SAR EVALUATION REPORT

FCC 47 CFR § 2.1093
IEEE Std 1528-2013

For

Acer Connect 5G Mobile Wi-Fi

MODEL NUMBER: M6E

REPORT NUMBER: 4791517585.3-1-SAR-1

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Prepared for

Acer Incorporated
8F, 88, Sec. 1, Xintai 5th Rd. Xizhi New Taipei City 221 Taiwan

Prepared by

UL Verification Services (Guangzhou) Co., Ltd, Song Shan Lake Branch
Building 10, Innovation Technology Park, No. 1, Li Bin Road, Song Shan Lake Hi-Tech Development Zone Dongguan, 523808, People's Republic of China

Tel: +86 769 22038881
Fax: +86 769 33244054
Website: www.ul.com

Revision History

Rev.	Issue Date	Revisions	Revised By
V1.0	February 22, 2025	Initial Issue	\

Note:

1) This test report is only published to and used by the applicant, and it is not for evidence purpose in China.
2) The measurement result for the sample received is <Pass> according to < IEEE Std. 1528>when <Simple Acceptance> decision rule is applied.

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1. Attestation of Test Results

Applicant Name	Acer Incorporated	
Address	8F, 88, Sec. 1, Xintai 5th Rd. Xizhi New Taipei City 221 Taiwan	
Manufacturer	Acer Incorporated	
Address	8F, 88, Sec. 1, Xintai 5th Rd. Xizhi New Taipei City 221 Taiwan	
EUT Name	Acer Connect 5G Mobile Wi-Fi	
Model	M6E	
Brand	ACER	
Sample Status	Normal	
Sample ID	7722525	
Sample Received Date	October 18, 2024	
Date of Tested	December 7, 2024~February 20, 2025	
Applicable Standards	FCC 47 CFR § 2.1093 IEEE Std. 1528-2013 KDB publication	
SAR Limits (W/Kg)		
Exposure Category	Peak spatial-average (1g of tissue)	Extremities (hands, wrists, ankles, etc.) (10g of tissue)
General population / Uncontrolled exposure	1.6	4
Occupational / Controlled exposure	8	20
The Highest Reported SAR (W/kg)		

RF Exposure Conditions		**Equipment Class**		
		PCB	**DTS**	**NII**
Body-worn (10mm)		1.165	0.417	0.551
Hotspot (10mm)		1.165	0.417	0.920
Simultaneous Transmission (1-g)	Body-worn	1.593		
	Hotspot	1.597		
Test Results		Pass		

Prepared By: Burt Hu Burt Hu Laboratory Engineer	Reviewed By: Kebo Zhang Kebo Zhang Senior Project Engineer	Approved By: Stephen Guo Stephen Guo Laboratory Manager

2. Test Specification, Methods and Procedures

The tests documented in this report were performed in accordance with IEEE Std.1528-2013 the following FCC Published RF exposure KDB procedures:

- 248227 D01 802.11 Wi-Fi SAR v02
- 447498 D01 General RF Exposure Guidance v06
- 690783 D01 SAR Listings on Grants v01
- 865664 D01 SAR measurement 100 MHz to 6 GHz v01
- 865664 D02 RF Exposure Reporting v01
- 941225 D05 SAR for LTE Devices v02
- 941225 D07 UMPC Mini Tablet v01
- 941225 D01 3G SAR Procedures v03
- 616217 D04 SAR for laptop and tablets v01r02

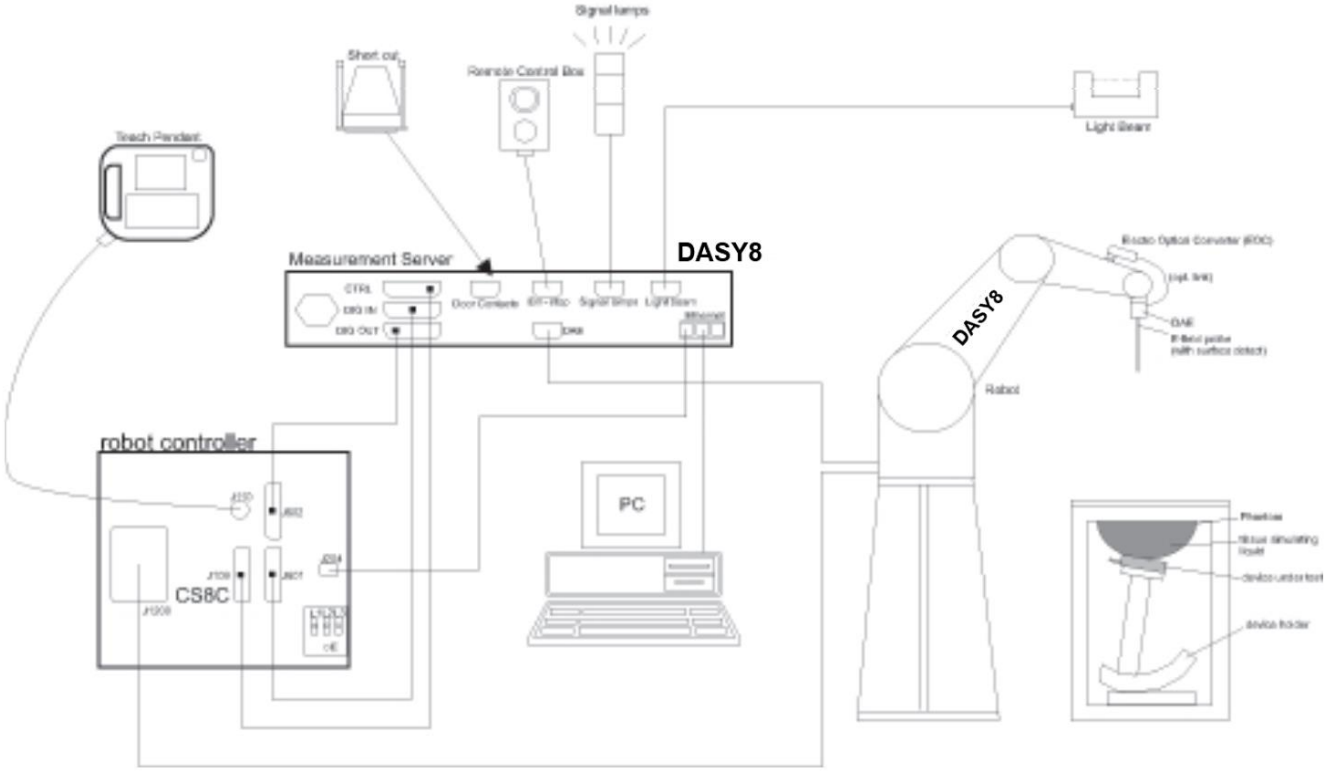
3. Facilities and Accreditation

Test Location	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Address	Building 10, Innovation Technology Park, Song Shan Lake Hi-tech Development Zone, Dongguan, 523808, China
Accreditation Certificate	**A2LA (Certificate No.: 4102.01)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with A2LA. **FCC (FCC Designation No.: CN1187)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. Has been recognized to perform compliance testing on equipment subject to the Commission's Delcaration of Conformity (DoC) and Certification rules. **ISED (Company No.: 21320)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been registered and fully described in a report filed with ISED. The Company Number is 21320 and the test lab Conformity Assessment Body Identifier (CABID) is CN0046. **VCCI (Registration No.: G-20192, C-20153, T-20155 and R-20202)** UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. has been assessed and proved to be in compliance with VCCI, the Membership No. is 3793. Facility Name: Chamber D, the VCCI registration No. is G-20192 and R-20202. Shielding Room B, the VCCI registration No. is C-20153 and T-20155.
Description	All measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi-tech Development Zone, Dongguan, 523808, China.

4. SAR Measurement System & Test Equipment

4.1. SAR Measurement System

The DASY8 system used for performing compliance tests consists of the following items:



- A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
- An isotropic Field probe optimized and calibrated for the targeted measurement.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
- A computer running Win 10 and the DASY8 software.
- Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
- The phantom, the device holder and other accessories according to the targeted measurement.

4.2. SAR Scan Procedures

Step 1: Power Reference Measurement

The Power Reference Measurement and Power Drift Measurements are for monitoring the power drift of the device under test in the batch process. The minimum distance of probe sensors to surface determines the closest measurement point to phantom surface. The minimum distance of probe sensors to surface is 2.1 mm. This distance cannot be smaller than the distance of sensor calibration points to probe tip as defined in the probe properties.

Step 2: Area Scan

The Area Scan is used as a fast scan in two dimensions to find the area of high field values, before doing a fine measurement around the hot spot. The sophisticated interpolation routines implemented in DASY software can find the maximum locations even in relatively coarse grids. When an Area Scan has measured all reachable points, it computes the field maximal 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 Standard 1528 and IEC 62209 standards, whereby 3 dB is a requirement when compliance is assessed in accordance with the ARIB standard (Japan). If only one Zoom Scan follows the Area Scan, then only the absolute maximum will be taken as reference. For cases where multiple maximums are detected, the number of Zoom Scans has to be increased accordingly.

Area Scan Parameters extracted from KDB 865664 D01 v01r04 SAR Measurement 100 MHz to 6 GHz

	≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface	5 mm ± 1 mm	½·δ·ln(2) mm ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location	30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

Step 3: Zoom Scan

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

Zoom Scan Parameters extracted from KDB 865664 D01 v01r04 SAR Measurement 100 MHz to 6 GHz

Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$ mm	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Step 4: Power drift measurement

The Power Drift Measurement measures the field at the same location as the most recent power reference measurement within the same procedure, and with the same settings. The Power Drift Measurement gives the field difference in dB from the reading conducted within the last Power Reference Measurement. This allows a user to monitor the power drift of the device under test within a batch process. The measurement procedure is the same as Step 1.

Step 5: Z-Scan (FCC only)

The Z Scan measures points along a vertical straight line. The line runs along the Z-axis of a one-dimensional grid. In order to get a reasonable extrapolation the extrapolated distance should not be greater than the step size in Z-direction.

4.3. Test Equipment

The measuring equipment used to perform the tests documented in this report has been calibrated in accordance with the manufacturers' recommendations, and is traceable to recognized national standards.

Name of equipment	Manufacturer	Type/Model	Serial No.	Cal. Due Date
ENA Network Analyzer	Keysight	E5080A	MY55100583	2025.09.27
Dielectric Probe kit	SPEAG	SM DAK 040 SA	1155	2025.02.27
DC power supply	Keysight	E36103A	MY55350020	2025.09.27
Signal Generator	Rohde & Schwarz	SME06	837633\001	2025.08.05
BI-Directional Coupler	KRYTAR	1850	54733	2025.09.27
Peak and Average Power Sensor	Keysight	E9325A	MY62220002	2025.09.27
Peak and Average Power Sensor	Keysight	E9325A	MY62220003	2025.09.27
Dual Channel PK Power Meter	Keysight	N1912A	MY55416024	2025.09.27
Amplifier	CORAD TECHNOLOGY LTD	AMF-4D-00400600-50-30P	1983561	NCR
Dosimetric E-Field Probe	SPEAG	EX3DV4	7733	2025.02.20
Dosimetric E-Field Probe	SPEAG	EX3DV4	7683	2025.07.02
Data Acquisition Electronic	SPEAG	DAE4	1739	2025.01.22
Data Acquisition Electronic	SPEAG	DAE4	1318	2025.10.08
Dipole Kit 750 MHz	SPEAG	D750V3	1153	2024.12.14
Dipole Kit 750 MHz	SPEAG	D750V3	1153	2027.12.1
Dipole Kit 835 MHz	SPEAG	D835V2	4d206	2024.12.16
Dipole Kit 835 MHz	SPEAG	D835V2	4d206	2027.12.23
Dipole Kit 1800 MHz	SPEAG	D1800V2	2d212	2024.12.20
Dipole Kit 1800 MHz	SPEAG	D1800V2	2d212	2027.12.25
Dipole Kit 1900 MHz	SPEAG	D1900V2	5d212	2024.12.19
Dipole Kit 1900 MHz	SPEAG	D1900V2	5d212	2027.12.24
Dipole Kit 2300 MHz	SPEAG	D2300V2	1065	2024.12.20
Dipole Kit 2300 MHz	SPEAG	D2300V2	1065	2027.12.23
Dipole Kit 2450 MHz	SPEAG	D2450V2	977	2024.12.16
Dipole Kit 2450 MHz	SPEAG	D2450V2	977	2027.12.25
Dipole Kit 2600 MHz	SPEAG	D2600V2	1117	2024.12.19
Dipole Kit 2600 MHz	SPEAG	D2600V2	1117	2027.12.26
Dipole Kit 3500 MHz	SPEAG	D3500V2	1047	2027.01.30
Dipole Kit 3700 MHz	SPEAG	D3700V2	1013	2027.01.30
Dipole Kit 5 GHz	SPEAG	D5GHzV2	1231	2024.12.15
Dipole Kit 5 GHz	SPEAG	D5GHzV2	1231	2027.12.24
Software	SPEAG	DASY8	N/A	NCR
Phantom	SPEAG	SAM V8.0	2100	NCR
Thermometer	/	GX-138	150709653	2025.10.7
Thermometer	VICTOR	ITHX-SD-5	18470005	2025.10.7

Note:

1) As per KDB865664D01 requirements for dipole calibration, the test laboratory has adopted three-year extended calibration interval. Each measured dipole is expected to evaluate with the following criteria at least on annual interval in Appendix C.
   a) There is no physical damage on the dipole;
   b) System check with specific dipole is within 10% of calibrated value;

c) The most recent return-loss result, measured at least annually, deviates by no more than 20% from the previous measurement.
d) The most recent measurement of the real or imaginary parts of the impedance, measured at least annually is within 5Ω from the previous measurement.

2) Dielectric assessment kit is calibrated against air, distilled water and a shorting block performed before measuring liquid parameters.
3) NCR is short for “No Calibration Requirement”.
4) The test date spans some device calibration dates, so some devices reflect calibration information twice

5. Measurement Uncertainty

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

6. Device Under Test (DUT) Information

6.1. DUT Description

DUT is a Connect 5G Mobile Wi-Fi that supports 2.4 / 5/6 GHz Wi-Fi wireless and WCDMA/LTE/NR technology.	
DUT Dimension	Overall (Length x Width x Height): 140 mm x 86 mm x 19.05 mm

6.2. Wireless Technology

Wireless technologies	Frequency bands	Operating mode
LTE	FDD Band2 FDD Band4 FDD Band5 FDD Band7 FDD Band12 FDD Band13 FDD Band14 FDD Band17 FDD Band25 FDD Band26 FDD Band30 FDD Band66 FDD Band71 TDD Band41 TDD Band42 TDD Band48	QPSK 16QAM ☐ Rel. 10 Does not support Carrier Aggregation (CA) ☒ Rel. 10 Carrier Aggregation (Downlink only) ☐ Rel. 11 Carrier Aggregation (2 Uplink and 2 Downlinks)
NR	FDD n2 FDD n5 FDD n7 FDD n66 FDD n71 TDD n38 TDD n41 TDD n77 TDD n78	DFT-s-OFDM: Pi/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM
W-CDMA (UMTS)	Band II Band VI Band V	UMTS Rel. 99 (Data) HSDPA (Rel. 5) HSUPA (Rel. 6)
Wi-Fi	2.4GHz	b/g/n HT20/11n HT40/ax HE20/ax HE40
Wi-Fi	5GHz	a20/n HT20/HT40/ac VHT20/VHT40/VHT80/ax HE20/HE40/HE80
Wi-Fi	6GHz	ax HE20/HE40/HE80

7. Test Configuration

7.1. 3G SAR Test Reduction Procedure

According to KDB 941225D01, in the following procedures, the mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as “otherwise” in the applicable procedures; SAR measurement is required for the secondary mode.

7.1.1. UMTS Test Configuration

1. Output Power Verification

Maximum output power is verified on the High, Middle and Low channels according to the procedures description in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all “1s” for WCDMA/HSDPA or applying the required inner loop power control procedure to maintain maximum output power while HSUPA is active. Result for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HSDPA, HSPA) Should be tabulated in the SAR report. All configuration that are not supported by the DUT or cannot be measured due to technical or equipment limitation should be clearly identified.

2. WCDMA

Body SAR Measurements

SAR for body-worn accessory configurations is measured using a 12.2 kbps RMC with TPC bits configured to all “1"s”. The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the handset with 12.2 kbps RMC as the primary mode.

3. HSDPA

SAR for body exposure configurations is measured according to the “Body SAR Measurements"" procedures of 3G device. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as “otherwise” in the applicable procedures; SAR measurement is required for the secondary mode.

As per KDB941225 D01, the 3G SAR test reduction procedure is applied to HSDPA body configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures for the highest reported SAR body exposure configuration in 12.2 kbps RMC.

HSDPA should be configured according to UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HAPRQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission condition, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. The β c and β d gain factors for DPCCH and DPDCH were set according to the values in the below table, β hs for HS-DPCCH is set automatically to the correct value when ΔACK, ΔNACK, ΔCQI = 8. The variation of the □c /□d ratio causes a power reduction at sub-tests 2 - 4.

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (1)	CM(dB)(2)	MPR (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0
2	12/15(3)	15/15(3)	64	12/15(3)	24/15	1.0	0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: △ACK, △NACK and △CQI = 8 $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$

Note 2 : CM=1 for β_c/β_d= 12/15, β_{hs}/β_c = 24/15. For all other combinations of DPDCH,DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 3 : For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1,TF1) to β_c = 11/15 and β_d = 15/15

The measurements were performed with a Fixed Reference Channel (FRC) and H-Set 1 QPSK.
Settings of required H-Set 1 QPSK acc. to 3GPP 34.121

Parameter	Value
Nominal average inf. bit rate	534 kbit/s
Inter-TTI Distance	3 TTI"s
Number of HARQ Processes	2 Processes
Information Bit Payload	3202 Bits
MAC-d PDU size	336 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	4800 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	9600 SMLs
Coding Rate	0.67
Number of Physical Channel Codes	5

HSDPA UE category

HS-DSCH Category	Maximum HS-DSCH Codes Received	Minimum Inter-TTI Interval	Maximum HS-DSCH Transport Block Bits/HS-DSCH TTI	Total Soft Channel Bits
1	5	3	7298	19200
2	5	3	7298	28800
3	5	2	7298	28800
4	5	2	7298	38400
5	5	1	7298	57600
6	5	1	7298	67200
7	10	1	14411	115200
8	10	1	14411	134400
9	15	1	25251	172800
10	15	1	27952	172800
11	5	2	3630	14400
12	5	1	3630	28800
13	15	1	34800	259200
14	15	1	42196	259200
15	15	1	23370	345600
16	15	1	27952	345600

4. HSUPA

SAR for body exposure configurations is measured according to the “Body SAR Measurements"" procedures of 3G device. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is ≤ ¼ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode.

As per KDB941225 D01v03, the 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures for the highest reported body exposure SAR configuration in 12.2 kbps RMC.

Due to inner loop power control requirements in HSDPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSDPA should be configured according to the values indicated below as well as other applicable procedures described in the „WCDMA Handset" and „Release 5 HSDPA Data Device" sections of 3G device.

Subtests for WCDMA Release 6 HSUPA

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs}(1)	β_{ec}	β_{ed}	β_{ec} (SF)	β_{ed} (code)	CM(2) (dB)	MPR (dB)	AG(4) Index	E-TFCI
1	11/15(3)	15/15(3)	64	11/15(3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}:47/15 β_{ed2}:47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15(4)	15/15(4)	64	15/15(4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: Δ ACK, Δ NACK and Δ CQI = 8 $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$

Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference

Note 3 : For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$

Note 4 : For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 14/15$ and $\beta_d = 15/15$

Note 5 : Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g

Note 6: β_{ed} can not be set directly; it is set by Absolute Grant Value.

HSUPA UE category

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCH TTI(ms)	Minimum Speading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	10	2SF2&2SF4	11484	5.76
	4	4	2		20000	2.00
7 (No DPDCH)	4	8	2	2SF2&2SF4	22996	?
	4	4	10		20000	?

Note:

1) When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4.UE categories 1 to 6 support QPSK only. UE category 7 supports QPSK and 16QAM. (TS25.306-7.3.0).

5. DC-HSDPA

SAR is required for Rel. 8 DC-HSDPA when SAR is required for Rel. 5 HSDPA; otherwise, the 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Power is measured for DC-HSDPA according to the H-Set 12, FRC configuration in Table C.8.1.12 of 3GPP TS 34.121-1 to determine SAR test reduction. A primary and a Second serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0. A summary of these setting is illustrated below:

Downlink Physical Channels are set as per 3GPP TS34.121-1 v9.0.0 E.5.0
Levels for HSDPA connection setup

Parameter During Connection setup	Unit	Value
P-CPICH_Ec/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH _Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

Call is set up as per 3GPP TS34.108 v9.5.0 sub clause 7.3.13

The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.

The measurements were performed with a Fixed Reference Channel (FRC) H-Set 12 with QPSK

Parameter	Value
Nominal average inf. bit rate	60 kbit/s
Inter-TTI Distance	1 TTI"s
Number of HARQ Processes	6 Processes
Information Bit Payload	120 Bits
Number Code Blocks	1 Block
Binary Channel Bits Per TTI	960 Bits
Total Available SMLs in UE	19200 SMLs
Number of SMLs per HARQ Process	3200 SMLs
Coding Rate	0.15
Number of Physical Channel Codes	1

Note:

1) The RMC is intended to be used for DC-HSDPA mode and both cells shall transmit with identical parameters as listed in the table above.
2) Maximum number of transmission is limited to 1, i.e., retransmission is not allowed. The redundancy and constellation version 0 shall be used.

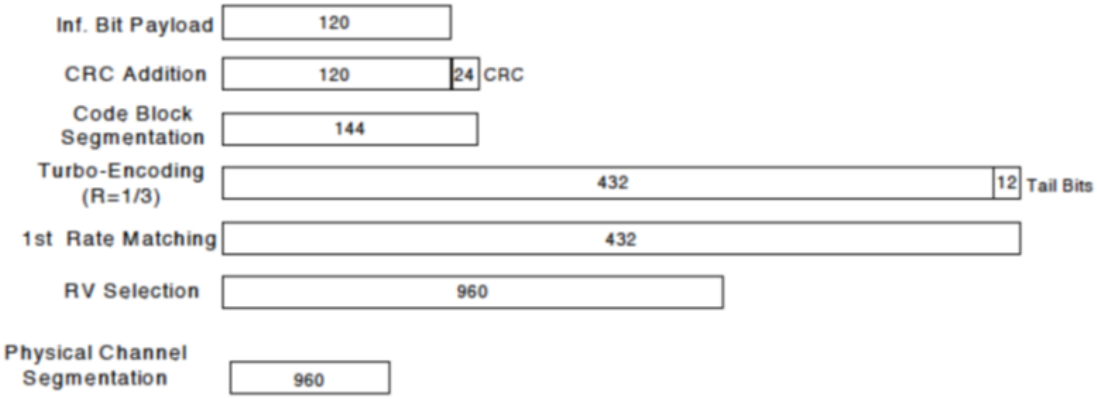


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

The following 4 Sub-tests for HSDPA were completed according to Release 5 procedures. A summary of subtest setting is illustrated below:

Sub-test	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs} (1)	CM(dB)(2)	MPR (dB)
1	2/15	15/15	64	2/15	4/15	0.0	0
2	12/15(3)	15/15(3)	64	12/15(3)	24/15	1.0	0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note 1: Δ ACK, Δ NACK and Δ CQI = 8 $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$

Note 2: CM=1 for β_c/β_d= 12/15, β_{hs}/β_c = 24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

Note 3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to β_c = 11/15 and β_d = 15/15

Up commands are set continuously to set the UE to Max power.
Note:
1) The Dual Carriers transmission only applies to HSDPA physical channels.
2) The Dual Carriers belong to the same Node and are on adjacent carriers.
3) The Dual Carriers do not support MIMO to serve UEs configured for dual cell operation.
4) The Dual Carriers operate in the same frequency band.
5) The device doesn't support the modulation of 16QAM in uplink but 64QAM in downlink for DC-HSDPA mode.

The device doesn't support carrier aggregation for it just can operate in Release 8.

7.2. LTE Test Configuration

Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR. The R&S CMW500 was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

1) Spectrum Plots for RB configurations

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

2) MPR

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

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

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

3) A-MPR

A-MPR (Additional MPR) has been disabled for all SAR tests by using Network Signaling Value of “NS=01” on the base station simulator.

4) SAR test requirements

A) Largest channel bandwidth standalone SAR test requirements

i) QPSK with 1 RB allocation

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

ii) QPSK with 50% RB allocation

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

iii) QPSK with 100% RB allocation

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

iv) Higher order modulations

For each modulation besides QPSK e.g., 16-QAM, 64-QAM, apply the QPSK procedures in above sections to determine the QAM configurations that may need SAR measurement. For each configuration identified as required for testing, SAR is required only when the highest maximum output power for the configuration in the higher order modulation is > ½ dB higher than the same configuration in QPSK or when the reported SAR for the QPSK configuration is > 1.45 W/kg.

B) Other channel bandwidth standalone SAR test requirements

For the other channel bandwidths used by the device in a frequency band, apply all the procedures required for the largest channel bandwidth in section A) to determine the channels and RB configurations that need SAR testing and only measure SAR when the highest maximum output power of a configuration requiring testing in the smaller channel bandwidth is > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

Table 4.2-1: Configuration of special subframe (lengths of DwPTS/GP/UpPTS)

Special subframe configuration	Normal cyclic prefix in downlink			Extended cyclic prefix in downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink		Normal cyclic prefix in uplink	Extended cyclic prefix in uplink
0	$6592 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$	$7680 \cdot T_s$	$2192 \cdot T_s$	$2560 \cdot T_s$
1	$19760 \cdot T_s$			$20480 \cdot T_s$		
2	$21952 \cdot T_s$			$23040 \cdot T_s$		
3	$24144 \cdot T_s$			$25600 \cdot T_s$		
4	$26336 \cdot T_s$			$7680 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$
5	$6592 \cdot T_s$	$4384 \cdot T_s$	$5120 \cdot T_s$	$20480 \cdot T_s$		
6	$19760 \cdot T_s$			$23040 \cdot T_s$		
7	$21952 \cdot T_s$			$12800 \cdot T_s$		
8	$24144 \cdot T_s$			-	-	-
9	$13168 \cdot T_s$			-	-	-

Table 4.2-2: Uplink-downlink configurations

Uplink-downlink configuration	Downlink-to-Uplink Switch-point periodicity	Subframe number									
		0	1	2	3	4	5	6	7	8	9
0	5 ms	D	S	U	U	U	D	S	U	U	U
1	5 ms	D	S	U	U	D	D	S	U	U	D
2	5 ms	D	S	U	D	D	D	S	U	D	D
3	10 ms	D	S	U	U	U	D	D	D	D	D
4	10 ms	D	S	U	U	D	D	D	D	D	D
5	10 ms	D	S	U	D	D	D	D	D	D	D
6	5 ms	D	S	U	U	U	D	S	U	U	D

According to Figure 4.2-1, one radio frame is configured by 10 subframes, which consist of Uplink-subframe, Downlink-subframe and Special subframe. For TDD-LTE, the Duty Cycle should be calculated on Uplink-subframes and Special subframes, due to Special subframe containing both Uplink transmissions. So for one radio frame, Duty Cycle can be calculated with formula as below. The count of Uplink subframes are according to Table 4.2-2:

Duty cycle = (30720Ts*Ups + Uplink Component*Specials)/(307200Ts)

About the uplink component of Special subframes, we can figure out by Table 4.2-1:

Uplink Component = UpPTS

In conclusion, for the TDD LTE Band, Duty Cycle can be calculated with formula as below. all these sets are ok when we test, or we can set as below.

Duty cycle =[(30720Ts*Ups) + UpPTS * Specials]/(307200Ts)

And we can get different Duty cycles under different configurations:

Uplink-downlink configuratin	Subframe number			Configuration of special subframe							
				Normal cyclic prefix in downlink				Extended cyclic prefix in downlink			
				Normal cyclic prefix in uplink		Extended cyclic prefix in uplink		Normal cyclic prefix in uplink		Extended cyclic prefix in uplink	
	D	S	U	configuration 0-4	configuration 5-9	configuration 0-4	configuration 5-9	configuration 0-3	configuration 4-7	configuration 0-3	configuration
0	2	2	6	61.43%	62.85%	61.67%	63.33%	61.43%	62.85%	61.67%	63.33%
1	4	2	4	41.43%	42.85%	41.67%	43.33%	41.43%	42.85%	41.67%	43.33%
2	6	2	2	21.43%	22.85%	21.67%	23.33%	21.43%	22.85%	21.67%	23.33%
3	6	1	3	30.71%	31.43%	30.83%	31.67%	30.71%	31.43%	30.83%	31.67%
4	7	1	2	20.71%	21.43%	20.83%	21.67%	20.71%	21.43%	20.83%	21.67%
5	8	1	1	10.71%	11.43%	10.83%	11.67%	10.71%	11.43%	10.83%	11.67%
6	3	2	5	51.43%	52.85%	51.67%	53.33%	51.43%	52.85%	51.67%	53.33%

For TDD LTE, SAR should be tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7 for Frame structure type 2.

7.3. NR Band Test Configuration

For 5G NR test procedure was following step similar FCC KDB 941225 D05:

a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 3GPP 38.101 maximum power reduction for power class 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-QPSK or the reported SAR for the DFT-QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.

b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class 3, for PI/2 BPSK/16QAM/64QMA/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the PI/2 BPSK/16QAM/64QMA/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.

c. SAR testing start with the largest SCS and largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.

d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.

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

f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK/16QAM/64QAM/256QAM SAR testing are not required.

g. Smaller SCS/bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device.

7.4. Wi-Fi Test Configuration

For Wi-Fi SAR testing, a communication link is set up with the testing software for Wi-Fi mode test. During the test, at each test frequency channel, the EUT is operated at the RF continuous emission mode. The test procedures in KDB 248227D01 are applied.

7.4.1. Initial Test Position Procedure

For exposure condition with multiple test position, such as handsets operating next to the ear, devices with hotspot mode or UMPC mini-tablet, procedures for initial test position can be applied. Using the transmission mode determined by the DSSS procedure or initial test configuration, area scans are measured for all position in an exposure condition. The test position with the highest extrapolated (peak) SAR is used as the initial test position. When reported SAR for the initial test position is ≤ 0.4W/kg, no additional testing for the remaining test position is required. Otherwise, SAR is evaluated at the subsequent highest peak SAR position until the reported SAR result is ≤ 0.8W/kg or all test position are measured. For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

7.4.2. Initial Test Configuration Procedure

An initial test configuration is determined for OFDM transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. SAR is measured using the highest measured maximum output power channel. For configurations with the same specified or measured maximum output power, additional transmission mode and test channel selection procedures are required (see section 5.3.2 of KDB 248227D01). SAR test reduction of subsequent highest output test channels is based on the reported SAR of the initial test configuration.

For next to the ear, hotspot mode and UMC mini-tablet exposure configurations where multiple test positions are required, the initial test position procedure is applied to minimize the number of test positions required for SAR measurement using the initial test configuration transmission mode. For fixed exposure conditions that do not have multiple SAR test positions, SAR is measured in the transmission mode determined by the initial test configuration.

When the reported SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for the subsequent next highest measured output power channel(s) in the initial test configuration until the reported SAR is ≤ 1.2 W/kg or all required channels are tested.

7.4.3. Sub Test Configuration Procedure

SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units.

When the highest reported SAR for the initial test configuration, according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.

7.4.4. 2.4GHz Wi-Fi SAR Test Procedures

Separate SAR procedures are applied to DSSS and OFDM configurations in the 2.4 GHz band to simplify DSSS test requirements. For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions.

A) 802.11b DSSS SAR Test Requirements

SAR is measured for 2.4 GHz 802.11b DSSS using either a fixed test position or, when applicable, the initial test position procedure. SAR test reduction is determined according to the following:

1) When the reported SAR of the highest measured maximum output power channel (section 3.1 of KDB 248227D01) for the exposure configuration is ≤ 0.8 W/kg, no further SAR testing is required for 802.11b DSSS in that exposure configuration.
2) When the reported SAR is > 0.8 W/kg, SAR is required for that exposure configuration using the next highest measured output power channel. When any reported SAR is > 1.2 W/kg, SAR is required for the third channel i.e., all channels require testing.

B) 2.4GHz 802.11g/n OFDM SAR Test Exclusion Requirements

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied (section 5.3 of KDB 248227D01). SAR is not required for the following 2.4 GHz OFDM conditions.

1) When KDB Publication 447498 SAR test exclusion applies to the OFDM configuration.
2) 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.

C) SAR Test Requirements for OFDM configurations

When SAR measurement is required for 802.11 g/n OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.

7.4.5. 5GHz Wi-Fi SAR Test Procedures

U-NII-1 and U-NII-2A Bands

For devices that operate in only one of the U-NII-1 and U-NII-2A bands, the normally required SAR procedures for OFDM configurations are applied. For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following:

1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition); otherwise, both bands are tested independently for SAR.
2) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for the band with lower maximum output power in that test configuration; otherwise, both bands are tested independently for SAR.
3) The two U-NII bands may be aggregated to support a 160 MHz channel on channel number 50. Without additional testing, the maximum output power for this is limited to the lower of the maximum output power certified for the two bands. When SAR measurement is required for at least one of the bands and the highest reported SAR adjusted by the ratio of specified maximum output power of aggregated to standalone band is > 1.2 W/kg, SAR is required for the 160 MHz channel. This procedure does not apply to an aggregated band with maximum output higher than the standalone band(s); the aggregated band must be tested independently for SAR. SAR is not required when the 160 MHz channel is operating at a reduced maximum power and also qualifies for SAR test exclusion.

U-NII-2C and U-NII-3 Bands

The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. when Terminal Doppler Weather Radar (TDWR) restriction applies, all channels that operate at 5.60 – 5.65 GHz must be included to apply the SAR test reduction and measurement procedures.

When the same transmitter and antenna(s) are used for U-NII-2C band and U-NII-3 band or 5.8 GHz band of §15.247, the bands may be aggregated to enable additional channels with 20, 40 or 80 MHz bandwidth to span across the band gap, as illustrated in Appendix B. The maximum output power for the additional band gap channels is limited to the lower of those certified for the bands. Unless band gap channels are permanently disabled, they must be considered for SAR testing. The frequency range covered by these bands is 380 MHz (5.47 – 5.85 GHz), which requires a minimum of at least two SAR probe calibration frequency points to support SAR measurements. To maintain SAR measurement accuracy and to facilitate test reduction, the channels in U-NII-2C band above 5.65 GHz may be grouped with the 5.8 GHz channels in U-NII-3 or §15.247 band to enable two SAR probe calibration frequency points to cover the bands, including the band gap channels. When band gap channels are supported and the bands are not aggregated for SAR testing, band gap channels must be considered independently in each band according to the normally required OFDM SAR measurement and probe calibration frequency points requirements.

OFDM Transmission Mode and SAR Test Channel Selection

When the same maximum output power was specified for multiple OFDM transmission mode configurations in a frequency band or aggregated band, SAR is measured using the configuration with the largest channel bandwidth, lowest order modulation and lowest data rate. When the maximum output power of a channel is the same for equivalent OFDM configurations; for example, 802.11a, 802.11n and 802.11ac or 802.11g and 802.11n with the same channel bandwidth, modulation and data rate etc., the lower order 802.11 mode i.e., 802.11a, then 802.11n and 802.11ac or 802.11g then 802.11n, is used for SAR measurement. When the maximum output power are the same for multiple test channels, either according to the default or additional power measurement requirements, SAR is measured using the channel closest to the middle of the frequency band or aggregated band. When there are multiple channels with the same maximum output power, SAR is measured using the higher number channel.

7.5. Repeated measurements

Repeated measurements are required only when the measured SAR is ≥ 0.80 W/kg.18 If the measured SAR value of the initial repeated measurement is < 1.45 W/kg with ≤ 20% variation, only one repeated measurement is required to reaffirm that the results are not expected to have substantial variations, which may introduce significant compliance concerns. A second repeated measurement is required only if the measured result for the initial repeated measurement is within 10% of the SAR limit and vary by more than 20%, which are often related to device and measurement setup difficulties. The following procedures are applied to determine if repeated measurements are required. The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.19 The repeated measurement results must be clearly identified in the SAR report. All measured SAR, including the repeated results, must be considered to determine compliance and for reporting according to KDB Publication 690783.

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.

8. SAR evaluation analysis for PC2 power level

From May 2017 TCB Workshop, SAR tested were performed using Power Class 3. SAR test for Power Class 2 is tested using the highest SAR test configuration in Power Class 3 for each LTE configuration and exposure condition combination. According to the highest time averaged power for UL-DL configurations, configuration # 1 with duty cycle 43.3% is used for Power Class 2 SAR test. Additional SAR testing for Power Class 2 is not required when the reported SAR vs. output power can be linearly scaled with < 10% discrepancy between power classes and all reported SAR are < 1.4 W/kg.

Reported SAR vs. Output Power linearly scaled

LTE B41

RF Exposure Condition	LTE Band 41 PC2			LTE Band 41 PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	43.3	26.00	398.11	63.30	25.000	316.23	0.384	0.861	0.331	-0.62	±10%	No

EN-DC

RF Exposure Condition	LTE Band 41 PC2			LTE Band 41 PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	43.3	22.00	158.49	63.30	19.000	79.43	0.609	1.365	0.831	-0.39	±10%	No

NR N41

RF Exposure Condition	NR N41 PC2			NR N41 PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	26.00	398.11	100.00	24.500	281.84	0.676	0.706	0.477	-0.32	±10%	No

EN-DC

RF Exposure Condition	NR N41 PC2			NR N41 PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	24.0	251.19	100.00	22.5	177.83	0.365	0.706	0.258	-0.64	±10%	No

NR N77 A Sensor on

RF Exposure Condition	NR N77 A PC2			NR N77 A PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	24.0	251.19	100.00	22.5	177.83	0.365	0.777	0.258	-0.67	±10%	No

EN-DC+WLAN Sensor on

RF Exposure Condition	NR N77 A PC2			NR N77 A PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	23.0	199.53	100.00	21.5	141.25	0.365	0.504	0.258	-0.49	±10%	No

NR N77 C Sensor on

RF Exposure Condition	NR N77 C PC2			NR N77 C PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	24.0	251.19	100.00	22.5	177.83	0.767	0.504	0.542	0.07	±10%	No

EN-DC+WLAN Sensor on

RF Exposure Condition	NR N77 C PC2			NR N77 C PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	23.0	199.53	100.00	22.0	158.49	0.573	0.504	0.361	-0.28	±10%	No

NR N78 A:

RF Exposure Condition	NR N78 A PC2			NR N78 A PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	25.5	354.81	100.00	23.0	199.53	1.165	0.889	1.036	0.17	±10%	No

EN-DC Sensor on

RF Exposure Condition	NR N78 A PC2			NR N78 A PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	24.0	251.19	100.00	21.5	141.25	0.664	0.889	0.590	-0.34	±10%	No

EN-DC+WLAN Sensor on

RF Exposure Condition	NR N78 A PC2			NR N78 A PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	22.5	177.83	100.00	20.5	112.20	0.611	0.792	0.484	-0.39	±10%	No

NR N78 C

RF Exposure Condition	NR N78 C PC2			NR N78 C PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	25.5	354.81	100.00	23.5	223.87	0.812	0.792	0.643	-0.19	±10%	No

EN-DC Sensor on

RF Exposure Condition	NR N78 C PC2			NR N78 C PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	24.0	251.19	100.00	22.0	158.49	0.621	0.792	0.492	-0.38	±10%	No

EN-DC+WLAN Sensor on

RF Exposure Condition	NR N78 C PC2			NR N78 C PC3				PC3 scaled to PC2 factor	PC2 Linearly Scaled Reported SAR (W/kg)	Linearly Scaled (%)	Limit	Testing Required
	DC (%)	Tune-up (dBm)	Tune-up (mW)	DC (%)	Tune-up (dBm)	Tune-up (mW)	Reported SAR					
Body-worn & Hotspot	50.0	23.0	199.53	100.00	21.0	125.89	0.563	0.792	0.446	-0.44	±10%	No

9. Power reduction specification

9.1. Power reduction mechanism

This device uses a single fixed level of power reduction through static table look-up for SAR compliance and it is triggered by a single event or operation.

1) A fixed level power reduction is applied for some frequency bands when simultaneously transmitting with the other antennas in certain simultaneous transmission conditions. The standalone SAR compliance still uses the standalone SAR results tested at the maximum output power level without any power reduction.
2) The proximity sensor is used to indicate when the device is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes of main antenna to ensure SAR compliance (Refer to section 8.2 for detailed proximity Sensor information and validation data per KDB 616217).

The following tables summarize the key power reduction information. The detailed full power which is the Max. power the state can use and reduced tune-up specifications and conducted power measurement results are provided in section 9 of this report.

Body & Hotspot standalone power level(dBm)				
Power Reduction Scenario	LTE B7	LTE B30	N77 A	N77 C
Sensor on	22.5	20.5	22.5	22.5

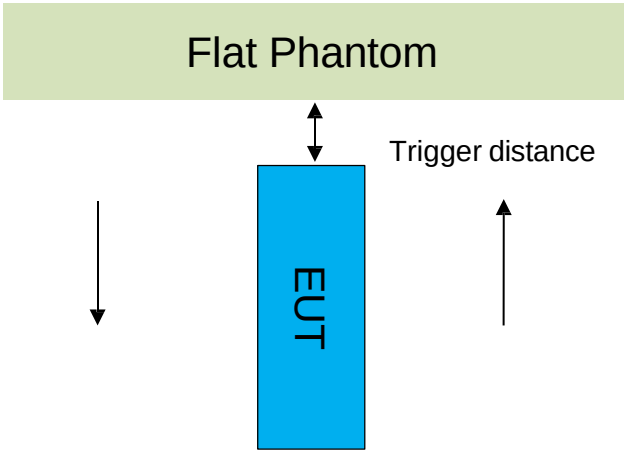
EN-DC simultaneous transmission power level(dBm)						
Power Reduction Scenario	LTE B5	LTE B26	LTE B66	N66	N78 A	N78 C
Sensor on	23	23	23	21	21.5	22

EN-DC+WLAN simultaneous transmission power level(dBm)															
Power Reduction Scenario	LTE B2	LTE B4	LTE B5	LTE B12	LTE B25	LTE B26	LTE B66	N2	N38	N41	N66	N77 A	N77 C	N78 A	N78 C
Sensor on	22	23	22.5	23.5	22.5	22.5	22.5	22.5	24	22.5	20.5	21.5	22	20.5	21

9.2. Proximity Sensor Triggering Test

Proximity sensor coverage
If a sensor is spatially offset from the antenna(s), it is necessary to verify sensor triggering for conditions where the antenna is next to the user but the sensor is laterally further away to ensure sensor coverage is sufficient for reducing the power to maintain compliance. For p-sensor coverage testing, the device is moved and “along the direction of maximum antenna and sensor offset”.
The proximity sensor and main antenna use same metallic electrode, so there is no spatial offset.

Proximity sensor triggering distances:
Proximity sensor triggering distance testing was performed according to the procedures outlined in KDB 616217 D04 section 6.2, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed.

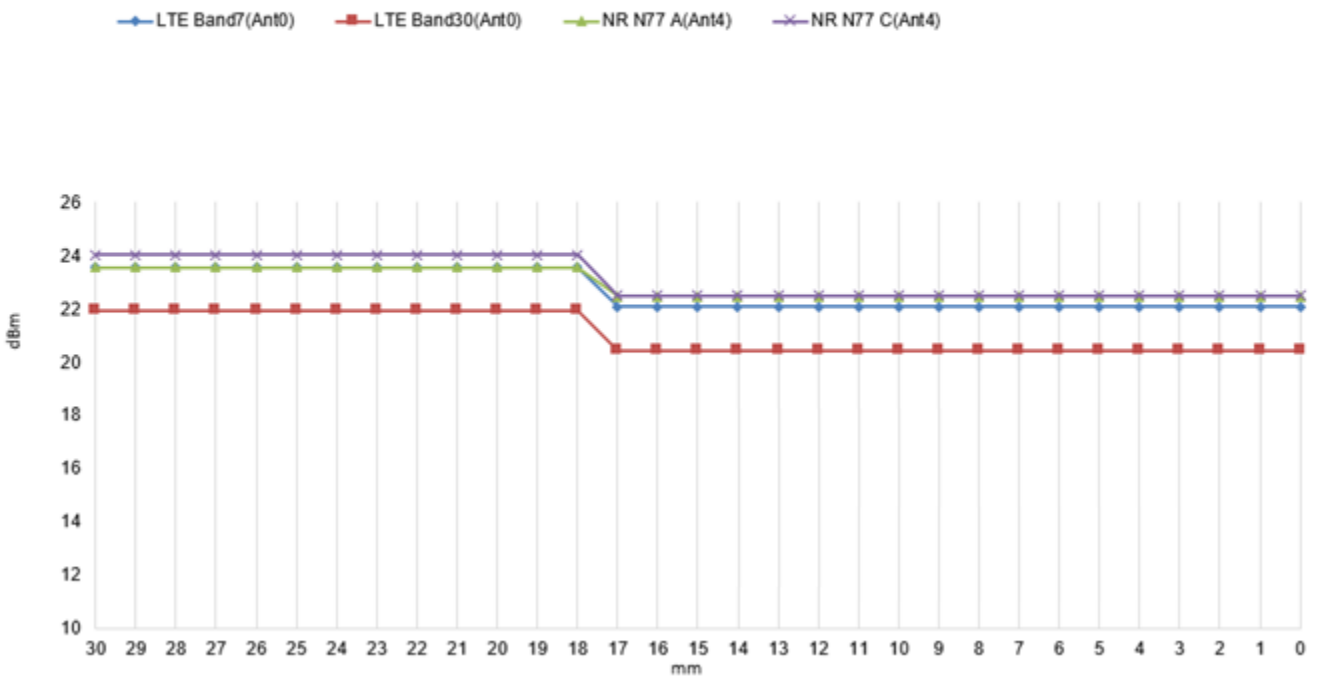


Proximity Sensor Triggering Distance(mm)						
ANT0						
Position	Front Surface	Back Surface	Top Edge	Bottom Edge	Left Edge	Right Edge
Minimum (mm)	17	17	17	17	17	17
Required SAR Test	Yes	Yes	Yes	Yes	Yes	Yes
ANT3						
Minimum (mm)	17	17	17	17	17	17
Required SAR Test	Yes	Yes	Yes	Yes	Yes	Yes
ANT4						
Minimum (mm)	17	17	17	17	17	17
Required SAR Test	Yes	Yes	Yes	Yes	Yes	Yes
ANT7						
Minimum (mm)	17	17	17	17	17	17
Required SAR Test	Yes	Yes	Yes	Yes	Yes	Yes
ANT8						
Minimum (mm)	17	17	17	17	17	17
Required SAR Test	Yes	Yes	Yes	Yes	Yes	Yes

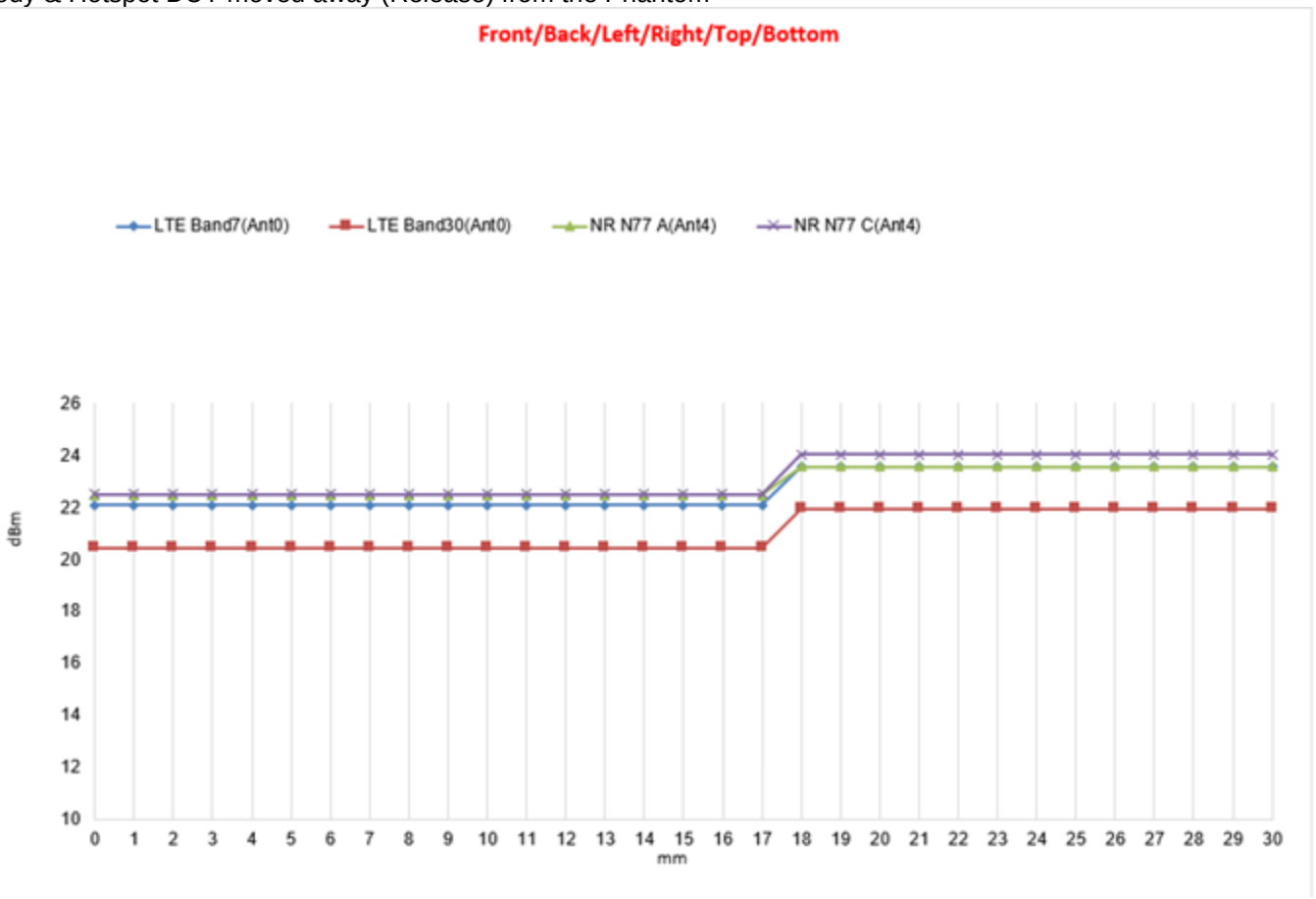
Note:
SAR tests with proximity sensor power reduction are only required for the sides of frequency bands in the table above. For the other sides or other frequency bands of the device, SAR is still tested at the full power level with sensor off.

Body & Hotspot DUT moved toward (Trigger) the Phantom

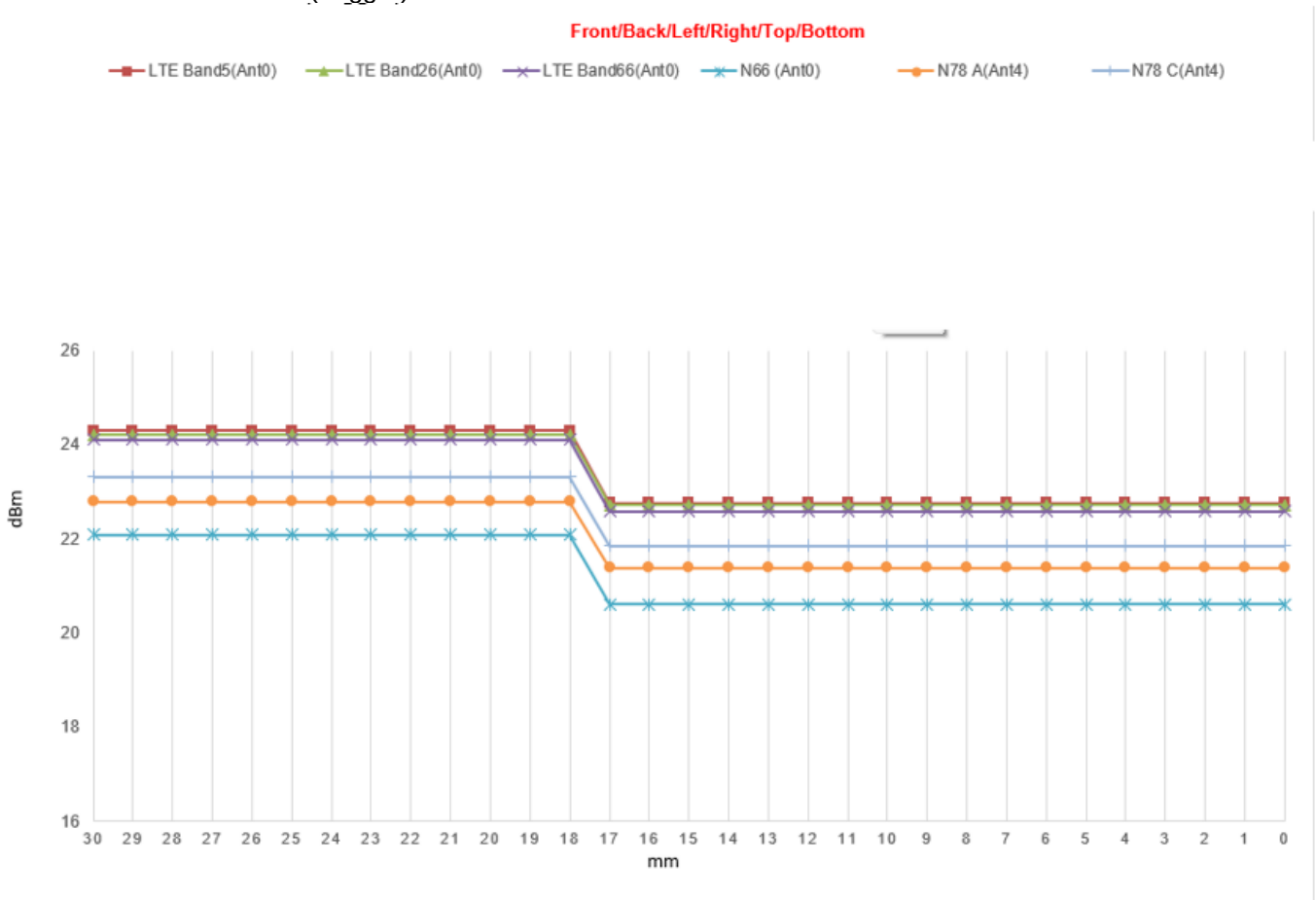
Front/Back/Left/Right/Top/Bottom



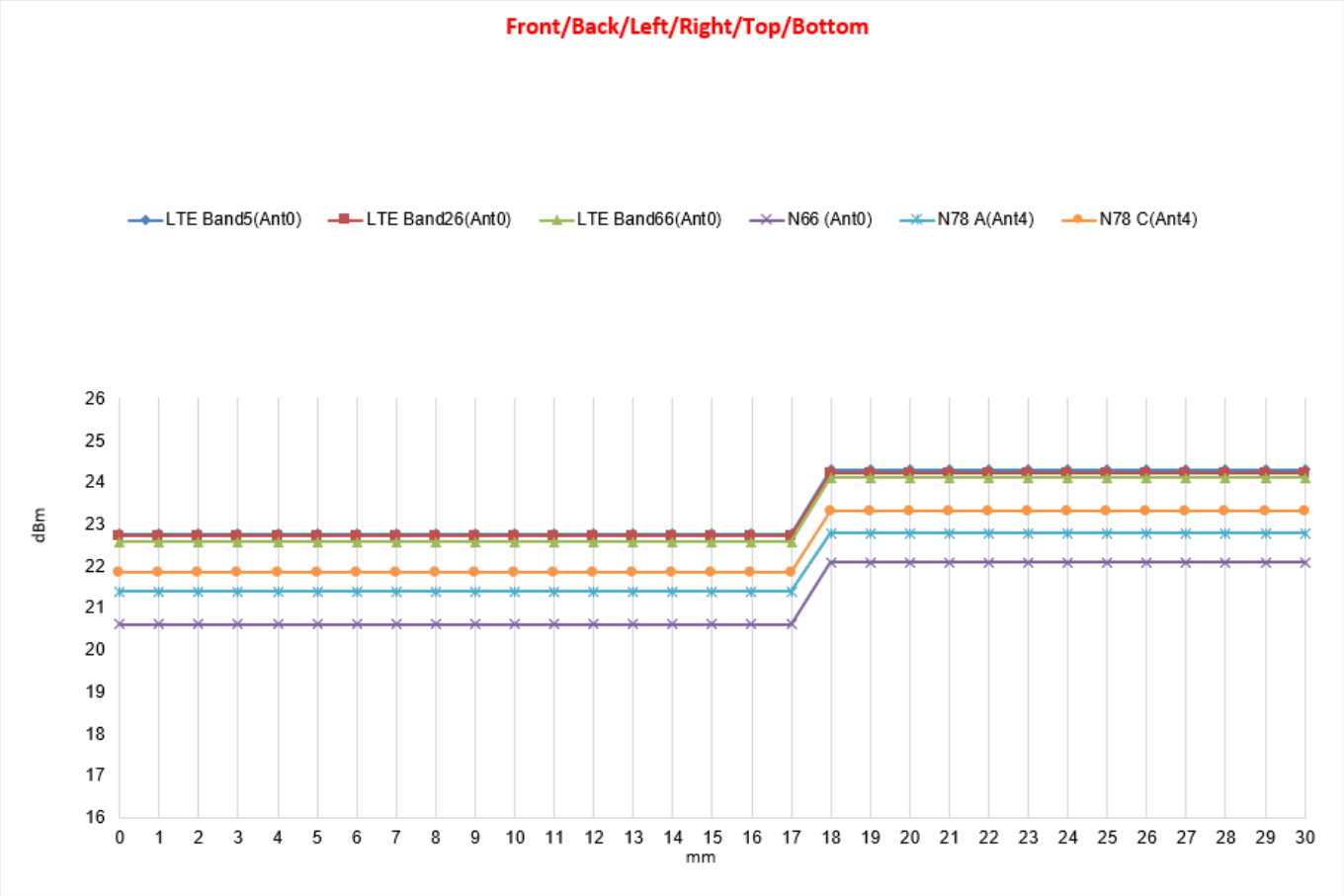
Body & Hotspot DUT moved away (Release) from the Phantom



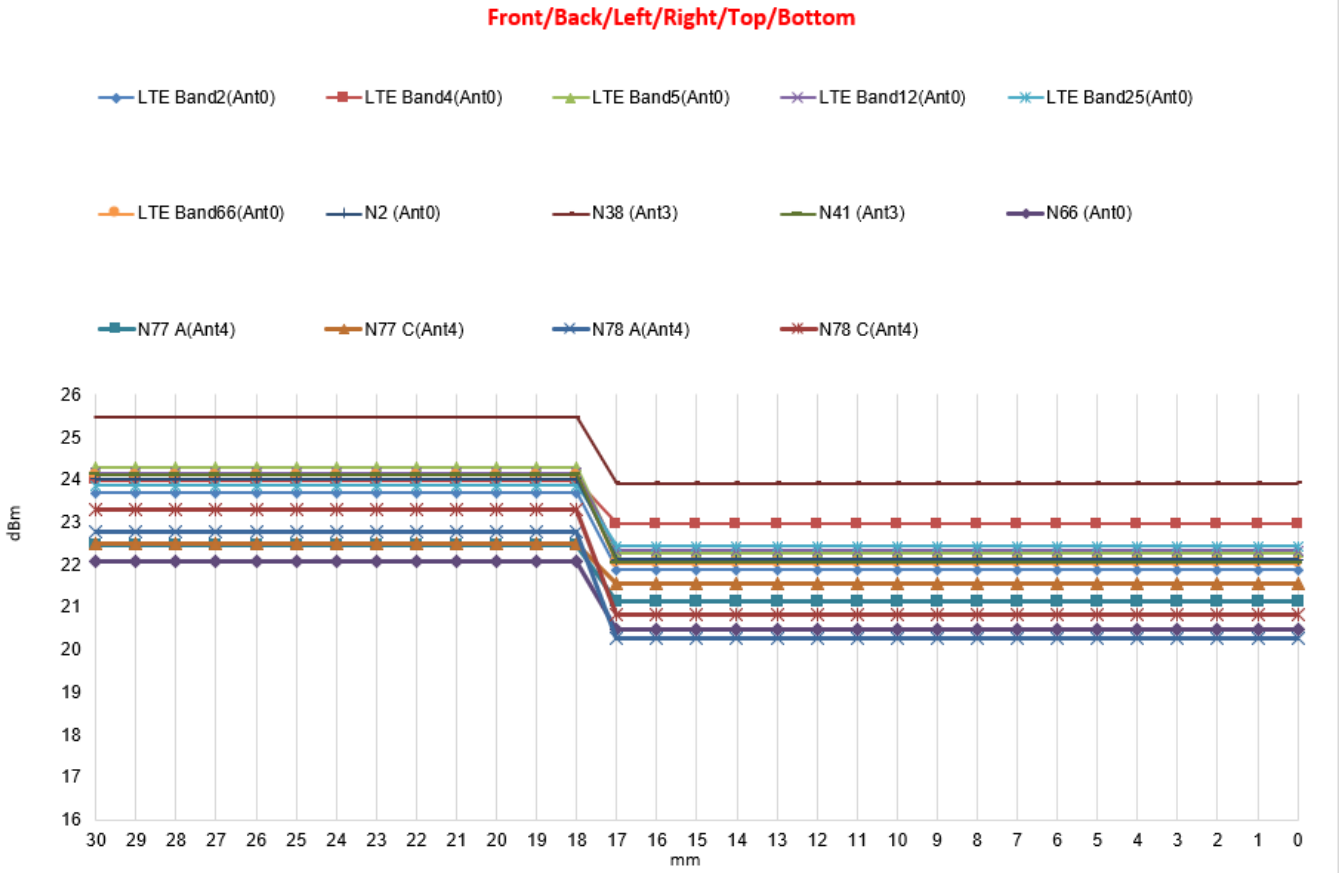
EN-DC DUT moved toward (Trigger) the Phantom



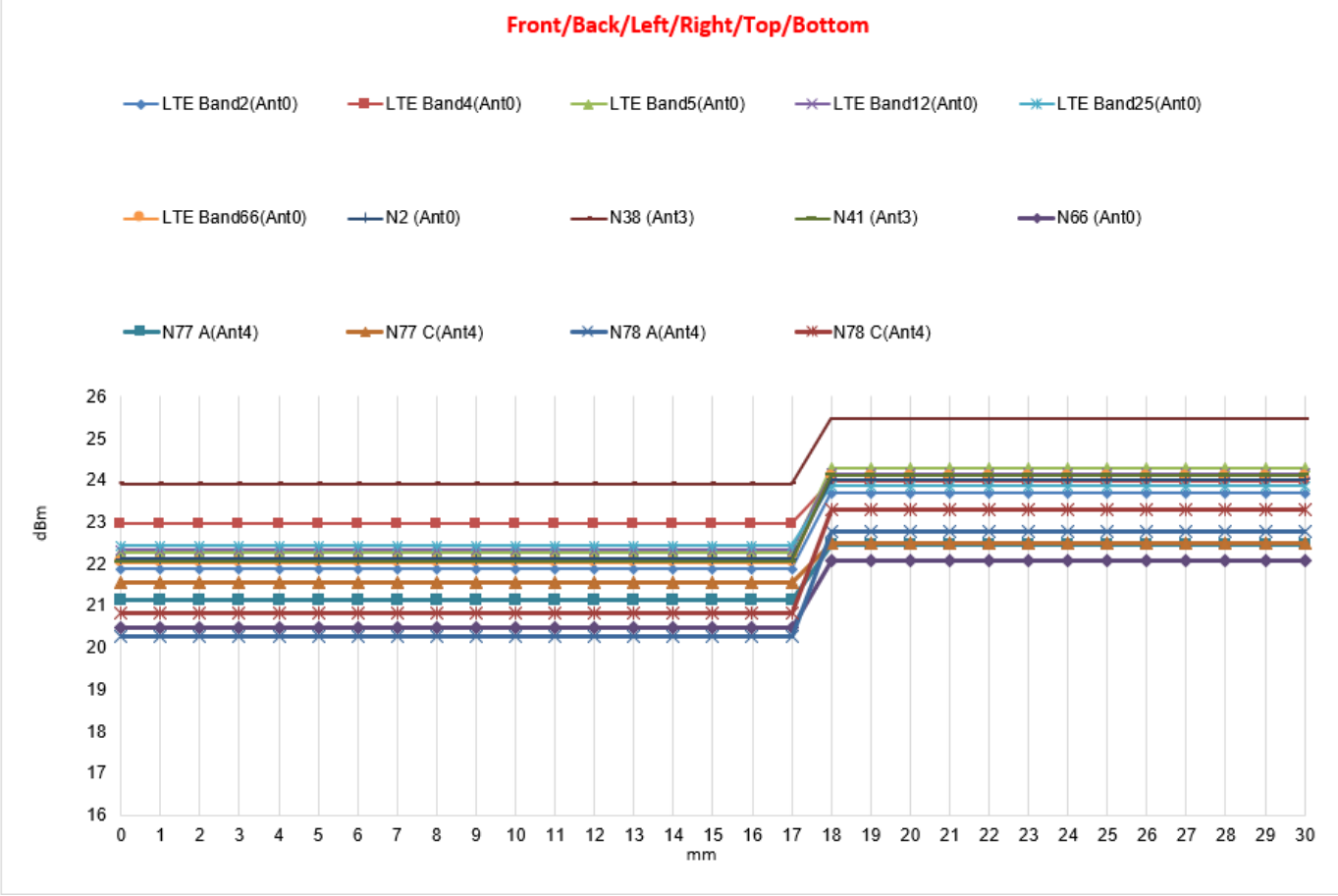
EN-DC DUT moved away (Release) from the Phantom



EN-DC+WLAN DUT moved toward (Trigger) the Phantom



EN-DC+WLAN DUT moved away (Release) from the Phantom



Proximity sensor coverage

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

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

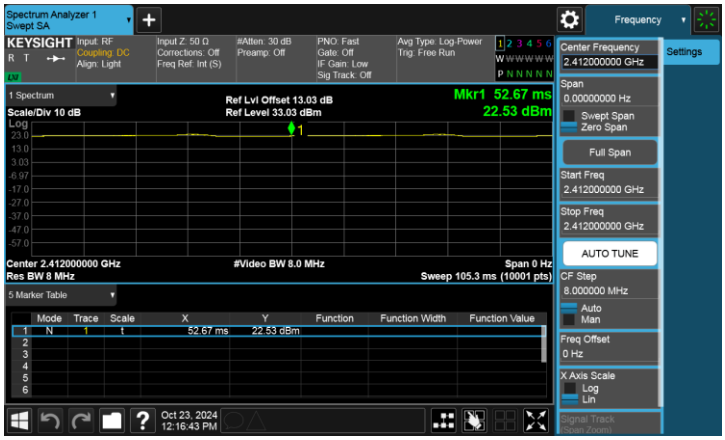
10. Conducted Output Power Measurement and tune-up tolerance

Detailed conducted power and tune-up tolerance please refer to 4791517585.3-1-SAR-1_App A Conducted power.

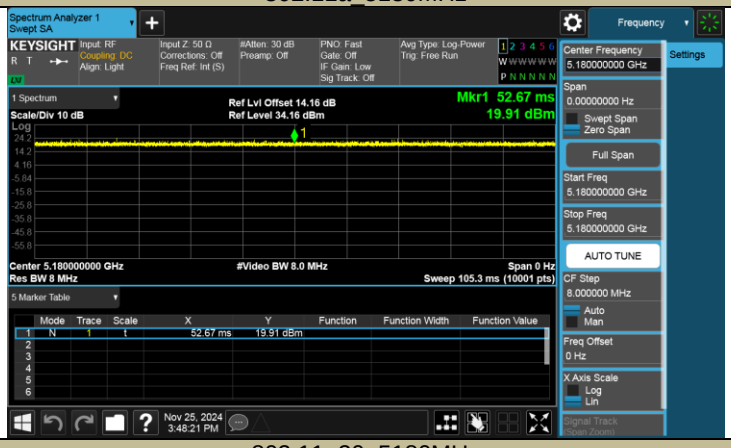
10.1. Duty Cycle

Test Mode	On Time (msec)	Period (msec)	Duty Cycle x (Linear)	Duty Cycle (%)
802.11b	105	105	1.0000	100.00
802.11a	105	105	1.0000	100.00
802.n20	105	105	1.0000	100.00
802.n40	105	105	1.0000	100.00

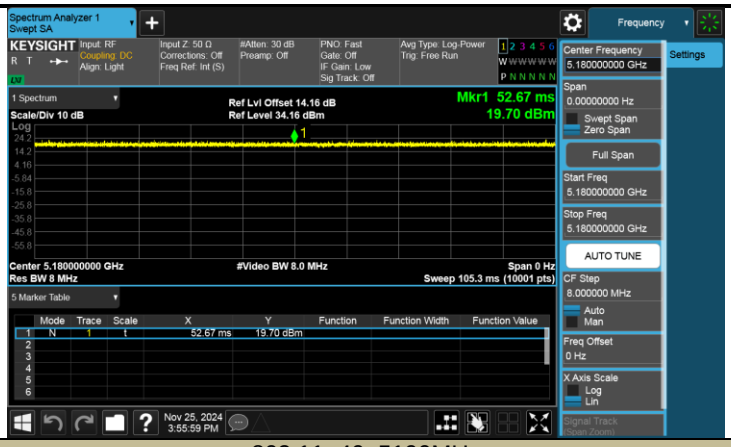
802.11b_2412MHz



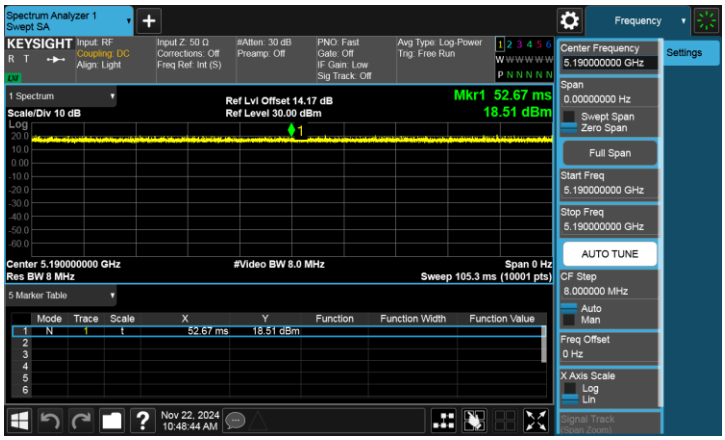
802.11a_5180MHz



802.11n20_5180MHz



802.11n40_5190MHz



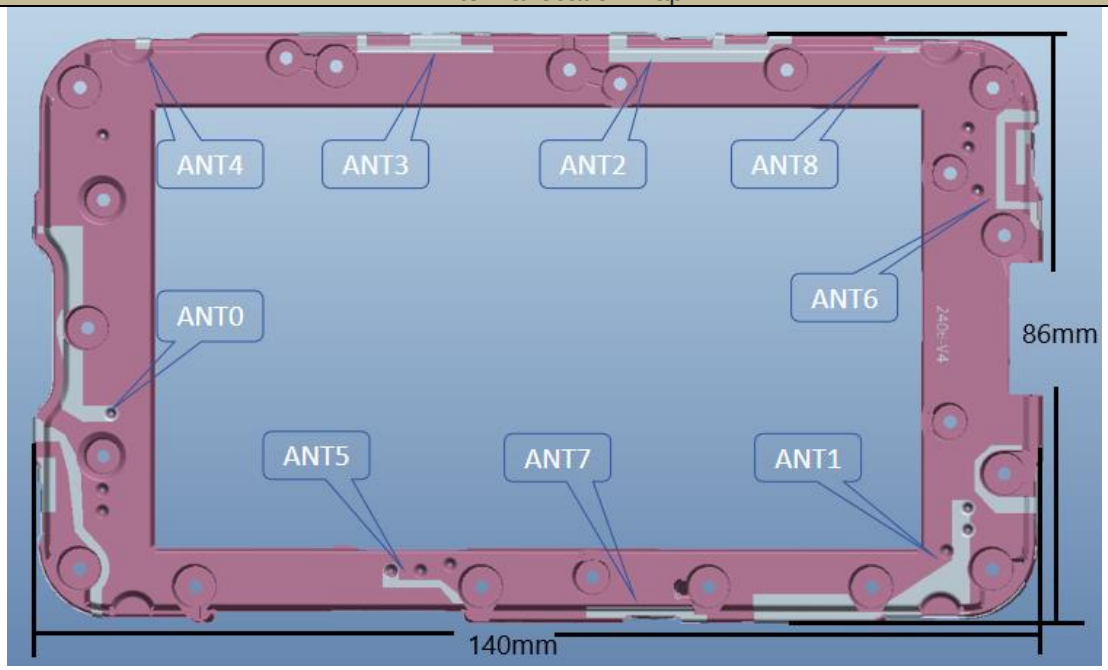
11. RF Exposure Conditions

Wireless technologies	RF Exposure Conditions	DUT-to-User Separation
WWAN/WLAN	Body-worn & Hotspot	10 mm

12. Antenna Location

Refer to the diagram inside the device which attached below for the specific details of the antenna-to-edges distances.

Antenna location map



ANT0: W2,W4,W5,B2,B4,B5,B7,B12,B13,B14,B17,B25,B26,B30,B66,B71,CCn2,n5,n7,n66,n71
ANT1: Receive only
ANT2: Receive only
ANT3: B38,B41, n38,n41
ANT4: B42, B42,n77,n78
ANT5: Receive only
ANT6: Receive only
ANT7: Wi-Fi
ANT8: Wi-Fi
EN-DC In this state, some LTE bands are reallocated as follows:
ANT0: B38,B41

13. Dielectric Property Measurements & System Check

13.1. Dielectric Property Measurements

The temperature of the tissue-equivalent medium used during measurement must also be within 18°C to 25°C and within ± 2°C of the temperature when the tissue parameters are characterized.
The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 3 – 4 days of use; or earlier if the dielectric parameters can become out of tolerance; for example, when the parameters are marginal at the beginning of the measurement series.
Tissue dielectric parameters were measured at the low, middle and high frequency of each operating frequency range of the test device.

Tissue Dielectric Parameters

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

Target Frequency (MHz)	Head		Body	
	ε_r	σ (S/m)	ε_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5000	36.2	4.45	49.3	5.07
5100	36.1	4.55	49.1	5.18
5200	36.0	4.66	49.0	5.30
5300	35.9	4.76	48.9	5.42
5400	35.8	4.86	48.7	5.53
5500	35.6	4.96	48.6	5.65
5600	35.5	5.07	48.5	5.77
5700	35.4	5.17	48.3	5.88
5800	35.3	5.27	48.2	6.00

IEEE Std 1528-2013
Refer to Table 3 within the IEEE Std 1528-2013

Dielectric Property Measurements Results:

Liquid	Freq.	Liquid Parameters				Deviation(%)		Limit (%)	Temp. (℃)	Test Date
		Measured		Target						
		ϵ_r	σ	ϵ_r	σ	ϵ_r	σ			
Head 750	650	42.900	0.867	42.43	0.88	1.11	-1.48	±5	22.5	December 7, 2024
	750	42.800	0.908	41.94	0.89	2.05	2.02			
	790	42.700	0.920	41.73	0.90	2.32	2.22			
Head 750	650	42.300	0.866	42.43	0.88	-0.31	-1.59	±5	21.8	December 9, 2024
	750	41.900	0.896	41.94	0.89	-0.10	0.67			
	790	41.300	0.932	41.73	0.90	-1.03	3.56			
Head 750	650	42.800	0.864	42.43	0.88	0.87	-1.82	±5	22.4	February 18, 2025
	750	42.700	0.904	41.94	0.89	1.81	1.57			
	790	42.600	0.916	41.73	0.90	2.08	1.78			
Head 835	805	42.800	0.925	41.66	0.90	2.74	2.78	±5	22.5	December 7, 2024
	835	42.800	0.935	41.50	0.90	3.13	3.89			
	980	42.800	0.975	41.35	1.00	3.51	-2.50			
Head 835	805	42.700	0.872	41.66	0.90	2.50	-3.11	±5	21.8	December 9, 2024
	835	42.300	0.902	41.50	0.90	1.93	0.22			
	980	40.700	1.040	41.35	1.00	-1.57	4.00			
Head 835	805	42.500	0.868	41.66	0.90	2.02	-3.56	±5	21.3	February 17, 2025
	835	42.200	0.898	41.50	0.90	1.69	-0.22			
	980	40.600	1.030	41.35	1.00	-1.81	3.00			
Head 1800	1720	40.900	1.330	40.13	1.35	1.92	-1.48	±5	21.1	December 7, 2024
	1800	40.200	1.430	40.00	1.40	0.50	2.14			
	1890	40.500	1.460	40.00	1.40	1.25	4.29			
Head 1800	1720	40.600	1.330	40.13	1.35	1.17	-1.48	±5	21.8	December 9, 2024
	1800	39.900	1.410	40.00	1.40	-0.25	0.71			
	1890	39.400	1.450	40.00	1.40	-1.50	3.57			
Head 1800	1720	40.900	1.290	40.13	1.35	1.92	-4.44	±5	21.3	February 17, 2025
	1800	41.500	1.400	40.00	1.40	3.75	0.00			
	1890	39.000	1.450	40.00	1.40	-2.50	3.57			
Head 1900	1850	41.400	1.390	40.00	1.40	3.50	-0.71	±5	21.8	December 9, 2024
	1900	41.200	1.370	40.00	1.40	3.00	-2.14			
	1980	41.000	1.440	40.00	1.40	2.50	2.86			
Head 1900	1850	41.300	1.370	40.00	1.40	3.25	-2.14	±5	22.5	February 19, 2025
	1900	41.100	1.360	40.00	1.40	2.75	-2.86			
	1980	40.800	1.430	40.00	1.40	2.00	2.14			
Head 2300	2210	40.200	1.610	39.63	1.59	1.44	1.26	±5	22.9	January 7, 2025
	2300	39.900	1.710	39.47	1.67	1.09	2.40			
	2390	38.800	1.720	39.31	1.75	-1.30	-1.71			
Head 2450	2400	40.700	1.790	39.29	1.76	3.59	1.70	±5	21.9	December 31, 2024
	2450	40.800	1.850	39.20	1.80	4.08	2.78			
	2480	40.600	1.870	39.16	1.83	3.68	2.19			

Head 2600	2500	38.600	1.910	39.14	1.85	-1.38	3.24	±5	21.2	December 11, 2024
	2600	39.600	2.010	39.01	1.96	1.51	2.55			
	2700	40.200	2.110	38.88	2.07	3.40	1.93			
Head 2600	2500	38.000	1.900	39.14	1.85	-2.91	2.70	±5	21.7	December 21, 2024
	2600	37.700	2.010	39.01	1.96	-3.36	2.55			
	2700	37.400	2.110	38.88	2.07	-3.81	1.93			
Head 2600	2500	39.100	1.900	39.14	1.85	-0.10	2.70	±5	22.6	January 8, 2025
	2600	39.900	1.980	39.01	1.96	2.28	1.02			
	2700	38.800	2.080	38.88	2.07	-0.21	0.48			
Head 2600	2500	38.900	1.890	39.14	1.85	-0.61	2.16	±5	22.5	February 19, 2025
	2600	39.800	1.970	39.01	1.96	2.03	0.51			
	2700	38.700	2.070	38.88	2.07	-0.46	0.00			
Head 3400	3300	38.100	2.710	38.40	2.71	-0.78	0.00	±5	21.7	December 21, 2024
	3400	37.700	2.880	38.02	2.81	-0.84	2.49			
	3500	37.600	2.990	37.90	2.91	-0.79	2.75			
Head 3500	3450	37.700	2.970	37.96	2.86	-0.68	3.85	±5	21.7	December 21, 2024
	3500	37.600	2.990	37.90	2.91	-0.79	2.75			
	3550	37.400	3.060	37.85	2.96	-1.19	3.38			
Head 3500	3450	37.800	2.750	37.96	2.86	-0.42	-3.85	±5	22.5	December 7, 2024
	3500	37.700	2.800	37.90	2.91	-0.53	-3.78			
	3550	39.300	2.840	37.85	2.96	3.83	-4.05			
Head 3500	3450	37.600	2.740	37.96	2.86	-0.95	-4.20	±5	22.5	February 19, 2025
	3500	37.600	2.780	37.90	2.91	-0.79	-4.47			
	3550	36.700	2.840	37.85	2.96	-3.04	-4.05			
Head 3700	3650	36.300	2.930	37.75	3.07	-3.84	-4.56	±5	22.5	December 7, 2024
	3700	36.700	2.970	37.70	3.12	-2.65	-4.81			
	3800	36.500	3.090	37.60	3.22	-2.93	-4.04			
Head 3700	3650	36.900	2.980	37.75	3.07	-2.25	-2.93	±5	21.7	December 21, 2024
	3700	36.800	3.020	37.70	3.12	-2.39	-3.21			
	3800	36.600	3.120	37.60	3.22	-2.66	-3.11			
Head 3700	3650	36.900	2.930	37.75	3.07	-2.25	-4.56	±5	22.5	February 19, 2025
	3700	36.700	2.970	37.70	3.12	-2.65	-4.81			
	3800	36.600	3.070	37.60	3.22	-2.66	-4.66			
Head 3900	3800	37.500	3.160	37.60	3.22	-0.27	-1.86	±5	22.5	February 19, 2025
	3900	37.400	3.380	37.50	3.33	-0.27	1.50			
	4000	37.200	3.490	37.40	3.43	-0.53	1.75			
Head 5250	5160	36.300	4.450	36.03	4.61	0.75	-3.47	±5	21.7	December 21, 2024
	5250	36.100	4.540	35.93	4.71	0.47	-3.61			
	5340	36.100	4.730	35.83	4.80	0.75	-1.46			
Head 5600	5500	36.100	4.990	35.64	4.96	1.29	0.60	±5	21.7	December 21, 2024
	5600	36.100	5.110	35.53	5.07	1.60	0.79			
	5700	35.300	5.350	35.41	5.17	-0.31	3.48			

Head 5750	5660	35.600	5.110	35.46	5.13	0.39	-0.39	±5	21.7	December 21, 2024
	5750	35.500	5.180	35.36	5.22	0.40	-0.77			
	5840	35.300	5.290	35.27	5.30	0.09	-0.19			
Head 6500	5950	34.300	5.280	35.15	5.43	-2.42	-2.76	±5	22.8	December 26, 2024
	6500	34.300	5.800	34.50	6.07	-0.58	-4.45			
	7000	34.400	6.420	33.90	6.65	1.47	-3.46			

13.2. System Check

SAR system verification is required to confirm measurement accuracy, according to the tissue dielectric media, probe calibration points and other system operating parameters required for measuring the SAR of a test device. The system verification must be performed for each frequency band and within the valid range of each probe calibration point required for testing the device. The same SAR probe(s) and tissue-equivalent media combinations used with each specific SAR system for system verification must be used for device testing. When multiple probe calibration points are required to cover substantially large transmission bands, independent system verifications are required for each probe calibration point. A system verification must be performed before each series of SAR measurements using the same probe calibration point and tissue-equivalent medium. Additional system verification should be considered according to the conditions of the tissue-equivalent medium and measured tissue dielectric parameters, typically every three to four days when the liquid parameters are re-measured or sooner when marginal liquid parameters are used at the beginning of a series of measurements.

System Performance Check Measurement Conditions:

- The measurements were performed in the flat section of the TWIN SAM or ELI phantom, shell thickness: 2.0 ±0.2 mm (bottom plate) filled with Body or Head simulating liquid of the following parameters.
- The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm for SAR measurements ≤ 3 GHz and ≥ 10.0 cm for measurements > 3 GHz.
- The DASY system with an E-Field Probe was used for the measurements.
- The dipole was mounted on the small tripod so that the dipole feed point was positioned below the center marking of the flat phantom section and the dipole was oriented parallel to the body axis (the long side of the phantom). The standard measuring distance was 10mm (above 1GHZ) and 15mm (below 1GHz) from dipole center to the simulating liquid surface.
- For area scan, standard grid spacing for head measurements is 15 mm in x- and y- dimension(≤2GHz), 12 mm in x- and y-dimension(2-4 GHz) and 10mm in x- and y- dimension(4-6GHz).
- For zoom scan, Δx_{zoom}, Δy_{zoom}≤ 2GHz - ≤8mm, 2-4GHz - ≤5 mm and 4-6 GHz-≤4mm; Δz_{zoom} ≤3GHz - ≤5 mm, 3-4 GHz- ≤4mm and 4-6GHz-≤2mm.
- Distance between probe sensors and phantom surface was set to 3 mm except for 5 GHz band. For 5GHz band, Distance between probe sensors and phantom surface was set to 2.5 mm
- The dipole input power (forward power) was set to 100 mW or 250 mW depend on the certificate of the dipoles.
- The results are normalized to 1 W input power.

System Check Results

The 1-g and 10-g SAR measured with a reference dipole, using the required tissue-equivalent medium at the test frequency, must be within 10% of the manufacturer calibrated dipole SAR target.

T.S. Liquid		Measured Results		Target (Ref. value)	Delta (%)	Limit (%)	Temp. (℃)	Test Date
		Result of 0.1W input power (W/Kg)	Normalize to 1W (W/Kg)					
Head 750	1-g	0.883	8.83	8.50	3.88	±10	21.1	December 7, 2024
	10-g	0.592	5.92	5.61	5.53			
Head 750	1-g	0.841	8.41	8.50	-1.06	±10	21.8	December 9, 2024
	10-g	0.556	5.56	5.61	-0.89			
Head 750	1-g	0.854	8.54	8.50	0.47	±10	22.4	February 18, 2025
	10-g	0.578	5.78	5.61	3.03			
Head 835	1-g	1.030	10.30	9.64	6.85	±10	21.1	December 7, 2024
	10-g	0.679	6.79	6.26	8.47			
Head 835	1-g	1.020	10.20	9.64	5.81	±10	21.8	December 9, 2024
	10-g	0.669	6.69	6.26	6.87			
Head 835	1-g	0.995	9.95	9.66	3.00	±10	21.3	February 17, 2025
	10-g	0.664	6.64	6.29	5.56			
Head 835	1-g	0.971	9.71	9.66	0.52	±10	22.4	February 18, 2025
	10-g	0.643	6.43	6.29	2.23			
Head 1800	1-g	3.830	38.30	38.70	-1.03	±10	21.1	December 7, 2024
	10-g	2.030	20.30	19.90	2.01			
Head 1800	1-g	3.850	38.50	38.70	-0.52	±10	21.8	December 9, 2024
	10-g	2.090	20.90	19.90	5.03			
Head 1800	1-g	3.730	37.30	39.10	-4.60	±10	21.3	February 17, 2025
	10-g	2.000	20.00	20.60	-2.91			
Head 1800	1-g	3.830	38.30	39.10	-2.05	±10	22.4	February 18, 2025
	10-g	2.060	20.60	20.60	0.00			
Head 1800	1-g	3.710	37.10	39.10	-5.12	±10	22.5	February 19, 2025
	10-g	1.980	19.80	20.60	-3.88			
Head 1900	1-g	3.850	38.50	39.60	-2.78	±10	21.8	December 9, 2024
	10-g	2.050	20.50	20.20	1.49			
Head 1900	1-g	3.840	38.40	39.50	-2.78	±10	22.5	February 19, 2025
	10-g	1.980	19.80	20.60	-3.88			
Head 2300	1-g	5.060	50.60	48.50	4.33	±10	22.9	January 9, 2025
	10-g	2.420	24.20	23.20	4.31			
Head 2450	1-g	5.260	52.60	52.80	-0.38	±10	21.7	December 31, 2024
	10-g	2.420	24.20	24.40	-0.82			
Head 2600	1-g	5.550	55.50	55.40	0.18	±10	21.2	December 11, 2024
	10-g	2.590	25.90	24.50	5.71			
Head 2600	1-g	5.400	54.00	55.60	-2.88	±10	21.7	December 21, 2024
	10-g	2.510	25.10	24.80	1.21			
Head 2600	1-g	5.330	53.30	55.60	-4.14	±10	22.6	January 8, 2025
	10-g	2.490	24.90	24.80	0.40			
Head 2600	1-g	5.220	52.20	55.60	-6.12	±10	22.5	February 19, 2025
	10-g	2.510	25.10	24.80	1.21			
Head 3400	1-g	6.360	63.60	66.90	-4.93	±10	21.7	December 21, 2024
	10-g	2.440	24.40	25.60	-4.69			

Head 3500	1-g	6.850	68.50	67.20	1.93	±10	21.7	December 21, 2024
	10-g	2.560	25.60	25.60	0.00			
Head 3500	1-g	6.550	65.50	67.20	-2.53	±10	22.5	February 19, 2025
	10-g	2.490	24.90	25.60	-2.73			
Head 3500	1-g	6.710	67.10	67.20	-0.15	±10	22.7	February 20, 2025
	10-g	2.550	25.50	25.60	-0.39			
Head 3700	1-g	6.650	66.50	67.40	-1.34	±10	21.1	December 7, 2024
	10-g	2.380	23.80	24.80	-4.03			
Head 3700	1-g	6.690	66.90	67.40	-0.74	±10	21.7	December 21, 2024
	10-g	2.580	25.80	24.80	4.03			
Head 3700	1-g	6.770	67.70	67.40	0.45	±10	22.5	February 19, 2025
	10-g	2.520	25.20	24.80	1.61			
Head 3700	1-g	6.610	66.10	67.40	-1.93	±10	22.7	February 20, 2025
	10-g	2.480	24.80	24.80	0.00			
Head 3900	1-g	6.800	68.00	68.00	0.00	±10	22.5	February 19, 2025
	10-g	2.390	23.90	23.60	1.27			
Head 5250	1-g	8.050	80.50	77.50	3.87	±10	21.7	December 31, 2024
	10-g	2.220	22.20	21.80	1.83			
Head 5600	1-g	8.690	86.90	82.70	5.08	±10	21.7	December 31, 2024
	10-g	2.480	24.80	23.10	7.36			
Head 5750	1-g	7.820	78.20	77.90	0.39	±10	21.7	December 31, 2024
	10-g	2.210	22.10	21.50	2.79			
Head 6500	1-g	29.700	297.00	294.00	1.02	±10	22.8	December 26, 2024
	10-g	5.720	57.20	54.60	4.76			

14. Measured and Reported (Scaled) SAR Results

SAR Test Reduction criteria are as follows：

●Reported SAR(W/kg) for Wi-Fi Measured SAR* Maximum Output Power scaling factor Duty Cycle scaling factor

●Duty Cycle scaling factor = 1 / Duty cycle (%)

General Notes:

1) As per KDB447498 D01, all SAR measurement results are scaled to the maximum tune-up tolerance limit to demonstrate SAR compliance.
2) As per KDB447498 D01, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:
   ● ≤ 0.8W/kg for 1-g or 2.0W/kg for 10-g respectively, when the transmission band is ≤ 100MHz.
   ● ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.
   ● ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz.
   When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel must be used.
3) As per KDB865664 D01 for each frequency band, repeated SAR measurement is required only when the measured SAR is ≥0.8W/Kg; if the deviation among the repeated measurement is ≤20%, and the measured SAR <1.45W/Kg, only one repeated measurement is required.
4) As per KDB865664 D02, SAR plot is only required for the highest measured SAR in each exposure configuration, wireless mode and frequency band combination; Plots are also required when the measured SAR is > 1.5 W/kg, or > 7.0 W/kg for occupational exposure. The published RF exposure KDB procedures may require additional plots; for example, to support SAR to peak location separation ratio test exclusion and/or volume scan post-processing (Refer to appendix B for detailed SAR plots).
5) Additional SAR tests in simultaneous transmission fixed power reduction scenario are also tested in some frequency bands and required test positions for the SAR worst case, which are only used to ensure simultaneous transmission SAR test exclusion. The standalone SAR compliance still uses the SAR results tested at the maximum output power level.

14.1. SAR Test Results of WCDMA Band II

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	RMC 12.2kbps	Front Surface	10	9400	23.5	23.40	0.577	-0.09	0.590	
Body-worn & Hotspot	RMC 12.2kbps	Back Surface	10	9400	23.5	23.40	0.569	-0.09	0.582	
Hotspot	RMC 12.2kbps	Left Edge	10	9400	23.5	23.40	0.100	0.09	0.102	
Hotspot	RMC 12.2kbps	Right Edge	10	9400	23.5	23.40	0.446	-0.17	0.456	
Hotspot	RMC 12.2kbps	Top Edge	10	9400	23.5	23.40	0.586	-0.11	0.600	
Hotspot	RMC 12.2kbps	Top Edge	10	9262	23.5	23.29	0.685	0.00	0.719	1
Hotspot	RMC 12.2kbps	Top Edge	10	9538	23.5	23.21	0.595	-0.14	0.636	
Hotspot	RMC 12.2kbps	Bottom Edge	10	9400	23.5	23.40	0.024	-0.02	0.025	

14.2. SAR Test Results of WCDMA Band IV

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	RMC 12.2kbps	Front Surface	10	1413	24.0	23.97	0.705	0.18	0.710	
Body-worn & Hotspot	RMC 12.2kbps	Back Surface	10	1413	24.0	23.97	0.712	0.01	0.717	2
Body-worn & Hotspot	RMC 12.2kbps	Back Surface	10	1312	24.0	23.64	0.703	0.13	0.764	
Body-worn & Hotspot	RMC 12.2kbps	Back Surface	10	1513	24.0	23.96	0.699	0.02	0.705	
Hotspot	RMC 12.2kbps	Left Edge	10	1413	24.0	23.97	0.192	0.00	0.193	
Hotspot	RMC 12.2kbps	Right Edge	10	1413	24.0	23.97	0.507	0.01	0.511	
Hotspot	RMC 12.2kbps	Top Edge	10	1413	24.0	23.97	0.702	0.14	0.707	
Hotspot	RMC 12.2kbps	Bottom Edge	10	1413	24.0	23.97	0.027	0.06	0.027	

14.3. SAR Test Results of WCDMA Band V

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	RMC 12.2kbps	Front Surface	10	4183	24.5	24.13	0.372	-0.14	0.405	
Body-worn & Hotspot	RMC 12.2kbps	Back Surface	10	4183	24.5	24.13	0.375	-0.03	0.408	
Body-worn & Hotspot	RMC 12.2kbps	Back Surface	10	4132	24.5	24.12	0.420	-0.01	0.458	3
Body-worn & Hotspot	RMC 12.2kbps	Back Surface	10	4233	24.5	24.06	0.395	0.05	0.437	
Hotspot	RMC 12.2kbps	Left Edge	10	4183	24.5	24.13	0.269	-0.16	0.293	
Hotspot	RMC 12.2kbps	Right Edge	10	4183	24.5	24.13	0.225	0.11	0.245	
Hotspot	RMC 12.2kbps	Top Edge	10	4183	24.5	24.13	0.073	-0.06	0.079	
Hotspot	RMC 12.2kbps	Bottom Edge	10	4183	24.5	24.13	0.031	0.16	0.034	

14.4. SAR Test Results of LTE B2

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	19100	24.0	23.68	0.497	-0.13	0.535	
Body-worn & Hotspot	20M QPSK 50RB#25	Front Surface	10	19100	23.0	22.75	0.419	-0.03	0.444	
Body-worn & Hotspot	20M QPSK 1RB#0	Back Surface	10	19100	24.0	23.68	0.423	-0.05	0.455	
Body-worn & Hotspot	20M QPSK 50RB#25	Back Surface	10	19100	23.0	22.75	0.348	0.10	0.369	
Hotspot	20M QPSK 1RB#0	Left Edge	10	19100	24.0	23.68	0.069	-0.16	0.074	
Hotspot	20M QPSK 50RB#25	Left Edge	10	19100	23.0	22.75	0.056	0.02	0.059	
Hotspot	20M QPSK 1RB#0	Right Edge	10	19100	24.0	23.68	0.367	0.16	0.395	
Hotspot	20M QPSK 50RB#25	Right Edge	10	19100	23.0	22.75	0.296	-0.10	0.314	
Hotspot	20M QPSK 1RB#0	Top Edge	10	19100	24.0	23.68	**0.578**	0.00	0.622	4
Hotspot	20M QPSK 1RB#0	Top Edge	10	18700	24.0	23.55	0.458	0.19	0.508	
Hotspot	20M QPSK 1RB#0	Top Edge	10	18900	24.0	23.62	0.462	-0.08	0.504	
Hotspot	20M QPSK 50RB#25	Top Edge	10	19100	23.0	22.75	0.467	-0.15	0.495	
Hotspot	20M QPSK 50RB#25	Top Edge	10	18700	23.0	22.62	0.343	-0.07	0.374	
Hotspot	20M QPSK 50RB#25	Top Edge	10	18900	23.0	22.63	0.334	-0.03	0.364	
Hotspot	20M QPSK 1RB#0	Bottom Edge	10	19100	24.0	23.68	0.023	-0.13	0.025	
Hotspot	20M QPSK 50RB#25	Bottom Edge	10	19100	23.0	22.75	0.018	-0.17	0.019	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	19100	22.0	21.87	0.347	0.03	0.358	
Body-worn & Hotspot	20M QPSK 50RB#25	Front Surface	10	19100	21.0	20.97	0.292	0.14	0.294	
Body-worn & Hotspot	20M QPSK 1RB#0	Back Surface	10	19100	22.0	21.87	0.295	-0.11	0.304	
Body-worn & Hotspot	20M QPSK 50RB#25	Back Surface	10	19100	21.0	20.97	0.243	0.15	0.245	
Hotspot	20M QPSK 1RB#0	Left Edge	10	19100	22.0	21.87	0.048	0.11	0.049	
Hotspot	20M QPSK 50RB#25	Left Edge	10	19100	21.0	20.97	0.039	-0.06	0.039	
Hotspot	20M QPSK 1RB#0	Right Edge	10	19100	22.0	21.87	0.256	0.18	0.264	
Hotspot	20M QPSK 50RB#25	Right Edge	10	19100	21.0	20.97	0.207	0.03	0.208	
Hotspot	20M QPSK 1RB#0	Top Edge	10	19100	22.0	21.87	0.404	0.02	0.416	5
Hotspot	20M QPSK 1RB#0	Top Edge	16	19100	24.0	23.68	0.199	-0.01	0.214	
Hotspot	20M QPSK 1RB#0	Top Edge	10	18700	22.0	21.70	0.320	-0.02	0.343	
Hotspot	20M QPSK 1RB#0	Top Edge	10	18900	22.0	21.76	0.322	-0.07	0.340	
Hotspot	20M QPSK 50RB#25	Top Edge	10	19100	21.0	20.97	0.326	0.09	0.328	
Hotspot	20M QPSK 50RB#25	Top Edge	10	18700	21.0	20.66	0.239	-0.18	0.258	
Hotspot	20M QPSK 50RB#25	Top Edge	10	18900	21.0	20.67	0.233	-0.05	0.251	
Hotspot	20M QPSK 50RB#25	Bottom Edge	10	19100	22.0	21.87	0.016	-0.17	0.016	
Hotspot	20M QPSK 1RB#99	Bottom Edge	10	19100	21.0	20.97	0.013	-0.07	0.013	

14.5. SAR Test Results of LTE B4

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#49	Front Surface	10	20050	24.0	23.98	0.410	-0.10	0.412	
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	20175	24.0	23.78	**0.662**	-0.02	0.696	6
Body-worn & Hotspot	20M QPSK 1RB#49	Front Surface	10	20300	24.0	23.83	0.628	0.09	0.653	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	20050	23.5	23.02	0.374	-0.02	0.418	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	20175	23.5	22.76	0.535	-0.01	0.634	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	20300	23.5	22.80	0.639	0.02	0.751	
Body-worn & Hotspot	20M QPSK 1RB#49	Back Surface	10	20050	24.0	23.98	0.320	0.01	0.321	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	20050	23.5	23.02	0.329	-0.14	0.367	
Hotspot	20M QPSK 1RB#49	Left Edge	10	20050	24.0	23.98	0.061	0.12	0.061	
Hotspot	20M QPSK 50RB#0	Left Edge	10	20050	23.5	23.02	0.054	-0.12	0.060	
Hotspot	20M QPSK 1RB#49	Right Edge	10	20050	24.0	23.98	0.360	0.04	0.362	
Hotspot	20M QPSK 50RB#0	Right Edge	10	20050	23.5	23.02	0.353	0.18	0.394	
Hotspot	20M QPSK 1RB#49	Top Edge	10	20050	24.0	23.98	0.216	-0.07	0.217	
Hotspot	20M QPSK 50RB#0	Top Edge	10	20050	23.5	23.02	0.214	0.06	0.239	
Hotspot	20M QPSK 1RB#49	Bottom Edge	10	20050	24.0	23.98	0.029	-0.01	0.029	
Hotspot	20M QPSK 50RB#0	Bottom Edge	10	20050	23.5	23.02	0.023	-0.07	0.026	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#49	Front Surface	10	20050	23.0	22.95	0.364	0.16	0.368	
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	20175	23.0	22.78	**0.589**	0.01	0.620	7
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	16	20175	24.0	23.78	0.262	0.01	0.276	
Body-worn & Hotspot	20M QPSK 1RB#49	Front Surface	10	20300	23.0	22.75	0.558	0.17	0.591	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	20050	22.5	22.03	0.332	0.14	0.370	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	20175	22.5	21.80	0.476	-0.18	0.559	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	20300	22.5	21.83	0.568	0.09	0.663	
Body-worn & Hotspot	20M QPSK 1RB#49	Back Surface	10	20050	23.0	22.95	0.284	-0.09	0.287	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	20050	22.5	22.03	0.292	0.07	0.325	
Hotspot	20M QPSK 1RB#49	Left Edge	10	20050	23.0	22.95	0.054	-0.04	0.055	
Hotspot	20M QPSK 50RB#0	Left Edge	10	20050	22.5	22.03	0.048	0.08	0.053	
Hotspot	20M QPSK 1RB#49	Right Edge	10	20050	23.0	22.95	0.320	-0.15	0.324	
Hotspot	20M QPSK 50RB#0	Right Edge	10	20050	22.5	22.03	0.314	0.00	0.350	
Hotspot	20M QPSK 1RB#49	Top Edge	10	20050	23.0	22.95	0.192	-0.12	0.194	
Hotspot	20M QPSK 50RB#0	Top Edge	10	20050	22.5	22.03	0.190	-0.08	0.212	
Hotspot	20M QPSK 1RB#49	Bottom Edge	10	20050	23.0	22.95	0.026	-0.17	0.026	
Hotspot	20M QPSK 50RB#0	Bottom Edge	10	20050	22.5	22.03	0.020	0.11	0.022	

14.6. SAR Test Results of LTE B5

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	10M QPSK 1RB#0	Front Surface	10	20600	24.5	24.30	0.633	0.08	0.663	
Body-worn & Hotspot	10M QPSK 25RB#12	Front Surface	10	20600	23.5	23.19	0.601	0.12	0.645	
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	10	20600	24.5	24.30	0.672	0.17	0.704	
Body-worn & Hotspot	10M QPSK 1RB#49	Back Surface	10	20450	24.5	24.15	0.719	0.00	0.779	8
Body-worn & Hotspot	10M QPSK 1RB#49	Back Surface	10	20525	24.5	24.24	0.691	-0.16	0.734	
Body-worn & Hotspot	10M QPSK 25RB#12	Back Surface	10	20600	23.5	23.19	0.535	-0.19	0.575	
Body-worn & Hotspot	10M QPSK 25RB#25	Back Surface	10	20450	23.5	23.15	0.583	0.09	0.632	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	20525	23.5	23.17	0.566	0.01	0.611	
Hotspot	10M QPSK 1RB#0	Left Edge	10	20600	24.5	24.30	**0.399**	0.13	0.418	
Hotspot	10M QPSK 25RB#12	Left Edge	10	20600	23.5	23.19	0.316	-0.17	0.339	
Hotspot	10M QPSK 1RB#0	Right Edge	10	20600	24.5	24.30	0.288	-0.05	0.302	
Hotspot	10M QPSK 25RB#12	Right Edge	10	20600	23.5	23.19	0.227	0.07	0.244	
Hotspot	10M QPSK 1RB#0	Top Edge	10	20600	24.5	24.30	0.085	0.07	0.089	
Hotspot	10M QPSK 25RB#12	Top Edge	10	20600	23.5	23.19	0.067	0.03	0.072	
Hotspot	10M QPSK 1RB#0	Bottom Edge	10	20600	24.5	24.30	0.031	0.09	0.032	
Hotspot	10M QPSK 25RB#12	Bottom Edge	10	20600	23.5	23.19	0.025	-0.19	0.027	

EN-DC power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	10M QPSK 1RB#0	Front Surface	10	20600	23.0	22.76	0.371	-0.11	0.392	
Body-worn & Hotspot	10M QPSK 25RB#12	Front Surface	10	20600	22.0	21.69	0.352	-0.08	0.378	
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	10	20600	23.0	22.76	0.394	-0.08	0.416	
Body-worn & Hotspot	10M QPSK 1RB#49	Back Surface	10	20450	23.0	22.69	0.421	0.00	0.452	9
Body-worn & Hotspot	10M QPSK 1RB#49	Back Surface	16	20450	24.5	24.15	0.296	0.00	0.321	
Body-worn & Hotspot	10M QPSK 1RB#49	Back Surface	10	20525	23.0	22.75	0.405	-0.09	0.429	
Body-worn & Hotspot	10M QPSK 25RB#12	Back Surface	10	20600	22.0	21.69	0.314	-0.10	0.337	
Body-worn & Hotspot	10M QPSK 25RB#25	Back Surface	10	20450	22.0	21.64	0.342	-0.11	0.372	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	20525	22.0	21.62	0.332	0.09	0.362	
Hotspot	10M QPSK 1RB#0	Left Edge	10	20600	23.0	22.76	0.234	0.02	0.247	
Hotspot	10M QPSK 25RB#12	Left Edge	10	20600	22.0	21.69	0.185	0.08	0.199	
Hotspot	10M QPSK 1RB#0	Right Edge	10	20600	23.0	22.76	0.169	0.02	0.179	
Hotspot	10M QPSK 25RB#12	Right Edge	10	20600	22.0	21.69	0.133	0.02	0.143	
Hotspot	10M QPSK 1RB#0	Top Edge	10	20600	23.0	22.76	0.050	0.18	0.053	
Hotspot	10M QPSK 25RB#12	Top Edge	10	20600	22.0	21.69	0.039	-0.06	0.042	
Hotspot	10M QPSK 1RB#0	Bottom Edge	10	20600	23.0	22.76	0.018	0.08	0.019	
Hotspot	10M QPSK 25RB#12	Bottom Edge	10	20600	22.0	21.69	0.015	0.16	0.016	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	10M QPSK 1RB#0	Front Surface	10	20600	22.5	22.28	0.297	-0.16	0.312	
Body-worn & Hotspot	10M QPSK 25RB#12	Front Surface	10	20600	21.5	21.21	0.282	0.17	0.301	
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	10	20600	22.5	22.28	0.315	0.12	0.331	
Body-worn & Hotspot	10M QPSK 1RB#49	Back Surface	10	20450	22.5	22.21	**0.337**	-0.02	0.360	10
Body-worn & Hotspot	10M QPSK 1RB#49	Back Surface	10	20525	22.5	22.26	0.324	-0.16	0.342	
Body-worn & Hotspot	10M QPSK 25RB#12	Back Surface	10	20600	21.5	21.21	0.251	-0.15	0.268	
Body-worn & Hotspot	10M QPSK 25RB#25	Back Surface	10	20450	21.5	21.19	0.273	-0.14	0.293	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	20525	21.5	21.13	0.265	0.04	0.289	
Hotspot	10M QPSK 1RB#0	Left Edge	10	20600	22.5	22.28	0.187	-0.13	0.197	
Hotspot	10M QPSK 25RB#12	Left Edge	10	20600	21.5	21.21	0.148	0.16	0.158	
Hotspot	10M QPSK 1RB#0	Right Edge	10	20600	22.5	22.28	0.135	-0.15	0.142	
Hotspot	10M QPSK 25RB#12	Right Edge	10	20600	21.5	21.21	0.106	0.17	0.113	
Hotspot	10M QPSK 1RB#0	Top Edge	10	20600	22.5	22.28	0.040	-0.10	0.042	
Hotspot	10M QPSK 25RB#12	Top Edge	10	20600	21.5	21.21	0.031	0.07	0.033	
Hotspot	10M QPSK 1RB#0	Bottom Edge	10	20600	22.5	22.28	0.015	0.06	0.016	
Hotspot	10M QPSK 1RB#49	Bottom Edge	10	20450	21.5	21.21	0.012	-0.03	0.013	

14.7. SAR Test Results of LTE B7

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#99	Front Surface	10	20850	22.5	22.08	0.456	0.08	0.502	
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	21100	22.5	22.04	0.462	0.05	0.514	
Body-worn & Hotspot	20M QPSK 1RB#49	Front Surface	10	21350	22.5	21.96	0.465	-0.06	0.527	11
Body-worn & Hotspot	20M QPSK 1RB#49	Front Surface	16	21350	24.0	23.56	0.311	-0.06	0.344	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	21100	21.5	21.16	0.389	0.13	0.421	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	20850	21.5	21.10	0.401	0.12	0.440	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	21350	21.5	20.99	0.411	-0.04	0.462	
Body-worn & Hotspot	20M QPSK 1RB#99	Back Surface	10	20850	22.5	22.08	0.438	0.15	0.482	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	21100	21.5	21.16	0.405	-0.01	0.438	
Hotspot	20M QPSK 1RB#99	Left Edge	10	20850	22.5	22.08	**0.071**	0.04	0.078	
Hotspot	20M QPSK 50RB#0	Left Edge	10	21100	21.5	21.16	0.055	-0.13	0.059	
Hotspot	20M QPSK 1RB#99	Right Edge	10	20850	22.5	22.08	0.306	-0.10	0.337	
Hotspot	20M QPSK 50RB#0	Right Edge	10	21100	21.5	21.16	0.311	-0.10	0.336	
Hotspot	20M QPSK 1RB#99	Top Edge	10	20850	22.5	22.08	0.369	0.09	0.406	
Hotspot	20M QPSK 50RB#0	Top Edge	10	21100	21.5	21.16	0.332	-0.02	0.359	
Hotspot	20M QPSK 1RB#99	Bottom Edge	10	20850	22.5	22.08	0.076	0.04	0.084	
Hotspot	20M QPSK 50RB#0	Bottom Edge	10	21100	21.5	21.16	0.053	-0.16	0.057	

14.8. SAR Test Results of LTE B12

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	10M QPSK 1RB#0	Front Surface	10	23130	24.5	24.15	0.534	-0.05	0.579	
Body-worn & Hotspot	10M QPSK 25RB#0	Front Surface	10	23130	23.5	23.07	0.424	0.14	0.468	
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	10	23130	24.5	24.15	0.545	-0.10	0.591	
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	10	23060	24.5	24.14	0.582	0.00	0.632	12
Body-worn & Hotspot	10M QPSK 1RB#49	Back Surface	10	23095	24.5	24.13	0.538	0.15	0.586	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	23130	23.5	23.07	0.448	-0.16	0.495	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	23060	23.5	23.02	0.448	-0.10	0.500	
Body-worn & Hotspot	10M QPSK 25RB#12	Back Surface	10	23095	23.5	23.05	0.463	0.01	0.514	
Hotspot	10M QPSK 1RB#0	Left Edge	10	23130	24.5	24.15	0.240	-0.15	0.260	
Hotspot	10M QPSK 25RB#0	Left Edge	10	23130	23.5	23.07	0.190	0.03	0.210	
Hotspot	10M QPSK 1RB#0	Right Edge	10	23130	24.5	24.15	0.289	-0.01	0.313	
Hotspot	10M QPSK 25RB#0	Right Edge	10	23130	23.5	23.07	0.228	-0.07	0.252	
Hotspot	10M QPSK 1RB#0	Top Edge	10	23130	24.5	24.15	0.036	-0.01	0.039	
Hotspot	10M QPSK 25RB#0	Top Edge	10	23130	23.5	23.07	0.028	-0.05	0.031	
Hotspot	10M QPSK 1RB#0	Bottom Edge	10	23130	24.5	24.15	0.019	0.17	0.021	
Hotspot	10M QPSK 25RB#0	Bottom Edge	10	23130	23.5	23.07	0.015	-0.18	0.017	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	10M QPSK 1RB#0	Front Surface	10	23130	23.5	23.33	0.481	-0.02	0.500	
Body-worn & Hotspot	10M QPSK 25RB#0	Front Surface	10	23130	22.5	22.15	0.382	-0.10	0.414	
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	10	23130	23.5	23.21	0.491	0.02	0.525	
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	10	23060	23.5	23.30	0.546	0.00	0.572	13
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	16	23060	24.5	24.14	0.224	0.00	0.243	
Body-worn & Hotspot	10M QPSK 1RB#49	Back Surface	10	23095	23.5	23.10	0.484	-0.10	0.531	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	23130	22.5	22.15	0.403	0.11	0.437	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	23060	22.5	22.08	0.403	0.16	0.444	
Body-worn & Hotspot	10M QPSK 25RB#12	Back Surface	10	23095	22.5	22.13	0.417	0.15	0.454	
Hotspot	10M QPSK 1RB#0	Left Edge	10	23130	23.5	23.33	0.216	0.15	0.225	
Hotspot	10M QPSK 25RB#0	Left Edge	10	23130	22.5	22.15	0.171	0.15	0.185	
Hotspot	10M QPSK 1RB#0	Right Edge	10	23130	23.5	23.33	0.260	-0.17	0.270	
Hotspot	10M QPSK 25RB#0	Right Edge	10	23130	22.5	22.15	0.205	-0.06	0.222	
Hotspot	10M QPSK 1RB#0	Top Edge	10	23130	23.5	23.33	0.032	0.15	0.033	
Hotspot	10M QPSK 25RB#0	Top Edge	10	23130	22.5	22.15	0.025	0.17	0.027	
Hotspot	10M QPSK 1RB#0	Bottom Edge	10	23130	23.5	23.33	0.017	-0.04	0.018	
Hotspot	10M QPSK 25RB#0	Bottom Edge	10	23130	22.5	22.15	0.014	0.00	0.015	

14.9. SAR Test Results of LTE B13

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	10M QPSK 1RB#24	Front Surface	10	23230	22.5	22.46	0.407	-0.18	0.411	
Body-worn & Hotspot	10M QPSK 25RB#25	Front Surface	10	23230	22.5	22.42	0.482	0.07	0.491	
Body-worn & Hotspot	10M QPSK 1RB#24	Back Surface	10	23230	22.5	22.46	0.422	-0.11	0.426	
Body-worn & Hotspot	10M QPSK 25RB#25	Back Surface	10	23230	22.5	22.42	0.512	0.00	0.522	14
Hotspot	10M QPSK 1RB#24	Left Edge	10	23230	22.5	22.46	0.219	-0.04	0.221	
Hotspot	10M QPSK 25RB#25	Left Edge	10	23230	22.5	22.42	0.273	-0.10	0.278	
Hotspot	10M QPSK 1RB#24	Right Edge	10	23230	22.5	22.46	0.212	0.10	0.214	
Hotspot	10M QPSK 25RB#25	Right Edge	10	23230	22.5	22.42	0.255	-0.08	0.260	
Hotspot	10M QPSK 1RB#24	Top Edge	10	23230	22.5	22.46	0.033	0.06	0.033	
Hotspot	10M QPSK 25RB#25	Top Edge	10	23230	22.5	22.42	0.044	0.17	0.045	
Hotspot	10M QPSK 1RB#24	Bottom Edge	10	23230	22.5	22.46	0.017	-0.05	0.017	
Hotspot	10M QPSK 25RB#25	Bottom Edge	10	23230	22.5	22.42	0.021	0.08	0.021	

14.10. SAR Test Results of LTE B14

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	10M QPSK 1RB#0	Front Surface	10	23330	24.5	24.17	0.681	-0.15	0.735	
Body-worn & Hotspot	10M QPSK 25RB#25	Front Surface	10	23330	24.5	23.31	0.561	-0.07	0.738	
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	10	23330	24.5	24.17	0.722	0.00	0.779	15
Body-worn & Hotspot	10M QPSK 25RB#25	Back Surface	10	23330	24.5	23.31	0.592	-0.03	0.779	
Hotspot	10M QPSK 1RB#0	Left Edge	10	23330	24.5	24.17	0.396	0.09	0.427	
Hotspot	10M QPSK 25RB#25	Left Edge	10	23330	24.5	23.31	0.325	0.15	0.427	
Hotspot	10M QPSK 1RB#0	Right Edge	10	23330	24.5	24.17	0.353	-0.09	0.381	
Hotspot	10M QPSK 25RB#25	Right Edge	10	23330	24.5	23.31	0.294	0.19	0.387	
Hotspot	10M QPSK 1RB#0	Top Edge	10	23330	24.5	24.17	0.062	0.11	0.067	
Hotspot	10M QPSK 25RB#25	Top Edge	10	23330	24.5	23.31	0.053	0.01	0.070	
Hotspot	10M QPSK 1RB#0	Bottom Edge	10	23330	24.5	24.17	0.029	0.05	0.031	
Hotspot	10M QPSK 25RB#25	Bottom Edge	10	23330	24.5	23.31	0.026	-0.11	0.034	

14.11. SAR Test Results of LTE B17

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	10M QPSK 1RB#24	Front Surface	10	23790	24.5	24.12	0.438	0.11	0.478	
Body-worn & Hotspot	10M QPSK 25RB#0	Front Surface	10	23790	24.5	24.06	0.468	-0.17	0.518	
Body-worn & Hotspot	10M QPSK 1RB#24	Back Surface	10	23790	24.5	24.12	0.511	0.00	0.558	16
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	10	23780	24.5	24.09	0.443	-0.07	0.487	
Body-worn & Hotspot	10M QPSK 1RB#0	Back Surface	10	23800	24.5	24.05	0.438	0.17	0.486	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	23790	24.5	24.06	0.476	-0.04	0.527	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	23780	24.5	24.02	0.490	-0.15	0.547	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	23800	24.5	23.98	0.461	0.17	0.520	
Hotspot	10M QPSK 1RB#24	Left Edge	10	23790	24.5	24.12	0.223	-0.10	0.243	
Hotspot	10M QPSK 25RB#0	Left Edge	10	23790	24.5	24.06	0.212	0.14	0.235	
Hotspot	10M QPSK 1RB#24	Right Edge	10	23790	24.5	24.12	0.265	0.18	0.289	
Hotspot	10M QPSK 25RB#0	Right Edge	10	23790	24.5	24.06	0.253	-0.18	0.280	
Hotspot	10M QPSK 1RB#24	Top Edge	10	23790	24.5	24.12	0.033	-0.13	0.036	
Hotspot	10M QPSK 25RB#0	Top Edge	10	23790	24.5	24.06	0.032	0.08	0.035	
Hotspot	10M QPSK 1RB#24	Bottom Edge	10	23790	24.5	24.12	0.019	-0.19	0.021	
Hotspot	10M QPSK 25RB#0	Bottom Edge	10	23790	24.5	24.06	0.018	-0.15	0.020	

14.12. SAR Test Results of LTE B25

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#99	Front Surface	10	26590	24.0	23.87	0.550	0.04	0.567	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	26590	23.0	22.88	0.547	-0.18	0.562	
Body-worn & Hotspot	20M QPSK 1RB#99	Back Surface	10	26590	24.0	23.87	0.618	-0.07	0.637	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	26590	23.0	22.88	0.473	-0.19	0.486	
Hotspot	20M QPSK 1RB#99	Left Edge	10	26590	24.0	23.87	0.121	-0.19	0.125	
Hotspot	20M QPSK 50RB#0	Left Edge	10	26590	23.0	22.88	0.088	0.05	0.090	
Hotspot	20M QPSK 1RB#99	Right Edge	10	26590	24.0	23.87	0.577	0.01	0.595	
Hotspot	20M QPSK 50RB#0	Right Edge	10	26590	23.0	22.88	0.466	-0.10	0.479	
Hotspot	20M QPSK 1RB#99	Top Edge	10	26590	24.0	23.87	0.671	0.00	0.691	17
Hotspot	20M QPSK 1RB#49	Top Edge	10	26140	24.0	23.70	0.667	0.15	0.715	
Hotspot	20M QPSK 1RB#0	Top Edge	10	26365	24.0	23.80	0.656	-0.12	0.687	
Hotspot	20M QPSK 50RB#0	Top Edge	10	26590	23.0	22.88	0.564	-0.15	0.580	
Hotspot	20M QPSK 50RB#25	Top Edge	10	26140	23.0	22.75	0.515	-0.08	0.546	
Hotspot	20M QPSK 50RB#0	Top Edge	10	26365	23.0	22.77	0.537	0.05	0.566	
Hotspot	20M QPSK 1RB#99	Bottom Edge	10	26590	24.0	23.87	0.031	-0.16	0.032	
Hotspot	20M QPSK 50RB#0	Bottom Edge	10	26590	23.0	22.88	0.027	-0.19	0.028	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#99	Front Surface	10	26590	22.5	22.44	0.383	0.08	0.388	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	26590	21.5	21.45	0.381	-0.09	0.385	
Body-worn & Hotspot	20M QPSK 1RB#99	Back Surface	10	26590	22.5	22.44	0.431	0.14	0.437	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	26590	21.5	21.45	0.330	0.08	0.334	
Hotspot	20M QPSK 1RB#99	Left Edge	10	26590	22.5	22.44	0.084	0.18	0.085	
Hotspot	20M QPSK 50RB#0	Left Edge	10	26590	21.5	21.45	0.061	-0.12	0.062	
Hotspot	20M QPSK 1RB#99	Right Edge	10	26590	22.5	22.44	0.402	0.05	0.408	
Hotspot	20M QPSK 50RB#0	Right Edge	10	26590	21.5	21.45	0.325	-0.12	0.329	
Hotspot	20M QPSK 1RB#99	Top Edge	10	26590	22.5	22.44	0.468	0.00	0.475	18
Hotspot	20M QPSK 1RB#99	Top Edge	16	26590	24.0	23.87	0.305	0.00	0.314	
Hotspot	20M QPSK 1RB#49	Top Edge	10	26140	22.5	22.24	0.465	0.18	0.494	
Hotspot	20M QPSK 1RB#0	Top Edge	10	26365	22.5	22.30	0.457	0.13	0.479	
Hotspot	20M QPSK 50RB#0	Top Edge	10	26590	21.5	21.45	0.393	0.16	0.398	
Hotspot	20M QPSK 50RB#25	Top Edge	10	26140	21.5	21.30	0.359	0.11	0.376	
Hotspot	20M QPSK 50RB#0	Top Edge	10	26365	21.5	21.31	0.374	-0.01	0.391	
Hotspot	20M QPSK 1RB#99	Bottom Edge	10	26590	22.5	22.44	0.022	-0.01	0.022	
Hotspot	20M QPSK 50RB#0	Bottom Edge	10	26590	21.5	21.45	0.019	0.02	0.019	

14.13. SAR Test Results of LTE B26

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	15M QPSK 1RB#38	Front Surface	10	26865	24.5	24.21	0.574	-0.05	0.614	
Body-worn & Hotspot	15M QPSK 36RB#0	Front Surface	10	26765	23.5	23.20	0.444	0.01	0.476	
Body-worn & Hotspot	15M QPSK 1RB#38	Back Surface	10	26865	24.5	24.21	0.613	0.14	0.655	
Body-worn & Hotspot	15M QPSK 1RB#0	Back Surface	10	26765	24.5	24.20	0.634	0.14	0.679	
Body-worn & Hotspot	15M QPSK 1RB#0	Back Surface	10	26965	24.5	24.17	**0.695**	0.01	0.750	19
Body-worn & Hotspot	15M QPSK 36RB#0	Back Surface	10	26765	23.5	23.20	0.484	0.17	0.519	
Body-worn & Hotspot	15M QPSK 36RB#37	Back Surface	10	26865	23.5	23.12	0.513	0.05	0.560	
Body-worn & Hotspot	15M QPSK 36RB#0	Back Surface	10	26965	23.5	23.13	0.519	0.16	0.565	
Hotspot	15M QPSK 1RB#38	Left Edge	10	26865	24.5	24.21	0.307	0.00	0.328	
Hotspot	15M QPSK 36RB#0	Left Edge	10	26765	23.5	23.20	0.244	-0.16	0.261	
Hotspot	15M QPSK 1RB#38	Right Edge	10	26865	24.5	24.21	0.248	0.10	0.265	
Hotspot	15M QPSK 36RB#0	Right Edge	10	26765	23.5	23.20	0.193	0.16	0.207	
Hotspot	15M QPSK 1RB#38	Top Edge	10	26865	24.5	24.21	0.065	-0.10	0.069	
Hotspot	15M QPSK 36RB#0	Top Edge	10	26765	23.5	23.20	0.054	0.14	0.058	
Hotspot	15M QPSK 1RB#38	Bottom Edge	10	26865	24.5	24.21	0.026	0.07	0.028	
Hotspot	15M QPSK 36RB#0	Bottom Edge	10	26765	23.5	23.20	0.025	-0.13	0.027	

EN-DC power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	15M QPSK 1RB#38	Front Surface	10	26865	23.0	22.72	0.374	-0.12	0.399	
Body-worn & Hotspot	15M QPSK 36RB#0	Front Surface	10	26765	22.0	21.79	0.289	0.04	0.303	
Body-worn & Hotspot	15M QPSK 1RB#38	Back Surface	10	26865	23.0	22.72	0.400	-0.06	0.427	
Body-worn & Hotspot	15M QPSK 1RB#0	Back Surface	10	26765	23.0	22.70	0.413	0.18	0.443	
Body-worn & Hotspot	15M QPSK 1RB#0	Back Surface	10	26965	23.0	22.66	0.453	-0.02	0.490	20
Body-worn & Hotspot	15M QPSK 1RB#0	Back Surface	16	26965	24.5	24.17	0.301	-0.01	0.325	
Body-worn & Hotspot	15M QPSK 36RB#0	Back Surface	10	26765	22.0	21.79	0.316	-0.11	0.332	
Body-worn & Hotspot	15M QPSK 36RB#37	Back Surface	10	26865	22.0	21.69	0.334	-0.04	0.359	
Body-worn & Hotspot	15M QPSK 36RB#0	Back Surface	10	26965	22.0	21.61	0.338	0.15	0.370	
Hotspot	15M QPSK 1RB#38	Left Edge	10	26865	23.0	22.72	0.200	-0.18	0.213	
Hotspot	15M QPSK 36RB#0	Left Edge	10	26765	22.0	21.79	0.159	0.14	0.167	
Hotspot	15M QPSK 1RB#38	Right Edge	10	26865	23.0	22.72	0.162	0.00	0.173	
Hotspot	15M QPSK 36RB#0	Right Edge	10	26765	22.0	21.79	0.126	0.04	0.132	
Hotspot	15M QPSK 1RB#38	Top Edge	10	26865	23.0	22.72	0.042	-0.14	0.045	
Hotspot	15M QPSK 36RB#0	Top Edge	10	26765	22.0	21.79	0.035	-0.09	0.037	
Hotspot	15M QPSK 1RB#38	Bottom Edge	10	26865	23.0	22.72	0.017	-0.09	0.018	
Hotspot	15M QPSK 36RB#0	Bottom Edge	10	26765	22.0	21.79	0.016	-0.17	0.017	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	15M QPSK 1RB#38	Front Surface	10	26865	22.5	22.23	0.290	0.15	0.309	
Body-worn & Hotspot	15M QPSK 36RB#0	Front Surface	10	26765	21.5	21.29	0.224	-0.05	0.235	
Body-worn & Hotspot	15M QPSK 1RB#38	Back Surface	10	26865	22.5	22.23	0.310	-0.15	0.330	
Body-worn & Hotspot	15M QPSK 1RB#0	Back Surface	10	26765	22.5	22.21	0.320	0.02	0.342	
Body-worn & Hotspot	15M QPSK 1RB#0	Back Surface	10	26965	22.5	22.15	0.351	-0.02	0.380	21
Body-worn & Hotspot	15M QPSK 36RB#0	Back Surface	10	26765	21.5	21.29	0.244	0.10	0.256	
Body-worn & Hotspot	15M QPSK 36RB#37	Back Surface	10	26865	21.5	21.17	0.259	0.05	0.279	
Body-worn & Hotspot	15M QPSK 36RB#0	Back Surface	10	26965	21.5	21.12	0.262	0.08	0.286	
Hotspot	15M QPSK 1RB#38	Left Edge	10	26865	22.5	22.23	0.155	0.13	0.165	
Hotspot	15M QPSK 36RB#0	Left Edge	10	26765	21.5	21.29	0.123	-0.08	0.129	
Hotspot	15M QPSK 1RB#38	Right Edge	10	26865	22.5	22.23	0.125	0.12	0.133	
Hotspot	15M QPSK 36RB#0	Right Edge	10	26765	21.5	21.29	0.097	0.12	0.102	
Hotspot	15M QPSK 1RB#38	Top Edge	10	26865	22.5	22.23	0.033	0.08	0.035	
Hotspot	15M QPSK 36RB#0	Top Edge	10	26765	21.5	21.29	0.027	-0.04	0.028	
Hotspot	15M QPSK 1RB#38	Bottom Edge	10	26865	22.5	22.23	0.013	-0.03	0.014	
Hotspot	15M QPSK 1RB#0	Bottom Edge	10	26765	21.5	21.29	0.000	0.10	0.000	

14.14. SAR Test Results of LTE B30

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	10M QPSK 1RB#24	Front Surface	10	27710	20.5	20.43	0.390	0.12	0.396	
Body-worn & Hotspot	10M QPSK 25RB#0	Front Surface	10	27710	19.5	19.38	0.440	0.05	0.452	
Body-worn & Hotspot	10M QPSK 1RB#24	Back Surface	10	27710	20.5	20.43	0.500	-0.10	0.508	
Body-worn & Hotspot	10M QPSK 25RB#0	Back Surface	10	27710	19.5	19.38	0.540	-0.04	0.555	
Hotspot	10M QPSK 1RB#24	Left Edge	10	27710	20.5	20.43	0.065	0.13	0.066	
Hotspot	10M QPSK 25RB#0	Left Edge	10	27710	19.5	19.38	0.070	0.04	0.072	
Hotspot	10M QPSK 1RB#24	Right Edge	10	27710	20.5	20.43	0.035	0.02	0.036	
Hotspot	10M QPSK 25RB#0	Right Edge	10	27710	19.5	19.38	0.037	0.16	0.038	
Hotspot	10M QPSK 1RB#24	Top Edge	10	27710	20.5	20.43	0.748	-0.06	0.760	
Hotspot	10M QPSK 25RB#0	Top Edge	10	27710	19.5	19.38	0.824	0.00	0.847	22
Hotspot	10M QPSK 25RB#0	Top Edge	16	27710	22.0	21.94	0.341	0.01	0.346	
Hotspot	10M QPSK 50RB#0	Top Edge	10	27710	18.0	17.68	0.771	-0.03	0.830	
Hotspot	10M QPSK 1RB#24	Bottom Edge	10	27710	20.5	20.43	0.003	-0.19	0.003	
Hotspot	10M QPSK 25RB#0	Bottom Edge	10	27710	19.5	19.38	0.003	-0.13	0.003	
Worst mode retest										
Hotspot	10M QPSK 25RB#0	Top Edge	10	27710	19.5	19.38	0.809	-0.04	0.832	

Note:

1) Due to 0.824/0.809 = 1.19 < 1.20, and SAR value of original and repeated measurement is ≤ 1.45 W/kg, so only one repeated measurement is required.

14.15. SAR Test Results of LTE B38

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#49	Front Surface	10	37850	25.5	25.37	0.498	-0.02	0.513	23
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	38000	25.5	25.21	0.492	0.08	0.526	
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	38150	25.5	24.63	0.488	0.08	0.596	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	37850	25.0	24.58	0.495	0.01	0.545	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	38000	25.0	24.25	0.475	0.08	0.565	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	38150	25.0	23.71	0.438	-0.12	0.589	
Body-worn & Hotspot	20M QPSK 1RB#49	Back Surface	10	37850	25.5	25.37	0.485	-0.10	0.500	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	37850	25.0	24.58	0.462	0.18	0.509	
Hotspot	20M QPSK 1RB#49	Left Edge	10	37850	25.5	25.37	0.426	0.04	0.439	
Hotspot	20M QPSK 50RB#0	Left Edge	10	37850	25.0	24.58	0.411	0.09	0.453	
Hotspot	20M QPSK 1RB#49	Right Edge	10	37850	25.5	25.37	0.029	-0.17	0.030	
Hotspot	20M QPSK 50RB#0	Right Edge	10	37850	25.0	24.58	0.022	0.14	0.024	
Hotspot	20M QPSK 1RB#49	Top Edge	10	37850	25.5	25.37	0.091	0.12	0.094	
Hotspot	20M QPSK 50RB#0	Top Edge	10	37850	25.0	24.58	0.085	-0.17	0.094	
Hotspot	20M QPSK 1RB#49	Bottom Edge	10	37850	25.5	25.37	0.036	-0.07	0.037	
Hotspot	20M QPSK 50RB#0	Bottom Edge	10	37850	25.0	24.58	0.028	0.08	0.031	

EN-DC power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	38150	21.5	21.25	0.085	-0.01	0.090	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	38150	20.5	20.23	0.073	-0.15	0.078	
Body-worn & Hotspot	20M QPSK 1RB#0	Back Surface	10	38150	21.5	21.25	0.082	0.08	0.087	
Body-worn & Hotspot	20M QPSK 50RB#50	Back Surface	10	38150	20.5	20.23	0.079	-0.14	0.084	
Hotspot	20M QPSK 1RB#0	Left Edge	10	38150	21.5	21.25	0.013	-0.04	0.014	
Hotspot	20M QPSK 50RB#50	Left Edge	10	38150	20.5	20.23	0.013	0.03	0.014	
Hotspot	20M QPSK 1RB#0	Right Edge	10	38150	21.5	21.25	0.022	0.14	0.023	
Hotspot	20M QPSK 50RB#50	Right Edge	10	38150	20.5	20.23	0.021	0.16	0.022	
Hotspot	20M QPSK 1RB#0	Top Edge	10	38150	21.5	21.25	0.157	0.06	0.166	
Hotspot	20M QPSK 1RB#0	Top Edge	10	37850	21.5	21.16	0.285	-0.06	0.308	24
Hotspot	20M QPSK 1RB#49	Top Edge	10	38000	21.5	21.12	0.183	0.13	0.200	
Hotspot	20M QPSK 1RB#49	Top Edge	10	38150	20.5	20.23	0.150	-0.08	0.160	
Hotspot	20M QPSK 50RB#50	Top Edge	10	37850	20.5	20.08	0.271	-0.15	0.299	
Hotspot	20M QPSK 50RB#50	Top Edge	10	38000	20.5	20.10	0.195	-0.08	0.214	
Hotspot	20M QPSK 50RB#25	Bottom Edge	10	38150	21.5	21.25	0.012	0.04	0.013	
Hotspot	20M QPSK 50RB#50	Bottom Edge	10	38150	20.5	20.23	0.011	0.15	0.012	

14.16. SAR Test Results of LTE B41

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	40620	25.0	24.50	0.273	-0.16	0.306	
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	39750	25.0	24.36	**0.308**	-0.02	0.357	25
Body-worn & Hotspot	20M QPSK 1RB#99	Front Surface	10	41490	25.0	23.96	0.302	0.08	0.384	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	39750	23.5	23.45	0.266	0.01	0.269	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	40620	23.5	23.36	0.271	0.08	0.280	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	41490	23.5	23.06	0.269	0.02	0.298	
Body-worn & Hotspot	20M QPSK 1RB#0	Back Surface	10	40620	25.0	24.50	0.234	0.05	0.263	
Body-worn & Hotspot	20M QPSK 50RB#50	Back Surface	10	39750	23.5	23.45	0.225	0.01	0.228	
Hotspot	20M QPSK 1RB#0	Left Edge	10	40620	25.0	24.50	0.269	0.00	0.302	
Hotspot	20M QPSK 50RB#50	Left Edge	10	39750	23.5	23.45	0.227	-0.15	0.230	
Hotspot	20M QPSK 1RB#0	Right Edge	10	40620	25.0	24.50	0.017	0.08	0.019	
Hotspot	20M QPSK 50RB#50	Right Edge	10	39750	23.5	23.45	0.013	0.03	0.013	
Hotspot	20M QPSK 1RB#0	Top Edge	10	40620	25.0	24.50	0.042	-0.15	0.047	
Hotspot	20M QPSK 50RB#50	Top Edge	10	39750	23.5	23.45	0.036	-0.02	0.036	
Hotspot	20M QPSK 1RB#0	Bottom Edge	10	40620	25.0	24.50	0.020	-0.12	0.022	
Hotspot	20M QPSK 50RB#50	Bottom Edge	10	39750	23.5	23.45	0.015	0.17	0.015	

EN-DC power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	41490	19.0	18.62	0.081	-0.18	0.088	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	41490	18.0	17.76	0.076	0.04	0.080	
Body-worn & Hotspot	20M QPSK 1RB#0	Back Surface	10	41490	19.0	18.62	0.090	-0.11	0.098	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	41490	18.0	17.76	0.084	-0.11	0.089	
Hotspot	20M QPSK 1RB#0	Left Edge	10	41490	19.0	18.62	0.015	-0.07	0.016	
Hotspot	20M QPSK 50RB#0	Left Edge	10	41490	18.0	17.76	0.014	-0.18	0.015	
Hotspot	20M QPSK 1RB#0	Right Edge	10	41490	19.0	18.62	0.026	0.05	0.028	
Hotspot	20M QPSK 50RB#0	Right Edge	10	41490	18.0	17.76	0.024	-0.02	0.025	
Hotspot	20M QPSK 1RB#0	Top Edge	10	41490	19.0	18.62	0.334	-0.07	0.365	
Hotspot	20M QPSK 1RB#49	Top Edge	10	39750	19.0	18.40	0.472	-0.01	0.542	
Hotspot	20M QPSK 1RB#0	Top Edge	10	40620	19.0	18.48	0.323	0.16	0.364	
Hotspot	20M QPSK 50RB#0	Top Edge	10	41490	18.0	17.76	0.421	0.00	0.445	
Hotspot	20M QPSK 50RB#25	Top Edge	10	39750	18.0	17.46	**0.538**	-0.03	0.609	26
Hotspot	20M QPSK 50RB#25	Top Edge	10	40620	18.0	17.51	0.405	0.14	0.453	
Hotspot	20M QPSK 1RB#0	Bottom Edge	10	41490	19.0	18.62	0.010	-0.18	0.011	
Hotspot	20M QPSK 50RB#0	Bottom Edge	10	41490	18.0	17.76	0.009	-0.11	0.010	

14.17. SAR Test Results of LTE B42

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#99	Front Surface	10	42590	24.0	23.83	0.316	0.19	0.329	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	42590	23.0	22.70	0.305	0.08	0.327	
Body-worn & Hotspot	20M QPSK 1RB#99	Back Surface	10	42590	24.0	23.83	0.439	0.11	0.457	
Body-worn & Hotspot	20M QPSK 50RB#50	Back Surface	10	42590	23.0	22.70	0.405	-0.15	0.434	
Hotspot	20M QPSK 1RB#99	Left Edge	10	42590	24.0	23.83	0.447	0.06	0.465	
Hotspot	20M QPSK 1RB#0	Left Edge	10	41690	24.0	22.57	0.383	0.04	0.532	
Hotspot	20M QPSK 1RB#49	Left Edge	10	43490	24.0	23.55	0.588	-0.04	0.652	27
Hotspot	20M QPSK 50RB#50	Left Edge	10	42590	23.0	22.70	0.408	-0.08	0.437	
Hotspot	20M QPSK 50RB#0	Left Edge	10	41690	23.0	21.64	0.336	0.04	0.460	
Hotspot	20M QPSK 50RB#50	Left Edge	10	43490	23.0	22.58	0.524	0.00	0.577	
Hotspot	20M QPSK 1RB#99	Right Edge	10	42590	24.0	23.83	0.008	-0.06	0.008	
Hotspot	20M QPSK 50RB#50	Right Edge	10	42590	23.0	22.70	0.005	0.06	0.005	
Hotspot	20M QPSK 1RB#99	Top Edge	10	42590	24.0	23.83	0.169	0.17	0.176	
Hotspot	20M QPSK 50RB#50	Top Edge	10	42590	23.0	22.70	0.151	0.14	0.162	
Hotspot	20M QPSK 1RB#99	Bottom Edge	10	42590	24.0	23.83	0.122	-0.15	0.127	
Hotspot	20M QPSK 50RB#50	Bottom Edge	10	42590	23.0	22.70	0.105	-0.08	0.113	

14.18. SAR Test Results of LTE B48

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#99	Front Surface	10	55990	23.5	23.21	0.290	-0.13	0.310	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	55990	22.0	21.96	0.271	0.17	0.274	
Body-worn & Hotspot	20M QPSK 1RB#99	Back Surface	10	55990	23.5	23.21	0.383	-0.19	0.409	
Body-worn & Hotspot	20M QPSK 50RB#50	Back Surface	10	55990	22.0	21.96	0.366	0.04	0.369	
Hotspot	20M QPSK 1RB#99	Left Edge	10	55990	23.5	23.21	0.554	0.19	0.592	
Hotspot	20M QPSK 1RB#49	Left Edge	10	55340	23.5	22.76	0.541	-0.14	0.642	
Hotspot	20M QPSK 1RB#0	Left Edge	10	56640	23.5	22.94	0.582	-0.01	0.662	28
Hotspot	20M QPSK 50RB#50	Left Edge	10	55990	22.0	21.96	0.513	0.05	0.518	
Hotspot	20M QPSK 50RB#50	Left Edge	10	55340	22.0	21.63	0.503	-0.14	0.548	
Hotspot	20M QPSK 50RB#0	Left Edge	10	56640	22.0	21.66	0.551	-0.04	0.596	
Hotspot	20M QPSK 1RB#99	Right Edge	10	55990	23.5	23.21	0.036	-0.04	0.038	
Hotspot	20M QPSK 50RB#50	Right Edge	10	55990	22.0	21.96	0.031	0.18	0.031	
Hotspot	20M QPSK 1RB#99	Top Edge	10	55990	23.5	23.21	0.246	-0.11	0.263	
Hotspot	20M QPSK 50RB#50	Top Edge	10	55990	22.0	21.96	0.223	0.19	0.225	
Hotspot	20M QPSK 1RB#99	Bottom Edge	10	55990	23.5	23.21	0.059	0.01	0.063	
Hotspot	20M QPSK 50RB#50	Bottom Edge	10	55990	22.0	21.96	0.043	0.10	0.043	

14.19. SAR Test Results of LTE B66

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	132072	24.5	24.10	0.614	0.12	0.673	
Body-worn & Hotspot	20M QPSK 1RB#99	Front Surface	10	132322	24.5	23.83	0.688	0.04	0.803	
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	132572	24.5	23.75	0.748	-0.02	0.889	29
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	132072	23.5	23.13	0.515	-0.18	0.561	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	132322	23.5	22.88	0.580	-0.15	0.669	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	132572	23.5	22.74	0.545	-0.10	0.649	
Body-worn & Hotspot	20M QPSK 1RB#0	Back Surface	10	132072	24.5	24.10	0.601	-0.08	0.659	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	132072	23.5	23.13	0.521	-0.17	0.567	
Hotspot	20M QPSK 1RB#0	Left Edge	10	132072	24.5	24.10	0.117	-0.06	0.128	
Hotspot	20M QPSK 50RB#0	Left Edge	10	132072	23.5	23.13	0.087	0.04	0.095	
Hotspot	20M QPSK 1RB#0	Right Edge	10	132072	24.5	24.10	0.613	-0.07	0.672	
Hotspot	20M QPSK 50RB#0	Right Edge	10	132072	23.5	23.13	0.500	0.13	0.544	
Hotspot	20M QPSK 1RB#0	Top Edge	10	132072	24.5	24.10	0.346	-0.16	0.379	
Hotspot	20M QPSK 50RB#0	Top Edge	10	132072	23.5	23.13	0.287	0.09	0.313	
Hotspot	20M QPSK 1RB#0	Bottom Edge	10	132072	24.5	24.10	0.045	0.12	0.049	
Hotspot	20M QPSK 50RB#0	Bottom Edge	10	132072	23.5	23.13	0.033	0.05	0.036	

EN-DC power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	132072	23.0	22.58	0.510	0.07	0.562	
Body-worn & Hotspot	20M QPSK 1RB#99	Front Surface	10	132322	23.0	22.37	0.571	0.04	0.660	
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	132572	23.0	22.22	0.621	-0.01	0.743	30
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	16	132572	23.0	22.22	0.249	-0.01	0.298	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	132072	22.0	21.67	0.427	-0.14	0.461	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	132322	22.0	21.35	0.481	0.07	0.559	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	132572	22.0	21.28	0.452	-0.01	0.534	
Body-worn & Hotspot	20M QPSK 1RB#0	Back Surface	10	132072	23.0	22.58	0.499	-0.15	0.550	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	132072	22.0	21.67	0.432	0.13	0.466	
Hotspot	20M QPSK 1RB#0	Left Edge	10	132072	23.0	22.58	0.097	0.15	0.107	
Hotspot	20M QPSK 50RB#0	Left Edge	10	132072	22.0	21.67	0.072	0.01	0.078	
Hotspot	20M QPSK 1RB#0	Right Edge	10	132072	23.0	22.58	0.509	0.16	0.561	
Hotspot	20M QPSK 50RB#0	Right Edge	10	132072	22.0	21.67	0.415	0.14	0.448	
Hotspot	20M QPSK 1RB#0	Top Edge	10	132072	23.0	22.58	0.287	0.16	0.316	
Hotspot	20M QPSK 50RB#0	Top Edge	10	132072	22.0	21.67	0.238	-0.04	0.257	
Hotspot	20M QPSK 1RB#0	Bottom Edge	10	132072	23.0	22.58	0.037	0.15	0.041	
Hotspot	20M QPSK 50RB#0	Bottom Edge	10	132072	22.0	21.67	0.027	0.08	0.029	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	132072	22.5	22.04	0.421	0.13	0.468	
Body-worn & Hotspot	20M QPSK 1RB#99	Front Surface	10	132322	22.5	21.85	0.471	-0.03	0.547	
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	132572	22.5	22.03	0.497	-0.01	0.554	31
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	132072	21.5	21.13	0.353	0.14	0.384	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	132322	21.5	20.84	0.397	0.15	0.462	
Body-worn & Hotspot	20M QPSK 50RB#0	Front Surface	10	132572	21.5	20.75	0.373	-0.15	0.443	
Body-worn & Hotspot	20M QPSK 1RB#0	Back Surface	10	132072	22.5	22.04	0.412	-0.01	0.458	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	132072	21.5	21.13	0.357	-0.10	0.389	
Hotspot	20M QPSK 1RB#0	Left Edge	10	132072	22.5	22.04	0.080	-0.01	0.089	
Hotspot	20M QPSK 50RB#0	Left Edge	10	132072	21.5	21.13	0.060	0.17	0.065	
Hotspot	20M QPSK 1RB#0	Right Edge	10	132072	22.5	22.04	0.391	0.17	0.435	
Hotspot	20M QPSK 50RB#0	Right Edge	10	132072	21.5	21.13	0.343	-0.09	0.374	
Hotspot	20M QPSK 1RB#0	Top Edge	10	132072	22.5	22.04	0.237	0.18	0.263	
Hotspot	20M QPSK 50RB#0	Top Edge	10	132072	21.5	21.13	0.197	-0.06	0.215	
Hotspot	20M QPSK 1RB#0	Bottom Edge	10	132072	22.5	22.04	0.031	-0.15	0.034	
Hotspot	20M QPSK 50RB#0	Bottom Edge	10	132072	21.5	21.13	0.023	0.14	0.025	

14.20. SAR Test Results of LTE B71

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M QPSK 1RB#0	Front Surface	10	133322	24.0	23.85	0.220	0.07	0.228	
Body-worn & Hotspot	20M QPSK 50RB#50	Front Surface	10	133372	23.5	23.18	0.289	0.05	0.311	
Body-worn & Hotspot	20M QPSK 1RB#0	Back Surface	10	133322	24.0	23.85	0.332	-0.06	0.344	32
Body-worn & Hotspot	20M QPSK 1RB#49	Back Surface	10	133222	24.0	23.68	0.279	0.14	0.300	
Body-worn & Hotspot	20M QPSK 1RB#49	Back Surface	10	133372	24.0	23.81	0.320	-0.12	0.334	
Body-worn & Hotspot	20M QPSK 50RB#50	Back Surface	10	133372	23.5	23.18	0.319	-0.12	0.343	
Body-worn & Hotspot	20M QPSK 50RB#50	Back Surface	10	133222	23.5	23.15	0.305	0.18	0.331	
Body-worn & Hotspot	20M QPSK 50RB#0	Back Surface	10	133322	23.5	23.15	0.318	-0.12	0.345	
Hotspot	20M QPSK 1RB#0	Left Edge	10	133322	24.0	23.85	0.121	0.00	0.125	
Hotspot	20M QPSK 50RB#50	Left Edge	10	133372	23.5	23.18	0.144	0.01	0.155	
Hotspot	20M QPSK 1RB#0	Right Edge	10	133322	24.0	23.85	0.194	-0.11	0.201	
Hotspot	20M QPSK 50RB#50	Right Edge	10	133372	23.5	23.18	0.182	-0.03	0.196	
Hotspot	20M QPSK 1RB#0	Top Edge	10	133322	24.0	23.85	0.034	0.16	0.035	
Hotspot	20M QPSK 50RB#50	Top Edge	10	133372	23.5	23.18	0.031	-0.09	0.033	
Hotspot	20M QPSK 1RB#0	Bottom Edge	10	133322	24.0	23.85	0.016	-0.03	0.017	
Hotspot	20M QPSK 50RB#50	Bottom Edge	10	133372	23.5	23.18	0.016	0.08	0.017	

14.21. SAR Test Results of NR n2

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Front Surface	10	372000	24.5	24.02	0.447	-0.06	0.499	
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Front Surface	10	376000	24.0	23.92	0.438	-0.01	0.446	
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Back Surface	10	372000	24.5	24.02	0.411	-0.07	0.459	
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Back Surface	10	376000	24.0	23.92	0.381	0.10	0.388	
Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Left Edge	10	372000	24.5	24.02	0.069	0.01	0.077	
Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Left Edge	10	376000	24.0	23.92	0.066	0.08	0.067	
Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Right Edge	10	372000	24.5	24.02	0.350	-0.04	0.391	
Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Right Edge	10	376000	24.0	23.92	0.337	0.03	0.343	
Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Top Edge	10	372000	24.5	24.02	0.460	-0.04	0.514	
Hotspot	20M DFT-S-OFDM QPSK 1RB#1	Top Edge	10	380000	24.5	24.02	0.476	0.15	0.532	
Hotspot	20M DFT-S-OFDM QPSK 1RB#1	Top Edge	10	376000	24.5	23.97	0.488	0.10	0.551	
Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Top Edge	10	376000	24.0	23.92	0.408	-0.06	0.416	
Hotspot	20M DFT-S-OFDM QPSK 50RB#28	Top Edge	10	372000	24.0	23.89	0.505	-0.06	0.518	33
Hotspot	20M DFT-S-OFDM QPSK 50RB#28	Top Edge	10	380000	24.0	23.90	0.381	0.06	0.390	
Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Bottom Edge	10	372000	24.5	24.02	0.019	0.01	0.021	
Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Bottom Edge	10	376000	24.0	23.92	0.012	-0.04	0.012	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Front Surface	10	372000	22.5	22.12	0.347	0.15	0.379	
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Front Surface	10	376000	22.0	21.98	0.340	0.08	0.342	
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Back Surface	10	372000	22.5	22.12	0.319	0.06	0.348	
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Back Surface	10	376000	22.0	21.98	0.296	-0.15	0.297	
Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Left Edge	10	372000	22.5	22.12	0.054	0.05	0.059	
Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Left Edge	10	376000	22.0	21.98	0.051	-0.08	0.051	
Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Right Edge	10	372000	22.5	22.12	0.216	0.02	0.236	
Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Right Edge	10	376000	22.0	21.98	0.204	0.14	0.205	
Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Top Edge	10	372000	22.5	22.12	0.357	0.14	0.390	
Hotspot	20M DFT-S-OFDM QPSK 1RB#1	Top Edge	10	380000	22.5	22.10	0.369	-0.14	0.405	
Hotspot	20M DFT-S-OFDM QPSK 1RB#1	Top Edge	10	376000	22.5	22.05	0.379	-0.06	0.420	
Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Top Edge	10	376000	22.0	21.98	0.317	-0.03	0.318	
Hotspot	20M DFT-S-OFDM QPSK 50RB#28	Top Edge	10	372000	22.0	21.86	0.392	-0.01	0.405	34
Hotspot	20M DFT-S-OFDM QPSK 50RB#28	Top Edge	16	372000	24.0	23.89	0.198	-0.04	0.203	
Hotspot	20M DFT-S-OFDM QPSK 50RB#28	Top Edge	10	380000	22.0	21.96	0.296	0.07	0.299	
Hotspot	20M DFT-S-OFDM QPSK 1RB#53	Bottom Edge	10	372000	22.5	22.12	0.015	0.03	0.016	
Hotspot	20M DFT-S-OFDM QPSK 50RB#55	Bottom Edge	10	376000	22.0	21.98	0.009	0.16	0.009	

14.22. SAR Test Results of NR n5

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	15M DFT-S-OFDM QPSK 1RB#104	Front Surface	10	166800	24.0	23.97	0.521	-0.07	0.525	
Body-worn & Hotspot	15M DFT-S-OFDM QPSK 50RB#28	Front Surface	10	167800	24.0	23.82	0.505	-0.11	0.526	
Body-worn & Hotspot	15M DFT-S-OFDM QPSK 1RB#104	Back Surface	10	166800	24.0	23.97	**0.557**	0.00	0.561	35
Body-worn & Hotspot	15M DFT-S-OFDM QPSK 1RB#104	Back Surface	10	166800	24.0	23.87	0.497	0.13	0.512	
Body-worn & Hotspot	15M DFT-S-OFDM QPSK 1RB#1	Back Surface	10	167300	24.0	23.59	0.488	0.09	0.536	
Body-worn & Hotspot	15M DFT-S-OFDM QPSK 1RB#1	Back Surface	10	167800	24.0	23.82	0.545	0.01	0.568	
Body-worn & Hotspot	15M DFT-S-OFDM QPSK 50RB#28	Back Surface	10	167800	24.0	23.82	0.552	-0.01	0.575	
Body-worn & Hotspot	15M DFT-S-OFDM QPSK 50RB#28	Back Surface	10	166800	24.0	23.76	0.549	-0.15	0.580	
Hotspot	15M DFT-S-OFDM QPSK 50RB#28	Left Edge	10	167300	24.0	23.97	0.284	0.01	0.286	
Hotspot	15M DFT-S-OFDM QPSK 50RB#28	Left Edge	10	167800	24.0	23.82	0.276	0.04	0.288	
Hotspot	15M DFT-S-OFDM QPSK 1RB#104	Right Edge	10	166800	24.0	23.97	0.237	0.17	0.239	
Hotspot	15M DFT-S-OFDM QPSK 50RB#28	Right Edge	10	167800	24.0	23.82	0.393	-0.19	0.410	
Hotspot	15M DFT-S-OFDM QPSK 1RB#104	Top Edge	10	166800	24.0	23.97	0.085	0.19	0.086	
Hotspot	15M DFT-S-OFDM QPSK 50RB#28	Top Edge	10	167800	24.0	23.82	0.089	-0.19	0.093	
Hotspot	15M DFT-S-OFDM QPSK 1RB#104	Bottom Edge	10	166800	24.0	23.97	0.033	-0.13	0.033	
Hotspot	15M DFT-S-OFDM QPSK 50RB#28	Bottom Edge	10	167800	24.0	23.82	0.032	-0.10	0.033	

14.23. SAR Test Results of NR n7

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#135	Front Surface	10	504000	21.5	21.28	0.517	0.10	0.544	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#135	Front Surface	10	507000	21.5	19.85	0.551	0.01	0.806	36
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Front Surface	10	510000	21.5	21.06	0.511	0.14	0.565	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 135RB#68	Front Surface	10	504000	21.0	20.54	0.501	0.04	0.557	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 135RB#0	Front Surface	10	507000	21.0	50.54	0.522	-0.01	0.001	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 135RB#0	Front Surface	10	510000	21.0	20.05	0.508	-0.13	0.632	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#135	Back Surface	10	504000	21.5	21.28	0.468	-0.05	0.492	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 135RB#68	Back Surface	10	504000	21.0	20.54	0.456	-0.14	0.507	
Hotspot	40M DFT-S-OFDM QPSK 1RB#135	Left Edge	10	504000	21.5	21.28	0.397	0.03	0.418	
Hotspot	40M DFT-S-OFDM QPSK 135RB#68	Left Edge	10	504000	21.0	20.54	0.385	-0.13	0.428	
Hotspot	40M DFT-S-OFDM QPSK 1RB#135	Right Edge	10	504000	21.5	21.28	0.381	0.01	0.401	
Hotspot	40M DFT-S-OFDM QPSK 135RB#68	Right Edge	10	504000	21.0	20.54	0.371	0.18	0.412	
Hotspot	40M DFT-S-OFDM QPSK 1RB#135	Top Edge	10	504000	21.5	21.28	0.370	-0.08	0.389	
Hotspot	40M DFT-S-OFDM QPSK 135RB#68	Top Edge	10	504000	21.0	20.54	0.362	0.19	0.402	
Hotspot	40M DFT-S-OFDM QPSK 1RB#135	Bottom Edge	10	504000	21.5	21.28	0.092	0.16	0.097	
Hotspot	40M DFT-S-OFDM QPSK 135RB#68	Bottom Edge	10	504000	21.0	20.54	0.088	-0.08	0.098	

14.24. SAR Test Results of NR n38

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Front Surface	10	520000	25.5	25.46	0.532	-0.05	0.537	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Front Surface	10	518000	25.0	24.63	0.541	0.05	0.589	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Back Surface	10	520000	25.5	25.46	0.549	0.00	0.554	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Back Surface	10	518000	25.0	24.63	0.535	-0.05	0.583	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Left Edge	10	520000	25.5	25.46	0.559	-0.02	0.564	37
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Left Edge	10	518000	25.5	25.14	0.543	-0.06	0.590	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Left Edge	10	519000	25.5	25.13	0.536	-0.06	0.584	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Left Edge	10	518000	25.0	24.63	0.548	-0.02	0.597	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Left Edge	10	519000	25.0	24.63	0.555	0.18	0.604	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Left Edge	10	520000	25.0	24.46	0.535	0.04	0.606	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Right Edge	10	520000	25.5	25.46	0.045	0.06	0.045	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Right Edge	10	518000	25.0	24.63	0.047	0.02	0.051	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Top Edge	10	520000	25.5	25.46	0.091	-0.17	0.092	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Top Edge	10	518000	25.0	24.63	0.099	-0.15	0.108	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Bottom Edge	10	520000	25.5	25.46	0.020	0.08	0.020	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Bottom Edge	10	518000	25.0	24.63	0.021	-0.05	0.023	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Front Surface	10	520000	24.0	23.92	0.361	-0.05	0.368	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Front Surface	10	518000	23.5	23.18	0.367	0.01	0.395	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Back Surface	10	520000	24.0	23.92	0.372	0.16	0.379	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Back Surface	10	518000	23.5	23.18	0.363	-0.15	0.391	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Left Edge	10	520000	24.0	23.92	0.379	0.04	0.386	38
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Left Edge	16	520000	25.5	25.46	0.236	0.07	0.238	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Left Edge	10	518000	24.0	23.66	0.368	-0.02	0.398	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Left Edge	10	519000	24.0	23.61	0.363	0.04	0.397	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Left Edge	10	518000	23.5	23.18	0.372	0.08	0.400	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Left Edge	10	519000	23.5	23.08	0.376	0.14	0.414	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Left Edge	10	520000	23.5	22.98	0.363	0.10	0.409	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Right Edge	10	520000	24.0	23.92	0.031	0.17	0.032	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Right Edge	10	518000	23.5	23.18	0.032	-0.04	0.034	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Top Edge	10	520000	24.0	23.92	0.062	0.18	0.063	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Top Edge	10	518000	23.5	23.18	0.067	0.09	0.072	
Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Bottom Edge	10	520000	24.0	23.92	0.014	0.01	0.014	
Hotspot	40M DFT-S-OFDM QPSK 50RB#28	Bottom Edge	10	518000	23.5	23.18	0.014	-0.14	0.015	

14.25. SAR Test Results of NR n41

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Front Surface	10	528000	24.5	24.12	0.558	0.01	0.609	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Front Surface	10	509202	24.5	23.83	0.521	0.19	0.608	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Front Surface	10	518598	24.5	23.91	0.549	0.19	0.629	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	509202	24.5	24.04	0.567	0.01	0.630	39
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	518598	24.5	23.79	0.530	-0.17	0.624	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	528000	24.5	23.70	0.562	0.19	0.676	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Back Surface	10	528000	24.5	24.12	0.554	0.03	0.605	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	509202	24.5	24.04	0.556	0.14	0.618	
Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Left Edge	10	528000	24.5	24.12	0.410	-0.05	0.447	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	509202	24.5	24.04	0.402	0.07	0.447	
Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Right Edge	10	528000	24.5	24.12	0.048	0.18	0.052	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	509202	24.5	24.04	0.052	0.00	0.058	
Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Top Edge	10	528000	24.5	24.12	0.088	-0.04	0.096	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	509202	24.5	24.04	0.092	0.17	0.102	
Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Bottom Edge	10	528000	24.5	24.12	0.034	0.01	0.037	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	509202	24.5	24.04	0.036	-0.13	0.040	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Front Surface	10	528000	22.5	22.05	0.322	0.11	0.357	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Front Surface	10	509202	22.5	21.85	0.301	-0.04	0.350	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Front Surface	10	518598	22.5	21.89	0.317	-0.04	0.365	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	509202	22.0	21.99	0.335	-0.03	0.336	40
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	16	509202	24.5	24.04	0.201	0.01	0.223	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	518598	22.0	21.84	0.306	-0.10	0.317	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	528000	22.0	21.67	0.324	0.10	0.350	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Back Surface	10	528000	22.5	22.05	0.320	0.10	0.355	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	509202	22.0	21.99	0.321	0.05	0.322	
Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Left Edge	10	528000	22.5	22.05	0.237	-0.07	0.263	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	509202	22.0	21.99	0.232	-0.11	0.233	
Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Right Edge	10	528000	22.5	22.05	0.028	0.15	0.031	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	509202	22.0	21.99	0.030	-0.09	0.030	
Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Top Edge	10	528000	22.5	22.05	0.051	-0.05	0.057	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	509202	22.0	21.99	0.053	-0.08	0.053	
Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Bottom Edge	10	528000	22.5	22.05	0.020	-0.15	0.022	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	509202	22.0	21.99	0.021	0.12	0.021	

14.26. SAR Test Results of NR n66

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Front Surface	10	352000	22.5	22.09	0.689	-0.07	0.757	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Front Surface	10	346000	22.5	21.56	0.653	0.04	0.811	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Front Surface	10	349000	22.5	21.60	0.665	0.06	0.818	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Front Surface	10	346000	22.0	21.66	0.716	0.00	0.774	41
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Front Surface	10	352000	22.0	21.66	0.683	-0.06	0.739	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Front Surface	10	349000	22.0	21.53	0.684	-0.18	0.762	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 216RB#0	Front Surface	10	346000	21.0	20.69	0.652	0.08	0.700	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Back Surface	10	352000	22.5	22.09	0.625	0.17	0.687	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Back Surface	10	346000	22.0	21.66	0.650	0.08	0.703	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Left Edge	10	352000	22.5	22.09	0.058	0.04	0.064	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Left Edge	10	346000	22.0	21.66	0.060	-0.09	0.065	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Right Edge	10	352000	22.5	22.09	0.616	-0.13	0.677	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Right Edge	10	346000	22.0	21.66	0.622	0.11	0.673	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Top Edge	10	352000	22.5	22.09	0.336	-0.02	0.369	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Top Edge	10	346000	22.0	21.66	0.347	0.07	0.375	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Bottom Edge	10	352000	22.5	22.09	0.046	-0.10	0.051	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Bottom Edge	10	346000	22.0	21.66	0.052	0.18	0.056	

EN-DC power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Front Surface	10	352000	21.0	20.61	0.537	0.11	0.587	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Front Surface	10	346000	21.0	20.01	0.509	-0.13	0.639	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Front Surface	10	349000	21.0	20.14	0.519	0.16	0.633	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Front Surface	10	346000	20.5	20.20	0.559	-0.04	0.599	42
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Front Surface	16	352000	22.5	22.09	0.306	0.02	0.336	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Front Surface	10	352000	20.5	20.12	0.533	0.15	0.582	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Front Surface	10	349000	20.5	20.08	0.534	0.09	0.588	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Back Surface	10	352000	21.0	20.61	0.488	-0.10	0.534	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Back Surface	10	346000	20.5	20.20	0.507	0.01	0.543	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Left Edge	10	352000	21.0	20.61	0.045	-0.10	0.049	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Left Edge	10	346000	20.5	20.20	0.047	-0.01	0.050	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Right Edge	10	352000	21.0	20.61	0.480	0.14	0.525	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Right Edge	10	346000	20.5	20.20	0.485	-0.15	0.520	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Top Edge	10	352000	21.0	20.61	0.262	0.09	0.287	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Top Edge	10	346000	20.5	20.20	0.271	-0.11	0.290	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Bottom Edge	10	352000	21.0	20.61	0.036	-0.08	0.039	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Bottom Edge	10	346000	20.5	20.20	0.041	-0.11	0.044	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Front Surface	10	352000	20.5	20.46	0.480	-0.18	0.484	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#1	Front Surface	10	346000	20.5	20.11	0.454	-0.02	0.497	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Front Surface	10	349000	20.5	21.08	0.463	0.14	0.405	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Front Surface	10	346000	20.0	19.98	0.499	-0.04	0.501	43
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Front Surface	10	352000	20.0	19.71	0.475	0.18	0.508	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Front Surface	10	349000	20.0	19.55	0.476	0.01	0.528	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Back Surface	10	352000	20.5	20.46	0.435	-0.10	0.439	
Body-worn & Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Back Surface	10	346000	20.0	19.98	0.452	0.15	0.454	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Left Edge	10	352000	20.5	20.46	0.040	0.04	0.040	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Left Edge	10	346000	20.0	19.98	0.042	0.06	0.042	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Right Edge	10	352000	20.5	20.46	0.393	0.12	0.397	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Right Edge	10	346000	20.0	19.98	0.385	0.01	0.387	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Top Edge	10	352000	20.5	20.46	0.234	0.08	0.236	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Top Edge	10	346000	20.0	19.98	0.242	-0.17	0.243	
Hotspot	40M DFT-S-OFDM QPSK 1RB#108	Bottom Edge	10	352000	20.5	20.46	0.032	0.08	0.032	
Hotspot	40M DFT-S-OFDM QPSK 108RB#54	Bottom Edge	10	346000	20.0	19.98	0.036	-0.11	0.036	

14.27. SAR Test Results of NR n71

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 1RB#108	Front Surface	10	136100	23.5	23.05	0.182	-0.15	0.202	
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 108RB#54	Front Surface	10	136100	23.5	23.14	0.189	0.04	0.205	44
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 1RB#108	Back Surface	10	136100	23.5	23.05	0.178	0.17	0.197	
Body-worn & Hotspot	20M DFT-S-OFDM QPSK 108RB#54	Back Surface	10	136100	23.5	23.14	0.185	-0.11	0.201	
Hotspot	20M DFT-S-OFDM QPSK 1RB#108	Left Edge	10	136100	23.5	23.05	0.060	0.18	0.067	
Hotspot	20M DFT-S-OFDM QPSK 108RB#54	Left Edge	10	136100	23.5	23.14	0.058	0.02	0.063	
Hotspot	20M DFT-S-OFDM QPSK 1RB#108	Right Edge	10	136100	23.5	23.05	0.094	0.06	0.104	
Hotspot	20M DFT-S-OFDM QPSK 108RB#54	Right Edge	10	136100	23.5	23.14	0.074	-0.18	0.080	
Hotspot	20M DFT-S-OFDM QPSK 1RB#108	Top Edge	10	136100	23.5	23.05	0.031	0.00	0.034	
Hotspot	20M DFT-S-OFDM QPSK 108RB#54	Top Edge	10	136100	23.5	23.14	0.028	0.01	0.030	
Hotspot	20M DFT-S-OFDM QPSK 1RB#108	Bottom Edge	10	136100	23.5	23.05	0.014	-0.02	0.016	
Hotspot	20M DFT-S-OFDM QPSK 108RB#54	Bottom Edge	10	136100	23.5	23.14	0.011	0.15	0.012	

14.28. SAR Test Results of NR n77 Block A

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Front Surface	10	633332	22.5	22.47	0.693	0.06	0.698	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	633332	21.5	21.46	0.460	0.11	0.464	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Back Surface	10	633332	22.5	22.47	0.752	-0.08	0.757	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	633332	21.5	21.46	0.770	0.00	0.777	45
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Left Edge	10	633332	22.5	22.47	0.533	-0.12	0.537	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	633332	21.5	21.46	0.538	0.12	0.543	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Right Edge	10	633332	22.5	22.47	0.045	-0.08	0.045	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	633332	21.5	21.46	0.047	-0.04	0.047	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Top Edge	10	633332	22.5	22.47	0.278	-0.10	0.280	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	633332	21.5	21.46	0.304	-0.15	0.307	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Bottom Edge	10	633332	22.5	22.47	0.010	0.13	0.010	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	633332	21.5	21.46	0.010	-0.08	0.010	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Front Surface	10	633332	21.5	21.13	0.387	-0.12	0.421	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	633332	21.0	20.32	0.257	-0.06	0.301	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Back Surface	10	633332	21.5	21.13	0.420	0.05	0.457	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	633332	21.0	20.32	0.431	-0.08	0.504	46
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Back Surface	16	633332	22.5	22.47	0.214	0.04	0.215	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Left Edge	10	633332	21.5	21.13	0.298	0.17	0.325	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	633332	21.0	20.32	0.301	-0.06	0.352	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Right Edge	10	633332	21.5	21.13	0.025	-0.11	0.027	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	633332	21.0	20.32	0.026	0.16	0.030	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Top Edge	10	633332	21.5	21.13	0.155	-0.12	0.169	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	633332	21.0	20.32	0.170	-0.18	0.199	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Bottom Edge	10	633332	21.5	21.13	0.006	-0.16	0.007	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	633332	21.0	20.32	0.006	-0.05	0.007	

14.29. SAR Test Results of NR n77 Block C

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Front Surface	10	656000	22.5	22.49	0.394	-0.15	0.395	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	662000	22.5	22.48	0.316	-0.05	0.317	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Back Surface	10	656000	22.5	22.49	0.459	-0.10	0.460	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Back Surface	10	650000	22.5	22.35	0.714	0.11	0.739	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Back Surface	10	662000	22.5	22.35	0.539	-0.19	0.558	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	662000	22.5	22.48	0.314	-0.15	0.315	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	650000	22.5	22.47	0.762	-0.03	0.767	47
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	656000	22.5	22.05	0.496	0.16	0.550	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 270RB#0	Back Surface	10	662000	21.5	21.05	0.522	0.06	0.579	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Left Edge	10	656000	22.5	22.49	0.167	-0.16	0.167	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	662000	22.5	22.48	0.152	0.07	0.153	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Right Edge	10	656000	22.5	22.49	0.111	0.05	0.111	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	662000	22.5	22.48	0.129	0.12	0.130	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Top Edge	10	656000	22.5	22.49	0.367	-0.06	0.368	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	662000	22.5	22.48	0.354	-0.13	0.356	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Bottom Edge	10	656000	22.5	22.49	0.060	-0.04	0.060	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	662000	22.5	22.48	0.059	-0.19	0.059	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Front Surface	10	656000	22.0	21.56	0.292	-0.05	0.323	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	662000	21.5	21.46	0.234	0.07	0.236	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Back Surface	10	656000	22.0	21.56	0.341	0.06	0.377	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Back Surface	10	650000	22.0	21.44	0.530	-0.04	0.603	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#1	Back Surface	10	662000	22.0	21.36	0.400	0.04	0.464	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	662000	21.5	21.16	0.233	0.16	0.252	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	650000	21.5	21.45	0.566	0.00	0.573	48
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	16	650000	22.5	22.47	0.285	0.02	0.287	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	656000	21.5	21.06	0.368	0.15	0.407	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Left Edge	10	656000	22.0	21.56	0.124	-0.12	0.137	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	662000	21.5	21.46	0.113	-0.02	0.114	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Right Edge	10	656000	22.0	21.56	0.082	0.00	0.091	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	662000	21.5	21.46	0.096	0.01	0.097	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Top Edge	10	656000	22.0	21.56	0.272	-0.02	0.301	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	662000	21.5	21.46	0.263	0.17	0.265	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Bottom Edge	10	656000	22.0	21.56	0.045	-0.18	0.050	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	662000	21.5	21.46	0.044	-0.12	0.044	

14.30. SAR Test Results of NR n78 Block A

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Front Surface	10	633332	23.0	22.79	0.619	-0.18	0.650	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	633332	23.0	22.79	0.608	0.04	0.638	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Back Surface	10	633332	23.0	22.79	1.110	0.05	1.165	49
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	633332	23.0	22.79	1.050	0.01	1.102	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Left Edge	10	633332	23.0	22.79	0.712	0.08	0.747	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	633332	23.0	22.79	0.735	0.13	0.771	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Right Edge	10	633332	23.0	22.79	0.067	0.00	0.070	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	633332	23.0	22.79	0.066	0.09	0.069	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Top Edge	10	633332	23.0	22.79	0.340	-0.05	0.357	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	633332	23.0	22.79	0.345	-0.06	0.362	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Bottom Edge	10	633332	23.0	22.79	0.018	-0.18	0.019	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	633332	23.0	22.79	0.022	-0.03	0.023	
Worst mode retest										
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Back Surface	10	633332	23.0	22.79	1.020	-0.06	1.071	

Note:

1) Due to 1.110/1.020 = 1.08 < 1.20, and SAR value of original and repeated measurement is ≤ 1.45 W/kg, so only one repeated measurement is required.

EN-DC power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Front Surface	10	633332	21.5	21.39	0.361	-0.13	0.370	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	633332	21.5	21.35	0.354	0.18	0.366	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Back Surface	10	633332	21.5	21.39	0.647	-0.01	0.664	50
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Back Surface	16	633332	23.0	22.79	0.415	-0.04	0.436	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	633332	21.5	21.35	0.612	-0.08	0.634	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Left Edge	10	633332	21.5	21.39	0.415	0.11	0.426	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	633332	21.5	21.35	0.429	-0.09	0.444	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Right Edge	10	633332	21.5	21.39	0.039	-0.16	0.040	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	633332	21.5	21.35	0.038	0.08	0.039	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Top Edge	10	633332	21.5	21.39	0.198	0.05	0.203	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	633332	21.5	21.35	0.201	-0.05	0.208	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Bottom Edge	10	633332	21.5	21.39	0.010	-0.15	0.010	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	633332	21.5	21.35	0.013	0.05	0.013	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Front Surface	10	633332	20.5	20.26	0.322	-0.13	0.340	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	633332	20.5	20.25	0.316	-0.16	0.335	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Back Surface	10	633332	20.5	20.26	0.578	0.00	0.611	51
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	633332	20.5	20.25	0.546	-0.02	0.578	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Left Edge	10	633332	20.5	20.26	0.370	0.16	0.391	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	633332	20.5	20.25	0.382	0.05	0.405	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Right Edge	10	633332	20.5	20.26	0.035	-0.06	0.037	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	633332	20.5	20.25	0.034	-0.14	0.036	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Top Edge	10	633332	20.5	20.26	0.177	-0.01	0.187	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	633332	20.5	20.25	0.179	-0.11	0.190	
Hotspot	100M DFT-S-OFDM QPSK 1RB#136	Bottom Edge	10	633332	20.5	20.26	0.009	0.16	0.010	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	633332	20.5	20.25	0.011	0.13	0.012	

14.31. SAR Test Results of NR n78 Block C

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Front Surface	10	650000	23.5	23.31	0.473	0.03	0.494	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	650000	22.5	22.35	0.447	0.09	0.463	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Back Surface	10	650000	23.5	23.31	0.693	-0.17	0.724	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	650000	22.5	22.35	0.784	-0.08	0.812	52
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Left Edge	10	650000	23.5	23.31	0.465	0.06	0.486	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	650000	22.5	22.35	0.354	0.10	0.366	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Right Edge	10	650000	23.5	23.31	0.110	0.06	0.115	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	650000	22.5	22.35	0.104	-0.12	0.108	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Top Edge	10	650000	23.5	23.31	0.472	-0.07	0.493	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	650000	22.5	22.35	0.422	0.14	0.437	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Bottom Edge	10	650000	23.5	23.31	0.037	-0.12	0.039	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	650000	22.5	22.35	0.033	-0.18	0.034	

EN-DC power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.	1-g (W/Kg)			
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Front Surface	10	650000	22.0	21.85	0.361	-0.08	0.374	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	650000	21.0	20.84	0.342	-0.12	0.355	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Back Surface	10	650000	22.0	21.85	0.529	0.00	0.548	
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	650000	21.0	20.84	0.599	-0.03	0.621	53
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	650000	22.5	22.35	0.336	-0.09	0.348	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Left Edge	10	650000	22.0	21.85	0.355	-0.09	0.367	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	650000	21.0	20.84	0.270	-0.13	0.280	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Right Edge	10	650000	22.0	21.85	0.084	0.01	0.087	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	650000	21.0	20.84	0.079	0.14	0.082	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Top Edge	10	650000	22.0	21.85	0.361	0.12	0.374	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	650000	21.0	20.84	0.322	-0.09	0.334	
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Bottom Edge	10	650000	22.0	21.85	0.028	-0.09	0.029	
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	650000	21.0	20.84	0.025	-0.06	0.026	

EN-DC+WLAN power level

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		Measured	Pwr. Drift	Scaled (W/Kg)
					Tune-up Limit	Meas.	1-g (W/Kg)		
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Front Surface	10	650000	21.0	20.83	0.289	-0.05	0.301
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Front Surface	10	650000	20.5	19.80	0.273	0.12	0.321
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Back Surface	10	650000	21.0	20.83	0.423	0.04	0.440
Body-worn & Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Back Surface	10	650000	20.5	19.80	0.479	0.00	0.563
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Left Edge	10	650000	21.0	20.83	0.284	-0.06	0.295
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Left Edge	10	650000	20.5	19.80	0.216	0.11	0.254
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Right Edge	10	650000	21.0	20.83	0.067	-0.03	0.070
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Right Edge	10	650000	20.5	19.80	0.063	0.06	0.074
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Top Edge	10	650000	21.0	20.83	0.288	-0.05	0.299
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Top Edge	10	650000	20.5	19.80	0.257	-0.01	0.302
Hotspot	100M DFT-S-OFDM QPSK 1RB#271	Bottom Edge	10	650000	21.0	20.83	0.023	-0.17	0.024
Hotspot	100M DFT-S-OFDM QPSK 135RB#69	Bottom Edge	10	650000	20.5	19.80	0.020	-0.09	0.023

14.32. SAR Test Results of 2.4GHz Wi-Fi

ANT 7												
RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		DC. (%)	duty cycle scaling factor	Measured 1-g (W/Kg)	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up	Meas.						
Body-worn & Hotspot	802.11 b	Front Surface	10	6	20.0	19.68	100.00	1.00	0.218	-0.18	0.235	
Body-worn & Hotspot	802.11 b	Back Surface	10	6	20.0	19.68	100.00	1.00	**0.322**	-0.09	0.347	55
Body-worn & Hotspot	802.11 b	Back Surface	10	1	20.0	19.05	100.00	1.00	0.248	-0.18	0.309	
Body-worn & Hotspot	802.11 b	Back Surface	10	11	20.0	19.52	100.00	1.00	0.321	0.15	0.359	
Hotspot	802.11 b	Left Edge	10	6	20.0	19.68	100.00	1.00	0.028	-0.04	0.030	
Hotspot	802.11 b	Right Edge	10	6	20.0	19.68	100.00	1.00	0.319	-0.09	0.343	
Hotspot	802.11 b	Top Edge	10	6	20.0	19.68	100.00	1.00	0.013	0.09	0.014	
Hotspot	802.11 b	Bottom Edge	10	6	20.0	19.68	100.00	1.00	0.051	-0.02	0.055	

ANT 8												
RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		DC. (%)	duty cycle scaling factor	Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up Limit	Meas.			1-g (W/Kg)			
Body-worn & Hotspot	802.11 b	Front Surface	10	6	20.0	19.49	100.00	1.00	0.333	0.11	0.374	
Body-worn & Hotspot	802.11 b	Back Surface	10	6	20.0	19.49	100.00	1.00	0.342	0.15	0.385	
Body-worn & Hotspot	802.11 b	Back Surface	10	1	20.0	19.16	100.00	1.00	**0.344**	0.12	0.417	56
Body-worn & Hotspot	802.11 b	Back Surface	10	11	20.0	19.12	100.00	1.00	0.287	-0.07	0.351	
Hotspot	802.11 b	Left Edge	10	6	20.0	19.49	100.00	1.00	0.236	-0.01	0.265	
Hotspot	802.11 b	Right Edge	10	6	20.0	19.49	100.00	1.00	0.012	0.15	0.013	
Hotspot	802.11 b	Top Edge	10	6	20.0	19.49	100.00	1.00	0.038	-0.18	0.043	
Hotspot	802.11 b	Bottom Edge	10	6	20.0	19.49	100.00	1.00	0.273	0.04	0.307	

14.33. SAR Test Results of 5GHz Wi-Fi U-NII-2A

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		DC. (%)	duty cycle scaling factor	Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up	Meas.			1-g (W/Kg)			
Body-worn & Hotspot	802.11 a	Front Surface	10	52	19.5	19.35	100.00	1.00	0.412	0.11	0.426	
Body-worn & Hotspot	802.11 a	Back Surface	10	52	19.5	19.35	100.00	1.00	0.285	-0.16	0.295	
Hotspot	802.11 a	Left Edge	10	52	19.5	19.35	100.00	1.00	0.473	-0.09	0.490	
Hotspot	802.11 a	Right Edge	10	52	19.5	19.35	100.00	1.00	**0.889**	-0.03	0.920	57
Hotspot	802.11 a	Right Edge	10	56	19.5	19.09	100.00	1.00	0.720	0.00	0.791	
Hotspot	802.11 a	Right Edge	10	64	19.5	18.60	100.00	1.00	0.596	-0.01	0.733	
Hotspot	802.11 a	Top Edge	10	52	19.5	19.35	100.00	1.00	0.050	0.08	0.052	
Hotspot	802.11 a	Bottom Edge	10	52	19.5	19.35	100.00	1.00	0.061	-0.08	0.063	
Worst mode retest												
Hotspot	802.11 a	Right Edge	10	52	19.5	19.35	100.00	1.00	**0.851**	-0.06	0.881	

Note:

1) Due to 0.889/0.851 = 1.05 < 1.20, and SAR value of original and repeated measurement is ≤ 1.45 W/kg, so only one repeated measurement is required.
2) Test in MIMO mode

14.34. SAR Test Results of 5GHz Wi-Fi U-NII-2C

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		DC. (%)	duty cycle scaling factor	Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up	Meas.			1-g (W/Kg)			
Body-worn & Hotspot	802.11 n 20M	Front Surface	10	116	20.0	19.55	100.00	1.00	0.497	0.05	0.551	
Body-worn & Hotspot	802.11 n 20M	Back Surface	10	116	20.0	19.55	100.00	1.00	0.247	0.05	0.274	
Hotspot	802.11 n 20M	Left Edge	10	116	20.0	19.55	100.00	1.00	0.626	-0.04	0.694	
Hotspot	802.11 n 20M	Left Edge	10	100	20.0	19.31	100.00	1.00	**0.671**	-0.03	0.787	58
Hotspot	802.11 n 20M	Left Edge	10	140	20.0	19.20	100.00	1.00	0.477	0.08	0.573	
Hotspot	802.11 n 20M	Right Edge	10	116	20.0	19.55	100.00	1.00	0.400	-0.02	0.444	
Hotspot	802.11 n 20M	Top Edge	10	116	20.0	19.55	100.00	1.00	0.040	-0.17	0.044	
Hotspot	802.11 n 20M	Bottom Edge	10	116	20.0	19.55	100.00	1.00	0.149	0.07	0.165	

Note:

1) Test in MIMO mode

14.35. SAR Test Results of 5GHz Wi-Fi U-NII-3

RF Exposure Condition	Test Mode	Test Position	Dist. (mm)	Channel	Pwr. (dBm)		DC. (%)	duty cycle scaling factor	Measured	Pwr. Drift	Scaled (W/Kg)	Plot No.
					Tune-up	Meas.			1-g (W/Kg)			
Body-worn & Hotspot	802.11 n 40M	Front Surface	10	151	19.5	19.27	100.00	1.00	0.356	0.09	0.375	
Body-worn & Hotspot	802.11 n 40M	Back Surface	10	151	19.5	19.27	100.00	1.00	0.187	-0.13	0.197	
Hotspot	802.11 n 40M	Left Edge	10	151	19.5	19.27	100.00	1.00	0.481	0.02	0.507	
Hotspot	802.11 n 40M	Left Edge	10	159	19.5	19.10	100.00	1.00	**0.486**	-0.08	0.533	59
Hotspot	802.11 n 40M	Right Edge	10	151	19.5	19.27	100.00	1.00	0.359	0.04	0.379	
Hotspot	802.11 n 40M	Top Edge	10	151	19.5	19.27	100.00	1.00	0.028	0.02	0.030	
Hotspot	802.11 n 40M	Bottom Edge	10	151	19.5	19.27	100.00	1.00	0.149	-0.09	0.157	

Note:

1) Test in MIMO mode

15. Simultaneous Transmission SAR Analysis

Simultaneous transmission possibilities			
No.	Simultaneous TX Combination	Body- worn	Hotspot
1	WWAN (single antenna / EN-DC) + Wi-Fi (SISO/MIMO)	Y	Y

SN:		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
RF Exposure Condition	Test Position	LTE Band 2	LTE Band 4	LTE Band 5	LTE Band 7	LTE Band 12	LTE Band 13	LTE Band 14	LTE Band 17	LTE Band 25	LTE Band 26	LTE Band 30	LTE Band 38	LTE Band 40	LTE Band 41	LTE Band 48	LTE Band 66	LTE Band 71	NR n2	NR n5	NR n7
Body-worn & Hotspot	Front Surface	0.535	0.751	0.663	0.527	0.579	0.491	0.738	0.518	0.567	0.614	0.452	0.596	0.329	0.384	0.310	0.889	0.311	0.499	0.526	0.806
	Back Surface	0.455	0.367	0.779	0.482	0.632	0.522	0.779	0.558	0.637	0.750	0.555	0.509	0.457	0.263	0.409	0.659	0.345	0.459	0.580	0.507
Hotspot	Left Edge	0.074	0.061	0.418	0.078	0.260	0.278	0.427	0.243	0.125	0.328	0.072	0.453	0.652	0.302	0.662	0.128	0.155	0.077	0.288	0.428
	Right Edge	0.395	0.394	0.302	0.337	0.313	0.260	0.387	0.289	0.595	0.265	0.038	0.030	0.008	0.019	0.038	0.672	0.201	0.391	0.410	0.412
	Top Edge	0.622	0.239	0.089	0.406	0.039	0.045	0.070	0.036	0.715	0.069	0.847	0.094	0.176	0.047	0.263	0.379	0.035	0.551	0.093	0.402
	Bottom Edge	0.025	0.029	0.032	0.084	0.021	0.021	0.034	0.021	0.032	0.028	0.003	0.037	0.127	0.022	0.063	0.049	0.017	0.021	0.033	0.098

SN:		21	22	23	24	38	39	40	41	37	27	28	29	30	31	25	26	42	70	71	72
RF Exposure Condition	Test Position	NR n38	NR n41	NR n66	NR n71	NR n77 (Block A)	NR n77 (Block C)	NR n78 (Block A)	NR n78 (Block C)	LB41-ANT0 ENDC	2.4G Wi-Fi ANT7	2.4G Wi-Fi ANT8	U-NII-2A	U-NII-2C	U-NII-3	N77max	N78max	WLAN max	N78 ENDC max	N77 ENDC + WLAN max	N78 ENDC + WLAN max
Body-worn & Hotspot	Front Surface	0.589	0.676	0.818	0.205	0.698	0.395	0.650	0.494	0.088	0.235	0.374	0.426	0.551	0.375	0.698	0.650	0.551	0.374	0.421	0.340
	Back Surface	0.583	0.618	0.703	0.201	0.777	0.767	1.165	0.812	0.098	0.359	0.417	0.295	0.274	0.197	0.777	1.165	0.417	0.664	0.603	0.611
Hotspot	Left Edge	0.606	0.447	0.065	0.067	0.543	0.167	0.771	0.486	0.016	0.030	0.265	0.490	0.787	0.533	0.543	0.771	0.787	0.444	0.352	0.405
	Right Edge	0.051	0.058	0.677	0.104	0.047	0.130	0.070	0.115	0.028	0.343	0.013	0.920	0.444	0.379	0.130	0.115	0.920	0.087	0.097	0.074
	Top Edge	0.108	0.102	0.375	0.034	0.307	0.368	0.362	0.493	0.609	0.014	0.043	0.052	0.044	0.030	0.368	0.493	0.077	0.374	0.301	0.302
	Bottom Edge	0.023	0.040	0.056	0.016	0.010	0.060	0.023	0.039	0.011	0.055	0.307	0.063	0.165	0.157	0.060	0.039	0.307	0.029	0.050	0.024

SN:		43	44	45	46	47	48	49	52	53	54	55	56	57	58
RF Exposure Condition	Test Position	WCDMA B2	WCDMA B4	WCDMA B5	LTE B5 ENDC	LTE 26 ENDC	LTE 66 ENDC	NR n66 ENDC	NR n78A ENDC	NR n78C ENDC	LTE B2 ENDC+WLAN	LTE B4 ENDC+WLAN	LTE B5 ENDC+WLAN	LTE B12 ENDC+WLAN	LTE B25 ENDC+WLAN
Body-worn & Hotspot	Front Surface	0.590	0.710	0.405	0.392	0.399	0.743	0.639	0.370	0.374	0.358	0.663	0.312	0.500	0.388
	Back Surface	0.582	0.764	0.458	0.452	0.490	0.550	0.543	0.664	0.621	0.304	0.325	0.360	0.572	0.437
Hotspot	Left Edge	0.102	0.193	0.293	0.247	0.213	0.107	0.050	0.444	0.367	0.049	0.055	0.197	0.225	0.085
	Right Edge	0.456	0.511	0.245	0.179	0.173	0.561	0.525	0.040	0.087	0.264	0.350	0.142	0.270	0.408
	Top Edge	0.719	0.707	0.079	0.053	0.045	0.316	0.290	0.208	0.374	0.416	0.212	0.042	0.033	0.494
	Bottom Edge	0.025	0.027	0.034	0.019	0.018	0.041	0.044	0.013	0.029	0.016	0.026	0.016	0.018	0.022

SN:		59	60	61	62	63	64	65	66	67	68	36	32	33	34	35
RF Exposure Condition	Test Position	LTE B26 ENDC+WLAN	LTE B66 ENDC+WLAN	NR n2 ENDC+WLAN	NR n38 ENDC+WLAN	NR n41 ENDC+WLAN	NR n66 ENDC+WLAN	NR n77A ENDC+WLAN	NR n77C ENDC+WLAN	NR n78A ENDC+WLAN	NR n78C ENDC+WLAN	L B38-ANT0 ENDC	U-NII-5	U-NII-6	U-NII-7	U-NII-8
Body-worn & Hotspot	Front Surface	0.309	0.554	0.379	0.395	0.365	0.528	0.421	0.323	0.340	0.321	0.090	0.471	0.397	0.342	0.367
	Back Surface	0.380	0.458	0.348	0.391	0.355	0.454	0.504	0.603	0.611	0.563	0.087	0.196	0.261	0.388	0.274
Hotspot	Left Edge	0.165	0.089	0.059	0.414	0.263	0.042	0.352	0.137	0.405	0.295	0.014	0.319	0.320	0.302	0.250
	Right Edge	0.133	0.435	0.236	0.034	0.031	0.397	0.030	0.097	0.037	0.074	0.023	0.223	0.351	0.450	0.372
	Top Edge	0.035	0.263	0.420	0.072	0.057	0.243	0.199	0.301	0.190	0.302	0.308	0.037	0.086	0.047	0.085
	Bottom Edge	0.014	0.034	0.016	0.015	0.022	0.036	0.007	0.050	0.012	0.024	0.013	0.135	0.230	0.220	0.116

15.1. Analysis for WWAN single band & WLAN

RF Exposure Condition	Test Position	WWAN max	WLAN max	SUM
Body-worn & Hotspot	Front Surface	0.889	0.551	1.440
	Back Surface	1.165	0.417	1.582
Hotspot	Left Edge	0.771	0.787	1.558
	Right Edge	0.677	0.920	1.597
	Top Edge	0.936	0.077	1.013
	Bottom Edge	0.127	0.307	0.434

15.2. EN-DC

SN:		1+22	1+23	1+24	1+25	1+70	2+18	2+22	3+18	46+49	46+25	46+70	4+70	5+22
RF Exposure Condition	Test Position	DC_2A_n41A	DC_2A_n66A	DC_2A_n71A	DC_2A_n77A	DC_2A_n78A	DC_4A_n2A	DC_4A_n41A	DC_5A_n2A	DC_5A_n66A	DC_5A_n77A	DC_5A_n78A	DC_7A_n78A	DC_12A_n41A
Body-worn & Hotspot	Front Surface	1.211	1.353	0.740	1.233	0.909	1.250	1.427	1.162	1.031	1.090	0.766	0.901	1.255
	Back Surface	1.073	1.158	0.656	1.232	1.119	0.826	0.985	1.238	0.995	1.229	1.116	1.146	1.250
Hotspot	Left Edge	0.521	0.139	0.141	0.617	0.518	0.138	0.508	0.495	0.297	0.790	0.691	0.522	0.707
	Right Edge	0.453	1.072	0.499	0.525	0.482	0.785	0.452	0.693	0.704	0.309	0.266	0.424	0.371
	Top Edge	0.724	0.997	0.656	0.990	0.996	0.790	0.341	0.640	0.343	0.421	0.427	0.780	0.141
	Bottom Edge	0.065	0.081	0.041	0.085	0.054	0.050	0.069	0.053	0.063	0.079	0.048	0.113	0.061

SN:		5+23	5+25	9+25	47+25	47+70	11+25	36+70	37+25	37+70	48+18	48+21	48+22	48+24	48+25	48+70	17+49
RF Exposure Condition	Test Position	DC_12A_n66A	DC_12A_n77A	DC_25A_n77A	DC_26A_n77A	DC_26A_n78A	DC_30A_n77A	DC_38A_n78A	DC_41A_n77A	DC_41A_n78A	DC_66A_n2A	DC_66A_n38A	DC_66A_n41A	DC_66A_n71A	DC_66A_n77A	DC_66A_n78A	DC_71A_n66A
Body-worn & Hotspot	Front Surface	1.397	1.277	1.265	1.097	0.773	1.147	0.464	0.786	0.462	1.242	1.332	1.419	0.948	1.441	1.117	0.844
	Back Surface	1.335	1.409	1.414	1.267	1.154	1.328	0.751	0.875	0.762	1.009	1.133	1.168	0.751	1.327	1.214	0.744
Hotspot	Left Edge	0.325	0.803	0.668	0.756	0.657	0.614	0.458	0.559	0.460	0.184	0.713	0.554	0.174	0.650	0.551	0.117
	Right Edge	0.990	0.443	0.725	0.303	0.260	0.168	0.110	0.158	0.115	0.952	0.612	0.619	0.665	0.691	0.648	0.629
	Top Edge	0.414	0.407	1.083	0.413	0.419	1.304	0.682	0.977	0.983	0.867	0.424	0.418	0.350	0.684	0.690	0.324
	Bottom Edge	0.077	0.081	0.092	0.078	0.047	0.063	0.042	0.071	0.040	0.062	0.064	0.081	0.057	0.101	0.070	0.060

15.3. EN-DC & WLAN max

SN:		54+63+42	54+64+42	54+17+42	54+71+42	54+72+42	55+61+42	55+63+42	56+61+42	56+64+42	56+71+42	56+72+42	4+72+42	57+63+42	57+64+42
RF Exposure Condition	Test Position	DC_2A_N41a+WLANmax	DC_2A_n66A+WLANmax	DC_2A_n71A+WLANmax	DC_2A_n77A+WLANmax	DC_2A_n78A+WLANmax	DC_4A_n2A+WLANmax	DC_4A_n41A+WLANmax	DC_5A_n2A+WLANmax	DC_5A_n66A+WLANmax	DC_5A_n77A+WLANmax	DC_5A_n78A+WLANmax	DC_7A_n78A+WLANmax	DC_12A_n41A+WLANmax	DC_12A_n66A+WLANmax
Body-worn & Hotspot	Front Surface	1.274	1.437	1.220	1.330	1.249	1.593	1.579	1.242	1.391	1.284	1.203	1.418	1.416	1.579
	Back Surface	1.076	1.175	1.066	1.324	1.332	1.090	1.097	1.125	1.231	1.380	1.388	1.510	1.344	1.443
Hotspot	Left Edge	1.099	0.878	0.991	1.188	1.241	0.901	1.105	1.043	1.026	1.336	1.389	1.270	1.275	1.054
	Right Edge	1.215	1.581	1.385	1.281	1.258	1.506	1.301	1.298	1.459	1.159	1.136	1.331	1.221	1.587
	Top Edge	0.550	0.736	0.528	0.794	0.795	0.709	0.346	0.539	0.362	0.420	0.421	0.785	0.167	0.353
	Bottom Edge	0.345	0.359	0.340	0.373	0.347	0.349	0.355	0.339	0.359	0.373	0.347	0.415	0.347	0.361

SN:		57+71+42	58+71+42	59+71+42	59+72+42	11+71+42	36+72+42	37+71+42	37+72+42	60+61+42	60+62+42	60+63+42	60+24+42	60+71+42	60+72+42	17+64+42
RF Exposure Condition	Test Position	DC_12A_n77A+WLANmax	DC_25A_n77A+WLANmax	DC_26A_n77A+WLANmax	DC_26A_n78A+WLANmax	DC_30A_n77A+WLANmax	DC_38A_n78A+WLANmax	DC_41A_n77A+WLANmax	DC_41A_n78A+WLANmax	DC_66A_n2A+WLANmax	DC_66A_n38A+WLANmax	DC_66A_n41A+WLANmax	DC_66A_n71A+WLANmax	DC_66A_n77A+WLANmax	DC_66A_n78A+WLANmax	DC_71A_n66A+WLANmax
Body-worn & Hotspot	Front Surface	1.472	1.360	1.281	1.200	1.421	0.981	1.060	0.979	1.484	1.500	1.470	1.310	1.526	1.445	1.390
	Back Surface	1.592	1.457	1.400	1.408	1.571	1.115	1.118	1.126	1.223	1.266	1.230	1.076	1.478	1.486	1.216
Hotspot	Left Edge	1.364	1.224	1.304	1.357	1.210	1.206	1.155	1.208	0.935	1.290	1.139	0.943	1.228	1.281	0.984
	Right Edge	1.287	1.425	1.150	1.127	1.055	1.017	1.045	1.022	1.591	1.389	1.386	1.459	1.452	1.429	1.518
	Top Edge	0.411	0.872	0.413	0.414	1.314	0.687	0.987	0.988	0.760	0.412	0.397	0.374	0.641	0.642	0.355
	Bottom Edge	0.375	0.379	0.371	0.345	0.360	0.344	0.368	0.342	0.357	0.356	0.363	0.357	0.391	0.365	0.360

Appendixes

Refer to separated files for the following appendixes.

4791517585.3-1-SAR-1_App A Conducted power

4791517585.3-1-SAR-1_App B Photo

4791517585.3-1-SAR-1_App C System Check Plots

4791517585.3-1-SAR-1_App D Highest Test Plots

4791517585.3-1-SAR-1_App E Cal. Certificates

---------End of Report---------