

FCC SAR EVALUATION REPORT

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

Product Name : Smartphone

Brand Name : Bigme

Model Name : HiBreak pro

Family Model : HiBreak pro plus, HiBreak pro se, HiBreak pro color, HiBreak pro color plus, HiBreak pro color se, B651, B651 Lite, B651 Pro, B651 Plus, B651C, B651C Lite, B651C Pro, B651C+, B651 Color, B651 Color Lite, B651 Color Pro, B651 Color Plus

Report No. : S25021100606001

FCC ID : 2A8EM-HIBREAKPRO

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TEST RESULT CERTIFICATION

Applicant's name Bigme Cloud Literacy Technology Co., Ltd.Address..... 01 18F, COFCO Property Tower, Baomin No.1Rd, Bao an 3rd District,
Shenzhen, China**Manufacturer's Name** . Bigme Cloud Literacy Technology Co., Ltd.Address..... 01 18F, COFCO Property Tower, Baomin No.1Rd, Bao an 3rd District,
Shenzhen, China**Product description**

Product name Smartphone

Brand Name Bigme

Model and/or type
reference HiBreak proFamily Model HiBreak pro plus, HiBreak pro se, HiBreak pro color, HiBreak pro color plus,
HiBreak pro color se, B651, B651 Lite, B651 Pro, B651 Plus, B651C, B651C
Lite, B651C Pro, B651C+, B651 Color, B651 Color Lite, B651 Color Pro, B651
Color Plus
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.

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Test Sample Number S250211006007

Date of Test

Date (s) of performance of tests... Feb.21, 2025~ Mar.15, 2025

Date of Issue Apr.9, 2025

Test Result..... **Pass**Prepared
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※ ※ Revision History ※ ※

REV.	DESCRIPTION	ISSUED DATE	REMARK
Rev.1.0	Initial Test Report Release	Apr.9, 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
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. NR SA Power	57
7.5. WLAN & Bluetooth Output Power	72
7.6. NFC	76
8. Antenna Location.....	77
9. Stand-alone SAR test exclusion.....	77
10. SAR Results	78
10.1. SAR measurement Result.....	78
10.1.1. SAR measurement Result of GSM850.....	78
10.1.2. SAR measurement Result of GSM1900.....	79
10.1.3. SAR measurement Result of CDMA2000 BC0	81
10.1.4. SAR measurement Result of CDMA2000 BC1	82
10.1.5. SAR measurement Result of WCDMA Band 2.....	84
10.1.6. SAR measurement Result of WCDMA Band 4.....	85
10.1.7. SAR measurement Result of WCDMA Band 5.....	86
10.1.8. SAR measurement Result of LTE Band 2	87
10.1.9. SAR measurement Result of LTE Band 4	89
10.1.10. SAR measurement Result of LTE Band 5	91
10.1.11. SAR measurement Result of LTE Band 7	93
10.1.12. SAR measurement Result of LTE Band 12	95
10.1.13. SAR measurement Result of LTE Band 13	96
10.1.14. SAR measurement Result of LTE Band 17	98
10.1.15. SAR measurement Result of LTE Band 25	100
10.1.16. SAR measurement Result of LTE Band 26a	102
10.1.17. SAR measurement Result of LTE Band 26b	104
10.1.18. SAR measurement Result of LTE Band 38	106
10.1.19. SAR measurement Result of LTE Band 41	108
10.1.20. SAR measurement Result of LTE Band 66	110
10.1.21. SAR measurement Result of NR 2	112
10.1.22. SAR measurement Result of NR 5	114
10.1.23. SAR measurement Result of NR 7	115
10.1.24. SAR measurement Result of NR 78.....	117
10.1.25. SAR measurement Result of WLAN2.4G	119
10.1.26. SAR measurement Result of WLAN5.2G.....	123
10.1.27. SAR measurement Result of WLAN5.3G	126
10.1.28. SAR measurement Result of WLAN5.6G	130
10.1.29. SAR measurement Result of WLAN5.8G	133
10.2. Simultaneous Transmission Analysis.....	137
11. Appendix A. Photo documentation	140
12. Appendix B. System Check Plots.....	141
13. Appendix C. Plots of High SAR Measurement.....	168
14. Appendix D. Calibration Certificate	299

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 HiBreak pro are as follows.

RF Exposure Conditions		Equipment Class -Highest Reported SAR (W/kg)					Max. Reported SAR (W/kg)
		PCE	DTS	NII	DSS	NSA	
1-g Head		0.389	0.571	0.924	0.133	0.552	0.924
1-g Body-Worn (Separation distance of 10mm)		0.640	0.139	0.263	0.066	0.704	0.640
1-g Hotspot (Separation distance of 10mm)		0.640	0.139	0.263	0.066	0.704	
Max Simultaneous Tx	Head	1.313	0.960	1.313	0.522	1.476	1.476
	Body-Worn	0.903	0.757	0.903	0.706	0.967	0.967
	Hotspot	0.903	0.757	0.903	0.706	0.967	

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	Smartphone
Brand Name	Bigme
Model Name	HiBreak pro
Family Model	HiBreak pro plus, HiBreak pro se, HiBreak pro color, HiBreak pro color plus, HiBreak pro color se, B651, B651 Lite, B651 Pro, B651 Plus, B651C, B651C Lite, B651C Pro, B651C+, B651 Color, B651 Color Lite, B651 Color Pro, B651 Color Plus
Model Difference	All models are the same circuit and RF module, except for model names.
FCC ID	2A8EM-HIBREAKPRO
Device Phase	Identical Prototype
Exposure Category	General population / Uncontrolled environment
Antenna Type	FPC Antenna
Battery Information	DC 3.85V, 4500mAh, 17.325Wh
HW Version	V1

SW Version	N/A		
Device Operating Configurations			
Supporting Mode(s)	GSM850/1900,WCDMABand2/4/5,LTEBand2/4/5/7/12/13/17/25/26/38/41/66, NR SA n2,n5,n7,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
	CDMA2000 BC0	824.7-848.31	869-894
	CDMA2000 BC1	1851.25-1908.75	1931.25-1988.75
	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 13	777-787	746-756
	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	869-894
	LTE Band 38	2570-2620	
	LTE Band 41	2496-2690	
	LTE Band 66	1710-1780	2110-2200
	NR n2	1710-1780	2110-2200
	NR n5	824-849	869-894
	NR n7	2500-2570	2620-2690
	NR n78	3450-3550	
	WLAN 2.4G	2412-2462	
	WLAN 5.2G	5180-5240	
	WLAN 5.3G	5260-5320	
	WLAN 5.6G	5500-5700	
	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 13)
	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 26a)
	3, tested with power control all Max.(LTE Band 26b)
	3, tested with power control all Max.(LTE Band 38)
	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 2)
	3, tested with power control all Max.(NR SA 5)
	3, tested with power control all Max.(NR SA 7)
	3, tested with power control all Max.(NR SA 78)

1.4. Test specification(s)

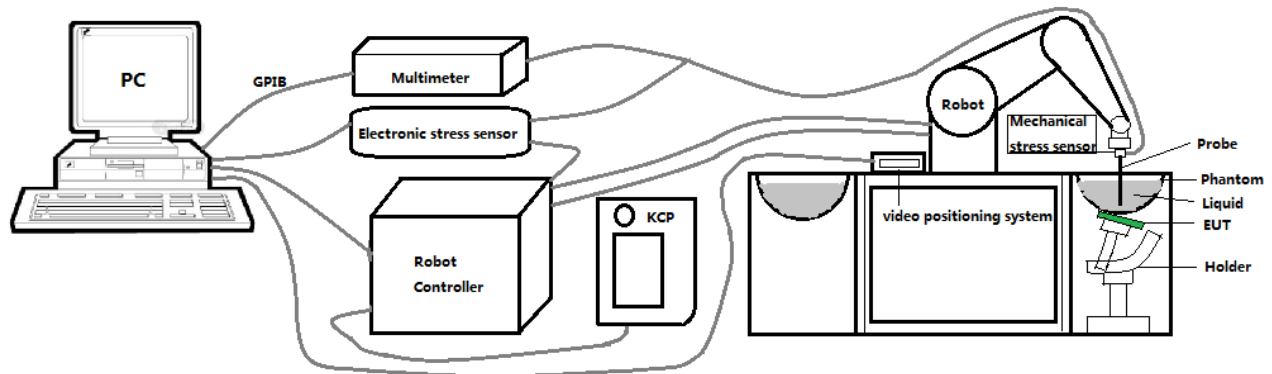
FCC 47 CFR Part 2(2.1093)
IEEE Std 1528-2013
KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04;
KDB 865664 D02 RF Exposure Reporting v01r02;
KDB 447498 D01 General RF Exposure Guidance v06;
KDB 248227 D01 802.11 Wi-Fi SAR v02r02;
KDB 941225 D01 3G SAR Procedures v01r02;
KDB 941225 D05 SAR for LTE Devices v01r02;
KDB 941225 D06 Hotspot SAR v02r01;
KDB 648474 D04 Handset SAR v01r03;

1.5. Ambient Condition

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

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

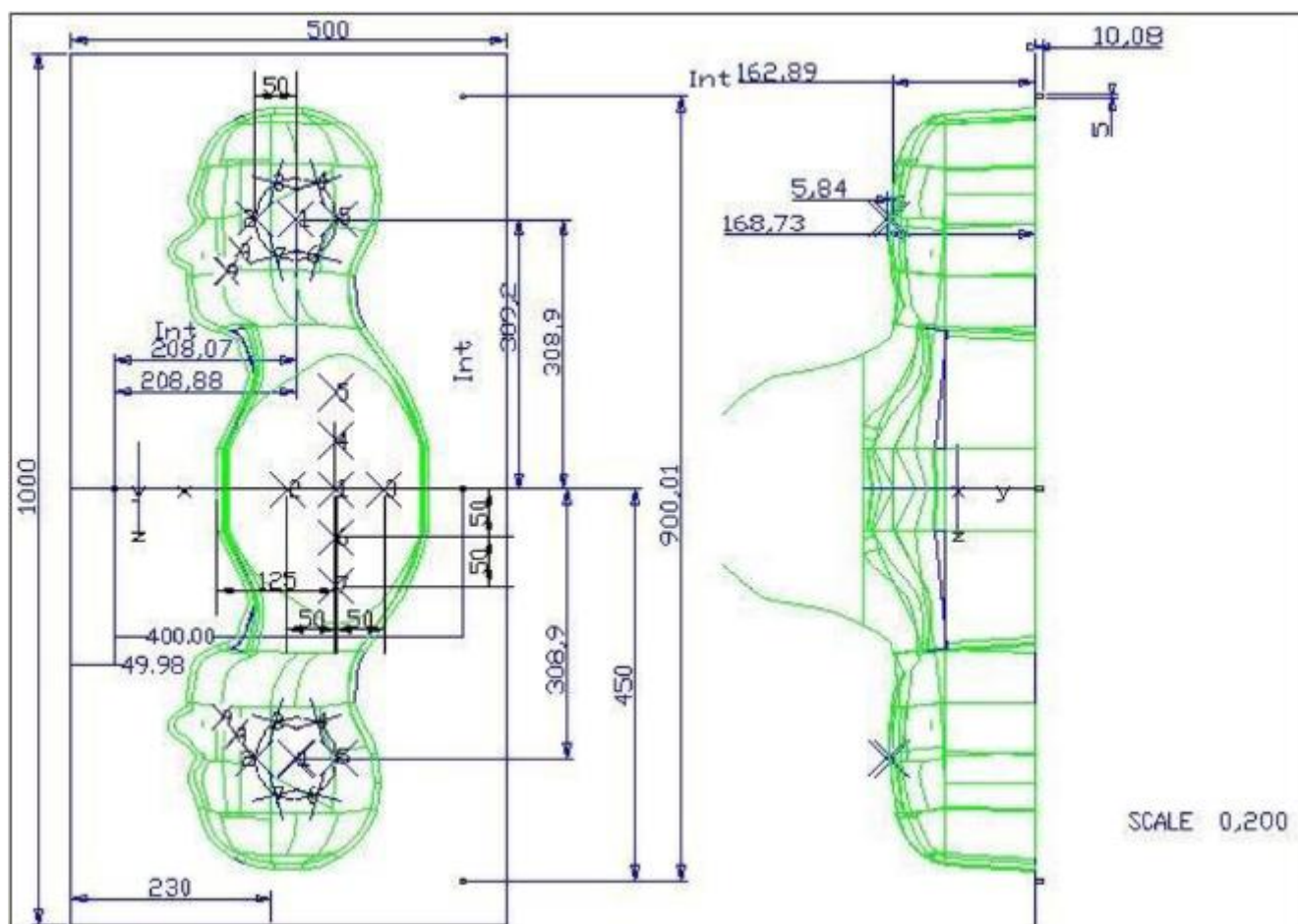
Photo of SAM phantom SN 16/15 SAM119



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

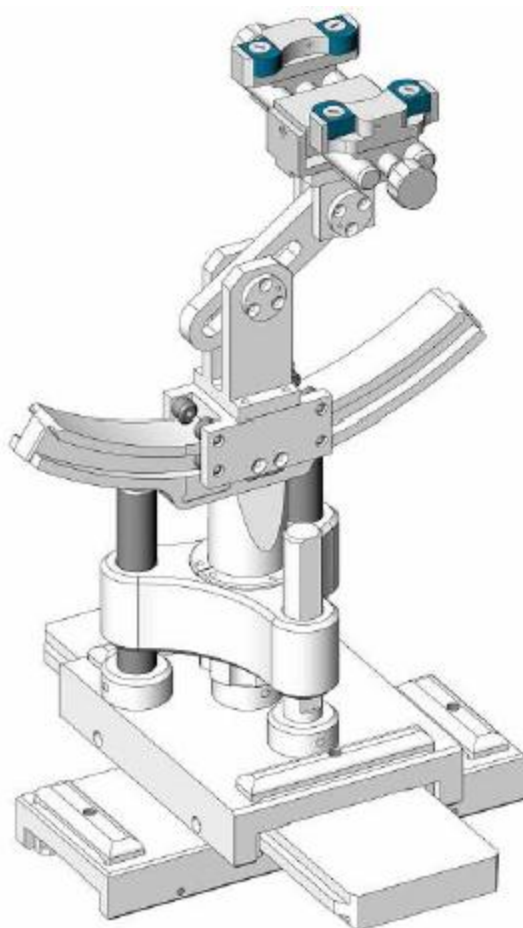


Serial Number	Left Head(mm)		Right Head(mm)		Flat Part(mm)	
SN 16/15 SAM119	2	2.02	2	2.08	1	2.09
	3	2.05	3	2.06	2	2.06
	4	2.07	4	2.07	3	2.08
	5	2.08	5	2.08	4	2.10
	6	2.05	6	2.07	5	2.10
	7	2.05	7	2.05	6	2.07
	8	2.07	8	2.06	7	2.07
	9	2.08	9	2.06	-	-

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	3700 MHz Dipole	SID3700	SN 09/12 DIP 3G/700-361	Oct. 15 2022	Oct. 14 2025
☒	MVG	5000 MHz Dipole	SWG5500	SN 13/14 WGA 33	Feb. 21, 2024	Feb. 20, 2027
☒	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, 2024	Nov. 28, 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
☒	Anritsu	4G LTE comprehensive tester	MT8821C	6262192315	2024/7/17	2025/7/16
☒	Anritsu	5G NR comprehensive tester	MT8000A	6262186364	2024/7/17	2025/7/16
☒	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 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 used to determine 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 of a full 3D scan over a specific area. This 3D scan is useful for multi Tx SAR measurement. Indeed, it is possible with OpenSAR to add, point by point, several volumetric scans to calculate the SAR value of the combined measurement as it is defined in the standard IEEE1528 and IEC62209.

3.5. Power Drift

All SAR testing is under the EUT with 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.

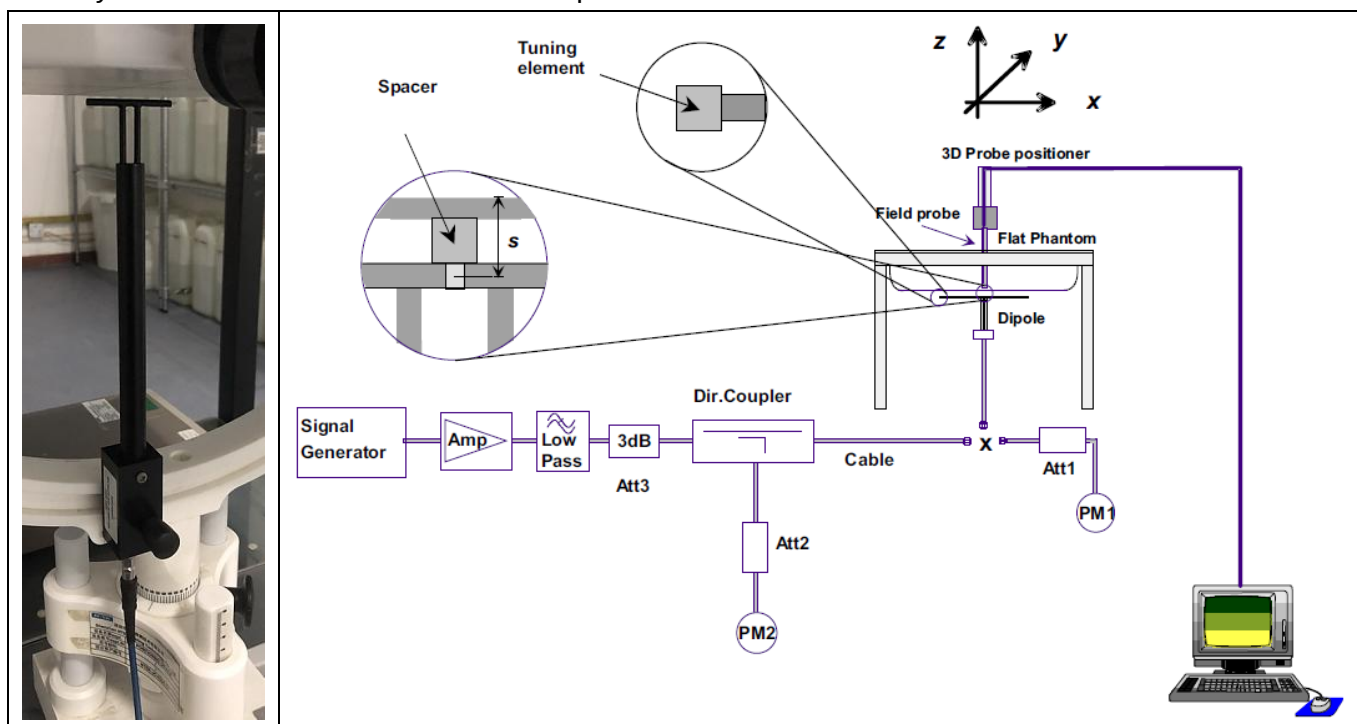
Tissue Type	Measured Frequency (MHz)	Target Tissue		Measured Tissue		Liquid Temp.	Test Date
		$\epsilon_r (\pm 5\%)$	σ (S/m) ($\pm 5\%$)	ϵ_r	σ (S/m)		
Head 750	750	41.96 (39.86~44.06)	0.89 (0.85~0.93)	40.76	0.90	21.5 °C	Feb. 21, 2025
Head 850	835	41.50 (39.43~43.58)	0.90 (0.86~0.95)	41.73	0.91	21.3 °C	Mar. 10, 2025
Head 1800	1800	40.00 (38.00~42.00)	1.40 (1.33~1.47)	39.06	1.39	21.3 °C	Mar. 05, 2025
Head 1900	1900	40.00 (38.00~42.00)	1.40 (1.33~1.47)	38.36	1.45	21.9 °C	Mar. 11, 2025
Head 2450	2450	39.20 (37.24~41.16)	1.80 (1.71~1.89)	38.30	1.78	21.7 °C	Mar. 07, 2025
Head 2600	2600	39.01 (37.06~40.96)	1.96 (1.86~2.06)	39.28	2.00	21.2 °C	Mar. 06, 2025
Head 3300	3300	38.14 (36.04~39.82)	2.71 (2.77~3.05)	39.27	2.65	21.5 °C	Feb. 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 3700	3700	37.70 (35.82~39.59)	3.12 (2.97~3.27)	36.99	3.09	21.6 °C	Feb. 25, 2025
Head 5200	5200	36.00 (34.20~37.80)	4.66 (4.43~4.89)	37.23	4.58	21.8 °C	Mar. 12, 2025
Head 5400	5400	35.80 (34.01~37.59)	4.86 (4.62~5.10)	34.29	4.80	21.3 °C	Mar. 13, 2025
Head 5600	5600	35.50 (33.73~37.28)	5.07 (4.82~5.32)	34.37	4.93	21.6 °C	Mar. 14, 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) ($\pm 10\%$)		Measured SAR			Measured SAR (Normalized to 1W)		Liquid Temp.	Test Date
	1-g (W/Kg)	10-g (W/Kg)	Input Power	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)	20dBm	0.830	0.578	8.30	5.78	21.5 °C	Feb. 21, 2025
835MHz	9.40 (8.46~10.34)	6.28 (5.65~6.91)	20dBm	0.887	0.583	8.87	5.83	21.3 °C	Mar. 10, 2025
1800MHz	37.06 (33.35~40.77)	20.01 (18.01~22.01)	20dBm	4.028	1.977	40.28	19.77	21.3 °C	Mar. 05, 2025
1900MHz	39.69 (35.72~43.66)	20.92 (18.83~23.01)	20dBm	4.176	1.967	41.76	19.67	21.9 °C	Mar. 11, 2025
2450MHz	50.05 (45.05~55.06)	23.80 (21.42~26.18)	20dBm	5.247	2.241	52.47	22.41	21.7 °C	Mar. 07, 2025
2600MHz	54.16 (48.74~59.58)	24.85 (22.37~27.34)	20dBm	5.494	2.278	54.94	22.78	21.2 °C	Mar. 06, 2025
3300MHz	67.61 (60.85~74.37)	26.04 (23.44~28.64)	20dBm	6.266	2.694	62.66	26.94	21.5 °C	Feb. 22, 2025
3500MHz	67.18 (60.47~73.89)	24.50 (22.05~26.95)	20dBm	6.169	2.640	61.69	26.40	21.3 °C	Feb. 24, 2025
3700MHz	66.30 (59.67~72.93)	24.16 (22.96~26.57)	20dBm	6.035	2.609	60.35	26.09	21.6 °C	Feb. 25, 2025
5200MHz	162.59 (146.33~178.85)	56.21 (50.59~61.83)	10dBm	1.609	0.547	160.90	54.70	21.8 °C	Mar. 12, 2025
5400MHz	159.81 (143.83~175.79)	55.00 (49.50~60.50)	10dBm	1.459	0.543	145.90	54.30	21.3 °C	Mar. 13, 2025
5600MHz	179.15 (161.24~197.07)	61.01 (54.91~67.11)	10dBm	1.798	0.670	179.80	67.00	21.8 °C	Mar. 14, 2025
5800MHz	182.20 (163.98~200.42)	61.32 (55.19~67.45)	10dBm	1.822	0.622	182.20	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.

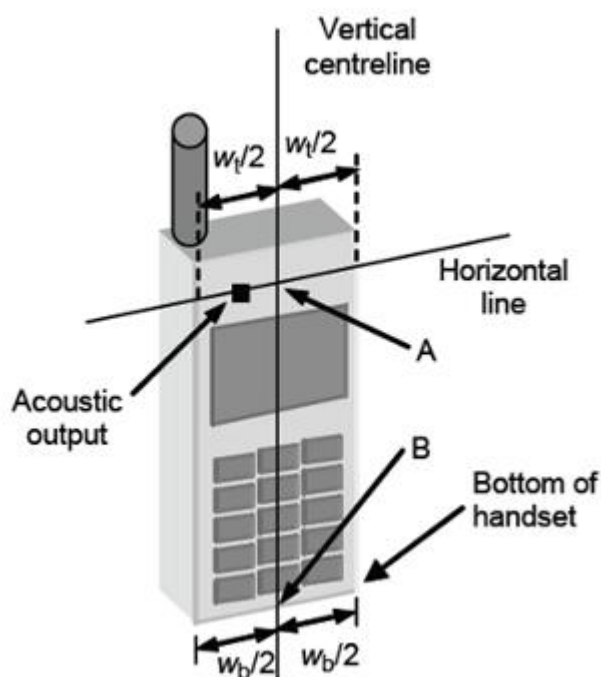


Fig 6.2.1 Handset vertical and horizontal reference lines—"fixed case"

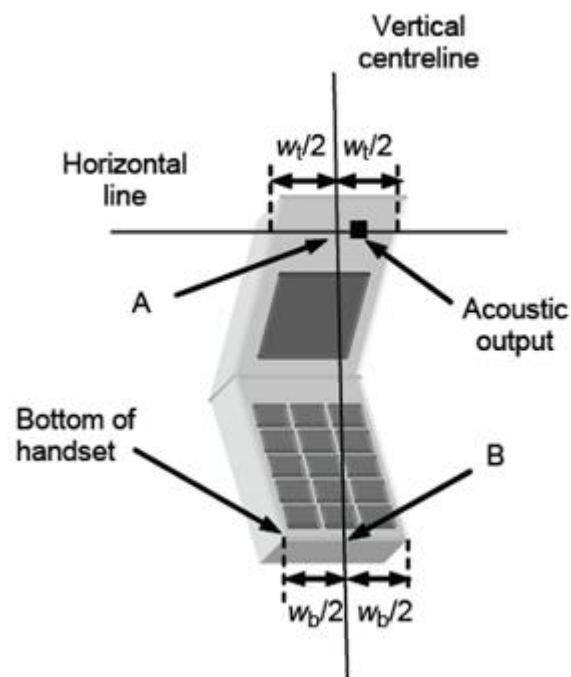


Fig 6.2.2 Handset vertical and horizontal reference lines—"clam-shell case"

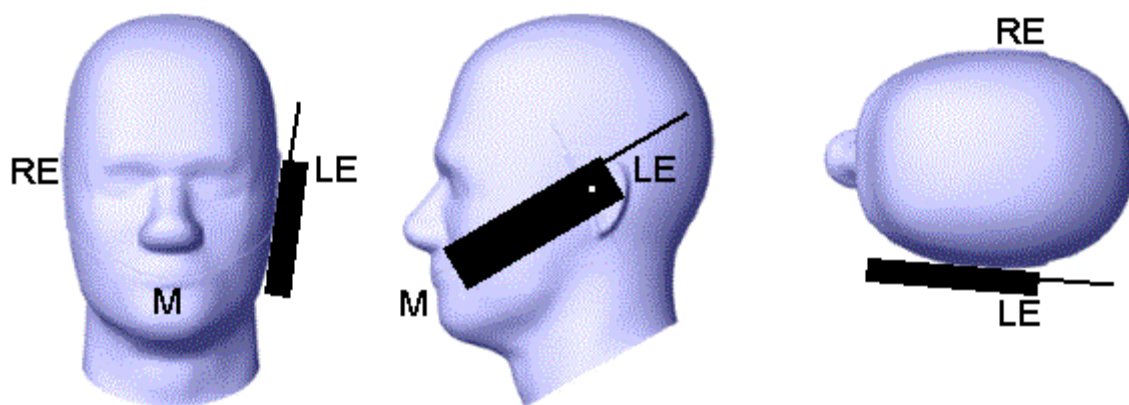


Fig 6.2.3 cheek or touch position. The reference points for the right ear (RE), left ear (LE), and mouth (M), which establish the Reference Plane for handset positioning, are indicated.

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.

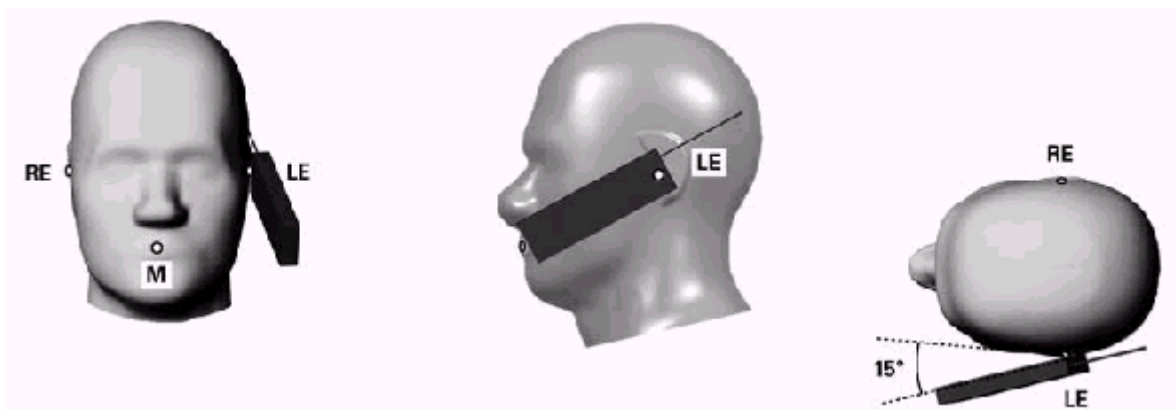


Figure 6.3.1 – Tilt position of the wireless device on the left side of SAM

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.

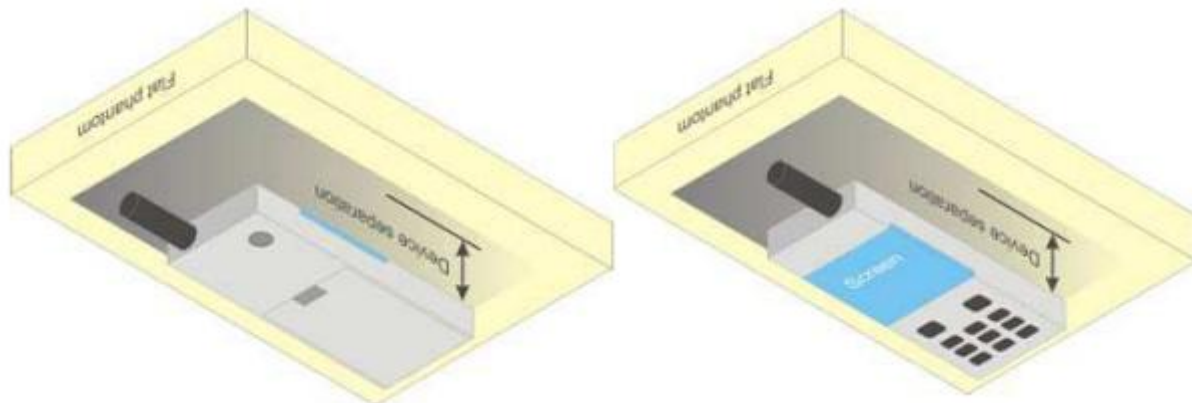


Figure 6.4.1 – Test positions for body-worn devices

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		824.2	836.4	848.8
GSM (GMSK)	32.00	31.81	31.90	31.86	-9.03	22.97	22.78	22.87
GPRS(GMSK,1 Tx slot)	32.00	31.70	31.79	31.74	-9.03	22.97	22.67	22.76
GPRS(GMSK,2 Tx slot)	31.00	30.88	30.93	30.89	-6.02	24.98	24.86	24.91
GPRS(GMSK,3 Tx slot)	29.50	28.92	29.09	29.02	-4.26	25.24	24.66	24.83
GPRS(GMSK,4 Tx slot)	28.00	27.70	27.82	27.77	-3.01	24.99	24.69	24.81
EGPRS(8PSK,1 Tx slot)	30.00	29.82	29.86	29.65	-9.03	20.97	20.79	20.83
EGPRS(8PSK,2 Tx slot)	29.50	29.34	29.23	28.90	-6.02	23.48	23.32	23.21
EGPRS(8PSK,3 Tx slot)	28.00	27.95	27.87	27.52	-4.26	23.74	23.69	23.61
EGPRS(8PSK,4 Tx slot)	27.00	26.73	26.67	26.84	-3.01	23.99	23.72	23.66
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		1850.2	1880	1909.8
GSM (GMSK)	30.00	29.30	29.55	29.45	-9.03	20.97	20.27	20.52
GPRS(GMSK,1 Tx slot)	30.00	29.32	29.59	29.49	-9.03	20.97	20.29	20.56
GPRS(GMSK,2 Tx slot)	29.00	28.49	28.80	28.45	-6.02	22.98	22.47	22.78
GPRS(GMSK,3 Tx slot)	27.50	26.71	27.10	26.99	-4.26	23.24	22.45	22.84
GPRS(GMSK,4 Tx slot)	26.50	25.80	26.18	26.07	-3.01	23.49	22.79	23.17
EGPRS(8PSK,1 Tx slot)	29.50	29.03	28.82	28.56	-9.03	20.47	20.00	19.79
EGPRS(8PSK,2 Tx slot)	29.00	28.67	28.47	27.89	-6.02	22.98	22.65	22.45
EGPRS(8PSK,3 Tx slot)	27.00	26.97	26.59	26.58	-4.26	22.74	22.71	22.33
EGPRS(8PSK,4 Tx slot)	26.00	25.86	25.82	24.96	-3.01	22.99	22.85	22.81

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	22.00	21.46	21.73	21.90
HSDPA Sub 1	21.00	20.54	20.78	20.85
HSDPA Sub 2	20.50	20.13	20.33	20.49

HSDPA Sub 3	19.50	19.10	19.24	18.97
HSDPA Sub 4	19.50	19.27	18.93	19.17
HSUPA Sub 1	21.00	19.21	20.49	20.57
HSUPA Sub 2	21.00	20.37	20.67	20.73
HSUPA Sub 3	19.50	18.64	19.17	19.49
HSUPA Sub 4	21.00	20.48	20.71	20.80
HSUPA Sub 5	20.50	19.34	20.00	20.11
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	21.00	20.67	20.50	20.70
HSDPA Sub 1	20.00	19.67	19.51	19.73
HSDPA Sub 2	19.50	19.13	19.19	19.42
HSDPA Sub 3	18.50	18.37	18.07	18.35
HSDPA Sub 4	19.00	18.33	18.07	18.59
HSUPA Sub 1	20.00	18.14	19.36	19.56
HSUPA Sub 2	20.00	19.53	19.35	19.56
HSUPA Sub 3	18.50	18.24	18.34	18.13
HSUPA Sub 4	20.00	19.70	19.52	19.73
HSUPA Sub 5	19.50	18.01	18.95	19.27
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	22.50	21.99	21.70	22.03
HSDPA Sub 1	21.50	21.01	20.70	21.02
HSDPA Sub 2	21.00	20.66	20.36	20.68
HSDPA Sub 3	20.00	19.59	18.94	19.10
HSDPA Sub 4	20.00	19.52	18.96	19.53
HSUPA Sub 1	21.00	20.01	20.54	20.85
HSUPA Sub 2	21.50	21.01	20.54	20.85
HSUPA Sub 3	20.00	19.42	19.36	19.82
HSUPA Sub 4	21.50	21.01	20.68	21.01
HSUPA Sub 5	20.50	19.50	19.97	20.31

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	22.00	21.00	21.30	21.64
			1	2	22.00	20.98	21.26	21.62
			1	5	22.00	20.97	21.26	21.63
			3	0	22.00	21.01	21.32	21.70
			3	1	22.00	20.99	21.33	21.69
			3	2	22.00	20.98	21.30	21.68
			6	0	21.00	20.00	20.30	20.68
		16QAM	1	0	21.00	20.18	20.46	20.92
			1	2	21.00	20.23	20.51	20.83
			1	5	21.00	20.12	20.50	20.83
			3	0	21.00	19.99	20.41	20.74
			3	1	21.00	19.97	20.31	20.77
			3	2	21.00	20.01	20.38	20.76
			6	0	20.00	18.98	19.40	19.75
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	22.00	20.91	21.32	21.60
			1	7	22.00	20.87	21.27	21.62
			1	14	22.00	20.88	21.20	21.62
			8	0	21.00	19.92	20.29	20.63
			8	4	21.00	19.90	20.26	20.65
			8	7	21.00	19.87	20.26	20.65
			15	0	21.00	19.90	20.34	20.65
		16QAM	1	0	21.00	20.14	20.47	20.72
			1	7	21.00	20.02	20.56	20.90
			1	14	21.00	20.09	20.39	20.86
			8	0	20.00	18.99	19.41	19.75
			8	4	20.00	18.98	19.37	19.74
			8	7	20.00	18.96	19.34	19.74
			15	0	20.00	18.96	19.34	19.70
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	22.00	20.96	21.41	21.55

Band 2			1	12	22.00	20.92	21.32	21.66
			1	24	22.00	20.89	21.18	21.67
			12	0	21.00	19.92	20.37	20.63
			12	6	21.00	19.93	20.35	20.70
			12	11	21.00	19.91	20.27	20.67
			25	0	21.00	19.91	20.33	20.66
		16QAM	1	0	21.00	20.18	20.61	20.74
			1	12	21.00	20.19	20.55	20.91
			1	24	21.00	20.19	20.33	20.94
			12	0	20.00	18.90	19.36	19.64
			12	6	20.00	18.88	19.35	19.68
			12	11	20.00	18.91	19.27	19.65
			25	0	20.00	18.94	19.35	19.69
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	22.00	20.92	21.45	21.33
			1	24	22.00	20.91	21.28	21.56
			1	49	22.00	21.01	21.04	21.66
			25	0	21.00	19.87	20.38	20.47
			25	12	21.00	19.93	20.33	20.58
			25	24	21.00	19.89	20.22	20.66
			50	0	21.00	19.90	20.29	20.60
		16QAM	1	0	21.00	20.11	20.70	20.50
			1	24	21.00	20.17	20.61	20.82
			1	49	21.00	20.19	20.20	20.84
			25	0	20.00	18.90	19.36	19.52
			25	12	20.00	18.91	19.36	19.62
			25	24	20.00	18.92	19.30	19.71
			50	0	20.00	18.92	19.32	19.55
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	22.00	20.84	21.45	21.07
			1	37	22.00	20.95	21.28	21.42
			1	74	22.00	21.15	20.93	21.59
			36	0	21.00	19.88	20.35	20.22
			36	18	21.00	19.96	20.29	20.46
			36	37	21.00	20.00	20.13	20.62

			75	0	20.50	20.00	20.31	20.49
		16QAM	1	0	21.00	20.07	20.77	20.34
			1	37	21.00	20.16	20.51	20.62
			1	74	21.00	20.40	20.16	20.89
			36	0	20.00	18.90	19.38	19.26
			36	18	20.00	18.92	19.30	19.49
			36	37	20.00	19.05	19.19	19.63
			75	0	19.50	18.98	19.28	19.48
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	22.00	20.82	21.40	20.94
			1	49	22.00	21.02	21.30	21.30
			1	99	22.00	21.37	20.83	21.56
			50	0	21.50	19.99	20.38	20.19
			50	24	21.50	20.11	20.33	20.39
			50	49	21.50	20.30	20.10	20.61
			100	0	20.50	20.14	20.22	20.44
		16QAM	1	0	21.00	20.08	20.61	20.30
			1	49	21.00	20.35	20.45	20.56
			1	99	21.00	20.63	20.12	20.81
			50	0	20.00	19.03	19.35	19.18
			50	24	20.00	19.09	19.32	19.35
			50	49	20.00	19.26	19.07	19.61
			100	0	19.50	19.08	19.16	19.44

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	21.50	20.49	21.23	20.86
			1	2	21.50	20.51	21.20	20.91
			1	5	21.50	20.49	21.20	20.93
			3	0	21.50	20.52	21.27	20.91
			3	1	21.50	20.50	21.21	20.96
			3	2	21.50	20.50	21.20	20.96
			6	0	20.50	19.49	20.24	19.91
		16QAM	1	0	21.00	19.76	20.54	20.16
			1	2	21.00	19.74	20.49	20.21
			1	5	21.00	19.83	20.51	20.24

			3	0	20.50	19.56	20.27	19.96
			3	1	20.50	19.42	20.28	19.89
			3	2	20.50	19.51	20.18	19.93
			6	0	19.50	18.54	19.35	19.01
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	21.50	20.49	21.24	20.86
			1	7	21.50	20.49	21.19	20.86
			1	14	21.50	20.49	21.19	20.93
			8	0	20.50	19.51	20.25	19.86
			8	4	20.50	19.48	20.20	19.92
			8	7	20.50	19.50	20.18	19.92
			15	0	20.50	19.53	20.23	19.90
		16QAM	1	0	21.00	19.84	20.50	20.08
			1	7	21.00	19.82	20.47	20.19
			1	14	21.00	19.87	20.42	20.17
			8	0	19.50	18.59	19.32	18.92
			8	4	19.50	18.55	19.32	18.91
			8	7	19.50	18.60	19.26	18.96
			15	0	19.50	18.55	19.26	18.90
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	21.50	20.55	21.30	20.83
			1	12	21.50	20.52	21.24	20.93
			1	24	21.50	20.62	21.20	20.98
			12	0	20.50	19.63	20.35	19.85
			12	6	20.50	19.56	20.28	19.88
			12	11	20.50	19.49	20.22	19.92
			25	0	20.50	19.56	20.25	19.89
		16QAM	1	0	20.50	19.88	20.48	20.05
			1	12	20.50	19.82	20.48	20.12
			1	24	20.50	19.84	20.43	20.25
			12	0	19.50	18.56	19.31	18.87
			12	6	19.50	18.52	19.25	18.83
			12	11	19.50	18.53	19.23	18.85

			25	0	19.50	18.53	19.30	18.87
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	21.50	20.51	21.29	20.75
			1	24	21.50	20.61	21.27	20.77
			1	49	21.50	20.85	21.08	20.97
			25	0	20.50	19.57	20.30	19.76
			25	12	20.50	19.61	20.24	19.75
			25	24	20.50	19.72	20.20	19.82
			50	0	20.50	19.68	20.25	19.78
		16QAM	1	0	21.00	19.77	20.56	19.96
			1	24	21.00	19.86	20.51	20.09
			1	49	21.00	20.20	20.24	20.25
			25	0	19.50	18.58	19.29	18.79
			25	12	19.50	18.59	19.29	18.78
			25	24	19.50	18.74	19.20	18.85
			50	0	19.50	18.65	19.25	18.81
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	21.50	20.45	21.15	20.70
			1	37	21.50	20.69	21.21	20.69
			1	74	21.50	21.12	20.86	20.89
			36	0	20.50	19.51	20.28	19.71
			36	18	20.50	19.75	20.19	19.70
			36	37	20.50	19.98	20.08	19.77
			75	0	20.50	19.78	20.15	19.77
		16QAM	1	0	20.50	19.68	20.47	19.93
			1	37	20.50	20.00	20.41	19.98
			1	74	20.50	20.37	20.11	20.19
			36	0	19.50	18.58	19.25	18.68
			36	18	19.50	18.76	19.21	18.69
			36	37	19.50	18.91	19.07	18.78
			75	0	19.50	18.80	19.13	18.72
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	21.50	20.43	20.99	20.98
			1	49	21.50	20.88	21.21	20.75
			1	99	21.50	21.25	20.72	20.86
			50	0	20.50	19.68	20.23	19.83
			50	24	20.50	19.93	20.25	19.77
			50	49	20.50	20.25	20.14	19.68
			100	0	20.50	19.97	20.15	19.74
		16QAM	1	0	21.00	19.74	20.27	20.29
			1	49	21.00	20.16	20.50	20.03
			1	99	21.00	20.44	19.98	20.18
			50	0	19.50	18.68	19.18	18.84
			50	24	19.50	18.94	19.21	18.74
			50	49	19.50	19.22	19.08	18.70
			100	0	19.50	18.95	19.15	18.73

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	22.50	22.27	22.37	22.32
			1	2	22.50	22.27	22.37	22.27
			1	5	22.50	22.25	22.41	22.24
			3	0	22.50	22.27	22.42	22.34
			3	1	22.50	22.30	22.40	22.35
			3	2	22.50	22.27	22.40	22.32
			6	0	21.50	21.28	21.43	21.38
		16QAM	1	0	22.00	21.52	21.64	21.59
			1	2	22.00	21.47	21.62	21.54
			1	5	22.00	21.38	21.61	21.48
			3	0	21.50	21.27	21.44	21.39
			3	1	21.50	21.29	21.42	21.38
			3	2	21.50	21.19	21.36	21.38
			6	0	20.50	20.33	20.46	20.39
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	22.50	22.17	22.31	22.35
			1	7	22.50	22.16	22.37	22.31
			1	14	22.50	22.16	22.38	22.24

			8	0	21.50	21.19	21.33	21.37
			8	4	21.50	21.17	21.40	21.35
			8	7	21.50	21.17	21.40	21.29
			15	0	21.50	21.19	21.39	21.37
		16QAM	1	0	22.00	21.36	21.56	21.65
			1	7	22.00	21.47	21.60	21.51
			1	14	22.00	21.35	21.72	21.46
			8	0	20.50	20.24	20.42	20.43
			8	4	20.50	20.26	20.45	20.41
			8	7	20.50	20.28	20.47	20.37
			15	0	20.50	20.19	20.40	20.41
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	22.50	22.22	22.37	22.44
			1	12	22.50	22.15	22.37	22.36
			1	24	22.50	22.24	22.42	22.29
			12	0	21.50	21.19	21.39	21.49
			12	6	21.50	21.20	21.43	21.36
			12	11	21.50	21.26	21.40	21.34
			25	0	21.50	21.24	21.39	21.39
		16QAM	1	0	22.00	21.49	21.66	21.66
			1	12	22.00	21.40	21.66	21.58
			1	24	22.00	21.43	21.72	21.47
			12	0	21.00	20.19	20.43	20.50
			12	6	21.00	20.18	20.38	20.34
			12	11	21.00	20.21	20.36	20.34
			25	0	20.50	20.28	20.42	20.39
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	22.50	22.17	22.24	22.42
			1	24	22.50	22.27	22.41	22.41
			1	49	22.50	22.28	22.41	22.21
			25	0	22.00	21.21	21.39	21.53
			25	12	22.00	21.26	21.43	21.44
			25	24	22.00	21.26	21.46	21.34
			50	0	21.50	21.28	21.45	21.48
		16QAM	1	0	22.00	21.40	21.54	21.75

			1	24	22.00	21.41	21.71	21.63
			1	49	22.00	21.50	21.71	21.44
			25	0	21.00	20.23	20.38	20.57
			25	12	21.00	20.29	20.41	20.49
			25	24	21.00	20.29	20.44	20.45
			50	0	20.50	20.26	20.41	20.48

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	22.67	23.32	22.95
			1	12	23.50	22.78	23.21	22.91
			1	24	23.50	22.72	23.30	22.84
			12	0	22.50	21.82	22.02	21.83
			12	6	22.50	21.91	21.92	21.79
			12	11	22.50	21.91	21.96	21.87
			25	0	22.00	21.77	21.96	21.90
		16QAM	1	0	23.50	22.36	22.54	23.08
			1	12	23.50	22.43	22.61	23.12
			1	24	23.50	22.40	22.59	23.00
			12	0	21.50	20.96	21.21	21.06
			12	6	21.50	21.03	21.10	20.97
			12	11	21.50	20.99	21.20	21.01
			25	0	21.50	21.09	21.37	20.92
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	23.50	23.16	23.07	23.04
			1	24	23.50	23.15	23.04	22.94
			1	49	23.50	23.07	23.03	22.76
			25	0	22.50	21.82	22.06	21.92
			25	12	22.50	21.84	22.02	21.97
			25	24	22.50	21.79	22.05	21.93
			50	0	22.00	21.76	21.94	21.86
		16QAM	1	0	23.50	22.43	23.26	23.22
			1	24	23.50	22.31	23.31	23.07
			1	49	23.50	22.44	23.05	23.01
			25	0	21.50	21.15	21.14	21.00
			25	12	21.50	21.13	21.03	20.92
			25	24	21.50	21.14	21.09	20.95

			50	0	21.50	20.86	21.01	20.97
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	23.50	22.85	23.28	23.13
			1	37	23.50	22.81	23.22	22.92
			1	74	23.50	22.88	23.26	22.85
			36	0	22.50	21.79	22.16	22.09
			36	18	22.50	21.79	21.99	21.79
			36	37	22.50	21.93	22.11	21.90
			75	0	22.50	21.80	22.09	21.87
		16QAM	1	0	23.50	23.20	22.71	23.36
			1	37	23.50	23.03	22.61	23.19
			1	74	23.50	23.18	22.58	23.01
			36	0	21.50	20.93	21.24	21.10
			36	18	21.50	20.86	21.20	20.97
			36	37	21.50	21.05	21.20	20.93
			75	0	21.50	21.00	21.12	21.06
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	22.79	23.19	23.29
			1	49	23.50	22.72	23.15	23.12
			1	99	23.50	22.74	23.18	22.94
			50	0	22.50	21.88	22.03	22.16
			50	24	22.50	21.79	22.04	21.95
			50	49	22.50	21.79	21.98	21.98
			100	0	22.00	21.82	21.91	21.96
		16QAM	1	0	23.50	23.14	22.61	22.69
			1	49	23.50	23.04	22.62	22.50
			1	99	23.50	23.22	22.66	22.27
			50	0	21.50	21.00	21.15	21.12
			50	24	21.50	20.80	21.09	21.21
			50	49	21.50	20.99	21.11	20.99
			100	0	21.50	20.83	21.17	21.12

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	23.00	22.43	22.31	22.18
			1	2	23.00	22.51	22.29	22.18
			1	5	23.00	22.46	22.27	22.17
			3	0	23.00	22.47	22.35	22.19
			3	1	23.00	22.50	22.32	22.22
			3	2	23.00	22.48	22.33	22.22
			6	0	21.50	21.48	21.31	21.19
		16QAM	1	0	22.00	21.79	21.66	21.43
			1	2	22.00	21.74	21.54	21.38
			1	5	22.00	21.74	21.55	21.41
			3	0	22.00	21.46	21.34	21.15
			3	1	22.00	21.53	21.31	21.25
			3	2	22.00	21.49	21.36	21.24
			6	0	21.00	20.50	20.40	20.29
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	22.50	22.43	22.35	22.22
			1	7	22.50	22.39	22.28	22.16
			1	14	22.50	22.39	22.26	22.18
			8	0	21.50	21.47	21.31	21.20
			8	4	21.50	21.41	21.27	21.16
			8	7	21.50	21.41	21.25	21.21
			15	0	21.50	21.43	21.29	21.21
		16QAM	1	0	22.00	21.73	21.63	21.53
			1	7	22.00	21.76	21.55	21.50
			1	14	22.00	21.59	21.56	21.45
			8	0	21.00	20.50	20.38	20.33
			8	4	21.00	20.51	20.39	20.27
			8	7	21.00	20.48	20.32	20.27
			15	0	20.50	20.46	20.30	20.23
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	22.50	22.49	22.42	22.22
			1	12	22.50	22.45	22.30	22.20
			1	24	22.50	22.41	22.25	22.19
			12	0	22.00	21.50	21.44	21.28
			12	6	22.00	21.46	21.33	21.23

		16QAM	12	11	22.00	21.45	21.28	21.19
			25	0	21.50	21.47	21.30	21.25
			1	0	22.00	21.72	21.69	21.44
			1	12	22.00	21.66	21.59	21.43
			1	24	22.00	21.63	21.49	21.50
			12	0	20.50	20.44	20.40	20.21
			12	6	20.50	20.49	20.26	20.25
			12	11	20.50	20.38	20.30	20.10
			25	0	21.00	20.50	20.34	20.26
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	23.00	22.50	22.49	22.38
			1	24	23.00	22.38	22.36	22.22
			1	49	23.00	22.28	22.20	22.17
			25	0	21.50	21.47	21.41	21.35
			25	12	21.50	21.44	21.36	21.29
			25	24	21.50	21.32	21.33	21.21
			50	0	21.50	21.38	21.34	21.30
		16QAM	1	0	22.00	21.86	21.79	21.70
			1	24	22.00	21.77	21.69	21.43
			1	49	22.00	21.62	21.52	21.35
			25	0	20.50	20.49	20.42	20.31
			25	12	20.50	20.41	20.38	20.33
			25	24	20.50	20.36	20.31	20.27
			50	0	20.50	20.42	20.35	20.27

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		23205/779.5	23230/782	23255/784.5
LTE Band 13	5MHz	QPSK	1	0	22.50	22.26	22.21	22.17
			1	12	22.50	22.20	22.14	22.05
			1	24	22.50	22.22	22.09	22.03
			12	0	21.50	21.36	21.28	21.29
			12	6	21.50	21.32	21.33	21.23
			12	11	21.50	21.39	21.27	21.08
			25	0	21.50	21.38	21.30	21.21
		16QAM	1	0	22.00	21.61	21.62	21.62
			1	12	22.00	21.64	21.64	21.44

			1	24	22.00	21.66	21.55	21.45
			12	0	20.50	20.31	20.23	20.27
			12	6	20.50	20.34	20.27	20.22
			12	11	20.50	20.34	20.23	20.01
			25	0	20.50	20.42	20.27	20.18
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		/	23230/782	/
LTE Band 13	10MHz	QPSK	1	0	22.50	/	22.25	/
			1	24	22.50	/	22.16	/
			1	49	22.50	/	21.99	/
			25	0	21.50	/	21.24	/
			25	12	21.50	/	21.29	/
			25	24	21.50	/	21.16	/
			50	0	21.50	/	21.25	/
		16QAM	1	0	22.00	/	21.62	/
			1	24	22.00	/	21.52	/
			1	49	22.00	/	21.42	/
			25	0	20.50	/	20.25	/
			25	12	20.50	/	20.30	/
			25	24	20.50	/	20.15	/
			50	0	20.50	/	20.24	/

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	22.43	22.31	22.25
			1	12	22.50	22.31	22.27	22.16
			1	24	22.50	22.35	22.24	22.16
			12	0	21.50	21.37	21.29	21.26
			12	6	21.50	21.34	21.25	21.21
			12	11	21.50	21.27	21.21	21.13
			25	0	21.50	21.30	21.27	21.21
		16QAM	1	0	22.00	21.63	21.56	21.49
			1	12	22.00	21.64	21.50	21.51
			1	24	22.00	21.58	21.48	21.48
			12	0	20.50	20.35	20.30	20.24
			12	6	20.50	20.23	20.28	20.17
			12	11	20.50	20.26	20.18	20.15
			25	0	20.50	20.30	20.29	20.21

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	22.43	22.40	22.38
			1	24	22.50	22.33	22.29	22.27
			1	49	22.50	22.14	22.14	22.11
			25	0	21.50	21.34	21.31	21.24
			25	12	21.50	21.23	21.32	21.27
			25	24	21.50	21.30	21.22	21.21
			50	0	21.50	21.30	21.30	21.29
		16QAM	1	0	22.00	21.61	21.75	21.72
			1	24	22.00	21.62	21.52	21.58
			1	49	22.00	21.49	21.44	21.39
			25	0	20.50	20.36	20.36	20.31
			25	12	20.50	20.27	20.26	20.30
			25	24	20.50	20.28	20.24	20.22
			50	0	20.50	20.32	20.27	20.29

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	21.50	20.90	21.08	21.47
			1	2	21.50	20.91	21.06	21.45
			1	5	21.50	20.89	21.07	21.43
			3	0	22.00	20.92	21.12	21.51
			3	1	22.00	20.90	21.10	21.51
			3	2	22.00	20.89	21.09	21.48
			6	0	21.00	19.92	20.09	20.52
		16QAM	1	0	21.00	20.11	20.27	20.67
			1	2	21.00	20.12	20.33	20.65
			1	5	21.00	20.09	20.20	20.76
			3	0	21.00	19.92	20.16	20.55
			3	1	21.00	19.87	20.12	20.57
			3	2	21.00	19.91	20.12	20.51
			6	0	20.00	18.92	19.20	19.58
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	20.80	21.15	21.55
			1	7	22.00	20.76	21.06	21.48
			1	14	22.00	20.75	21.00	21.42
			8	0	21.00	19.79	20.11	20.61
			8	4	21.00	19.78	20.06	20.50
			8	7	21.00	19.75	20.07	20.49
			15	0	21.00	19.78	20.10	20.55
		16QAM	1	0	21.00	20.04	20.39	20.73
			1	7	21.00	20.00	20.30	20.66
			1	14	21.00	20.02	20.17	20.60
			8	0	20.00	18.92	19.19	19.66
			8	4	20.00	18.87	19.19	19.57
			8	7	20.00	18.85	19.14	19.53
			15	0	20.00	18.86	19.14	19.58
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	20.85	21.25	21.62
			1	12	22.00	20.76	21.07	21.55
			1	24	22.00	20.78	21.04	21.52
			12	0	21.00	19.80	20.21	20.74
			12	6	21.00	19.82	20.13	20.59
			12	11	21.00	19.77	20.09	20.43
			25	0	21.00	19.78	20.15	20.61
		16QAM	1	0	21.00	20.14	20.43	20.85
			1	12	21.00	20.04	20.29	20.69
			1	24	21.00	20.01	20.17	20.67
			12	0	20.00	18.80	19.22	19.71
			12	6	20.00	18.81	19.12	19.60
			12	11	20.00	18.75	19.08	19.43
			25	0	20.00	18.83	19.22	19.63
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	20.82	21.29	21.48
			1	24	22.00	20.78	21.15	21.65
			1	49	22.00	20.94	20.91	21.47
			25	0	21.00	19.78	20.18	20.63
			25	12	21.00	19.82	20.14	20.62
			25	24	21.00	19.80	19.99	20.42
			50	0	21.00	19.80	20.13	20.56
		16QAM	1	0	21.00	20.15	20.48	20.74
			1	24	21.00	20.03	20.38	20.84
			1	49	21.00	20.12	20.18	20.71
			25	0	20.00	18.83	19.23	19.65
			25	12	20.00	18.82	19.18	19.63
			25	24	20.00	18.75	19.03	19.43
			50	0	20.00	18.80	19.13	19.57
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	20.77	21.29	21.18
			1	37	22.00	20.84	21.06	21.54
			1	74	22.00	21.08	20.78	21.41
			36	0	21.00	19.79	20.18	20.40
			36	18	21.00	19.85	20.08	20.54
			36	37	21.00	19.94	19.91	20.44
			75	0	20.50	19.87	20.10	20.46
		16QAM	1	0	21.00	19.94	20.57	20.52
			1	37	21.00	20.17	20.29	20.80
			1	74	21.00	20.34	20.00	20.61
			36	0	20.00	18.78	19.24	19.42
			36	18	20.00	18.85	19.10	19.57
			36	37	20.00	18.91	18.93	19.44
			75	0	19.50	18.91	19.10	19.49
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26140/1860	26365/1882.5	26590/1905
LTE Band 25	20MHz	QPSK	1	0	21.50	20.72	21.33	20.97
			1	49	21.50	20.96	21.07	21.44
			1	99	21.50	21.31	20.80	21.43
			50	0	21.00	19.91	20.25	20.26

			50	24	21.00	19.97	20.19	20.51
			50	49	21.00	20.24	19.87	20.45
			100	0	20.50	20.03	20.02	20.34
		16QAM	1	0	21.00	19.93	20.55	20.30
			1	49	21.00	20.18	20.29	20.61
			1	99	21.00	20.47	20.08	20.62
			50	0	19.50	18.93	19.21	19.24
			50	24	19.50	19.03	19.11	19.49
			50	49	19.50	19.22	18.85	19.42
			100	0	19.50	19.01	19.02	19.33

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	22.50	22.26	22.15	22.02
			1	2	22.50	22.25	22.11	22.04
			1	5	22.50	22.24	22.13	22.02
			3	0	22.50	22.26	22.20	22.07
			3	1	22.50	22.26	22.17	22.04
			3	2	22.50	22.23	22.12	22.04
			6	0	21.50	21.25	21.16	21.03
		16QAM	1	0	21.50	21.39	21.33	21.22
			1	2	21.50	21.39	21.35	21.27
			1	5	21.50	21.43	21.38	21.19
			3	0	21.50	21.19	21.12	21.10
			3	1	21.50	21.25	21.16	21.11
			3	2	21.50	21.19	21.16	20.98
			6	0	20.50	20.33	20.23	20.08
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	22.50	22.14	22.14	22.03
			1	7	22.50	22.11	22.06	22.01
			1	14	22.50	22.08	22.05	22.00
			8	0	21.50	21.17	21.18	21.02
			8	4	21.50	21.15	21.12	21.01
			8	7	21.50	21.13	21.08	20.98
			15	0	21.50	21.16	21.15	21.02
		16QAM	1	0	21.50	21.34	21.41	21.28
			1	7	21.50	21.35	21.30	21.35

			1	14	21.50	21.31	21.22	21.28
			8	0	20.50	20.23	20.24	20.12
			8	4	20.50	20.24	20.21	20.09
			8	7	20.50	20.22	20.17	20.05
			15	0	20.50	20.16	20.18	20.07
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	22.50	22.19	22.23	22.12
			1	12	22.50	22.14	22.09	22.03
			1	24	22.50	22.04	22.06	22.05
			12	0	21.50	21.18	21.23	21.16
			12	6	21.50	21.18	21.18	21.06
			12	11	21.50	21.12	21.07	21.02
			25	0	21.50	21.12	21.15	21.09
		16QAM	1	0	22.00	21.38	21.52	21.41
			1	12	22.00	21.32	21.33	21.23
			1	24	22.00	21.23	21.23	21.24
			12	0	20.50	20.18	20.20	20.13
			12	6	20.50	20.16	20.13	20.07
			12	11	20.50	20.07	20.02	19.98
			25	0	20.50	20.17	20.20	20.11
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	/	22.28	/
			1	24	22.50	/	22.13	/
			1	49	22.50	/	22.02	/
			25	0	21.50	/	21.22	/
			25	12	21.50	/	21.16	/
			25	24	21.50	/	21.04	/
			50	0	21.50	/	21.17	/
		16QAM	1	0	21.50	/	21.44	/
			1	24	21.50	/	21.42	/
			1	49	21.50	/	21.24	/
			25	0	20.50	/	20.25	/
			25	12	20.50	/	20.14	/
			25	24	20.50	/	20.06	/
			50	0	20.50	/	20.16	/

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	22.50	22.02	22.16	22.06
			1	2	22.50	22.03	22.19	22.02
			1	5	22.50	22.03	22.16	21.99
			3	0	22.50	22.03	22.23	22.12
			3	1	22.50	22.02	22.19	22.09
			3	2	22.50	22.06	22.20	22.09
			6	0	21.50	21.04	21.22	21.10
		16QAM	1	0	21.50	21.22	21.36	21.31
			1	2	21.50	21.14	21.42	21.22
			1	5	21.50	21.28	21.49	21.23
			3	0	21.50	21.01	21.19	21.10
			3	1	21.50	20.97	21.20	21.15
			3	2	21.50	21.06	21.18	21.13
			6	0	20.50	20.05	20.25	20.20
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	22.50	21.97	22.11	22.11
			1	7	22.50	21.95	22.16	22.06
			1	14	22.50	21.96	22.19	22.02
			8	0	21.50	20.98	21.17	21.13
			8	4	21.50	21.00	21.15	21.06
			8	7	21.50	20.98	21.18	21.03
			15	0	21.50	20.99	21.21	21.15
		16QAM	1	0	21.50	21.16	21.33	21.32
			1	7	21.50	21.27	21.39	21.35
			1	14	21.50	21.18	21.40	21.29
			8	0	20.50	20.08	20.27	20.19
			8	4	20.50	20.07	20.26	20.17
			8	7	20.50	20.07	20.22	20.13
			15	0	20.50	20.01	20.24	20.16
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		26815/826.5	26915/836.5	27015/846.5
LTE Band	5MHz	QPSK	1	0	22.50	22.02	22.18	22.21
			1	12	22.50	21.98	22.19	22.10

26b			1	24	22.50	22.00	22.26	22.05
			12	0	21.50	21.07	21.23	21.27
			12	6	21.50	21.03	21.24	21.17
			12	11	21.50	20.98	21.24	21.16
			25	0	21.50	21.04	21.22	21.20
		16QAM	1	0	21.50	21.21	21.33	21.49
			1	12	21.50	21.19	21.43	21.29
			1	24	21.50	21.20	21.44	21.34
			12	0	20.50	19.99	20.19	20.25
			12	6	20.50	19.99	20.25	20.14
			12	11	20.50	19.97	20.19	20.07
			25	0	20.50	20.01	20.27	20.26
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	22.50	22.02	22.07	22.27
			1	24	22.50	22.02	22.22	22.17
			1	49	22.50	22.10	22.22	22.02
			25	0	21.50	20.99	21.21	21.36
			25	12	21.50	21.09	21.21	21.23
			25	24	21.50	21.03	21.20	21.17
			50	0	21.50	21.04	21.20	21.25
		16QAM	1	0	22.00	21.27	21.30	21.42
			1	24	22.00	21.33	21.38	21.47
			1	49	22.00	21.34	21.52	21.23
			25	0	20.50	20.01	20.18	20.36
			25	12	20.50	20.08	20.29	20.25
			25	24	20.50	20.08	20.23	20.15
			50	0	20.50	20.02	20.14	20.26
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	22.50	21.97	21.98	22.11
			1	37	22.50	22.05	22.20	22.22
			1	74	22.50	22.17	22.13	21.99
			36	0	21.50	21.04	21.18	21.18
			36	18	21.50	21.07	21.19	21.21
			36	37	21.50	21.08	21.15	21.14
			75	0	21.50	21.14	21.17	21.17

		16QAM	1	0	21.50	21.28	21.34	21.34
			1	37	21.50	21.37	21.49	21.46
			1	74	21.50	21.37	21.38	21.27
			36	0	20.50	20.03	20.17	20.18
			36	18	20.50	20.01	20.20	20.24
			36	37	20.50	20.14	20.14	20.13
			75	0	20.50	20.11	20.16	20.17

Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		37775/2572.5	38000/2595	38225/2617.5
LTE Band 38	5MHz	QPSK	1	0	23.00	22.49	22.56	22.37
			1	12	23.00	22.35	22.51	22.36
			1	24	23.00	22.32	22.50	22.35
			12	0	22.00	21.35	21.69	21.54
			12	6	22.00	21.25	21.61	21.48
			12	11	22.00	21.21	21.61	21.47
			25	0	22.00	21.27	21.63	21.45
		16QAM	1	0	22.00	21.53	21.76	21.59
			1	12	22.00	21.40	21.75	21.60
			1	24	22.00	21.37	21.73	21.57
			12	0	21.00	20.39	20.72	20.58
			12	6	21.00	20.25	20.65	20.52
			12	11	21.00	20.20	20.66	20.54
			25	0	21.00	20.31	20.74	20.60
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		37800/2575	38000/2595	38200/2615
LTE Band 38	10MHz	QPSK	1	0	23.00	22.29	22.50	22.30
			1	24	23.00	22.16	22.55	22.36
			1	49	23.00	22.10	22.42	22.31
			25	0	22.00	21.29	21.67	21.45
			25	12	22.00	21.19	21.65	21.47
			25	24	22.00	21.17	21.58	21.48
			50	0	22.00	21.26	21.64	21.51
		16QAM	1	0	22.00	21.53	21.75	21.56
			1	24	22.00	21.38	21.80	21.60
			1	49	22.00	21.34	21.67	21.55
			25	0	21.00	20.36	20.76	20.59
			25	12	21.00	20.25	20.73	20.59

			25	24	21.00	20.27	20.65	20.59
			50	0	21.00	20.31	20.70	20.60
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		37825/2577.5	38000/2595	38175/2615
LTE Band 38	15MHz	QPSK	1	0	23.00	22.24	22.39	22.30
			1	37	23.00	22.11	22.51	22.30
			1	74	23.00	22.19	22.30	22.25
			36	0	22.00	21.27	21.66	21.48
			36	18	22.00	21.19	21.66	21.47
			36	37	22.00	21.25	21.59	21.50
			75	0	22.00	21.26	21.61	21.48
		16QAM	1	0	22.00	21.50	21.67	21.58
			1	37	22.00	21.36	21.77	21.55
			1	74	22.00	21.45	21.58	21.50
			36	0	21.00	20.27	20.66	20.50
			36	18	21.00	20.21	20.66	20.49
			36	37	21.00	20.24	20.60	20.52
			75	0	21.00	20.29	20.63	20.53
Band	Band Width	Modulation	RB Configuration		Tune-up (dBm)	Channel/Frequency(MHz)		
			RB Size	RB Offset		37850/2580	38000/2595	38150/2610
LTE Band 38	20MHz	QPSK	1	0	23.00	22.23	22.29	22.40
			1	49	23.00	22.15	22.53	22.30
			1	99	23.00	22.35	22.22	22.21
			50	0	22.00	21.31	21.61	21.56
			50	24	22.00	21.28	21.66	21.49
			50	49	22.00	21.35	21.52	21.48
			100	0	22.00	21.34	21.57	21.50
		16QAM	1	0	22.00	21.47	21.55	21.67
			1	49	22.00	21.39	21.79	21.55
			1	99	22.00	21.60	21.49	21.47
			50	0	21.00	20.39	20.68	20.63
			50	24	21.00	20.33	20.72	20.58
			50	49	21.00	20.39	20.58	20.56
			100	0	21.00	20.37	20.61	20.54

Band	Band Width	Modulation	RB Configuration	Tune-up (dBm)	Channel/Frequency(MHz)
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			RB Size	RB Offset		39675/ 2498.5	40148/ 2546	40620/ 2593	41093/ 2640	41565/ 2687.5
LTE Band 41	5MHz	QPSK	1	0	25.00	22.92	23.82	24.44	23.57	24.86
			1	12	25.00	22.59	24.07	24.31	24.13	24.81
			1	24	25.00	22.35	23.15	24.24	24.38	24.86
			12	0	24.50	22.71	24.17	24.13	24.10	24.46
			12	6	24.50	22.54	22.54	24.09	23.15	24.40
			12	11	24.50	22.40	22.96	24.07	22.76	24.37
			25	0	24.50	22.46	23.83	24.06	24.28	24.37
		16QAM	1	0	24.50	22.44	22.30	24.12	22.77	24.45
			1	12	24.50	22.20	22.21	24.11	24.03	24.39
			1	24	24.50	22.00	24.43	24.12	22.39	24.35
			12	0	24.00	22.06	23.42	23.20	23.39	23.52
			12	6	24.00	22.06	22.92	23.15	22.63	23.47
			12	11	24.00	22.02	22.27	23.14	23.05	23.43
			25	0	24.00	22.09	22.83	23.21	23.43	23.53
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	25.00	22.63	24.15	24.33	24.69	24.74
			1	24	25.00	22.14	24.54	24.32	22.00	24.77
			1	49	25.00	21.70	23.81	24.15	23.49	24.89
			25	0	25.00	22.45	24.47	24.10	23.97	24.50
			25	12	25.00	22.22	23.05	24.10	24.20	24.44
			25	24	25.00	21.99	22.32	24.06	22.02	24.37
			50	0	24.50	22.22	23.12	24.14	24.29	24.48
		16QAM	1	0	25.00	22.36	23.45	24.06	22.37	24.51
			1	24	25.00	21.94	23.24	24.17	21.78	24.46
			1	49	25.00	21.52	24.22	24.06	22.07	24.34
			25	0	24.00	22.16	23.25	23.24	23.59	23.66
			25	12	24.00	21.98	23.60	23.22	22.61	23.59
			25	24	24.00	21.75	22.75	23.18	23.19	23.48
			50	0	24.00	21.97	23.45	23.25	22.03	23.60
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	15MHz	QPSK	1	0	25.00	22.56	24.21	24.23	22.59	24.44

Band 41			1	37	25.00	21.83	21.60	24.25	24.30	24.61
			1	74	25.00	21.30	21.41	23.98	24.50	24.76
			36	0	24.50	22.38	22.89	24.09	23.40	24.47
			36	18	24.50	22.00	22.41	24.11	21.68	24.43
			36	37	24.50	21.66	23.02	24.10	23.59	24.33
			75	0	24.50	21.97	22.07	24.03	23.18	24.36
		16QAM	1	0	24.50	22.31	23.32	23.95	22.03	24.35
			1	37	24.50	21.64	24.14	24.12	23.94	24.35
			1	74	24.50	21.14	21.83	23.92	23.55	24.19
			36	0	23.50	22.02	22.71	23.12	23.03	23.49
			36	18	23.50	21.74	21.84	23.16	22.25	23.46
			36	37	23.50	21.41	21.47	23.11	22.94	23.33
			75	0	23.50	21.72	21.95	23.12	21.73	23.44
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	25.00	22.43	23.78	24.09	22.92	24.27
			1	49	25.00	23.52	22.23	24.24	21.87	24.50
			1	99	25.00	21.16	22.80	23.73	22.87	24.66
			50	0	24.50	22.18	22.00	24.08	22.27	24.45
			50	24	24.50	21.73	21.45	24.18	23.25	24.49
			50	49	24.50	21.40	23.36	24.10	22.88	24.40
			100	0	24.50	21.77	22.45	24.07	22.57	24.36
		16QAM	1	0	24.50	22.19	24.27	23.82	22.22	24.20
			1	49	24.50	21.34	22.57	24.14	23.13	24.38
			1	99	24.50	21.01	23.38	23.67	21.11	24.14
			50	0	24.00	21.92	22.00	23.18	22.32	23.52
			50	24	24.00	21.49	21.65	23.28	23.23	23.61
			50	49	24.00	21.15	22.32	23.19	22.49	23.45
			100	0	23.50	21.52	22.63	23.12	22.02	23.39

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	21.00	20.33	20.55	20.83
			1	2	21.00	20.35	20.56	20.83
			1	5	21.00	20.33	20.52	20.83

			3	0	21.00	20.39	20.60	20.90
			3	1	21.00	20.39	20.55	20.89
			3	2	21.00	20.39	20.57	20.84
			6	0	20.00	19.38	19.59	19.86
		16QAM	1	0	20.50	19.59	19.88	20.19
			1	2	20.50	19.63	19.88	20.06
			1	5	20.50	19.59	19.87	20.14
			3	0	20.00	19.39	19.52	19.91
			3	1	20.00	19.31	19.58	19.90
			3	2	20.00	19.31	19.55	19.83
			6	0	19.00	18.48	18.67	18.94
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	21.00	20.35	20.57	20.83
			1	7	21.00	20.34	20.56	20.85
			1	14	21.00	20.38	20.54	20.88
			8	0	20.00	19.34	19.58	19.84
			8	4	20.00	19.36	19.57	19.85
			8	7	20.00	19.35	19.50	19.84
			15	0	20.00	19.40	19.52	19.81
		16QAM	1	0	20.50	19.69	19.83	20.10
			1	7	20.50	19.67	19.90	20.16
			1	14	20.50	19.73	19.80	20.08
			8	0	19.00	18.44	18.63	18.92
			8	4	19.00	18.41	18.62	18.95
			8	7	19.00	18.45	18.61	18.94
			15	0	19.00	18.44	18.57	18.88
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	21.00	20.41	20.63	20.97
			1	12	21.00	20.40	20.57	20.90
			1	24	21.00	20.48	20.60	20.87
			12	0	20.00	19.41	19.62	19.95
			12	6	20.00	19.42	19.58	19.90
			12	11	20.00	19.42	19.54	19.91

			25	0	20.00	19.46	19.56	19.89
		16QAM	1	0	20.50	19.66	19.95	20.21
			1	12	20.50	19.74	19.78	20.12
			1	24	20.50	19.77	19.88	20.10
			12	0	19.00	18.37	18.65	18.99
			12	6	19.00	18.39	18.54	18.87
			12	11	19.00	18.37	18.47	18.87
			25	0	19.00	18.44	18.57	18.93
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	21.50	20.36	20.72	21.24
			1	24	21.50	20.49	20.61	21.01
			1	49	21.50	20.70	20.64	20.88
			25	0	20.50	19.50	19.66	20.07
			25	12	20.50	19.49	19.59	20.00
			25	24	20.50	19.59	19.58	19.92
			50	0	20.50	19.53	19.64	20.05
		16QAM	1	0	21.00	19.60	19.92	20.55
			1	24	21.00	19.77	19.86	20.24
			1	49	21.00	19.95	19.92	20.19
			25	0	19.50	18.48	18.65	19.12
			25	12	19.50	18.52	18.58	19.02
			25	24	19.50	18.62	18.62	18.96
			50	0	19.50	18.52	18.59	19.05
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	21.50	20.27	20.71	21.09
			1	37	21.50	20.56	20.56	20.96
			1	74	21.50	20.95	20.67	20.72
			36	0	20.50	19.48	19.70	20.09
			36	18	20.50	19.52	19.55	20.03
			36	37	20.50	19.85	19.57	19.86
			75	0	20.50	19.66	19.63	20.01
		16QAM	1	0	20.50	19.51	19.96	20.33
			1	37	20.50	19.82	19.79	20.22

			1	74	20.50	20.23	19.96	20.01
			36	0	19.50	18.50	18.67	19.13
			36	18	19.50	18.59	18.57	18.99
			36	37	19.50	18.80	18.56	18.86
			75	0	19.00	18.62	18.58	18.99
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	21.50	20.25	20.81	21.00
			1	49	21.50	20.73	20.59	21.13
			1	99	21.50	21.08	20.76	20.73
			50	0	20.50	19.55	19.71	20.18
			50	24	20.50	19.77	19.65	20.12
			50	49	20.50	20.08	19.55	19.94
			100	0	20.50	19.82	19.63	20.05
		16QAM	1	0	20.50	19.58	20.05	20.29
			1	49	20.50	20.00	19.76	20.39
			1	99	20.50	20.36	20.03	19.96
			50	0	19.50	18.49	18.65	19.17
			50	24	19.50	18.77	18.61	19.14
			50	49	19.50	19.02	18.54	18.98
			100	0	19.50	18.80	18.54	19.05

7.4. NR SA Power

Band	SCS (kHz)	Bandwidth (MHz)	UL Channel	RB Allocation	Modulation	Tune-up (dBm)	Power (dBm)
n2	30	10	371000	1@1	DFT_BPSK	23.00	22.92
n2	30	10	371000	24@0	DFT_QPSK	22.00	22.00
n2	30	10	371000	12@6	DFT_QPSK	23.50	23.08
n2	30	10	371000	1@1	DFT_QPSK	23.50	23.17
n2	30	10	371000	1@22	DFT_QPSK	23.50	23.08
n2	30	10	371000	1@1	DFT_QAM16	22.00	21.99
n2	30	10	371000	1@1	DFT_QAM64	20.50	20.43
n2	30	10	371000	1@1	DFT_QAM256	18.50	18.27
n2	30	10	371000	1@1	CP_QPSK	21.50	21.27
n2	30	10	376000	1@1	DFT_BPSK	23.00	22.67
n2	30	10	376000	24@0	DFT_QPSK	22.50	21.97
n2	30	10	376000	12@6	DFT_QPSK	23.50	23.01

n2	30	10	376000	1@1	DFT_QPSK	23.00	22.74
n2	30	10	376000	1@22	DFT_QPSK	23.00	22.92
n2	30	10	376000	1@1	DFT_QAM16	22.00	21.72
n2	30	10	376000	1@1	DFT_QAM64	20.50	20.17
n2	30	10	376000	1@1	DFT_QAM256	18.50	18.12
n2	30	10	376000	1@1	CP_QPSK	21.50	21.03
n2	30	10	381000	1@1	DFT_BPSK	23.00	22.85
n2	30	10	381000	24@0	DFT_QPSK	22.50	22.15
n2	30	10	381000	12@6	DFT_QPSK	23.50	23.15
n2	30	10	381000	1@1	DFT_QPSK	23.00	22.86
n2	30	10	381000	1@22	DFT_QPSK	23.00	22.91
n2	30	10	381000	1@1	DFT_QAM16	22.50	22.39
n2	30	10	381000	1@1	DFT_QAM64	21.00	20.58
n2	30	10	381000	1@1	DFT_QAM256	19.00	18.61
n2	30	10	381000	1@1	CP_QPSK	21.50	21.31
n2	30	15	371500	1@1	DFT_BPSK	23.00	22.81
n2	30	15	371500	36@0	DFT_QPSK	22.00	22.00
n2	30	15	371500	18@9	DFT_QPSK	23.50	23.02
n2	30	15	371500	1@1	DFT_QPSK	23.00	22.70
n2	30	15	371500	1@36	DFT_QPSK	23.00	22.70
n2	30	15	371500	1@1	DFT_QAM16	22.50	22.25
n2	30	15	371500	1@1	DFT_QAM64	21.00	20.66
n2	30	15	371500	1@1	DFT_QAM256	19.00	18.57
n2	30	15	371500	1@1	CP_QPSK	21.50	21.25
n2	30	15	376000	1@1	DFT_BPSK	23.00	22.72
n2	30	15	376000	36@0	DFT_QPSK	22.00	22.00
n2	30	15	376000	18@9	DFT_QPSK	23.00	22.96
n2	30	15	376000	1@1	DFT_QPSK	23.00	23.00
n2	30	15	376000	1@36	DFT_QPSK	23.50	23.17
n2	30	15	376000	1@1	DFT_QAM16	22.00	21.73
n2	30	15	376000	1@1	DFT_QAM64	20.00	20.23
n2	30	15	376000	1@1	DFT_QAM256	19.00	18.57
n2	30	15	376000	1@1	CP_QPSK	21.50	21.23
n2	30	15	380500	1@1	DFT_BPSK	23.00	22.96
n2	30	15	380500	36@0	DFT_QPSK	22.50	22.15
n2	30	15	380500	18@9	DFT_QPSK	23.50	23.07
n2	30	15	380500	1@1	DFT_QPSK	23.50	23.28
n2	30	15	380500	1@36	DFT_QPSK	23.50	23.38
n2	30	15	380500	1@1	DFT_QAM16	22.50	22.24

n2	30	15	380500	1@1	DFT_QAM64	20.50	20.47
n2	30	15	380500	1@1	DFT_QAM256	19.00	18.89
n2	30	15	380500	1@1	CP_QPSK	22.00	21.53
n2	30	20	372000	1@1	DFT_BPSK	23.00	22.84
n2	30	20	372000	50@0	DFT_QPSK	22.00	21.93
n2	30	20	372000	25@12	DFT_QPSK	23.50	23.02
n2	30	20	372000	1@1	DFT_QPSK	23.00	22.85
n2	30	20	372000	1@49	DFT_QPSK	23.00	22.67
n2	30	20	372000	1@1	DFT_QAM16	22.00	21.73
n2	30	20	372000	1@1	DFT_QAM64	20.50	20.18
n2	30	20	372000	1@1	DFT_QAM256	18.50	18.34
n2	30	20	372000	1@1	CP_QPSK	21.50	21.14
n2	30	20	376000	1@1	DFT_BPSK	23.00	22.56
n2	30	20	376000	50@0	DFT_QPSK	22.00	21.90
n2	30	20	376000	25@12	DFT_QPSK	23.00	22.96
n2	30	20	376000	1@1	DFT_QPSK	23.00	22.59
n2	30	20	376000	1@49	DFT_QPSK	23.00	22.93
n2	30	20	376000	1@1	DFT_QAM16	22.00	21.59
n2	30	20	376000	1@1	DFT_QAM64	20.00	19.89
n2	30	20	376000	1@1	DFT_QAM256	18.50	18.12
n2	30	20	376000	1@1	CP_QPSK	21.00	20.95
n2	30	20	380000	1@1	DFT_BPSK	23.00	22.97
n2	30	20	380000	50@0	DFT_QPSK	22.50	22.18
n2	30	20	380000	25@12	DFT_QPSK	23.50	23.14
n2	30	20	380000	1@1	DFT_QPSK	23.00	22.94
n2	30	20	380000	1@49	DFT_QPSK	23.00	22.78
n2	30	20	380000	1@1	DFT_QAM16	22.50	22.06
n2	30	20	380000	1@1	DFT_QAM64	20.00	20.48
n2	30	20	380000	1@1	DFT_QAM256	19.00	18.64
n2	30	20	380000	1@1	CP_QPSK	22.00	21.83
n5	15	5	165300	1@1	DFT_BPSK	23.00	22.79
n5	15	5	165300	25@0	DFT_QPSK	22.00	21.92
n5	15	5	165300	12@6	DFT_QPSK	23.00	22.91
n5	15	5	165300	1@1	DFT_QPSK	23.00	22.87
n5	15	5	165300	1@23	DFT_QPSK	23.00	22.86
n5	15	5	165300	1@1	DFT_QAM16	22.50	22.06
n5	15	5	165300	1@1	DFT_QAM64	20.50	20.23
n5	15	5	165300	1@1	DFT_QAM256	21.00	20.60
n5	15	5	165300	1@1	CP_QPSK	22.00	21.59

n5	15	5	167300	1@1	DFT_BPSK	23.00	22.74
n5	15	5	167300	25@0	DFT_QPSK	22.00	21.72
n5	15	5	167300	12@6	DFT_QPSK	23.00	22.73
n5	15	5	167300	1@1	DFT_QPSK	23.00	22.71
n5	15	5	167300	1@23	DFT_QPSK	23.00	22.54
n5	15	5	167300	1@1	DFT_QAM16	21.50	21.44
n5	15	5	167300	1@1	DFT_QAM64	20.50	20.21
n5	15	5	167300	1@1	DFT_QAM256	18.50	18.19
n5	15	5	167300	1@1	CP_QPSK	21.50	21.12
n5	15	5	169300	1@1	DFT_BPSK	22.50	22.45
n5	15	5	169300	25@0	DFT_QPSK	22.00	21.59
n5	15	5	169300	12@6	DFT_QPSK	23.00	22.54
n5	15	5	169300	1@1	DFT_QPSK	22.50	22.37
n5	15	5	169300	1@23	DFT_QPSK	23.00	22.54
n5	15	5	169300	1@1	DFT_QAM16	21.50	21.16
n5	15	5	169300	1@1	DFT_QAM64	20.00	19.92
n5	15	5	169300	1@1	DFT_QAM256	18.00	17.87
n5	15	5	169300	1@1	CP_QPSK	21.00	20.89
n5	15	10	165800	1@1	DFT_BPSK	23.00	22.67
n5	15	10	165800	50@0	DFT_QPSK	22.00	21.73
n5	15	10	165800	25@12	DFT_QPSK	23.00	22.76
n5	15	10	165800	1@1	DFT_QPSK	23.00	22.74
n5	15	10	165800	1@50	DFT_QPSK	23.00	22.51
n5	15	10	165800	1@1	DFT_QAM16	22.00	21.77
n5	15	10	165800	1@1	DFT_QAM64	20.00	19.98
n5	15	10	165800	1@1	DFT_QAM256	18.50	18.26
n5	15	10	165800	1@1	CP_QPSK	21.50	21.08
n5	15	10	167300	1@1	DFT_BPSK	23.00	22.52
n5	15	10	167300	50@0	DFT_QPSK	21.50	21.46
n5	15	10	167300	25@12	DFT_QPSK	23.00	22.58
n5	15	10	167300	1@1	DFT_QPSK	23.00	22.68
n5	15	10	167300	1@50	DFT_QPSK	22.50	22.36
n5	15	10	167300	1@1	DFT_QAM16	22.00	21.79
n5	15	10	167300	1@1	DFT_QAM64	20.50	20.22
n5	15	10	167300	1@1	DFT_QAM256	18.50	18.26
n5	15	10	167300	1@1	CP_QPSK	21.50	21.05
n5	15	10	168800	1@1	DFT_BPSK	22.50	22.35
n5	15	10	168800	50@0	DFT_QPSK	21.50	21.47
n5	15	10	168800	25@12	DFT_QPSK	22.50	22.45

n5	15	10	168800	1@1	DFT_QPSK	23.00	22.50
n5	15	10	168800	1@50	DFT_QPSK	23.00	22.56
n5	15	10	168800	1@1	DFT_QAM16	21.50	21.48
n5	15	10	168800	1@1	DFT_QAM64	20.00	19.71
n5	15	10	168800	1@1	DFT_QAM256	18.00	17.98
n5	15	10	168800	1@1	CP_QPSK	21.00	20.75
n5	15	15	166300	1@1	DFT_BPSK	23.00	22.74
n5	15	15	166300	75@0	DFT_QPSK	22.00	21.86
n5	15	15	166300	36@18	DFT_QPSK	23.00	22.86
n5	15	15	166300	1@1	DFT_QPSK	23.00	22.87
n5	15	15	166300	1@77	DFT_QPSK	22.00	22.47
n5	15	15	166300	1@1	DFT_QAM16	22.50	22.01
n5	15	15	166300	1@1	DFT_QAM64	20.00	20.39
n5	15	15	166300	1@1	DFT_QAM256	18.50	18.45
n5	15	15	166300	1@1	CP_QPSK	21.50	21.25
n5	15	15	167300	1@1	DFT_BPSK	23.00	22.84
n5	15	15	167300	75@0	DFT_QPSK	22.00	21.78
n5	15	15	167300	36@18	DFT_QPSK	23.00	22.77
n5	15	15	167300	1@1	DFT_QPSK	23.00	22.91
n5	15	15	167300	1@77	DFT_QPSK	22.00	22.49
n5	15	15	167300	1@1	DFT_QAM16	22.50	22.07
n5	15	15	167300	1@1	DFT_QAM64	20.50	20.39
n5	15	15	167300	1@1	DFT_QAM256	18.50	18.28
n5	15	15	167300	1@1	CP_QPSK	21.50	21.34
n5	15	15	168300	1@1	DFT_BPSK	23.00	22.61
n5	15	15	168300	75@0	DFT_QPSK	22.00	21.66
n5	15	15	168300	36@18	DFT_QPSK	23.00	22.67
n5	15	15	168300	1@1	DFT_QPSK	23.00	22.88
n5	15	15	168300	1@77	DFT_QPSK	23.00	22.68
n5	15	15	168300	1@1	DFT_QAM16	22.00	21.85
n5	15	15	168300	1@1	DFT_QAM64	20.50	20.14
n5	15	15	168300	1@1	DFT_QAM256	18.50	18.07
n5	15	15	168300	1@1	CP_QPSK	21.50	21.17
n5	15	20	166800	1@1	DFT_BPSK	23.00	22.68
n5	15	20	166800	100@0	DFT_QPSK	22.00	21.71
n5	15	20	166800	50@25	DFT_QPSK	23.00	22.75
n5	15	20	166800	1@1	DFT_QPSK	23.00	22.79
n5	15	20	166800	1@104	DFT_QPSK	22.00	22.26
n5	15	20	166800	1@1	DFT_QAM16	22.00	21.67

n5	15	20	166800	1@1	DFT_QAM64	20.50	20.47
n5	15	20	166800	1@1	DFT_QAM256	18.50	18.32
n5	15	20	166800	1@1	CP_QPSK	21.50	21.29
n5	15	20	167300	1@1	DFT_BPSK	23.00	22.79
n5	15	20	167300	100@0	DFT_QPSK	22.00	21.71
n5	15	20	167300	50@25	DFT_QPSK	23.00	22.76
n5	15	20	167300	1@1	DFT_QPSK	23.00	22.96
n5	15	20	167300	1@104	DFT_QPSK	22.50	22.42
n5	15	20	167300	1@1	DFT_QAM16	22.00	21.82
n5	15	20	167300	1@1	DFT_QAM64	20.50	20.30
n5	15	20	167300	1@1	DFT_QAM256	18.50	18.43
n5	15	20	167300	1@1	CP_QPSK	21.50	21.29
n5	15	20	167800	1@1	DFT_BPSK	23.00	22.73
n5	15	20	167800	100@0	DFT_QPSK	22.00	21.67
n5	15	20	167800	50@25	DFT_QPSK	23.00	22.69
n5	15	20	167800	1@1	DFT_QPSK	23.00	22.63
n5	15	20	167800	1@104	DFT_QPSK	22.50	22.34
n5	15	20	167800	1@1	DFT_QAM16	22.00	21.88
n5	15	20	167800	1@1	DFT_QAM64	20.50	20.32
n5	15	20	167800	1@1	DFT_QAM256	18.50	18.02
n5	15	20	167800	1@1	CP_QPSK	21.50	21.32
n7	15	5	500500	1@1	DFT_BPSK	21.50	21.02
n7	15	5	500500	25@0	DFT_QPSK	20.50	20.30
n7	15	5	500500	12@6	DFT_QPSK	21.50	21.24
n7	15	5	500500	1@1	DFT_QPSK	21.50	21.07
n7	15	5	500500	1@23	DFT_QPSK	21.50	21.03
n7	15	5	500500	1@1	DFT_QAM16	20.00	19.89
n7	15	5	500500	1@1	DFT_QAM64	19.00	18.96
n7	15	5	500500	1@1	DFT_QAM256	17.00	16.89
n7	15	5	500500	1@1	CP_QPSK	20.50	20.05
n7	15	5	507000	1@1	DFT_BPSK	21.50	21.14
n7	15	5	507000	25@0	DFT_QPSK	20.50	20.23
n7	15	5	507000	12@6	DFT_QPSK	21.50	21.26
n7	15	5	507000	1@1	DFT_QPSK	21.50	21.21
n7	15	5	507000	1@23	DFT_QPSK	21.50	21.15
n7	15	5	507000	1@1	DFT_QAM16	20.50	20.27
n7	15	5	507000	1@1	DFT_QAM64	19.00	18.89
n7	15	5	507000	1@1	DFT_QAM256	17.00	16.88
n7	15	5	507000	1@1	CP_QPSK	20.00	19.89

n7	15	5	513500	1@1	DFT_BPSK	21.50	21.36
n7	15	5	513500	25@0	DFT_QPSK	20.50	20.45
n7	15	5	513500	12@6	DFT_QPSK	21.50	21.42
n7	15	5	513500	1@1	DFT_QPSK	21.50	21.23
n7	15	5	513500	1@23	DFT_QPSK	21.50	21.21
n7	15	5	513500	1@1	DFT_QAM16	21.00	20.80
n7	15	5	513500	1@1	DFT_QAM64	19.50	19.17
n7	15	5	513500	1@1	DFT_QAM256	17.00	16.96
n7	15	5	513500	1@1	CP_QPSK	20.50	20.20
n7	15	10	501000	1@1	DFT_BPSK	21.00	20.80
n7	15	10	501000	50@0	DFT_QPSK	20.50	20.10
n7	15	10	501000	25@12	DFT_QPSK	21.50	21.15
n7	15	10	501000	1@1	DFT_QPSK	21.00	20.79
n7	15	10	501000	1@50	DFT_QPSK	21.00	20.82
n7	15	10	501000	1@1	DFT_QAM16	20.50	20.09
n7	15	10	501000	1@1	DFT_QAM64	19.00	18.70
n7	15	10	501000	1@1	DFT_QAM256	19.00	18.91
n7	15	10	501000	1@1	CP_QPSK	19.50	19.28
n7	15	10	507000	1@1	DFT_BPSK	21.50	21.04
n7	15	10	507000	50@0	DFT_QPSK	20.50	20.11
n7	15	10	507000	25@12	DFT_QPSK	21.50	21.11
n7	15	10	507000	1@1	DFT_QPSK	21.50	21.01
n7	15	10	507000	1@50	DFT_QPSK	21.00	20.99
n7	15	10	507000	1@1	DFT_QAM16	20.50	20.42
n7	15	10	507000	1@1	DFT_QAM64	19.00	18.73
n7	15	10	507000	1@1	DFT_QAM256	17.00	16.57
n7	15	10	507000	1@1	CP_QPSK	20.00	19.66
n7	15	10	513000	1@1	DFT_BPSK	21.50	21.17
n7	15	10	513000	50@0	DFT_QPSK	20.50	20.38
n7	15	10	513000	25@12	DFT_QPSK	21.50	21.37
n7	15	10	513000	1@1	DFT_QPSK	21.50	21.25
n7	15	10	513000	1@50	DFT_QPSK	21.50	21.18
n7	15	10	513000	1@1	DFT_QAM16	21.00	20.67
n7	15	10	513000	1@1	DFT_QAM64	19.00	18.95
n7	15	10	513000	1@1	DFT_QAM256	17.50	17.11
n7	15	10	513000	1@1	CP_QPSK	20.00	19.51
n7	15	15	501500	1@1	DFT_BPSK	21.00	20.93
n7	15	15	501500	75@0	DFT_QPSK	20.50	20.29
n7	15	15	501500	36@18	DFT_QPSK	21.50	21.24

n7	15	15	501500	1@1	DFT_QPSK	21.50	21.08
n7	15	15	501500	1@77	DFT_QPSK	21.50	21.15
n7	15	15	501500	1@1	DFT_QAM16	20.50	20.12
n7	15	15	501500	1@1	DFT_QAM64	18.50	18.46
n7	15	15	501500	1@1	DFT_QAM256	17.00	16.94
n7	15	15	501500	1@1	CP_QPSK	19.50	19.36
n7	15	15	507000	1@1	DFT_BPSK	21.50	21.16
n7	15	15	507000	75@0	DFT_QPSK	20.50	20.23
n7	15	15	507000	36@18	DFT_QPSK	21.50	21.22
n7	15	15	507000	1@1	DFT_QPSK	21.50	21.21
n7	15	15	507000	1@77	DFT_QPSK	21.50	21.16
n7	15	15	507000	1@1	DFT_QAM16	20.50	20.03
n7	15	15	507000	1@1	DFT_QAM64	19.00	19.00
n7	15	15	507000	1@1	DFT_QAM256	17.00	16.87
n7	15	15	507000	1@1	CP_QPSK	20.00	19.96
n7	15	15	512500	1@1	DFT_BPSK	21.50	21.31
n7	15	15	512500	75@0	DFT_QPSK	21.00	20.55
n7	15	15	512500	36@18	DFT_QPSK	22.00	21.56
n7	15	15	512500	1@1	DFT_QPSK	21.50	21.44
n7	15	15	512500	1@77	DFT_QPSK	21.50	21.32
n7	15	15	512500	1@1	DFT_QAM16	20.50	20.29
n7	15	15	512500	1@1	DFT_QAM64	19.50	19.29
n7	15	15	512500	1@1	DFT_QAM256	17.50	17.02
n7	15	15	512500	1@1	CP_QPSK	20.50	20.21
n7	15	20	502000	1@1	DFT_BPSK	21.00	20.93
n7	15	20	502000	100@0	DFT_QPSK	20.50	20.30
n7	15	20	502000	50@25	DFT_QPSK	21.50	21.27
n7	15	20	502000	1@1	DFT_QPSK	21.50	21.06
n7	15	20	502000	1@104	DFT_QPSK	21.50	21.20
n7	15	20	502000	1@1	DFT_QAM16	20.00	19.91
n7	15	20	502000	1@1	DFT_QAM64	19.00	19.00
n7	15	20	502000	1@1	DFT_QAM256	16.50	16.01
n7	15	20	502000	1@1	CP_QPSK	19.50	19.48
n7	15	20	507000	1@1	DFT_BPSK	21.50	21.15
n7	15	20	507000	100@0	DFT_QPSK	20.50	20.29
n7	15	20	507000	50@25	DFT_QPSK	21.50	21.27
n7	15	20	507000	1@1	DFT_QPSK	21.50	21.15
n7	15	20	507000	1@104	DFT_QPSK	21.50	21.12
n7	15	20	507000	1@1	DFT_QAM16	20.50	20.36

n7	15	20	507000	1@1	DFT_QAM64	19.00	18.97
n7	15	20	507000	1@1	DFT_QAM256	16.50	16.14
n7	15	20	507000	1@1	CP_QPSK	20.00	19.62
n7	15	20	512000	1@1	DFT_BPSK	21.50	21.39
n7	15	20	512000	100@0	DFT_QPSK	21.00	20.61
n7	15	20	512000	50@25	DFT_QPSK	22.00	21.62
n7	15	20	512000	1@1	DFT_QPSK	21.50	21.43
n7	15	20	512000	1@104	DFT_QPSK	21.50	21.28
n7	15	20	512000	1@1	DFT_QAM16	20.50	20.25
n7	15	20	512000	1@1	DFT_QAM64	19.50	19.20
n7	15	20	512000	1@1	DFT_QAM256	16.50	16.34
n7	15	20	512000	1@1	CP_QPSK	20.00	19.77
n78	30	10	620334	1@1	DFT_BPSK	24.00	23.64
n78	30	10	620334	24@0	DFT_QPSK	23.00	22.70
n78	30	10	620334	12@6	DFT_QPSK	24.00	23.68
n78	30	10	620334	1@1	DFT_QPSK	24.00	23.57
n78	30	10	620334	1@22	DFT_QPSK	24.00	23.51
n78	30	10	620334	1@1	DFT_QAM16	23.00	22.60
n78	30	10	620334	1@1	DFT_QAM64	21.50	21.26
n78	30	10	620334	1@1	DFT_QAM256	19.50	19.13
n78	30	10	620334	1@1	CP_QPSK	22.50	22.18
n78	30	10	636666	1@1	DFT_BPSK	23.50	23.41
n78	30	10	636666	24@0	DFT_QPSK	22.50	22.45
n78	30	10	636666	12@6	DFT_QPSK	23.50	23.46
n78	30	10	636666	1@1	DFT_QPSK	23.50	23.38
n78	30	10	636666	1@22	DFT_QPSK	23.50	23.33
n78	30	10	636666	1@1	DFT_QAM16	22.50	22.38
n78	30	10	636666	1@1	DFT_QAM64	21.00	20.94
n78	30	10	636666	1@1	DFT_QAM256	19.00	18.89
n78	30	10	636666	1@1	CP_QPSK	22.00	21.96
n78	30	10	653000	1@1	DFT_BPSK	24.00	24.00
n78	30	10	653000	24@0	DFT_QPSK	23.50	23.11
n78	30	10	653000	12@6	DFT_QPSK	24.50	24.09
n78	30	10	653000	1@1	DFT_QPSK	24.00	23.89
n78	30	10	653000	1@22	DFT_QPSK	24.50	24.03
n78	30	10	653000	1@1	DFT_QAM16	23.00	22.90
n78	30	10	653000	1@1	DFT_QAM64	22.00	21.65
n78	30	10	653000	1@1	DFT_QAM256	20.00	19.52
n78	30	10	653000	1@1	CP_QPSK	22.00	22.49

n78	30	15	620500	1@1	DFT_BPSK	24.00	23.83
n78	30	15	620500	36@0	DFT_QPSK	23.00	22.84
n78	30	15	620500	18@9	DFT_QPSK	24.00	23.84
n78	30	15	620500	1@1	DFT_QPSK	24.00	23.80
n78	30	15	620500	1@36	DFT_QPSK	24.00	23.73
n78	30	15	620500	1@1	DFT_QAM16	23.00	22.83
n78	30	15	620500	1@1	DFT_QAM64	21.50	21.37
n78	30	15	620500	1@1	DFT_QAM256	19.50	19.36
n78	30	15	620500	1@1	CP_QPSK	22.50	22.32
n78	30	15	636666	1@1	DFT_BPSK	24.00	23.63
n78	30	15	636666	36@0	DFT_QPSK	23.00	22.67
n78	30	15	636666	18@9	DFT_QPSK	24.00	23.66
n78	30	15	636666	1@1	DFT_QPSK	24.00	23.66
n78	30	15	636666	1@36	DFT_QPSK	24.00	23.59
n78	30	15	636666	1@1	DFT_QAM16	23.00	22.50
n78	30	15	636666	1@1	DFT_QAM64	21.50	21.18
n78	30	15	636666	1@1	DFT_QAM256	19.50	19.25
n78	30	15	636666	1@1	CP_QPSK	22.50	22.16
n78	30	15	652832	1@1	DFT_BPSK	24.50	24.05
n78	30	15	652832	36@0	DFT_QPSK	23.50	23.13
n78	30	15	652832	18@9	DFT_QPSK	24.50	24.18
n78	30	15	652832	1@1	DFT_QPSK	24.00	24.00
n78	30	15	652832	1@36	DFT_QPSK	24.50	24.15
n78	30	15	652832	1@1	DFT_QAM16	23.00	22.87
n78	30	15	652832	1@1	DFT_QAM64	22.00	21.70
n78	30	15	652832	1@1	DFT_QAM256	20.00	19.66
n78	30	15	652832	1@1	CP_QPSK	23.00	22.58
n78	30	20	620668	1@1	DFT_BPSK	24.00	23.90
n78	30	20	620668	50@0	DFT_QPSK	23.00	22.96
n78	30	20	620668	25@12	DFT_QPSK	24.00	23.97
n78	30	20	620668	1@1	DFT_QPSK	24.00	23.85
n78	30	20	620668	1@49	DFT_QPSK	24.00	23.86
n78	30	20	620668	1@1	DFT_QAM16	23.00	22.84
n78	30	20	620668	1@1	DFT_QAM64	21.50	21.48
n78	30	20	620668	1@1	DFT_QAM256	20.00	19.62
n78	30	20	620668	1@1	CP_QPSK	22.50	22.41
n78	30	20	636666	1@1	DFT_BPSK	24.00	23.70
n78	30	20	636666	50@0	DFT_QPSK	23.00	22.75
n78	30	20	636666	25@12	DFT_QPSK	24.00	23.72

n78	30	20	636666	1@1	DFT_QPSK	24.00	23.69
n78	30	20	636666	1@49	DFT_QPSK	24.00	23.56
n78	30	20	636666	1@1	DFT_QAM16	23.00	22.76
n78	30	20	636666	1@1	DFT_QAM64	21.50	21.44
n78	30	20	636666	1@1	DFT_QAM256	20.00	19.52
n78	30	20	636666	1@1	CP_QPSK	22.50	22.23
n78	30	20	652666	1@1	DFT_BPSK	24.50	24.02
n78	30	20	652666	50@0	DFT_QPSK	23.50	23.18
n78	30	20	652666	25@12	DFT_QPSK	24.50	24.18
n78	30	20	652666	1@1	DFT_QPSK	24.00	24.00
n78	30	20	652666	1@49	DFT_QPSK	24.50	24.19
n78	30	20	652666	1@1	DFT_QAM16	23.50	23.09
n78	30	20	652666	1@1	DFT_QAM64	22.00	21.69
n78	30	20	652666	1@1	DFT_QAM256	20.00	19.77
n78	30	20	652666	1@1	CP_QPSK	22.00	22.46
n78	30	40	621334	1@1	DFT_BPSK	24.00	23.62
n78	30	40	621334	100@0	DFT_QPSK	23.00	22.94
n78	30	40	621334	50@25	DFT_QPSK	24.00	24.07
n78	30	40	621334	1@1	DFT_QPSK	24.00	23.65
n78	30	40	621334	1@104	DFT_QPSK	23.00	23.36
n78	30	40	621334	1@1	DFT_QAM16	23.00	22.77
n78	30	40	621334	1@1	DFT_QAM64	21.00	21.06
n78	30	40	621334	1@1	DFT_QAM256	19.50	19.05
n78	30	40	621334	1@1	CP_QPSK	22.50	22.12
n78	30	40	636666	1@1	DFT_BPSK	23.50	23.41
n78	30	40	636666	100@0	DFT_QPSK	23.00	22.74
n78	30	40	636666	50@25	DFT_QPSK	24.00	23.82
n78	30	40	636666	1@1	DFT_QPSK	23.50	23.43
n78	30	40	636666	1@104	DFT_QPSK	23.50	23.36
n78	30	40	636666	1@1	DFT_QAM16	23.00	22.58
n78	30	40	636666	1@1	DFT_QAM64	21.00	20.90
n78	30	40	636666	1@1	DFT_QAM256	19.00	18.87
n78	30	40	636666	1@1	CP_QPSK	22.00	21.92
n78	30	40	652000	1@1	DFT_BPSK	24.00	23.56
n78	30	40	652000	100@0	DFT_QPSK	23.50	23.11
n78	30	40	652000	50@25	DFT_QPSK	24.50	24.15
n78	30	40	652000	1@1	DFT_QPSK	24.00	23.51
n78	30	40	652000	1@104	DFT_QPSK	24.00	23.82
n78	30	40	652000	1@1	DFT_QAM16	23.00	22.67

n78	30	40	652000	1@1	DFT_QAM64	21.00	20.95
n78	30	40	652000	1@1	DFT_QAM256	19.00	18.93
n78	30	40	652000	1@1	CP_QPSK	22.00	21.87
n78	30	50	621668	1@1	DFT_BPSK	24.00	23.93
n78	30	50	621668	128@0	DFT_QPSK	23.00	22.98
n78	30	50	621668	64@32	DFT_QPSK	24.50	24.07
n78	30	50	621668	1@1	DFT_QPSK	24.00	23.97
n78	30	50	621668	1@131	DFT_QPSK	24.00	23.73
n78	30	50	621668	1@1	DFT_QAM16	23.50	23.06
n78	30	50	621668	1@1	DFT_QAM64	21.50	21.43
n78	30	50	621668	1@1	DFT_QAM256	19.50	19.30
n78	30	50	621668	1@1	CP_QPSK	22.50	22.44
n78	30	50	636666	1@1	DFT_BPSK	24.00	23.57
n78	30	50	636666	128@0	DFT_QPSK	23.00	22.82
n78	30	50	636666	64@32	DFT_QPSK	24.00	23.84
n78	30	50	636666	1@1	DFT_QPSK	24.00	23.58
n78	30	50	636666	1@131	DFT_QPSK	24.00	23.50
n78	30	50	636666	1@1	DFT_QAM16	23.00	22.69
n78	30	50	636666	1@1	DFT_QAM64	21.50	21.08
n78	30	50	636666	1@1	DFT_QAM256	19.50	19.04
n78	30	50	636666	1@1	CP_QPSK	22.50	22.39
n78	30	50	651666	1@1	DFT_BPSK	24.00	23.89
n78	30	50	651666	128@0	DFT_QPSK	23.50	23.20
n78	30	50	651666	64@32	DFT_QPSK	24.50	24.26
n78	30	50	651666	1@1	DFT_QPSK	24.00	23.89
n78	30	50	651666	1@131	DFT_QPSK	24.50	24.22
n78	30	50	651666	1@1	DFT_QAM16	23.00	22.71
n78	30	50	651666	1@1	DFT_QAM64	21.50	21.34
n78	30	50	651666	1@1	DFT_QAM256	19.50	19.39
n78	30	50	651666	1@1	CP_QPSK	23.00	22.52
n78	30	60	622000	1@1	DFT_BPSK	24.00	23.90
n78	30	60	622000	162@0	DFT_QPSK	23.00	22.98
n78	30	60	622000	81@40	DFT_QPSK	24.50	24.04
n78	30	60	622000	1@1	DFT_QPSK	24.00	23.90
n78	30	60	622000	1@160	DFT_QPSK	24.00	23.82
n78	30	60	622000	1@1	DFT_QAM16	23.00	22.79
n78	30	60	622000	1@1	DFT_QAM64	21.50	21.43
n78	30	60	622000	1@1	DFT_QAM256	19.50	19.42
n78	30	60	622000	1@1	CP_QPSK	22.50	22.46

n78	30	60	636666	1@1	DFT_BPSK	23.50	23.31
n78	30	60	636666	162@0	DFT_QPSK	23.00	22.73
n78	30	60	636666	81@40	DFT_QPSK	24.00	23.83
n78	30	60	636666	1@1	DFT_QPSK	23.50	23.34
n78	30	60	636666	1@160	DFT_QPSK	23.50	23.24
n78	30	60	636666	1@1	DFT_QAM16	22.50	22.13
n78	30	60	636666	1@1	DFT_QAM64	21.00	20.84
n78	30	60	636666	1@1	DFT_QAM256	19.00	18.91
n78	30	60	636666	1@1	CP_QPSK	22.50	22.01
n78	30	60	651332	1@1	DFT_BPSK	24.00	24.00
n78	30	60	651332	162@0	DFT_QPSK	23.50	23.23
n78	30	60	651332	81@40	DFT_QPSK	24.50	24.33
n78	30	60	651332	1@1	DFT_QPSK	24.50	24.02
n78	30	60	651332	1@160	DFT_QPSK	24.50	24.28
n78	30	60	651332	1@1	DFT_QAM16	23.00	22.93
n78	30	60	651332	1@1	DFT_QAM64	22.00	21.57
n78	30	60	651332	1@1	DFT_QAM256	20.00	19.68
n78	30	60	651332	1@1	CP_QPSK	23.00	22.53
n78	30	70	622334	1@1	DFT_BPSK	21.00	20.94
n78	30	70	622334	162@0	DFT_QPSK	21.00	20.93
n78	30	70	622334	81@40	DFT_QPSK	21.00	20.92
n78	30	70	622334	1@1	DFT_QPSK	21.00	20.87
n78	30	70	622334	1@160	DFT_QPSK	21.00	20.87
n78	30	70	622334	1@1	DFT_QAM16	21.00	20.88
n78	30	70	622334	1@1	DFT_QAM64	21.00	20.89
n78	30	70	622334	1@1	DFT_QAM256	21.00	20.90
n78	30	70	622334	1@1	CP_QPSK	21.00	20.89
n78	30	70	636666	1@1	DFT_BPSK	21.00	20.62
n78	30	70	636666	162@0	DFT_QPSK	21.00	20.62
n78	30	70	636666	81@40	DFT_QPSK	21.00	20.63
n78	30	70	636666	1@1	DFT_QPSK	21.00	20.62
n78	30	70	636666	1@160	DFT_QPSK	21.00	20.62
n78	30	70	636666	1@1	DFT_QAM16	21.00	20.63
n78	30	70	636666	1@1	DFT_QAM64	21.00	20.62
n78	30	70	636666	1@1	DFT_QAM256	21.00	20.61
n78	30	70	636666	1@1	CP_QPSK	21.00	20.63
n78	30	70	651000	1@1	DFT_BPSK	21.50	21.30
n78	30	70	651000	162@0	DFT_QPSK	21.50	21.30
n78	30	70	651000	81@40	DFT_QPSK	21.50	21.31

n78	30	70	651000	1@1	DFT_QPSK	21.50	21.31
n78	30	70	651000	1@160	DFT_QPSK	21.50	21.29
n78	30	70	651000	1@1	DFT_QAM16	21.50	21.28
n78	30	70	651000	1@1	DFT_QAM64	21.50	21.30
n78	30	70	651000	1@1	DFT_QAM256	21.50	21.30
n78	30	70	651000	1@1	CP_QPSK	21.50	21.30
n78	30	80	622668	1@1	DFT_BPSK	24.00	23.65
n78	30	80	622668	216@0	DFT_QPSK	23.00	22.92
n78	30	80	622668	108@54	DFT_QPSK	24.50	24.04
n78	30	80	622668	1@1	DFT_QPSK	24.00	23.66
n78	30	80	622668	1@215	DFT_QPSK	23.50	23.21
n78	30	80	622668	1@1	DFT_QAM16	22.50	22.42
n78	30	80	622668	1@1	DFT_QAM64	21.50	21.14
n78	30	80	622668	1@1	DFT_QAM256	19.50	19.11
n78	30	80	622668	1@1	CP_QPSK	22.50	22.14
n78	30	80	636666	1@1	DFT_BPSK	23.50	23.15
n78	30	80	636666	216@0	DFT_QPSK	23.00	22.66
n78	30	80	636666	108@54	DFT_QPSK	24.00	23.90
n78	30	80	636666	1@1	DFT_QPSK	23.50	23.11
n78	30	80	636666	1@215	DFT_QPSK	23.00	22.80
n78	30	80	636666	1@1	DFT_QAM16	22.50	22.02
n78	30	80	636666	1@1	DFT_QAM64	21.00	20.76
n78	30	80	636666	1@1	DFT_QAM256	18.50	18.47
n78	30	80	636666	1@1	CP_QPSK	22.00	21.68
n78	30	80	650666	1@1	DFT_BPSK	24.00	23.62
n78	30	80	650666	216@0	DFT_QPSK	23.50	23.27
n78	30	80	650666	108@54	DFT_QPSK	24.50	24.34
n78	30	80	650666	1@1	DFT_QPSK	24.00	23.52
n78	30	80	650666	1@215	DFT_QPSK	24.50	24.06
n78	30	80	650666	1@1	DFT_QAM16	23.00	22.62
n78	30	80	650666	1@1	DFT_QAM64	21.00	20.92
n78	30	80	650666	1@1	DFT_QAM256	19.50	19.01
n78	30	80	650666	1@1	CP_QPSK	22.50	22.23
n78	30	90	623000	1@1	DFT_BPSK	24.00	23.60
n78	30	90	623000	240@0	DFT_QPSK	23.00	22.95
n78	30	90	623000	120@60	DFT_QPSK	24.50	24.07
n78	30	90	623000	1@1	DFT_QPSK	24.00	23.58
n78	30	90	623000	1@243	DFT_QPSK	23.50	23.29
n78	30	90	623000	1@1	DFT_QAM16	23.00	22.66

n78	30	90	623000	1@1	DFT_QAM64	21.00	20.98
n78	30	90	623000	1@1	DFT_QAM256	19.00	18.82
n78	30	90	623000	1@1	CP_QPSK	22.50	22.05
n78	30	90	636666	1@1	DFT_BPSK	23.50	23.11
n78	30	90	636666	240@0	DFT_QPSK	23.00	22.61
n78	30	90	636666	120@60	DFT_QPSK	24.00	23.82
n78	30	90	636666	1@1	DFT_QPSK	23.50	23.08
n78	30	90	636666	1@243	DFT_QPSK	23.00	22.70
n78	30	90	636666	1@1	DFT_QAM16	22.50	22.06
n78	30	90	636666	1@1	DFT_QAM64	20.50	20.43
n78	30	90	636666	1@1	DFT_QAM256	18.50	18.48
n78	30	90	636666	1@1	CP_QPSK	22.00	21.73
n78	30	90	650332	1@1	DFT_BPSK	23.50	23.42
n78	30	90	650332	240@0	DFT_QPSK	23.50	23.19
n78	30	90	650332	120@60	DFT_QPSK	24.50	24.25
n78	30	90	650332	1@1	DFT_QPSK	23.50	23.36
n78	30	90	650332	1@243	DFT_QPSK	24.00	23.91
n78	30	90	650332	1@1	DFT_QAM16	22.50	22.29
n78	30	90	650332	1@1	DFT_QAM64	21.00	20.86
n78	30	90	650332	1@1	DFT_QAM256	19.00	18.80
n78	30	90	650332	1@1	CP_QPSK	22.50	22.02
n78	30	100	623334	1@1	DFT_BPSK	23.50	23.31
n78	30	100	623334	270@0	DFT_QPSK	23.00	22.71
n78	30	100	623334	135@67	DFT_QPSK	24.00	23.92
n78	30	100	623334	1@1	DFT_QPSK	23.50	23.32
n78	30	100	623334	1@271	DFT_QPSK	23.50	23.07
n78	30	100	623334	1@1	DFT_QAM16	22.50	22.30
n78	30	100	623334	1@1	DFT_QAM64	21.00	20.81
n78	30	100	623334	1@1	DFT_QAM256	19.00	18.68
n78	30	100	623334	1@1	CP_QPSK	22.00	21.90
n78	30	100	636666	1@1	DFT_BPSK	23.50	23.03
n78	30	100	636666	270@0	DFT_QPSK	22.50	22.49
n78	30	100	636666	135@67	DFT_QPSK	24.00	23.81
n78	30	100	636666	1@1	DFT_QPSK	23.00	22.99
n78	30	100	636666	1@271	DFT_QPSK	23.00	22.58
n78	30	100	636666	1@1	DFT_QAM16	22.00	22.00
n78	30	100	636666	1@1	DFT_QAM64	20.50	20.34
n78	30	100	636666	1@1	DFT_QAM256	18.50	18.39
n78	30	100	636666	1@1	CP_QPSK	22.00	21.58

n78	30	100	650000	1@1	DFT_BPSK	23.50	23.26
n78	30	100	650000	270@0	DFT_QPSK	23.50	23.10
n78	30	100	650000	135@67	DFT_QPSK	24.50	24.19
n78	30	100	650000	1@1	DFT_QPSK	23.50	23.07
n78	30	100	650000	1@271	DFT_QPSK	24.00	23.76
n78	30	100	650000	1@1	DFT_QAM16	22.50	22.03
n78	30	100	650000	1@1	DFT_QAM64	20.50	20.43
n78	30	100	650000	1@1	DFT_QAM256	19.00	18.50
n78	30	100	650000	1@1	CP_QPSK	22.00	21.77

7.5. WLAN & Bluetooth Output Power

Mode	Channel	Frequency (MHz)	Tune-up (dBm)		Output Power (dBm)		Tune-up (dBm)		Output Power (dBm)	
			Ant1		Ant2		MIMO			
802.11b	1	2412	12.00	11.75	13.00	12.66	/	/	/	/
	6	2437	12.00	11.17	13.00	12.39	/	/	/	/
	11	2462	12.00	11.87	13.00	12.14	/	/	/	/
802.11g	1	2412	12.50	11.51	12.00	11.93	/	/	/	/
	6	2437	12.50	11.40	12.00	11.66	/	/	/	/
	11	2462	12.50	12.14	12.00	11.51	/	/	/	/
802.11n HT20	1	2412	12.00	11.83	12.00	11.84	15.00	14.57	15.00	14.57
	6	2437	12.00	11.32	12.00	11.56	15.00	14.50	15.00	14.50
	11	2462	12.00	11.80	12.00	11.37	15.00	14.62	15.00	14.62
802.11n HT40	3	2422	12.50	11.41	12.00	11.82	15.00	14.49	15.00	14.49
	6	2437	12.50	11.36	12.00	11.77	15.00	14.59	15.00	14.59
	9	2452	12.50	12.30	12.00	11.50	15.00	14.71	15.00	14.71
802.11ax HT20	1	2412	13.00	11.88	12.00	12.00	15.50	14.91	15.50	14.91
	6	2437	13.00	11.60	12.00	11.81	15.50	14.70	15.50	14.70
	11	2462	13.00	12.50	12.00	11.70	15.50	15.07	15.50	15.07
802.11ax HT40	3	2422	13.00	11.92	12.50	12.07	15.50	14.63	15.50	14.63
	6	2437	13.00	11.87	12.50	12.10	15.50	14.73	15.50	14.73
	9	2452	13.00	12.59	12.50	11.95	15.50	15.11	15.50	15.11

NOTE: Power measurement results of WLAN 2.4G.

Mode	Channel	Frequency (MHz)	Tune-up (dBm)		Output Power (dBm)		Tune-up (dBm)		Output Power (dBm)	
			Ant1		Ant2		MIMO			
802.11a	36	5180	13.00	12.81	14.00	13.77	/	/	/	/

	40	5200	13.00	12.73	14.00	13.87	/	/
	48	5240	13.00	12.39	14.00	13.78	/	/
802.11n HT20	36	5180	13.00	12.65	14.00	13.67	16.00	15.79
	40	5200	13.00	12.88	14.00	13.74	16.00	15.94
	48	5240	13.00	12.13	14.00	13.68	16.00	15.78
802.11n HT40	38	5190	12.00	11.74	14.00	13.93	15.50	15.08
	46	5230	12.00	11.67	14.00	13.96	15.50	14.99
802.11ac VHT20	36	5180	13.00	12.85	14.00	13.72	16.50	16.10
	40	5200	13.00	12.69	14.00	13.70	16.50	15.92
	48	5240	13.00	12.36	14.00	13.62	16.50	15.77
802.11ac VHT40	38	5190	12.00	11.82	14.00	13.99	15.50	15.06
	46	5230	12.00	11.68	14.00	13.91	15.50	14.94
802.11ac VHT80	42	5210	10.50	10.44	13.00	12.64	14.00	13.71
802.11ax HE20	36	5180	13.00	12.85	14.00	13.72	17.00	16.55
	40	5200	13.00	12.69	14.00	13.70	17.00	16.07
	48	5240	13.00	12.36	14.00	13.62	17.00	16.01
802.11ax HE40	38	5190	12.00	11.82	14.00	13.99	15.50	15.30
	46	5230	12.00	11.68	14.00	13.91	15.50	15.27
802.11ax HE80	42	5210	10.50	10.44	13.00	12.64	15.50	15.12

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	52	5260	13.00	12.54	13.00	12.71	/	/
	56	5280	13.00	12.54	13.00	12.84	/	/
	64	5320	13.00	12.93	13.00	12.68	/	/
802.11n HT20	52	5260	13.00	12.17	13.00	12.87	16.00	15.76
	56	5280	13.00	12.37	13.00	12.89	16.00	15.61
	64	5320	13.00	12.75	13.00	12.81	16.00	15.92
802.11n HT40	54	5270	13.00	12.54	12.00	11.82	15.00	14.89
	62	5310	13.00	11.79	12.00	11.80	15.00	14.92
802.11ac VHT20	52	5260	13.00	12.12	13.00	12.66	16.00	15.64
	56	5280	13.00	12.32	13.00	12.76	16.00	15.75
	64	5320	13.00	12.64	13.00	12.80	16.00	15.79
802.11ac VHT40	54	5270	12.00	11.55	12.00	11.84	15.00	14.86
	62	5310	12.00	11.79	12.00	11.94	15.00	14.81

802.11ac VHT80	58	5290	11.00	10.52	11.00	10.72	14.00	13.54
802.11ax HE20	52	5260	13.50	12.64	13.50	13.03	16.00	15.86
	56	5280	13.50	12.68	13.50	13.21	16.00	15.98
	64	5320	13.50	13.13	13.50	13.12	16.00	15.97
802.11ax HE40	54	5270	12.50	11.84	12.50	12.11	15.50	15.09
	62	5310	12.50	12.06	12.50	12.09	15.50	15.04
802.11ax HE80	58	5290	11.00	10.89	11.00	10.95	14.00	13.86

NOTE: Power measurement results of WLAN 5.3G.

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	100	5500	13.00	12.65	13.50	13.28	/	/
	120	5600	13.00	11.91	13.50	13.44	/	/
	140	5700	13.00	11.64	13.50	13.24	/	/
802.11n HT20	100	5500	12.50	12.26	13.50	13.23	16.50	16.01
	120	5600	12.50	11.60	13.50	13.41	16.50	15.77
	140	5700	12.50	11.51	13.50	13.01	16.50	15.54
802.11n HT40	102	5510	12.00	11.61	12.50	12.33	15.50	15.23
	118	5590	12.00	10.82	12.50	12.44	15.50	14.90
	134	5670	12.00	10.88	12.50	12.39	15.50	14.90
802.11ac VHT20	100	5500	12.50	12.27	13.50	13.18	16.50	16.08
	120	5600	12.50	11.71	13.50	13.31	16.50	15.73
	140	5700	12.50	11.72	13.50	13.22	16.50	15.55
802.11ac VHT40	102	5510	12.00	11.57	13.00	12.51	15.50	15.24
	118	5590	12.00	11.04	13.00	12.58	15.50	14.98
	134	5670	12.00	10.64	13.00	12.62	15.50	14.85
802.11ac VHT80	106	5530	11.50	11.27	12.50	12.21	15.50	15.01
	122	5610	11.50	10.61	12.50	12.39	15.50	14.70
802.11ax HE20	100	5500	12.50	12.31	14.00	13.50	16.50	16.32
	120	5600	12.50	11.71	14.00	13.66	16.50	15.97
	140	5700	12.50	11.67	14.00	13.46	16.50	15.77
802.11ax HE40	102	5510	12.00	11.64	13.50	12.65	15.50	15.42
	118	5590	12.00	11.35	13.50	13.09	15.50	15.30
	134	5670	12.00	11.12	13.50	12.73	15.50	15.16
802.11ax HE80	106	5530	12.00	11.73	13.00	12.67	15.50	15.27
	122	5610	12.00	10.88	13.00	12.65	15.50	15.03

NOTE: Power measurement results of WLAN 5.6G.

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	11.50	11.01	14.00	13.96	/	/
	157	5785	11.50	11.16	14.00	12.83	/	/
	165	5825	11.50	10.65	14.00	13.05	/	/
802.11n HT20	149	5745	11.50	11.06	13.00	12.86	16.00	15.62
	157	5785	11.50	10.97	13.00	12.66	16.00	15.11
	165	5825	11.50	10.74	13.00	12.79	16.00	15.04
802.11n HT40	151	5755	10.50	10.19	12.50	12.06	14.50	14.35
	159	5795	10.50	10.17	12.50	11.97	14.50	14.35
802.11ac VHT20	149	5745	11.50	11.00	13.00	12.91	15.50	15.22
	157	5785	11.50	11.08	13.00	12.69	15.50	15.15
	165	5825	11.50	10.88	13.00	12.81	15.50	15.16
802.11ac VHT40	151	5755	10.50	10.31	12.50	12.07	14.50	14.39
	159	5795	10.50	10.08	12.50	11.99	14.50	14.33
802.11ac VHT80	155	5775	10.00	10.00	12.00	11.79	14.50	14.14
802.11ax HE20	149	5745	11.50	11.29	13.50	13.12	16.00	15.55
	157	5785	11.50	11.13	13.50	12.92	16.00	15.41
	165	5825	11.50	10.92	13.50	13.14	16.00	15.34
802.11ax HE40	151	5755	10.50	10.41	12.50	12.29	15.50	15.07
	159	5795	10.50	10.39	12.50	12.27	15.50	14.88
802.11ax HE80	155	5775	10.50	10.17	12.50	12.06	15.00	14.82

NOTE: Power measurement results of WLAN 5.8G.

BR+EDR	Output Power (dBm)				
	Data Rates	Tune-up (dBm)	Channel		
			0CH	39CH	78CH
	1M	5.00	3.83	3.70	4.27
	2M	4.00	3.51	3.45	4.00
	3M	5.00	3.88	3.83	4.37

BLE	Output Power (dBm)				
	Data Rates	Tune-up (dBm)	Channe		
			0CH	19CH	39CH

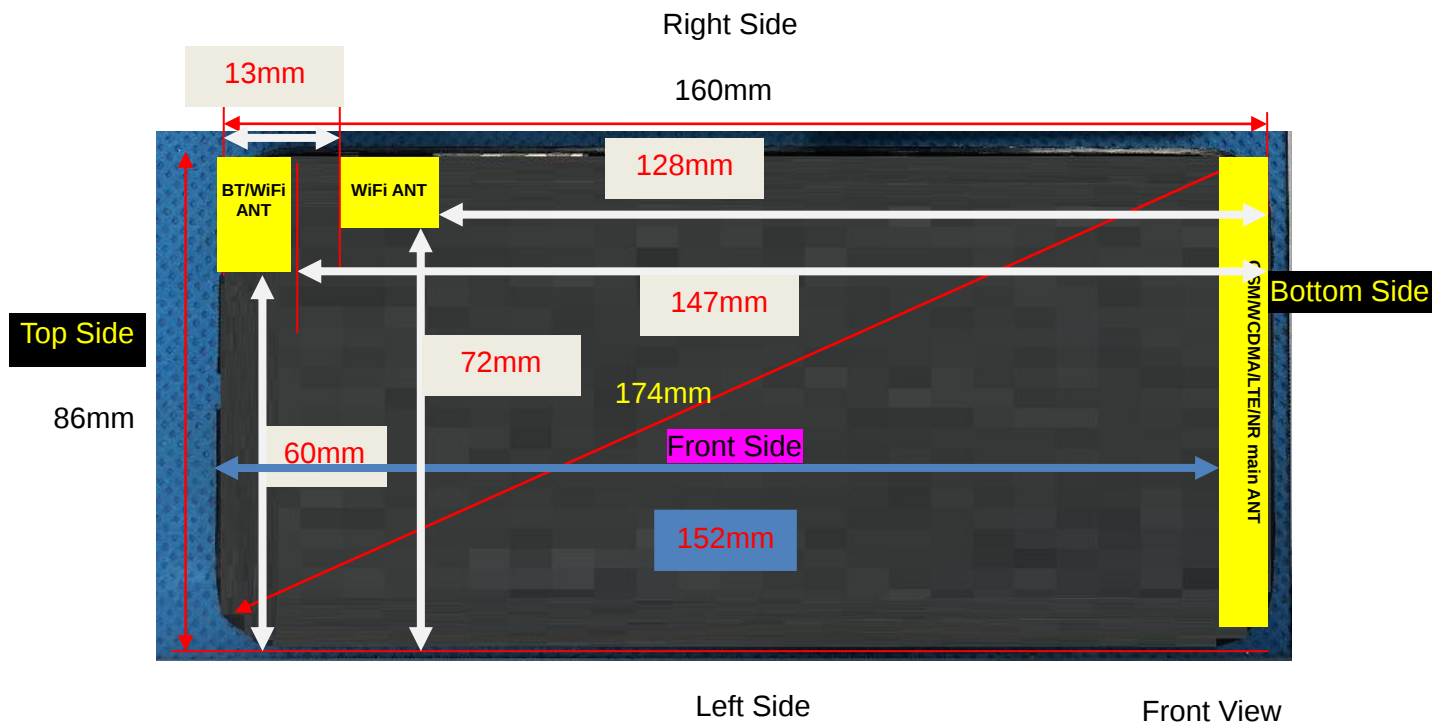
	1M	4.50	3.99	3.98	4.35
	2M	4.50	4.03	4.04	4.44

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	-34.63	-34.63 ± 1	0.00043	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 Main ANT	≤ 25mm	≤ 25mm	≤ 25mm	≤ 25mm	> 25mm	≤ 25mm
WLAN & Bluetooth ANT	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	>25mm
WLAN ANT	≤ 25mm	≤ 25mm	>25mm	≤ 25mm	≤ 25mm	>25mm
Positions for SAR tests						
Antennas	Front Side	Back Side	Left Side	Right Side	Top Side	Bottom Side
WWAN Main ANT	Yes	Yes	Yes	Yes	NO	Yes
WLAN & Bluetooth	Yes	Yes	NO	Yes	Yes	NO
WLAN ANT	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:

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

- $f_{(\text{GHz})}$ 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