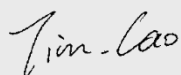


Test report No:
25A0670R.706

FCC TEST REPORT

Product Name	Mobile Phone
Model and /or type reference	25128RN17L
Trademark	REDMI
FCC ID	2AFZZ8RN17L
Applicant's name / address	Xiaomi Communications Co., Ltd. #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085
Test method requested, standard	47 CFR FCC Part 2 (Section 2.1093) IEEE Std 1528-2013 EN IEC/IEEE 62209-1528:2021 ANSI C95.1-2019
Verdict Summary	IN COMPLIANCE
Documented by (name / position & signature)	Tim Cao / Project Manager 
Approved by (name / position & signature)	Frank He / Technical Manager 
Date of issue	2025-11-25
Report Version	V1.0
Report template No	Template_FCC SAR-RF-V1.0

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COMPETENCES AND GUARANTEES

DEKRA is a testing laboratory competent to carry out the tests described in this report.

In order to assure the traceability to other national and international laboratories, DEKRA has a calibration and maintenance program for its measurement equipment.

DEKRA guarantees the reliability of the data presented in this report, which is the result of the measurements and the tests performed to the item under test on the date and under the conditions stated in the report and it is based on the knowledge and technical facilities available at DEKRA at the time of performance of the test.

DEKRA is liable to the client for the maintenance of the confidentiality of all information related to the item under test and the results of the test.

The results presented in this Test Report apply only to the particular item under test established in this document.

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GENERAL CONDITIONS

Test Location	No. 99, Hongye Road, Suzhou Industrial Park Suzhou, 215006, P.R. China
Test Facility	A2LA (Certificate No. 3235.01) CNAS (Certificate No. L5313) FCC - Designation Number: CN1199 Test Firm Registration Number: 566524 ISED - CAB identifier: CN0040 IC#: 4075B
Date (receive sample)	Oct. 20, 2025
Date (start test)	Oct. 21, 2025
Date (finish test)	Nov. 15, 2025

1. This report is only referred to the item that has undergone the test.
2. This report does not constitute or imply on its own an approval of the product by the Certification Bodies or Competent Authorities.
3. This document is only valid if complete; no partial reproduction can be made without previous written permission of DEKRA.
4. The measurement result is considered in conformance with the requirement if it is within the prescribed limit, it is not necessary to account for the uncertainty associated with the measurement result.



DOCUMENT HISTORY

Report No.	Version	Description	Issued Date
25A0670R.706	V1.0	Initial issue of report.	2025-11-25

STATEMENT OF COMPLIANCE

The maximum results of Specific Absorption Rate (SAR) and Power Density found during testing for Mobile Phone, 25128RN17L, are as follows.

ANT 0				
Frequency Band	Maximum Reported SAR(W/kg)			
	Head	Hotspot	Body-worn	Limbs SAR 10g SAR
GSM850	0.21	0.45	0.45	/
GSM1900	0.06	0.65	0.32	/
WCDMA Band II	0.14	0.58	0.25	1.34
WCDMA Band IV	0.11	0.62	0.43	1.74
WCDMA Band V	0.19	0.34	0.27	/
LTE Band 2	0.16	0.51	0.35	1.56
LTE Band 4	0.16	0.68	0.51	2.05
LTE Band 5	0.23	0.41	0.41	/
LTE Band 7	0.52	0.51	0.38	1.65
LTE Band 13	0.19	0.39	0.39	/
LTE Band 26	0.21	0.41	0.41	/
LTE Band 38	0.16	0.51	0.27	1.19
LTE Band 41	0.16	0.57	0.54	0.93
LTE Band 66	0.10	0.74	0.51	1.58
Bluetooth	0.14	0.07	0.07	/
WLAN 2.4G	0.24	0.43	0.43	/
WLAN 5.2G	0.41	0.41	0.23	/
WLAN 5.3G	0.42	/	0.20	1.11
WLAN 5.6G	0.41	/	0.22	1.31
WLAN 5.8G	0.39	0.43	0.29	/
SAR Limited(W/kg)	1.6			4.0
Maximum Simultaneous Transmission SAR (W/kg)				
Scenario	Head	Hotspot	Body-worn	Limbs SAR 10g SAR
Sum SAR	1.07	0.97	0.97	2.73
Sum Limited(W/kg)	1.6			4.0

ANT 1				
Frequency Band ANT 1	Maximum Reported SAR(W/kg)			
	Head	Hotspot	Body-worn	Limbs SAR 10g SAR
GSM850	0.79	0.46	0.46	/
GSM1900	0.42	0.70	0.31	1.13
WCDMA Band II	0.92	0.66	0.27	1.04
WCDMA Band IV	0.88	0.71	0.47	0.63
WCDMA Band V	0.76	0.44	0.44	/
LTE Band 2	0.79	0.56	0.35	1.24
LTE Band 4	0.75	0.71	0.55	1.13
LTE Band 5	0.78	0.52	0.52	/
LTE Band 7	0.89	0.48	0.24	1.61
LTE Band 13	0.41	0.23	0.23	/
LTE Band 26	0.69	0.54	0.54	/
LTE Band 38	1.09	0.53	0.27	0.95
LTE Band 41	1.05	0.52	0.33	1.20
LTE Band 66	0.65	0.96	0.72	1.11
Bluetooth	0.14	0.07	0.07	/
WLAN 2.4G	0.24	0.43	0.43	/
WLAN 5.2G	0.41	0.41	0.23	/
WLAN 5.3G	0.42	/	0.20	1.11
WLAN 5.6G	0.41	/	0.22	1.31
WLAN 5.8G	0.39	0.43	0.29	/
SAR Limited(W/kg)	1.6			4.0
Maximum Simultaneous Transmission SAR (W/kg)				
Scenario	Head	Hotspot	Body-worn	Limbs SAR 10g SAR
Sum SAR	1.59	1.39	1.15	2.92
Sum Limited(W/kg)	1.6			4.0

USED EQUIPMENT

SAR Test and Power Density Test / TR6

Instrument	Manufacturer	Model No.	Serial No.	Next Cal. Date
Stäubli Robot TX60L	Stäubli	TX60L	F10/5C90A1/A/01	N/A
Controller	Stäubli	SP1	S-0034	N/A
Dipole Validation Kits	Speag	D750V3	1086	2026.03.20
Dipole Validation Kits	Speag	D835V2	4d094	2028.03.17
Dipole Validation Kits	Speag	D900V2	1d096	2028.03.13
Dipole Validation Kits	Speag	D1800V2	2d179	2028.03.17
Dipole Validation Kits	Speag	D1900V2	5d121	2028.03.16
Dipole Validation Kits	Speag	D2300V2	1069	2028.03.19
Dipole Validation Kits	Speag	D2450V2	839	2028.03.17
Dipole Validation Kits	Speag	D2600V2	1029	2028.03.12
Dipole Validation Kits	Speag	D5GHzV2	1078	2028.03.13
SAM Twin Phantom	Speag	SAM	TP-1562	N/A
Device Holder	Speag	SD 000 H01 HA	N/A	N/A
Data Acquisition Electronic	Speag	DAE4	1220	2026.03.13
E-Field Probe	Speag	EX3DV4	7860	2026.04.06
SAR Software	Speag	DASY6	V5.2 Build 162	N/A
Power Amplifier	MVE	MPC1018.50	C30002D	2026.05.16
Dual Directional Coupler	woken	0110A05A82Z-20	CMLC66W1A1	2026.05.16
Tissue fluid test probe	SPEAG	DAK 3.5	1308	N/A
Vector Network	Agilent	E5071C	MY46103316	2026.07.24
Signal Generator	R&S	SMBV100A	263697	2026.05.09
Power Meter	Keysight	N1912A	MY60300004	2026.05.16
Radio Communication Analyzer	Anritsu	MT8821C	6262297906	2025.12.13
Temperature/Humidity Meter	Rites	RTS-1909	THM-034	2026.04.29
Temperature/Humidity Meter	Rites	RTS-1909	THM-035	2026.04.29
Temperatuer	LKM	DTM3000	3777	2026.05.18

SAR Test and Power Density Test / TR6

Instrument	Manufacturer	Model No.	Serial No.	Firmware Version	Software Version
SAR Software	Speag	DASY6	V5.2 Build 162	N/A	V16.2.4.2448
Power Amplifier	MVE	MPC1018.50	C30002D	A.14.03	N/A
Vector Network	Agilent	E5071C	MY46103316	A.11.31	N/A
Signal Generator	R&S	SMBV100A	263697	V4.15.125.49	N/A
Power Meter	Keysight	N1912A	MY60300004	A2.06.01	N/A

UNCERTAINTY

Uncertainties have been calculated according to the DEKRA internal document. The reported expanded uncertainties are based on a standard uncertainty multiplied by a coverage factor of $k=2$, providing a level of confidence of approximately 95% .

Uncertainty for System Validation 4MHz – 300 MHz								
Error Description	Unc. ±%	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) veff
Measurement System								
Probe Calibration	±13.3%	N	2	1	1	±6.65%	±6.65%	∞
Axial Isotropy	±0.5%	R	$\sqrt{3}$	0.7	0.7	±0.2%	±0.2%	∞
Hemispherical Isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Linearity	±0.6%	R	$\sqrt{3}$	1	1	±0.4%	±0.4%	∞
Modulation	±2.4%	R	$\sqrt{3}$	1	1	±1.4%	±1.4%	∞
System Detection Limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.0%	R	$\sqrt{3}$	1	1	±0.0%	±0.0%	∞
Integration Time	±0.0%	R	$\sqrt{3}$	1	1	±0.0%	±0.0%	∞
RF Ambient Noise	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
RF Ambient Reflections	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Probe Positioner	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Probe Positioning	±2.0%	R	$\sqrt{3}$	1	1	±1.2%	±1.2%	∞
Max. SAR Eval.	±2.0%	R	$\sqrt{3}$	1	1	±1.2%	±1.2%	∞
Dipole Related								
Deviation from exp. dipole	±5.5%	R	$\sqrt{3}$	0	0	±0.0%	±0.0%	∞
Dipole axis to liquid distance	±2.0%	R	$\sqrt{3}$	1	1	±1.2%	±1.2%	∞
Dipole input power and SAR drift	±3.4%	R	$\sqrt{3}$	1	1	±2.0%	±2.0%	∞
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
SAR correction for deviations in conductivity and permittivity(target)	±5%	R	$\sqrt{3}$	1	0.84	±2.9%	±2.4%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.26	0.26	±0.6%	±0.7%	∞
Liquid conductivity - temperature uncertainty	±1.7%	R	$\sqrt{3}$	0.78	0.71	±0.8%	±0.7%	
Liquid permittivity - temperature uncertainty	±0.3%	R	$\sqrt{3}$	0.23	0.26	±0.0%	±0.0%	
Combined Std. Uncertainty						±10.6%	±10.4%	
Expanded Std. Uncertainty						±21.2%	±20.9%	

DASY6 SAR Uncertainty

Measurement uncertainty for 300 MHz to 3 GHz averaged over 1 gram / 10 gram.

Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) v _{eff}
Measurement System								
Probe Calibration	±5.5%	N	1	1	1	±5.5%	±5.5%	∞
Axial Isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.4%	R	$\sqrt{3}$	1	1	±0.2%	±0.2%	∞
Probe Positioning	±2.9%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Max. SAR Eval.	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.26	0.26	±0.6%	±0.7%	∞
Combined Std. Uncertainty						±10.6%	±10.5%	361
Expanded STD Uncertainty						±21.2%	±21.1%	

DASY6 SAR Uncertainty								
Measurement uncertainty for 3 GHz to 6 GHz averaged over 1 gram / 10 gram.								
Error Description	Uncert. value	Prob. Dist.	Div.	(ci) 1g	(ci) 10g	Std. Unc. (1g)	Std. Unc. (10g)	(vi) v _{eff}
Measurement System								
Probe Calibration	±6.65%	N	1	1	1	±6.65%	±6.65%	∞
Axial Isotropy	±4.7%	R	$\sqrt{3}$	0.7	0.7	±1.9%	±1.9%	∞
Hemispherical Isotropy	±9.6%	R	$\sqrt{3}$	0.7	0.7	±3.9%	±3.9%	∞
Boundary Effects	±2.0%	R	$\sqrt{3}$	1	1	±1.2%	±1.2%	∞
Linearity	±4.7%	R	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
System Detection Limits	±1.0%	R	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Readout Electronics	±0.3%	N	1	1	1	±0.3%	±0.3%	∞
Response Time	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Integration Time	±2.6%	R	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
RF Ambient Noise	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
RF Ambient Reflections	±3.0%	R	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
Probe Positioner	±0.8%	R	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
Probe Positioning	±6.7%	R	$\sqrt{3}$	1	1	±3.9%	±3.9%	∞
Max. SAR Eval.	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Test Sample Related								
Device Positioning	±2.9%	N	1	1	1	±2.9%	±2.9%	145
Device Holder	±3.6%	N	1	1	1	±3.6%	±3.6%	5
Power Drift	±5.0%	R	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Setup								
Phantom Uncertainty	±4.0%	R	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
Liquid Conductivity (meas.)	±2.5%	N	1	0.78	0.71	±2.0%	±1.8%	∞
Liquid Permittivity (meas.)	±2.5%	N	1	0.26	0.26	±0.6%	±0.7%	∞
Combined Std. Uncertainty						±12.0%	±12.0%	784
Expanded STD Uncertainty						±24.0%	±23.9%	

1 GENERAL INFORMATION

Product Name:	Mobile Phone	
Model Name:	25128RN17L	
Trademark.:	REDMI	
FCC ID:	2AFZZ8RN17L	
Power Supply	3.86 Vdc, EUT is equipped with an adapter to power it via AC/DC.	
Hardware Version	135100502	
Software Version	Xiaomi HyperOS 3.0	
Manufacturer	Xiaomi Communications Co., Ltd.	
Manufacturer Address	#019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085	
Test Matrix/ IMEI	IMEI 1: 863426080028684 IMEI 2: 863426080028692	IMEI 1: 863426080028262 IMEI 2: 863426080028270
Wireless specification	GSM	
Support Band(s)	GSM 850, GSM 1900	
Uplink Frequency	GSM 850: 824.2-848.8 MHz GSM1900: 1850.2-1909.8 MHz	
Downlink Frequency	GSM 850: 869.2-893.8 MHz GSM1900: 1930.2-1989.8 MHz	
Wireless specification	WCDMA	
Support Band(s)	Band 2, Band 4, Band 5	
Uplink Frequency	Band 2: 1850-1910 MHz Band 4: 1710-1755 MHz Band 5: 824-849 MHz	
Downlink Frequency	Band 2: 1930-1990 MHz Band 4: 2110-2155 MHz Band 5: 869-894 MHz	
Type of Modulation	Downlink modulation: QPSK & 16QAM & 64QAM Uplink modulation: QPSK & 16QAM	
Wireless specification	LTE	
Support Band(s)	Band2/4/5/7/13/26/38/41/66	
Uplink Frequency	Band 2: 1850-1910 MHz Band 4: 1710-1755 MHz Band 5: 824-849 MHz Band 7: 2500-2570 MHz Band 13: 777-787 MHz Band 26: 814-824MHz, 824-849 MHz Band 38: 2570-2620 MHz Band 41: 2496-2690 MHz Band 66: 1710-1780 MHz	
Downlink Frequency	Band 2: 1930-1990 MHz Band 4: 2110-2155 MHz Band 5: 869-894 MHz Band 7: 2620-2690 MHz Band 13: 746-756 MHz Band 26: 859-869 MHz, 869-894 MHz	

	Band 38: 2570-2620 MHz Band 41: 2496-2690 MHz Band 66: 2110-2200 MHz					
Type of Modulation	Downlink modulation: QPSK & 16QAM & 64QAM Uplink modulation: QPSK & 16QAM & 64QAM					
Wireless specification	802.11b / g / n					
Operating frequency	2412~2462MHz					
Type of Modulation	DSSS / OFDM					
Smart System	☒	SISO				
Wireless specification	802.11a / n / ac					
Frequency Range	U-NII-1: 5150 MHz to 5250 MHz					
	U-NII-2A: 5250 MHz to 5350 MHz					
	U-NII-2C: 5470 MHz to 5725 MHz					
	U-NII-3: 5725 MHz to 5850 MHz					
Channel Bandwidth	802.11a 20 MHz 802.11n 20 MHz, 40 MHz 802.11ac 20 MHz, 40 MHz, 80 MHz					
Modulation technology	OFDM					
Smart System	☒	SISO				
Wireless specification	Bluetooth (BR/EDR)					
Operating frequency range(s)	2402~2480MHz					
Type of Modulation	GFSK & DPSK					
PHYs	☒	GFSK	☒	Pi/4 DQPSK	☒	8DPSK
Data Rate	☒	1Mbit/s	☒	2Mbit/s	☒	3Mbit/s
Number of channels	79					
Wireless specification	Bluetooth (LE)					
Operating frequency range(s)	2402~2480MHz					
Type of Modulation	GFSK & DPSK					
PHYs	☒	LE 1M	☒	LE 2M		
Data Rate	☒	1Mbit/s	☒	2Mbit/s		
Number of channels	40					
Remark: As above information is provided and confirmed by the applicant. DEKRA is not liable to the accuracy, suitability, reliability or/and integrity of the information.						

1.1 DUT Antenna Locations

Note: The DUT Antenna Locations please see appendix.

Note:

- 1) The test device is a Tablet Computer. The overall dimensions of this equipment are 170*80mm in length and width. Per KDB 616217 D04, because the diagonal distance of this device is $\geq 200\text{mm}$, Therefore, tests should be conducted at intervals of 0mm.

According to the distance between WWAN/Wi-Fi antennas and the sides of the EUT we can draw the conclusion that:

EUT Sides for SAR Testing							
Mode	Exposure Condition	Front	Back	Left	Right	Top	Bottom
WWAN Antenna	Product specific 10g SAR	Yes	Yes	Yes	Yes	Yes	Yes
WLAN Antenna	Product specific 10g SAR	Yes	Yes	Yes	Yes	Yes	Yes

Note:

- 1) When the antenna-to-edge distance is greater than 2.5cm, such position does not need to be tested.

1.2 Power reduction specification

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

- 1) A fixed level power reduction is applied for some frequency bands when hotspot mode becomes active. When the hotspot is disabled, the power value will be recovered.
- 2) A fixed level power reduction is applied for some frequency bands when simultaneously transmitting with the other antennas in certain simultaneous transmission conditions. The standalone SAR compliance still uses the standalone SAR results tested at the maximum output power level without any power reduction
- 3) A fixed level power reduction is applied for some frequency bands when handset operate "held to the ear" condition, the power reduction triggered by audio receiver detection. The audio receiver detection is used to determine head or body scenario.
- 4) The proximity sensor is used to indicate when the device is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes of main antenna to ensure SAR compliance(Refer to section 5.4 for detailed proximity Sensor information and validation data per KDB 616217).

The following tables summarize the key power reduction information. The detailed full power which is the Max. power the state can use and reduced tune-up specifications and conducted power measurement results are provided in Section 8 of this report.

Band	Antenna	Full Power (Receiver off) DSI 2	Head SAR (Receiver on) DSI 1	Hotspot SAR (Sensor on) DSI 3	Body worn SAR (Sensor on) DSI 3	Limbs SAR (Sensor on) DSI 3
GSM850 (GPRS 3TX)	ANT0	29.50	29.50	29.50	29.50	N/A
DCS1900 (GPRS 3TX)	ANT0	27.00	27.00	26.00	26.00	N/A
WCDMA II	ANT0	25.00	25.00	20.00	20.00	20.00
WCDMA IV	ANT0	25.00	25.00	21.50	21.50	21.50
WCDMA V	ANT0	25.00	25.00	25.00	25.00	N/A
LTE Band 2	ANT0	24.50	24.50	21.50	21.50	21.50
LTE Band 4	ANT0	25.00	25.00	21.50	21.50	21.50
LTE Band 5	ANT0	25.50	25.50	25.00	25.00	N/A
LTE Band 7	ANT0	24.50	24.50	21.50	21.50	21.50
LTE Band 13	ANT0	25.50	25.50	25.50	25.50	N/A
LTE Band 26	ANT0	25.50	25.50	25.50	25.50	N/A
LTE Band 38	ANT0	25.50	25.50	22.00	22.00	22.00
LTE Band 41	ANT0	25.50	25.50	22.00	22.00	22.00
LTE Band 66	ANT0	24.50	24.50	22.00	22.00	22.00

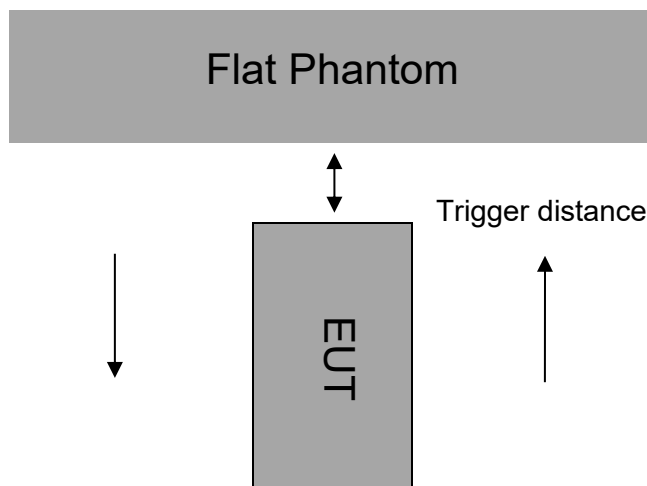
Band	Antenna	Full Power (Receiver off) DSI 2	Head SAR (Receiver on) DSI 1	Hotspot SAR (Sensor on) DSI 4	Body worn SAR (Sensor on) DSI 4	Limbs SAR (Sensor on) DSI 4
GSM850 (GPRS 3TX)	ANT1	29.50	26.50	29.50	29.50	N/A
DCS1900 (GPRS 3TX)	ANT1	27.00	20.00	21.00	21.00	21.00
WCDMA II	ANT1	25.00	14.50	25.00	15.50	15.50
WCDMA IV	ANT1	25.00	14.00	20.00	15.50	15.50
WCDMA V	ANT1	25.00	22.50	21.50	24.50	N/A
LTE Band 2	ANT1	25.50	15.00	15.50	15.50	15.50
LTE Band 4	ANT1	25.50	14.00	15.50	15.50	15.50
LTE Band 5	ANT1	25.50	22.00	25.00	25.00	N/A
LTE Band 7	ANT1	25.50	17.00	16.50	16.50	16.50
LTE Band 13	ANT1	25.50	24.50	25.50	25.50	N/A
LTE Band 26	ANT1	25.50	22.00	25.50	25.50	N/A
LTE Band 38	ANT1	25.50	19.50	19.00	19.00	19.00
LTE Band 41	ANT1	25.50	19.50	19.00	19.00	19.00
LTE Band 66	ANT1	25.50	13.00	16.50	16.50	16.50

Band	Antenna	Full Power (Receiver off) DSI 2	Head SAR (Receiver on) DSI 1	Hotspot SAR (Receiver off) DSI 3/4	Body worn SAR (Receiver off) DSI 3/4	Limbs SAR (Receiver off) DSI 3/4
Bluetooth	ANT10	11.50	11.50	11.50	11.50	N/A
WIFI2.4G	ANT10	20.00	15.00	20.00	20.00	N/A
WIFI 5.2G	ANT10	15.00	20.00	18.00	18.00	N/A
WIFI 5.3G	ANT10	15.00	20.00	18.00	18.00	18.00
WIFI 5.6G	ANT10	14.00	20.00	18.00	18.00	18.00
WIFI 5.8G	ANT10	12.00	20.00	18.00	18.00	N/A

1.3 Power reduction specification

Proximity sensor triggering distances :

The Proximity sensor triggering was applied to Antenna. Proximity sensor triggering distance testing was performed according to the procedures outlined, and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed.



Target Power reduction applied for each wireless mode and orientation

Band	Antenna	Full Power (Sensor not trigger) DSI 2	Down Power (Sensor trigger) DSI 3	
GSM850 (GPRS 3TX)	ANT0	29.50	29.50	0.0
DCS1900 (GPRS 3TX)	ANT0	27.00	26.00	1.0
WCDMA II	ANT0	25.00	20.00	5.0
WCDMA IV	ANT0	25.00	21.50	3.5
WCDMA V	ANT0	25.00	25.00	0.0
LTE Band 2	ANT0	24.50	21.50	3.0
LTE Band 4	ANT0	25.00	21.50	3.5
LTE Band 5	ANT0	25.50	25.00	0.5
LTE Band 7	ANT0	24.50	21.50	3.0
LTE Band 13	ANT0	25.50	25.50	0.0
LTE Band 26	ANT0	25.50	25.50	0.0
LTE Band 38	ANT0	25.50	22.00	3.5
LTE Band 41	ANT0	25.50	22.00	3.5
LTE Band 66	ANT0	24.50	22.00	2.5

Band	Antenna	Full Power (Sensor not trigger) DSI 2	Down Power (Sensor trigger) DSI 4	
GSM850 (GPRS 3TX)	ANT1	29.50	29.50	0.0
DCS1900 (GPRS 3TX)	ANT1	27.00	21.00	6.0
WCDMA II	ANT1	25.00	25.00	0.0
WCDMA IV	ANT1	25.00	20.00	5.0
WCDMA V	ANT1	25.00	21.50	3.5
LTE Band 2	ANT1	25.50	15.50	10.0
LTE Band 4	ANT1	25.50	15.50	10.0
LTE Band 5	ANT1	25.50	25.00	0.5
LTE Band 7	ANT1	25.50	26.50	9.0
LTE Band 13	ANT1	25.50	25.50	0.0
LTE Band 26	ANT1	25.50	25.50	0.0
LTE Band 38	ANT1	25.50	19.00	6.5
LTE Band 41	ANT1	25.50	19.00	6.5
LTE Band 66	ANT1	25.50	16.50	9.0

Note: The Proximity Sensor Technical Description please see sensor op.

Remark:

As above information is provided and confirmed by the applicant. DEKRA is not liable to the accuracy, suitability, reliability or/and integrity of the information.

1.4 Test Specification

Identity	Document Title
FCC 47CFR §2.1093	Radio frequency Radiation Exposure Evaluation: Portable Devices
IEC TR 63170	Measurement procedure for the evaluation of power density related to human exposure to radio frequency fields from wireless communication devices operating between 6 GHz and 100 GHz
IEC/IEEE 63195-1	Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 1: Measurement procedure
IEC/IEEE 63195-2	Assessment of power density of human exposure to radio frequency fields from wireless devices in close proximity to the head and body (frequency range of 6 GHz to 300 GHz) – Part 2: Computational procedure
ANSI/IEEE C95.1-2019	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.
IEEE 1528-2013	Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques
EN IEC/IEEE 62209-1528	Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz) (IEC/IEEE 62209-1528)
KDB 941225 D05	SAR for LTE Devices v02r05
KDB 941225 D05A	LTE Rel.10 KDB Inquiry Sheet v01r02
KDB 941225 D06	Hotspot Mode SAR v02r01
KDB 248227 D01	SAR Guidance for IEEE 802.11 Wi-Fi SAR v02r02
KDB 648474 D04	Handset SAR v01r03
KDB447498 D01	General RF Exposure Guidance v06
KDB 865664 D01	SAR Measurement 100 MHz to 6 GHz v01r04
KDB 865664 D02	RF Exposure Reporting v01r02
KDB 690783 D01	SAR Listings on Grants v01r03
KDB 616217 D04	SAR for laptop and tablets v01r02

1.5 RF exposure limits

This device belongs to portable device category because its radiating structure is allowed to be used within 20 centimetres 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.

SAR Exposure Limit		
	General Population / Uncontrolled Exposure ¹ (W/kg)	Occupational / Controlled Exposure ² (W/kg)
Spatial Peak SAR ³ (head or Body)	1.60	8.00
Spatial Peak SAR ⁴ (Whole Body)	0.08	0.40
Spatial Peak SAR ⁵ (Hands / Feet / Ankle / Wrist)	4.00	20.00
Power Density Exposure Limit (1,500 - 100,000 MHz)		
	General Population / Uncontrolled Exposure (mW/cm²) ⁶	Occupational / Controlled Exposure (mW/cm²)
Power Density (S)	1.0	5.0

Notes:

1. **General Population / Uncontrolled Environments** are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.
2. **Occupational / Controlled Environments** are defined as locations where there is exposure that may be incurred by persons who are aware of the potential for exposure, (i.e. as a result of employment or occupation).
3. The Spatial Peak value of the SAR averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
4. The Spatial Average value of the SAR averaged over the whole body.
5. The Spatial Peak value of the SAR averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube) and over the appropriate averaging time.
6. 1 mW/cm² = 10 W/m²,

2 SAR MEASUREMENTS SYSTEM CONFIGURATION

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 (p). The equation description is as below:

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

SAR measurement can be related to the electrical field in the tissue by

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

Where:

σ = conductivity of the tissue (S/m)

ρ = mass density of the tissue (kg/m³)

E = RMS electric field strength (V/m)

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

Power Tensity Definition

The power density for an electromagnetic field represents the rate of energy transfer per unit area. The local power density (i.e. Poynting vector) at a given spatial point is deduced from electromagnetic fields by the following formula:

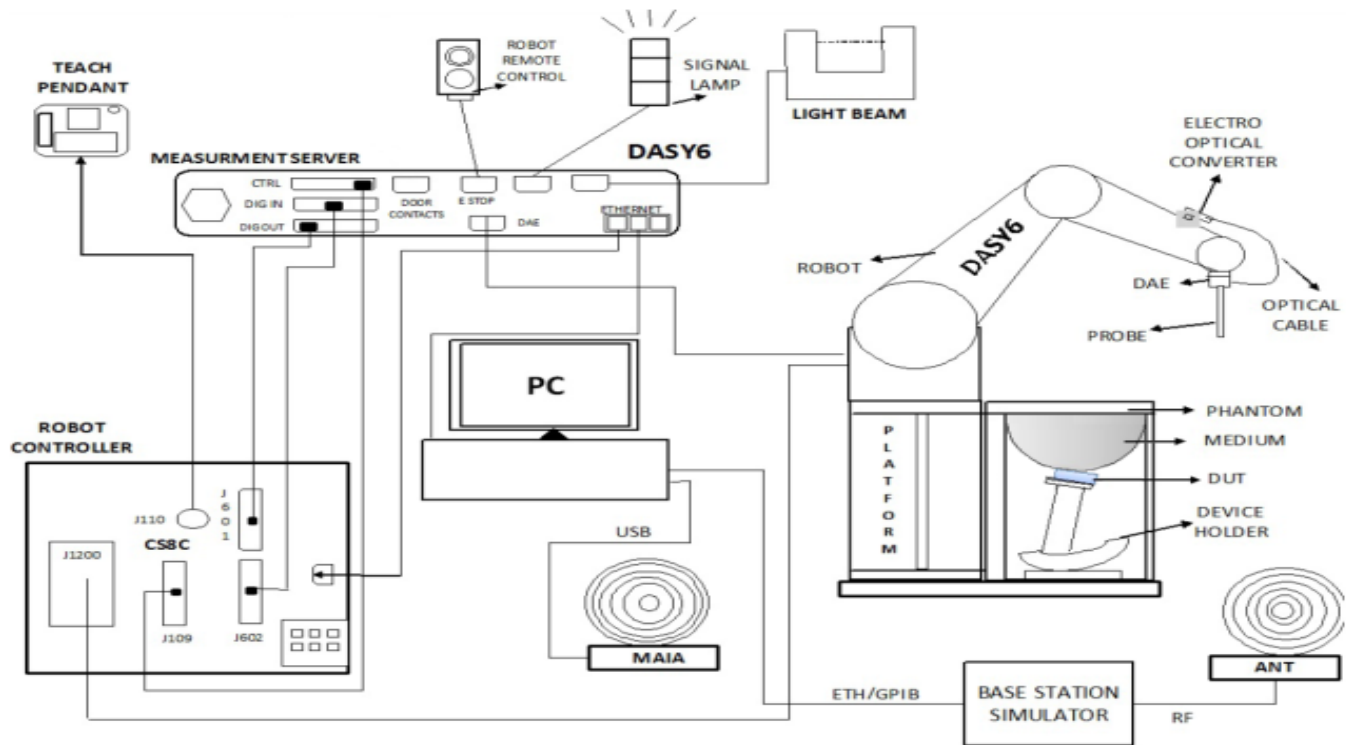
$$S = \frac{1}{2} \text{Re}\{E \times H^*\} \cdot \vec{n}$$

Where: E is the complex electric field peak phasor and H is the complex conjugate magnetic field peak phasor.

The spatial-average power density distribution on the evaluation surface is determined per the IEC TR 63170. The spatial area, A is specified by the applicable exposure limit or regulatory requirements. The circular shape was used.

$$S_{av} = \frac{1}{2A} \Re \left(\int E \times H^* \cdot \hat{n} dA \right)$$

2.1 DASY6 SAR System Description

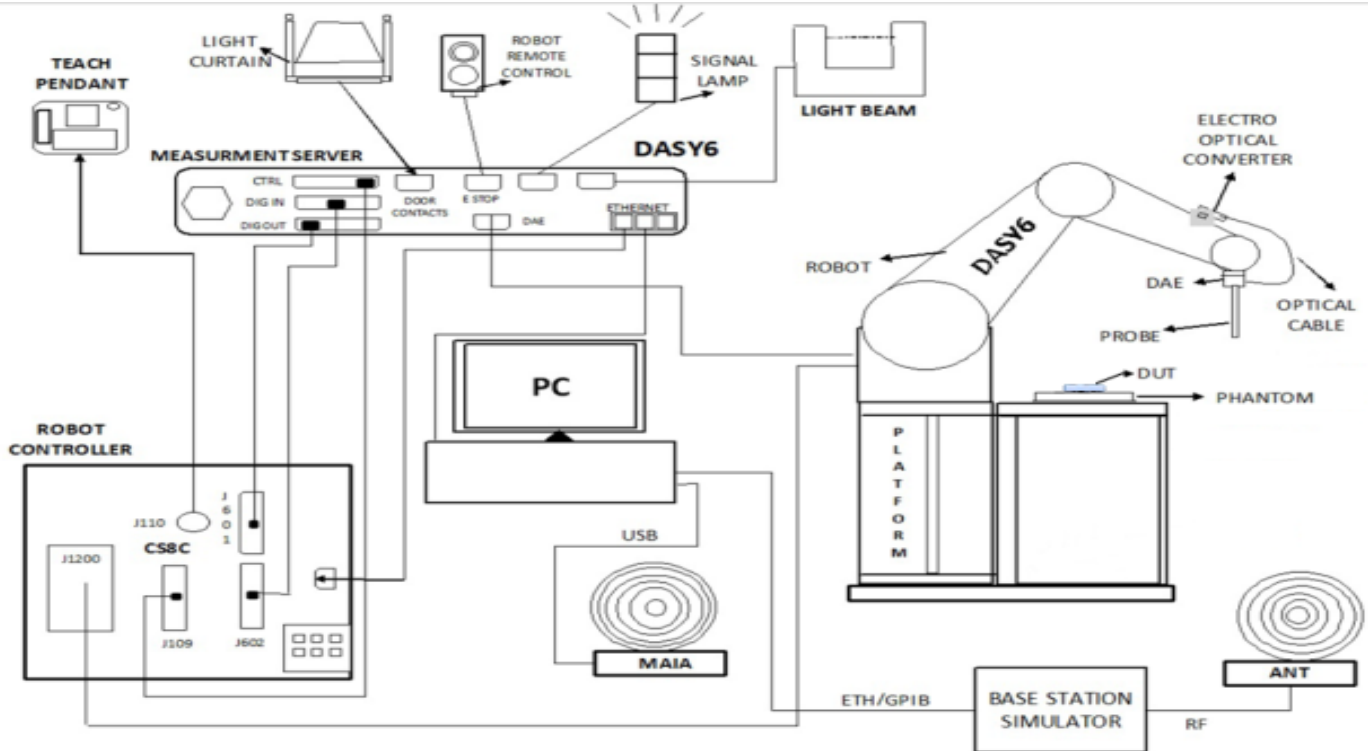


The DASY6 system for performing compliance tests consists of the following items:

1. A standard high precision 6-axis robot with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
3. The Electro-optical converter (EOC) performs the conversion from optical to electrical signals for the digital communication to the DAE. To use optical surface detection, a special version of the EOC is required. The EOC signal is transmitted to the measurement server.
4. The Light Beam used is for probe alignment. This improves the (absolute) accuracy of the probe positioning.
5. A computer running Windows 11 and the DASY6 software.
6. Remote control and teach pendant as well as additional circuitry for robot safety such as warning lamps, etc.
7. The phantom, the device holder and other accessories according to the targeted measurement.

2.2 DASY6 Power Density System Description

Power density measurements for mmWave frequencies were performed using SPEAG DASY6 with cDASY6 5G module. The DASY6 included a high precision robotics system (Staubli), robot controller, desktop computer, near-field probe, probe alignment sensor, and the 5G phantom cover.



EUmmWVx probe:

The EUmmWVx probe is based on the pseudo-vector probe design, which not only measures the field magnitude but also derives its polarization ellipse. The design entails two small 0.8mm dipole sensors mechanically protected by high-density foam, printed on both sides of a 0.9mm wide and 0.12mm thick glass substrate. The body of the probe is specifically constructed to minimize distortion by the scattered fields. The probe consists of two sensors with different angles (1 and 2) arranged in the same plane in the probe axis. Three or more measurements of the two sensors are taken for different probe rotational angles to derive the amplitude and polarization information. The probe design allows measurements at distances as small as 2mm from the sensors to the surface of the device under test (DuT). The typical sensor to probe tip distance is 1.5 mm. The exact distance is calibrated. A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted.

2.3 Applications

Predefined procedures and evaluations for automated compliance testing with all worldwide standards, e.g., IEC/IEEE 62209-1528 others.

2.4 Area & Zoom Scan Procedures

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 measures points and step size follow as below. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution. The measure settings are referred 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 $\leq$ 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
		Δz Zoom (n>1): between subsequent points		4–5 GHz: ≤ 2.5 mm 5–6 GHz: ≤ 2 mm
Minimum zoom scan volume	x, y, z		≥ 30 mm	3–4 GHz: ≥ 28 mm
				4–5 GHz: ≥ 25 mm
				5–6 GHz: ≥ 22 mm

Note:

1. δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.
2. * 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.

2.5 Uncertainty of Inter-/Extrapolation and Averaging

To evaluate the uncertainty of the interpolation, extrapolation and averaged SAR calculation algorithms of the Postprocessor, DASY6 allows the generation of measurement grids which are artificially predefined by analytically based test functions. Therefore, the grids of area scans and zoom scans can be filled with uncertainty test data, according to the SAR benchmark functions of IEC/IEEE 62209-1528. The three analytical functions shown in equations as below are used to describe the possible range of the expected SAR distributions for the tested handsets. The field gradients are covered by the spatially flat distribution f1, the spatially steep distribution f3 and f2 accounts for H-field cancellation on the phantom/tissue surface.

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

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

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

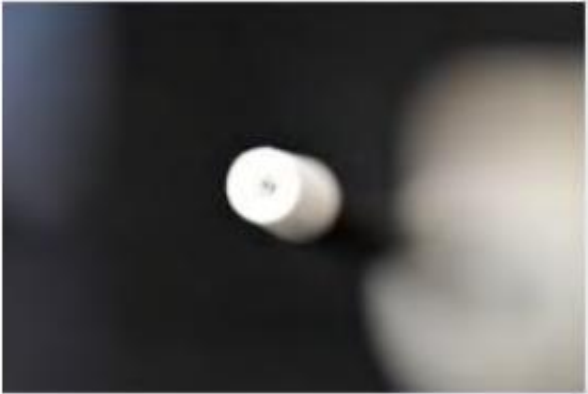
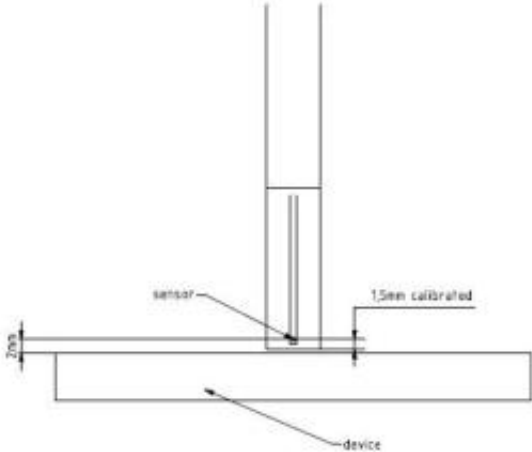
2.6 DASY6 E-Field Probe & EUmmWV Probe

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

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

Construction	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Frequency	4 MHz to 10 GHz Linearity: ± 0.2 dB (30 MHz to 10 GHz)
Directivity	±0.1 dB in TSL (rotation around probe axis) ±0.3 dB in TSL (rotation normal to probe axis)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Calibration	ISO/IEC 17025 calibration service available
<div></div> <div></div>	
EX3DV4 E-Field Probe Probe setup on robot	

The EUmmWV3 probe is based on the pseudo-vector probe design, which not only measures the field magnitude but also derives its polarization ellipse. This probe concept also has the advantage that the sensor angle errors or distortions of the field by the substrate can be largely nullified by calibration. This is particularly important as, at these very high frequencies, field distortions by the substrate are dependent on the wavelength. It has two dipoles optimally arranged to obtain pseudo-vector information. It has minimum 3 measurements/point, 120° rotated around probe axis. Sensors (0.8 mm length) printed on glass substrate protected by high density foam. Low perturbation of the measured field. Requires positioner which can do accurate probe rotation.

Frequency Range	750 MHz - 110 GHz
Dynamic Range	< 20 V/m - 10'000 V/m with PRE-10 (min < 50 V/m - 3000 V/m)
Position Precision	< 0.2 mm
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: encapsulation 8 mm (internal sensor < 1mm) Distance from probe tip to dipole centers: < 2 mm Sensor displacement to probe's calibration point: < 0.3 mm
Applications	Electric field measurements of 5G devices and other mm-wave transmitters operating above 10 GHz in <2 mm distance from device (free-space) Power density, magnetic field, and far-field analysis using total field reconstruction (cDASY6 5G or ICEy-mmW module required)
compatibility	cDASY6 + 5G-Module SW1.0 and higher
	
E-Field mm-Wave Probe	Sensor to DUT Surface

2.7 Boundary Detection Unit and Probe Mounting Device

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

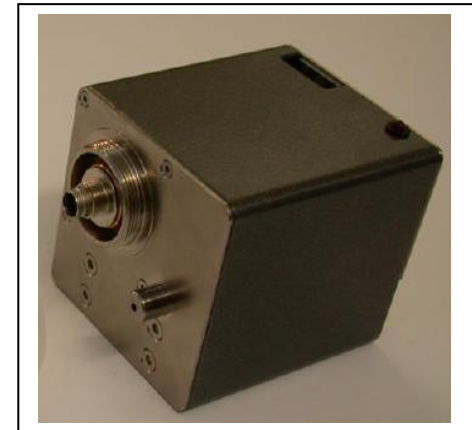


2.8 DATA Acquisition Electronics (DAE) and Measurement Server

The data acquisition electronics (DAE) consists of a highly sensitive electrometer-grade preamplifier with auto-zeroing, a channel and gain-switching multiplexer, a fast 16 bit AD-converter and a command decoder and control logic unit.

Transmission to the measurement server is accomplished through an optical downlink for data and status information as well as an optical uplink for commands and the clock.

The input impedance of the DAE4 is 200M Ohm; the inputs are symmetrical and floating. Common mode rejection is above 80dB.



The DASY6 measurement server is based on a PC/104 CPU board with a 400MHz intel ULV Celeron, 128MB chipdisk and 128MB RAM. The necessary circuits for communication with the DAE electronics box, as well as the 16 bit AD converter system for optical detection and digital I/O interface are contained on the DASY6 I/O board, which is directly connected to the PC/104 bus of the CPU board



2.9 Robot

The DASY6 system uses the high precision robots TX60 XL type out of the newer series from Stäubli SA (France). For the 6-axis controller DASY6 system, the CS8C robot controller version from Stäubli is used. The XL robot series have many features that are important for our application:

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



2.10 Light Beam Unit

The light beam switch allows automatic "tooling" of the probe. During the process, the actual position of the probe tip with respect to the robot arm is measured, as well as the probe length and the horizontal probe offset. The software then corrects all movements, such that the robot coordinates are valid for the probe tip.

The repeatability of this process is better than 0.1 mm. If a position has been taught with an aligned probe, the same position will be reached with another aligned probe within 0.1 mm, even if the other probe has different dimensions. During probe rotations, the probe tip will keep its actual position.



2.11 Device Holder

The DASY6 device holder is designed to cope with different positions given in the standard. It has two scales for the device rotation (with respect to the body axis) and the device inclination (with respect to the line between the ear reference points). The rotation center for both scales is the ear reference point (EPR).

Thus the device needs no repositioning when changing the angles.

The DASY6 device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon_r = 3$ and loss tangent $\delta = 0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.



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

The DASY6 device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity $\epsilon_r = 3$ and loss tangent $\delta = 0.02$. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.



2.12 SAM Phantom

SAM Twin Phantom

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

- Left head
- Right head
- Flat phantom

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



ELI Phantom

The SAM phantom is a fiberglass shell phantom with 2mm shell thickness. It has one measurement areas:

- ELI phantom

The ELI phantom is intended for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI4 is fully compatible with standard and all known tissue simulating liquids.



3 TISSUE SIMULATING LIQUID

3.1 The composition of the tissue simulating liquid

Simulate 10MHz~10000MHz liquid, manufactured by SPEAG

Table F.1 – Suggested recipes for achieving target dielectric properties, 30 MHz to 900 MHz

Frequency (MHz)	30	50		144		450		835	900	
Recipe source number	3	3	2	2	3	2	4	2	2	4
Ingredients (% by weight)										
De-ionized water	48,30	48,30	53,53	55,12	48,30	48,53	56	50,36	50,31	56
Tween 20			44,70	43,31		49,51		48,39	48,34	
Oxidized mineral oil							44			44
Diethyleneglycol monoethylether										
Triton X-100										
Diacetin	50,00	50,00			50,00					
DGBE										
NaCl	1,60	1,60	1,77	1,57	1,60	1,96		1,25	1,35	
Additives and salt	0,10	0,10			0,10					
Measured temperature dependence										
Temp. (°C)			21	21		21	20	21	21	20
$\epsilon_{\text{liquid temp. unc.}}$ (%)	0,8	0,1			0,1	0,1		0,04	0,04	
$\sigma_{\text{liquid temp. unc.}}$ (%)	2,8	2,8			2,6	4,2		1,6	1,6	

Table F.2 – Suggested recipes for achieving target dielectric properties, 1 800 MHz to 10 000 MHz

Frequency (MHz)	1 800		2 450	4 000	5 000	5 200	5 800	6 000	8 000	10 000
Recipe source number	2	4	4	4	4	1	1	4	5	5
Ingredients (% by weight)										
De-ionized water	54,23	56	56	56	56	65,53	65,53	56	67,8	66,0
Tween	45,27								31,1	33,0
Oxidized mineral oil		44	44	44	44			44		
Diethyleneglycol monoethylether						17,24	17,24			
Triton X-100						17,24	17,24			
Diacetin										
DGBE										
NaCl	0,50									
Additives and salt										
Measured temperature dependence										
Temp. (°C)	21	20	20	20	20	22	22	20	20	20
$\epsilon_{\text{liquid temp. unc.}}$ (%)	0,4					1,7	1,8			
$\sigma_{\text{liquid temp. unc.}}$ (%)	2,3					2,7	2,6			

NOTE 1 Multiple columns under a single frequency indicate optional recipes.

NOTE 2 Recipe source numbers: 1 verified by different labs, 2 Reference [59], 3 developed by IT'IS Foundation, 4 developed by IT'IS Foundation, 5 Reference [60].

NOTE 3 The values of $\epsilon_{\text{liquid temp. unc.}}$ and $\sigma_{\text{liquid temp. unc.}}$ are liquid temperature uncertainties described in O.9.6, based on measurements of the applicable liquid recipes given above. These are not part of the original publications but have been subsequently developed by the project team.

NOTE 4 The recipes at 8 000 MHz and 10 000 MHz are sufficiently broadband that they cover the frequency range of 6 000 MHz to 10 000 MHz within a tolerance of ± 10 % for permittivity and conductivity.

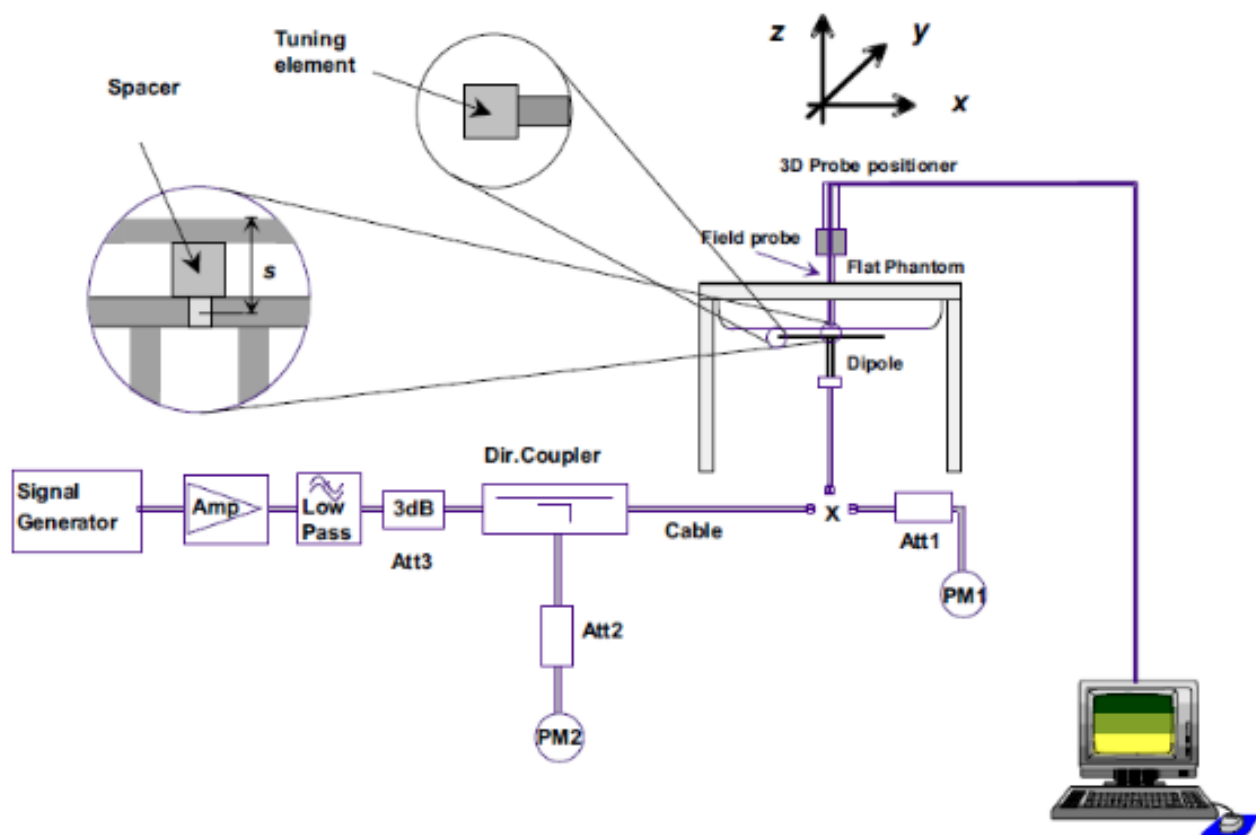
3.2 Measurement for Tissue Simulate Liquid

The dielectric properties for this Tissue Simulate Liquids were measured by using the Agilent E5071C Network Analyzer (600 KHz-10000 MHz). The Conductivity (σ) and Permittivity (ρ) are listed in below table. For the SAR measurement given in this report. The temperature variation of the Tissue Simulate Liquids was 22 ± 2 °C.

Tissue Type	Measured Frequency (MHz)	Target Tissue ($\pm 5\%$)		Measured Tissue		Liquid Temp.(°C)	Measured Date
		ϵ_r	σ (S/m)	ϵ_r	σ (S/m)		
750 Head	750	41.9 (39.81~44)	0.89 (0.85~0.94)	43.76	0.92	22.50	2025.11.01
835 Head	835	41.5 (39.43~43.58)	0.90 (0.86~0.95)	43.54	0.95	22.50	2025.11.03
1800 Head	1800	40.0 (38.00~42.00)	1.40 (1.33~1.47)	41.77	1.40	22.50	2025.11.05
1900 Head	1900	40.0 (38.00~42.00)	1.40 (1.33~1.47)	41.81	1.46	22.50	2025.11.07
2450 Head	2450	39.2 (37.24~41.16)	1.80 (1.71~1.89)	40.80	1.89	22.50	2025.11.09
2600 Head	2600	39.0 (37.05~40.95)	1.96 (1.86~2.06)	40.54	2.01	22.50	2025.11.11
5250 Head	5250	35.9 (34.11~37.70)	4.71 (4.47~4.95)	35.92	4.76	22.50	2025.11.13
5600 Head	5600	35.5 (33.73~37.28)	5.07 (4.82~5.32)	35.27	5.19	22.50	2025.11.15
5750 Head	5750	35.4 (33.63~37.17)	5.22 (4.96~5.48)	34.98	5.36	22.50	2025.11.17

4 SYSTEM CHECK

The microwave circuit arrangement for system Check is sketched in F-12. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR measurement was performed to see if the measured SAR was within $\pm 10\%$ from the target SAR values. The tests were conducted on the same days as the measurement of the EUT. The obtained results from the system accuracy verification are displayed in the following table (A power level of 250Mw (below 3GHz) or 100Mw (3-6GHz) was input to the dipole antenna). During the tests, the ambient temperature of the laboratory was in the range $22\pm 2^{\circ}\text{C}$, the relative humidity was in the range 60% and the liquid depth above the ear reference points was above $15\pm 0.5\text{ cm}$ in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.



F-1. The microwave circuit arrangement used for SAR system check

4.1 Justification for Extended Dipole Calibrations

1) Referring to KDB865664 D01 requirements for dipole calibration, instead of the typical annual calibration recommended by measurement standards, longer calibration intervals of up to three years may be considered when it is demonstrated that the SAR target, impedance and return loss of a dipole have remain stable according to the following requirements. Each measured dipole is expected to evaluate with the following criteria at least on annual interval in Appendix C.

- a) There is no physical damage on the dipole;
- b) System check with specific dipole is within 10% of calibrated value;
- c) Return-loss is within 10% of calibrated measurement;
- d) Impedance is within 5Ω from the previous measurement.

2) Network analyser probe calibration against air, distilled water and a shorting block performed before measuring liquid parameters.

4.2 Measurement for System Check

Validation Kit		Measured SAR 250mW		Measured SAR 1W		Normalized to 1W Target ($\pm 10\%$)		Liquid Temp.(°C)	Measured Date
		1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)		
D750V3	Head	2.21	1.47	8.84	5.88	8.41 (7.57~9.25)	5.50 (4.95~6.05)	22.50	2025.11.01
D835V2	Head	2.34	1.55	9.36	6.20	9.56 (8.60~10.52)	6.36 (5.72~7.00)	22.50	2025.11.03
D1800V2	Head	9.67	5.13	38.68	20.52	38.80 (34.92~42.68)	20.60 (18.54~22.66)	22.50	2025.11.05
D1900V2	Head	10.20	5.34	40.80	21.36	39.50 (35.55~43.45)	20.70 (18.63~22.77)	22.50	2025.11.07
D2450V2	Head	13.30	6.19	53.20	24.76	52.80 (47.52~58.08)	24.60 (22.14~27.06)	22.50	2025.11.09
D2600V2	Head	14.20	6.35	56.80	25.40	55.50 (49.95~61.05)	24.90 (22.41~27.39)	22.50	2025.11.11
Validation Kit		Measured SAR 100mW		Measured SAR 1W		Normalized to 1W Target ($\pm 10\%$)		Liquid Temp.(°C)	Measured Date
		1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)		
D5GHzV2 5.25GHz	Head	7.68	2.17	76.80	21.70	77.60 (69.84~85.36)	21.60 (19.44~23.76)	22.50	2025.11.13
D5GHzV2 5.6GHz	Head	7.36	2.08	73.60	20.80	81.30 (73.17~89.43)	22.60 (20.34~24.86)	22.50	2025.11.15
D5GHzV2 5.75GHz	Head	8.21	2.31	82.10	23.10	77.40 (69.66~85.14)	21.30 (19.17~23.43)	22.50	2025.11.17

5 TEST CONFIGURATION

5.1 SAR Test Reduction Procedure

According to KDB 941225D01, in the following procedures, the mode tested for SAR is referred to as the primary mode. The equivalent modes considered for SAR test reduction are denoted as secondary modes. Both primary and secondary modes must be in the same frequency band. When the maximum output power and tune-up tolerance specified for production units in a secondary mode is $\leq \frac{1}{4}$ dB higher than the primary mode or when the highest reported SAR of the primary mode is scaled by the ratio of specified maximum output power and tune-up tolerance of secondary to primary mode and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for the secondary mode. This is referred to as the 3G SAR test reduction procedure in the following SAR test guidance, where the primary mode is identified in the applicable wireless mode test procedures and the secondary mode is wireless mode being considered for SAR test reduction by that procedure. When the 3G SAR test reduction procedure is not satisfied, it is identified as “otherwise” in the applicable procedures; SAR measurement is required for the secondary mode.

5.2 Operation Configurations

5.2.1. GSM Test Configuration

SAR tests for GSM 850 and GSM 1900, a communication link is set up with a base station by air link. Using CMW500 the power lever is set to “5” and “0” in SAR of GSM 850 and GSM 1900. The tests in the band of GSM 850 and GSM 1900 are performed in the mode of GPRS/EGPRS function. Since the GPRS class is 12 for this EUT, it has at most 4 timeslots in uplink and at most 4 timeslots in downlink, the maximum total timeslot is 5. The EGPRS class is 12 for this EUT, it has at most 4 timeslots in uplink, and at most 4 timeslots in downlink, the maximum total timeslot is 5.

SAR test reduction for GPRS and EDGE modes is determined by the source-based time-averaged output power specified for production units, including tune-up tolerance. The data mode with highest specified time-averaged output power should be tested for SAR compliance in the applicable exposure conditions. For modes with the same specified maximum output power and tolerance, the higher number time-slot configuration should be tested.

When SAR tests for EGPRS mode is necessary, GMSK modulation should be used to minimize SAR measurement error due to higher peak-to-average power (PAR) ratios inherent in 8-PSK.

The 3G SAR test reduction procedure is applied to 8-PSK EDGE with GMSK GPRS/EDGE as the primary mode

5.2.2. WCDMA Test Configuration

1) . Output Power Verification

Maximum output power is verified on the high, middle and low channels according to procedures described in section 5.2 of 3GPP TS 34.121, using the appropriate RMC or AMR with TPC (transmit power control) set to all "1's" for WCDMA/HSDPA or by applying the required inner loop power control procedures to maintain maximum output power while HSUPA is active. Results for all applicable physical channel configurations (DPCCH, DPDCHn and spreading codes, HSDPA, HSPA) are required in the SAR report. All configurations that are not supported by the handset or cannot be measured due to technical or equipment limitations must be clearly identified.

2) . Head SAR

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for 12.2 kbps AMR in 3.4 kbps SRB (signaling radio bearer) using the highest reported SAR configuration in 12.2 kbps RMC for head exposure

3) . Body SAR

SAR for body configurations is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to other spreading codes and multiple DPDCHn configurations supported by the handset with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured using an applicable RMC configuration with the corresponding spreading code or DPDCHn, for the highest reported body-worn accessory exposure SAR configuration in 12.2 kbps RMC. When more than 2 DPDCHn are supported by the handset, it may be necessary to configure additional DPDCHn using FTM (Factory Test Mode) or other chipset based test approaches with parameters similar to those used in 384 kbps and 768 kbps RMC.

4) . HSDPA / HSUPA / DC-HSDPA

According to KDB 941225 D01v03, RMC 12.2kbps setting is used to evaluate SAR. If the maximum output power and tune-up tolerance specified for production units in HSDPA / HSUPA / DC-HSDPA is $\leq \frac{1}{4}$ dB higher than RMC 12.2Kbps or when the highest reported SAR of the RMC12.2Kbps is scaled by the ratio of specified maximum output power and tune-up tolerance of HSDPA / HSUPA / DC-HSDPA to RMC12.2Kbps and the adjusted SAR is ≤ 1.2 W/kg, SAR measurement is not required for HSDPA / HSUPA / DC-HSDPA

a) HSDPA

HSDPA is configured according to the applicable UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms and a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors (β_c , β_d), and HS-DPCCH power offset parameters (Δ_{ACK} , Δ_{NACK} , Δ_{CQI}) are set according to values indicated in the following table. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

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

Note1: Δ_{ACK} , Δ_{NACK} and $\Delta_{CQI} = 8$ Ahs = $\beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$

Note2: For the HS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude (EVM) with HS-DPCCH test in clause 5.13.1.A, and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and $\Delta_{NACK} = 8$ (Ahs=30/15) with $\beta_{hs} = 30/15 * \beta_c$, and $\Delta_{CQI} = 7$ (Ahs=24/15) with $\beta_{hs} = 24/15 * \beta_c$.

Note3: CM=1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.

The measurements were performed with a Fixed Reference Channel (FRC) and H-Set 1 QPSK.

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

settings of required H-Set 1 QPSK acc. to 3GPP 34.121

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

HSDPA UE category

b) HSUPA

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

Sub-test ^o	β_c ^o	β_d ^o	β_d (SF) ^o	β_c/β_d ^o	β_{hs} (1) ^o	β_{ac} ^o	β_{ad} ^o	β_c (SF) ^o	β_{ad} (code) ^o	CM (2) ^o (dB) ^o	MP R ^o (dB) ^o	AG ⁽⁴⁾ Index ^o	E-TFC I ^o
1 ^o	11/15 ⁽³⁾ ^o	15/15 ⁽³⁾ ^o	64 ^o	11/15 ⁽³⁾ ^o	22/15 ^o	209/225 ^o	1039/225 ^o	4 ^o	1 ^o	1.0 ^o	0.0 ^o	20 ^o	75 ^o
2 ^o	6/15 ^o	15/15 ^o	64 ^o	6/15 ^o	12/15 ^o	12/15 ^o	94/75 ^o	4 ^o	1 ^o	3.0 ^o	2.0 ^o	12 ^o	67 ^o
3 ^o	15/15 ^o	9/15 ^o	64 ^o	15/9 ^o	30/15 ^o	30/15 ^o	$\beta_{ad1}:47/15$ $\beta_{ad2}:47/15$	4 ^o	2 ^o	2.0 ^o	1.0 ^o	15 ^o	92 ^o
4 ^o	2/15 ^o	15/15 ^o	64 ^o	2/15 ^o	4/15 ^o	2/15 ^o	56/75 ^o	4 ^o	1 ^o	3.0 ^o	2.0 ^o	17 ^o	71 ^o
5 ^o	15/15 ⁽⁴⁾ ^o	15/15 ⁽⁴⁾ ^o	64 ^o	15/15 ⁽⁴⁾ ^o	30/15 ^o	24/15 ^o	134/15 ^o	4 ^o	1 ^o	1.0 ^o	0.0 ^o	21 ^o	81 ^o
Note 1: ΔACK , $\Delta NACK$ and $\Delta CQI=8$ $A_{hs} = \beta_{hs}/\beta_c = 30/15$ $\beta_{hs} = 30/15 * \beta_c$ Note 2: CM = 1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. For all other combinations of DPDCH, DPCCH, HS-DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference. Note 3 : For subtest 1 the β_c/β_d ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 10/15$ and $\beta_d = 15/15$ Note 4 : For subtest 5 the β_c/β_d ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 14/15$ and $\beta_d = 15/15$ Note 5 : Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g Note 6: β_{ad} can not be set directly; it is set by Absolute Grant Value.													

Subtests for UMTS Release 6 HSUPA

UE E-DCH Category	Maximum E-DCH Codes Transmitted	Number of HARQ Processes	E-DCH TTI(ms)	Minimum Spreading Factor	Maximum E-DCH Transport Block Bits	Max Rate (Mbps)
1	1	4	10	4	7110	0.7296
2	2	8	2	4	2798	1.4592
	2	4	10	4	14484	
3	2	4	10	4	14484	1.4592
4	2	8	2	2	5772	2.9185
	2	4	10	2	20000	2.00
5	2	4	10	2	20000	2.00
6 (No DPDCH)	4	8	10	2SF2&2SF	11484	5.76
	4	4	2	4	20000	2.00
7 (No DPDCH)	4	8	2	2SF2&2SF	22996	?
	4	4	10	4	20000	?
NOTE: When 4 codes are transmitted in parallel, two codes shall be transmitted with SF2 and two with SF4. UE categories 1 to 6 support QPSK only. UE category 7 supports QPSK and 16QAM. (TS 25.306-7.3.0).						

HSUPA UE category

c) DC-HSDPA

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

The following tests were completed according to procedures in section 7.3.13 of 3GPP TS 34.108 v9.5.0.

A summary of these settings are illustrated below:

Downlink Physical Channels are set as per 3GPP TS34.121-1 v9.0.0 E.5.0

Table E.5.0: Levels for HSDPA connection setup

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

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

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

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

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

settings of required H-Set 12 QPSK acc. to 3GPP 34.121

Note:

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

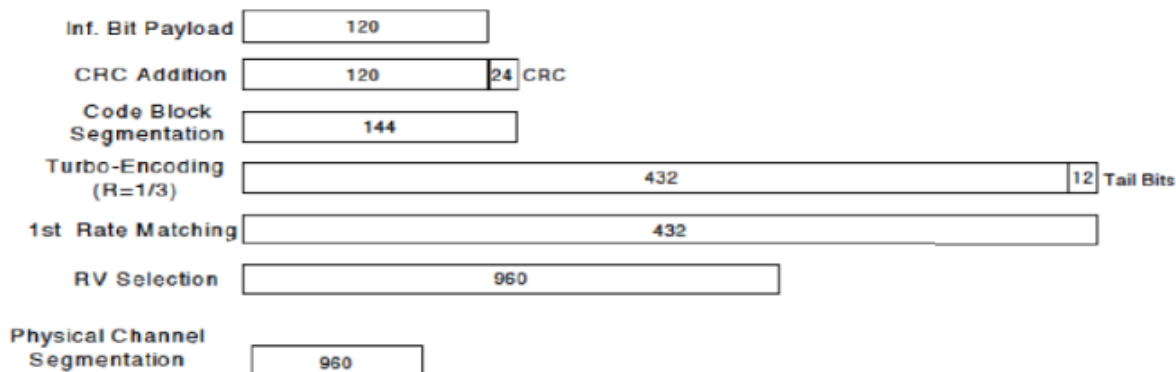


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

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

Sub-test [Ⓢ]	β_c [Ⓢ]	β_d [Ⓢ]	β_d (SF) [Ⓢ]	β_c/β_d [Ⓢ]	$\beta_{hs}(1)$ [Ⓢ]	CM(dB)(2) [Ⓢ]	MPR (dB) [Ⓢ]
1 [Ⓢ]	2/15 [Ⓢ]	15/15 [Ⓢ]	64 [Ⓢ]	2/15 [Ⓢ]	4/15 [Ⓢ]	0.0 [Ⓢ]	0 [Ⓢ]
2 [Ⓢ]	12/15(3) [Ⓢ]	15/15(3) [Ⓢ]	64 [Ⓢ]	12/15(3) [Ⓢ]	24/15 [Ⓢ]	1.0 [Ⓢ]	0 [Ⓢ]
3 [Ⓢ]	15/15 [Ⓢ]	8/15 [Ⓢ]	64 [Ⓢ]	15/8 [Ⓢ]	30/15 [Ⓢ]	1.5 [Ⓢ]	0.5 [Ⓢ]
4 [Ⓢ]	15/15 [Ⓢ]	4/15 [Ⓢ]	64 [Ⓢ]	15/4 [Ⓢ]	30/15 [Ⓢ]	1.5 [Ⓢ]	0.5 [Ⓢ]
Note1: ΔACK , $\Delta NACK$ and $\Delta CQI=8$ $A_{hs}=\beta_{hs}/\beta_c=30/15$ $\beta_{hs}=30/15 * \beta_c$ Note2: CM=1 for $\beta_c/\beta_d=12/15$, $\beta_{hs}/\beta_c=24/15$. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases. Note3: For subtest 2 the β_c/β_d ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signalled gain factors for the reference TFC (TF1, TF1) to $\beta_c=11/15$ and $\beta_d=15/15$							

Up commands are set continuously to set the UE to Max power.

Note:

1. The Dual Carriers transmission only applies to HSDPA physical channels
2. The Dual Carriers belong to the same Node and are on adjacent carriers.
3. The Dual Carriers do not support MIMO to serve UEs configured for dual cell operation
4. The Dual Carriers operate in the same frequency band.
5. The device doesn't support the modulation of 16QAM in uplink but 64QAM in downlink for DC-HSDPA mode.
6. The device doesn't support carrier aggregation for it just can operate in Release 8.

d) HSPA+

Per KDB941225D01, SAR is required for Rel. 7 HSPA+ when SAR is required for Rel. 6 HSPA; otherwise, the 3G SAR test reduction procedure is applied to (uplink) HSPA+ with 12.2 kbps RMC as the primary mode. Power is measured for HSPA+ that supports uplink 16 QAM according to configurations in Table C.11.1.4 of 3GPP TS 34.121-1 to determine SAR test reduction.

■ Table C.11.1.4: β values for transmitter characteristics tests with HS-DPCCH and E-DCH with 16QAM[Ⓢ]

Sub-test [Ⓢ]	β_c [Ⓢ] (Note3) [Ⓢ]	β_d [Ⓢ]	β_{hs} [Ⓢ] (Note1) [Ⓢ]	β_{ed} [Ⓢ]	β_{ed} [Ⓢ] (2xSF2) [Ⓢ] (Note 4) [Ⓢ]	β_{ed} [Ⓢ] (2xSF4) [Ⓢ] (Note 4) [Ⓢ]	CM [Ⓢ] (dB) [Ⓢ] (Note 2) [Ⓢ]	MPR [Ⓢ] (dB) [Ⓢ] (Note 2) [Ⓢ]	AG [Ⓢ] Index [Ⓢ] (Note 4) [Ⓢ]	E-TFCI [Ⓢ] (Note 5) [Ⓢ]	E-TFCI [Ⓢ] (boost) [Ⓢ]
1 [Ⓢ]	1 [Ⓢ]	0 [Ⓢ]	30/15 [Ⓢ]	30/15 [Ⓢ]	$\beta_{ed1}: 30/15$ $\beta_{ed2}: 30/15$	$\beta_{ed3}: 24/15$ $\beta_{ed4}: 24/15$	3.5 [Ⓢ]	2.5 [Ⓢ]	14 [Ⓢ]	105 [Ⓢ]	105 [Ⓢ]
Note 1: ΔACK , $\Delta NACK$ and $\Delta CQI = 30/15$ with $\beta_{hs} = 30/15 * \beta_c$ Note 2: CM = 3.5 and the MPR is based on the relative CM difference, MPR = MAX(CM-1,0). Note 3: DPDCH is not configured, therefore the β_c is set to 1 and $\beta_d = 0$ by default. Note 4: β_{ed} can not be set directly; it is set by Absolute Grant Value. Note 5: All the sub-tests require the UE to transmit 2SF2+2SF4 16QAM EDCH and they apply for UE using E-DPDCH category 7. E-DCH TTI is set to 2ms TTI and E-DCH table index = 2. To support these E-DCH configurations DPDCH is not allocated. The UE is signalled to use the extrapolation algorithm.											

5.2.3. LTE Test Configuration

LTE modes were tested according to FCC KDB 941225 D05 publication. Please see notes after the tabulated SAR data for required test configurations. Establishing connections with base station simulators ensure a consistent means for testing SAR and are recommended for evaluating SAR [4]. The Anritsu MT8821C was used for LTE output power measurements and SAR testing. Max power control was used so the UE transmits with maximum output power during SAR testing. SAR must be measured with the maximum TTI (transmit time interval) supported by the device in each LTE configuration.

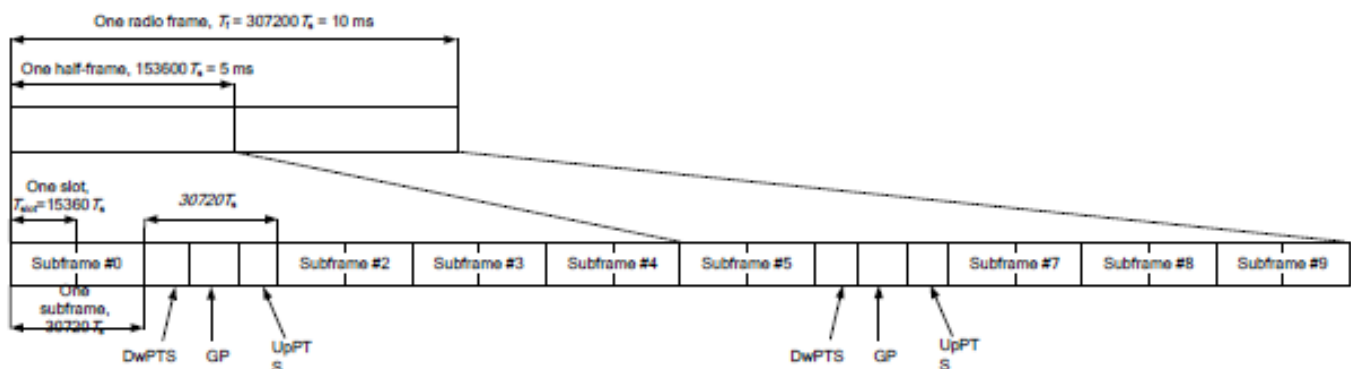
TDD LTE test consideration

For Time-Division Duplex (TDD) systems, SAR must be tested using a fixed periodic duty factor according to the highest transmission duty factor implemented for the device and supported by the defined 3GPP LTE TDD configurations.

SAR was tested with the highest transmission duty factor (63.33%) using Uplink-downlink configuration 0 and Special subframe configuration 7.

LTE TDD Band support 3GPP TS 36.211 section 4.2 for Type 2 Frame Structure and Table 4.2-2 for uplink-downlink configurations and Table 4.2-1 for Special subframe configurations.

Frame structure type 2:



Configuration of special subframe (lengths of DwPTS/GP/UpPTS).

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

Uplink-downlink configurations.

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

Calculated Duty Cycle=[Extended cyclic prefix in uplink x (Ts) x # of S + # of U]/10ms

Uplink-Downlink Configuration	Downlink-to-Uplink Switch-point Periodicity	Subframe Number										Calculated Duty Cycle (%)
		0	1	2	3	4	5	6	7	8	9	
0	5 ms	D	S	U	U	U	D	S	U	U	U	63.33
1	5 ms	D	S	U	U	D	D	S	U	U	D	43.33
2	5 ms	D	S	U	D	D	D	S	U	D	D	23.33
3	10 ms	D	S	U	U	U	D	D	D	D	D	31.67
4	10 ms	D	S	U	U	D	D	D	D	D	D	21.67
5	10 ms	D	S	U	D	D	D	D	D	D	D	11.67
6	5 ms	D	S	U	U	U	D	S	U	U	D	53.33

A) Spectrum Plots for RB Configurations

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

B) MPR

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

Table 6.2.3-1: Maximum Power Reduction (MPR) for Power Class 1, 2 and 3

Modulation	Channel bandwidth / Transmission bandwidth (N _{RB})						MPR (dB)
	1.4 MHz	3.0 MHz	5 MHz	10 MHz	15 MHz	20 MHz	
QPSK	> 5	> 4	> 8	> 12	> 16	> 18	≤ 1
16 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 1
16 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 2
64 QAM	≤ 5	≤ 4	≤ 8	≤ 12	≤ 16	≤ 18	≤ 2
64 QAM	> 5	> 4	> 8	> 12	> 16	> 18	≤ 3
256 QAM	≥ 1						≤ 5

C) A-MPR

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

D) Largest channel bandwidth standalone SAR test requirements

1) QPSK with 1 RB allocation

Start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle

and lower edge of each required test channel. When the reported SAR is ≤ 0.8 W/kg, testing of the remaining RB offset configurations and required test channels is not required for 1 RB allocation; otherwise, SAR is required for the remaining required test channels and only for the RB offset configuration with the highest output power for that channel. When the reported SAR of a required test channel is > 1.45 W/kg, SAR is required for all three RB offset configurations for that required test channel.

2) QPSK with 50% RB allocation

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

3) QPSK with 100% RB allocation

For QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation in 1) and 2) are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.

4) Higher order modulations

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

E) Other channel bandwidth standalone SAR test requirements

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

LTE Downlink CA consideration

The device supports the carrier aggregation in the downlink. Uplink maximum output power is measured with downlink carrier aggregation active only for the channel with highest measured maximum output power when downlink carrier aggregation is inactive, to confirm that when downlink carrier aggregation is active uplink maximum output power remains within the specified tune-up tolerance limits and not more than % dB higher than the maximum output power measured when downlink carrier aggregation inactive. The downlink channels selected to perform the uplink power measurement must satisfy 3GPP channel spacing (5.4.1A of 3GPP TS 36.521 or equivalent) and channel bandwidth (5.4.2A) requirements. The nominal channel spacing is determined by $[BW1 + BW2 - 0.1 \cdot |BW1 - BW2|]$ MHz where BW1 and BW2 are the channel bandwidths of the CC in a 2-CC aggregation configuration. The downlink PCC channel should be paired with the uplink channel according to normal configurations, as if there is no carrier aggregation. The downlink SCC should be adjacent to the PCC and remain within the downlink transmission band for contiguous intra-band CA. For non-contiguous intra-band CA, the SCC should be selected to provide maximum separation from the PCC and must remain fully within the downlink transmission band. For inter-band CA, the SCC should be near the middle of its transmission band. When downlink carrier aggregation is active uplink maximum output power remain within the specified tune-up tolerance limits and not more than $\frac{1}{4}$ dB higher than the maximum output power measured when downlink carrier aggregation inactive, so SAR evaluation is not required for downlink carrier aggregation.

LTE intra-band UL CA(contiguous)

The device supports LTE intra-band contiguous UL CA. The maximum output power is measured for each UL Configuration for the required test channels. UL PCC configuration is determined by the required test channel. SCC and subsequent CCs are added alternatively to either side of the PCC or within the transmission band for channels at the ends of frequency band. SAR for UL CA is required in highest standalone head/body test position and frequency band combination. Since the maximum output for UL CA is < standalone LTE mode (without CA), PCC is configured according to the highest standalone SAR configuration tested, SCC and subsequent CCs are configured according to procedures used for power measurement and parameters (BW, RB etc.) similar to that used for the PCC.

5.2.4. NR Test Configuration

SAR tests for NR bands and LTE anchor bands were performed separately due to limitations in SAR probe calibration factor. Due to test setup limitation, SAR testing for NR was performed using factory test mode software to establish the connection.

5G NR Power/SAR procedure is similar with KDB 941225 D05.

- A)** For power measurement reduction of DFT-s-OFDM and CP-OFDM, CP-OFDM will not higher than DFT-OFDM based on 3GPP MPR table, so CP-OFDM QPSK power measurement is spot check for 1RB allocation/1 RB offset configuration to ensure the output power will not $\frac{1}{2}$ dB higher than $P_{i/2}$ BPSK and QPSK.
- B)** For power measurement reduction Of DFT-S-OFDM, 16QAM/64QAM/256QAM will not higher than $P_{i/2}$ BPSK and QPSK based on 3GPP MPR table, so $P_{i/2}$ BPSK and QPSK are measured fully, and 16QAM is spot check 1RB allocation/1 RB offset configuration to ensure the output power will not % dB higher than $P_{i/2}$ BPSK and QPSK. Smaller bandwidth output power will also follow the largest bandwidth to ensure output power will not $\frac{1}{2}$ dB higher than largest supported bandwidth.
- C)** SAR testing start with the largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
- D)** 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
- E)** QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
- F)** 16QAM/64QAM/256QAM output powers according to 3GPP MPR will not $\frac{1}{2}$ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configurations than 1.45W/kg, 16QAM/64QAM/256QAM SAR testing are not required.
- G)** Smaller bandwidth output power for each RB allocation configuration for this device will not $\frac{1}{2}$ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device.

5.2.5. Wi-Fi Test Configuration

DSSS and OFDM configurations are considered separately according to the required SAR procedures. SAR is measured in the initial test position using the 802.11 transmission mode configuration required by the DSSS procedure or initial test configuration and subsequent test configuration(s) according to the OFDM procedures. The initial test position procedure is described in the following:

- 1) . When the reported SAR of the initial test position is ≤ 0.4 W/kg, further SAR measurement is not required for the other (remaining) test positions in that exposure configuration and 802.11 transmission mode combinations within the frequency band or aggregated band. SAR is also not required for that exposure configuration in the subsequent test configuration(s).
- 2) . When the reported SAR of the initial test position is > 0.4 W/kg, SAR is repeated for the 802.11 transmission mode configuration tested in the initial test position using subsequent highest extrapolated or estimated 1-g SAR conditions determined by area scans or next closest/smallest test separation distance and maximum RF coupling test positions based on manufacturer justification, on the highest maximum output power channel, until the reported SAR is ≤ 0.8 W/kg or all required test positions (left, right, touch, tilt or subsequent surfaces and edges) are tested.
- 3) . For all positions/configurations tested using the initial test position and subsequent test positions, when the reported SAR is > 0.8 W/kg, SAR is measured for these test positions/configurations on the subsequent next highest measured output power channel(s) until the reported SAR is ≤ 1.2 W/kg or all required channels are tested. a) Additional power measurements may be required for this step, which should be limited to those necessary for identifying the subsequent highest output power channels.

Initial Test Configuration Procedures

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

For next to the ear, hotspot mode and UMC mini-tablet exposure configurations where multiple test positions are required, the initial test position procedure is applied to minimize the number of test positions required for SAR measurement using the initial test configuration transmission mode. For fixed exposure conditions that do not have multiple SAR test positions, SAR is measured in the transmission mode determined by the initial test configuration. When the *reported* SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for subsequent next highest measured output power channel(s) in the initial test configuration until *reported* SAR is ≤ 1.2 W/kg or all required channels are tested.

Subsequent Test Configuration Procedures

SAR measurement requirements for the remaining 802.11 transmission mode configurations that have not been tested in the initial test configuration are determined separately for each standalone and aggregated frequency band, in each exposure condition, according to the maximum output power specified for production units. The initial test position procedure is applied to next to the ear, UMPC mini-tablet and hotspot mode configurations. When the same maximum output power is specified for multiple transmission modes, additional power measurements may be required to determine if SAR measurements are required for subsequent highest output power channels in a subsequent test configuration. The subsequent test configuration and SAR measurement procedures are described in the following.

- 1) . When SAR test exclusion provisions of KDB Publication 447498 are applicable and SAR measurement is not required for the initial test configuration, SAR is also not required for the next highest maximum output power transmission mode subsequent test configuration(s) in that frequency band or aggregated band and

exposure configuration.

- 2) . When the highest *reported* SAR for the initial test configuration (when applicable, include subsequent highest output channels), according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.
- 3) . The number of channels in the initial test configuration and subsequent test configuration can be different due to differences in channel bandwidth. When SAR measurement is required for a subsequent test configuration and the channel bandwidth is smaller than that in the initial test configuration, all channels in the subsequent test configuration that overlap with the larger bandwidth channel tested in the initial test configuration should be used to determine the highest maximum output power channel. This step requires additional power measurement to identify the highest maximum output power channel in the subsequent test configuration to determine SAR test reduction.
 - a) SAR should first be measured for the channel with highest measured output power in the subsequent test configuration.
 - b) SAR for subsequent highest measured maximum output power channels in the subsequent test configuration is required only when the *reported* SAR of the preceding higher maximum output power channel(s) in the subsequent test configuration is > 1.2 W/kg or until all required channels are tested. i) For channels with the same measured maximum output power, SAR should be measured using the channel closest to the center frequency of the larger channel bandwidth channel in the initial test configuration.
- 4) . SAR measurements for the remaining highest specified maximum output power OFDM transmission mode configurations that have not been tested in the initial test configuration (highest maximum output) or subsequent test configuration(s) (subsequent next highest maximum output power) is determined by recursively applying the subsequent test configuration procedures in this section to the remaining configurations according to the following:
 - a) replace "subsequent test configuration" with "next subsequent test configuration" (i.e., subsequent next highest specified maximum output power configuration)
 - b) replace "initial test configuration" with "all tested higher output power configurations"

2.4 GHz WiFi SAR Procedures

Separate SAR procedures are applied to DSSS and OFDM configurations in the 2.4 GHz band to simplify DSSS test requirements. For 802.11b DSSS SAR measurements, DSSS SAR procedure applies to fixed exposure test position and initial test position procedure applies to multiple exposure test positions. When SAR measurement is required for an OFDM configuration, the initial test configuration, subsequent test configuration and initial test position procedures are applied. The SAR test exclusion requirements for 802.11g/n OFDM configurations are described in following.

• 802.11b DSSS SAR Test Requirements

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

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

• 2.4 GHz 802.11g/n OFDM&OFDMA SAR Test Exclusion Requirements

When SAR measurement is required for 2.4 GHz 802.11g/n OFDM configurations, the measurement and test reduction procedures for OFDM are applied (section 5.3, including sub-sections). SAR is not required for the following 2.4 GHz OFDM conditions.

- 1) . When KDB Publication 447498 SAR test exclusion applies to the OFDM configuration.
- 2) . When the highest reported SAR for DSSS is adjusted by the ratio of OFDM to DSSS specified maximum

output power and the adjusted SAR is ≤ 1.2 W/kg.

- **SAR Test Requirements for OFDM&OFDMA configurations**

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

5 GHz WiFi SAR Procedures

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

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

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

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

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

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

calibration frequency points requirements.

- **OFDM&OFDMA Transmission Mode SAR Test Configuration and Channel Selection Requirements**

The initial test configuration for 5 GHz OFDM transmission modes is determined by the 802.11 configuration with the highest maximum output power specified for production units, including tune-up tolerance, in each standalone and aggregated frequency band. SAR for the initial test configuration is measured using the highest maximum output power channel determined by the default power measurement procedures. When multiple configurations in a frequency band have the same specified maximum output power, the initial test configuration is determined according to the following steps applied sequentially.

- 1) The largest channel bandwidth configuration is selected among the multiple configurations with the same specified maximum output power.
- 2) If multiple configurations have the same specified maximum output power and largest channel bandwidth, the lowest order modulation among the largest channel bandwidth configurations is selected.
- 3) If multiple configurations have the same specified maximum output power, largest channel bandwidth and lowest order modulation, the lowest data rate configuration among these configurations is selected.
- 4) When multiple transmission modes (802.11a/g/n/ac) have the same specified maximum output power, largest channel bandwidth, lowest order modulation and lowest data rate, the lowest order 802.11 mode is selected; i.e., 802.11a is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n. After an initial test configuration is determined, if multiple test channels have the same measured maximum output power, the channel chosen for SAR measurement is determined according to the following. These channel selection procedures apply to both the initial test configuration and subsequent test configuration(s), with respect to the default power measurement procedures or additional power measurements required for further SAR test reduction. The same procedures also apply to subsequent highest output power channel(s) selection.
 - a) The channel closest to mid-band frequency is selected for SAR measurement.
 - b) For channels with equal separation from mid-band frequency; for example, high and low channels or two mid-band channels, the higher frequency (number) channel is selected for SAR measurement.

- **SAR Test Requirements for OFDM&OFDMA configurations**

When SAR measurement is required for 802.11 a/n/ac OFDM configurations, each standalone and frequency aggregated band is considered separately for SAR test reduction. When the same transmitter and antenna(s) are used for U-NII-1 and U-NII-2A bands, additional SAR test reduction applies. When band gap channels between U-NII-2C band and 5.8 GHz U-NII-3 or §15.247 band are supported, the highest maximum output power transmission mode configuration and maximum output power channel across the bands must be used to determine SAR test reduction, according to the initial test configuration and subsequent test configuration requirements. In applying the initial test configuration and subsequent test configuration procedures, the 802.11 transmission configuration with the highest specified maximum output power and the channel within a test configuration with the highest measured maximum output power should be clearly distinguished to apply the procedures.

6 GHz WiFi SAR Procedures

Initial Test Configuration: An initial test configuration is determined for OFDMA transmission modes according to the channel bandwidth, modulation and data rate combination(s) with the highest maximum output power specified for production units in each standalone and aggregated frequency band. SAR is measured using the highest measured maximum output power channel. When the reported SAR of the initial test configuration is > 0.8 W/kg, SAR measurement is required for the subsequent next highest measured output power channel(s) in the initial test configuration until the reported SAR is ≤ 1.2 W/kg or all required channels are tested. Since the highest reported SAR for the initial test configuration is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for subsequent test configuration.

- **Power Density Test Requirements**

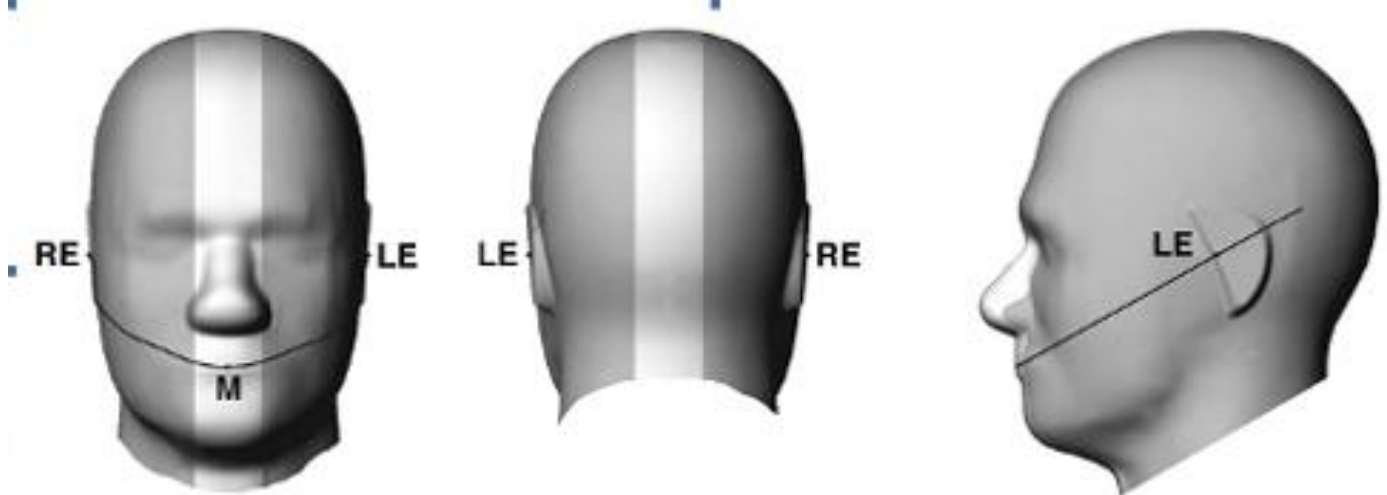
Per October 2020 & April 2021 TCB Workshop interim procedures and FCC guidance, start instead with a minimum of 5 test channels across the fullband, then adapt and apply conducted power and SAR test reduction procedures of KDB Pub.248227 v02r02. WLAN 6GHz SAR is measured by using 6-7GHz parameters per IEC/IEEE 62209-1528:2020 and report also estimated absorbed PD (for reference purposes only, not specifically for compliance). For the highest SAR test configurations also measure incident PD (total) using mmW near-field probe and total-field/power-density reconstruction method.

- 1) Per equipment manufacturer guidance, power density was measured at $d=2\text{mm}$ with the grid step (0.0625λ) for determining compliance at $d=2\text{mm}$.
- 2) According to October 2020 TCB Workshop Interim procedures power density results were scaled according to IEC 62479:2010 for the portion of the measurement uncertainty $> 30\%$. Total expanded uncertainty of 2.68 dB (85%) was used to determine the psPD measurement scaling factor.
- 3) Per FCC guidance, for simultaneous transmission evaluation, using SAR sum and SPLSR for simultaneous transmit exclusion analyses and evaluations

6 DESCRIPTION OF TEST POSITION

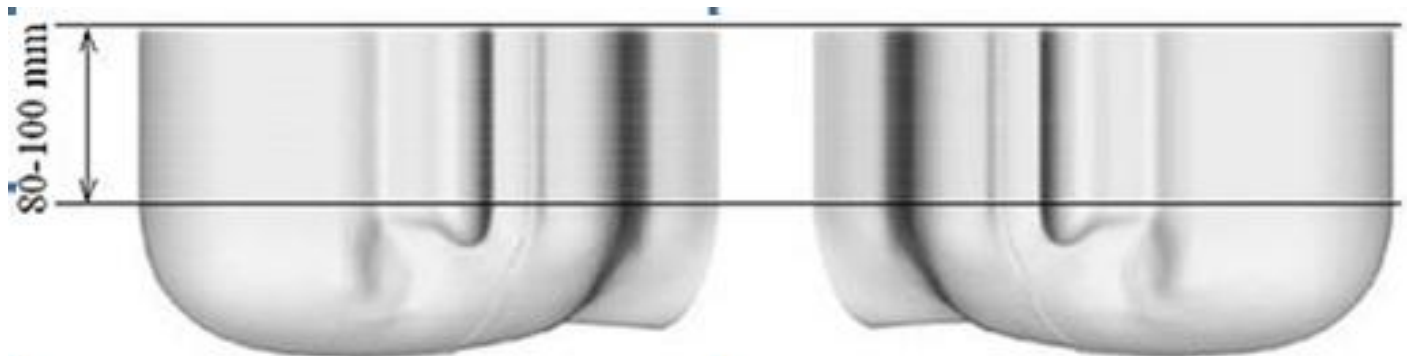
6.1 SAR Test Reduction Procedure

6.1.1. Head Test Position Conditions

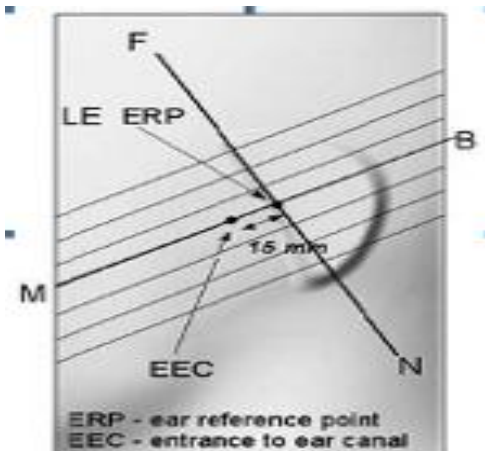


Front, back, and side views of SAM (model for the phantom shell). Full-head model is for illustration purposes only—procedures in this recommended practice are intended primarily for the phantom setup.

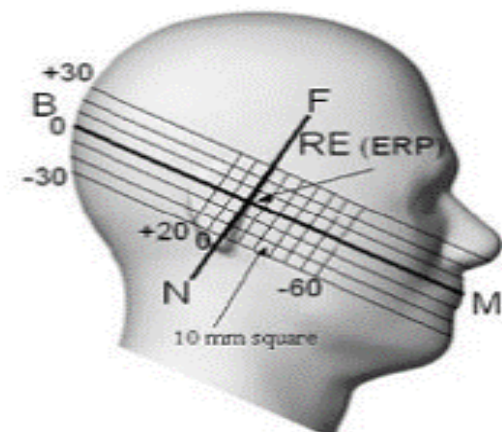
Note: The centre strip including the nose region has a different thickness tolerance.



Sagittally bisected phantom with extended perimeter (shown placed on its side as used for SAR measurements)



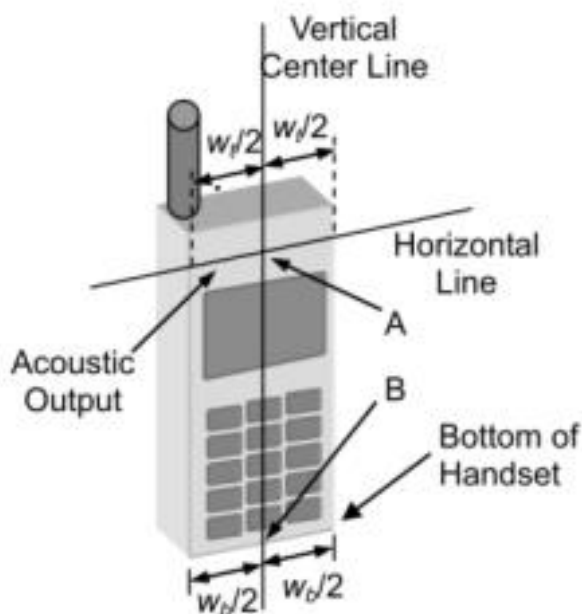
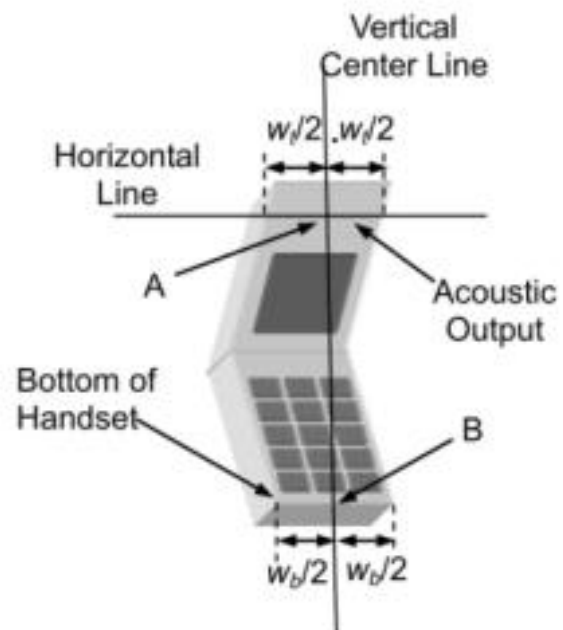
Close-up side view of phantom, showing the ear region, N-F and B-M lines, and seven cross-sectional plane locations



Side view of the phantom showing relevant markings and seven cross-sectional plane locations

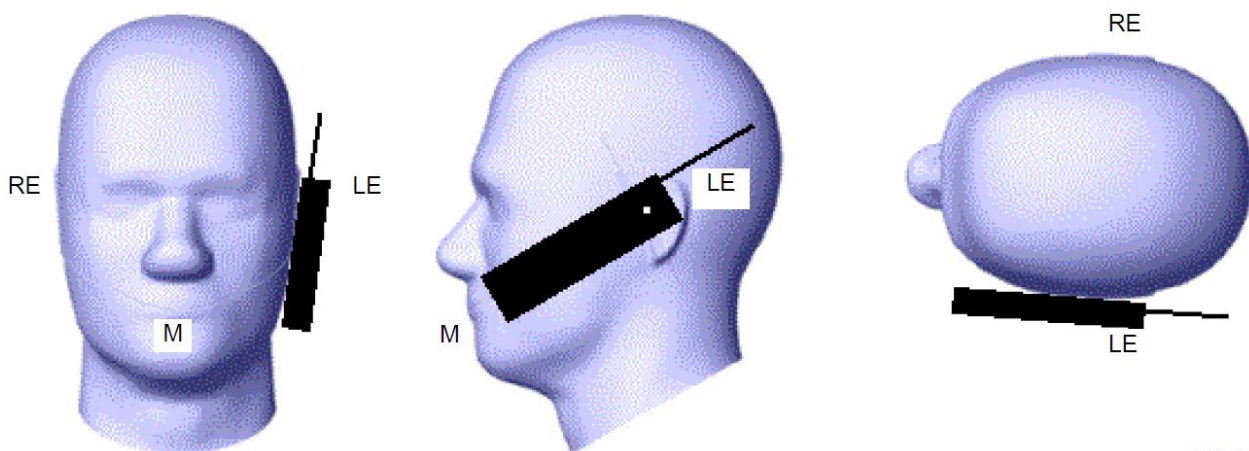
EUT constructions

- (a) 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.
- (b) 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.
- (c) 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.



Cheek Position

- 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.
- 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.



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Tilted Position

- To position the device in the “cheek” position described above.
- 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.

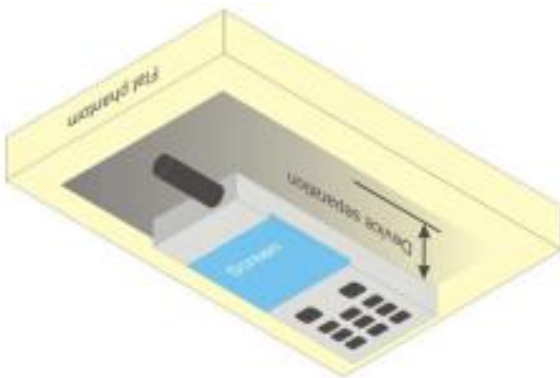
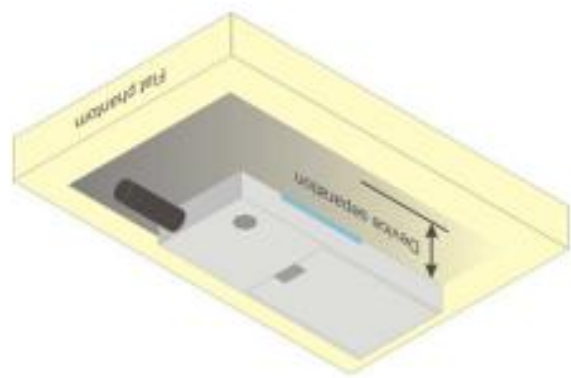


6.1.2. Body-worn Test Position Conditions

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.

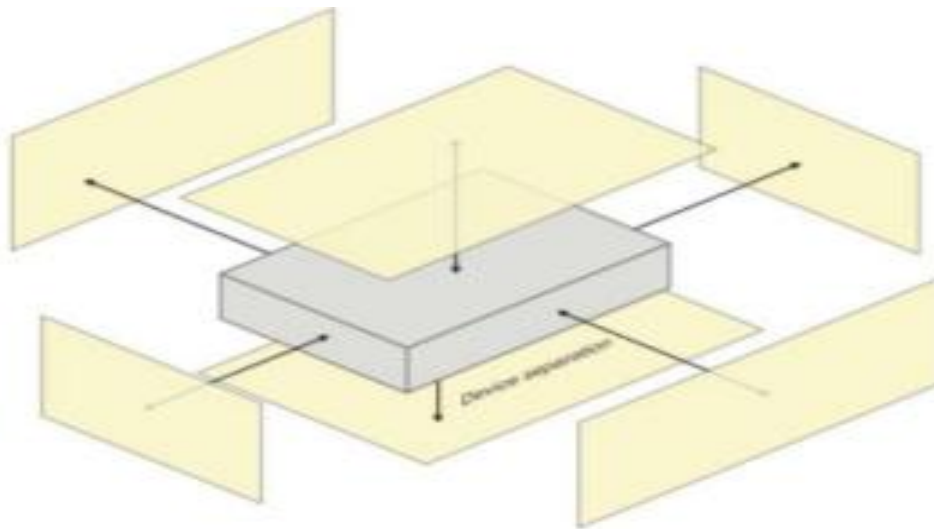
Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics.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



6.1.3. Hotspot Mode Test 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).

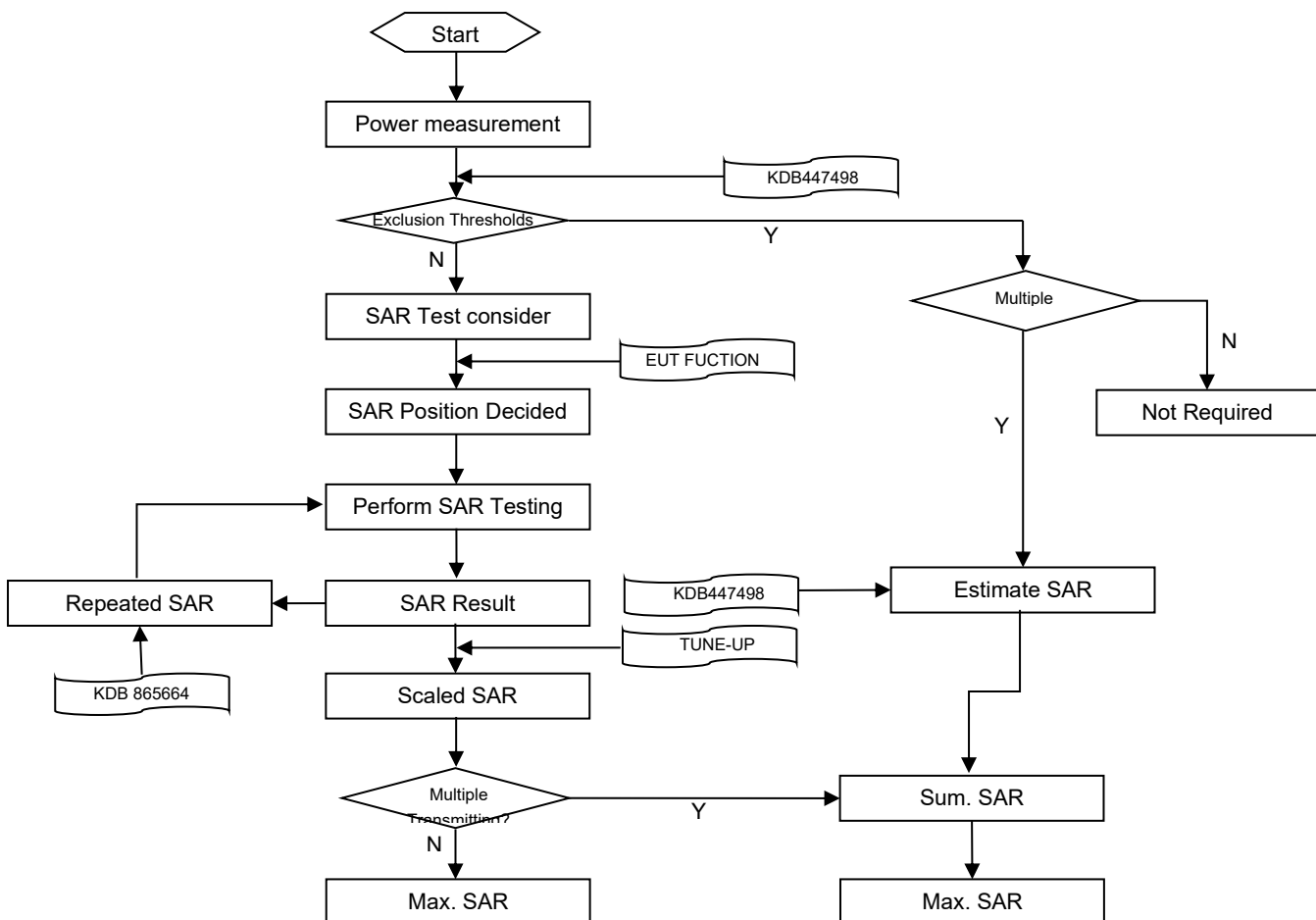


6.2 Product Specific 10g Exposure Consideration

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 modems 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.

6.3 Measurement Process Diagram



7 TEST RESULT

7.1 Measurement of RF conducted Power

Note: The detailed conducted power table can refer to Appendix.

7.2 Measurement of SAR Test Results

7.2.1. Measurement of SAR Test Data

GSM850 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	GPRS 3Tx	189/836.4	DSI 1	1:1	0.132	0.09	28.91	29.50	1.146	0.151
Left Tilted	GPRS 3Tx	189/836.4	DSI 1	1:1	0.070	0.09	28.91	29.50	1.146	0.08
Right Check	GPRS 3Tx	189/836.4	DSI 1	1:1	0.150	0.08	28.91	29.50	1.146	0.172
Right Tilted	GPRS 3Tx	189/836.4	DSI 1	1:1	0.072	0.11	28.91	29.50	1.146	0.082
Right Check	GPRS 3Tx	128/824.2	DSI 1	1:1	0.092	0.07	28.75	29.50	1.189	0.109
Right Check	GPRS 3Tx	251/848.8	DSI 1	1:1	0.181	0.12	28.84	29.50	1.164	0.211
Hotspot SAR Test data(Separate 10mm)										
Front	GPRS 3Tx	189/836.4	DSI 3	1:1	0.199	0.11	28.91	29.50	1.146	0.228
Back	GPRS 3Tx	189/836.4	DSI 3	1:1	0.307	0.09	28.91	29.50	1.146	0.352
Left Side	GPRS 3Tx	189/836.4	DSI 3	1:1	0.089	0.13	28.91	29.50	1.146	0.102
Right Side	GPRS 3Tx	189/836.4	DSI 3	1:1	0.172	0.11	28.91	29.50	1.146	0.197
Top Side	GPRS 3Tx	189/836.4	DSI 3	1:1	0.000	0.10	28.91	29.50	1.146	0
Bottom Side	GPRS 3Tx	189/836.4	DSI 3	1:1	0.252	0.08	28.91	29.50	1.146	0.289
Back	GPRS 3Tx	128/824.2	DSI 3	1:1	0.244	0.12	28.75	29.50	1.189	0.29
Back	GPRS 3Tx	251/848.8	DSI 3	1:1	0.383	0.08	28.84	29.50	1.164	0.446
Body worn SAR Test data(Separate 10mm)										
Front	GPRS 3Tx	189/836.4	DSI 3	1:1	0.199	0.11	28.91	29.50	1.146	0.228
Back	GPRS 3Tx	189/836.4	DSI 3	1:1	0.307	0.09	28.91	29.50	1.146	0.352
Back	GPRS 3Tx	128/824.2	DSI 3	1:1	0.244	0.12	28.75	29.50	1.189	0.29
Back	GPRS 3Tx	251/848.8	DSI 3	1:1	0.383	0.08	28.84	29.50	1.164	0.446
GSM850 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	Power drift (dB)	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	GPRS 3Tx	189/836.4	DSI 1	1:1	0.555	0.11	25.70	26.50	1.202	0.667
Left Tilted	GPRS 3Tx	189/836.4	DSI 1	1:1	0.483	0.03	25.70	26.50	1.202	0.581
Right Check	GPRS 3Tx	189/836.4	DSI 1	1:1	0.655	-0.03	25.70	26.50	1.202	0.787
Right Tilted	GPRS 3Tx	189/836.4	DSI 1	1:1	0.487	0.08	25.70	26.50	1.202	0.586
Right Check	GPRS 3Tx	128/824.2	DSI 1	1:1	0.578	0.09	25.53	26.50	1.250	0.723
Right Check	GPRS 3Tx	251/848.8	DSI 1	1:1	0.518	0.11	25.54	26.50	1.247	0.646
Hotspot SAR Test data(Separate 10mm)										
Front	GPRS 3Tx	189/836.4	DSI 4	1:1	0.305	-0.03	28.99	29.50	1.125	0.343
Back	GPRS 3Tx	189/836.4	DSI 4	1:1	0.406	0.05	28.99	29.50	1.125	0.457
Left Side	GPRS 3Tx	189/836.4	DSI 4	1:1	0.127	0.07	28.99	29.50	1.125	0.143
Right Side	GPRS 3Tx	189/836.4	DSI 4	1:1	0.177	0.03	28.99	29.50	1.125	0.199
Top Side	GPRS 3Tx	189/836.4	DSI 4	1:1	0.284	0.13	28.99	29.50	1.125	0.319
Bottom Side	GPRS 3Tx	189/836.4	DSI 4	1:1	0.000	0.05	28.99	29.50	1.125	0
Back	GPRS 3Tx	128/824.2	DSI 4	1:1	0.383	0.02	28.83	29.50	1.167	0.447
Back	GPRS 3Tx	251/848.8	DSI 4	1:1	0.391	0.08	28.96	29.50	1.132	0.443
Body worn SAR Test data(Separate 10mm)										
Front	GPRS 3Tx	189/836.4	DSI 4	1:1	0.305	-0.03	28.99	29.50	1.125	0.343
Back	GPRS 3Tx	189/836.4	DSI 4	1:1	0.406	0.05	28.99	29.50	1.125	0.457
Back	GPRS 3Tx	128/824.2	DSI 4	1:1	0.383	0.02	28.83	29.50	1.167	0.447
Back	GPRS 3Tx	251/848.8	DSI 4	1:1	0.391	0.08	28.96	29.50	1.132	0.443

GSM1900 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	GPRS 3Tx	810/1909.8	DSI 1	1:1	0.000	0.00	25.61	27.00	1.377	0
Left Tilted	GPRS 3Tx	810/1909.8	DSI 1	1:1	0.000	0.00	25.61	27.00	1.377	0
Right Check	GPRS 3Tx	810/1909.8	DSI 1	1:1	0.044	0.03	25.61	27.00	1.377	0.061
Right Tilted	GPRS 3Tx	810/1909.8	DSI 1	1:1	0.000	0.00	25.61	27.00	1.377	0
Right Check	GPRS 3Tx	512/1850.2	DSI 1	1:1	0.044	0.08	25.56	27.00	1.393	0.061
Right Check	GPRS 3Tx	661/1880	DSI 1	1:1	0.000	0.00	25.41	27.00	1.442	0
Hotspot SAR Test data(Separate 10mm)										
Front	GPRS 3Tx	810/1909.8	DSI 3	1:1	0.128	-0.03	24.71	26.00	1.346	0.172
Back	GPRS 3Tx	810/1909.8	DSI 3	1:1	0.231	0.09	24.71	26.00	1.346	0.311
Left Side	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.081	0.01	25.61	27.00	1.377	0.112
Right Side	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.000	0.00	25.61	27.00	1.377	0
Top Side	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.000	0.00	25.61	27.00	1.377	0
Bottom Side	GPRS 3Tx	810/1909.8	DSI 3	1:1	0.443	-0.04	24.71	26.00	1.346	0.596
Bottom Side	GPRS 3Tx	512/1850.2	DSI 3	1:1	0.478	0.08	24.65	26.00	1.365	0.652
Bottom Side	GPRS 3Tx	661/1880	DSI 3	1:1	0.416	0.10	24.71	26.00	1.346	0.56
Body worn SAR Test data(Separate 10mm)										
Front	GPRS 3Tx	810/1909.8	DSI 3	1:1	0.128	0.03	25.61	27.00	1.377	0.176
Back	GPRS 3Tx	810/1909.8	DSI 3	1:1	0.231	0.09	25.61	27.00	1.377	0.318
Distance SAR Test data(Separate n-1mm)										
Front	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.080	0.07	25.61	27.00	1.377	0.11
Back	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.200	0.13	25.61	27.00	1.377	0.275
Bottom Side	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.261	-0.05	25.61	27.00	1.377	0.359
GSM1900 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	GPRS 3Tx	810/1909.8	DSI 1	1:1	0.278	0.09	18.66	20.00	1.361	0.378
Left Tilted	GPRS 3Tx	810/1909.8	DSI 1	1:1	0.310	0.02	18.66	20.00	1.361	0.422
Right Check	GPRS 3Tx	810/1909.8	DSI 1	1:1	0.291	-0.12	18.66	20.00	1.361	0.396
Right Tilted	GPRS 3Tx	810/1909.8	DSI 1	1:1	0.286	0.09	18.66	20.00	1.361	0.389
Left Tilted	GPRS 3Tx	512/1850.2	DSI 1	1:1	0.283	0.04	18.47	20.00	1.422	0.403
Left Tilted	GPRS 3Tx	661/1880	DSI 1	1:1	0.294	0.08	18.54	20.00	1.400	0.411
Hotspot SAR Test data(Separate 10mm)										
Front	GPRS 3Tx	810/1909.8	DSI 4	1:1	0.106	0.03	19.65	21.00	1.365	0.145
Back	GPRS 3Tx	810/1909.8	DSI 4	1:1	0.225	0.08	19.65	21.00	1.365	0.307
Left Side	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.000	0.00	25.59	27.00	1.384	0
Right Side	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.000	0.00	25.59	27.00	1.384	0
Top Side	GPRS 3Tx	810/1909.8	DSI 4	1:1	0.468	0.03	19.65	21.00	1.365	0.639
Bottom Side	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.000	0.00	25.59	27.00	1.384	0
Top Side	GPRS 3Tx	512/1850.2	DSI 4	1:1	0.494	0.12	19.51	21.00	1.409	0.696
Top Side	GPRS 3Tx	661/1880	DSI 4	1:1	0.453	0.01	19.56	21.00	1.393	0.631
Body worn SAR Test data(Separate 10mm)										
Front	GPRS 3Tx	810/1909.8	DSI 4	1:1	0.106	0.03	19.65	21.00	1.365	0.145
Back	GPRS 3Tx	810/1909.8	DSI 4	1:1	0.225	0.08	19.65	21.00	1.365	0.307
Distance SAR Test data(Separate n-1mm)										
Front	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.089	0.02	25.61	27.00	1.377	0.123
Back	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.211	0.03	25.61	27.00	1.377	0.291
Top Side	GPRS 3Tx	810/1909.8	DSI 2	1:1	0.412	0.08	25.61	27.00	1.377	0.567
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Top Side	GPRS 3Tx	810/1909.8	DSI 4	1:1	0.831	-0.08	19.65	21.00	1.365	1.134
Top Side	GPRS 3Tx	512/1850.2	DSI 4	1:1	0.758	0.02	19.51	21.00	1.409	1.068
Top Side	GPRS 3Tx	661/1880	DSI 4	1:1	0.748	0.07	19.56	21.00	1.393	1.042

W B2 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	RMC	9538/1907.6	DSI 1	1:1	0.083	0.03	23.71	25.00	1.346	0.112
Left Tilted	RMC	9538/1907.6	DSI 1	1:1	0.073	0.02	23.71	25.00	1.346	0.098
Right Check	RMC	9538/1907.6	DSI 1	1:1	0.087	0.01	23.71	25.00	1.346	0.117
Right Tilted	RMC	9538/1907.6	DSI 1	1:1	0.076	0.04	23.71	25.00	1.346	0.102
Right Check	RMC	9262/1852.4	DSI 1	1:1	0.100	0.05	23.61	25.00	1.377	0.138
Right Check	RMC	9400/1880	DSI 1	1:1	0.093	0.08	23.63	25.00	1.371	0.127
Hotspot SAR Test data(Separate 10mm)										
Front	RMC	9538/1907.6	DSI 3	1:1	0.098	-0.02	18.94	20.00	1.276	0.125
Back	RMC	9538/1907.6	DSI 3	1:1	0.192	0.01	18.94	20.00	1.276	0.245
Left Side	RMC	9538/1907.6	DSI 2	1:1	0.189	0.07	23.71	25.00	1.346	0.254
Right Side	RMC	9538/1907.6	DSI 2	1:1	0.134	0.01	23.71	25.00	1.346	0.18
Top Side	RMC	9538/1907.6	DSI 2	1:1	0.000	0.00	23.71	25.00	1.346	0
Bottom Side	RMC	9538/1907.6	DSI 3	1:1	0.383	0.02	18.94	20.00	1.276	0.489
Bottom Side	RMC	9262/1852.4	DSI 3	1:1	0.438	0.06	18.81	20.00	1.315	0.576
Bottom Side	RMC	9400/1880	DSI 3	1:1	0.404	0.10	18.88	20.00	1.294	0.523
Body worn SAR Test data(Separate 10mm)										
Front	RMC	9538/1907.6	DSI 3	1:1	0.098	-0.02	18.94	20.00	1.276	0.125
Back	RMC	9538/1907.6	DSI 3	1:1	0.192	0.01	18.94	20.00	1.276	0.245
Distance SAR Test data(Separate n-1mm)										
Front side	RMC	9538/1907.6	DSI 2	1:1	0.145	0.07	23.71	25.00	1.346	0.195
Back side	RMC	9538/1907.6	DSI 2	1:1	0.203	0.02	23.71	25.00	1.346	0.273
Bottom side	RMC	9538/1907.6	DSI 2	1:1	0.403	0.13	23.71	25.00	1.346	0.542
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Back	RMC	9538/1907.6	DSI 3	1:1	0.794	0.11	18.94	20.00	1.276	1.013
Bottom side	RMC	9538/1907.6	DSI 3	1:1	1.010	0.02	18.94	20.00	1.276	1.289
Bottom side	RMC	9262/1852.4	DSI 3	1:1	1.020	-0.08	18.81	20.00	1.315	1.342
Bottom side	RMC	9400/1880	DSI 3	1:1	0.978	0.03	18.88	20.00	1.294	1.266
W B2 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	Power drift (dB)	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	RMC	9538/1907.6	DSI 1	1:1	0.266	0.02	13.30	14.50	1.318	0.351
Left Tilted	RMC	9538/1907.6	DSI 1	1:1	0.336	0.07	13.30	14.50	1.318	0.443
Right Check	RMC	9538/1907.6	DSI 1	1:1	0.321	0.01	13.30	14.50	1.318	0.423
Right Tilted	RMC	9538/1907.6	DSI 1	1:1	0.523	0.03	13.30	14.50	1.318	0.689
Right Tilted	RMC	9262/1852.4	DSI 1	1:1	0.683	-0.02	13.21	14.50	1.346	0.919
Right Tilted	RMC	9400/1880	DSI 1	1:1	0.571	0.07	13.28	14.50	1.324	0.756
Hotspot SAR Test data(Separate 10mm)										
Front	RMC	9538/1907.6	DSI 4	1:1	0.114	-0.06	14.41	15.50	1.285	0.147
Back	RMC	9538/1907.6	DSI 4	1:1	0.210	0.05	14.41	15.50	1.285	0.27
Left Side	RMC	9538/1907.6	DSI 2	1:1	0.000	0.00	23.79	25.00	1.321	0
Right Side	RMC	9538/1907.6	DSI 2	1:1	0.000	0.00	23.79	25.00	1.321	0
Top Side	RMC	9538/1907.6	DSI 4	1:1	0.410	0.05	14.41	15.50	1.285	0.527
Bottom Side	RMC	9538/1907.6	DSI 2	1:1	0.000	0.00	23.79	25.00	1.321	0
Top Side	RMC	9262/1852.4	DSI 4	1:1	0.499	-0.07	14.31	15.50	1.315	0.656
Top Side	RMC	9400/1880	DSI 4	1:1	0.451	0.05	14.25	15.50	1.334	0.601
Body worn SAR Test data(Separate 10mm)										
Front	RMC	9538/1907.6	DSI 4	1:1	0.114	-0.06	14.41	15.50	1.285	0.147
Back	RMC	9538/1907.6	DSI 4	1:1	0.210	0.05	14.41	15.50	1.285	0.27
Distance SAR Test data(Separate n-1mm)										
Front side	RMC	9538/1907.6	DSI 2	1:1	0.094	0.04	23.79	25.00	1.321	0.124
Back side	RMC	9538/1907.6	DSI 2	1:1	0.183	0.01	23.79	25.00	1.321	0.242
Bottom side	RMC	9538/1907.6	DSI 2	1:1	0.324	0.08	23.79	25.00	1.321	0.428
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)

Limbs SAR Test data(Separate 0mm)										
Front side	RMC	9538/1907.6	DSI 4	1:1	0.352	-0.09	14.41	15.50	1.285	0.452
Back side	RMC	9538/1907.6	DSI 4	1:1	0.463	0.10	14.41	15.50	1.285	0.595
Top Side	RMC	9538/1907.6	DSI 4	1:1	0.810	0.02	14.41	15.50	1.285	1.041

W B4 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	RMC	1413/1732.6	DSI 1	1:1	0.070	0.06	23.78	25.00	1.324	0.093
Left Tilted	RMC	1413/1732.6	DSI 1	1:1	0.041	0.10	23.78	25.00	1.324	0.054
Right Check	RMC	1413/1732.6	DSI 1	1:1	0.073	0.09	23.78	25.00	1.324	0.097
Right Tilted	RMC	1413/1732.6	DSI 1	1:1	0.046	0.07	23.78	25.00	1.324	0.061
Right Check	RMC	1312/1712.4	DSI 1	1:1	0.069	0.10	23.66	25.00	1.361	0.094
Right Check	RMC	1513/1752.6	DSI 1	1:1	0.082	0.11	23.67	25.00	1.358	0.111
Hotspot SAR Test data(Separate 10mm)										
Front side	RMC	1413/1732.6	DSI 3	1:1	0.142	-0.03	20.51	21.50	1.256	0.178
Back side	RMC	1413/1732.6	DSI 3	1:1	0.341	0.05	20.51	21.50	1.256	0.428
Left side	RMC	1413/1732.6	DSI 2	1:1	0.123	-0.03	23.78	25.00	1.324	0.163
Right side	RMC	1413/1732.6	DSI 2	1:1	0.101	0.01	23.78	25.00	1.324	0.134
Top side	RMC	1413/1732.6	DSI 2	1:1	0.000	0.00	23.78	25.00	1.324	0
Bottom side	RMC	1413/1732.6	DSI 3	1:1	0.456	0.06	20.51	21.50	1.256	0.573
Bottom side	RMC	1312/1712.4	DSI 3	1:1	0.463	0.09	20.40	21.50	1.288	0.596
Bottom side	RMC	1513/1752.6	DSI 3	1:1	0.471	-0.08	20.33	21.50	1.309	0.617
Body worn SAR Test data(Separate 10mm)										
Front side	RMC	1413/1732.6	DSI 3	1:1	0.142	-0.03	20.51	21.50	1.256	0.178
Back side	RMC	1413/1732.6	DSI 3	1:1	0.341	0.05	20.51	21.50	1.256	0.428
Distance SAR Test data(Separate n-1mm)										
Front side	RMC	1413/1732.6	DSI 2	1:1	0.180	0.04	23.78	25.00	1.324	0.238
Back side	RMC	1413/1732.6	DSI 2	1:1	0.351	0.08	23.78	25.00	1.324	0.465
Bottom side	RMC	1413/1732.6	DSI 2	1:1	0.511	0.09	23.78	25.00	1.324	0.677
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Back side	RMC	1413/1732.6	DSI 3	1:1	1.200	0.01	23.78	25.00	1.324	1.589
Bottom side	RMC	1413/1732.6	DSI 3	1:1	1.230	0.10	23.78	25.00	1.324	1.629
Bottom side	RMC	1312/1712.4	DSI 3	1:1	1.210	0.08	23.66	25.00	1.361	1.647
Bottom side	RMC	1513/1752.6	DSI 3	1:1	1.280	-0.10	23.67	25.00	1.358	1.739
W B4 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	Power drift (dB)	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	RMC	1413/1732.6	DSI 1	1:1	0.442	0.04	23.84	25.00	1.306	0.577
Left Tilted	RMC	1413/1732.6	DSI 1	1:1	0.508	0.10	23.84	25.00	1.306	0.664
Right Check	RMC	1413/1732.6	DSI 1	1:1	0.529	0.03	23.84	25.00	1.306	0.691
Right Tilted	RMC	1413/1732.6	DSI 1	1:1	0.596	-0.01	23.84	25.00	1.306	0.778
Right Tilted	RMC	1312/1712.4	DSI 1	1:1	0.660	0.09	23.76	25.00	1.330	0.878
Right Tilted	RMC	1513/1752.6	DSI 1	1:1	0.553	0.03	23.72	25.00	1.343	0.743
Hotspot SAR Test data(Separate 10mm)										
Front side	RMC	1413/1732.6	DSI 4	1:1	0.237	0.08	14.27	15.50	1.327	0.315
Back side	RMC	1413/1732.6	DSI 4	1:1	0.353	-0.04	14.27	15.50	1.327	0.469
Left side	RMC	1413/1732.6	DSI 2	1:1	0.000	0.10	23.84	25.00	1.306	0
Right side	RMC	1413/1732.6	DSI 2	1:1	0.000	0.01	23.84	25.00	1.306	0
Top side	RMC	1413/1732.6	DSI 4	1:1	0.478	-0.09	14.27	15.50	1.327	0.634
Bottom side	RMC	1413/1732.6	DSI 2	1:1	0.000	0.08	23.84	25.00	1.306	0
Top side	RMC	1312/1712.4	DSI 4	1:1	0.493	-0.05	13.91	15.50	1.442	0.711
Top side	RMC	1513/1752.6	DSI 4	1:1	0.470	-0.03	14.23	15.50	1.340	0.63
Body worn SAR Test data(Separate 10mm)										
Front side	RMC	1413/1732.6	DSI 4	1:1	0.237	0.08	14.27	15.50	1.327	0.315
Back side	RMC	1413/1732.6	DSI 4	1:1	0.353	-0.04	14.27	15.50	1.327	0.469
Distance SAR Test data(Separate n-1mm)										
Front side	RMC	1413/1732.6	DSI 2	1:1	0.152	0.07	23.84	25.00	1.306	0.199
Back side	RMC	1413/1732.6	DSI 2	1:1	0.272	0.02	23.84	25.00	1.306	0.355
Top side	RMC	1413/1732.6	DSI 2	1:1	0.399	0.09	23.84	25.00	1.306	0.521
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)

Limbs SAR Test data(Separate 0mm)										
Front side	RMC	1413/1732.6	DSI 4	1:1	0.333	-0.05	14.27	15.50	1.327	0.442
Back side	RMC	1413/1732.6	DSI 4	1:1	0.439	0.07	14.27	15.50	1.327	0.583
Top side	RMC	1413/1732.6	DSI 4	1:1	0.471	-0.13	14.27	15.50	1.327	0.625

W B5 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	RMC	4182/836.4	DSI 1	1:1	0.132	0.08	23.96	25.00	1.271	0.168
Left Tilted	RMC	4182/836.4	DSI 1	1:1	0.070	0.02	23.96	25.00	1.271	0.089
Right Check	RMC	4182/836.4	DSI 1	1:1	0.149	0.10	23.96	25.00	1.271	0.189
Right Tilted	RMC	4182/836.4	DSI 1	1:1	0.069	0.02	23.96	25.00	1.271	0.088
Right Check	RMC	4132/826.4	DSI 1	1:1	0.115	0.09	23.93	25.00	1.279	0.147
Right Check	RMC	4233/846.6	DSI 1	1:1	0.147	0.06	23.82	25.00	1.312	0.193
Hotspot SAR Test data(Separate 10mm)										
Front side	RMC	4182/836.4	DSI 3	1:1	0.156	0.03	23.96	25.00	1.271	0.198
Back side	RMC	4182/836.4	DSI 3	1:1	0.209	-0.02	23.96	25.00	1.271	0.266
Left side	RMC	4182/836.4	DSI 3	1:1	0.083	0.06	23.96	25.00	1.271	0.105
Right side	RMC	4182/836.4	DSI 3	1:1	0.168	0.05	23.96	25.00	1.271	0.213
Top side	RMC	4182/836.4	DSI 3	1:1	0.000	0.00	23.96	25.00	1.271	0
Bottom side	RMC	4182/836.4	DSI 3	1:1	0.228	0.01	23.96	25.00	1.271	0.29
Bottom side	RMC	4132/826.4	DSI 3	1:1	0.211	0.04	23.93	25.00	1.279	0.27
Bottom side	RMC	4233/846.6	DSI 3	1:1	0.259	0.07	23.82	25.00	1.312	0.34
Body worn SAR Test data(Separate 10mm)										
Front side	RMC	4182/836.4	DSI 3	1:1	0.156	0.03	23.96	25.00	1.271	0.198
Back side	RMC	4182/836.4	DSI 3	1:1	0.209	-0.02	23.96	25.00	1.271	0.266
W B5 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	Power drift (dB)	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	RMC	4182/836.4	DSI 1	1:1	0.538	-0.12	21.53	22.50	1.250	0.673
Left Tilted	RMC	4182/836.4	DSI 1	1:1	0.465	0.05	21.53	22.50	1.250	0.581
Right Check	RMC	4182/836.4	DSI 1	1:1	0.574	0.03	21.53	22.50	1.250	0.718
Right Tilted	RMC	4182/836.4	DSI 1	1:1	0.472	0.04	21.53	22.50	1.250	0.59
Right Check	RMC	4132/826.4	DSI 1	1:1	0.603	0.06	21.48	22.50	1.265	0.763
Right Check	RMC	4233/846.6	DSI 1	1:1	0.541	0.03	21.49	22.50	1.262	0.683
Hotspot SAR Test data(Separate 10mm)										
Front side	RMC	4182/836.4	DSI 4	1:1	0.247	-0.03	23.51	24.50	1.256	0.31
Back side	RMC	4182/836.4	DSI 4	1:1	0.331	0.04	23.51	24.50	1.256	0.416
Left side	RMC	4182/836.4	DSI 2	1:1	0.113	0.01	24.10	25.00	1.230	0.139
Right side	RMC	4182/836.4	DSI 2	1:1	0.162	0.07	24.10	25.00	1.230	0.199
Top side	RMC	4182/836.4	DSI 4	1:1	0.185	-0.08	23.51	24.50	1.256	0.232
Bottom side	RMC	4182/836.4	DSI 2	1:1	0.000	0.00	24.10	25.00	1.230	0
Back side	RMC	4132/826.4	DSI 4	1:1	0.346	-0.02	23.46	24.50	1.271	0.44
Back side	RMC	4233/846.6	DSI 4	1:1	0.293	0.01	23.45	24.50	1.274	0.373
Body worn SAR Test data(Separate 10mm)										
Front side	RMC	4182/836.4	DSI 4	1:1	0.247	-0.03	23.51	24.50	1.256	0.31
Back side	RMC	4182/836.4	DSI 4	1:1	0.331	0.04	23.51	24.50	1.256	0.416
Back side	RMC	4132/826.4	DSI 4	1:1	0.346	-0.02	23.46	24.50	1.271	0.44
Back side	RMC	4233/846.6	DSI 4	1:1	0.293	0.01	23.45	24.50	1.274	0.373

LTE Band 2 BW20 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_99	18900/1880	DSI 1	1:1	0.093	0.08	23.81	24.50	1.172	0.109
Left Check	QPSK 50_50	18900/1880	DSI 1	1:1	0.070	0.09	22.41	23.50	1.285	0.09
Left Tilted	QPSK 1_99	18900/1880	DSI 1	1:1	0.084	0.05	23.81	24.50	1.172	0.098
Left Tilted	QPSK 50_50	18900/1880	DSI 1	1:1	0.061	0.01	22.41	23.50	1.285	0.078
Right Check	QPSK 1_99	18900/1880	DSI 1	1:1	0.114	0.02	23.81	24.50	1.172	0.134
Right Check	QPSK 50_50	18900/1880	DSI 1	1:1	0.090	0.04	22.41	23.50	1.285	0.116
Right Tilted	QPSK 1_99	18900/1880	DSI 1	1:1	0.096	0.09	23.81	24.50	1.172	0.113
Right Tilted	QPSK 50_50	18900/1880	DSI 1	1:1	0.067	0.05	22.41	23.50	1.285	0.086
Right Check	QPSK 1_0	18700/1860	DSI 1	1:1	0.125	0.06	23.47	24.50	1.268	0.158
Right Check	QPSK 1_0	19100/1900	DSI 1	1:1	0.121	-0.02	23.56	24.50	1.242	0.15
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	18900/1880	DSI 3	1:1	0.141	0.03	20.84	21.50	1.164	0.164
Front side	QPSK 50_50	18900/1880	DSI 3	1:1	0.087	0.05	19.52	20.50	1.253	0.109
Back side	QPSK 1_99	18900/1880	DSI 3	1:1	0.304	0.06	20.84	21.50	1.164	0.354
Back side	QPSK 50_50	18900/1880	DSI 3	1:1	0.252	-0.05	19.52	20.50	1.253	0.316
Left side	QPSK 1_99	18900/1880	DSI 2	1:1	0.215	0.10	23.81	24.50	1.172	0.252
Left side	QPSK 50_50	18900/1880	DSI 2	1:1	0.164	0.05	22.41	23.50	1.285	0.211
Right side	QPSK 1_99	18900/1880	DSI 2	1:1	0.103	-0.01	23.81	24.50	1.172	0.121
Right side	QPSK 50_50	18900/1880	DSI 2	1:1	0.075	0.03	22.41	23.50	1.285	0.096
Top side	QPSK 1_99	18900/1880	DSI 2	1:1	0.000	0.00	23.81	24.50	1.172	0
Top side	QPSK 50_50	18900/1880	DSI 2	1:1	0.000	0.00	22.41	23.50	1.285	0
Bottom side	QPSK 1_99	18900/1880	DSI 3	1:1	0.423	0.04	20.84	21.50	1.164	0.492
Bottom side	QPSK 50_50	18900/1880	DSI 3	1:1	0.341	0.11	19.52	20.50	1.253	0.427
Bottom side	QPSK 1_99	18700/1860	DSI 3	1:1	0.433	-0.03	20.80	21.50	1.175	0.509
Bottom side	QPSK 50_50	18700/1860	DSI 3	1:1	0.389	0.12	19.34	20.50	1.306	0.508
Bottom side	QPSK 1_99	19100/1900	DSI 3	1:1	0.411	0.04	20.72	21.50	1.197	0.492
Bottom side	QPSK 50_50	19100/1900	DSI 3	1:1	0.323	0.08	19.43	20.50	1.279	0.413
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	18900/1880	DSI 3	1:1	0.141	0.03	20.84	21.50	1.164	0.164
Front side	QPSK 50_50	18900/1880	DSI 3	1:1	0.087	0.05	19.52	20.50	1.253	0.109
Back side	QPSK 1_99	18900/1880	DSI 3	1:1	0.304	0.06	20.84	21.50	1.164	0.354
Back side	QPSK 50_50	18900/1880	DSI 3	1:1	0.252	-0.05	19.52	20.50	1.253	0.316
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_99	18900/1880	DSI 2	1:1	0.133	0.07	23.81	24.50	1.172	0.156
Back side	QPSK 1_99	18900/1880	DSI 2	1:1	0.289	0.01	23.81	24.50	1.172	0.339
Bottom side	QPSK 1_99	18900/1880	DSI 2	1:1	0.429	0.05	23.81	24.50	1.172	0.503
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Back side	QPSK 1_99	18900/1880	DSI 3	1:1	1.150	0.06	20.84	21.50	1.164	1.339
Back side	QPSK 50_50	18900/1880	DSI 3	1:1	0.820	-0.07	19.52	20.50	1.253	1.028
Bottom side	QPSK 1_99	18900/1880	DSI 3	1:1	1.250	0.08	20.84	21.50	1.164	1.455
Bottom side	QPSK 50_50	18900/1880	DSI 3	1:1	1.010	0.04	19.52	20.50	1.253	1.266
Bottom side	QPSK 1_99	18700/1860	DSI 3	1:1	1.330	-0.03	20.80	21.50	1.175	1.563
Bottom side	QPSK 50_50	18700/1860	DSI 3	1:1	1.030	-0.01	19.34	20.50	1.306	1.345
Bottom side	QPSK 1_99	19100/1900	DSI 3	1:1	1.270	0.05	20.72	21.50	1.197	1.52
Bottom side	QPSK 50_50	19100/1900	DSI 3	1:1	0.967	0.03	19.43	20.50	1.279	1.237
LTE Band 2 BW20 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_99	18900/1880	DSI 1	1:1	0.393	0.07	14.09	15.00	1.233	0.485
Left Check	QPSK 50_50	18900/1880	DSI 1	1:1	0.296	-0.60	12.93	14.00	1.279	0.379
Left Tilted	QPSK 1_99	18900/1880	DSI 1	1:1	0.505	0.01	14.09	15.00	1.233	0.623
Left Tilted	QPSK 50_50	18900/1880	DSI 1	1:1	0.379	0.05	12.93	14.00	1.279	0.485
Right Check	QPSK 1_99	18900/1880	DSI 1	1:1	0.483	0.01	14.09	15.00	1.233	0.596
Right Check	QPSK 50_50	18900/1880	DSI 1	1:1	0.278	-0.01	12.93	14.00	1.279	0.356
Right Tilted	QPSK 1_99	18900/1880	DSI 1	1:1	0.643	-0.01	14.09	15.00	1.233	0.793
Right Tilted	QPSK 50_50	18900/1880	DSI 1	1:1	0.467	0.09	12.93	14.00	1.279	0.597

Right Tilted	QPSK 1_99	18700/1860	DSI 1	1:1	0.451	0.11	13.91	15.00	1.285	0.58
Right Tilted	QPSK 1_99	19100/1900	DSI 1	1:1	0.462	0.03	13.95	15.00	1.274	0.588
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	18900/1880	DSI 4	1:1	0.143	0.04	14.52	15.50	1.253	0.179
Front side	QPSK 50_50	18900/1880	DSI 4	1:1	0.093	0.06	13.46	14.50	1.271	0.118
Back side	QPSK 1_99	18900/1880	DSI 4	1:1	0.278	0.03	14.52	15.50	1.253	0.348
Back side	QPSK 50_50	18900/1880	DSI 4	1:1	0.221	0.09	13.46	14.50	1.271	0.281
Left side	QPSK 1_99	18900/1880	DSI 2	1:1	0.000	0.00	24.36	25.50	1.300	0
Left side	QPSK 50_50	18900/1880	DSI 2	1:1	0.000	0.00	23.22	24.50	1.343	0
Right side	QPSK 1_99	18900/1880	DSI 2	1:1	0.000	0.00	24.36	25.50	1.300	0
Right side	QPSK 50_50	18900/1880	DSI 2	1:1	0.000	0.00	23.22	24.50	1.343	0
Top side	QPSK 1_99	18900/1880	DSI 4	1:1	0.450	0.01	14.52	15.50	1.253	0.564
Top side	QPSK 50_50	18900/1880	DSI 4	1:1	0.401	0.05	13.46	14.50	1.271	0.51
Bottom side	QPSK 1_99	18900/1880	DSI 2	1:1	0.000	0.00	24.36	25.50	1.300	0
Bottom side	QPSK 50_50	18900/1880	DSI 2	1:1	0.000	0.00	23.22	24.50	1.343	0
Top side	QPSK 1_99	18700/1860	DSI 4	1:1	0.407	-0.05	14.42	15.50	1.282	0.522
Top side	QPSK 50_50	18700/1860	DSI 4	1:1	0.360	0.09	13.44	14.50	1.276	0.46
Top side	QPSK 1_99	19100/1900	DSI 4	1:1	0.440	0.01	14.50	15.50	1.259	0.554
Top side	QPSK 50_50	19100/1900	DSI 4	1:1	0.317	0.11	13.22	14.50	1.343	0.426
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	18900/1880	DSI 4	1:1	0.143	0.04	14.52	15.50	1.253	0.179
Front side	QPSK 50_50	18900/1880	DSI 4	1:1	0.093	0.06	13.46	14.50	1.271	0.118
Back side	QPSK 1_99	18900/1880	DSI 4	1:1	0.278	0.03	14.52	15.50	1.253	0.348
Back side	QPSK 50_50	18900/1880	DSI 4	1:1	0.221	0.09	13.46	14.50	1.271	0.281
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_99	18900/1880	DSI 2	1:1	0.114	0.07	24.36	25.50	1.300	0.148
Back side	QPSK 1_99	18900/1880	DSI 2	1:1	0.253	0.08	24.36	25.50	1.300	0.329
Top side	QPSK 1_99	19100/1900	DSI 2	1:1	0.341	0.04	24.36	25.50	1.300	0.443
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Top side	QPSK 1_99	18900/1880	DSI 4	1:1	0.990	0.06	14.52	15.50	1.253	1.241
Top side	QPSK 50_50	18900/1880	DSI 4	1:1	0.744	-0.03	13.46	14.50	1.271	0.945

LTE Band 4 BW20 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_49	20175/1732.5	DSI 1	1:1	0.103	0.09	23.91	25.00	1.285	0.132
Left Check	QPSK 50_24	20175/1732.5	DSI 1	1:1	0.083	0.12	22.80	24.00	1.318	0.109
Left Tilted	QPSK 1_49	20175/1732.5	DSI 1	1:1	0.091	0.14	23.91	25.00	1.285	0.117
Left Tilted	QPSK 50_24	20175/1732.5	DSI 1	1:1	0.072	0.14	22.80	24.00	1.318	0.095
Right Check	QPSK 1_49	20175/1732.5	DSI 1	1:1	0.126	0.09	23.91	25.00	1.285	0.162
Right Check	QPSK 50_24	20175/1732.5	DSI 1	1:1	0.099	0.08	22.80	24.00	1.318	0.131
Right Tilted	QPSK 1_49	20175/1732.5	DSI 1	1:1	0.091	0.15	23.91	25.00	1.285	0.117
Right Tilted	QPSK 50_24	20175/1732.5	DSI 1	1:1	0.062	0.09	22.80	24.00	1.318	0.082
Right Check	QPSK 1_49	20050/1720	DSI 1	1:1	0.111	0.10	23.79	25.00	1.321	0.147
Right Check	QPSK 1_49	20300/1745	DSI 1	1:1	0.109	0.02	23.84	25.00	1.306	0.142
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	20175/1732.5	DSI 3	1:1	0.131	0.08	20.31	21.50	1.315	0.172
Front side	QPSK 50_24	20175/1732.5	DSI 3	1:1	0.089	0.14	19.33	20.50	1.309	0.117
Back side	QPSK 1_49	20175/1732.5	DSI 3	1:1	0.384	0.07	20.31	21.50	1.315	0.505
Back side	QPSK 50_24	20175/1732.5	DSI 3	1:1	0.243	-0.03	19.33	20.50	1.309	0.318
Left side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.163	0.13	23.91	25.00	1.285	0.21
Left side	QPSK 50_24	20175/1732.5	DSI 2	1:1	0.148	0.07	22.80	24.00	1.318	0.195
Right side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.116	0.10	23.91	25.00	1.285	0.149
Right side	QPSK 50_24	20175/1732.5	DSI 2	1:1	0.097	0.04	22.80	24.00	1.318	0.128
Top side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.000	0.08	23.91	25.00	1.285	0
Top side	QPSK 50_24	20175/1732.5	DSI 2	1:1	0.000	0.06	22.80	24.00	1.318	0
Bottom side	QPSK 1_49	20175/1732.5	DSI 3	1:1	0.491	-0.11	20.31	21.50	1.315	0.646
Bottom side	QPSK 50_24	20175/1732.5	DSI 3	1:1	0.321	0.14	19.33	20.50	1.309	0.42
Bottom side	QPSK 1_49	20050/1720	DSI 3	1:1	0.451	0.02	20.20	21.50	1.349	0.608
Bottom side	QPSK 50_24	20050/1720	DSI 3	1:1	0.385	0.06	19.06	20.50	1.393	0.536
Bottom side	QPSK 1_49	20300/1745	DSI 3	1:1	0.510	0.08	20.26	21.50	1.330	0.679
Bottom side	QPSK 50_24	20300/1745	DSI 3	1:1	0.414	0.04	19.16	20.50	1.361	0.564
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	20175/1732.5	DSI 3	1:1	0.131	0.08	20.31	21.50	1.315	0.172
Front side	QPSK 50_24	20175/1732.5	DSI 3	1:1	0.089	0.14	19.33	20.50	1.309	0.117
Back side	QPSK 1_49	20175/1732.5	DSI 3	1:1	0.384	0.07	20.31	21.50	1.315	0.505
Back side	QPSK 50_24	20175/1732.5	DSI 3	1:1	0.243	-0.03	19.33	20.50	1.309	0.318
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.190	0.05	23.91	25.00	1.285	0.244
Back side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.403	0.02	23.91	25.00	1.285	0.518
Bottom side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.459	0.01	23.91	25.00	1.285	0.59
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Back side	QPSK 1_49	20175/1732.5	DSI 3	1:1	1.560	0.02	20.31	21.50	1.315	2.052
Back side	QPSK 50_24	20175/1732.5	DSI 3	1:1	0.776	0.11	19.33	20.50	1.309	1.016
Bottom side	QPSK 1_49	20175/1732.5	DSI 3	1:1	1.290	0.12	20.31	21.50	1.315	1.697
Bottom side	QPSK 50_24	20175/1732.5	DSI 3	1:1	0.805	0.04	19.33	20.50	1.309	1.054
LTE Band 4 BW20 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_49	20175/1732.5	DSI 1	1:1	0.405	0.11	12.49	14.00	1.416	0.573
Left Check	QPSK 50_24	20175/1732.5	DSI 1	1:1	0.333	0.06	11.55	13.00	1.396	0.465
Left Tilted	QPSK 1_49	20175/1732.5	DSI 1	1:1	0.461	0.09	12.49	14.00	1.416	0.653
Left Tilted	QPSK 50_24	20175/1732.5	DSI 1	1:1	0.381	-0.09	11.55	13.00	1.396	0.532
Right Check	QPSK 1_49	20175/1732.5	DSI 1	1:1	0.469	0.06	12.49	14.00	1.416	0.664
Right Check	QPSK 50_24	20175/1732.5	DSI 1	1:1	0.388	0.12	11.55	13.00	1.396	0.542
Right Tilted	QPSK 1_49	20175/1732.5	DSI 1	1:1	0.527	0.11	12.49	14.00	1.416	0.746
Right Tilted	QPSK 50_24	20175/1732.5	DSI 1	1:1	0.431	-0.02	11.55	13.00	1.396	0.602
Right Tilted	QPSK 1_49	20050/1720	DSI 1	1:1	0.501	0.01	12.41	14.00	1.442	0.722
Right Tilted	QPSK 1_49	20300/1745	DSI 1	1:1	0.472	0.07	12.40	14.00	1.445	0.682
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	20175/1732.5	DSI 4	1:1	0.225	0.10	13.93	15.50	1.435	0.323

Front side	QPSK 50_24	20175/1732.5	DSI 4	1:1	0.179	0.05	13.12	14.50	1.374	0.246
Back side	QPSK 1_49	20175/1732.5	DSI 4	1:1	0.385	0.15	13.93	15.50	1.435	0.553
Back side	QPSK 50_24	20175/1732.5	DSI 4	1:1	0.305	0.12	13.12	14.50	1.374	0.419
Left side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.000	0.07	24.35	25.50	1.303	0
Left side	QPSK 50_24	20175/1732.5	DSI 2	1:1	0.000	0.09	23.17	24.50	1.358	0
Right side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.000	0.11	24.35	25.50	1.303	0
Right side	QPSK 50_24	20175/1732.5	DSI 2	1:1	0.000	0.07	23.17	24.50	1.358	0
Top side	QPSK 1_49	20175/1732.5	DSI 4	1:1	0.483	0.13	13.93	15.50	1.435	0.693
Top side	QPSK 50_24	20175/1732.5	DSI 4	1:1	0.399	0.09	13.12	14.50	1.374	0.548
Bottom side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.000	0.12	24.35	25.50	1.303	0
Bottom side	QPSK 50_24	20175/1732.5	DSI 2	1:1	0.000	0.07	23.17	24.50	1.358	0
Top side	QPSK 1_49	20050/1720	DSI 4	1:1	0.486	0.09	13.86	15.50	1.459	0.709
Top side	QPSK 50_24	20050/1720	DSI 4	1:1	0.396	0.15	12.87	14.50	1.455	0.576
Top side	QPSK 1_49	20300/1745	DSI 4	1:1	0.488	0.12	13.87	15.50	1.455	0.71
Top side	QPSK 50_24	20300/1745	DSI 4	1:1	0.399	-0.10	12.82	14.50	1.472	0.587
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	20175/1732.5	DSI 4	1:1	0.225	0.10	13.93	15.50	1.435	0.323
Front side	QPSK 50_24	20175/1732.5	DSI 4	1:1	0.179	0.05	13.12	14.50	1.374	0.246
Back side	QPSK 1_49	20175/1732.5	DSI 4	1:1	0.385	0.15	13.93	15.50	1.435	0.553
Back side	QPSK 50_24	20175/1732.5	DSI 4	1:1	0.305	0.12	13.12	14.50	1.374	0.419
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.169	0.04	24.35	25.50	1.303	0.22
Back side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.314	0.01	24.35	25.50	1.303	0.409
Top side	QPSK 1_49	20175/1732.5	DSI 2	1:1	0.428	0.03	24.35	25.50	1.303	0.558
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Top side	QPSK 1_49	20175/1732.5	DSI 4	1:1	0.788	0.06	13.93	15.50	1.435	1.131
Top side	QPSK 50_24	20175/1732.5	DSI 4	1:1	0.648	0.12	13.12	14.50	1.374	0.89
Top side	QPSK 1_49	20050/1720	DSI 4	1:1	0.771	0.10	13.86	15.50	1.459	1.125
Top side	QPSK 50_24	20050/1720	DSI 4	1:1	0.626	0.13	12.87	14.50	1.455	0.911
Top side	QPSK 1_49	20300/1745	DSI 4	1:1	0.603	-0.08	13.87	15.50	1.455	0.878
Top side	QPSK 50_24	20300/1745	DSI 4	1:1	0.512	0.09	12.82	14.50	1.472	0.754

LTE Band 5 BW10 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_0	20450/829	DSI 1	1:1	0.117	0.09	24.31	25.50	1.315	0.154
Left Check	QPSK 25_12	20450/829	DSI 1	1:1	0.097	0.13	23.15	24.50	1.365	0.132
Left Tilted	QPSK 1_0	20450/829	DSI 1	1:1	0.100	0.05	24.31	25.50	1.315	0.132
Left Tilted	QPSK 25_12	20450/829	DSI 1	1:1	0.047	0.07	23.15	24.50	1.365	0.064
Right Check	QPSK 1_0	20450/829	DSI 1	1:1	0.103	0.12	24.31	25.50	1.315	0.135
Right Check	QPSK 25_12	20450/829	DSI 1	1:1	0.078	0.09	23.15	24.50	1.365	0.106
Right Tilted	QPSK 1_0	20450/829	DSI 1	1:1	0.058	0.12	24.31	25.50	1.315	0.076
Right Tilted	QPSK 25_12	20450/829	DSI 1	1:1	0.049	0.10	23.15	24.50	1.365	0.067
Right Check	QPSK 1_0	20525/836.5	DSI 1	1:1	0.147	0.06	24.12	25.50	1.374	0.202
Right Check	QPSK 1_0	20600/844	DSI 1	1:1	0.161	0.08	24.04	25.50	1.400	0.225
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_0	20450/829	DSI 3	1:1	0.140	0.12	24.23	25.00	1.194	0.167
Front side	QPSK 25_12	20450/829	DSI 3	1:1	0.124	0.11	23.11	24.00	1.227	0.152
Back side	QPSK 1_0	20450/829	DSI 3	1:1	0.260	0.06	24.23	25.00	1.194	0.31
Back side	QPSK 25_12	20450/829	DSI 3	1:1	0.217	0.12	23.11	24.00	1.227	0.266
Left side	QPSK 1_0	20450/829	DSI 2	1:1	0.076	0.06	24.31	25.50	1.315	0.1
Left side	QPSK 25_12	20450/829	DSI 2	1:1	0.068	0.05	23.15	24.50	1.365	0.093
Right side	QPSK 1_0	20450/829	DSI 2	1:1	0.154	0.07	24.31	25.50	1.315	0.203
Right side	QPSK 25_12	20450/829	DSI 2	1:1	0.138	0.09	23.15	24.50	1.365	0.188
Top side	QPSK 1_0	20450/829	DSI 2	1:1	0.000	0.14	24.31	25.50	1.315	0
Top side	QPSK 25_12	20450/829	DSI 2	1:1	0.000	0.08	23.15	24.50	1.365	0
Bottom side	QPSK 1_0	20450/829	DSI 3	1:1	0.157	0.12	24.23	25.00	1.194	0.187
Bottom side	QPSK 25_12	20450/829	DSI 3	1:1	0.128	0.10	23.11	24.00	1.227	0.157
Back side	QPSK 1_0	20525/836.5	DSI 3	1:1	0.286	-0.05	23.99	25.00	1.262	0.361
Back side	QPSK 1_0	20600/844	DSI 3	1:1	0.313	0.10	23.84	25.00	1.306	0.409
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_0	20450/829	DSI 3	1:1	0.140	0.12	24.23	25.00	1.194	0.167
Front side	QPSK 25_12	20450/829	DSI 3	1:1	0.124	0.11	23.11	24.00	1.227	0.152
Back side	QPSK 1_0	20450/829	DSI 3	1:1	0.260	0.06	24.23	25.00	1.194	0.31
Back side	QPSK 25_12	20450/829	DSI 3	1:1	0.217	0.12	23.11	24.00	1.227	0.266
Back side	QPSK 1_0	20525/836.5	DSI 3	1:1	0.286	-0.05	23.99	25.00	1.262	0.361
Back side	QPSK 1_0	20600/844	DSI 3	1:1	0.313	0.10	23.84	25.00	1.306	0.409
LTE Band 5 BW10 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_0	20450/829	DSI 1	1:1	0.606	0.09	21.23	22.00	1.194	0.724
Left Check	QPSK 25_12	20450/829	DSI 1	1:1	0.531	0.12	20.21	21.00	1.199	0.637
Left Tilted	QPSK 1_0	20450/829	DSI 1	1:1	0.525	0.06	21.23	22.00	1.194	0.627
Left Tilted	QPSK 25_12	20450/829	DSI 1	1:1	0.421	0.11	20.21	21.00	1.199	0.505
Right Check	QPSK 1_0	20450/829	DSI 1	1:1	0.651	0.15	21.23	22.00	1.194	0.777
Right Check	QPSK 25_12	20450/829	DSI 1	1:1	0.447	0.12	20.21	21.00	1.199	0.536
Right Tilted	QPSK 1_0	20450/829	DSI 1	1:1	0.439	0.10	21.23	22.00	1.194	0.524
Right Tilted	QPSK 25_12	20450/829	DSI 1	1:1	0.353	-0.09	20.21	21.00	1.199	0.423
Right Check	QPSK 1_0	20525/836.5	DSI 1	1:1	0.557	-0.12	21.09	22.00	1.233	0.687
Right Check	QPSK 1_0	20600/844	DSI 1	1:1	0.546	0.08	21.03	22.00	1.250	0.683
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_0	20450/829	DSI 4	1:1	0.249	0.14	24.03	25.00	1.250	0.311
Front side	QPSK 25_12	20450/829	DSI 4	1:1	0.211	0.11	22.88	24.00	1.294	0.273
Back side	QPSK 1_0	20450/829	DSI 4	1:1	0.371	0.06	24.03	25.00	1.250	0.464
Back side	QPSK 25_12	20450/829	DSI 4	1:1	0.293	0.10	22.88	24.00	1.294	0.379
Left side	QPSK 1_0	20450/829	DSI 2	1:1	0.117	-0.08	24.39	25.50	1.291	0.151
Left side	QPSK 25_12	20450/829	DSI 2	1:1	0.095	0.07	23.21	24.50	1.346	0.128
Right side	QPSK 1_0	20450/829	DSI 2	1:1	0.159	0.06	24.39	25.50	1.291	0.205
Right side	QPSK 25_12	20450/829	DSI 2	1:1	0.135	0.11	23.21	24.50	1.346	0.182
Top side	QPSK 1_0	20450/829	DSI 4	1:1	0.204	0.10	24.03	25.00	1.250	0.255
Top side	QPSK 25_12	20450/829	DSI 4	1:1	0.150	0.06	22.88	24.00	1.294	0.194
Bottom side	QPSK 1_0	20450/829	DSI 2	1:1	0.000	0.14	24.39	25.50	1.291	0
Bottom side	QPSK 25_12	20450/829	DSI 2	1:1	0.000	0.07	23.21	24.50	1.346	0
Back side	QPSK 1_0	20525/836.5	DSI 4	1:1	0.382	-0.08	23.67	25.00	1.358	0.519
Back side	QPSK 1_0	20600/844	DSI 4	1:1	0.363	0.13	23.66	25.00	1.361	0.494

Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_0	20450/829	DSI 4	1:1	0.249	0.14	24.03	25.00	1.250	0.311
Front side	QPSK 25_12	20450/829	DSI 4	1:1	0.211	0.11	22.88	24.00	1.294	0.273
Back side	QPSK 1_0	20450/829	DSI 4	1:1	0.371	0.06	24.03	25.00	1.250	0.464
Back side	QPSK 25_12	20450/829	DSI 4	1:1	0.293	0.10	22.88	24.00	1.294	0.379
Back side	QPSK 1_0	20525/836.5	DSI 4	1:1	0.382	-0.08	23.67	25.00	1.358	0.519
Back side	QPSK 1_0	20600/844	DSI 4	1:1	0.363	0.13	23.66	25.00	1.361	0.494

LTE Band 7 BW20 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_49	21100/2535	DSI 1	1:1	0.365	0.07	23.19	24.50	1.352	0.494
Left Check	QPSK 50_24	21100/2535	DSI 1	1:1	0.283	0.14	22.06	23.50	1.393	0.394
Left Tilted	QPSK 1_49	21100/2535	DSI 1	1:1	0.237	0.12	23.19	24.50	1.352	0.32
Left Tilted	QPSK 50_24	21100/2535	DSI 1	1:1	0.203	0.14	22.06	23.50	1.393	0.283
Right Check	QPSK 1_49	21100/2535	DSI 1	1:1	0.211	0.15	23.19	24.50	1.352	0.285
Right Check	QPSK 50_24	21100/2535	DSI 1	1:1	0.173	0.10	22.06	23.50	1.393	0.241
Right Tilted	QPSK 1_49	21100/2535	DSI 1	1:1	0.149	0.08	23.19	24.50	1.352	0.201
Right Tilted	QPSK 50_24	21100/2535	DSI 1	1:1	0.123	0.12	22.06	23.50	1.393	0.171
Left Check	QPSK 1_49	20850/2510	DSI 1	1:1	0.345	0.06	23.01	24.50	1.409	0.486
Left Check	QPSK 1_49	21350/2560	DSI 1	1:1	0.377	0.01	23.09	24.50	1.384	0.522
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	21100/2535	DSI 3	1:1	0.242	0.13	20.26	21.50	1.330	0.322
Front side	QPSK 50_24	21100/2535	DSI 3	1:1	0.218	0.15	19.15	20.50	1.365	0.297
Back side	QPSK 1_49	21100/2535	DSI 3	1:1	0.287	0.03	20.26	21.50	1.330	0.382
Back side	QPSK 50_24	21100/2535	DSI 3	1:1	0.203	-0.04	19.15	20.50	1.365	0.277
Left side	QPSK 1_49	21100/2535	DSI 2	1:1	0.334	0.04	23.19	24.50	1.352	0.452
Left side	QPSK 50_24	21100/2535	DSI 2	1:1	0.289	0.11	22.06	23.50	1.393	0.403
Right side	QPSK 1_49	21100/2535	DSI 2	1:1	0.194	0.02	23.19	24.50	1.352	0.262
Right side	QPSK 50_24	21100/2535	DSI 2	1:1	0.167	0.13	22.06	23.50	1.393	0.233
Top side	QPSK 1_49	21100/2535	DSI 2	1:1	0.056	0.04	23.19	24.50	1.352	0.076
Top side	QPSK 50_24	21100/2535	DSI 2	1:1	0.045	0.04	22.06	23.50	1.393	0.063
Bottom side	QPSK 1_49	21100/2535	DSI 3	1:1	0.367	0.10	20.26	21.50	1.330	0.488
Bottom side	QPSK 50_24	21100/2535	DSI 3	1:1	0.311	0.07	19.15	20.50	1.365	0.424
Bottom side	QPSK 1_49	20850/2510	DSI 3	1:1	0.370	-0.07	20.13	21.50	1.371	0.507
Bottom side	QPSK 1_49	21350/2560	DSI 3	1:1	0.364	0.04	20.20	21.50	1.349	0.491
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	21100/2535	DSI 3	1:1	0.242	0.13	20.26	21.50	1.330	0.322
Front side	QPSK 50_24	21100/2535	DSI 3	1:1	0.218	0.15	19.15	20.50	1.365	0.297
Back side	QPSK 1_49	21100/2535	DSI 3	1:1	0.287	0.03	20.26	21.50	1.330	0.382
Back side	QPSK 50_24	21100/2535	DSI 3	1:1	0.203	-0.04	19.15	20.50	1.365	0.277
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_49	21100/2535	DSI 2	1:1	0.212	0.07	23.19	24.50	1.352	0.287
Front side	QPSK 50_24	21100/2535	DSI 2	1:1	0.183	0.02	22.06	23.50	1.393	0.255
Back side	QPSK 1_49	21100/2535	DSI 2	1:1	0.245	0.13	23.19	24.50	1.352	0.331
Back side	QPSK 50_24	21100/2535	DSI 2	1:1	0.203	0.04	22.06	23.50	1.393	0.283
Bottom side	QPSK 1_49	21100/2535	DSI 2	1:1	0.354	-0.05	23.19	24.50	1.352	0.479
Bottom side	QPSK 50_24	21100/2535	DSI 2	1:1	0.319	0.14	22.06	23.50	1.393	0.444
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Front side	QPSK 1_49	21100/2535	DSI 3	1:1	0.851	0.02	20.26	21.50	1.330	1.132
Front side	QPSK 50_24	21100/2535	DSI 3	1:1	0.573	-0.06	19.15	20.50	1.365	0.782
Back side	QPSK 1_49	21100/2535	DSI 3	1:1	1.240	0.08	20.26	21.50	1.330	1.65
Back side	QPSK 50_24	21100/2535	DSI 3	1:1	0.806	0.07	19.15	20.50	1.365	1.1
Bottom side	QPSK 1_49	21100/2535	DSI 3	1:1	0.980	0.03	20.26	21.50	1.330	1.304
Bottom side	QPSK 50_24	21100/2535	DSI 3	1:1	0.720	-0.02	19.15	20.50	1.365	0.982
LTE Band 7 BW20 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_49	21100/2535	DSI 1	1:1	0.391	0.05	15.56	17.00	1.393	0.545
Left Check	QPSK 50_24	21100/2535	DSI 1	1:1	0.330	0.06	14.44	16.00	1.432	0.473
Left Tilted	QPSK 1_49	21100/2535	DSI 1	1:1	0.498	0.13	15.56	17.00	1.393	0.694
Left Tilted	QPSK 50_24	21100/2535	DSI 1	1:1	0.378	0.11	14.44	16.00	1.432	0.541
Right Check	QPSK 1_49	21100/2535	DSI 1	1:1	0.317	-0.06	15.56	17.00	1.393	0.442
Right Check	QPSK 50_24	21100/2535	DSI 1	1:1	0.318	0.01	14.44	16.00	1.432	0.455
Right Tilted	QPSK 1_49	21100/2535	DSI 1	1:1	0.387	0.09	15.56	17.00	1.393	0.539
Right Tilted	QPSK 50_24	21100/2535	DSI 1	1:1	0.319	0.10	14.44	16.00	1.432	0.457
Left Tilted	QPSK 1_49	20850/2510	DSI 1	1:1	0.541	0.13	14.94	17.00	1.607	0.869

Left Tilted	QPSK 1_49	21350/2560	DSI 1	1:1	0.635	0.04	15.55	17.00	1.396	0.887
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	21100/2535	DSI 4	1:1	0.117	0.02	15.11	16.50	1.377	0.161
Front side	QPSK 50_24	21100/2535	DSI 4	1:1	0.097	-0.60	13.94	15.50	1.432	0.139
Back side	QPSK 1_49	21100/2535	DSI 4	1:1	0.176	0.10	15.11	16.50	1.377	0.242
Back side	QPSK 50_24	21100/2535	DSI 4	1:1	0.140	0.14	13.94	15.50	1.432	0.201
Left side	QPSK 1_49	21100/2535	DSI 2	1:1	0.119	0.04	24.27	25.50	1.327	0.158
Left side	QPSK 50_24	21100/2535	DSI 2	1:1	0.103	0.03	23.12	24.50	1.374	0.142
Right side	QPSK 1_49	21100/2535	DSI 2	1:1	0.107	0.08	24.27	25.50	1.327	0.142
Right side	QPSK 50_24	21100/2535	DSI 2	1:1	0.098	0.05	23.12	24.50	1.374	0.135
Top side	QPSK 1_49	21100/2535	DSI 4	1:1	0.324	-0.02	15.11	16.50	1.377	0.446
Top side	QPSK 50_24	21100/2535	DSI 4	1:1	0.269	0.07	13.94	15.50	1.432	0.385
Bottom side	QPSK 1_49	21100/2535	DSI 2	1:1	0.000	0.00	24.27	25.50	1.327	0
Bottom side	QPSK 50_24	21100/2535	DSI 2	1:1	0.000	0.00	23.12	24.50	1.374	0
Top side	QPSK 1_49	20850/2510	DSI 4	1:1	0.332	0.09	14.89	16.50	1.449	0.481
Top side	QPSK 50_24	20850/2510	DSI 4	1:1	0.276	0.14	13.59	15.50	1.552	0.428
Top side	QPSK 1_49	21350/2560	DSI 4	1:1	0.321	0.01	15.08	16.50	1.387	0.445
Top side	QPSK 50_24	21350/2560	DSI 4	1:1	0.262	0.03	13.69	15.50	1.517	0.397
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	21100/2535	DSI 4	1:1	0.117	0.02	15.11	16.50	1.377	0.161
Front side	QPSK 50_24	21100/2535	DSI 4	1:1	0.097	-0.60	13.94	15.50	1.432	0.139
Back side	QPSK 1_49	21100/2535	DSI 4	1:1	0.176	0.10	15.11	16.50	1.377	0.242
Back side	QPSK 50_24	21100/2535	DSI 4	1:1	0.140	0.14	13.94	15.50	1.432	0.201
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_49	21100/2535	DSI 2	1:1	0.129	0.06	24.27	25.50	1.327	0.171
Front side	QPSK 50_24	21100/2535	DSI 2	1:1	0.092	0.07	23.12	24.50	1.374	0.126
Back side	QPSK 1_49	21100/2535	DSI 2	1:1	0.181	-0.03	24.27	25.50	1.327	0.24
Back side	QPSK 50_24	21100/2535	DSI 2	1:1	0.118	0.02	23.12	24.50	1.374	0.162
Top side	QPSK 1_49	21100/2535	DSI 2	1:1	0.321	0.11	24.27	25.50	1.327	0.426
Top side	QPSK 50_24	21100/2535	DSI 2	1:1	0.229	0.02	23.12	24.50	1.374	0.315
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Top side	QPSK 1_49	21100/2535	DSI 4	1:1	1.170	0.04	15.11	16.50	1.377	1.611
Top side	QPSK 50_24	21100/2535	DSI 4	1:1	0.989	0.02	13.94	15.50	1.432	1.416

LTE Band 13 BW10 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_49	23230/782	DSI 1	1:1	0.111	0.06	24.29	25.50	1.321	0.147
Left Check	QPSK 25_25	23230/782	DSI 1	1:1	0.093	0.03	23.31	24.50	1.315	0.122
Left Tilted	QPSK 1_49	23230/782	DSI 1	1:1	0.070	-0.09	24.29	25.50	1.321	0.092
Left Tilted	QPSK 25_25	23230/782	DSI 1	1:1	0.057	0.02	23.31	24.50	1.315	0.075
Right Check	QPSK 1_49	23230/782	DSI 1	1:1	0.144	0.10	24.29	25.50	1.321	0.19
Right Check	QPSK 25_25	23230/782	DSI 1	1:1	0.113	0.12	23.31	24.50	1.315	0.149
Right Tilted	QPSK 1_49	23230/782	DSI 1	1:1	0.088	0.07	24.29	25.50	1.321	0.116
Right Tilted	QPSK 25_25	23230/782	DSI 1	1:1	0.072	0.05	23.31	24.50	1.315	0.095
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	23230/782	DSI 3	1:1	0.153	0.07	24.29	25.50	1.321	0.202
Front side	QPSK 25_25	23230/782	DSI 3	1:1	0.130	-0.03	23.31	24.50	1.315	0.171
Back side	QPSK 1_49	23230/782	DSI 3	1:1	0.293	-0.05	24.29	25.50	1.321	0.387
Back side	QPSK 25_25	23230/782	DSI 3	1:1	0.241	0.03	23.31	24.50	1.315	0.317
Left side	QPSK 1_49	23230/782	DSI 2	1:1	0.146	0.01	24.29	25.50	1.321	0.193
Left side	QPSK 25_25	23230/782	DSI 2	1:1	0.120	0.02	23.31	24.50	1.315	0.158
Right side	QPSK 1_49	23230/782	DSI 2	1:1	0.251	0.11	24.29	25.50	1.321	0.332
Right side	QPSK 25_25	23230/782	DSI 2	1:1	0.202	0.14	23.31	24.50	1.315	0.266
Top side	QPSK 1_49	23230/782	DSI 2	1:1	0.000	0.00	24.29	25.50	1.321	0
Top side	QPSK 25_25	23230/782	DSI 2	1:1	0.000	0.00	23.31	24.50	1.315	0
Bottom side	QPSK 1_49	23230/782	DSI 3	1:1	0.275	0.02	24.29	25.50	1.321	0.363
Bottom side	QPSK 25_25	23230/782	DSI 3	1:1	0.228	0.10	23.31	24.50	1.315	0.3
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	23230/782	DSI 3	1:1	0.153	0.07	24.29	25.50	1.321	0.202
Front side	QPSK 25_25	23230/782	DSI 3	1:1	0.130	-0.03	23.31	24.50	1.315	0.171
Back side	QPSK 1_49	23230/782	DSI 3	1:1	0.293	-0.05	24.29	25.50	1.321	0.387
Back side	QPSK 25_25	23230/782	DSI 3	1:1	0.241	0.03	23.31	24.50	1.315	0.317
LTE Band 13 BW10 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_49	23230/782	DSI 1	1:1	0.273	0.05	23.21	24.50	1.346	0.367
Left Check	QPSK 25_25	23230/782	DSI 1	1:1	0.226	0.13	22.27	23.50	1.327	0.3
Left Tilted	QPSK 1_49	23230/782	DSI 1	1:1	0.247	0.01	23.21	24.50	1.346	0.332
Left Tilted	QPSK 25_25	23230/782	DSI 1	1:1	0.206	0.09	22.27	23.50	1.327	0.273
Right Check	QPSK 1_49	23230/782	DSI 1	1:1	0.302	0.02	23.21	24.50	1.346	0.406
Right Check	QPSK 25_25	23230/782	DSI 1	1:1	0.243	0.03	22.27	23.50	1.327	0.323
Right Tilted	QPSK 1_49	23230/782	DSI 1	1:1	0.245	0.08	23.21	24.50	1.346	0.33
Right Tilted	QPSK 25_25	23230/782	DSI 1	1:1	0.204	0.04	22.27	23.50	1.327	0.271
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	23230/782	DSI 4	1:1	0.106	0.07	24.36	25.50	1.300	0.138
Front side	QPSK 25_25	23230/782	DSI 4	1:1	0.078	0.08	23.34	24.50	1.306	0.102
Back side	QPSK 1_49	23230/782	DSI 4	1:1	0.179	0.14	24.36	25.50	1.300	0.233
Back side	QPSK 25_25	23230/782	DSI 4	1:1	0.135	-0.09	23.34	24.50	1.306	0.176
Left side	QPSK 1_49	23230/782	DSI 2	1:1	0.055	0.08	24.36	25.50	1.300	0.072
Left side	QPSK 25_25	23230/782	DSI 2	1:1	0.034	0.13	23.34	24.50	1.306	0.044
Right side	QPSK 1_49	23230/782	DSI 2	1:1	0.075	0.12	24.36	25.50	1.300	0.098
Right side	QPSK 25_25	23230/782	DSI 2	1:1	0.056	0.04	23.34	24.50	1.306	0.073
Top side	QPSK 1_49	23230/782	DSI 4	1:1	0.135	0.06	24.36	25.50	1.300	0.176
Top side	QPSK 25_25	23230/782	DSI 4	1:1	0.099	0.15	23.34	24.50	1.306	0.129
Bottom side	QPSK 1_49	23230/782	DSI 2	1:1	0.000	0.00	24.36	25.50	1.300	0
Bottom side	QPSK 25_25	23230/782	DSI 2	1:1	0.000	0.00	23.34	24.50	1.306	0
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	23230/782	DSI 4	1:1	0.106	0.07	24.36	25.50	1.300	0.138
Front side	QPSK 25_25	23230/782	DSI 4	1:1	0.078	0.08	23.34	24.50	1.306	0.102
Back side	QPSK 1_49	23230/782	DSI 4	1:1	0.179	0.14	24.36	25.50	1.300	0.233
Back side	QPSK 25_25	23230/782	DSI 4	1:1	0.135	-0.09	23.34	24.50	1.306	0.176

LTE Band 26 BW15 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_74	26765/821.5	DSI 1	1:1	0.119	0.08	24.43	25.50	1.279	0.152
Left Check	QPSK 36_39	26765/821.5	DSI 1	1:1	0.096	0.06	23.49	24.50	1.262	0.121
Left Tilted	QPSK 1_74	26765/821.5	DSI 1	1:1	0.054	0.04	24.43	25.50	1.279	0.069
Left Tilted	QPSK 36_39	26765/821.5	DSI 1	1:1	0.047	0.03	23.49	24.50	1.262	0.059
Right Check	QPSK 1_74	26765/821.5	DSI 1	1:1	0.124	-0.06	24.43	25.50	1.279	0.159
Right Check	QPSK 36_39	26765/821.5	DSI 1	1:1	0.107	0.05	23.49	24.50	1.262	0.135
Right Tilted	QPSK 1_74	26765/821.5	DSI 1	1:1	0.059	0.09	24.43	25.50	1.279	0.075
Right Tilted	QPSK 36_39	26765/821.5	DSI 1	1:1	0.051	0.04	23.49	24.50	1.262	0.064
Right Check	QPSK 1_74	26865/831.5	DSI 1	1:1	0.104	0.02	24.39	25.50	1.291	0.134
Right Check	QPSK 1_74	26965/841.5	DSI 1	1:1	0.164	-0.01	24.42	25.50	1.282	0.21
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_74	26765/821.5	DSI 3	1:1	0.165	0.07	24.43	25.50	1.279	0.211
Front side	QPSK 36_39	26765/821.5	DSI 3	1:1	0.139	0.02	23.49	24.50	1.262	0.175
Back side	QPSK 1_74	26765/821.5	DSI 3	1:1	0.301	0.10	24.43	25.50	1.279	0.385
Back side	QPSK 36_39	26765/821.5	DSI 3	1:1	0.251	0.08	23.49	24.50	1.262	0.317
Left side	QPSK 1_74	26765/821.5	DSI 2	1:1	0.072	-0.03	24.43	25.50	1.279	0.092
Left side	QPSK 36_39	26765/821.5	DSI 2	1:1	0.058	0.06	23.49	24.50	1.262	0.073
Right side	QPSK 1_74	26765/821.5	DSI 2	1:1	0.126	0.02	24.43	25.50	1.279	0.161
Right side	QPSK 36_39	26765/821.5	DSI 2	1:1	0.110	0.04	23.49	24.50	1.262	0.139
Top side	QPSK 1_74	26765/821.5	DSI 2	1:1	0.000	0.00	24.43	25.50	1.279	0
Top side	QPSK 36_39	26765/821.5	DSI 2	1:1	0.000	0.00	23.49	24.50	1.262	0
Bottom side	QPSK 1_74	26765/821.5	DSI 3	1:1	0.252	0.07	24.43	25.50	1.279	0.322
Bottom side	QPSK 36_39	26765/821.5	DSI 3	1:1	0.219	0.05	23.49	24.50	1.262	0.276
Back side	QPSK 1_74	26865/831.5	DSI 3	1:1	0.315	0.08	24.39	25.50	1.291	0.407
Back side	QPSK 36_39	26865/831.5	DSI 3	1:1	0.262	-0.11	23.39	24.50	1.291	0.338
Back side	QPSK 1_74	26965/841.5	DSI 3	1:1	0.309	0.03	24.42	25.50	1.282	0.396
Back side	QPSK 36_39	26965/841.5	DSI 3	1:1	0.253	0.05	23.41	24.50	1.285	0.325
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_74	26765/821.5	DSI 3	1:1	0.165	0.07	24.43	25.50	1.279	0.211
Front side	QPSK 36_39	26765/821.5	DSI 3	1:1	0.139	0.02	23.49	24.50	1.262	0.175
Back side	QPSK 1_74	26765/821.5	DSI 3	1:1	0.301	0.10	24.43	25.50	1.279	0.385
Back side	QPSK 36_39	26765/821.5	DSI 3	1:1	0.251	0.08	23.49	24.50	1.262	0.317
Back side	QPSK 1_74	26765/821.5	DSI 3	1:1	0.315	0.08	24.39	25.50	1.291	0.407
Back side	QPSK 36_39	26965/841.5	DSI 3	1:1	0.262	-0.11	23.39	24.50	1.291	0.338
Back side	QPSK 1_74	26765/821.5	DSI 3	1:1	0.309	0.03	24.42	25.50	1.282	0.396
Back side	QPSK 36_39	26965/841.5	DSI 3	1:1	0.253	0.05	23.41	24.50	1.285	0.325
LTE Band 26 BW15 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_74	26765/821.5	DSI 1	1:1	0.498	0.05	21.22	22.00	1.197	0.596
Left Check	QPSK 36_39	26765/821.5	DSI 1	1:1	0.395	0.09	20.19	21.00	1.205	0.476
Left Tilted	QPSK 1_74	26765/821.5	DSI 1	1:1	0.443	0.10	21.22	22.00	1.197	0.53
Left Tilted	QPSK 36_39	26765/821.5	DSI 1	1:1	0.351	0.07	20.19	21.00	1.205	0.423
Right Check	QPSK 1_74	26765/821.5	DSI 1	1:1	0.516	-0.05	21.22	22.00	1.197	0.618
Right Check	QPSK 36_39	26765/821.5	DSI 1	1:1	0.433	0.06	20.19	21.00	1.205	0.522
Right Tilted	QPSK 1_74	26765/821.5	DSI 1	1:1	0.431	0.05	21.22	22.00	1.197	0.516
Right Tilted	QPSK 36_39	26765/821.5	DSI 1	1:1	0.355	0.09	20.19	21.00	1.205	0.428
Right Check	QPSK 1_74	26865/831.5	DSI 1	1:1	0.565	0.08	21.16	22.00	1.213	0.686
Right Check	QPSK 1_74	26965/841.5	DSI 1	1:1	0.491	0.06	21.11	22.00	1.227	0.603
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_74	26765/821.5	DSI 4	1:1	0.289	0.02	24.53	25.50	1.250	0.361
Front side	QPSK 36_39	26765/821.5	DSI 4	1:1	0.235	0.03	23.49	24.50	1.262	0.297
Back side	QPSK 1_74	26765/821.5	DSI 4	1:1	0.428	0.05	24.53	25.50	1.250	0.535
Back side	QPSK 36_39	26765/821.5	DSI 4	1:1	0.371	0.02	23.49	24.50	1.262	0.468
Left side	QPSK 1_74	26765/821.5	DSI 2	1:1	0.111	0.06	24.53	25.50	1.250	0.139
Left side	QPSK 36_39	26765/821.5	DSI 2	1:1	0.090	0.01	23.49	24.50	1.262	0.114
Right side	QPSK 1_74	26765/821.5	DSI 2	1:1	0.151	0.06	24.53	25.50	1.250	0.189
Right side	QPSK 36_39	26765/821.5	DSI 2	1:1	0.123	0.05	23.49	24.50	1.262	0.155
Top side	QPSK 1_74	26765/821.5	DSI 4	1:1	0.308	0.09	24.53	25.50	1.250	0.385
Top side	QPSK 36_39	26765/821.5	DSI 4	1:1	0.253	0.10	23.49	24.50	1.262	0.319

Bottom side	QPSK 1_74	26765/821.5	DSI 2	1:1	0.000	0.00	24.53	25.50	1.250	0
Bottom side	QPSK 36_39	26765/821.5	DSI 2	1:1	0.000	0.00	23.49	24.50	1.262	0
Back side	QPSK 1_74	26865/831.5	DSI 4	1:1	0.411	0.10	24.39	25.50	1.291	0.531
Back side	QPSK 36_39	26865/831.5	DSI 4	1:1	0.334	0.06	23.44	24.50	1.276	0.426
Back side	QPSK 1_74	26965/841.5	DSI 4	1:1	0.406	0.05	24.48	25.50	1.265	0.513
Back side	QPSK 36_39	26965/841.5	DSI 4	1:1	0.329	0.08	23.40	24.50	1.288	0.424
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_74	26765/821.5	DSI 4	1:1	0.289	0.02	24.53	25.50	1.250	0.361
Front side	QPSK 36_39	26765/821.5	DSI 4	1:1	0.235	0.03	23.49	24.50	1.262	0.297
Back side	QPSK 1_74	26765/821.5	DSI 4	1:1	0.428	0.05	24.53	25.50	1.250	0.535
Back side	QPSK 36_39	26765/821.5	DSI 4	1:1	0.371	0.02	23.49	24.50	1.262	0.468
Back side	QPSK 1_74	26865/831.5	DSI 4	1:1	0.411	0.10	24.39	25.50	1.291	0.531
Back side	QPSK 36_39	26865/831.5	DSI 4	1:1	0.334	0.06	23.44	24.50	1.276	0.426
Back side	QPSK 1_74	26965/841.5	DSI 4	1:1	0.406	0.05	24.48	25.50	1.265	0.513
Back side	QPSK 36_39	26965/841.5	DSI 4	1:1	0.329	0.08	23.40	24.50	1.288	0.424

LTE Band 38 BW20 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_99	38000/2595	DSI 1	1:1	0.108	0.07	24.12	25.50	1.374	0.148
Left Check	QPSK 50_0	38000/2595	DSI 1	1:1	0.089	-0.09	23.16	24.50	1.361	0.121
Left Tilted	QPSK 1_99	38000/2595	DSI 1	1:1	0.098	0.03	24.12	25.50	1.374	0.135
Left Tilted	QPSK 50_0	38000/2595	DSI 1	1:1	0.086	0.07	23.16	24.50	1.361	0.117
Right Check	QPSK 1_99	38000/2595	DSI 1	1:1	0.090	0.08	24.12	25.50	1.374	0.124
Right Check	QPSK 50_0	38000/2595	DSI 1	1:1	0.077	0.02	23.16	24.50	1.361	0.105
Right Tilted	QPSK 1_99	38000/2595	DSI 1	1:1	0.047	0.04	24.12	25.50	1.374	0.065
Right Tilted	QPSK 50_0	38000/2595	DSI 1	1:1	0.000	0.00	23.16	24.50	1.361	0
Left Check	QPSK 1_99	37850/2580	DSI 1	1:1	0.080	0.01	24.04	25.50	1.400	0.112
Left Check	QPSK 1_99	38150/2610	DSI 1	1:1	0.114	0.13	24.06	25.50	1.393	0.159
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	38000/2595	DSI 3	1:1	0.189	0.04	20.69	22.00	1.352	0.256
Front side	QPSK 50_0	38000/2595	DSI 3	1:1	0.158	0.02	19.71	21.00	1.346	0.213
Back side	QPSK 1_99	38000/2595	DSI 3	1:1	0.198	-0.06	20.69	22.00	1.352	0.268
Back side	QPSK 50_0	38000/2595	DSI 3	1:1	0.184	0.08	19.71	21.00	1.346	0.248
Left side	QPSK 1_99	38000/2595	DSI 2	1:1	0.144	0.04	24.12	25.50	1.374	0.198
Left side	QPSK 50_0	38000/2595	DSI 2	1:1	0.074	0.11	23.16	24.50	1.361	0.101
Right side	QPSK 1_99	38000/2595	DSI 2	1:1	0.096	0.08	24.12	25.50	1.374	0.132
Right side	QPSK 50_0	38000/2595	DSI 2	1:1	0.090	0.06	23.16	24.50	1.361	0.123
Top side	QPSK 1_99	38000/2595	DSI 2	1:1	0.058	0.10	24.12	25.50	1.374	0.08
Top side	QPSK 50_0	38000/2595	DSI 2	1:1	0.054	0.04	23.16	24.50	1.361	0.074
Bottom side	QPSK 1_99	38000/2595	DSI 3	1:1	0.354	0.07	20.69	22.00	1.352	0.479
Bottom side	QPSK 50_0	38000/2595	DSI 3	1:1	0.301	0.03	19.71	21.00	1.346	0.405
Bottom side	QPSK 1_99	37850/2580	DSI 3	1:1	0.365	0.01	20.53	22.00	1.403	0.512
Bottom side	QPSK 50_0	37850/2580	DSI 3	1:1	0.332	0.03	19.48	21.00	1.419	0.471
Bottom side	QPSK 1_99	38150/2610	DSI 3	1:1	0.351	0.05	20.56	22.00	1.393	0.489
Bottom side	QPSK 50_0	38150/2610	DSI 3	1:1	0.309	0.07	19.54	21.00	1.400	0.432
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	38000/2595	DSI 3	1:1	0.189	0.04	20.69	22.00	1.352	0.256
Front side	QPSK 50_0	38000/2595	DSI 3	1:1	0.158	0.02	19.71	21.00	1.346	0.213
Back side	QPSK 1_99	38000/2595	DSI 3	1:1	0.198	-0.06	20.69	22.00	1.352	0.268
Back side	QPSK 50_0	38000/2595	DSI 3	1:1	0.184	0.08	19.71	21.00	1.346	0.248
Distance SAR Test data(Separate n=1mm)										
Front side	QPSK 1_99	38000/2595	DSI 2	1:1	0.123	0.05	24.12	25.50	1.374	0.169
Front side	QPSK 50_0	38000/2595	DSI 2	1:1	0.103	0.03	23.16	24.50	1.361	0.14
Back side	QPSK 1_99	38000/2595	DSI 2	1:1	0.178	0.04	24.12	25.50	1.374	0.245
Back side	QPSK 50_0	38000/2595	DSI 2	1:1	0.162	0.09	23.16	24.50	1.361	0.221
Bottom side	QPSK 1_99	38000/2595	DSI 2	1:1	0.332	0.01	24.12	25.50	1.374	0.456
Bottom side	QPSK 50_0	38000/2595	DSI 2	1:1	0.279	0.08	23.16	24.50	1.361	0.38
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Front side	QPSK 1_99	38000/2595	DSI 3	1:1	0.694	-0.06	20.69	22.00	1.352	0.938
Front side	QPSK 50_0	38000/2595	DSI 3	1:1	0.595	0.02	19.71	21.00	1.346	0.801
Back side	QPSK 1_99	38000/2595	DSI 3	1:1	0.877	0.05	20.69	22.00	1.352	1.186
Back side	QPSK 50_0	38000/2595	DSI 3	1:1	0.702	0.03	19.71	21.00	1.346	0.945
Bottom side	QPSK 1_99	38000/2595	DSI 3	1:1	0.795	0.04	20.69	22.00	1.352	1.075
Bottom side	QPSK 50_0	38000/2595	DSI 3	1:1	0.661	0.09	19.71	21.00	1.346	0.89
LTE Band 38 BW20 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_99	38000/2595	DSI 1	1:1	0.623	0.06	18.26	19.50	1.330	0.829
Left Check	QPSK 50_0	38000/2595	DSI 1	1:1	0.581	0.09	17.13	18.50	1.371	0.796
Left Check	QPSK 100_0	38000/2595	DSI 1	1:1	0.575	0.09	17.09	18.50	1.384	0.796
Left Tilted	QPSK 1_99	38000/2595	DSI 1	1:1	0.741	0.08	18.26	19.50	1.330	0.986
Left Tilted	QPSK 50_0	38000/2595	DSI 1	1:1	0.704	0.10	17.13	18.50	1.371	0.965
Left Tilted	QPSK 100_0	38000/2595	DSI 1	1:1	0.711	0.11	17.09	18.50	1.384	0.984
Right Check	QPSK 1_99	38000/2595	DSI 1	1:1	0.569	0.02	18.26	19.50	1.330	0.757

Right Check	QPSK 50_0	38000/2595	DSI 1	1:1	0.493	-0.03	17.13	18.50	1.371	0.676
Right Tilted	QPSK 1_99	38000/2595	DSI 1	1:1	0.560	0.04	18.26	19.50	1.330	0.745
Right Tilted	QPSK 50_0	38000/2595	DSI 1	1:1	0.523	0.05	17.13	18.50	1.371	0.717
Left Check	QPSK 1_99	37850/2580	DSI 1	1:1	0.643	0.01	18.17	19.50	1.358	0.873
Left Check	QPSK 1_99	38150/2610	DSI 1	1:1	0.591	0.04	18.24	19.50	1.337	0.79
Left Tilted	QPSK 1_99	37850/2580	DSI 1	1:1	0.801	0.03	18.17	19.50	1.358	1.088
Left Tilted	QPSK 50_0	38150/2610	DSI 1	1:1	0.744	0.02	18.24	19.50	1.337	0.994
Left Tilted	QPSK 1_99	38150/2610	DSI 1	1:1	0.798	0.08	18.24	19.50	1.337	1.067
Left Tilted	QPSK 50_0	38150/2610	DSI 1	1:1	0.736	0.01	18.24	19.50	1.337	0.984
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	38000/2595	DSI 4	1:1	0.179	0.07	17.76	19.00	1.330	0.238
Front side	QPSK 50_0	38000/2595	DSI 4	1:1	0.157	0.02	16.55	18.00	1.396	0.219
Back side	QPSK 1_99	38000/2595	DSI 4	1:1	0.205	0.04	17.76	19.00	1.330	0.273
Back side	QPSK 50_0	38000/2595	DSI 4	1:1	0.184	0.01	16.55	18.00	1.396	0.257
Left side	QPSK 1_99	38000/2595	DSI 2	1:1	0.231	0.04	24.19	25.50	1.352	0.312
Left side	QPSK 50_0	38000/2595	DSI 2	1:1	0.186	0.01	23.19	24.50	1.352	0.251
Right side	QPSK 1_99	38000/2595	DSI 2	1:1	0.100	0.08	24.19	25.50	1.352	0.135
Right side	QPSK 50_0	38000/2595	DSI 2	1:1	0.078	0.05	23.19	24.50	1.352	0.105
Top side	QPSK 1_99	38000/2595	DSI 4	1:1	0.397	0.07	17.76	19.00	1.330	0.528
Top side	QPSK 50_0	38000/2595	DSI 4	1:1	0.341	0.04	16.55	18.00	1.396	0.476
Bottom side	QPSK 1_99	38000/2595	DSI 4	1:1	0.000	0.00	17.76	19.00	1.330	0
Bottom side	QPSK 50_0	38000/2595	DSI 4	1:1	0.000	0.00	16.55	18.00	1.396	0
Top side	QPSK 1_99	37850/2580	DSI 4	1:1	0.333	0.04	17.50	19.00	1.413	0.47
Top side	QPSK 1_99	38150/2610	DSI 4	1:1	0.375	0.06	17.62	19.00	1.374	0.515
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	38000/2595	DSI 4	1:1	0.179	0.07	17.76	19.00	1.330	0.238
Front side	QPSK 50_0	38000/2595	DSI 4	1:1	0.157	0.02	16.55	18.00	1.396	0.219
Back side	QPSK 1_99	38000/2595	DSI 4	1:1	0.205	0.04	17.76	19.00	1.330	0.273
Back side	QPSK 50_0	38000/2595	DSI 4	1:1	0.184	0.01	16.55	18.00	1.396	0.257
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_99	38000/2595	DSI 2	1:1	0.136	0.06	24.19	25.50	1.352	0.184
Front side	QPSK 50_0	38000/2595	DSI 2	1:1	0.105	0.11	23.19	24.50	1.352	0.142
Back side	QPSK 1_99	38000/2595	DSI 2	1:1	0.173	0.02	24.19	25.50	1.352	0.234
Back side	QPSK 50_0	38000/2595	DSI 2	1:1	0.142	0.05	23.19	24.50	1.352	0.192
Top side	QPSK 1_99	38000/2595	DSI 2	1:1	0.351	0.08	24.19	25.50	1.352	0.475
Top side	QPSK 50_0	38000/2595	DSI 2	1:1	0.285	0.10	23.19	24.50	1.352	0.385
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Top side	QPSK 1_99	38000/2595	DSI 4	1:1	0.717	-0.06	17.76	19.00	1.330	0.954
Top side	QPSK 50_0	38000/2595	DSI 4	1:1	0.586	0.08	16.55	18.00	1.396	0.818

LTE Band 41 BW20 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_99	40185/2549.5	DSI 1	1:1	0.106	0.03	24.07	25.50	1.390	0.147
Left Check	QPSK 50_0	40185/2549.5	DSI 1	1:1	0.090	0.08	23.14	24.50	1.368	0.123
Left Tilted	QPSK 1_99	40185/2549.5	DSI 1	1:1	0.091	0.06	24.07	25.50	1.390	0.126
Left Tilted	QPSK 50_0	40185/2549.5	DSI 1	1:1	0.090	0.05	23.14	24.50	1.368	0.123
Right Check	QPSK 1_99	40185/2549.5	DSI 1	1:1	0.093	0.09	24.07	25.50	1.390	0.129
Right Check	QPSK 50_0	40185/2549.5	DSI 1	1:1	0.074	0.04	23.14	24.50	1.368	0.101
Right Tilted	QPSK 1_99	40185/2549.5	DSI 1	1:1	0.047	-0.07	24.07	25.50	1.390	0.065
Right Tilted	QPSK 50_0	40185/2549.5	DSI 1	1:1	0.042	0.10	23.14	24.50	1.368	0.057
Left Check	QPSK 1_99	39750/2506	DSI 1	1:1	0.112	0.13	24.01	25.50	1.409	0.158
Left Check	QPSK 1_99	41490/2680	DSI 1	1:1	0.102	0.06	23.95	25.50	1.429	0.146
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	40185/2549.5	DSI 3	1:1	0.231	0.05	20.71	22.00	1.346	0.311
Front side	QPSK 50_0	40185/2549.5	DSI 3	1:1	0.172	0.10	19.79	21.00	1.321	0.227
Back side	QPSK 1_99	40185/2549.5	DSI 3	1:1	0.399	0.07	20.71	22.00	1.346	0.537
Back side	QPSK 50_0	40185/2549.5	DSI 3	1:1	0.323	0.03	19.79	21.00	1.321	0.427
Left side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.128	0.09	24.07	25.50	1.390	0.178
Left side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.107	0.08	23.14	24.50	1.368	0.146
Right side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.094	-0.10	24.07	25.50	1.390	0.131
Right side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.092	0.01	23.14	24.50	1.368	0.126
Top side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.059	0.02	24.07	25.50	1.390	0.082
Top side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.069	0.07	23.14	24.50	1.368	0.094
Bottom side	QPSK 1_99	40185/2549.5	DSI 3	1:1	0.423	-0.03	20.71	22.00	1.346	0.569
Bottom side	QPSK 50_0	40185/2549.5	DSI 3	1:1	0.372	0.09	19.79	21.00	1.321	0.492
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	40185/2549.5	DSI 3	1:1	0.231	0.05	20.71	22.00	1.346	0.311
Front side	QPSK 50_0	40185/2549.5	DSI 3	1:1	0.172	0.10	19.79	21.00	1.321	0.227
Back side	QPSK 1_99	40185/2549.5	DSI 3	1:1	0.399	0.07	20.71	22.00	1.346	0.537
Back side	QPSK 50_0	40185/2549.5	DSI 3	1:1	0.323	0.03	19.79	21.00	1.321	0.427
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.289	0.07	24.07	25.50	1.390	0.402
Front side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.203	0.04	23.14	24.50	1.368	0.278
Back side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.355	0.03	24.07	25.50	1.390	0.493
Back side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.322	0.06	23.14	24.50	1.368	0.44
Bottom side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.394	0.09	24.07	25.50	1.390	0.548
Bottom side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.331	0.02	23.14	24.50	1.368	0.453
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Bottom side	QPSK 1_99	40185/2549.5	DSI 3	1:1	0.694	-0.02	20.71	22.00	1.346	0.934
Bottom side	QPSK 50_0	40185/2549.5	DSI 3	1:1	0.543	0.03	19.79	21.00	1.321	0.717
LTE Band 41 BW20 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_99	40185/2549.5	DSI 1	1:1	0.701	0.03	18.39	19.50	1.291	0.905
Left Check	QPSK 50_0	40185/2549.5	DSI 1	1:1	0.550	0.08	17.29	18.50	1.321	0.727
Left Check	QPSK 100_0	40185/2549.5	DSI 1	1:1	0.539	0.01	17.21	18.50	1.346	0.725
Left Tilted	QPSK 1_99	40185/2549.5	DSI 1	1:1	0.811	0.07	18.39	19.50	1.291	1.047
Left Tilted	QPSK 50_0	40185/2549.5	DSI 1	1:1	0.647	0.10	17.29	18.50	1.321	0.855
Left Tilted	QPSK 100_0	40185/2549.5	DSI 1	1:1	0.654	0.10	17.21	18.50	1.346	0.88
Right Check	QPSK 1_99	40185/2549.5	DSI 1	1:1	0.601	0.02	18.39	19.50	1.291	0.776
Right Check	QPSK 50_0	40185/2549.5	DSI 1	1:1	0.480	0.04	17.29	18.50	1.321	0.634
Right Tilted	QPSK 1_99	40185/2549.5	DSI 1	1:1	0.617	0.06	18.39	19.50	1.291	0.797
Right Tilted	QPSK 50_0	40185/2549.5	DSI 1	1:1	0.544	0.01	17.29	18.50	1.321	0.719
Left Check	QPSK 1_99	39750/2506	DSI 1	1:1	0.651	0.03	18.05	19.50	1.396	0.909
Left Check	QPSK 1_99	40620/2593	DSI 1	1:1	0.598	0.02	18.31	19.50	1.315	0.787
Left Check	QPSK 1_99	41055/2636.5	DSI 1	1:1	0.623	0.02	18.23	19.50	1.340	0.835
Left Check	QPSK 1_99	41490/2680	DSI 1	1:1	0.661	0.02	18.21	19.50	1.346	0.89
Left Tilted	QPSK 1_99	39750/2506	DSI 1	1:1	0.723	-0.03	18.05	19.50	1.396	1.01

Left Tilted	QPSK 50_0	39750/2506	DSI 1	1:1	0.584	0.12	16.91	18.50	1.442	0.842
Left Tilted	QPSK 1_99	40620/2593	DSI 1	1:1	0.744	0.12	18.31	19.50	1.315	0.979
Left Tilted	QPSK 50_0	40620/2593	DSI 1	1:1	0.583	0.09	16.91	18.50	1.442	0.841
Left Tilted	QPSK 1_99	41055/2636.5	DSI 1	1:1	0.729	0.04	18.23	19.50	1.340	0.977
Left Tilted	QPSK 50_0	41055/2636.5	DSI 1	1:1	0.591	-0.12	17.11	18.50	1.377	0.814
Left Tilted	QPSK 1_99	41490/2680	DSI 1	1:1	0.741	0.09	18.21	19.50	1.346	0.997
Left Tilted	QPSK 50_0	41490/2680	DSI 1	1:1	0.659	0.09	17.09	18.50	1.384	0.912
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	40185/2549.5	DSI 4	1:1	0.177	0.06	17.73	19.00	1.340	0.237
Front side	QPSK 50_0	40185/2549.5	DSI 4	1:1	0.131	0.04	16.66	18.00	1.361	0.178
Back side	QPSK 1_99	40185/2549.5	DSI 4	1:1	0.246	0.10	17.73	19.00	1.340	0.33
Back side	QPSK 50_0	40185/2549.5	DSI 4	1:1	0.183	0.04	16.66	18.00	1.361	0.249
Left side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.152	0.07	24.11	25.50	1.377	0.209
Left side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.135	0.09	23.21	24.50	1.346	0.182
Right side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.064	0.10	24.11	25.50	1.377	0.088
Right side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.041	0.09	23.21	24.50	1.346	0.055
Top side	QPSK 1_99	40185/2549.5	DSI 4	1:1	0.389	0.10	17.73	19.00	1.340	0.521
Top side	QPSK 50_0	40185/2549.5	DSI 4	1:1	0.313	0.02	16.66	18.00	1.361	0.426
Bottom side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.000	0.00	24.11	25.50	1.377	0
Bottom side	QPSK 50_0	40620/2593	DSI 2	1:1	0.000	0.00	22.93	24.50	1.435	0
Top side	QPSK 1_99	39750/2506	DSI 4	1:1	0.372	-0.06	18.05	19.00	1.245	0.463
Top side	QPSK 1_99	39750/2506	DSI 4	1:1	0.365	0.02	18.31	19.00	1.172	0.428
Top side	QPSK 1_99	41490/2680	DSI 4	1:1	0.371	0.05	18.23	19.00	1.194	0.443
Top side	QPSK 1_99	41490/2680	DSI 4	1:1	0.345	0.04	18.21	19.00	1.199	0.414
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_99	40185/2549.5	DSI 4	1:1	0.177	0.06	17.73	19.00	1.340	0.237
Front side	QPSK 50_0	40185/2549.5	DSI 4	1:1	0.131	0.04	16.66	18.00	1.361	0.178
Back side	QPSK 1_99	40185/2549.5	DSI 4	1:1	0.246	0.10	17.73	19.00	1.340	0.33
Back side	QPSK 50_0	40185/2549.5	DSI 4	1:1	0.183	0.04	16.66	18.00	1.361	0.249
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.139	0.09	24.11	25.50	1.377	0.191
Front side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.110	0.08	23.21	24.50	1.346	0.148
Back side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.174	0.02	24.11	25.50	1.377	0.24
Back side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.154	0.10	23.21	24.50	1.346	0.207
Top side	QPSK 1_99	40185/2549.5	DSI 2	1:1	0.345	0.11	24.11	25.50	1.377	0.475
Top side	QPSK 50_0	40185/2549.5	DSI 2	1:1	0.271	0.08	23.21	24.50	1.346	0.365
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Top side	QPSK 1_99	40185/2549.5	DSI 4	1:1	0.893	0.05	17.73	19.00	1.340	1.196
Top side	QPSK 50_0	40185/2549.5	DSI 4	1:1	0.841	0.01	16.66	18.00	1.361	1.145

LTE Band 66 BW20 Ant0 SAR Test Record										
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_49	132322/1745	DSI 1	1:1	0.084	0.06	23.63	24.50	1.222	0.103
Left Check	QPSK 50_24	132322/1745	DSI 1	1:1	0.071	0.15	22.66	23.50	1.213	0.086
Left Tilted	QPSK 1_49	132322/1745	DSI 1	1:1	0.051	0.12	23.63	24.50	1.222	0.062
Left Tilted	QPSK 50_24	132322/1745	DSI 1	1:1	0.042	0.05	22.66	23.50	1.213	0.051
Right Check	QPSK 1_49	132322/1745	DSI 1	1:1	0.079	0.13	23.63	24.50	1.222	0.097
Right Check	QPSK 50_24	132322/1745	DSI 1	1:1	0.064	0.08	22.66	23.50	1.213	0.077
Right Tilted	QPSK 1_49	132322/1745	DSI 1	1:1	0.043	0.01	23.63	24.50	1.222	0.053
Right Tilted	QPSK 50_24	132322/1745	DSI 1	1:1	0.042	0.02	22.66	23.50	1.213	0.051
Right Check	QPSK 1_49	132072/1720	DSI 1	1:1	0.074	-0.03	23.35	24.50	1.303	0.096
Right Check	QPSK 1_49	132572/1770	DSI 1	1:1	0.063	0.05	23.39	24.50	1.291	0.081
Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	132322/1745	DSI 3	1:1	0.158	0.14	21.38	22.00	1.153	0.182
Front side	QPSK 50_24	132322/1745	DSI 3	1:1	0.108	0.09	20.45	21.00	1.135	0.123
Back side	QPSK 1_49	132322/1745	DSI 3	1:1	0.439	0.13	21.38	22.00	1.153	0.506
Back side	QPSK 50_24	132322/1745	DSI 3	1:1	0.288	0.02	20.45	21.00	1.135	0.327
Left side	QPSK 1_49	132322/1745	DSI 2	1:1	0.165	0.06	23.63	24.50	1.222	0.202
Left side	QPSK 50_24	132322/1745	DSI 2	1:1	0.130	-0.05	22.66	23.50	1.213	0.158
Right side	QPSK 1_49	132322/1745	DSI 2	1:1	0.132	0.03	23.63	24.50	1.222	0.161
Right side	QPSK 50_24	132322/1745	DSI 2	1:1	0.101	0.04	22.66	23.50	1.213	0.123
Top side	QPSK 1_49	132322/1745	DSI 2	1:1	0.000	0.00	23.63	24.50	1.222	0
Top side	QPSK 50_24	132322/1745	DSI 2	1:1	0.000	0.00	22.66	23.50	1.213	0
Bottom side	QPSK 1_49	132322/1745	DSI 3	1:1	0.571	0.03	21.38	22.00	1.153	0.659
Bottom side	QPSK 50_24	132322/1745	DSI 3	1:1	0.381	0.08	20.45	21.00	1.135	0.432
Bottom side	QPSK 1_49	132072/1720	DSI 3	1:1	0.532	0.11	21.15	22.00	1.216	0.647
Bottom side	QPSK 50_24	132072/1720	DSI 3	1:1	0.468	0.05	20.41	21.00	1.146	0.536
Bottom side	QPSK 1_49	132572/1770	DSI 3	1:1	0.604	0.04	21.15	22.00	1.216	0.735
Bottom side	QPSK 50_24	132572/1770	DSI 3	1:1	0.521	-0.07	20.37	21.00	1.156	0.602
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	132322/1745	DSI 3	1:1	0.158	0.14	21.38	22.00	1.153	0.182
Front side	QPSK 50_24	132322/1745	DSI 3	1:1	0.108	0.09	20.45	21.00	1.135	0.123
Back side	QPSK 1_49	132322/1745	DSI 3	1:1	0.439	0.13	21.38	22.00	1.153	0.506
Back side	QPSK 50_24	132322/1745	DSI 3	1:1	0.288	0.02	20.45	21.00	1.135	0.327
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_49	132322/1745	DSI 2	1:1	0.215	0.05	23.63	24.50	1.222	0.263
Back side	QPSK 1_49	132322/1745	DSI 2	1:1	0.413	0.02	23.63	24.50	1.222	0.505
Bottom side	QPSK 1_49	132322/1745	DSI 2	1:1	0.561	0.08	23.63	24.50	1.222	0.685
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Front side	QPSK 1_49	132322/1745	DSI 3	1:1	0.411	-0.04	21.38	22.00	1.153	0.474
Front side	QPSK 50_24	132322/1745	DSI 3	1:1	0.359	0.02	20.45	21.00	1.135	0.407
Back side	QPSK 1_49	132322/1745	DSI 3	1:1	1.210	0.08	21.38	22.00	1.153	1.396
Back side	QPSK 50_24	132322/1745	DSI 3	1:1	1.030	0.11	20.45	21.00	1.135	1.169
Bottom side	QPSK 1_49	132322/1745	DSI 3	1:1	1.370	-0.09	21.38	22.00	1.153	1.58
Bottom side	QPSK 50_24	132322/1745	DSI 3	1:1	1.290	0.02	20.45	21.00	1.135	1.464
LTE Band 66 BW20 Ant1 SAR Test Record										
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)										
Left Check	QPSK 1_49	132322/1745	DSI 1	1:1	0.394	0.08	11.64	13.00	1.368	0.539
Left Check	QPSK 50_24	132322/1745	DSI 1	1:1	0.275	0.04	10.73	12.00	1.340	0.368
Left Tilted	QPSK 1_49	132322/1745	DSI 1	1:1	0.457	0.07	11.64	13.00	1.368	0.625
Left Tilted	QPSK 50_24	132322/1745	DSI 1	1:1	0.320	0.11	10.73	12.00	1.340	0.429
Right Check	QPSK 1_49	132322/1745	DSI 1	1:1	0.467	0.08	11.64	13.00	1.368	0.639
Right Check	QPSK 50_24	132322/1745	DSI 1	1:1	0.288	0.13	10.73	12.00	1.340	0.386
Right Tilted	QPSK 1_49	132322/1745	DSI 1	1:1	0.474	-0.05	11.64	13.00	1.368	0.648
Right Tilted	QPSK 50_24	132322/1745	DSI 1	1:1	0.329	0.12	10.73	12.00	1.340	0.441
Right Tilted	QPSK 1_49	132072/1720	DSI 1	1:1	0.376	0.01	11.54	13.00	1.400	0.526
Right Tilted	QPSK 1_49	132572/1770	DSI 1	1:1	0.381	0.09	11.43	13.00	1.435	0.547

Hotspot SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	132322/1745	DSI 4	1:1	0.250	0.05	14.92	16.50	1.439	0.36
Front side	QPSK 50_24	132322/1745	DSI 4	1:1	0.210	-0.03	13.95	15.50	1.429	0.3
Back side	QPSK 1_49	132322/1745	DSI 4	1:1	0.501	0.13	14.92	16.50	1.439	0.721
Back side	QPSK 50_24	132322/1745	DSI 4	1:1	0.373	0.08	13.95	15.50	1.429	0.533
Left side	QPSK 1_49	132322/1745	DSI 2	1:1	0.000	0.13	24.35	25.50	1.303	0
Left side	QPSK 50_24	132322/1745	DSI 2	1:1	0.000	0.04	23.41	24.50	1.285	0
Right side	QPSK 1_49	132322/1745	DSI 2	1:1	0.000	0.07	24.35	25.50	1.303	0
Right side	QPSK 50_24	132322/1745	DSI 2	1:1	0.000	0.12	23.41	24.50	1.285	0
Top side	QPSK 1_49	132322/1745	DSI 4	1:1	0.623	0.05	14.92	16.50	1.439	0.896
Top side	QPSK 50_24	132322/1745	DSI 4	1:1	0.501	0.07	13.95	15.50	1.429	0.716
Top side	QPSK 100_0	132322/1745	DSI 4	1:1	0.499	0.03	14.22	15.50	1.343	0.67
Bottom side	QPSK 1_49	132322/1745	DSI 2	1:1	0.000	0.12	24.35	25.50	1.303	0
Bottom side	QPSK 50_24	132322/1745	DSI 2	1:1	0.000	0.03	23.41	24.50	1.285	0
Top side	QPSK 1_49	132072/1720	DSI 4	1:1	0.638	0.07	14.72	16.50	1.507	0.961
Top side	QPSK 1_49	132572/1770	DSI 4	1:1	0.611	0.03	14.67	16.50	1.524	0.931
Body worn SAR Test data(Separate 10mm)										
Front side	QPSK 1_49	132322/1745	DSI 4	1:1	0.250	0.05	14.92	16.50	1.439	0.36
Front side	QPSK 50_24	132322/1745	DSI 4	1:1	0.210	-0.03	13.95	15.50	1.429	0.3
Back side	QPSK 1_49	132322/1745	DSI 4	1:1	0.501	0.13	14.92	16.50	1.439	0.721
Back side	QPSK 50_24	132322/1745	DSI 4	1:1	0.373	0.08	13.95	15.50	1.429	0.533
Distance SAR Test data(Separate n-1mm)										
Front side	QPSK 1_0	132322/1745	DSI 2	1:1	0.238	0.11	24.30	25.50	1.318	0.314
Back side	QPSK 1_0	132322/1745	DSI 2	1:1	0.409	0.02	24.30	25.50	1.318	0.539
Top side	QPSK 1_0	132322/1745	DSI 2	1:1	0.471	0.15	24.30	25.50	1.318	0.621
Test position	Test mode	Test ch./Freq.	DSI	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)										
Front side	QPSK 1_49	132322/1745	DSI 4	1:1	0.608	0.04	14.92	16.50	1.439	0.875
Front side	QPSK 50_24	132322/1745	DSI 4	1:1	0.509	0.07	13.95	15.50	1.429	0.727
Back side	QPSK 1_49	132322/1745	DSI 4	1:1	0.645	0.14	14.92	16.50	1.439	0.928
Back side	QPSK 50_24	132322/1745	DSI 4	1:1	0.550	0.10	13.95	15.50	1.429	0.786
Top side	QPSK 1_49	132322/1745	DSI 4	1:1	0.770	0.08	14.92	16.50	1.439	1.108
Top side	QPSK 50_24	132322/1745	DSI 4	1:1	0.654	0.10	13.95	15.50	1.429	0.934

Bluetooth SAR Test Record									
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)									
Left Check	DH5	0/2402	1:1.28	0.125	0.05	10.43	11.00	1.140	0.143
Left Tilted	DH5	0/2402	1:1.28	0.070	0.07	10.43	11.00	1.140	0.08
Right Check	DH5	0/2402	1:1.28	0.000	0.00	10.43	11.00	1.140	0
Right Tilted	DH5	0/2402	1:1.28	0.000	0.00	10.43	11.00	1.140	0
Left Check	DH5	39/2441	1:1.28	0.105	0.03	10.26	11.00	1.186	0.125
Left Check	DH5	78/2480	1:1.28	0.097	0.10	9.89	11.00	1.292	0.125
Hotspot SAR Test data(Separate 10mm)									
Front side	DH5	0/2402	1:1.28	0.000	0.00	10.43	11.00	1.140	0
Back side	DH5	0/2402	1:1.28	0.051	0.08	10.43	11.00	1.140	0.058
Left side	DH5	0/2402	1:1.28	0.000	0.00	10.43	11.00	1.140	0
Right side	DH5	0/2402	1:1.28	0.000	0.00	10.43	11.00	1.140	0
Top side	DH5	0/2402	1:1.28	0.000	0.00	10.43	11.00	1.140	0
Bottom side	DH5	0/2402	1:1.28	0.000	0.00	10.43	11.00	1.140	0
Back side	DH5	39/2441	1:1.28	0.061	0.03	10.26	11.00	1.186	0.073
Back side	DH5	78/2480	1:1.28	0.044	0.08	9.89	11.00	1.292	0.057
Body worn SAR Test data(Separate 10mm)									
Front side	DH5	0/2402	1:1.28	0.000	0.00	10.43	11.00	1.140	0
Back side	DH5	0/2402	1:1.28	0.051	0.08	10.43	11.00	1.140	0.058
Back side	DH5	39/2441	1:1.28	0.061	0.03	10.26	11.00	1.186	0.073
Back side	DH5	78/2480	1:1.28	0.044	0.08	9.89	11.00	1.292	0.057

WLAN 2.4G SAR Test Record									
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)									
Left Check	802.11b	6/2437	1:1.04	0.122	0.07	13.70	15.00	1.350	0.165
Left Tilted	802.11b	6/2437	1:1.04	0.101	-0.03	13.70	15.00	1.350	0.136
Right Check	802.11b	6/2437	1:1.04	0.065	0.05	13.70	15.00	1.350	0.088
Right Tilted	802.11b	6/2437	1:1.04	0.051	0.04	13.70	15.00	1.350	0.069
Left Check	802.11b	1/2412	1:1.04	0.168	0.12	13.51	15.00	1.410	0.237
Left Check	802.11b	11/2462	1:1.04	0.145	0.04	13.45	15.00	1.430	0.207
Hotspot SAR Test data(Separate 10mm)									
Front side	802.11b	6/2437	1:1.04	0.123	0.05	18.51	20.00	1.410	0.173
Back side	802.11b	6/2437	1:1.04	0.267	0.03	18.51	20.00	1.410	0.377
Left side	802.11b	6/2437	1:1.04	0.041	0.04	18.51	20.00	1.410	0.058
Right side	802.11b	6/2437	1:1.04	0.123	0.08	18.51	20.00	1.410	0.173
Top side	802.11b	6/2437	1:1.04	0.089	0.09	18.51	20.00	1.410	0.126
Bottom side	802.11b	6/2437	1:1.04	0.000	0.00	18.51	20.00	1.410	0
Back side	802.11b	1/2412	1:1.04	0.297	0.07	18.41	20.00	1.443	0.429
Back side	802.11b	11/2462	1:1.04	0.278	0.03	18.27	20.00	1.490	0.414
Body worn SAR Test data(Separate 10mm)									
Front side	802.11b	6/2437	1:1.04	0.123	0.05	18.51	20.00	1.410	0.173
Back side	802.11b	6/2437	1:1.04	0.267	0.03	18.51	20.00	1.410	0.377
Back side	802.11b	1/2412	1:1.04	0.297	0.07	18.41	20.00	1.443	0.429
Back side	802.11b	11/2462	1:1.04	0.278	0.03	18.27	20.00	1.490	0.414

WLAN 5.2G SAR Test Record									
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)									
Left Check	802.11a	40/5200	1:1.09	0.303	0.07	13.69	15.00	1.351	0.409
Left Tilted	802.11a	40/5200	1:1.09	0.304	0.06	13.69	15.00	1.351	0.411
Right Check	802.11a	40/5200	1:1.09	0.301	0.03	13.69	15.00	1.351	0.407
Right Tilted	802.11a	40/5200	1:1.09	0.278	0.01	13.69	15.00	1.351	0.376
Left Tilted	802.11a	36/5180	1:1.09	0.251	0.04	13.17	15.00	1.523	0.382
Left Tilted	802.11a	48/5240	1:1.09	0.278	0.09	13.33	15.00	1.468	0.408
Hotspot SAR Test data(Separate 10mm)									
Front side	802.11a	40/5200	1:1.09	0.117	0.01	16.67	18.00	1.358	0.159
Back side	802.11a	40/5200	1:1.09	0.169	0.08	16.67	18.00	1.358	0.229
Left side	802.11a	40/5200	1:1.09	0.068	0.04	16.67	18.00	1.358	0.092
Right side	802.11a	40/5200	1:1.09	0.078	0.02	16.67	18.00	1.358	0.106
Top side	802.11a	40/5200	1:1.09	0.300	0.04	16.67	18.00	1.358	0.407
Bottom side	802.11a	40/5200	1:1.09	0.000	0.01	16.67	18.00	1.358	0
Top side	802.11a	36/5180	1:1.09	0.233	0.06	16.49	18.00	1.415	0.33
Top side	802.11a	48/5240	1:1.09	0.227	0.07	16.37	18.00	1.455	0.33
Body worn SAR Test data(Separate 10mm)									
Front side	802.11a	40/5200	1:1.09	0.117	0.01	16.67	18.00	1.358	0.159
Back side	802.11a	40/5200	1:1.09	0.169	0.08	16.67	18.00	1.358	0.229
Back side	802.11a	36/5180	1:1.09	0.183	0.03	16.49	18.00	1.415	0.259
Back side	802.11a	48/5240	1:1.09	0.196	0.10	16.37	18.00	1.455	0.285

WLAN 5.3G SAR Test Record									
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)									
Left Check	802.11a	64/5320	1:1.09	0.256	0.07	13.91	15.00	1.285	0.329
Left Tilted	802.11a	64/5320	1:1.09	0.293	0.60	13.91	15.00	1.285	0.376
Right Check	802.11a	64/5320	1:1.09	0.288	0.02	13.91	15.00	1.285	0.37
Right Tilted	802.11a	64/5320	1:1.09	0.261	0.01	13.91	15.00	1.285	0.335
Left Tilted	802.11a	52/5260	1:1.09	0.295	0.04	13.49	15.00	1.415	0.417
Left Tilted	802.11a	56/5280	1:1.09	0.278	0.04	13.32	15.00	1.472	0.409
Body worn SAR Test data(Separate 10mm)									
Front side	802.11a	64/5320	1:1.09	0.000	0.03	17.59	18.00	1.098	0
Back side	802.11a	64/5320	1:1.09	0.178	0.05	17.59	18.00	1.098	0.196
Back side	802.11a	52/5260	1:1.09	0.144	0.08	16.88	18.00	1.294	0.186
Back side	802.11a	56/5280	1:1.09	0.142	0.01	16.69	18.00	1.351	0.192
WLAN 5.3G SAR Test Record									
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)									
Front side	802.11a	64/5320	1:1.09	0.253	0.15	17.59	18.00	1.098	0.278
Back side	802.11a	64/5320	1:1.09	0.450	0.07	17.59	18.00	1.098	0.494
Left side	802.11a	64/5320	1:1.09	0.000	0.03	17.59	18.00	1.098	0
Right side	802.11a	64/5320	1:1.09	0.030	0.09	17.59	18.00	1.098	0.033
Top side	802.11a	64/5320	1:1.09	0.727	0.02	17.59	18.00	1.098	0.799
Bottom side	802.11a	64/5320	1:1.09	0.027	0.07	17.59	18.00	1.098	0.03
Top side	802.11a	52/5260	1:1.09	0.819	0.14	16.88	18.00	1.294	1.059
Top side	802.11a	56/5280	1:1.09	0.822	-0.08	16.69	18.00	1.351	1.111

WLAN 5.6G SAR Test Record									
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)									
Left Check	802.11a	100/5500	1:1.09	0.221	0.10	13.14	14.00	1.218	0.269
Left Tilted	802.11a	100/5500	1:1.09	0.283	0.05	13.14	14.00	1.218	0.345
Right Check	802.11a	100/5500	1:1.09	0.234	0.03	13.14	14.00	1.218	0.285
Right Tilted	802.11a	100/5500	1:1.09	0.271	0.10	13.14	14.00	1.218	0.33
Left Tilted	802.11a	116/5580	1:1.09	0.301	0.07	12.34	13.50	1.306	0.393
Left Tilted	802.11a	140/5700	1:1.09	0.312	0.04	12.29	13.50	1.321	0.412
Body worn SAR Test data(Separate 10mm)									
Front side	802.11a	100/5500	1:1.09	0.103	0.08	17.28	18.00	1.180	0.122
Back side	802.11a	100/5500	1:1.09	0.189	-0.02	17.28	18.00	1.180	0.223
Back side	802.11a	116/5580	1:1.09	0.163	0.01	17.00	18.00	1.258	0.205
Back side	802.11a	140/5700	1:1.09	0.159	0.09	14.99	16.00	1.261	0.201
WLAN 5.6G SAR Test Record									
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 10-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 10-g(W/kg)
Limbs SAR Test data(Separate 0mm)									
Front side	802.11a	100/5500	1:1.09	0.370	0.04	17.28	18.00	1.180	0.437
Back side	802.11a	100/5500	1:1.09	0.578	0.03	17.28	18.00	1.180	0.682
Left side	802.11a	100/5500	1:1.09	0.064	0.01	17.28	18.00	1.180	0.076
Right side	802.11a	100/5500	1:1.09	0.282	0.12	17.28	18.00	1.180	0.333
Top side	802.11a	100/5500	1:1.09	1.110	-0.10	17.28	18.00	1.180	1.31
Bottom side	802.11a	100/5500	1:1.09	0.051	0.03	17.28	18.00	1.180	0.06
Top side	802.11a	116/5580	1:1.09	0.989	0.09	17.00	18.00	1.258	1.244
Top side	802.11a	140/5700	1:1.09	0.732	0.02	14.99	16.00	1.261	0.923

WLAN 5.8G SAR Test Record									
Test position	Test mode	Test ch./Freq.	Duty Cycle	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power (dBm)	Tune up Limit (dBm)	Scaled factor	Scaled SAR 1-g(W/kg)
Head SAR Test data(Separate 0mm)									
Left Check	802.11a	157/5785	1:1.09	0.312	0.03	11.68	12.00	1.076	0.336
Left Tilted	802.11a	157/5785	1:1.09	0.345	0.04	11.68	12.00	1.076	0.371
Right Check	802.11a	157/5785	1:1.09	0.256	0.07	11.68	12.00	1.076	0.275
Right Tilted	802.11a	157/5785	1:1.09	0.303	-0.02	11.68	12.00	1.076	0.326
Left Tilted	802.11a	149/5745	1:1.09	0.354	0.08	11.57	12.00	1.104	0.391
Left Tilted	802.11a	165/5825	1:1.09	0.231	0.05	10.48	12.00	1.418	0.328
Hotspot SAR Test data(Separate 10mm)									
Front side	802.11a	157/5785	1:1.09	0.108	0.09	17.25	18.00	1.188	0.128
Back side	802.11a	157/5785	1:1.09	0.247	0.07	17.25	18.00	1.188	0.293
Left side	802.11a	157/5785	1:1.09	0.000	0.11	17.25	18.00	1.188	0
Right side	802.11a	157/5785	1:1.09	0.102	0.09	17.25	18.00	1.188	0.121
Top side	802.11a	157/5785	1:1.09	0.324	0.06	17.25	18.00	1.188	0.385
Bottom side	802.11a	157/5785	1:1.09	0.000	0.10	17.25	18.00	1.188	0
Top side	802.11a	149/5745	1:1.09	0.335	0.06	16.92	18.00	1.282	0.429
Top side	802.11a	165/5825	1:1.09	0.321	0.02	16.80	18.00	1.318	0.423
Body worn SAR Test data(Separate 10mm)									
Front side	802.11a	157/5785	1:1.09	0.108	0.09	17.25	18.00	1.188	0.128
Back side	802.11a	157/5785	1:1.09	0.247	0.07	17.25	18.00	1.188	0.293

SAR Test Note:

1. Per KDB648474 D04y01r03.this device is considered a phablet since the display diagonal dimension > 15.0 cm or an overall diagonal dimension > 16.0 cm. Therefore, phablet SAR tests are required when wireless mode does not apply or if wireless router 1g SAR > 1.2W/kg.
2. Per KDB 941225 D05v02r05, when a properly configured base station simulator is used for the SAR and power measurements, spectrum plots for each RB allocation and offset configuration is not required.
3. Considering the theoretical duty cycle of 63.3% for extended cyclic prefix in the uplink, and the theoretical duty cycle of 62.9% for normal cyclic prefix in uplink, a scaling factor of extended cyclic prefix $63.3\%/62.9\% = 1.006$ is applied to scale-up the measured SAR result. The reported TDD LTE SAR (W/kg) = Measured SAR (W/kg)* scaling factor for extended cyclic prefix.
4. The Wi-Fi duty cycle is 95~100%, Wi-Fi SAR scaling need further consideration and the theoretical duty cycle is 100%, therefore the actual duty cycle will be scaled up to the theoretical value of Wi-Fi reported SAR calculation.
5. The ratio is the difference in percentage between original and repeated measured SAR.
6. All measurement SAR result is scaled-up to account for tune-up tolerance and is compliant.

7.2.2. SAR Measurement Variability

Band	Mode	Test Position	Ch.	Freq. (MHz)	Antenna	Original 1g SAR (W/kg)	First 1g SAR (W/kg)	First Ratio (%)
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Note:

According to KDB 865664 D01v01r04, SAR measurement variability must be assessed for each frequency band, which is determined by the SAR probe calibration point and tissue-equivalent medium used for the device measurements. When both head and body tissue-equivalent media are required for SAR measurements in a frequency band, the variability measurement procedures should be applied to the tissue medium with the highest measured SAR, using the highest measured SAR configuration for that tissue-equivalent medium.

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

1. The original highest measured Reported SAR 1-g ≥ 0.80 W/kg repeated that measurement once.
2. Perform a second repeated measurement the ratio of the largest to the smallest SAR for the original and first repeated measurements is < 1.2 W/kg, or when the original or repeated measurement ≥ 1.45 W/kg (~10% from the 1-g SAR limit).

7.3 Multiple Transmitter Evaluation

7.3.1. Simultaneous SAR test evaluation

- **Simultaneous Transmission Possibilities**

• Simultaneous TX Combination	Head SAR	Hotspot SAR	Body worn SAR	Limbs SAR
WWAN + Wi-Fi 2.4G	Y	Y	Y	Y
WWAN + Wi-Fi 5G	Y	Y	Y	Y
WWAN + Bluetooth	Y	Y	Y	Y
WWAN + Wi-Fi 5G + Bluetooth	Y	Y	Y	Y
Wi-Fi 5G + Bluetooth	Y	Y	Y	Y

7.3.2. Simultaneous Transmission SAR Summation Scenario

Simultaneous Transmission SAR Summation Scenario for Head SAR:

Head SAR		ANT 0								
WWAN Band	Exposure Position (0mm)	Reported SAR								
		1	2	3	4	1+2	1+3	1+4	1+3+4	3+4
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	Summed				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850	Left Cheek	0.151	0.237	0.409	0.143	0.39	0.56	0.29	0.70	0.55
	Left Tilted	0.08	0.136	0.417	0.080	0.22	0.50	0.16	0.58	0.50
	Right Cheek	0.211	0.088	0.407	0.000	0.30	0.62	0.21	0.62	0.41
	Right Tilted	0.082	0.069	0.376	0.000	0.15	0.46	0.08	0.46	0.38
GSM1900	Left Cheek	0	0.237	0.409	0.143	0.24	0.41	0.14	0.55	0.55
	Left Tilted	0	0.136	0.417	0.080	0.14	0.42	0.08	0.50	0.50
	Right Cheek	0.061	0.088	0.407	0.000	0.15	0.47	0.06	0.47	0.41
	Right Tilted	0	0.069	0.376	0.000	0.07	0.38	0.00	0.38	0.38
WCDMA II	Left Cheek	0.112	0.237	0.409	0.143	0.35	0.52	0.26	0.66	0.55
	Left Tilted	0.098	0.136	0.417	0.080	0.23	0.52	0.18	0.60	0.50
	Right Cheek	0.138	0.088	0.407	0.000	0.23	0.55	0.14	0.55	0.41
	Right Tilted	0.102	0.069	0.376	0.000	0.17	0.48	0.10	0.48	0.38
WCDMA IV	Left Cheek	0.093	0.237	0.409	0.143	0.33	0.50	0.24	0.65	0.55
	Left Tilted	0.054	0.136	0.417	0.080	0.19	0.47	0.13	0.55	0.50
	Right Cheek	0.097	0.088	0.407	0.000	0.19	0.50	0.10	0.50	0.41
	Right Tilted	0.061	0.069	0.376	0.000	0.13	0.44	0.06	0.44	0.38
WCDMA V	Left Cheek	0.168	0.237	0.409	0.143	0.41	0.58	0.31	0.72	0.55
	Left Tilted	0.089	0.136	0.417	0.080	0.23	0.51	0.17	0.59	0.50
	Right Cheek	0.193	0.088	0.407	0.000	0.28	0.60	0.19	0.60	0.41
	Right Tilted	0.088	0.069	0.376	0.000	0.16	0.46	0.09	0.46	0.38
LTE B2	Left Cheek	0.109	0.237	0.409	0.143	0.35	0.52	0.25	0.66	0.55
	Left Tilted	0.098	0.136	0.417	0.080	0.23	0.52	0.18	0.60	0.50
	Right Cheek	0.158	0.088	0.407	0.000	0.25	0.57	0.16	0.57	0.41
	Right Tilted	0.113	0.069	0.376	0.000	0.18	0.49	0.11	0.49	0.38
LTE B4	Left Cheek	0.132	0.237	0.409	0.143	0.37	0.54	0.28	0.68	0.55
	Left Tilted	0.117	0.136	0.417	0.080	0.25	0.53	0.20	0.61	0.50
	Right Cheek	0.162	0.088	0.407	0.000	0.25	0.57	0.16	0.57	0.41
	Right Tilted	0.117	0.069	0.376	0.000	0.19	0.49	0.12	0.49	0.38
LTE B5	Left Cheek	0.154	0.237	0.409	0.143	0.39	0.56	0.30	0.71	0.55
	Left Tilted	0.132	0.136	0.417	0.080	0.27	0.55	0.21	0.63	0.50
	Right Cheek	0.225	0.088	0.407	0.000	0.31	0.63	0.23	0.63	0.41
	Right Tilted	0.076	0.069	0.376	0.000	0.15	0.45	0.08	0.45	0.38
LTE B7	Left Cheek	0.522	0.237	0.409	0.143	0.76	0.93	0.67	1.07	0.55
	Left Tilted	0.32	0.136	0.417	0.080	0.46	0.74	0.40	0.82	0.50
	Right Cheek	0.285	0.088	0.407	0.000	0.37	0.69	0.29	0.69	0.41
	Right Tilted	0.201	0.069	0.376	0.000	0.27	0.58	0.20	0.58	0.38
LTE B13	Left Cheek	0.147	0.237	0.409	0.143	0.38	0.56	0.29	0.70	0.55
	Left Tilted	0.092	0.136	0.417	0.080	0.23	0.51	0.17	0.59	0.50
	Right Cheek	0.190	0.088	0.407	0.000	0.28	0.60	0.19	0.60	0.41
	Right Tilted	0.116	0.069	0.376	0.000	0.19	0.49	0.12	0.49	0.38
LTE B26	Left Cheek	0.152	0.237	0.409	0.143	0.39	0.56	0.30	0.70	0.55
	Left Tilted	0.069	0.136	0.417	0.080	0.21	0.49	0.15	0.57	0.50
	Right Cheek	0.210	0.088	0.407	0.000	0.30	0.62	0.21	0.62	0.41
	Right Tilted	0.075	0.069	0.376	0.000	0.14	0.45	0.08	0.45	0.38
LTE B38	Left Cheek	0.159	0.237	0.409	0.143	0.40	0.57	0.30	0.71	0.55
	Left Tilted	0.135	0.136	0.417	0.080	0.27	0.55	0.22	0.63	0.50
	Right Cheek	0.124	0.088	0.407	0.000	0.21	0.53	0.12	0.53	0.41
	Right Tilted	0.065	0.069	0.376	0.000	0.13	0.44	0.07	0.44	0.38
LTE B41	Left Cheek	0.158	0.237	0.409	0.143	0.40	0.57	0.30	0.71	0.55
	Left Tilted	0.126	0.136	0.417	0.080	0.26	0.54	0.21	0.62	0.50
	Right Cheek	0.129	0.088	0.407	0.000	0.22	0.54	0.13	0.54	0.41
	Right Tilted	0.065	0.069	0.376	0.000	0.13	0.44	0.07	0.44	0.38
LTE B66	Left Cheek	0.103	0.237	0.409	0.143	0.34	0.51	0.25	0.66	0.55
	Left Tilted	0.062	0.136	0.417	0.080	0.20	0.48	0.14	0.56	0.50
	Right Cheek	0.097	0.088	0.407	0.000	0.19	0.50	0.10	0.50	0.41
	Right Tilted	0.053	0.069	0.376	0.000	0.12	0.43	0.05	0.43	0.38

ANT 1										
Head SAR		Reported SAR								
WWAN Band	Exposure Position (0mm)	1	2	3	4	1+2	1+3	1+4	1+3+4	3+4
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	Summed				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850	Left Cheek	0.667	0.237	0.409	0.143	0.90	1.08	0.81	1.22	0.55
	Left Tilted	0.581	0.136	0.417	0.080	0.72	1.00	0.66	1.08	0.50
	Right Cheek	0.787	0.088	0.407	0.000	0.88	1.19	0.79	1.19	0.41
	Right Tilted	0.586	0.069	0.376	0.000	0.66	0.96	0.59	0.96	0.38
GSM1900	Left Cheek	0.378	0.237	0.409	0.143	0.62	0.79	0.52	0.93	0.55
	Left Tilted	0.422	0.136	0.417	0.080	0.56	0.84	0.50	0.92	0.50
	Right Cheek	0.396	0.088	0.407	0.000	0.48	0.80	0.40	0.80	0.41
	Right Tilted	0.389	0.069	0.376	0.000	0.46	0.77	0.39	0.77	0.38
WCDMA II	Left Cheek	0.351	0.237	0.409	0.143	0.59	0.76	0.49	0.90	0.55
	Left Tilted	0.443	0.136	0.417	0.080	0.58	0.86	0.52	0.94	0.50
	Right Cheek	0.423	0.088	0.407	0.000	0.51	0.83	0.42	0.83	0.41
	Right Tilted	0.919	0.069	0.376	0.000	0.99	1.30	0.92	1.30	0.38
WCDMA IV	Left Cheek	0.577	0.237	0.409	0.143	0.81	0.99	0.72	1.13	0.55
	Left Tilted	0.664	0.136	0.417	0.080	0.80	1.08	0.74	1.16	0.50
	Right Cheek	0.691	0.088	0.407	0.000	0.78	1.10	0.69	1.10	0.41
	Right Tilted	0.878	0.069	0.376	0.000	0.95	1.25	0.88	1.25	0.38
WCDMA V	Left Cheek	0.673	0.237	0.409	0.143	0.91	1.08	0.82	1.23	0.55
	Left Tilted	0.581	0.136	0.417	0.080	0.72	1.00	0.66	1.08	0.50
	Right Cheek	0.763	0.088	0.407	0.000	0.85	1.17	0.76	1.17	0.41
	Right Tilted	0.59	0.069	0.376	0.000	0.66	0.97	0.59	0.97	0.38
LTE B2	Left Cheek	0.485	0.237	0.409	0.143	0.72	0.89	0.63	1.04	0.55
	Left Tilted	0.623	0.136	0.417	0.080	0.76	1.04	0.70	1.12	0.50
	Right Cheek	0.596	0.088	0.407	0.000	0.68	1.00	0.60	1.00	0.41
	Right Tilted	0.793	0.069	0.376	0.000	0.86	1.17	0.79	1.17	0.38
LTE B4	Left Cheek	0.573	0.237	0.409	0.143	0.81	0.98	0.72	1.13	0.55
	Left Tilted	0.653	0.136	0.417	0.080	0.79	1.07	0.73	1.15	0.50
	Right Cheek	0.664	0.088	0.407	0.000	0.75	1.07	0.66	1.07	0.41
	Right Tilted	0.746	0.069	0.376	0.000	0.82	1.12	0.75	1.12	0.38
LTE B5	Left Cheek	0.724	0.237	0.409	0.143	0.96	1.13	0.87	1.28	0.55
	Left Tilted	0.627	0.136	0.417	0.080	0.76	1.04	0.71	1.12	0.50
	Right Cheek	0.777	0.088	0.407	0.000	0.87	1.18	0.78	1.18	0.41
	Right Tilted	0.524	0.069	0.376	0.000	0.59	0.90	0.52	0.90	0.38
LTE B7	Left Cheek	0.545	0.237	0.409	0.143	0.78	0.95	0.69	1.10	0.55
	Left Tilted	0.887	0.136	0.417	0.080	1.02	1.30	0.97	1.38	0.50
	Right Cheek	0.442	0.088	0.407	0.000	0.53	0.85	0.44	0.85	0.41
	Right Tilted	0.539	0.069	0.376	0.000	0.61	0.92	0.54	0.92	0.38
LTE B13	Left Cheek	0.367	0.237	0.409	0.143	0.60	0.78	0.51	0.92	0.55
	Left Tilted	0.332	0.136	0.417	0.080	0.47	0.75	0.41	0.83	0.50
	Right Cheek	0.406	0.088	0.407	0.000	0.49	0.81	0.41	0.81	0.41
	Right Tilted	0.330	0.069	0.376	0.000	0.40	0.71	0.33	0.71	0.38
LTE B26	Left Cheek	0.596	0.237	0.409	0.143	0.83	1.01	0.74	1.15	0.55
	Left Tilted	0.530	0.136	0.417	0.080	0.67	0.95	0.61	1.03	0.50
	Right Cheek	0.686	0.088	0.407	0.000	0.77	1.09	0.69	1.09	0.41
	Right Tilted	0.516	0.069	0.376	0.000	0.59	0.89	0.52	0.89	0.38
LTE B38	Left Cheek	0.873	0.237	0.409	0.143	1.11	1.28	1.02	1.43	0.55
	Left Tilted	1.088	0.136	0.417	0.080	1.22	1.51	1.17	1.59	0.50
	Right Cheek	0.757	0.088	0.407	0.000	0.85	1.16	0.76	1.16	0.41
	Right Tilted	0.745	0.069	0.376	0.000	0.81	1.12	0.75	1.12	0.38
LTE B41	Left Cheek	0.905	0.237	0.409	0.143	1.14	1.31	1.05	1.46	0.55
	Left Tilted	1.047	0.136	0.417	0.080	1.18	1.46	1.13	1.54	0.50
	Right Cheek	0.776	0.088	0.407	0.000	0.86	1.18	0.78	1.18	0.41
	Right Tilted	0.797	0.069	0.376	0.000	0.87	1.17	0.80	1.17	0.38
LTE B66	Left Cheek	0.539	0.237	0.409	0.143	0.78	0.95	0.68	1.09	0.55
	Left Tilted	0.625	0.136	0.417	0.080	0.76	1.04	0.71	1.12	0.50
	Right Cheek	0.639	0.088	0.407	0.000	0.73	1.05	0.64	1.05	0.41
	Right Tilted	0.648	0.069	0.376	0.000	0.72	1.02	0.65	1.02	0.38

Simultaneous Transmission SAR Summation Scenario for Hotspot SAR:

ANT 0										
Hotspot SAR		Reported SAR								
WWAN Band	Exposure Position (10mm)	1	2	3	4	1+2	1+3	1+4	1+3+4	3+4
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	Summed				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850	Front Side	0.228	0.173	0.159	0.000	0.40	0.39	0.23	0.39	0.16
	Back Side	0.446	0.429	0.293	0.073	0.88	0.74	0.52	0.81	0.37
	Left Side	0.102	0.058	0.092	0.000	0.16	0.19	0.10	0.19	0.09
	Right Side	0.197	0.173	0.121	0.000	0.37	0.32	0.20	0.32	0.12
	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.289	0.000	0.000	0.000	0.29	0.29	0.29	0.29	0.00
GSM1900	Front Side	0.176	0.173	0.159	0.000	0.35	0.34	0.18	0.34	0.16
	Back Side	0.318	0.429	0.293	0.073	0.75	0.61	0.39	0.68	0.37
	Left Side	0.112	0.058	0.092	0.000	0.17	0.20	0.11	0.20	0.09
	Right Side	0.000	0.173	0.121	0.000	0.17	0.12	0.00	0.12	0.12
	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.652	0.000	0.000	0.000	0.65	0.65	0.65	0.65	0.00
WCDMA II	Front Side	0.195	0.173	0.159	0.000	0.37	0.35	0.20	0.35	0.16
	Back Side	0.273	0.429	0.293	0.073	0.70	0.57	0.35	0.64	0.37
	Left Side	0.254	0.058	0.092	0.000	0.31	0.35	0.25	0.35	0.09
	Right Side	0.180	0.173	0.121	0.000	0.35	0.30	0.18	0.30	0.12
	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.576	0.000	0.000	0.000	0.58	0.58	0.58	0.58	0.00
WCDMA IV	Front Side	0.238	0.173	0.159	0.000	0.41	0.40	0.24	0.40	0.16
	Back Side	0.465	0.429	0.293	0.073	0.89	0.76	0.54	0.83	0.37
	Left Side	0.163	0.058	0.092	0.000	0.22	0.26	0.16	0.26	0.09
	Right Side	0.134	0.173	0.121	0.000	0.31	0.26	0.13	0.26	0.12
	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.617	0.000	0.000	0.000	0.62	0.62	0.62	0.62	0.00
WCDMA V	Front Side	0.198	0.173	0.159	0.000	0.37	0.36	0.20	0.36	0.16
	Back Side	0.266	0.429	0.293	0.073	0.70	0.56	0.34	0.63	0.37
	Left Side	0.105	0.058	0.092	0.000	0.16	0.20	0.11	0.20	0.09
	Right Side	0.213	0.173	0.121	0.000	0.39	0.33	0.21	0.33	0.12
	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.340	0.000	0.000	0.000	0.34	0.34	0.34	0.34	0.00
LTE B2	Front Side	0.164	0.173	0.159	0.000	0.34	0.32	0.16	0.32	0.16
	Back Side	0.354	0.429	0.293	0.073	0.78	0.65	0.43	0.72	0.37
	Left Side	0.252	0.058	0.092	0.000	0.31	0.34	0.25	0.34	0.09
	Right Side	0.121	0.173	0.121	0.000	0.29	0.24	0.12	0.24	0.12
	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.509	0.000	0.000	0.000	0.51	0.51	0.51	0.51	0.00
LTE B4	Front Side	0.244	0.173	0.159	0.000	0.42	0.40	0.24	0.40	0.16
	Back Side	0.518	0.429	0.293	0.073	0.95	0.81	0.59	0.88	0.37
	Left Side	0.210	0.058	0.092	0.000	0.27	0.30	0.21	0.30	0.09
	Right Side	0.149	0.173	0.121	0.000	0.32	0.27	0.15	0.27	0.12
	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.679	0.000	0.000	0.000	0.68	0.68	0.68	0.68	0.00
LTE B5	Front Side	0.167	0.173	0.159	0.000	0.34	0.33	0.17	0.33	0.16
	Back Side	0.409	0.429	0.293	0.073	0.84	0.70	0.48	0.78	0.37
	Left Side	0.100	0.058	0.092	0.000	0.16	0.19	0.10	0.19	0.09
	Right Side	0.203	0.173	0.121	0.000	0.38	0.32	0.20	0.32	0.12
	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.187	0.000	0.000	0.000	0.19	0.19	0.19	0.19	0.00
LTE B7	Front Side	0.322	0.173	0.159	0.000	0.50	0.48	0.32	0.48	0.16
	Back Side	0.382	0.429	0.293	0.073	0.81	0.68	0.46	0.75	0.37
	Left Side	0.452	0.058	0.092	0.000	0.51	0.54	0.45	0.54	0.09
	Right Side	0.262	0.173	0.121	0.000	0.44	0.38	0.26	0.38	0.12
	Top Side	0.076	0.126	0.429	0.000	0.20	0.51	0.08	0.51	0.43
	Bottom Side	0.507	0.000	0.000	0.000	0.51	0.51	0.51	0.51	0.00
LTE B13	Front Side	0.202	0.173	0.159	0.000	0.38	0.36	0.20	0.36	0.16
	Back Side	0.387	0.429	0.293	0.073	0.82	0.68	0.46	0.75	0.37
	Left Side	0.193	0.058	0.092	0.000	0.25	0.29	0.19	0.29	0.09
	Right Side	0.332	0.173	0.121	0.000	0.51	0.45	0.33	0.45	0.12
	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.363	0.000	0.000	0.000	0.36	0.36	0.36	0.36	0.00
LTE B26	Front Side	0.211	0.173	0.159	0.000	0.38	0.37	0.21	0.37	0.16
	Back Side	0.407	0.429	0.293	0.073	0.84	0.70	0.48	0.77	0.37
	Left Side	0.092	0.058	0.092	0.000	0.15	0.18	0.09	0.18	0.09
	Right Side	0.161	0.173	0.121	0.000	0.33	0.28	0.16	0.28	0.12

	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.322	0.000	0.000	0.000	0.32	0.32	0.32	0.32	0.00
LTE B38	Front Side	0.256	0.173	0.159	0.000	0.43	0.42	0.26	0.42	0.16
	Back Side	0.268	0.429	0.293	0.073	0.70	0.56	0.34	0.63	0.37
	Left Side	0.198	0.058	0.092	0.000	0.26	0.29	0.20	0.29	0.09
	Right Side	0.132	0.173	0.121	0.000	0.31	0.25	0.13	0.25	0.12
	Top Side	0.080	0.126	0.429	0.000	0.21	0.51	0.08	0.51	0.43
	Bottom Side	0.512	0.000	0.000	0.000	0.51	0.51	0.51	0.51	0.00
LTE B41	Front Side	0.402	0.173	0.159	0.000	0.58	0.56	0.40	0.56	0.16
	Back Side	0.537	0.429	0.293	0.073	0.97	0.83	0.61	0.90	0.37
	Left Side	0.178	0.058	0.092	0.000	0.24	0.27	0.18	0.27	0.09
	Right Side	0.131	0.173	0.121	0.000	0.30	0.25	0.13	0.25	0.12
	Top Side	0.082	0.126	0.429	0.000	0.21	0.51	0.08	0.51	0.43
	Bottom Side	0.569	0.000	0.000	0.000	0.57	0.57	0.57	0.57	0.00
LTE B66	Front Side	0.263	0.173	0.159	0.000	0.44	0.42	0.26	0.42	0.16
	Back Side	0.506	0.429	0.293	0.073	0.94	0.80	0.58	0.87	0.37
	Left Side	0.202	0.058	0.092	0.000	0.26	0.29	0.20	0.29	0.09
	Right Side	0.161	0.173	0.121	0.000	0.33	0.28	0.16	0.28	0.12
	Top Side	0.000	0.126	0.429	0.000	0.13	0.43	0.00	0.43	0.43
	Bottom Side	0.735	0.000	0.000	0.000	0.74	0.74	0.74	0.74	0.00

ANT 1										
Hotspot SAR		Reported SAR								
WWAN Band	Exposure Position (10mm)	1	2	3	4	1+2	1+3	1+4	1+3+4	3+4
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	Summed				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850	Front Side	0.343	0.173	0.159	0.000	0.52	0.50	0.34	0.50	0.16
	Back Side	0.457	0.429	0.293	0.073	0.89	0.75	0.53	0.82	0.37
	Left Side	0.143	0.058	0.092	0.000	0.20	0.24	0.14	0.24	0.09
	Right Side	0.199	0.173	0.121	0.000	0.37	0.32	0.20	0.32	0.12
	Top Side	0.319	0.126	0.429	0.000	0.45	0.75	0.32	0.75	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
GSM1900	Front Side	0.145	0.173	0.159	0.000	0.32	0.30	0.15	0.30	0.16
	Back Side	0.307	0.429	0.293	0.073	0.74	0.60	0.38	0.67	0.37
	Left Side	0.000	0.058	0.092	0.000	0.06	0.09	0.00	0.09	0.09
	Right Side	0.000	0.173	0.121	0.000	0.17	0.12	0.00	0.12	0.12
	Top Side	0.696	0.126	0.429	0.000	0.82	1.13	0.70	1.13	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
WCDMA II	Front Side	0.147	0.173	0.159	0.000	0.32	0.31	0.15	0.31	0.16
	Back Side	0.270	0.429	0.293	0.073	0.70	0.56	0.34	0.64	0.37
	Left Side	0.000	0.058	0.092	0.000	0.06	0.09	0.00	0.09	0.09
	Right Side	0.000	0.173	0.121	0.000	0.17	0.12	0.00	0.12	0.12
	Top Side	0.527	0.126	0.429	0.000	0.65	0.96	0.53	0.96	0.43
	Bottom Side	0.656	0.000	0.000	0.000	0.66	0.66	0.66	0.66	0.00
WCDMA IV	Front Side	0.315	0.173	0.159	0.000	0.49	0.47	0.32	0.47	0.16
	Back Side	0.469	0.429	0.293	0.073	0.90	0.76	0.54	0.84	0.37
	Left Side	0.000	0.058	0.092	0.000	0.06	0.09	0.00	0.09	0.09
	Right Side	0.000	0.173	0.121	0.000	0.17	0.12	0.00	0.12	0.12
	Top Side	0.711	0.126	0.429	0.000	0.84	1.14	0.71	1.14	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
WCDMA V	Front Side	0.310	0.173	0.159	0.000	0.48	0.47	0.31	0.47	0.16
	Back Side	0.440	0.429	0.293	0.073	0.87	0.73	0.51	0.81	0.37
	Left Side	0.139	0.058	0.092	0.000	0.20	0.23	0.14	0.23	0.09
	Right Side	0.199	0.173	0.121	0.000	0.37	0.32	0.20	0.32	0.12
	Top Side	0.232	0.126	0.429	0.000	0.36	0.66	0.23	0.66	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
LTE B2	Front Side	0.179	0.173	0.159	0.000	0.35	0.34	0.18	0.34	0.16
	Back Side	0.348	0.429	0.293	0.073	0.78	0.64	0.42	0.71	0.37
	Left Side	0.000	0.058	0.092	0.000	0.06	0.09	0.00	0.09	0.09
	Right Side	0.000	0.173	0.121	0.000	0.17	0.12	0.00	0.12	0.12
	Top Side	0.564	0.126	0.429	0.000	0.69	0.99	0.56	0.99	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
LTE B4	Front Side	0.323	0.173	0.159	0.000	0.50	0.48	0.32	0.48	0.16
	Back Side	0.553	0.429	0.293	0.073	0.98	0.85	0.63	0.92	0.37
	Left Side	0.000	0.058	0.092	0.000	0.06	0.09	0.00	0.09	0.09
	Right Side	0.000	0.173	0.121	0.000	0.17	0.12	0.00	0.12	0.12
	Top Side	0.710	0.126	0.429	0.000	0.84	1.14	0.71	1.14	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
LTE B5	Front Side	0.311	0.173	0.159	0.000	0.48	0.47	0.31	0.47	0.16
	Back Side	0.519	0.429	0.293	0.073	0.95	0.81	0.59	0.89	0.37
	Left Side	0.151	0.058	0.092	0.000	0.21	0.24	0.15	0.24	0.09
	Right Side	0.205	0.173	0.121	0.000	0.38	0.33	0.21	0.33	0.12
	Top Side	0.255	0.126	0.429	0.000	0.38	0.68	0.26	0.68	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
LTE B7	Front Side	0.161	0.173	0.159	0.000	0.33	0.32	0.16	0.32	0.16
	Back Side	0.242	0.429	0.293	0.073	0.67	0.54	0.32	0.61	0.37
	Left Side	0.158	0.058	0.092	0.000	0.22	0.25	0.16	0.25	0.09
	Right Side	0.142	0.173	0.121	0.000	0.32	0.26	0.14	0.26	0.12
	Top Side	0.481	0.126	0.429	0.000	0.61	0.91	0.48	0.91	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
LTE B13	Front Side	0.138	0.173	0.159	0.000	0.31	0.30	0.14	0.30	0.16
	Back Side	0.233	0.429	0.293	0.073	0.66	0.53	0.31	0.60	0.37
	Left Side	0.072	0.058	0.092	0.000	0.13	0.16	0.07	0.16	0.09
	Right Side	0.098	0.173	0.121	0.000	0.27	0.22	0.10	0.22	0.12
	Top Side	0.176	0.126	0.429	0.000	0.30	0.61	0.18	0.61	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
LTE B26	Front Side	0.361	0.173	0.159	0.000	0.53	0.52	0.36	0.52	0.16
	Back Side	0.535	0.429	0.293	0.073	0.96	0.83	0.61	0.90	0.37
	Left Side	0.139	0.058	0.092	0.000	0.20	0.23	0.14	0.23	0.09
	Right Side	0.189	0.173	0.121	0.000	0.36	0.31	0.19	0.31	0.12
	Top Side	0.385	0.126	0.429	0.000	0.51	0.81	0.39	0.81	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
LTE B38	Front Side	0.238	0.173	0.159	0.000	0.41	0.40	0.24	0.40	0.16

	Back Side	0.273	0.429	0.293	0.073	0.70	0.57	0.35	0.64	0.37
	Left Side	0.312	0.058	0.092	0.000	0.37	0.40	0.31	0.40	0.09
	Right Side	0.135	0.173	0.121	0.000	0.31	0.26	0.14	0.26	0.12
	Top Side	0.528	0.126	0.429	0.000	0.65	0.96	0.53	0.96	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
LTE B41	Front Side	0.237	0.173	0.159	0.000	0.41	0.40	0.24	0.40	0.16
	Back Side	0.330	0.429	0.293	0.073	0.76	0.62	0.40	0.70	0.37
	Left Side	0.209	0.058	0.092	0.000	0.27	0.30	0.21	0.30	0.09
	Right Side	0.088	0.173	0.121	0.000	0.26	0.21	0.09	0.21	0.12
	Top Side	0.521	0.126	0.429	0.000	0.65	0.95	0.52	0.95	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00
LTE B66	Front Side	0.360	0.173	0.159	0.000	0.53	0.52	0.36	0.52	0.16
	Back Side	0.721	0.429	0.293	0.073	1.15	1.01	0.79	1.09	0.37
	Left Side	0.000	0.058	0.092	0.000	0.06	0.09	0.00	0.09	0.09
	Right Side	0.000	0.173	0.121	0.000	0.17	0.12	0.00	0.12	0.12
	Top Side	0.961	0.126	0.429	0.000	1.09	1.39	0.96	1.39	0.43
	Bottom Side	0.000	0.000	0.000	0.000	0.00	0.00	0.00	0.00	0.00

Simultaneous Transmission SAR Summation Scenario for Body worn SAR:

ANT 0										
Body worn SAR		Reported SAR								
WWAN Band	Exposure Position (10mm)	1	2	3	4	1+2	1+3	1+4	1+3+4	3+4
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	Summed				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850	Front Side	0.228	0.173	0.159	0.000	0.40	0.39	0.23	0.39	0.16
	Back Side	0.446	0.429	0.293	0.073	0.88	0.74	0.52	0.81	0.37
GSM1900	Front Side	0.176	0.173	0.159	0.000	0.35	0.34	0.18	0.34	0.16
	Back Side	0.318	0.429	0.293	0.073	0.75	0.61	0.39	0.68	0.37
WCDMA II	Front Side	0.195	0.173	0.159	0.000	0.37	0.35	0.20	0.35	0.16
	Back Side	0.273	0.429	0.293	0.073	0.70	0.57	0.35	0.64	0.37
WCDMA IV	Front Side	0.238	0.173	0.159	0.000	0.41	0.40	0.24	0.40	0.16
	Back Side	0.465	0.429	0.293	0.073	0.89	0.76	0.54	0.83	0.37
WCDMA V	Front Side	0.198	0.173	0.159	0.000	0.37	0.36	0.20	0.36	0.16
	Back Side	0.266	0.429	0.293	0.073	0.70	0.56	0.34	0.63	0.37
LTE B2	Front Side	0.164	0.173	0.159	0.000	0.34	0.32	0.16	0.32	0.16
	Back Side	0.354	0.429	0.293	0.073	0.78	0.65	0.43	0.72	0.37
LTE B4	Front Side	0.244	0.173	0.159	0.000	0.42	0.40	0.24	0.40	0.16
	Back Side	0.518	0.429	0.293	0.073	0.95	0.81	0.59	0.88	0.37
LTE B5	Front Side	0.167	0.173	0.159	0.000	0.34	0.33	0.17	0.33	0.16
	Back Side	0.409	0.429	0.293	0.073	0.84	0.70	0.48	0.78	0.37
LTE B7	Front Side	0.322	0.173	0.159	0.000	0.50	0.48	0.32	0.48	0.16
	Back Side	0.382	0.429	0.293	0.073	0.81	0.68	0.46	0.75	0.37
LTE B13	Front Side	0.202	0.173	0.159	0.000	0.38	0.36	0.20	0.36	0.16
	Back Side	0.387	0.429	0.293	0.073	0.82	0.68	0.46	0.75	0.37
LTE B26	Front Side	0.211	0.173	0.159	0.000	0.38	0.37	0.21	0.37	0.16
	Back Side	0.407	0.429	0.293	0.073	0.84	0.70	0.48	0.77	0.37
LTE B38	Front Side	0.256	0.173	0.159	0.000	0.43	0.42	0.26	0.42	0.16
	Back Side	0.268	0.429	0.293	0.073	0.70	0.56	0.34	0.63	0.37
LTE B41	Front Side	0.402	0.173	0.159	0.000	0.58	0.56	0.40	0.56	0.16
	Back Side	0.537	0.429	0.293	0.073	0.97	0.83	0.61	0.90	0.37
LTE B66	Front Side	0.263	0.173	0.159	0.000	0.44	0.42	0.26	0.42	0.16
	Back Side	0.506	0.429	0.293	0.073	0.94	0.80	0.58	0.87	0.37

ANT 1										
Body worn SAR		Reported SAR								
WWAN Band	Exposure Position (10mm)	1	2	3	4	1+2	1+3	1+4	1+3+4	3+4
		WWAN	2.4GHz WLAN	5GHz WLAN	Bluetooth	Summed				
		1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)	1g SAR (W/kg)
GSM850	Front Side	0.343	0.173	0.159	0.000	0.52	0.50	0.34	0.50	0.16
	Back Side	0.457	0.429	0.293	0.073	0.89	0.75	0.53	0.82	0.37
GSM1900	Front Side	0.145	0.173	0.159	0.000	0.32	0.30	0.15	0.30	0.16
	Back Side	0.307	0.429	0.293	0.073	0.74	0.60	0.38	0.67	0.37
WCDMA II	Front Side	0.147	0.173	0.159	0.000	0.32	0.31	0.15	0.31	0.16
	Back Side	0.270	0.429	0.293	0.073	0.70	0.56	0.34	0.64	0.37
WCDMA IV	Front Side	0.315	0.173	0.159	0.000	0.49	0.47	0.32	0.47	0.16
	Back Side	0.469	0.429	0.293	0.073	0.90	0.76	0.54	0.84	0.37
WCDMA V	Front Side	0.310	0.173	0.159	0.000	0.48	0.47	0.31	0.47	0.16
	Back Side	0.440	0.429	0.293	0.073	0.87	0.73	0.51	0.81	0.37
LTE B2	Front Side	0.179	0.173	0.159	0.000	0.35	0.34	0.18	0.34	0.16
	Back Side	0.348	0.429	0.293	0.073	0.78	0.64	0.42	0.71	0.37
LTE B4	Front Side	0.323	0.173	0.159	0.000	0.50	0.48	0.32	0.48	0.16
	Back Side	0.553	0.429	0.293	0.073	0.98	0.85	0.63	0.92	0.37
LTE B5	Front Side	0.311	0.173	0.159	0.000	0.48	0.47	0.31	0.47	0.16
	Back Side	0.519	0.429	0.293	0.073	0.95	0.81	0.59	0.89	0.37
LTE B7	Front Side	0.171	0.173	0.159	0.000	0.34	0.33	0.17	0.33	0.16
	Back Side	0.242	0.429	0.293	0.073	0.67	0.54	0.32	0.61	0.37
LTE B13	Front Side	0.138	0.173	0.159	0.000	0.31	0.30	0.14	0.30	0.16
	Back Side	0.233	0.429	0.293	0.073	0.66	0.53	0.31	0.60	0.37
LTE B26	Front Side	0.361	0.173	0.159	0.000	0.53	0.52	0.36	0.52	0.16
	Back Side	0.535	0.429	0.293	0.073	0.96	0.83	0.61	0.90	0.37
LTE B38	Front Side	0.238	0.173	0.159	0.000	0.41	0.40	0.24	0.40	0.16
	Back Side	0.273	0.429	0.293	0.073	0.70	0.57	0.35	0.64	0.37
LTE B41	Front Side	0.237	0.173	0.159	0.000	0.41	0.40	0.24	0.40	0.16
	Back Side	0.330	0.429	0.293	0.073	0.76	0.62	0.40	0.70	0.37
LTE B66	Front Side	0.360	0.173	0.159	0.000	0.53	0.52	0.36	0.52	0.16
	Back Side	0.721	0.429	0.293	0.073	1.15	1.01	0.79	1.09	0.37

Simultaneous Transmission SAR Summation Scenario for Limbs SAR:

Limbs SAR		ANT 0		
WWAN Band	Exposure Position (0mm)	Reported SAR		
		1	3	1+3
		WWAN	5GHz WLAN	Summed
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
WCDMA II	Front Side		0.44	0.44
	Back Side	1.013	0.68	1.70
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side		1.31	1.31
	Bottom Side	1.342	0.06	1.40
WCDMA IV	Front Side		0.44	0.44
	Back Side	1.589	0.68	2.27
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side		1.31	1.31
	Bottom Side	1.739	0.06	1.80
LTE B2	Front Side		0.44	0.44
	Back Side	1.339	0.68	2.02
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side		1.31	1.31
	Bottom Side	1.563	0.06	1.62
LTE B4	Front Side		0.44	0.44
	Back Side	2.052	0.68	2.73
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side		1.31	1.31
	Bottom Side	1.697	0.06	1.76
LTE B7	Front Side	1.132	0.44	1.57
	Back Side	1.650	0.68	2.33
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side		1.31	1.31
	Bottom Side	1.304	0.06	1.36
LTE B38	Front Side	0.938	0.44	1.38
	Back Side	1.186	0.68	1.87
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side		1.31	1.31
	Bottom Side	1.075	0.06	1.14
LTE B41	Front Side		0.44	0.44
	Back Side		0.68	0.68
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side		1.31	1.31
	Bottom Side	0.934	0.06	0.99
LTE B66	Front Side	0.474	0.44	0.91
	Back Side	1.396	0.68	2.08
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side		1.31	1.31
	Bottom Side	1.580	0.06	1.64

		ANT 1		
Limbs SAR		Reported SAR		
WWAN Band	Exposure Position (0mm)	1	3	1+3
		WWAN	5GHz WLAN	Summed
		10g SAR (W/kg)	10g SAR (W/kg)	10g SAR (W/kg)
GSM1900	Front Side		0.44	0.44
	Back Side		0.68	0.68
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side	1.134	1.31	2.44
	Bottom Side		0.06	0.06
WCDMA II	Front Side	0.452	0.44	0.89
	Back Side	0.595	0.68	1.28
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side	1.041	1.31	2.35
	Bottom Side		0.06	0.06
WCDMA IV	Front Side	0.442	0.44	0.88
	Back Side	0.583	0.68	1.27
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side	0.625	1.31	1.94
	Bottom Side		0.06	0.06
LTE B2	Front Side		0.44	0.44
	Back Side		0.68	0.68
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side	1.241	1.31	2.55
	Bottom Side		0.06	0.06
LTE B4	Front Side		0.44	0.44
	Back Side		0.68	0.68
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side	1.131	1.31	2.44
	Bottom Side		0.06	0.06
LTE B7	Front Side		0.44	0.44
	Back Side		0.68	0.68
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side	1.611	1.31	2.92
	Bottom Side		0.06	0.06
LTE B38	Front Side		0.44	0.44
	Back Side		0.68	0.68
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side	0.954	1.31	2.26
	Bottom Side		0.06	0.06
LTE B41	Front Side		0.44	0.44
	Back Side		0.68	0.68
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side	1.196	1.31	2.51
	Bottom Side		0.06	0.06
LTE 66	Front Side	0.875	0.44	1.31
	Back Side	0.928	0.68	1.61
	Left Side		0.08	0.08
	Right Side		0.33	0.33
	Top Side	1.108	1.31	2.42
	Bottom Side		0.06	0.06

8 SAR VALIDATION DATA

Note: The Validation Data can refer to Appendix.

9 SAR TEST DATA

Note: The SAR Test Data can refer to Appendix.

10 CALIBRATION CERTIFICATE

Note: The detailed calibration certificate can refer to Appendix.

11 TEST SETUP PHOTO

Note: The Test Setup Photo please see appendix.

_____ The End _____