DEKRA Testing and Certification (Suzhou) Co., Ltd.
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Test report No:
24A0319R-RF-US-P03V01

SAR TEST REPORT

Product Name	POS Terminal
Trademark	
Model and /or type reference	MF960
FCC ID	2AQRE-MF960
Applicant´s name / address	Fujian Morefun Electronic Technology Co., Ltd. 4th Floor, #15 Building, Standard plant, Fuwan, Jinshan Industry Center Area, #869 Panyu Rd, Gaishan Town, Cangshan Area, Fuzhou, Fujian, China
Test method requested, standard	FCC 47CFR §2.1093 IEEE Std 1528-2013 EN IEC/IEEE 62209-1528:2021 ANSI C95.1-2005
Highest Measurement SAR	MAX Body SAR: **1.026** W/kg MAX Limbs SAR: **1.681** W/kg
Highest Simultaneous Transmission SAR	MAX Body SAR: **1.08** W/kg MAX Limbs SAR: **1.80** 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	2024-12-08
Report Version	V1.0
Report template No	Template_FCC SAR-RF-V1.0

INDEX

Page

COMPETENCES AND GUARANTEES **4**

GENERAL CONDITIONS **4**

ENVIRONMENTAL CONDITIONS **5**

POSSIBLE TEST CASE VERDICTS **5**

ABBREVIATIONS **5**

DOCUMENT HISTORY **6**

REMARKS AND COMMENTS **6**

1 GENERAL INFORMATION **7**

1.1 General Description of the Item(s) 7
1.2 Antenna Information 11
1.3 Antenna location diagram 12
1.4 Data Rate 13
1.5 Channel List 15
1.6 Test Facility 17

2 SAR MEASUREMENT SYSTEM **18**

2.1 DASY6 System Description 18
2.1.1. Applications 18
2.1.2. Area & Zoom Scan Procedures 19
2.1.3. Uncertainty of Inter-/Extrapolation and Averaging 20
2.2 DASY6 E-Field Probe 21
2.3 Boundary Detection Unit and Probe Mounting Device 22
2.4 DATA Acquisition Electronics (DAE) and Measurement Server 22
2.5 Robot 23
2.6 Light Beam Unit 23
2.7 Device Holder 24
2.8 Phantom 25

3 TISSUE SIMULATING LIQUID **26**

3.1 The composition of the tissue simulating liquid 26
3.2 Tissue Calibration Result 27
3.3 Tissue Dielectric Parameters for Head Phantoms 28

4 SAR MEASUREMENT PROCEDURE **29**

4.1 SAR System Validation 29
4.1.1. Validation Dipoles 29
4.1.2. Validation Result 30
4.1.3. Dipole Calibration Data 32
4.2 SAR Measurement Procedure 46
5 SAR EXPOSURE LIMITS 47
6 TEST EQUIPMENT LIST 48
7 MEASUREMENT UNCERTAINTY 49
8 CONDUCTED POWER MEASUREMENT 51
9 TEST RESULTS 80
9.1 SAR Test Results Summary 80
9.2 Simultaneous Transmission Analysis 90
APPENDIX A. SAR SYSTEM VALIDATION DATA 91
APPENDIX B. SAR MEASUREMENT DATA 100
APPENDIX C. PROBE CALIBRATION DATA 140
APPENDIX D. DIPOLE CALIBRATION DATA 162
APPENDIX E. DAE CALIBRATION DATA 206

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.

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GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Date(receive sample)	Oct. 14, 2024
Date (start test)	Oct. 15, 2024
Date (finish test)	Oct. 30, 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.
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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

ABBREVIATIONS

For the purposes of the present document, the following abbreviations apply:

EUT	:	Equipment Under Test
QP	:	Quasi-Peak
CAV	:	CISPR Average
AV	:	Average
CDN	:	Coupling Decoupling Network
SAC	:	Semi-Anechoic Chamber
OATS	:	Open Area Test Site
BW	:	Bandwidth
AM	:	Amplitude Modulation
PM	:	Pulse Modulation
HCP	:	Horizontal Coupling Plane
VCP	:	Vertical Coupling Plane
U_N	:	Nominal voltage
*T*x	:	Transmitter
*R*x	:	Receiver
N/A	:	Not Applicable
N/M	:	Not Measured

DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
24A0319R-RF-US-P03V01	V1.0	Initial issue of report.	2024-12-08

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 47CFR §2.1093, IEEE Std. 1528-2013, EN IEC/IEEE 62209-1528:2021, ANSI C95.1-2005.
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 Data Rate.
   - Chapter 1.5 Channel List.

1 General Information

1.1 General Description of the Item(s)

Product Name ..... :	POS Terminal
Model No. ..... :	MF960
Trademark..... :	
FCC ID..... :	2AQRE-MF960
Hardware Version..... :	B30
Software Version..... :	V13.0.1
Manufacturer..... :	Fujian Morefun Electronic Technology Co., Ltd.
Manufacturer Address..... :	4th Floor, #15 Building, Standard plant, Fuwan, Jinshan Industry Center Area, #869 Panyu Rd, Gaishan Town, Cangshan Area, Fuzhou, Fujian, China
Factory..... :	Fujian Morefun Electronic Technology Co., Ltd.
Factory address ..... :	4th Floor, #15 Building, Standard plant, Fuwan, Jinshan Industry Center Area, #869 Panyu Rd, Gaishan Town, Cangshan Area, Fuzhou, Fujian, China
Operating temperature ..... :	-20 ~ +60 ℃

Module..... :	Z400-H
Wireless specifiction..... :	GSM
Support Band(s)..... :	GSM850 / PCS1900
Uplink Frequency	GSM850: 824.4-848.8 MHz PCS1900: 1850.2-1909.8 MHz
Downlink Frequency	GSM850: 869.2-893.8 MHz PCS1900: 1930.4-1987.6 MHz
Type of Modulation..... :	GMSK For GSM/GPRS 8PSK For EGPRS
Power Class..... :	4 For GSM850 1 For PCS1900
Wireless specifiction ..... :	WCDMA
Support Band(s)..... :	Band II / Band IV / Band V
Uplink Frequency	Band II: 1852.4-1907.6 MHz Band IV: 1710-1755 MHz Band V: 826.4-846.6 MHz
Downlink Frequency	Band II: 1932.4-1987.6 MHz Band IV: 2110-2155 MHz Band V: 871.4-891.6 MHz
Type of Modulation..... :	QPSK
Power Class ..... :	3
Wireless specifiction..... :	LTE
Support Band(s) ..... :	FDD LTE Band 2 / 4 / 5 / 7 / 12 / 13 / 14 / 17 / 25 / 26 / 66 / 71 TDD LTE Band 38 / 41
Uplink..... :	Band 2: 1850-1910 MHz Band 4: 1710-1755 MHz

	Band 5: 824-849 MHz Band 7: 2500-2570 MHz Band 12: 699-716 MHz Band 13: 777-787 MHz Band 14: 788-798 MHz Band 17: 704-716 MHz Band 25: 1850-1915 MHz Band 26: 814-849 MHz Band 66: 1710-1780 MHz Band 71: 663-698 MHz Band 38: 2570-2620 MHz Band 41: 2535-2655 MHz	
Downlink .....:	Band 2: 1930-1990 MHz Band 4: 2110-2155 MHz Band 5: 869-894 MHz Band 7: 2620-2690 MHz Band 12: 729-746 MHz Band 13: 746-756 MHz Band 14: 758-768 MHz Band 17: 734-746 MHz Band 25: 1930-1995 MHz Band 26: 859-894 MHz Band 66: 2110-2200 MHz Band 71: 617-652 MHz Band 38: 2570-2620 MHz Band 41: 2535-2655 MHz	
Channel Bandwidth(MHz) .....:	Band 2:	1.4 MHz / 3 MHz / 5 MHz / 10 MHz / 15 MHz / 20 MHz
	Band 4:	1.4 MHz / 3 MHz / 5 MHz / 10 MHz / 15 MHz / 20 MHz
	Band 5:	1.4 MHz / 3 MHz / 5 MHz / 10 MHz
	Band 7:	5 MHz / 10 MHz / 15 MHz / 20 MHz
	Band 12:	1.4 MHz / 3 MHz / 5 MHz / 10 MHz
	Band 13:	5 MHz / 10 MHz
	Band 14:	5 MHz / 10 MHz
	Band 17:	5 MHz / 10 MHz
	Band 25:	1.4 MHz / 3 MHz / 5 MHz / 10 MHz / 15 MHz / 20 MHz
	Band 26:	5 MHz / 10 MHz / 15 MHz
	Band 66:	1.4 MHz / 3 MHz / 5 MHz / 10 MHz / 15 MHz / 20 MHz
	Band 71:	5 MHz / 10 MHz / 15 MHz / 20 MHz
	Band 38:	5 MHz / 10 MHz / 15 MHz / 20 MHz
	Band 41:	5 MHz / 10 MHz / 15 MHz / 20 MHz
Type of Modulation .....:	QPSK, 16QAM, 64QAM(Only Downlink)	

Module .....:	Z400-H
Wireless specification .....:	Bluetooth (BR/EDR&LE)
Operating frequency range(s)	2402~2480MHz
Type of Modulation .....:	FHSS: 1Mbps(GFSK), 2Mbps(Pi/4 DQPSK), 3Mbps (8DPSK)

	LE : 1Mbps(GFSK); 2Mbps(GFSK);
Number of channel.....:	FHSS: 79 LE : 40
BT Channel Separation .....:	FHSS: 1MHz LE : 2MHz

Wireless Card .....:	Z400-H	
Wireless specifiction.....:	802.11b/g/n	
Operating frequency range(s).....:	2412~2462MHz	
Number of channel.....:	802.11b/g/n(20MHz) : 11 802.11n(40MHz) : 07	
Type of Modulation & Data Rate ....:	Refer to Clause 1.3	
Device category .....:	☐	Fixed point-to-point
	☐	Emit multiple directional beams, simultaneously or sequentially
	☒	Other cases
Wireless specifiction.....:	802.11a / n / ac	
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 802.11n 20 MHz, 40 MHz 802.11ac 20 MHz, 40 MHz, 80 MHz	
Modulation technology.....:	OFDM	
Product Type.....:	Mobile and Portable Client For FCC	
Type of Modulation & Data Rate ....:	Refer to Clause 1.4	
Number of channels .....:	Refer to Clause 1.3	

Rated power supply..... :	Voltage and Frequency	
	☐	AC: 220 - 240 V, 50/60 Hz
	☐	AC: 100 - 240 V, 50/60 Hz
	☒	DC: 5 Vdc
	☒	Battery: 7.20 Vdc, 2600 mAh, 18.72 Wh
	☒	Adapter:
Adapter Model..... :	DGL0502000LUS	
	Input: 100-240V ~ 50/60Hz,0.3A Max Output: 5.0V / 2000 mA	
Mounting position ..... :	☐	Tabletop equipment
	☐	Wall/Ceiling mounted equipment
	☐	Floor standing equipment
	☒	Hand-held/Portable equipment

	☐	Other:

1.2 Antenna Information

WWAN Antenna

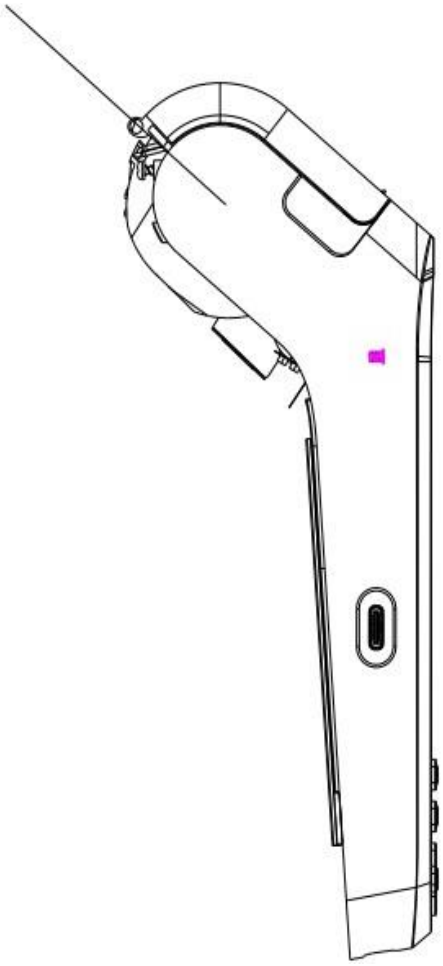
Antenna Delivery ..... :	☒	1TX + 1RX		
	☐	2TX + 2RX		
Antenna technology..... :	☒	SISO		
	☐	MIMO		
Antenna Type ..... :	☐	External	☐	Dipole
			☐	Sectorized
	☒	Internal	☒	Fixed
			☐	FPC
			☐	Ceramic Chip
			☐	Others……..
Antenna Gain ..... :	GSM 850: -1.963 dBi, PCS 1900: -1.806 dBi WCDMA II: -1.806 dBi, WCDMA IV: -0.556 dBi, WCDMA V: -1.963 dBi Band 2: -1.806 dBi, Band 4: -0.556 dBi, Band 5: -1.963 dBi Band 7: -4.011 dBi, Band 12: -1.963 dBi, Band 13: -1.963 dBi Band 14: -1.963 dBi, Band 17: -1.963 dBi, Band 25: -1.979 dBi Band 26: -1.638 dBi, Band 66: -0.556 dBi, Band 71: -1.963 dBi Band 38: -3.724 dBi, Band 41: -3.724 dBi			

WLAN Antenna

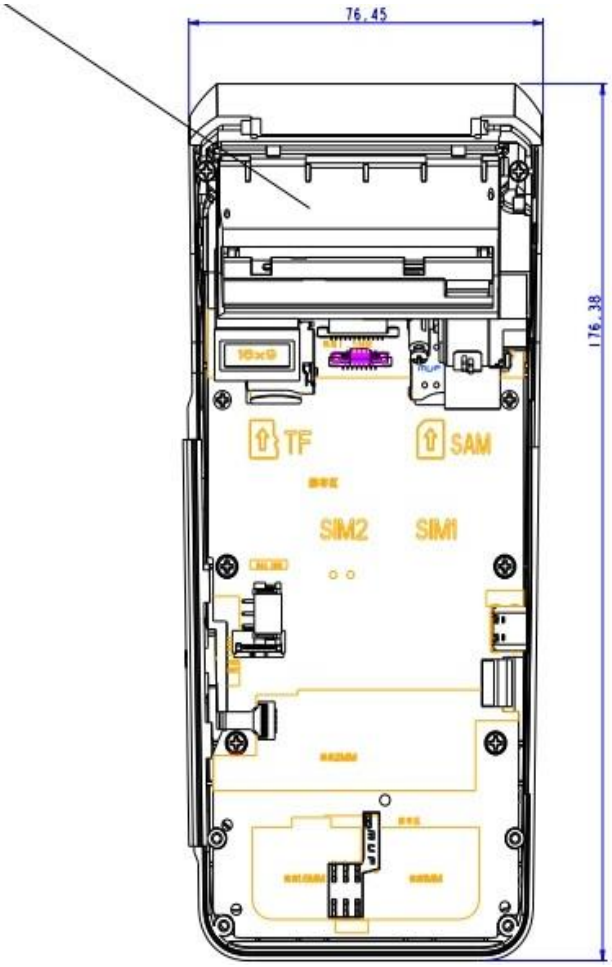
Antenna model / type number.....:	MF960B30 Z400			
Antenna Delivery .....:	☒	1TX + 1RX		
	☐	2TX + 2RX		
	☐	Others: ……		
Antenna technology.....:	☒	SISO		
	☐	MIMO	☐	CDD
			☐	Beam-forming
Antenna Type ..... :	☐	External	☐	Dipole
			☐	Sectorized
	☒	Internal	☐	Ceramic Chip
			☐	PIFA
			☒	FPC
			☐	Others……..
Antenna Gain .....:	2400 MHz ~ 2483.5 MHz: 1.17 dBi 5150 MHz ~ 5850 MHz: 7.10 dBi			

1.3 Antenna location diagram

Wi-Fi / BT Antenna



WWAN Antenna



1.4 Data 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

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 (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(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(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(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(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

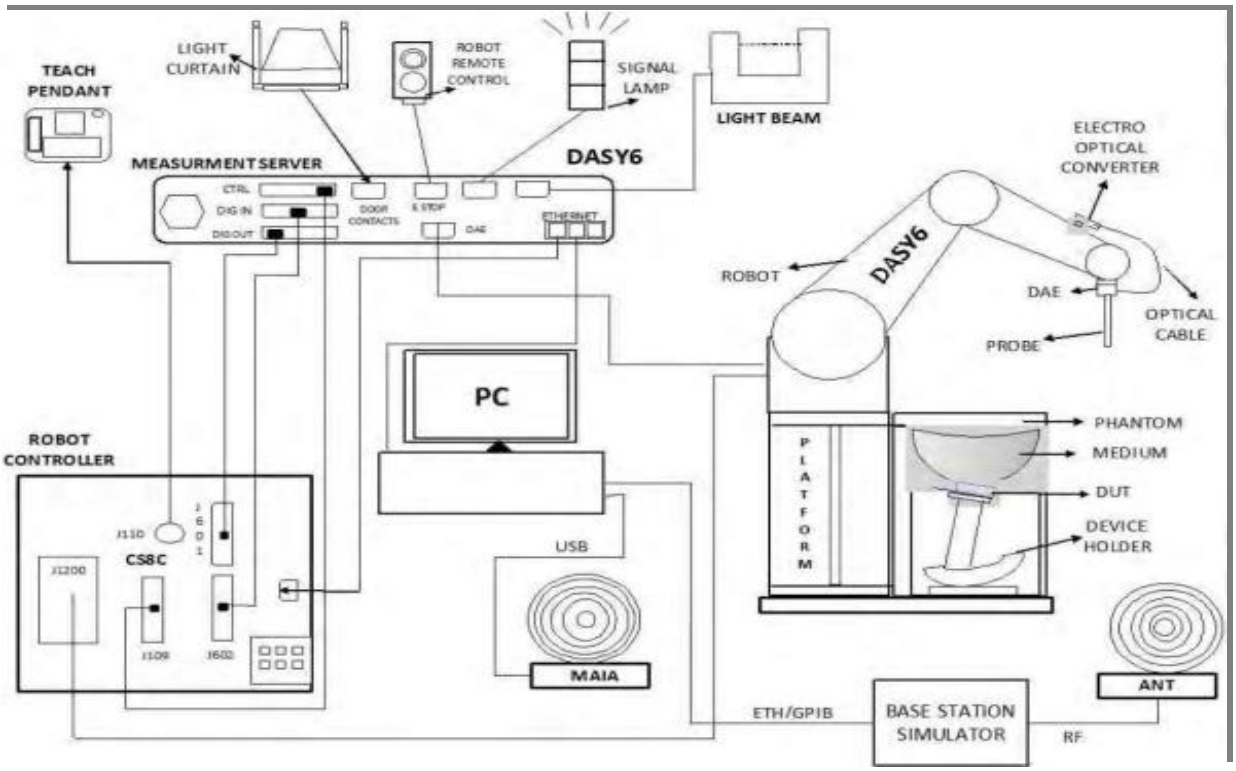
Note: The General Description of the Item, antenna information and Channel List in clause 1 are provided and confirmed by the client.

1.6 Test Facility

USA	**:**	**FCC Designation Number: CN1199**

2 SAR MEASUREMENT SYSTEM

2.1 DASY6 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.

2.1.1. Applications

Predefined procedures and evaluations for automated compliance testing with all worldwide standards, e.g., IEC/IEEE 62209-1528, KDB 865664 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.

2.1.3. 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.

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

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

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

2.2 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.

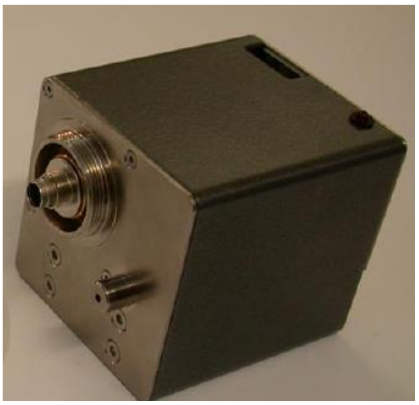
Model	EX3DV4	
Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz to 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)	
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)	
Dynamic Range	10 µW/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)	
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.	

2.3 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.

2.4 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.

2.5 Robot

The DASY6 system uses the high precision robots TX90 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

2.6 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.

2.7 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.

2.8 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 7.125 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.

3 TISSUE SIMULATING LIQUID

3.1 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.

3.2 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]	
750MHz	Reference result ± 5% window	41.9 39.81 to 44.0	0.89 0.85 to 0.93	N/A
	15-10-2024	41.70	0.90	22.0
835MHz	Reference result ± 5% window	41.5 39.43 to 43.58	0.90 0.86 to 0.95	N/A
	16-10-2024	41.24	0.90	22.0
1800MHz	Reference result ± 5% window	40.0 38 to 42	1.40 1.33 to 1.47	N/A
	21-10-2024	38.83	1.41	22.0
1900MHz	Reference result ± 5% window	40.0 38 to 42	1.40 1.33 to 1.47	N/A
	22-10-2024	39.03	1.40	22.0
2600MHz	Reference result ± 5% window	39.0 37.05 to 40.95	1.96 1.86 to 2.06	N/A
	25-10-2024	37.86	2.03	22.0
2450 MHz	Reference result ± 5% window	39.2 37.24 to 41.16	1.80 1.71 to 1.89	N/A
	28-10-2024	38.54	1.86	22.0
5250 MHz	Reference result ± 5% window	35.9 34.11 to 37.70	4.71 4.47 to 4.95	N/A
	30-10-2024	36.40	4.60	22.0
5600 MHz	Reference result ± 5% window	35.5 33.73 to 37.28	5.07 4.82 to 5.32	N/A
	30-10-2024	35.82	4.99	22.0
5750 MHz	Reference result ± 5% window	35.4 33.63 to 37.17	5.22 4.96 to 5.48	N/A
	30-10-2024	35.57	5.16	22.0

3.3 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 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.

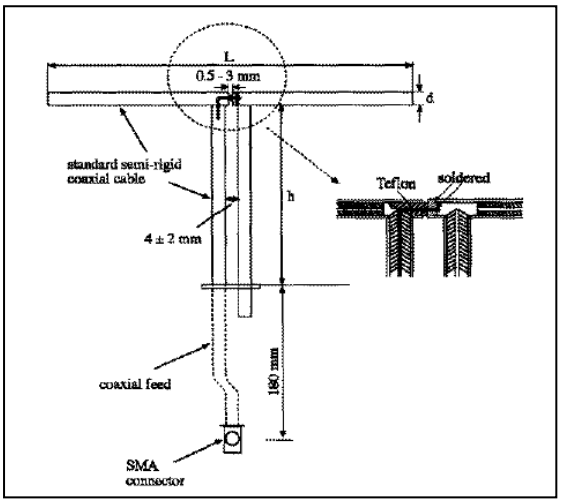
Target Frequency	Head	
(MHz)	ε_r	σ (S/m)
150	52.3	0.76
300	45.3	0.87
450	43.5	0.87
750	41.9	0.89
835	41.5	0.90
900	41.5	0.97
915	41.5	0.98
1450	40.5	1.20
1610	40.3	1.29
1800 – 2000	40.0	1.40
2450	39.2	1.80
2600	39.0	1.96
3000	38.5	2.40
5800	35.3	5.07

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

4 SAR MEASUREMENT PROCEDURE

4.1 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)
750MHz	176.0	100.0	6.35
835MHz	161.0	89.8	3.6
900MHz	149.0	83.3	3.6
1800MHz	72.0	41.7	3.6
2000MHz	64.5	37.5	3.6
2600MHz	48.5	28.8	3.6
3500MHz	37.0	26.4	3.6
3700MHz	34.7	26.4	3.6
3900MHz	32.4	26.4	3.6
5000 to 6000MHz	20.6	40.3	3.6

4.1.2. Validation Result

System Performance Check at 750MHz, 835MHz, 1800MHz, 1900MHz, 2450MHz, 2600MHz, 5250MHz, 5600MHz, 5750MHz				
Validation Dipole: D750V3, SN: 1086				
Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
750 MHz	Reference result ± 10% window	8.41 7.57 to 9.25	5.50 4.95 to 6.05	N/A
	15-10-2024	8.96	6.12	22.0
Validation Dipole: D835V2, SN: 4d094				
835 MHz	Reference result ± 10% window	9.44 8.50 to 10.38	6.20 5.58 to 6.82	N/A
	16-10-2024	9.72	5.92	22.0
Validation Dipole: D1800V2, SN: 2d179				
1800 MHz	Reference result ± 10% window	39.00 35.1 to 42.9	20.50 18.45 to 22.55	N/A
	21-10-2024	37.76	20.48	22.0
Validation Dipole: D1900V2, SN: 5d121				
1900 MHz	Reference result ± 10% window	39.50 39.55 to 43.45	20.30 18.27 to 22.33	N/A
	22-10-2024	40.80	21.32	22.0
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
	28-10-2024	52.80	24.48	22.0
Validation Dipole: D2600V2, SN: 1029				
2600 MHz	Reference result ± 10% window	55.60 50.04 to 61.16	24.80 22.32 to 27.28	N/A
	25-10-2024	53.60	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
	30-10-2024	80.50	21.20	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

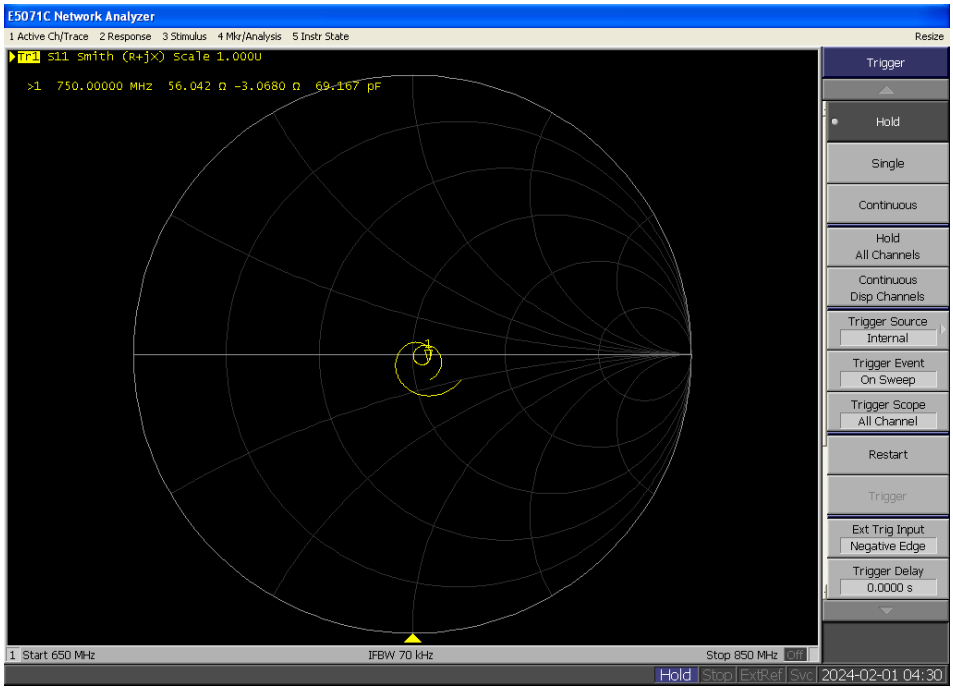
	30-10-2024	77.90	22.10	22.0
Validation Dipole: D5GHzV2, SN: 1078				
5750 MHz	Reference result ± 10% window	75.70 68.13 to 83.27	21.30 19.17 to 23.43	N/A
	30-10-2024	74.30	21.10	22.0
Note: All SAR values are normalized to 1W forward power.				

4.1.3. Dipole Calibration Data

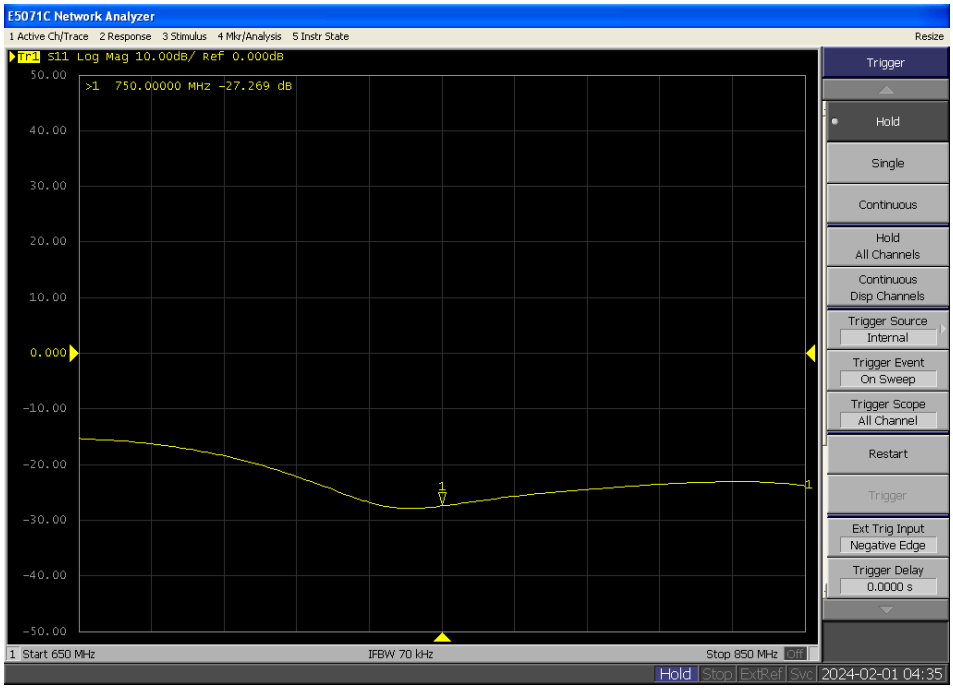
Impedance Plot for D750V3

750MHz Head

Calibrated impedance: 55.283 Ω; Measured impedance: 56.042 Ω (within 5Ω)



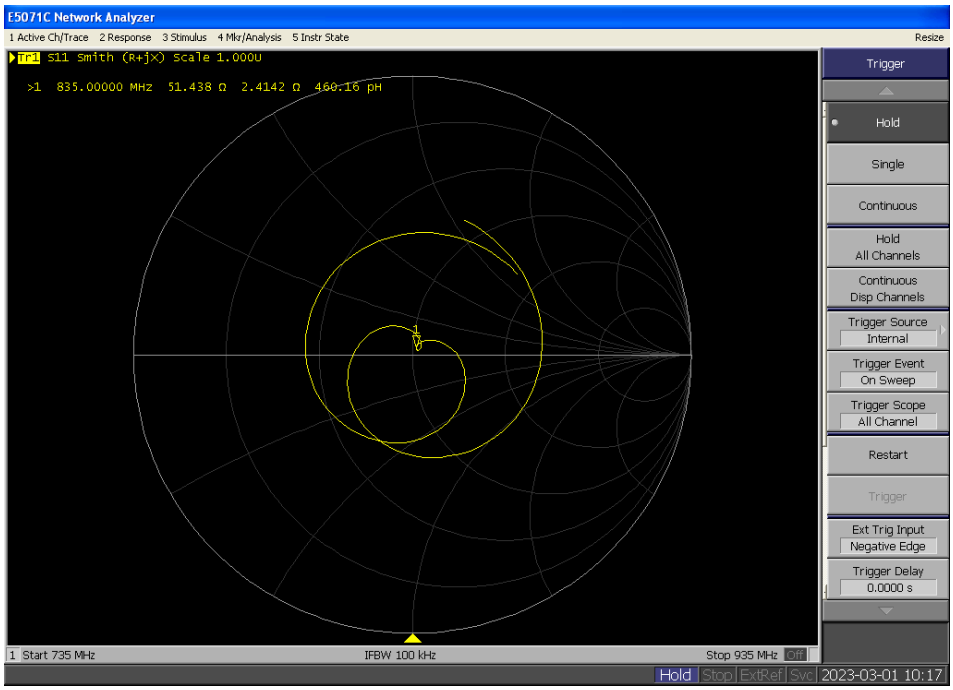
Calibrated return loss: -25.938 dB; Measured impedance: -27.269 dB (within 20%)



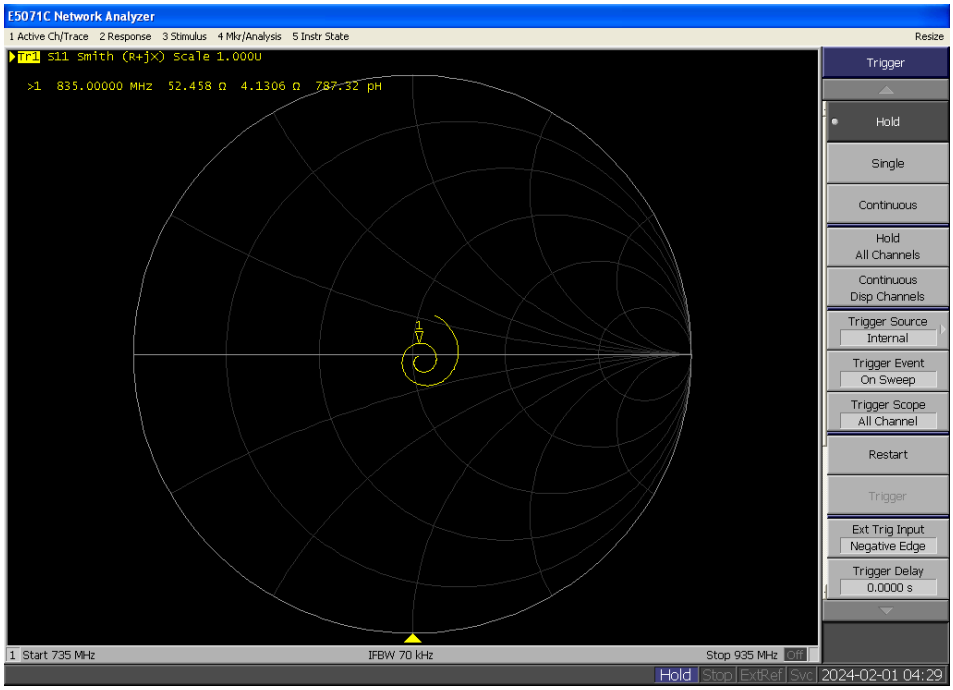
Impedance Plot for D835V2

835MHz Head

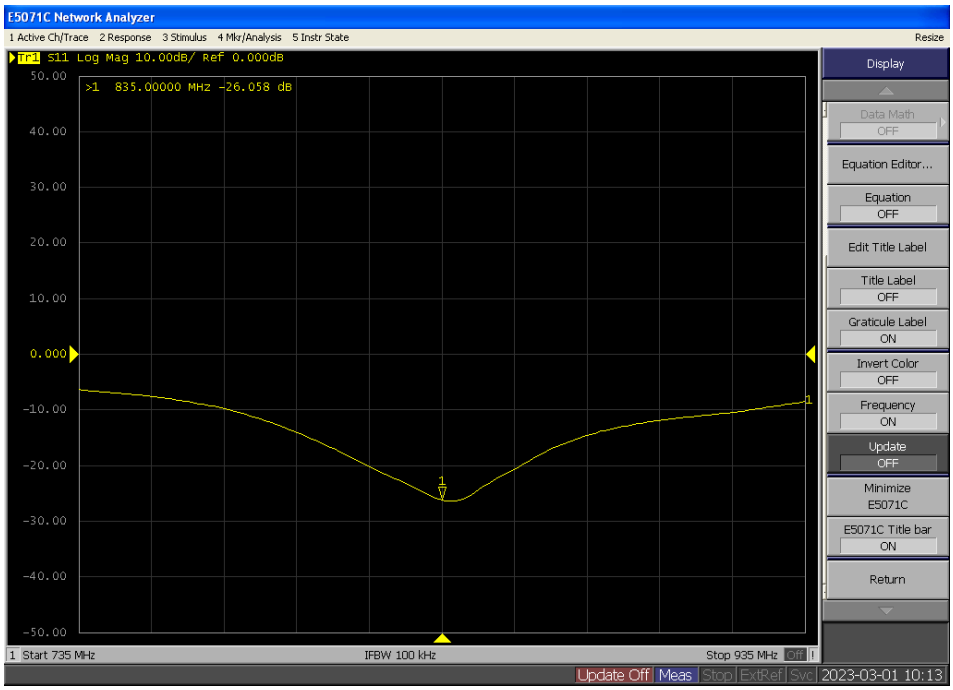
Calibrated impedance: 50.234 Ω; Measured impedance: 51.438 Ω (within 5Ω)



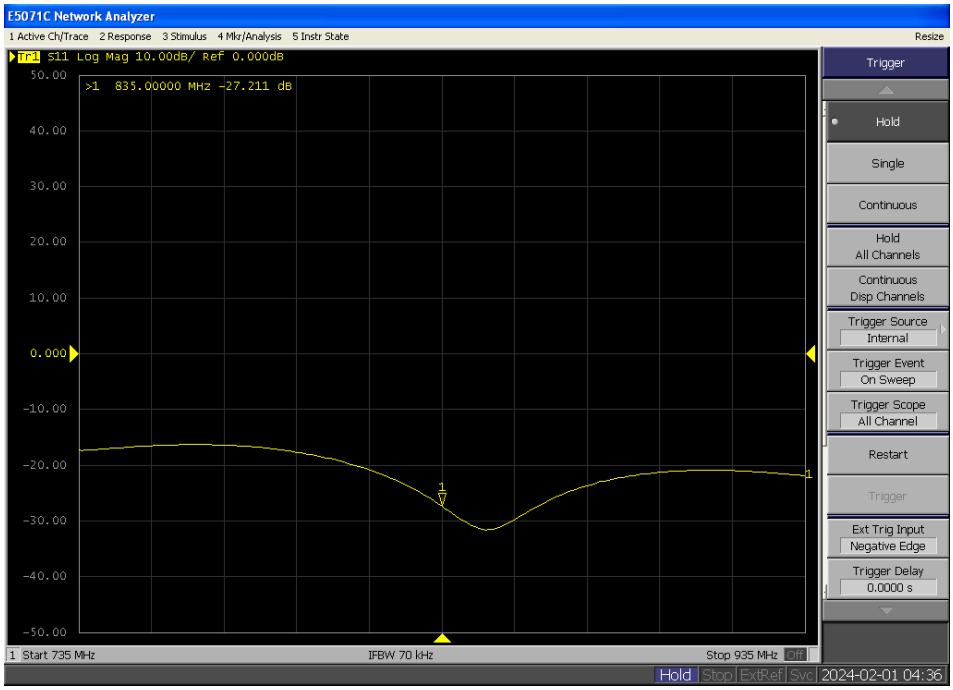
Calibrated impedance: 50.234 Ω; Measured impedance: 52.458 Ω (within 5Ω)



Calibrated return loss: -27.673 dB; Measured impedance: -26.058 dB (within 20%)



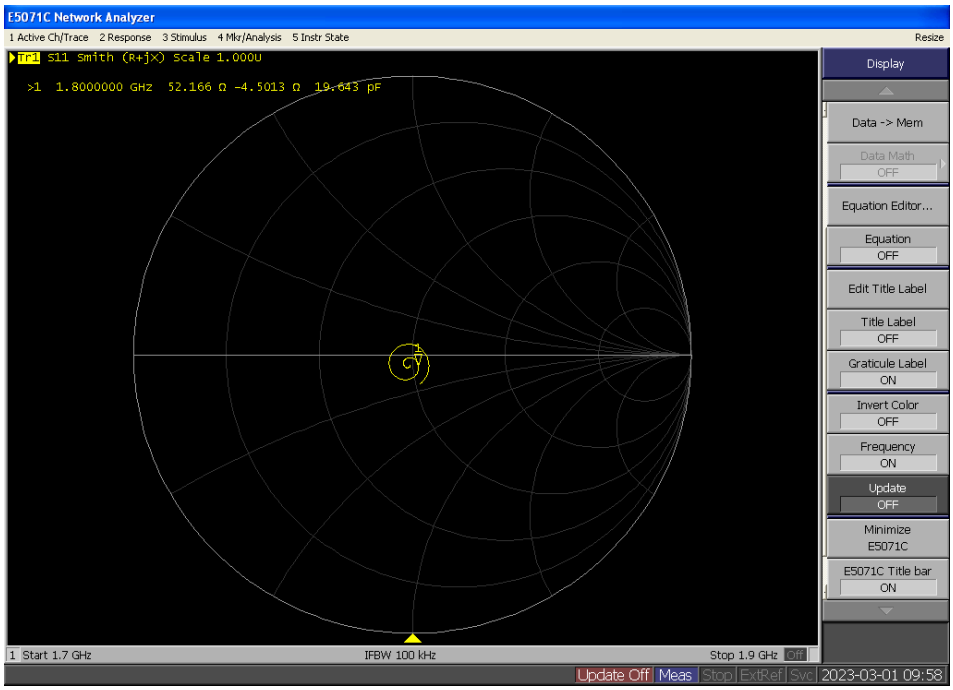
Calibrated return loss: -27.673 dB; Measured impedance: -27.211 dB (within 20%)



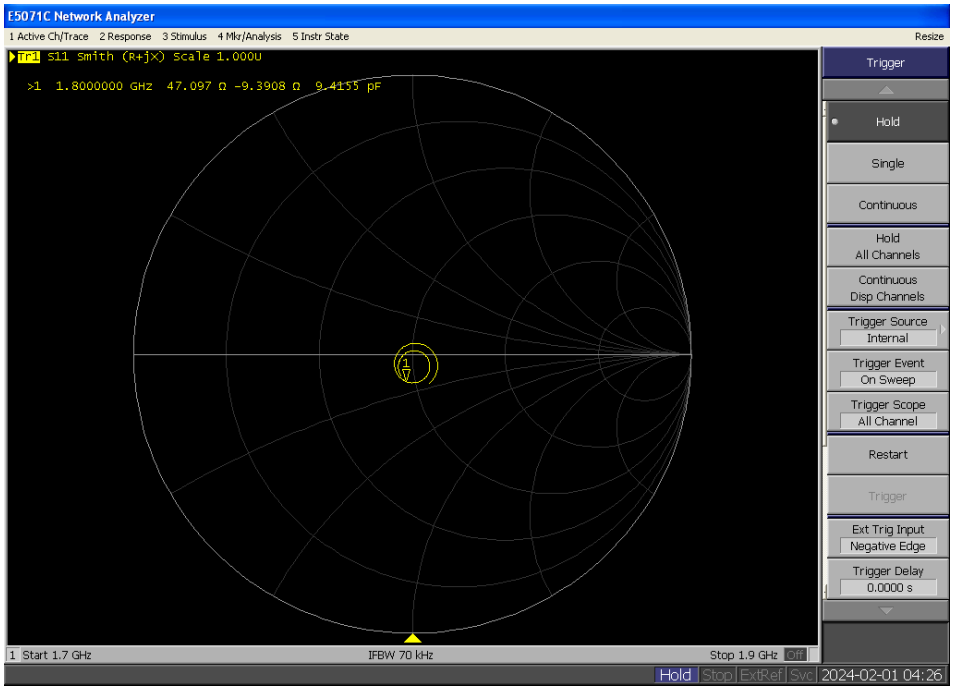
Impedance Plot for D1800V2

1800MHz Head

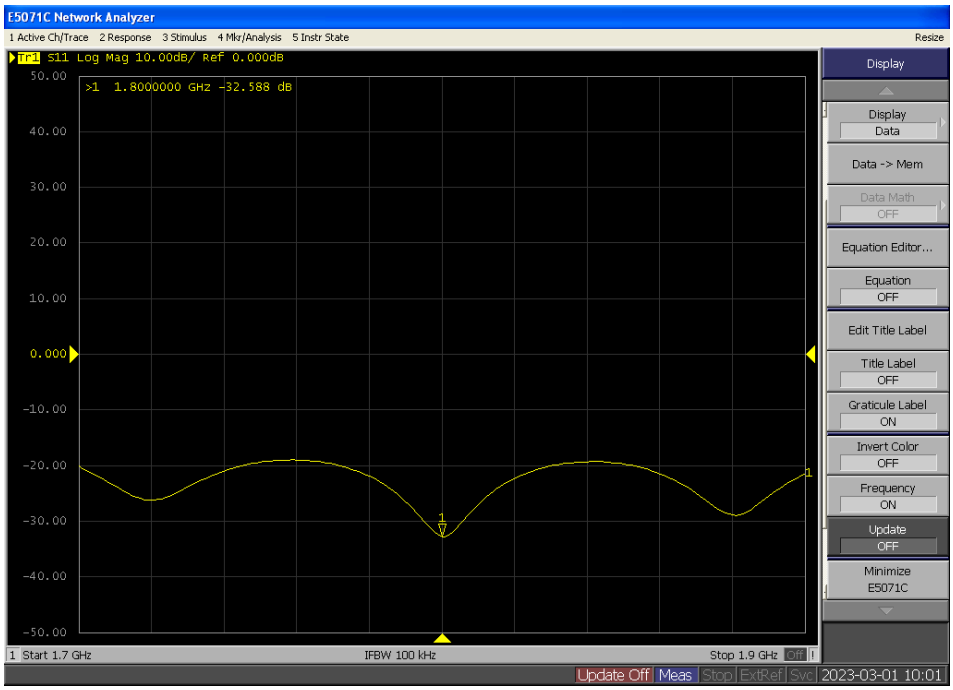
Calibrated impedance: 49.000 Ω; Measured impedance: 52.166 Ω (within 5Ω)



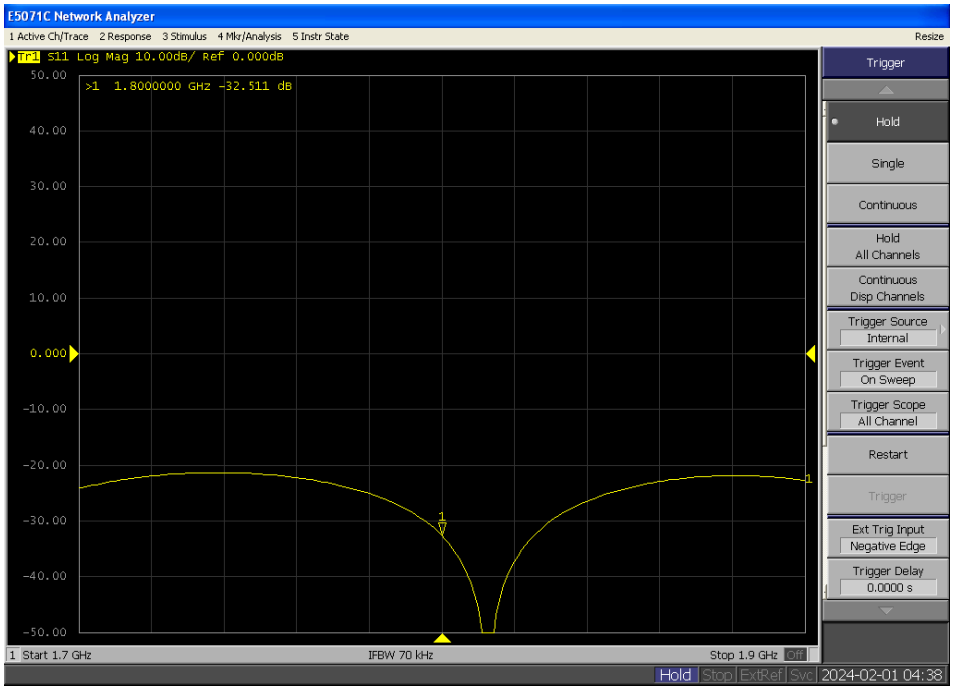
Calibrated impedance: 49.000 Ω; Measured impedance: 47.097 Ω (within 5Ω)



Calibrated return loss: -31.568 dB; Measured impedance: -32.588 dB (within 20%)



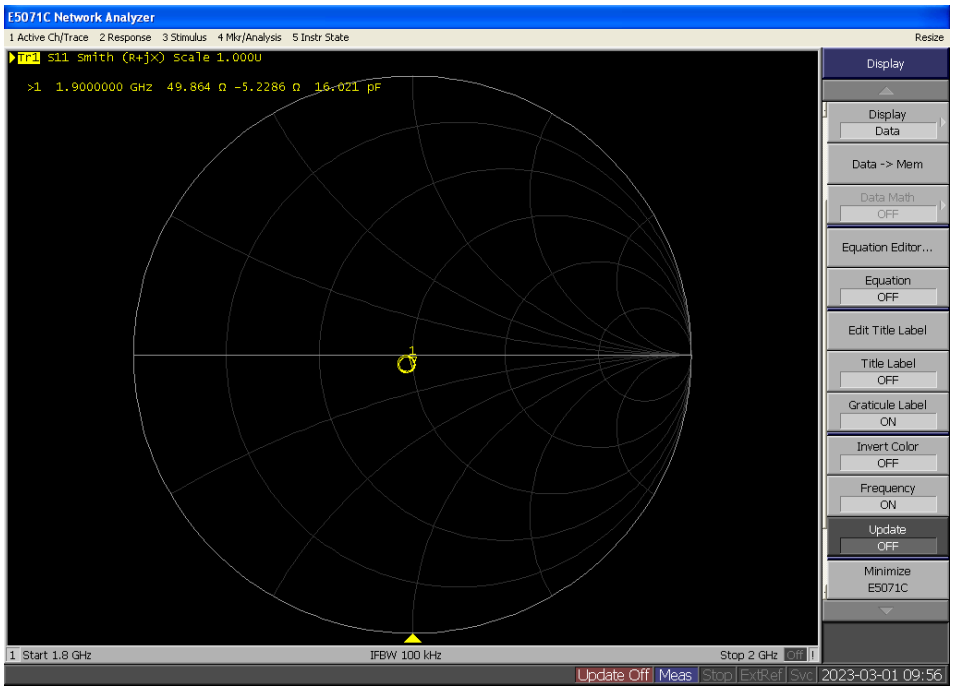
Calibrated return loss: -31.568 dB; Measured impedance: -32.511 dB (within 20%)



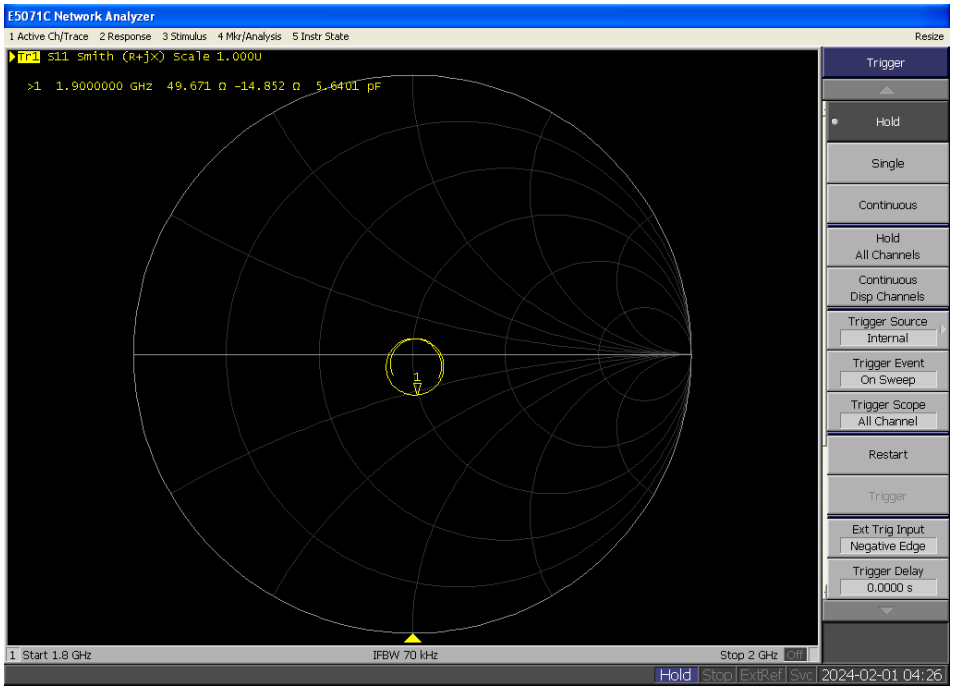
Impedance Plot for D1900V2

1900MHz Head

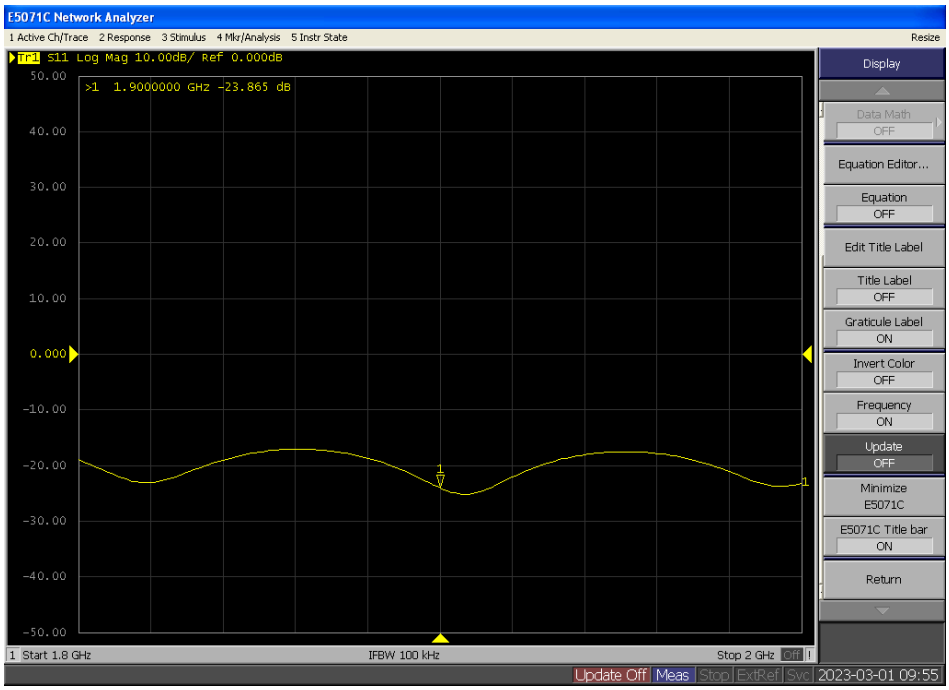
Calibrated impedance: 49.116 Ω; Measured impedance: 49.864 Ω (within 5Ω)



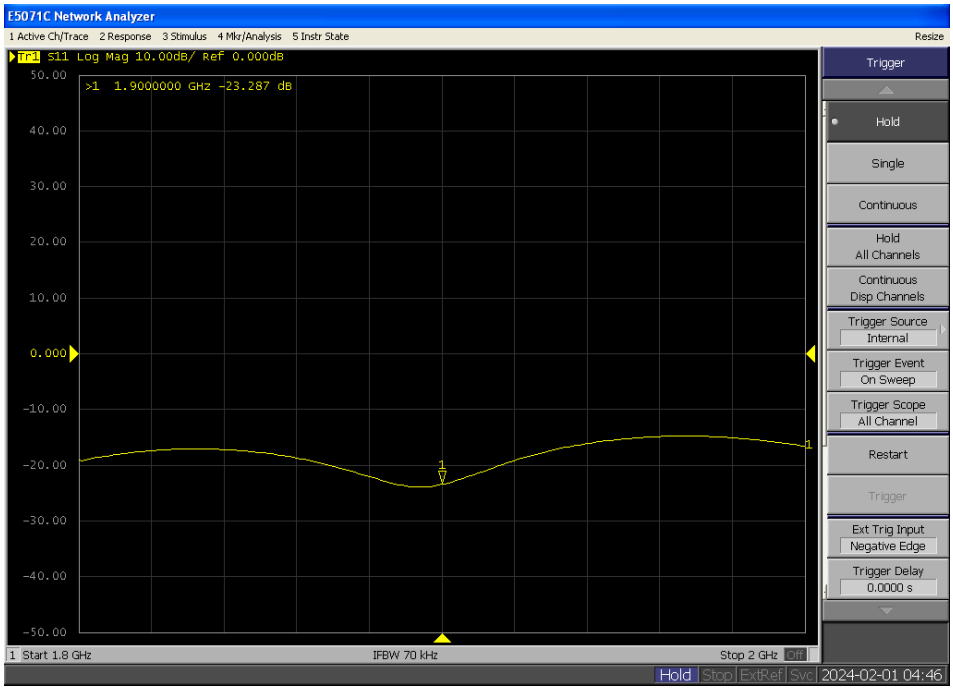
Calibrated impedance: 49.116 Ω; Measured impedance: 49.671 Ω (within 5Ω)



Calibrated return loss: -24.371 dB; Measured impedance: -23.865 dB (within 20%)



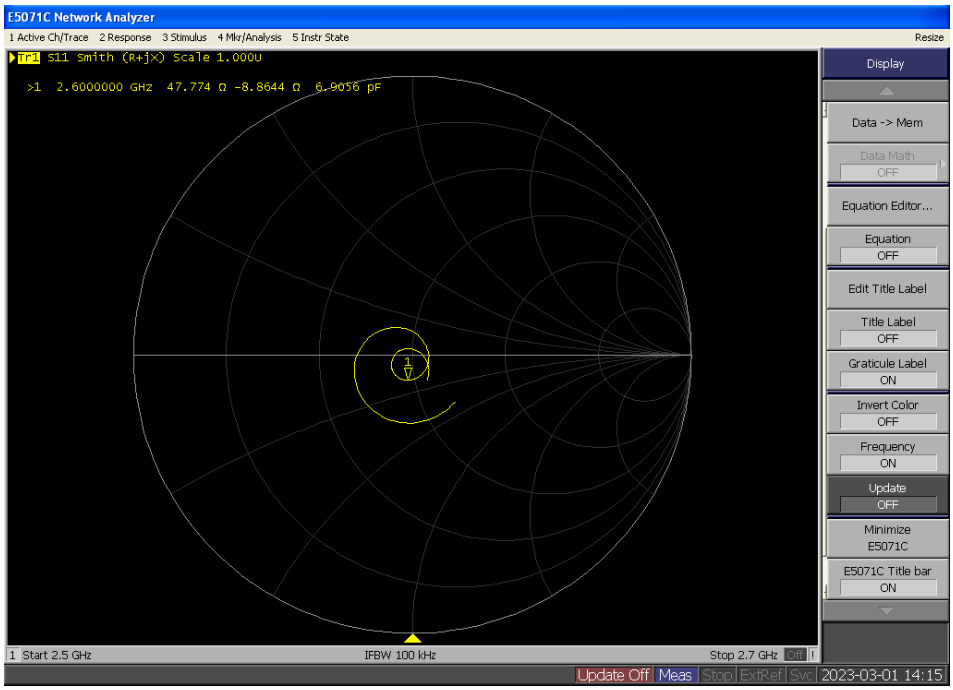
Calibrated return loss: -24.371 dB; Measured impedance: -23.287 dB (within 20%)



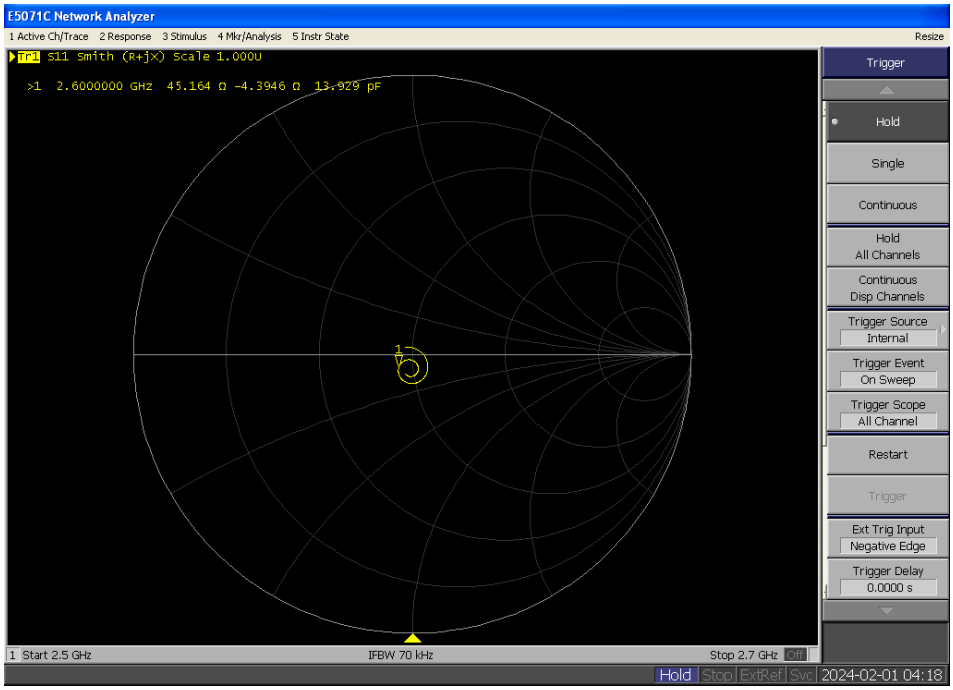
Impedance Plot for D2600V2

2600MHz Head

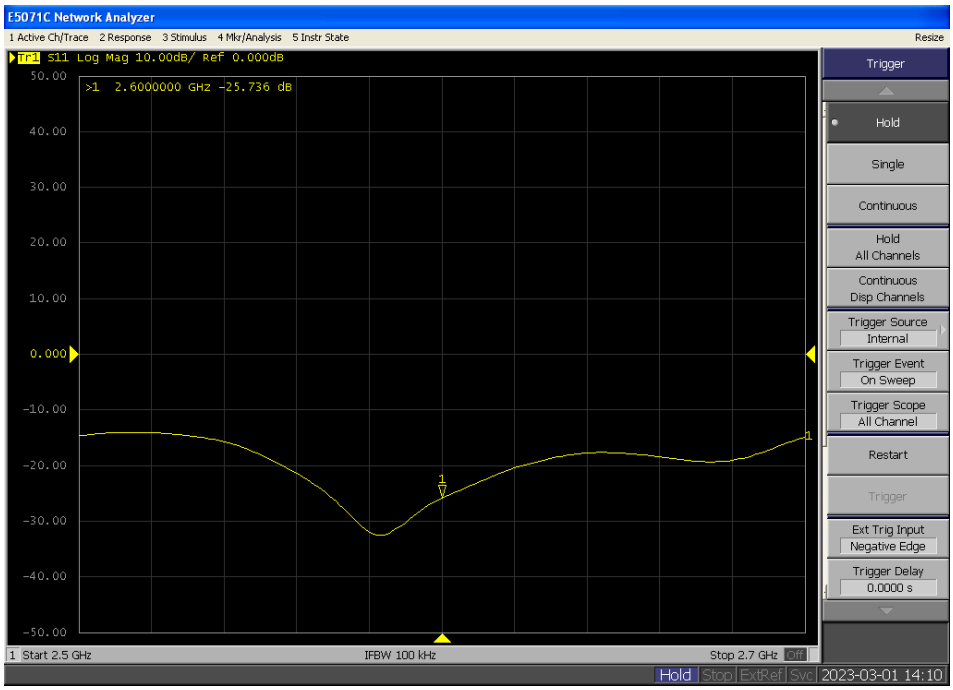
Calibrated impedance: 48.200 Ω; Measured impedance: 47.774 Ω (within 5Ω)



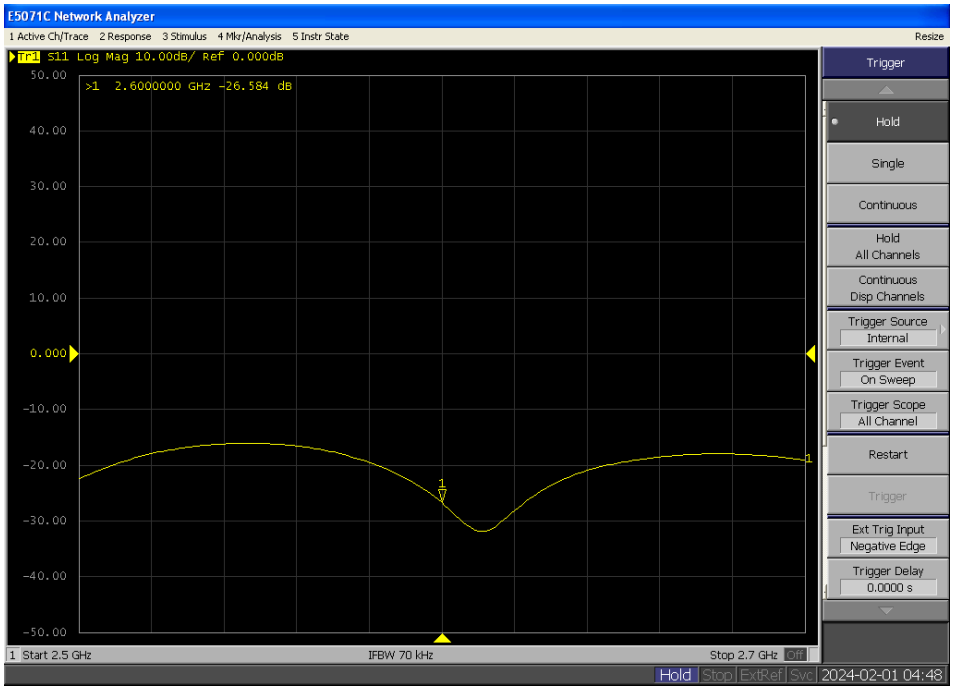
Calibrated impedance: 48.200 Ω; Measured impedance: 45.164 Ω (within 5Ω)



Calibrated return loss: -26.012 dB; Measured impedance: -25.736 dB (within 20%)



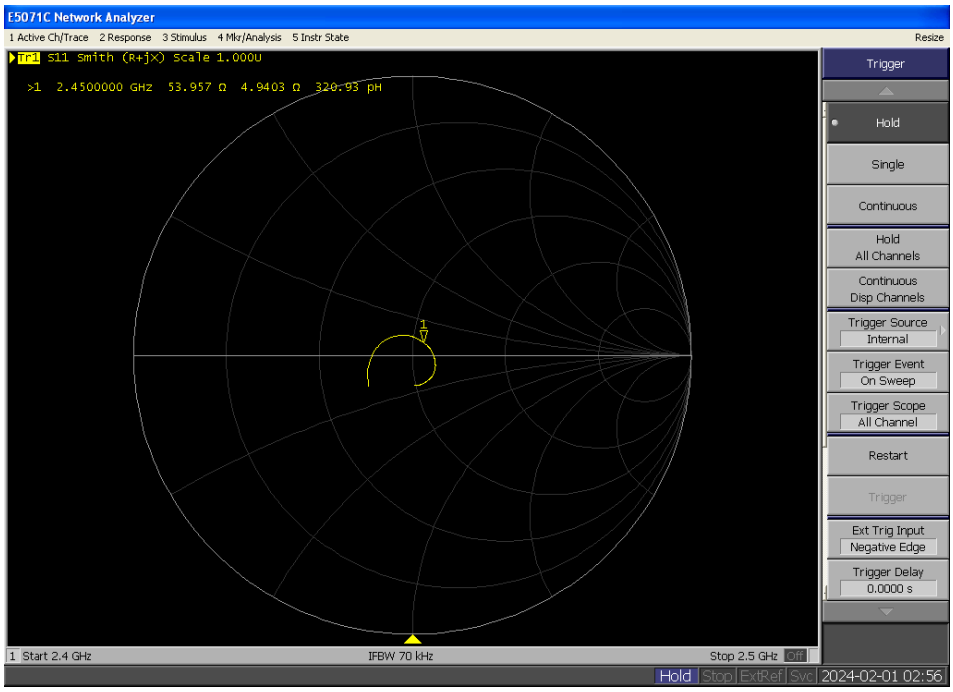
Calibrated return loss: -26.012 dB; Measured impedance: -26.584 dB (within 20%)



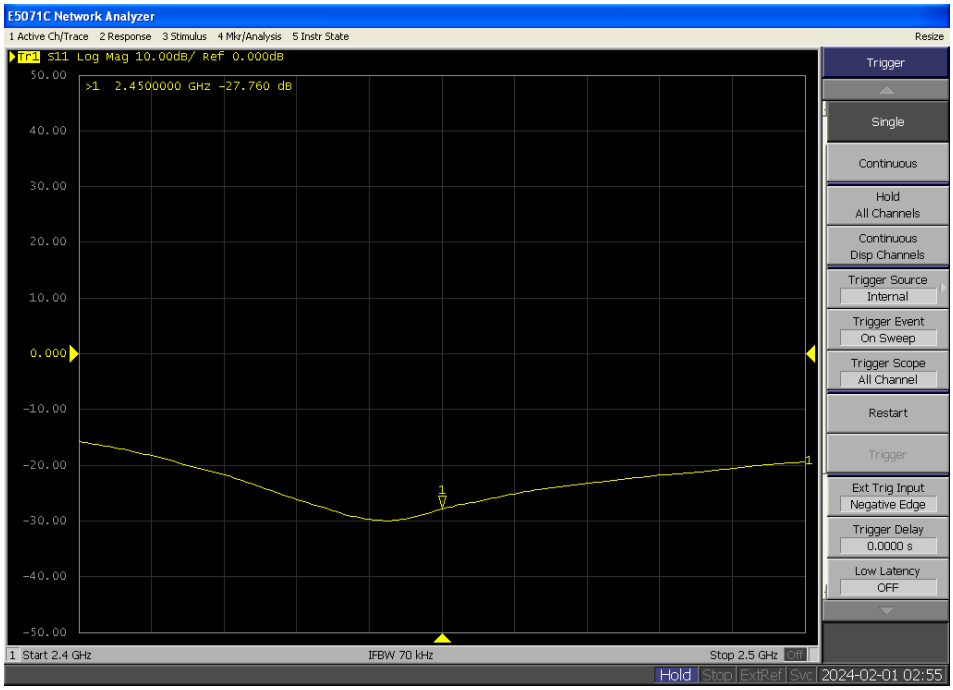
Impedance Plot for D2450V2

2450MHz Head

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



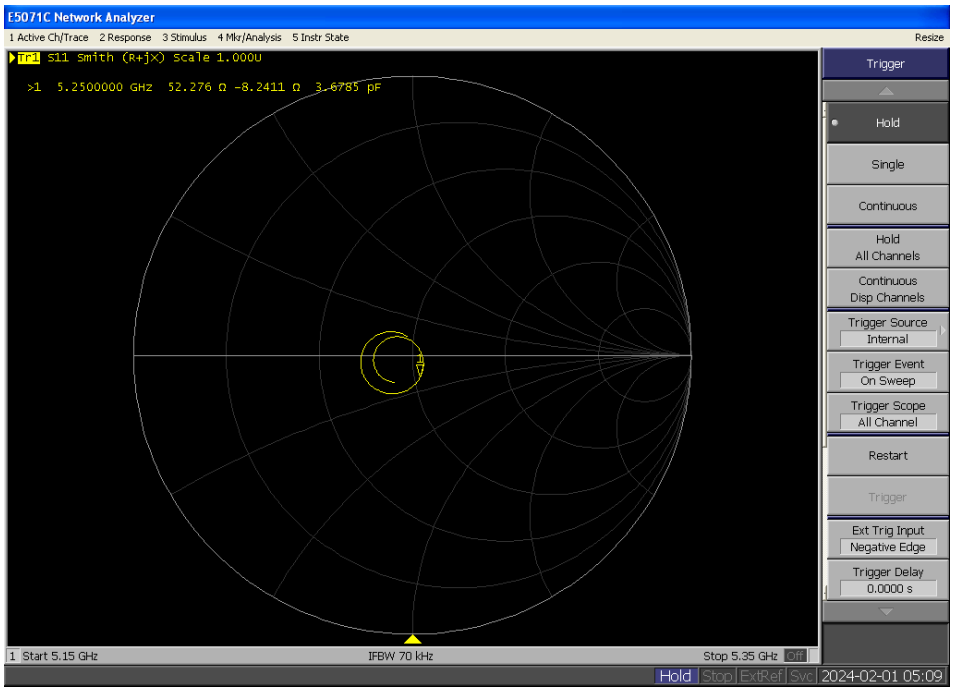
Calibrated return loss: -25.693 dB; Measured impedance: -27.760 dB (within 20%)



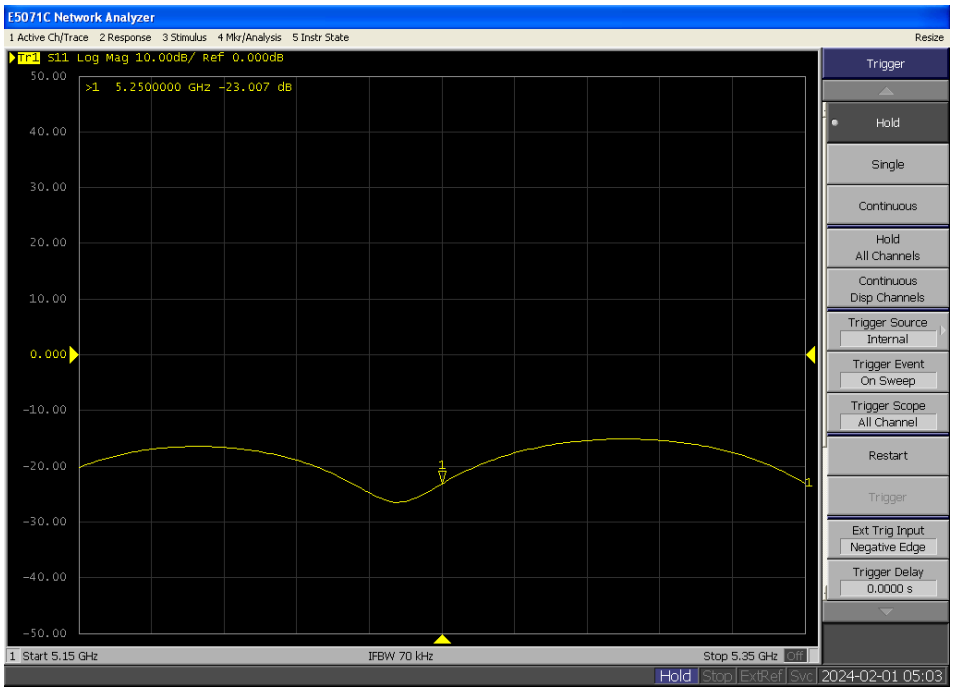
Impedance Plot for D5250V2

5250MHz Head

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



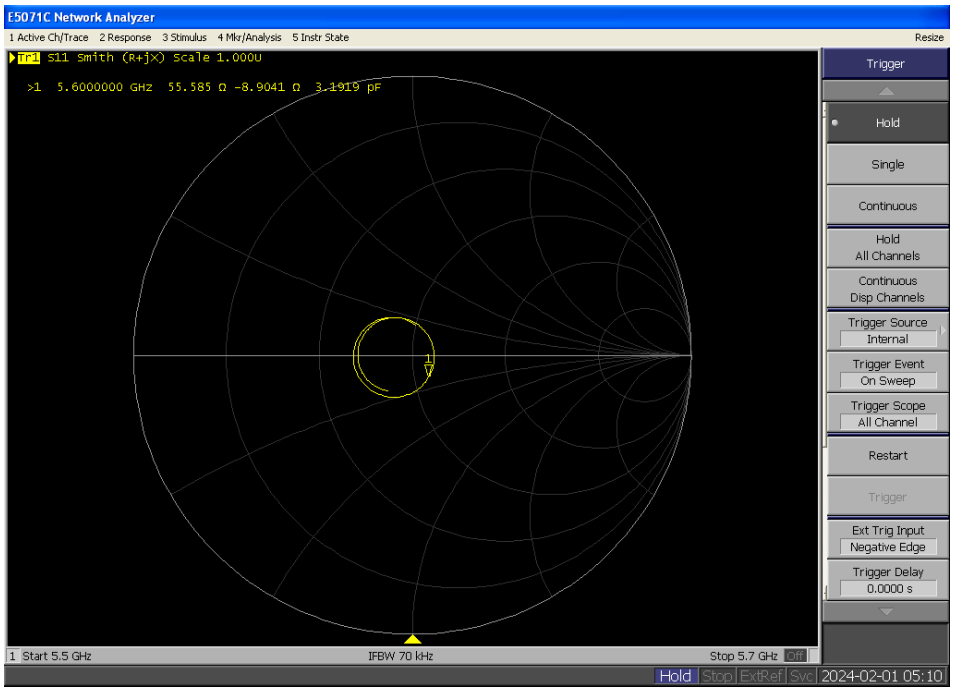
Calibrated return loss: -22.294 dB; Measured impedance: -23.007 dB (within 20%)



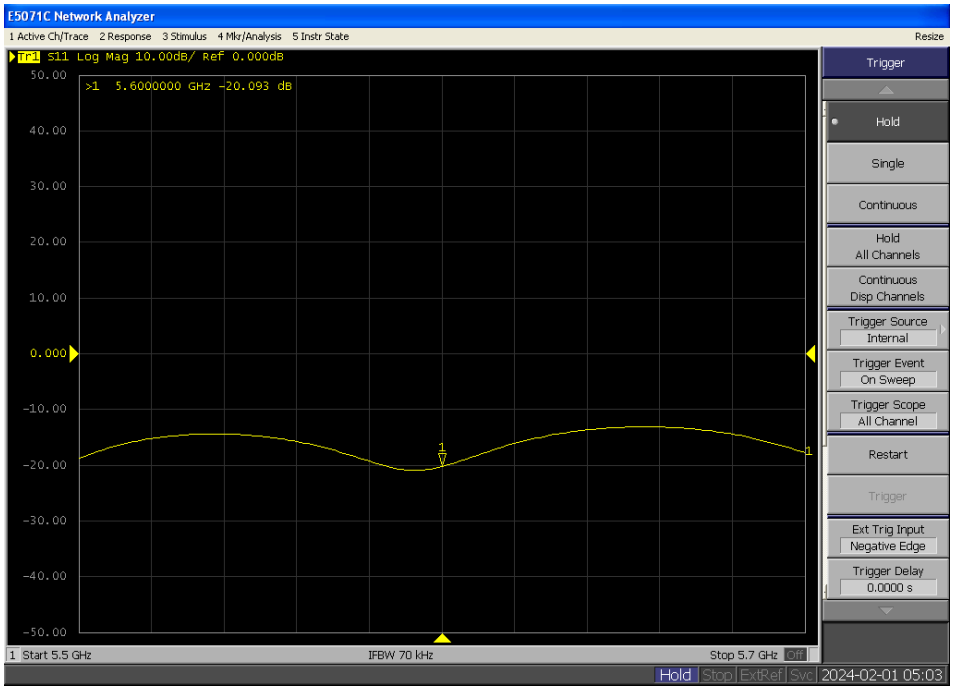
Impedance Plot for D5600V2

5600MHz Head

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



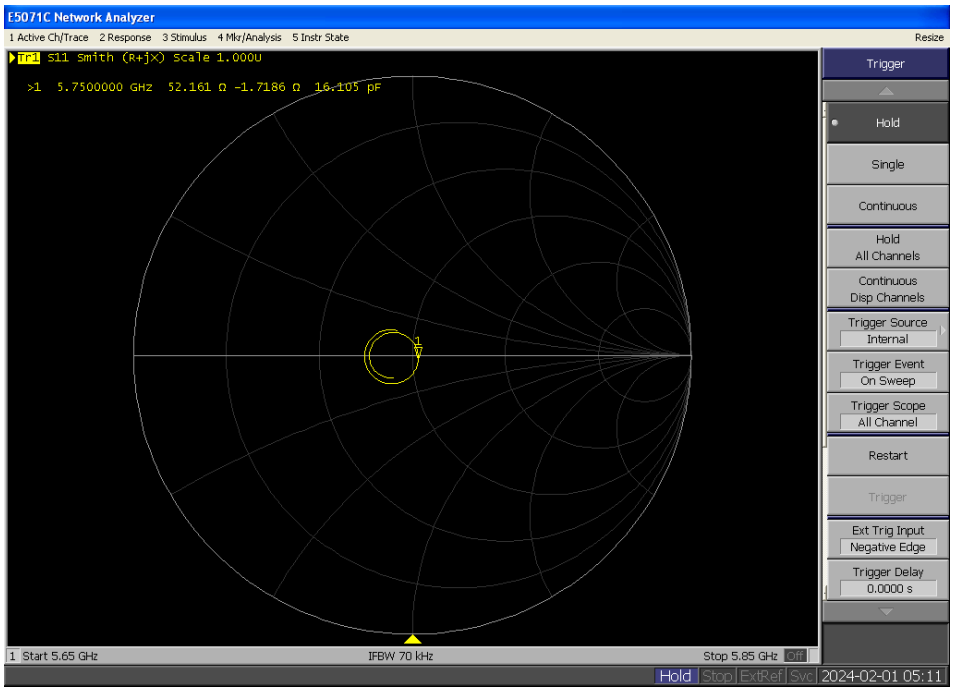
Calibrated return loss: -21.282 dB; Measured impedance: -20.093 dB (within 20%)



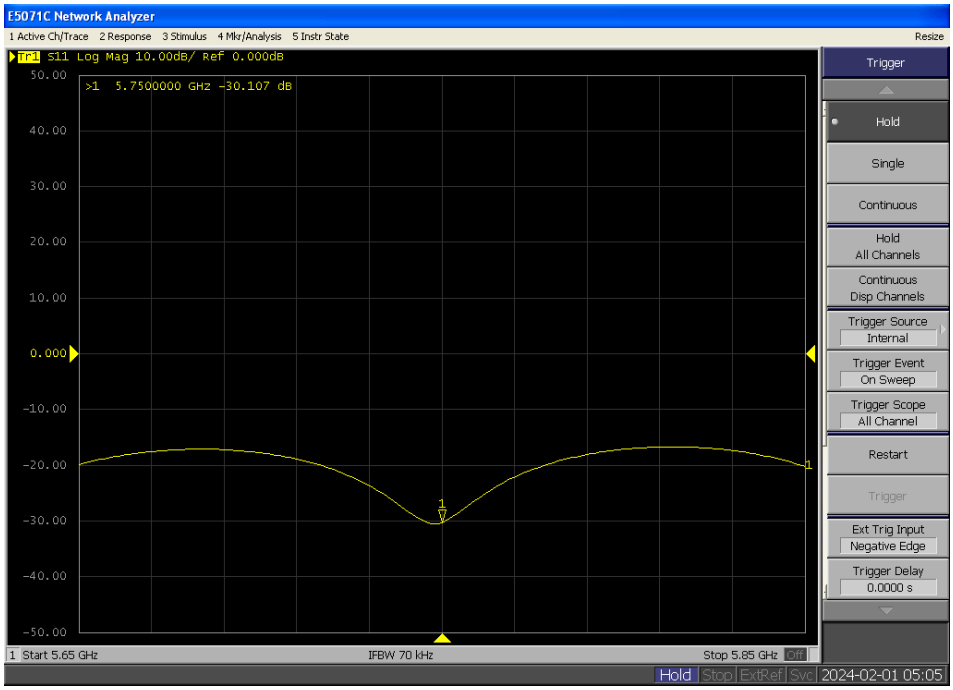
Impedance Plot for D5750V2

5750MHz Head

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%)



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).

4.2 SAR Measurement Procedure

The DASY 6 calculates SAR using the following equation,

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

σ: represents the simulated tissue conductivity

ρ: represents the tissue density

The EUT is set to transmit at the required power in line with product specification, at each frequency relating to the LOW, MID, and HIGH channel settings.

Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the Universal Phantom where the maximum area scan dimensions are larger than the physical size of the resonating antenna. When the scan size is not large enough to cover the peak SAR distribution, it is modified by either extending the area scan size in both the X and Y directions, or the device is shifted within the predefined area.

The area scan is then run to establish the peak SAR location (interpolated resolution set at $1mm^2$) which is then used to orient the center of the zoom scan. The zoom scan is then executed and the 1g and 10g averages are derived from the zoom scan volume (interpolated resolution set at $1mm^3$).

5 SAR EXPOSURE LIMITS

SAR assessments have been made in line with the requirements of IEEE-1528, FCC Supplement C, and comply with ANSI/IEEE C95.1-1992 “Uncontrolled Environments” limits. These limits apply to a location which is deemed as “Uncontrolled Environment” which can be described as a situation where the general public may be exposed to an RF source with no prior knowledge or control over their exposure.

Limits for General Population/Uncontrolled Exposure (W/kg)

Type Exposure	Uncontrolled Environment Limit
Spatial Peak SAR (1g cube tissue for brain or Body)	**1.6 W/kg**
Spatial Average SAR (whole Body)	**0.08 W/kg**
Spatial Peak SAR (10g for hands, feet, ankles and wrist)	**4.00 W/kg**

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	D750V3	1086	2023.03.20	2026.03.19	N/A	N/A
Dipole Validation Kits	Speag	D835V2	4d094	2022.03.31	2025.03.30	N/A	N/A
Dipole Validation Kits	Speag	D1800V2	2d179	2022.03.31	2025.03.30	N/A	N/A
Dipole Validation Kits	Speag	D1900V2	5d121	2022.03.28	2025.03.27	N/A	N/A
Dipole Validation Kits	Speag	D2450V2	839	2022.04.01	2025.03.31	N/A	N/A
Dipole Validation Kits	Speag	D2600V2	1029	2022.03.31	2025.03.30	N/A	N/A
Dipole Validation Kits	Speag	D5GHzV2	1078	2022.03.28	2025.03.27	N/A	N/A
SAM Twin Phantom	Speag	SAM	TP-1562	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	2024.09.19	2025.09.18	N/A	N/A
SAR Software	Speag	DASY6	V5.2 Build 162	N/A	N/A	N/A	V16.2.4.2448
Power Amplifier	MVE	MPC1018.50	C30002D	2024.07.04	2025.07.03	N/A	N/A
Dual Directional Coupler	woken	0110A05A82Z-20	CMLC66W1A1	2024.06.30	2025.06.29	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
Wideband Radio Communication Tester	R&S	CMW 500	170870	2024.05.15	2025.05.14	4.0.62.11	N/A
Temperature/Humidity Meter	Rites	RTS-8S	RF06	2024.07.04	2025.07.03	N/A	N/A
Temperaturer	LKM	DTM3000	3777	2024.07.25	2025.07.24	N/A	N/A

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%	

8 CONDUCTED POWER MEASUREMENT

GSM850	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
TX Channel	128	189	251		128	189	251		
Frequency (MHz)	824.2	836.4	848.8		824.2	836.4	848.8		
GPRS 1 Tx slot	32.67	32.81	32.78	33.00	23.67	23.81	23.78	24.00	0.14
GPRS 2 Tx slots	31.01	31.12	31.01	31.50	25.01	25.12	25.01	25.50	0.11
GPRS 3 Tx slots	29.27	29.35	29.21	30.00	25.01	25.09	24.95	25.74	0.14
GPRS 4 Tx slots	28.01	28.15	28.03	28.50	25.01	25.15	25.03	25.50	0.14
EDGE 1 Tx slot	26.83	27.11	26.98	27.50	17.83	18.11	17.98	18.50	0.28
EDGE 2 Tx slots	25.41	25.84	25.65	26.00	19.41	19.84	19.65	20.00	0.43
EDGE 3 Tx slots	23.23	23.31	23.56	24.00	18.97	19.05	19.30	19.74	0.33
EDGE 4 Tx slots	21.48	21.72	21.67	23.00	18.48	18.72	18.67	20.00	0.24

GSM1900	Burst Average Power (dBm)			Tune-up Limit (dBm)	Frame-Average Power (dBm)			Tune-up Limit (dBm)	Ch Delta > 0.5
TX Channel	512	661	810		512	661	810		
Frequency (MHz)	1850.2	1880	1909.8		1850.2	1880	1909.8		
GPRS 1 Tx slot	30.23	30.34	30.07	30.50	11.23	21.34	21.07	21.50	0.27
GPRS 2 Tx slots	29.02	29.23	28.76	29.50	23.02	23.23	22.76	23.50	0.47
GPRS 3 Tx slots	26.50	26.67	26.21	27.00	22.24	22.41	21.95	22.74	0.46
GPRS 4 Tx slots	25.29	25.43	24.99	26.00	22.29	22.43	21.99	23.00	0.44
EDGE 1 Tx slot	25.59	25.88	25.43	26.50	16.59	16.88	16.43	17.50	0.45
EDGE 2 Tx slots	24.29	24.65	24.36	25.00	18.29	18.65	18.36	19.00	0.36
EDGE 3 Tx slots	22.45	22.66	22.64	23.50	18.19	18.40	18.38	19.24	0.21
EDGE 4 Tx slots	21.65	22.01	21.67	22.50	18.65	19.01	18.67	19.50	0.36

Band		WCDMA II			Tune-up Limit (dBm)	WCDMA II
TX Channel		9262	9400	9538		Ch Delta > 0.5
Rx Channel		9662	9800	9938		
Frequency (MHz)		1852.4	1880	1907.6		
3GPP Rel 99	RMC 12.2Kbps	23.30	23.52	23.21	25.00	0.37
3GPP Rel 6	HSDPA Subtest-1	22.26	22.58	22.21	24.00	0.26
3GPP Rel 6	HSDPA Subtest-2	22.23	22.12	22.31	24.00	0.09
3GPP Rel 6	HSDPA Subtest-3	21.84	22.06	21.71	23.50	0.28
3GPP Rel 6	HSDPA Subtest-4	21.85	22.07	21.67	23.50	0.46
3GPP Rel 6	HSUPA Subtest-1	21.23	21.55	21.19	23.00	0.33
3GPP Rel 6	HSUPA Subtest-2	20.32	20.55	20.25	22.00	0.32
3GPP Rel 6	HSUPA Subtest-3	21.32	21.57	21.25	23.00	0.38
3GPP Rel 6	HSUPA Subtest-4	19.81	20.06	19.77	21.00	0.27
3GPP Rel 6	HSUPA Subtest-5	21.32	21.58	21.21	23.00	0.45
Mode			Max.	23.52		

Band		WCDMA IV			Tune-up Limit (dBm)	WCDMA IV
TX Channel		1312	1413	1513		Ch Delta > 0.5
Rx Channel		1537	1638	1738		
Frequency (MHz)		1712.4	1732.6	1752.6		
3GPP Rel 99	RMC 12.2Kbps	23.13	23.50	23.20	25.00	0.37
3GPP Rel 6	HSDPA Subtest-1	22.13	22.39	22.13	23.00	0.26
3GPP Rel 6	HSDPA Subtest-2	22.17	22.12	22.21	23.00	0.09
3GPP Rel 6	HSDPA Subtest-3	21.65	21.93	21.66	22.50	0.28
3GPP Rel 6	HSDPA Subtest-4	21.77	21.95	21.49	22.50	0.46
3GPP Rel 6	HSUPA Subtest-1	21.17	21.50	21.18	22.00	0.33
3GPP Rel 6	HSUPA Subtest-2	20.27	20.44	20.12	21.00	0.32
3GPP Rel 6	HSUPA Subtest-3	21.15	21.43	21.05	22.00	0.38
3GPP Rel 6	HSUPA Subtest-4	19.61	19.88	19.62	21.00	0.27
3GPP Rel 6	HSUPA Subtest-5	21.16	21.57	21.12	22.00	0.45
Mode			Max.	23.50		

Band		WCDMA V			Tune-up Limit (dBm)	WCDMA V
TX Channel		4132	4183	4233		Ch Delta > 0.5
Rx Channel		4357	4408	4458		
Frequency (MHz)		826.4	836.6	846.6		
3GPP Rel 99	RMC 12.2Kbps	23.74	23.83	23.57	24.50	0.26
3GPP Rel 6	HSDPA Subtest-1	22.59	22.91	22.53	24.00	0.38
3GPP Rel 6	HSDPA Subtest-2	22.73	22.56	22.67	24.00	0.17
3GPP Rel 6	HSDPA Subtest-3	22.29	22.34	22.02	23.50	0.32
3GPP Rel 6	HSDPA Subtest-4	22.35	22.23	22.13	23.50	0.22
3GPP Rel 6	HSUPA Subtest-1	21.71	21.98	21.51	23.00	0.47
3GPP Rel 6	HSUPA Subtest-2	20.82	20.87	20.58	22.00	0.29
3GPP Rel 6	HSUPA Subtest-3	21.79	21.87	21.65	23.00	0.22
3GPP Rel 6	HSUPA Subtest-4	20.25	20.47	20.13	21.00	0.34
3GPP Rel 6	HSUPA Subtest-5	21.72	21.78	21.70	23.00	0.08
Mode			Max.	23.83		

Band 2

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				18700	18900	19100					
Frequency (MHz)				1860	1880	1900					
20	QPSK	1	0	22.96	23.01	22.76	24.5	0	1.74	1.49	0.40
20	QPSK	1	49	22.62	22.67	22.99			1.88	1.51	
20	QPSK	1	99	22.61	22.66	22.64			1.89	1.84	
20	QPSK	50	0	21.83	22.03	21.71	23.5	1	1.79	1.47	0.32
20	QPSK	50	24	21.75	22.01	21.71			1.79	1.49	
20	QPSK	50	50	21.88	21.88	21.89			1.62	1.61	
20	QPSK	100	0	21.67	21.88	21.64			1.86	1.62	0.24
20	16QAM	1	0	22.00	21.93	21.77	23.5	1	1.73	1.50	0.48
20	16QAM	1	49	21.53	21.64	21.92			1.97	1.58	
20	16QAM	1	99	21.52	21.62	21.54			1.98	1.88	
20	16QAM	50	0	20.85	21.09	20.75	22.5	2	1.75	1.41	0.38
20	16QAM	50	24	20.81	21.01	20.71			1.79	1.49	
20	16QAM	50	50	20.81	20.88	20.98			1.69	1.52	
20	16QAM	100	0	20.58	20.45	20.68			2.05	1.82	0.23
Channel				18675	18900	19125	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1857.5	1880	1902.5					
15	QPSK	1	0	22.82	22.89	22.58	24.5	0	1.92	1.61	0.49
15	QPSK	1	37	22.40	22.56	22.85			2.10	1.65	
15	QPSK	1	74	22.47	22.49	22.42			2.08	2.01	
15	QPSK	36	0	21.63	21.80	21.56	23.5	1	1.94	1.70	0.31
15	QPSK	36	20	21.60	21.85	21.54			1.96	1.65	
15	QPSK	36	39	21.68	21.75	21.71			1.82	1.75	
15	QPSK	75	0	21.53	21.27	21.57			2.23	1.93	0.30
15	16QAM	1	0	21.86	21.76	21.69	23.5	1	1.81	1.64	0.56
15	16QAM	1	37	21.30	21.46	21.80			2.20	1.70	
15	16QAM	1	74	21.45	21.49	21.45			2.05	2.01	
15	16QAM	36	0	20.77	20.88	20.65	22.5	2	1.85	1.62	0.31
15	16QAM	36	20	20.71	20.79	20.57			1.93	1.71	
15	16QAM	36	39	20.72	20.80	20.83			1.78	1.67	
15	16QAM	75	0	20.38	20.32	20.54			2.18	1.96	0.22
Channel				18650	18900	19150	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1855	1880	1905					
10	QPSK	1	0	22.84	22.91	22.57	24.5	0	1.93	1.59	0.46
10	QPSK	1	25	22.45	22.60	22.90			2.05	1.60	
10	QPSK	1	49	22.47	22.47	22.48			2.03	2.02	
10	QPSK	25	0	21.71	21.92	21.58	23.5	1	1.92	1.58	0.38
10	QPSK	25	12	21.65	21.82	21.54			1.96	1.68	
10	QPSK	25	25	21.70	21.71	21.79			1.80	1.71	
10	QPSK	50	0	21.59	21.33	21.55			2.17	1.91	0.26
10	16QAM	1	0	21.92	21.73	21.55	23.5	1	1.95	1.58	0.60
10	16QAM	1	25	21.36	21.56	21.73			2.14	1.77	

10	16QAM	1	49	21.32	21.49	21.37			2.18	2.01	
10	16QAM	25	0	20.63	20.93	20.66	22.5	2	1.87	1.57	0.38
10	16QAM	25	12	20.66	20.85	20.55			1.95	1.65	
10	16QAM	25	25	20.68	20.78	20.88			1.82	1.62	
10	16QAM	50	0	20.36	20.37	20.56			2.14	1.94	0.20
Channel				18625	18900	19175	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1852.5	1880	1907.5					
5	QPSK	1	0	22.89	22.86	22.64	24.5	0	1.86	1.61	0.48
5	QPSK	1	12	22.42	22.51	22.89			2.08	1.61	
5	QPSK	1	24	22.50	22.51	22.41			2.09	1.99	
5	QPSK	12	0	21.72	21.88	21.60	23.5	1	1.90	1.62	0.38
5	QPSK	12	7	21.58	21.81	21.50			2.00	1.69	
5	QPSK	12	13	21.81	21.79	21.72			1.78	1.69	
5	QPSK	25	0	21.45	21.28	21.41			2.22	2.05	0.17
5	16QAM	1	0	21.90	21.77	21.68	23.5	1	1.82	1.60	0.58
5	16QAM	1	12	21.33	21.55	21.83			2.17	1.67	
5	16QAM	1	24	21.37	21.51	21.32			2.18	1.99	
5	16QAM	12	0	20.76	20.93	20.55	22.5	2	1.95	1.57	0.38
5	16QAM	12	7	20.59	20.81	20.63			1.91	1.69	
5	16QAM	12	13	20.67	20.73	20.83			1.83	1.67	
5	16QAM	25	0	20.47	20.28	20.48			2.22	2.02	0.20
Channel				18615	18900	19185	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1851.5	1880	1908.5					
3	QPSK	1	0	22.85	22.93	22.61	24.5	0	1.89	1.57	0.54
3	QPSK	1	8	22.39	22.57	22.83			2.11	1.67	
3	QPSK	1	14	22.42	22.58	22.54			2.08	1.92	
3	QPSK	8	0	21.75	21.80	21.58	23.5	1	1.92	1.70	0.40
3	QPSK	8	4	21.53	21.93	21.54			1.97	1.57	
3	QPSK	8	7	21.77	21.79	21.72			1.78	1.71	
3	QPSK	15	0	21.52	21.28	21.41			2.22	1.98	0.24
3	16QAM	1	0	21.83	21.81	21.61	23.5	1	1.89	1.67	0.52
3	16QAM	1	8	21.31	21.44	21.73			2.19	1.77	
3	16QAM	1	14	21.36	21.50	21.42			2.14	2.00	
3	16QAM	8	0	20.77	21.01	20.54	22.5	2	1.96	1.49	0.50
3	16QAM	8	4	20.74	20.92	20.51			1.99	1.58	
3	16QAM	8	7	20.59	20.70	20.79			1.91	1.71	
3	16QAM	15	0	20.46	20.24	20.49			2.26	2.01	0.25
Channel				18607	18900	19193	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1850.7	1880	1909.3					
1.4	QPSK	1	0	22.87	22.86	22.63	24.5	0	1.87	1.87	0.46
1.4	QPSK	1	3	22.41	22.55	22.87			2.09	2.09	
1.4	QPSK	1	5	22.42	22.45	22.53			2.08	2.08	
1.4	QPSK	3	0	22.81	22.84	22.66			1.84	1.84	0.41
1.4	QPSK	3	1	22.49	22.56	22.80			2.01	2.01	
1.4	QPSK	3	3	22.43	22.46	22.52			2.07	2.07	
1.4	QPSK	6	0	21.45	21.36	21.51	23.5	1	2.14	2.14	0.15
1.4	16QAM	1	0	21.80	21.82	21.63	23.5	1	1.87	1.87	0.47
1.4	16QAM	1	3	21.35	21.43	21.73			2.15	2.15	
1.4	16QAM	1	5	21.41	21.49	21.39			2.11	2.11	

1.4	16QAM	3	0	21.84	21.75	21.67			1.83	1.83	0.49
1.4	16QAM	3	1	21.35	21.48	21.82			2.15	2.15	
1.4	16QAM	3	3	21.42	21.46	21.43			2.08	2.08	
1.4	16QAM	6	0	20.41	20.26	20.57	22.5	2	2.24	2.24	0.31

Band 4

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				20050	20175	20300					
Frequency (MHz)				1720	1732.5	1745					
20	QPSK	1	0	22.99	23.03	22.71	24.5	0	1.79	1.47	0.41
20	QPSK	1	49	22.66	22.66	23.03			1.84	1.47	
20	QPSK	1	99	22.65	22.62	22.70			1.88	1.80	
20	QPSK	50	0	21.78	22.06	21.66	23.5	1	1.84	1.44	0.42
20	QPSK	50	24	21.67	21.94	21.64			1.86	1.56	
20	QPSK	50	50	21.93	21.95	21.89			1.61	1.55	
20	QPSK	100	0	21.59	21.94	21.72			1.91	1.56	0.35
20	16QAM	1	0	21.97	21.95	21.85	23.5	1	1.65	1.53	0.50
20	16QAM	1	49	21.58	21.71	21.92			1.92	1.58	
20	16QAM	1	99	21.50	21.65	21.47			2.03	1.85	
20	16QAM	50	0	20.92	21.03	20.76	22.5	2	1.74	1.47	0.39
20	16QAM	50	24	20.87	21.01	20.64			1.86	1.49	
20	16QAM	50	50	20.86	20.83	20.92			1.67	1.58	
20	16QAM	100	0	20.51	20.49	20.62			2.01	1.88	0.13
Channel				20025	20175	20325	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1717.5	1732.5	1747.5					
15	QPSK	1	0	22.76	22.89	22.69	24.5	0	1.81	1.61	0.45
15	QPSK	1	37	22.49	22.54	22.84			2.01	1.66	
15	QPSK	1	74	22.44	22.55	22.48			2.06	1.95	
15	QPSK	36	0	21.64	21.88	21.52	23.5	1	1.98	1.62	0.36
15	QPSK	36	20	21.70	21.83	21.66			1.84	1.67	
15	QPSK	36	39	21.77	21.82	21.78			1.73	1.68	
15	QPSK	75	0	21.57	21.84	21.57			1.93	1.66	0.27
15	16QAM	1	0	21.85	21.86	21.72	23.5	1	1.78	1.64	0.46
15	16QAM	1	37	21.40	21.53	21.79			2.10	1.71	
15	16QAM	1	74	21.46	21.48	21.40			2.10	2.02	
15	16QAM	36	0	20.65	20.90	20.56	22.5	2	1.94	1.60	0.40
15	16QAM	36	20	20.61	20.91	20.54			1.96	1.59	
15	16QAM	36	39	20.66	20.68	20.94			1.84	1.56	
15	16QAM	75	0	20.44	20.26	20.59			2.24	1.91	0.33
Channel				20000	20175	20350	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1715	1732.5	1750					
10	QPSK	1	0	22.90	22.94	22.65	24.5	0	1.85	1.56	0.48
10	QPSK	1	25	22.46	22.55	22.81			2.04	1.69	

10	QPSK	1	49	22.57	22.50	22.56			2.00	1.93	
10	QPSK	25	0	21.71	21.96	21.62	23.5	1	1.88	1.54	0.45
10	QPSK	25	12	21.61	21.96	21.51			1.99	1.54	
10	QPSK	25	25	21.74	21.76	21.77			1.76	1.73	
10	QPSK	50	0	21.50	21.83	21.52			2.00	1.67	0.33
10	16QAM	1	0	21.83	21.80	21.69	23.5	1	1.81	1.67	0.50
10	16QAM	1	25	21.45	21.56	21.75			2.05	1.75	
10	16QAM	1	49	21.33	21.49	21.41			2.17	2.01	
10	16QAM	25	0	20.75	21.01	20.66	22.5	2	1.84	1.49	0.38
10	16QAM	25	12	20.64	20.91	20.63			1.87	1.59	
10	16QAM	25	25	20.70	20.68	20.89			1.82	1.61	
10	16QAM	50	0	20.39	20.40	20.50			2.11	2.00	0.11
Channel				19975	20175	20375	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1712.5	1732.5	1752.5					
5	QPSK	1	0	22.80	22.93	22.68	24.5	0	1.82	1.57	0.45
5	QPSK	1	12	22.56	22.52	22.94			1.98	1.56	
5	QPSK	1	24	22.49	22.61	22.54			2.01	1.89	
5	QPSK	12	0	21.65	21.88	21.58	23.5	1	1.92	1.62	0.38
5	QPSK	12	7	21.71	21.96	21.65			1.85	1.54	
5	QPSK	12	13	21.70	21.83	21.84			1.80	1.66	
5	QPSK	25	0	21.51	21.78	21.50			2.00	1.72	0.28
5	16QAM	1	0	21.80	21.88	21.59	23.5	1	1.91	1.62	0.54
5	16QAM	1	12	21.40	21.50	21.82			2.10	1.68	
5	16QAM	1	24	21.34	21.46	21.34			2.16	2.04	
5	16QAM	12	0	20.66	21.01	20.69	22.5	2	1.84	1.49	0.46
5	16QAM	12	7	20.71	20.92	20.55			1.95	1.58	
5	16QAM	12	13	20.62	20.78	20.91			1.88	1.59	
5	16QAM	25	0	20.46	20.29	20.59			2.21	1.91	0.30
Channel				19965	20175	20385	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1711.5	1732.5	1753.5					
3	QPSK	1	0	22.85	22.87	22.61	24.5	0	1.89	1.63	0.38
3	QPSK	1	8	22.58	22.51	22.80			1.99	1.70	
3	QPSK	1	14	22.49	22.51	22.57			2.01	1.93	
3	QPSK	8	0	21.75	21.87	21.56	23.5	1	1.94	1.63	0.35
3	QPSK	8	4	21.60	21.87	21.52			1.98	1.63	
3	QPSK	8	7	21.83	21.77	21.84			1.73	1.66	
3	QPSK	15	0	21.48	21.72	21.45			2.05	1.78	0.27
3	16QAM	1	0	21.95	21.80	21.73	23.5	1	1.77	1.55	0.57
3	16QAM	1	8	21.44	21.44	21.84			2.06	1.66	
3	16QAM	1	14	21.38	21.53	21.40			2.12	1.97	
3	16QAM	8	0	20.71	20.92	20.69	22.5	2	1.81	1.58	0.38
3	16QAM	8	4	20.71	20.87	20.54			1.96	1.63	
3	16QAM	8	7	20.73	20.68	20.91			1.82	1.59	
3	16QAM	15	0	20.41	20.33	20.54			2.17	1.96	0.21
Channel				19957	20175	20393	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1710.7	1732.5	1754.3					
1.4	QPSK	1	0	22.95	22.80	22.60	24.5	0	1.90	1.90	0.59
1.4	QPSK	1	3	22.36	22.55	22.91			2.14	2.14	
1.4	QPSK	1	5	22.50	22.52	22.56			2.00	2.00	

1.4	QPSK	3	0	22.80	22.90	22.62			1.88	1.88	0.55
1.4	QPSK	3	1	22.50	22.62	22.84			2.00	2.00	
1.4	QPSK	3	3	22.35	22.44	22.45			2.15	2.15	
1.4	QPSK	6	0	21.49	21.32	21.58	23.5	1	2.18	2.18	0.26
1.4	16QAM	1	0	21.85	21.78	21.56	23.5	1	1.94	1.94	0.56
1.4	16QAM	1	3	21.29	21.41	21.74			2.21	2.21	
1.4	16QAM	1	5	21.40	21.43	21.37			2.13	2.13	
1.4	16QAM	3	0	21.84	21.76	21.67			1.83	1.83	0.47
1.4	16QAM	3	1	21.37	21.55	21.75			2.13	2.13	
1.4	16QAM	3	3	21.38	21.39	21.47			2.12	2.12	
1.4	16QAM	6	0	20.41	20.29	20.58	22.5	2	2.21	2.21	0.29

Band 5

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				20450	20525	20600					
Frequency (MHz)				829	836.5	844					
10	QPSK	1	0	23.51	23.67	23.38	24	0	0.62	0.33	0.46
10	QPSK	1	25	23.24	23.31	23.65			0.76	0.35	
10	QPSK	1	49	23.21	23.29	23.26			0.79	0.71	
10	QPSK	25	0	22.44	22.63	22.28	23	1	0.72	0.37	0.35
10	QPSK	25	12	22.30	22.51	22.28			0.72	0.49	
10	QPSK	25	25	22.57	22.56	22.44			0.56	0.43	
10	QPSK	50	0	22.26	22.58	22.28			0.74	0.42	0.32
10	16QAM	1	0	22.56	22.58	22.47	23	1	0.53	0.42	0.54
10	16QAM	1	25	22.21	22.33	22.53			0.79	0.47	
10	16QAM	1	49	22.04	22.20	22.12			0.96	0.80	
10	16QAM	25	0	21.51	21.70	21.29	22	2	0.71	0.30	0.43
10	16QAM	25	12	21.42	21.61	21.27			0.73	0.39	
10	16QAM	25	25	21.39	21.50	21.49			0.61	0.50	
10	16QAM	50	0	21.19	21.04	21.19			0.96	0.81	0.15
Channel				20425	20525	20625	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				826.5	836.5	846.5					
5	QPSK	1	0	23.45	23.61	23.28	24	0	0.72	0.39	0.51
5	QPSK	1	12	23.10	23.14	23.46			0.90	0.54	
5	QPSK	1	24	23.22	23.13	23.20			0.87	0.78	
5	QPSK	12	0	22.33	22.57	22.16	23	1	0.84	0.43	0.41
5	QPSK	12	7	22.23	22.44	22.18			0.82	0.56	
5	QPSK	12	13	22.46	22.42	22.36			0.64	0.54	
5	QPSK	25	0	22.15	22.37	22.27			0.85	0.63	0.22
5	16QAM	1	0	22.47	22.51	22.42	23	1	0.58	0.49	0.58
5	16QAM	1	12	22.12	22.27	22.48			0.88	0.52	
5	16QAM	1	24	22.06	22.13	21.93			1.07	0.87	
5	16QAM	12	0	21.39	21.47	21.30	22	2	0.70	0.53	0.44

5	16QAM	12	7	21.37	21.57	21.13			0.87	0.43	
5	16QAM	12	13	21.35	21.27	21.42			0.73	0.58	
5	16QAM	25	0	21.08	20.99	21.07			1.01	0.92	0.09
Channel				20415	20525	20635	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				825.5	836.5	847.5					
3	QPSK	1	0	23.32	23.60	23.22	24	0	0.78	0.40	0.50
3	QPSK	1	8	23.20	23.10	23.56			0.90	0.44	
3	QPSK	1	14	23.10	23.15	23.21			0.90	0.79	
3	QPSK	8	0	22.25	22.60	22.15	23	1	0.85	0.40	0.53
3	QPSK	8	4	22.12	22.43	22.07			0.93	0.57	
3	QPSK	8	7	22.46	22.50	22.43			0.57	0.50	
3	QPSK	15	0	22.08	22.44	22.24			0.92	0.56	0.36
3	16QAM	1	0	22.43	22.51	22.36	23	1	0.64	0.49	0.61
3	16QAM	1	8	22.13	22.26	22.37			0.87	0.63	
3	16QAM	1	14	22.05	22.23	21.90			1.10	0.77	
3	16QAM	8	0	21.41	21.55	21.24	22	2	0.76	0.45	0.44
3	16QAM	8	4	21.33	21.56	21.12			0.88	0.44	
3	16QAM	8	7	21.33	21.25	21.46			0.75	0.54	
3	16QAM	15	0	21.06	21.03	21.19			0.97	0.81	0.16
Channel				20407	20525	20643	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				824.7	836.5	848.3					
1.4	QPSK	1	0	23.43	23.57	23.26	24	0	0.74	0.74	0.49
1.4	QPSK	1	3	23.24	23.09	23.46			0.91	0.91	
1.4	QPSK	1	5	23.08	23.09	23.23			0.92	0.92	
1.4	QPSK	3	0	23.43	23.57	23.26			0.74	0.74	0.49
1.4	QPSK	3	1	23.24	23.09	23.46			0.91	0.91	
1.4	QPSK	3	3	23.08	23.09	23.23			0.92	0.92	
1.4	QPSK	6	0	22.04	22.41	22.26	23	1	0.96	0.96	0.37
1.4	16QAM	1	0	22.42	22.52	22.34	23	1	0.66	0.66	0.54
1.4	16QAM	1	3	22.14	22.29	22.36			0.86	0.86	
1.4	16QAM	1	5	22.04	22.07	21.98			1.02	1.02	
1.4	16QAM	3	0	22.13	22.38	22.16			0.87	0.87	0.37
1.4	16QAM	3	1	22.37	22.40	22.32			0.68	0.68	
1.4	16QAM	3	3	22.04	22.41	22.26			0.96	0.96	
1.4	16QAM	6	0	20.99	20.91	21.12	22	2	1.09	1.09	0.21

Band 7

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				20850	21100	21350					
Frequency (MHz)				2510	2535	2560					
20	QPSK	1	0	23.27	23.39	23.06	25	0	1.94	1.61	0.37
20	QPSK	1	49	23.02	23.10	23.37			1.98	1.63	
20	QPSK	1	99	23.02	23.10	23.15			1.98	1.85	

20	QPSK	50	0	22.16	22.42	22.00	24	1	2.00	1.58	0.42
20	QPSK	50	24	22.10	22.31	22.01			1.99	1.69	
20	QPSK	50	50	22.33	22.32	22.22			1.78	1.67	
20	QPSK	100	0	22.06	22.37	22.16			1.94	1.63	0.31
20	16QAM	1	0	22.43	22.34	22.23	24	1	1.77	1.57	0.62
20	16QAM	1	49	22.00	22.05	22.30			2.00	1.70	
20	16QAM	1	99	21.85	22.08	21.81			2.19	1.92	
20	16QAM	50	0	21.27	21.48	21.10	23	2	1.90	1.52	0.49
20	16QAM	50	24	21.20	21.39	20.99			2.01	1.61	
20	16QAM	50	50	21.20	21.28	21.37			1.80	1.63	
20	16QAM	100	0	20.95	20.86	21.02			2.14	1.98	0.16
Channel				20825	21100	21375	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				2507.5	2535	2562.5					
15	QPSK	1	0	23.21	23.32	22.97	25	0	2.03	1.68	0.43
15	QPSK	1	37	22.95	22.97	23.26			2.05	1.74	
15	QPSK	1	74	22.89	22.91	22.97			2.11	2.03	
15	QPSK	36	0	22.11	22.43	22.03	24	1	1.97	1.57	0.47
15	QPSK	36	20	21.99	22.19	21.96			2.04	1.81	
15	QPSK	36	39	22.30	22.20	22.20			1.80	1.70	
15	QPSK	75	0	21.89	22.24	22.04			2.11	1.76	0.35
15	16QAM	1	0	22.32	22.26	22.13	24	1	1.87	1.68	0.59
15	16QAM	1	37	21.82	22.07	22.25			2.18	1.75	
15	16QAM	1	74	21.73	21.94	21.77			2.27	2.06	
15	16QAM	36	0	21.30	21.36	21.10	23	2	1.90	1.64	0.45
15	16QAM	36	20	21.21	21.37	20.92			2.08	1.63	
15	16QAM	36	39	21.23	21.06	21.23			1.94	1.77	
15	16QAM	75	0	20.75	20.85	20.85			2.25	2.15	0.10
Channel				20800	21100	21400	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				2505	2535	2565					
10	QPSK	1	0	23.20	23.28	22.95	25	0	2.05	1.72	0.50
10	QPSK	1	25	22.88	22.96	23.36			2.12	1.64	
10	QPSK	1	49	22.93	22.86	22.95			2.14	2.05	
10	QPSK	25	0	22.15	22.31	21.96	24	1	2.04	1.69	0.42
10	QPSK	25	12	21.90	22.28	21.98			2.10	1.72	
10	QPSK	25	25	22.16	22.32	22.22			1.84	1.68	
10	QPSK	50	0	21.87	22.30	22.06			2.13	1.70	0.43
10	16QAM	1	0	22.34	22.32	22.17	24	1	1.83	1.66	0.63
10	16QAM	1	25	21.87	22.04	22.25			2.13	1.75	
10	16QAM	1	49	21.83	22.02	21.71			2.29	1.98	
10	16QAM	25	0	21.18	21.28	21.12	23	2	1.88	1.72	0.50
10	16QAM	25	12	21.20	21.38	20.88			2.12	1.62	
10	16QAM	25	25	21.21	21.13	21.24			1.87	1.76	
10	16QAM	50	0	20.88	20.82	20.85			2.18	2.12	0.06
Channel				20775	21100	21425	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				2502.5	2535	2567.5					
5	QPSK	1	0	23.21	23.29	23.01	25	0	1.99	1.71	0.48
5	QPSK	1	12	22.99	23.02	23.39			2.01	1.61	
5	QPSK	1	24	22.99	22.91	22.93			2.09	2.01	
5	QPSK	12	0	22.06	22.31	21.99	24	1	2.01	1.69	0.32

5	QPSK	12	7	22.05	22.29	21.99			2.01	1.71	
5	QPSK	12	13	22.17	22.25	22.25			1.83	1.75	
5	QPSK	25	0	21.91	22.27	22.00			2.09	1.73	0.36
5	16QAM	1	0	22.24	22.19	22.09			1.91	1.76	
5	16QAM	1	12	21.94	22.08	22.20	24	1	2.06	1.80	0.51
5	16QAM	1	24	21.73	21.93	21.85			2.27	2.07	
5	16QAM	12	0	21.15	21.29	21.10			1.90	1.71	
5	16QAM	12	7	21.23	21.23	20.89	23	2	2.11	1.77	0.40
5	16QAM	12	13	21.11	21.05	21.16			1.95	1.84	
5	16QAM	25	0	20.81	20.71	20.99			2.29	2.01	0.28

Band 12

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				23060	23095	23130					
Frequency (MHz)				704	707.5	711					
10	QPSK	1	0	23.75	23.88	23.54			0.46	0.12	
10	QPSK	1	25	23.49	23.52	23.83	24	0	0.51	0.17	0.53
10	QPSK	1	49	23.47	23.35	23.55			0.65	0.45	
10	QPSK	25	0	22.53	22.93	22.43			0.57	0.07	
10	QPSK	25	12	22.52	22.75	22.49	23	1	0.51	0.25	0.50
10	QPSK	25	25	22.69	22.83	22.71			0.31	0.17	
10	QPSK	50	0	22.39	22.77	22.47			0.61	0.23	0.38
10	16QAM	1	0	22.78	22.73	22.72			0.28	0.22	
10	16QAM	1	25	22.35	22.50	22.66	23	1	0.65	0.34	0.52
10	16QAM	1	49	22.26	22.38	22.29			0.74	0.62	
10	16QAM	25	0	21.77	21.76	21.63			0.37	0.23	
10	16QAM	25	12	21.73	21.74	21.38	22	2	0.62	0.26	0.39
10	16QAM	25	25	21.64	21.59	21.69			0.41	0.31	
10	16QAM	50	0	21.37	21.32	21.49			0.68	0.51	0.17
Channel				23035	23095	23155	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				701.5	707.5	713.5					
5	QPSK	1	0	23.53	23.75	23.45			0.55	0.25	
5	QPSK	1	12	23.40	23.43	23.68	24	0	0.60	0.32	0.45
5	QPSK	1	24	23.30	23.36	23.39			0.70	0.61	
5	QPSK	12	0	22.56	22.84	22.38			0.62	0.16	
5	QPSK	12	7	22.42	22.58	22.32	23	1	0.68	0.42	0.52
5	QPSK	12	13	22.67	22.69	22.59			0.41	0.31	
5	QPSK	25	0	22.25	22.61	22.40			0.75	0.39	0.36
5	16QAM	1	0	22.71	22.70	22.53			0.47	0.29	
5	16QAM	1	12	22.36	22.33	22.62	23	1	0.67	0.38	0.57
5	16QAM	1	24	22.23	22.39	22.14			0.86	0.61	
5	16QAM	12	0	21.61	21.75	21.43	22	2	0.57	0.25	0.39
5	16QAM	12	7	21.56	21.71	21.36			0.64	0.29	

5	16QAM	12	13	21.58	21.56	21.62			0.44	0.38	
5	16QAM	25	0	21.19	21.17	21.27			0.83	0.73	0.10
Channel				23025	23095	23165	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				700.5	707.5	714.5					
3	QPSK	1	0	23.51	23.78	23.35	24	0	0.65	0.22	0.50
3	QPSK	1	8	23.36	23.38	23.70			0.64	0.30	
3	QPSK	1	14	23.32	23.28	23.39			0.72	0.61	
3	QPSK	8	0	22.42	22.69	22.33	23	1	0.67	0.31	0.37
3	QPSK	8	4	22.41	22.70	22.38			0.62	0.30	
3	QPSK	8	7	22.57	22.65	22.62			0.43	0.35	
3	QPSK	15	0	22.21	22.66	22.40			0.79	0.34	0.45
3	16QAM	1	0	22.65	22.58	22.60	23	1	0.42	0.35	0.46
3	16QAM	1	8	22.22	22.35	22.58			0.78	0.42	
3	16QAM	1	14	22.24	22.37	22.19			0.81	0.63	
3	16QAM	8	0	21.65	21.80	21.51	22	2	0.49	0.20	0.49
3	16QAM	8	4	21.55	21.75	21.31			0.69	0.25	
3	16QAM	8	7	21.49	21.48	21.63			0.52	0.37	
3	16QAM	15	0	21.29	21.17	21.31			0.83	0.69	0.14
Channel				23017	23095	23173	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				699.7	707.5	715.3					
1.4	QPSK	1	0	23.55	23.75	23.44	24	0	0.56	0.56	0.46
1.4	QPSK	1	3	23.39	23.38	23.73			0.62	0.62	
1.4	QPSK	1	5	23.34	23.29	23.41			0.71	0.71	
1.4	QPSK	3	0	23.55	23.75	23.44			0.56	0.56	0.46
1.4	QPSK	3	1	23.39	23.38	23.73			0.62	0.62	
1.4	QPSK	3	3	23.34	23.29	23.41			0.71	0.71	
1.4	QPSK	6	0	22.27	22.62	22.48	23	1	0.73	0.73	0.35
1.4	16QAM	1	0	22.65	22.70	22.50	23	1	0.50	0.50	0.51
1.4	16QAM	1	3	22.29	22.37	22.60			0.71	0.71	
1.4	16QAM	1	5	22.20	22.28	22.19			0.81	0.81	
1.4	16QAM	3	0	22.65	22.63	22.66			0.37	0.37	0.43
1.4	16QAM	3	1	22.27	22.62	22.48			0.73	0.73	
1.4	16QAM	3	3	22.65	22.70	22.50			0.50	0.50	
1.4	16QAM	6	0	21.16	21.16	21.38	22	2	0.84	0.84	0.22

Band 13

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				23230							
Frequency (MHz)				782							
10	QPSK	1	0		23.64		24	0	0.36	0.36	0.42
10	QPSK	1	25		23.39				0.61	0.61	
10	QPSK	1	49		23.22				0.78	0.78	
10	QPSK	25	0		22.71		23	1	0.29	0.29	0.16

10	QPSK	25	12		22.55				0.45	0.45	
10	QPSK	25	25		22.59				0.41	0.41	
10	QPSK	50	0		22.63				0.37	0.37	0.00
10	16QAM	1	0		22.56		23	1	0.44	0.44	0.34
10	16QAM	1	25		22.25				0.75	0.75	
10	16QAM	1	49		22.22				0.78	0.78	
10	16QAM	25	0		21.53		22	2	0.47	0.47	0.21
10	16QAM	25	12		21.62				0.38	0.38	
10	16QAM	25	25		21.41				0.59	0.59	
10	16QAM	50	0		21.13				0.87	0.87	0.00
Channel				23205	23230	23255	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				779.5	782	784.5					
5	QPSK	1	0	23.34	23.54	23.30	24	0	0.70	0.46	0.48
5	QPSK	1	12	23.16	23.27	23.54			0.84	0.46	
5	QPSK	1	24	23.06	23.20	23.18			0.94	0.80	
5	QPSK	12	0	22.32	22.68	22.12	23	1	0.88	0.32	0.60
5	QPSK	12	7	22.18	22.45	22.08			0.92	0.55	
5	QPSK	12	13	22.52	22.55	22.37			0.63	0.45	
5	QPSK	25	0	22.04	22.33	22.21			0.96	0.67	0.29
5	16QAM	1	0	22.56	22.47	22.29	23	1	0.71	0.44	0.61
5	16QAM	1	12	22.22	22.14	22.36			0.86	0.64	
5	16QAM	1	24	21.95	22.15	21.97			1.05	0.85	
5	16QAM	12	0	21.40	21.62	21.22	22	2	0.78	0.38	0.53
5	16QAM	12	7	21.44	21.48	21.09			0.91	0.52	
5	16QAM	12	13	21.45	21.43	21.34			0.66	0.55	
5	16QAM	25	0	20.92	21.01	21.05			1.08	0.95	0.13

Band 14

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel					23330						
Frequency (MHz)					793						
10	QPSK	1	0		23.44		23.5	0	0.06	0.06	0.42
10	QPSK	1	25		23.23				0.27	0.27	
10	QPSK	1	49		23.02				0.48	0.48	
10	QPSK	25	0		22.43		22.5	1	0.07	0.07	0.07
10	QPSK	25	12		22.38				0.12	0.12	
10	QPSK	25	25		22.36				0.14	0.14	
10	QPSK	50	0		22.40				0.10	0.10	0.00
10	16QAM	1	0		22.35		22.5	1	0.15	0.15	0.34
10	16QAM	1	25		22.01				0.49	0.49	
10	16QAM	1	49		22.09				0.41	0.41	
10	16QAM	25	0		21.25		21.5	2	0.25	0.25	0.25
10	16QAM	25	12		21.50				0.00	0.00	

10	16QAM	25	25		21.25				0.25	0.25	
10	16QAM	50	0		20.86				0.64	0.64	0.00
Channel				23305	23330	23355	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				790.5	793	795.5					
5	QPSK	1	0	23.07	23.29	23.07	23.5	0	0.43	0.21	0.44
5	QPSK	1	12	22.90	23.10	23.34			0.60	0.16	
5	QPSK	1	24	22.91	22.98	23.01			0.59	0.49	
5	QPSK	12	0	22.14	22.42	21.96	22.5	1	0.54	0.08	0.53
5	QPSK	12	7	21.99	22.20	21.89			0.61	0.30	
5	QPSK	12	13	22.29	22.29	22.16			0.34	0.21	
5	QPSK	25	0	21.79	22.13	22.03			0.71	0.37	0.34
5	16QAM	1	0	22.31	22.30	22.04	22.5	1	0.46	0.19	0.63
5	16QAM	1	12	21.95	21.94	22.08			0.56	0.42	
5	16QAM	1	24	21.68	21.98	21.73			0.82	0.52	
5	16QAM	12	0	21.25	21.41	21.03	21.5	2	0.47	0.09	0.57
5	16QAM	12	7	21.20	21.34	20.84			0.66	0.16	
5	16QAM	12	13	21.17	21.16	21.08			0.42	0.33	
5	16QAM	25	0	20.80	20.77	20.77			0.73	0.70	0.03

Band 17

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				23780	23790	23800					
Frequency (MHz)				709	710	711					
10	QPSK	1	0	23.15	23.35	23.26	23.5	0	0.35	0.15	0.46
10	QPSK	1	25	22.99	22.98	23.33			0.52	0.17	
10	QPSK	1	49	22.94	22.89	23.01			0.61	0.49	
10	QPSK	25	0	22.04	22.30	21.99	22.5	1	0.51	0.20	0.38
10	QPSK	25	12	21.92	22.20	22.01			0.58	0.30	
10	QPSK	25	25	22.25	22.23	22.26			0.27	0.24	
10	QPSK	50	0	21.87	22.22	22.08			0.63	0.28	0.35
10	16QAM	1	0	22.25	22.30	22.10	22.5	1	0.40	0.20	0.51
10	16QAM	1	25	21.89	21.97	22.20			0.61	0.30	
10	16QAM	1	49	21.80	21.88	21.79			0.71	0.62	
10	16QAM	25	0	21.21	21.31	21.10	21.5	2	0.40	0.19	0.42
10	16QAM	25	12	21.22	21.29	20.89			0.61	0.21	
10	16QAM	25	25	21.11	21.06	21.23			0.44	0.27	
10	16QAM	50	0	20.76	20.76	20.98			0.74	0.52	0.22
Channel				23755	23790	23825	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				706.5	710	713.5					
5	QPSK	1	0	22.99	23.19	22.84	23.5	0	0.66	0.31	0.51
5	QPSK	1	12	22.68	22.80	23.06			0.82	0.44	
5	QPSK	1	24	22.82	22.77	22.87			0.73	0.63	
5	QPSK	12	0	21.95	22.21	21.80	22.5	1	0.70	0.29	0.54

5	QPSK	12	7	21.71	22.05	21.67			0.83	0.45	
5	QPSK	12	13	22.07	21.97	21.98			0.53	0.43	
5	QPSK	25	0	21.75	22.01	21.89			0.75	0.49	0.26
5	16QAM	1	0	22.06	22.05	21.93	22.5	1	0.57	0.44	0.53
5	16QAM	1	12	21.64	21.75	22.10			0.86	0.40	
5	16QAM	1	24	21.58	21.81	21.57			0.93	0.69	
5	16QAM	12	0	21.05	21.12	20.91	21.5	2	0.59	0.38	0.45
5	16QAM	12	7	21.03	21.10	20.67			0.83	0.40	
5	16QAM	12	13	21.02	21.00	21.08			0.50	0.42	
5	16QAM	25	0	20.53	20.63	20.78			0.97	0.72	0.25

Band 25

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				26140	26340	26590					
Frequency (MHz)				1860	1880	1905					
20	QPSK	1	0	23.05	23.08	22.81	24.5	0	1.69	1.42	0.40
20	QPSK	1	49	22.80	22.87	23.11			1.70	1.39	
20	QPSK	1	99	22.76	22.81	22.71			1.79	1.69	
20	QPSK	50	0	21.94	22.15	21.89	23.5	1	1.61	1.35	0.32
20	QPSK	50	24	21.83	22.11	21.83			1.67	1.39	
20	QPSK	50	50	21.94	21.97	22.01			1.56	1.49	
20	QPSK	100	0	21.76	21.97	21.77			1.74	1.53	0.21
20	16QAM	1	0	22.09	22.11	21.86	23.5	1	1.64	1.39	0.48
20	16QAM	1	49	21.65	21.69	22.09			1.85	1.41	
20	16QAM	1	99	21.71	21.67	21.63			1.87	1.79	
20	16QAM	50	0	20.96	21.26	20.86	22.5	2	1.64	1.24	0.46
20	16QAM	50	24	20.91	21.14	20.80			1.70	1.36	
20	16QAM	50	50	20.85	21.05	21.06			1.65	1.44	
20	16QAM	100	0	20.71	20.55	20.80			1.95	1.70	0.25
Channel				26115	26340	26615	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1857.5	1880	1907.5					
15	QPSK	1	0	22.93	22.98	22.76	24.5	0	1.74	1.52	0.45
15	QPSK	1	37	22.57	22.65	22.92			1.93	1.58	
15	QPSK	1	74	22.53	22.69	22.62			1.97	1.81	
15	QPSK	36	0	21.80	21.94	21.70	23.5	1	1.80	1.56	0.30
15	QPSK	36	20	21.72	21.92	21.64			1.86	1.58	
15	QPSK	36	39	21.84	21.79	21.86			1.71	1.64	
15	QPSK	75	0	21.63	21.82	21.65			1.87	1.68	0.19
15	16QAM	1	0	22.03	21.89	21.65	23.5	1	1.85	1.47	0.58
15	16QAM	1	37	21.52	21.64	21.81			1.98	1.69	
15	16QAM	1	74	21.45	21.51	21.49			2.05	1.99	
15	16QAM	36	0	20.72	21.00	20.75	22.5	2	1.78	1.50	0.34
15	16QAM	36	20	20.78	20.92	20.66			1.84	1.58	

15	16QAM	36	39	20.77	20.89	20.86			1.73	1.61	
15	16QAM	75	0	20.52	20.44	20.57			2.06	1.93	0.13
Channel				26090	26340	26640	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1855	1880	1910					
10	QPSK	1	0	22.87	23.01	22.65	24.5	0	1.85	1.49	0.46
10	QPSK	1	25	22.64	22.67	22.95			1.86	1.55	
10	QPSK	1	49	22.55	22.65	22.67			1.95	1.83	
10	QPSK	25	0	21.80	22.05	21.74	23.5	1	1.76	1.45	0.42
10	QPSK	25	12	21.63	22.03	21.71			1.87	1.47	
10	QPSK	25	25	21.85	21.85	21.91			1.65	1.59	
10	QPSK	50	0	21.63	21.75	21.59			1.91	1.75	0.16
10	16QAM	1	0	21.88	21.90	21.67	23.5	1	1.83	1.60	0.44
10	16QAM	1	25	21.46	21.54	21.79			2.04	1.71	
10	16QAM	1	49	21.50	21.55	21.50			2.00	1.95	
10	16QAM	25	0	20.74	21.04	20.77	22.5	2	1.76	1.46	0.40
10	16QAM	25	12	20.72	20.95	20.64			1.86	1.55	
10	16QAM	25	25	20.71	20.81	20.88			1.79	1.62	
10	16QAM	50	0	20.57	20.45	20.69			2.05	1.81	0.24
Channel				26065	26340	26665	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1852.5	1880	1912.5					
5	QPSK	1	0	22.91	22.99	22.63	24.5	0	1.87	1.51	0.47
5	QPSK	1	12	22.52	22.55	22.94			1.98	1.56	
5	QPSK	1	24	22.58	22.64	22.64			1.92	1.86	
5	QPSK	12	0	21.86	22.05	21.69	23.5	1	1.81	1.45	0.46
5	QPSK	12	7	21.66	22.04	21.59			1.91	1.46	
5	QPSK	12	13	21.86	21.83	21.76			1.74	1.64	
5	QPSK	25	0	21.59	21.87	21.58			1.92	1.63	0.29
5	16QAM	1	0	21.94	21.94	21.72	23.5	1	1.78	1.56	0.52
5	16QAM	1	12	21.44	21.63	21.91			2.06	1.59	
5	16QAM	1	24	21.46	21.65	21.42			2.08	1.85	
5	16QAM	12	0	20.74	21.05	20.77	22.5	2	1.76	1.45	0.37
5	16QAM	12	7	20.81	20.90	20.68			1.82	1.60	
5	16QAM	12	13	20.77	20.84	20.95			1.73	1.55	
5	16QAM	25	0	20.56	20.43	20.56			2.07	1.94	0.13
Channel				26055	26340	26675	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1851.5	1880	1913.5					
3	QPSK	1	0	22.91	22.97	22.64	24.5	0	1.86	1.53	0.41
3	QPSK	1	8	22.58	22.64	22.93			1.92	1.57	
3	QPSK	1	14	22.56	22.60	22.65			1.94	1.85	
3	QPSK	8	0	21.82	22.01	21.66	23.5	1	1.84	1.49	0.36
3	QPSK	8	4	21.65	21.94	21.66			1.85	1.56	
3	QPSK	8	7	21.84	21.80	21.89			1.70	1.61	
3	QPSK	15	0	21.64	21.87	21.52			1.98	1.63	0.35
3	16QAM	1	0	21.94	21.84	21.79	23.5	1	1.71	1.56	0.50
3	16QAM	1	8	21.44	21.64	21.85			2.06	1.65	
3	16QAM	1	14	21.51	21.58	21.56			1.99	1.92	
3	16QAM	8	0	20.83	20.98	20.74	22.5	2	1.76	1.52	0.31
3	16QAM	8	4	20.81	20.89	20.67			1.83	1.61	
3	16QAM	8	7	20.73	20.82	20.88			1.77	1.62	

3	16QAM	15	0	20.46	20.47	20.69			2.04	1.81	0.23
Channel				26047	26340	26683	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1850.7	1880	1914.3					
1.4	QPSK	1	0	22.95	23.00	22.71	24.5	0	1.79	1.79	0.46
1.4	QPSK	1	3	22.63	22.55	22.94			1.95	1.95	
1.4	QPSK	1	5	22.54	22.63	22.66			1.96	1.96	
1.4	QPSK	3	0	22.88	22.97	22.64			1.86	1.86	0.46
1.4	QPSK	3	1	22.51	22.60	22.89			1.99	1.99	
1.4	QPSK	3	3	22.63	22.54	22.57			1.96	1.96	
1.4	QPSK	6	0	21.60	21.77	21.51	23.5	1	1.99	1.99	0.26
1.4	16QAM	1	0	21.96	21.92	21.76	23.5	1	1.74	1.74	0.51
1.4	16QAM	1	3	21.55	21.59	21.85			1.95	1.95	
1.4	16QAM	1	5	21.45	21.61	21.56			2.05	2.05	
1.4	16QAM	3	0	21.93	21.83	21.77			1.73	1.73	0.46
1.4	16QAM	3	1	21.50	21.66	21.83			2.00	2.00	
1.4	16QAM	3	3	21.47	21.54	21.49			2.03	2.03	
1.4	16QAM	6	0	20.55	20.48	20.67	22.5	2	2.02	2.02	0.19

Band 26

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel					26740						
Frequency (MHz)					819						
10	QPSK	1	0		23.51		24	0	0.49	0.49	0.31
10	QPSK	1	25		23.33				0.67	0.67	
10	QPSK	1	49		23.20				0.80	0.80	
10	QPSK	25	0		22.40		23	1	0.60	0.60	0.25
10	QPSK	25	12		22.24				0.76	0.76	
10	QPSK	25	25		22.49				0.51	0.51	
10	QPSK	50	0		22.12				0.88	0.88	0.00
10	16QAM	1	0		22.65		23	1	0.35	0.35	0.61
10	16QAM	1	25		22.14				0.86	0.86	
10	16QAM	1	49		22.04				0.96	0.96	
10	16QAM	25	0		21.44		22	2	0.56	0.56	0.02
10	16QAM	25	12		21.45				0.55	0.55	
10	16QAM	25	25		21.46				0.54	0.54	
10	16QAM	50	0		21.14				0.86	0.86	0.00
Channel				26715	26740	26765	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				816.5	819	821.5					
5	QPSK	1	0	23.53	23.46	23.15	24	0	0.85	0.47	0.43
5	QPSK	1	12	23.31	23.17	23.51			0.83	0.49	
5	QPSK	1	24	23.31	23.10	23.19			0.90	0.69	
5	QPSK	12	0	22.42	22.47	21.96	23	1	1.04	0.53	0.51
5	QPSK	12	7	22.24	22.39	22.04			0.96	0.61	

5	QPSK	12	13	22.45	22.31	22.33			0.69	0.55	
5	QPSK	25	0	22.14	22.29	22.16			0.86	0.71	0.15
5	16QAM	1	0	22.56	22.39	22.19	23	1	0.81	0.44	0.74
5	16QAM	1	12	22.13	22.10	22.20			0.90	0.80	
5	16QAM	1	24	22.10	22.13	21.82			1.18	0.87	
5	16QAM	12	0	21.55	21.43	21.12	22	2	0.88	0.45	0.55
5	16QAM	12	7	21.48	21.40	21.00			1.00	0.52	
5	16QAM	12	13	21.38	21.21	21.24			0.79	0.62	
5	16QAM	25	0	21.08	20.92	21.10			1.08	0.90	0.18
Channel				26705	26740	26775	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				815.5	819	822.5					
3	QPSK	1	0	23.51	23.33	23.10	24	0	0.90	0.49	0.48
3	QPSK	1	8	23.26	23.10	23.49			0.90	0.51	
3	QPSK	1	14	23.24	23.03	23.03			0.97	0.76	
3	QPSK	8	0	22.43	22.36	22.09	23	1	0.91	0.57	0.47
3	QPSK	8	4	22.21	22.46	22.17			0.83	0.54	
3	QPSK	8	7	22.56	22.44	22.30			0.70	0.44	
3	QPSK	15	0	22.25	22.41	22.08			0.92	0.59	0.33
3	16QAM	1	0	22.60	22.25	22.25	23	1	0.75	0.40	0.87
3	16QAM	1	8	22.17	22.16	22.37			0.84	0.63	
3	16QAM	1	14	22.02	22.00	21.73			1.27	0.98	
3	16QAM	8	0	21.53	21.37	21.24	22	2	0.76	0.47	0.55
3	16QAM	8	4	21.54	21.36	20.99			1.01	0.46	
3	16QAM	8	7	21.44	21.28	21.27			0.73	0.56	
3	16QAM	15	0	21.10	20.93	21.05			1.07	0.90	0.17
Channel				26697	26740	26783	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				814.7	819	823.3					
1.4	QPSK	1	0	23.51	23.48	23.20	24	0	0.80	0.80	0.52
1.4	QPSK	1	3	23.24	23.09	23.50			0.91	0.91	
1.4	QPSK	1	5	23.21	23.15	22.99			1.01	1.01	
1.4	QPSK	3	0	23.21	23.02	23.02			0.98	0.98	1.17
1.4	QPSK	3	1	22.44	22.45	22.04			1.96	1.96	
1.4	QPSK	3	3	22.30	22.28	22.10			1.90	1.90	
1.4	QPSK	6	0	22.26	22.38	22.05	23	1	0.95	0.95	0.33
1.4	16QAM	1	0	22.56	22.39	22.31	23	1	0.69	0.69	0.62
1.4	16QAM	1	3	22.21	22.12	22.27			0.88	0.88	
1.4	16QAM	1	5	22.04	21.94	21.97			1.06	1.06	
1.4	16QAM	3	0	22.56	22.38	22.32			0.68	0.68	0.65
1.4	16QAM	3	1	22.21	22.16	22.28			0.84	0.84	
1.4	16QAM	3	3	22.04	22.05	21.91			1.09	1.09	
1.4	16QAM	6	0	21.19	20.85	20.91	22	2	1.15	1.15	0.34

Band 26

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				26865	26915	26965					
Frequency (MHz)				831.5	836.5	841.5					
15	QPSK	1	0	23.63	23.77	23.50	24	0	0.50	0.23	0.49
15	QPSK	1	37	23.33	23.46	23.65			0.67	0.35	
15	QPSK	1	74	23.32	23.28	23.45			0.72	0.55	
15	QPSK	36	0	22.56	22.82	22.37	23	1	0.63	0.18	0.47
15	QPSK	36	20	22.35	22.62	22.36			0.65	0.38	
15	QPSK	36	39	22.66	22.74	22.57			0.43	0.26	
15	QPSK	75	0	22.30	22.63	22.51			0.70	0.37	0.33
15	16QAM	1	0	22.70	22.74	22.57	23	1	0.43	0.26	0.60
15	16QAM	1	37	22.35	22.43	22.66			0.65	0.34	
15	16QAM	1	74	22.20	22.41	22.14			0.86	0.59	
15	16QAM	36	0	21.72	21.69	21.51	22	2	0.49	0.28	0.38
15	16QAM	36	20	21.68	21.77	21.39			0.61	0.23	
15	16QAM	36	39	21.58	21.63	21.63			0.42	0.37	
15	16QAM	75	0	21.25	21.16	21.32			0.84	0.68	0.16
Channel				26840	26915	26990	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				829	836.5	844					
10	QPSK	1	0	23.45	23.57	23.34	24	0	0.66	0.43	0.55
10	QPSK	1	25	23.20	23.26	23.67			0.80	0.33	
10	QPSK	1	49	23.12	23.22	23.31			0.88	0.69	
10	QPSK	25	0	22.32	22.60	22.33	23	1	0.68	0.40	0.56
10	QPSK	25	12	22.06	22.60	22.19			0.94	0.40	
10	QPSK	25	25	22.32	22.62	22.41			0.68	0.38	
10	QPSK	50	0	22.03	22.56	22.34			0.97	0.44	0.53
10	16QAM	1	0	22.63	22.51	22.51	23	1	0.49	0.37	0.75
10	16QAM	1	25	21.97	22.24	22.54			1.03	0.46	
10	16QAM	1	49	21.88	22.21	22.01			1.12	0.79	
10	16QAM	25	0	21.34	21.59	21.44	22	2	0.66	0.41	0.34
10	16QAM	25	12	21.32	21.56	21.25			0.75	0.44	
10	16QAM	25	25	21.43	21.46	21.49			0.57	0.51	
10	16QAM	50	0	20.98	21.05	21.23			1.02	0.77	0.25
Channel				26815	26915	27015	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				826.5	836.5	846.5					
5	QPSK	1	0	23.44	23.62	23.31	24	0	0.69	0.38	0.51
5	QPSK	1	12	23.15	23.32	23.66			0.85	0.34	
5	QPSK	1	24	23.23	23.26	23.37			0.77	0.63	
5	QPSK	12	0	22.33	22.70	22.23	23	1	0.77	0.30	0.54
5	QPSK	12	7	22.16	22.58	22.20			0.84	0.42	
5	QPSK	12	13	22.35	22.58	22.57			0.65	0.42	
5	QPSK	25	0	22.11	22.48	22.37			0.89	0.52	0.37

5	16QAM	1	0	22.42	22.61	22.43	23	1	0.58	0.39	0.68
5	16QAM	1	12	22.06	22.32	22.45			0.94	0.55	
5	16QAM	1	24	21.93	22.31	22.10			1.07	0.69	
5	16QAM	12	0	21.52	21.68	21.39	22	2	0.61	0.32	0.47
5	16QAM	12	7	21.42	21.68	21.21			0.79	0.32	
5	16QAM	12	13	21.33	21.47	21.46			0.67	0.53	
5	16QAM	25	0	21.02	21.12	21.27			0.98	0.73	0.25
Channel				26805	26915	27025	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				825.5	836.5	847.5					
3	QPSK	1	0	23.44	23.59	23.33	24	0	0.67	0.41	0.50
3	QPSK	1	8	23.16	23.28	23.66			0.84	0.34	
3	QPSK	1	14	23.20	23.23	23.24			0.80	0.76	
3	QPSK	8	0	22.35	22.63	22.27	23	1	0.73	0.37	0.49
3	QPSK	8	4	22.14	22.58	22.31			0.86	0.42	
3	QPSK	8	7	22.40	22.60	22.56			0.60	0.40	
3	QPSK	15	0	22.14	22.55	22.24			0.86	0.45	0.41
3	16QAM	1	0	22.45	22.51	22.50	23	1	0.55	0.49	0.64
3	16QAM	1	8	22.03	22.31	22.51			0.97	0.49	
3	16QAM	1	14	21.87	22.28	22.00			1.13	0.72	
3	16QAM	8	0	21.38	21.65	21.43	22	2	0.62	0.35	0.49
3	16QAM	8	4	21.41	21.56	21.16			0.84	0.44	
3	16QAM	8	7	21.41	21.44	21.54			0.59	0.46	
3	16QAM	15	0	20.95	21.08	21.18			1.05	0.82	0.23
Channel				26797	26915	27033	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				824.7	836.5	848.3					
1.4	QPSK	1	0	23.49	23.62	23.38	24	0	0.62	0.62	0.57
1.4	QPSK	1	3	23.09	23.31	23.65			0.91	0.91	
1.4	QPSK	1	5	23.08	23.29	23.26			0.92	0.92	
1.4	QPSK	3	0	23.16	23.29	23.26			0.84	0.84	1.02
1.4	QPSK	3	1	22.33	22.63	22.28			1.72	1.72	
1.4	QPSK	3	3	22.27	22.51	22.28			1.73	1.73	
1.4	QPSK	6	0	22.11	22.58	22.28	23	1	0.89	0.89	0.47
1.4	16QAM	1	0	22.49	22.58	22.47	23	1	0.53	0.53	0.56
1.4	16QAM	1	3	22.12	22.33	22.53			0.88	0.88	
1.4	16QAM	1	5	22.02	22.20	22.12			0.98	0.98	
1.4	16QAM	3	0	22.51	22.58	22.47			0.53	0.53	0.70
1.4	16QAM	3	1	22.09	22.33	22.53			0.91	0.91	
1.4	16QAM	3	3	21.88	22.20	22.12			1.12	1.12	
1.4	16QAM	6	0	21.12	21.04	21.19	22	2	0.96	0.96	0.15

Band 66

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				132072	132322	132572					

Frequency (MHz)				1720	1745	1770					
20	QPSK	1	0	22.91	22.94	22.63	23	0	0.37	0.06	0.49
20	QPSK	1	49	22.53	22.56	22.72			0.47	0.28	
20	QPSK	1	99	22.59	22.45	22.55			0.55	0.41	
20	QPSK	50	0	21.74	21.99	21.54	22	1	0.46	0.01	0.45
20	QPSK	50	24	21.61	21.90	21.55			0.45	0.10	
20	QPSK	50	50	21.78	21.81	21.80			0.22	0.19	
20	QPSK	100	0	21.54	21.90	21.60			0.46	0.10	0.36
20	16QAM	1	0	21.84	21.91	21.69	22	1	0.31	0.09	0.57
20	16QAM	1	49	21.46	21.58	21.86			0.54	0.14	
20	16QAM	1	99	21.34	21.58	21.41			0.66	0.42	
20	16QAM	50	0	20.87	20.92	20.67	21	2	0.33	0.08	0.38
20	16QAM	50	24	20.84	20.88	20.54			0.46	0.12	
20	16QAM	50	50	20.76	20.76	20.89			0.24	0.11	
20	16QAM	100	0	20.35	20.33	20.59			0.67	0.41	0.26
Channel				132047	132322	132597	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1717.5	1745	1772.5					
15	QPSK	1	0	22.67	22.73	22.42	23	0	0.58	0.27	0.56
15	QPSK	1	37	22.46	22.38	22.83			0.62	0.17	
15	QPSK	1	74	22.39	22.27	22.43			0.73	0.57	
15	QPSK	36	0	21.44	21.73	21.38	22	1	0.62	0.27	0.40
15	QPSK	36	20	21.37	21.71	21.33			0.67	0.29	
15	QPSK	36	39	21.58	21.72	21.58			0.42	0.28	
15	QPSK	75	0	21.37	21.73	21.47			0.63	0.27	0.36
15	16QAM	1	0	21.62	21.75	21.58	22	1	0.42	0.25	0.55
15	16QAM	1	37	21.34	21.40	21.66			0.66	0.34	
15	16QAM	1	74	21.20	21.35	21.26			0.80	0.65	
15	16QAM	36	0	20.64	20.76	20.41	21	2	0.59	0.24	0.46
15	16QAM	36	20	20.63	20.73	20.30			0.70	0.27	
15	16QAM	36	39	20.52	20.49	20.61			0.51	0.39	
15	16QAM	75	0	20.16	20.17	20.29			0.84	0.71	0.13
Channel				132022	132322	132622	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1715	1745	1775					
10	QPSK	1	0	22.78	22.75	22.38	23	0	0.62	0.22	0.48
10	QPSK	1	25	22.39	22.44	22.69			0.61	0.31	
10	QPSK	1	49	22.39	22.30	22.36			0.70	0.61	
10	QPSK	25	0	21.51	21.81	21.39	22	1	0.61	0.19	0.50
10	QPSK	25	12	21.42	21.73	21.31			0.69	0.27	
10	QPSK	25	25	21.64	21.71	21.61			0.39	0.29	
10	QPSK	50	0	21.24	21.67	21.40			0.76	0.33	0.43
10	16QAM	1	0	21.68	21.59	21.52	22	1	0.48	0.32	0.53
10	16QAM	1	25	21.34	21.43	21.64			0.66	0.36	
10	16QAM	1	49	21.25	21.36	21.15			0.85	0.64	
10	16QAM	25	0	20.56	20.76	20.43	21	2	0.57	0.24	0.45
10	16QAM	25	12	20.51	20.69	20.31			0.69	0.31	
10	16QAM	25	25	20.56	20.50	20.70			0.50	0.30	
10	16QAM	50	0	20.30	20.18	20.30			0.82	0.70	0.12
Channel				131997	132322	132647	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1712.5	1745	1777.5					

5	QPSK	1	0	22.68	22.81	22.49	23	0	0.51	0.19	0.50
5	QPSK	1	12	22.32	22.40	22.82			0.68	0.18	
5	QPSK	1	24	22.34	22.36	22.41			0.66	0.59	
5	QPSK	12	0	21.54	21.80	21.42	22	1	0.58	0.20	0.42
5	QPSK	12	7	21.44	21.72	21.38			0.62	0.28	
5	QPSK	12	13	21.58	21.68	21.66			0.42	0.32	
5	QPSK	25	0	21.38	21.71	21.45			0.62	0.29	0.33
5	16QAM	1	0	21.68	21.69	21.58	22	1	0.42	0.31	0.50
5	16QAM	1	12	21.30	21.39	21.61			0.70	0.39	
5	16QAM	1	24	21.27	21.41	21.19			0.81	0.59	
5	16QAM	12	0	20.67	20.80	20.51	21	2	0.49	0.20	0.43
5	16QAM	12	7	20.57	20.79	20.37			0.63	0.21	
5	16QAM	12	13	20.53	20.62	20.64			0.47	0.36	
5	16QAM	25	0	20.18	20.25	20.38			0.82	0.62	0.20
Channel				131987	132322	132657	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1711.5	1745	1778.5					
3	QPSK	1	0	22.67	22.70	22.51	23	0	0.49	0.30	0.41
3	QPSK	1	8	22.37	22.39	22.68			0.63	0.32	
3	QPSK	1	14	22.33	22.29	22.40			0.71	0.60	
3	QPSK	8	0	21.46	21.83	21.37	22	1	0.63	0.17	0.50
3	QPSK	8	4	21.36	21.71	21.33			0.67	0.29	
3	QPSK	8	7	21.66	21.69	21.54			0.46	0.31	
3	QPSK	15	0	21.29	21.61	21.43			0.71	0.39	0.32
3	16QAM	1	0	21.67	21.62	21.53	22	1	0.47	0.33	0.53
3	16QAM	1	8	21.36	21.49	21.67			0.64	0.33	
3	16QAM	1	14	21.24	21.29	21.14			0.86	0.71	
3	16QAM	8	0	20.72	20.72	20.44	21	2	0.56	0.28	0.35
3	16QAM	8	4	20.67	20.75	20.40			0.60	0.25	
3	16QAM	8	7	20.57	20.47	20.62			0.53	0.38	
3	16QAM	15	0	20.22	20.17	20.32			0.83	0.68	0.15
Channel				131979	132322	132665	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				1710.7	1745	1779.3					
1.4	QPSK	1	0	22.72	22.77	22.35	23	0	0.65	0.65	0.43
1.4	QPSK	1	3	22.34	22.43	22.68			0.66	0.66	
1.4	QPSK	1	5	22.34	22.37	22.40			0.66	0.66	
1.4	QPSK	3	0	22.67	22.81	22.44			0.56	0.56	0.52
1.4	QPSK	3	1	22.45	22.40	22.74			0.60	0.60	
1.4	QPSK	3	3	22.29	22.31	22.46			0.71	0.71	
1.4	QPSK	6	0	21.38	21.59	21.38	22	1	0.62	0.62	0.21
1.4	16QAM	1	0	21.76	21.73	21.59	22	1	0.41	0.41	0.59
1.4	16QAM	1	3	21.28	21.47	21.63			0.72	0.72	
1.4	16QAM	1	5	21.24	21.44	21.17			0.83	0.83	
1.4	16QAM	3	0	21.69	21.68	21.52			0.48	0.48	0.54
1.4	16QAM	3	1	21.33	21.45	21.56			0.67	0.67	
1.4	16QAM	3	3	21.28	21.43	21.15			0.85	0.85	
1.4	16QAM	6	0	20.30	20.14	20.36	21	2	0.86	0.86	0.22

Band 71

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				133222	133322	133372					
Frequency (MHz)				673	683	688					
20	QPSK	1	0	23.68	23.81	23.71	24	0	0.32	0.19	0.51
20	QPSK	1	49	23.30	23.50	23.74			0.70	0.26	
20	QPSK	1	99	23.31	23.38	23.41			0.69	0.59	
20	QPSK	50	0	22.54	22.82	22.36	23	1	0.64	0.18	0.53
20	QPSK	50	24	22.39	22.60	22.29			0.71	0.40	
20	QPSK	50	50	22.69	22.69	22.56			0.44	0.31	
20	QPSK	100	0	22.19	22.53	22.43			0.81	0.47	0.34
20	16QAM	1	0	22.71	22.70	22.44	23	1	0.56	0.29	0.63
20	16QAM	1	49	22.35	22.34	22.48			0.66	0.52	
20	16QAM	1	99	22.08	22.38	22.13			0.92	0.62	
20	16QAM	50	0	21.65	21.81	21.43	22	2	0.57	0.19	0.57
20	16QAM	50	24	21.60	21.74	21.24			0.76	0.26	
20	16QAM	50	50	21.57	21.56	21.48			0.52	0.43	
20	16QAM	100	0	21.20	21.17	21.17			0.83	0.80	0.03
Channel				133197	133297	133397	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				670.5	680.5	690.5					
15	QPSK	1	0	23.40	23.60	23.47	24	0	0.60	0.40	0.58
15	QPSK	1	37	23.26	23.42	23.69			0.74	0.31	
15	QPSK	1	74	23.11	23.32	23.22			0.89	0.68	
15	QPSK	36	0	22.34	22.85	22.14	23	1	0.86	0.15	0.71
15	QPSK	36	20	22.36	22.49	22.24			0.76	0.51	
15	QPSK	36	39	22.55	22.64	22.43			0.57	0.36	
15	QPSK	75	0	22.17	22.38	22.38			0.83	0.62	0.21
15	16QAM	1	0	22.73	22.61	22.33	23	1	0.67	0.27	0.67
15	16QAM	1	37	22.24	22.27	22.46			0.76	0.54	
15	16QAM	1	74	22.11	22.20	22.06			0.94	0.80	
15	16QAM	36	0	21.45	21.74	21.26	22	2	0.74	0.26	0.53
15	16QAM	36	20	21.50	21.56	21.21			0.79	0.44	
15	16QAM	36	39	21.56	21.55	21.38			0.62	0.44	
15	16QAM	75	0	20.95	21.10	21.13			1.05	0.87	0.18
Channel				133172	133272	133422	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				668	678	693					
10	QPSK	1	0	23.43	23.68	23.36	24	0	0.64	0.32	0.59
10	QPSK	1	25	23.25	23.41	23.63			0.75	0.37	
10	QPSK	1	49	23.09	23.24	23.35			0.91	0.65	
10	QPSK	25	0	22.36	22.70	22.29	23	1	0.71	0.30	0.51
10	QPSK	25	12	22.32	22.57	22.19			0.81	0.43	
10	QPSK	25	25	22.63	22.70	22.48			0.52	0.30	
10	QPSK	50	0	22.08	22.35	22.36			0.92	0.64	0.28
10	16QAM	1	0	22.64	22.59	22.40	23	1	0.60	0.36	0.67
10	16QAM	1	25	22.36	22.31	22.42			0.69	0.58	

10	16QAM	1	49	21.97	22.30	22.13			1.03	0.70	
10	16QAM	25	0	21.42	21.78	21.32	22	2	0.68	0.22	0.65
10	16QAM	25	12	21.47	21.56	21.13			0.87	0.44	
10	16QAM	25	25	21.48	21.46	21.52			0.54	0.48	
10	16QAM	50	0	20.95	21.09	21.07			1.05	0.91	0.14
Channel				133147	133247	133447	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				665.5	675.5	695.5					
5	QPSK	1	0	23.47	23.71	23.43	24	0	0.57	0.29	0.54
5	QPSK	1	12	23.31	23.37	23.63			0.69	0.37	
5	QPSK	1	24	23.17	23.30	23.23			0.83	0.70	
5	QPSK	12	0	22.40	22.81	22.23	23	1	0.77	0.19	0.68
5	QPSK	12	7	22.22	22.55	22.13			0.87	0.45	
5	QPSK	12	13	22.58	22.66	22.44			0.56	0.34	
5	QPSK	25	0	22.12	22.40	22.31			0.88	0.60	0.28
5	16QAM	1	0	22.67	22.55	22.43	23	1	0.57	0.33	0.65
5	16QAM	1	12	22.25	22.31	22.52			0.75	0.48	
5	16QAM	1	24	22.02	22.30	22.06			0.98	0.70	
5	16QAM	12	0	21.54	21.71	21.38	22	2	0.62	0.29	0.46
5	16QAM	12	7	21.59	21.51	21.25			0.75	0.41	
5	16QAM	12	13	21.50	21.57	21.47			0.53	0.43	
5	16QAM	25	0	20.98	21.07	21.20			1.02	0.80	0.22

Band 38

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				37850	38000	38150					
Frequency (MHz)				2580	2595	2610					
20	QPSK	1	0	23.20	23.40	23.08	25	0	1.92	1.60	0.51
20	QPSK	1	49	23.01	23.14	23.39			1.99	1.61	
20	QPSK	1	99	22.89	23.04	23.04			2.11	1.96	
20	QPSK	50	0	22.06	22.50	21.97	24	1	2.03	1.50	0.55
20	QPSK	50	24	21.96	22.24	21.95			2.05	1.76	
20	QPSK	50	50	22.39	22.32	22.16			1.84	1.61	
20	QPSK	100	0	21.88	22.20	22.00			2.12	1.80	0.32
20	16QAM	1	0	22.32	22.31	22.02	24	1	1.98	1.68	0.54
20	16QAM	1	49	22.03	21.87	22.13			2.13	1.87	
20	16QAM	1	99	21.80	22.01	21.78			2.22	1.99	
20	16QAM	50	0	21.17	21.48	21.08	23	2	1.92	1.52	0.59
20	16QAM	50	24	21.29	21.27	20.89			2.11	1.71	
20	16QAM	50	50	21.23	21.28	21.15			1.85	1.72	
20	16QAM	100	0	20.79	20.86	20.79			2.21	2.14	0.07
Channel				37825	38000	38175	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				2577.5	2595	2612.5					
15	QPSK	1	0	22.97	23.28	23.03	25	0	2.03	1.72	0.52
15	QPSK	1	37	22.80	22.92	23.28			2.20	1.72	
15	QPSK	1	74	22.76	22.94	22.86			2.24	2.06	
15	QPSK	36	0	22.07	22.34	21.76	24	1	2.24	1.66	0.60
15	QPSK	36	20	21.95	22.20	21.74			2.26	1.80	
15	QPSK	36	39	22.30	22.24	22.04			1.96	1.70	
15	QPSK	75	0	21.68	22.10	21.89			2.32	1.90	0.42
15	16QAM	1	0	22.28	22.21	21.99	24	1	2.01	1.72	0.69
15	16QAM	1	37	21.99	21.89	22.10			2.11	1.90	
15	16QAM	1	74	21.59	21.84	21.69			2.41	2.16	
15	16QAM	36	0	21.15	21.38	20.86	23	2	2.14	1.62	0.60
15	16QAM	36	20	21.20	21.24	20.78			2.22	1.76	
15	16QAM	36	39	21.09	21.07	21.07			1.93	1.91	
15	16QAM	75	0	20.69	20.78	20.75			2.31	2.22	0.09
Channel				37800	38000	38200	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				2575	2595	2615					
10	QPSK	1	0	23.11	23.29	22.99	25	0	2.01	1.71	0.48
10	QPSK	1	25	22.88	22.99	23.16			2.12	1.84	
10	QPSK	1	49	22.81	22.97	22.90			2.19	2.03	
10	QPSK	25	0	22.06	22.31	21.77	24	1	2.23	1.69	0.54
10	QPSK	25	12	21.90	22.21	21.80			2.20	1.79	
10	QPSK	25	25	22.22	22.17	22.13			1.87	1.78	
10	QPSK	50	0	21.74	22.06	21.89			2.26	1.94	0.32
10	16QAM	1	0	22.22	22.17	21.94	24	1	2.06	1.78	0.61
10	16QAM	1	25	21.99	21.90	22.02			2.10	1.98	

10	16QAM	1	49	21.61	21.88	21.73			2.39	2.12	
10	16QAM	25	0	21.05	21.38	20.89	23	2	2.11	1.62	0.62
10	16QAM	25	12	21.11	21.21	20.76			2.24	1.79	
10	16QAM	25	25	21.12	21.14	21.10			1.90	1.86	
10	16QAM	50	0	20.62	20.75	20.83			2.38	2.17	0.21
Channel				37775	38000	38225	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				2572.5	2595	2617.5					
5	QPSK	1	0	23.11	23.21	22.93	25	0	2.07	1.79	0.53
5	QPSK	1	12	22.83	23.03	23.31			2.17	1.69	
5	QPSK	1	24	22.78	22.93	22.86			2.22	2.07	
5	QPSK	12	0	21.99	22.40	21.85	24	1	2.15	1.60	0.59
5	QPSK	12	7	21.92	22.11	21.81			2.19	1.89	
5	QPSK	12	13	22.27	22.31	22.11			1.89	1.69	
5	QPSK	25	0	21.77	22.08	21.98			2.23	1.92	0.31
5	16QAM	1	0	22.20	22.12	22.03	24	1	1.97	1.80	0.53
5	16QAM	1	12	21.92	21.80	22.06			2.20	1.94	
5	16QAM	1	24	21.73	21.77	21.67			2.33	2.23	
5	16QAM	12	0	21.17	21.29	20.98	23	2	2.02	1.71	0.49
5	16QAM	12	7	21.18	21.13	20.80			2.20	1.82	
5	16QAM	12	13	21.19	21.18	21.00			2.00	1.81	
5	16QAM	25	0	20.61	20.63	20.83			2.39	2.17	0.22

Band 41

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Channel				40140	40640	41140					
Frequency (MHz)				2545	2595	2645					
20	QPSK	1	0	23.23	23.51	23.19	25	0	1.81	1.49	0.50
20	QPSK	1	49	23.03	23.16	23.42			1.97	1.58	
20	QPSK	1	99	23.01	23.09	23.05			1.99	1.91	
20	QPSK	50	0	22.24	22.65	22.41	24	1	1.76	1.35	0.59
20	QPSK	50	24	22.08	22.34	22.06			1.94	1.66	
20	QPSK	50	50	22.38	22.40	22.31			1.69	1.60	
20	QPSK	100	0	22.33	22.43	22.35			1.67	1.57	0.10
20	16QAM	1	0	22.50	22.33	22.33	24	1	1.67	1.50	0.30
20	16QAM	1	49	22.34	22.29	22.20			1.80	1.66	
20	16QAM	1	99	22.41	22.35	22.34			1.66	1.59	
20	16QAM	50	0	21.28	21.52	21.19	23	2	1.81	1.48	0.53
20	16QAM	50	24	21.41	21.30	20.99			2.01	1.59	
20	16QAM	50	50	21.31	21.40	21.19			1.81	1.60	
20	16QAM	100	0	20.75	20.97	20.89			2.25	2.03	0.22
Channel				40115	40640	41165	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				2542.5	2595	2647.5					
15	QPSK	1	0	23.11	23.39	23.07	25	0	1.93	1.61	0.56
15	QPSK	1	37	22.93	23.10	23.25			2.07	1.75	
15	QPSK	1	74	22.83	22.97	22.99			2.17	2.01	

15	QPSK	36	0	22.09	22.46	22.32	24	1	1.91	1.54	0.57
15	QPSK	36	20	21.89	22.25	21.91			2.11	1.75	
15	QPSK	36	39	22.22	22.21	22.19			1.81	1.78	
15	QPSK	75	0	22.14	22.31	22.22			1.86	1.69	0.17
15	16QAM	1	0	22.31	22.27	22.17	24	1	1.83	1.69	0.26
15	16QAM	1	37	22.15	22.15	22.06			1.94	1.85	
15	16QAM	1	74	22.32	22.15	22.22			1.85	1.68	
15	16QAM	36	0	21.23	21.40	21.07	23	2	1.93	1.60	0.60
15	16QAM	36	20	21.35	21.16	20.80			2.20	1.65	
15	16QAM	36	39	21.23	21.26	21.07			1.93	1.74	
15	16QAM	75	0	20.65	20.78	20.83			2.35	2.17	0.18
Channel				40090	40640	41190	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				2540	2595	2650					
10	QPSK	1	0	23.17	23.47	23.09	25	0	1.91	1.53	0.59
10	QPSK	1	25	22.88	23.04	23.22			2.12	1.78	
10	QPSK	1	49	22.91	22.99	23.01			2.09	1.99	
10	QPSK	25	0	22.16	22.47	22.32	24	1	1.84	1.53	0.57
10	QPSK	25	12	21.90	22.25	22.00			2.10	1.75	
10	QPSK	25	25	22.28	22.28	22.24			1.76	1.72	
10	QPSK	50	0	22.19	22.23	22.25			1.81	1.75	0.06
10	16QAM	1	0	22.32	22.22	22.14	24	1	1.86	1.68	0.30
10	16QAM	1	25	22.28	22.20	22.02			1.98	1.72	
10	16QAM	1	49	22.22	22.25	22.19			1.81	1.75	
10	16QAM	25	0	21.20	21.44	21.01	23	2	1.99	1.56	0.61
10	16QAM	25	12	21.25	21.17	20.83			2.17	1.75	
10	16QAM	25	25	21.19	21.30	21.11			1.89	1.70	
10	16QAM	50	0	20.59	20.83	20.82			2.41	2.17	0.24
Channel				40065	40640	41215	Tune-up limit (dBm)	MPR (dB)	< Tune-up-2	> Tune-up	Ch Delta > 0.5
Frequency (MHz)				2537.5	2595	2652.5					
5	QPSK	1	0	23.17	23.41	23.14	25	0	1.86	1.59	0.59
5	QPSK	1	12	22.85	23.02	23.23			2.15	1.77	
5	QPSK	1	24	22.82	22.95	22.99			2.18	2.01	
5	QPSK	12	0	22.06	22.49	22.34	24	1	1.94	1.51	0.55
5	QPSK	12	7	21.94	22.22	22.01			2.06	1.78	
5	QPSK	12	13	22.19	22.25	22.24			1.81	1.75	
5	QPSK	25	0	22.15	22.23	22.15			1.85	1.77	0.08
5	16QAM	1	0	22.34	22.17	22.14	24	1	1.86	1.66	0.31
5	16QAM	1	12	22.27	22.16	22.03			1.97	1.73	
5	16QAM	1	24	22.25	22.17	22.18			1.83	1.75	
5	16QAM	12	0	21.14	21.33	21.02	23	2	1.98	1.67	0.48
5	16QAM	12	7	21.27	21.19	20.87			2.13	1.73	
5	16QAM	12	13	21.16	21.35	21.08			1.92	1.65	
5	16QAM	25	0	20.64	20.85	20.84			2.36	2.15	0.21

2.4GHz WLAN						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11b 1Mbps	1	2412	17.89	18.50	22.00	99.80
	6	2437	17.93	18.50	22.00	
	11	2462	18.07	18.50	22.00	
802.11g 6Mbps	1	2412	15.23	16.00	19.00	97.63
	6	2437	15.32	16.00	19.00	
	11	2462	15.61	16.00	19.00	
802.11n-HT20 MCS0	1	2412	14.56	15.50	18.00	97.47
	6	2437	14.30	15.50	18.00	
	11	2462	14.35	15.50	18.00	
802.11n-HT40 MCS0	3	2422	14.44	15.50	18.00	95.11
	6	2437	14.31	15.50	18.00	
	9	2452	14.29	15.50	18.00	

Mode	Channel	Frequency (MHz)	Average power (dBm)			Duty cycle:	80.88
			1Mbps	2Mbps	1.236		
BR / EDR	CH 00	2402	7.66	7.64	1.030	PDF Factor :	1.236
	CH 39	2441	7.83	7.66	80.88		
	CH 78	2480	7.77	7.67	1.236	SAR Excel :	1.03
Tune-up Limit			9	9	9		

Mode	Channel	Frequency (MHz)	Average power (dBm)	
			1Mbps	2Mbps
LE	CH 00	2402	-4.11	-4.23
	CH 19	2440	-4.26	-4.29
	CH 39	2480	-4.16	-4.23
Tune-up Limit			-2	-2

5GHz WLAN						
Mode	Channel	Frequency (MHz)	Average power (dBm)	Tune-Up Limit	Power Setting	Duty Cycle %
802.11a 6Mbps	8	5180	11.13	12.00	18.00	97.57
	40	5200	11.23	12.00	18.00	
	48	5240	11.32	12.00	18.00	
	52	5260	14.76	16.00	22.00	
	60	5300	14.81	16.00	22.00	
	64	5320	14.21	16.00	21.00	
	100	5500	13.78	14.50	20.00	
	116	5580	13.81	14.50	20.00	
	140	5700	13.56	14.50	20.00	
	149	5745	14.18	15.00	21.00	
	157	5785	14.22	15.00	21.00	
	165	5825	14.06	15.00	21.00	
802.11n-HT20 MCS0	36	5180	11.12	12.00	18.00	97.44
	40	5200	11.67	12.00	18.00	
	48	5240	11.73	12.00	18.00	
	52	5260	14.23	15.50	21.00	
	60	5300	14.78	15.50	21.00	
	64	5320	14.38	15.50	21.00	
	100	5500	13.23	14.00	20.00	
	116	5580	13.14	14.00	20.00	
	140	5700	12.58	14.00	20.00	
	149	5745	13.67	15.00	21.00	
	157	5785	13.87	15.00	21.00	
	165	5825	13.78	15.00	21.00	
802.11n-HT40 MCS0	38	5190	9.01	10.00	16.00	95.08
	46	5230	9.41	10.00	17.00	
	54	5270	11.78	13.00	18.00	
	62	5310	11.45	13.00	18.00	
	102	5510	10.53	12.50	18.00	
	110	5550	11.23	12.50	19.00	
	134	5670	11.45	12.50	19.00	
	151	5755	14.42	15.00	21.00	
	159	5795	14.28	15.00	21.00	
802.11ac-VHT20 MCS0	36	5180	10.23	12.00	17.00	97.45
	40	5200	11.56	12.00	18.00	

	48	5240	11.45	12.00	18.00	
	52	5260	13.78	15.00	21.00	
	60	5300	13.61	15.00	21.00	
	64	5320	13.64	15.00	21.00	
	100	5500	13.23	14.00	20.00	
	116	5580	13.19	14.00	20.00	
	140	5700	12.22	14.00	20.00	
	149	5745	13.98	15.00	21.00	
	157	5785	14.12	15.00	21.00	
	165	5825	14.23	15.00	21.00	
802.11ac-VHT40 MCS0	38	5190	9.98	11.00	16.00	95.13
	46	5230	10.64	11.00	17.00	
	54	5270	11.65	13.00	19.00	
	62	5310	11.61	13.00	19.00	
	102	5510	10.52	12.50	19.00	
	110	5550	11.35	12.50	19.00	
	134	5670	11.54	12.50	19.00	
	151	5755	14.23	15.00	21.00	
	159	5795	14.02	15.00	21.00	
802.11ac-VHT80 MCS0	42	5210	9.81	10.00	16.00	90.58
	58	5290	10.78	12.00	18.00	
	106	5530	10.54	12.50	18.00	
	122	5610	11.52	12.50	19.00	
	155	5775	14.23	15.00	21.00	

9 TEST RESULTS

9.1 SAR Test Results Summary

Band	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Power Setting	MAX Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 1g SAR (W/kg)	Reported 1g SAR (W/kg)
Body SAR Limit 1g 1.6W/kg														
GSM850	GPRS 3 Tx slots	Front	10	189	836.4	N/A	29.35	30.00	1.161	100	1.000	-0.04	0.146	0.170
GSM850	GPRS 3 Tx slots	Back	10	189	836.4	N/A	29.35	30.00	1.161	100	1.000	0.11	0.198	0.230
GSM850	GPRS 3 Tx slots	Right Side	10	189	836.4	N/A	29.35	30.00	1.161	100	1.000	-0.06	0.201	0.233
GSM850	GPRS 3 Tx slots	Left Side	10	189	836.4	N/A	29.35	30.00	1.161	100	1.000	-0.09	0.077	0.090
GSM850	GPRS 3 Tx slots	Top Side	10	189	836.4	N/A	29.35	30.00	1.161	100	1.000	0.02	0.167	0.194
GSM1900	GPRS 2 Tx slots	Front	10	661	1880	N/A	29.23	29.50	1.064	100	1.000	0.05	0.071	0.075
GSM1900	GPRS 2 Tx slots	Back	10	661	1880	N/A	29.23	29.50	1.064	100	1.000	0.02	0.196	0.209
GSM1900	GPRS 2 Tx slots	Right Side	10	661	1880	N/A	29.23	29.50	1.064	100	1.000	-0.03	0.107	0.114
GSM1900	GPRS 2 Tx slots	Left Side	10	661	1880	N/A	29.23	29.50	1.064	100	1.000	0.03	0.085	0.090
GSM1900	GPRS 2 Tx slots	Top Side	10	661	1880	N/A	29.23	29.50	1.064	100	1.000	0.06	0.101	0.107
WCDMA II	RMC 12.2K	Front	10	9400	1880	N/A	23.52	25.00	1.406	100	1.000	0.16	0.043	0.061
WCDMA II	RMC 12.2K	Back	10	9400	1880	N/A	23.52	25.00	1.406	100	1.000	0.10	0.190	0.267
WCDMA II	RMC 12.2K	Right Side	10	9400	1880	N/A	23.52	25.00	1.406	100	1.000	0.02	0.161	0.226
WCDMA II	RMC 12.2K	Left Side	10	9400	1880	N/A	23.52	25.00	1.406	100	1.000	0.07	0.016	0.022
WCDMA II	RMC 12.2K	Top Side	10	9400	1880	N/A	23.52	25.00	1.406	100	1.000	0.03	0.098	0.138
WCDMA IV	RMC 12.2K	Front	10	1413	1732.6	N/A	23.50	25.00	1.413	100	1.000	0.01	0.069	0.097
WCDMA IV	RMC 12.2K	Back	10	1413	1732.6	N/A	23.50	25.00	1.413	100	1.000	-0.10	0.569	0.804
WCDMA IV	RMC 12.2K	Right Side	10	1413	1732.6	N/A	23.50	25.00	1.413	100	1.000	0.14	0.155	0.219
WCDMA IV	RMC 12.2K	Left Side	10	1413	1732.6	N/A	23.50	25.00	1.413	100	1.000	0.01	0.078	0.110
WCDMA IV	RMC 12.2K	Top Side	10	1413	1732.6	N/A	23.50	25.00	1.413	100	1.000	0.04	0.123	0.174
WCDMA V	RMC 12.2K	Front	10	4182	836.4	N/A	23.83	24.50	1.167	100	1.000	-0.04	0.104	0.121
WCDMA V	RMC 12.2K	Back	10	4182	836.4	N/A	23.83	24.50	1.167	100	1.000	-0.04	0.202	0.236
WCDMA V	RMC 12.2K	Right Side	10	4182	836.4	N/A	23.83	24.50	1.167	100	1.000	0.02	0.136	0.159
WCDMA V	RMC 12.2K	Left Side	10	4182	836.4	N/A	23.83	24.50	1.167	100	1.000	-0.04	0.067	0.078
WCDMA V	RMC 12.2K	Top Side	10	4182	836.4	N/A	23.83	24.50	1.167	100	1.000	0.03	0.141	0.165
LTE Band 25/2	BW20_QPSK_1 RB0Offset	Front	10	26340	1880	N/A	23.08	24.50	1.387	100	1.000	0.05	0.043	0.060
LTE Band 25/2	BW20_QPSK_50 RB0Offset	Front	10	26340	1880	N/A	22.15	23.50	1.365	100	1.000	0.03	0.035	0.048
LTE Band 25/2	BW20_QPSK_1 RB0Offset	Back	10	26340	1880	N/A	23.08	24.50	1.387	100	1.000	0.05	0.131	0.182
LTE Band 25/2	BW20_QPSK_50 RB0Offset	Back	10	26340	1880	N/A	22.15	23.50	1.365	100	1.000	0.01	0.103	0.141
LTE Band 25/2	BW20_QPSK_1 RB0Offset	Right Side	10	26340	1880	N/A	23.08	24.50	1.387	100	1.000	-0.12	0.144	0.200
LTE Band 25/2	BW20_QPSK_50 RB0Offset	Right Side	10	26340	1880	N/A	22.15	23.50	1.365	100	1.000	-0.03	0.125	0.171
LTE Band 25/2	BW20_QPSK_1 RB0Offset	Left Side	10	26340	1880	N/A	23.08	24.50	1.387	100	1.000	0.04	0.028	0.039
LTE Band 25/2	BW20_QPSK_50 RB0Offset	Left Side	10	26340	1880	N/A	22.15	23.50	1.365	100	1.000	0.03	0.021	0.029
LTE Band 25/2	BW20_QPSK_1 RB0Offset	Top Side	10	26340	1880	N/A	23.08	24.50	1.387	100	1.000	0.06	0.058	0.081
LTE Band 25/2	BW20_QPSK_50 RB0Offset	Top Side	10	26340	1880	N/A	22.15	23.50	1.365	100	1.000	0.01	0.049	0.067
LTE Band 4	BW20_QPSK_1 RB0Offset	Front	10	20175	1732.5	N/A	23.03	24.50	1.403	100	1.000	-0.01	0.072	0.102
LTE Band 4	BW20_QPSK_50 RB0Offset	Front	10	20175	1732.5	N/A	22.06	23.50	1.393	100	1.000	0.03	0.061	0.085

LTE Band 4	BW20_QPSK_1 RB0Offset	Back	10	20175	1732.5	N/A	23.03	24.50	1.403	100	1.000	**0.04**	**0.649**	**0.910**
LTE Band 4	BW20_QPSK_1 RB0Offset	Back	10	20050	1720	N/A	22.99	24.50	1.416	100	1.000	-0.03	0.611	0.865
LTE Band 4	BW20_QPSK_1 RB0Offset	Back	10	20300	1745	N/A	22.71	24.50	1.510	100	1.000	0.12	0.591	0.892
LTE Band 4	BW20_QPSK_50 RB0Offset	Back	10	20175	1732.5	N/A	22.06	23.50	1.393	100	1.000	0.01	0.534	0.744
LTE Band 4	BW20_QPSK_10 0RB0Offset	Back	10	20175	1732.5	N/A	21.94	23.50	1.432	100	1.000	0.01	0.528	0.756
LTE Band 4	BW20_QPSK_1 RB0Offset	Right Side	10	20175	1732.5	N/A	23.03	24.50	1.403	100	1.000	0.04	0.127	0.178
LTE Band 4	BW20_QPSK_50 RB0Offset	Right Side	10	20175	1732.5	N/A	22.06	23.50	1.393	100	1.000	0.01	0.103	0.143
LTE Band 4	BW20_QPSK_1 RB0Offset	Left Side	10	20175	1732.5	N/A	23.03	24.50	1.403	100	1.000	0.03	0.094	0.131
LTE Band 4	BW20_QPSK_50 RB0Offset	Left Side	10	20175	1732.5	N/A	22.06	23.50	1.393	100	1.000	-0.03	0.068	0.095
LTE Band 4	BW20_QPSK_1 RB0Offset	Top Side	10	20175	1732.5	N/A	23.03	24.50	1.403	100	1.000	0.01	0.123	0.173
LTE Band 4	BW20_QPSK_50 RB0Offset	Top Side	10	20175	1732.5	N/A	22.06	23.50	1.393	100	1.000	-0.03	0.098	0.137
LTE Band 66	BW20_QPSK_1 RB0Offset	Front	10	132322	1745	N/A	22.94	23.00	1.014	100	1.000	0.02	0.081	0.082
LTE Band 66	BW20_QPSK_50 RB0Offset	Front	10	132322	1745	N/A	21.99	22.00	1.002	100	1.000	-0.03	0.068	0.068
LTE Band 66	BW20_QPSK_1 RB0Offset	Back	10	132322	1745	N/A	22.94	23.00	1.014	100	1.000	**0.04**	**0.625**	**0.634**
LTE Band 66	BW20_QPSK_50 RB0Offset	Back	10	132322	1745	N/A	21.99	22.00	1.002	100	1.000	0.01	0.545	0.546
LTE Band 66	BW20_QPSK_1 RB0Offset	Right Side	10	132322	1745	N/A	22.94	23.00	1.014	100	1.000	0.07	0.160	0.162
LTE Band 66	BW20_QPSK_50 RB0Offset	Right Side	10	132322	1745	N/A	21.99	22.00	1.002	100	1.000	0.03	0.120	0.120
LTE Band 66	BW20_QPSK_1 RB0Offset	Left Side	10	132322	1745	N/A	22.94	23.00	1.014	100	1.000	-0.03	0.109	0.111
LTE Band 66	BW20_QPSK_50 RB0Offset	Left Side	10	132322	1745	N/A	21.99	22.00	1.002	100	1.000	0.12	0.085	0.085
LTE Band 66	BW20_QPSK_1 RB0Offset	Top Side	10	132322	1745	N/A	22.94	23.00	1.014	100	1.000	0.03	0.135	0.137
LTE Band 66	BW20_QPSK_50 RB0Offset	Top Side	10	132322	1745	N/A	21.99	22.00	1.002	100	1.000	0.01	0.108	0.108
LTE Band 26/5	BW15_QPSK_1 RB0Offset	Front	10	26915	836.5	N/A	23.77	24.00	1.054	100	1.000	0.01	0.078	0.082
LTE Band 26/5	BW15_QPSK_50 RB0Offset	Front	10	26915	836.5	N/A	22.82	23.00	1.042	100	1.000	-0.03	0.071	0.074
LTE Band 26/5	BW15_QPSK_1 RB0Offset	Back	10	26915	836.5	N/A	23.77	24.00	1.054	100	1.000	**-0.06**	**0.187**	**0.197**
LTE Band 26/5	BW15_QPSK_50 RB0Offset	Back	10	26915	836.5	N/A	22.82	23.00	1.042	100	1.000	0.01	0.151	0.157
LTE Band 26/5	BW15_QPSK_1 RB0Offset	Right Side	10	26915	836.5	N/A	23.77	24.00	1.054	100	1.000	0.06	0.133	0.140
LTE Band 26/5	BW15_QPSK_50 RB0Offset	Right Side	10	26915	836.5	N/A	22.82	23.00	1.042	100	1.000	0.03	0.111	0.116
LTE Band 26/5	BW15_QPSK_1 RB0Offset	Left Side	10	26915	836.5	N/A	23.77	24.00	1.054	100	1.000	0.03	0.019	0.020
LTE Band 26/5	BW15_QPSK_50 RB0Offset	Left Side	10	26915	836.5	N/A	22.82	23.00	1.042	100	1.000	0.04	0.012	0.013
LTE Band 26/5	BW15_QPSK_1 RB0Offset	Top Side	10	26915	836.5	N/A	23.77	24.00	1.054	100	1.000	0.03	0.110	0.116
LTE Band 26/5	BW15_QPSK_50 RB0Offset	Top Side	10	26915	836.5	N/A	22.82	23.00	1.042	100	1.000	0.04	0.085	0.089
LTE Band 7	BW20_QPSK_1 RB0Offset	Front	10	21100	2535	N/A	23.39	25.00	1.449	100	1.000	0.03	0.113	0.164
LTE Band 7	BW20_QPSK_50 RB0Offset	Front	10	21100	2535	N/A	22.42	24.00	1.439	100	1.000	-0.03	0.103	0.148
LTE Band 7	BW20_QPSK_1 RB0Offset	Back	10	21100	2535	N/A	23.39	25.00	1.449	100	1.000	-0.10	0.523	0.758
LTE Band 7	BW20_QPSK_50 RB0Offset	Back	10	21100	2535	N/A	22.42	24.00	1.439	100	1.000	0.03	0.488	0.702
LTE Band 7	BW20_QPSK_1 RB0Offset	Right Side	10	21100	2535	N/A	23.39	25.00	1.449	100	1.000	**-0.10**	**0.708**	**1.026**
LTE Band 7	BW20_QPSK_1 RB0Offset	Right Side	10	20850	2510	N/A	23.27	25.00	1.489	100	1.000	-0.03	0.656	0.977
LTE Band 7	BW20_QPSK_1 RB0Offset	Right Side	10	21350	2560	N/A	23.06	25.00	1.563	100	1.000	0.01	0.628	0.982
LTE Band 7	BW20_QPSK_50 RB0Offset	Right Side	10	21100	2535	N/A	22.42	24.00	1.439	100	1.000	0.13	0.545	0.784
LTE Band 7	BW20_QPSK_10 0RB0Offset	Right Side	10	21100	2535	N/A	22.37	24.00	1.455	100	1.000	0.13	0.549	0.799
LTE Band 7	BW20_QPSK_1 RB0Offset	Left Side	10	21100	2535	N/A	23.39	25.00	1.449	100	1.000	0.08	0.224	0.325
LTE Band 7	BW20_QPSK_50 RB0Offset	Left Side	10	21100	2535	N/A	22.42	24.00	1.439	100	1.000	0.03	0.128	0.184
LTE Band 7	BW20_QPSK_1 RB0Offset	Top Side	10	21100	2535	N/A	23.39	25.00	1.449	100	1.000	-0.02	0.214	0.310
LTE Band 7	BW20_QPSK_50 RB0Offset	Top Side	10	21100	2535	N/A	22.42	24.00	1.439	100	1.000	0.03	0.145	0.209

LTE Band 12/17	BW10_QPSK_1 RB0Offset	Front	10	23095	707.5	N/A	23.88	24.00	1.028	100	1.000	0.03	0.067	0.069
LTE Band 12/17	BW10_QPSK_50 RB0Offset	Front	10	23095	707.5	N/A	22.93	23.00	1.016	100	1.000	-0.12	0.051	0.052
LTE Band 12/17	BW10_QPSK_1 RB0Offset	Back	10	23095	707.5	N/A	23.88	24.00	1.028	100	1.000	**-0.18**	**0.436**	**0.448**
LTE Band 12/17	BW10_QPSK_50 RB0Offset	Back	10	23095	707.5	N/A	22.93	23.00	1.016	100	1.000	0.08	0.389	0.395
LTE Band 12/17	BW10_QPSK_1 RB0Offset	Right Side	10	23095	707.5	N/A	23.88	24.00	1.028	100	1.000	0.09	0.110	0.113
LTE Band 12/17	BW10_QPSK_50 RB0Offset	Right Side	10	23095	707.5	N/A	22.93	23.00	1.016	100	1.000	-0.03	0.103	0.105
LTE Band 12/17	BW10_QPSK_1 RB0Offset	Left Side	10	23095	707.5	N/A	23.88	24.00	1.028	100	1.000	0.03	0.028	0.029
LTE Band 12/17	BW10_QPSK_50 RB0Offset	Left Side	10	23095	707.5	N/A	22.93	23.00	1.016	100	1.000	0.01	0.024	0.024
LTE Band 12/17	BW10_QPSK_1 RB0Offset	Top Side	10	23095	707.5	N/A	23.88	24.00	1.028	100	1.000	-0.15	0.080	0.082
LTE Band 12/17	BW10_QPSK_50 RB0Offset	Top Side	10	23095	707.5	N/A	22.93	23.00	1.016	100	1.000	0.03	0.068	0.069
LTE Band 13	BW10_QPSK_1 RB0Offset	Front	10	23230	782	N/A	23.64	24.00	1.086	100	1.000	0.06	0.016	0.017
LTE Band 13	BW10_QPSK_50 RB0Offset	Front	10	23230	782	N/A	22.71	23.00	1.069	100	1.000	-0.03	0.012	0.013
LTE Band 13	BW10_QPSK_1 RB0Offset	Back	10	23230	782	N/A	23.64	24.00	1.086	100	1.000	**-0.02**	**0.114**	**0.124**
LTE Band 13	BW10_QPSK_50 RB0Offset	Back	10	23230	782	N/A	22.71	23.00	1.069	100	1.000	0.03	0.098	0.105
LTE Band 13	BW10_QPSK_1 RB0Offset	Right Side	10	23230	782	N/A	23.64	24.00	1.086	100	1.000	0.19	0.034	0.037
LTE Band 13	BW10_QPSK_50 RB0Offset	Right Side	10	23230	782	N/A	22.71	23.00	1.069	100	1.000	0.04	0.023	0.025
LTE Band 13	BW10_QPSK_1 RB0Offset	Left Side	10	23230	782	N/A	23.64	24.00	1.086	100	1.000	-0.01	0.082	0.089
LTE Band 13	BW10_QPSK_50 RB0Offset	Left Side	10	23230	782	N/A	22.71	23.00	1.069	100	1.000	0.03	0.078	0.083
LTE Band 13	BW10_QPSK_1 RB0Offset	Top Side	10	23230	782	N/A	23.64	24.00	1.086	100	1.000	-0.03	0.026	0.028
LTE Band 13	BW10_QPSK_50 RB0Offset	Top Side	10	23230	782	N/A	22.71	23.00	1.069	100	1.000	0.01	0.021	0.022
LTE Band 14	BW10_QPSK_1 RB0Offset	Front	10	23330	793	N/A	23.44	23.50	1.014	100	1.000	0.04	0.034	0.034
LTE Band 14	BW10_QPSK_50 RB0Offset	Front	10	23330	793	N/A	22.43	22.50	1.016	100	1.000	0.01	0.027	0.027
LTE Band 14	BW10_QPSK_1 RB0Offset	Back	10	23330	793	N/A	23.44	23.50	1.014	100	1.000	**-0.06**	**0.099**	**0.100**
LTE Band 14	BW10_QPSK_50 RB0Offset	Back	10	23330	793	N/A	22.43	22.50	1.016	100	1.000	-0.03	0.078	0.079
LTE Band 14	BW10_QPSK_1 RB0Offset	Right Side	10	23330	793	N/A	23.44	23.50	1.014	100	1.000	0.10	0.043	0.044
LTE Band 14	BW10_QPSK_50 RB0Offset	Right Side	10	23330	793	N/A	22.43	22.50	1.016	100	1.000	0.10	0.023	0.023
LTE Band 14	BW10_QPSK_1 RB0Offset	Left Side	10	23330	793	N/A	23.44	23.50	1.014	100	1.000	0.03	0.078	0.079
LTE Band 14	BW10_QPSK_50 RB0Offset	Left Side	10	23330	793	N/A	22.43	22.50	1.016	100	1.000	0.03	0.066	0.067
LTE Band 14	BW10_QPSK_1 RB0Offset	Top Side	10	23330	793	N/A	23.44	23.50	1.014	100	1.000	0.12	0.022	0.022
LTE Band 14	BW10_QPSK_50 RB0Offset	Top Side	10	23330	793	N/A	22.43	22.50	1.016	100	1.000	0.03	0.017	0.017
LTE Band 71	BW20_QPSK_1 RB0Offset	Front	10	133322	683	N/A	23.81	24.00	1.045	100	1.000	0.11	0.019	0.020
LTE Band 71	BW20_QPSK_50 RB0Offset	Front	10	133322	683	N/A	22.82	23.00	1.042	100	1.000	-0.03	0.015	0.016
LTE Band 71	BW20_QPSK_1 RB0Offset	Back	10	133322	683	N/A	23.81	24.00	1.045	100	1.000	**-0.140**	**0.560**	**0.585**
LTE Band 71	BW20_QPSK_50 RB0Offset	Back	10	133322	683	N/A	22.82	23.00	1.042	100	1.000	0.04	0.512	0.534
LTE Band 71	BW20_QPSK_1 RB0Offset	Right Side	10	133322	683	N/A	23.81	24.00	1.045	100	1.000	0.04	0.036	0.037
LTE Band 71	BW20_QPSK_50 RB0Offset	Right Side	10	133322	683	N/A	22.82	23.00	1.042	100	1.000	-0.03	0.033	0.034
LTE Band 71	BW20_QPSK_1 RB0Offset	Left Side	10	133322	683	N/A	23.81	24.00	1.045	100	1.000	0.07	0.017	0.017
LTE Band 71	BW20_QPSK_50 RB0Offset	Left Side	10	133322	683	N/A	22.82	23.00	1.042	100	1.000	0.04	0.012	0.013
LTE Band 71	BW20_QPSK_1 RB0Offset	Top Side	10	133322	683	N/A	23.81	24.00	1.045	100	1.000	0.03	0.038	0.040
LTE Band 71	BW20_QPSK_50 RB0Offset	Top Side	10	133322	683	N/A	22.82	23.00	1.042	100	1.000	0.01	0.031	0.032
LTE Band 41/38	BW20_QPSK_1 RB0Offset	Front	10	40640	2595	N/A	23.51	25.00	1.409	62.9	1.006	0.05	0.065	0.092
LTE Band 41/38	BW20_QPSK_50 RB0Offset	Front	10	40640	2595	N/A	22.65	24.00	1.365	62.9	1.006	0.03	0.056	0.077
LTE Band 41/38	BW20_QPSK_1 RB0Offset	Back	10	40640	2595	N/A	23.51	25.00	1.409	62.9	1.006	**0.06**	**0.215**	**0.305**
LTE Band 41/38	BW20_QPSK_50 RB0Offset	Back	10	40640	2595	N/A	22.65	24.00	1.365	62.9	1.006	0.01	0.189	0.259

LTE Band 41/38	BW20_QPSK_1 RB0Offset	Right Side	10	40640	2595	N/A	23.51	25.00	1.409	62.9	1.006	0.03	0.211	0.299
LTE Band 41/38	BW20_QPSK_50 RB0Offset	Right Side	10	40640	2595	N/A	22.65	24.00	1.365	62.9	1.006	0.01	0.168	0.231
LTE Band 41/38	BW20_QPSK_1 RB0Offset	Left Side	10	40640	2595	N/A	23.51	25.00	1.409	62.9	1.006	0.03	0.080	0.113
LTE Band 41/38	BW20_QPSK_50 RB0Offset	Left Side	10	40640	2595	N/A	22.65	24.00	1.365	62.9	1.006	0.02	0.068	0.093
LTE Band 41/38	BW20_QPSK_1 RB0Offset	Top Side	10	40640	2595	N/A	23.51	25.00	1.409	62.9	1.006	0.01	0.035	0.050
LTE Band 41/38	BW20_QPSK_50 RB0Offset	Top Side	10	40640	2595	N/A	22.65	24.00	1.365	62.9	1.006	0.03	0.029	0.040
Bluetooth	3DH5	Front	10	78	2480	N/A	7.91	9.00	1.285	80.88	1.236	0.00	0.000	0.000
Bluetooth	3DH5	Back	10	78	2480	N/A	7.91	9.00	1.285	80.88	1.236	**0.00**	**0.000**	**0.000**
Bluetooth	3DH5	Right Side	10	78	2480	N/A	7.91	9.00	1.285	80.88	1.236	0.00	0.000	0.000
Bluetooth	3DH5	Left Side	10	78	2480	N/A	7.91	9.00	1.285	80.88	1.236	0.00	0.000	0.000
Bluetooth	3DH5	Top Side	10	78	2480	N/A	7.91	9.00	1.285	80.88	1.236	0.00	0.000	0.000
2.4GWLAN	802.11b 1Mbps	Front	10	11	2462	22	18.07	18.50	1.104	99.8	1.002	0.01	0.032	0.035
2.4GWLAN	802.11b 1Mbps	Back	10	11	2462	22	18.07	18.50	1.104	99.8	1.002	**0.02**	**0.049**	**0.054**
2.4GWLAN	802.11b 1Mbps	Right Side	10	11	2462	22	18.07	18.50	1.104	99.8	1.002	0.03	0.024	0.027
2.4GWLAN	802.11b 1Mbps	Left Side	10	11	2462	22	18.07	18.50	1.104	99.8	1.002	0.05	0.038	0.042
2.4GWLAN	802.11b 1Mbps	Top Side	10	11	2462	22	18.07	18.50	1.104	99.8	1.002	-0.17	0.031	0.034
5.3GWLAN	802.11a 6Mbps	Front	10	60	5300	22	14.81	16.00	1.315	97.57	1.025	0.00	0.000	0.000
5.3GWLAN	802.11a 6Mbps	Back	10	60	5300	22	14.81	16.00	1.315	97.57	1.025	0.00	0.000	0.000
5.3GWLAN	802.11a 6Mbps	Right Side	10	60	5300	22	14.81	16.00	1.315	97.57	1.025	**0.00**	**0.000**	**0.000**
5.3GWLAN	802.11a 6Mbps	Left Side	10	60	5300	22	14.81	16.00	1.315	97.57	1.025	0.00	0.000	0.000
5.3GWLAN	802.11a 6Mbps	Top Side	10	60	5300	22	14.81	16.00	1.315	97.57	1.025	0.00	0.000	0.000
5.6GWLAN	802.11a 6Mbps	Front	10	116	5580	20	13.81	14.50	1.172	97.57	1.025	0.00	0.000	0.000
5.6GWLAN	802.11a 6Mbps	Back	10	116	5580	20	13.81	14.50	1.172	97.57	1.025	0.00	0.000	0.000
5.6GWLAN	802.11a 6Mbps	Right Side	10	116	5580	20	13.81	14.50	1.172	97.57	1.025	**0.00**	**0.000**	**0.000**
5.6GWLAN	802.11a 6Mbps	Left Side	10	116	5580	20	13.81	14.50	1.172	97.57	1.025	0.00	0.000	0.000
5.6GWLAN	802.11a 6Mbps	Top Side	10	116	5580	20	13.81	14.50	1.172	97.57	1.025	0.00	0.000	0.000
5.8GWLAN	802.11ac VHT80 MCS0	Front	10	155	5775	21	14.23	15.00	1.194	90.58	1.104	0.00	0.000	0.000
5.8GWLAN	802.11ac VHT80 MCS0	Back	10	155	5775	21	14.23	15.00	1.194	90.58	1.104	0.00	0.000	0.000
5.8GWLAN	802.11ac VHT80 MCS0	Right Side	10	155	5775	21	14.23	15.00	1.194	90.58	1.104	**0.00**	**0.000**	**0.000**
5.8GWLAN	802.11ac VHT80 MCS0	Left Side	10	155	5775	21	14.23	15.00	1.194	90.58	1.104	0.00	0.000	0.000
5.8GWLAN	802.11ac VHT80 MCS0	Top Side	10	155	5775	21	14.23	15.00	1.194	90.58	1.104	0.00	0.000	0.000
END														

Band	Mode	Test Position	Gap (mm)	Ch.	Freq. (MHz)	Power Setting	MAX Power (dBm)	Tune-Up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle %	Duty Cycle Scaling Factor	Power Drift (dB)	Measured 10g SAR (W/kg)	Reported 10g SAR (W/kg)
Limbs SAR Limit 10g 4.0W/kg														
GSM850	GPRS 3 Tx slots	Front	0	189	836.4	N/A	29.35	30.00	1.161	100	1.000	-0.02	0.234	0.272
GSM850	GPRS 3 Tx slots	Back	0	189	836.4	N/A	29.35	30.00	1.161	100	1.000	-0.04	0.251	0.292
GSM850	GPRS 3 Tx slots	Right Side	0	189	836.4	N/A	29.35	30.00	1.161	100	1.000	-0.06	0.339	0.394
GSM850	GPRS 3 Tx slots	Left Side	0	189	836.4	N/A	29.35	30.00	1.161	100	1.000	-0.10	0.132	0.153
GSM850	GPRS 3 Tx slots	Top Side	0	189	836.4	N/A	29.35	30.00	1.161	100	1.000	0.03	0.045	0.052
GSM1900	GPRS 2 Tx slots	Front	0	661	1880	N/A	29.23	29.50	1.064	100	1.000	0.05	0.153	0.163
GSM1900	GPRS 2 Tx slots	Back	0	661	1880	N/A	29.23	29.50	1.064	100	1.000	0.02	0.578	0.615
GSM1900	GPRS 2 Tx slots	Right Side	0	661	1880	N/A	29.23	29.50	1.064	100	1.000	-0.12	0.557	0.593
GSM1900	GPRS 2 Tx slots	Left Side	0	661	1880	N/A	29.23	29.50	1.064	100	1.000	-0.05	0.070	0.074
GSM1900	GPRS 2 Tx slots	Top Side	0	661	1880	N/A	29.23	29.50	1.064	100	1.000	0.03	0.123	0.131
WCDMA II	RMC 12.2K	Front	0	9400	1880	N/A	23.52	25.00	1.406	100	1.000	0.06	0.067	0.094
WCDMA II	RMC 12.2K	Back	0	9400	1880	N/A	23.52	25.00	1.406	100	1.000	0.07	0.458	0.644
WCDMA II	RMC 12.2K	Right Side	0	9400	1880	N/A	23.52	25.00	1.406	100	1.000	0.03	0.194	0.273
WCDMA II	RMC 12.2K	Left Side	0	9400	1880	N/A	23.52	25.00	1.406	100	1.000	0.08	0.041	0.058
WCDMA II	RMC 12.2K	Top Side	0	9400	1880	N/A	23.52	25.00	1.406	100	1.000	0.19	0.048	0.067
WCDMA IV	RMC 12.2K	Front	0	1413	1732.6	N/A	23.50	25.00	1.413	100	1.000	-0.03	0.141	0.199
WCDMA IV	RMC 12.2K	Back	0	1413	1732.6	N/A	23.50	25.00	1.413	100	1.000	0.06	0.849	1.199
WCDMA IV	RMC 12.2K	Right Side	0	1413	1732.6	N/A	23.50	25.00	1.413	100	1.000	-0.01	0.263	0.371
WCDMA IV	RMC 12.2K	Left Side	0	1413	1732.6	N/A	23.50	25.00	1.413	100	1.000	-0.03	0.112	0.158
WCDMA IV	RMC 12.2K	Top Side	0	1413	1732.6	N/A	23.50	25.00	1.413	100	1.000	-0.06	0.167	0.236
WCDMA V	RMC 12.2K	Front	0	4182	836.4	N/A	23.83	24.50	1.167	100	1.000	0.03	0.204	0.238
WCDMA V	RMC 12.2K	Back	0	4182	836.4	N/A	23.83	24.50	1.167	100	1.000	0.07	0.305	0.356
WCDMA V	RMC 12.2K	Right Side	0	4182	836.4	N/A	23.83	24.50	1.167	100	1.000	0.03	0.223	0.260
WCDMA V	RMC 12.2K	Left Side	0	4182	836.4	N/A	23.83	24.50	1.167	100	1.000	0.01	0.086	0.101
WCDMA V	RMC 12.2K	Top Side	0	4182	836.4	N/A	23.83	24.50	1.167	100	1.000	-0.03	0.191	0.223
LTE Band 25/2	BW20_QPSK_1RB0Offset	Front	0	26340	1880	N/A	23.08	24.50	1.387	100	1.000	0.07	0.099	0.137
LTE Band 25/2	BW20_QPSK_50RB0Offset	Front	0	26340	1880	N/A	22.15	23.50	1.365	100	1.000	0.03	0.078	0.106
LTE Band 25/2	BW20_QPSK_1RB0Offset	Back	0	26340	1880	N/A	23.08	24.50	1.387	100	1.000	0.03	0.517	0.717
LTE Band 25/2	BW20_QPSK_50RB0Offset	Back	0	26340	1880	N/A	22.15	23.50	1.365	100	1.000	0.12	0.451	0.615
LTE Band 25/2	BW20_QPSK_1RB0Offset	Right Side	0	26340	1880	N/A	23.08	24.50	1.387	100	1.000	0.01	0.186	0.258
LTE Band 25/2	BW20_QPSK_50RB0Offset	Right Side	0	26340	1880	N/A	22.15	23.50	1.365	100	1.000	0.04	0.154	0.210
LTE Band 25/2	BW20_QPSK_1RB0Offset	Left Side	0	26340	1880	N/A	23.08	24.50	1.387	100	1.000	0.03	0.052	0.073
LTE Band 25/2	BW20_QPSK_50RB0Offset	Left Side	0	26340	1880	N/A	22.15	23.50	1.365	100	1.000	0.12	0.038	0.052
LTE Band 25/2	BW20_QPSK_1RB0Offset	Top Side	0	26340	1880	N/A	23.08	24.50	1.387	100	1.000	0.01	0.072	0.100
LTE Band 25/2	BW20_QPSK_50RB0Offset	Top Side	0	26340	1880	N/A	22.15	23.50	1.365	100	1.000	0.03	0.061	0.083
LTE Band 4	BW20_QPSK_1RB99Offset	Front	0	20175	1732.5	N/A	23.03	24.50	1.403	100	1.000	0.02	0.168	0.236
LTE Band 4	BW20_QPSK_50RB0Offset	Front	0	20175	1732.5	N/A	22.06	23.50	1.393	100	1.000	0.03	0.125	0.174
LTE Band 4	BW20_QPSK_1RB99Offset	Back	0	20175	1732.5	N/A	23.03	24.50	1.403	100	1.000	0.05	0.911	1.278

LTE Band 4	BW20_QPSK_50RB0Offset	Back	0	20175	1732.5	N/A	22.06	23.50	1.393	100	1.000	0.01	0.781	1.088
LTE Band 4	BW20_QPSK_1RB99Offset	Right Side	0	20175	1732.5	N/A	23.03	24.50	1.403	100	1.000	0.04	0.120	0.168
LTE Band 4	BW20_QPSK_50RB0Offset	Right Side	0	20175	1732.5	N/A	22.06	23.50	1.393	100	1.000	-0.03	0.103	0.143
LTE Band 4	BW20_QPSK_1RB99Offset	Left Side	0	20175	1732.5	N/A	23.03	24.50	1.403	100	1.000	-0.01	0.303	0.425
LTE Band 4	BW20_QPSK_50RB0Offset	Left Side	0	20175	1732.5	N/A	22.06	23.50	1.393	100	1.000	0.02	0.222	0.309
LTE Band 4	BW20_QPSK_1RB99Offset	Top Side	0	20175	1732.5	N/A	23.03	24.50	1.403	100	1.000	0.11	0.121	0.170
LTE Band 4	BW20_QPSK_50RB0Offset	Top Side	0	20175	1732.5	N/A	22.06	23.50	1.393	100	1.000	-0.03	0.103	0.143
LTE Band 66	BW20_QPSK_1RB99Offset	Front	0	132322	1745	N/A	22.94	23.00	1.014	100	1.000	0.09	0.130	0.132
LTE Band 66	BW20_QPSK_50RB0Offset	Front	0	132322	1745	N/A	21.99	22.00	1.002	100	1.000	0.01	0.101	0.101
LTE Band 66	BW20_QPSK_1RB99Offset	Back	0	132322	1745	N/A	22.94	23.00	1.014	100	1.000	**0.14**	**0.981**	**0.995**
LTE Band 66	BW20_QPSK_50RB0Offset	Back	0	132322	1745	N/A	21.99	22.00	1.002	100	1.000	-0.03	0.810	0.812
LTE Band 66	BW20_QPSK_1RB99Offset	Right Side	0	132322	1745	N/A	22.94	23.00	1.014	100	1.000	-0.01	0.336	0.341
LTE Band 66	BW20_QPSK_50RB0Offset	Right Side	0	132322	1745	N/A	21.99	22.00	1.002	100	1.000	0.02	0.285	0.286
LTE Band 66	BW20_QPSK_1RB99Offset	Left Side	0	132322	1745	N/A	22.94	23.00	1.014	100	1.000	0.03	0.192	0.195
LTE Band 66	BW20_QPSK_50RB0Offset	Left Side	0	132322	1745	N/A	21.99	22.00	1.002	100	1.000	0.04	0.165	0.165
LTE Band 66	BW20_QPSK_1RB99Offset	Top Side	0	132322	1745	N/A	22.94	23.00	1.014	100	1.000	-0.12	0.206	0.209
LTE Band 66	BW20_QPSK_50RB0Offset	Top Side	0	132322	1745	N/A	21.99	22.00	1.002	100	1.000	0.11	0.177	0.177
LTE Band 26/5	BW15_QPSK_1RB0Offset	Front	0	26915	836.5	N/A	23.77	24.00	1.054	100	1.000	0.04	0.179	0.189
LTE Band 26/5	BW15_QPSK_50RB0Offset	Front	0	26915	836.5	N/A	22.82	23.00	1.042	100	1.000	-0.03	0.161	0.168
LTE Band 26/5	BW15_QPSK_1RB0Offset	Back	0	26915	836.5	N/A	23.77	24.00	1.054	100	1.000	**0.04**	**0.358**	**0.377**
LTE Band 26/5	BW15_QPSK_50RB0Offset	Back	0	26915	836.5	N/A	22.82	23.00	1.042	100	1.000	0.12	0.301	0.314
LTE Band 26/5	BW15_QPSK_1RB0Offset	Right Side	0	26915	836.5	N/A	23.77	24.00	1.054	100	1.000	0.01	0.248	0.261
LTE Band 26/5	BW15_QPSK_50RB0Offset	Right Side	0	26915	836.5	N/A	22.82	23.00	1.042	100	1.000	0.03	0.210	0.219
LTE Band 26/5	BW15_QPSK_1RB0Offset	Left Side	0	26915	836.5	N/A	23.77	24.00	1.054	100	1.000	0.01	0.086	0.091
LTE Band 26/5	BW15_QPSK_50RB0Offset	Left Side	0	26915	836.5	N/A	22.82	23.00	1.042	100	1.000	0.03	0.061	0.064
LTE Band 26/5	BW15_QPSK_1RB0Offset	Top Side	0	26915	836.5	N/A	23.77	24.00	1.054	100	1.000	0.03	0.215	0.227
LTE Band 26/5	BW15_QPSK_50RB0Offset	Top Side	0	26915	836.5	N/A	22.82	23.00	1.042	100	1.000	0.12	0.178	0.186
LTE Band 7	BW20_QPSK_1RB0Offset	Front	0	21100	2535	N/A	23.39	25.00	1.449	100	1.000	0.05	0.165	0.239
LTE Band 7	BW20_QPSK_50RB0Offset	Front	0	21100	2535	N/A	22.42	24.00	1.439	100	1.000	-0.03	0.165	0.237
LTE Band 7	BW20_QPSK_1RB0Offset	Back	0	21100	2535	N/A	23.39	25.00	1.449	100	1.000	-0.01	0.914	1.324
LTE Band 7	BW20_QPSK_50RB0Offset	Back	0	21100	2535	N/A	22.42	24.00	1.439	100	1.000	0.12	0.785	1.129
LTE Band 7	BW20_QPSK_1RB0Offset	Right Side	0	21100	2535	N/A	23.39	25.00	1.449	100	1.000	**0.03**	**1.160**	**1.681**
LTE Band 7	BW20_QPSK_50RB0Offset	Right Side	0	21100	2535	N/A	22.42	24.00	1.439	100	1.000	0.12	0.923	1.328
LTE Band 7	BW20_QPSK_1RB0Offset	Left Side	0	21100	2535	N/A	23.39	25.00	1.449	100	1.000	-0.07	0.514	0.745
LTE Band 7	BW20_QPSK_50RB0Offset	Left Side	0	21100	2535	N/A	22.42	24.00	1.439	100	1.000	0.04	0.412	0.593
LTE Band 7	BW20_QPSK_1RB0Offset	Top Side	0	21100	2535	N/A	23.39	25.00	1.449	100	1.000	0.07	0.123	0.178
LTE Band 7	BW20_QPSK_50RB0Offset	Top Side	0	21100	2535	N/A	22.42	24.00	1.439	100	1.000	-0.03	0.103	0.148
LTE Band 12/17	BW10_QPSK_1RB0Offset	Front	0	23095	707.5	N/A	23.88	24.00	1.028	100	1.000	0.05	0.095	0.098
LTE Band 12/17	BW10_QPSK_50RB0Offset	Front	0	23095	707.5	N/A	22.93	23.00	1.016	100	1.000	-0.03	0.081	0.082
LTE Band 12/17	BW10_QPSK_1RB0Offset	Back	0	23095	707.5	N/A	23.88	24.00	1.028	100	1.000	**-0.01**	**0.926**	**0.952**
LTE Band 12/17	BW10_QPSK_50RB0Offset	Back	0	23095	707.5	N/A	22.93	23.00	1.016	100	1.000	0.12	0.835	0.849
LTE Band 12/17	BW10_QPSK_1RB0Offset	Right Side	0	23095	707.5	N/A	23.88	24.00	1.028	100	1.000	0.02	0.194	0.199
LTE Band 12/17	BW10_QPSK_50RB0Offset	Right Side	0	23095	707.5	N/A	22.93	23.00	1.016	100	1.000	0.04	0.158	0.161

LTE Band 12/17	BW10_QPSK_1RB0Offset	Left Side	0	23095	707.5	N/A	23.88	24.00	1.028	100	1.000	-0.03	0.104	0.107
LTE Band 12/17	BW10_QPSK_50RB0Offset	Left Side	0	23095	707.5	N/A	22.93	23.00	1.016	100	1.000	0.11	0.085	0.086
LTE Band 12/17	BW10_QPSK_1RB0Offset	Top Side	0	23095	707.5	N/A	23.88	24.00	1.028	100	1.000	-0.09	0.189	0.194
LTE Band 12/17	BW10_QPSK_50RB0Offset	Top Side	0	23095	707.5	N/A	22.93	23.00	1.016	100	1.000	0.04	0.145	0.147
LTE Band 13	BW10_QPSK_1RB0Offset	Front	0	23230	782	N/A	23.64	24.00	1.086	100	1.000	-0.03	0.108	0.117
LTE Band 13	BW10_QPSK_50RB0Offset	Front	0	23230	782	N/A	22.71	23.00	1.069	100	1.000	-0.01	0.088	0.094
LTE Band 13	BW10_QPSK_1RB0Offset	Back	0	23230	782	N/A	23.64	24.00	1.086	100	1.000	0.00	0.264	0.287
LTE Band 13	BW10_QPSK_50RB0Offset	Back	0	23230	782	N/A	22.71	23.00	1.069	100	1.000	0.03	0.212	0.227
LTE Band 13	BW10_QPSK_1RB0Offset	Right Side	0	23230	782	N/A	23.64	24.00	1.086	100	1.000	0.19	0.123	0.134
LTE Band 13	BW10_QPSK_50RB0Offset	Right Side	0	23230	782	N/A	22.71	23.00	1.069	100	1.000	0.11	0.108	0.115
LTE Band 13	BW10_QPSK_1RB0Offset	Left Side	0	23230	782	N/A	23.64	24.00	1.086	100	1.000	**-0.06**	**0.275**	**0.299**
LTE Band 13	BW10_QPSK_50RB0Offset	Left Side	0	23230	782	N/A	22.71	23.00	1.069	100	1.000	0.04	0.212	0.227
LTE Band 13	BW10_QPSK_1RB0Offset	Top Side	0	23230	782	N/A	23.64	24.00	1.086	100	1.000	0.10	0.051	0.056
LTE Band 13	BW10_QPSK_50RB0Offset	Top Side	0	23230	782	N/A	22.71	23.00	1.069	100	1.000	0.12	0.043	0.046
LTE Band 14	BW10_QPSK_1RB0Offset	Front	0	23330	793	N/A	23.44	23.50	1.014	100	1.000	0.13	0.118	0.120
LTE Band 14	BW10_QPSK_50RB0Offset	Front	0	23330	793	N/A	22.43	22.50	1.016	100	1.000	-0.03	0.109	0.111
LTE Band 14	BW10_QPSK_1RB0Offset	Back	0	23330	793	N/A	23.44	23.50	1.014	100	1.000	0.03	0.159	0.161
LTE Band 14	BW10_QPSK_50RB0Offset	Back	0	23330	793	N/A	22.43	22.50	1.016	100	1.000	0.02	0.134	0.136
LTE Band 14	BW10_QPSK_1RB0Offset	Right Side	0	23330	793	N/A	23.44	23.50	1.014	100	1.000	-0.19	0.170	0.172
LTE Band 14	BW10_QPSK_50RB0Offset	Right Side	0	23330	793	N/A	22.43	22.50	1.016	100	1.000	-0.03	0.154	0.157
LTE Band 14	BW10_QPSK_1RB0Offset	Left Side	0	23330	793	N/A	23.44	23.50	1.014	100	1.000	**-0.03**	**0.211**	**0.214**
LTE Band 14	BW10_QPSK_50RB0Offset	Left Side	0	23330	793	N/A	22.43	22.50	1.016	100	1.000	0.12	0.191	0.194
LTE Band 14	BW10_QPSK_1RB0Offset	Top Side	0	23330	793	N/A	23.44	23.50	1.014	100	1.000	-0.03	0.154	0.156
LTE Band 14	BW10_QPSK_50RB0Offset	Top Side	0	23330	793	N/A	22.43	22.50	1.016	100	1.000	0.03	0.144	0.146
LTE Band 71	BW20_QPSK_1RB0Offset	Front	0	133322	683	N/A	23.81	24.00	1.045	100	1.000	-0.04	0.101	0.106
LTE Band 71	BW20_QPSK_50RB0Offset	Front	0	133322	683	N/A	22.82	23.00	1.042	100	1.000	-0.03	0.089	0.093
LTE Band 71	BW20_QPSK_1RB0Offset	Back	0	133322	683	N/A	23.81	24.00	1.045	100	1.000	**-0.03**	**0.865**	**0.904**
LTE Band 71	BW20_QPSK_50RB0Offset	Back	0	133322	683	N/A	22.82	23.00	1.042	100	1.000	0.12	0.789	0.822
LTE Band 71	BW20_QPSK_1RB0Offset	Right Side	0	133322	683	N/A	23.81	24.00	1.045	100	1.000	0.03	0.075	0.078
LTE Band 71	BW20_QPSK_50RB0Offset	Right Side	0	133322	683	N/A	22.82	23.00	1.042	100	1.000	0.04	0.070	0.073
LTE Band 71	BW20_QPSK_1RB0Offset	Left Side	0	133322	683	N/A	23.81	24.00	1.045	100	1.000	-0.08	0.083	0.087
LTE Band 71	BW20_QPSK_50RB0Offset	Left Side	0	133322	683	N/A	22.82	23.00	1.042	100	1.000	0.01	0.067	0.070
LTE Band 71	BW20_QPSK_1RB0Offset	Top Side	0	133322	683	N/A	23.81	24.00	1.045	100	1.000	0.03	0.047	0.049
LTE Band 71	BW20_QPSK_50RB0Offset	Top Side	0	133322	683	N/A	22.82	23.00	1.042	100	1.000	0.02	0.035	0.036
LTE Band 41/38	BW20_QPSK_1RB0Offset	Front	0	40620	2593	N/A	23.51	25.00	1.409	62.9	1.006	0.04	0.063	0.089
LTE Band 41/38	BW20_QPSK_50RB0Offset	Front	0	40620	2593	N/A	22.65	24.00	1.365	62.9	1.006	0.03	0.051	0.070
LTE Band 41/38	BW20_QPSK_1RB0Offset	Back	0	40620	2593	N/A	23.51	25.00	1.409	62.9	1.006	-0.14	0.331	0.469
LTE Band 41/38	BW20_QPSK_50RB0Offset	Back	0	40620	2593	N/A	22.65	24.00	1.365	62.9	1.006	-0.03	0.255	0.350
LTE Band 41/38	BW20_QPSK_1RB0Offset	Right Side	0	40620	2593	N/A	23.51	25.00	1.409	62.9	1.006	**0.07**	**0.342**	**0.485**
LTE Band 41/38	BW20_QPSK_50RB0Offset	Right Side	0	40620	2593	N/A	22.65	24.00	1.365	62.9	1.006	-0.03	0.312	0.428
LTE Band 41/38	BW20_QPSK_1RB0Offset	Left Side	0	40620	2593	N/A	23.51	25.00	1.409	62.9	1.006	-0.02	0.018	0.026
LTE Band 41/38	BW20_QPSK_50RB0Offset	Left Side	0	40620	2593	N/A	22.65	24.00	1.365	62.9	1.006	0.15	0.011	0.015
LTE Band 41/38	BW20_QPSK_1RB0Offset	Top Side	0	40620	2593	N/A	23.51	25.00	1.409	62.9	1.006	0.01	0.023	0.033

LTE Band 41/38	BW20_QPSK_ 50RB0Offset	Top Side	0	40620	2593	N/A	22.65	24.00	1.365	62.9	1.006	0.03	0.150	0.206
Bluetooth	3DH5	Front	0	78	2480	N/A	7.91	9.00	1.285	80.88	1.236	0.00	0.000	0.000
Bluetooth	3DH5	Back	0	78	2480	N/A	7.91	9.00	1.285	80.88	1.236	**0.07**	**0.001**	**0.002**
Bluetooth	3DH5	Right Side	0	78	2480	N/A	7.91	9.00	1.285	80.88	1.236	0.01	0.000	0.000
Bluetooth	3DH5	Left Side	0	78	2480	N/A	7.91	9.00	1.285	80.88	1.236	0.05	0.000	0.000
Bluetooth	3DH5	Top Side	0	78	2480	N/A	7.91	9.00	1.285	80.88	1.236	0.09	0.000	0.000
2.4GWLAN	802.11b 1Mbps	Front	0	11	2462	22	18.07	18.50	1.104	99.8	1.002	0.03	0.098	0.108
2.4GWLAN	802.11b 1Mbps	Back	0	11	2462	22	18.07	18.50	1.104	99.8	1.002	-0.06	0.104	0.115
2.4GWLAN	802.11b 1Mbps	Right Side	0	11	2462	22	18.07	18.50	1.104	99.8	1.002	**-0.03**	**0.105**	**0.116**
2.4GWLAN	802.11b 1Mbps	Left Side	0	11	2462	22	18.07	18.50	1.104	99.8	1.002	0.07	0.072	0.080
2.4GWLAN	802.11b 1Mbps	Top Side	0	11	2462	22	18.07	18.50	1.104	99.8	1.002	0.00	0.003	0.003
5.3GWLAN	802.11a 6Mbps	Front	0	60	5300	22	14.81	16.00	1.315	97.57	1.025	0.00	0.000	0.000
5.3GWLAN	802.11a 6Mbps	Back	0	60	5300	22	14.81	16.00	1.315	97.57	1.025	0.00	0.071	0.096
5.3GWLAN	802.11a 6Mbps	Right Side	0	60	5300	22	14.81	16.00	1.315	97.57	1.025	**0.07**	**0.153**	**0.206**
5.3GWLAN	802.11a 6Mbps	Left Side	0	60	5300	22	14.81	16.00	1.315	97.57	1.025	0.07	0.031	0.041
5.3GWLAN	802.11a 6Mbps	Top Side	0	60	5300	22	14.81	16.00	1.315	97.57	1.025	0.03	0.003	0.004
5.6GWLAN	802.11a 6Mbps	Front	0	116	5580	20	13.81	14.50	1.172	97.57	1.025	0.00	0.000	0.000
5.6GWLAN	802.11a 6Mbps	Back	0	116	5580	20	13.81	14.50	1.172	97.57	1.025	0.06	0.081	0.097
5.6GWLAN	802.11a 6Mbps	Right Side	0	116	5580	20	13.81	14.50	1.172	97.57	1.025	**-0.02**	**0.210**	**0.252**
5.6GWLAN	802.11a 6Mbps	Left Side	0	116	5580	20	13.81	14.50	1.172	97.57	1.025	0.03	0.044	0.053
5.6GWLAN	802.11a 6Mbps	Top Side	0	116	5580	20	13.81	14.50	1.172	97.57	1.025	0.00	0.000	0.000
5.8GWLAN	802.11ac VHT80 MCS0	Front	0	155	5775	21	14.23	15.00	1.194	90.58	1.104	0.00	0.000	0.000
5.8GWLAN	802.11ac VHT80 MCS0	Back	0	155	5775	21	14.23	15.00	1.194	90.58	1.104	0.03	0.083	0.109
5.8GWLAN	802.11ac VHT80 MCS0	Right Side	0	155	5775	21	14.23	15.00	1.194	90.58	1.104	**-0.09**	**0.193**	**0.254**
5.8GWLAN	802.11ac VHT80 MCS0	Left Side	0	155	5775	21	14.23	15.00	1.194	90.58	1.104	0.03	0.037	0.049
5.8GWLAN	802.11ac VHT80 MCS0	Top Side	0	155	5775	21	14.23	15.00	1.194	90.58	1.104	0.00	0.000	0.000
END														

SAR Test Note:

1. Per KDB648474 D04y01r03.this device is considered a phablet since the display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm. Therefore, phablet SAR tests are required when wireless mode does not apply or if wireless router1g SAR >1.2W/kg.

2. Due to the distance between the antenna and the test edge, the result of 0.001 in the table is the result of decimal point rounding, and the actual test results are ⩽ 0.001.

3. Per KDB 941225 D01v03r01, for SAR testing is measured using a 12.2 kbps RMC with TPC bits configured to all "1's".

4. Per KDB 941225 D01v03r01, RMC 12.2kbps setting is used to evaluate SAR. The maximum output power and tune-up tolerance specified for production units in HSDPA/ HSUPA/ DC-HSDPA is ≤1/4 dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance Of HSDPA / HSUPA/ DC-HSDPA to RMC12.2Kbps and the adjusted SAR is s 1.2 W/kg, SAR measurement is not required for HSDPA/ HSUPA/ DC-HSDPA, and according to the following RF output power, the output power results of the secondary modes (HSUPA, HSDPA, DC-HSDPA) are less than 1/4 dB higher than the

primary modes; therefore, SAR measurement is not required for HSDPA/ HSUPA/ DC-HSDPA.

5. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.

6. Per KDB 941225 D05v02r05, start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.

7. Per KDB 941225 D05v02r05, 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.

8. Per KDB 941225 D05v02r05, For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

9. Duty cycle of TDD was fixed, therefore not require scaled to 100% of duty cycle. For SAR system, the crest factor 1:1.59 (62.9%) was used perform testing.

10. Considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix 63.3%/62.9% = 1.006 is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = Measured SAR (W/kg)* scaling factor for extended cyclic prefix.

11. Per KDB 941225 D05v02r05, 16QAM output power for each RB allocation configuration is > not 1/2 dB higher than the same configuration in QPSK and the reported SAR for the QPSK configuration is ≤ 1.45 W/kg; Per KDB 941225D05v02r05.16QAM SAR testing is not required.

12. Per KDB 941225 D05v02r05, Smaller bandwidth output power for each RB allocation configuration is > not 1/2 dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg; Per KDB 941225 D05v02r05, smaller bandwidth SAR testing is not required.

13. LTE Band 2/5/17/38 SAR test was covered by LTE Band 25/26/12/41, due to the output power level and have duplicate frequency range.

14. The maximum output power specified for production units are determined for all applicable 802.11 transmission modes in each standalone and aggregated frequency band. Maximum output power is measured for the highest maximum output power configuration(s) in each frequency band according to the default power measurement procedures. For "Not required", SAR Test reduction was applied from KDB 248227 guidance, Sec. 2.1b), 1) when the same maximum power is specified for multiple transmission modes in a frequency band. The largest channel bandwidth, lowest or demodulation, lowest data rate and lowest order 802.11algin/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, additional output power measurements were not necessary.

15. Per KDB 248227 D01v02r02, SAR test reduction is determined according to 802.11 transmission mode configurations and certain exposure conditions with multiple test positions. In the 2.4 GHz band, separate SAR procedures are applied to DSSS and OFDM configurations to simplify DSSS test requirements. For OFDM, in both 2.4 and 5 GHz bands, an initial test configuration must be determined for each standalone and aggregated frequency band, according to the transmission mode configuration with the highest maximum output power specified for

production units to perform SAR measurements. If the same highest maximum output power applies to different combinations of channel bandwidths, modulations and data rates, additional procedures are applied to determine which test configurations require SAR measurement. When applicable, an initial test position may be applied to reduce the number of SAR measurements required for next to the ear, UMPC mini-tablet or hotspot mode configurations with multiple test positions.

- 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.

16. The Bluetooth duty cycle is 77.50%, Bluetooth SAR scaling need further consideration and the theoretical duty cycle is 100%, therefore the actual duty cycle will be scaled up to the theoretical value of Bluetooth reported SAR calculation.
17. The ratio is the difference in percentage between original and repeated measured SAR.
18. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

9.2 Simultaneous Transmission Analysis

NO.	Simultaneous Transmission Configurations	Body SAR & Limbs SAR
1.	WWAN+ 2.4GHz WLAN	Yes
2.	WWAN+ 5GHz WLAN	Yes
3.	WWAN+ Bluetooth	Yes
4.	2.4GHz WLAN + Bluetooth	Yes
5.	5GHz WLAN + Bluetooth	Yes

Body SAR								
WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	NO.1	NO.2	NO.3	NO.4	NO.5
				Summed	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)	1g SAR (W/kg)
1.026	0.054	0.00	0.00	**1.08**	**1.03**	**1.03**	**0.05**	**0.0**

Limbs SAR								
WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	NO.1	NO.2	NO.3	NO.4	NO.5
				Summed	Summed	Summed	Summed	Summed
10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
1.681	0.116	0.254	0.002	**1.80**	**1.94**	**1.68**	**0.12**	**0.26**

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. If 10g-SAR scalar summation < 4.0 W/kg, simultaneous SAR measurement is not necessary.

Appendix A. SAR System Validation Data

Date: 2024/10/15

Test Laboratory: DEKRA Lab

System Check Head 750MHz

DUT: Dipole

Communication System: UID 0, CW (0); Communication System Band: D750MHz; Duty Cycle: 1:1.0; Frequency: 750 MHz; Medium parameters used: f = 750 MHz; σ = 0.895 S/m; εr = 41.699; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.18, 8.93, 9.03) ; Calibrated: 2024/9/19
- 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 (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.65 W/kg

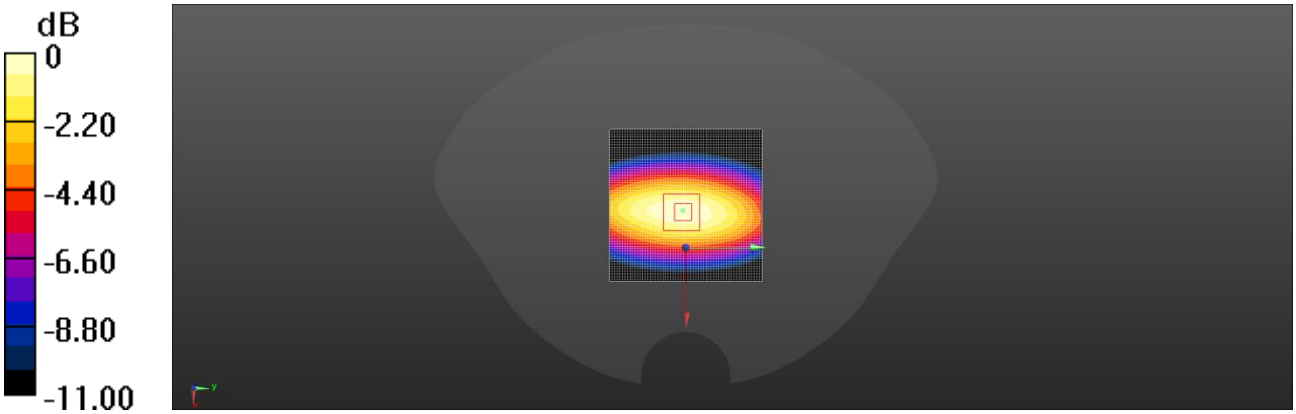
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.70 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 3.88 W/kg

SAR(1 g) = 2.24 W/kg; SAR(10 g) = 1.53 W/kg

Maximum value of SAR (measured) = 3.67 W/kg



0 dB = 3.67 W/kg = 2.23 dBW/kg

Date: 2024/10/16

Test Laboratory: DEKRA Lab

System Check Head 835MHz

DUT: Dipole

Communication System: UID 0, CW (0); Communication System Band: D835MHz; Duty Cycle: 1:1.0; Frequency: 835 MHz; Medium parameters used: f = 835 MHz; σ = 0.902 S/m; εr = 41.240; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.11, 8.85, 8.95) ; Calibrated: 2024/9/19
- 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 (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.21 W/kg

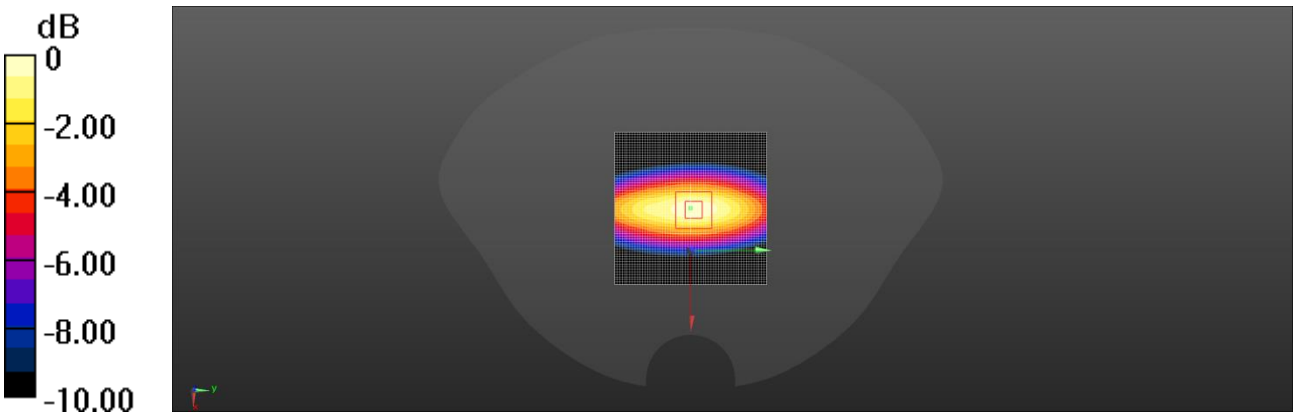
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 62.57 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 3.57 W/kg

SAR(1 g) = 2.43 W/kg; SAR(10 g) = 1.48 W/kg

Maximum value of SAR (measured) = 3.21 W/kg



0 dB = 3.21 W/kg = 3.44 dBW/kg

Date: 2024/10/21

Test Laboratory: DEKRA Lab

System Check Head 1800MHz

DUT: Dipole

Communication System: UID 0, CW (0); Communication System Band: D1800MHz; Duty Cycle: 1:1.0; Frequency: 1800 MHz; Medium parameters used: f = 1800 MHz; σ = 1.406 S/m; εr = 38.83; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.72, 7.5, 7.59) ; Calibrated: 2024/9/19
- 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 (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 13.7 W/kg

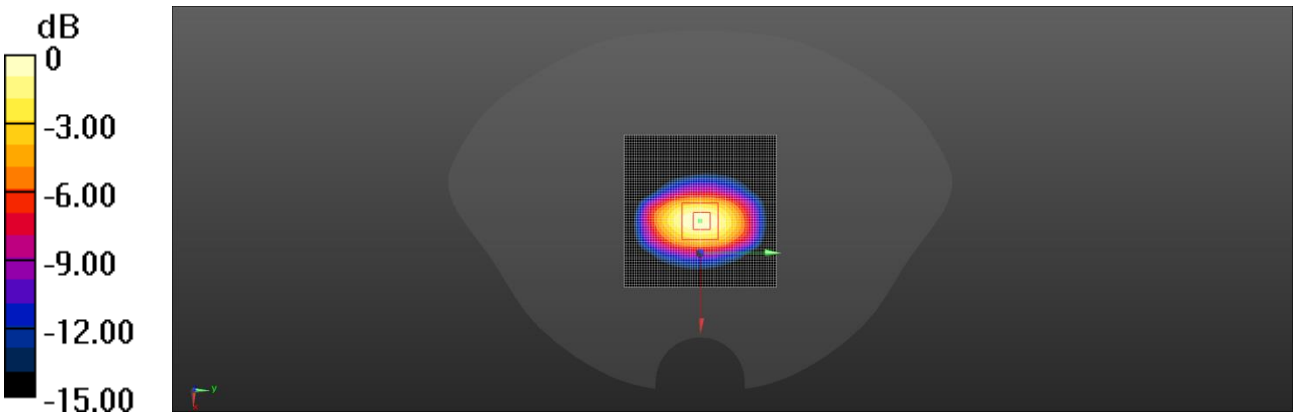
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 73.12 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 12.2 W/kg

SAR(1 g) = 9.44 W/kg; SAR(10 g) = 5.12 W/kg

Maximum value of SAR (measured) = 13.8 W/kg



0 dB = 13.8 W/kg = 8.25 dBW/kg

Date: 2024/10/22

Test Laboratory: DEKRA Lab

System Check Head 1900MHz

DUT: Dipole

Communication System: UID 0, CW (0); Communication System Band: D1900MHz; Duty Cycle: 1:1.0; Frequency: 1900 MHz; Medium parameters used: f = 1900 MHz; σ = 1.397 S/m; εr = 39.03; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.45, 7.25, 7.33) ; Calibrated: 2024/9/19
- 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 (61x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 14.4 W/kg

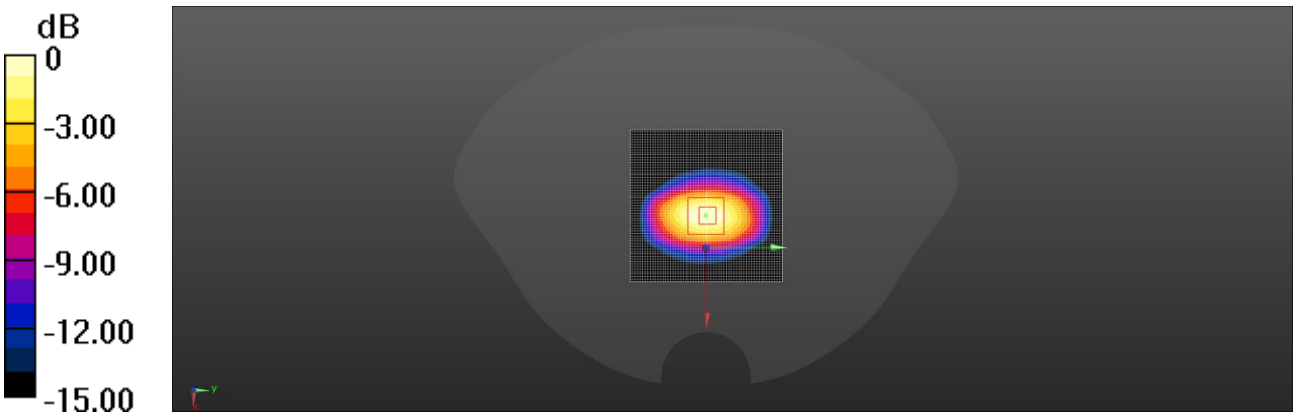
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 84.02 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 14.5 W/kg

SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.33 W/kg

Maximum value of SAR (measured) = 14.7 W/kg



0 dB = 14.7 W/kg = 8.31 dBW/kg

Date: 2024/10/28

Test Laboratory: DEKRA Lab

System Check Head 2450MHz

DUT: Dipole

Communication System: UID 0, CW (0); Communication System Band: D2450MHz; Duty Cycle: 1:1.0; Frequency: 2450 MHz; Medium parameters used: f = 2450 MHz; σ = 1.86 S/m; εr = 38.54; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.03, 6.83, 6.91) ; Calibrated: 2024/9/19
- 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 (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 16.2 W/kg

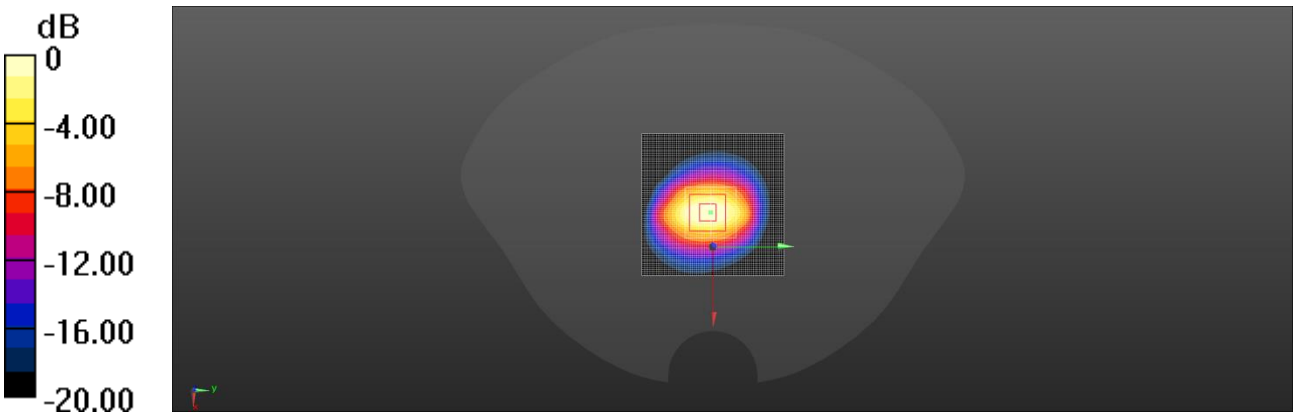
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 82.34 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 15.4 W/kg

SAR(1 g) = 13.2 W/kg; SAR(10 g) = 6.12 W/kg

Maximum value of SAR (measured) = 18.5 W/kg



0 dB = 18.5 W/kg = 9.29 dBW/kg

Date: 2024/10/25

Test Laboratory: DEKRA Lab

System Check Head 2600MHz

DUT: Dipole

Communication System: UID 0, CW (0); Communication System Band: D2600MHz; Duty Cycle: 1:1.0; Frequency: 2600 MHz; Medium parameters used: f = 2600 MHz; σ = 2.027 S/m; εr = 37.86; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.1, 6.9, 6.98) ; Calibrated: 2024/9/19
- 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 (71x71x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 17.4 W/kg

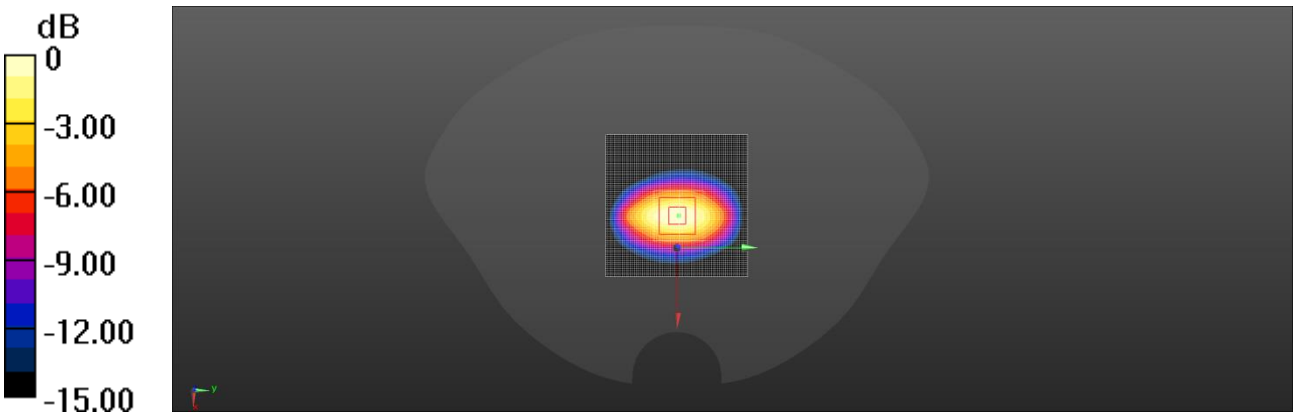
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 85.72 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 16.0 W/kg

SAR(1 g) = 13.4 W/kg; SAR(10 g) = 6.22 W/kg

Maximum value of SAR (measured) = 17.3 W/kg



0 dB = 17.3 W/kg = 10.13 dBW/kg

Date: 2024/10/30

Test Laboratory: DEKRA Lab

System Check Head 5250MHz

DUT: Dipole

Communication System: UID 0, CW (0); Communication System Band: 5GHz; Duty Cycle: 1:1.0; Frequency: 5250 MHz; Medium parameters used: f = 5250 MHz; σ = 4.595 S/m; εr = 36.40; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.42, 5.27, 5.33) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 20.0 W/kg

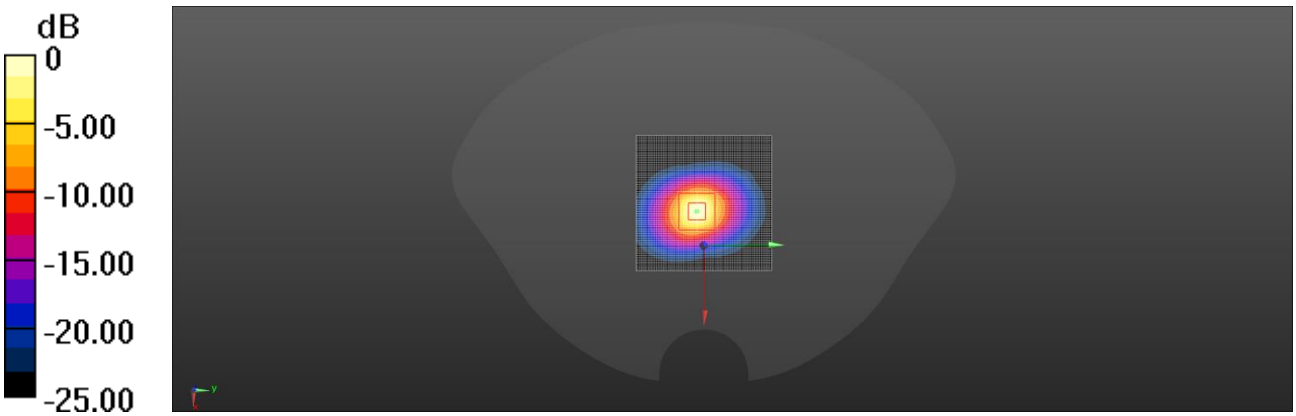
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 57.03 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 35.1 W/kg

SAR(1 g) = 8.05 W/kg; SAR(10 g) = 2.12 W/kg

Maximum value of SAR (measured) = 21.6 W/kg



0 dB = 21.6 W/kg = 13.34 dBW/kg

Date: 2024/10/30

Test Laboratory: DEKRA Lab

System Check Head 5600MHz

DUT: Dipole

Communication System: UID 0, CW (0); Communication System Band: D5GHz; Duty Cycle: 1:1.0; Frequency: 5600 MHz; Medium parameters used: f = 5600 MHz; σ = 4.985 S/m; εr = 35.82; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(4.64, 4.51, 4.56) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 21.6 W/kg

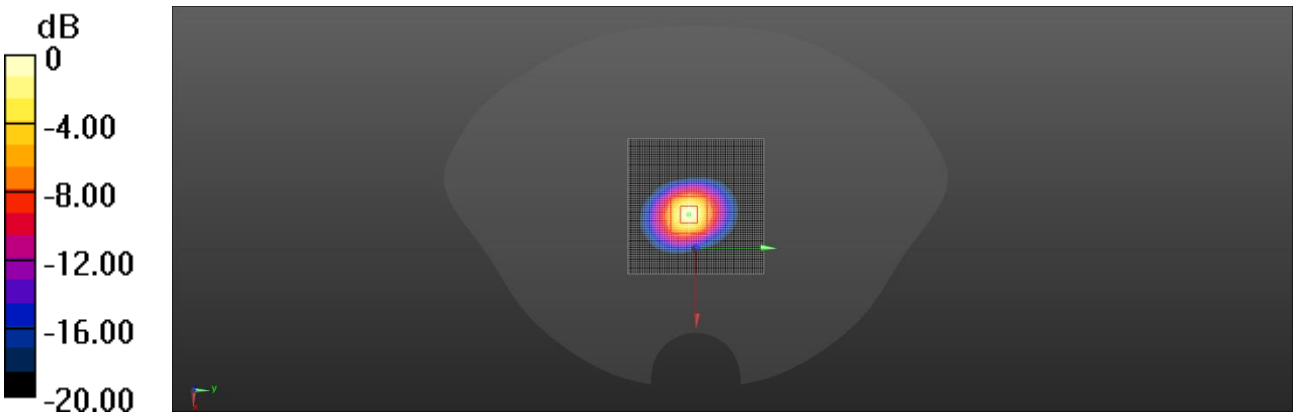
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 56.34 V/m; Power Drift = -0.17 dB

Peak SAR (extrapolated) = 39.8 W/kg

SAR(1 g) = 7.79 W/kg; SAR(10 g) = 2.21 W/kg

Maximum value of SAR (measured) = 23.0 W/kg



0 dB = 23.0 W/kg = 13.62 dBW/kg

Date: 2024/10/30

Test Laboratory: DEKRA Lab

System Check Head 5750MHz

DUT: Dipole

Communication System: UID 0, CW (0); Communication System Band: D5GHz; Duty Cycle: 1:1.0; Frequency: 5750 MHz; Medium parameters used: f = 5750 MHz; σ = 5.16 S/m; εr = 35.57; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.05, 4.91, 4.97); Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 18.5 W/kg

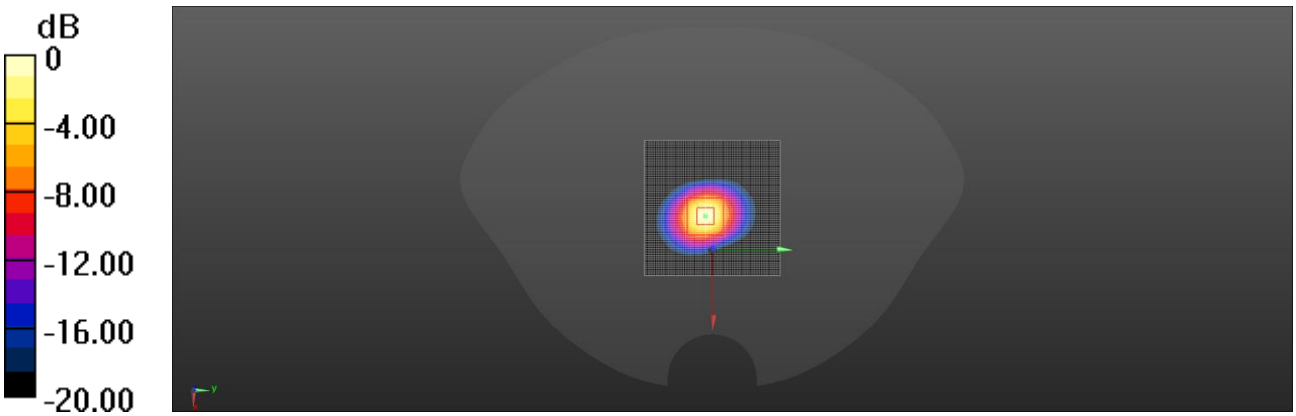
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 51.26 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 33.9 W/kg

SAR(1 g) = 7.43 W/kg; SAR(10 g) = 2.11 W/kg

Maximum value of SAR (measured) = 19.5 W/kg



0 dB = 19.5 W/kg = 12.90 dBW/kg

Appendix B. SAR measurement Data

Date: 2024/10/16

Test Laboratory: DEKRA Lab

GSM850-GPRS 3 Tx_slots-Right Side-10mm-CH189-836.4MHz

DUT: POS Terminal

Communication System: UID 0, GSM (0); Communication System Band: GSM 850; Duty Cycle: 1:2.77; Frequency: 836.4 MHz; Medium parameters used: f = 836.4 MHz; σ = 0.903 S/m; εr = 41.219; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.7, 10.17, 9.56) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.288 W/kg

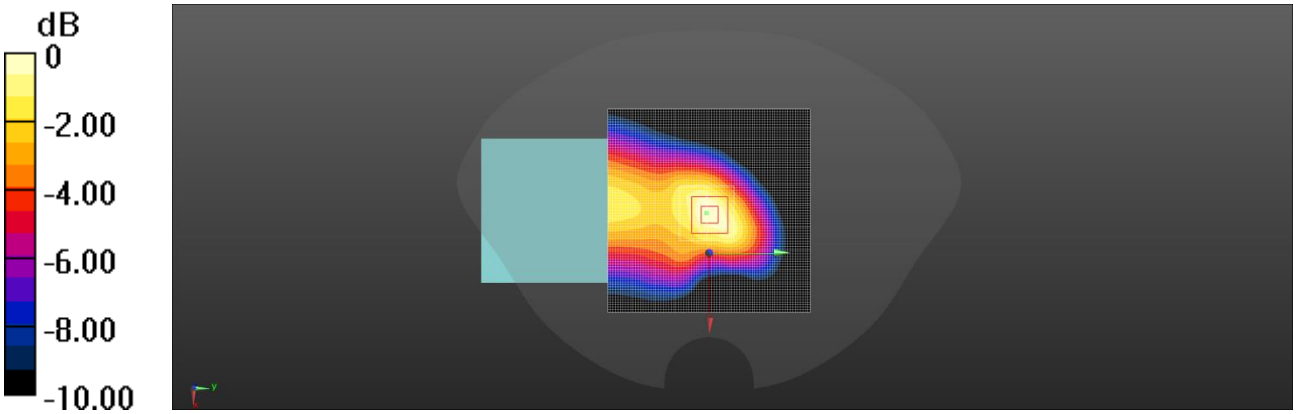
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.52 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.201 W/kg; SAR(10 g) = 0.125 W/kg

Maximum value of SAR (measured) = 0.277 W/kg



0 dB = 0.277 W/kg = -5.58 dBW/kg

Date: 2024/10/22

Test Laboratory: DEKRA Lab

GSM-1900_GPRS 2_Tx slots-Back-10mm-CH661-1880MHz

DUT: POS Terminal

Communication System: UID 0, GSM (0); Communication System Band: GSM 1900; Duty Cycle: 1:4.15; Frequency: 1880 MHz; Medium parameters used: f = 1880 MHz; σ = 1.376 S/m; εr = 39.136; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.77, 8.15, 7.66) ; Calibrated: 2024/9/19
- 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 (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.331 W/kg

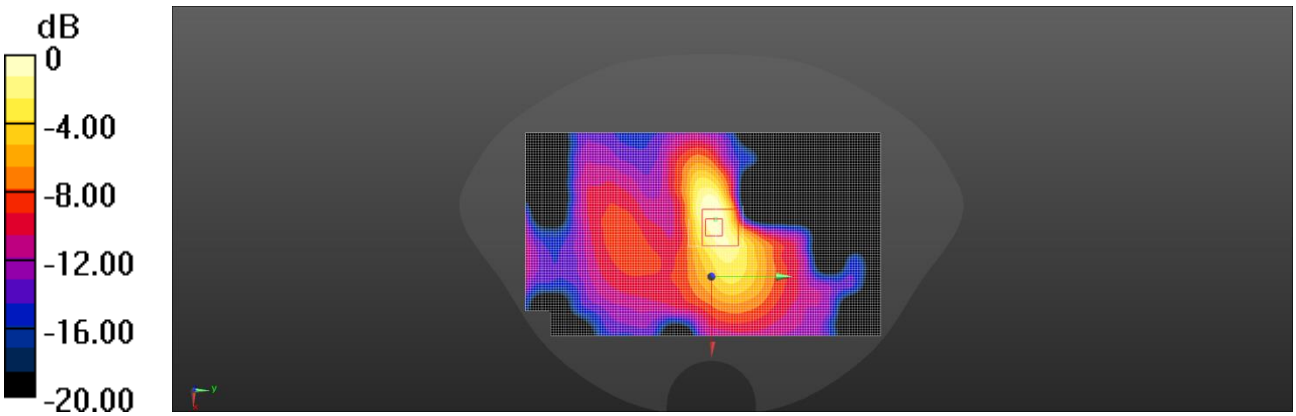
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.99 V/m; Power Drift = 0.02

Peak SAR (extrapolated) = 0.436 W/kg

SAR(1 g) = 0.196 W/kg; SAR(10 g) = 0.098 W/kg

Maximum value of SAR (measured) = 0.307 W/kg



0 dB = 0.307 W/kg = -5.13 dBW/kg

Date: 2024/10/22

Test Laboratory: DEKRA Lab

WCDMA II-RMC_12.2K-Back-10mm-CH9400- 1880MHz

DUT: POS Terminal

Communication System: UID 0, WCDMA (0); Communication System Band: WCDMA II; Duty Cycle: 1:1; Frequency: 1880 MHz; Medium parameters used: f = 1880 MHz; σ = 1.376 S/m; εr = 39.136; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.77, 8.15, 7.66) ; Calibrated: 2024/9/19
- 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 (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.298 W/kg

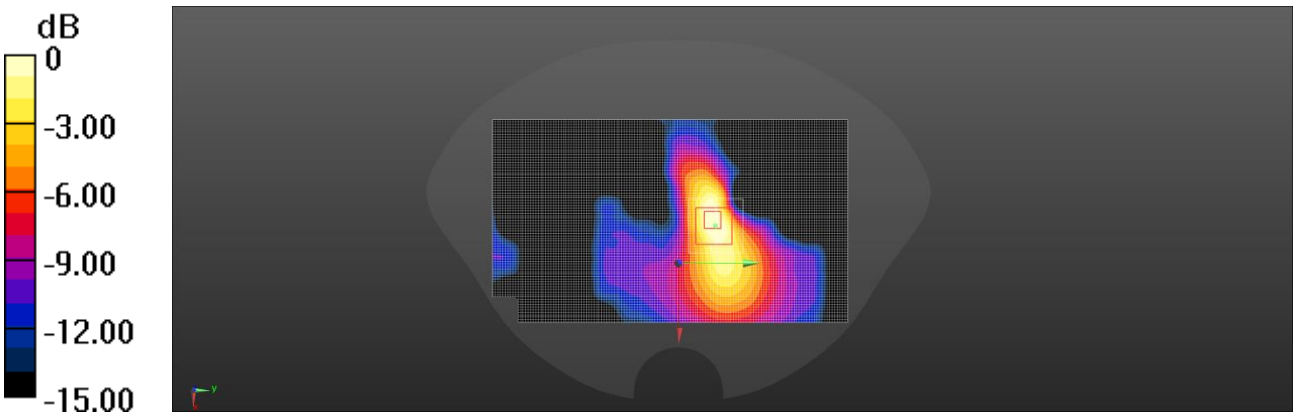
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.181 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.319 W/kg

SAR(1 g) = 0.190 W/kg; SAR(10 g) = 0.102 W/kg

Maximum value of SAR (measured) = 0.270 W/kg



0 dB = 0.270 W/kg = -5.69 dBW/kg

Date: 2024/10/21

Test Laboratory: DEKRA Lab

WCDMA IV-RMC_12.2K-Back-10mm-CH1413- 1732.6MHz

DUT: POS Terminal

Communication System: UID 0, WCDMA (0); Communication System Band: WCDMA IV; Duty Cycle: 1:1; Frequency: 1732.6 MHz; Medium parameters used: f = 1733 MHz; σ = 1.338 S/m; εr = 39.138; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(8.01, 8.4, 7.89) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.756 W/kg

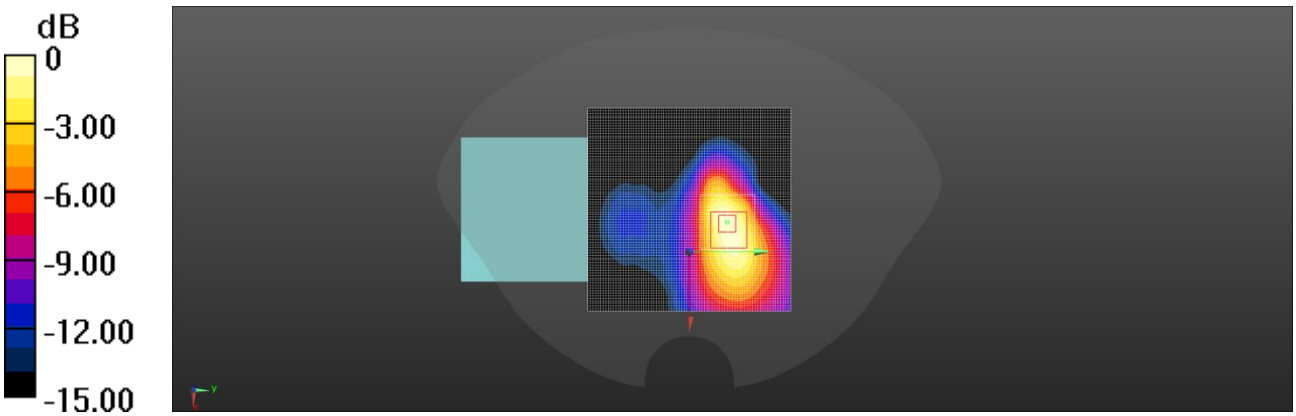
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.782 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.877 W/kg

SAR(1 g) = 0.569 W/kg; SAR(10 g) = 0.332 W/kg

Maximum value of SAR (measured) = 0.787 W/kg



0 dB = 0.787 W/kg = -1.04 dBW/kg

Date: 2024/10/16

Test Laboratory: DEKRA Lab

WCDMA V-RMC_12.2K-Back-10mm-CH4182- 836.4MHz

DUT: POS Terminal

Communication System: UID 0, WCDMA (0); Communication System Band: WCDMA V; Duty Cycle: 1:1; Frequency: 836.4 MHz; Medium parameters used (interpolated): f = 836.4 MHz; σ = 0.903 S/m; εr = 41.219; ρ = 1000 kg/m3 ;

Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.7, 10.17, 9.56) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.266 W/kg

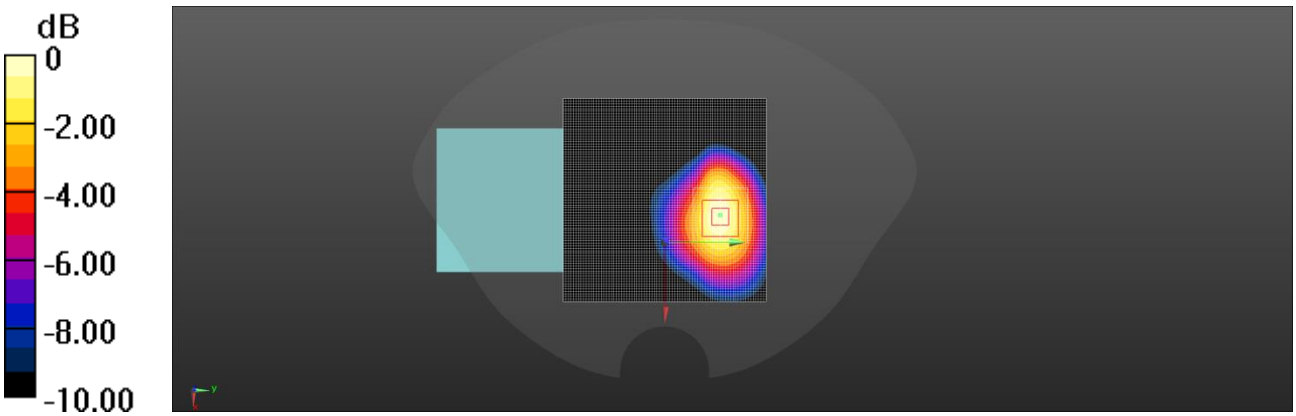
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.886 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.299 W/kg

SAR(1 g) = 0.202 W/kg; SAR(10 g) = 0.127 W/kg

Maximum value of SAR (measured) = 0.270 W/kg



0 dB = 0.270 W/kg = -5.69 dBW/kg

Date: 2024/10/22

Test Laboratory: DEKRA Lab

LTE Band 25-BW20_QPSK_1RB0Offset-Right Side-10mm-CH26340_1880MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band25; Duty Cycle: 1:1; Frequency: 1880 MHz; Medium parameters used: f = 1880 MHz; σ = 1.376 S/m; εr = 39.136; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.77, 8.15, 7.66) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.208 W/kg

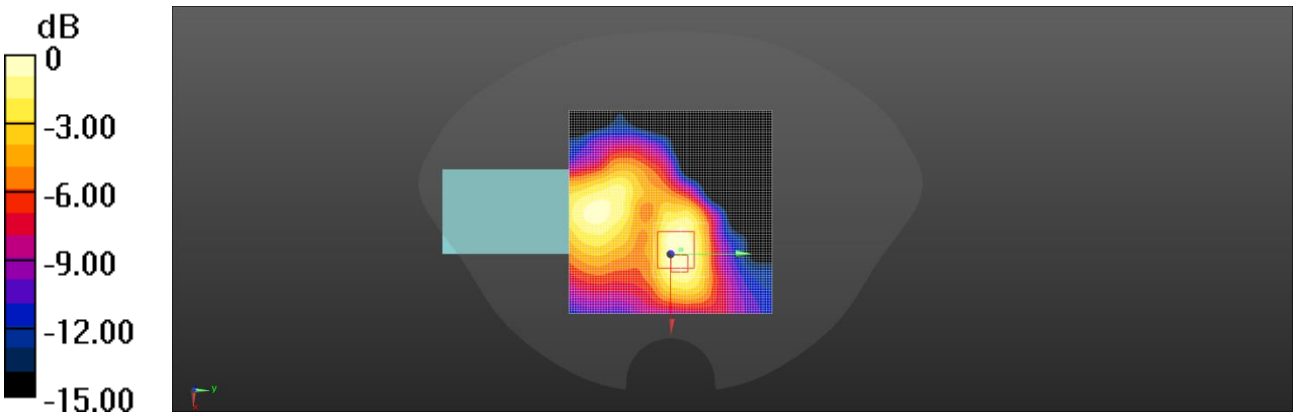
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.703 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.234 W/kg

SAR(1 g) = 0.144 W/kg; SAR(10 g) = 0.085 W/kg

Maximum value of SAR (measured) = 0.211 W/kg



0 dB = 0.211 W/kg = -6.76 dBW/kg

Date: 2024/10/21

Test Laboratory: DEKRA Lab

LTE Band 4-BW20_QPSK_1RB0Offset-Back-10mm-CH20175-1732.5MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band4; Duty Cycle: 1:1.0; Frequency: 1745 MHz; Medium parameters used: f = 1733 MHz; σ = 1.338 S/m; εr = 39.138; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.72, 7.5, 7.59) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.900 W/kg

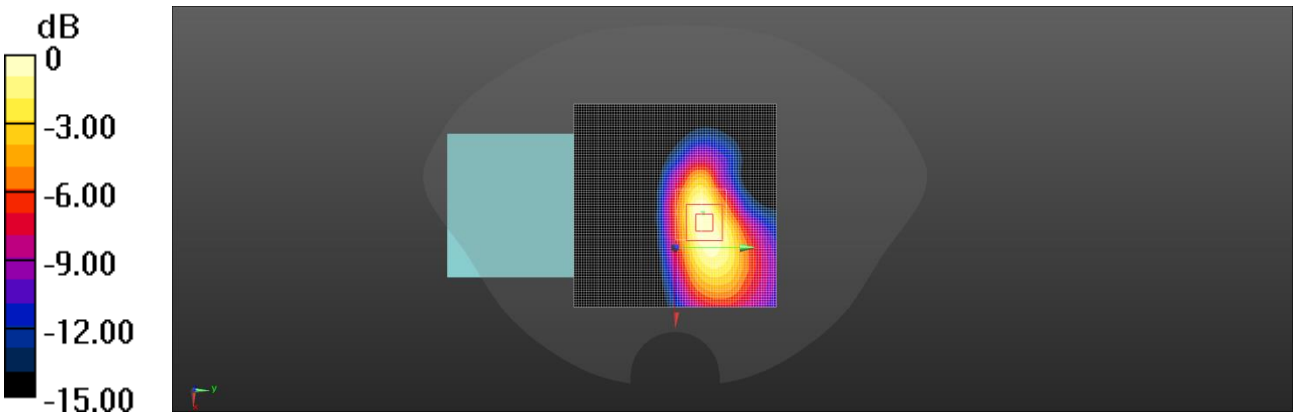
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.23 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.649 W/kg; SAR(10 g) = 0.370 W/kg

Maximum value of SAR (measured) = 0.884 W/kg



0 dB = 0.884 W/kg = -0.54 dBW/kg

Date: 2024/10/21

Test Laboratory: DEKRA Lab

LTE Band 66-BW20_QPSK_1RB0Offset-Back-10mm-CH132322-1745MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band66; Duty Cycle: 1:1; Frequency: 1745 MHz; Medium parameters used: f = 1745 MHz; σ = 1.352 S/m; εr = 39.083; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(8.01, 8.4, 7.89) ; Calibrated: 2024/9/19
- 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 (91x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.09 W/kg

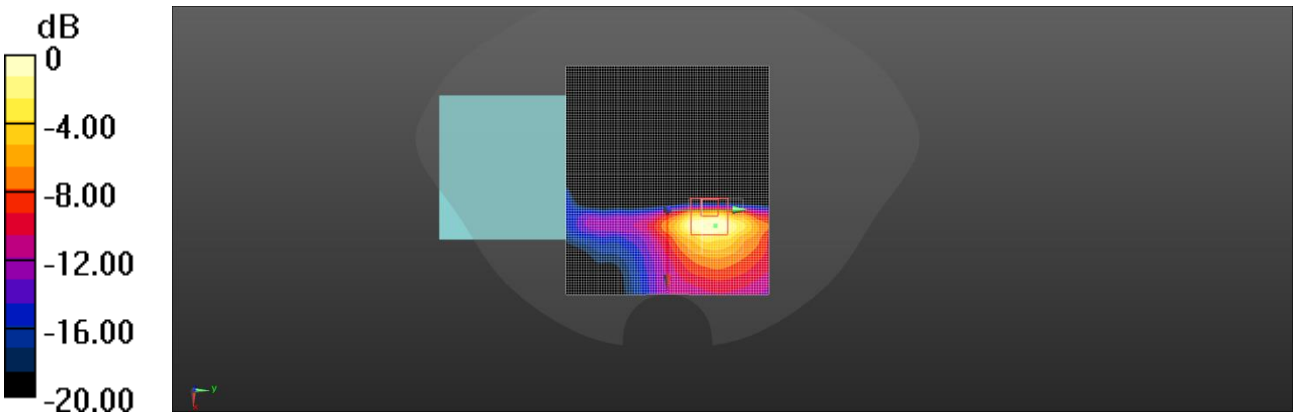
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.29 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.07 W/kg

SAR(1 g) = 0.625 W/kg; SAR(10 g) = 0.304 W/kg

Maximum value of SAR (measured) = 0.877 W/kg



0 dB = 0.877 W/kg = -0.57 dBW/kg

Date: 2024/10/16

Test Laboratory: DEKRA Lab

LTE Band 26-BW15_QPSK_1RB0Offset-Back-0mm-CH26915-836.5MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band26; Duty Cycle: 1:1; Frequency: 836.5 MHz; Medium parameters used: f = 836.5 MHz; σ = 0.898 S/m; εr = 41.28; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.7, 10.17, 9.56) ; Calibrated: 2024/9/19
- 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 (91x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.256 W/kg

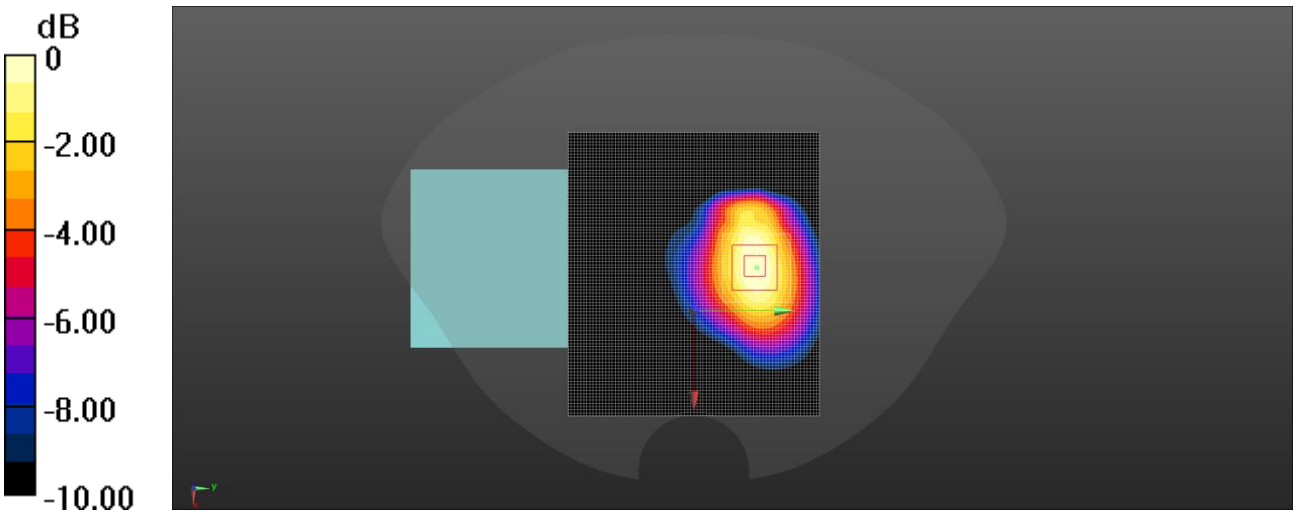
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.549 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.276 W/kg

SAR(1 g) = 0.187 W/kg; SAR(10 g) = 0.119 W/kg

Maximum value of SAR (measured) = 0.248 W/kg



0 dB = 0.248 W/kg = -6.06 dBW/kg

Date: 2024/10/25

Test Laboratory: DEKRA Lab

LTE Band 7-BW20_QPSK_1RB0Offset-Right Side-10mm-CH21100-2535MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band7; Duty Cycle: 1:1; Frequency: 2535 MHz; Medium parameters used: f = 2535 MHz; σ = 1.951 S/m; εr = 38.117; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.29, 7.64, 7.18) ; Calibrated: 2024/9/19
- 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 (101x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.07 W/kg

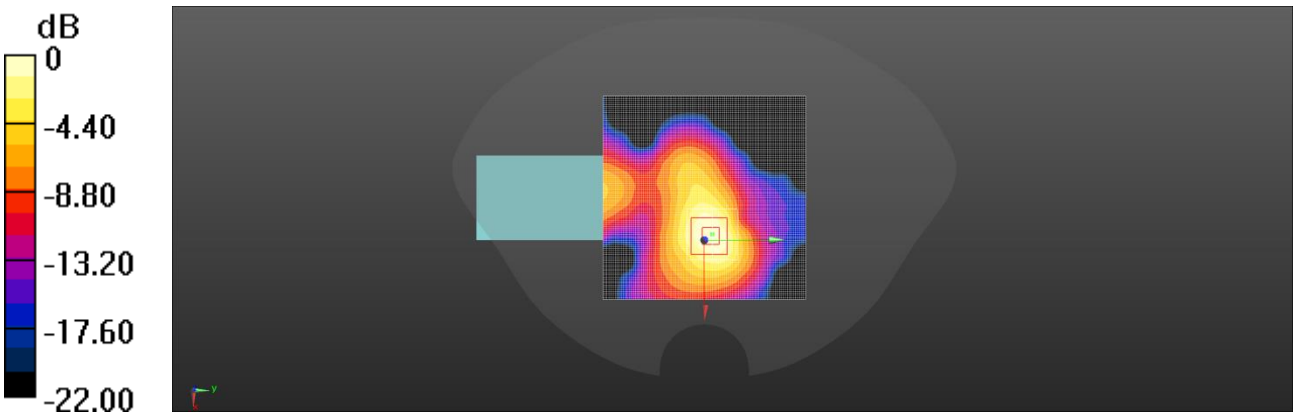
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.50 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.708 W/kg; SAR(10 g) = 0.373 W/kg

Maximum value of SAR (measured) = 1.05 W/kg



0 dB = 1.05 W/kg = 0.21 dBW/kg

Date: 2024/10/15

Test Laboratory: DEKRA Lab

LTE Band 12-BW10_QPSK_1RB0Offset-Back-10mm-CH23095-707.5MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band12; Duty Cycle: 1:1; Frequency: 707.5 MHz; Medium parameters used: f = 707.5 MHz; σ = 0.852 S/m; εr = 42.279; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.99, 10.47, 9.84) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.589 W/kg

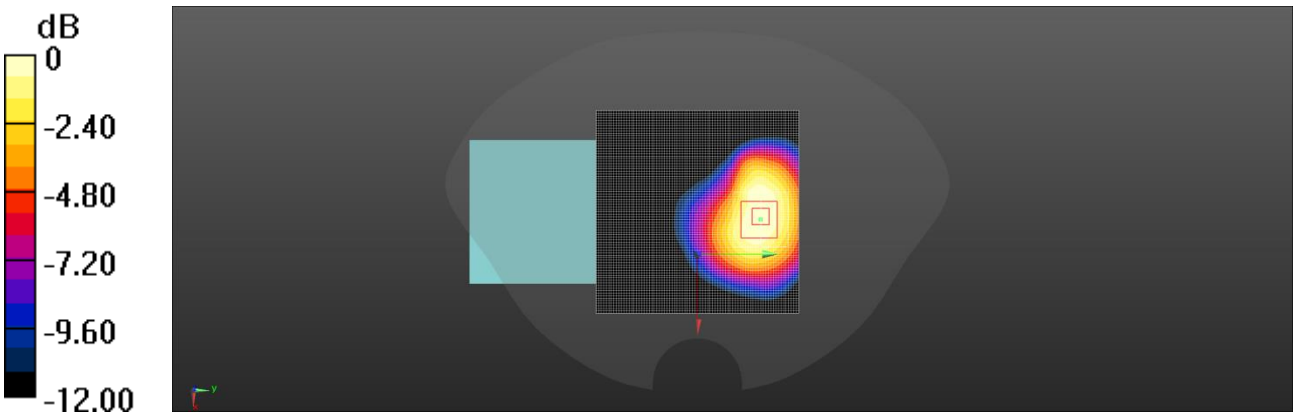
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.44 V/m; Power Drift = -0.18 dB

Peak SAR (extrapolated) = 0.643 W/kg

SAR(1 g) = 0.436 W/kg; SAR(10 g) = 0.285 W/kg

Maximum value of SAR (measured) = 0.573 W/kg



0 dB = 0.573 W/kg = -2.42 dBW/kg

Date: 2024/10/15

Test Laboratory: DEKRA Lab

LTE Band 13-BW10_QPSK_1RB0Offset-Back-10mm-CH23230-782MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band13; Duty Cycle: 1:1; Frequency: 782 MHz; Medium parameters used: f = 782 MHz; σ = 0.923 S/m; εr = 41.305; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.99, 10.47, 9.84) ; Calibrated: 2024/9/19
- 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 (91x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.154 W/kg

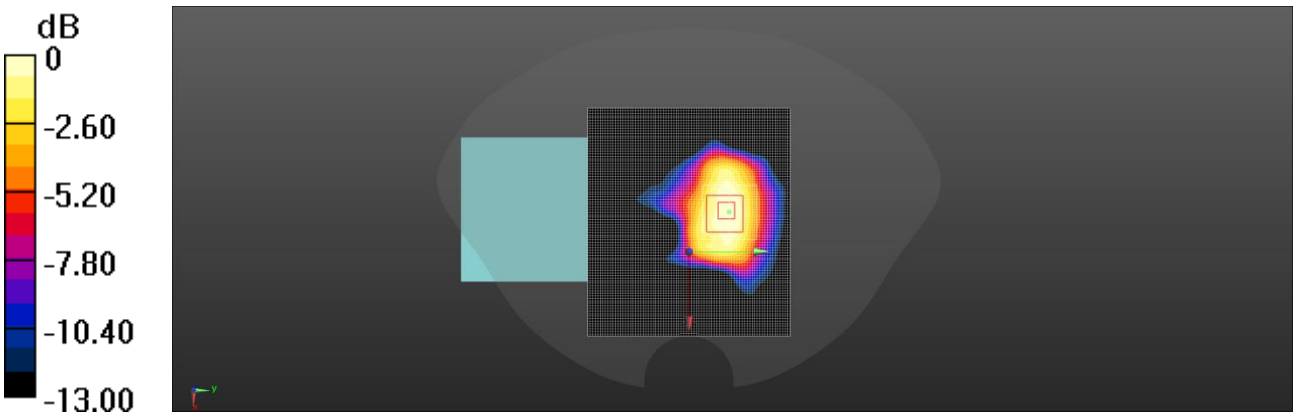
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.439 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.175 W/kg

SAR(1 g) = 0.114 W/kg; SAR(10 g) = 0.072 W/kg

Maximum value of SAR (measured) = 0.155 W/kg



0 dB = 0.155 W/kg = -8.10 dBW/kg

Date: 2024/10/15

Test Laboratory: DEKRA Lab

LTE Band 14-BW10_QPSK_1RB0Offset-Back-10mm-CH23330-793MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band14; Duty Cycle: 1:1; Frequency: 793 MHz; Medium parameters used: f = 793 MHz; σ = 0.934 S/m; εr = 41.15; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.99, 10.47, 9.84) ; Calibrated: 2024/9/19
- 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 (91x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.280 W/kg

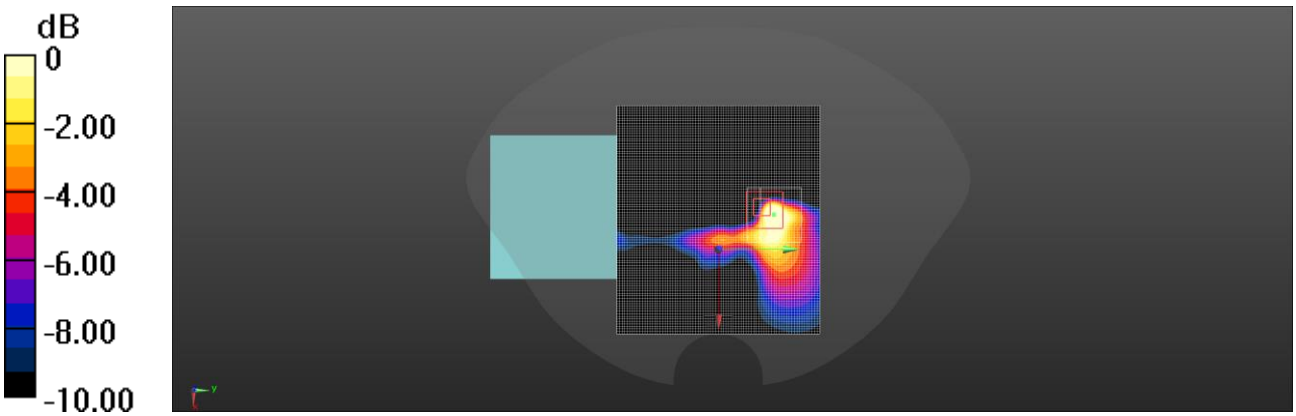
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.882 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.148 W/kg

SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.062 W/kg

Maximum value of SAR (measured) = 0.133 W/kg



0 dB = 0.133 W/kg = -8.76 dBW/kg

Date: 2024/10/15

Test Laboratory: DEKRA Lab

LTE Band 71-BW20_QPSK_1RB0Offset-Back-10mm-CH133322-683MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band71; Duty Cycle: 1:1; Frequency: 683 MHz; Medium parameters used: f = 683 MHz; σ = 0.83 S/m; εr = 42.654; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.99, 10.47, 9.84); Calibrated: 2024/9/19
- 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 (91x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.732 W/kg

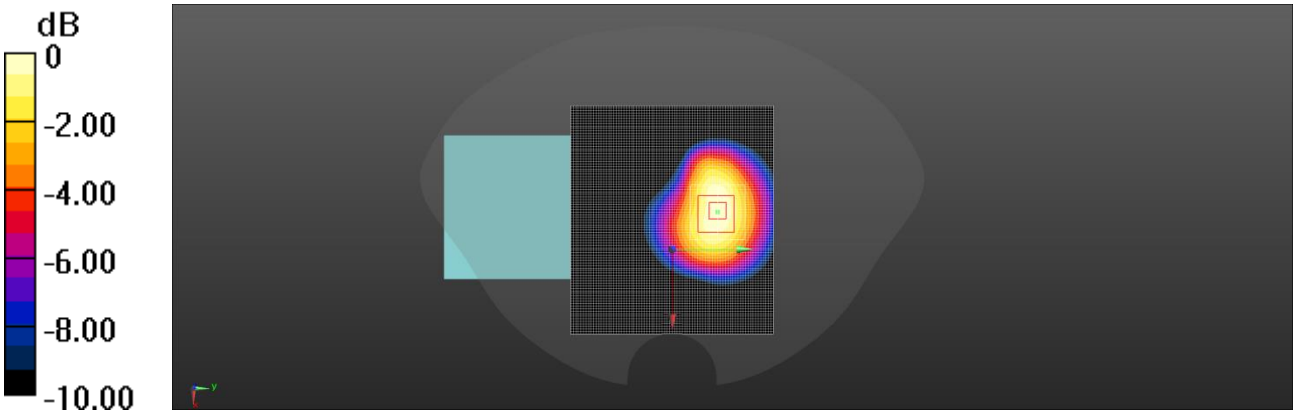
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.68 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 0.822 W/kg

SAR(1 g) = 0.560 W/kg; SAR(10 g) = 0.366 W/kg

Maximum value of SAR (measured) = 0.735 W/kg



0 dB = 0.735 W/kg = -1.34 dBW/kg

Date: 2024/10/25

Test Laboratory: DEKRA Lab

LTE Band 41-BW20_QPSK_1RB0Offset-Back-10mm-CH40620-2593MHz

DUT: POS Terminal

Communication System: UID 0, LTE TDD (0); Communication System Band: Band 41; Duty Cycle: 1:1.59; Frequency: 2593 MHz; Medium parameters used: f = 2593 MHz; σ = 2.018 S/m; εr = 37.887; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.29, 7.64, 7.18) ; Calibrated: 2024/9/19
- 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 (101x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.615 W/kg

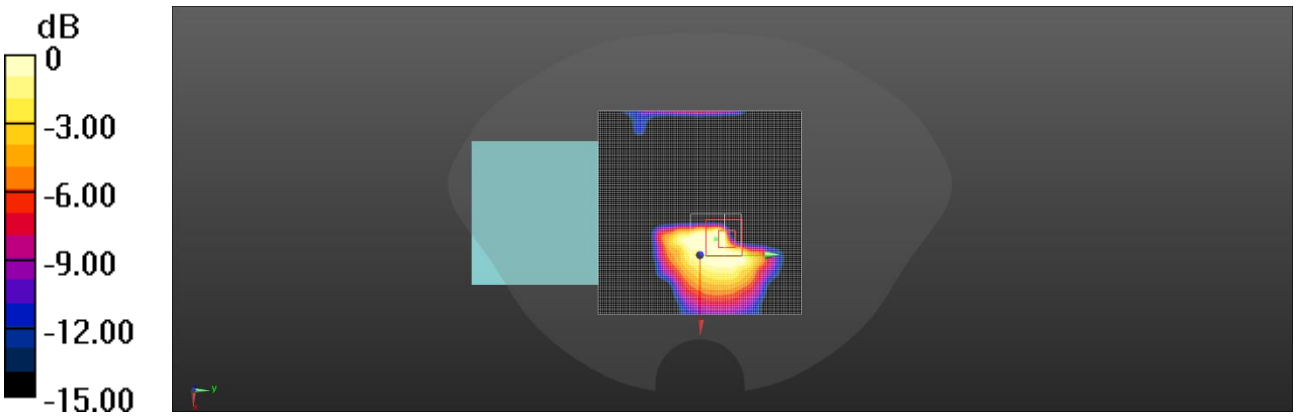
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.813 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.365 W/kg

SAR(1 g) = 0.215 W/kg; SAR(10 g) = 0.121 W/kg

Maximum value of SAR (measured) = 0.310 W/kg



0 dB = 0.310 W/kg = -5.09 dBW/kg

Date: 2024/10/28

Test Laboratory: DEKRA Lab

Bluetooth-3DH5-Back-10mm-CH78-2480Mhz

DUT: POS Terminal

Communication System: UID 0, Bluetooth (0); Communication System Band: BLE; Duty Cycle: 1:1.236; Frequency: 2480 MHz; Medium parameters used: f = 2480 MHz; σ = 1.893 S/m; εr = 38.436; ρ = 1000 kg/m3 ; Phantom section: Flat Section

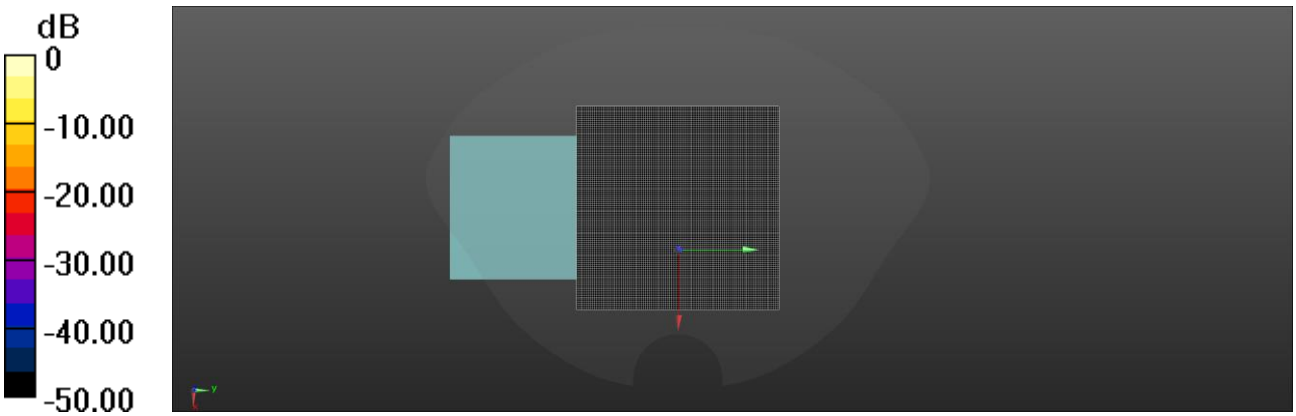
Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.25, 7.6, 7.14) ; Calibrated: 2024/9/19
- 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 (101x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0 W/kg



0 dB = 0 W/kg = -999.00 dBW/kg

Date: 2024/10/28

Test Laboratory: DEKRA Lab

2.4GWLAN-802.11b 1Mbps-Back-10mm-CH11-2462MHz

DUT: POS Terminal

Communication System: UID 0, WIFI 2.4G (0); Communication System Band: 802.11b(20M); Duty Cycle: 1:1;

Frequency: 2462 MHz; Medium parameters used: f = 2462 MHz; σ = 1.874 S/m; εr = 38.506; ρ = 1000 kg/m3 ;

Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.25, 7.6, 7.14) ; Calibrated: 2024/9/19
- 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 (101x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.0697 W/kg

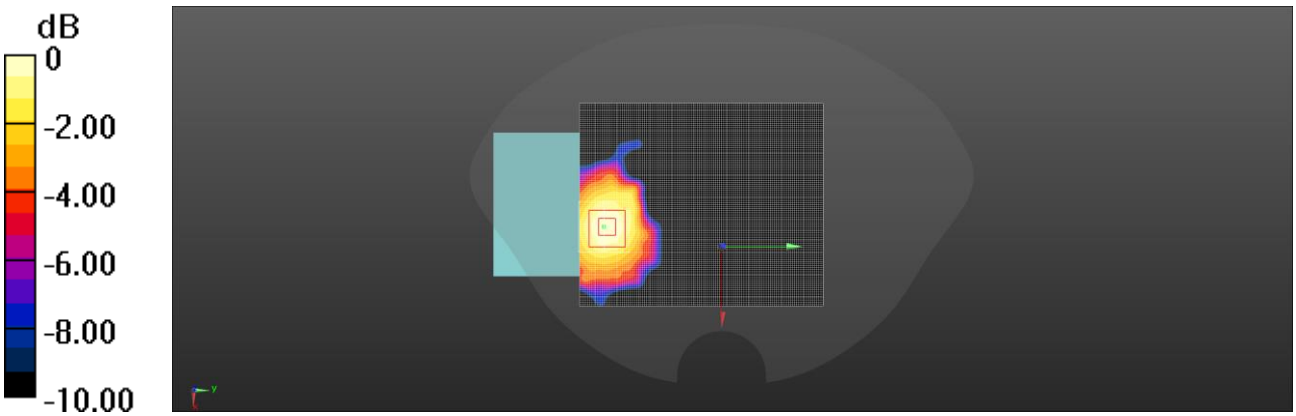
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.0810 W/kg

SAR(1 g) = 0.049 W/kg; SAR(10 g) = 0.028 W/kg

Maximum value of SAR (measured) = 0.0696 W/kg



0 dB = 0.0696 W/kg = -11.57 dBW/kg

Date: 2024/10/30

Test Laboratory: DEKRA Lab

5GWLAN-802.11a 6Mbps-Right Side-10mm-CH60-5300MHz

DUT: POS Terminal

Communication System: UID 0, WIFI 5G (0); Communication System Band: 802.11a(20M); Duty Cycle: 1:1.025;

Frequency: 5300 MHz; Medium parameters used: f = 5300 MHz; σ = 4.649 S/m; εr = 36.324; ρ = 1000 kg/m3 ;

Phantom section: Flat Section

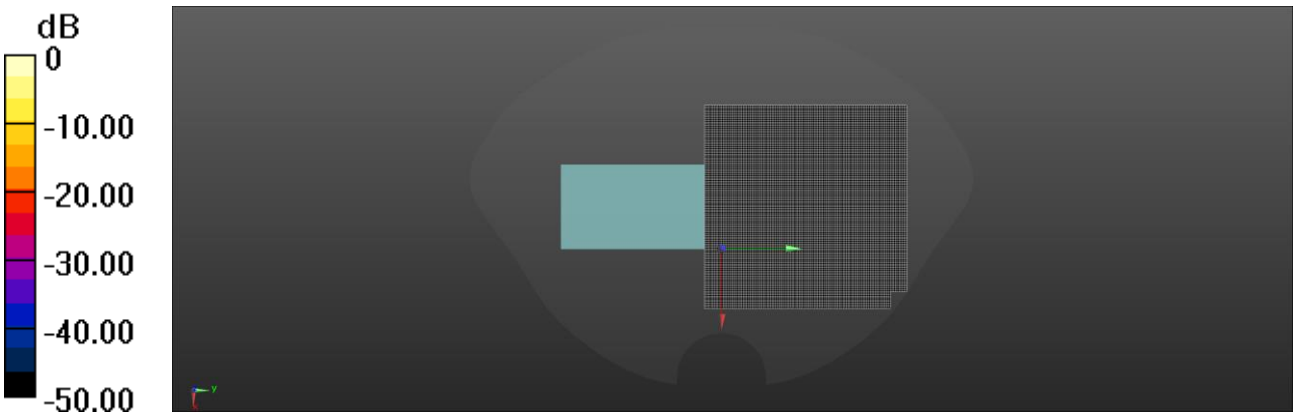
Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.42, 5.27, 5.33) ; Calibrated: 2024/9/19
- 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 (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0 W/kg



0 dB = 0 W/kg = -999.00 dBW/kg

Date: 2024/10/30

Test Laboratory: DEKRA Lab

5GWLAN-802.11a 6Mbps-Right Side-10mm-CH116-5580MHz

DUT: POS Terminal

Communication System: UID 0, WIFI 5G (0); Communication System Band: 802.11a(20M); Duty Cycle: 1:1.025;

Frequency: 5580 MHz; Medium parameters used: f = 5580 MHz; σ = 4.966 S/m; εr = 35.889; ρ = 1000 kg/m3 ;

Phantom section: Flat Section

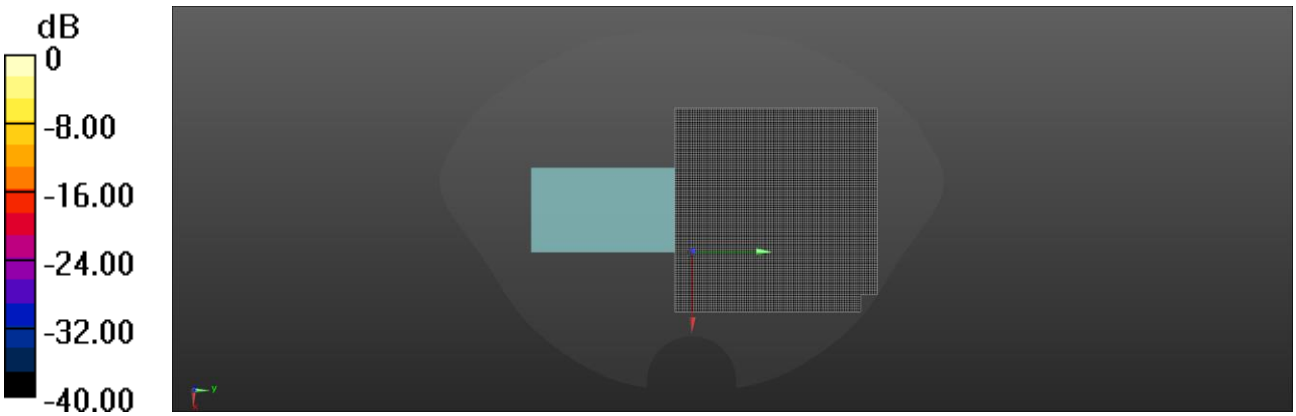
Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(4.64, 4.51, 4.56) ; Calibrated: 2024/9/19
- 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 (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0 W/kg



0 dB = 0 W/kg = -999.00 dBW/kg

Date: 2024/10/30

Test Laboratory: DEKRA Lab

5GWLAN-802.11ac VHT80 MCS0-Right Side-10mm-CH155-5775MHz

DUT: POS Terminal

Communication System: UID 0, WIFI 5G (0); Communication System Band: 802.11ac(80M); Duty Cycle: 1:1.104;

Frequency: 5775 MHz; Medium parameters used: f = 5775 MHz; σ = 5.194 S/m; εr = 35.562; ρ = 1000 kg/m3 ;

Phantom section: Flat Section

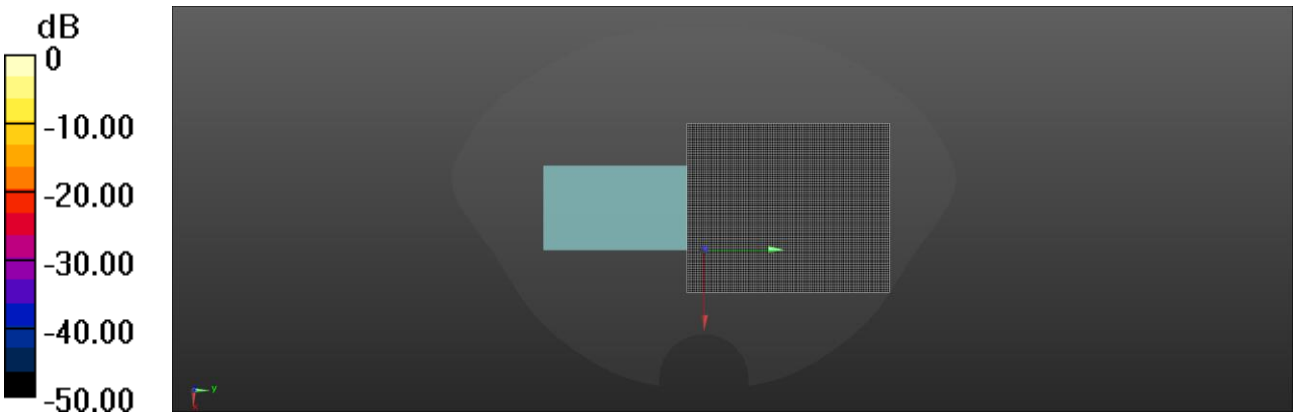
Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.05, 4.91, 4.97); Calibrated: 2024/9/19
- 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)

Unnamed procedure/Area Scan (101x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0 W/kg



0 dB = 0 W/kg = -999.00 dBW/kg

Date: 2024/10/16

Test Laboratory: DEKRA Lab

GSM850-GPRS 3 Tx_slots-Right Side-0mm-CH189-836.4MHz

DUT: POS Terminal

Communication System: UID 0, GSM (0); Communication System Band: GSM 850; Duty Cycle: 1:2.77; Frequency: 836.4 MHz; Medium parameters used: f = 836.4 MHz; σ = 0.903 S/m; εr = 41.219; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.7, 10.17, 9.56) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.865 W/kg

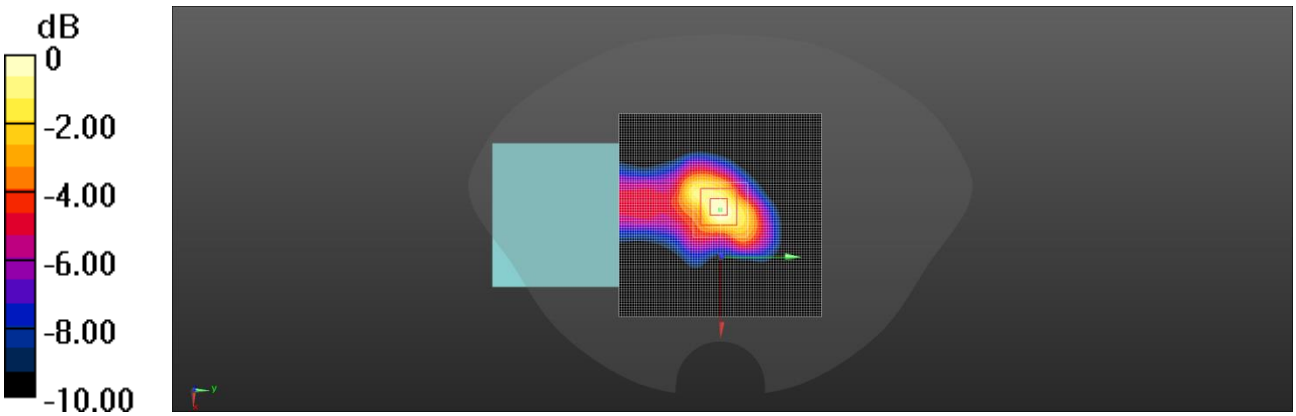
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.78 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.593 W/kg; SAR(10 g) = 0.339 W/kg

Maximum value of SAR (measured) = 0.863 W/kg



0 dB = 0.863 W/kg = -0.64 dBW/kg

Date: 2024/10/22

Test Laboratory: DEKRA Lab

GSM-1900_GPRS 2_Tx slots-Back-0mm-CH661-1880MHz

DUT: POS Terminal

Communication System: UID 0, GSM (0); Communication System Band: GSM 1900; Duty Cycle: 1:4.15; Frequency: 1880 MHz; Medium parameters used: f = 1880 MHz; σ = 1.376 S/m; εr = 39.136; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.77, 8.15, 7.66) ; Calibrated: 2024/9/19
- 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 (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.71 W/kg

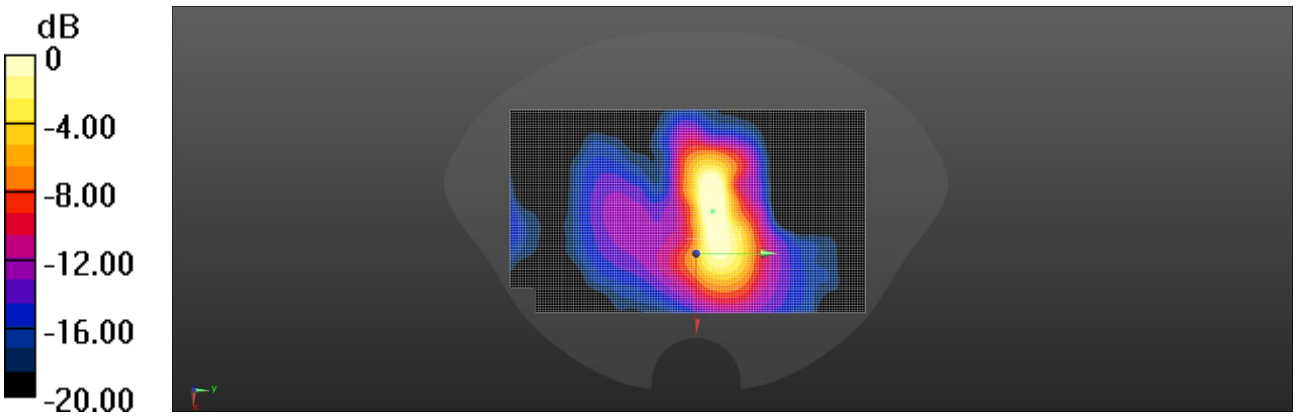
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.26 V/m; Power Drift = 0.02

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.993 W/kg; SAR(10 g) = 0.578 W/kg.

Maximum value of SAR (measured) = 1.02 W/kg



0 dB = 1.02 W/kg = 0.09 dBW/kg

Date: 2024/10/22

Test Laboratory: DEKRA Lab

WCDMA II-RMC_12.2K-Back-0mm-CH9400- 1880MHz

DUT: POS Terminal

Communication System: UID 0, WCDMA (0); Communication System Band: WCDMA II; Duty Cycle: 1:1; Frequency: 1880 MHz; Medium parameters used: f = 1880 MHz; σ = 1.376 S/m; εr = 39.136; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.77, 8.15, 7.66) ; Calibrated: 2024/9/19
- 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 (81x141x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.48 W/kg

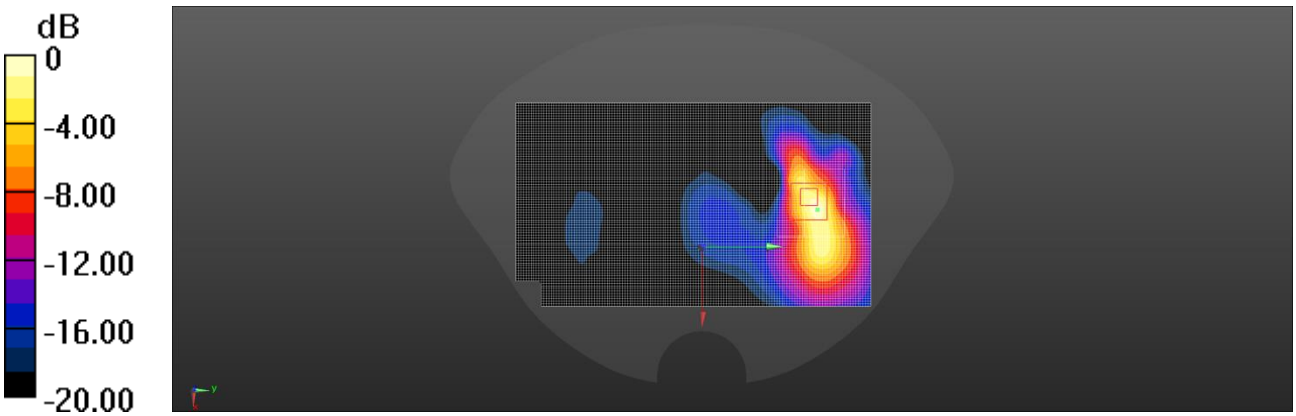
Zoom Scan (6x6x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.925 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 2.46 W/kg

SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.458 W/kg

Maximum value of SAR (measured) = 1.68 W/kg



0 dB = 1.68 W/kg = 2.25 dBW/kg

Date: 2024/10/21

Test Laboratory: DEKRA Lab

WCDMA IV-RMC_12.2K-Back-0mm-CH1413- 1732.6MHz

DUT: POS Terminal

Communication System: UID 0, WCDMA (0); Communication System Band: WCDMA IV; Duty Cycle: 1:1; Frequency: 1732.6 MHz; Medium parameters used: f = 1733 MHz; σ = 1.338 S/m; εr = 39.138; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(8.01, 8.4, 7.89) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.91 W/kg

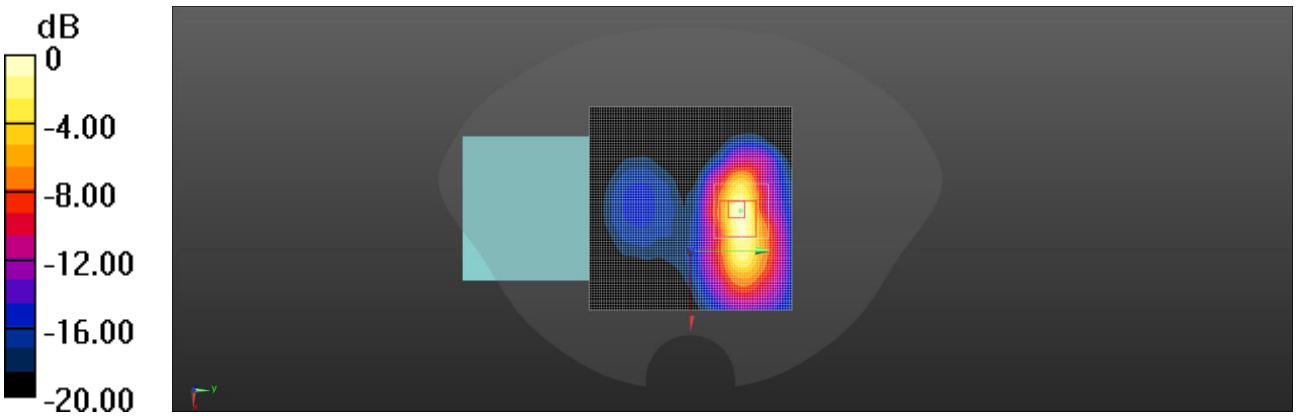
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.942 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 3.38 W/kg

SAR(1 g) = 1.79 W/kg; SAR(10 g) = 0.849 W/kg

Maximum value of SAR (measured) = 2.79 W/kg



0 dB = 2.79 W/kg = 4.46 dBW/kg

Date: 2024/10/16

Test Laboratory: DEKRA Lab

WCDMA V-RMC_12.2K-Back-0mm-CH4182- 836.4MHz

DUT: POS Terminal

Communication System: UID 0, WCDMA (0); Communication System Band: WCDMA V; Duty Cycle: 1:1; Frequency: 836.4 MHz; Medium parameters used: f = 836.4 MHz; σ = 0.903 S/m; εr = 41.219; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.7, 10.17, 9.56) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.763 W/kg

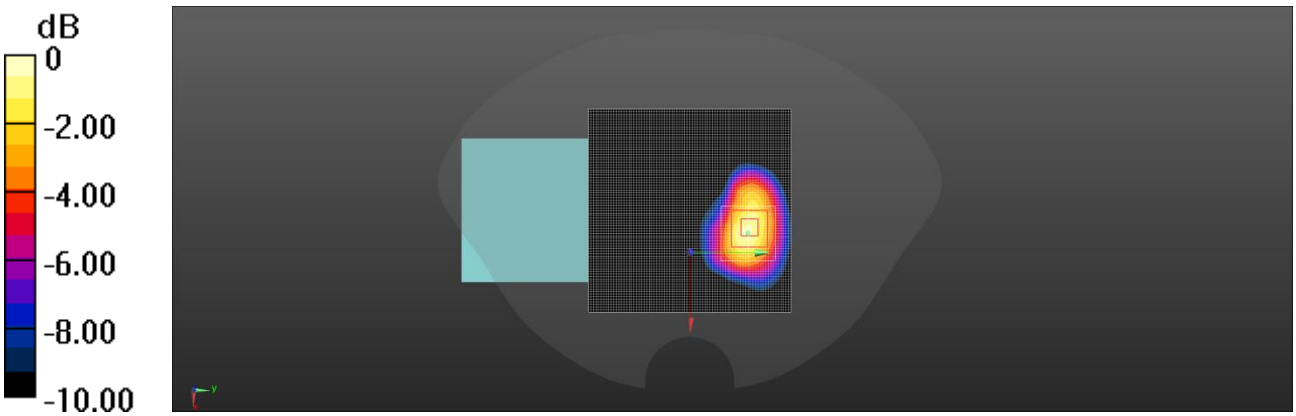
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.078 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.555 W/kg; SAR(10 g) = 0.305 W/kg

Maximum value of SAR (measured) = 0.859 W/kg



0 dB = 0.859 W/kg = -0.66 dBW/kg

Date: 2024/10/22

Test Laboratory: DEKRA Lab

LTE Band 25-BW20_QPSK_1RB0Offset-Back-0mm-CH26340-1880MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band25; Duty Cycle: 1:1; Frequency: 1880 MHz; Medium parameters used: f = 1880 MHz; σ = 1.376 S/m; εr = 39.136; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.77, 8.15, 7.66) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.63 W/kg

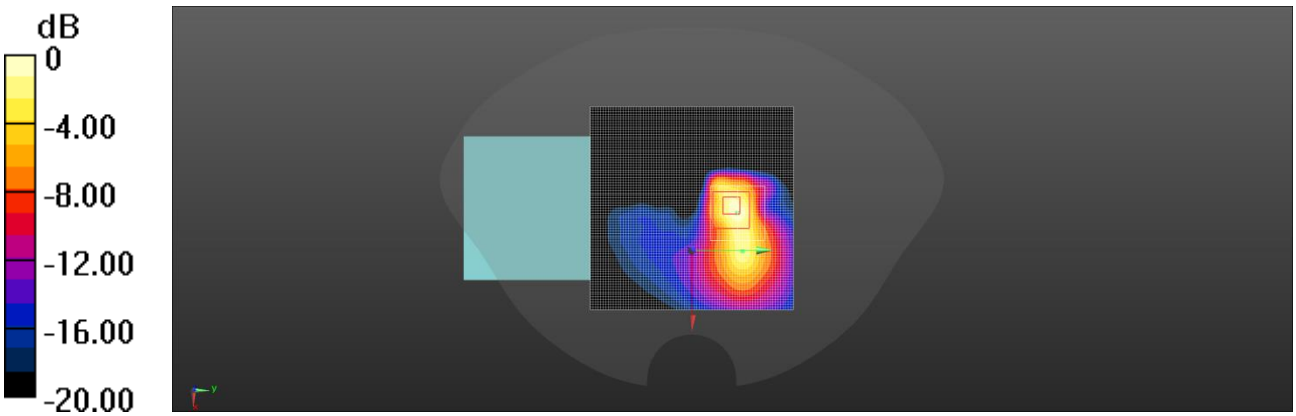
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.133 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.63 W/kg

SAR(1 g) = 1.23 W/kg; SAR(10 g) = 0.517 W/kg

Maximum value of SAR (measured) = 1.78 W/kg



0 dB = 1.78 W/kg = 2.50 dBW/kg

Date: 2024/10/21

Test Laboratory: DEKRA Lab

LTE Band 4-BW20_QPSK_1RB0Offset-Back-0mm-CH20175-1732.5MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band4; Duty Cycle: 1:1.0; Frequency: 1745 MHz; Medium parameters used: f = 1733 MHz; σ = 1.338 S/m; εr = 39.138; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.72, 7.5, 7.59; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.41 W/kg

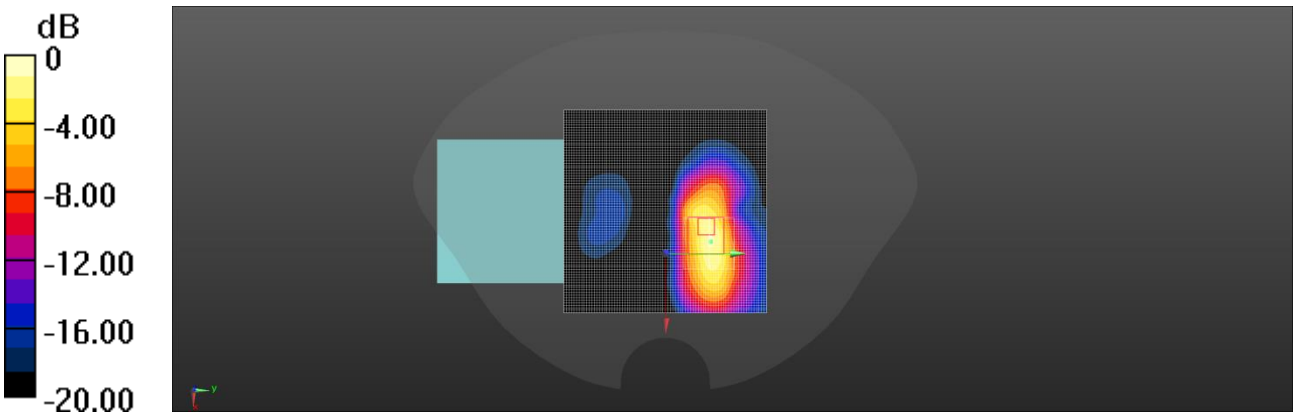
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.727 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 4.31 W/kg

SAR(1 g) = 1.91 W/kg; SAR(10 g) = 0.911 W/kg

Maximum value of SAR (measured) = 3.17 W/kg



0 dB = 3.17 W/kg = 5.01 dBW/kg

Date: 2024/10/21

Test Laboratory: DEKRA Lab

LTE Band 66-BW20_QPSK_1RB0Offset-Back-0mm-CH132322-1745MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band66; Duty Cycle: 1:1; Frequency: 1745 MHz; Medium parameters used: f = 1745 MHz; σ = 1.352 S/m; εr = 39.083; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(8.01, 8.4, 7.89); Calibrated: 2024/9/19
- 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 (91x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.08 W/kg

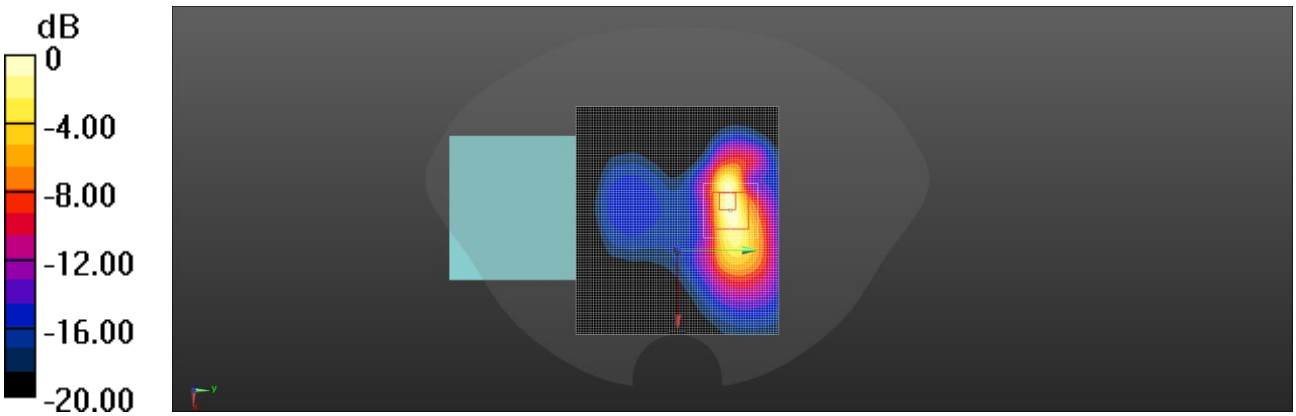
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.707 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 4.08 W/kg

SAR(1 g) = 2.08 W/kg; SAR(10 g) = 0.981 W/kg

Maximum value of SAR (measured) = 3.33 W/kg



0 dB = 3.33 W/kg = 5.22 dBW/kg

Date: 2024/10/16

Test Laboratory: DEKRA Lab

LTE Band 26-BW15_QPSK_1RB0Offset-Back-0mm-CH26915-836.5MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band26; Duty Cycle: 1:1; Frequency: 836.5 MHz; Medium parameters used: f = 836.5 MHz; σ = 0.898 S/m; εr = 41.28; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.7, 10.17, 9.56) ; Calibrated: 2024/9/19
- 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 (91x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.804 W/kg

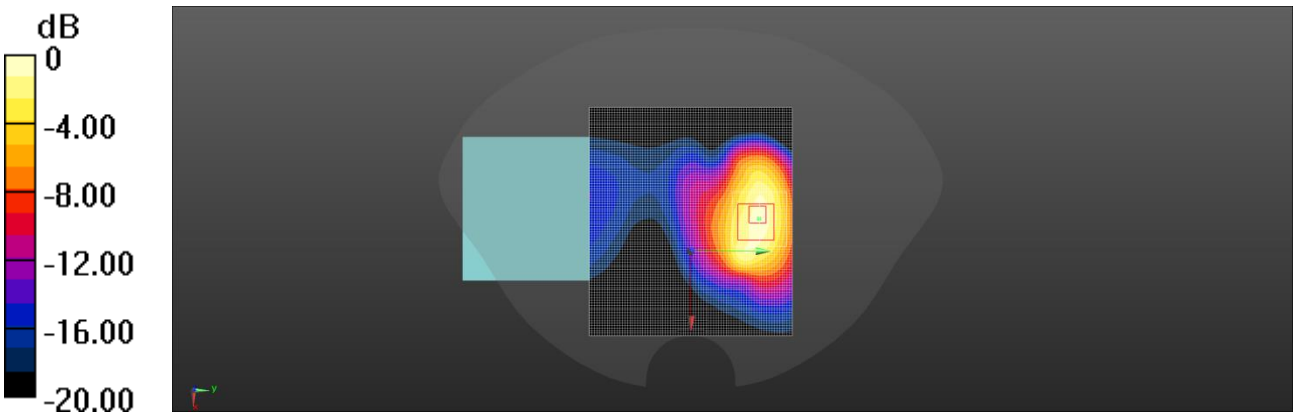
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.327 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.89 W/kg

SAR(1 g) = 0.749 W/kg; SAR(10 g) = 0.358 W/kg

Maximum value of SAR (measured) = 0.911 W/kg



0 dB = 0.911 W/kg = -0.40 dBW/kg

Date: 2024/10/25

Test Laboratory: DEKRA Lab

LTE Band 7-BW20_QPSK_1RB0Offset-Right Side-0mm-CH21100-2535MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band7; Duty Cycle: 1:1; Frequency: 2535 MHz; Medium parameters used: f = 2535 MHz; σ = 1.951 S/m; εr = 38.117; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.29, 7.64, 7.18) ; Calibrated: 2024/9/19
- 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 (101x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 3.95 W/kg

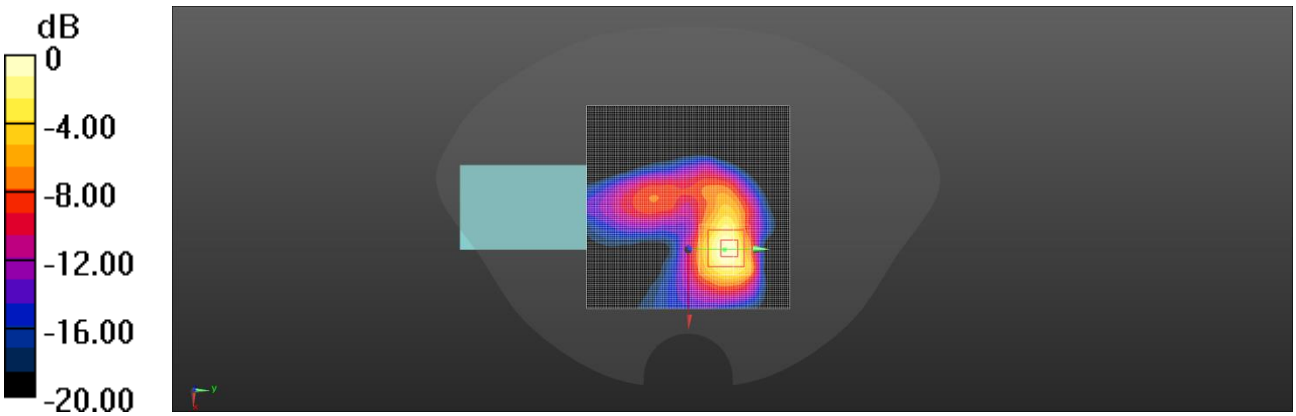
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.44 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 4.60 W/kg

SAR(1 g) = 2.53 W/kg; SAR(10 g) = 1.16 W/kg

Maximum value of SAR (measured) = 3.81 W/kg



0 dB = 3.81 W/kg = 5.81 dBW/kg

Date: 2024/10/15

Test Laboratory: DEKRA Lab

LTE Band 12-BW10_QPSK_1RB0Offset-Back-0mm-CH23095-707.5MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band12; Duty Cycle: 1:1; Frequency: 707.5 MHz; Medium parameters used: f = 707.5 MHz; σ = 0.852 S/m; εr = 42.279; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.99, 10.47, 9.84) ; Calibrated: 2024/9/19
- 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 (91x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 3.87 W/kg

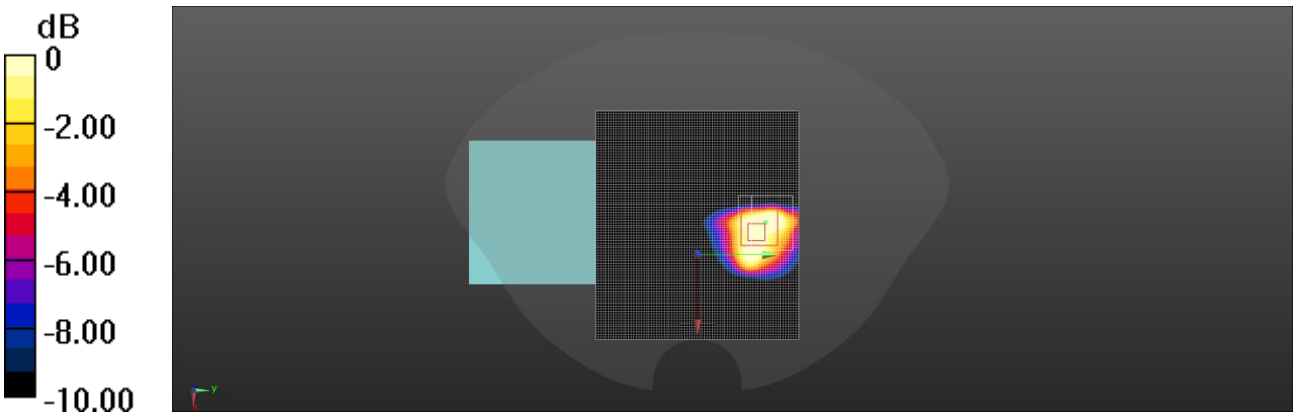
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.59 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.97 W/kg

SAR(1 g) = 1.58 W/kg; SAR(10 g) = 0.926 W/kg

Maximum value of SAR (measured) = 2.39 W/kg



0 dB = 2.39 W/kg = 3.78 dBW/kg

Date: 2024/10/15

Test Laboratory: DEKRA Lab

LTE Band 13-BW10_QPSK_1RB0Offset-Left Side-0mm-CH23230-782MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band13; Duty Cycle: 1:1; Frequency: 782 MHz; Medium parameters used: f = 782 MHz; σ = 0.923 S/m; εr = 41.305; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.99, 10.47, 9.84) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 1.05 W/kg

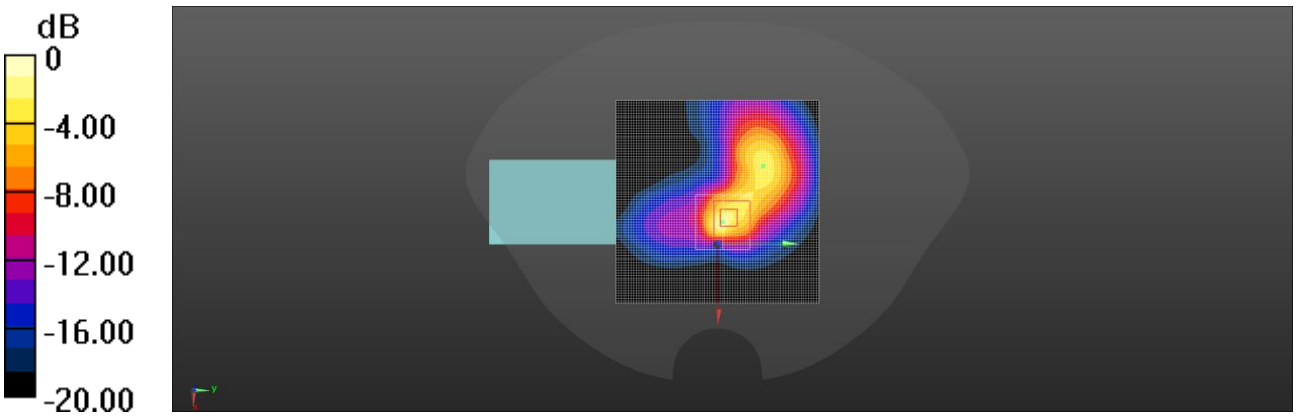
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.34 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 3.41 W/kg

SAR(1 g) = 0.863 W/kg; SAR(10 g) = 0.275 W/kg

Maximum value of SAR (measured) = 1.51 W/kg



0 dB = 1.51 W/kg = 1.79 dBW/kg

Date: 2024/10/15

Test Laboratory: DEKRA Lab

LTE Band 14-BW10_QPSK_1RB0Offset-Left Side-0mm-CH23330-793MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band14; Duty Cycle: 1:1; Frequency: 793 MHz; Medium parameters used: f = 793 MHz; σ = 0.934 S/m; εr = 41.15; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.99, 10.47, 9.84) ; Calibrated: 2024/9/19
- 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 (81x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.536 W/kg

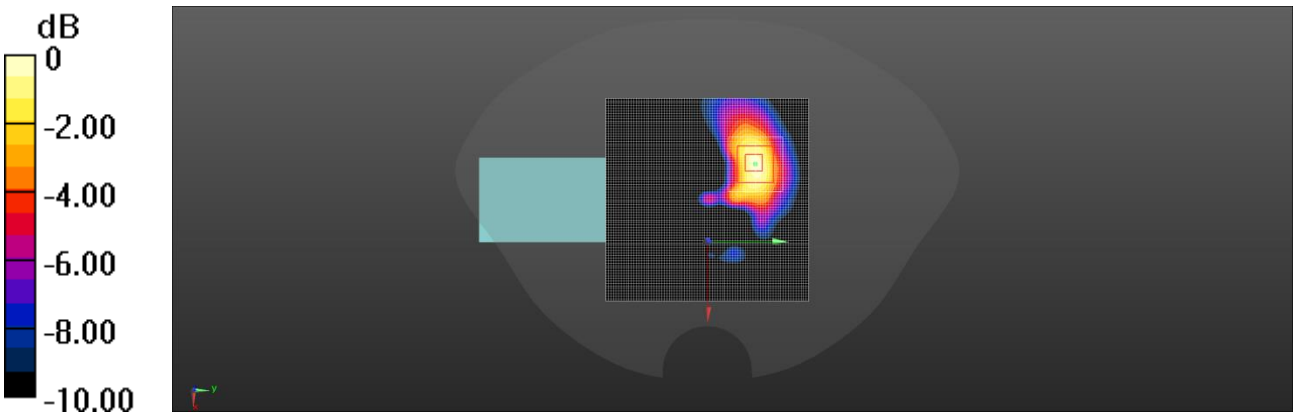
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.84 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.664 W/kg

SAR(1 g) = 0.384 W/kg; SAR(10 g) = 0.211 W/kg

Maximum value of SAR (measured) = 0.574 W/kg



0 dB = 0.574 W/kg = -2.41 dBW/kg

Date: 2024/10/15

Test Laboratory: DEKRA Lab

LTE Band 71-BW20_QPSK_1RB0Offset-Back-0mm-CH133322-683MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band71; Duty Cycle: 1:1; Frequency: 683 MHz; Medium parameters used: f = 683 MHz; σ = 0.83 S/m; εr = 42.654; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(9.99, 10.47, 9.84) ; Calibrated: 2024/9/19
- 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 (91x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 2.48 W/kg

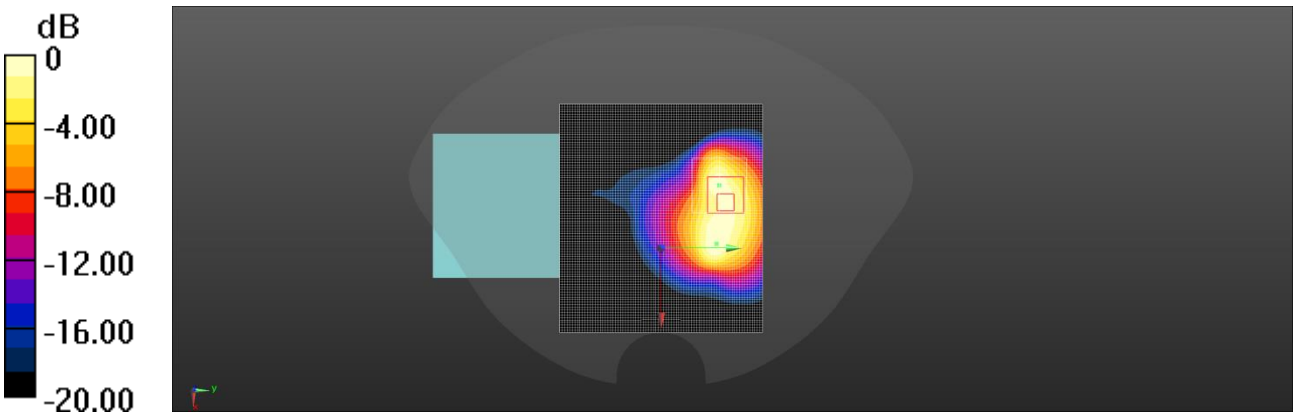
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.92 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.92 W/kg

SAR(1 g) = 1.55 W/kg; SAR(10 g) = 0.865 W/kg

Maximum value of SAR (measured) = 2.52 W/kg



0 dB = 2.52 W/kg = 4.01 dBW/kg

Date: 2024/10/25

Test Laboratory: DEKRA Lab

LTE Band 41-BW20_QPSK_1RB0Offset-Right Side-0mm-CH40620-2593MHz

DUT: POS Terminal

Communication System: UID 0, LTE FDD (0); Communication System Band: Band7; Duty Cycle: 1:1.59; Frequency: 2535 MHz; Medium parameters used: f = 2535 MHz; σ = 1.951 S/m; εr = 38.117; ρ = 1000 kg/m3 ; Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.29, 7.64, 7.18); Calibrated: 2024/9/19
- 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 (101x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 1.21 W/kg

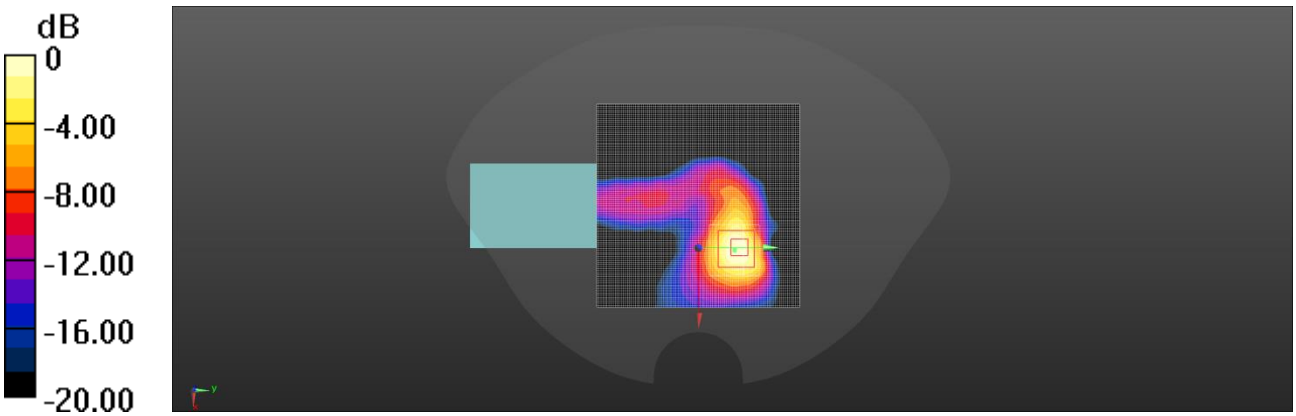
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.880 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.743 W/kg; SAR(10 g) = 0.342 W/kg

Maximum value of SAR (measured) = 1.12 W/kg



0 dB = 1.12 W/kg = 0.49 dBW/kg

Date: 2024/10/28

Test Laboratory: DEKRA Lab

Bluetooth_3DH5-Back-0mm-CH78-2480MHz

DUT: POS Terminal

Communication System: UID 0, Bluetooth (0); Communication System Band: BDR+EDR; Duty Cycle: 1:1.236;

Frequency: 2480 MHz; Medium parameters used: f = 2480 MHz; σ = 1.893 S/m; εr = 38.436; ρ = 1000 kg/m3 ;

Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.25, 7.6, 7.14) ; Calibrated: 2024/9/19
- 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 (101x101x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.000581 W/kg

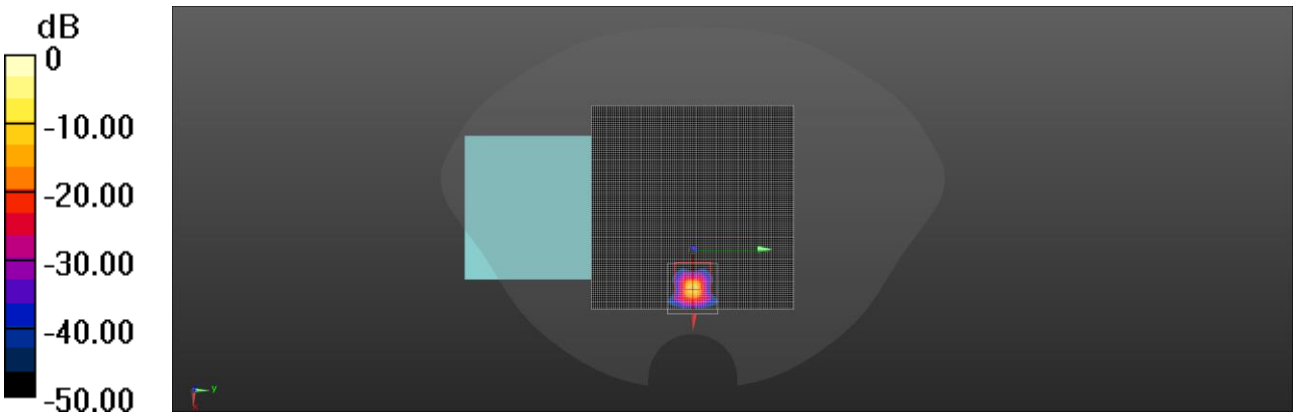
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 0 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.00123 W/kg

SAR(1 g) = 1.17e-005 W/kg; SAR(10 g) = 1.17e-006 W/kg

Maximum value of SAR (measured) = 0.00485 W/kg



0 dB = 0.00485 W/kg = -23.14 dBW/kg

Date: 2024/10/28

Test Laboratory: DEKRA Lab

2.4GWLAN-802.11b 1Mbps-Right Side-0mm-CH11-2462MHz

DUT: POS Terminal

Communication System: UID 0, WIFI 2.4G (0); Communication System Band: 802.11b(20M); Duty Cycle: 1:1.002;

Frequency: 2462 MHz; Medium parameters used: f = 2462 MHz; σ = 1.874 S/m; εr = 38.506; ρ = 1000 kg/m3 ;

Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(7.03, 6.83, 6.91) ; Calibrated: 2024/9/19
- 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 (61x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.403 W/kg

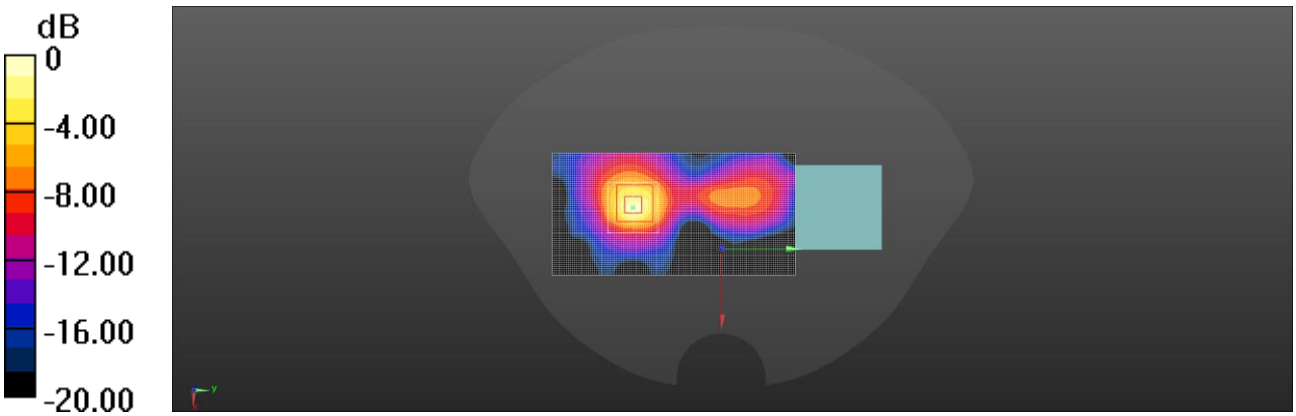
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.301 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.613 W/kg

SAR(1 g) = 0.256 W/kg; SAR(10 g) = 0.105 W/kg

Maximum value of SAR (measured) = 0.470 W/kg



0 dB = 0.470 W/kg = -3.28 dBW/kg

Date: 2024/10/30

Test Laboratory: DEKRA Lab

5GWLAN-802.11a 6Mbps-Right Side-0mm-CH60-5300Mhz-22dbm

DUT: POS Terminal

Communication System: UID 0, WIFI 5G (0); Communication System Band: 802.11a(20M); Duty Cycle: 1:1.025;

Frequency: 5300 MHz; Medium parameters used: f = 5300 MHz; σ = 4.649 S/m; εr = 36.324; ρ = 1000 kg/m3 ;

Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.42, 5.27, 5.33) ; Calibrated: 2024/9/19
- 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)

Unnamed procedure/Area Scan (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.714 W/kg

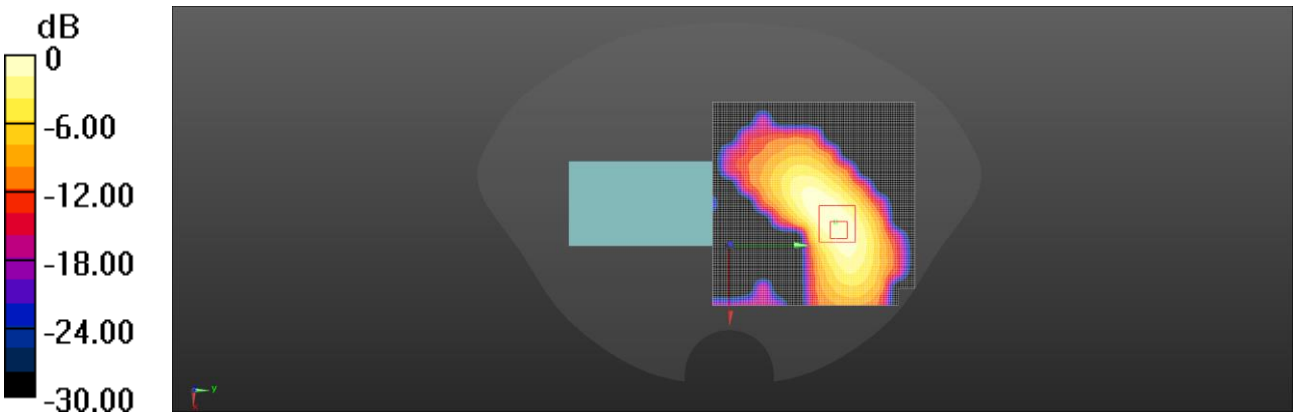
Unnamed procedure/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 0.6020 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 1.80 W/kg

SAR(1 g) = 0.492 W/kg; SAR(10 g) = 0.153 W/kg

Maximum value of SAR (measured) = 0.700 W/kg



0 dB = 0.700 W/kg = -1.55 dBW/kg

Date: 2024/10/30

Test Laboratory: DEKRA Lab

5GWLAN-802.11a 6Mbps-Right Side-0mm-CH116-5580MHz

DUT: POS Terminal

Communication System: UID 0, WIFI 5G (0); Communication System Band: 802.11a(20M); Duty Cycle: 1:1.025;

Frequency: 5580 MHz; Medium parameters used: f = 5580 MHz; σ = 4.966 S/m; εr = 35.889; ρ = 1000 kg/m3 ;

Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(4.64, 4.51, 4.56) ; Calibrated: 2024/9/19
- 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 (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.867 W/kg

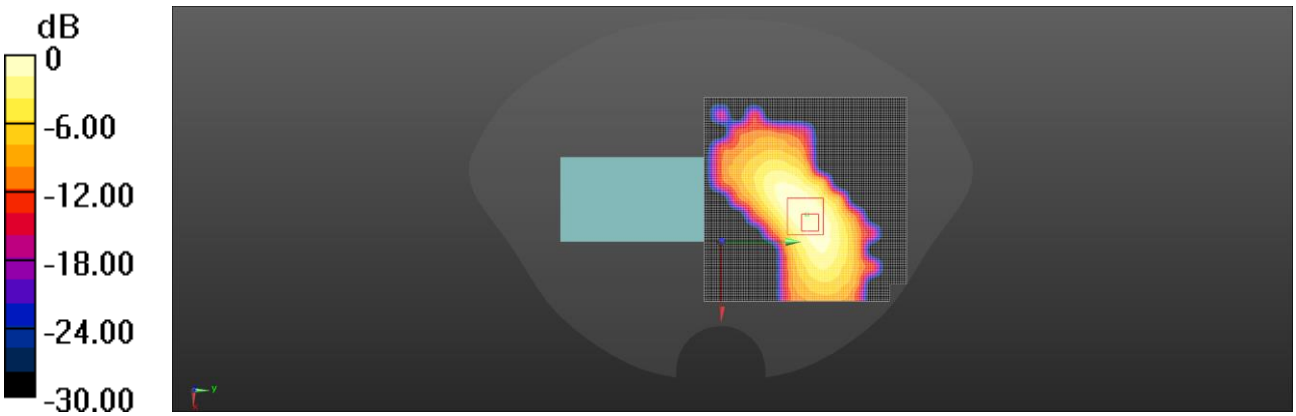
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.721 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 3.19 W/kg

SAR(1 g) = 0.614 W/kg; SAR(10 g) = 0.210 W/kg

Maximum value of SAR (measured) = 0.864 W/kg



0 dB = 0.864 W/kg = -0.63 dBW/kg

Date: 2024/10/30

Test Laboratory: DEKRA Lab

5GWLAN-802.11ac VHT80 MCS0-Right Side-0mm-CH155-5775MHz

DUT: POS Terminal

Communication System: UID 0, WIFI 5G (0); Communication System Band: 802.11ac(80M); Duty Cycle: 1:1.104;

Frequency: 5775 MHz; Medium parameters used: f = 5775 MHz; σ = 5.194 S/m; εr = 35.562; ρ = 1000 kg/m3 ;

Phantom section: Flat Section

Ambient temperature (℃): 23.5, Liquid temperature (℃): 22.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7761; ConvF(5.05, 4.91, 4.97) ; Calibrated: 2024/9/19
- 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 (121x121x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm

Maximum value of SAR (interpolated) = 0.851 W/kg

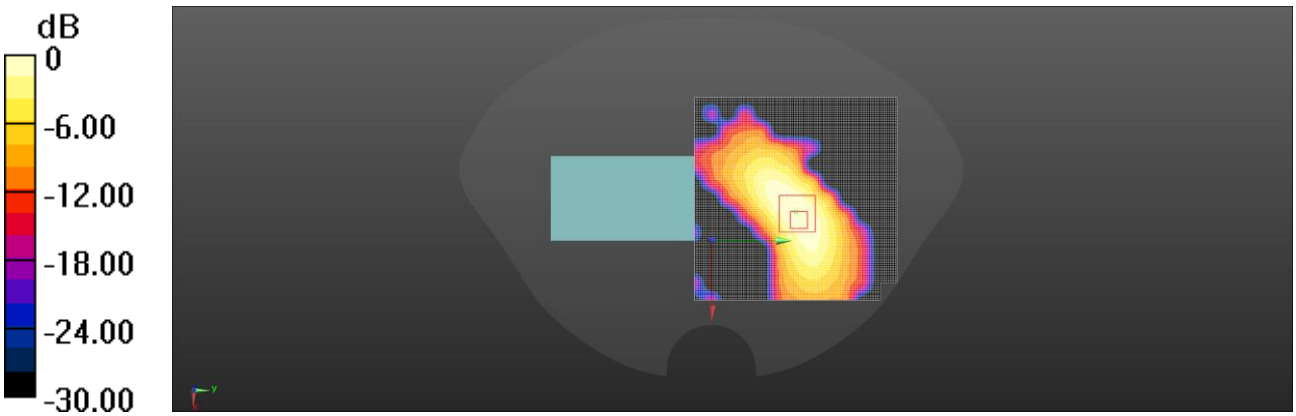
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.516 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 2.32 W/kg

SAR(1 g) = 0.609 W/kg; SAR(10 g) = 0.193 W/kg

Maximum value of SAR (measured) = 0.855 W/kg



0 dB = 0.855 W/kg = -0.68 dBW/kg

Note: We evaluated all channels, antennas, and RB, providing data for only the worst channel mode.

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
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_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

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

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)
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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 $\vartheta = 0$ ($f \leq 900$ 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 $f \leq 800$ 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).