

TEST REPORT

Applicant: TECNO MOBILE LIMITED
Address: FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL
CENTRE 19-25 SHAN MEI STREET FOTAN NT
HONGKONG
Equipment Type: Mobile Phone
Model Name: KN8
Brand Name: TECNO
FCC ID: 2ADYY-KN8
Test Standard: FCC 47 CFR Part 2.1093
(refer section 3.1)
Maximum SAR: Head (1g@0mm): 1.00 W/kg
Body-worn (1g@10mm): 0.61 W/kg
Hotspot (1g@10mm): 0.61 W/kg
Sample Arrival Date: Dec. 17, 2025
Test Date: Dec. 18, 2025 - Feb. 05, 2026
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ISSUED BY:

Shanghai Tejet Communications Technology Co., Ltd. Testing Center

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Revision History

Version	Issue Date	Revisions Content
<u>Rev. 01</u>	<u>Feb. 06, 2026</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Address	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China

1.2 Test Location

Name	Shanghai Tejet Communications Technology Co., Ltd. Testing Center
Location	1-2/F., Building 1, No.222, Xuanlan Road, Xuanqiao, Pudong New District, Shanghai, China
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1352. The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 29671.

1.3 Test Environment Condition

Ambient Temperature	18°C to 25°C
Ambient Relative Humidity	30% to 70%

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	TECNO MOBILE LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.2 Manufacturer Information

Manufacturer	TECNO MOBILE LIMITED
Address	FLAT N 16/F BLOCK B UNIVERSAL INDUSTRIAL CENTRE 19-25 SHAN MEI STREET FOTAN NT HONGKONG

2.3 General Description for Equipment under Test (EUT)

EUT Name	Mobile Phone
Model Name Under Test	KN8
Series Model Name	N/A
Description of Model name differentiation	N/A
Sample Number	SC-SH25C0080-S15 SC-SH25C0080-S16
Hardware Version	N/A
Software Version	N/A
Dimensions (Approx.)	L:167.9 mm* W: 79.3 mm* H: 8.37 mm
Weight (Approx.)	N/A

2.4 Ancillary Equipment

Ancillary Equipment 1	Battery1	
	Brand Name	TECNO
	Model No.	BL-60AT
	Serial No.	N/A
	Capacity	6150mAh
	Rated Voltage	3.92V
	Limit Charge Voltage	4.53V

2.5 Technical Information

Network and Wireless connectivity	2G Network GSM/GPRS/EDGE 850/1900 MHz 3G Network WCDMA/HSDPA/HSUPA Band 2/4/5 4G Network LTE FDD Band 2/4/5/7/12/13/17/66 LTE TDD Band 38/41/42/43/48 ULCA: CA 5B, CA 7C, CA 38C, CA 41C, CA 66C CA_B2A-B4A, CA_B2A-B5A, CA_B2A-B7A, CA_B4A-B5A, CA_B4A-B7A, CA_B4A-B17A, CA_B7A-B5A 5G Network SA: n5/n7/n12/n38/n41/n48/n66/n77/n78 ENDC: DC_2A-n7A, DC_4A-n7A, DC_5A-n7A, DC_66A-n7A, DC_4A n38A, DC_5A-n38A, DC_66A-n38A, DC_4A-n41A, DC_5A-n41A, DC_66A-n41A, DC_2A-n66A, DC_5A-n66A, DC_7A-n66A, DC_2A n78A, DC_4A-n78A, DC_5A-n78A, DC_7A-n78A, DC_41A-n78A, DC_66A-n78A, DC_3A-n77A, DC_5A-n77A, DC_7A-n77A, DC_41A-n77A, DC_66A-n77A Bluetooth (BR+EDR+BLE) 2.4G WIFI 802.11b, 802.11g, 802.11n (HT20) 5G WIFI 802.11a, 802.11n (HT20/40), 802.11ac (VHT20/40/80) GPS, GLONASS, BDS, Galileo, SBAS, FM receiver, NFC
Note: The EUT is a mobile phone, which supports dual SIM card under the same transceiver. Each SIM supports GSM, WCDMA and LTE, and both SIM share the same transmitting electro circuit, NV parameters, so only SIM1 was tested in this report.	

The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	GSM, WCDMA, LTE, WIFI, NR, Bluetooth		
Frequency Range	GSM 850	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	GSM 1900	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	WCDMA Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	WCDMA Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
	LTE Band 4	TX: 1710 ~ 1755 MHz	RX: 2110 ~ 2155 MHz
	LTE Band 5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	LTE Band 7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	LTE Band 12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	LTE Band 13	TX: 777 ~ 787 MHz	RX: 746 ~ 756 MHz
	LTE Band 17	TX: 704 ~ 716 MHz	RX: 734 ~ 746 MHz
	LTE Band 38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	LTE Band 41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz

	LTE Band 42	TX: 3450 ~ 3550 MHz	RX: 3450 ~ 3550 MHz
	LTE Band 48	TX: 3550 ~ 3700 MHz	RX: 3550 ~ 3700 MHz
	LTE Band 66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	NR n5	TX: 824 ~ 849 MHz	RX: 869 ~ 894 MHz
	NR n7	TX: 2500 ~ 2570 MHz	RX: 2620 ~ 2690 MHz
	NR n12	TX: 699 ~ 716 MHz	RX: 729 ~ 746 MHz
	NR n38	TX: 2570 ~ 2620 MHz	RX: 2570 ~ 2620 MHz
	NR n41	TX: 2496 ~ 2690 MHz	RX: 2496 ~ 2690 MHz
	NR n48	TX: 3550 ~ 3700 MHz	RX: 3550 ~ 3700 MHz
	NR n66	TX: 1710 ~ 1780 MHz	RX: 2110 ~ 2180 MHz
	NR n77	TX: 3450 ~ 3550 MHz	RX: 3450 ~ 3550 MHz
		TX: 3700 ~ 3980 MHz	RX: 3700 ~ 3980 MHz
	NR n78	TX: 3450 ~ 3550 MHz	RX: 3450 ~ 3550 MHz
		TX: 3700 ~ 3800 MHz	RX: 3700 ~ 3800 MHz
	2.4G WIFI	2412 ~ 2462 MHz	
	5G WIFI	5150 ~ 5250 MHz	
		5250 ~ 5350 MHz	
5470 ~ 5725 MHz			
5725 ~ 5850 MHz			
Bluetooth	2402 ~ 2480 MHz		
Antenna Type	WWAN: PIFA Antenna WLAN: PIFA Antenna Bluetooth: PIFA Antenna		
DTM	N/A		
Hotspot Function	Support		
Power Reduction	Support		
Exposure Category	General Population/Uncontrolled exposure		
Product Type	Portable Device		
EUT Type	☒ Production unit	☐ Identical prototype	

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	47 CFR Part 2.1093	Radiofrequency radiation exposure evaluation: portable devices
2	ANSI C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz
3	IEEE Std. 1528-2013	IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate(SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
4	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01
5	KDB 941225 D01 v03r01	3G SAR MEAUREMENT PROCEDURES
6	KDB 941225 D05 v02r05	SAR Evaluation Considerations for LTE Devices
7	KDB 941225 D05A v01r02	REL. 10 LTE SAR TEST GUIDANCE AND KDB INQUIRIES
7	KDB 941225 D06 v02r01	SAR EVALUATION PROCEDURES FOR PORTABLE DEVICES WITH WIRELESS ROUTER CAPABILITIES
8	KDB 865664 D01 v01r04	SAR Measurement 100 MHz to 6 GHz
9	KDB 865664 D02 v01r02	RF Exposure Reporting
10	KDB 648474 D04 v01r03	SAR EVALUATION CONSIDERATIONS FOR WIRELESS HANDSETS
11	KDB 248227 D01 v02r02	SAR GUIDANCE FOR IEEE 802.11 (Wi-Fi) TRANSMITTERS

3.2 Device Category and SAR Limit

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimeters of the body of the user.

Limit for General Population/Uncontrolled exposure should be applied for this device, it is 1.6 W/kg as averaged over any 1 gram of tissue.

Table of Exposure Limits:

Body Position	SAR Value (W/Kg)	
	General Population/ Uncontrolled Exposure	Occupational/ Controlled Exposure
Whole-Body SAR (averaged over the entire body)	0.08	0.4
Partial-Body SAR (averaged over any 1 gram of tissue)	1.60	8.0
SAR for hands, wrists, feet and ankles (averaged over any 10 grams of tissue)	4.0	20.0

NOTE:

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

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

3.3 Test Result Summary

3.3.1 Highest SAR Values

Equipment Class	Band	Maximum Scaled SAR (W/kg)			Maximum Report SAR (W/kg)		
		Head (0mm)	Body-worn (10mm)	Hotsopt (10mm)	Head (0mm)	Body-worn (10mm)	Hotsopt (10mm)
		1g SAR			1g SAR		
PCE	GSM 850	0.57	0.18	0.20	1.00	0.61	0.61
	GSM 1900	0.34	0.16	0.23			
	WCDMA Band 2	0.70	0.28	0.40			
	WCDMA Band 4	0.80	0.29	0.34			
	WCDMA Band 5	0.93	0.22	0.25			
	LTE Band 2	0.69	0.35	0.39			
	LTE Band 5	0.41	0.10	0.10			
	LTE Band 7	0.19	0.29	0.30			
	LTE Band 12	0.38	0.11	0.11			
	LTE Band 13	0.40	0.17	0.19			
	LTE Band 66	0.21	0.14	0.16			
	LTE Band 41	0.38	0.21	0.23			
	LTE Band 42	0.53	0.50	0.61			
	LTE Band 43	0.61	0.45	0.45			
	LTE Band 48	0.70	0.60	0.60			
	NR Band 5	0.93	0.24	0.25			
	NR Band 7	1.00	0.40	0.44			
	NR Band 12	0.50	0.14	0.14			
	NR Band 66	0.95	0.33	0.42			
	NR Band 38	0.96	0.27	0.30			
	NR Band 41	0.50	0.23	0.24			
	NR Band 48	0.70	0.61	0.61			
	NR Band 77	0.34	0.20	0.20			
NR Band 78	0.33	0.20	0.20				
DTS	2.4G WIFI	0.57	0.19	0.20			
NII	5.2G WIFI	0.30	0.20	0.25			
	5.3G WIFI	0.36	0.23	0.28			
	5.6G WIFI	0.65	0.19	0.21			
	5.8G WIFI	0.71	0.15	0.18			
DSS	Bluetooth	0.17	0.03	0.05	1.6	1.6	
Limit (W/kg)		1.6					
Verdict		Pass					
Note: This device supports LTE B12/41/66 and LTE B17/38/4, Since the supported frequency span for LTE B17/38/4 falls completely within the supports frequency span for LTE B12/41/66, these LTE bands share the same transmission path, and LTE B17/38/4 have lower or the same target power as LTE B12/41/66: Therefore, SAR was only assessed for LTE B12/41/66.							

3.3.2 Highest Simultaneous Transmission SAR Values

Equipment Class	Maximum Scaled SAR (W/kg)		
	Head 1g (0mm)	Body-worn 1g (10mm)	Hotspot 1g (10mm)
PCE	1.49	0.87	0.87
Limit (W/kg)	1.6	1.6	1.6
Verdict	Pass		
Note: The highest simultaneous SAR please refer section 12			

3.4 Test Uncertainty

3.4.1 Measurement uncertainty evaluation for SAR test

The following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in IEC/IEEE 62209-1528. This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of $k=2$.

1) System Measurement Uncertainty (Frequency range from 300 MHz to 3 GHz)

DASY5 Uncertainty Budget (Frequency band: 300 MHz - 3 GHz range)								
Symbol	Error Description	Uncert. value	Prob Dist.	Div	(c) 1g	(c) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	$\pm 12.0\%$	N	2	1	1	$\pm 6.0\%$	$\pm 6.0\%$
CF _{drift}	Probe Calibration Drift	$\pm 1.0\%$	N	1	1	1	$\pm 1.0\%$	$\pm 1.0\%$
LIN	Probe Linearity	$\pm 4.7\%$	R	$\sqrt{3}$	1	1	$\pm 2.7\%$	$\pm 2.7\%$
BBS	Broadband Signal	$\pm 3.0\%$	N	2	1	1	$\pm 1.5\%$	$\pm 1.5\%$
ISO	Probe Isotropy	$\pm 7.6\%$	R	$\sqrt{3}$	1	1	$\pm 4.4\%$	$\pm 4.4\%$
DAE	Data Acquisition	$\pm 0.3\%$	N	1	1	1	$\pm 0.3\%$	$\pm 0.3\%$
AMB	RF Ambient	$\pm 1.8\%$	N	1	1	1	$\pm 1.8\%$	$\pm 1.8\%$
Δ_{sys}	Probe Positioning	$\pm 0.2\%$	N	1	0.1 4	0.14	$\pm 0\%$	$\pm 0\%$
DAT	Data Processing	$\pm 1.2\%$	N	1	1	1	$\pm 1.2\%$	$\pm 1.2\%$
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.) ^{DAK}	$\pm 2.5\%$	N	1	0.7 8	0.71	$\pm 2.0\%$	$\pm 1.8\%$
LIQ(T_{σ})	Conductivity (temp.) ^{BB}	$\pm 3.3\%$	R	$\sqrt{3}$	0.7 8	0.71	$\pm 1.5\%$	$\pm 1.4\%$
EPS	Phantom Permittivity	$\pm 14.0\%$	R	$\sqrt{3}$	0	0	$\pm 0\%$	$\pm 0\%$
DAS	Distance DUT - TSL	$\pm 2.1\%$	N	1	2	2	$\pm 4.2\%$	$\pm 4.2\%$
H	Device Holder	$\pm 3.8\%$	N	1	1	1	$\pm 3.8\%$	$\pm 3.8\%$
MOD	DUT Modulation ^m	$\pm 2.4\%$	R	$\sqrt{3}$	1	1	$\pm 1.4\%$	$\pm 1.4\%$
TAS	Time-average SAR	$\pm 2.6\%$	R	$\sqrt{3}$	1	1	$\pm 1.5\%$	$\pm 1.5\%$
RF _{drift}	DUT drift	$\pm 5.0\%$	R	$\sqrt{3}$	1	1	$\pm 2.9\%$	$\pm 2.9\%$
Correction to the SAR results								
C(ϵ , σ)	Deviation to Target	$\pm 1.9\%$	N	1	1	0.84	$\pm 1.9\%$	$\pm 1.6\%$
C(R)	SAR scaling ^p	$\pm 0\%$	R	$\sqrt{3}$	1	1	$\pm 0\%$	$\pm 0\%$
u(Δ SAR)	Combined Uncertainty						$\pm 11.2\%$	$\pm 11.0\%$
U	Expanded Uncertainty						$\pm 22.3\%$	$\pm 22.2\%$

2) System Measurement Uncertainty (Frequency range from 3 GHz to 6 GHz)

DASY5 Uncertainty Budget (Frequency band: 3 GHz - 6 GHz range)								
Symbol	Error Description	Uncert. value	Prob. Dist.	Div	(c) 1g	(c) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	±14.0%	N	2	1	1	±7.0%	±7.0%
CF _{drift}	Probe Calibration Drift	±1.0%	N	1	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±3.0%	N	2	1	1	±1.5%	±1.5%
ISO	Probe Isotropy	±7.6%	R	√3	1	1	±4.4%	±4.4%
DAE	Data Acquisition	±0.3%	N	1	1	1	±0.3%	±0.3%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ _{sys}	Probe Positioning	±0.2%	N	1	0.3 3	0.33	±0.1%	±0.1%
DAT	Data Processing	±2.3%	N	1	1	1	±2.3%	±2.3%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.) ^{DAK}	±2.5%	N	1	0.7 8	0.71	±2.0%	±1.8%
LIQ(T _σ)	Conductivity (temp.) ^{BB}	±3.4%	R	√3	0.7 8	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	√3	0.2 5	0.25	±2.0%	±2.0%
DAS	Distance DUT - TSL	±2.1%	N	1	2	2	±4.2%	±4.2%
H	Device Holder	±3.8%	N	1	1	1	±3.8%	±3.8%
MOD	DUT Modulation ^m	±2.4%	R	√3	1	1	±1.4%	±1.4%
TAS	Time-average SAR	±2.6%	R	√3	1	1	±1.5%	±1.5%
RF _{drift}	DUT drift	±5.0%	R	√3	1	1	±2.9%	±2.9%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
C(R)	SAR scaling ^p	±0%	R	√3	1	1	±0%	±0%
u(ΔSAR)	Combined Uncertainty	/	/	/	/	/	±12.1%	±12.0%
U	Expanded Uncertainty	/	/	/	/	/	±24.2%	±24.0%

3.4.2 Measurement uncertainty evaluation for system check

This measurement uncertainty budget is suggested by IEC/IEEE 62209-1528. The breakdown of the individual uncertainties is as follows:

DASY5 Uncertainty Budget (Frequency band: 300 MHz - 6 GHz range)								
Symbol	Error Description	Uncert. value	Prob. Dist.	Div.	(c _i) 1g	(c _i) 10g	Std. Unc. (1g)	Std. Unc. (10g)
Measurement System Errors								
CF	Probe Calibration	±14.0%	N	2	1	1	±7.0%	±7.0%
CF _{drift}	Probe Calibration Drift	±1.0%	N	1	1	1	±1.0%	±1.0%
LIN	Probe Linearity	±4.7%	R	√3	1	1	±2.7%	±2.7%
BBS	Broadband Signal	±0.0%	N	2	1	1	±0.0%	±0.0%
ISO	Probe Isotropy	±7.6%	R	√3	1	1	±4.4%	±4.4%
DAE	Data Acquisition	±0.3%	N	1	1	1	±0.3%	±0.3%
AMB	RF Ambient	±1.8%	N	1	1	1	±1.8%	±1.8%
Δ _{sys}	Probe Positioning	±0.2%	N	1	0.33	0.33	±0%	±0%
Phantom and Device Errors								
LIQ(σ)	Conductivity (meas.) ^{DAK}	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%
LIQ(T _σ)	Conductivity (temp.) ^{BB}	±3.4%	R	√3	0.78	0.71	±1.5%	±1.4%
EPS	Phantom Permittivity	±14.0%	R	√3	0.25	0.25	±2.0%	±2.0%
DAS	Distance DUT - TSL	±1.0%	N	1	2	2	±2.0%	±2.0%
VAL	Validation antenna	±0.0%	R	√3	1	1	±0.0%	±0.0%
P _{in}	Accepted power	±1.2%	N	1	1	1	±1.2%	±1.2%
RF _{drift}	DUT drift	±5.0%	R	√3	1	1	±2.9%	±2.9%
Correction to the SAR results								
C(ε, σ)	Deviation to Target	±1.9%	N	1	1	0.84	±1.9%	±1.6%
u(ΔSAR)	Combined Uncertainty	/	/	/	/	/	±10.4%	±10.3%
U	Expanded Uncertainty	/	/	/	/	/	±20.7%	±20.5%

4 MEASUREMENT SYSTEM

4.1 Specific Absorption Rate (SAR) Definition

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling. The standard recommends limits for two tiers of groups, occupational/controlled and general population/uncontrolled, based on a person's awareness and ability to exercise control over his or her exposure. In general, occupational/controlled exposure limits are higher than the limits for general population/uncontrolled.

The SAR definition is the time derivative (rate) of the incremental energy (dW) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). The equation description is as below:

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

SAR is expressed in units of Watts per kilogram (W/kg) SAR measurement can be related to the electrical field in the tissue by

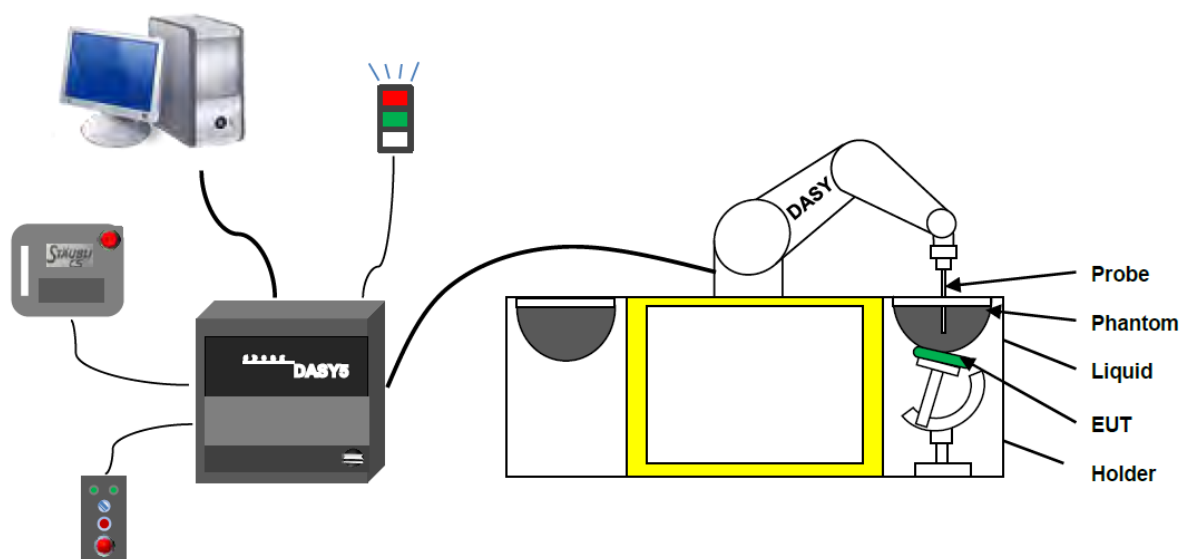
$$\text{SAR} = \frac{\sigma E^2}{\rho}$$

Where: σ is the conductivity of the tissue,

ρ is the mass density of the tissue and E is the RMS electrical field strength.

4.2 DASY SAR System

4.2.1 DASY SAR System Diagram

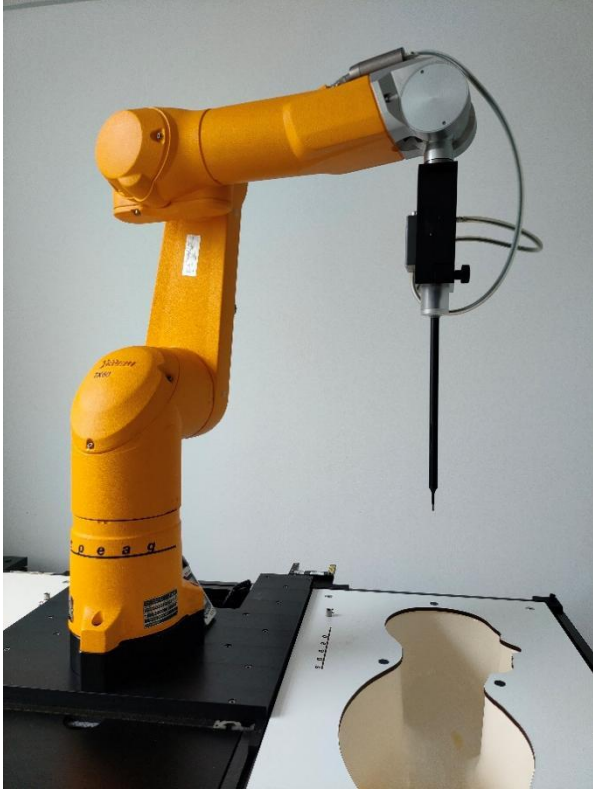


The DASY5 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot (Stäubli RX family) with controller and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e. an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. A data acquisition electronic (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.
4. A unit to operate the optical surface detector which is connected to the EOC.
5. The Electro-Optical Coupler (EOC) performs the conversion from the optical into a digital electric signal of the DAE. The EOC is connected to the DASY5 measurement server.
6. The DASY5 measurement server, which performs all real-time data evaluation for field measurements and surface detection, controls robot movements and handles safety operation.
7. DASY5 software and SEMCAD data evaluation software.
8. Remote control with teach panel and additional circuitry for robot safety such as warning lamps, etc.
9. The generic twin phantom enabling the testing of left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. System validation dipoles allowing to validate the proper functioning of the system.

4.2.2 Robot

The Dasy SAR system uses the high precision robots. Symmetrical design with triangular core Built-in optical fiber for surface detection system For the 6-axis controller system, Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents). The robot series have many features that are important for our application:



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

4.2.3 E-Field Probe

The probe is specially designed and calibrated for use in liquids with high permittivities for the measurements the Specific Dosimetric E-Field Probe EX3DV4 with following specifications is used.

Construction	Symmetrical design with triangular core Built-in optical fiber for surface detection system Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., glycolether)
Calibration	ISO/IEC 17025 calibration service available
Frequency	4 MHz to 10 GHz; Linearity: ± 0.2 dB
Directivity	± 0.2 dB in HSL (rotation around probe axis) ; ± 0.4 dB in HSL (rotation normal to probe axis)
Dynamic range	5 μ W/g to > 100 mW/g; Linearity: ± 0.2 dB
Dimensions	Overall length: 337 mm (Tip: 9 mm) Tip diameter: 2.5 mm (Body: 10 mm) Distance from probe tip to dipole centers: 1.0 mm
Application	General dosimetry up to 3 GHz Compliance tests of mobile phones Fast automatic scanning in arbitrary phantoms (EX3DV4)



E-Field Probe Calibration Process

Probe calibration is realized, in compliance with IEC/IEEE 62209-1528 and IEEE 1528 std, with CALISAR, Antennessa proprietary calibration system. The calibration is performed with the IEC/IEEE 62209-1528 annexe technique using reference guide at the five frequencies.

4.2.4 Data Acquisition Electronics

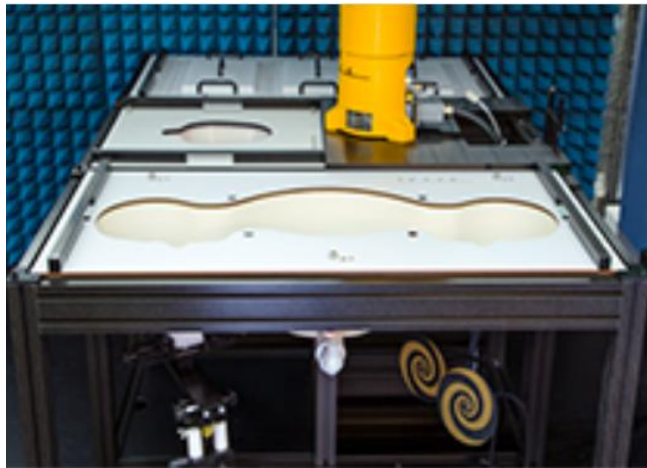
The data acquisition electronics (DAE) consist of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converte and a command decoder with a control logic unit. Transmission to the measurement server is accomplished through an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



- Input Impedance: 200M Ω m
- The Inputs: Symmetrical and Floating
- Commom Mode Rejection: Above 80dB

4.2.5 Phantoms

For the measurements the Specific Anthropomorphic Mannequin (SAM) defined by the IEEE SCC-34/SC2 group is used. The phantom is a polyurethane shell integrated in a wooden table. The thickness of the phantom amounts to 2mm +/- 0.2mm. It enables the dosimetric evaluation of left and right phone usage and includes an additional flat phantom part for the simplified performance check. The phantom set-up includes a cover, which prevents the evaporation of the liquid.



- Left head
- Right head
- Flat phantom

Photo of Phantom SN1857&1473



Serial Number	Material	Length	Height
SN 1857&1473 SAM1	Vinylester, glass fiber reinforced	1000	500

4.2.6 Device Holder

The DASY5 device holder has two scales for device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear openings). The plane between the ear openings and the mouth tip has a rotation angle of 65° . The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. This device holder is used for standard mobile phones or PDA's only. If necessary an additional support of polystyrene material is used. Larger DUT's (e.g. notebooks) cannot be tested using this device holder. Instead a support of bigger polystyrene cubes and thin polystyrene plates is used to position the DUT in all relevant positions to find and measure spots with maximum SAR values. Therefore those devices are normally only tested at the flat part of the SAM.

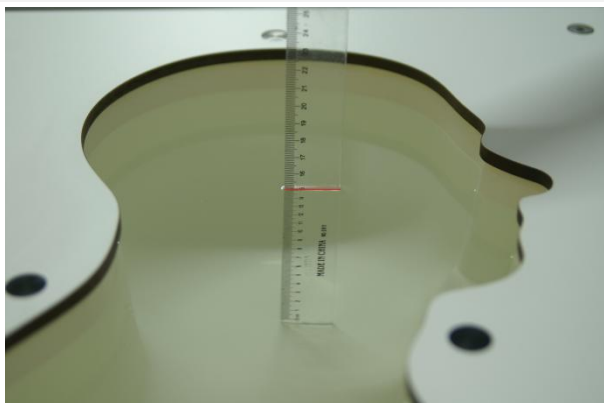


The positioning system allows obtaining cheek and tilting position with a very good accuracy. Incompliance with CENELEC, the tilt angle uncertainty is lower than 1° .

4.2.7 Simulating Liquid

For SAR measurement of the field distribution inside the phantom, the phantom must be filled with homogeneous tissue simulating liquid to a depth of at least 15 cm. For head SAR testing, the liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is larger than 15 cm. For body SAR testing, the liquid height from the center of the flat phantom to the liquid top surface is larger than 15 cm. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5%.

Head Liquid Depth



Body Liquid Depth



The following table gives the recipes for tissue simulating liquid.

TSL	Manufacturer / Model	Freq Range (MHz)	Main Ingredients
Head WideBand	SPEAG HBBL600-10000V6	600-10000	Ethanediol, Sodium petroleum sulfonate, Hexylene Glycol / 2-Methyl-pentane-2.4-diol, Alkoxylated alcohol

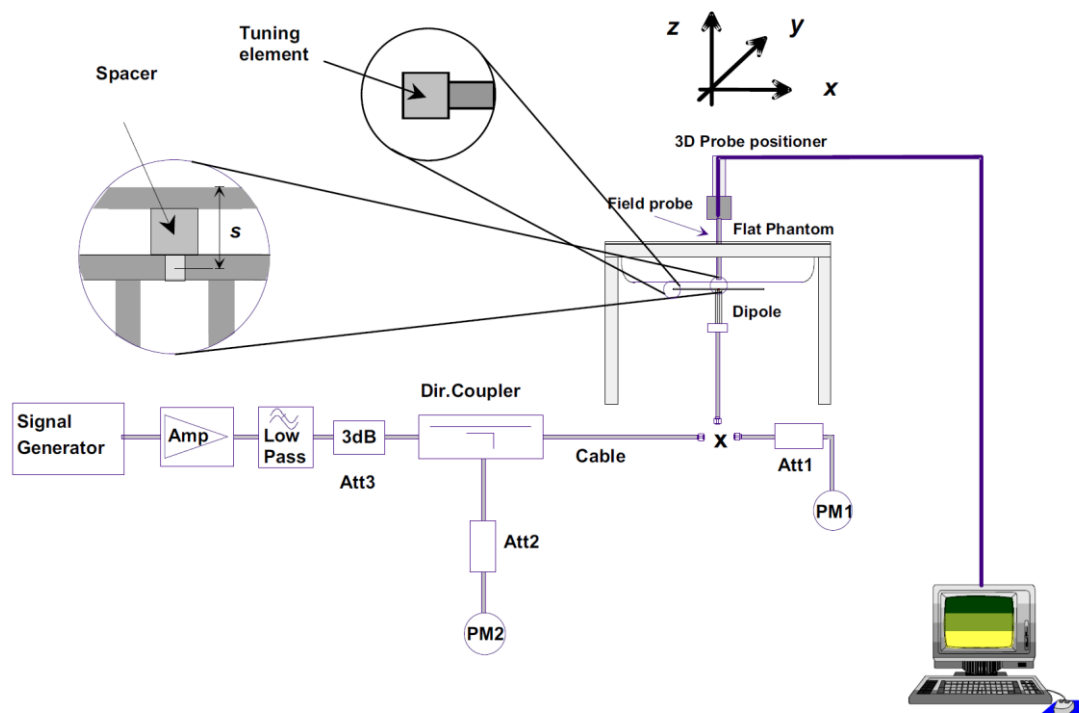
5 SYSTEM VERIFICATION

5.1 Purpose of System Check

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

5.2 System Check Setup

In the simplified setup for system evaluation, the EUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave that comes from a signal generator. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:



6 TEST POSITION CONFIGURATIONS

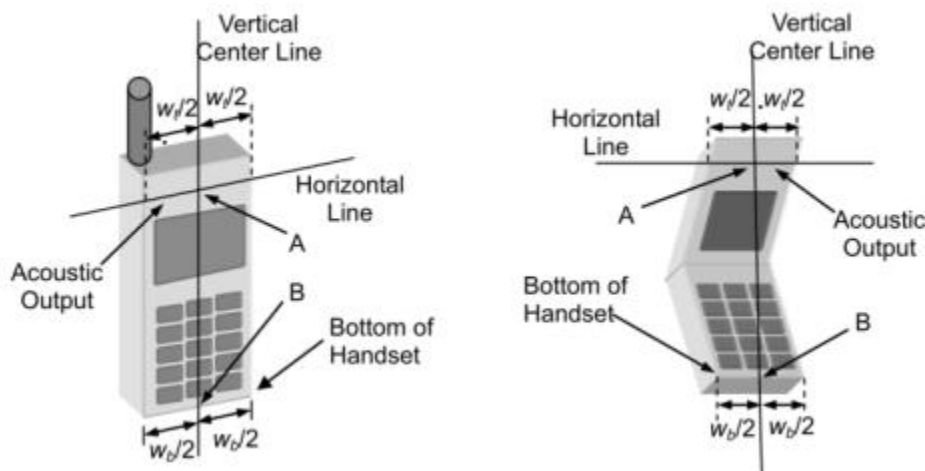
According to KDB 648474 D04 Handset, handsets are tested for SAR compliance in head, body-worn accessory and other use configurations described in the following subsections.

6.1 Head Exposure Conditions

Head exposure is limited to next to the ear voice mode operations. Head SAR compliance is tested according to the test positions defined in IEEE Std 1528-2013 using the SAM phantom illustrated as below.

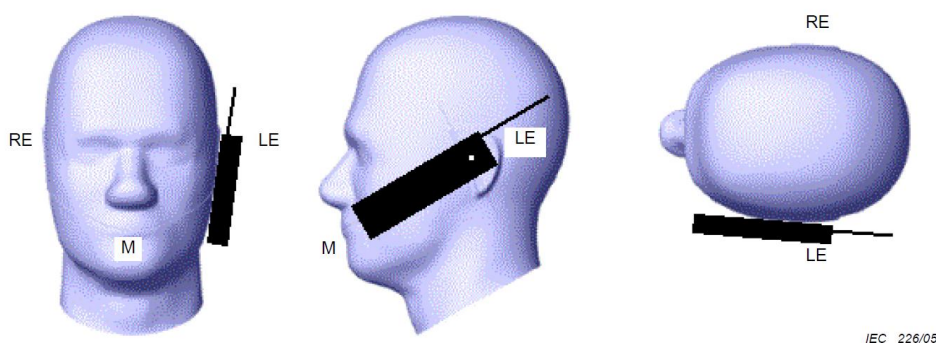
6.1.1 Two Imaginary Lines on the Handset

- The vertical center line passes through two points on the front side of the handset - the midpoint of the width w_t of the handset at the level of the acoustic output, and the midpoint of the width w_b of the bottom of the handset.
- The horizontal line is perpendicular to the vertical centerline and passes through the center of the acoustic output. The horizontal line is also tangential to the face of the handset at point A.
- The two lines intersect at point A. Note that for many handsets, point A coincides with the center of the acoustic output; however, the acoustic output may be located elsewhere on the horizontal line. Also note that the vertical center line is not necessarily parallel to the front face of the handset, especially for clamshell handsets, handsets with flip covers, and other irregularly shaped handsets.



6.1.2 Cheek Position

- (a) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M: Mouth, RE: Right Ear, and LE: Left Ear) and align the center of the ear piece with the line RE-LE.
- (b) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost.



6.1.3 Tilted Position

- (a) To position the device in the “cheek” position described above.
- (b) While maintaining the device the reference plane described above and pivoting against the ear, moves it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost.

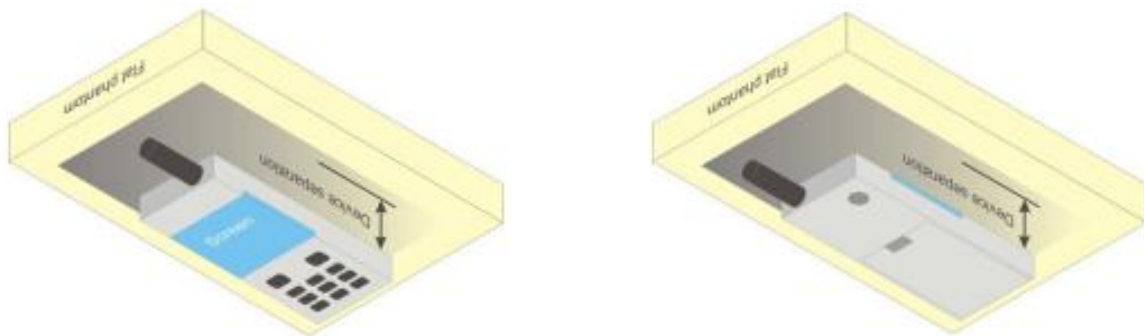


6.2 Body-worn Position Conditions

Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories. The body-worn accessory procedures in KDB 447498 are used to test for body-worn accessory SAR compliance, without a headset connected to it. This enables the test results for such configuration to be compatible with that required for hotspot mode when the body-worn accessory test separation distance is greater than or equal to that required for hotspot mode. When the reported SAR for a body-worn accessory.

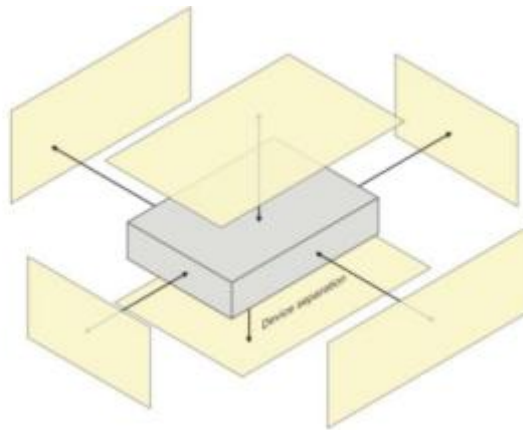
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. All body-worn accessories containing metallic components are tested in conjunction with the host device.

Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice only operations in its normal and expected use conditions, testing of data mode for body-worn compliance is not required. A conservative minimum test separation distance for supporting off-the-shelf body-worn accessories that may be acquired by users of consumer handsets is used to test for body-worn accessory SAR compliance. This distance is determined by the handset manufacturer, according to the requirements of Supplement C 01-01. Devices that are designed to operate on the body of users using lanyards and straps, or without requiring additional body-worn accessories, will be tested using a conservative minimum test separation distance ≤ 5 mm to support compliance.



6.3 Hotspot Mode Exposure Position Conditions

For handsets that support hotspot mode operations, with wireless router capabilities and various web browsing functions, the relevant hand and body exposure conditions are tested according to the hotspot SAR procedures in KDB 941225. A test separation distance of 10 mm is required between the phantom and all surfaces and edges with a transmitting antenna located within 25 mm from that surface or edge. When the form factor of a handset is smaller than 9 cm x 5 cm, a test separation distance of 5 mm (instead of 10 mm) is required for testing hotspot mode. When the separation distance required for body-worn accessory testing is larger than or equal to that tested for hotspot mode, in the same wireless mode and for the same surface of the phone, the hotspot mode SAR data may be used to support body-worn accessory SAR compliance for that particular configuration (surface).



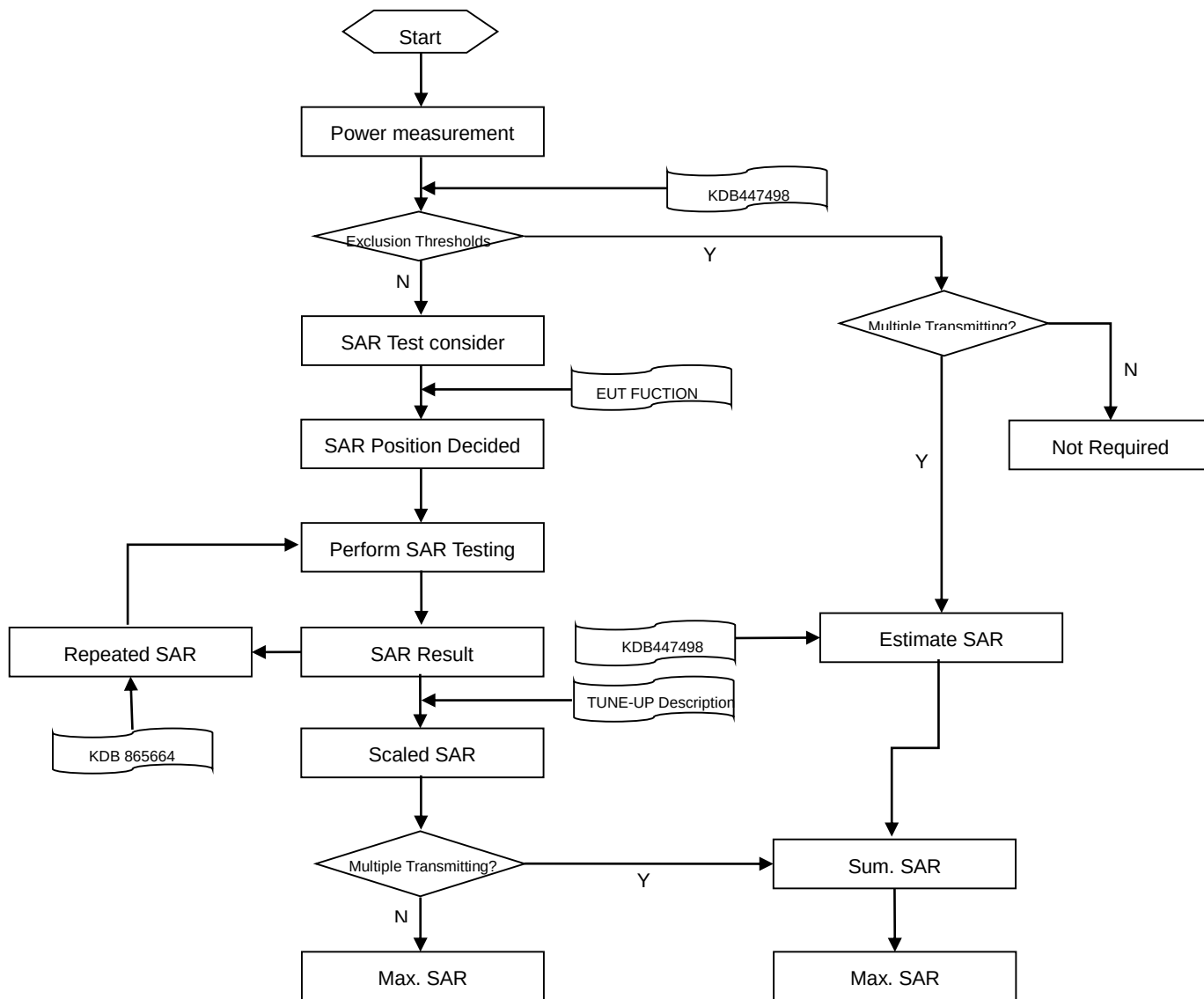
6.4 Product Specific 10g Exposure Consideration

According with FCC KDB 648474 D04, for smart phones with a display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm that provide similar mobile web access and multimedia support found in mini-tablets or UMPC mini-tablets that support voice calls next to the ear, unless it is confirmed otherwise through KDB inquiries, the following phablet procedures should be applied to evaluate SAR compliance for each applicable wireless modes and frequency band. Devices marketed as phablets, regardless of form factors and operating characteristics must be tested as a phablet to determine SAR compliance;

The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB 865664 to address interactive hand use exposure conditions. The UMPC mini-tablet 1-g SAR at 5 mm is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg.

7 MEASUREMENT PROCEDURE

7.1 Measurement Process Diagram



7.2 SAR Scan General Requirement

Probe boundary effect error compensation is required for measurements with the probe tip closer than half a probe tip diameter to the phantom surface. Both the probe tip diameter and sensor offset distance must satisfy measurement protocols; to ensure probe boundary effect errors are minimized and the higher fields closest to the phantom surface can be correctly measured and extrapolated to the phantom surface for computing 1 g SAR. Tolerances of the post-processing algorithms must be verified by the test laboratory for the scan resolutions used in the SAR measurements, according to the reference distribution functions specified in IEEE Std 1528-2013.

			≤3GHz	>3GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5±1 mm	$\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5$ 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.	
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: Δz Zoom (n)		≤ 5 mm	3–4 GHz: ≤ 4 mm
				4–5 GHz: ≤ 3 mm
				5–6 GHz: ≤ 2 mm
	graded grid	Δz Zoom (1): between 1st two points closest to phantom surface	≤ 4 mm	3–4 GHz: ≤ 3 mm
				4–5 GHz: ≤ 2.5 mm
		Δz Zoom (n>1): between subsequent points	≤ 1.5·Δz Zoom (n-1)	
Minimum zoom scan volume	x, y, z		≥30 mm	3–4 GHz: ≥ 28 mm
				4–5 GHz: ≥ 25 mm
				5–6 GHz: ≥ 22 mm

Note:

- δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
- * When zoom scan is required and the reported SAR from the area scan based 1 g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.

7.3 Measurement Procedure

The following steps are used for each test position

- a. Establish a call with the maximum output power with a base station simulator. The connection between the mobile and the base station simulator is established via air interface
- b. Measurement of the local E-field value at a fixed location. This value serves as a reference value for calculating a possible power drift.
- c. Measurement of the SAR distribution with a grid of 8 to 16mm * 8 to 16 mm and a constant distance to the inner surface of the phantom. Since the sensors cannot directly measure at the inner phantom surface, the values between the sensors and the inner phantom surface are extrapolated. With these values the area of the maximum SAR is calculated by an interpolation scheme.
- d. Around this point, a cube of 30 * 30 * 30 mm or 32 * 32 * 32 mm is assessed by measuring 5 or 8 * 5 or 8*4 or 5 mm. With these data, the peak spatial-average SAR value can be calculated.

7.4 Area & Zoom Scan Procedure

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g. Area scan and zoom scan resolution setting follows KDB 865664 D01v01r04 quoted below.

When the 1 g SAR of the highest peak is within 2 dB of the SAR limit, additional zoom scans are required for other peaks within 2 dB of the highest peak that have not been included in any zoom scan to ensure there is no increase in SAR.

8 CONDUCTED RF OUPUT POWER

8.1 GSM

Please refer the document “BL-SH25C1427-AP.pdf”.

8.2 WCDMA

Please refer the document “BL-SH25C1427-AP.pdf”.

8.3 LTE

Please refer the document “BL-SH25C1427-AP.pdf”.

8.4 NR

Please refer the document “BL-SH25C1427-AP.pdf”.

8.5 WIFI

8.5.1 2.4G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
2.4 (2.4~2.4835)	802.11b	1	2412	17.43	18.50	No
		6	2437	17.41	18.50	No
		11	2462	17.46	18.50	Yes
	802.11g	1	2412	15.45	16.50	No
		6	2437	15.40	16.50	No
		11	2462	15.27	16.50	No
	802.11n(HT20)	1	2412	16.06	17.00	No
		6	2437	16.23	17.00	No
		11	2462	16.13	17.00	No

Note: When multiple channel bandwidth configurations in a frequency band have the same maximum tune-up output power, the test configuration is determined by applying the following steps sequentially.

- 1) The largest channel bandwidth configuration is selected between the multiple configurations in a frequency band with the same maximum tune-up output power.
- 2) When multiple transmission modes (802.11b/g/n) have the same maximum tune-up output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11b is chosen over 802.11g, and 802.11g chosen over 802.11n.

8.5.2 5G WIFI

Band (GHz)	Mode	Channel	Freq. (MHz)	Conducted Power (dBm)	Tune-up Limit (dBm)	SAR Test Require.
5.2 (5.15~5.25)	802.11a	36	5180	13.60	14.50	No
		44	5220	14.11	15.00	No
		48	5240	14.12	15.00	No
	802.11n(HT20)	36	5180	15.47	16.50	No
		44	5220	17.33	18.00	Yes
		48	5240	17.30	18.00	No
	802.11n(HT40)	38	5190	14.04	15.00	No
		46	5230	15.14	16.00	No
	802.11ac(VHT20)	36	5180	14.88	15.50	No
		44	5220	15.06	16.00	No
		48	5240	15.07	16.00	No
	802.11ac(VHT40)	38	5190	15.04	16.00	No
		46	5230	15.15	16.00	No
5.3 (5.25~5.35)	802.11a	52	5260	14.09	15.00	No
		60	5300	14.10	15.00	No
		64	5320	14.04	15.00	No
	802.11n(HT20)	52	5260	16.95	18.00	No
		60	5300	16.97	18.00	Yes
		64	5320	16.44	17.50	No
	802.11n(HT40)	54	5270	15.09	16.00	No
		62	5310	13.59	14.50	No
	802.11ac(VHT20)	52	5260	15.06	16.00	No
		60	5300	15.05	16.00	No
		64	5320	14.94	16.00	No
	802.11ac(VHT40)	54	5270	15.11	16.00	No
		62	5310	15.07	16.00	No
5.6 (5.47~5.725)	802.11a	100	5500	14.26	15.00	No
		116	5580	14.35	15.00	No
		140	5700	13.12	14.00	No
	802.11n(HT20)	100	5500	15.30	16.00	No
		116	5580	16.86	17.50	Yes
		140	5700	11.94	13.00	No
	802.11n(HT40)	102	5510	11.19	12.00	No
		118	5590	15.14	16.00	No
		134	5670	14.09	15.00	No
	802.11ac(VHT20)	100	5500	15.12	16.00	No

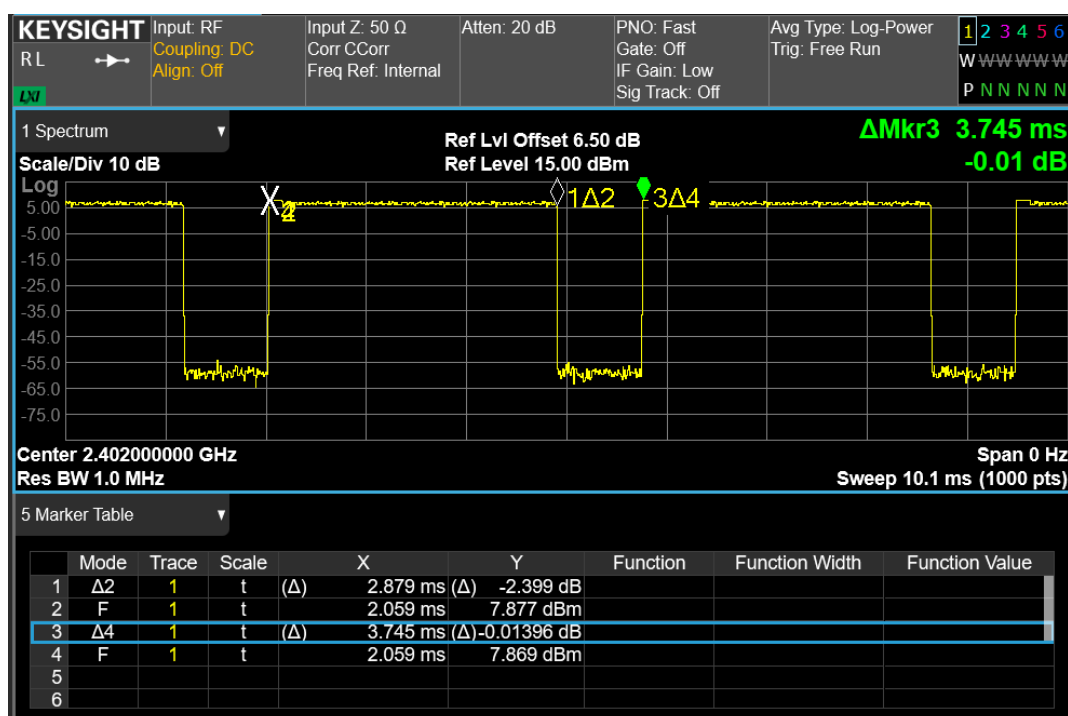
		116	5580	15.17	16.00	No
		140	5700	14.71	15.50	No
	802.11ac(VHT40)	102	5510	15.10	16.00	No
		118	5590	15.09	16.00	No
		134	5670	14.80	15.50	No
	802.11ac(VHT80)	106	5530	11.99	13.00	No
		122	5690	14.11	15.00	No
5.8 (5.725~5.850)	802.11a	149	5745	13.54	14.50	No
		157	5785	13.65	14.50	No
		165	5825	13.60	14.50	No
	802.11n(HT20)	149	5745	15.86	16.50	No
		157	5785	16.06	17.00	Yes
		165	5825	16.02	17.00	No
	802.11n(HT40)	151	5755	14.38	15.50	No
		159	5795	14.44	15.50	No
	802.11ac(VHT20)	149	5745	14.33	15.50	No
		157	5785	14.46	16.00	No
		165	5825	14.48	16.00	No
	802.11ac(VHT40)	151	5755	14.37	16.00	No
		159	5795	14.47	16.00	No
	802.11ac(VHT80)	155	5775	13.89	16.50	No
	Note: 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, each band is tested independently for SAR.					

8.6 Bluetooth

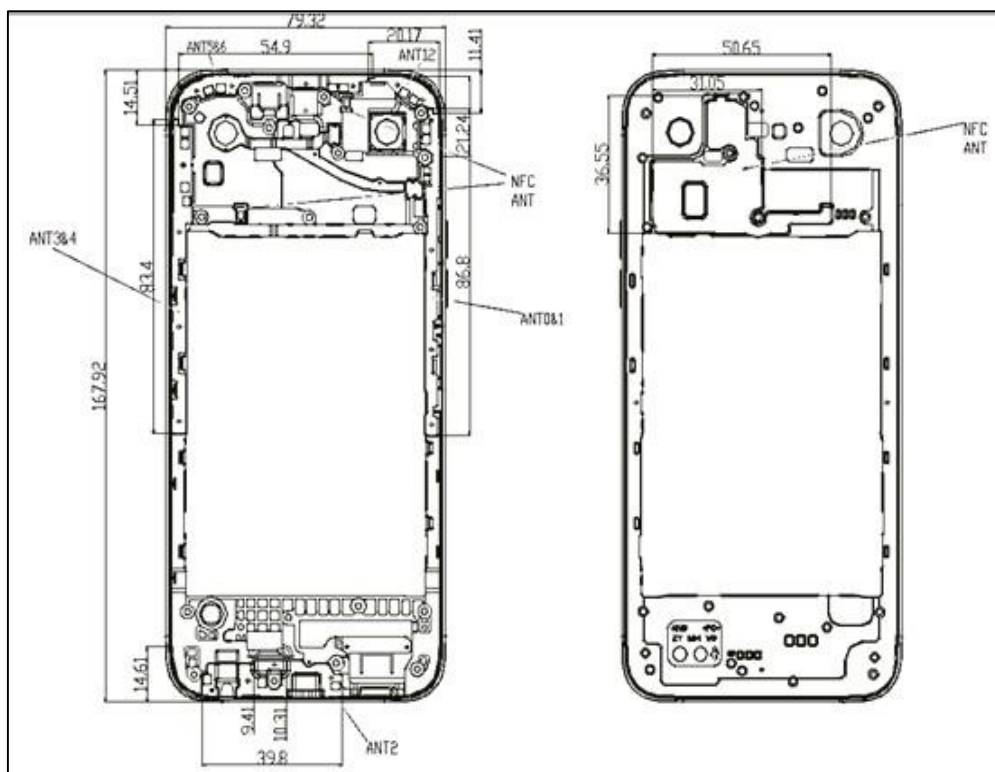
Mode	GFSK			$\pi/4$ -DQPSK		
Channel	0	39	78	0	39	78
Frequency (MHz)	2402	2441	2480	2402	2441	2480
Conducted Power (dBm)	8.74	9.46	11.11	7.99	9.62	11.22
Tune-Up Limit (dBm)	9.50	10.50	12.00	9.00	10.50	12.00
SAR Test Require	NO	NO	NO	NO	NO	NO
Mode	8-DPSK			/		
Channel	0	39	78	/	/	/
Frequency (MHz)	2402	2441	2480	/	/	/
Conducted Power (dBm)	8.00	9.62	11.22	/	/	/
Tune-Up Limit (dBm)	9.00	10.50	12.00	/	/	/
SAR Test Require	NO	NO	YES	/	/	/
Mode	BLE-1Mbps			BLE-2Mbps		
Channel	0	19	39	0	19	39
Frequency (MHz)	2402	2440	2480	2402	2440	2480
Conducted Power (dBm)	-4.24	-3.39	-2.80	-3.91	-3.30	-2.66
Tune-Up Limit (dBm)	-3.50	-2.50	-2.00	-3.00	-2.50	-2.00
SAR Test Require	NO	NO	NO	NO	NO	NO

Note 1: Since bluetooth BR mode is the maximum output power mode, SAR measurements were performed with test software using DH5 modulation, and SAR measurement is not required for the EDR and LE. When the secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode.

The Bluetooth duty cycle is 76.88% as following figure, according to 2016 Oct. TCB workshop for Bluetooth SAR scaling need further consideration and the maximum duty cycle is 100%, therefore the actual duty cycle will be scaled up to 100% for Bluetooth reported SAR calculation Duty Cycle.



9 Antenna Location



Antenna	Support Band
Ant 5	GSM850/1900 WCDMA B2/B4/B5 LTEB2 /B4/B5/B7 /B12/B13/B17/B66/B38/B41 n5/n7/n12/n66/n38/n41
Ant 2	GSM850/1900 WCDMA B2/B4/B5 LTEB2 /B4/B5/B7 /B12/B13/B17/B66/B38/B41 n5/n7/n12/n66/n38/n41
Ant 0	LTEB42/B43/B48 n48/n77/n78
Ant 1	LTEB42/B43/B48 n48/n77/n78
Ant 3	(LTE B1/B3/B4/B7/B38/B40/B41/B66/n1/n3/n7/n38/n40/n41/n66) only Rx
Ant 4	LTEB42/B43/B48 n48/n77/n78
Ant 6	LTEB42/B43/B48 n48/n77/n78
	WIFI5G
Ant 12	WIFI2.4G/BT
Ant 11	NFC

10 TEST RESULT

Note: Refer to ANNEX C for the detailed test data for each test configuration.

10.1 GSM 850

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head												
GSM 850	Ant.2	Left cheek	0mm	GPRS 4TX	190	836.6	-0.02	0.064	23.77	25.00	1.327	0.085	/
GSM 850	Ant.2	Left tilt	0mm		190	836.6	-0.06	0.062	23.77	25.00	1.327	0.082	/
GSM 850	Ant.2	Right cheek	0mm		190	836.6	-0.01	0.058	23.77	25.00	1.327	0.077	/
GSM 850	Ant.2	Right tilt	0mm		190	836.6	-0.14	0.049	23.77	25.00	1.327	0.065	/
GSM 850	Ant.5	Left cheek	0mm	GPRS 4TX	190	836.6	-0.11	0.470	25.13	26.00	1.222	0.574	1
GSM 850	Ant.5	Left tilt	0mm		190	836.6	0.15	0.423	25.13	26.00	1.222	0.517	/
GSM 850	Ant.5	Right cheek	0mm		190	836.6	0.19	0.247	25.13	26.00	1.222	0.302	/
GSM 850	Ant.5	Right tilt	0mm		190	836.6	-0.01	0.242	25.13	26.00	1.222	0.296	/
	Body-worn&Hotspot												
GSM 850	Ant.2	Front side	10mm	GPRS 4TX	190	836.6	0.19	0.033	23.77	25.00	1.327	0.044	/
GSM 850	Ant.2	Back side	10mm		190	836.6	0.14	0.069	23.77	25.00	1.327	0.092	/
GSM 850	Ant.2	Left side	10mm		190	836.6	-0.18	0.019	23.77	25.00	1.327	0.025	/
GSM 850	Ant.2	Right side	10mm		190	836.6	0.05	0.025	23.77	25.00	1.327	0.033	/
GSM 850	Ant.2	Top side	10mm		190	836.6	-0.18	0.014	23.77	25.00	1.327	0.019	/
GSM 850	Ant.2	Bottom side	10mm		190	836.6	-0.11	0.035	23.77	25.00	1.327	0.046	/
GSM 850	Ant.5	Front side	10mm	GPRS 4TX	190	836.6	0.15	0.124	25.13	26.00	1.222	0.152	/
GSM 850	Ant.5	Back side	10mm		190	836.6	0.14	0.150	25.13	26.00	1.222	0.183	/
GSM 850	Ant.5	Left side	10mm		190	836.6	0.06	0.080	25.13	26.00	1.222	0.097	/
GSM 850	Ant.5	Right side	10mm		190	836.6	-0.03	0.060	25.13	26.00	1.222	0.074	/
GSM 850	Ant.5	Top side	10mm		190	836.6	-0.09	0.166	25.13	26.00	1.222	0.202	2
GSM 850	Ant.5	Bottom side	10mm		190	836.6	0.09	0.022	25.13	26.00	1.222	0.027	/

10.2 GSM 1900

Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head												
GSM 1900	Ant.2	Left cheek	0mm	GPRS 2TX	661	1880	0.12	0.043	20.42	21.50	1.282	0.055	/
GSM 1900	Ant.2	Left tilt	0mm		661	1880	0.12	0.032	20.42	21.50	1.282	0.041	/
GSM 1900	Ant.2	Right cheek	0mm		661	1880	-0.11	0.047	20.42	21.50	1.282	0.060	/
GSM 1900	Ant.2	Right tilt	0mm		661	1880	0.01	0.039	20.42	21.50	1.282	0.050	/
GSM 1900	Ant.5	Left cheek	0mm	GPRS 2TX	661	1880	-0.03	0.148	20.80	22.00	1.318	0.195	/
GSM 1900	Ant.5	Left tilt	0mm		661	1880	-0.15	0.181	20.80	22.00	1.318	0.239	/
GSM 1900	Ant.5	Right cheek	0mm		661	1880	-0.01	0.255	20.80	22.00	1.318	0.336	3
GSM 1900	Ant.5	Right tilt	0mm		661	1880	0.03	0.163	20.80	22.00	1.318	0.215	/
	Body-worn&Hotspot												
GSM 1900	Ant.2	Front side	10mm	GPRS 2TX	661	1880	0.17	0.022	20.42	21.50	1.282	0.028	/
GSM 1900	Ant.2	Back side	10mm		661	1880	0.14	0.056	20.42	21.50	1.282	0.072	/
GSM 1900	Ant.2	Left side	10mm		661	1880	-0.11	0.021	20.42	21.50	1.282	0.027	/
GSM 1900	Ant.2	Right side	10mm		661	1880	-0.01	0.024	20.42	21.50	1.282	0.031	/
GSM 1900	Ant.2	Top side	10mm		661	1880	0.02	0.031	20.42	21.50	1.282	0.040	/
GSM 1900	Ant.2	Bottom side	10mm	GPRS 2TX	661	1880	-0.03	0.069	20.42	21.50	1.282	0.088	/
GSM 1900	Ant.5	Front side	10mm		661	1880	-0.03	0.060	20.80	22.00	1.318	0.079	/
GSM 1900	Ant.5	Back side	10mm		661	1880	0.06	0.123	20.80	22.00	1.318	0.162	/
GSM 1900	Ant.5	Left side	10mm		661	1880	0.18	0.032	20.80	22.00	1.318	0.042	/
GSM 1900	Ant.5	Right side	10mm		661	1880	0.04	0.028	20.80	22.00	1.318	0.037	/
GSM 1900	Ant.5	Top side	10mm		661	1880	-0.11	0.174	20.80	22.00	1.318	0.229	4
GSM 1900	Ant.5	Bottom side	10mm		661	1880	0.08	0.022	20.80	22.00	1.318	0.029	/

10.3 WCDMA Band 2

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Head													
WCDMA B2	Ant.2	Left cheek	0mm	RMC 12.2Kbps	9400	1880	-0.16	0.036	15.86	17.00	1.300	0.047	/
WCDMA B2	Ant.2	Left tilt	0mm		9400	1880	-0.09	0.030	15.86	17.00	1.300	0.039	/
WCDMA B2	Ant.2	Right cheek	0mm		9400	1880	-0.02	0.044	15.86	17.00	1.300	0.057	/
WCDMA B2	Ant.2	Right tilt	0mm		9400	1880	0.14	0.034	15.86	17.00	1.300	0.044	/
WCDMA B2	Ant.5	Left cheek	0mm	RMC 12.2Kbps	9400	1880	0.04	0.237	16.32	17.50	1.312	0.311	/
WCDMA B2	Ant.5	Left tilt	0mm		9400	1880	-0.09	0.297	16.32	17.50	1.312	0.390	/
WCDMA B2	Ant.5	Right cheek	0mm		9400	1880	-0.04	0.536	16.32	17.50	1.312	0.703	5
WCDMA B2	Ant.5	Right tilt	0mm		9400	1880	0.07	0.345	16.32	17.50	1.312	0.453	/
Body-worn&Hotspot													
WCDMA B2	Ant.2	Front side	10mm	RMC 12.2Kbps	9400	1880	0.05	0.057	15.86	17.00	1.300	0.074	/
WCDMA B2	Ant.2	Back side	10mm		9400	1880	-0.13	0.121	15.86	17.00	1.300	0.157	/
WCDMA B2	Ant.2	Left side	10mm		9400	1880	0.18	0.040	15.86	17.00	1.300	0.052	/
WCDMA B2	Ant.2	Right side	10mm		9400	1880	-0.04	0.021	15.86	17.00	1.300	0.027	/
WCDMA B2	Ant.2	Top side	10mm		9400	1880	-0.19	0.029	15.86	17.00	1.300	0.038	/
WCDMA B2	Ant.2	Bottom side	10mm		9400	1880	0.08	0.139	15.86	17.00	1.300	0.181	/
WCDMA B2	Ant.5	Front side	10mm	RMC 12.2Kbps	9400	1880	-0.04	0.106	16.32	17.50	1.312	0.139	/
WCDMA B2	Ant.5	Back side	10mm		9400	1880	0.06	0.211	16.32	17.50	1.312	0.277	/
WCDMA B2	Ant.5	Left side	10mm		9400	1880	-0.01	0.037	16.32	17.50	1.312	0.049	/
WCDMA B2	Ant.5	Right side	10mm		9400	1880	-0.05	0.031	16.32	17.50	1.312	0.041	/
WCDMA B2	Ant.5	Top side	10mm		9400	1880	0.01	0.301	16.32	17.50	1.312	0.395	6
WCDMA B2	Ant.5	Bottom side	10mm		9400	1880	-0.12	0.019	16.32	17.50	1.312	0.025	/

10.4 WCDMA Band 4

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head												
WCDMA B4	Ant.2	Left cheek	0mm	RMC 12.2Kbps	1413	1732.6	-0.16	0.036	17.65	18.50	1.216	0.044	/
WCDMA B4	Ant.2	Left tilt	0mm		1413	1732.6	-0.16	0.030	17.65	18.50	1.216	0.036	/
WCDMA B4	Ant.2	Right cheek	0mm		1413	1732.6	-0.19	0.034	17.65	18.50	1.216	0.041	/
WCDMA B4	Ant.2	Right tilt	0mm		1413	1732.6	0.03	0.028	17.65	18.50	1.216	0.034	/
WCDMA B4	Ant.5	Left cheek	0mm	RMC 12.2Kbps	1413	1732.6	-0.15	0.309	17.75	18.50	1.189	0.367	/
WCDMA B4	Ant.5	Left tilt	0mm		1413	1732.6	0.18	0.416	17.75	18.50	1.189	0.494	/
WCDMA B4	Ant.5	Right cheek	0mm		1413	1732.6	0.02	0.674	17.75	18.50	1.189	0.801	7
WCDMA B4	Ant.5	Right tilt	0mm		1413	1732.6	0.04	0.487	17.75	18.50	1.189	0.579	/
WCDMA B4	Ant.5	Right cheek	0mm		1312	1712.4	-0.18	0.520	17.57	18.50	1.239	0.644	/
WCDMA B4	Ant.5	Right cheek	0mm		1513	1752.6	0.15	0.542	17.54	18.50	1.247	0.676	/
	Body-worn&Hotspot												
WCDMA B4	Ant.2	Front side	10mm	RMC 12.2Kbps	1413	1732.6	-0.09	0.025	17.65	18.50	1.216	0.030	/
WCDMA B4	Ant.2	Back side	10mm		1413	1732.6	0.19	0.063	17.65	18.50	1.216	0.077	/
WCDMA B4	Ant.2	Left side	10mm		1413	1732.6	-0.18	0.020	17.65	18.50	1.216	0.024	/
WCDMA B4	Ant.2	Right side	10mm		1413	1732.6	0.12	0.025	17.65	18.50	1.216	0.030	/
WCDMA B4	Ant.2	Top side	10mm		1413	1732.6	-0.04	0.027	17.65	18.50	1.216	0.033	/
WCDMA B4	Ant.2	Bottom side	10mm		1413	1732.6	0.12	0.076	17.65	18.50	1.216	0.092	/
WCDMA B4	Ant.5	Front side	10mm	RMC 12.2Kbps	1413	1732.6	0.08	0.158	17.75	18.50	1.189	0.188	/
WCDMA B4	Ant.5	Back side	10mm		1413	1732.6	0.14	0.246	17.75	18.50	1.189	0.292	/
WCDMA B4	Ant.5	Left side	10mm		1413	1732.6	-0.16	0.043	17.75	18.50	1.189	0.051	/
WCDMA B4	Ant.5	Right side	10mm		1413	1732.6	0.11	0.019	17.75	18.50	1.189	0.023	/
WCDMA B4	Ant.5	Top side	10mm		1413	1732.6	0.02	0.282	17.75	18.50	1.189	0.335	8
WCDMA B4	Ant.5	Bottom side	10mm		1413	1732.6	0.16	0.024	17.75	18.50	1.189	0.029	/

10.5WCDMA Band 5

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head												
WCDMA B5	Ant.2	Left cheek	0mm	RMC 12.2Kbps	4182	836.4	0.01	0.060	22.53	23.50	1.250	0.075	/
WCDMA B5	Ant.2	Left tilt	0mm		4182	836.4	-0.02	0.039	22.53	23.50	1.250	0.049	/
WCDMA B5	Ant.2	Right cheek	0mm		4182	836.4	0.06	0.055	22.53	23.50	1.250	0.069	/
WCDMA B5	Ant.2	Right tilt	0mm		4182	836.4	-0.14	0.033	22.53	23.50	1.250	0.041	/
WCDMA B5	Ant.5	Left cheek	0mm	RMC 12.2Kbps	4182	836.4	0.15	0.527	22.72	23.50	1.197	0.631	/
WCDMA B5	Ant.5	Left tilt	0mm		4182	836.4	-0.07	0.521	22.72	23.50	1.197	0.624	/
WCDMA B5	Ant.5	Right cheek	0mm		4182	836.4	-0.16	0.775	22.72	23.50	1.197	0.927	9
WCDMA B5	Ant.5	Right tilt	0mm		4182	836.4	0.04	0.509	22.72	23.50	1.197	0.609	/
WCDMA B5	Ant.5	Right cheek	0mm		4132	826.4	-0.16	0.700	22.67	23.50	1.211	0.847	/
WCDMA B5	Ant.5	Right cheek	0mm		4233	846.6	0.04	0.705	22.65	23.50	1.216	0.857	/
	Body-worn&Hotspot												
WCDMA B5	Ant.2	Front side	10mm	RMC 12.2Kbps	4182	836.4	0.06	0.045	22.53	23.50	1.250	0.056	/
WCDMA B5	Ant.2	Back side	10mm		4182	836.4	-0.03	0.079	22.53	23.50	1.250	0.099	/
WCDMA B5	Ant.2	Left side	10mm		4182	836.4	0.12	0.030	22.53	23.50	1.250	0.038	/
WCDMA B5	Ant.2	Right side	10mm		4182	836.4	0.08	0.037	22.53	23.50	1.250	0.046	/
WCDMA B5	Ant.2	Top side	10mm		4182	836.4	-0.19	0.026	22.53	23.50	1.250	0.033	/
WCDMA B5	Ant.2	Bottom side	10mm		4182	836.4	0.13	0.078	22.53	23.50	1.250	0.098	/
WCDMA B5	Ant.5	Front side	10mm	RMC 12.2Kbps	4182	836.4	-0.04	0.169	22.72	23.50	1.197	0.202	/
WCDMA B5	Ant.5	Back side	10mm		4182	836.4	-0.03	0.187	22.72	23.50	1.197	0.224	/
WCDMA B5	Ant.5	Left side	10mm		4182	836.4	-0.07	0.105	22.72	23.50	1.197	0.126	/
WCDMA B5	Ant.5	Right side	10mm		4182	836.4	0.14	0.078	22.72	23.50	1.197	0.093	/
WCDMA B5	Ant.5	Top side	10mm		4182	836.4	0.11	0.210	22.72	23.50	1.197	0.251	10
WCDMA B5	Ant.5	Bottom side	10mm		4182	836.4	-0.04	0.032	22.72	23.50	1.197	0.038	/

10.6LTE Band 2

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Head															
LTE B2	Ant.2	Left cheek	0mm	QPSK-20MHz	18900	1880	1	0	0.03	0.036	17.45	18.50	1.274	0.046	/
LTE B2	Ant.2	Left tilt	0mm		18900	1880	1	0	-0.14	0.030	17.45	18.50	1.274	0.038	/
LTE B2	Ant.2	Right cheek	0mm		18900	1880	1	0	-0.06	0.044	17.45	18.50	1.274	0.056	/
LTE B2	Ant.2	Right tilt	0mm		18900	1880	1	0	0.13	0.037	17.45	18.50	1.274	0.047	/
LTE B2	Ant.2	Left cheek	0mm		18900	1880	50	0	0.03	0.030	16.50	17.50	1.259	0.038	/
LTE B2	Ant.2	Left tilt	0mm		18900	1880	50	0	0.05	0.024	16.50	17.50	1.259	0.030	/
LTE B2	Ant.2	Right cheek	0mm		18900	1880	50	0	0.02	0.043	16.50	17.50	1.259	0.054	/
LTE B2	Ant.2	Right tilt	0mm		18900	1880	50	0	0.06	0.036	16.50	17.50	1.259	0.045	/
LTE B2	Ant.5	Left cheek	0mm	QPSK-20MHz	18900	1880	1	0	-0.03	0.243	17.92	18.50	1.143	0.278	/
LTE B2	Ant.5	Left tilt	0mm		18900	1880	1	0	-0.14	0.387	17.92	18.50	1.143	0.442	/
LTE B2	Ant.5	Right cheek	0mm		18900	1880	1	0	0.01	0.600	17.92	18.50	1.143	0.686	11
LTE B2	Ant.5	Right tilt	0mm		18900	1880	1	0	0.18	0.470	17.92	18.50	1.143	0.537	/
LTE B2	Ant.5	Left cheek	0mm		18900	1880	50	0	-0.07	0.216	16.86	17.50	1.159	0.250	/
LTE B2	Ant.5	Left tilt	0mm		18900	1880	50	0	-0.04	0.317	16.86	17.50	1.159	0.367	/
LTE B2	Ant.5	Right cheek	0mm		18900	1880	50	0	-0.17	0.456	16.86	17.50	1.159	0.528	/
LTE B2	Ant.5	Right tilt	0mm		18900	1880	50	0	-0.01	0.419	16.86	17.50	1.159	0.486	/
Body-worn&Hotspot															
LTE B2	Ant.2	Front side	10mm	QPSK-20MHz	18900	1880	1	0	0.02	0.080	17.45	18.50	1.274	0.102	/
LTE B2	Ant.2	Back side	10mm		18900	1880	1	0	0.01	0.134	17.45	18.50	1.274	0.171	/
LTE B2	Ant.2	Left side	10mm		18900	1880	1	0	0.13	0.039	17.45	18.50	1.274	0.050	/
LTE B2	Ant.2	Right side	10mm		18900	1880	1	0	0.03	0.042	17.45	18.50	1.274	0.053	/
LTE B2	Ant.2	Top side	10mm		18900	1880	1	0	0.02	0.045	17.45	18.50	1.274	0.057	/
LTE B2	Ant.2	Bottom side	10mm		18900	1880	1	0	-0.04	0.152	17.45	18.50	1.274	0.194	/
LTE B2	Ant.2	Front side	10mm		18900	1880	50	0	0.09	0.063	16.50	17.50	1.259	0.079	/
LTE B2	Ant.2	Back side	10mm		18900	1880	50	0	-0.18	0.113	16.50	17.50	1.259	0.142	/
LTE B2	Ant.2	Left side	10mm	QPSK-20MHz	18900	1880	50	0	-0.05	0.029	16.50	17.50	1.259	0.037	/
LTE B2	Ant.2	Right side	10mm		18900	1880	50	0	0.04	0.032	16.50	17.50	1.259	0.040	/
LTE B2	Ant.2	Top side	10mm		18900	1880	50	0	0.01	0.035	16.50	17.50	1.259	0.044	/
LTE B2	Ant.2	Bottom side	10mm		18900	1880	50	0	0.12	0.137	16.50	17.50	1.259	0.172	/
LTE B2	Ant.5	Front side	10mm		18900	1880	1	0	0.12	0.149	17.92	18.50	1.143	0.170	/
LTE B2	Ant.5	Back side	10mm		18900	1880	1	0	0.19	0.309	17.92	18.50	1.143	0.353	/
LTE B2	Ant.5	Left side	10mm		18900	1880	1	0	-0.06	0.059	17.92	18.50	1.143	0.067	/
LTE B2	Ant.5	Right side	10mm		18900	1880	1	0	-0.05	0.033	17.92	18.50	1.143	0.038	/
LTE B2	Ant.5	Top side	10mm	QPSK-20MHz	18900	1880	1	0	-0.04	0.339	17.92	18.50	1.143	0.387	12
LTE B2	Ant.5	Bottom side	10mm		18900	1880	1	0	0.02	0.032	17.92	18.50	1.143	0.037	/
LTE B2	Ant.5	Front side	10mm		18900	1880	50	0	-0.15	0.137	16.86	17.50	1.159	0.159	/
LTE B2	Ant.5	Back side	10mm		18900	1880	50	0	-0.15	0.251	16.86	17.50	1.159	0.291	/
LTE B2	Ant.5	Left side	10mm		18900	1880	50	0	0.04	0.068	16.86	17.50	1.159	0.079	/
LTE B2	Ant.5	Right side	10mm		18900	1880	50	0	-0.01	0.029	16.86	17.50	1.159	0.034	/
LTE B2	Ant.5	Top side	10mm		18900	1880	50	0	0.19	0.257	16.86	17.50	1.159	0.298	/
LTE B2	Ant.5	Bottom side	10mm		18900	1880	50	0	0.15	0.031	16.86	17.50	1.159	0.036	/

10.7LTE Band 5

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B5	Ant.2	Left cheek	0mm	QPSK-10MHz	20525	836.5	1	0	-0.1	0.056	19.67	20.50	1.211	0.068	/
LTE B5	Ant.2	Left tilt	0mm		20525	836.5	1	0	-0.18	0.032	19.67	20.50	1.211	0.039	/
LTE B5	Ant.2	Right cheek	0mm		20525	836.5	1	0	0.09	0.050	19.67	20.50	1.211	0.061	/
LTE B5	Ant.2	Right tilt	0mm		20525	836.5	1	0	-0.19	0.035	19.67	20.50	1.211	0.042	/
LTE B5	Ant.2	Left cheek	0mm		20525	836.5	25	0	-0.01	0.047	18.65	19.50	1.216	0.057	/
LTE B5	Ant.2	Left tilt	0mm		20525	836.5	25	0	0.12	0.030	18.65	19.50	1.216	0.036	/
LTE B5	Ant.2	Right cheek	0mm		20525	836.5	25	0	0.19	0.049	18.65	19.50	1.216	0.060	/
LTE B5	Ant.2	Right tilt	0mm		20525	836.5	25	0	0.02	0.034	18.65	19.50	1.216	0.041	/
LTE B5	Ant.5	Left cheek	0mm	QPSK-10MHz	20525	836.5	1	0	-0.02	0.269	19.95	20.50	1.135	0.305	/
LTE B5	Ant.5	Left tilt	0mm		20525	836.5	1	0	0.08	0.259	19.95	20.50	1.135	0.294	/
LTE B5	Ant.5	Right cheek	0mm		20525	836.5	1	0	-0.08	0.360	19.95	20.50	1.135	0.409	13
LTE B5	Ant.5	Right tilt	0mm		20525	836.5	1	0	0.11	0.339	19.95	20.50	1.135	0.385	/
LTE B5	Ant.5	Left cheek	0mm		20525	836.5	25	0	0.12	0.205	18.88	19.50	1.153	0.236	/
LTE B5	Ant.5	Left tilt	0mm		20525	836.5	25	0	-0.12	0.197	18.88	19.50	1.153	0.227	/
LTE B5	Ant.5	Right cheek	0mm		20525	836.5	25	0	0.02	0.338	18.88	19.50	1.153	0.390	/
LTE B5	Ant.5	Right tilt	0mm		20525	836.5	25	0	0.07	0.302	18.88	19.50	1.153	0.348	/
	Body-worn&Hotspot														
LTE B5	Ant.2	Front side	10mm	QPSK-10MHz	20525	836.5	1	0	-0.17	0.055	19.67	20.50	1.211	0.067	/
LTE B5	Ant.2	Back side	10mm		20525	836.5	1	0	0.02	0.078	19.67	20.50	1.211	0.094	/
LTE B5	Ant.2	Left side	10mm		20525	836.5	1	0	-0.02	0.035	19.67	20.50	1.211	0.042	/
LTE B5	Ant.2	Right side	10mm		20525	836.5	1	0	-0.08	0.028	19.67	20.50	1.211	0.034	/
LTE B5	Ant.2	Top side	10mm		20525	836.5	1	0	-0.04	0.039	19.67	20.50	1.211	0.047	/
LTE B5	Ant.2	Bottom side	10mm		20525	836.5	1	0	0.18	0.047	19.67	20.50	1.211	0.057	/
LTE B5	Ant.2	Front side	10mm		20525	836.5	25	0	0.03	0.054	18.65	19.50	1.216	0.066	/
LTE B5	Ant.2	Back side	10mm		20525	836.5	25	0	0.19	0.081	18.65	19.50	1.216	0.099	/
LTE B5	Ant.2	Left side	10mm		20525	836.5	25	0	0.06	0.029	18.65	19.50	1.216	0.035	/
LTE B5	Ant.2	Right side	10mm		20525	836.5	25	0	0.09	0.025	18.65	19.50	1.216	0.030	/
LTE B5	Ant.2	Top side	10mm		20525	836.5	25	0	-0.07	0.033	18.65	19.50	1.216	0.040	/
LTE B5	Ant.2	Bottom side	10mm		20525	836.5	25	0	-0.05	0.051	18.65	19.50	1.216	0.062	/
LTE B5	Ant.5	Front side	10mm		20525	836.5	1	0	-0.03	0.079	19.95	20.50	1.135	0.090	/
LTE B5	Ant.5	Back side	10mm		20525	836.5	1	0	-0.07	0.086	19.95	20.50	1.135	0.098	/
LTE B5	Ant.5	Left side	10mm		20525	836.5	1	0	-0.05	0.053	19.95	20.50	1.135	0.060	/
LTE B5	Ant.5	Right side	10mm		20525	836.5	1	0	-0.12	0.031	19.95	20.50	1.135	0.035	/
LTE B5	Ant.5	Top side	10mm	QPSK-10MHz	20525	836.5	1	0	0.09	0.091	19.95	20.50	1.135	0.103	14
LTE B5	Ant.5	Bottom side	10mm		20525	836.5	1	0	0.03	0.019	19.95	20.50	1.135	0.022	/
LTE B5	Ant.5	Front side	10mm		20525	836.5	25	0	0.02	0.069	18.88	19.50	1.153	0.080	/
LTE B5	Ant.5	Back side	10mm		20525	836.5	25	0	-0.04	0.083	18.88	19.50	1.153	0.096	/
LTE B5	Ant.5	Left side	10mm		20525	836.5	25	0	0.02	0.025	18.88	19.50	1.153	0.029	/
LTE B5	Ant.5	Right side	10mm		20525	836.5	25	0	0.18	0.031	18.88	19.50	1.153	0.036	/
LTE B5	Ant.5	Top side	10mm		20525	836.5	25	0	0.11	0.085	18.88	19.50	1.153	0.098	/
LTE B5	Ant.5	Bottom side	10mm		20525	836.5	25	0	-0.18	0.017	18.88	19.50	1.153	0.020	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Head															
LTE B5	Ant.2	Left cheek	0mm	QPSK-10MHz	20476+20575	831.6	1+49	1+0	0.06	0.046	19.56	20.50	1.242	0.057	/
LTE B5	Ant.5	Right cheek	0mm	QPSK-10MHz	20476+20575	831.6	1+49	1+0	-0.15	0.318	19.59	20.50	1.233	0.392	/
Body-worn&Hotspot															
LTE B5	Ant.2	Back side	10mm	QPSK-10MHz	20476+20575	831.6	1+49	1+0	0.12	0.072	19.56	20.50	1.242	0.089	/
LTE B5	Ant.5	Top side	10mm	QPSK-10MHz	20476+20575	831.6	1+49	1+0	0.07	0.081	19.59	20.50	1.233	0.100	/

10.8LTE Band 7

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B7	Ant.2	Left cheek	0mm	QPSK-20MHz	21100	2535	1	0	0.01	0.036	14.96	16.00	1.271	0.046	/
LTE B7	Ant.2	Left tilt	0mm		21100	2535	1	0	-0.1	0.030	14.96	16.00	1.271	0.038	/
LTE B7	Ant.2	Right cheek	0mm		21100	2535	1	0	0.06	0.032	14.96	16.00	1.271	0.041	/
LTE B7	Ant.2	Right tilt	0mm		21100	2535	1	0	0.08	0.027	14.96	16.00	1.271	0.034	/
LTE B7	Ant.2	Left cheek	0mm		21100	2535	50	0	0.18	0.030	13.92	15.00	1.282	0.038	/
LTE B7	Ant.2	Left tilt	0mm		21100	2535	50	0	-0.07	0.024	13.92	15.00	1.282	0.031	/
LTE B7	Ant.2	Right cheek	0mm		21100	2535	50	0	-0.05	0.030	13.92	15.00	1.282	0.038	/
LTE B7	Ant.2	Right tilt	0mm		21100	2535	50	0	-0.14	0.025	13.92	15.00	1.282	0.032	/
LTE B7	Ant.5	Left cheek	0mm	QPSK-20MHz	21100	2535	1	0	-0.04	0.152	16.85	17.50	1.161	0.177	/
LTE B7	Ant.5	Left tilt	0mm		21100	2535	1	0	0.15	0.161	16.85	17.50	1.161	0.187	15
LTE B7	Ant.5	Right cheek	0mm		21100	2535	1	0	0.04	0.145	16.85	17.50	1.161	0.168	/
LTE B7	Ant.5	Right tilt	0mm		21100	2535	1	0	-0.06	0.126	16.85	17.50	1.161	0.146	/
LTE B7	Ant.5	Left cheek	0mm		21100	2535	50	0	-0.06	0.094	15.85	16.50	1.161	0.109	/
LTE B7	Ant.5	Left tilt	0mm		21100	2535	50	0	-0.05	0.125	15.85	16.50	1.161	0.145	/
LTE B7	Ant.5	Right cheek	0mm		21100	2535	50	0	-0.1	0.108	15.85	16.50	1.161	0.125	/
LTE B7	Ant.5	Right tilt	0mm		21100	2535	50	0	-0.18	0.129	15.85	16.50	1.161	0.150	/
	Body-worn&Hotspot														
LTE B7	Ant.2	Front side	10mm	QPSK-20MHz	21100	2535	1	0	-0.07	0.042	14.96	16.00	1.271	0.053	/
LTE B7	Ant.2	Back side	10mm		21100	2535	1	0	-0.12	0.103	14.96	16.00	1.271	0.131	/
LTE B7	Ant.2	Left side	10mm		21100	2535	1	0	0.18	0.040	14.96	16.00	1.271	0.051	/
LTE B7	Ant.2	Right side	10mm		21100	2535	1	0	-0.03	0.038	14.96	16.00	1.271	0.048	/
LTE B7	Ant.2	Top side	10mm		21100	2535	1	0	-0.11	0.036	14.96	16.00	1.271	0.046	/
LTE B7	Ant.2	Bottom side	10mm		21100	2535	1	0	-0.04	0.082	14.96	16.00	1.271	0.104	/
LTE B7	Ant.2	Front side	10mm		21100	2535	50	0	0.03	0.037	13.92	15.00	1.282	0.047	/
LTE B7	Ant.2	Back side	10mm		21100	2535	50	0	-0.17	0.085	13.92	15.00	1.282	0.109	/
LTE B7	Ant.2	Left side	10mm		21100	2535	50	0	-0.1	0.042	13.92	15.00	1.282	0.054	/
LTE B7	Ant.2	Right side	10mm		21100	2535	50	0	-0.06	0.040	13.92	15.00	1.282	0.051	/
LTE B7	Ant.2	Top side	10mm		21100	2535	50	0	0.16	0.029	13.92	15.00	1.282	0.037	/
LTE B7	Ant.2	Bottom side	10mm		21100	2535	50	0	-0.13	0.074	13.92	15.00	1.282	0.095	/
LTE B7	Ant.5	Front side	10mm	QPSK-20MHz	21100	2535	1	0	0.17	0.110	16.85	17.50	1.161	0.128	/
LTE B7	Ant.5	Back side	10mm		21100	2535	1	0	-0.19	0.245	16.85	17.50	1.161	0.285	/
LTE B7	Ant.5	Left side	10mm		21100	2535	1	0	0.06	0.071	16.85	17.50	1.161	0.082	/
LTE B7	Ant.5	Right side	10mm		21100	2535	1	0	-0.09	0.031	16.85	17.50	1.161	0.036	/
LTE B7	Ant.5	Top side	10mm		21100	2535	1	0	0.07	0.260	16.85	17.50	1.161	0.302	16
LTE B7	Ant.5	Bottom side	10mm		21100	2535	1	0	-0.02	0.038	16.85	17.50	1.161	0.044	/
LTE B7	Ant.5	Front side	10mm		21100	2535	50	0	-0.04	0.092	15.85	16.50	1.161	0.107	/
LTE B7	Ant.5	Back side	10mm		21100	2535	50	0	-0.18	0.196	15.85	16.50	1.161	0.228	/
LTE B7	Ant.5	Left side	10mm		21100	2535	50	0	0.12	0.054	15.85	16.50	1.161	0.063	/
LTE B7	Ant.5	Right side	10mm		21100	2535	50	0	0.1	0.026	15.85	16.50	1.161	0.030	/
LTE B7	Ant.5	Top side	10mm		21100	2535	50	0	-0.15	0.214	15.85	16.50	1.161	0.249	/
LTE B7	Ant.5	Bottom side	10mm		21100	2535	50	0	0.16	0.016	15.85	16.50	1.161	0.019	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Head															
LTE B7	Ant.2	Left cheek	0mm	QPSK-20MHz	21001+21199	2525.1	1+99	1+0	0.05	0.031	14.84	16.00	1.306	0.040	/
LTE B7	Ant.5	Left tilt	0mm	QPSK-20MHz	21001+21199	2525.1	1+99	1+0	0.12	0.152	16.79	17.50	1.178	0.179	/
Body-worn&Hotspot															
LTE B7	Ant.2	Back side	10mm	QPSK-20MHz	21001+21199	2525.1	1+99	1+0	-0.11	0.095	14.84	16.00	1.306	0.124	/
LTE B7	Ant.5	Top side	10mm	QPSK-20MHz	21001+21199	2525.1	1+99	1+0	0.15	0.212	16.79	17.50	1.178	0.250	/

10.9LTE Band 12

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B12	Ant.2	Left cheek	0mm	QPSK-10MHz	23095	707.5	1	0	-0.07	0.038	22.94	24.00	1.276	0.049	/
LTE B12	Ant.2	Left tilt	0mm		23095	707.5	1	0	0.05	0.031	22.94	24.00	1.276	0.040	/
LTE B12	Ant.2	Right cheek	0mm		23095	707.5	1	0	0.12	0.044	22.94	24.00	1.276	0.056	/
LTE B12	Ant.2	Right tilt	0mm		23095	707.5	1	0	-0.03	0.035	22.94	24.00	1.276	0.045	/
LTE B12	Ant.2	Left cheek	0mm		23095	707.5	25	0	-0.04	0.030	21.82	23.00	1.312	0.039	/
LTE B12	Ant.2	Left tilt	0mm		23095	707.5	25	0	0.12	0.026	21.82	23.00	1.312	0.034	/
LTE B12	Ant.2	Right cheek	0mm		23095	707.5	25	0	-0.03	0.039	21.82	23.00	1.312	0.051	/
LTE B12	Ant.2	Right tilt	0mm		23095	707.5	25	0	0.11	0.031	21.82	23.00	1.312	0.041	/
LTE B12	Ant.5	Left cheek	0mm	QPSK-10MHz	23095	707.5	1	0	-0.15	0.213	23.30	24.00	1.175	0.250	/
LTE B12	Ant.5	Left tilt	0mm		23095	707.5	1	0	-0.06	0.211	23.30	24.00	1.175	0.248	/
LTE B12	Ant.5	Right cheek	0mm		23095	707.5	1	0	0.02	0.317	23.30	24.00	1.175	0.373	/
LTE B12	Ant.5	Right tilt	0mm		23095	707.5	1	0	0.09	0.321	23.30	24.00	1.175	0.377	17
LTE B12	Ant.5	Left cheek	0mm		23095	707.5	25	0	-0.15	0.277	22.09	23.00	1.233	0.342	/
LTE B12	Ant.5	Left tilt	0mm		23095	707.5	25	0	0.07	0.174	22.09	23.00	1.233	0.215	/
LTE B12	Ant.5	Right cheek	0mm		23095	707.5	25	0	0.02	0.295	22.09	23.00	1.233	0.364	/
LTE B12	Ant.5	Right tilt	0mm		23095	707.5	25	0	0.09	0.287	22.09	23.00	1.233	0.354	/
	Body-worn&Hotspot														
LTE B12	Ant.2	Front side	10mm	QPSK-10MHz	23095	707.5	1	0	0.06	0.045	22.94	24.00	1.276	0.057	/
LTE B12	Ant.2	Back side	10mm		23095	707.5	1	0	-0.11	0.078	22.94	24.00	1.276	0.100	/
LTE B12	Ant.2	Left side	10mm		23095	707.5	1	0	0.02	0.035	22.94	24.00	1.276	0.045	/
LTE B12	Ant.2	Right side	10mm		23095	707.5	1	0	0.17	0.059	22.94	24.00	1.276	0.075	/
LTE B12	Ant.2	Top side	10mm		23095	707.5	1	0	-0.08	0.027	22.94	24.00	1.276	0.034	/
LTE B12	Ant.2	Bottom side	10mm		23095	707.5	1	0	-0.15	0.042	22.94	24.00	1.276	0.054	/
LTE B12	Ant.2	Front side	10mm		23095	707.5	25	0	-0.18	0.035	21.82	23.00	1.312	0.046	/
LTE B12	Ant.2	Back side	10mm		23095	707.5	25	0	-0.08	0.064	21.82	23.00	1.312	0.084	/
LTE B12	Ant.2	Left side	10mm		23095	707.5	25	0	0.08	0.029	21.82	23.00	1.312	0.038	/
LTE B12	Ant.2	Right side	10mm		23095	707.5	25	0	-0.1	0.050	21.82	23.00	1.312	0.066	/
LTE B12	Ant.2	Top side	10mm		23095	707.5	25	0	0.08	0.025	21.82	23.00	1.312	0.033	/
LTE B12	Ant.2	Bottom side	10mm		23095	707.5	25	0	0.06	0.037	21.82	23.00	1.312	0.049	/
LTE B12	Ant.5	Front side	10mm	QPSK-10MHz	23095	707.5	1	0	-0.16	0.086	23.30	24.00	1.175	0.101	/
LTE B12	Ant.5	Back side	10mm		23095	707.5	1	0	-0.12	0.089	23.30	24.00	1.175	0.105	/
LTE B12	Ant.5	Left side	10mm		23095	707.5	1	0	-0.03	0.091	23.30	24.00	1.175	0.107	/
LTE B12	Ant.5	Right side	10mm		23095	707.5	1	0	-0.1	0.077	23.30	24.00	1.175	0.090	/
LTE B12	Ant.5	Top side	10mm		23095	707.5	1	0	-0.07	0.094	23.30	24.00	1.175	0.110	18
LTE B12	Ant.5	Bottom side	10mm		23095	707.5	1	0	-0.15	0.033	23.30	24.00	1.175	0.039	/
LTE B12	Ant.5	Front side	10mm		23095	707.5	25	0	-0.12	0.068	22.09	23.00	1.233	0.084	/
LTE B12	Ant.5	Back side	10mm		23095	707.5	25	0	0.06	0.082	22.09	23.00	1.233	0.101	/
LTE B12	Ant.5	Left side	10mm		23095	707.5	25	0	-0.12	0.088	22.09	23.00	1.233	0.109	/
LTE B12	Ant.5	Right side	10mm		23095	707.5	25	0	-0.12	0.065	22.09	23.00	1.233	0.080	/
LTE B12	Ant.5	Top side	10mm		23095	707.5	25	0	0.01	0.085	22.09	23.00	1.233	0.105	/
LTE B12	Ant.5	Bottom side	10mm		23095	707.5	25	0	0.05	0.029	22.09	23.00	1.233	0.036	/

10.10 LTE Band 13

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B13	Ant.2	Left cheek	0mm	QPSK-10MHz	23230	782	1	0	-0.08	0.067	23.25	24.00	1.189	0.080	/
LTE B13	Ant.2	Left tilt	0mm		23230	782	1	0	-0.08	0.035	23.25	24.00	1.189	0.042	/
LTE B13	Ant.2	Right cheek	0mm		23230	782	1	0	-0.01	0.055	23.25	24.00	1.189	0.065	/
LTE B13	Ant.2	Right tilt	0mm		23230	782	1	0	0.01	0.032	23.25	24.00	1.189	0.038	/
LTE B13	Ant.2	Left cheek	0mm		23230	782	25	0	0.18	0.049	21.91	23.00	1.285	0.063	/
LTE B13	Ant.2	Left tilt	0mm		23230	782	25	0	0.07	0.032	21.91	23.00	1.285	0.041	/
LTE B13	Ant.2	Right cheek	0mm		23230	782	25	0	0.16	0.044	21.91	23.00	1.285	0.057	/
LTE B13	Ant.2	Right tilt	0mm		23230	782	25	0	-0.16	0.025	21.91	23.00	1.285	0.032	/
LTE B13	Ant.5	Left cheek	0mm	QPSK-10MHz	23230	782	1	0	0.07	0.282	23.29	24.00	1.178	0.332	/
LTE B13	Ant.5	Left tilt	0mm		23230	782	1	0	-0.17	0.272	23.29	24.00	1.178	0.320	/
LTE B13	Ant.5	Right cheek	0mm		23230	782	1	0	-0.03	0.331	23.29	24.00	1.178	0.390	/
LTE B13	Ant.5	Right tilt	0mm		23230	782	1	0	0.08	0.342	23.29	24.00	1.178	0.403	19
LTE B13	Ant.5	Left cheek	0mm		23230	782	25	0	-0.19	0.302	21.99	23.00	1.262	0.381	/
LTE B13	Ant.5	Left tilt	0mm		23230	782	25	0	-0.09	0.302	21.99	23.00	1.262	0.381	/
LTE B13	Ant.5	Right cheek	0mm		23230	782	25	0	-0.1	0.305	21.99	23.00	1.262	0.385	/
LTE B13	Ant.5	Right tilt	0mm		23230	782	25	0	0.04	0.311	21.99	23.00	1.262	0.392	/
	Body-worn&Hotspot														
LTE B13	Ant.2	Front side	10mm	QPSK-10MHz	23230	782	1	0	-0.04	0.072	23.25	24.00	1.189	0.086	/
LTE B13	Ant.2	Back side	10mm		23230	782	1	0	-0.01	0.120	23.25	24.00	1.189	0.143	/
LTE B13	Ant.2	Left side	10mm		23230	782	1	0	0.08	0.050	23.25	24.00	1.189	0.059	/
LTE B13	Ant.2	Right side	10mm		23230	782	1	0	-0.1	0.079	23.25	24.00	1.189	0.094	/
LTE B13	Ant.2	Top side	10mm		23230	782	1	0	-0.12	0.029	23.25	24.00	1.189	0.034	/
LTE B13	Ant.2	Bottom side	10mm		23230	782	1	0	-0.17	0.089	23.25	24.00	1.189	0.106	/
LTE B13	Ant.2	Front side	10mm		23230	782	25	0	0.13	0.053	21.91	23.00	1.285	0.068	/
LTE B13	Ant.2	Back side	10mm		23230	782	25	0	-0.02	0.091	21.91	23.00	1.285	0.117	/
LTE B13	Ant.2	Left side	10mm		23230	782	25	0	0.17	0.042	21.91	23.00	1.285	0.054	/
LTE B13	Ant.2	Right side	10mm		23230	782	25	0	0.18	0.058	21.91	23.00	1.285	0.075	/
LTE B13	Ant.2	Top side	10mm		23230	782	25	0	-0.01	0.025	21.91	23.00	1.285	0.032	/
LTE B13	Ant.2	Bottom side	10mm		23230	782	25	0	0.18	0.068	21.91	23.00	1.285	0.087	/
LTE B13	Ant.5	Front side	10mm	QPSK-10MHz	23230	782	1	0	0.08	0.123	23.29	24.00	1.178	0.145	/
LTE B13	Ant.5	Back side	10mm		23230	782	1	0	-0.16	0.144	23.29	24.00	1.178	0.170	/
LTE B13	Ant.5	Left side	10mm		23230	782	1	0	0.05	0.125	23.29	24.00	1.178	0.147	/
LTE B13	Ant.5	Right side	10mm		23230	782	1	0	-0.11	0.081	23.29	24.00	1.178	0.095	/
LTE B13	Ant.5	Top side	10mm		23230	782	1	0	-0.13	0.157	23.29	24.00	1.178	0.185	20
LTE B13	Ant.5	Bottom side	10mm		23230	782	1	0	-0.11	0.039	23.29	24.00	1.178	0.046	/
LTE B13	Ant.5	Front side	10mm		23230	782	25	0	0.13	0.090	21.99	23.00	1.262	0.114	/
LTE B13	Ant.5	Back side	10mm		23230	782	25	0	-0.02	0.106	21.99	23.00	1.262	0.134	/
LTE B13	Ant.5	Left side	10mm		23230	782	25	0	-0.16	0.093	21.99	23.00	1.262	0.117	/
LTE B13	Ant.5	Right side	10mm		23230	782	25	0	0.16	0.058	21.99	23.00	1.262	0.073	/
LTE B13	Ant.5	Top side	10mm		23230	782	25	0	-0.12	0.128	21.99	23.00	1.262	0.162	/
LTE B13	Ant.5	Bottom side	10mm		23230	782	25	0	0.15	0.033	21.99	23.00	1.262	0.042	/

10.11 LTE Band 66

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B66	Ant.2	Left cheek	0mm	QPSK-20MHz	132322	1745	1	0	-0.18	0.036	15.62	16.50	1.225	0.044	/
LTE B66	Ant.2	Left tilt	0mm		132322	1745	1	0	0.07	0.026	15.62	16.50	1.225	0.032	/
LTE B66	Ant.2	Right cheek	0mm		132322	1745	1	0	-0.17	0.027	15.62	16.50	1.225	0.033	/
LTE B66	Ant.2	Right tilt	0mm		132322	1745	1	0	0.05	0.022	15.62	16.50	1.225	0.027	/
LTE B66	Ant.2	Left cheek	0mm		132322	1745	50	0	0.12	0.030	14.33	15.50	1.309	0.039	/
LTE B66	Ant.2	Left tilt	0mm		132322	1745	50	0	0.05	0.022	14.33	15.50	1.309	0.029	/
LTE B66	Ant.2	Right cheek	0mm		132322	1745	50	0	0.02	0.021	14.33	15.50	1.309	0.027	/
LTE B66	Ant.2	Right tilt	0mm		132322	1745	50	0	0.13	0.017	14.33	15.50	1.309	0.022	/
LTE B66	Ant.5	Left cheek	0mm	QPSK-20MHz	132322	1745	1	0	-0.01	0.157	15.82	16.50	1.169	0.184	/
LTE B66	Ant.5	Left tilt	0mm		132322	1745	1	0	0.17	0.176	15.82	16.50	1.169	0.206	21
LTE B66	Ant.5	Right cheek	0mm		132322	1745	1	0	0.03	0.153	15.82	16.50	1.169	0.179	/
LTE B66	Ant.5	Right tilt	0mm		132322	1745	1	0	-0.14	0.168	15.82	16.50	1.169	0.196	/
LTE B66	Ant.5	Left cheek	0mm		132322	1745	50	0	0.17	0.103	14.74	15.50	1.191	0.123	/
LTE B66	Ant.5	Left tilt	0mm		132322	1745	50	0	0.07	0.141	14.74	15.50	1.191	0.168	/
LTE B66	Ant.5	Right cheek	0mm		132322	1745	50	0	0.09	0.136	14.74	15.50	1.191	0.162	/
LTE B66	Ant.5	Right tilt	0mm		132322	1745	50	0	-0.06	0.149	14.74	15.50	1.191	0.177	/
	Body-worn&Hotspot														
LTE B66	Ant.2	Front side	10mm	QPSK-20MHz	132322	1745	1	0	0.08	0.028	15.62	16.50	1.225	0.034	/
LTE B66	Ant.2	Back side	10mm		132322	1745	1	0	0.08	0.057	15.62	16.50	1.225	0.070	/
LTE B66	Ant.2	Left side	10mm		132322	1745	1	0	-0.16	0.038	15.62	16.50	1.225	0.047	/
LTE B66	Ant.2	Right side	10mm		132322	1745	1	0	-0.07	0.035	15.62	16.50	1.225	0.043	/
LTE B66	Ant.2	Top side	10mm		132322	1745	1	0	0.13	0.028	15.62	16.50	1.225	0.034	/
LTE B66	Ant.2	Bottom side	10mm		132322	1745	1	0	0.04	0.079	15.62	16.50	1.225	0.097	/
LTE B66	Ant.2	Front side	10mm		132322	1745	50	0	0.1	0.025	14.33	15.50	1.309	0.033	/
LTE B66	Ant.2	Back side	10mm		132322	1745	50	0	-0.18	0.055	14.33	15.50	1.309	0.072	/
LTE B66	Ant.2	Left side	10mm		132322	1745	50	0	0.01	0.033	14.33	15.50	1.309	0.043	/
LTE B66	Ant.2	Right side	10mm		132322	1745	50	0	-0.15	0.031	14.33	15.50	1.309	0.041	/
LTE B66	Ant.2	Top side	10mm		132322	1745	50	0	-0.19	0.024	14.33	15.50	1.309	0.031	/
LTE B66	Ant.2	Bottom side	10mm		132322	1745	50	0	-0.06	0.066	14.33	15.50	1.309	0.086	/
LTE B66	Ant.5	Front side	10mm	QPSK-20MHz	132322	1745	1	0	0.09	0.075	15.82	16.50	1.169	0.088	/
LTE B66	Ant.5	Back side	10mm		132322	1745	1	0	-0.06	0.123	15.82	16.50	1.169	0.144	/
LTE B66	Ant.5	Left side	10mm		132322	1745	1	0	0.11	0.024	15.82	16.50	1.169	0.028	/
LTE B66	Ant.5	Right side	10mm		132322	1745	1	0	0.05	0.032	15.82	16.50	1.169	0.037	/
LTE B66	Ant.5	Top side	10mm		132322	1745	1	0	0.07	0.134	15.82	16.50	1.169	0.157	22
LTE B66	Ant.5	Bottom side	10mm		132322	1745	1	0	0.04	0.035	15.82	16.50	1.169	0.041	/
LTE B66	Ant.5	Front side	10mm		132322	1745	50	0	0.14	0.059	14.74	15.50	1.191	0.070	/
LTE B66	Ant.5	Back side	10mm		132322	1745	50	0	0.18	0.102	14.74	15.50	1.191	0.122	/
LTE B66	Ant.5	Left side	10mm		132322	1745	50	0	-0.06	0.019	14.74	15.50	1.191	0.023	/
LTE B66	Ant.5	Right side	10mm		132322	1745	50	0	0.02	0.026	14.74	15.50	1.191	0.031	/
LTE B66	Ant.5	Top side	10mm		132322	1745	50	0	-0.07	0.121	14.74	15.50	1.191	0.144	/
LTE B66	Ant.5	Bottom side	10mm		132322	1745	50	0	0.15	0.036	14.74	15.50	1.191	0.043	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Head															
LTE B66	Ant.2	Left cheek	0mm	QPSK-20MHz	132323+132521	1745.1	1+99	1+0	-0.15	0.036	15.58	16.50	1.236	0.044	/
LTE B66	Ant.5	Left tilt	0mm	QPSK-20MHz	132322+132520	1745.1	1+99	1+0	0.12	0.165	15.77	16.50	1.183	0.195	/
Body-worn&Hotspot															
LTE B66	Ant.2	Bottom side	10mm	QPSK-20MHz	132322+132520	1745.1	1+99	1+0	0.05	0.071	15.58	16.50	1.236	0.088	/
LTE B66	Ant.5	Top side	10mm	QPSK-20MHz	132322+132520	1745.1	1+99	1+0	0.04	0.128	15.77	16.50	1.183	0.151	/

10.12 LTE Band 41

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B41	Ant.2	Left cheek	0mm	QPSK-20MHz	40620	2593	1	0	-0.19	0.040	16.20	17.00	1.202	0.048	/
LTE B41	Ant.2	Left tilt	0mm		40620	2593	1	0	0.06	0.030	16.20	17.00	1.202	0.036	/
LTE B41	Ant.2	Right cheek	0mm		40620	2593	1	0	-0.12	0.066	16.20	17.00	1.202	0.079	/
LTE B41	Ant.2	Right tilt	0mm		40620	2593	1	0	-0.08	0.042	16.20	17.00	1.202	0.050	/
LTE B41	Ant.2	Left cheek	0mm		40620	2593	50	0	-0.18	0.032	14.97	16.00	1.268	0.041	/
LTE B41	Ant.2	Left tilt	0mm		40620	2593	50	0	-0.04	0.028	14.97	16.00	1.268	0.035	/
LTE B41	Ant.2	Right cheek	0mm		40620	2593	50	0	0.07	0.052	14.97	16.00	1.268	0.066	/
LTE B41	Ant.2	Right tilt	0mm		40620	2593	50	0	0.02	0.033	14.97	16.00	1.268	0.042	/
LTE B41	Ant.5	Left cheek	0mm	QPSK-20MHz	40620	2593	1	0	0.19	0.107	17.81	18.50	1.172	0.125	/
LTE B41	Ant.5	Left tilt	0mm		40620	2593	1	0	-0.17	0.154	17.81	18.50	1.172	0.181	/
LTE B41	Ant.5	Right cheek	0mm		40620	2593	1	0	0.03	0.326	17.81	18.50	1.172	0.382	23
LTE B41	Ant.5	Right tilt	0mm		40620	2593	1	0	-0.05	0.149	17.81	18.50	1.172	0.175	/
LTE B41	Ant.5	Left cheek	0mm		40620	2593	50	0	0.08	0.089	16.75	17.50	1.189	0.106	/
LTE B41	Ant.5	Left tilt	0mm		40620	2593	50	0	-0.07	0.129	16.75	17.50	1.189	0.153	/
LTE B41	Ant.5	Right cheek	0mm		40620	2593	50	0	0.11	0.180	16.75	17.50	1.189	0.214	/
LTE B41	Ant.5	Right tilt	0mm		40620	2593	50	0	-0.11	0.133	16.75	17.50	1.189	0.158	/
	Body-worn&Hotspot														
LTE B41	Ant.2	Front side	10mm	QPSK-20MHz	40620	2593	1	0	0.13	0.042	16.20	17.00	1.202	0.050	/
LTE B41	Ant.2	Back side	10mm		40620	2593	1	0	0.01	0.111	16.20	17.00	1.202	0.133	/
LTE B41	Ant.2	Left side	10mm		40620	2593	1	0	0.15	0.033	16.20	17.00	1.202	0.040	/
LTE B41	Ant.2	Right side	10mm		40620	2593	1	0	0.09	0.035	16.20	17.00	1.202	0.042	/
LTE B41	Ant.2	Top side	10mm		40620	2593	1	0	0.18	0.024	16.20	17.00	1.202	0.029	/
LTE B41	Ant.2	Bottom side	10mm		40620	2593	1	0	0.07	0.089	16.20	17.00	1.202	0.107	/
LTE B41	Ant.2	Front side	10mm		40620	2593	50	0	0.03	0.044	14.97	16.00	1.268	0.056	/
LTE B41	Ant.2	Back side	10mm		40620	2593	50	0	0.1	0.083	14.97	16.00	1.268	0.105	/
LTE B41	Ant.2	Left side	10mm		40620	2593	50	0	0.18	0.049	14.97	16.00	1.268	0.062	/
LTE B41	Ant.2	Right side	10mm		40620	2593	50	0	0.03	0.030	14.97	16.00	1.268	0.038	/
LTE B41	Ant.2	Top side	10mm		40620	2593	50	0	0.04	0.019	14.97	16.00	1.268	0.024	/
LTE B41	Ant.2	Bottom side	10mm		40620	2593	50	0	-0.1	0.079	14.97	16.00	1.268	0.100	/
LTE B41	Ant.5	Front side	10mm	QPSK-20MHz	40620	2593	1	0	0.1	0.097	17.81	18.50	1.172	0.114	/
LTE B41	Ant.5	Back side	10mm		40620	2593	1	0	0.02	0.175	17.81	18.50	1.172	0.205	/
LTE B41	Ant.5	Left side	10mm		40620	2593	1	0	0.17	0.069	17.81	18.50	1.172	0.081	/
LTE B41	Ant.5	Right side	10mm		40620	2593	1	0	-0.06	0.041	17.81	18.50	1.172	0.048	/
LTE B41	Ant.5	Top side	10mm		40620	2593	1	0	0.1	0.196	17.81	18.50	1.172	0.230	24
LTE B41	Ant.5	Bottom side	10mm		40620	2593	1	0	0.08	0.019	17.81	18.50	1.172	0.022	/
LTE B41	Ant.5	Front side	10mm		40620	2593	50	0	-0.16	0.050	16.75	17.50	1.189	0.059	/
LTE B41	Ant.5	Back side	10mm		40620	2593	50	0	-0.13	0.089	16.75	17.50	1.189	0.106	/
LTE B41	Ant.5	Left side	10mm		40620	2593	50	0	-0.01	0.038	16.75	17.50	1.189	0.045	/
LTE B41	Ant.5	Right side	10mm		40620	2593	50	0	-0.02	0.013	16.75	17.50	1.189	0.015	/
LTE B41	Ant.5	Top side	10mm		40620	2593	50	0	-0.06	0.146	16.75	17.50	1.189	0.174	/
LTE B41	Ant.5	Bottom side	10mm		40620	2593	50	0	0.19	0.011	16.75	17.50	1.189	0.013	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Head															
LTE B41	Ant.2	Right cheek	0mm	QPSK-20MHz	40521+40719	2583.1	1+99	1+0	-0.16	0.060	16.13	17.00	1.222	0.073	/
LTE B41	Ant.5	Right cheek	0mm	QPSK-20MHz	40521+40719	2583.1	1+99	1+0	0.12	0.311	17.74	18.50	1.191	0.370	/
Body-worn&Hotspot															
LTE B41	Ant.2	Back side	10mm	QPSK-20MHz	40521+40719	2583.1	1+99	1+0	-0.05	0.102	16.13	17.00	1.222	0.125	/
LTE B41	Ant.5	Top side	10mm	QPSK-20MHz	40521+40719	2583.1	1+99	1+0	0.12	0.188	17.74	18.50	1.191	0.224	/

10.13 LTE Band 42

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B42	Ant.0	Left cheek	0mm	QPSK-20MHz	42590	3500	1	0	0.02	0.414	20.46	21.00	1.132	0.469	/
LTE B42	Ant.0	Left tilt	0mm		42590	3500	1	0	0.14	0.469	20.46	21.00	1.132	0.531	25
LTE B42	Ant.0	Right cheek	0mm		42590	3500	1	0	0.1	0.119	20.46	21.00	1.132	0.135	/
LTE B42	Ant.0	Right tilt	0mm		42590	3500	1	0	0.08	0.136	20.46	21.00	1.132	0.154	/
LTE B42	Ant.0	Left cheek	0mm		42590	3500	50	0	0.02	0.338	19.33	20.00	1.167	0.394	/
LTE B42	Ant.0	Left tilt	0mm		42590	3500	50	0	-0.09	0.398	19.33	20.00	1.167	0.464	/
LTE B42	Ant.0	Right cheek	0mm		42590	3500	50	0	-0.13	0.116	19.33	20.00	1.167	0.135	/
LTE B42	Ant.0	Right tilt	0mm		42590	3500	50	0	-0.09	0.132	19.33	20.00	1.167	0.154	/
LTE B42	Ant.1	Left cheek	0mm	QPSK-20MHz	42590	3500	1	0	0.02	0.049	19.27	20.00	1.183	0.058	/
LTE B42	Ant.1	Left tilt	0mm		42590	3500	1	0	0.12	0.036	19.27	20.00	1.183	0.043	/
LTE B42	Ant.1	Right cheek	0mm		42590	3500	1	0	0.02	0.166	19.27	20.00	1.183	0.196	/
LTE B42	Ant.1	Right tilt	0mm		42590	3500	1	0	-0.16	0.133	19.27	20.00	1.183	0.157	/
LTE B42	Ant.1	Left cheek	0mm		42590	3500	50	0	-0.03	0.040	18.26	19.00	1.186	0.047	/
LTE B42	Ant.1	Left tilt	0mm		42590	3500	50	0	-0.02	0.047	18.26	19.00	1.186	0.056	/
LTE B42	Ant.1	Right cheek	0mm		42590	3500	50	0	-0.19	0.161	18.26	19.00	1.186	0.191	/
LTE B42	Ant.1	Right tilt	0mm		42590	3500	50	0	0.08	0.129	18.26	19.00	1.186	0.153	/
LTE B42	Ant.4	Left cheek	0mm	QPSK-20MHz	42590	3500	1	0	-0.18	0.036	15.81	16.50	1.172	0.042	/
LTE B42	Ant.4	Left tilt	0mm		42590	3500	1	0	0.08	0.037	15.81	16.50	1.172	0.043	/
LTE B42	Ant.4	Right cheek	0mm		42590	3500	1	0	-0.13	0.170	15.81	16.50	1.172	0.199	/
LTE B42	Ant.4	Right tilt	0mm		42590	3500	1	0	-0.05	0.144	15.81	16.50	1.172	0.169	/
LTE B42	Ant.4	Left cheek	0mm		42590	3500	50	0	-0.04	0.037	14.71	15.50	1.199	0.044	/
LTE B42	Ant.4	Left tilt	0mm		42590	3500	50	0	-0.19	0.041	14.71	15.50	1.199	0.049	/
LTE B42	Ant.4	Right cheek	0mm		42590	3500	50	0	0.1	0.165	14.71	15.50	1.199	0.198	/
LTE B42	Ant.4	Right tilt	0mm		42590	3500	50	0	0.18	0.140	14.71	15.50	1.199	0.168	/
LTE B42	Ant.6	Left cheek	0mm	QPSK-20MHz	42590	3500	1	0	-0.03	0.096	16.75	17.50	1.189	0.114	/
LTE B42	Ant.6	Left tilt	0mm		42590	3500	1	0	0.11	0.089	16.75	17.50	1.189	0.106	/
LTE B42	Ant.6	Right cheek	0mm		42590	3500	1	0	0.03	0.174	16.75	17.50	1.189	0.207	/
LTE B42	Ant.6	Right tilt	0mm		42590	3500	1	0	-0.14	0.136	16.75	17.50	1.189	0.162	/
LTE B42	Ant.6	Left cheek	0mm		42590	3500	50	0	0.19	0.079	15.78	16.50	1.180	0.093	/
LTE B42	Ant.6	Left tilt	0mm		42590	3500	50	0	0.18	0.067	15.78	16.50	1.180	0.079	/
LTE B42	Ant.6	Right cheek	0mm		42590	3500	50	0	0.18	0.169	15.78	16.50	1.180	0.199	/
LTE B42	Ant.6	Right tilt	0mm		42590	3500	50	0	-0.09	0.132	15.78	16.50	1.180	0.156	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Body-worn&Hotspot															
LTE B42	Ant.0	Front side	10mm	QPSK-20MHz	42590	3500	1	0	0.08	0.132	20.46	21.00	1.132	0.149	/
LTE B42	Ant.0	Back side	10mm		42590	3500	1	0	0.02	0.440	20.46	21.00	1.132	0.498	/
LTE B42	Ant.0	Left side	10mm		42590	3500	1	0	0.11	0.071	20.46	21.00	1.132	0.080	/
LTE B42	Ant.0	Right side	10mm		42590	3500	1	0	-0.1	0.534	20.46	21.00	1.132	0.605	26
LTE B42	Ant.0	Top side	10mm		42590	3500	1	0	0.15	0.369	20.46	21.00	1.132	0.418	/
LTE B42	Ant.0	Bottom side	10mm		42590	3500	1	0	-0.15	0.044	20.46	21.00	1.132	0.050	/
LTE B42	Ant.0	Front side	10mm		42590	3500	50	0	-0.1	0.108	19.33	20.00	1.167	0.126	/
LTE B42	Ant.0	Back side	10mm		42590	3500	50	0	-0.17	0.386	19.33	20.00	1.167	0.450	/
LTE B42	Ant.0	Left side	10mm		42590	3500	50	0	-0.1	0.035	19.33	20.00	1.167	0.041	/
LTE B42	Ant.0	Right side	10mm		42590	3500	50	0	-0.16	0.374	19.33	20.00	1.167	0.436	/
LTE B42	Ant.0	Top side	10mm	QPSK-20MHz	42590	3500	50	0	0.03	0.281	19.33	20.00	1.167	0.328	/
LTE B42	Ant.0	Bottom side	10mm		42590	3500	50	0	-0.08	0.033	19.33	20.00	1.167	0.039	/
LTE B42	Ant.1	Front side	10mm		42590	3500	1	0	-0.04	0.048	19.27	20.00	1.183	0.057	/
LTE B42	Ant.1	Back side	10mm		42590	3500	1	0	-0.06	0.076	19.27	20.00	1.183	0.090	/
LTE B42	Ant.1	Left side	10mm		42590	3500	1	0	0.11	0.063	19.27	20.00	1.183	0.075	/
LTE B42	Ant.1	Right side	10mm		42590	3500	1	0	-0.07	0.033	19.27	20.00	1.183	0.039	/
LTE B42	Ant.1	Top side	10mm		42590	3500	1	0	0.11	0.044	19.27	20.00	1.183	0.052	/
LTE B42	Ant.1	Bottom side	10mm		42590	3500	1	0	0.19	0.039	19.27	20.00	1.183	0.046	/
LTE B42	Ant.1	Front side	10mm		42590	3500	50	0	-0.08	0.041	18.26	19.00	1.186	0.049	/
LTE B42	Ant.1	Back side	10mm		42590	3500	50	0	-0.09	0.071	18.26	19.00	1.186	0.084	/
LTE B42	Ant.1	Left side	10mm	QPSK-20MHz	42590	3500	50	0	-0.19	0.060	18.26	19.00	1.186	0.071	/
LTE B42	Ant.1	Right side	10mm		42590	3500	50	0	-0.03	0.031	18.26	19.00	1.186	0.037	/
LTE B42	Ant.1	Top side	10mm		42590	3500	50	0	0.17	0.040	18.26	19.00	1.186	0.047	/
LTE B42	Ant.1	Bottom side	10mm		42590	3500	50	0	-0.11	0.042	18.26	19.00	1.186	0.050	/
LTE B42	Ant.4	Front side	10mm		42590	3500	1	0	0.12	0.055	15.81	16.50	1.172	0.064	/
LTE B42	Ant.4	Back side	10mm		42590	3500	1	0	-0.03	0.034	15.81	16.50	1.172	0.040	/
LTE B42	Ant.4	Left side	10mm		42590	3500	1	0	0.06	0.039	15.81	16.50	1.172	0.046	/
LTE B42	Ant.4	Right side	10mm		42590	3500	1	0	0.11	0.029	15.81	16.50	1.172	0.034	/
LTE B42	Ant.4	Top side	10mm		42590	3500	1	0	0.06	0.037	15.81	16.50	1.172	0.043	/
LTE B42	Ant.4	Bottom side	10mm		42590	3500	1	0	-0.11	0.028	15.81	16.50	1.172	0.033	/
LTE B42	Ant.4	Front side	10mm	QPSK-20MHz	42590	3500	50	0	-0.13	0.050	14.71	15.50	1.199	0.060	/
LTE B42	Ant.4	Back side	10mm		42590	3500	50	0	-0.04	0.033	14.71	15.50	1.199	0.040	/
LTE B42	Ant.4	Left side	10mm		42590	3500	50	0	0.11	0.038	14.71	15.50	1.199	0.046	/
LTE B42	Ant.4	Right side	10mm		42590	3500	50	0	0.04	0.027	14.71	15.50	1.199	0.032	/
LTE B42	Ant.4	Top side	10mm		42590	3500	50	0	-0.01	0.032	14.71	15.50	1.199	0.038	/
LTE B42	Ant.4	Bottom side	10mm		42590	3500	50	0	-0.15	0.025	14.71	15.50	1.199	0.030	/
LTE B42	Ant.6	Front side	10mm		42590	3500	1	0	-0.16	0.041	16.75	17.50	1.189	0.049	/
LTE B42	Ant.6	Back side	10mm		42590	3500	1	0	-0.18	0.047	16.75	17.50	1.189	0.056	/
LTE B42	Ant.6	Left side	10mm		42590	3500	1	0	-0.05	0.045	16.75	17.50	1.189	0.053	/
LTE B42	Ant.6	Right side	10mm		42590	3500	1	0	0.18	0.059	16.75	17.50	1.189	0.070	/
LTE B42	Ant.6	Top side	10mm	QPSK-20MHz	42590	3500	1	0	-0.09	0.047	16.75	17.50	1.189	0.056	/
LTE B42	Ant.6	Bottom side	10mm		42590	3500	1	0	-0.18	0.032	16.75	17.50	1.189	0.038	/
LTE B42	Ant.6	Front side	10mm		42590	3500	50	0	-0.12	0.033	15.78	16.50	1.180	0.039	/
LTE B42	Ant.6	Back side	10mm		42590	3500	50	0	0.15	0.037	15.78	16.50	1.180	0.044	/
LTE B42	Ant.6	Left side	10mm		42590	3500	50	0	-0.15	0.040	15.78	16.50	1.180	0.047	/
LTE B42	Ant.6	Right side	10mm		42590	3500	50	0	0.12	0.056	15.78	16.50	1.180	0.066	/
LTE B42	Ant.6	Top side	10mm		42590	3500	50	0	-0.08	0.040	15.78	16.50	1.180	0.047	/
LTE B42	Ant.6	Bottom side	10mm		42590	3500	50	0	-0.08	0.029	15.78	16.50	1.180	0.034	/

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Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B43	Ant.0	Left cheek	0mm	QPSK-20MHz	44590	3700	1	0	0.12	0.413	20.26	20.50	1.057	0.436	/
LTE B43	Ant.0	Left tilt	0mm		44590	3700	1	0	-0.15	0.581	20.26	20.50	1.057	0.614	27
LTE B43	Ant.0	Right cheek	0mm		44590	3700	1	0	0.09	0.089	20.26	20.50	1.057	0.094	/
LTE B43	Ant.0	Right tilt	0mm		44590	3700	1	0	-0.03	0.161	20.26	20.50	1.057	0.170	/
LTE B43	Ant.0	Left cheek	0mm		44590	3700	50	0	0.12	0.337	19.22	19.50	1.067	0.359	/
LTE B43	Ant.0	Left tilt	0mm		44590	3700	50	0	-0.11	0.410	19.22	19.50	1.067	0.437	/
LTE B43	Ant.0	Right cheek	0mm		44590	3700	50	0	-0.11	0.087	19.22	19.50	1.067	0.093	/
LTE B43	Ant.0	Right tilt	0mm		44590	3700	50	0	0.1	0.157	19.22	19.50	1.067	0.167	/
LTE B43	Ant.1	Left cheek	0mm	QPSK-20MHz	44590	3700	1	0	-0.18	0.174	18.93	19.50	1.140	0.198	/
LTE B43	Ant.1	Left tilt	0mm		44590	3700	1	0	0.14	0.088	18.93	19.50	1.140	0.100	/
LTE B43	Ant.1	Right cheek	0mm		44590	3700	1	0	-0.02	0.125	18.93	19.50	1.140	0.143	/
LTE B43	Ant.1	Right tilt	0mm		44590	3700	1	0	-0.17	0.156	18.93	19.50	1.140	0.178	/
LTE B43	Ant.1	Left cheek	0mm		44590	3700	50	0	-0.04	0.140	17.83	18.50	1.167	0.163	/
LTE B43	Ant.1	Left tilt	0mm		44590	3700	50	0	0.18	0.078	17.83	18.50	1.167	0.091	/
LTE B43	Ant.1	Right cheek	0mm		44590	3700	50	0	-0.16	0.122	17.83	18.50	1.167	0.142	/
LTE B43	Ant.1	Right tilt	0mm		44590	3700	50	0	-0.14	0.152	17.83	18.50	1.167	0.177	/
LTE B43	Ant.4	Left cheek	0mm	QPSK-20MHz	44590	3700	1	0	-0.08	0.031	14.65	15.50	1.216	0.038	/
LTE B43	Ant.4	Left tilt	0mm		44590	3700	1	0	-0.12	0.026	14.65	15.50	1.216	0.032	/
LTE B43	Ant.4	Right cheek	0mm		44590	3700	1	0	0.04	0.132	14.65	15.50	1.216	0.161	/
LTE B43	Ant.4	Right tilt	0mm		44590	3700	1	0	0.16	0.153	14.65	15.50	1.216	0.186	/
LTE B43	Ant.4	Left cheek	0mm		44590	3700	50	0	0.18	0.028	13.47	14.50	1.268	0.035	/
LTE B43	Ant.4	Left tilt	0mm		44590	3700	50	0	0.17	0.022	13.47	14.50	1.268	0.028	/
LTE B43	Ant.4	Right cheek	0mm		44590	3700	50	0	-0.07	0.128	13.47	14.50	1.268	0.162	/
LTE B43	Ant.4	Right tilt	0mm		44590	3700	50	0	-0.18	0.149	13.47	14.50	1.268	0.189	/
LTE B43	Ant.6	Left cheek	0mm	QPSK-20MHz	44590	3700	1	0	0.03	0.132	15.61	16.50	1.227	0.162	/
LTE B43	Ant.6	Left tilt	0mm		44590	3700	1	0	-0.17	0.139	15.61	16.50	1.227	0.171	/
LTE B43	Ant.6	Right cheek	0mm		44590	3700	1	0	0.1	0.085	15.61	16.50	1.227	0.104	/
LTE B43	Ant.6	Right tilt	0mm		44590	3700	1	0	-0.17	0.161	15.61	16.50	1.227	0.198	/
LTE B43	Ant.6	Left cheek	0mm		44590	3700	50	0	-0.1	0.108	14.62	15.50	1.225	0.132	/
LTE B43	Ant.6	Left tilt	0mm		44590	3700	50	0	-0.06	0.106	14.62	15.50	1.225	0.130	/
LTE B43	Ant.6	Right cheek	0mm		44590	3700	50	0	-0.13	0.083	14.62	15.50	1.225	0.102	/
LTE B43	Ant.6	Right tilt	0mm		44590	3700	50	0	-0.13	0.157	14.62	15.50	1.225	0.192	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Body-worn&Hotspot															
LTE B43	Ant.0	Front side	10mm	QPSK-20MHz	44590	3700	1	0	-0.1	0.132	20.26	20.50	1.057	0.140	/
LTE B43	Ant.0	Back side	10mm		44590	3700	1	0	0.08	0.429	20.26	20.50	1.057	0.453	28
LTE B43	Ant.0	Left side	10mm		44590	3700	1	0	-0.1	0.041	20.26	20.50	1.057	0.043	/
LTE B43	Ant.0	Right side	10mm		44590	3700	1	0	-0.14	0.317	20.26	20.50	1.057	0.335	/
LTE B43	Ant.0	Top side	10mm		44590	3700	1	0	-0.17	0.366	20.26	20.50	1.057	0.387	/
LTE B43	Ant.0	Bottom side	10mm		44590	3700	1	0	-0.1	0.028	20.26	20.50	1.057	0.030	/
LTE B43	Ant.0	Front side	10mm		44590	3700	50	0	-0.14	0.109	19.22	19.50	1.067	0.116	/
LTE B43	Ant.0	Back side	10mm		44590	3700	50	0	-0.05	0.332	19.22	19.50	1.067	0.354	/
LTE B43	Ant.0	Left side	10mm		44590	3700	50	0	-0.14	0.030	19.22	19.50	1.067	0.032	/
LTE B43	Ant.0	Right side	10mm		44590	3700	50	0	-0.1	0.271	19.22	19.50	1.067	0.289	/
LTE B43	Ant.0	Top side	10mm	QPSK-20MHz	44590	3700	50	0	-0.02	0.318	19.22	19.50	1.067	0.339	/
LTE B43	Ant.0	Bottom side	10mm		44590	3700	50	0	0.06	0.021	19.22	19.50	1.067	0.022	/
LTE B43	Ant.1	Front side	10mm		44590	3700	1	0	0.16	0.038	18.93	19.50	1.140	0.043	/
LTE B43	Ant.1	Back side	10mm		44590	3700	1	0	0.08	0.080	18.93	19.50	1.140	0.091	/
LTE B43	Ant.1	Left side	10mm		44590	3700	1	0	0.18	0.038	18.93	19.50	1.140	0.043	/
LTE B43	Ant.1	Right side	10mm		44590	3700	1	0	0.18	0.120	18.93	19.50	1.140	0.137	/
LTE B43	Ant.1	Top side	10mm		44590	3700	1	0	0.06	0.065	18.93	19.50	1.140	0.074	/
LTE B43	Ant.1	Bottom side	10mm		44590	3700	1	0	-0.15	0.025	18.93	19.50	1.140	0.029	/
LTE B43	Ant.1	Front side	10mm		44590	3700	50	0	-0.01	0.050	17.83	18.50	1.167	0.058	/
LTE B43	Ant.1	Back side	10mm		44590	3700	50	0	-0.14	0.067	17.83	18.50	1.167	0.078	/
LTE B43	Ant.1	Left side	10mm	QPSK-20MHz	44590	3700	50	0	0.14	0.032	17.83	18.50	1.167	0.037	/
LTE B43	Ant.1	Right side	10mm		44590	3700	50	0	0.13	0.095	17.83	18.50	1.167	0.111	/
LTE B43	Ant.1	Top side	10mm		44590	3700	50	0	-0.12	0.082	17.83	18.50	1.167	0.096	/
LTE B43	Ant.1	Bottom side	10mm		44590	3700	50	0	-0.11	0.033	17.83	18.50	1.167	0.039	/
LTE B43	Ant.4	Front side	10mm		44590	3700	1	0	-0.09	0.052	14.65	15.50	1.216	0.063	/
LTE B43	Ant.4	Back side	10mm		44590	3700	1	0	0.18	0.059	14.65	15.50	1.216	0.072	/
LTE B43	Ant.4	Left side	10mm		44590	3700	1	0	-0.07	0.048	14.65	15.50	1.216	0.058	/
LTE B43	Ant.4	Right side	10mm		44590	3700	1	0	0.07	0.033	14.65	15.50	1.216	0.040	/
LTE B43	Ant.4	Top side	10mm		44590	3700	1	0	-0.15	0.035	14.65	15.50	1.216	0.043	/
LTE B43	Ant.4	Bottom side	10mm		44590	3700	1	0	0.1	0.025	14.65	15.50	1.216	0.030	/
LTE B43	Ant.4	Front side	10mm	QPSK-20MHz	44590	3700	50	0	0.02	0.043	13.47	14.50	1.268	0.055	/
LTE B43	Ant.4	Back side	10mm		44590	3700	50	0	-0.07	0.051	13.47	14.50	1.268	0.065	/
LTE B43	Ant.4	Left side	10mm		44590	3700	50	0	-0.17	0.044	13.47	14.50	1.268	0.056	/
LTE B43	Ant.4	Right side	10mm		44590	3700	50	0	-0.05	0.031	13.47	14.50	1.268	0.039	/
LTE B43	Ant.4	Top side	10mm		44590	3700	50	0	0.15	0.034	13.47	14.50	1.268	0.043	/
LTE B43	Ant.4	Bottom side	10mm		44590	3700	50	0	-0.19	0.022	13.47	14.50	1.268	0.028	/
LTE B43	Ant.6	Front side	10mm		44590	3700	1	0	-0.07	0.030	15.61	16.50	1.227	0.037	/
LTE B43	Ant.6	Back side	10mm		44590	3700	1	0	-0.07	0.087	15.61	16.50	1.227	0.107	/
LTE B43	Ant.6	Left side	10mm		44590	3700	1	0	0.06	0.086	15.61	16.50	1.227	0.106	/
LTE B43	Ant.6	Right side	10mm		44590	3700	1	0	-0.02	0.046	15.61	16.50	1.227	0.056	/
LTE B43	Ant.6	Top side	10mm	QPSK-20MHz	44590	3700	1	0	-0.03	0.070	15.61	16.50	1.227	0.086	/
LTE B43	Ant.6	Bottom side	10mm		44590	3700	1	0	-0.09	0.035	15.61	16.50	1.227	0.043	/
LTE B43	Ant.6	Front side	10mm		44590	3700	50	0	-0.03	0.029	14.62	15.50	1.225	0.036	/
LTE B43	Ant.6	Back side	10mm		44590	3700	50	0	-0.07	0.046	14.62	15.50	1.225	0.056	/
LTE B43	Ant.6	Left side	10mm		44590	3700	50	0	-0.13	0.040	14.62	15.50	1.225	0.049	/
LTE B43	Ant.6	Right side	10mm		44590	3700	50	0	0.07	0.023	14.62	15.50	1.225	0.028	/
LTE B43	Ant.6	Top side	10mm		44590	3700	50	0	0.06	0.086	14.62	15.50	1.225	0.105	/
LTE B43	Ant.6	Bottom side	10mm		44590	3700	50	0	0.14	0.033	14.62	15.50	1.225	0.040	/

10.15 LTE Band 48

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head														
LTE B48	Ant.0	Left cheek	0mm	QPSK-20MHz	55990	3625	1	0	-0.14	0.449	20.06	21.00	1.242	0.558	/
LTE B48	Ant.0	Left tilt	0mm		55990	3625	1	0	-0.08	0.567	20.06	21.00	1.242	0.704	29
LTE B48	Ant.0	Right cheek	0mm		55990	3625	1	0	-0.1	0.134	20.06	21.00	1.242	0.166	/
LTE B48	Ant.0	Right tilt	0mm		55990	3625	1	0	0.04	0.152	20.06	21.00	1.242	0.189	/
LTE B48	Ant.0	Left cheek	0mm		55990	3625	50	0	0.18	0.350	18.91	20.00	1.285	0.450	/
LTE B48	Ant.0	Left tilt	0mm		55990	3625	50	0	0.1	0.444	18.91	20.00	1.285	0.571	/
LTE B48	Ant.0	Right cheek	0mm		55990	3625	50	0	0.02	0.130	18.91	20.00	1.285	0.167	/
LTE B48	Ant.0	Right tilt	0mm		55990	3625	50	0	0.18	0.148	18.91	20.00	1.285	0.190	/
LTE B48	Ant.1	Left cheek	0mm	QPSK-20MHz	55990	3625	1	0	0.11	0.151	18.60	19.50	1.230	0.186	/
LTE B48	Ant.1	Left tilt	0mm		55990	3625	1	0	-0.02	0.056	18.60	19.50	1.230	0.069	/
LTE B48	Ant.1	Right cheek	0mm		55990	3625	1	0	0.14	0.131	18.60	19.50	1.230	0.161	/
LTE B48	Ant.1	Right tilt	0mm		55990	3625	1	0	-0.19	0.152	18.60	19.50	1.230	0.187	/
LTE B48	Ant.1	Left cheek	0mm		55990	3625	50	0	-0.12	0.116	17.53	18.50	1.250	0.145	/
LTE B48	Ant.1	Left tilt	0mm		55990	3625	50	0	0.07	0.040	17.53	18.50	1.250	0.050	/
LTE B48	Ant.1	Right cheek	0mm		55990	3625	50	0	0.16	0.127	17.53	18.50	1.250	0.159	/
LTE B48	Ant.1	Right tilt	0mm		55990	3625	50	0	-0.19	0.148	17.53	18.50	1.250	0.185	/
LTE B48	Ant.4	Left cheek	0mm	QPSK-20MHz	55990	3625	1	0	-0.1	0.042	14.58	15.50	1.236	0.052	/
LTE B48	Ant.4	Left tilt	0mm		55990	3625	1	0	0.17	0.030	14.58	15.50	1.236	0.037	/
LTE B48	Ant.4	Right cheek	0mm		55990	3625	1	0	0.19	0.133	14.58	15.50	1.236	0.164	/
LTE B48	Ant.4	Right tilt	0mm		55990	3625	1	0	0.08	0.158	14.58	15.50	1.236	0.195	/
LTE B48	Ant.4	Left cheek	0mm		55990	3625	50	0	-0.07	0.038	13.58	14.50	1.236	0.047	/
LTE B48	Ant.4	Left tilt	0mm		55990	3625	50	0	-0.16	0.027	13.58	14.50	1.236	0.033	/
LTE B48	Ant.4	Right cheek	0mm		55990	3625	50	0	-0.19	0.129	13.58	14.50	1.236	0.159	/
LTE B48	Ant.4	Right tilt	0mm		55990	3625	50	0	0.05	0.154	13.58	14.50	1.236	0.190	/
LTE B48	Ant.6	Left cheek	0mm	QPSK-20MHz	55990	3625	1	0	-0.18	0.137	15.55	16.50	1.245	0.170	/
LTE B48	Ant.6	Left tilt	0mm		55990	3625	1	0	0.01	0.153	15.55	16.50	1.245	0.190	/
LTE B48	Ant.6	Right cheek	0mm		55990	3625	1	0	0.01	0.473	15.55	16.50	1.245	0.589	/
LTE B48	Ant.6	Right tilt	0mm		55990	3625	1	0	0.06	0.150	15.55	16.50	1.245	0.187	/
LTE B48	Ant.6	Left cheek	0mm		55990	3625	50	0	0.18	0.124	14.56	15.50	1.242	0.154	/
LTE B48	Ant.6	Left tilt	0mm		55990	3625	50	0	-0.1	0.125	14.56	15.50	1.242	0.155	/
LTE B48	Ant.6	Right cheek	0mm		55990	3625	50	0	0.04	0.482	14.56	15.50	1.242	0.598	/
LTE B48	Ant.6	Right tilt	0mm		55990	3625	50	0	-0.19	0.146	14.56	15.50	1.242	0.181	/

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. no.
Body-worn&Hotspot															
LTE B48	Ant.0	Front side	10mm	QPSK-20MHz	55990	3625	1	0	0.01	0.150	20.06	21.00	1.242	0.186	/
LTE B48	Ant.0	Back side	10mm		55990	3625	1	0	0.15	0.486	20.06	21.00	1.242	0.603	30
LTE B48	Ant.0	Left side	10mm		55990	3625	1	0	0.09	0.037	20.06	21.00	1.242	0.046	/
LTE B48	Ant.0	Right side	10mm		55990	3625	1	0	0.05	0.381	20.06	21.00	1.242	0.473	/
LTE B48	Ant.0	Top side	10mm		55990	3625	1	0	0.11	0.401	20.06	21.00	1.242	0.498	/
LTE B48	Ant.0	Bottom side	10mm		55990	3625	1	0	0.02	0.028	20.06	21.00	1.242	0.035	/
LTE B48	Ant.0	Front side	10mm		55990	3625	50	0	0.02	0.115	18.91	20.00	1.285	0.148	/
LTE B48	Ant.0	Back side	10mm		55990	3625	50	0	-0.07	0.376	18.91	20.00	1.285	0.483	/
LTE B48	Ant.0	Left side	10mm		55990	3625	50	0	-0.13	0.029	18.91	20.00	1.285	0.037	/
LTE B48	Ant.0	Right side	10mm		55990	3625	50	0	0.12	0.290	18.91	20.00	1.285	0.373	/
LTE B48	Ant.0	Top side	10mm		55990	3625	50	0	-0.15	0.317	18.91	20.00	1.285	0.407	/
LTE B48	Ant.0	Bottom side	10mm		55990	3625	50	0	0.12	0.036	18.91	20.00	1.285	0.046	/
LTE B48	Ant.1	Front side	10mm	QPSK-20MHz	55990	3625	1	0	-0.18	0.041	18.60	19.50	1.230	0.050	/
LTE B48	Ant.1	Back side	10mm		55990	3625	1	0	-0.07	0.056	18.60	19.50	1.230	0.069	/
LTE B48	Ant.1	Left side	10mm		55990	3625	1	0	0.19	0.042	18.60	19.50	1.230	0.052	/
LTE B48	Ant.1	Right side	10mm		55990	3625	1	0	0.04	0.095	18.60	19.50	1.230	0.117	/
LTE B48	Ant.1	Top side	10mm		55990	3625	1	0	-0.11	0.035	18.60	19.50	1.230	0.043	/
LTE B48	Ant.1	Bottom side	10mm		55990	3625	1	0	0.14	0.028	18.60	19.50	1.230	0.034	/
LTE B48	Ant.1	Front side	10mm		55990	3625	50	0	0.17	0.030	17.53	18.50	1.250	0.038	/
LTE B48	Ant.1	Back side	10mm		55990	3625	50	0	0.13	0.043	17.53	18.50	1.250	0.054	/
LTE B48	Ant.1	Left side	10mm		55990	3625	50	0	-0.14	0.046	17.53	18.50	1.250	0.058	/
LTE B48	Ant.1	Right side	10mm		55990	3625	50	0	-0.01	0.083	17.53	18.50	1.250	0.104	/
LTE B48	Ant.1	Top side	10mm		55990	3625	50	0	-0.08	0.039	17.53	18.50	1.250	0.049	/
LTE B48	Ant.1	Bottom side	10mm		55990	3625	50	0	-0.16	0.026	17.53	18.50	1.250	0.033	/
LTE B48	Ant.4	Front side	10mm	QPSK-20MHz	55990	3625	1	0	-0.17	0.041	14.58	15.50	1.236	0.051	/
LTE B48	Ant.4	Back side	10mm		55990	3625	1	0	0.17	0.046	14.58	15.50	1.236	0.057	/
LTE B48	Ant.4	Left side	10mm		55990	3625	1	0	0.08	0.030	14.58	15.50	1.236	0.037	/
LTE B48	Ant.4	Right side	10mm		55990	3625	1	0	-0.07	0.035	14.58	15.50	1.236	0.043	/
LTE B48	Ant.4	Top side	10mm		55990	3625	1	0	0.07	0.034	14.58	15.50	1.236	0.042	/
LTE B48	Ant.4	Bottom side	10mm		55990	3625	1	0	-0.11	0.032	14.58	15.50	1.236	0.040	/
LTE B48	Ant.4	Front side	10mm		55990	3625	50	0	0.19	0.036	13.58	14.50	1.236	0.044	/
LTE B48	Ant.4	Back side	10mm		55990	3625	50	0	-0.02	0.038	13.58	14.50	1.236	0.047	/
LTE B48	Ant.4	Left side	10mm		55990	3625	50	0	0.13	0.034	13.58	14.50	1.236	0.042	/
LTE B48	Ant.4	Right side	10mm		55990	3625	50	0	0.13	0.020	13.58	14.50	1.236	0.025	/
LTE B48	Ant.4	Top side	10mm		55990	3625	50	0	0.15	0.045	13.58	14.50	1.236	0.056	/
LTE B48	Ant.4	Bottom side	10mm		55990	3625	50	0	0.14	0.030	13.58	14.50	1.236	0.037	/
LTE B48	Ant.6	Front side	10mm	QPSK-20MHz	55990	3625	1	0	0.05	0.038	15.55	16.50	1.245	0.047	/
LTE B48	Ant.6	Back side	10mm		55990	3625	1	0	0.05	0.035	15.55	16.50	1.245	0.044	/
LTE B48	Ant.6	Left side	10mm		55990	3625	1	0	-0.15	0.030	15.55	16.50	1.245	0.037	/
LTE B48	Ant.6	Right side	10mm		55990	3625	1	0	0.03	0.026	15.55	16.50	1.245	0.032	/
LTE B48	Ant.6	Top side	10mm		55990	3625	1	0	0.06	0.059	15.55	16.50	1.245	0.073	/
LTE B48	Ant.6	Bottom side	10mm		55990	3625	1	0	-0.04	0.020	15.55	16.50	1.245	0.025	/
LTE B48	Ant.6	Front side	10mm		55990	3625	50	0	-0.15	0.035	14.56	15.50	1.242	0.043	/
LTE B48	Ant.6	Back side	10mm		55990	3625	50	0	-0.02	0.034	14.56	15.50	1.242	0.042	/
LTE B48	Ant.6	Left side	10mm		55990	3625	50	0	0.11	0.028	14.56	15.50	1.242	0.035	/
LTE B48	Ant.6	Right side	10mm		55990	3625	50	0	0.03	0.035	14.56	15.50	1.242	0.043	/
LTE B48	Ant.6	Top side	10mm		55990	3625	50	0	0.08	0.047	14.56	15.50	1.242	0.058	/
LTE B48	Ant.6	Bottom side	10mm		55990	3625	50	0	0.06	0.018	14.56	15.50	1.242	0.022	/

10.16 NR n5

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head															
NR n5 SA	Ant.2	Left cheek	0mm	(BW 20MHz) DFT-s-OFDM BPSK	DFT-15kHz	167300	836.5	1	1	-0.02	0.065	22.96	24.00	1.271	0.083	/
NR n5 SA	Ant.2	Left tilt	0mm			167300	836.5	1	1	-0.1	0.033	22.96	24.00	1.271	0.042	/
NR n5 SA	Ant.2	Right cheek	0mm			167300	836.5	1	1	-0.18	0.067	22.96	24.00	1.271	0.085	/
NR n5 SA	Ant.2	Right tilt	0mm			167300	836.5	1	1	-0.04	0.039	22.96	24.00	1.271	0.050	/
NR n5 SA	Ant.2	Left cheek	0mm			167300	836.5	50	28	-0.04	0.053	22.92	24.00	1.282	0.068	/
NR n5 SA	Ant.2	Left tilt	0mm			167300	836.5	50	28	-0.01	0.031	22.92	24.00	1.282	0.040	/
NR n5 SA	Ant.2	Right cheek	0mm			167300	836.5	50	28	0.14	0.065	22.92	24.00	1.282	0.083	/
NR n5 SA	Ant.2	Right tilt	0mm			167300	836.5	50	28	-0.08	0.038	22.92	24.00	1.282	0.049	/
NR n5 SA	Ant.5	Left cheek	0mm	(BW 20MHz) DFT-s-OFDM BPSK	DFT-15kHz	167300	836.5	1	1	0.12	0.594	23.50	24.50	1.259	0.748	/
NR n5 SA	Ant.5	Left tilt	0mm			167300	836.5	1	1	0.04	0.455	23.50	24.50	1.259	0.573	/
NR n5 SA	Ant.5	Right cheek	0mm			167300	836.5	1	1	-0.01	0.704	23.50	24.50	1.259	0.886	/
NR n5 SA	Ant.5	Right tilt	0mm			167300	836.5	1	1	0.07	0.570	23.50	24.50	1.259	0.718	/
NR n5 SA	Ant.5	Right cheek	0mm			166800	834	1	1	-0.05	0.724	23.48	24.50	1.265	0.916	/
NR n5 SA	Ant.5	Right cheek	0mm			167800	839	1	1	0.13	0.711	23.35	24.50	1.303	0.927	31
NR n5 SA	Ant.5	Left cheek	0mm			167300	836.5	50	28	0.15	0.604	23.46	24.50	1.271	0.767	/
NR n5 SA	Ant.5	Left tilt	0mm			167300	836.5	50	28	-0.05	0.565	23.46	24.50	1.271	0.718	/
NR n5 SA	Ant.5	Right cheek	0mm			167300	836.5	50	28	0.14	0.627	23.46	24.50	1.271	0.797	/
NR n5 SA	Ant.5	Right tilt	0mm			167300	836.5	50	28	0.05	0.508	23.46	24.50	1.271	0.645	/
NR n5 SA	Ant.5	Right cheek	0mm			166800	834	1	1	-0.02	0.645	23.48	24.50	1.265	0.816	/
NR n5 SA	Ant.5	Right cheek	0mm			167800	839	1	1	0.18	0.633	23.35	24.50	1.303	0.825	/
Body-worn&Hotspot																
NR n5 SA	Ant.2	Front side	10mm	(BW 20MHz) DFT-s-OFDM BPSK	DFT-15kHz	167300	836.5	1	1	0.07	0.053	22.96	24.00	1.271	0.067	/
NR n5 SA	Ant.2	Back side	10mm			167300	836.5	1	1	-0.09	0.098	22.96	24.00	1.271	0.125	/
NR n5 SA	Ant.2	Left side	10mm			167300	836.5	1	1	0.02	0.032	22.96	24.00	1.271	0.041	/
NR n5 SA	Ant.2	Right side	10mm			167300	836.5	1	1	-0.12	0.050	22.96	24.00	1.271	0.064	/
NR n5 SA	Ant.2	Top side	10mm			167300	836.5	1	1	0.03	0.030	22.96	24.00	1.271	0.038	/
NR n5 SA	Ant.2	Bottom side	10mm			167300	836.5	1	1	-0.18	0.056	22.96	24.00	1.271	0.071	/
NR n5 SA	Ant.2	Front side	10mm			167300	836.5	50	28	-0.04	0.056	22.92	24.00	1.282	0.072	/
NR n5 SA	Ant.2	Back side	10mm			167300	836.5	50	28	0.18	0.098	22.92	24.00	1.282	0.126	/
NR n5 SA	Ant.2	Left side	10mm			167300	836.5	50	28	-0.13	0.032	22.92	24.00	1.282	0.041	/
NR n5 SA	Ant.2	Right side	10mm			167300	836.5	50	28	-0.07	0.063	22.92	24.00	1.282	0.081	/
NR n5 SA	Ant.2	Top side	10mm			167300	836.5	50	28	-0.14	0.030	22.92	24.00	1.282	0.038	/
NR n5 SA	Ant.2	Bottom side	10mm			167300	836.5	50	28	-0.15	0.060	22.92	24.00	1.282	0.077	/
NR n5 SA	Ant.5	Front side	10mm	(BW 20MHz) DFT-s-OFDM BPSK	DFT-15kHz	167300	836.5	1	1	0.13	0.165	23.50	24.50	1.259	0.208	/
NR n5 SA	Ant.5	Back side	10mm			167300	836.5	1	1	-0.03	0.188	23.50	24.50	1.259	0.237	/
NR n5 SA	Ant.5	Left side	10mm			167300	836.5	1	1	0.06	0.108	23.50	24.50	1.259	0.136	/
NR n5 SA	Ant.5	Right side	10mm			167300	836.5	1	1	-0.08	0.090	23.50	24.50	1.259	0.113	/
NR n5 SA	Ant.5	Top side	10mm			167300	836.5	1	1	0.05	0.201	23.50	24.50	1.259	0.253	32
NR n5 SA	Ant.5	Bottom side	10mm			167300	836.5	1	1	0.13	0.035	23.50	24.50	1.259	0.044	/
NR n5 SA	Ant.5	Front side	10mm			167300	836.5	50	28	-0.07	0.170	23.46	24.50	1.271	0.216	/
NR n5 SA	Ant.5	Back side	10mm			167300	836.5	50	28	0.11	0.169	23.46	24.50	1.271	0.215	/
NR n5 SA	Ant.5	Left side	10mm			167300	836.5	50	28	-0.16	0.126	23.46	24.50	1.271	0.160	/
NR n5 SA	Ant.5	Right side	10mm			167300	836.5	50	28	0.08	0.110	23.46	24.50	1.271	0.140	/
NR n5 SA	Ant.5	Top side	10mm			167300	836.5	50	28	-0.05	0.175	23.46	24.50	1.271	0.222	/
NR n5 SA	Ant.5	Bottom side	10mm			167300	836.5	50	28	0.12	0.032	23.46	24.50	1.271	0.041	/

10.17 NR n7

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head															
NR n7 SA	Ant.2	Left cheek	0mm	(BW 50MHz) DFT-s-OFDM BPSK	DFT-15kHz	507000	2535	1	1	-0.12	0.032	16.08	17.00	1.236	0.040	/
NR n7 SA	Ant.2	Left tilt	0mm			507000	2535	1	1	-0.12	0.028	16.08	17.00	1.236	0.035	/
NR n7 SA	Ant.2	Right cheek	0mm			507000	2535	1	1	-0.19	0.037	16.08	17.00	1.236	0.046	/
NR n7 SA	Ant.2	Right tilt	0mm			507000	2535	1	1	-0.09	0.033	16.08	17.00	1.236	0.041	/
NR n7 SA	Ant.2	Left cheek	0mm			507000	2535	135	68	-0.04	0.030	16.05	17.00	1.245	0.037	/
NR n7 SA	Ant.2	Left tilt	0mm			507000	2535	135	68	0.05	0.024	16.05	17.00	1.245	0.030	/
NR n7 SA	Ant.2	Right cheek	0mm			507000	2535	135	68	-0.11	0.036	16.05	17.00	1.245	0.045	/
NR n7 SA	Ant.2	Right tilt	0mm			507000	2535	135	68	0.17	0.032	16.05	17.00	1.245	0.040	/
NR n7 SA	Ant.5	Left cheek	0mm	(BW 50MHz) DFT-s-OFDM BPSK	DFT-15kHz	507000	2535	1	1	0.06	0.187	18.02	19.00	1.253	0.234	/
NR n7 SA	Ant.5	Left tilt	0mm			507000	2535	1	1	-0.12	0.270	18.02	19.00	1.253	0.338	/
NR n7 SA	Ant.5	Right cheek	0mm			507000	2535	1	1	-0.04	0.348	18.02	19.00	1.253	0.436	/
NR n7 SA	Ant.5	Right tilt	0mm			507000	2535	1	1	0.11	0.794	18.02	19.00	1.253	0.995	33
NR n7 SA	Ant.5	Right tilt	0mm			505000	2525	1	1	-0.04	0.771	17.93	19.00	1.279	0.986	/
NR n7 SA	Ant.5	Right tilt	0mm			509000	2545	1	1	0.11	0.765	17.90	19.00	1.288	0.986	/
NR n7 SA	Ant.5	Left cheek	0mm			507000	2535	135	68	0.03	0.266	17.87	19.00	1.297	0.345	/
NR n7 SA	Ant.5	Left tilt	0mm			507000	2535	135	68	0.07	0.370	17.87	19.00	1.297	0.480	/
NR n7 SA	Ant.5	Right cheek	0mm			507000	2535	135	68	-0.15	0.310	17.87	19.00	1.297	0.402	/
NR n7 SA	Ant.5	Right tilt	0mm			507000	2535	135	68	-0.13	0.382	17.87	19.00	1.297	0.496	/
NR n7 SA	Ant.5	Right tilt	0mm			505000	2525	135	68	-0.15	0.620	17.77	19.00	1.327	0.823	/
NR n7 SA	Ant.5	Right tilt	0mm			509000	2545	135	68	-0.13	0.626	17.78	19.00	1.324	0.829	/
Body-worn&Hotspot																
NR n7 SA	Ant.2	Front side	10mm	(BW 50MHz) DFT-s-OFDM BPSK	DFT-15kHz	507000	2535	1	1	0.11	0.039	16.08	17.00	1.236	0.048	/
NR n7 SA	Ant.2	Back side	10mm			507000	2535	1	1	0.16	0.080	16.08	17.00	1.236	0.099	/
NR n7 SA	Ant.2	Left side	10mm			507000	2535	1	1	-0.03	0.021	16.08	17.00	1.236	0.026	/
NR n7 SA	Ant.2	Right side	10mm			507000	2535	1	1	0.15	0.019	16.08	17.00	1.236	0.023	/
NR n7 SA	Ant.2	Top side	10mm			507000	2535	1	1	-0.06	0.017	16.08	17.00	1.236	0.021	/
NR n7 SA	Ant.2	Bottom side	10mm			507000	2535	1	1	0.11	0.067	16.08	17.00	1.236	0.083	/
NR n7 SA	Ant.2	Front side	10mm			507000	2535	135	68	-0.12	0.039	16.05	17.00	1.245	0.049	/
NR n7 SA	Ant.2	Back side	10mm			507000	2535	135	68	-0.08	0.071	16.05	17.00	1.245	0.088	/
NR n7 SA	Ant.2	Left side	10mm			507000	2535	135	68	0.04	0.020	16.05	17.00	1.245	0.025	/
NR n7 SA	Ant.2	Right side	10mm			507000	2535	135	68	-0.13	0.016	16.05	17.00	1.245	0.020	/
NR n7 SA	Ant.2	Top side	10mm			507000	2535	135	68	-0.03	0.015	16.05	17.00	1.245	0.019	/
NR n7 SA	Ant.2	Bottom side	10mm			507000	2535	135	68	-0.11	0.059	16.05	17.00	1.245	0.073	/
NR n7 SA	Ant.5	Front side	10mm	(BW 50MHz) DFT-s-OFDM BPSK	DFT-15kHz	507000	2535	1	1	0.08	0.131	18.02	19.00	1.253	0.164	/
NR n7 SA	Ant.5	Back side	10mm			507000	2535	1	1	0.11	0.305	18.02	19.00	1.253	0.382	/
NR n7 SA	Ant.5	Left side	10mm			507000	2535	1	1	0.09	0.081	18.02	19.00	1.253	0.102	/
NR n7 SA	Ant.5	Right side	10mm			507000	2535	1	1	0.12	0.039	18.02	19.00	1.253	0.049	/
NR n7 SA	Ant.5	Top side	10mm			507000	2535	1	1	0.09	0.319	18.02	19.00	1.253	0.400	/
NR n7 SA	Ant.5	Bottom side	10mm			507000	2535	1	1	0.13	0.029	18.02	19.00	1.253	0.036	/
NR n7 SA	Ant.5	Front side	10mm			507000	2535	135	68	0.19	0.159	17.87	19.00	1.297	0.206	/
NR n7 SA	Ant.5	Back side	10mm			507000	2535	135	68	0.06	0.311	17.87	19.00	1.297	0.403	/
NR n7 SA	Ant.5	Left side	10mm			507000	2535	135	68	-0.06	0.104	17.87	19.00	1.297	0.135	/
NR n7 SA	Ant.5	Right side	10mm			507000	2535	135	68	-0.14	0.035	17.87	19.00	1.297	0.045	/
NR n7 SA	Ant.5	Top side	10mm			507000	2535	135	68	0.09	0.339	17.87	19.00	1.297	0.440	34
NR n7 SA	Ant.5	Bottom side	10mm			507000	2535	135	68	-0.03	0.031	17.87	19.00	1.297	0.040	/

10.18 NR n12

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head															
NR n12 SA	Ant.2	Left cheek	0mm	(BW 15MHz) DFT-s-OFDM BPSK	DFT-15kHz	141500	707.5	1	1	-0.1	0.030	23.09	24.00	1.233	0.037	/
NR n12 SA	Ant.2	Left tilt	0mm			141500	707.5	1	1	-0.02	0.026	23.09	24.00	1.233	0.032	/
NR n12 SA	Ant.2	Right cheek	0mm			141500	707.5	1	1	-0.07	0.045	23.09	24.00	1.233	0.055	/
NR n12 SA	Ant.2	Right tilt	0mm			141500	707.5	1	1	-0.18	0.033	23.09	24.00	1.233	0.041	/
NR n12 SA	Ant.2	Left cheek	0mm			141500	707.5	36	22	-0.07	0.036	22.95	24.00	1.274	0.046	/
NR n12 SA	Ant.2	Left tilt	0mm			141500	707.5	36	22	-0.17	0.028	22.95	24.00	1.274	0.036	/
NR n12 SA	Ant.2	Right cheek	0mm			141500	707.5	36	22	0.12	0.036	22.95	24.00	1.274	0.046	/
NR n12 SA	Ant.2	Right tilt	0mm			141500	707.5	36	22	0.04	0.026	22.95	24.00	1.274	0.033	/
NR n12 SA	Ant.5	Left cheek	0mm	(BW 15MHz) DFT-s-OFDM BPSK	DFT-15kHz	141500	707.5	1	1	0.19	0.304	23.75	24.50	1.189	0.361	/
NR n12 SA	Ant.5	Left tilt	0mm			141500	707.5	1	1	0.18	0.305	23.75	24.50	1.189	0.362	/
NR n12 SA	Ant.5	Right cheek	0mm			141500	707.5	1	1	0.13	0.418	23.75	24.50	1.189	0.497	35
NR n12 SA	Ant.5	Right tilt	0mm			141500	707.5	1	1	-0.06	0.299	23.75	24.50	1.189	0.355	/
NR n12 SA	Ant.5	Left cheek	0mm			141500	707.5	36	22	0.09	0.220	23.71	24.50	1.199	0.264	/
NR n12 SA	Ant.5	Left tilt	0mm			141500	707.5	36	22	-0.17	0.227	23.71	24.50	1.199	0.272	/
NR n12 SA	Ant.5	Right cheek	0mm			141500	707.5	36	22	-0.06	0.402	23.71	24.50	1.199	0.482	/
NR n12 SA	Ant.5	Right tilt	0mm			141500	707.5	36	22	0.02	0.291	23.71	24.50	1.199	0.349	/
	Body-worn&Hotspot															
NR n12 SA	Ant.2	Front side	10mm	(BW 15MHz) DFT-s-OFDM BPSK	DFT-15kHz	141500	707.5	1	1	-0.19	0.030	23.09	24.00	1.233	0.037	/
NR n12 SA	Ant.2	Back side	10mm			141500	707.5	1	1	0.02	0.064	23.09	24.00	1.233	0.079	/
NR n12 SA	Ant.2	Left side	10mm			141500	707.5	1	1	0.06	0.032	23.09	24.00	1.233	0.039	/
NR n12 SA	Ant.2	Right side	10mm			141500	707.5	1	1	0.09	0.065	23.09	24.00	1.233	0.080	/
NR n12 SA	Ant.2	Top side	10mm			141500	707.5	1	1	-0.04	0.028	23.09	24.00	1.233	0.035	/
NR n12 SA	Ant.2	Bottom side	10mm			141500	707.5	1	1	-0.01	0.031	23.09	24.00	1.233	0.038	/
NR n12 SA	Ant.2	Front side	10mm			141500	707.5	36	22	0.03	0.028	22.95	24.00	1.274	0.036	/
NR n12 SA	Ant.2	Back side	10mm			141500	707.5	36	22	0.16	0.062	22.95	24.00	1.274	0.079	/
NR n12 SA	Ant.2	Left side	10mm			141500	707.5	36	22	-0.09	0.033	22.95	24.00	1.274	0.042	/
NR n12 SA	Ant.2	Right side	10mm			141500	707.5	36	22	-0.18	0.065	22.95	24.00	1.274	0.083	/
NR n12 SA	Ant.2	Top side	10mm			141500	707.5	36	22	0.11	0.026	22.95	24.00	1.274	0.033	/
NR n12 SA	Ant.2	Bottom side	10mm			141500	707.5	36	22	-0.01	0.029	22.95	24.00	1.274	0.037	/
NR n12 SA	Ant.5	Front side	10mm	(BW 15MHz) DFT-s-OFDM BPSK	DFT-15kHz	141500	707.5	1	1	0.05	0.078	23.75	24.50	1.189	0.093	/
NR n12 SA	Ant.5	Back side	10mm			141500	707.5	1	1	0.04	0.111	23.75	24.50	1.189	0.132	/
NR n12 SA	Ant.5	Left side	10mm			141500	707.5	1	1	-0.17	0.118	23.75	24.50	1.189	0.140	/
NR n12 SA	Ant.5	Right side	10mm			141500	707.5	1	1	0.06	0.084	23.75	24.50	1.189	0.100	/
NR n12 SA	Ant.5	Top side	10mm			141500	707.5	1	1	0.02	0.106	23.75	24.50	1.189	0.126	/
NR n12 SA	Ant.5	Bottom side	10mm			141500	707.5	1	1	0.13	0.030	23.75	24.50	1.189	0.036	/
NR n12 SA	Ant.5	Front side	10mm			141500	707.5	36	22	-0.1	0.079	23.71	24.50	1.199	0.095	/
NR n12 SA	Ant.5	Back side	10mm			141500	707.5	36	22	-0.06	0.117	23.71	24.50	1.199	0.140	36
NR n12 SA	Ant.5	Left side	10mm			141500	707.5	36	22	0.11	0.093	23.71	24.50	1.199	0.112	/
NR n12 SA	Ant.5	Right side	10mm			141500	707.5	36	22	-0.02	0.073	23.71	24.50	1.199	0.088	/
NR n12 SA	Ant.5	Top side	10mm			141500	707.5	36	22	-0.03	0.115	23.71	24.50	1.199	0.138	/
NR n12 SA	Ant.5	Bottom side	10mm			141500	707.5	36	22	-0.05	0.036	23.71	24.50	1.199	0.043	/

10.19 NR n66

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head															
NR n66 SA	Ant.2	Left cheek	0mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-15kHz	349000	1745	1	1	-0.17	0.038	17.90	19.00	1.288	0.049	/
NR n66 SA	Ant.2	Left tilt	0mm			349000	1745	1	1	-0.14	0.030	17.90	19.00	1.288	0.039	/
NR n66 SA	Ant.2	Right cheek	0mm			349000	1745	1	1	0.16	0.045	17.90	19.00	1.288	0.058	/
NR n66 SA	Ant.2	Right tilt	0mm			349000	1745	1	1	-0.16	0.037	17.90	19.00	1.288	0.048	/
NR n66 SA	Ant.2	Left cheek	0mm			349000	1745	108	54	-0.03	0.034	17.82	19.00	1.312	0.045	/
NR n66 SA	Ant.2	Left tilt	0mm			349000	1745	108	54	-0.05	0.032	17.82	19.00	1.312	0.042	/
NR n66 SA	Ant.2	Right cheek	0mm			349000	1745	108	54	-0.05	0.036	17.82	19.00	1.312	0.047	/
NR n66 SA	Ant.2	Right tilt	0mm			349000	1745	108	54	-0.07	0.029	17.82	19.00	1.312	0.038	/
NR n66 SA	Ant.5	Left cheek	0mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-15kHz	349000	1745	1	1	0.02	0.310	18.24	19.00	1.191	0.369	/
NR n66 SA	Ant.5	Left tilt	0mm			349000	1745	1	1	0.11	0.359	18.24	19.00	1.191	0.428	/
NR n66 SA	Ant.5	Right cheek	0mm			349000	1745	1	1	0.19	0.572	18.24	19.00	1.191	0.681	/
NR n66 SA	Ant.5	Right tilt	0mm			349000	1745	1	1	0.04	0.795	18.24	19.00	1.191	0.947	37
NR n66 SA	Ant.5	Right tilt	0mm			346000	1730	1	1	0.16	0.763	18.16	19.00	1.213	0.926	/
NR n66 SA	Ant.5	Right tilt	0mm			352000	1760	1	1	-0.03	0.757	18.19	19.00	1.205	0.912	/
NR n66 SA	Ant.5	Left cheek	0mm			349000	1745	108	54	-0.1	0.314	18.18	19.00	1.208	0.379	/
NR n66 SA	Ant.5	Left tilt	0mm			349000	1745	108	54	0.13	0.394	18.18	19.00	1.208	0.476	/
NR n66 SA	Ant.5	Right cheek	0mm			349000	1745	108	54	0.09	0.510	18.18	19.00	1.208	0.616	/
NR n66 SA	Ant.5	Right tilt	0mm			349000	1745	108	54	-0.04	0.741	18.18	19.00	1.208	0.895	/
NR n66 SA	Ant.5	Right cheek	0mm			346000	1730	1	1	-0.1	0.698	18.16	19.00	1.213	0.847	/
NR n66 SA	Ant.5	Right cheek	0mm			352000	1760	1	1	-0.14	0.705	18.19	19.00	1.205	0.850	/
	Body-worn&Hotspot															
NR n66 SA	Ant.2	Front side	10mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-15kHz	349000	1745	1	1	0.13	0.030	17.90	19.00	1.288	0.039	/
NR n66 SA	Ant.2	Back side	10mm			349000	1745	1	1	0.04	0.067	17.90	19.00	1.288	0.086	/
NR n66 SA	Ant.2	Left side	10mm			349000	1745	1	1	-0.06	0.029	17.90	19.00	1.288	0.037	/
NR n66 SA	Ant.2	Right side	10mm			349000	1745	1	1	0.18	0.031	17.90	19.00	1.288	0.040	/
NR n66 SA	Ant.2	Top side	10mm			349000	1745	1	1	0.01	0.022	17.90	19.00	1.288	0.028	/
NR n66 SA	Ant.2	Bottom side	10mm			349000	1745	1	1	-0.15	0.080	17.90	19.00	1.288	0.103	/
NR n66 SA	Ant.2	Front side	10mm			349000	1745	108	54	-0.18	0.027	17.82	19.00	1.312	0.035	/
NR n66 SA	Ant.2	Back side	10mm			349000	1745	108	54	0.17	0.070	17.82	19.00	1.312	0.092	/
NR n66 SA	Ant.2	Left side	10mm			349000	1745	108	54	0.05	0.030	17.82	19.00	1.312	0.039	/
NR n66 SA	Ant.2	Right side	10mm			349000	1745	108	54	-0.07	0.026	17.82	19.00	1.312	0.034	/
NR n66 SA	Ant.2	Top side	10mm			349000	1745	108	54	-0.06	0.024	17.82	19.00	1.312	0.031	/
NR n66 SA	Ant.2	Bottom side	10mm			349000	1745	108	54	-0.13	0.085	17.82	19.00	1.312	0.112	/
NR n66 SA	Ant.5	Front side	10mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-15kHz	349000	1745	1	1	0.11	0.171	18.24	19.00	1.191	0.204	/
NR n66 SA	Ant.5	Back side	10mm			349000	1745	1	1	-0.09	0.265	18.24	19.00	1.191	0.316	/
NR n66 SA	Ant.5	Left side	10mm			349000	1745	1	1	0.06	0.050	18.24	19.00	1.191	0.060	/
NR n66 SA	Ant.5	Right side	10mm			349000	1745	1	1	0.02	0.021	18.24	19.00	1.191	0.025	/
NR n66 SA	Ant.5	Top side	10mm			349000	1745	1	1	0.15	0.328	18.24	19.00	1.191	0.391	/
NR n66 SA	Ant.5	Bottom side	10mm			349000	1745	1	1	0.09	0.017	18.24	19.00	1.191	0.020	/
NR n66 SA	Ant.5	Front side	10mm			349000	1745	108	54	0.03	0.164	18.18	19.00	1.208	0.198	/
NR n66 SA	Ant.5	Back side	10mm			349000	1745	108	54	-0.15	0.271	18.18	19.00	1.208	0.327	/
NR n66 SA	Ant.5	Left side	10mm			349000	1745	108	54	0.05	0.054	18.18	19.00	1.208	0.065	/
NR n66 SA	Ant.5	Right side	10mm			349000	1745	108	54	-0.12	0.020	18.18	19.00	1.208	0.024	/
NR n66 SA	Ant.5	Top side	10mm			349000	1745	108	54	0.1	0.346	18.18	19.00	1.208	0.418	38
NR n66 SA	Ant.5	Bottom side	10mm			349000	1745	108	54	0.11	0.015	18.18	19.00	1.208	0.018	/

10.20 NR n38

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head															
NR n38 SA	Ant.2	Left cheek	0mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	519000	2595	1	1	-0.02	0.029	14.13	15.00	1.222	0.035	/
NR n38 SA	Ant.2	Left tilt	0mm			519000	2595	1	1	0.11	0.016	14.13	15.00	1.222	0.020	/
NR n38 SA	Ant.2	Right cheek	0mm			519000	2595	1	1	0.03	0.013	14.13	15.00	1.222	0.016	/
NR n38 SA	Ant.2	Right tilt	0mm			519000	2595	1	1	0.04	0.006	14.13	15.00	1.222	0.007	/
NR n38 SA	Ant.2	Left cheek	0mm			519000	2595	50	28	0.12	0.026	14.00	15.00	1.259	0.033	/
NR n38 SA	Ant.2	Left tilt	0mm			519000	2595	50	28	0.05	0.012	14.00	15.00	1.259	0.015	/
NR n38 SA	Ant.2	Right cheek	0mm			519000	2595	50	28	0.17	0.008	14.00	15.00	1.259	0.010	/
NR n38 SA	Ant.2	Right tilt	0mm			519000	2595	50	28	-0.11	0.005	14.00	15.00	1.259	0.006	/
NR n38 SA	Ant.5	Left cheek	0mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	519000	2595	1	1	0.08	0.148	16.18	17.00	1.208	0.179	/
NR n38 SA	Ant.5	Left tilt	0mm			519000	2595	1	1	0.09	0.202	16.18	17.00	1.208	0.244	/
NR n38 SA	Ant.5	Right cheek	0mm			519000	2595	1	1	-0.06	0.382	16.18	17.00	1.208	0.461	/
NR n38 SA	Ant.5	Right tilt	0mm			519000	2595	1	1	-0.12	0.798	16.18	17.00	1.208	0.964	39
NR n38 SA	Ant.5	Right tilt	0mm			518004	2590.02	1	1	-0.16	0.762	16.11	17.00	1.227	0.935	/
NR n38 SA	Ant.5	Right tilt	0mm			519996	2599.98	1	1	-0.09	0.754	16.15	17.00	1.216	0.917	/
NR n38 SA	Ant.5	Left cheek	0mm			519000	2595	50	28	0.05	0.170	16.17	17.00	1.211	0.206	/
NR n38 SA	Ant.5	Left tilt	0mm			519000	2595	50	28	-0.14	0.237	16.17	17.00	1.211	0.287	/
NR n38 SA	Ant.5	Right cheek	0mm	519000	2595	50	28	-0.03	0.340	16.17	17.00	1.211	0.412	/		
NR n38 SA	Ant.5	Right tilt	0mm	519000	2595	50	28	0.08	0.370	16.17	17.00	1.211	0.448	/		
	Body-worn&Hotspot															
NR n38 SA	Ant.2	Front side	10mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	519000	2595	1	1	-0.03	0.029	14.13	15.00	1.222	0.035	/
NR n38 SA	Ant.2	Back side	10mm			519000	2595	1	1	-0.07	0.044	14.13	15.00	1.222	0.054	/
NR n38 SA	Ant.2	Left side	10mm			519000	2595	1	1	0.08	0.022	14.13	15.00	1.222	0.027	/
NR n38 SA	Ant.2	Right side	10mm			519000	2595	1	1	0.06	0.019	14.13	15.00	1.222	0.023	/
NR n38 SA	Ant.2	Top side	10mm			519000	2595	1	1	-0.1	0.025	14.13	15.00	1.222	0.031	/
NR n38 SA	Ant.2	Bottom side	10mm			519000	2595	1	1	0.07	0.034	14.13	15.00	1.222	0.042	/
NR n38 SA	Ant.2	Front side	10mm			519000	2595	50	28	0	0.022	14.00	15.00	1.259	0.028	/
NR n38 SA	Ant.2	Back side	10mm			519000	2595	50	28	0.05	0.049	14.00	15.00	1.259	0.062	/
NR n38 SA	Ant.2	Left side	10mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	519000	2595	50	28	0.07	0.021	14.00	15.00	1.259	0.026	/
NR n38 SA	Ant.2	Right side	10mm			519000	2595	50	28	0.08	0.019	14.00	15.00	1.259	0.024	/
NR n38 SA	Ant.2	Top side	10mm			519000	2595	50	28	0.02	0.027	14.00	15.00	1.259	0.034	/
NR n38 SA	Ant.2	Bottom side	10mm			519000	2595	50	28	0.02	0.035	14.00	15.00	1.259	0.044	/
NR n38 SA	Ant.5	Front side	10mm			519000	2595	1	1	0.02	0.125	16.18	17.00	1.208	0.151	/
NR n38 SA	Ant.5	Back side	10mm			519000	2595	1	1	-0.03	0.223	16.18	17.00	1.208	0.269	/
NR n38 SA	Ant.5	Left side	10mm			519000	2595	1	1	0.05	0.089	16.18	17.00	1.208	0.107	/
NR n38 SA	Ant.5	Right side	10mm			519000	2595	1	1	0.16	0.019	16.18	17.00	1.208	0.023	/
NR n38 SA	Ant.5	Top side	10mm			519000	2595	1	1	0.07	0.247	16.18	17.00	1.208	0.298	40
NR n38 SA	Ant.5	Bottom side	10mm			519000	2595	1	1	-0.07	0.014	16.18	17.00	1.208	0.017	/
NR n38 SA	Ant.5	Front side	10mm			519000	2595	50	28	-0.06	0.139	16.17	17.00	1.211	0.168	/
NR n38 SA	Ant.5	Back side	10mm			519000	2595	50	28	0.02	0.198	16.17	17.00	1.211	0.239	/
NR n38 SA	Ant.5	Left side	10mm			519000	2595	50	28	0.04	0.098	16.17	17.00	1.211	0.119	/
NR n38 SA	Ant.5	Right side	10mm			519000	2595	50	28	-0.18	0.020	16.17	17.00	1.211	0.024	/
NR n38 SA	Ant.5	Top side	10mm			519000	2595	50	28	0.12	0.239	16.17	17.00	1.211	0.289	/
NR n38 SA	Ant.5	Bottom side	10mm			519000	2595	50	28	0.05	0.013	16.17	17.00	1.211	0.016	/

10.21 NR n41

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
	Head															
NR n41 SA	Ant.2	Left cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	518598	2592.99	1	1	-0.09	0.022	13.10	14.00	1.230	0.027	/
NR n41 SA	Ant.2	Left tilt	0mm			518598	2592.99	1	1	0.17	0.035	13.10	14.00	1.230	0.043	/
NR n41 SA	Ant.2	Right cheek	0mm			518598	2592.99	1	1	-0.02	0.010	13.10	14.00	1.230	0.012	/
NR n41 SA	Ant.2	Right tilt	0mm			518598	2592.99	1	1	-0.03	0.015	13.10	14.00	1.230	0.018	/
NR n41 SA	Ant.2	Left cheek	0mm			518598	2592.99	135	69	-0.09	0.032	13.08	14.00	1.236	0.040	/
NR n41 SA	Ant.2	Left tilt	0mm			518598	2592.99	135	69	0.07	0.022	13.08	14.00	1.236	0.027	/
NR n41 SA	Ant.2	Right cheek	0mm			518598	2592.99	135	69	-0.1	0.009	13.08	14.00	1.236	0.011	/
NR n41 SA	Ant.2	Right tilt	0mm			518598	2592.99	135	69	0.06	0.005	13.08	14.00	1.236	0.006	/
NR n41 SA	Ant.5	Left cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	518598	2592.99	1	1	0.07	0.125	15.01	16.00	1.256	0.157	/
NR n41 SA	Ant.5	Left tilt	0mm			518598	2592.99	1	1	-0.14	0.180	15.01	16.00	1.256	0.226	/
NR n41 SA	Ant.5	Right cheek	0mm			518598	2592.99	1	1	0.07	0.190	15.01	16.00	1.256	0.239	/
NR n41 SA	Ant.5	Right tilt	0mm			518598	2592.99	1	1	0.01	0.395	15.01	16.00	1.256	0.496	41
NR n41 SA	Ant.5	Left cheek	0mm			518598	2592.99	135	69	0.02	0.155	14.89	16.00	1.291	0.200	/
NR n41 SA	Ant.5	Left tilt	0mm			518598	2592.99	135	69	-0.02	0.209	14.89	16.00	1.291	0.270	/
NR n41 SA	Ant.5	Right cheek	0mm			518598	2592.99	135	69	0.02	0.169	14.89	16.00	1.291	0.218	/
NR n41 SA	Ant.5	Right tilt	0mm			518598	2592.99	135	69	0.02	0.201	14.89	16.00	1.291	0.260	/
	Body-worn&Hotspot															
NR n41 SA	Ant.2	Front side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	518598	2592.99	1	1	-0.06	0.030	13.10	14.00	1.230	0.037	/
NR n41 SA	Ant.2	Back side	10mm			518598	2592.99	1	1	-0.01	0.067	13.10	14.00	1.230	0.082	/
NR n41 SA	Ant.2	Left side	10mm			518598	2592.99	1	1	0.08	0.028	13.10	14.00	1.230	0.034	/
NR n41 SA	Ant.2	Right side	10mm			518598	2592.99	1	1	0.12	0.029	13.10	14.00	1.230	0.036	/
NR n41 SA	Ant.2	Top side	10mm			518598	2592.99	1	1	0.01	0.039	13.10	14.00	1.230	0.048	/
NR n41 SA	Ant.2	Bottom side	10mm			518598	2592.99	1	1	-0.11	0.050	13.10	14.00	1.230	0.062	/
NR n41 SA	Ant.2	Front side	10mm			518598	2592.99	135	69	0.01	0.026	13.08	14.00	1.236	0.032	/
NR n41 SA	Ant.2	Back side	10mm			518598	2592.99	135	69	0.15	0.061	13.08	14.00	1.236	0.075	/
NR n41 SA	Ant.2	Left side	10mm	518598	2592.99	135	69	0.02	0.031	13.08	14.00	1.236	0.038	/		
NR n41 SA	Ant.2	Right side	10mm	518598	2592.99	135	69	0.08	0.030	13.08	14.00	1.236	0.037	/		
NR n41 SA	Ant.2	Top side	10mm	518598	2592.99	135	69	0.08	0.032	13.08	14.00	1.236	0.040	/		
NR n41 SA	Ant.2	Bottom side	10mm	518598	2592.99	135	69	0.14	0.048	13.08	14.00	1.236	0.059	/		
NR n41 SA	Ant.5	Front side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	518598	2592.99	1	1	-0.11	0.099	15.01	16.00	1.256	0.124	/
NR n41 SA	Ant.5	Back side	10mm			518598	2592.99	1	1	-0.08	0.185	15.01	16.00	1.256	0.233	/
NR n41 SA	Ant.5	Left side	10mm			518598	2592.99	1	1	-0.13	0.042	15.01	16.00	1.256	0.053	/
NR n41 SA	Ant.5	Right side	10mm			518598	2592.99	1	1	-0.03	0.013	15.01	16.00	1.256	0.016	/
NR n41 SA	Ant.5	Top side	10mm			518598	2592.99	1	1	0.03	0.193	15.01	16.00	1.256	0.242	42
NR n41 SA	Ant.5	Bottom side	10mm			518598	2592.99	1	1	-0.04	0.015	15.01	16.00	1.256	0.019	/
NR n41 SA	Ant.5	Front side	10mm			518598	2592.99	135	69	-0.18	0.117	14.89	16.00	1.291	0.151	/
NR n41 SA	Ant.5	Back side	10mm			518598	2592.99	135	69	0.04	0.174	14.89	16.00	1.291	0.225	/
NR n41 SA	Ant.5	Left side	10mm	518598	2592.99	135	69	0.03	0.043	14.89	16.00	1.291	0.056	/		
NR n41 SA	Ant.5	Right side	10mm	518598	2592.99	135	69	-0.02	0.015	14.89	16.00	1.291	0.019	/		
NR n41 SA	Ant.5	Top side	10mm	518598	2592.99	135	69	0.13	0.173	14.89	16.00	1.291	0.224	/		
NR n41 SA	Ant.5	Bottom side	10mm	518598	2592.99	135	69	0.1	0.014	14.89	16.00	1.291	0.018	/		

10.22 NR n48

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
Head																
NR n48 SA	Ant.0	Left cheek	0mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	1	1	0.01	0.452	12.82	13.50	1.169	0.529	/
NR n48 SA	Ant.0	Left tilt	0mm			641666	3624.99	1	1	0.02	0.504	12.82	13.50	1.169	0.589	/
NR n48 SA	Ant.0	Right cheek	0mm			641666	3624.99	1	1	-0.15	0.148	12.82	13.50	1.169	0.173	/
NR n48 SA	Ant.0	Right tilt	0mm			641666	3624.99	1	1	0.13	0.280	12.82	13.50	1.169	0.327	/
NR n48 SA	Ant.0	Left cheek	0mm			641666	3624.99	135	69	-0.02	0.412	12.78	13.50	1.180	0.486	/
NR n48 SA	Ant.0	Left tilt	0mm			641666	3624.99	135	69	0.09	0.593	12.78	13.50	1.180	0.700	43
NR n48 SA	Ant.0	Right cheek	0mm			641666	3624.99	135	69	-0.02	0.132	12.78	13.50	1.180	0.156	/
NR n48 SA	Ant.0	Right tilt	0mm			641666	3624.99	135	69	-0.13	0.141	12.78	13.50	1.180	0.166	/
NR n48 SA	Ant.1	Left cheek	0mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	1	1	-0.13	0.089	11.24	12.00	1.191	0.106	/
NR n48 SA	Ant.1	Left tilt	0mm			641666	3624.99	1	1	-0.02	0.051	11.24	12.00	1.191	0.061	/
NR n48 SA	Ant.1	Right cheek	0mm			641666	3624.99	1	1	-0.02	0.024	11.24	12.00	1.191	0.029	/
NR n48 SA	Ant.1	Right tilt	0mm			641666	3624.99	1	1	-0.01	0.015	11.24	12.00	1.191	0.018	/
NR n48 SA	Ant.1	Left cheek	0mm			641666	3624.99	135	69	0.02	0.131	11.09	12.00	1.233	0.162	/
NR n48 SA	Ant.1	Left tilt	0mm			641666	3624.99	135	69	0.17	0.074	11.09	12.00	1.233	0.091	/
NR n48 SA	Ant.1	Right cheek	0mm			641666	3624.99	135	69	-0.04	0.022	11.09	12.00	1.233	0.027	/
NR n48 SA	Ant.1	Right tilt	0mm			641666	3624.99	135	69	-0.08	0.014	11.09	12.00	1.233	0.017	/
NR n48 SA	Ant.4	Left cheek	0mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	1	1	-0.07	0.026	5.84	6.50	1.164	0.030	/
NR n48 SA	Ant.4	Left tilt	0mm			641666	3624.99	1	1	0.16	0.040	5.84	6.50	1.164	0.047	/
NR n48 SA	Ant.4	Right cheek	0mm			641666	3624.99	1	1	-0.04	0.028	5.84	6.50	1.164	0.033	/
NR n48 SA	Ant.4	Right tilt	0mm			641666	3624.99	1	1	-0.03	0.031	5.84	6.50	1.164	0.036	/
NR n48 SA	Ant.4	Left cheek	0mm			641666	3624.99	135	69	-0.02	0.022	5.71	6.50	1.199	0.026	/
NR n48 SA	Ant.4	Left tilt	0mm			641666	3624.99	135	69	-0.04	0.035	5.71	6.50	1.199	0.042	/
NR n48 SA	Ant.4	Right cheek	0mm			641666	3624.99	135	69	-0.15	0.026	5.71	6.50	1.199	0.031	/
NR n48 SA	Ant.4	Right tilt	0mm			641666	3624.99	135	69	-0.09	0.029	5.71	6.50	1.199	0.035	/
NR n48 SA	Ant.6	Left cheek	0mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	1	1	-0.15	0.122	3.67	4.50	1.211	0.148	/
NR n48 SA	Ant.6	Left tilt	0mm			641666	3624.99	1	1	-0.06	0.126	3.67	4.50	1.211	0.153	/
NR n48 SA	Ant.6	Right cheek	0mm			641666	3624.99	1	1	0.04	0.015	3.67	4.50	1.211	0.018	/
NR n48 SA	Ant.6	Right tilt	0mm			641666	3624.99	1	1	-0.03	0.011	3.67	4.50	1.211	0.013	/
NR n48 SA	Ant.6	Left cheek	0mm			641666	3624.99	135	69	0.06	0.136	3.53	4.50	1.250	0.170	/
NR n48 SA	Ant.6	Left tilt	0mm			641666	3624.99	135	69	-0.03	0.150	3.53	4.50	1.250	0.188	/
NR n48 SA	Ant.6	Right cheek	0mm			641666	3624.99	135	69	0.04	0.014	3.53	4.50	1.250	0.018	/
NR n48 SA	Ant.6	Right tilt	0mm			641666	3624.99	135	69	-0.05	0.010	3.53	4.50	1.250	0.013	/

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
Body-worn&Hotspot																
NR n48 SA	Ant.0	Front side	10mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	1	1	0.04	0.139	12.82	13.50	1.169	0.163	/
NR n48 SA	Ant.0	Back side	10mm			641666	3624.99	1	1	0.10	0.521	12.82	13.50	1.169	0.609	44
NR n48 SA	Ant.0	Left side	10mm			641666	3624.99	1	1	-0.02	0.035	12.82	13.50	1.169	0.041	/
NR n48 SA	Ant.0	Right side	10mm			641666	3624.99	1	1	-0.02	0.308	12.82	13.50	1.169	0.360	/
NR n48 SA	Ant.0	Top side	10mm			641666	3624.99	1	1	-0.03	0.423	12.82	13.50	1.169	0.495	/
NR n48 SA	Ant.0	Bottom side	10mm			641666	3624.99	1	1	-0.10	0.028	12.82	13.50	1.169	0.033	/
NR n48 SA	Ant.0	Front side	10mm			641666	3624.99	135	69	-0.02	0.145	12.78	13.50	1.180	0.171	/
NR n48 SA	Ant.0	Back side	10mm			641666	3624.99	135	69	0.07	0.463	12.78	13.50	1.180	0.546	/
NR n48 SA	Ant.0	Left side	10mm			641666	3624.99	135	69	0.06	0.029	12.78	13.50	1.180	0.034	/
NR n48 SA	Ant.0	Right side	10mm			641666	3624.99	135	69	-0.11	0.286	12.78	13.50	1.180	0.338	/
NR n48 SA	Ant.0	Top side	10mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	135	69	0.12	0.412	12.78	13.50	1.180	0.486	/
NR n48 SA	Ant.0	Bottom side	10mm			641666	3624.99	135	69	-0.03	0.022	12.78	13.50	1.180	0.026	/
NR n48 SA	Ant.1	Front side	10mm			641666	3624.99	1	1	-0.12	0.040	11.24	12.00	1.191	0.048	/
NR n48 SA	Ant.1	Back side	10mm			641666	3624.99	1	1	-0.03	0.042	11.24	12.00	1.191	0.050	/
NR n48 SA	Ant.1	Left side	10mm			641666	3624.99	1	1	-0.02	0.022	11.24	12.00	1.191	0.026	/
NR n48 SA	Ant.1	Right side	10mm			641666	3624.99	1	1	0.02	0.074	11.24	12.00	1.191	0.088	/
NR n48 SA	Ant.1	Top side	10mm			641666	3624.99	1	1	-0.05	0.041	11.24	12.00	1.191	0.049	/
NR n48 SA	Ant.1	Bottom side	10mm			641666	3624.99	1	1	-0.08	0.025	11.24	12.00	1.191	0.030	/
NR n48 SA	Ant.1	Front side	10mm			641666	3624.99	135	69	-0.01	0.047	11.09	12.00	1.233	0.058	/
NR n48 SA	Ant.1	Back side	10mm			641666	3624.99	135	69	-0.03	0.048	11.09	12.00	1.233	0.059	/
NR n48 SA	Ant.1	Left side	10mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	135	69	-0.03	0.029	11.09	12.00	1.233	0.036	/
NR n48 SA	Ant.1	Right side	10mm			641666	3624.99	135	69	-0.10	0.091	11.09	12.00	1.233	0.112	/
NR n48 SA	Ant.1	Top side	10mm			641666	3624.99	135	69	-0.06	0.065	11.09	12.00	1.233	0.080	/
NR n48 SA	Ant.1	Bottom side	10mm			641666	3624.99	135	69	-0.15	0.031	11.09	12.00	1.233	0.038	/
NR n48 SA	Ant.4	Front side	10mm			641666	3624.99	1	1	-0.04	0.022	5.84	6.50	1.164	0.026	/
NR n48 SA	Ant.4	Back side	10mm			641666	3624.99	1	1	-0.12	0.042	5.84	6.50	1.164	0.049	/
NR n48 SA	Ant.4	Left side	10mm			641666	3624.99	1	1	-0.02	0.050	5.84	6.50	1.164	0.058	/
NR n48 SA	Ant.4	Right side	10mm			641666	3624.99	1	1	-0.06	0.020	5.84	6.50	1.164	0.023	/
NR n48 SA	Ant.4	Top side	10mm			641666	3624.99	1	1	-0.02	0.025	5.84	6.50	1.164	0.029	/
NR n48 SA	Ant.4	Bottom side	10mm			641666	3624.99	1	1	-0.03	0.018	5.84	6.50	1.164	0.021	/
NR n48 SA	Ant.4	Front side	10mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	135	69	-0.02	0.027	5.71	6.50	1.199	0.032	/
NR n48 SA	Ant.4	Back side	10mm			641666	3624.99	135	69	0.06	0.051	5.71	6.50	1.199	0.061	/
NR n48 SA	Ant.4	Left side	10mm			641666	3624.99	135	69	0.10	0.056	5.71	6.50	1.199	0.067	/
NR n48 SA	Ant.4	Right side	10mm			641666	3624.99	135	69	-0.14	0.019	5.71	6.50	1.199	0.023	/
NR n48 SA	Ant.4	Top side	10mm			641666	3624.99	135	69	-0.05	0.028	5.71	6.50	1.199	0.034	/
NR n48 SA	Ant.4	Bottom side	10mm			641666	3624.99	135	69	-0.13	0.015	5.71	6.50	1.199	0.018	/
NR n48 SA	Ant.6	Front side	10mm			641666	3624.99	1	1	-0.06	0.039	3.67	4.50	1.211	0.047	/
NR n48 SA	Ant.6	Back side	10mm			641666	3624.99	1	1	-0.02	0.022	3.67	4.50	1.211	0.027	/
NR n48 SA	Ant.6	Left side	10mm			641666	3624.99	1	1	-0.14	0.025	3.67	4.50	1.211	0.030	/
NR n48 SA	Ant.6	Right side	10mm			641666	3624.99	1	1	-0.02	0.044	3.67	4.50	1.211	0.053	/
NR n48 SA	Ant.6	Top side	10mm	(BW 40MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	1	1	-0.02	0.057	3.67	4.50	1.211	0.069	/
NR n48 SA	Ant.6	Bottom side	10mm			641666	3624.99	1	1	0.03	0.016	3.67	4.50	1.211	0.019	/
NR n48 SA	Ant.6	Front side	10mm			641666	3624.99	135	69	-0.01	0.041	3.53	4.50	1.250	0.051	/
NR n48 SA	Ant.6	Back side	10mm			641666	3624.99	135	69	-0.02	0.043	3.53	4.50	1.250	0.054	/
NR n48 SA	Ant.6	Left side	10mm			641666	3624.99	135	69	0.07	0.028	3.53	4.50	1.250	0.035	/
NR n48 SA	Ant.6	Right side	10mm			641666	3624.99	135	69	0.03	0.050	3.53	4.50	1.250	0.063	/
NR n48 SA	Ant.6	Top side	10mm			641666	3624.99	135	69	-0.17	0.065	3.53	4.50	1.250	0.081	/
NR n48 SA	Ant.6	Bottom side	10mm			641666	3624.99	135	69	-0.08	0.023	3.53	4.50	1.250	0.029	/

10.23 NR n77

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
Head																
NR n77 SA	Ant.0	Left cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	647666	3714.99	1	1	-0.02	0.161	14.11	15.00	1.227	0.198	/
NR n77 SA	Ant.0	Left tilt	0mm			647666	3714.99	1	1	0.04	0.279	14.11	15.00	1.227	0.342	45
NR n77 SA	Ant.0	Right cheek	0mm			647666	3714.99	1	1	0.10	0.065	14.11	15.00	1.227	0.080	/
NR n77 SA	Ant.0	Right tilt	0mm			647666	3714.99	1	1	0.01	0.094	14.11	15.00	1.227	0.115	/
NR n77 SA	Ant.0	Left cheek	0mm			647666	3714.99	135	69	0.17	0.156	14.10	15.00	1.230	0.192	/
NR n77 SA	Ant.0	Left tilt	0mm			647666	3714.99	135	69	-0.03	0.236	14.10	15.00	1.230	0.290	/
NR n77 SA	Ant.0	Right cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	647666	3714.99	135	69	-0.08	0.058	14.10	15.00	1.230	0.071	/
NR n77 SA	Ant.0	Right tilt	0mm			647666	3714.99	135	69	-0.02	0.084	14.10	15.00	1.230	0.103	/
NR n77 SA	Ant.1	Left cheek	0mm			647666	3714.99	1	1	-0.02	0.044	12.76	13.50	1.186	0.052	/
NR n77 SA	Ant.1	Left tilt	0mm			647666	3714.99	1	1	-0.08	0.033	12.76	13.50	1.186	0.039	/
NR n77 SA	Ant.1	Right cheek	0mm			647666	3714.99	1	1	-0.01	0.010	12.76	13.50	1.186	0.012	/
NR n77 SA	Ant.1	Right tilt	0mm			647666	3714.99	1	1	-0.05	0.016	12.76	13.50	1.186	0.019	/
NR n77 SA	Ant.1	Left cheek	0mm			647666	3714.99	135	69	0.02	0.056	12.61	13.50	1.227	0.069	/
NR n77 SA	Ant.1	Left tilt	0mm			647666	3714.99	135	69	-0.02	0.043	12.61	13.50	1.227	0.053	/
NR n77 SA	Ant.1	Right cheek	0mm			647666	3714.99	135	69	0.08	0.009	12.61	13.50	1.227	0.011	/
NR n77 SA	Ant.1	Right tilt	0mm			647666	3714.99	135	69	-0.06	0.015	12.61	13.50	1.227	0.018	/
NR n77 SA	Ant.4	Left cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	647666	3714.99	1	1	-0.14	0.025	7.71	8.50	1.199	0.030	/
NR n77 SA	Ant.4	Left tilt	0mm			647666	3714.99	1	1	0.02	0.031	7.71	8.50	1.199	0.037	/
NR n77 SA	Ant.4	Right cheek	0mm			647666	3714.99	1	1	-0.05	0.027	7.71	8.50	1.199	0.032	/
NR n77 SA	Ant.4	Right tilt	0mm			647666	3714.99	1	1	-0.10	0.021	7.71	8.50	1.199	0.025	/
NR n77 SA	Ant.4	Left cheek	0mm			647666	3714.99	135	69	-0.02	0.021	7.67	8.50	1.211	0.025	/
NR n77 SA	Ant.4	Left tilt	0mm			647666	3714.99	135	69	0.02	0.034	7.67	8.50	1.211	0.041	/
NR n77 SA	Ant.4	Right cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	647666	3714.99	135	69	-0.07	0.025	7.67	8.50	1.211	0.030	/
NR n77 SA	Ant.4	Right tilt	0mm			647666	3714.99	135	69	0.12	0.019	7.67	8.50	1.211	0.023	/
NR n77 SA	Ant.6	Left cheek	0mm			647666	3714.99	1	1	-0.02	0.135	6.69	7.50	1.205	0.163	/
NR n77 SA	Ant.6	Left tilt	0mm			647666	3714.99	1	1	0.09	0.144	6.69	7.50	1.205	0.174	/
NR n77 SA	Ant.6	Right cheek	0mm			647666	3714.99	1	1	0.02	0.029	6.69	7.50	1.205	0.035	/
NR n77 SA	Ant.6	Right tilt	0mm			647666	3714.99	1	1	-0.01	0.042	6.69	7.50	1.205	0.051	/
NR n77 SA	Ant.6	Left cheek	0mm			647666	3714.99	135	69	-0.04	0.133	6.67	7.50	1.211	0.161	/
NR n77 SA	Ant.6	Left tilt	0mm			647666	3714.99	135	69	0.05	0.132	6.67	7.50	1.211	0.160	/
NR n77 SA	Ant.6	Right cheek	0mm			647666	3714.99	135	69	0.09	0.027	6.67	7.50	1.211	0.033	/
NR n77 SA	Ant.6	Right tilt	0mm			647666	3714.99	135	69	0.02	0.039	6.67	7.50	1.211	0.047	/

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
Body-worn&Hotspot																
NR n77 SA	Ant.0	Front side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	647666	3714.99	1	1	0.03	0.063	14.11	15.00	1.227	0.077	/
NR n77 SA	Ant.0	Back side	10mm			647666	3714.99	1	1	0.02	0.162	14.11	15.00	1.227	0.199	46
NR n77 SA	Ant.0	Left side	10mm			647666	3714.99	1	1	0.09	0.027	14.11	15.00	1.227	0.033	/
NR n77 SA	Ant.0	Right side	10mm			647666	3714.99	1	1	0.08	0.092	14.11	15.00	1.227	0.113	/
NR n77 SA	Ant.0	Top side	10mm			647666	3714.99	1	1	-0.09	0.147	14.11	15.00	1.227	0.180	/
NR n77 SA	Ant.0	Bottom side	10mm			647666	3714.99	1	1	0.15	0.026	14.11	15.00	1.227	0.032	/
NR n77 SA	Ant.0	Front side	10mm			647666	3714.99	135	69	0.02	0.053	14.10	15.00	1.230	0.065	/
NR n77 SA	Ant.0	Back side	10mm			647666	3714.99	135	69	0.02	0.155	14.10	15.00	1.230	0.191	/
NR n77 SA	Ant.0	Left side	10mm			647666	3714.99	135	69	-0.15	0.023	14.10	15.00	1.230	0.028	/
NR n77 SA	Ant.0	Right side	10mm			647666	3714.99	135	69	-0.03	0.080	14.10	15.00	1.230	0.098	/
NR n77 SA	Ant.0	Top side	10mm			647666	3714.99	135	69	0.08	0.155	14.10	15.00	1.230	0.191	/
NR n77 SA	Ant.0	Bottom side	10mm			647666	3714.99	135	69	-0.04	0.034	14.10	15.00	1.230	0.042	/
NR n77 SA	Ant.1	Front side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	647666	3714.99	1	1	0.03	0.040	12.76	13.50	1.186	0.047	/
NR n77 SA	Ant.1	Back side	10mm			647666	3714.99	1	1	0.02	0.070	12.76	13.50	1.186	0.083	/
NR n77 SA	Ant.1	Left side	10mm			647666	3714.99	1	1	0.12	0.024	12.76	13.50	1.186	0.028	/
NR n77 SA	Ant.1	Right side	10mm			647666	3714.99	1	1	-0.07	0.100	12.76	13.50	1.186	0.119	/
NR n77 SA	Ant.1	Top side	10mm			647666	3714.99	1	1	0.06	0.054	12.76	13.50	1.186	0.064	/
NR n77 SA	Ant.1	Bottom side	10mm			647666	3714.99	1	1	0.01	0.016	12.76	13.50	1.186	0.019	/
NR n77 SA	Ant.1	Front side	10mm			647666	3714.99	135	69	0.11	0.035	12.61	13.50	1.227	0.043	/
NR n77 SA	Ant.1	Back side	10mm			647666	3714.99	135	69	-0.15	0.079	12.61	13.50	1.227	0.097	/
NR n77 SA	Ant.1	Left side	10mm			647666	3714.99	135	69	-0.14	0.029	12.61	13.50	1.227	0.036	/
NR n77 SA	Ant.1	Right side	10mm			647666	3714.99	135	69	0.16	0.086	12.61	13.50	1.227	0.106	/
NR n77 SA	Ant.1	Top side	10mm			647666	3714.99	135	69	0.04	0.062	12.61	13.50	1.227	0.076	/
NR n77 SA	Ant.1	Bottom side	10mm			647666	3714.99	135	69	0.01	0.017	12.61	13.50	1.227	0.021	/
NR n77 SA	Ant.4	Front side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	647666	3714.99	1	1	-0.05	0.044	7.71	8.50	1.199	0.053	/
NR n77 SA	Ant.4	Back side	10mm			647666	3714.99	1	1	-0.14	0.052	7.71	8.50	1.199	0.062	/
NR n77 SA	Ant.4	Left side	10mm			647666	3714.99	1	1	0.06	0.042	7.71	8.50	1.199	0.050	/
NR n77 SA	Ant.4	Right side	10mm			647666	3714.99	1	1	-0.03	0.022	7.71	8.50	1.199	0.026	/
NR n77 SA	Ant.4	Top side	10mm			647666	3714.99	1	1	-0.16	0.027	7.71	8.50	1.199	0.032	/
NR n77 SA	Ant.4	Bottom side	10mm			647666	3714.99	1	1	-0.04	0.024	7.71	8.50	1.199	0.029	/
NR n77 SA	Ant.4	Front side	10mm			647666	3714.99	135	69	-0.03	0.032	7.67	8.50	1.211	0.039	/
NR n77 SA	Ant.4	Back side	10mm			647666	3714.99	135	69	0.09	0.029	7.67	8.50	1.211	0.035	/
NR n77 SA	Ant.4	Left side	10mm			647666	3714.99	135	69	-0.10	0.036	7.67	8.50	1.211	0.044	/
NR n77 SA	Ant.4	Right side	10mm			647666	3714.99	135	69	0.09	0.019	7.67	8.50	1.211	0.023	/
NR n77 SA	Ant.4	Top side	10mm			647666	3714.99	135	69	-0.05	0.038	7.67	8.50	1.211	0.046	/
NR n77 SA	Ant.4	Bottom side	10mm			647666	3714.99	135	69	0.04	0.015	7.67	8.50	1.211	0.018	/
NR n77 SA	Ant.6	Front side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	647666	3714.99	1	1	0.03	0.092	6.69	7.50	1.205	0.111	/
NR n77 SA	Ant.6	Back side	10mm			647666	3714.99	1	1	0.05	0.059	6.69	7.50	1.205	0.071	/
NR n77 SA	Ant.6	Left side	10mm			647666	3714.99	1	1	-0.03	0.052	6.69	7.50	1.205	0.063	/
NR n77 SA	Ant.6	Right side	10mm			647666	3714.99	1	1	0.03	0.014	6.69	7.50	1.205	0.017	/
NR n77 SA	Ant.6	Top side	10mm			647666	3714.99	1	1	0.1	0.091	6.69	7.50	1.205	0.110	/
NR n77 SA	Ant.6	Bottom side	10mm			647666	3714.99	1	1	0.06	0.014	6.69	7.50	1.205	0.017	/
NR n77 SA	Ant.6	Front side	10mm			647666	3714.99	135	69	0.07	0.100	6.67	7.50	1.211	0.121	/
NR n77 SA	Ant.6	Back side	10mm			647666	3714.99	135	69	-0.03	0.080	6.67	7.50	1.211	0.097	/
NR n77 SA	Ant.6	Left side	10mm			647666	3714.99	135	69	0.01	0.047	6.67	7.50	1.211	0.057	/
NR n77 SA	Ant.6	Right side	10mm			647666	3714.99	135	69	0.02	0.019	6.67	7.50	1.211	0.023	/
NR n77 SA	Ant.6	Top side	10mm			647666	3714.99	135	69	-0.02	0.031	6.67	7.50	1.211	0.038	/
NR n77 SA	Ant.6	Bottom side	10mm			647666	3714.99	135	69	0.09	0.015	6.67	7.50	1.211	0.018	/

10.24 NR n78

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
Head																
NR n78 SA	Ant.0	Left cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	1	1	-0.04	0.171	12.84	13.50	1.164	0.199	/
NR n78 SA	Ant.0	Left tilt	0mm			641666	3624.99	1	1	0.05	0.281	12.84	13.50	1.164	0.327	47
NR n78 SA	Ant.0	Right cheek	0mm			641666	3624.99	1	1	-0.03	0.057	12.84	13.50	1.164	0.066	/
NR n78 SA	Ant.0	Right tilt	0mm			641666	3624.99	1	1	-0.02	0.087	12.84	13.50	1.164	0.101	/
NR n78 SA	Ant.0	Left cheek	0mm			641666	3624.99	135	69	-0.01	0.167	12.71	13.50	1.199	0.200	/
NR n78 SA	Ant.0	Left tilt	0mm			641666	3624.99	135	69	0.15	0.204	12.71	13.50	1.199	0.245	/
NR n78 SA	Ant.0	Right cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	135	69	-0.13	0.051	12.71	13.50	1.199	0.061	/
NR n78 SA	Ant.0	Right tilt	0mm			641666	3624.99	135	69	0.04	0.078	12.71	13.50	1.199	0.094	/
NR n78 SA	Ant.1	Left cheek	0mm			641666	3624.99	1	1	0.06	0.045	11.72	12.50	1.197	0.054	/
NR n78 SA	Ant.1	Left tilt	0mm			641666	3624.99	1	1	-0.03	0.029	11.72	12.50	1.197	0.035	/
NR n78 SA	Ant.1	Right cheek	0mm			641666	3624.99	1	1	-0.08	0.011	11.72	12.50	1.197	0.013	/
NR n78 SA	Ant.1	Right tilt	0mm			641666	3624.99	1	1	0.18	0.015	11.72	12.50	1.197	0.018	/
NR n78 SA	Ant.1	Left cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3624.99	135	69	-0.04	0.092	11.63	12.50	1.222	0.112	/
NR n78 SA	Ant.1	Left tilt	0mm			641666	3624.99	135	69	-0.04	0.041	11.63	12.50	1.222	0.050	/
NR n78 SA	Ant.1	Right cheek	0mm			641666	3624.99	135	69	0.03	0.010	11.63	12.50	1.222	0.012	/
NR n78 SA	Ant.1	Right tilt	0mm			641666	3624.99	135	69	0.03	0.014	11.63	12.50	1.222	0.017	/
NR n78 SA	Ant.4	Left cheek	0mm			641666	3644.99	1	1	0.12	0.019	5.92	7.00	1.282	0.024	/
NR n78 SA	Ant.4	Left tilt	0mm			641666	3644.99	1	1	0.08	0.037	5.92	7.00	1.282	0.047	/
NR n78 SA	Ant.4	Right cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3644.99	1	1	0.03	0.033	5.92	7.00	1.282	0.042	/
NR n78 SA	Ant.4	Right tilt	0mm			641666	3644.99	1	1	0.07	0.021	5.92	7.00	1.282	0.027	/
NR n78 SA	Ant.4	Left cheek	0mm			641666	3644.99	135	69	0.04	0.022	5.85	7.00	1.303	0.029	/
NR n78 SA	Ant.4	Left tilt	0mm			641666	3644.99	135	69	-0.06	0.054	5.85	7.00	1.303	0.070	/
NR n78 SA	Ant.4	Right cheek	0mm			641666	3644.99	135	69	-0.08	0.030	5.85	7.00	1.303	0.039	/
NR n78 SA	Ant.4	Right tilt	0mm			641666	3644.99	135	69	0.10	0.019	5.85	7.00	1.303	0.025	/
NR n78 SA	Ant.6	Left cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3644.99	1	1	0.04	0.123	4.15	5.00	1.216	0.150	/
NR n78 SA	Ant.6	Left tilt	0mm			641666	3644.99	1	1	-0.05	0.137	4.15	5.00	1.216	0.167	/
NR n78 SA	Ant.6	Right cheek	0mm			641666	3644.99	1	1	-0.02	0.049	4.15	5.00	1.216	0.060	/
NR n78 SA	Ant.6	Right tilt	0mm			641666	3644.99	1	1	-0.08	0.042	4.15	5.00	1.216	0.051	/
NR n78 SA	Ant.6	Left cheek	0mm			641666	3644.99	135	69	0.10	0.149	3.95	5.00	1.274	0.190	/
NR n78 SA	Ant.6	Left tilt	0mm			641666	3644.99	135	69	0.02	0.142	3.95	5.00	1.274	0.181	/
NR n78 SA	Ant.6	Right cheek	0mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3644.99	135	69	0.02	0.045	3.95	5.00	1.274	0.057	/
NR n78 SA	Ant.6	Right tilt	0mm			641666	3644.99	135	69	0.04	0.039	3.95	5.00	1.274	0.050	/

Test Band	Antenna	Test Position	Dist.	Test Mode	SCS	Channel	Freq. (MHz)	RB num.	RB Start	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Reported 1g SAR (W/kg)	Meas. No.
Body-worn&Hotspot																
NR n78 SA	Ant.0	Front side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3644.99	1	1	-0.02	0.055	12.84	13.50	1.164	0.064	/
NR n78 SA	Ant.0	Back side	10mm			641666	3644.99	1	1	0.1	0.172	12.84	13.50	1.164	0.200	48
NR n78 SA	Ant.0	Left side	10mm			641666	3644.99	1	1	0.07	0.051	12.84	13.50	1.164	0.059	/
NR n78 SA	Ant.0	Right side	10mm			641666	3644.99	1	1	-0.01	0.138	12.84	13.50	1.164	0.161	/
NR n78 SA	Ant.0	Top side	10mm			641666	3644.99	1	1	0.09	0.166	12.84	13.50	1.164	0.193	/
NR n78 SA	Ant.0	Bottom side	10mm			641666	3644.99	1	1	0.03	0.027	12.84	13.50	1.164	0.031	/
NR n78 SA	Ant.0	Front side	10mm			641666	3644.99	135	69	0.04	0.052	12.71	13.50	1.199	0.062	/
NR n78 SA	Ant.0	Back side	10mm			641666	3644.99	135	69	-0.07	0.165	12.71	13.50	1.199	0.198	/
NR n78 SA	Ant.0	Left side	10mm			641666	3644.99	135	69	0.02	0.036	12.71	13.50	1.199	0.043	/
NR n78 SA	Ant.0	Right side	10mm			641666	3644.99	135	69	0.03	0.135	12.71	13.50	1.199	0.162	/
NR n78 SA	Ant.0	Top side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3644.99	135	69	-0.04	0.159	12.71	13.50	1.199	0.191	/
NR n78 SA	Ant.0	Bottom side	10mm			641666	3644.99	135	69	-0.13	0.019	12.71	13.50	1.199	0.023	/
NR n78 SA	Ant.1	Front side	10mm			641666	3644.99	1	1	-0.15	0.028	11.72	12.50	1.197	0.034	/
NR n78 SA	Ant.1	Back side	10mm			641666	3644.99	1	1	-0.08	0.034	11.72	12.50	1.197	0.041	/
NR n78 SA	Ant.1	Left side	10mm			641666	3644.99	1	1	0.02	0.025	11.72	12.50	1.197	0.030	/
NR n78 SA	Ant.1	Right side	10mm			641666	3644.99	1	1	-0.02	0.052	11.72	12.50	1.197	0.062	/
NR n78 SA	Ant.1	Top side	10mm			641666	3644.99	1	1	0.03	0.028	11.72	12.50	1.197	0.034	/
NR n78 SA	Ant.1	Bottom side	10mm			641666	3644.99	1	1	-0.09	0.019	11.72	12.50	1.197	0.023	/
NR n78 SA	Ant.1	Front side	10mm			641666	3644.99	135	69	-0.02	0.025	11.63	12.50	1.222	0.031	/
NR n78 SA	Ant.1	Back side	10mm			641666	3644.99	135	69	0.02	0.029	11.63	12.50	1.222	0.035	/
NR n78 SA	Ant.1	Left side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3644.99	135	69	-0.06	0.021	11.63	12.50	1.222	0.026	/
NR n78 SA	Ant.1	Right side	10mm			641666	3644.99	135	69	-0.09	0.059	11.63	12.50	1.222	0.072	/
NR n78 SA	Ant.1	Top side	10mm			641666	3644.99	135	69	-0.16	0.031	11.63	12.50	1.222	0.038	/
NR n78 SA	Ant.1	Bottom side	10mm			641666	3644.99	135	69	0.07	0.022	11.63	12.50	1.222	0.027	/
NR n78 SA	Ant.4	Front side	10mm			641666	3644.99	1	1	0.12	0.028	5.92	7.00	1.282	0.036	/
NR n78 SA	Ant.4	Back side	10mm			641666	3644.99	1	1	0.07	0.030	5.92	7.00	1.282	0.038	/
NR n78 SA	Ant.4	Left side	10mm			641666	3644.99	1	1	-0.04	0.024	5.92	7.00	1.282	0.031	/
NR n78 SA	Ant.4	Right side	10mm			641666	3644.99	1	1	-0.02	0.034	5.92	7.00	1.282	0.044	/
NR n78 SA	Ant.4	Top side	10mm			641666	3644.99	1	1	-0.05	0.021	5.92	7.00	1.282	0.027	/
NR n78 SA	Ant.4	Bottom side	10mm			641666	3644.99	1	1	-0.05	0.018	5.92	7.00	1.282	0.023	/
NR n78 SA	Ant.4	Front side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3644.99	135	69	-0.03	0.031	5.85	7.00	1.303	0.040	/
NR n78 SA	Ant.4	Back side	10mm			641666	3644.99	135	69	-0.01	0.035	5.85	7.00	1.303	0.046	/
NR n78 SA	Ant.4	Left side	10mm			641666	3644.99	135	69	0.11	0.028	5.85	7.00	1.303	0.036	/
NR n78 SA	Ant.4	Right side	10mm			641666	3644.99	135	69	-0.15	0.039	5.85	7.00	1.303	0.051	/
NR n78 SA	Ant.4	Top side	10mm			641666	3644.99	135	69	0.03	0.024	5.85	7.00	1.303	0.031	/
NR n78 SA	Ant.4	Bottom side	10mm			641666	3644.99	135	69	-0.03	0.020	5.85	7.00	1.303	0.026	/
NR n78 SA	Ant.6	Front side	10mm			641666	3644.99	1	1	-0.15	0.032	4.15	5.00	1.216	0.039	/
NR n78 SA	Ant.6	Back side	10mm			641666	3644.99	1	1	0.03	0.047	4.15	5.00	1.216	0.057	/
NR n78 SA	Ant.6	Left side	10mm			641666	3644.99	1	1	-0.07	0.028	4.15	5.00	1.216	0.034	/
NR n78 SA	Ant.6	Right side	10mm			641666	3644.99	1	1	-0.06	0.027	4.15	5.00	1.216	0.033	/
NR n78 SA	Ant.6	Top side	10mm	(BW 100MHz) DFT-s-OFDM BPSK	DFT-30kHz	641666	3644.99	1	1	0.05	0.024	4.15	5.00	1.216	0.029	/
NR n78 SA	Ant.6	Bottom side	10mm			641666	3644.99	1	1	-0.06	0.015	4.15	5.00	1.216	0.018	/
NR n78 SA	Ant.6	Front side	10mm			641666	3644.99	135	69	-0.06	0.034	3.95	5.00	1.274	0.043	/
NR n78 SA	Ant.6	Back side	10mm			641666	3644.99	135	69	0.07	0.051	3.95	5.00	1.274	0.065	/
NR n78 SA	Ant.6	Left side	10mm			641666	3644.99	135	69	0.06	0.024	3.95	5.00	1.274	0.031	/
NR n78 SA	Ant.6	Right side	10mm			641666	3644.99	135	69	-0.09	0.029	3.95	5.00	1.274	0.037	/
NR n78 SA	Ant.6	Top side	10mm			641666	3644.99	135	69	0.03	0.020	3.95	5.00	1.274	0.025	/
NR n78 SA	Ant.6	Bottom side	10mm			641666	3644.99	135	69	-0.12	0.018	3.95	5.00	1.274	0.023	/

10.25 WIFI 2.4GHZ

Test Band	Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq.(MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	Reported 1g SAR (W/kg)	Meas. No.
WLAN 2.4G	Head															
	WLAN 2.4G	Ant.12	Left cheek	0mm	802.11b	11	2462	-0.04	0.450	17.46	18.50	1.271	99.60	1.004	0.574	49
	WLAN 2.4G	Ant.12	Left tilt	0mm		11	2462	-0.09	0.384	17.46	18.50	1.271	99.60	1.004	0.490	
	WLAN 2.4G	Ant.12	Right cheek	0mm		11	2462	0.17	0.172	17.46	18.50	1.271	99.60	1.004	0.219	
	WLAN 2.4G	Ant.12	Right tilt	0mm		11	2462	-0.04	0.149	17.46	18.50	1.271	99.60	1.004	0.190	
	Body-worn&Hotspot															
	WLAN 2.4G	Ant.12	Front side	10mm	802.11b	11	2462	-0.16	0.122	17.46	18.50	1.271	99.60	1.004	0.156	
	WLAN 2.4G	Ant.12	Back side	10mm		11	2462	0.14	0.146	17.46	18.50	1.271	99.60	1.004	0.186	
	WLAN 2.4G	Ant.12	Left side	10mm		11	2462	0.07	0.035	17.46	18.50	1.271	99.60	1.004	0.045	
	WLAN 2.4G	Ant.12	Right side	10mm		11	2462	-0.16	0.156	17.46	18.50	1.271	99.60	1.004	0.199	50
	WLAN 2.4G	Ant.12	Top side	10mm		11	2462	-0.06	0.080	17.46	18.50	1.271	99.60	1.004	0.102	
	WLAN 2.4G	Ant.12	Bottom side	10mm		11	2462	0.07	0.029	17.46	18.50	1.271	99.60	1.004	0.037	

10.26 WIFI 5GHz

Test Band	Test Band	Antenna	Test Position	Dist.	Test Mode	Channel	Freq.(MHz)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	Reported 1g SAR (W/kg)	Duty Cycle (%)	
WLAN 5G	Head																
	WLAN 5.2G	Ant.6	Left cheek	0mm	802.11n(HT 20)	44	5220	-0.05	0.242	17.33	18.00	1.167	97.11	1.030	0.291		
	WLAN 5.2G	Ant.6	Left tilt	0mm		44	5220	0.12	0.252	17.33	18.00	1.167	97.11	1.030	0.303	51	
	WLAN 5.2G	Ant.6	Right cheek	0mm		44	5220	-0.19	0.136	17.33	18.00	1.167	97.11	1.030	0.163		
	WLAN 5.2G	Ant.6	Right tilt	0mm		44	5220	-0.06	0.150	17.33	18.00	1.167	97.11	1.030	0.180		
	WLAN 5.3G	Ant.6	Left cheek	0mm	802.11n(HT 20)	60	5300	0.01	0.251	16.97	18.00	1.268	97.11	1.030	0.328		
	WLAN 5.3G	Ant.6	Left tilt	0mm		60	5300	0.08	0.278	16.97	18.00	1.268	97.11	1.030	0.363	52	
	WLAN 5.3G	Ant.6	Right cheek	0mm		60	5300	-0.15	0.181	16.97	18.00	1.268	97.11	1.030	0.236		
	WLAN 5.3G	Ant.6	Right tilt	0mm		60	5300	0.02	0.203	16.97	18.00	1.268	97.11	1.030	0.265		
	WLAN 5.6G	Ant.6	Left cheek	0mm	802.11n(HT 20)	116	5580	0.18	0.325	16.86	17.50	1.159	97.11	1.030	0.388		
	WLAN 5.6G	Ant.6	Left tilt	0mm		116	5580	-0.03	0.546	16.86	17.50	1.159	97.11	1.030	0.652	53	
	WLAN 5.6G	Ant.6	Right cheek	0mm		116	5580	0.19	0.205	16.86	17.50	1.159	97.11	1.030	0.245		
	WLAN 5.6G	Ant.6	Right tilt	0mm		116	5580	-0.15	0.303	16.86	17.50	1.159	97.11	1.030	0.362		
	WLAN 5.8G	Ant.6	Left cheek	0mm	802.11n(HT 20)	157	5785	-0.12	0.268	16.06	17.00	1.242	97.11	1.030	0.343		
	WLAN 5.8G	Ant.6	Left tilt	0mm		157	5785	0.08	0.552	16.06	17.00	1.242	97.11	1.030	0.706	54	
	WLAN 5.8G	Ant.6	Right cheek	0mm		157	5785	0.01	0.260	16.06	17.00	1.242	97.11	1.030	0.333		
	WLAN 5.8G	Ant.6	Right tilt	0mm		157	5785	0.02	0.285	16.06	17.00	1.242	97.11	1.030	0.364		
	Body-worn&Hotspot																
	WLAN 5.2G	Ant.6	Front side	10mm	802.11n(HT 20)	44	5220	0.15	0.068	17.33	18.00	1.167	97.11	1.030	0.082		
	WLAN 5.2G	Ant.6	Back side	10mm		44	5220	0.08	0.170	17.33	18.00	1.167	97.11	1.030	0.204		
	WLAN 5.2G	Ant.6	Left side	10mm		44	5220	-0.16	0.033	17.33	18.00	1.167	97.11	1.030	0.040		
	WLAN 5.2G	Ant.6	Right side	10mm		44	5220	-0.14	0.058	17.33	18.00	1.167	97.11	1.030	0.070		
	WLAN 5.2G	Ant.6	Top side	10mm	802.11n(HT 20)	44	5220	-0.16	0.211	17.33	18.00	1.167	97.11	1.030	0.254	55	
	WLAN 5.2G	Ant.6	Bottom side	10mm		44	5220	-0.01	0.029	17.33	18.00	1.167	97.11	1.030	0.035		
	WLAN 5.3G	Ant.6	Front side	10mm		60	5300	-0.09	0.084	16.97	18.00	1.268	97.11	1.030	0.110		
	WLAN 5.3G	Ant.6	Back side	10mm		60	5300	-0.19	0.176	16.97	18.00	1.268	97.11	1.030	0.230		
	WLAN 5.3G	Ant.6	Left side	10mm	802.11n(HT 20)	60	5300	-0.09	0.044	16.97	18.00	1.268	97.11	1.030	0.057		
	WLAN 5.3G	Ant.6	Right side	10mm		60	5300	0.09	0.060	16.97	18.00	1.268	97.11	1.030	0.078		
	WLAN 5.3G	Ant.6	Top side	10mm		60	5300	-0.04	0.215	16.97	18.00	1.268	97.11	1.030	0.281	56	
	WLAN 5.3G	Ant.6	Bottom side	10mm		60	5300	0.15	0.033	16.97	18.00	1.268	97.11	1.030	0.043		
	WLAN 5.6G	Ant.6	Front side	10mm	802.11n(HT 20)	116	5580	0.13	0.119	16.86	17.50	1.159	97.11	1.030	0.142		
	WLAN 5.6G	Ant.6	Back side	10mm		116	5580	-0.04	0.155	16.86	17.50	1.159	97.11	1.030	0.185		
	WLAN 5.6G	Ant.6	Left side	10mm		116	5580	-0.19	0.051	16.86	17.50	1.159	97.11	1.030	0.061		
	WLAN 5.6G	Ant.6	Right side	10mm		116	5580	0.14	0.104	16.86	17.50	1.159	97.11	1.030	0.124		
	WLAN 5.6G	Ant.6	Top side	10mm	802.11n(HT 20)	116	5580	0.16	0.178	16.86	17.50	1.159	97.11	1.030	0.212	57	
	WLAN 5.6G	Ant.6	Bottom side	10mm		116	5580	-0.17	0.041	16.86	17.50	1.159	97.11	1.030	0.049		
	WLAN 5.8G	Ant.6	Front side	10mm		157	5785	-0.07	0.112	16.06	17.00	1.242	97.11	1.030	0.143		
	WLAN 5.8G	Ant.6	Back side	10mm		157	5785	0.19	0.114	16.06	17.00	1.242	97.11	1.030	0.146		
	WLAN 5.8G	Ant.6	Left side	10mm	802.11n(HT 20)	157	5785	0.09	0.062	16.06	17.00	1.242	97.11	1.030	0.079		
	WLAN 5.8G	Ant.6	Right side	10mm		157	5785	0.15	0.052	16.06	17.00	1.242	97.11	1.030	0.067		
	WLAN 5.8G	Ant.6	Top side	10mm		157	5785	0.18	0.140	16.06	17.00	1.242	97.11	1.030	0.179	58	
	WLAN 5.8G	Ant.6	Bottom side	10mm		157	5785	-0.02	0.039	16.06	17.00	1.242	97.11	1.030	0.050		

10.27 Bluetooth

Band	Antenna	Position	Dist.	Test Mode	Channel	Freq. (MHz)	Power Drift(dB)	Power Drift(dB)	Measured 1g SAR (W/kg)	Average Power (dBm)	Tune-up Limit (dBm)	Tune-up Scaling Factor	Duty Cycle (%)	Duty Cycle Scaled Factor	Reported 1g SAR (W/kg)	Meas. no.
	Head															
Bluetooth	Ant.12	Left cheek	0mm	8-DPSK	78	2480	0.17	0.04	0.109	11.22	12.00	1.197	76.88	1.301	0.170	59
Bluetooth	Ant.12	Left tilt	0mm		78	2480	0.09	-0.06	0.045	11.22	12.00	1.197	76.88	1.301	0.070	
Bluetooth	Ant.12	Right cheek	0mm		78	2480	0.13	-0.03	0.019	11.22	12.00	1.197	76.88	1.301	0.030	
Bluetooth	Ant.12	Right tilt	0mm		78	2480	0.01	-0.19	0.016	11.22	12.00	1.197	76.88	1.301	0.025	
	Body-worn&Hotspot															
Bluetooth	Ant.12	Front side	10mm	8-DPSK	78	2480	-0.15	-0.09	0.015	11.22	12.00	1.197	76.88	1.301	0.023	
Bluetooth	Ant.12	Back side	10mm		78	2480	-0.15	-0.1	0.018	11.22	12.00	1.197	76.88	1.301	0.028	
Bluetooth	Ant.12	Right side	10mm		78	2480	0.18	-0.08	0.035	11.22	12.00	1.197	76.88	1.301	0.054	60
Bluetooth	Ant.12	Left side	10mm		78	2480	0.06	0.09	0.013	11.22	12.00	1.197	76.88	1.301	0.020	
Bluetooth	Ant.12	Top side	10mm		78	2480	0.11	0.03	0.014	11.22	12.00	1.197	76.88	1.301	0.022	
Bluetooth	Ant.12	Bottom side	10mm		78	2480	-0.07	-0.1	0.019	11.22	12.00	1.197	76.88	1.301	0.030	

10.28 NFC

1. According to the 2022.04 TCBC Workshop meeting, the power threshold is $\leq 100\text{MHz}$, refer to P6s.

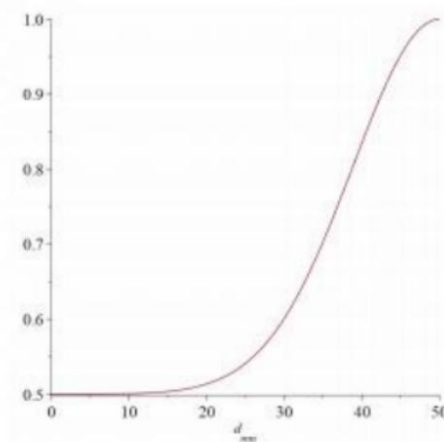
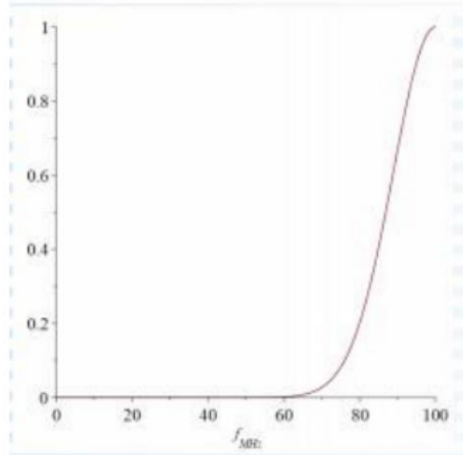
$$P_{7X}(d_{mm}, f_{MHz}) := \begin{cases} P_{6S}(d_{mm}, f_{MHz}) & f_{MHz} \leq 100 \\ P_{6to7}(d_{mm}, f_{MHz}) & 100 < f_{MHz} \leq 300 \\ P_7(d_{mm}, f_{MHz}) & 300 < f_{MHz} \end{cases}$$

2. For portable products, when using a distance of $\leq 50\text{mm}$, such as mobile phone NFC, P6s is calculated with the following formula calculate.

$$S_f(f_{MHz}) \cdot P_{431a}(d_{mm}, f_{MHz}) + (1 - S_f(f_{MHz})) \cdot S_d(d_{mm}) \cdot P_{431b1}(50., 100.) \cdot \left(1 + \log_{10}\left(\frac{100.}{f_{MHz}}\right)\right) \quad d_{mm} \leq 50 \text{ and } f_{MHz} \leq 100$$

3. The smoothing functions Sf and Sd in P6s calculate the limits based on KDB 447498 V06 and are calculated as follows.

$$S_f(f_{MHz}) := \exp\left(-10 \frac{(f_{MHz} - f_{max})^2}{\Delta f^2}\right) \quad S_d(d_{mm}) := 0.5 + 0.5 \cdot \exp\left(-10 \frac{(d_{mm} - d_{max})^2}{\Delta d^2}\right)$$



d≤50mm				
f Max(MHz)	100		d Max(mm)	50
f MHz	13.56		d(mm)	5
△ f(MHz)	100		△ d	50
S _f (f _{MHz})	0.000568861		S _d (dmm)	0.50015177
P6s(mW)	443.1257378			
Note: SAR testing is required when the distance is 5mm and the power is greater than 443.13mW.				

4. According to the ANSI C63.10 clause 11.12.2.2:

The value of maximum peak output power is according to the method described in ANSI C63.10 clause 11.12.2.2 General procedure for conducted measurements in restricted bands:

- a) Measure the conducted output power (in dBm) using the detector specified (see guidance regarding measurement procedures for determining quasi-peak, peak, and average conducted output power, respectively).
- b) Add the maximum transmit antenna gain (in dBi) to the measured output power level to determine the ERP level (see guidance on determining the applicable antenna gain)
- c) Add the appropriate maximum ground reflection factor to the ERP level (6 dB for frequencies ≤ 30 MHz, 4.7 dB for frequencies between 30 MHz and 1000 MHz, inclusive and 0 dB for frequencies > 1000 MHz).
- d) For devices with multiple antenna-ports, measure the power of each individual chain and sum the ERP of all chains in linear terms (e.g., Watts, mW).
- e) Convert the resultant ERP level to an equivalent electric field strength using the following relationship: $E = ERP - 20\log D + 104.8$

where:

E = electric field strength in dB μ V/m,

ERP = equivalent isotropic radiated power in dBm

D = specified measurement distance in meters.

Mode	f (MHz)	Max. E-Field strength (dB μ V/m)	D (m)	Ground reflection factor (dB)	ERP (dBm)
NFC (13.56MHz)	13.56	64.89	3	6	-13.91
Note: 1. Add the appropriate maximum ground reflection factor to the ERP level (6 dB for frequencies ≤ 30 MHz). 2. $ERP = 64.89 + 20 \cdot \log(10) - 104.8 + 6 = -13.91$ (dBm)					

According to the FCC KDB 447498 D04

Estimated SAR: $SAR_{test} = 1.6 \cdot P_{ant} / P_{th}$ [W/kg]

Estimated SAR	$1.6 \cdot P_{ant} / P_{th}$ [W/kg]		
Pmeas.(dBm)	-13.91	Pmeas.(mW)	0.041
Pth.(mW)	443.13		
NFC Estimated 1g SAR [W/kg]	<0.001		

11 SIMULTANEOUS TRANSMISSION

Simultaneous transmission SAR test exclusion is determined for each operating configuration and exposure condition according to the reported standalone SAR of each applicable simultaneous transmitting antenna. When the sum of SAR 1g of all simultaneously transmitting antennas in an operating mode and exposure condition combination is within the SAR limit (SAR 1g 1.6 W/kg), the simultaneous transmission SAR is not required. When the sum of SAR 1g is greater than the SAR limit (SAR 1g 1.6 W/kg), SAR test exclusion is determined by the SAR to Peak Location Ratio (SPLSR).

11.1 Simultaneous Transmission Mode Consider

No.	Simultaneous Tx Combination	Head	Body-worn	Hotspot
1	WWAN+Wi-Fi2.4G	Yes	Yes	Yes
2	WWAN+Wi-Fi5G	Yes	Yes	Yes
3	WWAN+WIFI5G+BT	Yes	Yes	Yes
4	WWAN+BT	Yes	Yes	Yes
5	WIFI5G+BT	Yes	Yes	Yes

Note:

1. When stand-alone SAR is not required for a side of antenna, its SAR is considered zero in the SAR summing process to assess Multi-band transmission SAR compliance.
2. The maximum SAR summation is calculated based on the same configuration and test position.
3. The simultaneous transmission summed of the more antennas contain combinations of less antennas, so only the worst simultaneous transmission combinations is shown in this report.

11.2 Sum SAR of Simultaneous Transmission

Please refer the document “BL-SH25C1427-AST.pdf”.

11.3 Highest Total Exposure Ratio of Simultaneous Transmission

NFC multi-transmit requires the use of the TER formula:

$$TER = \sum_{k=1}^{N_s} \left(\frac{SAR_k}{SAR_{lim}} \right) + \sum_{k=1}^{N_f} \left(\frac{MPE_{field, k}}{MPE_{field, lim}} \right)^2 + \sum_{k=1}^{N_{PD}} \left(\frac{MPE_{PD, k}}{MPE_{PD, lim}} \right) \quad \text{The}$$

maximum SAR value for Simultaneous Transmission is 1.494 [W/kg]. Therefore, the worst TER = (1.494+0.001)/1.6 = 0.93 < 1, the NFC SAR transmit simultaneously Pass.

12 TEST EQUIPMENTS LIST

Description	Manufacturer	Model	Serial No./Version	Cal. Date	Cal. Due
PC	Dell	N/A	N/A	N/A	N/A
Test Software	Speag	DASY5	52.8.8.1222	N/A	N/A
Test Software	Speag	DASY5	52.10.4.1535	N/A	N/A
750MHz Validation Dipole	Speag	D750V3	1201	2024/09/03	2027/09/02
835MHz Validation Dipole	Speag	D835V2	4d277	2024/08/30	2027/08/29
1750MHz Validation Dipole	Speag	D1750V2	1183	2024/09/03	2027/09/02
1900MHz Validation Dipole	Speag	D1900V2	5d155	2024/09/02	2027/09/01
2300MHz Validation Dipole	Speag	D2300V2	1111	2024/09/03	2027/09/02
2450MHz Validation Dipole	Speag	D2450V2	1065	2024/09/05	2027/09/04
2600MHz Validation Dipole	Speag	D2600V2	1184	2024/08/30	2027/08/29
3500MHz Validation Dipole	Speag	D3500V2	1115	2024/09/03	2027/09/03
3700MHz Validation Dipole	Speag	D3700V2	1086	2024/09/05	2027/09/05
3900MHz Validation Dipole	Speag	D3900V2	1059	2024/08/30	2027/08/30
5GHz Validation Dipole	Speag	D5GHzV2	1333	2024/09/05	2027/09/04
Data Acquisition Electronics	Speag	DAE4	1423	2025/06/05	2026/06/04
Data Acquisition Electronics	Speag	DAE4	540	2025/04/21	2026/04/20
E-Field Probe	Speag	EX3DV4	3748	2025/04/24	2026/04/23
E-Field Probe	Speag	EX3DV4	3974	2025/06/05	2026/06/04
Signal Generator	R&S	SMB100A	182635	2025/02/12	2026/02/12
Power Meter	Agilent	E4419B	MY45104512	2025/02/11	2026/02/11
Power Sensor	Agilent	E9304A	MY41499059	2025/02/11	2026/02/11
Power Sensor	Agilent	E9304A	MY41499060	2025/02/11	2026/02/11
Wireless Communication Test Set	R&S	CMW500	168792	2025/02/11	2026/02/11
Wireless Communication Test Set	Anritsu	MT8820C	6201144551	2024/05/29	2025/05/28
Network Analyzer	Agilent	E5071C	MY56301409	2024/03/09	2025/03/08
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	Keysight	85070E	MY44300524	N/A	N/A
Power Amplifier	SATIMO	6552B	22374	N/A	N/A
Dielectric Probe Kit	Keysight	85070E	MY44300524	N/A	N/A
Phantom	Speag	SAM	SN: 1857	N/A	N/A
Phantom	Speag	SAM	SN: 1437	N/A	N/A
Attenuator	COM-MW	ZA-S1-31	1305003187	N/A	N/A

Note: For dipole antennas, Tejet has adopted 3 years as calibration intervals, and on annual basis, every measurement dipole has been evaluated and is in compliance with the following criteria:

1. There is no physical damage on the dipole;
2. System validation with specific dipole is within 10% of calibrated value;
3. Return-loss in within 20% of calibrated measurement.
4. Impedance (real or imaginary parts) in within 5 Ohms of calibrated measurement.

ANNEX A SIMULATING LIQUID VERIFICATION RESULT

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an 85070E Dielectric Probe Kit.

Head Liquid

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity(σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2025.12.18	Head	750	21.6	0.87	42.78	0.89	41.94	-2.25	2.00
2026.01.02	Head	750	21.3	0.91	41.51	0.89	41.94	2.25	-1.03
2026.01.19	Head	750	21.2	0.90	41.03	0.89	41.94	1.12	-2.17
2025.12.19	Head	835	21.2	0.90	41.20	0.90	41.50	0.00	-0.72
2025.12.20	Head	835	21.3	0.92	40.92	0.90	41.50	2.22	-1.40
2026.02.03	Head	835	21.5	0.90	42.32	0.90	41.50	0.00	1.98
2026.01.05	Head	1750	21.7	1.32	39.33	1.37	40.08	-3.65	-1.87
2026.01.21	Head	1750	21.1	1.36	39.26	1.37	40.08	-0.73	-2.05
2026.02.02	Head	1750	21.0	1.38	39.21	1.37	40.08	0.73	-2.17
2025.12.24	Head	1900	21.3	1.43	38.25	1.40	40.00	2.14	-4.38
2026.01.19	Head	1900	21.2	1.40	38.86	1.40	40.00	0.00	-2.85
2026.02.02	Head	1900	20.9	1.44	38.93	1.40	40.00	2.86	-2.68
2026.02.04	Head	2300	21.0	1.70	38.65	1.67	39.47	1.80	-2.08
2026.01.15	Head	2450	21.5	1.86	38.78	1.80	39.20	3.33	-1.07
2025.12.27	Head	2600	20.8	2.01	38.00	1.96	39.01	2.55	-2.59
2025.12.27	Head	2600	21.2	1.97	37.57	1.96	39.01	0.51	-3.69
2025.12.28	Head	2600	21.3	1.99	38.73	1.96	39.01	1.53	-0.72
2026.02.05	Head	2600	20.8	1.97	38.07	1.96	39.01	0.51	-2.41
2026.02.05	Head	2600	20.6	1.99	38.65	1.96	39.01	1.53	-0.92
2025.12.21	Head	3500	20.8	2.87	38.63	2.91	37.93	-1.37	1.85
2025.12.28	Head	3500	21.0	2.85	38.31	2.91	37.93	-2.06	1.00
2025.12.29	Head	3500	21.2	2.86	38.22	2.91	37.93	-1.72	0.76
2025.12.31	Head	3500	20.6	2.87	38.63	2.91	37.93	-1.37	1.85
2026.01.03	Head	3500	21.4	2.90	37.71	2.91	37.93	-0.34	-0.58
2026.01.05	Head	3500	21.4	2.81	36.83	2.91	37.93	-3.44	-2.90
2026.01.14	Head	3500	20.8	2.81	36.83	2.91	37.93	-3.44	-2.90
2026.01.16	Head	3500	20.5	2.87	38.63	2.91	37.93	-1.37	1.85
2025.12.29	Head	3700	21.2	3.06	38.27	3.12	37.70	-1.92	1.51
2025.12.31	Head	3700	20.6	3.06	38.27	3.12	37.70	-1.92	1.51
2026.01.01	Head	3700	21.2	3.02	36.75	3.12	37.70	-3.21	-2.52
2026.01.02	Head	3700	21.5	3.07	36.62	3.12	37.70	-1.60	-2.86
2026.01.14	Head	3700	20.8	2.99	36.45	3.12	37.70	-4.17	-3.32
2026.01.16	Head	3700	20.5	3.06	38.27	3.12	37.70	-1.92	1.51

Date	Liquid Type	Fre. (MHz)	Temp. (°C)	Meas. Conductivity (σ) (S/m)	Meas. Permittivity (ϵ)	Target Conductivity(σ) (S/m)	Target Permittivity (ϵ)	Conductivity Tolerance (%)	Permittivity Tolerance (%)
2026.02.02	Head	3700	21.0	3.00	36.82	3.12	37.70	-3.85	-2.33
2026.02.03	Head	3700	21.5	3.03	38.77	3.12	37.70	-2.88	2.84
2026.01.14	Head	3900	20.8	3.31	36.58	3.32	37.47	-0.30	-2.38
2026.01.16	Head	3900	20.5	3.25	37.95	3.32	37.47	-2.11	1.28
2025.12.26	Head	5200	21.3	4.54	35.20	4.66	35.99	-2.58	-2.20
2026.01.17	Head	5300	21.1	4.87	34.99	4.76	35.87	2.31	-2.45
2026.01.18	Head	5600	21.5	5.26	34.51	5.07	35.53	3.75	-2.87
2026.01.13	Head	5800	21.4	5.45	34.16	5.27	35.30	3.42	-3.23

Note: The tolerance limit of Conductivity and Permittivity is $\pm 5\%$.

ANNEX B SYSTEM CHECK RESULT

Comparing to the original SAR value provided by Speag, the validation data should be within its specification of 10 % (for 1 g).

Liquid 1g

Date	Freq. (MHz)	Power (mW)	1g Meas. SAR (W/kg)	1g Normalized SAR (W/kg)	1g Dipole SAR (W/kg)	1g Dipole. SAR Div. (%)
2025.12.18	Head	750	100	0.835	8.35	8.46
2026.01.02	Head	750	100	0.850	8.50	8.46
2026.01.19	Head	750	100	0.905	9.05	8.46
2025.12.19	Head	835	100	0.919	9.19	9.59
2025.12.20	Head	835	100	0.971	9.71	9.59
2026.02.03	Head	835	100	0.922	9.22	9.59
2026.01.05	Head	1750	100	3.620	36.20	36.50
2026.01.21	Head	1750	100	3.830	38.30	36.50
2026.02.02	Head	1750	100	3.910	39.10	36.50
2025.12.24	Head	1900	100	3.720	37.20	39.90
2026.01.19	Head	1900	100	3.650	36.50	39.90
2026.02.02	Head	1900	100	4.320	43.20	39.90
2026.02.04	Head	2300	100	5.170	51.70	49.10
2026.01.15	Head	2450	100	5.410	54.10	52.60
2025.12.27	Head	2600	100	5.800	58.00	55.30
2025.12.27	Head	2600	100	5.780	57.80	55.30
2025.12.28	Head	2600	100	5.720	57.20	55.30
2026.02.05	Head	2600	100	5.510	55.10	55.30
2026.02.05	Head	2600	100	5.150	51.50	55.30
2025.12.21	Head	3500	100	6.660	66.60	67.20
2025.12.28	Head	3500	100	6.980	69.80	67.20
2025.12.29	Head	3500	100	6.970	69.70	67.20
2025.12.31	Head	3500	100	6.660	66.60	67.20
2026.01.03	Head	3500	100	6.510	65.10	67.20
2026.01.05	Head	3500	100	6.620	66.20	67.20
2026.01.14	Head	3500	100	6.710	67.10	67.20
2026.01.16	Head	3500	100	7.030	70.30	67.20
2025.12.29	Head	3700	100	6.560	65.60	66.70
2025.12.31	Head	3700	100	6.870	68.70	66.70
2026.01.01	Head	3700	100	6.620	66.20	66.70
2026.01.02	Head	3700	100	6.590	65.90	66.70
2026.01.14	Head	3700	100	6.750	67.50	66.70
2026.01.16	Head	3700	100	6.560	65.60	66.70
2026.02.02	Head	3700	100	6.150	61.50	66.70

Date	Freq. (MHz)	Power (mW)	1g Meas. SAR (W/kg)	1g Normalized SAR (W/kg)	1g Dipole SAR (W/kg)	1g Dipole. SAR Div. (%)
2026.02.03	Head	3700	100	6.830	68.30	66.70
2026.01.14	Head	3900	100	6.850	68.50	67.40
2026.01.16	Head	3900	100	6.260	62.60	67.40
2025.12.26	Head	5200	100	7.230	72.30	77.80
2026.01.17	Head	5300	100	7.510	75.10	79.00
2026.01.18	Head	5600	100	9.090	90.90	82.80
2026.01.13	Head	5800	100	7.870	78.70	78.50
Note: The tolerance limit of System validation $\pm 10\%$.						

Please refer the document “BL-SH25C1427-ASC.pdf”.

ANNEX C TEST DATA

Please refer the document “BL-SH25C1427-ATD.pdf”.

ANNEX D EUT EXTERNAL PHOTOS

Please refer the document “BL-SH25C1427-AW.pdf”.

ANNEX E SAR TEST SETUP PHOTOS

Please refer the document “BL-SH25C1427-AS.pdf”.

ANNEX F CALIBRATION REPORT

Please refer the document “BL-SH25C1427-AC.pdf”.

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--END OF REPORT--