

TEST REPORT

Reference No...... : WTX21X05049596W
FCC ID : 2AHAF-MDT661
Applicant : TOPICON HK LIMITED
Address..... : Room 2314-2316, Tower C, Huangdu Plaza, Yitian Road, Futian District,
Shenzhen, China
Product Name : Rugged Phone
Test Model : MDT661
FCC Part 2.1093
Standards : ANSI / IEEE C95.1 : 2005+A1:2010
ANSI / IEEE C95.3 : 2002(R2008)
IEEE 1528 :2013
Date of Receipt sample : May. 25, 2021
Date of Test..... : May. 25, 2021 to Sep. 02, 2021
Date of Issue : Sep. 03, 2021
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 compiler and approver.

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1. General Information

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant: TOPICON HK LIMITED
 Address of applicant: Room 2314-2316, Tower C, Huangdu Plaza, Yitian Road,
 Futian District, Shenzhen, China

Manufacturer: TOPICON HK LIMITED
 Address of manufacturer: Room 2314-2316, Tower C, Huangdu Plaza, Yitian Road,
 Futian District, Shenzhen, China

General Description of EUT:	
Product Name:	Rugged Phone
Brand Name:	/
Model No.:	MDT661
Adding Model(s):	MDT660, MDT662, OBC661, PN6043, M620, M620A, MDT615D, X6, Paceblade SDT 121
Rated Voltage:	DC3.8V
Battery:	4000mAh
Software Version:	mdt661_1.3.5
Hardware Version:	MDT661_V1.0
<p><i>Note: The test data is gathered from a production sample provided by the manufacturer. The appearance of others models listed in the report is different from main-test model MDT661, but the circuit and the electronic construction do not change, declared by the manufacturer.</i></p>	

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:	GSM850: 32.95dBm, GSM1900: 29.33dBm EDGE850: 25.53dBm, EDGE1900: 25.17dBm
Type of Modulation:	GMSK, 8PSK
Type of Antenna:	Integral Antenna
Antenna Gain:	GSM850: 1.0dBi; GSM1900: 1.0dBi
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 5: 2110-2155 MHz WCDMA Band 5: 869~894MHz
RF Output Power:	WCDMA Band 2: 22.96dBm, WCDMA Band 4: 22.45dBm, WCDMA Band 5: 23.10dBm
Type of Modulation:	BPSK
Antenna Type:	Integral Antenna
Antenna Gain:	WCDMA Band 2: 1.0dBi, WCDMA Band 4: 1.0dBi, WCDMA Band 5: 1.0dBi
4G	
Support Networks:	FDD-LTE, TDD-LTE
Support Band:	FDD-LTE Band 2, 4, 5, 7, 12, 17, TDD-LTE Band 38, 40, 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 7 Tx: 2500-2570MHz, FDD-LTE Band 12 Tx: 699-716MHz, FDD-LTE Band 17 Tx: 704-716MHz TDD-LTE Band 38 Tx: 2570-2620MHz

	FDD-LTE Band 40: Tx: 2305-2315MHz FDD-LTE Band 40: Tx: 2350-2365MHz FDD-LTE Band 41: Tx: 2555-2655MHz
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 7: Rx: 2620-2690MHz, FDD-LTE Band 12: Rx: 729-746MHz, FDD-LTE Band 17: Rx: 734-746MHz TDD-LTE Band 38: Rx: 2570-2620MHz FDD-LTE Band 40: Rx: 2305-2315MHz FDD-LTE Band 40: Rx: 2350-2365MHz FDD-LTE Band 41: Rx: 2555-2655MHz
RF Output Power:	FDD-LTE Band 2: 24.09dBm FDD-LTE Band 4: 23.48dBm FDD-LTE Band 5: 23.70dBm FDD-LTE Band 7: 23.20dBm FDD-LTE Band 12: 23.65dBm FDD-LTE Band 17: 23.59dBm TDD-LTE Band 38: 24.03dBm TDD-LTE Band 40(2305-2315): 23.86dBm TDD-LTE Band 40(2350-2360): 23.95dBm TDD-LTE Band 41: 23.35dBm
Type of Modulation:	QPSK, 16QAM
Antenna Type:	Integral Antenna
Antenna Gain:	FDD-LTE Band 2: 1.0dBi, FDD-LTE Band 4: 1.0dBi, FDD-LTE Band 5: 1.0dBi, FDD-LTE Band 7: 1.0dBi, FDD-LTE Band 12: 1.0dBi, FDD-LTE Band 17: 1.0dBi TDD-LTE Band 38: 1.0dBi, TDD-LTE Band 40: 1.0dBi, TDD-LTE Band 40: 1.0dBi, TDD-LTE Band 41: 1.0dBi
WIFI(2.4G)	
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:	17.01dBm (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:	0.99dBi
Bluetooth	
Bluetooth Version:	V4.1
Frequency Range:	2402-2480MHz
RF Output Power:	8.83dBm (Conducted)
Data Rate:	1Mbps, 2Mbps, 3Mbps
Modulation:	GFSK, Pi/4 QDPSK, 8DPSK
Quantity of Channels:	79/40
Channel Separation:	1MHz/2MHz
Antenna Type:	Integral Antenna
Antenna Gain:	0.99dBi
NFC	
Frequency Range:	13.56MHz
Max. Field Strength:	55.94dBuV/m (at 3m)
Antenna Type:	Integral Antenna

1.2 Test Standards

The following report is accordance with FCC 47 CFR Part 2.1093, ANSI/IEEE C95.1-2005, ANSI / IEEE C95.3 :2002, 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 (10mm 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	0.311	0.352	0.514	1.6
WCDMA	0.654	0.538	0.750	1.6
LTE	0.472	0.491	0.735	1.6
WLAN 2.4G	0.229	0.191	0.191	1.6
Simultaneous Transmission	0.985	0.703	0.915	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 ANSI/IEEE C95.1-2005, 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 techniques 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:

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

SAR is expressed in units of Watts per kilogram (W/kg)

SAR measurement can be either related to the temperature elevation in tissue by

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

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

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

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

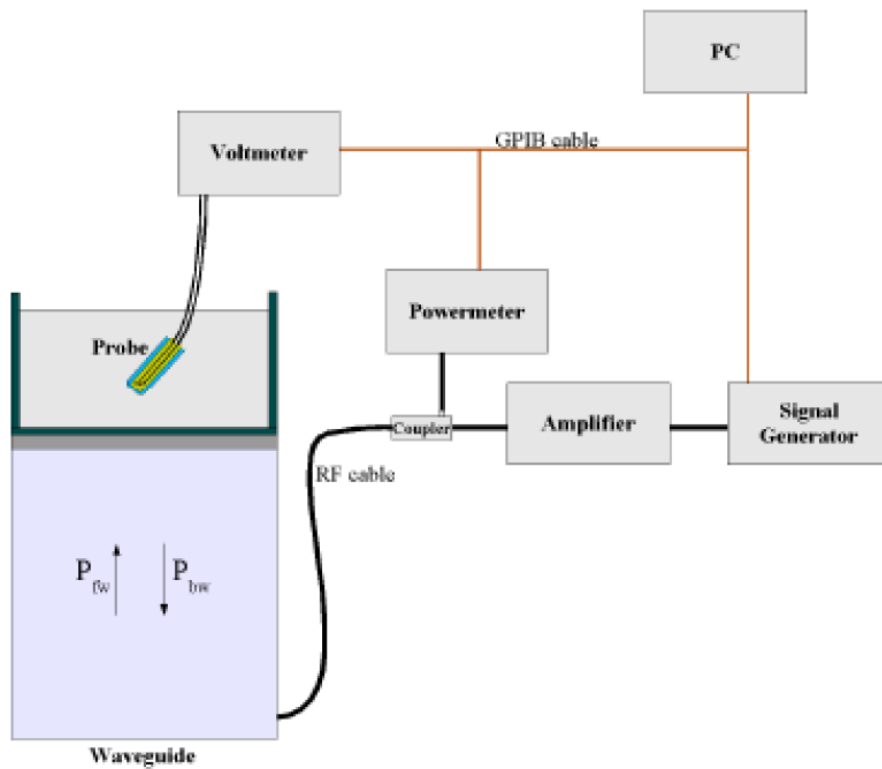
For the measurements the Specific Dosimetric E-Field Probe SSE2 SN 45/15 EPGO280 with following specifications is used

- 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

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- 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 surface normal line: less 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.



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

Where :

P_{fw} = Forward Power

P_{bw} = Backward Power

a and b = Waveguide dimensions

δ = 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.

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

$$CF(N)=SAR(N)/V_{lin}(N) \quad (N=1,2,3)$$

The linearised output voltage $V_{lin}(N)$ is obtained from the displayed output voltage $V(N)$ using

$$V_{lin}(N)=V(N)*(1+V(N)/DCP(N)) \quad (N=1,2,3)$$

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.

Where:

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

Δt = exposure time (30 seconds),

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

ΔT = temperature increase due to RF exposure.

SAR is proportional to $\Delta T / \Delta t$, 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.

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

Where:

σ = simulated tissue conductivity,

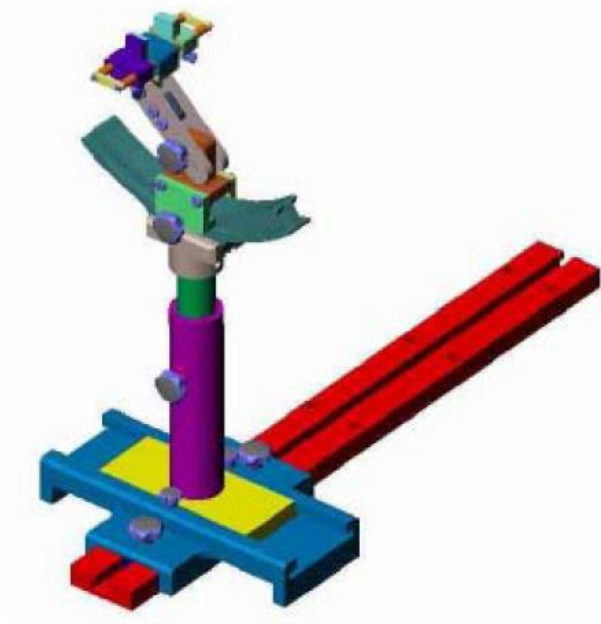
ρ = Tissue density (1.25 g/cm³ for brain tissue)

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

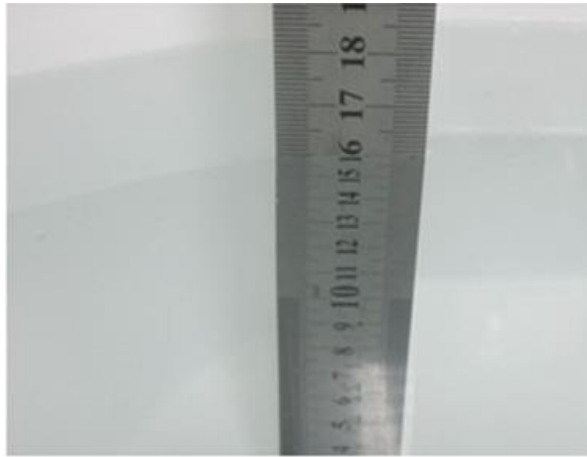
4.6 Test Equipment List

Description	Manufacturer	Model	Serial Number	Cal. Date	Due. Date
E-Field Probe	MVG	SSE5	SN 09/13 EP168	2020-05-22	2022-05-21
E-Field Probe	MVG	SSE2	SN 45/15 EPGO280	2020-07-03	2022-07-02
835MHz Dipole	MVG	SID835	SN 47/12 DIP 0G835-204	2020-03-11	2022-03-10
1800MHz Dipole	MVG	SID1800	SN 47/12 DIP 1G800-206	2020-03-11	2022-03-10
1900MHz Dipole	MVG	SID1900	SN 47/12 DIP 1G900-207	2020-03-11	2022-03-10
2450MHz Dipole	MVG	SID2450	SN 13/15 DIP 2G450-364	2020-03-11	2022-03-10
2600MHz Dipole	MVG	SID2600	SN 13/15 DIP 2G600-365	2020-03-11	2022-03-10
5 GHz Waveguide	MVG	SWG5500	SN 49/16 WGA45	2020-07-03	2022-07-02
Dielectric Probe	SATIMO	SCLMP	SN 47/12 OCPG49	2020-03-11	2022-03-10
SAM Phantom	SATIMO	SAM	SN/ 47/12 SAM95	N/A	N/A
Multi Meter	Keithley	Keithley 2000	4006367	2021-03-27	2022-03-26
Power meter	Keithley	3500	JC-2017-09-001	2021-03-27	2022-03-26
Power meter	Keithley	3500	JC-2017-09-001	2021-03-27	2022-03-26
Power Sensor	Agilent	11636B	JC-2017-10-002	2021-03-27	2022-03-26
Signal Generator	Rohde & Schwarz	SMR20	100047	2021-03-27	2022-03-26
Universal Tester	Rohde & Schwarz	CMU200	112315	2021-03-27	2022-03-26
Communications Tester	Rohde & Schwarz	CMW500	148650	2021-03-27	2022-03-26
Network Analyzer	HP	8753C	SEMT-1064	2021-03-27	2022-03-26
Directional Couplers	Agilent	778D	20160	2021-03-27	2022-03-26

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

The Composition of Tissue Simulating Liquid

Frequency (MHz)	Water (%)	Salt (%)	Sugar (%)	HEC (%)	Preventol (%)	DGBE (%)
Head/Body						
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

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)
150	0.76	52.3
300	0.87	45.3
450	0.87	43.5
750	0.89	41.9
835	0.90	41.5
900	0.97	41.5
915	0.98	41.5
1450	1.20	40.5
1610	1.29	40.3
1750	1.37	40.1
1800-2000	1.40	40.0
2450	1.80	39.2
3000	2.40	38.5
5200	4.66	36.0
5800	5.27	35.3

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. (°C)	Conductivity			Permittivity			Limit (%)	Date
		Reading (σ)	Target (σ)	Delta (%)	Reading (ϵ_r)	Target (ϵ_r)	Delta (%)		
750	21.2	0.86	0.89	-3.37	41.32	41.90	-1.38	±5	2021-08-27
835	21.2	0.87	0.90	-3.33	41.11	41.50	-0.94	±5	2021-08-27
1750	21.3	1.37	1.37	0.00	39.02	40.1	-2.69	±5	2021-08-27
1900	21.3	1.38	1.40	-1.43	38.56	40.00	-3.60	±5	2021-08-27
2450	21.3	1.74	1.80	-3.33	38.15	39.20	-2.68	±5	2021-08-23
2600	21.3	1.93	1.96	-1.53	38.63	39.0	-0.95	±5	2021-08-31

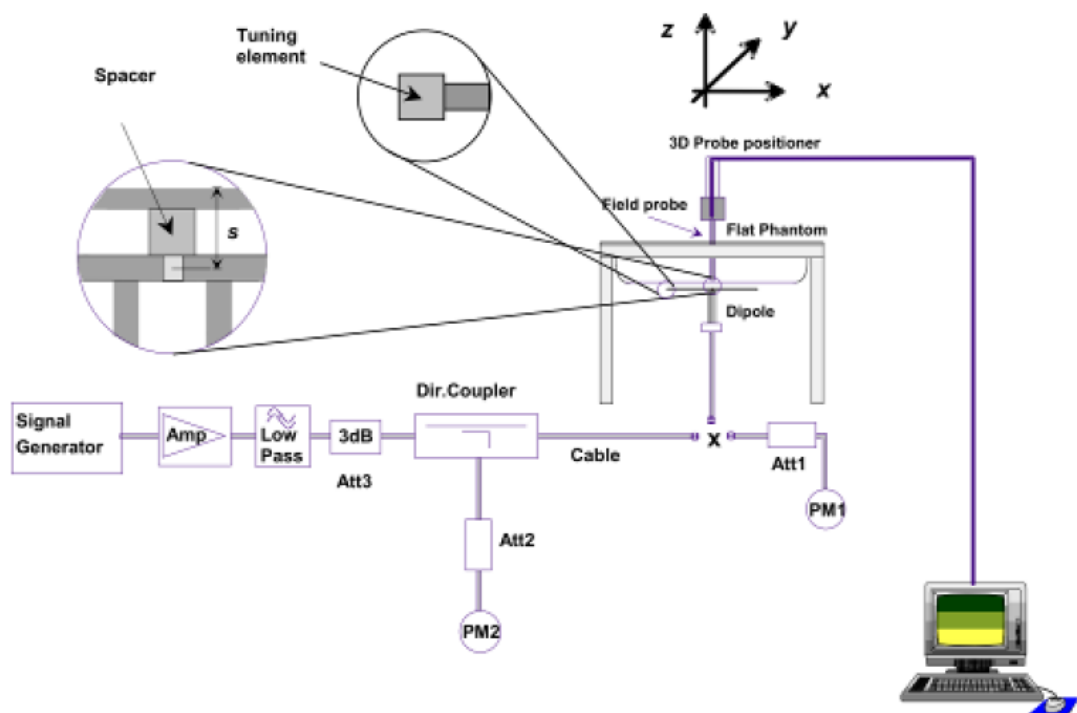
6. SAR Measurement Evaluation

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 750 MHz, 835MHz ,1750MHz, 1800MHz, 1900MHz 2450MHz,2600MHz. 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 MHz	Targeted SAR _{1g} (W/kg)	Measured SAR _{1g} (W/kg)	Normalized SAR _{1g} (W/kg)	Tolerance (%)	Date
Head/Body					
750	8.40	2.16	8.64	2.86	2021-08-27
835	9.65	2.41	9.64	-0.10	2021-08-27
1800	38.49	9.61	38.44	-0.13	2021-08-27
1900	39.59	9.91	39.64	0.13	2021-08-27
2450	53.76	13.45	53.8	0.07	2021-08-23
2600	55.07	13.67	54.68	-0.71	2021-08-31

Remark: Referring to IEEE 1528-2013, Section 8.2, The system check shall be performed at a test frequency that is within $\pm 10\%$ 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.

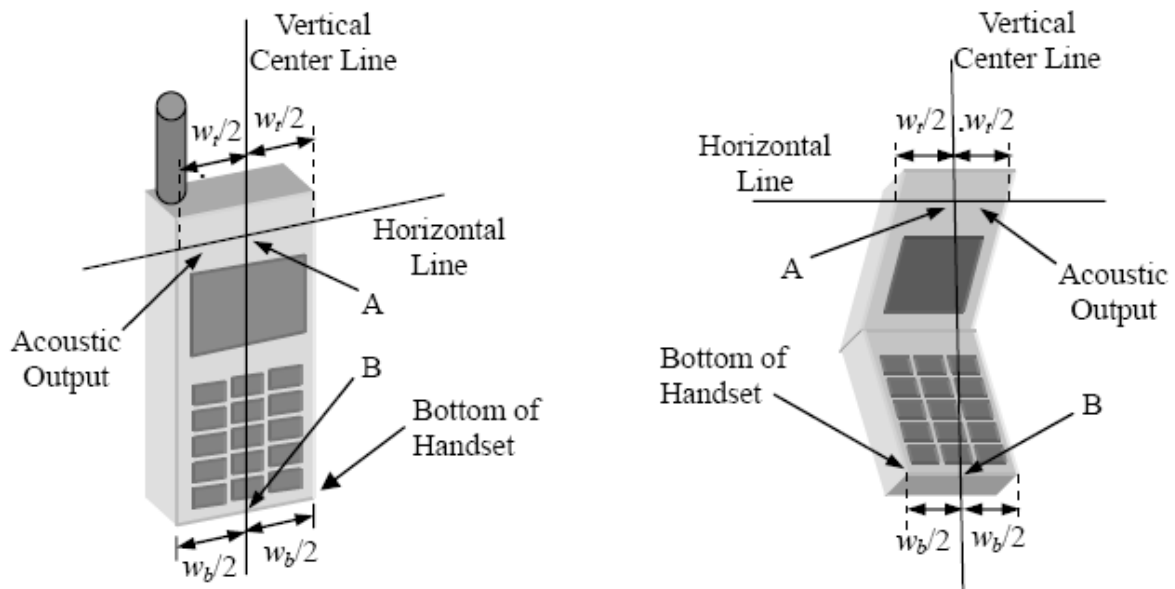


Illustration for Handset Vertical and Horizontal Reference Lines

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).

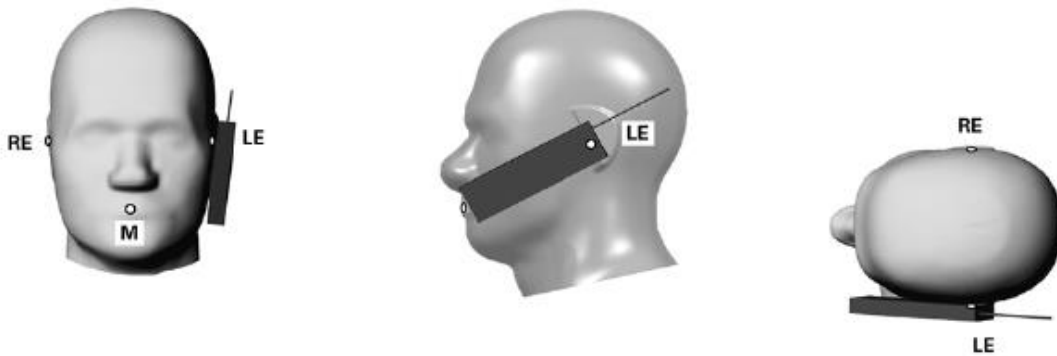


Illustration for Cheek Position

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).

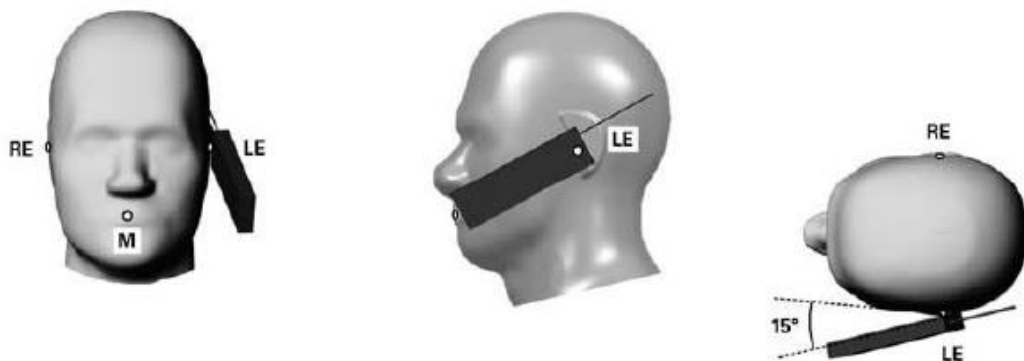


Illustration for Tilted Position

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.

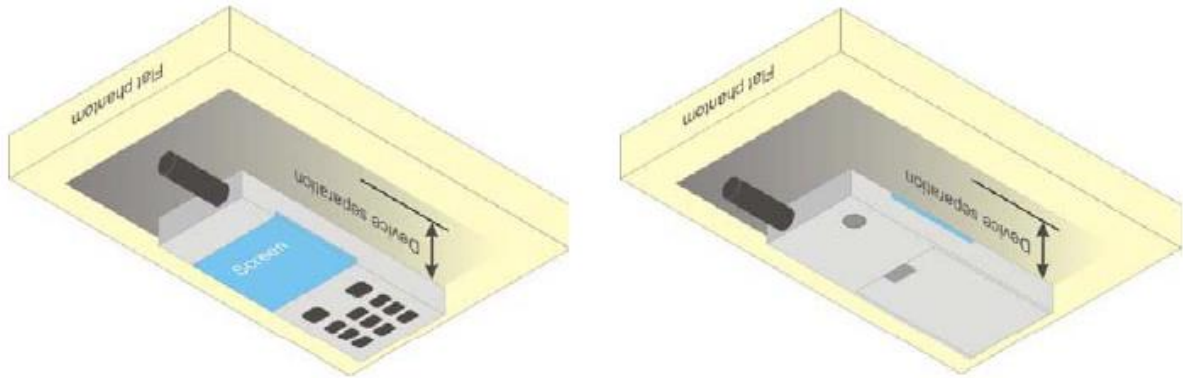
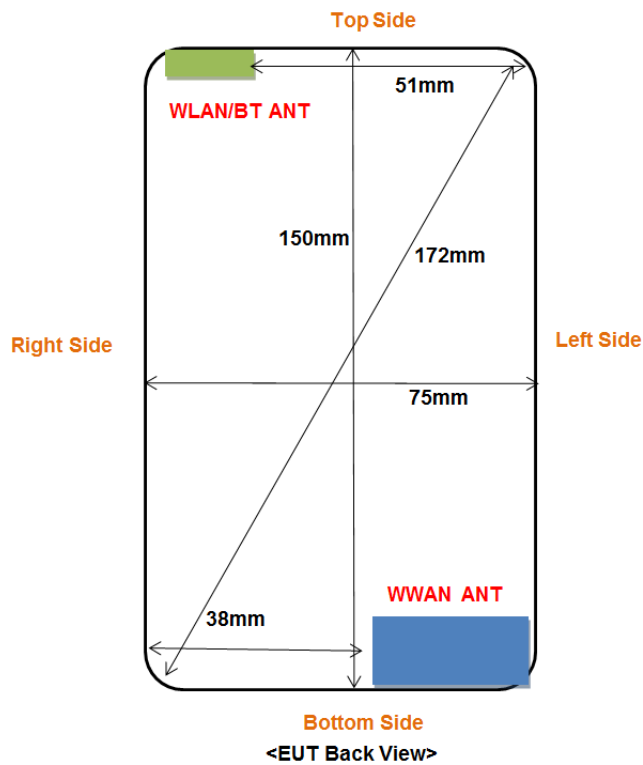


Illustration for Body Position

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
WWAN	<25	<25	<25	38	148	<25
WLAN	<25	<25	51	<25	<25	150

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
WWAN	Yes	Yes	Yes	Yes
WLAN	Yes	Yes	Yes	Yes

Body SAR tests, Test distance: 10mm						
Antennas	Front	Back	Left Side	Right Side	Top Side	Bottom Side
WWAN	Yes	Yes	Yes	No	No	Yes
WLAN	Yes	Yes	No	Yes	Yes	No

Body-worn SAR tests, Test distance: 10mm		
Antennas	Front	Back
WWAN	Yes	Yes
WLAN	Yes	Yes

Remark:

- Referring to KDB 941225 D06, when the overall device length and width are $\geq 9\text{cm} \times 5\text{cm}$, the 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.
- 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 $> 1.2 \text{ W/kg}$

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 from 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

GSM - Burst Average Power (dBm)								
Band	GSM850			Tune-up power (dBm)	PCS1900			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	32.84	32.52	32.72	33.0	29.23	29.07	29.33	29.50
GPRS (1 slot)	32.75	32.87	32.95	33.0	29.26	29.14	29.36	29.50
GPRS (2 slots)	31.97	32.12	32.23	32.5	28.45	28.15	28.34	28.5
GPRS (3 slots)	30.01	30.14	30.29	30.5	26.61	26.11	26.31	27.0
GPRS (4 slots)	28.9	29.03	29.15	29.5	25.51	24.99	25.17	26.0
EDGE (1 slot)	25.39	25.53	25.42	26.0	25.17	24.35	24.34	25.5
EDGE (2 slots)	24.32	24.55	24.52	25.0	24.24	23.42	23.5	24.0
EDGE (3 slots)	22.5	22.76	22.58	23.0	22.52	21.81	21.87	23.0
EDGE (4 slots)	21.51	21.61	21.65	22.0	21.54	20.96	20.92	22.0

GSM - Source-Based Time-Average Power (dBm)								
Band	GSM850			Tune-up power (dBm)	PCS1900			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	23.84	23.52	23.72	24.0	20.23	20.07	20.33	20.5
GPRS (1 slot)	23.75	23.87	23.95	24.0	20.26	20.14	20.36	20.5
GPRS (2 slots)	25.97	26.12	26.23	26.5	22.45	22.15	22.34	22.5
GPRS (3 slots)	25.76	25.89	26.04	26.5	22.36	21.86	22.06	22.5
GPRS (4 slots)	25.90	26.03	26.15	26.5	22.51	21.99	22.17	23.0
EDGE (1 slot)	16.39	16.53	16.42	17.0	16.17	15.35	15.34	16.5
EDGE (2 slots)	18.32	18.55	18.52	19.0	18.24	17.42	17.50	18.5
EDGE (3 slots)	18.25	18.51	18.33	19.0	18.27	17.56	17.62	18.5
EDGE (4 slots)	18.51	18.61	18.65	19.0	18.54	17.96	17.92	19.0

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 (2TX slots) for GSM850 and GPRS (4TX slots) for GSM1900 due to its highest source-based time-average power.

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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.
5. The DUT do not support Hotspot function.

WCDMA - Average Power (dBm)								
Band	WCDMA Band II				WCDMA Band V			
Channel	9262	9400	9538	Tune-up	4132	4183	4233	Tune-up
Frequency (MHz)	1852.4	1880.0	1907.6	power (dBm)	826.4	836.4	846.6	power (dBm)
RMC 12.2k	22.96	22.90	22.80	23.0	23.05	23.10	23.09	23.5
HSDPA Subtest-1	21.94	22.01	21.86	22.5	22.07	22.16	22.16	22.5
HSDPA Subtest-2	21.92	21.96	21.85	22.0	22.05	22.13	22.13	22.5
HSDPA Subtest-3	21.91	21.97	21.84	22.0	22.04	22.14	22.14	22.5
HSDPA Subtest-4	21.90	21.98	21.84	22.0	22.05	22.14	22.14	22.5
HSUPA Subtest-1	21.78	21.80	21.88	22.0	22.06	22.10	22.10	22.5
HSUPA Subtest-2	21.75	21.78	21.85	22.0	22.04	22.08	22.09	22.5
HSUPA Subtest-3	21.76	21.79	21.86	22.0	22.04	22.09	22.08	22.5
HSUPA Subtest-4	21.75	21.76	21.87	22.0	22.05	22.07	22.07	22.5
HSUPA Subtest-5	21.75	21.78	21.85	22.0	22.04	22.08	22.08	22.5

WCDMA - Average Power (dBm)								
Band	WCDMA Band IV							
Channel	1312	1412	1513	Tune-up				
Frequency (MHz)	1712.4	1732.4	1752.6	power (dBm)				
RMC 12.2k	22.39	22.43	22.45	22.5				
HSDPA Subtest-1	21.46	21.50	21.56	22.0				
HSDPA Subtest-2	21.45	21.48	21.53	22.0				
HSDPA Subtest-3	21.43	21.49	21.54	22.0				
HSDPA Subtest-4	21.44	21.48	21.54	22.0				
HSUPA Subtest-1	21.46	21.52	21.44	22.0				
HSUPA Subtest-2	21.43	21.49	21.42	21.5				
HSUPA Subtest-3	21.44	21.46	21.43	21.5				
HSUPA Subtest-4	21.44	21.47	21.43	21.5				
HSUPA Subtest-5	21.43	21.47	21.44	21.5				

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 $\leq 1/4$ 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.

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band2	1.4MHz	QPSK	18607	1RB#0	23.71	PASS
Band2	1.4MHz	QPSK	18607	1RB#2	23.87	PASS
Band2	1.4MHz	QPSK	18607	1RB#5	23.74	PASS
Band2	1.4MHz	QPSK	18607	3RB#0	23.90	PASS
Band2	1.4MHz	QPSK	18607	3RB#1	23.90	PASS
Band2	1.4MHz	QPSK	18607	3RB#3	23.85	PASS
Band2	1.4MHz	QPSK	18607	6RB#0	22.80	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	23.74	PASS
Band2	1.4MHz	QPSK	18900	1RB#2	23.85	PASS
Band2	1.4MHz	QPSK	18900	1RB#5	23.72	PASS
Band2	1.4MHz	QPSK	18900	3RB#0	23.85	PASS
Band2	1.4MHz	QPSK	18900	3RB#1	23.84	PASS
Band2	1.4MHz	QPSK	18900	3RB#3	23.85	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	22.75	PASS
Band2	1.4MHz	QPSK	19193	1RB#0	23.89	PASS
Band2	1.4MHz	QPSK	19193	1RB#2	24.03	PASS
Band2	1.4MHz	QPSK	19193	1RB#5	23.86	PASS
Band2	1.4MHz	QPSK	19193	3RB#0	23.34	PASS
Band2	1.4MHz	QPSK	19193	3RB#1	23.36	PASS
Band2	1.4MHz	QPSK	19193	3RB#3	23.34	PASS
Band2	1.4MHz	QPSK	19193	6RB#0	22.35	PASS
Band2	1.4MHz	16QAM	18607	1RB#0	22.62	PASS
Band2	1.4MHz	16QAM	18607	1RB#2	22.78	PASS
Band2	1.4MHz	16QAM	18607	1RB#5	22.63	PASS
Band2	1.4MHz	16QAM	18607	3RB#0	22.72	PASS
Band2	1.4MHz	16QAM	18607	3RB#1	22.71	PASS
Band2	1.4MHz	16QAM	18607	3RB#3	22.69	PASS
Band2	1.4MHz	16QAM	18607	6RB#0	21.77	PASS
Band2	1.4MHz	16QAM	18900	1RB#0	22.54	PASS
Band2	1.4MHz	16QAM	18900	1RB#2	22.69	PASS
Band2	1.4MHz	16QAM	18900	1RB#5	22.56	PASS
Band2	1.4MHz	16QAM	18900	3RB#0	22.70	PASS
Band2	1.4MHz	16QAM	18900	3RB#1	22.60	PASS
Band2	1.4MHz	16QAM	18900	3RB#3	22.66	PASS
Band2	1.4MHz	16QAM	18900	6RB#0	21.75	PASS

Band2	1.4MHz	16QAM	19193	1RB#0	22.54	PASS
Band2	1.4MHz	16QAM	19193	1RB#2	22.80	PASS
Band2	1.4MHz	16QAM	19193	1RB#5	22.26	PASS
Band2	1.4MHz	16QAM	19193	3RB#0	22.14	PASS
Band2	1.4MHz	16QAM	19193	3RB#1	22.12	PASS
Band2	1.4MHz	16QAM	19193	3RB#3	22.11	PASS
Band2	1.4MHz	16QAM	19193	6RB#0	21.29	PASS
Band2	3MHz	QPSK	18615	1RB#0	23.80	PASS
Band2	3MHz	QPSK	18615	1RB#8	23.80	PASS
Band2	3MHz	QPSK	18615	1RB#14	23.22	PASS
Band2	3MHz	QPSK	18615	8RB#0	22.25	PASS
Band2	3MHz	QPSK	18615	8RB#4	22.28	PASS
Band2	3MHz	QPSK	18615	8RB#7	22.24	PASS
Band2	3MHz	QPSK	18615	15RB#0	22.23	PASS
Band2	3MHz	QPSK	18900	1RB#0	23.32	PASS
Band2	3MHz	QPSK	18900	1RB#8	23.36	PASS
Band2	3MHz	QPSK	18900	1RB#14	23.31	PASS
Band2	3MHz	QPSK	18900	8RB#0	22.28	PASS
Band2	3MHz	QPSK	18900	8RB#4	22.27	PASS
Band2	3MHz	QPSK	18900	8RB#7	22.18	PASS
Band2	3MHz	QPSK	18900	15RB#0	22.26	PASS
Band2	3MHz	QPSK	19185	1RB#0	23.36	PASS
Band2	3MHz	QPSK	19185	1RB#8	23.37	PASS
Band2	3MHz	QPSK	19185	1RB#14	23.36	PASS
Band2	3MHz	QPSK	19185	8RB#0	22.38	PASS
Band2	3MHz	QPSK	19185	8RB#4	22.41	PASS
Band2	3MHz	QPSK	19185	8RB#7	22.36	PASS
Band2	3MHz	QPSK	19185	15RB#0	22.33	PASS
Band2	3MHz	16QAM	18615	1RB#0	22.83	PASS
Band2	3MHz	16QAM	18615	1RB#8	22.28	PASS
Band2	3MHz	16QAM	18615	1RB#14	22.32	PASS
Band2	3MHz	16QAM	18615	8RB#0	21.35	PASS
Band2	3MHz	16QAM	18615	8RB#4	21.37	PASS
Band2	3MHz	16QAM	18615	8RB#7	21.33	PASS
Band2	3MHz	16QAM	18615	15RB#0	21.35	PASS
Band2	3MHz	16QAM	18900	1RB#0	22.10	PASS
Band2	3MHz	16QAM	18900	1RB#8	22.07	PASS

Band2	3MHz	16QAM	18900	1RB#14	22.07	PASS
Band2	3MHz	16QAM	18900	8RB#0	21.30	PASS
Band2	3MHz	16QAM	18900	8RB#4	21.28	PASS
Band2	3MHz	16QAM	18900	8RB#7	21.23	PASS
Band2	3MHz	16QAM	18900	15RB#0	21.23	PASS
Band2	3MHz	16QAM	19185	1RB#0	21.99	PASS
Band2	3MHz	16QAM	19185	1RB#8	22.06	PASS
Band2	3MHz	16QAM	19185	1RB#14	22.06	PASS
Band2	3MHz	16QAM	19185	8RB#0	21.38	PASS
Band2	3MHz	16QAM	19185	8RB#4	21.35	PASS
Band2	3MHz	16QAM	19185	8RB#7	21.35	PASS
Band2	3MHz	16QAM	19185	15RB#0	21.29	PASS
Band2	5MHz	QPSK	18625	1RB#0	23.80	PASS
Band2	5MHz	QPSK	18625	1RB#12	23.41	PASS
Band2	5MHz	QPSK	18625	1RB#24	23.24	PASS
Band2	5MHz	QPSK	18625	12RB#0	22.30	PASS
Band2	5MHz	QPSK	18625	12RB#6	22.28	PASS
Band2	5MHz	QPSK	18625	12RB#13	22.37	PASS
Band2	5MHz	QPSK	18625	25RB#0	22.33	PASS
Band2	5MHz	QPSK	18900	1RB#0	23.20	PASS
Band2	5MHz	QPSK	18900	1RB#12	23.32	PASS
Band2	5MHz	QPSK	18900	1RB#24	23.18	PASS
Band2	5MHz	QPSK	18900	12RB#0	22.34	PASS
Band2	5MHz	QPSK	18900	12RB#6	22.29	PASS
Band2	5MHz	QPSK	18900	12RB#13	22.27	PASS
Band2	5MHz	QPSK	18900	25RB#0	22.34	PASS
Band2	5MHz	QPSK	19175	1RB#0	23.31	PASS
Band2	5MHz	QPSK	19175	1RB#12	23.53	PASS
Band2	5MHz	QPSK	19175	1RB#24	23.41	PASS
Band2	5MHz	QPSK	19175	12RB#0	22.44	PASS
Band2	5MHz	QPSK	19175	12RB#6	22.41	PASS
Band2	5MHz	QPSK	19175	12RB#13	22.30	PASS
Band2	5MHz	QPSK	19175	25RB#0	22.37	PASS
Band2	5MHz	16QAM	18625	1RB#0	22.70	PASS
Band2	5MHz	16QAM	18625	1RB#12	22.32	PASS
Band2	5MHz	16QAM	18625	1RB#24	22.22	PASS
Band2	5MHz	16QAM	18625	12RB#0	21.35	PASS

Band2	5MHz	16QAM	18625	12RB#6	21.37	PASS
Band2	5MHz	16QAM	18625	12RB#13	21.40	PASS
Band2	5MHz	16QAM	18625	25RB#0	21.49	PASS
Band2	5MHz	16QAM	18900	1RB#0	22.26	PASS
Band2	5MHz	16QAM	18900	1RB#12	22.36	PASS
Band2	5MHz	16QAM	18900	1RB#24	22.24	PASS
Band2	5MHz	16QAM	18900	12RB#0	21.48	PASS
Band2	5MHz	16QAM	18900	12RB#6	21.48	PASS
Band2	5MHz	16QAM	18900	12RB#13	21.42	PASS
Band2	5MHz	16QAM	18900	25RB#0	21.42	PASS
Band2	5MHz	16QAM	19175	1RB#0	22.16	PASS
Band2	5MHz	16QAM	19175	1RB#12	22.27	PASS
Band2	5MHz	16QAM	19175	1RB#24	22.16	PASS
Band2	5MHz	16QAM	19175	12RB#0	21.50	PASS
Band2	5MHz	16QAM	19175	12RB#6	21.49	PASS
Band2	5MHz	16QAM	19175	12RB#13	21.35	PASS
Band2	5MHz	16QAM	19175	25RB#0	21.48	PASS
Band2	10MHz	QPSK	18650	1RB#0	23.35	PASS
Band2	10MHz	QPSK	18650	1RB#24	23.35	PASS
Band2	10MHz	QPSK	18650	1RB#49	23.29	PASS
Band2	10MHz	QPSK	18650	25RB#0	22.34	PASS
Band2	10MHz	QPSK	18650	25RB#12	22.34	PASS
Band2	10MHz	QPSK	18650	25RB#25	22.43	PASS
Band2	10MHz	QPSK	18650	50RB#0	22.43	PASS
Band2	10MHz	QPSK	18900	1RB#0	23.34	PASS
Band2	10MHz	QPSK	18900	1RB#24	23.49	PASS
Band2	10MHz	QPSK	18900	1RB#49	23.35	PASS
Band2	10MHz	QPSK	18900	25RB#0	22.37	PASS
Band2	10MHz	QPSK	18900	25RB#12	22.40	PASS
Band2	10MHz	QPSK	18900	25RB#25	22.28	PASS
Band2	10MHz	QPSK	18900	50RB#0	22.33	PASS
Band2	10MHz	QPSK	19150	1RB#0	23.35	PASS
Band2	10MHz	QPSK	19150	1RB#24	23.42	PASS
Band2	10MHz	QPSK	19150	1RB#49	23.43	PASS
Band2	10MHz	QPSK	19150	25RB#0	22.44	PASS
Band2	10MHz	QPSK	19150	25RB#12	22.43	PASS
Band2	10MHz	QPSK	19150	25RB#25	22.24	PASS

Band2	10MHz	QPSK	19150	50RB#0	22.34	PASS
Band2	10MHz	16QAM	18650	1RB#0	22.38	PASS
Band2	10MHz	16QAM	18650	1RB#24	22.41	PASS
Band2	10MHz	16QAM	18650	1RB#49	22.39	PASS
Band2	10MHz	16QAM	18650	25RB#0	21.41	PASS
Band2	10MHz	16QAM	18650	25RB#12	21.45	PASS
Band2	10MHz	16QAM	18650	25RB#25	21.56	PASS
Band2	10MHz	16QAM	18650	50RB#0	21.51	PASS
Band2	10MHz	16QAM	18900	1RB#0	22.10	PASS
Band2	10MHz	16QAM	18900	1RB#24	22.20	PASS
Band2	10MHz	16QAM	18900	1RB#49	22.13	PASS
Band2	10MHz	16QAM	18900	25RB#0	21.56	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	21.53	PASS
Band2	10MHz	16QAM	19150	1RB#0	22.08	PASS
Band2	10MHz	16QAM	19150	1RB#24	22.21	PASS
Band2	10MHz	16QAM	19150	1RB#49	22.06	PASS
Band2	10MHz	16QAM	19150	25RB#0	21.52	PASS
Band2	10MHz	16QAM	19150	25RB#12	21.58	PASS
Band2	10MHz	16QAM	19150	25RB#25	21.33	PASS
Band2	10MHz	16QAM	19150	50RB#0	21.42	PASS
Band2	15MHz	QPSK	18675	1RB#0	23.30	PASS
Band2	15MHz	QPSK	18675	1RB#38	23.36	PASS
Band2	15MHz	QPSK	18675	1RB#74	23.13	PASS
Band2	15MHz	QPSK	18675	38RB#0	22.29	PASS
Band2	15MHz	QPSK	18675	38RB#18	22.42	PASS
Band2	15MHz	QPSK	18675	38RB#37	22.27	PASS
Band2	15MHz	QPSK	18675	75RB#0	22.37	PASS
Band2	15MHz	QPSK	18900	1RB#0	23.18	PASS
Band2	15MHz	QPSK	18900	1RB#38	23.28	PASS
Band2	15MHz	QPSK	18900	1RB#74	23.15	PASS
Band2	15MHz	QPSK	18900	38RB#0	22.30	PASS
Band2	15MHz	QPSK	18900	38RB#18	22.36	PASS
Band2	15MHz	QPSK	18900	38RB#37	22.32	PASS
Band2	15MHz	QPSK	18900	75RB#0	22.44	PASS
Band2	15MHz	QPSK	19125	1RB#0	23.31	PASS

Band2	15MHz	QPSK	19125	1RB#38	23.42	PASS
Band2	15MHz	QPSK	19125	1RB#74	23.33	PASS
Band2	15MHz	QPSK	19125	38RB#0	22.09	PASS
Band2	15MHz	QPSK	19125	38RB#18	22.10	PASS
Band2	15MHz	QPSK	19125	38RB#37	22.00	PASS
Band2	15MHz	QPSK	19125	75RB#0	22.43	PASS
Band2	15MHz	16QAM	18675	1RB#0	22.36	PASS
Band2	15MHz	16QAM	18675	1RB#38	22.42	PASS
Band2	15MHz	16QAM	18675	1RB#74	22.28	PASS
Band2	15MHz	16QAM	18675	38RB#0	22.33	PASS
Band2	15MHz	16QAM	18675	38RB#18	22.42	PASS
Band2	15MHz	16QAM	18675	38RB#37	22.22	PASS
Band2	15MHz	16QAM	18675	75RB#0	21.44	PASS
Band2	15MHz	16QAM	18900	1RB#0	22.34	PASS
Band2	15MHz	16QAM	18900	1RB#38	22.35	PASS
Band2	15MHz	16QAM	18900	1RB#74	22.26	PASS
Band2	15MHz	16QAM	18900	38RB#0	22.31	PASS
Band2	15MHz	16QAM	18900	38RB#18	22.37	PASS
Band2	15MHz	16QAM	18900	38RB#37	22.29	PASS
Band2	15MHz	16QAM	18900	75RB#0	21.55	PASS
Band2	15MHz	16QAM	19125	1RB#0	22.06	PASS
Band2	15MHz	16QAM	19125	1RB#38	22.07	PASS
Band2	15MHz	16QAM	19125	1RB#74	22.01	PASS
Band2	15MHz	16QAM	19125	38RB#0	22.11	PASS
Band2	15MHz	16QAM	19125	38RB#18	22.09	PASS
Band2	15MHz	16QAM	19125	38RB#37	21.99	PASS
Band2	15MHz	16QAM	19125	75RB#0	21.43	PASS
Band2	20MHz	QPSK	18700	1RB#0	23.23	PASS
Band2	20MHz	QPSK	18700	1RB#49	23.49	PASS
Band2	20MHz	QPSK	18700	1RB#99	23.06	PASS
Band2	20MHz	QPSK	18700	50RB#0	22.32	PASS
Band2	20MHz	QPSK	18700	50RB#25	22.30	PASS
Band2	20MHz	QPSK	18700	50RB#50	22.46	PASS
Band2	20MHz	QPSK	18700	100RB#0	22.41	PASS
Band2	20MHz	QPSK	18900	1RB#0	23.18	PASS
Band2	20MHz	QPSK	18900	1RB#49	24.09	PASS
Band2	20MHz	QPSK	18900	1RB#99	23.15	PASS

Band2	20MHz	QPSK	18900	50RB#0	22.51	PASS
Band2	20MHz	QPSK	18900	50RB#25	22.51	PASS
Band2	20MHz	QPSK	18900	50RB#50	22.35	PASS
Band2	20MHz	QPSK	18900	100RB#0	22.46	PASS
Band2	20MHz	QPSK	19100	1RB#0	23.14	PASS
Band2	20MHz	QPSK	19100	1RB#49	23.54	PASS
Band2	20MHz	QPSK	19100	1RB#99	23.16	PASS
Band2	20MHz	QPSK	19100	50RB#0	22.36	PASS
Band2	20MHz	QPSK	19100	50RB#25	22.35	PASS
Band2	20MHz	QPSK	19100	50RB#50	22.19	PASS
Band2	20MHz	QPSK	19100	100RB#0	22.28	PASS
Band2	20MHz	16QAM	18700	1RB#0	22.12	PASS
Band2	20MHz	16QAM	18700	1RB#49	22.41	PASS
Band2	20MHz	16QAM	18700	1RB#99	22.00	PASS
Band2	20MHz	16QAM	18700	50RB#0	21.44	PASS
Band2	20MHz	16QAM	18700	50RB#25	21.48	PASS
Band2	20MHz	16QAM	18700	50RB#50	21.61	PASS
Band2	20MHz	16QAM	18700	100RB#0	21.53	PASS
Band2	20MHz	16QAM	18900	1RB#0	22.25	PASS
Band2	20MHz	16QAM	18900	1RB#49	22.47	PASS
Band2	20MHz	16QAM	18900	1RB#99	22.30	PASS
Band2	20MHz	16QAM	18900	50RB#0	21.63	PASS
Band2	20MHz	16QAM	18900	50RB#25	21.66	PASS
Band2	20MHz	16QAM	18900	50RB#50	21.47	PASS
Band2	20MHz	16QAM	18900	100RB#0	21.62	PASS
Band2	20MHz	16QAM	19100	1RB#0	21.95	PASS
Band2	20MHz	16QAM	19100	1RB#49	22.24	PASS
Band2	20MHz	16QAM	19100	1RB#99	21.92	PASS
Band2	20MHz	16QAM	19100	50RB#0	21.59	PASS
Band2	20MHz	16QAM	19100	50RB#25	21.57	PASS
Band2	20MHz	16QAM	19100	50RB#50	21.27	PASS
Band2	20MHz	16QAM	19100	100RB#0	21.36	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band4	1.4MHz	QPSK	19957	1RB#0	22.82	PASS
Band4	1.4MHz	QPSK	19957	1RB#2	22.89	PASS
Band4	1.4MHz	QPSK	19957	1RB#5	22.80	PASS
Band4	1.4MHz	QPSK	19957	3RB#0	22.89	PASS
Band4	1.4MHz	QPSK	19957	3RB#1	22.91	PASS
Band4	1.4MHz	QPSK	19957	3RB#3	22.87	PASS
Band4	1.4MHz	QPSK	19957	6RB#0	21.92	PASS
Band4	1.4MHz	QPSK	20175	1RB#0	22.98	PASS
Band4	1.4MHz	QPSK	20175	1RB#2	23.17	PASS
Band4	1.4MHz	QPSK	20175	1RB#5	23.01	PASS
Band4	1.4MHz	QPSK	20175	3RB#0	22.95	PASS
Band4	1.4MHz	QPSK	20175	3RB#1	22.94	PASS
Band4	1.4MHz	QPSK	20175	3RB#3	22.97	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	22.03	PASS
Band4	1.4MHz	QPSK	20393	1RB#0	22.31	PASS
Band4	1.4MHz	QPSK	20393	1RB#2	22.13	PASS
Band4	1.4MHz	QPSK	20393	1RB#5	21.71	PASS
Band4	1.4MHz	QPSK	20393	3RB#0	22.12	PASS
Band4	1.4MHz	QPSK	20393	3RB#1	22.08	PASS
Band4	1.4MHz	QPSK	20393	3RB#3	21.82	PASS
Band4	1.4MHz	QPSK	20393	6RB#0	21.95	PASS
Band4	1.4MHz	16QAM	19957	1RB#0	21.67	PASS
Band4	1.4MHz	16QAM	19957	1RB#2	21.91	PASS
Band4	1.4MHz	16QAM	19957	1RB#5	21.64	PASS
Band4	1.4MHz	16QAM	19957	3RB#0	21.69	PASS
Band4	1.4MHz	16QAM	19957	3RB#1	21.69	PASS
Band4	1.4MHz	16QAM	19957	3RB#3	21.69	PASS
Band4	1.4MHz	16QAM	19957	6RB#0	20.88	PASS
Band4	1.4MHz	16QAM	20175	1RB#0	21.66	PASS
Band4	1.4MHz	16QAM	20175	1RB#2	21.85	PASS
Band4	1.4MHz	16QAM	20175	1RB#5	21.69	PASS
Band4	1.4MHz	16QAM	20175	3RB#0	21.71	PASS
Band4	1.4MHz	16QAM	20175	3RB#1	21.74	PASS
Band4	1.4MHz	16QAM	20175	3RB#3	21.74	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	20.81	PASS

Band4	1.4MHz	16QAM	20393	1RB#0	21.71	PASS
Band4	1.4MHz	16QAM	20393	1RB#2	21.85	PASS
Band4	1.4MHz	16QAM	20393	1RB#5	21.55	PASS
Band4	1.4MHz	16QAM	20393	3RB#0	21.61	PASS
Band4	1.4MHz	16QAM	20393	3RB#1	21.57	PASS
Band4	1.4MHz	16QAM	20393	3RB#3	21.59	PASS
Band4	1.4MHz	16QAM	20393	6RB#0	20.97	PASS
Band4	3MHz	QPSK	19965	1RB#0	22.93	PASS
Band4	3MHz	QPSK	19965	1RB#8	22.90	PASS
Band4	3MHz	QPSK	19965	1RB#14	22.87	PASS
Band4	3MHz	QPSK	19965	8RB#0	21.91	PASS
Band4	3MHz	QPSK	19965	8RB#4	21.92	PASS
Band4	3MHz	QPSK	19965	8RB#7	21.89	PASS
Band4	3MHz	QPSK	19965	15RB#0	21.88	PASS
Band4	3MHz	QPSK	20175	1RB#0	23.07	PASS
Band4	3MHz	QPSK	20175	1RB#8	23.13	PASS
Band4	3MHz	QPSK	20175	1RB#14	23.15	PASS
Band4	3MHz	QPSK	20175	8RB#0	22.03	PASS
Band4	3MHz	QPSK	20175	8RB#4	22.04	PASS
Band4	3MHz	QPSK	20175	8RB#7	22.08	PASS
Band4	3MHz	QPSK	20175	15RB#0	21.98	PASS
Band4	3MHz	QPSK	20385	1RB#0	23.14	PASS
Band4	3MHz	QPSK	20385	1RB#8	22.65	PASS
Band4	3MHz	QPSK	20385	1RB#14	21.86	PASS
Band4	3MHz	QPSK	20385	8RB#0	22.15	PASS
Band4	3MHz	QPSK	20385	8RB#4	22.18	PASS
Band4	3MHz	QPSK	20385	8RB#7	22.09	PASS
Band4	3MHz	QPSK	20385	15RB#0	22.03	PASS
Band4	3MHz	16QAM	19965	1RB#0	21.97	PASS
Band4	3MHz	16QAM	19965	1RB#8	21.86	PASS
Band4	3MHz	16QAM	19965	1RB#14	21.83	PASS
Band4	3MHz	16QAM	19965	8RB#0	20.94	PASS
Band4	3MHz	16QAM	19965	8RB#4	20.97	PASS
Band4	3MHz	16QAM	19965	8RB#7	20.93	PASS
Band4	3MHz	16QAM	19965	15RB#0	20.94	PASS
Band4	3MHz	16QAM	20175	1RB#0	21.78	PASS
Band4	3MHz	16QAM	20175	1RB#8	21.79	PASS

Band4	3MHz	16QAM	20175	1RB#14	21.82	PASS
Band4	3MHz	16QAM	20175	8RB#0	20.96	PASS
Band4	3MHz	16QAM	20175	8RB#4	20.94	PASS
Band4	3MHz	16QAM	20175	8RB#7	20.99	PASS
Band4	3MHz	16QAM	20175	15RB#0	20.90	PASS
Band4	3MHz	16QAM	20385	1RB#0	22.05	PASS
Band4	3MHz	16QAM	20385	1RB#8	21.98	PASS
Band4	3MHz	16QAM	20385	1RB#14	21.78	PASS
Band4	3MHz	16QAM	20385	8RB#0	21.13	PASS
Band4	3MHz	16QAM	20385	8RB#4	21.11	PASS
Band4	3MHz	16QAM	20385	8RB#7	20.97	PASS
Band4	3MHz	16QAM	20385	15RB#0	21.00	PASS
Band4	5MHz	QPSK	19975	1RB#0	22.91	PASS
Band4	5MHz	QPSK	19975	1RB#12	23.00	PASS
Band4	5MHz	QPSK	19975	1RB#24	22.84	PASS
Band4	5MHz	QPSK	19975	12RB#0	21.83	PASS
Band4	5MHz	QPSK	19975	12RB#6	21.90	PASS
Band4	5MHz	QPSK	19975	12RB#13	21.81	PASS
Band4	5MHz	QPSK	19975	25RB#0	21.85	PASS
Band4	5MHz	QPSK	20175	1RB#0	22.87	PASS
Band4	5MHz	QPSK	20175	1RB#12	23.12	PASS
Band4	5MHz	QPSK	20175	1RB#24	23.06	PASS
Band4	5MHz	QPSK	20175	12RB#0	21.95	PASS
Band4	5MHz	QPSK	20175	12RB#6	21.96	PASS
Band4	5MHz	QPSK	20175	12RB#13	22.03	PASS
Band4	5MHz	QPSK	20175	25RB#0	21.97	PASS
Band4	5MHz	QPSK	20375	1RB#0	23.20	PASS
Band4	5MHz	QPSK	20375	1RB#12	23.03	PASS
Band4	5MHz	QPSK	20375	1RB#24	22.07	PASS
Band4	5MHz	QPSK	20375	12RB#0	22.25	PASS
Band4	5MHz	QPSK	20375	12RB#6	22.28	PASS
Band4	5MHz	QPSK	20375	12RB#13	21.90	PASS
Band4	5MHz	QPSK	20375	25RB#0	22.06	PASS
Band4	5MHz	16QAM	19975	1RB#0	21.79	PASS
Band4	5MHz	16QAM	19975	1RB#12	21.86	PASS
Band4	5MHz	16QAM	19975	1RB#24	21.70	PASS
Band4	5MHz	16QAM	19975	12RB#0	20.86	PASS

Band4	5MHz	16QAM	19975	12RB#6	20.90	PASS
Band4	5MHz	16QAM	19975	12RB#13	20.79	PASS
Band4	5MHz	16QAM	19975	25RB#0	20.89	PASS
Band4	5MHz	16QAM	20175	1RB#0	21.84	PASS
Band4	5MHz	16QAM	20175	1RB#12	22.04	PASS
Band4	5MHz	16QAM	20175	1RB#24	22.05	PASS
Band4	5MHz	16QAM	20175	12RB#0	20.91	PASS
Band4	5MHz	16QAM	20175	12RB#6	20.92	PASS
Band4	5MHz	16QAM	20175	12RB#13	21.07	PASS
Band4	5MHz	16QAM	20175	25RB#0	20.98	PASS
Band4	5MHz	16QAM	20375	1RB#0	22.04	PASS
Band4	5MHz	16QAM	20375	1RB#12	22.02	PASS
Band4	5MHz	16QAM	20375	1RB#24	21.90	PASS
Band4	5MHz	16QAM	20375	12RB#0	21.14	PASS
Band4	5MHz	16QAM	20375	12RB#6	21.17	PASS
Band4	5MHz	16QAM	20375	12RB#13	20.81	PASS
Band4	5MHz	16QAM	20375	25RB#0	21.05	PASS
Band4	10MHz	QPSK	20000	1RB#0	22.94	PASS
Band4	10MHz	QPSK	20000	1RB#24	22.98	PASS
Band4	10MHz	QPSK	20000	1RB#49	22.79	PASS
Band4	10MHz	QPSK	20000	25RB#0	21.92	PASS
Band4	10MHz	QPSK	20000	25RB#12	21.92	PASS
Band4	10MHz	QPSK	20000	25RB#25	21.65	PASS
Band4	10MHz	QPSK	20000	50RB#0	21.82	PASS
Band4	10MHz	QPSK	20175	1RB#0	23.01	PASS
Band4	10MHz	QPSK	20175	1RB#24	23.24	PASS
Band4	10MHz	QPSK	20175	1RB#49	23.18	PASS
Band4	10MHz	QPSK	20175	25RB#0	22.01	PASS
Band4	10MHz	QPSK	20175	25RB#12	22.02	PASS
Band4	10MHz	QPSK	20175	25RB#25	22.22	PASS
Band4	10MHz	QPSK	20175	50RB#0	22.04	PASS
Band4	10MHz	QPSK	20350	1RB#0	23.31	PASS
Band4	10MHz	QPSK	20350	1RB#24	23.35	PASS
Band4	10MHz	QPSK	20350	1RB#49	22.24	PASS
Band4	10MHz	QPSK	20350	25RB#0	22.32	PASS
Band4	10MHz	QPSK	20350	25RB#12	22.29	PASS
Band4	10MHz	QPSK	20350	25RB#25	21.89	PASS

Band4	10MHz	QPSK	20350	50RB#0	22.13	PASS
Band4	10MHz	16QAM	20000	1RB#0	21.97	PASS
Band4	10MHz	16QAM	20000	1RB#24	21.95	PASS
Band4	10MHz	16QAM	20000	1RB#49	21.70	PASS
Band4	10MHz	16QAM	20000	25RB#0	20.92	PASS
Band4	10MHz	16QAM	20000	25RB#12	20.92	PASS
Band4	10MHz	16QAM	20000	25RB#25	20.66	PASS
Band4	10MHz	16QAM	20000	50RB#0	20.76	PASS
Band4	10MHz	16QAM	20175	1RB#0	21.64	PASS
Band4	10MHz	16QAM	20175	1RB#24	21.92	PASS
Band4	10MHz	16QAM	20175	1RB#49	21.94	PASS
Band4	10MHz	16QAM	20175	25RB#0	20.98	PASS
Band4	10MHz	16QAM	20175	25RB#12	20.97	PASS
Band4	10MHz	16QAM	20175	25RB#25	21.30	PASS
Band4	10MHz	16QAM	20175	50RB#0	21.08	PASS
Band4	10MHz	16QAM	20350	1RB#0	22.31	PASS
Band4	10MHz	16QAM	20350	1RB#24	22.24	PASS
Band4	10MHz	16QAM	20350	1RB#49	22.06	PASS
Band4	10MHz	16QAM	20350	25RB#0	21.28	PASS
Band4	10MHz	16QAM	20350	25RB#12	21.29	PASS
Band4	10MHz	16QAM	20350	25RB#25	20.87	PASS
Band4	10MHz	16QAM	20350	50RB#0	21.13	PASS
Band4	15MHz	QPSK	20025	1RB#0	22.88	PASS
Band4	15MHz	QPSK	20025	1RB#38	22.78	PASS
Band4	15MHz	QPSK	20025	1RB#74	22.72	PASS
Band4	15MHz	QPSK	20025	38RB#0	21.88	PASS
Band4	15MHz	QPSK	20025	38RB#18	21.74	PASS
Band4	15MHz	QPSK	20025	38RB#37	21.57	PASS
Band4	15MHz	QPSK	20025	75RB#0	21.91	PASS
Band4	15MHz	QPSK	20175	1RB#0	22.82	PASS
Band4	15MHz	QPSK	20175	1RB#38	23.06	PASS
Band4	15MHz	QPSK	20175	1RB#74	22.99	PASS
Band4	15MHz	QPSK	20175	38RB#0	21.75	PASS
Band4	15MHz	QPSK	20175	38RB#18	22.12	PASS
Band4	15MHz	QPSK	20175	38RB#37	22.16	PASS
Band4	15MHz	QPSK	20175	75RB#0	22.20	PASS
Band4	15MHz	QPSK	20325	1RB#0	23.29	PASS

Band4	15MHz	QPSK	20325	1RB#38	23.25	PASS
Band4	15MHz	QPSK	20325	1RB#74	22.54	PASS
Band4	15MHz	QPSK	20325	38RB#0	22.30	PASS
Band4	15MHz	QPSK	20325	38RB#18	22.26	PASS
Band4	15MHz	QPSK	20325	38RB#37	21.91	PASS
Band4	15MHz	QPSK	20325	75RB#0	22.26	PASS
Band4	15MHz	16QAM	20025	1RB#0	21.92	PASS
Band4	15MHz	16QAM	20025	1RB#38	21.72	PASS
Band4	15MHz	16QAM	20025	1RB#74	21.61	PASS
Band4	15MHz	16QAM	20025	38RB#0	21.91	PASS
Band4	15MHz	16QAM	20025	38RB#18	21.78	PASS
Band4	15MHz	16QAM	20025	38RB#37	21.58	PASS
Band4	15MHz	16QAM	20025	75RB#0	20.76	PASS
Band4	15MHz	16QAM	20175	1RB#0	21.77	PASS
Band4	15MHz	16QAM	20175	1RB#38	22.09	PASS
Band4	15MHz	16QAM	20175	1RB#74	22.13	PASS
Band4	15MHz	16QAM	20175	38RB#0	21.74	PASS
Band4	15MHz	16QAM	20175	38RB#18	22.09	PASS
Band4	15MHz	16QAM	20175	38RB#37	22.10	PASS
Band4	15MHz	16QAM	20175	75RB#0	21.17	PASS
Band4	15MHz	16QAM	20325	1RB#0	22.32	PASS
Band4	15MHz	16QAM	20325	1RB#38	22.27	PASS
Band4	15MHz	16QAM	20325	1RB#74	21.91	PASS
Band4	15MHz	16QAM	20325	38RB#0	22.32	PASS
Band4	15MHz	16QAM	20325	38RB#18	22.18	PASS
Band4	15MHz	16QAM	20325	38RB#37	21.90	PASS
Band4	15MHz	16QAM	20325	75RB#0	21.21	PASS
Band4	20MHz	QPSK	20050	1RB#0	22.74	PASS
Band4	20MHz	QPSK	20050	1RB#49	22.95	PASS
Band4	20MHz	QPSK	20050	1RB#99	22.76	PASS
Band4	20MHz	QPSK	20050	50RB#0	21.93	PASS
Band4	20MHz	QPSK	20050	50RB#25	21.89	PASS
Band4	20MHz	QPSK	20050	50RB#50	21.50	PASS
Band4	20MHz	QPSK	20050	100RB#0	21.83	PASS
Band4	20MHz	QPSK	20175	1RB#0	22.68	PASS
Band4	20MHz	QPSK	20175	1RB#49	23.23	PASS
Band4	20MHz	QPSK	20175	1RB#99	22.99	PASS

Band4	20MHz	QPSK	20175	50RB#0	21.93	PASS
Band4	20MHz	QPSK	20175	50RB#25	21.95	PASS
Band4	20MHz	QPSK	20175	50RB#50	22.28	PASS
Band4	20MHz	QPSK	20175	100RB#0	22.10	PASS
Band4	20MHz	QPSK	20300	1RB#0	23.13	PASS
Band4	20MHz	QPSK	20300	1RB#49	23.48	PASS
Band4	20MHz	QPSK	20300	1RB#99	22.73	PASS
Band4	20MHz	QPSK	20300	50RB#0	22.18	PASS
Band4	20MHz	QPSK	20300	50RB#25	22.13	PASS
Band4	20MHz	QPSK	20300	50RB#50	21.88	PASS
Band4	20MHz	QPSK	20300	100RB#0	22.07	PASS
Band4	20MHz	16QAM	20050	1RB#0	21.65	PASS
Band4	20MHz	16QAM	20050	1RB#49	21.70	PASS
Band4	20MHz	16QAM	20050	1RB#99	21.52	PASS
Band4	20MHz	16QAM	20050	50RB#0	20.91	PASS
Band4	20MHz	16QAM	20050	50RB#25	20.88	PASS
Band4	20MHz	16QAM	20050	50RB#50	20.46	PASS
Band4	20MHz	16QAM	20050	100RB#0	20.76	PASS
Band4	20MHz	16QAM	20175	1RB#0	21.59	PASS
Band4	20MHz	16QAM	20175	1RB#49	22.20	PASS
Band4	20MHz	16QAM	20175	1RB#99	22.07	PASS
Band4	20MHz	16QAM	20175	50RB#0	20.94	PASS
Band4	20MHz	16QAM	20175	50RB#25	20.98	PASS
Band4	20MHz	16QAM	20175	50RB#50	21.34	PASS
Band4	20MHz	16QAM	20175	100RB#0	21.15	PASS
Band4	20MHz	16QAM	20300	1RB#0	21.95	PASS
Band4	20MHz	16QAM	20300	1RB#49	22.28	PASS
Band4	20MHz	16QAM	20300	1RB#99	21.62	PASS
Band4	20MHz	16QAM	20300	50RB#0	21.25	PASS
Band4	20MHz	16QAM	20300	50RB#25	21.25	PASS
Band4	20MHz	16QAM	20300	50RB#50	20.97	PASS
Band4	20MHz	16QAM	20300	100RB#0	21.12	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band5	1.4MHz	QPSK	20407	1RB#0	22.76	PASS
Band5	1.4MHz	QPSK	20407	1RB#2	22.84	PASS
Band5	1.4MHz	QPSK	20407	1RB#5	22.73	PASS

Band5	1.4MHz	QPSK	20407	3RB#0	22.81	PASS
Band5	1.4MHz	QPSK	20407	3RB#1	22.82	PASS
Band5	1.4MHz	QPSK	20407	3RB#3	22.79	PASS
Band5	1.4MHz	QPSK	20407	6RB#0	21.89	PASS
Band5	1.4MHz	QPSK	20525	1RB#0	23.03	PASS
Band5	1.4MHz	QPSK	20525	1RB#2	23.13	PASS
Band5	1.4MHz	QPSK	20525	1RB#5	23.06	PASS
Band5	1.4MHz	QPSK	20525	3RB#0	23.11	PASS
Band5	1.4MHz	QPSK	20525	3RB#1	23.08	PASS
Band5	1.4MHz	QPSK	20525	3RB#3	23.17	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	22.08	PASS
Band5	1.4MHz	QPSK	20643	1RB#0	22.97	PASS
Band5	1.4MHz	QPSK	20643	1RB#2	23.11	PASS
Band5	1.4MHz	QPSK	20643	1RB#5	22.95	PASS
Band5	1.4MHz	QPSK	20643	3RB#0	23.18	PASS
Band5	1.4MHz	QPSK	20643	3RB#1	23.20	PASS
Band5	1.4MHz	QPSK	20643	3RB#3	23.13	PASS
Band5	1.4MHz	QPSK	20643	6RB#0	22.04	PASS
Band5	1.4MHz	16QAM	20407	1RB#0	21.74	PASS
Band5	1.4MHz	16QAM	20407	1RB#2	21.88	PASS
Band5	1.4MHz	16QAM	20407	1RB#5	21.68	PASS
Band5	1.4MHz	16QAM	20407	3RB#0	21.62	PASS
Band5	1.4MHz	16QAM	20407	3RB#1	21.64	PASS
Band5	1.4MHz	16QAM	20407	3RB#3	21.63	PASS
Band5	1.4MHz	16QAM	20407	6RB#0	20.88	PASS
Band5	1.4MHz	16QAM	20525	1RB#0	21.93	PASS
Band5	1.4MHz	16QAM	20525	1RB#2	21.98	PASS
Band5	1.4MHz	16QAM	20525	1RB#5	21.88	PASS
Band5	1.4MHz	16QAM	20525	3RB#0	21.86	PASS
Band5	1.4MHz	16QAM	20525	3RB#1	21.91	PASS
Band5	1.4MHz	16QAM	20525	3RB#3	21.85	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	20.96	PASS
Band5	1.4MHz	16QAM	20643	1RB#0	21.94	PASS
Band5	1.4MHz	16QAM	20643	1RB#2	22.15	PASS
Band5	1.4MHz	16QAM	20643	1RB#5	21.95	PASS
Band5	1.4MHz	16QAM	20643	3RB#0	21.99	PASS
Band5	1.4MHz	16QAM	20643	3RB#1	21.98	PASS

Band5	1.4MHz	16QAM	20643	3RB#3	21.99	PASS
Band5	1.4MHz	16QAM	20643	6RB#0	21.13	PASS
Band5	3MHz	QPSK	20415	1RB#0	23.39	PASS
Band5	3MHz	QPSK	20415	1RB#8	23.42	PASS
Band5	3MHz	QPSK	20415	1RB#14	23.46	PASS
Band5	3MHz	QPSK	20415	8RB#0	22.43	PASS
Band5	3MHz	QPSK	20415	8RB#4	22.43	PASS
Band5	3MHz	QPSK	20415	8RB#7	22.41	PASS
Band5	3MHz	QPSK	20415	15RB#0	22.38	PASS
Band5	3MHz	QPSK	20525	1RB#0	23.69	PASS
Band5	3MHz	QPSK	20525	1RB#8	23.51	PASS
Band5	3MHz	QPSK	20525	1RB#14	23.29	PASS
Band5	3MHz	QPSK	20525	8RB#0	22.67	PASS
Band5	3MHz	QPSK	20525	8RB#4	22.58	PASS
Band5	3MHz	QPSK	20525	8RB#7	22.64	PASS
Band5	3MHz	QPSK	20525	15RB#0	22.52	PASS
Band5	3MHz	QPSK	20635	1RB#0	23.21	PASS
Band5	3MHz	QPSK	20635	1RB#8	23.12	PASS
Band5	3MHz	QPSK	20635	1RB#14	23.15	PASS
Band5	3MHz	QPSK	20635	8RB#0	22.18	PASS
Band5	3MHz	QPSK	20635	8RB#4	22.16	PASS
Band5	3MHz	QPSK	20635	8RB#7	22.12	PASS
Band5	3MHz	QPSK	20635	15RB#0	22.14	PASS
Band5	3MHz	16QAM	20415	1RB#0	22.43	PASS
Band5	3MHz	16QAM	20415	1RB#8	22.38	PASS
Band5	3MHz	16QAM	20415	1RB#14	22.47	PASS
Band5	3MHz	16QAM	20415	8RB#0	21.50	PASS
Band5	3MHz	16QAM	20415	8RB#4	21.45	PASS
Band5	3MHz	16QAM	20415	8RB#7	21.45	PASS
Band5	3MHz	16QAM	20415	15RB#0	21.33	PASS
Band5	3MHz	16QAM	20525	1RB#0	22.53	PASS
Band5	3MHz	16QAM	20525	1RB#8	22.19	PASS
Band5	3MHz	16QAM	20525	1RB#14	22.00	PASS
Band5	3MHz	16QAM	20525	8RB#0	21.58	PASS
Band5	3MHz	16QAM	20525	8RB#4	21.63	PASS
Band5	3MHz	16QAM	20525	8RB#7	21.56	PASS
Band5	3MHz	16QAM	20525	15RB#0	21.09	PASS

Band5	3MHz	16QAM	20635	1RB#0	22.31	PASS
Band5	3MHz	16QAM	20635	1RB#8	22.23	PASS
Band5	3MHz	16QAM	20635	1RB#14	22.23	PASS
Band5	3MHz	16QAM	20635	8RB#0	21.25	PASS
Band5	3MHz	16QAM	20635	8RB#4	21.30	PASS
Band5	3MHz	16QAM	20635	8RB#7	21.24	PASS
Band5	3MHz	16QAM	20635	15RB#0	21.28	PASS
Band5	5MHz	QPSK	20425	1RB#0	23.39	PASS
Band5	5MHz	QPSK	20425	1RB#12	23.51	PASS
Band5	5MHz	QPSK	20425	1RB#24	22.97	PASS
Band5	5MHz	QPSK	20425	12RB#0	21.94	PASS
Band5	5MHz	QPSK	20425	12RB#6	21.98	PASS
Band5	5MHz	QPSK	20425	12RB#13	22.00	PASS
Band5	5MHz	QPSK	20425	25RB#0	22.00	PASS
Band5	5MHz	QPSK	20525	1RB#0	23.03	PASS
Band5	5MHz	QPSK	20525	1RB#12	23.18	PASS
Band5	5MHz	QPSK	20525	1RB#24	23.07	PASS
Band5	5MHz	QPSK	20525	12RB#0	22.20	PASS
Band5	5MHz	QPSK	20525	12RB#6	22.14	PASS
Band5	5MHz	QPSK	20525	12RB#13	22.10	PASS
Band5	5MHz	QPSK	20525	25RB#0	22.18	PASS
Band5	5MHz	QPSK	20625	1RB#0	23.18	PASS
Band5	5MHz	QPSK	20625	1RB#12	23.26	PASS
Band5	5MHz	QPSK	20625	1RB#24	23.16	PASS
Band5	5MHz	QPSK	20625	12RB#0	22.25	PASS
Band5	5MHz	QPSK	20625	12RB#6	22.30	PASS
Band5	5MHz	QPSK	20625	12RB#13	22.18	PASS
Band5	5MHz	QPSK	20625	25RB#0	22.25	PASS
Band5	5MHz	16QAM	20425	1RB#0	22.26	PASS
Band5	5MHz	16QAM	20425	1RB#12	22.27	PASS
Band5	5MHz	16QAM	20425	1RB#24	21.92	PASS
Band5	5MHz	16QAM	20425	12RB#0	20.89	PASS
Band5	5MHz	16QAM	20425	12RB#6	20.88	PASS
Band5	5MHz	16QAM	20425	12RB#13	20.96	PASS
Band5	5MHz	16QAM	20425	25RB#0	20.98	PASS
Band5	5MHz	16QAM	20525	1RB#0	22.13	PASS
Band5	5MHz	16QAM	20525	1RB#12	22.21	PASS

Band5	5MHz	16QAM	20525	1RB#24	22.15	PASS
Band5	5MHz	16QAM	20525	12RB#0	21.21	PASS
Band5	5MHz	16QAM	20525	12RB#6	21.20	PASS
Band5	5MHz	16QAM	20525	12RB#13	21.13	PASS
Band5	5MHz	16QAM	20525	25RB#0	21.17	PASS
Band5	5MHz	16QAM	20625	1RB#0	22.17	PASS
Band5	5MHz	16QAM	20625	1RB#12	22.24	PASS
Band5	5MHz	16QAM	20625	1RB#24	22.09	PASS
Band5	5MHz	16QAM	20625	12RB#0	21.28	PASS
Band5	5MHz	16QAM	20625	12RB#6	21.29	PASS
Band5	5MHz	16QAM	20625	12RB#13	21.15	PASS
Band5	5MHz	16QAM	20625	25RB#0	21.28	PASS
Band5	10MHz	QPSK	20450	1RB#0	23.42	PASS
Band5	10MHz	QPSK	20450	1RB#24	23.59	PASS
Band5	10MHz	QPSK	20450	1RB#49	23.49	PASS
Band5	10MHz	QPSK	20450	25RB#0	22.00	PASS
Band5	10MHz	QPSK	20450	25RB#12	22.03	PASS
Band5	10MHz	QPSK	20450	25RB#25	22.19	PASS
Band5	10MHz	QPSK	20450	50RB#0	22.07	PASS
Band5	10MHz	QPSK	20525	1RB#0	23.12	PASS
Band5	10MHz	QPSK	20525	1RB#24	23.31	PASS
Band5	10MHz	QPSK	20525	1RB#49	23.21	PASS
Band5	10MHz	QPSK	20525	25RB#0	22.25	PASS
Band5	10MHz	QPSK	20525	25RB#12	22.19	PASS
Band5	10MHz	QPSK	20525	25RB#25	22.21	PASS
Band5	10MHz	QPSK	20525	50RB#0	22.18	PASS
Band5	10MHz	QPSK	20600	1RB#0	23.70	PASS
Band5	10MHz	QPSK	20600	1RB#24	23.57	PASS
Band5	10MHz	QPSK	20600	1RB#49	23.42	PASS
Band5	10MHz	QPSK	20600	25RB#0	22.38	PASS
Band5	10MHz	QPSK	20600	25RB#12	22.35	PASS
Band5	10MHz	QPSK	20600	25RB#25	22.15	PASS
Band5	10MHz	QPSK	20600	50RB#0	22.28	PASS
Band5	10MHz	16QAM	20450	1RB#0	22.41	PASS
Band5	10MHz	16QAM	20450	1RB#24	22.58	PASS
Band5	10MHz	16QAM	20450	1RB#49	22.24	PASS
Band5	10MHz	16QAM	20450	25RB#0	21.01	PASS

Band5	10MHz	16QAM	20450	25RB#12	20.95	PASS
Band5	10MHz	16QAM	20450	25RB#25	21.18	PASS
Band5	10MHz	16QAM	20450	50RB#0	21.07	PASS
Band5	10MHz	16QAM	20525	1RB#0	21.99	PASS
Band5	10MHz	16QAM	20525	1RB#24	22.09	PASS
Band5	10MHz	16QAM	20525	1RB#49	22.09	PASS
Band5	10MHz	16QAM	20525	25RB#0	21.20	PASS
Band5	10MHz	16QAM	20525	25RB#12	21.23	PASS
Band5	10MHz	16QAM	20525	25RB#25	21.22	PASS
Band5	10MHz	16QAM	20525	50RB#0	21.18	PASS
Band5	10MHz	16QAM	20600	1RB#0	22.27	PASS
Band5	10MHz	16QAM	20600	1RB#24	22.34	PASS
Band5	10MHz	16QAM	20600	1RB#49	22.22	PASS
Band5	10MHz	16QAM	20600	25RB#0	21.39	PASS
Band5	10MHz	16QAM	20600	25RB#12	21.39	PASS
Band5	10MHz	16QAM	20600	25RB#25	21.21	PASS
Band5	10MHz	16QAM	20600	50RB#0	21.29	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band7	5MHz	QPSK	20775	1RB#0	22.77	PASS
Band7	5MHz	QPSK	20775	1RB#12	22.48	PASS
Band7	5MHz	QPSK	20775	1RB#24	22.03	PASS
Band7	5MHz	QPSK	20775	12RB#0	22.05	PASS
Band7	5MHz	QPSK	20775	12RB#6	22.04	PASS
Band7	5MHz	QPSK	20775	12RB#13	21.89	PASS
Band7	5MHz	QPSK	20775	25RB#0	21.92	PASS
Band7	5MHz	QPSK	21100	1RB#0	22.86	PASS
Band7	5MHz	QPSK	21100	1RB#12	23.00	PASS
Band7	5MHz	QPSK	21100	1RB#24	22.89	PASS
Band7	5MHz	QPSK	21100	12RB#0	21.91	PASS
Band7	5MHz	QPSK	21100	12RB#6	21.88	PASS
Band7	5MHz	QPSK	21100	12RB#13	21.89	PASS
Band7	5MHz	QPSK	21100	25RB#0	21.90	PASS
Band7	5MHz	QPSK	21425	1RB#0	22.74	PASS
Band7	5MHz	QPSK	21425	1RB#12	23.26	PASS
Band7	5MHz	QPSK	21425	1RB#24	23.13	PASS
Band7	5MHz	QPSK	21425	12RB#0	22.14	PASS

Band7	5MHz	QPSK	21425	12RB#6	22.15	PASS
Band7	5MHz	QPSK	21425	12RB#13	22.21	PASS
Band7	5MHz	QPSK	21425	25RB#0	22.12	PASS
Band7	5MHz	16QAM	20775	1RB#0	21.86	PASS
Band7	5MHz	16QAM	20775	1RB#12	21.99	PASS
Band7	5MHz	16QAM	20775	1RB#24	21.88	PASS
Band7	5MHz	16QAM	20775	12RB#0	20.93	PASS
Band7	5MHz	16QAM	20775	12RB#6	20.94	PASS
Band7	5MHz	16QAM	20775	12RB#13	20.80	PASS
Band7	5MHz	16QAM	20775	25RB#0	20.95	PASS
Band7	5MHz	16QAM	21100	1RB#0	21.84	PASS
Band7	5MHz	16QAM	21100	1RB#12	21.92	PASS
Band7	5MHz	16QAM	21100	1RB#24	21.81	PASS
Band7	5MHz	16QAM	21100	12RB#0	20.88	PASS
Band7	5MHz	16QAM	21100	12RB#6	20.87	PASS
Band7	5MHz	16QAM	21100	12RB#13	20.89	PASS
Band7	5MHz	16QAM	21100	25RB#0	20.99	PASS
Band7	5MHz	16QAM	21425	1RB#0	21.99	PASS
Band7	5MHz	16QAM	21425	1RB#12	22.17	PASS
Band7	5MHz	16QAM	21425	1RB#24	21.99	PASS
Band7	5MHz	16QAM	21425	12RB#0	21.10	PASS
Band7	5MHz	16QAM	21425	12RB#6	21.09	PASS
Band7	5MHz	16QAM	21425	12RB#13	21.14	PASS
Band7	5MHz	16QAM	21425	25RB#0	21.19	PASS
Band7	10MHz	QPSK	20800	1RB#0	22.88	PASS
Band7	10MHz	QPSK	20800	1RB#24	22.60	PASS
Band7	10MHz	QPSK	20800	1RB#49	21.78	PASS
Band7	10MHz	QPSK	20800	25RB#0	22.06	PASS
Band7	10MHz	QPSK	20800	25RB#12	22.08	PASS
Band7	10MHz	QPSK	20800	25RB#25	21.90	PASS
Band7	10MHz	QPSK	20800	50RB#0	21.93	PASS
Band7	10MHz	QPSK	21100	1RB#0	22.70	PASS
Band7	10MHz	QPSK	21100	1RB#24	23.11	PASS
Band7	10MHz	QPSK	21100	1RB#49	22.90	PASS
Band7	10MHz	QPSK	21100	25RB#0	21.92	PASS
Band7	10MHz	QPSK	21100	25RB#12	21.91	PASS
Band7	10MHz	QPSK	21100	25RB#25	21.91	PASS

Band7	10MHz	QPSK	21100	50RB#0	21.93	PASS
Band7	10MHz	QPSK	21400	1RB#0	21.26	PASS
Band7	10MHz	QPSK	21400	1RB#24	22.47	PASS
Band7	10MHz	QPSK	21400	1RB#49	23.18	PASS
Band7	10MHz	QPSK	21400	25RB#0	21.79	PASS
Band7	10MHz	QPSK	21400	25RB#12	21.74	PASS
Band7	10MHz	QPSK	21400	25RB#25	22.27	PASS
Band7	10MHz	QPSK	21400	50RB#0	22.17	PASS
Band7	10MHz	16QAM	20800	1RB#0	21.95	PASS
Band7	10MHz	16QAM	20800	1RB#24	22.04	PASS
Band7	10MHz	16QAM	20800	1RB#49	21.69	PASS
Band7	10MHz	16QAM	20800	25RB#0	21.04	PASS
Band7	10MHz	16QAM	20800	25RB#12	21.02	PASS
Band7	10MHz	16QAM	20800	25RB#25	20.82	PASS
Band7	10MHz	16QAM	20800	50RB#0	21.00	PASS
Band7	10MHz	16QAM	21100	1RB#0	21.88	PASS
Band7	10MHz	16QAM	21100	1RB#24	22.13	PASS
Band7	10MHz	16QAM	21100	1RB#49	21.91	PASS
Band7	10MHz	16QAM	21100	25RB#0	20.96	PASS
Band7	10MHz	16QAM	21100	25RB#12	20.94	PASS
Band7	10MHz	16QAM	21100	25RB#25	20.97	PASS
Band7	10MHz	16QAM	21100	50RB#0	20.96	PASS
Band7	10MHz	16QAM	21400	1RB#0	20.76	PASS
Band7	10MHz	16QAM	21400	1RB#24	21.91	PASS
Band7	10MHz	16QAM	21400	1RB#49	22.09	PASS
Band7	10MHz	16QAM	21400	25RB#0	20.94	PASS
Band7	10MHz	16QAM	21400	25RB#12	20.91	PASS
Band7	10MHz	16QAM	21400	25RB#25	21.26	PASS
Band7	10MHz	16QAM	21400	50RB#0	21.15	PASS
Band7	15MHz	QPSK	20825	1RB#0	22.87	PASS
Band7	15MHz	QPSK	20825	1RB#38	22.46	PASS
Band7	15MHz	QPSK	20825	1RB#74	21.59	PASS
Band7	15MHz	QPSK	20825	38RB#0	21.92	PASS
Band7	15MHz	QPSK	20825	38RB#18	21.89	PASS
Band7	15MHz	QPSK	20825	38RB#37	21.31	PASS
Band7	15MHz	QPSK	20825	75RB#0	22.06	PASS
Band7	15MHz	QPSK	21100	1RB#0	22.54	PASS

Band7	15MHz	QPSK	21100	1RB#38	22.92	PASS
Band7	15MHz	QPSK	21100	1RB#74	22.81	PASS
Band7	15MHz	QPSK	21100	38RB#0	21.81	PASS
Band7	15MHz	QPSK	21100	38RB#18	21.96	PASS
Band7	15MHz	QPSK	21100	38RB#37	21.82	PASS
Band7	15MHz	QPSK	21100	75RB#0	21.96	PASS
Band7	15MHz	QPSK	21375	1RB#0	21.08	PASS
Band7	15MHz	QPSK	21375	1RB#38	21.67	PASS
Band7	15MHz	QPSK	21375	1RB#74	23.17	PASS
Band7	15MHz	QPSK	21375	38RB#0	20.78	PASS
Band7	15MHz	QPSK	21375	38RB#18	21.13	PASS
Band7	15MHz	QPSK	21375	38RB#37	22.02	PASS
Band7	15MHz	QPSK	21375	75RB#0	21.98	PASS
Band7	15MHz	16QAM	20825	1RB#0	21.94	PASS
Band7	15MHz	16QAM	20825	1RB#38	21.88	PASS
Band7	15MHz	16QAM	20825	1RB#74	21.48	PASS
Band7	15MHz	16QAM	20825	38RB#0	21.92	PASS
Band7	15MHz	16QAM	20825	38RB#18	21.90	PASS
Band7	15MHz	16QAM	20825	38RB#37	21.24	PASS
Band7	15MHz	16QAM	20825	75RB#0	20.98	PASS
Band7	15MHz	16QAM	21100	1RB#0	21.83	PASS
Band7	15MHz	16QAM	21100	1RB#38	21.97	PASS
Band7	15MHz	16QAM	21100	1RB#74	21.83	PASS
Band7	15MHz	16QAM	21100	38RB#0	21.82	PASS
Band7	15MHz	16QAM	21100	38RB#18	21.99	PASS
Band7	15MHz	16QAM	21100	38RB#37	21.84	PASS
Band7	15MHz	16QAM	21100	75RB#0	20.89	PASS
Band7	15MHz	16QAM	21375	1RB#0	20.91	PASS
Band7	15MHz	16QAM	21375	1RB#38	21.18	PASS
Band7	15MHz	16QAM	21375	1RB#74	22.05	PASS
Band7	15MHz	16QAM	21375	38RB#0	20.75	PASS
Band7	15MHz	16QAM	21375	38RB#18	21.12	PASS
Band7	15MHz	16QAM	21375	38RB#37	22.03	PASS
Band7	15MHz	16QAM	21375	75RB#0	21.24	PASS
Band7	20MHz	QPSK	20850	1RB#0	22.75	PASS
Band7	20MHz	QPSK	20850	1RB#49	22.47	PASS
Band7	20MHz	QPSK	20850	1RB#99	21.66	PASS

Band7	20MHz	QPSK	20850	50RB#0	22.07	PASS
Band7	20MHz	QPSK	20850	50RB#25	22.05	PASS
Band7	20MHz	QPSK	20850	50RB#50	21.47	PASS
Band7	20MHz	QPSK	20850	100RB#0	21.92	PASS
Band7	20MHz	QPSK	21100	1RB#0	22.08	PASS
Band7	20MHz	QPSK	21100	1RB#49	23.20	PASS
Band7	20MHz	QPSK	21100	1RB#99	22.68	PASS
Band7	20MHz	QPSK	21100	50RB#0	21.75	PASS
Band7	20MHz	QPSK	21100	50RB#25	21.78	PASS
Band7	20MHz	QPSK	21100	50RB#50	21.80	PASS
Band7	20MHz	QPSK	21100	100RB#0	21.80	PASS
Band7	20MHz	QPSK	21350	1RB#0	21.43	PASS
Band7	20MHz	QPSK	21350	1RB#49	21.49	PASS
Band7	20MHz	QPSK	21350	1RB#99	23.10	PASS
Band7	20MHz	QPSK	21350	50RB#0	21.18	PASS
Band7	20MHz	QPSK	21350	50RB#25	21.12	PASS
Band7	20MHz	QPSK	21350	50RB#50	22.27	PASS
Band7	20MHz	QPSK	21350	100RB#0	21.75	PASS
Band7	20MHz	16QAM	20850	1RB#0	21.67	PASS
Band7	20MHz	16QAM	20850	1RB#49	21.84	PASS
Band7	20MHz	16QAM	20850	1RB#99	21.42	PASS
Band7	20MHz	16QAM	20850	50RB#0	21.10	PASS
Band7	20MHz	16QAM	20850	50RB#25	21.10	PASS
Band7	20MHz	16QAM	20850	50RB#50	20.67	PASS
Band7	20MHz	16QAM	20850	100RB#0	20.97	PASS
Band7	20MHz	16QAM	21100	1RB#0	21.50	PASS
Band7	20MHz	16QAM	21100	1RB#49	22.08	PASS
Band7	20MHz	16QAM	21100	1RB#99	21.57	PASS
Band7	20MHz	16QAM	21100	50RB#0	20.79	PASS
Band7	20MHz	16QAM	21100	50RB#25	20.79	PASS
Band7	20MHz	16QAM	21100	50RB#50	20.88	PASS
Band7	20MHz	16QAM	21100	100RB#0	20.86	PASS
Band7	20MHz	16QAM	21350	1RB#0	21.23	PASS
Band7	20MHz	16QAM	21350	1RB#49	20.88	PASS
Band7	20MHz	16QAM	21350	1RB#99	21.81	PASS
Band7	20MHz	16QAM	21350	50RB#0	21.03	PASS
Band7	20MHz	16QAM	21350	50RB#25	21.06	PASS

Band7	20MHz	16QAM	21350	50RB#50	21.30	PASS
Band7	20MHz	16QAM	21350	100RB#0	21.16	PASS

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Verdict
Band12	1.4MHz	QPSK	23017	1RB#0	22.92	PASS
Band12	1.4MHz	QPSK	23017	1RB#2	23.09	PASS
Band12	1.4MHz	QPSK	23017	1RB#5	22.93	PASS
Band12	1.4MHz	QPSK	23017	3RB#0	23.12	PASS
Band12	1.4MHz	QPSK	23017	3RB#1	23.11	PASS
Band12	1.4MHz	QPSK	23017	3RB#3	23.15	PASS
Band12	1.4MHz	QPSK	23017	6RB#0	22.08	PASS
Band12	1.4MHz	QPSK	23095	1RB#0	22.90	PASS
Band12	1.4MHz	QPSK	23095	1RB#2	23.10	PASS
Band12	1.4MHz	QPSK	23095	1RB#5	22.85	PASS
Band12	1.4MHz	QPSK	23095	3RB#0	23.04	PASS
Band12	1.4MHz	QPSK	23095	3RB#1	23.05	PASS
Band12	1.4MHz	QPSK	23095	3RB#3	23.06	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	21.87	PASS
Band12	1.4MHz	QPSK	23173	1RB#0	22.71	PASS
Band12	1.4MHz	QPSK	23173	1RB#2	22.88	PASS
Band12	1.4MHz	QPSK	23173	1RB#5	22.76	PASS
Band12	1.4MHz	QPSK	23173	3RB#0	22.88	PASS
Band12	1.4MHz	QPSK	23173	3RB#1	22.90	PASS
Band12	1.4MHz	QPSK	23173	3RB#3	22.91	PASS
Band12	1.4MHz	QPSK	23173	6RB#0	21.78	PASS
Band12	1.4MHz	16QAM	23017	1RB#0	21.92	PASS
Band12	1.4MHz	16QAM	23017	1RB#2	22.15	PASS
Band12	1.4MHz	16QAM	23017	1RB#5	21.92	PASS
Band12	1.4MHz	16QAM	23017	3RB#0	21.91	PASS
Band12	1.4MHz	16QAM	23017	3RB#1	21.90	PASS
Band12	1.4MHz	16QAM	23017	3RB#3	21.93	PASS
Band12	1.4MHz	16QAM	23017	6RB#0	21.05	PASS
Band12	1.4MHz	16QAM	23095	1RB#0	21.84	PASS
Band12	1.4MHz	16QAM	23095	1RB#2	21.92	PASS
Band12	1.4MHz	16QAM	23095	1RB#5	21.83	PASS
Band12	1.4MHz	16QAM	23095	3RB#0	21.91	PASS
Band12	1.4MHz	16QAM	23095	3RB#1	21.90	PASS

Band12	1.4MHz	16QAM	23095	3RB#3	21.88	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	20.86	PASS
Band12	1.4MHz	16QAM	23173	1RB#0	21.56	PASS
Band12	1.4MHz	16QAM	23173	1RB#2	21.67	PASS
Band12	1.4MHz	16QAM	23173	1RB#5	21.51	PASS
Band12	1.4MHz	16QAM	23173	3RB#0	21.63	PASS
Band12	1.4MHz	16QAM	23173	3RB#1	21.66	PASS
Band12	1.4MHz	16QAM	23173	3RB#3	21.62	PASS
Band12	1.4MHz	16QAM	23173	6RB#0	20.76	PASS
Band12	3MHz	QPSK	23025	1RB#0	23.53	PASS
Band12	3MHz	QPSK	23025	1RB#8	23.52	PASS
Band12	3MHz	QPSK	23025	1RB#14	23.53	PASS
Band12	3MHz	QPSK	23025	8RB#0	22.52	PASS
Band12	3MHz	QPSK	23025	8RB#4	22.03	PASS
Band12	3MHz	QPSK	23025	8RB#7	22.07	PASS
Band12	3MHz	QPSK	23025	15RB#0	22.05	PASS
Band12	3MHz	QPSK	23095	1RB#0	23.03	PASS
Band12	3MHz	QPSK	23095	1RB#8	22.97	PASS
Band12	3MHz	QPSK	23095	1RB#14	22.89	PASS
Band12	3MHz	QPSK	23095	8RB#0	21.90	PASS
Band12	3MHz	QPSK	23095	8RB#4	21.90	PASS
Band12	3MHz	QPSK	23095	8RB#7	21.88	PASS
Band12	3MHz	QPSK	23095	15RB#0	21.94	PASS
Band12	3MHz	QPSK	23165	1RB#0	22.82	PASS
Band12	3MHz	QPSK	23165	1RB#8	22.82	PASS
Band12	3MHz	QPSK	23165	1RB#14	22.78	PASS
Band12	3MHz	QPSK	23165	8RB#0	21.87	PASS
Band12	3MHz	QPSK	23165	8RB#4	21.85	PASS
Band12	3MHz	QPSK	23165	8RB#7	21.78	PASS
Band12	3MHz	QPSK	23165	15RB#0	21.79	PASS
Band12	3MHz	16QAM	23025	1RB#0	22.65	PASS
Band12	3MHz	16QAM	23025	1RB#8	22.66	PASS
Band12	3MHz	16QAM	23025	1RB#14	22.40	PASS
Band12	3MHz	16QAM	23025	8RB#0	21.21	PASS
Band12	3MHz	16QAM	23025	8RB#4	21.09	PASS
Band12	3MHz	16QAM	23025	8RB#7	21.10	PASS
Band12	3MHz	16QAM	23025	15RB#0	21.02	PASS

Band12	3MHz	16QAM	23095	1RB#0	21.99	PASS
Band12	3MHz	16QAM	23095	1RB#8	21.83	PASS
Band12	3MHz	16QAM	23095	1RB#14	21.82	PASS
Band12	3MHz	16QAM	23095	8RB#0	20.94	PASS
Band12	3MHz	16QAM	23095	8RB#4	20.93	PASS
Band12	3MHz	16QAM	23095	8RB#7	20.94	PASS
Band12	3MHz	16QAM	23095	15RB#0	20.89	PASS
Band12	3MHz	16QAM	23165	1RB#0	21.56	PASS
Band12	3MHz	16QAM	23165	1RB#8	21.63	PASS
Band12	3MHz	16QAM	23165	1RB#14	21.61	PASS
Band12	3MHz	16QAM	23165	8RB#0	20.83	PASS
Band12	3MHz	16QAM	23165	8RB#4	20.83	PASS
Band12	3MHz	16QAM	23165	8RB#7	20.75	PASS
Band12	3MHz	16QAM	23165	15RB#0	20.67	PASS
Band12	5MHz	QPSK	23035	1RB#0	23.49	PASS
Band12	5MHz	QPSK	23035	1RB#12	23.61	PASS
Band12	5MHz	QPSK	23035	1RB#24	23.40	PASS
Band12	5MHz	QPSK	23035	12RB#0	22.05	PASS
Band12	5MHz	QPSK	23035	12RB#6	22.09	PASS
Band12	5MHz	QPSK	23035	12RB#13	22.03	PASS
Band12	5MHz	QPSK	23035	25RB#0	22.12	PASS
Band12	5MHz	QPSK	23095	1RB#0	22.92	PASS
Band12	5MHz	QPSK	23095	1RB#12	22.95	PASS
Band12	5MHz	QPSK	23095	1RB#24	22.80	PASS
Band12	5MHz	QPSK	23095	12RB#0	21.96	PASS
Band12	5MHz	QPSK	23095	12RB#6	21.99	PASS
Band12	5MHz	QPSK	23095	12RB#13	22.01	PASS
Band12	5MHz	QPSK	23095	25RB#0	22.04	PASS
Band12	5MHz	QPSK	23155	1RB#0	22.76	PASS
Band12	5MHz	QPSK	23155	1RB#12	22.88	PASS
Band12	5MHz	QPSK	23155	1RB#24	22.68	PASS
Band12	5MHz	QPSK	23155	12RB#0	21.87	PASS
Band12	5MHz	QPSK	23155	12RB#6	21.85	PASS
Band12	5MHz	QPSK	23155	12RB#13	21.72	PASS
Band12	5MHz	QPSK	23155	25RB#0	21.83	PASS
Band12	5MHz	16QAM	23035	1RB#0	22.51	PASS
Band12	5MHz	16QAM	23035	1RB#12	22.62	PASS