RF Exposure report

The following samples were submitted and identified on behalf of the client as:

Product Name	Notebook Computer
Brand Name	HP
Model No.	HSN-I62C
Applicant	HP Inc.
	1501 Page Mill Road, Palo Alto CA 94304 USA
Standards	IEEE/ANSI C95.1-1992, IEEE 1528-2013
FCC ID	B94HNI62PAR
Date of EUT Receipt	Dec. 02, 2024
Date of Test(s)	Dec. 12, 2024 ~ Dec. 14, 2024
Date of Issue	Feb. 10, 2025

In the configuration tested, the EUT complied with the standards specified above.

Remarks:

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

This report may only be reproduced and distributed in full. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS Taiwan Ltd. Central RF Lab or testing done by SGS Taiwan Ltd. Central RF Lab in connection with distribution or use of the product described in this report must be approved by SGS Taiwan Ltd. Central RF Lab in writing.

Signed on behalf of SGS

Clerk / Kimmy Chiou	PM / Afu Chen	Approved By / John Yeh
Kimmy Chiou	afu Chen	John Yeh

Date: Feb. 10, 2025

Revision History

Report Number	Revision	Description	Issue Date	Revised By	Remark
TESA2412000851EN	00	Initial creation of document	Feb. 06, 2025	Kimmy Chiou	
TESA2412000851EN	01	Modify comment	Feb. 10, 2025	Kimmy Chiou	*

Note:

1. The mark " * " is the revised version of the report due to comments submitted by the certification.
2. Measurement results in the original test report TESA2412000850EN are fully leveraged in this test report.
3. The data for this test report WWAN leverages the measurements from the original test report
4. TESA2412000850EN.
5. The data for this test report Top Edge leverages the measurements from the original test report
6. 240828-04.TR05.
7. The data for this test report WLAN(2.4G / 5G) leverages the measurements from the original test report 231109-06.TR07.
8. The data for this test report WLAN(6E) leverages the measurements from the original test report 231109-06.TR01.

Contents

1 GENERAL INFORMATION

1.1 Test Methodology

The SAR testing method and procedure for this device is in accordance with the following standards:
IEEE/ANSI C95.1-1992
IEEE 1528-2013
KDB447498D01v06
KDB865664D01v01r04
KDB865664D02v01r02
KDB616217D04v01r02
KDB941225D01v03r01
KDB941225D05v02r05
KDB941225D05Av01r02

1.2 Description of EUT

Product Name	Notebook Computer	
Brand Name	HP	
Model No.	HSN-I62C	
FCC ID	B94HNI62PAR	
Integrated WWAN Module	Brand Name: THINGSX Model Name: TX520-GL	
Integrated WLAN Module	Brand Name: Intel Model Name: BE201NGW	
Duty Cycle	GSM (DTM multi class B)	1/8.3
	GPRS (support multi class 12 max)	1/2 (1Dn4UP) 1/2.76 (1Dn3UP) 1/4.1 (1Dn2UP) 1/8.3 (1Dn1UP)
	EDGE (support multi class 12 max)	1/2 (1Dn4UP) 1/2.76 (1Dn3UP) 1/4.1 (1Dn2UP) 1/8.3 (1Dn1UP)
	CAT.M1 FDD	1
Supported radios (TX Frequency Range, MHz)	GSM850	824-849
	GSM1900	1850-1910
	CAT.M1 FDD Band 2	1850-1910
	CAT.M1 FDD Band 4	1710-1755
	CAT.M1 FDD Band 5	824-849
	CAT.M1 FDD Band 12	699-716
	CAT.M1 FDD Band 13	777-787
	CAT.M1 FDD Band 14	788-798
	CAT.M1 FDD Band 25	1850-1915
	CAT.M1 FDD Band 26	814-849
	CAT.M1 FDD Band 66	1710-1780
	CAT.M1 FDD Band 85	698-716

1.3 Maximum value

Frequency Band		Summary	Highest Simultaneous Transmission 1g SAR (W/kg)
		1g SAR (W/kg)	
GSM	850	0.07	1.49
	1900	0.14	
LTE	Cat.M1 B2	0.27	
	Cat.M1 B4	0.29	
	Cat.M1 B5	0.16	
	Cat.M1 B12	0.01	
	Cat.M1 B13	0.09	
	Cat.M1 B14	0.13	
	Cat.M1 B25	0.32	
	Cat.M1 B26	0.15	
	Cat.M1 B66	0.22	
	Cat.M1 B85	0.01	
	PCE	0.32	

1.4 Antenna Information

Notebook mode

Vendor	Vendor1									
Antenna	Ant5									
Part Number	6036B0366201(81ELBF15.G36)									
Frequency(MHz)	85	12	13	14	26	5	4	66	25	2
	698~716	699~716	777~787	788~798	814~849	824~849	1710~1755	1710~1780	1850~1915	1850~1910
Gain (dBi)	-0.18	-0.18	-1.38	-2.70	-1.93	-1.93	-2.50	-2.50	-1.40	-1.40

Vendor	Vendor2									
Antenna	Ant5									
Part Number	6036B0370401(00-330270505L)									
Frequency(MHz)	85	12	13	14	26	5	4	66	25	2
	698~716	699~716	777~787	788~798	814~849	824~849	1710~1755	1710~1780	1850~1915	1850~1910
Gain (dBi)	0.58	0.58	0.91	0.54	0.74	0.74	-1.21	-0.23	-0.61	-0.61

Tablet mode

Vendor	Vendor1									
Antenna	Ant5									
Part Number	6036B0366201(81ELBF15.G36)									
Frequency(MHz)	85	12	13	14	26	5	4	66	25	2
	698~716	699~716	777~787	788~798	814~849	824~849	1710~1755	1710~1780	1850~1915	1850~1910
Gain (dBi)	-3.80	-3.80	-6.49	-8.01	-5.75	-5.75	-4.64	-4.08	-4.44	-4.44

Vendor	Vendor2									
Antenna	Ant5									
Part Number	6036B0370401(00-330270505L)									
Frequency(MHz)	85	12	13	14	26	5	4	66	25	2
	698~716	699~716	777~787	788~798	814~849	824~849	1710~1755	1710~1780	1850~1915	1850~1910
Gain (dBi)	-7.17	-7.17	-4.48	-4.82	-3.96	-3.96	-3.53	-3.27	-2.73	-2.73

Note: Antenna information is provided by the applicant.

2 MEASUREMENT SYSTEM

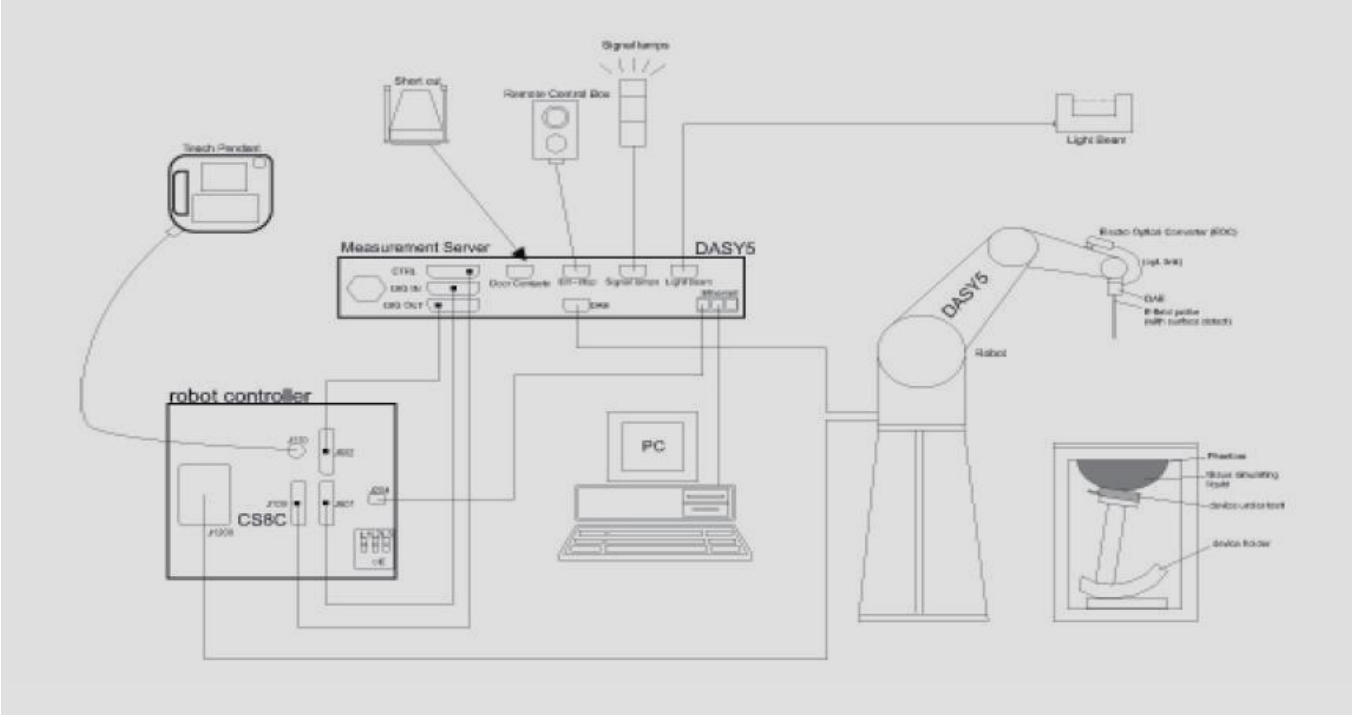
2.1 Test Facility

Laboratory	Test Site Address	Test Site Name	FCC Designation number	IC CAB identifier
SGS Taiwan Ltd. Central RF Lab. (TAF code 3702)	**1F, No. 8, Alley 15, Lane 120, Sec. 1, NeiHu Road, Neihu District, Taipei City, 11493, Taiwan.**	SAR 2	TW0029	TW3702
		SAR 6		
		SAR 8		
	No. 2, Keji 1st Rd., Guishan Township, Taoyuan County, 33383, Taiwan	SAR 1	TW0028	
		SAR 4		
	No.134, Wu Kung Road, New Taipei Industrial Park, Wuku District, New Taipei City, Taiwan	SAR 3	TW0027	
		SAR 7		
Note: Test site name is remarked on a bolded mark as an indication where measurements occurred in specific test site and address.				

2.2 SAR System

Block Diagram (DASY5)

A block diagram of the SAR measurement System is given in below. This SAR measurement system uses a computer-controlled 3-D stepper motor system (SPEAG DASY 5 professional system). The model EX3DV4 field probe is used to determine the internal electric fields. The SAR can be obtained from the equation SAR= σ ($|Ei|^2$)/ ρ where σ and ρ are the conductivity and mass density of the tissue-simulant.



EX3DV4 E-Field Probe

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Calibration	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL 750/835/1750/1900 MHz Additional CF for other liquids and frequencies upon request	
Frequency	10 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	Tip diameter: 2.5 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%.	

PHANTOM (ELI)

Model	ELI	
Construction	The ELI phantom is used for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.	
Shell Thickness	2 ± 0.2 mm	
Filling Volume	Approx. 30 liters	
Dimensions	Major axis: 600 mm Minor axis: 400 mm	

DEVICE HOLDER

Construction	The device holder (Supporter) for Notebook is made by POM (polyoxymethylene resin) , which is non-metal and non-conductive. The height can be adjusted to fit varies kind of notebooks.	 Device Holder

3 SAR SYSTEM VERIFICATION

3.1 Tissue Simulating Liquid

For the measurement of the field distribution inside the SAM phantom with DASY, the phantom must be filled with homogeneous tissue simulating liquid. For head SAR testing, the liquid height from the ear rint (ERP) of the phantom to the liquid top surface is larger than 15cm. For body SAR testing, the liquid height fromeference po the center of the flat phantom to the liquid top surface is larger than 15cm.

3.2 Tissue Simulant Liquid measurement

The dielectric properties for this Head-simulant fluid were measured by using the SPEAG Dielectric Assessment Kit (DAKS-3.5)
All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurements. The measured conductivity and permittivity are all within ± 5% of the target values.

3.3 Measurement results of Tissue Simulant Liquid

Measured Frequency (MHz)	Target Dielectric Constant, εr	Target Conductivity, σ (S/m)	Measured Dielectric Constant, εr	Measured Conductivity, σ (S/m)	% dev εr	% dev σ	Limit	Measurement Date
700.5	42.164	0.887	41.740	0.863	-1.01%	-2.70%	± 5%	Dec. 12, 2024
701.5	42.159	0.887	41.734	0.863	-1.01%	-2.69%	± 5%	Dec. 12, 2024
707	42.129	0.887	41.708	0.864	-1.00%	-2.63%	± 5%	Dec. 12, 2024
707.5	42.127	0.887	41.703	0.864	-1.01%	-2.62%	± 5%	Dec. 12, 2024
713.5	42.095	0.888	41.672	0.865	-1.00%	-2.56%	± 5%	Dec. 12, 2024
750	41.900	0.890	41.485	0.868	-0.99%	-2.48%	± 5%	Dec. 12, 2024
779.5	41.761	0.893	41.329	0.872	-1.03%	-2.40%	± 5%	Dec. 12, 2024
782	41.749	0.894	41.319	0.872	-1.03%	-2.41%	± 5%	Dec. 12, 2024
784.5	41.738	0.894	41.303	0.872	-1.04%	-2.41%	± 5%	Dec. 12, 2024
790.5	41.709	0.895	41.272	0.873	-1.05%	-2.44%	± 5%	Dec. 12, 2024
793	41.698	0.895	41.262	0.873	-1.05%	-2.46%	± 5%	Dec. 12, 2024
795.5	41.686	0.895	41.246	0.873	-1.06%	-2.47%	± 5%	Dec. 12, 2024
816.5	41.587	0.898	41.163	0.881	-1.02%	-1.90%	± 5%	Dec. 13, 2024
824.2	41.551	0.899	41.138	0.884	-0.99%	-1.67%	± 5%	Dec. 13, 2024
826.5	41.540	0.899	41.127	0.885	-0.99%	-1.56%	± 5%	Dec. 13, 2024
831.5	41.516	0.900	41.109	0.887	-0.98%	-1.41%	± 5%	Dec. 13, 2024
835	41.500	0.900	41.098	0.888	-0.97%	-1.32%	± 5%	Dec. 13, 2024
836.5	41.500	0.902	41.097	0.888	-0.97%	-1.51%	± 5%	Dec. 13, 2024
836.6	41.500	0.902	41.091	0.889	-0.99%	-1.42%	± 5%	Dec. 13, 2024
846.5	41.500	0.912	41.054	0.893	-1.07%	-2.16%	± 5%	Dec. 13, 2024
848.8	41.500	0.915	41.047	0.893	-1.09%	-2.35%	± 5%	Dec. 13, 2024
1712.5	40.125	1.350	41.137	1.389	2.52%	2.91%	± 5%	Dec. 14, 2024
1732.5	40.096	1.361	41.106	1.402	2.52%	2.95%	± 5%	Dec. 14, 2024
1745	40.079	1.369	41.087	1.409	2.52%	2.95%	± 5%	Dec. 14, 2024
1750	40.071	1.371	41.079	1.412	2.51%	2.96%	± 5%	Dec. 14, 2024
1752.5	40.068	1.373	41.074	1.414	2.51%	2.99%	± 5%	Dec. 14, 2024
1777.5	40.032	1.387	41.035	1.429	2.50%	3.02%	± 5%	Dec. 14, 2024
1850.2	40.000	1.400	40.529	1.412	1.32%	0.86%	± 5%	Dec. 14, 2024
1852.5	40.000	1.400	40.528	1.413	1.32%	0.93%	± 5%	Dec. 14, 2024
1880	40.000	1.400	40.519	1.419	1.30%	1.36%	± 5%	Dec. 14, 2024
1882.5	40.000	1.400	40.518	1.420	1.30%	1.43%	± 5%	Dec. 14, 2024
1900	40.000	1.400	40.514	1.424	1.29%	1.71%	± 5%	Dec. 14, 2024
1907.5	40.000	1.400	40.512	1.425	1.28%	1.79%	± 5%	Dec. 14, 2024
1909.8	40.000	1.400	40.511	1.427	1.28%	1.93%	± 5%	Dec. 14, 2024
1912.5	40.000	1.400	40.508	1.429	1.27%	2.07%	± 5%	Dec. 14, 2024

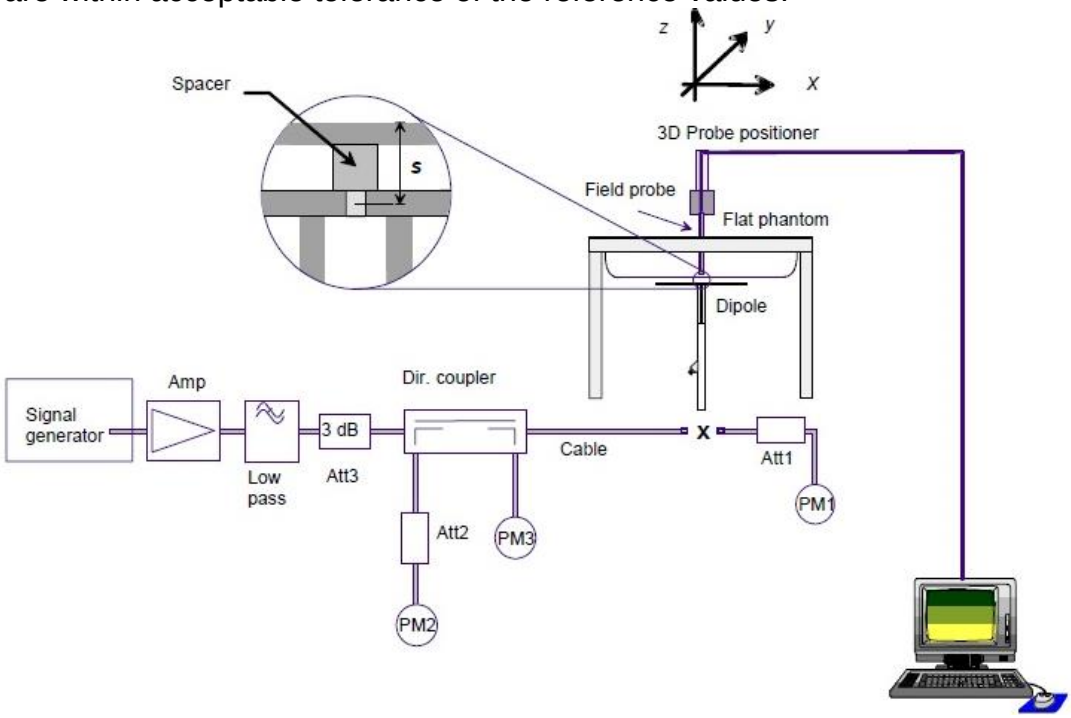
3.4 The composition of the tissue simulating liquid:

Simulating Liquids for 600 MHz -10 GHz, Manufactured by SPEAG:

Broad-band head tissue simulating liquids	SPEAG Product	Frequency range (MHz)	Main Ingredients
	HBBL600-10000V6	600 - 10000	Water, Oil

3.5 System check

The microwave circuit arrangement for system check is sketched in below. The daily system accuracy verification occurs within the flat section of the SAM phantom and ELI phantom. A SAR measurement was performed to see if the measured SAR was within +/- 10% from the target SAR values.
The tests were conducted on the same days as the measurement of the DUT. The obtained results from the system accuracy verification are displayed with SAR values normalized to 1W forward power delivered to the dipole.
During the tests, the liquid depth from the center of the flat phantom to the liquid top surface was 15 cm above in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.



The block diagram of system check

3.6 System check results

Validation Kit	S/N	Frequency (MHz)	1W Target 1g-SAR (W/kg)	pin=250mW Measured 1g-SAR (W/kg)	Normalized to 1W 1g-SAR (W/kg)	Deviation (%)	Limit	Measurement Date
D750V3	1015	750	8.51	2.21	8.84	3.88	± 10%	Dec.12,2024
D835V2	4d063	835	9.4	2.48	9.92	5.53	± 10%	Dec.12,2024
D1750V2	1158	1750	36.3	8.71	34.84	-4.02	± 10%	Dec.13,2024
D1900V2	5d173	1900	39.9	10.2	40.8	2.26	± 10%	Dec.14,2024

4 TEST CONFIGURATIONS

4.1 Test Environment

Ambient Temperature: 22±2° C
Tissue Simulating Liquid: 22±2° C

4.2 Test Note

- **General:** Measurements are performed respectively on the lowest, middle and highest channels of the operating band(s).
- **General:** The EUT is set to maximum power level during all tests, and at the beginning of each test the battery is fully charged.
- **General:** During the SAR testing, the DASY system checks power drift by comparing the e-field strength of one specific location measured at the beginning with that measured at the end of the SAR testing.
- **General:** According to KDB447498D01v06, testing of other required channels is not required when the reported 1-g SAR for the highest output channel is ≤ 0.8 W/kg, when the transmission band is ≤ 100 MHz. According to KDB865664D01v01r04, SAR measurement variability must be assessed for each frequency band. When the original highest measured SAR is ≥ 0.8 W/kg, repeated that measurement once. Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).

- **GSM:** SAR test reduction for GPRS/EDGE mode is determined by the source-based time-averaged output power. The data mode with highest specified time-averaged output power should be tested for SAR compliance.
- **UMTS (HSDPA):** The 3G SAR test reduction procedure is applied to HSDPA with 12.2 kbps RMC as the primary mode. Since the maximum output power in a secondary mode (HSDPA) is ≤ ¼ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (HSDPA). The following 4 sub-tests were completed according to Release 5 procedures in section 5.2 of 3GPP TS 34.121. A summary of these setting are illustrated below:

Sub-test	β_c	β_d	β_d *(SF)*	β_c/β_d	β_{hs} (1)	CM (dB)(2)
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15(3)	15/15(3)	64	12/15(3)	24/15	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$
Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15.
Note 3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d = 15/15.

- **UMTS (HSPA):** The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) with 12.2 kbps RMC as the primary mode. Since the maximum output power in a secondary mode (HSPA) is ≤ ¼ dB higher than the

primary mode (WCDMA), SAR measurement is not required for the secondary mode (HSPA). The following 5 sub-tests were completed according to Release 6 procedures in section 5.2 of 3GPP TS 34.121. A summary of these setting are illustrated below:

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs}(1)	β_{ec}	β_{ed}	β_{ed} (SF)	β_{ed} (codes)	CM(2) (dB)	MPR (dB)	AG(4) Index	E-TFCI
1	11/15(3)	15/15(3)	64	11/15(3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}: 47/15 β_{ed2}: 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15(4)	15/15(4)	64	15/15(4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 8 ⇔ $A_{hs} = \beta_{hs}/\beta_c$ = 30/15 ⇔ β_{hs}= 30/15 *β_c.
Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
Note 3: For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to β_c = 10/15 and β_d = 15/15.
Note 4: For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to β_c = 14/15 and β_d = 15/15.
Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.
Note 6: β_{ed} cannot be set directly; it is set by Absolute Grant Value.

• **UMTS (HSPA+):** The 3G SAR test reduction procedure is applied to HSPA+ with 12.2 kbps RMC as the primary mode. Since the maximum output power in a secondary mode (HSPA+) is ≤ ¼ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (HSPA+). The following 1 sub-test was completed according to Release 7 procedures in section 5.2 of 3GPP TS34.121. A summary of these settings are illustrated below:

Table C.11.1.4**: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM**

Sub-test	β_c (Note3)	β_d	β_{HS} (Note1)	β_{ec}	β_{ed} (2xSF2) (Note 4)	β_{ed} (2xSF4) (Note 4)	CM (dB) (Note 2)	MPR (dB) (Note 2)	AG Index (Note 4)	E-TFCI (Note 5)	E-TFCI (boost)
1	1	0	30/15	30/15	β_{ed}1: 30/15 β_{ed}2: 30/15	β_{ed}3: 24/15 β_{ed}4: 24/15	3.5	2.5	14	105	105

Note 1: Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 30/15 with β_{hs} = 30/15 * β_c.
Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0).
Note 3: DPDCH is not configured, therefore the β_c is set to 1 and β_d = 0 by default.
Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value.
Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.

• **UMTS (DC-HSDPA):** The 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable. Since the maximum output power in a secondary mode (DC-HSDPA) is ≤ ¼ dB higher than the primary mode (WCDMA), SAR measurement is not required for the secondary mode (DC-HSDPA). The following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0. A summary of these setting are illustrated below:

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122

Table C.8.1.12: Fixed Reference Channel H-Set 12

Parameter	Unit	Value
Nominal Avg. Inf. Bit Rate	kbps	60
Inter-TTI Distance	TTI's	1
Number of HARQ Processes	Processes	6
Information Bit Payload (N_{INF})	Bits	120
Number Code Blocks	Blocks	1
Binary Channel Bits Per TTI	Bits	960
Total Available SML's in UE	SML's	19200
Number of SML's per HARQ Proc.	SML's	3200
Coding Rate		0.15
Number of Physical Channel Codes	Codes	1
Modulation		QPSK
Note 1: The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table.		
Note 2: Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.		

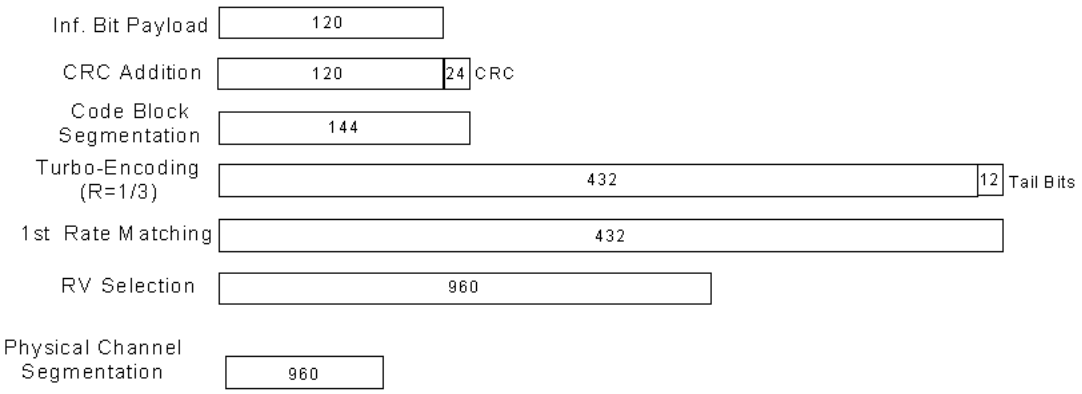


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

The following 4 sub-tests for HSDPA were completed according to Release 8 procedures in section 5.2 of 3GPP TS34.121. A summary of subtest settings are illustrated below:

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (1)	CM (dB) (2)
1	2/15	15/15	64	2/15	4/15	0.0
2	12/15 (3)	15/15 (3)	64	12/15 (3)	24/15	1.0
3	15/15	8/15	64	15/8	30/15	1.5
4	15/15	4/15	64	15/4	30/15	1.5

Note 1: Δ_{ACK}, Δ_{NACK} and $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs}/\beta_c = 30/15 \Leftrightarrow \beta_{hs} = 30/15 * \beta_c$
Note 2: CM = 1 for β_c/β_d =12/15, β_{hs}/β_c=24/15.
Note 3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d = 15/15.

- **CAT.M1:** CAT.M1 modes test according to **KDB 941225D05v02r05.**

a. Per Section 5.2.1, 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.
- When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel.
- When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

b. Per Section 5.2.2, the largest channel bandwidth and measure SAR for QPSK with 50% RB allocation

- The procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.

c. Per Section 5.2.3, the largest channel bandwidth and measure SAR for QPSK with 100% RB allocation

- 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 in 5.2.1 and 5.2.2 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.

d. Per Section 5.2.4, Higher order modulations

- For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in sections 5.2.1, 5.2.2 and 5.2.3 to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

e. Per Section 5.3, other channel bandwidth standalone SAR test requirements

- For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section 5.2 to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring

testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg. The equivalent channel configuration for the RB allocation, RB offset and modulation etc. is determined for the smaller channel bandwidth according to the same number of RB allocated in the largest channel bandwidth.

- TDD CAT.M1 was tested at highest duty factor using UL-DL configuration 0 with 6 UL subframes and 2 special subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4.2, the duty factor for UL-DL configuration 0/special subframe configuration 6 using extended cyclic prefix is 0.633.

According to KDB 941225 D05, SAR testing for TDD CAT.M1 must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP TDD CAT.M1 configurations. The TDD-CAT.M1 of this device supports frame structure type 2 defined in 3GPP TS 36.211 section 4.2, and the frame structure configuration can be tabulated as below.

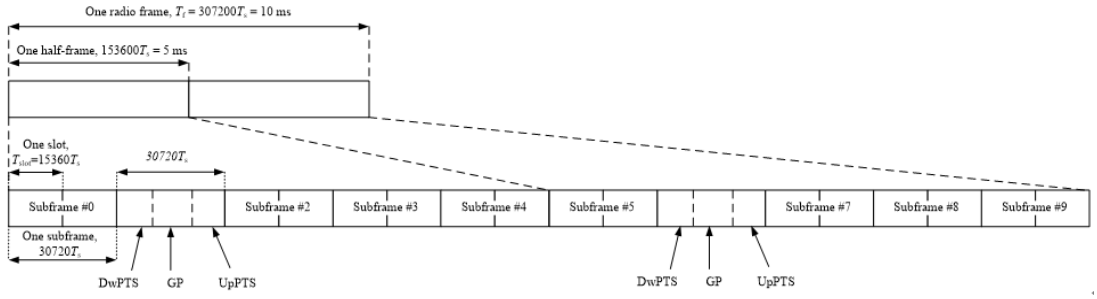


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity)

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$(1+X) \cdot 2192 \cdot T_s$	$(1+X) \cdot 2560 \cdot T_s$	$7680 \cdot T_s$	$(1+X) \cdot 2192 \cdot T_s$	$(1+X) \cdot 2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$(2+X) \cdot 2192 \cdot T_s$	$(2+X) \cdot 2560 \cdot T_s$
5	$6592 \cdot T_s$	$(2+X) \cdot 2192 \cdot T_s$	$(2+X) \cdot 2560 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Table 4.2-2: Uplink-downlink configurations

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Considering the highest transmission duty cycle, TDD CAT.M1 was tested using Uplink-Downlink configuration 0 with 6 uplink subframe and 2 special subframe. The special subframe was set to special subframe configuration 6 using extended cyclic prefix uplink. Therefore, SAR testing for TDD CAT.M1 was measured at the maximum output power with highest transmission duty cycle of 63.33%.

- **CAT.M1:** CAT.M1 modes test according to **KDB 941225D05v02r05.**

a. Per Section 5.2.1, 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.
- When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel.
- When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

b. Per Section 5.2.2, the largest channel bandwidth and measure SAR for QPSK with 50% RB allocation

- The procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.

c. Per Section 5.2.3, the largest channel bandwidth and measure SAR for QPSK with 100% RB allocation

- 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 in 5.2.1 and 5.2.2 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.

d. Per Section 5.2.4, Higher order modulations

- For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in sections 5.2.1, 5.2.2 and 5.2.3 to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

e. Per Section 5.3, other channel bandwidth standalone SAR test requirements

- For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section 5.2 to determine the channels and RB configurations that need SAR testing and only

measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg. The equivalent channel configuration for the RB allocation, RB offset and modulation etc. is determined for the smaller channel bandwidth according to the same number of RB allocated in the largest channel bandwidth.

- TDD CAT.M1 was tested at highest duty factor using UL-DL configuration 0 with 6 UL subframes and 2 special subframes using extended cyclic prefix only and special subframe configuration 6. SAR tests were performed at maximum output power and worst-case transmission duty factor in extended cyclic prefix. Per 3GPP 36.211 Section 4.2, the duty factor for UL-DL configuration 0/special subframe configuration 6 using extended cyclic prefix is 0.633.

According to KDB 941225 D05, SAR testing for TDD CAT.M1 must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP TDD CAT.M1 configurations. The TDD-CAT.M1 of this device supports frame structure type 2 defined in 3GPP TS 36.211 section 4.2, and the frame structure configuration can be tabulated as below.

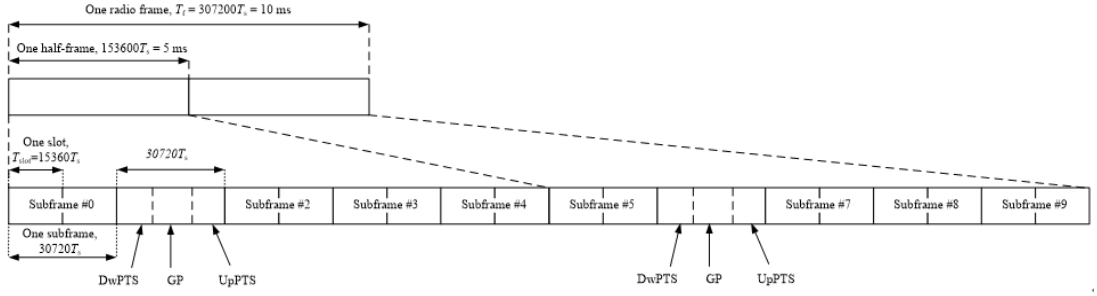


Figure 4.2-1: Frame structure type 2 (for 5 ms switch-point periodicity)

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

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		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$(1+X) \cdot 2192 \cdot T_s$	$(1+X) \cdot 2560 \cdot T_s$	$7680 \cdot T_s$	$(1+X) \cdot 2192 \cdot T_s$	$(1+X) \cdot 2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
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4	$26336 \cdot T_s$			$7680 \cdot T_s$	$(2+X) \cdot 2192 \cdot T_s$	$(2+X) \cdot 2560 \cdot T_s$
5	$6592 \cdot T_s$	$(2+X) \cdot 2192 \cdot T_s$	$(2+X) \cdot 2560 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Table 4.2-2: Uplink-downlink configurations

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

Considering the highest transmission duty cycle, TDD CAT.M1 was tested using Uplink-Downlink configuration 0 with 6 uplink subframe and 2 special subframe. The special subframe was set to special subframe configuration 6 using extended cyclic prefix uplink. Therefore, SAR testing for TDD CAT.M1 was measured at the maximum output power with highest transmission duty cycle of 63.33%.

- Test exclusion for NFC:

Based on KDB447498D01v06 4.3.1 c), SAR test exclusion threshold for NFC (13.56MHz) shall be evaluated as below,

a) For test separation distances ≤ 50 mm, the power threshold determined by the equation in 4.3.1 c) 1) for 50 mm and 100 MHz is multiplied by ½

b) The power threshold at 50mm/100 MHz in 4.3.1 b) is multiplied by [1 + log(100/f(MHz))] where f is 13.56MHz

c) The power threshold in 4.3.1 b) is [Power allowed at numeric threshold for 50 mm in 4.3.1 a)] + [(test separation distance – 50 mm)·(f(MHz)/150)] mW, for 100 MHz to 1500 MHz where test separation distance is 50mm, frequency is 100MHz.

d) Power allowed at numeric threshold for 50 mm in 4.3.1 a) is [3/√f(GHz)]·(test separation distance)

Hence, SAR test exclusion threshold is calculated in reverse sequence:

d) : [3/√0.1]·50 = 474.3416mW

c) : 474.3416 + (50-50)·(100/150) = 474.3416mW

b) : 474.3416·[1+log(100/13.56)] = 885.9469mW

a) : 885.9469 · 0.5 = 442.973mW

Step c:

Frequency (MHz)	E-FIELD dBuV/m	Test Distance (m)	EIRP (dBm)	EIRP (mW)	Threshold (mW)
13.56	76.18	3	-18.97757	0.01265443	442.973

Note:

EIRP (dBm)= (E-FIELD(dBuV/m)+ 20log(d(m))-104.7

EIRP(mW)= (10^(EIRP(dBm)/10))

- Estimated SAR for NFC:

Based on KDB447498D01v06 4.3.2 b), when an antenna qualifies for the standalone SAR test exclusion of 4.3.1 and also transmits simultaneously with other antennas, the standalone SAR value must be estimated according to the following to determine the simultaneous transmission SAR test exclusion criteria:

Using the most conservative test separation distance 5mm, so the estimated 1g-SAR for NFC would be 0.00004 W/Kg.

4.3 Test position

Tablet mode SAR test position (0mm)

For full-size tablet, according to KDB 616217 D04, SAR evaluation is required for back surface and edges of the devices. The back surface and edges of the tablet are tested with the tablet touching the phantom. Exposures from antennas through the front surface of the display section of a tablet are generally limited to the user's hands. Exposures to hands for typical consumer transmitters used in tablets are not expected to exceed the extremity SAR limit; therefore, SAR evaluation for the front surface of tablet display screens are generally not necessary. When voice mode is supported on a tablet and it is limited to speaker mode or headset operations only, additional SAR testing for this type of voice use is not required.

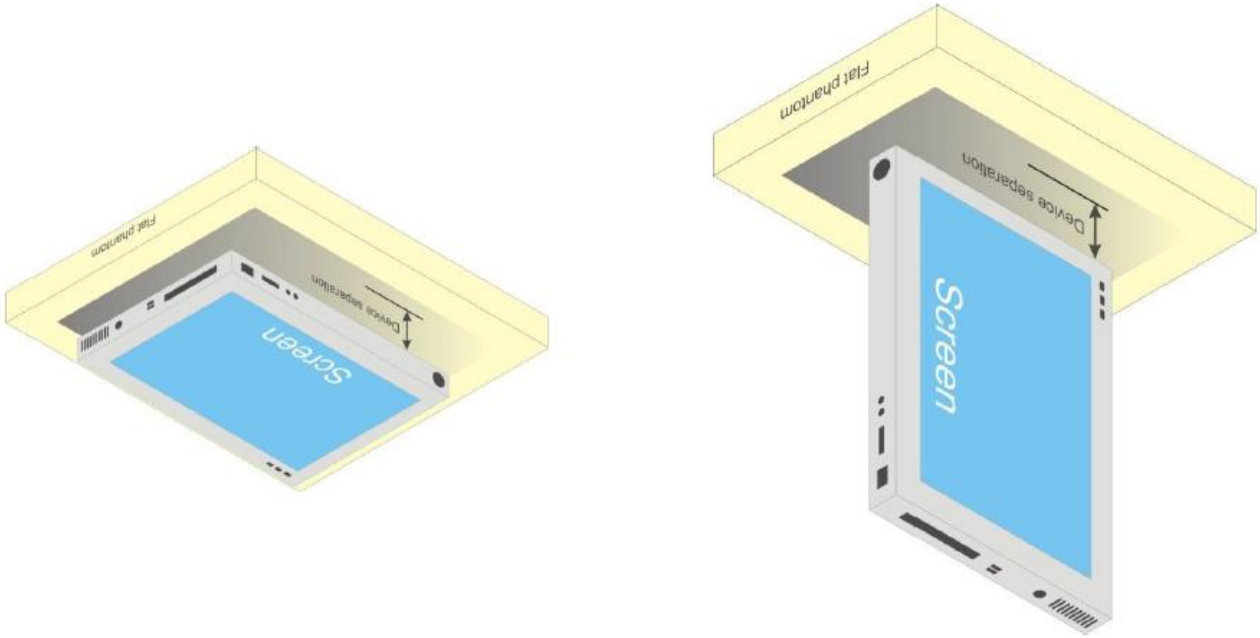


Illustration for Tablet Setup

4.4 Power verification of device mode

The device is a convertible laptop computer with predefined single fixed power to each device modes. For the device modes verification, the measured conducted output power is monitored qualitatively to identify the triggering characteristics and recorded quantitatively.

Results and conclusion

The measured output power versus lid angle is tabulated in the following table based on the guidance from 2019-11 TCB workshop, and the triggering verification complies with the device mode / power level declared by the manufacturer.

Device mode verification by power measurement

Antenna	Operation mode	Lid angle	GPRS 850	GPRS 1900	Cat.M1 Band 2	Cat.M1 Band 4	Cat.M1 Band 5	Cat.M1 Band 12	Cat.M1 Band 13	Cat.M1 Band 14	Cat.M1 Band 25	Cat.M1 Band 26	Cat.M1 Band 66	Cat.M1 Band 85
Ant5	Lid close	0°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		10°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		20°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Laptop	30°	27.44	23.43	20.80	20.98	20.80	20.95	20.85	20.86	20.96	20.88	20.94	20.86
	Lid close	25°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		26°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		27°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		28°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		29°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Laptop	30°	27.35	23.45	20.84	20.80	20.85	20.96	20.82	20.89	20.97	20.81	20.91	20.85
		31°	27.44	23.46	20.98	20.95	20.81	20.95	20.98	20.86	20.94	20.92	20.87	20.93
		32°	27.43	23.39	20.99	20.94	20.86	20.99	20.82	20.99	20.86	20.91	20.81	20.90
		33°	27.36	23.34	20.95	20.94	20.84	20.99	20.87	20.89	20.92	20.83	20.85	20.81
		34°	27.47	23.38	20.84	20.90	20.88	20.82	20.93	20.81	20.87	20.82	20.88	20.91
		35°	27.37	23.40	20.85	20.99	20.87	20.86	20.85	20.92	20.86	20.87	20.82	20.80
		40°	27.40	23.47	20.81	20.95	20.99	20.83	20.99	20.96	20.93	20.90	20.93	20.90
		50°	27.38	23.34	20.88	20.81	20.98	20.93	20.98	20.96	20.89	20.87	20.85	20.99
		60°	27.36	23.47	20.96	20.84	20.98	20.82	20.99	20.86	20.92	20.96	20.88	20.92
		70°	27.43	23.39	20.90	20.90	20.95	20.87	20.89	20.83	20.87	20.95	20.91	20.99
		80°	27.45	23.30	20.83	20.88	20.81	20.83	20.94	20.85	20.96	20.88	20.97	20.99
		90°	27.33	23.46	20.98	20.99	20.88	20.98	20.96	20.87	20.82	20.96	20.86	20.88
		100°	27.44	23.37	20.97	20.89	20.88	20.95	20.81	20.94	20.99	20.94	20.97	20.91
		110°	27.30	23.41	20.83	20.81	20.88	20.92	20.91	20.91	20.94	20.90	20.80	20.81
		120°	27.32	23.31	20.86	20.83	20.87	20.84	20.89	20.80	20.84	20.98	20.83	20.86
	Tablet	130°	13.83	11.98	16.48	15.97	18.47	17.82	18.98	18.87	16.95	18.39	15.40	17.83
	Laptop	125°	27.32	23.31	20.91	20.92	20.88	20.97	20.84	20.82	20.81	20.92	20.84	20.93
		126°	27.42	23.49	20.91	20.80	20.93	20.82	20.85	20.92	20.91	20.93	20.92	20.91
		127°	27.43	23.48	20.92	20.95	20.80	20.98	20.92	20.90	20.84	20.89	20.92	20.85
		128°	27.36	23.33	20.97	20.98	20.95	20.98	20.81	20.90	20.88	20.82	20.93	20.81
		129°	27.49	23.35	20.83	20.88	20.85	20.88	20.96	20.83	20.91	20.95	20.88	20.84
	Tablet	130°	13.96	11.88	16.36	15.81	18.48	17.85	18.99	18.86	16.97	18.34	15.33	17.88
		131°	13.92	11.82	16.39	15.84	18.30	17.93	18.87	18.93	16.91	18.46	15.42	17.83
		132°	13.99	11.97	16.40	15.88	18.49	17.88	18.84	18.80	16.98	18.36	15.39	17.86
		133°	13.95	11.83	16.44	15.94	18.45	17.92	18.96	18.97	16.85	18.30	15.47	17.96
		134°	13.87	11.90	16.38	15.80	18.31	17.86	18.81	18.97	16.98	18.40	15.31	17.83
		135°	13.80	11.89	16.37	15.88	18.35	17.83	18.83	18.83	16.80	18.47	15.36	17.97
		145°	13.98	11.87	16.33	15.96	18.30	17.90	18.86	18.92	16.88	18.45	15.47	17.84
		155°	13.90	11.88	16.32	15.94	18.33	17.89	18.83	18.81	16.94	18.43	15.35	17.86
		165°	13.91	11.84	16.46	15.93	18.30	17.91	18.96	18.90	16.96	18.49	15.37	17.95
		175°	13.88	11.96	16.34	15.99	18.46	17.86	18.91	18.83	16.86	18.32	15.31	17.82
		185°	13.81	11.80	16.48	15.80	18.46	17.80	18.88	18.82	16.93	18.33	15.44	17.80
		195°	13.93	11.88	16.46	15.90	18.41	17.82	18.96	18.89	16.81	18.39	15.46	17.87
		205°	13.97	11.92	16.47	15.81	18.44	17.83	18.89	18.96	16.87	18.32	15.32	17.84
		215°	13.99	11.87	16.46	15.83	18.35	17.93	18.83	18.93	16.87	18.34	15.32	17.93
		225°	13.81	11.96	16.47	15.80	18.44	17.94	18.86	18.91	16.94	18.34	15.48	17.84
		235°	13.96	11.95	16.34	15.80	18.49	17.98	18.81	18.80	16.98	18.46	15.47	17.99
		245°	13.81	11.86	16.34	15.88	18.49	17.99	18.89	18.87	16.94	18.36	15.37	17.81
		255°	13.89	11.98	16.45	15.96	18.48	17.82	18.98	18.96	16.88	18.49	15.46	17.82
		265°	13.95	11.80	16.36	15.88	18.49	17.86	18.99	18.80	16.83	18.32	15.36	17.98
		275°	13.88	11.93	16.37	15.89	18.43	17.96	18.81	18.87	16.87	18.35	15.30	17.99
		285°	13.85	11.81	16.42	15.80	18.31	17.80	18.94	18.86	16.92	18.45	15.34	17.80
		295°	13.82	11.91	16.47	15.83	18.31	17.94	18.88	18.80	16.83	18.39	15.45	17.93
		305°	13.80	11.99	16.33	15.92	18.36	17.86	18.94	18.99	16.98	18.36	15.31	17.95
		315°	13.94	11.90	16.36	15.97	18.46	17.81	18.95	18.98	16.80	18.31	15.49	17.80
		325°	13.91	11.82	16.32	15.98	18.30	17.94	18.91	18.80	16.92	18.38	15.30	17.82
		335°	13.85	11.86	16.48	15.86	18.40	17.88	18.81	18.85	16.89	18.33	15.45	17.82
		345°	13.87	11.87	16.48	15.82	18.49	17.88	18.97	18.80	16.99	18.47	15.31	17.89
		355°	13.99	11.81	16.48	15.82	18.35	17.80	18.99	18.87	16.90	18.48	15.44	17.89
		360°	13.98	11.99	16.40	15.98	18.39	17.85	18.83	18.98	16.84	18.42	15.35	17.93
	Tablet	350°	13.85	11.83	16.46	15.93	18.47	17.83	18.86	18.92	16.82	18.35	15.32	17.92
		340°	13.90	11.99	16.42	15.98	18.44	17.96	18.96	18.96	16.99	18.43	15.47	17.91
		330°	13.95	11.93	16.44	15.83	18.45	17.83	18.95	18.87	16.93	18.36	15.35	17.92
		320°	13.89	11.82	16.32	15.99	18.34	17.85	18.95	18.95	16.88	18.46	15.40	17.87
		310°	13.83	11.96	16.47	15.81	18.47	17.88	18.81	18.93	16.81	18.30	15.32	17.94
		300°	13.86	11.86	16.47	15.91	18.33	17.98	18.92	18.96	16.88	18.31	15.31	17.87
		290°	13.92	11.92	16.43	15.90	18.31	17.80	18.98	18.99	16.87	18.34	15.49	17.84
		280°	13.97	11.93	16.41	15.84	18.31	17.84	18.81	18.80	16.85	18.40	15.45	17.94
		270°	13.87	11.95	16.35	15.86	18.33	17.81	18.92	18.84	16.86	18.47	15.41	17.99
		260°	13.83	11.98	16.48	15.94	18.32	17.86	18.90	18.80	16.86	18.32	15.30	17.98
		250°	13.98	11.93	16.39	15.92	18.47	17.94	18.95	18.94	16.99	18.49	15.30	17.82
		240°	13.99	11.89	16.36	15.84	18.38	17.93	18.96	18.95	16.84	18.48	15.32	17.92
		230°	13.83	11.94	16.47	15.83	18.45	17.95	18.98	18.93	16.98	18.31	15.38	17.83
		220°	13.87	11.87	16.31	15.85	18.45	17.82	18.90	18.81	16.85	18.35	15.46	17.87
		210°	13.87	11.94	16.40	15.92	18.48	17.81	18.98	18.94	16.96	18.36	15.38	17.86
		200°	13.81	11.83	16.33	15.99	18.38	17.84	18.98	18.81	16.97	18.46	15.49	17.86
		190°	13.88	11.83	16.48	15.85	18.30	17.84	18.80	18.96	16.89	18.39	15.39	17.90
		180°	13.85	11.92	16.42	15.82	18.41	17.88	18.87	18.94	16.88	18.36	15.46	17.81
		170°	13.92	11.89	16.47	15.99	18.32	17.91	18.88	18.90	16.93	18.33	15.39	17.84
		160°	13.91	11.86	16.32	15.84	18.41	17.95	18.80	18.91	16.96	18.34	15.34	17.95
		150°	13.98	11.83	16.31	15.97	18.43	17.85	18.87	18.92	16.94	18.47	15.40	17.85
		140°	13.99	11.83	16.49	15.93	18.41	17.80	18.97	18.80	16.93	18.37	15.45	17.87
		130°	13.97	11.95	16.39	15.98	18.48	17.83	18.92	18.87	16.96	18.35	15.49	17.88
	Laptop	120°	27.42	23.47	20.97	20.88	20.98	20.81	20.86	20.92	20.93	20.82	20.93	20.82
		125°	27.30	23.37	20.81	20.84	20.99	20.87	20.93	20.99	20.95	20.80	20.81	20.82
	Tablet	130°	13.90	11.88	16.46	15.89	18.37	17.93	18.80	18.90	16.96	18.49	15.47	17.83
	Laptop	129°	27.46	23.39	20.83	20.96	20.98	20.87	20.98	20.94	20.94	20.90	20.87	20.90
		128°	27.42	23.38	20.94	20.87	20.97	20.89	20.90	20.82	20.92	20.99	20.80	20.94
		127°	27.31	23.35	20.98	20.84	20.90	20.91	20.92	20.91	20.80	20.90	20.88	20.99
		126°	27.42	23.42	20.85	20.84	20.96	20.84	20.81	20.97	20.80	20.85	20.84	20.92
		125°	27.39	23.49	20.85	20.83	20.89	20.91	20.80	20.93	20.84	20.81	20.82	20.84
		115°	27.35	23.31	20.86	20.97	20.89	20.82	20.96	20.84	20.95	20.83	20.91	20.86
		105°	27.45	23.30	20.88	20.94	20.80	20.88	20.92	20.84	20.90	20.92	20.98	20.98
		95°	27.36	23.38	20.93	20.87	20.90	20.88	20.99	20.80	20.98	20.97	20.89	20.97
		85°	27.40	23.31	20.85	20.94	20.81	20.99	20.84	20.88	20.80	20.99	20.82	20.87
		75°	27.34	23.32	20.99	20.93	20.96	20.97	20.83	20.94	20.80	20.92	20.96	20.80
		65°	27.38	23.44	20.97	20.93	20.80	20.88	20.81	20.99	20.94	20.97	20.93	20.80
		55°	27.38	23.46	20.99	20.84	20.94	20.81	20.93	20.90	20.84	20.97	20.97	20.99
		45°	27.43	23.30	20.93	20.81	20.87	20.95	20.84	20.91	20.90	20.94	20.87	20.84
		35°	27.38	23.46	20.93	20.99	20.81	20.83	20.81	20.89	20.92	20.81	20.89	20.89
	Lid close	25°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Laptop	30°	27.37	23.32	20.89	20.88	20.91	20.88	20.91	20.95	20.80	20.82	20.84	20.97
	Lid close	29°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		28°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		27°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		26°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		25°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		20°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		10°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		0°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

Antenna	Operation mode	Lid angle	GPRS 850	GPRS 1900	Cat.M1 Band 2	Cat.M1 Band 4	Cat.M1 Band 5	Cat.M1 Band 12	Cat.M1 Band 13	Cat.M1 Band 14	Cat.M1 Band 25	Cat.M1 Band 26	Cat.M1 Band 66	Cat.M1 Band 85
		200°	27.36	23.32	20.99	20.96	20.99	20.88	20.83	20.84	20.94	20.98	20.83	20.97
		210°	27.34	23.33	20.96	20.84	20.93	20.98	20.87	20.81	20.92	20.87	20.83	20.98
		220°	27.30	23.34	20.94	20.95	20.98	20.85	20.92	20.90	20.95	20.93	20.95	20.87
		230°	27.46	23.47	20.95	20.97	20.82	20.91	20.94	20.80	20.93	20.98	20.85	20.85
		240°	27.34	23.40	20.84	20.82	20.97	20.82	20.85	20.89	20.82	20.92	20.94	20.95
		250°	27.44	23.38	20.80	20.97	20.85	20.95	20.81	20.94	20.99	20.87	20.80	20.86
	Stand mode	260°	27.38	23.36	20.88	20.85	20.95	20.93	20.98	20.80	20.89	20.88	20.89	20.96
		270°	27.49	23.49	20.97	20.81	20.84	20.90	20.84	20.82	20.96	20.83	20.84	20.83
		280°	27.44	23.34	20.96	20.82	20.92	20.86	20.80	20.95	20.94	20.82	20.81	20.88
		290°	27.35	23.32	20.99	20.93	20.96	20.82	20.92	20.91	20.99	20.88	20.98	20.96
		300°	27.31	23.40	20.95	20.88	20.97	20.87	20.85	20.84	20.82	20.86	20.93	20.91
		310°	27.40	23.47	20.82	20.98	20.98	20.88	20.82	20.93	20.85	20.92	20.93	20.91
		320°	27.43	23.32	20.86	20.94	20.80	20.83	20.82	20.86	20.83	20.99	20.98	20.96
		330°	27.39	23.47	20.80	20.93	20.91	20.82	20.89	20.85	20.86	20.91	20.90	20.99
	Tablet	340°	13.87	11.83	16.35	15.98	18.46	17.88	18.89	18.94	16.80	18.45	15.39	17.94
		335°	27.44	23.31	20.81	20.93	20.95	20.83	20.84	20.98	20.97	20.98	20.87	20.97
	Stand mode	336°	27.35	23.37	20.96	20.93	20.92	20.91	20.87	20.88	20.92	20.88	20.99	20.90
		337°	27.48	23.46	20.87	20.85	20.99	20.87	20.99	20.85	20.93	20.98	20.80	20.85
		338°	27.32	23.41	20.90	20.96	20.90	20.99	20.89	20.97	20.94	20.96	20.87	20.82
		339°	27.48	23.38	20.81	20.92	20.97	20.80	20.93	20.87	20.89	20.98	20.82	20.81
		340°	13.83	11.81	16.33	15.80	18.48	17.83	18.86	18.98	16.85	18.30	15.41	17.86
		341°	13.81	11.85	16.49	15.84	18.31	17.86	18.92	18.89	16.84	18.31	15.35	17.96
		342°	13.83	11.91	16.49	15.95	18.39	17.87	18.87	18.96	16.98	18.42	15.30	17.94
	Tablet	343°	13.85	11.89	16.47	15.96	18.49	17.80	18.89	18.89	16.90	18.43	15.43	17.87
		344°	13.92	11.86	16.30	15.97	18.49	17.82	18.91	18.89	16.82	18.43	15.33	17.81
		345°	13.91	11.80	16.49	15.94	18.46	17.84	18.88	18.93	16.90	18.45	15.38	17.95
		355°	13.96	11.83	16.43	15.92	18.48	17.85	18.85	18.82	16.89	18.40	15.42	17.92
		360°	13.82	11.98	16.35	15.93	18.45	17.97	18.89	18.97	16.92	18.30	15.48	17.90
	Tablet	350°	13.87	11.85	16.33	15.95	18.34	17.81	18.86	18.84	16.94	18.49	15.37	17.92
		340°	13.83	11.82	16.46	15.85	18.35	17.88	18.88	18.81	16.84	18.31	15.38	17.99
	Stand mode	330°	27.45	23.46	20.94	20.80	20.82	20.93	20.93	20.99	20.95	20.83	20.82	20.97
		335°	27.30	23.45	20.92	20.98	20.88	20.99	20.88	20.86	20.96	20.82	20.95	20.88
	Tablet	340°	13.92	11.96	16.47	15.93	18.36	17.91	18.99	18.96	16.97	18.40	15.44	17.91
		339°	27.32	23.34	20.99	20.86	20.94	20.93	20.88	20.97	20.83	20.83	20.96	20.93
		338°	27.45	23.42	20.95	20.82	20.84	20.99	20.95	20.97	20.82	20.99	20.89	20.83
		337°	27.40	23.31	20.91	20.97	20.92	20.98	20.80	20.88	20.93	20.96	20.92	20.86
		336°	27.45	23.35	20.85	20.92	20.92	20.81	20.93	20.81	20.96	20.91	20.87	20.95
		335°	27.44	23.35	20.85	20.86	20.87	20.87	20.99	20.85	20.96	20.95	20.96	20.91
		325°	27.35	23.40	20.94	20.88	20.97	20.97	20.89	20.86	20.93	20.98	20.92	20.97
		315°	27.49	23.33	20.81	20.85	20.92	20.86	20.96	20.93	20.86	20.96	20.84	20.88
		305°	27.48	23.44	20.81	20.98	20.83	20.87	20.80	20.85	20.94	20.92	20.94	20.95
		295°	27.44	23.46	20.85	20.98	20.96	20.85	20.86	20.81	20.86	20.99	20.84	20.90
	Stand mode	285°	27.47	23.47	20.99	20.81	20.86	20.82	20.95	20.98	20.81	20.99	20.97	20.91
		275°	27.48	23.45	20.90	20.95	20.82	20.99	20.94	20.82	20.97	20.88	20.93	20.99
		265°	27.41	23.47	20.80	20.95	20.91	20.90	20.86	20.88	20.99	20.92	20.89	20.92
		255°	27.49	23.36	20.84	20.99	20.93	20.91	20.83	20.82	20.97	20.82	20.90	20.99
		245°	27.37	23.32	20.88	20.82	20.91	20.93	20.92	20.86	20.81	20.95	20.86	20.95
		235°	27.41	23.32	20.97	20.83	20.84	20.92	20.82	20.93	20.97	20.88	20.95	20.99
		225°	27.49	23.36	20.99	20.86	20.96	20.84	20.83	20.87	20.96	20.88	20.94	20.96
		215°	27.43	23.43	20.81	20.99	20.84	20.92	20.82	20.86	20.97	20.96	20.85	20.88
		205°	27.41	23.31	20.98	20.90	20.86	20.96	20.91	20.94	20.89	20.99	20.95	20.96
		200°	27.30	23.44	20.88	20.90	20.84	20.94	20.90	20.92	20.82	20.92	20.86	20.97
		0°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Lid close	10°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		20°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Book mode	30°	13.94	11.83	16.45	15.82	18.47	17.83	18.93	18.95	16.95	18.44	15.41	17.95
		25°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Lid close	26°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		27°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		28°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		29°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		30°	13.93	11.80	16.42	15.88	18.37	17.93	18.84	18.92	16.83	18.32	15.44	17.89
		31°	13.80	11.99	16.44	15.81	18.40	17.82	18.89	18.87	16.94	18.35	15.37	17.94
		32°	13.89	11.83	16.36	15.95	18.40	17.85	18.81	18.97	16.84	18.38	15.40	17.83
		33°	13.95	11.88	16.40	15.84	18.30	17.98	18.99	18.81	16.94	18.43	15.42	17.84
		34°	13.84	11.82	16.40	15.81	18.45	17.91	18.87	18.91	16.97	18.46	15.39	17.84
		35°	13.82	11.80	16.33	15.93	18.33	17.84	18.98	18.83	16.80	18.31	15.37	17.92
		40°	13.95	11.95	16.45	15.92	18.35	17.80	18.90	18.90	16.85	18.45	15.38	17.93
		50°	13.97	11.91	16.49	15.87	18.37	17.88	18.82	18.89	16.90	18.38	15.32	17.81
		60°	13.90	11.85	16.35	15.93	18.31	17.92	18.94	18.87	16.85	18.31	15.45	17.98
		70°	13.99	11.81	16.48	15.94	18.41	17.85	18.89	18.92	16.90	18.40	15.41	17.90
		80°	13.95	11.95	16.31	15.98	18.37	17.89	18.92	18.94	16.81	18.43	15.31	17.96
	Book mode	90°	13.88	11.81	16.35	15.98	18.40	17.89	18.88	18.88	16.81	18.35	15.46	17.97
		100°	13.95	11.80	16.30	15.88	18.32	17.95	18.88	18.90	16.85	18.48	15.34	17.99
		110°	13.81	11.96	16.46	15.96	18.36	17.89	18.87	18.91	16.80	18.38	15.48	17.81
		120°	13.93	11.87	16.32	15.86	18.42	17.87	18.92	18.84	16.93	18.41	15.38	17.96
		130°	13.80	11.96	16.49	15.94	18.49	17.85	18.92	18.93	16.97	18.43	15.40	17.89
		140°	13.98	11.91	16.46	15.83	18.47	17.96	18.91	18.86	16.88	18.33	15.48	17.85
		150°	13.92	11.82	16.37	15.83	18.44	17.97	18.93	18.94	16.80	18.31	15.46	17.95
		160°	13.89	11.91	16.42	15.81	18.36	17.83	18.96	18.86	16.87	18.48	15.46	17.91
		170°	13.98	11.95	16.43	15.96	18.49	17.94	18.92	18.82	16.93	18.31	15.38	17.98
		180°	13.87	11.90	16.44	15.94	18.39	17.81	18.93	18.87	16.90	18.38	15.48	17.84
		190°	13.99	11.89	16.32	15.97	18.48	17.80	18.81	18.88	16.84	18.48	15.36	17.80
		199°	13.86	11.99	16.35	15.83	18.42	17.95	18.99	18.87	16.96	18.30	15.41	17.81
		190°	13.99	11.89	16.46	15.93	18.30	17.90	18.85	18.87	16.95	18.32	15.31	17.80
		180°	13.95	11.98	16.37	15.94	18.39	17.81	18.93	18.95	16.86	18.33	15.37	17.99
		170°	13.91	11.85	16.39	15.95	18.47	17.88	18.97	18.98	16.82	18.34	15.35	17.95
		160°	13.90	11.83	16.41	15.84	18.39	17.86	18.89	18.94	16.97	18.40	15.37	17.99
		150°	13.92	11.88	16.35	15.88	18.48	17.81	18.82	18.89	16.86	18.44	15.36	17.97
		140°	13.94	11.91	16.44	15.95	18.33	17.80	18.88	18.80	16.96	18.40	15.37	17.84
		130°	13.95	11.94	16.38	15.95	18.34	17.98	18.88	18.82	16.90	18.34	15.37	17.82
	Book mode	120°	13.91	11.87	16.45	15.91	18.43	17.93	18.94	18.92	16.86	18.32	15.48	17.95
		110°	13.93	11.92	16.48	15.90	18.39	17.82	18.95	18.95	16.96	18.37	15.46	17.92
		100°	13.81	11.98	16.45	15.88	18.44	17.93	18.99	18.97	16.90	18.35	15.41	17.96
		90°	13.93	11.97	16.37	15.97	18.40	17.92	18.93	18.98	16.93	18.43	15.34	17.89
		80°	13.97	11.80	16.45	15.93	18.35	17.87	18.95	18.85	16.83	18.46	15.38	17.96
		70°	13.92	11.84	16.40	15.83	18.38	17.99	18.81	18.86	16.85	18.43	15.47	17.90
		60°	13.94	11.93	16.38	15.92	18.49	17.81	18.82	18.80	16.85	18.47	15.35	17.90
		50°	13.90	11.88	16.45	15.91	18.48	17.84	18.88	18.84	16.85	18.39	15.48	17.94
		40°	13.97	11.90	16.31	15.99	18.32	17.93	18.80	18.86	16.82	18.39	15.49	17.87
		30°	13.99	11.90	16.35	15.87	18.35	17.83	18.82	18.96	16.86	18.47	15.46	17.96
	Lid close	20°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		25°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Book mode	30°	13.94	11.81	16.44	15.97	18.49	17.99	18.80	18.99	16.85	18.31	15.38	17.88
		29°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		28°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		27°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
	Lid close	26°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		25°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		20°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		10°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
		0°	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

4.5 Test limit

§ 2.1093(d)(1)
Applications for equipment authorization of portable RF sources subject to routine environmental evaluation must contain a statement confirming compliance with the limits specified in § 1.1310 as part of their application. Technical information showing the basis for this statement must be submitted to the Commission upon request. The SAR limits specified in § 1.1310(a) through (c) of this chapter shall be used for evaluation of portable devices transmitting in the frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz shall be evaluated in terms of the MPE limits specified in Table 1 to § 1.1310(e)(1). A minimum separation distance applicable to the operating configurations and exposure conditions of the device shall be used for the evaluation. In general, maximum time-averaged power levels must be used for evaluation. All unlicensed personal communications service (PCS) devices and unlicensed NII devices shall be subject to the limits for general population/uncontrolled exposure.
Radiofrequency radiation exposure limits.
§ 1.1310(a)
Specific absorption rate (SAR) shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in § 1.1307(b) within the frequency range of 100 kHz to 6 GHz (inclusive).
§ 1.1310(b)
The SAR limits for occupational/controlled exposure are 0.4 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 8 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit for occupational/controlled exposure is 20 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 6 minutes to determine compliance with occupational/controlled SAR limits.
§ 1.1310(c)
The SAR limits for general population/uncontrolled exposure are 0.08 W/kg, as averaged over the whole body, and a peak spatial-average SAR of 1.6 W/kg, averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the parts of the human body treated as extremities, such as hands, wrists, feet, ankles, and pinnae, where the peak spatial-average SAR limit is 4 W/kg, averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube). Exposure may be averaged over a time period not to exceed 30 minutes to determine compliance with general population/uncontrolled SAR limits.

Note to paragraphs (a) through (c):
SAR is a measure of the rate of energy absorption due to exposure to RF electromagnetic energy. These SAR limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized SAR in Section 4.2 of "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE Std C95.1-1992, copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in "Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields," NCRP Report No. 86, Section 17.4.5, copyright 1986 by NCRP, Bethesda, Maryland 20814. Limits for whole body SAR and peak spatial-average SAR are based

on recommendations made in both of these documents. The MPE limits in Table 1 are based generally on criteria published by the NCRP in “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” NCRP Report No. 86, Sections 17.4.1, 17.4.1.1, 17.4.2 and 17.4.3, copyright 1986 by NCRP, Bethesda, Maryland 20814. In the frequency range from 100 MHz to 1500 MHz, these MPE exposure limits for field strength and power density are also generally based on criteria recommended by the ANSI in Section 4.1 of “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” ANSI/IEEE Std C95.1-1992, copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017.

Portable devices that transmit at frequencies above 6 GHz shall be evaluated in terms of the MPE limits specified in Table 1 to § 1.1310(e)(1).
According to ANSI/IEEE C95.1-1992, the criteria listed in the following Table shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.
Peak Spatially Averaged Power Density was evaluated over a circular area of 4cm2 per interim FCC Guidance for near-field power density evaluations per October 2018 TCB Workshop notes

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(i) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*($900/f^2$)	<6
30-300	61.4	0.163	1.0	<6
300-1,500			f/300	<6
1,500-100,000			5	<6
(ii) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*($180/f^2$)	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1.0	<30

f = frequency in MHz. * = Plane-wave equivalent power density.
Table 1 to § 1.1310(e)(1) - Limits for Maximum Permissible Exposure (MPE)

5 MAXIMUM OUTPUT POWER

5.1 GSM/GPRS/EDGE

Notebook mode

Burst average power						
Max. Rated Avg. Power + Max. Tolerance (dBm)			34.5	31.5	29.5	28.5
			1Dn1UP Multi- class 8	1Dn2UP Multi- class 10	1Dn3UP Multi- class 11	1Dn4UP Multi- class 12
EUT mode	Frequency (MHz)	CH	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)
GPRS 850 (GMSK)	824.2	128	33.16	29.10	28.02	27.54
	836.6	190	33.22	29.18	27.89	27.55
	848.8	251	33.10	29.20	27.76	27.49
Source-based time average power						
GPRS 850 (GMSK)	824.2	128	24.13	23.08	23.76	24.53
	836.6	190	24.19	23.16	23.63	24.54
	848.8	251	24.07	23.18	23.50	21.44
The division factor compared to the number of TX time slot						
Division factor			1 TX time slot	2 TX time slot	3 TX time slot	4 TX time slot
			-9.03	-6.02	-4.26	-3.01

Burst average power						
Max. Rated Avg. Power + Max. Tolerance (dBm)			31	28	26	25
			1Dn1UP Multi- class 8	1Dn2UP Multi- class 10	1Dn3UP Multi- class 11	1Dn4UP Multi- class 12
EUT mode	Frequency (MHz)	CH	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)
EDGE 850 (8PSK)	824.2	128	25.62	24.19	22.78	21.96
	836.6	190	25.76	24.24	22.91	21.95
	848.8	251	25.70	24.14	22.76	21.82
Source-based time average power						
EDGE 850 (8PSK)	824.2	128	16.59	18.17	18.52	18.95
	836.6	190	16.73	18.22	18.65	18.94
	848.8	251	16.67	18.12	18.50	18.81
The division factor compared to the number of TX time slot						
Division factor			1 TX time slot	2 TX time slot	3 TX time slot	4 TX time slot
			-9.03	-6.02	-4.26	-3.01

Burst average power						
Max. Rated Avg. Power + Max. Tolerance (dBm)			30	27	25	24
			1Dn1UP Multi- class 8	1Dn2UP Multi- class 10	1Dn3UP Multi- class 11	1Dn4UP Multi- class 12
EUT mode	Frequency (MHz)	CH	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)
GPRS 1900 (GMSK)	1850.2	512	28.94	27.21	25.41	24.38
	1880	661	28.87	27.02	25.23	24.21
	1909.8	810	28.75	26.76	25.72	24.77
Source-based time average power						
GPRS 1900 (GMSK)	1850.2	512	19.91	21.19	21.15	21.37
	1880	661	19.84	21.00	20.97	21.20
	1909.8	810	19.72	20.74	21.46	21.76
The division factor compared to the number of TX time slot						
Division factor			1 TX time slot	2 TX time slot	3 TX time slot	4 TX time slot
			-9.03	-6.02	-4.26	-3.01

Burst average power						
Max. Rated Avg. Power + Max. Tolerance (dBm)			26	23	21	20
			1Dn1UP Multi- class 8	1Dn2UP Multi- class 10	1Dn3UP Multi- class 11	1Dn4UP Multi- class 12
EUT mode	Frequency (MHz)	CH	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)
EDGE 1900 (8PSK)	1850.2	512	25.48	24.70	23.12	22.22
	1880	661	25.42	24.51	22.95	21.93
	1909.8	810	25.29	24.60	23.05	22.13
Source-based time average power						
EDGE 1900 (8PSK)	1850.2	512	16.45	18.68	18.86	19.21
	1880	661	16.39	18.49	18.69	18.92
	1909.8	810	16.26	18.58	18.79	19.12
The division factor compared to the number of TX time slot						
Division factor			1 TX time slot	2 TX time slot	3 TX time slot	4 TX time slot
			-9.03	-6.02	-4.26	-3.01

Tablet mode

Burst average power						
Max. Rated Avg. Power + Max. Tolerance (dBm)			19.5	16.5	14.5	13.5
			1Dn1UP Multi- class 8	1Dn2UP Multi- class 10	1Dn3UP Multi- class 11	1Dn4UP Multi- class 12
EUT mode	Frequency (MHz)	CH	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)
GPRS 850 (GMSK)	824.2	128	18.85	15.85	13.67	13.26
	836.6	190	18.78	15.82	13.54	13.23
	848.8	251	18.65	15.68	13.43	13.10
Source-based time average power						
GPRS 850 (GMSK)	824.2	128	9.82	9.83	9.41	10.25
	836.6	190	9.75	9.80	9.28	10.22
	848.8	251	9.62	9.66	9.17	21.44
The division factor compared to the number of TX time slot						
Division factor			1 TX time slot	2 TX time slot	3 TX time slot	4 TX time slot
			-9.03	-6.02	-4.26	-3.01
Burst average power						
Max. Rated Avg. Power + Max. Tolerance (dBm)			16	13	11	10
			1Dn1UP Multi- class 8	1Dn2UP Multi- class 10	1Dn3UP Multi- class 11	1Dn4UP Multi- class 12
EUT mode	Frequency (MHz)	CH	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)
EDGE 850 (8PSK)	824.2	128	15.42	12.36	10.21	10.20
	836.6	190	15.57	12.45	10.16	10.15
	848.8	251	15.34	12.32	10.20	10.12
Source-based time average power						
EDGE 850 (8PSK)	824.2	128	6.39	6.34	5.95	7.19
	836.6	190	6.54	6.43	5.90	7.14
	848.8	251	6.31	6.30	5.94	7.11
The division factor compared to the number of TX time slot						
Division factor			1 TX time slot	2 TX time slot	3 TX time slot	4 TX time slot
			-9.03	-6.02	-4.26	-3.01

Burst average power						
Max. Rated Avg. Power + Max. Tolerance (dBm)			17.5	14.5	12.5	11.5
			1Dn1UP Multi- class 8	1Dn2UP Multi- class 10	1Dn3UP Multi- class 11	1Dn4UP Multi- class 12
EUT mode	Frequency (MHz)	CH	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)
GPRS 1900 (GMSK)	1850.2	512	17.38	13.92	12.30	10.54
	1880	661	17.29	13.88	12.21	10.51
	1909.8	810	17.10	13.73	12.11	10.39
Source-based time average power						
GPRS 1900 (GMSK)	1850.2	512	8.35	7.90	8.04	7.53
	1880	661	8.26	7.86	7.95	7.50
	1909.8	810	8.07	7.71	7.85	7.38
The division factor compared to the number of TX time slot						
Division factor			1 TX time slot	2 TX time slot	3 TX time slot	4 TX time slot
			-9.03	-6.02	-4.26	-3.01

Burst average power						
Max. Rated Avg. Power + Max. Tolerance (dBm)			13.5	10.5	8.5	7.5
			1Dn1UP Multi- class 8	1Dn2UP Multi- class 10	1Dn3UP Multi- class 11	1Dn4UP Multi- class 12
EUT mode	Frequency (MHz)	CH	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)	Avg. (dBm)
EDGE 1900 (8PSK)	1850.2	512	13.25	10.02	8.06	6.98
	1880	661	12.97	9.78	8.01	6.78
	1909.8	810	13.24	10.12	7.92	7.00
Source-based time average power						
EDGE 1900 (8PSK)	1850.2	512	4.22	4.00	3.80	3.97
	1880	661	3.94	3.76	3.75	3.77
	1909.8	810	4.21	4.10	3.66	3.99
The division factor compared to the number of TX time slot						
Division factor			1 TX time slot	2 TX time slot	3 TX time slot	4 TX time slot
			-9.03	-6.02	-4.26	-3.01

5.2 FDD CAT.M1

Notebook mode

LTE Band 2_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1852.5	1880	1907.5		
Channel					18625	18900	19175		
5	QPSK	1	0	0	20.14	20.47	20.93	22.00	0
		1	5	0	19.93	20.32	20.74	22.00	0
		1	0	1	19.97	20.28	20.69	22.00	0
		1	5	1	19.94	20.33	20.74	22.00	0
		1	0	3	19.85	20.26	20.78	22.00	0
		1	5	3	19.94	20.28	20.77	22.00	0
		3	0	0	19.89	20.28	20.77	22.00	0
		3	3	3	19.99	20.21	20.83	22.00	0
		6	0	0	19.00	19.49	19.83	21.00	0-1
		6	0	1	19.10	19.43	19.91	21.00	0-1
		6	0	3	19.04	19.46	19.90	21.00	0-1
	16-QAM	1	0	0	19.92	20.33	20.79	22.00	0
		1	5	0	20.01	20.36	20.65	22.00	0
		1	0	1	19.92	20.33	20.89	22.00	0
		1	5	1	19.88	20.40	20.65	22.00	0
		1	0	3	19.91	20.29	20.78	22.00	0
		1	5	3	19.98	20.27	20.89	22.00	0
		3	0	0	20.04	20.36	20.79	22.00	0
		3	3	3	19.97	20.44	20.78	22.00	0
		5	0	0	19.12	19.31	19.82	21.00	0-1
		5	0	1	19.19	19.54	19.84	21.00	0-1
		5	0	3	18.99	19.44	19.85	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1851.5	1880	1908.5		
Channel					18615	18900	19185		
3	QPSK	1	0	0	19.99	20.23	20.79	22.00	0
		1	5	0	19.93	20.38	20.65	22.00	0
		1	0	1	19.89	20.30	20.76	22.00	0
		1	5	1	19.99	20.33	20.83	22.00	0
		3	3	0	19.95	20.31	20.88	22.00	0
		3	3	1	20.03	20.25	20.88	22.00	0
		6	0	0	19.13	19.50	19.91	21.00	0-1
		6	0	1	19.18	19.39	19.85	21.00	0-1
	16-QAM	1	0	0	20.04	20.24	20.89	22.00	0
		1	5	0	19.90	20.28	20.79	22.00	0
		1	0	1	20.05	20.27	20.69	22.00	0
		1	5	1	19.93	20.33	20.72	22.00	0
		3	0	0	20.04	20.32	20.76	22.00	0
		3	3	1	19.99	20.27	20.87	22.00	0
		5	0	0	19.02	19.42	19.94	21.00	0-1
		5	0	1	19.05	19.39	19.85	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1850.7	1880	1909.3		
Channel					18607	18900	19193		
1.4	QPSK	1	0	0	19.92	20.30	20.70	22.00	0
		1	5	0	19.98	20.23	20.85	22.00	0
		3	3	0	19.96	20.35	20.71	22.00	0
		6	0	0	19.09	19.29	19.81	21.00	0-1
	16-QAM	1	0	0	19.93	20.25	20.66	22.00	0
		1	5	0	20.02	20.37	20.81	22.00	0
		3	0	0	19.94	20.27	20.81	22.00	0
		5	0	0	19.08	19.32	19.89	21.00	0-1

LTE Band 4_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1712.5	1732.5	1752.5		
Channel					19975	20175	20375		
5	QPSK	1	0	0	20.14	20.70	20.84	22.00	0
		1	5	0	20.03	20.51	20.73	22.00	0
		1	0	1	20.02	20.47	20.70	22.00	0
		1	5	1	20.06	20.51	20.73	22.00	0
		1	0	3	19.94	20.58	20.67	22.00	0
		1	5	3	19.98	20.48	20.57	22.00	0
		3	0	0	20.00	20.63	20.65	22.00	0
		3	3	3	19.96	20.52	20.67	22.00	0
		6	0	0	19.03	19.71	19.78	21.00	0-1
		6	0	1	19.20	19.66	19.76	21.00	0-1
		6	0	3	19.18	19.57	19.81	21.00	0-1
	16-QAM	1	0	0	19.95	20.48	20.61	22.00	0
		1	5	0	19.96	20.54	20.68	22.00	0
		1	0	1	20.08	20.60	20.74	22.00	0
		1	5	1	19.97	20.50	20.75	22.00	0
		1	0	3	19.93	20.55	20.62	22.00	0
		1	5	3	20.03	20.62	20.58	22.00	0
		3	0	0	19.92	20.46	20.67	22.00	0
		3	3	3	19.96	20.46	20.59	22.00	0
		5	0	0	19.09	19.62	19.68	21.00	0-1
		5	0	1	19.06	19.62	19.77	21.00	0-1
		5	0	3	19.10	19.61	19.73	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1711.5	1732.5	1753.5		
Channel					19965	20175	20385		
3	QPSK	1	0	0	20.05	20.61	20.62	22.00	0
		1	5	0	19.87	20.56	20.72	22.00	0
		1	0	1	19.97	20.48	20.80	22.00	0
		1	5	1	19.89	20.64	20.61	22.00	0
		3	3	0	19.96	20.59	20.66	22.00	0
		3	3	1	19.91	20.67	20.71	22.00	0
		6	0	0	19.11	19.71	19.73	21.00	0-1
		6	0	1	19.04	19.58	19.74	21.00	0-1
	16-QAM	1	0	0	19.87	20.53	20.63	22.00	0
		1	5	0	19.93	20.52	20.58	22.00	0
		1	0	1	19.89	20.43	20.69	22.00	0
		1	5	1	20.03	20.65	20.64	22.00	0
		3	0	0	19.90	20.44	20.58	22.00	0
		3	3	1	20.04	20.53	20.60	22.00	0
		5	0	0	19.06	19.66	19.82	21.00	0-1
		5	0	1	19.12	19.66	19.74	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1710.7	1732.5	1754.3		
Channel					19957	20175	20393		
1.4	QPSK	1	0	0	19.96	20.66	20.71	22.00	0
		1	5	0	20.04	20.60	20.68	22.00	0
		3	3	0	20.02	20.53	20.59	22.00	0
		6	0	0	19.16	19.70	19.80	21.00	0-1
	16-QAM	1	0	0	19.91	20.60	20.64	22.00	0
		1	5	0	19.98	20.51	20.74	22.00	0
		3	0	0	19.97	20.46	20.60	22.00	0
		5	0	0	19.11	19.68	19.77	21.00	0-1

LTE Band 5_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					826.5	836.5	846.5		
Channel					20425	20525	20625		
5	QPSK	1	0	0	20.38	20.16	20.08	22.00	0
		1	5	0	20.25	20.00	19.93	22.00	0
		1	0	1	20.22	19.88	19.97	22.00	0
		1	5	1	20.20	19.86	19.89	22.00	0
		1	0	3	20.33	20.04	19.92	22.00	0
		1	5	3	20.29	19.91	20.02	22.00	0
		3	0	0	20.19	19.94	20.02	22.00	0
		3	3	3	20.24	19.96	19.90	22.00	0
		6	0	0	19.35	19.08	18.96	21.00	0-1
		6	0	1	19.33	19.13	19.02	21.00	0-1
		6	0	3	19.30	19.12	19.02	21.00	0-1
	16-QAM	1	0	0	20.27	19.94	19.85	22.00	0
		1	5	0	20.23	20.07	19.97	22.00	0
		1	0	1	20.18	19.98	19.87	22.00	0
		1	5	1	20.12	19.98	19.94	22.00	0
		1	0	3	20.31	20.11	19.89	22.00	0
		1	5	3	20.24	20.00	19.93	22.00	0
		3	0	0	20.12	19.90	19.93	22.00	0
		3	3	3	20.21	19.94	19.97	22.00	0
		5	0	0	19.42	19.04	18.92	21.00	0-1
		5	0	1	19.27	19.19	19.08	21.00	0-1
		5	0	3	19.31	19.09	19.00	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					825.5	836.5	847.5		
Channel					20415	20525	20635		
3	QPSK	1	0	0	20.20	20.00	19.99	22.00	0
		1	5	0	20.24	20.05	19.93	22.00	0
		1	0	1	20.23	19.94	19.84	22.00	0
		1	5	1	20.18	20.04	19.96	22.00	0
		3	3	0	20.26	19.95	19.94	22.00	0
		3	3	1	20.27	20.09	19.90	22.00	0
		6	0	0	19.38	19.09	18.92	21.00	0-1
		6	0	1	19.27	19.08	18.99	21.00	0-1
	16-QAM	1	0	0	20.23	20.05	19.88	22.00	0
		1	5	0	20.15	19.94	19.90	22.00	0
		1	0	1	20.30	19.94	19.96	22.00	0
		1	5	1	20.18	20.09	19.81	22.00	0
		3	0	0	20.16	20.09	19.90	22.00	0
		3	3	1	20.18	20.00	19.89	22.00	0
		5	0	0	19.31	19.01	18.90	21.00	0-1
		5	0	1	19.44	19.08	18.99	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1710.7	1732.5	1754.3		
Channel					19957	20175	20393		
1.4	QPSK	1	0	0	20.23	20.06	19.88	22.00	0
		1	5	0	20.24	19.94	19.82	22.00	0
		3	3	0	20.17	19.95	19.78	22.00	0
		6	0	0	19.26	19.06	19.10	21.00	0-1
	16-QAM	1	0	0	20.26	20.00	19.85	22.00	0
		1	5	0	20.25	20.01	20.03	22.00	0
		3	0	0	20.19	19.94	20.02	22.00	0
		5	0	0	19.34	19.04	18.99	21.00	0-1

LTE Band 12_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					701.5	707.5	713.5		
Channel					23035	23095	23155		
5	QPSK	1	0	0	20.42	20.31	20.11	22.00	0
		1	5	0	20.29	20.11	19.94	22.00	0
		1	0	1	20.19	20.20	19.96	22.00	0
		1	5	1	20.24	20.08	19.96	22.00	0
		1	0	3	20.13	20.18	19.93	22.00	0
		1	5	3	20.22	20.13	19.95	22.00	0
		3	0	0	20.34	20.14	19.97	22.00	0
		3	3	3	20.20	20.11	19.95	22.00	0
		6	0	0	19.36	19.25	19.13	21.00	0-1
		6	0	1	19.44	19.12	19.02	21.00	0-1
		6	0	3	19.38	19.17	18.94	21.00	0-1
	16-QAM	1	0	0	20.22	20.07	20.04	22.00	0
		1	5	0	20.37	20.15	20.01	22.00	0
		1	0	1	20.21	20.09	19.90	22.00	0
		1	5	1	20.16	20.07	19.85	22.00	0
		1	0	3	20.33	20.06	20.08	22.00	0
		1	5	3	20.38	20.20	19.88	22.00	0
		3	0	0	20.26	20.12	19.88	22.00	0
		3	3	3	20.28	20.21	20.07	22.00	0
		5	0	0	19.42	19.22	19.09	21.00	0-1
		5	0	1	19.37	19.17	19.09	21.00	0-1
		5	0	3	19.36	19.36	18.95	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					700.5	707.5	714.5		
Channel					23025	23095	23165		
3	QPSK	1	0	0	20.34	20.28	19.97	22.00	0
		1	5	0	20.22	20.07	19.81	22.00	0
		1	0	1	20.25	20.24	19.92	22.00	0
		1	5	1	20.27	20.03	19.93	22.00	0
		3	3	0	20.29	20.13	19.90	22.00	0
		3	3	1	20.37	20.24	19.97	22.00	0
		6	0	0	19.27	19.13	19.09	21.00	0-1
		6	0	1	19.44	19.29	19.01	21.00	0-1
	16-QAM	1	0	0	20.24	20.15	19.91	22.00	0
		1	5	0	20.24	20.09	19.92	22.00	0
		1	0	1	20.13	20.10	19.93	22.00	0
		1	5	1	20.25	20.13	19.94	22.00	0
		3	0	0	20.17	20.20	19.99	22.00	0
		3	3	1	20.34	20.11	19.97	22.00	0
		5	0	0	19.32	19.27	19.04	21.00	0-1
		5	0	1	19.38	19.36	19.14	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					699.7	707.5	715.3		
Channel					23017	23095	23173		
1.4	QPSK	1	0	0	20.24	20.10	19.85	22.00	0
		1	5	0	20.20	20.19	19.89	22.00	0
		3	3	0	20.24	20.03	19.95	22.00	0
		6	0	0	19.32	19.24	19.14	21.00	0-1
	16-QAM	1	0	0	20.25	20.16	20.03	22.00	0
		1	5	0	20.24	20.15	19.95	22.00	0
		3	0	0	20.26	20.13	20.02	22.00	0
		5	0	0	19.30	19.30	19.03	21.00	0-1

LTE Band 13_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					779.5	782	784.5		
Channel					23205	23230	23255		
5	QPSK	1	0	0	20.14	20.13	20.12	22.00	0
		1	5	0	20.08	19.93	20.03	22.00	0
		1	0	1	19.87	20.01	19.99	22.00	0
		1	5	1	19.94	19.96	19.96	22.00	0
		1	0	3	19.99	19.94	19.97	22.00	0
		1	5	3	19.95	19.97	19.92	22.00	0
		3	0	0	19.99	19.95	19.93	22.00	0
		3	3	3	20.04	19.92	20.07	22.00	0
		6	0	0	19.02	19.01	19.00	21.00	0-1
		6	0	1	19.06	19.14	19.09	21.00	0-1
		6	0	3	19.11	19.05	19.08	21.00	0-1
	16-QAM	1	0	0	19.91	19.96	20.04	22.00	0
		1	5	0	20.00	20.02	19.91	22.00	0
		1	0	1	19.95	19.97	19.96	22.00	0
		1	5	1	20.00	19.94	20.04	22.00	0
		1	0	3	19.99	19.97	19.85	22.00	0
		1	5	3	19.94	20.04	20.03	22.00	0
		3	0	0	20.06	19.86	19.98	22.00	0
		3	3	3	19.96	20.03	19.84	22.00	0
		5	0	0	19.15	19.05	19.06	21.00	0-1
		5	0	1	19.20	19.01	19.07	21.00	0-1
		5	0	3	19.07	19.07	19.19	21.00	0-1

LTE Band 14_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					790.5	793	795.5		
Channel					23305	23330	23355		
5	QPSK	1	0	0	20.35	20.36	20.32	22.00	0
		1	5	0	20.17	20.27	20.16	22.00	0
		1	0	1	20.22	20.25	20.16	22.00	0
		1	5	1	20.20	20.11	20.08	22.00	0
		1	0	3	20.26	20.20	20.17	22.00	0
		1	5	3	20.22	20.24	20.13	22.00	0
		3	0	0	20.19	20.19	20.25	22.00	0
		3	3	3	20.25	20.29	20.19	22.00	0
		6	0	0	19.27	19.33	19.29	21.00	0-1
		6	0	1	19.25	19.27	19.18	21.00	0-1
		6	0	3	19.25	19.22	19.36	21.00	0-1
	16-QAM	1	0	0	20.09	20.24	20.13	22.00	0
		1	5	0	20.18	20.12	20.10	22.00	0
		1	0	1	20.25	20.10	20.12	22.00	0
		1	5	1	20.24	20.21	20.20	22.00	0
		1	0	3	20.27	20.07	20.20	22.00	0
		1	5	3	20.28	20.18	20.18	22.00	0
		3	0	0	20.20	20.20	20.25	22.00	0
		3	3	3	20.24	20.19	20.10	22.00	0
		5	0	0	19.26	19.37	19.28	21.00	0-1
		5	0	1	19.27	19.24	19.22	21.00	0-1
		5	0	3	19.28	19.34	19.18	21.00	0-1

LTE Band 25_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1852.5	1882.5	1912.5		
Channel					26065	26365	26665		
5	QPSK	1	0	0	20.14	20.40	20.90	22.00	0
		1	5	0	20.32	20.61	20.14	22.00	0
		1	0	1	20.10	20.76	20.13	22.00	0
		1	5	1	20.20	20.66	20.08	22.00	0
		1	0	3	20.26	20.70	20.20	22.00	0
		1	5	3	20.35	20.67	20.13	22.00	0
		3	0	0	20.24	20.73	20.16	22.00	0
		3	3	3	20.13	20.72	20.23	22.00	0
		6	0	0	19.31	19.80	19.25	21.00	0-1
		6	0	1	19.35	19.80	19.22	21.00	0-1
		6	0	3	19.42	19.90	19.35	21.00	0-1
	16-QAM	1	0	0	20.16	20.65	20.10	22.00	0
		1	5	0	20.33	20.72	20.15	22.00	0
		1	0	1	20.18	20.64	20.13	22.00	0
		1	5	1	20.15	20.79	20.05	22.00	0
		1	0	3	20.27	20.74	20.04	22.00	0
		1	5	3	20.29	20.64	20.18	22.00	0
		3	0	0	20.29	20.77	20.22	22.00	0
		3	3	3	20.28	20.84	20.10	22.00	0
		5	0	0	19.38	19.93	19.28	21.00	0-1
		5	0	1	19.22	19.83	19.23	21.00	0-1
		5	0	3	19.32	19.76	19.34	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1851.5	1882.5	1913.5		
Channel					26055	26365	26675		
3	QPSK	1	0	0	20.26	20.75	20.20	22.00	0
		1	5	0	20.25	20.65	20.13	22.00	0
		1	0	1	20.31	20.68	20.17	22.00	0
		1	5	1	20.32	20.70	20.20	22.00	0
		3	3	0	20.18	20.70	20.11	22.00	0
		3	3	1	20.35	20.80	20.16	22.00	0
		6	0	0	19.30	19.86	19.27	21.00	0-1
		6	0	1	19.47	19.84	19.19	21.00	0-1
	16-QAM	1	0	0	20.29	20.83	20.17	22.00	0
		1	5	0	20.27	20.70	20.20	22.00	0
		1	0	1	20.29	20.74	20.20	22.00	0
		1	5	1	20.31	20.80	20.22	22.00	0
		3	0	0	20.35	20.74	20.12	22.00	0
		3	3	1	20.23	20.84	20.17	22.00	0
		5	0	0	19.28	19.85	19.30	21.00	0-1
		5	0	1	19.46	19.78	19.27	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1850.7	1882.5	1914.3		
Channel					26047	26365	26683		
1.4	QPSK	1	0	0	20.25	20.74	20.16	22.00	0
		1	5	0	20.26	20.75	20.14	22.00	0
		3	3	0	20.22	20.76	20.10	22.00	0
		6	0	0	19.44	19.89	19.24	21.00	0-1
	16-QAM	1	0	0	20.24	20.75	20.15	22.00	0
		1	5	0	20.30	20.74	20.17	22.00	0
		3	0	0	20.31	20.67	20.23	22.00	0
		5	0	0	19.25	19.78	19.28	21.00	0-1

LTE Band 26_Cat.M1_FCC									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					816.5	831.5	846.5		
Channel					26715	26865	27015		
5	QPSK	1	0	0	20.73	20.22	20.03	22.00	0
		1	5	0	20.54	20.08	19.82	22.00	0
		1	0	1	20.56	20.13	19.87	22.00	0
		1	5	1	20.64	20.05	19.82	22.00	0
		1	0	3	20.60	19.98	19.78	22.00	0
		1	5	3	20.70	20.13	19.80	22.00	0
		3	0	0	20.43	20.00	19.94	22.00	0
		3	3	3	20.65	20.12	19.86	22.00	0
		6	0	0	19.70	19.27	18.95	21.00	0-1
		6	0	1	19.63	19.24	19.04	21.00	0-1
		6	0	3	19.59	19.05	18.94	21.00	0-1
	16-QAM	1	0	0	20.51	20.03	19.83	22.00	0
		1	5	0	20.55	20.06	19.87	22.00	0
		1	0	1	20.59	20.11	19.88	22.00	0
		1	5	1	20.59	19.99	19.99	22.00	0
		1	0	3	20.70	20.12	19.89	22.00	0
		1	5	3	20.64	20.09	19.84	22.00	0
		3	0	0	20.57	20.19	19.77	22.00	0
		3	3	3	20.46	20.10	19.98	22.00	0
		5	0	0	19.74	19.15	18.91	21.00	0-1
		5	0	1	19.65	19.10	19.04	21.00	0-1
		5	0	3	19.76	19.18	18.83	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					815.5	831.5	847.5		
Channel					26705	26865	27025		
3	QPSK	1	0	0	20.62	20.17	19.87	22.00	0
		1	5	0	20.50	20.01	19.84	22.00	0
		1	0	1	20.58	20.05	19.86	22.00	0
		1	5	1	20.52	20.19	19.93	22.00	0
		3	3	0	20.58	20.06	19.98	22.00	0
		3	3	1	20.53	20.08	19.85	22.00	0
		6	0	0	19.68	19.18	18.94	21.00	0-1
		6	0	1	19.63	19.11	18.96	21.00	0-1
	16-QAM	1	0	0	20.51	20.12	19.86	22.00	0
		1	5	0	20.55	20.04	19.89	22.00	0
		1	0	1	20.59	20.07	19.91	22.00	0
		1	5	1	20.71	20.05	19.90	22.00	0
		3	0	0	20.60	20.15	19.95	22.00	0
		3	3	1	20.68	20.10	19.95	22.00	0
		5	0	0	19.63	19.10	19.11	21.00	0-1
		5	0	1	19.69	19.16	19.03	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					814.7	831.5	848.3		
Channel					26697	26865	27033		
1.4	QPSK	1	0	0	20.52	20.07	19.89	22.00	0
		1	5	0	20.57	19.95	19.78	22.00	0
		3	3	0	20.64	20.05	19.89	22.00	0
		6	0	0	19.73	19.20	18.94	21.00	0-1
	16-QAM	1	0	0	20.63	20.10	19.96	22.00	0
		1	5	0	20.57	20.18	19.93	22.00	0
		3	0	0	20.57	20.13	19.91	22.00	0
		5	0	0	19.72	19.12	19.07	21.00	0-1

LTE Band 66_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1712.5	1745	1777.5		
Channel					131997	132322	132647		
5	QPSK	1	0	0	20.06	20.41	20.44	22.00	0
		1	5	0	19.99	20.38	20.29	22.00	0
		1	0	1	19.87	20.26	20.24	22.00	0
		1	5	1	19.91	20.22	20.32	22.00	0
		1	0	3	19.79	20.36	20.29	22.00	0
		1	5	3	19.93	20.18	20.24	22.00	0
		3	0	0	19.82	20.22	20.23	22.00	0
		3	3	3	19.99	20.24	20.29	22.00	0
		6	0	0	19.12	19.43	19.32	21.00	0-1
		6	0	1	19.02	19.35	19.49	21.00	0-1
		6	0	3	19.06	19.31	19.36	21.00	0-1
	16-QAM	1	0	0	19.91	20.18	20.24	22.00	0
		1	5	0	19.92	20.18	20.26	22.00	0
		1	0	1	19.89	20.22	20.19	22.00	0
		1	5	1	19.90	20.13	20.29	22.00	0
		1	0	3	19.95	20.23	20.32	22.00	0
		1	5	3	19.90	20.20	20.21	22.00	0
		3	0	0	19.86	20.33	20.31	22.00	0
		3	3	3	19.91	20.16	20.22	22.00	0
		5	0	0	19.03	19.34	19.37	21.00	0-1
		5	0	1	19.10	19.26	19.34	21.00	0-1
		5	0	3	19.08	19.35	19.30	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1711.5	1745	1778.5		
Channel					131987	132322	132657		
3	QPSK	1	0	0	20.03	20.28	20.18	22.00	0
		1	5	0	19.91	20.34	20.27	22.00	0
		1	0	1	19.86	20.14	20.20	22.00	0
		1	5	1	19.93	20.35	20.23	22.00	0
		3	3	0	19.97	20.27	20.26	22.00	0
		3	3	1	19.90	20.26	20.28	22.00	0
		6	0	0	19.04	19.35	19.35	21.00	0-1
		6	0	1	19.00	19.43	19.37	21.00	0-1
	16-QAM	1	0	0	19.88	20.28	20.30	22.00	0
		1	5	0	19.92	20.33	20.42	22.00	0
		1	0	1	19.89	20.25	20.40	22.00	0
		1	5	1	19.82	20.26	20.40	22.00	0
		3	0	0	19.91	20.31	20.23	22.00	0
		3	3	1	19.87	20.28	20.36	22.00	0
		5	0	0	18.94	19.37	19.39	21.00	0-1
		5	0	1	19.04	19.25	19.46	21.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1710.7	1745	1779.3		
Channel					131979	132322	132665		
1.4	QPSK	1	0	0	19.90	20.14	20.41	22.00	0
		1	5	0	19.85	20.23	20.23	22.00	0
		3	3	0	19.90	20.30	20.20	22.00	0
		6	0	0	18.96	19.46	19.41	21.00	0-1
	16-QAM	1	0	0	19.92	20.18	20.29	22.00	0
		1	5	0	19.98	20.27	20.37	22.00	0
		3	0	0	19.91	20.30	20.30	22.00	0
		5	0	0	18.98	19.42	19.43	21.00	0-1

LTE Band 85_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					700.5	707	713.5		
Channel					134027	134092	134157		
5	QPSK	1	0	0	20.51	20.38	20.11	22.00	0
		1	5	0	20.42	20.19	19.86	22.00	0
		1	0	1	20.33	20.21	20.06	22.00	0
		1	5	1	20.31	20.25	19.90	22.00	0
		1	0	3	20.39	20.28	20.02	22.00	0
		1	5	3	20.43	20.19	19.88	22.00	0
		3	0	0	20.43	20.23	19.94	22.00	0
		3	3	3	20.34	20.27	19.85	22.00	0
		6	0	0	19.39	19.42	19.03	21.00	0-1
		6	0	1	19.48	19.33	19.12	21.00	0-1
		6	0	3	19.46	19.39	19.11	21.00	0-1
	16-QAM	1	0	0	20.42	20.15	19.92	22.00	0
		1	5	0	20.33	20.25	19.96	22.00	0
		1	0	1	20.40	20.13	19.95	22.00	0
		1	5	1	20.40	20.20	20.03	22.00	0
		1	0	3	20.48	20.13	19.86	22.00	0
		1	5	3	20.38	20.23	19.81	22.00	0
		3	0	0	20.37	20.16	20.02	22.00	0
		3	3	3	20.43	20.09	20.03	22.00	0
		5	0	0	19.58	19.28	18.96	21.00	0-1
		5	0	1	19.41	19.36	19.19	21.00	0-1
		5	0	3	19.39	19.23	19.16	21.00	0-1

Tablet mode

LTE Band 2_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1852.5	1880	1907.5		
Channel					18625	18900	19175		
5	QPSK	1	0	0	16.98	17.30	17.48	17.50	0
		1	5	0	16.81	17.11	17.40	17.50	0
		1	0	1	16.85	17.10	17.26	17.50	0
		1	5	1	16.83	17.17	17.35	17.50	0
		1	0	3	16.78	17.16	17.43	17.50	0
		1	5	3	16.93	17.15	17.41	17.50	0
		3	0	0	16.81	17.14	17.32	17.50	0
		3	3	3	16.73	17.14	17.31	17.50	0
		6	0	0	15.89	16.19	16.41	16.50	0-1
		6	0	1	15.87	16.28	16.41	16.50	0-1
		6	0	3	15.90	16.24	16.37	16.50	0-1
	16-QAM	1	0	0	16.94	17.21	17.34	17.50	0
		1	5	0	16.73	17.28	17.30	17.50	0
		1	0	1	16.82	17.13	17.21	17.50	0
		1	5	1	16.81	17.11	17.22	17.50	0
		1	0	3	16.74	17.19	17.29	17.50	0
		1	5	3	16.83	17.08	17.21	17.50	0
		3	0	0	16.78	17.14	17.32	17.50	0
		3	3	3	16.80	17.09	17.29	17.50	0
		5	0	0	15.96	16.26	16.38	16.50	0-1
		5	0	1	15.91	16.22	16.38	16.50	0-1
		5	0	3	15.93	16.28	16.31	16.50	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1851.5	1880	1908.5		
Channel					18615	18900	19185		
3	QPSK	1	0	0	16.76	17.06	17.26	17.50	0
		1	5	0	16.84	17.16	17.29	17.50	0
		1	0	1	16.74	17.14	17.37	17.50	0
		1	5	1	16.82	17.11	17.44	17.50	0
		3	3	0	16.83	17.13	17.28	17.50	0
		3	3	1	16.79	17.09	17.31	17.50	0
		6	0	0	15.85	16.28	16.47	16.50	0-1
		6	0	1	15.88	16.14	16.38	16.50	0-1
	16-QAM	1	0	0	16.82	17.02	17.28	17.50	0
		1	5	0	16.91	17.14	17.32	17.50	0
		1	0	1	16.79	17.07	17.23	17.50	0
		1	5	1	16.86	17.22	17.25	17.50	0
		3	0	0	16.75	17.16	17.18	17.50	0
		3	3	1	16.83	17.19	17.40	17.50	0
		5	0	0	15.86	16.20	16.47	16.50	0-1
		5	0	1	16.04	16.21	16.43	16.50	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1850.7	1880	1909.3		
Channel					18607	18900	19193		
1.4	QPSK	1	0	0	16.73	17.11	17.29	17.50	0
		1	5	0	16.73	17.12	17.39	17.50	0
		3	3	0	16.92	17.10	17.26	17.50	0
		6	0	0	15.90	16.33	16.42	16.50	0-1
	16-QAM	1	0	0	16.87	17.21	17.32	17.50	0
		1	5	0	16.86	17.15	17.36	17.50	0
		3	0	0	16.79	17.19	17.27	17.50	0
		5	0	0	15.97	16.28	16.42	16.50	0-1

LTE Band 4_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1712.5	1732.5	1752.5		
Channel					19975	20175	20375		
5	QPSK	1	0	0	16.55	16.96	16.99	17.00	0
		1	5	0	16.37	16.72	16.87	17.00	0
		1	0	1	16.41	16.78	16.87	17.00	0
		1	5	1	16.49	16.75	16.87	17.00	0
		1	0	3	16.53	16.77	16.88	17.00	0
		1	5	3	16.42	16.83	16.86	17.00	0
		3	0	0	16.30	16.80	16.71	17.00	0
		3	3	3	16.34	16.84	16.89	17.00	0
		6	0	0	15.50	15.86	15.88	16.00	0-1
		6	0	1	15.52	15.91	16.00	16.00	0-1
		6	0	3	15.49	15.94	15.97	16.00	0-1
	16-QAM	1	0	0	16.44	16.66	16.72	17.00	0
		1	5	0	16.53	16.75	16.86	17.00	0
		1	0	1	16.32	16.89	16.94	17.00	0
		1	5	1	16.36	16.87	16.81	17.00	0
		1	0	3	16.43	16.81	16.86	17.00	0
		1	5	3	16.41	16.75	16.88	17.00	0
		3	0	0	16.39	16.82	16.72	17.00	0
		3	3	3	16.37	16.69	16.89	17.00	0
		5	0	0	15.37	15.81	16.03	16.00	0-1
		5	0	1	15.46	15.81	15.94	16.00	0-1
		5	0	3	15.35	15.91	15.79	16.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1711.5	1732.5	1753.5		
Channel					19965	20175	20385		
3	QPSK	1	0	0	16.41	16.91	16.80	17.00	0
		1	5	0	16.39	16.83	16.86	17.00	0
		1	0	1	16.40	16.72	16.72	17.00	0
		1	5	1	16.46	16.89	16.71	17.00	0
		3	3	0	16.40	16.69	16.76	17.00	0
		3	3	1	16.31	16.79	16.83	17.00	0
		6	0	0	15.61	15.91	15.94	16.00	0-1
		6	0	1	15.50	15.94	15.80	16.00	0-1
	16-QAM	1	0	0	16.40	16.72	16.81	17.00	0
		1	5	0	16.47	16.79	16.83	17.00	0
		1	0	1	16.40	16.75	16.92	17.00	0
		1	5	1	16.33	16.76	16.90	17.00	0
		3	0	0	16.40	16.79	16.82	17.00	0
		3	3	1	16.53	16.83	16.86	17.00	0
		5	0	0	15.47	16.00	15.90	16.00	0-1
		5	0	1	15.57	15.85	15.89	16.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1710.7	1732.5	1754.3		
Channel					19957	20175	20393		
1.4	QPSK	1	0	0	16.36	16.81	16.88	17.00	0
		1	5	0	16.38	16.78	16.69	17.00	0
		3	3	0	16.30	16.79	16.86	17.00	0
		6	0	0	15.39	15.94	15.91	16.00	0-1
	16-QAM	1	0	0	16.52	16.89	16.83	17.00	0
		1	5	0	16.35	16.93	16.97	17.00	0
		3	0	0	16.41	16.80	16.92	17.00	0
		5	0	0	15.46	15.90	15.91	16.00	0-1

LTE Band 5_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					826.5	836.5	846.5		
Channel					20425	20525	20625		
5	QPSK	1	0	0	19.28	19.11	18.95	19.50	0
		1	5	0	19.05	18.92	18.74	19.50	0
		1	0	1	19.04	19.00	18.88	19.50	0
		1	5	1	19.04	18.86	18.82	19.50	0
		1	0	3	19.12	18.96	18.79	19.50	0
		1	5	3	19.26	19.07	18.86	19.50	0
		3	0	0	19.16	18.90	18.89	19.50	0
		3	3	3	19.12	18.87	18.79	19.50	0
		6	0	0	18.19	18.04	17.91	18.50	0-1
		6	0	1	18.11	17.99	17.82	18.50	0-1
		6	0	3	18.24	18.11	17.99	18.50	0-1
	16-QAM	1	0	0	19.13	18.91	18.82	19.50	0
		1	5	0	19.14	18.90	18.85	19.50	0
		1	0	1	19.04	19.02	18.77	19.50	0
		1	5	1	19.04	19.01	18.75	19.50	0
		1	0	3	19.11	18.94	18.84	19.50	0
		1	5	3	19.00	19.03	18.80	19.50	0
		3	0	0	19.12	18.90	18.91	19.50	0
		3	3	3	19.06	18.93	18.76	19.50	0
		5	0	0	18.24	18.01	17.88	18.50	0-1
		5	0	1	18.14	17.92	17.94	18.50	0-1
		5	0	3	18.25	18.00	17.89	18.50	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					825.5	836.5	847.5		
Channel					20415	20525	20635		
3	QPSK	1	0	0	19.20	19.00	18.70	19.50	0
		1	5	0	19.18	18.93	18.77	19.50	0
		1	0	1	19.03	19.05	18.80	19.50	0
		1	5	1	19.08	19.03	18.83	19.50	0
		3	3	0	19.15	18.85	18.76	19.50	0
		3	3	1	19.12	18.81	18.73	19.50	0
		6	0	0	18.20	17.94	17.95	18.50	0-1
		6	0	1	18.35	18.01	17.76	18.50	0-1
	16-QAM	1	0	0	19.23	18.91	18.80	19.50	0
		1	5	0	19.24	18.95	18.84	19.50	0
		1	0	1	19.15	19.01	18.77	19.50	0
		1	5	1	19.21	19.04	18.70	19.50	0
		3	0	0	19.04	18.90	18.68	19.50	0
		3	3	1	19.06	18.95	18.73	19.50	0
		5	0	0	18.11	17.94	18.00	18.50	0-1
		5	0	1	18.23	18.07	17.80	18.50	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1710.7	1732.5	1754.3		
Channel					19957	20175	20393		
1.4	QPSK	1	0	0	19.17	18.85	18.73	19.50	0
		1	5	0	19.12	19.02	18.76	19.50	0
		3	3	0	19.07	18.83	18.79	19.50	0
		6	0	0	18.28	18.01	17.93	18.50	0-1
	16-QAM	1	0	0	19.11	18.90	18.89	19.50	0
		1	5	0	19.13	18.97	18.76	19.50	0
		3	0	0	19.13	18.89	18.88	19.50	0
		5	0	0	18.16	18.01	17.96	18.50	0-1

LTE Band 12_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					701.5	707.5	713.5		
Channel					23035	23095	23155		
5	QPSK	1	0	0	18.83	18.71	18.60	19.00	0
		1	5	0	18.76	18.55	18.41	19.00	0
		1	0	1	18.70	18.59	18.39	19.00	0
		1	5	1	18.59	18.52	18.38	19.00	0
		1	0	3	18.59	18.58	18.42	19.00	0
		1	5	3	18.70	18.53	18.44	19.00	0
		3	0	0	18.80	18.56	18.46	19.00	0
		3	3	3	18.71	18.47	18.52	19.00	0
		6	0	0	17.82	17.79	17.55	18.00	0-1
		6	0	1	17.83	17.70	17.59	18.00	0-1
		6	0	3	17.73	17.64	17.53	18.00	0-1
	16-QAM	1	0	0	18.78	18.55	18.43	19.00	0
		1	5	0	18.76	18.61	18.40	19.00	0
		1	0	1	18.74	18.51	18.42	19.00	0
		1	5	1	18.74	18.41	18.48	19.00	0
		1	0	3	18.62	18.53	18.44	19.00	0
		1	5	3	18.57	18.47	18.41	19.00	0
		3	0	0	18.68	18.61	18.53	19.00	0
		3	3	3	18.68	18.57	18.41	19.00	0
		5	0	0	17.83	17.67	17.54	18.00	0-1
		5	0	1	17.88	17.61	17.41	18.00	0-1
		5	0	3	17.77	17.68	17.57	18.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					700.5	707.5	714.5		
Channel					23025	23095	23165		
3	QPSK	1	0	0	18.62	18.56	18.51	19.00	0
		1	5	0	18.66	18.47	18.37	19.00	0
		1	0	1	18.77	18.59	18.40	19.00	0
		1	5	1	18.62	18.52	18.46	19.00	0
		3	3	0	18.63	18.59	18.48	19.00	0
		3	3	1	18.69	18.54	18.40	19.00	0
		6	0	0	17.80	17.62	17.55	18.00	0-1
		6	0	1	17.77	17.61	17.55	18.00	0-1
	16-QAM	1	0	0	18.65	18.54	18.47	19.00	0
		1	5	0	18.67	18.59	18.46	19.00	0
		1	0	1	18.76	18.54	18.45	19.00	0
		1	5	1	18.75	18.55	18.33	19.00	0
		3	0	0	18.67	18.46	18.55	19.00	0
		3	3	1	18.65	18.59	18.43	19.00	0
		5	0	0	17.76	17.55	17.53	18.00	0-1
		5	0	1	17.73	17.72	17.60	18.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					699.7	707.5	715.3		
Channel					23017	23095	23173		
1.4	QPSK	1	0	0	18.62	18.64	18.47	19.00	0
		1	5	0	18.76	18.54	18.39	19.00	0
		3	3	0	18.62	18.58	18.40	19.00	0
		6	0	0	17.83	17.61	17.46	18.00	0-1
	16-QAM	1	0	0	18.67	18.54	18.34	19.00	0
		1	5	0	18.64	18.46	18.43	19.00	0
		3	0	0	18.60	18.59	18.46	19.00	0
		5	0	0	17.73	17.57	17.61	18.00	0-1

LTE Band 13_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					779.5	782	784.5		
Channel					23205	23230	23255		
5	QPSK	1	0	0	19.54	19.61	19.67	20.00	0
		1	5	0	19.43	19.39	19.49	20.00	0
		1	0	1	19.35	19.58	19.60	20.00	0
		1	5	1	19.44	19.43	19.45	20.00	0
		1	0	3	19.51	19.45	19.52	20.00	0
		1	5	3	19.36	19.39	19.39	20.00	0
		3	0	0	19.45	19.36	19.53	20.00	0
		3	3	3	19.40	19.54	19.55	20.00	0
		6	0	0	18.51	18.65	18.63	19.00	0-1
		6	0	1	18.55	18.53	18.53	19.00	0-1
		6	0	3	18.56	18.43	18.57	19.00	0-1
	16-QAM	1	0	0	19.40	19.49	19.50	20.00	0
		1	5	0	19.37	19.43	19.60	20.00	0
		1	0	1	19.39	19.41	19.52	20.00	0
		1	5	1	19.46	19.50	19.61	20.00	0
		1	0	3	19.40	19.42	19.47	20.00	0
		1	5	3	19.36	19.39	19.52	20.00	0
		3	0	0	19.28	19.41	19.44	20.00	0
		3	3	3	19.32	19.45	19.51	20.00	0
		5	0	0	18.41	18.52	18.71	19.00	0-1
		5	0	1	18.56	18.44	18.64	19.00	0-1
		5	0	3	18.34	18.61	18.55	19.00	0-1

LTE Band 14_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					790.5	793	795.5		
Channel					23305	23330	23355		
5	QPSK	1	0	0	19.76	19.80	19.78	20.00	0
		1	5	0	19.65	19.60	19.60	20.00	0
		1	0	1	19.53	19.63	19.63	20.00	0
		1	5	1	19.58	19.56	19.58	20.00	0
		1	0	3	19.63	19.64	19.72	20.00	0
		1	5	3	19.65	19.65	19.50	20.00	0
		3	0	0	19.50	19.62	19.62	20.00	0
		3	3	3	19.58	19.72	19.57	20.00	0
		6	0	0	18.60	18.81	18.68	19.00	0-1
		6	0	1	18.69	18.65	18.81	19.00	0-1
		6	0	3	18.63	18.66	18.63	19.00	0-1
	16-QAM	1	0	0	19.50	19.52	19.56	20.00	0
		1	5	0	19.64	19.62	19.65	20.00	0
		1	0	1	19.56	19.60	19.62	20.00	0
		1	5	1	19.57	19.62	19.61	20.00	0
		1	0	3	19.67	19.65	19.74	20.00	0
		1	5	3	19.59	19.55	19.66	20.00	0
		3	0	0	19.56	19.66	19.66	20.00	0
		3	3	3	19.65	19.55	19.62	20.00	0
		5	0	0	18.75	18.73	18.81	19.00	0-1
		5	0	1	18.77	18.72	18.76	19.00	0-1
		5	0	3	18.75	18.73	18.81	19.00	0-1

LTE Band 25_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1852.5	1882.5	1912.5		
Channel					26065	26365	26665		
5	QPSK	1	0	0	17.45	17.78	17.96	18.00	0
		1	5	0	17.27	17.66	17.78	18.00	0
		1	0	1	17.30	17.50	17.82	18.00	0
		1	5	1	17.28	17.69	17.69	18.00	0
		1	0	3	17.21	17.55	17.79	18.00	0
		1	5	3	17.28	17.71	17.84	18.00	0
		3	0	0	17.34	17.62	17.84	18.00	0
		3	3	3	17.20	17.71	17.79	18.00	0
		6	0	0	16.41	16.69	16.89	17.00	0-1
		6	0	1	16.29	16.73	16.99	17.00	0-1
		6	0	3	16.30	16.72	16.98	17.00	0-1
	16-QAM	1	0	0	17.39	17.65	17.69	18.00	0
		1	5	0	17.38	17.65	17.79	18.00	0
		1	0	1	17.31	17.56	17.81	18.00	0
		1	5	1	17.31	17.53	17.93	18.00	0
		1	0	3	17.35	17.61	17.74	18.00	0
		1	5	3	17.32	17.55	17.78	18.00	0
		3	0	0	17.24	17.57	17.86	18.00	0
		3	3	3	17.22	17.68	17.80	18.00	0
		5	0	0	16.43	16.71	16.85	17.00	0-1
		5	0	1	16.43	16.82	16.88	17.00	0-1
		5	0	3	16.42	16.70	16.91	17.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1851.5	1882.5	1913.5		
Channel					26055	26365	26675		
3	QPSK	1	0	0	17.33	17.55	17.77	18.00	0
		1	5	0	17.25	17.62	17.81	18.00	0
		1	0	1	17.37	17.58	17.87	18.00	0
		1	5	1	17.22	17.52	17.87	18.00	0
		3	3	0	17.30	17.67	17.87	18.00	0
		3	3	1	17.25	17.61	17.85	18.00	0
		6	0	0	16.35	16.84	16.88	17.00	0-1
		6	0	1	16.39	16.67	16.81	17.00	0-1
	16-QAM	1	0	0	17.22	17.66	17.73	18.00	0
		1	5	0	17.37	17.57	17.89	18.00	0
		1	0	1	17.35	17.58	17.82	18.00	0
		1	5	1	17.25	17.58	17.73	18.00	0
		3	0	0	17.29	17.63	17.71	18.00	0
		3	3	1	17.23	17.68	17.83	18.00	0
		5	0	0	16.47	16.75	16.90	17.00	0-1
		5	0	1	16.40	16.67	16.94	17.00	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1850.7	1882.5	1914.3		
Channel					26047	26365	26683		
1.4	QPSK	1	0	0	17.33	17.52	17.69	18.00	0
		1	5	0	17.16	17.66	17.79	18.00	0
		3	3	0	17.21	17.73	17.83	18.00	0
		6	0	0	16.30	16.61	16.82	17.00	0-1
	16-QAM	1	0	0	17.23	17.57	17.80	18.00	0
		1	5	0	17.30	17.62	17.79	18.00	0
		3	0	0	17.27	17.67	17.77	18.00	0
		5	0	0	16.30	16.79	16.90	17.00	0-1

LTE Band 26_Cat.M1_FCC									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					816.5	831.5	846.5		
Channel					26715	26865	27015		
5	QPSK	1	0	0	19.47	19.27	19.05	19.50	0
		1	5	0	19.37	19.05	18.91	19.50	0
		1	0	1	19.35	19.15	18.99	19.50	0
		1	5	1	19.36	19.17	18.86	19.50	0
		1	0	3	19.29	19.03	18.90	19.50	0
		1	5	3	19.22	18.99	18.88	19.50	0
		3	0	0	19.41	19.07	18.98	19.50	0
		3	3	3	19.28	19.16	18.87	19.50	0
		6	0	0	18.34	18.32	18.00	18.50	0-1
		6	0	1	18.44	18.21	17.91	18.50	0-1
		6	0	3	18.40	18.23	17.98	18.50	0-1
	16-QAM	1	0	0	19.33	19.16	18.82	19.50	0
		1	5	0	19.24	19.00	18.80	19.50	0
		1	0	1	19.33	19.18	18.87	19.50	0
		1	5	1	19.28	19.07	18.98	19.50	0
		1	0	3	19.45	19.16	18.98	19.50	0
		1	5	3	19.25	19.12	18.90	19.50	0
		3	0	0	19.42	19.21	19.03	19.50	0
		3	3	3	19.39	19.09	19.01	19.50	0
		5	0	0	18.38	18.16	17.92	18.50	0-1
		5	0	1	18.42	18.23	18.08	18.50	0-1
		5	0	3	18.34	18.18	17.94	18.50	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					815.5	831.5	847.5		
Channel					26705	26865	27025		
3	QPSK	1	0	0	19.41	19.08	19.00	19.50	0
		1	5	0	19.40	19.11	18.86	19.50	0
		1	0	1	19.30	19.15	18.83	19.50	0
		1	5	1	19.34	19.10	18.90	19.50	0
		3	3	0	19.23	19.06	18.87	19.50	0
		3	3	1	19.44	19.16	18.97	19.50	0
		6	0	0	18.48	18.20	18.01	18.50	0-1
		6	0	1	18.41	18.34	18.03	18.50	0-1
	16-QAM	1	0	0	19.29	19.11	18.99	19.50	0
		1	5	0	19.23	19.16	18.89	19.50	0
		1	0	1	19.30	19.11	18.89	19.50	0
		1	5	1	19.36	19.15	18.84	19.50	0
		3	0	0	19.32	19.06	18.91	19.50	0
		3	3	1	19.18	19.03	18.91	19.50	0
		5	0	0	18.34	18.27	18.04	18.50	0-1
		5	0	1	18.42	18.28	18.01	18.50	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					814.7	831.5	848.3		
Channel					26697	26865	27033		
1.4	QPSK	1	0	0	19.36	19.20	18.93	19.50	0
		1	5	0	19.29	19.22	18.91	19.50	0
		3	3	0	19.38	19.05	18.86	19.50	0
		6	0	0	18.44	18.17	18.03	18.50	0-1
	16-QAM	1	0	0	19.43	19.15	18.88	19.50	0
		1	5	0	19.27	19.05	18.87	19.50	0
		3	0	0	19.42	19.21	18.93	19.50	0
		5	0	0	18.41	18.27	18.00	18.50	0-1

LTE Band 66_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1712.5	1745	1777.5		
Channel					131997	132322	132647		
5	QPSK	1	0	0	16.06	16.45	16.15	16.50	0
		1	5	0	15.77	16.31	15.91	16.50	0
		1	0	1	15.91	16.30	15.98	16.50	0
		1	5	1	15.89	16.24	16.01	16.50	0
		1	0	3	15.78	16.30	15.97	16.50	0
		1	5	3	15.86	16.32	15.93	16.50	0
		3	0	0	15.92	16.33	16.08	16.50	0
		3	3	3	15.93	16.38	15.92	16.50	0
		6	0	0	15.00	15.38	15.08	15.50	0-1
		6	0	1	14.91	15.39	15.14	15.50	0-1
		6	0	3	15.12	15.40	15.12	15.50	0-1
	16-QAM	1	0	0	15.84	16.24	15.99	16.50	0
		1	5	0	16.02	16.27	16.04	16.50	0
		1	0	1	15.96	16.27	16.07	16.50	0
		1	5	1	15.94	16.32	15.93	16.50	0
		1	0	3	15.87	16.33	15.88	16.50	0
		1	5	3	15.86	16.19	16.01	16.50	0
		3	0	0	15.89	16.24	15.92	16.50	0
		3	3	3	15.94	16.26	16.00	16.50	0
		5	0	0	15.03	15.44	15.21	15.50	0-1
		5	0	1	14.86	15.38	15.13	15.50	0-1
		5	0	3	14.92	15.42	15.05	15.50	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1711.5	1745	1778.5		
Channel					131987	132322	132657		
3	QPSK	1	0	0	16.02	16.31	15.89	16.50	0
		1	5	0	15.97	16.26	15.99	16.50	0
		1	0	1	15.83	16.22	16.05	16.50	0
		1	5	1	15.92	16.36	15.87	16.50	0
		3	3	0	16.01	16.17	15.99	16.50	0
		3	3	1	15.90	16.29	15.94	16.50	0
		6	0	0	14.90	15.52	15.08	15.50	0-1
		6	0	1	15.03	15.41	15.10	15.50	0-1
	16-QAM	1	0	0	15.95	16.42	15.98	16.50	0
		1	5	0	15.93	16.23	15.97	16.50	0
		1	0	1	15.96	16.34	15.96	16.50	0
		1	5	1	15.92	16.28	15.88	16.50	0
		3	0	0	15.88	16.32	15.91	16.50	0
		3	3	1	15.95	16.28	16.01	16.50	0
		5	0	0	15.08	15.39	15.19	15.50	0-1
		5	0	1	14.99	15.34	15.01	15.50	0-1
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					1710.7	1745	1779.3		
Channel					131979	132322	132665		
1.4	QPSK	1	0	0	15.85	16.29	15.96	16.50	0
		1	5	0	16.01	16.28	16.01	16.50	0
		3	3	0	15.83	16.17	15.94	16.50	0
		6	0	0	15.04	15.34	15.07	15.50	0-1
	16-QAM	1	0	0	15.94	16.16	16.02	16.50	0
		1	5	0	15.83	16.29	16.04	16.50	0
		3	0	0	15.99	16.22	15.99	16.50	0
		5	0	0	14.94	15.45	15.12	15.50	0-1

LTE Band 85_Cat.M1									
BW(MHz)	Modulation	RB Size	RB Offset	Narrowband Index	Conducted power (dBm)			Target Power + Max. Tolerance (dBm)	MPR Allowed per 3GPP(dB)
Frequency (MHz)					700.5	707	713.5		
Channel					134027	134092	134157		
5	QPSK	1	0	0	18.76	18.80	18.56	19.00	0
		1	5	0	18.67	18.52	18.41	19.00	0
		1	0	1	18.65	18.66	18.44	19.00	0
		1	5	1	18.67	18.75	18.42	19.00	0
		1	0	3	18.67	18.60	18.37	19.00	0
		1	5	3	18.54	18.59	18.30	19.00	0
		3	0	0	18.68	18.64	18.36	19.00	0
		3	3	3	18.68	18.73	18.49	19.00	0
		6	0	0	17.73	17.76	17.55	18.00	0-1
		6	0	1	17.79	17.78	17.57	18.00	0-1
		6	0	3	17.66	17.75	17.52	18.00	0-1
	16-QAM	1	0	0	18.63	18.75	18.33	19.00	0
		1	5	0	18.61	18.70	18.52	19.00	0
		1	0	1	18.64	18.60	18.45	19.00	0
		1	5	1	18.70	18.69	18.36	19.00	0
		1	0	3	18.54	18.70	18.46	19.00	0
		1	5	3	18.66	18.62	18.38	19.00	0
		3	0	0	18.49	18.58	18.38	19.00	0
		3	3	3	18.55	18.59	18.44	19.00	0
		5	0	0	17.72	17.75	17.55	18.00	0-1
		5	0	1	17.67	17.88	17.62	18.00	0-1
		5	0	3	17.69	17.72	17.39	18.00	0-1

6 SUMMARY OF RESULTS

6.1 Decision rules

Reported measurement data comply with Test Methodology in section 1.1.
Determining compliance shall be based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

6.2 Summary of SAR Results

Tablet mode

Band	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Scaling	Averaged SAR over 1g (W/kg)		ID
								Measured	Reported	
GPRS850 <1Dn4Up>	Back Surface	0	128	824.2	13.5	13.26	105.68%	0.007	0.007	-
GPRS850 <1Dn4Up>	Top Edge	0	128	824.2	13.5	13.26	105.68%	0.053	0.056	-
GPRS850 <1Dn4Up>	Top Edge	0	190	836.6	13.5	13.23	106.41%	0.059	0.063	001
GPRS850 <1Dn4Up>	Top Edge	0	251	848.8	13.5	13.10	109.65%	0.046	0.050	-
GPRS850 <1Dn4Up>	Right Edge	0	128	824.2	13.5	13.26	105.68%	0.010	0.011	-
GPRS850 <1Dn4Up>	Top Edge*	0	128	824.2	13.5	13.26	105.68%	0.052	0.055	-
GPRS1900 <1Dn4Up>	Back Surface	0	512	1850.2	11.5	10.54	124.74%	0.011	0.014	-
GPRS1900 <1Dn4Up>	Top Edge	0	512	1850.2	11.5	10.54	124.74%	0.086	0.107	-
GPRS1900 <1Dn4Up>	Top Edge	0	661	1880	11.5	10.51	125.60%	0.098	0.123	-
GPRS1900 <1Dn4Up>	Top Edge	0	810	1909.8	11.5	10.39	129.12%	0.105	0.136	002
GPRS1900 <1Dn4Up>	Top Edge*	0	810	1909.8	11.5	10.39	129.12%	0.082	0.106	-

Mode	Bandwidth (MHz)	Modulation	RB Size	RB start	Narrowband Index	Position	Distance (mm)	Channel	Freq. (MHz)	Max. Rated Avg. Power + Max. Tolerance (dBm)	Measured Avg. Power (dBm)	Scaling	Averaged SAR over 1g (W/kg)		ID
													Measured	Reported	
CAT.M1 Band 2	5MHz	QPSK	1	0	0	Back Surface	0	19175	1907.5	17.50	17.48	100.46%	0.022	0.022	-
CAT.M1 Band 2			1	0	0	Top Edge	0	18625	1852.5	17.50	16.98	112.72%	0.217	0.245	-
CAT.M1 Band 2			1	0	0	Top Edge	0	18900	1880	17.50	17.30	104.71%	0.235	0.246	-
CAT.M1 Band 2			1	0	0	Top Edge	0	19175	1907.5	17.50	17.48	100.46%	0.273	0.274	003
CAT.M1 Band 2			1	0	0	Right Edge	0	19175	1907.5	17.50	17.48	100.46%	0.036	0.036	-
CAT.M1 Band 2			1	0	0	Top Edge*	0	19175	1907.5	17.50	17.48	100.46%	0.242	0.243	-
CAT.M1 Band 4	5MHz	QPSK	1	0	0	Back Surface	0	20375	1752.5	17.00	16.99	100.23%	0.053	0.053	-
CAT.M1 Band 4			1	0	0	Top Edge	0	19975	1712.5	17.00	16.55	110.92%	0.224	0.248	-
CAT.M1 Band 4			1	0	0	Top Edge	0	20175	1732.5	17.00	16.96	100.93%	0.253	0.255	-
CAT.M1 Band 4			1	0	0	Top Edge	0	20375	1752.5	17.00	16.99	100.23%	0.287	0.288	004
CAT.M1 Band 4			1	0	0	Right Edge	0	20375	1752.5	17.00	16.99	100.23%	0.077	0.077	-
CAT.M1 Band 4			1	0	0	Top Edge*	0	20375	1752.5	17.00	16.99	100.23%	0.255	0.256	-
CAT.M1 Band 5	5MHz	QPSK	1	0	0	Back Surface	0	20425	826.5	19.50	19.28	105.20%	0.024	0.025	-
CAT.M1 Band 5			1	0	0	Top Edge	0	20425	826.5	19.50	19.28	105.20%	0.135	0.142	-
CAT.M1 Band 5			1	0	0	Top Edge	0	20525	836.5	19.50	19.11	109.40%	0.146	0.160	005
CAT.M1 Band 5			1	0	0	Top Edge	0	20625	846.5	19.50	18.95	113.50%	0.127	0.144	-
CAT.M1 Band 5			1	0	0	Right Edge	0	20425	826.5	19.50	19.28	105.20%	0.050	0.053	-
CAT.M1 Band 5			1	0	0	Top Edge*	0	20425	826.5	19.50	19.28	105.20%	0.127	0.134	-
CAT.M1 Band 12	5MHz	QPSK	1	0	0	Back Surface	0	23035	701.5	19.00	18.83	103.99%	0.002	0.002	-
CAT.M1 Band 12			1	0	0	Top Edge	0	23035	701.5	19.00	18.83	103.99%	0.009	0.009	-
CAT.M1 Band 12			1	0	0	Top Edge	0	23095	707.5	19.00	18.71	106.91%	0.008	0.009	-
CAT.M1 Band 12			1	0	0	Top Edge	0	23155	713.5	19.00	18.60	109.65%	0.013	0.014	006
CAT.M1 Band 12			1	0	0	Right Edge	0	23035	701.5	19.00	18.83	103.99%	0.001	0.001	-
CAT.M1 Band 12			1	0	0	Top Edge*	0	23155	713.5	19.00	18.60	109.65%	0.010	0.011	-
CAT.M1 Band 13	5MHz	QPSK	1	0	0	Back Surface	0	23255	784.5	20.00	19.67	107.89%	0.008	0.009	-
CAT.M1 Band 13			1	0	0	Top Edge	0	23205	779.5	20.00	19.54	111.17%	0.079	0.088	-
CAT.M1 Band 13			1	0	0	Top Edge	0	23230	782	20.00	19.61	109.40%	0.084	0.092	007
CAT.M1 Band 13			1	0	0	Top Edge	0	23255	784.5	20.00	19.67	107.89%	0.082	0.089	-
CAT.M1 Band 13			1	0	0	Right Edge	0	23255	784.5	20.00	19.67	107.89%	0.016	0.017	-
CAT.M1 Band 13			1	0	0	Top Edge*	0	23230	782	20.00	19.61	109.40%	0.072	0.079	-
CAT.M1 Band 14	5MHz	QPSK	1	0	0	Back Surface	0	23330	793	20.00	19.80	104.71%	0.011	0.012	-
CAT.M1 Band 14			1	0	0	Top Edge	0	23305	790.5	20.00	19.76	105.68%	0.101	0.107	-
CAT.M1 Band 14			1	0	0	Top Edge	0	23330	793	20.00	19.80	104.71%	0.119	0.125	008
CAT.M1 Band 14			1	0	0	Top Edge	0	23355	795.5	20.00	19.78	105.20%	0.092	0.097	-
CAT.M1 Band 14			1	0	0	Right Edge	0	23330	793	20.00	19.80	104.71%	0.023	0.024	-
CAT.M1 Band 14			1	0	0	Top Edge*	0	23330	793	20.00	19.80	104.71%	0.108	0.113	-
CAT.M1 Band 25	5MHz	QPSK	1	0	0	Back Surface	0	26665	1912.5	18.00	17.96	100.93%	0.031	0.031	-
CAT.M1 Band 25			1	0	0	Top Edge	0	26065	1852.5	18.00	17.45	113.50%	0.263	0.299	-
CAT.M1 Band 25			1	0	0	Top Edge	0	26365	1882.5	18.00	17.78	105.20%	0.284	0.299	-
CAT.M1 Band 25			1	0	0	Top Edge	0	26665	1912.5	18.00	17.96	100.93%	0.313	0.316	009
CAT.M1 Band 25			1	0	0	Right Edge	0	26665	1912.5	18.00	17.96	100.93%	0.042	0.042	-
CAT.M1 Band 25			1	0	0	Top Edge*	0	26665	1912.5	18.00	17.96	100.93%	0.301	0.304	-
CAT.M1 Band 26_FCC	5MHz	QPSK	1	0	0	Back Surface	0	26715	816.5	19.50	19.47	100.69%	0.015	0.015	-
CAT.M1 Band 26_FCC			1	0	0	Top Edge	0	26715	816.5	19.50	19.47	100.69%	0.142	0.143	-
CAT.M1 Band 26_FCC			1	0	0	Top Edge	0	26865	831.5	19.50	19.27	105.44%	0.146	0.154	010
CAT.M1 Band 26_FCC			1	0	0	Top Edge	0	27015	846.5	19.50	19.05	110.92%	0.128	0.142	-
CAT.M1 Band 26_FCC			1	0	0	Right Edge	0	26715	816.5	19.50	19.47	100.69%	0.047	0.047	-
CAT.M1 Band 26_FCC			1	0	0	Top Edge*	0	26865	831.5	19.50	19.27	105.44%	0.132	0.139	-

CAT.M1 Band 66	5MHz	QPSK	1	0	0	Back Surface	0	132322	1745	16.50	16.45	101.16%	0.022	0.022	-
CAT.M1 Band 66			1	0	0	Top Edge	0	131997	1712.5	16.50	16.06	110.66%	0.184	0.204	-
CAT.M1 Band 66			1	0	0	Top Edge	0	132322	1745	16.50	16.45	101.16%	0.218	0.221	012
CAT.M1 Band 66			1	0	0	Top Edge	0	132647	1777.5	16.50	16.15	108.39%	0.193	0.209	-
CAT.M1 Band 66			1	0	0	Right Edge	0	132322	1745	16.50	16.45	101.16%	0.066	0.067	-
CAT.M1 Band 66			1	0	0	Top Edge*	0	132322	1745	16.50	16.45	101.16%	0.192	0.194	-
CAT.M1 Band 85	5MHz	QPSK	1	0	0	Back Surface	0	134092	707	19.00	18.80	104.71%	0.002	0.002	-
CAT.M1 Band 85			1	0	0	Top Edge	0	134027	700.5	19.00	18.76	105.68%	0.011	0.012	-
CAT.M1 Band 85			1	0	0	Top Edge	0	134092	707	19.00	18.80	104.71%	0.009	0.009	-
CAT.M1 Band 85			1	0	0	Top Edge	0	134157	713.5	19.00	18.56	110.66%	0.013	0.014	013
CAT.M1 Band 85			1	0	0	Right Edge	0	134092	707	19.00	18.80	104.71%	0.001	0.001	-
CAT.M1 Band 85			1	0	0	Top Edge*	0	134157	713.5	19.00	18.80	104.71%	0.011	0.012	-

Note: ** - Vendor2 Spot check

Note:
Reported SAR = measured SAR * Power scaling * Duty cycle scaling

6.3 Reporting statements of conformity

The conformity statement in this report is based solely on the test results, measurement uncertainty is excluded.

6.4 Conclusion

The device is compliant because all the standalone results are less than their corresponding criteria.

7 SIMULTANEOUS TRANSMISSION ANALYSIS

7.1 Simultaneous Transmission Scenarios:

Simultaneous Transmission configurations
WWAN + WLAN 2.4GHz Ant2 + BT Ant1 + NFC
WWAN + WLAN 2.4GHz Ant2 + WLAN 2.4GHz Ant1 + NFC
WWAN + WLAN 5GHz Ant2 + BT Ant1 + NFC
WWAN + WLAN 5GHz Ant2 + WLAN 5GHz Ant1 + NFC
WWAN + WLAN 5GHz Ant2 + WLAN 5GHz Ant1 + BT Ant1 + NFC
WWAN + WLAN 6GHz Ant2 + BT Ant1 + NFC
WWAN + WLAN 6GHz Ant2 + WLAN 6GHz Ant1 + NFC
WWAN + WLAN 6GHz Ant2 + WLAN 6GHz Ant1 + BT Ant1

Note.
All of WLAN/BT SAR data can be referred to Intel SAR test report, Report No.: 240828-04.TR05, 231109-06.TR01 and 231109-06.TR07 and these results are used for simultaneous transmission analysis.

7.2 Estimated SAR calculation

According to KDB447498 D01v06 – When standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:

$$\text{Estimated SAR} = \frac{\text{Max. tune up power (mW)}}{\text{Min. test separation distance(mm)}} \times \frac{\sqrt{\text{f(GHz)}}}{7.5}$$

If the minimum test separation distance is < 5mm, a distance of 5mm is used for estimated SAR calculation. When the test separation distance is >50mm, the 0.4W/kg is used for SAR-1g.

7.3 SPLSR evaluation and analysis

Per KDB447498D01, when the sum of SAR is larger than the limit, SAR test exclusion is determined by the SAR sum to peak location separation ratio(SPLSR).

The simultaneous transmitting antennas in each operating mode and exposure condition combination must be considered one pair at a time to determine the SAR to peak location separation ratio to qualify for test exclusion.

The ratio is determined by **(SAR1 + SAR2)^1.5/Ri**, rounded to two decimal digits, and must be **≤ 0.04** for all antenna pairs in the configuration to qualify for 1-g SAR test exclusion.

SAR1 and SAR2 are the highest reported or estimated SAR for each antenna in the pair, and Ri is the separation distance between the peak SAR locations for the antenna pair in mm.

When standalone test exclusion applies, SAR is estimated; the peak location is assumed to be at the feed-point or geometric center of the antenna.

Simultaneous Transmission Combination

Exposure Position			Reported SAR												Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5	Scenario 6	Scenario 7	Scenario 8
			0	1	2	3	4	5	6	7	8	9	10	11	0+1+4	0+1+7	0+1+3+8	0+1+6+8	0+1+7+8	0+1+8+10	0+1+11	0+1+9+11
			NFC	WWAN	2.4GHz WLAN Ant 1	2.4GHz WLAN Ant 2	2.4GHz WLAN Ant 1+2	5GHz WLAN Ant 1	5GHz WLAN Ant 2	5GHz WLAN Ant 1+2	Bluetooth Ant 1	6GHz WLAN Ant 1	6GHz WLAN Ant 2	6GHz WLAN Ant 1+2	Summed	Summed	Summed	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)	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)	1g SAR (W/kg)	1g SAR (W/kg)
GPRS850 <1Dn4Up>	Back Surface	0	0.00004	0.008	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.798**	**0.763**	**1.148**	**1.138**	**1.103**	**1.138**	**0.763**	**1.103**
	Top Edge	0	0.00004	0.071	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**0.916**	**0.906**	**1.001**	**1.031**	**1.106**	**1.191**	**1.041**	**1.241**
	Right Edge	0	0.00004	0.012		0.400	0.200		0.400	0.200			0.400	0.200	**0.212**	**0.212**	**0.412**	**0.412**	**0.212**	**0.412**	**0.212**	**0.212**
GPRS1900 <1Dn4Up>	Back Surface	0	0.00004	0.014	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.804**	**0.769**	**1.154**	**1.144**	**1.109**	**1.144**	**0.769**	**1.109**
	Top Edge	0	0.00004	0.143	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**0.988**	**0.978**	**1.073**	**1.103**	**1.178**	**1.263**	**1.113**	**1.313**
	Right Edge	0	0.00004	0.023		0.400	0.200		0.400	0.200			0.400	0.200	**0.223**	**0.223**	**0.423**	**0.423**	**0.223**	**0.423**	**0.223**	**0.223**
CAT.M1 Band 2	Back Surface	0	0.00004	0.022	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.812**	**0.777**	**1.162**	**1.152**	**1.117**	**1.152**	**0.777**	**1.117**
	Top Edge	0	0.00004	0.274	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**1.119**	**1.109**	**1.204**	**1.234**	**1.309**	**1.394**	**1.244**	**1.444**
	Right Edge	0	0.00004	0.036		0.400	0.200		0.400	0.200			0.400	0.200	**0.236**	**0.236**	**0.436**	**0.436**	**0.236**	**0.436**	**0.236**	**0.236**
CAT.M1 Band 4	Back Surface	0	0.00004	0.053	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.843**	**0.808**	**1.193**	**1.183**	**1.148**	**1.183**	**0.808**	**1.148**
	Top Edge	0	0.00004	0.288	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**1.133**	**1.123**	**1.218**	**1.248**	**1.323**	**1.408**	**1.258**	**1.458**
	Right Edge	0	0.00004	0.077		0.400	0.200		0.400	0.200			0.400	0.200	**0.277**	**0.277**	**0.477**	**0.477**	**0.277**	**0.477**	**0.277**	**0.277**
CAT.M1 Band 5	Back Surface	0	0.00004	0.025	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.815**	**0.780**	**1.165**	**1.155**	**1.120**	**1.155**	**0.780**	**1.120**
	Top Edge	0	0.00004	0.160	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**1.005**	**0.995**	**1.090**	**1.120**	**1.195**	**1.280**	**1.130**	**1.330**
	Right Edge	0	0.00004	0.053		0.400	0.200		0.400	0.200			0.400	0.200	**0.253**	**0.253**	**0.453**	**0.453**	**0.253**	**0.453**	**0.253**	**0.253**
CAT.M1 Band 12	Back Surface	0	0.00004	0.002	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.792**	**0.757**	**1.142**	**1.132**	**1.097**	**1.132**	**0.757**	**1.097**
	Top Edge	0	0.00004	0.014	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**0.859**	**0.849**	**0.944**	**0.974**	**1.049**	**1.134**	**0.984**	**1.184**
	Right Edge	0	0.00004	0.001		0.400	0.200		0.400	0.200			0.400	0.200	**0.201**	**0.201**	**0.401**	**0.401**	**0.201**	**0.401**	**0.201**	**0.201**
CAT.M1 Band 13	Back Surface	0	0.00004	0.009	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.799**	**0.764**	**1.149**	**1.139**	**1.104**	**1.139**	**0.764**	**1.104**
	Top Edge	0	0.00004	0.092	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**0.937**	**0.927**	**1.022**	**1.052**	**1.127**	**1.212**	**1.062**	**1.262**
	Right Edge	0	0.00004	0.017		0.400	0.200		0.400	0.200			0.400	0.200	**0.217**	**0.217**	**0.417**	**0.417**	**0.217**	**0.417**	**0.217**	**0.217**
CAT.M1 Band 14	Back Surface	0	0.00004	0.012	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.802**	**0.767**	**1.152**	**1.142**	**1.107**	**1.142**	**0.767**	**1.107**
	Top Edge	0	0.00004	0.125	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**0.970**	**0.960**	**1.055**	**1.085**	**1.160**	**1.245**	**1.095**	**1.295**
	Right Edge	0	0.00004	0.024		0.400	0.200		0.400	0.200			0.400	0.200	**0.224**	**0.224**	**0.424**	**0.424**	**0.224**	**0.424**	**0.224**	**0.224**
CAT.M1 Band 25	Back Surface	0	0.00004	0.031	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.821**	**0.786**	**1.171**	**1.161**	**1.126**	**1.161**	**0.786**	**1.126**
	Top Edge	0	0.00004	0.316	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**1.161**	**1.151**	**1.246**	**1.276**	**1.351**	**1.436**	**1.286**	**1.486**
	Right Edge	0	0.00004	0.042		0.400	0.200		0.400	0.200			0.400	0.200	**0.242**	**0.242**	**0.442**	**0.442**	**0.242**	**0.442**	**0.242**	**0.242**
CAT.M1 Band 26_FCC	Back Surface	0	0.00004	0.015	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.805**	**0.770**	**1.155**	**1.145**	**1.110**	**1.145**	**0.770**	**1.110**
	Top Edge	0	0.00004	0.154	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**0.999**	**0.989**	**1.084**	**1.114**	**1.189**	**1.274**	**1.124**	**1.324**
	Right Edge	0	0.00004	0.047		0.400	0.200		0.400	0.200			0.400	0.200	**0.247**	**0.247**	**0.447**	**0.447**	**0.247**	**0.447**	**0.247**	**0.247**
CAT.M1 Band 66	Back Surface	0	0.00004	0.022	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.812**	**0.777**	**1.162**	**1.152**	**1.117**	**1.152**	**0.777**	**1.117**
	Top Edge	0	0.00004	0.221	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**1.066**	**1.056**	**1.151**	**1.181**	**1.256**	**1.341**	**1.191**	**1.391**
	Right Edge	0	0.00004	0.067		0.400	0.200		0.400	0.200			0.400	0.200	**0.267**	**0.267**	**0.467**	**0.467**	**0.267**	**0.467**	**0.267**	**0.267**
CAT.M1 Band 85	Back Surface	0	0.00004	0.002	0.780	0.800	0.790	0.720	0.790	0.755	0.340	0.720	0.790	0.755	**0.792**	**0.757**	**1.142**	**1.132**	**1.097**	**1.132**	**0.757**	**1.097**
	Top Edge	0	0.00004	0.014	0.960	0.730	0.845	0.910	0.760	0.835	0.200	1.020	0.920	0.970	**0.859**	**0.849**	**0.944**	**0.974**	**1.049**	**1.134**	**0.984**	**1.184**
	Right Edge	0	0.00004	0.001		0.400	0.200		0.400	0.200			0.400	0.200	**0.201**	**0.201**	**0.401**	**0.401**	**0.201**	**0.401**	**0.201**	**0.201**

7.4 Conclusion

The simultaneous transmission is compliant because both SAR sum and/or SPLSR are less than their corresponding criteria.

8 INSTRUMENTS LIST

Equipment List					
Manufacturer	**Device**	**Type**	**Serial number**	**Date of last calibration**	**Date of next calibration**
SPEAG	Data acquisition Electronics	DAE4	856	Apr/22/2024	Apr/21/2025
SPEAG	Dosimetric E-Field Probe	EX3DV4	7712	Apr/18/2024	Apr/17/2025
SPEAG	System Validation Dipole	D750V3	1015	Sep/27/2024	Sep/26/2025
SPEAG	System Validation Dipole	D835V2	4d063	Sep/16/2024	Sep/15/2025
SPEAG	System Validation Dipole	D1750V2	1158	Aug/20/2024	Aug/19/2025
SPEAG	System Validation Dipole	D1900V2	5d173	Apr/25/2024	Apr/24/2025
SPEAG	Dielectric Assessment Kit	DAKS-3.5	1053	Feb/21/2024	Feb/20/2025
R&S	MXG Analog Signal Generator	SMB100A03	182012	May/21/2024	May/20/2025
Agilent	Dual-directional coupler	772D	MY46151258	Sep/30/2024	Sep/29/2025
Agilent	Dual-directional coupler	778D	MY46151242	Sep/03/2024	Sep/02/2025
EMCI	Amplifier	EMC 074225P	980155	Calibration not required	Calibration not required
R&S	Power Sensor	NRP18S	101973	Feb/27/2024	Feb/26/2025
R&S	Power Meter	NRX	102191	Feb/27/2024	Feb/26/2025
R&S	Power Sensor	NRP18S	101974	Nov/11/2024	Nov/10/2025
SPEAG	Software	DASY 52 V52.10.4.1527	N/A	Calibration not required	Calibration not required
SPEAG	Phantom	ELI	N/A	Calibration not required	Calibration not required
R&S	Radio Communication Test	CMW 500	125470	May/17/2024	May/16/2025
TECPEL	Digital thermometer	DTM-303A	TP131515	May/23/2024	May/22/2025

9 UNCERTAINTY BUDGET

Measurement Uncertainty evaluation template for DUT SAR test (0.3-3G)

A	c	D	e		f	g	h=c * f / e	i=c * g / e	k
Source of Uncertainty	Tolerance/ Uncertainty	Probability Distributio	Div	Div Value	ci (1g)	ci (10g)	Standard uncertainty	Standard uncertainty	vi, or Veff
Measurement system									
Probe calibration	6.00%	N	1	1	1	1	6.00%	6.00%	∞
Isotropy , Axial	3.50%	R	√3	1.732	1	1	2.02%	2.02%	∞
Isotropy, Hemispherical	9.60%	R	√3	1.732	1	1	5.54%	5.54%	∞
Modulation Response	2.40%	R	√3	1.732	1	1	1.40%	1.40%	∞
Boundary Effect	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Linearity	4.70%	R	√3	1.732	1	1	2.71%	2.71%	∞
Detection Limits	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Readout Electronics	0.30%	N	1	1	1	1	0.30%	0.30%	∞
Response time	0.80%	R	√3	1.732	1	1	0.46%	0.46%	∞
Integration Time	2.60%	R	√3	1.732	1	1	1.50%	1.50%	∞
Measurement drift (class A evaluation)	1.75%	R	√3	1.732	1	1	1.01%	1.01%	∞
RF ambient condition - noise	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
RF ambient conditions - reflections	3.00%	R	√3	1.732	1	1	1.73%	1.73%	∞
Probe positioner Mechanical restrictions	0.40%	R	√3	1.732	1	1	0.23%	0.23%	∞
Probe Positioning with respect to phantom shell	2.90%	R	√3	1.732	1	1	1.67%	1.67%	∞
Post-processing	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Max SAR Eval	1.00%	R	√3	1.732	1	1	0.58%	0.58%	∞
Test Sample related									
Test sample positioning	2.90%	N	1	1	1	1	2.90%	2.90%	M-1
Device Holder Uncertainty	3.60%	N	1	1	1	1	3.60%	3.60%	M-1
Drift of output power	5.00%	R	√3	1.732	1	1	2.89%	2.89%	∞
Phantom and Setup									
Phantom Uncertainty	4.00%	R	√3	1.732	1	1	2.31%	2.31%	∞
Liquid permittivity (mea.)	2.52%	N	1	1	0.64	0.43	1.61%	1.08%	M
Liquid Conductivity (mea.)	3.02%	N	1	1	0.6	0.49	1.81%	1.48%	M
Combined standard uncertainty		RSS					11.67%	11.55%	
Expant uncertainty (95% confidence interval), K=2							23.35%	23.11%	

10 SAR MEASUREMENT RESULTS

Date: 2024/12/13

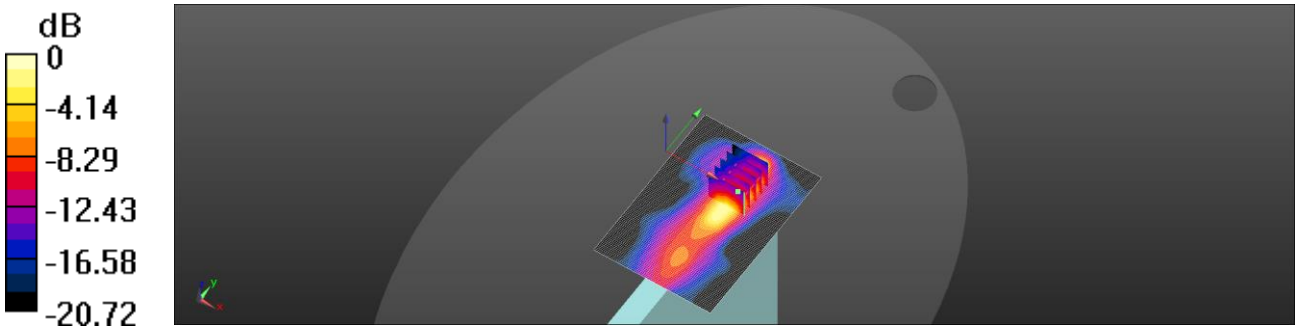
ID: 001
Report No. :TESA2412000850EN
GPRS850_Body_Top Edge_CH 190_0mm
Communication System: GPRS(1Dn4Up); Frequency: 836.6 MHz; Duty cycle= 1:2
Medium parameters used: f = 836.6 MHz; σ = 0.889 S/m; εr = 41.091; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(9.5, 9.1, 9.44) @ 836.6 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.105 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.252 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.144 W/kg
SAR(1 g) = 0.059 W/kg; SAR(10 g) = 0.025 W/kg
Smallest distance from peaks to all points 3 dB below = 8.5 mm
Ratio of SAR at M2 to SAR at M1 = 41%
Maximum value of SAR (measured) = 0.103 W/kg



0 dB = 0.103 W/kg = -9.87 dBW/kg

Date: 2024/12/14

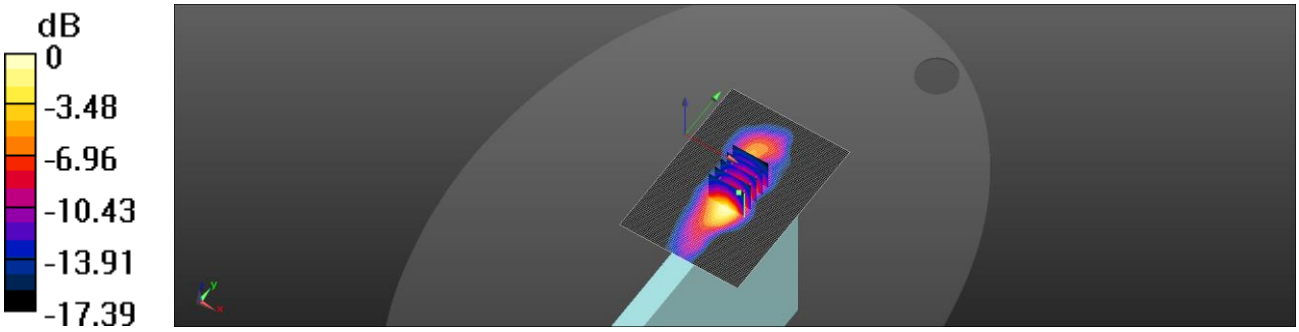
ID: 002
Report No. :TESA2412000850EN
GPRS1900_Body_Top Edge_CH 810_0mm
Communication System: GPRS(1Dn4Up); Frequency: 1909.8 MHz; Duty cycle= 1:2
Medium parameters used: f = 1909.8 MHz; σ = 1.427 S/m; εr = 40.511; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(8.17, 7.9, 8.07) @ 1909.8 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.223 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.941 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 0.197 W/kg
SAR(1 g) = 0.105 W/kg; SAR(10 g) = 0.048 W/kg
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 58.2%
Maximum value of SAR (measured) = 0.160 W/kg



0 dB = 0.160 W/kg = -7.96 dBW/kg

Date: 2024/12/14

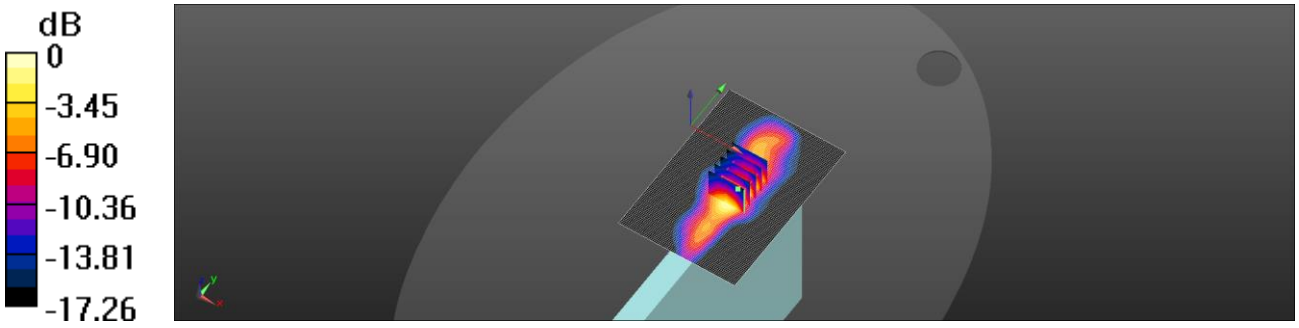
ID: 003
Report No. :TESA2412000850EN
CAT.M1 Band 2 (5MHz)_Body_Top Edge_CH 19175_QPSK_1-0_0mm
Communication System: CAT.M1; Frequency: 1907.5 MHz; Duty cycle= 1:1
Medium parameters used: f = 1907.5 MHz; σ = 1.425 S/m; εr = 40.512; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(8.17, 7.9, 8.07) @ 1907.5 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.518 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.828 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.528 W/kg
SAR(1 g) = 0.273 W/kg; SAR(10 g) = 0.127 W/kg
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 58%
Maximum value of SAR (measured) = 0.355 W/kg



0 dB = 0.355 W/kg = -4.50 dBW/kg

Date: 2024/12/14

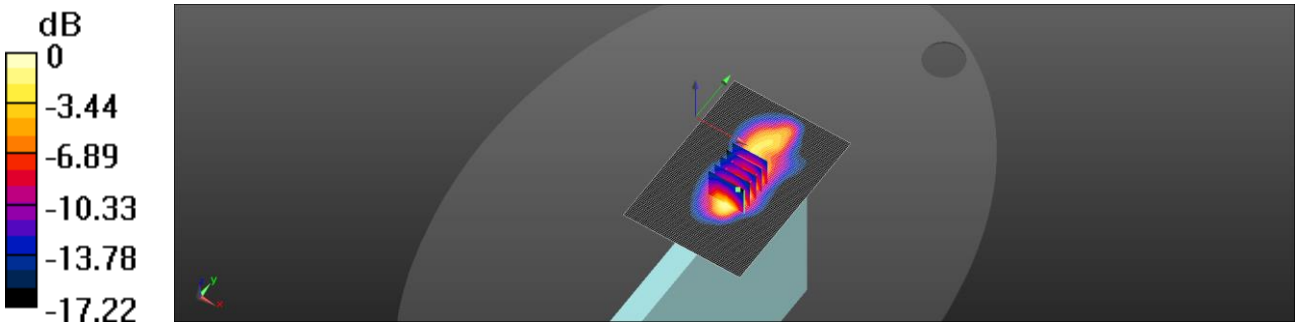
ID: 004
Report No. :TESA2412000850EN
CAT.M1 Band 4 (5MHz)_Body_Top Edge_CH 20375_QPSK_1-0_0mm
Communication System: CAT.M1; Frequency: 1752.5 MHz; Duty cycle= 1:1
Medium parameters used: f = 1752.5 MHz; σ = 1.414 S/m; εr = 41.074; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(8.49, 8.17, 8.46) @ 1752.5 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.516 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.886 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.510 W/kg
SAR(1 g) = 0.287 W/kg; SAR(10 g) = 0.146 W/kg
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 61.3%
Maximum value of SAR (measured) = 0.406 W/kg



0 dB = 0.406 W/kg = -3.91 dBW/kg

Date: 2024/12/13

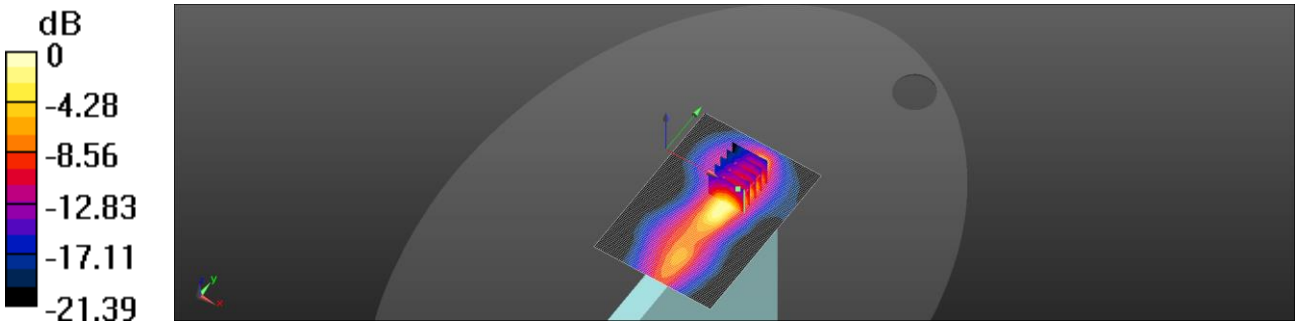
ID: 005
Report No. :TESA2412000850EN
CAT.M1 Band 5 (5MHz)_Body_Top Edge_CH 20525_QPSK_1-0_0mm
Communication System: CAT.M1; Frequency: 836.5 MHz; Duty cycle= 1:1
Medium parameters used: f = 836.5 MHz; σ = 0.888 S/m; εr = 41.097; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(9.5, 9.1, 9.44) @ 836.5 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.259 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.560 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.357 W/kg
SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.062 W/kg
Smallest distance from peaks to all points 3 dB below = 8.5 mm
Ratio of SAR at M2 to SAR at M1 = 42.3%
Maximum value of SAR (measured) = 0.257 W/kg



0 dB = 0.257 W/kg = -5.90 dBW/kg

Date: 2024/12/12

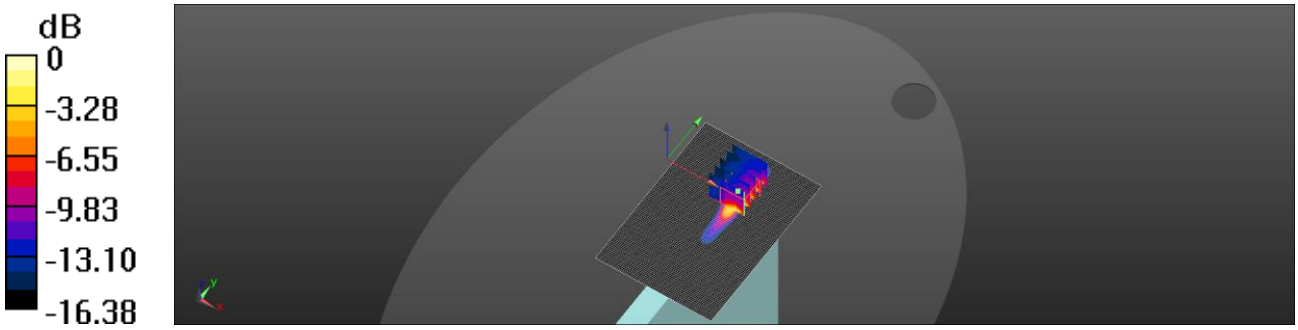
ID: 006
Report No. :TESA2412000850EN
CAT.M1 Band 12 (5MHz)_Body_Top Edge_CH 23155_QPSK_1-0_0mm
Communication System: CAT.M1; Frequency: 713.5 MHz; Duty cycle= 1:1
Medium parameters used: f = 713.5 MHz; σ = 0.865 S/m; εr = 41.672; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.9°C; Liquid temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(9.57, 9.46, 9.78) @ 713.5 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.0369 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.322 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.0370 W/kg
SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.00524 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 37.2%
Maximum value of SAR (measured) = 0.0291 W/kg



0 dB = 0.0291 W/kg = -15.36 dBW/kg

Date: 2024/12/12

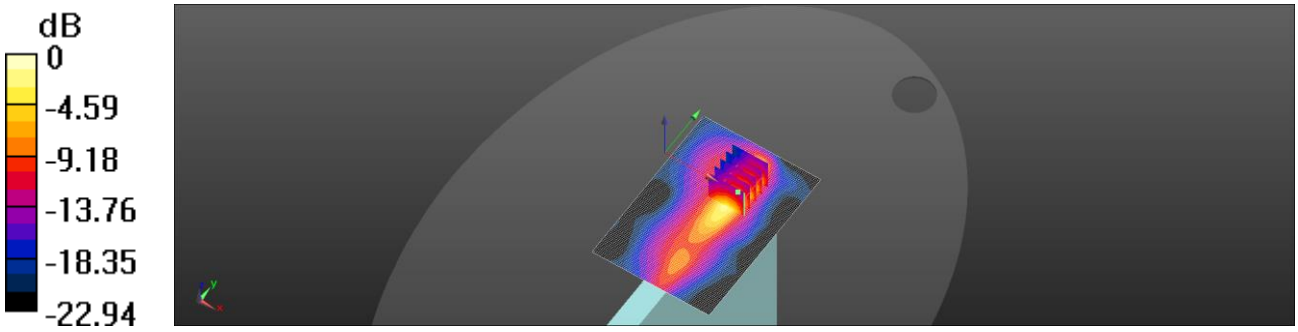
ID: 007
Report No. :TESA2412000850EN
CAT.M1 Band 13 (5MHz)_Body_Top Edge_CH 23230_QPSK_1-0_0mm
Communication System: CAT.M1; Frequency: 782 MHz; Duty cycle= 1:1
Medium parameters used: f = 782 MHz; σ = 0.872 S/m; εr = 41.319; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.9°C; Liquid temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(9.57, 9.46, 9.78) @ 782 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.153 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.655 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.213 W/kg
SAR(1 g) = 0.084 W/kg; SAR(10 g) = 0.034 W/kg
Smallest distance from peaks to all points 3 dB below = 8.5 mm
Ratio of SAR at M2 to SAR at M1 = 41.6%
Maximum value of SAR (measured) = 0.147 W/kg



0 dB = 0.147 W/kg = -8.33 dBW/kg

Date: 2024/12/12

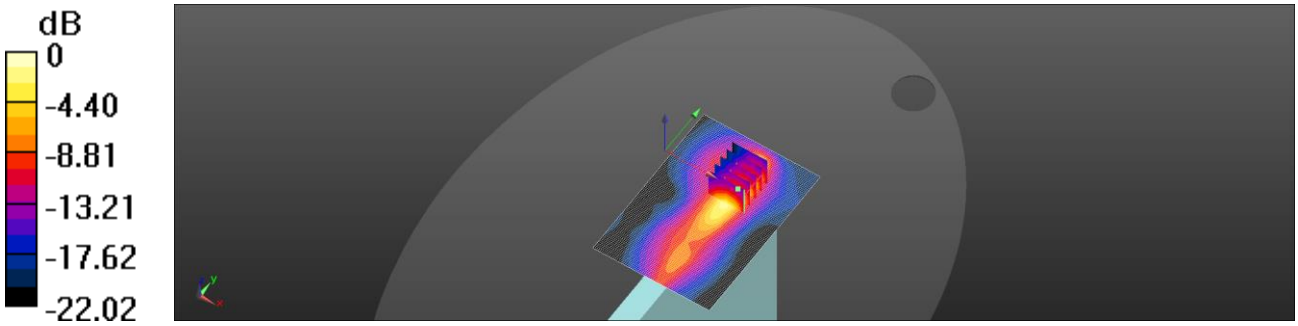
ID: 008
Report No. :TESA2412000850EN
CAT.M1 Band 14 (5MHz)_Body_Top Edge_CH 23330_QPSK_1-0_0mm
Communication System: CAT.M1; Frequency: 793 MHz; Duty cycle= 1:1
Medium parameters used: f = 793 MHz; σ = 0.873 S/m; εr = 41.262; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.9°C; Liquid temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(9.57, 9.46, 9.78) @ 793 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.213 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.484 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.305 W/kg
SAR(1 g) = 0.119 W/kg; SAR(10 g) = 0.048 W/kg
Smallest distance from peaks to all points 3 dB below = 8.6 mm
Ratio of SAR at M2 to SAR at M1 = 42.1%
Maximum value of SAR (measured) = 0.206 W/kg



0 dB = 0.206 W/kg = -6.86 dBW/kg

Date: 2024/12/14

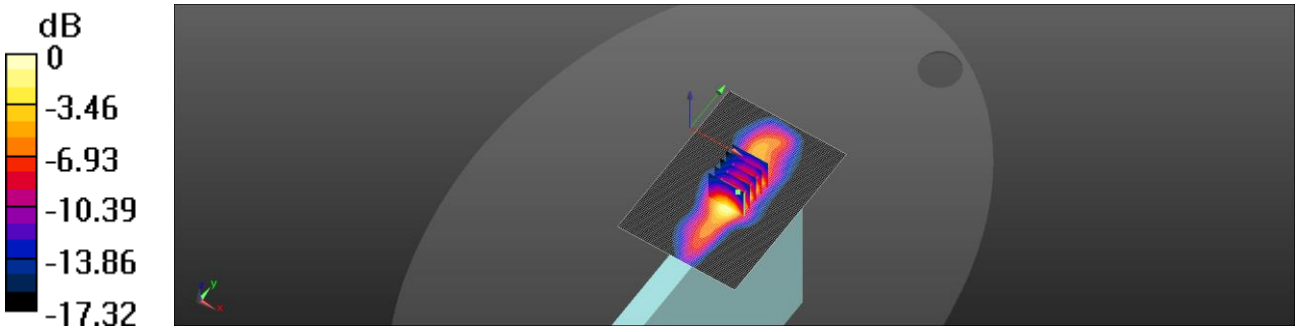
ID: 009
Report No. :TESA2412000850EN
CAT.M1 Band 25 (5MHz)_Body_Top Edge_CH 26665_QPSK_1-0_0mm
Communication System: CAT.M1; Frequency: 1912.5 MHz; Duty cycle= 1:1
Medium parameters used: f = 1912.5 MHz; σ = 1.429 S/m; εr = 40.508; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(8.17, 7.9, 8.07) @ 1912.5 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.588 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.553 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 0.604 W/kg
SAR(1 g) = 0.313 W/kg; SAR(10 g) = 0.147 W/kg
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 58%
Maximum value of SAR (measured) = 0.405 W/kg



0 dB = 0.405 W/kg = -3.93 dBW/kg

Date: 2024/12/13

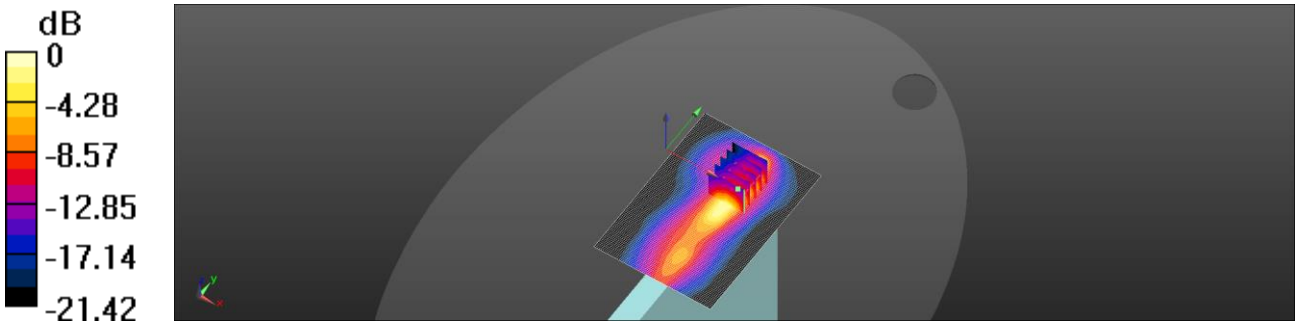
ID: 010
Report No. :TESA2412000850EN
CAT.M1 Band 26 (5MHz)_Body_Top Edge_CH 26865_QPSK_1-0_0mm_FCC
Communication System: CAT.M1; Frequency: 831.5 MHz; Duty cycle= 1:1
Medium parameters used: f = 831.5 MHz; σ = 0.887 S/m; εr = 41.109; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(9.5, 9.1, 9.44) @ 831.5 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.261 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.476 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.358 W/kg
SAR(1 g) = 0.146 W/kg; SAR(10 g) = 0.061 W/kg
Smallest distance from peaks to all points 3 dB below = 8.5 mm
Ratio of SAR at M2 to SAR at M1 = 42.1%
Maximum value of SAR (measured) = 0.257 W/kg



0 dB = 0.257 W/kg = -5.90 dBW/kg

Date: 2024/12/14

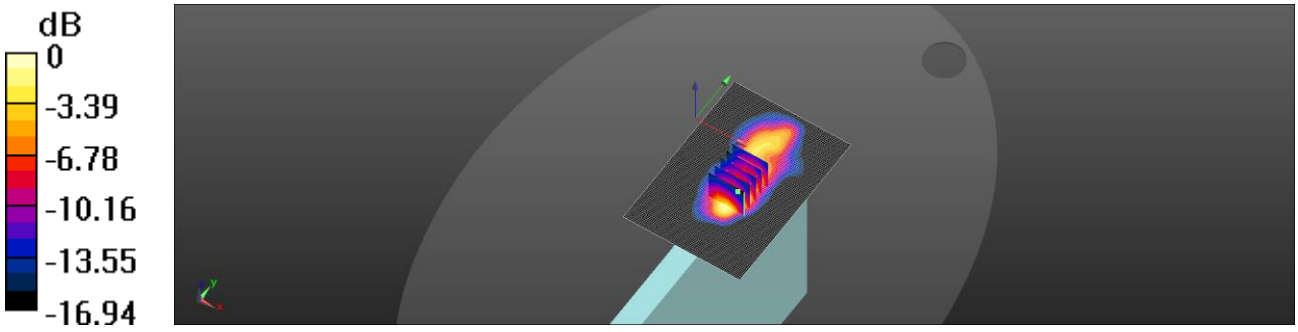
ID: 012
Report No. :TESA2412000850EN
CAT.M1 Band 66 (5MHz)_Body_Top Edge_CH 132322_QPSK_1-0_0mm
Communication System: CAT.M1; Frequency: 1745 MHz; Duty cycle= 1:1
Medium parameters used: f = 1745 MHz; σ = 1.409 S/m; εr = 41.087; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(8.49, 8.17, 8.46) @ 1745 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.401 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.233 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 0.391 W/kg
SAR(1 g) = 0.218 W/kg; SAR(10 g) = 0.110 W/kg
Smallest distance from peaks to all points 3 dB below = 8.4 mm
Ratio of SAR at M2 to SAR at M1 = 60.6%
Maximum value of SAR (measured) = 0.310 W/kg



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

Date: 2024/12/12

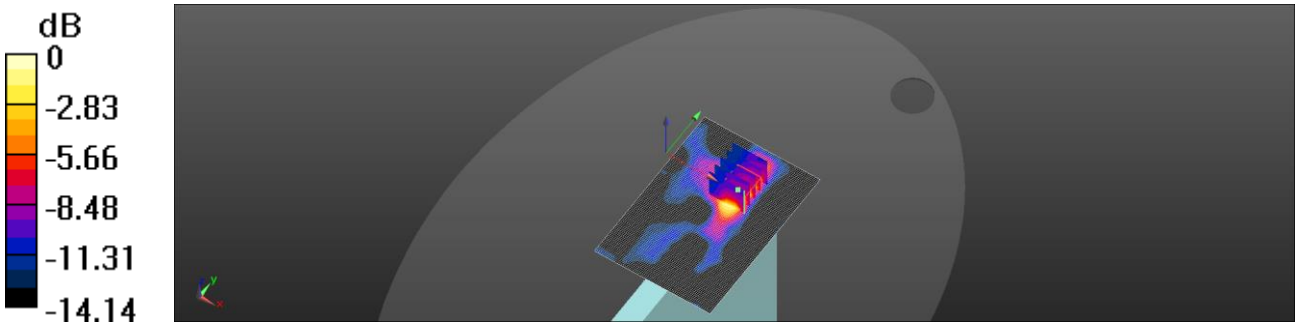
ID: 013
Report No. :TESA2412000850EN
CAT.M1 Band 85 (5MHz)_Body_Top Edge_CH 134157_QPSK_1-0_0mm
Communication System: CAT.M1; Frequency: 713.5 MHz; Duty cycle= 1:1
Medium parameters used: f = 713.5 MHz; σ = 0.865 S/m; εr = 41.672; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.9°C; Liquid temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(9.57, 9.46, 9.78) @ 713.5 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (71x101x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 0.0254 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.276 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.0380 W/kg
SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.00567 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 47%
Maximum value of SAR (measured) = 0.0193 W/kg



0 dB = 0.0193 W/kg = -17.14 dBW/kg

11 SAR SYSTEM CHECK RESULTS

Date: 2024/12/12

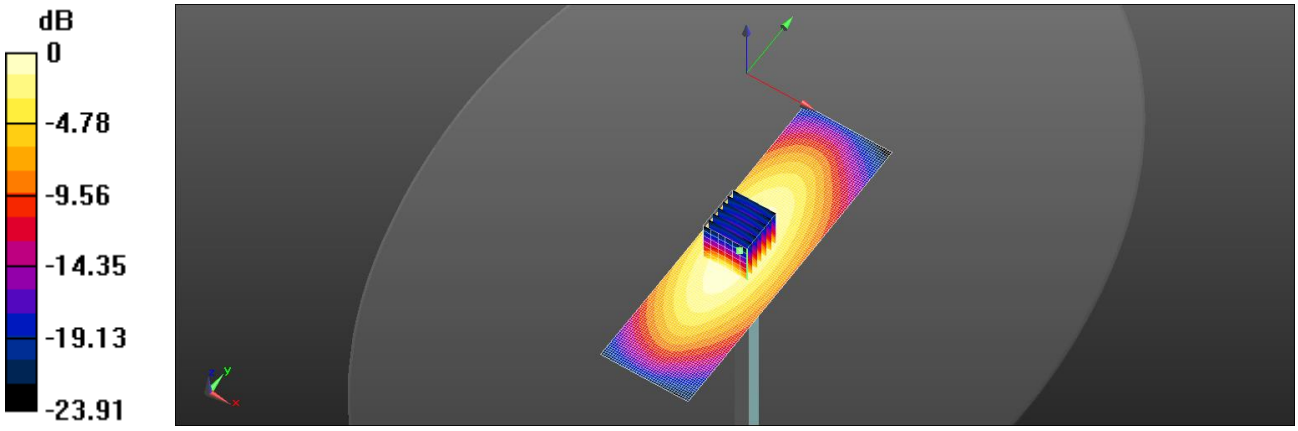
Report No. :TESA2412000850EN
Dipole 750 MHz_SN:1015
Communication System: CW; Frequency: 750 MHz; Duty cycle= 1:1
Medium parameters used: f = 750 MHz; σ = 0.868 S/m; ε_r = 41.485; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 21.9°C; Liquid temperature: 21.4°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(9.57, 9.46, 9.78) @ 750 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (41x141x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 2.74 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 53.07 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.27 W/kg
SAR(1 g) = 2.21 W/kg; SAR(10 g) = 1.49 W/kg
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid
Ratio of SAR at M2 to SAR at M1 = 68.1%
Maximum value of SAR (measured) = 2.78 W/kg



0 dB = 2.74 W/kg = 4.38 dBW/kg

Date: 2024/12/12

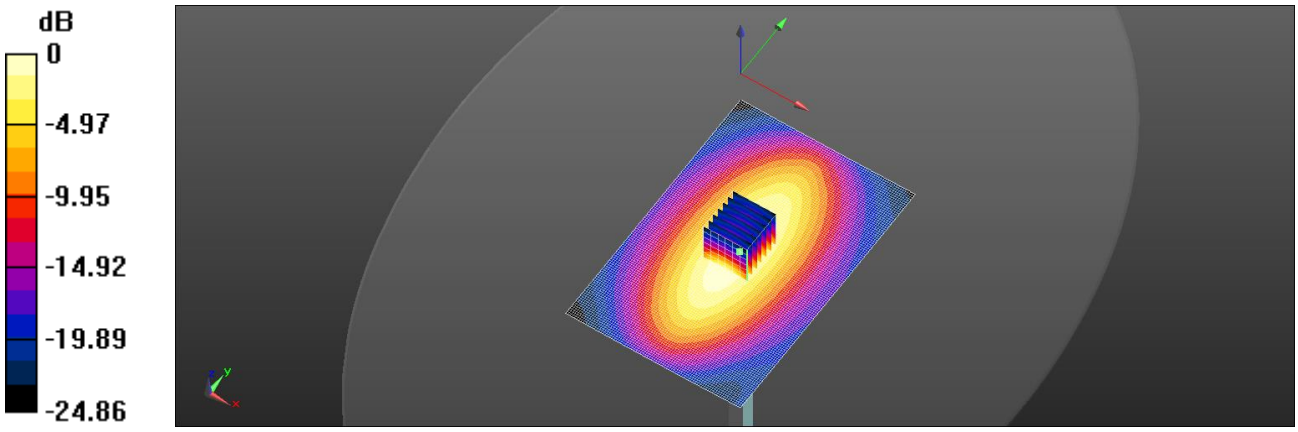
Report No. :TESA2412000850EN
Dipole 835 MHz_SN:4d063
Communication System: CW; Frequency: 835 MHz; Duty cycle= 1:1
Medium parameters used: f = 835 MHz; σ = 0.888 S/m; ε_r = 41.098; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.2°C; Liquid temperature: 21.7°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(9.5, 9.1, 9.44) @ 835 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (81x121x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 3.17 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 58.62 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.69 W/kg
SAR(1 g) = 2.48 W/kg; SAR(10 g) = 1.62 W/kg
Smallest distance from peaks to all points 3 dB below = 20.5 mm
Ratio of SAR at M2 to SAR at M1 = 67.6%
Maximum value of SAR (measured) = 3.16 W/kg



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

Date: 2024/12/13

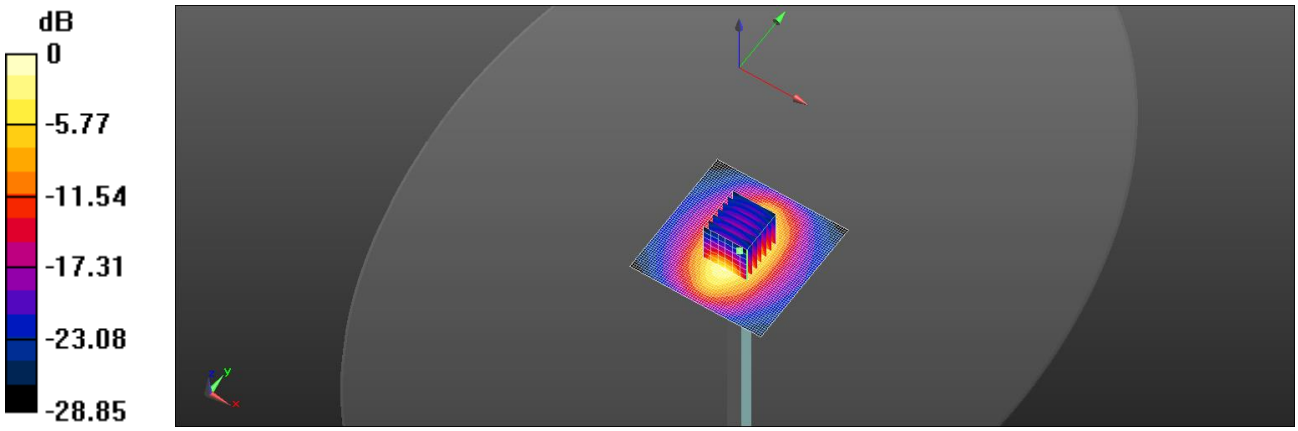
Report No. :TESA2412000850EN
Dipole 1750 MHz_SN:1158
Communication System: CW; Frequency: 1750 MHz; Duty cycle= 1:1
Medium parameters used: f = 1750 MHz; σ = 1.412 S/m; ε_r = 41.079; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 21.8°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(8.49, 8.17, 8.46) @ 1750 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x61x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 11.9 W/kg

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 96.83 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 14.4 W/kg
SAR(1 g) = 8.71 W/kg; SAR(10 g) = 4.89 W/kg
Smallest distance from peaks to all points 3 dB below = 10 mm
Ratio of SAR at M2 to SAR at M1 = 61.9%
Maximum value of SAR (measured) = 11.9 W/kg



0 dB = 11.9 W/kg = 10.77 dBW/kg

Date: 2024/12/14

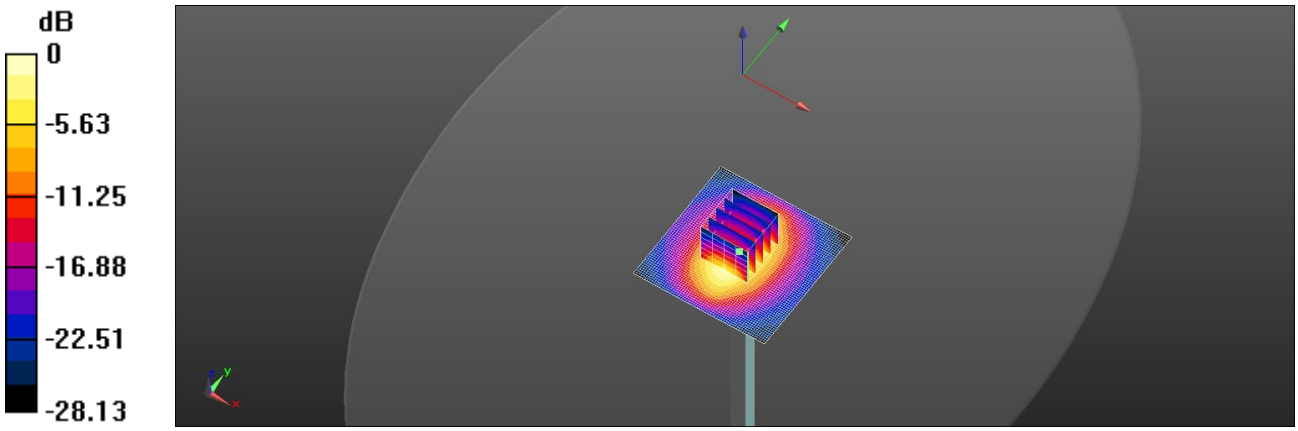
Report No. :TESA2412000850EN
Dipole 1900 MHz_SN:5d173
Communication System: CW; Frequency: 1900 MHz; Duty cycle= 1:1
Medium parameters used: f = 1900 MHz; σ = 1.45 S/m; ε_r = 40.639; ρ = 1000 kg/m^3
Phantom section: Flat Section
Ambient temperature: 22.4°C; Liquid temperature: 21.9°C

DASY5 Configuration:

- Probe: EX3DV4 - SN7712; ConvF(8.17, 7.9, 8.07) @ 1900 MHz; Calibrated: 2024/4/18
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn856; Calibrated: 2024/4/22
- Phantom: ELI
- DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Area Scan (61x61x1): Interpolated grid: dx=15 mm, dy=15 mm
Maximum value of SAR (interpolated) = 14.4 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 93.19 V/m; Power Drift = 0.03 dB
Peak SAR (extrapolated) = 18.0 W/kg
SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.48 W/kg
Smallest distance from peaks to all points 3 dB below = 11.2 mm
Ratio of SAR at M2 to SAR at M1 = 58.3%
Maximum value of SAR (measured) = 14.4 W/kg



0 dB = 14.4 W/kg = 11.58 dBW/kg

12 APPENDIXES

Refer to separated files for the following appendixes.

12.1 SAR_Appendix A Photographs

12.2 SAR_Appendix B DAE & Probe Cal. Certificate

12.3 SAR_Appendix C Phantom Description & Dipole Cal. Certificate

- End of report -