

FCC SAR Test Report

Applicant: Shenzhen Shire Star Electronic Technology Co., Ltd.

EUT Description: Smart Pet Collar

Model: C10

FCC ID: 2BFCX-C10

Standards: FCC 47CFR §2.1093

Date of Receipt: 2025/07/24

Date of Test: 2025/08/13 to 2025/08/15

Date of Issue: 2025/08/22

TOWE. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

the results documented in this report apply only the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility assure that additional production units of the model are manufactured with identical electrical and mechanical components. All sample tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise. without written approval of TOWE, the test report shall not be reproduced except in full.



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Revision History

Rev.	Issue Date	Description	Revised by
01	2025/08/22	Original	Jack Li

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1 Summary of Test Results

Band	Highest SAR _{1g} (W/kg)
	Body 0mm
LTE Band 2	0.42
LTE Band 5	0.74
LTE Band 12	0.39
LTE Band 13	0.47
LTE Band 66/4	0.35
LTE Band 71	0.36
BLE	-
Highest Simultaneous Transmission SAR	0.79
SAR Limited(W/kg)	1.6

Remark:

Band 4 SAR test was covered by Band 66; according to April 2015 TCB workshop, SAR test for overlapping bands can be reduced if:

- the maximum output power, including tolerance, for the smaller band is $\leq$ the larger band to qualify for the SAR test exclusion.
- the channel bandwidth and other operating parameters for the smaller band are fully supported by the larger band.

2 Guidance Applied

FCC 47CFR §2.1093

ANSI/IEEE C95.1-1992

IEEE 1528-2013

FCC KDB 941225 D01 3G SAR Measurement Procedures v03r01

FCC KDB 941225 D05 SAR for LTE Devices v02r05

FCC KDB 447498 D01 General RF Exposure Guidance v06

FCC KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04

FCC KDB 865664 D02 RF Exposure Reporting v01r02

3 Lab Information

3.1 Testing Location

These measurements tests were conducted at the Sushi TOWE Wireless Testing (Shenzhen) Co., Ltd. facility located at F401 and F101, Building E, Hongwei Industrial Zone, Liuxian 3rd Road, Bao'an District, Shenzhen, China. The measurement facility is compliant with the test site requirements specified in ANSI C63.4-2014

Tel.: +86-755-27212361

Contact Email: info@towewireless.com

3.2 Test Facility / Accreditations

A2LA (Certificate Number: 7088.01)

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

FCC Designation No.: CN1353

Sushi TOWE Wireless Testing (Shenzhen) Co., Ltd. has been recognized as an accredited testing laboratory.

Designation Number: CN1353.

ISED CAB identifier: CN0152

Sushi TOWE Wireless Testing (Shenzhen) Co., Ltd. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0152

Company Number: 31000

3.3 Ambient Condition

Temperature: 18°C~25°C

Relative Humidity: 30%~75%

4 Client Information

4.1 Applicant

Applicant:	Shenzhen Shire Star Electronic Technology Co., Ltd.
Address:	2nd Floor, Building F, Guanghao Industrial Park, Yunfeng Road, Longhua District, Shenzhen, China

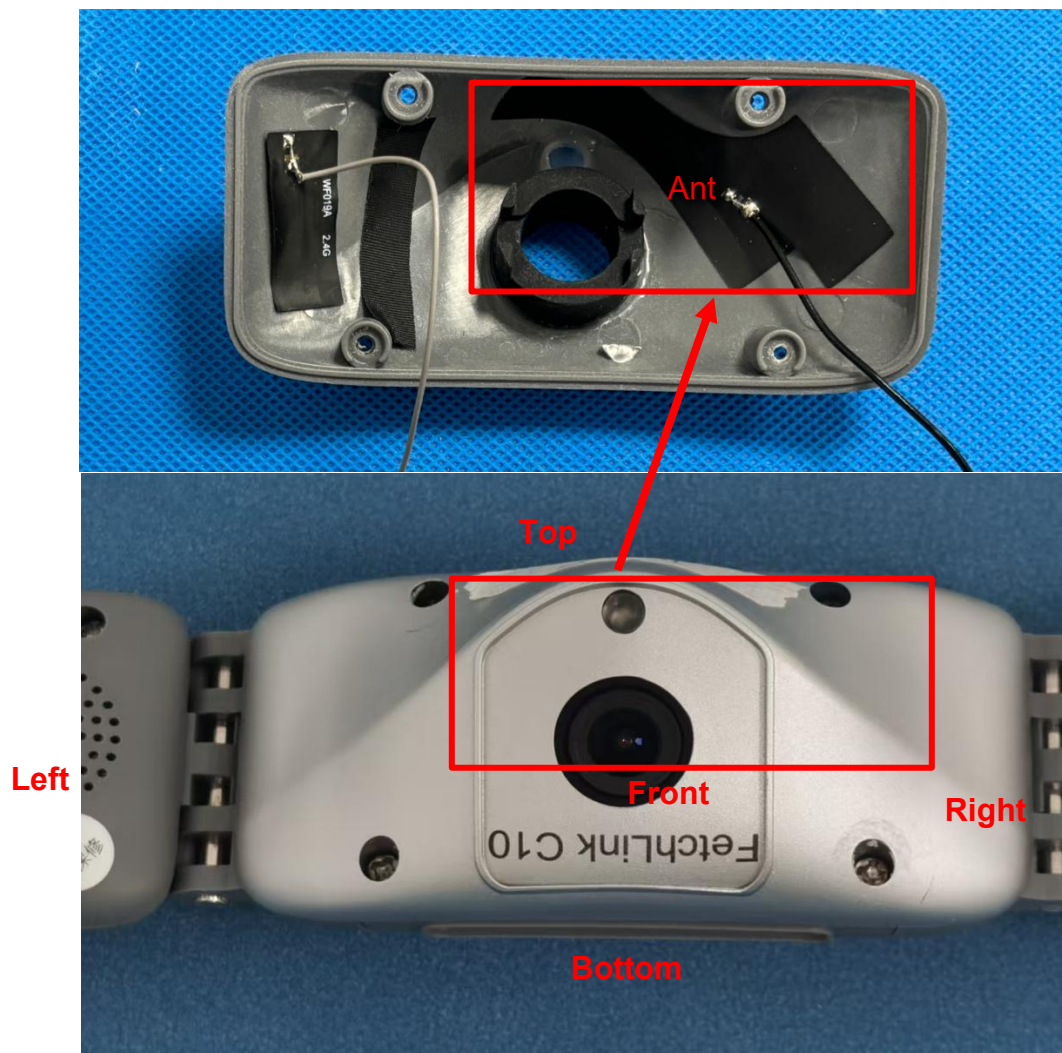
4.2 Manufacturer

Manufacturer:	Shenzhen Shire Star Electronic Technology Co., Ltd.
Address:	2nd Floor, Building F, Guanghao Industrial Park, Yunfeng Road, Longhua District, Shenzhen, China

5 Product Information

EUT Description	Smart Pet Collar	
Model	C10	
Hardware Version	V1.0	
Software Version	V1.0	
SN.	M-02 M-04	
Device Capabilities:		
Band	Frequency Range (MHz)	Modulation Type
LTE Band 2	1850 ~1910	QPSK 16QAM
LTE Band 4	1710~1755	
LTE Band 5	824~849	
LTE Band 12	699~716	
LTE Band 13	777~787	
LTE Band 66	1710~1780	
LTE Band 71	663 ~ 698	
BLE	2400~2483.5	GFSK
Antenna Type	☐ External, ☒ Integrated	
Remark: The above EUT's information was declared by applicant, please refer to the specifications or user manual for more detailed description.		

5.1 Antenna Locations (Front View)



6 RF Exposure Limits

Human Exposure	Uncontrolled Environment General Population (W/kg) or (mW/g)	Controlled Environment Occupational (W/kg) or (mW/g)
Spatial Peak SAR¹ (Brain/Trunk)	1.6	8.0
Spatial Average SAR² (Whole Body)	0.08	0.4
Spatial Peak SAR³ (Hands/Feet/Ankle/Wrist)	4.0	20.0

Note:

1, The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

2, The Spatial Average value of the SAR averaged over the whole body.

3, The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure. The general population/uncontrolled exposure limits are applicable to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Members of the general public would come under this category when exposure is not employment-related; for example, in the case of a wireless transmitter that exposes persons in its vicinity.

Controlled Environments are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation). In general, occupational/controlled exposure limits are applicable to situations in which persons are exposed as a consequence of their employment, who have been made fully aware of the potential for exposure and can exercise control over their exposure. The exposure category is also applicable when the exposure is of a transient nature due to incidental passage through a location where the exposure levels may be higher than the general population/uncontrolled limits, but the exposed person is fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

7 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.

7.1 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:

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

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

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

Where:

σ is the conductivity of the tissue material (S/m)

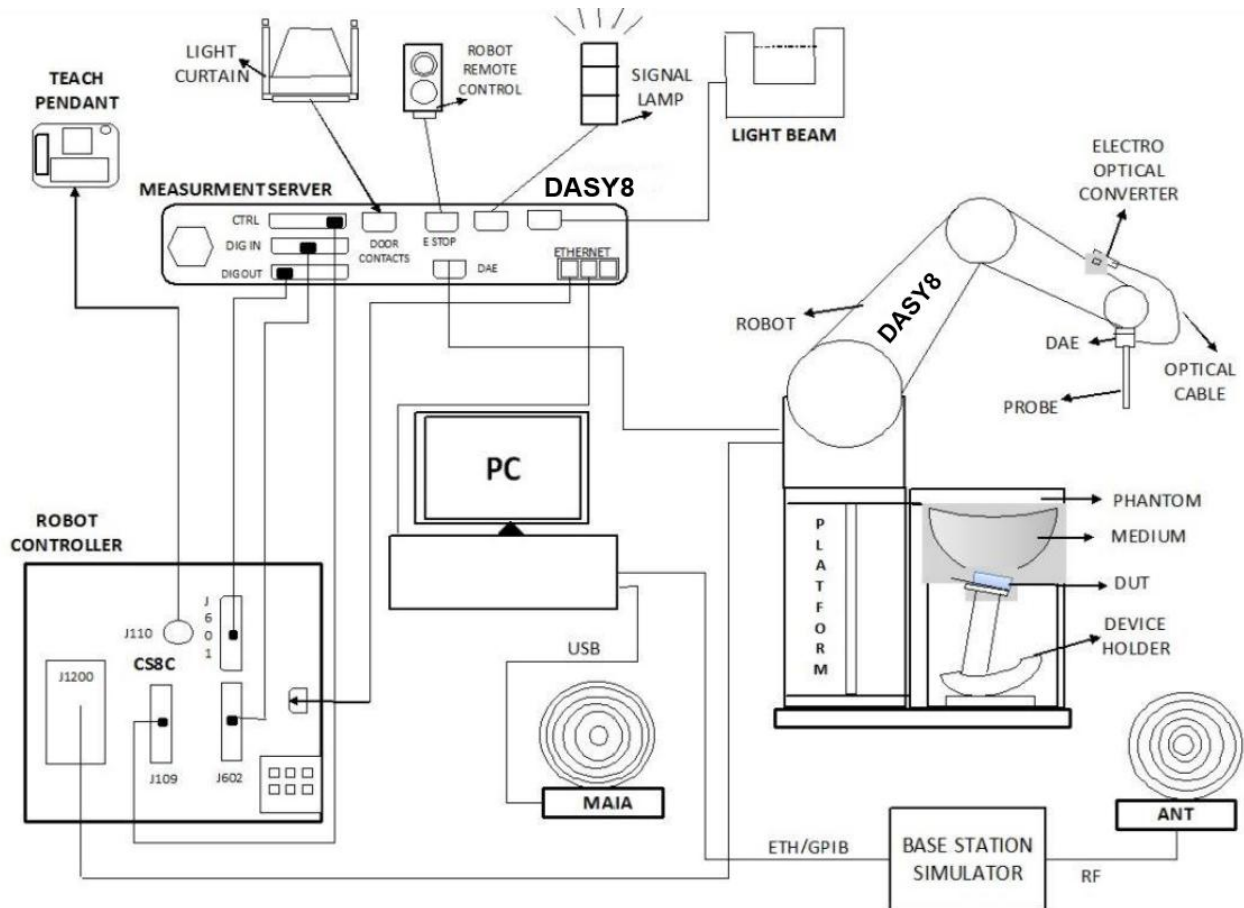
ρ is the mass density of the tissue material (kg/m³)

E is the RMS electrical field strength (V/m)

8 SAR Measurements System

8.1 The SAR Measurement Set-up

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



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Windows 11 and the DASY8 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

8.2 Measurement procedure

8.2.1 Power reference measurement

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

8.2.2 Area scan

Measurement procedures for evaluating SAR from wireless handsets typically start with a coarse measurement grid to determine the approximate location of the local peak SAR values. This is known as the area-scan procedure. In addition, identify the positions of any local maxima with SAR values within 2 dB of the maximum value, and that will not be within the zoom scan of other peaks. Additional zoom scans shall be measured for such peaks only when the primary peak is within 2 dB of the SAR compliance limit.

Area scan parameters SAR measurement as below:

Parameter	DUT transmit frequency being tested	
	$f \leq 3 \text{ GHz}$	$3 \text{ GHz} < f \leq 10 \text{ GHz}$
Maximum distance between the measured points (geometric centre of the sensors) and the inner phantom surface (z_{M1} in Figure 20 in mm)	5 ± 1	$\delta \ln(2)/2 \pm 0,5^a$
Maximum spacing between adjacent measured points in mm (see O.8.3.1) ^b	20, or half of the corresponding zoom scan length, whichever is smaller	$60/f$, or half of the corresponding zoom scan length, whichever is smaller
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20) ^c	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Tolerance in the probe angle	1°	1°
^a δ is the penetration depth for a plane-wave incident normally on a planar half-space. ^b See Clause O.8 on how Δx and Δy may be selected for individual area scan requirements. ^c The probe angle relative to the phantom surface normal is restricted due to the degradation in the measurement accuracy in fields with steep spatial gradients. The measurement accuracy decreases with increasing probe angle and increasing frequency. This is the reason for the tighter probe angle restriction at frequencies above 3 GHz.		

8.2.3 Zoom Scan

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. The Zoom Scan measures points (refer to table below) within a cube whose base faces are centered on the maxima found in a preceding area scan job within the same procedure. When the measurement is done, the Zoom Scan evaluates the averaged SAR for 1 g and 10 g and displays these values next to the job's label.

Zoom Scan parameters SAR measurement as below:

Parameter	DUT transmit frequency being tested	
	$f \leq 3 \text{ GHz}$	$3 \text{ GHz} < f \leq 10 \text{ GHz}$
Maximum distance between the closest measured points and the phantom surface (z_{M1} in Figure 20 and Table 3, in mm)	5	$\delta \ln(2)/2^a$
Maximum angle between the probe axis and the phantom surface normal (α in Figure 20)	5° (flat phantom only) 30° (other phantoms)	5° (flat phantom only) 20° (other phantoms)
Maximum spacing between measured points in the x - and y -directions (Δx and Δy , in mm)	8	$24/f^b$
For uniform grids: Maximum spacing between measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	5	$10/(f - 1)$
For graded grids: Maximum spacing between the two closest measured points in the direction normal to the phantom shell (Δz_1 in Figure 20, in mm)	4	$12/f$
For graded grids: Maximum incremental increase in the spacing between measured points in the direction normal to the phantom shell ($R_z = \Delta z_2/\Delta z_1$ in Figure 20)	1,5	1,5
Minimum edge length of the zoom scan volume in the x - and y -directions (L_z in O.8.3.2, in mm)	30	22
Minimum edge length of the zoom scan volume in the direction normal to the phantom shell (L_h in O.8.3.2 in mm)	30	22
Tolerance in the probe angle	1°	1°
^a δ is the penetration depth for a plane-wave incident normally on a planar half-space.		
^b This is the maximum spacing allowed, which might not work for all circumstances.		

8.2.4 Power Drift Measurement

The Power Drift Measurement job measures the field at the same location as the most recent power reference measurement job within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. Several drift measurements are possible for one reference measurement. This allows a user to monitor the power drift of the device under test that must remain within a maximum variation of $\pm 5\%$. Detail power drift measurement refer to appendix B.

9 Test Equipment list

Manufacturer	Equipment Name	Model	Serial Number	Calibration Date	Due Date of calibration
SPEAG	Twin Phantom	SAM	2168	NCR	NCR
SPEAG	E-Field Probe	EX3DV4	3624	2025/01/15	2026/01/14
SPEAG	E-Field Probe	EX3DV4	7758	2024/09/12	2025/09/11
SPEAG	Data Acquisition Electronics	DAE4	1846	2024/12/10	2025/12/09
SPEAG	System Validation Kits	D750V3	1231	2023/05/04	2026/05/03
SPEAG	System Validation Kits	D835V2	4d302	2023/02/06	2026/02/05
SPEAG	System Validation Kits	D1750V2	1115	2023/03/23	2026/03/22
SPEAG	System Validation Kits	D1950V3	1266	2023/01/27	2026/01/26
SPEAG	Dielectric parameter probes	DAK3.5	1341	2025/07/14	2026/07/13
Agilent	Network Analyzer	E5071B	MY42302220	2025/03/11	2026/03/10
Anritsu	Radio Communication Analyzer	MT8821C	6262170463	2025/03/11	2026/03/10
R&S	Signal Generator	SMR20	100648	2025/03/11	2026/03/10
R&S	AVG Power Sensor	NRP-Z21	101651	2025/03/11	2026/03/10
R&S	AVG Power Sensor	NRP-Z21	104189	2025/03/11	2026/03/10
HAISIDIKE	Thermometer	TP300	TOWE-EQ-SR-023	2025/03/12	2026/03/11
BingYu	Temperature and Humidity Indicator	HTC-1	TOWE-EQ-SR-024	2025/03/13	2026/03/12

Note:

1. Referring to KDB 865664 D01v01r04, the dipole calibration interval can be extended to 3 years with justification. The dipoles are also not physically damaged or repaired during the interval.
2. The justification data of dipole can be found in Appendix C. The return loss is < -20dB, within 20% of prior calibration, the impedance is within 5 ohm of prior calibration.

10 SAR measurement variability

SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue equivalent medium.

The following procedures are applied to determine if repeated measurements are required.

- 1) Repeated measurement is not required when the original highest measured SAR is < 0.80 or 2 W/kg (1-g or 10-g respectively); steps 2) through 4) do not apply.
- 2) When the original highest measured SAR is ≥ 0.80 or 2 W/kg (1-g or 10-g respectively), repeat that measurement once.
- 3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ≥ 1.45 or 3.6 W/kg ($\sim 10\%$ from the 1-g or 10-g respective SAR limit).
- 4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 1.5 or 3.75 W/kg (1-g or 10-g respectively) and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20

11 Description of Test Position

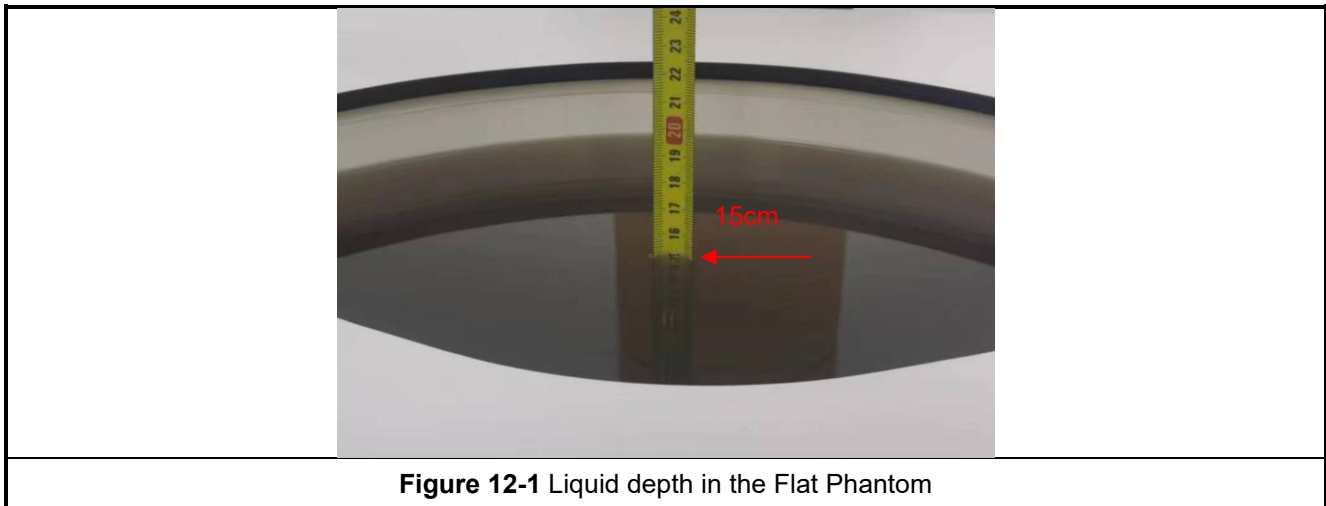
11.1 Body exposure conditions

SAR can test the sides near the antenna, the surface of the device should be tested for SAR compliance with the device touching the phantom. The SAR Exclusion Threshold in KDB 447498 D01 can be applied to determine SAR test exclusion for adjacent edge configurations. The closest distance from the antenna to an adjacent device surface is used to determine if SAR testing is required for the adjacent surfaces, with the adjacent surface positioned against the phantom and the surface containing the antenna positioned perpendicular to the phantom.

12 System Verification

12.1 Tissue Verification

The Conductivity (σ) and Permittivity (ρ) are listed in bellow table. The temperature variation of the Tissue Simulate Liquids was $22\pm 2^{\circ}\text{C}$, the liquid depth of the ear reference point or the flat phantom was at least 15 cm (which is shown in Figure 12-1).



Frequency (MHz)	Tissue Type	Liquid Temp. ($^{\circ}\text{C}$)	Target Tissue		Measured Tissue		Deviation (Limit $\pm 5\%$)		Date
			Permittivity ϵ_r	Conductivity $\sigma(\text{S/m})$	Permittivity ϵ_r	Conductivity $\sigma(\text{S/m})$	$\Delta\epsilon_r$	$\Delta\sigma$	
750	Head	21.9	41.90	0.89	42.400	0.892	1.19%	0.22%	2025/08/13
835	Head	22.1	41.50	0.90	43.100	0.930	3.86%	3.33%	2025/08/14
1750	Head	22.2	40.10	1.37	39.700	1.360	-1.00%	-0.73%	2025/08/15
1950	Head	22.2	40.00	1.40	40.500	1.370	1.25%	-2.14%	2025/08/15

Table 1: Measurement Tissue Parameters

12.2 SAR System Check

Prior to SAR assessment, a SAR system Check measurement was performed to see if the measured SAR was within $\pm 10\%$ from the target SAR values. The System Performance Check Setup in Figure 12-3.

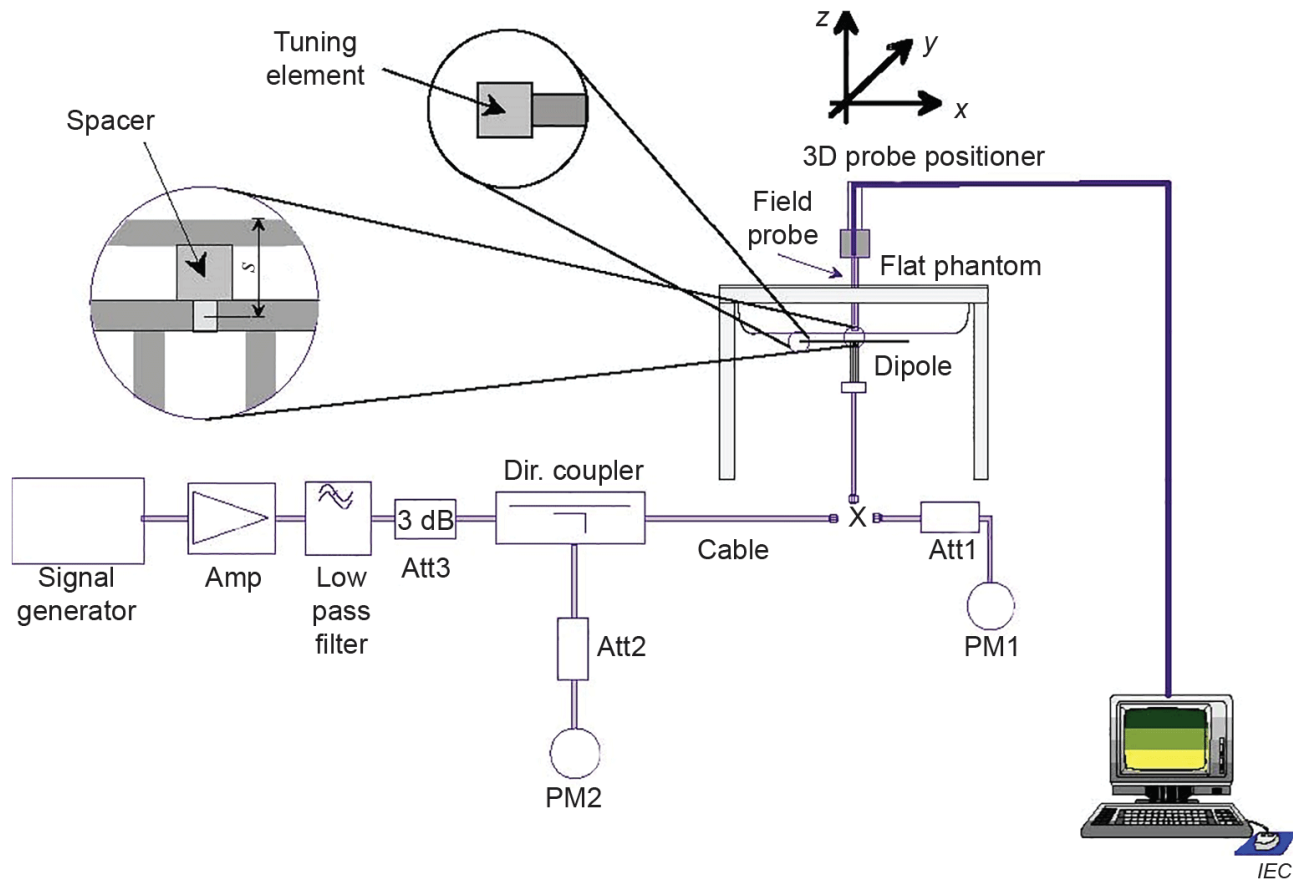


Figure 12-3 System Performance Check Setup

12.2.1 System Check Result

Frequency (MHz)	Tissue Type	Dipole	S/N	Target SAR (1W)		Measured SAR (100mW)		Measured SAR (normalized to 1W)		Deviation (Limit $\pm 10\%$)		Date
				1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	$\Delta 1g$	$\Delta 10g$	
750	Head	D750V3	1231	8.67	5.67	0.865	0.572	8.65	5.72	-0.23%	0.88%	2025/08/13
835	Head	D835V2	4d302	9.78	6.37	1.010	0.662	10.10	6.62	3.27%	3.92%	2025/08/14
1750	Head	D1750V2	1115	36.90	19.50	3.740	2.010	37.40	20.10	1.36%	3.08%	2025/08/15
1950	Head	D1950V3	1266	40.60	20.80	4.050	2.090	40.50	20.90	-0.25%	0.48%	2025/08/15

Table 2: SAR System Check Result

12.2.2 Detailed System Check Result

Please see Appendix A

13 SAR General Measurement Procedures

13.1 SAR Measurement Conditions for LTE

LTE modes are tested according to FCC KDB 941225 D05 publication. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The R&S CMW500 or Anritsu MT8820C/MT8821C simulators are used for LTE output power measurements and SAR testing. Closed loop power control was used so the UE transmits with maximum output power during SAR testing. SAR tests were performed with the same number of RB and RB offsets transmitting on all TTI frames (maximum TTI).

13.1.1 Spectrum Plots for RB Configurations

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

13.1.2 MPR

MPR is permanently implemented for this device by the manufacturer. The specific manufacturer target MPR is indicated alongside the SAR results. MPR is enabled for this device, according to 3GPP TS36.101 Section 6.2.3 – 6.2.5 under Table 6.2.3-1.

Modulation	Channel bandwidth/Transmission bandwidth						MPR (dB)
	1.4 MHz	3 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	0
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	1
16QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	1
16QAM	> 5	> 4	> 8	> 12	> 16	> 18	2
64QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	2
64QAM	> 5	> 4	> 8	> 12	> 16	> 18	3
256QAM	≥ 1						5

13.1.3 A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by setting NS=01 on the base station simulator.

13.1.4 Largest channel bandwidth standalone SAR test requirements

A. QPSK with 1 RB allocation

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

B. QPSK with 50% RB allocation

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

C. QPSK with 100% RB allocation

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

D. Higher order modulations

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

13.1.5 Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in 13.4.4 to determine the channels and RB configurations that need SAR testing, then only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is $> \frac{1}{2}$ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration, or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

14 Conducted Power

14.1 Conducted Power of LTE

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted (dBm)	Tune up (dBm)
Band2	1.4MHz	QPSK	18607	1RB#0	23.92	25.30
Band2	1.4MHz	QPSK	18607	1RB#2	23.89	25.30
Band2	1.4MHz	QPSK	18607	1RB#5	23.69	25.30
Band2	1.4MHz	QPSK	18607	3RB#0	23.81	25.30
Band2	1.4MHz	QPSK	18607	3RB#1	23.82	25.30
Band2	1.4MHz	QPSK	18607	3RB#3	23.72	25.30
Band2	1.4MHz	QPSK	18607	6RB#0	22.77	24.30
Band2	1.4MHz	16QAM	18607	1RB#0	23.09	24.30
Band2	1.4MHz	16QAM	18607	1RB#2	22.85	24.30
Band2	1.4MHz	16QAM	18607	1RB#5	22.89	24.30
Band2	1.4MHz	16QAM	18607	3RB#0	22.74	24.30
Band2	1.4MHz	16QAM	18607	3RB#1	22.81	24.30
Band2	1.4MHz	16QAM	18607	3RB#3	22.58	24.30
Band2	1.4MHz	16QAM	18607	6RB#0	21.76	23.30
Band2	1.4MHz	QPSK	18900	1RB#0	24.51	25.30
Band2	1.4MHz	QPSK	18900	1RB#2	24.34	25.30
Band2	1.4MHz	QPSK	18900	1RB#5	24.14	25.30
Band2	1.4MHz	QPSK	18900	3RB#0	24.19	25.30
Band2	1.4MHz	QPSK	18900	3RB#1	24.09	25.30
Band2	1.4MHz	QPSK	18900	3RB#3	24.59	25.30
Band2	1.4MHz	QPSK	18900	6RB#0	23.04	24.30
Band2	1.4MHz	16QAM	18900	1RB#0	23.36	24.30
Band2	1.4MHz	16QAM	18900	1RB#2	23.05	24.30
Band2	1.4MHz	16QAM	18900	1RB#5	23.08	24.30
Band2	1.4MHz	16QAM	18900	3RB#0	22.87	24.30
Band2	1.4MHz	16QAM	18900	3RB#1	23.03	24.30
Band2	1.4MHz	16QAM	18900	3RB#3	22.76	24.30
Band2	1.4MHz	16QAM	18900	6RB#0	21.91	23.30
Band2	1.4MHz	QPSK	19193	1RB#0	24.82	25.30
Band2	1.4MHz	QPSK	19193	1RB#2	24.22	25.30
Band2	1.4MHz	QPSK	19193	1RB#5	24.46	25.30
Band2	1.4MHz	QPSK	19193	3RB#0	24.40	25.30
Band2	1.4MHz	QPSK	19193	3RB#1	24.13	25.30
Band2	1.4MHz	QPSK	19193	3RB#3	24.04	25.30
Band2	1.4MHz	QPSK	19193	6RB#0	23.41	24.30
Band2	1.4MHz	16QAM	19193	1RB#0	23.01	24.30
Band2	1.4MHz	16QAM	19193	1RB#2	23.05	24.30
Band2	1.4MHz	16QAM	19193	1RB#5	23.40	24.30
Band2	1.4MHz	16QAM	19193	3RB#0	23.21	24.30
Band2	1.4MHz	16QAM	19193	3RB#1	23.54	24.30
Band2	1.4MHz	16QAM	19193	3RB#3	23.47	24.30
Band2	1.4MHz	16QAM	19193	6RB#0	22.97	23.30
Band2	3MHz	QPSK	18615	1RB#0	23.50	25.30
Band2	3MHz	QPSK	18615	1RB#8	23.71	25.30
Band2	3MHz	QPSK	18615	1RB#14	23.31	25.30
Band2	3MHz	QPSK	18615	8RB#0	22.78	24.30

Band2	3MHz	QPSK	18615	8RB#4	22.76	24.30
Band2	3MHz	QPSK	18615	8RB#7	22.58	24.30
Band2	3MHz	QPSK	18615	15RB#0	22.61	24.30
Band2	3MHz	16QAM	18615	1RB#0	22.63	24.30
Band2	3MHz	16QAM	18615	1RB#8	22.98	24.30
Band2	3MHz	16QAM	18615	1RB#14	22.39	24.30
Band2	3MHz	16QAM	18615	8RB#0	21.94	23.30
Band2	3MHz	16QAM	18615	8RB#4	21.86	23.30
Band2	3MHz	16QAM	18615	8RB#7	21.81	23.30
Band2	3MHz	16QAM	18615	15RB#0	21.68	23.30
Band2	3MHz	QPSK	18900	1RB#0	24.43	25.30
Band2	3MHz	QPSK	18900	1RB#8	24.27	25.30
Band2	3MHz	QPSK	18900	1RB#14	23.79	25.30
Band2	3MHz	QPSK	18900	8RB#0	23.12	24.30
Band2	3MHz	QPSK	18900	8RB#4	23.09	24.30
Band2	3MHz	QPSK	18900	8RB#7	22.96	24.30
Band2	3MHz	QPSK	18900	15RB#0	23.00	24.30
Band2	3MHz	16QAM	18900	1RB#0	23.38	24.30
Band2	3MHz	16QAM	18900	1RB#8	23.05	24.30
Band2	3MHz	16QAM	18900	1RB#14	22.86	24.30
Band2	3MHz	16QAM	18900	8RB#0	22.19	23.30
Band2	3MHz	16QAM	18900	8RB#4	21.95	23.30
Band2	3MHz	16QAM	18900	8RB#7	21.99	23.30
Band2	3MHz	16QAM	18900	15RB#0	21.92	23.30
Band2	3MHz	QPSK	19185	1RB#0	24.06	25.30
Band2	3MHz	QPSK	19185	1RB#8	24.43	25.30
Band2	3MHz	QPSK	19185	1RB#14	23.91	25.30
Band2	3MHz	QPSK	19185	8RB#0	23.10	24.30
Band2	3MHz	QPSK	19185	8RB#4	23.14	24.30
Band2	3MHz	QPSK	19185	8RB#7	23.80	24.30
Band2	3MHz	QPSK	19185	15RB#0	23.25	24.30
Band2	3MHz	16QAM	19185	1RB#0	22.60	24.30
Band2	3MHz	16QAM	19185	1RB#8	23.56	24.30
Band2	3MHz	16QAM	19185	1RB#14	23.12	24.30
Band2	3MHz	16QAM	19185	8RB#0	22.56	23.30
Band2	3MHz	16QAM	19185	8RB#4	22.96	23.30
Band2	3MHz	16QAM	19185	8RB#7	22.49	23.30
Band2	3MHz	16QAM	19185	15RB#0	22.57	23.30
Band2	5MHz	QPSK	18625	1RB#0	23.34	25.30
Band2	5MHz	QPSK	18625	1RB#12	23.46	25.30
Band2	5MHz	QPSK	18625	1RB#24	23.62	25.30
Band2	5MHz	QPSK	18625	12RB#0	23.87	24.30
Band2	5MHz	QPSK	18625	12RB#6	23.54	24.30
Band2	5MHz	QPSK	18625	12RB#13	23.74	24.30
Band2	5MHz	QPSK	18625	25RB#0	23.50	24.30
Band2	5MHz	16QAM	18625	1RB#0	23.41	24.30
Band2	5MHz	16QAM	18625	1RB#12	23.07	24.30
Band2	5MHz	16QAM	18625	1RB#24	23.31	24.30
Band2	5MHz	16QAM	18625	12RB#0	23.12	23.30
Band2	5MHz	16QAM	18625	12RB#6	23.14	23.30

Band2	5MHz	16QAM	18625	12RB#13	23.25	23.30
Band2	5MHz	16QAM	18625	25RB#0	23.10	23.30
Band2	5MHz	QPSK	18900	1RB#0	24.03	25.30
Band2	5MHz	QPSK	18900	1RB#12	24.10	25.30
Band2	5MHz	QPSK	18900	1RB#24	24.17	25.30
Band2	5MHz	QPSK	18900	12RB#0	22.79	24.30
Band2	5MHz	QPSK	18900	12RB#6	22.63	24.30
Band2	5MHz	QPSK	18900	12RB#13	22.59	24.30
Band2	5MHz	QPSK	18900	25RB#0	22.77	24.30
Band2	5MHz	16QAM	18900	1RB#0	22.82	24.30
Band2	5MHz	16QAM	18900	1RB#12	22.35	24.30
Band2	5MHz	16QAM	18900	1RB#24	22.95	24.30
Band2	5MHz	16QAM	18900	12RB#0	21.83	23.30
Band2	5MHz	16QAM	18900	12RB#6	21.53	23.30
Band2	5MHz	16QAM	18900	12RB#13	21.56	23.30
Band2	5MHz	16QAM	18900	25RB#0	21.63	23.30
Band2	5MHz	QPSK	19175	1RB#0	24.51	25.30
Band2	5MHz	QPSK	19175	1RB#12	24.29	25.30
Band2	5MHz	QPSK	19175	1RB#24	23.99	25.30
Band2	5MHz	QPSK	19175	12RB#0	22.37	24.30
Band2	5MHz	QPSK	19175	12RB#6	22.30	24.30
Band2	5MHz	QPSK	19175	12RB#13	22.98	24.30
Band2	5MHz	QPSK	19175	25RB#0	23.20	24.30
Band2	5MHz	16QAM	19175	1RB#0	22.54	24.30
Band2	5MHz	16QAM	19175	1RB#12	23.14	24.30
Band2	5MHz	16QAM	19175	1RB#24	23.42	24.30
Band2	5MHz	16QAM	19175	12RB#0	22.90	23.30
Band2	5MHz	16QAM	19175	12RB#6	23.10	23.30
Band2	5MHz	16QAM	19175	12RB#13	23.12	23.30
Band2	5MHz	16QAM	19175	25RB#0	23.21	23.30
Band2	10MHz	QPSK	18650	1RB#0	23.73	25.30
Band2	10MHz	QPSK	18650	1RB#24	23.98	25.30
Band2	10MHz	QPSK	18650	1RB#49	23.52	25.30
Band2	10MHz	QPSK	18650	25RB#0	22.59	24.30
Band2	10MHz	QPSK	18650	25RB#12	22.44	24.30
Band2	10MHz	QPSK	18650	25RB#25	22.65	24.30
Band2	10MHz	QPSK	18650	50RB#0	22.86	24.30
Band2	10MHz	16QAM	18650	1RB#0	23.14	24.30
Band2	10MHz	16QAM	18650	1RB#24	22.45	24.30
Band2	10MHz	16QAM	18650	1RB#49	23.13	24.30
Band2	10MHz	16QAM	18650	25RB#0	21.90	23.30
Band2	10MHz	16QAM	18650	25RB#12	21.73	23.30
Band2	10MHz	16QAM	18650	25RB#25	21.96	23.30
Band2	10MHz	QPSK	18900	1RB#0	23.99	25.30
Band2	10MHz	QPSK	18900	1RB#24	24.16	25.30
Band2	10MHz	QPSK	18900	1RB#49	23.74	25.30
Band2	10MHz	QPSK	18900	25RB#0	23.02	24.30
Band2	10MHz	QPSK	18900	25RB#12	22.71	24.30
Band2	10MHz	QPSK	18900	25RB#25	22.52	24.30
Band2	10MHz	QPSK	18900	50RB#0	23.22	24.30

Band2	10MHz	16QAM	18900	1RB#0	23.45	24.30
Band2	10MHz	16QAM	18900	1RB#24	22.60	24.30
Band2	10MHz	16QAM	18900	1RB#49	22.98	24.30
Band2	10MHz	16QAM	18900	25RB#0	22.05	23.30
Band2	10MHz	16QAM	18900	25RB#12	21.66	23.30
Band2	10MHz	16QAM	18900	25RB#25	21.47	23.30
Band2	10MHz	QPSK	19150	1RB#0	24.25	25.30
Band2	10MHz	QPSK	19150	1RB#24	24.37	25.30
Band2	10MHz	QPSK	19150	1RB#49	24.58	25.30
Band2	10MHz	QPSK	19150	25RB#0	22.34	24.30
Band2	10MHz	QPSK	19150	25RB#12	22.54	24.30
Band2	10MHz	QPSK	19150	25RB#25	22.88	24.30
Band2	10MHz	QPSK	19150	50RB#0	22.78	24.30
Band2	10MHz	16QAM	19150	1RB#0	22.81	24.30
Band2	10MHz	16QAM	19150	1RB#24	23.01	24.30
Band2	10MHz	16QAM	19150	1RB#49	23.15	24.30
Band2	10MHz	16QAM	19150	25RB#0	22.99	23.30
Band2	10MHz	16QAM	19150	25RB#12	23.02	23.30
Band2	10MHz	16QAM	19150	25RB#25	23.05	23.30
Band2	15MHz	QPSK	18675	1RB#0	24.61	25.30
Band2	15MHz	QPSK	18675	1RB#38	24.48	25.30
Band2	15MHz	QPSK	18675	1RB#74	24.13	25.30
Band2	15MHz	QPSK	18675	38RB#0	23.44	24.30
Band2	15MHz	QPSK	18675	38RB#18	23.16	24.30
Band2	15MHz	QPSK	18675	38RB#37	23.13	24.30
Band2	15MHz	QPSK	18675	75RB#0	23.42	24.30
Band2	15MHz	16QAM	18675	1RB#0	23.80	24.30
Band2	15MHz	16QAM	18675	1RB#38	23.57	24.30
Band2	15MHz	16QAM	18675	1RB#74	24.28	24.30
Band2	15MHz	16QAM	18675	38RB#0	23.11	23.30
Band2	15MHz	16QAM	18675	38RB#18	23.00	23.30
Band2	15MHz	16QAM	18675	38RB#37	23.01	23.30
Band2	15MHz	QPSK	18900	1RB#0	25.10	25.30
Band2	15MHz	QPSK	18900	1RB#38	24.30	25.30
Band2	15MHz	QPSK	18900	1RB#74	23.35	25.30
Band2	15MHz	QPSK	18900	38RB#0	23.23	24.30
Band2	15MHz	QPSK	18900	38RB#18	23.34	24.30
Band2	15MHz	QPSK	18900	38RB#37	23.21	24.30
Band2	15MHz	QPSK	18900	75RB#0	23.47	24.30
Band2	15MHz	16QAM	18900	1RB#0	24.04	24.30
Band2	15MHz	16QAM	18900	1RB#38	23.11	24.30
Band2	15MHz	16QAM	18900	1RB#74	22.45	24.30
Band2	15MHz	16QAM	18900	38RB#0	23.19	23.30
Band2	15MHz	16QAM	18900	38RB#18	23.04	23.30
Band2	15MHz	QPSK	19125	1RB#0	23.48	25.30
Band2	15MHz	QPSK	19125	1RB#38	24.32	25.30
Band2	15MHz	QPSK	19125	1RB#74	24.01	25.30
Band2	15MHz	QPSK	19125	38RB#0	22.41	24.30
Band2	15MHz	QPSK	19125	38RB#18	23.11	24.30
Band2	15MHz	QPSK	19125	38RB#37	22.58	24.30

Band2	15MHz	QPSK	19125	75RB#0	23.04	24.30
Band2	15MHz	16QAM	19125	1RB#0	23.07	24.30
Band2	15MHz	16QAM	19125	1RB#38	22.84	24.30
Band2	15MHz	16QAM	19125	1RB#74	23.64	24.30
Band2	15MHz	16QAM	19125	38RB#0	22.42	23.30
Band2	20MHz	QPSK	18700	1RB#0	23.47	25.30
Band2	20MHz	QPSK	18700	1RB#49	23.32	25.30
Band2	20MHz	QPSK	18700	1RB#99	24.51	25.30
Band2	20MHz	QPSK	18700	50RB#0	22.86	24.30
Band2	20MHz	QPSK	18700	50RB#25	22.71	24.30
Band2	20MHz	QPSK	18700	50RB#50	22.85	24.30
Band2	20MHz	QPSK	18700	100RB#0	22.36	24.30
Band2	20MHz	16QAM	18700	1RB#0	22.57	24.30
Band2	20MHz	16QAM	18700	1RB#49	22.33	24.30
Band2	20MHz	16QAM	18700	1RB#99	23.64	24.30
Band2	20MHz	QPSK	18900	1RB#0	24.62	25.30
Band2	20MHz	QPSK	18900	1RB#49	24.40	25.30
Band2	20MHz	QPSK	18900	1RB#99	24.26	25.30
Band2	20MHz	QPSK	18900	50RB#0	23.99	24.30
Band2	20MHz	QPSK	18900	50RB#25	24.00	24.30
Band2	20MHz	QPSK	18900	50RB#50	23.85	24.30
Band2	20MHz	QPSK	18900	100RB#0	23.74	24.30
Band2	20MHz	16QAM	18900	1RB#0	23.78	24.30
Band2	20MHz	16QAM	18900	1RB#49	22.78	24.30
Band2	20MHz	16QAM	18900	1RB#99	23.03	24.30
Band2	20MHz	QPSK	19100	1RB#0	23.65	25.30
Band2	20MHz	QPSK	19100	1RB#49	23.40	25.30
Band2	20MHz	QPSK	19100	1RB#99	23.60	25.30
Band2	20MHz	QPSK	19100	50RB#0	22.97	24.30
Band2	20MHz	QPSK	19100	50RB#50	23.15	24.30
Band2	20MHz	QPSK	19100	100RB#0	22.87	24.30
Band2	20MHz	16QAM	19100	1RB#0	23.23	24.30
Band2	20MHz	16QAM	19100	1RB#49	22.89	24.30
Band2	20MHz	16QAM	19100	1RB#99	23.41	24.30

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted (dBm)	Tune up (dBm)
Band4	1.4MHz	QPSK	19957	1RB#0	23.22	25.00
Band4	1.4MHz	QPSK	19957	1RB#2	23.02	25.00
Band4	1.4MHz	QPSK	19957	1RB#5	23.05	25.00
Band4	1.4MHz	QPSK	19957	3RB#0	23.33	25.00
Band4	1.4MHz	QPSK	19957	3RB#1	23.72	25.00
Band4	1.4MHz	QPSK	19957	3RB#3	23.72	25.00
Band4	1.4MHz	QPSK	19957	6RB#0	22.69	24.00
Band4	1.4MHz	16QAM	19957	1RB#0	22.07	24.00
Band4	1.4MHz	16QAM	19957	1RB#2	22.33	24.00
Band4	1.4MHz	16QAM	19957	1RB#5	23.83	24.00
Band4	1.4MHz	16QAM	19957	3RB#0	23.68	24.00
Band4	1.4MHz	16QAM	19957	3RB#1	23.73	24.00
Band4	1.4MHz	16QAM	19957	3RB#3	23.43	24.00
Band4	1.4MHz	16QAM	19957	6RB#0	22.67	23.00
Band4	1.4MHz	QPSK	20175	1RB#0	23.97	25.00
Band4	1.4MHz	QPSK	20175	1RB#2	23.68	25.00
Band4	1.4MHz	QPSK	20175	1RB#5	23.70	25.00
Band4	1.4MHz	QPSK	20175	3RB#0	23.44	25.00
Band4	1.4MHz	QPSK	20175	3RB#1	23.26	25.00
Band4	1.4MHz	QPSK	20175	3RB#3	23.27	25.00
Band4	1.4MHz	QPSK	20175	6RB#0	22.60	24.00
Band4	1.4MHz	16QAM	20175	1RB#0	22.87	24.00
Band4	1.4MHz	16QAM	20175	1RB#2	22.65	24.00
Band4	1.4MHz	16QAM	20175	1RB#5	22.78	24.00
Band4	1.4MHz	16QAM	20175	3RB#0	22.57	24.00
Band4	1.4MHz	16QAM	20175	3RB#1	22.44	24.00
Band4	1.4MHz	16QAM	20175	3RB#3	22.60	24.00
Band4	1.4MHz	16QAM	20175	6RB#0	21.89	23.00
Band4	1.4MHz	QPSK	20393	1RB#0	23.90	25.00
Band4	1.4MHz	QPSK	20393	1RB#2	23.81	25.00
Band4	1.4MHz	QPSK	20393	1RB#5	23.74	25.00
Band4	1.4MHz	QPSK	20393	3RB#0	23.80	25.00
Band4	1.4MHz	QPSK	20393	3RB#1	23.80	25.00
Band4	1.4MHz	QPSK	20393	3RB#3	23.75	25.00
Band4	1.4MHz	QPSK	20393	6RB#0	22.59	24.00
Band4	1.4MHz	16QAM	20393	1RB#0	22.61	24.00
Band4	1.4MHz	16QAM	20393	1RB#2	22.44	24.00
Band4	1.4MHz	16QAM	20393	1RB#5	22.49	24.00
Band4	1.4MHz	16QAM	20393	3RB#0	22.39	24.00
Band4	1.4MHz	16QAM	20393	3RB#1	22.49	24.00
Band4	1.4MHz	16QAM	20393	3RB#3	22.33	24.00
Band4	1.4MHz	16QAM	20393	6RB#0	21.38	23.00
Band4	3MHz	QPSK	19965	1RB#0	23.93	25.00
Band4	3MHz	QPSK	19965	1RB#8	23.72	25.00
Band4	3MHz	QPSK	19965	1RB#14	23.42	25.00
Band4	3MHz	QPSK	19965	8RB#0	23.86	24.00
Band4	3MHz	QPSK	19965	8RB#4	23.81	24.00
Band4	3MHz	QPSK	19965	8RB#7	23.73	24.00
Band4	3MHz	QPSK	19965	15RB#0	23.80	24.00

Band4	3MHz	16QAM	19965	1RB#0	22.08	24.00
Band4	3MHz	16QAM	19965	1RB#8	23.76	24.00
Band4	3MHz	16QAM	19965	1RB#14	23.65	24.00
Band4	3MHz	16QAM	19965	8RB#0	21.00	23.00
Band4	3MHz	16QAM	19965	8RB#4	22.76	23.00
Band4	3MHz	16QAM	19965	8RB#7	22.86	23.00
Band4	3MHz	16QAM	19965	15RB#0	22.83	23.00
Band4	3MHz	QPSK	20175	1RB#0	23.58	25.00
Band4	3MHz	QPSK	20175	1RB#8	23.69	25.00
Band4	3MHz	QPSK	20175	1RB#14	23.47	25.00
Band4	3MHz	QPSK	20175	8RB#0	22.47	24.00
Band4	3MHz	QPSK	20175	8RB#4	22.67	24.00
Band4	3MHz	QPSK	20175	8RB#7	22.70	24.00
Band4	3MHz	QPSK	20175	15RB#0	22.69	24.00
Band4	3MHz	16QAM	20175	1RB#0	22.48	24.00
Band4	3MHz	16QAM	20175	1RB#8	23.07	24.00
Band4	3MHz	16QAM	20175	1RB#14	22.65	24.00
Band4	3MHz	16QAM	20175	8RB#0	21.86	23.00
Band4	3MHz	16QAM	20175	8RB#4	21.96	23.00
Band4	3MHz	16QAM	20175	8RB#7	22.09	23.00
Band4	3MHz	16QAM	20175	15RB#0	21.97	23.00
Band4	3MHz	QPSK	20385	1RB#0	23.64	25.00
Band4	3MHz	QPSK	20385	1RB#8	23.70	25.00
Band4	3MHz	QPSK	20385	1RB#14	23.49	25.00
Band4	3MHz	QPSK	20385	8RB#0	22.47	24.00
Band4	3MHz	QPSK	20385	8RB#4	22.58	24.00
Band4	3MHz	QPSK	20385	8RB#7	22.52	24.00
Band4	3MHz	QPSK	20385	15RB#0	22.26	24.00
Band4	3MHz	16QAM	20385	1RB#0	22.28	24.00
Band4	3MHz	16QAM	20385	1RB#8	22.26	24.00
Band4	3MHz	16QAM	20385	1RB#14	22.18	24.00
Band4	3MHz	16QAM	20385	8RB#0	21.38	23.00
Band4	3MHz	16QAM	20385	8RB#4	21.37	23.00
Band4	3MHz	16QAM	20385	8RB#7	21.38	23.00
Band4	3MHz	16QAM	20385	15RB#0	21.36	23.00
Band4	5MHz	QPSK	19975	1RB#0	23.44	25.00
Band4	5MHz	QPSK	19975	1RB#12	23.63	25.00
Band4	5MHz	QPSK	19975	1RB#24	23.77	25.00
Band4	5MHz	QPSK	19975	12RB#0	23.95	24.00
Band4	5MHz	QPSK	19975	12RB#6	23.79	24.00
Band4	5MHz	QPSK	19975	12RB#13	23.52	24.00
Band4	5MHz	QPSK	19975	25RB#0	23.68	24.00
Band4	5MHz	16QAM	19975	1RB#0	22.12	24.00
Band4	5MHz	16QAM	19975	1RB#12	22.80	24.00
Band4	5MHz	16QAM	19975	1RB#24	23.02	24.00
Band4	5MHz	16QAM	19975	12RB#0	21.09	23.00
Band4	5MHz	16QAM	19975	12RB#6	22.30	23.00
Band4	5MHz	16QAM	19975	12RB#13	22.81	23.00
Band4	5MHz	16QAM	19975	25RB#0	22.86	23.00
Band4	5MHz	QPSK	20175	1RB#0	24.00	25.00

Band4	5MHz	QPSK	20175	1RB#12	23.52	25.00
Band4	5MHz	QPSK	20175	1RB#24	24.10	25.00
Band4	5MHz	QPSK	20175	12RB#0	22.54	24.00
Band4	5MHz	QPSK	20175	12RB#6	22.65	24.00
Band4	5MHz	QPSK	20175	12RB#13	22.95	24.00
Band4	5MHz	QPSK	20175	25RB#0	22.74	24.00
Band4	5MHz	16QAM	20175	1RB#0	23.13	24.00
Band4	5MHz	16QAM	20175	1RB#12	22.94	24.00
Band4	5MHz	16QAM	20175	1RB#24	23.48	24.00
Band4	5MHz	16QAM	20175	12RB#0	21.92	23.00
Band4	5MHz	16QAM	20175	12RB#6	21.93	23.00
Band4	5MHz	16QAM	20175	12RB#13	22.29	23.00
Band4	5MHz	16QAM	20175	25RB#0	21.95	23.00
Band4	5MHz	QPSK	20375	1RB#0	24.10	25.00
Band4	5MHz	QPSK	20375	1RB#12	23.82	25.00
Band4	5MHz	QPSK	20375	1RB#24	23.82	25.00
Band4	5MHz	QPSK	20375	12RB#0	22.58	24.00
Band4	5MHz	QPSK	20375	12RB#6	22.67	24.00
Band4	5MHz	QPSK	20375	12RB#13	22.62	24.00
Band4	5MHz	QPSK	20375	25RB#0	22.65	24.00
Band4	5MHz	16QAM	20375	1RB#0	22.66	24.00
Band4	5MHz	16QAM	20375	1RB#12	22.33	24.00
Band4	5MHz	16QAM	20375	1RB#24	22.51	24.00
Band4	5MHz	16QAM	20375	12RB#0	21.47	23.00
Band4	5MHz	16QAM	20375	12RB#6	21.48	23.00
Band4	5MHz	16QAM	20375	12RB#13	21.56	23.00
Band4	5MHz	16QAM	20375	25RB#0	21.48	23.00
Band4	10MHz	QPSK	20000	1RB#0	23.92	25.00
Band4	10MHz	QPSK	20000	1RB#24	23.88	25.00
Band4	10MHz	QPSK	20000	1RB#49	23.52	25.00
Band4	10MHz	QPSK	20000	25RB#0	22.50	24.00
Band4	10MHz	QPSK	20000	25RB#12	22.15	24.00
Band4	10MHz	QPSK	20000	25RB#25	22.98	24.00
Band4	10MHz	QPSK	20000	50RB#0	22.76	24.00
Band4	10MHz	16QAM	20000	1RB#0	23.09	24.00
Band4	10MHz	16QAM	20000	1RB#24	22.04	24.00
Band4	10MHz	16QAM	20000	1RB#49	22.02	24.00
Band4	10MHz	16QAM	20000	25RB#0	21.62	23.00
Band4	10MHz	16QAM	20000	25RB#12	21.23	23.00
Band4	10MHz	16QAM	20000	25RB#25	21.08	23.00
Band4	10MHz	QPSK	20175	1RB#0	23.61	25.00
Band4	10MHz	QPSK	20175	1RB#24	23.29	25.00
Band4	10MHz	QPSK	20175	1RB#49	24.34	25.00
Band4	10MHz	QPSK	20175	25RB#0	22.41	24.00
Band4	10MHz	QPSK	20175	25RB#12	22.68	24.00
Band4	10MHz	QPSK	20175	25RB#25	23.13	24.00
Band4	10MHz	QPSK	20175	50RB#0	23.60	24.00
Band4	10MHz	16QAM	20175	1RB#0	22.38	24.00
Band4	10MHz	16QAM	20175	1RB#24	22.91	24.00
Band4	10MHz	16QAM	20175	1RB#49	23.49	24.00

Band4	10MHz	16QAM	20175	25RB#0	21.67	23.00
Band4	10MHz	16QAM	20175	25RB#12	21.97	23.00
Band4	10MHz	16QAM	20175	25RB#25	22.35	23.00
Band4	10MHz	QPSK	20350	1RB#0	23.75	25.00
Band4	10MHz	QPSK	20350	1RB#24	23.59	25.00
Band4	10MHz	QPSK	20350	1RB#49	23.68	25.00
Band4	10MHz	QPSK	20350	25RB#0	22.82	24.00
Band4	10MHz	QPSK	20350	25RB#12	22.76	24.00
Band4	10MHz	QPSK	20350	25RB#25	22.74	24.00
Band4	10MHz	QPSK	20350	50RB#0	22.82	24.00
Band4	10MHz	16QAM	20350	1RB#0	22.31	24.00
Band4	10MHz	16QAM	20350	1RB#24	23.97	24.00
Band4	10MHz	16QAM	20350	1RB#49	23.27	24.00
Band4	10MHz	16QAM	20350	25RB#0	21.79	23.00
Band4	10MHz	16QAM	20350	25RB#12	21.65	23.00
Band4	10MHz	16QAM	20350	25RB#25	21.63	23.00
Band4	15MHz	QPSK	20025	1RB#0	23.99	25.00
Band4	15MHz	QPSK	20025	1RB#38	23.07	25.00
Band4	15MHz	QPSK	20025	1RB#74	23.52	25.00
Band4	15MHz	QPSK	20025	38RB#0	22.09	24.00
Band4	15MHz	QPSK	20025	38RB#18	22.23	24.00
Band4	15MHz	QPSK	20025	38RB#37	22.13	24.00
Band4	15MHz	QPSK	20025	75RB#0	22.92	24.00
Band4	15MHz	16QAM	20025	1RB#0	23.12	24.00
Band4	15MHz	16QAM	20025	1RB#38	22.11	24.00
Band4	15MHz	16QAM	20025	1RB#74	22.78	24.00
Band4	15MHz	16QAM	20025	38RB#0	22.11	23.00
Band4	15MHz	16QAM	20025	38RB#18	22.00	23.00
Band4	15MHz	16QAM	20025	38RB#37	22.14	23.00
Band4	15MHz	QPSK	20175	1RB#0	23.44	25.00
Band4	15MHz	QPSK	20175	1RB#38	23.69	25.00
Band4	15MHz	QPSK	20175	1RB#74	24.63	25.00
Band4	15MHz	QPSK	20175	38RB#0	22.87	24.00
Band4	15MHz	QPSK	20175	38RB#18	23.21	24.00
Band4	15MHz	QPSK	20175	38RB#37	23.11	24.00
Band4	15MHz	QPSK	20175	75RB#0	23.92	24.00
Band4	15MHz	16QAM	20175	1RB#0	22.56	24.00
Band4	15MHz	16QAM	20175	1RB#38	22.83	24.00
Band4	15MHz	16QAM	20175	1RB#74	23.91	24.00
Band4	15MHz	16QAM	20175	38RB#0	22.82	23.00
Band4	15MHz	16QAM	20175	38RB#18	22.00	23.00
Band4	15MHz	16QAM	20175	38RB#37	22.24	23.00
Band4	15MHz	QPSK	20325	1RB#0	23.36	25.00
Band4	15MHz	QPSK	20325	1RB#38	24.21	25.00
Band4	15MHz	QPSK	20325	1RB#74	24.29	25.00
Band4	15MHz	QPSK	20325	38RB#0	23.06	24.00
Band4	15MHz	QPSK	20325	38RB#18	23.38	24.00
Band4	15MHz	QPSK	20325	38RB#37	23.12	24.00
Band4	15MHz	QPSK	20325	75RB#0	23.84	24.00
Band4	15MHz	16QAM	20325	1RB#0	22.19	24.00

Band4	15MHz	16QAM	20325	1RB#38	22.93	24.00
Band4	15MHz	16QAM	20325	1RB#74	23.17	24.00
Band4	15MHz	16QAM	20325	38RB#0	23.04	24.00
Band4	20MHz	QPSK	20050	1RB#0	23.94	25.00
Band4	20MHz	QPSK	20050	1RB#49	23.56	25.00
Band4	20MHz	QPSK	20050	1RB#99	23.62	25.00
Band4	20MHz	QPSK	20050	50RB#0	23.47	24.00
Band4	20MHz	QPSK	20050	50RB#50	23.09	24.00
Band4	20MHz	QPSK	20050	100RB#0	22.64	24.00
Band4	20MHz	16QAM	20050	1RB#0	22.93	24.00
Band4	20MHz	16QAM	20050	1RB#49	22.55	24.00
Band4	20MHz	16QAM	20050	1RB#99	22.67	24.00
Band4	20MHz	QPSK	20175	1RB#0	23.33	25.00
Band4	20MHz	QPSK	20175	1RB#49	23.35	25.00
Band4	20MHz	QPSK	20175	1RB#99	23.15	25.00
Band4	20MHz	QPSK	20175	50RB#0	23.99	24.00
Band4	20MHz	QPSK	20175	50RB#50	23.40	24.00
Band4	20MHz	QPSK	20175	100RB#0	23.34	24.00
Band4	20MHz	16QAM	20175	1RB#0	22.63	24.00
Band4	20MHz	16QAM	20175	1RB#49	22.66	24.00
Band4	20MHz	16QAM	20175	1RB#99	23.79	24.00
Band4	20MHz	QPSK	20300	1RB#0	23.64	25.00
Band4	20MHz	QPSK	20300	1RB#49	23.90	25.00
Band4	20MHz	QPSK	20300	1RB#99	24.05	25.00
Band4	20MHz	QPSK	20300	50RB#0	22.94	24.00
Band4	20MHz	QPSK	20300	50RB#50	23.01	24.00
Band4	20MHz	QPSK	20300	100RB#0	23.60	24.00
Band4	20MHz	16QAM	20300	1RB#0	23.59	24.00
Band4	20MHz	16QAM	20300	1RB#49	22.63	24.00
Band4	20MHz	16QAM	20300	1RB#99	23.32	24.00

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted (dBm)	Tune up (dBm)
Band66	1.4MHz	QPSK	131979	1RB#0	24.03	25.00
Band66	1.4MHz	QPSK	131979	1RB#2	24.02	25.00
Band66	1.4MHz	QPSK	131979	1RB#5	23.83	25.00
Band66	1.4MHz	QPSK	131979	3RB#0	23.47	25.00
Band66	1.4MHz	QPSK	131979	3RB#1	23.36	25.00
Band66	1.4MHz	QPSK	131979	3RB#3	23.15	25.00
Band66	1.4MHz	QPSK	131979	6RB#0	22.29	24.00
Band66	1.4MHz	16QAM	131979	1RB#0	23.04	24.00
Band66	1.4MHz	16QAM	131979	1RB#2	23.15	24.00
Band66	1.4MHz	16QAM	131979	1RB#5	22.58	24.00
Band66	1.4MHz	16QAM	131979	3RB#0	22.26	24.00
Band66	1.4MHz	16QAM	131979	3RB#1	22.35	24.00
Band66	1.4MHz	16QAM	131979	3RB#3	22.05	24.00
Band66	1.4MHz	16QAM	131979	6RB#0	21.16	23.00
Band66	1.4MHz	QPSK	132322	1RB#0	24.31	25.00
Band66	1.4MHz	QPSK	132322	1RB#2	24.14	25.00
Band66	1.4MHz	QPSK	132322	1RB#5	24.12	25.00
Band66	1.4MHz	QPSK	132322	3RB#0	24.04	25.00
Band66	1.4MHz	QPSK	132322	3RB#1	23.98	25.00
Band66	1.4MHz	QPSK	132322	3RB#3	24.04	25.00
Band66	1.4MHz	QPSK	132322	6RB#0	23.06	24.00
Band66	1.4MHz	16QAM	132322	1RB#0	23.12	24.00
Band66	1.4MHz	16QAM	132322	1RB#2	22.90	24.00
Band66	1.4MHz	16QAM	132322	1RB#5	23.13	24.00
Band66	1.4MHz	16QAM	132322	3RB#0	22.95	24.00
Band66	1.4MHz	16QAM	132322	3RB#1	22.94	24.00
Band66	1.4MHz	16QAM	132322	3RB#3	22.98	24.00
Band66	1.4MHz	16QAM	132322	6RB#0	22.03	23.00
Band66	1.4MHz	QPSK	132665	1RB#0	23.98	25.00
Band66	1.4MHz	QPSK	132665	1RB#2	23.52	25.00
Band66	1.4MHz	QPSK	132665	1RB#5	23.46	25.00
Band66	1.4MHz	QPSK	132665	3RB#0	23.48	25.00
Band66	1.4MHz	QPSK	132665	3RB#1	23.40	25.00
Band66	1.4MHz	QPSK	132665	3RB#3	23.26	25.00
Band66	1.4MHz	QPSK	132665	6RB#0	22.55	24.00
Band66	1.4MHz	16QAM	132665	1RB#0	22.87	24.00
Band66	1.4MHz	16QAM	132665	1RB#2	22.63	24.00
Band66	1.4MHz	16QAM	132665	1RB#5	22.70	24.00
Band66	1.4MHz	16QAM	132665	3RB#0	22.49	24.00
Band66	1.4MHz	16QAM	132665	3RB#1	22.59	24.00
Band66	1.4MHz	16QAM	132665	3RB#3	22.39	24.00
Band66	1.4MHz	16QAM	132665	6RB#0	21.62	23.00
Band66	3MHz	QPSK	131987	1RB#0	23.61	25.00
Band66	3MHz	QPSK	131987	1RB#8	23.45	25.00
Band66	3MHz	QPSK	131987	1RB#14	23.02	25.00
Band66	3MHz	QPSK	131987	8RB#0	22.20	24.00
Band66	3MHz	QPSK	131987	8RB#4	22.10	24.00
Band66	3MHz	QPSK	131987	8RB#7	22.90	24.00
Band66	3MHz	QPSK	131987	15RB#0	22.92	24.00

Band66	3MHz	16QAM	131987	1RB#0	22.44	24.00
Band66	3MHz	16QAM	131987	1RB#8	22.51	24.00
Band66	3MHz	16QAM	131987	1RB#14	22.82	24.00
Band66	3MHz	16QAM	131987	8RB#0	21.06	23.00
Band66	3MHz	16QAM	131987	8RB#4	21.89	23.00
Band66	3MHz	16QAM	131987	8RB#7	21.89	23.00
Band66	3MHz	16QAM	131987	15RB#0	21.86	23.00
Band66	3MHz	QPSK	132322	1RB#0	23.91	25.00
Band66	3MHz	QPSK	132322	1RB#8	24.21	25.00
Band66	3MHz	QPSK	132322	1RB#14	24.11	25.00
Band66	3MHz	QPSK	132322	8RB#0	23.05	24.00
Band66	3MHz	QPSK	132322	8RB#4	23.18	24.00
Band66	3MHz	QPSK	132322	8RB#7	23.29	24.00
Band66	3MHz	QPSK	132322	15RB#0	23.18	24.00
Band66	3MHz	16QAM	132322	1RB#0	22.83	24.00
Band66	3MHz	16QAM	132322	1RB#8	23.02	24.00
Band66	3MHz	16QAM	132322	1RB#14	23.06	24.00
Band66	3MHz	16QAM	132322	8RB#0	22.09	23.00
Band66	3MHz	16QAM	132322	8RB#4	22.14	23.00
Band66	3MHz	16QAM	132322	8RB#7	22.22	23.00
Band66	3MHz	16QAM	132322	15RB#0	22.02	23.00
Band66	3MHz	QPSK	132657	1RB#0	23.94	25.00
Band66	3MHz	QPSK	132657	1RB#8	23.79	25.00
Band66	3MHz	QPSK	132657	1RB#14	23.37	25.00
Band66	3MHz	QPSK	132657	8RB#0	22.90	24.00
Band66	3MHz	QPSK	132657	8RB#4	22.89	24.00
Band66	3MHz	QPSK	132657	8RB#7	22.80	24.00
Band66	3MHz	QPSK	132657	15RB#0	22.80	24.00
Band66	3MHz	16QAM	132657	1RB#0	23.03	24.00
Band66	3MHz	16QAM	132657	1RB#8	22.87	24.00
Band66	3MHz	16QAM	132657	1RB#14	22.76	24.00
Band66	3MHz	16QAM	132657	8RB#0	22.01	23.00
Band66	3MHz	16QAM	132657	8RB#4	21.82	23.00
Band66	3MHz	16QAM	132657	8RB#7	21.89	23.00
Band66	3MHz	16QAM	132657	15RB#0	21.80	23.00
Band66	5MHz	QPSK	131997	1RB#0	23.43	25.00
Band66	5MHz	QPSK	131997	1RB#12	23.70	25.00
Band66	5MHz	QPSK	131997	1RB#24	23.84	25.00
Band66	5MHz	QPSK	131997	12RB#0	22.02	24.00
Band66	5MHz	QPSK	131997	12RB#6	22.89	24.00
Band66	5MHz	QPSK	131997	12RB#13	22.80	24.00
Band66	5MHz	QPSK	131997	25RB#0	22.98	24.00
Band66	5MHz	16QAM	131997	1RB#0	22.15	24.00
Band66	5MHz	16QAM	131997	1RB#12	22.63	24.00
Band66	5MHz	16QAM	131997	1RB#24	22.45	24.00
Band66	5MHz	16QAM	131997	12RB#0	21.14	23.00
Band66	5MHz	16QAM	131997	12RB#6	22.88	23.00
Band66	5MHz	16QAM	131997	12RB#13	21.89	23.00
Band66	5MHz	16QAM	131997	25RB#0	21.92	23.00
Band66	5MHz	QPSK	132322	1RB#0	24.14	25.00

Band66	5MHz	QPSK	132322	1RB#12	23.99	25.00
Band66	5MHz	QPSK	132322	1RB#24	24.27	25.00
Band66	5MHz	QPSK	132322	12RB#0	23.00	24.00
Band66	5MHz	QPSK	132322	12RB#6	23.17	24.00
Band66	5MHz	QPSK	132322	12RB#13	23.22	24.00
Band66	5MHz	QPSK	132322	25RB#0	23.16	24.00
Band66	5MHz	16QAM	132322	1RB#0	23.13	24.00
Band66	5MHz	16QAM	132322	1RB#12	23.18	24.00
Band66	5MHz	16QAM	132322	1RB#24	23.48	24.00
Band66	5MHz	16QAM	132322	12RB#0	22.03	23.00
Band66	5MHz	16QAM	132322	12RB#6	22.06	23.00
Band66	5MHz	16QAM	132322	12RB#13	22.21	23.00
Band66	5MHz	16QAM	132322	25RB#0	22.02	23.00
Band66	5MHz	QPSK	132647	1RB#0	24.69	25.00
Band66	5MHz	QPSK	132647	1RB#12	23.83	25.00
Band66	5MHz	QPSK	132647	1RB#24	23.78	25.00
Band66	5MHz	QPSK	132647	12RB#0	23.21	24.00
Band66	5MHz	QPSK	132647	12RB#6	23.06	24.00
Band66	5MHz	QPSK	132647	12RB#13	22.95	24.00
Band66	5MHz	QPSK	132647	25RB#0	23.12	24.00
Band66	5MHz	16QAM	132647	1RB#0	23.33	24.00
Band66	5MHz	16QAM	132647	1RB#12	22.76	24.00
Band66	5MHz	16QAM	132647	1RB#24	22.72	24.00
Band66	5MHz	16QAM	132647	12RB#0	22.39	23.00
Band66	5MHz	16QAM	132647	12RB#6	22.10	23.00
Band66	5MHz	16QAM	132647	12RB#13	22.11	23.00
Band66	5MHz	16QAM	132647	25RB#0	22.15	23.00
Band66	10MHz	QPSK	132022	1RB#0	24.11	25.00
Band66	10MHz	QPSK	132022	1RB#24	23.26	25.00
Band66	10MHz	QPSK	132022	1RB#49	23.92	25.00
Band66	10MHz	QPSK	132022	25RB#0	22.71	24.00
Band66	10MHz	QPSK	132022	25RB#12	22.40	24.00
Band66	10MHz	QPSK	132022	25RB#25	22.12	24.00
Band66	10MHz	QPSK	132022	50RB#0	23.09	24.00
Band66	10MHz	16QAM	132022	1RB#0	23.43	24.00
Band66	10MHz	16QAM	132022	1RB#24	22.26	24.00
Band66	10MHz	16QAM	132022	1RB#49	22.23	24.00
Band66	10MHz	16QAM	132022	25RB#0	21.90	23.00
Band66	10MHz	16QAM	132022	25RB#12	21.47	23.00
Band66	10MHz	16QAM	132022	25RB#25	21.30	23.00
Band66	10MHz	QPSK	132322	1RB#0	23.73	25.00
Band66	10MHz	QPSK	132322	1RB#24	24.06	25.00
Band66	10MHz	QPSK	132322	1RB#49	24.33	25.00
Band66	10MHz	QPSK	132322	25RB#0	22.98	24.00
Band66	10MHz	QPSK	132322	25RB#12	23.15	24.00
Band66	10MHz	QPSK	132322	25RB#25	23.42	24.00
Band66	10MHz	QPSK	132322	50RB#0	23.70	24.00
Band66	10MHz	16QAM	132322	1RB#0	22.68	24.00
Band66	10MHz	16QAM	132322	1RB#24	23.34	24.00
Band66	10MHz	16QAM	132322	1RB#49	23.31	24.00

Band66	10MHz	16QAM	132322	25RB#0	21.90	23.00
Band66	10MHz	16QAM	132322	25RB#12	22.07	23.00
Band66	10MHz	16QAM	132322	25RB#25	22.28	23.00
Band66	10MHz	QPSK	132622	1RB#0	24.36	25.00
Band66	10MHz	QPSK	132622	1RB#24	23.68	25.00
Band66	10MHz	QPSK	132622	1RB#49	23.25	25.00
Band66	10MHz	QPSK	132622	25RB#0	23.01	24.00
Band66	10MHz	QPSK	132622	25RB#12	22.74	24.00
Band66	10MHz	QPSK	132622	25RB#25	22.53	24.00
Band66	10MHz	QPSK	132622	50RB#0	23.15	24.00
Band66	10MHz	16QAM	132622	1RB#0	23.32	24.00
Band66	10MHz	16QAM	132622	1RB#24	22.58	24.00
Band66	10MHz	16QAM	132622	1RB#49	22.47	24.00
Band66	10MHz	16QAM	132622	25RB#0	22.00	23.00
Band66	10MHz	16QAM	132622	25RB#12	21.69	23.00
Band66	10MHz	16QAM	132622	25RB#25	21.56	23.00
Band66	15MHz	QPSK	132047	1RB#0	24.87	25.00
Band66	15MHz	QPSK	132047	1RB#38	23.84	25.00
Band66	15MHz	QPSK	132047	1RB#74	23.20	25.00
Band66	15MHz	QPSK	132047	38RB#0	22.61	24.00
Band66	15MHz	QPSK	132047	38RB#18	22.33	24.00
Band66	15MHz	QPSK	132047	38RB#37	22.17	24.00
Band66	15MHz	QPSK	132047	75RB#0	22.03	24.00
Band66	15MHz	16QAM	132047	1RB#0	23.83	24.00
Band66	15MHz	16QAM	132047	1RB#38	22.66	24.00
Band66	15MHz	16QAM	132047	1RB#74	22.14	24.00
Band66	15MHz	16QAM	132047	38RB#0	22.51	23.00
Band66	15MHz	QPSK	132322	1RB#0	23.23	25.00
Band66	15MHz	QPSK	132322	1RB#38	24.32	25.00
Band66	15MHz	QPSK	132322	1RB#74	24.57	25.00
Band66	15MHz	QPSK	132322	38RB#0	23.07	24.00
Band66	15MHz	QPSK	132322	38RB#18	23.12	24.00
Band66	15MHz	QPSK	132322	38RB#37	23.04	24.00
Band66	15MHz	QPSK	132322	75RB#0	23.02	24.00
Band66	15MHz	16QAM	132322	1RB#0	22.00	24.00
Band66	15MHz	16QAM	132322	1RB#38	23.08	24.00
Band66	15MHz	16QAM	132322	1RB#74	22.47	23.00
Band66	15MHz	16QAM	132322	38RB#0	23.11	24.00
Band66	15MHz	QPSK	132597	1RB#0	24.57	25.00
Band66	15MHz	QPSK	132597	1RB#38	23.59	25.00
Band66	15MHz	QPSK	132597	1RB#74	23.24	25.00
Band66	15MHz	QPSK	132597	38RB#0	22.68	24.00
Band66	15MHz	QPSK	132597	38RB#18	22.86	24.00
Band66	15MHz	QPSK	132597	38RB#37	22.83	24.00
Band66	15MHz	QPSK	132597	75RB#0	22.79	24.00
Band66	15MHz	16QAM	132597	1RB#0	23.50	24.00
Band66	15MHz	16QAM	132597	1RB#38	22.59	24.00
Band66	15MHz	16QAM	132597	1RB#74	22.32	24.00
Band66	15MHz	16QAM	132597	38RB#0	22.71	23.00
Band66	20MHz	QPSK	132072	1RB#0	23.90	25.00

Band66	20MHz	QPSK	132072	1RB#49	23.56	25.00
Band66	20MHz	QPSK	132072	1RB#99	23.57	25.00
Band66	20MHz	QPSK	132072	50RB#0	23.29	24.00
Band66	20MHz	QPSK	132072	50RB#50	22.61	24.00
Band66	20MHz	QPSK	132072	100RB#0	22.93	24.00
Band66	20MHz	16QAM	132072	1RB#0	22.78	24.00
Band66	20MHz	16QAM	132072	1RB#49	22.49	24.00
Band66	20MHz	16QAM	132072	1RB#99	22.64	24.00
Band66	20MHz	QPSK	132322	1RB#0	23.54	25.00
Band66	20MHz	QPSK	132322	1RB#49	23.77	25.00
Band66	20MHz	QPSK	132322	1RB#99	24.03	25.00
Band66	20MHz	QPSK	132322	50RB#0	23.02	24.00
Band66	20MHz	QPSK	132322	50RB#50	23.83	24.00
Band66	20MHz	QPSK	132322	100RB#0	23.24	24.00
Band66	20MHz	16QAM	132322	1RB#0	22.75	24.00
Band66	20MHz	16QAM	132322	1RB#49	22.84	24.00
Band66	20MHz	16QAM	132322	1RB#99	23.47	24.00
Band66	20MHz	QPSK	132572	1RB#0	24.43	25.00
Band66	20MHz	QPSK	132572	1RB#49	23.82	25.00
Band66	20MHz	QPSK	132572	1RB#99	23.95	25.00
Band66	20MHz	QPSK	132572	50RB#0	23.79	24.00
Band66	20MHz	QPSK	132572	50RB#50	22.79	24.00
Band66	20MHz	QPSK	132572	100RB#0	23.06	24.00
Band66	20MHz	16QAM	132572	1RB#0	23.29	24.00
Band66	20MHz	16QAM	132572	1RB#49	22.54	24.00
Band66	20MHz	16QAM	132572	1RB#99	22.90	24.00

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted (dBm)	Tune up (dBm)
Band5	1.4MHz	QPSK	20407	1RB#0	23.90	25.50
Band5	1.4MHz	QPSK	20407	1RB#2	23.86	25.50
Band5	1.4MHz	QPSK	20407	1RB#5	23.77	25.50
Band5	1.4MHz	QPSK	20407	3RB#0	23.77	25.50
Band5	1.4MHz	QPSK	20407	3RB#1	23.63	25.50
Band5	1.4MHz	QPSK	20407	3RB#3	23.85	25.50
Band5	1.4MHz	QPSK	20407	6RB#0	22.68	24.50
Band5	1.4MHz	16QAM	20407	1RB#0	22.80	24.50
Band5	1.4MHz	16QAM	20407	1RB#2	22.88	24.50
Band5	1.4MHz	16QAM	20407	1RB#5	22.53	24.50
Band5	1.4MHz	16QAM	20407	3RB#0	22.67	24.50
Band5	1.4MHz	16QAM	20407	3RB#1	22.58	24.50
Band5	1.4MHz	16QAM	20407	3RB#3	22.51	24.50
Band5	1.4MHz	16QAM	20407	6RB#0	21.62	23.50
Band5	1.4MHz	QPSK	20525	1RB#0	24.31	25.50
Band5	1.4MHz	QPSK	20525	1RB#2	24.29	25.50
Band5	1.4MHz	QPSK	20525	1RB#5	24.39	25.50
Band5	1.4MHz	QPSK	20525	3RB#0	24.37	25.50
Band5	1.4MHz	QPSK	20525	3RB#1	24.31	25.50
Band5	1.4MHz	QPSK	20525	3RB#3	24.30	25.50
Band5	1.4MHz	QPSK	20525	6RB#0	22.94	24.50

Band5	1.4MHz	16QAM	20525	1RB#0	23.11	24.50
Band5	1.4MHz	16QAM	20525	1RB#2	23.04	24.50
Band5	1.4MHz	16QAM	20525	1RB#5	23.11	24.50
Band5	1.4MHz	16QAM	20525	3RB#0	22.85	24.50
Band5	1.4MHz	16QAM	20525	3RB#1	23.00	24.50
Band5	1.4MHz	16QAM	20525	3RB#3	22.78	24.50
Band5	1.4MHz	16QAM	20525	6RB#0	21.82	23.50
Band5	1.4MHz	QPSK	20643	1RB#0	24.74	25.50
Band5	1.4MHz	QPSK	20643	1RB#2	24.07	25.50
Band5	1.4MHz	QPSK	20643	1RB#5	24.05	25.50
Band5	1.4MHz	QPSK	20643	3RB#0	24.13	25.50
Band5	1.4MHz	QPSK	20643	3RB#1	24.05	25.50
Band5	1.4MHz	QPSK	20643	3RB#3	24.13	25.50
Band5	1.4MHz	QPSK	20643	6RB#0	23.45	24.50
Band5	1.4MHz	16QAM	20643	1RB#0	23.36	24.50
Band5	1.4MHz	16QAM	20643	1RB#2	23.55	24.50
Band5	1.4MHz	16QAM	20643	1RB#5	23.04	24.50
Band5	1.4MHz	16QAM	20643	3RB#0	22.90	24.50
Band5	1.4MHz	16QAM	20643	3RB#1	23.39	24.50
Band5	1.4MHz	16QAM	20643	3RB#3	23.03	24.50
Band5	1.4MHz	16QAM	20643	6RB#0	21.97	23.50
Band5	3MHz	QPSK	20415	1RB#0	23.87	25.50
Band5	3MHz	QPSK	20415	1RB#8	24.08	25.50
Band5	3MHz	QPSK	20415	1RB#14	23.90	25.50
Band5	3MHz	QPSK	20415	8RB#0	22.70	24.50
Band5	3MHz	QPSK	20415	8RB#4	22.77	24.50
Band5	3MHz	QPSK	20415	8RB#7	22.75	24.50
Band5	3MHz	QPSK	20415	15RB#0	22.78	24.50
Band5	3MHz	16QAM	20415	1RB#0	22.86	24.50
Band5	3MHz	16QAM	20415	1RB#8	22.72	24.50
Band5	3MHz	16QAM	20415	1RB#14	22.71	24.50
Band5	3MHz	16QAM	20415	8RB#0	21.76	23.50
Band5	3MHz	16QAM	20415	8RB#4	21.65	23.50
Band5	3MHz	16QAM	20415	8RB#7	21.82	23.50
Band5	3MHz	16QAM	20415	15RB#0	21.72	23.50
Band5	3MHz	QPSK	20525	1RB#0	23.99	25.50
Band5	3MHz	QPSK	20525	1RB#8	24.06	25.50
Band5	3MHz	QPSK	20525	1RB#14	24.29	25.50
Band5	3MHz	QPSK	20525	8RB#0	22.79	24.50
Band5	3MHz	QPSK	20525	8RB#4	22.92	24.50
Band5	3MHz	QPSK	20525	8RB#7	22.72	24.50
Band5	3MHz	QPSK	20525	15RB#0	22.68	24.50
Band5	3MHz	16QAM	20525	1RB#0	22.52	24.50
Band5	3MHz	16QAM	20525	1RB#8	23.24	24.50
Band5	3MHz	16QAM	20525	1RB#14	22.57	24.50
Band5	3MHz	16QAM	20525	8RB#0	21.71	23.50
Band5	3MHz	16QAM	20525	8RB#4	21.73	23.50
Band5	3MHz	16QAM	20525	8RB#7	21.63	23.50
Band5	3MHz	16QAM	20525	15RB#0	21.65	23.50
Band5	3MHz	QPSK	20635	1RB#0	24.74	25.50

Band5	3MHz	QPSK	20635	1RB#8	24.37	25.50
Band5	3MHz	QPSK	20635	1RB#14	24.96	25.50
Band5	3MHz	QPSK	20635	8RB#0	23.35	24.50
Band5	3MHz	QPSK	20635	8RB#4	23.38	24.50
Band5	3MHz	QPSK	20635	8RB#7	23.38	24.50
Band5	3MHz	QPSK	20635	15RB#0	23.40	24.50
Band5	3MHz	16QAM	20635	1RB#0	23.33	24.50
Band5	3MHz	16QAM	20635	1RB#8	23.14	24.50
Band5	3MHz	16QAM	20635	1RB#14	23.00	24.50
Band5	3MHz	16QAM	20635	8RB#0	22.27	23.50
Band5	3MHz	16QAM	20635	8RB#4	22.08	23.50
Band5	3MHz	16QAM	20635	8RB#7	22.10	23.50
Band5	3MHz	16QAM	20635	15RB#0	22.03	23.50
Band5	5MHz	QPSK	20425	1RB#0	24.25	25.50
Band5	5MHz	QPSK	20425	1RB#12	24.10	25.50
Band5	5MHz	QPSK	20425	1RB#24	24.31	25.50
Band5	5MHz	QPSK	20425	12RB#0	22.81	24.50
Band5	5MHz	QPSK	20425	12RB#6	22.76	24.50
Band5	5MHz	QPSK	20425	12RB#13	22.85	24.50
Band5	5MHz	QPSK	20425	25RB#0	22.94	24.50
Band5	5MHz	16QAM	20425	1RB#0	22.86	24.50
Band5	5MHz	16QAM	20425	1RB#12	22.50	24.50
Band5	5MHz	16QAM	20425	1RB#24	22.76	24.50
Band5	5MHz	16QAM	20425	12RB#0	21.95	23.50
Band5	5MHz	16QAM	20425	12RB#6	21.70	23.50
Band5	5MHz	16QAM	20425	12RB#13	21.93	23.50
Band5	5MHz	16QAM	20425	25RB#0	21.84	23.50
Band5	5MHz	QPSK	20525	1RB#0	24.39	25.50
Band5	5MHz	QPSK	20525	1RB#12	24.47	25.50
Band5	5MHz	QPSK	20525	1RB#24	24.73	25.50
Band5	5MHz	QPSK	20525	12RB#0	22.77	24.50
Band5	5MHz	QPSK	20525	12RB#6	22.84	24.50
Band5	5MHz	QPSK	20525	12RB#13	22.86	24.50
Band5	5MHz	QPSK	20525	25RB#0	22.85	24.50
Band5	5MHz	16QAM	20525	1RB#0	23.30	24.50
Band5	5MHz	16QAM	20525	1RB#12	23.01	24.50
Band5	5MHz	16QAM	20525	1RB#24	23.33	24.50
Band5	5MHz	16QAM	20525	12RB#0	21.77	23.50
Band5	5MHz	16QAM	20525	12RB#6	21.72	23.50
Band5	5MHz	16QAM	20525	12RB#13	21.91	23.50
Band5	5MHz	16QAM	20525	25RB#0	21.66	23.50
Band5	5MHz	QPSK	20625	1RB#0	23.79	25.50
Band5	5MHz	QPSK	20625	1RB#12	24.85	25.50
Band5	5MHz	QPSK	20625	1RB#24	24.02	25.50
Band5	5MHz	QPSK	20625	12RB#0	23.64	24.50
Band5	5MHz	QPSK	20625	12RB#6	23.67	24.50
Band5	5MHz	QPSK	20625	12RB#13	23.66	24.50
Band5	5MHz	QPSK	20625	25RB#0	23.68	24.50
Band5	5MHz	16QAM	20625	1RB#0	23.68	24.50
Band5	5MHz	16QAM	20625	1RB#12	23.34	24.50

Band5	5MHz	16QAM	20625	1RB#24	23.57	24.50
Band5	5MHz	16QAM	20625	12RB#0	22.46	23.50
Band5	5MHz	16QAM	20625	12RB#6	22.45	23.50
Band5	5MHz	16QAM	20625	12RB#13	22.55	23.50
Band5	5MHz	16QAM	20625	25RB#0	22.43	23.50
Band5	10MHz	QPSK	20450	1RB#0	24.49	25.50
Band5	10MHz	QPSK	20450	1RB#24	24.00	25.50
Band5	10MHz	QPSK	20450	1RB#49	24.16	25.50
Band5	10MHz	QPSK	20450	25RB#0	23.03	24.50
Band5	10MHz	QPSK	20450	25RB#12	22.89	24.50
Band5	10MHz	QPSK	20450	25RB#25	22.92	24.50
Band5	10MHz	QPSK	20450	50RB#0	23.07	24.50
Band5	10MHz	16QAM	20450	1RB#0	23.38	24.50
Band5	10MHz	16QAM	20450	1RB#24	22.92	24.50
Band5	10MHz	16QAM	20450	1RB#49	23.22	24.50
Band5	10MHz	16QAM	20450	25RB#0	22.25	23.50
Band5	10MHz	16QAM	20450	25RB#12	21.98	23.50
Band5	10MHz	16QAM	20450	25RB#25	22.03	23.50
Band5	10MHz	QPSK	20525	1RB#0	24.20	25.50
Band5	10MHz	QPSK	20525	1RB#24	24.03	25.50
Band5	10MHz	QPSK	20525	1RB#49	24.78	25.50
Band5	10MHz	QPSK	20525	25RB#0	22.76	24.50
Band5	10MHz	QPSK	20525	25RB#12	22.88	24.50
Band5	10MHz	QPSK	20525	25RB#25	23.08	24.50
Band5	10MHz	QPSK	20525	50RB#0	23.03	24.50
Band5	10MHz	16QAM	20525	1RB#0	22.70	24.50
Band5	10MHz	16QAM	20525	1RB#24	23.13	24.50
Band5	10MHz	16QAM	20525	1RB#49	23.12	24.50
Band5	10MHz	16QAM	20525	25RB#0	21.63	23.50
Band5	10MHz	16QAM	20525	25RB#12	21.74	23.50
Band5	10MHz	16QAM	20525	25RB#25	21.86	23.50
Band5	10MHz	QPSK	20600	1RB#0	25.39	25.50
Band5	10MHz	QPSK	20600	1RB#24	24.90	25.50
Band5	10MHz	QPSK	20600	1RB#49	24.85	25.50
Band5	10MHz	QPSK	20600	25RB#0	23.63	24.50
Band5	10MHz	QPSK	20600	25RB#12	23.42	24.50
Band5	10MHz	QPSK	20600	25RB#25	23.53	24.50
Band5	10MHz	QPSK	20600	50RB#0	23.90	24.50
Band5	10MHz	16QAM	20600	1RB#0	23.84	24.50
Band5	10MHz	16QAM	20600	1RB#24	23.12	24.50
Band5	10MHz	16QAM	20600	1RB#49	23.42	24.50
Band5	10MHz	16QAM	20600	25RB#0	22.59	23.50
Band5	10MHz	16QAM	20600	25RB#12	22.45	23.50
Band5	10MHz	16QAM	20600	25RB#25	22.54	23.50

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted (dBm)	Tune up (dBm)
Band12	1.4MHz	QPSK	23017	1RB#0	23.02	23.50
Band12	1.4MHz	QPSK	23017	1RB#2	22.98	23.50
Band12	1.4MHz	QPSK	23017	1RB#5	23.03	23.50
Band12	1.4MHz	QPSK	23017	3RB#0	22.68	23.50
Band12	1.4MHz	QPSK	23017	3RB#1	22.65	23.50
Band12	1.4MHz	QPSK	23017	3RB#3	22.74	23.50
Band12	1.4MHz	QPSK	23017	6RB#0	21.79	22.50
Band12	1.4MHz	16QAM	23017	1RB#0	21.87	22.50
Band12	1.4MHz	16QAM	23017	1RB#2	21.82	22.50
Band12	1.4MHz	16QAM	23017	1RB#5	22.04	22.50
Band12	1.4MHz	16QAM	23017	3RB#0	21.83	22.50
Band12	1.4MHz	16QAM	23017	3RB#1	21.79	22.50
Band12	1.4MHz	16QAM	23017	3RB#3	21.85	22.50
Band12	1.4MHz	16QAM	23017	6RB#0	20.94	22.00
Band12	1.4MHz	QPSK	23095	1RB#0	22.59	23.50
Band12	1.4MHz	QPSK	23095	1RB#2	22.16	23.50
Band12	1.4MHz	QPSK	23095	1RB#5	22.01	23.50
Band12	1.4MHz	QPSK	23095	3RB#0	22.17	23.50
Band12	1.4MHz	QPSK	23095	3RB#1	22.04	23.50
Band12	1.4MHz	QPSK	23095	3RB#3	21.80	23.50
Band12	1.4MHz	QPSK	23095	6RB#0	21.04	22.50
Band12	1.4MHz	16QAM	23095	1RB#0	21.49	22.50
Band12	1.4MHz	16QAM	23095	1RB#2	21.09	22.50
Band12	1.4MHz	16QAM	23095	1RB#5	20.96	22.50
Band12	1.4MHz	16QAM	23095	3RB#0	21.03	22.50
Band12	1.4MHz	16QAM	23095	3RB#1	21.05	22.50
Band12	1.4MHz	16QAM	23095	3RB#3	20.75	22.50
Band12	1.4MHz	16QAM	23095	6RB#0	20.11	22.00
Band12	1.4MHz	QPSK	23173	1RB#0	22.93	23.50
Band12	1.4MHz	QPSK	23173	1RB#2	22.67	23.50
Band12	1.4MHz	QPSK	23173	1RB#5	22.83	23.50
Band12	1.4MHz	QPSK	23173	3RB#0	22.67	23.50
Band12	1.4MHz	QPSK	23173	3RB#1	22.63	23.50
Band12	1.4MHz	QPSK	23173	3RB#3	22.77	23.50
Band12	1.4MHz	QPSK	23173	6RB#0	21.83	22.50
Band12	1.4MHz	16QAM	23173	1RB#0	21.72	22.50
Band12	1.4MHz	16QAM	23173	1RB#2	22.10	22.50
Band12	1.4MHz	16QAM	23173	1RB#5	21.91	22.50
Band12	1.4MHz	16QAM	23173	3RB#0	21.47	22.50
Band12	1.4MHz	16QAM	23173	3RB#1	21.75	22.50
Band12	1.4MHz	16QAM	23173	3RB#3	21.63	22.50
Band12	1.4MHz	16QAM	23173	6RB#0	21.00	22.00
Band12	3MHz	QPSK	23025	1RB#0	22.32	23.50
Band12	3MHz	QPSK	23025	1RB#8	22.86	23.50
Band12	3MHz	QPSK	23025	1RB#14	22.72	23.50
Band12	3MHz	QPSK	23025	8RB#0	21.61	22.50
Band12	3MHz	QPSK	23025	8RB#4	21.86	22.50
Band12	3MHz	QPSK	23025	8RB#7	21.96	22.50
Band12	3MHz	QPSK	23025	15RB#0	21.84	22.50

Band12	3MHz	16QAM	23025	1RB#0	21.60	22.50
Band12	3MHz	16QAM	23025	1RB#8	21.92	22.50
Band12	3MHz	16QAM	23025	1RB#14	22.22	22.50
Band12	3MHz	16QAM	23025	8RB#0	20.96	22.00
Band12	3MHz	16QAM	23025	8RB#4	21.04	22.00
Band12	3MHz	16QAM	23025	8RB#7	21.24	22.00
Band12	3MHz	16QAM	23025	15RB#0	20.96	22.00
Band12	3MHz	QPSK	23095	1RB#0	22.31	23.50
Band12	3MHz	QPSK	23095	1RB#8	21.72	23.50
Band12	3MHz	QPSK	23095	1RB#14	21.74	23.50
Band12	3MHz	QPSK	23095	8RB#0	20.97	22.50
Band12	3MHz	QPSK	23095	8RB#4	20.87	22.50
Band12	3MHz	QPSK	23095	8RB#7	20.72	22.50
Band12	3MHz	QPSK	23095	15RB#0	20.93	22.50
Band12	3MHz	16QAM	23095	1RB#0	21.36	22.50
Band12	3MHz	16QAM	23095	1RB#8	20.63	22.50
Band12	3MHz	16QAM	23095	1RB#14	20.63	22.50
Band12	3MHz	16QAM	23095	8RB#0	20.36	22.00
Band12	3MHz	16QAM	23095	8RB#4	20.00	22.00
Band12	3MHz	16QAM	23095	8RB#7	20.01	22.00
Band12	3MHz	16QAM	23095	15RB#0	20.14	22.00
Band12	3MHz	QPSK	23165	1RB#0	22.02	23.50
Band12	3MHz	QPSK	23165	1RB#8	22.49	23.50
Band12	3MHz	QPSK	23165	1RB#14	22.63	23.50
Band12	3MHz	QPSK	23165	8RB#0	21.11	22.50
Band12	3MHz	QPSK	23165	8RB#4	21.52	22.50
Band12	3MHz	QPSK	23165	8RB#7	21.69	22.50
Band12	3MHz	QPSK	23165	15RB#0	21.44	22.50
Band12	3MHz	16QAM	23165	1RB#0	20.67	22.50
Band12	3MHz	16QAM	23165	1RB#8	21.92	22.50
Band12	3MHz	16QAM	23165	1RB#14	21.69	22.50
Band12	3MHz	16QAM	23165	8RB#0	20.31	22.00
Band12	3MHz	16QAM	23165	8RB#4	20.63	22.00
Band12	3MHz	16QAM	23165	8RB#7	20.90	22.00
Band12	3MHz	16QAM	23165	15RB#0	20.64	22.00
Band12	5MHz	QPSK	23035	1RB#0	22.97	23.50
Band12	5MHz	QPSK	23035	1RB#12	23.14	23.50
Band12	5MHz	QPSK	23035	1RB#24	23.26	23.50
Band12	5MHz	QPSK	23035	12RB#0	22.09	22.50
Band12	5MHz	QPSK	23035	12RB#6	22.26	22.50
Band12	5MHz	QPSK	23035	12RB#13	22.34	22.50
Band12	5MHz	QPSK	23035	25RB#0	22.28	22.50
Band12	5MHz	16QAM	23035	1RB#0	21.73	22.50
Band12	5MHz	16QAM	23035	1RB#12	22.10	22.50
Band12	5MHz	16QAM	23035	1RB#24	22.26	22.50
Band12	5MHz	16QAM	23035	12RB#0	21.30	22.00
Band12	5MHz	16QAM	23035	12RB#6	21.41	22.00
Band12	5MHz	16QAM	23035	12RB#13	21.60	22.00
Band12	5MHz	16QAM	23035	25RB#0	21.37	22.00
Band12	5MHz	QPSK	23095	1RB#0	23.05	23.50

Band12	5MHz	QPSK	23095	1RB#12	21.75	23.50
Band12	5MHz	QPSK	23095	1RB#24	21.72	23.50
Band12	5MHz	QPSK	23095	12RB#0	21.31	22.50
Band12	5MHz	QPSK	23095	12RB#6	20.99	22.50
Band12	5MHz	QPSK	23095	12RB#13	20.78	22.50
Band12	5MHz	QPSK	23095	25RB#0	21.13	22.50
Band12	5MHz	16QAM	23095	1RB#0	21.59	22.50
Band12	5MHz	16QAM	23095	1RB#12	20.54	22.50
Band12	5MHz	16QAM	23095	1RB#24	20.74	22.50
Band12	5MHz	16QAM	23095	12RB#0	20.70	22.00
Band12	5MHz	16QAM	23095	12RB#6	20.20	22.00
Band12	5MHz	16QAM	23095	12RB#13	20.06	22.00
Band12	5MHz	16QAM	23095	25RB#0	20.32	22.00
Band12	5MHz	QPSK	23155	1RB#0	22.38	23.50
Band12	5MHz	QPSK	23155	1RB#12	22.18	23.50
Band12	5MHz	QPSK	23155	1RB#24	23.21	23.50
Band12	5MHz	QPSK	23155	12RB#0	21.00	22.50
Band12	5MHz	QPSK	23155	12RB#6	21.24	22.50
Band12	5MHz	QPSK	23155	12RB#13	21.85	22.50
Band12	5MHz	QPSK	23155	25RB#0	21.48	22.50
Band12	5MHz	16QAM	23155	1RB#0	21.51	22.50
Band12	5MHz	16QAM	23155	1RB#12	21.48	22.50
Band12	5MHz	16QAM	23155	1RB#24	22.01	22.50
Band12	5MHz	16QAM	23155	12RB#0	20.22	22.00
Band12	5MHz	16QAM	23155	12RB#6	20.36	22.00
Band12	5MHz	16QAM	23155	12RB#13	21.05	22.00
Band12	5MHz	16QAM	23155	25RB#0	20.51	22.00
Band12	10MHz	QPSK	23060	1RB#0	22.71	23.50
Band12	10MHz	QPSK	23060	1RB#24	22.79	23.50
Band12	10MHz	QPSK	23060	1RB#49	22.02	23.50
Band12	10MHz	QPSK	23060	25RB#0	22.01	22.50
Band12	10MHz	QPSK	23060	25RB#12	21.98	22.50
Band12	10MHz	QPSK	23060	25RB#25	21.65	22.50
Band12	10MHz	QPSK	23060	50RB#0	22.27	22.50
Band12	10MHz	16QAM	23060	1RB#0	21.96	22.50
Band12	10MHz	16QAM	23060	1RB#24	21.89	22.50
Band12	10MHz	16QAM	23060	1RB#49	21.39	22.50
Band12	10MHz	16QAM	23060	25RB#0	21.27	22.00
Band12	10MHz	16QAM	23060	25RB#12	21.19	22.00
Band12	10MHz	16QAM	23060	25RB#25	20.89	22.00
Band12	10MHz	QPSK	23095	1RB#0	23.33	23.50
Band12	10MHz	QPSK	23095	1RB#24	21.91	23.50
Band12	10MHz	QPSK	23095	1RB#49	21.87	23.50
Band12	10MHz	QPSK	23095	25RB#0	21.45	22.50
Band12	10MHz	QPSK	23095	25RB#12	21.11	22.50
Band12	10MHz	QPSK	23095	25RB#25	20.70	22.50
Band12	10MHz	QPSK	23095	50RB#0	21.79	22.50
Band12	10MHz	16QAM	23095	1RB#0	21.93	22.50
Band12	10MHz	16QAM	23095	1RB#24	21.24	22.50
Band12	10MHz	16QAM	23095	1RB#49	20.64	22.50

Band12	10MHz	16QAM	23095	25RB#0	20.80	22.00
Band12	10MHz	16QAM	23095	25RB#12	20.36	22.00
Band12	10MHz	16QAM	23095	25RB#25	21.93	22.00
Band12	10MHz	QPSK	23130	1RB#0	23.03	23.50
Band12	10MHz	QPSK	23130	1RB#24	22.22	23.50
Band12	10MHz	QPSK	23130	1RB#49	23.36	23.50
Band12	10MHz	QPSK	23130	25RB#0	21.38	22.50
Band12	10MHz	QPSK	23130	25RB#12	21.00	22.50
Band12	10MHz	QPSK	23130	25RB#25	21.36	22.50
Band12	10MHz	QPSK	23130	50RB#0	21.63	22.50
Band12	10MHz	16QAM	23130	1RB#0	22.01	22.50
Band12	10MHz	16QAM	23130	1RB#24	21.60	22.50
Band12	10MHz	16QAM	23130	1RB#49	22.22	22.50
Band12	10MHz	16QAM	23130	25RB#0	20.55	22.00
Band12	10MHz	16QAM	23130	25RB#12	20.20	22.00
Band12	10MHz	16QAM	23130	25RB#25	20.51	22.00

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted (dBm)	Tune up (dBm)
Band13	5MHz	QPSK	23205	1RB#0	24.42	25.50
Band13	5MHz	QPSK	23205	1RB#12	23.97	25.50
Band13	5MHz	QPSK	23205	1RB#24	24.05	25.50
Band13	5MHz	QPSK	23205	12RB#0	23.23	24.50
Band13	5MHz	QPSK	23205	12RB#6	23.72	24.50
Band13	5MHz	QPSK	23205	12RB#13	23.18	24.50
Band13	5MHz	QPSK	23205	25RB#0	23.97	24.50
Band13	5MHz	16QAM	23205	1RB#0	24.25	24.50
Band13	5MHz	16QAM	23205	1RB#12	23.02	24.50
Band13	5MHz	16QAM	23205	1RB#24	23.48	24.50
Band13	5MHz	16QAM	23205	12RB#0	21.65	23.50
Band13	5MHz	16QAM	23205	12RB#6	22.14	23.50
Band13	5MHz	16QAM	23205	12RB#13	21.50	23.50
Band13	5MHz	16QAM	23205	25RB#0	22.40	23.50
Band13	5MHz	QPSK	23230	1RB#0	23.98	25.50
Band13	5MHz	QPSK	23230	1RB#12	23.58	25.50
Band13	5MHz	QPSK	23230	1RB#24	24.25	25.50
Band13	5MHz	QPSK	23230	12RB#0	23.60	24.50
Band13	5MHz	QPSK	23230	12RB#6	23.45	24.50
Band13	5MHz	QPSK	23230	12RB#13	23.24	24.50
Band13	5MHz	QPSK	23230	25RB#0	22.56	24.50
Band13	5MHz	16QAM	23230	1RB#0	23.80	24.50
Band13	5MHz	16QAM	23230	1RB#12	23.44	24.50
Band13	5MHz	16QAM	23230	1RB#24	23.36	24.50
Band13	5MHz	16QAM	23230	12RB#0	23.20	23.50
Band13	5MHz	16QAM	23230	12RB#6	21.69	23.50
Band13	5MHz	16QAM	23230	12RB#13	22.61	23.50
Band13	5MHz	16QAM	23230	25RB#0	21.74	23.50
Band13	5MHz	QPSK	23255	1RB#0	23.75	25.50
Band13	5MHz	QPSK	23255	1RB#12	23.57	25.50
Band13	5MHz	QPSK	23255	1RB#24	23.69	25.50

Band13	5MHz	QPSK	23255	12RB#0	23.35	24.50
Band13	5MHz	QPSK	23255	12RB#6	23.45	24.50
Band13	5MHz	QPSK	23255	12RB#13	23.34	24.50
Band13	5MHz	QPSK	23255	25RB#0	23.41	24.50
Band13	5MHz	16QAM	23255	1RB#0	24.36	24.50
Band13	5MHz	16QAM	23255	1RB#12	22.71	24.50
Band13	5MHz	16QAM	23255	1RB#24	23.20	24.50
Band13	5MHz	16QAM	23255	12RB#0	21.56	23.50
Band13	5MHz	16QAM	23255	12RB#6	21.59	23.50
Band13	5MHz	16QAM	23255	12RB#13	21.51	23.50
Band13	5MHz	16QAM	23255	25RB#0	22.48	23.50
Band13	10MHz	QPSK	23230	1RB#0	23.57	25.50
Band13	10MHz	QPSK	23230	1RB#24	23.88	25.50
Band13	10MHz	QPSK	23230	1RB#49	23.90	25.50
Band13	10MHz	QPSK	23230	25RB#0	23.27	24.50
Band13	10MHz	QPSK	23230	25RB#12	22.80	24.50
Band13	10MHz	QPSK	23230	25RB#25	23.17	24.50
Band13	10MHz	QPSK	23230	50RB#0	23.29	24.50
Band13	10MHz	16QAM	23230	1RB#0	23.95	24.50
Band13	10MHz	16QAM	23230	1RB#24	23.46	24.50
Band13	10MHz	16QAM	23230	1RB#49	23.06	24.50
Band13	10MHz	16QAM	23230	25RB#0	23.30	23.50
Band13	10MHz	16QAM	23230	25RB#12	21.64	23.50
Band13	10MHz	16QAM	23230	25RB#25	22.52	23.50

Band	Bandwidth	Modulation	Channel	RB Configuration	Conducted (dBm)	Tune up (dBm)
Band71	5MHz	QPSK	133147	1RB#0	24.93	25.10
Band71	5MHz	QPSK	133147	1RB#12	23.95	25.10
Band71	5MHz	QPSK	133147	1RB#24	24.39	25.10
Band71	5MHz	QPSK	133147	12RB#0	23.37	24.10
Band71	5MHz	QPSK	133147	12RB#6	22.86	24.10
Band71	5MHz	QPSK	133147	12RB#13	22.86	24.10
Band71	5MHz	QPSK	133147	25RB#0	22.98	24.10
Band71	5MHz	16QAM	133147	1RB#0	23.70	24.10
Band71	5MHz	16QAM	133147	1RB#12	22.83	24.10
Band71	5MHz	16QAM	133147	1RB#24	23.23	24.10
Band71	5MHz	16QAM	133147	12RB#0	22.53	23.10
Band71	5MHz	16QAM	133147	12RB#6	21.96	23.10
Band71	5MHz	16QAM	133147	12RB#13	22.07	23.10
Band71	5MHz	16QAM	133147	25RB#0	22.15	23.10
Band71	5MHz	QPSK	133297	1RB#0	24.46	25.10
Band71	5MHz	QPSK	133297	1RB#12	23.70	25.10
Band71	5MHz	QPSK	133297	1RB#24	23.93	25.10
Band71	5MHz	QPSK	133297	12RB#0	22.89	24.10
Band71	5MHz	QPSK	133297	12RB#6	22.75	24.10
Band71	5MHz	QPSK	133297	12RB#13	22.65	24.10
Band71	5MHz	QPSK	133297	25RB#0	22.77	24.10
Band71	5MHz	16QAM	133297	1RB#0	23.07	24.10
Band71	5MHz	16QAM	133297	1RB#12	22.48	24.10

Band71	5MHz	16QAM	133297	1RB#24	22.58	24.10
Band71	5MHz	16QAM	133297	12RB#0	22.02	23.10
Band71	5MHz	16QAM	133297	12RB#6	21.72	23.10
Band71	5MHz	16QAM	133297	12RB#13	21.83	23.10
Band71	5MHz	16QAM	133297	25RB#0	21.86	23.10
Band71	5MHz	QPSK	133447	1RB#0	25.08	25.10
Band71	5MHz	QPSK	133447	1RB#12	24.37	25.10
Band71	5MHz	QPSK	133447	1RB#24	24.75	25.10
Band71	5MHz	QPSK	133447	12RB#0	23.52	24.10
Band71	5MHz	QPSK	133447	12RB#6	23.24	24.10
Band71	5MHz	QPSK	133447	12RB#13	23.20	24.10
Band71	5MHz	QPSK	133447	25RB#0	23.40	24.10
Band71	5MHz	16QAM	133447	1RB#0	24.08	24.10
Band71	5MHz	16QAM	133447	1RB#12	23.32	24.10
Band71	5MHz	16QAM	133447	1RB#24	23.52	24.10
Band71	5MHz	16QAM	133447	12RB#0	22.40	23.10
Band71	5MHz	16QAM	133447	12RB#6	22.10	23.10
Band71	5MHz	16QAM	133447	12RB#13	22.02	23.10
Band71	5MHz	16QAM	133447	25RB#0	22.16	23.10
Band71	10MHz	QPSK	133172	1RB#0	23.87	25.10
Band71	10MHz	QPSK	133172	1RB#24	23.62	25.10
Band71	10MHz	QPSK	133172	1RB#49	24.65	25.10
Band71	10MHz	QPSK	133172	25RB#0	22.43	24.10
Band71	10MHz	QPSK	133172	25RB#12	22.49	24.10
Band71	10MHz	QPSK	133172	25RB#25	23.21	24.10
Band71	10MHz	QPSK	133172	50RB#0	23.25	24.10
Band71	10MHz	16QAM	133172	1RB#0	23.10	24.10
Band71	10MHz	16QAM	133172	1RB#24	22.80	24.10
Band71	10MHz	16QAM	133172	1RB#49	23.69	24.10
Band71	10MHz	16QAM	133172	25RB#0	21.60	23.10
Band71	10MHz	16QAM	133172	25RB#12	21.71	23.10
Band71	10MHz	16QAM	133172	25RB#25	22.30	23.10
Band71	10MHz	QPSK	133297	1RB#0	24.69	25.10
Band71	10MHz	QPSK	133297	1RB#24	23.78	25.10
Band71	10MHz	QPSK	133297	1RB#49	24.19	25.10
Band71	10MHz	QPSK	133297	25RB#0	23.07	24.10
Band71	10MHz	QPSK	133297	25RB#12	22.68	24.10
Band71	10MHz	QPSK	133297	25RB#25	22.69	24.10
Band71	10MHz	QPSK	133297	50RB#0	23.22	24.10
Band71	10MHz	16QAM	133297	1RB#0	23.61	24.10
Band71	10MHz	16QAM	133297	1RB#24	22.90	24.10
Band71	10MHz	16QAM	133297	1RB#49	23.05	24.10
Band71	10MHz	16QAM	133297	25RB#0	22.03	23.10
Band71	10MHz	16QAM	133297	25RB#12	21.77	23.10
Band71	10MHz	16QAM	133297	25RB#25	21.76	23.10
Band71	10MHz	QPSK	133422	1RB#0	24.43	25.10
Band71	10MHz	QPSK	133422	1RB#24	24.27	25.10
Band71	10MHz	QPSK	133422	1RB#49	24.28	25.10
Band71	10MHz	QPSK	133422	25RB#0	23.27	24.10
Band71	10MHz	QPSK	133422	25RB#12	23.25	24.10

Band71	10MHz	QPSK	133422	25RB#25	22.92	24.10
Band71	10MHz	QPSK	133422	50RB#0	23.04	24.10
Band71	10MHz	16QAM	133422	1RB#0	23.23	24.10
Band71	10MHz	16QAM	133422	1RB#24	23.56	24.10
Band71	10MHz	16QAM	133422	1RB#49	22.62	24.10
Band71	10MHz	16QAM	133422	25RB#0	22.01	23.10
Band71	10MHz	16QAM	133422	25RB#12	21.93	23.10
Band71	10MHz	16QAM	133422	25RB#25	21.46	23.10
Band71	15MHz	QPSK	133197	1RB#0	24.31	25.10
Band71	15MHz	QPSK	133197	1RB#38	24.62	25.10
Band71	15MHz	QPSK	133197	1RB#74	24.71	25.10
Band71	15MHz	QPSK	133197	38RB#0	23.38	24.10
Band71	15MHz	QPSK	133197	38RB#18	23.37	24.10
Band71	15MHz	QPSK	133197	38RB#37	23.67	24.10
Band71	15MHz	QPSK	133197	75RB#0	23.42	24.10
Band71	15MHz	16QAM	133197	1RB#0	23.67	24.10
Band71	15MHz	16QAM	133197	1RB#38	23.59	24.10
Band71	15MHz	16QAM	133197	1RB#74	24.00	24.10
Band71	15MHz	16QAM	133197	38RB#0	22.68	23.10
Band71	15MHz	QPSK	133297	1RB#0	24.84	25.10
Band71	15MHz	QPSK	133297	1RB#38	23.76	25.10
Band71	15MHz	QPSK	133297	1RB#74	24.39	25.10
Band71	15MHz	QPSK	133297	38RB#0	23.84	24.10
Band71	15MHz	QPSK	133297	38RB#18	23.05	24.10
Band71	15MHz	QPSK	133297	38RB#37	23.51	24.10
Band71	15MHz	QPSK	133297	75RB#0	23.34	24.10
Band71	15MHz	16QAM	133297	1RB#0	23.96	24.10
Band71	15MHz	16QAM	133297	1RB#38	22.62	24.10
Band71	15MHz	16QAM	133297	1RB#74	23.46	24.10
Band71	15MHz	16QAM	133297	38RB#0	22.80	23.10
Band71	15MHz	QPSK	133397	1RB#0	23.27	25.10
Band71	15MHz	QPSK	133397	1RB#38	24.15	25.10
Band71	15MHz	QPSK	133397	1RB#74	23.79	25.10
Band71	15MHz	QPSK	133397	38RB#0	23.04	24.10
Band71	15MHz	QPSK	133397	38RB#18	23.23	24.10
Band71	15MHz	QPSK	133397	38RB#37	22.44	24.10
Band71	15MHz	QPSK	133397	75RB#0	23.07	24.10
Band71	15MHz	16QAM	133397	1RB#0	23.03	24.10
Band71	15MHz	16QAM	133397	1RB#38	23.06	24.10
Band71	15MHz	16QAM	133397	1RB#74	22.41	24.10
Band71	15MHz	16QAM	133397	38RB#0	22.06	23.10
Band71	20MHz	QPSK	133222	1RB#0	23.42	25.10
Band71	20MHz	QPSK	133222	1RB#49	24.26	25.10
Band71	20MHz	QPSK	133222	1RB#99	23.51	25.10
Band71	20MHz	QPSK	133222	50RB#0	22.72	24.10
Band71	20MHz	QPSK	133222	50RB#50	22.97	24.10
Band71	20MHz	QPSK	133222	100RB#0	22.86	24.10
Band71	20MHz	16QAM	133222	1RB#0	22.82	24.10
Band71	20MHz	16QAM	133222	1RB#49	23.16	24.10
Band71	20MHz	16QAM	133222	1RB#99	22.77	24.10

Band71	20MHz	QPSK	133322	1RB#0	24.88	25.10
Band71	20MHz	QPSK	133322	1RB#49	23.83	25.10
Band71	20MHz	QPSK	133322	1RB#99	24.59	25.10
Band71	20MHz	QPSK	133322	50RB#0	23.57	24.10
Band71	20MHz	QPSK	133322	50RB#50	23.82	24.10
Band71	20MHz	QPSK	133322	100RB#0	23.63	24.10
Band71	20MHz	16QAM	133322	1RB#0	24.10	24.10
Band71	20MHz	16QAM	133322	1RB#49	22.63	24.10
Band71	20MHz	16QAM	133322	1RB#99	23.95	24.10
Band71	20MHz	QPSK	133372	1RB#0	23.19	25.10
Band71	20MHz	QPSK	133372	1RB#49	23.95	25.10
Band71	20MHz	QPSK	133372	1RB#99	23.57	25.10
Band71	20MHz	QPSK	133372	50RB#0	22.21	24.10
Band71	20MHz	QPSK	133372	50RB#50	22.88	24.10
Band71	20MHz	QPSK	133372	100RB#0	22.59	24.10
Band71	20MHz	16QAM	133372	1RB#0	23.04	24.10
Band71	20MHz	16QAM	133372	1RB#49	22.60	24.10
Band71	20MHz	16QAM	133372	1RB#99	22.16	24.10

14.2 Conducted Power of BLE

Test Mode	Frequency [MHz]	Conducted Power (dBm)	Tune up (dBm)
BLE_1M	2402	0.06	1.5
BLE_1M	2440	0.52	1.5
BLE_1M	2480	0.85	1.5

15 Stand-alone SAR test evaluation

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and Product specific 10g SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Test Exclusion Threshold condition is satisfied. These test exclusion conditions are based on source-based time-averaged maximum conducted output power of the RF channel requiring evaluation, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

Band	Frequency (GHz)	Max Average Power		Test Separation (mm)	Calculate Value	Exclusion Threshold	Exclusion (Y/N)
		dBm	mW				
BLE	2.4835	1.5	1.41	5	0.44	3	Y

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

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

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

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

Estimated SAR:

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

- $(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm}) \cdot [\sqrt{f(\text{GHz})} / x]$ W/kg for test separation distances ≤ 50 mm;

Where $x = 7.5$ for 1-g SAR, and $x = 18.75$ for 10-g SAR.

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

Estimated SAR Result					
Band	Frequency (GHz)	Test Position	Max. power (dBm)	Test Separation (mm)	Estimated
					SAR (W/kg)
BLE	2.4835	Body	1.5	5	0.059

16 SAR Data Summary

General Notes:

- 1) The Highest Reported SAR Plot refer to Appendix B.
- 2) Per KDB 447498 D01, testing of other required channels within the operating mode of a frequency band is not required when the reported 1g or 10g SAR for the mid-band or highest output power channel is:
 - $\leq 0.8\text{W/kg}$ for 1g or 2.0W/kg for 10g respectively, when the transmission band is $\leq 100\text{MHz}$.
 - $\leq 0.6\text{ W/kg}$ or 1.5 W/kg , for 1g or 10g respectively, when the transmission band is between 100 MHz and 200MHz.
 - $\leq 0.4\text{ W/kg}$ or 1.0 W/kg , for 1g or 10g respectively, when the transmission band is $\geq 200\text{MHz}$.

16.1 SAR Measurement Result of LTE Band 2

Test position	BW. (MHz)	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Front side	20	QPSK 1_0	18900/1880	0.362	24.62	25.30	1.169	0.423
Back side	20	QPSK 1_0	18900/1880	<0.01	24.62	25.30	1.169	<0.01
Left side	20	QPSK 1_0	18900/1880	<0.01	24.62	25.30	1.169	<0.01
Right side	20	QPSK 1_0	18900/1880	<0.01	24.62	25.30	1.169	<0.01
Top side	20	QPSK 1_0	18900/1880	0.351	24.62	25.30	1.169	0.410
Bottom side	20	QPSK 1_0	18900/1880	0.020	24.62	25.30	1.169	0.023
Body 0mm 50%RB								
Front side	20	QPSK 50_25	18900/1880	0.393	24.00	24.30	1.072	0.421
Back side	20	QPSK 50_25	18900/1880	<0.01	24.00	24.30	1.072	<0.01
Left side	20	QPSK 50_25	18900/1880	<0.01	24.00	24.30	1.072	<0.01
Right side	20	QPSK 50_25	18900/1880	<0.01	24.00	24.30	1.072	<0.01
Top side	20	QPSK 50_25	18900/1880	0.363	24.00	24.30	1.072	0.389
Bottom side	20	QPSK 50_25	18900/1880	0.018	24.00	24.30	1.072	0.019

Table 1: SAR of LTE Band 2.

16.2 SAR Measurement Result of LTE Band 5

Test position	BW. (MHz)	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Front side	10	QPSK 1_0	20600/844	0.717	25.39	25.50	1.026	0.735
Back side	10	QPSK 1_0	20600/844	0.058	25.39	25.50	1.026	0.059
Left side	10	QPSK 1_0	20600/844	<0.01	25.39	25.50	1.026	<0.01
Right side	10	QPSK 1_0	20600/844	<0.01	25.39	25.50	1.026	<0.01
Top side	10	QPSK 1_0	20600/844	0.213	25.39	25.50	1.026	0.218
Bottom side	10	QPSK 1_0	20600/844	0.062	25.39	25.50	1.026	0.064
Body 0mm 50%RB								
Front side	10	QPSK 25_0	20600/844	0.431	23.63	24.50	1.222	0.527
Back side	10	QPSK 25_0	20600/844	0.052	23.63	24.50	1.222	0.064
Left side	10	QPSK 25_0	20600/844	<0.01	23.63	24.50	1.222	<0.01
Right side	10	QPSK 25_0	20600/844	<0.01	23.63	24.50	1.222	<0.01
Top side	10	QPSK 25_0	20600/844	0.125	23.63	24.50	1.222	0.153
Bottom side	10	QPSK 25_0	20600/844	0.042	23.63	24.50	1.222	0.051

Table 2: SAR of LTE Band 5.

16.3 SAR Measurement Result of LTE Band 12

Test position	BW. (MHz)	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Front side	10	QPSK 1_49	23130/711	0.375	23.36	23.50	1.033	0.387
Back side	10	QPSK 1_49	23130/711	0.080	23.36	23.50	1.033	0.083
Left side	10	QPSK 1_49	23130/711	<0.01	23.36	23.50	1.033	<0.01
Right side	10	QPSK 1_49	23130/711	<0.01	23.36	23.50	1.033	<0.01
Top side	10	QPSK 1_49	23130/711	0.105	23.36	23.50	1.033	0.108
Bottom side	10	QPSK 1_49	23130/711	<0.01	23.36	23.50	1.033	<0.01
Body 0mm 50%RB								
Front side	10	QPSK 25_0	23060/704	0.321	22.01	22.50	1.119	0.359
Back side	10	QPSK 25_0	23060/704	0.041	22.01	22.50	1.119	0.046
Left side	10	QPSK 25_0	23060/704	<0.01	22.01	22.50	1.119	<0.01
Right side	10	QPSK 25_0	23060/704	<0.01	22.01	22.50	1.119	<0.01
Top side	10	QPSK 25_0	23060/704	0.053	22.01	22.50	1.119	0.059
Bottom side	10	QPSK 25_0	23060/704	<0.01	22.01	22.50	1.119	<0.01

Table 3: SAR of LTE Band 12.

16.4 SAR Measurement Result of LTE Band 13

Test position	BW. (MHz)	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Front side	10	QPSK 1_49	23230/782	0.322	23.90	25.50	1.445	0.465
Back side	10	QPSK 1_49	23230/782	0.039	23.90	25.50	1.445	0.056
Left side	10	QPSK 1_49	23230/782	<0.01	23.90	25.50	1.445	<0.01
Right side	10	QPSK 1_49	23230/782	<0.01	23.90	25.50	1.445	<0.01
Top side	10	QPSK 1_49	23230/782	0.085	23.90	25.50	1.445	0.123
Bottom side	10	QPSK 1_49	23230/782	<0.01	23.90	25.50	1.445	<0.01
Body 0mm 50%RB								
Front side	10	QPSK 25_0	23230/782	0.303	23.27	24.50	1.327	0.402
Back side	10	QPSK 25_0	23230/782	0.056	23.27	24.50	1.327	0.074
Left side	10	QPSK 25_0	23230/782	<0.01	23.27	24.50	1.327	<0.01
Right side	10	QPSK 25_0	23230/782	<0.01	23.27	24.50	1.327	<0.01
Top side	10	QPSK 25_0	23230/782	0.083	23.27	24.50	1.327	0.110
Bottom side	10	QPSK 25_0	23230/782	<0.01	23.27	24.50	1.327	<0.01

Table 4: SAR of LTE Band 13.

16.5 SAR Measurement Result of LTE Band 66

Test position	BW. (MHz)	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Front side	20	QPSK 1_0	132572/1770	0.307	24.43	25.00	1.140	0.350
Back side	20	QPSK 1_0	132572/1770	<0.01	24.43	25.00	1.140	<0.01
Left side	20	QPSK 1_0	132572/1770	<0.01	24.43	25.00	1.140	<0.01
Right side	20	QPSK 1_0	132572/1770	<0.01	24.43	25.00	1.140	<0.01
Top side	20	QPSK 1_0	132572/1770	0.175	24.43	25.00	1.140	0.200
Bottom side	20	QPSK 1_0	132572/1770	0.017	24.43	25.00	1.140	0.019
Body 0mm 50%RB								
Front side	20	QPSK 50_50	132322/1745	0.324	23.83	24.00	1.040	0.337
Back side	20	QPSK 50_50	132322/1745	<0.01	23.83	24.00	1.040	<0.01
Left side	20	QPSK 50_50	132322/1745	<0.01	23.83	24.00	1.040	<0.01
Right side	20	QPSK 50_50	132322/1745	<0.01	23.83	24.00	1.040	<0.01
Top side	20	QPSK 50_50	132322/1745	0.186	23.83	24.00	1.040	0.193
Bottom side	20	QPSK 50_50	132322/1745	0.018	23.83	24.00	1.040	0.019

Table 5: SAR of LTE Band 66.

16.6 SAR Measurement Result of LTE Band 71

Test position	BW. (MHz)	Mode	Ch./Freq. (MHz)	SAR (W/kg) 1-g	Conducted Power(dBm)	Tune up Limit(dBm)	Scaling Factor	Reported 1g SAR (W/kg)
Body 0mm 1RB								
Front side	20	QPSK 1_0	133322/683	0.342	24.88	25.10	1.052	0.360
Back side	20	QPSK 1_0	133322/683	0.040	24.88	25.10	1.052	0.042
Left side	20	QPSK 1_0	133322/683	<0.01	24.88	25.10	1.052	<0.01
Right side	20	QPSK 1_0	133322/683	<0.01	24.88	25.10	1.052	<0.01
Top side	20	QPSK 1_0	133322/683	0.069	24.88	25.10	1.052	0.073
Bottom side	20	QPSK 1_0	133322/683	<0.01	24.88	25.10	1.052	<0.01
Body 0mm 50%RB								
Front side	20	QPSK 50_50	133322/683	0.319	23.82	24.10	1.067	0.340
Back side	20	QPSK 50_50	133322/683	0.049	23.82	24.10	1.067	0.052
Left side	20	QPSK 50_50	133322/683	<0.01	23.82	24.10	1.067	<0.01
Right side	20	QPSK 50_50	133322/683	<0.01	23.82	24.10	1.067	<0.01
Top side	20	QPSK 50_50	133322/683	0.063	23.82	24.10	1.067	0.067
Bottom side	20	QPSK 50_50	133322/683	<0.01	23.82	24.10	1.067	<0.01

Table 6: SAR of LTE Band 71.

17 Simultaneous Transmission Analysis

The Simultaneous Transmission Possibilities of this device are as below:

NO.	Simultaneous TX Combination	Body
1	WWAN + BLE	Y

Test position		SAR _{max} (W/kg)							Summed SAR _{max}
		LTE B2	LTE B5	LTE B12	LTE B13	LTE B66	LTE B71	BLE	
		1							
Body 0mm	Front side	0.423	0.735	0.387	0.465	0.350	0.360	0.059	0.794
	Back side	<0.01	0.064	0.083	0.074	<0.01	0.052	0.059	0.142
	Left side	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.059	0.063
	Right side	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.059	0.067
	Top side	0.410	0.218	0.108	0.123	0.200	0.073	0.059	0.469
	Bottom side	0.023	0.064	<0.01	<0.01	0.019	<0.01	0.059	0.123

18 Measurement Uncertainty

Per KDB 865664 D01 SAR measurement 100MHz to 6GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be $\leq 30\%$, for a confidence interval of $k = 2$. If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

19 Calibration Certificate

Please see the Appendix C

20 Test Setup Photos

Please see the Appendix D

Appendix A: System Check Plots

Appendix B: SAR Test Plots

Appendix C: Calibration certificate

Appendix D: Test Setup Photos

--- The End ---
