TEST REPORT

Applicant Name :	Shenzhen Youmi Intelligent Technology Co., Ltd.
Address :	406-407 Jinqi Zhigu Building, 4/F, 1 Tangling Road, Nanshan District, Shenzhen City, China
Report Number :	SZNS211130-61697E-20
FCC ID:	2ATZ4-BG2P5G
IC:	26074BG2P5G

Test Standard (s)

FCC Part 2.1093

RSS-102 Issue 5 Amendment 1 (February 2, 2021)

Sample Description

Product Type:	RP02
Model No.:	BISON GT2 5G
Multiple Model(s) No.:	BISON GT2 PRO 5G
Trade Mark:	UMIDIGI
Date Received:	2021/12/01
Date of Test:	2022/1/16~2022/1/23
Report Date:	2022/1/25

Test Result:	Pass*

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

Prepared and Checked By:

Lance Li

EMC Engineer

Approved By:

Candy Li

EMC Engineer

Note: This report may contain data that are not covered by the A2LA accreditation and are marked with an asterisk "★".

Shenzhen Accurate Technology Co., Ltd. is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk '*'. Customer model name, addresses, names, trademarks etc. are not considered data.

Attestation of Test Results			
MODE		**Max. SAR Level(s) Reported(W/kg)**	**Limit (W/kg)**
GSM 850	1g Head SAR	0.05	**1. 6**
	1g Body SAR	0.24	
PCS 1900	1g Head SAR	0.04	
	1g Body SAR	0.33	
WCDMA Band 2	1g Head SAR	0.10	
	1g Body SAR	0.99	
WCDMA Band 5	1g Head SAR	0.04	
	1g Body SAR	0.16	
LTE Band 2	1g Head SAR	0.10	
	1g Body SAR	0.79	
LTE Band 5	1g Head SAR	0.04	
	1g Body SAR	0.17	
LTE Band 12	1g Head SAR	0.03	
	1g Body SAR	0.05	
LTE Band 41	1g Head SAR	0.71	
	1g Body SAR	0.51	
5G NR n66	1g Head SAR	0.21	
	1g Body SAR	0.93	
2.4G Wi-Fi	1g Head SAR	0.28	
	1g Body SAR	0.11	
5.2G Wi-Fi	1g Head SAR	0.35	
	1g Body SAR	0.06	
5.8G Wi-Fi	1g Head SAR	0.35	
	1g Body SAR	0.24	
	1g Body SAR	0.98	
Simultaneous	1g Head SAR	1.06	
	1g Body SAR	**1.23**	
	1g Head SAR	1.23 (hotspot)	
Applicable Standards	**FCC 47 CFR part 2.1093** Radiofrequency radiation exposure evaluation: portable devices		
	RSS-102 Issue 5 Amendment 1 (February 2, 2021) Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus (All Frequency Bands).		
	RF Exposure Procedures: TCB Workshop April 2015		
	RF Exposure Policy Updates (5G NR FR1 NSA EN-DCUE SAR Evaluations): TCB Workshop November 2019		
	IEC/IEEE 62209-1528:2020 Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices – Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)		
	KDB procedures KDB 447498 D01 General RF Exposure Guidance v06 KDB 648474 D04 Handset SAR v01r03 KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04 KDB 865664 D02 RF Exposure Reporting v01r02 KDB 941225 D01 3G SAR Procedures v03r01 KDB 941225 D05 SAR for LTE Devices v02r05 KDB 941225 D06 Hotspot Mode v02r01 KDB 248227 D01 802 11 Wi-Fi SAR v02r02		
Note: This wireless device has been shown to be capable of compliance for localized specific absorption rate (SAR) for General Population/Uncontrolled Exposure limits specified in **FCC 47 CFR part 2.1093/ RSS-102 Issue 5 Amendment 1 (February 2, 2021)** and has been tested in accordance with the measurement procedures specified in IEC/IEEE 62209-1528:2020 and RF exposure KDB procedures. **The results and statements contained in this report pertain only to the device(s) evaluated.**			

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DOCUMENT REVISION HISTORY

Revision Number	Report Number	Description of Revision	Date of Revision
0	SZNS211130-61697E-20	Original Report	2022/1/25

EUT DESCRIPTION

This report has been prepared on behalf of ***Shenzhen Youmi Intelligent Technology Co., Ltd.*** and their product ***RP02***, Model: ***BISON GT2 5G***, FCC ID: ***2ATZ4-BG2P5G***, IC: ***26074BG2P5G*** or the EUT (Equipment under Test) as referred to in the rest of this report.

*Notes: This series products model: **BISON GT2 PRO 5G** and **BISON GT2 5G** are identical; Model **BISON GT2 5G** was selected for fully testing, the detailed information can be referred to the attached declaration which was stated and guaranteed by the applicant.*

Technical Specification

Device Type:	Portable
Exposure Category:	Population / Uncontrolled
Antenna Type(s):	Internal Antenna
DTM Type:	Class B
Multi-slot Class:	GPRS(Class 12); EDGE(Class 12)
Power Class	LTE Band 41 for power class 3
Body-Worn Accessories:	Headset
Face-Head Accessories:	None
Proximity Sensor:	None Proximity Sensor for power reduction
Carrier Aggregation:	None Carrier Aggregation
Operation Mode :	GSM Voice, GPRS Data, WCDMA(R99 (Voice+Data), HSDPA/HSUPA/ HSPA+), FDD-LTE, TDD-LTE, 5G NR, Wi-Fi and Bluetooth
Frequency Band:	GSM 850: 824-849 MHz(TX); 869-894 MHz(RX) PCS 1900: 1850-1910 MHz(TX); 1930-1990 MHz(RX) WCDMA Band 2: 1850-1910 MHz(TX); 1930-1990 MHz(RX) WCDMA Band 5: 824-849 MHz(TX); 869-894 MHz(RX) LTE Band 2: 1850-1910 MHz(TX); 1930-1990 MHz(RX) LTE Band 5: 824-849 MHz(TX) ; 869-894 MHz(RX) LTE Band 12: 699-716 MHz(TX); 729-746 MHz(RX) LTE Band 41: FCC: 2496-2690MHz(TX/RX); IC: 2500-2690MHz(TX/RX) 5G NR n66: 1710-1780 MHz(TX); 2110-2200MHz (RX) Wi-Fi 2.4G: 2412-2472 MHz/2422-2462 MHz Wi-Fi 5.2G: 5150-5250 MHz Wi-Fi 5.8G: 5725-5850 MHz Bluetooth: 2402 -2480 MHz
EN-DC Possible Combinations:	DC_B12_n66
Power Source:	Rechargeable Battery
Normal Operation:	Head and Body-worn

REFERENCE, STANDARDS, AND GUIDELINES

FCC:

The Report and Order requires routine SAR evaluation prior to equipment authorization of portable transmitter devices, including portable telephones. For consumer products, the applicable limit is 1.6 mW/g as recommended by the ANSI/IEEE standard C95.1-1992 [6] for an uncontrolled environment (Paragraph 65). According to the Supplement C of OET Bulletin 65 “Evaluating Compliance with FCC Guide-lines for Human Exposure to Radio frequency Electromagnetic Fields", released on Jun 29, 2001 by the FCC, the device should be evaluated at maximum output power (radiated from the antenna) under “worst-case” conditions for normal or intended use, incorporating normal antenna operating positions, device peak performance frequencies and positions for maximum RF energy coupling.

This report describes the methodology and results of experiments performed on wireless data terminal. The objective was to determine if there is RF radiation and if radiation is found, what is the extent of radiation with respect to safety limits. SAR (Specific Absorption Rate) is the measure of RF exposure determined by the amount of RF energy absorbed by human body (or its parts) – to determine how the RF energy couples to the body or head which is a primary health concern for body worn devices. The limit below which the exposure to RF is considered safe by regulatory bodies in North America is 1.6 mW/g average over 1 gram of tissue mass.

CE:

The order requires routine SAR evaluation prior to equipment authorization of portable transmitter devices, including portable telephones. For consumer products, the applicable limit is 2 mW/g as recommended by EN62209-1 for an uncontrolled environment. According to the Standard, the device should be evaluated at maximum output power (radiated from the antenna) under “worst-case” conditions for normal or intended use, incorporating normal antenna operating positions, device peak performance frequencies and positions for maximum RF energy coupling.

This report describes the methodology and results of experiments performed on wireless data terminal. The objective was to determine if there is RF radiation and if radiation is found, what is the extent of radiation with respect to safety limits. SAR (Specific Absorption Rate) is the measure of RF exposure determined by the amount of RF energy absorbed by human body (or its parts) – to determine how the RF energy couples to the body or head which is a primary health concern for body worn devices. The limit below which the exposure to RF is considered safe by regulatory bodies in Europe is 2 mW/g average over 10 gram of tissue mass.

The test configurations were laid out on a specially designed test fixture to ensure the reproducibility of measurements. Each configuration was scanned for SAR. Analysis of each scan was carried out to characterize the above effects in the device.

SAR Limits

FCC Limit(1g Tissue)

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average (averaged over the whole body)	0.08	0.4
Spatial Peak (averaged over any 1 g of tissue)	**1.60**	8.0
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)	4.0	20.0

CE Limit(10g Tissue)

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average (averaged over the whole body)	0.08	0.4
Spatial Peak (averaged over any 10 g of tissue)	2.0	10
Spatial Peak (hands/wrists/feet/ankles averaged over 10 g)	4.0	20.0

Population/Uncontrolled Environments are defined as locations where there is the exposure of individual who have no knowledge or control of their exposure.

Occupational/Controlled Environments are defined as locations where there is exposure that may be incurred by people who are aware of the potential for exposure (i.e. as a result of employment or occupation).

General Population/Uncontrolled environments Spatial Peak limit 1.6W/kg (FCC) & 2 W/kg (CE) applied to the EUT.

FACILITIES

The test site used by Shenzhen Accurate Technology Co., Ltd. to collect test data is located on the 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China.

The test site has been approved by the FCC under the KDB 974614 D01 and is listed in the FCC Public Access Link (PAL) database, FCC Registration No.: 708358,the FCC Designation No.: CN1189. Accredited by American Association for Laboratory Accreditation (A2LA) The Certificate Number is 4297.01 .

Listed by Innovation, Science and Economic Development Canada (ISEDC), the Registration Number is 5077A.

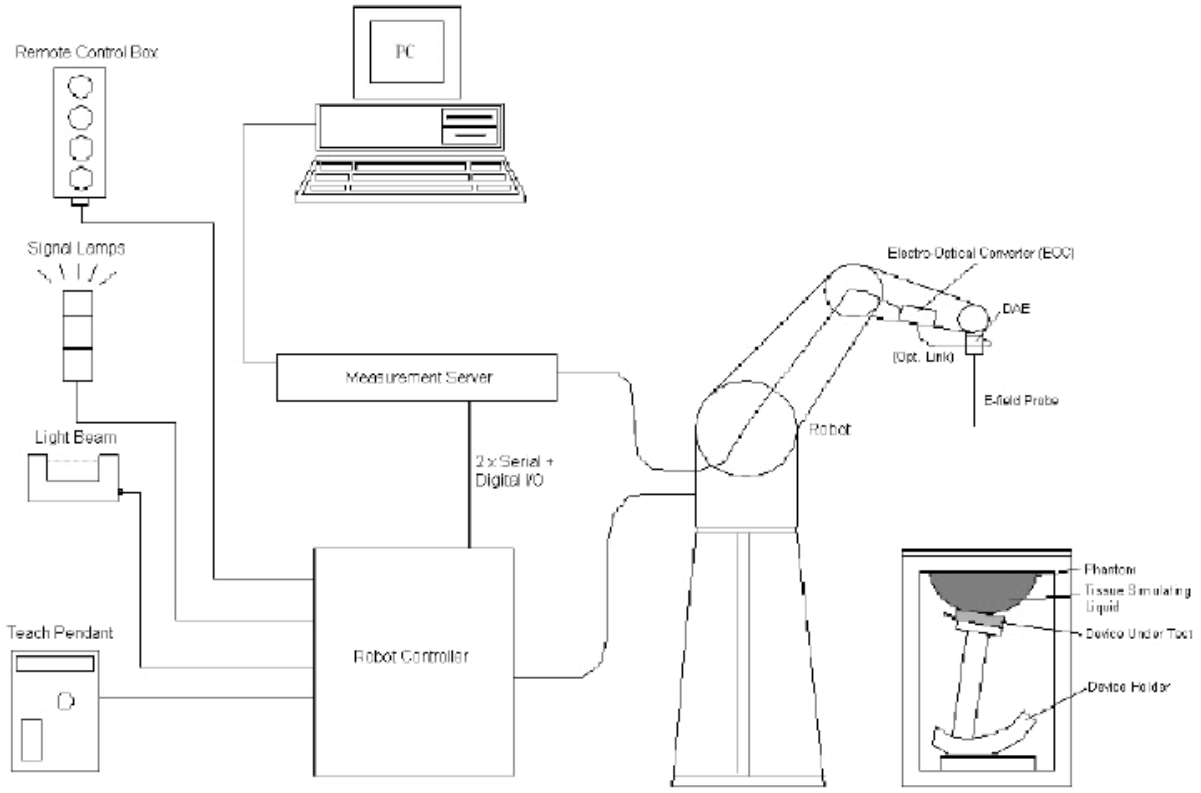
The test site has been registered with ISED Canada under ISED Canada Registration Number CN0016.

DESCRIPTION OF TEST SYSTEM

These measurements were performed with the automated near-field scanning system DASY5 from Schmid & Partner Engineering AG (SPEAG) which is the Fifth generation of the system shown in the figure hereinafter:

DASY5 System Description

The DASY5 system for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot (Staubli TX=RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal application, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win7 professional operating system and the DASY52 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

DASY5 Measurement Server

The DASY5 measurement server is based on a PC/104 CPU board with a 400 MHz Intel ULV Celeron, 128 MB chip-disk and 128 MB RAM. The necessary circuits for communication with the DAE4 (or DAE3) electronics box, as well as the 16-bit AD converter system for optical detection and digital I/O interface are contained on the DASY6 I/O board, which is directly connected to the PC/104 bus of the CPU board.

The measurement server performs all real-time data evaluations of field measurements and surface detection, controls robot movements, and handles safety operations. The PC operating system cannot interfere with these time-critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program- controlled robot movements. Furthermore, the measurement server is equipped with an expansion port, which is reserved for future applications. Please note that this expansion port does not have a standardized pinout, and therefore only devices provided by SPEAG can be connected. Connection of devices from any other supplier could seriously damage the measurement server.

Data Acquisition Electronics

The data acquisition electronics (DAE4) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of both the DAE4 as well as of the DAE3 box is 200MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.

EX3DV4 E-Field Probes

Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 μW/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μW/g)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better 30%.
Compatibility	DASY3, DASY4, DASY52 SAR and higher, EASY4/MRI

SAM Twin Phantom

The SAM Twin Phantom (shown in front of DASY5) is a fiberglass shell phantom with shell thickness 2 mm, except in the ear region where the thickness is increased to 6 mm..

When the phantom is mounted inside allocated slot of the DASY5 platform, phantom reference points can be taught directly in the DASY5 V5.2 software. When the DASY5 platform is used to mount the

Phantom, some of the phantom teaching points cannot be reached by the robot in DASY5 V5.2. A special tool called P1a-P2aX-Former is provided to transform two of the three points, P1 and P2, to reachable locations. To use these new teaching points, a revised phantom configuration file is required.

In addition to our standard broadband liquids, the phantom can be used with the following tissue simulating liquids:

Sugar-water-based liquids can be left permanently in the phantom. Always cover the liquid when the system is not in use to prevent changes in liquid parameters due to water evaporation.

DGBE-based liquids should be used with care. As DGBE is a softener for most plastics, the liquid should be taken out of the phantom, and the phantom should be dried when the system is not in use (desirable at least once a week).

Do not use other organic solvents without previously testing the solvent resistivity of the phantom.

Approximately 25 liters of liquid is required to fill the SAM Twin phantom.

Calibration Frequency Points for EX3DV4 E-Field Probes SN: 7441 Calibrated: 2021/02/23

Calibration Frequency Point(MHz)	Frequency Range(MHz)		Conversion Factor		
	From	To	X	Y	Z
750 Head	650	850	10.28	10.28	10.28
900 Head	850	1000	9.80	9.80	9.80
1450 Head	1350	1550	8.61	8.61	8.61
1750 Head	1650	1850	8.39	8.39	8.39
1900 Head	1850	1950	8.02	8.02	8.02
2000 Head	1950	2100	8.07	8.07	8.07
2300 Head	2200	2400	7.92	7.92	7.92
2450 Head	2400	2550	7.63	7.63	7.63
2600 Head	2550	2700	7.33	7.33	7.33
3300 Head	3200	3400	7.21	7.21	7.21
3500 Head	3400	3600	6.96	6.96	6.96
3700 Head	3600	3800	6.65	6.65	6.65
3900 Head	3800	4000	6.66	6.66	6.66
4400 Head	4300	4500	6.45	6.45	6.45
4600 Head	4500	4700	6.30	6.30	6.30
4800 Head	4700	4900	6.24	6.24	6.24
4950 Head	4900	5050	5.95	5.95	5.95

Calibration Frequency Points for EX3DV4 E-Field Probes SN: 3619 Calibrated: 2021/08/25

Calibration Frequency Point(MHz)	Frequency Range(MHz)		Conversion Factor		
	From	To	X	Y	Z
5250 Head	5140	5360	4.37	4.37	4.37
5600 Head	5490	5700	4.03	4.03	4.03
5800 Head	5700	5910	3.93	3.93	3.93

Area scan parameters

Parameter	DUT transmit frequency being tested	
	$f \leq 3$ GHz	3 GHz < $f \leq 10$ GHz
Maximum distance between the measured points (geometric centre of the sensors) and the inner phantom surface (z_{M1} in Figure 20 in mm)	5 ± 1	$\delta \ln(2)/2 \pm 0,5$ [a]
Maximum spacing between adjacent measured points in mm (see O.8.3.1)[b]	20, or half of the corresponding zoom scan length, whichever is smaller	$60/f$, or half of the corresponding zoom scan length, whichever is smaller
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20)[c]	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Tolerance in the probe angle	1°	1°

[a] δ is the penetration depth for a plane-wave incident normally on a planar half-space.

[b] See Clause O.8 on how Δx and Δy may be selected for individual area scan requirements.

[c] The probe angle relative to the phantom surface normal is restricted due to the degradation in the measurement accuracy in fields with steep spatial gradients. The measurement accuracy decreases with increasing probe angle and increasing frequency. This is the reason for the tighter probe angle restriction at frequencies above 3 GHz.

Zoom scan parameters

Parameter	DUT transmit frequency being tested	
	$f \leq 3$ GHz	3 GHz < $f \leq 10$ GHz
Maximum distance between the closest measured points and the phantom surface (z_{M1} in Figure 20 and Table 3, in mm)	5	$\delta \ln(2)/2$ [a]
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20)	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Maximum spacing between measured points in the x- and y-directions (Δx and Δy, in mm)	8	$24/f$ [b]
For uniform grids: Maximum spacing between measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	5	$10/(f-1)$
For graded grids: Maximum spacing between the two closest measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	4	$12/f$
For graded grids: Maximum incremental increase in the spacing between measured points in the direction normal to the phantom shell ($R_z = \Delta z_2/\Delta z_1$ in Figure 20)	1,5	1,5
Minimum edge length of the zoom scan volume in the x- and y-directions (L_z in O.8.3.2, in mm)	30	22
Minimum edge length of the zoom scan volume in the direction normal to the phantom shell (L_h in O.8.3.2 in mm)	30	22
Tolerance in the probe angle	1°	1°

[a] δ is the penetration depth for a plane-wave incident normally on a planar half-space.

[b] This is the maximum spacing allowed, which might not work for all circumstances.

Recommended Tissue Dielectric Parameters for Head

Table 2 – Dielectric properties of the tissue-equivalent medium

Frequency MHz	Real part of the complex relative permittivity, ε_r'	Conductivity, σ S/m	Penetration depth (E-field), δ mm
4	*55,0*	*0,75*	293,0
13	*55,0*	*0,75*	165,5
30	55,0	0,75	112,8
150	52,3	0,76	62,0
300	45,3	0,87	46,1
450	43,5	0,87	43,0
750	*41,9*	*0,89*	39,8
835	41,5	0,90	39,0
900	41,5	0,97	36,2
1 450	40,5	1,20	28,6
1 800	40,0	1,40	24,3
1 900	40,0	1,40	24,3
1 950	40,0	1,40	24,3
2 000	40,0	1,40	24,3
2 100	*39,8*	*1,49*	22,8
2 450	39,2	1,80	18,7
2 600	*39,0*	*1,96*	17,2
3 000	38,5	2,40	14,0
3 500	*37,9*	*2,91*	11,4
4 000	*37,4*	*3,43*	10,0
4 500	*36,8*	*3,94*	9,7
5 000	*36,2*	*4,45*	1,5
5 200	*36,0*	*4,66*	8,4
5 400	*35,8*	*4,86*	8,1
5 600	*35,5*	*5,07*	7,5
5 800	35,3	5,27	7,3
6 000	*35,1*	*5,48*	7,0
6 500	*34,5*	*6,07*	6,7
7 000	*33,9*	*6,65*	6,4
7 500	*33,3*	*7,24*	6,1
8 000	*32,7*	*7,84*	5,9
8 500	*32,1*	*8,46*	5,3
9 000	*31,6*	*9,08*	4,8
9 500	*31,0*	*9,71*	4,4
10 000	*30,4*	*10,40*	4,0

NOTE For convenience, permittivity and conductivity values are linearly interpolated for frequencies that are not a part of the original data from Drossos et al. [2]. They are shown in italics in Table 2. The italicized values are linearly interpolated (below 5 800 MHz) or extrapolated (above 5 800 MHz) from the non-italicized values that are immediately above and below these values.

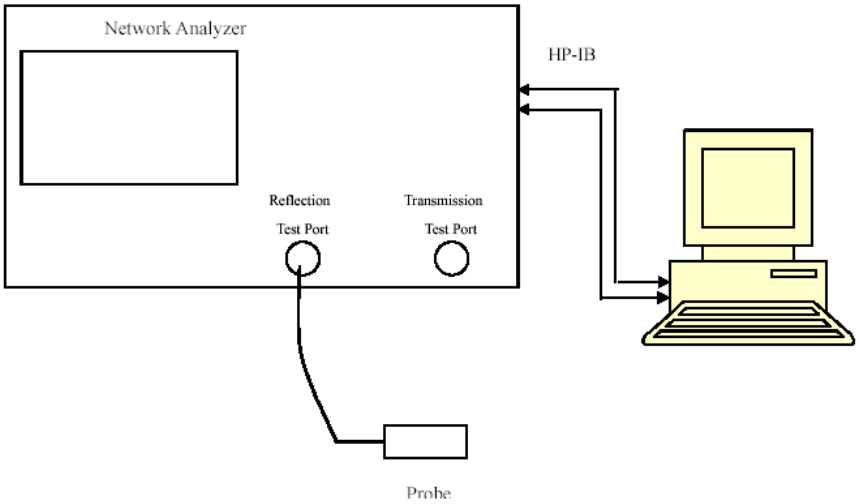
EQUIPMENT LIST AND CALIBRATION

Equipments List & Calibration Information

Equipment	Model	S/N	Calibration Date	Calibration Due Date
DASY5 Test Software	DASY52 52.10.4	N/A	NCR	NCR
DASY5 Measurement Server	DASY5 6.0.31	N/A	NCR	NCR
Data Acquisition Electronics	DAE4	1562	2021/12/13	2022/12/12
E-Field Probe	EX3DV4	7441	2021/02/23	2022/02/22
E-Field Probe	EX3DV4	3619	2021/08/25	2022/08/24
Mounting Device	MD4HHTV5	SD 000 H01 KA	NCR	NCR
SAM Twin Phantom	SAM-Twin V5.0	1744	NCR	NCR
Dipole,750MHz	D750V2	1194	2021/10/27	2024/10/26
Dipole,1800MHz	D1800V2	2d018	2020/10/15	2023/10/14
Dipole,1900MHz	D1900V2	5d128	2021/10/27	2024/10/26
Dipole,2450MHz	D2450V2	751	2020/10/13	2023/10/12
Dipole,2600MHz	D2600V2	1162	2019/10/2	2022/10/1
Dipole,5GHz	D5GHzV2	1301	2020/01/10	2023/01/09
Simulated Tissue Liquid Head(500-9500MHz)	HBBL600-10000V6	180622-2	Each Time	/
Network Analyzer	8753D	3410A08288	2021/7/07	2022/7/06
Dielectric Assessment Kit	DAK-3.5	1248	NCR	NCR
Signal Generator	SMB100A	108362	2021/12/23	2022/12/22
USB wideband power sensor	U2021XA	MY52350001	2021/12/23	2022/12/22
Power Amplifier	CBA 1G-070	T44328	2021/12/23	2022/12/22
Linear Power Amplifier	AS0860-40/45	1060913	2021/12/23	2022/12/22
Directional Coupler	4223-20	3.113.277	2021/12/23	2022/12/22
6dB Attenuator	8493B 6dB Attenuator	2708A 04769	2021/12/23	2022/12/22
Wideband Radio Communication Tester	CMW500	143458	2021/03/03	2022/03/02
Radio Communication Analyzer	Anritsu	MT8821C	2021/04/27	2022/04/26

SAR MEASUREMENT SYSTEM VERIFICATION

Liquid Verification



Liquid Verification Setup Block Diagram

Liquid Verification Results

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$ (S/m)	
750	Simulated Tissue Liquid Head	42.542	0.872	41.9	0.89	1.53	-2.02	±5
824.2	Simulated Tissue Liquid Head	41.858	0.886	41.55	0.9	0.74	-1.56	±5
826.4	Simulated Tissue Liquid Head	41.663	0.889	41.55	0.9	0.27	-1.22	±5
829	Simulated Tissue Liquid Head	41.801	0.899	41.5	0.9	0.73	-0.11	±5
836.5	Simulated Tissue Liquid Head	41.735	0.914	41.5	0.9	0.57	1.56	±5
836.6	Simulated Tissue Liquid Head	41.735	0.914	41.5	0.9	0.57	1.56	±5
844	Simulated Tissue Liquid Head	42.582	0.935	41.5	0.91	2.61	2.75	±5
846.6	Simulated Tissue Liquid Head	42.066	0.937	41.5	0.91	1.36	2.97	±5
848.8	Simulated Tissue Liquid Head	41.268	0.947	41.5	0.91	-0.56	4.07	±5

**Liquid Verification above was performed on 2022/1/16.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$ (S/m)	
704	Simulated Tissue Liquid Head	42.874	0.869	42.18	0.89	1.65	-2.36	±5
707.5	Simulated Tissue Liquid Head	43.341	0.875	42.16	0.89	2.8	-1.69	±5
711	Simulated Tissue Liquid Head	42.777	0.878	42.14	0.89	1.51	-1.35	±5
750	Simulated Tissue Liquid Head	42.474	0.869	41.9	0.89	1.53	-2.02	±5
826.4	Simulated Tissue Liquid Head	41.826	0.891	41.54	0.9	0.69	-1	±5
836.6	Simulated Tissue Liquid Head	41.735	0.914	41.5	0.9	0.57	1.56	±5
846.6	Simulated Tissue Liquid Head	41.425	0.942	41.5	0.91	-0.18	3.52	±5

**Liquid Verification above was performed on 2022/1/17.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$ (S/m)	
1720	Simulated Tissue Liquid Head	39.812	1.375	40.13	1.35	-0.79	1.85	±5
1730	Simulated Tissue Liquid Head	39.944	1.377	40.12	1.36	-0.44	1.25	±5
1732.5	Simulated Tissue Liquid Head	40.034	1.378	40.12	1.36	-0.21	1.32	±5
1745	Simulated Tissue Liquid Head	39.76	1.383	40.1	1.37	-0.85	0.95	±5
1760	Simulated Tissue Liquid Head	39.664	1.389	40.1	1.37	-1.09	1.39	±5
1770	Simulated Tissue Liquid Head	39.625	1.394	40.1	1.37	-1.18	1.75	±5
1800	Simulated Tissue Liquid Head	39.264	1.435	40	1.4	-1.84	2.5	±5

**Liquid Verification above was performed on 2022/1/19.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$ (S/m)	
1850.2	Simulated Tissue Liquid Head	40.156	1.396	40	1.4	0.39	-0.29	±5
1852.4	Simulated Tissue Liquid Head	40.399	1.397	40	1.4	1	-0.21	±5
1860	Simulated Tissue Liquid Head	40.065	1.401	40	1.4	0.16	0.07	±5
1880	Simulated Tissue Liquid Head	40.091	1.412	40	1.4	0.23	0.86	±5
1900	Simulated Tissue Liquid Head	39.17	1.423	40	1.4	-2.08	1.64	±5
1907.6	Simulated Tissue Liquid Head	39.577	1.438	40	1.4	-1.06	2.71	±5
1909.8	Simulated Tissue Liquid Head	39.486	1.446	40	1.4	-1.29	3.29	±5

**Liquid Verification above was performed on 2022/1/18.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$ (S/m)	
2412	Simulated Tissue Liquid Head	39.247	1.763	39.28	1.77	-0.08	-0.4	±5
2442	Simulated Tissue Liquid Head	39.041	1.798	39.22	1.79	-0.46	0.45	±5
2450	Simulated Tissue Liquid Head	38.985	1.806	39.2	1.8	-0.55	0.33	±5
2472	Simulated Tissue Liquid Head	38.786	1.823	39.17	1.82	-0.98	0.16	±5

**Liquid Verification above was performed on 2022/1/20.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$ (S/m)	
2506	Simulated Tissue Liquid Head	39.448	1.938	39.02	1.94	1.1	-0.1	±5
2549.5	Simulated Tissue Liquid Head	39.622	1.932	39.00	1.95	1.59	-0.92	±5
2593	Simulated Tissue Liquid Head	39.808	1.928	38.99	1.96	2.1	-1.63	±5
2600	Simulated Tissue Liquid Head	39.881	1.95	39.00	1.96	2.26	-0.51	±5
2636.5	Simulated Tissue Liquid Head	39.723	1.97	38.98	1.98	1.91	-0.51	±5
2680	Simulated Tissue Liquid Head	39.566	1.985	38.94	2.01	1.61	-1.24	±5

**Liquid Verification above was performed on 2022/1/21.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$	
5180	Simulated Tissue Liquid Head	36.626	4.651	36.02	4.64	1.68	0.24	±5
5200	Simulated Tissue Liquid Head	36.134	4.798	36	4.66	0.37	2.96	±5
5240	Simulated Tissue Liquid Head	35.769	4.824	35.96	4.7	-0.53	2.64	±5
5250	Simulated Tissue Liquid Head	35.652	4.905	35.95	4.71	-0.83	4.14	±5

**Liquid Verification was performed on 2022/1/22.*

Frequency (MHz)	Liquid Type	Liquid Parameter		Target Value		Delta (%)		Tolerance (%)
		ε_r	σ (S/m)	ε_r	σ (S/m)	$\Delta\varepsilon_r$	$\Delta\sigma$	
5745	Simulated Tissue Liquid Head	34.861	5.358	35.36	5.22	-1.41	2.64	±5
5785	Simulated Tissue Liquid Head	34.734	5.392	35.32	5.26	-1.66	2.51	±5
5800	Simulated Tissue Liquid Head	34.628	5.395	35.3	5.27	-1.9	2.37	±5
5825	Simulated Tissue Liquid Head	34.556	5.401	35.28	5.3	-2.05	1.91	±5

**Liquid Verification was performed on 2022/1/23.*

System Accuracy Verification

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of ±10%. The validation results are tabulated below. And also the corresponding SAR plot is attached as well in the SAR plots files.

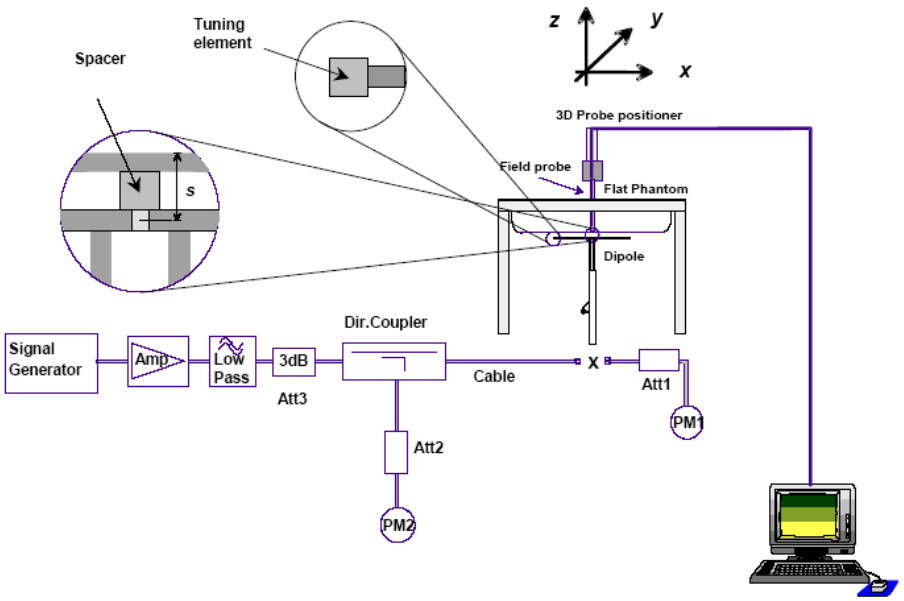
The spacing distances in the **System Verification Setup Block Diagram** is given by the following:

a) s = 15 mm ± 0,2 mm for 300 MHz ≤ f ≤ 1 000 MHz;

b) s = 10 mm ± 0,2 mm for 1 000 MHz < f ≤ 3 000 MHz;

c) s = 10 mm ± 0,2 mm for 3 000 MHz < f ≤ 6 000 MHz.

System Verification Setup Block Diagram



System Accuracy Check Results

Date	Frequency Band	Liquid Type	Input Power (mW)	Measured SAR (W/kg)		Normalized to 1W (W/kg)	Target Value (W/kg)	Delta (%)	Tolerance (%)
2022/1/16	750 MHz	Head	100	1g	0.858	8.58	8.55	0.35	±10
2022/1/17	750 MHz	Head	100	1g	0.855	8.55	8.55	0	±10
2022/1/19	1800 MHz	Head	100	1g	4.27	42.7	39.3	8.6	±10
2022/1/18	1900 MHz	Head	100	1g	4.27	42.7	40.3	5.96	±10
2022/1/20	2450 MHz	Head	100	1g	5.43	54.3	53.0	2.45	±10
2022/1/21	2600 MHz	Head	100	1g	5.62	56.2	55.4	1.44	±10
2022/1/22	5250 MHz	Head	100	1g	8.09	80.9	80.7	0.25	±10
2022/1/23	5800 MHz	Head	100	1g	7.96	79.6	80.2	-0.75	±10

*The SAR values above are normalized to 1 Watt forward power.

SAR SYSTEM VALIDATION DATA

System Performance 750 MHz

DUT: D750V3; Type: 750 MHz; Serial: 1194

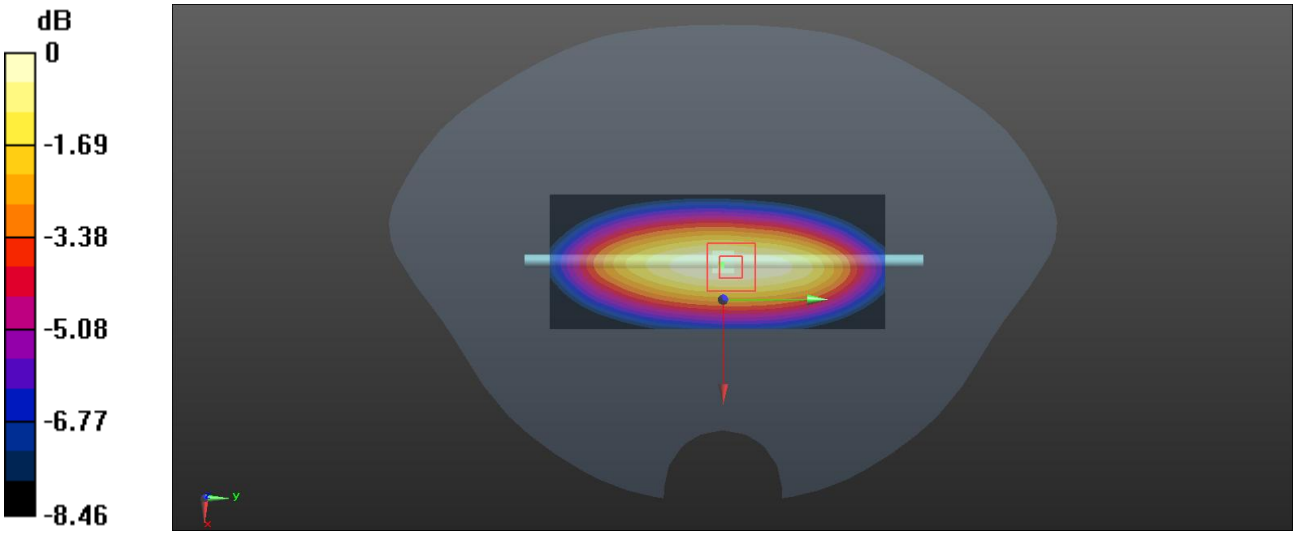
Communication System: CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.872 S/m; ε_r = 42.542; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7441; ConvF(10.28, 10.28, 10.28) @ 750 MHz; Calibrated: 2021/02/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 2021/12/13
- Phantom: Head model; Type: QD000P40CC; Serial: TP:1744
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (41x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.24 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 31.68 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 1.49 W/kg
SAR(1 g) = 0.858 W/kg; SAR(10 g) = 0.562 W/kg
Maximum value of SAR (measured) = 1.18 W/kg



0 dB = 1.18 W/kg = 0.72 dBW/kg

System Performance 750 MHz

DUT: D750V3; Type: 750 MHz; Serial: 1194

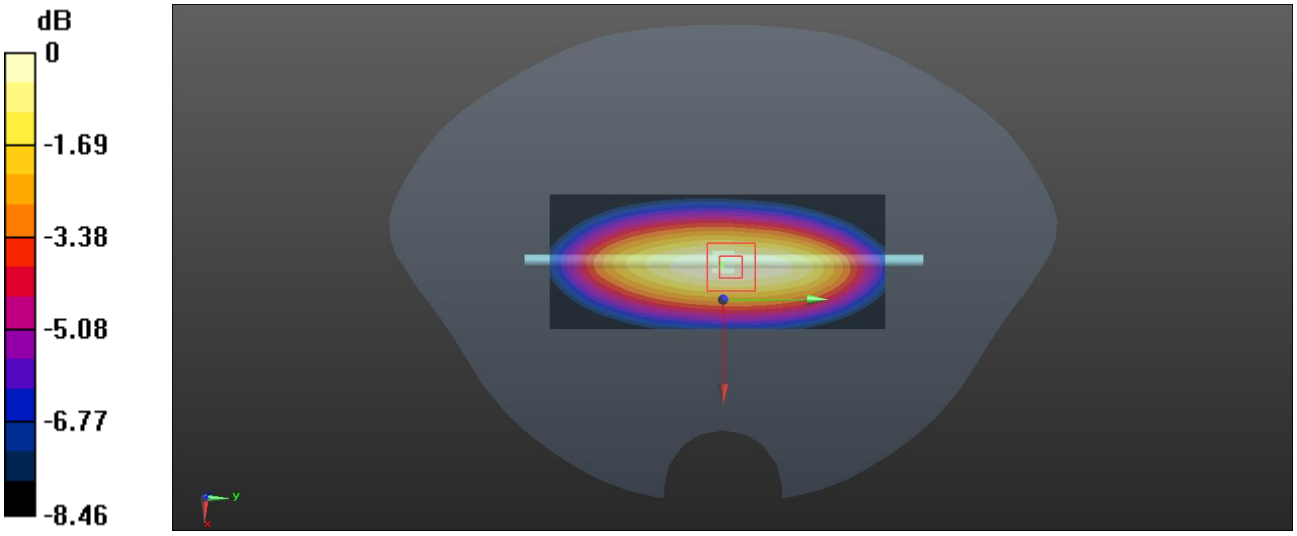
Communication System: CW; Frequency: 750 MHz;Duty Cycle: 1:1
Medium parameters used: f = 750 MHz; σ = 0.869 S/m; ε_r = 42.474; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7441; ConvF(10.28, 10.28, 10.28) @ 750 MHz; Calibrated: 2021/02/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 2021/12/13
- Phantom: Head model; Type: QD000P40CC; Serial: TP:1744
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (41x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 1.25 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 30.07 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.855 W/kg; SAR(10 g) = 0.561 W/kg
Maximum value of SAR (measured) = 1.15 W/kg



0 dB = 1.15 W/kg = 0.61 dBW/kg

System Performance 1800 MHz

DUT: D1800V2; Type: 1800MHz; Serial: 2d018

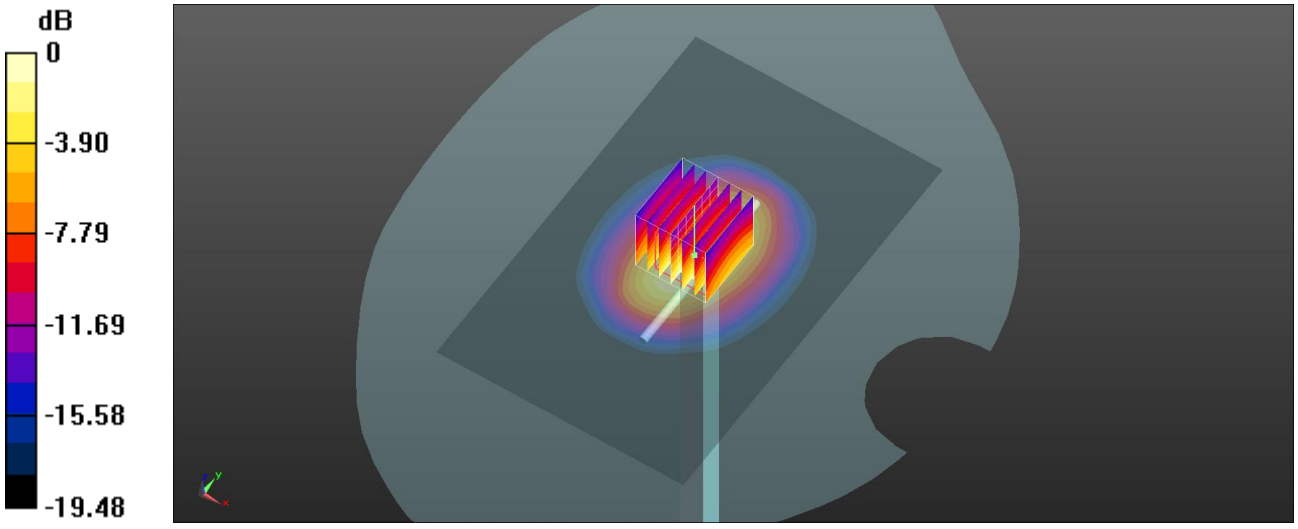
Communication System: UID 0, CW (0); Frequency: 1800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1800 MHz; σ = 1.435 S/m; ε_r = 39.264; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 – SN7441; ConvF(8.39, 8.39, 8.39) ; Calibrated: 2021/2/23
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 2021/12/13
- Phantom: Head model; Type: QD000P40CC; Serial: TP:1744
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

System Performance Cheek at 1800MHz/d=10mm, Pin=100mw/Area Scan (71x111x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 4.89 W/kg

System Performance Cheek at 1800MHz/d=10mm, Pin=100mw/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 60.11 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 7.06 W/kg
SAR(1 g) = 4.27 W/kg; SAR(10 g) = 2.35 W/kg
Maximum value of SAR (measured) = 4.69 W/kg



0 dB = 4.69 W/kg = 6.71 dBW/kg

System Performance 1900MHz

DUT: D1900V2; Type: 1900 MHz; Serial: 5d231

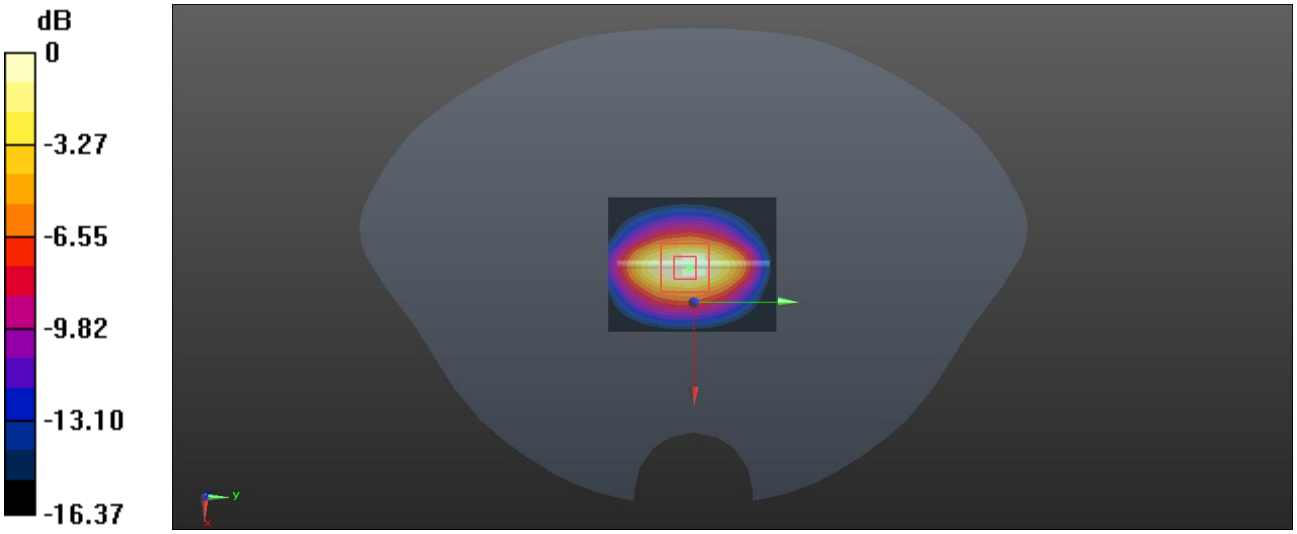
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.423 S/m; ε_r = 39.17; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7441; ConvF(8.02, 8.02, 8.02) @ 1900 MHz; Calibrated: 2021/02/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 2021/12/13
- Phantom: Head model; Type: QD000P40CC; Serial: TP:1744
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (41x51x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 6.95 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 57.86 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 7.87 W/kg
SAR(1 g) = 4.27 W/kg; SAR(10 g) = 2.19 W/kg
Maximum value of SAR (measured) = 6.54 W/kg



0 dB = 6.54 W/kg = 8.16 dBW/kg

System Performance 2450MHz

DUT: D2450V2; Type: 2450 MHz; Serial: 751

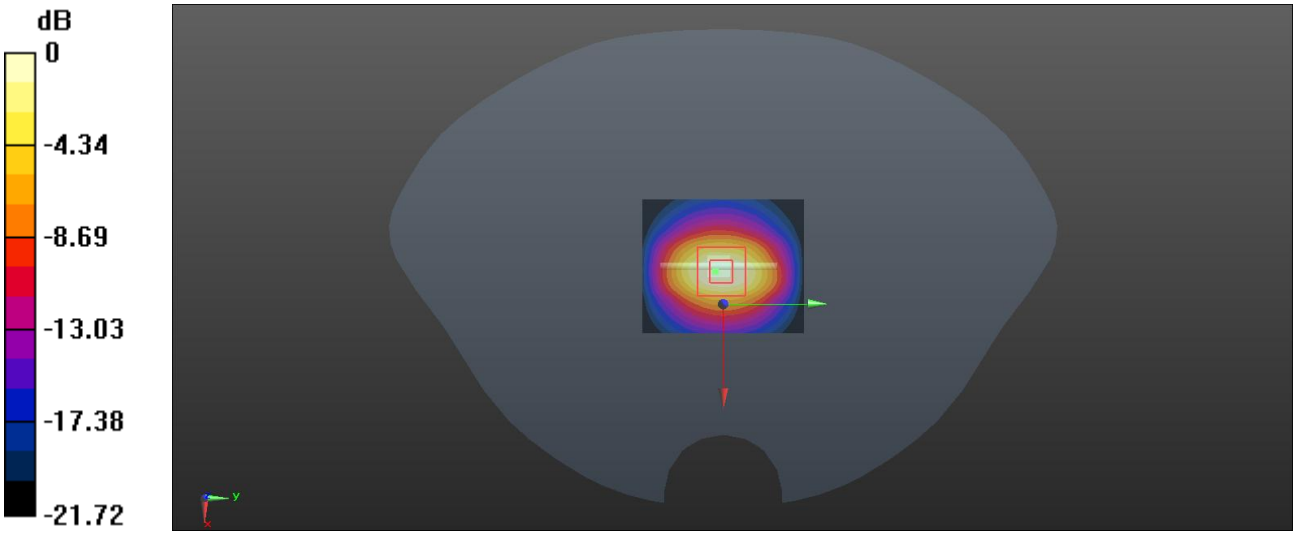
Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.806 S/m; ε_r = 38.985; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7441; ConvF(7.63, 7.63, 7.63) @ 2450 MHz; Calibrated: 2021/02/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 2021/12/13
- Phantom: Head model; Type: QD000P40CC; Serial: TP:1744
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (51x61x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 10.6 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 56.98 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 11.9 W/kg
SAR(1 g) = 5.43 W/kg; SAR(10 g) = 2.49 W/kg
Maximum value of SAR (measured) = 9.13 W/kg



0 dB = 9.13 W/kg = 9.60 dBW/kg

System Performance 2600MHz

DUT: D2600V2; Type: 2600 MHz; Serial: 1162

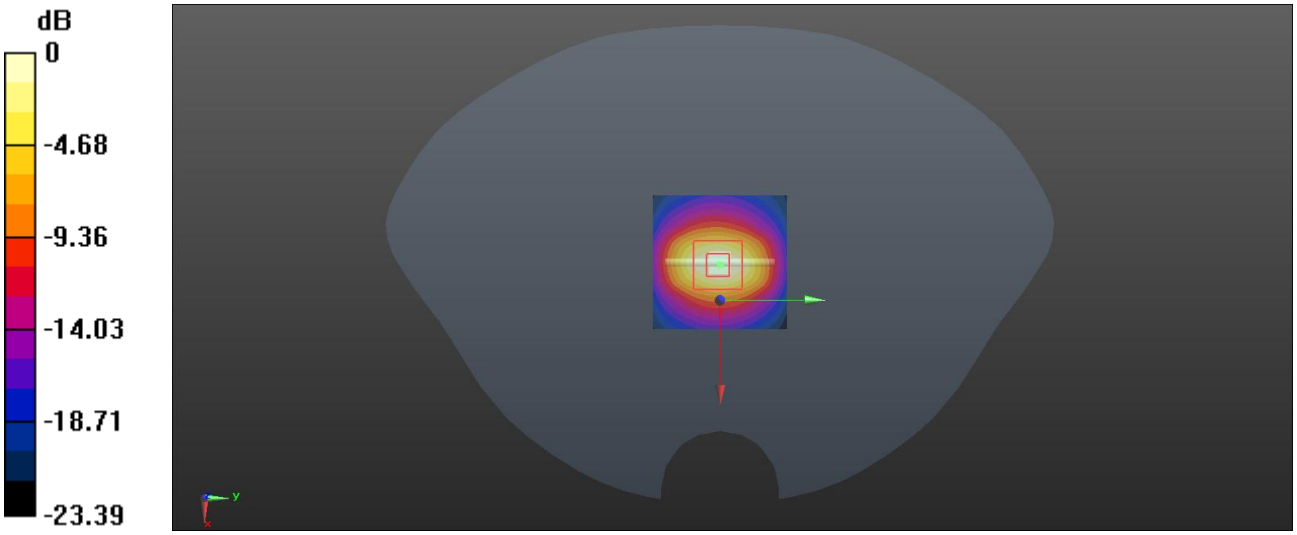
Communication System: CW; Frequency: 2600 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2600 MHz; σ = 1.95 S/m; ε_r = 39.881; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN7441; ConvF(7.33, 7.33, 7.33) @ 2600 MHz; Calibrated: 2021/02/23
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 2021/12/13
- Phantom: Head model; Type: QD000P40CC; Serial: TP:1744
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (51x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm
Maximum value of SAR (interpolated) = 11.5 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 57.27 V/m; Power Drift = 0.12 dB
Peak SAR (extrapolated) = 12.2 W/kg
SAR(1 g) = 5.62 W/kg; SAR(10 g) = 2.44 W/kg
Maximum value of SAR (measured) = 9.75 W/kg



0 dB = 9.75 W/kg = 9.89 dBW/kg

System Performance 5250MHz

DUT: D5GHzV2; Type: 5250MHz; Serial: 1301

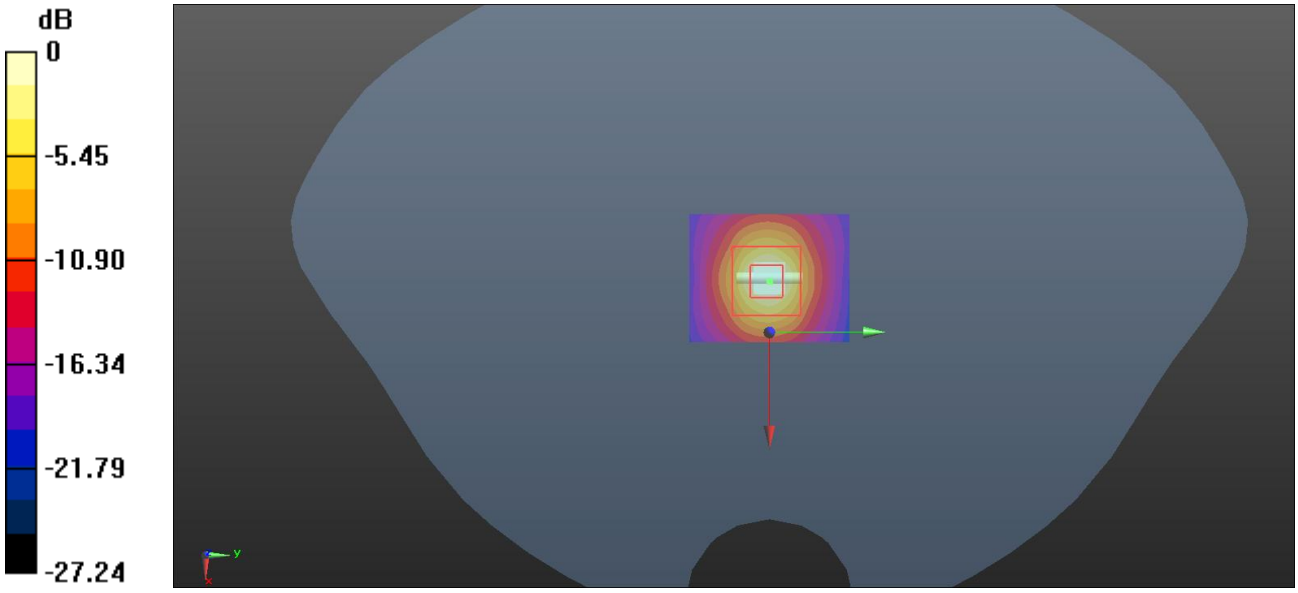
Communication System: CW; Frequency: 5250 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5250 MHz; σ = 4.905 S/m; ε_r = 35.652; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3619; ConvF(4.37, 4.37, 4.37) @ 5250 MHz; Calibrated: 2021/08/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 2021/12/13
- Phantom: Head model; Type: QD000P40CC; Serial: TP:1744
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (41x51x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 23.3 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 44.37 V/m; Power Drift = -0.16 dB
Peak SAR (extrapolated) = 36.7 W/kg
SAR(1 g) = 8.09 W/kg; SAR(10 g) = 2.32 W/kg
Maximum value of SAR (measured) = 21.5 W/kg



0 dB = 21.5 W/kg = 13.32 dBW/kg

System Performance 5800MHz

DUT: D5GHzV2; Type: 5800MHz; Serial: 1301

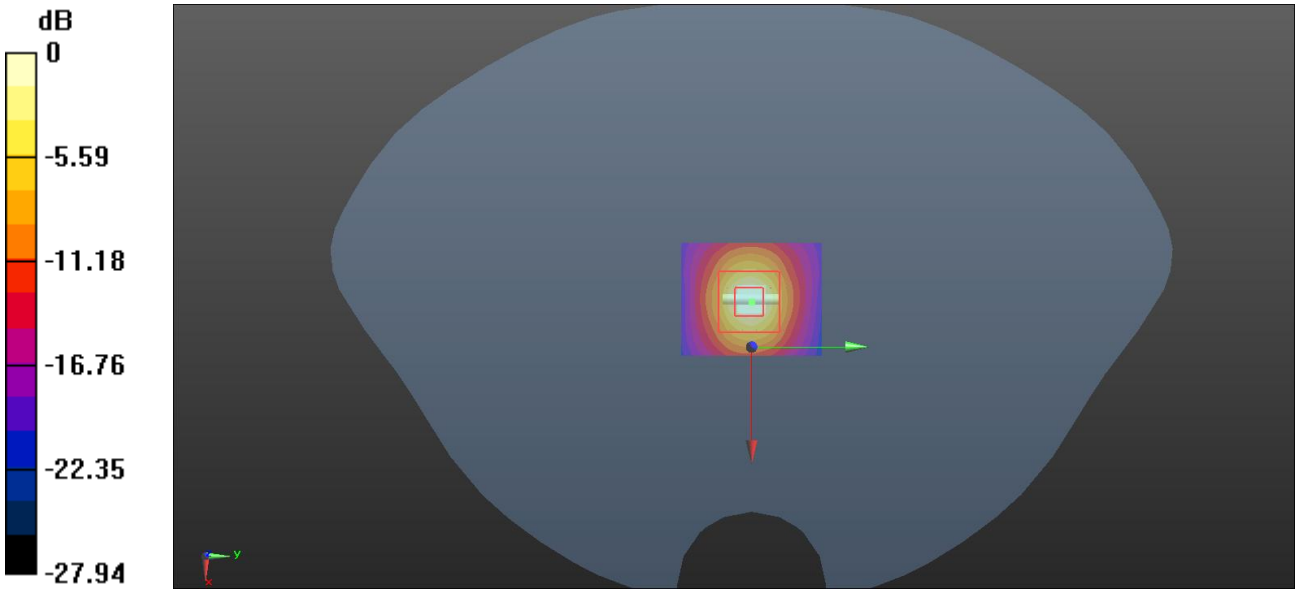
Communication System: CW; Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 5.395 S/m; ε_r = 34.628; ρ = 1000 kg/m^3
Phantom section: Flat Section

DASY5 Configuration:

- Probe: EX3DV4 - SN3619; ConvF(3.93, 3.93, 3.93) @ 5800 MHz; Calibrated: 2021/08/25
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1562; Calibrated: 2021/12/13
- Phantom: Head model; Type: QD000P40CC; Serial: TP:1744
- Measurement SW: DASY52, Version 52.10 (4); SEMCAD X Version 14.6.14 (7501)

Area Scan (41x51x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm
Maximum value of SAR (interpolated) = 24.6 W/kg

Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 41.72 V/m; Power Drift = 0.18 dB
Peak SAR (extrapolated) = 39.7 W/kg
SAR(1 g) = 7.96 W/kg; SAR(10 g) = 2.33 W/kg
Maximum value of SAR (measured) = 21.8 W/kg



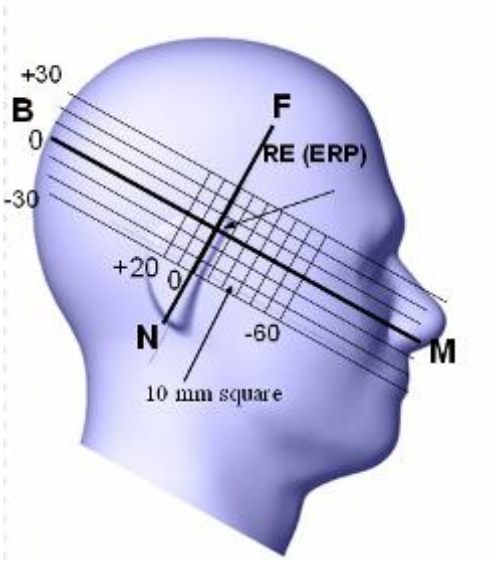
0 dB = 21.8 W/kg = 13.38 dBW/kg

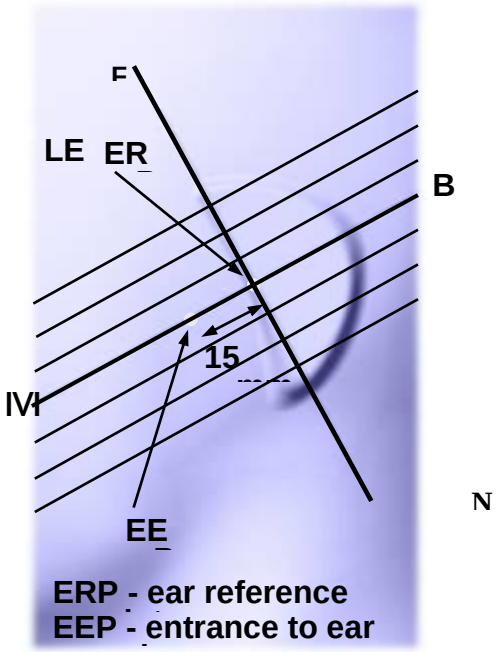
EUT TEST STRATEGY AND METHODOLOGY

Test Positions for Device Operating Next to a Person's Ear

This category includes most wireless handsets with fixed, retractable or internal antennas located toward the top half of the device, with or without a foldout, sliding or similar keypad cover. The handset should have its earpiece located within the upper ¼ of the device, either along the centerline or off-centered, as perceived by its users. This type of handset should be positioned in a normal operating position with the "test device reference point" located along the "vertical centerline" on the front of the device aligned to the "ear reference point". The "test device reference point" should be located at the same level as the center of the earpiece region. The "vertical centerline" should bisect the front surface of the handset at its top and bottom edges. A "ear reference point" is located on the outer surface of the head phantom on each ear spacer. It is located 1.5 cm above the center of the ear canal entrance in the "phantom reference plane" defined by the three lines joining the center of each "ear reference point" (left and right) and the tip of the mouth.

A handset should be initially positioned with the earpiece region pressed against the ear spacer of a head phantom. For the SCC-34/SC-2 head phantom, the device should be positioned parallel to the "N-F" line defined along the base of the ear spacer that contains the "ear reference point". For interim head phantoms, the device should be positioned parallel to the cheek for maximum RF energy coupling. The "test device reference point" is aligned to the "ear reference point" on the head phantom and the "vertical centerline" is aligned to the "phantom reference plane". This is called the "initial ear position". While maintaining these three alignments, the body of the handset is gradually adjusted to each of the following positions for evaluating SAR:





Cheek/Touch Position

The device is brought toward the mouth of the head phantom by pivoting against the “ear reference point” or along the “N-F” line for the SCC-34/SC-2 head phantom.

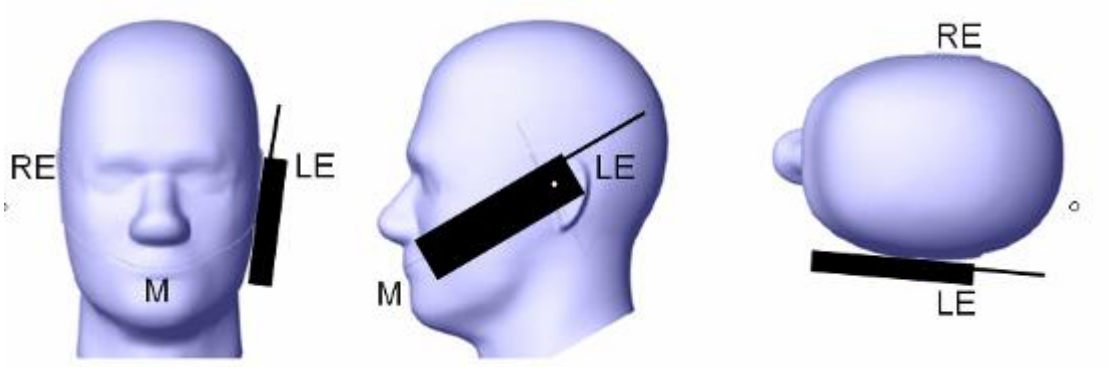
This test position is established:

When any point on the display, keypad or mouthpiece portions of the handset is in contact with the phantom.

(or) When any portion of a foldout, sliding or similar keypad cover opened to its intended self-adjusting normal use position is in contact with the cheek or mouth of the phantom.

For existing head phantoms – when the handset loses contact with the phantom at the pivoting point, rotation should continue until the device touches the cheek of the phantom or breaks its last contact from the ear spacer.

Cheek /Touch Position



Ear/Tilt Position

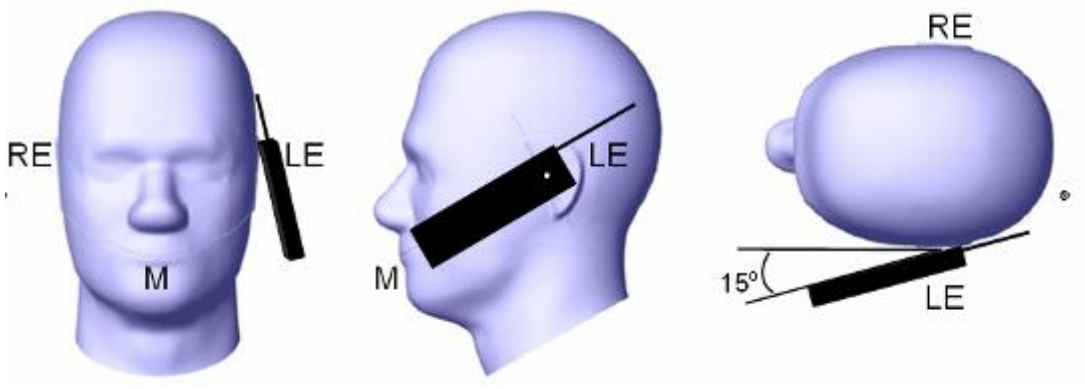
With the handset aligned in the “Cheek/Touch Position”:

1) If the earpiece of the handset is not in full contact with the phantom’s ear spacer (in the “Cheek/Touch position”) and the peak SAR location for the “Cheek/Touch” position is located at the ear spacer region or corresponds to the earpiece region of the handset, the device should be returned to the “initial ear position” by rotating it away from the mouth until the earpiece is in full contact with the ear spacer.

2) (otherwise) The handset should be moved (translated) away from the cheek perpendicular to the line passes through both “ear reference points” (note: one of these ear reference points may not physically exist on a split head model) for approximate 2-3 cm. While it is in this position, the device handset is tilted away from the mouth with respect to the “test device reference point” until the inside angle between the vertical centerline on the front surface of the phone and the horizontal line passing through the ear reference point is by 15 80 °. After the tilt, it is then moved (translated) back toward the head perpendicular to the line passes through both “ear reference points” until the device touches the phantom or the ear spacer. If the antenna touches the head first, the positioning process should be repeated with a tilt angle less than 15 °so that the device and its antenna would touch the phantom simultaneously. This test position may require a device holder or positioner to achieve the translation and tilting with acceptable positioning repeatability.

If a device is also designed to transmit with its keypad cover closed for operating in the head position, such positions should also be considered in the SAR evaluation. The device should be tested on the left and right side of the head phantom in the “Cheek/Touch” and “Ear/Tilt” positions. When applicable, each configuration should be tested with the antenna in its fully extended and fully retracted positions. These test configurations should be tested at the high, middle and low frequency channels of each operating mode; for example, AMPS, CDMA, and TDMA. If the SAR measured at the middle channel for each test configuration (left, right, Cheek/Touch, Tilt/Ear, extended and retracted) is at least 2.0 dB lower than the SAR limit, testing at the high and low channels is optional for such test configuration(s). If the transmission band of the test device is less than 10 MHz, testing at the high and low frequency channels is optional.

Ear /Tilt 15° Position



Test positions for body-worn and other configurations

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. Devices with a headset output should be tested with a headset connected to the device. When multiple accessories that do not contain metallic components are supplied with the device, the device may be tested with only the accessory that dictates the closest spacing to the body. When multiple accessories that contain metallic components are supplied with the device, the device must be tested with each accessory that contains a unique metallic component. If multiple accessories share an identical metallic component (e.g., the same metallic belt-clip used with different holsters with no other metallic components), only the accessory that dictates the closest spacing to the body must be tested.

Body-worn accessories may not always be supplied or available as options for some devices that are intended to be authorized for body-worn use. A separation distance of 1.5 cm between the back of the device and a flat phantom is recommended for testing body-worn SAR compliance under such circumstances. Other separation distances may be used, but they should not exceed 2.5 cm. In these cases, the device may use body-worn accessories that provide a separation distance greater than that tested for the device provided however that the accessory contains no metallic components.

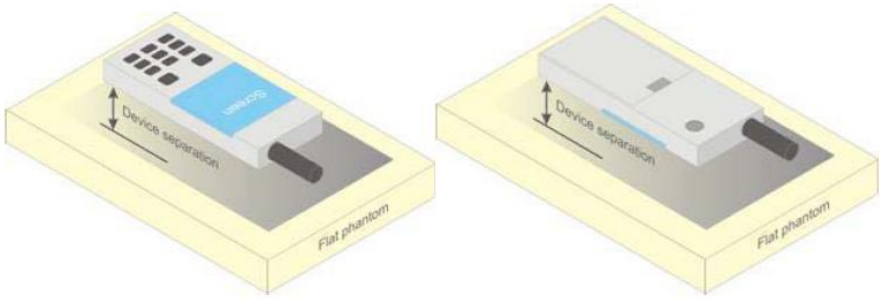


Figure 5 – Test positions for body-worn devices

Test Distance for SAR Evaluation

In this case the EUT(Equipment Under Test) is set directly against the phantom, the test distance is 0mm.

SAR Evaluation Procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the SAR value at a fixed location above the ear point or central position was used as a reference value for assessing the power drop. The SAR at this point is measured at the start of the test and then again at the end of the testing.

Step 2: The SAR distribution at the exposed side of the head was measured at a distance of 4 mm from the inner surface of the shell. The area covered the entire dimension of the head or radiating structures of the EUT, the horizontal grid spacing was 15 mm x 15 mm, and the SAR distribution was determined by integrated grid of 1.5mm x 1.5mm. Based on these data, the area of the maximum absorption was determined by spline interpolation. The first Area Scan covers the entire dimension of the EUT to ensure that the hotspot was correctly identified.

Step 3: Around this point, a volume of 30 mm x 30 mm x 30 mm was assessed by measuring 7x 7 x 7 points. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

1) The data at the surface were extrapolated, since the center of the dipoles is 1.2 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip.

2) The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one dimensional splines with the “Not a knot"-condition (in x, y and z-directions). The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the averages.

All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement of the SAR value at the same location as in Step 1. If the value changed by more than 5%, the evaluation was repeated.

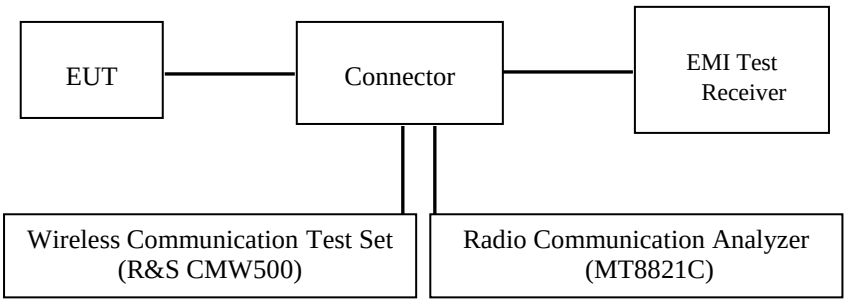
CONDUCTED OUTPUT POWER MEASUREMENT

Provision Applicable

The measured peak output power should be greater and within 5% than EMI measurement.

Test Procedure

The RF output of the transmitter was connected to the input of the EMI Test Receiver through Connector.



GSM/WCDMA/LTE/5G NR

Radio Configuration

The power measurement was configured by the Wireless Communication Test Set.

GSM/GPRS

Function: Menu select > GSM Mobile Station > GSM 850/1900
Press Connection control to choose the different menus
Press RESET > choose all the reset all settings
Connection Press Signal Off to turn off the signal and change settings
Network Support > GSM + GPRS or GSM + EGSM
Main Service > Packet Data
Service selection > Test Mode A – Auto Slot Config. off
MS Signal Press Slot Config Bottom on the right twice to select and change the number of time slots and power setting
> Slot configuration > Uplink/Gamma
> 33 dBm for GPRS 850
> 30 dBm for GPRS 1900
BS Signal Enter the same channel number for TCH channel (test channel) and BCCH channel
Frequency Offset > + 0 Hz
Mode > BCCH and TCH
BCCH Level > -85 dBm (May need to adjust if link is not stabe)
BCCH Channel > choose desire test channel [Enter the same channel number for TCH channel (test channel) and BCCH channel]

Channel Type > Off
P0 > 4 dB
Slot Config >Unchanged (if already set under MS signal)
TCH > choose desired test channel
Hopping > Off

Main Timeslot > 3
Network Coding Scheme > CS4 (GPRS)
Bit Stream >2E9-1 PSR Bit Stream
AF/RF Enter appropriate offsets for Ext. Att. Output and Ext. Att. Input
Connection Press Signal on to turn on the signal and change settings
WCDMA Release 99

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP

TS34.121-1 specification. The EUT has a nominal maximum output power of 24dBm (+1.7/-3.7).

WCDMA General Settings	Loopback Mode	Test Mode 1
	Rel99 RMC	12.2kbps RMC
	Power Control Algorithm	Algorithm2
	β_c/β_d	8/15

HSDPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSDPA	HSDPA	HSDPA	HSDPA
	Subset	1	2	3	4
WCDMA General Settings	Loopback Mode	Test Mode 1			
	Rel99 RMC	12.2kbps RMC			
	HSDPA FRC	H-Set1			
	Power Control Algorithm	Algorithm2			
	β_c	2/15	12/15	15/15	15/15
	β_d	15/15	15/15	8/15	4/15
	β_d(SF)	64			
	β_c/β_d	2/15	12/15	15/8	15/4
	β_{hs}	4/15	24/15	30/15	30/15
	MPR(dB)	0	0	0.5	0.5
HSDPA Specific Settings	DACK	8			
	DNAK	8			
	DCQI	8			
	Ack-Nack repetition factor	3			
	CQI Feedback	4ms			
	CQI Repetition Factor	2			
	Ahs=βhs/ βc	30/15			

HSUPA

The following tests were conducted according to the test requirements outlines in section 5.2 of the 3GPP TS34.121-1 specification.

	Mode	HSUPA	HSUPA	HSUPA	HSUPA	HSUPA
	Subset	**1**	**2**	**3**	**4**	**5**
WCDMA General Settings	Loopback Mode	Test Mode 1				
	Rel99 RMC	12.2kbps RMC				
	HSDPA FRC	H-Set1				
	HSUPA Test	HSUPA Loopback				
	Power Control Algorithm	Algorithm2				
	β_c	11/15	6/15	15/15	2/15	15/15
	β_d	15/15	15/15	9/15	15/15	0
	β_{ec}	209/225	12/15	30/15	2/15	5/15
	β_c/β_d	11/15	6/15	15/9	2/15	-
	β_{hs}	22/15	12/15	30/15	4/15	5/15
	CM(dB)	1.0	3.0	2.0	3.0	1.0
	MPR(dB)	0	2	1	2	0
HSDPA Specific Settings	DACK	8				
	DNAK	8				
	DCQI	8				
	Ack-Nack repetition factor	3				
	CQI Feedback	4ms				
	CQI Repetition Factor	2				
	$Ahs=\beta_{hs}/\beta_c$	30/15				
HSUPA Specific Settings	DE-DPCCH	6	8	8	5	7
	DHARQ	0	0	0	0	0
	AG Index	20	12	15	17	21
	ETFCI	75	67	92	71	81
	Associated Max UL Data Rate kbps	242.1	174.9	482.8	205.8	308.9
	Reference E_FCls	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27		E-TFCI 11 E-TFCI PO4 E-TFCI 92 E-TFCI PO 18	E-TFCI 11 E E-TFCI PO 4 E-TFCI 67 E-TFCI PO 18 E-TFCI 71 E-TFCI PO23 E-TFCI 75 E-TFCI PO26 E-TFCI 81 E-TFCI PO 27	

HSPA+

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.

FDD-LTE

For UE Power Class 1 and 3, the allowed Maximum Power Reduction (MPR) for the maximum output power in Table 6.2.2-1due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N_{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

For UE Power Class 1 and 3 the specific requirements and identified sub clauses are specified in Table 6.2.4-1 along with the allowed A-MPR values that may be used to meet these requirements. The allowed A-MPR values specified below in Table 6.2.4.-1 to 6.2.4-15 are in addition to the allowed MPR requirements specified in sub clause 6.2.3.

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (subclause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	N/A
NS_03	6.6.2.2.1	2, 4,10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10,15,20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	N/A
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 6.2.4-2	
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4-3	
NS_11	6.6.2.2.1	23	1.4, 3, 5, 10, 15, 20	Table 6.2.4-5	
NS_12	6.6.3.3.5	26	1.4, 3, 5	Table 6.2.4-6	
NS_13	6.6.3.3.6	26	5	Table 6.2.4-7	
NS_14	6.6.3.3.7	26	10, 15	Table 6.2.4-8	
NS_15	6.6.3.3.8	26	1.4, 3, 5, 10, 15	Table 6.2.4-9 Table 6.2.4-10	
NS_16	6.6.3.3.9	27	3, 5, 10	Table 6.2.4-11, Table 6.2.4-12, Table 6.2.4-13	
NS_17	6.6.3.3.10	28	5, 10	Table 5.6-1	N/A
NS_18	6.6.3.3.11	28	5	≥ 2	≤ 1
			10, 15, 20	≥ 1	≤ 4
NS_19	6.6.3.3.12	44	10, 15, 20	Table 6.2.4-14	
NS_20	6.2.2 6.6.2.2.1 6.6.3.2	23	5, 10, 15, 20	Table 6.2.4-15	
...					
NS_32	-	-	-	-	-

TDD-LTE

LTE TDD Band 41 supports 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

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	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
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	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
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

Calculated Duty Cycle

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-point Periodicity	Subframe Number										Calculated Duty Cycle (%)
		0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	63.33
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10 ms	D	S	U	U	U	D	D	D	D	D	31.67
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.33

Calculated Duty Cycle = Extended cyclic prefix in uplink x (T_s) x # of S + # of U

Example for Calculated Duty Cycle for Uplink-Downlink Configuration 0:
Calculated Duty Cycle = 5120 x [1/(15000 x 2048)] x 2 + 6 ms = 63.33%
where
T_s = 1/(15000 x 2048) seconds

5G NR

n66	SCS (kHz)	Frequency range: 1710 - 1780 MHz (BW = 70 MHz)												
		Channel Bandwidth (MHz)												
		100	90	80	70	60	50	40	30	25	20	15	10	5
Low	15							346000 /1730	345000 /1725		344000 /1720	343500 /1717.5	343000 /1715	342500 /1712.5
Mid	15							349000 /1745	349000 /1745		349000 /1745	349000 /1745	349000 /1745	349000 /1745
High	15							352000 /1760	353000 /1765		354000 /1770	354500 /1772.5	355000 /1775	355500 /1777.5

SCS	15KHz(n66)
A-MPR(Additional MPR)disabled for SAR testing?	YES
EN-DC Carrier Aggregation Possible Combinations	
LTE Anchor Bands for NR band n66	LTE Band 12

Maximum Target Output Power

Max Target Power(dBm)			
Mode/Band	Channel		
	Low	Middle	High
GSM 850	33.0	33.0	33.0
GPRS 1 TX Slot	32.5	32.5	32.5
GPRS 2 TX Slot	32.0	32.0	32.0
GPRS 3 TX Slot	30.5	30.5	30.5
GPRS 4 TX Slot	29.5	29.5	29.5
PCS 1900	32.0	32.0	32.0
GPRS 1 TX Slot	29.5	29.5	29.5
GPRS 2 TX Slot	29.0	29.0	29.0
GPRS 3 TX Slot	27.5	27.5	27.5
GPRS 4 TX Slot	26.5	26.5	26.5
WCDMA Band 2	22.5	22.5	22.5
HSDPA	22.5	22.5	22.5
HSUPA	22.0	22.0	22.0
HSPA+	22.0	22.0	22.0
WCDMA Band 5	22.5	22.5	22.5
HSDPA	22.5	22.5	22.5
HSUPA	22.0	22.0	22.0
HSPA+	22.5	22.5	22.5
LTE Band 2	22.5	22.5	22.5
LTE Band 5	23.0	23.0	23.0
LTE Band 12	23.0	23.0	23.0
LTE Band 41	22.5	22.5	22.5
5G NR band n66	23.5	23.5	23.5
WLAN 2.4G	24.5	24.5	24.5
WLAN 5.2G	18.0	18.0	18.0
WLAN 5.8G	21.5	21.5	21.5
Bluetooth BDR/EDR	4.0	4.0	4.0
BLE	1.0	1.0	1.0

Test Results:

GSM:

Band	Channel No.	Frequency (MHz)	RF Output Power (dBm)
GSM 850	128	824.2	32.62
	190	836.6	32.70
	251	848.8	32.85
PCS 1900	512	1850.2	31.21
	661	1880	31.30
	810	1909.8	31.54

GPRS:

Band	Channel No.	Frequency (MHz)	RF Output Power (dBm)			
			1 slot	2 slots	3 slots	4 slots
GSM 850	128	824.2	32.28	31.37	29.97	28.75
	190	836.6	32.30	31.48	30.12	28.99
	251	848.8	32.39	31.73	30.14	29.07
PCS 1900	512	1850.2	29.26	28.31	27.26	26.35
	661	1880	29.30	28.48	27.42	26.21
	810	1909.8	29.09	24.25	27.34	26.27

For SAR, the time based average power is relevant, the difference in between depends on the duty cycle of the TDMA signal.

Number of Time slot	1	2	3	4
Duty Cycle	1:8	1:4	1:2.66	1:2
Time based Ave. power compared to slotted Ave. power	-9 dB	-6 dB	-4.25 dB	-3 dB
Crest Factor	8	4	2.66	2

The time based average power for GPRS

Band	Channel No.	Frequency (MHz)	RF Output Power (dBm)			
			1 slot	2 slots	3 slots	4 slots
GSM 850	128	824.2	23.28	25.37	25.72	25.75
	190	836.6	23.3	25.48	25.87	25.99
	251	848.8	23.39	25.73	25.89	**26.07**
PCS 1900	512	1850.2	20.26	22.31	23.01	**23.35**
	661	1880	20.3	22.48	23.17	23.21
	810	1909.8	20.09	18.25	23.09	23.27

Note:

1. Rohde & Schwarz Radio Communication Tester (CMU200) was used for the measurement of GSM peak and average output power for active timeslots.
2 .For GSM voice, 1 timeslot has been activated with power level 5 (850 MHz band) and 0 (1900 MHz band).
3 .For GPRS, 1, 2, 3 and 4 timeslots has been activated separately with power level 3(850 MHz band) and 3(1900 MHz band).

WCDMA Band 2:

Test Condition	Test Mode	3GPP Sub Test	Averaged Mean Power (dBm)		
			Low Frequency	Mid Frequency	High Frequency
Normal	RMC12.2k		20.83	21.02	21.36
	HSDPA	1	18.98	19.07	19.23
		2	19.27	19.14	19.23
		3	19.27	19.41	19.35
		4	19.38	19.40	19.28
	HSUPA	1	20.11	20.36	20.43
		2	20.23	20.25	20.40
		3	20.34	20.30	20.44
		4	20.33	20.34	20.32
		5	20.26	20.24	20.23
	HSPA+	1	20.32	20.48	20.51

WCDMA Band 5:

Test Condition	Test Mode	3GPP Sub Test	Averaged Mean Power (dBm)		
			Low Frequency	Mid Frequency	High Frequency
Normal	RMC12.2k		22.11	22.15	22.23
	HSDPA	1	22.05	21.34	21.56
		2	21.83	21.58	21.56
		3	21.97	21.41	21.49
		4	22.02	21.56	21.65
	HSUPA	1	21.64	21.21	21.09
		2	21.56	20.97	21.14
		3	21.48	21.14	21.25
		4	21.68	21.23	21.39
		5	21.74	21.48	21.34
	HSPA+	1	21.96	21.43	21.54

Note:

1. The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model 1.
2. KDB 941225 D01-Body SAR is not required for HSDPA/HSUPA/ HSPA+ when the maximum average output of each RF channel is less than ¼ dB higher than measured 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is < 75% of SAR limit.

LTE Band 2:

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas MPR	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4M	QPSK	1#0	0	0	21.83	21.82	21.83
		1#2	0	0	22.29	22.13	21.98
		1#5	0	0	22.06	21.91	21.81
		3#0	1	1	22.2	22.07	21.95
		3#2	1	1	22.15	21.95	21.95
		6#0	1	1	21.18	20.93	20.85
	16-QAM	1#0	1	1	21.11	21	20.76
		1#2	1	1	21.34	21.27	21.12
		1#5	1	1	21.06	21.01	20.8
		3#0	2	2	21.28	20.87	20.98
		3#2	2	2	21.31	20.96	20.8
		6#0	2	2	20.33	20	19.8
3M	QPSK	1#0	0	0	22.19	21.87	21.88
		1#7	0	0	21.98	21.9	21.81
		1#14	0	0	21.94	21.94	21.75
		8#0	1	1	21.03	20.83	20.68
		8#7	1	1	21.15	20.84	20.79
		15#0	1	1	21.07	20.96	20.87
	16-QAM	1#0	1	1	21.68	21.07	20.74
		1#7	1	1	21.74	20.98	20.74
		1#14	1	1	21.68	21	20.77
		8#0	2	2	20.29	20.04	19.85
		8#7	2	2	20.24	20.03	19.8
		15#0	2	2	20.19	19.9	19.88
5M	QPSK	1#0	0	0	22.01	21.75	21.67
		1#12	0	0	22.13	22.01	21.77
		1#24	0	0	21.97	21.75	21.77
		12#0	1	1	21.13	20.91	20.98
		12#11	1	1	21.08	20.9	20.68
		25#0	1	1	21.03	20.79	20.71
	16-QAM	1#0	1	1	20.96	21.19	20.76
		1#12	1	1	21.08	21.19	20.84
		1#24	1	1	20.9	20.97	20.71
		12#0	2	2	20.24	19.88	19.88
		12#11	2	2	20.16	19.88	19.72
		25#0	2	2	20.11	19.92	19.71

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas MPR	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
10M	QPSK	1#0	0	0	22.15	21.89	21.8
		1#24	0	0	22.24	21.97	21.93
		1#49	0	0	21.84	21.91	21.84
		25#0	1	1	21.18	20.88	20.96
		25#24	1	1	21.09	20.77	20.59
		50#0	1	1	21.05	20.87	20.74
	16-QAM	1#0	1	1	21.58	21.12	20.7
		1#24	1	1	21.7	21.19	21.01
		1#49	1	1	21.62	21.01	20.78
		25#0	2	2	20.28	19.92	20.01
		25#24	2	2	20.04	19.78	19.76
		50#0	2	2	20.16	19.85	19.83
15M	QPSK	1#0	0	0	21.98	21.8	21.62
		1#37	0	0	21.93	21.88	21.67
		1#74	0	0	21.86	21.83	21.72
		36#0	1	1	21.02	20.9	20.69
		36#35	1	1	21.07	20.77	20.65
		75#0	1	1	21.08	20.77	20.82
	16-QAM	1#0	1	1	21.57	20.89	20.96
		1#37	1	1	21.67	21.09	21.09
		1#74	1	1	21.47	20.84	21.02
		36#0	2	2	20.1	20.03	19.77
		36#35	2	2	20.08	19.9	19.71
		75#0	2	2	20.05	19.81	19.75
20M	QPSK	1#0	0	0	21.96	21.71	21.58
		1#49	0	0	22.19	22.02	22.09
		1#99	0	0	21.62	21.55	21.4
		50#0	1	1	21.45	21.99	21.59
		50#49	1	1	21.13	20.79	20.65
		100#0	1	1	20.99	20.91	20.78
	16-QAM	1#0	1	1	21.09	20.89	21.06
		1#49	1	1	21.53	21.33	21.38
		1#99	1	1	21	20.71	21.07
		50#0	2	2	20.12	19.98	19.79
		50#49	2	2	20.1	19.64	19.48
		100#0	2	2	20.12	19.89	19.64

LTE Band 5:

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas MPR	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4M	QPSK	1#0	0	0	22.7	22.72	22.75
		1#2	0	0	22.79	22.88	22.8
		1#5	0	0	22.72	22.67	22.72
		3#0	1	1	22.76	22.73	22.86
		3#2	1	1	22.71	22.74	22.91
		6#0	1	1	21.66	21.69	21.71
	16-QAM	1#0	1	1	21.76	21.86	21.65
		1#2	1	1	21.89	22	22.03
		1#5	1	1	21.69	21.72	21.72
		3#0	2	2	21.92	21.77	21.84
		3#2	2	2	21.92	21.72	21.96
		6#0	2	2	20.75	20.87	20.66
3M	QPSK	1#0	0	0	22.8	22.8	22.73
		1#7	0	0	22.69	22.81	22.74
		1#14	0	0	22.64	22.79	22.78
		8#0	1	1	21.7	21.85	21.86
		8#7	1	1	21.81	21.79	21.69
		15#0	1	1	21.78	21.76	21.81
	16-QAM	1#0	1	1	22.32	21.87	21.91
		1#7	1	1	22.37	21.83	21.87
		1#14	1	1	22.27	21.88	21.9
		8#0	2	2	20.86	20.72	20.71
		8#7	2	2	20.78	20.86	20.67
		15#0	2	2	20.86	20.8	20.81
5M	QPSK	1#0	0	0	22.55	22.78	22.55
		1#12	0	0	22.81	22.81	22.85
		1#24	0	0	22.75	22.66	22.76
		12#0	1	1	21.62	21.65	21.88
		12#11	1	1	21.75	21.83	21.6
		25#0	1	1	21.75	21.6	21.8
	16-QAM	1#0	1	1	21.47	21.9	21.84
		1#12	1	1	21.76	22.07	21.82
		1#24	1	1	21.68	22.03	21.7
		12#0	2	2	20.84	20.86	20.99
		12#11	2	2	20.89	20.8	20.52
		25#0	2	2	20.79	20.7	20.73

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas MPR	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
10M	QPSK	1#0	0	0	22.66	22.69	22.81
		1#24	0	0	22.91	22.89	22.96
		1#49	0	0	22.68	22.71	22.72
		25#0	1	1	22.71	22.72	22.65
		25#24	1	1	21.9	21.71	21.39
		50#0	1	1	21.74	21.76	21.55
	16-QAM	1#0	1	1	22.36	21.86	21.68
		1#24	1	1	22.44	22.02	21.87
		1#49	1	1	22.27	21.93	21.87
		25#0	2	2	20.93	20.8	20.69
		25#24	2	2	20.86	20.86	20.54
		50#0	2	2	20.89	20.91	20.68

LTE Band 12:

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas MPR	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
1.4M	QPSK	1#0	0	0	22.44	22.46	22.38
		1#3	0	0	22.44	22.50	22.42
		1#5	0	0	22.42	22.51	22.39
		3#0	1	1	22.48	22.61	22.60
		3#3	1	1	22.36	22.51	22.63
		6#0	1	1	21.47	21.55	21.42
	16-QAM	1#0	1	1	21.65	21.67	21.48
		1#3	1	1	21.63	21.50	21.61
		1#5	1	1	21.58	21.57	21.50
		3#0	2	2	21.43	21.61	21.62
		3#3	2	2	21.54	21.45	21.63
		6#0	2	2	20.51	20.43	20.40
3M	QPSK	1#0	0	0	22.61	22.48	22.47
		1#8	0	0	22.43	22.55	22.44
		1#14	0	0	22.64	22.49	22.51
		6#0	1	1	21.35	21.62	21.55
		6#9	1	1	21.58	21.43	21.46
		15#0	1	1	21.49	21.46	21.53
	16-QAM	1#0	1	1	22.02	21.65	21.45
		1#8	1	1	21.98	21.68	21.43
		1#14	1	1	21.97	21.69	21.53
		6#0	2	2	20.43	20.50	20.39
		6#9	2	2	20.47	20.56	20.27
		15#0	2	2	20.45	20.36	20.49
5M	QPSK	1#0	0	0	22.81	22.55	22.60
		1#13	0	0	22.71	22.46	22.52
		1#24	0	0	22.85	22.70	22.60
		15#0	1	1	21.29	21.56	21.48
		15#10	1	1	21.57	21.51	21.41
		25#0	1	1	21.42	21.61	21.39
	16-QAM	1#0	1	1	21.37	21.72	21.61
		1#13	1	1	21.41	21.87	21.44
		1#24	1	1	21.46	21.87	21.49
		15#0	2	2	20.43	20.49	20.42
		15#10	2	2	20.49	20.38	20.41
		25#0	2	2	20.47	20.54	20.36

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas MPR	Low Channel (dBm)	Middle Channel (dBm)	High Channel (dBm)
10M	QPSK	1#0	0	0	22.60	22.51	22.40
		1#25	0	0	22.64	22.68	22.54
		1#49	0	0	22.67	22.56	22.34
		25#0	1	1	21.38	21.26	21.36
		25#25	1	1	21.46	21.35	21.37
		50#0	1	1	21.07	21.22	21.10
	16-QAM	1#0	1	1	22.06	22.09	22.20
		1#25	1	1	22.04	21.93	22.00
		1#49	1	1	22.04	21.91	21.97
		25#0	2	2	20.32	20.33	20.50
		25#25	2	2	20.30	20.43	20.54
		50#0	2	2	20.62	20.45	20.58

LTE Band 41(Power Class 3):

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas MPR	Low (dBm)	Low-Mid (dBm)	Mid (dBm)	Mid-High (dBm)	High (dBm)
5M	QPSK	1#0	0	0	22.74	22.78	22.41	22.76	22.37
		1#12	0	0	22.61	22.75	22.58	22.69	22.50
		1#24	0	0	22.50	22.79	22.58	22.81	22.53
		12#0	1	1	21.63	21.82	21.50	21.75	21.54
		12#11	1	1	21.77	21.62	21.46	21.62	21.48
		25#0	1	1	21.67	21.74	21.43	21.73	21.47
	16-QAM	1#0	1	1	21.81	21.57	21.43	21.62	21.45
		1#12	1	1	21.80	21.58	21.33	21.48	21.35
		1#24	1	1	21.95	21.59	21.45	21.57	21.41
		12#0	2	2	20.64	20.62	20.80	20.53	20.75
		12#11	2	2	20.76	20.58	20.69	20.64	20.70
		25#0	2	2	20.70	20.71	20.72	20.74	20.67
10M	QPSK	1#0	0	0	22.62	22.35	22.29	22.40	22.37
		1#24	0	0	22.55	22.47	22.38	22.47	22.45
		1#49	0	0	22.67	22.27	22.33	22.39	22.35
		25#0	1	1	21.54	21.63	21.64	21.56	21.56
		25#24	1	1	21.87	21.79	21.55	21.74	21.62
		50#0	1	1	21.62	21.66	21.52	21.50	21.53
	16-QAM	1#0	1	1	21.75	21.45	21.58	21.57	21.52
		1#24	1	1	21.93	21.56	21.60	21.50	21.66
		1#49	1	1	21.88	21.49	21.51	21.57	21.54
		25#0	2	2	20.69	20.55	20.72	20.61	20.67
		25#24	2	2	20.73	20.81	20.86	20.65	20.77
		50#0	2	2	20.63	20.59	20.70	20.60	20.62
15M	QPSK	1#0	0	0	22.70	22.34	22.59	22.21	22.57
		1#37	0	0	22.64	22.45	22.70	22.51	22.68
		1#74	0	0	22.58	22.31	22.60	22.28	22.56
		36#0	1	1	21.59	21.56	21.36	21.62	21.35
		36#35	1	1	21.73	21.56	21.51	21.61	21.52
		75#0	1	1	21.58	21.78	21.48	21.69	21.48
	16-QAM	1#0	1	1	21.73	21.28	21.50	21.30	21.57
		1#37	1	1	21.92	21.60	21.75	21.65	21.68
		1#74	1	1	21.80	21.43	21.74	21.35	21.70
		36#0	2	2	20.57	20.57	20.69	20.59	20.64
		36#35	2	2	20.68	20.64	20.67	20.62	20.67
		75#0	2	2	20.72	20.60	20.69	20.61	20.70

Test Bandwidth	Test Modulation	Resource Block & RB offset	Target MPR	Meas MPR	Low (dBm)	Low-Mid (dBm)	Mid (dBm)	Mid-High (dBm)	High (dBm)
20M	QPSK	1#0	0	0	22.42	22.29	22.14	22.34	22.29
		1#49	0	0	22.47	22.61	22.29	22.54	22.56
		1#99	0	0	22.42	22.36	22.26	22.37	22.33
		50#0	1	1	21.66	21.54	21.58	21.73	21.59
		50#49	1	1	21.85	21.71	21.50	21.92	21.73
		100#0	1	1	21.69	21.69	21.51	21.65	21.74
	16-QAM	1#0	1	1	21.58	21.48	21.63	21.66	21.45
		1#49	1	1	21.67	21.55	21.99	21.71	21.63
		1#99	1	1	21.57	21.51	21.85	21.50	21.58
		50#0	2	2	20.55	20.75	20.72	20.54	20.75
		50#49	2	2	20.85	20.71	20.68	20.80	20.72
		100#0	2	2	20.81	20.77	20.73	20.82	20.72

Note: *The power class 3 used for LTE Band 41*

5G NR Band n66:

Mode	conducted power (dBm)
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.86
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM PI/2 BPSK_RB12@6	22.96
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@23	22.92
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM PI/2 BPSK_RB25@0	22.01
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM QPSK_RB1@1	22.90
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM QPSK_RB12@6	23.02
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM QPSK_RB1@23	22.96
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM QPSK_RB25@0	22.03
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM 16 QAM_RB25@0	20.99
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM 64 QAM_RB25@0	21.35
n66_5MHz_15kHz_1712.5MHz_DFT-s-OFDM 256 QAM_RB25@0	18.51
n66_5MHz_15kHz_1712.5MHz_CP-OFDM QPSK_RB1@1	21.40
n66_5MHz_15kHz_1712.5MHz_CP-OFDM QPSK_RB13@6	21.39
n66_5MHz_15kHz_1712.5MHz_CP-OFDM QPSK_RB1@23	21.42
n66_5MHz_15kHz_1712.5MHz_CP-OFDM QPSK_RB25@0	20.83
n66_5MHz_15kHz_1712.5MHz_CP-OFDM 16 QAM_RB25@0	19.97
n66_5MHz_15kHz_1712.5MHz_CP-OFDM 64 QAM_RB25@0	19.47
n66_5MHz_15kHz_1712.5MHz_CP-OFDM 256 QAM_RB25@0	16.58
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.83
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB12@6	22.86
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@23	22.78
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB25@0	21.93

n66_5MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	22.82
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB12@6	22.91
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@23	22.85
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB25@0	21.88
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB25@0	20.87
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB25@0	20.37
n66_5MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB25@0	18.40
n66_5MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	21.37
n66_5MHz_15kHz_1745MHz_CP-OFDM QPSK_RB13@6	21.33
n66_5MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@23	21.36
n66_5MHz_15kHz_1745MHz_CP-OFDM QPSK_RB25@0	19.89
n66_5MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB25@0	19.87
n66_5MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB25@0	19.28
n66_5MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB25@0	16.31
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.70
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM PI/2 BPSK_RB12@6	22.81
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@23	22.57
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM PI/2 BPSK_RB25@0	21.78
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM QPSK_RB1@1	22.69
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM QPSK_RB12@6	22.75
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM QPSK_RB1@23	22.71
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM QPSK_RB25@0	21.78
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM 16 QAM_RB25@0	20.71
n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM 64 QAM_RB25@0	20.26

n66_5MHz_15kHz_1777.5MHz_DFT-s-OFDM 256 QAM_RB25@0	18.29
n66_5MHz_15kHz_1777.5MHz_CP-OFDM QPSK_RB1@1	21.24
n66_5MHz_15kHz_1777.5MHz_CP-OFDM QPSK_RB13@6	21.19
n66_5MHz_15kHz_1777.5MHz_CP-OFDM QPSK_RB1@23	21.09
n66_5MHz_15kHz_1777.5MHz_CP-OFDM QPSK_RB25@0	19.78
n66_5MHz_15kHz_1777.5MHz_CP-OFDM 16 QAM_RB25@0	19.79
n66_5MHz_15kHz_1777.5MHz_CP-OFDM 64 QAM_RB25@0	19.23
n66_5MHz_15kHz_1777.5MHz_CP-OFDM 256 QAM_RB25@0	16.29
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.66
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM PI/2 BPSK_RB25@12	22.87
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM PI/2 BPSK_RB1@50	22.75
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM PI/2 BPSK_RB50@0	21.83
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM QPSK_RB1@1	22.64
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM QPSK_RB25@12	22.97
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM QPSK_RB1@50	22.76
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM QPSK_RB50@0	21.93
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM 16 QAM_RB50@0	20.86
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM 64 QAM_RB50@0	20.40
n66_10MHz_15kHz_1715MHz_DFT-s-OFDM 256 QAM_RB50@0	18.30
n66_10MHz_15kHz_1715MHz_CP-OFDM QPSK_RB1@1	21.13
n66_10MHz_15kHz_1715MHz_CP-OFDM QPSK_RB26@13	21.36
n66_10MHz_15kHz_1715MHz_CP-OFDM QPSK_RB1@50	21.28
n66_10MHz_15kHz_1715MHz_CP-OFDM QPSK_RB52@0	19.84
n66_10MHz_15kHz_1715MHz_CP-OFDM 16 QAM_RB52@0	19.75

n66_10MHz_15kHz_1715MHz_CP-OFDM 64 QAM_RB52@0	19.40
n66_10MHz_15kHz_1715MHz_CP-OFDM 256 QAM_RB52@0	16.37
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.60
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB25@12	22.76
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@50	22.66
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB50@0	21.78
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	22.59
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB25@12	22.76
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@50	22.64
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB50@0	21.76
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB50@0	20.78
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB50@0	20.29
n66_10MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB50@0	18.26
n66_10MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	21.12
n66_10MHz_15kHz_1745MHz_CP-OFDM QPSK_RB26@13	21.20
n66_10MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@50	21.13
n66_10MHz_15kHz_1745MHz_CP-OFDM QPSK_RB52@0	19.76
n66_10MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB52@0	19.70
n66_10MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB52@0	19.27
n66_10MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB52@0	16.27
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.55
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM PI/2 BPSK_RB25@12	22.62
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM PI/2 BPSK_RB1@50	22.46
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM PI/2 BPSK_RB50@0	21.60

n66_10MHz_15kHz_1775MHz_DFT-s-OFDM QPSK_RB1@1	22.57
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM QPSK_RB25@12	22.66
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM QPSK_RB1@50	22.44
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM QPSK_RB50@0	21.61
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM 16 QAM_RB50@0	20.56
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM 64 QAM_RB50@0	20.11
n66_10MHz_15kHz_1775MHz_DFT-s-OFDM 256 QAM_RB50@0	18.10
n66_10MHz_15kHz_1775MHz_CP-OFDM QPSK_RB1@1	20.90
n66_10MHz_15kHz_1775MHz_CP-OFDM QPSK_RB26@13	21.08
n66_10MHz_15kHz_1775MHz_CP-OFDM QPSK_RB1@50	20.93
n66_10MHz_15kHz_1775MHz_CP-OFDM QPSK_RB52@0	19.54
n66_10MHz_15kHz_1775MHz_CP-OFDM 16 QAM_RB52@0	19.65
n66_10MHz_15kHz_1775MHz_CP-OFDM 64 QAM_RB52@0	19.14
n66_10MHz_15kHz_1775MHz_CP-OFDM 256 QAM_RB52@0	16.08
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.64
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM PI/2 BPSK_RB36@18	23.04
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@77	22.83
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM PI/2 BPSK_RB75@0	22.08
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM QPSK_RB1@1	22.81
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM QPSK_RB36@18	23.05
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM QPSK_RB1@77	22.86
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM QPSK_RB75@0	22.05
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM 16 QAM_RB75@0	21.05
n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM 64 QAM_RB75@0	20.54

n66_15MHz_15kHz_1717.5MHz_DFT-s-OFDM 256 QAM_RB75@0	18.54
n66_15MHz_15kHz_1717.5MHz_CP-OFDM QPSK_RB1@1	21.23
n66_15MHz_15kHz_1717.5MHz_CP-OFDM QPSK_RB39@19	21.58
n66_15MHz_15kHz_1717.5MHz_CP-OFDM QPSK_RB1@77	21.27
n66_15MHz_15kHz_1717.5MHz_CP-OFDM QPSK_RB79@0	20.05
n66_15MHz_15kHz_1717.5MHz_CP-OFDM 16 QAM_RB79@0	20.02
n66_15MHz_15kHz_1717.5MHz_CP-OFDM 64 QAM_RB79@0	19.59
n66_15MHz_15kHz_1717.5MHz_CP-OFDM 256 QAM_RB79@0	16.71
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.75
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB36@18	22.92
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@77	22.76
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB75@0	22.01
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	22.70
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB36@18	22.97
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@77	22.77
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB75@0	21.99
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB75@0	20.95
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB75@0	20.54
n66_15MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB75@0	18.46
n66_15MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	21.25
n66_15MHz_15kHz_1745MHz_CP-OFDM QPSK_RB39@19	21.43
n66_15MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@77	21.27
n66_15MHz_15kHz_1745MHz_CP-OFDM QPSK_RB79@0	19.96
n66_15MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB79@0	19.93

n66_15MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB79@0	19.38
n66_15MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB79@0	16.47
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.57
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM PI/2 BPSK_RB36@18	22.78
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@77	22.56
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM PI/2 BPSK_RB75@0	21.78
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM QPSK_RB1@1	22.67
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM QPSK_RB36@18	22.81
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM QPSK_RB1@77	22.54
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM QPSK_RB75@0	21.77
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM 16 QAM_RB75@0	20.81
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM 64 QAM_RB75@0	20.30
n66_15MHz_15kHz_1772.5MHz_DFT-s-OFDM 256 QAM_RB75@0	18.28
n66_15MHz_15kHz_1772.5MHz_CP-OFDM QPSK_RB1@1	21.13
n66_15MHz_15kHz_1772.5MHz_CP-OFDM QPSK_RB39@19	21.33
n66_15MHz_15kHz_1772.5MHz_CP-OFDM QPSK_RB1@77	21.09
n66_15MHz_15kHz_1772.5MHz_CP-OFDM QPSK_RB79@0	19.81
n66_15MHz_15kHz_1772.5MHz_CP-OFDM 16 QAM_RB79@0	19.73
n66_15MHz_15kHz_1772.5MHz_CP-OFDM 64 QAM_RB79@0	19.27
n66_15MHz_15kHz_1772.5MHz_CP-OFDM 256 QAM_RB79@0	16.29
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.72
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM PI/2 BPSK_RB50@25	23.04
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM PI/2 BPSK_RB1@104	22.71
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM PI/2 BPSK_RB100@0	22.07

n66_20MHz_15kHz_1720MHz_DFT-s-OFDM QPSK_RB1@1	22.78
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM QPSK_RB50@25	23.12
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM QPSK_RB1@104	22.80
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM QPSK_RB100@0	22.00
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM 16 QAM_RB100@0	21.07
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM 64 QAM_RB100@0	20.48
n66_20MHz_15kHz_1720MHz_DFT-s-OFDM 256 QAM_RB100@0	18.50
n66_20MHz_15kHz_1720MHz_CP-OFDM QPSK_RB1@1	21.18
n66_20MHz_15kHz_1720MHz_CP-OFDM QPSK_RB53@26	21.53
n66_20MHz_15kHz_1720MHz_CP-OFDM QPSK_RB1@104	21.15
n66_20MHz_15kHz_1720MHz_CP-OFDM QPSK_RB106@0	19.94
n66_20MHz_15kHz_1720MHz_CP-OFDM 16 QAM_RB106@0	20.09
n66_20MHz_15kHz_1720MHz_CP-OFDM 64 QAM_RB106@0	19.45
n66_20MHz_15kHz_1720MHz_CP-OFDM 256 QAM_RB106@0	16.47
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.73
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB50@25	22.93
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@104	22.63
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB100@0	22.05
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	22.68
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB50@25	22.92
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@104	22.74
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB100@0	21.98
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB100@0	21.00
n66_20MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB100@0	20.51

n66_20MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB100@0	18.46
n66_20MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	20.12
n66_20MHz_15kHz_1745MHz_CP-OFDM QPSK_RB53@26	21.41
n66_20MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@104	21.21
n66_20MHz_15kHz_1745MHz_CP-OFDM QPSK_RB106@0	19.89
n66_20MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB106@0	20.01
n66_20MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB106@0	19.40
n66_20MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB106@0	16.42
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM PI/2 BPSK_RB50@25	22.88
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM PI/2 BPSK_RB1@104	22.51
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM PI/2 BPSK_RB100@0	21.79
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM QPSK_RB1@1	22.68
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM QPSK_RB50@25	22.89
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM QPSK_RB1@104	22.59
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM QPSK_RB100@0	21.76
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM 16 QAM_RB100@0	20.79
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM 64 QAM_RB100@0	20.22
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM 256 QAM_RB100@0	18.17
n66_20MHz_15kHz_1770MHz_CP-OFDM QPSK_RB1@1	21.11
n66_20MHz_15kHz_1770MHz_CP-OFDM QPSK_RB53@26	21.33
n66_20MHz_15kHz_1770MHz_CP-OFDM QPSK_RB1@104	20.98
n66_20MHz_15kHz_1770MHz_CP-OFDM QPSK_RB106@0	19.81
n66_20MHz_15kHz_1770MHz_CP-OFDM 16 QAM_RB106@0	19.78
n66_20MHz_15kHz_1770MHz_CP-OFDM 64 QAM_RB106@0	19.19

n66_20MHz_15kHz_1770MHz_CP-OFDM 256 QAM_RB106@0	16.27
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.75
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM PI/2 BPSK_RB64@32	23.01
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@131	22.65
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM PI/2 BPSK_RB128@0	21.98
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM QPSK_RB1@1	22.77
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM QPSK_RB64@32	23.04
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM QPSK_RB1@131	22.63
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM QPSK_RB128@0	21.95
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM 16 QAM_RB128@0	20.94
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM 64 QAM_RB128@0	20.41
n66_25MHz_15kHz_1722.5MHz_DFT-s-OFDM 256 QAM_RB128@0	18.38
n66_25MHz_15kHz_1722.5MHz_CP-OFDM QPSK_RB1@1	21.19
n66_25MHz_15kHz_1722.5MHz_CP-OFDM QPSK_RB67@33	21.44
n66_25MHz_15kHz_1722.5MHz_CP-OFDM QPSK_RB1@131	21.14
n66_25MHz_15kHz_1722.5MHz_CP-OFDM QPSK_RB133@0	19.90
n66_25MHz_15kHz_1722.5MHz_CP-OFDM 16 QAM_RB133@0	19.94
n66_25MHz_15kHz_1722.5MHz_CP-OFDM 64 QAM_RB133@0	19.42
n66_25MHz_15kHz_1722.5MHz_CP-OFDM 256 QAM_RB133@0	16.47
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.75
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB64@32	22.92
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@131	22.50
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB128@0	21.87
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	22.64

n66_25MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB64@32	22.94
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@131	22.69
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB128@0	21.88
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB128@0	20.93
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB128@0	20.34
n66_25MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB128@0	18.42
n66_25MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	21.17
n66_25MHz_15kHz_1745MHz_CP-OFDM QPSK_RB67@33	21.36
n66_25MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@131	21.24
n66_25MHz_15kHz_1745MHz_CP-OFDM QPSK_RB133@0	19.81
n66_25MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB133@0	19.92
n66_25MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB133@0	19.31
n66_25MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB133@0	16.32
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.59
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM PI/2 BPSK_RB64@32	22.86
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM PI/2 BPSK_RB1@131	22.44
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM PI/2 BPSK_RB128@0	21.85
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM QPSK_RB1@1	22.63
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM QPSK_RB64@32	22.86
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM QPSK_RB1@131	22.51
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM QPSK_RB128@0	21.74
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM 16 QAM_RB128@0	20.78
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM 64 QAM_RB128@0	20.27
n66_25MHz_15kHz_1767.5MHz_DFT-s-OFDM 256 QAM_RB128@0	18.24

n66_25MHz_15kHz_1767.5MHz_CP-OFDM QPSK_RB1@1	21.09
n66_25MHz_15kHz_1767.5MHz_CP-OFDM QPSK_RB67@33	21.22
n66_25MHz_15kHz_1767.5MHz_CP-OFDM QPSK_RB1@131	20.84
n66_25MHz_15kHz_1767.5MHz_CP-OFDM QPSK_RB133@0	19.67
n66_25MHz_15kHz_1767.5MHz_CP-OFDM 16 QAM_RB133@0	19.70
n66_25MHz_15kHz_1767.5MHz_CP-OFDM 64 QAM_RB133@0	19.23
n66_25MHz_15kHz_1767.5MHz_CP-OFDM 256 QAM_RB133@0	16.26
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.56
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM PI/2 BPSK_RB80@40	22.95
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM PI/2 BPSK_RB1@158	22.46
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM PI/2 BPSK_RB160@0	21.78
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM QPSK_RB1@1	22.61
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM QPSK_RB80@40	22.96
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM QPSK_RB1@158	22.60
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM QPSK_RB160@0	21.80
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM 16 QAM_RB160@0	20.88
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM 64 QAM_RB160@0	20.37
n66_30MHz_15kHz_1725MHz_DFT-s-OFDM 256 QAM_RB160@0	18.35
n66_30MHz_15kHz_1725MHz_CP-OFDM QPSK_RB1@1	21.11
n66_30MHz_15kHz_1725MHz_CP-OFDM QPSK_RB80@40	21.47
n66_30MHz_15kHz_1725MHz_CP-OFDM QPSK_RB1@158	21.01
n66_30MHz_15kHz_1725MHz_CP-OFDM QPSK_RB160@0	19.77
n66_30MHz_15kHz_1725MHz_CP-OFDM 16 QAM_RB160@0	19.78
n66_30MHz_15kHz_1725MHz_CP-OFDM 64 QAM_RB160@0	19.33

n66_30MHz_15kHz_1725MHz_CP-OFDM 256 QAM_RB160@0	16.27
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.47
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB80@40	22.89
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@158	22.39
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB160@0	21.89
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	22.49
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB80@40	22.84
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@158	22.51
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB160@0	21.91
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB160@0	20.85
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB160@0	20.41
n66_30MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB160@0	18.33
n66_30MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	21.03
n66_30MHz_15kHz_1745MHz_CP-OFDM QPSK_RB80@40	21.29
n66_30MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@158	21.02
n66_30MHz_15kHz_1745MHz_CP-OFDM QPSK_RB160@0	19.84
n66_30MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB160@0	19.97
n66_30MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB160@0	19.38
n66_30MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB160@0	16.40
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.43
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM PI/2 BPSK_RB80@40	22.85
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM PI/2 BPSK_RB1@158	22.30
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM PI/2 BPSK_RB160@0	21.78
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM QPSK_RB1@1	22.48

n66_30MHz_15kHz_1765MHz_DFT-s-OFDM QPSK_RB80@40	22.80
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM QPSK_RB1@158	22.35
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM QPSK_RB160@0	21.79
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM 16 QAM_RB160@0	20.78
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM 64 QAM_RB160@0	20.21
n66_30MHz_15kHz_1765MHz_DFT-s-OFDM 256 QAM_RB160@0	18.20
n66_30MHz_15kHz_1765MHz_CP-OFDM QPSK_RB1@1	20.96
n66_30MHz_15kHz_1765MHz_CP-OFDM QPSK_RB80@40	21.26
n66_30MHz_15kHz_1765MHz_CP-OFDM QPSK_RB1@158	20.92
n66_30MHz_15kHz_1765MHz_CP-OFDM QPSK_RB160@0	19.71
n66_30MHz_15kHz_1765MHz_CP-OFDM 16 QAM_RB160@0	19.71
n66_30MHz_15kHz_1765MHz_CP-OFDM 64 QAM_RB160@0	19.25
n66_30MHz_15kHz_1765MHz_CP-OFDM 256 QAM_RB160@0	16.20
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.34
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM PI/2 BPSK_RB108@54	22.87
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM PI/2 BPSK_RB1@214	22.29
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM PI/2 BPSK_RB216@0	21.68
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM QPSK_RB1@1	22.42
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM QPSK_RB108@54	22.95
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM QPSK_RB1@214	22.31
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM QPSK_RB216@0	21.63
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM 16 QAM_RB216@0	20.67
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM 64 QAM_RB216@0	20.18
n66_40MHz_15kHz_1730MHz_DFT-s-OFDM 256 QAM_RB216@0	18.15

n66_40MHz_15kHz_1730MHz_CP-OFDM QPSK_RB1@1	20.91
n66_40MHz_15kHz_1730MHz_CP-OFDM QPSK_RB108@54	21.44
n66_40MHz_15kHz_1730MHz_CP-OFDM QPSK_RB1@214	20.77
n66_40MHz_15kHz_1730MHz_CP-OFDM QPSK_RB216@0	19.61
n66_40MHz_15kHz_1730MHz_CP-OFDM 16 QAM_RB216@0	19.63
n66_40MHz_15kHz_1730MHz_CP-OFDM 64 QAM_RB216@0	19.08
n66_40MHz_15kHz_1730MHz_CP-OFDM 256 QAM_RB216@0	16.18
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.35
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB108@54	22.91
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB1@214	22.11
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM PI/2 BPSK_RB216@0	21.89
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@1	22.33
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB108@54	22.85
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB1@214	22.22
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM QPSK_RB216@0	21.95
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM 16 QAM_RB216@0	20.85
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM 64 QAM_RB216@0	20.43
n66_40MHz_15kHz_1745MHz_DFT-s-OFDM 256 QAM_RB216@0	18.43
n66_40MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@1	20.88
n66_40MHz_15kHz_1745MHz_CP-OFDM QPSK_RB108@54	21.31
n66_40MHz_15kHz_1745MHz_CP-OFDM QPSK_RB1@214	20.73
n66_40MHz_15kHz_1745MHz_CP-OFDM QPSK_RB216@0	19.89
n66_40MHz_15kHz_1745MHz_CP-OFDM 16 QAM_RB216@0	19.87
n66_40MHz_15kHz_1745MHz_CP-OFDM 64 QAM_RB216@0	19.40

n66_40MHz_15kHz_1745MHz_CP-OFDM 256 QAM_RB216@0	16.41
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.19
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM PI/2 BPSK_RB108@54	22.84
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM PI/2 BPSK_RB1@214	22.05
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM PI/2 BPSK_RB216@0	21.78
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM QPSK_RB1@1	22.33
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM QPSK_RB108@54	22.82
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM QPSK_RB1@214	22.11
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM QPSK_RB216@0	21.86
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM 16 QAM_RB216@0	20.82
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM 64 QAM_RB216@0	20.36
n66_40MHz_15kHz_1760MHz_DFT-s-OFDM 256 QAM_RB216@0	18.35
n66_40MHz_15kHz_1760MHz_CP-OFDM QPSK_RB1@1	20.69
n66_40MHz_15kHz_1760MHz_CP-OFDM QPSK_RB108@54	21.26
n66_40MHz_15kHz_1760MHz_CP-OFDM QPSK_RB1@214	20.66
n66_40MHz_15kHz_1760MHz_CP-OFDM QPSK_RB216@0	19.79
n66_40MHz_15kHz_1760MHz_CP-OFDM 16 QAM_RB216@0	19.80
n66_40MHz_15kHz_1760MHz_CP-OFDM 64 QAM_RB216@0	19.34
n66_40MHz_15kHz_1760MHz_CP-OFDM 256 QAM_RB216@0	16.31
n66_20MHz_15kHz_1770MHz_DFT-s-OFDM PI/2 BPSK_RB1@1	22.64

Mode	conducted power (dBm)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@0|RB1@0	23.46 (18.67|21.71)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB12@6	22.94 (20.16|19.68)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|DFT-s-OFDM QPSK_RB1@0|RB1@0	24.17 (22.19|19.80)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB12@6	22.50 (18.98|19.94)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB12@6	21.82 (17.15|20.01)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB12@6	21.97 (17.61|19.98)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB12@6	21.10 (17.60|18.53)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|CP-OFDM QPSK_RB1@0|RB1@0	21.23 (17.01|19.16)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|CP-OFDM QPSK_RB12@0|RB13@6	22.02 (17.85|19.92)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB13@6	21.91 (17.41|20.01)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB13@6	21.42 (16.80|19.58)
DC_12A_n66A_10MHz|5MHz_15kHz_704MHz|1712.5MHz_QPSK|CP-OFDM 256 QAM_RB12@0|RB13@6	19.80 (16.98|16.58)
DC_12A_n66A_10MHz|5MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB12@6	22.58 (19.12|19.97)
DC_12A_n66A_10MHz|5MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB12@6	22.51 (18.99|19.96)
DC_12A_n66A_10MHz|5MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB12@6	22.44 (18.83|19.96)
DC_12A_n66A_10MHz|5MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB12@6	22.69 (19.21|20.11)
DC_12A_n66A_10MHz|5MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB12@6	21.62 (18.66|18.57)
DC_12A_n66A_10MHz|5MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM QPSK_RB12@0|RB13@6	22.33 (18.55|19.98)
DC_12A_n66A_10MHz|5MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB13@6	22.61 (19.11|20.03)
DC_12A_n66A_10MHz|5MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB13@6	22.28 (18.99|19.53)
DC_12A_n66A_10MHz|5MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-	20.72 (18.58|16.62)

OFDM 256 QAM_RB12@0|RB13@6	
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@49|RB1@24	22.34 (18.54|20.00)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@38|RB12@6	22.37 (18.57|20.03)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|DFT-s-OFDM QPSK_RB12@38|RB12@6	21.96 (17.53|20.02)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@38|RB12@6	22.59 (19.04|20.06)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@38|RB12@6	22.71 (19.27|20.09)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@38|RB12@6	22.00 (19.35|18.59)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|CP-OFDM QPSK_RB1@49|RB1@24	22.03 (18.73|19.30)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|CP-OFDM QPSK_RB12@38|RB13@6	21.93 (17.40|20.04)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|CP-OFDM 16 QAM_RB12@38|RB13@6	22.42 (18.54|20.14)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|CP-OFDM 64 QAM_RB12@38|RB13@6	22.29 (18.90|19.62)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|CP-OFDM 256 QAM_RB12@38|RB13@6	20.68 (18.50|16.65)
DC_12A_n66A_10MHz|5MHz_15kHz_711MHz|1777.5MHz_QPSK|DFT-s-OFDM QPSK_RB1@49|RB1@24	22.58 (18.99|20.09)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@0|RB1@0	22.41 (19.11|19.68)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB25@12	22.63 (19.43|19.80)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|DFT-s-OFDM QPSK_RB1@0|RB1@0	22.19 (18.66|19.65)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB25@12	22.47 (19.10|19.79)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB25@12	22.63 (19.30|19.92)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB25@12	22.34 (18.72|19.86)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB25@12	21.70 (18.96|18.39)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|CP-OFDM QPSK_RB1@0|RB1@0	21.93 (19.00|18.83)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|CP-OFDM QPSK_RB12@0|RB26@13	22.54 (19.18|19.85)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|CP-	22.28 (18.44|19.97)

OFDM 16 QAM_RB12@0|RB26@13	
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB26@13	22.16 (18.87|19.41)
DC_12A_n66A_10MHz|10MHz_15kHz_704MHz|1715MHz_QPSK|CP-OFDM 256 QAM_RB12@0|RB26@13	20.96 (19.04|16.49)
DC_12A_n66A_10MHz|10MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB25@12	22.56 (19.26|19.82)
DC_12A_n66A_10MHz|10MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB25@12	22.57 (19.26|19.84)
DC_12A_n66A_10MHz|10MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB25@12	22.41 (18.96|19.81)
DC_12A_n66A_10MHz|10MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB25@12	22.09 (18.15|19.84)
DC_12A_n66A_10MHz|10MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB25@12	21.74 (19.01|18.43)
DC_12A_n66A_10MHz|10MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM QPSK_RB12@0|RB26@13	22.59 (19.37|19.79)
DC_12A_n66A_10MHz|10MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB26@13	22.69 (19.47|19.87)
DC_12A_n66A_10MHz|10MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB26@13	22.35 (19.31|19.38)
DC_12A_n66A_10MHz|10MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 256 QAM_RB12@0|RB26@13	20.31 (18.04|16.41)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@49|RB1@51	22.04 (18.20|19.72)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@38|RB25@12	22.22 (18.40|19.89)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|DFT-s-OFDM QPSK_RB1@49|RB1@51	21.98 (18.06|19.72)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|DFT-s-OFDM QPSK_RB12@38|RB25@12	22.50 (19.07|19.87)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@38|RB25@12	21.94 (17.72|19.88)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@38|RB25@12	22.32 (18.64|19.90)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@38|RB25@12	21.70 (18.93|18.44)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|CP-OFDM QPSK_RB1@49|RB1@51	21.52 (18.04|18.93)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|CP-OFDM QPSK_RB12@38|RB26@13	22.37 (18.90|19.77)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|CP-OFDM 16 QAM_RB12@38|RB26@13	22.56 (19.06|20.00)
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|CP-	22.40 (19.33|19.45)

OFDM 64 QAM_RB12@38|RB26@13	
DC_12A_n66A_10MHz|10MHz_15kHz_711MHz|1775MHz_QPSK|CP-OFDM 256 QAM_RB12@38|RB26@13	21.17 (19.33|16.54)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@0|RB1@0	22.13 (18.40|19.74)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB36@18	22.69 (19.26|20.06)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|DFT-s-OFDM QPSK_RB1@0|RB1@0	22.55 (19.36|19.72)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB36@18	22.59 (19.13|19.99)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB36@18	22.41 (18.75|19.98)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB36@18	22.77 (19.49|20.02)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB36@18	21.90 (19.14|18.62)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|CP-OFDM QPSK_RB1@0|RB1@0	21.92 (18.95|18.88)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|CP-OFDM QPSK_RB12@0|RB39@19	22.49 (18.96|19.95)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB39@19	22.62 (19.08|20.08)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB39@19	22.32 (19.07|19.53)
DC_12A_n66A_10MHz|15MHz_15kHz_704MHz|1717.5MHz_QPSK|CP-OFDM 256 QAM_RB12@0|RB39@19	21.09 (19.15|16.67)
DC_12A_n66A_10MHz|15MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB36@18	22.49 (18.82|20.06)
DC_12A_n66A_10MHz|15MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB36@18	22.50 (18.95|19.98)
DC_12A_n66A_10MHz|15MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB36@18	22.59 (19.14|19.98)
DC_12A_n66A_10MHz|15MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB36@18	22.44 (18.81|19.98)
DC_12A_n66A_10MHz|15MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB36@18	22.02 (19.37|18.61)
DC_12A_n66A_10MHz|15MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM QPSK_RB12@0|RB39@19	22.61 (19.22|19.95)
DC_12A_n66A_10MHz|15MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB39@19	22.64 (19.20|20.01)
DC_12A_n66A_10MHz|15MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB39@19	22.38 (19.21|19.52)
DC_12A_n66A_10MHz|15MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-	20.28 (17.78|16.69)

OFDM 256 QAM_RB12@0|RB39@19	
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@49|RB1@78	22.27 (18.62|19.82)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@38|RB36@18	22.36 (18.52|20.04)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|DFT-s-OFDM QPSK_RB1@49|RB1@78	22.57 (19.39|19.72)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|DFT-s-OFDM QPSK_RB12@38|RB36@18	22.62 (19.17|20.00)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@38|RB36@18	22.64 (19.18|20.04)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@38|RB36@18	22.15 (18.01|20.04)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@38|RB36@18	21.77 (18.86|18.66)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|CP-OFDM QPSK_RB1@49|RB1@78	21.43 (17.66|19.07)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|CP-OFDM QPSK_RB12@38|RB39@19	22.37 (18.67|19.96)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|CP-OFDM 16 QAM_RB12@38|RB39@19	22.74 (19.35|20.08)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|CP-OFDM 64 QAM_RB12@38|RB39@19	21.93 (18.01|19.67)
DC_12A_n66A_10MHz|15MHz_15kHz_711MHz|1772.5MHz_QPSK|CP-OFDM 256 QAM_RB12@38|RB39@19	20.58 (18.34|16.64)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@0|RB1@0	21.99 (18.08|19.73)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB50@25	22.38 (18.60|20.03)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|DFT-s-OFDM QPSK_RB1@0|RB1@0	22.36 (19.05|19.62)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB50@25	22.59 (19.10|20.02)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB50@25	22.63 (19.04|20.13)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB50@25	22.73 (19.30|20.10)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB50@25	21.70 (18.67|18.71)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|CP-OFDM QPSK_RB1@0|RB1@0	22.09 (19.26|18.89)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|CP-OFDM QPSK_RB12@0|RB53@26	22.66 (19.23|20.03)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|CP-	22.84 (19.60|20.05)

OFDM 16 QAM_RB12@0|RB53@26	
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB53@26	22.40 (19.15|19.62)
DC_12A_n66A_10MHz|20MHz_15kHz_704MHz|1720MHz_QPSK|CP-OFDM 256 QAM_RB12@0|RB53@26	20.96 (18.90|16.73)
DC_12A_n66A_10MHz|20MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB50@25	22.68 (19.23|20.07)
DC_12A_n66A_10MHz|20MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB50@25	22.38 (18.60|20.01)
DC_12A_n66A_10MHz|20MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB50@25	22.76 (19.44|20.04)
DC_12A_n66A_10MHz|20MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB50@25	22.40 (18.58|20.07)
DC_12A_n66A_10MHz|20MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB50@25	21.46 (18.22|18.67)
DC_12A_n66A_10MHz|20MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM QPSK_RB12@0|RB53@26	22.45 (18.85|19.95)
DC_12A_n66A_10MHz|20MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB53@26	22.25 (18.29|20.01)
DC_12A_n66A_10MHz|20MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB53@26	21.87 (17.93|19.63)
DC_12A_n66A_10MHz|20MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 256 QAM_RB12@0|RB53@26	21.33 (19.57|16.57)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@49|RB1@105	22.35 (18.77|19.84)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@38|RB50@25	22.16 (18.03|20.05)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|DFT-s-OFDM QPSK_RB1@49|RB1@105	22.16 (18.49|19.72)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|DFT-s-OFDM QPSK_RB12@38|RB50@25	22.52 (18.91|20.04)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@38|RB50@25	22.45 (18.72|20.06)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@38|RB50@25	22.58 (19.06|20.04)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@38|RB50@25	21.52 (18.32|18.70)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|CP-OFDM QPSK_RB1@49|RB1@105	21.96 (18.96|18.95)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|CP-OFDM QPSK_RB12@38|RB53@26	22.37 (18.58|20.02)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|CP-OFDM 16 QAM_RB12@38|RB53@26	22.62 (19.08|20.07)
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|CP-	22.25 (18.73|19.69)

OFDM 64 QAM_RB12@38|RB53@26	
DC_12A_n66A_10MHz|20MHz_15kHz_711MHz|1770MHz_QPSK|CP-OFDM 256 QAM_RB12@38|RB53@26	20.98 (18.95|16.70)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@0|RB1@0	22.42 (19.07|19.73)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB64@32	22.74 (19.34|20.08)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|DFT-s-OFDM QPSK_RB1@0|RB1@0	22.34 (18.98|19.65)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB64@32	22.63 (19.11|20.08)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB64@32	22.53 (18.90|20.07)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB64@32	22.50 (18.81|20.08)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB64@32	21.99 (19.21|18.74)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|CP-OFDM QPSK_RB1@0|RB1@0	21.73 (18.48|18.94)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|CP-OFDM QPSK_RB12@0|RB67@33	22.43 (18.70|20.03)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB67@33	22.53 (18.98|20.00)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB67@33	22.05 (18.42|19.58)
DC_12A_n66A_10MHz|25MHz_15kHz_704MHz|1722.5MHz_QPSK|CP-OFDM 256 QAM_RB12@0|RB67@33	21.08 (19.15|16.64)
DC_12A_n66A_10MHz|25MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB64@32	22.09 (17.89|20.01)
DC_12A_n66A_10MHz|25MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB64@32	22.52 (18.95|20.00)
DC_12A_n66A_10MHz|25MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB64@32	22.17 (18.08|20.03)
DC_12A_n66A_10MHz|25MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB64@32	22.70 (19.29|20.05)
DC_12A_n66A_10MHz|25MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB64@32	21.50 (18.33|18.64)
DC_12A_n66A_10MHz|25MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM QPSK_RB12@0|RB67@33	22.32 (18.48|20.00)
DC_12A_n66A_10MHz|25MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB67@33	22.22 (18.33|19.95)
DC_12A_n66A_10MHz|25MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB67@33	22.56 (19.51|19.58)
DC_12A_n66A_10MHz|25MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-	21.15 (19.29|16.58)

OFDM 256 QAM_RB12@0|RB67@33	
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@49|RB1@132	22.36 (18.83|19.82)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@38|RB64@32	22.53 (18.96|20.01)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|DFT-s-OFDM QPSK_RB1@49|RB1@132	22.33 (18.87|19.74)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|DFT-s-OFDM QPSK_RB12@38|RB64@32	22.35 (18.54|20.03)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@38|RB64@32	22.48 (18.80|20.05)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@38|RB64@32	22.39 (18.57|20.06)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@38|RB64@32	21.80 (18.94|18.64)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|CP-OFDM QPSK_RB1@49|RB1@132	22.07 (18.99|19.12)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|CP-OFDM QPSK_RB12@38|RB67@33	22.14 (18.09|19.97)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|CP-OFDM 16 QAM_RB12@38|RB67@33	22.47 (18.88|19.98)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|CP-OFDM 64 QAM_RB12@38|RB67@33	21.87 (17.98|19.59)
DC_12A_n66A_10MHz|25MHz_15kHz_711MHz|1767.5MHz_QPSK|CP-OFDM 256 QAM_RB12@38|RB67@33	20.33 (17.89|16.67)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@0|RB1@0	22.22 (18.81|19.58)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB80@40	22.64 (19.17|20.05)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|DFT-s-OFDM QPSK_RB1@0|RB1@0	22.43 (19.33|19.51)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB80@40	22.66 (19.30|19.97)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB80@40	22.66 (19.18|20.07)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB80@40	22.50 (18.82|20.07)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB80@40	21.99 (19.32|18.62)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|CP-OFDM QPSK_RB1@0|RB1@0	21.91 (19.06|18.74)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|CP-OFDM QPSK_RB12@0|RB80@40	22.61 (19.15|20.00)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|CP-	22.66 (19.35|19.94)

OFDM 16 QAM_RB12@0|RB80@40	
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB80@40	22.25 (18.83|19.62)
DC_12A_n66A_10MHz|30MHz_15kHz_704MHz|1725MHz_QPSK|CP-OFDM 256 QAM_RB12@0|RB80@40	20.65 (18.47|16.61)
DC_12A_n66A_10MHz|30MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB80@40	22.09 (17.96|19.97)
DC_12A_n66A_10MHz|30MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB80@40	22.29 (18.54|19.91)
DC_12A_n66A_10MHz|30MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB80@40	21.98 (17.75|19.93)
DC_12A_n66A_10MHz|30MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB80@40	22.77 (19.54|19.96)
DC_12A_n66A_10MHz|30MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB80@40	21.60 (18.59|18.59)
DC_12A_n66A_10MHz|30MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM QPSK_RB12@0|RB80@40	22.64 (19.34|19.91)
DC_12A_n66A_10MHz|30MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB80@40	22.63 (19.39|19.84)
DC_12A_n66A_10MHz|30MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB80@40	22.28 (19.05|19.48)
DC_12A_n66A_10MHz|30MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 256 QAM_RB12@0|RB80@40	21.30 (19.51|16.58)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@49|RB1@159	22.30 (18.93|19.62)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@38|RB80@40	22.23 (18.36|19.93)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|DFT-s-OFDM QPSK_RB1@49|RB1@159	21.92 (18.11|19.59)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|DFT-s-OFDM QPSK_RB12@38|RB80@40	22.30 (18.48|19.96)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@38|RB80@40	22.40 (18.80|19.92)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@38|RB80@40	22.17 (18.19|19.96)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@38|RB80@40	21.35 (18.08|18.59)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|CP-OFDM QPSK_RB1@49|RB1@159	21.76 (18.52|18.97)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|CP-OFDM QPSK_RB12@38|RB80@40	22.17 (18.20|19.94)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|CP-OFDM 16 QAM_RB12@38|RB80@40	22.05 (17.99|19.89)
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|CP-	22.20 (18.79|19.56)

OFDM 64 QAM_RB12@38|RB80@40	
DC_12A_n66A_10MHz|30MHz_15kHz_711MHz|1765MHz_QPSK|CP-OFDM 256 QAM_RB12@38|RB80@40	20.47 (18.22|16.54)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@0|RB1@0	22.13 (18.87|19.36)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB108@54	22.29 (18.42|20.00)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|DFT-s-OFDM QPSK_RB1@0|RB1@0	22.15 (18.93|19.35)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB108@54	22.35 (18.57|19.99)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB108@54	22.47 (18.84|20.01)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB108@54	22.82 (19.52|20.07)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB108@54	21.60 (18.53|18.66)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|CP-OFDM QPSK_RB1@0|RB1@0	21.78 (18.91|18.62)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|CP-OFDM QPSK_RB12@0|RB108@54	22.42 (18.72|19.99)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB108@54	22.40 (18.79|19.93)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB108@54	22.49 (19.39|19.57)
DC_12A_n66A_10MHz|40MHz_15kHz_704MHz|1730MHz_QPSK|CP-OFDM 256 QAM_RB12@0|RB108@54	21.11 (19.17|16.68)
DC_12A_n66A_10MHz|40MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@0|RB108@54	22.61 (19.12|20.04)
DC_12A_n66A_10MHz|40MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM QPSK_RB12@0|RB108@54	22.33 (18.47|20.03)
DC_12A_n66A_10MHz|40MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@0|RB108@54	22.31 (18.48|19.99)
DC_12A_n66A_10MHz|40MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@0|RB108@54	22.14 (18.08|19.97)
DC_12A_n66A_10MHz|40MHz_15kHz_707.5MHz|1745MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@0|RB108@54	22.11 (19.50|18.65)
DC_12A_n66A_10MHz|40MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM QPSK_RB12@0|RB108@54	22.28 (18.47|19.94)
DC_12A_n66A_10MHz|40MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 16 QAM_RB12@0|RB108@54	22.16 (18.24|19.90)
DC_12A_n66A_10MHz|40MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-OFDM 64 QAM_RB12@0|RB108@54	22.31 (19.04|19.56)
DC_12A_n66A_10MHz|40MHz_15kHz_707.5MHz|1745MHz_QPSK|CP-	20.84 (18.80|16.59)

OFDM 256 QAM_RB12@0|RB108@54	
DC_12A_n66A_10MHz|40MHz_15kHz_711MHz|1760MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB1@49|RB1@215	21.89 (18.21|19.46)
DC_12A_n66A_10MHz|40MHz_15kHz_711MHz|1760MHz_QPSK|DFT-s-OFDM PI/2 BPSK_RB12@38|RB108@54	22.15 (18.19|19.92)
DC_12A_n66A_10MHz|40MHz_15kHz_711MHz|1760MHz_QPSK|DFT-s-OFDM QPSK_RB1@49|RB1@215	21.60 (17.63|19.37)
DC_12A_n66A_10MHz|40MHz_15kHz_711MHz|1760MHz_QPSK|DFT-s-OFDM QPSK_RB12@38|RB108@54	22.53 (19.07|19.93)
DC_12A_n66A_10MHz|40MHz_15kHz_711MHz|1760MHz_QPSK|DFT-s-OFDM 16 QAM_RB12@38|RB108@54	22.61 (19.20|19.97)
DC_12A_n66A_10MHz|40MHz_15kHz_711MHz|1760MHz_QPSK|DFT-s-OFDM 64 QAM_RB12@38|RB108@54	22.63 (19.21|20.00)
DC_12A_n66A_10MHz|40MHz_15kHz_711MHz|1760MHz_QPSK|DFT-s-OFDM 256 QAM_RB12@38|RB108@54	21.78 (18.95|18.58)
DC_12A_n66A_10MHz|40MHz_15kHz_711MHz|1760MHz_QPSK|CP-OFDM QPSK_RB1@49|RB1@215	21.94 (19.10|18.75)
DC_12A_n66A_10MHz|40MHz_15kHz_711MHz|1760MHz_QPSK|CP-OFDM QPSK_RB12@38|RB108@54	22.36 (18.68|19.94)

Wi-Fi 2.4G:

Test Mode	Antenna	Channel frequency (MHz)	Conducted Average Output
11B-CDD	4	2412	19.17
	7	2412	18.07
	4+7	2412	21.70
	4	2442	21.89
	7	2442	20.85
	4+7	2442	24.40
	4	2472	19.69
	7	2472	17.76
	4+7	2472	21.80
11G-CDD	4	2412	21.31
	7	2412	21.12
	4+7	2412	24.26
	4	2442	21.14
	7	2442	20.55
	4+7	2442	23.94
	4	2472	20.09
	7	2472	19.92
	4+7	2472	23.04
11N20MIMO	4	2412	21.09
	7	2412	20.75
	4+7	2412	23.91
	4	2442	20.83
	7	2442	20.39
	4+7	2442	23.62
	4	2472	19.65
	7	2472	19.06
	4+7	2472	22.42
11N40MIMO	4	2422	19.07
	7	2422	18.95
	4+7	2422	22.06
	4	2442	19.52
	7	2442	19.42
	4+7	2442	22.56
	4	2462	19.44
	7	2462	19.55
	4+7	2462	22.51
11AX20MIMO	4	2412	20.82
	7	2412	20.86
	4+7	2412	23.92
	4	2442	20.45

	7	2442	19.91
	4+7	2442	23.24
	4	2472	19.46
	7	2472	19.47
	4+7	2472	22.52
11AX40MIMO	4	2422	21.16
	7	2422	20.45
	4+7	2422	23.82
	4	2442	20.65
	7	2442	20.44
	4+7	2442	23.62
	4	2462	20.36
	7	2462	20.74
	4+7	2462	23.62

Wi-Fi 5G:

Test Mode	Antenna	Channel frequency (MHz)	Conducted Average Output
11A-CDD	4	5180	7.76
	7	5180	5.31
	4+7	5180	9.70
	4	5200	7.45
	7	5200	8.77
	4+7	5200	11.20
	4	5240	6.98
	7	5240	8.11
	4+7	5240	10.60
	4	5745	18.38
	7	5745	17.60
	4+7	5745	21.00
	4	5785	18.45
	7	5785	17.43
	4+7	5785	21.00
	4	5825	18.42
	7	5825	17.16
	4+7	5825	20.80
11N20MIMO	4	5180	7.04
	7	5180	7.52
	4+7	5180	10.37
	4	5200	8.21
	7	5200	7.64
	4+7	5200	10.95
	4	5240	8.06
	7	5240	6.14
	4+7	5240	10.87
	4	5745	17.44
	7	5745	16.55
	4+7	5745	20.06
	4	5785	17.33
	7	5785	16.34
	4+7	5785	19.93
	4	5825	17.33
	7	5825	16.15
	4+7	5825	19.84
11N40MIMO	4	5190	9.79
	7	5190	9.92
	4+7	5190	12.91

	4	5230	9.82
	7	5230	9.54
	4+7	5230	12.2
	4	5755	16.81
	7	5755	15.85
	4+7	5755	19.33
	4	5795	16.75
	7	5795	15.68
	4+7	5795	19.34
11AC20MIMO	4	5180	8.12
	7	5180	7.85
	4+7	5180	11.05
	4	5200	8.04
	7	5200	8.73
	4+7	5200	11.5
	4	5240	7.17
	7	5240	6.63
	4+7	5240	9.92
	4	5745	17.52
	7	5745	16.55
	4+7	5745	20.17
	4	5785	17.33
	7	5785	16.33
	4+7	5785	19.94
	4	5825	17.31
	7	5825	16.15
	4+7	5825	19.82
11AC40MIMO	4	5190	11.36
	7	5190	10.76
	4+7	5190	14.18
	4	5230	10.81
	7	5230	11.05
	4+7	5230	14.06
	4	5755	16.87
	7	5755	15.82
	4+7	5755	19.42
	4	5795	16.75
	7	5795	15.64
	4+7	5795	19.31
11AC80MIMO	4	5210	8.46
	7	5210	8.54
	4+7	5210	11.58
	4	5775	16.56
	7	5775	15.45

	4+7	5775	19.01
11AX40MIMO	4	5190	6.35
	7	5190	8.75
	4+7	5190	10.76
	4	5230	6.62
	7	5230	6.65
	4+7	5230	9.63
	4	5755	17.17
	7	5755	16.15
	4+7	5755	19.72
	4	5795	16.52
	7	5795	15.33
	4+7	5795	19.06
11AX80MIMO	4	5210	9.65
	7	5210	15.22
	4+7	5210	17.82
	4	5775	17.41
	7	5775	15.63
	4+7	5775	19.62

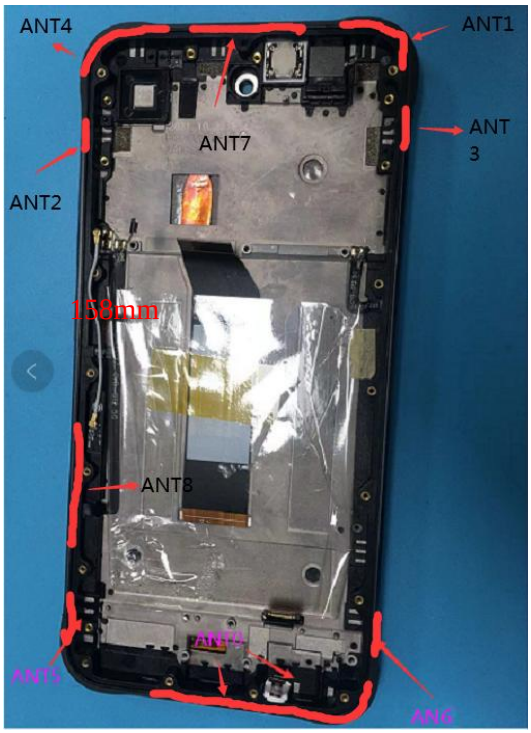
Bluetooth(ANT 4):

Mode	Channel frequency (MHz)	RF Output Power (dBm)
BDR(GFSK)	2402	2.96
	2441	3.09
	2480	2.07
EDR(π/4-DQPSK)	2402	2.57
	2441	2.90
	2480	1.66
EDR(8DPSK)	2402	2.89
	2441	3.36
	2480	2.19
BLE_1M	2402	0.68
	2440	0.88
	2480	0.50
BLE_2M	2402	0.68
	2440	0.69
	2480	0.29

Standalone SAR test exclusion considerations

Antennas Location:

Top



Right Left

Bottom

<Back View>

Ant	Description
Ant 0	GSM, WCDMA,LTE(B2, B5, B12), 5G n66-Main antenna; 5G NSA DC-B12_N66-B12(NR) antenna LTE B41-Aux antenna;
Ant 1	LTE B41- Main antenna LTE(B2, B5, B12)-Aux antenna; 5G NSA DC-B12_N66-B12(LTE) antenna
Ant 2	LTE B2, LTE B41, 5G NR-Aux antenna;
Ant 3	LTE B2, LTE B41, 5G NR-Aux antenna;
Ant 4	BT/BLE/WIFI 2.4G/WIFI 5G ANT1
Ant 5	N/A(for other country band)
Ant 6	N/A(for other country band)
Ant 7	WIFI 2.4G/WIFI 5G ANT2
Ant 8	N/A(for other country band)

Note: The device don't supports dynamic antenna tuning for same bands

Antenna Distance To Edge

Antenna Distance To Edge(mm)						
Antenna	**Front**	**Back**	**Left**	**Right**	**Top**	**Bottom**
WWAN Ant 0	< 5	< 5	< 5	59	155	< 5
WWAN Ant 1	< 5	< 5	< 5	62	< 5	158
WLAN Ant 4	< 5	< 5	77	< 5	< 5	158
WLAN Ant 7	< 5	< 5	65	8	< 5	158

Standalone SAR test exclusion considerations (KDB)

Mode	Frequency (MHz)	Output Power (dBm)	Output Power (mW)	Distance (mm)	Calculated value	Threshold (1-g)	SAR Test Exclusion
2.4G WLAN	2472	24.5	281.84	0	88.6	3	NO
5.2G WLAN	5240	18.0	63.10	0	28.9	3	NO
5.8G WLAN	5825	21.5	141.25	0	68.2	3	NO
BT	2480	4.0	2.51	0	0.8	3	YES

NOTE:

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤7.5 for 10-g extremity SAR, where

1. f(GHz) is the RF channel transmit frequency in GHz.
2. Power and distance are rounded to the nearest mW and mm before calculation.
3. The result is rounded to one decimal place for comparison.
4. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion.

Standalone SAR test exclusion considerations(RSS-102)

2.5.1 Exemption Limits for Routine Evaluation – SAR Evaluation

SAR evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm, except when the device operates at or below the applicable output power level (adjusted for tune-up tolerance) for the specified separation distance defined in Table 1.

Table 1: SAR evaluation – Exemption limits for routine evaluation based on frequency and separation distance[4,5]

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of ≤5 mm	At separation distance of 10 mm	At separation distance of 15 mm	At separation distance of 20 mm	At separation distance of 25 mm
≤300	71 mW	101 mW	132 mW	162 mW	193 mW
450	52 mW	70 mW	88 mW	106 mW	123 mW
835	17 mW	30 mW	42 mW	55 mW	67 mW
1900	7 mW	10 mW	18 mW	34 mW	60 mW
2450	4 mW	7 mW	15 mW	30 mW	52 mW
3500	2 mW	6 mW	16 mW	32 mW	55 mW
5800	1 mW	6 mW	15 mW	27 mW	41 mW

Frequency (MHz)	Exemption Limits (mW)				
	At separation distance of 30 mm	At separation distance of 35 mm	At separation distance of 40 mm	At separation distance of 45 mm	At separation distance of ≥50 mm
≤300	223 mW	254 mW	284 mW	315 mW	345 mW
450	141 mW	159 mW	177 mW	195 mW	213 mW
835	80 mW	92 mW	105 mW	117 mW	130 mW
1900	99 mW	153 mW	225 mW	316 mW	431 mW
2450	83 mW	123 mW	173 mW	235 mW	309 mW
3500	86 mW	124 mW	170 mW	225 mW	290 mW
5800	56 mW	71 mW	85 mW	97 mW	106 mW

Output power level shall be the higher of the maximum conducted or equivalent isotropically radiated power (e.i.r.p.) source-based, time-averaged output power. For controlled use devices where the 8 W/kg for 1 gram of tissue applies, the exemption limits for routine evaluation in Table 1 are multiplied by a

Mode	Frequency (MHz)	Pavg (dBm)	Antenna Gain(dBi)	EIRP (mW)	Distance (mm)	Threshold (Power,mW)	SAR Test Exclusion
2.4G WLAN	2472	24.5	1.8	426.58	0	4.0	NO
5.2G WLAN	5240	18.0	1.1	81.28	0	1.2	NO
5.8G WLAN	5825	21.5	1.1	181.97	0	1.0	NO
BT	2480	4.0	1.8	3.80	0	4.0	YES

Note:

We should select the larger value of the conducted power and EIRP for Standalone SAR test exclusion considerations. The EIRP is greater than conducted power, so we choose EIRP for Standalone SAR test exclusion considerations

Standalone SAR estimation:

Mode	Frequency (MHz)	Output Power (dBm)	Output Power (mW)	Distance (mm)	Estimated 1-g (W/kg)
BT Head	2480	5.8	3.8	0	0.16
BT Body	2480	5.8	3.8	10	0.08

Note:

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:
[(max. power of channel, including tune-up tolerance , mW)/(min. test separation distance,mm)] · [√f(GHz)/x]
W/kg for test separation distances ≤50 mm;
where x = 7.5 for 1-g SAR.
When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test Exclusion

SAR test exclusion for the EUT edge considerations Result

Antenna Distance To Edge(mm)						
Mode	**Front**	**Back**	**Left**	**Right**	**Top**	**Bottom**
ANT 4(BT)	Exclusion*	Exclusion*	Exclusion*	Exclusion*	Exclusion*	Exclusion*
ANT 4(Wi-Fi 2.4G/5G)	**Required**	**Required**	Exclusion	**Required**	**Required**	Exclusion
ANT 7(Wi-Fi 2.4G/5G)	**Required**	**Required**	Exclusion	**Required**	**Required**	Exclusion
ANT 0(GSM/WCDMA/LTE/ 5G NR)	**Required**	**Required**	**Required**	Exclusion	Exclusion	**Required**
ANT 1(LTE)	**Required**	**Required**	**Required**	Exclusion	**Required**	Exclusion

Note:
Required:The distance is less than **25mm**, the SAR test is required.
Exclusion: The distance is large than **25mm**, SAR test is not required.
Exclusion*: SAR test exclusion evaluation has been done above.

SAR MEASUREMENT RESULTS

This page summarizes the results of the performed dosimetric evaluation.

SAR Test Data

Environmental Conditions

Temperature:	22.0-23.6 ℃	22.6-24.1 ℃	22.5-24.0 ℃	22.4-24.5 ℃	22.1-24.2 ℃	22.7-24.5 ℃	22.4-24.1 ℃	21.9-24.0 ℃
Relative Humidity:	42-58%	47-59 %	46-58 %	50-55 %	49-57 %	47-52 %	49-59 %	42-55 %
ATM Pressure:	101.2 kPa	101.7 kPa	101.5 kPa	101.6 kPa	101.7 kPa	101.2 kPa	101.5 kPa	101.4 kPa
Test Date:	2022/1/16	2022/1/17	2022/1/18	2022/1/19	2022/1/20	2022/1/21	2022/1/22	2022/1/23

Testing was performed by Seven Liang, Jacky Yang, Fake Ou.

GSM 850：

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	824.2	GSM	\	\	\	\	\	\	\
	836.6	GSM	32.70	33.0	1.072	0.019	0.02	0.02	1#
	848.8	GSM	\	\	\	\	\	\	\
Head Left Tilt	824.2	GSM	\	\	\	\	\	\	\
	836.6	GSM	32.70	33.0	1.072	0.019	0.02	0.02	2#
	848.8	GSM	\	\	\	\	\	\	\
Head Right Cheek	824.2	GSM	32.62	33.0	1.091	0.041	0.04	0.04	3#
	836.6	GSM	32.70	33.0	1.072	0.042	0.05	0.05	4#
	848.8	GSM	32.85	33.0	1.035	0.032	0.03	0.03	5#
Head Right Tilt	824.2	GSM	\	\	\	\	\	\	\
	836.6	GSM	32.70	33.0	1.072	0.017	0.02	0.02	6#
	848.8	GSM	\	\	\	\	\	\	\
Body Worn Back (10mm)	824.2	GSM	\	\	\	\	\	\	\
	836.6	GSM	32.70	33.0	1.072	0.106	0.11	0.11	7#
	848.8	GSM	\	\	\	\	\	\	\
Body Front (10mm)	824.2	GPRS	\	\	\	\	\	\	\
	836.6	GPRS	28.99	29.5	1.125	0.140	0.16	0.16	8#
	848.8	GPRS	\	\	\	\	\	\	\
Body Back (10mm)	824.2	GPRS	\	\	\	\	\	\	\
	836.6	GPRS	28.99	29.5	1.125	0.163	0.18	0.18	9#
	848.8	GPRS	\	\	\	\	\	\	\
Body Left (10mm)	824.2	GPRS	\	\	\	\	\	\	\
	836.6	GPRS	28.99	29.5	1.125	0.041	0.05	0.05	10#
	848.8	GPRS	\	\	\	\	\	\	\
Body Bottom (10mm)	824.2	GPRS	28.75	29.5	1.189	0.193	0.23	0.23	11#
	836.6	GPRS	28.99	29.5	1.125	0.17	0.19	0.19	12#
	848.8	GPRS	29.07	29.5	1.104	0.215	0.24	0.24	13#

Note:

1. Based on the Notice 2016-DRS001 requirements, the low, mid and high frequency channels for the configuration with the highest SAR value must be tested regardless of the SAR value measured.
2. The EUT transmit and receive through the same GSM antenna while testing SAR.
3. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
4. When the maximum output power variation across the required test channels is > 0.5 dB, instead of the middle channel, the highest output power channel must be used.
5. The Multi-slot Classes of EUT is Class 12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 1DL+4UL is the worst case.
6. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR has a positive sign, the measured SAR results shall not be corrected.
7. EUT was tested with a plastic case.

PCS 1900：

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	1850.2	GSM	31.21	32.0	1.199	0.03	0.04	0.04	14#
	1880	GSM	31.30	32.0	1.175	0.018	0.02	0.02	15#
	1909.8	GSM	31.54	32.0	1.112	0.016	0.02	0.02	16#
Head Left Tilt	1850.2	GSM	\	\	\	\	\	\	\
	1880	GSM	31.30	32.0	1.175	0.007	0.01	0.01	17#
	1909.8	GSM	\	\	\	\	\	\	\
Head Right Cheek	1850.2	GSM	\	\	\	\	\	\	\
	1880	GSM	31.30	32.0	1.175	0.009	0.01	0.01	18#
	1909.8	GSM	\	\	\	\	\	\	\
Head Right Tilt	1850.2	GSM	\	\	\	\	\	\	\
	1880	GSM	31.30	32.0	1.175	0.008	0.01	0.01	19#
	1909.8	GSM	\	\	\	\	\	\	\
Body Worn Back (10mm)	1850.2	GSM	\	\	\	\	\	\	\
	1880	GSM	31.30	32.0	1.175	0.218	0.26	0.26	20#
	1909.8	GSM	\	\	\	\	\	\	\
Body Front (10mm)	1850.2	GPRS	\	\	\	\	\	\	\
	1880	GPRS	26.21	26.5	1.069	0.298	0.32	0.32	21#
	1909.8	GPRS	\	\	\	\	\	\	\
Body Back (10mm)	1850.2	GPRS	26.35	26.5	1.035	0.264	0.27	0.27	22#
	1880	GPRS	26.21	26.5	1.069	0.306	0.33	0.33	23#
	1909.8	GPRS	26.27	26.5	1.054	0.164	0.17	0.17	24#
Body Left (10mm)	1850.2	GPRS	\	\	\	\	\	\	\
	1880	GPRS	26.21	26.5	1.069	0.09	0.10	0.10	25#
	1909.8	GPRS	\	\	\	\	\	\	\
Body Bottom (10mm)	1850.2	GPRS	\	\	\	\	\	\	\
	1880	GPRS	26.21	26.5	1.069	0.237	0.25	0.25	26#
	1909.8	GPRS	\	\	\	\	\	\	\

Note:

1. Based on the Notice 2016-DRS001 requirements, the low, mid and high frequency channels for the configuration with the highest SAR value must be tested regardless of the SAR value measured.
2. The EUT transmit and receive through the same GSM antenna while testing SAR.
3. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
4. When the maximum output power variation across the required test channels is > 0.5 dB, instead of the middle channel, the highest output power channel must be used.
5. The Multi-slot Classes of EUT is Class 12 which has maximum 4 Downlink slots and 4 Uplink slots, the maximum active slots is 5, when perform the multiple slots scan, 1DL+4UL is the worst case.
6. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR has a positive sign, the measured SAR results shall not be corrected.
7. EUT was tested with a plastic case.

WCDMA Band 2：

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	1852.4	RMC	20.83	21.5	1.167	0.083	0.10	0.10	27#
	1880	RMC	21.02	21.5	1.117	0.053	0.06	0.06	28#
	1907.6	RMC	21.36	21.5	1.033	0.049	0.05	0.05	29#
Head Left Tilt	1852.4	RMC	\	\	\	\	\	\	\
	1880	RMC	21.02	21.5	1.117	0.02	0.02	0.02	30#
	1907.6	RMC	\	\	\	\	\	\	\
Head Right Cheek	1852.4	RMC	\	\	\	\	\	\	\
	1880	RMC	21.02	21.5	1.117	0.025	0.03	0.03	31#
	1907.6	RMC	\	\	\	\	\	\	\
Head Right Tilt	1852.4	RMC	\	\	\	\	\	\	\
	1880	RMC	21.02	21.5	1.117	0.021	0.02	0.02	32#
	1907.6	RMC	\	\	\	\	\	\	\
Body Front (10mm)	1852.4	RMC	\	\	\	\	\	\	\
	1880	RMC	21.02	21.5	1.117	0.637	0.71	0.71	33#
	1907.6	RMC	\	\	\	\	\	\	\
Body Back (10mm)	1852.4	RMC	\	\	\	\	\	\	\
	1880	RMC	21.02	21.5	1.117	0.229	0.26	0.26	34#
	1907.6	RMC	\	\	\	\	\	\	\
Body Left (10mm)	1852.4	RMC	\	\	\	\	\	\	\
	1880	RMC	21.02	21.5	1.117	0.11	0.12	0.12	35#
	1907.6	RMC	\	\	\	\	\	\	\
Body Bottom (10mm)	1852.4	RMC	20.83	21.5	1.167	0.851	0.99	0.99	36#
	1880	RMC	21.02	21.5	1.117	0.648	0.72	0.72	37#
	1907.6	RMC	21.36	21.5	1.033	0.55	0.57	0.57	38#

WCDMA Band 5：

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	826.4	RMC	\	\	\	\	\	\	\
	836.6	RMC	22.15	22.5	1.084	0.022	0.02	0.02	39#
	846.6	RMC	\	\	\	\	\	\	\
Head Left Tilt	826.4	RMC	\	\	\	\	\	\	\
	836.6	RMC	22.15	22.5	1.084	0.018	0.02	0.02	40#
	846.6	RMC	\	\	\	\	\	\	\
Head Right Cheek	826.4	RMC	22.11	22.5	1.094	0.038	0.04	0.04	41#
	836.6	RMC	22.15	22.5	1.084	0.037	0.04	0.04	42#
	846.6	RMC	22.23	22.5	1.064	0.036	0.04	0.04	43#
Head Right Tilt	826.4	RMC	\	\	\	\	\	\	\
	836.6	RMC	22.15	22.5	1.084	0.017	0.02	0.02	44#
	846.6	RMC	\	\	\	\	\	\	\
Body Front (10mm)	826.4	RMC	\	\	\	\	\	\	\
	836.6	RMC	22.15	22.5	1.084	0.107	0.12	0.12	45#
	846.6	RMC	\	\	\	\	\	\	\
Body Back (10mm)	826.4	RMC	\	\	\	\	\	\	\
	836.6	RMC	22.15	22.5	1.084	0.118	0.13	0.13	46#
	846.6	RMC	\	\	\	\	\	\	\
Body Left (10mm)	826.4	RMC	\	\	\	\	\	\	\
	836.6	RMC	22.15	22.5	1.084	0.031	0.03	0.03	47#
	846.6	RMC	\	\	\	\	\	\	\
Body Bottom (10mm)	826.4	RMC	22.11	22.5	1.094	0.123	0.13	0.13	48#
	836.6	RMC	22.15	22.5	1.084	0.12	0.13	0.13	49#
	846.6	RMC	22.23	22.5	1.064	0.153	0.16	0.16	50#

Note:

1. Based on the Notice 2016-DRS001 requirements, the low, mid and high frequency channels for the configuration with the highest SAR value must be tested regardless of the SAR value measured.
2. The EUT transmit and receive through the same antenna while testing SAR.
3. The default test configuration is to measure SAR with an established radio link between the EUT and a communication test set using a 12.2 kbps RMC (reference measurement Channel) Configured in Test Loop Model.
4. KDB 941225 D01-Body SAR is not required for HSDPA/HSUPA/HSPA+ when the maximum average output of each RF channel is less than ¼ dB higher than measured 12.2kbps RMC or the maximum SAR for 12.2kbps RMC is < 75% of SAR limit.
5. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
6. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR has a positive sign, the measured SAR results shall not be corrected.
7. EUT was tested with a plastic case.

LTE Band 2：

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
						Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	1860	20	1RB	21.96	22.5	1.132	0.086	0.10	0.10	51#
	1880	20	1RB	21.71	22.5	1.199	0.069	0.08	0.08	52#
	1900	20	1RB	21.58	22.5	1.236	0.056	0.07	0.07	53#
	1880	20	50%RB	21.33	22.5	1.309	0.052	0.07	0.07	54#
Head Left Tilt	1860	20	1RB	\	\	\	\	\	\	\
	1880	20	1RB	21.71	22.5	1.199	0.021	0.03	0.03	55#
	1900	20	1RB	\	\	\	\	\	\	\
	1880	20	50%RB	21.33	22.5	1.309	0.017	0.02	0.02	56#
Head Right Cheek	1860	20	1RB	\	\	\	\	\	\	\
	1880	20	1RB	21.71	22.5	1.199	0.03	0.04	0.04	57#
	1900	20	1RB	\	\	\	\	\	\	\
	1880	20	50%RB	21.33	22.5	1.309	0.025	0.03	0.03	58#
Head Right Tilt	1860	20	1RB	\	\	\	\	\	\	\
	1880	20	1RB	21.71	22.5	1.199	0.027	0.03	0.03	59#
	1900	20	1RB	\	\	\	\	\	\	\
	1880	20	50%RB	21.33	22.5	1.309	0.019	0.02	0.02	60#
Body Front (10mm)	1860	20	1RB	\	\	\	\	\	\	\
	1880	20	1RB	21.71	22.5	1.199	0.595	0.71	0.71	61#
	1900	20	1RB	\	\	\	\	\	\	\
	1880	20	50%RB	21.33	22.5	1.309	0.518	0.68	0.68	62#
Body Back (10mm)	1860	20	1RB	\	\	\	\	\	\	\
	1880	20	1RB	21.71	22.5	1.199	0.256	0.31	0.31	63#
	1900	20	1RB	\	\	\	\	\	\	\
	1880	20	50%RB	21.33	22.5	1.309	0.221	0.29	0.29	64#
Body Left (10mm)	1860	20	1RB	\	\	\	\	\	\	\
	1880	20	1RB	21.71	22.5	1.199	0.126	0.15	0.15	65#
	1900	20	1RB	\	\	\	\	\	\	\
	1880	20	50%RB	21.33	22.5	1.309	0.095	0.12	0.12	66#
Body Bottom (10mm)	1860	20	1RB	21.96	22.5	1.132	0.609	0.69	0.69	67#
	1880	20	1RB	21.71	22.5	1.199	0.603	0.72	0.72	68#
	1900	20	1RB	21.58	22.5	1.236	0.607	0.75	0.75	69#
	1880	20	50%RB	21.33	22.5	1.309	0.606	0.79	0.79	70#

LTE Band 5：

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
						Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	829	10	1RB	\	\	\	\	\	\	\
	836.5	10	1RB	22.69	23.0	1.074	0.027	0.03	0.03	71#
	844	10	1RB	\	\	\	\	\	\	\
	836.5	10	50%RB	22.71	23.0	1.069	0.02	0.02	0.02	72#
Head Left Tilt	829	10	1RB	\	\	\	\	\	\	\
	836.5	10	1RB	22.69	23.0	1.074	0.021	0.02	0.02	73#
	844	10	1RB	\	\	\	\	\	\	\
	836.5	10	50%RB	22.71	23.0	1.069	0.015	0.02	0.02	74#
Head Right Cheek	829	10	1RB	22.66	23.0	1.081	0.041	0.04	0.04	75#
	836.5	10	1RB	22.69	23.0	1.074	0.039	0.04	0.04	76#
	844	10	1RB	22.81	23.0	1.045	0.039	0.04	0.04	77#
	836.5	10	50%RB	22.71	23.0	1.069	0.03	0.03	0.03	78#
Head Right Tilt	829	10	1RB	\	\	\	\	\	\	\
	836.5	10	1RB	22.69	23.0	1.074	0.017	0.02	0.02	79#
	844	10	1RB	\	\	\	\	\	\	\
	836.5	10	50%RB	22.71	23.0	1.069	0.012	0.01	0.01	80#
Body Front (10mm)	829	10	1RB	\	\	\	\	\	\	\
	836.5	10	1RB	22.69	23.0	1.074	0.149	0.16	0.16	81#
	844	10	1RB	\	\	\	\	\	\	\
	836.5	10	50%RB	22.71	23.0	1.069	0.13	0.14	0.14	82#
Body Back (10mm)	829	10	1RB	\	\	\	\	\	\	\
	836.5	10	1RB	22.69	23.0	1.074	0.142	0.15	0.15	83#
	844	10	1RB	\	\	\	\	\	\	\
	836.5	10	50%RB	22.71	23.0	1.069	0.104	0.11	0.11	84#
Body Left (10mm)	829	10	1RB	\	\	\	\	\	\	\
	836.5	10	1RB	22.69	23.0	1.074	0.033	0.04	0.04	85#
	844	10	1RB	\	\	\	\	\	\	\
	836.5	10	50%RB	22.71	23.0	1.069	0.025	0.03	0.03	86#
Body Bottom (10mm)	829	10	1RB	22.66	23.0	1.081	0.094	0.10	0.10	87#
	836.5	10	1RB	22.69	23.0	1.074	0.155	0.17	0.17	88#
	844	10	1RB	22.81	23.0	1.045	0.113	0.12	0.12	89#
	836.5	10	50%RB	22.71	23.0	1.069	0.121	0.13	0.13	90#

LTE Band 12(Ant 0)：

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
						Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	22.51	23.0	1.119	0.02	0.02	0.02	91#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	22.56	23.0	1.107	0.014	0.02	0.02	92#
Head Left Tilt	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	22.51	23.0	1.119	0.01	0.01	0.01	93#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	22.56	23.0	1.107	0.005	0.01	0.01	94#
Head Right Cheek	704	10	1RB	22.60	23.0	1.096	0.021	0.02	0.02	95#
	707.5	10	1RB	22.51	23.0	1.119	0.024	0.03	0.03	96#
	711	10	1RB	22.40	23.0	1.148	0.021	0.02	0.02	97#
	707.5	10	50%RB	22.56	23.0	1.107	0.017	0.02	0.02	98#
Head Right Tilt	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	22.51	23.0	1.119	0.005	0.01	0.01	99#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	22.56	23.0	1.107	0.006	0.01	0.01	100#
Body Front (10mm)	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	22.51	23.0	1.119	0.039	0.04	0.04	101#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	22.56	23.0	1.107	0.037	0.04	0.04	102#
Body Back (10mm)	704	10	1RB	22.60	23.0	1.096	0.043	0.05	0.05	103#
	707.5	10	1RB	22.51	23.0	1.119	0.042	0.05	0.05	104#
	711	10	1RB	22.40	23.0	1.148	0.043	0.05	0.05	105#
	707.5	10	50%RB	22.56	23.0	1.107	0.033	0.04	0.04	106#
Body Left (10mm)	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	22.51	23.0	1.119	0.018	0.02	0.02	107#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	22.56	23.0	1.107	0.015	0.02	0.02	108#
Body Bottom (10mm)	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	22.51	23.0	1.119	0.028	0.03	0.03	109#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	22.56	23.0	1.107	0.021	0.02	0.02	110#

LTE Band 41(Power Class 3)：

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
						Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	2506	20	1RB	\	\	\	\	\	\	\
	2549.5	20	1RB	\	\	\	\	\	\	\
	2593	20	1RB	22.14	22.5	1.086	0.472	0.51	0.51	111#
	2636.5	20	1RB	\	\	\	\	\	\	\
	2680	20	1RB	\	\	\	\	\	\	\
	2593	20	50%RB	22.29	22.5	1.050	0.41	0.43	0.43	112#
Head Left Tilt	2506	20	1RB	\	\	\	\	\	\	\
	2549.5	20	1RB	\	\	\	\	\	\	\
	2593	20	1RB	22.14	22.5	1.086	0.628	0.68	0.68	113#
	2636.5	20	1RB	\	\	\	\	\	\	\
	2680	20	1RB	\	\	\	\	\	\	\
	2593	20	50%RB	22.29	22.5	1.050	0.542	0.57	0.57	114#
Head Right Cheek	2506	20	1RB	22.42	22.5	1.019	0.674	0.69	0.69	115#
	2549.5	20	1RB	22.29	22.5	1.050	0.626	0.66	0.66	116#
	2593	20	1RB	22.14	22.5	1.086	0.658	0.71	0.71	117#
	2636.5	20	1RB	22.34	22.5	1.038	0.669	0.69	0.69	118#
	2680	20	1RB	22.29	22.5	1.050	0.644	0.68	0.68	119#
	2593	20	50%RB	22.29	22.5	1.050	0.637	0.67	0.67	120#
Head Right Tilt	2506	20	1RB	\	\	\	\	\	\	\
	2549.5	20	1RB	\	\	\	\	\	\	\
	2593	20	1RB	22.14	22.5	1.086	0.585	0.64	0.64	121#
	2636.5	20	1RB	\	\	\	\	\	\	\
	2680	20	1RB	\	\	\	\	\	\	\
	2593	20	50%RB	22.29	22.5	1.050	0.554	0.58	0.58	122#
Body Front (10mm)	2506	20	1RB	\	\	\	\	\	\	\
	2549.5	20	1RB	\	\	\	\	\	\	\
	2593	20	1RB	22.14	22.5	1.086	0.217	0.24	0.24	123#
	2636.5	20	1RB	\	\	\	\	\	\	\
	2680	20	1RB	\	\	\	\	\	\	\
	2593	20	50%RB	22.29	22.5	1.050	0.175	0.18	0.18	124#
Body Back (10mm)	2506	20	1RB	\	\	\	\	\	\	\
	2549.5	20	1RB	\	\	\	\	\	\	\
	2593	20	1RB	22.14	22.5	1.086	0.287	0.31	0.31	125#
	2636.5	20	1RB	\	\	\	\	\	\	\
	2680	20	1RB	\	\	\	\	\	\	\
	2593	20	50%RB	22.29	22.5	1.050	0.224	0.24	0.24	126#
Body Left (10mm)	2506	20	1RB	\	\	\	\	\	\	\
	2549.5	20	1RB	\	\	\	\	\	\	\
	2593	20	1RB	22.14	22.5	1.086	0.121	0.13	0.13	127#
	2636.5	20	1RB	\	\	\	\	\	\	\
	2680	20	1RB	\	\	\	\	\	\	\
	2593	20	50%RB	22.29	22.5	1.050	0.109	0.11	0.11	128#

Body Top (10mm)	2506	20	1RB	22.42	22.5	1.019	0.457	0.47	0.47	129#
	2549.5	20	1RB	22.29	22.5	1.050	0.446	0.47	0.47	130#
	2593	20	1RB	22.14	22.5	1.086	0.467	0.51	0.51	131#
	2636.5	20	1RB	22.34	22.5	1.038	0.439	0.46	0.46	132#
	2680	20	1RB	22.29	22.5	1.050	0.432	0.45	0.45	133#
	2593	20	50%RB	22.29	22.5	1.050	0.394	0.41	0.41	134#

The frequency range of LTE Band 41 is 2496 ~ 2690MHz. Per KDB 447498 D01, according to the following formula Calculate N_c is 5.

KDB procedures, the following should be applied to determine the number of required test channels. The test channels should be evenly spread across the transmission frequency band of each wireless mode.[14]

$$N_c = Round\left\{\left[100\left(f_{high} - f_{low}\right)/f_c\right]^{0.5} \times \left(f_c/100\right)^{0.2}\right\},$$

where

- N_c is the number of test channels, rounded to the nearest integer,
- f_{high} and f_{low} are the highest and lowest channel frequencies within the transmission band,
- f_c is the mid-band channel frequency,
- all frequencies are in MHz.

Note:

1. Based on the Notice 2016-DRS001 requirements, the low, mid and high frequency channels for the configuration with the highest SAR value must be tested regardless of the SAR value measured.
2. SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices v02.
3. KDB941225D05-SAR for higher order modulation is required only when the highest maximum output power for the configuration in the higher order modulation is > 0.5 dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg
4. KDB941225D05-For QPSK with 100% RB allocation, when the reported SAR measured for the Highest output power channel is <1.45 W/kg, tests for the remaining required test channels are optional.
5. KDB941225D05- For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg.
6. KDB941225D05- Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among RB offset the upper edge, middle and lower edge of each required test channel.
7. KDB941225D05- other channel bandwidths SAR test is required when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > 0.5 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.
8. Worst case SAR for 50% RB allocation is selected to be tested.
9. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR has a positive sign, the measured SAR results shall not be corrected.
10. EUT was tested with a plastic case.
11. From May 2017 TCB Workshop, SAR tested were performed using Power Class 3 and maximum output power(Tune-up Limit) PC3 is higher from PC2.

5G NR Band n66(20M Bandwidth):

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
						Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	22.73	23.5	1.194	0.093	0.11	0.11	135#
	1770	20	1RB	/	/	/	/	/	/	/
	1720	20	50%RB	23.04	23.5	1.112	0.137	0.15	0.15	136#
	1745	20	50%RB	22.93	23.5	1.140	0.1	0.11	0.11	137#
	1770	20	50%RB	22.88	23.5	1.153	0.179	0.21	0.21	138#
Head Left Tilt	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	22.73	23.5	1.194	0.038	0.05	0.05	139#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	22.93	23.5	1.140	0.041	0.05	0.05	140#
Head Right Cheek	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	22.73	23.5	1.194	0.035	0.04	0.04	141#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	22.93	23.5	1.140	0.048	0.05	0.05	142#
Head Right Tilt	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	22.73	23.5	1.194	0.041	0.05	0.05	143#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	22.93	23.5	1.140	0.058	0.07	0.07	144#
Body Front (10mm)	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	22.73	23.5	1.194	0.615	0.73	0.73	145#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	22.93	23.5	1.140	0.595	0.68	0.68	146#
Body Back (10mm)	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	22.73	23.5	1.194	0.327	0.39	0.39	147#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	22.93	23.5	1.140	0.341	0.39	0.39	148#
Body Left (10mm)	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	22.73	23.5	1.194	0.171	0.20	0.20	149#
	1770	20	1RB	/	/	/	/	/	/	/
	1745	20	50%RB	22.93	23.5	1.140	0.18	0.21	0.21	150#
Body Bottom (10mm)	1720	20	1RB	/	/	/	/	/	/	/
	1745	20	1RB	22.73	23.5	1.194	0.665	0.79	0.79	151#
	1770	20	1RB	/	/	/	/	/	/	/
	1720	20	50%RB	23.04	23.5	1.112	0.718	0.80	0.80	152#
	1745	20	50%RB	22.93	23.5	1.140	0.727	0.83	0.83	153#
	1770	20	50%RB	22.88	23.5	1.153	0.705	0.81	0.81	154#
	1745	20	100%RB	22.05	23.5	1.396	0.667	0.93	0.93	155#

5G NR Band n66(40M Bandwidth):

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
						Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	1730	\	\	\	\	\		\	\	\
	1745	40	1RB	22.35	23.0	1.161	0.072	0.08	0.08	156#
	1760	\	\	\	\	\		\	\	\
	1730	40	50%RB	22.95	23.0	1.012	0.084	0.08	0.08	157#
	1745	40	50%RB	22.91	23.0	1.021	0.087	0.09	0.09	158#
	1760	40	50%RB	22.82	23.0	1.042	0.078	0.08	0.08	159#
Head Left Tilt	1730	\	\	\	\	\		\	\	\
	1745	40	1RB	22.35	23.0	1.161	0.034	0.04	0.04	160#
	1760	\	\	\	\	\		\	\	\
	1745	40	50%RB	22.91	23.0	1.021	0.038	0.04	0.04	161#
Head Right Cheek	1730	\	\	\	\	\		\	\	\
	1745	40	1RB	22.35	23.0	1.161	0.025	0.03	0.03	162#
	1760	\	\	\	\	\		\	\	\
	1745	40	50%RB	22.91	23.0	1.021	0.032	0.03	0.03	163#
Head Right Tilt	1730	\	\	\	\	\		\	\	\
	1745	40	1RB	22.35	23.0	1.161	0.035	0.04	0.04	164#
	1760	\	\	\	\	\		\	\	\
	1745	40	50%RB	22.91	23.0	1.021	0.053	0.05	0.05	165#
Body Front (10mm)	1730	\	\	\	\	\		\	\	\
	1745	40	1RB	22.35	23.0	1.161	0.633	0.74	0.74	166#
	1760	\	\	\	\	\		\	\	\
	1745	40	50%RB	22.91	23.0	1.021	0.588	0.60	0.60	167#
Body Back (10mm)	1730	\	\	\	\	\		\	\	\
	1745	40	1RB	22.35	23.0	1.161	0.262	0.30	0.30	168#
	1760	\	\	\	\	\		\	\	\
	1745	40	50%RB	22.91	23.0	1.021	0.319	0.33	0.33	169#
Body Left (10mm)	1730	\	\	\	\	\		\	\	\
	1745	40	1RB	22.35	23.0	1.161	0.113	0.13	0.13	170#
	1760	\	\	\	\	\		\	\	\
	1745	40	50%RB	22.91	23.0	1.021	0.142	0.14	0.14	171#
Body Bottom (10mm)	1730	\	\	\	\	\		\	\	\
	1745	40	1RB	22.35	23.0	1.161	0.612	0.71	0.71	172#
	1760	\	\	\	\	\		\	\	\
	1730	40	50%RB	22.95	23.0	1.012	0.722	0.73	0.73	173#
	1745	40	50%RB	22.91	23.0	1.021	0.75	0.77	0.77	174#
	1760	40	50%RB	22.82	23.0	1.042	0.685	0.71	0.71	175#

NOTE:

1. Maximum bandwidth does not support at least three non-overlapping channels in certain channel bandwidths. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing per FCC Guidance.
2. SAR test for NR bands and LTE anchor Bands were performed separately due to limitations in SAR probe calibration factors. And, due to test setup limitations, SR testing for NR was performed using test mode software to establish the connection.
3. FR1 supported standalone.

WLAN 2.4G(ANT 4):

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	21.89	22.0	1.026	0.224	0.23	0.23	176#
	2472	802.11b	\	\	\	\	\	\	\
Head Left Tilt	2412	802.11b	19.17	20.0	1.211	0.235	0.28	0.28	177#
	2442	802.11b	21.89	22.0	1.026	0.232	0.24	0.24	178#
	2472	802.11b	19.69	20.0	1.074	0.226	0.24	0.24	179#
Head Right Cheek	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	21.89	22.0	1.026	0.148	0.15	0.15	180#
	2472	802.11b	\	\	\	\	\	\	\
Head Right Tilt	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	21.89	22.0	1.026	0.19	0.19	0.19	181#
	2472	802.11b	\	\	\	\	\	\	\
Body Front (10mm)	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	21.89	22.0	1.026	0.029	0.03	0.03	182#
	2472	802.11b	\	\	\	\	\	\	\
Body Back (10mm)	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	21.89	22.0	1.026	0.039	0.04	0.04	183#
	2472	802.11b	\	\	\	\	\	\	\
Body Right (10mm)	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	21.89	22.0	1.026	0.017	0.02	0.02	184#
	2472	802.11b	\	\	\	\	\	\	\
Body Top (10mm)	2412	802.11b	19.17	20.0	1.211	0.055	0.07	0.07	185#
	2442	802.11b	21.89	22.0	1.026	0.067	0.07	0.07	186#
	2472	802.11b	19.69	20.0	1.074	0.061	0.07	0.07	187#

WLAN 2.4G(ANT 7):

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	20.85	21.0	1.035	0.111	0.11	0.11	188#
	2472	802.11b	\	\	\	\	\	\	\
Head Left Tilt	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	20.85	21.0	1.035	0.106	0.11	0.11	189#
	2472	802.11b	\	\	\	\	\	\	\
Head Right Cheek	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	20.85	21.0	1.035	0.161	0.17	0.17	190#
	2472	802.11b	\	\	\	\	\	\	\
Head Right Tilt	2412	802.11b	18.07	18.5	1.104	0.177	0.20	0.20	191#
	2442	802.11b	20.85	21.0	1.035	0.18	0.19	0.19	192#
	2472	802.11b	17.76	18.0	1.057	0.172	0.18	0.18	193#
Body Front (10mm)	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	20.85	21.0	1.035	0.061	0.06	0.06	194#
	2472	802.11b	\	\	\	\	\	\	\
Body Back (10mm)	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	20.85	21.0	1.035	0.054	0.06	0.06	195#
	2472	802.11b	\	\	\	\	\	\	\
Body Right (10mm)	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	20.85	21.0	1.035	0.005	0.01	0.01	196#
	2472	802.11b	\	\	\	\	\	\	\
Body Top (10mm)	2412	802.11b	18.07	18.5	1.104	0.062	0.07	0.07	197#
	2442	802.11b	20.85	21.0	1.035	0.064	0.07	0.07	198#
	2472	802.11b	17.76	18.0	1.057	0.064	0.07	0.07	199#

WLAN 2.4G(ANT 4+7):

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	24.4	24.5	1.023	0.172	0.18	0.18	200#
	2472	802.11b	\	\	\	\	\	\	\
Head Left Tilt	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	24.4	24.5	1.023	0.14	0.14	0.14	201#
	2472	802.11b	\	\	\	\	\	\	\
Head Right Cheek	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	24.4	24.5	1.023	0.16	0.16	0.16	202#
	2472	802.11b	\	\	\	\	\	\	\
Head Right Tilt	2412	802.11b	21.7	22.0	1.072	0.175	0.19	0.19	203#
	2442	802.11b	24.4	24.5	1.023	0.182	0.19	0.19	204#
	2472	802.11b	21.8	22.0	1.047	0.179	0.19	0.19	205#
Body Front (10mm)	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	24.4	24.5	1.023	0.091	0.09	0.09	206#
	2472	802.11b	\	\	\	\	\	\	\
Body Back (10mm)	2412	802.11b	21.7	22.0	1.072	0.095	0.10	0.10	207#
	2442	802.11b	24.4	24.5	1.023	0.102	0.10	0.10	208#
	2472	802.11b	21.8	22.0	1.047	0.105	0.11	0.11	209#
Body Right (10mm)	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	24.4	24.5	1.023	0.017	0.02	0.02	210#
	2472	802.11b	\	\	\	\	\	\	\
Body Top (10mm)	2412	802.11b	\	\	\	\	\	\	\
	2442	802.11b	24.4	24.5	1.023	0.101	0.10	0.10	211#
	2472	802.11b	\	\	\	\	\	\	\

Note:

1. Based on the Notice 2016-DRS001 requirements, the low, mid and high frequency channels for the configuration with the highest SAR value must be tested regardless of the SAR value measured.
2. When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance.
3. KDB 248227 D01-SAR measurement is not required for 2.4 GHz OFDM(801.11g/n) when the highest reported SAR for DSS.
4. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR has a positive sign, the measured SAR results shall not be corrected.
5. EUT was tested with a plastic case.

WLAN 5.2G(ANT 4):

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	5180	802.11a	7.76	8.0	1.057	0.257	0.27	0.27	212#
	5200	802.11a	7.45	8.0	1.135	0.249	0.28	0.28	213#
	5240	802.11a	6.98	7.5	1.127	0.234	0.26	0.26	214#
Head Left Tilt	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	7.45	8.0	1.135	0.172	0.20	0.20	215#
	5240	802.11a	\	\	\	\	\	\	\
Head Right Cheek	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	7.45	8.0	1.135	0.156	0.18	0.18	216#
	5240	802.11a	\	\	\	\	\	\	\
Head Right Tilt	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	7.45	8.0	1.135	0.071	0.08	0.08	217#
	5240	802.11a	\	\	\	\	\	\	\
Body Front (10mm)	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	7.45	8.0	1.135	0.031	0.04	0.04	218#
	5240	802.11a	\	\	\	\	\	\	\
Body Back (10mm)	5180	802.11a	7.76	8.0	1.057	0.021	0.02	0.02	219#
	5200	802.11a	7.45	8.0	1.135	0.052	0.06	0.06	220#
	5240	802.11a	6.98	7.5	1.127	0.029	0.03	0.03	221#
Body Right (10mm)	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	7.45	8.0	1.135	0.004	0.01	0.01	222#
	5240	802.11a	\	\	\	\	\	\	\
Body Top (10mm)	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	7.45	8.0	1.135	0.012	0.01	0.01	223#
	5240	802.11a	\	\	\	\	\	\	\

WLAN 5.2G(ANT 7):

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	5180	802.11a	5.31	5.5	1.045	0.272	0.28	0.28	224#
	5200	802.11a	8.77	9.0	1.054	0.333	0.35	0.35	225#
	5240	802.11a	8.11	8.5	1.094	0.27	0.30	0.30	226#
Head Left Tilt	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	8.77	9.0	1.054	0.323	0.34	0.34	227#
	5240	802.11a	\	\	\	\	\	\	\
Head Right Cheek	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	8.77	9.0	1.054	0.216	0.23	0.23	228#
	5240	802.11a	\	\	\	\	\	\	\
Head Right Tilt	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	8.77	9.0	1.054	0.018	0.02	0.02	229#
	5240	802.11a	\	\	\	\	\	\	\
Body Front (10mm)	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	8.77	9.0	1.054	0.031	0.03	0.03	230#
	5240	802.11a	\	\	\	\	\	\	\
Body Back (10mm)	5180	802.11a	5.31	5.5	1.045	0.048	0.05	0.05	231#
	5200	802.11a	8.77	9.0	1.054	0.033	0.03	0.03	232#
	5240	802.11a	8.11	8.5	1.094	0.027	0.03	0.03	233#
Body Right (10mm)	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	8.77	9.0	1.054	0.029	0.03	0.03	234#
	5240	802.11a	\	\	\	\	\	\	\
Body Top (10mm)	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	8.77	9.0	1.054	0.033	0.03	0.03	235#
	5240	802.11a	\	\	\	\	\	\	\

WLAN 5.2G(ANT 4+7):

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	5180	802.11a	9.7	10.0	1.072	0.222	0.24	0.24	236#
	5200	802.11a	11.2	11.5	1.072	0.308	0.33	0.33	237#
	5240	802.11a	10.6	11.0	1.096	0.261	0.29	0.29	238#
Head Left Tilt	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	11.2	11.5	1.072	0.192	0.21	0.21	239#
	5240	802.11a	\	\	\	\	\	\	\
Head Right Cheek	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	11.2	11.5	1.072	0.14	0.15	0.15	240#
	5240	802.11a	\	\	\	\	\	\	\
Head Right Tilt	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	11.2	11.5	1.072	0.076	0.08	0.08	241#
	5240	802.11a	\	\	\	\	\	\	\
Body Front (10mm)	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	11.2	11.5	1.072	0.046	0.05	0.05	242#
	5240	802.11a	\	\	\	\	\	\	\
Body Back (10mm)	5180	802.11a	9.7	10.0	1.072	0.046	0.05	0.05	243#
	5200	802.11a	11.2	11.5	1.072	0.053	0.06	0.06	244#
	5240	802.11a	10.6	11.0	1.096	0.034	0.04	0.04	245#
Body Right (10mm)	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	11.2	11.5	1.072	0.002	0.01	0.01	246#
	5240	802.11a	\	\	\	\	\	\	\
Body Top (10mm)	5180	802.11a	\	\	\	\	\	\	\
	5200	802.11a	11.2	11.5	1.072	0.042	0.05	0.05	247#
	5240	802.11a	\	\	\	\	\	\	\

WLAN 5.8G(ANT 4):

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	5745	802.11a	18.38	18.5	1.028	0.322	0.33	0.33	248#
	5785	802.11a	18.45	18.5	1.012	0.346	0.35	0.35	249#
	5825	802.11a	18.42	18.5	1.019	0.293	0.30	0.30	250#
Head Left Tilt	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	18.45	18.5	1.012	0.321	0.32	0.32	251#
	5825	802.11a	\	\	\	\	\	\	\
Head Right Cheek	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	18.45	18.5	1.012	0.282	0.29	0.29	252#
	5825	802.11a	\	\	\	\	\	\	\
Head Right Tilt	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	18.45	18.5	1.012	0.218	0.22	0.22	253#
	5825	802.11a	\	\	\	\	\	\	\
Body Front (10mm)	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	18.45	18.5	1.012	0.038	0.04	0.04	254#
	5825	802.11a	\	\	\	\	\	\	\
Body Back (10mm)	5745	802.11a	18.38	18.5	1.028	0.229	0.24	0.24	255#
	5785	802.11a	18.45	18.5	1.012	0.236	0.24	0.24	256#
	5825	802.11a	18.42	18.5	1.019	0.215	0.22	0.22	257#
Body Right (10mm)	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	18.45	18.5	1.012	0.085	0.09	0.09	258#
	5825	802.11a	\	\	\	\	\	\	\
Body Top (10mm)	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	18.45	18.5	1.012	0.158	0.16	0.16	259#
	5825	802.11a	\	\	\	\	\	\	\

WLAN 5.8G(ANT 7):

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	5745	802.11a	17.60	18.0	1.096	0.231	0.25	0.25	260#
	5785	802.11a	17.43	18.0	1.140	0.233	0.27	0.27	261#
	5825	802.11a	17.16	18.0	1.213	0.212	0.26	0.26	262#
Head Left Tilt	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	17.43	18.0	1.140	0.194	0.22	0.22	263#
	5825	802.11a	\	\	\	\	\	\	\
Head Right Cheek	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	17.43	18.0	1.140	0.214	0.24	0.24	264#
	5825	802.11a	\	\	\	\	\	\	\
Head Right Tilt	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	17.43	18.0	1.140	0.145	0.17	0.17	265#
	5825	802.11a	\	\	\	\	\	\	\
Body Front (10mm)	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	17.43	18.0	1.140	0.022	0.03	0.03	266#
	5825	802.11a	\	\	\	\	\	\	\
Body Back (10mm)	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	17.43	18.0	1.140	0.018	0.02	0.02	267#
	5825	802.11a	\	\	\	\	\	\	\
Body Right (10mm)	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	17.43	18.0	1.140	0.009	0.01	0.01	268#
	5825	802.11a	\	\	\	\	\	\	\
Body Top (10mm)	5745	802.11a	17.60	18.0	1.096	0.017	0.02	0.02	269#
	5785	802.11a	17.43	18.0	1.140	0.024	0.03	0.03	270#
	5825	802.11a	17.16	18.0	1.213	0.022	0.03	0.03	271#

WLAN 5.8G(ANT 4+7):

EUT Position	Frequency (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
					Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	5745	802.11a	21.0	21.5	1.122	0.263	0.30	0.30	272#
	5785	802.11a	21.0	21.5	1.122	0.276	0.31	0.31	273#
	5825	802.11a	20.8	21.5	1.175	0.28	0.33	0.33	274#
Head Left Tilt	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	21.0	21.5	1.122	0.216	0.24	0.24	275#
	5825	802.11a	\	\	\	\	\	\	\
Head Right Cheek	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	21.0	21.5	1.122	0.203	0.23	0.23	276#
	5825	802.11a	\	\	\	\	\	\	\
Head Right Tilt	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	21.0	21.5	1.122	0.184	0.21	0.21	277#
	5825	802.11a	\	\	\	\	\	\	\
Body Front (10mm)	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	21.0	21.5	1.122	0.08	0.09	0.09	278#
	5825	802.11a	\	\	\	\	\	\	\
Body Back (10mm)	5745	802.11a	21.0	21.5	1.122	0.063	0.07	0.07	279#
	5785	802.11a	21.0	21.5	1.122	0.084	0.09	0.09	280#
	5825	802.11a	20.8	21.5	1.175	0.06	0.07	0.07	281#
Body Right (10mm)	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	21.0	21.5	1.122	0.025	0.03	0.03	282#
	5825	802.11a	\	\	\	\	\	\	\
Body Top (10mm)	5745	802.11a	\	\	\	\	\	\	\
	5785	802.11a	21.0	21.5	1.122	0.034	0.04	0.04	283#
	5825	802.11a	\	\	\	\	\	\	\

Note:

1.Based on the Notice 2016-DRS001 requirements, the low, mid and high frequency channels for the configuration with the highest SAR value must be tested regardless of the SAR value measured.

2.When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance

3. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR has a positive sign, the measured SAR results shall not be corrected.

4. EUT was tested with a plastic case.

LTE Band 12(Ant 1):

EUT Position	Frequency (MHz)	Bandwidth (MHz)	Test Mode	Max. Meas. Power (dBm)	Max. Rated Power (dBm)	1g SAR (W/kg)				
						Scaled Factor	Meas. SAR	Scaled SAR	Correct SAR	Plot
Head Left Cheek	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	18.47	19.0	1.130	0.027	0.03	0.03	284#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	18.65	19.0	1.084	0.018	0.02	0.02	285#
Head Left Tilt	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	18.47	19.0	1.130	0.039	0.04	0.04	286#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	18.65	19.0	1.084	0.025	0.03	0.03	287#
Head Right Cheek	704	10	1RB	18.93	19.0	1.016	0.091	0.09	0.09	288#
	707.5	10	1RB	18.47	19.0	1.130	0.171	0.19	0.19	289#
	711	10	1RB	17.63	19.0	1.371	0.121	0.17	0.17	290#
	707.5	10	50%RB	18.65	19.0	1.084	0.134	0.15	0.15	291#
Head Right Tilt	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	18.47	19.0	1.130	0.123	0.14	0.14	292#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	18.65	19.0	1.084	0.165	0.18	0.18	293#
Body Front (10mm)	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	18.47	19.0	1.130	0.012	0.01	0.01	294#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	18.65	19.0	1.084	0.00964	0.01	0.01	295#
Body Back (10mm)	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	18.47	19.0	1.130	0.013	0.01	0.01	296#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	18.65	19.0	1.084	0.00818	0.01	0.01	297#
Body Left (10mm)	704	10	1RB	\	\	\	\	\	\	\
	707.5	10	1RB	18.47	19.0	1.130	0.00505	0.01	0.01	298#
	711	10	1RB	\	\	\	\	\	\	\
	707.5	10	50%RB	18.65	19.0	1.084	0.0067	0.01	0.01	299#
Body Top (10mm)	704	10	1RB	18.93	19.0	1.016	0.033	0.03	0.03	300#
	707.5	10	1RB	18.47	19.0	1.130	0.042	0.05	0.05	301#
	711	10	1RB	17.63	19.0	1.371	0.037	0.05	0.05	302#
	707.5	10	50%RB	18.65	19.0	1.084	0.021	0.02	0.02	303#

Note:

1. DC_B12_n66 tests LTE Band 12 transmitted by Ant 1 by setting RB of 5G Band n66 to 0 to prevent transmition of n66, thereby testing LTE Band 12 transmitted by Ant 1.

1.Based on the Notice 2016-DRS001 requirements, the low, mid and high frequency channels for the configuration with the highest SAR value must be tested regardless of the SAR value measured.

2.When SAR or MPE is not measured at the maximum power level allowed for production units, the results must be scaled to the maximum tune-up tolerance limit according to the power applied to the individual channels tested to determine compliance

3. According to IEC/IEEE 62209-1528:2020, If the correction ΔSAR has a positive sign, the measured SAR results shall not be corrected.

4. EUT was tested with a plastic case.

SAR Measurement Variability

In accordance with published RF Exposure KDB procedure 865664 D01 SAR measurement 100 MHz to 6 GHz v01. These additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
2) When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3) 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).
4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Note: The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

The Highest Measured SAR Configuration in Each Frequency Band

Body

SAR probe calibration point	Frequency Band	Freq.(MHz)	EUT Position	Meas. SAR (W/kg)		Largest to Smallest SAR Ratio
				Original	Repeated	
1900MHz (1850-2000MHz)	WCDMA Band 2	1852.4	Body Bottom	0.851	0.845	1.01
2600MHz (2550-2650MHz)	LTE Band 41	2593	Head Right Cheek	1.15	1.11	1.04

Note:

1. Second Repeated Measurement is not required since the ratio of the largest to smallest SAR for the original and first repeated measurement is not > 1.20.
2. The measured SAR results **do not** have to be scaled to the maximum tune-up tolerance to determine if repeated measurements are required.
3. SAR measurement variability must be assessed for each frequency band, which is determined by the **SAR probe calibration point and tissue-equivalent medium** used for the device measurements.

7.8.2 SAR correction formula

From Douglas et al. ([28], [29]), a linear relationship was found between the percentage change in SAR (denoted ΔSAR) and the percentage change in the permittivity and conductivity from the target values in Table 2 (denoted $\Delta\varepsilon_r$ and $\Delta\sigma$, respectively). This linear relationship agrees with the results of Kuster and Balzano [30] and Bit-Babik et al. [31]. The relationship is given by:

$$\Delta SAR = c_\varepsilon \Delta\varepsilon_r + c_\sigma \Delta\sigma \tag{8}$$

where

c_ε = $\partial(\Delta SAR)/\partial(\Delta\varepsilon)$ is the coefficient representing the sensitivity of SAR to permittivity where SAR is normalized to output power;

c_σ = $\partial(\Delta SAR)/\partial(\Delta\sigma)$ is the coefficient representing the sensitivity of SAR to conductivity, where SAR is normalized to output power.

The values of c_ε and c_σ have a simple relationship with frequency that can be described using polynomial equations. For dipole antennas at frequencies from 4 MHz to 6 GHz, the 1 g averaged SAR c_ε and c_σ are given by

$$c_\varepsilon = -7{,}854\times10^{-4} f^3 + 9{,}402\times10^{-3} f^2 - 2{,}742\times10^{-2} f - 0{,}202\,6 \tag{9}$$

$$c_\sigma = 9{,}804\times10^{-3} f^3 - 8{,}661\times10^{-2} f^2 + 2{,}981\times10^{-2} f + 0{,}782\,9 \tag{10}$$

where f is the frequency in GHz. Above 6 GHz, the sensitivity is non-varying with frequency due to the small penetration depth; the values of c_ε = −0,198 and c_σ = 0 shall be used.

For frequencies from 4 MHz to 6 GHz, the 10 g averaged SAR c_ε and c_σ are given by:

$$c_\varepsilon = 3{,}456\times10^{-3} f^3 - 3{,}531\times10^{-2} f^2 + 7{,}675\times10^{-2} f - 0{,}186\,0 \tag{11}$$

$$c_\sigma = 4{,}479\times10^{-3} f^3 - 1{,}586\times10^{-2} f^2 - 0{,}197\,2 f + 0{,}771\,7 \tag{12}$$

Corrected SAR Evaluation Table

Frequency (MHz)	Liquid Type	C ε	Δεr	C δ	Δδ	ΔSAR (%)
750	1g Head	-0.218	1.53	0.761	2.02	1.20
824.2	1g Head	-0.219	0.74	0.754	1.56	1.01
829	1g Head	-0.219	0.69	0.754	1.0	0.60
836.5	1g Head	-0.219	0.73	0.754	1.11	0.68
836.6	1g Head	-0.219	0.57	0.753	1.33	0.88
844	1g Head	-0.219	0.57	0.753	1.56	1.05
848.8	1g Head	-0.22	2.61	0.752	2.75	1.49
704	1g Head	-0.22	-0.18	0.752	3.52	2.69
707.5	1g Head	-0.22	-0.56	0.752	4.07	3.18
711	1g Head	-0.226	0.67	0.604	1.5	0.75
826.4	1g Head	-0.226	-0.62	0.598	0.86	0.65
836.6	1g Head	-0.226	-1.05	0.594	2.43	1.68
846.6	1g Head	-0.226	-1.36	0.593	3.93	2.64
1720	1g Head	-0.226	-1.47	0.592	4.79	3.17
1732.5	1g Head	-0.225	0.05	0.491	0.51	0.24
1745	1g Head	-0.225	-0.08	0.489	0.4	0.21
1800	1g Head	-0.45	0.082	0.28	0.45	0.09
1850.2	1g Head	-0.225	-0.46	0.482	0.45	0.32
1852.4	1g Head	-0.225	-0.55	0.48	0.33	0.28
1860	1g Head	-0.225	-0.98	0.475	0.16	0.30
1880	1g Head	-1.12	0.474	0.87	0.66	0.04
1900	1g Head	-0.225	-1.31	0.467	1.29	0.90
1907.6	1g Head	-0.224	-1.45	0.462	0.42	0.52
1909.8	1g Head	-0.224	-1.65	0.459	0.21	0.47
2412	1g Head	-0.224	-1.99	0.456	0.36	0.61
2442	1g Head	-0.224	-2.34	0.454	0.16	0.60
2450	1g Head	-0.224	-2.57	0.448	0.15	0.64
2472	1g Head	-0.224	-2.68	0.447	0.2	0.69
2506	1g Head	-0.202	0.88	0.665	0.29	0.02
2600	1g Head	-0.201	0.37	0.026	2.96	0.00
2593	1g Head	-0.201	-0.53	0.028	2.64	0.18
2680	1g Head	-0.201	-0.83	-0.029	4.14	0.05
5180	1g Head	-0.199	-1.29	-0.045	0.63	0.23
5200	1g Head	-0.199	-1.41	-0.045	2.64	0.16
5240	1g Head	-0.199	-1.66	-0.045	2.51	0.22
5250	1g Head	-0.199	-1.9	-0.045	2.37	0.27
5745	1g Head	-0.199	-2.05	-0.044	1.91	0.32
5785	1g Head	-1.90	-2.05	-0.044	1.91	3.81
5800	1g Head	-1.90	-2.05	-0.044	1.91	3.81
5825	1g Head	-1.90	-2.05	-0.044	1.91	3.81

Note:

1. According to Notice 2012-DRS0529, if the correction △ SAR has a negative sign, the measured SAR result should be corrected, and has a positive sign, the measured SAR result shall not be corrected.

SAR SIMULTANEOUS TRANSMISSION DESCRIPTION

Simultaneous Transmission:

Description of Simultaneous Transmit Capabilities		
Transmitter Combination	**Simultaneous?**	**Hotspot?**
WWAN(GSM/WCDMA/LTE/5G NR) + Bluetooth	√	×
WWAN(GSM/WCDMA/LTE/5G NR) + 2.4G WLAN	√	√
WWAN(GSM/WCDMA/LTE/5G NR) + 5G WLAN	√	√
EN_DC+ Bluetooth	√	×
EN_DC+ 2.4G WLAN	√	√
EN_DC+ 5G WLAN	√	√
2.4G WLAN + Bluetooth	×	×
5G WLAN + Bluetooth	×	×

Simultaneous and Hotspot SAR test exclusion considerations:

Mode(SAR1+SAR2)	Position	Reported SAR(W/kg)		ΣSAR < 1.6W/kg
		MAX_{SAR1}	MAX_{SAR2}	
DC_B12_n66(Ant 1+Ant 0)	Head	0.19	0.21	0.40
DC_B12_n66(Ant 1+Ant 0)	Body	0.05	0.93	0.98

Note: SAR1 is the SAR value measured with EN-DC modes (LTE B12), which transmit by Ant1. SAR2 is the SAR value measured by 5G NR n66 transmitted by Ant 0

Mode(SAR3+SAR4)	Position	Reported SAR(W/kg)		ΣSAR < 1.6W/kg
		MAX_{SAR3}	MAX_{SAR4}	
WWAN+ Bluetooth	Head	0.71	0.16	0.87
WWAN+ Bluetooth	Body	0.99	0.08	1.07
WWAN+ 2.4G WLAN	Head	0.71	0.28	0.99
WWAN+ 2.4G WLAN	Body	0.99	0.11	1.10
WWAN+ 5G WLAN	Head	0.71	0.35	1.06
WWAN+ 5G WLAN	Body	0.99	0.24	1.23

Mode(SAR1+ SAR2+SAR4)	Position	Reported SAR(W/kg)		ΣSAR < 1.6W/kg
		$MAX_{SAR1+ SAR2}$	MAX_{SAR4}	
DC_B12_n66+ Bluetooth	Head	0.40	0.16	0.56
DC_B12_n66+ Bluetooth	Body	0.98	0.08	1.06
DC_B12_n66+ 2.4G WLAN	Head	0.40	0.28	0.68
DC_B12_n66+ 2.4G WLAN	Body	0.98	0.11	1.09
DC_B12_n66+ 5G WLAN	Head	0.40	0.35	0.75
DC_B12_n66+ 5G WLAN	Body	0.98	0.24	1.22

Conclusion:

Sum of SAR: **ΣSAR ≤ 1.6 W/kg** therefore simultaneous transmission SAR with Volume Scans is **not Required**.

SAR Plots

Please Refer to the Attachment.

APPENDIX A MEASUREMENT UNCERTAINTY

The uncertainty budget has been determined for the measurement system and is given in the following Table.

Measurement uncertainty evaluation for IEC/IEEE 62209-1528:2020 SAR test

$$\Delta SAR = LIN + ISO + DAE + AMB + \frac{2}{\delta}\Delta_{xyz} + DAT + 2DIS + H + D_{xyz} + MOD + RF_{drift}$$

Symbol	Input quantity X_i (source of uncertainty)	Prob Dist.[a] PDF_i	Unc. $a(x_i)$	Div.[a] q_i	$u(x_i)= a(x_i)/q_i$	c_i	$u(y)= c_i \cdot u(x_i)$	v_i
		Measurement system errors						
CF	Probe calibration	N (k=2)	6.55	2	3.3	1	3.3	∞
CF_{drift}	Probe calibration drift	R	1.0	√3	0.6	1	0.6	∞
LIN	Probe linearity and detection limit	R	4.7	√3	3.3	1	3.3	∞
BBS	Boundary signal	R	1.0	√3	0.6	1	0.6	∞
ISO	Probe isotropy	R	9.6	√3	5.5	1	5.5	∞
DAE	Other probe and data acquistion errors	N	1.0	1	1.0	1	1.0	∞
AMB	RF ambient and noise	N	1.0	1	1.0	1	1.0	∞
Δ_{xyz}	Probe positioning errors	N	0.8	1	0.8	2/δ	0.9	∞
DAT	Data processing errors	N	2.0	1	2.0	1	2.0	∞
		Phantom and device(DUT or validation antenna)errors						
$LIQ(\sigma)$	Measurement of phantom conductivity(σ)	N	2.5	1	2.5	1	2.5	∞
$LIQ(Tc)$	Temperature effects(medium)	R	0.1	√3	0.05	1	0.05	∞
EPS	Shell permittivity	R	4.0	√3	2.3	$\begin{cases}0 & f \le 3\,GHz\\ 0.25 & 3\,GHz < f \le 6\,GHz\\ 0.5 & 6\,GHz < f \le 10\,GHz\end{cases}$	0	∞
DIS	Distance between the radiating element of the DUT and the phantom medium	N	5.0	1	5.0	2	10.0	∞
D_{xyz}	Repeatability of positioning the DUT or source against the phantom	N	2.8	1	2.8	1	2.8	5
H	Device holder effects	N	6.3	1	6.3	1	6.3	∞
MOD	Effect of operating mode on	R	9.0	√3	5.2	1	5.2	∞
TAS	Time-average SAR	R	2.0	√3	1.1	1	1.1	∞
RF_{drift}	Variation in SAR due to drift in output of DUT	N	1.0	1	1.0	1	1.0	∞
VAL	Validation antenna uncertainty(validation measurement only)	N	5.0	1	5.0	1	5.0	∞
P_{in}	Uncertainty in accepted power(validation measurement only)	N	5.0	1	5.0	1	5.0	∞
		Corrections to the SAR result(if applied)						
$C(\varepsilon',\sigma)$	Phantom deviation from target(ε',σ)	N	1.9	1	1.9	1	1.9	∞
$C(R)$	SAR scaling	R	4.0	√3	2.3	1	2.3	∞
$u(\Delta SAR)$	Combined uncertainty	RSS	7.4	1	7.4	1	7.4	∞
U	Expanded uncertainty and effective degrees of freedom	K=2	7.4	1	7.4	U =K	14.8	*v*eff

APPENDIX B EUT TEST POSITION PHOTOS

Please Refer to the Attachment.

APPENDIX C PROBE CALIBRATION CERTIFICATES

Please Refer to the Attachment.

APPENDIX D DIPOLE CALIBRATION CERTIFICATES

Please Refer to the Attachment.

******* END OF REPORT *******