FCC SAR Test Report

Product Name ： Mobile Computer

Model No. ： RS35

Applicant ： Cipherlab Co, Ltd.

Address ： 12F, NO.333, SEC.2, DUNHUA S. RD., TAIPEI, TAIWAN, R.O.C.

Date of Receipt ： 2020/06/08

Issued Date ： 2020/08/10

Report No. ： 2060284R-E3082130008

Report Version ： V1.0

Test Report

Issued Date: 2020/08/10
Report No.: 2060284R-E3082130008

Product Name	:	Mobile Computer
Applicant	:	Cipherlab Co, Ltd.
Address	:	12F, NO.333, SEC.2, DUNHUA S. RD., TAIPEI, TAIWAN, R.O.C.
Manufacturer	:	Cipherlab Co, Ltd.
Model No.	:	RS35
Trade Name	:	CIPHERLAB
FCC ID	:	Q3N-RS35
Applicable Standard	:	IEEE 1528-2013 KDB 447498 D01 v06 KDB 865664 D01 v01r04
Measurement procedures	:	47CFR § 2.1093 KDB 248227 D01 v02r02 KDB 648474 D04 v01r03 KDB 941225 D01 v03r01 KDB 941225 D05 v02r05 KDB 941225 D06 v02r01
Test Result	:	Max. SAR Measurement

Band	Head / Body SAR (1g)	Limb SAR (10g)
WLAN	**1.023** W/kg	**1.429** W/kg
WWAN	**1.193** W/kg	**2.603** W/kg

Application Type : Certification

The above equipment has been tested by DEKRA, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's SAR characteristics under the conditions specified in this report.

Documented By : Anny Chou
(Senior Adm. Specialist / Anny Chou)

Tested By : Vorana Chen
(Senior Engineer / Vorana Chen)

Approved By :
(Director / Vincent Lin)

TABLE OF CONTENTS

Revision History

Report No.	Version	Description	Issued Date
2060284R-E3082130008	V1.0	Initial issue of report.	2020-08-10

1. General Information

1.1 EUT Description

Product Name	Mobile Computer		
Trade Name	CIPHERLAB		
Model No.	RS35		
FCC ID	Q3N-RS35		
TX Frequency (WWAN)	GSM850/WCDMA Band 5/ LTE Band 5: 824MHz ~ 849MHz PCS1900/WCDMA Band 2/ LTE Band 2: 1850MHz ~ 1910MHz WCDMA Band 4/ LTE Band 4: 1710MHz ~ 1755 MHz LTE Band 7: 2500MHz ~2570 MHz; LTE Band 12: 699MHz ~716 MHz LTE Band 13: 777MHz ~787 MHz; LTE Band 17: 704MHz ~716 MHz LTE Band 25: 1850MHz ~1915 MHz; LTE Band 26: 814MHz ~849 MHz LTE Band 38: 2570MHz ~2620MHz; LTE Band 41: 2496MHz ~2690 MHz		
RX Frequency (WWAN)	GSM850/WCDMA Band 5/ LTE Band 5: 869MHz ~ 894MHz PCS1900/WCDMA Band 2/ LTE Band 2: 1930MHz ~ 1990MHz WCDMA Band 4/ LTE Band 4: 2110MHz ~ 2155 MHz LTE Band 7: 2620MHz ~2690 MHz; LTE Band 12: 729MHz ~746 MHz LTE Band 13: 746MHz ~756 MHz; LTE Band 17: 734MHz ~746 MHz LTE Band 25: 1930MHz ~1995 MHz; LTE Band 26: 859MHz ~894 MHz LTE Band 38: 2570MHz ~2620MHz; LTE Band 41: 2496MHz ~2690 MHz		
TX Frequency	802.11b/g/n-20MHz:2412MHz~2462MHz, 802.11n-40MHz: 2422MHz~2452MHz 802.11a/n-20:5180-5320MHz,5500-5720MHz, 5745-5825MHz 802.11n-40/MHz: 5190-5310MHz, 5510-5670MHz, 5755-5795MHz 802.11ac-20MHz: 5720MHz, 802.11ac-40MHz: 5710MHz 802.11ac-80MHz: 5210-5290MHz, 5530-5690MHz, 5775MHz BT : 2402 – 2480MHz		
Channel separation	802.11b/g/n-20MHz: 5 MHz, 802.11a/n-20MHz: 20MHz 802.11n-40: 40MHz, 802.11ac-80MHz: 80MHz BT : 1MHz , BLE : 2MHz		
Number of Channels	802.11b/g/n-20MHz: 11, n-40MHz: 7 802.11a/n-20MHz: 25; 802.11n-40MHz: 12,802.11ac-80MHz: 6 BT : 79 , BLE : 40		
Data Rate	802.11b: 1-11Mbps, 802.11a/g: 6-54Mbps, 802.11n: up to 150Mbps 802.11ac-80MHz: up to 433.3Mbps BT : 3Mbps , BLE : 1Mpbs		
Type of Modulation	2G: GMSK/8PSK; 3G: WCDMA: QPSK; 4G-LTE: QPSK/16-QAM/64-QAM DSSS/OFDM/BPSK/QPSK/16QAM/64QAM/256QAM FHSS: GFSK(1Mbps) / π /4DQPSK(2Mbps) / 8DPSK(3Mbps)		
Antenna Type	PIFA		
Device Category	Portable		
RF Exposure Environment	Uncontrolled		
Summary of test result –Reported Head/Body(Hotspot) (1g SAR (W/Kg)			
Test configuration	WWAN	WLAN	DSS(BT)
Head-Standalone	0.776	N/A	N/A
Body-Standalone	1.193	1.023	0.007
Body-Simultaneous	2.100 (SPLSR=0.021)		
Summary of test result –Reported Limbs 10g SAR (W/Kg)			
Test configuration	WWAN	WLAN	DSS(BT)
Limbs -Standalone	2.603	1.429	0.016
Limbs -Simultaneous	2.832		

1.2 Antenna List

No.	Manufacturer	Part No.	Peak Gain
1	Auden	RS35 (WWAN Main)	0.8 dBi for 698-716 MHz 0.6 dBi for 777-787 MHz 0.1 dBi for 806-849 MHz 4.6 dBi for 1710-1755 MHz 4.4 dBi for 1850-1920 MHz 2.6 dBi for 2494-2690 MHz
2	Auden	RS35 (WWAN Aux)	-3.7 dBi for 728-756 MHz -2.5 dBi for 821-894 MHz -0.5 dBi for 1930-1990 MHz -3.4 dBi for 2110-2155 MHz -2.3 dBi for 2200-2690 MHz
3	Auden	RS35 (WLAN/BT)	0.1dBi for 2.4GHz 1.9dBi for 5.150-5.250 GHz 3 0dBi for 5.250-5.350 GHz 3.6dBi for 5.470-5.725 GHz 2.7dBi For 5.725~5.825GHz

1.3 SAR Test Exclusion Calculation

According to KDB Publication 447498 D01, section 4.3.1, per the calculations of item 1 (Power(mW)/separation (mm)*sqrt(f(GHz)≤3.0), SAR is required as shown in the table below where calculated values are greater than 3.0 :

According to KDB Publication 447498 D01, section 4.3.1, per the calculations of item 1 (Power(mW)/separation (mm)*sqrt(f(GHz)≤7.5), Limb SAR is required as shown in the table below where calculated values are greater than 7.5 :

SAR exclusion calculations for WiFi-SISO and Bluetooth for antenna < 50mm from the user :

Antenna	Tx	Frequency (MHz)	Output Power		Separation distances (mm)						Calculated Threshold Value (≦3.0 SAR is not required)					
			dBm	mW	Back	Right	Left	Top	Bottom	Front	Back	Right	Left	Top	Bottom	Front
Main	WiFi	2462	19	79	5	10	48	5	140	5	24.9	12.5	**2.6**	24.9	>50mm	24.9
Main	WiFi	5240	17.5	56	5	10	48	5	140	5	25.7	12.9	**2.7**	25.7	>50mm	25.7
Main	WiFi	5320	17.5	56	5	10	48	5	140	5	25.9	13.0	**2.7**	25.9	>50mm	25.9
Main	WiFi	5700	17.5	56	5	10	48	5	140	5	26.9	13.4	**2.8**	26.9	>50mm	26.9
Main	WiFi	5825	17.5	56	5	10	48	5	140	5	27.1	13.6	**2.8**	27.1	>50mm	27.1
Main	BT	2480	7	5	5	10	48	5	140	5	**1.6**	**0.8**	**0.2**	**1.6**	>50mm	**1.6**

SAR exclusion calculations for WiFi-SISO and Bluetooth for antenna > 50mm from the user :

Antenna	Tx	Frequency (MHz)	Output Power		Separation distances (mm)						Calculated Threshold Value (SAR test exclusion power,mW)					
			dBm	mW	Back	Right	Left	Top	Bottom	Front	Back	Right	Left	Top	Bottom	Front
Main	WiFi	2462	19	79	5	10	48	5	140	5	<50mm	<50mm	<50mm	<50mm	995.6	<50mm
Main	WiFi	5240	17.5	56	5	10	48	5	140	5	<50mm	<50mm	<50mm	<50mm	965.5	<50mm
Main	WiFi	5320	17.5	56	5	10	48	5	140	5	<50mm	<50mm	<50mm	<50mm	965.0	<50mm
Main	WiFi	5700	17.5	56	5	10	48	5	140	5	<50mm	<50mm	<50mm	<50mm	962.8	<50mm
Main	WiFi	5825	17.5	56	5	10	48	5	140	5	<50mm	<50mm	<50mm	<50mm	962.2	<50mm
Main	BT	2480	7	5	5	10	48	5	140	5	<50mm	<50mm	<50mm	<50mm	995.3	<50mm

SAR exclusion calculations for WWAN for antenna < 50mm from the user :

Antenna	Tx	Frequency (MHz)	Output Power		Separation distances (mm)						Calculated Threshold Value (≤3.0 SAR is not required)					
			dBm	mW	Back	Right	Left	Top	Bottom	Front	Back	Right	Left	Top	Bottom	Front
Main	GSM	850	34.5	2818	5	5	5	143	5	5	519.7	519.7	519.7	>50mm	519.7	519.7
Main	GSM	1900	28.5	708	5	5	5	143	5	5	195.2	195.2	195.2	>50mm	195.2	195.2
Main	WCDMA	1900	21.5	141	5	5	5	143	5	5	38.9	38.9	38.9	>50mm	38.9	38.9
Main	WCDMA	1700	21	126	5	5	5	143	5	5	32.8	32.8	32.8	>50mm	32.8	32.8
Main	WCDMA	850	25	316	5	5	5	143	5	5	58.3	58.3	58.3	>50mm	58.3	58.3
Main	LTE	1900	21.5	141	5	5	5	143	5	5	38.9	38.9	38.9	>50mm	38.9	38.9
Main	LTE	1700	20	100	5	5	5	143	5	5	26.1	26.1	26.1	>50mm	26.1	26.1
Main	LTE	850	25	316	5	5	5	143	5	5	58.3	58.3	58.3	>50mm	58.3	58.3
Main	LTE	2500	20.5	112	5	5	5	143	5	5	35.5	35.5	35.5	>50mm	35.5	35.5
Main	LTE	700	25	316	5	5	5	143	5	5	52.9	52.9	52.9	>50mm	52.9	52.9
Main	LTE	750	25	316	5	5	5	143	5	5	54.8	54.8	54.8	>50mm	54.8	54.8
Main	LTE	700	25	316	5	5	5	143	5	5	52.9	52.9	52.9	>50mm	52.9	52.9
Main	LTE	1900	21.5	141	5	5	5	143	5	5	38.9	38.9	38.9	>50mm	38.9	38.9
Main	LTE	850	25	316	5	5	5	143	5	5	58.3	58.3	58.3	>50mm	58.3	58.3
Main	LTE	2600	25	316	5	5	5	143	5	5	102.0	102.0	102.0	>50mm	102.0	102.0
Main	LTE	2600	25	316	5	5	5	143	5	5	102.0	102.0	102.0	>50mm	102.0	102.0

SAR exclusion calculations for WWAN for antenna > 50mm from the user :

Antenna	Tx	Frequency (MHz)	Output Power		Separation distances (mm)						Calculated Threshold Value (SAR test exclusion power,mW)					
			dBm	mW	Back	Right	Left	Top	Bottom	Front	Back	Right	Left	Top	Bottom	Front
Main	GSM	850	34.5	2818	5	5	5	143	5	5	>50mm	>50mm	>50mm	689.7	>50mm	>50mm
Main	GSM	1900	28.5	708	5	5	5	143	5	5	>50mm	>50mm	>50mm	1038.8	>50mm	>50mm
Main	WCDMA	1900	21.5	141	5	5	5	143	5	5	>50mm	>50mm	>50mm	1038.8	>50mm	>50mm
Main	WCDMA	1700	21	126	5	5	5	143	5	5	>50mm	>50mm	>50mm	1045.0	>50mm	>50mm
Main	WCDMA	850	25	316	5	5	5	143	5	5	>50mm	>50mm	>50mm	689.7	>50mm	>50mm
Main	LTE	1900	21.5	141	5	5	5	143	5	5	>50mm	>50mm	>50mm	1038.8	>50mm	>50mm
Main	LTE	1700	20	100	5	5	5	143	5	5	>50mm	>50mm	>50mm	1045.0	>50mm	>50mm
Main	LTE	850	25	316	5	5	5	143	5	5	>50mm	>50mm	>50mm	689.7	>50mm	>50mm
Main	LTE	2500	20.5	112	5	5	5	143	5	5	>50mm	>50mm	>50mm	1024.9	>50mm	>50mm
Main	LTE	700	25	316	5	5	5	143	5	5	>50mm	>50mm	>50mm	638.2	>50mm	>50mm
Main	LTE	750	25	316	5	5	5	143	5	5	>50mm	>50mm	>50mm	638.2	>50mm	>50mm
Main	LTE	700	25	316	5	5	5	143	5	5	>50mm	>50mm	>50mm	613.3	>50mm	>50mm
Main	LTE	1900	21.5	141	5	5	5	143	5	5	>50mm	>50mm	>50mm	1038.8	>50mm	>50mm
Main	LTE	850	25	316	5	5	5	143	5	5	>50mm	>50mm	>50mm	689.7	>50mm	>50mm
Main	LTE	2600	25	316	5	5	5	143	5	5	>50mm	>50mm	>50mm	1023.0	>50mm	>50mm
Main	LTE	2600	25	316	5	5	5	143	5	5	>50mm	>50mm	>50mm	1023.0	>50mm	>50mm

1.4 Test Environment

Ambient conditions in the laboratory:

Test Mode: WLAN 2.4GHz

Items	Required	Actual
Temperature (°C)	18-25	22.8 ± 2
Humidity (%RH)	30-70	51

Test Mode: WLAN 5GHz

Items	Required	Actual
Temperature (°C)	18-25	23.1 ± 2
Humidity (%RH)	30-70	52

Test Mode: GSM850

Items	Required	Actual
Temperature (°C)	18-25	22.9 ± 2
Humidity (%RH)	30-70	52

Test Mode: PCS1900

Items	Required	Actual
Temperature (°C)	18-25	22.8 ± 2
Humidity (%RH)	30-70	53

Test Mode: WCDMA Band 2

Items	Required	Actual
Temperature (°C)	18-25	22.8 ± 2
Humidity (%RH)	30-70	53

Test Mode: WCDMA Band 4

Items	Required	Actual
Temperature (°C)	18-25	22.8 ± 2
Humidity (%RH)	30-70	53

Test Mode: WCDMA Band 5

Items	Required	Actual
Temperature (°C)	18-25	22.9 ± 2
Humidity (%RH)	30-70	52

Test Mode: LTE Band 2

Items	Required	Actual
Temperature (°C)	18-25	22.8 ± 2
Humidity (%RH)	30-70	53

Test Mode: LTE Band 4

Items	Required	Actual
Temperature (°C)	18-25	22.8 ± 2
Humidity (%RH)	30-70	53

Test Mode: LTE Band 5

Items	Required	Actual
Temperature (°C)	18-25	22.9 ± 2
Humidity (%RH)	30-70	52

Test Mode: LTE Band 7

Items	Required	Actual
Temperature (°C)	18-25	22.6 ± 2
Humidity (%RH)	30-70	54

Test Mode: LTE Band 12

Items	Required	Actual
Temperature (°C)	18-25	22.9 ± 2
Humidity (%RH)	30-70	52

Test Mode: LTE Band 13

Items	Required	Actual
Temperature (°C)	18-25	22.9 ± 2
Humidity (%RH)	30-70	52

Test Mode: LTE Band 17

Items	Required	Actual
Temperature (°C)	18-25	22.9 ± 2
Humidity (%RH)	30-70	52

Test Mode: LTE Band 25

Items	Required	Actual
Temperature (°C)	18-25	22.8 ± 2
Humidity (%RH)	30-70	53

Test Mode: LTE Band 26

Items	Required	Actual
Temperature (°C)	18-25	22.9 ± 2
Humidity (%RH)	30-70	52

Test Mode: LTE Band 38

Items	Required	Actual
Temperature (°C)	18-25	22.6 ± 2
Humidity (%RH)	30-70	54

Test Mode: LTE Band 41

Items	Required	Actual
Temperature (°C)	18-25	22.6 ± 2
Humidity (%RH)	30-70	54

USA : FCC Registration Number: TW3023

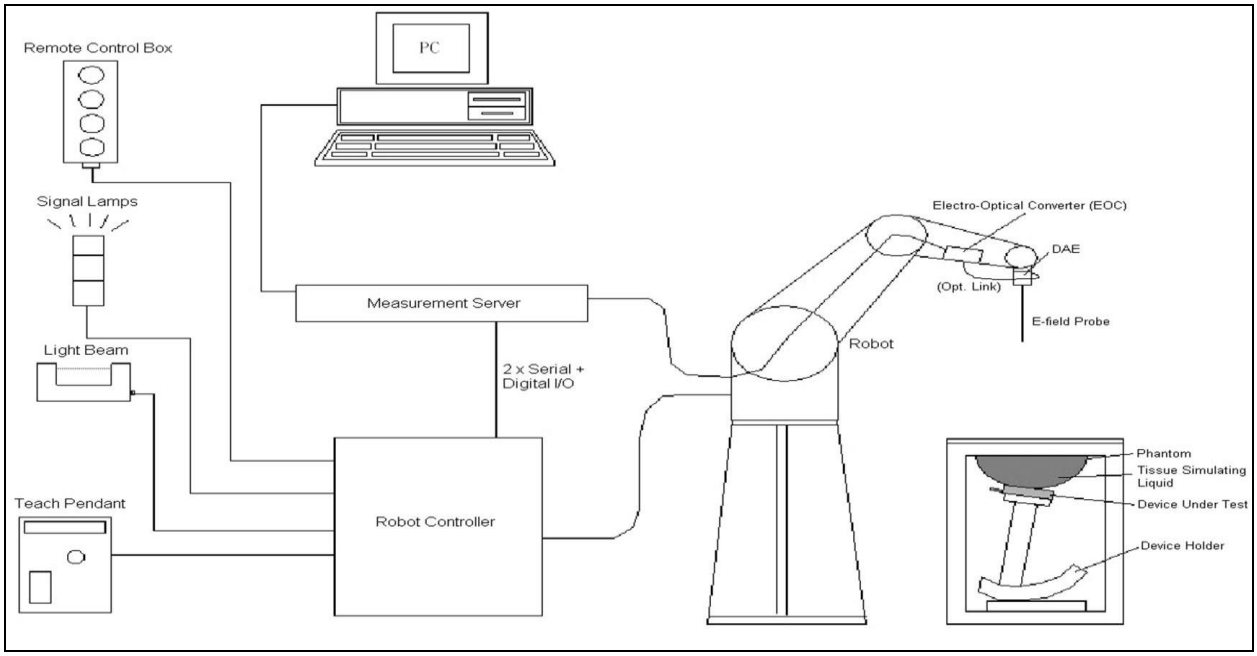
Canada : IC Registration Number: 4075A

Site Description: Accredited by TAF
Accredited Number: 3023

Test Laboratory: DEKRA Testing and Certification Co., Ltd
Address: No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
Phone number: 886-2-8601-3788
Fax number: 886-2-8601-3789
Email address: info.tw@dekra.com
Website: http://www.dekra.com.tw

2. SAR Measurement System

2.1 DASY5 System Description



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

- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- 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 Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running WinXP 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.

2.1.1 Applications

Predefined procedures and evaluations for automated compliance testing with all worldwide standards, e.g., IEEE 1528, OET 65, IEC 62209-1, IEC 62209-2, EN 50360, EN 50383 and others.

2.1.2 Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a $10mm^2$ step integral, with 1mm interpolation used to locate the peak SAR area used for zoom scan assessments.

When an Area Scan has measured all reachable points, it computes the field maxima found in the scanned area, within a range of the global maximum. The range (in dB) is specified in the standards for compliance testing. For example, a 2 dB range is required in IEEE 1528-2013, EN 50361 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan).

2.1.3 Zoom Scan (Cube Scan Averaging)

Zoom Scans are used to assess the peak spatial SAR values within a cubic averaging volume containing 1 g and 10 g of simulated tissue. A density of 1000 kg/m^3 is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1 g cube is 10mm, with the side length of the 10 g cube 21,5mm.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications (including FCC) utilize a physical step of 5x5x7 (8mmx8mmx5mm) providing a volume of 32mm in the X & Y axis, and 30mm in the Z axis.

2.1.4 Uncertainty of Inter-/Extrapolation and Averaging

In order to evaluate the uncertainty of the interpolation, extrapolation and averaged SAR calculation algorithms of the Postprocessor, DASY5 allows the generation of measurement grids which are artificially predefined by analytically based test functions. Therefore, the grids of area scans and zoom scans can be filled with uncertainty test data, according to the SAR benchmark functions of IEEE 1528.The three analytical functions shown in equations as below are used to describe the possible range of the expected SAR distributions for the tested handsets. The field gradients are covered by the spatially flat

distribution f1, the spatially steep distribution f3 and f2 accounts for H-field cancellation on the phantom/tissue surface.

$$f_1(x,y,z) = Ae^{-\frac{z}{2a}}\cos^2\left(\frac{\pi}{2}\frac{\sqrt{x'^2+y'^2}}{5a}\right)$$

$$f_2(x,y,z) = Ae^{-\frac{z}{a}}\frac{a^2}{a^2+x'^2}\left(3-e^{-\frac{2z}{a}}\right)\cos^2\left(\frac{\pi}{2}\frac{y'}{3a}\right)$$

$$f_3(x,y,z) = A\frac{a^2}{\frac{a^2}{4}+x'^2+y'^2}\left(e^{-\frac{2z}{a}}+\frac{a^2}{2(a+2z)^2}\right)$$

2.2 DASY5 E-Field Probe

The SAR measurement is conducted with the dosimetric probe manufactured by SPEAG. The probe is specially designed and calibrated for use in liquid with high permittivity. The dosimetric probe has special calibration in liquid at different frequency.

SPEAG conducts the probe calibration in compliance with international and national standards (e.g. IEEE 1528, EN 62209-1, IEC 62209, etc.) under ISO 17025. The calibration data are in Appendix D**.**

2.2.1 Isotropic E-Field Probe Specification

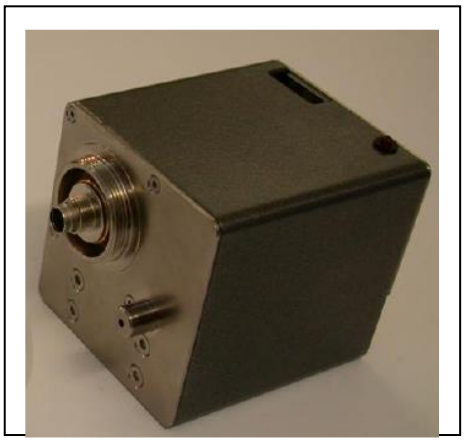
Model	Ex3DV4	
Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)	
Frequency	10 MHz to 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)	
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)	
Dynamic Range	10 µW/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)	
Dimensions	Overall length: 330 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm	
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.	

2.3 Boundary Detection Unit and Probe Mounting Device

The DASY probes use a precise connector and an additional holder for the probe, consisting of a plastic tube and a flexible silicon ring to center the probe. The connector at the DAE is flexibly mounted and held in the default position with magnets and springs. Two switching systems in the connector mount detect frontal and lateral probe collisions and trigger the necessary software response.

2.4 DATA Acquisition Electronics (DAE) and Measurement Server

The data acquisition electronics (DAE) consists 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 and 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 input impedance of the DAE4 is 200M Ohm; the inputs are symmetrical and floating. Common mode rejection is above 80dB.



The DASY5 measurement server is based on a PC/104 CPU board with a 400MHz intel ULV Celeron, 128MB chipdisk and 128MB RAM. The necessary circuits for communication with the DAE electronics box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY5 I/O board, which is directly connected to the PC/104 bus of the CPU board.

2.5 Robot

The DASY5 system uses the high precision robots TX90 XL type out of the newer series from Stäubli SA (France). For the 6-axis controller DASY5 system, the CS8C robot controller version from Stäubli is used.
The XL robot series have many features that are important for our application:

- High precision (repeatability 0.02 mm)
- High reliability (industrial design)
- Jerk-free straight movements
- Low ELF interference (the closed metallic construction shields against motor control fields)
- 6-axis controller

2.6 Light Beam Unit

The light beam switch allows automatic "tooling" of the probe. During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip.
The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.

2.7 Device Holder

The DASY5 device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR).

Thus the device needs no repositioning when changing the angles.

The DASY5 device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity εr =3 and loss tangent δ = 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.

2.8 SAM Twin Phantom

The SAM twin phantom is a fiberglass shell phantom with 2mm shell thickness (except the ear region where shell thickness increases to 6mm). It has three measurement areas:

- Left head
- Right head
- Flat phantom

The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters. On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

3. Tissue Simulating Liquid

3.1 The composition of the tissue simulating liquid

INGREDIENT (% Weight)	750MHz Head	1750MHz Head	1950MHz Head	2450MHz Head	2600MHz Head	5200MHz Head	5800MHz Head
Water	40.45	52.55	54.90	46.70	44.53	67.63	68.29
Salt	1.45	0.34	0.18	0	0.17	0	0
Sugar	57.60	0	0	0	0	0	0
HEC	0.40	0	0	0	0	0	0
Preventol	0.10	0	0	0	0	0	0
DGBE	0	47.50	44.92	53.30	55.30	3.38	2.44
Triton X-100	0	0	0	0	0	28.99	29.27

3.2 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using APREL Dielectric Probe Kit and Agilent E5071C Vector Network Analyzer.

Head Tissue Simulate Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε_r	σ [s/m]	
750 MHz	Reference result ± 5% window	41.9 39.81 to 44	0.89 0.85 to 0.93	N/A
	30-Jul-20	42.26	0.88	21.8
704 MHz	Channel 23060	42.72	0.86	21.8
707.5 MHz	Channel 23095	42.69	0.86	21.8
709 MHz	Channel 23780	42.67	0.86	21.8
710 MHz	Channel 23790	42.65	0.87	21.8
711 MHz	Channel 23130	42.64	0.87	21.8
711 MHz	Channel 23800	42.64	0.87	21.8
782 MHz	Channel 23230	41.91	0.89	21.8
824.2 MHz	Channel 128	41.59	0.89	21.8
826.4 MHz	Channel 4132	41.57	0.89	21.8
829 MHz	Channel 20450	41.51	0.89	21.8
836.4 MHz	Channel 189	41.46	0.90	21.8
836.5 MHz	Channel 20525	41.45	0.90	21.8
836.6 MHz	Channel 4183	41.45	0.90	21.8
844 MHz	Channel 20600	41.29	0.90	21.8
846.6 MHz	Channel 4233	41.33	0.90	21.8
848.8 MHz	Channel 251	41.30	0.90	21.8

Head Tissue Simulate Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε r	σ [s/m]	
1750MHz	Reference result ± 5% window	40.1 38.1 to 42.11	1.37 1.30 to 1.44	N/A
	06-Aug-20	40.42	1.37	21.9
1712.4 MHz	Channel 1312	41.02	1.32	21.9
1720 MHz	Channel 20050	40.41	1.33	21.9
1732.5 MHz	Channel 20175	40.63	1.35	21.9
1732.6 MHz	Channel 1413	40.61	1.35	21.9
1745 MHz	Channel 20300	40.50	1.36	21.9
1752.6 MHz	Channel 1513	40.37	1.37	21.9

Head Tissue Simulate Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε r	σ [s/m]	
1950MHz	Reference result ± 5% window	40 38 to 42	1.4 1.33 to 1.47	N/A
	03-Aug-20	40.26	1.41	21.6
1850.2 MHz	Channel 512	41.05	1.33	21.6
1852.4 MHz	Channel 9262	41.08	1.33	21.6
1860 MHz	Channel 18700	40.92	1.34	21.6
1860 MHz	Channel 26140	40.91	1.34	21.6
1880 MHz	Channel 661	40.83	1.36	21.6
1880 MHz	Channel 9400	40.83	1.36	21.6
1880 MHz	Channel 18900	40.83	1.36	21.6
1882.5 MHz	Channel 26365	40.81	1.36	21.6
1900 MHz	Channel 19100	40.49	1.39	21.6
1905 MHz	Channel 26590	40.6	1.39	21.6
1907.6 MHz	Channel 9538	40.57	1.39	21.6
1909.8 MHz	Channel 810	40.52	1.40	21.6

Head Tissue Simulate Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε_r	σ [s/m]	
2450 MHz	Reference result ± 5% window	39.2 37.24 to 41.16	1.8 1.71 to 1.89	N/A
	28-Jul-20	39.82	1.84	21.7
2412 MHz	Channel 1	40.32	1.80	21.7
2437 MHz	Channel 6	40.08	1.82	21.7
2441 MHz	Channel 39	39.94	1.83	21.7
2462 MHz	Channel 11	39.72	1.85	21.7

Head Tissue Simulate Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε r	σ [s/m]	
2600MHz	Reference result ± 5% window	39 37.05 to 40.95	1.96 1.86 to 2.06	N/A
	26-Jul-20	39.18	1.94	21.5
2506 MHz	Channel 39750	40.21	1.87	21.5
2510 MHz	Channel 20850	40.09	1.88	21.5
2535 MHz	Channel 21100	39.85	1.90	21.5
2560 MHz	Channel 21350	39.68	1.91	21.5
2580 MHz	Channel 37850	39.45	1.92	21.5
2593 MHz	Channel 40620	39.29	1.94	21.5
2595 MHz	Channel 38000	39.23	1.94	21.5
2610 MHz	Channel 38150	38.98	1.96	21.5
2680 MHz	Channel 41490	38.76	1.98	21.5

Head Tissue Simulate Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε r	σ [s/m]	
5250MHz	Reference result ± 5% window	35.95 34.15 to 37.75	4.71 4.47 to 4.95	N/A
	31-Jul-20	35.51	4.84	22
5220 MHz	Channel 44	35.64	4.78	22
5300 MHz	Channel 60	35.28	4.91	22

Head Tissue Simulate Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε r	σ [s/m]	
5600MHz	Reference result ± 5% window	35.5 33.73 to 37.28	5.07 4.82 to 5.32	N/A
	31-Jul-20	34.77	5.29	22
5580 MHz	Channel 116	34.83	5.18	22

Head Tissue Simulate Measurement				
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε r	σ [s/m]	
5800MHz	Reference result ± 5% window	35.3 33.54 to 37.07	5.27 5.01 to 5.53	N/A
	31-Jul-20	34.42	5.49	22
5745 MHz	Channel 149	34.61	5.43	22
5785 MHz	Channel 157	34.46	5.48	22
5825 MHz	Channel 165	34.39	5.50	22

3.3 Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEC 62209-1 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head tissue parameters that have not been specified are interpolated according to the head parameters specified in IEC 62209-1

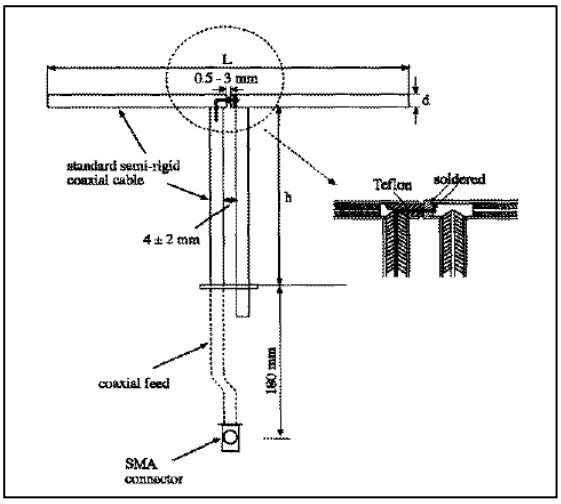
Target Frequency	Head	
(MHz)	ε_r	σ (S/m)
300	45.3	0.87
450	43.5	0.87
750	41.9	0.89
835	41.5	0.90
900	41.5	0.97
1450	40.5	1.20
1640	40.2	1.31
1750	40.1	1.37
1800 – 2000	40.0	1.40
2450	39.2	1.80
3000	38.5	2.40
5000	36.2	4.45
5200	36.0	4.66
5400	35.8	4.86
5600	35.3	5.27
5800	35.3	5.27
6000	35.1	5.48

(ε_r = relative permittivity, σ = conductivity and ρ = 1000 kg/m^3)

4. SAR Measurement Procedure

4.1 SAR System Check

4.1.1 Dipoles



The dipoles used is based on the IEEE-1528 standard, and is complied with mechanical and electrical specifications in line with the requirements of both IEEE and FCC Supplement C. the table below provides details for the mechanical and electrical specifications for the dipoles.

Frequency	L (mm)	h (mm)	d (mm)
750MHz	176.0	100.0	6.35
1750MHz	75.2	42.9	3.6
1950MHz	66.3	38.5	3.6
2450MHz	51.5	30.4	3.6
2600MHz	48.5	28.8	3.6
5200M~5800MHz	20.6	40.3	3.6

4.1.2 System Check Result

System Performance Check at 750MHz
Dipole Kit: D750V3

Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
750 MHz	Reference result ± 10% window	8.58 7.72 to 9.44	5.61 5.05 to 6.17	N/A
	30-Jul-20	8.44	5.44	21.8

Note: (1) The power level is used 250mW
(2) All SAR values are normalized to 1W forward power.
(3) The reference result is from Appendix E.

System Performance Check at 1750MHz, 1950MHz, 2450MHz, 2600MHz

Dipole Kit: D1750V2

Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
1750 MHz	Reference result ± 10% window	37.30 33.57 to 41.03	19.6 17.64 to 21.56	N/A
	06-Aug-20	39.24	20.4	21.9

Dipole Kit: D1950V3

Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
1950 MHz	Reference result ± 10% window	39.7 35.73 to 43.67	20.7 18.63 to 22.77	N/A
	03-Aug-20	40.4	20.44	21.6

Dipole Kit: D2450V2

Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
2450 MHz	Reference result ± 10% window	53.1 47.79 to 58.41	24.6 22.14 to 27.06	N/A
	28-Jul-20	52.4	22.88	21.7

Dipole Kit: ALS-D-2600

Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
2600 MHz	Reference result ± 10% window	57.9 52.11 to 63.69	25.7 23.13 to 28.27	N/A
	26-Jul-20	56.8	25	21.5

Note: (1) The power level is used 250mW
(2) All SAR values are normalized to 1W forward power.
(3) The reference result is from Appendix E.

System Performance Check at 5250MHz, 5600MHz and 5800MHz

Dipole Kit: D5GHzV2

Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
5250 MHz	Reference result ± 10% window	81.6 73.44 to 89.76	23.2 20.88 to 25.52	N/A
	31-Jul-20	86.1	23.6	22
Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
5600 MHz	Reference result ± 10% window	85.9 77.31 to 94.49	24.2 21.78 to 26.62	N/A
	31-Jul-20	86.3	24.2	22
Frequency [MHz]	Description	SAR [w/kg] 1g	SAR [w/kg] 10g	Tissue Temp. [°C]
5800 MHz	Reference result ± 10% window	82.0 73.80 to 90.20	22.8 20.52 to 25.08	N/A
	31-Jul-20	77.5	21.8	22

Note: (1) The power level is used 100mW
(2) All SAR values are normalized to 1W forward power.
(3) The reference result is from Appendix E.

4.2 SAR Measurement Procedure

The Dasy5 calculates SAR using the following equation,

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

σ: represents the simulated tissue conductivity

ρ: represents the tissue density

The EUT is set to transmit at the required power in line with product specification, at each frequency relating to the LOW, MID, and HIGH channel settings.

Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the Universal Phantom where the maximum area scan dimensions are larger than the physical size of the resonating antenna. When the scan size is not large enough to cover the peak SAR distribution, it is modified by either extending the area scan size in both the X and Y directions, or the device is shifted within the predefined area.

The area scan is then run to establish the peak SAR location (interpolated resolution set at $1mm^2$)which is then used to orient the center of the zoom scan. The zoom scan is then executed and the 1g and 10g averages are derived from the zoom scan volume (interpolated resolution set at $1mm^3$).

5. SAR Exposure Limits

SAR assessments have been made in line with the requirements of IEEE-1528, FCC Supplement C, and comply with ANSI/IEEE C95.1-1992 “Uncontrolled Environments” limits. These limits apply to a location which is deemed as “Uncontrolled Environment” which can be described as a situation where the general public may be exposed to an RF source with no prior knowledge or control over their exposure.

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

Type Exposure	Uncontrolled Environment Limit
Spatial Peak SAR (1g cube tissue for brain or body)	**1.60 W/kg**
Spatial Average SAR (whole body)	**0.08 W/kg**
Spatial Peak SAR (10g for hands, feet, ankles and wrist)	**4.00 W/kg**

6. Test Equipment List

Instrument	Manufacturer	Model No.	Serial No.	Last Calibration	Next Calibration
Stäubli Robot TX60L	Stäubli	TX60L	F09/5BL1A1/A06	2009/05/18	only once
Controller	Speag	CS8c	N/A	2009/05/18	only once
Reference Dipole 750MHz	Speag	D750V3	1031	2020/05/27	2023/05/26
Reference Dipole 1750MHz	Speag	D1750V2	1113	2019/11/21	2022/11/20
Reference Dipole 1950MHz	Speag	D1950V3	1213	2019/11/05	2022/11/04
Reference Dipole 2450MHz	Speag	D2450V2	930	2019/11/21	2022/11/20
Reference Dipole 2600MHz	Speag	ALS-D-2600	QTK-225	2019/05/14	2022/05/13
Reference Dipole 5GHz	Speag	D5GHzV2	1041	2020/05/25	2023/05/24
SAM Twin Phantom	Speag	QD000 P40 CA	Tp 1515	N/A	N/A
Device Holder	Speag	N/A	N/A	N/A	N/A
Data Acquisition Electronic	Speag	DAE4	1207	2019/11/14	2020/11/13
E-Field Probe	Speag	EX3DV4	3698	2019/11/22	2020/11/21
SAR Software	Speag	DASY52	V52.10.0.1446	N/A	N/A
Aprel Dipole Spaccer	Aprel	ALS-DS-U	QTK-295	N/A	N/A
Power Amplifier	Mini-Circuit	ZHL-42	D051404-20	N/A	N/A
Directional Coupler	Agilent	87300C	MY44300353	N/A	N/A1
Attenuator	Woken	WATT-218FS-10	N/A	N/A	N/A1
Attenuator	Mini-Circuit	BW-S20W2+	N/A	N/A	N/A1
Universal Radio Communication	R&S	CMU200	104846	2019/08/11	2020/08/10
Universal Radio Communication	Anritsu	MT8820C	6201465467	2019/07/30	2020/07/29
Universal Radio Communication	R&S	CMW500	157304	2019/11/13	2020/11/12
Vector Network	Agilent	E5071C	MY46106342	2019/09/09	2020/09/08
Signal Generator	Anritsu	MG3694A	041902	2019/08/23	2020/08/22
Power Meter	Anritsu	ML2487A	6K00001447	2019/10/24	2020/10/23
Wide Bandwidth Sensor	Anritsu	MA2411B	1339194	2019/10/24	2020/10/23

Note: 1. System Check, the path loss measured by the network analyzer, includes the signal generator, amplifier, cable, attenuator and directional coupler.

7. Measurement Uncertainty

DASY5 Uncertainty (According to IEEE 1528-2013) Measurement uncertainty for 30 MHz to 3 GHz								
Error Description	Uncert. value	Prob. Dist.	Div.	(c_i) 1g	(c_i) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(v_i) v_{eff}
Measurement System								
Probe Calibration	±6%	N	1	1	1	±6.0%	±6.0%	∞
Axial Isotropy	±4.7%	R	√3	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	√3	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±1.0%	R	√3	1	1	±0.6%	±0.6%	∞
Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	√3	1	1	±0.6%	±0.6%	∞
Modulation Response	±2.4%	R	√3	1	1	±1.4%	±1.4%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	√3	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	√3	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	√3	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	√3	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.4%	R	√3	1	1	±0.2%	±0.2%	∞
Probe Positioning	±2.9%	R	√3	1	1	±1.7%	±1.7%	∞
Max. SAR Eval.	±4.0%	R	√3	1	1	±1.2%	±1.2%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	√3	1	1	±2.9%	±2.9%	∞
Power Scaling	±0%	R	√3	1	1	±0.0%	±0.0%	
Phantom and Setup								
Phantom Uncertainty	±6.1%	R	√3	1	1	±3.5%	±3.5%	∞
SAR correction	±1.9%	R	√3	1	0.84	±1.1%	±0.9%	∞
Liquid Conductivity (meas.)	±2.5%	R	√3	0.78	0.71	±1.1%	±1.0%	∞
Liquid Permittivity (meas.)	±2.5%	R	√3	0.26	0.26	±0.3%	±0.4%	∞
Temp. unc. - Conductivity	±3.4%	R	√3	0.78	0.71	±1.5%	±1.4%	∞
Temp. unc. - Permittivity	±0.4%	R	√3	0.23	0.26	±0.1%	±0.1%	∞
Combined Std. Uncertainty						±11.2%	±11.1%	361
Expanded STD Uncertainty						±22.3%	±22.2%	

DASY5 Uncertainty (According to IEEE 1528-2013) Measurement uncertainty for 3GHz to 6 GHz								
Error Description	Uncert. value	Prob. Dist.	Div.	(c_i) 1g	(c_i) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(v_i) v_{eff}
Measurement System								
Probe Calibration	±6.55%	N	1	1	1	±6.55%	±6.55%	∞
Axial Isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±2.0%	R	$\sqrt{3}$	1	1	±1.2%	±1.2%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Modulation Response	±2.4%	R	$\sqrt{3}$	1	1	±1.4%	±1.4%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Probe Positioning	±6.7%	R	$\sqrt{3}$	1	1	±3.9%	±3.9%	∞
Post-processing	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Power Scaling	±0%	R	$\sqrt{3}$	1	1	±0.0%	±0.0%	
Phantom and Setup								
Phantom Uncertainty	±6.6%	R	$\sqrt{3}$	1	1	±3.8%	±3.8%	∞
SAR correction	±1.9%	R	$\sqrt{3}$	1	1	±1.1%	±0.9%	∞
Liquid Conductivity (meas.)	±2.5%	R	$\sqrt{3}$	1	0.84	±1.1%	±1.0%	∞
Liquid Permittivity (meas.)	±2.5%	R	$\sqrt{3}$	0.26	0.26	±0.3%	±0.4%	∞
Temp. unc. - Conductivity	±3.4%	R	$\sqrt{3}$	0.78	0.71	±1.5%	±1.4%	∞
Temp. unc. - Permittivity	±0.4%	R	$\sqrt{3}$	0.23	0.26	±0.1%	±0.1%	∞
Combined Std. Uncertainty						±12.3%	±12.2%	748
Expanded STD Uncertainty						±24.6%	±24.5%	

8. Conducted Power Measurement (Including tolerance allowed for production unit)

WLAN 2.4G 1TX SISO

	Frequency	Mode	BW	SISO-Main(TX1)			
				CH	PK Power	AV Power	AV Target
DSSS/OFDM mode specified maximum output power at an antenna port	WLAN 2.4GHz	b	20	1	21.39	18.78	19
				6	21.52	18.82	19
				11	21.01	18.47	19
				12	N/A	N/A	N/A
				13	N/A	N/A	N/A
		g	20	1	25.12	17.45	18
				6	25.87	17.69	18
				10	24.93	17.35	18
				11	23.6	15.66	16
				13	N/A	N/A	N/A
		n(HT)	20	1	24.65	16.37	16.5
				6	25.12	16.31	16.5
				10	24.48	16.39	16.5
				11	22.7	13.81	14
				13	N/A	N/A	N/A
			40	3	25.44	16.06	16.5
				6	25.53	16.49	16.5
				8	24.65	16.27	16.5
				9	24.16	14.44	14.5
				11	N/A	N/A	N/A

WLAN 5G 1TX SISO

OFDM mode specified maximum output power at an antenna port

Frequency	Mode	BW	SISO-Main(TX1) CH	AV Power	AV Target	Frequency	Mode	BW	SISO-Main(TX1) CH	AV Power	AV Target
U-NII-1 (5150~5250MHz)	a	20	36	17.48	17.5	U-NII-2A (5250~5350MHz)	a	20	52	17.23	17.5
			40	17.15	17.5				56	17.15	17.5
			44	17.47	17.5				60	17.48	17.5
			48	17.31	17.5				64	17.13	17.5
	n(HT)	20	36	16.74	17		n(HT)	20	52	16.77	17
			40	16.75	17				56	16.61	17
			44	16.61	17				60	16.69	17
			48	16.953	17				64	16.6	17
		40	38	13.41	13.5			40	54	16.62	17
			46	16.95	17				62	13.55	14
	ac	80	42	12.6	13		ac	80	58	14.51	15
	U-NII-1 + U-NII-2A						ac	160	50	N/A	N/A
U-NII-2C (5470~5650MHz)	a	20	100	17.15	17.5	5.65 GHz & U-NII-3 (5725~5850MHz)	a	20	132	17.21	17.5
			112	17.12	17.5				149	17.37	17.5
			116	17.26	17.5				157	17.42	17.5
			128	17.19	17.5				165	17.38	17.5
	n(HT)	20	100	16.66	17		n(HT)	20	132	16.59	17
			112	16.69	17				149	16.42	17
			116	16.84	17				157	16.37	17
			128	16.53	17				165	16.39	17
		40	102	11.67	12			40	134	16.8	17
			110	16.91	17				151	16.76	17
			118	16.59	17				159	16.68	17
			126	16.65	17		ac	20	144	N/A	N/A
	ac	80	106	11.83	12			40	142	N/A	N/A
			122	14.73	15			80	138	14.7	15
		160	114	N/A	N/A				155	14.62	15

BT Only Support Main

Bluetooth mode maximum output power	Frequency	Mode	Modulation	SISO-Main(TX1)				SISO-Aux(TX2)			
				CH	PK Power	AV Power	AV Target	CH	PK Power	AV Power	AV Target
	BT 2.4GHz	BR	GFSK	0	N/A	N/A	N/A	0	6.12	5.87	7
				39	N/A	N/A	N/A	39	7.20	6.96	7
				78	N/A	N/A	N/A	78	5.96	5.70	7
		EDR	8DPSK	0	N/A	N/A	N/A	0	1.93	-0.74	1
				39	N/A	N/A	N/A	39	3.12	0.47	1
				78	N/A	N/A	N/A	78	2.35	-0.27	1
		BLE	GFSK	0	N/A	N/A	N/A	0	0.31	-0.02	1
				19	N/A	N/A	N/A	19	-1.82	-2.33	1
				39	N/A	N/A	N/A	39	-2.93	-3.61	1

Mode		WWAN Max Power (dBm) (Including tolerance)
GSM 850	VOICE	34.5
	GPRS Class 8	34.5
	GPRS Class 10	31.0
	GPRS Class 11	29.0
	GPRS Class 12	28.0
PCS 1900	VOICE	28.5
	GPRS Class 8	28.5
	GPRS Class 10	27.5
	GPRS Class 11	26.0
	GPRS Class 12	25.0
WCDMA BAND 2	RMC	21.5
	HSDPA	21.5
	HSUPA	21.5
WCDMA BAND 4	RMC	21.0
	HSDPA	21.0
	HSUPA	21.0
WCDMA BAND 5	RMC	25.0
	HSDPA	25.0
	HSUPA	25.0
LTE Band 2	QPSK	21.5
LTE Band 4	QPSK	20.0
LTE Band 5	QPSK	25.0
LTE Band 7	QPSK	20.5
LTE Band 12	QPSK	25.0
LTE Band 13	QPSK	25.0
LTE Band 17	QPSK	25.0
LTE Band 25	QPSK	21.5
LTE Band 26	QPSK	25.0
LTE Band 38	QPSK	25.0
LTE Band 41	QPSK	25.0

Band	GSM 850			GSM 1900		
CHANNEL	128	189	251	512	661	810
VOICE	32.11	32.33	32.51	28.33	28.13	28.21
GPRS Class 8	32.68	32.98	33.08	28.22	28.36	27.94
GPRS Class 10	29.37	29.84	30.00	26.94	27.49	27.14
GPRS Class 11	27.38	27.63	27.63	25.47	25.81	25.47
GPRS Class 12	26.07	26.33	26.37	24.01	24.62	24.16
EGPRS Class 8	27.30	27.57	27.59	26.34	26.55	26.27
EGPRS Class 10	25.84	26.24	26.06	25.16	25.33	25.07
EGPRS Class 11	24.21	24.50	24.40	23.40	23.61	23.33
EGPRS Class 12	22.52	22.83	23.07	20.98	21.45	21.08
Note: Unit : dBm						

Band	WCDMA Band 2			WCDMA Band 4			WCDMA Band 5		
CHANNEL	9262	9400	9538	1312	1413	1513	4132	4183	4233
VOICE	19.23	19.44	19.57	19.45	19.46	19.60	23.53	23.40	23.42
RMC	19.17	19.34	19.52	19.47	19.45	19.54	23.48	23.26	24.06
HSDPA Set 1	18.20	18.32	18.53	18.36	18.38	18.50	22.62	22.49	22.53
HSDPA Set 2	17.49	17.90	17.89	17.99	17.95	18.09	22.24	22.04	22.04
HSDPA Set 3	17.55	17.72	17.94	17.90	18.04	18.17	22.17	22.02	22.10
HSDPA Set 4	17.46	17.76	18.03	17.99	17.96	18.16	22.31	21.98	22.02
HSUPA Set 1	18.01	18.31	18.52	18.41	18.45	18.51	22.12	22.06	22.22
HSUPA Set 2	16.07	16.29	16.50	16.42	16.47	16.61	20.33	20.32	20.61
HSUPA Set 3	17.14	17.24	17.49	17.31	17.55	17.49	21.32	21.35	21.53
HSUPA Set 4	16.10	16.25	16.44	16.45	16.49	16.69	20.35	20.39	20.60
HSUPA Set 5	18.12	18.34	18.53	18.38	18.11	18.57	22.37	22.43	22.60
Note: Unit : dBm									

Channel	Modulation	LTE Band 2 (1900MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	20.17	19.70	19.80	19.77	19.95	19.71
		1	#Mid	20.37	19.89	**20.25**	19.91	**20.03**	20.12
		1	#Max	20.42	19.76	19.69	19.97	19.91	19.83
		50%	#0	20.39	19.19	19.03	19.07	19.06	19.09
		50%	#Mid	20.51	19.12	19.05	19.02	19.01	18.98
		50%	#Max	**20.57**	18.99	19.02	19.03	18.99	18.86
		100%	--	19.39	18.94	18.98	19.00	19.05	19.04
	16QAM	1	#0	19.24	**19.11**	18.56	18.80	18.92	18.25
		1	#Mid	19.12	18.63	**18.57**	18.95	**18.93**	**19.14**
		1	#Max	19.21	18.82	18.45	18.69	18.71	18.60
		50%	#0	19.38	18.07	18.27	18.13	18.08	18.19
		50%	#Mid	**19.52**	18.00	18.21	18.24	18.09	18.10
		50%	#Max	19.46	18.07	18.01	18.07	18.01	18.01
		100%	--	18.49	18.08	18.07	18.07	18.17	18.07
	64QAM	1	#0	17.65	17.56	17.83	18.16	18.20	18.16
		1	#Mid	18.08	18.01	18.04	18.22	18.35	18.61
		1	#Max	17.76	17.72	17.77	18.59	17.94	18.47
		50%	#0	18.16	17.02	17.18	17.42	17.08	17.29
		50%	#Mid	18.35	17.06	17.29	17.08	17.23	17.34
		50%	#Max	18.22	17.14	17.42	17.42	17.14	17.19
		100%	--	16.78	17.02	17.03	17.23	17.07	17.18
Mid	QPSK	1	#0	20.14	19.65	19.59	19.66	19.82	19.57
		1	#Mid	20.33	19.90	19.80	**20.07**	19.95	20.01
		1	#Max	20.21	19.55	19.46	19.80	19.68	19.49
		50%	#0	20.16	19.04	18.91	18.92	18.98	18.97
		50%	#Mid	20.28	18.97	18.94	18.89	18.95	18.96
		50%	#Max	20.29	18.87	18.94	18.93	18.93	18.84
		100%	--	19.25	18.90	18.87	18.87	18.94	18.91
	16QAM	1	#0	19.04	18.71	18.30	18.75	18.67	18.85
		1	#Mid	19.01	18.60	18.31	18.85	18.62	18.97
		1	#Max	19.25	18.78	18.31	18.55	18.65	18.66

		50%	#0	19.32	17.99	18.13	18.03	18.03	18.13
		50%	#Mid	19.46	18.14	18.00	18.01	18.00	17.99
		50%	#Max	19.07	17.96	18.09	17.96	17.98	18.02
		100%	--	18.40	17.91	17.94	18.01	18.06	17.99
	64QAM	1	#0	18.09	18.11	18.12	17.74	17.39	18.41
		1	#Mid	18.31	18.06	18.33	17.78	17.36	18.62
		1	#Max	18.10	17.99	18.12	17.85	17.55	18.38
		50%	#0	18.20	17.18	17.42	17.12	17.26	17.26
		50%	#Mid	18.21	17.08	17.39	17.32	17.19	17.25
		50%	#Max	18.67	17.21	17.40	17.25	17.23	17.26
		100%	--	16.87	17.24	17.14	17.06	17.20	17.05
High	QPSK	1	#0	20.26	19.79	19.63	19.77	19.91	19.65
		1	#Mid	20.34	**20.10**	19.87	19.88	19.93	**20.17**
		1	#Max	20.31	19.91	19.51	19.67	19.84	19.58
		50%	#0	20.45	18.94	18.95	19.09	19.08	18.97
		50%	#Mid	20.34	18.94	19.00	19.05	19.05	19.01
		50%	#Max	20.36	18.98	19.02	19.06	19.06	18.99
		100%	--	19.32	19.07	19.00	19.02	19.04	19.04
	16QAM	1	#0	19.14	18.98	18.54	**19.30**	18.79	18.57
		1	#Mid	19.06	18.81	18.54	19.01	18.70	19.01
		1	#Max	19.09	18.89	18.45	18.75	18.73	18.73
		50%	#0	19.43	17.74	17.82	18.26	18.09	18.10
		50%	#Mid	19.39	18.14	17.84	18.32	18.08	18.17
		50%	#Max	19.31	18.12	18.03	18.03	17.99	18.06
		100%	--	18.20	17.85	18.13	18.06	18.07	18.08
	64QAM	1	#0	18.25	18.02	18.02	17.77	18.67	18.07
		1	#Mid	18.34	18.26	18.27	17.89	18.82	18.53
		1	#Max	18.31	17.97	17.86	17.51	17.63	17.88
		50%	#0	18.33	16.95	17.10	17.27	17.13	17.30
		50%	#Mid	18.44	16.77	17.25	17.22	17.26	17.10
		50%	#Max	18.51	16.97	17.18	17.30	17.10	17.23
		100%	--	17.42	17.10	17.09	17.17	17.11	17.12

Channel	Modulation	LTE Band 4 (1700MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	19.49	19.48	18.99	19.06	19.04	18.99
		1	#Mid	19.62	19.43	19.56	19.49	19.46	19.62
		1	#Max	19.49	19.50	19.50	19.20	19.33	19.04
		50%	#0	19.56	18.39	18.25	18.38	18.30	18.32
		50%	#Mid	19.71	18.41	18.35	18.34	18.36	18.32
		50%	#Max	19.55	18.40	18.32	18.41	18.32	18.25
		100%	--	18.50	18.35	18.31	18.26	18.37	18.39
	16QAM	1	#0	18.18	18.42	17.81	18.08	18.19	18.02
		1	#Mid	18.51	18.45	18.23	18.26	18.15	18.29
		1	#Max	18.16	18.43	17.93	18.19	18.05	18.03
		50%	#0	18.49	17.49	17.26	17.39	17.27	17.32
		50%	#Mid	18.50	17.43	17.48	17.36	17.40	17.35
		50%	#Max	18.48	17.51	17.36	17.43	17.35	17.26
		100%	--	17.43	17.37	17.34	17.39	17.38	17.39
	64QAM	1	#0	17.07	16.87	17.15	17.27	17.43	17.67
		1	#Mid	17.64	17.38	17.47	17.57	17.94	18.09
		1	#Max	17.31	17.09	17.08	17.41	17.51	17.89
		50%	#0	17.56	16.56	16.37	16.64	16.63	16.58
		50%	#Mid	17.62	16.39	16.59	16.62	16.72	16.68
		50%	#Max	17.58	16.59	16.41	16.72	16.62	16.63
		100%	--	16.79	16.64	16.44	16.35	16.60	16.59
Mid	QPSK	1	#0	19.61	19.19	19.25	19.24	19.12	19.06
		1	#Mid	19.59	19.42	**19.66**	19.50	19.49	19.57
		1	#Max	19.52	19.22	19.19	19.23	19.48	19.60
		50%	#0	19.77	18.56	18.40	18.35	18.37	18.33
		50%	#Mid	19.78	18.48	18.51	18.39	18.32	18.28
		50%	#Max	19.67	18.52	18.33	18.30	18.34	18.26
		100%	--	18.55	18.40	18.41	18.34	18.34	18.29
	16QAM	1	#0	18.43	18.18	18.11	18.16	18.05	18.07
		1	#Mid	18.47	18.04	18.07	18.34	17.98	18.14
		1	#Max	18.50	18.15	18.02	17.93	18.09	18.24
		50%	#0	18.60	17.63	17.41	17.40	17.38	17.44

		50%	#Mid	18.76	17.61	17.61	17.32	17.33	17.40
		50%	#Max	18.58	17.63	17.36	17.43	17.35	17.39
		100%	--	17.63	17.51	17.28	17.47	17.43	17.29
	64QAM	1	#0	17.57	17.51	17.76	16.99	16.68	17.70
		1	#Mid	17.42	17.42	18.00	17.84	17.21	17.95
		1	#Max	17.63	17.58	17.73	17.32	16.89	18.12
		50%	#0	17.44	16.83	16.22	16.62	16.70	16.53
		50%	#Mid	17.73	16.62	16.39	16.46	16.70	16.57
		50%	#Max	17.77	16.57	16.43	16.60	16.57	16.54
		100%	--	16.68	16.81	16.63	16.41	16.60	16.55
High	QPSK	1	#0	19.72	**19.94**	19.52	19.54	19.64	19.24
		1	#Mid	19.75	19.88	19.64	**19.73**	**19.78**	**19.79**
		1	#Max	19.59	19.44	19.44	19.50	19.46	19.55
		50%	#0	**19.93**	18.77	18.76	18.60	18.59	18.57
		50%	#Mid	19.90	18.63	18.75	18.62	18.57	18.50
		50%	#Max	19.91	18.66	18.65	18.63	18.61	18.60
		100%	--	18.68	18.65	18.65	18.60	18.59	18.51
	16QAM	1	#0	**18.96**	**18.62**	18.62	18.48	18.28	18.24
		1	#Mid	18.73	18.39	**19.20**	**18.77**	**18.36**	**18.42**
		1	#Max	18.94	18.23	18.58	18.42	18.34	18.38
		50%	#0	18.62	17.76	17.94	17.85	17.61	17.63
		50%	#Mid	18.64	17.63	17.93	17.69	17.64	17.64
		50%	#Max	18.55	17.72	17.76	17.76	17.69	17.77
		100%	--	17.67	17.68	17.83	17.76	17.63	17.63
	64QAM	1	#0	17.83	17.80	17.98	17.77	17.61	17.24
		1	#Mid	17.85	17.93	18.15	17.92	18.54	18.31
		1	#Max	17.84	18.02	17.74	17.90	17.87	17.48
		50%	#0	18.39	16.62	17.08	16.78	16.95	16.79
		50%	#Mid	18.41	16.56	17.06	17.03	16.93	16.72
		50%	#Max	18.32	16.58	16.95	16.88	16.81	16.80
		100%	--	16.66	16.63	16.80	16.92	16.80	16.73

Channel	Modulation	LTE Band 5 (850MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	23.61	23.26	23.19	23.35	--	--
		1	#Mid	23.69	**23.69**	**23.85**	**23.76**	--	--
		1	#Max	23.54	23.59	23.34	23.21	--	--
		50%	#0	23.67	22.71	22.54	22.68	--	--
		50%	#Mid	23.68	22.67	22.71	22.68	--	--
		50%	#Max	**23.73**	22.64	22.54	22.68	--	--
		100%	--	22.67	22.66	22.68	22.54	--	--
	16QAM	1	#0	22.27	22.52	22.62	22.16	--	--
		1	#Mid	22.17	**22.80**	**22.66**	**22.55**	--	--
		1	#Max	22.34	22.55	22.51	22.17	--	--
		50%	#0	22.49	21.76	21.81	21.63	--	--
		50%	#Mid	**22.80**	21.72	21.78	21.53	--	--
		50%	#Max	22.48	21.68	21.60	21.61	--	--
		100%	--	21.59	21.62	21.78	21.49	--	--
	64QAM	1	#0	22.11	22.10	22.02	21.45	--	--
		1	#Mid	22.40	22.42	22.54	22.27	--	--
		1	#Max	22.21	22.15	22.32	21.44	--	--
		50%	#0	22.25	21.11	21.36	21.17	--	--
		50%	#Mid	22.32	21.28	21.28	21.20	--	--
		50%	#Max	22.36	21.30	21.33	21.04	--	--
		100%	--	20.92	21.05	21.14	21.19	--	--
Mid	QPSK	1	#0	23.38	23.04	23.05	23.23	--	--
		1	#Mid	23.43	23.38	23.33	23.45	--	--
		1	#Max	23.40	23.31	22.96	23.35	--	--
		50%	#0	23.39	22.50	22.43	22.42	--	--
		50%	#Mid	23.50	22.36	22.47	22.40	--	--
		50%	#Max	23.53	22.45	22.34	22.34	--	--
		100%	--	22.53	22.46	22.37	22.45	--	--
	16QAM	1	#0	22.30	22.36	22.30	22.20	--	--
		1	#Mid	22.40	21.92	22.06	22.30	--	--
		1	#Max	22.37	22.31	22.25	22.10	--	--
		50%	#0	22.59	21.35	21.45	21.31	--	--

		50%	#Mid	22.51	21.40	21.39	21.44	--	--
		50%	#Max	22.45	21.48	21.12	21.28	--	--
		100%	--	21.41	21.33	21.62	21.22	--	--
	64QAM	1	#0	21.10	21.23	21.18	21.75	--	--
		1	#Mid	21.13	21.35	21.60	21.61	--	--
		1	#Max	21.19	21.29	21.47	21.54	--	--
		50%	#0	21.46	20.69	20.82	20.97	--	--
		50%	#Mid	21.76	20.86	20.71	21.02	--	--
		50%	#Max	21.88	20.89	20.91	21.00	--	--
		100%	--	21.09	20.84	20.76	20.81	--	--
High	QPSK	1	#0	23.26	23.39	22.91	23.00	--	--
		1	#Mid	23.43	23.48	23.41	23.49	--	--
		1	#Max	23.38	23.22	23.19	23.12	--	--
		50%	#0	23.40	22.50	22.40	22.47	--	--
		50%	#Mid	23.38	22.36	22.49	22.47	--	--
		50%	#Max	23.42	22.45	22.46	22.50	--	--
		100%	--	22.35	22.35	22.47	22.46	--	--
	16QAM	1	#0	22.19	22.51	21.95	22.44	--	--
		1	#Mid	22.07	22.32	22.19	22.47	--	--
		1	#Max	22.09	22.46	21.89	22.20	--	--
		50%	#0	22.42	21.48	21.50	21.33	--	--
		50%	#Mid	22.50	21.33	21.32	21.34	--	--
		50%	#Max	22.48	21.45	21.42	21.40	--	--
		100%	--	21.44	21.33	21.35	21.53	--	--
	64QAM	1	#0	21.71	22.13	21.64	21.73	--	--
		1	#Mid	21.96	21.84	21.70	22.13	--	--
		1	#Max	21.84	21.41	21.60	21.94	--	--
		50%	#0	22.01	20.71	20.99	20.73	--	--
		50%	#Mid	22.16	20.83	21.26	20.68	--	--
		50%	#Max	22.05	20.62	20.95	20.92	--	--
		100%	--	20.99	20.82	20.88	21.16	--	--

Channel	Modulation	LTE Band 7 (2500MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	--	--	19.13	19.35	19.62	19.39
		1	#Mid	--	--	19.74	19.74	19.80	19.81
		1	#Max	--	--	19.19	19.58	19.64	19.67
		50%	#0	--	--	18.70	18.60	18.67	18.67
		50%	#Mid	--	--	18.71	18.64	18.72	18.72
		50%	#Max	--	--	18.54	18.69	18.76	18.66
		100%	--	--	--	18.61	18.61	18.63	18.66
	16QAM	1	#0	--	--	18.51	18.50	18.54	18.49
		1	#Mid	--	--	18.57	18.77	18.52	18.83
		1	#Max	--	--	18.54	18.49	18.59	18.42
		50%	#0	--	--	17.75	17.84	17.70	17.73
		50%	#Mid	--	--	17.64	17.76	17.68	17.64
		50%	#Max	--	--	17.49	17.66	17.65	17.71
		100%	--	--	--	17.58	17.73	17.67	17.71
	64QAM	1	#0	--	--	17.71	17.72	17.74	17.67
		1	#Mid	--	--	17.97	18.15	18.31	17.96
		1	#Max	--	--	17.62	17.94	18.06	17.65
		50%	#0	--	--	16.98	16.63	16.59	16.74
		50%	#Mid	--	--	17.01	16.80	16.90	16.73
		50%	#Max	--	--	16.93	16.98	16.85	16.80
		100%	--	--	--	17.10	16.78	16.77	16.75
Mid	QPSK	1	#0	--	--	19.42	19.38	19.51	19.39
		1	#Mid	--	--	19.93	19.81	19.68	19.87
		1	#Max	--	--	19.27	19.40	19.53	19.71
		50%	#0	--	--	18.67	18.63	18.71	18.72
		50%	#Mid	--	--	18.64	18.68	18.71	18.70
		50%	#Max	--	--	18.60	18.71	18.69	18.71
		100%	--	--	--	18.68	18.67	18.67	18.70
	16QAM	1	#0	--	--	18.54	18.45	18.53	18.44
		1	#Mid	--	--	18.73	18.66	18.50	18.79
		1	#Max	--	--	18.68	18.51	18.55	18.57
		50%	#0	--	--	17.45	17.84	17.66	17.76

		50%	#Mid	--	--	17.54	17.66	17.75	17.74
		50%	#Max	--	--	17.64	17.66	17.63	17.75
		100%	--	--	--	17.68	17.65	17.69	17.67
	64QAM	1	#0	--	--	17.57	17.28	17.01	17.81
		1	#Mid	--	--	18.21	18.11	17.32	18.21
		1	#Max	--	--	17.83	17.23	16.98	17.79
		50%	#0	--	--	16.84	16.82	16.59	16.75
		50%	#Mid	--	--	17.04	17.03	16.89	16.76
		50%	#Max	--	--	17.05	16.95	16.70	16.71
		100%	--	--	--	16.82	16.84	16.83	16.70
High	QPSK	1	#0	--	--	19.50	19.54	19.76	19.46
		1	#Mid	--	--	**20.17**	**19.86**	**19.92**	**20.00**
		1	#Max	--	--	19.58	19.59	19.87	19.50
		50%	#0	--	--	18.77	18.87	18.79	18.85
		50%	#Mid	--	--	18.85	18.87	18.83	18.88
		50%	#Max	--	--	18.82	18.84	18.91	18.88
		100%	--	--	--	18.75	18.85	18.82	18.86
	16QAM	1	#0	--	--	18.73	18.59	18.70	18.64
		1	#Mid	--	--	**18.76**	**18.90**	**18.73**	**18.87**
		1	#Max	--	--	18.75	18.70	18.68	18.54
		50%	#0	--	--	17.59	17.82	17.83	17.94
		50%	#Mid	--	--	17.87	17.84	17.91	17.85
		50%	#Max	--	--	17.75	17.88	17.87	17.80
		100%	--	--	--	17.92	17.83	17.86	17.82
	64QAM	1	#0	--	--	17.08	17.54	17.81	17.73
		1	#Mid	--	--	17.92	17.67	18.32	18.30
		1	#Max	--	--	17.52	17.60	17.87	17.65
		50%	#0	--	--	16.70	16.87	16.89	16.80
		50%	#Mid	--	--	16.78	16.86	16.75	16.72
		50%	#Max	--	--	16.74	16.81	16.78	16.89
		100%	--	--	--	16.94	16.90	16.82	16.58

Channel	Modulation	LTE Band 12 (700MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	23.74	23.79	23.76	23.78	--	--
		1	#Mid	23.74	23.94	24.02	**23.99**	--	--
		1	#Max	23.68	23.57	23.40	23.59	--	--
		50%	#0	23.98	22.92	22.95	22.99	--	--
		50%	#Mid	23.93	22.95	22.98	22.91	--	--
		50%	#Max	24.05	22.94	22.99	22.94	--	--
		100%	--	22.93	23.06	22.97	22.95	--	--
	16QAM	1	#0	22.76	23.10	22.87	22.60	--	--
		1	#Mid	23.05	23.15	**22.99**	22.71	--	--
		1	#Max	22.98	22.86	22.82	22.49	--	--
		50%	#0	22.79	21.95	22.00	22.11	--	--
		50%	#Mid	23.04	21.95	22.02	21.83	--	--
		50%	#Max	23.07	21.93	21.77	21.94	--	--
		100%	--	21.87	21.85	21.95	21.90	--	--
	64QAM	1	#0	21.89	22.25	21.75	22.18	--	--
		1	#Mid	22.01	22.38	22.15	22.34	--	--
		1	#Max	21.71	22.05	21.67	21.97	--	--
		50%	#0	22.13	21.37	21.48	21.16	--	--
		50%	#Mid	22.22	21.44	21.63	21.42	--	--
		50%	#Max	22.44	21.39	21.31	21.08	--	--
		100%	--	21.53	21.33	21.62	21.29	--	--
Mid	QPSK	1	#0	23.73	23.53	23.50	23.58	--	--
		1	#Mid	23.79	**24.03**	**24.17**	23.97	--	--
		1	#Max	23.75	23.84	23.88	23.98	--	--
		50%	#0	23.92	23.00	22.78	22.95	--	--
		50%	#Mid	23.89	22.83	22.87	22.78	--	--
		50%	#Max	23.94	22.89	22.89	22.94	--	--
		100%	--	22.79	22.87	22.83	22.81	--	--
	16QAM	1	#0	22.53	22.84	22.76	22.54	--	--
		1	#Mid	22.53	22.68	22.73	22.80	--	--
		1	#Max	22.36	22.85	22.74	22.63	--	--
		50%	#0	23.07	21.92	21.59	21.71	--	--

		50%	#Mid	22.85	22.07	21.94	21.97	--	--
		50%	#Max	23.05	21.88	21.79	21.73	--	--
		100%	--	21.82	21.79	21.91	21.76	--	--
	64QAM	1	#0	22.55	21.73	22.32	22.05	--	--
		1	#Mid	22.49	22.07	22.80	22.21	--	--
		1	#Max	22.44	21.69	22.55	21.96	--	--
		50%	#0	22.32	21.37	21.17	21.29	--	--
		50%	#Mid	22.43	21.25	21.24	21.51	--	--
		50%	#Max	22.30	21.34	21.15	21.25	--	--
		100%	--	21.27	21.47	21.38	21.29	--	--
High	QPSK	1	#0	23.83	23.78	23.47	23.51	--	--
		1	#Mid	23.92	24.02	23.96	**23.99**	--	--
		1	#Max	23.90	23.86	23.61	23.76	--	--
		50%	#0	24.03	22.88	22.91	22.83	--	--
		50%	#Mid	**24.12**	22.92	22.92	22.90	--	--
		50%	#Max	24.03	22.92	22.87	22.87	--	--
		100%	--	22.84	22.98	22.85	22.89	--	--
	16QAM	1	#0	22.70	**23.25**	22.55	22.46	--	--
		1	#Mid	22.73	22.79	22.54	**22.89**	--	--
		1	#Max	22.69	23.06	22.50	22.65	--	--
		50%	#0	**23.19**	21.92	21.79	22.03	--	--
		50%	#Mid	23.15	21.89	21.75	21.83	--	--
		50%	#Max	22.96	21.97	21.68	22.01	--	--
		100%	--	21.71	21.80	21.85	21.83	--	--
	64QAM	1	#0	22.36	22.39	22.01	22.35	--	--
		1	#Mid	22.58	22.30	22.22	22.46	--	--
		1	#Max	22.28	22.30	21.80	22.30	--	--
		50%	#0	22.48	21.31	21.22	21.25	--	--
		50%	#Mid	22.47	20.30	21.36	21.41	--	--
		50%	#Max	22.37	21.40	21.32	21.41	--	--
		100%	--	21.32	21.20	21.27	21.31	--	--

Channel	Modulation	LTE Band 13 (700MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	--	--	23.48	--	--	--
		1	#Mid	--	--	23.61	--	--	--
		1	#Max	--	--	23.73	--	--	--
		50%	#0	--	--	22.53	--	--	--
		50%	#Mid	--	--	22.83	--	--	--
		50%	#Max	--	--	22.68	--	--	--
		100%	--	--	--	22.72	--	--	--
	16QAM	1	#0	--	--	22.12	--	--	--
		1	#Mid	--	--	22.53	--	--	--
		1	#Max	--	--	22.07	--	--	--
		50%	#0	--	--	21.69	--	--	--
		50%	#Mid	--	--	21.66	--	--	--
		50%	#Max	--	--	21.69	--	--	--
		100%	--	--	--	21.61	--	--	--
	64QAM	1	#0	--	--	22.52	--	--	--
		1	#Mid	--	--	22.62	--	--	--
		1	#Max	--	--	22.18	--	--	--
		50%	#0	--	--	20.96	--	--	--
		50%	#Mid	--	--	20.95	--	--	--
		50%	#Max	--	--	21.06	--	--	--
		100%	--	--	--	21.18	--	--	--
Mid	QPSK	1	#0	--	--	23.71	23.60	--	--
		1	#Mid	--	--	23.59	**23.88**	--	--
		1	#Max	--	--	23.40	23.55	--	--
		50%	#0	--	--	22.61	22.71	--	--
		50%	#Mid	--	--	22.67	22.70	--	--
		50%	#Max	--	--	22.64	22.63	--	--
		100%	--	--	--	22.70	22.65	--	--
	16QAM	1	#0	--	--	22.36	22.48	--	--
		1	#Mid	--	--	**22.71**	**22.90**	--	--
		1	#Max	--	--	22.40	22.73	--	--
		50%	#0	--	--	21.49	21.63	--	--

		50%	#Mid	--	--	21.61	21.81	--	--
		50%	#Max	--	--	21.64	21.56	--	--
		100%	--	--	--	21.46	21.53	--	--
	64QAM	1	#0	--	--	21.73	22.30	--	--
		1	#Mid	--	--	22.16	22.29	--	--
		1	#Max	--	--	21.82	22.62	--	--
		50%	#0	--	--	21.02	21.00	--	--
		50%	#Mid	--	--	21.03	20.97	--	--
		50%	#Max	--	--	21.02	21.12	--	--
		100%	--	--	--	21.11	21.03	--	--
High	QPSK	1	#0	--	--	23.26	--	--	--
		1	#Mid	--	--	**23.95**	--	--	--
		1	#Max	--	--	23.71	--	--	--
		50%	#0	--	--	22.46	--	--	--
		50%	#Mid	--	--	22.67	--	--	--
		50%	#Max	--	--	22.80	--	--	--
		100%	--	--	--	22.64	--	--	--
	16QAM	1	#0	--	--	22.43	--	--	--
		1	#Mid	--	--	22.42	--	--	--
		1	#Max	--	--	22.39	--	--	--
		50%	#0	--	--	21.52	--	--	--
		50%	#Mid	--	--	21.64	--	--	--
		50%	#Max	--	--	21.45	--	--	--
		100%	--	--	--	21.58	--	--	--
	64QAM	1	#0	--	--	21.35	--	--	--
		1	#Mid	--	--	21.52	--	--	--
		1	#Max	--	--	21.43	--	--	--
		50%	#0	--	--	20.97	--	--	--
		50%	#Mid	--	--	20.97	--	--	--
		50%	#Max	--	--	21.23	--	--	--
		100%	--	--	--	21.13	--	--	--

Channel	Modulation	LTE Band 17 (700MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	--	--	23.27	23.56	--	--
		1	#Mid	--	--	23.90	**23.91**	--	--
		1	#Max	--	--	23.34	23.36	--	--
		50%	#0	--	--	22.87	22.76	--	--
		50%	#Mid	--	--	22.93	22.81	--	--
		50%	#Max	--	--	22.73	22.88	--	--
		100%	--	--	--	22.76	22.84	--	--
	16QAM	1	#0	--	--	22.07	22.77	--	--
		1	#Mid	--	--	22.14	22.89	--	--
		1	#Max	--	--	22.22	22.23	--	--
		50%	#0	--	--	21.76	21.85	--	--
		50%	#Mid	--	--	21.78	21.81	--	--
		50%	#Max	--	--	21.68	21.77	--	--
		100%	--	--	--	22.00	21.85	--	--
	64QAM	1	#0	--	--	22.24	21.96	--	--
		1	#Mid	--	--	22.53	22.40	--	--
		1	#Max	--	--	22.30	21.46	--	--
		50%	#0	--	--	21.30	21.42	--	--
		50%	#Mid	--	--	21.21	21.40	--	--
		50%	#Max	--	--	21.39	21.38	--	--
		100%	--	--	--	21.14	21.47	--	--
Mid	QPSK	1	#0	--	--	23.27	23.67	--	--
		1	#Mid	--	--	**24.00**	23.87	--	--
		1	#Max	--	--	23.25	23.23	--	--
		50%	#0	--	--	22.77	22.80	--	--
		50%	#Mid	--	--	22.85	22.77	--	--
		50%	#Max	--	--	22.66	22.77	--	--
		100%	--	--	--	22.71	22.69	--	--
	16QAM	1	#0	--	--	22.28	22.72	--	--
		1	#Mid	--	--	22.27	**23.00**	--	--
		1	#Max	--	--	22.15	22.51	--	--
		50%	#0	--	--	21.63	21.88	--	--

		50%	#Mid	--	--	21.86	21.72	--	--
		50%	#Max	--	--	21.59	21.68	--	--
		100%	--	--	--	21.77	21.64	--	--
	64QAM	1	#0	--	--	22.10	22.21	--	--
		1	#Mid	--	--	22.30	22.23	--	--
		1	#Max	--	--	21.97	22.18	--	--
		50%	#0	--	--	21.24	21.10	--	--
		50%	#Mid	--	--	21.11	21.25	--	--
		50%	#Max	--	--	21.05	21.13	--	--
		100%	--	--	--	21.25	21.33	--	--
High	QPSK	1	#0	--	--	23.35	23.36	--	--
		1	#Mid	--	--	23.40	23.68	--	--
		1	#Max	--	--	23.08	23.22	--	--
		50%	#0	--	--	22.63	22.76	--	--
		50%	#Mid	--	--	22.56	22.73	--	--
		50%	#Max	--	--	22.52	22.58	--	--
		100%	--	--	--	22.49	22.63	--	--
	16QAM	1	#0	--	--	**22.32**	22.13	--	--
		1	#Mid	--	--	22.21	22.74	--	--
		1	#Max	--	--	22.22	22.23	--	--
		50%	#0	--	--	21.75	21.79	--	--
		50%	#Mid	--	--	21.69	21.89	--	--
		50%	#Max	--	--	21.29	21.56	--	--
		100%	--	--	--	21.39	21.75	--	--
	64QAM	1	#0	--	--	21.98	21.86	--	--
		1	#Mid	--	--	22.02	22.04	--	--
		1	#Max	--	--	21.71	21.31	--	--
		50%	#0	--	--	21.07	21.44	--	--
		50%	#Mid	--	--	21.12	21.45	--	--
		50%	#Max	--	--	21.00	21.13	--	--
		100%	--	--	--	21.29	21.40	--	--

Channel	Modulation	LTE Band 25 (1900MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	19.84	19.33	19.36	19.50	19.68	19.47
		1	#Mid	19.77	19.63	19.93	**19.78**	19.69	19.81
		1	#Max	19.73	19.48	19.72	19.69	19.65	19.49
		50%	#0	19.78	18.77	18.79	18.77	18.73	18.70
		50%	#Mid	19.80	18.65	18.69	18.76	18.62	18.62
		50%	#Max	19.80	18.63	18.70	18.56	18.58	18.60
		100%	--	18.65	18.71	18.65	18.69	18.63	18.57
	16QAM	1	#0	18.46	**18.74**	18.50	18.49	18.36	18.41
		1	#Mid	**18.82**	18.61	**18.81**	18.65	18.40	18.57
		1	#Max	18.61	18.70	18.47	18.39	18.28	18.19
		50%	#0	18.68	17.50	17.90	17.89	17.85	17.74
		50%	#Mid	18.77	17.73	17.93	17.80	17.65	17.71
		50%	#Max	18.66	17.81	17.82	17.64	17.58	17.66
		100%	--	17.65	17.81	17.75	17.85	17.75	17.71
	64QAM	1	#0	17.24	17.91	17.59	17.52	17.47	18.02
		1	#Mid	17.43	18.05	17.56	17.79	18.01	17.84
		1	#Max	17.12	17.74	17.54	17.70	17.74	17.82
		50%	#0	17.42	16.67	16.80	16.53	16.74	16.88
		50%	#Mid	17.50	17.01	16.82	17.06	16.97	16.74
		50%	#Max	17.58	16.77	16.90	16.67	16.82	16.61
		100%	--	17.16	16.72	16.82	16.93	16.68	16.85
Mid	QPSK	1	#0	19.31	19.30	19.13	19.18	19.49	19.28
		1	#Mid	19.44	19.52	19.55	19.54	19.53	19.65
		1	#Max	19.29	19.41	19.14	19.34	19.29	19.33
		50%	#0	19.54	18.43	18.39	18.44	18.45	18.52
		50%	#Mid	19.46	18.51	18.42	18.43	18.44	18.43
		50%	#Max	19.52	18.44	18.44	18.55	18.51	18.49
		100%	--	18.39	18.44	18.44	18.45	18.46	18.41
	16QAM	1	#0	17.91	18.55	18.23	18.30	18.29	18.31
		1	#Mid	17.90	18.57	18.38	18.32	18.22	18.47
		1	#Max	17.81	18.55	18.34	18.18	18.25	18.22
		50%	#0	18.44	17.50	17.37	17.80	17.47	17.51

		50%	#Mid	18.49	17.43	17.57	17.49	17.47	17.58
		50%	#Max	18.51	17.46	17.48	17.85	17.63	17.65
		100%	--	17.18	17.51	17.44	17.37	17.52	17.52
	64QAM	1	#0	17.65	17.11	17.81	17.03	17.15	17.82
		1	#Mid	17.63	17.15	17.98	17.36	17.17	18.25
		1	#Max	17.67	17.14	17.58	17.41	16.99	17.88
		50%	#0	17.49	16.83	16.49	16.58	16.60	16.41
		50%	#Mid	17.85	16.74	16.84	16.62	16.83	16.59
		50%	#Max	17.56	16.71	16.57	16.61	16.79	16.77
		100%	--	16.83	16.86	16.64	16.76	16.77	16.56
High	QPSK	1	#0	**19.98**	**19.82**	19.41	19.66	19.80	19.32
		1	#Mid	19.87	19.80	**20.08**	19.75	**19.86**	**20.03**
		1	#Max	19.84	19.75	19.55	19.74	19.84	19.51
		50%	#0	19.96	18.94	18.84	18.86	18.73	18.78
		50%	#Mid	19.91	18.92	18.96	18.81	18.80	18.84
		50%	#Max	19.92	18.91	18.88	18.94	18.79	18.78
		100%	--	18.83	18.92	18.96	18.84	18.85	18.82
	16QAM	1	#0	18.75	18.70	18.64	**19.07**	18.55	18.48
		1	#Mid	18.64	18.57	18.80	18.72	**18.68**	**18.86**
		1	#Max	18.46	18.68	18.71	18.61	18.62	18.62
		50%	#0	18.70	18.04	17.91	18.08	17.78	17.93
		50%	#Mid	18.55	17.90	17.98	18.04	17.85	17.96
		50%	#Max	18.62	18.00	17.95	17.96	17.75	17.91
		100%	--	17.69	17.85	17.81	17.74	17.90	17.86
	64QAM	1	#0	17.62	17.52	17.59	17.28	17.50	17.25
		1	#Mid	18.02	17.71	17.80	17.62	17.82	18.00
		1	#Max	17.55	17.04	17.52	17.19	17.31	17.45
		50%	#0	17.73	16.76	16.77	16.88	16.85	16.79
		50%	#Mid	17.74	16.85	16.82	16.90	16.69	16.99
		50%	#Max	17.43	16.54	16.76	16.88	16.81	16.95
		100%	--	16.49	16.52	16.74	16.67	16.90	16.75

Channel	Modulation	LTE Band 26 (850MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	23.64	23.49	23.52	23.38	23.59	--
		1	#Mid	23.73	23.64	**23.78**	**23.71**	23.61	--
		1	#Max	23.71	23.59	23.35	23.47	23.64	--
		50%	#0	23.72	22.72	22.61	22.59	22.67	--
		50%	#Mid	**23.77**	22.79	22.68	22.67	22.57	--
		50%	#Max	23.69	22.70	22.69	22.60	22.70	--
		100%	--	22.54	22.62	22.63	22.68	22.73	--
	16QAM	1	#0	22.69	22.41	22.31	22.19	22.49	--
		1	#Mid	22.65	**22.83**	**22.76**	**22.67**	22.47	--
		1	#Max	22.70	22.37	22.25	22.37	22.48	--
		50%	#0	22.78	21.75	21.65	21.73	21.64	--
		50%	#Mid	22.87	21.62	21.74	21.74	21.64	--
		50%	#Max	22.81	21.44	21.76	21.67	21.64	--
		100%	--	21.41	21.71	21.51	21.68	21.74	--
	64QAM	1	#0	21.43	21.21	21.25	21.55	21.55	--
		1	#Mid	21.70	21.49	21.66	22.07	21.81	--
		1	#Max	21.38	21.26	21.04	21.44	21.55	--
		50%	#0	21.67	20.77	20.82	20.73	20.91	--
		50%	#Mid	21.64	20.93	20.70	20.79	20.98	--
		50%	#Max	21.68	20.82	20.81	20.51	20.96	--
		100%	--	20.88	20.83	20.75	20.77	20.95	--
Mid	QPSK	1	#0	23.67	23.43	23.21	23.47	23.62	--
		1	#Mid	23.70	23.53	23.63	**23.71**	**23.73**	--
		1	#Max	23.68	23.39	23.24	23.57	23.12	--
		50%	#0	23.62	22.84	22.67	22.72	22.64	--
		50%	#Mid	23.69	22.70	22.57	22.75	22.64	--
		50%	#Max	23.75	22.75	22.61	22.73	22.64	--
		100%	--	22.66	22.60	22.62	22.76	22.59	--
	16QAM	1	#0	22.76	22.28	22.36	22.66	22.27	--
		1	#Mid	**22.89**	22.77	22.48	22.50	**22.54**	--
		1	#Max	22.83	22.66	22.30	22.41	22.23	--
		50%	#0	22.60	21.68	21.46	21.59	21.58	--

		50%	#Mid	22.76	21.65	21.62	21.84	21.52	--
		50%	#Max	22.73	21.40	21.57	21.62	21.55	--
		100%	--	21.48	21.44	21.71	21.59	21.57	--
	64QAM	1	#0	21.56	21.78	21.18	21.72	21.74	--
		1	#Mid	21.93	22.26	21.84	21.75	22.14	--
		1	#Max	22.04	21.88	21.19	21.97	21.72	--
		50%	#0	21.97	21.08	21.04	21.04	20.85	--
		50%	#Mid	22.21	21.03	21.14	20.91	21.10	--
		50%	#Max	22.15	21.08	21.00	20.73	20.72	--
		100%	--	20.98	20.93	21.16	20.97	20.96	--
High	QPSK	1	#0	23.54	23.41	23.38	23.36	23.47	--
		1	#Mid	23.53	**23.67**	23.27	23.68	23.53	--
		1	#Max	23.31	22.99	23.08	23.52	23.25	--
		50%	#0	23.46	22.51	22.40	22.54	22.60	--
		50%	#Mid	23.30	22.39	22.51	22.54	22.55	--
		50%	#Max	23.34	22.46	22.45	22.47	22.58	--
		100%	--	22.33	22.43	22.49	22.53	22.54	--
	16QAM	1	#0	22.22	22.18	22.33	22.33	22.51	--
		1	#Mid	22.19	22.13	22.24	22.62	22.40	--
		1	#Max	22.20	22.20	21.98	22.30	22.18	--
		50%	#0	22.23	21.41	21.52	21.54	21.60	--
		50%	#Mid	22.43	21.36	21.53	21.54	21.57	--
		50%	#Max	22.37	21.42	21.37	21.47	21.45	--
		100%	--	21.42	21.45	21.51	21.54	21.56	--
	64QAM	1	#0	21.88	21.81	21.85	21.88	21.58	--
		1	#Mid	22.16	21.79	22.05	21.57	22.08	--
		1	#Max	21.89	21.74	21.82	21.99	21.39	--
		50%	#0	21.80	20.74	20.95	20.79	20.76	--
		50%	#Mid	21.87	20.67	20.96	20.76	20.71	--
		50%	#Max	21.91	21.04	20.69	20.72	20.66	--
		100%	--	20.75	20.58	20.76	20.91	20.78	--

Channel	Modulation	LTE Band 38 (2600MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	--	--	23.48	23.61	23.74	23.61
		1	#Mid	--	--	23.59	23.57	23.66	23.84
		1	#Max	--	--	23.58	23.50	23.66	23.62
		50%	#0	--	--	22.83	22.88	22.84	22.95
		50%	#Mid	--	--	22.87	22.78	22.79	22.93
		50%	#Max	--	--	22.77	22.83	22.80	22.90
		100%	--	--	--	22.74	22.93	22.75	22.93
	16QAM	1	#0	--	--	22.33	22.55	22.38	22.50
		1	#Mid	--	--	22.56	22.65	22.37	22.68
		1	#Max	--	--	22.30	22.44	22.38	22.45
		50%	#0	--	--	21.63	21.69	21.76	21.72
		50%	#Mid	--	--	21.64	21.68	21.73	21.72
		50%	#Max	--	--	21.81	21.64	21.66	21.88
		100%	--	--	--	21.65	21.66	21.73	21.81
	64QAM	1	#0	--	--	21.83	21.70	22.14	22.40
		1	#Mid	--	--	22.30	22.01	22.60	22.68
		1	#Max	--	--	21.82	21.67	21.94	22.45
		50%	#0	--	--	20.96	20.93	21.16	20.94
		50%	#Mid	--	--	21.09	20.95	21.09	20.84
		50%	#Max	--	--	21.08	20.90	21.04	21.08
		100%	--	--	--	21.06	21.20	20.99	21.03
Mid	QPSK	1	#0	--	--	23.58	23.72	23.79	23.60
		1	#Mid	--	--	**23.93**	23.69	23.77	23.83
		1	#Max	--	--	23.64	**23.89**	**23.80**	23.67
		50%	#0	--	--	22.91	22.96	23.05	23.07
		50%	#Mid	--	--	22.94	22.92	23.02	23.01
		50%	#Max	--	--	22.90	22.94	22.95	23.06
		100%	--	--	--	22.96	23.00	22.98	23.03
	16QAM	1	#0	--	--	22.46	22.64	**22.58**	22.45
		1	#Mid	--	--	**22.61**	22.65	22.48	**22.92**
		1	#Max	--	--	22.52	22.62	22.46	22.56
		50%	#0	--	--	21.90	22.11	21.83	21.99

		50%	#Mid	--	--	21.91	22.14	21.87	21.88
		50%	#Max	--	--	21.81	21.84	21.87	22.01
		100%	--	--	--	21.82	21.95	21.89	21.98
	64QAM	1	#0	--	--	21.54	22.15	21.89	21.80
		1	#Mid	--	--	21.50	22.12	20.96	22.05
		1	#Max	--	--	21.35	22.14	21.85	21.89
		50%	#0	--	--	21.12	21.24	21.05	21.01
		50%	#Mid	--	--	21.10	21.15	20.97	21.09
		50%	#Max	--	--	21.14	21.26	20.98	21.11
		100%	--	--	--	21.13	21.17	21.10	21.22
High	QPSK	1	#0	--	--	23.51	23.67	23.71	23.19
		1	#Mid	--	--	23.67	23.78	23.70	**24.06**
		1	#Max	--	--	23.51	23.87	23.79	23.16
		50%	#0	--	--	22.86	22.82	22.80	23.01
		50%	#Mid	--	--	22.86	22.87	22.82	22.98
		50%	#Max	--	--	22.90	22.89	22.85	22.96
		100%	--	--	--	22.87	22.97	22.81	22.98
	16QAM	1	#0	--	--	22.38	22.60	22.47	22.44
		1	#Mid	--	--	22.54	**22.67**	22.43	22.85
		1	#Max	--	--	22.35	22.47	22.45	22.46
		50%	#0	--	--	21.83	21.82	21.63	21.98
		50%	#Mid	--	--	21.73	22.06	21.64	21.82
		50%	#Max	--	--	21.86	21.89	21.81	21.93
		100%	--	--	--	22.11	21.79	21.78	21.86
	64QAM	1	#0	--	--	22.14	21.27	21.98	22.10
		1	#Mid	--	--	22.55	21.83	21.64	22.47
		1	#Max	--	--	21.93	21.29	21.72	22.09
		50%	#0	--	--	21.13	21.04	21.38	21.14
		50%	#Mid	--	--	21.28	21.17	21.32	21.27
		50%	#Max	--	--	21.14	21.13	21.40	21.21
		100%	--	--	--	21.05	21.10	21.09	21.18

Channel	Modulation	LTE Band 41 (2600MHz)							
		RB	RB	Maximum Conducted Output Power					
		No.	Offset	1.4M	3M	5M	10M	15M	20M
Low	QPSK	1	#0	--	--	23.53	23.66	23.53	23.63
		1	#Mid	--	--	23.69	23.74	23.35	23.53
		1	#Max	--	--	23.48	23.50	23.46	23.42
		50%	#0	--	--	22.75	22.84	22.65	22.61
		50%	#Mid	--	--	22.74	22.84	22.65	22.57
		50%	#Max	--	--	22.77	22.84	22.73	22.63
		100%	--	--	--	22.69	22.93	22.65	22.59
	16QAM	1	#0	--	--	22.40	22.67	22.29	22.30
		1	#Mid	--	--	22.46	22.68	22.19	22.44
		1	#Max	--	--	22.34	22.40	22.17	22.14
		50%	#0	--	--	21.67	21.88	21.67	21.45
		50%	#Mid	--	--	21.62	22.02	21.62	21.63
		50%	#Max	--	--	21.63	21.81	21.64	21.48
		100%	--	--	--	21.80	21.79	21.63	21.56
	64QAM	1	#0	--	--	20.72	19.86	19.56	20.27
		1	#Mid	--	--	21.40	20.63	20.48	21.68
		1	#Max	--	--	20.52	19.47	19.09	20.46
		50%	#0	--	--	19.60	19.45	19.39	19.31
		50%	#Mid	--	--	19.80	20.31	19.62	19.39
		50%	#Max	--	--	19.52	19.27	19.14	19.01
		100%	--	--	--	19.41	19.41	19.13	19.09
Mid	QPSK	1	#0	--	--	23.70	23.82	23.93	23.95
		1	#Mid	--	--	23.78	23.94	23.86	23.84
		1	#Max	--	--	23.66	**23.95**	23.88	23.70
		50%	#0	--	--	22.93	22.91	22.99	23.03
		50%	#Mid	--	--	22.92	23.03	22.93	23.00
		50%	#Max	--	--	22.95	23.06	23.00	22.98
		100%	--	--	--	22.97	23.07	22.91	23.02
	16QAM	1	#0	--	--	22.41	22.66	**22.57**	22.49
		1	#Mid	--	--	**22.64**	22.61	22.56	**22.84**
		1	#Max	--	--	22.50	22.59	22.53	22.57
		50%	#0	--	--	21.75	22.06	21.76	21.93

		50%	#Mid	--	--	21.91	22.23	21.96	21.77
		50%	#Max	--	--	21.81	21.85	21.83	21.82
		100%	--	--	--	21.78	21.99	21.98	21.88
	64QAM	1	#0	--	--	21.05	21.25	21.04	20.61
		1	#Mid	--	--	21.61	21.90	21.91	22.10
		1	#Max	--	--	20.82	20.94	20.68	20.89
		50%	#0	--	--	20.16	20.23	20.30	20.24
		50%	#Mid	--	--	20.24	20.31	20.45	20.35
		50%	#Max	--	--	19.97	20.01	20.02	19.95
		100%	--	--	--	19.96	20.09	20.07	20.03
High	QPSK	1	#0	--	--	**23.82**	23.74	23.35	23.17
		1	#Mid	--	--	23.72	23.88	**24.24**	**24.06**
		1	#Max	--	--	23.75	23.88	23.84	23.61
		50%	#0	--	--	22.84	22.96	22.93	22.94
		50%	#Mid	--	--	22.92	22.92	22.88	22.95
		50%	#Max	--	--	22.92	22.86	22.90	22.91
		100%	--	--	--	22.87	22.96	22.94	22.86
	16QAM	1	#0	--	--	22.55	22.62	22.55	22.43
		1	#Mid	--	--	22.59	22.67	22.49	22.77
		1	#Max	--	--	22.41	**22.71**	22.47	22.52
		50%	#0	--	--	21.72	21.78	21.75	21.72
		50%	#Mid	--	--	21.71	22.03	21.92	21.85
		50%	#Max	--	--	21.76	22.13	21.78	21.72
		100%	--	--	--	22.15	21.92	21.82	21.85
	64QAM	1	#0	--	--	21.81	21.25	20.83	20.78
		1	#Mid	--	--	22.66	22.40	22.52	22.92
		1	#Max	--	--	22.08	21.76	21.85	22.63
		50%	#0	--	--	21.16	20.95	20.64	20.54
		50%	#Mid	--	--	21.42	21.40	21.15	21.04
		50%	#Max	--	--	21.27	21.25	21.06	21.09
		100%	--	--	--	21.20	21.12	20.91	20.73

9. Test Results

9.1 SAR Test Results Summary

WLAN 2.4G Hotspot SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.7 ±2						Relative Humidity (%): 51			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: 802.11b 10mm									
Front	Fixed	10	1	2412	18.78	19	0.162	0.170	1.6
Front	Fixed	10	6	2437	18.82	19	0.195	0.203	1.6
Front	Fixed	10	11	2462	18.47	19	0.183	**0.207**	1.6
Back	Fixed	10	6	2437	18.82	19	0.168	0.175	1.6
Top	Fixed	10	6	2437	18.82	19	0.048	0.050	1.6
Left-side	Fixed	10	6	2437	18.82	19	0.0047	0.005	1.6
Right-side	Fixed	10	6	2437	18.82	19	0.126	0.131	1.6
Test Mode: BT-1M 10mm									
Front	Fixed	10	39	2441	6.96	7	0.00734	0.007	1.6
Note : 1. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required. 2. When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.									

WLAN 2.4G Limb SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.7 ±2						Relative Humidity (%): 51			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 10g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: 802.11b 0mm									
Front	Fixed	0	1	2412	18.78	19	0.415	0.437	4
Front	Fixed	0	6	2437	18.82	19	0.432	0.450	4
Front	Fixed	0	11	2462	18.47	19	0.437	**0.494**	4
Back	Fixed	0	6	2437	18.82	19	0.315	0.328	4
Top	Fixed	0	6	2437	18.82	19	0.107	0.112	4
Left-side	Fixed	0	6	2437	18.82	19	0.00415	0.004	4
Right-side	Fixed	0	6	2437	18.82	19	0.227	0.237	4
Test Mode: BT-1M 0mm									
Front	Fixed	0	39	2441	6.96	7	0.016	0.016	4
Note : 1. When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum output power and the adjusted SAR is ≤ 3 W/kg, SAR is not required. 2. When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.									

WLAN 5G Hotspot SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 22 ±2					Relative Humidity (%): 52				
Ambient Temperature (°C) : 23.1 ±2					Depth of Liquid (cm):>15				
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: 802.11a 10mm									
Front	Fixed	10	60	5300	17.48	17.5	0.460	0.462	1.6
Front	Fixed	10	116	5580	17.26	17.5	0.739	0.781	1.6
Front	Fixed	10	149	5745	17.37	17.5	0.805	0.829	1.6
Front	Fixed	10	157	5785	17.42	17.5	0.865	0.881	1.6
Front	Fixed	10	165	5825	17.38	17.5	0.916	0.942	1.6
Back	Fixed	10	60	5300	17.48	17.5	0.237	0.238	1.6
Back	Fixed	10	116	5580	17.26	17.5	0.598	0.632	1.6
Back	Fixed	10	149	5745	17.37	17.5	0.836	0.861	1.6
Back	Fixed	10	157	5785	17.42	17.5	0.860	0.876	1.6
Back	Fixed	10	165	5825	17.38	17.5	0.925	0.951	1.6
Top	Fixed	10	44	5220	17.47	17.5	0.458	0.461	1.6
Top	Fixed	10	60	5300	17.48	17.5	0.469	0.471	1.6
Top	Fixed	10	116	5580	17.26	17.5	0.672	0.710	1.6
Top	Fixed	10	149	5745	17.37	17.5	0.854	0.880	1.6
Top	Fixed	10	157	5785	17.42	17.5	0.938	0.955	1.6
Top	Fixed	10	165	5825	17.38	17.5	0.995	**1.023**	1.6
Left-side	Fixed	10	60	5300	17.48	17.5	0.040	0.040	1.6
Left-side	Fixed	10	116	5580	17.26	17.5	0.050	0.053	1.6
Left-side	Fixed	10	157	5785	17.42	17.5	0.090	0.092	1.6
Right-side	Fixed	10	60	5300	17.48	17.5	0.195	0.196	1.6
Right-side	Fixed	10	116	5580	17.26	17.5	0.343	0.362	1.6
Right-side	Fixed	10	157	5785	17.42	17.5	0.480	0.489	1.6

Note : 1. When multiple transmission modes (802.11 n) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected

2. When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in that exposure configuration.

3. When the reported SAR of the highest measured maximum U-NII-2A for the exposure configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band.

WLAN 5G Limb SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 22 ±2						Relative Humidity (%): 52			
Ambient Temperature (°C) : 23.1 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 10g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: 802.11a 0mm									
Front	Fixed	0	60	5300	17.48	17.5	0.510	0.512	4
Front	Fixed	0	116	5580	17.26	17.5	0.824	0.871	4
Front	Fixed	0	157	5785	17.42	17.5	0.977	0.995	4
Back	Fixed	0	60	5300	17.48	17.5	0.453	0.455	4
Back	Fixed	0	116	5580	17.26	17.5	0.456	0.482	4
Back	Fixed	0	157	5785	17.42	17.5	0.548	0.558	4
Top	Fixed	0	44	5220	17.47	17.5	0.973	0.980	4
Top	Fixed	0	60	5300	17.48	17.5	0.934	0.938	4
Top	Fixed	0	116	5580	17.26	17.5	1.110	1.173	4
Top	Fixed	0	149	5745	17.37	17.5	1.310	1.350	4
Top	Fixed	0	157	5785	17.42	17.5	1.330	1.355	4
Top	Fixed	0	165	5825	17.38	17.5	1.390	**1.429**	4
Left-side	Fixed	0	60	5300	17.48	17.5	0.042	0.042	4
Left-side	Fixed	0	116	5580	17.26	17.5	0.046	0.049	4
Left-side	Fixed	0	157	5785	17.42	17.5	0.084	0.086	4
Right-side	Fixed	0	60	5300	17.48	17.5	0.205	0.206	4
Right-side	Fixed	0	116	5580	17.26	17.5	0.337	0.356	4
Right-side	Fixed	0	157	5785	17.42	17.5	0.464	0.473	4

Note : 1. When multiple transmission modes (802.11 n) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected

2. When the reported SAR of the highest measured maximum output power channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in that exposure configuration.

3. When the reported SAR of the highest measured maximum U-NII-2A for the exposure configuration is ≤ 3 W/kg, SAR is not required for U-NII-1 band.

GSM 850 Head SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.8 ±2						Relative Humidity (%): 52			
Ambient Temperature (°C) : 22.9 ±2						Depth of Liquid (cm):>15			
Test Position Head	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: 850 MHz Voice									
Left-Cheek	Fixed	0	189	836.4	32.33	34.5	0.394	0.649	1.6
Left-Tilt	Fixed	0	189	836.4	32.33	34.5	0.227	0.374	1.6
Right-Cheek	Fixed	0	189	836.4	32.33	34.5	0.426	0.702	1.6
Right-Tilt	Fixed	0	189	836.4	32.33	34.5	0.242	0.399	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.									

GSM 850 Hotspot SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.8 ±2						Relative Humidity (%): 52			
Ambient Temperature (°C) : 22.9 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: 850 MHz GPRS 1UP 10mm									
Front	Fixed	10	189	836.4	32.98	34.5	0.301	0.427	1.6
Back	Fixed	10	128	824.2	32.68	34.5	0.359	0.546	1.6
Back	Fixed	10	189	836.4	32.98	34.5	0.384	0.545	1.6
Back	Fixed	10	251	848.8	33.08	34.5	0.510	**0.707**	1.6
Bottom	Fixed	10	189	836.4	32.98	34.5	0.092	0.131	1.6
Left-Side	Fixed	10	189	836.4	32.98	34.5	0.246	0.349	1.6
Right-Side	Fixed	10	189	836.4	32.98	34.5	0.296	0.420	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.									

GSM 850 Limb SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.8 ±2					Relative Humidity (%): 52				
Ambient Temperature (°C) : 22.9 ±2					Depth of Liquid (cm):>15				
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 10g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: 850 MHz GPRS 1UP 0mm									
Front	Fixed	0	189	836.4	32.98	34.5	0.725	1.029	4
Back	Fixed	0	128	824.2	32.68	34.5	1.110	1.688	4
Back	Fixed	0	189	836.4	32.98	34.5	1.200	**1.703**	4
Back	Fixed	0	251	848.8	33.08	34.5	1.220	1.692	4
Bottom	Fixed	0	189	836.4	32.98	34.5	0.278	0.394	4
Left-Side	Fixed	0	189	836.4	32.98	34.5	0.228	0.324	4
Right-Side	Fixed	0	189	836.4	32.98	34.5	0.366	0.519	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.									

PCS 1900 Head SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.6 ±2						Relative Humidity (%): 53			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Head	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: PCS 1900 Voice									
Left-Cheek	Fixed	0	661	1880	28.13	28.5	0.135	0.147	1.6
Left-Tilt	Fixed	0	661	1880	28.13	28.5	0.161	0.175	1.6
Right-Cheek	Fixed	0	661	1880	28.13	28.5	0.232	0.253	1.6
Right-Tilt	Fixed	0	661	1880	28.13	28.5	0.136	0.148	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.									

PCS 1900 Hotspot SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.6 ±2						Relative Humidity (%): 53			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: 1900 MHz GPRS 4UP 10mm									
Front	Fixed	10	661	1880	24.62	25	0.282	0.308	1.6
Back	Fixed	10	512	1850.2	24.01	25	0.813	**1.021**	1.6
Back	Fixed	10	661	1880	24.62	25	0.736	0.803	1.6
Back	Fixed	10	810	1909.8	24.16	25	0.682	0.828	1.6
Bottom	Fixed	10	661	1880	24.62	25	0.726	0.792	1.6
Left-Side	Fixed	10	661	1880	24.62	25	0.130	0.142	1.6
Right-Side	Fixed	10	661	1880	24.62	25	0.032	0.035	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.									

PCS 1900 Limb SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.6 ±2						Relative Humidity (%): 53			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 10g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: 1900 MHz GPRS 4UP 0mm									
Front	Fixed	0	661	1880	24.62	25	0.650	0.709	4
Back	Fixed	0	512	1850.2	24.01	25	1.620	2.035	4
Back	Fixed	0	661	1880	24.62	25	1.880	**2.052**	4
Back	Fixed	0	810	1909.8	24.16	25	1.650	2.002	4
Bottom	Fixed	0	661	1880	24.62	25	1.400	1.528	4
Left-Side	Fixed	0	661	1880	24.62	25	0.135	0.147	4
Right-Side	Fixed	0	661	1880	24.62	25	0.043	0.047	4

Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.

WCDMA Band 2 Head SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.6 ±2						Relative Humidity (%): 53			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Head	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: WCDMA Band 2 Voice									
Left-Cheek	Fixed	0	9400	1880	19.44	21.5	0.404	0.649	1.6
Left-Tilt	Fixed	0	9400	1880	19.44	21.5	0.291	0.468	1.6
Right-Cheek	Fixed	0	9400	1880	19.44	21.5	0.423	0.680	1.6
Right-Tilt	Fixed	0	9400	1880	19.44	21.5	0.273	0.439	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.									

WCDMA Band 2 Hotspot SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.6 ±2						Relative Humidity (%): 53			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: WCDMA Band 2 RMC 10mm									
Front	Fixed	10	9400	1880	19.34	21.5	0.370	0.608	1.6
Back	Fixed	10	9262	1852.4	19.17	21.5	0.438	**0.749**	1.6
Back	Fixed	10	9400	1880	19.34	21.5	0.407	0.669	1.6
Back	Fixed	10	9538	1907.6	19.52	21.5	0.456	0.719	1.6
Bottom	Fixed	10	9400	1880	19.34	21.5	0.359	0.590	1.6
Left-Side	Fixed	10	9400	1880	19.34	21.5	0.133	0.219	1.6
Right-Side	Fixed	10	9400	1880	19.34	21.5	0.032	0.053	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.									

WCDMA Band 2 Limb SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.6 ±2						Relative Humidity (%): 53			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 10g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: WCDMA Band 2 RMC 0mm									
Front	Fixed	0	9400	1880	19.34	21.5	0.421	0.692	4
Back	Fixed	0	9262	1852.4	19.17	21.5	1.080	**1.847**	4
Back	Fixed	0	9400	1880	19.34	21.5	1.040	1.710	4
Back	Fixed	0	9538	1907.6	19.52	21.5	0.952	1.502	4
Bottom	Fixed	0	9400	1880	19.34	21.5	0.791	1.301	4
Left-Side	Fixed	0	9400	1880	19.34	21.5	0.276	0.454	4
Right-Side	Fixed	0	9400	1880	19.34	21.5	0.041	0.067	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.									

WCDMA Band 4 Head SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.9 ±2						Relative Humidity (%): 53			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Head	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: WCDMA Band 4 Voice									
Left-Cheek	Fixed	0	1413	1732.6	19.46	21	0.544	0.776	1.6
Left-Tilt	Fixed	0	1413	1732.6	19.46	21	0.173	0.247	1.6
Right-Cheek	Fixed	0	1413	1732.6	19.46	21	0.246	0.351	1.6
Right-Tilt	Fixed	0	1413	1732.6	19.46	21	0.209	0.298	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.									

WCDMA Band 4 Body SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.9 ±2						Relative Humidity (%): 53			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: WCDMA Band 4 RMC 10mm									
Front	Fixed	10	1413	1732.6	19.45	21	0.272	0.389	1.6
Back	Fixed	10	1312	1712.4	19.47	21	0.724	1.030	1.6
Back	Fixed	10	1413	1732.6	19.45	21	0.703	1.005	1.6
Back	Fixed	10	1513	1752.6	19.54	21	0.614	0.859	1.6
Bottom	Fixed	10	1312	1712.4	19.47	21	0.839	**1.193**	1.6
Bottom	Fixed	10	1413	1732.6	19.45	21	0.805	1.150	1.6
Bottom	Fixed	10	1513	1752.6	19.54	21	0.720	1.008	1.6
Left-Side	Fixed	10	1413	1732.6	19.45	21	0.118	0.169	1.6
Right-Side	Fixed	10	1413	1732.6	19.45	21	0.068	0.097	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.									

WCDMA Band 4 Limb SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.9 ±2						Relative Humidity (%): 53			
Ambient Temperature (°C) : 22.8 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 10g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: WCDMA Band 4 RMC 0mm									
Front	Fixed	0	1413	1732.6	19.45	21	0.663	0.947	4
Back	Fixed	0	1413	1732.6	19.45	21	1.580	2.258	4
Bottom	Fixed	0	1312	1712.4	19.47	21	1.830	**2.603**	4
Bottom	Fixed	0	1413	1732.6	19.45	21	1.820	2.601	4
Bottom	Fixed	0	1513	1752.6	19.54	21	1.810	2.533	4
Left-Side	Fixed	0	1413	1732.6	19.45	21	0.222	0.317	4
Right-Side	Fixed	0	1413	1732.6	19.45	21	0.081	0.116	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.									

WCDMA Band 5 Head SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.8 ±2						Relative Humidity (%): 52			
Ambient Temperature (°C) : 22.9 ±2						Depth of Liquid (cm):>15			
Test Position Head	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: WCDMA Band 5 Voice									
Left-Cheek	Fixed	0	4183	836.6	23.4	25	0.416	0.601	1.6
Left-Tilt	Fixed	0	4183	836.6	23.4	25	0.225	0.325	1.6
Right-Cheek	Fixed	0	4183	836.6	23.4	25	0.458	**0.662**	1.6
Right-Tilt	Fixed	0	4183	836.6	23.4	25	0.236	0.341	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.									

WCDMA Band 5 Body SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.8 ±2						Relative Humidity (%): 52			
Ambient Temperature (°C) : 22.9 ±2						Depth of Liquid (cm):>15			
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: WCDMA Band 5 RMC 10mm									
Front	Fixed	10	4183	836.6	23.26	25	0.288	0.430	1.6
Back	Fixed	10	4132	826.4	23.48	25	0.430	0.610	1.6
Back	Fixed	10	4183	836.6	23.26	25	0.432	0.645	1.6
Back	Fixed	10	4233	846.6	24.06	25	0.416	0.517	1.6
Bottom	Fixed	10	4183	836.6	23.26	25	0.073	0.109	1.6
Left-Side	Fixed	10	4183	836.6	23.26	25	0.225	0.336	1.6
Right-Side	Fixed	10	4183	836.6	23.26	25	0.235	0.351	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.									

WCDMA Band 5 Limb SAR									
SAR MEASUREMENT									
Liquid Temperature (°C) : 21.8 ±2					Relative Humidity (%): 52				
Ambient Temperature (°C) : 22.9 ±2					Depth of Liquid (cm):>15				
Test Position Body	Antenna Position	Dist (mm)	Frequency		Conducted Power (dBm)		**SAR** 10g (W/kg)		Limit (W/kg)
			Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Scaled	
Test Mode: WCDMA Band 5 RMC 0mm									
Front	Fixed	0	4183	836.6	23.26	25	0.497	0.742	4
Back	Fixed	0	4132	826.4	23.48	25	1.110	1.575	4
Back	Fixed	0	4183	836.6	23.26	25	1.100	**1.642**	4
Back	Fixed	0	4233	846.6	24.06	25	1.120	1.391	4
Bottom	Fixed	0	4183	836.6	23.26	25	0.296	0.442	4
Left-Side	Fixed	0	4183	836.6	23.26	25	0.187	0.279	4
Right-Side	Fixed	0	4183	836.6	23.26	25	0.298	0.445	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.									

LTE Band 2 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.6 ±2								Relative Humidity (%): 53			
Ambient Temperature (°C): 22.8 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 2 QPSK 20M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	0	18900	1880	20.01	21.5	0.392	0.552	1.6
Left-Cheek	Fixed	0	50	0	18900	1880	18.97	20	0.339	0.430	1.6
Left-Tilt	Fixed	0	1	0	18900	1880	20.01	21.5	0.310	0.437	1.6
Right-Cheek	Fixed	0	1	0	18900	1880	20.01	21.5	0.389	0.548	1.6
Right-Tilt	Fixed	0	1	0	18900	1880	20.01	21.5	0.284	0.400	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 2 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.6 ±2								Relative Humidity (%): 53			
Ambient Temperature (°C): 22.8 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 2 QPSK 20M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	50	18900	1880	20.01	21.5	0.245	0.345	1.6
Back	Fixed	10	1	50	18900	1880	20.01	21.5	0.434	0.612	1.6
Bottom	Fixed	10	1	50	18700	1860	20.12	21.5	0.537	0.738	1.6
Bottom	Fixed	10	1	50	18900	1880	20.01	21.5	0.600	**0.846**	1.6
Bottom	Fixed	10	1	50	19100	1900	20.17	21.5	0.533	0.724	1.6
Bottom	Fixed	10	50	0	18900	1880	18.97	20	0.418	0.530	1.6
Left-Side	Fixed	10	1	50	18900	1880	20.01	21.5	0.189	0.266	1.6
Right-Side	Fixed	10	1	50	18900	1880	20.01	21.5	0.043	0.061	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 2 Limb SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.6 ±2								Relative Humidity (%): 53			
Ambient Temperature (°C): 22.8 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 2 QPSK 20M 0mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	50	18900	1880	20.01	21.5	0.423	0.596	4
Back	Fixed	0	1	50	18700	1860	20.12	21.5	1.290	1.773	4
Back	Fixed	0	1	50	18900	1880	20.01	21.5	1.260	**1.776**	4
Back	Fixed	0	1	50	19100	1900	20.17	21.5	1.190	1.616	4
Back	Fixed	0	50	0	18900	1880	18.97	20	0.962	1.219	4
Bottom	Fixed	0	1	50	18900	1880	20.01	21.5	1.160	1.635	4
Left-Side	Fixed	0	1	50	18900	1880	20.01	21.5	0.272	0.383	4
Right-Side	Fixed	0	1	50	18900	1880	20.01	21.5	0.060	0.085	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.											

LTE Band 4 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.9 ±2								Relative Humidity (%): 53			
Ambient Temperature (°C): 22.8 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 4 QPSK 20M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	50	20175	1732.5	19.57	20	0.424	0.468	1.6
Left-Cheek	Fixed	0	50	0	20175	1732.5	18.33	18.5	0.387	0.402	1.6
Left-Tilt	Fixed	0	1	50	20175	1732.5	19.57	20	0.137	0.151	1.6
Right-Cheek	Fixed	0	1	50	20175	1732.5	19.57	20	0.256	0.283	1.6
Right-Tilt	Fixed	0	1	50	20175	1732.5	19.57	20	0.170	0.188	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 4 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.9 ±2								Relative Humidity (%): 53			
Ambient Temperature (°C): 22.8 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 4 QPSK 20M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	50	20175	1732.5	19.57	20	0.285	0.315	1.6
Back	Fixed	10	1	50	20050	1720	19.62	20	0.847	0.924	1.6
Back	Fixed	10	1	50	20175	1732.5	19.57	20	0.870	0.961	1.6
Back	Fixed	10	1	50	20300	1745	19.79	20	0.798	0.838	1.6
Bottom	Fixed	10	1	50	20050	1720	19.62	20	1.040	**1.135**	1.6
Bottom	Fixed	10	1	50	20175	1732.5	19.57	20	1.020	1.126	1.6
Bottom	Fixed	10	1	50	20300	1745	19.79	20	0.993	1.042	1.6
Bottom	Fixed	10	50	0	20175	1732.5	18.33	18.5	0.745	0.775	1.6
Left-Side	Fixed	10	1	50	20175	1732.5	19.57	20	0.040	0.044	1.6
Right-Side	Fixed	10	1	50	20175	1732.5	19.57	20	0.052	0.058	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 4 Limb SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.9 ±2								Relative Humidity (%): 53			
Ambient Temperature (°C): 22.8 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 4 QPSK 20M 0mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	50	20175	1732.5	19.57	20	0.558	0.616	4
Back	Fixed	0	1	50	20175	1732.5	19.57	20	1.360	1.502	4
Bottom	Fixed	0	1	50	20050	1720	19.62	20	1.600	1.746	4
Bottom	Fixed	0	1	50	20175	1732.5	19.57	20	1.590	**1.755**	4
Bottom	Fixed	0	1	50	20300	1745	19.79	20	1.660	1.742	4
Bottom	Fixed	0	50	0	20175	1732.5	18.33	18.5	1.230	1.279	4
Left-Side	Fixed	0	1	50	20175	1732.5	19.57	20	0.170	0.188	4
Right-Side	Fixed	0	1	50	20175	1732.5	19.57	20	0.068	0.075	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.											

LTE Band 5 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2							Relative Humidity (%): 52				
Ambient Temperature (°C): 22.9 ±2							Depth of Liquid (cm): >15				
Test Mode: LTE Band 5 QPSK 10M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	25	20525	836.5	23.45	25	0.369	0.527	1.6
Left-Tilt	Fixed	0	1	25	20525	836.5	23.45	25	0.227	0.324	1.6
Right-Cheek	Fixed	0	1	25	20525	836.5	23.45	25	0.397	**0.567**	1.6
Right-Cheek	Fixed	0	25	0	20525	836.5	22.42	23.5	0.306	0.392	1.6
Right-Tilt	Fixed	0	1	25	20525	836.5	23.45	25	0.271	0.387	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 5 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2							Relative Humidity (%): 52				
Ambient Temperature (°C): 22.9 ±2							Depth of Liquid (cm): >15				
Test Mode: LTE Band 5 QPSK 10M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	25	20525	836.5	23.45	25	0.310	0.443	1.6
Back	Fixed	10	1	25	20450	829	23.76	25	0.384	0.511	1.6
Back	Fixed	10	1	25	20525	836.5	23.45	25	0.361	0.516	1.6
Back	Fixed	10	1	25	20600	844	23.49	25	0.332	0.470	1.6
Back	Fixed	10	25	0	20525	836.5	22.42	23.5	0.285	0.365	1.6
Bottom	Fixed	10	1	25	20525	836.5	23.45	25	0.087	0.124	1.6
Left-Side	Fixed	10	1	25	20525	836.5	23.45	25	0.195	0.279	1.6
Right-Side	Fixed	10	1	25	20525	836.5	23.45	25	0.205	0.293	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 5 Limb SAR

SAR MEASUREMENT

Liquid Temperature (°C): 21.8 ±2	Relative Humidity (%): 52
Ambient Temperature (°C): 22.9 ±2	Depth of Liquid (cm): >15

Test Mode: LTE Band 5 QPSK 10M 0mm

Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	25	20525	836.5	23.45	25	0.556	0.794	4
Back	Fixed	0	1	25	20450	829	23.76	25	1.070	1.424	4
Back	Fixed	0	1	25	20525	836.5	23.45	25	1.070	1.529	4
Back	Fixed	0	1	25	20600	844	23.49	25	1.100	**1.557**	4
Back	Fixed	0	25	0	20525	836.5	22.42	23.5	0.844	1.082	4
Bottom	Fixed	0	1	25	20525	836.5	23.45	25	0.275	0.393	4
Left-Side	Fixed	0	1	25	20525	836.5	23.45	25	0.231	0.330	4
Right-Side	Fixed	0	1	25	20525	836.5	23.45	25	0.262	0.374	4

Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.

LTE Band 7 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.5 ±2								Relative Humidity (%): 54			
Ambient Temperature (°C): 22.6 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 7 QPSK 20M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	50	21100	2535	19.87	20.5	0.237	0.274	1.6
Left-Cheek	Fixed	0	50	0	21100	2535	18.72	19	0.232	0.247	1.6
Left-Tilt	Fixed	0	1	50	21100	2535	19.87	20.5	0.048	0.055	1.6
Right-Cheek	Fixed	0	1	50	21100	2535	19.87	20.5	0.075	0.087	1.6
Right-Tilt	Fixed	0	1	50	21100	2535	19.87	20.5	0.050	0.058	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 7 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.5 ±2								Relative Humidity (%): 54			
Ambient Temperature (°C): 22.6 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 7 QPSK 20M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	50	21100	2535	19.87	20.5	0.148	0.171	1.6
Back	Fixed	10	1	50	21100	2535	19.87	20.5	0.768	0.888	1.6
Bottom	Fixed	10	1	50	20850	2510	19.81	20.5	0.926	**1.085**	1.6
Bottom	Fixed	10	1	50	21100	2535	19.87	20.5	0.842	0.973	1.6
Bottom	Fixed	10	1	50	21350	2560	20.00	20.5	0.654	0.734	1.6
Bottom	Fixed	10	50	0	21100	2535	18.72	19	0.690	0.736	1.6
Left-Side	Fixed	10	1	50	21100	2535	19.87	20.5	0.086	0.099	1.6
Right-Side	Fixed	10	1	50	21100	2535	19.87	20.5	0.092	0.106	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 7 Limb SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.5 ±2								Relative Humidity (%): 54			
Ambient Temperature (°C): 22.6 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 7 QPSK 20M 0mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	50	21100	2535	19.87	20.5	0.265	0.306	4
Back	Fixed	0	1	50	21100	2535	19.87	20.5	0.918	1.061	4
Bottom	Fixed	0	1	50	20850	2510	19.81	20.5	1.230	**1.442**	4
Bottom	Fixed	0	1	50	21100	2535	19.87	20.5	1.110	1.283	4
Bottom	Fixed	0	1	50	21350	2560	20.00	20.5	0.898	1.008	4
Bottom	Fixed	0	50	0	21100	2535	18.72	19	0.903	0.963	4
Left-Side	Fixed	0	1	50	21100	2535	19.87	20.5	0.223	0.258	4
Right-Side	Fixed	0	1	50	21100	2535	19.87	20.5	0.099	0.114	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.											

LTE Band 12 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2								Relative Humidity (%): 52			
Ambient Temperature (°C): 22.9 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 12 QPSK 10M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	49	23095	707.5	23.98	25	0.243	0.307	1.6
Left-Tilt	Fixed	0	1	49	23095	707.5	23.98	25	0.198	0.250	1.6
Right-Cheek	Fixed	0	1	49	23095	707.5	23.98	25	0.411	0.520	1.6
Right-Cheek	Fixed	0	25	0	23095	707.5	22.95	23.5	0.265	0.301	1.6
Right-Tilt	Fixed	0	1	49	23095	707.5	23.98	25	0.208	0.263	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 12 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2								Relative Humidity (%): 52			
Ambient Temperature (°C): 22.9 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 12 QPSK 10M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	49	23095	707.5	23.98	25	0.429	0.543	1.6
Back	Fixed	10	1	25	23060	704	23.99	25	0.462	0.583	1.6
Back	Fixed	10	1	49	23095	707.5	23.98	25	0.544	0.688	1.6
Back	Fixed	10	1	25	23130	711	23.99	25	0.554	**0.699**	1.6
Back	Fixed	10	25	0	23095	707.5	22.95	23.5	0.422	0.479	1.6
Bottom	Fixed	10	1	49	23095	707.5	23.98	25	0.072	0.091	1.6
Left-Side	Fixed	10	1	49	23095	707.5	23.98	25	0.356	0.450	1.6
Right-Side	Fixed	10	1	49	23095	707.5	23.98	25	0.421	0.532	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 12 Limb SAR

SAR MEASUREMENT

Liquid Temperature (°C): 21.8 ±2	Relative Humidity (%): 52
Ambient Temperature (°C): 22.9 ±2	Depth of Liquid (cm): >15

Test Mode: LTE Band 12 QPSK 10M 0mm

Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	49	23095	707.5	23.98	25	0.313	0.396	4
Back	Fixed	0	1	25	23060	704	23.99	25	0.895	**1.129**	4
Back	Fixed	0	1	49	23095	707.5	23.98	25	0.821	1.038	4
Back	Fixed	0	1	25	23130	711	23.99	25	0.856	1.080	4
Back	Fixed	0	25	0	23095	707.5	22.95	23.5	0.755	0.857	4
Bottom	Fixed	0	1	49	23095	707.5	23.98	25	0.196	0.248	4
Left-Side	Fixed	0	1	49	23095	707.5	23.98	25	0.298	0.377	4
Right-Side	Fixed	0	1	49	23095	707.5	23.98	25	0.508	0.642	4

Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.

LTE Band 13 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2								Relative Humidity (%): 52			
Ambient Temperature (°C): 22.9 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 13 QPSK 10M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	25	23230	782	23.88	25	0.395	0.511	1.6
Left-Tilt	Fixed	0	1	25	23230	782	23.88	25	0.221	0.286	1.6
Right-Cheek	Fixed	0	1	25	23230	782	23.88	25	0.414	0.536	1.6
Right-Cheek	Fixed	0	25	0	23230	782	22.71	23.5	0.344	0.413	1.6
Right-Tilt	Fixed	0	1	25	23230	782	23.88	25	0.224	0.290	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 13 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2								Relative Humidity (%): 52			
Ambient Temperature (°C): 22.9 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 13 QPSK 10M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	25	23230	782	23.88	25	0.393	0.509	1.6
Back	Fixed	10	1	25	23230	782	23.88	25	0.505	**0.654**	1.6
Back	Fixed	10	25	0	23230	782	22.71	23.5	0.397	0.476	1.6
Bottom	Fixed	10	1	25	23230	782	23.88	25	0.063	0.082	1.6
Left-Side	Fixed	10	1	25	23230	782	23.88	25	0.294	0.380	1.6
Right-Side	Fixed	10	1	25	23230	782	23.88	25	0.325	0.421	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 13 Limb SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2								Relative Humidity (%): 52			
Ambient Temperature (°C): 22.9 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 13 QPSK 10M 0mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	25	23230	782	23.88	25	0.474	0.613	4
Back	Fixed	0	1	25	23230	782	23.88	25	0.955	**1.236**	4
Back	Fixed	0	25	0	23230	782	22.71	23.5	0.833	0.999	4
Bottom	Fixed	0	1	25	23230	782	23.88	25	0.201	0.260	4
Left-Side	Fixed	0	1	25	23230	782	23.88	25	0.192	0.248	4
Right-Side	Fixed	0	1	25	23230	782	23.88	25	0.395	0.511	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.											

LTE Band 17 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2								Relative Humidity (%): 52			
Ambient Temperature (°C): 22.9 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 17 QPSK 10M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	25	23790	710	23.87	25	0.383	0.497	1.6
Left-Tilt	Fixed	0	1	25	23790	710	23.87	25	0.184	0.239	1.6
Right-Cheek	Fixed	0	1	25	23790	710	23.87	25	0.385	0.499	1.6
Right-Cheek	Fixed	0	25	0	23790	710	22.80	23.5	0.323	0.379	1.6
Right-Tilt	Fixed	0	1	25	23790	710	23.87	25	0.180	0.233	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 17 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2								Relative Humidity (%): 52			
Ambient Temperature (°C): 22.9 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 17 QPSK 10M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	25	23790	710	23.87	25	0.428	0.555	1.6
Back	Fixed	10	1	25	23780	709	23.91	25	0.544	0.699	1.6
Back	Fixed	10	1	25	23790	710	23.87	25	0.566	**0.734**	1.6
Back	Fixed	10	1	25	23800	711	23.68	25	0.500	0.678	1.6
Back	Fixed	10	25	0	23790	710	22.80	23.5	0.438	0.515	1.6
Bottom	Fixed	10	1	25	23790	710	23.87	25	0.075	0.097	1.6
Left-Side	Fixed	10	1	25	23790	710	23.87	25	0.352	0.457	1.6
Right-Side	Fixed	10	1	25	23790	710	23.87	25	0.426	0.553	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 17 Limb SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2								Relative Humidity (%): 52			
Ambient Temperature (°C): 22.9 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 17 QPSK 10M 0mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	25	23790	710	23.87	25	0.378	0.490	4
Back	Fixed	0	1	25	23780	709	23.91	25	0.823	1.058	4
Back	Fixed	0	1	25	23790	710	23.87	25	0.838	1.087	4
Back	Fixed	0	1	25	23800	711	23.68	25	0.836	**1.133**	4
Back	Fixed	0	25	0	23790	710	22.80	23.5	0.828	0.973	4
Bottom	Fixed	0	1	25	23790	710	23.87	25	0.200	0.259	4
Left-Side	Fixed	0	1	25	23790	710	23.87	25	0.306	0.397	4
Right-Side	Fixed	0	1	25	23790	710	23.87	25	0.515	0.668	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.											

LTE Band 25 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.6 ±2								Relative Humidity (%): 53			
Ambient Temperature (°C): 22.8 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 25 QPSK 20M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	50	26365	1882.5	19.65	21.5	0.481	0.736	1.6
Left-Cheek	Fixed	0	50	0	26365	1882.5	18.52	20	0.258	0.363	1.6
Left-Tilt	Fixed	0	1	50	26365	1882.5	19.65	21.5	0.381	0.583	1.6
Right-Cheek	Fixed	0	1	50	26365	1882.5	19.65	21.5	0.478	0.732	1.6
Right-Tilt	Fixed	0	1	50	26365	1882.5	19.65	21.5	0.337	0.516	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 25 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.6 ±2								Relative Humidity (%): 53			
Ambient Temperature (°C): 22.8 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 25 QPSK 20M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	50	26365	1882.5	19.65	21.5	0.218	0.334	1.6
Back	Fixed	10	1	50	26365	1882.5	19.65	21.5	0.421	0.645	1.6
Bottom	Fixed	10	1	50	26140	1860	19.81	21.5	0.493	0.728	1.6
Bottom	Fixed	10	1	50	26365	1882.5	19.65	21.5	0.514	**0.787**	1.6
Bottom	Fixed	10	1	50	26590	1905	20.03	21.5	0.506	0.710	1.6
Bottom	Fixed	10	50	0	26365	1882.5	18.52	20	0.405	0.569	1.6
Left-Side	Fixed	10	1	50	26365	1882.5	19.65	21.5	0.147	0.225	1.6
Right-Side	Fixed	10	1	50	26365	1882.5	19.65	21.5	0.040	0.061	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 25 Limb SAR

SAR MEASUREMENT

Liquid Temperature (°C): 21.6 ±2	Relative Humidity (%): 53
Ambient Temperature (°C): 22.8 ±2	Depth of Liquid (cm): >15

Test Mode: LTE Band 25 QPSK 20M 0mm

Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	50	26365	1882.5	19.65	21.5	0.503	0.770	4
Back	Fixed	0	1	50	26140	1860	19.81	21.5	1.190	1.756	4
Back	Fixed	0	1	50	26365	1882.5	19.65	21.5	1.180	**1.807**	4
Back	Fixed	0	1	50	26590	1905	20.03	21.5	1.130	1.585	4
Back	Fixed	0	50	0	26365	1882.5	18.52	20	0.913	1.284	4
Bottom	Fixed	0	1	50	26365	1882.5	19.65	21.5	1.060	1.623	4
Left-Side	Fixed	0	1	50	26365	1882.5	19.65	21.5	0.325	0.498	4
Right-Side	Fixed	0	1	50	26365	1882.5	19.65	21.5	0.055	0.084	4

Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.

LTE Band 26 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2							Relative Humidity (%): 52				
Ambient Temperature (°C): 22.9 ±2							Depth of Liquid (cm): >15				
Test Mode: LTE Band 26 QPSK 15M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	36	26865	831.5	23.73	25	0.364	0.488	1.6
Left-Tilt	Fixed	0	1	36	26865	831.5	23.73	25	0.212	0.284	1.6
Right-Cheek	Fixed	0	1	36	26865	831.5	23.73	25	0.389	**0.521**	1.6
Right-Cheek	Fixed	0	36	0	26865	831.5	22.64	23.5	0.320	0.390	1.6
Right-Tilt	Fixed	0	1	36	26865	831.5	23.73	25	0.220	0.295	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 26 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2							Relative Humidity (%): 52				
Ambient Temperature (°C): 22.9 ±2							Depth of Liquid (cm): >15				
Test Mode: LTE Band 26 QPSK 15M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	36	26865	831.5	23.73	25	0.329	0.441	1.6
Back	Fixed	10	1	74	26765	821.5	23.64	25	0.380	0.520	1.6
Back	Fixed	10	1	36	26865	831.5	23.73	25	0.379	0.508	1.6
Back	Fixed	10	1	36	26965	841.5	23.53	25	0.298	0.418	1.6
Back	Fixed	10	36	0	26865	831.5	22.64	23.5	0.307	0.374	1.6
Bottom	Fixed	10	1	36	26865	831.5	23.73	25	0.089	0.119	1.6
Left-Side	Fixed	10	1	36	26865	831.5	23.73	25	0.247	0.331	1.6
Right-Side	Fixed	10	1	36	26865	831.5	23.73	25	0.280	0.375	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 26 Limb SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.8 ±2								Relative Humidity (%): 52			
Ambient Temperature (°C): 22.9 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 26 QPSK 15M 0mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	36	26865	831.5	23.73	25	0.567	0.760	4
Back	Fixed	0	1	74	26765	821.5	23.64	25	1.020	1.395	4
Back	Fixed	0	1	36	26865	831.5	23.73	25	1.050	1.407	4
Back	Fixed	0	1	36	26965	841.5	23.53	25	1.090	**1.529**	4
Back	Fixed	0	36	0	26865	831.5	22.64	23.5	0.903	1.101	4
Bottom	Fixed	0	1	36	26865	831.5	23.73	25	0.273	0.366	4
Left-Side	Fixed	0	1	36	26865	831.5	23.73	25	0.203	0.272	4
Right-Side	Fixed	0	1	36	26865	831.5	23.73	25	0.347	0.465	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.											

LTE Band 38 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.5 ±2							Relative Humidity (%): 54				
Ambient Temperature (°C): 22.6 ±2							Depth of Liquid (cm): >15				
Test Mode: LTE Band 38 QPSK 20M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	50	38000	2595	23.83	25	0.177	0.232	1.6
Left-Cheek	Fixed	0	50	0	38000	2595	23.07	23.5	0.179	0.198	1.6
Left-Tilt	Fixed	0	1	50	38000	2595	23.83	25	0.020	0.026	1.6
Right-Cheek	Fixed	0	1	50	38000	2595	23.83	25	0.071	0.093	1.6
Right-Tilt	Fixed	0	1	50	38000	2595	23.83	25	0.047	0.062	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 38 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.5 ±2							Relative Humidity (%): 54				
Ambient Temperature (°C): 22.6 ±2							Depth of Liquid (cm): >15				
Test Mode: LTE Band 38 QPSK 20M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	50	38000	2595	23.83	25	0.169	0.221	1.6
Back	Fixed	10	1	50	37850	2580	23.84	25	0.874	1.142	1.6
Back	Fixed	10	1	50	38000	2595	23.83	25	0.804	1.053	1.6
Back	Fixed	10	1	50	38150	2610	24.06	25	0.644	0.800	1.6
Back	Fixed	10	50	0	38000	2595	23.07	23.5	0.658	0.726	1.6
Bottom	Fixed	10	1	50	37850	2580	23.84	25	0.900	**1.176**	1.6
Bottom	Fixed	10	1	50	38000	2595	23.83	25	0.783	1.025	1.6
Bottom	Fixed	10	1	50	38150	2610	24.06	25	0.636	0.790	1.6
Left-Side	Fixed	10	1	50	38000	2595	23.83	25	0.155	0.203	1.6
Right-Side	Fixed	10	1	50	38000	2595	23.83	25	0.094	0.123	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 38 Limb SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.5 ±2								Relative Humidity (%): 54			
Ambient Temperature (°C): 22.6 ±2								Depth of Liquid (cm): >15			
Test Mode: LTE Band 38 QPSK 20M 0mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	50	38000	2595	23.83	25	0.312	0.408	4
Back	Fixed	0	1	50	38000	2595	23.83	25	0.986	1.291	4
Bottom	Fixed	0	1	50	37850	2580	23.84	25	1.300	**1.698**	4
Bottom	Fixed	0	1	50	38000	2595	23.83	25	1.130	1.479	4
Bottom	Fixed	0	1	50	38150	2610	24.06	25	0.937	1.163	4
Bottom	Fixed	0	50	0	38000	2595	23.07	23.5	0.923	1.019	4
Left-Side	Fixed	0	1	50	38000	2595	23.83	25	0.334	0.437	4
Right-Side	Fixed	0	1	50	38000	2595	23.83	25	0.121	0.158	4
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.											

LTE Band 41 Head SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.5 ±2							Relative Humidity (%): 54				
Ambient Temperature (°C): 22.6 ±2							Depth of Liquid (cm): >15				
Test Mode: LTE Band 41 QPSK 20M											
Test Position Head	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Left-Cheek	Fixed	0	1	0	40620	2593	23.95	25	0.370	0.471	1.6
Left-Cheek	Fixed	0	50	0	40620	2593	23.03	23.5	0.187	0.208	1.6
Left-Tilt	Fixed	0	1	0	40620	2593	23.95	25	0.165	0.210	1.6
Right-Cheek	Fixed	0	1	0	40620	2593	23.95	25	0.025	0.032	1.6
Right-Tilt	Fixed	0	1	0	40620	2593	23.95	25	0.050	0.064	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 41 Hotspot SAR											
SAR MEASUREMENT											
Liquid Temperature (°C): 21.5 ±2							Relative Humidity (%): 54				
Ambient Temperature (°C): 22.6 ±2							Depth of Liquid (cm): >15				
Test Mode: LTE Band 41 QPSK 20M 10mm											
Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 1g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	10	1	0	40620	2593	23.95	25	0.189	0.241	1.6
Back	Fixed	10	1	0	39750	2506	23.63	25	0.819	1.017	1.6
Back	Fixed	10	1	0	40620	2593	23.95	25	0.873	**1.112**	1.6
Back	Fixed	10	1	50	41490	2680	24.06	25	0.340	0.422	1.6
Back	Fixed	10	50	0	40620	2593	23.03	23.5	0.662	0.738	1.6
Bottom	Fixed	10	1	0	40620	2593	23.95	25	0.486	0.619	1.6
Left-Side	Fixed	10	1	0	40620	2593	23.95	25	0.140	0.178	1.6
Right-Side	Fixed	10	1	0	40620	2593	23.95	25	0.106	0.135	1.6
Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required in other channel.											

LTE Band 41 Limb SAR

SAR MEASUREMENT

Liquid Temperature (°C): 21.5 ±2	Relative Humidity (%): 54
Ambient Temperature (°C): 22.6 ±2	Depth of Liquid (cm): >15

Test Mode: LTE Band 41 QPSK 20M 0mm

Test Position Body	Antenna Position	Dist (mm)	RB	RB offset	Frequency		Conducted Power (dBm)		SAR 10g (W/Kg)		Limit (W/kg)
					Channel	MHz	Measurement	Tune-up Limit	Measurement	Tune-up Limit	
Front	Fixed	0	1	0	40620	2593	23.95	25	0.174	0.222	4
Back	Fixed	0	1	0	40620	2593	23.95	25	1.030	1.312	4
Bottom	Fixed	0	1	0	39750	2506	23.63	25	1.260	**1.727**	4
Bottom	Fixed	0	1	0	40620	2593	23.95	25	1.270	1.617	4
Bottom	Fixed	0	1	50	41490	2680	24.06	25	0.346	0.430	4
Bottom	Fixed	0	50	0	40620	2593	23.03	23.5	0.970	1.081	4
Left-Side	Fixed	0	1	0	40620	2593	23.95	25	0.177	0.225	4
Right-Side	Fixed	0		0	40620	2593	23.95	25	0.139	0.177	4

Note: When the reported SAR of the Mid channel for the exposure configuration is ≤ 2 W/kg, no further SAR testing is required in other channel.

9.2 Simultaneous Transmission

Simultaneous Transmission Configurations	
1	WWAN + WLAN 2.4GHz + BT
2	WWAN + WLAN 5GHz + BT

Worst Case SAR

1g Body

WWAN BAND	Front	Back	Top	Bottom	Left-side	Right-side
GSM 850	0.427	0.707	--	0.131	0.349	0.420
DCS 1900	0.308	1.021	--	0.792	0.142	0.035
WCDMA B2	**0.608**	0.749	--	0.590	0.219	0.053
WCDMA B4	0.389	1.030	--	**1.193**	0.169	0.097
WCDMA B5	0.430	0.645	--	0.109	0.336	0.351
LTE B2	0.345	0.612	--	0.846	0.266	0.061
LTE B4	0.315	0.961	--	1.135	0.044	0.058
LTE B5	0.443	0.516	--	0.124	0.279	0.293
LTE B7	0.171	0.888	--	1.085	0.099	0.106
LTE B12	0.543	0.699	--	0.091	0.450	0.532
LTE B13	0.509	0.654	--	0.082	0.380	0.421
LTE B17	0.555	0.734	--	0.097	**0.457**	**0.553**
LTE B25	0.334	0.645	--	0.787	0.225	0.061
LTE B26	0.441	0.520	--	0.119	0.331	0.375
LTE B38	0.221	**1.142**	--	1.176	0.203	0.123
LTE B41	0.241	1.112	--	0.619	0.178	0.135
WLAN BAND	Front	Back	Top	Bottom	Left-side	Right-side
2.4G Main	0.207	0.175	0.050	--	0.005	0.131
5G Main	0.942	0.951	1.023	--	0.092	0.489
BT	0.007	--	--	--	--	--

Worst Case SAR

10g Limbs

WWAN BAND	Front	Back	Top	Bottom	Left-side	Right-side
GSM 850	**1.029**	1.703	--	0.394	0.324	0.519
DCS 1900	0.709	2.052	--	1.528	0.147	0.047
WCDMA B2	0.692	1.847	--	1.301	0.454	0.067
WCDMA B4	0.947	**2.258**	--	**2.603**	0.317	0.116
WCDMA B5	0.742	1.642	--	0.442	0.279	0.445
LTE B2	0.596	1.776	--	1.635	0.383	0.085
LTE B4	0.616	1.502	--	1.755	0.188	0.075
LTE B5	0.794	1.557	--	0.393	0.330	0.374
LTE B7	0.306	1.061	--	1.442	0.258	0.114
LTE B12	0.396	1.129	--	0.248	0.377	0.642
LTE B13	0.613	1.236	--	0.260	0.248	0.511
LTE B17	0.490	1.133	--	0.259	0.397	**0.668**
LTE B25	0.770	1.807	--	1.623	**0.498**	0.084
LTE B26	0.760	1.529	--	0.366	0.272	0.465
LTE B38	0.408	1.291	--	1.698	0.437	0.158
LTE B41	0.222	1.312	--	1.727	0.225	0.177
WLAN BAND	Front	Back	Top	Bottom	Left-side	Right-side
2.4G Main	0.494	0.328	0.112	--	0.004	0.237
5G Main	0.995	0.558	1.429	--	0.085	0.473
BT	0.016	--	--	--	--	--

9.2.1 Simultaneous transmission of Wi-Fi and other wireless technologies

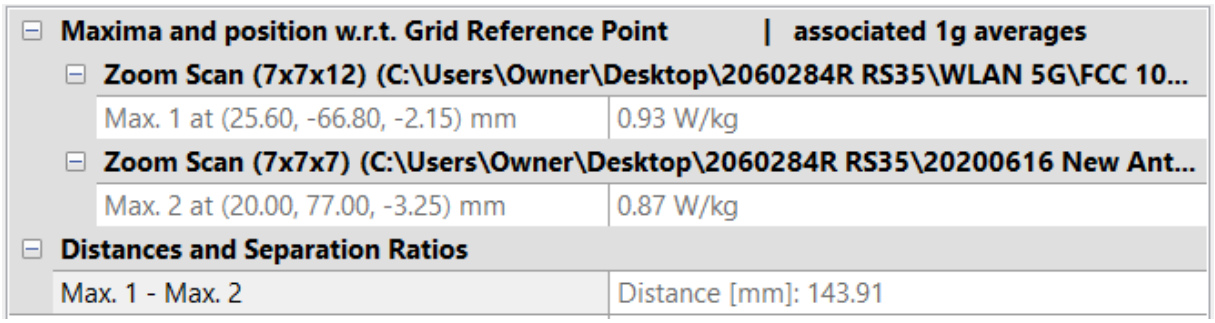
1g Body

Simultaneous Transmission Summation Scenario

Test Position (Body)	Worst Case WWAN Band	(1) WWAN (W/Kg)	(2) DTS (W/Kg)	(3) UNII (W/Kg)	(4) BT (W/Kg)	(1)+(2)+(4) **Σ 10-g SAR**	(1)+(3)+(4) **Σ 10-g SAR**
Front	WCDMA B2	0.608	0.207	0.942	0.007	0.822	1.557
Back	LTE B38	1.142	0.175	0.951	0.007	1.324	**2.100**
Top	--	--	0.050	1.023	0.007	0.057	1.030
Bottom	WCDMA B4	1.193	--	--	0.007	1.200	1.200
Left-Side	LTE B17	0.457	0.005	0.092	0.007	0.469	0.556
Right-Side	LTE B17	0.553	0.131	0.489	0.007	0.691	1.049

Note: The sum of value is less than 1.6 W/Kg, thus simultaneous SAR testing is not need

WWAN + WLAN 2.4G:



Configurations	Simultaneous Transmission (W/Kg)	Antenna pair in mm	Peak location separation ratio
(1)+(2)+(4)	2.100	143.91	0.021

10g Limbs

Simultaneous Transmission Summation Scenario

Test Position (Body)	Worst Case WWAN Band	(1) WWAN (W/Kg)	(2) DTS (W/Kg)	(3) UNII (W/Kg)	(4) BT (W/Kg)	(1)+(2)+(4)	(1)+(3)+(4)
						Σ 10-g SAR	**Σ 10-g SAR**
Front	GSM 850	1.029	0.494	0.995	0.016	1.539	2.040
Back	WCDMA B4	2.258	0.328	0.558	0.016	2.602	2.832
Top	--	--	0.112	1.429	0.016	0.128	1.445
Bottom	WCDMA B4	2.603	--	--	0.016	2.619	2.619
Left-Side	LTE B25	0.498	0.004	0.085	0.016	0.518	0.599
Right-Side	LTE B17	0.668	0.237	0.473	0.016	0.921	1.157

Note: The sum of value is less than 4 W/Kg, thus simultaneous SAR testing is not need

10. SAR measurement variability

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

Frequency				**SAR** 1g (W/kg)						
Mode	Band	Channel	MHz	Original	First Repeated		Second Repeated		Third Repeated	
					Value	Ratio	Value	Ratio	Value	Ratio
WLAN	2.4G	11	2462	0.183	N/A	N/A	N/A	N/A	N/A	N/A
WLAN	5G	165	5825	0.995	0.969	1.027	N/A	N/A	N/A	N/A
BT	2.4G	39	2441	0.007	N/A	N/A	N/A	N/A	N/A	N/A
GSM	850	251	848.8	0.510	N/A	N/A	N/A	N/A	N/A	N/A
PCS	1900	512	1850.2	0.813	0.795	1.023	N/A	N/A	N/A	N/A
WCDMA	B2	9538	1907.6	0.456	N/A	N/A	N/A	N/A	N/A	N/A
WCDMA	B4	1312	1712.4	0.839	0.831	1.010	N/A	N/A	N/A	N/A
WCDMA	B5	4183	826.4	0.432	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B2	18900	1880	0.600	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B4	20050	1720	1.040	1.010	1.030	N/A	N/A	N/A	N/A
LTE	B5	20450	829	0.384	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B7	20850	2510	0.926	0.898	1.031	N/A	N/A	N/A	N/A
LTE	B12	23130	711	0.554	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B13	23230	782	0.505	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B17	23790	710	0.566	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B25	26365	1882.5	0.514	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B26	26765	821.5	0.380	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B38	37850	2580	0.900	0.854	1.054	N/A	N/A	N/A	N/A
LTE	B41	40620	2593	0.873	0.869	1.005	N/A	N/A	N/A	N/A

1) Repeated measurement is not required when the original highest measured SAR is < 2 W/kg; steps 2) through 4) do not apply.
2) When the original highest measured SAR is ≥ 2 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 > 3 or when the original or repeated measurement is ≥ 3.61 W/kg (~ 10% from the 10-g SAR limit).
4) Perform a third repeated measurement only if the original, first or second repeated measurement is ≥ 3.75 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

Frequency				**SAR** 1g (W/kg)						
Mode	Band	Channel	MHz	Original	First Repeated		Second Repeated		Third Repeated	
					Value	Ratio	Value	Ratio	Value	Ratio
WLAN	2.4G	11	2462	0.437	N/A	N/A	N/A	N/A	N/A	N/A
WLAN	5G	165	5825	1.390	N/A	N/A	N/A	N/A	N/A	N/A
BT	2.4G	39	2441	0.016	N/A	N/A	N/A	N/A	N/A	N/A
GSM	850	251	848.8	1.220	N/A	N/A	N/A	N/A	N/A	N/A
PCS	1900	661	1880	1.880	N/A	N/A	N/A	N/A	N/A	N/A
WCDMA	B2	9262	1852.4	1.080	N/A	N/A	N/A	N/A	N/A	N/A
WCDMA	B4	1312	1712.4	1.830	N/A	N/A	N/A	N/A	N/A	N/A
WCDMA	B5	4233	846.6	1.120	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B2	18700	1860	1.290	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B4	20300	1745	1.660	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B5	20600	844	1.100	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B7	20850	2510	1.230	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B12	23060	704	0.895	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B13	23230	782	0.955	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B17	23790	710	0.838	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B25	26140	1860	1.190	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B26	26965	841.5	1.090	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B38	37850	2580	1.300	N/A	N/A	N/A	N/A	N/A	N/A
LTE	B41	40620	2593	1.270	N/A	N/A	N/A	N/A	N/A	N/A

Appendix

Appendix A. SAR System Check Data

Appendix B. SAR measurement Data

Appendix C. Test Setup Photographs & EUT Photographs

Appendix D. Probe Calibration Data

Appendix E. Dipole Calibration Data