

FCC SAR EVALUATION REPORT

**In accordance with the requirements of
FCC 47 CFR Part 2(2.1093) and
IEEE Std 1528-2013**

Product Name : Smart Phone

Brand Name : OUKITEL

Model Name : WP56

Family Model : WP56 Pro, WP56 S, WP56 Plus, WP56 Ultra,
WP56 TITAN, WP56 GT

Report No. : S25022204507001

FCC ID : 2ANMU-24138B

Prepared for

SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL ZONE,
GUANLAN, LONGHUA SHENZHEN, 518XXX China

Prepared by

Shenzhen NTEK Testing Technology Co., Ltd.
No. 24 Xinfu East Road, Xiangshan Community, Xinqiao Street, Baoan District,
Shenzhen, Guangdong, People's Republic of China
Tel. 0755-23200050 Website: <http://www.ntek.org.cn>

TEST RESULT CERTIFICATION

Applicant's name SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address..... A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL
ZONE, GUANLAN, LONGHUA SHENZHEN, 518XXX China
Manufacturer's Name . SHENZHEN YUNJI INTELLIGENT TECHNOLOGY CO.,LTD
Address..... A2 2F BUILDING ENET NEW INDUSTRIAL PARK, DAFU INDUSTRIAL
ZONE, GUANLAN, LONGHUA SHENZHEN, 518XXX China

Product description

Product name Smart Phone
Brand Name OUKITEL
Model and/or type WP56
reference
Family Model WP56 Pro, WP56 S, WP56 Plus, WP56 Ultra, WP56 TITAN, WP56 GT
FCC 47 CFR Part 2(2.1093)

Standards IEEE Std 1528-2013
Published RF exposure KDB procedures

This device described above has been tested by Shenzhen NTEK. In accordance with the measurement methods and procedures specified in IEEE Std 1528-2013 and KDB 865664 D01. Testing has shown that this device is capable of compliance with localized specific absorption rate (SAR) specified in FCC 47 CFR Part 2(2.1093). The test results in this report apply only to the tested sample of the stated device/equipment. Other similar device/equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties.

This report shall not be reproduced except in full, without the written approval of Shenzhen NTEK, this document may be altered or revised by Shenzhen NTEK, personal only, and shall be noted in the revision of the document.

Test Sample Number S250222045007

Date of Test

Date (s) of performance of tests... Feb. 24, 2025~ Mar. 22, 2025

Date of Issue Apr. 21, 2025

Test Result **Pass**

Prepared By : Owen Xiao
Owen Xiao
(Project Engineer)

Reviewed By : Aaron Cheng
Aaron Cheng
(Supervisor)

Approved By : Alex Li
Alex Li
(Manager)

※ ※ Revision History ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	Apr. 21, 2025	Owen Xiao

TABLE OF CONTENTS

1. General Information	6
1.1. RF exposure limits.....	6
1.2. Statement of Compliance	7
1.3. EUT Description	7
1.4. Test specification(s)	9
1.5. Ambient Condition.....	9
1.6. Facilities And Accreditations	9
1.6.1. Facilities	9
1.6.2. Laboratory Accreditations And Listings.....	9
2. SAR Measurement System	10
2.1. SATIMO SAR Measurement Set-up Diagram	10
2.2. Robot	11
2.3. E-Field Probe.....	12
2.3.1. E-Field Probe Calibration	12
2.4. SAM phantoms	13
2.4.1. Technical Data	14
2.5. Device Holder	15
2.6. Test Equipment List	16
3. SAR Measurement Procedures	18
3.1. Power Reference	18
3.2. Area scan & Zoom scan.....	18
3.3. Description of interpolation/extrapolation scheme	20
3.4. Volumetric Scan	20
3.5. Power Drift	20
4. System Verification Procedure	21
4.1. Tissue Verification	21
4.1.1. Tissue Dielectric Parameter Check Results	22
4.2. System Verification Procedure	23
4.2.1. System Verification Results	24
5. SAR Measurement variability and uncertainty	25
5.1. SAR measurement variability.....	25
5.2. SAR measurement uncertainty	25
6. RF Exposure Positions	26
6.1. Ear and handset reference point	26
6.2. Definition of the cheek position	26
6.3. Definition of the tilt position	28
6.4. Body Worn Accessory	28
6.5. Wireless Router Devices	29
7. RF Output Power	30

7.1. GSM Conducted Power	30
7.2. WCDMA Conducted Power	30
7.3. LTE Conducted Power	32
7.4. 5G NR Conducted Power	54
7.5. WLAN & Bluetooth Output Power	61
7.6. NFC	63
8. Antenna Location.....	64
9. Stand-alone SAR test exclusion.....	64
10. SAR Results	65
10.1. SAR measurement Result.....	65
10.1.1. SAR measurement Result of GSM850.....	65
10.1.2. SAR measurement Result of GSM1900.....	66
10.1.3. SAR measurement Result of WCDMA Band 2.....	67
10.1.4. SAR measurement Result of WCDMA Band 4.....	68
10.1.5. SAR measurement Result of WCDMA Band 5.....	69
10.1.6. SAR measurement Result of LTE Band 2	70
10.1.7. SAR measurement Result of LTE Band 4	72
10.1.8. SAR measurement Result of LTE Band 5	74
10.1.9. SAR measurement Result of LTE Band 7	76
10.1.10. SAR measurement Result of LTE Band 12	78
10.1.11. SAR measurement Result of LTE Band 17	80
10.1.12. SAR measurement Result of LTE Band 25	82
10.1.13. SAR measurement Result of LTE Band 26a	84
10.1.14. SAR measurement Result of LTE Band 26b	86
10.1.15. SAR measurement Result of LTE Band 41	88
10.1.16. SAR measurement Result of LTE Band 66	89
10.1.17. SAR measurement Result of NR 78.....	91
10.1.18. SAR measurement Result of WLAN2.4G.....	94
10.1.19. SAR measurement Result of WLAN5.2G.....	97
10.1.20. SAR measurement Result of WLAN5.8G.....	100
10.2. Simultaneous Transmission Analysis.....	103
11. Appendix A. Photo documentation	107
12. Appendix B. System Check Plots.....	108
13. Appendix C. Plots of High SAR Measurement.....	127
14. Appendix D. Calibration Certificate	233

1. General Information

1.1. RF exposure limits

(A).Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

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

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

NOTE: **Whole-Body SAR** is averaged over the entire body, **partial-body SAR** is averaged over any 1 gram of tissue defined as a tissue volume in the shape of a cube. **SAR for hands, wrists, feet and ankles** is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.

Occupational/Controlled Environments:

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

General Population/Uncontrolled Environments:

Are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

NOTE
HEAD AND TRUNK LIMIT
1.6 W/kg
APPLIED TO THIS EUT

1.2. Statement of Compliance

The maximum results of Specific Absorption Rate (SAR) found during testing for WP56 are as follows.

RF Exposure Conditions		Equipment Class -Highest Reported SAR (W/kg)				Max. Reported SAR (W/kg)
		PCE	DTS	NII	DSS	
1-g Head		0.202	0.102	0.577	0.236	0.577
1-g Body-Worn (Separation distance of 10mm)		0.721	0.103	0.254	0.118	0.929
1-g Hotspot (Separation distance of 10mm)		0.766	0.144	0.929	0.118	
Max Simultaneous Tx	Head	0.779	0.304	0.779	0.438	0.779
	Body-Worn	0.975	0.824	0.975	0.839	1.134
	Hotspot	1.134	0.824	1.134	0.839	

Note: The Max Simultaneous Tx is calculated based on the same configuration and test position.

This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in FCC 47 CFR Part 2(2.1093), and had been tested in accordance with the measurement methods and procedures specified in IEEE Std 1528-2013 & KDB 865664 D01.

1.3. EUT Description

Device Information	
Product Name	Smart Phone
Brand Name	OUKITEL
Model Name	WP56
Family Model	WP56 Pro, WP56 S, WP56 Plus, WP56 Ultra, WP56 TITAN, WP56 GT
Model Difference	All models are the same circuit and RF module, except for model names.
FCC ID	2ANMU-24138B
Device Phase	Identical Prototype
Exposure Category	General population / Uncontrolled environment
Antenna Type	LDS Antenna
Battery Information	DC 3.87V, 16000mAh,61.92Wh
Power supply	DC 3.87V from battery or DC 5V/9V/12V/15V/20V from adapter
HW Version	M1702-MUB-V1
SW Version	V04

Device Operating Configurations			
Supporting Mode(s)	GSM850/1900,WCDMABand2/4/5,LTEBand2/4/5/7/12/17/25/26/41/66, NR SA n78,WLAN 2.4G/5G, Bluetooth, NFC		
Test Modulation	GSM(GMSK), WCDMA(QPSK), LTE(QPSK/16QAM), NR(DFT-s-OFDM:PI/2 BPSK/QPSK/16-QAM/64QAM/256QAMCP-OFDM:QPSK/16-QAM/64QAM/256QAM), WLAN(DSSS/OFDM), Bluetooth(GFSK, $\pi/4$ -DQPSK, 8DPSK), NFC(ASK)		
Device Class	B		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	GSM 850	824-849	869-894
	GSM 1900	1850-1910	1930-1990
	WCDMA Band 2	1850-1910	1930-1990
	WCDMA Band 4	1710-1755	2110-2155
	WCDMA Band 5	824-849	869-894
	LTE Band 2	1850-1910	1930-1990
	LTE Band 4	1710-1755	2110-2155
	LTE Band 5	824-849	869-894
	LTE Band 7	2500-2570	2620-2690
	LTE Band 12	699-716	729-746
	LTE Band 17	704-716	734-746
	LTE Band 25	1850-1915	1930-1995
	LTE Band 26a	814-824	859-869
	LTE Band 26b	824-849	829-894
	LTE Band 41	2496-2690	
	LTE Band 66	1710-1780	2110-2200
	NR n78	3450-3550	
	WLAN 2.4G	2412-2462	
	WLAN 5.2G	5180-5240	
	WLAN 5.8G	5745-5825	
	Bluetooth	2402-2480	
	NFC	13.56	
Power Class	4, tested with power level 5(GSM 850)		
	1, tested with power level 0(GSM 1900)		
	3, tested with power control “all 1”(WCDMA Band 2)		
	3, tested with power control “all 1”(WCDMA Band 4)		
	3, tested with power control “all 1”(WCDMA Band 5)		
	3, tested with power control all Max.(LTE Band 2)		
	3, tested with power control all Max.(LTE Band 4)		
	3, tested with power control all Max.(LTE Band 5)		
	3, tested with power control all Max.(LTE Band 7)		
	3, tested with power control all Max.(LTE Band 12)		

	3, tested with power control all Max.(LTE Band 17)
	3, tested with power control all Max.(LTE Band 25)
	3, tested with power control all Max.(LTE Band 26)
	3, tested with power control all Max.(LTE Band 41)
	3, tested with power control all Max.(LTE Band 66)
	3, tested with power control all Max.(NR SA 78)

1.4. Test specification(s)

FCC 47 CFR Part 2(2.1093)
IEEE Std 1528-2013
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz
KDB 865664 D02 RF Exposure Reporting
KDB 447498 D01 General RF Exposure Guidance
KDB 248227 D01 802.11 Wi-Fi SAR
KDB 941225 D01 3G SAR Procedures
KDB 941225 D05 SAR for LTE Devices
KDB 941225 D06 Hotspot SAR
KDB 648474 D04 Handset SAR

1.5. Ambient Condition

Ambient temperature	20°C – 24°C
Relative Humidity	30% – 70%

1.6. Facilities And Accreditations

1.6.1. Facilities

All measurement facilities used to collect the measurement data are located at Building 1, No. 24 Xinfu East Road, Xiangshan Community, Xinqiao Street, Bao'an District, Shenzhen, Guangdong, China

The sites are constructed in conformance with the requirements of IEC/IEEE 1528:2013

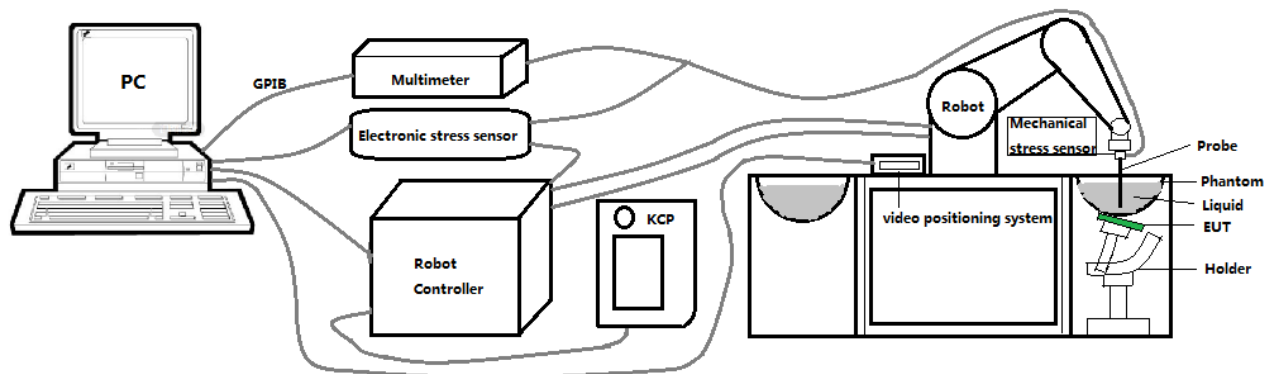
1.6.2. Laboratory Accreditations And Listings

Site Description

CNAS Lab. : The Certificate Registration Number is L5516
A2LA Lab. : The Certificate Registration Number is 4298.01
FCC Accredited : Test Firm Registration Number: 463705
Designation Number: CN1184
ISED Registration : Company Number: 9270A
CAB identifier: CN0074

2. SAR Measurement System

2.1. SATIMO SAR Measurement Set-up Diagram



These measurements were performed with the automated near-field scanning system OPENSAR from SATIMO. The system is based on a high precision robot (working range: 901 mm), which positions the probes with a positional repeatability of better than ± 0.03 mm. The SAR measurements were conducted with dosimetric probe (manufactured by SATIMO), designed in the classical triangular configuration and optimized for dosimetric evaluation.

The first step of the field measurement is the evaluation of the voltages induced on the probe by the device under test. Probe diode detectors are nonlinear. Below the diode compression point, the output voltage is proportional to the square of the applied E-field; above the diode compression point, it is linear to the applied E-field. The compression point depends on the diode, and a calibration procedure is necessary for each sensor of the probe.

The Keithley multimeter reads the voltage of each sensor and send these three values to the PC. The corresponding E field value is calculated using the probe calibration factors, which are stored in the working directory. This evaluation includes linearization of the diode characteristics. The field calculation is done separately for each sensor. Each component of the E field is displayed on the "Dipole Area Scan Interface" and the total E field is displayed on the "3D Interface"

2.2. Robot

The SATIMO SAR system uses the high precision robots from KUKA. For the 6-axis controller system, the robot controller version (KUKA) from KUKA is used. The KUKA robot series have many features that are important for our application:



- High precision (repeatability ± 0.03 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)

2.3. E-Field Probe

This E-field detection probe is composed of three orthogonal dipoles linked to special Schottky diodes with low detection thresholds. The probe allows the measurement of electric fields in liquids such as the one defined in the IEEE and CENELEC standards.

For the measurements the Specific Dosimetric E-Field Probe 4024-EPGO-442 with following specifications is used



- Dynamic range: 0.01-100 W/kg
- Tip Diameter : 2.5 mm
- Distance between probe tip and sensor center: 1 mm
- Distance between sensor center and the inner phantom surface: 2 mm (repeatability better than ± 1 mm).
- Probe linearity: ± 0.06 dB
- Axial isotropy: ± 0.01 dB
- Hemispherical Isotropy: ± 0.01 dB
- Calibration range: 650MHz to 5900MHz for head & body simulating liquid.
- Lower detection limit: 8mW/kg

Angle between probe axis (evaluation axis) and surface normal line: less than 30° .

2.3.1. E-Field Probe Calibration

Each probe needs to be calibrated according to a dosimetric assessment procedure with accuracy better than $\pm 10\%$. The spherical isotropy shall be evaluated and within ± 0.25 dB. The sensitivity parameters (Norm X, Norm Y, and Norm Z), the diode compression parameter (DCP) and the conversion factor (Conv F) of the probe are tested. The calibration data can be referred to appendix D of this report.

2.4. SAM phantoms

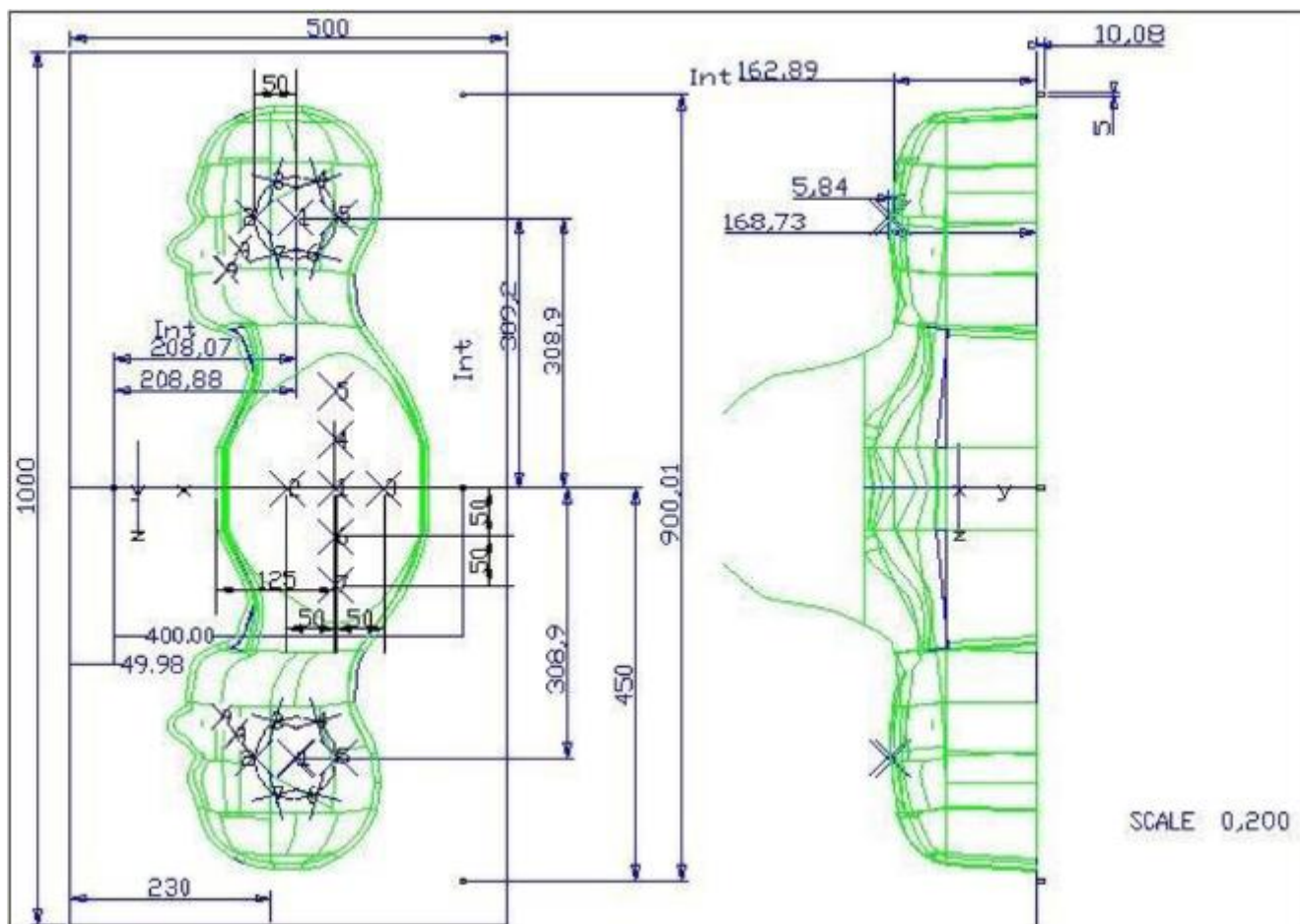
Photo of SAM phantom SN 16/15 SAM119



The SAM phantom is used to measure the SAR relative to people exposed to electro-magnetic field radiated by Mobile Phones.

2.4.1. Technical Data

Serial Number	Shell thickness	Filling volume	Dimensions	Positionner Material	Permittivity	Loss Tangent
SN 16/15 SAM119	2 mm ±0.2 mm	27 liters	Length:1000 mm Width:500 mm Height:200 mm	Gelcoat with fiberglass	3.4	0.02

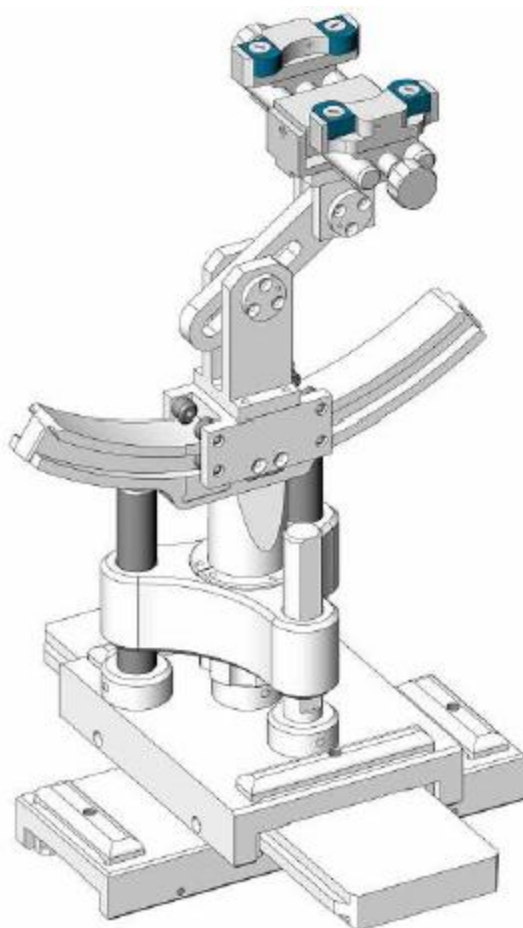


Serial Number	Left Head(mm)		Right Head(mm)		Flat Part(mm)	
SN 16/15 SAM119	2	2.02	2	2.08	1	2.09
	3	2.05	3	2.06	2	2.06
	4	2.07	4	2.07	3	2.08
	5	2.08	5	2.08	4	2.10
	6	2.05	6	2.07	5	2.10
	7	2.05	7	2.05	6	2.07
	8	2.07	8	2.06	7	2.07
	9	2.08	9	2.06	-	-

The test, based on ultrasonic system, allows measuring the thickness with an accuracy of 10 μm .

2.5. Device Holder

The positioning system allows obtaining cheek and tilting position with a very good accuracy. In compliance with CENELEC, the tilt angle uncertainty is lower than 1 degree.



Serial Number	Holder Material	Permittivity	Loss Tangent
SN 16/15 MSH100	Delrin	3.7	0.005

2.6. Test Equipment List

This table gives a complete overview of the SAR measurement equipment.

Devices used during the test described are marked ☒

	Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
					Last Cal.	Due Date
☒	MVG	E FIELD PROBE	SSE2	4024-EPGO-442	Oct.4.2024	Oct.3.2025
☒	MVG	750 MHz Dipole	SID750	SN 03/15 DIP 0G750-355	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	835 MHz Dipole	SID835	SN 03/15 DIP 0G835-347	Feb. 21, 2024	Feb. 20, 2027
☐	MVG	900 MHz Dipole	SID900	SN 03/15 DIP 0G900-348	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	1800 MHz Dipole	SID1800	SN 03/15 DIP 1G800-349	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	1900 MHz Dipole	SID1900	SN 03/15 DIP 1G900-350	Feb. 21, 2024	Feb. 20, 2027
☐	MVG	2000 MHz Dipole	SID2000	SN 03/15 DIP 2G000-351	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	2450 MHz Dipole	SID2450	SN 03/15 DIP 2G450-352	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	2600 MHz Dipole	SID2600	SN 03/15 DIP 2G600-356	Feb. 21, 2024	Feb. 20, 2027
☒	MVG	3500 MHz Dipole	SID3500	SN 09/12 DIP 3G500-360	Oct. 15, 2022	Oct. 14, 2025
☒	MVG	5000 MHz Dipole	SWG5500	SN 13/14 WGA 33	Feb. 21, 2024	Feb. 20, 2027
☒	Anritsu	4G LTE comprehensive tester	MT8821C	6262192315	Jul,17, 2024	Jul,16, 2025
☒	Anritsu	5G NR comprehensive tester	MT8000A	6262186364	Jul,17, 2024	Jul,16, 2025
☒	MVG	Liquid measurement Kit	SCLMP	SN 21/15 OCPG 72	NCR	NCR
☒	MVG	Power Amplifier	N.A	AMPLISAR_28/14_003	NCR	NCR
☒	KEITHLEY	Millivoltmeter	2000	4072790	Nov. 29,	Nov. 28,

					2024	2025
☒	R&S	Universal radio communication tester	CMU200	105747	Apr. 26, 2024	Apr. 25, 2025
☒	R&S	Wideband radio communication tester	CMW500	103917	Apr. 26, 2024	Apr. 25, 2025
☒	HP	Network Analyzer	E5071C	LPS-461	Oct. 15, 2024	Oct. 14, 2025
☒	Agilent	Calibration Kit	85033E	N/A	May. 31, 2024	May. 30, 2025
☒	Agilent	MXG Vector Signal Generator	N5182A	MY47070317	Apr. 25, 2024	Apr. 24, 2025
☒	Agilent	Power meter	E4419B	MY45102538	Apr. 25, 2024	Apr. 24, 2025
☒	Agilent	Power sensor	E9301A	LES-413-C	May. 30, 2024	May. 29, 2025
☒	Agilent	Power sensor	E9301A	US39212148	Apr. 25, 2024	Apr. 24, 2025
☒	MCLI/USA	Directional Coupler	CB11-20	0D2L51502	Apr. 26, 2024	Apr. 25, 2027
☒	N/A	Thermometer	N/A	LES-085	Mar. 27, 2023	Mar. 26, 2026
☒	MVG	SAM Phantom	SSM2	SN 16/15 SAM119	NCR	NCR
☒	MVG	Device Holder	SMPPD	SN 16/15 MSH100	NCR	NCR

Measurement Software

Manufacturer	Software Name	Software Version
SATIMO	OpenSAR	V5.3.15.11

3. SAR Measurement Procedures

The measurement procedures are as follows:

<Conducted power measurement>

- (a) For WWAN power measurement, use base station simulator to configure EUT WWAN transmission in conducted connection with RF cable, at maximum power in each supported wireless interface and frequency band.
- (b) Read the WWAN RF power level from the base station simulator.
- (c) For Wi-Fi/BT power measurement, use engineering software to configure EUT Wi-Fi/BT continuously transmission, at maximum RF power in each supported wireless interface and frequency band.
- (d) Connect EUT RF port through RF cable to the power meter, and measure Wi-Fi/BT output power.

<SAR measurement>

- (a) Use base station simulator to configure EUT WWAN transmission in radiated connection, and engineering software to configure EUT Wi-Fi/BT continuously transmission, at maximum RF power, in the highest power channel.
- (b) Place the EUT in the positions as Appendix A demonstrates.
- (c) Set scan area, grid size and other setting on the OPENSAR software.
- (d) Measure SAR results for the highest power channel on each testing position.
- (e) Find out the largest SAR result on these testing positions of each band.
- (f) Measure SAR results for other channels in worst SAR testing position if the reported SAR of highest power channel is larger than 0.8 W/kg.

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

- (a) Power reference measurement
- (b) Area scan
- (c) Zoom scan
- (d) Power drift measurement

3.1. Power Reference

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

3.2. Area scan & Zoom scan

The area scan is a 2D scan to find the hot spot location on the DUT. The zoom scan is a 3D scan

above the hot spot to calculate the 1g and 10g SAR value.

Measurement of the SAR distribution with a grid of 8 to 16 mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8 * 4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

From the scanned SAR distribution, identify the position of the maximum SAR value, in addition identify the positions of any local maxima with SAR values within 2 dB of the maximum value that will not be within the zoom scan of other peaks; additional peaks shall be measured only when the primary peak is within 2 dB of the SAR compliance limit (e.g., 1 W/kg for 1,6 W/kg 1 g limit, or 1,26 W/kg for 2 W/kg, 10 g limit).

Area scan & Zoom scan scan parameters extracted from FCC KDB 865664 D01 SAR measurement 100 MHz to 6 GHz.

			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 ± 1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5 \text{ mm}$
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: $\Delta x_{\text{Area}}, \Delta y_{\text{Area}}$			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}, \Delta y_{\text{Zoom}}$			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{\text{Zoom}}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{\text{Zoom}}(1)$: between 1 st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{\text{Zoom}}(n>1)$: between subsequent points	≤ 1.5 · $\Delta z_{\text{Zoom}}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.

* When zoom scan is required and the *reported* SAR from the *area scan based 1-g SAR estimation* procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

3.3. Description of interpolation/extrapolation scheme

The local SAR inside the phantom is measured using small dipole sensing elements inside a probe body. The probe tip must not be in contact with the phantom surface in order to minimise measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1 mm step.

The measurements have to be performed over a limited time (due to the duration of the battery) so the step of measurement is high. It could vary between 5 and 8 mm. To obtain an accurate assessment of the maximum SAR averaged over 10 grams and 1 gram requires a very fine resolution in the three dimensional scanned data array.

3.4. Volumetric Scan

The volumetric scan consists to a full 3D scan over a specific area. This 3D scan is useful form multi Tx SAR measurement. Indeed, it is possible with OpenSAR to add, point by point, several volumetric scan to calculate the SAR value of the combined measurement as it is define in the standard IEEE1528 and IEC62209.

3.5. Power Drift

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In OpenSAR measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of EUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in V/m. If the power drifts more than $\pm 5\%$, the SAR will be retested.

4. System Verification Procedure

4.1. Tissue Verification

The following tissue formulations are provided for reference only as some of the parameters have not been thoroughly verified. The composition of ingredients may be modified accordingly to achieve the desired target tissue parameters required for routine SAR evaluation.

Ingredients (% of weight)	Head Tissue									
Frequency Band (MHz)	750	835	900	1800	1900	2000	2450	2600	5200	5800
Water	34.40	34.40	34.40	55.36	55.36	57.87	57.87	57.87	65.53	65.53
NaCl	0.79	0.79	0.79	0.35	0.35	0.16	0.16	0.16	0.00	0.00
1,2-Propanediol	64.81	64.81	64.81	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Triton X-100	0.00	0.00	0.00	30.45	30.45	19.97	19.97	19.97	24.24	24.24
DGBE	0.00	0.00	0.00	13.84	13.84	22.00	22.00	22.00	10.23	10.23

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid depth from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm.

Photo of Liquid depth for Head Position	Photo of Liquid depth for Body Position
	

4.1.1. Tissue Dielectric Parameter Check Results

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.

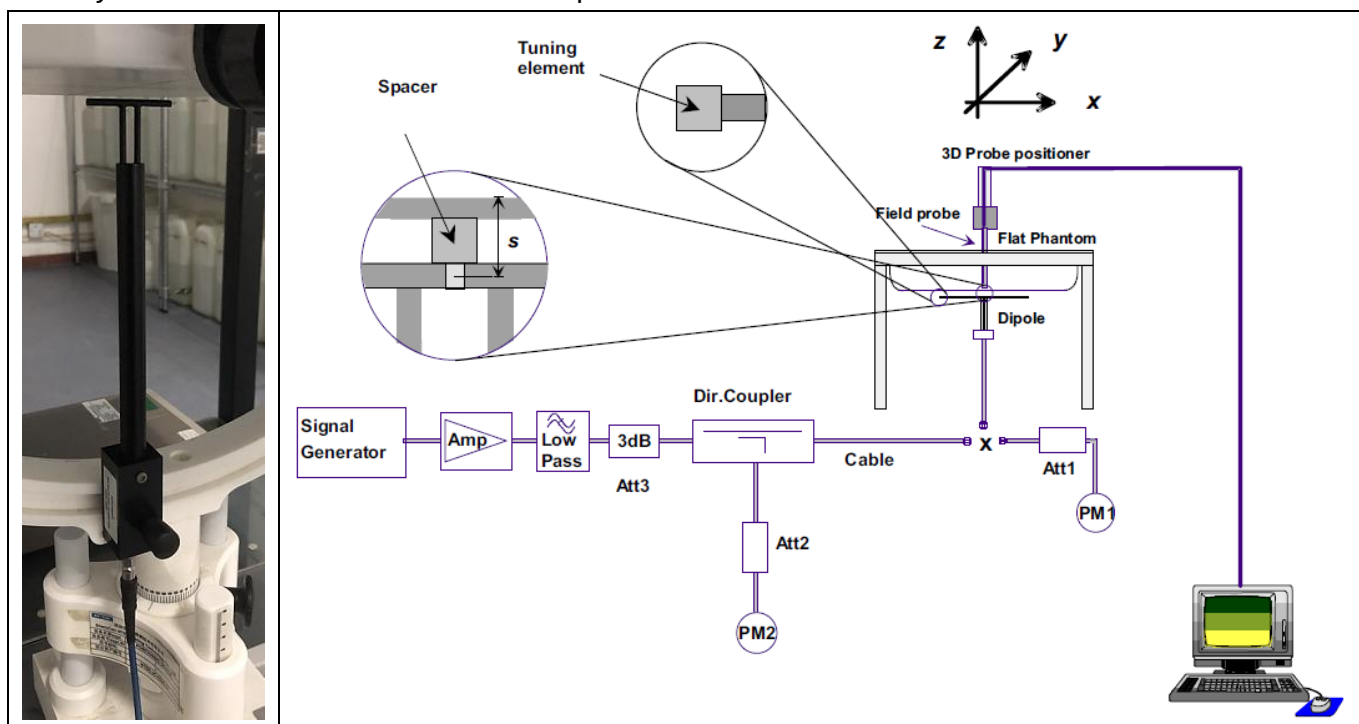
Tissue Type	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
		$\epsilon_r (\pm 5\%)$	σ (S/m) ($\pm 5\%$)	ϵ_r	σ (S/m)		
Head 750	750	41.96 (39.86~44.06)	0.89 (0.85~0.93)	40.85	0.90	21.7 °C	Mar. 08, 2025
Head 850	835	41.50 (39.43~43.58)	0.90 (0.86~0.95)	41.64	0.90	21.6 °C	Mar. 01, 2025
Head 1800	1800	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.91	1.38	21.4 °C	Mar. 19, 2025
Head 1900	1900	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.27	1.44	21.4 °C	Mar. 02, 2025
Head 2450	2450	39.20 (37.24~41.16)	1.80 (1.71~1.89)	37.81	1.78	21.3 °C	Feb. 26, 2025
Head 2600	2600	39.01 (37.06~40.96)	1.96 (1.86~2.06)	39.13	1.99	21.5 °C	Mar. 22, 2025
Head 3500	3500	37.93 (36.04~39.82)	2.91 (2.77~3.05)	37.52	2.82	21.3 °C	Feb. 24, 2025
Head 5200	5200	36.00 (34.20~37.80)	4.66 (4.43~4.89)	37.28	4.59	21.4 °C	Feb. 27, 2025
Head 5800	5800	35.30 (33.54~37.07)	5.27 (5.01~5.53)	36.17	5.13	21.2 °C	Mar. 15, 2025

NOTE: 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.

4.2. System Verification Procedure

The system verification is performed for verifying the accuracy of the complete measurement system and performance of the software. 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. To adjust this power a power meter is used. The power sensor is connected to the cable before the system verification 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 verification 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 (result on plot).

The system verification is shown as below picture:



4.2.1. System Verification Results

Comparing to the original SAR value provided by SATIMO, the verification data should be within its specification of $\pm 10\%$. Below table shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance verification can meet the variation criterion and the plots can be referred to Appendix B of this report.

System Verification	Target SAR (1W)		Measured SAR		Measured SAR		Liquid Temp.	Test Date
	(±10%)				(Normalized to 1W)			
	1-g (W/Kg)	10-g (W/Kg)	1-g (W/Kg)	10-g (W/Kg)	1-g (W/Kg)	10-g (W/Kg)		
750MHz	8.60 (7.74~9.46)	5.78 (5.20~6.36)	0.872	0.606	8.72	6.06	21.7 °C	Mar. 08, 2025
835MHz	9.40 (8.46~10.34)	6.28 (5.65~6.91)	0.893	0.587	8.93	5.87	21.6 °C	Mar. 01, 2025
1800MHz	37.06 (33.35~40.77)	20.01 (18.01~22.01)	4.038	1.983	40.38	19.83	21.4 °C	Mar. 19, 2025
1900MHz	39.69 (35.72~43.66)	20.92 (18.83~23.01)	4.272	2.009	42.72	20.09	21.4 °C	Mar. 02, 2025
2450MHz	50.05 (45.05~55.06)	23.80 (21.42~26.18)	5.167	2.214	51.67	22.14	21.3 °C	Feb. 26, 2025
2600MHz	54.16 (48.74~59.58)	24.85 (22.37~27.34)	5.684	2.343	56.84	23.43	21.5 °C	Mar. 22, 2025
3500MHz	67.18 (60.47~73.89)	24.50 (22.05~26.95)	6.169	2.640	61.69	26.40	21.3 °C	Feb. 24, 2025
5200MHz	162.59 (146.33~178.85)	56.21 (50.59~61.83)	1.673	0.617	167.30	61.70	21.4 °C	Feb. 27, 2025
5800MHz	182.20 (163.98~200.42)	61.32 (55.19~67.45)	1.822	0.622	182.200	62.20	21.2 °C	Mar. 15, 2025

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 (~ 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 .

5.2. SAR measurement uncertainty

Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

6. RF Exposure Positions

6.1. Ear and handset reference point

Figure 6.1.1 shows the front, back, and side views of the SAM phantom. The center-of-mouth reference point is labeled “M”, the left ear reference point (ERP) is marked “LE”, and the right ERP is marked “RE”.



Fig 6.1.1 Front, back, and side views of SAM phantom

6.2. Definition of the cheek position

1. Define two imaginary lines on the handset, the vertical centerline and the horizontal line. The vertical centerline passes through two points on the front side of the handset: the midpoint of the width w_t of the handset at the level of the acoustic output (point A in Figure 6.2.1 and Figure 6.2.2), and the midpoint of the width w_b of the bottom of the handset (point B). The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output (see Figure 6.2.1). The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical centerline is not necessarily parallel to the front face of the handset (see Figure 6.2.2), especially for clamshell handsets, handsets with flip covers, and other irregularly-shaped handsets.
2. Position the handset close to the surface of the phantom such that point A is on the (virtual) extension of the line passing through points RE and LE on the phantom (see Figure 6.2.3), such that the plane defined by the vertical centerline and the horizontal line of the handset is approximately parallel to the sagittal plane of the phantom.
3. Translate the handset towards the phantom along the line passing through RE and LE until handset point A touches the pinna at the ERP
4. While maintaining the handset in this plane, rotate it around the LE-RE line until the vertical centerline is in the plane normal to the plane containing B-M and N-F lines, i.e., the Reference Plane.
5. Rotate the handset around the vertical centerline until the handset (horizontal line) is parallel to the N-F line.

6. While maintaining the vertical centerline in the Reference Plane, keeping point A on the line passing through RE and LE, and maintaining the handset contact with the pinna, rotate the handset about the N-F line until any point on the handset is in contact with a phantom point below the pinna on the cheek. See Figure 6.2.3. The actual rotation angles should be documented in the test report.

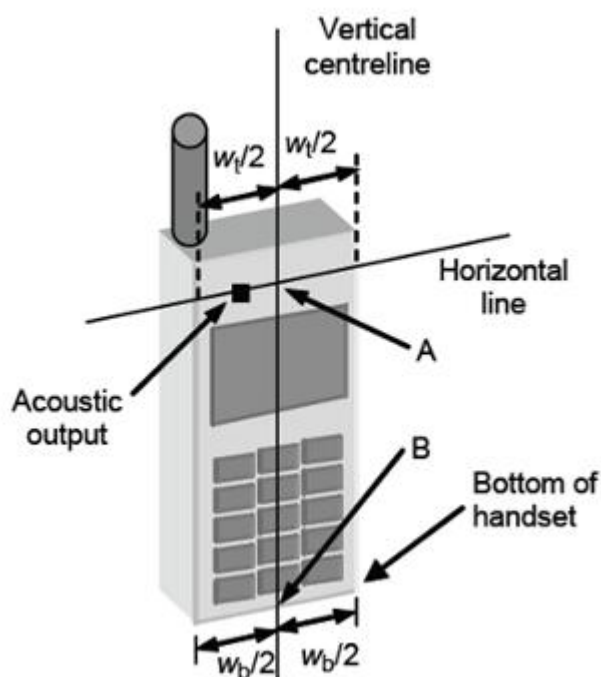


Fig 6.2.1 Handset vertical and horizontal reference lines—"fixed case"

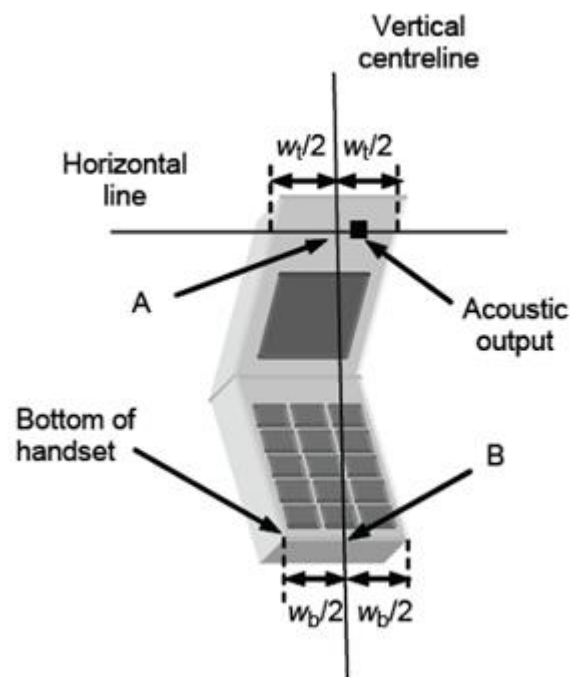


Fig 6.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

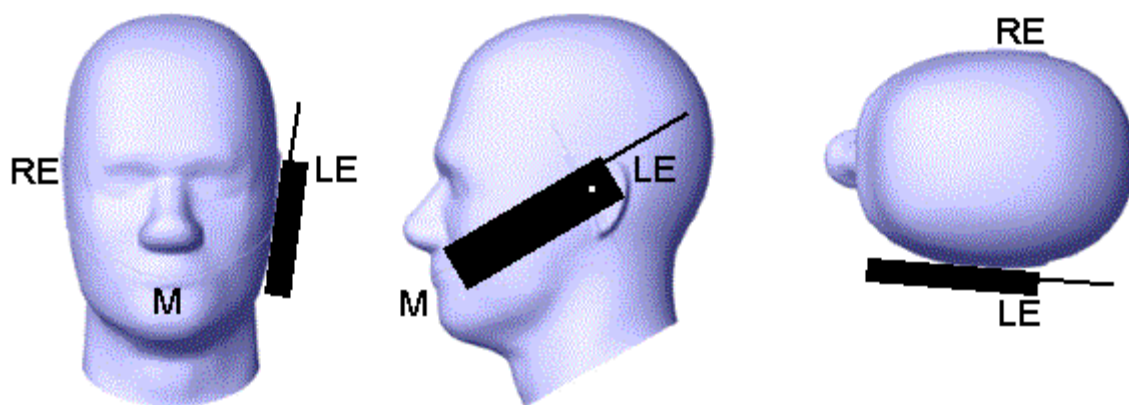


Fig 6.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

6.3. Definition of the tilt position

1. While maintaining the orientation of the handset, retract the handset parallel to the reference plane far enough away from the phantom to enable a rotation of the device by 15 degree.
2. Rotate the Handset around the horizontal line by 15 degree (see Figure 6.3.1).
3. While maintaining the orientation of the handset, move the handset towards the phantom on a line passing through RE and LE until any part of the handset touches the ear. The tilt position is obtained when the contact is on the pinna. If the contact is at any location other than the pinna, e.g., the antenna with the back of the phantom head, the angle of the handset shall be reduced. In this case, the tilt position is obtained if any part of the handset is in contact with the pinna as well as a second part of the handset is in contact with the phantom, e.g., the antenna with the back of the head.

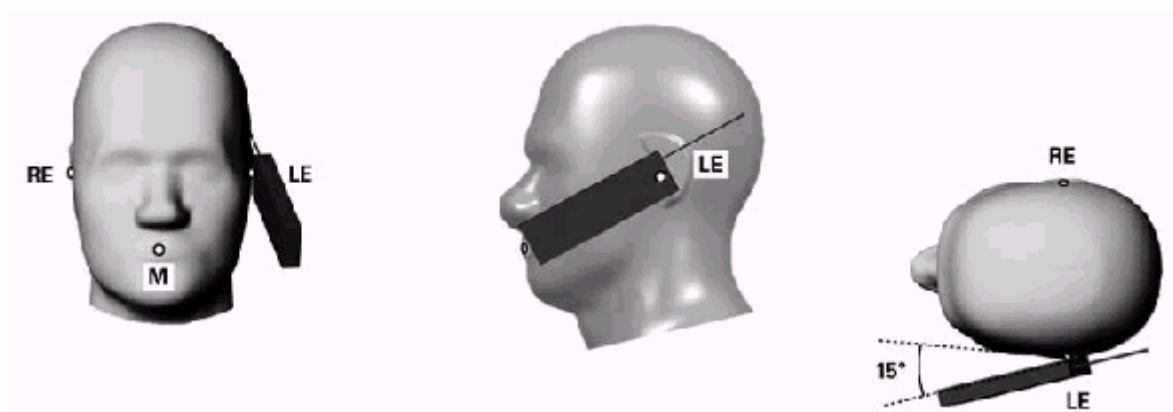


Figure 6.3.1 – Tilt position of the wireless device on the left side of SAM

6.4. Body Worn Accessory

1. Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Figure 6.4.1). Per KDB 648474 D04, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is $< 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a headset attached to the handset.
2. Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest

spacing to the body. Then multiple accessories that contain metallic components are test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.

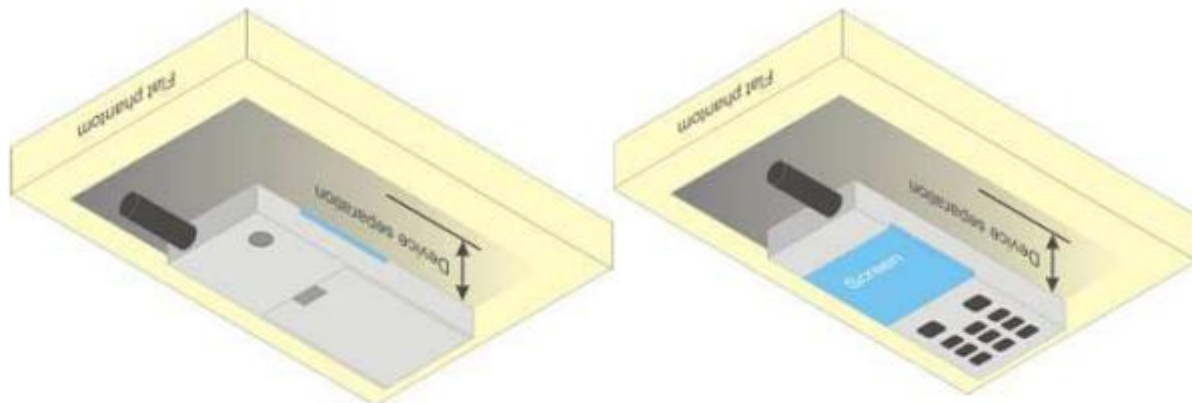


Figure 6.4.1 – Test positions for body-worn devices

6.5. Wireless Router Devices

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WLAN simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06 where SAR test considerations for handsets ($L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WLAN transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WLAN transmitter according to FCC KDB Publication 447498 D01 publication procedures. The “Portable Hotspot” feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

7. RF Output Power

7.1. GSM Conducted Power

Band GSM850	Burst-Averaged output Power (dBm)				Frame-Averaged output Power (dBm)			
Tx Channel	Tune-up	128	189	251	Tune-up	128	189	251
Frequency (MHz)	(dBm)	824.2	836.4	848.8	Tune-up	824.2	836.4	848.8
GSM (GMSK)	32.50	32.26	32.30	32.19	23.47	23.23	23.27	23.16
GPRS(GMSK,1 Tx slot)	32.50	32.23	32.28	32.17	23.47	23.20	23.25	23.14
GPRS(GMSK,2 Tx slot)	32.00	31.48	31.51	31.39	25.98	25.46	25.49	25.37
GPRS(GMSK,3 Tx slot)	30.00	29.66	29.72	29.65	25.74	25.40	25.46	25.39
GPRS(GMSK,4 Tx slot)	29.00	28.65	28.34	28.51	25.99	25.64	25.33	25.50
EGPRS(8PSK,1 Tx slot)	27.00	26.78	26.80	26.83	17.97	17.75	17.77	17.80
EGPRS(8PSK,2 Tx slot)	26.00	25.96	25.83	25.67	19.98	19.94	19.81	19.65
EGPRS(8PSK,3 Tx slot)	24.50	23.60	23.78	24.08	20.24	19.34	19.52	19.82
EGPRS(8PSK,4 Tx slot)	23.00	22.31	22.33	22.51	19.99	19.30	19.32	19.50
Band GSM1900	Burst-Averaged output Power (dBm)				Frame-Averaged output Power (dBm)			
Tx Channel	Tune-up	512	661	810	Tune-up	512	661	810
Frequency (MHz)	(dBm)	1850.2	1880	1909.8	Tune-up	1850.2	1880	1909.8
GSM (GMSK)	29.50	28.95	29.01	29.00	20.47	19.92	19.98	19.97
GPRS(GMSK,1 Tx slot)	29.00	28.92	28.99	28.96	19.97	19.89	19.96	19.93
GPRS(GMSK,2 Tx slot)	28.50	28.15	28.24	28.27	22.48	22.13	22.22	22.25
GPRS(GMSK,3 Tx slot)	27.00	26.26	26.48	26.60	22.74	22.00	22.22	22.34
GPRS(GMSK,4 Tx slot)	26.00	25.24	25.46	25.55	22.99	22.23	22.45	22.54
EGPRS(8PSK,1 Tx slot)	26.00	24.95	25.87	25.14	16.97	15.92	16.84	16.11
EGPRS(8PSK,2 Tx slot)	25.00	24.15	24.80	24.32	18.98	18.13	18.78	18.30
EGPRS(8PSK,3 Tx slot)	22.50	22.31	21.97	21.32	18.24	18.05	17.71	17.06
EGPRS(8PSK,4 Tx slot)	21.00	20.94	20.99	20.54	17.99	17.93	17.98	17.53

7.2. WCDMA Conducted Power

WCDMA Band 2	Burst-Averaged output Power (dBm)			
Tx Channel	Tune-up	9262	9400	9538
Frequency (MHz)	(dBm)	1852.4	1880	1907.6
RMC12.2K	24.00	23.86	23.73	23.57
HSDPA Sub 1	23.00	22.93	22.79	22.60
HSDPA Sub 2	22.50	22.33	22.23	22.22

HSDPA Sub 3	21.50	21.49	21.33	20.89
HSDPA Sub 4	21.50	21.46	21.40	21.10
HSUPA Sub 1	23.00	21.75	22.52	22.33
HSUPA Sub 2	23.00	22.77	22.53	22.42
HSUPA Sub 3	22.00	20.86	21.54	21.35
HSUPA Sub 4	23.00	22.85	22.73	22.54
HSUPA Sub 5	22.50	21.17	22.08	21.87
WCDMA Band 4	Burst-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	1312	1413	1513
Frequency (MHz)		1712.4	1732.6	1752.6
RMC12.2K	24.00	23.75	23.54	23.46
HSDPA Sub 1	23.00	22.78	22.57	22.49
HSDPA Sub 2	22.50	22.31	22.20	22.02
HSDPA Sub 3	21.50	21.29	20.89	21.10
HSDPA Sub 4	21.50	21.34	20.76	21.14
HSUPA Sub 1	22.50	21.31	22.35	22.29
HSUPA Sub 2	23.00	22.58	22.52	22.32
HSUPA Sub 3	21.50	21.01	21.41	21.13
HSUPA Sub 4	23.00	22.76	22.57	22.48
HSUPA Sub 5	22.00	21.38	21.84	21.76
WCDMA Band 5	Burst-Averaged output Power (dBm)			
Tx Channel	Tune-up (dBm)	4132	4182	4233
Frequency (MHz)		826.4	836.4	846.6
RMC12.2K	23.50	23.03	22.95	22.91
HSDPA Sub 1	22.50	22.04	21.94	21.91
HSDPA Sub 2	22.00	21.53	21.52	21.50
HSDPA Sub 3	21.00	20.68	20.45	20.07
HSDPA Sub 4	21.00	20.55	20.51	20.49
HSUPA Sub 1	22.00	21.08	21.82	21.74
HSUPA Sub 2	22.00	21.90	21.91	21.74
HSUPA Sub 3	21.00	20.34	20.48	20.68
HSUPA Sub 4	22.50	22.05	21.97	21.93
HSUPA Sub 5	21.50	20.63	21.29	21.19

7.3. LTE Conducted Power

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18607/1850.7	18900/1880	19193/1909.3
LTE Band 2	1.4MHz	QPSK	1	0	23.00	22.71	22.70	22.57
			1	2	23.00	22.74	22.67	22.60
			1	5	23.00	22.69	22.64	22.57
			3	0	23.00	22.74	22.69	22.59
			3	1	23.00	22.74	22.62	22.61
			3	2	23.00	22.73	22.61	22.63
			6	0	22.00	21.75	21.64	21.62
		16QAM	1	0	22.50	22.04	21.97	21.91
			1		22.50	21.93	21.84	21.89
			1	5	22.50	22.06	21.90	21.91
			3	0	22.00	21.75	21.66	21.67
			3	1	22.00	21.73	21.61	21.67
			3	2	22.00	21.73	21.62	21.63
			6	0	21.00	20.79	20.67	20.68
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18615/1851.5	18900/1880	19185/1908.5
LTE Band 2	3MHz	QPSK	1	0	23.00	22.65	22.67	22.51
			1	7	23.00	22.58	22.57	22.55
			1	14	23.00	22.58	22.54	22.57
			8	0	22.00	21.61	21.60	21.49
			8	4	22.00	21.57	21.57	21.55
			8	7	22.00	21.58	21.52	21.54
			15	0	22.00	21.59	21.58	21.56
		16QAM	1	0	22.00	21.94	21.99	21.82
			1	7	22.00	21.80	21.88	21.77
			1	14	22.00	21.76	21.85	21.78
			8	0	21.00	20.64	20.64	20.58
			8	4	21.00	20.66	20.60	20.58
			8	7	21.00	20.62	20.58	20.61
			15	0	21.00	20.62	20.58	20.51
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18625/1852.5	18900/1880	19175/1907.5
LTE	5MHz	QPSK	1	0	23.00	22.68	22.63	22.38

Band 2			1	12	23.00	22.55	22.56	22.50
			1	24	23.00	22.45	22.53	22.56
			12	0	22.00	21.62	21.63	21.42
			12	6	22.00	21.56	21.56	21.48
			12	11	22.00	21.49	21.49	21.54
			25	0	22.00	21.49	21.59	21.46
		16QAM	1	0	22.00	21.89	21.89	21.74
			1	12	22.00	21.71	21.80	21.70
			1	24	22.00	21.68	21.69	21.87
			12	0	21.00	20.59	20.52	20.38
			12	6	21.00	20.52	20.52	20.48
			12	11	21.00	20.43	20.44	20.48
			25	0	21.00	20.49	20.55	20.51
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18650/1855	18900/1880	19150/1905
LTE Band 2	10MHz	QPSK	1	0	23.00	22.59	22.60	22.15
			1	24	23.00	22.41	22.56	22.35
			1	49	23.00	22.26	22.30	22.52
			25	0	22.00	21.45	21.51	21.11
			25	12	22.00	21.41	21.51	21.33
			25	24	22.00	21.23	21.46	21.53
			50	0	22.00	21.38	21.53	21.35
		16QAM	1	0	22.00	21.91	21.95	21.35
			1	24	22.00	21.64	21.81	21.61
			1	49	22.00	21.51	21.58	21.67
			25	0	21.00	20.43	20.57	20.15
			25	12	21.00	20.37	20.54	20.33
			25	24	21.00	20.25	20.41	20.52
			50	0	20.50	20.35	20.46	20.33
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18675/1857.5	18900/1880	19125/1902.5
LTE Band 2	15MHz	QPSK	1	0	23.00	22.46	22.57	21.92
			1	37	23.00	22.25	22.51	22.21
			1	74	23.00	22.22	22.07	22.41
			36	0	22.00	21.32	21.57	21.03
			36	18	22.00	21.21	21.47	21.17
			36	37	22.00	21.14	21.31	21.39

		16QAM	75	0	21.50	21.30	21.47	21.25
			1	0	22.00	21.79	21.71	21.23
			1	37	22.00	21.50	21.85	21.49
			1	74	22.00	21.44	21.32	21.64
			36	0	21.00	20.39	20.54	20.00
			36	18	21.00	20.28	20.45	20.12
			36	37	21.00	20.16	20.32	20.37
			75	0	20.50	20.33	20.42	20.15
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		18700/1860	18900/1880	19100/1900
LTE Band 2	20MHz	QPSK	1	0	23.50	22.38	22.42	21.91
			1	49	23.50	22.23	22.48	22.06
			1	99	23.50	22.36	21.88	22.41
			50	0	22.00	21.45	21.57	21.12
			50	24	22.00	21.31	21.43	21.13
			50	49	22.00	21.34	21.31	21.44
			100	0	21.50	21.35	21.41	21.29
			1	0	22.00	21.77	21.75	21.17
		16QAM	1	49	22.00	21.41	21.79	21.31
			1	99	22.00	21.58	21.24	21.60
			50	0	21.00	20.38	20.52	20.06
			50	24	21.00	20.30	20.44	20.03
			50	49	21.00	20.29	20.23	20.44
			100	0	20.50	20.34	20.36	20.26

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19957/1710.7	20175/1732.5	20393/1754.3
LTE Band 4	1.4MHz	QPSK	1	0	23.50	22.99	23.04	22.76
			1	2	23.50	23.01	23.04	22.78
			1	5	23.50	22.99	23.05	22.76
			3	0	23.50	23.01	23.07	22.80
			3	1	23.50	23.02	23.05	22.80
			3	2	23.50	23.01	23.06	22.79
			6	0	22.50	22.03	22.07	21.81
		16QAM	1	0	22.50	22.21	22.26	22.11
			1	2	22.50	22.16	22.35	22.10
			1	5	22.50	22.12	22.34	22.10

			3	0	22.50	22.06	22.15	21.83
			3	1	22.50	22.06	22.00	21.81
			3	2	22.50	21.99	22.11	21.83
			6	0	21.50	21.05	21.12	20.89
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19965/1711.5	20175/1732.5	20385/1753.5
LTE Band 4	3MHz	QPSK	1	0	23.50	22.94	23.05	22.78
			1	7	23.50	22.90	23.04	22.78
			1	14	23.50	22.92	23.06	22.76
			8	0	22.50	21.95	22.08	21.81
			8	4	22.50	21.94	22.05	21.77
			8	7	22.50	21.95	22.02	21.78
			15	0	22.50	22.00	22.03	21.80
		16QAM	1	0	22.50	22.25	22.39	22.06
			1	7	22.50	22.17	22.32	22.09
			1	14	22.50	22.24	22.37	22.06
			8	0	21.50	21.05	21.10	20.85
			8	4	21.50	21.07	21.05	20.89
			8	7	21.50	21.07	21.07	20.85
			15	0	21.50	21.01	21.06	20.86
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		19975/1712.5	20175/1732.5	20375/1752.5
LTE Band 4	5MHz	QPSK	1	0	23.50	23.00	23.10	22.85
			1	12	23.50	22.97	23.09	22.79
			1	24	23.50	23.04	23.11	22.82
			12	0	22.50	22.03	22.13	21.86
			12	6	22.50	22.00	22.10	21.83
			12	11	22.50	22.03	22.13	21.82
			25	0	22.50	22.03	22.11	21.86
		16QAM	1	0	22.50	22.22	22.27	22.14
			1	12	22.50	22.22	22.39	22.03
			1	24	22.50	22.27	22.35	22.08
			12	0	21.50	21.00	21.11	20.82
			12	6	21.50	20.97	21.02	20.81
			12	11	21.50	21.01	21.04	20.75

			25	0	21.50	21.01	21.11	20.83
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20000/1715	20175/1732.5	20350/1750
LTE Band 4	10MHz	QPSK	1	0	23.50	22.97	23.06	22.89
			1	24	23.50	23.06	23.11	22.85
			1	49	23.50	23.01	23.07	22.79
			25	0	22.50	22.00	22.10	21.94
			25	12	22.50	22.01	22.11	21.82
			25	24	22.50	22.05	22.11	21.85
			50	0	22.50	22.02	22.13	21.95
		16QAM	1	0	22.50	22.17	22.33	22.13
			1	24	22.50	22.27	22.41	22.03
			1	49	22.50	22.29	22.27	22.08
			25	0	21.50	21.02	21.10	20.93
			25	12	21.50	21.05	21.11	20.85
			25	24	21.50	21.08	21.13	20.86
			50	0	21.50	20.99	21.10	20.89
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20025/1717.5	20175/1732.5	20325/1747.5
LTE Band 4	15MHz	QPSK	1	0	23.50	22.89	22.97	22.88
			1	37	23.50	23.00	23.07	22.82
			1	74	23.50	23.01	23.01	22.75
			36	0	22.50	21.93	21.95	21.93
			36	18	22.50	22.06	22.06	21.89
			36	37	22.50	22.00	22.05	21.82
			75	0	22.50	22.07	22.08	21.87
		16QAM	1	0	22.50	22.12	22.19	22.14
			1	37	22.50	22.18	22.40	22.07
			1	74	22.50	22.25	22.30	22.09
			36	0	21.50	20.96	20.96	20.92
			36	18	21.50	21.07	21.03	20.87
			36	37	21.50	21.09	21.13	20.83
			75	0	21.50	20.98	21.07	20.91
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		

			RB Size	RB Offset		20050/1720	20175/1732.5	20300/1745
LTE Band 4	20MHz	QPSK	1	0	23.50	22.86	22.93	22.92
			1	49	23.50	23.02	23.08	22.89
			1	99	23.50	23.06	22.92	22.73
			50	0	22.50	22.00	22.01	21.91
			50	24	22.50	22.14	22.08	21.97
			50	49	22.50	22.26	22.18	21.84
			100	0	22.50	22.11	22.02	21.90
		16QAM	1	0	22.50	22.09	22.22	22.19
			1	49	22.50	22.35	22.39	22.12
			1	99	22.50	22.34	22.16	22.07
			50	0	21.50	20.98	20.96	20.87
			50	24	21.50	21.06	21.06	20.92
			50	49	21.50	21.21	21.13	20.83
			100	0	21.50	21.08	20.98	20.83

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20407/824.7	20525/836.5	20643/848.3
LTE Band 5	1.4MHz	QPSK	1	0	23.00	22.72	22.63	22.76
			1	2	23.00	22.73	22.67	22.73
			1	5	23.00	22.71	22.64	22.72
			3	0	23.00	22.76	22.68	22.81
			3	1	23.00	22.73	22.66	22.79
			3	2	23.00	22.73	22.66	22.77
			6	0	22.00	21.73	21.68	21.78
		16QAM	1	0	22.50	22.01	21.95	22.01
			1	2	22.50	21.97	21.92	21.97
			1	5	22.50	21.94	21.98	22.11
			3	0	22.00	21.70	21.74	21.73
			3	1	22.00	21.75	21.63	21.76
			3	2	22.00	21.73	21.70	21.84
			6	0	21.00	20.82	20.73	20.85
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20415/825.5	20525/836.5	20635/847.5
LTE Band 5	3MHz	QPSK	1	0	23.00	22.72	22.65	22.77
			1	7	23.00	22.67	22.65	22.75
			1	14	23.00	22.69	22.67	22.74

			8	0	22.00	21.69	21.62	21.77
			8	4	22.00	21.66	21.68	21.75
			8	7	22.00	21.68	21.67	21.76
			15	0	22.00	21.71	21.65	21.81
		16QAM	1	0	22.50	22.00	21.92	22.07
			1	7	22.50	22.02	21.92	22.08
			1	14	22.50	21.88	21.97	21.94
			8	0	21.00	20.78	20.68	20.85
			8	4	21.00	20.79	20.69	20.84
			8	7	21.00	20.74	20.73	20.86
			15	0	21.00	20.67	20.68	20.83
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20425/826.5	20525/836.5	20625/846.5
LTE Band 5	5MHz	QPSK	1	0	23.00	22.79	22.69	22.85
			1	12	23.00	22.69	22.68	22.77
			1	24	23.00	22.72	22.76	22.79
			12	0	22.00	21.72	21.69	21.87
			12	6	22.00	21.69	21.70	21.79
			12	11	22.00	21.64	21.64	21.76
			25	0	22.00	21.69	21.65	21.84
		16QAM	1	0	22.50	21.97	21.91	22.15
			1	12	22.50	21.87	21.87	22.12
			1	24	22.50	21.96	21.94	22.11
			12	0	21.00	20.71	20.70	20.83
			12	6	21.00	20.68	20.68	20.75
			12	11	21.00	20.57	20.61	20.74
			25	0	21.00	20.69	20.68	20.84
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20450/829	20525/836.5	20600/844
LTE Band 5	10MHz	QPSK	1	0	23.00	22.72	22.66	22.74
			1	24	23.00	22.74	22.70	22.85
			1	49	23.00	22.64	22.74	22.71
			25	0	22.00	21.68	21.73	21.85
			25	12	22.00	21.69	21.69	21.80
			25	24	22.00	21.62	21.63	21.69
			50	0	22.00	21.71	21.69	21.77
		16QAM	1	0	22.50	22.01	22.02	22.05

			1	24	22.50	21.92	22.02	22.09
			1	49	22.50	21.97	22.08	21.98
			25	0	21.00	20.71	20.74	20.82
			25	12	21.00	20.67	20.69	20.80
			25	24	21.00	20.65	20.66	20.67
			50	0	21.00	20.68	20.69	20.76

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20775/2502.5	21100/2535	21425/2567.5
LTE Band 7	5MHz	QPSK	1	0	23.50	22.80	23.30	23.44
			1	12	23.50	22.73	23.26	23.36
			1	24	23.50	22.67	23.21	23.32
			12	0	23.00	21.68	22.36	22.51
			12	6	23.00	21.71	22.28	22.40
			12	11	23.00	21.70	22.25	22.36
			25	0	22.50	21.70	22.27	22.40
		16QAM	1	0	23.00	21.94	22.59	22.74
			1	12	23.00	21.91	22.50	22.57
			1	24	23.00	21.84	22.39	22.48
			12	0	21.50	20.66	21.37	21.45
			12	6	21.50	20.70	21.26	21.38
			12	11	21.50	20.69	21.21	21.33
			25	0	21.50	20.73	21.31	21.47
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20800/2505	21100/2535	21400/2565
LTE Band 7	10MHz	QPSK	1	0	24.00	22.77	23.29	23.52
			1	24	24.00	22.66	23.33	23.49
			1	49	24.00	22.42	23.11	23.34
			25	0	23.00	21.66	22.39	22.61
			25	12	23.00	21.66	22.27	22.52
			25	24	23.00	21.59	22.25	22.45
			50	0	23.00	21.67	22.30	22.53
		16QAM	1	0	23.00	22.00	22.60	22.73
			1	24	23.00	21.89	22.49	22.70
			1	49	23.00	21.71	22.34	22.59
			25	0	22.00	20.73	21.42	21.63
			25	12	22.00	20.67	21.35	21.57
			25	24	22.00	20.62	21.22	21.49

			50	0	22.00	20.59	21.39	21.56
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20825/2507.5	21100/2535	21375/2562.5
LTE Band 7	15MHz	QPSK	1	0	24.00	22.71	23.18	23.29
			1	37	24.00	22.49	23.30	23.52
			1	74	24.00	22.25	22.95	23.28
			36	0	23.00	21.54	22.35	22.48
			36	18	23.00	21.57	22.32	22.50
			36	37	23.00	21.38	22.10	22.41
			75	0	22.50	21.56	22.29	22.47
		16QAM	1	0	23.00	22.01	22.49	22.38
			1	37	23.00	21.73	22.49	22.77
			1	74	23.00	21.47	22.16	22.39
			36	0	22.00	20.59	21.35	21.44
			36	18	22.00	20.58	21.37	21.55
			36	37	22.00	20.37	21.10	21.45
			75	0	22.00	20.53	21.29	21.51
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		20850/2510	21100/2535	21350/2560
LTE Band 7	20MHz	QPSK	1	0	23.50	22.62	22.99	23.03
			1	49	23.50	22.40	23.30	23.48
			1	99	23.50	22.31	22.85	22.94
			50	0	22.50	21.55	22.42	22.34
			50	24	22.50	21.52	22.37	22.49
			50	49	22.50	21.40	22.12	22.47
			100	0	22.50	21.41	22.22	22.33
		16QAM	1	0	23.00	21.93	22.27	22.24
			1	49	23.00	21.62	22.57	22.29
			1	99	23.00	21.59	22.15	22.49
			50	0	22.00	20.47	21.40	21.32
			50	24	22.00	20.45	21.37	21.50
			50	49	22.00	20.33	21.10	21.46
			100	0	21.50	20.40	21.19	21.30

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23017/699.7	23095/707.5	23173/715.3

LTE Band 12	1.4MHz	QPSK	1	0	22.00	21.77	21.84	21.95
			1	2	22.00	21.80	21.86	21.92
			1	5	22.00	21.74	21.83	21.95
			3	0	22.00	21.80	21.89	21.96
			3	1	22.00	21.80	21.86	21.95
			3	2	22.00	21.78	21.88	21.95
			6	0	21.00	20.78	20.88	20.92
		16QAM	1	0	21.50	20.99	21.17	21.14
			1	2	21.50	20.99	21.06	21.16
			1	5	21.50	21.04	21.17	21.25
			3	0	21.00	20.77	20.85	20.93
			3	1	21.00	20.84	20.89	21.00
			3	2	21.00	20.80	20.93	20.94
			6	0	20.50	19.94	20.04	20.06
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23025/700.5	23095/707.5	23165/714.5
LTE Band 12	3MHz	QPSK	1	0	22.00	21.73	21.83	21.93
			1	7	22.00	21.71	21.83	21.93
			1	14	22.00	21.75	21.84	21.93
			8	0	21.00	20.77	20.78	20.97
			8	4	21.00	20.74	20.86	20.89
			8	7	21.00	20.71	20.80	20.88
			15	0	21.00	20.75	20.82	20.90
		16QAM	1	0	21.50	21.01	21.03	21.21
			1	7	21.50	20.97	21.16	21.17
			1	14	21.50	20.96	21.15	21.11
			8	0	20.50	19.90	19.91	20.08
			8	4	20.50	19.88	20.00	20.06
			8	7	20.50	19.89	19.97	20.02
			15	0	20.50	19.86	19.95	20.03
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23035/701.5	23095/707.5	23155/713.5
LTE Band 12	5MHz	QPSK	1	0	22.00	21.83	21.85	21.93
			1	12	22.00	21.76	21.85	21.92
			1	24	22.00	21.82	21.89	21.94
			12	0	21.00	20.81	20.85	20.97
			12	6	21.00	20.78	20.85	20.97

		16QAM	12	11	21.00	20.73	20.87	20.86
			25	0	21.00	20.81	20.84	20.91
			1	0	21.50	21.00	21.06	21.05
			1	12	21.50	21.00	21.05	21.13
			1	24	21.50	21.14	21.23	21.26
			12	0	20.50	19.87	19.86	20.09
			12	6	20.50	19.77	19.92	20.01
			12	11	20.50	19.90	19.95	19.92
			25	0	20.50	19.91	19.94	20.01
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23060/704	23095/707.5	23130/711
LTE Band 12	10MHz	QPSK	1	0	22.00	21.79	21.80	21.84
			1	24	22.00	21.79	21.88	21.87
			1	49	22.00	21.82	21.89	21.92
			25	0	21.00	20.76	20.83	20.83
			25	12	21.00	20.81	20.82	20.84
			25	24	21.00	20.80	20.82	20.82
			50	0	21.00	20.82	20.89	20.87
		16QAM	1	0	21.50	21.05	21.14	21.13
			1	24	21.50	21.08	21.20	21.17
			1	49	21.50	21.08	21.09	20.89
			25	0	20.00	19.91	19.94	19.89
			25	12	20.00	19.92	19.90	19.92
			25	24	20.00	19.97	19.92	19.94
			50	0	20.00	19.90	19.92	19.91

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23755/706.5	23790/710	23825/713.5
LTE Band 17	5MHz	QPSK	1	0	22.50	22.06	21.64	22.15
			1	12	22.50	22.05	22.12	21.65
			1	24	22.50	22.14	22.16	22.19
			12	0	21.50	21.06	21.12	21.20
			12	6	21.50	21.08	21.09	21.16
			12	11	21.50	21.07	21.04	21.13
			25	0	21.50	21.08	21.10	21.16
		16QAM	1	0	22.00	21.34	21.39	20.86
			1	12	22.00	21.31	20.90	20.93

			1	24	22.00	21.50	21.14	21.00
			12	0	20.50	20.08	20.15	20.27
			12	6	20.50	20.12	20.10	20.20
			12	11	20.50	20.12	20.13	20.20
			25	0	20.50	20.16	20.14	20.20
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23780/709	23790/710	23800/711
LTE Band 17	10MHz	QPSK	1	0	22.50	21.52	21.55	21.59
			1	24	22.50	21.60	21.64	21.62
			1	49	22.50	21.62	21.62	21.63
			25	0	21.50	20.96	21.03	21.07
			25	12	21.50	21.05	21.13	21.05
			25	24	21.50	21.03	21.04	21.06
			50	0	21.50	21.07	21.05	21.09
		16QAM	1	0	21.00	20.83	20.75	20.81
			1	24	21.00	20.89	20.96	20.82
			1	49	21.00	20.88	20.85	20.97
			25	0	20.50	20.09	20.12	20.12
			25	12	20.50	20.18	20.20	20.18
			25	24	20.50	20.07	20.10	20.15
			50	0	20.50	20.14	20.06	20.12

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26047/1850.7	26365/1882.5	26683/1914.3
LTE Band 25	1.4MHz	QPSK	1	0	22.50	22.42	22.25	21.79
			1	2	22.50	22.41	22.22	21.80
			1	5	22.50	22.38	22.17	21.75
			3	0	22.50	22.39	22.25	22.30
			3	1	22.50	22.38	22.20	22.32
			3	2	22.50	22.38	22.19	22.28
		16QAM	6	0	21.50	21.39	21.21	21.30
			1	0	22.00	21.66	21.12	20.98
			1	2	22.00	21.71	21.07	20.96
			1	5	22.00	21.66	21.04	21.01
			3	0	21.50	21.36	21.33	21.35
			3	1	21.50	21.31	21.21	21.34
			3	2	21.50	21.36	21.12	21.35

			6	0	20.50	20.44	20.31	20.41
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26055/1851.5	26365/1882.5	26675/1913.5
LTE Band 25	3MHz	QPSK	1	0	22.00	21.91	21.83	21.75
			1	7	22.00	21.85	21.71	21.76
			1	14	22.00	21.77	21.67	21.75
			8	0	21.50	21.38	21.24	21.31
			8	4	21.50	21.34	21.19	21.30
			8	7	21.50	21.34	21.17	21.25
			15	0	21.50	21.36	21.21	21.27
		16QAM	1	0	21.50	21.14	21.04	21.03
			1	7	21.50	21.18	21.04	20.94
			1	14	21.50	21.07	20.98	21.02
			8	0	20.50	20.42	20.31	20.34
			8	4	20.50	20.41	20.25	20.38
			8	7	20.50	20.38	20.17	20.32
			15	0	20.50	20.39	20.21	20.31
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26065/1852.5	26365/1882.5	26665/1912.5
LTE Band 25	5MHz	QPSK	1	0	22.00	21.97	21.89	21.80
			1	12	22.00	21.82	21.76	21.82
			1	24	22.00	21.72	21.57	21.81
			12	0	21.50	21.37	21.31	21.44
			12	6	21.50	21.34	21.24	21.32
			12	11	21.50	21.29	21.10	21.18
			25	0	21.50	21.29	21.26	21.29
		16QAM	1	0	21.50	21.11	21.25	21.04
			1	12	21.50	21.13	21.06	21.07
			1	24	21.50	21.07	20.78	21.00
			12	0	20.50	20.37	20.27	20.38
			12	6	20.50	20.35	20.18	20.30
			12	11	20.50	20.19	20.08	20.16
			25	0	20.50	20.30	20.24	20.31
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		

			RB Size	RB Offset		26090/1855	26365/1882.5	26640/1910
LTE Band 25	10MHz	QPSK	1	0	22.00	21.95	21.96	21.73
			1	24	22.00	21.74	21.76	21.80
			1	49	22.00	21.62	21.40	21.80
			25	0	21.50	21.26	21.33	21.24
			25	12	21.50	21.19	21.20	21.29
			25	24	21.50	21.09	21.06	21.14
			50	0	21.50	21.19	21.18	21.26
		16QAM	1	0	21.50	21.15	21.18	20.99
			1	24	21.50	21.04	21.02	21.09
			1	49	21.50	20.85	20.69	21.03
			25	0	20.50	20.26	20.30	20.21
			25	12	20.50	20.20	20.20	20.32
			25	24	20.50	20.07	20.12	20.19
			50	0	20.50	20.21	20.18	20.25
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26115/1857.5	26365/1882.5	26615/1907.5
LTE Band 25	15MHz	QPSK	1	0	22.00	21.84	21.96	21.41
			1	37	22.00	21.63	21.77	21.73
			1	74	22.00	21.64	21.24	21.77
			36	0	21.50	21.24	21.38	20.99
			36	18	21.50	21.11	21.12	21.18
			36	37	21.50	21.07	20.91	21.21
			75	0	21.50	21.18	21.14	21.16
		16QAM	1	0	21.50	21.20	21.23	20.61
			1	37	21.50	20.88	20.97	21.03
			1	74	21.50	20.97	20.49	20.93
			36	0	20.50	20.17	20.34	19.98
			36	18	20.50	20.13	20.16	20.24
			36	37	20.50	20.00	19.97	20.18
			75	0	20.50	20.18	20.15	20.14
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26140/1860	26365/1882.5	26590/1905
LTE	20MHz	QPSK	1	0	22.00	21.80	21.90	21.25

Band 25			1	49	22.00	21.62	21.74	21.70
			1	99	22.00	21.80	21.16	21.76
			50	0	21.50	21.34	21.35	20.84
			50	24	21.50	21.20	21.21	21.24
			50	49	21.50	21.18	20.85	21.27
			100	0	21.50	21.24	21.07	21.08
		16QAM	1	0	21.50	21.09	21.27	20.47
			1	49	21.50	20.93	21.06	20.97
			1	99	21.50	21.10	20.51	21.05
			50	0	20.50	20.27	20.33	19.84
			50	24	20.50	20.14	20.15	20.17
			50	49	20.50	20.22	19.86	20.25
			100	0	20.50	20.21	20.04	20.05

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26697/814.7	26740/819	26783/823.3
LTE Band 26a	1.4MHz	QPSK	1	0	23.00	22.78	22.81	22.64
			1	2	23.00	22.79	22.69	22.76
			1	5	23.00	22.77	22.78	22.66
			3	0	23.00	22.82	22.86	22.82
			3	1	23.00	22.79	22.84	22.79
			3	2	23.00	22.81	22.83	22.80
			6	0	22.00	21.79	21.85	21.79
		16QAM	1	0	22.50	22.03	21.66	21.54
			1	2	22.50	22.01	21.60	21.53
			1	5	22.50	22.04	21.62	21.63
			3	0	22.00	21.85	21.90	21.85
			3	1	22.00	21.83	21.85	21.82
			3	2	22.00	21.71	21.83	21.79
			6	0	21.00	20.83	20.92	20.82
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26705/818.5	26740/819	26775/822.5
LTE Band 26a	3MHz	QPSK	1	0	23.00	22.23	22.69	22.32
			1	7	23.00	22.42	22.29	22.27
			1	14	23.00	22.66	22.30	22.27
			8	0	22.00	21.76	21.81	21.78
			8	4	22.00	21.73	21.81	21.79
			8	7	22.00	21.75	21.82	21.76

			15	0	22.00	21.72	21.83	21.80
		16QAM	1	0	22.00	21.55	21.69	21.55
			1	7	22.00	21.50	21.55	21.59
			1	14	22.00	21.43	21.69	21.98
			8	0	21.00	20.79	20.89	20.85
			8	4	21.00	20.82	20.89	20.88
			8	7	21.00	20.86	20.89	20.89
			15	0	21.00	20.78	20.87	20.84
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26715/816.5	26740/819	26765/821.5
LTE Band 26a	5MHz	QPSK	1	0	23.00	22.31	22.44	22.35
			1	12	23.00	22.27	22.31	22.71
			1	24	23.00	22.70	22.88	22.34
			12	0	22.00	21.78	21.87	21.81
			12	6	22.00	21.80	21.91	21.86
			12	11	22.00	21.75	21.85	21.88
			25	0	22.00	21.80	21.86	21.83
		16QAM	1	0	22.50	21.76	21.84	21.81
			1	12	22.50	21.40	21.62	21.65
			1	24	22.50	21.98	22.15	21.91
			12	0	21.00	20.79	20.84	20.79
			12	6	21.00	20.79	20.83	20.84
			12	11	21.00	20.74	20.81	20.90
			25	0	21.00	20.79	20.86	20.85
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		/	26740/819	/
LTE Band 26a	10MHz	QPSK	1	0	22.50	/	22.40	/
			1	24	22.50	/	22.36	/
			1	49	22.50	/	22.31	/
			25	0	22.00	/	21.88	/
			25	12	22.00	/	21.89	/
			25	24	22.00	/	21.87	/
			50	0	22.00	/	21.89	/
		16QAM	1	0	22.00	/	21.63	/
			1	24	22.00	/	21.74	/
			1	49	22.00	/	21.57	/
			25	0	21.00	/	20.88	/

			25	12	21.00	/	20.89	/
			25	24	21.00	/	20.86	/
			50	0	21.00	/	20.90	/

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26797/824.7	26915/836.5	27033/848.3
LTE Band 26b	1.4MHz	QPSK	1	0	23.00	22.82	22.70	22.80
			1	2	23.00	22.80	22.73	22.83
			1	5	23.00	22.77	22.71	22.80
			3	0	23.00	22.83	22.73	22.86
			3	1	23.00	22.82	22.73	22.82
			3	2	23.00	22.81	22.73	22.83
			6	0	22.00	21.82	21.73	21.83
		16QAM	1	0	22.50	22.10	21.91	21.88
			1	2	22.50	22.10	21.91	22.15
			1	5	22.50	21.96	21.94	22.02
			3	0	22.00	21.85	21.70	21.91
			3	1	22.00	21.77	21.78	21.82
			3	2	22.00	21.83	21.75	21.92
			6	0	21.00	20.89	20.83	20.93
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26805/825.5	26915/836.5	27025/847.5
LTE Band 26b	3MHz	QPSK	1	0	23.00	22.79	22.71	22.36
			1	7	23.00	22.71	22.71	22.84
			1	14	23.00	22.72	22.73	22.81
			8	0	22.00	21.78	21.71	21.84
			8	4	22.00	21.77	21.67	21.81
			8	7	22.00	21.74	21.76	21.83
			15	0	22.00	21.75	21.75	21.83
		16QAM	1	0	22.50	22.01	21.98	22.16
			1	7	22.50	22.04	22.08	22.07
			1	14	22.50	22.00	22.06	22.15
			8	0	21.00	20.85	20.78	20.92
			8	4	21.00	20.81	20.76	20.86
			8	7	21.00	20.81	20.83	20.91
			15	0	21.00	20.75	20.78	20.85
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB	RB		26815/826.5	26915/836.5	27015/846.5

			Size	Offset				
LTE Band 26b	5MHz	QPSK	1	0	23.00	22.84	22.74	22.86
			1	12	23.00	22.80	22.77	22.88
			1	24	23.00	22.80	22.83	22.89
			12	0	22.00	21.82	21.82	21.96
			12	6	22.00	21.79	21.82	21.90
			12	11	22.00	21.76	21.76	21.84
			25	0	22.00	21.78	21.80	21.88
		16QAM	1	0	22.50	22.16	21.99	21.77
			1	12	22.50	21.99	22.08	22.01
			1	24	22.50	22.08	21.87	22.17
			12	0	21.00	20.81	20.81	20.91
			12	6	21.00	20.74	20.81	20.85
			12	11	21.00	20.72	20.73	20.83
			25	0	21.00	20.82	20.81	20.92
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26840/829	26915/836.5	26990/844
LTE Band 26b	10MHz	QPSK	1	0	23.00	22.80	22.73	22.82
			1	24	23.00	22.82	22.80	22.89
			1	49	23.00	22.72	22.87	22.80
			25	0	22.00	21.75	21.78	21.92
			25	12	22.00	21.74	21.74	21.86
			25	24	22.00	21.66	21.73	21.74
			50	0	22.00	21.77	21.80	21.85
		16QAM	1	0	22.50	22.13	21.99	22.10
			1	24	22.50	22.09	22.10	22.18
			1	49	22.50	22.07	22.02	22.05
			25	0	21.00	20.80	20.78	20.95
			25	12	21.00	20.75	20.77	20.87
			25	24	21.00	20.69	20.76	20.77
			50	0	21.00	20.77	20.84	20.86
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26865/831.5	26915/836.5	26965/841.5
LTE Band 26b	15MHz	QPSK	1	0	23.00	22.77	22.69	22.70
			1	37	23.00	22.71	22.76	22.83
			1	74	23.00	22.72	22.83	22.77
			36	0	22.00	21.77	21.73	21.84

			36	18	22.00	21.74	21.72	21.77
			36	37	22.00	21.71	21.74	21.76
			75	0	22.00	21.75	21.80	21.83
		16QAM	1	0	22.50	21.96	22.11	21.98
			1	37	22.50	22.07	22.09	22.07
			1	74	22.50	21.91	22.15	22.13
			36	0	21.00	20.75	20.73	20.85
			36	18	21.00	20.73	20.68	20.77
			36	37	21.00	20.71	20.80	20.73
			75	0	21.00	20.76	20.77	20.83

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)				
			RB Size	RB Offset		39675/2498.5	40148/2546	40620/2593	41093/2640	41565/2687.5
LTE Band 41	5MHz	QPSK	1	0	24.00	22.90	23.05	23.78	23.10	23.88
			1	12	24.00	22.90	22.94	23.73	23.55	23.80
			1	24	24.00	22.91	23.42	23.73	23.09	23.75
			12	0	23.00	21.90	21.95	22.75	22.68	22.94
			12	6	23.00	21.88	22.35	22.75	21.87	22.89
			12	11	23.00	21.86	22.10	22.75	22.55	22.84
			25	0	23.00	21.83	22.25	22.76	22.50	22.89
		16QAM	1	0	23.50	21.98	22.06	22.99	21.99	23.06
			1	12	23.50	22.00	22.28	22.92	22.79	23.01
			1	24	23.50	22.01	22.97	22.91	22.29	22.95
			12	0	22.00	20.91	20.92	21.76	21.55	21.96
			12	6	22.00	20.83	21.54	21.77	21.88	21.91
			12	11	22.00	20.87	21.94	21.79	21.69	21.84
			25	0	22.00	20.95	21.79	21.85	21.53	21.96
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)				
			RB Size	RB Offset		39700/2501	40160/2547	40620/2593	41080/2639	41540/2685
LTE Band 41	10MHz	QPSK	1	0	24.00	22.77	23.51	23.68	23.40	23.82
			1	24	24.00	22.79	23.85	23.75	22.73	23.86
			1	49	24.00	22.64	23.36	23.67	22.66	23.71
			25	0	23.00	21.84	22.46	22.71	22.61	22.95
			25	12	23.00	21.81	22.47	22.78	22.81	22.92
			25	24	23.00	21.74	22.46	22.76	22.58	22.85
			50	0	23.00	21.81	22.46	22.76	22.55	22.94

		16QAM	1	0	23.50	21.99	22.37	22.90	22.45	23.04
			1	24	23.50	22.01	22.55	22.95	22.04	23.08
			1	49	23.50	21.84	21.90	22.89	22.99	22.95
			25	0	22.00	20.89	21.85	21.76	20.89	21.98
			25	12	22.00	20.87	21.76	21.83	21.25	21.97
			25	24	22.00	20.79	21.01	21.83	21.43	21.91
			50	0	22.00	20.87	20.89	21.79	21.04	21.98
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)				
			RB Size	RB Offset		39725/2503.5	40173/2548	40620/2593	41068/2638	41515/2682.5
LTE Band 41	15MHz	QPSK	1	0	24.00	22.72	23.05	23.61	22.65	23.64
			1	37	24.00	22.67	22.70	23.75	23.08	23.71
			1	74	24.00	22.37	23.26	23.61	22.54	23.56
			36	0	23.00	21.78	21.56	22.70	22.19	22.76
			36	18	23.00	21.68	21.56	22.74	22.08	22.80
			36	37	23.00	21.56	21.83	22.73	21.79	22.78
			75	0	23.00	21.68	22.23	22.72	22.69	22.80
		16QAM	1	0	23.00	21.95	21.83	22.83	22.00	22.87
			1	37	23.00	21.91	22.92	22.93	21.71	22.95
			1	74	23.00	21.61	22.07	22.79	22.05	22.83
			36	0	22.00	20.78	21.12	21.73	21.43	21.73
			36	18	22.00	20.73	20.97	21.69	20.80	21.77
			36	37	22.00	20.62	21.23	21.68	21.52	21.75
			75	0	22.00	20.69	20.86	21.76	21.72	21.82
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)				
			RB Size	RB Offset		39750/2506	40185/2549.5	40620/2593	39650/2636.5	41490/2680
LTE Band 41	20MHz	QPSK	1	0	24.00	22.70	22.33	23.48	23.47	23.67
			1	49	24.00	22.62	23.11	23.74	22.91	23.68
			1	99	24.00	22.27	22.72	23.53	22.63	23.53
			50	0	23.00	21.71	21.53	22.70	21.96	22.77
			50	24	23.00	21.68	22.06	22.80	21.82	22.81
			50	49	23.00	21.48	22.59	22.74	22.19	22.75
			100	0	23.00	21.60	22.15	22.78	21.65	22.79
		16QAM	1	0	23.00	21.91	22.38	22.66	22.48	22.89
			1	49	23.00	21.82	22.23	22.96	22.86	22.91
			1	99	23.00	21.50	22.70	22.77	22.82	22.77

			50	0	22.00	20.78	21.58	21.74	21.15	21.80
			50	24	22.00	20.67	21.15	21.80	20.62	21.86
			50	49	22.00	20.54	21.25	21.79	20.62	21.79
			100	0	22.00	20.65	20.95	21.75	21.13	21.82

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		131979/1710.7	132322/1745	132665/1779.3
LTE Band 66	1.4MHz	QPSK	1	0	23.50	23.13	23.00	23.20
			1	2	23.50	23.14	22.98	23.19
			1	5	23.50	23.15	23.01	23.19
			3	0	23.50	23.13	23.02	23.24
			3	1	23.50	23.13	23.01	23.24
			3	2	23.50	23.14	22.99	23.22
		16QAM	6	0	22.50	22.14	22.02	22.22
			1	0	22.50	22.31	22.32	22.40
			1	2	22.50	22.33	22.15	22.38
			1	5	22.50	22.29	22.17	22.42
			3	0	22.50	22.14	22.09	22.28
			3	1	22.50	22.16	22.07	22.24
			3	2	22.50	22.13	22.00	22.25
			6	0	21.50	21.20	21.11	21.33
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		131987/1711.5	132322/1745	132657/1778.5
LTE Band 66	3MHz	QPSK	1	0	23.50	23.06	23.01	23.20
			1	7	23.50	23.02	22.96	23.18
			1	14	23.50	23.03	22.95	23.19
			8	0	22.50	22.07	22.02	22.22
			8	4	22.50	22.09	21.98	22.22
			8	7	22.50	22.06	21.96	22.19
			15	0	22.50	22.09	21.99	22.24
		16QAM	1	0	22.50	22.34	22.26	22.41
			1	7	22.50	22.21	22.28	22.37
			1	14	22.50	22.24	22.23	22.49
			8	0	21.50	21.15	21.13	21.31
			8	4	21.50	21.17	21.03	21.30
			8	7	21.50	21.15	20.98	21.26

			15	0	21.50	21.13	20.98	21.25
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		131997/1712.5	132322/1745	132647/1777.5
LTE Band 66	5MHz	QPSK	1	0	23.50	23.11	23.08	23.22
			1	12	23.50	23.07	23.03	23.23
			1	24	23.50	23.09	23.02	23.24
			12	0	22.50	22.13	22.12	22.33
			12	6	22.50	22.10	22.00	22.25
			12	11	22.50	22.12	21.96	22.20
			25	0	22.50	22.08	22.01	22.25
		16QAM	1	0	22.50	22.31	22.34	22.44
			1	12	22.50	22.31	22.20	22.44
			1	24	22.50	22.26	22.22	22.45
			12	0	21.50	21.06	21.07	21.27
			12	6	21.50	21.09	20.96	21.23
			12	11	21.50	21.05	20.92	21.17
			25	0	21.50	21.10	21.03	21.26
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		132022/1715	132322/1745	132622/1775
LTE Band 66	10MHz	QPSK	1	0	23.50	23.08	23.10	23.18
			1	24	23.50	23.09	22.85	23.23
			1	49	23.50	23.15	22.95	23.23
			25	0	22.50	22.11	22.09	22.21
			25	12	22.50	22.08	22.03	22.26
			25	24	22.50	22.15	21.98	22.18
			50	0	22.50	22.13	22.08	22.23
		16QAM	1	0	22.50	22.27	22.40	22.35
			1	24	22.50	22.25	22.26	22.40
			1	49	22.50	22.38	22.24	22.44
			25	0	21.50	21.09	21.09	21.20
			25	12	21.50	21.13	21.04	21.28
			25	24	21.50	21.17	20.99	21.25
			50	0	21.50	21.10	21.06	21.25
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		

			RB Size	RB Offset		132047/1717.5	132322/1745	132597/1772.5
LTE Band 66	15MHz	QPSK	1	0	23.50	23.02	23.06	22.42
			1	37	23.50	23.12	22.66	23.12
			1	74	23.50	23.13	22.89	23.09
			36	0	22.50	22.10	22.06	22.04
			36	18	22.50	22.08	21.98	22.15
			36	37	22.50	22.21	21.89	22.16
			75	0	22.50	22.12	22.06	22.12
		16QAM	1	0	22.50	22.31	22.40	22.22
			1	37	22.50	22.28	22.29	22.05
			1	74	22.50	22.48	22.00	22.27
			36	0	21.50	21.09	21.08	20.99
			36	18	21.50	21.13	21.05	21.08
			36	37	21.50	21.14	20.88	21.17
			75	0	21.50	21.10	20.99	21.06
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		132072/1720	132322/1745	132572/1770
LTE Band 66	20MHz	QPSK	1	0	23.50	22.63	22.58	22.35
			1	49	23.50	23.14	22.50	22.58
			1	99	23.50	23.15	22.71	22.78
			50	0	22.50	22.14	22.08	22.02
			50	24	22.50	22.16	22.06	22.09
			50	49	22.50	22.33	21.96	22.12
			100	0	22.50	22.24	21.98	22.11
		16QAM	1	0	22.50	21.93	22.24	21.59
			1	49	22.50	21.83	21.69	21.80
			1	99	22.50	22.43	22.03	22.19
			50	0	21.50	21.11	21.05	21.03
			50	24	21.50	21.14	21.04	21.10
			50	49	21.50	21.27	20.92	21.12
			100	0	21.50	21.20	20.94	21.02

7.4. 5G NR Conducted Power

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Tune-up(dBm)	Power (dBm)
n78	30	10	630334	1@1	DFT_BPSK	26.50	26.21

n78	30	10	630334	24@0	DFT_QPSK	25.50	25.15
n78	30	10	630334	12@6	DFT_QPSK	26.50	26.18
n78	30	10	630334	1@1	DFT_QPSK	26.50	26.14
n78	30	10	630334	1@22	DFT_QPSK	26.00	25.99
n78	30	10	630334	1@1	DFT_QAM16	25.50	25.20
n78	30	10	630334	1@1	DFT_QAM64	24.00	23.53
n78	30	10	630334	1@1	DFT_QAM256	22.00	21.69
n78	30	10	630334	1@1	CP_QPSK	25.00	24.67
n78	30	10	633334	1@1	DFT_BPSK	26.50	26.20
n78	30	10	633334	24@0	DFT_QPSK	25.50	25.25
n78	30	10	633334	12@6	DFT_QPSK	26.50	26.20
n78	30	10	633334	1@1	DFT_QPSK	26.50	26.17
n78	30	10	633334	1@22	DFT_QPSK	26.50	26.22
n78	30	10	633334	1@1	DFT_QAM16	25.50	25.28
n78	30	10	633334	1@1	DFT_QAM64	24.00	23.52
n78	30	10	633334	1@1	DFT_QAM256	22.00	21.72
n78	30	10	633334	1@1	CP_QPSK	25.00	24.70
n78	30	10	636332	1@1	DFT_BPSK	26.50	26.16
n78	30	10	636332	24@0	DFT_QPSK	25.50	25.25
n78	30	10	636332	12@6	DFT_QPSK	26.50	26.25
n78	30	10	636332	1@1	DFT_QPSK	26.50	26.13
n78	30	10	636332	1@22	DFT_QPSK	26.50	26.21
n78	30	10	636332	1@1	DFT_QAM16	25.50	25.21
n78	30	10	636332	1@1	DFT_QAM64	24.00	23.51
n78	30	10	636332	1@1	DFT_QAM256	22.00	21.67
n78	30	10	636332	1@1	CP_QPSK	25.00	24.65
n78	30	15	630500	1@1	DFT_BPSK	26.50	26.22
n78	30	15	630500	36@0	DFT_QPSK	25.50	25.27
n78	30	15	630500	18@9	DFT_QPSK	26.50	26.20
n78	30	15	630500	1@1	DFT_QPSK	26.50	26.23
n78	30	15	630500	1@36	DFT_QPSK	26.50	26.03
n78	30	15	630500	1@1	DFT_QAM16	25.50	25.29
n78	30	15	630500	1@1	DFT_QAM64	24.00	23.57
n78	30	15	630500	1@1	DFT_QAM256	22.00	21.76
n78	30	15	630500	1@1	CP_QPSK	25.00	24.71
n78	30	15	633334	1@1	DFT_BPSK	26.50	26.28
n78	30	15	633334	36@0	DFT_QPSK	25.50	25.31
n78	30	15	633334	18@9	DFT_QPSK	26.50	26.28
n78	30	15	633334	1@1	DFT_QPSK	26.50	26.26

n78	30	15	633334	1@36	DFT_QPSK	26.50	26.21
n78	30	15	633334	1@1	DFT_QAM16	25.50	25.31
n78	30	15	633334	1@1	DFT_QAM64	24.00	23.57
n78	30	15	633334	1@1	DFT_QAM256	22.00	21.80
n78	30	15	633334	1@1	CP_QPSK	25.00	24.77
n78	30	15	636166	1@1	DFT_BPSK	26.50	26.10
n78	30	15	636166	36@0	DFT_QPSK	25.50	25.27
n78	30	15	636166	18@9	DFT_QPSK	26.50	26.26
n78	30	15	636166	1@1	DFT_QPSK	26.50	26.10
n78	30	15	636166	1@36	DFT_QPSK	26.50	26.21
n78	30	15	636166	1@1	DFT_QAM16	25.50	25.13
n78	30	15	636166	1@1	DFT_QAM64	24.00	23.52
n78	30	15	636166	1@1	DFT_QAM256	22.00	21.66
n78	30	15	636166	1@1	CP_QPSK	25.00	24.63
n78	30	20	630668	1@1	DFT_BPSK	26.50	26.21
n78	30	20	630668	50@0	DFT_QPSK	25.50	25.21
n78	30	20	630668	25@12	DFT_QPSK	26.50	26.23
n78	30	20	630668	1@1	DFT_QPSK	26.50	26.19
n78	30	20	630668	1@49	DFT_QPSK	26.00	25.99
n78	30	20	630668	1@1	DFT_QAM16	25.50	25.22
n78	30	20	630668	1@1	DFT_QAM64	24.00	23.54
n78	30	20	630668	1@1	DFT_QAM256	22.00	21.74
n78	30	20	630668	1@1	CP_QPSK	25.00	24.67
n78	30	20	633334	1@1	DFT_BPSK	26.50	26.24
n78	30	20	633334	50@0	DFT_QPSK	25.50	25.30
n78	30	20	633334	25@12	DFT_QPSK	26.50	26.27
n78	30	20	633334	1@1	DFT_QPSK	26.50	26.25
n78	30	20	633334	1@49	DFT_QPSK	26.50	26.17
n78	30	20	633334	1@1	DFT_QAM16	25.50	25.30
n78	30	20	633334	1@1	DFT_QAM64	24.00	23.67
n78	30	20	633334	1@1	DFT_QAM256	22.00	21.84
n78	30	20	633334	1@1	CP_QPSK	25.00	24.74
n78	30	20	636000	1@1	DFT_BPSK	26.50	26.09
n78	30	20	636000	50@0	DFT_QPSK	25.50	25.25
n78	30	20	636000	25@12	DFT_QPSK	26.50	26.18
n78	30	20	636000	1@1	DFT_QPSK	26.50	26.06
n78	30	20	636000	1@49	DFT_QPSK	26.50	26.14
n78	30	20	636000	1@1	DFT_QAM16	25.50	25.16
n78	30	20	636000	1@1	DFT_QAM64	23.50	23.42

n78	30	20	636000	1@1	DFT_QAM256	22.00	21.63
n78	30	20	636000	1@1	CP_QPSK	25.00	24.55
n78	30	40	631334	1@1	DFT_BPSK	26.00	25.79
n78	30	40	631334	100@0	DFT_QPSK	25.50	25.19
n78	30	40	631334	50@25	DFT_QPSK	26.50	26.17
n78	30	40	631334	1@1	DFT_QPSK	26.00	25.84
n78	30	40	631334	1@104	DFT_QPSK	26.00	25.85
n78	30	40	631334	1@1	DFT_QAM16	25.00	24.90
n78	30	40	631334	1@1	DFT_QAM64	23.50	23.28
n78	30	40	631334	1@1	DFT_QAM256	21.50	21.43
n78	30	40	631334	1@1	CP_QPSK	24.50	24.33
n78	30	40	633334	1@1	DFT_BPSK	26.00	25.86
n78	30	40	633334	100@0	DFT_QPSK	25.50	25.25
n78	30	40	633334	50@25	DFT_QPSK	26.50	26.33
n78	30	40	633334	1@1	DFT_QPSK	26.00	25.86
n78	30	40	633334	1@104	DFT_QPSK	26.00	25.84
n78	30	40	633334	1@1	DFT_QAM16	25.00	24.96
n78	30	40	633334	1@1	DFT_QAM64	23.50	23.21
n78	30	40	633334	1@1	DFT_QAM256	21.50	21.45
n78	30	40	633334	1@1	CP_QPSK	24.50	24.42
n78	30	40	635332	1@1	DFT_BPSK	26.00	25.88
n78	30	40	635332	100@0	DFT_QPSK	25.50	25.22
n78	30	40	635332	50@25	DFT_QPSK	26.50	26.26
n78	30	40	635332	1@1	DFT_QPSK	26.00	25.87
n78	30	40	635332	1@104	DFT_QPSK	26.00	25.79
n78	30	40	635332	1@1	DFT_QAM16	25.00	24.92
n78	30	40	635332	1@1	DFT_QAM64	23.50	23.21
n78	30	40	635332	1@1	DFT_QAM256	21.50	21.48
n78	30	40	635332	1@1	CP_QPSK	24.50	24.38
n78	30	50	631668	1@1	DFT_BPSK	26.50	26.11
n78	30	50	631668	128@0	DFT_QPSK	25.50	25.27
n78	30	50	631668	64@32	DFT_QPSK	26.50	26.28
n78	30	50	631668	1@1	DFT_QPSK	26.50	26.07
n78	30	50	631668	1@131	DFT_QPSK	26.00	25.97
n78	30	50	631668	1@1	DFT_QAM16	25.50	25.14
n78	30	50	631668	1@1	DFT_QAM64	23.50	23.42
n78	30	50	631668	1@1	DFT_QAM256	22.00	21.65
n78	30	50	631668	1@1	CP_QPSK	25.00	24.58
n78	30	50	633334	1@1	DFT_BPSK	26.50	26.03

n78	30	50	633334	128@0	DFT_QPSK	25.50	25.34
n78	30	50	633334	64@32	DFT_QPSK	26.50	26.38
n78	30	50	633334	1@1	DFT_QPSK	26.50	26.03
n78	30	50	633334	1@131	DFT_QPSK	26.50	26.00
n78	30	50	633334	1@1	DFT_QAM16	25.50	25.11
n78	30	50	633334	1@1	DFT_QAM64	23.50	23.39
n78	30	50	633334	1@1	DFT_QAM256	22.00	21.59
n78	30	50	633334	1@1	CP_QPSK	25.00	24.58
n78	30	50	635000	1@1	DFT_BPSK	26.00	26.50
n78	30	50	635000	128@0	DFT_QPSK	25.50	25.34
n78	30	50	635000	64@32	DFT_QPSK	26.50	26.36
n78	30	50	635000	1@1	DFT_QPSK	26.50	26.07
n78	30	50	635000	1@131	DFT_QPSK	26.50	26.05
n78	30	50	635000	1@1	DFT_QAM16	25.50	25.15
n78	30	50	635000	1@1	DFT_QAM64	23.5.5	23.45
n78	30	50	635000	1@1	DFT_QAM256	22.00	21.65
n78	30	50	635000	1@1	CP_QPSK	25.00	24.59
n78	30	60	632000	1@1	DFT_BPSK	26.5.5	26.01
n78	30	60	632000	162@0	DFT_QPSK	25.5.5	25.30
n78	30	60	632000	81@40	DFT_QPSK	26.50	26.32
n78	30	60	632000	1@1	DFT_QPSK	26.50	26.01
n78	30	60	632000	1@160	DFT_QPSK	26.00	25.92
n78	30	60	632000	1@1	DFT_QAM16	25.50	25.07
n78	30	60	632000	1@1	DFT_QAM64	23.50	23.42
n78	30	60	632000	1@1	DFT_QAM256	22.00	21.58
n78	30	60	632000	1@1	CP_QPSK	24.00	24.49
n78	30	60	633334	1@1	DFT_BPSK	26.00	25.83
n78	30	60	633334	162@0	DFT_QPSK	25.50	25.34
n78	30	60	633334	81@40	DFT_QPSK	26.50	26.38
n78	30	60	633334	1@1	DFT_QPSK	26.00	25.83
n78	30	60	633334	1@160	DFT_QPSK	26.00	25.84
n78	30	60	633334	1@1	DFT_QAM16	25.00	24.90
n78	30	60	633334	1@1	DFT_QAM64	23.50	23.20
n78	30	60	633334	1@1	DFT_QAM256	21.50	21.39
n78	30	60	633334	1@1	CP_QPSK	24.50	24.39
n78	30	60	634666	1@1	DFT_BPSK	26.50	26.09
n78	30	60	634666	162@0	DFT_QPSK	25.50	25.30
n78	30	60	634666	81@40	DFT_QPSK	26.00	26.36
n78	30	60	634666	1@1	DFT_QPSK	26.50	26.06

n78	30	60	634666	1@160	DFT_QPSK	26.00	25.93
n78	30	60	634666	1@1	DFT_QAM16	25.50	25.12
n78	30	60	634666	1@1	DFT_QAM64	23.50	23.46
n78	30	60	634666	1@1	DFT_QAM256	22.00	21.63
n78	30	60	634666	1@1	CP_QPSK	25.00	24.57
n78	30	70	632334	1@1	DFT_BPSK	23.50	23.23
n78	30	70	632334	162@0	DFT_QPSK	23.50	23.23
n78	30	70	632334	81@40	DFT_QPSK	23.50	23.22
n78	30	70	632334	1@1	DFT_QPSK	23.50	23.22
n78	30	70	632334	1@160	DFT_QPSK	23.50	23.21
n78	30	70	632334	1@1	DFT_QAM16	23.50	23.21
n78	30	70	632334	1@1	DFT_QAM64	23.50	23.22
n78	30	70	632334	1@1	DFT_QAM256	23.50	23.23
n78	30	70	632334	1@1	CP_QPSK	23.50	23.23
n78	30	70	633334	1@1	DFT_BPSK	23.50	23.24
n78	30	70	633334	162@0	DFT_QPSK	23.50	23.25
n78	30	70	633334	81@40	DFT_QPSK	23.50	23.23
n78	30	70	633334	1@1	DFT_QPSK	23.50	23.23
n78	30	70	633334	1@160	DFT_QPSK	23.50	23.25
n78	30	70	633334	1@1	DFT_QAM16	23.50	23.24
n78	30	70	633334	1@1	DFT_QAM64	23.50	23.24
n78	30	70	633334	1@1	DFT_QAM256	23.50	23.24
n78	30	70	633334	1@1	CP_QPSK	23.50	23.24
n78	30	70	634332	1@1	DFT_BPSK	23.50	23.30
n78	30	70	634332	162@0	DFT_QPSK	23.50	23.29
n78	30	70	634332	81@40	DFT_QPSK	23.50	23.32
n78	30	70	634332	1@1	DFT_QPSK	23.50	23.29
n78	30	70	634332	1@160	DFT_QPSK	23.50	23.30
n78	30	70	634332	1@1	DFT_QAM16	23.50	23.30
n78	30	70	634332	1@1	DFT_QAM64	23.50	23.30
n78	30	70	634332	1@1	DFT_QAM256	23.50	23.30
n78	30	70	634332	1@1	CP_QPSK	23.50	23.30
n78	30	80	632668	1@1	DFT_BPSK	26.00	25.79
n78	30	80	632668	216@0	DFT_QPSK	25.50	25.21
n78	30	80	632668	108@54	DFT_QPSK	26.50	26.33
n78	30	80	632668	1@1	DFT_QPSK	26.00	25.80
n78	30	80	632668	1@215	DFT_QPSK	26.00	25.61
n78	30	80	632668	1@1	DFT_QAM16	25.00	24.86
n78	30	80	632668	1@1	DFT_QAM64	23.50	23.07

n78	30	80	632668	1@1	DFT_QAM256	21.50	21.32
n78	30	80	632668	1@1	CP_QPSK	24.50	24.25
n78	30	80	633334	1@1	DFT_BPSK	26.00	25.65
n78	30	80	633334	216@0	DFT_QPSK	25.50	25.18
n78	30	80	633334	108@54	DFT_QPSK	26.50	26.38
n78	30	80	633334	1@1	DFT_QPSK	26.00	25.69
n78	30	80	633334	1@215	DFT_QPSK	26.00	25.64
n78	30	80	633334	1@1	DFT_QAM16	25.00	24.74
n78	30	80	633334	1@1	DFT_QAM64	23.50	23.00
n78	30	80	633334	1@1	DFT_QAM256	21.50	21.20
n78	30	80	633334	1@1	CP_QPSK	24.50	24.18
n78	30	80	634000	1@1	DFT_BPSK	26.00	25.60
n78	30	80	634000	216@0	DFT_QPSK	25.50	25.22
n78	30	80	634000	108@54	DFT_QPSK	26.50	26.39
n78	30	80	634000	1@1	DFT_QPSK	26.00	25.68
n78	30	80	634000	1@215	DFT_QPSK	26.00	25.79
n78	30	80	634000	1@1	DFT_QAM16	25.00	24.82
n78	30	80	634000	1@1	DFT_QAM64	23.50	23.08
n78	30	80	634000	1@1	DFT_QAM256	21.50	21.16
n78	30	80	634000	1@1	CP_QPSK	24.50	24.16
n78	30	90	633000	1@1	DFT_BPSK	26.00	25.67
n78	30	90	633000	240@0	DFT_QPSK	25.50	25.17
n78	30	90	633000	120@60	DFT_QPSK	26.50	26.36
n78	30	90	633000	1@1	DFT_QPSK	26.00	25.62
n78	30	90	633000	1@243	DFT_QPSK	25.50	25.42
n78	30	90	633000	1@1	DFT_QAM16	25.00	24.68
n78	30	90	633000	1@1	DFT_QAM64	23.50	23.10
n78	30	90	633000	1@1	DFT_QAM256	21.50	21.12
n78	30	90	633000	1@1	CP_QPSK	24.50	24.23
n78	30	90	633334	1@1	DFT_BPSK	26.00	25.64
n78	30	90	633334	240@0	DFT_QPSK	25.50	25.20
n78	30	90	633334	120@60	DFT_QPSK	26.50	26.37
n78	30	90	633334	1@1	DFT_QPSK	26.00	25.62
n78	30	90	633334	1@243	DFT_QPSK	26.00	25.56
n78	30	90	633334	1@1	DFT_QAM16	25.00	24.79
n78	30	90	633334	1@1	DFT_QAM64	23.50	23.01
n78	30	90	633334	1@1	DFT_QAM256	21.50	21.12
n78	30	90	633334	1@1	CP_QPSK	24.50	24.11
n78	30	90	633666	1@1	DFT_BPSK	26.00	25.55

n78	30	90	633666	240@0	DFT_QPSK	25.50	25.22
n78	30	90	633666	120@60	DFT_QPSK	26.50	26.38
n78	30	90	633666	1@1	DFT_QPSK	26.00	25.54
n78	30	90	633666	1@243	DFT_QPSK	26.00	25.61
n78	30	90	633666	1@1	DFT_QAM16	25.00	24.60
n78	30	90	633666	1@1	DFT_QAM64	23.00	22.89
n78	30	90	633666	1@1	DFT_QAM256	21.50	21.09
n78	30	90	633666	1@1	CP_QPSK	24.50	24.07
n78	30	100	633334	1@1	DFT_BPSK	25.50	25.49
n78	30	100	633334	270@0	DFT_QPSK	25.50	25.12
n78	30	100	633334	135@67	DFT_QPSK	26.50	26.35
n78	30	100	633334	1@1	DFT_QPSK	25.50	25.49
n78	30	100	633334	1@271	DFT_QPSK	25.50	25.41
n78	30	100	633334	1@1	DFT_QAM16	25.00	24.53
n78	30	100	633334	1@1	DFT_QAM64	23.00	22.80
n78	30	100	633334	1@1	DFT_QAM256	21.50	21.02
n78	30	100	633334	1@1	CP_QPSK	24.50	24.03

7.5. WLAN & Bluetooth Output Power

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11b	1	2412	16.50	16.33	17.00	16.45	/	/
	6	2437	16.50	15.75	17.00	16.56	/	/
	11	2462	16.50	15.44	17.00	16.05	/	/
802.11g	1	2412	14.00	13.74	14.00	13.09	/	/
	6	2437	14.00	13.18	14.00	13.85	/	/
	11	2462	14.00	12.97	14.00	13.45	/	/
802.11n HT20	1	2412	13.00	12.76	12.50	12.07	17.00	16.32
	6	2437	13.00	11.96	12.50	12.34	17.00	16.93
	11	2462	13.00	11.80	12.50	11.79	17.00	16.06
802.11n HT40	3	2422	12.50	12.36	12.50	12.05	16.50	16.32
	6	2437	12.50	12.35	12.50	11.95	16.50	15.99
	9	2452	12.50	12.48	12.50	12.14	16.50	16.01
802.11ax HE20	1	2412	13.00	12.90	13.00	12.17	16.50	15.53
	6	2437	13.00	12.24	13.00	12.51	16.50	16.17
	11	2462	13.00	12.40	13.00	12.03	16.50	15.37

802.11ax HE40	3	2422	13.00	12.47	12.50	12.30	16.00	15.66
	6	2437	13.00	12.58	12.50	12.32	16.00	15.41
	9	2452	13.00	12.62	12.50	12.45	16.00	15.47

NOTE: Power measurement results of WLAN 2.4G.

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11a	36	5180	12.00	11.71	13.00	11.43	/	/
	40	5200	12.00	11.88	13.00	11.97	/	/
	48	5240	12.00	11.90	13.00	12.60	/	/
802.11n HT20	36	5180	12.00	11.90	12.50	11.73	15.50	13.63
	40	5200	12.00	11.86	12.50	11.99	15.50	15.33
	48	5240	12.00	11.83	12.50	12.46	15.50	14.69
802.11n HT40	38	5190	11.50	11.06	12.00	10.93	15.00	14.86
	46	5230	11.50	11.03	12.00	11.54	15.00	14.79
802.11ac VHT20	36	5180	12.00	11.71	13.00	11.77	15.50	14.44
	40	5200	12.00	11.97	13.00	12.06	15.50	15.29
	48	5240	12.00	11.78	13.00	12.50	15.50	14.76
802.11ac VHT40	38	5190	11.50	11.11	11.50	11.05	15.00	12.68
	46	5230	11.50	11.10	11.50	11.48	15.00	14.66
802.11ac VHT80	42	5210	11.00	10.94	11.00	10.89	14.50	14.47
802.11ax HE20	36	5180	12.50	12.11	13.00	11.72	15.50	14.40
	40	5200	12.50	12.32	13.00	12.52	15.50	15.33
	48	5240	12.50	12.03	13.00	12.96	15.50	14.89
802.11ax HE40	38	5190	12.00	11.37	12.00	11.25	15.50	14.97
	46	5230	12.00	11.54	12.00	11.82	15.50	15.04
802.11ax HE80	42	5210	11.50	11.29	11.50	11.44	15.00	14.79

NOTE: Power measurement results of WLAN 5.2G.

Mode	Channel	Frequency (MHz)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)	Tune-up (dBm)	Output Power (dBm)
			Ant1		Ant2		MIMO	
802.11a	149	5745	12.50	11.78	13.00	11.93	/	/
	157	5785	12.50	12.46	13.00	11.57	/	/
	165	5825	12.50	12.01	13.00	12.62	/	/
802.11n	149	5745	12.50	11.66	12.00	11.66	15.50	14.50

HT20	157	5785	12.50	12.28	12.00	11.30	15.50	15.00
	165	5825	12.50	11.85	12.00	11.71	15.50	15.23
802.11n	151	5755	11.50	10.92	12.00	11.68	15.00	14.67
HT40	159	5795	11.50	11.44	12.00	11.30	15.00	14.69
802.11ac VHT20	149	5745	12.50	11.67	12.00	11.71	15.50	14.82
	157	5785	12.50	12.38	12.00	11.51	15.50	14.86
	165	5825	12.50	11.90	12.00	11.73	15.50	15.24
802.11ac VHT40	151	5755	11.50	10.91	12.00	11.69	15.00	14.76
	159	5795	11.50	11.42	12.00	11.48	15.00	14.65
802.11ac VHT80	155	5775	11.50	11.07	11.50	11.33	14.50	14.30
802.11ax HE20	149	5745	13.00	11.98	12.50	12.18	15.50	14.79
	157	5785	13.00	12.67	12.50	11.96	15.50	14.96
	165	5825	13.00	12.07	12.50	11.95	15.50	15.38
802.11ax HE40	151	5755	12.00	11.19	12.50	12.02	15.00	14.60
	159	5795	12.00	11.74	12.50	11.81	15.00	14.78
802.11ax HE80	155	5775	11.50	11.39	12.00	11.73	15.00	14.53

NOTE: Power measurement results of WLAN 5.8G.

BR+EDR	Output Power (dBm)				
	Data Rates	Tune-up (dBm)	Channel		
			0CH	39CH	78CH
	1M	7.00	6.45	6.88	5.61
	2M	6.50	6.10	6.31	5.31
	3M	7.00	6.62	6.78	5.73

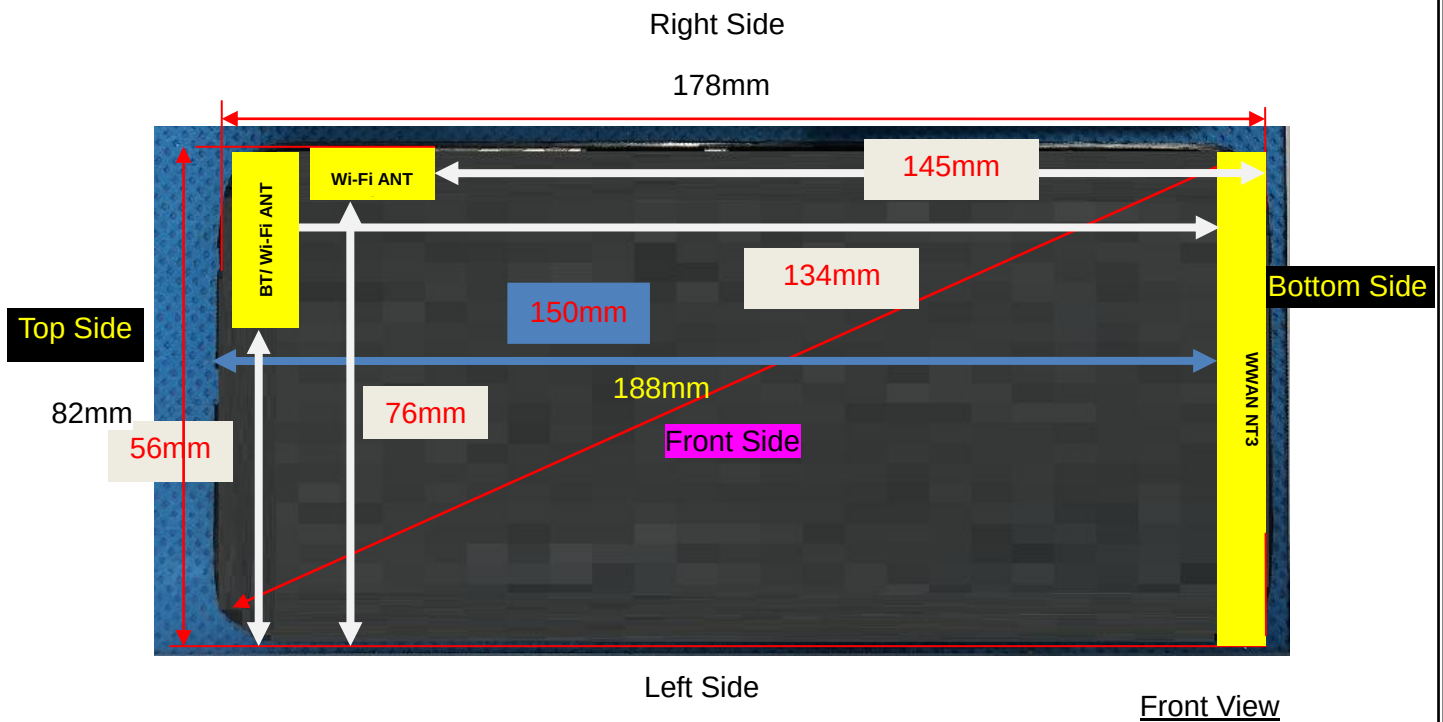
BLE	Output Power (dBm)				
	Data Rates	Tune-up (dBm)	Channe		
			0CH	19CH	39CH
	1M	7	6.58	6.74	5.63
	2M	7.5	6.67	7.02	6.07

NOTE: Power measurement results of Bluetooth.

7.6. NFC

Channel Freq (MHz)	Min Distance (mm)	Max power (dBm)	tune-up power (dBm)	Max power (mW)	Limits (mW)	SAR Test Exclusion
13.56	10	-36.54	-35.54 ± 1	0.00028	443	Yes

8. Antenna Location



Note: Since the confidentiality request of EUT, the antenna location example diagram see as above.

Distance of the Antenna to the EUT surface/edge						
Antennas	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
WWAN ANT	≤ 25mm	≤ 25mm	≤ 25mm	≤ 25mm	>25mm	≤ 25mm
WLAN & Bluetooth ANT 1	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	>25mm
WLAN ANT 2	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm	≤ 25mm	>25mm
Positions for SAR tests						
Antennas	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
WWAN ANT	Yes	Yes	Yes	Yes	Yes	NO
WLAN & Bluetooth ANT 1	Yes	Yes	NO	Yes	Yes	NO
WLAN ANT 2	Yes	Yes	NO	Yes	Yes	NO

9. Stand-alone SAR test exclusion

Refer to FCC KDB 447498D01, the 1-g SAR and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f_{(\text{GHz})}}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:

- $f_{(\text{GHz})}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	P _{max} (dBm)	P _{max} (mW)	Distance (mm)	f (GHz)	Calculation Result	SAR Exclusion threshold	SAR test exclusion
Bluetooth	7.500	5.623	5	2.480	1.771	3	Yes

NOTE: Standalone SAR test exclusion for Bluetooth.

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

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] * [\sqrt{f_{\text{(GHz)}}}/x] \text{ W/kg}$ for test separation distances $\leq 50\text{mm}$, where $x = 7.5$ for 1-g SAR and $x = 18.75$ for 10-g SAR.

When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Mode	Position	P _{max} (dBm)	P _{max} (mW)	Distance (mm)	f (GHz)	x	Estimated SAR (W/Kg)
Bluetooth	Head	7.50	5.623	5	2.48	7.5	0.236
Bluetooth	Body	7.50	5.623	10	2.48	7.5	0.118
Bluetooth	Hotspot	7.50	5.623	10	2.48	7.5	0.118

NOTE: Estimated SAR calculation for Bluetooth

10. SAR Results

10.1. SAR measurement Result

10.1.1. SAR measurement Result of GSM850

Test Position of Head	Test channel /Freq.	Mode	SAR Value (W/kg)		Power Drift(±5%)	Conducted Power (dBm)	Tune-up Power (dBm)	Scaled SAR 1-g (W/Kg)	Date	Plot
			1-g	10-g						
Left Cheek	189/836.4	GPRS(GMSK 4TS)	0.112	0.087	3.42	28.34	29.00	0.130	2025/3/01	1#
Left Tilt 15 Degree	189/836.4	GPRS(GMSK 4TS)	0.062	0.046	-1.98	28.34	29.00	0.072	2025/3/01	
Right Cheek	189/836.4	GPRS(GMSK 4TS)	0.105	0.079	2.40	28.34	29.00	0.122	2025/3/01	
Right Tilt 15	189/836.4	GPRS(GMSK 4TS)	0.048	0.036	-0.77	28.34	29.00	0.056	2025/3/01	

Degree										
--------	--	--	--	--	--	--	--	--	--	--

NOTE: Head SAR test results of GSM850.

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	189/836.4	GPRS(GMSK 4TS)	0.195	0.104	1.23	28.34	29.00	0.227	2025/3/01	
Back Side	189/836.4	GPRS(GMSK 4TS)	0.336	0.189	0.46	28.34	29.00	0.391	2025/3/01	

NOTE: Body-Worn SAR test results of GSM850

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	189/836.4	GPRS(GMSK 4TS)	0.195	0.104	1.23	28.34	29.00	0.227	2025/3/01	
Back Side	189/836.4	GPRS(GMSK 4TS)	0.336	0.189	0.46	28.34	29.00	0.391	2025/3/01	
Left Side	189/836.4	GPRS(GMSK 4TS)	0.059	0.032	0.79	28.34	29.00	0.069	2025/3/01	
Right Side	189/836.4	GPRS(GMSK 4TS)	0.176	0.095	-2.40	28.34	29.00	0.205	2025/3/01	
Bottom Side	189/836.4	GPRS(GMSK 4TS)	0.381	0.214	-2.63	28.34	29.00	0.444	2025/3/01	2#

NOTE: Hotspot SAR test results of GSM850

10.1.2. SAR measurement Result of GSM1900

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
Left Cheek	661/1880	GPRS(GMSK 4TS)	0.091	0.050	3.43	25.46	26.00	0.103	2025/3/02	3#
Left Tilt 15	661/1880	GPRS(GMSK 4TS)	0.049	0.027	-2.86	25.46	26.00	0.055	2025/3/02	

Degree										
Right Cheek	661/1880	GPRS(GMSK 4TS)	0.080	0.043	-3.70	25.46	26.00	0.091	2025/3/02	
Right Tilt 15 Degree	661/1880	GPRS(GMSK 4TS)	0.042	0.022	-3.17	25.46	26.00	0.048	2025/3/02	

NOTE: Head SAR test results of GSM1900

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	661/1880	GPRS(GMSK 4TS)	0.168	0.088	0.22	25.46	26.00	0.190	2025/3/02	
Back Side	661/1880	GPRS(GMSK 4TS)	0.409	0.226	-0.92	25.46	26.00	0.463	2025/3/02	4#

NOTE: Body-Worn SAR test results of GSM1900

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducte d power (dBm)	Tune-up power (dBm)	Scale d SAR 1g (W/K g)	Date	Plot
			1-g	10-g						
Front Side	661/1880	GPRS(GMSK 4TS)	0.168	0.088	0.22	25.46	26.00	0.190	2025/3/02	
Back Side	661/1880	GPRS(GMSK 4TS)	0.409	0.226	-0.92	25.46	26.00	0.463	2025/3/02	4#
Left Side	661/1880	GPRS(GMSK 4TS)	0.180	0.098	2.65	25.46	26.00	0.204	2025/3/02	
Right Side	661/1880	GPRS(GMSK 4TS)	0.045	0.024	1.57	25.46	26.00	0.051	2025/3/02	
Bottom Side	661/1880	GPRS(GMSK 4TS)	0.315	0.172	3.57	25.46	26.00	0.357	2025/3/02	

NOTE: Hotspot SAR test results of GSM1900

10.1.3. SAR measurement Result of WCDMA Band 2

Test Position of Head	Test channel /Freq	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						

Left Cheek	9400/1880	RMC12.2K	0.098	0.057	0.25	23.73	24.00	0.104	2025/3/02	5#
Left Tilt 15 Degree	9400/1880	RMC12.2K	0.052	0.030	0.93	23.73	24.00	0.055	2025/3/02	
Right Cheek	9400/1880	RMC12.2K	0.085	0.049	-0.22	23.73	24.00	0.090	2025/3/02	
Right Tilt 15 Degree	9400/1880	RMC12.2K	0.047	0.026	3.44	23.73	24.00	0.050	2025/3/02	

NOTE: Head SAR test results of WCDMA Band 2

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	9400/1880	RMC12.2K	0.136	0.074	-0.36	23.73	24.00	0.145	2025/3/02	
Back Side	9400/1880	RMC12.2K	0.333	0.180	1.42	23.73	24.00	0.354	2025/3/02	6#

NOTE: Body-Worn SAR test results of WCDMA Band 2

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducte d power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	9400/1880	RMC12.2K	0.136	0.074	-0.36	23.73	24.00	0.145	2025/3/02	
Back Side	9400/1880	RMC12.2K	0.333	0.180	1.42	23.73	24.00	0.354	2025/3/02	6#
Left Side	9400/1880	RMC12.2K	0.144	0.078	3.53	23.73	24.00	0.153	2025/3/02	
Right Side	9400/1880	RMC12.2K	0.037	0.020	-1.62	23.73	24.00	0.039	2025/3/02	
Bottom Side	9400/1880	RMC12.2K	0.252	0.131	-0.03	23.73	24.00	0.268	2025/3/02	

NOTE: Hotspot SAR test results of WCDMA Band 2

10.1.4. SAR measurement Result of WCDMA Band 4

Test Position of Head	Test channel /Freq	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
Left Cheek	1413/1732.6	RMC12.2K	0.060	0.036	1.58	23.54	24.00	0.067	2025/3/19	7#
Left Tilt 15 Degree	1413/1732.6	RMC12.2K	0.031	0.018	-2.00	23.54	24.00	0.034	2025/3/19	
Right Cheek	1413/1732.6	RMC12.2K	0.054	0.031	0.06	23.54	24.00	0.060	2025/3/19	

Right Tilt 15 Degree	1413/1732.6	RMC12.2K	0.029	0.017	0.48	23.54	24.00	0.032	2025/3/19	
-------------------------	-------------	----------	-------	-------	------	-------	-------	-------	-----------	--

NOTE: Head SAR test results of WCDMA Band 4

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	1413/1732.6	RMC12.2K	0.196	0.109	2.44	23.54	24.00	0.218	2025/3/19	
Back Side	1413/1732.6	RMC12.2K	0.456	0.256	1.51	23.54	24.00	0.507	2025/3/19	8#

NOTE: Body-Worn SAR test results of WCDMA Band 4

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	1413/1732.6	RMC12.2K	0.196	0.109	2.44	23.54	24.00	0.218	2025/3/19	
Back Side	1413/1732.6	RMC12.2K	0.456	0.256	1.51	23.54	24.00	0.507	2025/3/19	8#
Left Side	1413/1732.6	RMC12.2K	0.192	0.107	-3.43	23.54	24.00	0.213	2025/3/19	
Right Side	1413/1732.6	RMC12.2K	0.046	0.025	1.73	23.54	24.00	0.051	2025/3/19	
Bottom Side	1413/1732.6	RMC12.2K	0.343	0.191	0.17	23.54	24.00	0.381	2025/3/19	

NOTE: Hotspot SAR test results of WCDMA Band 4

10.1.5. SAR measurement Result of WCDMA Band 5

Test Position of Head	Test channel /Freq	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
Left Cheek	4182/836.4	RMC12.2K	0.072	0.055	4.15	22.95	23.50	0.082	2025/3/01	9#
Left Tilt 15 Degree	4182/836.4	RMC12.2K	0.040	0.029	0.32	22.95	23.50	0.045	2025/3/01	
Right Cheek	4182/836.4	RMC12.2K	0.068	0.051	3.55	22.95	23.50	0.077	2025/3/01	

Right Tilt 15 Degree	4182/836.4	RMC12.2K	0.033	0.024	-2.93	22.95	23.50	0.037	2025/3/01	
-------------------------	------------	----------	-------	-------	-------	-------	-------	-------	-----------	--

NOTE: Head SAR test results of WCDMA Band 5

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
Front Side	4182/836.4	RMC12.2K	0.140	0.077	-2.02	22.95	23.50	0.159	2025/3/01	
Back Side	4182/836.4	RMC12.2K	0.192	0.110	-1.18	22.95	23.50	0.218	2025/3/01	

NOTE: Body-Worn SAR test results of WCDMA Band 5

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
Front Side	4182/836.4	RMC12.2K	0.140	0.077	-2.02	22.95	23.50	0.159	2025/3/01	
Back Side	4182/836.4	RMC12.2K	0.192	0.110	-1.18	22.95	23.50	0.218	2025/3/01	
Left Side	4182/836.4	RMC12.2K	0.039	0.022	2.38	22.95	23.50	0.044	2025/3/01	
Right Side	4182/836.4	RMC12.2K	0.122	0.067	-3.97	22.95	23.50	0.138	2025/3/01	
Bottom Side	4182/836.4	RMC12.2K	0.236	0.136	-1.48	22.95	23.50	0.268	2025/3/01	10#

NOTE: Hotspot SAR test results of WCDMA Band 5

10.1.6. SAR measurement Result of LTE Band 2

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Left Cheek	18900/1880	20M QPSK(1,49)	0.061	0.036	3.68	22.48	23.50	0.077	2025/3/02	29#
Left Tilt 15	18900/1880	20M QPSK(1,49)	0.036	0.020	-3.78	22.48	23.50	0.046	2025/3/02	

Degree										
Right Cheek	18900/1880	20M QPSK(1,49)	0.054	0.030	-0.27	22.48	23.50	0.068	2025/3/02	
Right Tilt 15 Degree	18900/1880	20M QPSK(1,49)	0.028	0.017	-1.45	22.48	23.50	0.035	2025/3/02	
50%RB										
Left Cheek	18900/1880	20M QPSK(50,0)	0.032	0.019	0.58	21.57	22.00	0.035	2025/3/02	
Left Tilt 15 Degree	18900/1880	20M QPSK(50,0)	0.020	0.011	-1.70	21.57	22.00	0.022	2025/3/02	
Right Cheek	18900/1880	20M QPSK(50,0)	0.031	0.017	-2.14	21.57	22.00	0.034	2025/3/02	
Right Tilt 15 Degree	18900/1880	20M QPSK(50,0)	0.017	0.009	-2.65	21.57	22.00	0.019	2025/3/02	

NOTE: Head SAR test results of LTE Band 2

Test Position of Body- Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
1RB										
Front Side	18900/1880	20M QPSK(1,49)	0.132	0.066	-2.95	22.48	23.50	0.167	2025/3/02	
Back Side	18900/1880	20M QPSK(1,49)	0.292	0.147	0.17	22.48	23.50	0.369	2025/3/02	30#
50%RB										
Front Side	18900/1880	20M QPSK(50,0)	0.077	0.033	2.67	21.57	22.00	0.085	2025/3/02	
Back Side	18900/1880	20M QPSK(50,0)	0.165	0.082	1.08	21.57	22.00	0.182	2025/3/02	

NOTE: Body-Worn SAR test results of LTE Band 2

Test Position	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift	Conducted power	Tune-up power	Scaled SAR	Date	Plot
---------------	---------------------	-----------	------------------	--	-------------	-----------------	---------------	------------	------	------

of Hotspot with 10mm			1-g	10-g	(±5%)	(dBm)	(dBm)	1g (W/Kg)		
1RB										
Front Side	18900/1880	20M QPSK(1,49)	0.132	0.066	-2.95	22.48	23.50	0.167	2025/3/02	
Back Side	18900/1880	20M QPSK(1,49)	0.292	0.147	0.17	22.48	23.50	0.369	2025/3/02	30#
Left Side	18900/1880	20M QPSK(1,49)	0.132	0.063	-1.98	22.48	23.50	0.167	2025/3/02	
Right Side	18900/1880	20M QPSK(1,49)	0.030	0.015	0.61	22.48	23.50	0.038	2025/3/02	
Bottom Side	18900/1880	20M QPSK(1,49)	0.238	0.116	3.65	22.48	23.50	0.301	2025/3/02	
50%RB										
Front Side	18900/1880	20M QPSK(50,0)	0.077	0.033	2.67	21.57	22.00	0.085	2025/3/02	
Back Side	18900/1880	20M QPSK(50,0)	0.165	0.082	1.08	21.57	22.00	0.182	2025/3/02	
Left Side	18900/1880	20M QPSK(50,0)	0.077	0.035	0.23	21.57	22.00	0.085	2025/3/02	
Right Side	18900/1880	20M QPSK(50,0)	0.017	0.008	-3.31	21.57	22.00	0.019	2025/3/02	
Bottom Side	18900/1880	20M QPSK(50,0)	0.121	0.069	4.94	21.57	22.00	0.134	2025/3/02	

NOTE: Hotspot SAR test results of LTE Band 2

10.1.7. SAR measurement Result of LTE Band 4

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Left Cheek	20175/1732.5	20M QPSK(1,49)	0.107	0.066	-2.42	23.08	23.50	0.118	2025/3/19	31#
Left Tilt 15 Degree	20175/1732.5	20M QPSK(1,49)	0.058	0.035	3.97	23.08	23.50	0.064	2025/3/19	
Right	20175/1732.5	20M	0.101	0.062	0.93	23.08	23.50	0.111	2025/3/19	

Cheek		QPSK(1,49)								
Right Tilt 15 Degree	20175/1732.5	20M QPSK(1,49)	0.051	0.030	1.32	23.08	23.50	0.056	2025/3/19	
50%RB										
Left Cheek	20175/1732.5	20M QPSK(50,0)	0.063	0.037	0.23	22.18	22.50	0.068	2025/3/19	
Left Tilt 15 Degree	20175/1732.5	20M QPSK(50,0)	0.032	0.018	-0.07	22.18	22.50	0.034	2025/3/19	
Right Cheek	20175/1732.5	20M QPSK(50,0)	0.054	0.035	-1.01	22.18	22.50	0.058	2025/3/19	
Right Tilt 15 Degree	20175/1732.5	20M QPSK(50,0)	0.026	0.017	-2.37	22.18	22.50	0.028	2025/3/19	

NOTE: Head SAR test results of LTE Band 4

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
1RB										
Front Side	20175/1732.5	20M QPSK(1,49)	0.232	0.124	-0.94	23.08	23.50	0.256	2025/3/19	
Back Side	20175/1732.5	20M QPSK(1,49)	0.579	0.327	-0.70	23.08	23.50	0.638	2025/3/19	32#
50%RB										
Front Side	20175/1732.5	20M QPSK(50,0)	0.129	0.070	4.31	22.18	22.50	0.139	2025/3/19	
Back Side	20175/1732.5	20M QPSK(50,0)	0.304	0.165	-0.50	22.18	22.50	0.327	2025/3/19	

NOTE: Body-Worn SAR test results of LTE Band 4

[illegible]

1RB										
Front Side	20175/1732.5	20M QPSK(1,49)	0.232	0.124	-0.94	23.08	23.50	0.256	2025/3/19	
Back Side	20175/1732.5	20M QPSK(1,49)	0.579	0.327	-0.70	23.08	23.50	0.638	2025/3/19	32#
Left Side	20175/1732.5	20M QPSK(1,49)	0.236	0.127	3.49	23.08	23.50	0.260	2025/3/19	
Right Side	20175/1732.5	20M QPSK(1,49)	0.061	0.034	-0.29	23.08	23.50	0.067	2025/3/19	
Bottom Side	20175/1732.5	20M QPSK(1,49)	0.406	0.222	3.08	23.08	23.50	0.447	2025/3/19	
50%RB										
Front Side	20175/1732.5	20M QPSK(50,0)	0.129	0.070	4.31	22.18	22.50	0.139	2025/3/19	
Back Side	20175/1732.5	20M QPSK(50,0)	0.304	0.165	-0.50	22.18	22.50	0.327	2025/3/19	
Left Side	20175/1732.5	20M QPSK(50,0)	0.132	0.070	4.96	22.18	22.50	0.142	2025/3/19	
Right Side	20175/1732.5	20M QPSK(50,0)	0.032	0.018	-4.71	22.18	22.50	0.034	2025/3/19	
Bottom Side	20175/1732.5	20M QPSK(50,0)	0.224	0.129	0.33	22.18	22.50	0.241	2025/3/19	

NOTE: Hotspot SAR test results of LTE Band 4

10.1.8. SAR measurement Result of LTE Band 5

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Left Cheek	20525/836.5	10M QPSK(1,49)	0.069	0.054	-2.06	22.74	23.00	0.073	2025/3/01	33#
Left Tilt 15 Degree	20525/836.5	10M QPSK(1,49)	0.041	0.031	2.87	22.74	23.00	0.044	2025/3/01	
Right Cheek	20525/836.5	10M QPSK(1,49)	0.062	0.047	-0.17	22.74	23.00	0.066	2025/3/01	
Right Tilt 15	20525/836.5	10M QPSK(1,49)	0.029	0.022	2.42	22.74	23.00	0.031	2025/3/01	

Degree										
50%RB										
Left Cheek	20525/836.5	10M QPSK(25,0)	0.039	0.030	-1.96	21.73	22.00	0.042	2025/3/01	
Left Tilt 15 Degree	20525/836.5	10M QPSK(25,0)	0.023	0.016	3.55	21.73	22.00	0.024	2025/3/01	
Right Cheek	20525/836.5	10M QPSK(25,0)	0.033	0.025	0.15	21.73	22.00	0.035	2025/3/01	
Right Tilt 15 Degree	20525/836.5	10M QPSK(25,0)	0.016	0.011	3.63	21.73	22.00	0.017	2025/3/01	

NOTE: Head SAR test results of LTE Band 5

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
1RB										
Front Side	20525/836.5	10M QPSK(1,49)	0.135	0.078	1.09	22.74	23.00	0.143	2025/3/01	
Back Side	20525/836.5	10M QPSK(1,49)	0.224	0.129	-1.76	22.74	23.00	0.238	2025/3/01	
50%RB										
Front Side	20525/836.5	10M QPSK(25,0)	0.073	0.043	0.95	21.73	22.00	0.078	2025/3/01	
Back Side	20525/836.5	10M QPSK(25,0)	0.122	0.065	-4.89	21.73	22.00	0.130	2025/3/01	

NOTE: Body-Worn SAR test results of LTE Band 5

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										

Front Side	20525/836.5	10M QPSK(1,49)	0.135	0.078	1.09	22.74	23.00	0.143	2025/3/01	
Back Side	20525/836.5	10M QPSK(1,49)	0.224	0.129	-1.76	22.74	23.00	0.238	2025/3/01	
Left Side	20525/836.5	10M QPSK(1,49)	0.041	0.023	-3.65	22.74	23.00	0.044	2025/3/01	
Right Side	20525/836.5	10M QPSK(1,49)	0.113	0.065	-3.38	22.74	23.00	0.120	2025/3/01	
Bottom Side	20525/836.5	10M QPSK(1,49)	0.233	0.134	-0.15	22.74	23.00	0.247	2025/3/01	34#
50%RB										
Front Side	20525/836.5	10M QPSK(25,0)	0.073	0.043	0.95	21.73	22.00	0.078	2025/3/01	
Back Side	20525/836.5	10M QPSK(25,0)	0.122	0.065	-4.89	21.73	22.00	0.130	2025/3/01	
Left Side	20525/836.5	10M QPSK(25,0)	0.022	0.012	4.17	21.73	22.00	0.023	2025/3/01	
Right Side	20525/836.5	10M QPSK(25,0)	0.058	0.033	-0.58	21.73	22.00	0.062	2025/3/01	
Bottom Side	20525/836.5	10M QPSK(25,0)	0.131	0.080	3.91	21.73	22.00	0.139	2025/3/01	

NOTE: Hotspot SAR test results of LTE Band 5

10.1.9. SAR measurement Result of LTE Band 7

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Left Cheek	21100/2535	20M QPSK(1,49)	0.193	0.097	1.01	23.30	23.50	0.202	2025/3/22	35#
Left Tilt 15 Degree	21100/2535	20M QPSK(1,49)	0.106	0.053	0.69	23.30	23.50	0.111	2025/3/22	
Right Cheek	21100/2535	20M QPSK(1,49)	0.165	0.080	0.74	23.30	23.50	0.173	2025/3/22	
Right Tilt 15 Degree	21100/2535	20M QPSK(1,49)	0.080	0.040	0.55	23.30	23.50	0.084	2025/3/22	

50%RB										
Left Cheek	21100/2535	20M QPSK(50,0)	0.104	0.052	-4.67	22.42	22.50	0.106	2025/3/22	
Left Tilt 15 Degree	21100/2535	20M QPSK(50,0)	0.061	0.030	3.97	22.42	22.50	0.062	2025/3/22	
Right Cheek	21100/2535	20M QPSK(50,0)	0.093	0.048	-1.23	22.42	22.50	0.095	2025/3/22	
Right Tilt 15 Degree	21100/2535	20M QPSK(50,0)	0.046	0.021	4.73	22.42	22.50	0.047	2025/3/22	

NOTE: Head SAR test results of LTE Band 7

Test Position of Body-Worn with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1g	10g						
1RB										
Front Side	21100/2535	20M QPSK(1,49)	0.273	0.126	-0.27	23.30	23.50	0.286	2025/3/22	
Back Side	21100/2535	20M QPSK(1,49)	0.689	0.333	2.89	23.30	23.50	0.721	2025/3/22	
50%RB										
Front Side	21100/2535	20M QPSK(50,0)	0.152	0.067	4.06	22.42	22.50	0.155	2025/3/22	
Back Side	21100/2535	20M QPSK(50,0)	0.408	0.191	3.49	22.42	22.50	0.416	2025/3/22	

NOTE: Body-Worn SAR test results of LTE Band 7

Test Position of Hotspot with 10mm	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Front	21100/2535	20M	0.273	0.126	-0.27	23.30	23.50	0.286	2025/3/22	

Side		QPSK(1,49)								
Back Side	21100/2535	20M QPSK(1,49)	0.689	0.333	2.89	23.30	23.50	0.721	2025/3/22	
Left Side	21100/2535	20M QPSK(1,49)	0.347	0.167	1.47	23.30	23.50	0.363	2025/3/22	
Right Side	21100/2535	20M QPSK(1,49)	0.081	0.039	2.12	23.30	23.50	0.085	2025/3/22	
Bottom Side	21100/2535	20M QPSK(1,49)	0.732	0.373	-0.72	23.30	23.50	0.766	2025/3/22	36#
50%RB										
Front Side	21100/2535	20M QPSK(50,0)	0.152	0.067	4.06	22.42	22.50	0.155	2025/3/22	
Back Side	21100/2535	20M QPSK(50,0)	0.408	0.191	3.49	22.42	22.50	0.416	2025/3/22	
Left Side	21100/2535	20M QPSK(50,0)	0.177	0.091	4.29	22.42	22.50	0.180	2025/3/22	
Right Side	21100/2535	20M QPSK(50,0)	0.044	0.021	2.41	22.42	22.50	0.045	2025/3/22	
Bottom Side	21100/2535	20M QPSK(50,0)	0.377	0.219	-0.74	22.42	22.50	0.384	2025/3/22	

NOTE: Hotspot SAR test results of LTE Band 7

10.1.10. SAR measurement Result of LTE Band 12

Test Position of Head	Test channel /Freq.	Test Mode	SAR Value (W/kg)		Power Drift (±5%)	Conducted power (dBm)	Tune-up power (dBm)	Scaled SAR 1g (W/Kg)	Date	Plot
			1-g	10-g						
1RB										
Left Cheek	23095/707.5	10M QPSK(1,49)	0.064	0.052	-3.18	21.89	22.00	0.066	2025/3/08	37#
Left Tilt 15 Degree	23095/707.5	10M QPSK(1,49)	0.038	0.030	-3.67	21.89	22.00	0.039	2025/3/08	
Right Cheek	23095/707.5	10M QPSK(1,49)	0.059	0.046	-1.66	21.89	22.00	0.061	2025/3/08	
Right Tilt 15 Degree	23095/707.5	10M QPSK(1,49)	0.027	0.022	0.84	21.89	22.00	0.028	2025/3/08	
50%RB										
Left	23095/707.5	10M	0.037	0.028	4.97	20.83	21.00	0.038	2025/3/08	