

Patrol 6, LLC

TEST REPORT

SCOPE OF WORK
FCC TESTING— P1

REPORT NUMBER
260317073SZN-007

ISSUE DATE **[REVISED DATE]**
22 April 2026 [-----]

PAGES
85

DOCUMENT CONTROL NUMBER
FCC SAR_b
© 2017 INTERTEK



SAR TEST REPORT

For

Patrol 6, LLC

Product Description: Body worn camera

FCC ID: 2BVFCP6-BC-V1

Model No.: P1

Report No.: 260317073SZN-007

Issue Date: 22 April 2026

Prepared and Checked by:



Draven Li
Sr. Project Engineer

Approved by:



Johnny Wang
Project Engineer
22 April 2026

- This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to copy or distribute this report. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results referenced from this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.
- The test report only allows to be revised only within the report defined retention period unless further standard or the requirement was noticed

Table of Contents

1. GENERAL INFORMATION	3
2. STATEMENT OF COMPLIANCE	4
3. EQUIPMENT UNDER TEST (EUT) TECHNICAL DESCRIPTION.....	5
4. AUXILIARY EQUIPMENT DETAILS.....	8
5. TEST FACILITY	8
6. GUIDANCE STANDARD.....	9
7. EXPOSURE POSITIONS CONSIDERATION.....	10
8. RF EXPOSURE	12
9. SPECIFIC ABSORPTION RATE (SAR)	13
10. SAR MEASUREMENTS SYSTEM CONFIGURATION	14
11. MEASUREMENT PROCEDURES	29
12. TEST RESULTS	34
13. MEASUREMENT UNCERTAINTY	83
14. MAIN TEST INSTRUMENT	84
ANNEX A: TEST LAYOUT AND SETUP	85
ANNEX B: SYSTEM CHECK RESULTS.....	85
ANNEX C: MAXIMUM GRAPH RESULTS	85
ANNEX D: SYSTEM VALIDATION	85
ANNEX E: EUT PHOTO	85
ANNEX F: PROBE CALIBRATION CERTIFICATE	85
ANNEX G: DIPOLE CALIBRATION CERTIFICATE.....	85
ANNEX H: DAE CALIBRATION CERTIFICATE.....	85

1. GENERAL INFORMATION

Applicant:	Patrol 6, LLC 2843 E. Robin Lane Phoenix, AZ 85050 USA
Manufacturer:	Patrol 6, LLC 2843 E. Robin Lane Phoenix, AZ 85050 USA
Product Description:	Body worn camera
Model Number:	P1
File Number:	260317073SZN-007
Date of Test:	17 March 2026 to 30 March 2026

The above equipment was tested by Intertek Testing Services Shenzhen Ltd. Longhua Branch. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in IEEE 1528-2013 and KDB 865664. This device is in compliance with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6 W/kg) specified in ANSI/IEEE C95.1-1992.

The test results of this report relate only to the tested sample identified in this report.

2. STATEMENT OF COMPLIANCE

The Maximum reported SAR 1g

Band	Max reported SAR Value(W/kg)
	1-g Body
LTE Band 2	0.689
LTE Band 4	0.660
LTE Band 5	0.497
LTE Band 12	0.381
LTE Band 17	0.442
LTE Band 30	0.782
LTE Band 66	0.732
LTE Band 71	0.356
WLAN 2.4G	0.147
WLAN 5.2G	0.433
WLAN 5.8G	0.572
Bluetooth (EDR)	0.021
Bluetooth (BLE)	0.042
NFC	0

3. Equipment Under Test (EUT) TECHNICAL DESCRIPTION

Characteristics	Description		
Product Name:	Body worn camera		
Device type:	Portable device		
Exposure Category:	Uncontrolled Environment/General Population		
Test Mode(s):	LTE/TM1 (LTE system, QPSK modulation)		
	LTE/TM2 (LTE system, 16QAM modulation)		
	WiFi 2.4G (DSSS/OFDM)		
	WiFi 5G (OFDM)		
	Bluetooth (GFSK, Pi/4 DQPSK, 8DPSK)		
Device Class:	B		
Antenna Type:	Internal permanent antenna		
Antenna Gain:	LTE BAND2: 3.03 dBi LTE BAND4: 2.9 dBi LTE BAND5: -1.11 dBi LTE BAND12: -8.78 dBi LTE BAND17: -8.78 dBi LTE BAND30: 2.45 dBi LTE BAND66: 2.9 dBi LTE BAND71: -9.42 dBi 2.4G WIFI: 1.46 dBi 5G WIFI: 1.27 dBi		
Operating Frequency Range(s)	Band	Tx (MHz)	Rx (MHz)
	LTE Band 2	1850 - 1910	1930 - 1990
	LTE Band 4	1710 - 1755	2110 - 2155
	LTE Band 5	824 - 849	869 - 894
	LTE Band 12	699 - 716	729 - 746
	LTE Band 17	704 - 716	734 - 746
	LTE Band 30	2305 - 2315	2350 - 2360
	LTE Band 66	1710 - 1780	2110 - 2200
	LTE Band 71	663 - 698	617 - 652
	BT	2400-2483.5	
	WiFi 2.4G	2412-2462	
WiFi 5G	5150MHz~5250 MHz, 5725MHz~5850MHz		
HSUPA UE Category:	6		
HSDPA UE Category:	14		

Characteristics	Description
Power Class:	LTE Band 2: 3 LTE Band 4: 3 LTE Band 5: 3 LTE Band 12: 3 LTE Band 17: 3 LTE Band 30: 3 LTE Band 66: 3 LTE Band 71: 3
Test Channels (low-mid-high):	18607-18900-19193 (LTE Band 2 BW=1.4MHz) 18615-18900-19185(LTE Band 2 BW=3MHz) 18625-18900-19175(LTE Band 2 BW=5MHz) 18650-18900-19150(LTE Band 2 BW=10MHz) 18675-18900-19125(LTE Band 2 BW=15MHz) 18700-18900-19100(LTE Band 2 BW=20MHz) 19957-20175-20393(LTE Band 4 BW=1.4MHz) 19965-20175-20385(LTE Band 4 BW=3MHz) 19975-20175-20375(LTE Band 4 BW=5MHz) 20000-20175-20350(LTE Band 4 BW=10MHz) 20025-20175-20325(LTE Band 4 BW=15MHz) 20050-20175-20300(LTE Band 4 BW=20MHz) 20407-20525-20643(LTE Band 5 BW=1.4MHz) 20415-20525-20635(LTE Band 5 BW=3MHz) 20425-20525-20625(LTE Band 5 BW=5MHz) 20450-20525-20600(LTE Band 5 BW=10MHz) 23017-23095-23173(LTE Band 12 BW=1.4MHz) 23025-23095-23165(LTE Band 12 BW=3MHz) 23035-23095-23155(LTE Band 12 BW=5MHz) 23205-23230-23255(LTE Band 12 BW=10MHz) 23755-23790-23825(LTE Band 17 BW=5MHz) 23780-23790-23800(LTE Band 17 BW=10MHz) 27665-27710-27755(LTE Band 30 BW=5MHz) 27670-27710-27750(LTE Band 30BW=10MHz) 131979-132322-132665(LTE Band 66 BW=1.4MHz) 131987-132322-132657(LTE Band 66 BW=3MHz) 131997-132322-132647(LTE Band 66 BW=5MHz) 132022-132322-132622(LTE Band 66 BW=10MHz) 132047-132322-132597(LTE Band 66 BW=15MHz)

Characteristics	Description
	132072-132322-132572(LTE Band 66 BW=20MHz)
	133147-133297-133447(LTE Band 71 BW=5MHz)
	133172-133297-133422(LTE Band 71 BW=10MHz)
	133197-133297-133397(LTE Band 71 BW=15MHz)
	133222-133322-133372(LTE Band 71 BW=20MHz)
Power supply:	DC 3.8V rechargeable battery
	DC 5V/2A by adapter
Product Software Version:	P6_RELEASE_ROM_A36_V1.9
Product Hardware Version:	Z696_MB_V1.0

Note:

1. N/A is Not Applicable.
2. For more details, please refer to the User's manual of the EUT.
3. The sample under test was selected by the applicant.

4. Auxiliary Equipment Details

Description	Manufacturer	Model No.
Laptop (Provided by Intertek)	DELL	Latitude 3480
Router (Provided by Intertek)	NETGEAR	Model: R7800
Adapter (Provided by Applicant)	Dongguan Kaisheng electronic technology co., LTD	Input: 100-240V~ 50/60Hz 0.3A Output: 5V=2A
Type-C Cable (Provided by Applicant)	N/A	Unshielded, Length 1.0m

5. Test Facility

Site Description	
EMC Lab.	The Laboratory has been assessed and proved to be in compliance with CNAS/CL01: 2006(identical to ISO/IEC17025: 2005) The Certificate Registration Number is L0327
	Accredited by FCC The Certificate Registration Number is CN1188
Name of Firm	Intertek Testing Services Shenzhen Ltd. Longhua Branch
Site Location	101, 201, Building B, No. 308 Wuhe Avenue, Zhangkengjing Community, GuanHu Subdistrict, LongHua District, ShenZhen, P.R. China

6. Guidance Standard

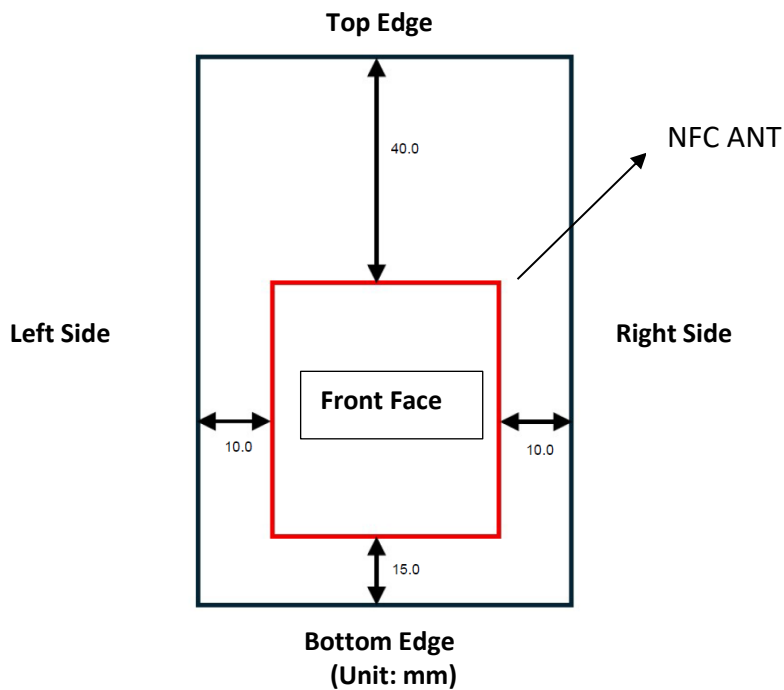
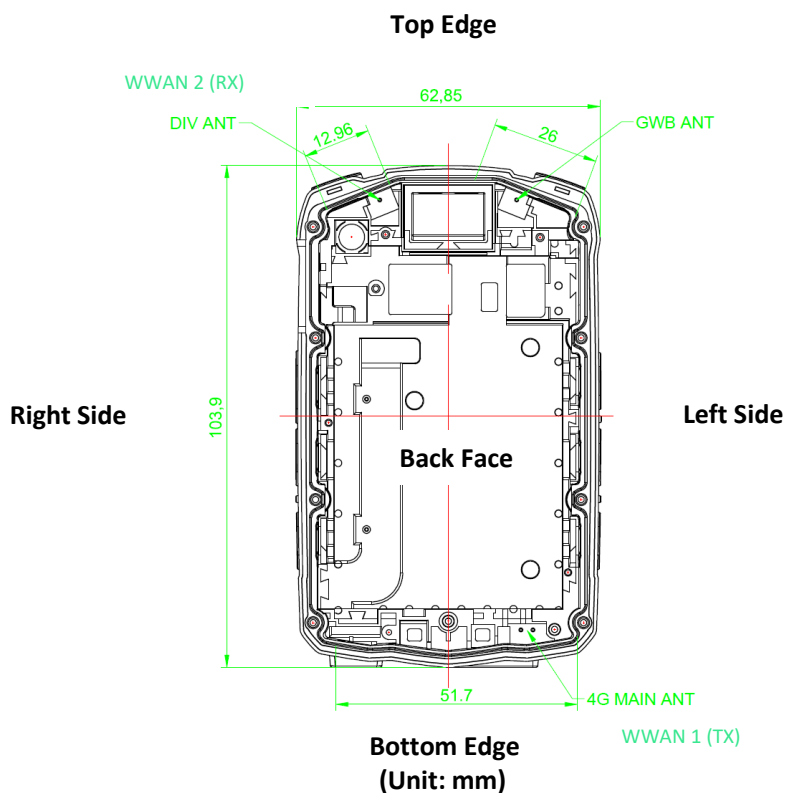
The Specific Absorption Rate (SAR) testing specification, method, and procedure for this device is in accordance with the following standards:

- ☒ FCC 47CFR §2.1093 Radiofrequency Radiation Exposure Evaluation: Portable Devices
- ☒ ANSI C95.1, 1992: Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz. (IEEE Std C95.1-1991)
- ☒ IEEE Std 1528™-2013: IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques.
- ☒ KDB 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04: SAR Measurement Requirements for 100 MHz to 6 GHz
- ☒ KDB 865664 D02 SAR Reporting v01r02
- ☒ KDB690783 D01 SAR Listings on Grants v01r03
- ☒ KDB 447498 D01 Mobile Portable RF Exposure v06: Mobile and Portable Device RF Exposure Procedures and Equipment Authorization Policies
- ☒ KDB 648474 D04 Handset SAR v01r03: SAR Evaluation Considerations for Wireless Handsets.
- ☒ KDB 941225 D05 SAR for LTE Devices v02r05: SAR Evaluation Considerations for LTE Devices
- ☒ KDB 941225 D06 Hotspot Mode v02r01: SAR Evaluation Procedures for Portable Devices with Wireless Router Capabilities
- ☒ KDB 248227 D01 SAR measurement for 802.11(Wi-Fi) v02r02: SAR Measurement Procedures for 802.11 (Wi-Fi) Transmitters

Remark:

This portable wireless equipment has been measured in all cases requested by the relevant standards. Test results in Chapter 11 of this test report are below limits specified in the relevant standards for the tested bands only.

7. EXPOSURE POSITIONS CONSIDERATION



All Side for SAR Testing Evaluation (Test distance: 5mm):

Mode	Location	Distance from ANT (mm)	tune-up Power (dBm)	Max. tune-up Power (mW)	Exemption with Max. Allowed Power (mW)	SAR Test
WWAN 1	Rear Face	1	21±2	199.5	9.8	YES
	Front Face	1	21±2	199.5	9.8	YES
	Top Edge	103	21±2	199.5	627.6	NO
	Bottom Edge	1	21±2	199.5	9.8	YES
	Left Side	1	21±2	199.5	9.8	YES
	Right Side	1	21±2	199.5	9.8	YES
2.4G WIFI	Rear Face	1	19±4	199.5	9.5	YES
	Front Face	1	19±4	199.5	9.5	YES
	Top Edge	1	19±4	199.5	9.5	YES
	Bottom Edge	90	19±4	199.5	495.3	NO
	Left Side	1	19±4	199.5	9.5	YES
	Right Side	40	19±4	199.5	76.2	YES
5G WIFI	Rear Face	1	12±3	31.6	6.2	YES
	Front Face	1	12±3	31.6	6.2	YES
	Top Edge	1	12±3	31.6	6.2	YES
	Bottom Edge	90	12±3	31.6	462.0	NO
	Left Side	1	12±3	31.6	6.2	YES
	Right Side	40	12±3	31.6	49.6	NO
Bluetooth	Rear Face	1	11±1	15.8	9.5	YES
	Front Face	1	11±1	15.8	9.5	YES
	Top Edge	1	11±1	15.8	9.5	YES
	Bottom Edge	90	11±1	15.8	495.3	NO
	Left Side	1	11±1	15.8	9.5	YES
	Right Side	40	11±1	15.8	76.2	NO

Note: SAR testing exemption according to KDB 447498 D01 Clause 4.3.1 with the following formula.

a) For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g SAR test exclusion thresholds are determined by the following:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance mm})] \cdot$$

$$[Vf(\text{GHz})] \leq 3.0 \text{ for 1-g SAR, } 7.5 \text{ for 10-g SAR}$$

*where f(GHz) is the RF channel transmit frequency in GHz

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

b) For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following

$$\text{a) } \{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot 10]\} \text{ mW, for } > 1500 \text{ MHz and } \leq 6 \text{ GHz}$$

Note:

1. Body-worn/Hotspot SAR assessments are required.
2. Referring to KDB 941225 D06v02r01, when the overall device length and width are $\geq 9\text{cm} * 5\text{cm}$, the test distance is 10mm. SAR must be measured for all sides and surfaces with a transmitting antenna located within 25mm from that surface or edge.
3. Per KDB 447498 D01v06, for handsets the test separation distance is determined by the smallest distance between the outer surface of the device and the user, which is 5 mm body-worn SAR.

8. RF Exposure

8.1 Uncontrolled Environment

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.

8.2 Limits

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

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

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

9. Specific Absorption Rate (SAR)

9.1 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.

9.2 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:

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

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

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

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

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

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

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

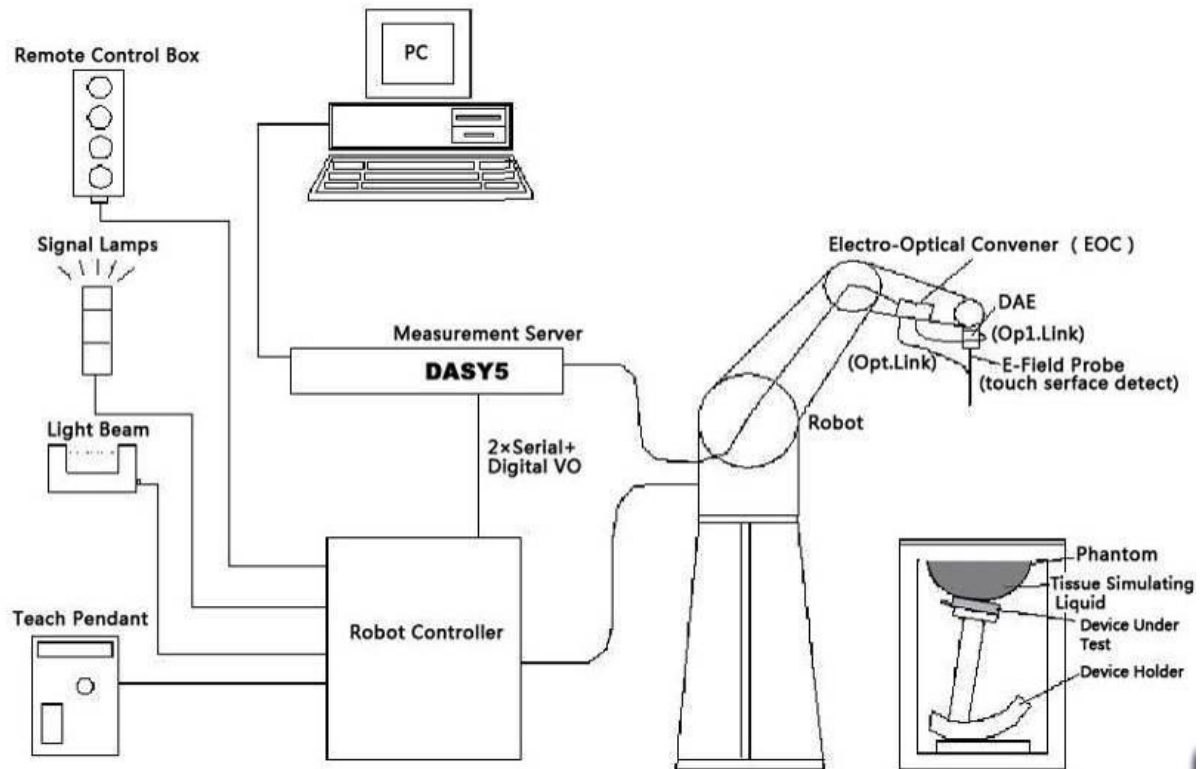
However for evaluating SAR of low power transmitter, electrical field measurement is typically applied.

10. SAR Measurements System Configuration

10.1 SAR MEASUREMENT SET-UP

The DASY5 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Stäubli TX=RX family) 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 Win 7 profesional operating system and the DASY5 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.



Picture 1. SAR Lab Test Measurement Set-up

10.2 DASY5 E-FIELD PROBE SYSTEM

The SAR measurements were conducted with the dosimetric probe designed in the classical triangular configuration and optimized for dosimetric evaluation. The probe is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multifiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY5 software reads the reflection turning a software approach and looks for the maximum using 2nd ord curve fitting. The approach is stopped at reaching the maximum.

Probe Specifications:

Model:	EX3DV4
Calibration:	ISO/IEC 17025 calibration service available
Probe Length:	337 mm
Probe Tip Length:	9 mm
Body Diameter:	10 mm
Tip Diameter:	2.5 mm
Application:	High Precision dosimetric measurements in any exposure scenario (e.g., very strong Picture 2 E-field Probe gradient fields).



10.3 E-FIELD PROBE CALIBRATION

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell 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 RF Signal generator, TEM cell, and RF Power Meter.

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 then rotated 360 degrees until the three channels show the maximum reading. The power density readings equate to 1 mW/cm².

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

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

Where:

Δt = Exposure time (30 seconds),

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

ΔT = Temperature increase due to RF exposure.

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

Where:

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m³).

10.4 OTHER TEST EQUIPMENT

10.4.1 Data Acquisition Electronics (DAE)

The data acquisition electronics consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an optical downlink for data and status information, as well as an optical uplink for commands and the clock.

The mechanical probe mounting device includes two different sensor systems for frontal and sideways probe contacts. They are used for mechanical surface detection and probe collision detection.

The input impedance of the DAE is 200 MOhm; the inputs are symmetrical and floating. Common mode rejection is above 80 dB.



Picture 3: DAE

10.4.2 Robot

The SPEAG DASY system uses the high precision robots (DASY5: TX90XL) type from Stäubli SA (France). For the 6-axis controller system, the robot controller version from Stäubli is used. The Stäubli robot series have many features that are important for our application:

- High precision (repeatability 0.02mm)
- High reliability (industrial design)
- Low maintenance costs (virtually maintenance free due to direct drive gears; no belt drives)
- Jerk-free straight movements (brushless synchron motors; no stepper motors)
- Low ELF interference (motor control fields shielded via the closed metallic construction shields)



Picture 4 DASY 5

10.4.3 Measurement Server

The Measurement server is based on a PC/104 CPU board with CPU (DASY5: 400 MHz, Intel Celeron), chip disk (DASY5: 128MB), RAM (DASY5: 128MB). The necessary circuits for communication with the DAE electronic box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY I/O board, which is directly connected to the PC/104 bus of the CPU board.



Picture 5 Server for DASY 5

The measurement server performs all real-time data evaluation of field measurements and surface detection, controls robot movements and handles safety operation. The PC operating system cannot interfere with these time critical processes. All connections are supervised by a watchdog, and disconnection of any of the cables to the measurement server will automatically disarm the robot and disable all program-controlled robot movements. Furthermore, the measurement server is equipped with an expansion port which is reserved for future applications. Please note that this expansion port does not have a standardized pinout, and therefore only devices provided by SPEAG can be connected. Devices from any other supplier could seriously damage the measurement server.

10.4.4 Device Holder for Phantom

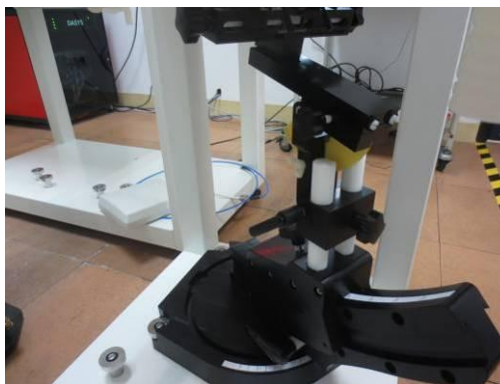
The SAR in the phantom is approximately inversely proportional to the square of the distance between the source and the liquid surface. For a source at 5mm distance, a positioning uncertainty of $\pm 0.5\text{mm}$ would produce a SAR uncertainty of $\pm 20\%$. Accurate device positioning is therefore crucial for accurate and repeatable measurements. The positions in which the devices must be measured are defined by the standards.

The DASY device holder is designed to cope with the different positions given in the standard. It has two scales for device rotation (with respect to the body axis) and device inclination (with respect to the line between the ear reference points). The rotation centers for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.

The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon = 3$ and loss tangent $\delta = 0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

<Laptop Extension Kit>

The extension is lightweight and made of POM, acrylic glass and foam. It fits easily on the upper part of the Mounting Device in place of the phone positioner. The extension is fully compatible with the Twin-SAM and ELI phantoms.

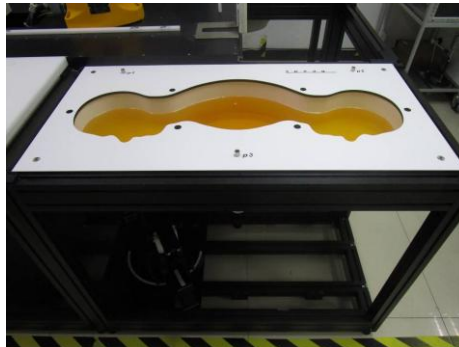


Picture 6: Device Holder

10.4.5 Phantom

The SAM Twin Phantom V4.0 is constructed of a fiberglass shell integrated in a table. The shape of the shell is based on data from an anatomical study designed to Represent the 90th percentile of the population. The phantom enables the dissymmetric evaluation of SAR for both left and right handed handset usage, as well as body-worn usage using the flat phantom region. Reference markings on the Phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points in the robot. The shell phantom has a 2mm shell thickness (except the ear region where shell thickness increases to 6 mm).

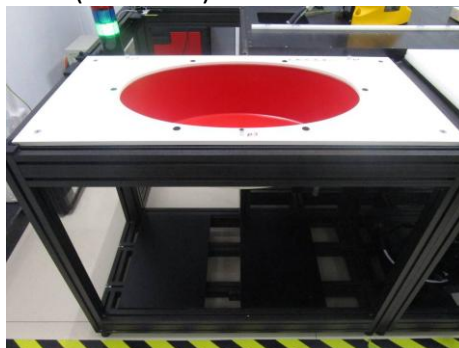
Shell Thickness: 2 ± 0.2 mm
Filling Volume: Approx. 25 liters
Dimensions: 810 x 1000 x 500 mm (H x L x W)
Available: Special



Picture 7: SAM Twin Phantom

Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.

Shell Thickness: 2 ± 0.2 mm
Filling Volume: Approx. 30 liters
Dimensions: 190×600×0 mm (H x L x W)



Picture 8.ELI Phantom

10.5 SCANNING PROCEDURE

The DASY5 installation includes predefined files with recommended procedures for measurements and validation. They are read-only document files and destined as fully defined but unmeasured masks. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

The “reference” and “drift” measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure. The indicated drift is mainly the variation of the DUT’s output power and should vary max. $\pm 5\%$.

The “surface check” measurement tests the optical surface detection system of the DASY5 system by repeatedly detecting the surface with the optical and mechanical surface detector and comparing the results. The output gives the detecting heights of both systems, the difference between the two systems and the standard deviation of the detection repeatability. Air bubbles or refraction in the liquid due to separation of the sugar-water mixture gives poor repeatability (above $\pm 0.1\text{mm}$). To prevent wrong results tests are only executed when the liquid is free of air bubbles. The difference between the optical surface detection and the actual surface depends on the probe and is specified with each probe. (It does not depend on the surface reflectivity or the probe angle to the surface within $\pm 30^\circ$.)

Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values before running a detailed measurement around the hot spot. Before starting the area scan a grid spacing is set according to FCC KDB Publication 865664. During scan the distance of the probe to the phantom remains unchanged. After finishing area scan, the field maxima within a range of 2 dB will be ascertained.

Zoom Scan

After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the “Not a knot” condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm.

Spatial Peak Detection

The procedure for spatial peak SAR evaluation has been implemented and can determine values of masses of 1g and 10g, as well as for user-specific masses. The DASY5 system allows evaluations that combine measured data and robot positions, such as:

- maximum search
- extrapolation
- boundary correction
- peak search for averaged SAR

During a maximum search, global and local maxima searches are automatically performed in 2-D after each Area Scan measurement with at least 6 measurement points. It is based on the evaluation of the local SAR gradient calculated by the Quadratic Shepard's method. The algorithm will find the global maximum and all local maxima within -2 dB of the global maxima for all SAR distributions.

Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. Several measurements at different distances are necessary for the extrapolation. Extrapolation routines require at least 10 measurement points in 3-D space.

They are used in the Zoom Scan to obtain SAR values between the lowest measurement points and the inner phantom surface. The routine uses the modified Quadratic Shepard's method for extrapolation.

A Z-axis scan measures the total SAR value at the x-and y-position of the maximum SAR value found during the cube scan. The probe is moved away in z-direction from the bottom of the SAM phantom in 5mm steps.

Table 1: Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01

Frequency	Maximum Area Scan Resolution (mm) (Δx_{area} , Δy_{area})	Maximum Zoom Scan Resolution (mm) (Δx_{zoom} , Δy_{zoom})	Maximum Zoom Scan Spatial Resolution (mm) $\Delta z_{zoom}(n)$	Minimum Zoom Scan Volume (mm) (x,y,z)
≤ 2 GHz	≤ 15	≤ 8	≤ 5	≥ 30
2-3 GHz	≤ 12	≤ 5	≤ 5	≥ 30
3-4 GHz	≤ 12	≤ 5	≤ 4	≥ 28
4-5 GHz	≤ 10	≤ 4	≤ 3	≥ 25
5-6 GHz	≤ 10	≤ 4	≤ 2	≥ 22

10.6 DATA STORAGE AND EVALUATION

10.6.1 Data Storage

The DASY5 software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension “.DAE4”. The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device set up, the parameter can be corrected afterwards and the data can be re-evaluated.

The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [mW/g], [mW/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a loss less media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

10.6.2 Data Evaluation by SEMCAD

The SEMCAD software automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software:

Probe parameters:

- Sensitivity Norm_i, a_{i0}, a_{i1}, a_{i2}
- Conversion factor ConvF_i
- Diode compression point Dcp_i

Device parameters:

- Frequency f
- Crest factor cf

Media parameters:

- Conductivity
- Density

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY5 components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics.

If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as:

$$V_i = U_i + U_i^2 \cdot c f / dcp_i$$

With V_i = compensated signal of channel i ($i = x, y, z$)

U_i = input signal of channel i ($i = x, y, z$)

cf = crest factor of exciting field (DASY parameter)

dcp_i = diode compression point (DASY parameter)

From the compensated input signals the primary field data for each channel can be evaluated:

E-field probes: $E_i = (V_i / \text{Norm}_i \cdot \text{ConvF})^{1/2}$

H-field probes: $H_i = (V_i)^{1/2} \cdot (a_{i0} + a_{i1} f + a_{i2} f^2) / f$

With V_i = compensated signal of channel i ($i = x, y, z$)

Norm_i = sensor sensitivity of channel i ($i = x, y, z$)

[mV/(V/m)²] for E-field Probes

ConvF = sensitivity enhancement in solution

a_{ij} = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

E_i = electric field strength of channel i in V/m

H_i = magnetic field strength of channel i in A/m

The RSS value of the field components gives the total field strength (Hermitian magnitude):

$$E_{\text{tot}} = (E_x^2 + E_y^2 + E_z^2)^{1/2}$$

The primary field data are used to calculate the derived field units.

$$\text{SAR} = (E_{\text{tot}}^2 \cdot 2 \cdot \sigma / (\rho \cdot 1000))$$

with SAR = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m

σ = conductivity in [mho/m] or [Siemens/m]

ρ = equivalent tissue density in g/cm³

Note that the density is normally set to 1 (or 1.06), to account for actual brain density rather than the density of the simulation liquid. The power flow density is calculated assuming the excitation field to be a free space field.

$$P_{\text{pwe}} = E_{\text{tot}}^2 / 3770 \text{ or } P_{\text{pwe}} = H_{\text{tot}}^2 \cdot 37.7$$

with P_{pwe} = equivalent power density of a plane wave in mW/cm²

E_{tot} = total electric field strength in V/m ; H_{tot} = total magnetic field strength in A/m

10.7 TISSUE-EQUIVALENT LIQUID

10.7.1 Tissue-equivalent Liquid Ingredients

The liquid is consisted of water, salt and Glycol etc. The liquid has previously been proven to be suited for worst-case. The Table 2 & 3 shows the detail solution. It's satisfying the latest tissue dielectric parameters requirements proposed by the KDB 865664 D01.

Table 2: The following recipe(s) were used for Head (H) and Body (B) Tissue-equivalent liquid(s)

Tissue Type	Bactericide	DGBE	HEC	NaCl	Sucrose	Triton X-100	Water	Diethylene Glycol Mono- hexylether
H750	0.2	-	0.2	1.4	57.0	-	41.1	-
H835	0.1	-	1.0	1.4	57.0	-	40.5	-
H900	0.1	-	1.0	1.5	56.5	-	40.9	-
H1450	-	45.5	-	0.7	-	-	53.8	-
H1640	-	45.8	-	0.5	-	-	53.7	-
H1750	-	44.5	-	0.3	-	-	55.2	-
H1800	-	44.9	-	0.2	-	-	54.9	-
H1900	-	44.9	-	0.2	-	-	54.9	-
H2000	-	50	-	-	-	-	50	-
H2300	-	44.9	-	0.1	-	-	55.0	-
H2450	-	45.0	-	0.1	-	-	54.9	-
H2600	-	45.1	-	0.1	-	-	54.8	-
H3500	-	8.0	-	0.2	-	20.0	71.8	-
H5G	-	-	-	-	-	17.2	65.52	17.3
B750	0.2	-	0.2	0.8	48.8	-	50.0	-
B835	0.2	-	0.2	0.9	48.5	-	50.2	-
B900	0.2	-	0.2	0.9	48.2	-	50.5	-
B1450	-	34.0	-	0.3	-	-	65.7	-
B1640	-	32.5	-	0.3	-	-	67.2	-
B1750	-	29.4	-	0.4	-	-	70.2	-
B1800	-	29.5	-	0.4	-	-	70.1	-
B1900	-	29.5	-	0.3	-	-	70.2	-
B2000	-	30.0	-	0.2	-	-	69.8	-
B2300	-	31.0	-	0.1	-	-	68.9	-
B2450	-	31.4	-	0.1	-	-	68.5	-
B2600	-	31.8	-	0.1	-	-	68.1	-
B3500	-	28.8	-	0.1	-	-	71.1	-
B5G	-	-	-	-	-	10.7	78.6	10.7

Table 3: Targets of Tissue Simulating Liquid

Frequency (MHz)	Relative permittivity ϵ_r	Conductivity (σ) S/m
750	41.9	0.89
835	41.5	0.90
900	41.5	0.97
1750	40.1	1.37
1800	40.0	1.40
1900	40.0	1.40
2000	40.0	1.40
2300	39.5	1.67
2450	39.2	1.80
2600	39.0	1.96
5200	36.0	4.66
5300	35.9	4.76
5500	35.6	4.96
5600	35.5	5.07
5800	35.3	5.27

10.7.2 Tissue-equivalent Liquid Properties

Table 4: Dielectric Performance of Head Tissue Simulating Liquid

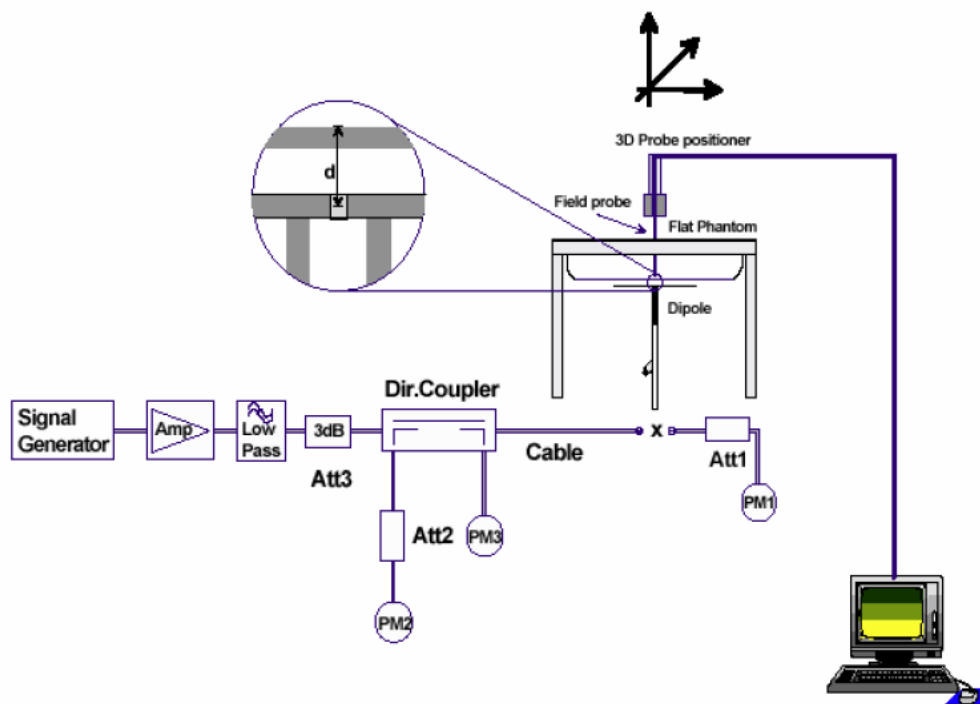
Tissue Verification								
Tissue Type	Frequency (MHz)	Conductivity (σ)	Permittivity (ϵ_r)	Targeted Conductivity (σ)	Targeted Permittivity (ϵ_r)	Deviation Conductivity (σ)	Deviation Permittivity (ϵ_r)	Date
Head	750	0.895	42.372	0.89	41.9	0.56	1.13	2026-03-28
Head	835	0.892	42.225	0.90	41.5	-0.89	1.75	2026-03-28
Head	900	0.963	41.305	0.97	41.5	-0.72	-0.47	2026-03-28
Head	1750	1.402	40.562	1.37	40.1	2.34	1.15	2026-03-28
Head	1900	1.385	40.382	1.40	40.0	-1.07	0.95	2026-03-28
Head	2450	1.882	38.250	1.80	39.2	4.56	-2.42	2026-03-29
Head	5200	4.568	34.802	4.66	36.0	-1.97	-3.33	2026-03-30
Head	5800	5.125	33.934	5.27	35.3	-2.75	-3.87	2026-03-30

Note: The dielectric properties have been measured using the contact probe method at 22±2°C.

10.8 SYSTEM CHECK

10.8.1 Description of System Check

The manufacturer calibrates the probes annually. Dielectric parameters of the tissue simulants were measured every day using the dielectric probe kit and the network analyzer. A system check measurement was made following the determination of the dielectric parameters of the simulant, using the dipole validation kit. A power level of 250 mW was supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom. The system check results (dielectric parameters and SAR values) are given in the table 5. System check results have to be equal or near the values determined during dipole calibration with the relevant liquids and test system ($\pm 10\%$). System check is performed regularly on all frequency bands where tests are performed with the DASY5 system.



Picture 10. System Check Set-up

Justification for Extended SAR Dipole Calibrations

Usage of SAR dipoles calibrated less than 3 years ago but more than 1 year ago were confirmed in maintaining return loss (< -20 dB, within 20% of prior calibration) and impedance (within 5 ohm from prior calibration) requirements per extended calibrations in KDB 865664 D01:

10.8.2 System Check Results

Table 5: System Check for Simulating Liquid

Measurement Date	Frequency (MHz)	Liquid Type (head/body)	1W Target SAR1g (W/kg)	Measured SAR1g (W/kg)	1W Normalized SAR1g (W/kg)	Limit (±10% Deviation)
2026-03-28	750	Head	8.50	2.03	8.12	-4.47
2026-03-28	835	Head	9.64	2.39	9.56	-0.83
2026-03-28	900	Head	10.70	2.68	10.72	0.19
2026-03-28	1750	Head	36.80	9.10	36.40	-1.09
2026-03-28	1900	Head	39.40	9.82	39.28	-0.30
2026-03-29	2450	Head	52.40	13.12	52.48	0.15
2026-03-30	5200	Head	76.40	7.71	77.10	0.92
2026-03-30	5800	Head	78.20	7.91	79.10	1.15

Note: Below 5GHz system check input power: 250mW, above 5GHz system check input power: 100mW

11. Measurement Procedures

11.1 GENERAL DESCRIPTION OF TEST PROCEDURES

A communication link is set up with a System Simulator (SS) by air link, and a call is established. Then EUT is commanded to operate at maximum transmitting power.

Connection to the EUT is established via air interface with CMU 200, and the EUT is set to maximum output power. The EUT battery must be fully charged and checked periodically during the test to as certain uniform power output. The antenna connected to the output of the base station simulator shall be placed at least 50 cm away from the EUT. The signal transmitted by the simulator to the antenna feeding point shall be lower than the output power level of the EUT by at least 30 dB.

11.2 MEASUREMENT VARIABILITY

Per FCC KDB Publication 865664 D01, SAR measurement variability was assessed for each frequency band, which was determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media were required for SAR measurements in a frequency band, the variability measurement procedures were applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium. These additional measurements were repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device was returned to ambient conditions (normal room temperature) with the battery fully charged before it was re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

SAR Measurement Variability was assessed using the following procedures for each frequency band:

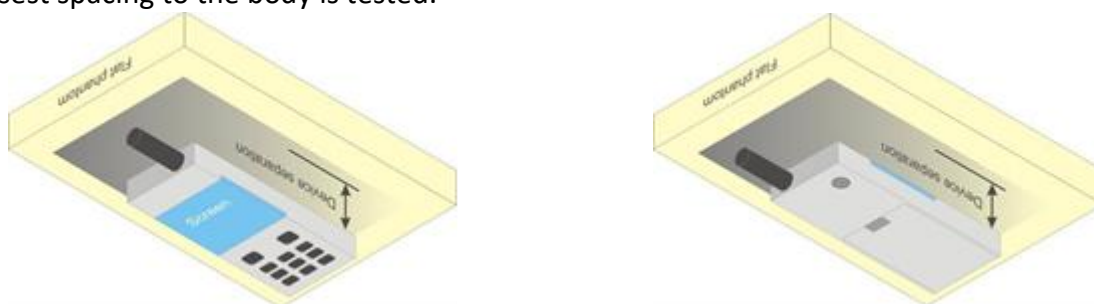
1. Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.
2. When the original highest measured SAR is ≥ 0.80 W/kg, repeat that measurement once.
3. Perform a second repeated measurement only if the ratio of largest to smallest SAR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

11.3 Test Positions Requirements

11.3.1 Body Worn Accessory

Body-worn operating configurations are tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in a normal use configuration (see Picture 18). Per KDB 648474 D04v01r02, body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in FCC KDB 447498 D01v05r02 should be used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode, when applicable. When the reported SAR for body-worn accessory, measured without a headset connected to the handset is $< 1.2 \text{ W/kg}$, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for that body-worn accessory with a handset attached to the handset.

Accessories for body-worn operation configurations are divided into two categories: those that do not contain metallic components and those that do contain metallic components and those that do contain metallic components. When multiple accessories that do not contain metallic components are supplied with the device, the device is tested with only the accessory that dictates the closest spacing to the body. Then multiple accessories that contain metallic components are test with the device with each accessory. If multiple accessories share an identical metallic component (i.e. the same metallic belt-clip used with different holsters with no other metallic components) only the accessory that dictates the closest spacing to the body is tested.



Picture18 Body Worn Position

11.3.2 Wireless Router

Some battery-operated handsets have the capability to transmit and receive user through simultaneous transmission of WIFI simultaneously with a separate licensed transmitter. The FCC has provided guidance in FCC KDB Publication 941225 D06v01r01 where SAR test considerations for handsets ($L \times W \geq 9 \text{ cm} \times 5 \text{ cm}$) are based on a composite test separation distance of 10mm from the front, back and edges of the device containing transmitting antennas within 2.5cm of their edges, determined from general mixed use conditions for this type of devices. Since the hotspot SAR results may overlap with the body-worn accessory SAR requirements, the more conservative configurations can be considered, thus excluding some body-worn accessory SAR tests.

When the user enables the personal wireless router functions for the handset, actual operations include simultaneous transmission of both the WIFI transmitter and another licensed transmitter. Both transmitters often do not transmit at the same transmitting frequency and thus cannot be evaluated for SAR under actual use conditions due to the limitations of the SAR assessment probes. Therefore, SAR must be evaluated for each frequency transmission and mode separately and spatially summed with the WIFI transmitter according to FCC KDB Publication 447498 D01v05r02 publication procedures. The "Portable Hotspot" feature on the handset was NOT activated during SAR assessments, to ensure the SAR measurements were evaluated for a single transmission frequency RF signal at a time.

11.4 TEST COFIGURATION

11.4.1 LTE Test Configuration

This device contains LTE transmitter which follows 3GPP standards, is category 3, supports both QPSK and 16QAM modulations. The output power was tested per 3GPP TS 36.521-1 maximum transmit procedures for both QPSK and 16QAM modulation.

During LTE SAR testing, the related parameters of operating band, channel bandwidth, uplink channel number, modulation type, and RB was set in base station simulator. When the EUT has registered and communicated to base station simulator, the simulator set to make EUT transmitting the maximum radiated power.

11.4.1.1 General

The general test requirements of VoIP support for handsets are described in KDB Publication 648474 D04. The head, body, body-worn accessories and other required test considerations in KDB Publication 447498 D01 and other published RF exposure KDB procedures should be applied to configure LTE devices for standalone and simultaneous transmission in voice and data modes for the required exposure conditions.

Based on the design specifications and other information available from the device manufacturer, typically through measurement and analysis during product development, when the maximum output power specifications for the different RB allocations and RB offset conditions within a channel bandwidth, modulation, or across the channels in a frequency band varies by more than 1 dB, a KDB inquiry is required to determine whether the required test channels are acceptable for SAR testing or if a different set of required test channels should be used. The maximum average conducted output power measured according to the following configurations, for the required test channels, channel bandwidths and uplink modulations, in each frequency band, are used to support the SAR test reduction and exclusion.

a) 100% RB allocation

b) 1 RB, and also 50% RB allocation, offset to the upper edge, middle, and lower edge of the channel bandwidth of each required test channel

Based on the power measurements, the SAR test reduction and exclusion provisions in KDB Publication 447498 D01 should be applied to determine SAR measurement requirements. SAR is evaluated separately according to the following procedures for the different test positions in each exposure condition – head, body, body-worn accessories, and other use conditions. The configurations and conditions that qualify for SAR test exclusion or require testing must be clearly explained in the SAR report. The procedures in the following subsections are applied separately to test each LTE frequency band. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration. The TTI configurations supported and tested must be described in the SAR report.

11.4.1.2 Largest channel bandwidth standalone SAR test requirements

1. QPSK with 1 RB allocation

Start with the largest channel bandwidth then measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power among 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.

2. QPSK with 50% RB allocation

The procedures required for 1 RB allocation in 5.2.1 are applied to measure the SAR for QPSK with 50% RB allocation.

3. QPSK with 100% RB allocation

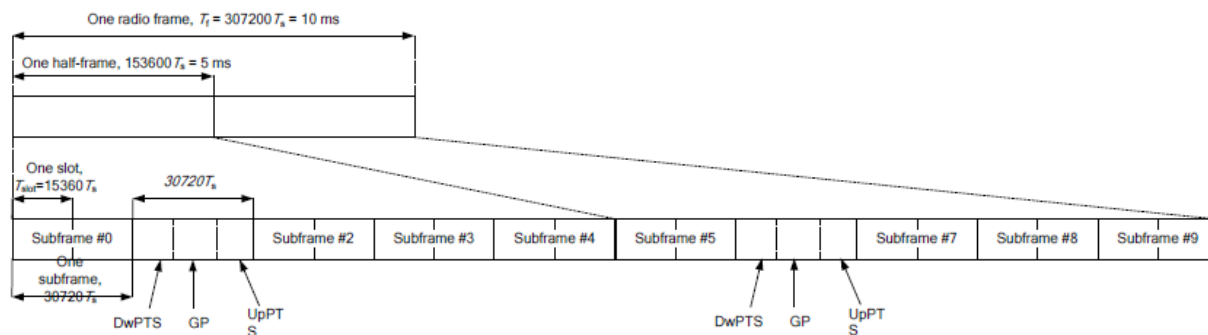
For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations, and the highest reported SAR for 1 RB and 50% RB allocation in 5.2.1 and 5.2.2 are ≤ 0.8 W/kg. Otherwise, SAR 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.

4. Higher order modulations

For each modulation besides QPSK; e.g., 16-QAM, 64-QAM, apply the QPSK procedures in 5.2.1, 5.2.2, and 5.2.3 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.

11.4.1.3 TDD-LTE test configurations

According to KDB 941225 D05, SAR testing for TDD-LTE device must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP TDD-LTE configurations. The TDD-LTE of this device supports frame structure type 2 defined in 3GPP TS 36.211 section 4.2, and the frame structure configuration can be referred to below.



3GPP TS 36.211 Figure 4.2-1: Frame Structure Type 2

Special Subframe Configuration	Normal Cyclic Prefix in Downlink			Extended Cyclic Prefix in Downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal Cyclic Prefix in Uplink	Extended Cyclic Prefix in Uplink		Normal Cyclic Prefix in Uplink	Extended Cyclic Prefix in Uplink
0	6592 • Ts	2192 • Ts	2560 • Ts	7680 • Ts	2192 • Ts	2560 • Ts
1	19760 • Ts			20480 • Ts		
2	21952 • Ts			23040 • Ts		
3	24144 • Ts			25600 • Ts		
4	26336 • Ts	4384 • Ts	5120 • Ts	7680 • Ts	4384 • Ts	5120 • Ts
5	6592 • Ts			20480 • Ts		
6	19760 • Ts			23040 • Ts		
7	21952 • Ts			12800 • Ts		
8	24144 • Ts			-		
9	13168 • Ts			-	-	-

3GPP TS 36.211 Table 4.2-1: Configuration of Special Subframe

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-Point Periodicity	Subframe Number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

3GPP TS 36.211 Table 4.2-2: Uplink-Downlink Configurations

The variety of different TD-LTE uplink-downlink configurations allows a network operator to allocate the network's capacity between uplink and downlink traffic to meet the needs of the network. The uplink duty cycle of these seven configurations can readily be computed and shown in below.

UL-DL Configuration	0	1	2	3	4	5	6
Highest Duty-Cycle	63.33%	43.33%	23.33%	31.67%	21.67%	11.67%	53.33%

Considering the highest transmission duty cycle, TDD-LTE was tested using Uplink-Downlink Configuration 0 with 6 uplink subframe and 2 special subframe. The special subframe was set to special subframe configuration 7 using extended cyclic prefix uplink. Therefore, SAR testing for TDD-LTE was performed at the maximum output power with highest transmission duty cycle of 63.33%.

12. TEST RESULTS

12.1 Conducted Power Results

Test Condition:

1. Conducted Measurement

EUT was set for low, mid, high channel with modulated mode and highest RF output power.
The base station simulator was connected to the antenna terminal.

2 Conducted Emissions Measurement Uncertainty

All test measurements carried out are traceable to national standards. The uncertainty of the measurement at a confidence level of approximately 95% (in the case where distributions are normal), with a coverage factor of 2, in the range 30MHz – 40GHz is $\pm 1.5\text{dB}$.

3	Environmental Conditions	Temperature	22°C
		Relative Humidity	55%
		Atmospheric Pressure	1009mbar

4 Test Date: 10 December 2023

Tested By: Draven Li

Test Procedures:

Tablet radio output power measurement

1. The transmitter output port was connected to base station emulator.
2. Establish communication link between emulator and EUT and set EUT to operate at maximum output power all the time.
3. Select lowest, middle, and highest channels for each band and different possible test mode.
4. Measure the conducted peak burst power and conducted average burst power from EUT antenna port.

Other radio output power measurement:

The output power was measured using power meter at low, mid, and hi channels.

Source-based Time Averaged Burst Power Calculation:

For TDMA, the following duty cycle factor was used to calculate the source-based time average power

Number of Time slot	1	2	3	4
Duty Cycle	1:8	1:4	1:2.66	1:2
Duty cycle factor	-9.03 dB	-6.02 dB	-4.26 dB	-3.01 dB
Crest Factor	8	4	2.66	2

Remark: *Time slot duty cycle factor = $10 * \log (\text{Time Slot Duty Cycle})$*

Source based time averaged power = Maximum burst averaged power (1 Uplink) – 9.03 dB

Source based time averaged power = Maximum burst averaged power (2 Uplink) – 6.02 dB

Source based time averaged power = Maximum burst averaged power (3 Uplink) – 4.26 dB

Source based time averaged power = Maximum burst averaged power (4 Uplink) – 3.01 dB

LTE Power

The following tests were conducted according to the test requirements outlined in section 6.2 of the 3GPP TS36.101 specification.

The allowed Maximum Power Reduction (MPR) for the maximum output power due to higher order modulation and transmit bandwidth configuration (resource blocks) is specified in Table 6.2.3-1 of the 3GPP TS36.101.

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 3

Modulation	Channel bandwidth / Transmission bandwidth (RB)						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2

The allowed A-MPR values specified below in Table 6.2.4-1 of 3GPP TS36.101 are in addition to the allowed MPR requirements. All the measurements below were performed with A-MPR disabled, by using Network Signalling Value of “NS_01”.

Table 6.2.4-1: Additional Maximum Power Reduction (A-MPR)

Network Signalling value	Requirements (sub-clause)	E-UTRA Band	Channel bandwidth (MHz)	Resources Blocks (N_{RB})	A-MPR (dB)
NS_01	6.6.2.1.1	Table 5.5-1	1.4, 3, 5, 10, 15, 20	Table 5.6-1	NA
NS_03	6.6.2.2.1	2, 4, 10, 23, 25, 35, 36	3	>5	≤ 1
			5	>6	≤ 1
			10	>6	≤ 1
			15	>8	≤ 1
			20	>10	≤ 1
NS_04	6.6.2.2.2	41	5	>6	≤ 1
			10, 15, 20	See Table 6.2.4-4	
NS_05	6.6.3.3.1	1	10, 15, 20	≥ 50	≤ 1
NS_06	6.6.2.2.3	12, 13, 14, 17	1.4, 3, 5, 10	Table 5.6-1	n/a
NS_07	6.6.2.2.3 6.6.3.3.2	13	10	Table 6.2.4-2	Table 6.2.4-2
NS_08	6.6.3.3.3	19	10, 15	> 44	≤ 3
NS_09	6.6.3.3.4	21	10, 15	> 40	≤ 1
				> 55	≤ 2
NS_10		20	15, 20	Table 6.2.4-3	Table 6.2.4-3
NS_11	6.6.2.2.1	23 ¹	1.4, 3, 5, 10	Table 6.2.4-5	Table 6.2.4-5
..					
NS_32	-	-	-	-	-

Note 1: Applies to the lower block of Band 23, i.e. a carrier placed in the 2000-2010 MHz region.

Maximum Output Power for LTE

LTE QPSK configuration has the highest maximum average output power per 3GPP standard.

Refer to KDB 941225 D05: SAR measurement is not required for the 16QAM and 64QAM. When the highest maximum output power for 16QAM and 64QAM is $\leq \frac{1}{2}$ dB higher than the QPSK or when the reported SAR for the QPSK configuration is ≤ 1.45 W/kg.

Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dBm)	Tune up limited (dBm)
Band2	1.4MHz	QPSK	18607	1RB#0	21.22	21.0±1
Band2	1.4MHz	QPSK	18607	1RB#2	21.21	21.0±1
Band2	1.4MHz	QPSK	18607	1RB#5	21.23	21.0±1
Band2	1.4MHz	QPSK	18607	3RB#0	21.30	21.0±1
Band2	1.4MHz	QPSK	18607	3RB#1	21.31	21.0±1
Band2	1.4MHz	QPSK	18607	3RB#3	21.27	21.0±1
Band2	1.4MHz	QPSK	18607	6RB#0	21.29	21.0±1
Band2	1.4MHz	QPSK	18900	1RB#0	21.03	21.0±1
Band2	1.4MHz	QPSK	18900	1RB#2	21.14	21.0±1
Band2	1.4MHz	QPSK	18900	1RB#5	21.19	21.0±1
Band2	1.4MHz	QPSK	18900	3RB#0	21.08	21.0±1
Band2	1.4MHz	QPSK	18900	3RB#1	21.12	21.0±1
Band2	1.4MHz	QPSK	18900	3RB#3	21.04	21.0±1
Band2	1.4MHz	QPSK	18900	6RB#0	21.29	21.0±1
Band2	1.4MHz	QPSK	19193	1RB#0	21.27	21.0±1
Band2	1.4MHz	QPSK	19193	1RB#2	21.33	21.0±1
Band2	1.4MHz	QPSK	19193	1RB#5	21.32	21.0±1
Band2	1.4MHz	QPSK	19193	3RB#0	21.35	21.0±1
Band2	1.4MHz	QPSK	19193	3RB#1	21.35	21.0±1
Band2	1.4MHz	QPSK	19193	3RB#3	21.36	21.0±1
Band2	1.4MHz	QPSK	19193	6RB#0	20.43	21.0±1
Band2	1.4MHz	16QAM	18607	1RB#0	21.13	21.0±1
Band2	1.4MHz	16QAM	18607	1RB#2	21.35	21.0±1
Band2	1.4MHz	16QAM	18607	1RB#5	21.15	21.0±1
Band2	1.4MHz	16QAM	18607	3RB#0	21.12	21.0±1
Band2	1.4MHz	16QAM	18607	3RB#1	21.11	21.0±1
Band2	1.4MHz	16QAM	18607	3RB#3	21.08	21.0±1
Band2	1.4MHz	16QAM	18607	6RB#0	20.29	21.0±1
Band2	1.4MHz	16QAM	18900	1RB#0	21.15	21.0±1

Band2	1.4MHz	16QAM	18900	1RB#2	21.33	21.0±1
Band2	1.4MHz	16QAM	18900	1RB#5	21.02	21.0±1
Band2	1.4MHz	16QAM	18900	3RB#0	20.95	21.0±1
Band2	1.4MHz	16QAM	18900	3RB#1	20.96	21.0±1
Band2	1.4MHz	16QAM	18900	3RB#3	20.91	21.0±1
Band2	1.4MHz	16QAM	18900	6RB#0	20.11	21.0±1
Band2	1.4MHz	16QAM	19193	1RB#0	20.36	21.0±1
Band2	1.4MHz	16QAM	19193	1RB#2	20.45	21.0±1
Band2	1.4MHz	16QAM	19193	1RB#5	20.33	21.0±1
Band2	1.4MHz	16QAM	19193	3RB#0	20.17	21.0±1
Band2	1.4MHz	16QAM	19193	3RB#1	20.18	21.0±1
Band2	1.4MHz	16QAM	19193	3RB#3	20.23	21.0±1
Band2	1.4MHz	16QAM	19193	6RB#0	20.22	21.0±1
Band2	3MHz	QPSK	18615	1RB#0	21.20	21.0±1
Band2	3MHz	QPSK	18615	1RB#8	21.24	21.0±1
Band2	3MHz	QPSK	18615	1RB#14	21.19	21.0±1
Band2	3MHz	QPSK	18615	8RB#0	21.26	21.0±1
Band2	3MHz	QPSK	18615	8RB#4	21.28	21.0±1
Band2	3MHz	QPSK	18615	8RB#7	21.25	21.0±1
Band2	3MHz	QPSK	18615	15RB#0	21.23	21.0±1
Band2	3MHz	QPSK	18900	1RB#0	21.08	21.0±1
Band2	3MHz	QPSK	18900	1RB#8	21.07	21.0±1
Band2	3MHz	QPSK	18900	1RB#14	21.01	21.0±1
Band2	3MHz	QPSK	18900	8RB#0	21.03	21.0±1
Band2	3MHz	QPSK	18900	8RB#4	21.06	21.0±1
Band2	3MHz	QPSK	18900	8RB#7	20.99	21.0±1
Band2	3MHz	QPSK	18900	15RB#0	21.00	21.0±1
Band2	3MHz	QPSK	19185	1RB#0	21.18	21.0±1
Band2	3MHz	QPSK	19185	1RB#8	21.26	21.0±1
Band2	3MHz	QPSK	19185	1RB#14	21.35	21.0±1
Band2	3MHz	QPSK	19185	8RB#0	20.43	21.0±1
Band2	3MHz	QPSK	19185	8RB#4	20.45	21.0±1
Band2	3MHz	QPSK	19185	8RB#7	20.41	21.0±1
Band2	3MHz	QPSK	19185	15RB#0	20.35	21.0±1
Band2	3MHz	16QAM	18615	1RB#0	21.34	21.0±1
Band2	3MHz	16QAM	18615	1RB#8	21.30	21.0±1

Band2	3MHz	16QAM	18615	1RB#14	21.15	21.0±1
Band2	3MHz	16QAM	18615	8RB#0	20.29	21.0±1
Band2	3MHz	16QAM	18615	8RB#4	20.28	21.0±1
Band2	3MHz	16QAM	18615	8RB#7	20.23	21.0±1
Band2	3MHz	16QAM	18615	15RB#0	20.22	21.0±1
Band2	3MHz	16QAM	18900	1RB#0	21.24	21.0±1
Band2	3MHz	16QAM	18900	1RB#8	21.21	21.0±1
Band2	3MHz	16QAM	18900	1RB#14	21.16	21.0±1
Band2	3MHz	16QAM	18900	8RB#0	20.03	21.0±1
Band2	3MHz	16QAM	18900	8RB#4	20.05	21.0±1
Band2	3MHz	16QAM	18900	8RB#7	20.05	21.0±1
Band2	3MHz	16QAM	18900	15RB#0	20.16	21.0±1
Band2	3MHz	16QAM	19185	1RB#0	20.55	21.0±1
Band2	3MHz	16QAM	19185	1RB#8	20.23	21.0±1
Band2	3MHz	16QAM	19185	1RB#14	20.22	21.0±1
Band2	3MHz	16QAM	19185	8RB#0	20.21	21.0±1
Band2	3MHz	16QAM	19185	8RB#4	20.22	21.0±1
Band2	3MHz	16QAM	19185	8RB#7	20.35	21.0±1
Band2	3MHz	16QAM	19185	15RB#0	20.25	21.0±1
Band2	5MHz	QPSK	18625	1RB#0	21.71	21.0±1
Band2	5MHz	QPSK	18625	1RB#12	21.22	21.0±1
Band2	5MHz	QPSK	18625	1RB#24	21.29	21.0±1
Band2	5MHz	QPSK	18625	12RB#0	21.12	21.0±1
Band2	5MHz	QPSK	18625	12RB#6	21.13	21.0±1
Band2	5MHz	QPSK	18625	12RB#13	21.10	21.0±1
Band2	5MHz	QPSK	18625	25RB#0	21.11	21.0±1
Band2	5MHz	QPSK	18900	1RB#0	21.95	21.0±1
Band2	5MHz	QPSK	18900	1RB#12	21.02	21.0±1
Band2	5MHz	QPSK	18900	1RB#24	21.20	21.0±1
Band2	5MHz	QPSK	18900	12RB#0	20.92	21.0±1
Band2	5MHz	QPSK	18900	12RB#6	20.93	21.0±1
Band2	5MHz	QPSK	18900	12RB#13	20.90	21.0±1
Band2	5MHz	QPSK	18900	25RB#0	20.98	21.0±1
Band2	5MHz	QPSK	19175	1RB#0	21.36	21.0±1
Band2	5MHz	QPSK	19175	1RB#12	21.22	21.0±1
Band2	5MHz	QPSK	19175	1RB#24	21.24	21.0±1

Band2	5MHz	QPSK	19175	12RB#0	20.24	21.0±1
Band2	5MHz	QPSK	19175	12RB#6	20.29	21.0±1
Band2	5MHz	QPSK	19175	12RB#13	20.10	21.0±1
Band2	5MHz	QPSK	19175	25RB#0	20.17	21.0±1
Band2	5MHz	16QAM	18625	1RB#0	20.63	21.0±1
Band2	5MHz	16QAM	18625	1RB#12	20.90	21.0±1
Band2	5MHz	16QAM	18625	1RB#24	20.75	21.0±1
Band2	5MHz	16QAM	18625	12RB#0	20.06	21.0±1
Band2	5MHz	16QAM	18625	12RB#6	20.10	21.0±1
Band2	5MHz	16QAM	18625	12RB#13	20.03	21.0±1
Band2	5MHz	16QAM	18625	25RB#0	20.11	21.0±1
Band2	5MHz	16QAM	18900	1RB#0	21.17	21.0±1
Band2	5MHz	16QAM	18900	1RB#12	21.21	21.0±1
Band2	5MHz	16QAM	18900	1RB#24	21.08	21.0±1
Band2	5MHz	16QAM	18900	12RB#0	20.03	21.0±1
Band2	5MHz	16QAM	18900	12RB#6	20.02	21.0±1
Band2	5MHz	16QAM	18900	12RB#13	20.19	21.0±1
Band2	5MHz	16QAM	18900	25RB#0	20.15	21.0±1
Band2	5MHz	16QAM	19175	1RB#0	20.84	21.0±1
Band2	5MHz	16QAM	19175	1RB#12	20.39	21.0±1
Band2	5MHz	16QAM	19175	1RB#24	20.15	21.0±1
Band2	5MHz	16QAM	19175	12RB#0	20.32	21.0±1
Band2	5MHz	16QAM	19175	12RB#6	20.22	21.0±1
Band2	5MHz	16QAM	19175	12RB#13	20.05	21.0±1
Band2	5MHz	16QAM	19175	25RB#0	20.33	21.0±1
Band2	10MHz	QPSK	18650	1RB#0	21.14	21.0±1
Band2	10MHz	QPSK	18650	1RB#24	21.16	21.0±1
Band2	10MHz	QPSK	18650	1RB#49	21.25	21.0±1
Band2	10MHz	QPSK	18650	25RB#0	20.80	21.0±1
Band2	10MHz	QPSK	18650	25RB#12	21.11	21.0±1
Band2	10MHz	QPSK	18650	25RB#25	20.68	21.0±1
Band2	10MHz	QPSK	18650	50RB#0	21.04	21.0±1
Band2	10MHz	QPSK	18900	1RB#0	21.04	21.0±1
Band2	10MHz	QPSK	18900	1RB#24	21.29	21.0±1
Band2	10MHz	QPSK	18900	1RB#49	21.35	21.0±1
Band2	10MHz	QPSK	18900	25RB#0	20.85	21.0±1

Band2	10MHz	QPSK	18900	25RB#12	20.85	21.0±1
Band2	10MHz	QPSK	18900	25RB#25	20.91	21.0±1
Band2	10MHz	QPSK	18900	50RB#0	21.00	21.0±1
Band2	10MHz	QPSK	19150	1RB#0	21.17	21.0±1
Band2	10MHz	QPSK	19150	1RB#24	21.07	21.0±1
Band2	10MHz	QPSK	19150	1RB#49	21.18	21.0±1
Band2	10MHz	QPSK	19150	25RB#0	20.34	21.0±1
Band2	10MHz	QPSK	19150	25RB#12	20.35	21.0±1
Band2	10MHz	QPSK	19150	25RB#25	20.33	21.0±1
Band2	10MHz	QPSK	19150	50RB#0	20.36	21.0±1
Band2	10MHz	16QAM	18650	1RB#0	20.81	21.0±1
Band2	10MHz	16QAM	18650	1RB#24	20.99	21.0±1
Band2	10MHz	16QAM	18650	1RB#49	20.69	21.0±1
Band2	10MHz	16QAM	18650	25RB#0	20.14	21.0±1
Band2	10MHz	16QAM	18650	25RB#12	20.20	21.0±1
Band2	10MHz	16QAM	18650	25RB#25	20.22	21.0±1
Band2	10MHz	16QAM	18650	50RB#0	20.16	21.0±1
Band2	10MHz	16QAM	18900	1RB#0	20.80	21.0±1
Band2	10MHz	16QAM	18900	1RB#24	20.78	21.0±1
Band2	10MHz	16QAM	18900	1RB#49	20.43	21.0±1
Band2	10MHz	16QAM	18900	25RB#0	20.13	21.0±1
Band2	10MHz	16QAM	18900	25RB#12	20.26	21.0±1
Band2	10MHz	16QAM	18900	25RB#25	20.00	21.0±1
Band2	10MHz	16QAM	18900	50RB#0	20.32	21.0±1
Band2	10MHz	16QAM	19150	1RB#0	20.62	21.0±1
Band2	10MHz	16QAM	19150	1RB#24	20.64	21.0±1
Band2	10MHz	16QAM	19150	1RB#49	20.22	21.0±1
Band2	10MHz	16QAM	19150	25RB#0	20.34	21.0±1
Band2	10MHz	16QAM	19150	25RB#12	20.34	21.0±1
Band2	10MHz	16QAM	19150	25RB#25	20.40	21.0±1
Band2	10MHz	16QAM	19150	50RB#0	20.36	21.0±1
Band2	15MHz	QPSK	18675	1RB#0	21.35	21.0±1
Band2	15MHz	QPSK	18675	1RB#38	21.33	21.0±1
Band2	15MHz	QPSK	18675	1RB#74	21.34	21.0±1
Band2	15MHz	QPSK	18675	38RB#0	20.82	21.0±1
Band2	15MHz	QPSK	18675	38RB#18	20.84	21.0±1

Band2	15MHz	QPSK	18675	38RB#37	20.87	21.0±1
Band2	15MHz	QPSK	18675	75RB#0	20.87	21.0±1
Band2	15MHz	QPSK	18900	1RB#0	21.35	21.0±1
Band2	15MHz	QPSK	18900	1RB#38	21.31	21.0±1
Band2	15MHz	QPSK	18900	1RB#74	21.28	21.0±1
Band2	15MHz	QPSK	18900	38RB#0	20.69	21.0±1
Band2	15MHz	QPSK	18900	38RB#18	20.92	21.0±1
Band2	15MHz	QPSK	18900	38RB#37	20.74	21.0±1
Band2	15MHz	QPSK	18900	75RB#0	20.82	21.0±1
Band2	15MHz	QPSK	19125	1RB#0	21.36	21.0±1
Band2	15MHz	QPSK	19125	1RB#38	21.17	21.0±1
Band2	15MHz	QPSK	19125	1RB#74	21.13	21.0±1
Band2	15MHz	QPSK	19125	38RB#0	20.47	21.0±1
Band2	15MHz	QPSK	19125	38RB#18	20.48	21.0±1
Band2	15MHz	QPSK	19125	38RB#37	20.49	21.0±1
Band2	15MHz	QPSK	19125	75RB#0	20.49	21.0±1
Band2	15MHz	16QAM	18675	1RB#0	20.70	21.0±1
Band2	15MHz	16QAM	18675	1RB#38	20.83	21.0±1
Band2	15MHz	16QAM	18675	1RB#74	20.59	21.0±1
Band2	15MHz	16QAM	18675	38RB#0	20.90	21.0±1
Band2	15MHz	16QAM	18675	38RB#18	20.80	21.0±1
Band2	15MHz	16QAM	18675	38RB#37	20.92	21.0±1
Band2	15MHz	16QAM	18675	75RB#0	20.84	21.0±1
Band2	15MHz	16QAM	18900	1RB#0	20.62	21.0±1
Band2	15MHz	16QAM	18900	1RB#38	20.82	21.0±1
Band2	15MHz	16QAM	18900	1RB#74	20.53	21.0±1
Band2	15MHz	16QAM	18900	38RB#0	20.74	21.0±1
Band2	15MHz	16QAM	18900	38RB#18	20.74	21.0±1
Band2	15MHz	16QAM	18900	38RB#37	20.85	21.0±1
Band2	15MHz	16QAM	18900	75RB#0	20.96	21.0±1
Band2	15MHz	16QAM	19125	1RB#0	20.17	21.0±1
Band2	15MHz	16QAM	19125	1RB#38	20.35	21.0±1
Band2	15MHz	16QAM	19125	1RB#74	20.01	21.0±1
Band2	15MHz	16QAM	19125	38RB#0	20.51	21.0±1
Band2	15MHz	16QAM	19125	38RB#18	20.54	21.0±1
Band2	15MHz	16QAM	19125	38RB#37	20.50	21.0±1

Band2	15MHz	16QAM	19125	75RB#0	20.52	21.0±1
Band2	20MHz	QPSK	18700	1RB#0	21.88	21.0±1
Band2	20MHz	QPSK	18700	1RB#49	21.98	21.0±1
Band2	20MHz	QPSK	18700	1RB#99	21.89	21.0±1
Band2	20MHz	QPSK	18700	50RB#0	21.33	21.0±1
Band2	20MHz	QPSK	18700	50RB#25	21.37	21.0±1
Band2	20MHz	QPSK	18700	50RB#50	21.03	21.0±1
Band2	20MHz	QPSK	18700	100RB#0	21.26	21.0±1
Band2	20MHz	QPSK	18900	1RB#0	21.85	21.0±1
Band2	20MHz	QPSK	18900	1RB#49	21.90	21.0±1
Band2	20MHz	QPSK	18900	1RB#99	21.50	21.0±1
Band2	20MHz	QPSK	18900	50RB#0	20.79	21.0±1
Band2	20MHz	QPSK	18900	50RB#25	20.69	21.0±1
Band2	20MHz	QPSK	18900	50RB#50	20.89	21.0±1
Band2	20MHz	QPSK	18900	100RB#0	20.93	21.0±1
Band2	20MHz	QPSK	19100	1RB#0	21.55	21.0±1
Band2	20MHz	QPSK	19100	1RB#49	21.49	21.0±1
Band2	20MHz	QPSK	19100	1RB#99	20.93	21.0±1
Band2	20MHz	QPSK	19100	50RB#0	20.73	21.0±1
Band2	20MHz	QPSK	19100	50RB#25	20.72	21.0±1
Band2	20MHz	QPSK	19100	50RB#50	20.72	21.0±1
Band2	20MHz	QPSK	19100	100RB#0	20.71	21.0±1
Band2	20MHz	16QAM	18700	1RB#0	21.02	21.0±1
Band2	20MHz	16QAM	18700	1RB#49	21.32	21.0±1
Band2	20MHz	16QAM	18700	1RB#99	20.87	21.0±1
Band2	20MHz	16QAM	18700	50RB#0	20.37	21.0±1
Band2	20MHz	16QAM	18700	50RB#25	20.37	21.0±1
Band2	20MHz	16QAM	18700	50RB#50	20.04	21.0±1
Band2	20MHz	16QAM	18700	100RB#0	20.20	21.0±1
Band2	20MHz	16QAM	18900	1RB#0	21.02	21.0±1
Band2	20MHz	16QAM	18900	1RB#49	21.05	21.0±1
Band2	20MHz	16QAM	18900	1RB#99	20.52	21.0±1
Band2	20MHz	16QAM	18900	50RB#0	20.82	21.0±1
Band2	20MHz	16QAM	18900	50RB#25	20.69	21.0±1
Band2	20MHz	16QAM	18900	50RB#50	20.89	21.0±1
Band2	20MHz	16QAM	18900	100RB#0	20.83	21.0±1

Band2	20MHz	16QAM	19100	1RB#0	20.40	21.0±1
Band2	20MHz	16QAM	19100	1RB#49	20.68	21.0±1
Band2	20MHz	16QAM	19100	1RB#99	20.00	21.0±1
Band2	20MHz	16QAM	19100	50RB#0	20.74	21.0±1
Band2	20MHz	16QAM	19100	50RB#25	20.74	21.0±1
Band2	20MHz	16QAM	19100	50RB#50	20.74	21.0±1
Band2	20MHz	16QAM	19100	100RB#0	20.71	21.0±1
Band4	1.4MHz	QPSK	19957	1RB#0	21.02	21.0±1
Band4	1.4MHz	QPSK	19957	1RB#2	21.13	21.0±1
Band4	1.4MHz	QPSK	19957	1RB#5	21.08	21.0±1
Band4	1.4MHz	QPSK	19957	3RB#0	21.17	21.0±1
Band4	1.4MHz	QPSK	19957	3RB#1	21.18	21.0±1
Band4	1.4MHz	QPSK	19957	3RB#3	21.12	21.0±1
Band4	1.4MHz	QPSK	19957	6RB#0	21.04	21.0±1
Band4	1.4MHz	QPSK	20175	1RB#0	21.04	21.0±1
Band4	1.4MHz	QPSK	20175	1RB#2	21.16	21.0±1
Band4	1.4MHz	QPSK	20175	1RB#5	21.03	21.0±1
Band4	1.4MHz	QPSK	20175	3RB#0	21.16	21.0±1
Band4	1.4MHz	QPSK	20175	3RB#1	21.15	21.0±1
Band4	1.4MHz	QPSK	20175	3RB#3	21.13	21.0±1
Band4	1.4MHz	QPSK	20175	6RB#0	21.05	21.0±1
Band4	1.4MHz	QPSK	20393	1RB#0	21.00	21.0±1
Band4	1.4MHz	QPSK	20393	1RB#2	21.03	21.0±1
Band4	1.4MHz	QPSK	20393	1RB#5	21.00	21.0±1
Band4	1.4MHz	QPSK	20393	3RB#0	21.10	21.0±1
Band4	1.4MHz	QPSK	20393	3RB#1	21.18	21.0±1
Band4	1.4MHz	QPSK	20393	3RB#3	21.11	21.0±1
Band4	1.4MHz	QPSK	20393	6RB#0	21.20	21.0±1
Band4	1.4MHz	16QAM	19957	1RB#0	21.19	21.0±1
Band4	1.4MHz	16QAM	19957	1RB#2	21.18	21.0±1
Band4	1.4MHz	16QAM	19957	1RB#5	21.21	21.0±1
Band4	1.4MHz	16QAM	19957	3RB#0	21.08	21.0±1
Band4	1.4MHz	16QAM	19957	3RB#1	21.10	21.0±1
Band4	1.4MHz	16QAM	19957	3RB#3	21.07	21.0±1
Band4	1.4MHz	16QAM	19957	6RB#0	20.16	21.0±1
Band4	1.4MHz	16QAM	20175	1RB#0	21.21	21.0±1

Band4	1.4MHz	16QAM	20175	1RB#2	21.16	21.0±1
Band4	1.4MHz	16QAM	20175	1RB#5	21.21	21.0±1
Band4	1.4MHz	16QAM	20175	3RB#0	21.07	21.0±1
Band4	1.4MHz	16QAM	20175	3RB#1	21.09	21.0±1
Band4	1.4MHz	16QAM	20175	3RB#3	21.10	21.0±1
Band4	1.4MHz	16QAM	20175	6RB#0	20.89	21.0±1
Band4	1.4MHz	16QAM	20393	1RB#0	20.84	21.0±1
Band4	1.4MHz	16QAM	20393	1RB#2	20.90	21.0±1
Band4	1.4MHz	16QAM	20393	1RB#5	20.93	21.0±1
Band4	1.4MHz	16QAM	20393	3RB#0	20.79	21.0±1
Band4	1.4MHz	16QAM	20393	3RB#1	21.11	21.0±1
Band4	1.4MHz	16QAM	20393	3RB#3	20.85	21.0±1
Band4	1.4MHz	16QAM	20393	6RB#0	20.18	21.0±1
Band4	3MHz	QPSK	19965	1RB#0	21.13	21.0±1
Band4	3MHz	QPSK	19965	1RB#8	21.12	21.0±1
Band4	3MHz	QPSK	19965	1RB#14	21.17	21.0±1
Band4	3MHz	QPSK	19965	8RB#0	21.19	21.0±1
Band4	3MHz	QPSK	19965	8RB#4	21.21	21.0±1
Band4	3MHz	QPSK	19965	8RB#7	21.17	21.0±1
Band4	3MHz	QPSK	19965	15RB#0	21.14	21.0±1
Band4	3MHz	QPSK	20175	1RB#0	21.15	21.0±1
Band4	3MHz	QPSK	20175	1RB#8	21.12	21.0±1
Band4	3MHz	QPSK	20175	1RB#14	21.17	21.0±1
Band4	3MHz	QPSK	20175	8RB#0	21.15	21.0±1
Band4	3MHz	QPSK	20175	8RB#4	21.17	21.0±1
Band4	3MHz	QPSK	20175	8RB#7	21.13	21.0±1
Band4	3MHz	QPSK	20175	15RB#0	21.14	21.0±1
Band4	3MHz	QPSK	20385	1RB#0	21.21	21.0±1
Band4	3MHz	QPSK	20385	1RB#8	21.02	21.0±1
Band4	3MHz	QPSK	20385	1RB#14	21.01	21.0±1
Band4	3MHz	QPSK	20385	8RB#0	21.20	21.0±1
Band4	3MHz	QPSK	20385	8RB#4	21.18	21.0±1
Band4	3MHz	QPSK	20385	8RB#7	21.20	21.0±1
Band4	3MHz	QPSK	20385	15RB#0	21.00	21.0±1
Band4	3MHz	16QAM	19965	1RB#0	21.13	21.0±1
Band4	3MHz	16QAM	19965	1RB#8	21.12	21.0±1

Band4	3MHz	16QAM	19965	1RB#14	21.19	21.0±1
Band4	3MHz	16QAM	19965	8RB#0	20.21	21.0±1
Band4	3MHz	16QAM	19965	8RB#4	20.26	21.0±1
Band4	3MHz	16QAM	19965	8RB#7	20.20	21.0±1
Band4	3MHz	16QAM	19965	15RB#0	20.13	21.0±1
Band4	3MHz	16QAM	20175	1RB#0	21.17	21.0±1
Band4	3MHz	16QAM	20175	1RB#8	21.13	21.0±1
Band4	3MHz	16QAM	20175	1RB#14	21.20	21.0±1
Band4	3MHz	16QAM	20175	8RB#0	20.21	21.0±1
Band4	3MHz	16QAM	20175	8RB#4	20.22	21.0±1
Band4	3MHz	16QAM	20175	8RB#7	20.23	21.0±1
Band4	3MHz	16QAM	20175	15RB#0	20.18	21.0±1
Band4	3MHz	16QAM	20385	1RB#0	21.14	21.0±1
Band4	3MHz	16QAM	20385	1RB#8	21.13	21.0±1
Band4	3MHz	16QAM	20385	1RB#14	21.20	21.0±1
Band4	3MHz	16QAM	20385	8RB#0	20.45	21.0±1
Band4	3MHz	16QAM	20385	8RB#4	20.35	21.0±1
Band4	3MHz	16QAM	20385	8RB#7	20.31	21.0±1
Band4	3MHz	16QAM	20385	15RB#0	20.41	21.0±1
Band4	5MHz	QPSK	19975	1RB#0	21.04	21.0±1
Band4	5MHz	QPSK	19975	1RB#12	21.67	21.0±1
Band4	5MHz	QPSK	19975	1RB#24	21.02	21.0±1
Band4	5MHz	QPSK	19975	12RB#0	21.04	21.0±1
Band4	5MHz	QPSK	19975	12RB#6	21.05	21.0±1
Band4	5MHz	QPSK	19975	12RB#13	20.99	21.0±1
Band4	5MHz	QPSK	19975	25RB#0	21.06	21.0±1
Band4	5MHz	QPSK	20175	1RB#0	21.02	21.0±1
Band4	5MHz	QPSK	20175	1RB#12	21.18	21.0±1
Band4	5MHz	QPSK	20175	1RB#24	21.00	21.0±1
Band4	5MHz	QPSK	20175	12RB#0	21.06	21.0±1
Band4	5MHz	QPSK	20175	12RB#6	21.05	21.0±1
Band4	5MHz	QPSK	20175	12RB#13	21.07	21.0±1
Band4	5MHz	QPSK	20175	25RB#0	21.02	21.0±1
Band4	5MHz	QPSK	20375	1RB#0	21.06	21.0±1
Band4	5MHz	QPSK	20375	1RB#12	21.02	21.0±1
Band4	5MHz	QPSK	20375	1RB#24	21.00	21.0±1

Band4	5MHz	QPSK	20375	12RB#0	20.93	21.0±1
Band4	5MHz	QPSK	20375	12RB#6	21.07	21.0±1
Band4	5MHz	QPSK	20375	12RB#13	21.15	21.0±1
Band4	5MHz	QPSK	20375	25RB#0	21.15	21.0±1
Band4	5MHz	16QAM	19975	1RB#0	21.15	21.0±1
Band4	5MHz	16QAM	19975	1RB#12	21.09	21.0±1
Band4	5MHz	16QAM	19975	1RB#24	21.07	21.0±1
Band4	5MHz	16QAM	19975	12RB#0	20.15	21.0±1
Band4	5MHz	16QAM	19975	12RB#6	20.14	21.0±1
Band4	5MHz	16QAM	19975	12RB#13	20.10	21.0±1
Band4	5MHz	16QAM	19975	25RB#0	20.14	21.0±1
Band4	5MHz	16QAM	20175	1RB#0	21.11	21.0±1
Band4	5MHz	16QAM	20175	1RB#12	21.17	21.0±1
Band4	5MHz	16QAM	20175	1RB#24	21.03	21.0±1
Band4	5MHz	16QAM	20175	12RB#0	20.98	21.0±1
Band4	5MHz	16QAM	20175	12RB#6	20.99	21.0±1
Band4	5MHz	16QAM	20175	12RB#13	20.02	21.0±1
Band4	5MHz	16QAM	20175	25RB#0	20.07	21.0±1
Band4	5MHz	16QAM	20375	1RB#0	21.05	21.0±1
Band4	5MHz	16QAM	20375	1RB#12	21.17	21.0±1
Band4	5MHz	16QAM	20375	1RB#24	21.08	21.0±1
Band4	5MHz	16QAM	20375	12RB#0	20.96	21.0±1
Band4	5MHz	16QAM	20375	12RB#6	20.08	21.0±1
Band4	5MHz	16QAM	20375	12RB#13	20.23	21.0±1
Band4	5MHz	16QAM	20375	25RB#0	20.40	21.0±1
Band4	10MHz	QPSK	20000	1RB#0	21.03	21.0±1
Band4	10MHz	QPSK	20000	1RB#24	21.19	21.0±1
Band4	10MHz	QPSK	20000	1RB#49	21.06	21.0±1
Band4	10MHz	QPSK	20000	25RB#0	21.21	21.0±1
Band4	10MHz	QPSK	20000	25RB#12	21.16	21.0±1
Band4	10MHz	QPSK	20000	25RB#25	21.14	21.0±1
Band4	10MHz	QPSK	20000	50RB#0	21.13	21.0±1
Band4	10MHz	QPSK	20175	1RB#0	21.04	21.0±1
Band4	10MHz	QPSK	20175	1RB#24	21.14	21.0±1
Band4	10MHz	QPSK	20175	1RB#49	21.03	21.0±1
Band4	10MHz	QPSK	20175	25RB#0	21.10	21.0±1

Band4	10MHz	QPSK	20175	25RB#12	21.06	21.0±1
Band4	10MHz	QPSK	20175	25RB#25	21.15	21.0±1
Band4	10MHz	QPSK	20175	50RB#0	21.08	21.0±1
Band4	10MHz	QPSK	20350	1RB#0	21.05	21.0±1
Band4	10MHz	QPSK	20350	1RB#24	21.12	21.0±1
Band4	10MHz	QPSK	20350	1RB#49	21.00	21.0±1
Band4	10MHz	QPSK	20350	25RB#0	21.08	21.0±1
Band4	10MHz	QPSK	20350	25RB#12	21.02	21.0±1
Band4	10MHz	QPSK	20350	25RB#25	21.07	21.0±1
Band4	10MHz	QPSK	20350	50RB#0	21.16	21.0±1
Band4	10MHz	16QAM	20000	1RB#0	21.11	21.0±1
Band4	10MHz	16QAM	20000	1RB#24	21.12	21.0±1
Band4	10MHz	16QAM	20000	1RB#49	21.31	21.0±1
Band4	10MHz	16QAM	20000	25RB#0	20.21	21.0±1
Band4	10MHz	16QAM	20000	25RB#12	20.22	21.0±1
Band4	10MHz	16QAM	20000	25RB#25	20.16	21.0±1
Band4	10MHz	16QAM	20000	50RB#0	20.16	21.0±1
Band4	10MHz	16QAM	20175	1RB#0	21.20	21.0±1
Band4	10MHz	16QAM	20175	1RB#24	21.17	21.0±1
Band4	10MHz	16QAM	20175	1RB#49	21.16	21.0±1
Band4	10MHz	16QAM	20175	25RB#0	20.11	21.0±1
Band4	10MHz	16QAM	20175	25RB#12	20.12	21.0±1
Band4	10MHz	16QAM	20175	25RB#25	20.19	21.0±1
Band4	10MHz	16QAM	20175	50RB#0	20.14	21.0±1
Band4	10MHz	16QAM	20350	1RB#0	20.89	21.0±1
Band4	10MHz	16QAM	20350	1RB#24	20.96	21.0±1
Band4	10MHz	16QAM	20350	1RB#49	20.78	21.0±1
Band4	10MHz	16QAM	20350	25RB#0	20.05	21.0±1
Band4	10MHz	16QAM	20350	25RB#12	20.03	21.0±1
Band4	10MHz	16QAM	20350	25RB#25	20.11	21.0±1
Band4	10MHz	16QAM	20350	50RB#0	20.28	21.0±1
Band4	15MHz	QPSK	20025	1RB#0	21.17	21.0±1
Band4	15MHz	QPSK	20025	1RB#38	21.02	21.0±1
Band4	15MHz	QPSK	20025	1RB#74	21.16	21.0±1
Band4	15MHz	QPSK	20025	38RB#0	21.10	21.0±1
Band4	15MHz	QPSK	20025	38RB#18	21.07	21.0±1

Band4	15MHz	QPSK	20025	38RB#37	21.07	21.0±1
Band4	15MHz	QPSK	20025	75RB#0	21.09	21.0±1
Band4	15MHz	QPSK	20175	1RB#0	21.05	21.0±1
Band4	15MHz	QPSK	20175	1RB#38	21.06	21.0±1
Band4	15MHz	QPSK	20175	1RB#74	21.02	21.0±1
Band4	15MHz	QPSK	20175	38RB#0	21.04	21.0±1
Band4	15MHz	QPSK	20175	38RB#18	21.06	21.0±1
Band4	15MHz	QPSK	20175	38RB#37	21.07	21.0±1
Band4	15MHz	QPSK	20175	75RB#0	21.01	21.0±1
Band4	15MHz	QPSK	20325	1RB#0	21.12	21.0±1
Band4	15MHz	QPSK	20325	1RB#38	21.12	21.0±1
Band4	15MHz	QPSK	20325	1RB#74	21.03	21.0±1
Band4	15MHz	QPSK	20325	38RB#0	20.99	21.0±1
Band4	15MHz	QPSK	20325	38RB#18	21.01	21.0±1
Band4	15MHz	QPSK	20325	38RB#37	20.99	21.0±1
Band4	15MHz	QPSK	20325	75RB#0	20.97	21.0±1
Band4	15MHz	16QAM	20025	1RB#0	21.21	21.0±1
Band4	15MHz	16QAM	20025	1RB#38	21.07	21.0±1
Band4	15MHz	16QAM	20025	1RB#74	21.19	21.0±1
Band4	15MHz	16QAM	20025	38RB#0	21.06	21.0±1
Band4	15MHz	16QAM	20025	38RB#18	21.07	21.0±1
Band4	15MHz	16QAM	20025	38RB#37	21.04	21.0±1
Band4	15MHz	16QAM	20025	75RB#0	20.07	21.0±1
Band4	15MHz	16QAM	20175	1RB#0	20.86	21.0±1
Band4	15MHz	16QAM	20175	1RB#38	21.01	21.0±1
Band4	15MHz	16QAM	20175	1RB#74	20.74	21.0±1
Band4	15MHz	16QAM	20175	38RB#0	21.01	21.0±1
Band4	15MHz	16QAM	20175	38RB#18	21.04	21.0±1
Band4	15MHz	16QAM	20175	38RB#37	21.05	21.0±1
Band4	15MHz	16QAM	20175	75RB#0	20.06	21.0±1
Band4	15MHz	16QAM	20325	1RB#0	20.99	21.0±1
Band4	15MHz	16QAM	20325	1RB#38	21.06	21.0±1
Band4	15MHz	16QAM	20325	1RB#74	20.88	21.0±1
Band4	15MHz	16QAM	20325	38RB#0	20.94	21.0±1
Band4	15MHz	16QAM	20325	38RB#18	20.99	21.0±1
Band4	15MHz	16QAM	20325	38RB#37	20.96	21.0±1

Band4	15MHz	16QAM	20325	75RB#0	20.10	21.0±1
Band4	20MHz	QPSK	20050	1RB#0	21.07	21.0±1
Band4	20MHz	QPSK	20050	1RB#49	21.94	21.0±1
Band4	20MHz	QPSK	20050	1RB#99	21.81	21.0±1
Band4	20MHz	QPSK	20050	50RB#0	21.12	21.0±1
Band4	20MHz	QPSK	20050	50RB#25	21.13	21.0±1
Band4	20MHz	QPSK	20050	50RB#50	21.14	21.0±1
Band4	20MHz	QPSK	20050	100RB#0	21.15	21.0±1
Band4	20MHz	QPSK	20175	1RB#0	21.75	21.0±1
Band4	20MHz	QPSK	20175	1RB#49	21.87	21.0±1
Band4	20MHz	QPSK	20175	1RB#99	21.62	21.0±1
Band4	20MHz	QPSK	20175	50RB#0	21.03	21.0±1
Band4	20MHz	QPSK	20175	50RB#25	21.06	21.0±1
Band4	20MHz	QPSK	20175	50RB#50	21.12	21.0±1
Band4	20MHz	QPSK	20175	100RB#0	21.09	21.0±1
Band4	20MHz	QPSK	20300	1RB#0	21.83	21.0±1
Band4	20MHz	QPSK	20300	1RB#49	21.87	21.0±1
Band4	20MHz	QPSK	20300	1RB#99	21.72	21.0±1
Band4	20MHz	QPSK	20300	50RB#0	20.95	21.0±1
Band4	20MHz	QPSK	20300	50RB#25	20.92	21.0±1
Band4	20MHz	QPSK	20300	50RB#50	21.22	21.0±1
Band4	20MHz	QPSK	20300	100RB#0	21.28	21.0±1
Band4	20MHz	16QAM	20050	1RB#0	21.04	21.0±1
Band4	20MHz	16QAM	20050	1RB#49	21.02	21.0±1
Band4	20MHz	16QAM	20050	1RB#99	21.01	21.0±1
Band4	20MHz	16QAM	20050	50RB#0	20.19	21.0±1
Band4	20MHz	16QAM	20050	50RB#25	20.21	21.0±1
Band4	20MHz	16QAM	20050	50RB#50	20.18	21.0±1
Band4	20MHz	16QAM	20050	100RB#0	20.17	21.0±1
Band4	20MHz	16QAM	20175	1RB#0	20.90	21.0±1
Band4	20MHz	16QAM	20175	1RB#49	21.18	21.0±1
Band4	20MHz	16QAM	20175	1RB#99	20.68	21.0±1
Band4	20MHz	16QAM	20175	50RB#0	20.08	21.0±1
Band4	20MHz	16QAM	20175	50RB#25	20.10	21.0±1
Band4	20MHz	16QAM	20175	50RB#50	20.20	21.0±1
Band4	20MHz	16QAM	20175	100RB#0	20.05	21.0±1

Band4	20MHz	16QAM	20300	1RB#0	20.85	21.0±1
Band4	20MHz	16QAM	20300	1RB#49	21.18	21.0±1
Band4	20MHz	16QAM	20300	1RB#99	20.72	21.0±1
Band4	20MHz	16QAM	20300	50RB#0	20.95	21.0±1
Band4	20MHz	16QAM	20300	50RB#25	20.04	21.0±1
Band4	20MHz	16QAM	20300	50RB#50	20.23	21.0±1
Band4	20MHz	16QAM	20300	100RB#0	20.22	21.0±1
Band5	1.4MHz	QPSK	20407	1RB#0	21.18	22.0±1
Band5	1.4MHz	QPSK	20407	1RB#2	21.20	22.0±1
Band5	1.4MHz	QPSK	20407	1RB#5	21.21	22.0±1
Band5	1.4MHz	QPSK	20407	3RB#0	21.22	22.0±1
Band5	1.4MHz	QPSK	20407	3RB#1	21.25	22.0±1
Band5	1.4MHz	QPSK	20407	3RB#3	21.21	22.0±1
Band5	1.4MHz	QPSK	20407	6RB#0	21.19	22.0±1
Band5	1.4MHz	QPSK	20525	1RB#0	21.14	22.0±1
Band5	1.4MHz	QPSK	20525	1RB#2	21.20	22.0±1
Band5	1.4MHz	QPSK	20525	1RB#5	21.19	22.0±1
Band5	1.4MHz	QPSK	20525	3RB#0	21.27	22.0±1
Band5	1.4MHz	QPSK	20525	3RB#1	21.25	22.0±1
Band5	1.4MHz	QPSK	20525	3RB#3	21.29	22.0±1
Band5	1.4MHz	QPSK	20525	6RB#0	21.22	22.0±1
Band5	1.4MHz	QPSK	20643	1RB#0	21.18	22.0±1
Band5	1.4MHz	QPSK	20643	1RB#2	21.00	22.0±1
Band5	1.4MHz	QPSK	20643	1RB#5	21.19	22.0±1
Band5	1.4MHz	QPSK	20643	3RB#0	21.26	22.0±1
Band5	1.4MHz	QPSK	20643	3RB#1	21.26	22.0±1
Band5	1.4MHz	QPSK	20643	3RB#3	21.30	22.0±1
Band5	1.4MHz	QPSK	20643	6RB#0	21.23	22.0±1
Band5	1.4MHz	16QAM	20407	1RB#0	21.10	22.0±1
Band5	1.4MHz	16QAM	20407	1RB#2	21.25	22.0±1
Band5	1.4MHz	16QAM	20407	1RB#5	21.10	22.0±1
Band5	1.4MHz	16QAM	20407	3RB#0	21.11	22.0±1
Band5	1.4MHz	16QAM	20407	3RB#1	21.08	22.0±1
Band5	1.4MHz	16QAM	20407	3RB#3	21.04	22.0±1
Band5	1.4MHz	16QAM	20407	6RB#0	21.23	22.0±1
Band5	1.4MHz	16QAM	20525	1RB#0	21.24	22.0±1

Band5	1.4MHz	16QAM	20525	1RB#2	21.20	22.0±1
Band5	1.4MHz	16QAM	20525	1RB#5	21.26	22.0±1
Band5	1.4MHz	16QAM	20525	3RB#0	21.16	22.0±1
Band5	1.4MHz	16QAM	20525	3RB#1	21.17	22.0±1
Band5	1.4MHz	16QAM	20525	3RB#3	21.16	22.0±1
Band5	1.4MHz	16QAM	20525	6RB#0	21.25	22.0±1
Band5	1.4MHz	16QAM	20643	1RB#0	21.34	22.0±1
Band5	1.4MHz	16QAM	20643	1RB#2	21.53	22.0±1
Band5	1.4MHz	16QAM	20643	1RB#5	21.33	22.0±1
Band5	1.4MHz	16QAM	20643	3RB#0	21.17	22.0±1
Band5	1.4MHz	16QAM	20643	3RB#1	21.18	22.0±1
Band5	1.4MHz	16QAM	20643	3RB#3	21.16	22.0±1
Band5	1.4MHz	16QAM	20643	6RB#0	21.12	22.0±1
Band5	3MHz	QPSK	20415	1RB#0	21.22	22.0±1
Band5	3MHz	QPSK	20415	1RB#8	21.29	22.0±1
Band5	3MHz	QPSK	20415	1RB#14	21.21	22.0±1
Band5	3MHz	QPSK	20415	8RB#0	21.23	22.0±1
Band5	3MHz	QPSK	20415	8RB#4	21.24	22.0±1
Band5	3MHz	QPSK	20415	8RB#7	21.26	22.0±1
Band5	3MHz	QPSK	20415	15RB#0	21.20	22.0±1
Band5	3MHz	QPSK	20525	1RB#0	21.29	22.0±1
Band5	3MHz	QPSK	20525	1RB#8	21.29	22.0±1
Band5	3MHz	QPSK	20525	1RB#14	21.29	22.0±1
Band5	3MHz	QPSK	20525	8RB#0	21.27	22.0±1
Band5	3MHz	QPSK	20525	8RB#4	21.23	22.0±1
Band5	3MHz	QPSK	20525	8RB#7	21.28	22.0±1
Band5	3MHz	QPSK	20525	15RB#0	21.27	22.0±1
Band5	3MHz	QPSK	20635	1RB#0	21.26	22.0±1
Band5	3MHz	QPSK	20635	1RB#8	21.28	22.0±1
Band5	3MHz	QPSK	20635	1RB#14	21.23	22.0±1
Band5	3MHz	QPSK	20635	8RB#0	21.28	22.0±1
Band5	3MHz	QPSK	20635	8RB#4	21.29	22.0±1
Band5	3MHz	QPSK	20635	8RB#7	21.12	22.0±1
Band5	3MHz	QPSK	20635	15RB#0	21.26	22.0±1
Band5	3MHz	16QAM	20415	1RB#0	21.02	22.0±1
Band5	3MHz	16QAM	20415	1RB#8	21.22	22.0±1

Band5	3MHz	16QAM	20415	1RB#14	21.11	22.0±1
Band5	3MHz	16QAM	20415	8RB#0	21.28	22.0±1
Band5	3MHz	16QAM	20415	8RB#4	21.28	22.0±1
Band5	3MHz	16QAM	20415	8RB#7	21.28	22.0±1
Band5	3MHz	16QAM	20415	15RB#0	21.20	22.0±1
Band5	3MHz	16QAM	20525	1RB#0	21.08	22.0±1
Band5	3MHz	16QAM	20525	1RB#8	21.03	22.0±1
Band5	3MHz	16QAM	20525	1RB#14	21.06	22.0±1
Band5	3MHz	16QAM	20525	8RB#0	21.26	22.0±1
Band5	3MHz	16QAM	20525	8RB#4	21.24	22.0±1
Band5	3MHz	16QAM	20525	8RB#7	21.22	22.0±1
Band5	3MHz	16QAM	20525	15RB#0	21.16	22.0±1
Band5	3MHz	16QAM	20635	1RB#0	21.21	22.0±1
Band5	3MHz	16QAM	20635	1RB#8	21.23	22.0±1
Band5	3MHz	16QAM	20635	1RB#14	21.21	22.0±1
Band5	3MHz	16QAM	20635	8RB#0	21.23	22.0±1
Band5	3MHz	16QAM	20635	8RB#4	21.22	22.0±1
Band5	3MHz	16QAM	20635	8RB#7	21.20	22.0±1
Band5	3MHz	16QAM	20635	15RB#0	21.17	22.0±1
Band5	5MHz	QPSK	20425	1RB#0	21.15	22.0±1
Band5	5MHz	QPSK	20425	1RB#12	21.24	22.0±1
Band5	5MHz	QPSK	20425	1RB#24	21.20	22.0±1
Band5	5MHz	QPSK	20425	12RB#0	21.16	22.0±1
Band5	5MHz	QPSK	20425	12RB#6	21.18	22.0±1
Band5	5MHz	QPSK	20425	12RB#13	21.18	22.0±1
Band5	5MHz	QPSK	20425	25RB#0	21.18	22.0±1
Band5	5MHz	QPSK	20525	1RB#0	21.18	22.0±1
Band5	5MHz	QPSK	20525	1RB#12	21.22	22.0±1
Band5	5MHz	QPSK	20525	1RB#24	21.23	22.0±1
Band5	5MHz	QPSK	20525	12RB#0	21.16	22.0±1
Band5	5MHz	QPSK	20525	12RB#6	21.20	22.0±1
Band5	5MHz	QPSK	20525	12RB#13	21.19	22.0±1
Band5	5MHz	QPSK	20525	25RB#0	21.26	22.0±1
Band5	5MHz	QPSK	20625	1RB#0	21.10	22.0±1
Band5	5MHz	QPSK	20625	1RB#12	21.26	22.0±1
Band5	5MHz	QPSK	20625	1RB#24	21.20	22.0±1

Band5	5MHz	QPSK	20625	12RB#0	21.20	22.0±1
Band5	5MHz	QPSK	20625	12RB#6	21.20	22.0±1
Band5	5MHz	QPSK	20625	12RB#13	21.14	22.0±1
Band5	5MHz	QPSK	20625	25RB#0	21.21	22.0±1
Band5	5MHz	16QAM	20425	1RB#0	21.21	22.0±1
Band5	5MHz	16QAM	20425	1RB#12	21.28	22.0±1
Band5	5MHz	16QAM	20425	1RB#24	21.28	22.0±1
Band5	5MHz	16QAM	20425	12RB#0	21.09	22.0±1
Band5	5MHz	16QAM	20425	12RB#6	21.14	22.0±1
Band5	5MHz	16QAM	20425	12RB#13	21.15	22.0±1
Band5	5MHz	16QAM	20425	25RB#0	21.14	22.0±1
Band5	5MHz	16QAM	20525	1RB#0	21.20	22.0±1
Band5	5MHz	16QAM	20525	1RB#12	21.22	22.0±1
Band5	5MHz	16QAM	20525	1RB#24	21.19	22.0±1
Band5	5MHz	16QAM	20525	12RB#0	21.21	22.0±1
Band5	5MHz	16QAM	20525	12RB#6	21.22	22.0±1
Band5	5MHz	16QAM	20525	12RB#13	21.21	22.0±1
Band5	5MHz	16QAM	20525	25RB#0	21.25	22.0±1
Band5	5MHz	16QAM	20625	1RB#0	21.17	22.0±1
Band5	5MHz	16QAM	20625	1RB#12	21.22	22.0±1
Band5	5MHz	16QAM	20625	1RB#24	21.19	22.0±1
Band5	5MHz	16QAM	20625	12RB#0	21.19	22.0±1
Band5	5MHz	16QAM	20625	12RB#6	21.13	22.0±1
Band5	5MHz	16QAM	20625	12RB#13	21.17	22.0±1
Band5	5MHz	16QAM	20625	25RB#0	21.20	22.0±1
Band5	10MHz	QPSK	20450	1RB#0	22.13	22.0±1
Band5	10MHz	QPSK	20450	1RB#24	22.35	22.0±1
Band5	10MHz	QPSK	20450	1RB#49	22.16	22.0±1
Band5	10MHz	QPSK	20450	25RB#0	21.30	22.0±1
Band5	10MHz	QPSK	20450	25RB#12	21.29	22.0±1
Band5	10MHz	QPSK	20450	25RB#25	21.18	22.0±1
Band5	10MHz	QPSK	20450	50RB#0	21.21	22.0±1
Band5	10MHz	QPSK	20525	1RB#0	22.21	22.0±1
Band5	10MHz	QPSK	20525	1RB#24	22.36	22.0±1
Band5	10MHz	QPSK	20525	1RB#49	22.18	22.0±1
Band5	10MHz	QPSK	20525	25RB#0	21.30	22.0±1

Band5	10MHz	QPSK	20525	25RB#12	21.29	22.0±1
Band5	10MHz	QPSK	20525	25RB#25	21.28	22.0±1
Band5	10MHz	QPSK	20525	50RB#0	21.31	22.0±1
Band5	10MHz	QPSK	20600	1RB#0	22.19	22.0±1
Band5	10MHz	QPSK	20600	1RB#24	22.39	22.0±1
Band5	10MHz	QPSK	20600	1RB#49	22.22	22.0±1
Band5	10MHz	QPSK	20600	25RB#0	21.30	22.0±1
Band5	10MHz	QPSK	20600	25RB#12	21.27	22.0±1
Band5	10MHz	QPSK	20600	25RB#25	21.21	22.0±1
Band5	10MHz	QPSK	20600	50RB#0	21.22	22.0±1
Band5	10MHz	16QAM	20450	1RB#0	21.23	22.0±1
Band5	10MHz	16QAM	20450	1RB#24	21.20	22.0±1
Band5	10MHz	16QAM	20450	1RB#49	21.23	22.0±1
Band5	10MHz	16QAM	20450	25RB#0	21.26	22.0±1
Band5	10MHz	16QAM	20450	25RB#12	21.27	22.0±1
Band5	10MHz	16QAM	20450	25RB#25	21.18	22.0±1
Band5	10MHz	16QAM	20450	50RB#0	21.19	22.0±1
Band5	10MHz	16QAM	20525	1RB#0	21.30	22.0±1
Band5	10MHz	16QAM	20525	1RB#24	21.24	22.0±1
Band5	10MHz	16QAM	20525	1RB#49	21.23	22.0±1
Band5	10MHz	16QAM	20525	25RB#0	21.30	22.0±1
Band5	10MHz	16QAM	20525	25RB#12	21.26	22.0±1
Band5	10MHz	16QAM	20525	25RB#25	21.30	22.0±1
Band5	10MHz	16QAM	20525	50RB#0	21.25	22.0±1
Band5	10MHz	16QAM	20600	1RB#0	21.10	22.0±1
Band5	10MHz	16QAM	20600	1RB#24	21.27	22.0±1
Band5	10MHz	16QAM	20600	1RB#49	21.13	22.0±1
Band5	10MHz	16QAM	20600	25RB#0	21.20	22.0±1
Band5	10MHz	16QAM	20600	25RB#12	21.22	22.0±1
Band5	10MHz	16QAM	20600	25RB#25	21.25	22.0±1
Band5	10MHz	16QAM	20600	50RB#0	21.21	22.0±1
Band12	1.4MHz	QPSK	23017	1RB#0	21.07	21.0±1
Band12	1.4MHz	QPSK	23017	1RB#2	21.34	21.0±1
Band12	1.4MHz	QPSK	23017	1RB#5	21.37	21.0±1
Band12	1.4MHz	QPSK	23017	3RB#0	21.26	21.0±1
Band12	1.4MHz	QPSK	23017	3RB#1	21.26	21.0±1

Band12	1.4MHz	QPSK	23017	3RB#3	21.26	21.0±1
Band12	1.4MHz	QPSK	23017	6RB#0	20.69	21.0±1
Band12	1.4MHz	QPSK	23095	1RB#0	21.26	21.0±1
Band12	1.4MHz	QPSK	23095	1RB#2	21.21	21.0±1
Band12	1.4MHz	QPSK	23095	1RB#5	21.24	21.0±1
Band12	1.4MHz	QPSK	23095	3RB#0	21.30	21.0±1
Band12	1.4MHz	QPSK	23095	3RB#1	21.38	21.0±1
Band12	1.4MHz	QPSK	23095	3RB#3	21.37	21.0±1
Band12	1.4MHz	QPSK	23095	6RB#0	20.65	21.0±1
Band12	1.4MHz	QPSK	23173	1RB#0	21.46	21.0±1
Band12	1.4MHz	QPSK	23173	1RB#2	21.38	21.0±1
Band12	1.4MHz	QPSK	23173	1RB#5	21.33	21.0±1
Band12	1.4MHz	QPSK	23173	3RB#0	21.30	21.0±1
Band12	1.4MHz	QPSK	23173	3RB#1	21.39	21.0±1
Band12	1.4MHz	QPSK	23173	3RB#3	21.36	21.0±1
Band12	1.4MHz	QPSK	23173	6RB#0	20.61	21.0±1
Band12	1.4MHz	16QAM	23017	1RB#0	21.17	21.0±1
Band12	1.4MHz	16QAM	23017	1RB#2	21.09	21.0±1
Band12	1.4MHz	16QAM	23017	1RB#5	20.79	21.0±1
Band12	1.4MHz	16QAM	23017	3RB#0	20.58	21.0±1
Band12	1.4MHz	16QAM	23017	3RB#1	20.58	21.0±1
Band12	1.4MHz	16QAM	23017	3RB#3	20.59	21.0±1
Band12	1.4MHz	16QAM	23017	6RB#0	20.72	21.0±1
Band12	1.4MHz	16QAM	23095	1RB#0	20.75	21.0±1
Band12	1.4MHz	16QAM	23095	1RB#2	20.87	21.0±1
Band12	1.4MHz	16QAM	23095	1RB#5	20.73	21.0±1
Band12	1.4MHz	16QAM	23095	3RB#0	20.54	21.0±1
Band12	1.4MHz	16QAM	23095	3RB#1	20.53	21.0±1
Band12	1.4MHz	16QAM	23095	3RB#3	20.58	21.0±1
Band12	1.4MHz	16QAM	23095	6RB#0	20.54	21.0±1
Band12	1.4MHz	16QAM	23173	1RB#0	20.47	21.0±1
Band12	1.4MHz	16QAM	23173	1RB#2	20.63	21.0±1
Band12	1.4MHz	16QAM	23173	1RB#5	20.52	21.0±1
Band12	1.4MHz	16QAM	23173	3RB#0	20.47	21.0±1
Band12	1.4MHz	16QAM	23173	3RB#1	20.49	21.0±1
Band12	1.4MHz	16QAM	23173	3RB#3	20.47	21.0±1

Band12	1.4MHz	16QAM	23173	6RB#0	20.61	21.0±1
Band12	3MHz	QPSK	23025	1RB#0	21.24	21.0±1
Band12	3MHz	QPSK	23025	1RB#8	21.24	21.0±1
Band12	3MHz	QPSK	23025	1RB#14	21.21	21.0±1
Band12	3MHz	QPSK	23025	8RB#0	21.18	21.0±1
Band12	3MHz	QPSK	23025	8RB#4	21.19	21.0±1
Band12	3MHz	QPSK	23025	8RB#7	21.23	21.0±1
Band12	3MHz	QPSK	23025	15RB#0	21.23	21.0±1
Band12	3MHz	QPSK	23095	1RB#0	21.19	21.0±1
Band12	3MHz	QPSK	23095	1RB#8	21.36	21.0±1
Band12	3MHz	QPSK	23095	1RB#14	21.36	21.0±1
Band12	3MHz	QPSK	23095	8RB#0	20.68	21.0±1
Band12	3MHz	QPSK	23095	8RB#4	20.73	21.0±1
Band12	3MHz	QPSK	23095	8RB#7	20.67	21.0±1
Band12	3MHz	QPSK	23095	15RB#0	20.70	21.0±1
Band12	3MHz	QPSK	23165	1RB#0	21.38	21.0±1
Band12	3MHz	QPSK	23165	1RB#8	21.37	21.0±1
Band12	3MHz	QPSK	23165	1RB#14	21.30	21.0±1
Band12	3MHz	QPSK	23165	8RB#0	20.68	21.0±1
Band12	3MHz	QPSK	23165	8RB#4	20.96	21.0±1
Band12	3MHz	QPSK	23165	8RB#7	20.82	21.0±1
Band12	3MHz	QPSK	23165	15RB#0	21.00	21.0±1
Band12	3MHz	16QAM	23025	1RB#0	21.45	21.0±1
Band12	3MHz	16QAM	23025	1RB#8	21.43	21.0±1
Band12	3MHz	16QAM	23025	1RB#14	21.35	21.0±1
Band12	3MHz	16QAM	23025	8RB#0	20.28	21.0±1
Band12	3MHz	16QAM	23025	8RB#4	20.30	21.0±1
Band12	3MHz	16QAM	23025	8RB#7	20.23	21.0±1
Band12	3MHz	16QAM	23025	15RB#0	20.12	21.0±1
Band12	3MHz	16QAM	23095	1RB#0	21.34	21.0±1
Band12	3MHz	16QAM	23095	1RB#8	20.82	21.0±1
Band12	3MHz	16QAM	23095	1RB#14	20.86	21.0±1
Band12	3MHz	16QAM	23095	8RB#0	20.72	21.0±1
Band12	3MHz	16QAM	23095	8RB#4	20.72	21.0±1
Band12	3MHz	16QAM	23095	8RB#7	20.68	21.0±1
Band12	3MHz	16QAM	23095	15RB#0	20.64	21.0±1

Band12	3MHz	16QAM	23165	1RB#0	20.66	21.0±1
Band12	3MHz	16QAM	23165	1RB#8	20.65	21.0±1
Band12	3MHz	16QAM	23165	1RB#14	20.67	21.0±1
Band12	3MHz	16QAM	23165	8RB#0	20.00	21.0±1
Band12	3MHz	16QAM	23165	8RB#4	20.04	21.0±1
Band12	3MHz	16QAM	23165	8RB#7	20.98	21.0±1
Band12	3MHz	16QAM	23165	15RB#0	20.95	21.0±1
Band12	5MHz	QPSK	23035	1RB#0	21.07	21.0±1
Band12	5MHz	QPSK	23035	1RB#12	21.16	21.0±1
Band12	5MHz	QPSK	23035	1RB#24	21.05	21.0±1
Band12	5MHz	QPSK	23035	12RB#0	20.91	21.0±1
Band12	5MHz	QPSK	23035	12RB#6	20.90	21.0±1
Band12	5MHz	QPSK	23035	12RB#13	21.18	21.0±1
Band12	5MHz	QPSK	23035	25RB#0	21.09	21.0±1
Band12	5MHz	QPSK	23095	1RB#0	21.08	21.0±1
Band12	5MHz	QPSK	23095	1RB#12	21.13	21.0±1
Band12	5MHz	QPSK	23095	1RB#24	21.09	21.0±1
Band12	5MHz	QPSK	23095	12RB#0	21.26	21.0±1
Band12	5MHz	QPSK	23095	12RB#6	21.25	21.0±1
Band12	5MHz	QPSK	23095	12RB#13	21.10	21.0±1
Band12	5MHz	QPSK	23095	25RB#0	21.20	21.0±1
Band12	5MHz	QPSK	23155	1RB#0	21.14	21.0±1
Band12	5MHz	QPSK	23155	1RB#12	21.19	21.0±1
Band12	5MHz	QPSK	23155	1RB#24	21.13	21.0±1
Band12	5MHz	QPSK	23155	12RB#0	20.87	21.0±1
Band12	5MHz	QPSK	23155	12RB#6	20.89	21.0±1
Band12	5MHz	QPSK	23155	12RB#13	20.94	21.0±1
Band12	5MHz	QPSK	23155	25RB#0	20.94	21.0±1
Band12	5MHz	16QAM	23035	1RB#0	21.18	21.0±1
Band12	5MHz	16QAM	23035	1RB#12	21.25	21.0±1
Band12	5MHz	16QAM	23035	1RB#24	21.12	21.0±1
Band12	5MHz	16QAM	23035	12RB#0	20.90	21.0±1
Band12	5MHz	16QAM	23035	12RB#6	20.88	21.0±1
Band12	5MHz	16QAM	23035	12RB#13	20.15	21.0±1
Band12	5MHz	16QAM	23035	25RB#0	20.11	21.0±1
Band12	5MHz	16QAM	23095	1RB#0	21.32	21.0±1

Band12	5MHz	16QAM	23095	1RB#12	21.45	21.0±1
Band12	5MHz	16QAM	23095	1RB#24	21.25	21.0±1
Band12	5MHz	16QAM	23095	12RB#0	20.27	21.0±1
Band12	5MHz	16QAM	23095	12RB#6	20.30	21.0±1
Band12	5MHz	16QAM	23095	12RB#13	20.18	21.0±1
Band12	5MHz	16QAM	23095	25RB#0	20.18	21.0±1
Band12	5MHz	16QAM	23155	1RB#0	21.07	21.0±1
Band12	5MHz	16QAM	23155	1RB#12	21.16	21.0±1
Band12	5MHz	16QAM	23155	1RB#24	21.10	21.0±1
Band12	5MHz	16QAM	23155	12RB#0	20.91	21.0±1
Band12	5MHz	16QAM	23155	12RB#6	20.88	21.0±1
Band12	5MHz	16QAM	23155	12RB#13	20.98	21.0±1
Band12	5MHz	16QAM	23155	25RB#0	20.07	21.0±1
Band12	10MHz	QPSK	23060	1RB#0	21.98	21.0±1
Band12	10MHz	QPSK	23060	1RB#24	21.92	21.0±1
Band12	10MHz	QPSK	23060	1RB#49	21.77	21.0±1
Band12	10MHz	QPSK	23060	25RB#0	20.94	21.0±1
Band12	10MHz	QPSK	23060	25RB#12	20.95	21.0±1
Band12	10MHz	QPSK	23060	25RB#25	20.95	21.0±1
Band12	10MHz	QPSK	23060	50RB#0	20.96	21.0±1
Band12	10MHz	QPSK	23095	1RB#0	21.86	21.0±1
Band12	10MHz	QPSK	23095	1RB#24	21.98	21.0±1
Band12	10MHz	QPSK	23095	1RB#49	21.88	21.0±1
Band12	10MHz	QPSK	23095	25RB#0	21.46	21.0±1
Band12	10MHz	QPSK	23095	25RB#12	21.46	21.0±1
Band12	10MHz	QPSK	23095	25RB#25	21.31	21.0±1
Band12	10MHz	QPSK	23095	50RB#0	21.38	21.0±1
Band12	10MHz	QPSK	23130	1RB#0	21.91	21.0±1
Band12	10MHz	QPSK	23130	1RB#24	21.93	21.0±1
Band12	10MHz	QPSK	23130	1RB#49	21.89	21.0±1
Band12	10MHz	QPSK	23130	25RB#0	21.22	21.0±1
Band12	10MHz	QPSK	23130	25RB#12	21.26	21.0±1
Band12	10MHz	QPSK	23130	25RB#25	21.19	21.0±1
Band12	10MHz	QPSK	23130	50RB#0	21.17	21.0±1
Band12	10MHz	16QAM	23060	1RB#0	21.37	21.0±1
Band12	10MHz	16QAM	23060	1RB#24	21.34	21.0±1

Band12	10MHz	16QAM	23060	1RB#49	21.32	21.0±1
Band12	10MHz	16QAM	23060	25RB#0	20.01	21.0±1
Band12	10MHz	16QAM	23060	25RB#12	20.98	21.0±1
Band12	10MHz	16QAM	23060	25RB#25	20.98	21.0±1
Band12	10MHz	16QAM	23060	50RB#0	20.96	21.0±1
Band12	10MHz	16QAM	23095	1RB#0	21.11	21.0±1
Band12	10MHz	16QAM	23095	1RB#24	21.26	21.0±1
Band12	10MHz	16QAM	23095	1RB#49	21.01	21.0±1
Band12	10MHz	16QAM	23095	25RB#0	20.49	21.0±1
Band12	10MHz	16QAM	23095	25RB#12	20.49	21.0±1
Band12	10MHz	16QAM	23095	25RB#25	20.36	21.0±1
Band12	10MHz	16QAM	23095	50RB#0	20.36	21.0±1
Band12	10MHz	16QAM	23130	1RB#0	21.33	21.0±1
Band12	10MHz	16QAM	23130	1RB#24	21.42	21.0±1
Band12	10MHz	16QAM	23130	1RB#49	21.21	21.0±1
Band12	10MHz	16QAM	23130	25RB#0	20.26	21.0±1
Band12	10MHz	16QAM	23130	25RB#12	20.21	21.0±1
Band12	10MHz	16QAM	23130	25RB#25	20.25	21.0±1
Band12	10MHz	16QAM	23130	50RB#0	20.23	21.0±1
Band17	5MHz	QPSK	23755	1RB#0	22.15	22.0±1
Band17	5MHz	QPSK	23755	1RB#12	22.30	22.0±1
Band17	5MHz	QPSK	23755	1RB#24	22.14	22.0±1
Band17	5MHz	QPSK	23755	12RB#0	21.29	22.0±1
Band17	5MHz	QPSK	23755	12RB#6	21.28	22.0±1
Band17	5MHz	QPSK	23755	12RB#13	21.09	22.0±1
Band17	5MHz	QPSK	23755	25RB#0	21.25	22.0±1
Band17	5MHz	QPSK	23790	1RB#0	22.18	22.0±1
Band17	5MHz	QPSK	23790	1RB#12	22.22	22.0±1
Band17	5MHz	QPSK	23790	1RB#24	22.09	22.0±1
Band17	5MHz	QPSK	23790	12RB#0	21.21	22.0±1
Band17	5MHz	QPSK	23790	12RB#6	21.14	22.0±1
Band17	5MHz	QPSK	23790	12RB#13	21.16	22.0±1
Band17	5MHz	QPSK	23790	25RB#0	21.18	22.0±1
Band17	5MHz	QPSK	23825	1RB#0	22.16	22.0±1
Band17	5MHz	QPSK	23825	1RB#12	22.27	22.0±1
Band17	5MHz	QPSK	23825	1RB#24	22.08	22.0±1

Band17	5MHz	QPSK	23825	12RB#0	21.98	22.0±1
Band17	5MHz	QPSK	23825	12RB#6	21.00	22.0±1
Band17	5MHz	QPSK	23825	12RB#13	21.03	22.0±1
Band17	5MHz	QPSK	23825	25RB#0	21.02	22.0±1
Band17	5MHz	16QAM	23755	1RB#0	21.20	22.0±1
Band17	5MHz	16QAM	23755	1RB#12	21.36	22.0±1
Band17	5MHz	16QAM	23755	1RB#24	21.21	22.0±1
Band17	5MHz	16QAM	23755	12RB#0	21.30	22.0±1
Band17	5MHz	16QAM	23755	12RB#6	21.27	22.0±1
Band17	5MHz	16QAM	23755	12RB#13	21.01	22.0±1
Band17	5MHz	16QAM	23755	25RB#0	21.19	22.0±1
Band17	5MHz	16QAM	23790	1RB#0	21.41	22.0±1
Band17	5MHz	16QAM	23790	1RB#12	21.47	22.0±1
Band17	5MHz	16QAM	23790	1RB#24	21.33	22.0±1
Band17	5MHz	16QAM	23790	12RB#0	21.20	22.0±1
Band17	5MHz	16QAM	23790	12RB#6	21.20	22.0±1
Band17	5MHz	16QAM	23790	12RB#13	21.24	22.0±1
Band17	5MHz	16QAM	23790	25RB#0	21.24	22.0±1
Band17	5MHz	16QAM	23825	1RB#0	21.14	22.0±1
Band17	5MHz	16QAM	23825	1RB#12	21.25	22.0±1
Band17	5MHz	16QAM	23825	1RB#24	21.08	22.0±1
Band17	5MHz	16QAM	23825	12RB#0	21.04	22.0±1
Band17	5MHz	16QAM	23825	12RB#6	21.00	22.0±1
Band17	5MHz	16QAM	23825	12RB#13	21.11	22.0±1
Band17	5MHz	16QAM	23825	25RB#0	21.13	22.0±1
Band17	10MHz	QPSK	23780	1RB#0	22.07	22.0±1
Band17	10MHz	QPSK	23780	1RB#24	22.48	22.0±1
Band17	10MHz	QPSK	23780	1RB#49	22.02	22.0±1
Band17	10MHz	QPSK	23780	25RB#0	22.28	22.0±1
Band17	10MHz	QPSK	23780	25RB#12	21.47	22.0±1
Band17	10MHz	QPSK	23780	25RB#25	21.34	22.0±1
Band17	10MHz	QPSK	23780	50RB#0	21.43	22.0±1
Band17	10MHz	QPSK	23790	1RB#0	22.12	22.0±1
Band17	10MHz	QPSK	23790	1RB#24	22.19	22.0±1
Band17	10MHz	QPSK	23790	1RB#49	22.10	22.0±1
Band17	10MHz	QPSK	23790	25RB#0	21.38	22.0±1

Band17	10MHz	QPSK	23790	25RB#12	21.36	22.0±1
Band17	10MHz	QPSK	23790	25RB#25	21.37	22.0±1
Band17	10MHz	QPSK	23790	50RB#0	21.36	22.0±1
Band17	10MHz	QPSK	23800	1RB#0	22.17	22.0±1
Band17	10MHz	QPSK	23800	1RB#24	22.32	22.0±1
Band17	10MHz	QPSK	23800	1RB#49	22.07	22.0±1
Band17	10MHz	QPSK	23800	25RB#0	21.26	22.0±1
Band17	10MHz	QPSK	23800	25RB#12	21.29	22.0±1
Band17	10MHz	QPSK	23800	25RB#25	21.26	22.0±1
Band17	10MHz	QPSK	23800	50RB#0	21.22	22.0±1
Band17	10MHz	16QAM	23780	1RB#0	21.35	22.0±1
Band17	10MHz	16QAM	23780	1RB#24	21.52	22.0±1
Band17	10MHz	16QAM	23780	1RB#49	21.23	22.0±1
Band17	10MHz	16QAM	23780	25RB#0	21.44	22.0±1
Band17	10MHz	16QAM	23780	25RB#12	21.45	22.0±1
Band17	10MHz	16QAM	23780	25RB#25	21.43	22.0±1
Band17	10MHz	16QAM	23780	50RB#0	21.43	22.0±1
Band17	10MHz	16QAM	23790	1RB#0	21.31	22.0±1
Band17	10MHz	16QAM	23790	1RB#24	21.48	22.0±1
Band17	10MHz	16QAM	23790	1RB#49	21.24	22.0±1
Band17	10MHz	16QAM	23790	25RB#0	21.40	22.0±1
Band17	10MHz	16QAM	23790	25RB#12	21.38	22.0±1
Band17	10MHz	16QAM	23790	25RB#25	21.43	22.0±1
Band17	10MHz	16QAM	23790	50RB#0	21.45	22.0±1
Band17	10MHz	16QAM	23800	1RB#0	21.14	22.0±1
Band17	10MHz	16QAM	23800	1RB#24	21.23	22.0±1
Band17	10MHz	16QAM	23800	1RB#49	21.93	22.0±1
Band17	10MHz	16QAM	23800	25RB#0	21.32	22.0±1
Band17	10MHz	16QAM	23800	25RB#12	21.31	22.0±1
Band17	10MHz	16QAM	23800	25RB#25	21.31	22.0±1
Band17	10MHz	16QAM	23800	50RB#0	21.28	22.0±1
Band30	5MHz	QPSK	27685	1RB#0	20.79	21.0±1
Band30	5MHz	QPSK	27685	1RB#12	20.87	21.0±1
Band30	5MHz	QPSK	27685	1RB#24	20.73	21.0±1
Band30	5MHz	QPSK	27685	12RB#0	20.72	21.0±1
Band30	5MHz	QPSK	27685	12RB#6	20.72	21.0±1

Band30	5MHz	QPSK	27685	12RB#13	20.68	21.0±1
Band30	5MHz	QPSK	27685	25RB#0	20.73	21.0±1
Band30	5MHz	QPSK	27710	1RB#0	20.74	21.0±1
Band30	5MHz	QPSK	27710	1RB#12	20.84	21.0±1
Band30	5MHz	QPSK	27710	1RB#24	20.70	21.0±1
Band30	5MHz	QPSK	27710	12RB#0	20.72	21.0±1
Band30	5MHz	QPSK	27710	12RB#6	20.75	21.0±1
Band30	5MHz	QPSK	27710	12RB#13	20.65	21.0±1
Band30	5MHz	QPSK	27710	25RB#0	20.72	21.0±1
Band30	5MHz	QPSK	27735	1RB#0	20.77	21.0±1
Band30	5MHz	QPSK	27735	1RB#12	20.91	21.0±1
Band30	5MHz	QPSK	27735	1RB#24	20.79	21.0±1
Band30	5MHz	QPSK	27735	12RB#0	20.72	21.0±1
Band30	5MHz	QPSK	27735	12RB#6	20.72	21.0±1
Band30	5MHz	QPSK	27735	12RB#13	20.65	21.0±1
Band30	5MHz	QPSK	27735	25RB#0	20.68	21.0±1
Band30	5MHz	16QAM	27685	1RB#0	20.64	21.0±1
Band30	5MHz	16QAM	27685	1RB#12	20.74	21.0±1
Band30	5MHz	16QAM	27685	1RB#24	20.60	21.0±1
Band30	5MHz	16QAM	27685	12RB#0	20.64	21.0±1
Band30	5MHz	16QAM	27685	12RB#6	20.62	21.0±1
Band30	5MHz	16QAM	27685	12RB#13	20.65	21.0±1
Band30	5MHz	16QAM	27685	25RB#0	20.68	21.0±1
Band30	5MHz	16QAM	27710	1RB#0	20.85	21.0±1
Band30	5MHz	16QAM	27710	1RB#12	20.95	21.0±1
Band30	5MHz	16QAM	27710	1RB#24	20.76	21.0±1
Band30	5MHz	16QAM	27710	12RB#0	20.71	21.0±1
Band30	5MHz	16QAM	27710	12RB#6	20.72	21.0±1
Band30	5MHz	16QAM	27710	12RB#13	20.59	21.0±1
Band30	5MHz	16QAM	27710	25RB#0	20.67	21.0±1
Band30	5MHz	16QAM	27735	1RB#0	20.72	21.0±1
Band30	5MHz	16QAM	27735	1RB#12	20.79	21.0±1
Band30	5MHz	16QAM	27735	1RB#24	20.62	21.0±1
Band30	5MHz	16QAM	27735	12RB#0	20.65	21.0±1
Band30	5MHz	16QAM	27735	12RB#6	20.62	21.0±1
Band30	5MHz	16QAM	27735	12RB#13	20.50	21.0±1

Band30	5MHz	16QAM	27735	25RB#0	20.62	21.0±1
Band30	10MHz	QPSK	27710	1RB#0	21.64	21.0±1
Band30	10MHz	QPSK	27710	1RB#24	21.64	21.0±1
Band30	10MHz	QPSK	27710	1RB#49	21.81	21.0±1
Band30	10MHz	QPSK	27710	25RB#0	20.62	21.0±1
Band30	10MHz	QPSK	27710	25RB#12	20.65	21.0±1
Band30	10MHz	QPSK	27710	25RB#25	20.85	21.0±1
Band30	10MHz	QPSK	27710	50RB#0	20.99	21.0±1
Band30	10MHz	16QAM	27710	1RB#0	20.83	21.0±1
Band30	10MHz	16QAM	27710	1RB#24	20.00	21.0±1
Band30	10MHz	16QAM	27710	1RB#49	20.71	21.0±1
Band30	10MHz	16QAM	27710	25RB#0	20.76	21.0±1
Band30	10MHz	16QAM	27710	25RB#12	20.80	21.0±1
Band30	10MHz	16QAM	27710	25RB#25	20.61	21.0±1
Band30	10MHz	16QAM	27710	50RB#0	20.69	21.0±1
Band66	1.4MHz	QPSK	131979	1RB#0	22.27	22.0±1
Band66	1.4MHz	QPSK	131979	1RB#2	22.29	22.0±1
Band66	1.4MHz	QPSK	131979	1RB#5	22.20	22.0±1
Band66	1.4MHz	QPSK	131979	3RB#0	22.00	22.0±1
Band66	1.4MHz	QPSK	131979	3RB#1	22.27	22.0±1
Band66	1.4MHz	QPSK	131979	3RB#3	22.03	22.0±1
Band66	1.4MHz	QPSK	131979	6RB#0	21.95	22.0±1
Band66	1.4MHz	QPSK	132322	1RB#0	21.83	22.0±1
Band66	1.4MHz	QPSK	132322	1RB#2	21.95	22.0±1
Band66	1.4MHz	QPSK	132322	1RB#5	21.85	22.0±1
Band66	1.4MHz	QPSK	132322	3RB#0	21.87	22.0±1
Band66	1.4MHz	QPSK	132322	3RB#1	21.89	22.0±1
Band66	1.4MHz	QPSK	132322	3RB#3	21.86	22.0±1
Band66	1.4MHz	QPSK	132322	6RB#0	21.94	22.0±1
Band66	1.4MHz	QPSK	132665	1RB#0	21.84	22.0±1
Band66	1.4MHz	QPSK	132665	1RB#2	21.96	22.0±1
Band66	1.4MHz	QPSK	132665	1RB#5	21.85	22.0±1
Band66	1.4MHz	QPSK	132665	3RB#0	21.95	22.0±1
Band66	1.4MHz	QPSK	132665	3RB#1	21.94	22.0±1
Band66	1.4MHz	QPSK	132665	3RB#3	21.94	22.0±1
Band66	1.4MHz	QPSK	132665	6RB#0	21.93	22.0±1

Band66	1.4MHz	16QAM	131979	1RB#0	21.04	22.0±1
Band66	1.4MHz	16QAM	131979	1RB#2	21.23	22.0±1
Band66	1.4MHz	16QAM	131979	1RB#5	21.02	22.0±1
Band66	1.4MHz	16QAM	131979	3RB#0	21.90	22.0±1
Band66	1.4MHz	16QAM	131979	3RB#1	21.92	22.0±1
Band66	1.4MHz	16QAM	131979	3RB#3	21.88	22.0±1
Band66	1.4MHz	16QAM	131979	6RB#0	21.82	22.0±1
Band66	1.4MHz	16QAM	132322	1RB#0	21.72	22.0±1
Band66	1.4MHz	16QAM	132322	1RB#2	21.86	22.0±1
Band66	1.4MHz	16QAM	132322	1RB#5	21.69	22.0±1
Band66	1.4MHz	16QAM	132322	3RB#0	21.68	22.0±1
Band66	1.4MHz	16QAM	132322	3RB#1	21.65	22.0±1
Band66	1.4MHz	16QAM	132322	3RB#3	21.65	22.0±1
Band66	1.4MHz	16QAM	132322	6RB#0	21.90	22.0±1
Band66	1.4MHz	16QAM	132665	1RB#0	21.93	22.0±1
Band66	1.4MHz	16QAM	132665	1RB#2	22.09	22.0±1
Band66	1.4MHz	16QAM	132665	1RB#5	22.02	22.0±1
Band66	1.4MHz	16QAM	132665	3RB#0	21.78	22.0±1
Band66	1.4MHz	16QAM	132665	3RB#1	21.84	22.0±1
Band66	1.4MHz	16QAM	132665	3RB#3	21.75	22.0±1
Band66	1.4MHz	16QAM	132665	6RB#0	21.93	22.0±1
Band66	3MHz	QPSK	131987	1RB#0	21.94	22.0±1
Band66	3MHz	QPSK	131987	1RB#8	21.98	22.0±1
Band66	3MHz	QPSK	131987	1RB#14	21.98	22.0±1
Band66	3MHz	QPSK	131987	8RB#0	22.02	22.0±1
Band66	3MHz	QPSK	131987	8RB#4	21.82	22.0±1
Band66	3MHz	QPSK	131987	8RB#7	21.82	22.0±1
Band66	3MHz	QPSK	131987	15RB#0	21.46	22.0±1
Band66	3MHz	QPSK	132322	1RB#0	21.85	22.0±1
Band66	3MHz	QPSK	132322	1RB#8	21.67	22.0±1
Band66	3MHz	QPSK	132322	1RB#14	21.53	22.0±1
Band66	3MHz	QPSK	132322	8RB#0	21.85	22.0±1
Band66	3MHz	QPSK	132322	8RB#4	21.94	22.0±1
Band66	3MHz	QPSK	132322	8RB#7	21.94	22.0±1
Band66	3MHz	QPSK	132322	15RB#0	21.89	22.0±1
Band66	3MHz	QPSK	132657	1RB#0	21.00	22.0±1

Band66	3MHz	QPSK	132657	1RB#8	21.49	22.0±1
Band66	3MHz	QPSK	132657	1RB#14	21.52	22.0±1
Band66	3MHz	QPSK	132657	8RB#0	21.48	22.0±1
Band66	3MHz	QPSK	132657	8RB#4	21.49	22.0±1
Band66	3MHz	QPSK	132657	8RB#7	21.49	22.0±1
Band66	3MHz	QPSK	132657	15RB#0	21.45	22.0±1
Band66	3MHz	16QAM	131987	1RB#0	22.22	22.0±1
Band66	3MHz	16QAM	131987	1RB#8	22.17	22.0±1
Band66	3MHz	16QAM	131987	1RB#14	22.12	22.0±1
Band66	3MHz	16QAM	131987	8RB#0	21.05	22.0±1
Band66	3MHz	16QAM	131987	8RB#4	21.97	22.0±1
Band66	3MHz	16QAM	131987	8RB#7	21.76	22.0±1
Band66	3MHz	16QAM	131987	15RB#0	21.53	22.0±1
Band66	3MHz	16QAM	132322	1RB#0	21.74	22.0±1
Band66	3MHz	16QAM	132322	1RB#8	21.77	22.0±1
Band66	3MHz	16QAM	132322	1RB#14	21.65	22.0±1
Band66	3MHz	16QAM	132322	8RB#0	21.91	22.0±1
Band66	3MHz	16QAM	132322	8RB#4	21.88	22.0±1
Band66	3MHz	16QAM	132322	8RB#7	21.89	22.0±1
Band66	3MHz	16QAM	132322	15RB#0	21.79	22.0±1
Band66	3MHz	16QAM	132657	1RB#0	21.56	22.0±1
Band66	3MHz	16QAM	132657	1RB#8	21.43	22.0±1
Band66	3MHz	16QAM	132657	1RB#14	21.39	22.0±1
Band66	3MHz	16QAM	132657	8RB#0	20.52	22.0±1
Band66	3MHz	16QAM	132657	8RB#4	21.48	22.0±1
Band66	3MHz	16QAM	132657	8RB#7	21.51	22.0±1
Band66	3MHz	16QAM	132657	15RB#0	21.45	22.0±1
Band66	5MHz	QPSK	131997	1RB#0	22.32	22.0±1
Band66	5MHz	QPSK	131997	1RB#12	22.21	22.0±1
Band66	5MHz	QPSK	131997	1RB#24	22.33	22.0±1
Band66	5MHz	QPSK	131997	12RB#0	21.42	22.0±1
Band66	5MHz	QPSK	131997	12RB#6	21.38	22.0±1
Band66	5MHz	QPSK	131997	12RB#13	21.37	22.0±1
Band66	5MHz	QPSK	131997	25RB#0	21.41	22.0±1
Band66	5MHz	QPSK	132322	1RB#0	22.28	22.0±1
Band66	5MHz	QPSK	132322	1RB#12	22.23	22.0±1

Band66	5MHz	QPSK	132322	1RB#24	22.25	22.0±1
Band66	5MHz	QPSK	132322	12RB#0	21.63	22.0±1
Band66	5MHz	QPSK	132322	12RB#6	21.79	22.0±1
Band66	5MHz	QPSK	132322	12RB#13	21.79	22.0±1
Band66	5MHz	QPSK	132322	25RB#0	21.81	22.0±1
Band66	5MHz	QPSK	132647	1RB#0	22.15	22.0±1
Band66	5MHz	QPSK	132647	1RB#12	22.16	22.0±1
Band66	5MHz	QPSK	132647	1RB#24	22.25	22.0±1
Band66	5MHz	QPSK	132647	12RB#0	21.36	22.0±1
Band66	5MHz	QPSK	132647	12RB#6	21.35	22.0±1
Band66	5MHz	QPSK	132647	12RB#13	21.47	22.0±1
Band66	5MHz	QPSK	132647	25RB#0	21.36	22.0±1
Band66	5MHz	16QAM	131997	1RB#0	21.42	22.0±1
Band66	5MHz	16QAM	131997	1RB#12	21.53	22.0±1
Band66	5MHz	16QAM	131997	1RB#24	21.42	22.0±1
Band66	5MHz	16QAM	131997	12RB#0	21.43	22.0±1
Band66	5MHz	16QAM	131997	12RB#6	21.42	22.0±1
Band66	5MHz	16QAM	131997	12RB#13	21.33	22.0±1
Band66	5MHz	16QAM	131997	25RB#0	21.47	22.0±1
Band66	5MHz	16QAM	132322	1RB#0	21.49	22.0±1
Band66	5MHz	16QAM	132322	1RB#12	21.62	22.0±1
Band66	5MHz	16QAM	132322	1RB#24	21.41	22.0±1
Band66	5MHz	16QAM	132322	12RB#0	21.80	22.0±1
Band66	5MHz	16QAM	132322	12RB#6	21.85	22.0±1
Band66	5MHz	16QAM	132322	12RB#13	21.78	22.0±1
Band66	5MHz	16QAM	132322	25RB#0	21.75	22.0±1
Band66	5MHz	16QAM	132647	1RB#0	21.45	22.0±1
Band66	5MHz	16QAM	132647	1RB#12	21.52	22.0±1
Band66	5MHz	16QAM	132647	1RB#24	21.38	22.0±1
Band66	5MHz	16QAM	132647	12RB#0	21.40	22.0±1
Band66	5MHz	16QAM	132647	12RB#6	21.42	22.0±1
Band66	5MHz	16QAM	132647	12RB#13	21.44	22.0±1
Band66	5MHz	16QAM	132647	25RB#0	21.42	22.0±1
Band66	10MHz	QPSK	132022	1RB#0	22.32	22.0±1
Band66	10MHz	QPSK	132022	1RB#24	22.28	22.0±1
Band66	10MHz	QPSK	132022	1RB#49	22.31	22.0±1

Band66	10MHz	QPSK	132022	25RB#0	21.52	22.0±1
Band66	10MHz	QPSK	132022	25RB#12	21.54	22.0±1
Band66	10MHz	QPSK	132022	25RB#25	21.43	22.0±1
Band66	10MHz	QPSK	132022	50RB#0	21.47	22.0±1
Band66	10MHz	QPSK	132322	1RB#0	22.30	22.0±1
Band66	10MHz	QPSK	132322	1RB#24	22.21	22.0±1
Band66	10MHz	QPSK	132322	1RB#49	22.25	22.0±1
Band66	10MHz	QPSK	132322	25RB#0	21.39	22.0±1
Band66	10MHz	QPSK	132322	25RB#12	21.53	22.0±1
Band66	10MHz	QPSK	132322	25RB#25	21.66	22.0±1
Band66	10MHz	QPSK	132322	50RB#0	21.50	22.0±1
Band66	10MHz	QPSK	132622	1RB#0	22.30	22.0±1
Band66	10MHz	QPSK	132622	1RB#24	22.12	22.0±1
Band66	10MHz	QPSK	132622	1RB#49	22.15	22.0±1
Band66	10MHz	QPSK	132622	25RB#0	21.42	22.0±1
Band66	10MHz	QPSK	132622	25RB#12	21.49	22.0±1
Band66	10MHz	QPSK	132622	25RB#25	21.47	22.0±1
Band66	10MHz	QPSK	132622	50RB#0	21.48	22.0±1
Band66	10MHz	16QAM	132022	1RB#0	21.55	22.0±1
Band66	10MHz	16QAM	132022	1RB#24	21.87	22.0±1
Band66	10MHz	16QAM	132022	1RB#49	21.57	22.0±1
Band66	10MHz	16QAM	132022	25RB#0	21.60	22.0±1
Band66	10MHz	16QAM	132022	25RB#12	21.54	22.0±1
Band66	10MHz	16QAM	132022	25RB#25	21.57	22.0±1
Band66	10MHz	16QAM	132022	50RB#0	21.56	22.0±1
Band66	10MHz	16QAM	132322	1RB#0	21.26	22.0±1
Band66	10MHz	16QAM	132322	1RB#24	21.45	22.0±1
Band66	10MHz	16QAM	132322	1RB#49	21.15	22.0±1
Band66	10MHz	16QAM	132322	25RB#0	21.44	22.0±1
Band66	10MHz	16QAM	132322	25RB#12	21.65	22.0±1
Band66	10MHz	16QAM	132322	25RB#25	21.75	22.0±1
Band66	10MHz	16QAM	132322	50RB#0	21.48	22.0±1
Band66	10MHz	16QAM	132622	1RB#0	21.53	22.0±1
Band66	10MHz	16QAM	132622	1RB#24	21.77	22.0±1
Band66	10MHz	16QAM	132622	1RB#49	21.54	22.0±1
Band66	10MHz	16QAM	132622	25RB#0	21.45	22.0±1

Band66	10MHz	16QAM	132622	25RB#12	21.50	22.0±1
Band66	10MHz	16QAM	132622	25RB#25	21.47	22.0±1
Band66	10MHz	16QAM	132622	50RB#0	21.45	22.0±1
Band66	15MHz	QPSK	132047	1RB#0	21.70	22.0±1
Band66	15MHz	QPSK	132047	1RB#38	21.89	22.0±1
Band66	15MHz	QPSK	132047	1RB#74	21.18	22.0±1
Band66	15MHz	QPSK	132047	38RB#0	21.47	22.0±1
Band66	15MHz	QPSK	132047	38RB#18	21.39	22.0±1
Band66	15MHz	QPSK	132047	38RB#37	21.38	22.0±1
Band66	15MHz	QPSK	132047	75RB#0	21.44	22.0±1
Band66	15MHz	QPSK	132322	1RB#0	21.26	22.0±1
Band66	15MHz	QPSK	132322	1RB#38	22.30	22.0±1
Band66	15MHz	QPSK	132322	1RB#74	22.09	22.0±1
Band66	15MHz	QPSK	132322	38RB#0	21.36	22.0±1
Band66	15MHz	QPSK	132322	38RB#18	21.45	22.0±1
Band66	15MHz	QPSK	132322	38RB#37	21.43	22.0±1
Band66	15MHz	QPSK	132322	75RB#0	21.66	22.0±1
Band66	15MHz	QPSK	132597	1RB#0	22.27	22.0±1
Band66	15MHz	QPSK	132597	1RB#38	22.25	22.0±1
Band66	15MHz	QPSK	132597	1RB#74	22.21	22.0±1
Band66	15MHz	QPSK	132597	38RB#0	21.41	22.0±1
Band66	15MHz	QPSK	132597	38RB#18	21.39	22.0±1
Band66	15MHz	QPSK	132597	38RB#37	21.40	22.0±1
Band66	15MHz	QPSK	132597	75RB#0	21.39	22.0±1
Band66	15MHz	16QAM	132047	1RB#0	21.97	22.0±1
Band66	15MHz	16QAM	132047	1RB#38	21.99	22.0±1
Band66	15MHz	16QAM	132047	1RB#74	21.46	22.0±1
Band66	15MHz	16QAM	132047	38RB#0	21.38	22.0±1
Band66	15MHz	16QAM	132047	38RB#18	21.40	22.0±1
Band66	15MHz	16QAM	132047	38RB#37	21.41	22.0±1
Band66	15MHz	16QAM	132047	75RB#0	21.44	22.0±1
Band66	15MHz	16QAM	132322	1RB#0	21.16	22.0±1
Band66	15MHz	16QAM	132322	1RB#38	21.26	22.0±1
Band66	15MHz	16QAM	132322	1RB#74	21.99	22.0±1
Band66	15MHz	16QAM	132322	38RB#0	21.46	22.0±1
Band66	15MHz	16QAM	132322	38RB#18	21.68	22.0±1

Band66	15MHz	16QAM	132322	38RB#37	21.52	22.0±1
Band66	15MHz	16QAM	132322	75RB#0	21.67	22.0±1
Band66	15MHz	16QAM	132597	1RB#0	21.35	22.0±1
Band66	15MHz	16QAM	132597	1RB#38	21.55	22.0±1
Band66	15MHz	16QAM	132597	1RB#74	21.41	22.0±1
Band66	15MHz	16QAM	132597	38RB#0	21.40	22.0±1
Band66	15MHz	16QAM	132597	38RB#18	21.40	22.0±1
Band66	15MHz	16QAM	132597	38RB#37	21.40	22.0±1
Band66	15MHz	16QAM	132597	75RB#0	21.40	22.0±1
Band66	20MHz	QPSK	132072	1RB#0	22.66	22.0±1
Band66	20MHz	QPSK	132072	1RB#49	22.89	22.0±1
Band66	20MHz	QPSK	132072	1RB#99	22.70	22.0±1
Band66	20MHz	QPSK	132072	50RB#0	22.34	22.0±1
Band66	20MHz	QPSK	132072	50RB#25	21.71	22.0±1
Band66	20MHz	QPSK	132072	50RB#50	21.58	22.0±1
Band66	20MHz	QPSK	132072	100RB#0	21.56	22.0±1
Band66	20MHz	QPSK	132322	1RB#0	22.48	22.0±1
Band66	20MHz	QPSK	132322	1RB#49	22.70	22.0±1
Band66	20MHz	QPSK	132322	1RB#99	22.05	22.0±1
Band66	20MHz	QPSK	132322	50RB#0	21.85	22.0±1
Band66	20MHz	QPSK	132322	50RB#25	21.90	22.0±1
Band66	20MHz	QPSK	132322	50RB#50	21.77	22.0±1
Band66	20MHz	QPSK	132322	100RB#0	21.79	22.0±1
Band66	20MHz	QPSK	132572	1RB#0	22.47	22.0±1
Band66	20MHz	QPSK	132572	1RB#49	22.56	22.0±1
Band66	20MHz	QPSK	132572	1RB#99	22.07	22.0±1
Band66	20MHz	QPSK	132572	50RB#0	21.47	22.0±1
Band66	20MHz	QPSK	132572	50RB#25	21.47	22.0±1
Band66	20MHz	QPSK	132572	50RB#50	21.30	22.0±1
Band66	20MHz	QPSK	132572	100RB#0	21.42	22.0±1
Band66	20MHz	16QAM	132072	1RB#0	21.76	22.0±1
Band66	20MHz	16QAM	132072	1RB#49	22.11	22.0±1
Band66	20MHz	16QAM	132072	1RB#99	21.69	22.0±1
Band66	20MHz	16QAM	132072	50RB#0	21.07	22.0±1
Band66	20MHz	16QAM	132072	50RB#25	21.84	22.0±1
Band66	20MHz	16QAM	132072	50RB#50	21.61	22.0±1

Band66	20MHz	16QAM	132072	100RB#0	21.54	22.0±1
Band66	20MHz	16QAM	132322	1RB#0	21.53	22.0±1
Band66	20MHz	16QAM	132322	1RB#49	21.65	22.0±1
Band66	20MHz	16QAM	132322	1RB#99	21.33	22.0±1
Band66	20MHz	16QAM	132322	50RB#0	21.84	22.0±1
Band66	20MHz	16QAM	132322	50RB#25	21.85	22.0±1
Band66	20MHz	16QAM	132322	50RB#50	21.71	22.0±1
Band66	20MHz	16QAM	132322	100RB#0	21.74	22.0±1
Band66	20MHz	16QAM	132572	1RB#0	21.50	22.0±1
Band66	20MHz	16QAM	132572	1RB#49	21.71	22.0±1
Band66	20MHz	16QAM	132572	1RB#99	21.05	22.0±1
Band66	20MHz	16QAM	132572	50RB#0	21.53	22.0±1
Band66	20MHz	16QAM	132572	50RB#25	21.64	22.0±1
Band66	20MHz	16QAM	132572	50RB#50	21.34	22.0±1
Band66	20MHz	16QAM	132572	100RB#0	21.42	22.0±1
Band71	5MHz	QPSK	133147	1RB#0	22.11	22.0±1
Band71	5MHz	QPSK	133147	1RB#12	21.19	22.0±1
Band71	5MHz	QPSK	133147	1RB#24	21.11	22.0±1
Band71	5MHz	QPSK	133147	12RB#0	21.03	22.0±1
Band71	5MHz	QPSK	133147	12RB#6	21.04	22.0±1
Band71	5MHz	QPSK	133147	12RB#13	21.23	22.0±1
Band71	5MHz	QPSK	133147	25RB#0	21.11	22.0±1
Band71	5MHz	QPSK	133297	1RB#0	21.21	22.0±1
Band71	5MHz	QPSK	133297	1RB#12	21.26	22.0±1
Band71	5MHz	QPSK	133297	1RB#24	21.14	22.0±1
Band71	5MHz	QPSK	133297	12RB#0	21.20	22.0±1
Band71	5MHz	QPSK	133297	12RB#6	21.15	22.0±1
Band71	5MHz	QPSK	133297	12RB#13	21.15	22.0±1
Band71	5MHz	QPSK	133297	25RB#0	21.17	22.0±1
Band71	5MHz	QPSK	133447	1RB#0	21.15	22.0±1
Band71	5MHz	QPSK	133447	1RB#12	21.25	22.0±1
Band71	5MHz	QPSK	133447	1RB#24	21.14	22.0±1
Band71	5MHz	QPSK	133447	12RB#0	21.20	22.0±1
Band71	5MHz	QPSK	133447	12RB#6	21.21	22.0±1
Band71	5MHz	QPSK	133447	12RB#13	21.24	22.0±1
Band71	5MHz	QPSK	133447	25RB#0	21.22	22.0±1

Band71	5MHz	16QAM	133147	1RB#0	21.26	22.0±1
Band71	5MHz	16QAM	133147	1RB#12	21.03	22.0±1
Band71	5MHz	16QAM	133147	1RB#24	21.06	22.0±1
Band71	5MHz	16QAM	133147	12RB#0	21.18	22.0±1
Band71	5MHz	16QAM	133147	12RB#6	21.08	22.0±1
Band71	5MHz	16QAM	133147	12RB#13	21.15	22.0±1
Band71	5MHz	16QAM	133147	25RB#0	21.06	22.0±1
Band71	5MHz	16QAM	133297	1RB#0	21.17	22.0±1
Band71	5MHz	16QAM	133297	1RB#12	21.22	22.0±1
Band71	5MHz	16QAM	133297	1RB#24	21.18	22.0±1
Band71	5MHz	16QAM	133297	12RB#0	21.11	22.0±1
Band71	5MHz	16QAM	133297	12RB#6	21.15	22.0±1
Band71	5MHz	16QAM	133297	12RB#13	21.14	22.0±1
Band71	5MHz	16QAM	133297	25RB#0	21.20	22.0±1
Band71	5MHz	16QAM	133447	1RB#0	21.20	22.0±1
Band71	5MHz	16QAM	133447	1RB#12	21.21	22.0±1
Band71	5MHz	16QAM	133447	1RB#24	21.17	22.0±1
Band71	5MHz	16QAM	133447	12RB#0	21.13	22.0±1
Band71	5MHz	16QAM	133447	12RB#6	21.19	22.0±1
Band71	5MHz	16QAM	133447	12RB#13	21.23	22.0±1
Band71	5MHz	16QAM	133447	25RB#0	21.21	22.0±1
Band71	10MHz	QPSK	133172	1RB#0	21.10	22.0±1
Band71	10MHz	QPSK	133172	1RB#24	21.25	22.0±1
Band71	10MHz	QPSK	133172	1RB#49	21.10	22.0±1
Band71	10MHz	QPSK	133172	25RB#0	21.13	22.0±1
Band71	10MHz	QPSK	133172	25RB#12	21.14	22.0±1
Band71	10MHz	QPSK	133172	25RB#25	21.21	22.0±1
Band71	10MHz	QPSK	133172	50RB#0	21.12	22.0±1
Band71	10MHz	QPSK	133297	1RB#0	21.12	22.0±1
Band71	10MHz	QPSK	133297	1RB#24	21.20	22.0±1
Band71	10MHz	QPSK	133297	1RB#49	21.08	22.0±1
Band71	10MHz	QPSK	133297	25RB#0	21.21	22.0±1
Band71	10MHz	QPSK	133297	25RB#12	21.22	22.0±1
Band71	10MHz	QPSK	133297	25RB#25	21.18	22.0±1
Band71	10MHz	QPSK	133297	50RB#0	21.20	22.0±1
Band71	10MHz	QPSK	133422	1RB#0	21.14	22.0±1

Band71	10MHz	QPSK	133422	1RB#24	21.08	22.0±1
Band71	10MHz	QPSK	133422	1RB#49	21.14	22.0±1
Band71	10MHz	QPSK	133422	25RB#0	21.20	22.0±1
Band71	10MHz	QPSK	133422	25RB#12	21.20	22.0±1
Band71	10MHz	QPSK	133422	25RB#25	21.21	22.0±1
Band71	10MHz	QPSK	133422	50RB#0	21.03	22.0±1
Band71	10MHz	16QAM	133172	1RB#0	21.23	22.0±1
Band71	10MHz	16QAM	133172	1RB#24	21.23	22.0±1
Band71	10MHz	16QAM	133172	1RB#49	21.03	22.0±1
Band71	10MHz	16QAM	133172	25RB#0	21.08	22.0±1
Band71	10MHz	16QAM	133172	25RB#12	21.09	22.0±1
Band71	10MHz	16QAM	133172	25RB#25	21.19	22.0±1
Band71	10MHz	16QAM	133172	50RB#0	21.09	22.0±1
Band71	10MHz	16QAM	133297	1RB#0	21.20	22.0±1
Band71	10MHz	16QAM	133297	1RB#24	21.04	22.0±1
Band71	10MHz	16QAM	133297	1RB#49	21.25	22.0±1
Band71	10MHz	16QAM	133297	25RB#0	21.22	22.0±1
Band71	10MHz	16QAM	133297	25RB#12	21.20	22.0±1
Band71	10MHz	16QAM	133297	25RB#25	21.15	22.0±1
Band71	10MHz	16QAM	133297	50RB#0	21.20	22.0±1
Band71	10MHz	16QAM	133422	1RB#0	21.08	22.0±1
Band71	10MHz	16QAM	133422	1RB#24	21.26	22.0±1
Band71	10MHz	16QAM	133422	1RB#49	21.08	22.0±1
Band71	10MHz	16QAM	133422	25RB#0	20.35	22.0±1
Band71	10MHz	16QAM	133422	25RB#12	21.25	22.0±1
Band71	10MHz	16QAM	133422	25RB#25	21.26	22.0±1
Band71	10MHz	16QAM	133422	50RB#0	21.26	22.0±1
Band71	15MHz	QPSK	133197	1RB#0	21.20	22.0±1
Band71	15MHz	QPSK	133197	1RB#38	21.09	22.0±1
Band71	15MHz	QPSK	133197	1RB#74	21.14	22.0±1
Band71	15MHz	QPSK	133197	38RB#0	21.24	22.0±1
Band71	15MHz	QPSK	133197	38RB#18	21.15	22.0±1
Band71	15MHz	QPSK	133197	38RB#37	21.23	22.0±1
Band71	15MHz	QPSK	133197	75RB#0	21.19	22.0±1
Band71	15MHz	QPSK	133297	1RB#0	21.02	22.0±1
Band71	15MHz	QPSK	133297	1RB#38	21.14	22.0±1

Band71	15MHz	QPSK	133297	1RB#74	21.09	22.0±1
Band71	15MHz	QPSK	133297	38RB#0	21.14	22.0±1
Band71	15MHz	QPSK	133297	38RB#18	21.06	22.0±1
Band71	15MHz	QPSK	133297	38RB#37	21.05	22.0±1
Band71	15MHz	QPSK	133297	75RB#0	21.07	22.0±1
Band71	15MHz	QPSK	133397	1RB#0	21.22	22.0±1
Band71	15MHz	QPSK	133397	1RB#38	21.17	22.0±1
Band71	15MHz	QPSK	133397	1RB#74	21.06	22.0±1
Band71	15MHz	QPSK	133397	38RB#0	21.13	22.0±1
Band71	15MHz	QPSK	133397	38RB#18	21.23	22.0±1
Band71	15MHz	QPSK	133397	38RB#37	21.17	22.0±1
Band71	15MHz	QPSK	133397	75RB#0	21.27	22.0±1
Band71	15MHz	16QAM	133197	1RB#0	21.09	22.0±1
Band71	15MHz	16QAM	133197	1RB#38	21.07	22.0±1
Band71	15MHz	16QAM	133197	1RB#74	21.20	22.0±1
Band71	15MHz	16QAM	133197	38RB#0	21.26	22.0±1
Band71	15MHz	16QAM	133197	38RB#18	21.34	22.0±1
Band71	15MHz	16QAM	133197	38RB#37	21.30	22.0±1
Band71	15MHz	16QAM	133197	75RB#0	21.13	22.0±1
Band71	15MHz	16QAM	133297	1RB#0	21.00	22.0±1
Band71	15MHz	16QAM	133297	1RB#38	21.13	22.0±1
Band71	15MHz	16QAM	133297	1RB#74	21.15	22.0±1
Band71	15MHz	16QAM	133297	38RB#0	21.15	22.0±1
Band71	15MHz	16QAM	133297	38RB#18	21.07	22.0±1
Band71	15MHz	16QAM	133297	38RB#37	20.93	22.0±1
Band71	15MHz	16QAM	133297	75RB#0	20.11	22.0±1
Band71	15MHz	16QAM	133397	1RB#0	21.15	22.0±1
Band71	15MHz	16QAM	133397	1RB#38	21.34	22.0±1
Band71	15MHz	16QAM	133397	1RB#74	21.16	22.0±1
Band71	15MHz	16QAM	133397	38RB#0	21.16	22.0±1
Band71	15MHz	16QAM	133397	38RB#18	21.23	22.0±1
Band71	15MHz	16QAM	133397	38RB#37	21.18	22.0±1
Band71	15MHz	16QAM	133397	75RB#0	21.17	22.0±1
Band71	20MHz	QPSK	133222	1RB#0	21.93	22.0±1
Band71	20MHz	QPSK	133222	1RB#49	22.49	22.0±1
Band71	20MHz	QPSK	133222	1RB#99	21.91	22.0±1

Band71	20MHz	QPSK	133222	50RB#0	21.17	22.0±1
Band71	20MHz	QPSK	133222	50RB#25	21.18	22.0±1
Band71	20MHz	QPSK	133222	50RB#50	21.24	22.0±1
Band71	20MHz	QPSK	133222	100RB#0	21.17	22.0±1
Band71	20MHz	QPSK	133322	1RB#0	21.92	22.0±1
Band71	20MHz	QPSK	133322	1RB#49	22.30	22.0±1
Band71	20MHz	QPSK	133322	1RB#99	21.85	22.0±1
Band71	20MHz	QPSK	133322	50RB#0	21.12	22.0±1
Band71	20MHz	QPSK	133322	50RB#25	21.14	22.0±1
Band71	20MHz	QPSK	133322	50RB#50	21.11	22.0±1
Band71	20MHz	QPSK	133322	100RB#0	21.15	22.0±1
Band71	20MHz	QPSK	133372	1RB#0	21.76	22.0±1
Band71	20MHz	QPSK	133372	1RB#49	22.17	22.0±1
Band71	20MHz	QPSK	133372	1RB#99	21.74	22.0±1
Band71	20MHz	QPSK	133372	50RB#0	21.27	22.0±1
Band71	20MHz	QPSK	133372	50RB#25	21.27	22.0±1
Band71	20MHz	QPSK	133372	50RB#50	21.21	22.0±1
Band71	20MHz	QPSK	133372	100RB#0	21.21	22.0±1
Band71	20MHz	16QAM	133222	1RB#0	21.28	22.0±1
Band71	20MHz	16QAM	133222	1RB#49	21.22	22.0±1
Band71	20MHz	16QAM	133222	1RB#99	21.20	22.0±1
Band71	20MHz	16QAM	133222	50RB#0	21.11	22.0±1
Band71	20MHz	16QAM	133222	50RB#25	21.15	22.0±1
Band71	20MHz	16QAM	133222	50RB#50	21.21	22.0±1
Band71	20MHz	16QAM	133222	100RB#0	21.10	22.0±1
Band71	20MHz	16QAM	133322	1RB#0	21.16	22.0±1
Band71	20MHz	16QAM	133322	1RB#49	21.08	22.0±1
Band71	20MHz	16QAM	133322	1RB#99	21.13	22.0±1
Band71	20MHz	16QAM	133322	50RB#0	21.14	22.0±1
Band71	20MHz	16QAM	133322	50RB#25	21.09	22.0±1
Band71	20MHz	16QAM	133322	50RB#50	21.04	22.0±1
Band71	20MHz	16QAM	133322	100RB#0	21.09	22.0±1
Band71	20MHz	16QAM	133372	1RB#0	21.27	22.0±1
Band71	20MHz	16QAM	133372	1RB#49	21.20	22.0±1
Band71	20MHz	16QAM	133372	1RB#99	21.13	22.0±1
Band71	20MHz	16QAM	133372	50RB#0	21.20	22.0±1

Band71	20MHz	16QAM	133372	50RB#25	21.25	22.0±1
Band71	20MHz	16QAM	133372	50RB#50	21.25	22.0±1
Band71	20MHz	16QAM	133372	100RB#0	21.22	22.0±1

WIFI Mode (2.4G)

Mode	Channel number	Frequency (MHz)	Data rate (Mbps)	Average Output Power(dBm)	Average Tune up limited(dBm)
802.11b	1	2412	1	14.0	13.0±1
	6	2437	1	13.9	13.0±1
	11	2462	1	14.0	13.0±1
802.11g	1	2412	6	11.9	11.0±1
	6	2437	6	12.0	11.0±1
	11	2462	6	12.0	11.0±1
802.11n(HT20)	1	2412	MCS0	10.0	9.0±1
	6	2437	MCS0	10.0	9.0±1
	11	2462	MCS0	9.9	9.0±1

WIFI Mode (5G)

Mode	Frequency (MHz)	Data rate (Mbps)	Output Power(dBm)	Tune up limited(dBm)
11A	5180	MCS0	14.77	14.0±1
	5200	MCS0	14.53	14.0±1
	5240	MCS0	14.40	14.0±1
	5745	MCS0	14.67	14.0±1
	5785	MCS0	14.24	14.0±1
	5825	MCS0	14.52	14.0±1
11N20	5180	MCS0	14.27	14.0±1
	5200	MCS0	14.24	14.0±1
	5240	MCS0	13.84	14.0±1
	5745	MCS0	14.05	14.0±1
	5785	MCS0	14.09	14.0±1
	5825	MCS0	14.34	14.0±1
11N40	5190	MCS0	14.01	14.0±1
	5230	MCS0	13.69	14.0±1
	5755	MCS0	13.95	14.0±1
	5795	MCS0	14.16	14.0±1
11AC20	5180	MCS0	11.42	11.0±1
	5200	MCS0	11.26	11.0±1
	5240	MCS0	11.18	11.0±1
	5745	MCS0	11.34	11.0±1
	5785	MCS0	11.40	11.0±1
	5825	MCS0	11.50	11.0±1
11AC40	5190	MCS0	11.09	11.0±1

	5230	MCS0	10.79	11.0±1
	5755	MCS0	10.63	11.0±1
	5795	MCS0	10.79	11.0±1
11AC80	5210	MCS0	10.70	11.0±1
	5775	MCS0	11.00	11.0±1

Bluetooth Measurement Result

Mode	Frequency (MHz)	Output Power(dBm)	Tune up limited(dBm)
GFSK	2402	11.02	10.5±1
	2441	10.54	10.5±1
	2480	10.99	10.5±1
$\pi/4$ DQPSK	2402	10.20	10.5±1
	2441	9.73	10.5±1
	2480	10.81	10.5±1
8DPSK	2402	10.21	10.5±1
	2441	9.70	10.5±1
	2480	10.80	10.5±1

BLE Measurement Result

Channel number	Frequency (MHz)	Output Power(dBm)	Tune up limited(dBm)
0	2402	-1.69	-1.0±1
19	2440	-1.39	-1.0±1
39	2480	-1.39	-1.0±1

12.2 SAR TEST RESULTS

Band	Mode	Test Position	Channel	RB	offset	Maximum Tune-up (dBm)	Conducted Power (dBm)	SAR 1g	Scaling Factor	Report 1g SAR
LTE 2	QPSK20M	Front Face	18700	1	49	22.0	21.98	0.3250	1.00	0.327
LTE 2	QPSK20M	Rear Face	18700	1	49	22.0	21.98	0.3440	1.00	0.346
LTE 2	QPSK20M	Left Side	18700	1	49	22.0	21.98	0.1550	1.00	0.156
LTE 2	QPSK20M	Right Side	18700	1	49	22.0	21.98	0.1960	1.00	0.197
LTE 2	QPSK20M	Bottom Edge	18700	1	49	22.0	21.98	0.6860	1.00	0.689
LTE 2	QPSK20M	Front Face	18700	50	25	22.0	21.37	0.2880	1.16	0.333
LTE 2	QPSK20M	Rear Face	18700	50	25	22.0	21.37	0.2920	1.16	0.338
LTE 2	QPSK20M	Left Side	18700	50	25	22.0	21.37	0.1380	1.16	0.160
LTE 2	QPSK20M	Right Side	18700	50	25	22.0	21.37	0.1760	1.16	0.203
LTE 2	QPSK20M	Bottom Edge	18700	50	25	22.0	21.37	0.5220	1.16	0.603
LTE 4	QPSK20M	Front Face	20050	1	49	22.0	21.94	0.3110	1.01	0.315
LTE 4	QPSK20M	Rear Face	20050	1	49	22.0	21.94	0.3280	1.01	0.333
LTE 4	QPSK20M	Left Side	20050	1	49	22.0	21.94	0.1420	1.01	0.144
LTE 4	QPSK20M	Right Side	20050	1	49	22.0	21.94	0.1730	1.01	0.175
LTE 4	QPSK20M	Bottom Edge	20050	1	49	22.0	21.94	0.6510	1.01	0.660
LTE 4	QPSK20M	Front Face	20300	50	50	22.0	21.22	0.2080	1.20	0.249
LTE 4	QPSK20M	Rear Face	20300	50	50	22.0	21.22	0.2230	1.20	0.267
LTE 4	QPSK20M	Left Side	20300	50	50	22.0	21.22	0.0780	1.20	0.093
LTE 4	QPSK20M	Right Side	20300	50	50	22.0	21.22	0.0940	1.20	0.112
LTE 4	QPSK20M	Bottom Edge	20300	50	50	22.0	21.22	0.4090	1.20	0.489
LTE 5	QPSK10M	Front Face	20600	1	24	23	22.39	0.2240	1.15	0.258
LTE 5	QPSK10M	Rear Face	20600	1	24	23	22.39	0.2510	1.15	0.289
LTE 5	QPSK10M	Left Side	20600	1	24	23	22.39	0.1140	1.15	0.131
LTE 5	QPSK10M	Right Side	20600	1	24	23	22.39	0.1320	1.15	0.152
LTE 5	QPSK10M	Bottom Edge	20600	1	24	23	22.39	0.4320	1.15	0.497
LTE 5	QPSK10M	Front Face	20600	25	0	23	21.30	0.1250	1.48	0.185
LTE 5	QPSK10M	Rear Face	20600	25	0	23	21.30	0.1370	1.48	0.203
LTE 5	QPSK10M	Left Side	20600	25	0	23	21.30	0.0650	1.48	0.096
LTE 5	QPSK10M	Right Side	20600	25	0	23	21.30	0.0870	1.48	0.129
LTE 5	QPSK10M	Bottom Edge	20600	25	0	23	21.30	0.2450	1.48	0.362
LTE 12	QPSK10M	Front Face	23095	1	24	22	21.98	0.1830	1.00	0.184
LTE 12	QPSK10M	Rear Face	23095	1	24	22	21.98	0.1970	1.00	0.198
LTE 12	QPSK10M	Left Side	23095	1	24	22	21.98	0.0950	1.00	0.095
LTE 12	QPSK10M	Right Side	23095	1	24	22	21.98	0.1020	1.00	0.102
LTE 12	QPSK10M	Bottom Edge	23095	1	24	22	21.98	0.3790	1.00	0.381
LTE 12	QPSK10M	Front Face	23095	25	0	22	21.46	0.1520	1.13	0.172
LTE 12	QPSK10M	Rear Face	23095	25	0	22	21.46	0.1630	1.13	0.185
LTE 12	QPSK10M	Left Side	23095	25	0	22	21.46	0.0450	1.13	0.051
LTE 12	QPSK10M	Right Side	23095	25	0	22	21.46	0.0750	1.13	0.085
LTE 12	QPSK10M	Bottom Edge	23095	25	0	22	21.46	0.3120	1.13	0.353
LTE 17	QPSK10M	Front Face	23780	1	24	23	22.48	0.2030	1.13	0.229
LTE 17	QPSK10M	Rear Face	23780	1	24	23	22.48	0.2110	1.13	0.238
LTE 17	QPSK10M	Left Side	23780	1	24	23	22.48	0.0880	1.13	0.099

Band	Mode	Test Position	Channel	RB	offset	Maximum Tune-up (dBm)	Conducted Power (dBm)	SAR 1g	Scaling Factor	Report 1g SAR
LTE 17	QPSK10M	Right Side	23780	1	24	23	22.48	0.0950	1.13	0.107
LTE 17	QPSK10M	Bottom Edge	23780	1	24	23	22.48	0.3920	1.13	0.442
LTE 17	QPSK10M	Front Face	23780	25	0	23	22.28	0.1650	1.18	0.195
LTE 17	QPSK10M	Rear Face	23780	25	0	23	22.28	0.1720	1.18	0.203
LTE 17	QPSK10M	Left Side	23780	25	0	23	22.28	0.0750	1.18	0.089
LTE 17	QPSK10M	Right Side	23780	25	0	23	22.28	0.0810	1.18	0.096
LTE 17	QPSK10M	Bottom Edge	23780	25	0	23	22.28	0.3580	1.18	0.423
LTE 30	QPSK10M	Front Face	27710	1	24	22	21.81	0.3600	1.04	0.376
LTE 30	QPSK10M	Rear Face	27710	1	24	22	21.81	0.3790	1.04	0.396
LTE 30	QPSK10M	Left Side	27710	1	24	22	21.81	0.1150	1.04	0.120
LTE 30	QPSK10M	Right Side	27710	1	24	22	21.81	0.1260	1.04	0.132
LTE 30	QPSK10M	Bottom Edge	27710	1	24	22	21.81	0.7490	1.04	0.782
LTE 30	QPSK10M	Front Face	27710	25	0	22	20.99	0.3110	1.26	0.392
LTE 30	QPSK10M	Rear Face	27710	25	0	22	20.99	0.3250	1.26	0.410
LTE 30	QPSK10M	Left Side	27710	25	0	22	20.99	0.0860	1.26	0.109
LTE 30	QPSK10M	Right Side	27710	25	0	22	20.99	0.0940	1.26	0.119
LTE 30	QPSK10M	Bottom Edge	27710	25	0	22	20.99	0.6080	1.26	0.767
LTE 66	QPSK20M	Front Face	132072	1	49	23.0	22.89	0.3530	1.03	0.362
LTE 66	QPSK20M	Rear Face	132072	1	49	23.0	22.89	0.3650	1.03	0.374
LTE 66	QPSK20M	Left Side	132072	1	49	23.0	22.89	0.1080	1.03	0.111
LTE 66	QPSK20M	Right Side	132072	1	49	23.0	22.89	0.1450	1.03	0.149
LTE 66	QPSK20M	Bottom Edge	132072	1	49	23.0	22.89	0.7140	1.03	0.732
LTE 66	QPSK20M	Front Face	132072	50	0	23.0	22.34	0.2750	1.16	0.320
LTE 66	QPSK20M	Rear Face	132072	50	0	23.0	22.34	0.2840	1.16	0.331
LTE 66	QPSK20M	Left Side	132072	50	0	23.0	22.34	0.0750	1.16	0.087
LTE 66	QPSK20M	Right Side	132072	50	0	23.0	22.34	0.0790	1.16	0.092
LTE 66	QPSK20M	Bottom Edge	132072	50	0	23.0	22.34	0.5880	1.16	0.685
LTE 71	QPSK20M	Front Face	133222	1	49	23.0	22.49	0.1440	1.12	0.162
LTE 71	QPSK20M	Rear Face	133222	1	49	23.0	22.49	0.1530	1.12	0.172
LTE 71	QPSK20M	Left Side	133222	1	49	23.0	22.49	0.0330	1.12	0.037
LTE 71	QPSK20M	Right Side	133222	1	49	23.0	22.49	0.0420	1.12	0.047
LTE 71	QPSK20M	Bottom Edge	133222	1	49	23.0	22.49	0.3170	1.12	0.356
LTE 71	QPSK20M	Front Face	133372	50	0	23.0	21.27	0.0950	1.49	0.141
LTE 71	QPSK20M	Rear Face	133372	50	0	23.0	21.27	0.1120	1.49	0.167
LTE 71	QPSK20M	Left Side	133372	50	0	23.0	21.27	0.0250	1.49	0.037
LTE 71	QPSK20M	Right Side	133372	50	0	23.0	21.27	0.0310	1.49	0.046
LTE 71	QPSK20M	Bottom Edge	133372	50	0	23.0	21.27	0.2080	1.49	0.310
802.11b	-	Front Face	11	-	-	14.0	14.0	0.1470	1.00	0.147
802.11b	-	Rear Face	11	-	-	14.0	14.0	0.0760	1.00	0.076
802.11b	-	Left Side	11	-	-	14.0	14.0	0.0480	1.00	0.048
802.11b	-	Right Side	11	-	-	14.0	14.0	0.0410	1.00	0.041
802.11b	-	Top Edge	11	-	-	14.0	14.0	0.1350	1.00	0.135
802.11A	-	Front Face	36	-	-	15.0	14.77	0.4110	1.05	0.433
802.11A	-	Rear Face	36	-	-	15.0	14.77	0.1970	1.05	0.208
802.11A	-	Left Side	36	-	-	15.0	14.77	0.0950	1.05	0.100

Band	Mode	Test Position	Channel	RB	offset	Maximum Tune-up (dBm)	Conducted Power (dBm)	SAR 1g	Scaling Factor	Report 1g SAR
802.11A	-	Top Edge	36	-	-	15.0	14.77	0.3880	1.05	0.409
802.11A	-	Front Face	149	-	-	15.0	14.67	0.5300	1.08	0.572
802.11A	-	Rear Face	149	-	-	15.0	14.67	0.2030	1.08	0.219
802.11A	-	Left Side	149	-	-	15.0	14.67	0.1130	1.08	0.122
802.11A	-	Top Edge	149	-	-	15.0	14.67	0.4860	1.08	0.524
EDR	-	Front Face	0	-	-	11.5	11.02	0.0190	1.12	0.021
EDR	-	Rear Face	0	-	-	11.5	11.02	0.0080	1.12	0.009
EDR	-	Left Side	0	-	-	11.5	11.02	0.0060	1.12	0.007
EDR	-	Top Edge	0	-	-	11.5	11.02	0.0150	1.12	0.017

1. Due to both Body-worn and Hotspot are measured with the separation distance of 5mm, the test data is shared.
2. According to FCC KDB 248227 D01v02r02 section 5.2.2, DSSS SAR value*(OFDM power/DSSS power) = $0.147 * (10^{(12.0/10)} / 10^{(14.0/10)}) = 0.09W/kg \leq 1.2W/kg$, SAR for OFDM is not required.
4. Per KDB 447498 D01v06, for handsets the test separation distance is determined by the smallest distance between the outer surface of the device and the user, which is 5 mm body-worn SAR.

12.3 Measurement variability consideration

According to KDB 865664 D01v01r04 section 2.8.1, repeated measurements are required following the procedures as below:

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

12.3.1 Repeated SAR

N/A

12.4 Simultaneous Transmission SAR Analysis.

List of Mode for Simultaneous Multi-band Transmission:

Simultaneous TX Combination
WWAN + WIFI 2.4G + NFC
WWAN + WIFI 5G + NFC
WWAN + BT + NFC

Remark:

1. BT/WIFI 2.4GHz share the same antenna and cannot transmit simultaneously.
2. BT/WIFI 5GHz share the same antenna and cannot transmit simultaneously.
3. WIFI 2.4GHz and WIFI 5G cannot transmit simultaneously.
4. According to the KDB 447498 D01, when standalone SAR test exclusion applies to an antenna that transmits simultaneously with other antennas, the standalone SAR must be estimated according to following to determine simultaneous transmission SAR test exclusion:
(max. power of channel, including tune-up tolerance, mW)/ (min. test separation distance, mm)] · [vf(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.
5. The maximum SAR summation is calculated based on the same configuration and test position.

For simultaneous transmission analysis, SAR is estimated per KDB 447498 D01 as below:

Bluetooth (BLE):

Tune-Up Power (dBm)	Max. Power (mW)	Distance (mm)	Frequency (GHz)	X	SAR(1g)
0	1	5	2.480	7.5	0.042

NFC

Tune-Up Power (dBm)	Max. Power (mW)	Distance (mm)	Frequency (GHz)	X	SAR(1g)
-33.53	0.00044361	5	0.01356	7.5	0.000

12.5 Simultaneous Transmission SAR Value

Position SAR 1g(W/Kg)	Front Face	Rear Face	Left Side	Right Side	Top Edge	Bottom Edge
LTE B2	0.333	0.346	0.160	0.203	/	0.689
LTE B4	0.315	0.333	0.144	0.175	/	0.660
LTE B5	0.258	0.289	0.131	0.152	/	0.497
LTE B12	0.184	0.198	0.095	0.102	/	0.381
LTE B17	0.229	0.238	0.099	0.107	/	0.442
LTE B30	0.392	0.410	0.120	0.132	/	0.782
LTE B66	0.362	0.374	0.111	0.149	/	0.732
LTE B71	0.162	0.172	0.037	0.047	/	0.356
WiFi 2.4G	0.147	0.076	0.048	0.041	0.135	/
WiFi 5G	0.572	0.219	0.122	/	0.524	/
BT (EDR)	0.021	0.009	0.007	/	0.017	/
BT (BLE)	0.042	0.042	0.042	0.042	0.042	0.042
NFC	0.000	0.000	0.000	0.000	0.000	0.000
WWAN + WiFi 2.4G + NFC	0.539	0.486	0.208	0.244	0.135	0.782
WWAN + WiFi 5G + NFC	0.964	0.629	0.282	0.203	0.524	0.782
WWAN + BT + NFC	0.434	0.452	0.202	0.245	0.042	0.824

12.6 MAXIMUM GRAPH RESULTS

The graph results see ANNEX C.

13. Measurement Uncertainty

When the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

14. Main Test Instrument

Equipment No.	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
SZ060-01	SAR Test System	SPEAG	DASY52 SAR TX90XL	F14/5YJ0B1/A/01	2025-04-21	1 year
SZ060-01-01	E-Field Probe	SPEAG	EX3DV4	7322	2025-04-21	1 year
SZ060-01-03	System Validation Dipole	SPEAG	D750V3	1055	2024-03-14	3 year
SZ060-01-04	System Validation Dipole	SPEAG	D835V2	4d196	2024-11-04	3 year
SZ060-01-05	System Validation Dipole	SPEAG	D900V2	1d182	2024-11-06	3 year
SZ060-01-06	System Validation Dipole	SPEAG	D1750V2	1138	2024-11-06	3 year
SZ060-01-07	System Validation Dipole	SPEAG	D1900V2	5d203	2024-11-04	3 year
SZ060-01-10	System Validation Dipole	SPEAG	D2450V2	966	2024-11-06	3 year
SZ060-01-12	System Validation Dipole	SPEAG	D5GHzV2	1218	2024-11-05	3 year
SZ060-01-13	Data Acquisition Unit	SPEAG	DAE4	1473	2025-04-21	1 year
SZ060-01-14	Dielectric Assessment Kit	SPEAG	DAKS 3.5	1056	2025-08-26	1 year
SZ060-01-15	Vector Reflectometer	Copper Mountain Technologies	Planar R140	0090614	2025-07-08	1 year
SZ060-01-16	Thermometer	LKM electronics GmbH	DTM3000	3477	2025-12-25	1 year
SZ060-01-17	Power Amplifier	Mini Circuits	ZHL-42W+	QA1449003	2025-11-01	1 year
SZ060-01-18	Power Amplifier	Mini Circuits	ZVE-8G+	111701437	2025-11-01	1 year
SZ060-01-19	SAM Twin Phantom	SPEAG	SAM Twin Phantom V5.0	1888	N/A	N/A
SZ060-01-20	SAM Twin Phantom	SPEAG	SAM Twin Phantom V5.0	1891	N/A	N/A
SZ060-01-21	ELI Phantom	SPEAG	ELI Phantom V6.0	2033	N/A	N/A
SZ180-13	MXG Vector Signal Generator	Keysight	N5182B	MY53051328	2025-09-15	1 year
SZ070-04	Directional Bridge	Agilent	86205A	MY31402141	2025-12-02	1 year
SZ182-02	RF Power Meter	Anritsu	ML2496A	1302005	2025-04-21	1 year
SZ182-02-01	Pulse Power Sensor	Anritsu	MA2411B	1207429	2025-04-21	1 year
SZ182-03	Average power sensor	R&S	NRP-Z22	101689	2025-04-21	1 year
SZ065-06	Wideband Radio Communication Tester	R&S	CMU200	112012	2025-07-14	1 year
N/A	Device Holder	SPEAG	N/A	N/A	N/A	N/A

ANNEX A: TEST LAYOUT AND SETUP

The graph results see ANNEX A of 260317073SZN-007-Appendix A.

ANNEX B: SYSTEM CHECK RESULTS

The graph results see ANNEX B of 260317073SZN-007-Appendix A.

ANNEX C: MAXIMUM GRAPH RESULTS

The graph results see ANNEX C of 260317073SZN-007-Appendix A.

ANNEX D: SYSTEM VALIDATION

The graph results see ANNEX D of 260317073SZN-007-Appendix A.

ANNEX E: EUT PHOTO

The EUT photos are saved with filename: external photos.pdf & internal photos.pdf.

ANNEX F: PROBE CALIBRATION CERTIFICATE

The graph results see ANNEX F of 260317073SZN-007-Appendix B.

ANNEX G: DIPOLE CALIBRATION CERTIFICATE

The graph results see ANNEX G of 260317073SZN-007-Appendix B.

ANNEX H: DAE CALIBRATION CERTIFICATE

The graph results see ANNEX H of 260317073SZN-007-Appendix B.

*****End the Report*****