TEST REPORT

Reference No.	:	WTX22X08156486W
FCC ID	:	YHLBLUF92E
Applicant	:	BLU Products, Inc.
Address	:	10814 NW 33rd St # 100 Doral, FL 33172,USA
Manufacturer		The same as Applicant
Address		The same as Applicant
Product Name	:	Smart Phone
Model No.	:	F92e 5G
Standards	:	FCC Part 2.1093 IEEE Std C95.1: 2019 IEEE Std C95.3: 2002 + Rev. 2008 IEEE 1528:2013
Date of Receipt sample	:	2022-08-01
Date of Test	:	2022-09-05 to 2022-10-18
Date of Issue	:	2022-10-19
Test Report Form No.	:	WTX_IEEE_1528_2013W
Test Result	:	**Pass**

Remarks:

The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of approver.

Prepared By:

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Version No.	Date of issue	Description
Rev.00	2022-10-19	Original
/	/	/

1. General Information

1.1 Product Description for Equipment Under Test (EUT)

General Description of EUT:	
Product Name:	Smart Phone
Brand Name:	BLU
Model No.:	F92e 5G
Adding Model(s):	/
Rated Voltage:	DC3.87V
Battery Capacity:	4900mAh(C886550500P)
Adapter Model	US-CR-2000 INPUT: AC100-240V, 50/60Hz, 0.3A; Output: DC5V, 2000mA
Software Version:	/
Hardware Version:	/
Note: The test data is gathered from a production sample provided by the manufacturer.	

Technical Characteristics of EUT:	
2G	
Support Networks:	GSM, GPRS, EDGE
Support Band:	GSM850/PCS1900
Uplink Frequency:	GSM/GPRS/EDGE 850: 824~849MHz GSM/GPRS/EDGE 1900: 1850~1910MHz
Downlink Frequency:	GSM/GPRS/EDGE 850: 869~894MHz GSM/GPRS/EDGE 1900: 1930~1990MHz
RF Output Power:	Normal: GSM850: 33.17dBm, GSM1900: 30.05dBm, EDGE850: 30.59dBm, EDGE1900: 25.60dBm Sar sensor: GSM1900: 27.20dBm, EDGE1900: 25.49dBm Receiver ON: GSM1900: 22.25dBm, EDGE1900: 25.46dBm Hotspot: GSM1900: 28.07dBm, EDGE1900: 25.52dBm
Type of Modulation:	GMSK, 8PSK
Type of Antenna:	Integral Antenna
Antenna Gain:	GSM850: -4.9dBi; GSM1900: -1.3dBi
GPRS/EDGE Class:	Class 12
3G	
Support Networks:	WCDMA, HSDPA, HSUPA
Support Band:	WCDMA Band 2, WCDMA Band 4, WCDMA Band 5
Uplink Frequency:	WCDMA Band 2: 1850~1910MHz WCDMA Band 4: 1710-1755MHz WCDMA Band 5: 824~849MHz
Downlink Frequency:	WCDMA Band 2: 1930~1990MHz WCDMA Band 4: 2110-2155MHz WCDMA Band 5: 869~894MHz
RF Output Power:	Normal: WCDMA Band 2: 23.25dBm, WCDMA Band 4: 22.87dBm, WCDMA Band 5: 23.40dBm Sar sensor: WCDMA Band 2: 20.09dBm, WCDMA Band 4: 19.54dBm, Receiver ON: WCDMA Band 2: 19.11dBm, WCDMA Band 4: 18.53dBm, Hotspot: WCDMA Band 2: 21.14dBm,

	WCDMA Band 4: 20.59dBm,
Type of Modulation:	BPSK
Antenna Type:	Integral Antenna
Antenna Gain:	WCDMA Band 2: -1.3dBi, WCDMA Band 4: -1.5dBi, WCDMA Band 5: -4.9dBi
4G	
Support Networks:	FDD-LTE, TDD-LTE
Support Band:	FDD-LTE Band 2, 4, 5, 12, 13, 17, 25, 26, 66, 71 TDD-LTE Band 41
Uplink Frequency:	FDD-LTE Band 2: Tx: 1850-1910MHz, FDD-LTE Band 4: Tx: 1710-1755MHz, FDD-LTE Band 5: Tx: 824-849MHz, FDD-LTE Band 12: Tx: 699-716MHz, FDD-LTE Band 13: Tx: 777-787MHz, FDD-LTE Band 17: Tx: 704-716MHz, FDD-LTE Band 25: Tx: 1850-1915MHz, FDD-LTE Band 26: Tx: 814-824MHz, FDD-LTE Band 26: Tx: 824-849MHz, TDD-LTE Band 41: Tx: 2496-2690MHz FDD-LTE Band 66: Tx: 1710-1780MHz, FDD-LTE Band 71: Tx: 663-698MHz,
Downlink Frequency:	FDD-LTE Band 2: Rx: 1930-1990MHz, FDD-LTE Band 4: Rx: 2110-2155MHz, FDD-LTE Band 5: Rx: 869-894MHz, FDD-LTE Band 12: Rx: 729-746MHz, FDD-LTE Band 13: Rx: 746-756MHz, FDD-LTE Band 17: Rx: 734-746MHz, FDD-LTE Band 25: Rx: 1930-1995MHz, FDD-LTE Band 26: Rx: 859-869MHz, FDD-LTE Band 26: Rx: 869-894MHz, TDD-LTE Band 41: Rx: 2496-2690MHz FDD-LTE Band 66: Rx: 2110-2200MHz, FDD-LTE Band 71: Rx: 617-652MHz,
RF Output Power:	Normal: FDD-LTE Band 2: 24.05dBm FDD-LTE Band 4: 24.01dBm FDD-LTE Band 5: 23.28dBm FDD-LTE Band 12: 24.01dBm FDD-LTE Band 13: 23.29dBm FDD-LTE Band 17: 23.53dBm FDD-LTE Band 25: 24.23dBm FDD-LTE Band 26(814-824MHz): 23.46dBm

	FDD-LTE Band 26(824-849MHz): 23.56dBm TDD-LTE Band 41: 22.99dBm FDD-LTE Band 66: 24.25dBm FDD-LTE Band 71: 24.23dBm Sar sensor: FDD-LTE Band 2: 20.67dBm FDD-LTE Band 4: 20.57dBm FDD-LTE Band 25: 21.08dBm TDD-LTE Band 41: 21.80dBm FDD-LTE Band 66: 20.97dBm Receiver ON: FDD-LTE Band 2: 19.86dBm FDD-LTE Band 4: 19.99dBm FDD-LTE Band 25: 20.09dBm TDD-LTE Band 41: 20.88 dBm FDD-LTE Band 66: 20.07dBm Hotspot: FDD-LTE Band 2: 21.86dBm FDD-LTE Band 4: 21.93dBm FDD-LTE Band 25: 22.08dBm TDD-LTE Band 41: 22.70dBm FDD-LTE Band 66: 22.62dBm,
Type of Modulation:	QPSK, 16QAM
Antenna Type:	Integral Antenna
Antenna Gain:	FDD-LTE Band 2: -1.3dBi, FDD-LTE Band 4: -1.5dBi, FDD-LTE Band 5: -4.9dBi, FDD-LTE Band 12: -4.6dBi, FDD-LTE Band 13: -4.5dBi, FDD-LTE Band 17: -4.7dBi, FDD-LTE Band 25: -1.5dBi, FDD-LTE Band 26(814-824MHz): -4.9dBi, FDD-LTE Band 26(824-849MHz): -4.9dBi, TDD-LTE Band 41: -1.2dBi, FDD-LTE Band 66: -1.6dBi FDD-LTE Band 71: -4.8dBi
5G NR	
Support Networks:	5G NR
Support Band:	n5; n41; n71
EN-DC Mode	DC_2A_n41A, DC_12A_n41A
Frequency Range:	5G NR n5: Tx: 824-849MHz, Rx: 869-894MHz
	5G NR n41: Tx: 2496-2690MHz, Rx: 2496-2690MHz
	5G NR n71: Tx: 663-698MHz, Rx: 617-652MHz

Modulation Type:	DFT-s-OFDM: PI/2 BPSK QPSK / 16QAM / 64QAM / 256QAM CP-OFDM: QPSK / 16QAM / 64QAM / 256QAM
Max.RF Output Power:	Normal: 5G NR n5: 24.77dBm, 5G NR n41: 23.98dBm, 5G NR n71: 23.68dBm Sar sensor: 5G NR n41: 20.91dBm Receiver ON: 5G NR n41: 19.99dBm Hotspot: 5G NR n41: 20.89dBm
Antenna Type:	Integral Antenna
Antenna Gain:	5G NR n5: -4.9dBi 5G NR n41: -1.2dBi 5G NR n71: -4.8dBi
WIFI(5GHz)	
Support Standards:	802.11a, 802.11n-HT20/40, 802.11ac-VHT80,
Frequency Range:	Band 1: 5180-5240MHz,Band 2: 5260-5320MHz, Band 3: 5500-5700MHz,Band 4: 5745-5825MHz
RF Output Power:	Normal: 15.43dBm (Conducted) Receiver ON: 13.46dBm (Conducted)
Type of Modulation:	QPSK, 16QAM, 64QAM
Type of Antenna:	Integral Antenna
Antenna Gain:	-1.2dBi
WIFI(2.4GHz)	
Support Standards:	802.11b, 802.11g, 802.11n
Frequency Range:	2412-2462MHz for 802.11b/g/n-HT20 2422-2452MHz for 802.11n-HT40
RF Output Power:	Normal: 19.30dBm (Conducted) Receiver ON: 14.64dBm (Conducted)
Type of Modulation:	DBPSK,BPSK,DQPSK,QPSK,16QAM,64QAM
Data Rate:	1-11Mbps, 6-54Mbps, up to 150Mbps
Quantity of Channels:	11 for 802.11b/g/n-HT20 7 for 802.11n-HT40
Channel Separation:	5MHz
Antenna Type:	Integral Antenna
Antenna Gain:	-1.0dBi
Bluetooth	
Bluetooth Version:	V5.1

Frequency Range:	2402-2480MHz
RF Output Power:	1.51dBm (Conducted)
Data Rate:	1Mbps, 2Mbps, 3Mbps
Modulation:	GFSK, π/4 DQPSK, 8DPSK
Quantity of Channels:	79/40
Channel Separation:	1MHz/2MHz
Antenna Type:	Integral Antenna
Antenna Gain:	-1.0dBi
Note: The Antenna Gain is provided by the customer and can affect the validity of results.	

1.2 Test Standards

The following report is accordance with FCC 47 CFR Part 2.1093, IEEE Std C95.1: 2019, IEEE Std C95.3: 2002 + Rev. 2008, IEEE 1528:2013, KDB 447498 D01 v06, KDB 648474 D04 v01r03, KDB 248227 D01 v02r02, KDB 941225 D01 v03r01, KDB 941225 D05 v02r05 , and KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02.

The objective is to determine compliance with FCC Part 2.1093 of the Federal Communication Commissions rules.

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.

1.3 Test Methodology

All measurements contained in this report were conducted with KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02. The public notice KDB 447498 D01 v06 for Mobile and Portable Devices RF Exposure Procedure also.

1.4 Test Facility

Address of the test laboratory
Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.
Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road,Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990
Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. The Designation Number is CN5010.Test Firm Registration Number is 125990.

Industry Canada (IC) Registration No.: 11464A
The 3m Semi-anechoic chamber of Waltek Testing Group (Shenzhen) Co., Ltd. Has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 11464A.

2. Summary of Test Results

The maximum results of Specific Absorption Rate (SAR) have found during testing are as follows:

Frequency Band	Head SAR	Body-worn (15mm Gap)	Hotspot (10mm Gap)	SAR_{1g} Limit (W/kg)
	Maximum SAR_{1g} (W/kg)	Maximum SAR_{1g} (W/kg)	Maximum SAR_{1g} (W/kg)	
GSM	0.460	0.220	0.360	1.6
WCDMA	0.314	0.248	0.492	1.6
LTE	0.415	0.275	0.414	1.6
NR	0.213	0.231	0.282	1.6
WLAN 5GHz	**0.685**	0.437	**0.594**	1.6
WLAN 2.4GHz	0.327	**0.441**	0.617	1.6
BT	0.200	0.041	0.131	1.6
Simultaneous Transmission	**1.145**	0.716	1.109	1.6

The 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 2.1093 and IEEE Std C95.1: 2019, and had been tested in accordance with the measurement methods and procedure specified in IEEE 1528:2013 and KDB 865664 D01 v01r04 and KDB 865664 D02 v01r02.

3. Specific Absorption Rate (SAR)

3.1 Introduction

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techiques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

3.2 SAR Definition

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

$$\mathbf{SAR} = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\mathbf{dm}}\right) = \frac{\mathbf{d}}{\mathbf{dt}}\left(\frac{\mathbf{dW}}{\boldsymbol{\rho}\mathbf{dv}}\right)$$

SAR is expressed in units of Watts per kilogram (W/kg)
SAR measurement can be either related to the temperature elevation in tissue by

$$\mathbf{SAR} = \mathbf{C}\left(\frac{\boldsymbol{\delta}\mathbf{T}}{\boldsymbol{\delta}\mathbf{t}}\right)$$

Where: C is the specific heat capacity, δ T is the temperature rise and δ t is the exposure duration, or related to the
electrical field in the tissue by

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

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

4. SAR Measurement System

4.1 The Measurement System

Comosar is a system that is able to determine the SAR distribution inside a phantom of human being according to different standards. The Comosar system consists of the following items:
- Main computer to control all the system
- 6 axis robot
- Data acquisition system
- Miniature E-field probe
- Phone holder
- Head simulating tissue

The following figure shows the system.

The EUT under test operating at the maximum power level is placed in the phone holder, under the phantom, which is filled with head simulating liquid. The E-Field probe measures the electric field inside the phantom. The OpenSAR software computes the results to give a SAR value in a 1g or 10g mass.

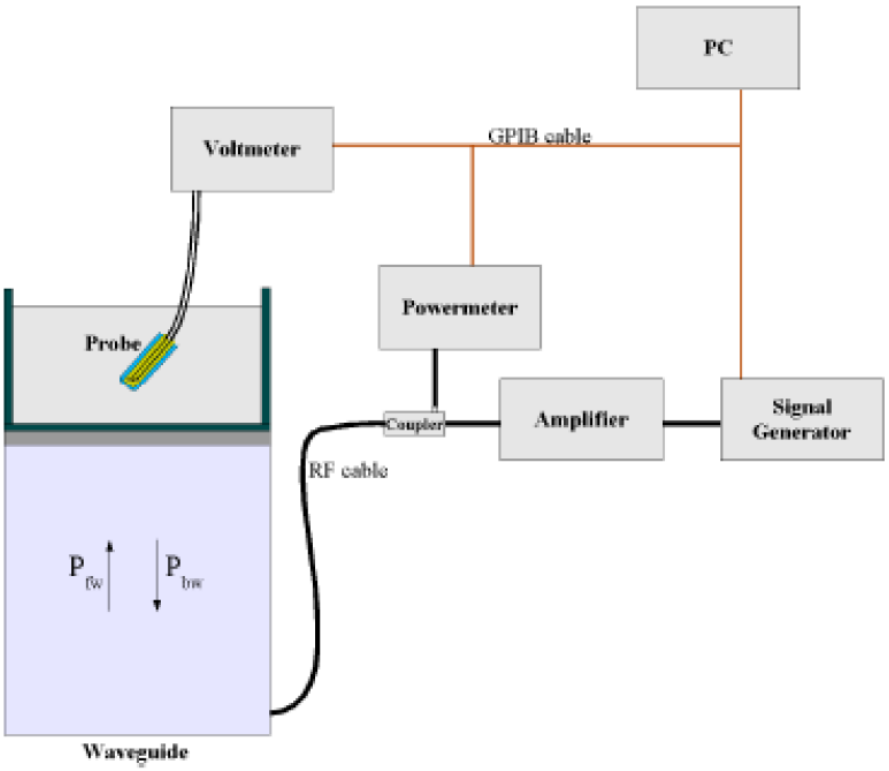
4.2 Probe

For the measurements the Specific Dosimetric E-Field Probe SSE2 SN 45/15 EPGO280 with following specifications is used
- Dynamic range: 0.01-100 W/kg
- Probe Length: 330 mm
- Length of Individual Dipoles: 4.5 mm
- Maximum external diameter: 8 mm
- Probe Tip External Diameter : 5 mm

- Distance between dipoles / probe extremity: 2.7mm
- Probe linearity: ＜0.25 dB
- Axial Isotropy: ＜0.25 dB
- Spherical Isotropy: ＜0.50 dB
- Calibration range: 700 to 3000MHz for head & body simulating liquid.

Angle between probe axis (evaluation axis) and suface normal line:1ess than 30°

Probe calibration is realized, in compliance with EN 62209-1 and IEEE 1528 STD, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the EN 62209-1 annexe technique using reference guide at the five frequencies.



$$SAR = \frac{4\left(P_{fw} - P_{bw}\right)}{ab\delta} \cos^2\left(\pi \frac{y}{a}\right) e^{(2z/\delta)}$$

Where :

Pfw = Forward Power

Pbw = Backward Power

a and b =Waveguide dimensions

I = Skin depth

Keithley configuration:

Rate = Medium; Filter = ON; RDGS = 10; Filter type = Moving Average; Range auto after each calibration, a SAR measurement is performed on a validation dipole and compared with a NPL calibrated probe, to verify it.

The calibration factors, CF(N), for the 3 sensors corresponding to dipole 1, dipole 2 and dipole 3 are:

$$CF(N)=SAR(N)/Vlin(N)\ (N=1,2,3)$$

The linearised output voltage Vlin(N) is obtained from the displayed output voltage V(N) using

$$Vlin(N)=V(N)*(1+V(N)/DCP(N))\ (N=1,2,3)$$

where DCP is the diode compression point in mV.

4.3 Probe Calibration Process

Dosimetric Assessment Procedure

Each E-Probe/Probe Amplifier combination has unique calibration parameters. SATIMO Probe calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm2) using an with CALISAR, Antenna proprietary calibration system.

Free Space Assessment Procedure

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1mW/cm2.

Temperature Assessment Procedure

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

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

Where:

Δt = exposure time (30 seconds),

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

ΔT = temperature increase due to RF exposure.

SAR is proportional to ΔT/Δt, the initial rate of tissue heating, before thermal diffusion takes place. The electric field in the simulated tissue can be used to estimate SAR by equating the thermally derived SAR to that with the E- field component.

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

Where:

σ = simulated tissue conductivity,

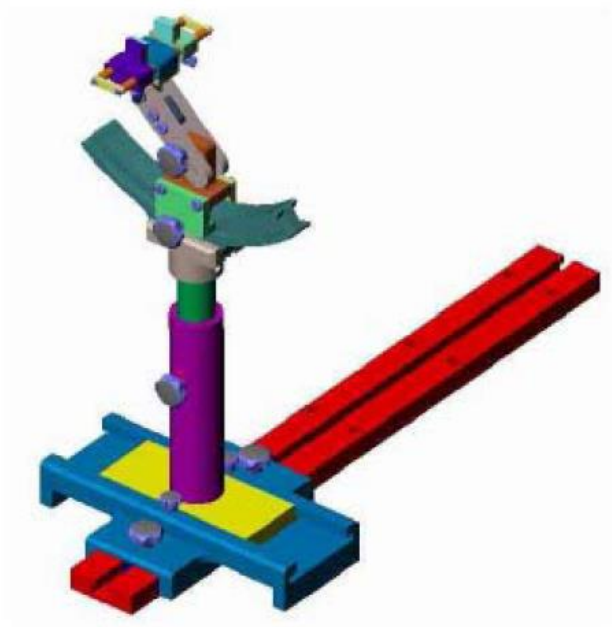
ρ = Tissue density (1.25 g/cm3 for brain tissue)

4.4 Phantom

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.

4.5 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°.



System Material	Permittivity	Loss Tangent
Delrin	3.7	0.005

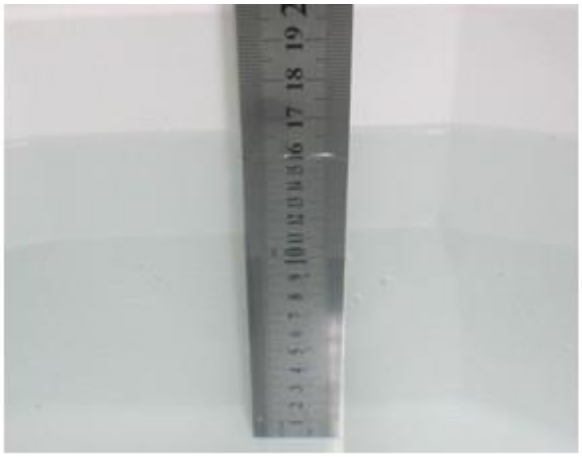
4.6 Test Equipment List

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
E-Field Probe	MVG	SSE2	SN 18/21 EPGO356	2022-07-08	2023-07-07
750MHz Dipole	MVG	SID750	SN 47/12 DIP 0G750-203	2020-03-11	2023-03-10
835MHz Dipole	MVG	SID835	SN 47/12 DIP 0G835-204	2020-03-11	2023-03-10
900MHz Dipole	MVG	SID900	SN 47/12 DIP 0G900-205	2020-03-11	2023-03-10
1800MHz Dipole	MVG	SID1800	SN 47/12 DIP 1G800-206	2020-03-11	2023-03-10
1900MHz Dipole	MVG	SID1900	SN 47/12 DIP 1G900-207	2020-03-11	2023-03-10
2000MHz Dipole	MVG	SID2000	SN 47/12 DIP 2G000-208	2020-03-11	2023-03-10
2300 MHz Dipole	MVG	SID2300	SN 50/20 DIP 2G300-513	2021-01-14	2024-01-13
2450MHz Dipole	MVG	SID2450	SN 13/15 DIP 2G450-364	2020-03-11	2023-03-10
2600MHz Dipole	MVG	SID2600	SN 28/21 DIP 2G600-590	2021-07-16	2024-07-15
5 GHz Dipole	MVG	SWG5500	SN 49/16 WGA45	2020-07-03	2023-07-02
Dielectric Probe	SATIMO	SCLMP	SN 47/12 OCPG49	2022-03-22	2023-03-21
SAM Phantom	SATIMO	SAM	SN/ 47/12 SAM95	N/A	N/A
Multi Meter	Keithley	Keithley 2000	4006367	2022-03-22	2023-03-21
Power meter	Keithley	3500	JC-2017-09-001	2022-03-22	2023-03-21
Power meter	Keithley	3500	JC-2017-09-001	2022-03-22	2023-03-21
Power Sensor	HP	11636B	JC-2017-10-002	2022-03-22	2023-03-21
MXG X-Series RF Vector Signal Generato	KEYSIGHT	N5182B	MY57300664	2022-03-22	2023-03-21
Universal Tester	Rohde & Schwarz	CMU200	112315	2022-03-22	2023-03-21
Universal Radio Communication Tester	Rohde & Schwarz	CMW500	148650	2022-03-22	2023-03-21
Network Analyzer	HP	8753C	2901A00831	2022-03-22	2023-03-21

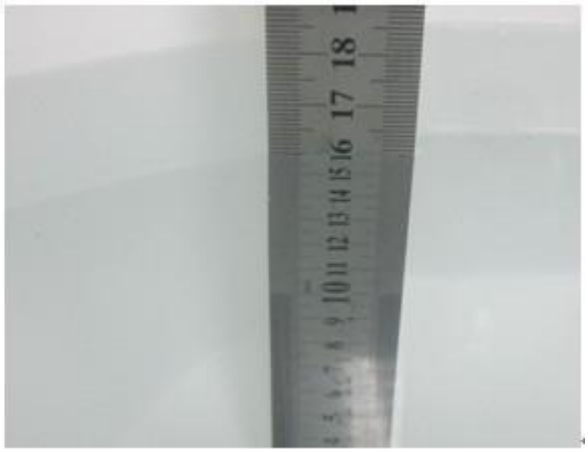
5. Tissue Simulating Liquids

5.1 Composition of Tissue Simulating Liquid

For the measurement of the field distribution inside the SAM phantom with SMTIMO, the phantom must be filled with around 25 liters of homogeneous body tissue simulating liquid. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. Please see the following photos for the liquid height.



Liquid Height for Head SAR



Liquid Height for Body SAR

The Composition of Tissue Simulating Liquid

Frequency (MHz)	Water (%)	Salt (%)	Sugar (%)	HEC (%)	Preventol (%)	DGBE (%)
Head						
750	41.1	1.4	57.0	0.2	0.3	0
835	40.3	1.4	57.9	0.2	0.2	0
1700-1900	55.2	0.3	0	0	0	44.5
2450	55.0	0.1	0	0	0	44.9
2600	54.9	0.1	0	0	0	45.0
Body						
750	50.0	0.8	48.8	0.2	0.2	0
835	50.8	0.9	48.1	0.1	0.1	0
1700-1900	70.2	0.4	0	0	0	29.4
2450	68.6	0.1	0	0	0	31.3
2600	68.2	0.1	0	0	0	31.7

Frequency (MHz)	Water (%)	Hexyl Carbitol (%)	Triton X-100 (%)
Head			
5000-6000	65.52	17.24	17.24
Body			
5000-6000	78.6	10.7	10.7

5.2 Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

Target Frequency (MHz)	Head		Body	
	Conductivity (σ)	Permittivity (ε_r)	Conductivity (σ)	Permittivity (ε_r)
150	0.76	52.3	0.80	61.9
300	0.87	45.3	0.92	58.2
450	0.87	43.5	0.94	56.7
750	**0.89**	**41.9**	**0.96**	**55.5**
835	**0.90**	**41.5**	**0.97**	**55.2**
900	0.97	41.5	1.05	55.0
915	0.98	41.5	1.06	55.0
1450	1.20	40.5	1.30	54.0
1610	1.29	40.3	1.40	53.8
1800-2000	**1.40**	**40.0**	**1.52**	**53.3**
2450	**1.80**	**39.2**	**1.95**	**52.7**
2600	**1.96**	**39.0**	**2.16**	**52.5**
3000	2.40	38.5	2.73	52.0
5200	**4.66**	**36.0**	**5.30**	**49.0**
5400	**4.86**	**35.8**	**5.53**	**48.7**
5600	**5.07**	**35.5**	**5.77**	**48.5**
5800	**5.27**	**35.3**	**6.00**	**48.2**

5.3 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using COMOSAR Dielectric Probe Kit and an Agilent Network Analyzer.

Calibration Result for Dielectric Parameters of Tissue Simulating Liquid

Head/Body Tissue Simulating Liquid									
Freq. MHz.	Temp. (℃)	Conductivity			Permittivity			Limit (%)	Date
		Reading (σ)	Target (σ)	Delta (%)	Reading (ε r)	Target (ε r)	Delta (%)		
750	23.5	0.87	0.89	-2.25	42.31	41.90	0.98	±5	2022-10-14
835	23.5	0.88	0.90	-2.22	42.06	41.50	1.35	±5	2022-10-14
1800	23.5	1.38	1.40	-1.43	39.60	40.00	-1.00	±5	2022-09-21
1900	23.5	1.38	1.40	-1.43	39.58	40.00	-1.05	±5	2022-09-21
2450	23.5	1.76	1.80	-2.22	39.09	39.20	-0.28	±5	2022-09-26
2600	23.5	1.94	1.96	-1.02	38.95	39.0	-0.13	±5	2022-09-26
5200	23.5	4.71	4.66	1.07	36.64	36.0	1.78	±5	2022-09-28
5400	23.5	4.83	4.86	-0.62	36.60	35.8	2.23	±5	2022-09-28
5600	23.5	5.11	5.07	0.79	36.61	35.5	3.13	±5	2022-09-29
5800	23.5	5.19	5.27	-1.52	36.92	35.3	4.59	±5	2022-09-29

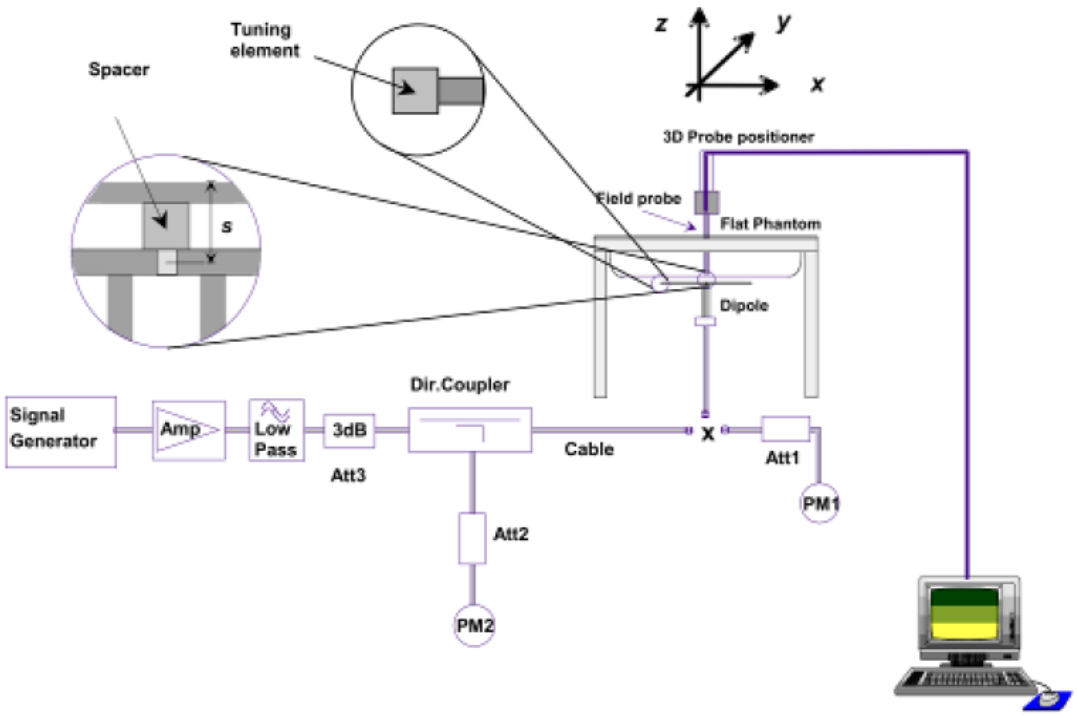
6. SAR Measurement Evaluation

6.1 Purpose of System Performance Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

6.2 System Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave which comes from a signal generator at frequency 835MHz ,1800MHz, 1900MHz 2450MHz,2600MHz,and 5GHz. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom.



System Verification Setup Block Diagram

Setup Photo of Dipole Antenna

The output power on dipole port must be calibrated to 24 dBm(250 mW) before dipole is connected.
The output power on 5 GHz Waveguide must be calibrated to 20 dBm (100mW) before 5 GHz Waveguide is connected.

6.3 Validation Results

Comparing to the original SAR value provided by SATIMO, the validation data should be within its specification of 10 %. Table 6.1 shows the target SAR and measured SAR after normalized to 1W input power. The table below indicates the system performance check can meet the variation criterion.

Frequency	Targeted SAR_{1g}	Measured SAR_{1g}	Normalized SAR_{1g}	Tolerance	Date
MHz	(W/kg)	(W/kg)	(W/kg)	(%)	
Head/Body					
750	8.40	2.16	8.64	2.86	2022-10-14
835	9.65	2.41	9.64	-0.10	2022-10-14
1800	38.49	9.61	38.44	-0.13	2022-09-21
1900	39.59	9.91	39.64	0.13	2022-09-21
2450	53.76	13.45	53.8	0.07	2022-09-26
2600	55.07	13.67	54.68	-0.71	2022-09-26
5200	161.23	16.946	169.46	5.10	2022-09-28
5400	165.58	17.111	171.11	3.34	2022-09-28
5600	173.58	17.330	173.30	-0.16	2022-09-29
5800	179.32	18.604	186.04	3.75	2022-09-29

Remark: Referring to IEEE 1528:2013, Section 8.2, The system check shall be performed at a test frequency that is within ±10% or ±100 MHz of the compliance test mid-band frequency, so the 1750 MHz system verification is made of 1800MHz Dipole.

Targeted and Measurement SAR

Please refer to Annex A for the plots of system performance check.

7. EUT Testing Position

7.1 Define Two Imaginary Lines on The Handset

(a) 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, and the midpoint of the width w_b of the bottom of the handset.

(b) The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.

(c) 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, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.

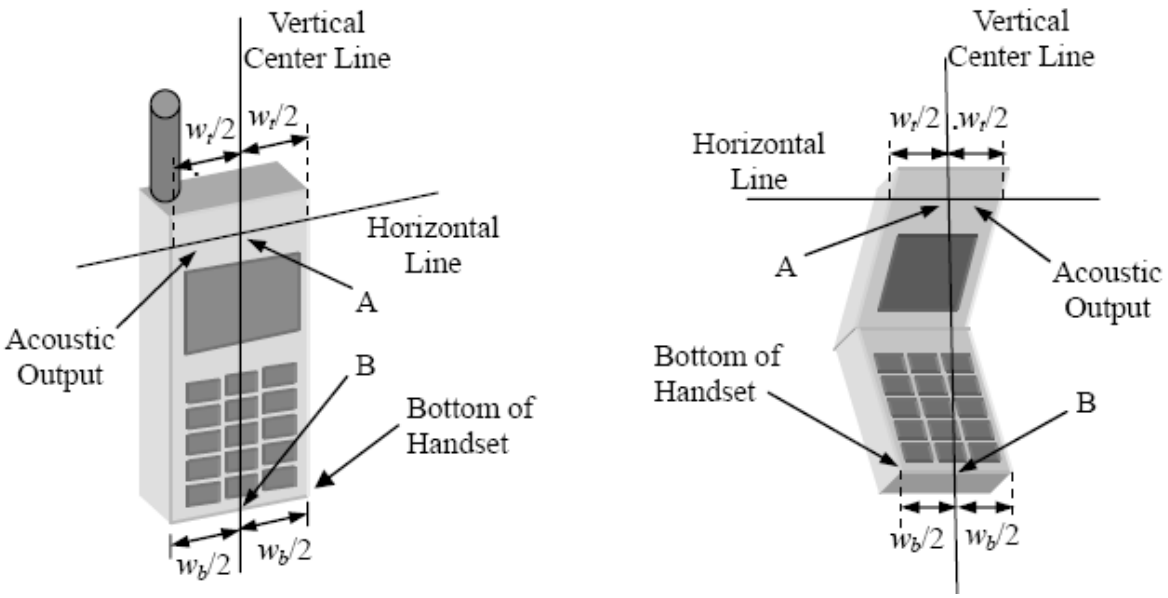


Illustration for Handset Vertical and Horizontal Reference Lines

7.2 Cheek Position

(a) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
(b) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost (see Fig. 7.2).

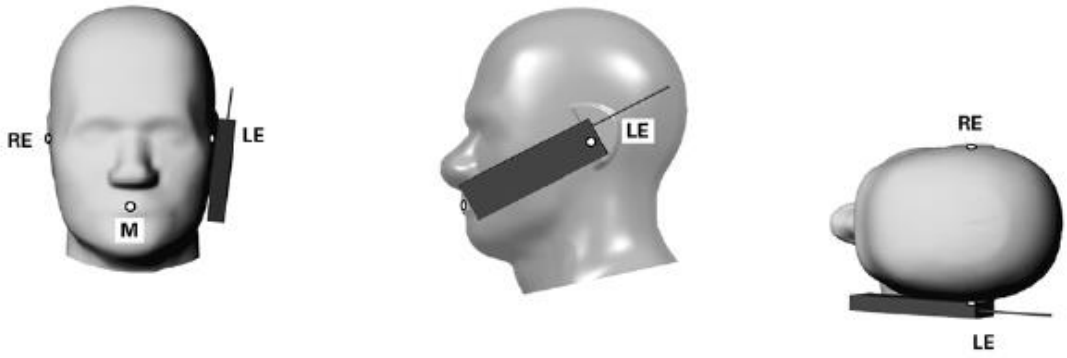


Illustration for Cheek Position

7.3 Tilted Position

(a) To position the device in the “cheek” position described above.
(b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost (see Fig. 7.3).

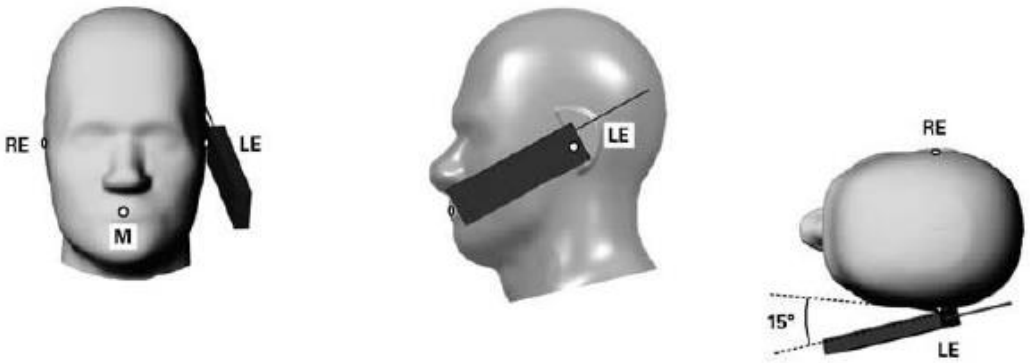


Illustration for Tilted Position

7.4 Body Position

(a) To position the device parallel to the phantom surface with each side.
(b) To adjust the device parallel to the flat phantom.
(c) To adjust the distance between the device surface and the flat phantom to 10mm.

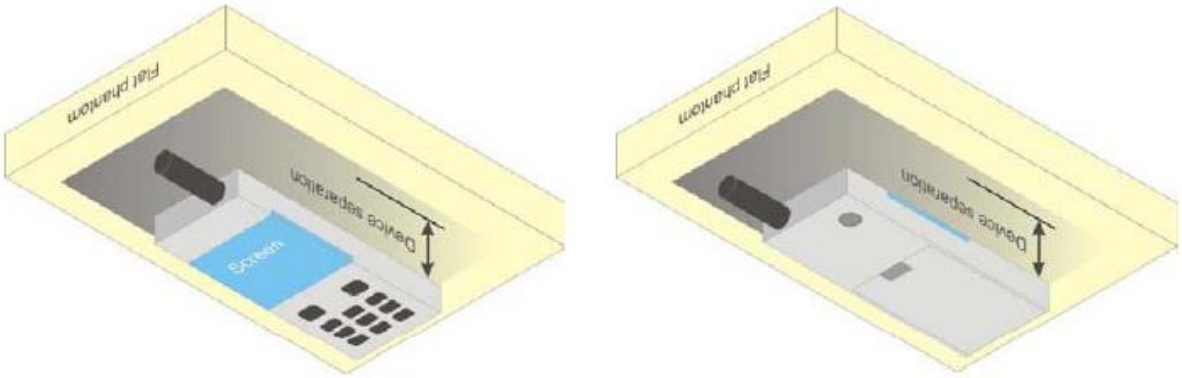
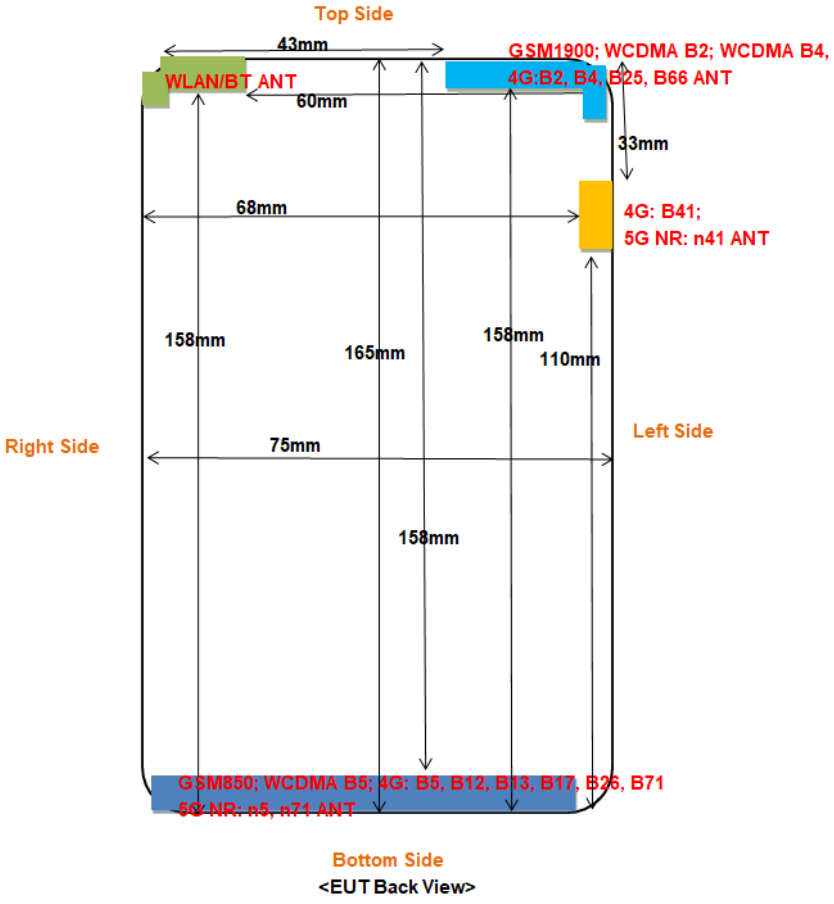


Illustration for Body Position

7.5 EUT Antenna Position



Block Diagram for EUT Antenna Position

Distance of EUT antenna-to-edge/surface(mm), Test distance:10mm						
Antennas	Back side	Front side	Left Edge	Right Edge	Top Edge	Bottom Edge
GSM850; WCDMA B5; 4G: B5, B12, B13, B17, B26, B71 5G NR: n5, n71	<25	<25	<25	<25	158	<25
GSM1900; WCDMA B2; WCDMA B4, 4G:B2, B4, B25, B66	<25	<25	<25	43	<25	158
LTE B41/5G NR_n41	<25	<25	<25	68	33	110
WLAN/Bluetooth	<25	<25	60	<25	<25	158

7.6 EUT Testing Position

Head/Body mode SAR assessments are required for this device. This EUT was tested in different positions for different SAR test modes, more information as below:

Head SAR tests				
Antennas	**Right Cheek**	**Left Cheek**	**Right Tilted**	**Left Tilted**
GSM850; WCDMA B5; 4G: B5, B12, B13, B17, B26, B71 5G NR: n5, n71	Yes	Yes	Yes	Yes
GSM1900; WCDMA B2; WCDMA B4, 4G:B2, B4, B25, B66	Yes	Yes	Yes	Yes
LTE B41/5G NR_n41	Yes	Yes	Yes	Yes
WLAN/Bluetooth	Yes	Yes	Yes	Yes

Body-worn SAR tests, Test distance: 15mm		
Antennas	**Front**	**Back**
GSM850; WCDMA B5; 4G: B5, B12, B13, B17, B26, B71 5G NR: n5, n71	Yes	Yes
GSM1900; WCDMA B2; WCDMA B4, 4G:B2, B4, B25, B66	Yes	Yes
LTE B41/5G NR_n41	Yes	Yes
WLAN/Bluetooth	Yes	Yes

Hotspot SAR tests, Test distance: 10mm						
Antennas	**Front**	**Back**	**Left Side**	**Right Side**	**Top Side**	**Bottom Side**
GSM850; WCDMA B5; 4G: B5, B12, B13, B17, B26, B71 5G NR: n5, n71	Yes	Yes	Yes	Yes	No	Yes
GSM1900; WCDMA B2; WCDMA B4, 4G:B2, B4, B25, B41, B66	Yes	Yes	Yes	No	Yes	No
LTE B41/5G NR_n41	Yes	Yes	Yes	No	No	No
WLAN/Bluetooth	Yes	Yes	No	Yes	Yes	No

Remark:

1. Referring to KDB 941225 D06, when the overall device length and width are >= 9cm*5cm, the Hotspot mode test separation distances is 10 mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.
2. Referring to KDB 447498 D01v06, a conservative minimum test separation distance for supporting off-the-shelf body-worn accessories that may be acquired by users of consumer handsets should be used to test for body-worn accessory SAR compliance. This distance is determined by the handset manufacturer according to the typical body-worn accessories users may acquire at the time of equipment certification, but not more than 2.5 cm, to enable users to purchase aftermarket body-worn accessories with the required minimum separation.
3. Referring to KDB 648474 D04 Handset SAR v01r03, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

Please refer to Annex D for the EUT test setup photos.

8. SAR Measurement Procedures

8.1 Measurement Procedures

The measurement procedures are as follows:
(a) Use base station simulator (if applicable) or engineering software to transmit RF power continuously (continuous Tx) in the highest power channel.
(b) Keep EUT to radiate maximum output power or 100% factor (if applicable)
(c) Measure output power through RF cable and power meter.
(d) Place the EUT in the positions as Annex D demonstrates.
(e) Set scan area, grid size and other setting on the SATIMO software.
(f) Measure SAR results for the highest power channel on each testing position.
(g) Find out the largest SAR result on these testing positions of each band
(h) Measure SAR results for other channels in worst SAR testing position if the 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

8.2 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The SATIMO software includes all numerical procedures necessary to evaluate the spatial peak SAR value.
The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.
The entire evaluation of the spatial peak values is performed within the post-processing engine. The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:
(a) Extraction of the measured data (grid and values) from the Zoom Scan
(b) Calculation of the SAR value at every measurement point based on all stored data
(c) Generation of a high-resolution mesh within the measured volume
(d) Interpolation of all measured values form the measurement grid to the high-resolution grid
(e) Extrapolation of the entire 3D field distribution to the phantom surface over the distance from sensor to surface
(f) Calculation of the averaged SAR within masses of 1g and 10g

8.3 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures 5x5x7 points with step size 8, 8 and 5 mm for 300 MHz to 3 GHz, and 8x8x8 points with step size 4, 4 and 2.5 mm for 3 GHz to 6 GHz. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

8.4 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the EUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing (step-size is 4, 4 and 2.5 mm). When all volume scan were completed, the software can combine and subsequently superpose these measurement data to calculating the multiband SAR.

8.5 SAR Averaged Methods

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 minimize measurements errors, but the highest local SAR will occur at the surface of the phantom.

An extrapolation is using to determinate this highest local SAR values. The extrapolation is based on a fourth-order least-square polynomial fit of measured data. The local SAR value is then extrapolated from the liquid surface with a 1mm 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 10g and 1 g requires a very fine resolution in the three dimensional scanned data array.

8.6 Power Drift Monitoring

All SAR testing is under the EUT install full charged battery and transmit maximum output power. In SATIMO 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 dB. If the power drift more than 5%, the SAR will be retested.

9. SAR Test Result

9.1 Conducted RF Output Power

Summary of Power Reduction:

1. Device only the Ant 2 and 4 are support **Receiver ON/ Hotspot/ Sensor ON** reduced power, there are GSM1900&WCDMA B2/4&LTE B2/4/25/66/41&5G NR n41. The priority order is Receiver ON to Hotspot to Sensor on.
2. WIFI2.4G&WIFI5G are support **Receiver ON** reduced power.

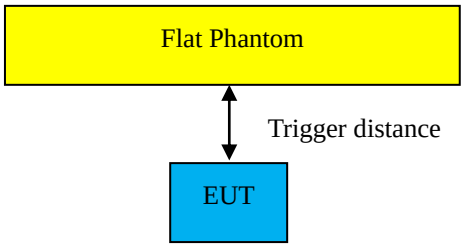
Antenna	Reduced power off	Receiver ON	Hotspot	Sensor ON
Ant 2/4	Power Level P1	Power Level P2	Power Level P3	Power Level P4

Antenna	Reduced power off	Receiver ON
WIFI	Power Level P1	Power Level P2

Note:
The power management for SAR compliance at different exposure conditions (head, hotspot). The device will invoke corresponding work scenarios power level base on frequency bands/antennas. Refer to the KDB 388624 D02 Pre-Approval Guidance List v18r03.

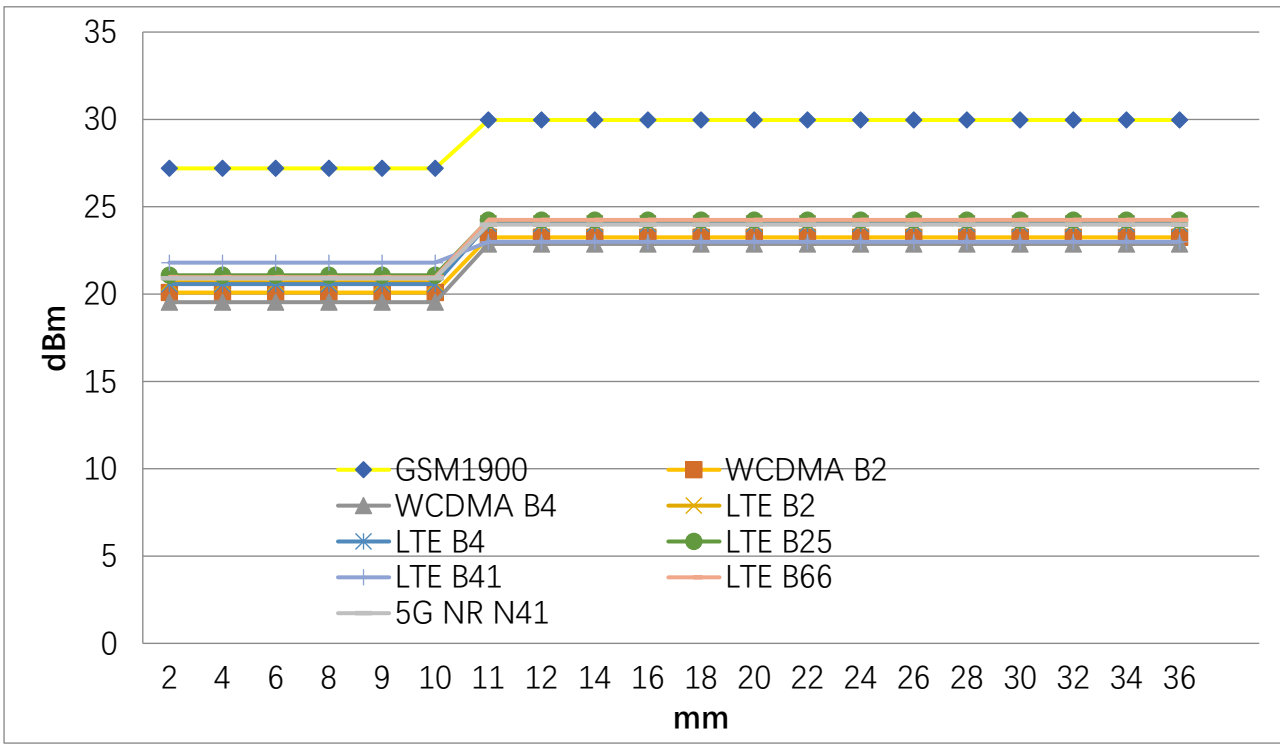
9.1.1 Proximity Sensor Triggering Test

1. Proximity sensor triggering distances:

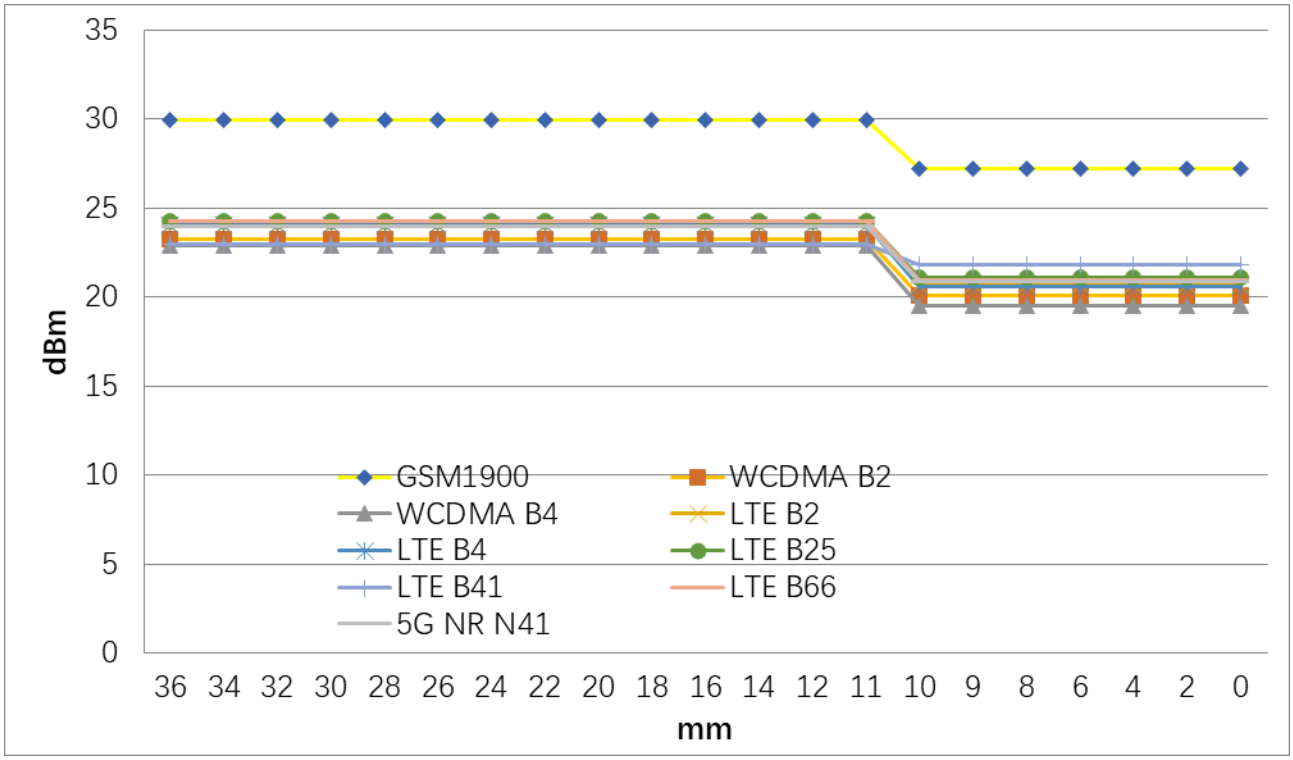


Proximity sensor triggering distances(mm)				
Position	**Front side**	**Back side**	**Top side**	**Right side**
Minimum	10	10	10	10
Required SAR Test	9	9	9	9

DUT Moving Away the Phantom Output Power:



DUT Moving Toward the Phantom Output Power:

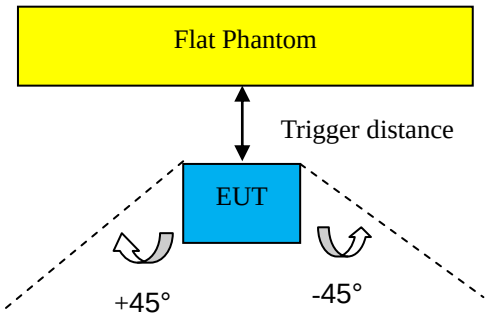


2. Proximity sensor coverage:

If a sensor is spatially offset from the antenna(s), it is necessary to verify sensor triggering for conditions where the antenna is next to the user but the sensor is laterally further away to ensure sensor coverage is sufficient for reducing the power to maintain compliance. For p-sensor coverage testing, the device is moved and "along the direction of maximum antenna and sensor offset".

The proximity sensor and main antenna use same metallic electrode, so there is no spatial offset.

3. Device tilt angele influences to proximity sensor triggering



Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering											
Band	**Min. trigger distance and maintained over ±45°**	**Power Reduction Status**									
		-45°	-35°	-25°	-15°	-5°	-0°	-5°	-15°	-25°	-35°	-45°
GSM1900	Top side: 10mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B2	Top side: 10mm	on	on	on	on	on	on	on	on	on	on	on
WCDMA B4	Top side: 10mm	on	on	on	on	on	on	on	on	on	on	on
LTE B2	Top side: 10mm	on	on	on	on	on	on	on	on	on	on	on
LTE B4	Top side: 10mm	on	on	on	on	on	on	on	on	on	on	on
LTE B25	Top side: 10mm	on	on	on	on	on	on	on	on	on	on	on
LTE B41	Top side: 10mm	on	on	on	on	on	on	on	on	on	on	on
LTE 66	Top side: 10mm	on	on	on	on	on	on	on	on	on	on	on
5G NR N41	Top side: 10mm	on	on	on	on	on	on	on	on	on	on	on

SAR test plan:

For front/back/top/right side, the worst trigger distance of proximity sensor is 10mm, thus we test these side in 10mm or 15mm without power reduction and 0mm with power reduction.

9.1.2 Conducted RF Output power result:

GSM - Burst Average Power (dBm)								
Band	**GSM850(P1)**			**Tune-up power (dBm)**	**PCS1900(P1)**			**Tune-up power (dBm)**
Channel	**128**	**190**	**251**		**512**	**661**	**810**	
Frequency (MHz)	**824.2**	**836.6**	**848.8**		**1850.2**	**1880**	**1909.8**	
GSM	**33.17**	33.03	32.86	33.5	29.51	29.60	**29.97**	30.0
GPRS (1 slot)	33.17	33.09	32.88	33.5	29.61	29.67	30.05	30.0
GPRS (2 slots)	32.49	32.39	32.21	32.5	26.53	26.69	**27.11**	27.5
GPRS (3 slots)	31.22	31.14	30.95	31.5	24.49	24.72	25.16	25.5
GPRS (4 slots)	**30.62**	30.56	30.37	31.0	23.39	23.65	24.06	24.5
EDGE (1 slot)	30.59	30.59	30.53	31.0	25.49	25.60	25.44	26.0
EDGE (2 slots)	29.43	29.40	29.38	29.5	24.34	24.52	24.26	25.0
EDGE (3 slots)	27.33	27.34	27.31	27.5	22.26	22.46	22.19	22.5
21EDGE (4 slots)	26.21	26.23	26.11	26.5	20.98	21.06	20.84	21.5

GSM - Source-Based Time-Average Power (dBm)								
Band	**GSM850(P1)**			**Tune-up power (dBm)**	**PCS1900(P1)**			**Tune-up power (dBm)**
Channel	**128**	**190**	**251**		**512**	**661**	**810**	
Frequency (MHz)	**824.2**	**836.6**	**848.8**		**1850.2**	**1880**	**1909.8**	
GSM	24.17	24.03	23.86	24.5	20.51	20.60	20.97	21.0
GPRS (1 slot)	24.17	24.09	23.88	24.5	20.61	20.67	21.05	21.5
GPRS (2 slots)	26.49	26.39	26.21	26.5	20.53	20.69	**21.11**	21.5
GPRS (3 slots)	26.97	26.89	26.70	27.0	20.24	20.47	20.91	21.0
GPRS (4 slots)	**27.62**	27.56	27.37	28.0	20.39	20.65	21.06	21.5
EDGE (1 slot)	21.59	21.59	21.53	22.0	16.49	16.60	16.44	17.0
EDGE (2 slots)	23.43	23.40	23.38	23.5	18.34	18.52	18.26	19.0
EDGE (3 slots)	23.08	23.09	23.06	23.5	18.01	18.21	17.94	18.5
EDGE (4 slots)	23.21	23.23	23.11	23.5	17.98	18.06	17.84	18.5
Note: The source-based time-averaged power is linearly scaled the maximum burst averaged power based on time slots. The calculated method are shown as below: Source based time-average power = Burst averaged power - Duty cycle factor in dB Duty cycle factor = 9 dB for 1 Tx slot, 6 dB for 2 Tx slots, 4.25 dB for 3 Tx slots, 3 dB for 4 Tx slots								

GSM - Burst Average Power (dBm)								
Band	**GSM 1900 (P4)**			**Tune-up power (dBm)**	**GSM 1900 (P2)**			**Tune-up power (dBm)**
Channel	**512**	**661**	**810**		**512**	**661**	**810**	
Frequency (MHz)	**1850.2**	**1880**	**1909.8**		**1850.2**	**1880**	**1909.8**	
GSM	26.20	26.50	**27.20**	27.5	21.21	21.67	**22.25**	22.5
GPRS (1 slot)	26.15	26.52	27.15	27.5	21.14	21.63	22.24	22.5
GPRS (2 slots)	26.13	26.47	**27.09**	27.5	21.10	21.60	22.20	22.5
GPRS (3 slots)	24.09	24.57	25.16	25.5	21.07	21.58	22.20	22.5
GPRS (4 slots)	23.00	23.50	24.06	24.5	21.05	21.57	**22.15**	22.5
EDGE (1 slot)	25.46	25.49	25.13	25.5	25.40	25.46	25.11	25.5
EDGE (2 slots)	24.38	25.39	24.04	25.5	24.35	24.36	23.98	24.5
EDGE (3 slots)	22.28	22.28	21.86	22.5	22.25	22.25	21.84	22.5
EDGE (4 slots)	20.92	20.90	20.43	21.0	20.88	20.87	20.45	21.0

GSM - Source-Based Time-Average Power (dBm)								
Band	**GSM 1900 (P4)**			**Tune-up power (dBm)**	**GSM 1900 (P2)**			**Tune-up power (dBm)**
Channel	**128**	**190**	**251**		**512**	**661**	**810**	
Frequency (MHz)	**824.2**	**836.6**	**848.8**		**1850.2**	**1880**	**1909.8**	
GSM	17.20	17.50	**18.20**	18.5	12.21	12.67	**13.25**	13.5
GPRS (1 slot)	17.15	17.52	18.15	18.5	12.14	12.63	13.24	13.5
GPRS (2 slots)	20.13	20.47	**21.09**	21.5	15.10	15.60	16.20	16.5
GPRS (3 slots)	19.84	20.32	20.91	21.0	16.82	17.33	17.95	18.0
GPRS (4 slots)	20.00	20.50	21.06	21.5	18.05	18.57	**19.15**	19.5
EDGE (1 slot)	16.46	16.49	16.13	16.5	16.40	16.46	16.11	16.5
EDGE (2 slots)	18.38	19.39	18.04	18.5	18.35	18.36	17.98	18.5
EDGE (3 slots)	18.03	18.03	17.61	18.5	18.00	18.00	17.59	18.5
EDGE (4 slots)	17.92	17.90	17.43	18.0	17.88	17.87	17.45	18.0

Note: The source-based time-averaged power is linearly scaled the maximum burst averaged power based on time slots. The calculated method are shown as below:

Source based time-average power = Burst averaged power - Duty cycle factor in dB

Duty cycle factor = 9 dB for 1 Tx slot, 6 dB for 2 Tx slots, 4.25 dB for 3 Tx slots, 3 dB for 4 Tx slots

GSM - Burst Average Power (dBm)								
Band	**GSM 1900 (P3)**			**Tune-up power (dBm)**				
Channel	**512**	**661**	**810**					
Frequency (MHz)	**1850.2**	**1880**	**1909.8**					
GSM	27.42	27.43	**27.89**	28.0				
GPRS (1 slot)	27.13	27.49	28.07	28.5				
GPRS (2 slots)	26.14	26.49	**27.10**	27.5				
GPRS (3 slots)	24.12	24.56	25.15	25.5				
GPRS (4 slots)	23.04	23.49	24.05	24.5				
EDGE (1 slot)	25.47	25.52	25.17	26.0				
EDGE (2 slots)	24.36	24.36	24.01	24.5				
EDGE (3 slots)	22.26	22.29	21.92	22.5				
EDGE (4 slots)	20.94	20.91	20.54	21.0				

GSM - Source-Based Time-Average Power (dBm)								
Band	**GSM 1900 (P3)**			**Tune-up power (dBm)**				
Channel	**128**	**190**	**251**					
Frequency (MHz)	**824.2**	**836.6**	**848.8**					
GSM	18.42	18.43	18.89	19.0				
GPRS (1 slot)	18.13	18.49	19.07	19.5				
GPRS (2 slots)	20.14	20.49	**21.10**	21.5				
GPRS (3 slots)	19.87	20.31	20.90	21.0				
GPRS (4 slots)	20.04	20.49	21.05	21.5				
EDGE (1 slot)	16.47	16.52	16.17	17.0				
EDGE (2 slots)	18.36	18.36	18.01	18.5				
EDGE (3 slots)	18.01	18.04	17.67	18.5				
EDGE (4 slots)	17.94	17.91	17.54	18.0				
Note: The source-based time-averaged power is linearly scaled the maximum burst averaged power based on time slots. The calculated method are shown as below: Source based time-average power = Burst averaged power - Duty cycle factor in dB Duty cycle factor = 9 dB for 1 Tx slot, 6 dB for 2 Tx slots, 4.25 dB for 3 Tx slots, 3 dB for 4 Tx slots								

Remark:

1. For Head SAR testing, GSM should be evaluated, therefore the EUT was set in GSM for GSM850 and GSM1900 due to its highest source-based time-average power.
2. For Body SAR testing, GPRS should be evaluated, therefore the EUT was set in GPRS (4TX slots) for GSM850, GPRS (2TX slots) for GSM1900(Normal), GPRS (2TX slots) for GSM1900(Sar sensor), GPRS (4TX slots) for GSM1900(Receiver ON), GPRS (2TX slots) for GSM1900(Hotspot),due to its highest source-based time-average power.
3. Per KDB 447498 D01 v06, the maximum output power channel is used for SAR testing and for further SAR test reduction.

4. The DUT do not support DTM function.

WCDMA - Average Power (dBm)								
Band	**WCDMA Band II (P1)**				**WCDMA Band IV(P1)**			
Channel	**9262**	**9400**	**9538**	**Tune-up power (dBm)**	**1312**	**1412**	**1513**	**Tune-up power (dBm)**
Frequency (MHz)	**1852.4**	**1880.0**	**1907.6**		**1712.4**	**1732.4**	**1752.6**	
RMC 12.2k	**23.25**	23.17	23.01	23.5	22.76	**22.87**	22.29	23.0
HSDPA Subtest-1	22.48	22.32	22.29	23.0	22.10	22.14	22.23	22.5
HSDPA Subtest-2	22.43	22.29	22.26	23.0	22.08	22.12	22.21	22.5
HSDPA Subtest-3	22.44	22.27	22.27	23.0	22.07	22.1	22.21	22.5
HSDPA Subtest-4	22.43	22.28	22.28	23.0	22.08	22.11	22.22	22.5
HSUPA Subtest-1	22.50	22.31	22.23	23.0	22.16	22.14	22.20	22.5
HSUPA Subtest-2	22.47	22.27	22.21	23.0	22.14	22.12	22.18	22.5
HSUPA Subtest-3	22.46	22.29	22.19	23.0	22.13	22.11	22.19	22.5
HSUPA Subtest-4	22.45	22.27	22.21	23.0	22.14	22.12	22.18	22.5
HSUPA Subtest-5	22.46	22.29	22.22	23.0	22.14	22.12	22.17	22.5

WCDMA - Average Power (dBm)								
Band	**WCDMA Band II(P4)**				**WCDMA Band IV(P4)**			
Channel	**9262**	**9400**	**9538**	**Tune-up power (dBm)**	**1312**	**1412**	**1513**	**Tune-up power (dBm)**
Frequency (MHz)	**1852.4**	**1880.0**	**1907.6**		**1712.4**	**1732.4**	**1752.6**	
RMC 12.2k	**20.09**	19.93	19.81	20.5	19.01	19.29	**19.54**	20.0
HSDPA Subtest-1	19.39	19.23	19.15	19.5	19.03	19.06	19.13	19.5
HSDPA Subtest-2	19.36	19.22	19.13	19.5	19.02	19.04	19.09	19.5
HSDPA Subtest-3	19.37	19.22	19.14	19.5	19.02	19.05	19.11	19.5
HSDPA Subtest-4	19.38	19.21	19.13	19.5	19.01	19.03	19.10	19.5
HSUPA Subtest-1	19.39	19.26	19.14	19.5	19.03	19.07	19.09	19.5
HSUPA Subtest-2	19.37	19.24	19.13	19.5	19.01	19.05	19.05	19.5
HSUPA Subtest-3	19.38	19.23	19.12	19.5	19.01	19.03	19.03	19.5
HSUPA Subtest-4	19.37	19.24	19.11	19.5	19.00	19.04	19.04	19.5
HSUPA Subtest-5	19.36	19.23	19.11	19.5	19.02	19.03	19.04	19.5

WCDMA - Average Power (dBm)								
Band	**WCDMA Band II (P2)**				**WCDMA Band IV(P2)**			
Channel	**9262**	**9400**	**9538**	**Tune-up power (dBm)**	**1312**	**1412**	**1513**	**Tune-up power (dBm)**
Frequency (MHz)	**1852.4**	**1880.0**	**1907.6**		**1712.4**	**1732.4**	**1752.6**	
RMC 12.2k	**19.11**	18.90	18.79	19.5	17.97	18.28	**18.53**	19.0
HSDPA Subtest-1	18.45	18.28	18.10	18.5	18.16	18.14	18.21	18.5
HSDPA Subtest-2	18.43	18.23	18.09	18.5	18.13	18.13	18.19	18.5
HSDPA Subtest-3	18.41	18.24	18.07	18.5	18.14	18.11	18.16	18.5
HSDPA Subtest-4	18.42	18.26	18.06	18.5	18.13	18.12	18.17	18.5
HSUPA Subtest-1	18.32	18.22	18.06	18.5	18.02	18.06	18.11	18.5
HSUPA Subtest-2	18.29	18.21	18.03	18.5	18.01	18.02	18.09	18.5
HSUPA Subtest-3	18.27	18.21	18.04	18.5	18.01	18.03	18.07	18.5
HSUPA Subtest-4	18.26	18.2	18.04	18.5	18.00	18.01	18.06	18.5
HSUPA Subtest-5	18.27	18.2	18.05	18.5	18.00	18.02	18.07	18.5

WCDMA - Average Power (dBm)								
Band	**WCDMA Band II (P3)**				**WCDMA Band IV(P3)**			
Channel	**9262**	**9400**	**9538**	**Tune-up power (dBm)**	**1312**	**1412**	**1513**	**Tune-up power (dBm)**
Frequency (MHz)	**1852.4**	**1880.0**	**1907.6**		**1712.4**	**1732.4**	**1752.6**	
RMC 12.2k	**21.14**	20.98	20.86	21.5	20.05	20.34	**20.59**	21.0
HSDPA Subtest-1	20.39	20.25	20.15	20.5	20.07	20.14	20.18	20.5
HSDPA Subtest-2	20.35	20.22	20.13	20.5	20.02	20.12	20.16	20.5
HSDPA Subtest-3	20.34	20.23	20.12	20.5	20.01	20.13	20.13	20.5
HSDPA Subtest-4	20.34	20.21	20.13	20.5	20.05	20.11	20.15	20.5
HSUPA Subtest-1	20.42	20.21	20.1	20.5	20.07	20.10	20.18	20.5
HSUPA Subtest-2	20.39	20.19	20.07	20.5	20.06	20.08	20.13	20.5
HSUPA Subtest-3	20.37	20.17	20.08	20.5	20.04	20.06	20.15	20.5
HSUPA Subtest-4	20.38	20.18	20.09	20.5	20.04	20.07	20.16	20.5
HSUPA Subtest-5	20.39	20.19	20.07	20.5	20.05	20.08	20.17	20.5

WCDMA - Average Power (dBm)								
Band	**WCDMA Band V(P1)**							
Channel	**4132**	**4183**	**4233**	**Tune-up power (dBm)**				
Frequency (MHz)	**826.4**	**836.4**	**846.6**					
RMC 12.2k	**23.40**	23.20	22.96	23.5				
HSDPA Subtest-1	22.48	22.3	22.05	22.5				
HSDPA Subtest-2	22.34	22.23	22.01	22.5				
HSDPA Subtest-3	22.21	22.18	21.87	22.5				
HSDPA Subtest-4	21.89	21.96	21.75	22.0				
HSUPA Subtest-1	22.48	22.29	22.03	22.5				
HSUPA Subtest-2	22.38	22.25	22.01	22.5				
HSUPA Subtest-3	22.34	22.18	21.95	22.5				
HSUPA Subtest-4	22.28	22.05	21.93	22.5				
HSUPA Subtest-5	22.18	22.03	21.85	22.5				

Remark:

1. per KDB 941225 D01 v03, The 12.2kbps RMC mode was selected for SAR testing(the primary mode).
2. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤1/4 dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode

LTE(P1)

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#0	23.84	PASS
Band2	1.4MHz	QPSK	18607	1RB#2	23.81	PASS
Band2	1.4MHz	QPSK	18607	1RB#5	23.84	PASS
Band2	1.4MHz	QPSK	18607	3RB#0	23.89	PASS
Band2	1.4MHz	QPSK	18607	3RB#1	23.90	PASS
Band2	1.4MHz	QPSK	18607	3RB#3	23.87	PASS
Band2	1.4MHz	QPSK	18607	6RB#0	22.93	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	23.78	PASS
Band2	1.4MHz	QPSK	18900	1RB#2	23.74	PASS
Band2	1.4MHz	QPSK	18900	1RB#5	23.75	PASS
Band2	1.4MHz	QPSK	18900	3RB#0	23.80	PASS
Band2	1.4MHz	QPSK	18900	3RB#1	23.83	PASS
Band2	1.4MHz	QPSK	18900	3RB#3	23.75	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	22.83	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	23.73	PASS
Band2	1.4MHz	QPSK	19193	1RB#2	23.72	PASS
Band2	1.4MHz	QPSK	19193	1RB#5	23.71	PASS
Band2	1.4MHz	QPSK	19193	3RB#0	23.83	PASS
Band2	1.4MHz	QPSK	19193	3RB#1	23.82	PASS
Band2	1.4MHz	QPSK	19193	3RB#3	23.78	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	22.88	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	22.78	PASS
Band2	1.4MHz	16QAM	18607	1RB#2	22.81	PASS
Band2	1.4MHz	16QAM	18607	1RB#5	22.75	PASS
Band2	1.4MHz	16QAM	18607	3RB#0	22.73	PASS
Band2	1.4MHz	16QAM	18607	3RB#1	22.71	PASS
Band2	1.4MHz	16QAM	18607	3RB#3	22.67	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	21.94	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	22.72	PASS
Band2	1.4MHz	16QAM	18900	1RB#2	22.75	PASS
Band2	1.4MHz	16QAM	18900	1RB#5	22.66	PASS
Band2	1.4MHz	16QAM	18900	3RB#0	22.61	PASS
Band2	1.4MHz	16QAM	18900	3RB#1	22.60	PASS

Band2	1.4MHz	16QAM	18900	3RB#3	22.52	PASS
Band2	1.4MHz	16QAM	18900	6RB#0	21.81	PASS
Band2	1.4MHz	16QAM	19193	1RB#0	22.71	PASS
Band2	1.4MHz	16QAM	19193	1RB#2	22.71	PASS
Band2	1.4MHz	16QAM	19193	1RB#5	22.63	PASS
Band2	1.4MHz	16QAM	19193	3RB#0	22.68	PASS
Band2	1.4MHz	16QAM	19193	3RB#1	22.70	PASS
Band2	1.4MHz	16QAM	19193	3RB#3	22.67	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	21.88	PASS
Band2	3MHz	QPSK	18615	1RB#0	24.00	PASS
Band2	3MHz	QPSK	18615	1RB#8	23.98	PASS
Band2	3MHz	QPSK	18615	1RB#14	24.03	PASS
Band2	3MHz	QPSK	18615	8RB#0	22.91	PASS
Band2	3MHz	QPSK	18615	8RB#4	22.90	PASS
Band2	3MHz	QPSK	18615	8RB#7	22.88	PASS
Band2	3MHz	QPSK	18615	15RB#0	22.91	PASS
Band2	3MHz	QPSK	18900	1RB#0	23.86	PASS
Band2	3MHz	QPSK	18900	1RB#8	23.84	PASS
Band2	3MHz	QPSK	18900	1RB#14	23.82	PASS
Band2	3MHz	QPSK	18900	8RB#0	22.84	PASS
Band2	3MHz	QPSK	18900	8RB#4	22.84	PASS
Band2	3MHz	QPSK	18900	8RB#7	22.75	PASS
Band2	3MHz	QPSK	18900	15RB#0	22.78	PASS
Band2	3MHz	QPSK	19185	1RB#0	23.80	PASS
Band2	3MHz	QPSK	19185	1RB#8	23.75	PASS
Band2	3MHz	QPSK	19185	1RB#14	23.74	PASS
Band2	3MHz	QPSK	19185	8RB#0	22.85	PASS
Band2	3MHz	QPSK	19185	8RB#4	22.86	PASS
Band2	3MHz	QPSK	19185	8RB#7	22.86	PASS
Band2	3MHz	QPSK	19185	15RB#0	22.89	PASS
Band2	3MHz	16QAM	18615	1RB#0	22.98	PASS
Band2	3MHz	16QAM	18615	1RB#8	22.95	PASS
Band2	3MHz	16QAM	18615	1RB#14	22.97	PASS
Band2	3MHz	16QAM	18615	8RB#0	21.97	PASS
Band2	3MHz	16QAM	18615	8RB#4	21.95	PASS
Band2	3MHz	16QAM	18615	8RB#7	21.93	PASS
Band2	3MHz	16QAM	18615	15RB#0	21.92	PASS

Band2	3MHz	16QAM	18900	1RB#0	22.77	PASS
Band2	3MHz	16QAM	18900	1RB#8	22.64	PASS
Band2	3MHz	16QAM	18900	1RB#14	22.63	PASS
Band2	3MHz	16QAM	18900	8RB#0	21.82	PASS
Band2	3MHz	16QAM	18900	8RB#4	21.81	PASS
Band2	3MHz	16QAM	18900	8RB#7	21.72	PASS
Band2	3MHz	16QAM	18900	15RB#0	21.70	PASS
Band2	3MHz	16QAM	19185	1RB#0	22.58	PASS
Band2	3MHz	16QAM	19185	1RB#8	22.60	PASS
Band2	3MHz	16QAM	19185	1RB#14	22.60	PASS
Band2	3MHz	16QAM	19185	8RB#0	21.88	PASS
Band2	3MHz	16QAM	19185	8RB#4	21.86	PASS
Band2	3MHz	16QAM	19185	8RB#7	21.86	PASS
Band2	3MHz	16QAM	19185	15RB#0	21.79	PASS
Band2	5MHz	QPSK	18625	1RB#0	23.78	PASS
Band2	5MHz	QPSK	18625	1RB#12	23.76	PASS
Band2	5MHz	QPSK	18625	1RB#24	23.73	PASS
Band2	5MHz	QPSK	18625	12RB#0	22.56	PASS
Band2	5MHz	QPSK	18625	12RB#6	22.54	PASS
Band2	5MHz	QPSK	18625	12RB#13	22.55	PASS
Band2	5MHz	QPSK	18625	25RB#0	22.55	PASS
Band2	5MHz	QPSK	18900	1RB#0	23.68	PASS
Band2	5MHz	QPSK	18900	1RB#12	23.60	PASS
Band2	5MHz	QPSK	18900	1RB#24	23.56	PASS
Band2	5MHz	QPSK	18900	12RB#0	22.50	PASS
Band2	5MHz	QPSK	18900	12RB#6	22.51	PASS
Band2	5MHz	QPSK	18900	12RB#13	22.38	PASS
Band2	5MHz	QPSK	18900	25RB#0	22.43	PASS
Band2	5MHz	QPSK	19175	1RB#0	23.61	PASS
Band2	5MHz	QPSK	19175	1RB#12	23.55	PASS
Band2	5MHz	QPSK	19175	1RB#24	23.58	PASS
Band2	5MHz	QPSK	19175	12RB#0	22.48	PASS
Band2	5MHz	QPSK	19175	12RB#6	22.45	PASS
Band2	5MHz	QPSK	19175	12RB#13	22.47	PASS
Band2	5MHz	QPSK	19175	25RB#0	22.50	PASS
Band2	5MHz	16QAM	18625	1RB#0	22.54	PASS
Band2	5MHz	16QAM	18625	1RB#12	22.54	PASS

Band2	5MHz	16QAM	18625	1RB#24	22.53	PASS
Band2	5MHz	16QAM	18625	12RB#0	21.53	PASS
Band2	5MHz	16QAM	18625	12RB#6	21.55	PASS
Band2	5MHz	16QAM	18625	12RB#13	21.54	PASS
Band2	5MHz	16QAM	18625	25RB#0	21.55	PASS
Band2	5MHz	16QAM	18900	1RB#0	22.49	PASS
Band2	5MHz	16QAM	18900	1RB#12	22.41	PASS
Band2	5MHz	16QAM	18900	1RB#24	22.35	PASS
Band2	5MHz	16QAM	18900	12RB#0	21.47	PASS
Band2	5MHz	16QAM	18900	12RB#6	21.48	PASS
Band2	5MHz	16QAM	18900	12RB#13	21.35	PASS
Band2	5MHz	16QAM	18900	25RB#0	21.45	PASS
Band2	5MHz	16QAM	19175	1RB#0	22.58	PASS
Band2	5MHz	16QAM	19175	1RB#12	22.52	PASS
Band2	5MHz	16QAM	19175	1RB#24	22.55	PASS
Band2	5MHz	16QAM	19175	12RB#0	21.49	PASS
Band2	5MHz	16QAM	19175	12RB#6	21.47	PASS
Band2	5MHz	16QAM	19175	12RB#13	21.49	PASS
Band2	5MHz	16QAM	19175	25RB#0	21.45	PASS
Band2	10MHz	QPSK	18650	1RB#0	23.62	PASS
Band2	10MHz	QPSK	18650	1RB#24	23.66	PASS
Band2	10MHz	QPSK	18650	1RB#49	23.59	PASS
Band2	10MHz	QPSK	18650	25RB#0	22.55	PASS
Band2	10MHz	QPSK	18650	25RB#12	22.57	PASS
Band2	10MHz	QPSK	18650	25RB#25	22.61	PASS
Band2	10MHz	QPSK	18650	50RB#0	22.60	PASS
Band2	10MHz	QPSK	18900	1RB#0	23.59	PASS
Band2	10MHz	QPSK	18900	1RB#24	23.53	PASS
Band2	10MHz	QPSK	18900	1RB#49	23.37	PASS
Band2	10MHz	QPSK	18900	25RB#0	22.53	PASS
Band2	10MHz	QPSK	18900	25RB#12	22.48	PASS
Band2	10MHz	QPSK	18900	25RB#25	22.46	PASS
Band2	10MHz	QPSK	18900	50RB#0	22.53	PASS
Band2	10MHz	QPSK	19150	1RB#0	23.41	PASS
Band2	10MHz	QPSK	19150	1RB#24	23.49	PASS
Band2	10MHz	QPSK	19150	1RB#49	23.38	PASS
Band2	10MHz	QPSK	19150	25RB#0	22.46	PASS

Band2	10MHz	QPSK	19150	25RB#12	22.48	PASS
Band2	10MHz	QPSK	19150	25RB#25	22.50	PASS
Band2	10MHz	QPSK	19150	50RB#0	22.55	PASS
Band2	10MHz	16QAM	18650	1RB#0	22.60	PASS
Band2	10MHz	16QAM	18650	1RB#24	22.63	PASS
Band2	10MHz	16QAM	18650	1RB#49	22.56	PASS
Band2	10MHz	16QAM	18650	25RB#0	21.50	PASS
Band2	10MHz	16QAM	18650	25RB#12	21.48	PASS
Band2	10MHz	16QAM	18650	25RB#25	21.58	PASS
Band2	10MHz	16QAM	18650	50RB#0	21.59	PASS
Band2	10MHz	16QAM	18900	1RB#0	22.42	PASS
Band2	10MHz	16QAM	18900	1RB#24	22.35	PASS
Band2	10MHz	16QAM	18900	1RB#49	22.22	PASS
Band2	10MHz	16QAM	18900	25RB#0	21.55	PASS
Band2	10MHz	16QAM	18900	25RB#12	21.51	PASS
Band2	10MHz	16QAM	18900	25RB#25	21.47	PASS
Band2	10MHz	16QAM	18900	50RB#0	21.49	PASS
Band2	10MHz	16QAM	19150	1RB#0	22.20	PASS
Band2	10MHz	16QAM	19150	1RB#24	22.25	PASS
Band2	10MHz	16QAM	19150	1RB#49	22.19	PASS
Band2	10MHz	16QAM	19150	25RB#0	21.51	PASS
Band2	10MHz	16QAM	19150	25RB#12	21.54	PASS
Band2	10MHz	16QAM	19150	25RB#25	21.52	PASS
Band2	10MHz	16QAM	19150	50RB#0	21.54	PASS
Band2	15MHz	QPSK	18675	1RB#0	23.61	PASS
Band2	15MHz	QPSK	18675	1RB#38	23.64	PASS
Band2	15MHz	QPSK	18675	1RB#74	23.57	PASS
Band2	15MHz	QPSK	18675	38RB#0	22.60	PASS
Band2	15MHz	QPSK	18675	38RB#18	22.60	PASS
Band2	15MHz	QPSK	18675	38RB#37	22.58	PASS
Band2	15MHz	QPSK	18675	75RB#0	22.63	PASS
Band2	15MHz	QPSK	18900	1RB#0	23.46	PASS
Band2	15MHz	QPSK	18900	1RB#38	23.40	PASS
Band2	15MHz	QPSK	18900	1RB#74	23.21	PASS
Band2	15MHz	QPSK	18900	38RB#0	22.61	PASS
Band2	15MHz	QPSK	18900	38RB#18	22.56	PASS
Band2	15MHz	QPSK	18900	38RB#37	22.42	PASS

Band2	15MHz	QPSK	18900	75RB#0	22.54	PASS
Band2	15MHz	QPSK	19125	1RB#0	23.37	PASS
Band2	15MHz	QPSK	19125	1RB#38	23.44	PASS
Band2	15MHz	QPSK	19125	1RB#74	23.37	PASS
Band2	15MHz	QPSK	19125	38RB#0	22.20	PASS
Band2	15MHz	QPSK	19125	38RB#18	22.27	PASS
Band2	15MHz	QPSK	19125	38RB#37	22.20	PASS
Band2	15MHz	QPSK	19125	75RB#0	22.53	PASS
Band2	15MHz	16QAM	18675	1RB#0	22.60	PASS
Band2	15MHz	16QAM	18675	1RB#38	22.60	PASS
Band2	15MHz	16QAM	18675	1RB#74	22.58	PASS
Band2	15MHz	16QAM	18675	38RB#0	22.62	PASS
Band2	15MHz	16QAM	18675	38RB#18	22.61	PASS
Band2	15MHz	16QAM	18675	38RB#37	22.57	PASS
Band2	15MHz	16QAM	18675	75RB#0	21.55	PASS
Band2	15MHz	16QAM	18900	1RB#0	22.59	PASS
Band2	15MHz	16QAM	18900	1RB#38	22.58	PASS
Band2	15MHz	16QAM	18900	1RB#74	22.42	PASS
Band2	15MHz	16QAM	18900	38RB#0	22.61	PASS
Band2	15MHz	16QAM	18900	38RB#18	22.56	PASS
Band2	15MHz	16QAM	18900	38RB#37	22.42	PASS
Band2	15MHz	16QAM	18900	75RB#0	21.50	PASS
Band2	15MHz	16QAM	19125	1RB#0	22.17	PASS
Band2	15MHz	16QAM	19125	1RB#38	22.25	PASS
Band2	15MHz	16QAM	19125	1RB#74	22.18	PASS
Band2	15MHz	16QAM	19125	38RB#0	22.22	PASS
Band2	15MHz	16QAM	19125	38RB#18	22.28	PASS
Band2	15MHz	16QAM	19125	38RB#37	22.18	PASS
Band2	15MHz	16QAM	19125	75RB#0	21.51	PASS
Band2	20MHz	QPSK	18700	1RB#0	23.65	PASS
Band2	20MHz	QPSK	18700	1RB#49	**24.05**	PASS
Band2	20MHz	QPSK	18700	1RB#99	23.61	PASS
Band2	20MHz	QPSK	18700	50RB#0	22.55	PASS
Band2	20MHz	QPSK	18700	50RB#25	22.54	PASS
Band2	20MHz	QPSK	18700	50RB#50	22.60	PASS
Band2	20MHz	QPSK	18700	100RB#0	22.57	PASS
Band2	20MHz	QPSK	18900	1RB#0	23.64	PASS

Band2	20MHz	QPSK	18900	1RB#49	23.63	PASS
Band2	20MHz	QPSK	18900	1RB#99	23.43	PASS
Band2	20MHz	QPSK	18900	50RB#0	22.62	PASS
Band2	20MHz	QPSK	18900	50RB#25	22.64	PASS
Band2	20MHz	QPSK	18900	50RB#50	22.59	PASS
Band2	20MHz	QPSK	18900	100RB#0	22.56	PASS
Band2	20MHz	QPSK	19100	1RB#0	23.35	PASS
Band2	20MHz	QPSK	19100	1RB#49	23.50	PASS
Band2	20MHz	QPSK	19100	1RB#99	23.41	PASS
Band2	20MHz	QPSK	19100	50RB#0	22.59	PASS
Band2	20MHz	QPSK	19100	50RB#25	22.63	PASS
Band2	20MHz	QPSK	19100	50RB#50	22.62	PASS
Band2	20MHz	QPSK	19100	100RB#0	22.57	PASS
Band2	20MHz	16QAM	18700	1RB#0	22.47	PASS
Band2	20MHz	16QAM	18700	1RB#49	22.54	PASS
Band2	20MHz	16QAM	18700	1RB#99	22.40	PASS
Band2	20MHz	16QAM	18700	50RB#0	21.46	PASS
Band2	20MHz	16QAM	18700	50RB#25	21.50	PASS
Band2	20MHz	16QAM	18700	50RB#50	21.56	PASS
Band2	20MHz	16QAM	18700	100RB#0	21.52	PASS
Band2	20MHz	16QAM	18900	1RB#0	22.46	PASS
Band2	20MHz	16QAM	18900	1RB#49	22.46	PASS
Band2	20MHz	16QAM	18900	1RB#99	22.25	PASS
Band2	20MHz	16QAM	18900	50RB#0	21.63	PASS
Band2	20MHz	16QAM	18900	50RB#25	21.62	PASS
Band2	20MHz	16QAM	18900	50RB#50	21.57	PASS
Band2	20MHz	16QAM	18900	100RB#0	21.56	PASS
Band2	20MHz	16QAM	19100	1RB#0	22.60	PASS
Band2	20MHz	16QAM	19100	1RB#49	22.75	PASS
Band2	20MHz	16QAM	19100	1RB#99	22.74	PASS
Band2	20MHz	16QAM	19100	50RB#0	21.63	PASS
Band2	20MHz	16QAM	19100	50RB#25	21.63	PASS
Band2	20MHz	16QAM	19100	50RB#50	21.62	PASS
Band2	20MHz	16QAM	19100	100RB#0	21.60	PASS

LTE(P4):

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#0	20.37	PASS
Band2	1.4MHz	QPSK	18607	1RB#2	20.37	PASS
Band2	1.4MHz	QPSK	18607	1RB#5	20.40	PASS
Band2	1.4MHz	QPSK	18607	3RB#0	20.42	PASS
Band2	1.4MHz	QPSK	18607	3RB#1	20.44	PASS
Band2	1.4MHz	QPSK	18607	3RB#3	20.41	PASS
Band2	1.4MHz	QPSK	18607	6RB#0	20.46	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	20.15	PASS
Band2	1.4MHz	QPSK	18900	1RB#2	20.21	PASS
Band2	1.4MHz	QPSK	18900	1RB#5	20.19	PASS
Band2	1.4MHz	QPSK	18900	3RB#0	20.24	PASS
Band2	1.4MHz	QPSK	18900	3RB#1	20.24	PASS
Band2	1.4MHz	QPSK	18900	3RB#3	20.12	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	20.28	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	20.01	PASS
Band2	1.4MHz	QPSK	19193	1RB#2	19.97	PASS
Band2	1.4MHz	QPSK	19193	1RB#5	19.99	PASS
Band2	1.4MHz	QPSK	19193	3RB#0	20.03	PASS
Band2	1.4MHz	QPSK	19193	3RB#1	20.01	PASS
Band2	1.4MHz	QPSK	19193	3RB#3	19.99	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	20.06	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	20.35	PASS
Band2	1.4MHz	16QAM	18607	1RB#2	20.36	PASS
Band2	1.4MHz	16QAM	18607	1RB#5	20.31	PASS
Band2	1.4MHz	16QAM	18607	3RB#0	20.25	PASS
Band2	1.4MHz	16QAM	18607	3RB#1	20.27	PASS
Band2	1.4MHz	16QAM	18607	3RB#3	20.23	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	20.48	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	20.17	PASS
Band2	1.4MHz	16QAM	18900	1RB#2	20.18	PASS
Band2	1.4MHz	16QAM	18900	1RB#5	20.14	PASS
Band2	1.4MHz	16QAM	18900	3RB#0	20.05	PASS
Band2	1.4MHz	16QAM	18900	3RB#1	20.02	PASS

Band2	1.4MHz	16QAM	18900	3RB#3	19.99	PASS
Band2	1.4MHz	16QAM	18900	6RB#0	20.25	PASS
Band2	1.4MHz	16QAM	19193	1RB#0	19.96	PASS
Band2	1.4MHz	16QAM	19193	1RB#2	19.99	PASS
Band2	1.4MHz	16QAM	19193	1RB#5	19.92	PASS
Band2	1.4MHz	16QAM	19193	3RB#0	19.82	PASS
Band2	1.4MHz	16QAM	19193	3RB#1	19.86	PASS
Band2	1.4MHz	16QAM	19193	3RB#3	19.80	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	20.07	PASS
Band2	3MHz	QPSK	18615	1RB#0	20.50	PASS
Band2	3MHz	QPSK	18615	1RB#8	20.47	PASS
Band2	3MHz	QPSK	18615	1RB#14	20.50	PASS
Band2	3MHz	QPSK	18615	8RB#0	20.48	PASS
Band2	3MHz	QPSK	18615	8RB#4	20.47	PASS
Band2	3MHz	QPSK	18615	8RB#7	20.46	PASS
Band2	3MHz	QPSK	18615	15RB#0	20.41	PASS
Band2	3MHz	QPSK	18900	1RB#0	20.22	PASS
Band2	3MHz	QPSK	18900	1RB#8	20.17	PASS
Band2	3MHz	QPSK	18900	1RB#14	20.23	PASS
Band2	3MHz	QPSK	18900	8RB#0	20.22	PASS
Band2	3MHz	QPSK	18900	8RB#4	20.21	PASS
Band2	3MHz	QPSK	18900	8RB#7	20.19	PASS
Band2	3MHz	QPSK	18900	15RB#0	20.15	PASS
Band2	3MHz	QPSK	19185	1RB#0	20.06	PASS
Band2	3MHz	QPSK	19185	1RB#8	20.01	PASS
Band2	3MHz	QPSK	19185	1RB#14	20.06	PASS
Band2	3MHz	QPSK	19185	8RB#0	19.97	PASS
Band2	3MHz	QPSK	19185	8RB#4	20.02	PASS
Band2	3MHz	QPSK	19185	8RB#7	20.07	PASS
Band2	3MHz	QPSK	19185	15RB#0	20.05	PASS
Band2	3MHz	16QAM	18615	1RB#0	20.45	PASS
Band2	3MHz	16QAM	18615	1RB#8	20.45	PASS
Band2	3MHz	16QAM	18615	1RB#14	20.52	PASS
Band2	3MHz	16QAM	18615	8RB#0	20.51	PASS
Band2	3MHz	16QAM	18615	8RB#4	20.51	PASS
Band2	3MHz	16QAM	18615	8RB#7	20.48	PASS
Band2	3MHz	16QAM	18615	15RB#0	20.49	PASS

Band2	3MHz	16QAM	18900	1RB#0	20.24	PASS
Band2	3MHz	16QAM	18900	1RB#8	20.19	PASS
Band2	3MHz	16QAM	18900	1RB#14	20.26	PASS
Band2	3MHz	16QAM	18900	8RB#0	20.30	PASS
Band2	3MHz	16QAM	18900	8RB#4	20.27	PASS
Band2	3MHz	16QAM	18900	8RB#7	20.20	PASS
Band2	3MHz	16QAM	18900	15RB#0	20.23	PASS
Band2	3MHz	16QAM	19185	1RB#0	19.95	PASS
Band2	3MHz	16QAM	19185	1RB#8	19.89	PASS
Band2	3MHz	16QAM	19185	1RB#14	19.89	PASS
Band2	3MHz	16QAM	19185	8RB#0	19.99	PASS
Band2	3MHz	16QAM	19185	8RB#4	19.99	PASS
Band2	3MHz	16QAM	19185	8RB#7	20.03	PASS
Band2	3MHz	16QAM	19185	15RB#0	19.98	PASS
Band2	5MHz	QPSK	18625	1RB#0	20.65	PASS
Band2	5MHz	QPSK	18625	1RB#12	20.64	PASS
Band2	5MHz	QPSK	18625	1RB#24	20.64	PASS
Band2	5MHz	QPSK	18625	12RB#0	20.53	PASS
Band2	5MHz	QPSK	18625	12RB#6	20.53	PASS
Band2	5MHz	QPSK	18625	12RB#13	20.49	PASS
Band2	5MHz	QPSK	18625	25RB#0	20.51	PASS
Band2	5MHz	QPSK	18900	1RB#0	20.27	PASS
Band2	5MHz	QPSK	18900	1RB#12	20.28	PASS
Band2	5MHz	QPSK	18900	1RB#24	20.31	PASS
Band2	5MHz	QPSK	18900	12RB#0	20.29	PASS
Band2	5MHz	QPSK	18900	12RB#6	20.27	PASS
Band2	5MHz	QPSK	18900	12RB#13	20.27	PASS
Band2	5MHz	QPSK	18900	25RB#0	20.27	PASS
Band2	5MHz	QPSK	19175	1RB#0	20.16	PASS
Band2	5MHz	QPSK	19175	1RB#12	20.12	PASS
Band2	5MHz	QPSK	19175	1RB#24	20.18	PASS
Band2	5MHz	QPSK	19175	12RB#0	20.08	PASS
Band2	5MHz	QPSK	19175	12RB#6	20.07	PASS
Band2	5MHz	QPSK	19175	12RB#13	20.11	PASS
Band2	5MHz	QPSK	19175	25RB#0	20.09	PASS
Band2	5MHz	16QAM	18625	1RB#0	20.49	PASS
Band2	5MHz	16QAM	18625	1RB#12	20.49	PASS

Band2	5MHz	16QAM	18625	1RB#24	20.45	PASS
Band2	5MHz	16QAM	18625	12RB#0	20.49	PASS
Band2	5MHz	16QAM	18625	12RB#6	20.52	PASS
Band2	5MHz	16QAM	18625	12RB#13	20.46	PASS
Band2	5MHz	16QAM	18625	25RB#0	20.53	PASS
Band2	5MHz	16QAM	18900	1RB#0	20.30	PASS
Band2	5MHz	16QAM	18900	1RB#12	20.35	PASS
Band2	5MHz	16QAM	18900	1RB#24	20.38	PASS
Band2	5MHz	16QAM	18900	12RB#0	20.27	PASS
Band2	5MHz	16QAM	18900	12RB#6	20.33	PASS
Band2	5MHz	16QAM	18900	12RB#13	20.29	PASS
Band2	5MHz	16QAM	18900	25RB#0	20.27	PASS
Band2	5MHz	16QAM	19175	1RB#0	20.05	PASS
Band2	5MHz	16QAM	19175	1RB#12	19.96	PASS
Band2	5MHz	16QAM	19175	1RB#24	20.05	PASS
Band2	5MHz	16QAM	19175	12RB#0	20.05	PASS
Band2	5MHz	16QAM	19175	12RB#6	20.05	PASS
Band2	5MHz	16QAM	19175	12RB#13	20.11	PASS
Band2	5MHz	16QAM	19175	25RB#0	20.12	PASS
Band2	10MHz	QPSK	18650	1RB#0	20.56	PASS
Band2	10MHz	QPSK	18650	1RB#24	20.59	PASS
Band2	10MHz	QPSK	18650	1RB#49	20.39	PASS
Band2	10MHz	QPSK	18650	25RB#0	20.55	PASS
Band2	10MHz	QPSK	18650	25RB#12	20.55	PASS
Band2	10MHz	QPSK	18650	25RB#25	20.60	PASS
Band2	10MHz	QPSK	18650	50RB#0	20.60	PASS
Band2	10MHz	QPSK	18900	1RB#0	20.29	PASS
Band2	10MHz	QPSK	18900	1RB#24	20.38	PASS
Band2	10MHz	QPSK	18900	1RB#49	20.36	PASS
Band2	10MHz	QPSK	18900	25RB#0	20.29	PASS
Band2	10MHz	QPSK	18900	25RB#12	20.28	PASS
Band2	10MHz	QPSK	18900	25RB#25	20.41	PASS
Band2	10MHz	QPSK	18900	50RB#0	20.34	PASS
Band2	10MHz	QPSK	19150	1RB#0	20.32	PASS
Band2	10MHz	QPSK	19150	1RB#24	20.21	PASS
Band2	10MHz	QPSK	19150	1RB#49	20.12	PASS
Band2	10MHz	QPSK	19150	25RB#0	20.24	PASS

Band2	10MHz	QPSK	19150	25RB#12	20.19	PASS
Band2	10MHz	QPSK	19150	25RB#25	20.29	PASS
Band2	10MHz	QPSK	19150	50RB#0	20.29	PASS
Band2	10MHz	16QAM	18650	1RB#0	20.53	PASS
Band2	10MHz	16QAM	18650	1RB#24	20.59	PASS
Band2	10MHz	16QAM	18650	1RB#49	20.40	PASS
Band2	10MHz	16QAM	18650	25RB#0	20.55	PASS
Band2	10MHz	16QAM	18650	25RB#12	20.53	PASS
Band2	10MHz	16QAM	18650	25RB#25	20.55	PASS
Band2	10MHz	16QAM	18650	50RB#0	20.56	PASS
Band2	10MHz	16QAM	18900	1RB#0	20.32	PASS
Band2	10MHz	16QAM	18900	1RB#24	20.33	PASS
Band2	10MHz	16QAM	18900	1RB#49	20.36	PASS
Band2	10MHz	16QAM	18900	25RB#0	20.30	PASS
Band2	10MHz	16QAM	18900	25RB#12	20.30	PASS
Band2	10MHz	16QAM	18900	25RB#25	20.41	PASS
Band2	10MHz	16QAM	18900	50RB#0	20.35	PASS
Band2	10MHz	16QAM	19150	1RB#0	20.13	PASS
Band2	10MHz	16QAM	19150	1RB#24	20.01	PASS
Band2	10MHz	16QAM	19150	1RB#49	19.98	PASS
Band2	10MHz	16QAM	19150	25RB#0	20.29	PASS
Band2	10MHz	16QAM	19150	25RB#12	20.28	PASS
Band2	10MHz	16QAM	19150	25RB#25	20.28	PASS
Band2	10MHz	16QAM	19150	50RB#0	20.29	PASS
Band2	15MHz	QPSK	18675	1RB#0	20.44	PASS
Band2	15MHz	QPSK	18675	1RB#38	20.46	PASS
Band2	15MHz	QPSK	18675	1RB#74	20.27	PASS
Band2	15MHz	QPSK	18675	38RB#0	20.55	PASS
Band2	15MHz	QPSK	18675	38RB#18	20.52	PASS
Band2	15MHz	QPSK	18675	38RB#37	20.32	PASS
Band2	15MHz	QPSK	18675	75RB#0	20.48	PASS
Band2	15MHz	QPSK	18900	1RB#0	20.20	PASS
Band2	15MHz	QPSK	18900	1RB#38	20.29	PASS
Band2	15MHz	QPSK	18900	1RB#74	20.37	PASS
Band2	15MHz	QPSK	18900	38RB#0	20.23	PASS
Band2	15MHz	QPSK	18900	38RB#18	20.31	PASS
Band2	15MHz	QPSK	18900	38RB#37	20.37	PASS

Band2	15MHz	QPSK	18900	75RB#0	20.36	PASS
Band2	15MHz	QPSK	19125	1RB#0	20.29	PASS
Band2	15MHz	QPSK	19125	1RB#38	20.09	PASS
Band2	15MHz	QPSK	19125	1RB#74	19.95	PASS
Band2	15MHz	QPSK	19125	38RB#0	20.47	PASS
Band2	15MHz	QPSK	19125	38RB#18	20.35	PASS
Band2	15MHz	QPSK	19125	38RB#37	20.15	PASS
Band2	15MHz	QPSK	19125	75RB#0	20.35	PASS
Band2	15MHz	16QAM	18675	1RB#0	20.53	PASS
Band2	15MHz	16QAM	18675	1RB#38	20.48	PASS
Band2	15MHz	16QAM	18675	1RB#74	20.29	PASS
Band2	15MHz	16QAM	18675	38RB#0	20.52	PASS
Band2	15MHz	16QAM	18675	38RB#18	20.52	PASS
Band2	15MHz	16QAM	18675	38RB#37	20.30	PASS
Band2	15MHz	16QAM	18675	75RB#0	20.44	PASS
Band2	15MHz	16QAM	18900	1RB#0	20.22	PASS
Band2	15MHz	16QAM	18900	1RB#38	20.34	PASS
Band2	15MHz	16QAM	18900	1RB#74	20.36	PASS
Band2	15MHz	16QAM	18900	38RB#0	20.22	PASS
Band2	15MHz	16QAM	18900	38RB#18	20.31	PASS
Band2	15MHz	16QAM	18900	38RB#37	20.38	PASS
Band2	15MHz	16QAM	18900	75RB#0	20.32	PASS
Band2	15MHz	16QAM	19125	1RB#0	20.50	PASS
Band2	15MHz	16QAM	19125	1RB#38	20.35	PASS
Band2	15MHz	16QAM	19125	1RB#74	20.17	PASS
Band2	15MHz	16QAM	19125	38RB#0	20.49	PASS
Band2	15MHz	16QAM	19125	38RB#18	20.36	PASS
Band2	15MHz	16QAM	19125	38RB#37	20.17	PASS
Band2	15MHz	16QAM	19125	75RB#0	20.37	PASS
Band2	20MHz	QPSK	18700	1RB#0	20.57	PASS
Band2	20MHz	QPSK	18700	1RB#49	20.52	PASS
Band2	20MHz	QPSK	18700	1RB#99	20.25	PASS
Band2	20MHz	QPSK	18700	50RB#0	20.47	PASS
Band2	20MHz	QPSK	18700	50RB#25	20.46	PASS
Band2	20MHz	QPSK	18700	50RB#50	20.37	PASS
Band2	20MHz	QPSK	18700	100RB#0	20.38	PASS
Band2	20MHz	QPSK	18900	1RB#0	20.22	PASS

Band2	20MHz	QPSK	18900	1RB#49	20.38	PASS
Band2	20MHz	QPSK	18900	1RB#99	20.38	PASS
Band2	20MHz	QPSK	18900	50RB#0	20.33	PASS
Band2	20MHz	QPSK	18900	50RB#25	20.38	PASS
Band2	20MHz	QPSK	18900	50RB#50	20.45	PASS
Band2	20MHz	QPSK	18900	100RB#0	20.39	PASS
Band2	20MHz	QPSK	19100	1RB#0	20.42	PASS
Band2	20MHz	QPSK	19100	1RB#49	20.27	PASS
Band2	20MHz	QPSK	19100	1RB#99	20.02	PASS
Band2	20MHz	QPSK	19100	50RB#0	**20.67**	PASS
Band2	20MHz	QPSK	19100	50RB#25	20.61	PASS
Band2	20MHz	QPSK	19100	50RB#50	20.34	PASS
Band2	20MHz	QPSK	19100	100RB#0	20.48	PASS
Band2	20MHz	16QAM	18700	1RB#0	20.47	PASS
Band2	20MHz	16QAM	18700	1RB#49	20.43	PASS
Band2	20MHz	16QAM	18700	1RB#99	20.10	PASS
Band2	20MHz	16QAM	18700	50RB#0	20.45	PASS
Band2	20MHz	16QAM	18700	50RB#25	20.46	PASS
Band2	20MHz	16QAM	18700	50RB#50	20.38	PASS
Band2	20MHz	16QAM	18700	100RB#0	20.42	PASS
Band2	20MHz	16QAM	18900	1RB#0	20.40	PASS
Band2	20MHz	16QAM	18900	1RB#49	20.52	PASS
Band2	20MHz	16QAM	18900	1RB#99	20.59	PASS
Band2	20MHz	16QAM	18900	50RB#0	20.35	PASS
Band2	20MHz	16QAM	18900	50RB#25	20.39	PASS
Band2	20MHz	16QAM	18900	50RB#50	20.50	PASS
Band2	20MHz	16QAM	18900	100RB#0	20.39	PASS
Band2	20MHz	16QAM	19100	1RB#0	20.24	PASS
Band2	20MHz	16QAM	19100	1RB#49	20.14	PASS
Band2	20MHz	16QAM	19100	1RB#99	19.87	PASS
Band2	20MHz	16QAM	19100	50RB#0	20.60	PASS
Band2	20MHz	16QAM	19100	50RB#25	20.61	PASS
Band2	20MHz	16QAM	19100	50RB#50	20.38	PASS
Band2	20MHz	16QAM	19100	100RB#0	20.44	PASS

LTE(P2):

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#0	19.66	PASS
Band2	1.4MHz	QPSK	18607	1RB#2	19.60	PASS
Band2	1.4MHz	QPSK	18607	1RB#5	19.62	PASS
Band2	1.4MHz	QPSK	18607	3RB#0	19.68	PASS
Band2	1.4MHz	QPSK	18607	3RB#1	19.67	PASS
Band2	1.4MHz	QPSK	18607	3RB#3	19.62	PASS
Band2	1.4MHz	QPSK	18607	6RB#0	19.67	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	19.61	PASS
Band2	1.4MHz	QPSK	18900	1RB#2	19.59	PASS
Band2	1.4MHz	QPSK	18900	1RB#5	19.56	PASS
Band2	1.4MHz	QPSK	18900	3RB#0	19.58	PASS
Band2	1.4MHz	QPSK	18900	3RB#1	19.57	PASS
Band2	1.4MHz	QPSK	18900	3RB#3	19.54	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	19.55	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	19.61	PASS
Band2	1.4MHz	QPSK	19193	1RB#2	19.57	PASS
Band2	1.4MHz	QPSK	19193	1RB#5	19.57	PASS
Band2	1.4MHz	QPSK	19193	3RB#0	19.61	PASS
Band2	1.4MHz	QPSK	19193	3RB#1	19.58	PASS
Band2	1.4MHz	QPSK	19193	3RB#3	19.57	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	19.61	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	19.55	PASS
Band2	1.4MHz	16QAM	18607	1RB#2	19.58	PASS
Band2	1.4MHz	16QAM	18607	1RB#5	19.52	PASS
Band2	1.4MHz	16QAM	18607	3RB#0	19.47	PASS
Band2	1.4MHz	16QAM	18607	3RB#1	19.46	PASS
Band2	1.4MHz	16QAM	18607	3RB#3	19.45	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	19.70	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	19.43	PASS
Band2	1.4MHz	16QAM	18900	1RB#2	19.46	PASS
Band2	1.4MHz	16QAM	18900	1RB#5	19.49	PASS
Band2	1.4MHz	16QAM	18900	3RB#0	19.41	PASS
Band2	1.4MHz	16QAM	18900	3RB#1	19.40	PASS
Band2	1.4MHz	16QAM	18900	3RB#3	19.36	PASS

Band2	1.4MHz	16QAM	18900	6RB#0	19.40	PASS
Band2	1.4MHz	16QAM	19193	1RB#0	19.39	PASS
Band2	1.4MHz	16QAM	19193	1RB#2	19.36	PASS
Band2	1.4MHz	16QAM	19193	1RB#5	19.34	PASS
Band2	1.4MHz	16QAM	19193	3RB#0	19.45	PASS
Band2	1.4MHz	16QAM	19193	3RB#1	19.45	PASS
Band2	1.4MHz	16QAM	19193	3RB#3	19.41	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	19.59	PASS
Band2	3MHz	QPSK	18615	1RB#0	19.67	PASS
Band2	3MHz	QPSK	18615	1RB#8	19.67	PASS
Band2	3MHz	QPSK	18615	1RB#14	19.67	PASS
Band2	3MHz	QPSK	18615	8RB#0	19.68	PASS
Band2	3MHz	QPSK	18615	8RB#4	19.66	PASS
Band2	3MHz	QPSK	18615	8RB#7	19.68	PASS
Band2	3MHz	QPSK	18615	15RB#0	19.69	PASS
Band2	3MHz	QPSK	18900	1RB#0	19.55	PASS
Band2	3MHz	QPSK	18900	1RB#8	19.54	PASS
Band2	3MHz	QPSK	18900	1RB#14	19.48	PASS
Band2	3MHz	QPSK	18900	8RB#0	19.58	PASS
Band2	3MHz	QPSK	18900	8RB#4	19.58	PASS
Band2	3MHz	QPSK	18900	8RB#7	19.52	PASS
Band2	3MHz	QPSK	18900	15RB#0	19.50	PASS
Band2	3MHz	QPSK	19185	1RB#0	19.63	PASS
Band2	3MHz	QPSK	19185	1RB#8	19.63	PASS
Band2	3MHz	QPSK	19185	1RB#14	19.59	PASS
Band2	3MHz	QPSK	19185	8RB#0	19.56	PASS
Band2	3MHz	QPSK	19185	8RB#4	19.58	PASS
Band2	3MHz	QPSK	19185	8RB#7	19.59	PASS
Band2	3MHz	QPSK	19185	15RB#0	19.57	PASS
Band2	3MHz	16QAM	18615	1RB#0	19.70	PASS
Band2	3MHz	16QAM	18615	1RB#8	19.66	PASS
Band2	3MHz	16QAM	18615	1RB#14	19.67	PASS
Band2	3MHz	16QAM	18615	8RB#0	19.72	PASS
Band2	3MHz	16QAM	18615	8RB#4	19.69	PASS
Band2	3MHz	16QAM	18615	8RB#7	19.68	PASS
Band2	3MHz	16QAM	18615	15RB#0	19.69	PASS
Band2	3MHz	16QAM	18900	1RB#0	19.60	PASS

Band2	3MHz	16QAM	18900	1RB#8	19.53	PASS
Band2	3MHz	16QAM	18900	1RB#14	19.55	PASS
Band2	3MHz	16QAM	18900	8RB#0	19.62	PASS
Band2	3MHz	16QAM	18900	8RB#4	19.64	PASS
Band2	3MHz	16QAM	18900	8RB#7	19.53	PASS
Band2	3MHz	16QAM	18900	15RB#0	19.54	PASS
Band2	3MHz	16QAM	19185	1RB#0	19.52	PASS
Band2	3MHz	16QAM	19185	1RB#8	19.46	PASS
Band2	3MHz	16QAM	19185	1RB#14	19.46	PASS
Band2	3MHz	16QAM	19185	8RB#0	19.56	PASS
Band2	3MHz	16QAM	19185	8RB#4	19.57	PASS
Band2	3MHz	16QAM	19185	8RB#7	19.59	PASS
Band2	3MHz	16QAM	19185	15RB#0	19.55	PASS
Band2	5MHz	QPSK	18625	1RB#0	19.80	PASS
Band2	5MHz	QPSK	18625	1RB#12	19.81	PASS
Band2	5MHz	QPSK	18625	1RB#24	19.85	PASS
Band2	5MHz	QPSK	18625	12RB#0	19.74	PASS
Band2	5MHz	QPSK	18625	12RB#6	19.73	PASS
Band2	5MHz	QPSK	18625	12RB#13	19.68	PASS
Band2	5MHz	QPSK	18625	25RB#0	19.69	PASS
Band2	5MHz	QPSK	18900	1RB#0	19.66	PASS
Band2	5MHz	QPSK	18900	1RB#12	19.58	PASS
Band2	5MHz	QPSK	18900	1RB#24	19.57	PASS
Band2	5MHz	QPSK	18900	12RB#0	19.60	PASS
Band2	5MHz	QPSK	18900	12RB#6	19.59	PASS
Band2	5MHz	QPSK	18900	12RB#13	19.52	PASS
Band2	5MHz	QPSK	18900	25RB#0	19.59	PASS
Band2	5MHz	QPSK	19175	1RB#0	19.68	PASS
Band2	5MHz	QPSK	19175	1RB#12	19.68	PASS
Band2	5MHz	QPSK	19175	1RB#24	19.72	PASS
Band2	5MHz	QPSK	19175	12RB#0	19.57	PASS
Band2	5MHz	QPSK	19175	12RB#6	19.59	PASS
Band2	5MHz	QPSK	19175	12RB#13	19.67	PASS
Band2	5MHz	QPSK	19175	25RB#0	19.63	PASS
Band2	5MHz	16QAM	18625	1RB#0	19.68	PASS
Band2	5MHz	16QAM	18625	1RB#12	19.63	PASS
Band2	5MHz	16QAM	18625	1RB#24	19.69	PASS

Band2	5MHz	16QAM	18625	12RB#0	19.66	PASS
Band2	5MHz	16QAM	18625	12RB#6	19.67	PASS
Band2	5MHz	16QAM	18625	12RB#13	19.68	PASS
Band2	5MHz	16QAM	18625	25RB#0	19.72	PASS
Band2	5MHz	16QAM	18900	1RB#0	19.70	PASS
Band2	5MHz	16QAM	18900	1RB#12	19.67	PASS
Band2	5MHz	16QAM	18900	1RB#24	19.64	PASS
Band2	5MHz	16QAM	18900	12RB#0	19.66	PASS
Band2	5MHz	16QAM	18900	12RB#6	19.66	PASS
Band2	5MHz	16QAM	18900	12RB#13	19.57	PASS
Band2	5MHz	16QAM	18900	25RB#0	19.54	PASS
Band2	5MHz	16QAM	19175	1RB#0	19.57	PASS
Band2	5MHz	16QAM	19175	1RB#12	19.53	PASS
Band2	5MHz	16QAM	19175	1RB#24	19.55	PASS
Band2	5MHz	16QAM	19175	12RB#0	19.63	PASS
Band2	5MHz	16QAM	19175	12RB#6	19.63	PASS
Band2	5MHz	16QAM	19175	12RB#13	19.67	PASS
Band2	5MHz	16QAM	19175	25RB#0	19.66	PASS
Band2	10MHz	QPSK	18650	1RB#0	19.73	PASS
Band2	10MHz	QPSK	18650	1RB#24	19.77	PASS
Band2	10MHz	QPSK	18650	1RB#49	19.68	PASS
Band2	10MHz	QPSK	18650	25RB#0	19.66	PASS
Band2	10MHz	QPSK	18650	25RB#12	19.66	PASS
Band2	10MHz	QPSK	18650	25RB#25	19.76	PASS
Band2	10MHz	QPSK	18650	50RB#0	19.73	PASS
Band2	10MHz	QPSK	18900	1RB#0	19.69	PASS
Band2	10MHz	QPSK	18900	1RB#24	19.64	PASS
Band2	10MHz	QPSK	18900	1RB#49	19.52	PASS
Band2	10MHz	QPSK	18900	25RB#0	19.64	PASS
Band2	10MHz	QPSK	18900	25RB#12	19.63	PASS
Band2	10MHz	QPSK	18900	25RB#25	19.59	PASS
Band2	10MHz	QPSK	18900	50RB#0	19.64	PASS
Band2	10MHz	QPSK	19150	1RB#0	19.62	PASS
Band2	10MHz	QPSK	19150	1RB#24	19.63	PASS
Band2	10MHz	QPSK	19150	1RB#49	19.60	PASS
Band2	10MHz	QPSK	19150	25RB#0	19.63	PASS
Band2	10MHz	QPSK	19150	25RB#12	19.64	PASS

Band2	10MHz	QPSK	19150	25RB#25	19.71	PASS
Band2	10MHz	QPSK	19150	50RB#0	19.72	PASS
Band2	10MHz	16QAM	18650	1RB#0	19.72	PASS
Band2	10MHz	16QAM	18650	1RB#24	19.81	PASS
Band2	10MHz	16QAM	18650	1RB#49	19.69	PASS
Band2	10MHz	16QAM	18650	25RB#0	19.66	PASS
Band2	10MHz	16QAM	18650	25RB#12	19.66	PASS
Band2	10MHz	16QAM	18650	25RB#25	19.75	PASS
Band2	10MHz	16QAM	18650	50RB#0	19.72	PASS
Band2	10MHz	16QAM	18900	1RB#0	19.52	PASS
Band2	10MHz	16QAM	18900	1RB#24	19.50	PASS
Band2	10MHz	16QAM	18900	1RB#49	19.32	PASS
Band2	10MHz	16QAM	18900	25RB#0	19.68	PASS
Band2	10MHz	16QAM	18900	25RB#12	19.66	PASS
Band2	10MHz	16QAM	18900	25RB#25	19.63	PASS
Band2	10MHz	16QAM	18900	50RB#0	19.64	PASS
Band2	10MHz	16QAM	19150	1RB#0	19.36	PASS
Band2	10MHz	16QAM	19150	1RB#24	19.39	PASS
Band2	10MHz	16QAM	19150	1RB#49	19.34	PASS
Band2	10MHz	16QAM	19150	25RB#0	19.67	PASS
Band2	10MHz	16QAM	19150	25RB#12	19.71	PASS
Band2	10MHz	16QAM	19150	25RB#25	19.78	PASS
Band2	10MHz	16QAM	19150	50RB#0	19.71	PASS
Band2	15MHz	QPSK	18675	1RB#0	19.65	PASS
Band2	15MHz	QPSK	18675	1RB#38	19.67	PASS
Band2	15MHz	QPSK	18675	1RB#74	19.68	PASS
Band2	15MHz	QPSK	18675	38RB#0	19.66	PASS
Band2	15MHz	QPSK	18675	38RB#18	19.70	PASS
Band2	15MHz	QPSK	18675	38RB#37	19.66	PASS
Band2	15MHz	QPSK	18675	75RB#0	19.72	PASS
Band2	15MHz	QPSK	18900	1RB#0	19.56	PASS
Band2	15MHz	QPSK	18900	1RB#38	19.51	PASS
Band2	15MHz	QPSK	18900	1RB#74	19.35	PASS
Band2	15MHz	QPSK	18900	38RB#0	19.73	PASS
Band2	15MHz	QPSK	18900	38RB#18	19.65	PASS
Band2	15MHz	QPSK	18900	38RB#37	19.52	PASS
Band2	15MHz	QPSK	18900	75RB#0	19.60	PASS

Band2	15MHz	QPSK	19125	1RB#0	19.57	PASS
Band2	15MHz	QPSK	19125	1RB#38	19.64	PASS
Band2	15MHz	QPSK	19125	1RB#74	19.54	PASS
Band2	15MHz	QPSK	19125	38RB#0	19.32	PASS
Band2	15MHz	QPSK	19125	38RB#18	19.44	PASS
Band2	15MHz	QPSK	19125	38RB#37	19.30	PASS
Band2	15MHz	QPSK	19125	75RB#0	19.72	PASS
Band2	15MHz	16QAM	18675	1RB#0	19.69	PASS
Band2	15MHz	16QAM	18675	1RB#38	19.74	PASS
Band2	15MHz	16QAM	18675	1RB#74	19.67	PASS
Band2	15MHz	16QAM	18675	38RB#0	19.68	PASS
Band2	15MHz	16QAM	18675	38RB#18	19.70	PASS
Band2	15MHz	16QAM	18675	38RB#37	19.65	PASS
Band2	15MHz	16QAM	18675	75RB#0	19.69	PASS
Band2	15MHz	16QAM	18900	1RB#0	19.69	PASS
Band2	15MHz	16QAM	18900	1RB#38	19.69	PASS
Band2	15MHz	16QAM	18900	1RB#74	19.50	PASS
Band2	15MHz	16QAM	18900	38RB#0	19.68	PASS
Band2	15MHz	16QAM	18900	38RB#18	19.63	PASS
Band2	15MHz	16QAM	18900	38RB#37	19.50	PASS
Band2	15MHz	16QAM	18900	75RB#0	19.64	PASS
Band2	15MHz	16QAM	19125	1RB#0	19.32	PASS
Band2	15MHz	16QAM	19125	1RB#38	19.43	PASS
Band2	15MHz	16QAM	19125	1RB#74	19.29	PASS
Band2	15MHz	16QAM	19125	38RB#0	19.34	PASS
Band2	15MHz	16QAM	19125	38RB#18	19.43	PASS
Band2	15MHz	16QAM	19125	38RB#37	19.31	PASS
Band2	15MHz	16QAM	19125	75RB#0	19.69	PASS
Band2	20MHz	QPSK	18700	1RB#0	19.68	PASS
Band2	20MHz	QPSK	18700	1RB#49	19.75	PASS
Band2	20MHz	QPSK	18700	1RB#99	19.65	PASS
Band2	20MHz	QPSK	18700	50RB#0	19.62	PASS
Band2	20MHz	QPSK	18700	50RB#25	19.62	PASS
Band2	20MHz	QPSK	18700	50RB#50	19.73	PASS
Band2	20MHz	QPSK	18700	100RB#0	19.67	PASS
Band2	20MHz	QPSK	18900	1RB#0	19.67	PASS
Band2	20MHz	QPSK	18900	1RB#49	19.59	PASS

Band2	20MHz	QPSK	18900	1RB#99	19.42	PASS
Band2	20MHz	QPSK	18900	50RB#0	19.76	PASS
Band2	20MHz	QPSK	18900	50RB#25	19.74	PASS
Band2	20MHz	QPSK	18900	50RB#50	19.64	PASS
Band2	20MHz	QPSK	18900	100RB#0	19.68	PASS
Band2	20MHz	QPSK	19100	1RB#0	19.46	PASS
Band2	20MHz	QPSK	19100	1RB#49	19.62	PASS
Band2	20MHz	QPSK	19100	1RB#99	19.52	PASS
Band2	20MHz	QPSK	19100	50RB#0	19.77	PASS
Band2	20MHz	QPSK	19100	50RB#25	19.77	PASS
Band2	20MHz	QPSK	19100	50RB#50	19.76	PASS
Band2	20MHz	QPSK	19100	100RB#0	19.74	PASS
Band2	20MHz	16QAM	18700	1RB#0	19.56	PASS
Band2	20MHz	16QAM	18700	1RB#49	19.66	PASS
Band2	20MHz	16QAM	18700	1RB#99	19.56	PASS
Band2	20MHz	16QAM	18700	50RB#0	19.61	PASS
Band2	20MHz	16QAM	18700	50RB#25	19.62	PASS
Band2	20MHz	16QAM	18700	50RB#50	19.71	PASS
Band2	20MHz	16QAM	18700	100RB#0	19.66	PASS
Band2	20MHz	16QAM	18900	1RB#0	**19.86**	PASS
Band2	20MHz	16QAM	18900	1RB#49	19.75	PASS
Band2	20MHz	16QAM	18900	1RB#99	19.65	PASS
Band2	20MHz	16QAM	18900	50RB#0	19.77	PASS
Band2	20MHz	16QAM	18900	50RB#25	19.78	PASS
Band2	20MHz	16QAM	18900	50RB#50	19.64	PASS
Band2	20MHz	16QAM	18900	100RB#0	19.65	PASS
Band2	20MHz	16QAM	19100	1RB#0	19.27	PASS
Band2	20MHz	16QAM	19100	1RB#49	19.42	PASS
Band2	20MHz	16QAM	19100	1RB#99	19.31	PASS
Band2	20MHz	16QAM	19100	50RB#0	19.80	PASS
Band2	20MHz	16QAM	19100	50RB#25	19.83	PASS
Band2	20MHz	16QAM	19100	50RB#50	19.77	PASS
Band2	20MHz	16QAM	19100	100RB#0	19.75	PASS