FCC SAR TEST REPORT

Application No.:	SUCR2412000562IT
Applicant:	Shenzhen Tinno Mobile Technology Corp.
Manufacturer:	Shenzhen Tinno Mobile Technology Corp.
Product Name:	Tablet
Model No.(EUT):	T715DS
FCC ID:	XD6T715DS
Standards:	FCC 47CFR §2.1093
Date of Receipt:	2024-12-18
Date of Test:	2024-12-26 to 2025-01-06
Date of Issue:	2025-02-15
Test conclusion:	**PASS ***

* In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Leon Liu

Nick Hu

Prepared by：Leon Liu/ Project Manager

Approved by：Nick HU/ Technical Manager

Revision Record			
Version	**Description**	**Date**	**Remark**
01	Original	2025/02/15	

TEST SUMMARY

Frequency Band	Maximum Reported SAR(W/kg)
	Body 0mm
WCDMA Band II	0.99
WCDMA Band V	1.13
LTE Band 2	0.51
LTE Band 7	0.98
LTE Band 12(17)	1.06
LTE Band 14	1.11
LTE Band 25(2)	0.97
LTE Band 26(5)	1.15
LTE Band 30	0.97
LTE Band 38	0.99
LTE Band 40	0.96
LTE Band 41	0.99
LTE Band 66(4)	1.12
LTE Band 71	1.06
NR Band n2	0.50
NR Band n5	1.08
NR Band n25(2)	0.92
NR Band n30	1.14
NR Band n41	0.94
NR Band n48	0.87
NR Band n66	0.84
NR Band n70	0.93
NR Band n71	1.12
NR Band n77	1.17
WI-FI (2.4GHz)	1.00
WI-FI (5GHz)	1.14
BT	0.20
SAR Limited(W/kg)	1.6
Maximum Simultaneous Transmission SAR (W/kg)	
Scenario	**Body 0mm**
Sum SAR	1.59
SPLSR	/
SPLSR Limited	0.04
Note: The Simultaneous transmission SAR is the same test position of the WWAN Antenna + WiFi/BT	

Antenna.
According to TCB workshop October,2014 RF Exposure Procedures Update (Overlapping Bands): SAR for LTE Band 2(Ant.2) (Frequency range:1850 - 1910 MHz)/LTE Band 4 (Frequency range:1710 - 1755 MHz)/LTE Band 5 (Frequency range:824 - 849 MHz)/ LTE band 17 (frequency range: 704-716 MHz)/n2 (Frequency range:1850 - 1910 MHz) is respectively covered by LTE Band 25(Ant.2) (Frequency range:1850 - 1915 MHz)/LTE Band66 (Frequency range:1710 - 1780 MHz)/LTE Band26 (Frequency range:814 - 849 MHz)/LTE band 12 (frequency range: 699-716 MHz) due to similar frequency range, same maximum tune up limit and same channel bandwidth.
Because the frequency range is similar, the maximum tuning limit is the same, and the channel bandwidth and other operating parameters for the smaller band is fully supported by the larger band.

CONTENTS

1 General Information

1.1 Details of Client

Applicant:	Shenzhen Tinno Mobile Technology Corp.
Address:	27-001, South Side of Tianlong Mobile Headquarters Building, Tongfa South Road, Xili Community, Xili Street, Nanshan District, Shenzhen ,PRC
Manufacturer:	Shenzhen Tinno Mobile Technology Corp.
Address:	27-001, South Side of Tianlong Mobile Headquarters Building, Tongfa South Road, Xili Community, Xili Street, Nanshan District, Shenzhen ,PRC

1.2 Test Location

Company:	SGS-CSTC Standards Technical Services (Suzhou) Co., Ltd.
Address:	South of No. 6 Plant, No. 1, Runsheng Road, Suzhou Industrial Park, Suzhou Area, China (Jiangsu) Pilot Free Trade Zone
Post code:	215000
Test Engineer:	Chen Koller; Liu Leon-l

1.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

- **A2LA (Certificate No. 6336.01)**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 6336.01.

- **Innovation, Science and Economic Development Canada**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0120.

IC#: 27594.

- **FCC –Designation Number: CN1312**

SGS-CSTC STANDARDS TECHNICAL SERVICES (SUZHOU) CO., LTD. has been recognized as an accredited testing laboratory.

Designation Number: CN1312.

Test Firm Registration Number: 0031225543

1.4 General Description of EUT

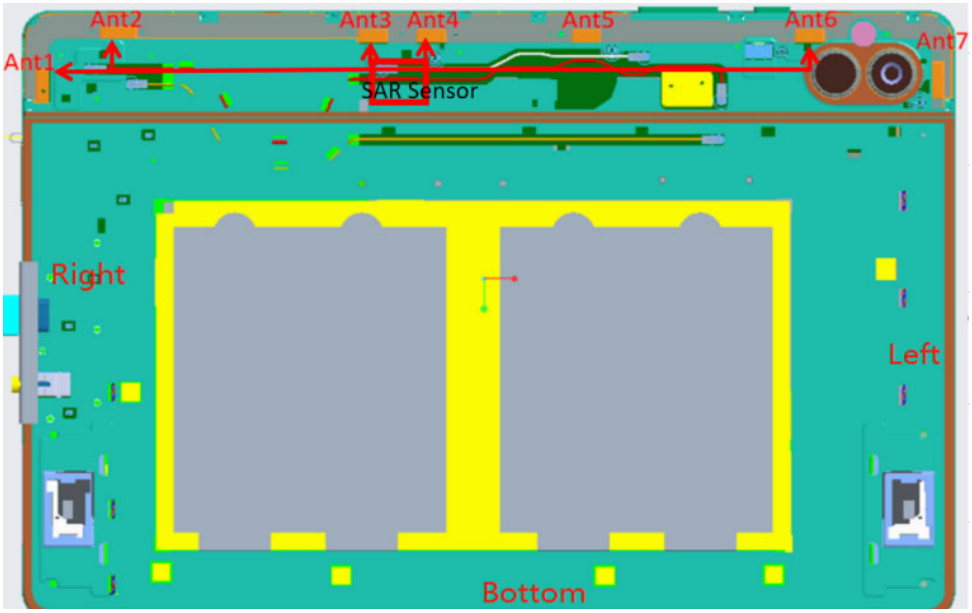
Device Type :	portable device		
Exposure Category:	uncontrolled environment / general population		
Product Name:	Tablet		
Model No.(EUT):	T715DS		
Product Phase:	Production Unit		
Hardware Version:	V1.0		
Software Version:	T715DSV01.05.10		
IMEI:	863287070007790		
Device Operating Configurations :			
Modulation Mode:	**WCDMA:** QPSK, 16QAM; **LTE:** QPSK,16QAM, 64QAM, 256QAM; **5G NR:** DFT-s-OFDM (PI/2 BPSK, QPSK, 16QAM, 64QAM, 256QAM), CP-OFDM (QPSK, 16QAM, 64QAM, 256QAM) **WIFI:** DSSS, OFDM; **BT:** GFSK, π/4DQPSK,8DPSK		
Device Class:	B		
HSDPA UE Category:	24	HSUPA UE Category	7
DC-HSDPA UE Category:	24		
Power Class	3, tested with power control “all 1”(WCDMA Band)		
	3, tested with power control Max Power(LTE Band)		
Frequency Bands:	Band	Tx (MHz)	Rx (MHz)
	WCDMA Band II	1850 - 1910	1930 - 1990
	WCDMA Band V	824 - 849	869 - 894
	LTE Band 2	1850 - 1910	1930 - 1990
	LTE Band 4	1710 - 1755	2110 - 2155
	LTE Band 5	824 - 849	869 - 894
	LTE Band 7	2500 - 2570	2620 - 2690
	LTE Band 12	699 - 716	729 - 746
	LTE Band 14	788 - 798	758 - 768
	LTE Band 17	704 - 716	734 - 746
	LTE Band 25	1850 - 1915	1930 - 1995
	LTE Band 26	814 - 849	859 - 894
	LTE Band 30	2305 - 2315	2350 - 2360
	LTE Band 66	1710 -1780	2110 - 2200
	LTE Band 71	663-698	617- 652
	LTE Band 38	2570 - 2620	2570 - 2620
	LTE Band 40	2305 - 2315	2305 - 2315
	LTE Band 41	2496 - 2690	2496 - 2690
	NR Band n2	1850 - 1910	1930 - 1990
	NR Band n5	824 - 849	869 - 894

	NR Band n25	1850 - 1915	1930 - 1995
	NR Band n30(SA only)	2305 - 2315	2350 - 2360
	NR Band n66	1710 - 1780	2110 - 2200
	NR Band n41	2496 - 2690	2496 - 2690
	NR Band n48(SA only)	3550 - 3700	3550 - 3700
	NR Band n70(SA only)	1695 - 1710	1995 - 2020
	NR Band n71	663 - 698	617 - 652
	NR Band n77	3450 - 3550	3450 - 3550
		3700 - 3980	3700 - 3980
	Bluetooth	2400 - 2483.5	2400 - 2483.5
	Wi-Fi 2.4G	2412 - 2462	2412 - 2462
	Wi-Fi 5G	5150 - 5250	5150 - 5250
		5250 - 5350	5250 - 5350
		5470 - 5725	5470 - 5725
		5725 - 5850	5725 - 5850
RF Cable:	☒ Provided by the applicant ☐ Provided by the laboratory		

Note: *Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information, SGS is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
As above information is provided and confirmed by the applicant. SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

EUT1	1nd
EUT2	add 2nd source
Note: For detailed instructions, see the Difference Statement.	

1.4.1 DUT Antenna Locations (Back View)



Ant	Band:
Ant1	LTE: B7/30/38/40/41 5G NR: N30/41
Ant2	WCDMA: B1/2/5/8 LTE: B1/2/3/4/5/8/12/14/17/20/25/26/29/66/71 5G NR: N2/5/25/29/66/70/71
Ant3	5G NR: N48/77
Ant4	WIFI2.4G WIFI5G Bluetooth
Ant5	LTE: B1/B2/4/25/38/41/66 5G NR: N2/25/41/48/66/70/77
Ant6	WCDMA: B1/2/5/8 LTE: B1/2/3/4/5/7/8/12/14/17/20/25/26/29/30/38/40/41/66/71 NR: N2/5/25/29/30/41/66/70/71
Ant7	LTE: B1/B2/4/25/38/41/66 5G NR: N2/25/41/48/66/70/77

Note:

1) The test device is a android tablet. The overall diagonal dimension of this device is 307 mm. Per KDB 648474 D04, because the diagonal distance of this device is ≥160mm, so it is a phablet.

1.4.2 EUT side for SAR Testing

- **Stand-alone SAR test evaluation**

1) Per FCC KDB 447498D01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where:
• f(GHz) is the RF channel transmit frequency in GHz
• Power and distance are rounded to the nearest mW and mm before calculation
• The result is rounded to one decimal place for comparison
When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.
2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
a) [Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance - 50 mm)·(f(MHz)/150)] mW, at 100 MHz to 1500 MHz
b) [Power allowed at numeric threshold for 50 mm in step 1) + (test separation distance - 50 mm)·10] mW at > 1500 MHz and ≤ 6 GHz

Bnad	Exposure Condition	f (GHz)	Pmax （dBm）	Pmax （mw）	separation distance**(cm)**					Calculated Value					SAR Test（Yes or No）				
			Conducted	Conducted	Back side	Left side	Right side	Top side	Bottom side	Back side	Left side	Right side	Top side	Bottom side	Back side	Left side	Right side	Top side	Bottom side
WCDMA B2 Ant.2	Body 0mm	1.90	23.80	239.88	0.50	23.0	3.60	1.00	16.00	3.36	3060.00	128.90	12.10	2026.44	Yes	No	Yes	Yes	No
WCDMA B5 Ant.2	Body 0mm	0.84	23.80	239.88	0.50	23.0	3.60	1.00	16.00	9.25	1703.40	150.75	24.64	1242.47	Yes	No	Yes	Yes	No
LTE B2 Ant.2	Body 0mm	1.90	24.30	269.15	0.50	23.0	3.60	1.00	16.00	3.36	3060.00	128.90	12.10	2026.44	Yes	No	Yes	Yes	No
LTE B2 Ant.6	Body 0mm	1.90	24.30	269.15	0.50	4.6	22.00	1.00	16.00	3.36	202.71	3060.00	12.10	2026.44	Yes	Yes	No	Yes	No
LTE B5 Ant.2	Body 0mm	0.84	24.80	302.00	0.50	23.0	3.60	1.00	16.00	9.25	1703.40	150.75	24.64	1242.47	Yes	No	Yes	Yes	No
LTE B7 Ant.1	Body 0mm	2.60	23.30	213.80	0.50	25.0	1.60	2.00	15.00	2.62	3060.00	24.27	37.21	1763.83	Yes	No	Yes	Yes	No
LTE B12 Ant.2	Body 0mm	0.75	24.80	302.00	0.50	23.0	3.60	1.00	16.00	10.75	1530.00	152.66	27.29	1133.54	Yes	No	Yes	Yes	No
LTE B14 Ant.2	Body 0mm	0.75	24.80	302.00	0.50	23.0	3.60	1.00	16.00	10.75	1530.00	152.66	27.29	1133.54	Yes	No	Yes	Yes	No
LTE B17 Ant.2	Body 0mm	0.75	23.80	239.88	0.50	23.0	3.60	1.00	16.00	10.75	1530.00	152.66	27.29	1133.54	Yes	No	Yes	Yes	No
LTE B25 Ant.2	Body 0mm	1.90	24.30	269.15	0.50	23.0	3.60	1.00	16.00	3.36	3060.00	128.90	12.10	2026.44	Yes	No	Yes	Yes	No
LTE B26 Ant.2	Body 0mm	0.84	24.80	302.00	0.50	23.0	3.60	1.00	16.00	9.25	1703.40	150.75	24.64	1242.47	Yes	No	Yes	Yes	No
LTE B30 Ant.1	Body 0mm	2.30	23.80	239.88	0.50	25.0	1.60	2.00	15.00	2.89	3060.00	25.96	39.56	1777.39	Yes	No	Yes	Yes	No
LTE B30 Ant.6	Body 0mm	2.30	23.80	239.88	0.50	4.6	22.00	1.00	16.00	2.89	190.72	3060.00	10.69	2007.77	Yes	Yes	No	Yes	No
LTE B38 Ant.1	Body 0mm	2.60	23.80	239.88	0.50	25.0	1.60	2.00	15.00	2.62	3060.00	24.27	37.21	1763.83	Yes	No	Yes	Yes	No
LTE B40 Ant.1	Body 0mm	2.60	23.80	239.88	0.50	25.0	1.60	2.00	15.00	2.62	3060.00	24.27	37.21	1763.83	Yes	No	Yes	Yes	No
LTE B41 Ant.1	Body 0mm	2.60	23.80	239.88	0.50	25.0	1.60	2.00	15.00	2.62	3060.00	24.27	37.21	1763.83	Yes	No	Yes	Yes	No
LTE B66 Ant.2	Body 0mm	1.75	24.30	269.15	0.50	23.0	3.60	1.00	16.00	3.59	3060.00	132.91	12.77	2034.53	Yes	No	Yes	Yes	No
LTE B66 Ant.6	Body 0mm	1.75	24.30	269.15	0.50	4.6	22.00	1.00	16.00	3.59	208.10	3060.00	12.77	2034.53	Yes	Yes	No	Yes	No
LTE B71 Ant.2	Body 0mm	0.75	24.80	302.00	0.50	23.0	3.60	1.00	16.00	10.75	1530.00	152.66	27.29	1133.54	Yes	No	Yes	Yes	No
NR n2 Ant.2	Body 0mm	1.90	24.30	269.15	0.50	23.0	3.60	1.00	16.00	3.36	3060.00	128.90	12.10	2026.44	Yes	No	Yes	Yes	No
NR n2 Ant.6	Body 0mm	1.90	24.30	269.15	0.50	4.6	22.00	1.00	16.00	3.36	202.71	3060.00	12.10	2026.44	Yes	Yes	No	Yes	No
NR n5 Ant.2	Body 0mm	0.84	24.80	302.00	0.50	23.0	3.60	1.00	16.00	9.25	1703.40	150.75	24.64	1242.47	Yes	No	Yes	Yes	No
NR n25 Ant.2	Body 0mm	1.90	24.30	269.15	0.50	23.0	3.60	1.00	16.00	3.36	3060.00	128.90	12.10	2026.44	Yes	No	Yes	Yes	No
NR n30 Ant.1	Body 0mm	2.30	23.80	239.88	0.50	25.0	1.60	2.00	15.00	2.89	3060.00	25.96	39.56	1777.39	Yes	No	Yes	Yes	No
NR n41 Ant.1	Body 0mm	2.60	26.80	478.63	0.50	25.0	1.60	2.00	15.00	2.62	3060.00	24.27	37.21	1763.83	Yes	No	Yes	Yes	No

Bnad	Exposure Condition	f (GHz)	Pmax （dBm）	Pmax （mw）	separation distance(cm)					Calculated Value					SAR Test （Yes or No）				
			Conducted	Conducted	Back side	Left side	Right side	Top side	Bottom side	Back side	Left side	Right side	Top side	Bottom side	Back side	Left side	Right side	Top side	Bottom side
NR n41 Ant.5	Body 0mm	2.60	8.80	7.59	0.50	11.6	15.00	1.00	16.00	2.62	1078.13	1763.83	9.87	1995.87	Yes	No	No	No	No
NR n41 Ant.6	Body 0mm	2.60	25.80	380.19	0.50	4.6	22.00	1.00	16.00	2.62	183.40	3060.00	9.87	1995.87	Yes	Yes	No	Yes	No
NR n41 Ant.7	Body 0mm	2.60	12.80	19.05	0.50	1.6	25.00	2.00	15.00	2.62	24.27	3060.00	37.21	1763.83	Yes	No	No	No	No
NR n48 Ant.3	Body 0mm	3.70	24.80	302.00	0.50	17.1	9.50	1.00	16.00	1.97	2239.86	694.71	7.84	1962.04	Yes	No	No	Yes	No
NR n66 Ant.2	Body 0mm	1.75	24.30	269.15	0.50	23.0	3.60	1.00	16.00	3.59	3060.00	132.91	12.77	2034.53	Yes	No	Yes	Yes	No
NR n66 Ant.6	Body 0mm	1.75	24.30	269.15	0.50	4.6	22.00	1.00	16.00	3.59	208.10	3060.00	12.77	2034.53	Yes	Yes	No	Yes	No
NR n70 Ant.2	Body 0mm	1.75	24.30	269.15	0.50	23.0	3.60	1.00	16.00	3.59	3060.00	132.91	12.77	2034.53	Yes	No	Yes	Yes	No
NR n71 Ant.2	Body 0mm	0.75	24.80	302.00	0.50	23.0	3.60	1.00	16.00	10.75	1530.00	152.66	27.29	1133.54	Yes	No	Yes	Yes	No
NR n77-3500 Ant.1	Body 0mm	3.50	24.30	269.15	0.50	25.0	1.60	2.00	15.00	2.06	3060.00	20.62	32.07	1731.38	Yes	No	Yes	Yes	No
NR n77-3500 Ant.3	Body 0mm	3.50	24.00	251.19	0.50	17.1	9.50	1.00	16.00	2.06	2244.10	700.98	8.13	1967.33	Yes	No	No	Yes	No
NR n77-3500 Ant.5	Body 0mm	3.50	14.30	26.92	0.50	11.6	15.00	1.00	16.00	2.06	1040.88	1731.38	8.13	1967.33	Yes	No	No	Yes	No
NR n77-3500 Ant.7	Body 0mm	3.50	12.30	16.98	0.50	1.6	25.00	2.00	15.00	2.06	20.62	3060.00	32.07	1731.38	Yes	No	No	No	No
NR n77-3900 Ant.1	Body 0mm	3.90	24.30	269.15	0.50	25.0	1.60	2.00	15.00	1.89	3060.00	19.43	30.38	1719.71	Yes	No	Yes	Yes	No
NR n77-3900 Ant.3	Body 0mm	3.90	24.00	251.19	0.50	17.1	9.50	1.00	16.00	1.89	2235.85	688.82	7.58	1957.04	Yes	No	No	Yes	No
NR n77-3900 Ant.5	Body 0mm	3.90	14.30	26.92	0.50	11.6	15.00	1.00	16.00	1.89	1027.65	1719.71	7.58	1957.04	Yes	No	No	Yes	No
NR n77-3900 Ant.7	Body 0mm	3.90	12.30	16.98	0.50	1.6	25.00	2.00	15.00	1.89	19.43	3060.00	30.38	1719.71	Yes	No	No	No	No
WIFI 2.4G Ant.4	Body 0mm	2.45	22.50	177.83	0.50	15.6	11.00	1.00	16.00	2.74	1907.52	981.41	10.26	2001.63	Yes	No	No	Yes	No
WIFI 5.2G Ant.4	Body 0mm	5.20	21.20	131.83	0.50	15.6	11.00	1.00	16.00	1.50	1831.62	890.07	6.29	1929.95	Yes	No	No	Yes	No
WIFI 5.3G Ant.4	Body 0mm	5.30	21.20	131.83	0.50	15.6	11.00	1.00	16.00	1.48	1829.74	887.87	6.21	1928.17	Yes	No	No	Yes	No
WIFI 5.5G Ant.4	Body 0mm	5.50	21.20	131.83	0.50	15.6	11.00	1.00	16.00	1.44	1826.08	883.61	6.06	1924.72	Yes	No	No	Yes	No
WIFI 5.8G Ant.4	Body 0mm	5.80	21.20	131.83	0.50	15.6	11.00	1.00	16.00	1.38	1820.86	877.54	5.85	1919.77	Yes	No	No	Yes	No
BT Ant.4	Body 0mm	2.45	5.00	3.16	0.50	15.6	11.00	1.00	16.00	2.74	1907.52	981.41	10.26	2001.63	Yes	No	No	No	No

Table 1： Estimated SAR calculation for WiFi and BT

Note:

1) * - maximum possible output power declared by manufacturer

1.5 Test Specification

Identity	Document Title
FCC 47CFR §2.1093	Radiofrequency Radiation Exposure Evaluation: Portable Devices
ANSI/IEEE C95.1-1992	IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz – 300 GHz.
KDB 941225 D01	3G SAR Measurement Procedures v03r01
KDB 941225 D05	SAR for LTE Devices v02r05
KDB 941225 D05A	LTE Rel.10 KDB Inquiry Sheet v01r02
KDB 248227 D01	SAR Guidance for IEEE 802 11 Wi-Fi SAR v02r02
KDB 447498 D04	General RF Exposure Guidance v01
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 Evaluation Considerations for Laptop, Notebook, Netbook and Tablet Computers. v01r02

1.6 RF exposure limits

Human Exposure	Uncontrolled Environment General Population	Controlled Environment Occupational
Spatial Peak SAR* (Brain*Trunk)	**1.60 mW/g**	8.00 mW/g
Spatial Average SAR** (Whole Body)	0.08 mW/g	0.40 mW/g
Spatial Peak SAR*** (Hands/Feet/Ankle/Wrist)	4.00 mW/g	20.00 mW/g

Notes:

* 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

** The Spatial Average value of the SAR averaged over the whole body.

*** 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.

Uncontrolled Environments are defined as locations where there is the exposure of individuals who have no knowledge or control of their exposure.

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.)

1.6.1 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 simultaneously transmitting with the other antennas in certain simultaneous transmission conditions. The standalone SAR compliance still uses the standalone SAR results tested at the maximum output power level without any power reduction

2) The proximity sensor is used to indicate when the device is held close to a user's body exposure condition. It utilizes the proximity sensor to reduce the output power in specific wireless and operating modes of main antenna to ensure SAR compliance (Refer to section 5.4 for detailed proximity Sensor information and validation data per KDB 616217).

The detailed power reduction information can be referred to Appendix E.

2 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25 °C
Relative humidity	Min. = 30%, Max. = 70%
Ambient noise is checked and found very low and in compliance with requirement of standards. Reflection of surrounding objects is minimized and in compliance with requirement of standards.	

Table 2： The Ambient Conditions

3 SAR Measurements System Configuration

3.1 The SAR Measurement System

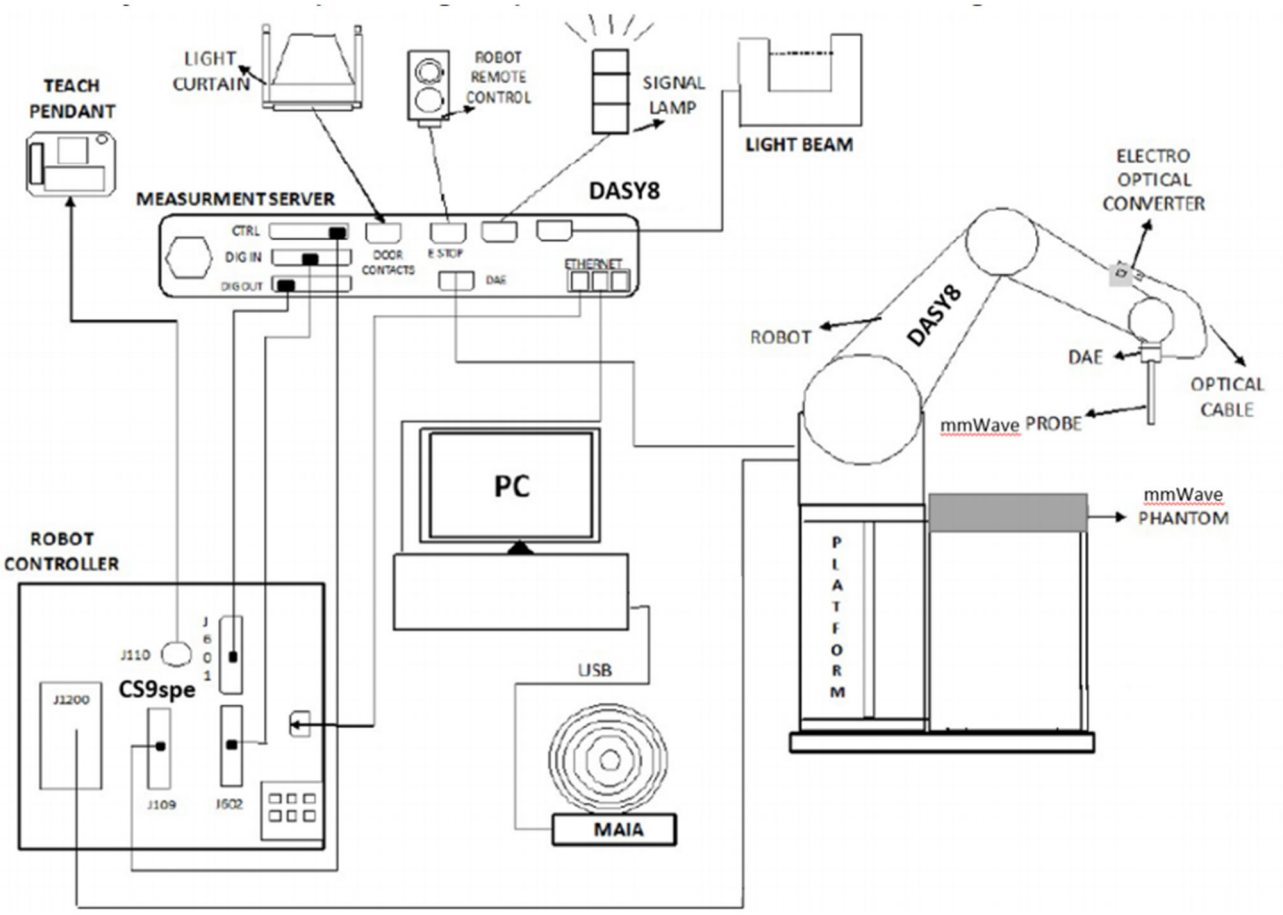
This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY professional system). A E-field probe is used to determine the internal electric fields. The SAR can be obtained from the equation SAR= σ (|Ei|2)/ ρ where σ and ρ are the conductivity and mass density of the tissue-Simulate.

The DASY system for performing compliance tests consists of the following items:
A standard high precision 6-axis robot (Stabile RX family) with controller, teach pendant and software. An arm extension for accommodation the data acquisition electronics (DAE).

A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.

A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.

The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to DAE and for the analog signal from the optical surface detection. The EOC is connected to the measurement server.



F-1. SAR Measurement System Configuration

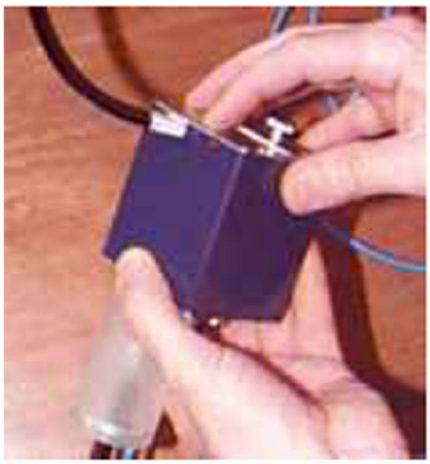
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
- A computer operating Windows 7.
- DASY5 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
- The SAM twin phantom enabling testing left-hand, right-hand and Body Worn usage.
- The device holder for handheld mobile phones.
- Tissue simulating liquid mixed according to the given recipes.
- Validation dipole kits allowing to validating the proper functioning of the system.

3.2 Isotropic E-field Probe EX3DV4

	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)
Calibration	ISO/IEC 17025 calibration service available.
Frequency	10 MHz to > 6 GHz Linearity: ± 0.2 dB (30 MHz to 6 GHz)
Directivity	± 0.3 dB in TSL (rotation around probe axis) ± 0.5 dB in TSL (rotation normal to probe axis)
Dynamic Range	10 µW/g to > 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 µW/g)
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 2.5 mm (Body: 12 mm) Typical distance from probe tip to dipole centers: 1 mm
Application	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields); the only probe that enables compliance testing for frequencies up to 6 GHz with precision of better 30%.
Compatibility	DASY52 SAR and higher, EASY4/MRI

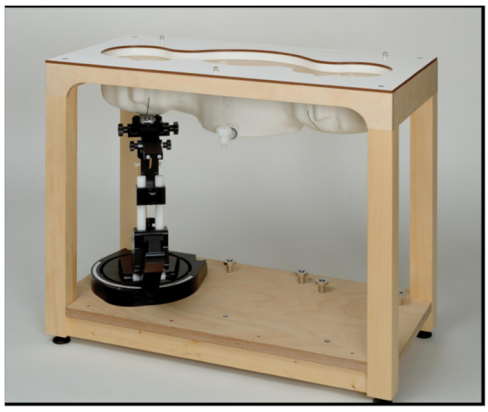
3.3 Data Acquisition Electronics (DAE)

Model	DAE
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY4/5 embedded system (fully remote controlled). Two step probe touch detector for mechanical surface detection and emergency robot stop.
Measurement Range	-100 to +300 mV (16 bit resolution and two range settings: 4mV,400mV)
Input Offset Voltage	< 5µV (with auto zero)
Input Bias Current	< 50 f A
Dimensions	60 x 60 x 68 mm



3.4 SAM Twin Phantom

Material	Vinylester, glass fiber reinforced (VE-GF)
Liquid Compatibility	Compatible with all SPEAG tissue simulating liquids (incl. DGBE type)
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)
Dimensions (incl. Wooden Support)	Length: 1000 mm Width: 500 mm Height: adjustable feet
Filling Volume	approx. 25 liters
Wooden Support	SPEAG standard phantom table

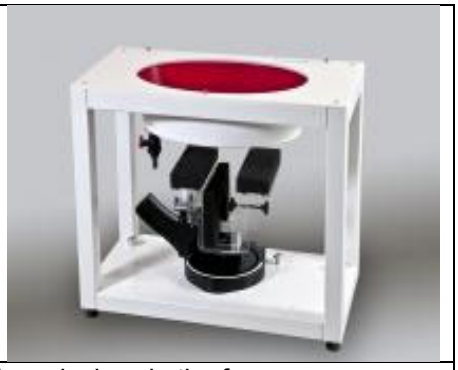


The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE 1528 and IEC 62209-1. It enables the dosimetric evaluation of left and right hand phone usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by teaching three points with the robot.

Twin SAM V5.0 has the same shell geometry and is manufactured from the same material as Twin SAM V4.0, but has reinforced top structure.

3.5 ELI Phantom

Material	Vinylester, glass fiber reinforced (VE-GF)
Liquid Compatibility	Compatible with all SPEAG tissue simulating liquids (incl. DGBE type)
Shell Thickness	2.0 ± 0.2 mm (bottom plate)
Dimensions	Major axis: 600 mm Minor axis: 400 mm
Filling Volume	approx. 30 liters
Wooden Support	SPEAG standard phantom table



Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.
ELI V5.0 has the same shell geometry and is manufactured from the same material as ELI4, but has reinforced top structure.

3.6 Device Holder for Transmitters

F-2. **Device Holder for Transmitters**

- The DASY 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 centres for both scales are the ear reference point (ERP). Thus the device needs no repositioning when changing the angles.
- The DASY device holder has been made out of low-loss POM material having the following dielectric parameters: relative permittivity ε=3 and loss tangent δ=0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

3.7 Measurement procedure

3.7.1 Scanning procedure

Step 1: Power reference measurement

The “reference” and “drift” measurements are located at the beginning and end of the batch process. They measure the field drift at one single point in the liquid over the complete procedure.

Step 2: Area scan

The SAR distribution at the exposed side of the head was measured at a distance of 4mm from the inner surface of the shell. The area covered the entire dimension of the head and the horizontal grid spacing was 15mm*15mm or 12mm*12mm or 10mm*10mm.Based on the area scan data, the area of the maximum absorption was determined by spline interpolation.

Step 3: Zoom scan

Around this point, a volume of 32mm*32mm*30mm (f≤2GHz), 30mm*30mm*30mm (f for 2-3GHz) and 24mm*24mm*22mm (f for 5-6GHz) was assessed by measuring 5x5x7 points (f≤2GHz), 7x7x7 points (f for 2-3GHz) and 7x7x12 points (f for 5-6GHz). On this basis of this data set, the spatial peak SAR value was evaluated with the following procedure:

The data at the surface was extrapolated, since the centre of the dipoles is 2.0mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.2mm. (This can be variable. Refer to the probe specification).The extrapolation was based on a least square algorithm. A polynomial of the fourth order was calculated through the points in z-axes. This polynomial was then used to evaluate the points between the surface and the probe tip. The maximum interpolated value was searched with a straight-forward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1g or 10g) were computed using the 3D-Spline interpolation algorithm. The volume was integrated with the trapezoidal algorithm. One thousand points were interpolated to calculate the average. All neighbouring volumes were evaluated until no neighboring volume with a higher average value was found.

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

			≤ 3 GHz	> 3 GHz
Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface			5 ± 1 mm	½·δ·ln(2) ± 0.5 mm
Maximum probe angle from probe axis to phantom surface normal at the measurement location			30° ± 1°	20° ± 1°
Maximum area scan spatial resolution: Δx_{Area}, Δy_{Area}			≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
			When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	
Maximum zoom scan spatial resolution: Δx_{Zoom}, Δy_{Zoom}			≤ 2 GHz: ≤ 8 mm 2 – 3 GHz: ≤ 5 mm*	3 – 4 GHz: ≤ 5 mm* 4 – 6 GHz: ≤ 4 mm*
Maximum zoom scan spatial resolution, normal to phantom surface	uniform grid: $\Delta z_{Zoom}(n)$		≤ 5 mm	3 – 4 GHz: ≤ 4 mm 4 – 5 GHz: ≤ 3 mm 5 – 6 GHz: ≤ 2 mm
	graded grid	$\Delta z_{Zoom}(1)$: between 1st two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta z_{Zoom}(n>1)$: between subsequent points	≤ 1.5·$\Delta z_{Zoom}(n-1)$	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm

Step 4: Power reference measurement (drift)

The Power Drift Measurement job measures the field at the same location as the most recent power reference measurement job within the same procedure, and with the same settings. The indicated drift is mainly the variation of the DUT's output power and should vary max. ± 5 %

3.7.2 Data Storage

The DASY software stores the acquired data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension ".DAE4". The software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of incorrect parameter settings. For example, if a measurement has been performed with a wrong crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be re-evaluated. The measured data can be visualized or exported in different units or formats, depending on the selected probe type ([V/m], [A/m], [°C], [m W/g], [m W/cm²], [dBrel], etc.). Some of these units are not available in certain situations or show meaningless results, e.g., a SAR output in a lossless media will always be zero. Raw data can also be exported to perform the evaluation with other software packages.

3.7.3 Data Evaluation by SEMCAD

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

Probe parameters: - Sensitivity Normi, ai0, ai1, ai2
- Conversion factor ConvFi
- Diode compression point Dcpi
Device parameters: - Frequency f
- Crest factor cf
Media parameters: - Conductivity ε
- Density ρ

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

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

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

$$V_i = U_i + U_i^2 \cdot cf / dcp_i$$

With Vi = compensated signal of channel i (i = x, y, z)
Ui = input signal of channel i (i = x, y, z)
cf = crest factor of exciting field (DASY parameter)
dcp i = diode compression point (DASY parameter)

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

E-field probes:

$$E_i = (V_i / Norm_i \cdot ConvF)^{1/2}$$

H-field probes:

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

With Vi = compensated signal of channel i (i = x, y, z)
Normi = sensor sensitivity of channel I (i = x, y, z)
[mV/(V/m)2] for E-field Probes
ConvF = sensitivity enhancement in solution
aij = sensor sensitivity factors for H-field probes
f = carrier frequency [GHz]
Ei = electric field strength of channel i in V/m
Hi = magnetic field strength of channel i in A/m

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

$$E_{tot} = (E_x^2 + E_Y^2 + E_z^2)^{1/2}$$

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

$$SAR = (Etot^2 \cdot \sigma) / (\varepsilon \cdot 1000)$$

with SAR = local specific absorption rate in mW/g
Etot = total field strength in V/m
σ= conductivity in [mho/m] or [Siemens/m]
ε= equivalent tissue density in g/cm3

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

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

with Ppwe = equivalent power density of a plane wave in mW/cm2
Etot = total electric field strength in V/m
Htot = total magnetic field strength in A/m

4 SAR measurement variability and uncertainty

4.1 SAR measurement variability

Per KDB865664 D01 SAR measurement 100 MHz to 6 GHz v01r04, 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. The additional measurements are repeated after the completion of all measurements requiring the same head or body tissue-equivalent medium in a frequency band. The test device should be returned to ambient conditions (normal room temperature) with the battery fully charged before it is re-mounted on the device holder for the repeated measurement(s) to minimize any unexpected variations in the repeated results.

1) Repeated measurement is not required when the original highest measured SAR is < 0.80 W/kg; steps 2) through 4) do not apply.

2) When the original highest measured SAR is ⩾ 0.80 W/kg, repeat that measurement once.

3) Perform a second repeated measurement only if the ratio of largest to smallest SAR for the original and first repeated measurements is > 1.20 or when the original or repeated measurement is ⩾ 1.45 W/kg (~ 10% from the 1-g SAR limit).

4) Perform a third repeated measurement only if the original, first or second repeated measurement is ⩾1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.

The same procedures should be adapted for measurements according to extremity and occupational exposure limits by applying a factor of 2.5 for extremity exposure and a factor of 5 for occupational exposure to the corresponding SAR thresholds.

4.2 SAR measurement uncertainty

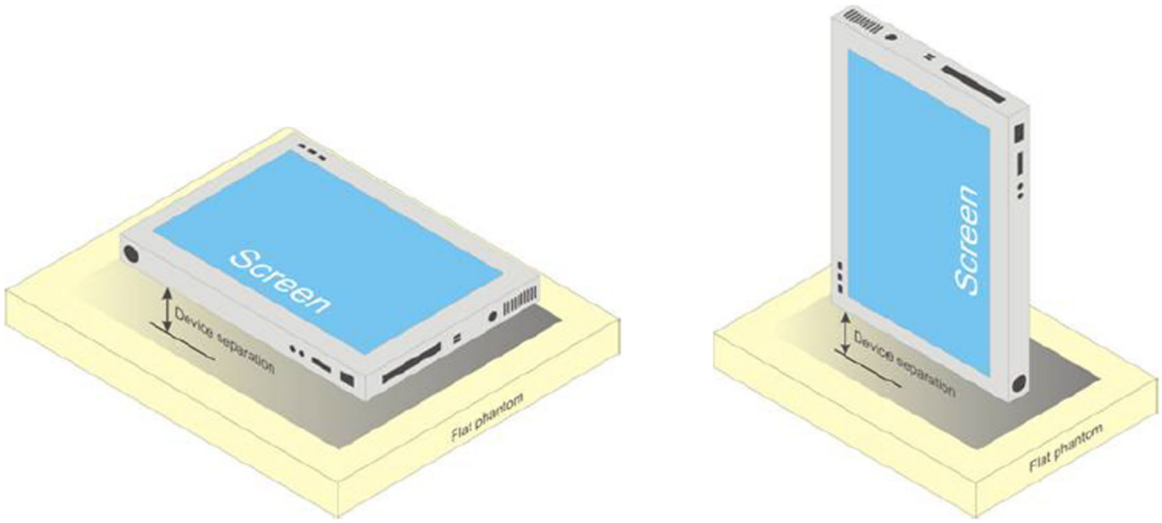
Per KDB865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval. The equivalent ratio (1.5/1.6) is applied to extremity and occupational exposure conditions.

5 Description of Test Position

5.1 Exposure Condition

5.1.1 The Body Test Position

The overall diagonal dimension of the display section of a tablet is > 20 cm, Per FCC KDB 616217, the back surface and edges of the tablet should be tested for SAR compliance with the tablet touching the phantom. SAR evaluation for the front surface of tablet display screens is generally not necessary. The SAR Exclusion Threshold in KDB 447498 D01 can be applied to determine SAR test exclusion for adjacent edge configurations. The closest distance from the antenna to an adjacent tablet edge is used to determine if SAR testing is required for the adjacent edges, with the adjacent edge positioned against the phantom and the edge containing the antenna positioned perpendicular to the phantom.

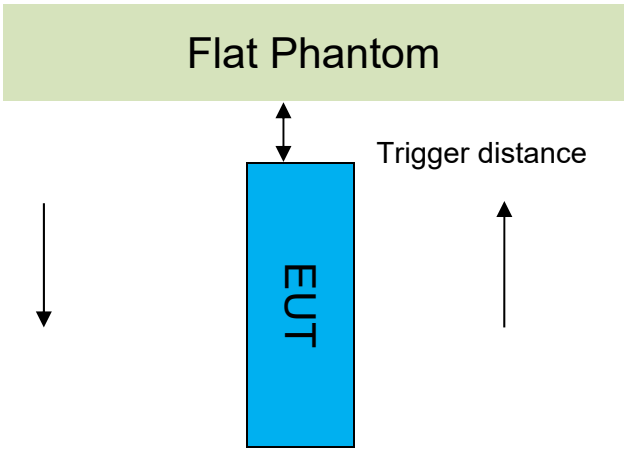


F-3. **Tablet form factor portable computer.**

5.2 Proximity Sensor Triggering Test

Proximity sensor triggering distances:

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



Proximity Sensor Triggering Distance(mm)			
Ant.1			
Position	Back side	Right side	Top side
Minimum	23	20	NA
Required SAR Test	22	19	NA
An.2			
Position	Back side	Right side	Top side
Minimum	29	11	27
Required SAR Test	25	9	25
Ant.3			
Position	Back side	Right side	Top side
Minimum	20	NA	10
Required SAR Test	19	NA	9
An.4			
Position	Back side	Right side	Top side
Minimum	29	NA	27
Required SAR Test	25	NA	25
An.6			
Position	Back side	Right side	Top side

Minimum	20	NA	25
Required SAR Test	19	NA	24

Note:

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

Proximity sensor coverage

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

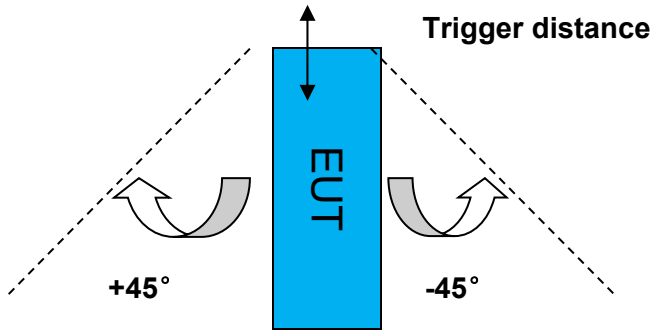
The proximity sensor and main antenna use same metallic electrode, so there is no spatial offset.

Device tilt angle influences to proximity sensor triggering

The influence of device tilt angles to proximity sensor triggering was determined by positioning each tablet edge that contains a transmitting antenna, perpendicular to the flat phantom.

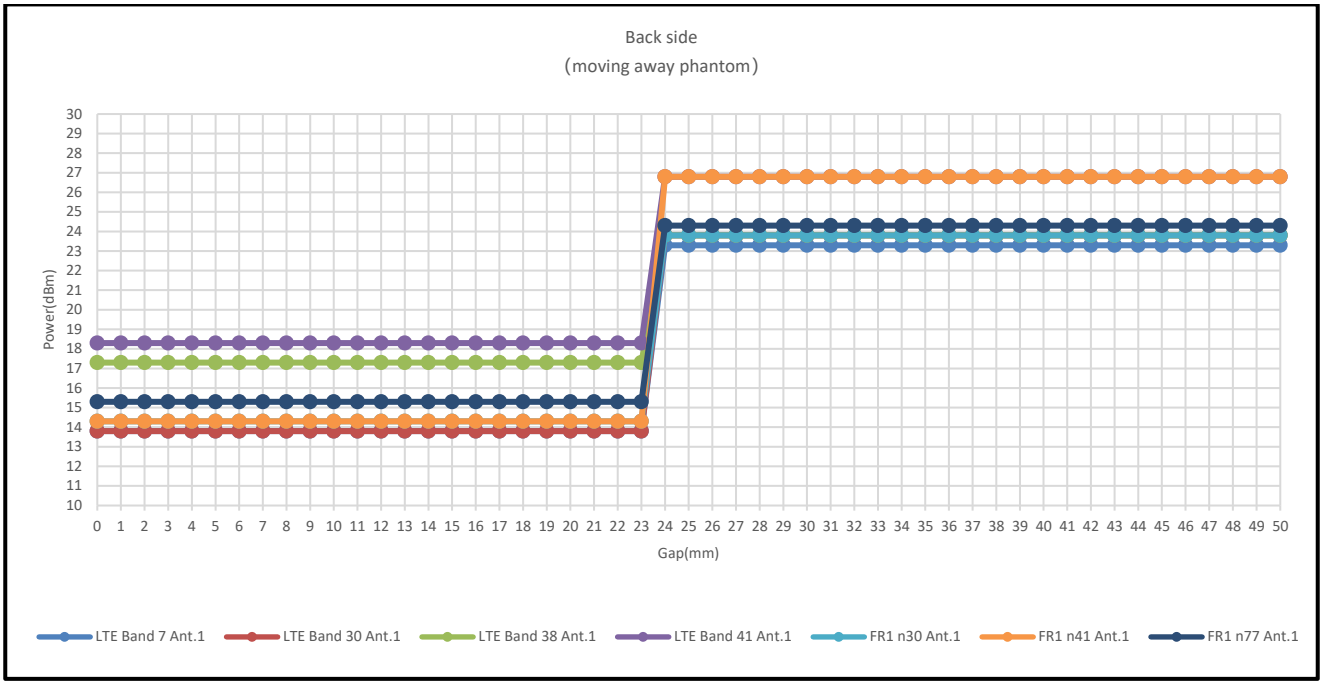
Rotating the tablet around the edge next to the phantom in ≤ 10° increments until the tablet is ± 45° from the vertical position at 0°, and the maximum output power remains in the reduced mode.

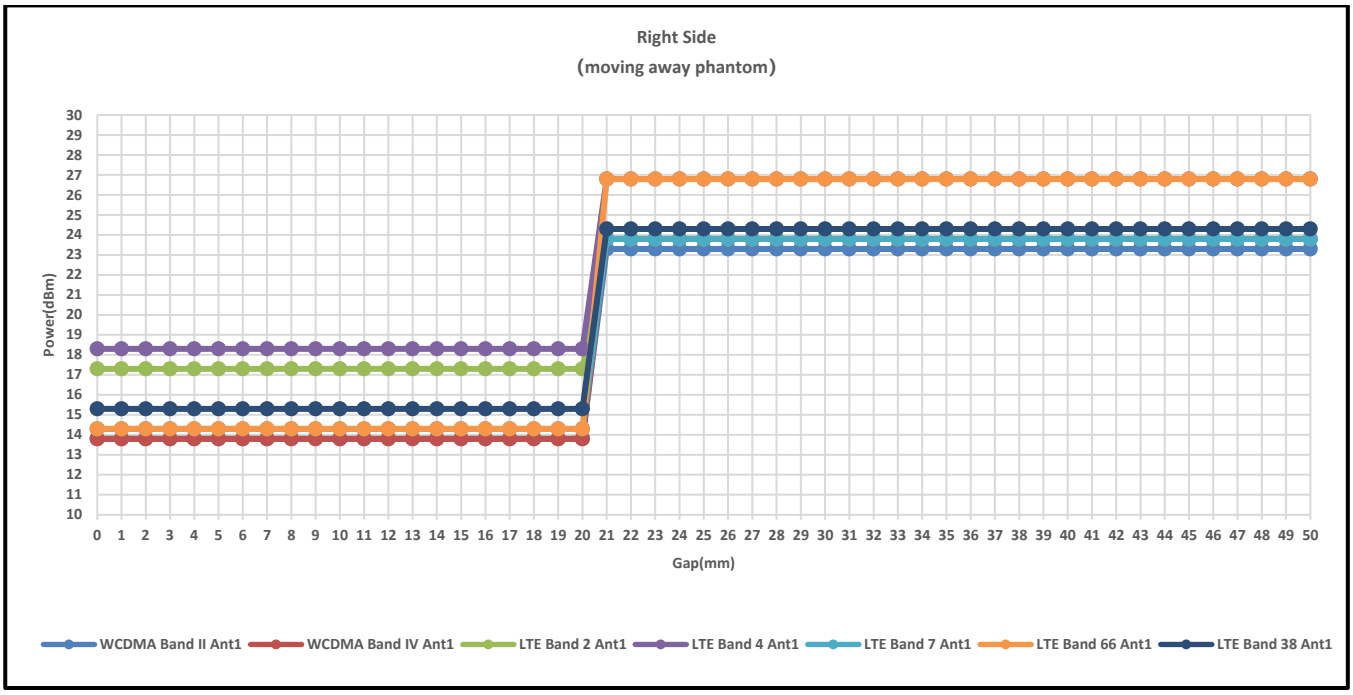
Flat Phantom

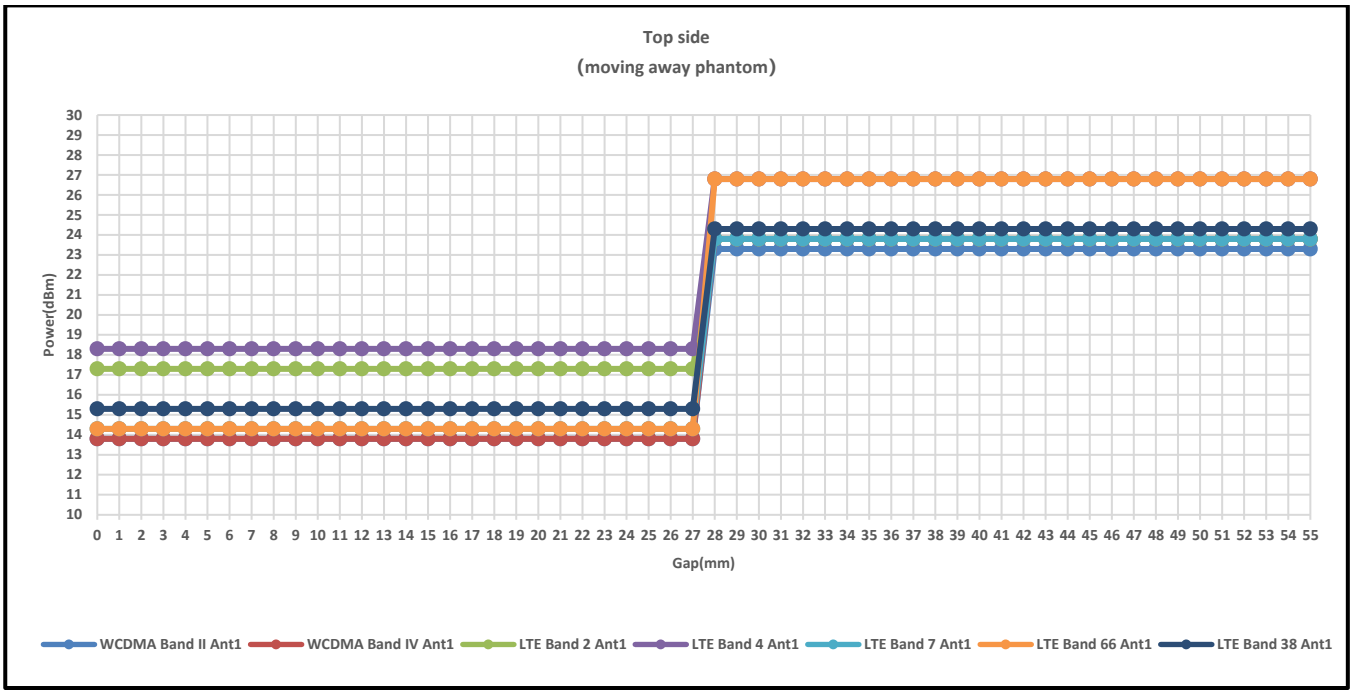


Summary of Tablet Tilt Angle Influence to Proximity Sensor Triggering for Top Side												
ANT	Minimum trigger distance Per KDB616217§6.2	Minimum trigger distance at which power reduction was maintained over ±45°	Power Reduction Status									
			-45°	-35°	-25°	-15°	-5°	0°	5°	15°	25°	35°	45°
Ant 1	Top side:27mm Right side:20mm	Top side:27mm Right side:20mm	on	on	on	on	on	on	on	on	on	on	on
Ant 2	Top side:27mm Right side:26mm	Top side:27mm Right side:26mm	on	on	on	on	on	on	on	on	on	on	on
Ant 3	Top side:10mm	Top side:10mm	on	on	on	on	on	on	on	on	on	on	on
Ant 4	Top side:27mm	Top side:27mm	on	on	on	on	on	on	on	on	on	on	on
Ant 6	Top side:25mm	Top side:25mm	on	on	on	on	on	on	on	on	on	on	on

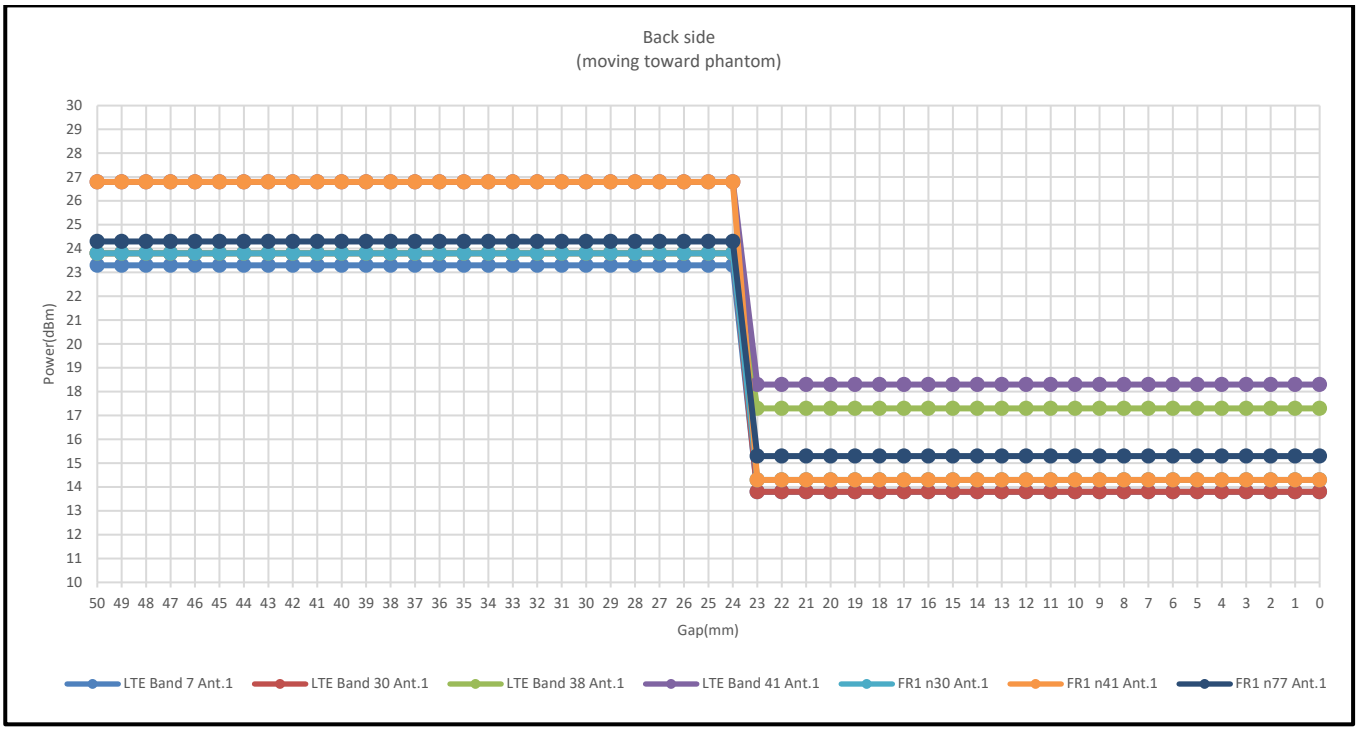
- Ant 1 DUT Moving Toward (Trigger)the Phantom

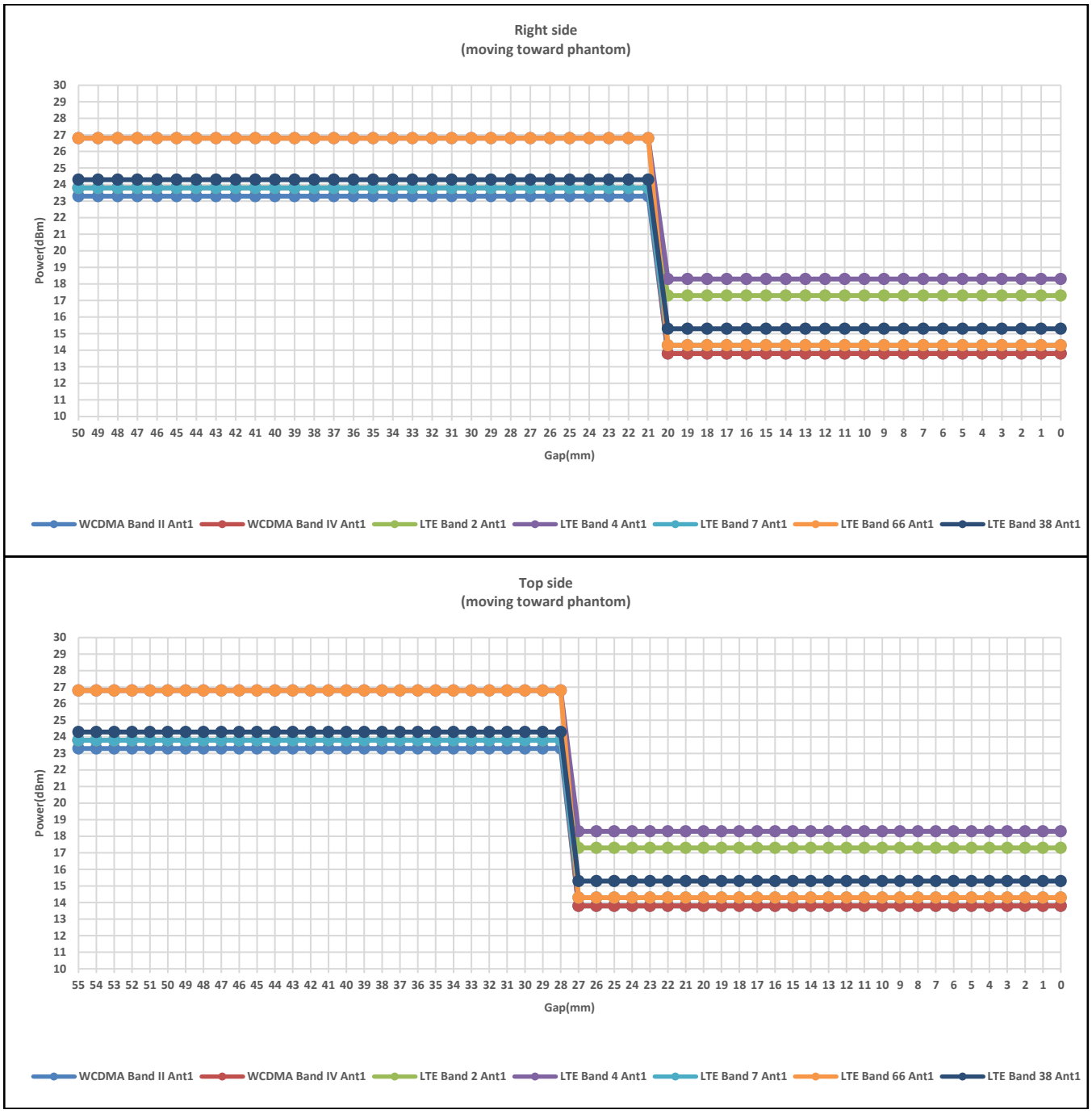




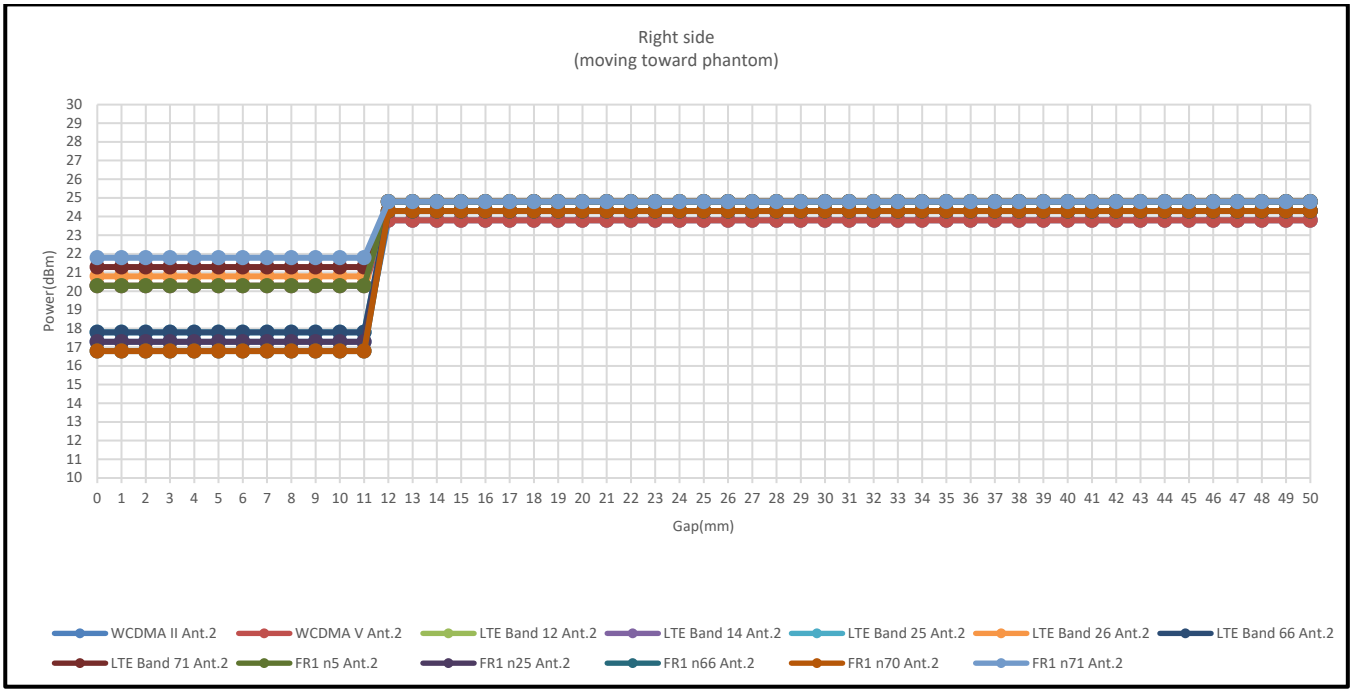


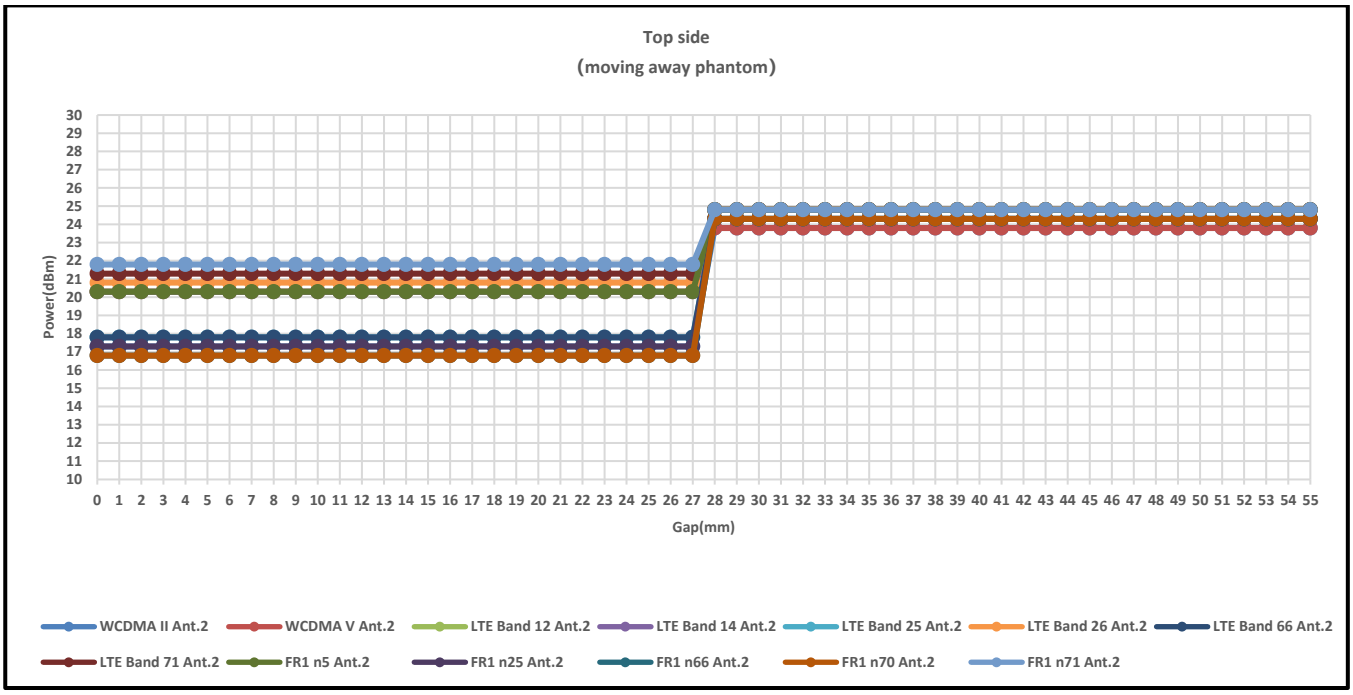
- Ant 1 DUT Moving Away (Release) from the Phantom

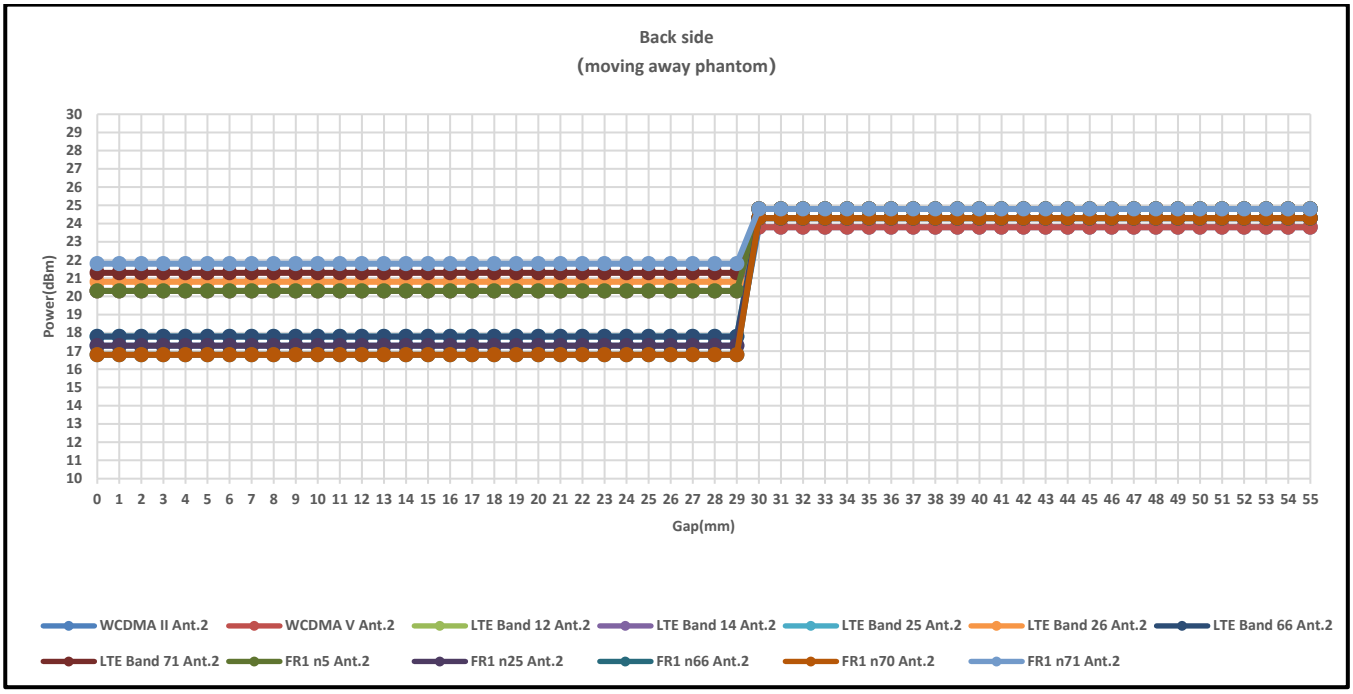




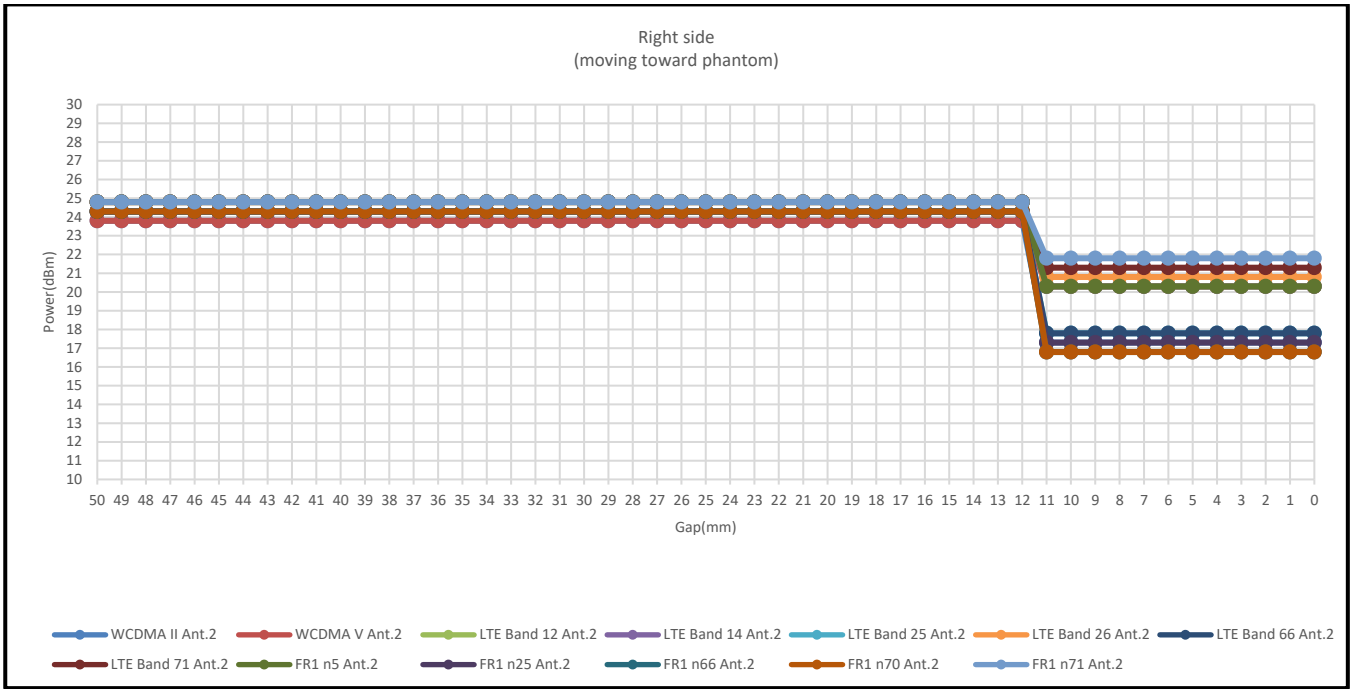
- Ant 2 DUT Moving Toward (Trigger)the Phantom

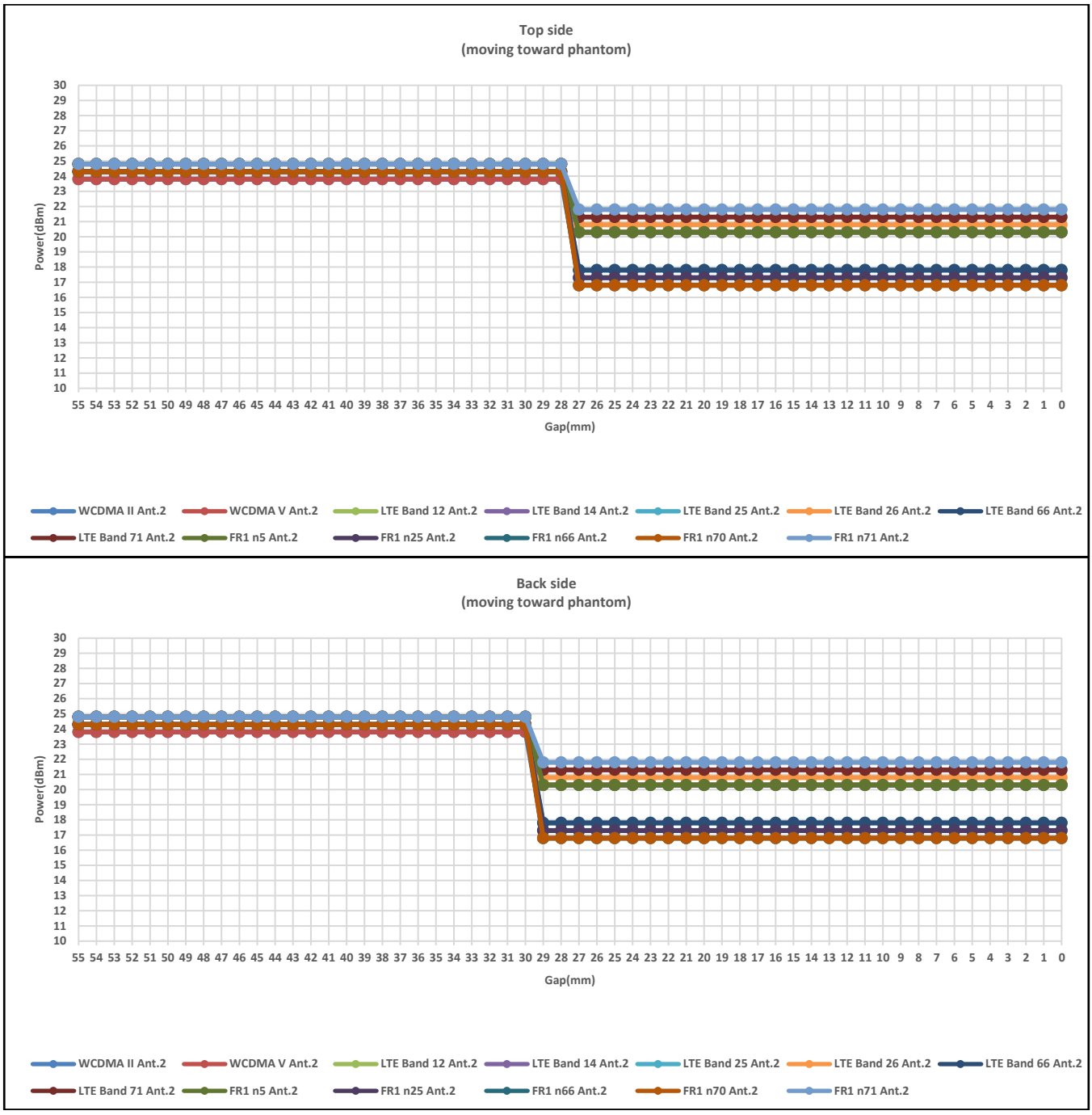




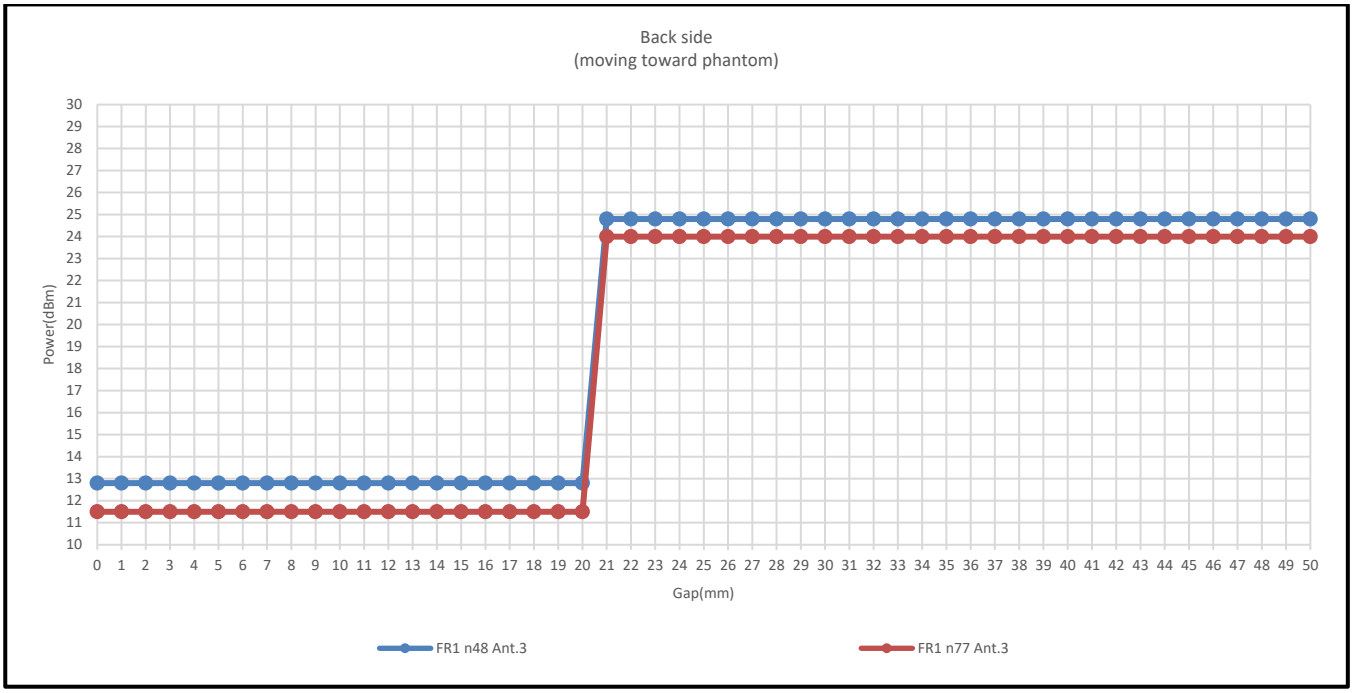


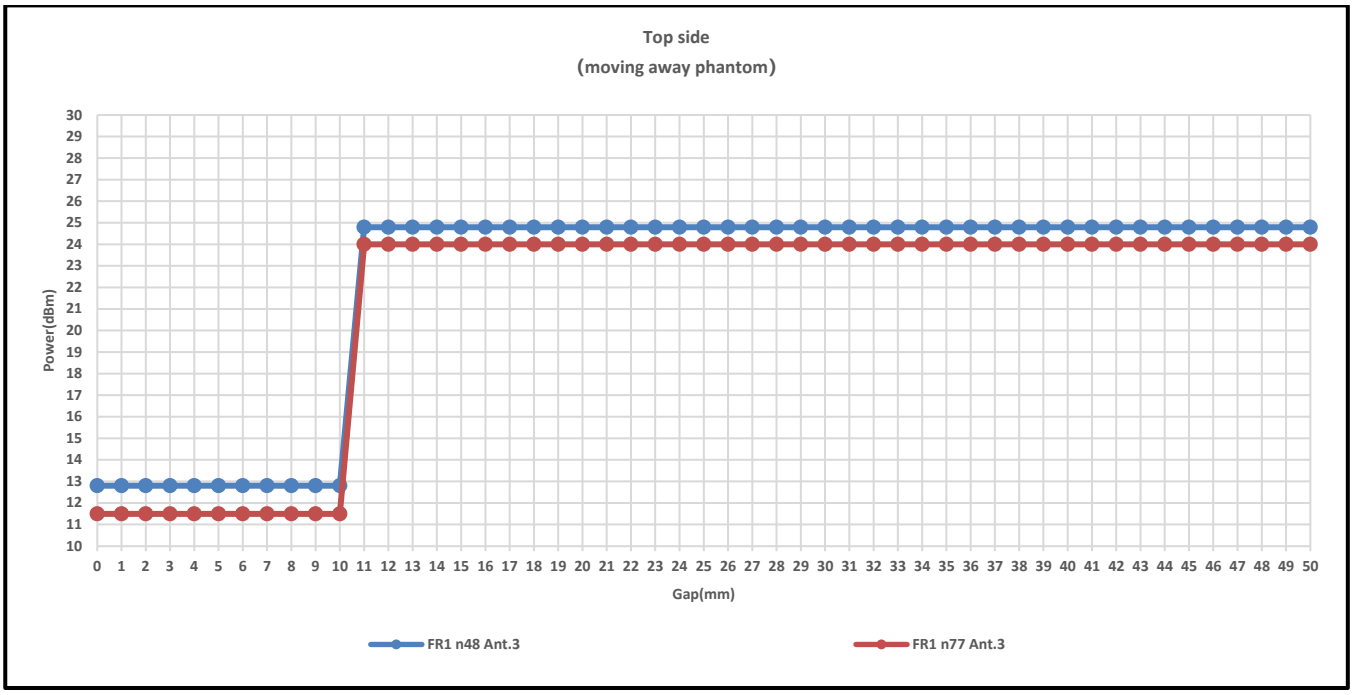
- Ant 2 DUT Moving Away (Release) from the Phantom



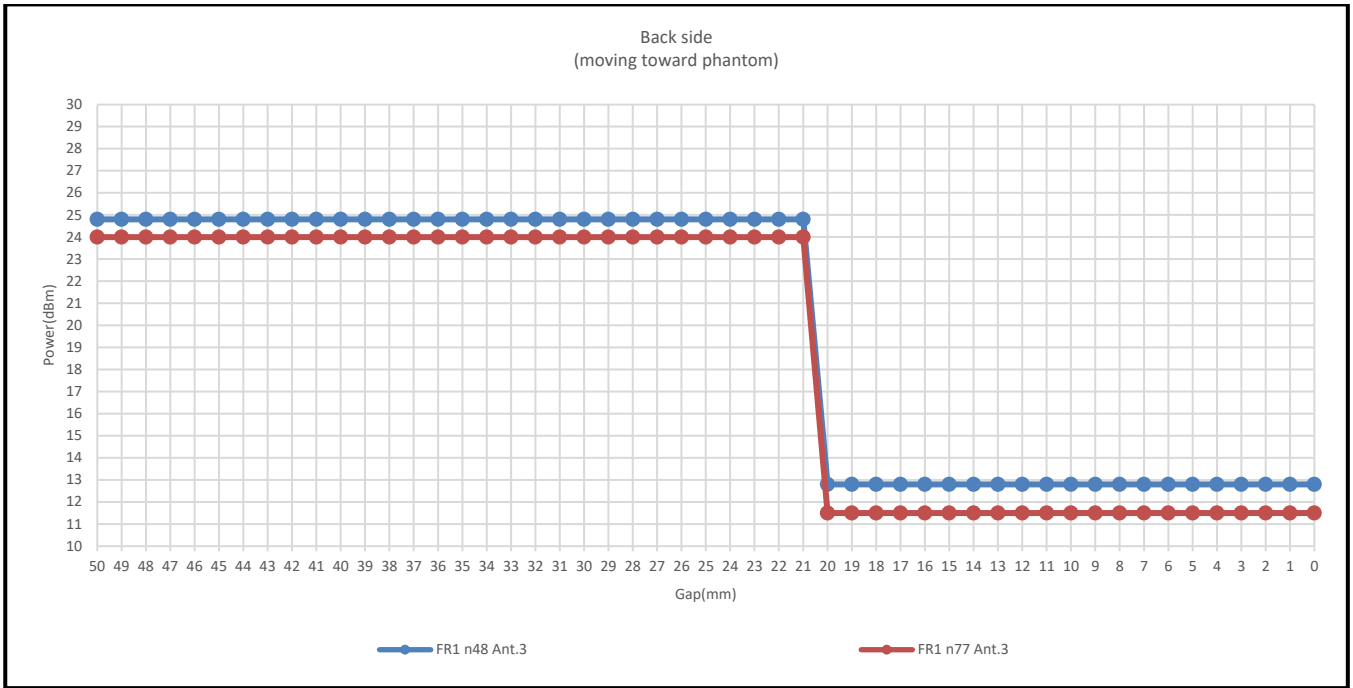


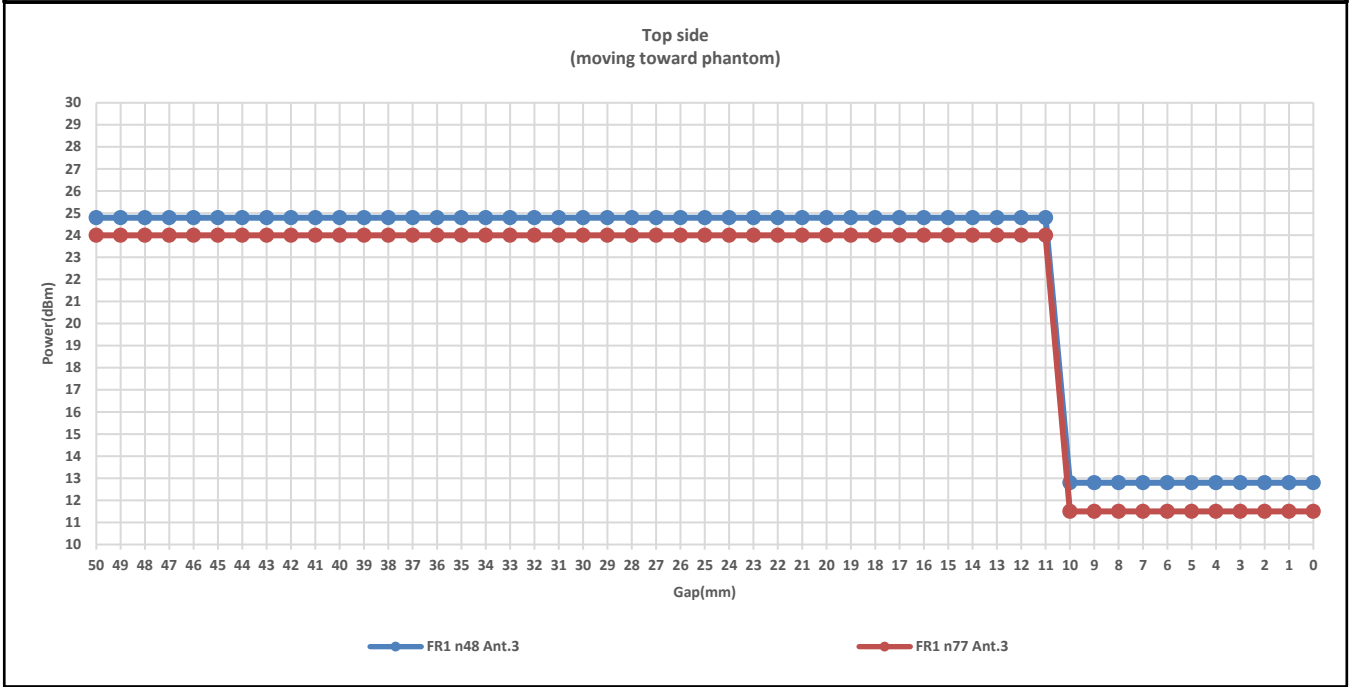
- Ant 3 DUT Moving Toward (Trigger)the Phantom



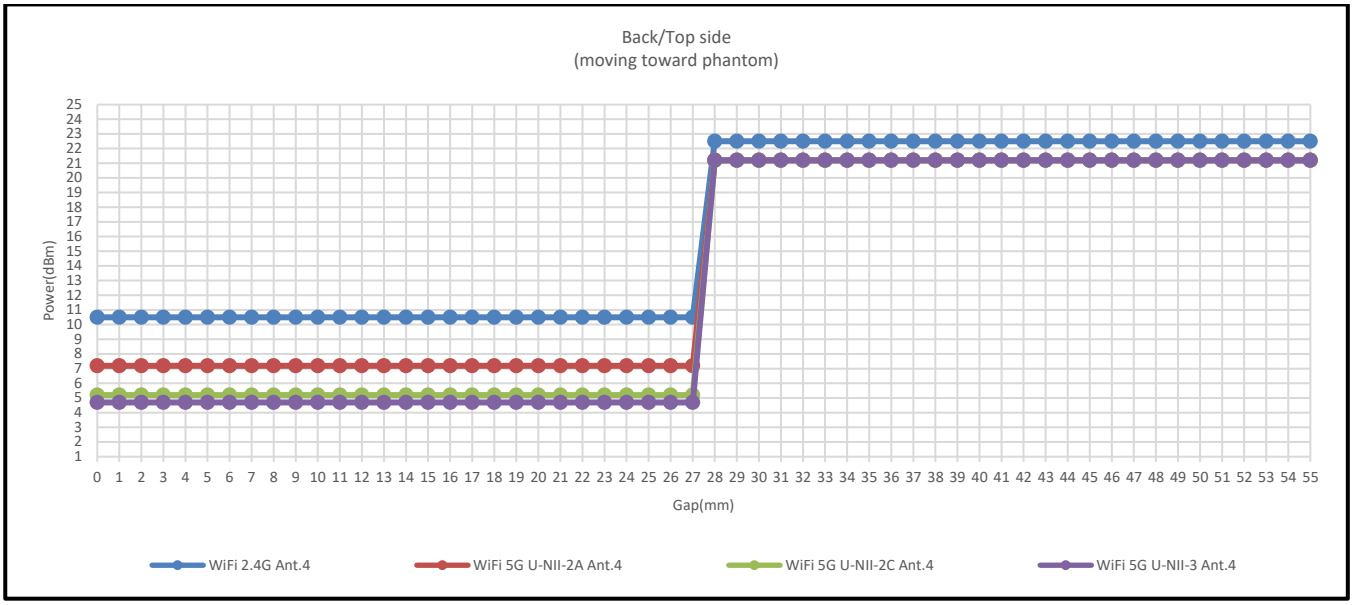


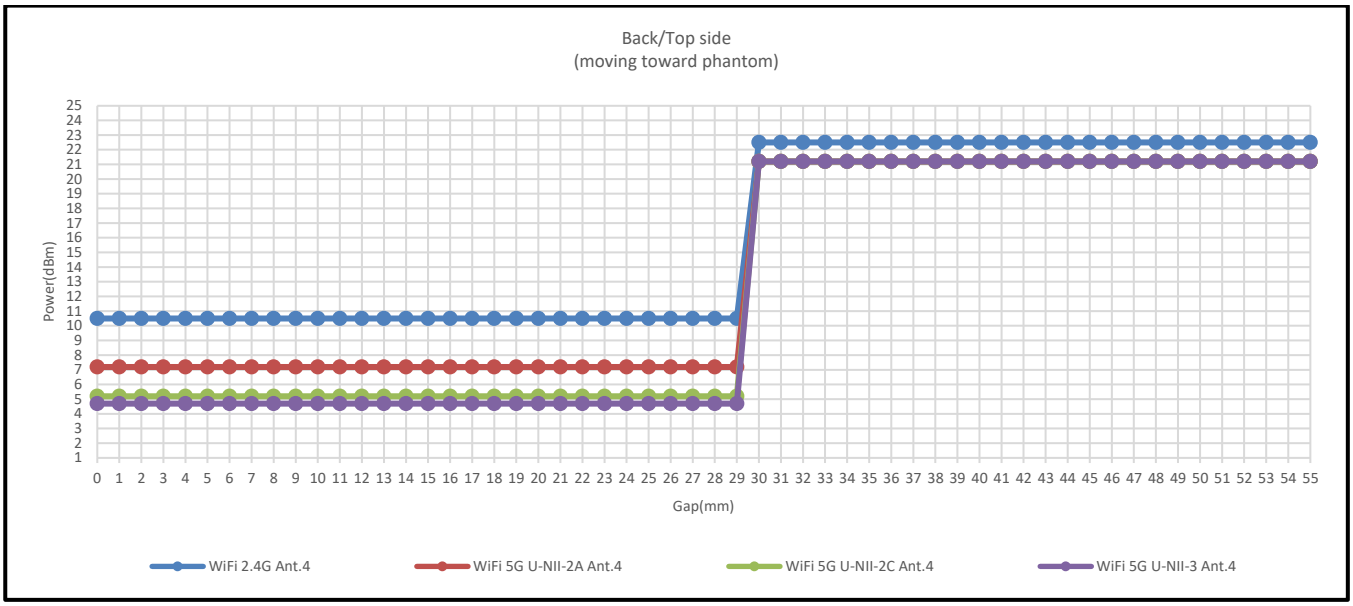
- Ant 3 DUT Moving Away (Release) from the Phantom



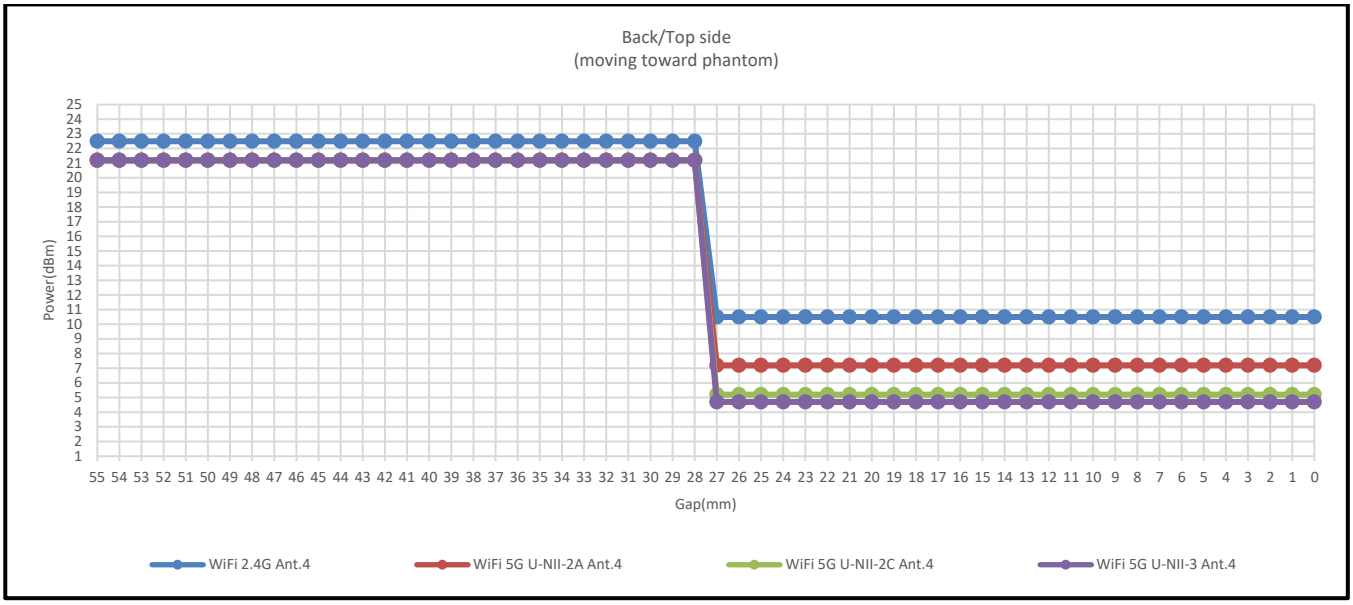


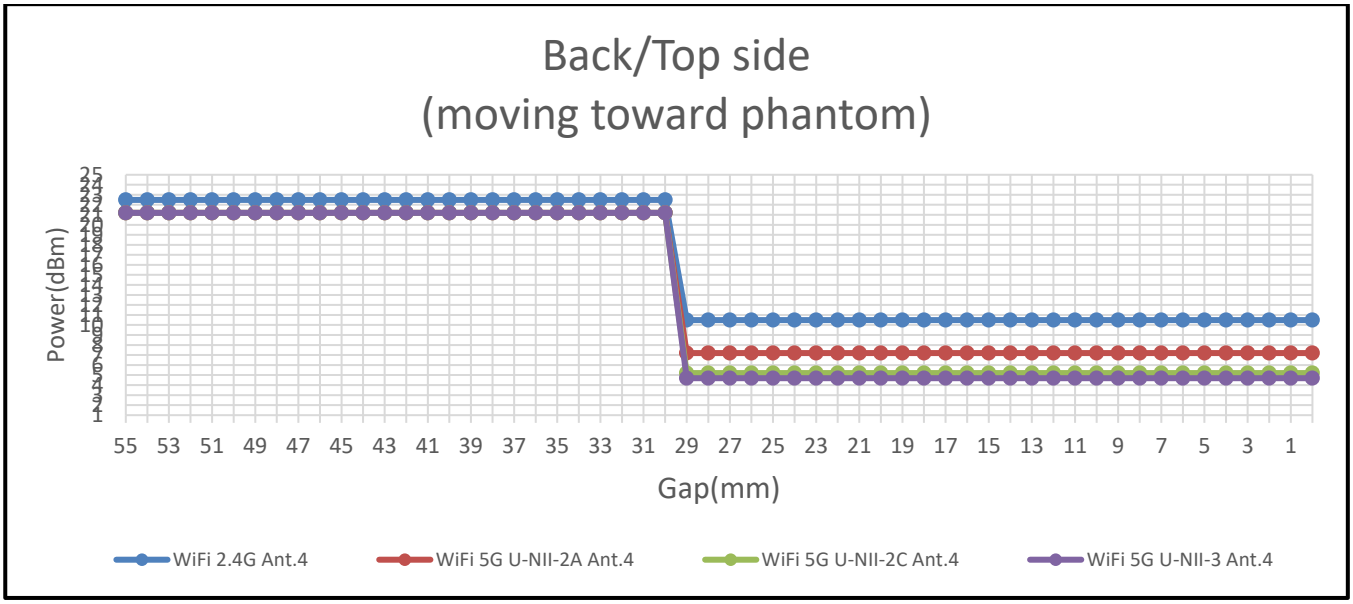
- Ant 4 DUT Moving Toward (Trigger)the Phantom



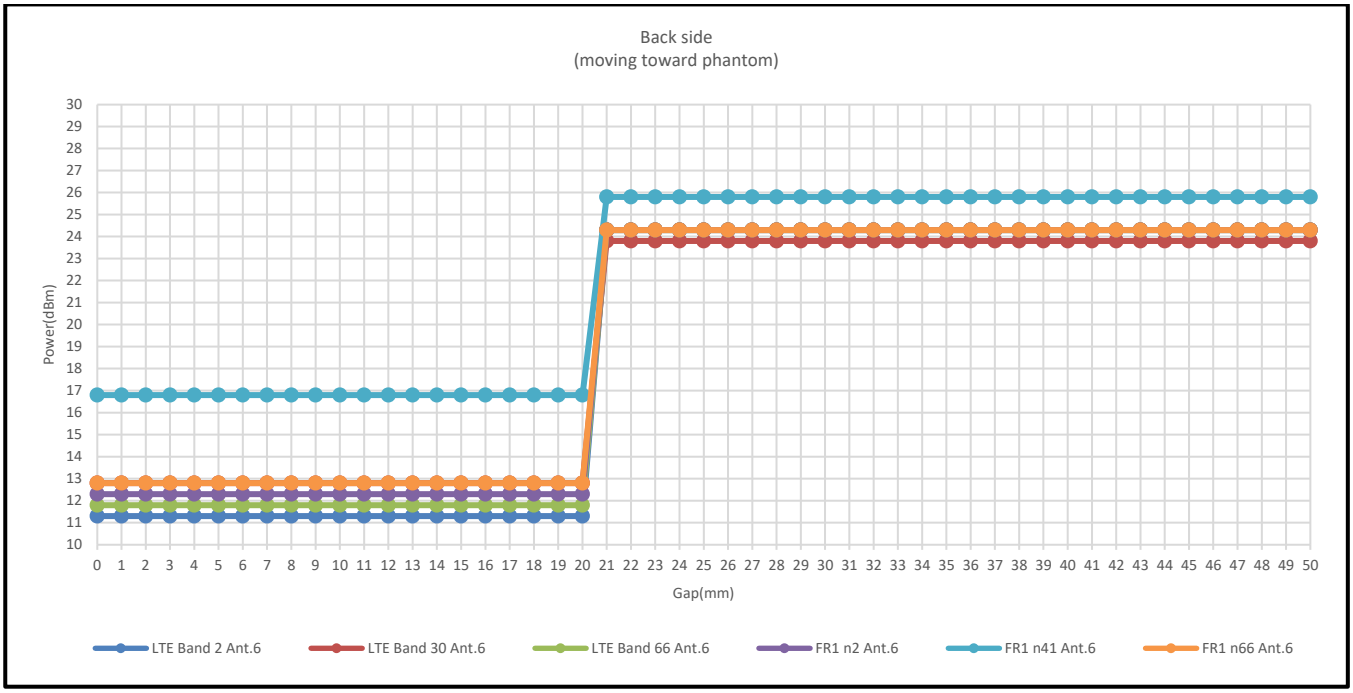


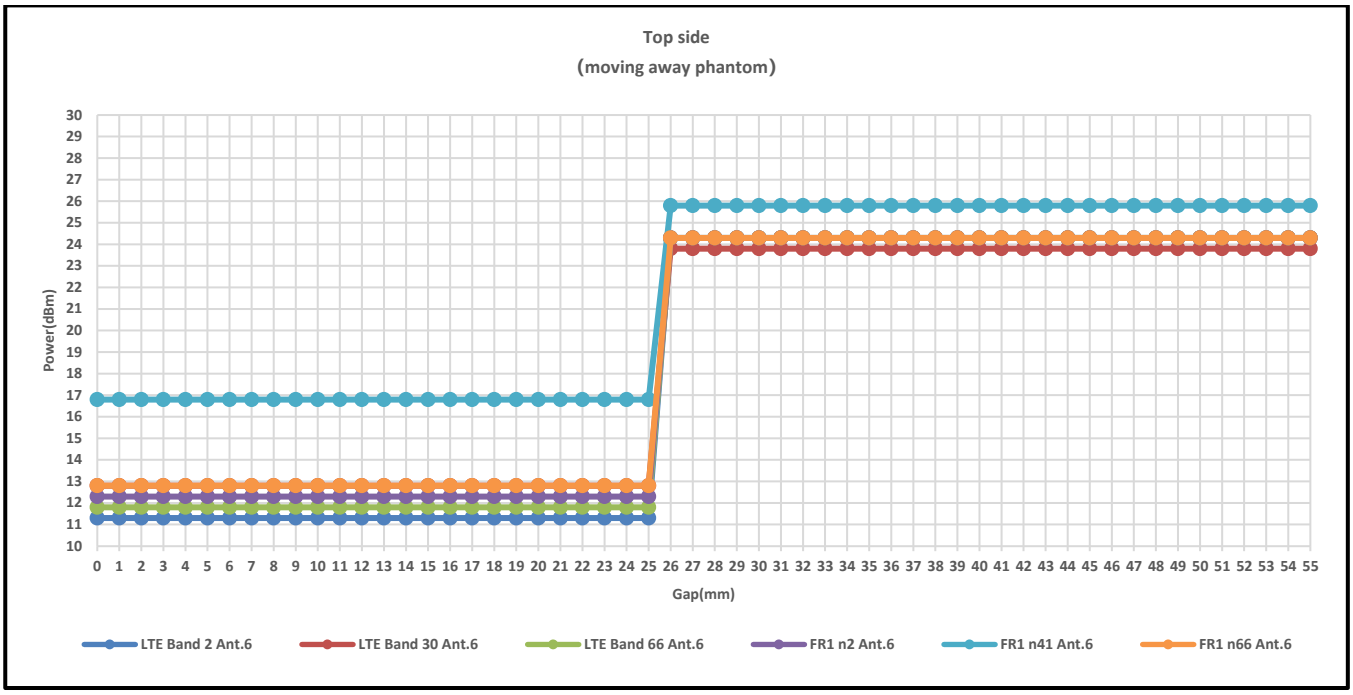
- Ant 4 DUT Moving Away (Release) from the Phantom



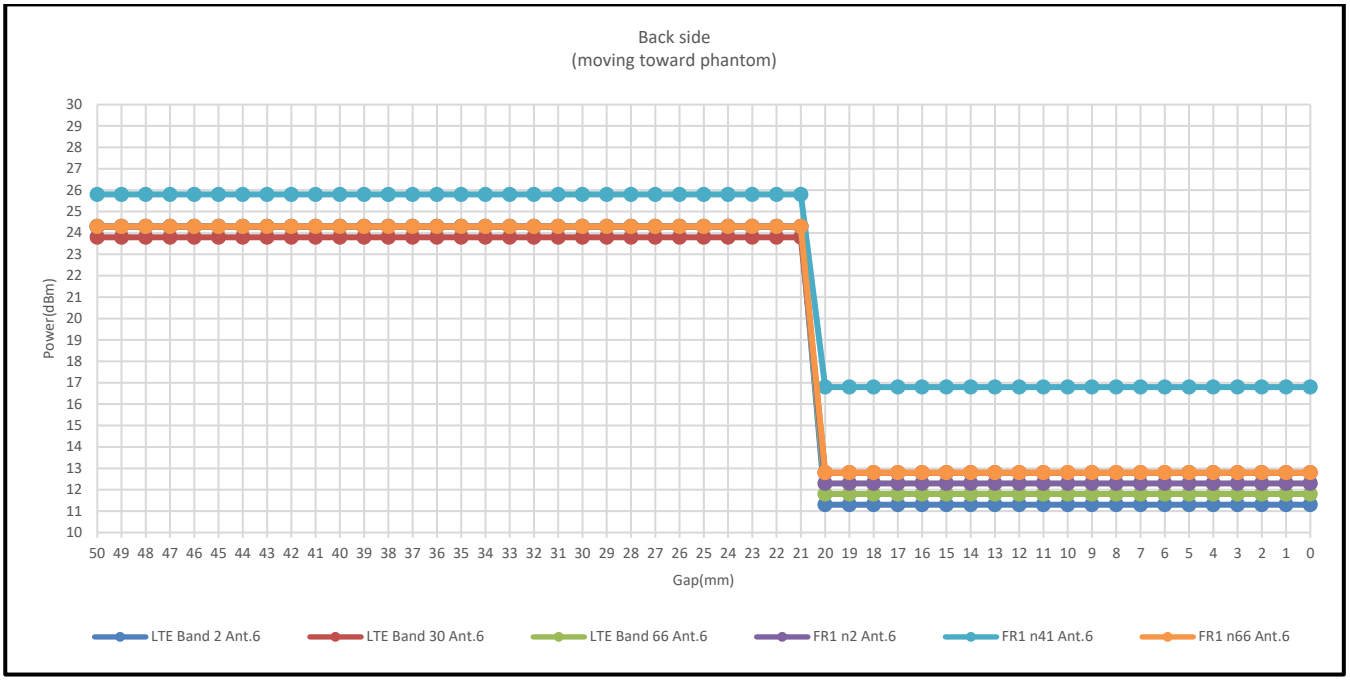


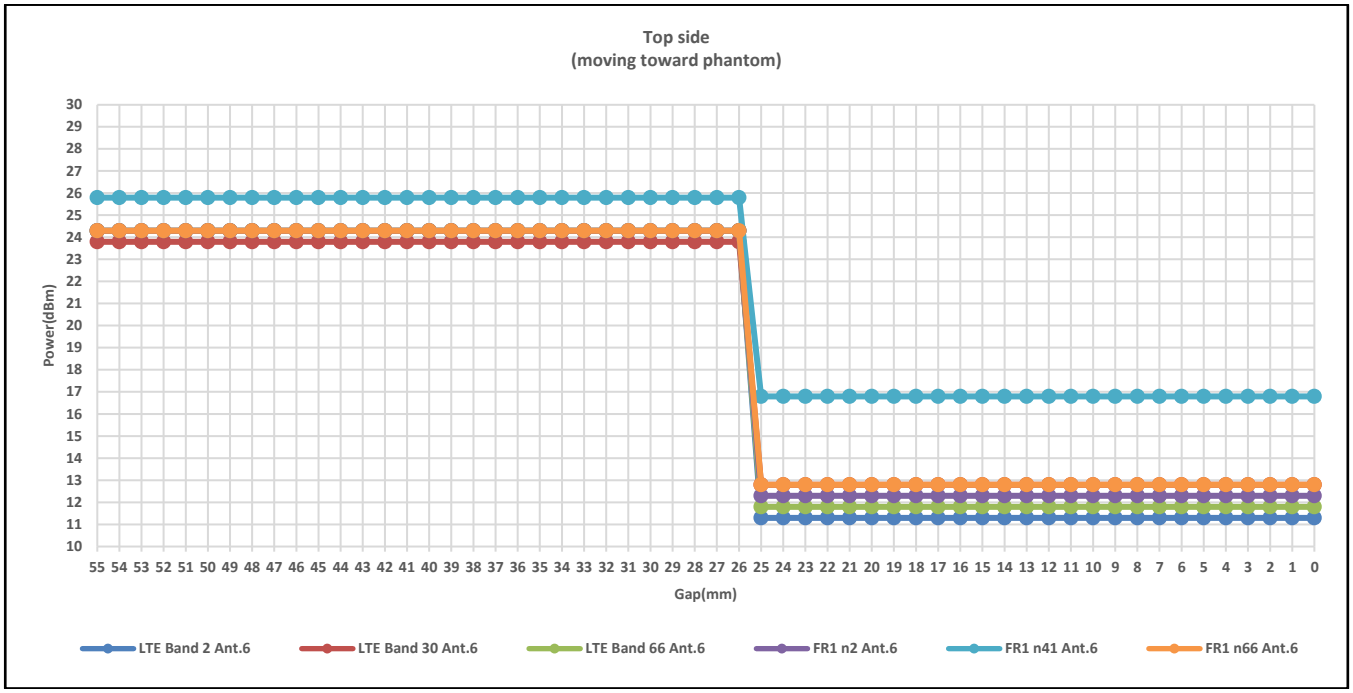
- Ant 6 DUT Moving Toward (Trigger)the Phantom





- Ant 6 DUT Moving Away (Release) from the Phantom





6 SAR System Verification Procedure

6.1 Tissue Simulate Liquid

6.1.1 Recipes for Tissue Simulate Liquid

The bellowing tables give the recipes for tissue simulating liquids to be used in different frequency bands：

Ingredients (% by weight)	Frequency (MHz)				
	450	700-900	1750-2000	2300-2500	2500-2700
Water	38.56	40.30	55.24	55.00	54.92
Salt (NaCl)	3.95	1.38	0.31	0.2	0.23
Sucrose	56.32	57.90	0	0	0
HEC	0.98	0.24	0	0	0
Bactericide	0.19	0.18	0	0	0
Tween	0	0	44.45	44.80	44.85
Salt: 99+% Pure Sodium Chloride Sucrose: 98+% Pure Sucrose Water: De-ionized, 16 MΩ+ resistivity HEC: Hydroxyethyl Cellulose Tween: Polyoxyethylene (20) sorbitan monolaurate					
HSL13MHz is composed of the following ingredients： Water：50-90% Non-ionic detergents：5-50% Nacl：0-2% Preservative：0.03-0.1% HSL5GHz is composed of the following ingredients： Water：50-65% Mineral oil：10-30% Emulsifiers：8-25% Sodium salt：0-1.5%					

Table 3： Recipe of Tissue Simulate Liquid

6.1.2 Measurement for Tissue Simulate Liquid

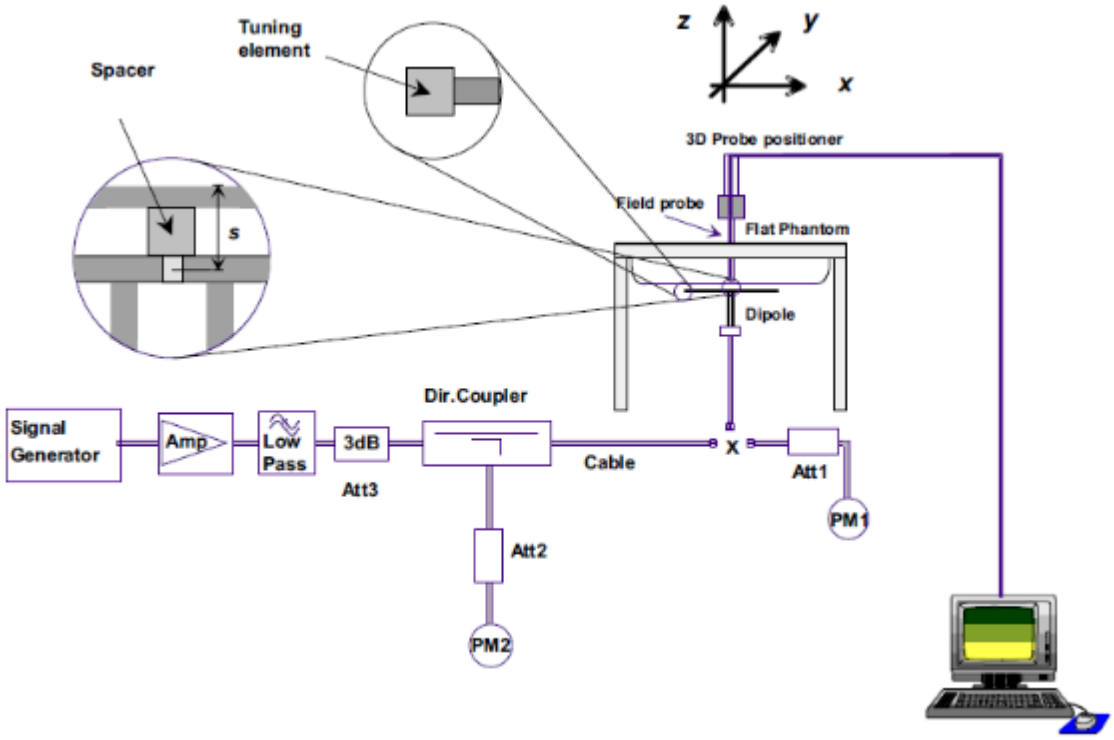
The Conductivity (σ) and Permittivity (ρ) are listed in bellow table. For the SAR measurement given in this report. The temperature variation of the Tissue Simulate Liquids was 22±2°C.

Measurement for Tissue Simulate Liquid							
Tissue Type	Measured Frequency (MHz)	Target Tissue (±5%)		Measured Tissue		Liquid Temp.	Test Date
		ε_r	σ(S/m)	ε_r	σ(S/m)	(℃)	
750 Head	750	41.9	0.89	41.780	0.887	22.2	2024/12/26
835 Head	835	41.5	0.9	42.067	0.910	22.3	2024/12/27
1750 Head	1750	40.1	1.37	38.557	1.331	22.1	2024/12/28
1950 Head	1900	40.0	1.4	38.761	1.401	21.9	2024/12/29
2300 Head	2300	39.5	1.67	38.666	1.675	22.4	2024/12/30
2450 Head	2450	39.2	1.8	38.563	1.824	22.3	2024/12/31
2600 Head	2600	39.0	1.96	38.242	2.031	22.2	2025/1/1
2600 Head	2600	39.0	1.96	39.867	1.997	22.1	2025/1/2
3500 Head	3500	37.9	2.91	38.588	2.809	21.9	2025/1/3
3700 Head	3700	37.7	3.12	38.172	2.968	22.2	2025/1/4
3900 Head	3900	37.5	3.32	37.911	3.200	22.1	2025/1/5
5250 Head	5250	35.9	4.71	36.536	4.857	22.3	2025/1/6
5600 Head	5600	35.5	5.07	35.668	5.249	22.3	2025/1/6
5750 Head	5750	35.4	5.22	35.487	5.446	22.3	2025/1/6

Table 4： Measurement result of Tissue electric parameters.

6.2 SAR 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 +/- 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±2°C, the relative humidity was in the range 60% and the liquid depth above the ear reference points was above 15±0.5 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-4. the microwave circuit arrangement used for SAR system check

6.2.1 Justification for Extended SAR 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 analyzer probe calibration against air, distilled water and a shorting block performed before measuring liquid parameters.

6.2.2 Summary System Check Result(s)

SAR System Validation Result(s)											
Validation Kit		Measured SAR 250mW	Measured SAR 250mW	Measured SAR (normalized to 1W)	Measured SAR (normalized to 1W)	Target SAR (normalized to 1W)	Target SAR (normalized to 1W)	Deviation (Within ±10%)		Liquid Temp. (℃)	Test Date
		1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1-g(W/kg)	10-g(W/kg)	1-g(W/kg)	10-g(W/kg)		
D750V3	Head	2.16	1.41	8.64	5.64	8.40	5.52	2.86%	2.17%	22.2	2024/12/26
D835V2	Head	2.44	1.51	9.76	6.04	9.60	6.16	1.67%	-1.95%	22.3	2024/12/27
D1750V2	Head	8.82	4.71	35.28	18.84	36.30	19.30	-2.81%	-2.38%	22.1	2024/12/28
D1950V3	Head	10.40	5.38	41.60	21.52	40.40	20.80	2.97%	3.46%	21.9	2024/12/29
D2300V2	Head	12.7	5.73	50.80	22.92	49.50	24.00	2.63%	-4.50%	22.4	2024/12/30
D2450V2	Head	13.40	6.07	53.60	24.28	52.70	24.60	1.71%	-1.30%	22.3	2024/12/31
D2600V2	Head	13.80	6.19	55.20	24.76	57.30	25.40	-3.66%	-2.52%	22.2	2025/1/1
D2600V2	Head	14.10	6.35	56.40	25.40	57.30	25.40	-1.57%	0.00%	22.1	2025/1/2
Validation Kit		Measured SAR 100mW	Measured SAR 100mW	Measured SAR (normalized to 1W)	Measured SAR (normalized to 1W)	Target SAR (normalized to 1W)	Target SAR (normalized to 1W)	Deviation (Within ±10%)		Liquid Temp. (℃)	Test Date
		1g (W/kg)	10g (W/kg)	1g (W/kg)	10g (W/kg)	1-g(W/kg)	10-g(W/kg)	1-g(W/kg)	10-g(W/kg)		
D3500V2	Head(3.5GHz)	6.22	2.43	62.20	24.30	65.90	24.70	-5.61%	-1.62%	21.9	2025/1/3
D3700V2	Head(3.7GHz)	6.42	2.47	64.20	24.70	67.60	24.40	-5.03%	1.23%	22.2	2025/1/4
D3900V2	Head(3.9GHz)	6.69	2.38	66.90	23.80	70.20	24.20	-4.70%	-1.65%	22.1	2025/1/5
D5GHzV2	Head(5.25GHz)	7.56	2.12	75.60	21.20	77.20	21.90	-2.07%	-3.20%	22.3	2025/1/6
	Head(5.6GHz)	7.88	2.18	78.80	21.80	81.10	22.80	-2.84%	-4.39%	22.3	2025/1/6
	Head(5.75GHz)	7.84	2.17	78.40	21.70	77.80	21.70	0.77%	0.00%	22.3	2025/1/6

Table 5： SAR System Check Result.

6.2.3 Detailed System Check Results

Please see the Appendix A

7 Test Configuration

7.1 3G SAR Test Reduction Procedure

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

7.2 Operation Configurations

7.2.1 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）. 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 spreaing 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.

3）. 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 ≤ ¼ 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(βc, βd), and HS-DPCCH power offset parameters (ΔACK, ΔNACK, ΔCQI) 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	βc	Bd	βd(SF)	βc/βd	βhs	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: △ACK, △NACK and △CQI= 8 Ahs = βhs/βc=30/15 βhs=30/15*βc
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, △ACK and △NACK= 8 (Ahs=30/15) with βhs=30/15*βc,and △CQI=
7 (Ahs=24/15) with βhs=24/15*βc.
Note3: CM=1 forβc/βd =12/15, βhs/βc=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

Table 6： settings of required H-Set 1 QPSK acc. to 3GPP 34.121

HS-DSCH Category	Maximum HS-DSCH Codes Received	Minimum Inter-TTI Interval	MaximumH S-DSCH Transport BlockBits/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

Table 7： 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	β_c	β_d	β_d (SF)	β_c/β_d	β_{hs}(1)	β_{ec}	β_{ed}	β_c (SF)	β_{ed} (codes)	CM(2) (dB)	MPR (dB)	AG(4) Index	E-TFCI
1	11/15(3)	15/15(3)	64	11/15(3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	β_{ed1}:47/15 β_{ed2}:47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15(4)	15/15(4)	64	15/15(4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

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

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

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

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

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

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

Table 8： Subtests for UMTS Release 6 HSUPA

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

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

Table 9： 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/Ior	dB	-10
P-CCPCH and SCH_Ec/Ior	dB	-12
PICH _Ec/Ior	dB	-15
HS-PDSCH	dB	off
HS-SCCH_1	dB	off
DPCH_Ec/Ior	dB	-5
OCNS_Ec/Ior	dB	-3.1

Call is set up as per 3GPP TS34.108 v9.5.0 sub clause 7.3.13.
The configurations of the fixed reference channels for HSDPA RF tests are described in 3GPP TS 34.121, annex C for FDD and 3GPP TS 34.122.
The measurements were performed with a Fixed Reference Channel (FRC) H-Set 12 with QPSK.

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

Table 10： 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.

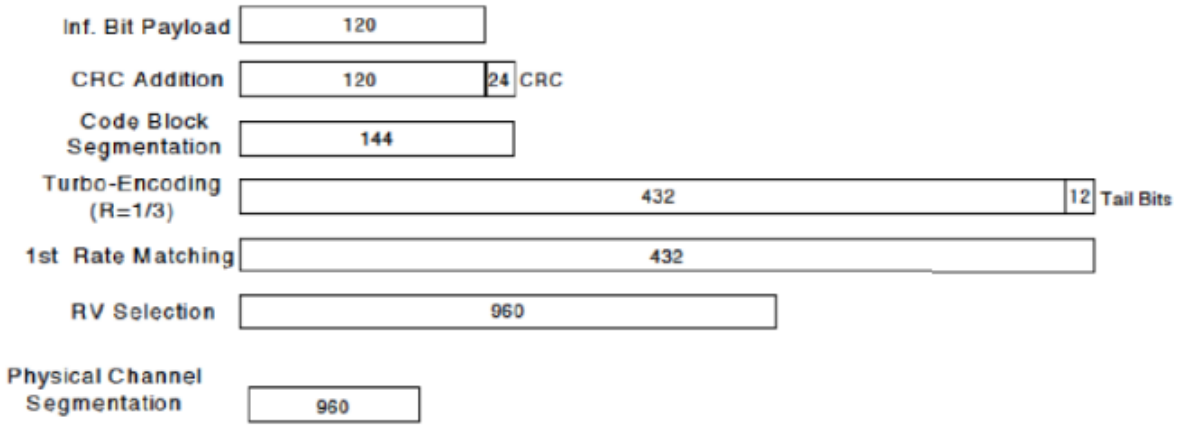


Figure C.8.19: Coding rate for Fixed reference Channel H-Set 12 (QPSK)

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

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

Note 2: CM=1 for $\beta_c/\beta_d = 12/15$, $\beta_{hs}/\beta_c = 24/15$. 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.

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

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

Note:

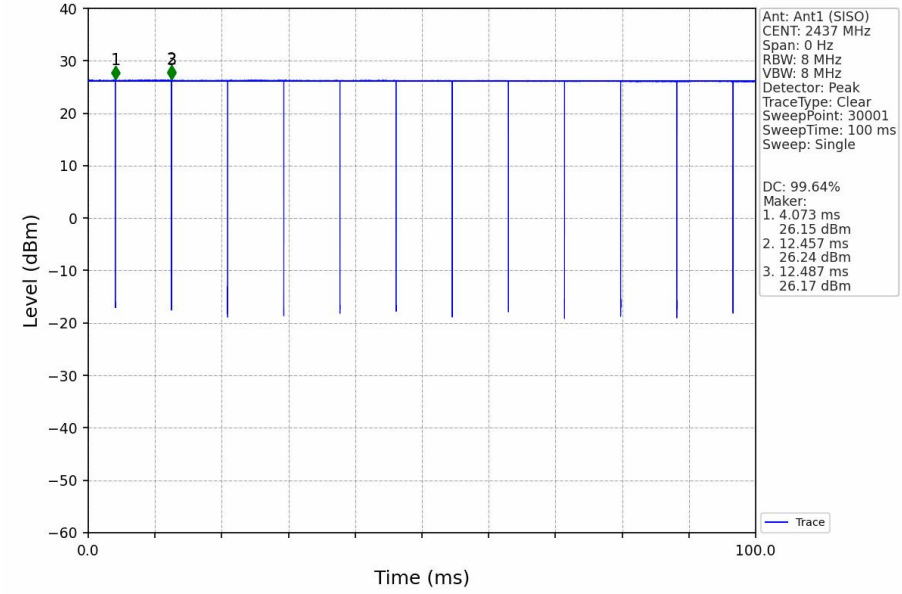
1. The Dual Carriers transmission only applies to HSDPA physical channels
2. The Dual Carriers belong to the same Node and are on adjacent carriers.
3. The Dual Carriers do not support MIMO to serve UEs configured for dual cell operation
4. The Dual Carriers operate in the same frequency band.
5. The 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.

7.2.2 WiFi Test Configuration

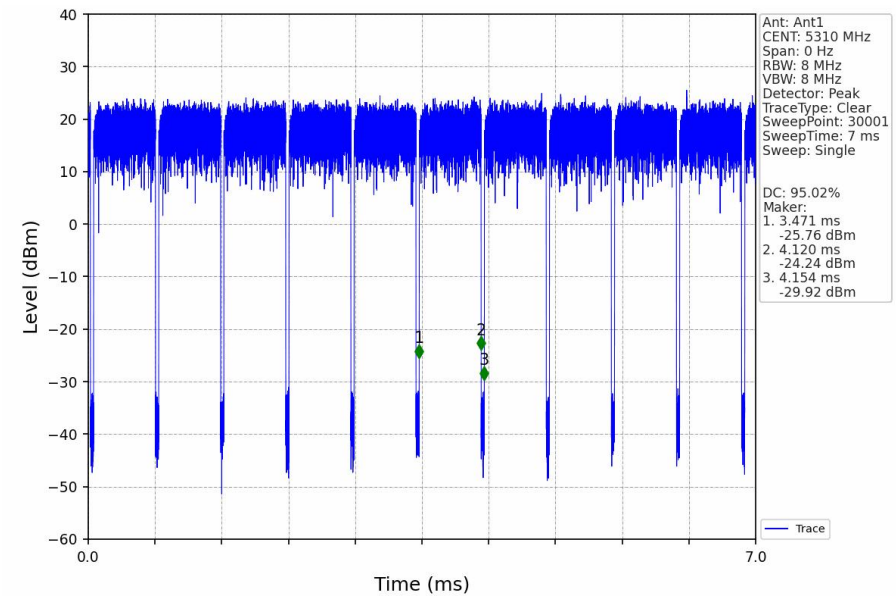
A Wi-Fi device must be configured to transmit continuously at the required data rate, channel bandwidth and signal modulation, using the highest transmission duty factor supported by the test mode tools for SAR measurement.

7.2.3 Duty cycle

Wi-Fi 2.4GHz 802.11b:
Duty cycle= 99.64%



Wi-Fi 5GHz 802.11n40:
Duty cycle=95.02%



7.2.3.1 Initial Test Position SAR Test Reduction Procedure

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.

7.2.3.2 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.

7.2.3.3 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”

7.2.3.4 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 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 configurations**

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

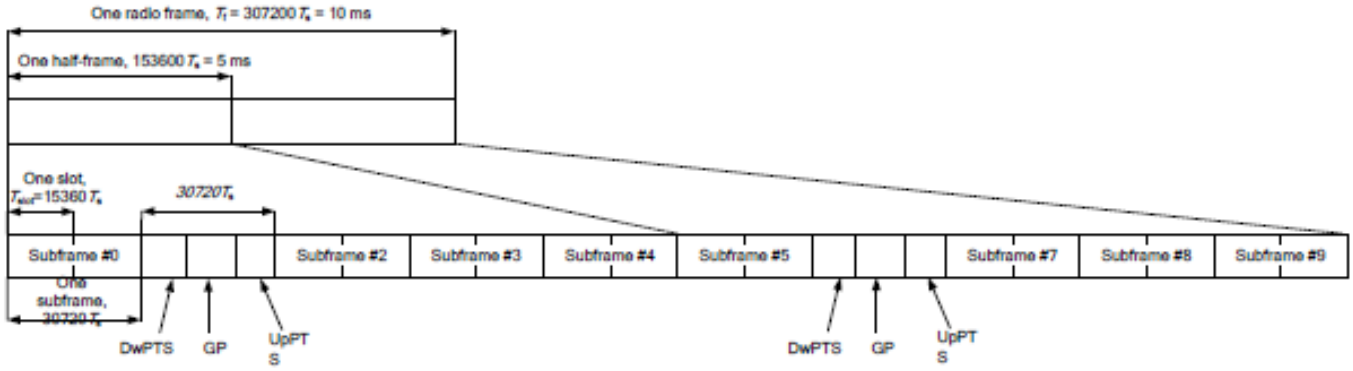
7.2.4 LTE Test Configuration

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 MT8820C 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			7680.Ts	4384.Ts	5120.Ts
5	6592.Ts	4384.Ts	5120.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.

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

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 > ½ 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 > ½ dB higher than the equivalent channel configurations in the largest channel bandwidth configuration or the reported SAR of a configuration for the largest channel bandwidth is > 1.45 W/kg.

F) LTE CA additional specification

The device supports intra-band contiguous and inter-band discontinuous uplink and downlink LTE Carrier Aggregation (CA). When carrier aggregation applies, implementation and measurement details for the following are necessary.

a) Intra-band carrier aggregation requirements for uplink.

b) Intra-band and inter-band carrier aggregation requirements for downlink.

The possible downlink and uplink LTE CA combinations supported by this device are as below tables per 3GPP TS 36.101 V15.4.0. The conducted power measurement results of downlink and uplink LTE CA are provided in Appendix E (Conducted RF Output Power). The downlink LTE CA SAR test is not required since the maximum output power for downlink LTE CA was not more than 0.25dB higher than the maximum output power for without downlink LTE CA.

2CC Downlink Carrier Aggregation
CA_2A-4A
CA_2A-5A
CA_2A-12A
CA_2A-14A
CA_2A-66A
CA_5A-66A
CA_12A-66A
CA_14A-66A

7.2.5 NR Band Test Configuration

1. NR Band n2/5/41/66/71/77 support SA&NSA mode. LTE+NR Band operations are possible only with LTE under EN-DC mode and the operations are possible as following table:

Band/Antenna		n2	n5	n41	n66	n71	n77
		Ant.2/6	Ant.2	Ant.1/5/6/7	Ant.2/6	Ant.2	Ant.1/3/5/7
LTE Band 2	Ant.2/6	√	√	√	√	√	√
LTE Band 5	Ant.2	√					√
LTE Band 12	Ant.2	√			√		√
LTE Band 14	Ant.2	√			√		√
LTE Band 30	Ant.1/6	√	√		√		√
LTE Band 66	Ant.2/6	√	√	√	√	√	√

2. The general information supported by the NR band is as following table:

Band			n2	n5	n25	n30	n41 PC3	n41 PC2	n48	n66	n70	n71	n77 PC3	n77 PC2
Modulation	DFT-s-OFDM	PI/2 BPSK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		QPSK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		16QAM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		64QAM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		256QAM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	CP-OFDM	QPSK	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		16QAM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		64QAM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
		256QAM	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Duty Cycle			100%	100%	100%	100%	77%	50%	100%	100%	100%	100%	77%	50%

Band	SCS	Bandwidth												
		5Mhz	10Mhz	15Mhz	20Mhz	25Mhz	30Mhz	40Mhz	50Mhz	60Mhz	70Mhz	80Mhz	90Mhz	100Mhz
N2	15KHZ	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A
N2	30KHZ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N5	15KHZ	Yes	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N5	30KHZ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N25	15KHZ	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A
N25	30KHZ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N30	15KHZ	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N30	30KHZ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N41	15KHZ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N41	30KHZ	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N48	15KHZ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N48	30KHZ	N/A	Yes	Yes	Yes	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N66	15KHZ	Yes	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A
N66	30KHZ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N70	15KHZ	Yes	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N70	30KHZ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N71	15KHZ	Yes	Yes	Yes	Yes	Yes	Yes	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N71	30KHZ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N77	15KHZ	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N77	30KHZ	N/A	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

3. For 5G NR test procedure was following step similar FCC KDB 941225 D05:
   a. For DFT-OFDM and CP-OFDM output power measurement reduction, according to 3GPP 38.101 maximum power reduction for power class 3, the CP-OFDM mode will not higher than DFT-OFDM mode, therefore, similar FCC KDB 941225 D05 procedure for other modulation output power for each RB allocation configuration is > not ½ dB higher than the same configuration in DFT-QPSK and the reported SAR for the DFT-QPSK configuration is ≤ 1.45 W/kg; CP-OFDM testing is not required.
   b. For DFT-OFDM output power measurement reduction, according to 38.101 maximum power reduction for power class 3, for PI/2 BPSK/16QAM/64QMA/256QAM and smaller bandwidth output power will spot check largest channel bandwidth worst RB configuration to ensure the PI/2 BPSK/16QAM/64QMA/256QAM and smaller bandwidth output power will not ½ dB higher than the same configuration in the largest supported bandwidth.
   c. SAR testing start with the largest SCS and largest channel bandwidth and measure SAR for QPSK with 1 RB allocation, using the RB offset and required test channel combination with the highest maximum output power for RB offsets at the upper edge, middle and lower edge of each required test channel.
   d. 50% RB allocation for QPSK SAR testing follows 1RB QPSK allocation procedure.
   e. QPSK with 100% RB allocation, SAR is not required when the highest maximum output power for 100 % RB allocation is less than the highest maximum output power in 50% and 1 RB allocations and the highest reported SAR for 1 RB and 50% RB allocation are ≤ 0.8 W/kg. Otherwise, SAR is measured for the highest output power channel; and if the reported SAR is > 1.45 W/kg, the remaining required test channels must also be tested.
   f. PI/2 BPSK/16QAM/64QAM/256QAM output powers according to 3GPP MPR will not ½ dB higher than the same configuration in QPSK, also reported SAR for the QPSK configuration is less than 1.45 W/kg, PI/2 BPSK/16QAM/64QAM/256QAM SAR testing are not required.
   g. Smaller SCS/bandwidth output power for each RB allocation configuration for this device will not ½ dB higher than the same configuration in the largest supported bandwidth, and the reported SAR for the largest supported bandwidth is ≤ 1.45 W/kg, smaller bandwidth SAR testing is not required for this device

4. 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 TS 38.101-1 Section 6.2.2 under Table 6.2.2 -1.

Modulation		MPR (dB)		
		Edge RB allocations	Outer RB allocations	Inner RB allocations
DFT-s-OFDM	PI/2 BPSK	≤ 3.5[1]	≤ 1.2[1]	≤ 0.2[1]
		≤ 0.5[2]	≤ 0.5[2]	0[2]
	QPSK	≤ 1		0
	16 QAM	≤ 2		≤ 1
	64 QAM	≤ 2.5		
	256 QAM	≤ 4.5		
CP-OFDM	QPSK	≤ 3		≤ 1.5
	16 QAM	≤ 3		≤ 2
	64 QAM	≤ 3.5		
	256 QAM	≤ 6.5		

NOTE 1: Applicable for UE operating in TDD mode with Pi/2 BPSK modulation and UE indicates support for UE capability powerBoosting-pi2BPSK and if the IE powerBoostPi2BPSK is set to 1 and 40 % or less slots in radio frame are used for UL transmission for bands n41,n78. The reference power of 0 dB MPR is 26dBm.

NOTE 2: Applicable for UE operating in FDD mode, or in TDD mode in bands other than n41,n78 with Pi/2 BPSK modulation and if the IE powerBoostPi2BPSK is set to 0 and if more than 40 % of slots in radio frame are used for UL transmission for bands n41,n78.

5. For FDD NR Band operation does not have the fixed UL/DL frame structure, but during the transmitting/ receiving it can be operated in the slot structure of 100% UL duty cycle, we are proposing the conservative way to evaluate SAR at 100% duty cycle. For the purpose of test NR Band standalone SAR, and also test SAR level at 100% TX duty cycle.

6. For 5G NR Sub6GHz SISO Mode, SAR Test plan as below:

1) For 5G NR NSA mode with the same UL EN_DC combination but different DL EN_DC combinations, eg: EN-DC configuration: UL DC_7A_n5 (UL two bands) with DL DC_7C_n5 (DL two bands)

a) The UL EN-DC configuration, including the Tx antenna configuration, RF path, the channel bandwidth and other operating parameters are the same.

b) The maximum output power, including tolerance, for the UL EN-DC configuration with DL two or more bands must be ≤ the same UL EN-DC configuration with DL two bands only to qualify for the SAR test exclusion.

7. For EN-DC SAR, as the existing SAR test system cannot test the multiple different frequency bands simultaneous Transmission SAR at the same time, we suggest that the conservative “max + max” multi-Tx and SAR scaling method can be used to evaluate the inter-band Uplink EN-DC SAR from standalone SAR test results of each LTE and NR EN-DC component band and the conservative “max + max” multi-Tx method to combine the scaled SAR value from each EN-DC component band as the inter-band Uplink EN-DC SAR. All Simultaneous Transmission Scenarios will be evaluated independently in the final SAR report.

8. When the reported SAR for and EN DC configuration is greater than 1.2 W/kg, EN DC SAR is also required for other NR based test channels.

9. EN DC SAR is also required for standalone NR configurations greater than 1.2 W/kg when scaled to the EN DC power level.

8 Test Result

8.1 Measurement of RF Conducted Power

The detailed conducted power table can refer to Appendix E.

Note:

1）. For GSM SAR the time-based average power is relevant. The difference in between depends on the duty cycle of the TDMA signal:

No. of timeslots	1	2	3	4
Duty Cycle	1:8.3	1:4.15	1:2.77	1:2.075
Time based avg. power compared to slotted avg. power	-9.19	-6.18	-4.42	-3.17

2）. The frame-averaged power is linearly proportion to the slot number configured and it is linearly scaled the maximum burst-averaged power based on time slots. The calculated method is shown as below:
Frame-averaged power = 10 x log (Burst-averaged power mW x Slot used / 8

3）. When the maximum output power variation across the required test channels is > ½ dB, instead of the middle channel, the highest output power channel must be used

4）. According to FCC guidance, the output power with uplink CA active was measured for the high / middle / low channel configuration with the highest reported SAR for each exposure condition, the power was measured with wideband signal integration over both component carriers.

5）. In applying the power measurement procedures of KDB 941225 D05A for DL CA to qualify for UL SAR test exclusion, power measurement is required only for the subset in each row with the largest combination of frequency bands and CCs.

6）. Maximum output power measurement is required for each UL CA configuration for the required test channels described in KDB 941225 D05.

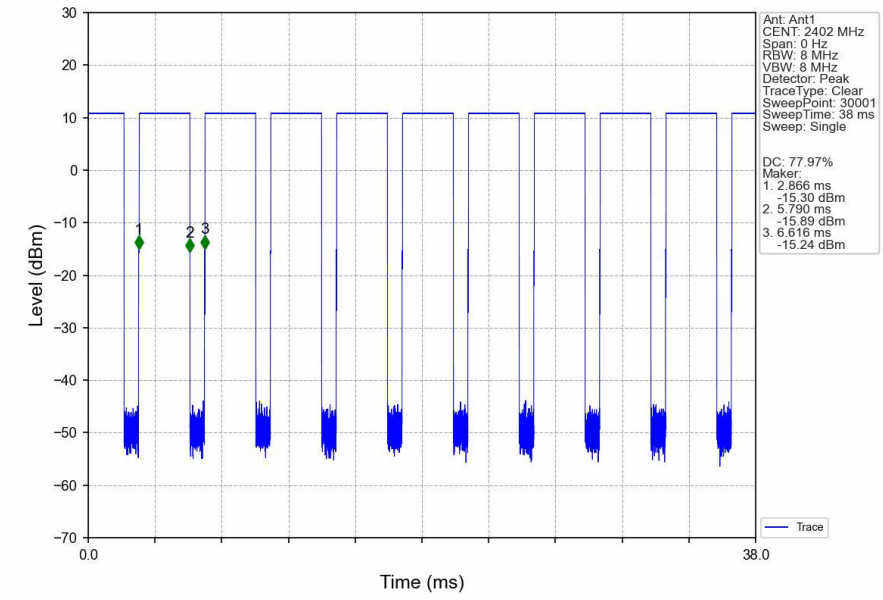
7）. Conducted power measurement results of downlink LTE carrier aggregation are provided to quantify downlink only carrier aggregation SAR test exclusion per KDB 941225 D05A.Uplink maximum output power is measured with downlink carrier aggregation active, using the channel with highest measured maximum 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 ¼ dB higher than the maximum output power measured when downlink carrier aggregation inactive, therefore SAR evaluation with downlink carrier aggregation can be excluded.
The possible downlink LTE CA combinations supported by this device are as below tables per 3GPP TS 36.101 V15.4.0. The detailed conducted power measurement results of downlink LTE CA are provided in the SAR report per 3GPP TS 36.521-1 V14.4.0. According to KDB 941225 D05A, the downlink only carrier aggregation conditions for this device can be excluded from SAR testing.
The conducted power measurement results of downlink LTE CA Conducted Power are as Appendix E conducted RF output power, so the downlink only carrier aggregation conditions for this device can be excluded from SAR testing.

8）. For conducted power of WIFI must be measured at each transmit antenna port according to the DSSS and OFDM transmission configurations in each standalone and aggregated frequency band. For each transmission mode configuration, power must be measured for the highest and lowest channels; and at the mid-band channel(s) when there are at least 3 channels. For configurations with multiple mid-band channels, due to an even number of channels, both channels should be measured. Power measurement is required for the transmission mode configuration with the highest maximum output power specified for production units.

1) When the same highest maximum output power specification applies to multiple transmission modes, the largest channel bandwidth configuration with the lowest order modulation and lowest data rate is measured.

2) When the same highest maximum output power is specified for multiple largest channel bandwidth configurations with the same lowest order modulation or lowest order modulation and lowest data rate, power measurement is required for all equivalent 802.11 configurations with the same maximum output power.

9）. The conducted power of BT is measured with RMS detector.
BT DH5 Duty Cycle=77.97%



8.2 Measurement of SAR Data

Note:

1) The maximum reported SAR value is marked in **bold.** Graph results refer to Appendix B

2) Per KDB447498 D01, testing of other required channels within the operating mode of a frequency band is not required when the reported 1-g or 10-g SAR for the mid-band or highest output power channel is:

- ≤ 0.8W/kg for 1-g or 2.0W/kg for 10-g respectively, when the transmission band is ≤ 100MHz.
- ≤ 0.6 W/kg or 1.5 W/kg, for 1-g or 10-g respectively, when the transmission band is between 100 MHz and 200 MHz.
- ≤ 0.4 W/kg or 1.0 W/kg, for 1-g or 10-g respectively, when the transmission band is ≥ 200 MHz.

3) Maximum bandwidth does not support at least three non-overlapping channels in certain channel bandwidths. When a device supports overlapping channel assignment in a channel bandwidth configuration, the middle channel of the group of overlapping channels should be selected for testing.

WiFi 2.4G:

1) When 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 test for the other 802.11 modes are not required.

WiFi 5G:

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. As 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.

2) For Wi-Fi 5G, U-NII-2A (5250-5350 MHz) and U-NII-2C (5470-5725 MHz) bands does not support hotspot function.

3) When 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 test for the other 802.11 modes are not required.

8.2.1 SAR Result of WCDMA Band II

WCDMA Band II SAR Test Record										
Ant 2 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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm)										
Back side	RMC	9400/1880	1:1	0.892	-0.03	16.83	17.30	1.114	0.994	21.9
Back side-Repeat SAR	RMC	9400/1880	1:1	0.869	0.01	16.83	17.30	1.114	0.968	21.9
Back side	RMC	9262/1852.4	1:1	0.874	-0.07	16.77	17.30	1.130	0.987	21.9
Back side	RMC	9538/1907.6	1:1	0.869	0.17	16.76	17.30	1.132	0.984	21.9
Right side	RMC	9400/1880	1:1	0.592	-0.17	16.83	17.30	1.114	0.660	21.9
Top side	RMC	9400/1880	1:1	0.546	0.15	16.83	17.30	1.114	0.608	21.9
Back side-sample2	RMC	9400/1880	1:1	0.864	0.03	16.83	17.30	1.114	0.963	21.9
Body (Sensor off) Test data										
Back side-25mm	RMC	9400/1880	1:1	0.649	0.15	23.48	23.80	1.076	0.699	21.9
Right side-9mm	RMC	9400/1880	1:1	0.302	-0.04	23.48	23.80	1.076	0.325	21.9
Top side-25mm	RMC	9400/1880	1:1	0.732	-0.01	23.48	23.80	1.076	0.788	21.9

Table 11： SAR of WCDMA Band II for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	9400/1880	0.892	0.869	1.026467204	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.2 SAR Result of WCDMA Band V

WCDMA Band V SAR Test Record										
Ant 2 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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm)										
Back side	RMC	4182/836.4	1:1	1.040	-0.06	19.95	20.30	1.084	1.127	22.3
Back side-Repeat SAR	RMC	4182/836.4	1:1	0.964	0.02	19.95	20.30	1.084	1.045	22.3
Back side	RMC	4132/826.4	1:1	0.974	-0.15	19.92	20.30	1.091	1.063	22.3
Back side	RMC	4233/846.6	1:1	0.982	-0.08	19.89	20.30	1.099	1.079	22.3
Right side	RMC	4182/836.4	1:1	0.943	0.04	19.95	20.30	1.084	1.022	22.3
Right side	RMC	4132/826.4	1:1	0.916	-0.08	19.92	20.30	1.091	1.000	22.3
Right side	RMC	4233/846.6	1:1	0.920	-0.11	19.89	20.30	1.099	1.011	22.3
Top side	RMC	4182/836.4	1:1	0.483	-0.11	19.95	20.30	1.084	0.524	22.3
Back side-sample2	RMC	4182/836.4	1:1	0.952	0.03	19.95	20.30	1.084	1.032	22.3
Body (Sensor off) Test data										
Back side-25mm	RMC	4182/836.4	1:1	0.273	-0.04	23.61	23.80	1.045	0.285	22.3
Right side-9mm	RMC	4182/836.4	1:1	0.173	0.06	23.61	23.80	1.045	0.181	22.3
Top side-25mm	RMC	4182/836.4	1:1	0.233	-0.18	23.61	23.80	1.045	0.243	22.3

Table 12： SAR of WCDMA Band V for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	4182/836.4	1.04	0.964	1.078838174	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.3 SAR Result of LTE Band 2

LTE Band 2 SAR Test Record											
Ant 6 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	20	QPSK 1_0	18900/1880	1:1	0.446	0.09	10.69	11.30	1.151	0.513	21.9
Top side	20	QPSK 1_0	18900/1880	1:1	0.320	0.02	10.69	11.30	1.151	0.368	21.9
Back side-sample2	20	QPSK 1_0	18900/1880	1:1	0.426	0.01	10.69	11.30	1.151	0.490	21.9
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	20	QPSK 50_0	18900/1880	1:1	0.389	-0.02	10.55	11.30	1.189	0.462	21.9
Top side	20	QPSK 50_0	18900/1880	1:1	0.275	0.16	10.55	11.30	1.189	0.327	21.9
Body (Sensor off) Test data (1RB)											
Back side-19mm	20	QPSK 1_0	18900/1880	1:1	0.452	0.02	23.82	24.30	1.117	0.505	21.9
Left side	20	QPSK 1_0	18900/1880	1:1	0.181	-0.16	23.82	24.30	1.117	0.202	21.9
Top side-24mm	20	QPSK 1_0	18900/1880	1:1	0.444	-0.02	23.82	24.30	1.117	0.496	21.9
Body (Sensor off) Test data (50%RB)											
Back side-19mm	20	QPSK 50_0	18900/1880	1:1	0.380	0.03	22.90	23.30	1.096	0.417	21.9
Left side	20	QPSK 50_0	18900/1880	1:1	0.073	-0.04	22.90	23.30	1.096	0.080	21.9
Top side-24mm	20	QPSK 50_0	18900/1880	1:1	0.366	0.08	22.90	23.30	1.096	0.401	21.9

Table 13： SAR of LTE Band 2 for Body.

8.2.4 SAR Result of LTE Band 7

LTE Band 7 SAR Test Record											
Ant 1 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	20	QPSK 1_0	21100/2535	1:1	0.855	0.09	13.23	13.80	1.140	0.975	22.2
Back side-Repeat SAR	20	QPSK 1_0	21100/2535	1:1	0.846	0.14	13.23	13.80	1.140	0.965	22.2
Back side	20	QPSK 1_0	20850/2510	1:1	0.832	0.06	13.16	13.80	1.159	0.964	22.2
Back side	20	QPSK 1_0	21350/2560	1:1	0.819	0.10	13.19	13.80	1.151	0.943	22.2
Right side	20	QPSK 1_0	21100/2535	1:1	0.193	-0.14	13.23	13.80	1.140	0.220	22.2
Top side	20	QPSK 1_0	21100/2535	1:1	0.591	0.14	13.23	13.80	1.140	0.674	22.2
Back side-sample2	20	QPSK 1_0	21100/2535	1:1	0.833	0.02	13.23	13.80	1.140	0.950	22.2
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	20	QPSK 50_0	21100/2535	1:1	0.691	0.17	13.17	13.80	1.156	0.799	22.2
Right side	20	QPSK 50_0	21100/2535	1:1	0.156	0.15	13.17	13.80	1.156	0.180	22.2
Top side	20	QPSK 50_0	21100/2535	1:1	0.462	0.05	13.17	13.80	1.156	0.534	22.2
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	20	QPSK 100_0	21100/2535	1:1	0.686	-0.02	12.94	13.80	1.219	0.836	22.2
Body (Sensor off) Test data (1RB)											
Back side-22mm	20	QPSK 1_0	21100/2535	1:1	0.350	-0.18	22.78	23.30	1.127	0.395	22.2
Right side-19mm	20	QPSK 1_0	21100/2535	1:1	0.381	0.07	22.78	23.30	1.127	0.429	22.2
Top side-19mm	20	QPSK 1_0	21100/2535	1:1	0.416	0.12	22.78	23.30	1.127	0.469	22.2
Body (Sensor off) Test data(50%RB)											
Back side-22mm	20	QPSK 50_0	21100/2535	1:1	0.283	-0.14	21.76	22.30	1.132	0.320	22.2
Right side-19mm	20	QPSK 50_0	21100/2535	1:1	0.309	-0.12	21.76	22.30	1.132	0.350	22.2
Top side-19mm	20	QPSK 50_0	21100/2535	1:1	0.339	0.07	21.76	22.30	1.132	0.384	22.2

Table 14： SAR of LTE Band 7 for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	21100/2535	0.855	0.846	1.010638298	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.5 SAR Result of LTE Band 12

LTE Band 12 SAR Test Record											
Ant 2 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	10	QPSK 1_0	23095/707.5	1:1	0.917	-0.06	19.66	20.30	1.159	1.063	22.2
Back side-Repeat SAR	10	QPSK 1_0	23095/707.5	1:1	0.909	0.11	19.66	20.30	1.159	1.053	22.2
Right side	10	QPSK 1_0	23095/707.5	1:1	0.861	0.07	19.66	20.30	1.159	0.998	22.2
Top side	10	QPSK 1_0	23095/707.5	1:1	0.363	0.04	19.66	20.30	1.159	0.421	22.2
Back side-sample2	10	QPSK 1_0	23095/707.5	1:1	0.882	0.03	19.66	20.30	1.159	1.022	22.2
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	10	QPSK 25_0	23095/707.5	1:1	0.884	0.09	19.56	20.30	1.186	1.048	22.2
Right side	10	QPSK 25_0	23095/707.5	1:1	0.622	0.06	19.56	20.30	1.186	0.738	22.2
Top side	10	QPSK 25_0	23095/707.5	1:1	0.298	-0.02	19.56	20.30	1.186	0.353	22.2
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	10	QPSK 50_0	23095/707.5	1:1	0.864	0.09	19.49	20.30	1.205	1.041	22.2
Right side	10	QPSK 50_0	23095/707.5	1:1	0.587	0.03	19.49	20.30	1.205	0.707	22.2
Body (Sensor off) Test data (1RB)											
Back side-25mm	10	QPSK 1_0	23095/707.5	1:1	0.263	-0.07	24.28	24.80	1.127	0.296	22.2
Right side-9mm	10	QPSK 1_0	23095/707.5	1:1	0.173	-0.18	24.28	24.80	1.127	0.195	22.2
Top side-25mm	10	QPSK 1_0	23095/707.5	1:1	0.192	0.04	24.28	24.80	1.127	0.216	22.2
Body (Sensor off) Test data(50%RB)											
Back side-25mm	10	QPSK 25_0	23095/707.5	1:1	0.254	-0.15	23.27	23.80	1.130	0.287	22.2
Right side-9mm	10	QPSK 25_0	23095/707.5	1:1	0.161	-0.07	23.27	23.80	1.130	0.182	22.2
Top side-25mm	10	QPSK 25_0	23095/707.5	1:1	0.174	0.11	23.27	23.80	1.130	0.197	22.2
Body Test data (Separate 0mm 1RB) - EN-DC											
Back side	10	QPSK 1_0	23095/707.5	1:1	0.917	-0.06	19.66	16.80	0.518	0.475	22.2
Right side	10	QPSK 1_0	23095/707.5	1:1	0.861	0.07	19.66	16.80	0.518	0.446	22.2
Top side	10	QPSK 1_0	23095/707.5	1:1	0.363	0.04	19.66	16.80	0.518	0.188	22.2
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side	10	QPSK 25_0	23095/707.5	1:1	0.892	0.09	19.56	16.80	0.530	0.472	22.2
Right side	10	QPSK 25_0	23095/707.5	1:1	0.622	0.06	19.56	16.80	0.530	0.329	22.2
Top side	10	QPSK 25_0	23095/707.5	1:1	0.298	-0.02	19.56	16.80	0.530	0.158	22.2

Table 15： SAR of LTE Band 12 for Body is covering LTE Band 17.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	23095/707.5	0.917	0.909	1.00880088	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

8.2.6 SAR Result of LTE Band 14

LTE Band 14 SAR Test Record											
Ant 2 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	10	QPSK 1_0	23330/793	1:1	0.944	-0.13	19.59	20.30	1.178	1.112	22.2
Back side-Repeat SAR	10	QPSK 1_0	23330/793	1:1	0.936	0.05	19.59	20.30	1.178	1.102	22.2
Right side	10	QPSK 1_0	23330/793	1:1	0.867	-0.18	19.59	20.30	1.178	1.021	22.2
Top side	10	QPSK 1_0	23330/793	1:1	0.550	-0.16	19.59	20.30	1.178	0.648	22.2
Back side-sample2	10	QPSK 1_0	23330/793	1:1	0.911	0.02	19.59	20.30	1.178	1.073	22.2
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	10	QPSK 25_0	23330/793	1:1	0.851	0.02	19.47	20.30	1.211	1.030	22.2
Right side	10	QPSK 25_0	23330/793	1:1	0.676	-0.16	19.47	20.30	1.211	0.818	22.2
Top side	10	QPSK 25_0	23330/793	1:1	0.401	0.01	19.47	20.30	1.211	0.485	22.2
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	10	QPSK 50_0	23330/793	1:1	0.816	0.04	19.45	20.30	1.216	0.992	22.2
Right side	10	QPSK 50_0	23330/793	1:1	0.655	0.08	19.45	20.30	1.216	0.797	22.2
Body (Sensor off) Test data (1RB)											
Back side-25mm	10	QPSK 1_0	23330/793	1:1	0.258	0.13	24.29	24.80	1.125	0.290	22.2
Right side-9mm	10	QPSK 1_0	23330/793	1:1	0.178	-0.07	24.29	24.80	1.125	0.200	22.2
Top side-25mm	10	QPSK 1_0	23330/793	1:1	0.277	0.05	24.29	24.80	1.125	0.312	22.2
Body (Sensor off) Test data(50%RB)											
Back side-25mm	10	QPSK 25_0	23330/793	1:1	0.233	-0.10	23.13	23.80	1.167	0.272	22.2
Right side-9mm	10	QPSK 25_0	23330/793	1:1	0.130	-0.14	23.13	23.80	1.167	0.152	22.2
Top side-25mm	10	QPSK 25_0	23330/793	1:1	0.203	0.03	23.13	23.80	1.167	0.237	22.2
Body Test data (Separate 0mm 1RB) - EN-DC											
Back side	10	QPSK 1_0	23330/793	1:1	0.944	-0.13	19.59	17.30	0.590	0.557	22.2
Right side	10	QPSK 1_0	23330/793	1:1	0.867	-0.18	19.59	17.30	0.590	0.512	22.2
Top side	10	QPSK 1_0	23330/793	1:1	0.550	-0.16	19.59	17.30	0.590	0.325	22.2
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side	10	QPSK 25_0	23330/793	1:1	0.851	0.02	19.47	17.30	0.607	0.516	22.2
Right side	10	QPSK 25_0	23330/793	1:1	0.676	-0.16	19.47	17.30	0.607	0.410	22.2
Top side	10	QPSK 25_0	23330/793	1:1	0.401	0.01	19.47	17.30	0.607	0.243	22.2

Table 16： SAR of LTE Band 14 for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	23330/793	0.944	0.936	1.008547009	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

8.2.7 SAR Result of LTE Band 25

LTE Band 25 SAR Test Record											
Ant 2 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	20	QPSK 1_0	26365/1882.5	1:1	0.870	0.04	17.31	17.80	1.119	0.974	21.9
Back side-Repeat SAR	20	QPSK 1_0	26365/1882.5	1:1	0.854	0.15	17.31	17.80	1.119	0.956	21.9
Back side	20	QPSK 1_0	26140/1860	1:1	0.860	-0.06	17.28	17.80	1.127	0.969	21.9
Back side	20	QPSK 1_0	26590/1905	1:1	0.852	0.09	17.25	17.80	1.135	0.967	21.9
Right side	20	QPSK 1_0	26365/1882.5	1:1	0.707	0.18	17.31	17.80	1.119	0.791	21.9
Top side	20	QPSK 1_0	26365/1882.5	1:1	0.696	-0.02	17.31	17.80	1.119	0.779	21.9
Back side-sample2	20	QPSK 1_0	26365/1882.5	1:1	0.856	-0.12	17.31	17.80	1.119	0.958	21.9
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	20	QPSK 50_0	26365/1882.5	1:1	0.674	0.12	17.20	17.80	1.148	0.774	21.9
Right side	20	QPSK 50_0	26365/1882.5	1:1	0.659	-0.06	17.20	17.80	1.148	0.757	21.9
Top side	20	QPSK 50_0	26365/1882.5	1:1	0.531	0.03	17.20	17.80	1.148	0.610	21.9
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	20	QPSK 100_0	26365/1882.5	1:1	0.659	0.02	17.12	17.80	1.169	0.771	21.9
Body (Sensor off) Test data (1RB)											
Back side-25mm	20	QPSK 1_0	26365/1882.5	1:1	0.630	-0.04	23.99	24.30	1.074	0.677	21.9
Right side-9mm	20	QPSK 1_0	26365/1882.5	1:1	0.359	0.18	23.99	24.30	1.074	0.386	21.9
Top side-25mm	20	QPSK 1_0	26365/1882.5	1:1	0.829	-0.19	23.99	24.30	1.074	0.890	21.9
Top side-25mm	20	QPSK 1_0	26140/1860	1:1	0.816	0.04	23.82	24.30	1.117	0.911	21.9
Top side-25mm	20	QPSK 1_0	26590/1905	1:1	0.805	0.02	23.77	24.30	1.130	0.909	21.9
Body (Sensor off) Test data(50%RB)											
Back side-25mm	20	QPSK 50_0	26365/1882.5	1:1	0.488	-0.06	22.91	23.30	1.094	0.534	21.9
Right side-9mm	20	QPSK 50_0	26365/1882.5	1:1	0.334	0.18	22.91	23.30	1.094	0.365	21.9
Top side-25mm	20	QPSK 50_0	26365/1882.5	1:1	0.665	-0.01	22.91	23.30	1.094	0.727	21.9
Body (Sensor off) Test data(100%RB)											
Top side-25mm	20	QPSK 100_0	26365/1882.5	1:1	0.652	0.01	22.74	23.30	1.138	0.742	21.9
SAR Test Record For LTE Band 2 ENDC											
Ant 2 Test Record											
Body Test data (Separate 0mm 1RB) - EN-DC											
Back side	20	QPSK 1_0	26365/1882.5	1:1	0.870	0.04	17.31	14.80	0.561	0.488	21.9
Right side	20	QPSK 1_0	26365/1882.5	1:1	0.707	0.18	17.31	14.80	0.561	0.397	21.9
Top side	20	QPSK 1_0	26365/1882.5	1:1	0.696	-0.02	17.31	14.80	0.561	0.390	21.9
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side	20	QPSK 50_0	26365/1882.5	1:1	0.674	0.12	17.20	14.80	0.575	0.388	21.9

Right side	20	QPSK 50_0	26365/1882.5	1:1	0.659	-0.06	17.20	14.80	0.575	0.379	21.9
Top side	20	QPSK 50_0	26365/1882.5	1:1	0.531	0.03	17.20	14.80	0.575	0.306	21.9
Body (Sensor off) Test data (1RB)-ENDC											
Back side-25mm	20	QPSK 1_0	26365/1882.5	1:1	0.630	-0.04	23.99	20.80	0.480	0.302	21.9
Right side-9mm	20	QPSK 1_0	26365/1882.5	1:1	0.359	0.18	23.99	20.80	0.480	0.172	21.9
Top side-25mm	20	QPSK 1_0	26365/1882.5	1:1	0.829	-0.19	23.99	20.80	0.480	0.398	21.9
Body (Sensor off) Test data(50%RB)-ENDC											
Back side-25mm	20	QPSK 50_0	26365/1882.5	1:1	0.488	-0.06	22.91	20.80	0.615	0.300	21.9
Right side-9mm	20	QPSK 50_0	26365/1882.5	1:1	0.334	0.18	22.91	20.80	0.615	0.205	21.9
Top side-25mm	20	QPSK 50_0	26365/1882.5	1:1	0.665	-0.01	22.91	20.80	0.615	0.409	21.9

Table 17： SAR of LTE Band 25 for Body is covering LTE Band 2.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	26365/1882.5	0.87	0.854	1.018735363	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.8 SAR Result of LTE Band 26

LTE Band 26 SAR Test Record											
Ant 2 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	15	QPSK 1_0	26865/831.5	1:1	1.030	-0.01	20.33	20.80	1.114	1.148	22.3
Back side-Repeat SAR	15	QPSK 1_0	26865/831.5	1:1	0.982	0.03	20.33	20.80	1.114	1.094	22.3
Right side	15	QPSK 1_0	26865/831.5	1:1	0.889	-0.06	20.33	20.80	1.114	0.991	22.3
Top side	15	QPSK 1_0	26865/831.5	1:1	0.491	-0.11	20.33	20.80	1.114	0.547	22.3
Back side-sample2	15	QPSK 1_0	26865/831.5	1:1	0.972	0.02	20.33	20.80	1.114	1.083	22.3
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	15	QPSK 36_0	26865/831.5	1:1	0.816	-0.07	20.24	20.80	1.138	0.928	22.3
Right side	15	QPSK 36_0	26865/831.5	1:1	0.701	0.01	20.24	20.80	1.138	0.797	22.3
Top side	15	QPSK 36_0	26865/831.5	1:1	0.374	-0.02	20.24	20.80	1.138	0.425	22.3
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	15	QPSK 75_0	26865/831.5	1:1	0.804	-0.17	20.14	20.80	1.164	0.936	22.3
Right side	15	QPSK 75_0	26865/831.5	1:1	0.682	0.10	20.14	20.80	1.164	0.794	22.3
Body (Sensor off) Test data (1RB)											
Back side-25mm	15	QPSK 1_0	26865/831.5	1:1	0.314	-0.11	24.34	24.80	1.112	0.349	22.3
Right side-9mm	15	QPSK 1_0	26865/831.5	1:1	0.190	-0.18	24.34	24.80	1.112	0.211	22.3
Top side-25mm	15	QPSK 1_0	26865/831.5	1:1	0.276	0.18	24.34	24.80	1.112	0.307	22.3
Body (Sensor off) Test data(50%RB)											
Back side-25mm	15	QPSK 36_0	26865/831.5	1:1	0.249	0.12	23.26	23.80	1.132	0.282	22.3
Right side-9mm	15	QPSK 36_0	26865/831.5	1:1	0.150	0.06	23.26	23.80	1.132	0.170	22.3
Top side-25mm	15	QPSK 36_0	26865/831.5	1:1	0.211	-0.07	23.26	23.80	1.132	0.239	22.3
Body Test data (Separate 0mm 1RB) - EN-DC											
Back side	15	QPSK 1_0	26865/831.5	1:1	1.030	-0.01	20.33	17.80	0.558	0.575	22.3
Right side	15	QPSK 1_0	26865/831.5	1:1	0.889	-0.06	20.33	17.80	0.558	0.496	22.3
Top side	15	QPSK 1_0	26865/831.5	1:1	0.491	-0.11	20.33	17.80	0.558	0.274	22.3
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side	15	QPSK 36_0	26865/831.5	1:1	0.816	-0.07	20.24	17.80	0.570	0.465	22.3
Right side	15	QPSK 36_0	26865/831.5	1:1	0.701	0.01	20.24	17.80	0.570	0.400	22.3
Top side	15	QPSK 36_0	26865/831.5	1:1	0.374	-0.02	20.24	17.80	0.570	0.213	22.3

Table 18： SAR of LTE Band 26 for Body is covering LTE Band 5.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)

Back side	26865/831.5	1.03	0.982	1.048879837	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.9 SAR Result of LTE Band 30

LTE Band 30 SAR Test Record											
Ant 1 Test Record											
Test position	**BW.**	**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)**	**Liquid Temp.(℃)**
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	10	QPSK 1_0	27710/2310	1:1	0.901	0.07	13.46	13.80	1.081	0.974	22.4
Back side-Repeat SAR	10	QPSK 1_0	27710/2310	1:1	0.892	0.04	13.46	13.80	1.081	0.965	22.4
Right side	10	QPSK 1_0	27710/2310	1:1	0.294	0.01	13.46	13.80	1.081	0.318	22.4
Top side	10	QPSK 1_0	27710/2310	1:1	0.307	-0.11	13.46	13.80	1.081	0.332	22.4
Back side-sample2	10	QPSK 1_0	27710/2310	1:1	0.877	0.02	13.46	13.80	1.081	0.948	22.4
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	10	QPSK 25_0	27710/2310	1:1	0.705	-0.11	13.33	13.80	1.114	0.786	22.4
Right side	10	QPSK 25_0	27710/2310	1:1	0.249	0.12	13.33	13.80	1.114	0.277	22.4
Top side	10	QPSK 25_0	27710/2310	1:1	0.232	0.13	13.33	13.80	1.114	0.259	22.4
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	10	QPSK 50_0	27710/2310	1:1	0.669	-0.02	13.23	13.80	1.140	0.763	22.4
Body (Sensor off) Test data (1RB)											
Back side-22mm	10	QPSK 1_0	27710/2310	1:1	0.441	-0.13	23.43	23.80	1.089	0.480	22.4
Right side-19mm	10	QPSK 1_0	27710/2310	1:1	0.696	0.05	23.43	23.80	1.089	0.758	22.4
Top side-19mm	10	QPSK 1_0	27710/2310	1:1	0.259	0.04	23.43	23.80	1.089	0.282	22.4
Body (Sensor off) Test data(50%RB)											
Back side-22mm	10	QPSK 25_0	27710/2310	1:1	0.345	0.13	22.35	22.80	1.109	0.383	22.4
Right side-19mm	10	QPSK 25_0	27710/2310	1:1	0.588	0.04	22.35	22.80	1.109	0.652	22.4
Top side-19mm	10	QPSK 25_0	27710/2310	1:1	0.217	-0.02	22.35	22.80	1.109	0.241	22.4
Ant 6 Test Record											
Test position	**BW.**	**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)**	**Liquid Temp.(℃)**
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	10	QPSK 1_0	27710/2310	1:1	0.502	-0.05	12.39	12.80	1.099	0.552	22.4
Top side	10	QPSK 1_0	27710/2310	1:1	0.280	-0.13	12.39	12.80	1.099	0.308	22.4
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	10	QPSK 25_0	27710/2310	1:1	0.448	0.01	12.27	12.80	1.130	0.506	22.4
Top side	10	QPSK 25_0	27710/2310	1:1	0.217	0.09	12.27	12.80	1.130	0.245	22.4
Body (Sensor off) Test data (1RB)											
Back side-19mm	10	QPSK 1_0	27710/2310	1:1	0.455	0.02	23.43	23.80	1.089	0.495	22.4
Left side	10	QPSK 1_0	27710/2310	1:1	0.079	0.19	23.43	23.80	1.089	0.086	22.4
Top side-24mm	10	QPSK 1_0	27710/2310	1:1	0.482	-0.03	23.43	23.80	1.089	0.525	22.4

Body (Sensor off) Test data(50%RB)											
Back side-19mm	10	QPSK 25_0	27710/2310	1:1	0.386	0.05	22.52	22.80	1.067	0.412	22.4
Left side	10	QPSK 25_0	27710/2310	1:1	0.032	-0.18	22.52	22.80	1.067	0.034	22.4
Top side-24mm	10	QPSK 25_0	27710/2310	1:1	0.411	0.01	22.52	22.80	1.067	0.438	22.4

Table 19： SAR of LTE Band 30 for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	27710/2310	0.901	0.892	1.010089686	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.10 SAR Result of LTE Band 38

LTE Band 38 SAR Test Record											
Ant 1 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	20	QPSK 1_0	38000/2595	1:1.58	0.883	0.19	16.82	17.30	1.117	0.986	22.2
Back side-Repeat SAR	20	QPSK 1_0	38000/2595	1:1.58	0.875	0.02	16.82	17.30	1.117	0.977	22.2
Right side	20	QPSK 1_0	38000/2595	1:1.58	0.188	-0.04	16.82	17.30	1.117	0.210	22.2
Top side	20	QPSK 1_0	38000/2595	1:1.58	0.630	0.03	16.82	17.30	1.117	0.704	22.2
Back side-sample2	20	QPSK 1_0	38000/2595	1:1.58	0.859	0.02	16.82	17.30	1.117	0.959	22.2
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	20	QPSK 50_0	38000/2595	1:1.58	0.713	-0.08	16.69	17.30	1.151	0.821	22.2
Right side	20	QPSK 50_0	38000/2595	1:1.58	0.150	0.05	16.69	17.30	1.151	0.173	22.2
Top side	20	QPSK 50_0	38000/2595	1:1.58	0.481	0.14	16.69	17.30	1.151	0.554	22.2
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	20	QPSK 100_0	38000/2595	1:1.58	0.679		16.71	17.30	1.146	0.778	22.2
Body (Sensor off) Test data (1RB)											
Back side-22mm	20	QPSK 1_0	38000/2595	1:1.58	0.237	-0.06	23.25	23.80	1.135	0.269	22.2
Right side-19mm	20	QPSK 1_0	38000/2595	1:1.58	0.244	-0.03	23.25	23.80	1.135	0.277	22.2
Top side-19mm	20	QPSK 1_0	38000/2595	1:1.58	0.283	0.05	23.25	23.80	1.135	0.321	22.2
Body (Sensor off) Test data(50%RB)											
Back side-22mm	20	QPSK 50_0	38000/2595	1:1.58	0.192	0.17	22.31	22.80	1.119	0.215	22.2
Right side-19mm	20	QPSK 50_0	38000/2595	1:1.58	0.194	-0.13	22.31	22.80	1.119	0.217	22.2
Top side-19mm	20	QPSK 50_0	38000/2595	1:1.58	0.262	0.09	22.31	22.80	1.119	0.293	22.2

Table 20： SAR of LTE Band 38 for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	38000/2595	0.883	0.875	1.009142857	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.11 SAR Result of LTE Band 40

LTE Band 40 SAR Test Record											
Ant 1 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	10	QPSK 1_0	38750/2310	1:4.25	0.898	0.01	20.51	20.80	1.069	0.960	22.4
Back side-Repeat SAR	10	QPSK 1_0	38750/2310	1:4.25	0.888	0.09	20.51	20.80	1.069	0.950	22.4
Right side	10	QPSK 1_0	38750/2310	1:4.25	0.287	0.03	20.51	20.80	1.069	0.306	22.4
Top side	10	QPSK 1_0	38750/2310	1:4.25	0.306	0.04	20.51	20.80	1.069	0.327	22.4
Back side-sample2	10	QPSK 1_0	38750/2310	1:4.25	0.870	0.06	20.51	20.80	1.069	0.930	22.4
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	10	QPSK 25_0	38750/2310	1:4.25	0.703	-0.05	20.55	20.80	1.059	0.745	22.4
Right side	10	QPSK 25_0	38750/2310	1:4.25	0.249	0.04	20.55	20.80	1.059	0.263	22.4
Top side	10	QPSK 25_0	38750/2310	1:4.25	0.231	0.01	20.55	20.80	1.059	0.245	22.4
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	10	QPSK 50_0	38750/2310	1:4.25	0.663	-0.03	20.60	20.80	1.047	0.694	22.4
Body (Sensor off) Test data (1RB)											
Back side-22mm	10	QPSK 1_0	38750/2310	1:4.25	0.090	0.01	23.37	23.80	1.104	0.099	22.4
Right side-19mm	10	QPSK 1_0	38750/2310	1:4.25	0.141	0.09	23.37	23.80	1.104	0.156	22.4
Top side-19mm	10	QPSK 1_0	38750/2310	1:4.25	0.051	0.05	23.37	23.80	1.104	0.056	22.4
Body (Sensor off) Test data(50%RB)											
Back side-22mm	10	QPSK 25_0	38750/2310	1:4.25	0.069	-0.03	22.38	22.80	1.102	0.076	22.4
Right side-19mm	10	QPSK 25_0	38750/2310	1:4.25	0.119	0.01	22.38	22.80	1.102	0.131	22.4
Top side-19mm	10	QPSK 25_0	38750/2310	1:4.25	0.039	0.08	22.38	22.80	1.102	0.043	22.4

Test Position	Channel/ Frequency	Measured SAR (1g)	1st Repeated	Ratio	2nd Repeated	3rd Repeated
	(MHz)		SAR (1g)		SAR (1g)	SAR (1g)
Back side	38750/2310	0.898	0.891	1.008	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.12 SAR Result of LTE Band 41 (PC3&2)

LTE Band 41 SAR Test Record											
Ant 1 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side-PC3	20	QPSK 1_0	40620/2593	1:1.58	0.909	-0.02	17.95	18.30	1.084	0.985	22.2
Back side-PC2	20	QPSK 1_0	40620/2593	1:2.33	0.658	0.01	17.95	18.30	1.084	0.713	22.2
Back side PC3-Repeat SAR	20	QPSK 1_0	40620/2593	1:1.58	0.889	0.09	17.95	18.30	1.084	0.964	22.2
Back side-PC3	20	QPSK 1_0	39750/2506	1:1.58	0.874	0.17	17.87	18.30	1.104	0.965	22.2
Back side-PC3	20	QPSK 1_0	40185/2549.5	1:1.58	0.882	-0.16	17.83	18.30	1.114	0.983	22.2
Back side-PC3	20	QPSK 1_0	41055/2636.5	1:1.58	0.869	-0.16	17.85	18.30	1.109	0.964	22.2
Back side-PC3	20	QPSK 1_0	41490/2680	1:1.58	0.871	-0.06	17.89	18.30	1.099	0.957	22.2
Right side-PC3	20	QPSK 1_0	40620/2593	1:1.58	0.191	0.02	17.95	18.30	1.084	0.207	22.2
Top side-PC3	20	QPSK 1_0	40620/2593	1:1.58	0.630	0.19	17.95	18.30	1.084	0.683	22.2
Back side PC3-sample2	20	QPSK 1_0	40620/2593	1:1.58	0.867	0.09	17.95	18.30	1.084	0.940	22.2
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side-PC3	20	QPSK 50_0	40620/2593	1:1.58	0.724	-0.16	17.91	18.30	1.094	0.792	22.2
Right side-PC3	20	QPSK 50_0	40620/2593	1:1.58	0.152	0.03	17.91	18.30	1.094	0.166	22.2
Top side-PC3	20	QPSK 50_0	40620/2593	1:1.58	0.501	-0.06	17.91	18.30	1.094	0.548	22.2
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side-PC3	20	QPSK 100_0	40620/2593	1:1.58	0.701	-0.02	17.74	18.30	1.138	0.797	22.2
Body (Sensor off) Test data (1RB)											
Back side PC3-22mm	20	QPSK 1_0	40620/2593	1:1.58	0.235	0.09	23.24	23.80	1.138	0.267	22.2
Right side PC3-19mm	20	QPSK 1_0	40620/2593	1:1.58	0.238	0.14	23.24	23.80	1.138	0.271	22.2
Top side PC3-19mm	20	QPSK 1_0	40620/2593	1:1.58	0.286	0.01	23.24	23.80	1.138	0.325	22.2
Back side PC2-22mm	20	QPSK 1_0	40620/2593	1:2.33	0.349	-0.08	26.47	26.80	1.079	0.377	22.2
Body (Sensor off) Test data(50%RB)											
Back side PC3-22mm	20	QPSK 50_0	40620/2593	1:1.58	0.190	0.08	23.24	23.80	1.138	0.216	22.2
Right side PC3-19mm	20	QPSK 50_0	40620/2593	1:1.58	0.192	0.09	23.24	23.80	1.138	0.218	22.2
Top side PC3-19mm	20	QPSK 50_0	40620/2593	1:1.58	0.248	0.01	23.24	23.80	1.138	0.282	22.2

Table 21： SAR of LTE Band 41 (PC3&2) for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	40620/2593	0.909	0.889	1.022497188	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						

3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

8.2.13 SAR Result of LTE Band 66

LTE Band 66 SAR Test Record											
Ant 2 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	20	QPSK 1_0	132322/1745	1:1	0.958	-0.09	17.13	17.80	1.167	1.118	22.1
Back side-Repeat SAR	20	QPSK 1_0	132322/1745	1:1	0.942	0.03	17.13	17.80	1.167	1.099	22.1
Back side	20	QPSK 1_0	132072/1720	1:1	0.936	0.11	17.11	17.80	1.172	1.097	22.1
Back side	20	QPSK 1_0	132572/1770	1:1	0.932	0.03	17.05	17.80	1.189	1.108	22.1
Right side	20	QPSK 1_0	132322/1745	1:1	0.185	-0.04	17.13	17.80	1.167	0.216	22.1
Top side	20	QPSK 1_0	132322/1745	1:1	0.446	-0.19	17.13	17.80	1.167	0.520	22.1
Back side-sample2	20	QPSK 1_0	132322/1745	1:1	0.942	0.02	17.13	17.80	1.167	1.099	22.1
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	20	QPSK 50_0	132322/1745	1:1	0.797	-0.05	17.09	17.80	1.178	0.939	22.1
Back side	20	QPSK 50_0	132072/1720	1:1	0.776	-0.06	17.06	17.80	1.186	0.920	22.1
Back side	20	QPSK 50_0	132572/1770	1:1	0.764	0.16	17.11	17.80	1.172	0.896	22.1
Right side	20	QPSK 50_0	132322/1745	1:1	0.149	-0.11	17.09	17.80	1.178	0.175	22.1
Top side	20	QPSK 50_0	132322/1745	1:1	0.341	-0.13	17.09	17.80	1.178	0.402	22.1
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	20	QPSK 100_0	132322/1745	1:1	0.764	0.03	17.01	17.80	1.199	0.916	22.1
Body (Sensor off) Test data (1RB)											
Back side-25mm	20	QPSK 1_0	132322/1745	1:1	0.806	-0.01	23.68	24.30	1.153	0.930	22.1
Back side-25mm	20	QPSK 1_0	132072/1720	1:1	0.782	-0.08	23.60	24.30	1.175	0.919	22.1
Back side-25mm	20	QPSK 1_0	132572/1770	1:1	0.779	0.02	23.56	24.30	1.186	0.924	22.1
Right side-9mm	20	QPSK 1_0	132322/1745	1:1	0.109	-0.10	23.68	24.30	1.153	0.126	22.1
Top side-25mm	20	QPSK 1_0	132322/1745	1:1	0.691	-0.01	23.68	24.30	1.153	0.797	22.1
Body (Sensor off) Test data(50%RB)											
Back side-25mm	20	QPSK 50_0	132322/1745	1:1	0.670	-0.12	22.72	23.30	1.143	0.766	22.1
Right side-9mm	20	QPSK 50_0	132322/1745	1:1	0.088	0.12	22.72	23.30	1.143	0.101	22.1
Top side-25mm	20	QPSK 50_0	132322/1745	1:1	0.529	0.13	22.72	23.30	1.143	0.605	22.1
Body (Sensor off) Test data(100%RB)											
Back side-25mm	20	QPSK 100_0	132322/1745	1:1	0.659	0.08	22.68	23.30	1.153	0.760	22.1
Body Test data (Separate 0mm 1RB) - EN-DC											
Back side	20	QPSK 1_0	132322/1745	1:1	0.958	-0.09	17.13	14.30	0.521	0.499	22.1
Right side	20	QPSK 1_0	132322/1745	1:1	0.185	-0.04	17.13	14.30	0.521	0.096	22.1
Top side	20	QPSK 1_0	132322/1745	1:1	0.446	-0.19	17.13	14.30	0.521	0.232	22.1
Body Test data(Separate 0mm 50%RB) - EN-DC											

Back side	20	QPSK 50_0	132322/1745	1:1	0.797	-0.05	17.09	14.30	0.526	0.419	22.1
Right side	20	QPSK 50_0	132322/1745	1:1	0.149	-0.11	17.09	14.30	0.526	0.078	22.1
Top side	20	QPSK 50_0	132322/1745	1:1	0.341	-0.13	17.09	14.30	0.526	0.179	22.1
Body (Sensor off) Test data (1RB)-ENDC											
Back side-25mm	20	QPSK 1_0	132322/1745	1:1	0.806	-0.01	23.68	20.80	0.515	0.415	22.1
Back side-25mm	20	QPSK 1_0	132072/1720	1:1	0.782	-0.08	23.60	20.80	0.525	0.410	22.1
Back side-25mm	20	QPSK 1_0	132572/1770	1:1	0.779	0.02	23.56	20.80	0.530	0.413	22.1
Right side-9mm	20	QPSK 1_0	132322/1745	1:1	0.109	-0.10	23.68	20.80	0.515	0.056	22.1
Top side-25mm	20	QPSK 1_0	132322/1745	1:1	0.691	-0.01	23.68	20.80	0.515	0.356	22.1
Body (Sensor off) Test data(50%RB)-ENDC											
Back side-25mm	20	QPSK 50_0	132322/1745	1:1	0.670	-0.12	22.72	20.80	0.643	0.431	22.1
Right side-9mm	20	QPSK 50_0	132322/1745	1:1	0.088	0.12	22.72	20.80	0.643	0.057	22.1
Top side-25mm	20	QPSK 50_0	132322/1745	1:1	0.529	0.13	22.72	20.80	0.643	0.340	22.1
Body (Sensor off) Test data(100%RB)-ENDC											
Back side-25mm	20	QPSK 100_0	132322/1745	1:1	0.659	0.08	22.68	20.80	0.649	0.427	22.1
Ant 6 Test Record											
Test position	**BW.**	**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)**	**Liquid Temp.(℃)**
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	20	QPSK 1_0	132322/1745	1:1	0.455	0.02	11.39	11.80	1.099	0.500	22.1
Top side	20	QPSK 1_0	132322/1745	1:1	0.365	0.01	11.39	11.80	1.099	0.401	22.1
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	20	QPSK 50_0	132322/1745	1:1	0.377	-0.03	11.31	11.80	1.119	0.422	22.1
Top side	20	QPSK 50_0	132322/1745	1:1	0.291	0.14	11.31	11.80	1.119	0.326	22.1
Body (Sensor off) Test data (Separate 0mm 1RB)											
Back side-19mm	20	QPSK 1_0	132322/1745	1:1	0.412	0.04	23.91	24.30	1.094	0.451	22.1
Left side	20	QPSK 1_0	132322/1745	1:1	0.384	0.10	23.91	24.30	1.094	0.420	22.1
Top side-24mm	20	QPSK 1_0	132322/1745	1:1	0.410	-0.02	23.91	24.30	1.094	0.449	22.1
Body (Sensor off) Test data(Separate 0mm 50%RB)											
Back side-19mm	20	QPSK 50_0	132322/1745	1:1	0.341	0.14	23.04	23.30	1.062	0.362	22.1
Left side	20	QPSK 50_0	132322/1745	1:1	0.252	0.08	23.04	23.30	1.062	0.268	22.1
Top side-24mm	20	QPSK 50_0	132322/1745	1:1	0.329	-0.03	23.04	23.30	1.062	0.349	22.1

Table 22： SAR of LTE Band 66 for Body is covering LTE Band 4.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	132322/1745	0.958	0.942	1.016985138	N/A	N/A

Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

8.2.14 SAR Result of LTE Band 71

LTE Band 71 SAR Test Record											
Ant 2 Test Record											
Test position	BW.	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)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm 1RB)											
Back side	20	QPSK 1_0	133322/683	1:1	0.959	-0.04	20.86	21.30	1.107	1.061	22.2
Back side-Repeat SAR	20	QPSK 1_0	133322/683	1:1	0.942	0.16	20.86	21.30	1.107	1.042	22.2
Right side	20	QPSK 1_0	133322/683	1:1	0.849	-0.15	20.86	21.30	1.107	0.940	22.2
Top side	20	QPSK 1_0	133322/683	1:1	0.548	0.15	20.86	21.30	1.107	0.606	22.2
Back side-sample2	20	QPSK 1_0	133322/683	1:1	0.932	0.02	20.86	21.30	1.107	1.031	22.2
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	20	QPSK 50_0	133322/683	1:1	0.778	-0.16	20.78	21.30	1.127	0.877	22.2
Right side	20	QPSK 50_0	133322/683	1:1	0.500	-0.05	20.78	21.30	1.127	0.564	22.2
Top side	20	QPSK 50_0	133322/683	1:1	0.454	-0.15	20.78	21.30	1.127	0.512	22.2
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	20	QPSK 100_0	133322/683	1:1	0.749	0.02	20.69	21.30	1.151	0.862	22.2
Right side	20	QPSK 100_0	133322/683	1:1	0.483	-0.11	20.69	21.30	1.151	0.556	22.2
Body (Sensor off) Test data (1RB)											
Back side-25mm	20	QPSK 1_0	133322/683	1:1	0.236	-0.16	24.32	24.80	1.117	0.264	22.2
Right side-9mm	20	QPSK 1_0	133322/683	1:1	0.146	0.14	24.32	24.80	1.117	0.163	22.2
Top side-25mm	20	QPSK 1_0	133322/683	1:1	0.248	-0.16	24.32	24.80	1.117	0.277	22.2
Body (Sensor off) Test data(50%RB)											
Back side-25mm	20	QPSK 50_0	133322/683	1:1	0.191	0.08	23.45	23.80	1.084	0.207	22.2
Right side-9mm	20	QPSK 50_0	133322/683	1:1	0.086	-0.03	23.45	23.80	1.084	0.093	22.2
Top side-25mm	20	QPSK 50_0	133322/683	1:1	0.206	-0.16	23.45	23.80	1.084	0.223	22.2

Table 23： SAR of LTE Band 71 for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	133322/683	0.959	0.942	1.018046709	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.15 SAR Result of 5G NR n2

SA N2 SAR Test Record											
Ant 6 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side	40	QPSK 1_1	376000/1880	1:1	0.491	-0.07	12.20	12.30	1.023	0.502	21.9
Top side	40	QPSK 1_1	376000/1880	1:1	0.338	0.01	12.20	12.30	1.023	0.346	21.9
Back side-sample2	40	QPSK 1_1	376000/1880	1:1	0.472	0.11	12.20	12.30	1.023	0.483	21.9
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	40	QPSK 108_54	376000/1880	1:1	0.441	-0.01	11.82	12.30	1.117	0.493	21.9
Top side	40	QPSK 108_54	376000/1880	1:1	0.321	0.09	11.82	12.30	1.117	0.359	21.9
Body (Sensor off) Test data(1RB)											
Back side-19mm	40	QPSK 1_1	376000/1880	1:1	0.386	0.04	23.76	24.30	1.132	0.437	21.9
Left side	40	QPSK 1_1	376000/1880	1:1	0.252	-0.01	23.76	24.30	1.132	0.285	21.9
Top side-24mm	40	QPSK 1_1	376000/1880	1:1	0.349	-0.11	23.76	24.30	1.132	0.395	21.9
Body (Sensor off) Test data(50%RB)											
Back side-19mm	40	QPSK 108_54	376000/1880	1:1	0.296	0.13	23.62	24.30	1.169	0.346	21.9
Left side	40	QPSK 108_54	376000/1880	1:1	0.108	-0.01	23.62	24.30	1.169	0.126	21.9
Top side-24mm	40	QPSK 108_54	376000/1880	1:1	0.255	0.02	23.62	24.30	1.169	0.298	21.9

Table 24： SAR of 5G NR n2 for Body.

8.2.16 SAR Result of 5G NR n5

SA N5 SAR Test Record											
Ant2 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side	25	QPSK 1_1	167300/836.5	1:1	0.980	-0.01	19.87	20.30	1.104	1.082	22.3
Back side-Repeat SAR	25	QPSK 1_1	167300/836.5	1:1	0.971	0.03	19.87	20.30	1.104	1.072	22.3
Right side	25	QPSK 1_1	167300/836.5	1:1	0.601	0.17	19.87	20.30	1.104	0.664	22.3
Top side	25	QPSK 1_1	167300/836.5	1:1	0.435	0.12	19.87	20.30	1.104	0.480	22.3
Back side-sample2	25	QPSK 1_1	167300/836.5	1:1	0.969	0.01	19.87	20.30	1.104	1.070	22.3
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	25	QPSK 64_33	167300/836.5	1:1	0.605	0.12	19.79	20.30	1.125	0.680	22.3
Right side	25	QPSK 64_33	167300/836.5	1:1	0.450	-0.05	19.79	20.30	1.125	0.506	22.3
Top side	25	QPSK 64_33	167300/836.5	1:1	0.285	0.13	19.79	20.30	1.125	0.321	22.3
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	25	QPSK 128_0	167300/836.5	1:1	0.625	-0.19	19.73	20.30	1.140	0.713	22.3
Body (Sensor off) Test data(1RB)											
Back side-25mm	25	QPSK 1_1	167300/836.5	1:1	0.396	-0.10	24.52	24.80	1.067	0.422	22.3
Right side-9mm	25	QPSK 1_1	167300/836.5	1:1	0.170	0.10	24.52	24.80	1.067	0.181	22.3
Top side-25mm	25	QPSK 1_1	167300/836.5	1:1	0.323	-0.05	24.52	24.80	1.067	0.345	22.3
Body (Sensor off) Test data(50%RB)											
Back side-25mm	25	QPSK 64_33	167300/836.5	1:1	0.244	0.17	24.40	24.80	1.096	0.268	22.3
Right side-9mm	25	QPSK 64_33	167300/836.5	1:1	0.127	0.16	24.40	24.80	1.096	0.139	22.3
Top side-25mm	25	QPSK 64_33	167300/836.5	1:1	0.212	0.14	24.40	24.80	1.096	0.232	22.3
Body Test data(Separate 0mm 1RB) - EN-DC											
Back side	25	QPSK 1_1	167300/836.5	1:1	0.980	-0.01	19.87	17.30	0.553	0.542	22.3
Right side	25	QPSK 1_1	167300/836.5	1:1	0.601	0.17	19.87	17.30	0.553	0.333	22.3
Top side	25	QPSK 1_1	167300/836.5	1:1	0.435	0.12	19.87	17.30	0.553	0.241	22.3
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side	25	QPSK 64_33	167300/836.5	1:1	0.605	0.12	19.79	17.30	0.564	0.341	22.3
Right side	25	QPSK 64_33	167300/836.5	1:1	0.450	-0.05	19.79	17.30	0.564	0.254	22.3
Top side	25	QPSK 64_33	167300/836.5	1:1	0.285	0.13	19.79	17.30	0.564	0.161	22.3

Table 25： SAR of 5G NR n5 for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	167300/836.5	0.98	0.971	1.009268795	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						

2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg

8.2.17 SAR Result of 5G NR n25

SA N25 SAR Test Record											
Ant2 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side	40	QPSK 1_1	376500/1882.5	1:1	0.820	-0.04	16.78	17.30	1.127	0.924	21.9
Back side-Repeat SAR	40	QPSK 1_1	376500/1882.5	1:1	0.811	0.05	16.78	17.30	1.127	0.914	21.9
Right side	40	QPSK 1_1	376500/1882.5	1:1	0.639	-0.08	16.78	17.30	1.127	0.720	21.9
Top side	40	QPSK 1_1	376500/1882.5	1:1	0.508	-0.09	16.78	17.30	1.127	0.573	21.9
Back side-sample2	40	QPSK 1_1	376500/1882.5	1:1	0.801	0.04	16.78	17.30	1.127	0.903	21.9
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	40	QPSK 108_54	376500/1882.5	1:1	0.697	-0.03	16.65	17.30	1.161	0.810	21.9
Right side	40	QPSK 108_54	376500/1882.5	1:1	0.312	0.15	16.65	17.30	1.161	0.362	21.9
Top side	40	QPSK 108_54	376500/1882.5	1:1	0.428	-0.18	16.65	17.30	1.161	0.497	21.9
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	40	QPSK 216_0	376500/1882.5	1:1	0.705	-0.06	16.56	17.30	1.186	0.836	21.9
Body (Sensor off) Test data(1RB)											
Back side-25mm	40	QPSK 1_1	376500/1882.5	1:1	0.651	-0.05	23.87	24.30	1.104	0.719	21.9
Right side-9mm	40	QPSK 1_1	376500/1882.5	1:1	0.355	0.02	23.87	24.30	1.104	0.392	21.9
Top side-25mm	40	QPSK 1_1	376500/1882.5	1:1	0.744	0.13	23.87	24.30	1.104	0.821	21.9
Body (Sensor off) Test data(50%RB)											
Back side-25mm	40	QPSK 108_54	376500/1882.5	1:1	0.554	0.19	23.72	24.30	1.143	0.633	21.9
Right side-9mm	40	QPSK 108_54	376500/1882.5	1:1	0.173	0.08	23.72	24.30	1.143	0.198	21.9
Top side-25mm	40	QPSK 108_54	376500/1882.5	1:1	0.626	-0.16	23.72	24.30	1.143	0.715	21.9
Body (Sensor off) Test data(100%RB)											
Top side-25mm	40	QPSK 216_0	376500/1882.5	1:1	0.582	0.02	22.78	23.30	1.127	0.656	21.9
SAR Test Record For 5G NR n2 ENDC											
Ant2 Test Record											
Body Test data(Separate 0mm 1RB) - EN-DC											
Back side	40	QPSK 1_1	376500/1882.5	1:1	0.820	-0.04	16.78	14.80	0.634	0.520	21.9
Right side	40	QPSK 1_1	376500/1882.5	1:1	0.639	-0.08	16.78	14.80	0.634	0.405	21.9
Top side	40	QPSK 1_1	376500/1882.5	1:1	0.508	-0.09	16.78	14.80	0.634	0.322	21.9
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side	40	QPSK 108_54	376500/1882.5	1:1	0.697	-0.03	16.65	14.80	0.653	0.455	21.9
Right side	40	QPSK 108_54	376500/1882.5	1:1	0.312	0.15	16.65	14.80	0.653	0.204	21.9
Top side	40	QPSK 108_54	376500/1882.5	1:1	0.428	-0.18	16.65	14.80	0.653	0.280	21.9
Body (Sensor off) Test data(1RB)-ENDC											
Back side-25mm	40	QPSK 1_1	376000/1880	1:1	0.651	-0.05	23.87	21.30	0.553	0.360	21.9

Right side-9mm	40	QPSK 1_1	376500/1882.5	1:1	0.355	0.02	23.87	21.30	0.553	0.196	21.9
Top side-25mm	40	QPSK 1_1	376500/1882.5	1:1	0.744	0.13	23.87	21.30	0.553	0.412	21.9
Body (Sensor off) Test data(50%RB)-ENDC											
Back side-25mm	40	QPSK 108_54	376500/1882.5	1:1	0.554	0.19	23.72	21.30	0.573	0.317	21.9
Right side-9mm	40	QPSK 108_54	376500/1882.5	1:1	0.173	0.08	23.72	21.30	0.573	0.099	21.9
Top side-25mm	40	QPSK 108_54	376500/1882.5	1:1	0.626	-0.16	23.72	21.30	0.573	0.359	21.9
Body (Sensor off) Test data(100%RB)-ENDC											
Top side-25mm	40	QPSK 216_0	376500/1882.5	1:1	0.582	0.02	22.78	21.30	0.711	0.414	21.9

Table 26： SAR of 5G NR n25 for Body is covering 5G NR N2.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	376500/1882.5	0.82	0.811	1.01109741	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.18 SAR Result of 5G NR n30

SA N30 SAR Test Record											
Ant1 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side	10	QPSK 1_1	462000/2310	1:1	0.892	0.05	13.23	14.30	1.279	1.141	22.4
Back side-Repeat SAR	10	QPSK 1_1	462000/2310	1:1	0.868	0.03	13.23	14.30	1.279	1.111	22.4
Right side	10	QPSK 1_1	462000/2310	1:1	0.289	-0.02	13.23	14.30	1.279	0.370	22.4
Top side	10	QPSK 1_1	462000/2310	1:1	0.275	0.12	13.23	14.30	1.279	0.352	22.4
Back side-sample2	10	QPSK 1_1	462000/2310	1:1	0.874	0.02	13.23	14.30	1.279	1.118	22.4
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	10	QPSK 25_14	462000/2310	1:1	0.793	0.14	13.07	14.30	1.327	1.053	22.4
Right side	10	QPSK 25_14	462000/2310	1:1	0.214	-0.11	13.07	14.30	1.327	0.284	22.4
Top side	10	QPSK 25_14	462000/2310	1:1	0.231	0.11	13.07	14.30	1.327	0.307	22.4
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	10	QPSK 50_0	462000/2310	1:1	0.786	-0.10	13.05	14.30	1.334	1.048	22.4
Body (Sensor off) Test data(1RB)											
Back side-22mm	10	QPSK 1_1	462000/2310	1:1	0.427	0.01	22.75	23.80	1.274	0.544	22.4
Right side-19mm	10	QPSK 1_1	462000/2310	1:1	0.670	0.03	22.75	23.80	1.274	0.853	22.4
Top side-19mm	10	QPSK 1_1	462000/2310	1:1	0.216	0.03	22.75	23.80	1.274	0.275	22.4
Body (Sensor off) Test data(50%RB)											
Back side-22mm	10	QPSK 25_14	462000/2310	1:1	0.380	-0.10	22.64	23.80	1.306	0.496	22.4
Right side-19mm	10	QPSK 25_14	462000/2310	1:1	0.496	-0.04	22.64	23.80	1.306	0.648	22.4
Top side-19mm	10	QPSK 25_14	462000/2310	1:1	0.185	0.12	22.64	23.80	1.306	0.242	22.4
Body (Sensor off) Test data(100%RB)											
Right side-19mm	10	QPSK 50_0	462000/2310	1:1	0.463	0.16	21.75	22.80	1.274	0.590	22.4
Body Test data(Separate 0mm 1RB) - EN-DC											
Back side	10	QPSK 1_1	462000/2310	1:1	0.892	0.05	13.23	11.30	0.641	0.572	22.4
Right side	10	QPSK 1_1	462000/2310	1:1	0.289	-0.02	13.23	11.30	0.641	0.185	22.4
Top side	10	QPSK 1_1	462000/2310	1:1	0.275	0.12	13.23	11.30	0.641	0.176	22.4
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side	10	QPSK 25_14	462000/2310	1:1	0.793	0.14	13.07	11.30	0.665	0.528	22.4
Right side	10	QPSK 25_14	462000/2310	1:1	0.214	-0.11	13.07	11.30	0.665	0.142	22.4
Top side	10	QPSK 25_14	462000/2310	1:1	0.231	0.11	13.07	11.30	0.665	0.154	22.4
Body (Sensor off) Test data(1RB)-ENDC											
Back side-22mm	10	QPSK 1_1	462000/2310	1:1	0.427	0.01	22.75	20.80	0.638	0.273	22.4
Right side-19mm	10	QPSK 1_1	462000/2310	1:1	0.670	0.03	22.75	20.80	0.638	0.428	22.4
Top side-19mm	10	QPSK 1_1	462000/2310	1:1	0.216	0.03	22.75	20.80	0.638	0.138	22.4

Body (Sensor off) Test data(50%RB)-ENDC											
Back side-22mm	10	QPSK 25_14	462000/2310	1:1	0.380	-0.10	22.64	20.80	0.655	0.249	22.4
Right side-19mm	10	QPSK 25_14	462000/2310	1:1	0.496	-0.04	22.64	20.80	0.655	0.325	22.4
Top side-19mm	10	QPSK 25_14	462000/2310	1:1	0.185	0.12	22.64	20.80	0.655	0.121	22.4
Body (Sensor off) Test data(100%RB)-ENDC											
Right side-19mm	10	QPSK 50_0	462000/2310	1:1	0.463	0.16	21.75	20.80	0.804	0.372	22.4

Table 27： SAR of 5G NR n30 for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	462000/2310	0.892	0.868	1.02764977	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.19 SAR Result of 5G NR n41 (PC3&2)

SA N41 SAR Test Record											
Ant1 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.864	-0.07	13.95	14.30	1.084	0.937	22.1
Back side PC3-Repeat SAR	100	QPSK 1_1	518598/2592.99	1:1.30	0.859	0.02	13.95	14.30	1.084	0.931	22.1
Right side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.153	-0.03	13.95	14.30	1.084	0.166	22.1
Top side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.526	-0.12	13.95	14.30	1.084	0.570	22.1
Back side PC3-sample2	100	QPSK 1_1	518598/2592.99	1:1.30	0.835	0.02	13.95	14.30	1.084	0.905	22.1
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.832	0.00	13.88	14.30	1.102	0.916	22.1
Right side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.147	-0.16	13.88	14.30	1.102	0.162	22.1
Top side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.509	0.01	13.88	14.30	1.102	0.561	22.1
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side-PC3	100	QPSK 270_0	518598/2592.99	1:1.30	0.824	0.09	13.89	14.30	1.099	0.906	22.1
Body (Sensor off) Test data(1RB)											
Back side PC2-22mm	100	QPSK 1_1	518598/2592.99	1:2.0	0.809	-0.15	26.18	26.80	1.153	0.933	22.1
Right side PC2-19mm	100	QPSK 1_1	518598/2592.99	1:2.0	0.791	-0.09	26.18	26.80	1.153	0.912	22.1
Top side PC2-19mm	100	QPSK 1_1	518598/2592.99	1:2.0	0.810	0.13	26.18	26.80	1.153	0.934	22.1
Top side PC3-19mm	100	QPSK 1_1	518598/2592.99	1:1.30	0.620	0.13	22.46	23.80	1.361	0.844	22.1
Body (Sensor off) Test data(50%RB)											
Back side PC2-22mm	100	QPSK 135_69	518598/2592.99	1:2.0	0.746	0.07	26.05	26.80	1.189	0.887	22.1
Right side PC2-19mm	100	QPSK 135_69	518598/2592.99	1:2.0	0.782	0.01	26.05	26.80	1.189	0.929	22.1
Top side PC2-19mm	100	QPSK 135_69	518598/2592.99	1:2.0	0.782	0.02	26.05	26.80	1.189	0.929	22.1
Body (Sensor off) Test data(100%RB)											
Back side PC2-22mm	100	QPSK 270_0	518598/2592.99	1:2.0	0.711	0.04	25.08	25.80	1.180	0.839	22.1
Right side PC2-19mm	100	QPSK 270_0	518598/2592.99	1:2.0	0.745	-0.07	25.08	25.80	1.180	0.879	22.1
Top side PC2-19mm	100	QPSK 270_0	518598/2592.99	1:2.0	0.742	0.01	25.08	25.80	1.180	0.876	22.1
Body Test data(Separate 0mm 1RB) - EN-DC											
Back side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.864	-0.07	13.95	11.80	0.610	0.527	22.1
Right side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.153	-0.03	13.95	11.80	0.610	0.093	22.1
Top side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.526	-0.12	13.95	11.80	0.610	0.321	22.1
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.832	0.00	13.88	11.80	0.619	0.515	22.1
Right side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.147	-0.16	13.88	11.80	0.619	0.091	22.1
Top side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.509	0.01	13.88	11.80	0.619	0.315	22.1
Body (Sensor off) Test data(1RB)-ENDC											

Back side PC2-22mm	100	QPSK 1_1	518598/2592.99	1:2.0	0.809	-0.15	26.18	23.30	0.515	0.417	22.1
Right side PC2-19mm	100	QPSK 1_1	518598/2592.99	1:2.0	0.791	-0.09	26.18	23.30	0.515	0.408	22.1
Top side PC2-19mm	100	QPSK 1_1	518598/2592.99	1:2.0	0.810	0.13	26.18	23.30	0.515	0.417	22.1
Top side PC3-19mm	100	QPSK 1_1	518598/2592.99	1:1.30	0.620	0.13	26.18	23.30	0.515	0.319	22.1
Body (Sensor off) Test data(50%RB)-ENDC											
Back side PC2-22mm	100	QPSK 135_69	518598/2592.99	1:2.0	0.746	0.07	26.05	23.30	0.531	0.396	22.1
Right side PC2-19mm	100	QPSK 135_69	518598/2592.99	1:2.0	0.782	0.01	26.05	23.30	0.531	0.415	22.1
Top side PC2-19mm	100	QPSK 135_69	518598/2592.99	1:2.0	0.782	0.02	26.05	23.30	0.531	0.415	22.1
Body (Sensor off) Test data(100%RB)-EN DC											
Back side PC2-22mm	100	QPSK 270_0	518598/2592.99	1:2.0	0.711	0.04	25.08	23.30	0.664	0.472	22.1
Right side PC2-19mm	100	QPSK 270_0	518598/2592.99	1:2.0	0.745	-0.07	25.08	23.30	0.664	0.494	22.1
Top side PC2-19mm	100	QPSK 270_0	518598/2592.99	1:2.0	0.742	0.01	25.08	23.30	0.664	0.492	22.1
Ant5 Test Record											
Test position	**BW.**	**Modulation**	**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)**	**Liquid Temp.(℃)**
Body Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.144	0.02	4.62	5.80	1.312	0.189	22.1
Top side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.216	-0.13	4.62	5.80	1.312	0.283	22.1
Top side-PC2	100	QPSK 1_1	518598/2592.99	1:2.0	0.516	0.19	8.35	8.80	1.109	0.572	22.1
Body Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.116	-0.09	4.36	5.80	1.393	0.162	22.1
Top side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.186	0.03	4.36	5.80	1.393	0.259	22.1
Ant6 Test Record											
Test position	**BW.**	**Modulation**	**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)**	**Liquid Temp.(℃)**
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.815	-0.05	16.36	16.80	1.107	0.902	22.1
Top side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.605	-0.11	16.36	16.80	1.107	0.670	22.1
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.736	0.16	16.26	16.80	1.132	0.833	22.1
Top side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.455	0.05	16.26	16.80	1.132	0.515	22.1
Body (Sensor off) Test data(1RB)											
Back side PC2-19mm	100	QPSK 1_1	518598/2592.99	1:2.0	0.323	0.09	24.88	25.80	1.236	0.399	22.1
Left side PC2 0mm	100	QPSK 1_1	518598/2592.99	1:2.0	0.305	0.05	24.88	25.80	1.236	0.377	22.1
Top side PC2-24mm	100	QPSK 1_1	518598/2592.99	1:2.0	0.354	0.01	24.88	25.80	1.236	0.438	22.1
Top side PC3-24mm	100	QPSK 1_1	518598/2592.99	1:2.0	0.227	0.01	21.43	21.80	1.089	0.247	22.1
Body (Sensor off) Test data(50%RB)											
Back side PC2-19mm	100	QPSK 135_69	518598/2592.99	1:2.0	0.254	-0.03	24.63	25.80	1.309	0.333	22.1
Left side PC2 0mm	100	QPSK 135_69	518598/2592.99	1:1	0.286	0.09	24.63	25.80	1.309	0.374	22.1
Top side PC2-24mm	100	QPSK 135_69	518598/2592.99	1:2.0	0.313	0.14	24.63	25.80	1.309	0.410	22.1

Body Test data(Separate 0mm 1RB) - EN-DC											
Back side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.815	-0.05	16.36	14.80	0.698	0.569	22.1
Left side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.194	0.02	16.36	14.80	0.698	0.135	22.1
Top side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.605	-0.11	16.36	14.80	0.698	0.422	22.1
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.736	0.16	16.26	14.80	0.714	0.526	22.1
Left side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.164	0.09	16.26	14.80	0.714	0.117	22.1
Top side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.455	0.05	16.26	14.80	0.714	0.325	22.1
Ant7 Test Record											
Test position	**BW.**	**Modulation**	**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)**	**Liquid Temp.(℃)**
Body Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.238	0.14	8.72	9.80	1.282	0.305	22.1
Back side-PC2	100	QPSK 1_1	518598/2592.99	1:2.0	0.473	0.01	11.88	12.80	1.236	0.585	22.1
Left side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.136	0.05	8.72	9.80	1.282	0.174	22.1
Top side-PC3	100	QPSK 1_1	518598/2592.99	1:1.30	0.049	-0.02	8.72	9.80	1.282	0.063	22.1
Body Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.216	0.14	8.53	9.80	1.340	0.289	22.1
Left side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.119	0.07	8.53	9.80	1.340	0.159	22.1
Top side-PC3	100	QPSK 135_69	518598/2592.99	1:1.30	0.035	0.11	8.53	9.80	1.340	0.047	22.1

Table 28： SAR of 5G NR n41 (PC3&2) for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	518598/2592.99	0.864	0.859	1.00582072	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.20 SAR Result of 5G NR n48

SA N48 SAR Test Record											
Ant3 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side	100	QPSK 1_1	641666/3624.99	1:1.30	0.654	0.05	11.56	12.80	1.330	0.870	22.2
Top side	100	QPSK 1_1	641666/3624.99	1:1.30	0.179	-0.11	11.56	12.80	1.330	0.238	22.2
Back side-sample2	100	QPSK 1_1	641666/3624.99	1:1.30	0.616	0.19	11.56	12.80	1.330	0.820	22.2
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	100	QPSK 135_69	641666/3624.99	1:1.30	0.517	0.08	11.39	12.80	1.384	0.715	22.2
Top side	100	QPSK 135_69	641666/3624.99	1:1.30	0.140	0.12	11.39	12.80	1.384	0.194	22.2
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	100	QPSK 270_0	641666/3624.99	1:1.30	0.525	0.12	11.39	12.80	1.384	0.726	22.2
Body (Sensor off) Test data(1RB)											
Back side-19mm	100	QPSK 1_1	641666/3624.99	1:1.30	0.412	0.09	23.68	24.80	1.294	0.533	22.2
Top side-9mm	100	QPSK 1_1	641666/3624.99	1:1.30	0.596	0.02	23.68	24.80	1.294	0.771	22.2
Body (Sensor off) Test data(50%RB)											
Back side-19mm	100	QPSK 135_69	641666/3624.99	1:1.30	0.386	0.11	23.30	24.80	1.413	0.545	22.2
Top side-9mm	100	QPSK 135_69	641666/3624.99	1:1.30	0.525	-0.03	23.30	24.80	1.413	0.742	22.2

Table 29： SAR of 5G NR n48 for Body.

8.2.21 SAR Result of 5G NR n66

SA N66 SAR Test Record											
Ant2 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side	40	QPSK 1_1	349000/1745	1:1	0.768	-0.16	16.43	16.80	1.089	0.836	22.1
Right side	40	QPSK 1_1	349000/1745	1:1	0.196	0.16	16.43	16.80	1.089	0.213	22.1
Top side	40	QPSK 1_1	349000/1745	1:1	0.389	0.02	16.43	16.80	1.089	0.424	22.1
Back side-sample2	40	QPSK 1_1	349000/1745	1:1	0.711	0.14	16.43	16.80	1.089	0.774	22.1
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	40	QPSK 108_54	349000/1745	1:1	0.562	-0.10	16.32	16.80	1.117	0.628	22.1
Right side	40	QPSK 108_54	349000/1745	1:1	0.166	0.03	16.32	16.80	1.117	0.185	22.1
Top side	40	QPSK 108_54	349000/1745	1:1	0.291	-0.11	16.32	16.80	1.117	0.325	22.1
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	40	QPSK 216_0	349000/1745	1:1	0.566	0.17	16.30	16.80	1.122	0.635	22.1
Body (Sensor off) Test data(1RB)											
Back side-25mm	40	QPSK 1_1	349000/1745	1:1	0.737	-0.05	23.99	24.30	1.074	0.792	22.1
Right side-9mm	40	QPSK 1_1	349000/1745	1:1	0.132	-0.09	23.99	24.30	1.074	0.142	22.1
Top side-25mm	40	QPSK 1_1	349000/1745	1:1	0.688	-0.18	23.99	24.30	1.074	0.739	22.1
Body (Sensor off) Test data(50%RB)											
Back side-25mm	40	QPSK 108_54	349000/1745	1:1	0.539	0.10	23.98	24.30	1.076	0.580	22.1
Right side-9mm	40	QPSK 108_54	349000/1745	1:1	0.111	0.14	23.98	24.30	1.076	0.119	22.1
Top side-25mm	40	QPSK 108_54	349000/1745	1:1	0.515	-0.05	23.98	24.30	1.076	0.554	22.1
Body Test data(Separate 0mm 1RB) - EN-DC											
Back side	40	QPSK 1_1	349000/1745	1:1	0.768	-0.16	16.43	14.80	0.687	0.528	22.1
Right side	40	QPSK 1_1	349000/1745	1:1	0.196	0.16	16.43	14.80	0.687	0.135	22.1
Top side	40	QPSK 1_1	349000/1745	1:1	0.389	0.02	16.43	14.80	0.687	0.267	22.1
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side	40	QPSK 108_54	349000/1745	1:1	0.562	-0.10	16.32	14.80	0.705	0.396	22.1
Right side	40	QPSK 108_54	349000/1745	1:1	0.166	0.03	16.32	14.80	0.705	0.117	22.1
Top side	40	QPSK 108_54	349000/1745	1:1	0.291	-0.11	16.32	14.80	0.705	0.205	22.1
Body (Sensor off) Test data(1RB)-ENDC											
Back side-25mm	40	QPSK 1_1	349000/1745	1:1	0.737	-0.05	23.99	21.30	0.538	0.397	22.1
Right side-9mm	40	QPSK 1_1	349000/1745	1:1	0.132	-0.09	23.99	21.30	0.538	0.071	22.1
Top side-25mm	40	QPSK 1_1	349000/1745	1:1	0.688	-0.18	23.99	21.30	0.538	0.370	22.1
Body (Sensor off) Test data(50%RB)-ENDC											
Back side-25mm	40	QPSK 108_54	349000/1745	1:1	0.539	0.10	23.98	21.30	0.540	0.291	22.1
Right side-9mm	40	QPSK 108_54	349000/1745	1:1	0.111	0.14	23.98	21.30	0.540	0.060	22.1

Top side-25mm	40	QPSK 108_54	349000/1745	1:1	0.515	-0.05	23.98	21.30	0.540	0.278	22.1
Ant 6 Test Record											
Test position	**BW.**	**Modulation**	**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)**	**Liquid Temp.(℃)**
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side	40	QPSK 1_1	349000/1745	1:1	0.462	-0.03	12.36	12.80	1.107	0.511	22.1
Top side	40	QPSK 1_1	349000/1745	1:1	0.363	0.11	12.36	12.80	1.107	0.402	22.1
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	40	QPSK 108_54	349000/1745	1:1	0.407	0.02	11.98	12.80	1.208	0.492	22.1
Top side	40	QPSK 108_54	349000/1745	1:1	0.340	0.06	11.98	12.80	1.208	0.411	22.1
Body (Sensor off) Test data(1RB)											
Back side-19mm	40	QPSK 1_1	349000/1745	1:1	0.416	0.05	23.86	24.30	1.107	0.460	22.1
Left side	40	QPSK 1_1	349000/1745	1:1	0.314	-0.02	23.86	24.30	1.107	0.347	22.1
Top side-24mm	40	QPSK 1_1	349000/1745	1:1	0.422	0.15	23.86	24.30	1.107	0.467	22.1
Body (Sensor off) Test data(50%RB)											
Back side-19mm	40	QPSK 108_54	349000/1745	1:1	0.344	0.14	23.79	24.30	1.125	0.387	22.1
Left side	40	QPSK 108_54	349000/1745	1:1	0.275	0.10	23.79	24.30	1.125	0.309	22.1
Top side-24mm	40	QPSK 108_54	349000/1745	1:1	0.362	0.02	23.79	24.30	1.125	0.407	22.1

Table 30： SAR of 5G NR n66 for Body.

8.2.22 SAR Result of 5G NR n70

SA N70 SAR Test Record											
Ant2 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side	15	QPSK 1_1	340500/1702.5	1:1	0.823	-0.13	16.26	16.80	1.132	0.932	22.1
Back side-Repeat SAR	15	QPSK 1_1	340500/1702.5	1:1	0.816	0.02	16.26	16.80	1.132	0.924	22.1
Right side	15	QPSK 1_1	340500/1702.5	1:1	0.179	0.17	16.26	16.80	1.132	0.203	22.1
Top side	15	QPSK 1_1	340500/1702.5	1:1	0.435	0.13	16.26	16.80	1.132	0.493	22.1
Back side-sample2	15	QPSK 1_1	340500/1702.5	1:1	0.785	0.02	16.26	16.80	1.132	0.889	22.1
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	15	QPSK 36_22	340500/1702.5	1:1	0.747	0.16	16.17	16.80	1.156	0.864	22.1
Right side	15	QPSK 36_22	340500/1702.5	1:1	0.140	-0.11	16.17	16.80	1.156	0.162	22.1
Top side	15	QPSK 36_22	340500/1702.5	1:1	0.344	-0.13	16.17	16.80	1.156	0.398	22.1
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	15	QPSK 75_0	340500/1702.5	1:1	0.769	-0.06	16.13	16.80	1.167	0.897	22.1
Body (Sensor off) Test data(1RB)											
Back side-25mm	15	QPSK 1_1	340500/1702.5	1:1	0.812	0.17	23.78	24.30	1.127	0.915	22.1
Right side-9mm	15	QPSK 1_1	340500/1702.5	1:1	0.124	0.16	23.78	24.30	1.127	0.140	22.1
Top side-25mm	15	QPSK 1_1	340500/1702.5	1:1	0.791	-0.04	23.78	24.30	1.127	0.892	22.1
Body (Sensor off) Test data(50%RB)											
Back side-25mm	15	QPSK 36_22	340500/1702.5	1:1	0.738	0.03	23.68	24.30	1.153	0.851	22.1
Right side-9mm	15	QPSK 36_22	340500/1702.5	1:1	0.069	0.04	23.68	24.30	1.153	0.080	22.1
Top side-25mm	15	QPSK 36_22	340500/1702.5	1:1	0.536	0.03	23.68	24.30	1.153	0.618	22.1
Body (Sensor off) Test data(100%RB)											
Back side-25mm	15	QPSK 75_0	340500/1702.5	1:1	0.684	0.15	22.54	23.30	1.191	0.815	22.1
Top side-25mm	15	QPSK 75_0	340500/1702.5	1:1	0.492	-0.11	22.54	23.30	1.191	0.586	22.1

Table 31： SAR of 5G NR n70 for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	340500/1702.5	0.823	0.816	1.00857843	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.23 SAR Result of 5G NR n71

SA N71 SAR Test Record											
Ant2 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side	30	QPSK 1_1	136100/680.5	1:1	1.060	0.03	21.56	21.80	1.057	1.120	22.2
Back side-Repeat SAR	30	QPSK 1_1	136100/680.5	1:1	0.992	-0.13	21.56	21.80	1.057	1.048	22.2
Right side	30	QPSK 1_1	136100/680.5	1:1	0.793	-0.01	21.56	21.80	1.057	0.838	22.2
Top side	30	QPSK 1_1	136100/680.5	1:1	0.786	0.09	21.56	21.80	1.057	0.831	22.2
Back side-sample2	30	QPSK 1_1	136100/680.5	1:1	0.982	0.01	21.56	21.80	1.057	1.038	22.2
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side	30	QPSK 80_40	136100/680.5	1:1	0.836	-0.10	21.47	21.80	1.079	0.902	22.2
Right side	30	QPSK 80_40	136100/680.5	1:1	0.627	0.18	21.47	21.80	1.079	0.676	22.2
Top side	30	QPSK 80_40	136100/680.5	1:1	0.542	-0.03	21.47	21.80	1.079	0.585	22.2
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side	30	QPSK 160_0	136100/680.5	1:1	0.816	0.09	21.43	21.80	1.089	0.889	22.2
Right side	30	QPSK 160_0	136100/680.5	1:1	0.605	-0.14	21.43	21.80	1.089	0.659	22.2
Top side	30	QPSK 160_0	136100/680.5	1:1	0.549	0.08	21.43	21.80	1.089	0.598	22.2
Body (Sensor off) Test data(1RB)											
Back side-25mm	30	QPSK 1_1	136100/680.5	1:1	0.235	-0.06	24.43	24.80	1.089	0.256	22.2
Right side-9mm	30	QPSK 1_1	136100/680.5	1:1	0.123	-0.08	24.43	24.80	1.089	0.134	22.2
Top side-25mm	30	QPSK 1_1	136100/680.5	1:1	0.321	-0.12	24.43	24.80	1.089	0.350	22.2
Body (Sensor off) Test data(50%RB)											
Back side-25mm	30	QPSK 80_40	136100/680.5	1:1	0.185	0.17	24.36	24.80	1.107	0.205	22.2
Right side-9mm	30	QPSK 80_40	136100/680.5	1:1	0.097	0.05	24.36	24.80	1.107	0.107	22.2
Top side-25mm	30	QPSK 80_40	136100/680.5	1:1	0.221	0.04	24.36	24.80	1.107	0.245	22.2
Body Test data(Separate 0mm 1RB) - EN-DC											
Back side	30	QPSK 1_1	136100/680.5	1:1	1.060	0.03	21.56	18.80	0.530	0.561	22.2
Right side	30	QPSK 1_1	136100/680.5	1:1	0.793	-0.01	21.56	18.80	0.530	0.420	22.2
Top side	30	QPSK 1_1	136100/680.5	1:1	0.786	0.09	21.56	18.80	0.530	0.416	22.2
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side	30	QPSK 80_40	136100/680.5	1:1	0.836	-0.10	21.47	18.80	0.541	0.452	22.2
Right side	30	QPSK 80_40	136100/680.5	1:1	0.627	0.18	21.47	18.80	0.541	0.339	22.2
Top side	30	QPSK 80_40	136100/680.5	1:1	0.542	-0.03	21.47	18.80	0.541	0.293	22.2

Table 32： SAR of 5G NR n71 for Body.

Test Position	Channel/ Frequency	Measured SAR (1g)	1st Repeated	Ratio	2nd Repeated	3rd Repeated

	(MHz)		SAR (1g)		SAR (1g)	SAR (1g)
Back side	136100/680.5	1.06	0.992	1.06854839	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.24 SAR Result of 5G NR n77 Part 27Q

SA N77 SAR Test Record											
Ant1 Test Record											
Test position	**BW.**	**Modulation**	**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)**	**Liquid Temp.(℃)**
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.624	0.05	14.54	15.30	1.191	0.743	21.9
Right side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.357	0.09	14.54	15.30	1.191	0.425	21.9
Top side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.134	0.11	14.54	15.30	1.191	0.160	21.9
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.578	-0.03	14.31	15.30	1.256	0.726	21.9
Right side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.294	0.14	14.31	15.30	1.256	0.369	21.9
Top side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.116	-0.06	14.31	15.30	1.256	0.146	21.9
Body (Sensor off) Test data(1RB)											
Back side PC3-22mm	100	QPSK 1_1	633334/3500	1:1.30	0.182	-0.14	20.79	21.30	1.125	0.205	21.9
Right side PC3-19mm	100	QPSK 1_1	633334/3500	1:1.30	0.335	0.05	20.79	21.30	1.125	0.377	21.9
Right side PC2-19mm	100	QPSK 1_1	633334/3500	1:2.0	0.428	0.01	23.74	24.30	1.138	0.487	21.9
Top side PC3-19mm	100	QPSK 1_1	633334/3500	1:1.30	0.138	0.03	20.79	21.30	1.125	0.155	21.9
Body (Sensor off) Test data(50%RB)											
Back side PC3-22mm	100	QPSK 135_69	633334/3500	1:1.30	0.145	0.04	23.60	24.30	1.175	0.170	21.9
Right side PC3-19mm	100	QPSK 135_69	633334/3500	1:1.30	0.292	0.02	23.60	24.30	1.175	0.343	21.9
Top side PC3-19mm	100	QPSK 135_69	633334/3500	1:1.30	0.121	-0.05	23.60	24.30	1.175	0.142	21.9
Body Test data(Separate 0mm 1RB) - EN-DC											
Back side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.654	0.05	14.54	13.30	0.752	0.492	21.9
Right side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.357	0.09	14.54	13.30	0.752	0.268	21.9
Top side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.140	0.11	14.54	13.30	0.752	0.105	21.9
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.608	-0.03	14.31	13.30	0.793	0.482	21.9
Right side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.294	0.14	14.31	13.30	0.793	0.233	21.9
Top side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.116	-0.06	14.31	13.30	0.793	0.092	21.9
Ant3 Test Record											
Test position	**BW.**	**Modulation**	**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)**	**Liquid Temp.(℃)**
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.638	0.09	10.75	11.50	1.189	0.758	21.9
Top side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.142	0.06	10.75	11.50	1.189	0.169	21.9
Back side PC3-sample2	100	QPSK 1_1	633334/3500	1:1.30	0.612	0.14	10.75	11.50	1.189	0.727	21.9
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.585	-0.13	10.45	11.50	1.274	0.745	21.9

Top side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.138	-0.18	10.45	11.50	1.274	0.176	21.9
Body (Sensor off) Test data(1RB)											
Back side PC3-19mm	100	QPSK 1_1	633334/3500	1:1.30	0.382	0.03	21.99	23.00	1.262	0.482	21.9
Top side PC3-9mm	100	QPSK 1_1	633334/3500	1:1.30	0.569	-0.11	21.99	23.00	1.262	0.718	21.9
Top side PC2-9mm	100	QPSK 1_1	633334/3500	1:2.0	0.595	0.07	22.98	24.00	1.265	0.753	21.9
Body (Sensor off) Test data(50%RB)											
Back side PC3-19mm	100	QPSK 135_69	633334/3500	1:1.30	0.316	0.02	21.94	23.00	1.276	0.403	21.9
Top side PC3-9mm	100	QPSK 135_69	633334/3500	1:1.30	0.482	0.01	21.94	23.00	1.276	0.615	21.9
Body Test data(Separate 0mm 1RB) - EN-DC											
Back side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.638	0.09	10.75	9.50	0.750	0.478	21.9
Top side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.142	0.06	10.75	9.50	0.750	0.106	21.9
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.585	-0.13	10.45	9.50	0.804	0.470	21.9
Top side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.138	-0.18	10.45	9.50	0.804	0.111	21.9
Body (Sensor off) Test data(1RB)-ENDC											
Back side PC3-19mm	100	QPSK 1_1	633334/3500	1:1.30	0.382	0.03	21.99	20.00	0.632	0.242	21.9
Top side PC3-9mm	100	QPSK 1_1	633334/3500	1:1.30	0.569	-0.11	21.99	20.00	0.632	0.360	21.9
Top side PC2-9mm	100	QPSK 1_1	633334/3500	1:2.0	0.595	0.07	22.98	20.00	0.504	0.300	21.9
Body (Sensor off) Test data(50%RB)-ENDC											
Back side PC3-19mm	100	QPSK 135_69	633334/3500	1:1.30	0.316	0.02	21.94	20.00	0.640	0.202	21.9
Top side PC3-9mm	100	QPSK 135_69	633334/3500	1:1.30	0.482	0.01	21.94	20.00	0.640	0.308	21.9
Ant5 Test Record											
Test position	**BW.**	**Modulation**	**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)**	**Liquid Temp.(℃)**
Body Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.229	0.01	10.59	11.30	1.178	0.270	21.9
Back side-PC2	100	QPSK 1_1	633334/3500	1:2.0	0.437	-0.02	13.48	14.30	1.208	0.528	21.9
Top side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.216	0.16	10.59	11.30	1.178	0.254	21.9
Body Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.214	0.05	10.46	11.30	1.213	0.260	21.9
Top side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.202	0.01	10.46	11.30	1.213	0.245	21.9
Ant7 Test Record											
Test position	**BW.**	**Modulation**	**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)**	**Liquid Temp.(℃)**
Body Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.079	0.14	8.53	9.30	1.194	0.094	21.9
Left side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.239	-0.03	8.53	9.30	1.194	0.285	21.9
Left side-PC2	100	QPSK 1_1	633334/3500	1:2.0	0.482	0.02	11.44	12.30	1.219	0.588	21.9
Top side-PC3	100	QPSK 1_1	633334/3500	1:1.30	0.011	0.05	8.53	9.30	1.194	0.013	21.9
Body Test data(Separate 0mm 50%RB)											

Back side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.072	-0.02	8.41	9.30	1.227	0.088	21.9
Left side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.226	-0.03	8.41	9.30	1.227	0.277	21.9
Top side-PC3	100	QPSK 135_69	633334/3500	1:1.30	0.010	0.01	8.41	9.30	1.227	0.012	21.9

Table 33： SAR of 5G NR n77 Part 27Q for Body.

8.2.25 SAR Result of 5G NR n77 Part 27O

SA N77 SAR Test Record											
Ant1 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	656000/3840	1:1	0.855	0.01	14.59	15.30	1.178	1.007	22.1
Right side-PC3	100	QPSK 1_1	656000/3840	1:1	0.457	0.09	14.59	15.30	1.178	0.538	22.1
Top side-PC3	100	QPSK 1_1	656000/3840	1:1	0.123	0.04	14.59	15.30	1.178	0.145	22.1
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	656000/3840	1:1	0.736	0.01	14.29	15.30	1.262	0.929	22.1
Right side-PC3	100	QPSK 135_69	656000/3840	1:1	0.416	0.02	14.29	15.30	1.262	0.525	22.1
Top side-PC3	100	QPSK 135_69	656000/3840	1:1	0.092	0.11	14.29	15.30	1.262	0.116	22.1
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side-PC3	100	QPSK 270_0	656000/3840	1:1	0.708	-0.03	14.40	14.40	1.000	0.708	22.1
Body (Sensor off) Test data(1RB)											
Back side PC3-22mm	100	QPSK 1_1	656000/3840	1:1	0.289	0.01	20.76	21.30	1.132	0.327	22.1
Right side PC3-19mm	100	QPSK 1_1	656000/3840	1:1	0.446	0.09	20.76	21.30	1.132	0.505	22.1
Right side PC2-19mm	100	QPSK 1_1	656000/3840	1:1	0.572	0.11	23.82	24.30	1.117	0.639	22.1
Top side PC3-19mm	100	QPSK 1_1	656000/3840	1:1	0.174	0.09	20.76	21.30	1.132	0.197	22.1
Body (Sensor off) Test data(50%RB)											
Back side PC3-22mm	100	QPSK 135_69	656000/3840	1:1	0.224	0.03	20.49	21.30	1.205	0.270	22.1
Right side PC3-19mm	100	QPSK 135_69	656000/3840	1:1	0.374	-0.11	20.49	21.30	1.205	0.451	22.1
Top side PC3-19mm	100	QPSK 135_69	656000/3840	1:1	0.165	0.02	20.49	21.30	1.205	0.199	22.1
Body Test data(Separate 0mm 1RB) - EN-DC											
Back side-PC3	100	QPSK 1_1	656000/3840	1:1	0.855	0.01	14.59	12.30	0.590	0.505	22.1
Right side-PC3	100	QPSK 1_1	656000/3840	1:1	0.457	0.09	14.59	12.30	0.590	0.270	22.1
Top side-PC3	100	QPSK 1_1	656000/3840	1:1	0.123	0.04	14.59	12.30	0.590	0.073	22.1
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side-PC3	100	QPSK 135_69	656000/3840	1:1	0.736	0.01	14.29	12.30	0.632	0.465	22.1
Right side-PC3	100	QPSK 135_69	656000/3840	1:1	0.416	0.02	14.29	12.30	0.632	0.263	22.1
Top side-PC3	100	QPSK 135_69	656000/3840	1:1	0.092	0.11	14.29	12.30	0.632	0.058	22.1
Ant3 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body (Sensor on) Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	656000/3840	1:1	0.982	0.02	10.73	11.50	1.194	1.172	22.1
Back side PC3-Repeat SAR	100	QPSK 1_1	656000/3840	1:1	0.964	0.17	10.73	11.50	1.194	1.151	22.1
Top side-PC3	100	QPSK 1_1	656000/3840	1:1	0.200	-0.05	10.73	11.50	1.194	0.239	22.1

Back side PC3-sample2	100	QPSK 1_1	656000/3840	1:1	0.935	0.04	10.73	11.50	1.194	1.116	22.1
Body (Sensor on) Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	656000/3840	1:1	0.916	-0.10	10.46	11.50	1.271	1.164	22.1
Top side-PC3	100	QPSK 135_69	656000/3840	1:1	0.184	-0.18	10.46	11.50	1.271	0.234	22.1
Body (Sensor on) Test data(Separate 0mm 100%RB)											
Back side-PC3	100	QPSK 270_0	656000/3840	1:1	0.872	-0.04	10.60	11.50	1.230	1.073	22.1
Body (Sensor off) Test data(1RB)											
Back side PC3-19mm	100	QPSK 1_1	656000/3840	1:1	0.578	0.01	22.04	23.00	1.247	0.721	22.1
Top side PC3-9mm	100	QPSK 1_1	656000/3840	1:1	0.752	0.03	22.04	23.00	1.247	0.938	22.1
Top side PC2-9mm	100	QPSK 1_1	656000/3840	1:1	0.816	-0.09	23.16	24.00	1.213	0.990	22.1
Body (Sensor off) Test data(50%RB)											
Back side PC3-19mm	100	QPSK 135_69	656000/3840	1:1	0.516	0.14	21.74	23.00	1.337	0.690	22.1
Top side PC3-9mm	100	QPSK 135_69	656000/3840	1:1	0.667	0.02	21.74	23.00	1.337	0.892	22.1
Body (Sensor off) Test data(Separate 0mm 100%RB)											
Top side PC3-9mm	100	QPSK 270_0	656000/3840	1:1	0.579	-0.03	20.92	22.00	1.282	0.742	22.1
Body Test data(Separate 0mm 1RB) - EN-DC											
Back side-PC3	100	QPSK 1_1	656000/3840	1:1	0.982	0.02	10.73	8.00	0.533	0.524	22.1
Top side-PC3	100	QPSK 1_1	656000/3840	1:1	0.200	-0.05	10.73	8.00	0.533	0.107	22.1
Body Test data(Separate 0mm 50%RB) - EN-DC											
Back side-PC3	100	QPSK 135_69	656000/3840	1:1	0.916	-0.10	10.46	8.00	0.568	0.520	22.1
Top side-PC3	100	QPSK 135_69	656000/3840	1:1	0.184	-0.18	10.46	8.00	0.568	0.104	22.1
Body (Sensor off) Test data(1RB)											
Back side PC3-19mm	100	QPSK 1_1	656000/3840	1:1	0.578	0.01	22.04	20.00	0.625	0.361	22.1
Top side PC3-9mm	100	QPSK 1_1	656000/3840	1:1	0.752	0.03	22.04	20.00	0.625	0.470	22.1
Top side PC2-9mm	100	QPSK 1_1	656000/3840	1:1	0.816	-0.09	23.16	20.00	0.483	0.394	22.1
Body (Sensor off) Test data(50%RB)											
Back side PC3-19mm	100	QPSK 135_69	656000/3840	1:1	0.516	0.14	21.74	20.00	0.670	0.346	22.1
Top side PC3-9mm	100	QPSK 135_69	656000/3840	1:1	0.667	0.02	21.74	20.00	0.670	0.447	22.1
Body (Sensor off) Test data(Separate 0mm 100%RB)											
Top side PC3-9mm	100	QPSK 270_0	656000/3840	1:1	0.579	-0.03	20.92	20.00	0.809	0.468	22.1
Ant 5 Test Record											
Test position	**BW.**	**Modulation**	**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)**	**Liquid Temp.(℃)**
Body Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	656000/3840	1:1	0.233	0.01	10.65	11.30	1.161	0.271	22.1
Back side-PC2	100	QPSK 1_1	656000/3840	1:1	0.442	-0.04	13.53	14.30	1.194	0.528	22.1
Top side-PC3	100	QPSK 1_1	656000/3840	1:1	0.195	-0.02	10.65	11.30	1.161	0.226	22.1
Body Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	656000/3840	1:1	0.216	0.03	10.39	11.30	1.233	0.266	22.1
Top side-PC3	100	QPSK 135_69	656000/3840	1:1	0.176	0.11	10.39	11.30	1.233	0.217	22.1

Ant7 Test Record											
Test position	BW.	Modulation	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)	Liquid Temp.(℃)
Body Test data(Separate 0mm 1RB)											
Back side-PC3	100	QPSK 1_1	656000/3840	1:1	0.085	0.09	8.57	9.30	1.183	0.101	22.1
Left side-PC3	100	QPSK 1_1	656000/3840	1:1	0.249	0.16	8.57	9.30	1.183	0.295	22.1
Left side-PC2	100	QPSK 1_1	656000/3840	1:1	0.475	-0.14	11.36	12.30	1.242	0.590	22.1
Top side-PC3	100	QPSK 1_1	656000/3840	1:1	0.011	0.05	8.57	9.30	1.183	0.013	22.1
Body Test data(Separate 0mm 50%RB)											
Back side-PC3	100	QPSK 135_69	656000/3840	1:1	0.071	0.05	8.26	9.30	1.271	0.090	22.1
Left side-PC3	100	QPSK 135_69	656000/3840	1:1	0.219	0.04	8.26	9.30	1.271	0.278	22.1
Top side-PC3	100	QPSK 135_69	656000/3840	1:1	0.009	0.14	8.26	9.30	1.271	0.011	22.1

Table 34： SAR of 5G NR n77 Part 27O for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Back side	656000/3840	0.982	0.964	1.0186722	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ≥ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

8.2.26 SAR Result of WIFI 2.4G

Wi-Fi 2.4G SAR Test Record											
Test Record											
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)
Body (Sensor on) Test data (Separate 0mm)											
Back side	802.11b	6/2437	99.64%	1.004	0.782	0.08	9.47	10.50	1.268	0.995	22.2
Top side	802.11b	6/2437	99.64%	1.004	0.670	0.06	9.47	10.50	1.268	0.852	22.2
Back side-sample2	802.11b	6/2437	99.64%	1.004	0.759	0.16	9.47	10.50	1.268	0.966	22.2
Body (Sensor off) Test data											
Back side-25mm	802.11b	6/2437	99.64%	1.004	0.375	-0.11	21.57	22.50	1.239	0.466	22.2
Top side-25mm	802.11b	6/2437	99.64%	1.004	0.486	0.17	21.57	22.50	1.239	0.604	22.2
Body Test data (Separate 0mm) - Simultaneous											
Back side	802.11b	6/2437	99.64%	1.004	0.782	0.08	9.47	6.50	0.505	0.396	22.2
Top side	802.11b	6/2437	99.64%	1.004	0.670	-0.14	9.47	6.50	0.505	0.339	22.2
Body (Sensor off) Test data - Simultaneous											
Back side-19mm	802.11b	6/2437	99.64%	1.004	1.090	0.05	21.57	19.00	0.553	0.605	22.2
Top side-9mm	802.11b	6/2437	99.64%	1.004	0.301	0.03	21.57	19.00	0.553	0.167	22.2

Table 35： SAR of WIFI 2.4G for Body.

Note: When 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 test for the other 802.11 modes are not required.

8.2.27 SAR Result of WIFI 5G

Wi-Fi 5G SAR Test Record											
Test Record											
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)
Body (Sensor on) Test data of U-NII-2A(Separate 0mm)											
Back side	802.11n-HT40	62/5310	95.02%	1.052	0.660	0.09	6.97	7.20	1.054	0.732	22.1
Top side	802.11n-HT40	62/5310	95.02%	1.052	1.030	0.02	6.97	7.20	1.054	1.143	22.1
Top side-Repeat SAR	802.11n-HT40	62/5310	95.02%	1.052	0.991	-0.19	6.97	7.20	1.054	1.100	22.1
Top side-sample2	802.11n-HT40	62/5310	95.02%	1.052	0.986	0.09	6.97	7.20	1.054	1.094	22.1
Body (Sensor on) Test data of U-NII-2C(Separate 0mm)											
Back side	802.11n-HT40	110/5550	95.02%	1.052	0.499	-0.12	4.75	5.20	1.109	0.582	22.1
Top side	802.11n-HT40	110/5550	95.02%	1.052	0.635	-0.01	4.75	5.20	1.109	0.741	22.1
Body (Sensor on) Test data of U-NII-3(Separate 0mm)											
Back side	802.11n-HT40	151/5755	95.02%	1.052	0.475	-0.04	3.70	4.70	1.259	0.629	22.1
Top side	802.11n-HT40	151/5755	95.02%	1.052	0.793	0.01	3.70	4.70	1.259	1.051	22.1
Body (Sensor off) Test data of U-NII-2A											
Back side-25mm	802.11n-HT40	62/5310	95.02%	1.052	0.574	0.18	20.79	21.20	1.099	0.664	22.1
Top side-25mm	802.11n-HT40	62/5310	95.02%	1.052	0.894	0.01	20.79	21.20	1.099	1.034	22.1
Body (Sensor off) Test data of U-NII-2C											
Back side-25mm	802.11n-HT40	110/5550	95.02%	1.052	0.482	-0.19	20.87	21.20	1.079	0.547	22.1
Top side-25mm	802.11n-HT40	110/5550	95.02%	1.052	0.619	0.15	20.87	21.20	1.079	0.703	22.1
Body (Sensor off) Test data of U-NII-3											
Back side-25mm	802.11n-HT40	151/5755	95.02%	1.052	0.546	0.11	20.32	21.20	1.225	0.704	22.1
Top side-25mm	802.11n-HT40	151/5755	95.02%	1.052	0.806	0.13	20.32	21.20	1.225	1.039	22.1
Body Test data of U-NII-2A(Separate 0mm) - Simultaneous											
Back side	802.11n-HT40	62/5310	95.02%	1.052	0.660	0.09	6.97	2.50	0.357	0.248	22.1
Top side	802.11n-HT40	62/5310	95.02%	1.052	1.030	0.02	6.97	2.50	0.357	0.387	22.1
Body Test data of U-NII-2C(Separate 0mm) - Simultaneous											
Back side	802.11n-HT40	110/5550	95.02%	1.052	0.499	-0.12	4.75	1.50	0.473	0.248	22.1
Top side	802.11n-HT40	110/5550	95.02%	1.052	0.635	-0.01	4.75	1.50	0.473	0.316	22.1
Body Test data of U-NII-3(Separate 0mm) - Simultaneous											
Back side	802.11n-HT40	151/5755	95.02%	1.052	0.475	0.07	3.70	0.50	0.479	0.239	22.1
Top side	802.11n-HT40	151/5755	95.02%	1.052	0.793	0.01	3.70	0.50	0.479	0.399	22.1
Body (Sensor off) Test data of U-NII-2A - Simultaneous											
Back side-19mm	802.11n-HT40	62/5310	95.02%	1.052	0.995	-0.02	20.79	13.70	0.195	0.205	22.1
Top side-9mm	802.11n-HT40	62/5310	95.02%	1.052	1.950	0.11	20.79	13.70	0.195	0.401	22.1
Body (Sensor off) Test data of U-NII-2C - Simultaneous											

Back side-19mm	802.11n-HT40	110/5550	95.02%	1.052	1.690	-0.04	20.87	11.70	0.121	0.215	22.1
Top side-9mm	802.11n-HT40	110/5550	95.02%	1.052	2.950	0.03	20.87	11.70	0.121	0.376	22.1
Body (Sensor off) Test data of U-NII-3 - Simultaneous											
Back side-19mm	802.11n-HT40	151/5755	95.02%	1.052	1.420	0.09	20.32	11.70	0.137	0.205	22.1
Top side-9mm	802.11n-HT40	151/5755	95.02%	1.052	2.580	-0.11	20.32	11.70	0.137	0.373	22.1

Table 36：SAR of WIFI 5G for Body.

Test Position	Channel/ Frequency (MHz)	Measured SAR (1g)	1st Repeated SAR (1g)	Ratio	2nd Repeated SAR (1g)	3rd Repeated SAR (1g)
Top side	62/5310	1.03	0.991	1.039354188	N/A	N/A
Note: 1) When the original highest measured SAR is ≥ 0.80 W/kg, the measurement was repeated once.						
2) A second repeated measurement was preformed only if the ratio of largest to smallest SAR for the original and first repeated measurements was > 1.20 or when the original or repeated measurement was ≥ 1.45 W/kg (~ 10% from the 1-g SAR limit).						
3) A third repeated measurement was preformed only if the original, first or second repeated measurement was ⩾ 1.5 W/kg and the ratio of largest to smallest SAR for the original, first and second repeated measurements is > 1.20.						
4) Repeated measurements are not required when the original highest measured SAR is < 0.80 W/kg						

Note:

1) As the 802.11a highest reported SAR is smaller than 1.2 W/kg , and the tune-up of the other 802.11 modes are not higher than 802.11a,therefore the adjusted SAR is ⩽ 1.2 W/kg for other 802.11 modes, SAR test for the other 802.11 modes are not required. For Product specific 10gSAR the highest reported SAR is smaller than 3.0 W/kg, SAR test for the other 802.11 modes are also not required.

8.2.28 SAR Result of BT

Bluetooth SAR Test Record											
SAR Test Record											
Test position	Test mode	Test ch./Freq.	Duty Cycle	Duty Cycle Scaled factor	SAR (W/kg) 1-g	Power drift (dB)	Conducted Power(dBm)	Tune up Limit(dBm)	Scaled factor	Scaled SAR 1-g (W/kg)	Liquid Temp.(℃)
Body Test data (Separate 0mm)											
Back side	DH5	0/2402	77.97%	1.283	0.128	0.02	4.74	5.00	1.062	0.174	22.2
Top side	DH5	0/2402	77.97%	1.283	0.145	-0.03	4.74	5.00	1.062	0.197	22.2
Top side-sample2	DH5	0/2402	77.97%	1.283	0.135	0.11	4.74	5.00	1.062	0.184	22.2

Table 37： SAR of BT for Body.

8.3 LTE Band 41 Power Class 2 and Power Class 3 Linearity

This device supports Power Class 2 and Power Class 3 operations for LTE Band 41. The highest available duty cycle for Power Class 2 operations is 43.3 % using UL-DL configuration 1. Per May 2017 TCB Workshop Notes based on the device behavior, all SAR tests were performed using Power Class 3. SAR with Power Class 2 at the highest power and available duty factor was additionally performed for the Power Class 3 configuration with the highest SAR for each exposure condition. The linearity between the Power Class 2 and Power Class 3 SAR results and the respective frame averaged powers was calculated to determine that the results were linear.

Per May 2017 TCB Workshop, no additional SAR measurements were required since the linearity between power classes was < 10% and all reported SAR values were < 1.4 W/kg for 1g and < 3.5 W/kg for 10g.

LTE Band 41 SAR testing with power class 2 at the highest power and available duty factor was additionally performed for the power class 3 configuration with the highest SAR for each exposure condition.

LTE Band 41 Head Linearity Data:

Ant 1 Sensor Off	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	23.80	26.80
Reported 1g SAR (W/kg)	0.235	0.349
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	151.85	207.25
Linearity SAR (W/kg)	0.321	
% deviation from expected linearity		8.81%

Ant 1 Sensor On	LTE Band 41 (Power Class 3)	LTE Band 41 (Power Class 2)
Maximum Tune up Power (dBm)	18.30	18.30
Reported 1g SAR (W/kg)	0.909	0.658
Duty Cycle	63.30%	43.30%
Frame Averaged (mW)	42.80	29.27
Linearity SAR (W/kg)	0.622	
% deviation from expected linearity		5.82%

8.4 Multiple Transmitter Evaluation

8.4.1 Simultaneous SAR test evaluation

•Simultaneous Transmission Possibilities

No.	Simultaneous Tx Combination	Body
1	WWAN + WLAN 2.4GHz	Yes
2	WWAN + WLAN 5GHz	Yes
3	WWAN + BT	Yes
4	WWAN + WLAN 5GHz + BT	Yes
5	WLAN 5GHz + BT	Yes

Note:

1) For Wi-Fi 5G, U-NII-1 (5150–5250 MHz) and U-NII-3 (5725-5850 MHz) bands does support hotspot function.
2) Per FCC KDB Publication 648474 D04 Handset SAR, Phablet SAR tests were not required it wireless router 1g SAR(Scaled to the maximum output power ,including tolerance) ＜ 1.2 W/Kg. Therefore, no further analysis beyond tables included in this section was required to determine that possible Simultaneous transmission scenarios would not exceed the SAR limit.

8.4.2 Simultaneous Transmission SAR Summation Scenario

Body:

Test position		SARmax (W/kg)				Summed SAR				
		WWAN	WiFi 2.4G	WiFi 5G	BT					
		1	2	3	4	1+2	1+3	1+4	1+3+4	3+4
WCDMA B2	Back side	0.994	0.396	0.248	0.174	1.390	1.242	1.168	1.416	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.660	0.000	0.000	0.000	0.660	0.660	0.660	0.660	0.000
	Top side	0.608	0.339	0.399	0.197	0.947	1.007	0.805	1.204	0.596
WCDMA B5	Back side	1.127	0.396	0.248	0.174	1.523	1.375	1.301	1.549	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	1.022	0.000	0.000	0.000	1.022	1.022	1.022	1.022	0.000
	Top side	0.524	0.339	0.399	0.197	0.863	0.923	0.721	1.120	0.596
LTE B2	Back side	0.513	0.396	0.248	0.174	0.909	0.761	0.687	0.935	0.422
	Left side	0.202	0.000	0.000	0.000	0.202	0.202	0.202	0.202	0.000
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.368	0.339	0.399	0.197	0.707	0.767	0.565	0.964	0.596
LTE B7	Back side	0.975	0.396	0.248	0.174	1.371	1.223	1.149	1.397	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.220	0.000	0.000	0.000	0.220	0.220	0.220	0.220	0.000
	Top side	0.674	0.339	0.399	0.197	1.013	1.073	0.871	1.270	0.596
LTE B12	Back side	1.063	0.396	0.248	0.174	1.459	1.311	1.237	1.485	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.998	0.000	0.000	0.000	0.998	0.998	0.998	0.998	0.000
	Top side	0.421	0.339	0.399	0.197	0.760	0.820	0.618	1.017	0.596
LTE B14	Back side	1.112	0.396	0.248	0.174	1.508	1.360	1.286	1.534	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	1.021	0.000	0.000	0.000	1.021	1.021	1.021	1.021	0.000
	Top side	0.648	0.339	0.399	0.197	0.987	1.047	0.845	1.244	0.596
LTE B25	Back side	0.974	0.396	0.248	0.174	1.370	1.222	1.148	1.396	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.791	0.000	0.000	0.000	0.791	0.791	0.791	0.791	0.000
	Top side	0.779	0.339	0.399	0.197	1.118	1.178	0.976	1.375	0.596
LTE B26	Back side	1.148	0.396	0.248	0.174	1.544	1.396	1.322	1.570	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.991	0.000	0.000	0.000	0.991	0.991	0.991	0.991	0.000
	Top side	0.547	0.339	0.399	0.197	0.886	0.946	0.744	1.143	0.596
LTE B30	Back side	0.974	0.396	0.248	0.174	1.370	1.222	1.148	1.396	0.422
	Left side	0.086	0.000	0.000	0.000	0.086	0.086	0.086	0.086	0.000

	Right side	0.318	0.000	0.000	0.000	0.318	0.318	0.318	0.318	0.000
	Top side	0.332	0.339	0.399	0.197	0.671	0.731	0.529	0.928	0.596
LTE B38	Back side	0.986	0.396	0.248	0.174	1.382	1.234	1.160	1.408	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.210	0.000	0.000	0.000	0.210	0.210	0.210	0.210	0.000
	Top side	0.704	0.339	0.399	0.197	1.043	1.103	0.901	1.300	0.596
LTE B40	Back side	0.960	0.396	0.248	0.174	1.356	1.208	1.134	1.382	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.306	0.000	0.000	0.000	0.306	0.306	0.306	0.306	0.000
	Top side	0.327	0.339	0.399	0.197	0.666	0.726	0.524	0.923	0.596
LTE B41	Back side	0.983	0.396	0.248	0.174	1.379	1.231	1.157	1.405	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.207	0.000	0.000	0.000	0.207	0.207	0.207	0.207	0.000
	Top side	0.683	0.339	0.399	0.197	1.022	1.082	0.880	1.279	0.596
LTE B66	Back side	1.118	0.396	0.248	0.174	1.514	1.366	1.292	1.540	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.216	0.000	0.000	0.000	0.216	0.216	0.216	0.216	0.000
	Top side	0.520	0.339	0.399	0.197	0.859	0.919	0.717	1.116	0.596
LTE B71	Back side	1.061	0.396	0.248	0.174	1.457	1.309	1.235	1.483	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.940	0.000	0.000	0.000	0.940	0.940	0.940	0.940	0.000
	Top side	0.606	0.339	0.399	0.197	0.945	1.005	0.803	1.202	0.596
NR n2	Back side	0.502	0.396	0.248	0.174	0.898	0.750	0.676	0.924	0.422
	Left side	0.285	0.000	0.000	0.000	0.285	0.285	0.285	0.285	0.000
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.359	0.339	0.399	0.197	0.698	0.758	0.556	0.955	0.596
NR n5	Back side	1.082	0.396	0.248	0.174	1.478	1.330	1.256	1.504	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.664	0.000	0.000	0.000	0.664	0.664	0.664	0.664	0.000
	Top side	0.480	0.339	0.399	0.197	0.819	0.879	0.677	1.076	0.596
NR n25	Back side	0.924	0.396	0.248	0.174	1.320	1.172	1.098	1.346	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.720	0.000	0.000	0.000	0.720	0.720	0.720	0.720	0.000
	Top side	0.573	0.339	0.399	0.197	0.912	0.972	0.770	1.169	0.596
NR n30	Back side	1.141	0.396	0.248	0.174	1.537	1.389	1.315	1.563	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.370	0.000	0.000	0.000	0.370	0.370	0.370	0.370	0.000
	Top side	0.352	0.339	0.399	0.197	0.691	0.751	0.549	0.948	0.596
NR n41	Back side	0.937	0.396	0.248	0.174	1.333	1.185	1.111	1.359	0.422
	Left side	0.174	0.000	0.000	0.000	0.174	0.174	0.174	0.174	0.000

	Right side	0.166	0.000	0.000	0.000	0.166	0.166	0.166	0.166	0.000
	Top side	0.670	0.339	0.399	0.197	1.009	1.069	0.867	1.266	0.596
NR n48	Back side	0.870	0.396	0.248	0.174	1.266	1.118	1.044	1.292	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.238	0.339	0.399	0.197	0.577	0.637	0.435	0.834	0.596
NR n66	Back side	0.836	0.396	0.248	0.174	1.232	1.084	1.010	1.258	0.422
	Left side	0.347	0.000	0.000	0.000	0.347	0.347	0.347	0.347	0.000
	Right side	0.213	0.000	0.000	0.000	0.213	0.213	0.213	0.213	0.000
	Top side	0.424	0.339	0.399	0.197	0.763	0.823	0.621	1.020	0.596
NR n70	Back side	0.932	0.396	0.248	0.174	1.328	1.180	1.106	1.354	0.422
	Left side	0.409	0.000	0.000	0.000	0.409	0.409	0.409	0.409	0.000
	Right side	0.203	0.000	0.000	0.000	0.203	0.203	0.203	0.203	0.000
	Top side	0.493	0.339	0.399	0.197	0.832	0.892	0.690	1.089	0.596
NR n71	Back side	1.120	0.396	0.248	0.174	1.516	1.368	1.294	1.542	0.422
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.838	0.000	0.000	0.000	0.838	0.838	0.838	0.838	0.000
	Top side	0.831	0.339	0.399	0.197	1.170	1.230	1.028	1.427	0.596
NR n77-3500	Back side	0.758	0.396	0.248	0.174	1.154	1.006	0.932	1.180	0.422
	Left side	0.588	0.000	0.000	0.000	0.588	0.588	0.588	0.588	0.000
	Right side	0.425	0.000	0.000	0.000	0.425	0.425	0.425	0.425	0.000
	Top side	0.254	0.339	0.399	0.197	0.593	0.653	0.451	0.850	0.596
NR n77-3900	Back side	1.172	0.396	0.248	0.174	1.568	1.420	1.346	1.594	0.422
	Left side	0.590	0.000	0.000	0.000	0.590	0.590	0.590	0.590	0.000
	Right side	0.538	0.000	0.000	0.000	0.538	0.538	0.538	0.538	0.000
	Top side	0.239	0.339	0.399	0.197	0.578	0.638	0.436	0.835	0.596

Sensor off:

Test position		SARmax (W/kg)				Summed SAR				
		WWAN	WiFi 2.4G	WiFi 5G	BT					
		1	2	3	4	1+2	1+3	1+4	1+3+4	3+4
WCDMA B2	Back side	0.699	0.605	0.215	0.174	1.304	0.914	0.873	1.088	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.325	0.000	0.000	0.000	0.325	0.325	0.325	0.325	0.000
	Top side	0.788	0.167	0.401	0.197	0.955	1.189	0.985	1.386	0.598
WCDMA B5	Back side	0.285	0.605	0.215	0.174	0.890	0.500	0.459	0.674	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.181	0.000	0.000	0.000	0.181	0.181	0.181	0.181	0.000
	Top side	0.243	0.167	0.401	0.197	0.410	0.644	0.440	0.841	0.598

LTE B2	Back side	0.505	0.605	0.215	0.174	1.110	0.720	0.679	0.894	0.389
	Left side	0.202	0.000	0.000	0.000	0.202	0.202	0.202	0.202	0.000
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.496	0.167	0.401	0.197	0.663	0.897	0.693	1.094	0.598
LTE B7	Back side	0.395	0.605	0.215	0.174	1.000	0.610	0.569	0.784	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.429	0.000	0.000	0.000	0.429	0.429	0.429	0.429	0.000
	Top side	0.469	0.167	0.401	0.197	0.636	0.870	0.666	1.067	0.598
LTE B12	Back side	0.296	0.605	0.215	0.174	0.901	0.511	0.470	0.685	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.195	0.000	0.000	0.000	0.195	0.195	0.195	0.195	0.000
	Top side	0.216	0.167	0.401	0.197	0.383	0.617	0.413	0.814	0.598
LTE B14	Back side	0.290	0.605	0.215	0.174	0.895	0.505	0.464	0.679	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.200	0.000	0.000	0.000	0.200	0.200	0.200	0.200	0.000
	Top side	0.312	0.167	0.401	0.197	0.479	0.713	0.509	0.910	0.598
LTE B25	Back side	0.677	0.605	0.215	0.174	1.282	0.892	0.851	1.066	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.386	0.000	0.000	0.000	0.386	0.386	0.386	0.386	0.000
	Top side	0.911	0.167	0.401	0.197	1.078	1.312	1.108	1.509	0.598
LTE B26	Back side	0.349	0.605	0.215	0.174	0.954	0.564	0.523	0.738	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.211	0.000	0.000	0.000	0.211	0.211	0.211	0.211	0.000
	Top side	0.307	0.167	0.401	0.197	0.474	0.708	0.504	0.905	0.598
LTE B30	Back side	0.495	0.605	0.215	0.174	1.100	0.710	0.669	0.884	0.389
	Left side	0.086	0.000	0.000	0.000	0.086	0.086	0.086	0.086	0.000
	Right side	0.758	0.000	0.000	0.000	0.758	0.758	0.758	0.758	0.000
	Top side	0.525	0.167	0.401	0.197	0.692	0.926	0.722	1.123	0.598
LTE B38	Back side	0.269	0.605	0.215	0.174	0.874	0.484	0.443	0.658	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.277	0.000	0.000	0.000	0.277	0.277	0.277	0.277	0.000
	Top side	0.321	0.167	0.401	0.197	0.488	0.722	0.518	0.919	0.598
LTE B41	Back side	0.377	0.605	0.215	0.174	0.982	0.592	0.551	0.766	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.271	0.000	0.000	0.000	0.271	0.271	0.271	0.271	0.000
	Top side	0.325	0.167	0.401	0.197	0.492	0.726	0.522	0.923	0.598
LTE B66	Back side	0.930	0.605	0.215	0.174	1.535	1.145	1.104	1.319	0.389
	Left side	0.420	0.000	0.000	0.000	0.420	0.420	0.420	0.420	0.000
	Right side	0.126	0.000	0.000	0.000	0.126	0.126	0.126	0.126	0.000
	Top side	0.797	0.167	0.401	0.197	0.964	1.198	0.994	1.395	0.598

LTE B71	Back side	0.264	0.605	0.215	0.174	0.869	0.479	0.438	0.653	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.163	0.000	0.000	0.000	0.163	0.163	0.163	0.163	0.000
	Top side	0.277	0.167	0.401	0.197	0.444	0.678	0.474	0.875	0.598
NR n2	Back side	0.437	0.605	0.215	0.174	1.042	0.652	0.611	0.826	0.389
	Left side	0.285	0.000	0.000	0.000	0.285	0.285	0.285	0.285	0.000
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.395	0.167	0.401	0.197	0.562	0.796	0.592	0.993	0.598
NR n5	Back side	0.422	0.605	0.215	0.174	1.027	0.637	0.596	0.811	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.181	0.000	0.000	0.000	0.181	0.181	0.181	0.181	0.000
	Top side	0.345	0.167	0.401	0.197	0.512	0.746	0.542	0.943	0.598
NR n25	Back side	0.719	0.605	0.215	0.174	1.324	0.934	0.893	1.108	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.392	0.000	0.000	0.000	0.392	0.392	0.392	0.392	0.000
	Top side	0.821	0.167	0.401	0.197	0.988	1.222	1.018	1.419	0.598
NR n30	Back side	0.544	0.605	0.215	0.174	1.149	0.759	0.718	0.933	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.853	0.000	0.000	0.000	0.853	0.853	0.853	0.853	0.000
	Top side	0.275	0.167	0.401	0.197	0.442	0.676	0.472	0.873	0.598
NR n41	Back side	0.933	0.605	0.215	0.174	1.538	1.148	1.107	1.322	0.389
	Left side	0.377	0.000	0.000	0.000	0.377	0.377	0.377	0.377	0.000
	Right side	0.929	0.000	0.000	0.000	0.929	0.929	0.929	0.929	0.000
	Top side	0.934	0.167	0.401	0.197	1.101	1.335	1.131	1.532	0.598
NR n48	Back side	0.545	0.605	0.215	0.174	1.150	0.760	0.719	0.934	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.771	0.167	0.401	0.197	0.938	1.172	0.968	1.369	0.598
NR n66	Back side	0.792	0.605	0.215	0.174	1.397	1.007	0.966	1.181	0.389
	Left side	0.347	0.000	0.000	0.000	0.347	0.347	0.347	0.347	0.000
	Right side	0.142	0.000	0.000	0.000	0.142	0.142	0.142	0.142	0.000
	Top side	0.739	0.167	0.401	0.197	0.906	1.140	0.936	1.337	0.598
NR n70	Back side	0.915	0.605	0.215	0.174	1.520	1.130	1.089	1.304	0.389
	Left side	0.409	0.000	0.000	0.000	0.409	0.409	0.409	0.409	0.000
	Right side	0.140	0.000	0.000	0.000	0.140	0.140	0.140	0.140	0.000
	Top side	0.892	0.167	0.401	0.197	1.059	1.293	1.089	1.490	0.598
NR n71	Back side	0.256	0.605	0.215	0.174	0.861	0.471	0.430	0.645	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.134	0.000	0.000	0.000	0.134	0.134	0.134	0.134	0.000
	Top side	0.350	0.167	0.401	0.197	0.517	0.751	0.547	0.948	0.598

NR n77-3500	Back side	0.482	0.605	0.215	0.174	1.087	0.697	0.656	0.871	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.487	0.000	0.000	0.000	0.487	0.487	0.487	0.487	0.000
	Top side	0.753	0.167	0.401	0.197	0.920	1.154	0.950	1.351	0.598
NR n77-3900	Back side	0.721	0.605	0.215	0.174	1.326	0.936	0.895	1.110	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.639	0.000	0.000	0.000	0.639	0.639	0.639	0.639	0.000
	Top side	0.990	0.167	0.401	0.197	1.157	1.391	1.187	1.588	0.598
LTE Band40	Back side	0.099	0.605	0.215	0.174	0.704	0.314	0.273	0.488	0.389
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.156	0.000	0.000	0.000	0.156	0.156	0.156	0.156	0.000
	Top side	0.056	0.167	0.401	0.197	0.223	0.457	0.253	0.654	0.598

UL CA:

Test position		SAR max (W/kg)					Summed SAR			
		LTE	LTE	WiFi 2.4G	WiFi 5G	BT				
		1	2	3	4	5	1+2+3	1+2+4	1+2+5	1+2+4+5
CA_2A(Ant.2)-4A(Ant.6)	Back side	0.488	0.500	0.396	0.248	0.174	1.384	1.236	1.162	1.410
	Left side	0.000	0.420	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.397	0.000	0.000	0.000	0.000	0.397	0.397	0.397	0.397
	Top side	0.409	0.401	0.339	0.399	0.197	1.149	1.209	1.007	1.406
CA_2A(Ant.6)-4A(Ant.2)	Back side	0.513	0.499	0.396	0.248	0.174	1.408	1.260	1.186	1.434
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.096	0.000	0.000	0.000	0.096	0.096	0.096	0.096
	Top side	0.368	0.356	0.339	0.399	0.197	1.063	1.123	0.921	1.320
CA_2A(Ant.6)-5A(Ant.2)	Back side	0.513	0.575	0.396	0.248	0.174	1.484	1.336	1.262	1.510
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.496	0.000	0.000	0.000	0.496	0.496	0.496	0.496
	Top side	0.368	0.307	0.339	0.399	0.197	1.014	1.074	0.872	1.271
CA_2A(Ant.6)-12A(Ant.2)	Back side	0.513	0.475	0.396	0.248	0.174	1.384	1.236	1.162	1.410
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.446	0.000	0.000	0.000	0.446	0.446	0.446	0.446
	Top side	0.368	0.188	0.339	0.399	0.197	0.895	0.955	0.753	1.152
CA_2A(Ant.6)-14A(Ant.2)	Back side	0.513	0.557	0.396	0.248	0.174	1.466	1.318	1.244	1.492
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.512	0.000	0.000	0.000	0.512	0.512	0.512	0.512
	Top side	0.368	0.325	0.339	0.399	0.197	1.032	1.092	0.890	1.289
CA_2A(Ant.2)-66A(Ant.6)	Back side	0.488	0.500	0.396	0.248	0.174	1.384	1.236	1.162	1.410
	Left side	0.000	0.420	0.000	0.000	0.000	0.420	0.420	0.420	0.420

	Right side	0.397	0.000	0.000	0.000	0.000	0.397	0.397	0.397	0.397
	Top side	0.409	0.401	0.339	0.399	0.197	1.149	1.209	1.007	1.406
CA_2A(Ant.6)-66A(Ant.2)	Back side	0.513	0.499	0.396	0.248	0.174	1.408	1.260	1.186	1.434
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.096	0.000	0.000	0.000	0.096	0.096	0.096	0.096
	Top side	0.368	0.356	0.339	0.399	0.197	1.063	1.123	0.921	1.320
CA_5A(Ant.2)-66A(Ant.6)	Back side	0.575	0.500	0.396	0.248	0.174	1.471	1.323	1.249	1.497
	Left side	0.000	0.420	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.496	0.000	0.000	0.000	0.000	0.496	0.496	0.496	0.496
	Top side	0.307	0.401	0.339	0.399	0.197	1.047	1.107	0.905	1.304
CA_12A(Ant.2)-66A(Ant.6)	Back side	0.475	0.500	0.396	0.248	0.174	1.371	1.223	1.149	1.397
	Left side	0.000	0.420	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.446	0.000	0.000	0.000	0.000	0.446	0.446	0.446	0.446
	Top side	0.188	0.401	0.339	0.399	0.197	0.928	0.988	0.786	1.185
CA_14A(Ant.2)-66A(Ant.6)	Back side	0.557	0.500	0.396	0.248	0.174	1.453	1.305	1.231	1.479
	Left side	0.000	0.420	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.512	0.000	0.000	0.000	0.000	0.512	0.512	0.512	0.512
	Top side	0.325	0.401	0.339	0.399	0.197	1.065	1.125	0.923	1.322

EN-DC:

Test position		SARmax (W/kg)					Summed SAR			
		LTE	FR1	WiFi 2.4G	WiFi 5G	BT				
		1	2	3	4	5	1+2+3	1+2+4	1+2+5	1+2+4+5
DC_2A(Ant.2)_n2A(Ant.6)	Back side	0.488	0.502	0.396	0.248	0.174	1.386	1.238	1.164	1.412
	Left side	0.000	0.285	0.000	0.000	0.000	0.285	0.285	0.285	0.285
	Right side	0.397	0.000	0.000	0.000	0.000	0.397	0.397	0.397	0.397
	Top side	0.409	0.359	0.339	0.399	0.197	1.107	1.167	0.965	1.364
DC_2A(Ant.6)_n2A(Ant.2)	Back side	0.513	0.520	0.396	0.248	0.174	1.429	1.281	1.207	1.455
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.405	0.000	0.000	0.000	0.405	0.405	0.405	0.405
	Top side	0.368	0.414	0.339	0.399	0.197	1.121	1.181	0.979	1.378
DC_2A(Ant.6)_n5A(Ant.2)	Back side	0.513	0.542	0.396	0.248	0.174	1.451	1.303	1.229	1.477
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.333	0.000	0.000	0.000	0.333	0.333	0.333	0.333
	Top side	0.368	0.345	0.339	0.399	0.197	1.052	1.112	0.910	1.309
DC_2A(Ant.2)_n66A(Ant.6)	Back side	0.488	0.511	0.396	0.248	0.174	1.395	1.247	1.173	1.421
	Left side	0.000	0.347	0.000	0.000	0.000	0.347	0.347	0.347	0.347
	Right side	0.397	0.000	0.000	0.000	0.000	0.397	0.397	0.397	0.397
	Top side	0.409	0.411	0.339	0.399	0.197	1.159	1.219	1.017	1.416

DC_2A(Ant.6)_n66A(Ant.2)	Back side	0.513	0.528	0.396	0.248	0.174	1.437	1.289	1.215	1.463
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.135	0.000	0.000	0.000	0.135	0.135	0.135	0.135
	Top side	0.368	0.370	0.339	0.399	0.197	1.077	1.137	0.935	1.334
DC_2A(Ant.2)_n41A(Ant.1)	Back side	0.488	0.527	0.396	0.248	0.174	1.411	1.263	1.189	1.437
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.397	0.494	0.000	0.000	0.000	0.891	0.891	0.891	0.891
	Top side	0.409	0.492	0.339	0.399	0.197	1.240	1.300	1.098	1.497
DC_2A(Ant.2)_n41A(Ant.5)	Back side	0.488	0.189	0.396	0.248	0.174	1.073	0.925	0.851	1.099
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.397	0.000	0.000	0.000	0.000	0.397	0.397	0.397	0.397
	Top side	0.409	0.572	0.339	0.399	0.197	1.320	1.380	1.178	1.577
DC_2A(Ant.2)_n41A(Ant.6)	Back side	0.488	0.569	0.396	0.248	0.174	1.453	1.305	1.231	1.479
	Left side	0.000	0.135	0.000	0.000	0.000	0.135	0.135	0.135	0.135
	Right side	0.397	0.377	0.000	0.000	0.000	0.774	0.774	0.774	0.774
	Top side	0.409	0.438	0.339	0.399	0.197	1.186	1.246	1.044	1.443
DC_2A(Ant.2)_n41A(Ant.7)	Back side	0.488	0.585	0.396	0.248	0.174	1.469	1.321	1.247	1.495
	Left side	0.000	0.174	0.000	0.000	0.000	0.174	0.174	0.174	0.174
	Right side	0.397	0.000	0.000	0.000	0.000	0.397	0.397	0.397	0.397
	Top side	0.409	0.063	0.339	0.399	0.197	0.811	0.871	0.669	1.068
DC_2A(Ant.6)_n41A(Ant.1)	Back side	0.513	0.527	0.396	0.248	0.174	1.436	1.288	1.214	1.462
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.494	0.000	0.000	0.000	0.494	0.494	0.494	0.494
	Top side	0.368	0.492	0.339	0.399	0.197	1.199	1.259	1.057	1.456
DC_2A(Ant.6)_n41A(Ant.5)	Back side	0.513	0.189	0.396	0.248	0.174	1.098	0.950	0.876	1.124
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.368	0.572	0.339	0.399	0.197	1.279	1.339	1.137	1.536
DC_2A(Ant.6)_n41A(Ant.7)	Back side	0.513	0.585	0.396	0.248	0.174	1.494	1.346	1.272	1.520
	Left side	0.202	0.174	0.000	0.000	0.000	0.376	0.376	0.376	0.376
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.368	0.063	0.339	0.399	0.197	0.770	0.830	0.628	1.027
DC_2A(Ant.6)_n71A(Ant.2)	Back side	0.513	0.561	0.396	0.248	0.174	1.470	1.322	1.248	1.496
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.420	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Top side	0.368	0.416	0.339	0.399	0.197	1.123	1.183	0.981	1.380
DC_2A(Ant.2)_n77A(Ant.1)	Back side	0.488	0.505	0.396	0.248	0.174	1.389	1.241	1.167	1.415
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.397	0.487	0.000	0.000	0.000	0.884	0.884	0.884	0.884
	Top side	0.409	0.155	0.339	0.399	0.197	0.903	0.963	0.761	1.160

DC_2A(Ant.2)_n77A(Ant.3)	Back side	0.488	0.524	0.396	0.248	0.174	1.408	1.260	1.186	1.434
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.397	0.000	0.000	0.000	0.000	0.397	0.397	0.397	0.397
	Top side	0.409	0.111	0.339	0.399	0.197	0.859	0.919	0.717	1.116
DC_2A(Ant.2)_n77A(Ant.5)	Back side	0.488	0.528	0.396	0.248	0.174	1.412	1.264	1.190	1.438
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.397	0.000	0.000	0.000	0.000	0.397	0.397	0.397	0.397
	Top side	0.409	0.254	0.339	0.399	0.197	1.002	1.062	0.860	1.259
DC_2A(Ant.2)_n77A(Ant.7)	Back side	0.488	0.101	0.396	0.248	0.174	0.985	0.837	0.763	1.011
	Left side	0.000	0.590	0.000	0.000	0.000	0.590	0.590	0.590	0.590
	Right side	0.397	0.000	0.000	0.000	0.000	0.397	0.397	0.397	0.397
	Top side	0.409	0.013	0.339	0.399	0.197	0.761	0.821	0.619	1.018
DC_2A(Ant.6)_n77A(Ant.1)	Back side	0.513	0.505	0.396	0.248	0.174	1.414	1.266	1.192	1.440
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.639	0.000	0.000	0.000	0.639	0.639	0.639	0.639
	Top side	0.368	0.199	0.339	0.399	0.197	0.906	0.966	0.764	1.163
DC_2A(Ant.6)_n77A(Ant.3)	Back side	0.513	0.524	0.396	0.248	0.174	1.433	1.285	1.211	1.459
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.368	0.111	0.339	0.399	0.197	0.818	0.878	0.676	1.075
DC_2A(Ant.6)_n77A(Ant.5)	Back side	0.513	0.528	0.396	0.248	0.174	1.437	1.289	1.215	1.463
	Left side	0.202	0.000	0.000	0.000	0.000	0.202	0.202	0.202	0.202
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.368	0.254	0.339	0.399	0.197	0.961	1.021	0.819	1.218
DC_2A(Ant.6)_n77A(Ant.7)	Back side	0.513	0.101	0.396	0.248	0.174	1.010	0.862	0.788	1.036
	Left side	0.202	0.590	0.000	0.000	0.000	0.792	0.792	0.792	0.792
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.368	0.013	0.339	0.399	0.197	0.720	0.780	0.578	0.977
DC_5A(Ant.2)_n2A(Ant.6)	Back side	0.575	0.502	0.396	0.248	0.174	1.473	1.325	1.251	1.499
	Left side	0.000	0.285	0.000	0.000	0.000	0.285	0.285	0.285	0.285
	Right side	0.496	0.000	0.000	0.000	0.000	0.496	0.496	0.496	0.496
	Top side	0.307	0.359	0.339	0.399	0.197	1.005	1.065	0.863	1.262
DC_5A(Ant.2)_n77A(Ant.1)	Back side	0.575	0.505	0.396	0.248	0.174	1.476	1.328	1.254	1.502
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.496	0.639	0.000	0.000	0.000	1.135	1.135	1.135	1.135
	Top side	0.307	0.199	0.339	0.399	0.197	0.845	0.905	0.703	1.102
DC_5A(Ant.2)_n77A(Ant.3)	Back side	0.575	0.524	0.396	0.248	0.174	1.495	1.347	1.273	1.521
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.496	0.000	0.000	0.000	0.000	0.496	0.496	0.496	0.496
	Top side	0.307	0.111	0.339	0.399	0.197	0.757	0.817	0.615	1.014

DC_5A(Ant.2)_n77A(Ant.5)	Back side	0.575	0.528	0.396	0.248	0.174	1.499	1.351	1.277	1.525
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.496	0.000	0.000	0.000	0.000	0.496	0.496	0.496	0.496
	Top side	0.307	0.254	0.339	0.399	0.197	0.900	0.960	0.758	1.157
DC_5A(Ant.2)_n77A(Ant.7)	Back side	0.575	0.101	0.396	0.248	0.174	1.072	0.924	0.850	1.098
	Left side	0.000	0.590	0.000	0.000	0.000	0.590	0.590	0.590	0.590
	Right side	0.496	0.000	0.000	0.000	0.000	0.496	0.496	0.496	0.496
	Top side	0.307	0.013	0.339	0.399	0.197	0.659	0.719	0.517	0.916
DC_12A(Ant.2)_n2A(Ant.6)	Back side	0.475	0.502	0.396	0.248	0.174	1.373	1.225	1.151	1.399
	Left side	0.000	0.285	0.000	0.000	0.000	0.285	0.285	0.285	0.285
	Right side	0.446	0.000	0.000	0.000	0.000	0.446	0.446	0.446	0.446
	Top side	0.188	0.359	0.339	0.399	0.197	0.886	0.946	0.744	1.143
DC_12A(Ant.2)_n66A(Ant.6)	Back side	0.475	0.511	0.396	0.248	0.174	1.382	1.234	1.160	1.408
	Left side	0.000	0.347	0.000	0.000	0.000	0.347	0.347	0.347	0.347
	Right side	0.446	0.000	0.000	0.000	0.000	0.446	0.446	0.446	0.446
	Top side	0.188	0.411	0.339	0.399	0.197	0.938	0.998	0.796	1.195
DC_12A(Ant.2)_n77A(Ant.1)	Back side	0.475	0.505	0.396	0.248	0.174	1.376	1.228	1.154	1.402
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.446	0.639	0.000	0.000	0.000	1.085	1.085	1.085	1.085
	Top side	0.188	0.199	0.339	0.399	0.197	0.726	0.786	0.584	0.983
DC_12A(Ant.2)_n77A(Ant.3)	Back side	0.475	0.524	0.396	0.248	0.174	1.395	1.247	1.173	1.421
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.446	0.000	0.000	0.000	0.000	0.446	0.446	0.446	0.446
	Top side	0.188	0.111	0.339	0.399	0.197	0.638	0.698	0.496	0.895
DC_12A(Ant.2)_n77A(Ant.5)	Back side	0.475	0.528	0.396	0.248	0.174	1.399	1.251	1.177	1.425
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.446	0.000	0.000	0.000	0.000	0.446	0.446	0.446	0.446
	Top side	0.188	0.254	0.339	0.399	0.197	0.781	0.841	0.639	1.038
DC_12A(Ant.2)_n77A(Ant.7)	Back side	0.475	0.101	0.396	0.248	0.174	0.972	0.824	0.750	0.998
	Left side	0.000	0.590	0.000	0.000	0.000	0.590	0.590	0.590	0.590
	Right side	0.446	0.000	0.000	0.000	0.000	0.446	0.446	0.446	0.446
	Top side	0.188	0.013	0.339	0.399	0.197	0.540	0.600	0.398	0.797
DC_14A(Ant.2)_n2A(Ant.6)	Back side	0.557	0.502	0.396	0.248	0.174	1.455	1.307	1.233	1.481
	Left side	0.000	0.285	0.000	0.000	0.000	0.285	0.285	0.285	0.285
	Right side	0.512	0.000	0.000	0.000	0.000	0.512	0.512	0.512	0.512
	Top side	0.325	0.359	0.339	0.399	0.197	1.023	1.083	0.881	1.280
DC_14A(Ant.2)_n66A(Ant.6)	Back side	0.557	0.511	0.396	0.248	0.174	1.464	1.316	1.242	1.490
	Left side	0.000	0.347	0.000	0.000	0.000	0.347	0.347	0.347	0.347
	Right side	0.512	0.000	0.000	0.000	0.000	0.512	0.512	0.512	0.512
	Top side	0.325	0.411	0.339	0.399	0.197	1.075	1.135	0.933	1.332

DC_14A(Ant.2)_n77A(Ant.1)	Back side	0.557	0.505	0.396	0.248	0.174	1.458	1.310	1.236	1.484
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.512	0.639	0.000	0.000	0.000	1.151	1.151	1.151	1.151
	Top side	0.325	0.199	0.339	0.399	0.197	0.863	0.923	0.721	1.120
DC_14A(Ant.2)_n77A(Ant.3)	Back side	0.557	0.524	0.396	0.248	0.174	1.477	1.329	1.255	1.503
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.512	0.000	0.000	0.000	0.000	0.512	0.512	0.512	0.512
	Top side	0.325	0.111	0.339	0.399	0.197	0.775	0.835	0.633	1.032
DC_14A(Ant.2)_n77A(Ant.5)	Back side	0.557	0.528	0.396	0.248	0.174	1.481	1.333	1.259	1.507
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.512	0.000	0.000	0.000	0.000	0.512	0.512	0.512	0.512
	Top side	0.325	0.254	0.339	0.399	0.197	0.918	0.978	0.776	1.175
DC_14A(Ant.2)_n77A(Ant.7)	Back side	0.557	0.101	0.396	0.248	0.174	1.054	0.906	0.832	1.080
	Left side	0.000	0.590	0.000	0.000	0.000	0.590	0.590	0.590	0.590
	Right side	0.512	0.000	0.000	0.000	0.000	0.512	0.512	0.512	0.512
	Top side	0.325	0.013	0.339	0.399	0.197	0.677	0.737	0.535	0.934
DC_30A(Ant.1)_n2A(Ant.6)	Back side	0.548	0.502	0.396	0.248	0.174	1.446	1.298	1.224	1.472
	Left side	0.000	0.285	0.000	0.000	0.000	0.285	0.285	0.285	0.285
	Right side	0.412	0.000	0.000	0.000	0.000	0.412	0.412	0.412	0.412
	Top side	0.187	0.359	0.339	0.399	0.197	0.885	0.945	0.743	1.142
DC_30A(Ant.6)_n2A(Ant.2)	Back side	0.552	0.520	0.396	0.248	0.174	1.468	1.320	1.246	1.494
	Left side	0.086	0.000	0.000	0.000	0.000	0.086	0.086	0.086	0.086
	Right side	0.000	0.405	0.000	0.000	0.000	0.405	0.405	0.405	0.405
	Top side	0.308	0.414	0.339	0.399	0.197	1.061	1.121	0.919	1.318
DC_30A(Ant.6)_n5A(Ant.2)	Back side	0.552	0.000	0.396	0.248	0.174	0.948	0.800	0.726	0.974
	Left side	0.086	0.333	0.000	0.000	0.000	0.419	0.419	0.419	0.419
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.308	0.000	0.339	0.399	0.197	0.647	0.707	0.505	0.904
DC_30A(Ant.1)_n66A(Ant.2)	Back side	0.548	0.528	0.396	0.248	0.174	1.472	1.324	1.250	1.498
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.412	0.135	0.000	0.000	0.000	0.547	0.547	0.547	0.547
	Top side	0.187	0.370	0.339	0.399	0.197	0.896	0.956	0.754	1.153
DC_30A(Ant.1)_n66A(Ant.6)	Back side	0.548	0.511	0.396	0.248	0.174	1.455	1.307	1.233	1.481
	Left side	0.000	0.347	0.000	0.000	0.000	0.347	0.347	0.347	0.347
	Right side	0.412	0.000	0.000	0.000	0.000	0.412	0.412	0.412	0.412
	Top side	0.187	0.411	0.339	0.399	0.197	0.937	0.997	0.795	1.194
DC_30A(Ant.6)_n66A(Ant.2)	Back side	0.552	0.528	0.396	0.248	0.174	1.476	1.328	1.254	1.502
	Left side	0.086	0.000	0.000	0.000	0.000	0.086	0.086	0.086	0.086
	Right side	0.000	0.135	0.000	0.000	0.000	0.135	0.135	0.135	0.135
	Top side	0.308	0.370	0.339	0.399	0.197	1.017	1.077	0.875	1.274

DC_30A(Ant.1)_n77A(Ant.3)	Back side	0.548	0.524	0.396	0.248	0.174	1.468	1.320	1.246	1.494
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.412	0.000	0.000	0.000	0.000	0.412	0.412	0.412	0.412
	Top side	0.187	0.111	0.339	0.399	0.197	0.637	0.697	0.495	0.894
DC_30A(Ant.1)_n77A(Ant.5)	Back side	0.548	0.528	0.396	0.248	0.174	1.472	1.324	1.250	1.498
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.412	0.000	0.000	0.000	0.000	0.412	0.412	0.412	0.412
	Top side	0.187	0.254	0.339	0.399	0.197	0.780	0.840	0.638	1.037
DC_30A(Ant.1)_n77A(Ant.7)	Back side	0.548	0.101	0.396	0.248	0.174	1.045	0.897	0.823	1.071
	Left side	0.000	0.590	0.000	0.000	0.000	0.590	0.590	0.590	0.590
	Right side	0.412	0.000	0.000	0.000	0.000	0.412	0.412	0.412	0.412
	Top side	0.187	0.013	0.339	0.399	0.197	0.539	0.599	0.397	0.796
DC_30A(Ant.6)_n77A(Ant.1)	Back side	0.552	0.505	0.396	0.248	0.174	1.453	1.305	1.231	1.479
	Left side	0.086	0.000	0.000	0.000	0.000	0.086	0.086	0.086	0.086
	Right side	0.000	0.639	0.000	0.000	0.000	0.639	0.639	0.639	0.639
	Top side	0.308	0.199	0.339	0.399	0.197	0.846	0.906	0.704	1.103
DC_30A(Ant.6)_n77A(Ant.3)	Back side	0.552	0.524	0.396	0.248	0.174	1.472	1.324	1.250	1.498
	Left side	0.086	0.000	0.000	0.000	0.000	0.086	0.086	0.086	0.086
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.308	0.111	0.339	0.399	0.197	0.758	0.818	0.616	1.015
DC_30A(Ant.6)_n77A(Ant.5)	Back side	0.552	0.528	0.396	0.248	0.174	1.476	1.328	1.254	1.502
	Left side	0.086	0.000	0.000	0.000	0.000	0.086	0.086	0.086	0.086
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.308	0.254	0.339	0.399	0.197	0.901	0.961	0.759	1.158
DC_30A(Ant.6)_n77A(Ant.7)	Back side	0.552	0.101	0.396	0.248	0.174	1.049	0.901	0.827	1.075
	Left side	0.086	0.590	0.000	0.000	0.000	0.676	0.676	0.676	0.676
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.308	0.013	0.339	0.399	0.197	0.660	0.720	0.518	0.917
DC_66A(Ant.2)_n2A(Ant.6)	Back side	0.499	0.502	0.396	0.248	0.174	1.397	1.249	1.175	1.423
	Left side	0.000	0.285	0.000	0.000	0.000	0.285	0.285	0.285	0.285
	Right side	0.096	0.000	0.000	0.000	0.000	0.096	0.096	0.096	0.096
	Top side	0.356	0.359	0.339	0.399	0.197	1.054	1.114	0.912	1.311
DC_66A(Ant.6)_n2A(Ant.2)	Back side	0.500	0.520	0.396	0.248	0.174	1.416	1.268	1.194	1.442
	Left side	0.420	0.000	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.000	0.405	0.000	0.000	0.000	0.405	0.405	0.405	0.405
	Top side	0.401	0.414	0.339	0.399	0.197	1.154	1.214	1.012	1.411
DC_66A(Ant.6)_n5A(Ant.2)	Back side	0.500	0.000	0.396	0.248	0.174	0.896	0.748	0.674	0.922
	Left side	0.420	0.333	0.000	0.000	0.000	0.753	0.753	0.753	0.753
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.401	0.000	0.339	0.399	0.197	0.740	0.800	0.598	0.997

DC_66A(Ant.2)_n41A(Ant.1)	Back side	0.499	0.527	0.396	0.248	0.174	1.422	1.274	1.200	1.448
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.096	0.494	0.000	0.000	0.000	0.590	0.590	0.590	0.590
	Top side	0.356	0.492	0.339	0.399	0.197	1.187	1.247	1.045	1.444
DC_66A(Ant.2)_n41A(Ant.5)	Back side	0.499	0.189	0.396	0.248	0.174	1.084	0.936	0.862	1.110
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.096	0.000	0.000	0.000	0.000	0.096	0.096	0.096	0.096
	Top side	0.356	0.572	0.339	0.399	0.197	1.267	1.327	1.125	1.524
DC_66A(Ant.2)_n41A(Ant.6)	Back side	0.499	0.569	0.396	0.248	0.174	1.464	1.316	1.242	1.490
	Left side	0.000	0.135	0.000	0.000	0.000	0.135	0.135	0.135	0.135
	Right side	0.096	0.377	0.000	0.000	0.000	0.473	0.473	0.473	0.473
	Top side	0.356	0.438	0.339	0.399	0.197	1.133	1.193	0.991	1.390
DC_66A(Ant.2)_n41A(Ant.7)	Back side	0.499	0.585	0.396	0.248	0.174	1.480	1.332	1.258	1.506
	Left side	0.000	0.174	0.000	0.000	0.000	0.174	0.174	0.174	0.174
	Right side	0.096	0.000	0.000	0.000	0.000	0.096	0.096	0.096	0.096
	Top side	0.356	0.063	0.339	0.399	0.197	0.758	0.818	0.616	1.015
DC_66A(Ant.6)_n41A(Ant.1)	Back side	0.500	0.527	0.396	0.248	0.174	1.423	1.275	1.201	1.449
	Left side	0.420	0.000	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.000	0.494	0.000	0.000	0.000	0.494	0.494	0.494	0.494
	Top side	0.401	0.492	0.339	0.399	0.197	1.232	1.292	1.090	1.489
DC_66A(Ant.6)_n41A(Ant.5)	Back side	0.500	0.189	0.396	0.248	0.174	1.085	0.937	0.863	1.111
	Left side	0.420	0.000	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.401	0.572	0.339	0.399	0.197	1.312	1.372	1.170	1.569
DC_66A(Ant.6)_n41A(Ant.7)	Back side	0.500	0.585	0.396	0.248	0.174	1.481	1.333	1.259	1.507
	Left side	0.420	0.174	0.000	0.000	0.000	0.594	0.594	0.594	0.594
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.401	0.063	0.339	0.399	0.197	0.803	0.863	0.661	1.060
DC_66A(Ant.2)_n66A(Ant.6)	Back side	0.499	0.511	0.396	0.248	0.174	1.406	1.258	1.184	1.432
	Left side	0.000	0.347	0.000	0.000	0.000	0.347	0.347	0.347	0.347
	Right side	0.096	0.000	0.000	0.000	0.000	0.096	0.096	0.096	0.096
	Top side	0.356	0.411	0.339	0.399	0.197	1.106	1.166	0.964	1.363
DC_66A(Ant.6)_n66A(Ant.2)	Back side	0.500	0.528	0.396	0.248	0.174	1.424	1.276	1.202	1.450
	Left side	0.420	0.000	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.000	0.135	0.000	0.000	0.000	0.135	0.135	0.135	0.135
	Top side	0.401	0.370	0.339	0.399	0.197	1.110	1.170	0.968	1.367
DC_66A(Ant.6)_n71A(Ant.2)	Back side	0.500	0.000	0.396	0.248	0.174	0.896	0.748	0.674	0.922
	Left side	0.420	0.420	0.000	0.000	0.000	0.840	0.840	0.840	0.840
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.401	0.000	0.339	0.399	0.197	0.740	0.800	0.598	0.997

DC_66A(Ant.2)_n77A(Ant.1)	Back side	0.499	0.505	0.396	0.248	0.174	1.400	1.252	1.178	1.426
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.096	0.639	0.000	0.000	0.000	0.735	0.735	0.735	0.735
	Top side	0.356	0.199	0.339	0.399	0.197	0.894	0.954	0.752	1.151
DC_66A(Ant.2)_n77A(Ant.3)	Back side	0.499	0.524	0.396	0.248	0.174	1.419	1.271	1.197	1.445
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.096	0.000	0.000	0.000	0.000	0.096	0.096	0.096	0.096
	Top side	0.356	0.111	0.339	0.399	0.197	0.806	0.866	0.664	1.063
DC_66A(Ant.2)_n77A(Ant.5)	Back side	0.499	0.528	0.396	0.248	0.174	1.423	1.275	1.201	1.449
	Left side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Right side	0.096	0.000	0.000	0.000	0.000	0.096	0.096	0.096	0.096
	Top side	0.356	0.254	0.339	0.399	0.197	0.949	1.009	0.807	1.206
DC_66A(Ant.2)_n77A(Ant.7)	Back side	0.499	0.101	0.396	0.248	0.174	0.996	0.848	0.774	1.022
	Left side	0.000	0.590	0.000	0.000	0.000	0.590	0.590	0.590	0.590
	Right side	0.096	0.000	0.000	0.000	0.000	0.096	0.096	0.096	0.096
	Top side	0.356	0.013	0.339	0.399	0.197	0.708	0.768	0.566	0.965
DC_66A(Ant.6)_n77A(Ant.1)	Back side	0.500	0.505	0.396	0.248	0.174	1.401	1.253	1.179	1.427
	Left side	0.420	0.000	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.000	0.639	0.000	0.000	0.000	0.639	0.639	0.639	0.639
	Top side	0.401	0.199	0.339	0.399	0.197	0.939	0.999	0.797	1.196
DC_66A(Ant.6)_n77A(Ant.3)	Back side	0.500	0.524	0.396	0.248	0.174	1.420	1.272	1.198	1.446
	Left side	0.420	0.000	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.401	0.111	0.339	0.399	0.197	0.851	0.911	0.709	1.108
DC_66A(Ant.6)_n77A(Ant.5)	Back side	0.500	0.528	0.396	0.248	0.174	1.424	1.276	1.202	1.450
	Left side	0.420	0.000	0.000	0.000	0.000	0.420	0.420	0.420	0.420
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.401	0.254	0.339	0.399	0.197	0.994	1.054	0.852	1.251
DC_66A(Ant.6)_n77A(Ant.7)	Back side	0.500	0.101	0.396	0.248	0.174	0.997	0.849	0.775	1.023
	Left side	0.420	0.590	0.000	0.000	0.000	1.010	1.010	1.010	1.010
	Right side	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
	Top side	0.401	0.013	0.339	0.399	0.197	0.753	0.813	0.611	1.010

9 Equipment list

Test Platform	SPEAG DASY5 Professional
Description	SAR Test System (Frequency range 10MHz-10GHz)
Software Reference	DASY52 52.10.4(1527); SEMCAD X 14.6.14(7483)

Hardware Reference

	Equipment	Manufacturer	Model	Serial Number	Calibration Date	Due date of calibration
☒	Twin Phantom	SPEAG	SAM8	1824	NCR	NCR
☒	DAE	SPEAG	DAE4	1484	2024-10-15	2025-10-14
☒	E-Field Probe	SPEAG	EX3DV4	3982	2024-04-29	2025-04-28
☒	Validation Kits	SPEAG	D750V3	1214	2022-02-07	2025-02-06
☒	Validation Kits	SPEAG	D835V2	4d161	2023-08-25	2026-08-24
☒	Validation Kits	SPEAG	D1750V2	1105	2023-11-03	2026-11-02
☒	Validation Kits	SPEAG	D1950V3	1218	2023-05-04	2026-05-03
	Validation Kits	SPEAG	D2300V2	1124	2022-02-03	2025-02-02
☒	Validation Kits	SPEAG	D2450V2	922	2023-08-28	2026-08-27
☒	Validation Kits	SPEAG	D2600V2	1187	2022-02-03	2025-02-02
☒	Validation Kits	SPEAG	D3500V2	1133	2022-02-08	2025-02-07
☒	Validation Kits	SPEAG	D3700V2	1108	2022-02-07	2025-02-06
☒	Validation Kits	SPEAG	D5GHzV2	1174	2023-08-23	2026-08-22
☒	Dielectric parameter probes	SPEAG	DAKS-3.5	1102	N/A	N/A
☒	Universal Radio Communication Tester	R&S	CMW500	111637	2024-09-16	2025-09-15
☒	RF Bi-Directional Coupler	Agilent	86205-60001	MY31400031	NCR	NCR
☒	Signal Generator	R&S	SMB100A	182393	2024-02-05	2025-02-04
☒	Preamplifier	Qiji	YX28980933	202104001	NCR	NCR
☒	Power Sensor	Keysight	U2002H	121251	2024-09-10	2025-09-09
☒	Attenuator	SHX	TS2-3dB	30704	NCR	NCR
☒	Coaxial low pass filter	Mini-Circuits	VLF-2500(+)	NA	NCR	NCR
☒	Coaxial low pass filter	Microlab Fxr	LA-F13	NA	NCR	NCR
☒	DC POWER SUPPLY	SAKO	SK1730SL5A	NA	NCR	NCR
☒	Speed reading thermometer	LKM	DTM3000	NA	2024-09-16	2025-09-15
☒	Humidity and Temperature Indicator	MingGao	MingGao	NA	2024-09-16	2025-09-15

Note: All the equipments are within the valid period when the tests are performed.

10 Calibration certificate

Please see the Appendix C

11 Photographs

Please see the Appendix D

Appendix A: Detailed System Check Results

Appendix B: Detailed Test Results

Appendix C: Calibration certificate

Appendix D: Photographs

Appendix E: Conducted RF Output Power

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