
2450MHz	51.5	30.4	3.6
5000-6000MHz	20.6	40.3	3.6
6000-8000MHz	14.5	35.1	2.2

Note: The L, h, and d, dimensions shall be within +2 % tolerance.

4.1.2. Validation Result

System Performance Check at 2450MHz, 5250MHz, 5600MHz, 5750MHz, 6500MHz				
Validation Dipole: D2450V2, SN: 839				
2450 MHz	Reference result ± 10% window	52.60 47.34 to 57.86	24.30 21.87 to 26.73	N/A
	25-08-2024	53.20	24.88	22.0
Validation Dipole: D5GHzV2, SN: 1078				
5250 MHz	Reference result ± 10% window	76.00 68.40 to 83.60	21.60 19.44 to 23.76	N/A
	26-08-2024	82.50	23.70	22.0
Validation Dipole: D5GHzV2, SN: 1078				
5600 MHz	Reference result ± 10% window	79.50 71.55 to 87.45	22.40 20.16 to 24.64	N/A
	27-08-2024	81.00	22.90	22.0
Validation Dipole: D5GHzV2, SN: 1078				
5750 MHz	Reference result ± 10% window	75.70 68.13 to 83.27	21.30 19.17 to 23.43	N/A
	28-08-2024	80.60	22.90	22.0
Validation Dipole: D6.5GHzV2, SN: 1084				
6500 MHz	Reference result ± 10% window	29.3 26.37 to 32.23	5.41 4.87 to 5.95	N/A
	29-08-2024	31.6	5.44	22.0
Note: All SAR values are normalized to 1W forward power.				

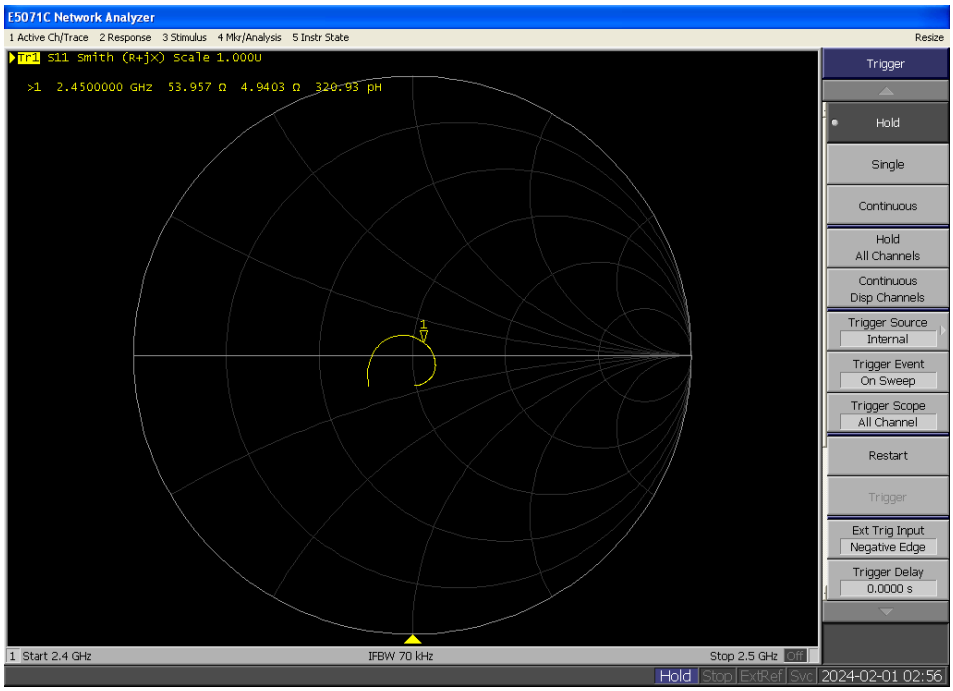
System Performance Check at 10 GHz					
Frequency [MHz]	Description	Prad (mW)	Max E-field (V/m)	Avg Power Density 1cm^2 Total PD (W/m^2)	Avg Power Density 4cm^2 Total PD (W/m^2)
10 GHz	Reference result ± 10% window	86.1 77.5 to 94.7	147 132 to 162	54.6 49.1 to 60.1	50.1 45.1 to 55.1
	30-08-2024	86.1	151	56.2	52.8

System Performance Check at 2450MHz, 5800MHz				
Validation Dipole: D2450V2, SN: 1076 Left Check (Top C0)				
2450 MHz	Reference result ± 10% window	55.20 49.68 to 60.72	25.70 23.13 to 28.27	N/A
	29-10-2024	51.92	24.36	22.0
Validation Dipole: D2450V2, SN: 1076 Right Check (Top C0)				
2450 MHz	Reference result ± 10% window	55.20 49.68 to 60.72	25.70 23.13 to 28.27	N/A
	29-10-2024	52.92	25.04	22.0
Validation Dipole: D5GHzV2, SN: 1348, Left Check (Top C0)				
5750 MHz	Reference result ± 10% window	85.40 76.86 to 93.94	24.40 21.96 to 26.84	N/A
	29-10-2024	81.30	23.90	22.0
Validation Dipole: D5GHzV2, SN: 1348, Right Check (Top C0)				
5750 MHz	Reference result ± 10% window	85.40 76.86 to 93.94	24.40 21.96 to 26.84	N/A
	29-10-2024	82.20	24.10	22.0
Note 1: All SAR values are normalized to 1W forward power. Note 2: The EUT antenna is located at the bracket above the cheek, which is located closest to the C point, and we evaluated and verified all the calibration points, and the C point is the worst.				

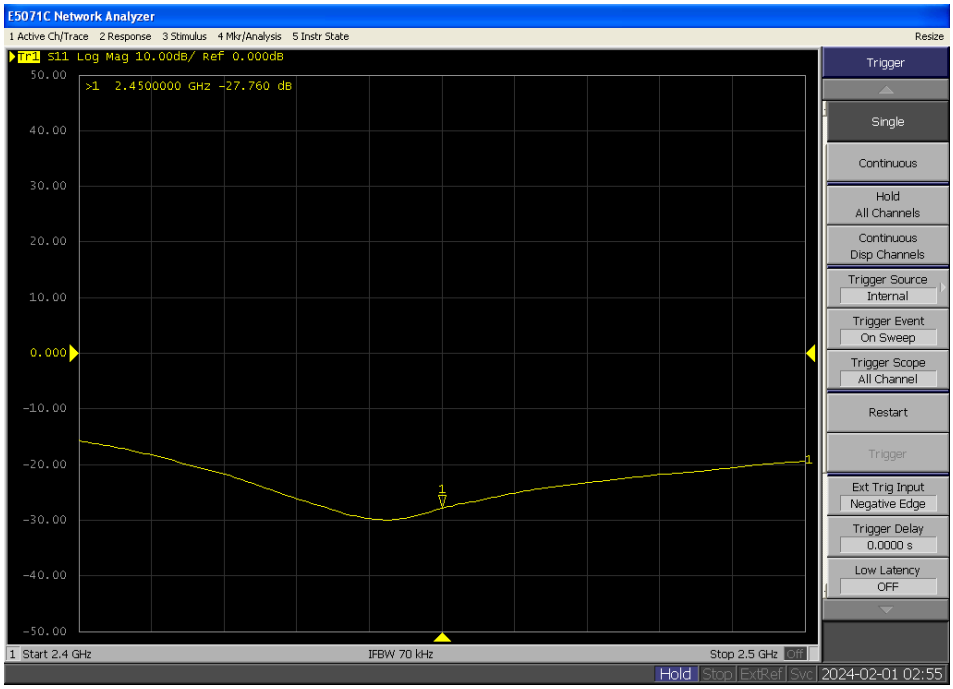
4.1.3. Dipole Calibration Data

Impedance Plot for D2450V2

Calibrated impedance: 54.028 Ω; Measured impedance: 53.957 Ω (within 5Ω)

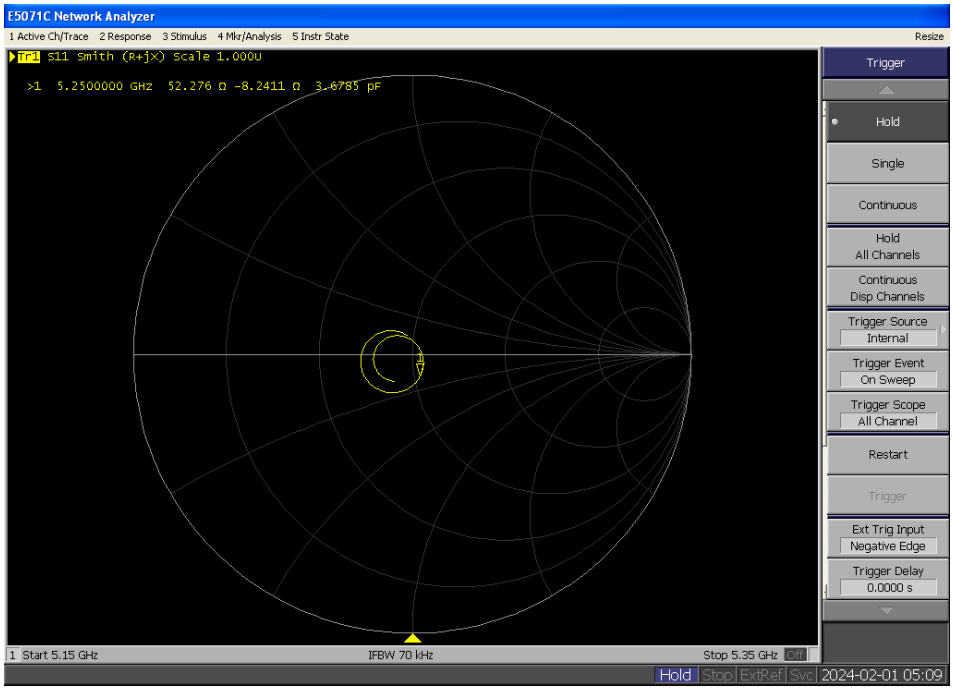


Calibrated return loss: -25.693 dB; Measured impedance: -27.760 dB (within 20%)

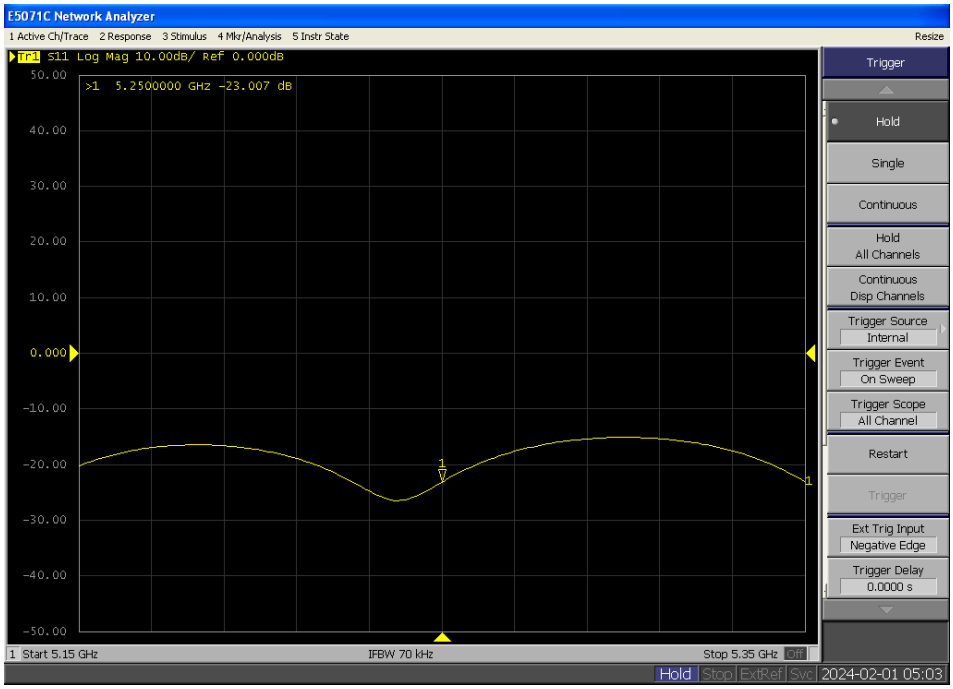


Impedance Plot for D5250V2

Calibrated impedance: 52.316 Ω; Measured impedance: 52.276 Ω (within 5Ω)

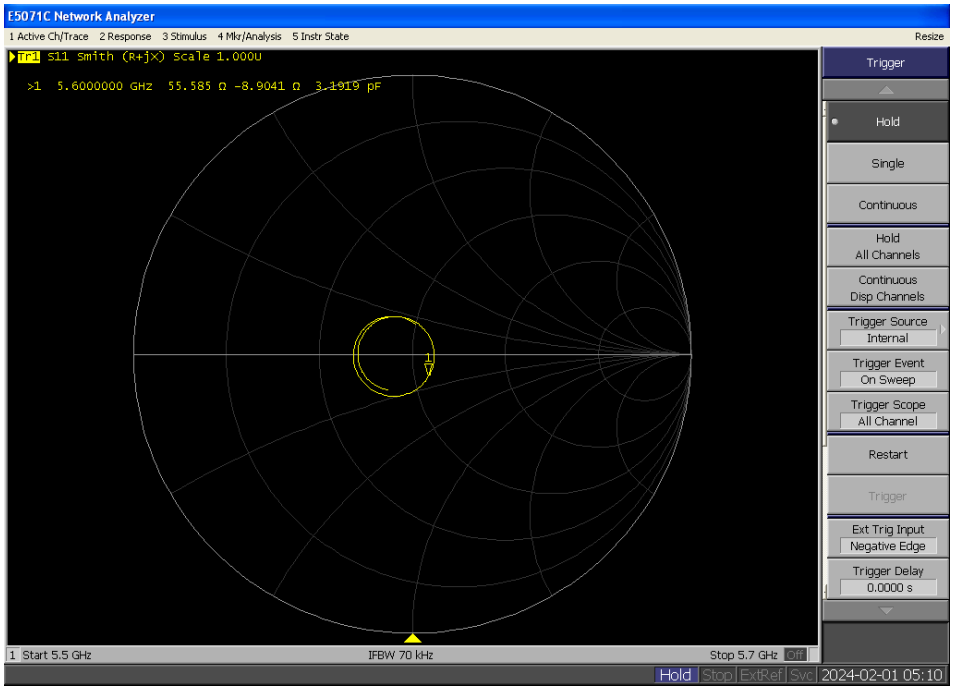


Calibrated return loss: -22.294 dB; Measured impedance: -23.007 dB (within 20%)

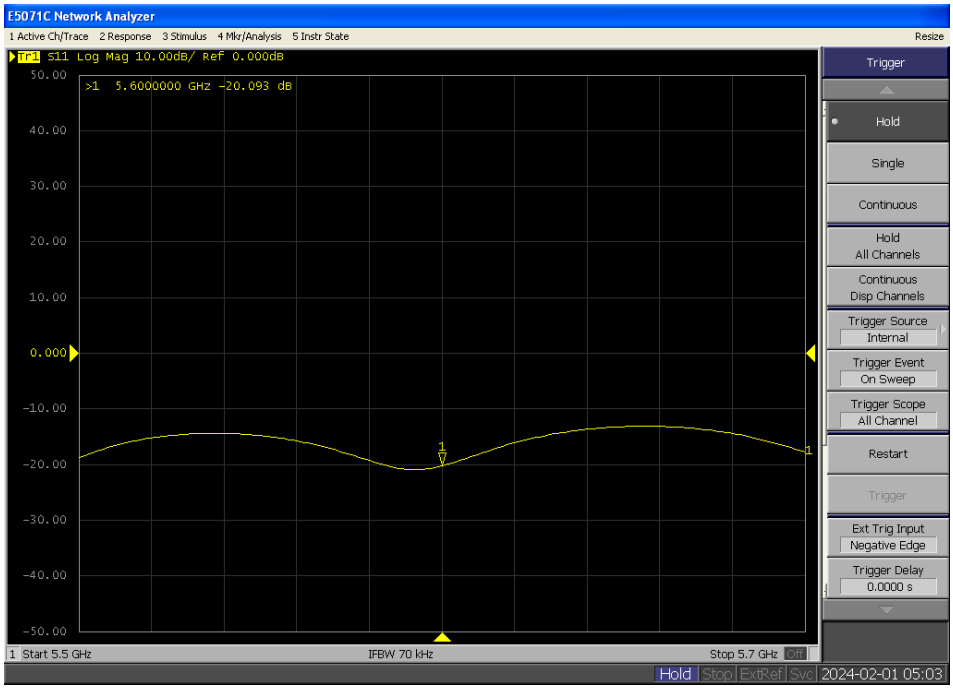


Impedance Plot for D5600V2

Calibrated impedance: 58.284 Ω; Measured impedance: 55.585 Ω (within 5Ω)

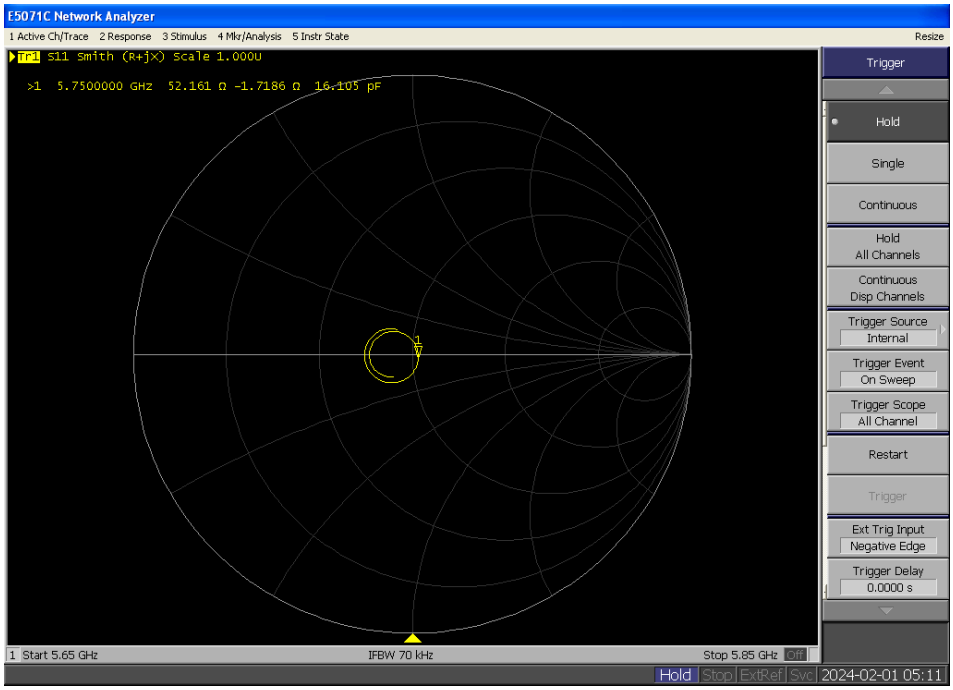


Calibrated return loss: -21.282 dB; Measured impedance: -20.093 dB (within 20%)

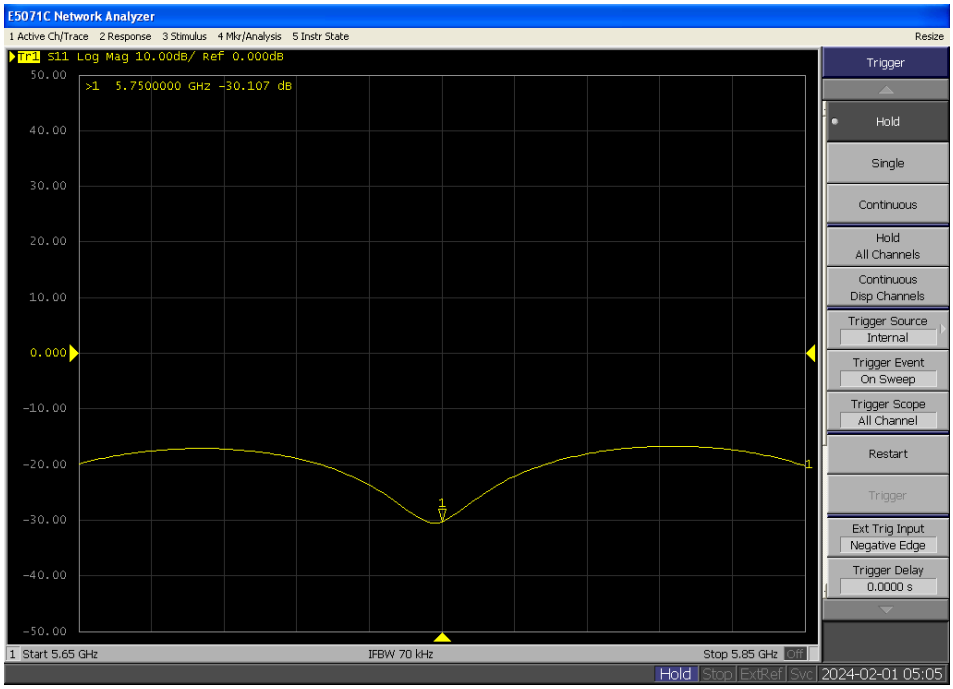


Impedance Plot for D5750V2

Calibrated impedance: 53.508 Ω; Measured impedance: 52.161 Ω (within 5Ω)

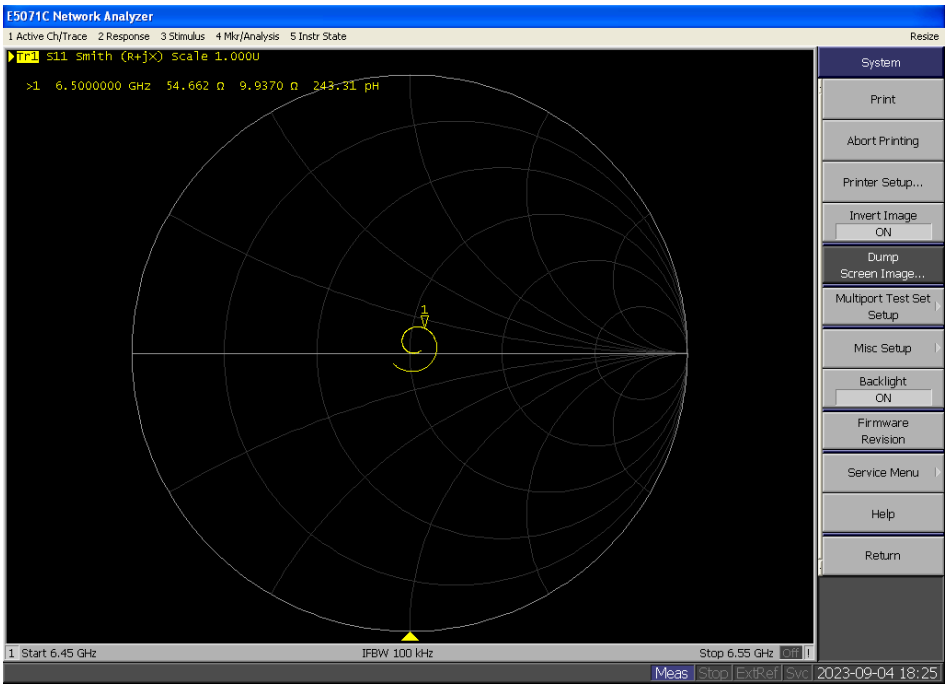


Calibrated return loss: -29.164 dB; Measured impedance: -30.107 dB (within 20%)

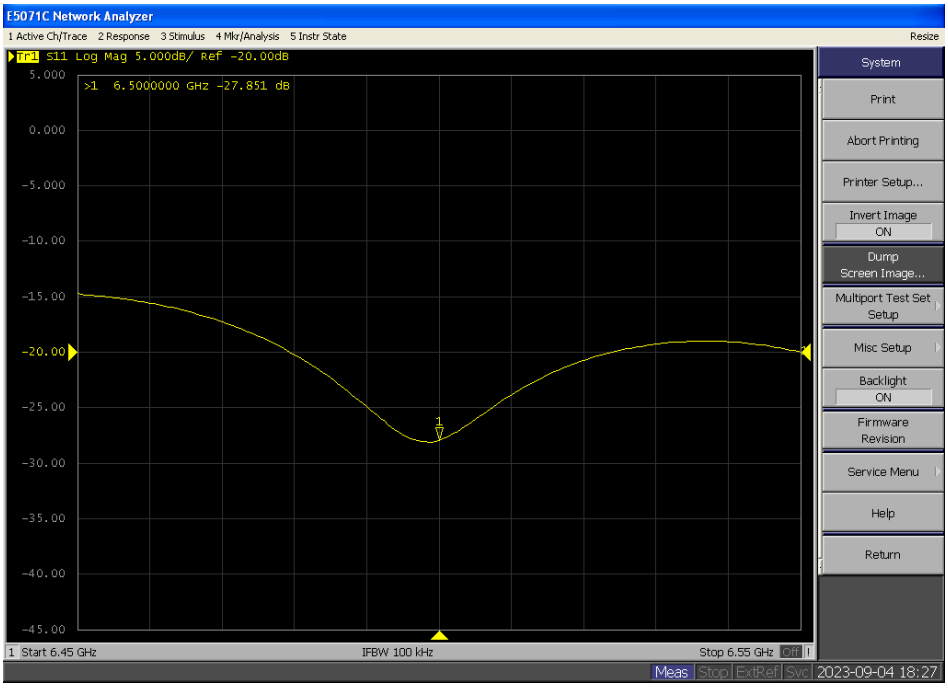


Impedance Plot for D6.5GHzV2

Calibrated impedance: 52.497 Ω; Measured impedance: 54.662 Ω (within 5Ω)



Calibrated return loss: -27.076 dB; Measured impedance: -27.851 dB (within 20%)



Note: Per KDB 450824 D02 requirements for dipole calibration, DEKRA Lab has adopted three years calibration interval. On annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole;

2. System validation with specific dipole is within 10% of calibrated value;

3. Return-loss is within 20% of calibrated measurement (Show above);
4. Impedance is within 5Ω of calibrated measurement (Show above).

6 TEST EQUIPMENT LIST

Instrument	Manufacturer	Model No.	Serial No.	Cal.Date	Next Cal. Date	Firmware Version	Software Version
Stäubli Robot TX60L	Stäubli	TX60L	F10/5C90A1/A/01	N/A	N/A	N/A	N/A
Controller	Stäubli	SP1	S-0034	N/A	N/A	N/A	N/A
Dipole Validation Kits	Speag	D2450V2	839	2022.04.01	2025.03.31	N/A	N/A
Dipole Validation Kits	Speag	D5GHzV2	1078	2022.03.28	2025.03.27	N/A	N/A
Dipole Validation Kits	Speag	D2450V2	1076	2024.10.16	2027.10.15	N/A	N/A
Dipole Validation Kits	Speag	D5GHzV2	1348	2024.10.04	2027.10.03	N/A	N/A
Dipole Validation Kits	Speag	D6.5GHzV2	1084	2022.09.12	2025.09.11	N/A	N/A
Dipole Validation Kits	Speag	5G Verification Source 10 GHz	1055	2022.09.09	2025.09.08	N/A	N/A
SAM Face Down	Speag	SAM	TP-1054	N/A	N/A	N/A	N/A
mmWave Phantom	Speag	mmWave	1108	N/A	N/A	N/A	N/A
Device Holder	Speag	SD 000 H01 HA	N/A	N/A	N/A	N/A	N/A
Data Acquisition Electronic	Speag	DAE4	1220	2024.03.22	2025.03.21	N/A	N/A
E-Field Probe	Speag	EX3DV4	7761	2023.09.13	2024.09.12	N/A	N/A
E-Field Probe	Speag	EX3DV4	7761	2024.09.19	2025.09.18	N/A	N/A
EUmmwv Probe	Speag	EUmmwv4	9681	2023.09.03	2024.09.04	N/A	N/A
SAR Software	Speag	DASY6	V5.2 Build162	N/A	N/A	N/A	V16.2.4.2448
Power Amplifier	Mini-Circuit	ZVA-183-S+	N657400950	N/A	N/A	N/A	N/A
Dual Directional Coupler	woken	0110A05A82Z-20	CMLC66W1A1	2024.04.27	2025.04.26	N/A	N/A
Tissue fluid test probe	SPEAG	DAK 3.5	1308	N/A	N/A	N/A	N/A
Vector Network	Agilent	E5071C	MY46103316	2024.08.15	2025.08.14	A.11.31	N/A
Signal Generator	R&S	SMBV100A	263697	2024/6/14	2025.06.13	V4.15.125.49	N/A
Power Meter	Keysight	N1912A	MY60300004	2024.06.30	2025.06.29	A2.06.01	N/A
Temperature/Humidity Meter	Rites	RTS-1909	THM-034	2024.05.17	2025.05.16	N/A	N/A
Temperature/Humidity Meter	Rites	RTS-1909	THM-035	2024.05.17	2025.05.16	N/A	N/A
Thermometer	Dretec	LKM	3777	2024.07.25	2025.07.24	N/A	N/A

Test Mode	Model No.	Test Data
WLAN 2.4G SAR	Dipole_D2450V2_SN839, DAE4_SN:1220, Probe_EX3DV4_SN:7761, SAM Face Down_SN:TP1054	SAR TEST: page 70, 82; System Check: page 76;
Bluetooth SAR	Dipole_D2450V2_SN839, DAE4_SN:1220, Probe_EX3DV4_SN:7761, SAM Face Down_SN:TP1054	SAR TEST: page 70, 83; System Check: page 76;
WLAN 5G SAR	Dipole_D5GHzV2_SN1078, DAE4_SN:1220, Probe_EX3DV4_SN:7761, SAM Face Down_SN:TP1054	SAR TEST: page 70, 84~86; System Check: page 77~79;
WLAN 6G SAR	Dipole_D6.5GHzV2_SN1084, DAE4_SN:1220, Probe_EX3DV4_SN:7761, SAM Face Down_SN:TP1054	SAR TEST: page 71, 87~90; System Check: page 80;
WLAN 6G Power Density	Dipole_5G Verification Source 10 GHz _SN1055, DAE4_SN:1220, Probe_ EUmmwv4_SN:9681, mmWave Phantom_SN:1108	SAR TEST: page 72, 91~94; System Check: page 81;
Face Down System Check	Dipole_D2450V2_SN1076, Dipole_ D5GHzV2_SN1348 DAE4_SN:1220, Probe_EX3DV4_SN:7761, SAM Face Down_SN:TP1054	System Check: page 84~97;

7 MEASUREMENT UNCERTAINTY

DASY6 SAR Uncertainty Measurement uncertainty for 300 MHz to 3 GHz averaged over 1 gram / 10 gram.								
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) veff
Measurement System								
Probe Calibration	±5.5%	N	1	1	1	±5.5%	±5.5%	∞
Axial Isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.4%	R	$\sqrt{3}$	1	1	±0.2%	±0.2%	∞
Probe Positioning	±2.9%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Max. SAR Eval.	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.26	0.26	±0.6%	±0.7%	∞
Combined Std. Uncertainty						±10.6%	±10.5%	361
Expanded STD Uncertainty						±21.2%	±21.1%	

DASY6 SAR Uncertainty Measurement uncertainty for 3 GHz to 6 GHz averaged over 1 gram / 10 gram.								
Error Description	Uncert. value	Prob. Dist.	Div.	(c_i) 1g	(c_i) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(v_i) v_{eff}
Measurement System								
Probe Calibration	±6.65%	N	1	1	1	±6.65%	±6.65%	∞
Axial Isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±2.0%	R	$\sqrt{3}$	1	1	±1.2%	±1.2%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Probe Positioning	±6.7%	R	$\sqrt{3}$	1	1	±3.9%	±3.9%	∞
Max. SAR Eval.	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.26	0.26	±0.6%	±0.7%	∞
Combined Std. Uncertainty						±12.0%	±12.0%	784
Expanded STD Uncertainty						±24.0%	±23.9%	

DASY6 SAR Uncertainty (Frequency band: 6 GHz–10 GHz range)								
Symbol	Error Description	Uncert. value	Prob. Dist.	Div.	(*ci*) (1 g)	(*ci*) (10 g)	Std. Unc. (1 g)	Std. Unc. (10 g)
Measurement System Errors								
CF	Probe Calibration	±18.6%	N	2	1	1	±9.3%	±9.3%
CF*drif t*	Probe Calibration Drift	±1.7%	R	√3	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±2.8%	R	√3	1	1	±1.6%	±1.6%
ISO	Probe Isotropy	±7.6%	R	√3	1	1	±4.4%	±4.4%
DAE	Other Probe+Electronic	±2.4%	N	1	1	1	±2.4%	±2.4%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ *sys*	Probe Positioning	±0.005 mm	N	1	0.5	0.5	±0.25%	±0.25%
DAT	Data Processing	±3.5%	N	1	1	1	±3.5%	±3.5%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.)*DAK*	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
LIQ(Tσ)	Conductivity (temp.)*BB*	±2.4%	R	√3	0.78	0.71	±1.1%	±1.0%
EPS	Phantom Permittivity	±14.0%	R	√3	0.5	0.5	±4.0%	±4.0%
DIS	Distance DUT – TSL	±2.0%	N	1	2	2	±4.0%	±4.0%
D *xyz*	Device Positioning	±1.0%	N	1	1	1	±1.0%	±1.0%
H	Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%
MOD	DUT Modulation*m*	±2.4%	R	√3	1	1	±1.4%	±1.4%
TAS	Time-average SAR	±1.7%	R	√3	1	1	±1.0%	±1.0%
RF*drif t*	DUT drift	±2.5%	N	1	1	1	±2.5%	±2.5%
VAL	Val Antenna Unc.*val*	±0.0%	N	1	1	1	±0%	±0%
RF*in*	Unc. Input Power*val*	±0.0%	N	1	1	1	±0%	±0%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
C(R)	SAR scaling*p*	±0%	R	√3	1	1	±0%	±0%

u	Random uncertainty	±0.6% for 1g and ±0.5% for 10g	N	1	1	1	±0.6%	±0.5%
u(ΔSAR)	Combined Uncertainty						±14.2%	±13.9%
U	**Expanded Uncertainty**						±28.4%	±28.3%

cDASY6 Mo dule mmWave Uncertainty Budget
Evaluation Distances to the Antennas > λ/2π
In Compliance with IEC/IEEE 63195

Symbol	Error Description	Uncertainty Value (±dB)	Probability	Divisor	(Ci)	Standard Uncertainty (±dB)
Uncertainty terms dep indent on the measurement system						
CAL	Probe Calibration	0.49	N	1	1	0.49
COR	Probe correction	0.00	R	1.732	1	0.00
FRS	Frequency response	0.20	R	1.732	1	0.12
SCC	Sensor cross coupling	0.00	R	1.732	1	0.00
ISO	Isotropy	0.50	R	1.732	1	0.29
LIN	Linearity	0.20	R	1.732	1	0.12
PSC	Probe scattering	0.00	R	1.732	1	0.00
PPO	Probe positioning offset	0.30	R	1.732	1	0.17
PPR	Probe positioning repeatability	0.04	R	1.732	1	0.02
SMO	Sensor mechanical offset	0.00	R	1.732	1	0.00
PSR	Probe spatial resolution	0.00	R	1.732	1	0.00
FLD	Field impedance dependance	0.00	R	1.732	1	0.00
APD	Amplitude and phase drift	0.00	R	1.732	1	0.00
APN	Amplitude and phase noise	0.04	R	1.732	1	0.02
TR	Measurement area truncation	0.00	R	1.732	1	0.00
DAQ	Data acquisition	0.03	N	1	1	0.03
SMP	Sampling	0.00	R	1.732	1	0.00
REC	Field reconstruction	2.00	R	1.732	1	1.15
TRA	Forward transformation	0.00	R	1.732	1	0.00
SCA	Power density scaling	0.00	R	1.732	1	0.00
SAV	Spatial averaging	0.10	R	1.732	1	0.06
SDL	System detection limit	0.04	R	1.732	1	0.02
Uncertainty terms dep indent on the DUT and environmental factors						
PC	Probe coupling with DUT	0.00	R	1.732	1	0.00
MOD	Modulation response	0.40	R	1.732	1	0.23
IT	Integration time	0.00	R	1.732	1	0.00
RT	Response time	0.00	R	1.732	1	0.00
DH	Device holder influence	0.10	R	1.732	1	0.06
DA	DUT alignment	0.00	R	1.732	1	0.00

AC	RF ambient conditions	0.04	R	1.732	1	0.02
AR	Ambient reflections	0.04	R	1.732	1	0.02
MSI	Immunity / secondary reception	0.00	R	1.732	1	0.00
DRI	Drift of the DUT	0.00	R	1.732	1	0.00
u	Random uncertainty	0.00	N	1	1	0.00
u(P D)	Combined Std. Uncertainty					1.34
U	**Expanded STD Uncertainty (95%)**					2.68

8 POWER TEST RESULTS

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit
Bluetooth BR/EDR	DH5	0	2402	15.93	18.00
		39	2441	16.77	18.00
		78	2480	12.76	14.00
	2DH5	0	2402	16.59	18.00
		39	2441	17.28	18.00
		78	2480	13.18	14.00
	3DH5	0	2402	17.10	18.00
		39	2441	17.81	18.00
		78	2480	13.63	14.00

	Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit
Bluetooth BLE	LE 1Mbps	0	2402	3.68	5.00
		19	2440	4.19	5.00
		39	2480	2.48	5.00
	LE 2Mbps	0	2402	3.69	5.00
		19	2440	4.22	5.00
		39	2480	2.47	5.00
	LE Coded S=8	0	2402	3.66	5.00
		19	2440	4.18	5.00
		39	2480	2.42	5.00
	LE Coded S=2	0	2402	3.70	5.00
		19	2440	4.21	5.00
		39	2480	2.47	5.00

	Mode	Channel	Frequency (MHz)	Average power (dBm) Ant 1	Tune-Up Limit Ant 1	Average power (dBm) Ant 2	Tune-Up Limit Ant 2	Average power (dBm) Ant 1+2	Tune-Up Limit Ant 1+2
2.4GHz WLAN	802.11b 1Mbps	1	2412	18.54	19.00	18.44	19.00	N/A	
		6	2437	13.01	14.00	13.98	14.00		
		11	2462	18.23	19.00	18.39	19.00		
	802.11g 6Mbps	1	2412	17.23	18.00	17.96	18.00		
		6	2437	17.42	18.00	17.99	18.00		
		11	2462	17.33	18.00	16.87	17.00		
	802.11n-HT20 MCS0	1	2412	16.88	17.00	15.77	16.00	19.55	20.00
		6	2437	16.70	17.00	15.67	16.00	**19.61**	**20.00**
		11	2462	16.58	17.00	15.83	16.00	19.39	20.00
	802.11n-HT40 MCS0	3	2422	13.78	14.00	14.23	15.00	17.23	18.00
		6	2437	13.91	14.00	14.11	15.00	17.14	18.00
		9	2452	13.82	14.00	13.98	14.00	16.96	17.00
	802.11ac-HE20 MCS0	1	2412	16.89	17.00	16.12	17.00	19.32	20.00
		6	2437	16.71	17.00	16.23	17.00	19.31	20.00
		11	2462	16.73	17.00	15.98	16.00	19.16	20.00
	802.11ac-HE40 MCS0	3	2422	13.77	14.00	13.98	14.00	17.11	18.00
		6	2437	13.93	14.00	14.18	15.00	17.31	18.00
		9	2452	13.82	14.00	14.23	15.00	17.23	18.00
	802.11ax-HE20 MCS0	1	2412	15.96	16.00	15.23	16.00	18.42	19.00
		6	2437	15.88	16.00	15.34	16.00	18.37	19.00
		11	2462	15.82	16.00	15.42	16.00	18.41	19.00
	802.11ax-HE40 MCS0	3	2422	13.78	14.00	14.23	15.00	17.67	18.00
		6	2437	13.92	14.00	14.13	15.00	16.93	17.00
		9	2452	13.73	14.00	14.14	15.00	16.82	17.00

	Mode	Channel	Frequency (MHz)	Average power (dBm) Ant 1	Tune-Up Limit Ant 1	Average power (dBm) Ant 2	Tune-Up Limit Ant 2	Average power (dBm) Ant 1+2	Tune-Up Limit Ant 1+2
5GHz WLAN	802.11a 6Mbps	36	5180	17.52	18.00	14.50	15.00	N/A	
		44	5220	17.05	18.00	14.78	15.00		
		48	5240	17.23	18.00	14.87	15.00		
		52	5260	18.12	19.00	15.64	16.00		
		60	5300	18.08	19.00	15.56	16.00		
		64	5320	15.72	16.00	15.75	16.00		
		100	5500	13.91	14.00	14.56	15.00		
		116	5580	13.45	14.00	13.51	14.00		
		140	5700	13.32	14.00	13.67	14.00		
		149	5745	14.75	15.00	13.78	14.00		
		157	5785	14.91	15.00	13.76	14.00		
		165	5825	15.46	16.00	13.69	14.00		
	802.11n-HT20 MCS0	36	5180	15.91	16.00	14.16	15.00	17.45	18.00
		44	5220	15.50	16.00	15.61	16.00	17.31	18.00
		48	5240	15.44	16.00	13.75	14.00	16.62	17.00
		52	5260	16.16	17.00	15.20	16.00	17.27	18.00
		60	5300	16.25	17.00	15.53	16.00	17.26	18.00
		64	5320	15.77	16.00	14.85	15.00	17.54	18.00
		100	5500	14.23	15.00	14.73	15.00	17.38	18.00
		116	5580	13.32	14.00	13.47	14.00	15.52	16.00
		140	5700	13.11	14.00	13.62	14.00	14.09	15.00
		149	5745	14.52	15.00	13.56	14.00	14.01	15.00
		157	5785	14.67	15.00	13.72	14.00	13.20	14.00
		165	5825	15.35	16.00	13.68	14.00	13.86	14.00
	802.11n-HT40 MCS0	38	5190	15.11	16.00	15.04	16.00	17.23	18.00
		46	5230	15.56	16.00	14.00	14.00	16.88	17.00
		54	5270	16.43	17.00	15.63	16.00	17.56	18.00
		62	5310	14.82	15.00	14.23	15.00	17.20	18.00
		102	5510	14.12	15.00	14.19	15.00	16.95	17.00
		118	5590	14.35	15.00	14.55	15.00	16.08	17.00
		134	5670	14.33	15.00	13.66	14.00	15.15	16.00
		151	5755	14.48	15.00	13.96	14.00	17.24	18.00

		159	5795	14.65	15.00	13.87	14.00	17.88	18.00
	802.11ac-VHT20 MCS0	36	5180	15.80	16.00	15.84	16.00	17.40	18.00
		44	5220	15.51	16.00	15.64	16.00	17.33	18.00
		48	5240	15.44	16.00	13.56	14.00	16.52	17.00
		52	5260	16.06	17.00	15.33	16.00	17.24	18.00
		60	5300	16.34	17.00	15.40	16.00	17.42	18.00
		64	5320	15.77	16.00	14.95	15.00	17.73	18.00
		100	5500	15.09	16.00	15.00	15.00	17.58	18.00
		116	5580	14.21	15.00	12.88	13.00	15.72	16.00
		140	5700	13.87	14.00	14.91	15.00	14.26	15.00
		149	5745	14.32	15.00	13.82	14.00	13.99	14.00
		157	5785	14.70	15.00	13.73	14.00	13.34	14.00
		165	5825	15.31	16.00	13.69	14.00	13.99	14.00
	802.11ac-VHT40 MCS0	38	5190	15.05	16.00	14.50	15.00	17.66	18.00
		46	5230	15.57	16.00	13.79	14.00	17.23	18.00
		54	5270	16.65	17.00	14.24	15.00	17.61	18.00
		62	5310	15.23	16.00	14.13	15.00	17.53	18.00
		102	5510	14.21	15.00	14.43	15.00	16.96	17.00
		118	5590	14.57	15.00	14.47	15.00	16.10	17.00
		134	5670	13.67	14.00	13.49	14.00	15.28	16.00
		151	5755	14.59	15.00	13.98	14.00	17.07	18.00
		159	5795	14.68	15.00	13.78	14.00	17.75	18.00
	802.11ac-VHT80 MCS0	42	5210	13.76	14.00	12.98	13.00	16.95	17.00
		58	5290	14.01	15.00	13.19	14.00	16.98	17.00
		106	5530	12.23	13.00	12.47	13.00	15.03	16.00
		112	5610	13.73	14.00	13.18	14.00	15.68	16.00
		155	5775	14.55	15.00	13.54	14.00	17.80	18.00
	802.11ac-VHT160 MCS0	50	5250	10.23	11.00	10.01	11.00	13.23	14.00
		114	5570	10.98	11.00	11.23	12.00	14.45	15.00
	802.11ax-HE20 MCS0	36	5180	15.92	16.00	14.34	15.00	17.69	18.00
		44	5220	15.29	16.00	15.72	16.00	17.38	18.00
		48	5240	15.69	16.00	13.85	14.00	16.96	17.00
		52	5260	16.59	17.00	15.37	16.00	17.41	18.00
		60	5300	16.48	17.00	15.48	16.00	17.43	18.00
		64	5320	15.78	16.00	15.06	16.00	17.76	18.00

		100	5500	15.77	16.00	14.99	15.00	17.63	18.00
		116	5580	14.24	15.00	12.88	13.00	15.70	16.00
		140	5700	14.71	15.00	14.61	15.00	14.30	15.00
		149	5745	14.63	15.00	13.76	14.00	14.10	15.00
		157	5785	14.72	15.00	13.43	14.00	13.57	14.00
		165	5825	15.71	16.00	13.67	14.00	14.00	15.00
	802.11ax-HE40 MCS0	38	5190	15.01	16.00	14.53	15.00	17.72	18.00
		46	5230	15.87	16.00	13.73	14.00	16.96	18.00
		54	5270	16.69	17.00	15.61	16.00	17.53	18.00
		62	5310	14.76	15.00	14.23	15.00	17.43	18.00
		102	5510	14.54	15.00	14.56	15.00	16.96	17.00
		118	5590	14.77	15.00	14.17	15.00	16.05	17.00
		134	5670	13.62	14.00	13.27	14.00	15.16	16.00
		151	5755	14.66	15.00	13.88	14.00	16.83	17.00
		159	5795	14.85	15.00	13.72	14.00	17.82	18.00
	802.11ax-HE80 MCS0	42	5210	13.98	14.00	13.08	14.00	16.43	17.00
		58	5290	14.21	15.00	13.65	14.00	16.83	17.00
		106	5530	12.45	13.00	12.88	13.00	15.23	16.00
		112	5610	14.19	15.00	12.90	13.00	15.92	16.00
		155	5775	14.95	15.00	13.44	14.00	17.98	18.00
	802.11ax-HE160 MCS0	50	5250	10.23	11.00	9.78	10.00	13.03	14.00
		114	5570	11.01	12.00	11.23	12.00	14.09	15.00

	Mode	Channel	Frequency (MHz)	Average power (dBm) Ant 1	Tune-Up Limit Ant 1	Average power (dBm) Ant 2	Tune-Up Limit Ant 2	Average power (dBm) Ant 1+2	Tune-Up Limit Ant 1+2
WiFi 6E	802.11ax-HE20 MCS0	1	5955	6.33	7.00	6.58	7.00	6.49	7.00
		45	6175	6.86	7.00	6.50	7.00	6.69	7.00
		93	6415	6.40	7.00	6.57	7.00	6.54	7.00
		97	6435	6.13	7.00	6.18	7.00	6.15	7.00
		105	6475	6.71	7.00	6.21	7.00	6.58	7.00
		113	6515	6.85	7.00	6.42	7.00	6.67	7.00
		117	6535	6.79	7.00	6.61	7.00	6.62	7.00
		149	6695	6.35	7.00	7.04	8.00	6.61	7.00
		181	6855	6.72	7.00	5.45	6.00	6.03	7.00
		185	6875	6.41	7.00	5.21	6.00	5.70	6.00
		189	6895	6.63	7.00	6.80	7.00	6.66	7.00
		209	6995	5.93	6.00	5.40	6.00	5.61	6.00
		233	7115	6.69	7.00	6.33	7.00	6.45	7.00
	802.11ax-HE40 MCS0	3	5965	8.37	9.00	8.43	9.00	8.01	9.00
		43	6165	8.48	9.00	8.52	9.00	8.10	9.00
		91	6405	8.02	9.00	8.59	9.00	8.30	9.00
		99	6445	8.12	9.00	7.96	8.00	7.97	8.00
		107	6485	8.35	9.00	8.12	9.00	8.23	9.00
		115	6525	8.44	9.00	8.33	9.00	8.11	9.00
		123	6565	8.37	9.00	8.58	9.00	8.13	9.00
		147	6685	8.15	9.00	8.56	9.00	8.32	9.00
		179	6845	8.08	9.00	6.94	7.00	7.51	8.00
		187	6885	8.09	9.00	8.56	9.00	8.18	9.00
		198	6925	8.21	9.00	8.30	9.00	8.25	9.00
		203	6965	8.19	9.00	8.13	9.00	8.01	9.00
		227	7085	8.03	9.00	8.16	9.00	7.94	8.00
	802.11ax-HE80 MCS0	7	5985	8.53	9.00	8.53	9.00	8.53	9.00
		39	6145	8.58	9.00	8.43	9.00	8.50	9.00
		87	6385	8.54	9.00	7.72	8.00	8.13	9.00
		103	6465	8.58	9.00	8.52	9.00	8.55	9.00
		119	6545	8.44	9.00	8.56	9.00	8.55	9.00
		135	6625	8.05	9.00	8.62	9.00	8.33	9.00

		151	6705	8.27	9.00	8.14	9.00	8.20	9.00
		167	6785	8.57	9.00	8.11	9.00	8.34	9.00
		183	6865	8.31	9.00	6.65	7.00	7.48	8.00
		199	6945	8.08	9.00	8.61	9.00	8.34	9.00
		215	7025	8.19	9.00	8.36	9.00	8.27	9.00
	802.11ax-HE160 MCS0	15	6025	8.23	9.00	8.49	9.00	8.12	9.00
		47	6185	8.49	9.00	8.64	9.00	8.03	9.00
		79	6345	8.31	9.00	8.34	9.00	8.11	9.00
		111	6505	8.57	9.00	8.66	9.00	8.09	9.00
		143	6665	8.23	9.00	8.37	9.00	8.13	9.00
		175	6825	8.34	9.00	8.48	9.00	8.16	9.00
		207	6985	8.58	9.00	8.29	9.00	8.03	9.00

9 SAR TEST RESULTS

9.1 SAR and Power Density Measurements

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
WLAN2.4GHz	802.11n-HT20	Face Down	0	Ant 1+2	6	2437	19.61	20.00	1.094	0.509	0.557
WLAN2.4GHz	802.11b 1Mbps	Face Down	0	Ant 1	1	2412	18.54	19.00	1.112	0.523	0.581
WLAN2.4GHz	802.11b 1Mbps	Face Down	0	Ant 1	11	2462	18.23	19.00	1.194	**0.611**	**0.730**
WLAN2.4GHz	802.11b 1Mbps	Face Down	0	Ant 2	1	2412	18.44	19.00	1.138	0.501	0.570
WLAN2.4GHz	802.11b 1Mbps	Face Down	0	Ant 2	11	2462	18.39	19.00	1.151	0.463	0.533
Bluetooth	3DH5	Face Down	0	Ant 1	0	2402	17.10	18.00	1.230	0.203	0.322
Bluetooth	3DH5	Face Down	0	Ant 1	39	2441	17.81	18.00	1.045	**0.241**	**0.325**
Bluetooth	3DH5	Face Down	0	Ant 1	78	2480	13.63	14.00	1.089	0.126	0.177
WLAN5.3GHz	802.11a 6Mbps	Face Down	0	Ant 1	52	5260	18.12	19.00	1.225	**0.549**	**0.672**
WLAN5.3GHz	802.11a 6Mbps	Face Down	0	Ant 1	60	5300	18.08	19.00	1.236	0.501	0.619
WLAN5.3GHz	802.11a 6Mbps	Face Down	0	Ant 1	64	5320	15.72	16.00	1.067	0.326	0.348
WLAN5.3GHz	802.11n-HT40	Face Down	0	Ant 2	54	5270	15.63	16.00	1.089	0.514	0.560
WLAN5.3GHz	802.11n-HT40	Face Down	0	Ant 2	62	5310	14.23	15.00	1.194	0.478	0.571
WLAN5.3GHz	802.11n-HT40	Face Down	0	Ant 1+2	54	5270	17.56	18.00	1.107	0.363	0.402
WLAN5.3GHz	802.11n-HT40	Face Down	0	Ant 1+2	62	5310	17.20	18.00	1.202	0.312	0.375
WLAN5.6GHz	802.11ac-VHT20	Face Down	0	Ant 1	100	5500	15.09	16.00	1.233	0.536	0.661
WLAN5.6GHz	802.11ac-VHT20	Face Down	0	Ant 1	116	5580	14.21	15.00	1.199	0.521	0.625
WLAN5.6GHz	802.11ac-VHT20	Face Down	0	Ant 1	140	5700	13.87	14.00	1.030	0.498	0.513
WLAN5.6GHz	802.11n-HT40	Face Down	0	Ant 2	102	5510	14.19	15.00	1.205	0.523	0.630
WLAN5.6GHz	802.11n-HT40	Face Down	0	Ant 2	118	5590	14.55	15.00	1.109	**0.602**	**0.668**
WLAN5.6GHz	802.11n-HT40	Face Down	0	Ant 2	134	5670	13.66	14.00	1.081	0.561	0.607
WLAN5.6GHz	802.11n-HT20	Face Down	0	Ant 1+2	100	5500	17.38	18.00	1.153	0.422	0.486
WLAN5.8GHz	802.11a 6Mbps	Face Down	0	Ant 1	149	5745	14.75	15.00	1.059	0.313	0.332
WLAN5.8GHz	802.11a 6Mbps	Face Down	0	Ant 1	157	5785	14.91	15.00	1.021	0.345	0.352
WLAN5.8GHz	802.11a 6Mbps	Face Down	0	Ant 1	165	5825	15.46	16.00	1.132	0.378	0.428
WLAN5.8GHz	802.11ac-VHT80	Face Down	0	Ant 2	155	5775	13.54	14.00	1.112	**0.586**	**0.651**
WLAN5.8GHz	802.11ac-VHT80	Face Down	0	Ant 1+2	155	5775	17.80	18.00	1.047	0.234	0.245

Band	Mode	Test Position	Gap (mm)	Antenna	Ch.	Freq. (MHz)	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)	Measured APD 4cm^2 (W/m2)
WLAN6GHz	802.11ax-HE160	Face Down	0	Ant 1	15	6025	8.23	9.00	1.194	0.053	0.063	0.393
WLAN6GHz	802.11ax-HE160	Face Down	0	Ant 2	15	6025	8.49	9.00	1.125	0.059	0.066	0.389
WLAN6GHz	802.11ax-HE160	Face Down	0	Ant 2	47	6185	8.64	9.00	1.086	0.308	0.335	2.11
WLAN6GHz	802.11ax-HE160	Face Down	0	Ant 2	79	6345	8.34	9.00	1.164	0.232	0.270	1.78
WLAN6GHz	802.11ax-HE160	Face Down	0	Ant 2	111	6505	8.66	9.00	1.081	**0.375**	**0.406**	3.19
WLAN6GHz	802.11ax-HE160	Face Down	0	Ant 2	143	6665	8.37	9.00	1.156	0.295	0.341	2.08
WLAN6GHz	802.11ax-HE160	Face Down	0	Ant 2	175	6825	8.48	9.00	1.127	0.079	0.089	0.496
WLAN6GHz	802.11ax-HE160	Face Down	0	Ant 2	207	6985	8.29	9.00	1.178	0.061	0.072	0.381

Band	Mode	Test Position	Gap (mm)	Channel	Frequency	Antenna	Average Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Scaling Factor Measurement Uncertainty	Averaging Area [4cm2] Normal PD [W/m2]	AveragingArea [4cm2] Total PD [W/m2]	Scaling Averaging Area [4cm2] Normal PD [W/m2]	Scaling Averaging Area [4cm2] Total PD [W/m2]
WLAN6GHz	802.11ax-HE160	Face Down	2	15	6025	Ant 1	8.23	9.00	1.194	1.550	1.740	4.230	3.220	7.830
WLAN6GHz	802.11ax-HE160	Face Down	2	15	6025	Ant 2	8.49	9.00	1.125	1.550	1.980	4.740	3.450	8.260
WLAN6GHz	802.11ax-HE160	Face Down	2	47	6185	Ant 2	8.64	9.00	1.086	1.550	1.640	4.440	2.760	7.480
WLAN6GHz	802.11ax-HE160	Face Down	2	79	6345	Ant 2	8.34	9.00	1.164	1.550	1.610	3.020	2.910	5.450
WLAN6GHz	802.11ax-HE160	Face Down	2	111	6505	Ant 2	8.63	9.00	1.089	1.550	**3.050**	**5.710**	**5.150**	**9.640**
WLAN6GHz	802.11ax-HE160	Face Down	2	143	6665	Ant 2	8.37	9.00	1.156	1.550	0.304	1.340	0.540	2.400
WLAN6GHz	802.11ax-HE160	Face Down	2	175	6825	Ant 2	8.48	9.00	1.127	1.550	0.991	2.250	1.730	3.930
WLAN6GHz	802.11ax-HE160	Face Down	2	207	6985	Ant 2	8.29	9.00	1.178	1.550	1.980	3.300	3.610	6.020

Note 1: The test spacing is the distance between probe sensor and DUT surface.

Note 2: 1.0 W/m^2 = 0.1 mW/cm^2.

Note 3: We tested the results for all modes, showing only WLAN6G worst mode data.

Note 4: Liquid tissue depth was at least 15.0 cm for all frequencies.

Note 5: The multiple test positions require SAR measurements in head, hotspot mode or UMPC mini-tablet configurations may be reduced according to the highest reported SAR determined using the initial test position(s) by applying the DSSS or OFDM SAR measurement procedures in the required wireless mode test configuration(s). The initial test position(s) is measured using the highest measured maximum output power channel in the required wireless mode test configuration(s). When the reported SAR for the initial test position is:

- ≤ 0.4 Wika, further SAR measurement is not required for the other test positions in that exposure configuration and wireless mode combination within the frequency band or aggregated band. DSSS and OFDM configurations are considered separately according to the required SAR procedures.
- 0.4 W/ka. SAR is repeated using the same wireless mode test configuration tested in the initial test position to measure the subsequent next closet/smallest test separation distance and maximum coupling test position, on

the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions are tested For subsequent test position with equivalent test separation distance or when exposure is dominated by coupling conditions, the position for maximum coupling condition should be tested. When it is unclear, all equivalent conditions must be tested.

- For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, measure the SAR for positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤1.2 W/kg or all required test channels are considered.
- When the specified maximum output power is the same for both UNII 1 and UNII 2A, begin SAR measurements in UNII 2A with the channel with the highest measured output power. If the reported SAR for UNII 2A is ≤ 1.2 W/kg, SAR is not required for UNII 1; otherwise treat the remaining bands separately and test them independently for SAR.
- When the specified maximum output power is different between UNII 1 and UNII 2A, begin SAR with the band that has the higher specified maximum output. If the highest reported SAR for the band with the highest specified power is ≤ 1.2 W/kg, testing for the band with the lower specified output power is not required; otherwise test the remaining bands independently for SAR.

Note 6: To determine the initial test position, Area Scans were performed to determine the position with the Maximum Value of SARl (measured). The position that produced the highest Maximum Value of SAR is considered as the worst case position; thusl used as the initial test position.

- After an initial test configuration is determined, if multiple test channels have the same measured maximum output power, the channel chosen for SAR measurement is determined according to the following:
  (1) The channel closest to mid-band frequency is selected for SAR measurement.
  (2) For channels with equal separation from mid-band frequency; for example, high and low channels or two mid-band channels, the higher frequency (number) channel is selected for SAR measurement.
  These channel selection procedures apply to both the initial test configuration and subsequent test configuration(s) selection.

Note 7: WIFI6E SAR and Power Density measurements were implemented according to the U-NII 6-7 GHz Interim Procedures described in Oct. 2020 TCB workshop.

- The SAR evaluations using 6-7 GHz parameters were performed per IEC/IEEE 62209-1528, and the Absorbed Power Density (APD) were reported based on SAR measurements.
  According to DASY Application Note, the APD is evaluated numerically using the FDTD method of Sim4Life V5.2. For comparison with the basic restrictions, the APD is averaged over square surface areas of 1 cm2 and 4 cm2 in the lowermost voxel layer of a flat phantom at a frequency of 6.5 GHz. The phantom consists of a dielectric shell of 2 mml thickness and a relative permittivity r=3.7. It is filled with a tissue-simulating liquid with &=34.5 and o=6.07 S/m.

9.2 SAR Measurement Variability

Band	Mode	Test Position	Ch.	Freq. (MHz)	Original 1g SAR (W/kg)	First 1g SAR (W/kg)	First Ratio SAR 1g
WLAN2.4GHz	802.11b 1Mbps	Face Down	11	2462	0.611	0.593	3.0 %
WLAN5.3GHz	802.11a 6Mbps	Face Down	52	5260	0.549	0.533	3.0 %
WLAN6GHz	802.11ax-HE160	Face Down	111	6505	0.375	0.367	2.2 %

Note:

According to KDB 865664 D01v01r04, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

The following procedures are applied to determine if repeated measurements are required:

1. The original highest measured Reported SAR 1-g ≥ 0.80 W/kg, repeated that measurement once.
2. Perform a second repeated measurement the ratio of the largest to the smallest SAR for the original and first repeated measurements is <1.2 W/kg, or when the original or repeated measurement ≥ 1.45 W/kg (~10% from the 1-g SAR limit).

9.3 Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Head SAR
1.	2.4GHz WLAN + 5GHz WLAN	Yes
2.	2.4GHz WLAN + 6GHz WLAN	Yes
3.	Bluetooth + 5GHz WLAN	Yes
4.	Bluetooth + 6GHz WLAN	Yes

2.4GHz WLAN	5GHz WLAN	6GHz WLAN	Bluetooth	**Summed**	**Summed**	**Summed**	**Summed**
1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	**1g SAR (W/kg)**	**1g SAR (W/kg)**	**1g SAR (W/kg)**	**1g SAR (W/kg)**
0.730	0.672	0.406	0.325	**1.402**	**1.136**	**0.997**	**0.731**

Note：

1. The maximum SAR summation is calculated based on the same configuration and test position.
2. If 1g-SAR scalar summation < 1.6 W/kg, simultaneous SAR measurement is not necessary.
3. Selection of highest assessed maximum SAR values – accurate estimate when separate maxima are far apart and do not effect each other by more than 5 %

Appendix A. SAR And Power Density Validation Data

Date: 2024/8/25

Test Laboratory: DEKRA Lab

System Check Head 2450MHz

DUT: Dipole 2450 MHz

Communication System: UID 0, CW; Communication System Band: D2450MHz; Duty Cycle: 1:1; Frequency: 2450 MHz; Medium parameters used: f = 2450 MHz; σ = 1.859 S/m; εr = 38.552; ρ = 1000 kg/m3 ; Phantom section: Flat Section ; Input Power=250mW

Ambient temperature (℃): 22.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.55, 7.31, 7.22) ; Calibrated: 2023/9/13
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 2024/3/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP-1562
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (9x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 21.7 W/kg

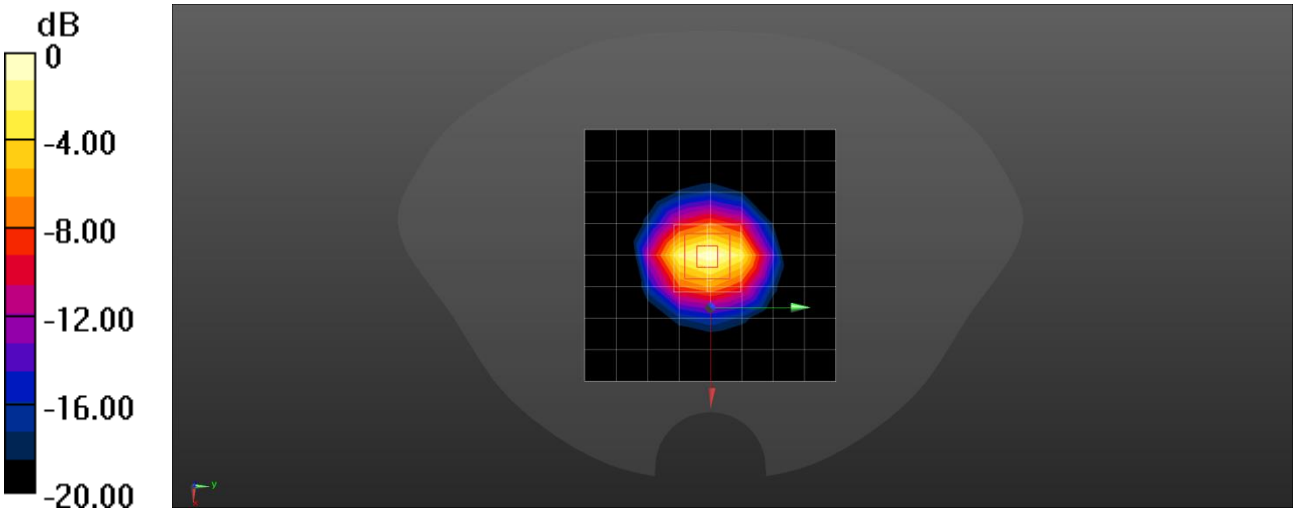
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 91.50 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 26.1 W/kg

SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.22 W/kg

Maximum value of SAR (measured) = 21.8 W/kg



0 dB = 21.8 W/kg = 13.38 dBW/kg

Date: 2024/8/26

Test Laboratory: DEKRA Lab

System Check Head 5250MHz

DUT: Dipole D5GHzV2

Communication System:UID0,CW(0);Communication System Band: 5GHz; Duty Cycle: 1:1; Frequency: 5250 MHz;

Medium parameters used : f = 5250 MHz; σ = 4.6 S/m; εr = 36.383; ρ = 1000 kg/m3 ; Phantom section: Flat Section ;

Input Power=100mW

Ambient temperature (℃): 22.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.57, 5.50, 5.46) ; Calibrated: 2023/9/13
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 2024/3/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP-1562
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 20.3 W/kg

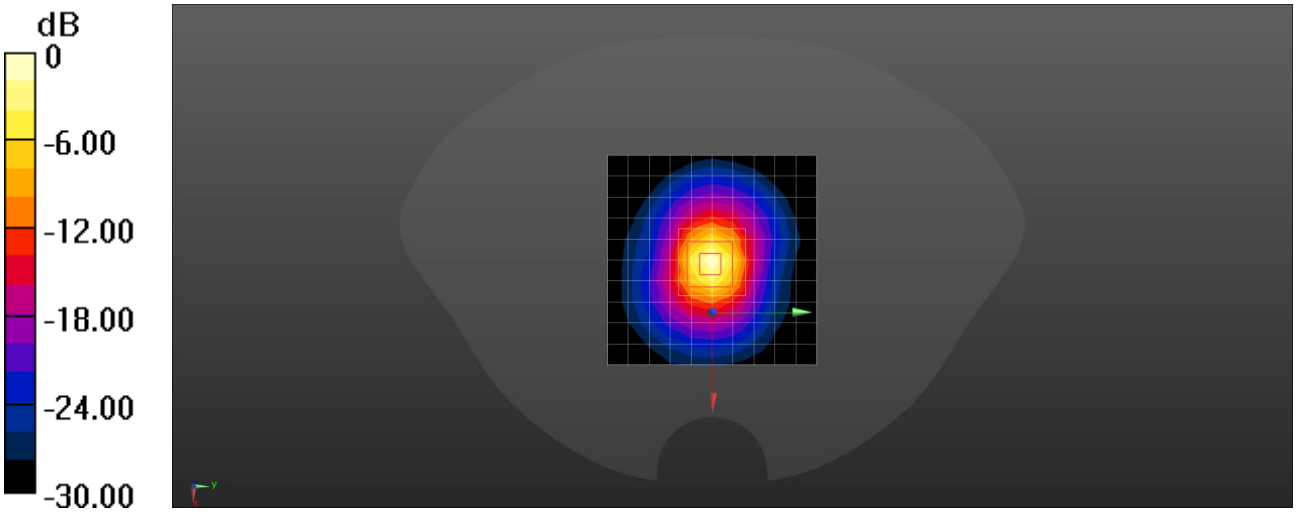
Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 44.28 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 34.9 W/kg

SAR(1 g) = 8.25 W/kg; SAR(10 g) = 2.37 W/kg

Maximum value of SAR (measured) = 20.9 W/kg



0 dB = 20.9 W/kg = 13.20 dBW/kg

Date: 2024/8/27

Test Laboratory: DEKRA Lab

System Check Head 5600MHz

DUT: Dipole D5GHzV2

Communication System: UID 0, CW (0); Communication System Band: 5GHz; Duty Cycle: 1:1; Frequency: 5600 MHz;

Medium parameters used: f = 5600 MHz; σ = 4.99 S/m; εr = 35.806; ρ = 1000 kg/m3 ; Phantom section: Flat Section ;

Input Power=100mW

Ambient temperature (℃): 22.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(4.84, 4.73, 4.74) ; Calibrated: 2023/9/13
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 2024/3/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP-1562
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 20.8 W/kg

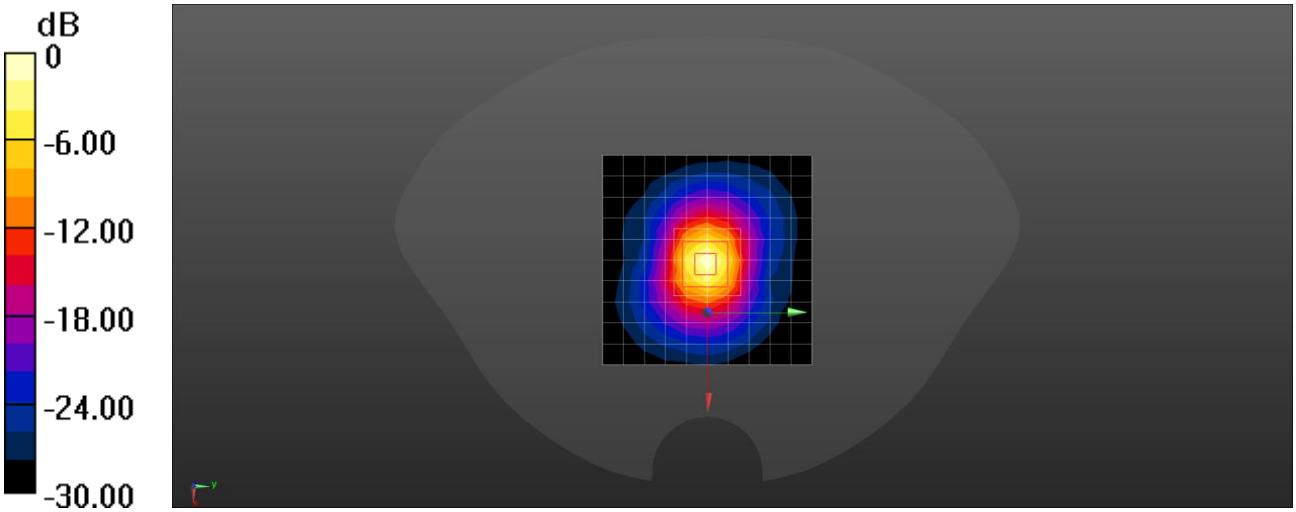
Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 67.39 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 37.6 W/kg

SAR(1 g) = 8.1 W/kg; SAR(10 g) = 2.29 W/kg

Maximum value of SAR (measured) = 21.2 W/kg



0 dB = 21.2 W/kg = 13.26 dBW/kg

Date: 2024/8/28

Test Laboratory: DEKRA Lab

System Check Head 5750MHz

DUT: Dipole D5GHzV2

CommunicationSystem:UID0,CW(0);Communication System Band: 5GHz; Duty Cycle: 1:1; Frequency: 5750 MHz;

Medium parameters used: f = 5750 MHz; σ = 5.166 S/m; εr = 35.551; ρ = 1000 kg/m3 ; Phantom section: Flat Section ; Input Power=100mW

Ambient temperature (℃): 22.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.10, 4.88, 4.91) ; Calibrated: 2023/9/13
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1220; Calibrated: 2024/3/22
- Phantom: Twin-SAM V5.0; Type: QD 000 P40 CD; Serial: TP-1562
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7483)

Area Scan (11x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 20.8 W/kg

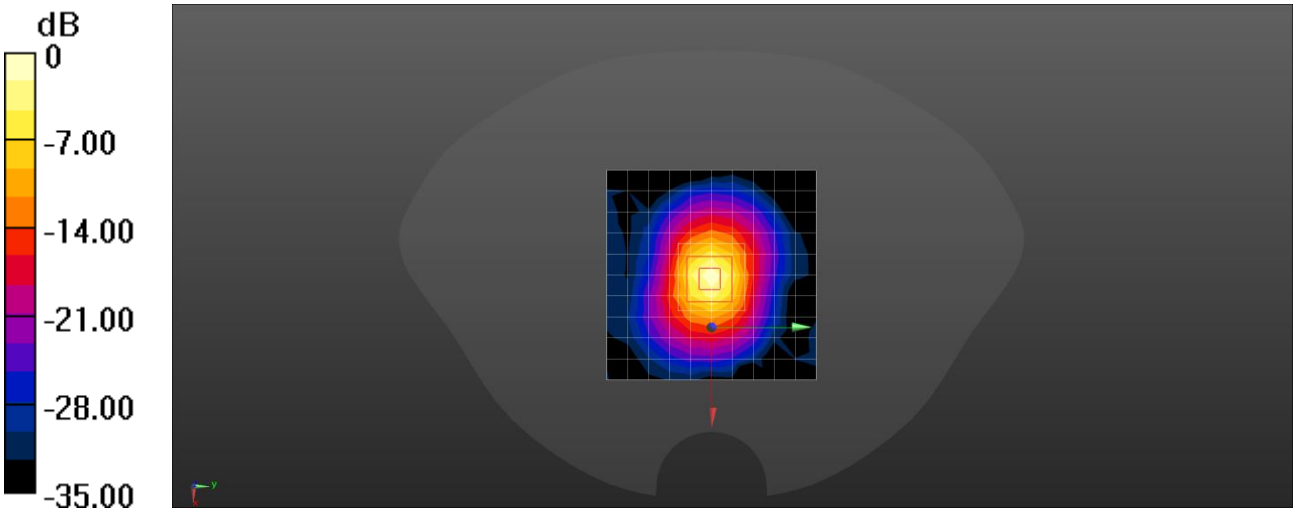
Zoom Scan (9x9x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 66.21 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 39.3 W/kg

SAR(1 g) = 8.06 W/kg; SAR(10 g) = 2.29 W/kg

Maximum value of SAR (measured) = 21.4 W/kg



0 dB = 21.4 W/kg = 13.30 dBW/kg

Measurement Report for Device, FRONT, Validation band, Channel 6500MHz

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz]	TSL Conductivity [S/m]	TSL Permittivity
Flat, HSL	FRONT, 5.00	6500	6.08	34.0

Hardware Setup

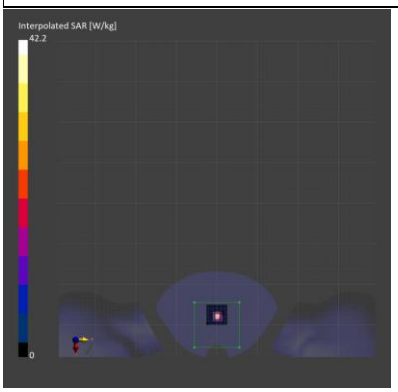
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Twin-SAM V5.0	HBBL-600-10000	EX3DV4 - SN7761, 2023-09-13	DAE4 Sn1220, 2024-03-22

Scans Setup

	Area Scan	Zoom Scan
Grid Extents [mm]	51.0 x 51.0	22.0 x 22.0 x 22.0
Grid Steps [mm]	8.5 x 8.5	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	1.4

Measurement Results

	Area Scan	Zoom Scan
Date	2024-08-29, 09:15	2024-08-29, 09:38
psSAR1g [W/Kg]	29.9	31.6
psSAR10g [W/Kg]	5.74	5.44
Power Drift [dB]	-0.07	0.01



Measurement Report for Device, FRONT, Validation band, Channel 10000MHz

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz]	Conversion Factor
5G	FRONT, 2.00	10000	1.0

Hardware Setup

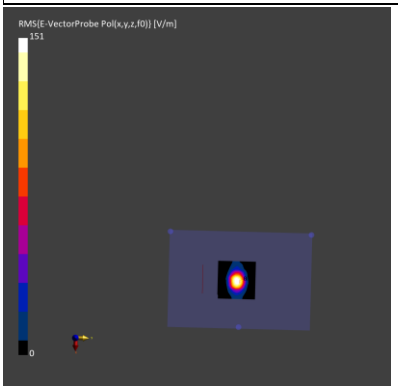
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air	EUmmWV4 - SN9681_F1-55GHz, 2023-09-05	DAE4 Sn1220, 2024-03-22

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	25.0 x 25.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2023-08-30, 11:37
Avg. Area [cm2]	4.00
psPDn+ [W/m2]	45.3
psPDtot+ [W/m2]	52.8
psPDmod+ [W/m2]	61.1
Emax [V/m]	151
Power Drift [dB]	-0.02



Measurement Report for Device, System Check, D2450, Channel2450MHz Left Check (Top)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz]	TSL Conductivity [S/m]	TSL Permittivity
Face-Down, HSL	Default, 10.00	2450	1.82	41.0

1Hardware Setup

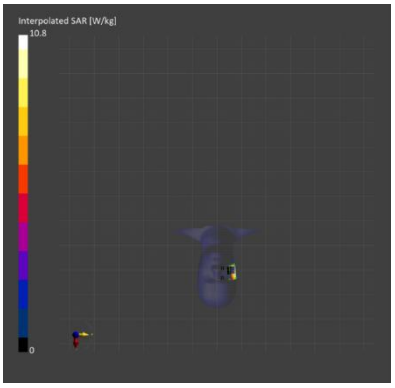
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Face-Down	HBBL-600-10000	EX3DV4 - SN7761, 2024-09-19	DAE4 Sn1220, 2024-03-22

Scan Setup

	Zoom Scan
Grid Extents [mm]	30.0 x 30.0 x 30.0
Grid Steps [mm]	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0
Graded Grid	Yes
Grading Ratio	1.5

Measurement Results

	Zoom Scan
Date	2024-10-29, 12:33
psSAR1g [W/kg]	12.98
psSAR10g [W/kg]	6.09
Power Drift [dB]	-0.08



Measurement Report for Device, System Check, D2450, Channel2450MHz Right Check (Top)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz]	TSL Conductivity [S/m]	TSL Permittivity
Face-Down, HSL	Default, 10.00	2450	1.82	41.0

1Hardware Setup

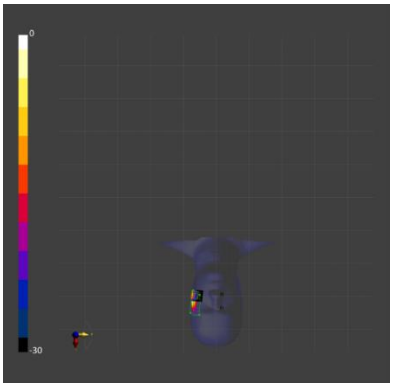
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Face-Down	HBBL-600-10000	EX3DV4 - SN7761, 2024-09-19	DAE4 Sn1220, 2024-03-22

Scan Setup

	Zoom Scan
Grid Extents [mm]	30.0 x 30.0 x 30.0
Grid Steps [mm]	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0
Graded Grid	Yes
Grading Ratio	1.5

Measurement Results

	Zoom Scan
Date	2024-10-29, 13:53
psSAR1g [W/kg]	13.23
psSAR10g [W/kg]	6.26
Power Drift [dB]	-0.01



Measurement Report for Device, System Check, D5800, Channel5800MHz Left Check (Top)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz]	TSL Conductivity [S/m]	TSL Permittivity
Face-Down, HSL	Default, 10.00	5800	5.23	35.3

1Hardware Setup

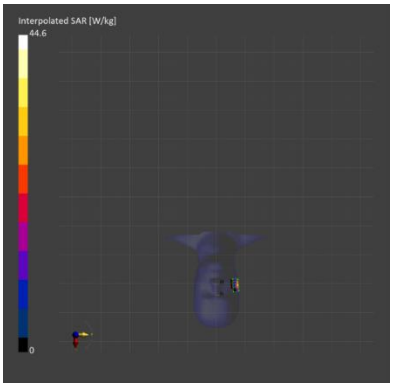
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Face-Down	HBBL-600-10000	EX3DV4 - SN7761, 2024-09-19	DAE4 Sn1220, 2024-03-22

Scan Setup

	Zoom Scan
Grid Extents [mm]	22.0 x 22.0 x 22.0
Grid Steps [mm]	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0
Graded Grid	Yes
Grading Ratio	1.4

Measurement Results

	Zoom Scan
Date	2024-10-29, 19:23
psSAR1g [W/kg]	8.13
psSAR10g [W/kg]	2.39
Power Drift [dB]	-0.09



Measurement Report for Device, System Check, D5800, Channel5800MHz Right Check (Top)

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz]	TSL Conductivity [S/m]	TSL Permittivity
Face-Down, HSL	Default, 10.00	5800	5.23	35.3

1Hardware Setup

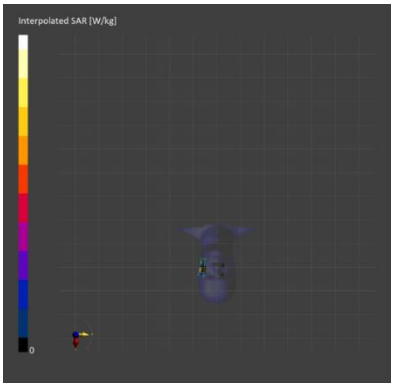
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
Face-Down	HBBL-600-10000	EX3DV4 - SN7761, 2024-09-19	DAE4 Sn1220, 2024-03-22

Scan Setup

	Zoom Scan
Grid Extents [mm]	22.0 x 22.0 x 22.0
Grid Steps [mm]	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0
Graded Grid	Yes
Grading Ratio	1.4

Measurement Results

	Zoom Scan
Date	2024-10-29, 17:34
psSAR1g [W/kg]	8.22
psSAR10g [W/kg]	2.41
Power Drift [dB]	-0.12



Appendix B. SAR And Power Density Test Data

Measurement Report for Device, DEFAULT, WLAN 2.4GHz, IEEE 802.11b (1Mbps), Channel 11 (2462MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz], Channel Number	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	2462, 11	1.85	38.7

Hardware Setup

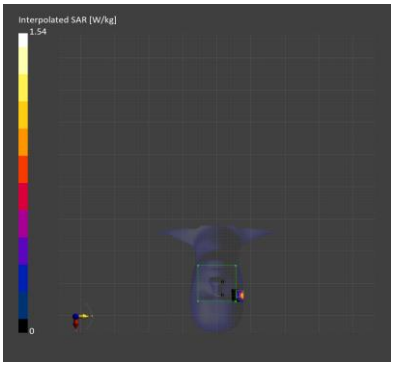
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0	HBBL-600-10000	EX3DV4 - SN7761, 2023-09-13	DAE4 Sn1220, 2024-03-22

Scans Setup

	FastVolume Scan	Zoom Scan
Grid Extents [mm]	58.2 x 34.2	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	3.0

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-08-25, 10:05	2024-08-25, 10:19
psSAR1g [W/Kg]	0.585	0.611
psSAR10g [W/Kg]	0.265	0.320
Power Drift [dB]	0.17	0.11



Measurement Report for Device, DEFAULT, Bluetooth (GFSK, 3DH5), Channel 39 (2441MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz], Channel Number	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	2441, 39	1.85	38.8

Hardware Setup

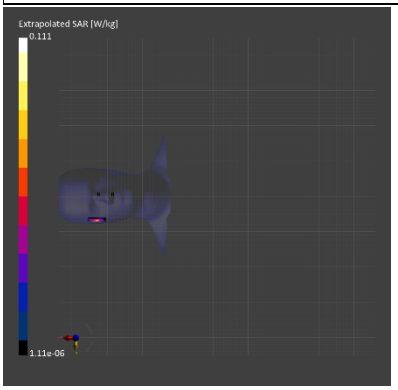
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown	HBBL-600-10000	EX3DV4 - SN7761, 2023-09-13	DAE4 Sn1220, 2024-03-22

Scans Setup

	FastVolume Scan	Zoom Scan
Grid Extents [mm]	53.9 x 23.9	30.0 x 30.0 x 30.0
Grid Steps [mm]	10.0 x 10.0	5.0 x 5.0 x 1.5
Sensor Surface [mm]	3.0	3.0

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-08-25, 09:42	2024-08-25, 09:57
psSAR1g [W/Kg]	0	0.241
psSAR10g [W/Kg]	0	0.118
Power Drift [dB]	-0.07	-0.08



Measurement Report for Device, DEFAULT, U-NII-2A, IEEE 802.11a (OFDM, 6 Mbps), Channel 52 (5260MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz], Channel Number	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	5260, 52	4.75	35.5

Hardware Setup

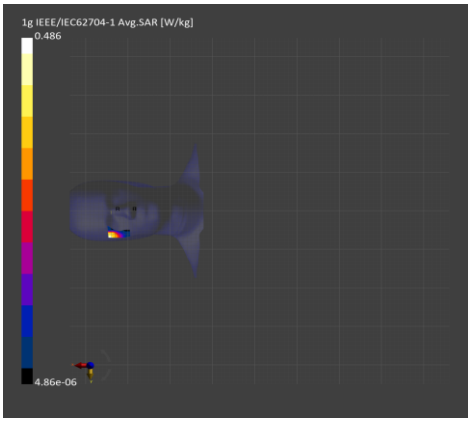
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0	HBBL-600-10000	EX3DV4 - SN7761, 2023-09-13	DAE4 Sn1220, 2024-03-22

Scans Setup

	FastVolume Scan	Zoom Scan
Grid Extents [mm]	68.6 x 52.1	22.0 x 22.0 x 22.0
Grid Steps [mm]	5.0 x 5.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	3.0

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-08-26, 13:51	2024-08-26, 14:07
psSAR1g [W/Kg]	0.486	0.549
psSAR10g [W/Kg]	0.175	0.181
Power Drift [dB]	-0.09	-0.08



Measurement Report for Device, DEFAULT, WLAN 5GHz, IEEE 802.11n (HT MCS0), Channel 118 (5590 MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz], Channel Number	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	5590, 118	5.11	35.0

Hardware Setup

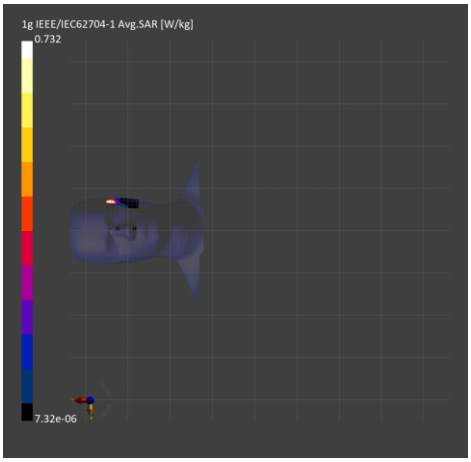
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0	HBBL-600-10000	EX3DV4 - SN7761, 2023-09-13	DAE4 Sn1220, 2024-03-22

Scans Setup

	FastVolume Scan	Zoom Scan
Grid Extents [mm]	102.8 x 95.4	22.0 x 22.0 x 22.0
Grid Steps [mm]	5.0 x 5.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	3.0

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-08-27, 18:49	2024-08-27, 19:01
psSAR1g [W/Kg]	0.732	0.602
psSAR10g [W/Kg]	0.242	0.216
Power Drift [dB]	-0.12	-0.02



Measurement Report for Device, DEFAULT, WLAN 5GHz, IEEE 802.11ac (VHT, MCS0), Channel 155 (5755MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz], Channel Number	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	5755, 155	5.28	34.9

Hardware Setup

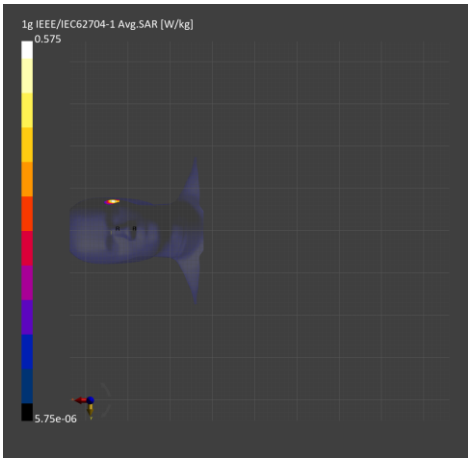
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0	HBBL-600-10000	EX3DV4 - SN7761, 2023-09-13	DAE4 Sn1220, 2024-03-22

Scans Setup

	FastVolume Scan	Zoom Scan
Grid Extents [mm]	42.5 x 42.4	22.0 x 22.0 x 22.0
Grid Steps [mm]	5.0 x 5.0	4.0 x 4.0 x 1.4
Sensor Surface [mm]	3.0	3.0

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-08-28, 10:30	2024-08-28, 10:45
psSAR1g [W/Kg]	0.575	0.586
psSAR10g [W/Kg]	0.215	0.204
Power Drift [dB]	0.08	-0.12



Measurement Report for Device, DEFAULT, U-NII-5, IEEE 802.11ax (160MHz, MCS0), Channel 47 (6185MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz], Channel Number	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	6185, 47	5.75	34.8

Hardware Setup

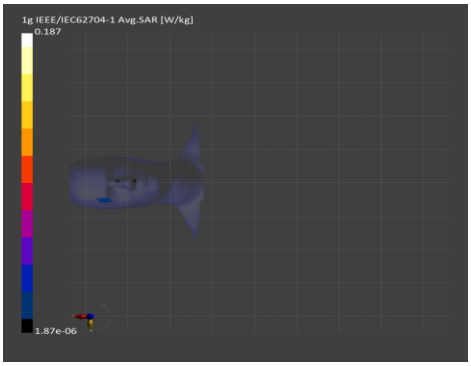
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0	HBBL-600-10000	EX3DV4 - SN7761, 2023-09-13	DAE4 Sn1220, 2024-03-22

Scans Setup

	FastVolume Scan	Zoom Scan
Grid Extents [mm]	32.1 x 30.4	22.0 x 22.0 x 22.0
Grid Steps [mm]	5.0 x 5.0	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	3.0

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-08-29, 14:39	2024-08-29, 15:01
psSAR1g [W/Kg]	0.187	0.308
psSAR10g [W/Kg]	0.080	0.130
Power Drift [dB]	-0.05	-0.02



Measurement Report for Device, DEFAULT, U-NII-6, (160MHz, MCS0), Channel 111 (6505MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz], Channel Number	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	6505, 111	6.12	34.4

Hardware Setup

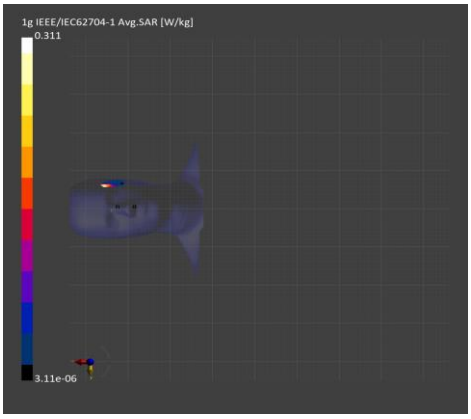
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0	HBBL-600-10000	EX3DV4 - SN7761, 2023-09-13	DAE4 Sn1220, 2024-03-22

Scans Setup

	FastVolume Scan	Zoom Scan
Grid Extents [mm]	56.1 x 40.5	22.0 x 22.0 x 22.0
Grid Steps [mm]	5.0 x 5.0	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	3.0

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-08-29, 15:50	2024-08-29, 16:09
psSAR1g [W/Kg]	0.311	0.375
psSAR10g [W/Kg]	0.092	0.140
Power Drift [dB]	0.09	0.13



Measurement Report for Device, DEFAULT, U-NII-7,(160MHz, MCS0), Channel 143 (6665MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz], Channel Number	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	6665, 143	6.29	34.3

Hardware Setup

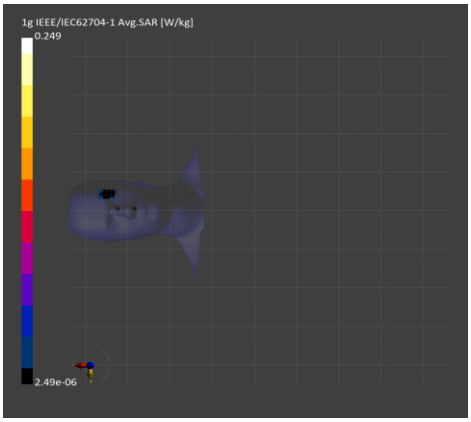
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0	HBBL-600-10000	EX3DV4 - SN7761, 2023-09-13	DAE4 Sn1220, 2024-03-22

Scans Setup

	FastVolume Scan	Zoom Scan
Grid Extents [mm]	39.6 x 37.3	22.0 x 22.0 x 22.0
Grid Steps [mm]	5.0 x 5.0	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	3.0

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-08-29, 16:43	2024-08-29, 17:12
psSAR1g [W/Kg]	0.249	0.295
psSAR10g [W/Kg]	0.082	0.091
Power Drift [dB]	0.06	-0.02



Measurement Report for Device, DEFAULT, U-NII-7,(160MHz, MCS0), Channel 175 (6825MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section, TSL	Position, Test Distance [mm]	Frequency [MHz], Channel Number	TSL Conductivity [S/m]	TSL Permittivity
Facedown, HSL	DEFAULT, 0.00	6825, 175	6.48	34.1

Hardware Setup

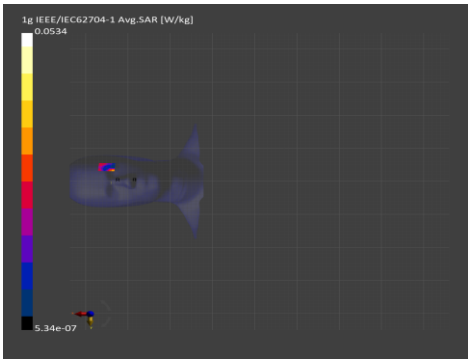
Phantom	TSL, Measured Date	Probe, Calibration Date	DAE, Calibration Date
SAM-FaceDown V10.0	HBBL-600-10000	EX3DV4 - SN7761, 2023-09-13	DAE4 Sn1220, 2024-03-22

Scans Setup

	FastVolume Scan	Zoom Scan
Grid Extents [mm]	39.6 x 37.3	22.0 x 22.0 x 22.0
Grid Steps [mm]	5.0 x 5.0	3.4 x 3.4 x 1.4
Sensor Surface [mm]	3.0	3.0

Measurement Results

	FastVolume Scan	Zoom Scan
Date	2024-08-29, 17:39	2024-08-29, 18:02
psSAR1g [W/Kg]	0.053	0.079
psSAR10g [W/Kg]	0.034	0.021
Power Drift [dB]	0.03	0.11



Measurement Report for Device, FRONT, U-NII-5, IEEE 802.11ax (160MHz, MCS0), Channel 15 (6025MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 2.00	6025, 15	1.0

Hardware Setup

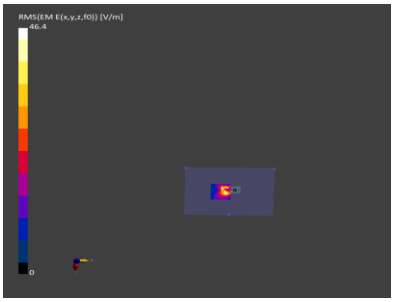
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air	EUmmWV4 - SN9681_F1-55GHz, 2023-09-05	DAE4 Sn1220, 2024-03-22

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2024-08-30, 10:39
Avg. Area [cm2]	4.00
psPDn+ [W/m2]	1.98
psPDtot+ [W/m2]	4.74
psPDmod+ [W/m2]	5.93
Emax [V/m]	46.4
Power Drift [dB]	0.17



Measurement Report for Device, BACK, U-NII-6, IEEE 802.11ax (160MHz, MCS0), Channel 111 (6505MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz], Channel Number	Conversion Factor
5G	BACK, 2.00	6505, 111	1.0

Hardware Setup

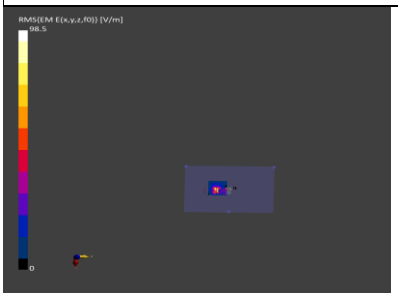
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air	EUmmWV4 - SN9681_F1-55GHz, 2023-09-05	DAE4 Sn1220, 2024-03-22

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2024-08-30, 10:11
Avg. Area [cm2]	4.00
psPDn+ [W/m2]	3.05
psPDtot+ [W/m2]	5.71
psPDmod+ [W/m2]	16.6
Emax [V/m]	98.5
Power Drift [dB]	0.10



Measurement Report for Device, FRONT, U-NII-7, IEEE 802.11ax (160MHz, MCS0), Channel 175 (6825 MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 2.00	6825, 175	1.0

Hardware Setup

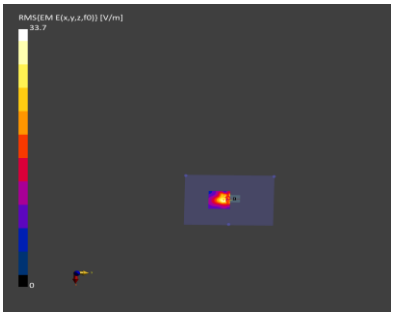
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air	EUmmWV4 - SN9681_F1-55GHz, 2023-09-05	DAE4 Sn1220, 2024-03-22

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2024-08-30, 17:11
Avg. Area [cm2]	4.00
psPDn+ [W/m2]	0.991
psPDtot+ [W/m2]	2.25
psPDmod+ [W/m2]	2.48
Emax [V/m]	33.7
Power Drift [dB]	-0.04



Measurement Report for Device, FRONT, U-NII-8, IEEE 802.11ax (160MHz, MCS0), Channel 207 (6985 MHz)

Product Name	SN
Argo	GJ2307170108

Exposure Conditions

Phantom Section	Position, Test Distance [mm]	Frequency [MHz], Channel Number	Conversion Factor
5G	FRONT, 2.00	6985, 207	1.0

Hardware Setup

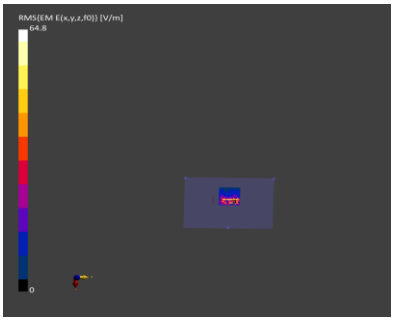
Phantom	Medium	Probe, Calibration Date	DAE, Calibration Date
mmWave	Air	EUmmWV4 - SN9681_F1-55GHz, 2023-09-05	DAE4 Sn1220, 2024-03-22

Scans Setup

Scan Type	5G Scan
Grid Extents [mm]	100.0 x 100.0
Grid Steps [lambda]	0.25 x 0.25
Sensor Surface [mm]	2.0

Measurement Results

Scan Type	5G Scan
Date	2024-08-30, 13:01
Avg. Area [cm2]	4.00
psPDn+ [W/m2]	1.98
psPDtot+ [W/m2]	3.30
psPDmod+ [W/m2]	7.86
Emax [V/m]	64.8
Power Drift [dB]	0.02



Note: We evaluated and tested all modes and channels, and only the worst modes and worst channels were reported in the report.

Appendix C. Probe Calibration Data

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Client	Dekra Suzhou	Certificate No.	EX-7761_Sep23

CALIBRATION CERTIFICATE

Object	EX3DV4 - SN:7761
Calibration procedure(s)	QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6, QA CAL-25.v8 Calibration procedure for dosimetric E-field probes
Calibration date	September 13, 2023

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP2	SN: 104778	30-Mar-23 (No. 217-03804/03805)	Mar-24
Power sensor NRP-Z91	SN: 103244	30-Mar-23 (No. 217-03804)	Mar-24
OCP DAK-3.5 (weighted)	SN: 1249	20-Oct-22 (OCP-DAK3.5-1249_Oct22)	Oct-23
OCP DAK-12	SN: 1016	20-Oct-22 (OCP-DAK12-1016_Oct22)	Oct-23
Reference 20 dB Attenuator	SN: CC2552 (20x)	30-Mar-23 (No. 217-03809)	Mar-24
DAE4	SN: 660	16-Mar-23 (No. DAE4-660_Mar23)	Mar-24
Reference Probe ES3DV2	SN: 3013	06-Jan-23 (No. ES3-3013_Jan23)	Jan-24

Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-22)	In house check: Jun-24
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-22)	In house check: Jun-24
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-22)	In house check: Oct-24

	Name	Function	Signature
Calibrated by	Aidonia Georgiadou	Laboratory Technician	
Approved by	Sven Kühn	Technical Manager	

Issued: September 13, 2023

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 0108

Glossary

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C, D	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis
Connector Angle	information used in DASY system to align probe sensor X to the robot coordinate system

Calibration is Performed According to the Following Standards:

a) IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices – Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
b) KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z*: Assessed for E-field polarization $\vartheta = 0$ ($f \le 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- *DCPx,y,z*: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.
- *PAR*: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z; Dx,y,z; VRx,y,z: A, B, C, D* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters*: Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \le 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ±50 MHz to ±100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- *Connector Angle*: The angle is assessed using the information gained by determining the *NORMx* (no uncertainty required).

Parameters of Probe: EX3DV4 - SN:7761

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc ($k = 2$)
Norm ($\mu V/(V/m)^2$) [A]	0.62	0.61	0.68	±10.1%
DCP (mV) [B]	107.9	109.9	108.1	±4.7%

Calibration Results for Modulation Response

UID	Communication System Name		A dB	B dB$\sqrt{\mu V}$	C	D dB	VR mV	Max dev.	Max Unc[E] $k = 2$
0	CW	X	0.00	0.00	1.00	0.00	123.8	±1.6%	±4.7%
		Y	0.00	0.00	1.00		131.7		
		Z	0.00	0.00	1.00		128.2		
10352	Pulse Waveform (200Hz, 10%)	X	1.49	60.35	6.07	10.00	60.0	±3.4%	±9.6%
		Y	1.50	60.00	5.95		60.0		
		Z	1.45	60.35	6.39		60.0		
10353	Pulse Waveform (200Hz, 20%)	X	20.00	74.00	9.00	6.99	80.0	±2.7%	±9.6%
		Y	1.02	60.00	5.06		80.0		
		Z	0.81	60.00	5.05		80.0		
10354	Pulse Waveform (200Hz, 40%)	X	0.20	143.63	0.15	3.98	95.0	±3.1%	±9.6%
		Y	0.68	60.00	4.06		95.0		
		Z	0.09	132.31	0.06		95.0		
10355	Pulse Waveform (200Hz, 60%)	X	6.92	159.98	12.10	2.22	120.0	±1.9%	±9.6%
		Y	15.04	148.39	0.01		120.0		
		Z	5.85	159.99	13.73		120.0		
10387	QPSK Waveform, 1 MHz	X	0.50	62.19	10.27	1.00	150.0	±5.0%	±9.6%
		Y	0.42	60.73	9.99		150.0		
		Z	0.52	61.86	10.36		150.0		
10388	QPSK Waveform, 10 MHz	X	1.23	64.29	12.69	0.00	150.0	±1.2%	±9.6%
		Y	1.26	65.10	13.06		150.0		
		Z	1.24	63.98	12.77		150.0		
10396	64-QAM Waveform, 100 kHz	X	1.83	66.04	16.68	3.01	150.0	±0.9%	±9.6%
		Y	1.79	65.41	16.18		150.0		
		Z	1.67	64.09	15.79		150.0		
10399	64-QAM Waveform, 40 MHz	X	2.73	65.63	14.50	0.00	150.0	±3.0%	±9.6%
		Y	2.78	66.19	14.75		150.0		
		Z	2.73	65.32	14.44		150.0		
10414	WLAN CCDF, 64-QAM, 40 MHz	X	3.76	65.43	14.84	0.00	150.0	±5.1%	±9.6%
		Y	3.77	65.93	15.00		150.0		
		Z	3.96	65.90	15.17		150.0		

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of Norm X,Y,Z do not affect the E^2-field uncertainty inside TSL (see Pages 5 and 6).
[B] Linearization parameter uncertainty for maximum specified field strength.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

Parameters of Probe: EX3DV4 - SN:7761

Sensor Model Parameters

	C1 fF	C2 fF	α V^{-1}	T1 $ms\,V^{-2}$	T2 $ms\,V^{-1}$	T3 ms	T4 V^{-2}	T5 V^{-1}	T6
x	10.9	78.78	33.07	3.82	0.00	4.93	0.65	0.00	1.01
y	9.8	68.53	31.49	10.46	0.00	4.90	0.73	0.00	1.01
z	11.9	86.75	33.70	3.52	0.00	4.96	0.00	0.10	1.01

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle	27.6°
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	9 mm
Tip Diameter	2.5 mm
Probe Tip to Sensor X Calibration Point	1 mm
Probe Tip to Sensor Y Calibration Point	1 mm
Probe Tip to Sensor Z Calibration Point	1 mm
Recommended Measurement Distance from Surface	1.4 mm

Note: Measurement distance from surface can be increased to 3–4 mm for an *Area Scan* job.

Parameters of Probe: EX3DV4 - SN:7761

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz)[C]	Relative Permittivity[F]	Conductivity[F] (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha[G]	Depth[G] (mm)	Unc ($k = 2$)
450	43.5	0.87	10.32	10.32	10.32	0.16	1.30	±13.3%
750	41.9	0.89	9.48	9.03	9.03	0.41	1.27	±12.0%
835	41.5	0.90	9.30	8.98	8.83	0.39	1.27	±12.0%
900	41.5	0.97	9.06	8.36	8.53	0.38	1.27	±12.0%
1750	40.1	1.37	8.46	8.26	8.16	0.28	1.27	±12.0%
1900	40.0	1.40	8.39	8.14	8.04	0.30	1.27	±12.0%
2100	39.8	1.49	8.16	7.89	7.80	0.31	1.27	±12.0%
2300	39.5	1.67	8.00	7.77	7.66	0.32	1.27	±12.0%
2450	39.2	1.80	7.55	7.31	7.22	0.31	1.27	±12.0%
2600	39.0	1.96	7.50	7.28	7.20	0.30	1.27	±12.0%
3300	38.2	2.71	7.00	6.80	6.69	0.36	1.27	±14.0%
3500	37.9	2.91	6.99	6.77	6.68	0.35	1.27	±14.0%
3700	37.7	3.12	6.83	6.62	6.53	0.36	1.27	±14.0%
3900	37.5	3.32	6.54	6.36	6.30	0.37	1.27	±14.0%
4100	37.2	3.53	6.42	6.22	6.18	0.37	1.27	±14.0%
4200	37.1	3.63	6.41	6.21	6.16	0.38	1.27	±14.0%
4400	36.9	3.84	6.34	6.13	6.09	0.39	1.27	±14.0%
4600	36.7	4.04	6.26	6.05	6.01	0.40	1.27	±14.0%
4800	36.4	4.25	6.25	6.04	6.00	0.38	1.27	±14.0%
4950	36.3	4.40	6.01	5.76	5.74	0.41	1.36	±14.0%
5250	35.9	4.71	5.57	5.50	5.46	0.37	1.53	±14.0%
5600	35.5	5.07	4.84	4.73	4.74	0.36	1.75	±14.0%
5750	35.4	5.22	5.10	4.88	4.91	0.35	1.84	±14.0%

[C] Frequency validity above 300 MHz of ±100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ±50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4–9 MHz, and ConvF assessed at 13 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.
[F] The probes are calibrated using tissue simulating liquids (TSL) that deviate for ε and σ by less than ±5% from the target values (typically better than ±3%) and are valid for TSL with deviations of up to ±10%. If TSL with deviations from the target of less than ±5% are used, the calibration uncertainties are 11.1% for 0.7 - 3 GHz and 13.1% for 3 - 6 GHz.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3–6 GHz at any distance larger than half the probe tip diameter from the boundary.

Parameters of Probe: EX3DV4 - SN:7761

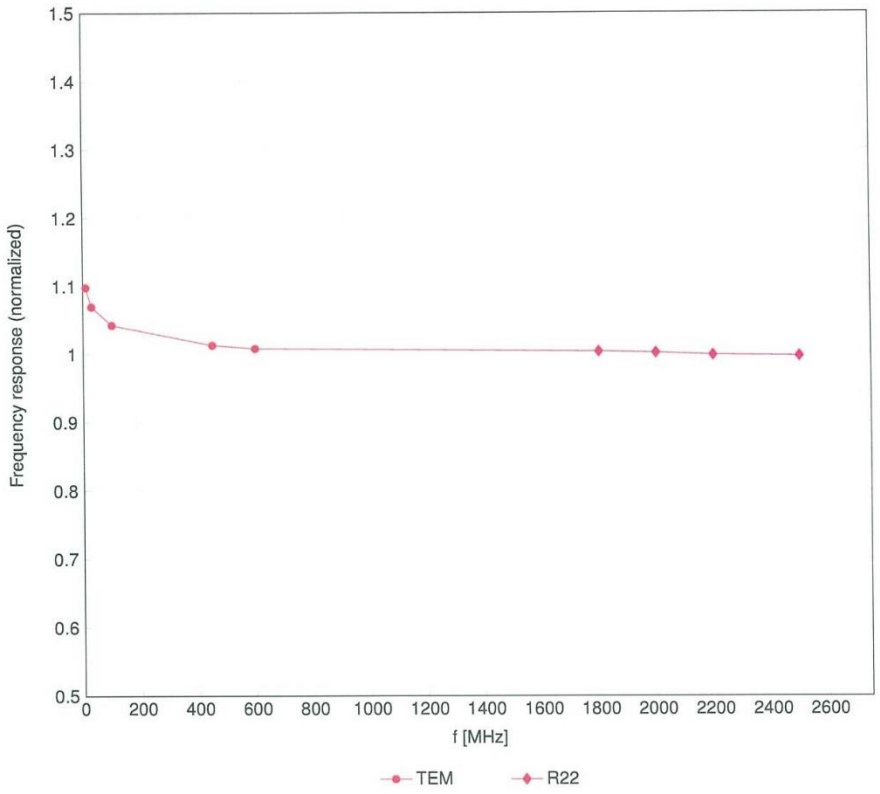
Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz)[C]	Relative Permittivity[F]	Conductivity[F] (S/m)	ConvF X	ConvF Y	ConvF Z	Alpha[G]	Depth[G] (mm)	Unc ($k = 2$)
6500	34.5	6.07	5.35	5.08	5.06	0.20	2.00	±18.6%

[C] Frequency validity at 6.5 GHz is −600/+700 MHz, and ±700 MHz at or above 7 GHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.
[F] The probes are calibrated using tissue simulating liquids (TSL) that deviate for ε and σ by less than ±10% from the target values (typically better than ±6%) and are valid for TSL with deviations of up to ±10%.
[G] Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz; below ±2% for frequencies between 3–6 GHz; and below ±4% for frequencies between 6–10 GHz at any distance larger than half the probe tip diameter from the boundary.

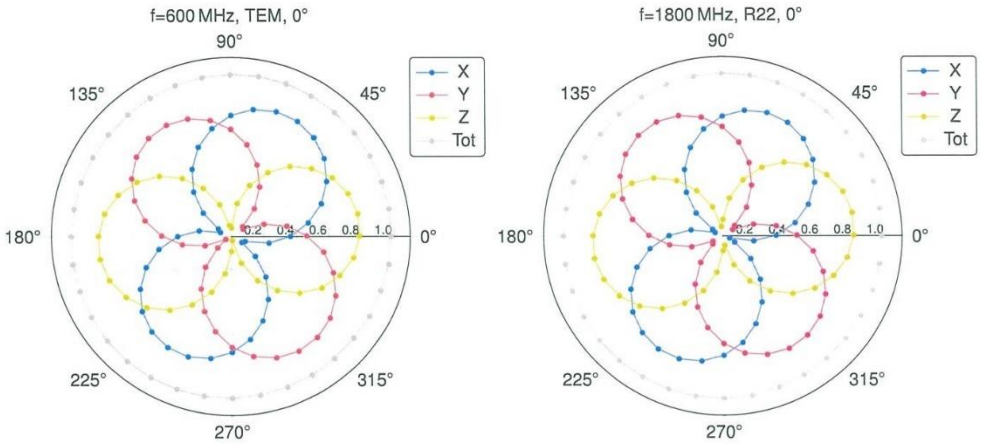
Frequency Response of E-Field

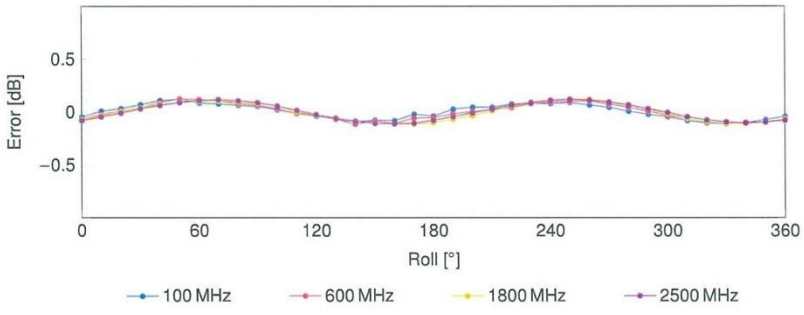
(TEM-Cell:ifi110 EXX, Waveguide:R22)



Uncertainty of Frequency Response of E-field: ±6.3% (k=2)

Receiving Pattern (ϕ), $\vartheta = 0°$

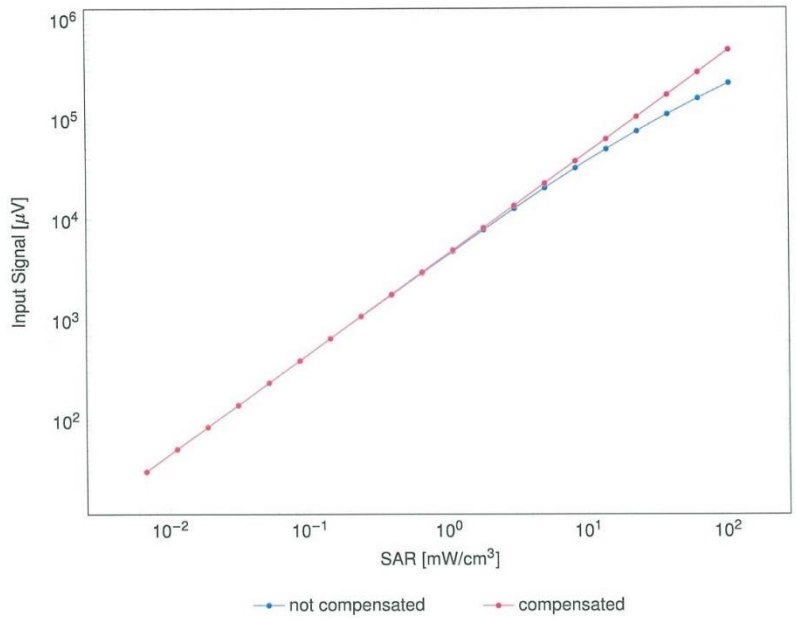


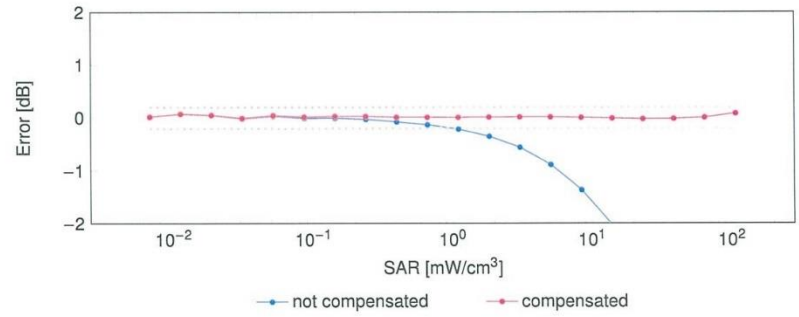


Uncertainty of Axial Isotropy Assessment: ±0.5% (k=2)

Dynamic Range f(SAR_{head})

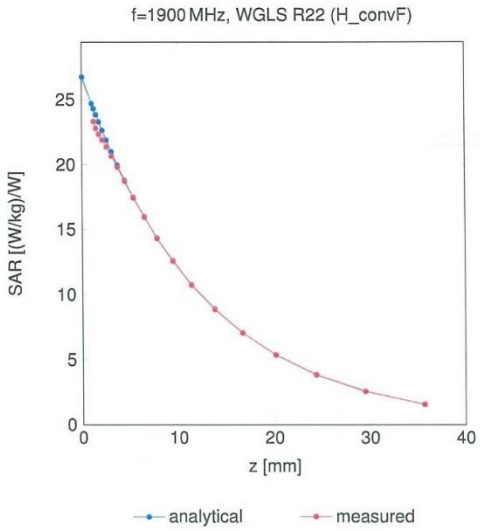
(TEM cell, f_{eval} = 1900 MHz)





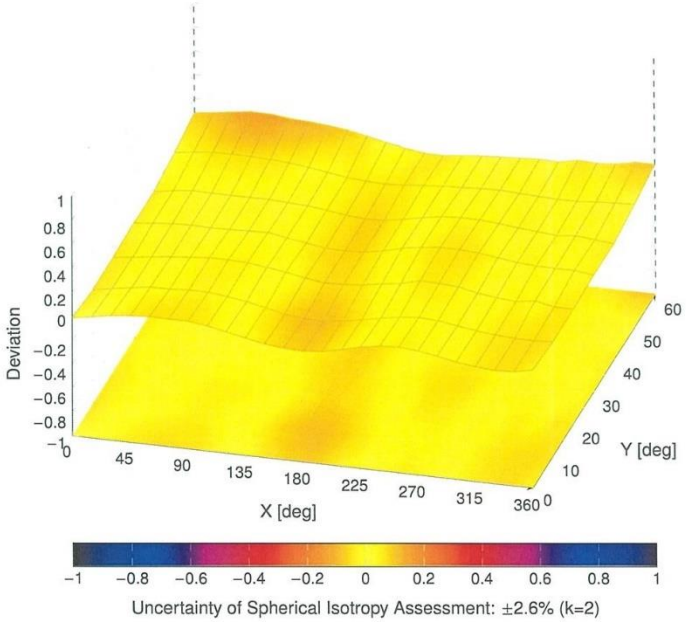
Uncertainty of Linearity Assessment: ±0.6% (k=2)

Conversion Factor Assessment



Deviation from Isotropy in Liquid

Error (ϕ,θ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ±2.6% (k=2)

Appendix: Modulation Calibration Parameters

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
0		CW	CW	0.00	±4.7
10010	CAB	SAR Validation (Square, 100 ms, 10 ms)	Test	10.00	±9.6
10011	CAC	UMTS-FDD (WCDMA)	WCDMA	2.91	±9.6
10012	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)	WLAN	1.87	±9.6
10013	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)	WLAN	9.46	±9.6
10021	DAC	GSM-FDD (TDMA, GMSK)	GSM	9.39	±9.6
10023	DAC	GPRS-FDD (TDMA, GMSK, TN 0)	GSM	9.57	±9.6
10024	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1)	GSM	6.56	±9.6
10025	DAC	EDGE-FDD (TDMA, 8PSK, TN 0)	GSM	12.62	±9.6
10026	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1)	GSM	9.55	±9.6
10027	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2)	GSM	4.80	±9.6
10028	DAC	GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)	GSM	3.55	±9.6
10029	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2)	GSM	7.78	±9.6
10030	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH1)	Bluetooth	5.30	±9.6
10031	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH3)	Bluetooth	1.87	±9.6
10032	CAA	IEEE 802.15.1 Bluetooth (GFSK, DH5)	Bluetooth	1.16	±9.6
10033	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH1)	Bluetooth	7.74	±9.6
10034	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH3)	Bluetooth	4.53	±9.6
10035	CAA	IEEE 802.15.1 Bluetooth (PI/4-DQPSK, DH5)	Bluetooth	3.83	±9.6
10036	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH1)	Bluetooth	8.01	±9.6
10037	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH3)	Bluetooth	4.77	±9.6
10038	CAA	IEEE 802.15.1 Bluetooth (8-DPSK, DH5)	Bluetooth	4.10	±9.6
10039	CAB	CDMA2000 (1xRTT, RC1)	CDMA2000	4.57	±9.6
10042	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Halfrate)	AMPS	7.78	±9.6
10044	CAA	IS-91/EIA/TIA-553 FDD (FDMA, FM)	AMPS	0.00	±9.6
10048	CAA	DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)	DECT	13.80	±9.6
10049	CAA	DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)	DECT	10.79	±9.6
10056	CAA	UMTS-TDD (TD-SCDMA, 1.28 Mcps)	TD-SCDMA	11.01	±9.6
10058	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)	GSM	6.52	±9.6
10059	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)	WLAN	2.12	±9.6
10060	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)	WLAN	2.83	±9.6
10061	CAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)	WLAN	3.60	±9.6
10062	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)	WLAN	8.68	±9.6
10063	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)	WLAN	8.63	±9.6
10064	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)	WLAN	9.09	±9.6
10065	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)	WLAN	9.00	±9.6
10066	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)	WLAN	9.38	±9.6
10067	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)	WLAN	10.12	±9.6
10068	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)	WLAN	10.24	±9.6
10069	CAD	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)	WLAN	10.56	±9.6
10071	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)	WLAN	9.83	±9.6
10072	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)	WLAN	9.62	±9.6
10073	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)	WLAN	9.94	±9.6
10074	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)	WLAN	10.30	±9.6
10075	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)	WLAN	10.77	±9.6
10076	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)	WLAN	10.94	±9.6
10077	CAB	IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)	WLAN	11.00	±9.6
10081	CAB	CDMA2000 (1xRTT, RC3)	CDMA2000	3.97	±9.6
10082	CAB	IS-54 / IS-136 FDD (TDMA/FDM, PI/4-DQPSK, Fullrate)	AMPS	4.77	±9.6
10090	DAC	GPRS-FDD (TDMA, GMSK, TN 0-4)	GSM	6.56	±9.6
10097	CAC	UMTS-FDD (HSDPA)	WCDMA	3.98	±9.6
10098	CAC	UMTS-FDD (HSUPA, Subtest 2)	WCDMA	3.98	±9.6
10099	DAC	EDGE-FDD (TDMA, 8PSK, TN 0-4)	GSM	9.55	±9.6
10100	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-FDD	5.67	±9.6
10101	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10102	CAF	LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10103	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)	LTE-TDD	9.29	±9.6
10104	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)	LTE-TDD	9.97	±9.6
10105	CAH	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)	LTE-TDD	10.01	±9.6
10108	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-FDD	5.80	±9.6
10109	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10110	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-FDD	5.75	±9.6
10111	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-FDD	6.44	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10112	CAH	LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-FDD	6.59	±9.6
10113	CAH	LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10114	CAD	IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)	WLAN	8.10	±9.6
10115	CAD	IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)	WLAN	8.46	±9.6
10116	CAD	IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM)	WLAN	8.15	±9.6
10117	CAD	IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)	WLAN	8.07	±9.6
10118	CAD	IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)	WLAN	8.59	±9.6
10119	CAD	IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)	WLAN	8.13	±9.6
10140	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10141	CAF	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-FDD	6.53	±9.6
10142	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10143	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-FDD	6.35	±9.6
10144	CAF	LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-FDD	6.65	±9.6
10145	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-FDD	5.76	±9.6
10146	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.41	±9.6
10147	CAG	LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.72	±9.6
10149	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-FDD	6.42	±9.6
10150	CAF	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10151	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-TDD	9.28	±9.6
10152	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
10153	CAH	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)	LTE-TDD	10.05	±9.6
10154	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-FDD	5.75	±9.6
10155	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10156	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-FDD	5.79	±9.6
10157	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-FDD	6.49	±9.6
10158	CAH	LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-FDD	6.62	±9.6
10159	CAH	LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-FDD	6.56	±9.6
10160	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-FDD	5.82	±9.6
10161	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-FDD	6.43	±9.6
10162	CAF	LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-FDD	6.58	±9.6
10166	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-FDD	5.46	±9.6
10167	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.21	±9.6
10168	CAG	LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.79	±9.6
10169	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-FDD	5.73	±9.6
10170	CAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10171	AAF	LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-FDD	6.49	±9.6
10172	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)	LTE-TDD	9.21	±9.6
10173	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10174	CAH	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10175	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-FDD	5.72	±9.6
10176	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10177	CAJ	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-FDD	5.73	±9.6
10178	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10179	CAH	LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10180	CAH	LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10181	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-FDD	5.72	±9.6
10182	CAF	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10183	AAE	LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10184	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-FDD	5.73	±9.6
10185	CAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-FDD	6.51	±9.6
10186	AAF	LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10187	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-FDD	5.73	±9.6
10188	CAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-FDD	6.52	±9.6
10189	AAG	LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-FDD	6.50	±9.6
10193	CAD	IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)	WLAN	8.09	±9.6
10194	CAD	IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)	WLAN	8.12	±9.6
10195	CAD	IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)	WLAN	8.21	±9.6
10196	CAD	IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)	WLAN	8.10	±9.6
10197	CAD	IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)	WLAN	8.13	±9.6
10198	CAD	IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)	WLAN	8.27	±9.6
10219	CAD	IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)	WLAN	8.03	±9.6
10220	CAD	IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)	WLAN	8.13	±9.6
10221	CAD	IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)	WLAN	8.27	±9.6
10222	CAD	IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)	WLAN	8.06	±9.6
10223	CAD	IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)	WLAN	8.48	±9.6
10224	CAD	IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)	WLAN	8.08	±9.6

EX3DV4 - SN:7761 September 13, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10225	CAC	UMTS-FDD (HSPA+)	WCDMA	5.97	±9.6
10226	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.49	±9.6
10227	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.26	±9.6
10228	CAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)	LTE-TDD	9.22	±9.6
10229	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10230	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10231	CAE	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)	LTE-TDD	9.19	±9.6
10232	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10233	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10234	CAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)	LTE-TDD	9.21	±9.6
10235	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10236	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10237	CAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)	LTE-TDD	9.21	±9.6
10238	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)	LTE-TDD	9.48	±9.6
10239	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)	LTE-TDD	10.25	±9.6
10240	CAG	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)	LTE-TDD	9.21	±9.6
10241	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.82	±9.6
10242	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)	LTE-TDD	9.86	±9.6
10243	CAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)	LTE-TDD	9.46	±9.6
10244	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-TDD	10.06	±9.6
10245	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-TDD	10.06	±9.6
10246	CAE	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-TDD	9.30	±9.6
10247	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)	LTE-TDD	9.91	±9.6
10248	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)	LTE-TDD	10.09	±9.6
10249	CAH	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)	LTE-TDD	9.29	±9.6
10250	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)	LTE-TDD	9.81	±9.6
10251	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)	LTE-TDD	10.17	±9.6
10252	CAH	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)	LTE-TDD	9.24	±9.6
10253	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)	LTE-TDD	9.90	±9.6
10254	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)	LTE-TDD	10.14	±9.6
10255	CAG	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)	LTE-TDD	9.20	±9.6
10256	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)	LTE-TDD	9.96	±9.6
10257	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)	LTE-TDD	10.08	±9.6
10258	CAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)	LTE-TDD	9.34	±9.6
10259	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)	LTE-TDD	9.98	±9.6
10260	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)	LTE-TDD	9.97	±9.6
10261	CAE	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)	LTE-TDD	9.24	±9.6
10262	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)	LTE-TDD	9.83	±9.6
10263	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)	LTE-TDD	10.16	±9.6
10264	CAH	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)	LTE-TDD	9.23	±9.6
10265	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)	LTE-TDD	9.92	±9.6
10266	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)	LTE-TDD	10.07	±9.6
10267	CAH	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)	LTE-TDD	9.30	±9.6
10268	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)	LTE-TDD	10.06	±9.6
10269	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)	LTE-TDD	10.13	±9.6
10270	CAG	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-TDD	9.58	±9.6
10274	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)	WCDMA	4.87	±9.6
10275	CAC	UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)	WCDMA	3.96	±9.6
10277	CAA	PHS (QPSK)	PHS	11.81	±9.6
10278	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.5)	PHS	11.81	±9.6
10279	CAA	PHS (QPSK, BW 884 MHz, Rolloff 0.38)	PHS	12.18	±9.6
10290	AAB	CDMA2000, RC1, SO55, Full Rate	CDMA2000	3.91	±9.6
10291	AAB	CDMA2000, RC3, SO55, Full Rate	CDMA2000	3.46	±9.6
10292	AAB	CDMA2000, RC3, SO32, Full Rate	CDMA2000	3.39	±9.6
10293	AAB	CDMA2000, RC3, SO3, Full Rate	CDMA2000	3.50	±9.6
10295	AAB	CDMA2000, RC1, SO3, 1/8th Rate 25 fr.	CDMA2000	12.49	±9.6
10297	AAE	LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)	LTE-FDD	5.81	±9.6
10298	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)	LTE-FDD	5.72	±9.6
10299	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)	LTE-FDD	6.39	±9.6
10300	AAE	LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)	LTE-FDD	6.60	±9.6
10301	AAA	IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC)	WiMAX	12.03	±9.6
10302	AAA	IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols)	WiMAX	12.57	±9.6
10303	AAA	IEEE 802.16e WiMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC)	WiMAX	12.52	±9.6
10304	AAA	IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC)	WiMAX	11.86	±9.6
10305	AAA	IEEE 802.16e WiMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)	WiMAX	15.24	±9.6
10306	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC, 18 symbols)	WiMAX	14.67	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10307	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)	WiMAX	14.49	±9.6
10308	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, PUSC)	WiMAX	14.46	±9.6
10309	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols)	WiMAX	14.58	±9.6
10310	AAA	IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols)	WiMAX	14.57	±9.6
10311	AAE	LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)	LTE-FDD	6.06	±9.6
10313	AAA	iDEN 1:3	iDEN	10.51	±9.6
10314	AAA	iDEN 1:6	iDEN	13.48	±9.6
10315	AAB	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)	WLAN	1.71	±9.6
10316	AAB	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10317	AAD	IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)	WLAN	8.36	±9.6
10352	AAA	Pulse Waveform (200Hz, 10%)	Generic	10.00	±9.6
10353	AAA	Pulse Waveform (200Hz, 20%)	Generic	6.99	±9.6
10354	AAA	Pulse Waveform (200Hz, 40%)	Generic	3.98	±9.6
10355	AAA	Pulse Waveform (200Hz, 60%)	Generic	2.22	±9.6
10356	AAA	Pulse Waveform (200Hz, 80%)	Generic	0.97	±9.6
10387	AAA	QPSK Waveform, 1 MHz	Generic	5.10	±9.6
10388	AAA	QPSK Waveform, 10 MHz	Generic	5.22	±9.6
10396	AAA	64-QAM Waveform, 100 kHz	Generic	6.27	±9.6
10399	AAA	64-QAM Waveform, 40 MHz	Generic	6.27	±9.6
10400	AAE	IEEE 802.11ac WiFi (20 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.37	±9.6
10401	AAE	IEEE 802.11ac WiFi (40 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.60	±9.6
10402	AAE	IEEE 802.11ac WiFi (80 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.53	±9.6
10403	AAB	CDMA2000 (1xEV-DO, Rev. 0)	CDMA2000	3.76	±9.6
10404	AAB	CDMA2000 (1xEV-DO, Rev. A)	CDMA2000	3.77	±9.6
10406	AAB	CDMA2000, RC3, SO32, SCH0, Full Rate	CDMA2000	5.22	±9.6
10410	AAH	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Conf=4)	LTE-TDD	7.82	±9.6
10414	AAA	WLAN CCDF, 64-QAM, 40 MHz	Generic	8.54	±9.6
10415	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 99pc duty cycle)	WLAN	1.54	±9.6
10416	AAA	IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10417	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10418	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Long preambule)	WLAN	8.14	±9.6
10419	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 99pc duty cycle, Short preambule)	WLAN	8.19	±9.6
10422	AAC	IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)	WLAN	8.32	±9.6
10423	AAC	IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)	WLAN	8.47	±9.6
10424	AAC	IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)	WLAN	8.40	±9.6
10425	AAC	IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)	WLAN	8.41	±9.6
10426	AAC	IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)	WLAN	8.45	±9.6
10427	AAC	IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)	WLAN	8.41	±9.6
10430	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)	LTE-FDD	8.28	±9.6
10431	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)	LTE-FDD	8.38	±9.6
10432	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10433	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)	LTE-FDD	8.34	±9.6
10434	AAB	W-CDMA (BS Test Model 1, 64 DPCH)	WCDMA	8.60	±9.6
10435	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10447	AAE	LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.56	±9.6
10448	AAE	LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clippin 44%)	LTE-FDD	7.53	±9.6
10449	AAD	LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Cliping 44%)	LTE-FDD	7.51	±9.6
10450	AAD	LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-FDD	7.48	±9.6
10451	AAB	W-CDMA (BS Test Model 1, 64 DPCH, Clipping 44%)	WCDMA	7.59	±9.6
10453	AAE	Validation (Square, 10 ms, 1 ms)	Test	10.00	±9.6
10456	AAC	IEEE 802.11ac WiFi (160 MHz, 64-QAM, 99pc duty cycle)	WLAN	8.63	±9.6
10457	AAB	UMTS-FDD (DC-HSDPA)	WCDMA	6.62	±9.6
10458	AAA	CDMA2000 (1xEV-DO, Rev. B, 2 carriers)	CDMA2000	6.55	±9.6
10459	AAA	CDMA2000 (1xEV-DO, Rev. B, 3 carriers)	CDMA2000	8.25	±9.6
10460	AAB	UMTS-FDD (WCDMA, AMR)	WCDMA	2.39	±9.6
10461	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10462	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.30	±9.6
10463	AAC	LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.6
10464	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10465	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10466	AAD	LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10467	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10468	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10469	AAG	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.56	±9.6
10470	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10471	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10472	AAG	LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10473	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.82	±9.6
10474	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10475	AAF	LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10477	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.32	±9.6
10478	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.57	±9.6
10479	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10480	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.18	±9.6
10481	AAC	LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±9.6
10482	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.71	±9.6
10483	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.39	±9.6
10484	AAD	LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.47	±9.6
10485	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.59	±9.6
10486	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.38	±9.6
10487	AAG	LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.60	±9.6
10488	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.70	±9.6
10489	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±9.6
10490	AAG	LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10491	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10492	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.41	±9.6
10493	AAF	LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10494	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10495	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.37	±9.6
10496	AAG	LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10497	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±9.6
10498	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.40	±9.6
10499	AAC	LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.68	±9.6
10500	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.67	±9.6
10501	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.44	±9.6
10502	AAD	LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.52	±9.6
10503	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.72	±9.6
10504	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.31	±9.6
10505	AAG	LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.54	±9.6
10506	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10507	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.36	±9.6
10508	AAG	LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.55	±9.6
10509	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.99	±9.6
10510	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.49	±9.6
10511	AAF	LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.51	±9.6
10512	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)	LTE-TDD	7.74	±9.6
10513	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.42	±9.6
10514	AAG	LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)	LTE-TDD	8.45	±9.6
10515	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
10516	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)	WLAN	1.57	±9.6
10517	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)	WLAN	1.58	±9.6
10518	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.23	±9.6
10519	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.39	±9.6
10520	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.12	±9.6
10521	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)	WLAN	7.97	±9.6
10522	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
10523	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.08	±9.6
10524	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.27	±9.6
10525	AAC	IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc duty cycle)	WLAN	8.36	±9.6
10526	AAC	IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc duty cycle)	WLAN	8.42	±9.6
10527	AAC	IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc duty cycle)	WLAN	8.21	±9.6
10528	AAC	IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc duty cycle)	WLAN	8.36	±9.6
10529	AAC	IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.36	±9.6
10531	AAC	IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.43	±9.6
10532	AAC	IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
10533	AAC	IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.38	±9.6
10534	AAC	IEEE 802.11ac WiFi (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.45	±9.6
10535	AAC	IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.45	±9.6
10536	AAC	IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.32	±9.6
10537	AAC	IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.44	±9.6
10538	AAC	IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.54	±9.6
10540	AAC	IEEE 802.11ac WiFi (40 MHz, MCS6, 99pc duty cycle)	WLAN	8.39	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10541	AAC	IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.46	±9.6
10542	AAC	IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.65	±9.6
10543	AAC	IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.65	±9.6
10544	AAC	IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.47	±9.6
10545	AAC	IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
10546	AAC	IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.35	±9.6
10547	AAC	IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.49	±9.6
10548	AAC	IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc duty cycle)	WLAN	8.37	±9.6
10550	AAC	IEEE 802.11ac WiFi (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.38	±9.6
10551	AAC	IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.50	±9.6
10552	AAC	IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.42	±9.6
10553	AAC	IEEE 802.11ac WiFi (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.45	±9.6
10554	AAD	IEEE 802.11ac WiFi (160 MHz, MCS0, 99pc duty cycle)	WLAN	8.48	±9.6
10555	AAD	IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.47	±9.6
10556	AAD	IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.50	±9.6
10557	AAD	IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc duty cycle)	WLAN	8.52	±9.6
10558	AAD	IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc duty cycle)	WLAN	8.61	±9.6
10560	AAD	IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.73	±9.6
10561	AAD	IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.56	±9.6
10562	AAD	IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc duty cycle)	WLAN	8.69	±9.6
10563	AAD	IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.77	±9.6
10564	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 99pc duty cycle)	WLAN	8.25	±9.6
10565	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 99pc duty cycle)	WLAN	8.45	±9.6
10566	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 99pc duty cycle)	WLAN	8.13	±9.6
10567	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 99pc duty cycle)	WLAN	8.00	±9.6
10568	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 99pc duty cycle)	WLAN	8.37	±9.6
10569	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 99pc duty cycle)	WLAN	8.10	±9.6
10570	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 99pc duty cycle)	WLAN	8.30	±9.6
10571	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
10572	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 90pc duty cycle)	WLAN	1.99	±9.6
10573	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6
10574	AAA	IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 90pc duty cycle)	WLAN	1.98	±9.6
10575	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6
10576	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6
10577	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
10578	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
10579	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6
10580	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6
10581	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6
10582	AAA	IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6
10583	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps, 90pc duty cycle)	WLAN	8.59	±9.6
10584	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps, 90pc duty cycle)	WLAN	8.60	±9.6
10585	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps, 90pc duty cycle)	WLAN	8.70	±9.6
10586	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps, 90pc duty cycle)	WLAN	8.49	±9.6
10587	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps, 90pc duty cycle)	WLAN	8.36	±9.6
10588	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps, 90pc duty cycle)	WLAN	8.76	±9.6
10589	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps, 90pc duty cycle)	WLAN	8.35	±9.6
10590	AAC	IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps, 90pc duty cycle)	WLAN	8.67	±9.6
10591	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle)	WLAN	8.63	±9.6
10592	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6
10593	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle)	WLAN	8.64	±9.6
10594	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6
10595	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle)	WLAN	8.74	±9.6
10596	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle)	WLAN	8.71	±9.6
10597	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc duty cycle)	WLAN	8.72	±9.6
10598	AAC	IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle)	WLAN	8.50	±9.6
10599	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle)	WLAN	8.79	±9.6
10600	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6
10601	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle)	WLAN	8.82	±9.6
10602	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle)	WLAN	8.94	±9.6
10603	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle)	WLAN	9.03	±9.6
10604	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle)	WLAN	8.76	±9.6
10605	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle)	WLAN	8.97	±9.6
10606	AAC	IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6
10607	AAC	IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle)	WLAN	8.64	±9.6
10608	AAC	IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.77	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10609	AAC	IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.57	±9.6
10610	AAC	IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.78	±9.6
10611	AAC	IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
10612	AAC	IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
10613	AAC	IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.94	±9.6
10614	AAC	IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.59	±9.6
10615	AAC	IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
10616	AAC	IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.82	±9.6
10617	AAC	IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.81	±9.6
10618	AAC	IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle)	WLAN	8.58	±9.6
10619	AAC	IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.86	±9.6
10620	AAC	IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle)	WLAN	8.87	±9.6
10621	AAC	IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
10622	AAC	IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc duty cycle)	WLAN	8.68	±9.6
10623	AAC	IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.82	±9.6
10624	AAC	IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc duty cycle)	WLAN	8.96	±9.6
10625	AAC	IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.96	±9.6
10626	AAC	IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.83	±9.6
10627	AAC	IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.88	±9.6
10628	AAC	IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.71	±9.6
10629	AAC	IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle)	WLAN	8.85	±9.6
10630	AAC	IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.72	±9.6
10631	AAC	IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.81	±9.6
10632	AAC	IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6
10633	AAC	IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duty cycle)	WLAN	8.83	±9.6
10634	AAC	IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle)	WLAN	8.80	±9.6
10635	AAC	IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.81	±9.6
10636	AAD	IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle)	WLAN	8.83	±9.6
10637	AAD	IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle)	WLAN	8.79	±9.6
10638	AAD	IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.86	±9.6
10639	AAD	IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle)	WLAN	8.85	±9.6
10640	AAD	IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle)	WLAN	8.98	±9.6
10641	AAD	IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle)	WLAN	9.06	±9.6
10642	AAD	IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc duty cycle)	WLAN	9.06	±9.6
10643	AAD	IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle)	WLAN	8.89	±9.6
10644	AAD	IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle)	WLAN	9.05	±9.6
10645	AAD	IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle)	WLAN	9.11	±9.6
10646	AAH	LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	±9.6
10647	AAG	LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7)	LTE-TDD	11.96	±9.6
10648	AAA	CDMA2000 (1x Advanced)	CDMA2000	3.45	±9.6
10652	AAF	LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.91	±9.6
10653	AAF	LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.42	±9.6
10654	AAE	LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	6.96	±9.6
10655	AAF	LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)	LTE-TDD	7.21	±9.6
10658	AAB	Pulse Waveform (200Hz, 10%)	Test	10.00	±9.6
10659	AAB	Pulse Waveform (200Hz, 20%)	Test	6.99	±9.6
10660	AAB	Pulse Waveform (200Hz, 40%)	Test	3.98	±9.6
10661	AAB	Pulse Waveform (200Hz, 60%)	Test	2.22	±9.6
10662	AAB	Pulse Waveform (200Hz, 80%)	Test	0.97	±9.6
10670	AAA	Bluetooth Low Energy	Bluetooth	2.19	±9.6
10671	AAC	IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle)	WLAN	9.09	±9.6
10672	AAC	IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)	WLAN	8.57	±9.6
10673	AAC	IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)	WLAN	8.78	±9.6
10674	AAC	IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)	WLAN	8.74	±9.6
10675	AAC	IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle)	WLAN	8.90	±9.6
10676	AAC	IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle)	WLAN	8.77	±9.6
10677	AAC	IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle)	WLAN	8.73	±9.6
10678	AAC	IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle)	WLAN	8.78	±9.6
10679	AAC	IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle)	WLAN	8.89	±9.6
10680	AAC	IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)	WLAN	8.80	±9.6
10681	AAC	IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle)	WLAN	8.62	±9.6
10682	AAC	IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)	WLAN	8.83	±9.6
10683	AAC	IEEE 802.11ax (20 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6
10684	AAC	IEEE 802.11ax (20 MHz, MCS1, 99pc duty cycle)	WLAN	8.26	±9.6
10685	AAC	IEEE 802.11ax (20 MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6
10686	AAC	IEEE 802.11ax (20 MHz, MCS3, 99pc duty cycle)	WLAN	8.28	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10687	AAC	IEEE 802.11ax (20 MHz, MCS4, 99pc duty cycle)	WLAN	8.45	±9.6
10688	AAC	IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle)	WLAN	8.29	±9.6
10689	AAC	IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle)	WLAN	8.55	±9.6
10690	AAC	IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
10691	AAC	IEEE 802.11ax (20 MHz, MCS8, 99pc duty cycle)	WLAN	8.25	±9.6
10692	AAC	IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle)	WLAN	8.29	±9.6
10693	AAC	IEEE 802.11ax (20 MHz, MCS10, 99pc duty cycle)	WLAN	8.25	±9.6
10694	AAC	IEEE 802.11ax (20 MHz, MCS11, 99pc duty cycle)	WLAN	8.57	±9.6
10695	AAC	IEEE 802.11ax (40 MHz, MCS0, 90pc duty cycle)	WLAN	8.78	±9.6
10696	AAC	IEEE 802.11ax (40 MHz, MCS1, 90pc duty cycle)	WLAN	8.91	±9.6
10697	AAC	IEEE 802.11ax (40 MHz, MCS2, 90pc duty cycle)	WLAN	8.61	±9.6
10698	AAC	IEEE 802.11ax (40 MHz, MCS3, 90pc duty cycle)	WLAN	8.89	±9.6
10699	AAC	IEEE 802.11ax (40 MHz, MCS4, 90pc duty cycle)	WLAN	8.82	±9.6
10700	AAC	IEEE 802.11ax (40 MHz, MCS5, 90pc duty cycle)	WLAN	8.73	±9.6
10701	AAC	IEEE 802.11ax (40 MHz, MCS6, 90pc duty cycle)	WLAN	8.86	±9.6
10702	AAC	IEEE 802.11ax (40 MHz, MCS7, 90pc duty cycle)	WLAN	8.70	±9.6
10703	AAC	IEEE 802.11ax (40 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
10704	AAC	IEEE 802.11ax (40 MHz, MCS9, 90pc duty cycle)	WLAN	8.56	±9.6
10705	AAC	IEEE 802.11ax (40 MHz, MCS10, 90pc duty cycle)	WLAN	8.69	±9.6
10706	AAC	IEEE 802.11ax (40 MHz, MCS11, 90pc duty cycle)	WLAN	8.66	±9.6
10707	AAC	IEEE 802.11ax (40 MHz, MCS0, 99pc duty cycle)	WLAN	8.32	±9.6
10708	AAC	IEEE 802.11ax (40 MHz, MCS1, 99pc duty cycle)	WLAN	8.55	±9.6
10709	AAC	IEEE 802.11ax (40 MHz, MCS2, 99pc duty cycle)	WLAN	8.33	±9.6
10710	AAC	IEEE 802.11ax (40 MHz, MCS3, 99pc duty cycle)	WLAN	8.29	±9.6
10711	AAC	IEEE 802.11ax (40 MHz, MCS4, 99pc duty cycle)	WLAN	8.39	±9.6
10712	AAC	IEEE 802.11ax (40 MHz, MCS5, 99pc duty cycle)	WLAN	8.67	±9.6
10713	AAC	IEEE 802.11ax (40 MHz, MCS6, 99pc duty cycle)	WLAN	8.33	±9.6
10714	AAC	IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)	WLAN	8.26	±9.6
10715	AAC	IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle)	WLAN	8.45	±9.6
10716	AAC	IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)	WLAN	8.30	±9.6
10717	AAC	IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle)	WLAN	8.48	±9.6
10718	AAC	IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle)	WLAN	8.24	±9.6
10719	AAC	IEEE 802.11ax (80 MHz, MCS0, 90pc duty cycle)	WLAN	8.81	±9.6
10720	AAC	IEEE 802.11ax (80 MHz, MCS1, 90pc duty cycle)	WLAN	8.87	±9.6
10721	AAC	IEEE 802.11ax (80 MHz, MCS2, 90pc duty cycle)	WLAN	8.76	±9.6
10722	AAC	IEEE 802.11ax (80 MHz, MCS3, 90pc duty cycle)	WLAN	8.55	±9.6
10723	AAC	IEEE 802.11ax (80 MHz, MCS4, 90pc duty cycle)	WLAN	8.70	±9.6
10724	AAC	IEEE 802.11ax (80 MHz, MCS5, 90pc duty cycle)	WLAN	8.90	±9.6
10725	AAC	IEEE 802.11ax (80 MHz, MCS6, 90pc duty cycle)	WLAN	8.74	±9.6
10726	AAC	IEEE 802.11ax (80 MHz, MCS7, 90pc duty cycle)	WLAN	8.72	±9.6
10727	AAC	IEEE 802.11ax (80 MHz, MCS8, 90pc duty cycle)	WLAN	8.66	±9.6
10728	AAC	IEEE 802.11ax (80 MHz, MCS9, 90pc duty cycle)	WLAN	8.65	±9.6
10729	AAC	IEEE 802.11ax (80 MHz, MCS10, 90pc duty cycle)	WLAN	8.64	±9.6
10730	AAC	IEEE 802.11ax (80 MHz, MCS11, 90pc duty cycle)	WLAN	8.67	±9.6
10731	AAC	IEEE 802.11ax (80 MHz, MCS0, 99pc duty cycle)	WLAN	8.42	±9.6
10732	AAC	IEEE 802.11ax (80 MHz, MCS1, 99pc duty cycle)	WLAN	8.46	±9.6
10733	AAC	IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle)	WLAN	8.40	±9.6
10734	AAC	IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)	WLAN	8.25	±9.6
10735	AAC	IEEE 802.11ax (80 MHz, MCS4, 99pc duty cycle)	WLAN	8.33	±9.6
10736	AAC	IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle)	WLAN	8.27	±9.6
10737	AAC	IEEE 802.11ax (80 MHz, MCS6, 99pc duty cycle)	WLAN	8.36	±9.6
10738	AAC	IEEE 802.11ax (80 MHz, MCS7, 99pc duty cycle)	WLAN	8.42	±9.6
10739	AAC	IEEE 802.11ax (80 MHz, MCS8, 99pc duty cycle)	WLAN	8.29	±9.6
10740	AAC	IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)	WLAN	8.48	±9.6
10741	AAC	IEEE 802.11ax (80 MHz, MCS10, 99pc duty cycle)	WLAN	8.40	±9.6
10742	AAC	IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle)	WLAN	8.43	±9.6
10743	AAC	IEEE 802.11ax (160 MHz, MCS0, 90pc duty cycle)	WLAN	8.94	±9.6
10744	AAC	IEEE 802.11ax (160 MHz, MCS1, 90pc duty cycle)	WLAN	9.16	±9.6
10745	AAC	IEEE 802.11ax (160 MHz, MCS2, 90pc duty cycle)	WLAN	8.93	±9.6
10746	AAC	IEEE 802.11ax (160 MHz, MCS3, 90pc duty cycle)	WLAN	9.11	±9.6
10747	AAC	IEEE 802.11ax (160 MHz, MCS4, 90pc duty cycle)	WLAN	9.04	±9.6
10748	AAC	IEEE 802.11ax (160 MHz, MCS5, 90pc duty cycle)	WLAN	8.93	±9.6
10749	AAC	IEEE 802.11ax (160 MHz, MCS6, 90pc duty cycle)	WLAN	8.90	±9.6
10750	AAC	IEEE 802.11ax (160 MHz, MCS7, 90pc duty cycle)	WLAN	8.79	±9.6
10751	AAC	IEEE 802.11ax (160 MHz, MCS8, 90pc duty cycle)	WLAN	8.82	±9.6
10752	AAC	IEEE 802.11ax (160 MHz, MCS9, 90pc duty cycle)	WLAN	8.81	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10753	AAC	IEEE 802.11ax (160 MHz, MCS10, 90pc duty cycle)	WLAN	9.00	±9.6
10754	AAC	IEEE 802.11ax (160 MHz, MCS11, 90pc duty cycle)	WLAN	8.94	±9.6
10755	AAC	IEEE 802.11ax (160 MHz, MCS0, 99pc duty cycle)	WLAN	8.64	±9.6
10756	AAC	IEEE 802.11ax (160 MHz, MCS1, 99pc duty cycle)	WLAN	8.77	±9.6
10757	AAC	IEEE 802.11ax (160 MHz, MCS2, 99pc duty cycle)	WLAN	8.77	±9.6
10758	AAC	IEEE 802.11ax (160 MHz, MCS3, 99pc duty cycle)	WLAN	8.69	±9.6
10759	AAC	IEEE 802.11ax (160 MHz, MCS4, 99pc duty cycle)	WLAN	8.58	±9.6
10760	AAC	IEEE 802.11ax (160 MHz, MCS5, 99pc duty cycle)	WLAN	8.49	±9.6
10761	AAC	IEEE 802.11ax (160 MHz, MCS6, 99pc duty cycle)	WLAN	8.58	±9.6
10762	AAC	IEEE 802.11ax (160 MHz, MCS7, 99pc duty cycle)	WLAN	8.49	±9.6
10763	AAC	IEEE 802.11ax (160 MHz, MCS8, 99pc duty cycle)	WLAN	8.53	±9.6
10764	AAC	IEEE 802.11ax (160 MHz, MCS9, 99pc duty cycle)	WLAN	8.54	±9.6
10765	AAC	IEEE 802.11ax (160 MHz, MCS10, 99pc duty cycle)	WLAN	8.54	±9.6
10766	AAC	IEEE 802.11ax (160 MHz, MCS11, 99pc duty cycle)	WLAN	8.51	±9.6
10767	AAE	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	7.99	±9.6
10768	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±9.6
10769	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.01	±9.6
10770	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
10771	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
10772	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.23	±9.6
10773	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.03	±9.6
10774	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.02	±9.6
10775	AAD	5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±9.6
10776	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±9.6
10777	AAC	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.30	±9.6
10778	AAD	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.34	±9.6
10779	AAC	5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.42	±9.6
10780	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±9.6
10781	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.38	±9.6
10782	AAD	5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.43	±9.6
10783	AAE	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.31	±9.6
10784	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.29	±9.6
10785	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.40	±9.6
10786	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.35	±9.6
10787	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.44	±9.6
10788	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	±9.6
10789	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.37	±9.6
10790	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	8.39	±9.6
10791	AAE	5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.83	±9.6
10792	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.92	±9.6
10793	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.95	±9.6
10794	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±9.6
10795	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.84	±9.6
10796	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.82	±9.6
10797	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.01	±9.6
10798	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6
10799	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±9.6
10801	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.89	±9.6
10802	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.87	±9.6
10803	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	7.93	±9.6
10805	AAD	5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
10806	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.37	±9.6
10809	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
10810	AAD	5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
10812	AAD	5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±9.6
10817	AAE	5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.35	±9.6
10818	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.34	±9.6
10819	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.33	±9.6
10820	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.30	±9.6
10821	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
10822	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
10823	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.36	±9.6
10824	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.39	±9.6
10825	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.41	±9.6
10827	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.42	±9.6
10828	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.43	±9.6

EX3DV4 - SN:7761 September 13, 2023

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10829	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	8.40	±9.6
10830	AAD	5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.63	±9.6
10831	AAD	5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.73	±9.6
10832	AAD	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.74	±9.6
10833	AAD	5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
10834	AAD	5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.75	±9.6
10835	AAD	5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
10836	AAD	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.66	±9.6
10837	AAD	5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.68	±9.6
10839	AAD	5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.70	±9.6
10840	AAD	5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.67	±9.6
10841	AAD	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	7.71	±9.6
10843	AAD	5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.49	±9.6
10844	AAD	5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
10846	AAD	5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10854	AAD	5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
10855	AAD	5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	±9.6
10856	AAD	5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±9.6
10857	AAD	5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.35	±9.6
10858	AAD	5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.36	±9.6
10859	AAD	5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.34	±9.6
10860	AAD	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10861	AAD	5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.40	±9.6
10863	AAD	5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10864	AAD	5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.37	±9.6
10865	AAD	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)	5G NR FR1 TDD	8.41	±9.6
10866	AAD	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10868	AAD	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.89	±9.6
10869	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
10870	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.86	±9.6
10871	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
10872	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.52	±9.6
10873	AAE	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	±9.6
10874	AAE	5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
10875	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±9.6
10876	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.39	±9.6
10877	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	7.95	±9.6
10878	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.41	±9.6
10879	AAE	5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.12	±9.6
10880	AAE	5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.38	±9.6
10881	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.75	±9.6
10882	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	5.96	±9.6
10883	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.57	±9.6
10884	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	6.53	±9.6
10885	AAE	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.61	±9.6
10886	AAE	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	6.65	±9.6
10887	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	7.78	±9.6
10888	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)	5G NR FR2 TDD	8.35	±9.6
10889	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.02	±9.6
10890	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)	5G NR FR2 TDD	8.40	±9.6
10891	AAE	5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.13	±9.6
10892	AAE	5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)	5G NR FR2 TDD	8.41	±9.6
10897	AAC	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.66	±9.6
10898	AAB	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±9.6
10899	AAB	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.67	±9.6
10900	AAB	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10901	AAB	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10902	AAB	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10903	AAB	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10904	AAB	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10905	AAB	5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10906	AAB	5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.68	±9.6
10907	AAC	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.78	±9.6
10908	AAB	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	±9.6
10909	AAB	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.96	±9.6
10910	AAB	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10911	AAB	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.93	±9.6
10912	AAB	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10913	AAB	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10914	AAB	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.85	±9.6
10915	AAB	5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.83	±9.6
10916	AAB	5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	±9.6
10917	AAB	5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	±9.6
10918	AAC	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	±9.6
10919	AAB	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.86	±9.6
10920	AAB	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.87	±9.6
10921	AAB	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10922	AAB	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.82	±9.6
10923	AAB	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10924	AAB	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10925	AAB	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.95	±9.6
10926	AAB	5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.84	±9.6
10927	AAB	5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	5.94	±9.6
10928	AAC	5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
10929	AAC	5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
10930	AAC	5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.52	±9.6
10931	AAC	5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10932	AAC	5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10933	AAC	5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10934	AAC	5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10935	AAD	5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.51	±9.6
10936	AAC	5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
10937	AAC	5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.77	±9.6
10938	AAC	5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.90	±9.6
10939	AAC	5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.82	±9.6
10940	AAC	5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.89	±9.6
10941	AAC	5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
10942	AAC	5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
10943	AAD	5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.95	±9.6
10944	AAC	5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.81	±9.6
10945	AAC	5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.85	±9.6
10946	AAC	5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.83	±9.6
10947	AAC	5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	±9.6
10948	AAC	5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	±9.6
10949	AAC	5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.87	±9.6
10950	AAC	5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.94	±9.6
10951	AAD	5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)	5G NR FR1 FDD	5.92	±9.6
10952	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.25	±9.6
10953	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.15	±9.6
10954	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.23	±9.6
10955	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.42	±9.6
10956	AAA	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.14	±9.6
10957	AAA	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.31	±9.6
10958	AAA	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.61	±9.6
10959	AAA	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.33	±9.6
10960	AAC	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.32	±9.6
10961	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.36	±9.6
10962	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.40	±9.6
10963	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.55	±9.6
10964	AAC	5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.29	±9.6
10965	AAB	5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.37	±9.6
10966	AAB	5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.55	±9.6
10967	AAB	5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.42	±9.6
10968	AAB	5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.49	±9.6
10972	AAB	5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)	5G NR FR1 TDD	11.59	±9.6
10973	AAB	5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)	5G NR FR1 TDD	9.06	±9.6
10974	AAB	5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)	5G NR FR1 TDD	10.28	±9.6
10978	AAA	ULLA BDR	ULLA	1.16	±9.6
10979	AAA	ULLA HDR4	ULLA	8.58	±9.6
10980	AAA	ULLA HDR8	ULLA	10.32	±9.6
10981	AAA	ULLA HDRp4	ULLA	3.19	±9.6
10982	AAA	ULLA HDRp8	ULLA	3.43	±9.6

UID	Rev	Communication System Name	Group	PAR (dB)	Unc^E $k=2$
10983	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.31	±9.6
10984	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	9.42	±9.6
10985	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.54	±9.6
10986	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.50	±9.6
10987	AAA	5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.53	±9.6
10988	AAA	5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.38	±9.6
10989	AAA	5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.33	±9.6
10990	AAA	5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	9.52	±9.6
11003	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz)	5G NR FR1 TDD	10.24	±9.6
11004	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz)	5G NR FR1 TDD	10.73	±9.6
11005	AAA	5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.70	±9.6
11006	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.55	±9.6
11007	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.46	±9.6
11008	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz)	5G NR FR1 FDD	8.51	±9.6
11009	AAA	5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.76	±9.6
11010	AAA	5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.95	±9.6
11011	AAA	5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.96	±9.6
11012	AAA	5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz)	5G NR FR1 FDD	8.68	±9.6
11013	AAA	IEEE 802.11be (320 MHz, MCS1, 99pc duty cycle)	WLAN	8.47	±9.6
11014	AAA	IEEE 802.11be (320 MHz, MCS2, 99pc duty cycle)	WLAN	8.45	±9.6
11015	AAA	IEEE 802.11be (320 MHz, MCS3, 99pc duty cycle)	WLAN	8.44	±9.6
11016	AAA	IEEE 802.11be (320 MHz, MCS4, 99pc duty cycle)	WLAN	8.44	±9.6
11017	AAA	IEEE 802.11be (320 MHz, MCS5, 99pc duty cycle)	WLAN	8.41	±9.6
11018	AAA	IEEE 802.11be (320 MHz, MCS6, 99pc duty cycle)	WLAN	8.40	±9.6
11019	AAA	IEEE 802.11be (320 MHz, MCS7, 99pc duty cycle)	WLAN	8.29	±9.6
11020	AAA	IEEE 802.11be (320 MHz, MCS8, 99pc duty cycle)	WLAN	8.27	±9.6
11021	AAA	IEEE 802.11be (320 MHz, MCS9, 99pc duty cycle)	WLAN	8.46	±9.6
11022	AAA	IEEE 802.11be (320 MHz, MCS10, 99pc duty cycle)	WLAN	8.36	±9.6
11023	AAA	IEEE 802.11be (320 MHz, MCS11, 99pc duty cycle)	WLAN	8.09	±9.6
11024	AAA	IEEE 802.11be (320 MHz, MCS12, 99pc duty cycle)	WLAN	8.42	±9.6
11025	AAA	IEEE 802.11be (320 MHz, MCS13, 99pc duty cycle)	WLAN	8.37	±9.6
11026	AAA	IEEE 802.11be (320 MHz, MCS0, 99pc duty cycle)	WLAN	8.39	±9.6

^{E} Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accreditation No.: SCS 0108

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Client	DEKRA Suzhou	Certificate No.	EX-7761_Sep24

CALIBRATION CERTIFICATE

Object	EX3DV4 - SN:7761
Calibration procedure(s)	QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6, QA CAL-25.v8 Calibration procedure for dosimetric E-field probes
Calibration date	September 19, 2024

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI). The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter NRP2	SN: 104778	26-Mar-24 (No. 217-04036/04037)	Mar-25
Power sensor NRP-Z91	SN: 103244	26-Mar-24 (No. 217-04036)	Mar-25
OCP DAK-3.5 (weighted)	SN: 1249	05-Oct-23 (OCP-DAK3.5-1249_Oct23)	Oct-24
OCP DAK-12	SN: 1016	05-Oct-23 (OCP-DAK12-1016_Oct23)	Oct-24
Reference 20 dB Attenuator	SN: CC2552 (20x)	26-Mar-24 (No. 217-04046)	Mar-25
DAE4	SN: 660	23-Feb-24 (No. DAE4-660_Feb24)	Feb-25
Reference Probe EX3DV4	SN: 7349	03-Jun-24 (No. EX3-7349_Jun24)	Jun-25

Secondary Standards	ID	Check Date (in house)	Scheduled Check
Power meter E4419B	SN: GB41293874	06-Apr-16 (in house check Jun-24)	In house check: Jun-26
Power sensor E4412A	SN: MY41498087	06-Apr-16 (in house check Jun-24)	In house check: Jun-26
Power sensor E4412A	SN: 000110210	06-Apr-16 (in house check Jun-24)	In house check: Jun-26
RF generator HP 8648C	SN: US3642U01700	04-Aug-99 (in house check Jun-24)	In house check: Jun-26
Network Analyzer E8358A	SN: US41080477	31-Mar-14 (in house check Oct-22)	In house check: Oct-24

	Name	Function	Signature
Calibrated by	Joanna Lleshaj	Laboratory Technician	
Approved by	Sven Kühn	Technical Manager	

Issued: September 19, 2024