



FCC SAR Test Report

FCC ID: 2AQ68DG501

Project No. : 2511E011
Equipment : 5G Redcap Dongle
Brand Name : General Mobile
Model Name : DG501VZ
Date of Receipt : Dec. 03, 2025
Date of Test : Dec. 08, 2025 ~ Jan. 09, 2026
Issued Date : Feb. 03, 2026
Test Sample : Engineering Sample No.: DG920251203296, DG920251203295
Standard(s) : Please refer to page 2.
Applicant : HON LIN Technology Co., Ltd.
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The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc. (Dongguan)

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Standard(s) : **IEEE Std C95.1:2019** IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 kHz to 300 GHz

IEEE Std 1528™-2013 IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques

KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
KDB447498 D01 General RF Exposure Guidance v06

Test method : **KDB865664 D02** SAR Reporting v01r02
KDB941225 D05 SAR for LTE Devices v02r05
KDB690783 D01 SAR Listings on Grants v01r03

Declaration

BTL represents to the client that testing is done in accordance with standard procedures as applicable and that test instruments used has been calibrated with standards traceable to international standard(s) and/or national standard(s).

BTL's reports apply only to the specific samples tested under conditions. It is manufacture's responsibility to ensure that additional production units of this model are manufactured with the identical electrical and mechanical components. BTL assumes no responsibility for the data provided by the customer, any statements, inferences or generalizations drawn by the customer or others from the reports issued by BTL. The report must not be used by the client to claim product certification, approval, or endorsement by A2LA or any agency of the U.S. Government.

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BTL's laboratory quality assurance procedures are in compliance with the ISO/IEC 17025: 2017 requirements, and accredited by the conformity assessment authorities listed in this test report.

BTL is not responsible for the sampling stage, so the results only apply to the sample as received.

The information, data and test plan are provided by manufacturer which may affect the validity of results, so it is manufacturer's responsibility to ensure that the apparatus meets the essential requirements of applied standards and in all the possible configurations as representative of its intended use.

Limitation

For the use of the authority's logo is limited unless the Test Standard(s)/Scope(s)/Item(s) mentioned in this test report is (are) included in the conformity assessment authorities acceptance respective.

Please note that the measurement uncertainty is provided for informational purpose only and are not use in determining the Pass/Fail results.

Table of Contents	Page
REVISION HISTORY	6
1 . GENERAL INFORMATION	7
1.1 STATEMENT OF COMPLIANCE	7
1.2 LABORATORY ENVIRONMENT	7
1.3 GENERAL DESCRIPTION OF EUT	8
1.4 MAIN TEST INSTRUMENTS	9
2 . RF EMISSIONS MEASUREMENT	10
2.1 TEST FACILITY	10
2.2 MEASUREMENT UNCERTAINTY	10
3 . SAR MEASUREMENTS SYSTEM CONFIGURATION	12
3.1 SAR MEASUREMENT SET-UP	12
3.1.1 TEST SETUP LAYOUT	12
3.2 DASY5 E-FIELD PROBE SYSTEM	13
3.2.1 PROBE SPECIFICATION	13
3.2.2 E-FIELD PROBE CALIBRATION	14
3.2.3 OTHER TEST EQUIPMENT	15
3.2.4 SCANNING PROCEDURE	16
3.2.5 SPATIAL PEAK SAR EVALUATION	17
3.2.6 DATA STORAGE AND EVALUATION	18
3.2.7 DATA EVALUATION BY SEMCAD	19
4 . SYSTEM VERIFICATION PROCEDURE	21
4.1 TISSUE VERIFICATION	21
4.2 SYSTEM CHECK	22
4.3 SYSTEM CHECK PROCEDURE	22
5 . SAR MEASUREMENT VARIABILITY AND UNCERTAINTY	23
5.1 SAR MEASUREMENT VARIABILITY	23
6 . OPERATIONAL CONDITIONS DURING TEST	24
6.1 GENERAL DESCRIPTION OF TEST PROCEDURES	24
6.2 SAR TEST CONFIGURATION	24
6.2.1 LTE TEST CONFIGURATION	24
6.2.2 5G NR TEST CONFIGURATION	26
6.2.3 TEST CONFIGURATION	29
6.3 TEST POSITION	30
6.3.1 TEST CONFIGURATION	30

Table of Contents	Page
7 . TEST RESULT	32
7.1 CONDUCTED POWER RESULTS	32
7.1.1 CONDUCTED POWER MEASUREMENTS RESULTS	32
7.2 SAR TEST RESULTS	52
7.2.1 SAR MEASUREMENT RESULT OF BODY	53
7.3 MULTIPLE TRANSMITTER EVALUATION	55
APPENDIX	56
1. TEST LAYOUT	56
Appendix A. SAR Plots of System Verification	
Appendix B. SAR Plots of SAR Measurement	
Appendix C. Calibration Certificate	
Appendix D. Photographs of the Test Set-Up	

REVISION HISTORY

Report No.	Version	Description	Issued Date	Note
BTL-FCC SAR-1-2511E011	R00	Original Report.	Jan. 29, 2026	Invalid
BTL-FCC SAR-1-2511E011	R01	This report updated title description in chapter 7.2.1. It is a revision of the report BTL-FCC SAR-1-2511E011 R00. This is a newly released report, replacing the BTL-FCC SAR-1-2511E011 R00 report.	Feb. 03, 2026	Valid

1. GENERAL INFORMATION

1.1 STATEMENT OF COMPLIANCE

Mode	Highest Bodyworn SAR-1g (W/kg)
LTE B2	1.101
LTE B4	1.234
LTE B5	0.686
LTE B13	0.802
LTE B66	1.124
NR N2	1.248
NR N5	0.594
NR N66	1.285
NR N77	1.281

Note:

1) The device is in compliance with Specific Absorption Rate (SAR) for general population uncontrolled exposure limits according to the FCC rule §2.1093, the ANSI/IEEE C95.1, the NCRP Report Number 86 for uncontrolled environment and had been tested in accordance with the measurement methods and procedures specified in IEEE 1528.

1.2 LABORATORY ENVIRONMENT

Temperature	Min. = 18°C, Max. = 25°C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5Ω
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

1.3 GENERAL DESCRIPTION OF EUT

Equipment	5G Redcap Dongle				
Brand Name	General Mobile				
Test Model	DG501VZ				
Model Name	DG501VZ				
Model Difference(s)	N/A				
Modulation	LTE(QPSK/16QAM/64QAM/256QAM), 5G NR(QPSK/16QAM/64QAM/256QAM),				
Operation Frequency Range(s)	Band	TX (MHz)			
	LTE B2	1850~1910			
	LTE B4	1710~1755			
	LTE B5	824~849			
	LTE B13	777~787			
	LTE B66	1710~1780			
	5G NR n2	1850~1910			
	5G NR n5	824~849			
	5G NR n66	1710~1780			
	5G NR n77	3300~4200			
Power Class	3, tested with power control “all Max” (LTE B2/4/5/13/66, 5G NR n2/5/66/77)				
Test Channels (low-mid-high)	18700-18900-19100 (LTE B2 BW=20MHz)				
	20050-20175-20300 (LTE B4 BW=20MHz)				
	20450-20525-20600 (LTE B5 BW=10MHz)				
	23230 (LTE B13 BW=10MHz)				
	372000-376000-380000 (5G NR n2 BW=20MHz)				
	166800-167300-167800 (5G NR n5 BW=20MHz)				
	344000-349000-354000 (5G NR n66 BW=20MHz)				
	620668-656000-679332 (5G NR n77 BW=20MHz)				
Antenna Information	Brand Name	Model Name	Antenna Type	Gain (dBi)	Band
		B01W033	FPC	1.71	LTE B2
				-0.09	LTE B4
				-0.62	LTE B5
				-2.31	LTE B13
				-0.09	LTE B66
				1.71	NR N2
				-0.62	NR N5
				-0.09	NR N66
				2.42	NR N77

Note: The antenna gain is provided by the manufacturer.

1.4 MAIN TEST INSTRUMENTS

Item	Equipment	Manufacturer	Model	Serial No.	Cal. Date	Cal. Interval
1	DASY5	Speag	DASY 5	N/A	N/A	N/A
2	Data Acquisition Electronics	Speag	DAE4	420	Apr. 08, 2025	1 Year
3	E-field Probe	Speag	EX3DV4	7544	Jun. 19, 2025	1 Year
4	E-field Probe	Speag	EX3DV4	7693	Nov. 26, 2025	1 Year
5	System Validation Dipole	Speag	D750V3	1095	Sep. 16, 2024	3 Years
6	System Validation Dipole	Speag	D835V2	4d160	Apr. 25, 2024	3 Years
7	System Validation Dipole	Speag	D1750V2	1101	Apr. 25, 2024	3 Years
8	System Validation Dipole	Speag	D1900V2	5d179	Apr. 25, 2024	3 Years
9	System Validation Dipole	Speag	D3500V2	1095	Jan. 10, 2023	3 Years
10	System Validation Dipole	Speag	D3700V2	1064	Jan. 10, 2023	3 Years
11	System Validation Dipole	Speag	D3900V2	1039	Jan. 11, 2023	3 Years
12	Twin Sam Phantom	Speag	SAM-Twim V8.0	2081	N/A	N/A
13	Radio Communication Analver	Anritsu	MT8821C	6261915479	May. 29, 2025	1 Year
14	Wideband Radio Communication Tester	R&S	CMW500	165848	Dec. 20, 2025	1 Year
15	Power Amplifier	Mini-Circuits	ZHL-42W+	QA1333003	May 29, 2025	1 Year
16	Power Amplifier	Mini-Circuits	ZVE-8G+	520701341	Dec. 20, 2025	1 Year
17	DC Source metter	Iteck	IT6154	0061041267682 01001	May. 29, 2025	1 Year
18	Vector Network Analyzer	Agilent	E5071C	MY46102965	Dec. 20, 2025	1 Year
19	Signal Generator	Agilent	N5172B	MY53050758	Dec. 20, 2025	1 Year
20	Smart Power Sensor	R&S	NRP18S	101333	May 29, 2025	1 Year
21	3.5mm Economy Calibration Kit	Agilent	85052D	MY43252246	Nov. 20, 2025	1 Year
22	Dielectric Assessment Kit	Speag	DAK-3.5	1226	Jan. 20, 2025	1 Year
23	Directional Coupler	Woken	TS-PCC0M-05	0107090019	Dec. 20, 2025	1 Year
24	Coupler	Woken	0110A05601O-10	COM5BNW1A2	Dec. 20, 2025	1 Year
25	Liquid Thermometer	Nscing Es	YZ6021S	/	Nov. 13, 2025	1 Year

Remark:

1. "N/A" denotes no model name, serial No. or calibration specified.
2. 1) Per KDB865664 D01 requirements for dipole calibration, the test laboratory has adopted three-year extended calibration interval. Each measured dipole is expected to evaluate with the following criteria at least on annual interval in Appendix C.
 - a) There is no physical damage on the dipole;
 - b) System check with specific dipole is within 10% of calibrated value;
 - c) The most recent return-loss result, measured at least annually, deviates by no more than 20% from the previous measurement;
 - d) The most recent measurement of the real or imaginary parts of the impedance, measured at least annually is within 5Ω from the previous measurement.
- 2) Network analyzer probe calibration against air, distilled water and a short block performed before measuring liquid parameters.

2. RF EMISSIONS MEASUREMENT

2.1 TEST FACILITY

The test facilities used to collect the test data in this report is SAR room at the location of No.3, Jinshagang 1st Road, Dalang, Dongguan, Guangdong People's Republic of China.

BTL's Registration Number for FCC: 747969

BTL's Designation Number for FCC: CN1377

2.2 MEASUREMENT UNCERTAINTY

Note: The test uses more than one Probe, and only the worst uncertainty result is presented.

Uncertainty Budget for Frequency range of 300 MHz to 3 GHz

Symbol	Input quantity X_i (source of uncertainty)	Unc. Value ($\pm\%$)	Prob. Dist.	Div.	c_i (1g)	c_i (10g)	Std.Unc. (1g) ($\pm\%$)	Std.Unc. (10g) ($\pm\%$)	Ref.
Measurement system errors									
<i>CF</i>	Probe calibration($\pm\%$)	13.0	N	2	1	1	6.5	6.5	8.4.1.1
<i>CFdrift</i>	Probe calibration drift($\pm\%$)	1.7	R	Ö3	1	1	1.0	1.0	8.4.1.2
<i>LIN</i>	Probe linearity and detection limit($\pm\%$)	4.7	R	Ö3	1	1	2.7	2.7	8.4.1.3
<i>BBS</i>	Broadband signal($\pm\%$)	3.0	R	Ö3	1	1	1.7	1.7	8.4.1.4
<i>ISO</i>	Probe isotropy($\pm\%$)	7.6	R	Ö3	1	1	4.4	4.4	8.4.1.5
<i>DAE</i>	Other probe and data acquisition errors($\pm\%$)	0.7	N	1	1	1	0.7	0.7	8.4.1.6
<i>AMB</i>	RF ambient and noise($\pm\%$)	1.8	N	1	1	1	1.8	1.8	8.4.1.7
<i>Dxyz</i>	Probe positioning errors($\pm\text{mm}$)	0.006	N	1	0.14	0.14	0.08	0.08	8.4.1.8
<i>DAT</i>	Data processing errors($\pm\%$)	1.2	N	1	1	1	1.2	1.2	8.4.1.9
Phantom and device (DUT or validation antenna) errors									
<i>LIQ(σ)</i>	Conductivity (meas.)($\pm\%$)	0.8	N	1	0.78	0.71	0.7	0.6	8.4.2.1
<i>LIQ(T_c)</i>	Conductivity (temp.)($\pm\%$)	4.16	R	Ö3	0.78	0.71	1.9	1.7	8.4.2.2
<i>EPS</i>	Phantom Permittivity($\pm\%$)	14	R	Ö3	0	0	0.0	0.0	8.4.2.3
<i>DIS</i>	Distance DUT - TSL($\pm\%$)	2	N	1	2	2	4.0	4.0	8.4.2.4
<i>Dxyz</i>	Device Positioning($\pm\%$)	0.1	N	1	1	1	0.1	0.1	8.4.2.5
<i>H</i>	Device Holder($\pm\%$)	2.1	N	1	1	1	2.1	2.1	8.4.2.6
<i>MOD</i>	DUT Modulationm($\pm\%$)	2.4	R	Ö3	1	1	1.4	1.4	8.4.2.7
<i>TAS</i>	Time-average SAR($\pm\%$)	1.7	R	Ö3	1	1	1.0	1.0	8.4.2.8
<i>RFdrift</i>	DUT drift($\pm\%$)	1.3	N	1	1	1	1.3	1.3	8.4.2.9
<i>VAL</i>	Val Antenna Unc.($\pm\%$)	0	N	1	1	1	0.0	0.0	8.4.2.10
<i>P_{in}</i>	Unc. Input Power($\pm\%$)	0	N	1	1	1	0.0	0.0	8.4.2.11
Corrections to the SAR result									
<i>C($\epsilon\phi, \sigma$)</i>	Deviation to Target($\pm\%$)	1.9	N	1	1	0.84	1.9	1.6	8.4.3.1
<i>C(R)</i>	SAR scaling($\pm\%$)	0	R	Ö3	1	1	0.0	0.0	8.4.3.2
<i>u(DSAR)</i>	Combined uncertainty						10.5	10.4	
	Coverage Factor for 95%						k=2	k=2	
<i>U</i>	Expanded uncertainty					<i>U</i> =	21.0	20.9	
a Other probability distributions and divisors may be used if they better represent available knowledge of the quantities concerned.									

Uncertainty Budget for Frequency range of 3 GHz to 6 GHz

Symbol	Input quantity X_i (source of uncertainty)	Unc. Value	Prob. Dist.	Div.	ci (1g)	ci (10g)	Std.Unc. (1g) (±%)	Std.Unc. (10g) (±%)	Ref.
Measurement system errors									
CF	Probe calibration(±%)	14.0	N	2	1	1	7.0	7.0	8.4.1.1
CFdrift	Probe calibration drift(±%)	1.7	R	Ö3	1	1	1.0	1.0	8.4.1.2
LIN	Probe linearity and detection limit(±%)	4.7	R	Ö3	1	1	2.7	2.7	8.4.1.3
BBS	Broadband signal(±%)	2.6	R	Ö3	1	1	1.5	1.5	8.4.1.4
ISO	Probe isotropy(±%)	7.6	R	Ö3	1	1	4.4	4.4	8.4.1.5
DAE	Other probe and data acquisition errors(±%)	1.2	N	1	1	1	1.2	1.2	8.4.1.6
AMB	RF ambient and noise(±%)	1.8	N	1	1	1	1.8	1.8	8.4.1.7
Dxyz	Probe positioning errors(±mm)	0.005	N	1	0.29	0.29	0.15	0.15	8.4.1.8
DAT	Data processing errors(±%)	2.3	N	1	1	1	2.3	2.3	8.4.1.9
Phantom and device (DUT or validation antenna) errors									
LIQ(σ)	Conductivity (meas.)(±%)	0.7	N	1	0.78	0.71	0.6	0.5	8.4.2.1
LIQ(T_c)	Conductivity (temp.)(±%)	2.45	R	Ö3	0.78	0.71	1.1	1.0	8.4.2.2
EPS	Phantom Permittivity(±%)	14	R	Ö3	0.25	0.25	2.0	2.0	8.4.2.3
DIS	Distance DUT - TSL(±%)	2	N	1	2	2	4.0	4.0	8.4.2.4
Dxyz	Device Positioning(±%)	0.5	N	1	1	1	0.5	0.5	8.4.2.5
H	Device Holder(±%)	1.9	N	1	1	1	1.9	1.9	8.4.2.6
MOD	DUT Modulationm(±%)	2.4	R	Ö3	1	1	1.4	1.4	8.4.2.7
TAS	Time-average SAR(±%)	1.7	R	Ö3	1	1	1.0	1.0	8.4.2.8
RFdrift	DUT drift(±%)	1.1	N	1	1	1	1.1	1.1	8.4.2.9
VAL	Val Antenna Unc.(±%)	0	N	1	1	1	0.0	0.0	8.4.2.10
Pin	Unc. Input Power(±%)	0	N	1	1	1	0.0	0.0	8.4.2.11
Corrections to the SAR result									
C($\epsilon\epsilon, \sigma$)	Deviation to Target(±%)	1.9	N	1	1	0.84	1.9	1.6	8.4.3.1
C(R)	SAR scaling(±%)	0	R	Ö3	1	1	0.0	0.0	8.4.3.2
u(DSAR)	Combined uncertainty						11.0	11.0	
	Coverage Factor for 95%						k=2	k=2	
U	Expanded uncertainty					U =	22.1	22.0	
a Other probability distributions and divisors may be used if they better represent available knowledge of the quantities concerned.									

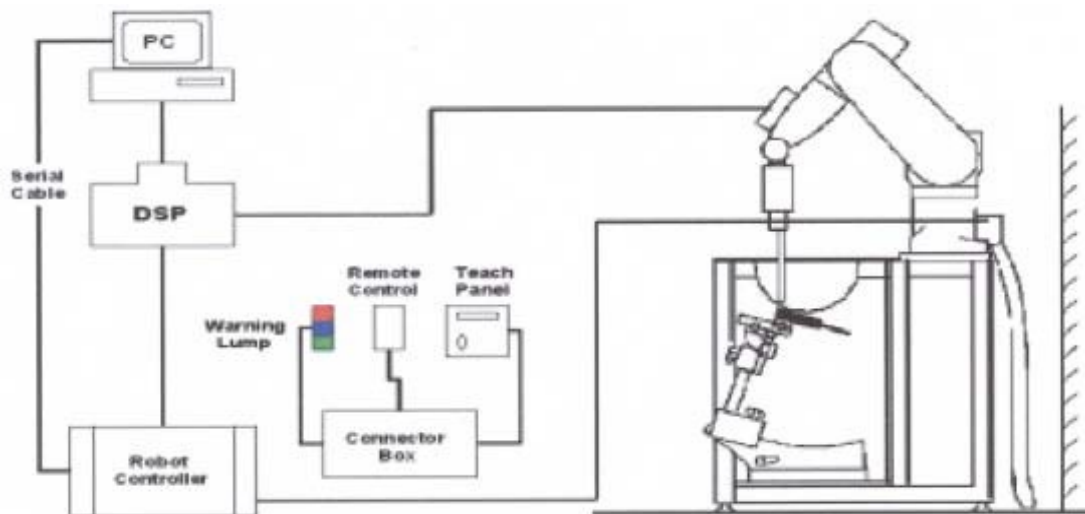
3. SAR MEASUREMENTS SYSTEM CONFIGURATION

3.1 SAR MEASUREMENT SET-UP

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

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. A data acquisition electronic (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
6. The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation. A computer operating Windows 7
7. DASY5 software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

3.1.1 TEST SETUP LAYOUT



3.2 DASY5 E-FIELD PROBE SYSTEM

The SAR measurements were conducted with the dosimetric probe EX3DV4 (manufactured by SPEAG), designed in the classical triangular configuration and optimized for dosimetric evaluation.

3.2.1 PROBE SPECIFICATION

EX3DV4

Construction	Symmetrical design with triangular core Interleaved sensors Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available
Frequency	10 MHz to 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)
Dynamic Range	10 μ W/g to > 100 mW/g Linearity: ± 0.2 dB
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Distance from probe tip to dipole centers: 1.0 mm



E-field Probe

3.2.2 E-FIELD PROBE CALIBRATION

Each probe is calibrated according to a dosimetric assessment procedure with accuracy better than $\pm 10\%$. The spherical isotropy was evaluated and found to be better than $\pm 0.25\text{dB}$. The sensitivity parameters (NormX, NormY, NormZ), the diode compression parameter (DCP) and the conversion factor (ConvF) of the probe are tested.

The free space E-field from amplified probe outputs is determined in a test chamber. This is performed in a TEM cell for frequencies below 1 GHz, and in a wave guide above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is then rotated 360 degrees.

E-field temperature correlation calibration is performed in a flat phantom filled with the appropriate simulated brain tissue. The measured free space E-field in the medium correlates to temperature rise in a dielectric medium. For temperature correlation calibration a RF transparent thermistor-based temperature probe is used in conjunction with the E-field probe.

$$\text{SAR} = C \frac{\Delta T}{\Delta t}$$

Where: Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (brain or muscle),

ΔT = Temperature increase due to RF exposure.

Or

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

Where: σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

3.2.3 OTHER TEST EQUIPMENT

3.2.3.1. Device Holder for Transmitters

Construction: Simple but effective and easy-to-use extension for Mounting Device that facilitates the testing of larger devices (e.g., laptops, cameras, etc.) It is light weight and fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin SAM, ELI and SAM v6.0 Phantoms.

Material: POM, Acrylic glass, Foam

3.2.3.2 Phantom

Model	Twin SAM	
Construction	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.	
Shell Thickness	2 ± 0.2 mm	
Filling Volume	Approx. 25 liters	
Dimensions	Length:1000mm; Width: 500mm Height: adjustable feet	
Available	Special	

3.2.4 SCANNING PROCEDURE

The DASY5 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

The “reference” and “drift” measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT’s output power and should vary max. $\pm 5\%$.

The “surface check” measurement tests the optical surface detection system of the DASY5 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above $\pm 0.1\text{mm}$). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within $\pm 30^\circ$.)

- Area Scan

The “area scan” measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strength is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The standard scan uses large grid spacing for faster measurement. Standard grid spacing for head measurements is 15 mm in x- and y- dimension ($\leq 2\text{GHz}$), 12 mm in x- and y- dimension (2-4 GHz) and 10mm in x- and y- dimension (4-6GHz). If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation.

- Zoom Scan

A “zoom scan” measures the field in a volume around the 2D peak SAR value acquired in the previous “coarse” scan. This is a fine grid with maximum scan spatial resolution: $\Delta x_{\text{zoom}}, \Delta y_{\text{zoom}} \leq 2\text{GHz} \rightarrow 8\text{mm}$, 2-4GHz $\rightarrow 5\text{mm}$ and 4-6 GHz $\rightarrow 4\text{mm}$; $\Delta z_{\text{zoom}} \leq 3\text{GHz} \rightarrow 5\text{mm}$, 3-4 GHz $\rightarrow 4\text{mm}$ and 4-6GHz $\rightarrow 2\text{mm}$ where the robot additionally moves the probe along the z-axis away from the bottom of the Phantom. DASY is also able to perform repeated zoom scans if more than 1 peak is found during area scan. In this document, the evaluated peak 1g and 10g averaged SAR values are shown in the 2D-graphics in Appendix B. Test results relevant for the specified standard (see chapter 1.4.) are shown in table form in chapter 7.2.

A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 2 mm steps. This measurement shows the continuity of the liquid and can - depending in the field strength – also show the liquid depth.

The following table summarizes the area scan and zoom scan resolutions per FCC KDB 865664D01:

Frequency	Maximun Area Scan resolution ($\Delta x_{\text{area}}, \Delta y_{\text{area}}$)	Maximun Zoom Scan spatial resolution ($\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$)	Maximun Zoom Scan spatial resolution			Minimum zoom scan volume (x,y,z)
			Uniform Grid	Graded Grad		
			$\Delta z_{\text{Zoom}}(n)$	$\Delta z_{\text{Zoom}}(1)^*$	$\Delta z_{\text{Zoom}}(n>1)^*$	
$\leq 2\text{GHz}$	$\leq 15\text{mm}$	$\leq 8\text{mm}$	$\leq 5\text{mm}$	$\leq 4\text{mm}$	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	$\geq 30\text{mm}$
2-3GHz	$\leq 12\text{mm}$	$\leq 5\text{mm}$	$\leq 5\text{mm}$	$\leq 4\text{mm}$	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	$\geq 30\text{mm}$
3-4GHz	$\leq 12\text{mm}$	$\leq 5\text{mm}$	$\leq 4\text{mm}$	$\leq 3\text{mm}$	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	$\geq 28\text{mm}$
4-5GHz	$\leq 10\text{mm}$	$\leq 4\text{mm}$	$\leq 3\text{mm}$	$\leq 2.5\text{mm}$	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	$\geq 25\text{mm}$
5-6GHz	$\leq 10\text{mm}$	$\leq 4\text{mm}$	$\leq 2\text{mm}$	$\leq 2\text{mm}$	$\leq 1.5 \cdot \Delta z_{\text{Zoom}}(n-1)$	$\geq 22\text{mm}$

3.2.5 SPATIAL PEAK SAR EVALUATION

The spatial peak SAR - value for 1 and 10 g is evaluated after the Cube measurements have been done. The basis of the evaluation are the SAR values measured at the points of the fine cube grid consisting of 5 x 5 x 7 points (with 8mm horizontal resolution) or 7 x 7 x 7 points (with 5mm horizontal resolution) or 8 x 8 x 7 points (with 4mm horizontal resolution). The algorithm that finds the maximal averaged volume is separated into three different stages.

- The data between the dipole center of the probe and the surface of the phantom are extrapolated. This data cannot be measured since the center of the dipole is 2.7 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is about 1 mm (see probe calibration sheet). The extrapolated data from a cube measurement can be visualized by selecting "Graph Evaluated".
- The maximum interpolated value is searched with a straight-forward algorithm. Around this maximum the SAR - values averaged over the spatial volumes (1g or 10 g) are computed using the 3d-spline interpolation algorithm. If the volume cannot be evaluated (i.e., if a part of the grid was cut off by the boundary of the measurement area) the evaluation will be started on the corners of the bottom plane of the cube.
- All neighboring volumes are evaluated until no neighboring volume with a higher average value is found.

Extrapolation

The extrapolation is based on a least square algorithm [W. Gander, Computer mathematic, p.168-180]. Through the points in the first 3 cm along the z-axis, polynomials of order four are calculated. These polynomials are then used to evaluate the points between the surface and the probe tip. The points, calculated from the surface, have a distance of 1 mm from each other.

Interpolation

The interpolation of the points is done with a 3d-Spline. The 3d-Spline is composed of three one-dimensional splines with the "Not a knot"-condition [W. Gander, Computer mathematic, p.141-150] (x, y and z -direction) [Numerical Recipes in C, Second Edition, p.123ff].

Volume Averaging

At First the size of the cube is calculated. Then the volume is integrated with the trapezoidal algorithm. 8000 points (20x20x20) are interpolated to calculate the average.

Advanced Extrapolation

DASY5 uses the advanced extrapolation option which is able to compensate boundary effects on E-field probes.

3.2.6 DATA STORAGE AND EVALUATION

3.2.6.1 Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension “DAE”. The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

3.2.7 DATA EVALUATION BY SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:	Sensitivity	Normi, ai0, ai1, ai2
	Conversion factor	ConvFi
	Diode compression point	Dcpj
Device parameters:	Frequency	f
	Crest factor	cf
Media parameters:	Conductivity	
	Density	

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY5 components. In the direct measuring mode of the multi meter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot cf / dcp_i$$

With	V_i = compensated signal of channel i	(i = x, y, z)
	U_i = input signal of channel i	(i = x, y, z)
	cf = crest factor of exciting field	(DASY parameter)
	dcp _i = diode compression point	(DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

$$\text{E-field probes: } E_i = (V_i / \text{Norm}_i \cdot \text{ConvF})^{1/2}$$

$$\text{H-field probes: } H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1} f + a_{i2} f^2) / f$$

With V_i = compensated signal of channel i ($i = x, y, z$)

Norm_i = sensor sensitivity of channel i ($i = x, y, z$)

[mV/(V/m)²] for E-field Probes

ConvF = sensitivity enhancement in solution

a_{ij} = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

E_i = electric field strength of channel i in V/m

H_i = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{\text{tot}} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$\text{SAR} = (E_{\text{tot}})^2 \cdot \sigma / (\rho \cdot 1000)$$

With SAR = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m

= conductivity in [mho/m] or [Siemens/m]

= equivalent tissue density in g/cm³

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{\text{pwe}} = E_{\text{tot}}^2 / 3770 \text{ or } P_{\text{pwe}} = H_{\text{tot}}^2 \cdot 37.7$$

With P_{pwe} = equivalent power density of a plane wave in mW/cm²

E_{tot} = total field strength in V/m

H_{tot} = total magnetic field strength in A/m

4. SYSTEM VERIFICATION PROCEDURE

4.1 TISSUE VERIFICATION

The simulating liquids should be checked at the beginning of a series of SAR measurements to determine if the dielectric parameters are within the tolerances of the specified target values. The measured conductivity and relative permittivity should be within $\pm 5\%$ of the target values.

The following materials are used for producing the tissue-equivalent materials.

Tissue Type	Bactericide	DGBE	HEC	NaCl	Sucrose	Triton X-100	Water	Diethylene Glycol Mono-hexylether
Head 750	0.2	-	0.2	1.5	56.0	-	42.1	-
Head 835	0.2	-	0.2	1.5	57.0	-	41.1	-
Head 1750	-	47.0	-	0.4	-	-	52.6	-
Head 1900	-	44.5	-	0.2	-	-	55.3	-
Head 3500	-	7.99	-	0.16	-	19.97	71.88	-
Head 3700	-	7.99	-	0.16	-	19.97	71.88	-
Head 3900	-	7.99	-	0.16	-	19.97	71.88	-

Salt: 99+% Pure Sodium Chloride; Sugar: 98+% Pure Sucrose; Water: De-ionized, 16M + resistivity
HEC: Hydroxyethyl Cellulose; DGBE: 99+% Di(ethylene glycol) butyl ether,[2-(2-butoxyethoxy)ethanol]
Triton X-100(ultra pure): Polyethylene glycol mono [4-(1,1,3,3-tetramethylbutyl)phenyl]ether

Tissue Verification									
Tissue Type	Frequency (MHz)	Liquid Temp. (°C)	Conductivity (σ)	Permittivity (ϵ_r)	Targeted Conductivity (σ)	Targeted Permittivity (ϵ_r)	Deviation Conductivity (σ) (%)	Deviation Permittivity (ϵ_r) (%)	Date
Head	750	22.4	0.882	41.569	0.89	41.9	-0.90	-0.79	Dec. 23, 2025
Head	835	22.4	0.931	41.193	0.90	41.5	3.44	-0.74	Dec. 23, 2025
Head	1750	21.3	1.389	41.594	1.37	40.1	1.39	3.73	Dec. 25, 2025
Head	1900	21.6	1.335	40.517	1.40	40.0	-4.64	1.29	Dec. 21, 2025
Head	3400	22.2	2.764	38.079	2.81	38.0	-1.64	0.16	Jan. 08, 2026
Head	3700	22.2	3.099	37.183	3.12	37.7	-0.67	-1.37	Jan. 08, 2026
Head	4100	22.2	3.568	36.067	3.53	37.2	1.08	-3.05	Jan. 08, 2026

Note:

- 1) The dielectric parameters of the tissue-equivalent liquid should be measured under similar ambient conditions and within 2 °C of the conditions expected during the SAR evaluation to satisfy protocol requirements.
- 2) KDB 865664 was ensured to be applied for probe calibration frequencies greater than or equal to 50MHz of the EUT frequencies.
- 3) The above measured tissue parameters were used in the DASY software to perform interpolation via the DASY software to determine actual dielectric parameters at the test frequencies. The SAR test plots may slightly differ from the table above since the DASY rounds to three significant digits.

4.2 SYSTEM CHECK

The system check is performed for verifying the accuracy of the complete measurement system and performance of the software. The system check is performed with tissue equivalent material according to IEEE 1528 (described above). The following table shows system check results for all frequency bands and tissue liquids used during the tests.

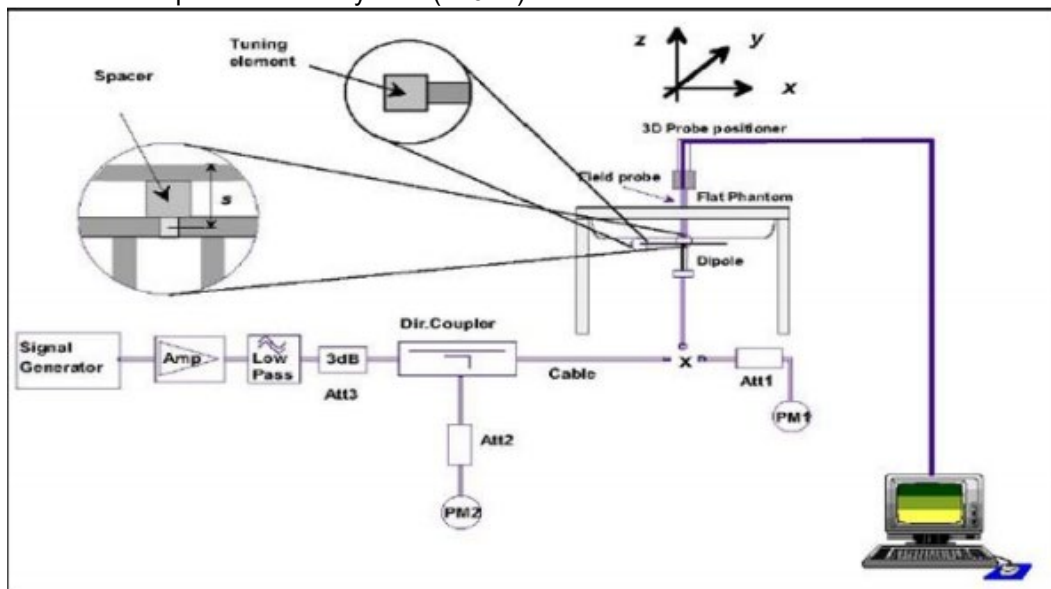
System Check	Date	Frequency (MHz)	Targeted SAR 1g (W/kg)	Measured SAR 1g (W/kg)	normalized SAR 1g (W/kg)	Deviation 1g (%)	Dipole S/N
Head	Dec. 23, 2025	750	8.48	0.824	8.24	-2.83	1095
Head	Dec. 23, 2025	835	9.83	1.010	10.10	2.75	4d160
Head	Dec. 25, 2025	1750	37.00	3.540	35.40	-4.32	1101
Head	Dec. 21, 2025	1900	39.40	3.820	38.20	-3.05	5d179
Head	Jan. 08, 2026	3400	68.20	7.070	70.70	3.67	1095
Head	Jan. 08, 2026	3700	65.80	6.610	66.10	0.46	1064
Head	Jan. 08, 2026	4100	68.00	6.740	67.40	-0.88	1039

4.3 SYSTEM CHECK PROCEDURE

The system check is performed by using a system check dipole which is positioned parallel to the planar part of the SAM phantom at the reference point. The distance of the dipole to the SAM phantom is determined by a plexiglass spacer. The dipole is connected to the signal source consisting of signal generator and amplifier via a directional coupler, N-connector cable and adaption to SMA. It is fed with a power of 250mW (below 3GHz) or 100mW (3-6GHz). To adjust this power a power meter is used.

The power sensor is connected to the cable before the system check to measure the power at this point and do adjustments at the signal generator. At the outputs of the directional coupler both return loss as well as forward power are controlled during the system check to make sure that emitted power at the dipole is kept constant. This can also be checked by the power drift measurement after the test.

System check results have to be equal or near the values determined during dipole calibration (target SAR in table above) with the relevant liquids and test system ($\pm 10\%$).



5. SAR MEASUREMENT VARIABILITY AND UNCERTAINTY

5.1 SAR MEASUREMENT VARIABILITY

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz, 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. The 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 ($\sim 10\%$ 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 .

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 detailed repeated measurement results are shown in Section 7.2.

6. OPERATIONAL CONDITIONS DURING TEST

6.1 GENERAL DESCRIPTION OF TEST PROCEDURES

Connection to the EUT is established via air interface with R&S CMW500, and the EUT is set to maximum output power by R&S CMW500. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output. The antenna connected to the output of the base station simulator shall be placed at least 50cm away from the EUT. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the EUT by at least 30dB.

6.2 SAR TEST CONFIGURATION

6.2.1 LTE TEST CONFIGURATION

SAR for LTE band exposure configurations is measured according to the procedures of KDB 941225 D05 SAR for LTE Devices. The CMW500 Wide Band Radio Communication Tester was used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR test were performed with the same number of RB and RB offsets transmitting on all TTI frames (Maximum TTI).

1. Spectrum Plots for RB configurations

A properly configured base station simulator was used for LTE output power measurements and SAR testing. Therefore, spectrum plots for RB configurations were not required to be included in this report.

2. MPR

When MPR is implemented permanently within the UE, regardless of network requirements, only those RB configurations allowed by 3GPP for the channel bandwidth and modulation. Combinations may be tested with MPR active. Configurations with RB allocations less than the RB thresholds required by 3GPP must be tested without MPR.

The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101:

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 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
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

3. A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by using Network Signalling Value of "NS_01" on the base station simulator.

4. LTE procedures for SAR testing

A) Largest channel bandwidth standalone SAR test requirements

i) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

ii) QPSK with 50% RB allocation

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

iii) QPSK with 100% RB allocation

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

iv) Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is $> \frac{1}{2}$ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

B) Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is $> \frac{1}{2}$ 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.

6.2.2 5G NR TEST CONFIGURATION

Connection to the EUT is established via air interface with Star Point SP9500 and the EUT is set to maximum output power by Star Point SP9500.

When SAR measurement is required, power measurement is also required to confirm output power settings and to determine reported SAR according to procedures in IEC/EN62209 standard.

Recommended Sub6G default power measurement procedures are as below:

1) Power must be measured for each transmit antenna(s), frequency band(s) and exposure conditions combination.
2) Power measurement is required for the transmission mode configuration with the highest maximum output power specified for production units (tune-up).

a) When the same highest maximum output power specification applies to multiple transmission modes, the largest channel bandwidth configuration power is measured, including all applicable modulations, RB allocation, RB offset and required test channels per 3GPP and EN 62209 standard.

b) When the same highest maximum output power is specified for largest channel bandwidth configurations with multiple SCS configurations, the largest channel bandwidth and largest SCS configuration power is measured.

c) Additional power measurements for other smaller bandwidth and SCS configurations are only required when SAR test is required for these configurations according to the SAR test procedures of sub6G above.

d) When the power meets 3GPP requirements at the maximum bandwidth, other bandwidths only measure the maximum power RB configuration.

Note: The maximum output power and tune-up tolerance of all transmit operation modes specified for production units should be clearly included in the SAR test report to determine SAR and power measurement test reduction.

1) The specification information of 5G NR (Sub 6G) of this device is shown as the following table:

NR Band	SCS (kHz)	5 MHz	10 MHz	15 MHz	20 MHz	25 MHz	30 MHz	40 MHz	50 MHz	60 MHz	70 MHz	80 MHz	90 MHz	100 MHz
n2	15	Yes	Yes	Yes	Yes	/	/	/	/	/	/	/	/	/
	30	/	/	/	/	/	/	/	/	/	/	/	/	/
	60	/	/	/	/	/	/	/	/	/	/	/	/	/
n5	15	Yes	Yes	Yes	Yes	/	/	/	/	/	/	/	/	/
	30	/	/	/	/	/	/	/	/	/	/	/	/	/
	60	/	/	/	/	/	/	/	/	/	/	/	/	/
n66	15	Yes	Yes	Yes	Yes	/	/	/	/	/	/	/	/	/
	30	/	/	/	/	/	/	/	/	/	/	/	/	/
	60	/	/	/	/	/	/	/	/	/	/	/	/	/
n77	15	/	/	/	/	/	/	/	/	/	/	/	/	/
	30	/	Yes	Yes	Yes	/	/	/	/	/	/	/	/	/
	60	/	/	/	/	/	/	/	/	/	/	/	/	/

Note: The bolded bandwidth and SCS configurations are power measurements in this report.

2) The MPR information for Sub 6G(Power class 3) is as below:

Modulation	MPR (dB)		
	Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM PI/2 BPSK	$\leq 3.5^1$	$\leq 1.2^1$	$\leq 0.2^1$
	$\leq 0.5^2$		0^2
DFT-s-OFDM QPSK	≤ 1		0
DFT-s-OFDM 16 QAM	≤ 2		≤ 1
DFT-s-OFDM 64 QAM	≤ 2.5		
DFT-s-OFDM 256 QAM	≤ 4.5		
CP-OFDM QPSK	≤ 3		≤ 1.5
CP-OFDM 16 QAM	≤ 3		≤ 2
CP-OFDM 64 QAM	≤ 3.5		
CP-OFDM 256 QAM	≤ 6.5		

NOTE 1: Applicable for UE operating in TDD mode with PI/2 BPSK modulation and UE indicates support for UE capability powerBoosting-pi2BPSK and if the IE powerBoostPi2BPSK is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79. The reference power of 0dB MPR is 26dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n40, n41, n77, n78 and n79 and if the IE powerBoostPi2BPSK is set to 0 and if more than 40% of slots in radio frame are used for UL transmission for bands n40, n41, n77, n78 and n79.

5G NR Test Configuration

1) Largest channel bandwidth standalone SAR test requirements

a) BPSK/QPSK modulation

Start with the largest channel bandwidth and largest SCS then measure SAR for BPSK or QPSK with RB allocation, RB offset and required test channel combination with the highest maximum output power. When the 1-g SAR is $\leq 0.8 \text{ W/kg}$ (50% Limit), testing of the remaining RB configurations and required test channels is not required; otherwise, SAR is required for the remaining required test channels and only for the RB configuration with the highest output power for that channel. When the 1-g SAR of a required test channel is $> 1.44 \text{ W/kg}$ (90% Limit), SAR is required for all RB configurations for that required test channel.

b) Other modulation configurations (If applicable)

For each modulation besides BPSK or QPSK; e.g., 16-QAM, 64-QAM, 256-QAM additional SAR is required only when the highest maximum output power for the configuration in these modulations is higher than the same configuration in QPSK or when the 1-g SAR for the QPSK configuration is $> 1.44 \text{ W/kg}$ (90% Limit).

2) Other channel bandwidth standalone SAR test requirements (If applicable)

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section 1.1 to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is higher than the equivalent channel configurations in the largest channel bandwidth configuration or the 1-g SAR of a configuration for the largest channel bandwidth is $> 1.44 \text{ W/kg}$ (90% Limit).

3) Other channel bandwidth standalone SAR test requirements (If applicable)

For other SCS configuration besides the largest SCS with QPSK, additional SAR is required only when the maximum tune-up output power for the configuration in these SCS configurations is higher than the same configuration in the largest SCS with QPSK or when the 1-g SAR for the largest SCS with QPSK configuration is $> 1.44 \text{ W/kg}$ (90% Limit).

4) Other channel bandwidth standalone SAR test requirements

According to IEC 62209 standard, test other required frequency channels for highest SAR test configuration and other test conditions within 3dB of applicable SAR limit.

5) 5G NR (Sub6G) EN-DC SAR test procedures are as below:

The EN-DC test for the worst case at highest SAR for PCC band.

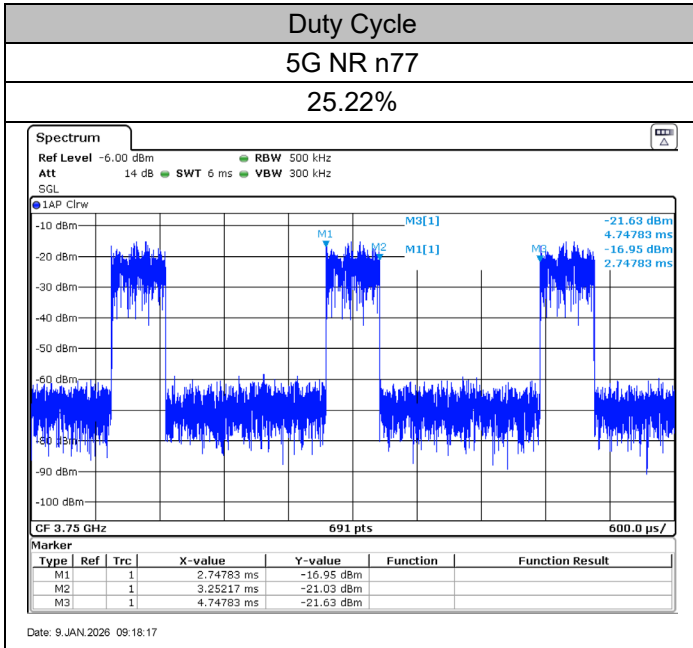
6) 5G NR (Sub6G) MIMO SAR test procedures are as below:

Repeat step 1~4.

6.2.3 TEST CONFIGURATION

The SAR evaluation shall be performed for all surfaces of the DUT that are accessible during intended use, as indicated in Figure 4. The separation distance in testing shall correspond to the intended use distance as specified in the user instructions provided by the manufacturer.

The device under test (DUT) must be powered via a Type-C interface. We tested the interfaces at the back, front, bottom, top, and left sides, 5mm from the interface. The right side has a USB port for power supply, and the main antenna is more than 25mm away from the right side.



6.3 TEST POSITION

6.3.1 TEST CONFIGURATION

The SAR evaluation shall be performed for all surfaces of the DUT that are accessible during intended use, as indicated in Figure 4. The separation distance in testing shall correspond to the intended use distance as specified in the user instructions provided by the manufacturer.

If the intended use is not specified, all surfaces of the DUT shall be tested directly against the flat phantom.

The surface of the generic device (or the surface of the carry accessory holding the DUT) pointing towards the flat phantom shall be parallel to the surface of the phantom.

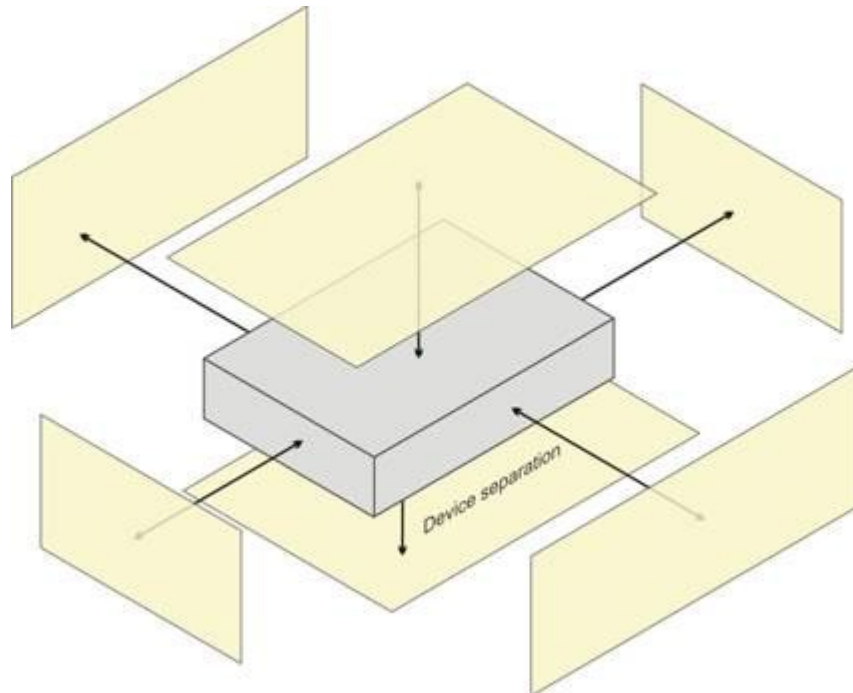


Figure 4: Test positions for a generic device

The location of the antenna inside EUT is as below:

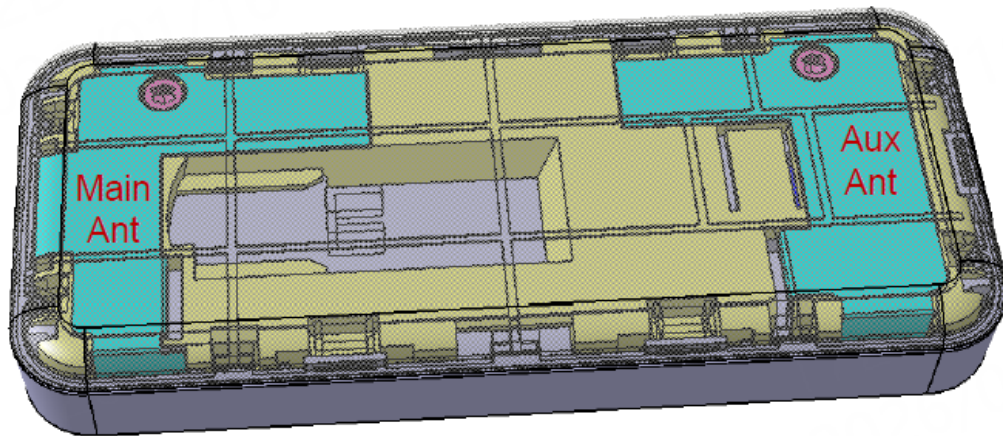


Figure: The location of the antennas

The Antenna-to-EUT sides separation distances are as below:

Antenna	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
Main Antenna	9mm	1.5mm	1.8mm	54mm	3.2mm	2.9mm
Aux Antenna	Only receive signal, so it was not figured out in the following pictures					

For each antenna, the EUT is tested at the following test positions:

Antenna	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
Main Antenna	Yes	Yes	Yes	NO	Yes	Yes

Note:

- 1) The right side is USB power port which is not required to be tested.
- 2) Aux Antenna does not support TX function.

7. TEST RESULT

7.1 CONDUCTED POWER RESULTS

7.1.1 CONDUCTED POWER MEASUREMENTS RESULTS

1. Conducted power measurement results of LTE B2

LTE B2/BW=1.4M		Average Conducted Power(dBm)				LTE B2/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18607/1850.7	18900/1880	19193/1909.3				18615/1851.5	18900/1880	19185/1908.5
QPSK	1/0	24.00	22.30	22.27	22.49	QPSK	1/0	24.00	22.08	22.27	22.62
	1/2	24.00	22.57	22.73	22.62		1/7	24.00	22.61	22.72	22.54
	1/5	24.00	22.52	22.69	22.35		1/14	24.00	22.67	22.74	22.50
	3/0	23.00	22.10	21.94	21.61		8/0	23.00	21.46	21.49	21.48
	3/1	23.00	22.16	22.20	22.09		8/3	23.00	21.46	21.66	21.57
	3/3	23.00	22.29	22.22	21.95		8/7	23.00	21.23	21.44	21.78
	6/0	23.00	21.61	21.74	21.80		15/0	23.00	21.64	21.39	21.67
16QAM	1/0	23.00	21.64	21.51	21.66	16QAM	1/0	23.00	21.45	21.32	21.70
	1/2	23.00	21.41	21.50	22.22		1/7	23.00	21.48	21.50	21.90
	1/5	23.00	21.89	21.91	21.65		1/14	23.00	21.63	21.56	21.54
	3/0	22.00	20.64	20.77	20.90		8/0	22.00	20.41	20.26	20.21
	3/1	22.00	21.04	20.61	20.71		8/3	22.00	20.79	20.62	20.50
	3/3	22.00	20.89	20.85	20.60		8/7	22.00	20.69	20.55	20.72
	6/0	22.00	20.49	20.68	20.78		15/0	22.00	20.48	20.34	20.52
64QAM	1/0	22.00	20.58	20.69	20.70	64QAM	1/0	22.00	20.72	20.82	20.76
	1/2	22.00	21.13	20.95	20.49		1/7	22.00	20.90	20.75	20.56
	1/5	22.00	20.26	20.49	20.41		1/14	22.00	20.27	20.50	20.27
	3/0	21.00	19.84	19.52	19.55		8/0	21.00	19.37	19.57	19.59
	3/1	21.00	19.57	19.78	19.58		8/3	21.00	19.44	19.38	19.37
	3/3	21.00	19.68	20.02	19.90		8/7	21.00	19.71	19.70	19.51
	6/0	21.00	20.19	20.25	20.11		15/0	21.00	20.27	20.32	20.21
256QAM	1/0	19.00	17.81	17.42	17.56	256QAM	1/0	19.00	17.70	17.43	17.39
	1/2	19.00	17.42	17.67	17.30		1/7	19.00	17.42	17.45	17.51
	1/5	19.00	17.62	17.73	17.56		1/14	19.00	17.35	17.57	17.63
	3/0	19.00	17.39	17.29	17.49		8/0	19.00	17.45	17.60	17.51
	3/1	19.00	17.47	17.91	17.45		8/3	19.00	17.52	17.69	17.49
	3/3	19.00	17.39	17.49	17.31		8/7	19.00	17.54	17.57	17.40
	6/0	19.00	17.25	17.53	17.29		15/0	19.00	17.24	17.58	17.36

LTE B2/BW=5M		Average Conducted Power(dBm)				LTE B2/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18625/1852.5	18900/1880	19175/1907.5				18650/1855	18900/1880	19150/1905
QPSK	1/0	24.00	22.26	22.35	22.52	QPSK	1/0	24.00	22.36	22.46	22.50
	1/12	24.00	22.73	22.64	22.46		1/24	24.00	22.39	22.57	22.57
	1/24	24.00	22.49	22.57	22.48		1/49	24.00	22.50	22.59	22.59
	12/0	23.00	21.60	21.54	21.49		25/0	23.00	21.40	21.53	21.53
	12/6	23.00	21.32	21.48	21.53		25/12	23.00	21.67	21.67	21.67
	12/13	23.00	21.38	21.55	21.69		25/25	23.00	21.72	21.69	21.69
	25/0	23.00	21.61	21.53	21.56		50/0	23.00	21.68	21.55	21.55
16QAM	1/0	23.00	21.33	21.48	21.55	16QAM	1/0	23.00	21.47	21.65	21.66
	1/12	23.00	21.59	21.64	21.81		1/24	23.00	21.73	21.56	21.55
	1/24	23.00	21.45	21.51	21.59		1/49	23.00	21.20	21.27	21.26
	12/0	22.00	20.44	20.43	20.32		25/0	22.00	20.38	20.54	20.60
	12/6	22.00	20.63	20.52	20.46		25/12	22.00	20.75	20.63	20.73
	12/13	22.00	20.69	20.70	20.76		25/25	22.00	20.58	20.58	20.62
	25/0	22.00	20.24	20.42	20.33		50/0	22.00	20.64	20.49	20.44
64QAM	1/0	22.00	20.75	20.76	20.89	64QAM	1/0	22.00	20.47	20.66	20.80
	1/12	22.00	20.93	20.74	20.65		1/24	22.00	20.74	20.62	20.80
	1/24	22.00	20.33	20.52	20.34		1/49	22.00	20.86	20.70	20.62
	12/0	21.00	19.38	19.55	19.59		25/0	21.00	19.49	19.56	19.50
	12/6	21.00	19.43	19.44	19.53		25/12	21.00	19.45	19.58	19.46
	12/13	21.00	19.66	19.64	19.66		25/25	21.00	19.56	19.51	19.62
	25/0	21.00	20.32	20.45	20.33		50/0	21.00	20.40	20.46	20.39
256QAM	1/0	19.00	17.54	17.50	17.58	256QAM	1/0	19.00	17.17	17.46	17.48
	1/12	19.00	17.34	17.39	17.53		1/24	19.00	17.94	17.77	17.85
	1/24	19.00	17.31	17.49	17.50		1/49	19.00	17.36	17.47	17.52
	12/0	19.00	17.47	17.45	17.38		25/0	19.00	17.23	17.38	17.32
	12/6	19.00	17.43	17.50	17.44		25/12	19.00	17.73	17.61	17.80
	12/13	19.00	17.60	17.49	17.47		25/25	19.00	17.49	17.44	17.31
	25/0	19.00	17.41	17.55	17.47		50/0	19.00	17.72	17.59	17.40

LTE B2/BW=15M		Average Conducted Power(dBm)				LTE B2/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			18675/ 1857.5	18900/ 1880	19125/ 1902.5				18700/ 1860	18900/ 1880	19100/ 1900
QPSK	1/0	24.00	22.33	22.41	22.58	QPSK	1/0	24.00	22.49	22.78	22.71
	1/37	24.00	22.44	22.52	22.57		1/50	24.00	22.48	22.61	22.56
	1/74	24.00	22.43	22.49	22.62		1/99	24.00	22.41	22.66	22.61
	36/0	23.00	21.49	21.63	21.22		50/0	23.00	21.77	21.64	21.54
	36/19	23.00	21.63	21.59	21.76		50/25	23.00	21.82	21.69	21.80
	36/39	23.00	21.52	21.63	21.85		50/50	23.00	21.72	21.72	21.67
	75/0	23.00	21.69	21.45	21.61		100/0	23.00	21.60	21.55	21.58
16QAM	1/0	23.00	21.62	21.57	21.35	16QAM	1/0	23.00	21.48	21.76	21.34
	1/37	23.00	21.82	21.78	21.74		1/50	23.00	21.66	21.69	21.50
	1/74	23.00	21.84	21.85	21.89		1/99	23.00	21.71	21.73	21.55
	36/0	22.00	20.42	20.57	20.46		50/0	22.00	20.54	20.56	20.44
	36/19	22.00	20.70	20.72	20.89		50/25	22.00	20.79	20.69	20.57
	36/39	22.00	20.59	20.65	20.71		50/50	22.00	20.47	20.66	20.51
	75/0	22.00	20.64	20.60	20.50		100/0	22.00	20.51	20.51	20.63
64QAM	1/0	22.00	20.57	20.78	20.71	64QAM	1/0	22.00	20.14	20.61	20.45
	1/37	22.00	20.63	20.76	20.72		1/50	22.00	20.42	20.58	20.40
	1/74	22.00	20.57	20.66	20.58		1/99	22.00	20.80	20.66	20.79
	36/0	21.00	19.54	19.57	19.49		50/0	21.00	19.49	19.52	19.71
	36/19	21.00	19.75	19.69	19.84		50/25	21.00	19.70	19.56	19.71
	36/39	21.00	19.97	19.81	19.94		50/50	21.00	19.80	19.64	19.68
	75/0	21.00	19.45	19.56	19.62		100/0	21.00	19.65	19.54	19.39
256QAM	1/0	19.00	17.43	17.51	17.56	256QAM	1/0	19.00	17.47	17.42	17.48
	1/37	19.00	17.51	17.35	17.45		1/50	19.00	17.71	17.61	17.69
	1/74	19.00	17.54	17.41	17.32		1/99	19.00	17.71	17.75	17.71
	36/0	19.00	17.30	17.48	17.47		50/0	19.00	17.71	17.58	17.56
	36/19	19.00	17.62	17.66	17.69		50/25	19.00	17.41	17.55	17.45
	36/39	19.00	17.47	17.59	17.53		50/50	19.00	17.64	17.65	17.69
	75/0	19.00	17.61	17.45	17.44		100/0	19.00	17.76	17.62	17.76

Note: The tested channel results are marks in bold.

2. Conducted power measurement results of LTE B4

LTE B4/BW=1.4M		Average Conducted Power(dBm)				LTE B4/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			19957/1710.7	20175/1732.5	20393/1754.3				19965/1711.5	20175/1732.5	20385/1753.5
QPSK	1/0	23.00	22.03	21.31	22.25	QPSK	1/0	23.00	22.25	22.29	22.37
	1/2	23.00	22.36	22.40	22.51		1/7	23.00	22.18	22.16	22.27
	1/5	23.00	22.15	22.24	22.15		1/14	23.00	22.07	22.21	22.14
	3/0	23.00	21.61	21.91	21.40		8/0	22.00	21.46	21.46	21.55
	3/1	23.00	21.71	21.48	21.52		8/3	22.00	21.49	21.41	21.37
	3/3	23.00	21.73	21.64	21.32		8/7	22.00	21.62	21.54	21.70
	6/0	22.00	21.14	21.16	21.40		15/0	22.00	21.34	21.44	21.26
16QAM	1/0	22.00	21.19	21.23	21.50	16QAM	1/0	22.00	21.34	21.59	21.70
	1/2	22.00	21.10	21.27	21.58		1/7	22.00	21.74	21.18	21.02
	1/5	22.00	21.28	21.33	21.34		1/14	22.00	21.41	21.84	21.79
	3/0	22.00	20.25	20.46	20.66		8/0	21.00	20.38	20.57	20.32
	3/1	22.00	20.62	20.35	20.25		8/3	21.00	20.66	20.39	20.28
	3/3	22.00	20.35	20.36	20.47		8/7	21.00	20.49	20.53	20.61
	6/0	21.00	19.47	20.05	20.28		15/0	21.00	20.28	20.53	20.33
64QAM	1/0	21.00	20.14	20.23	20.47	64QAM	1/0	21.00	20.47	20.44	20.48
	1/2	21.00	20.90	20.33	20.20		1/7	21.00	20.34	20.04	20.09
	1/5	21.00	20.03	19.89	20.16		1/14	21.00	20.34	20.35	20.30
	3/0	21.00	19.40	19.39	19.29		8/0	20.00	19.31	19.49	19.42
	3/1	21.00	19.47	19.54	19.52		8/3	20.00	19.86	19.49	19.44
	3/3	21.00	19.70	19.64	19.50		8/7	20.00	19.25	19.45	19.28
	6/0	20.00	19.56	19.52	19.61		15/0	20.00	19.39	19.65	19.55
256QAM	1/0	18.00	17.49	17.11	17.02	64QAM	1/0	18.00	17.18	17.25	17.65
	1/2	18.00	17.22	17.34	16.98		1/7	18.00	17.54	17.43	17.79
	1/5	18.00	17.11	17.18	17.23		1/14	18.00	17.38	17.30	16.91
	3/0	18.00	17.21	16.93	17.29		8/0	18.00	17.15	17.42	17.41
	3/1	18.00	17.17	17.55	16.98		8/3	18.00	17.67	17.43	17.24
	3/3	18.00	17.34	17.18	17.18		8/7	18.00	17.27	17.52	17.56
	6/0	18.00	16.82	17.17	17.14		15/0	18.00	17.60	17.45	17.50

LTE B4/BW=5M		Average Conducted Power(dBm)				LTE B4/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			19975/1712.5	20175/1732.5	20375/1752.5				20000/1715	20175/1732.5	20350/1750
QPSK	1/0	23.00	22.36	22.31	22.16	QPSK	1/0	23.00	22.43	22.21	22.27
	1/12	23.00	22.40	22.46	22.43		1/24	23.00	22.24	22.29	22.45
	1/24	23.00	22.22	22.32	22.19		1/49	23.00	22.15	22.15	22.20
	12/0	22.00	21.46	21.25	21.43		25/0	22.00	21.50	21.44	21.41
	12/6	22.00	21.53	21.49	21.50		25/12	22.00	21.52	21.53	21.45
	12/13	22.00	21.42	21.40	21.54		25/25	22.00	21.47	21.41	21.53
	25/0	22.00	21.25	21.40	21.44		50/0	22.00	21.32	21.48	21.32
16QAM	1/0	22.00	21.54	21.85	21.82	16QAM	1/0	22.00	21.50	21.69	21.65
	1/12	22.00	21.47	21.39	21.30		1/24	22.00	21.56	21.37	21.20
	1/24	22.00	21.81	21.92	21.88		1/49	22.00	21.58	21.73	21.71
	12/0	21.00	20.54	20.36	20.21		25/0	21.00	20.43	20.41	20.27
	12/6	21.00	20.41	20.49	20.42		25/12	21.00	20.61	20.46	20.38
	12/13	21.00	20.32	20.40	20.23		25/25	21.00	20.33	20.40	20.59
	25/0	21.00	20.29	20.41	20.58		50/0	21.00	20.25	20.43	20.37
64QAM	1/0	21.00	20.51	20.53	20.56	64QAM	1/0	21.00	20.47	20.47	20.43
	1/12	21.00	20.56	20.33	20.25		1/24	21.00	20.37	20.18	20.11
	1/24	21.00	20.57	20.61	20.60		1/49	21.00	20.48	20.44	20.40
	12/0	20.00	19.27	19.42	19.58		25/0	20.00	19.49	19.47	19.36
	12/6	20.00	19.63	19.64	19.82		25/12	20.00	19.68	19.52	19.63
	12/13	20.00	19.55	19.57	19.53		25/25	20.00	19.21	19.40	19.27
	25/0	20.00	19.68	19.51	19.38		50/0	20.00	19.42	19.51	19.63
256QAM	1/0	18.00	17.47	17.31	17.40	256QAM	1/0	18.00	17.25	17.38	17.46
	1/12	18.00	17.46	17.65	17.53		1/24	18.00	17.45	17.59	17.72
	1/24	18.00	16.81	17.13	17.32		1/49	18.00	17.26	17.14	17.03
	12/0	18.00	17.72	17.47	17.62		25/0	18.00	17.33	17.39	17.29
	12/6	18.00	17.59	17.66	17.49		25/12	18.00	17.66	17.49	17.36
	12/13	18.00	17.52	17.48	17.38		25/25	18.00	17.40	17.57	17.66
	25/0	18.00	17.35	17.38	17.43		50/0	18.00	17.65	17.51	17.65

LTE B4/BW=15M		Average Conducted Power(dBm)				LTE B4/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20025/1717.5	20175/1732.5	20325/1747.5				20050/1720	20175/1732.5	20300/1745
QPSK	1/0	23.00	22.44	22.10	22.50	QPSK	1/0	23.00	22.50	22.44	22.42
	1/37	23.00	22.36	22.42	22.28		1/50	23.00	22.42	22.46	22.30
	1/74	23.00	22.30	22.35	22.33		1/99	23.00	22.43	22.51	22.36
	36/0	22.00	21.61	21.45	21.51		50/0	22.00	21.25	21.10	21.18
	36/19	22.00	21.60	21.55	21.40		50/25	22.00	21.32	21.48	21.50
	36/39	22.00	21.59	21.60	21.58		50/50	22.00	21.52	21.57	21.51
	75/0	22.00	21.74	21.61	21.60		100/0	22.00	21.78	21.60	21.44
16QAM	1/0	22.00	21.49	21.36	21.34	16QAM	1/0	22.00	21.23	21.20	21.44
	1/37	22.00	21.82	21.64	21.67		1/50	22.00	21.23	21.40	21.26
	1/74	22.00	21.73	21.75	21.66		1/99	22.00	21.59	21.72	21.60
	36/0	21.00	20.45	20.34	20.23		50/0	21.00	20.35	20.21	20.03
	36/19	21.00	20.80	20.62	20.49		50/25	21.00	20.66	20.56	20.40
	36/39	21.00	20.43	20.46	20.65		50/50	21.00	20.33	20.47	20.65
	75/0	21.00	20.74	20.70	20.60		100/0	21.00	20.69	20.52	20.42
64QAM	1/0	21.00	20.77	20.48	20.21	64QAM	1/0	21.00	20.36	20.16	20.47
	1/37	21.00	20.56	20.53	20.36		1/50	21.00	20.48	20.35	20.51
	1/74	21.00	20.53	20.50	20.41		1/99	21.00	20.74	20.59	20.78
	36/0	20.00	19.43	19.38	19.54		50/0	20.00	19.24	19.21	19.05
	36/19	20.00	19.57	19.54	19.72		50/25	20.00	19.69	19.61	19.65
	36/39	20.00	19.37	19.52	19.45		50/50	20.00	19.44	19.58	19.57
	75/0	20.00	19.65	19.51	19.52		100/0	20.00	19.43	19.54	19.53
256QAM	1/0	18.00	17.24	17.26	17.15	256QAM	1/0	18.00	17.29	17.69	17.43
	1/37	18.00	17.42	17.58	17.73		1/50	18.00	17.49	17.57	17.40
	1/74	18.00	17.66	17.47	17.44		1/99	18.00	17.45	17.29	17.25
	36/0	18.00	17.57	17.54	17.63		50/0	18.00	17.63	17.60	17.63
	36/19	18.00	17.71	17.57	17.73		50/25	18.00	17.40	17.57	17.60
	36/39	18.00	17.30	17.47	17.32		50/50	18.00	17.40	17.39	17.46
	75/0	18.00	17.65	17.56	17.53		100/0	18.00	17.61	17.56	17.39

Note: The tested channel results are marks in bold.

3. Conducted power measurement results of LTE B5

LTE B5/BW=1.4M		Average Conducted Power(dBm)				LTE B5/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20407/824.7	20525/836.5	20643/848.3				20415/825.5	20525/836.5	20635/847.5
QPSK	1/0	24.00	22.24	22.20	22.45	QPSK	1/0	24.00	22.48	22.43	22.41
	1/2	24.00	22.32	22.42	22.55		1/7	24.00	22.43	22.61	22.43
	1/5	24.00	22.34	22.57	22.29		1/14	24.00	22.21	22.49	22.33
	3/0	23.00	21.92	22.30	22.15		8/0	23.00	21.54	21.66	21.71
	3/1	23.00	22.07	22.03	22.01		8/3	23.00	21.72	21.52	21.68
	3/3	23.00	22.10	21.90	21.82		8/7	23.00	21.42	21.48	21.25
	6/0	23.00	21.45	21.54	21.79		15/0	23.00	21.61	21.79	21.44
16QAM	1/0	23.00	21.54	21.39	21.54	16QAM	1/0	23.00	21.74	21.62	21.59
	1/2	23.00	21.46	21.75	22.04		1/7	23.00	21.68	22.01	21.94
	1/5	23.00	21.95	21.87	21.66		1/14	23.00	21.68	21.84	21.48
	3/0	22.00	20.95	20.85	21.09		8/0	22.00	20.37	20.50	20.45
	3/1	22.00	20.77	20.66	20.86		8/3	22.00	20.68	20.70	20.60
	3/3	22.00	20.56	20.56	20.87		8/7	22.00	20.86	20.54	20.33
	6/0	22.00	20.45	20.54	20.73		15/0	22.00	20.84	20.77	20.53
64QAM	1/0	22.00	20.58	20.73	20.66	64QAM	1/0	22.00	21.04	20.85	21.27
	1/2	22.00	21.19	20.69	20.54		1/7	22.00	21.18	21.01	21.22
	1/5	22.00	20.20	20.38	20.34		1/14	22.00	21.21	21.04	20.82
	3/0	21.00	19.72	19.95	19.86		8/0	21.00	19.74	20.09	19.72
	3/1	21.00	19.62	19.56	19.64		8/3	21.00	19.93	20.10	20.14
	3/3	21.00	19.86	20.03	19.58		8/7	21.00	20.01	19.96	20.13
	6/0	21.00	20.04	20.22	20.26		15/0	21.00	19.85	19.93	19.67
256QAM	1/0	19.00	17.89	17.68	17.43	256QAM	1/0	19.00	17.53	17.95	17.86
	1/2	19.00	17.79	17.41	17.49		1/7	19.00	17.37	17.33	17.20
	1/5	19.00	17.51	17.51	17.36		1/14	19.00	17.33	17.64	17.97
	3/0	19.00	17.37	17.63	17.66		8/0	19.00	17.80	17.74	17.60
	3/1	19.00	17.57	17.68	17.65		8/3	19.00	17.78	17.74	17.36
	3/3	19.00	17.68	17.39	17.35		8/7	19.00	17.62	17.58	17.29
	6/0	19.00	17.38	17.60	17.60		15/0	19.00	17.80	17.85	17.74

LTE B5/BW=5M		Average Conducted Power(dBm)				LTE B5/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			20425/826.5	20525/836.5	20625/846.5				20450/829	20525/836.5	20600/844
QPSK	1/0	24.00	22.58	22.56	22.52	QPSK	1/0	24.00	22.54	22.61	22.59
	1/12	24.00	22.59	22.54	22.45		1/24	24.00	22.53	22.44	22.38
	1/24	24.00	22.27	22.43	22.25		1/49	24.00	22.38	22.49	22.48
	12/0	23.00	21.52	21.60	21.78		25/0	23.00	21.43	21.54	21.48
	12/6	23.00	21.78	21.62	21.77		25/12	23.00	21.68	21.58	21.40
	12/13	23.00	21.60	21.53	21.35		25/25	23.00	21.66	21.61	21.49
	25/0	23.00	21.47	21.60	21.58		50/0	23.00	21.69	21.64	21.52
16QAM	1/0	23.00	21.72	21.78	21.72	16QAM	1/0	23.00	21.73	21.79	21.91
	1/12	23.00	21.69	21.88	21.87		1/24	23.00	21.79	21.77	21.79
	1/24	23.00	21.65	21.75	21.63		1/49	23.00	21.87	21.69	21.59
	12/0	22.00	20.53	20.58	20.48		25/0	22.00	20.51	20.59	20.62
	12/6	22.00	20.52	20.63	20.47		25/12	22.00	20.56	20.63	20.79
	12/13	22.00	20.67	20.54	20.48		25/25	22.00	20.43	20.61	20.48
	25/0	22.00	20.66	20.75	20.56		50/0	22.00	20.39	20.57	20.48
64QAM	1/0	22.00	20.95	20.93	21.19	64QAM	1/0	22.00	20.99	20.91	21.06
	1/12	22.00	21.15	21.01	21.12		1/24	22.00	21.14	21.09	21.21
	1/24	22.00	21.24	21.10	20.96		1/49	22.00	20.99	21.04	21.00
	12/0	21.00	19.86	19.98	19.88		25/0	21.00	19.83	19.91	19.96
	12/6	21.00	20.04	19.95	20.01		25/12	21.00	20.14	20.04	20.13
	12/13	21.00	20.15	20.03	20.06		25/25	21.00	20.10	19.93	19.80
	25/0	21.00	19.95	20.01	19.85		50/0	21.00	19.90	20.00	20.18
256QAM	1/0	19.00	17.39	17.76	17.77	256QAM	1/0	19.00	17.54	17.88	17.78
	1/12	19.00	17.32	17.43	17.33		1/24	19.00	17.54	17.61	17.54
	1/24	19.00	17.46	17.63	17.79		1/49	19.00	17.45	17.55	17.53
	12/0	19.00	17.64	17.66	17.58		25/0	19.00	17.66	17.57	17.58
	12/6	19.00	17.78	17.66	17.47		25/12	19.00	17.49	17.59	17.57
	12/13	19.00	17.43	17.53	17.38		25/25	19.00	17.79	17.68	17.74
	25/0	19.00	17.67	17.74	17.90		50/0	19.00	17.68	17.61	17.58

Note: The tested channel results are marks in bold.

4. Conducted power measurement results of LTE B13

LTE B13/BW=5M		Average Conducted Power(dBm)				LTE B13/BW=10M		Average Conducted Power(dBm)	
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency (MHz)
			23205/779.5	23230/782	23255/784.5				23230/782
QPSK	1/0	24.00	22.73	22.84	22.84	QPSK	1/0	24.00	22.77
	1/12	24.00	22.63	22.81	22.73		1/24	24.00	22.84
	1/24	24.00	22.78	22.74	22.70		1/49	24.00	22.88
	12/0	23.00	21.83	21.84	21.92		25/0	23.00	21.86
	12/6	23.00	21.79	21.81	21.86		25/12	23.00	21.91
	12/13	23.00	21.75	21.91	21.80		25/25	23.00	21.84
	25/0	23.00	21.89	21.94	21.93		50/0	23.00	21.97
16QAM	1/0	23.00	21.56	21.89	21.82	16QAM	1/0	23.00	22.08
	1/12	23.00	22.22	22.14	22.06		1/24	23.00	21.97
	1/24	23.00	22.09	21.93	21.89		1/49	23.00	21.90
	12/0	22.00	20.58	20.65	20.66		25/0	22.00	20.78
	12/6	22.00	21.03	21.09	20.91		25/12	22.00	21.01
	12/13	22.00	21.07	21.05	20.94		25/25	22.00	20.91
	25/0	22.00	20.78	20.92	20.95		50/0	22.00	20.98
64QAM	1/0	22.00	20.80	20.95	21.06	64QAM	1/0	22.00	21.01
	1/12	22.00	21.02	21.06	20.96		1/24	22.00	21.11
	1/24	22.00	21.06	21.03	21.09		1/49	22.00	21.15
	12/0	21.00	20.27	20.29	20.10		25/0	21.00	20.35
	12/6	21.00	20.04	20.21	20.37		25/12	21.00	20.28
	12/13	21.00	20.29	20.29	20.20		25/25	21.00	20.34
	25/0	21.00	20.21	20.33	20.39		50/0	21.00	20.36
256QAM	1/0	19.00	17.77	18.10	17.96	256QAM	1/0	19.00	18.12
	1/12	19.00	18.13	18.01	18.14		1/24	19.00	18.03
	1/24	19.00	17.88	18.06	17.93		1/49	19.00	17.88
	12/0	19.00	17.96	17.78	17.78		25/0	19.00	17.85
	12/6	19.00	18.20	18.03	17.99		25/12	19.00	17.92
	12/13	19.00	18.11	17.95	18.03		25/25	19.00	17.91
	25/0	19.00	17.86	17.86	17.71		50/0	19.00	17.87

Note: The tested channel results are marks in bold.

5. Conducted power measurement results of LTE B66

LTE B66/BW=1.4M		Average Conducted Power(dBm)				LTE B66/BW=3M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			131979/ 1710.7	132322/ 1745	132665/ 1779.3				131987/ 1711.5	132322/ 1745	132657/ 1778.5
QPSK	1/0	23.00	22.00	21.75	22.22	QPSK	1/0	23.00	22.05	22.16	22.12
	1/2	23.00	22.16	22.12	22.17		1/7	23.00	21.85	22.08	22.17
	1/5	23.00	22.16	22.19	22.18		1/14	23.00	22.12	22.03	21.92
	3/0	23.00	21.83	21.67	21.23		8/0	22.00	21.64	21.72	21.81
	3/1	23.00	21.64	21.85	21.76		8/3	22.00	21.38	21.45	21.24
	3/3	23.00	21.83	21.53	21.53		8/7	22.00	21.48	21.52	21.57
	6/0	22.00	20.96	21.41	21.23		15/0	22.00	21.43	21.41	21.19
16QAM	1/0	22.00	21.48	21.19	21.43	16QAM	1/0	22.00	21.30	21.56	21.20
	1/2	22.00	20.94	21.14	21.87		1/7	22.00	21.76	21.54	21.52
	1/5	22.00	21.29	21.50	21.21		1/14	22.00	21.34	21.66	21.39
	3/0	22.00	20.33	20.68	20.54		8/0	21.00	20.16	20.27	20.48
	3/1	22.00	20.43	20.31	20.24		8/3	21.00	19.66	20.11	19.99
	3/3	22.00	20.40	20.20	20.55		8/7	21.00	20.41	20.25	20.34
	6/0	21.00	19.54	20.15	20.28		15/0	21.00	20.21	20.31	20.15
64QAM	1/0	21.00	20.38	20.27	20.28	64QAM	1/0	21.00	20.48	20.46	20.20
	1/2	21.00	20.56	20.37	20.19		1/7	21.00	20.66	20.69	20.43
	1/5	21.00	20.01	19.95	19.87		1/14	21.00	20.57	20.30	20.19
	3/0	21.00	19.30	19.19	19.32		8/0	20.00	19.78	19.83	19.75
	3/1	21.00	19.29	19.47	19.28		8/3	20.00	19.66	19.66	19.70
	3/3	21.00	19.57	19.35	19.39		8/7	20.00	19.35	19.51	19.54
	6/0	20.00	19.44	19.34	19.38		15/0	20.00	19.17	19.39	19.55
256QAM	1/0	18.00	17.41	17.12	17.09	256QAM	1/0	18.00	17.38	16.94	16.93
	1/2	18.00	17.10	17.12	17.18		1/7	18.00	17.23	16.98	17.26
	1/5	18.00	16.95	17.44	17.35		1/14	18.00	17.88	17.77	17.47
	3/0	18.00	17.09	17.22	17.13		8/0	18.00	17.73	17.47	17.42
	3/1	18.00	17.10	17.33	16.99		8/3	18.00	17.29	17.37	17.43
	3/3	18.00	17.34	17.22	16.87		8/7	18.00	17.49	17.75	17.73
	6/0	18.00	16.73	17.08	17.00		15/0	18.00	17.00	17.32	17.11

LTE B66/BW=5M		Average Conducted Power(dBm)				LTE B66/BW=10M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			131997/1712.5	132322/1745	132647/1777.5				132022/1715	132322/1745	132622/1775
QPSK	1/0	23.00	22.13	22.17	22.18	QPSK	1/0	23.00	22.12	22.15	22.15
	1/12	23.00	22.13	22.12	22.22		1/24	23.00	22.03	22.16	22.18
	1/24	23.00	22.02	22.12	21.96		1/49	23.00	22.08	22.03	22.08
	12/0	22.00	21.68	21.66	21.48		25/0	22.00	21.54	21.68	21.75
	12/6	22.00	21.39	21.22	21.25		25/12	22.00	21.55	21.39	21.28
	12/13	22.00	21.02	21.11	21.24		25/25	22.00	21.38	21.39	21.49
	25/0	22.00	21.33	21.21	21.09		50/0	22.00	21.44	21.55	21.37
16QAM	1/0	22.00	21.43	21.36	21.10	16QAM	1/0	22.00	21.23	21.40	21.21
	1/12	22.00	21.53	21.65	21.73		1/24	22.00	21.71	21.62	21.47
	1/24	22.00	21.66	21.49	21.51		1/49	22.00	21.36	21.50	21.54
	12/0	21.00	20.67	20.57	20.53		25/0	21.00	20.31	20.35	20.41
	12/6	21.00	19.99	20.12	20.21		25/12	21.00	19.84	20.01	19.85
	12/13	21.00	20.34	20.33	20.38		25/25	21.00	20.36	20.34	20.26
	25/0	21.00	20.41	20.29	20.33		50/0	21.00	20.15	20.28	20.32
64QAM	1/0	21.00	20.54	20.75	20.53	64QAM	1/0	21.00	20.56	20.55	20.23
	1/12	21.00	20.67	20.51	20.44		1/24	21.00	20.58	20.51	20.41
	1/24	21.00	20.26	20.21	20.20		1/49	21.00	20.49	20.41	20.35
	12/0	20.00	19.66	19.50	19.33		25/0	20.00	19.68	19.70	19.61
	12/6	20.00	19.67	19.59	19.66		25/12	20.00	19.74	19.69	19.86
	12/13	20.00	19.36	19.38	19.35		25/25	20.00	19.48	19.34	19.46
	25/0	20.00	19.31	19.35	19.51		50/0	20.00	19.35	19.37	19.53
256QAM	1/0	18.00	17.05	17.43	17.23	256QAM	1/0	18.00	17.46	17.10	16.98
	1/12	18.00	17.23	17.08	16.90		1/24	18.00	17.10	17.07	17.14
	1/24	18.00	17.49	17.51	17.43		1/49	18.00	17.69	17.68	17.65
	12/0	18.00	17.18	17.33	17.52		25/0	18.00	17.64	17.45	17.42
	12/6	18.00	17.28	17.37	17.47		25/12	18.00	17.18	17.18	17.32
	12/13	18.00	17.51	17.34	17.33		25/25	18.00	17.67	17.69	17.60
	25/0	18.00	17.44	17.29	17.16		50/0	18.00	17.09	17.17	16.99

LTE B66/BW=15M		Average Conducted Power(dBm)				LTE B66/BW=20M		Average Conducted Power(dBm)			
Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)			Modulation	RB Size/Offset	Max. Tune-up	Channel/Frequency(MHz)		
			132047/1717.5	132322/1745	132597/1772.5				132072/1720	132322/1745	132572/1770
QPSK	1/0	23.00	22.13	22.12	22.21	QPSK	1/0	23.00	22.22	22.37	22.24
	1/37	23.00	22.14	22.25	22.15		1/50	23.00	22.28	22.26	22.05
	1/74	23.00	22.12	22.22	22.12		1/99	23.00	22.25	22.22	22.01
	36/0	22.00	21.38	21.49	21.57		50/0	22.00	21.53	21.30	21.35
	36/19	22.00	21.31	21.33	21.30		50/25	22.00	21.60	21.26	21.44
	36/39	22.00	21.12	21.28	21.47		50/50	22.00	21.24	21.30	21.29
	75/0	22.00	21.40	21.39	21.41		100/0	22.00	21.23	21.22	21.31
16QAM	1/0	22.00	21.21	21.38	21.07	16QAM	1/0	22.00	21.58	21.53	21.21
	1/37	22.00	21.63	21.47	21.59		1/50	22.00	21.71	21.73	21.74
	1/74	22.00	21.62	21.48	21.48		1/99	22.00	21.55	21.65	21.38
	36/0	21.00	20.71	20.52	20.67		50/0	21.00	20.56	20.48	20.45
	36/19	21.00	20.26	20.16	20.02		50/25	21.00	20.20	20.27	20.27
	36/39	21.00	20.12	20.27	20.12		50/50	21.00	20.48	20.30	20.49
	75/0	21.00	20.19	20.26	20.33		100/0	21.00	20.50	20.34	20.29
64QAM	1/0	21.00	20.76	20.48	20.24	64QAM	1/0	21.00	20.44	20.57	20.44
	1/37	21.00	20.28	20.40	20.58		1/50	21.00	20.57	20.50	20.57
	1/74	21.00	20.33	20.35	20.36		1/99	21.00	20.76	20.71	20.65
	36/0	20.00	19.48	19.64	19.49		50/0	20.00	19.52	19.67	19.85
	36/19	20.00	19.77	19.58	19.58		50/25	20.00	19.41	19.60	19.74
	36/39	20.00	19.50	19.39	19.50		50/50	20.00	19.41	19.56	19.59
	75/0	20.00	19.32	19.27	19.42		100/0	20.00	19.44	19.46	19.39
256QAM	1/0	18.00	17.20	17.28	17.27	256QAM	1/0	18.00	17.67	17.38	17.13
	1/37	18.00	17.23	17.10	17.04		1/50	18.00	17.18	17.13	17.13
	1/74	18.00	17.55	17.57	17.57		1/99	18.00	17.54	17.46	17.34
	36/0	18.00	17.50	17.47	17.28		50/0	18.00	17.52	17.50	17.54
	36/19	18.00	17.19	17.37	17.44		50/25	18.00	17.46	17.44	17.41
	36/39	18.00	17.65	17.50	17.51		50/50	18.00	17.45	17.32	17.47
	75/0	18.00	17.13	17.23	17.31		100/0	18.00	17.20	17.31	17.48

Note: The tested channel results are marks in bold.

6. Conducted power measurement results of 5G NR N2

CP-OFDM_SCS-15KHz							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	QPSK	50	25	22.11	22.31	22.16	24.0
20	16QAM	50	25	21.74	21.91	21.76	23.0
20	64QAM	50	25	20.14	20.29	20.34	21.5
20	256QAM	50	25	18.15	18.23	18.39	19.5

DFT-s-OFDM_SCS-15KHz							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	PI/2 BPSK	2	0	21.98	22.18	22.26	23.5
20	PI/2 BPSK	2	104	22.14	22.24	22.05	
20	PI/2 BPSK	1	0	22.14	22.13	22.26	
20	PI/2 BPSK	1	105	22.34	22.26	22.36	
20	PI/2 BPSK	100	0	22.29	22.22	22.38	23.5
20	PI/2 BPSK	50	25	22.54	22.39	22.24	24.0
20	PI/2 BPSK	1	1	22.31	22.23	22.33	
20	PI/2 BPSK	1	104	22.39	22.27	22.08	
20	QPSK	2	0	21.72	21.61	21.73	23.5
20	QPSK	2	104	21.65	21.72	21.57	
20	QPSK	1	0	21.90	21.73	21.66	
20	QPSK	1	105	21.80	21.83	21.67	
20	QPSK	100	0	21.67	21.67	21.67	23.5
20	QPSK	50	25	22.12	22.71	22.19	24.0
20	QPSK	1	1	22.23	22.27	22.10	
20	QPSK	1	104	22.45	22.31	22.55	
20	16QAM	2	0	20.40	20.51	20.33	22.0
20	16QAM	2	104	20.32	20.49	20.68	
20	16QAM	1	0	21.04	20.94	20.98	
20	16QAM	1	105	21.24	21.09	21.08	
20	16QAM	100	0	20.55	20.70	20.58	22.0
20	16QAM	50	25	21.65	21.80	21.62	23.0
20	16QAM	1	1	21.17	21.02	21.00	
20	16QAM	1	104	21.01	21.13	20.99	
20	64QAM	2	0	19.48	19.62	19.72	21.5
20	64QAM	2	104	19.58	19.75	19.92	
20	64QAM	1	0	19.80	19.64	19.53	
20	64QAM	1	105	19.95	19.78	19.65	
20	64QAM	100	0	19.73	19.82	19.98	21.5
20	64QAM	50	25	19.87	19.77	19.74	21.5
20	64QAM	1	1	19.54	19.57	19.54	
20	64QAM	1	104	19.75	19.67	19.67	

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				372000	376000	380000	
Frequency (MHz)				1860	1880	1900	
20	256QAM	2	0	17.57	17.70	17.80	19.5
20	256QAM	2	104	17.83	17.69	17.57	
20	256QAM	1	0	17.65	17.83	17.98	
20	256QAM	1	105	17.88	17.88	17.98	
20	256QAM	100	0	17.92	17.77	17.96	19.5
20	256QAM	50	25	17.72	17.81	17.96	19.5
20	256QAM	1	1	17.68	17.81	17.93	
20	256QAM	1	104	17.95	17.83	17.70	
Channel				371500	376000	380500	Tune-up limit (dBm)
Frequency (MHz)				1857.5	1880	1902.5	
15	PI/2 BPSK	36	18	22.11	22.32	22.48	24.0
15	QPSK	36	18	22.34	22.36	22.21	24.0
15	16QAM	36	18	21.35	21.48	21.25	23.0
15	64QAM	36	18	19.68	19.78	19.88	21.5
15	256QAM	36	18	17.54	17.88	17.68	19.5
Channel				371000	376000	381000	Tune-up limit (dBm)
Frequency (MHz)				1855	1880	1905	
10	PI/2 BPSK	25	12	22.12	22.50	22.51	24.0
10	QPSK	25	12	22.44	22.43	22.30	24.0
10	16QAM	25	12	21.27	21.43	21.42	23.0
10	64QAM	25	12	19.92	19.84	19.69	21.5
10	256QAM	25	12	17.74	17.91	17.82	19.5
Channel				370500	376000	381500	Tune-up limit (dBm)
Frequency (MHz)				1852.5	1880	1907.5	
5	PI/2 BPSK	12	6	22.09	22.42	22.38	24.0
5	QPSK	12	6	22.29	22.44	22.58	24.0
5	16QAM	12	6	21.16	21.30	21.48	23.0
5	64QAM	12	6	19.90	19.86	19.90	21.5
5	256QAM	12	6	17.73	17.71	17.80	19.5

Note: The tested channel results are marks in bold.

7. Conducted power measurement results of 5G NR N5

CP-OFDM_SCS-15KHz							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	QPSK	50	25	22.42	22.68	22.51	24.0
20	16QAM	50	25	21.88	21.93	21.88	23.0
20	64QAM	50	25	20.27	20.32	20.40	21.5
20	256QAM	50	25	18.41	18.45	18.45	19.5

DFT-s-OFDM_SCS-15KHz							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	PI/2 BPSK	2	0	22.05	22.19	22.34	23.5
20	PI/2 BPSK	2	104	22.27	22.37	22.26	
20	PI/2 BPSK	1	0	21.98	22.14	21.95	
20	PI/2 BPSK	1	105	22.34	22.42	22.46	
20	PI/2 BPSK	100	0	22.26	22.27	22.34	23.5
20	PI/2 BPSK	50	25	22.69	22.68	22.79	24.0
20	PI/2 BPSK	1	1	22.59	22.63	22.49	
20	PI/2 BPSK	1	104	22.42	22.40	22.36	
20	QPSK	2	0	21.48	21.57	21.70	23.5
20	QPSK	2	104	22.03	21.85	22.01	
20	QPSK	1	0	21.73	21.56	21.40	
20	QPSK	1	105	21.76	21.86	21.93	
20	QPSK	100	0	21.61	21.72	21.56	23.5
20	QPSK	50	25	22.45	22.86	22.52	24.0
20	QPSK	1	1	22.55	22.53	22.56	
20	QPSK	1	104	22.83	22.75	22.80	
20	16QAM	2	0	20.82	20.63	20.71	22.0
20	16QAM	2	104	20.75	20.76	20.85	
20	16QAM	1	0	20.96	20.86	20.67	
20	16QAM	1	105	21.24	21.29	21.13	
20	16QAM	100	0	20.72	20.91	21.06	22.0
20	16QAM	50	25	21.85	21.93	22.02	23.0
20	16QAM	1	1	22.13	21.94	21.97	
20	16QAM	1	104	22.13	22.04	22.02	
20	64QAM	2	0	20.02	20.07	20.11	21.5
20	64QAM	2	104	20.48	20.33	20.16	
20	64QAM	1	0	20.32	20.32	20.13	
20	64QAM	1	105	20.61	20.49	20.67	
20	64QAM	100	0	20.40	20.45	20.58	21.5
20	64QAM	50	25	20.33	20.36	20.21	21.5
20	64QAM	1	1	20.43	20.28	20.33	
20	64QAM	1	104	20.39	20.52	20.41	

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				166800	167300	167800	
Frequency (MHz)				834	836.5	839	
20	256QAM	2	0	18.49	18.32	18.23	19.5
20	256QAM	2	104	18.07	18.11	18.18	
20	256QAM	1	0	18.68	18.57	18.43	
20	256QAM	1	105	18.17	18.32	18.13	
20	256QAM	100	0	18.40	18.42	18.60	19.5
20	256QAM	50	25	18.28	18.36	18.49	19.5
20	256QAM	1	1	18.33	18.51	18.69	
20	256QAM	1	104	18.31	18.39	18.33	
Channel				166300	167300	168300	Tune-up limit (dBm)
Frequency (MHz)				831.5	836.5	841.5	
15	PI/2 BPSK	36	18	22.51	22.64	22.70	24.0
15	QPSK	36	18	22.70	22.82	22.79	24.0
15	16QAM	36	18	22.03	21.87	21.78	23.0
15	64QAM	36	18	20.35	20.47	20.44	21.5
15	256QAM	36	18	18.52	18.45	18.34	19.5
Channel				165800	167300	168800	Tune-up limit (dBm)
Frequency (MHz)				829	836.5	844	
10	PI/2 BPSK	25	12	22.34	22.27	22.26	24.0
10	QPSK	25	12	22.68	22.72	22.69	24.0
10	16QAM	25	12	21.14	20.96	20.96	23.0
10	64QAM	25	12	20.59	20.41	20.39	21.5
10	256QAM	25	12	18.38	18.42	18.60	19.5
Channel				165300	167300	169300	Tune-up limit (dBm)
Frequency (MHz)				826.5	836.5	846.5	
5	PI/2 BPSK	12	6	22.50	22.44	22.56	24.0
5	QPSK	12	6	22.74	22.69	22.60	24.0
5	16QAM	12	6	21.89	21.88	21.73	23.0
5	64QAM	12	6	20.47	20.31	20.31	21.5
5	256QAM	12	6	18.38	18.39	18.41	19.5

Note: The tested channel results are marks in bold.

8. Conducted power measurement results of 5G NR N66

CP-OFDM_SCS-15KHz							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				344000	349000	354000	
Frequency (MHz)				1720	1745	1770	
20	QPSK	50	25	22.49	22.64	22.32	23.0
20	16QAM	50	25	21.56	21.50	21.29	22.0
20	64QAM	50	25	20.04	20.01	19.80	20.5
20	256QAM	50	25	18.06	18.03	17.81	18.5

DFT-s-OFDM_SCS-15KHz							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				344000	349000	354000	
Frequency (MHz)				1720	1745	1770	
20	PI/2 BPSK	2	0	22.26	22.28	22.37	22.5
20	PI/2 BPSK	2	104	22.18	22.10	21.99	
20	PI/2 BPSK	1	0	22.28	22.33	22.41	
20	PI/2 BPSK	1	105	22.33	22.18	22.16	
20	PI/2 BPSK	100	0	22.26	22.23	22.06	22.5
20	PI/2 BPSK	50	25	22.87	22.78	22.75	23.0
20	PI/2 BPSK	1	1	22.77	22.81	22.87	
20	PI/2 BPSK	1	104	22.59	22.60	22.46	
20	QPSK	2	0	21.84	21.93	21.80	22.5
20	QPSK	2	104	21.77	21.63	21.75	
20	QPSK	1	0	21.84	21.68	21.59	
20	QPSK	1	105	21.36	21.53	21.48	
20	QPSK	100	0	21.81	21.67	21.83	22.5
20	QPSK	50	25	22.64	22.96	22.43	23.0
20	QPSK	1	1	22.95	22.60	22.69	
20	QPSK	1	104	22.57	22.56	22.30	
20	16QAM	2	0	20.59	20.73	20.90	21.0
20	16QAM	2	104	20.82	20.72	20.80	
20	16QAM	1	0	20.61	20.53	20.68	
20	16QAM	1	105	20.49	20.59	20.60	
20	16QAM	100	0	20.37	20.51	20.36	21.0
20	16QAM	50	25	21.79	21.83	21.92	22.0
20	16QAM	1	1	21.25	21.37	21.30	
20	16QAM	1	104	21.38	21.47	21.50	
20	64QAM	2	0	20.13	20.21	20.17	20.5
20	64QAM	2	104	19.91	20.08	20.24	
20	64QAM	1	0	20.11	20.07	19.94	
20	64QAM	1	105	20.17	20.00	20.06	
20	64QAM	100	0	19.93	19.86	19.98	20.5
20	64QAM	50	25	20.21	20.13	20.23	20.5
20	64QAM	1	1	20.05	20.09	20.03	
20	64QAM	1	104	20.18	20.11	19.97	

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				344000	349000	354000	
Frequency (MHz)				1720	1745	1770	
20	256QAM	2	0	18.38	18.19	18.26	18.5
20	256QAM	2	104	17.80	17.91	17.80	
20	256QAM	1	0	18.12	18.11	18.24	
20	256QAM	1	105	18.02	18.07	18.21	
20	256QAM	100	0	18.06	17.99	17.97	18.5
20	256QAM	50	25	17.94	18.09	18.21	18.5
20	256QAM	1	1	18.21	18.12	18.08	
20	256QAM	1	104	18.05	17.97	18.03	
Channel				343500	349000	354500	Tune-up limit (dBm)
Frequency (MHz)				1717.5	1745	1772.5	
15	PI/2 BPSK	36	18	22.44	22.47	22.31	23.0
15	QPSK	36	18	22.63	22.71	22.54	23.0
15	16QAM	36	18	21.68	21.55	21.49	22.0
15	64QAM	36	18	19.98	20.04	19.90	20.5
15	256QAM	36	18	17.95	18.09	18.13	18.5
Channel				343000	349000	355000	Tune-up limit (dBm)
Frequency (MHz)				1715	1745	1775	
10	PI/2 BPSK	25	12	22.58	22.48	22.36	23.0
10	QPSK	25	12	22.78	22.69	22.63	23.0
10	16QAM	25	12	21.68	21.64	21.51	22.0
10	64QAM	25	12	19.97	20.07	19.94	20.5
10	256QAM	25	12	18.04	18.06	17.91	18.5
Channel				342500	349000	355500	Tune-up limit (dBm)
Frequency (MHz)				1712.5	1745	1777.5	
5	PI/2 BPSK	12	6	22.46	22.59	22.37	23.0
5	QPSK	12	6	22.59	22.64	22.78	23.0
5	16QAM	12	6	21.56	21.51	21.61	22.0
5	64QAM	12	6	19.79	19.96	19.88	20.5
5	256QAM	12	6	17.95	17.91	17.97	18.5

Note: The tested channel results are marks in bold.

9. Conducted power measurement results of 5G NR N77

CP-OFDM_SCS-30KHz							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				620668	650000	679332	
Frequency (MHz)				3310.02	3750	4189.98	
20	QPSK	25	12	21.71	21.85	21.65	22.0
20	16QAM	25	12	20.26	20.25	19.44	21.0
20	64QAM	25	12	18.32	18.12	17.54	19.5
20	256QAM	25	12	16.75	16.65	16.11	17.5

DFT-s-OFDM_SCS-30KHz							
BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				620668	650000	679332	
Frequency (MHz)				3310.02	3750	4189.98	
20	PI/2 BPSK	2	0	20.58	20.43	20.15	21.5
20	PI/2 BPSK	2	49	20.54	20.51	20.17	
20	PI/2 BPSK	1	0	20.54	20.43	20.23	
20	PI/2 BPSK	1	50	20.46	20.56	20.18	
20	PI/2 BPSK	50	0	20.61	20.55	20.19	21.5
20	PI/2 BPSK	25	12	20.56	20.56	20.20	22.0
20	PI/2 BPSK	1	1	20.58	20.46	20.21	
20	PI/2 BPSK	1	49	20.51	20.45	20.19	
20	QPSK	2	0	20.61	20.89	20.18	21.5
20	QPSK	2	49	20.45	20.53	20.21	
20	QPSK	1	0	20.51	20.63	20.27	
20	QPSK	1	50	20.53	20.65	20.29	
20	QPSK	50	0	20.32	20.48	19.85	21.5
20	QPSK	25	12	21.76	21.87	21.68	22.0
20	QPSK	1	1	21.40	21.42	21.25	
20	QPSK	1	49	21.41	21.45	21.21	
20	16QAM	2	0	19.19	19.29	18.46	20.0
20	16QAM	2	49	19.24	19.26	18.43	
20	16QAM	1	0	19.07	18.95	18.54	
20	16QAM	1	50	19.13	18.94	18.53	
20	16QAM	50	0	19.21	19.20	18.57	20.0
20	16QAM	25	12	20.23	20.21	19.46	21.0
20	16QAM	1	1	20.07	19.91	19.52	
20	16QAM	1	49	20.15	19.96	19.46	
20	64QAM	2	0	18.25	18.19	17.57	19.5
20	64QAM	2	49	18.29	18.11	17.59	
20	64QAM	1	0	18.25	18.15	17.58	
20	64QAM	1	50	18.31	18.14	17.61	
20	64QAM	50	0	18.29	18.15	17.64	19.5
20	64QAM	25	12	18.30	18.22	17.58	19.5
20	64QAM	1	1	18.27	18.12	17.54	
20	64QAM	1	49	18.32	18.21	17.60	

BW [MHz]	Modulation	RB Size	RB Offset	Power Low Ch. / Freq.	Power Middle Ch. / Freq.	Power High Ch. / Freq.	Tune-up limit (dBm)
Channel				620668	650000	679332	
Frequency (MHz)				3310.02	3750	4189.98	
20	256QAM	2	0	16.79	16.73	16.03	17.5
20	256QAM	2	49	16.77	16.75	16.09	
20	256QAM	1	0	16.80	16.55	16.15	
20	256QAM	1	50	16.97	16.59	16.14	
20	256QAM	50	0	16.95	16.61	16.08	17.5
20	256QAM	25	12	16.81	16.68	16.14	17.5
20	256QAM	1	1	16.85	16.67	16.17	
20	256QAM	1	49	16.79	16.69	16.16	
Channel				620500	650000	679500	Tune-up limit (dBm)
Frequency (MHz)				3307.5	3750	4192.5	
15	PI/2 BPSK	18	9	20.22	20.24	20.11	22.0
15	QPSK	18	9	20.29	20.13	20.06	22.0
15	16QAM	18	9	19.95	19.91	19.46	21.0
15	64QAM	18	9	18.21	18.14	17.59	19.5
15	256QAM	18	9	16.52	16.62	16.14	17.5
Channel				620334	650000	679666	Tune-up limit (dBm)
Frequency (MHz)				3305.01	3750	4194.99	
10	PI/2 BPSK	12	6	20.24	20.21	20.10	22.0
10	QPSK	12	6	20.26	20.23	20.03	22.0
10	16QAM	12	6	19.95	19.95	19.52	21.0
10	64QAM	12	6	18.21	18.24	17.48	19.5
10	256QAM	12	6	16.43	16.53	16.12	17.5

Note: The tested channel results are marks in bold.

7.2 SAR TEST RESULTS

General Notes:

- 1) Per KDB447498 D04, all measurement SAR results are scaled to the maximum tune-up tolerance limit to demonstrate compliant.
- 2) Per KDB447498 D04, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is: ≤ 0.8 W/kg or 2.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≤ 100 MHz. When the maximum output power variation across the required test channels is $> \frac{1}{2}$ dB, instead of the middle channel, the highest output power channel must be used.
- 3) Per KDB865664 D01, for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg; if the deviation among the repeated measurement is $\leq 20\%$, and the measured SAR < 1.45 W/kg, only one repeated measurement is required.
- 4) Per KDB941225 D06, the DUT Dimension is bigger than 9 cm x 5 cm, so 10mm is chosen as the test separation distance for Hotspot mode. When the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.
- 5) Per KDB648474 D04, SAR is evaluated without a headset connected to the device. When the standalone reported body-worn SAR is ≤ 1.2 W/kg, no additional SAR evaluations using a headset are required.
- 6) Per KDB865664 D02, SAR plot is only required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination; Plots are also required when the measured SAR is > 1.5 W/kg, or > 7.0 W/kg for occupational exposure. The published RF exposure KDB procedures may require additional plots; for example, to support SAR to peak location separation ratio test exclusion and/or volume scan post-processing.

GSM Notes:

- 1) Per KDB648474 D04, body-worn accessory testing is typically associated with voice operations. Therefore, GSM voice was evaluated for body-worn SAR.
- 2) Per KDB941225 D01, SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

LTE Notes:

- 1) The LTE test configurations are determined according to KDB941225 D05 SAR for LTE Devices. The general test procedures used for SAR testing can be found in Section 7.1.3.
- 2) A-MPR was disabled for all SAR test by setting NS_01 on the base station simulator. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

7.2.1 SAR MEASUREMENT RESULT OF BODY

1. Body SAR test results of LTE

Test No.	Band	Mode	Channel	RB	offset	Test Position	Separation Distance (mm)	Ant	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
L01	LTE B2	QPSK20M	18900	1	0	Front Side	5	Main	24	22.78	-0.05	0.135	0.074	0.179
L02	LTE B2	QPSK20M	18900	1	0	Back Side	5	Main	24	22.78	-0.07	0.442	0.205	0.585
L03	LTE B2	QPSK20M	18900	1	0	Left Side	5	Main	24	22.78	-0.01	0.0899	0.0447	0.119
L04	LTE B2	QPSK20M	18900	1	0	Top Side	5	Main	24	22.78	0	0.0324	0.0117	0.043
L05	LTE B2	QPSK20M	18900	1	0	Bottom Side	5	Main	24	22.78	-0.07	0.0994	0.0569	0.132
L06	LTE B2	QPSK20M	18700	50	25	Back Side	5	Main	23	21.82	0.01	0.405	0.223	0.531
L07	LTE B2	QPSK20M	18700	1	0	Back Side	5	Main	24	22.49	0.08	0.778	0.354	1.101
L08	LTE B2	QPSK20M	19100	1	0	Back Side	5	Main	24	22.71	0.05	0.671	0.303	0.903
L10	LTE B4	QPSK20M	20175	1	99	Front Side	5	Main	23	22.51	-0.05	0.653	0.397	0.731
L11	LTE B4	QPSK20M	20175	1	99	Back Side	5	Main	23	22.51	0.05	0.98	0.439	1.097
L12	LTE B4	QPSK20M	20175	1	99	Left Side	5	Main	23	22.51	0.04	0.348	0.175	0.390
L13	LTE B4	QPSK20M	20175	1	99	Top Side	5	Main	23	22.51	-0.02	0.522	0.291	0.584
L14	LTE B4	QPSK20M	20175	1	99	Bottom Side	5	Main	23	22.51	-0.09	0.837	0.392	0.937
L15	LTE B4	QPSK20M	20175	50	50	Back Side	5	Main	22	21.57	0.05	0.869	0.429	0.959
L16	LTE B4	QPSK20M	20050	1	0	Back Side	5	Main	23	22.50	0.07	1.1	0.497	1.234
L17	LTE B4	QPSK20M	20300	1	0	Back Side	5	Main	23	22.42	0.08	0.837	0.373	0.957
L18	LTE B4	QPSK20M	20050	1	0	Back Side(repeated)	5	Main	23	22.50	0.01	1.07	0.49	1.201
L20	LTE B5	QPSK10M	20525	1	0	Front Side	5	Main	24	22.61	-0.11	0.298	0.157	0.410
L21	LTE B5	QPSK10M	20525	1	0	Back Side	5	Main	24	22.61	-0.09	0.33	0.169	0.454
L22	LTE B5	QPSK10M	20525	1	0	Left Side	5	Main	24	22.61	-0.04	0.183	0.0898	0.252
L23	LTE B5	QPSK10M	20525	1	0	Top Side	5	Main	24	22.61	0	0.169	0.0946	0.233
L24	LTE B5	QPSK10M	20525	1	0	Bottom Side	5	Main	24	22.61	0.12	0.218	0.12	0.300
L25	LTE B5	QPSK10M	20450	25	12	Back Side	5	Main	23	21.68	0.07	0.314	0.151	0.426
L26	LTE B5	QPSK10M	20450	1	0	Back Side	5	Main	24	22.54	0.02	0.49	0.238	0.686
L27	LTE B5	QPSK10M	20600	1	0	Back Side	5	Main	24	22.59	0	0.452	0.232	0.625
L29	LTE B13	QPSK10M	23230	1	49	Front Side	5	Main	24	22.88	0.18	0.62	0.38	0.802
L30	LTE B13	QPSK10M	23230	1	49	Back Side	5	Main	24	22.88	-0.01	0.575	0.311	0.744
L31	LTE B13	QPSK10M	23230	1	49	Left Side	5	Main	24	22.88	0.06	0.242	0.12	0.313
L32	LTE B13	QPSK10M	23230	1	49	Top Side	5	Main	24	22.88	-0.02	0.215	0.125	0.278
L33	LTE B13	QPSK10M	23230	1	49	Bottom Side	5	Main	24	22.88	0.13	0.203	0.112	0.263
L34	LTE B13	QPSK10M	23230	25	12	Front Side	5	Main	23	21.91	0	0.477	0.286	0.613
L36	LTE B66	QPSK20M	132322	1	0	Front Side	5	Main	23	22.37	-0.09	0.342	0.215	0.395
L37	LTE B66	QPSK20M	132322	1	0	Back Side	5	Main	23	22.37	0.11	0.572	0.258	0.661
L38	LTE B66	QPSK20M	132322	1	0	Left Side	5	Main	23	22.37	0.03	0.226	0.112	0.261
L39	LTE B66	QPSK20M	132322	1	0	Top Side	5	Main	23	22.37	0.07	0.28	0.156	0.324
L40	LTE B66	QPSK20M	132322	1	0	Bottom Side	5	Main	23	22.37	-0.11	0.417	0.243	0.482
L41	LTE B66	QPSK20M	132072	50	25	Back Side	5	Main	22	21.6	-0.04	0.542	0.240	0.594
L42	LTE B66	QPSK20M	132072	1	0	Back Side	5	Main	23	22.22	0.12	0.939	0.423	1.124
L43	LTE B66	QPSK20M	132572	1	0	Back Side	5	Main	23	22.24	-0.07	0.661	0.298	0.787
L44	LTE B66	QPSK20M	132572	1	0	Back Side(repeated)	5	Main	23	22.22	0	0.918	0.409	1.099

Note: The value with boldface is the maximum SAR Value of each test band.

2. Body SAR test results of 5G NR

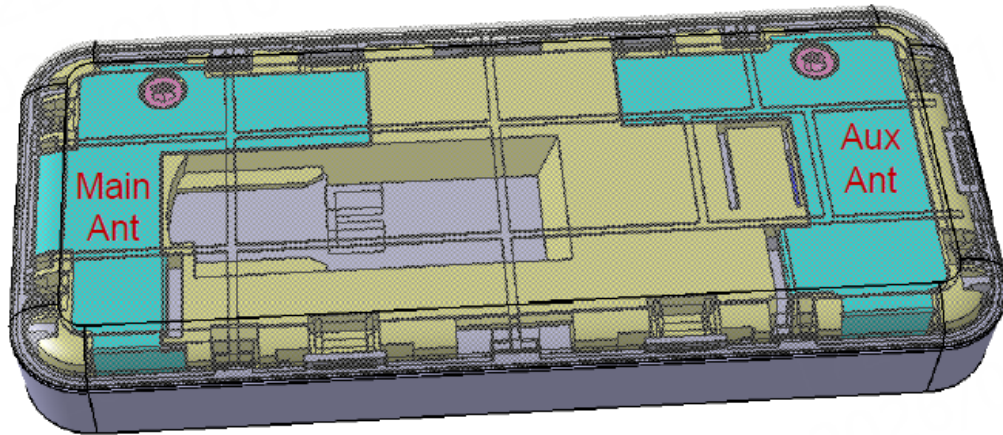
Test No.	Band	Mode	Channel/Frequency	Bandwidth	SCS	RB	offset	Test Position	Separation Distance (mm)	Ant	Duty Cycle %	Maximum Tune-up (dBm)	Conducted Power (dBm)	Power Drift (dB)	SAR 1g (W/kg)	SAR 10g (W/kg)	Reported 1g SAR
N01	NR n2	DFT-s-OFDM QPSK	376000/1880	20M	15K	50	25	Front Side	5	Main	100%	24	22.71	0.12	0.294	0.157	0.396
N02	NR n2	DFT-s-OFDM QPSK	376000/1880	20M	15K	50	25	Back Side	5	Main	100%	24	22.71	0.07	0.927	0.411	1.248
N03	NR n2	DFT-s-OFDM QPSK	376000/1880	20M	15K	50	25	Left Side	5	Main	100%	24	22.71	0.04	0.233	0.113	0.314
N04	NR n2	DFT-s-OFDM QPSK	376000/1880	20M	15K	50	25	Top Side	5	Main	100%	24	22.71	0.04	0.0774	0.0353	0.104
N05	NR n2	DFT-s-OFDM QPSK	376000/1880	20M	15K	50	25	Bottom Side	5	Main	100%	24	22.71	0.01	0.194	0.109	0.261
N06	NR n2	DFT-s-OFDM QPSK	372000/1860	20M	15K	1	0	Back Side	5	Main	100%	23.5	21.9	0.05	0.614	0.308	0.888
N07	NR n2	DFT-s-OFDM QPSK	372000/1860	20M	15K	1	104	Back Side	5	Main	100%	24	22.45	-0.03	0.581	0.263	0.830
N08	NR n2	DFT-s-OFDM QPSK	380000/1900	20M	15K	1	104	Back Side	5	Main	100%	24	22.55	0.01	0.884	0.381	1.234
N09	NR n2	DFT-s-OFDM QPSK	376000/1880	20M	15K	50	25	Back Side(repeated)	5	Main	100%	24	22.71	0.02	0.919	0.407	1.237
N11	NR n5	DFT-s-OFDM QPSK	167300/836.5	20M	15K	50	25	Front Side	5	Main	100%	24	22.86	0.12	0.351	0.201	0.456
N12	NR n5	DFT-s-OFDM QPSK	167300/836.5	20M	15K	50	25	Back Side	5	Main	100%	24	22.86	-0.05	0.457	0.234	0.594
N13	NR n5	DFT-s-OFDM QPSK	167300/836.5	20M	15K	50	25	Left Side	5	Main	100%	24	22.86	0.04	0.259	0.126	0.337
N14	NR n5	DFT-s-OFDM QPSK	167300/836.5	20M	15K	50	25	Top Side	5	Main	100%	24	22.86	0.04	0.168	0.096	0.218
N15	NR n5	DFT-s-OFDM QPSK	167300/836.5	20M	15K	50	25	Bottom Side	5	Main	100%	24	22.86	-0.03	0.185	0.109	0.241
N16	NR n5	DFT-s-OFDM QPSK	166800/834	20M	15K	2	104	Back Side	5	Main	100%	23.5	22.03	0.02	0.356	0.182	0.499
N17	NR n5	DFT-s-OFDM QPSK	166800/834	20M	15K	1	104	Back Side	5	Main	100%	24	22.83	-0.07	0.453	0.231	0.593
N18	NR n5	DFT-s-OFDM QPSK	167800/839	20M	15K	1	104	Back Side	5	Main	100%	24	22.80	0.04	0.449	0.23	0.592
N20	NR n66	DFT-s-OFDM QPSK	349000/1745	20M	15K	50	25	Front Side	5	Main	100%	23	22.96	-0.04	0.463	0.294	0.467
N21	NR n66	DFT-s-OFDM QPSK	349000/1745	20M	15K	50	25	Back Side	5	Main	100%	23	22.96	-0.07	1.17	0.507	1.181
N22	NR n66	DFT-s-OFDM QPSK	349000/1745	20M	15K	50	25	Left Side	5	Main	100%	23	22.96	-0.18	0.191	0.0927	0.193
N23	NR n66	DFT-s-OFDM QPSK	349000/1745	20M	15K	50	25	Top Side	5	Main	100%	23	22.96	0.07	0.219	0.121	0.221
N24	NR n66	DFT-s-OFDM QPSK	349000/1745	20M	15K	50	25	Bottom Side	5	Main	100%	23	22.96	0.11	0.512	0.301	0.517
N25	NR n66	DFT-s-OFDM QPSK	349000/1745	20M	15K	2	0	Back Side	5	Main	100%	22.5	21.93	0.01	0.959	0.355	1.093
N26	NR n66	DFT-s-OFDM QPSK	344000/1720	20M	15K	1	1	Back Side	5	Main	100%	23	22.95	0.15	1.27	0.574	1.285
N27	NR n66	DFT-s-OFDM QPSK	354000/1770	20M	15K	1	1	Back Side	5	Main	100%	23	22.69	-0.02	0.979	0.444	1.051
N28	NR n66	DFT-s-OFDM QPSK	344000/1720	20M	15K	1	1	Back Side (repeated)	5	Main	100%	23	22.95	0.04	1.23	0.560	1.244
N30	NR n77	DFT-s-OFDM QPSK	650000/3750	20M	30K	25	12	Front Side	5	Main	25%	22	21.87	-0.06	0.357	0.154	0.368
N31	NR n77	DFT-s-OFDM QPSK	650000/3750	20M	30K	25	12	Back Side	5	Main	25%	22	21.87	0.09	0.403	0.167	0.415
N32	NR n77	DFT-s-OFDM QPSK	650000/3750	20M	30K	25	12	Left Side	5	Main	25%	22	21.87	0.08	0.377	0.16	0.388
N33	NR n77	DFT-s-OFDM QPSK	650000/3750	20M	30K	25	12	Top Side	5	Main	25%	22	21.87	0.01	0.179	0.0702	0.184
N34	NR n77	DFT-s-OFDM QPSK	650000/3750	20M	30K	25	12	Bottom Side	5	Main	25%	22	21.87	0.03	0.19	0.0748	0.196
N35	NR n77	DFT-s-OFDM QPSK	650000/3750	20M	30K	2	0	Back Side	5	Main	25%	21.5	20.89	0	0.353	0.159	0.406
N36	NR n77	DFT-s-OFDM QPSK	620668/3310.02	20M	30K	25	12	Back Side	5	Main	25%	22	21.76	0.06	0.427	0.172	0.451
N37	NR n77	DFT-s-OFDM QPSK	679332/4189.98	20M	30K	25	12	Back Side	5	Main	25%	22	21.68	0.05	1.19	0.402	1.281
N38	NR n77	DFT-s-OFDM QPSK	679332/4189.98	20M	30K	25	12	Back Side (repeated)	5	Main	25%	22	21.68	-0.01	1.16	0.395	1.249

Note: The value with boldface is the maximum SAR Value of each test band.

7.3 MULTIPLE TRANSMITTER EVALUATION

The following tables list information which is relevant for the decision if a simultaneous transmit evaluation is necessary according to FCC KDB447498 D04 Interim General RF Exposure Guidance v01.

The location of the antenna inside EUT is as below:

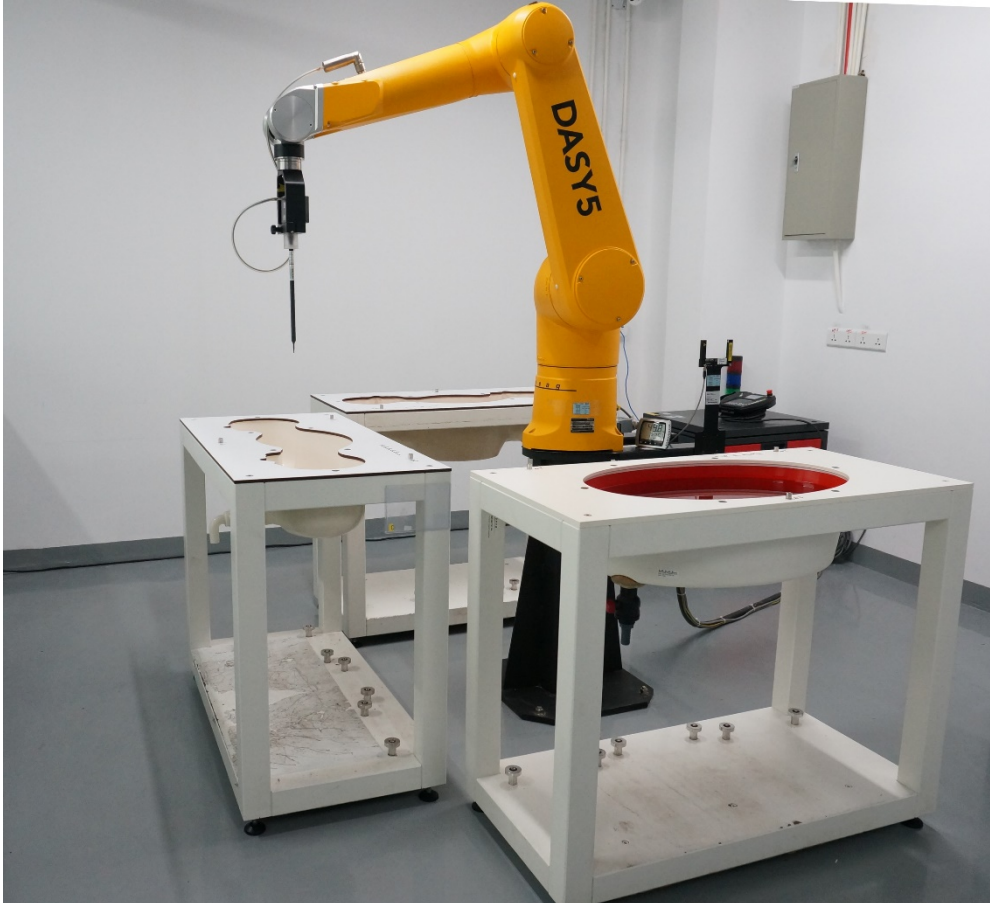


Note: 4G&5G NR share the same Tx antenna and can't transmit simultaneously.

APPENDIX

1. TEST LAYOUT

Specific Absorption Rate Test Layout

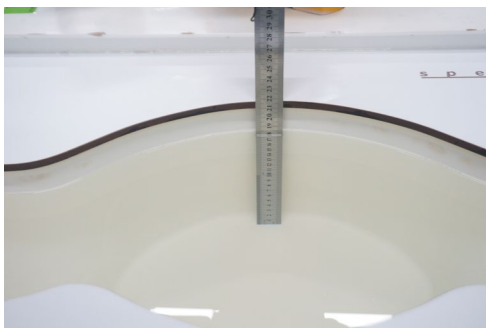


Liquid depth in the flat Phantom ($\geq 15\text{cm}$ depth)

Body_695-925_18.5cm



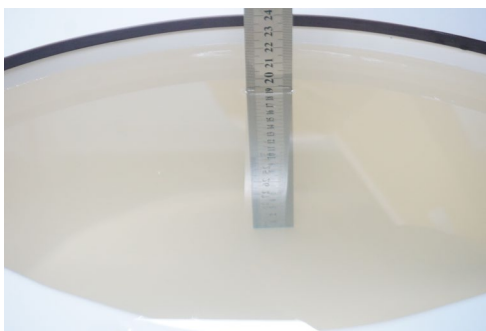
Body_1700-1900_18.1cm



Body_1900-2300_18.5cm



Body_3300-4200_19.4cm



Appendix A. SAR Plots of System Verification

(Pls See BTL-FCC SAR-1-2511E011_Appendix A.)

Appendix B. SAR Plots of SAR Measurement

(Pls See BTL-FCC SAR-1-2511E011_Appendix B.)

Appendix C. Calibration Certificate

(Pls See BTL-FCC SAR-1-2511E011_Appendix C.)

Appendix D. Photographs of the Test Set-Up

(Pls See BTL-FCC SAR-1-2511E011_Appendix D.)