



FCC SAR TEST REPORT

Product Name: Smartphone
Trade Mark: INVENTUS
Model No.: Inventus PD1
Add. Model No.: N/A
Report Number: 26052925036SAR-1
Test Standards: FCC 47 CFR Part 2 §2.1093
ANSI/IEEE C95.1-1992
IEEE Std 1528-2013
FCC ID: 2BDXXPD1
Test Result: PASS
Date of Issue: September 18, 2026

Prepared for:

INVENTUS GROUP LTD
C/O FLB ACCOUNTANTS LLP 1010 ESKDALE ROAD
WINNERSH TRIANGLE WOKINGHAM UNITED KINGDOM RG41 5TS

Prepared by:

Shenzhen UnionTrust Quality and Technology Co., Ltd.
16/F., Block A, Building 6, Baoneng Science and Technology Park,
Longhua Street, Longhua District, Shenzhen, Guangdong, China
TEL: +86-755-2823 0888
FAX: +86-755-2823 0886

Prepared by:

Curry Xue
Test Engineer

Reviewed by:

Henry Lu
Team Leader

Approved by:



Date: September 18, 2026

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China
Tel: +86-755-28230888 Fax: +86-755-28230886 E-mail: info@uttlab.com <http://www.uttlab.com>
UTTR-SAR-IEEE Std 1528-2013-V1.1

Version

Version No.	Date	Description
V1.0	September 18, 2026	Original Report



Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

CONTENTS

1. GENERAL INFORMATION	5
1.1. STATEMENT OF COMPLIANCE	5
1.2. CLIENT INFORMATION	6
1.3. EUT INFORMATION	6
1.3.1. GENERAL DESCRIPTION OF EUT	6
1.3.2. DESCRIPTION OF ACCESSORIES	6
1.3.3. EUT Tx FREQUENCY BANDS	7
1.3.4. WIRELESS TECHNOLOGIES	8
1.4. MAXIMUM CONDUCTED POWER	9
1.5. OTHER INFORMATION	12
1.6. TEST LOCATION	12
1.7. TEST FACILITY	12
1.8. GUIDANCE STANDARD	13
2. SPECIFIC ABSORPTION RATE (SAR)	14
2.1. INTRODUCTION	14
2.2. SAR DEFINITION	14
2.3. SAR LIMITS	14
3. SAR MEASUREMENT SYSTEM	15
3.1. SPEAG DASY SYSTEM	15
3.1.1. ROBOT	15
3.1.2. PROBE	16
3.1.3. DATA ACQUISITION ELECTRONICS (DAE)	16
3.1.4. PHANTOM	17
3.1.5. DEVICE HOLDER	18
3.1.6. SYSTEM VALIDATION DIPOLES	18
3.2. SAR SCAN PROCEDURE	19
3.2.1. SAR REFERENCE MEASUREMENT (DRIFT)	19
3.2.2. AREA SCAN	19
3.2.3. ZOOM SCAN	20
3.2.4. SAR DRIFT MEASUREMENT	20
3.3. EQUIPMENT LIST	21
3.4. MEASUREMENT UNCERTAINTY	21
3.5. TISSUE DIELECTRIC PARAMETER MEASUREMENT & SYSTEM VERIFICATION	22
3.5.1. TISSUE SIMULATING LIQUIDS	22
3.5.2. SYSTEM CHECK DESCRIPTION	24
3.5.3. TISSUE VERIFICATION	25
3.5.4. SYSTEM VERIFICATION	26
4. SAR MEASUREMENT EVALUATION	27
4.1. EUT CONFIGURATION AND SETTING	27
4.1.1. GSM CONFIGURATION AND TESTING	27
4.1.2. WCDMA CONFIGURATION AND TESTING	27
4.1.3. LTE CONFIGURATION AND TESTING	29
4.1.4. 5G NR CONFIGURATION AND TESTING	34
4.1.5. WLAN CONFIGURATION AND TESTING	40
4.1.6. BLUETOOTH CONFIGURATION AND TESTING	41
4.1.7. DEVICE STATE INDEX (DSI) INFORMATION	41
4.2. EUT TESTING POSITION	42
4.2.1. HEAD EXPOSURE CONDITIONS	42
4.2.2. BODY-WORN ACCESSORY EXPOSURE CONDITIONS	44
4.2.3. HOTSPOT ACCESSORY EXPOSURE CONDITIONS	45
4.2.4. EXTREMITY EXPOSURE CONDITIONS	46
4.3. PROXIMITY SENSORS TRIGGERING DISTANCES	47

4.3.1. TRIGGERING DISTANCE FOR PERPENDICULAR DUT ORIENTATION	47
4.3.2. TRIGGERING DISTANCE FOR TILTED DUT ORIENTATION	48
4.3.3. PROCEDURE FOR DETERMINING PROXIMITY SENSOR COVERAGE AREA	48
4.4. MEASURED CONDUCTED POWER RESULT	49
4.4.1. CONDUCTED POWER OF GSM BANDS	49
4.4.2. CONDUCTED POWER OF WCDMA BANDS	50
4.4.3. CONDUCTED POWER OF LTE BANDS	51
4.4.4. CONDUCTED POWER OF 5G NR BANDS	81
4.4.5. CONDUCTED POWER OF WLAN	95
4.4.6. CONDUCTED POWER OF BT	99
4.5. SAR TEST EXCLUSION EVALUATIONS	100
4.5.1. STANDALONE SAR TEST EXCLUSION CONSIDERATIONS	100
4.5.2. ESTIMATED SAR CALCULATION	103
4.6. SAR TESTING RESULTS	104
4.6.1. SAR TEST REDUCTION CONSIDERATIONS	104
4.6.2. SAR RESULTS FOR HEAD EXPOSURE CONDITION	106
4.6.3. SAR RESULTS FOR HOTSPOT EXPOSURE CONDITION	119
4.6.4. SAR RESULTS FOR BODY-WORN EXPOSURE CONDITION (SEPARATION DISTANCE IS 1.0 CM)	135
4.6.5. SAR RESULTS FOR EXTREMITY EXPOSURE CONDITION (SEPARATION DISTANCE IS 0 CM)	143
4.6.6. POWER CLASS 2 SAR RESULTS FOR 5G NR n41, 77(78)	144
4.7. SAR MEASUREMENT VARIABILITY	145
4.7.1. REPEATED MEASUREMENT	145
4.8. SIMULTANEOUS MULTI-BAND TRANSMISSION EVALUATION	146
4.8.1. SIMULTANEOUS TRANSMISSION SAR TEST EXCLUSION CONSIDERATIONS	146
4.8.2. SIMULTANEOUS TRANSMISSION POSSIBILITIES	147
4.8.3. MAX. STANDALONE SAR	148
4.8.4. SUM OF SAR	150
4.8.5. SAR TO PEAK LOCATION SEPARATION RATIO ANALYSIS	156

Appendix A. SAR Plots of System Verification

Appendix B. SAR Plots of SAR Measurement

Appendix C. Calibration Certificate for Probe and Dipole

Appendix D. Photographs of EUT and Setup

1. GENERAL INFORMATION

1.1. STATEMENT OF COMPLIANCE

The maximum results of Specific Absorption Rate (SAR) found during testing for the EUT are as follows:

Equipment Class	Mode	Highest Reported Head SAR _{1g} (W/kg)	Highest Reported Body-worn SAR _{1g} (1.0 cm Gap) (W/kg)	Highest Reported Hotspot SAR _{1g} (1.0 cm Gap) (W/kg)	Highest Reported Extremity SAR _{10g} (0 cm Gap) (W/kg)
	Limits	1.6 W/kg	1.6 W/kg	1.6 W/kg	4 W/kg
PCE	GSM 850	0.324	0.677	0.916	N/A
	PCS 1900	0.323	0.595	0.770	N/A
	WCDMA Band II	0.347	0.696	0.722	N/A
	WCDMA Band IV	0.397	1.263	1.320	N/A
	WCDMA Band V	0.208	0.384	0.384	N/A
	LTE Band 7	0.786	0.803	0.803	N/A
	LTE Band 12(17)	0.177	0.230	0.230	N/A
	LTE Band 13	0.232	0.369	0.369	N/A
	LTE Band 25(2)	0.777	0.770	0.770	N/A
	LTE Band 26(5)	0.271	0.505	0.505	N/A
	LTE Band 30	0.065	0.380	0.910	N/A
	LTE Band 41(38)	0.871	0.522	0.522	N/A
	LTE Band 42	1.051	0.513	0.513	N/A
	LTE Band 43	0.893	0.851	0.851	N/A
	LTE Band 48	0.839	0.588	0.588	N/A
	LTE Band 66(4)	0.372	0.515	0.515	N/A
	LTE Band 71	0.201	0.251	0.310	N/A
	5G NR n7	0.739	0.288	0.565	N/A
	5G NR n12	0.161	0.214	0.262	N/A
	5G NR n25(2)	0.284	0.667	0.681	N/A
	5G NR n26(5)	0.239	0.461	0.568	N/A
	5G NR n38_Ant 0	0.162	0.633	0.783	N/A
	5G NR n41(38)_Ant 4	0.696	0.551	0.551	N/A
	5G NR n66	0.625	0.303	0.968	N/A
	5G NR n71	0.229	0.296	0.428	N/A
	5G NR n77(78)	0.798	0.382	0.482	N/A
DTS	2.4G WLAN	1.133	0.274	0.36	N/A
NII-1	5G WLAN	1.161	0.272	0.503	N/A
NII-2A	5G WLAN	1.074	0.313	N/A	1.090
NII-2C	5G WLAN	1.180	0.490	N/A	2.455
NII-3	5G WLAN	1.316	0.338	0.734	N/A
NII-5/6/7/8	6G WLAN ^{Note 1)}	0.213	0.127	N/A	0.189
DSS	Bluetooth	0.491	0.197	0.197	N/A
DXX	NFC	N/A	N/A	N/A	N/A
Max. SAR		1.316	1.263	1.320	2.455
Highest Simultaneous Transmission SAR		Head (W/kg)	Body-worn (W/kg)	Hotspot (W/kg)	Extremity (W/kg)
PCE (SA) + DTS or NII + DSS		1.410	1.296	1.296	N/A
PCE (SA) + DTS or NII		1.321	1.172	1.172	N/A
PCE (NSA) + DTS or NII + DSS		1.566	1.488	1.488	N/A
PCE (NSA) + DTS or NII		1.442	1.429	1.429	N/A

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

Note:

1). The test results of 6G WLAN are based on the Report No.: FA660301 issued by Sporton International Inc. (Shenzhen).

1.2. CLIENT INFORMATION

Applicant:	INVENTUS GROUP LTD
Address of Applicant:	C/O FLB ACCOUNTANTS LLP 1010 ESKDALE ROAD WINNERSH TRIANGLE WOKINGHAM UNITED KINGDOM RG41 5TS
Manufacturer:	INVENTUS GROUP LTD
Address of Manufacturer:	C/O FLB ACCOUNTANTS LLP 1010 ESKDALE ROAD WINNERSH TRIANGLE WOKINGHAM UNITED KINGDOM RG41 5TS

1.3. EUT INFORMATION

1.3.1. General Description of EUT

Product Name:	Smartphone
Trade Mark:	INVENTUS
Model No.:	Inventus PD1
Add. Model No.:	N/A
DUT Stage:	Identical Prototype
IMEI:	Sample 1: IMEI 1 = 350156240000055, IMEI2 = 350156240002804 Sample 2: IMEI 1 = 350156240001061, IMEI2 = 350156240003810 Sample 3: IMEI 1 = 350156240000139, IMEI2 = 350156240002887 Sample 4: IMEI 1 = 350156240000261, IMEI2 = 350156240003018
Software Version:	SW1_V4.10_GPD1INVS_ROW_A16_040826 (Provided by the customer)
Hardware Version:	HW1 (Provided by the customer)
Sample Received Date:	May 25, 2026
Sample Tested Date:	June 20, 2026 to August 10, 2026

1.3.2. Description of Accessories

Refer to Report 26052925036EMC-1 for accessories.

1.3.3. EUT Tx Frequency Bands

RF Type	Band(s)	Tx Frequency Range (Unit: MHz)
GSM	GSM 850:	824 - 849
	PCS 1900:	1850 - 1910
WCDMA	WCDMA Band II:	1850 - 1910
	WCDMA Band IV:	1710 - 1755
	WCDMA Band V:	824 - 849
LTE	LTE Band 2:	1850 - 1910
	LTE Band 4:	1710 - 1755
	LTE Band 5:	824 - 849
	LTE Band 7:	2500 - 2570
	LTE Band 12:	699 - 716
	LTE Band 13:	777 - 787
	LTE Band 17:	704 - 716
	LTE Band 25:	1850 - 1915
	LTE Band 26:	814 - 849
	LTE Band 30:	2305 - 2315
	LTE Band 38:	2570 - 2620
	LTE Band 41:	2496 - 2690
	LTE Band 42:	3450 - 3550
	LTE Band 43:	3700 - 3800
	LTE Band 48:	3550 - 3700
	LTE Band 66:	1710 - 1780
	LTE Band 71:	663 - 698
5G NR	LTE Band 2:	1850 - 1910
	LTE Band 5:	824 - 849
	LTE Band 7:	2500 - 2570
	LTE Band 12:	699 - 716
	LTE Band 25:	1850 - 1915
	LTE Band 26:	814 - 849
	LTE Band 38:	2570 - 2620
	LTE Band 41:	2496 - 2690
	LTE Band 66:	1710 - 1780
	LTE Band 71:	663 - 698
WLAN	LTE Band 77:	3450-3550, 3700-3980
	LTE Band 78:	3450-3550, 3700-3800
	2.4 GHz:	2412 - 2462
	U-NII-1:	5180 - 5240
	U-NII-2A:	5260 - 5320
	U-NII-2C:	5500 - 5720
Bluetooth	U-NII-3:	5745 - 5825
	U-NII-5/6/7/8:	5955 - 7115
Bluetooth	2.4 GHz:	2402 - 2480
NFC	13.553-13.567 MHz	13.56

Note 1:

According to 201504 FCC TCB workshop RF exposure slides, for overlapping bands, only larger band was tested.

- The maximum output power, including tolerance, for the smaller band is the larger band to qualify for the SAR test exclusion.
- The channel bandwidth and other operating parameters for the smaller band is fully supported by the larger band.
 - LTE Band 66(1710 - 1780 MHz) SAR can support LTE Band 4 (1710 - 1755 MHz).
 - LTE Band 25 and 5G NR n25(1850 - 1915 MHz) SAR can support LTE Band 2 and 5G NR n2 (1850 - 1910 MHz).
 - LTE Band 26 and 5G NR n26 (814 - 849 MHz) SAR can support LTE Band 5 and 5G NR n5 (824 - 849 MHz).
 - LTE Band 12 (699 - 716 MHz) SAR can support LTE Band 17 (704 - 716 MHz).
 - LTE Band 41 and 5G NR n41 (2496 - 2690 MHz) SAR can support LTE Band 38 and 5G NR n38 (2570 - 2620 MHz)
 - 5G NR n77 (3450-3550 MHz and 3700-3980 MHz) SAR can support 5G NR n78 (3450-3550MHz and 3700-3800 MHz)

1.3.4. Wireless Technologies

GSM	Voice GPRS (Multi-Slot Class: 12-4UP) EDGE (Multi-Slot Class: 12-4UP)
WCDMA	RMC HSDPA HSUPA DC-HSUPA HSPA+
LTE	QPSK, 16QAM, 64QAM, 256QAM UL/DL CA VoLTE Note: SAR testing for LTE was performed on the maximum power mode.
NR	DFT-s-OFDM: $\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM Note: SAR testing for NR was performed on the maximum power mode.
2.4G WLAN	802.11b 802.11g 802.11n (HT20) 802.11ax (HE20) Note: SAR testing for WLAN was performed on the maximum power mode.
5G WLAN	802.11a 802.11n (HT20/HT40) 802.11ac (VHT20/VHT40/VHT80) 802.11ax (HE20/HE40/HE80) Note: SAR testing for WLAN was performed on the maximum power mode.
6G WLAN	802.11ax (HE20/HE40/HE80) Note: SAR testing for WLAN was performed on the maximum power mode.
Bluetooth	BR+EDR LE, 2LE, LE Code
Others	NFC, WPTs(Only Rx)
Device Class (GSM)	B
Antenna Type	WWAN/ WLAN / Bluetooth: PIFA Antenna NFC / WPTs: Loop Antenna
Power Reduction	Support Power selection is determined by the device's positioning and use case as described in Section 4.3
Dynamic Antenna	Not Support
Wireless Router (Hotspot)	2.4G WLAN: Support 5.2G WLAN: Support 5.3G WLAN: Not Support 5.6G WLAN: Not Support 5.8G WLAN: Support 6G WLAN: Not Support
VOIP	Support Note: Since this device supports VOIP capability through 3rd party apps software, we have evaluated data mode for head and body SAR.
Dual SIM	SIM 1: GSM + WCDMA + LTE + 5G NR SIM 2(eSIM): GSM + WCDMA + LTE + 5G NR Note : This device support dual SIM but they share the same antenna. Since these two SIM are used for subscriber identification only and it is not related to RF identity, only SIM1 was used for SAR testing.

1.4. MAXIMUM CONDUCTED POWER

The maximum conducted average power including tune-up tolerance is shown as below.

➤ GSM

Mode	Maximum conducted average power (dBm)	
	GSM 850 (DSI-0/1/2/3/4)	DCS 1900 (DSI-0/1/2/3/4)
GSM (GMSK, 1Tx-slot)	33.5	31.0
GPRS (GMSK, 1Tx-slot)	33.5	31.0
GPRS (GMSK, 2Tx-slot)	32.5	30.0
GPRS (GMSK, 3Tx-slot)	30.5	28.0
GPRS (GMSK, 4Tx-slot)	29.0	26.5
EDGE (8PSK, 1Tx-slot)	28.0	27.0
EDGE (8PSK, 2Tx-slot)	27.0	26.0
EDGE (8PSK, 3Tx-slot)	24.5	24.0
EDGE (8PSK, 4Tx-slot)	23.5	23.0
Mode	Source-Based Time-Averaged Power (dBm)	
	GSM 850 (DSI-0/1/2/3/4)	DCS 1900 (DSI-0/1/2/3/4)
GSM (GMSK, 1Tx-slot)	24.5	22.0
GPRS (GMSK, 1Tx-slot)	24.5	22.0
GPRS (GMSK, 2Tx-slot)	26.5	24.0
GPRS (GMSK, 3Tx-slot)	26.2	23.7
GPRS (GMSK, 4Tx-slot)	26.0	23.5
EDGE (8PSK, 1Tx-slot)	19.0	18.0
EDGE (8PSK, 2Tx-slot)	21.0	20.0
EDGE (8PSK, 3Tx-slot)	20.2	19.7
EDGE (8PSK, 4Tx-slot)	20.5	20.0

➤ WCDMA

Mode	Maximum conducted average power (dBm)			
	WCDMA Band II (DSI-0/1/2/3/4)	WCDMA Band V (DSI-0/1/2/3/4)	WCDMA Band IV (DSI-0/1/2/3)	WCDMA Band IV (DSI-4)
RMC 12.2K	25.0	24.0	24.0	22.0
HSDPA Subtest-1	24.0	23.0	23.0	21.5
HSDPA Subtest-2	23.5	22.5	22.5	21.0
HSDPA Subtest-3	23.5	22.5	22.5	21.0
HSDPA Subtest-4	23.5	22.5	22.5	21.0
HSUPA Subtest-1	22.0	21.0	21.0	19.5
HSUPA Subtest-2	21.5	21.0	21.0	19.5
HSUPA Subtest-3	23.0	22.0	22.0	20.5
HSUPA Subtest-4	21.5	20.5	20.5	19.0
HSUPA Subtest-5	23.0	22.0	22.0	20.5

➤ LTE

Band	Ant.	Maximum conducted average power (dBm)				
		(DSI-0)	(DSI-1)	(DSI-2)	(DSI-3)	(DSI-4)
LTE Band 7 (CA_7C)	0	24.0	N/A	N/A	17.5	17.5
	4	24.5	17.0	17.0	18.5	18.5
LTE Band 12(17)	0	25.0	N/A	N/A	N/A	N/A
LTE Band 13	0	25.0	N/A	N/A	N/A	N/A
LTE Band 25(2)	1	25.0	N/A	N/A	22.5	22.5
	4	24.5	18.2	18.2	16.5	16.5
LTE Band 26(5)	0	25.0	N/A	N/A	N/A	N/A
LTE Band 30	0	24.5	N/A	N/A	23.0	18.0
LTE Band 41(38)	0	24.0	N/A	N/A	19.0	19.0
LTE Band 41(38, CA_41C)	4	24.5	19.5	19.5	18.5	18.5
LTE Band 42	3	24.5	20.0	20.0	20.5	20.5
LTE CA_42C	3	24.0	19.5	19.5	20.0	20.0
LTE Band 43	3	24.5	19.5	19.5	19.5	19.5
LTE Band 48 (CA_48C)	3	25.0	20.0	20.0	20.0	20.0
LTE Band 66(4, CA_66C)	1	24.5	N/A	N/A	21.0	21.0
	4	24.5	N/A	N/A	N/A	N/A
LTE Band 71	0	25.0	N/A	N/A	N/A	N/A

Note: N/A indicates not applicable, meaning the maximum power used under this DSI is the same as that of DSI-0.

➤ 5G NR

Band	Ant.	Maximum conducted average power (dBm)				
		(DSI-0)	(DSI-1)	(DSI-2)	(DSI-3)	(DSI-4)
5G NR n7	0	24.0	N/A	N/A	N/A	N/A
	4	24.0	17.0	17.0	18.5	18.5
5G NR n12	0	24.5	N/A	N/A	N/A	N/A
5G NR n25(2)	1	24.5	N/A	N/A	22.5	22.5
	4	24.5	19.5	19.5	17.5	17.5
5G NR n26(5)	0	24.5	N/A	N/A	N/A	N/A
5G NR n38	0	24.0	N/A	N/A	19.5	19.5
5G NR n41	0/2	22.5	N/A	N/A	N/A	N/A
5G NR n41	6	21.5	N/A	N/A	N/A	N/A
5G NR n41_PC3 (38)	4	24.5	20.5	20.5	19.5	19.5
5G NR n41_PC2	4	26.4	22.4	22.4	21.4	21.4
5G NR n66	1	25.0	N/A	N/A	20.5	20.5
	4	24.0	N/A	N/A	N/A	N/A
5G NR n71	0	25.0	N/A	N/A	N/A	N/A
5G NR n77(78)_PC3	1	20.5	N/A	N/A	N/A	N/A
	2	20.0	N/A	N/A	N/A	N/A
	3	24.0	18.0	18.0	18.0	18.0
	6	21.0	N/A	N/A	N/A	N/A
5G NR n77(78)_PC2	3	26.2	20.2	20.2	20.2	20.2

Note: N/A indicates not applicable, meaning the maximum power used under this DSI is the same as that of DSI-0.

➤ 2.4GHz WLAN

Test Mode	RU	Maximum conducted average power (dBm)								
		(DSI-0/1/3)			(DSI-2)			(DSI-4)		
		Ant 5	Ant 7	Total	Ant 5	Ant 7	Total	Ant 5	Ant 7	Total
802.11b	---	18.5	18.0	/	12.5	12.0	/	13.5	13.0	/
802.11g	---	18.5	17.5	/	12.0	11.5	/	13.5	13.0	/
802.11n20	---	16.5	14.5	18.5	10.0	9.0	12.5	11.0	10.0	13.5
802.11ax20	FULL	15.5	14.0	18.0	9.5	8.5	12.0	10.5	9.5	13.0

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

➤ 5GHz WLAN

Test Mode	RU	Band	Maximum conducted average power (dBm)								
			(DSI-0)			(DSI-1)			(DSI-2)		
			Ant 5	Ant 7	Total	Ant 5	Ant 7	Total	Ant 5	Ant 7	Total
802.11a	---	U-NII-1	17.5	18.5	/	16.0	16.0	/	11.5	11.5	/
802.11a	---	U-NII-2A	18.0	18.0	/	16.5	16.5	/	12.0	12.5	/
802.11a	---	U-NII-2C	17.5	18.5	/	15.5	17.0	/	11.50	13.50	/
802.11a	---	U-NII-3	17.5	18.0	/	14.5	15.5	/	11.5	12.5	/
802.11n20	---	U-NII-1	15.0	15.5	18.0	13.0	13.5	16.0	9.0	8.0	11.5
802.11n20	---	U-NII-2A	15.5	15.0	18.0	14.0	13.0	16.5	9.5	9.0	12.0
802.11n20	---	U-NII-2C	14.5	15.5	18.0	11.5	13.0	15.5	7.50	8.50	11.00
802.11n20	---	U-NII-3	14.5	15.0	18.0	11.0	11.5	14.5	8.5	9.0	11.5
802.11n40	---	U-NII-1	15.0	14.5	17.5	13.0	12.0	15.5	9.0	8.0	11.5
802.11n40	---	U-NII-2A	15.0	14.5	17.5	14.0	13.5	16.5	9.5	9.0	12.0
802.11n40	---	U-NII-2C	14.5	16.0	18.5	11.5	13.0	15.5	7.5	9.0	11.5
802.11n40	---	U-NII-3	14.5	14.5	17.5	11.5	12.0	14.5	8.0	8.5	11.5
802.11ac20	---	U-NII-1	15.0	15.5	18.0	13.0	13.5	16.0	8.0	7.5	11.0
802.11ac20	---	U-NII-2A	15.0	15.0	18.0	13.5	13.0	16.0	9.5	9.0	12.0
802.11ac20	---	U-NII-2C	14.5	15.5	18.0	11.5	13.0	15.5	7.50	9.00	11.00
802.11ac20	---	U-NII-3	14.5	15.0	17.5	11.0	11.0	14.0	7.5	8.0	10.5
802.11ac40	---	U-NII-1	15.0	15.5	18.0	13.0	12.5	16.0	8.0	7.5	10.5
802.11ac40	---	U-NII-2A	15.0	14.5	18.0	13.0	12.5	15.5	9.0	9.5	12.0
802.11ac40	---	U-NII-2C	14.5	15.5	18.0	12.0	13.0	15.5	7.5	9.0	11.5
802.11ac40	---	U-NII-3	14.0	14.5	17.0	10.5	11.0	13.5	7.5	9.0	11.0
802.11ac80	---	U-NII-1	14.0	13.5	17.0	12.0	11.5	15.0	7.5	6.5	10.0
802.11ac80	---	U-NII-2A	14.5	14.5	17.5	12.0	12.0	15.0	8.5	9.0	11.5
802.11ac80	---	U-NII-2C	14.0	15.5	17.5	11.5	12.5	15.0	7.5	9.0	11.5
802.11ac80	---	U-NII-3	14.0	14.5	17.0	11.5	11.5	14.5	6.5	8.0	10.5
802.11ax20	FULL	U-NII-1	14.0	14.0	17.0	13.5	13.0	16.0	9.0	8.5	11.5
802.11ax20	FULL	U-NII-2A	14.5	14.0	17.0	13.5	13.0	16.0	9.5	9.0	12.0
802.11ax20	FULL	U-NII-2C	13.5	14.5	17.0	12.0	13.0	15.5	8.00	9.00	11.50
802.11ax20	FULL	U-NII-3	13.5	14.0	17.0	11.5	11.5	14.5	8.0	8.0	11.0
802.11ax40	FULL	U-NII-1	14.0	14.0	17.0	13.5	12.5	16.0	8.5	7.5	11.0
802.11ax40	FULL	U-NII-2A	14.0	14.0	17.0	13.0	12.5	16.0	9.5	9.0	12.0
802.11ax40	FULL	U-NII-2C	13.5	15.0	17.0	12.0	13.0	15.5	8.0	9.0	11.5
802.11ax40	FULL	U-NII-3	13.5	14.0	16.5	10.5	11.0	14.0	8.0	8.0	11.0
802.11ax80	FULL	U-NII-1	14.0	13.5	16.5	13.0	12.0	15.5	7.5	7.0	10.5
802.11ax80	FULL	U-NII-2A	14.0	14.0	17.0	12.5	12.0	15.0	9.0	9.5	12.0
802.11ax80	FULL	U-NII-2C	13.5	14.0	17.0	12.0	12.5	15.0	8.0	9.5	11.5
802.11ax80	FULL	U-NII-3	13.0	13.5	16.5	10.5	10.5	13.5	7.5	8.5	11.0

Test Mode	RU	Band	Maximum conducted average power (dBm)								
			(DSI-3)			(DSI-4)					
			Ant 5	Ant 7	Total	Ant 5	Ant 7	Total			
802.11a	---	U-NII-1	16.5	16.0	/	10.0	10.5	/			
802.11a	---	U-NII-2A	17.0	17.0	/	11.0	11.5	/			
802.11a	---	U-NII-2C	15.5	17.5	/	9.5	11.5	/			
802.11a	---	U-NII-3	15.5	16.5	/	9.5	10.5	/			
802.11n20	---	U-NII-1	14.0	13.0	16.5	8.0	7.5	10.5			
802.11n20	---	U-NII-2A	14.5	13.5	17.0	8.0	8.0	11.0			
802.11n20	---	U-NII-2C	11.5	13.0	15.5	5.0	6.5	9.0			
802.11n20	---	U-NII-3	12.5	13.0	15.5	6.5	7.0	9.5			
802.11n40	---	U-NII-1	14.0	13.0	16.5	8.0	7.5	10.5			
802.11n40	---	U-NII-2A	14.5	13.5	17.0	8.5	8.5	11.5			
802.11n40	---	U-NII-2C	11.5	13.0	15.5	5.5	7.0	9.0			
802.11n40	---	U-NII-3	12.5	12.5	15.5	6.5	6.5	9.5			
802.11ac20	---	U-NII-1	13.5	12.5	16.0	7.5	7.5	10.0			
802.11ac20	---	U-NII-2A	14.5	13.5	17.0	8.5	7.5	11.0			
802.11ac20	---	U-NII-2C	12.5	13.0	15.0	5.0	7.0	9.0			
802.11ac20	---	U-NII-3	12.0	12.5	15.0	6.0	6.0	9.0			
802.11ac40	---	U-NII-1	13.5	12.5	16.0	7.5	6.5	10.0			
802.11ac40	---	U-NII-2A	14.0	14.0	17.0	8.0	8.5	11.0			
802.11ac40	---	U-NII-2C	12.0	13.0	15.5	5.5	7.5	9.5			

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

802.11ac40	---	U-NII-3	11.5	12.5	15.0	5.5	7.0	9.0			
802.11ac80	---	U-NII-1	12.5	11.5	15.0	6.5	5.5	9.0			
802.11ac80	---	U-NII-2A	13.5	13.0	16.0	7.5	7.0	10.5			
802.11ac80	---	U-NII-2C	11.5	12.5	15.0	5.0	7.0	9.0			
802.11ac80	---	U-NII-3	11.0	12.5	15.0	5.0	6.5	9.0			
802.11ax20	FULL	U-NII-1	13.5	12.5	16.0	7.0	6.5	10.0			
802.11ax20	FULL	U-NII-2A	14.5	14.0	17.0	8.5	8.0	11.0			
802.11ax20	FULL	U-NII-2C	12.0	12.5	15.5	5.5	7.0	9.0			
802.11ax20	FULL	U-NII-3	12.0	12.0	15.0	6.0	7.0	9.5			
802.11ax40	FULL	U-NII-1	13.0	12.5	16.0	7.5	6.5	10.0			
802.11ax40	FULL	U-NII-2A	14.0	14.0	17.0	8.0	8.0	11.0			
802.11ax40	FULL	U-NII-2C	12.0	13.0	15.5	5.5	7.0	9.5			
802.11ax40	FULL	U-NII-3	11.5	12.0	14.5	5.5	7.0	9.5			
802.11ax80	FULL	U-NII-1	13.0	12.0	15.5	7.0	6.0	9.5			
802.11ax80	FULL	U-NII-2A	13.5	14.5	17.0	8.0	8.5	11.0			
802.11ax80	FULL	U-NII-2C	12.0	13.5	15.5	6.0	7.5	9.5			
802.11ax80	FULL	U-NII-3	11.5	12.5	15.0	5.5	6.5	9.0			

➤ Bluetooth

Mode	Modulation	Maximum conducted average power (dBm) (All DSI)
BR + EDR	GFSK	9.0
	$\pi/4$ -DQPSK	6.0
	8-DPSK	6.0
LE	GFSK	0.5
2LE	GFSK	-1.0
LE Code (S=2)	GFSK	1.5
LE Code (S=8)	GFSK	1.0

1.5. OTHER INFORMATION

None.

1.6. TEST LOCATION

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China
Telephone: +86 (0) 755 2823 0888
Fax: +86 (0) 755 2823 0886

1.7. TEST FACILITY

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

Shenzhen UnionTrust Quality and Technology Co., Ltd.

CNAS-Lab Code: L9069

The measuring equipment utilized to perform the tests documented in this report has been calibrated once a year or in accordance with the manufacturer's recommendations, and is traceable under the ISO/IEC 17025 to international or national standards. Equipment has been calibrated by accredited calibration laboratories.

A2LA-Lab Certificate No.: 4312.01

Shenzhen UnionTrust Quality and Technology Co., Ltd. has been accredited by A2LA for technical competence

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China
Tel: +86-755-28230888 Fax: +86-755-28230886 E-mail: info@uttlab.com <http://www.uttlab.com>
UTTR-SAR-IEEE Std 1528-2013-V1.1

in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

ISED Wireless Device Testing Laboratories

CAB identifier: CN0032

FCC Accredited Lab.

Designation Number: CN1194

Test Firm Registration Number: 259480

1.8. GUIDANCE STANDARD

The tests documented in this report were performed in accordance with FCC 47 CFR Part 2 §2.1093, IEEE Std 1528-2013, ANSI/IEEE C95.1-1992, the following FCC Published RF exposure KDB procedures:

1. 248227 D01 802.11 Wi-Fi SAR v02r02
2. 447498 D01 General RF Exposure Guidance v06
3. 447498 D03 Supplement C Cross-Reference v01
4. 648474 D04 Handset SAR v01r03
5. 865664 D01 SAR measurement 100 MHz to 6 GHz v01r04
6. 865664 D02 RF Exposure Reporting v01r02
7. 941225 D01 3G SAR Procedures v03r01
8. 941225 D05 SAR for LTE Devices v02r05
9. 941225 D05A LTE Rel.10 KDB Inquiry Sheet v01r02
10. 941225 D06 Hotspot Mode v02r01
11. 775926 D01 SAR Testing for Irregular Shaped Devices v01

In addition to the above, the following information was used:

TCB workshop October 2014; RF Exposure Procedures (Other LTE Considerations)
TCB workshop April 2015; RF Exposure Procedures (Overlapping LTE Bands)
TCB workshop October 2015; RF Exposure Procedures (KDB 941225 D05A)
TCB workshop April 2016; RF Exposure Procedures (LTE Carrier Aggregation for DL)
TCB workshop October 2016; RF Exposure Procedures (LTE Carrier Aggregation for UL)
TCB workshop October 2016; RF Exposure Procedures (Bluetooth Duty Factor)
TCB workshop October 2016; RF Exposure Procedures (DUT Holder Perturbations)
TCB workshop May 2017; RF Exposure Procedures (Broadband Liquid Above 3 GHz)
TCB workshop May 2017; RF Exposure Procedures (LTE Band 41 Power Class 2)
TCB workshop November 2017; RF Exposure Procedures (LTE UL/DL Carrier Aggregation SAR)
TCB workshop April 2018; RF Exposure Procedures (LTE DL CA SAR Test Exclusion)
TCB workshop October 2018; RF Exposure Procedures (LTE Inter-Band Uplink Carrier Aggregation Interim Procedures)
TCB workshop April 2019; RF Exposure Procedures (802.11ax SAR Testing)
TCB workshop November 2019; RF Exposure Policy Updates (5G NR FR1 NSA EN-DCUE SAR Evaluations)
TCB workshop April 2021; RF Exposure Procedures (Remarks on Test Reductions via Data Referencing for Closely Related Products)
TCB workshop April 2022; RF Exposure Procedures (Sum-Peak Location Separation Ratio)

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

2. SPECIFIC ABSORPTION RATE (SAR)

2.1. INTRODUCTION

SAR is related to the rate at which energy is absorbed per unit mass in an object exposed to a radio field. The SAR distribution in a biological body is complicated and is usually carried out by experimental techniques or numerical modeling, by appropriate techniques, to produce specific absorption rates (SARs) as averaged over the whole-body, any 1 g or any 10 g of tissue (defined as a tissue volume in the shape of a cube). All SAR values are to be averaged over any six-minute period. When portable device was used within 20 cm of the user's body, SAR evaluation of the device will be required. The SAR limit in chapter 2.3.

2.2. SAR DEFINITION

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

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

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

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

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

Where: σ is the conductivity of the tissue, ρ is the mass density of the tissue and E is the RMS electrical field strength.

2.3. SAR LIMITS

Limits for Occupational/Controlled Exposure (W/kg)

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.4	8.0	20.0

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

Whole-Body	Partial-Body	Hands, Wrists, Feet and Ankles
0.08	1.6	4.0

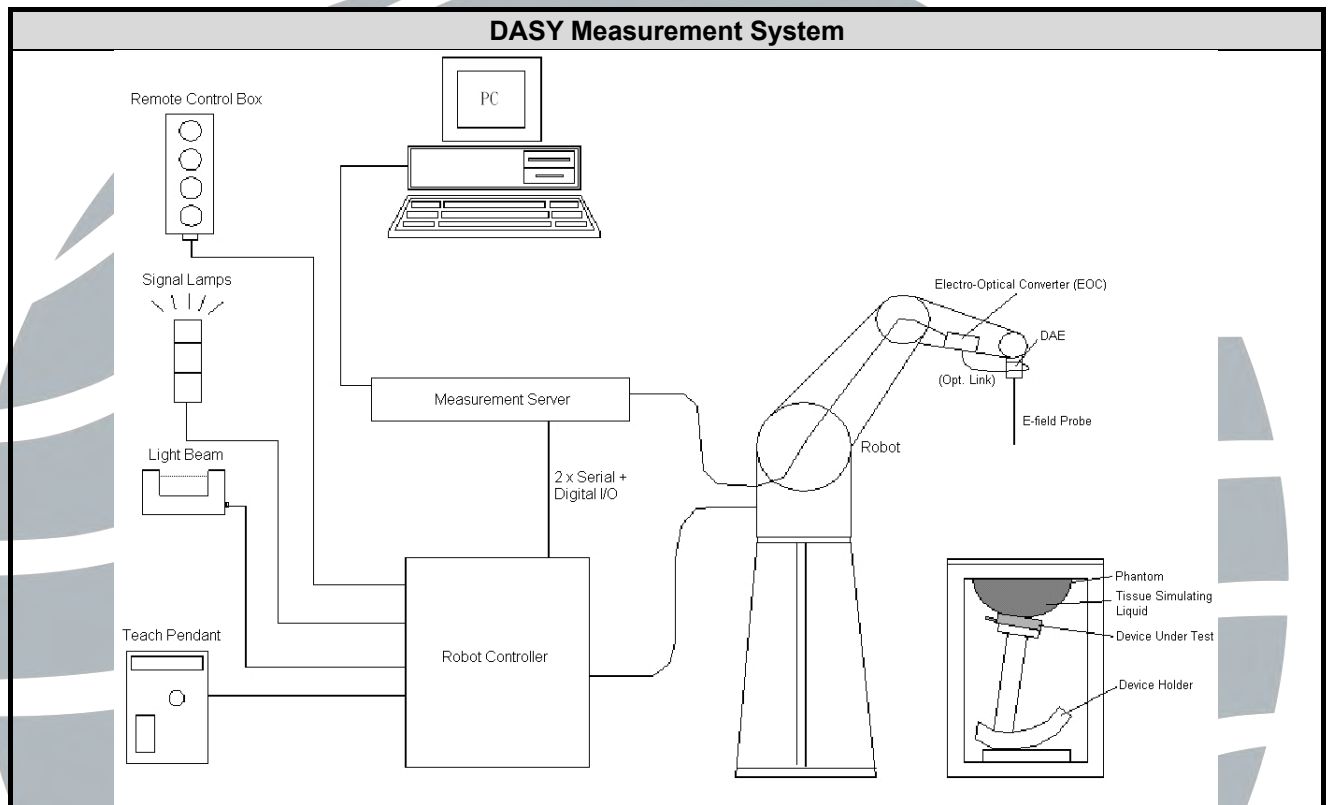
Note:

- 1) Whole-Body SAR is averaged over the entire body, partial-body SAR is averaged over any 1 gram of tissue defined as a tissue volume in the shape of a cube. SAR for hands, wrists, feet and ankles is averaged over any 10 grams of tissue defined as a tissue volume in the shape of a cube.
- 2) At frequencies above 6.0 GHz, SAR limits are not applicable and MPE limits for power density should be applied at 5 cm or more from the transmitting device.
- 3) The SAR limit is specified in FCC 47 CFR Part 2 §2.1093, ANSI/IEEE C95.1-1992.

3. SAR MEASUREMENT SYSTEM

3.1. SPEAG DASY SYSTEM

DASY system consists of high precision robot, probe alignment sensor, phantom, robot controller, controlled measurement server and near-field probe. The robot includes six axes that can move to the precision position of the DASY5 software defined. The DASY software can define the area that is detected by the probe. The robot is connected to controlled box. Controlled measurement server is connected to the controlled robot box. The DAE includes amplifier, signal multiplexing, AD converter, offset measurement and surface detection. It is connected to the Electro-optical coupler (ECO). The ECO performs the conversion from the optical into digital electric signal of the DAE and transfers data to the PC.



3.1.1. Robot

The DASY system uses the high precision robots from Stäubli SA (France). For the 6-axis controller system, the robot controller version (DASY5: CS8Cspeag-TX60) from Stäubli is used. The Stäubli robot series have many features that are important for our application:

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

3.1.2. Probe

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

Model	EX3DV4	
Construction	Symmetrical design with triangular core. Built-in shielding against static charges. PEEK enclosure material (resistant to organic solvents, e.g., DGBE).	
Frequency	10 MHz to 6 GHz Linearity: ± 0.2 dB	
Directivity	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)	
Dynamic Range	10 μ W/g to 100 mW/g Linearity: ± 0.2 dB (noise: typically < 1 μ W/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	

Model	ES3DV3	
Construction	Symmetrical design with triangular core. Interleaved sensors. Built-in shielding against static charges. PEEK enclosure material (resistant to organic solvents, e.g., DGBE).	
Frequency	10 MHz to 4 GHz Linearity: ± 0.2 dB	
Directivity	± 0.2 dB in HSL (rotation around probe axis) ± 0.3 dB in tissue material (rotation normal to probe axis)	
Dynamic Range	5 μ W/g to 100 mW/g Linearity: ± 0.2 dB	
Dimensions	Overall length: 337 mm (Tip: 20 mm) Tip diameter: 3.9 mm (Body: 12 mm) Distance from probe tip to dipole centers: 2.0 mm	

3.1.3. Data Acquisition Electronics (DAE)

Model	DAE3, DAE4	
Construction	Signal amplifier, multiplexer, A/D converter and control logic. Serial optical link for communication with DASY embedded system (fully remote controlled). Two step probe touch detectors for mechanical surface detection and emergency robot stop.	
Measurement Range	-100 to +300 mV (16-bit resolution and two range settings: 4mV, 400mV)	
Input Voltage Offset	< 5 μ V (with auto zero)	
Input Bias Current	< 50 fA	
Dimensions	60 x 60 x 68 mm	

3.1.4. Phantom

Model	Twin SAM	
Construction	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.	
Material	Vinylester, glass fiber reinforced (VE-GF)	
Shell Thickness	2 ± 0.2 mm (6 ± 0.2 mm at ear point)	
Dimensions	Length: 1000 mm Width: 500 mm Height: adjustable feet	
Filling Volume	approx. 25 liters	

Model	ELI	
Construction	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.	
Material	Vinylester, glass fiber reinforced (VE-GF)	
Shell Thickness	2.0 ± 0.2 mm (bottom plate)	
Dimensions	Major axis: 600 mm Minor axis: 400 mm	
Filling Volume	approx. 30 liters	

3.1.5. Device Holder

Model	Mounting Device	
Construction	In combination with the Twin SAM Phantom or ELI4, the Mounting Device enables the rotation of the mounted transmitter device in spherical coordinates. Rotation point is the ear opening point. Transmitter devices can be easily and accurately positioned according to IEC, IEEE, FCC or other specifications. The device holder can be locked for positioning at different phantom sections (left head, right head, flat).	
Material	POM	

Model	Laptop Extensions Kit	
Construction	Simple but effective and easy-to-use extension for Mounting Device that facilitates the testing of larger devices according to IEC 62209-2 (e.g., laptops, cameras, etc.). It is lightweight and fits easily on the upper part of the Mounting Device in place of the phone positioner.	
Material	POM, Acrylic glass, Foam	

3.1.6. System Validation Dipoles

Model	D-Serial	
Construction	Symmetrical dipole with 1/4 balun. Enables measurement of feed point impedance with NWA. Matched for use near flat phantoms filled with tissue simulating solutions.	
Frequency	750 MHz to 5800 MHz	
Return Loss	> 20 dB	
Power Capability	> 100 W ($f < 1\text{GHz}$), > 40 W ($f > 1\text{GHz}$)	

3.2. SAR SCAN PROCEDURE

3.2.1. SAR Reference Measurement (drift)

Prior to the SAR test, local SAR shall be measured at a stationary reference point where the SAR exceeds the lower detection limit of the measurement system.

3.2.2. Area Scan

Measurement procedures for evaluating the SAR of wireless device start with a coarse measurement grid to determine the approximate location of the local peak SAR values. This is known as the area-scan procedure. All antennas and radiating structures that may contribute to the measured SAR or influence the SAR distribution must be included in the area scan. The area scan measurement resolution must enable the extrapolation algorithms of the SAR system to correctly identify the peak SAR location(s) for subsequent zoom scan measurements to correctly determine the 1-g SAR. Area scans are performed at a constant distance from the phantom surface, determined by the measurement frequencies. When a measured peak is closer than $\frac{1}{2}$ the zoom scan volume dimension (x, y) from the edge of the area scan region, unless the entire peak and gram-averaging volume are both captured within the zoom scan volume, the area scan must be repeated by shifting and expanding the area scan region to ensure all peaks are away from the area scan boundary. The area scan resolutions specified in the table below must be applied to the SAR measurements.

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

3.2.3. Zoom Scan

To evaluate the peak spatial-average SAR values with respect to 1 g or 10 g cubes, fine resolution volume scans, called zoom scans, are performed at the peak SAR locations identified during the area scan. If the cube volume within the zoom scan chosen to calculate the peak spatial-average SAR touches any boundary of the zoom-scan volume, the zoom scan shall be repeated with the center of the zoom-scan volume shifted to the new maximum SAR location. For any secondary peaks found in the area scan that are within 2 dB of the maximum peak and are not within this zoom scan, the zoom scan shall be performed for such peaks, unless the peak spatial-average SAR at the location of the maximum peak is more than 2 dB below the applicable SAR limit (i.e., 1 W/kg for a 1.6 W/kg 1 g limit, or 1.26 W/kg for a 2 W/kg 10 g limit). The zoom scan resolutions specified in the table below must be applied to the SAR measurements.

			≤ 3 GHz	> 3 GHz
Maximum zoom scan spatial resolution: $\Delta x_{Zoom}, \Delta y_{Zoom}$			≤ 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 1 ST two points closest to phantom surface	≤ 4 mm	3 – 4 GHz: ≤ 3 mm 4 – 5 GHz: ≤ 2.5 mm 5 – 6 GHz: ≤ 2 mm
		$\Delta Z_{Zoom}(n>1)$: between subsequent points	≤ 1.5· $\Delta Z_{Zoom}(n-1)$ mm	
Minimum zoom scan volume	x, y, z		≥ 30 mm	3 – 4 GHz: ≥ 28 mm 4 – 5 GHz: ≥ 25 mm 5 – 6 GHz: ≥ 22 mm
Note: δ is the penetration depth of a plane-wave at normal incidence to the tissue medium; see IEEE Std 1528-2013 for details.				
* When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB Publication 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.				

3.2.4. SAR Drift Measurement

The local SAR (or conducted power) shall be measured at exactly the same location as in 3.2.1 section. The absolute value of the measurement drift (the difference between the SAR measured in 3.2.1 and 3.2.4 section) shall be recorded. The SAR drift shall be kept within ± 5%.

3.3. EQUIPMENT LIST

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Interval
System Validation Dipole	SPEAG	D750V3	1066	Jan. 02, 2024	3 Year
System Validation Dipole	SPEAG	D900V2	136	Mar. 15, 2024	3 Year
System Validation Dipole	SPEAG	D1750V2	1086	Mar. 14, 2024	3 Year
System Validation Dipole	SPEAG	D1900V2	509	Mar. 14, 2024	3 Year
System Validation Dipole	SPEAG	D2450V2	883	Jan.02, 2024	3 Year
System Validation Dipole	SPEAG	D2300V2	1087	Jun. 07, 2024	3 Year
System Validation Dipole	SPEAG	D2600V2	1082	Jan.02, 2024	3 Year
System Validation Dipole	SPEAG	D3500V2	1063	Jun. 06, 2024	3 Year
System Validation Dipole	SPEAG	D3700V2	1020	Jun. 06, 2024	3 Year
System Validation Dipole	SPEAG	D5GHzV2	1115	Jun. 02, 2024	3 Year
Data Acquisition Electronics	SPEAG	DAE4	662	Dec. 15, 2025	1 Year
Dosimetric E-Field Probe	SPEAG	ES3DV3	3090	Dec.15, 2025	1 Year
Dosimetric E-Field Probe	SPEAG	EX3DV4	7506	Nov. 28, 2025	1 Year
Wideband Radio Communication Tester	R&S	CMW500	120932	Mar. 20, 2026	1 Year
UXM 5G Wireless Test Platform	KEYSIGHT	E7515B	MY59020226	Mar. 20, 2026	1 Year
ENA Series Network Analyzer	Agilent	8753ES	US39170317	Oct. 24, 2025	1 Year
Phantom Table	SPEAG	QD 000 P40 CB	TP-1335	N/A	N/A
Phantom Table	SPEAG	QD OVA 002 AA	TP-1254	N/A	N/A
Robot controller	STAUBLI	CS8Cspeag-TX60	F13/5R4XC1/C/01	N/A	N/A
Robot	STAUBLI	TX60Lspeag	F13/5R4XC1/A/01	N/A	N/A
Dielectric Assessment Kit	SPEAG	DAK-3.5	1070	N/A	N/A
USB/GPIB Interface	Agilent	82357B	N10149	N/A	N/A
Signal Generator	R&S	SMB100A	103718	Mar. 20, 2026	1 Year
POWER METER	R&S	NRP	101293	Oct. 24, 2025	1 Year
Thermometer	Shanghai Gao Zhi Precision Instrument Co., Ltd.	HB6801	101293	Oct. 29, 2025	1 Year
Dual Directional Coupler	Agilent	778D	MY52180234	Oct. 24, 2025	1 Year
Amplifier	Mini-Circuit	ZHL42	QA1252001	Mar. 20, 2026	1 Year
DC Source	Agilent	66319B	MY43000795	Oct. 24, 2025	1 Year

3.4. MEASUREMENT UNCERTAINTY

TABLE 1 EXPOSURE ASSESSMENT UNCERTAINTY FOR HANDSET SAR

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

3.5. TISSUE DIELECTRIC PARAMETER MEASUREMENT & SYSTEM VERIFICATION

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg, the extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

3.5.1. Tissue Simulating Liquids

The temperature of the tissue-equivalent medium used during measurement must also be within 18 °C to 25 °C and within ± 2 °C of the temperature when the tissue parameters are characterized. The dielectric parameters must be measured before the tissue-equivalent medium is used in a series of SAR measurements. The parameters should be re-measured after each 3 - 4 days of use; or earlier if the dielectric parameters can become out of tolerance.

The depth of tissue-equivalent liquid in a phantom must be ≥ 15.0 cm with $\leq \pm 0.5$ cm variation for SAR measurements ≤ 3 GHz and ≥ 10.0 cm with $\leq \pm 0.5$ cm variation for measurements > 3 GHz. The nominal dielectric values of the tissue simulating liquids in the phantom and the tolerance of 5% are listed in Table-3.1.



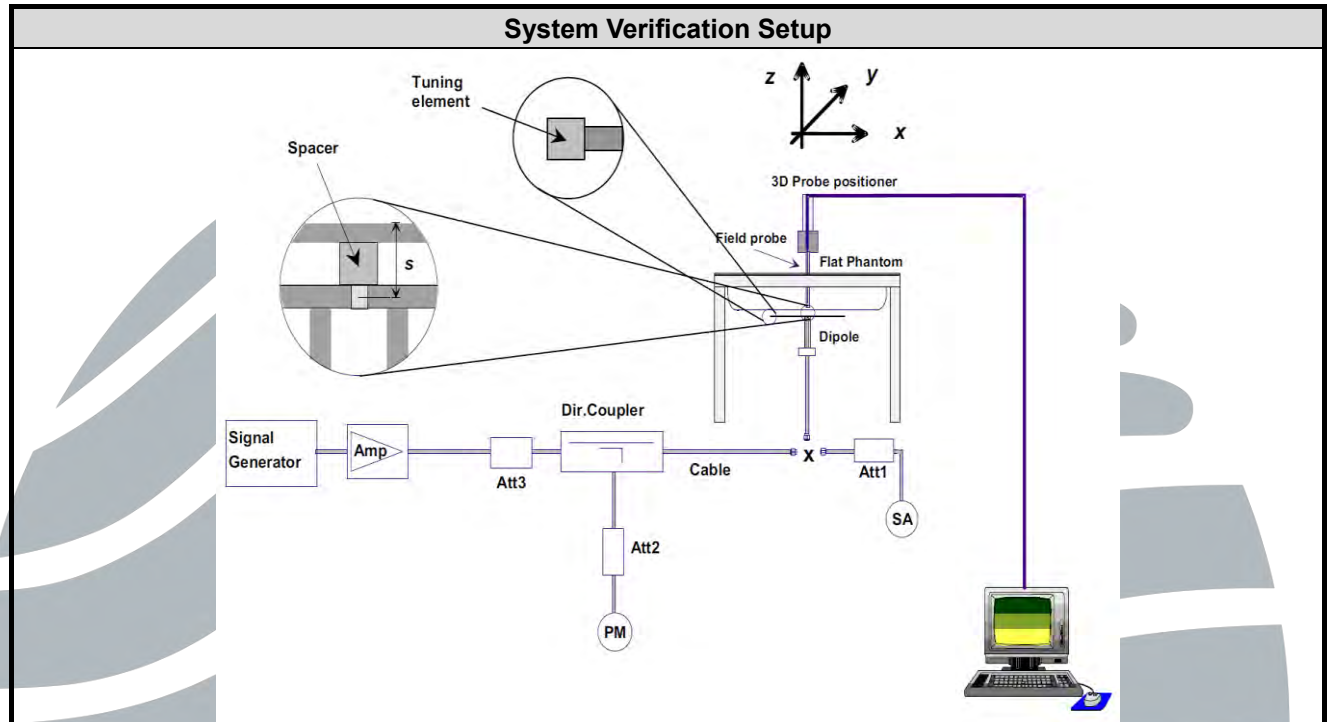
Tissue Dielectric Parameters for Head and Body				
Target Frequency (MHz)	Head		Body	
	ϵ_r	σ (S/m)	ϵ_r	σ (S/m)
750	41.9	0.89	55.5	0.96
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
1450	40.5	1.20	54.0	1.30
1640	40.3	1.29	53.8	1.40
1750	40.1	1.37	53.4	1.49
1800	40.0	1.40	53.3	1.52
1900	40.0	1.40	53.3	1.52
2000	40.0	1.40	53.3	1.52
2300	39.5	1.67	52.9	1.81
2450	39.2	1.80	52.7	1.95
2600	39.0	1.96	52.5	2.16
3500	37.9	2.91	51.3	3.31
5200	36.0	4.66	49.0	5.30
5300	35.9	4.76	48.9	5.42
5500	35.6	4.96	48.6	5.65
5600	35.5	5.07	48.5	5.77
5800	35.3	5.27	48.2	6.00
(ϵ_r = relative permittivity, σ = conductivity and $\rho = 1000$ kg/m ³)				

The following table gives the recipes for tissue simulating liquids.

Recipes of Tissue Simulating Liquid								
Tissue Type	Bactericide	DGBE	HEC	NaCl	Sucrose	Triton X-100	Water	Diethylene Glycol Mono-hexylether
H750	0.2	-	0.2	1.4	57.0	-	41.1	-
H835	0.1	-	1.0	1.4	57.0	-	40.5	-
H900	0.1	-	1.0	1.5	56.5	-	40.9	-
H1450	-	45.5	-	0.7	-	-	53.8	-
H1640	-	45.8	-	0.5	-	-	53.7	-
H1750	-	44.5	-	0.3	-	-	55.2	-
H1800	-	44.9	-	0.2	-	-	54.9	-
H1900	-	44.9	-	0.2	-	-	54.9	-
H2000	-	50	-	-	-	-	50	-
H2300	-	44.9	-	0.1	-	-	55.0	-
H2450	-	45.0	-	0.1	-	-	54.9	-
H2600	-	45.1	-	0.1	-	-	54.8	-
H3500	-	8.0	-	0.2	-	20.0	71.8	-
H5G	-	-	-	-	-	17.2	65.52	17.3
B750	0.2	-	0.2	0.8	48.8	-	50.0	-
B835	0.2	-	0.2	0.9	48.5	-	50.2	-
B900	0.2	-	0.2	0.9	48.2	-	50.5	-
B1450	-	34.0	-	0.3	-	-	65.7	-
B1640	-	32.5	-	0.3	-	-	67.2	-
B1750	-	29.4	-	0.4	-	-	70.2	-
B1800	-	29.5	-	0.4	-	-	70.1	-
B1900	-	29.5	-	0.3	-	-	70.2	-
B2000	-	30.0	-	0.2	-	-	69.8	-
B2300	-	31.0	-	0.1	-	-	68.9	-
B2450	-	31.4	-	0.1	-	-	68.5	-
B2600	-	31.8	-	0.1	-	-	68.1	-
B3500	-	28.8	-	0.1	-	-	71.1	-
B5G	-	-	-	-	-	10.7	78.6	10.7

3.5.2. System Check Description

The system check procedure provides a simple, fast, and reliable test method that can be performed daily or before every SAR measurement. The objective here is to ascertain that the measurement system has acceptable accuracy and repeatability. This test requires a flat phantom and a radiating source. The system verification setup is shown as below.



3.5.3. Tissue Verification

The measuring results for tissue simulating liquid are shown as below.

Test Date	Tissue Type	Frequency (MHz)	Liquid Temp. (°C)	Measured Conductivity (σ)	Measured Permittivity (ϵ_r)	Target Conductivity (σ)	Target Permittivity (ϵ_r)	Conductivity Deviation (%)	Permittivity Deviation (%)
Jul. 19, 2026	Head	750	21.4	0.908	41.02	0.90	42.00	0.89	-2.33
Jul. 21, 2026	Head	750	21.4	0.887	40.74	0.90	42.00	-1.48	-3.00
Jul. 18, 2026	Head	900	21.5	0.983	39.72	0.97	41.50	1.34	-4.29
Jul. 20, 2026	Head	900	21.1	0.965	40.53	0.97	41.50	-0.47	-2.34
Jul. 17, 2026	Head	1750	21.7	1.327	39.72	1.37	40.10	-3.14	-0.95
Jul. 22, 2026	Head	1750	21.8	1.324	40.30	1.37	40.10	-3.36	0.50
Jul. 14, 2026	Head	1900	21.6	1.458	39.05	1.40	40.00	4.14	-2.38
Jul. 18, 2026	Head	1900	21.1	1.346	40.13	1.40	40.00	-3.86	0.33
Aug. 10, 2026	Head	1900	20.9	1.404	40.02	1.40	40.00	0.29	0.05
Jul. 22, 2026	Head	2300	21.7	1.704	40.36	1.67	39.50	2.04	2.18
Jul. 11, 2026	Head	2450	21.6	1.868	39.72	1.80	39.20	3.78	1.33
Jul. 26, 2026	Head	2450	21.8	1.856	38.51	1.80	39.20	3.11	-1.76
Jul. 08, 2026	Head	2600	21.7	2.056	39.21	1.96	39.00	4.90	0.54
Jul. 24, 2026	Head	2600	22.0	1.969	38.12	1.96	39.00	0.46	-2.26
Jun. 20, 2026	Head	2600	21.9	1.986	38.32	1.96	39.00	1.33	-1.74
Jul. 13, 2026	Head	2600	21.7	1.984	37.44	1.96	39.00	1.22	-4.00
Jul. 31, 2026	Head	3500	21.5	2.837	38.451	2.91	37.90	-2.51	1.45
Aug. 02, 2026	Head	3500	21.9	2.839	38.449	2.91	37.90	-2.44	1.45
Aug. 01, 2026	Head	3700	21.4	3.118	37.709	3.12	37.70	-0.06	0.02
Aug. 03, 2026	Head	3700	21.7	3.137	38.127	3.12	37.70	0.54	1.13
Aug. 04, 2026	Head	5250	21.6	4.568	37.459	4.71	35.90	-3.01	4.34
Aug. 05, 2026	Head	5250	21.3	4.571	37.446	4.71	35.90	-2.95	4.31
Aug. 06, 2026	Head	5600	21.6	4.963	36.794	5.07	35.50	-2.11	3.65
Aug. 07, 2026	Head	5800	21.6	5.162	36.363	5.27	35.30	-2.05	3.01

Note:

The dielectric properties of the tissue simulating liquid must be measured within 24 hours before the SAR testing and within $\pm 5\%$ of the target values. The variation of the liquid temperature must be within $\pm 2^\circ\text{C}$ during the test.

3.5.4. System Verification

The measuring result for system verification is tabulated as below.

Test Date	Tissue Type	Freq. (MHz)	1W Target SAR-1g (W/kg)	1W Target SAR-10g (W/kg)	Measured SAR-1g (W/kg)	Measured SAR-10g (W/kg)	Normalized to 1W SAR-1g (W/kg)	Normalized to 1W SAR-10g (W/kg)	Deviation 1g(%)	Deviation 10g(%)	Dipole S/N	Probe S/N	DAE S/N
Jul. 19, 2026	Head	750	8.60	5.64	2.230	1.490	8.92	5.96	3.72	5.67	1066	3090	662
Jul. 21, 2026	Head	750	8.60	5.64	2.240	1.490	8.96	5.96	4.19	5.67	1066	3090	662
Jul. 18, 2026	Head	900	11.00	7.03	2.740	1.800	10.96	7.20	-0.36	2.42	136	3090	662
Jul. 20, 2026	Head	900	11.00	7.03	2.860	1.880	11.44	7.52	4.00	6.97	136	3090	662
Jul. 17, 2026	Head	1750	36.80	19.50	8.500	4.540	34.00	18.16	-7.61	-6.87	1086	3090	662
Jul. 22, 2026	Head	1750	36.80	19.50	8.470	4.510	33.88	18.04	-7.93	-7.49	1086	3090	662
Jul. 14, 2026	Head	1900	40.00	20.90	10.500	5.440	42.00	21.76	5.00	4.11	509	3090	662
Jul. 18, 2026	Head	1900	40.00	20.90	10.200	5.300	40.80	21.20	2.00	1.44	509	3090	662
Aug. 10, 2026	Head	1900	40.00	20.90	10.400	5.390	41.60	21.56	4.00	3.16	509	3090	662
Jul. 22, 2026	Head	2300	49.00	24.00	11.900	5.610	47.60	22.44	-2.86	-6.50	1087	3090	662
Jul. 11, 2026	Head	2450	53.70	24.80	13.600	6.400	54.40	25.60	1.30	3.23	883	3090	662
Jul. 26, 2026	Head	2450	53.70	24.80	14.200	6.560	56.80	26.24	5.77	5.81	883	3090	662
Jul. 08, 2026	Head	2600	56.10	24.80	13.400	6.220	53.60	24.88	-4.46	0.32	1082	3090	662
Jul. 24, 2026	Head	2600	56.10	24.80	13.800	6.170	55.20	24.68	-1.60	-0.48	1082	3090	662
Jun. 20, 2026	Head	2600	56.10	24.80	14.300	6.400	57.20	25.60	1.96	3.23	1082	3090	662
Jul. 13, 2026	Head	2600	56.10	24.80	14.000	6.280	56.00	25.12	-0.18	1.29	1082	3090	662
Jul. 31, 2026	Head	3500	65.10	24.60	6.46	2.48	64.60	24.80	-0.77	0.81	1063	7506	662
Aug. 02, 2026	Head	3500	65.10	24.60	6.43	2.46	64.30	24.60	-1.23	0.00	1063	7506	662
Aug. 01, 2026	Head	3700	67.40	24.70	6.89	2.55	68.90	25.50	2.23	3.24	1020	7506	662
Aug. 03, 2026	Head	3700	67.40	24.70	6.78	2.51	67.80	25.10	0.59	1.62	1020	7506	662
Aug. 04, 2026	Head	5250	78.60	22.30	7.75	2.22	77.50	22.20	-1.40	-0.45	1115	7506	662
Aug. 05, 2026	Head	5250	78.60	22.30	7.86	2.26	78.60	22.60	0.00	1.35	1115	7506	662
Aug. 06, 2026	Head	5600	81.90	23.10	8.23	2.32	82.30	23.20	0.49	0.43	1115	7506	662
Aug. 07, 2026	Head	5800	78.60	22.00	7.96	2.25	79.60	22.50	1.27	2.27	1115	7506	662

Note:

Comparing to the reference SAR value, the validation data should be within its specification of 10%. The result indicates the system check can meet the variation criterion and the plots can be referred to Appendix A of this report.

4. SAR MEASUREMENT EVALUATION

4.1. EUT CONFIGURATION AND SETTING

Connections between EUT and System Simulator

For WWAN SAR testing, the EUT was linked and controlled by base station emulator. Communication between the EUT and the emulator was established by air link. The distance between the EUT and the communicating antenna of the emulator is larger than 50 cm and the output power radiated from the emulator antenna is at least 30 dB smaller than the output power of EUT. The EUT was set from the emulator to radiate maximum output power during SAR testing.

4.1.1. GSM Configuration and Testing

GSM (GMSK: CS1) voice mode transmits with 1 time slot. GPRS (GMSK: CS1) and EDGE (GMSK: MCS1, 8PSK: MCS9) may transmit up to 4 time slots in the 8 time-slot frame according to the multislot class implemented in a device.

4.1.2. WCDMA Configuration and Testing

WCDMA Handsets Head SAR

SAR for next to the ear head exposure is measured using a 12.2 kbps RMC with TPC bits configured to all "1's". The 3G SAR test reduction procedure is applied to AMR configurations with 12.2 kbps RMC as the primary mode.

WCDMA Handsets Body-worn SAR

SAR for body-worn 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.

Handsets with Release 5 HSDPA

The 3G SAR test reduction procedure is applied to HSDPA body-worn configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSDPA using the HSDPA body SAR procedures in the "Release 5 HSDPA Data Devices", for the highest reported SAR body-worn exposure configuration in 12.2 kbps RMC. Handsets with both HSDPA and HSUPA are tested according to Release 6 HSPA test procedures.

Handsets with Release 6 HSUPA

The 3G SAR test reduction procedure is applied to HSPA (HSUPA/HSDPA with RMC) body-worn configurations with 12.2 kbps RMC as the primary mode. Otherwise, SAR is measured for HSPA using the HSPA body SAR procedures in the "Release 6 HSPA Data Devices", for the highest reported body-worn exposure SAR configuration in 12.2 kbps RMC. When VOIP is applicable for next to the ear head exposure in HSPA, the 3G SAR test reduction procedure is applied to HSPA with 12.2 kbps RMC as the primary mode; otherwise, the same HSPA configuration used for body-worn measurements is tested for next to the ear head exposure.

Release 5 HSDPA Data Devices

The 3G SAR test reduction procedure is applied to body SAR with 12.2 kbps RMC as the primary mode. Otherwise, body SAR for HSDPA is measured using an FRC with H-Set 1 in Sub-test 1 and a 12.2 kbps RMC configured in Test Loop Mode 1, for the highest reported SAR configuration in 12.2 kbps RMC without HSDPA. HSDPA is configured according to the applicable UE category of a test device. The number of HS-DSCH / HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms and a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors (β_c , β_d), and HS-DPCCH power offset parameters (Δ_{ACK} , Δ_{NACK} , Δ_{CQI}) are set according to values indicated in below. The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.

Sub-test	β_c	β_d	β_d (SF)	β_c / β_d	$\beta_{hs}^{(1)}$	CM (dB) ⁽²⁾	MPR
1	2 / 15	15 / 15	64	2 / 15	4 / 15	0.0	0

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

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 $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs} / \beta_c = 30 / 15 \Leftrightarrow \beta_{hs} = 30 / 15 * \beta_c$.

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

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 signaled gain factors for the reference TFC (TF1, TF1) to $\beta_c = 11 / 15$ and $\beta_d = 15 / 15$.

Release 6 HSPA Data Devices

The 3G SAR test reduction procedure is applied to body SAR with 12.2 kbps RMC as the primary mode. Otherwise, body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 and power control algorithm 2, according to the highest reported body SAR configuration in 12.2 kbps RMC without HSPA. When VOIP applies to head exposure, the 3G SAR test reduction procedure is applied with 12.2 kbps RMC as the primary mode. Otherwise, the same HSPA configuration used for body SAR measurements are applied to head exposure testing. Due to inner loop power control requirements in HSPA, a communication test set is required for output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA are configured according to the β values indicated in below.

Sub-test	β_c	β_d	β_d (SF)	β_c / β_d	β_{hs} ⁽¹⁾	β_{ec}	β_{ed}	β_{ed} (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	$\beta_{ed1}: 47/15$ $\beta_{ed2}: 47/15$	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 $\Delta_{CQI} = 8 \Leftrightarrow A_{hs} = \beta_{hs} / \beta_c = 30 / 15 \Leftrightarrow \beta_{hs} = 30 / 15 * \beta_c$.

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 signaled 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 signaled 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} cannot be set directly; it is set by Absolute Grant Value.

HSPA+ SAR Guidance

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

DC-HSDPA SAR Guidance

The 3G SAR test reduction procedure is applied to DC-HSDPA with 12.2 kbps RMC as the primary mode. Otherwise, when SAR is required for Rel. 5 HSDPA, SAR is required for Rel. 8 DC-HSDPA. 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 secondary serving HS-DSCH Cell are required to perform the power measurement and for the results to be acceptable.

4.1.3. LTE Configuration and Testing

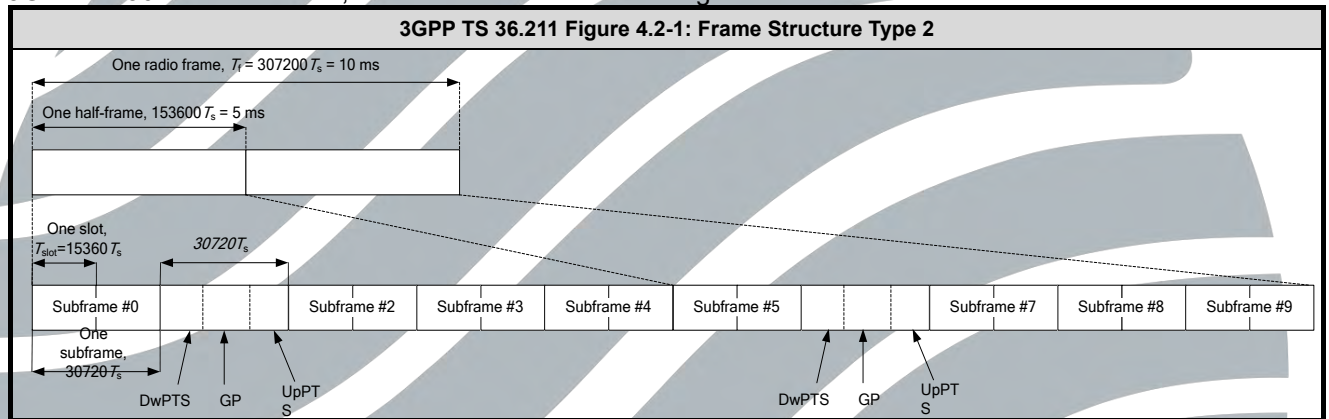
UE power class is category 3. The LTE maximum power reduction (MPR) in accordance with 3GPP TS 36.101 is active all times during LTE operation. The allowed MPR for the maximum output power please refer to the tune up procedure.

In addition, the device is compliant with additional maximum power reduction (A-MPR) requirements defined in 3GPP TS 36.101 section 6.2.4 that was disabled for all FCC compliance testing.

A properly configured base station simulator is used for the SAR and power measurements, so spectrum plots for each RB allocation and offset configuration are not included in the SAR report to demonstrate that the tested RB allocations have been correctly established at the maximum output power conditions.

TDD-LTE Setup Configurations

According to KDB 941225 D05, SAR testing for TDD-LTE device 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 TDD-LTE configurations. The TDD-LTE of this device supports frame structure type 2 defined in 3GPP TS 36.211 section 4.2, and the frame structure configuration can be referred to below.



3GPP TS 36.211 Table 4.2-1: Configuration of Special Subframe						
Special Subframe Configuration	Normal Cyclic Prefix in Downlink			Extended Cyclic Prefix in Downlink		
	DwPTS	UpPTS		DwPTS	UpPTS	
		Normal Cyclic Prefix in Uplink	Extended Cyclic Prefix in Uplink		Normal Cyclic Prefix in Uplink	Extended Cyclic Prefix in Uplink
0	6592·Ts	2192·Ts	2560·Ts	7680·Ts	2192·Ts	2560·Ts
1	19760·Ts			20480·Ts		
2	21952·Ts			23040·Ts		
3	24144·Ts			25600·Ts		
4	26336·Ts	4384·Ts	5120·Ts	7680·Ts	4384·Ts	5120·Ts
5	6592·Ts			20480·Ts		
6	19760·Ts			23040·Ts		
7	21952·Ts			12800·Ts		
8	24144·Ts	-	-	-	-	-
9	13168·Ts			-	-	-

Uplink-Downlink Configurations and duty cycle												
Uplink-Downlink Configuration	Downlink-to-Uplink Switch-Point Periodicity	Subframe Number										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%

Considering the highest transmission duty cycle, TDD-LTE was tested using Uplink-Downlink Configuration 0 with 6 uplink subframe and 2 special subframe. The special subframe was set to special subframe configuration 7 using extended cyclic prefix uplink. Therefore, SAR testing for TDD-LTE was performed at the maximum output power with highest transmission duty cycle of 63.33%.

LTE UL CA

This device supports UL CA and DL CA, E-UTRA CA configurations and bandwidth combination sets defined for intra-band contiguous CA as below table.

No.	Type	Total	Combo	Uplinks
1	LTE CA	2	CA 26A-41A	41A, 26A
2	LTE CA	2	CA 26A-66A	66A
3	LTE CA	2	CA 2A-2A	2A
4	LTE CA	2	CA 2A-4A	CA 2A-4A, 4A, 2A
5	LTE CA	2	CA 2A-5A	CA 2A-5A, 5A, 2A
6	LTE CA	2	CA 2A-66A	CA 2A-66A, 66A, 2A
7	LTE CA	2	CA 2A-7A	CA 2A-7A, 7A, 2A
8	LTE CA	2	CA 2C	2A
9	LTE CA	2	CA 38A-66A	66A, 38A
10	LTE CA	2	CA 38C	38A
11	LTE CA	2	CA 40A-40A	40A
12	LTE CA	2	CA 40C	CA 40C, 40A
13	LTE CA	2	CA 41A-42A	42A, 41A
14	LTE CA	2	CA 41C	CA 41C, 41A
15	LTE CA	2	CA 42C	42A
16	LTE CA	2	CA 4A-4A	4A
17	LTE CA	2	CA 4A-5A	CA 4A-5A, 5A, 4A
18	LTE CA	2	CA 4A-7A	CA 4A-7A, 7A, 4A
19	LTE CA	2	CA 5A-5A	5A
20	LTE CA	2	CA 5A-66A	CA 5A-66A, 66A, 5A
21	LTE CA	2	CA 5A-7A	CA 5A-7A, 7A, 5A
22	LTE CA	2	CA 66A-66A	66A
23	LTE CA	2	CA 66B	CA 66B, 66A
24	LTE CA	2	CA 66C	CA 66C, 66A
25	LTE CA	2	CA 7A-26A	7A, 26A
26	LTE CA	2	CA 7A-40A	7A, 40A
27	LTE CA	2	CA 7A-42A	7A, 42A
28	LTE CA	2	CA 7A-66A	7A, 66A
29	LTE CA	2	CA 7A-7A	7A
30	LTE CA	2	CA 7C	CA 7C, 7A
31	LTE CA	2	CA 38A-40A	40A, 38A
32	LTE CA	2	CA 3B	3A
33	LTE CA	2	CA 40A-41A	41A, 40A
34	LTE CA	2	CA 41A-41A	41A

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

No.	Type	Total	Combo	Uplinks
35	LTE CA	2	CA_5A-40A	5A, 40A
36	LTE CA	2	CA_7B	7A
37	LTE CA	2	CA_8B	8A
38	LTE CA	2	CA_12A-30A	30A, 12A
39	LTE CA	2	CA_12A-48A	48A, 12A
40	LTE CA	2	CA_12A-66A	CA_12A-66A, 66A, 12A
41	LTE CA	2	CA_12B	12A
42	LTE CA	2	CA_13A-48A	48A, 13A
43	LTE CA	2	CA_13A-66A	CA_13A-66A, 66A, 13A
44	LTE CA	2	CA_25A-25A	25A
45	LTE CA	2	CA_25A-26A	26A, 25A
46	LTE CA	2	CA_25A-41A	41A, 25A
47	LTE CA	2	CA_25A-66A	66A, 25A
48	LTE CA	2	CA_2A-12A	CA_2A-12A, 2A, 12A
49	LTE CA	2	CA_2A-13A	CA_2A-13A, 2A, 13A
50	LTE CA	2	CA_2A-17A	2A, 17A
51	LTE CA	2	CA_2A-30A	30A, 2A
52	LTE CA	2	CA_2A-48A	CA_2A-48A, 48A, 2A
53	LTE CA	2	CA_2A-71A	71A, 2A
54	LTE CA	2	CA_30A-66A	66A, 30A
55	LTE CA	2	CA_41A-48A	48A, 41A
56	LTE CA	2	CA_48A-48A	48A
57	LTE CA	2	CA_48A-66A	CA_48A-66A, 66A, 48A
58	LTE CA	2	CA_48B	CA_48B, 48A
59	LTE CA	2	CA_48C	CA_48C, 48A
60	LTE CA	2	CA_4A-12A	CA_4A-12A, 4A, 12A
61	LTE CA	2	CA_4A-13A	CA_4A-13A, 4A, 13A
62	LTE CA	2	CA_4A-17A	4A, 17A
63	LTE CA	2	CA_4A-30A	4A, 30A
64	LTE CA	2	CA_4A-48A	4A, 48A
65	LTE CA	2	CA_4A-66A	66A, 4A
66	LTE CA	2	CA_4A-71A	71A, 4A
67	LTE CA	2	CA_5A-30A	5A, 30A
68	LTE CA	2	CA_5A-41A	5A, 41A
69	LTE CA	2	CA_5A-48A	5A, 48A
70	LTE CA	2	CA_5B	CA_5B, 5A
71	LTE CA	2	CA_66A-71A	71A, 66A
72	LTE CA	2	CA_7A-12A	7A, 12A
73	LTE CA	2	CA_7A-13A	7A, 13A
74	LTE CA	2	CA_7A-25A	7A, 25A
75	LTE CA	2	CA_7A-71A	7A, 71A
76	LTE CA	3	CA_12A-30A-66A	CA_12A-66A, 66A, 30A, 12A
77	LTE CA	3	CA_12A-48C	48A, 12A
78	LTE CA	3	CA_12A-66A-66A	66A, 12A
79	LTE CA	3	CA_12A-66C	66A, 12A
80	LTE CA	3	CA_12B-66A	66A, 12A
81	LTE CA	3	CA_13A-48A-48A	48A, 13A
82	LTE CA	3	CA_13A-48A-66A	CA_48A-66A, CA_13A-66A, 66A, 48A, 13A
83	LTE CA	3	CA_13A-48C	48A, 13A
84	LTE CA	3	CA_13A-66A-66A	CA_13A-66A, 66A, 13A
85	LTE CA	3	CA_13A-66B	CA_13A-66A, 66A, 13A
86	LTE CA	3	CA_13A-66C	CA_13A-66A, 66A, 13A
87	LTE CA	3	CA_25A-25A-26A	26A, 25A
88	LTE CA	3	CA_25A-25A-66A	66A
89	LTE CA	3	CA_25A-25A-66A	25A
90	LTE CA	3	CA_25A-41C	41A, 25A

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

No.	Type	Total	Combo	Uplinks
91	LTE CA	3	CA_26A-41C	41A, 26A
92	LTE CA	3	CA_2A-12A-30A	CA_2A-12A, 30A, 2A, 12A
93	LTE CA	3	CA_2A-12A-66A	CA_2A-66A, CA_2A-12A, CA_12A-66A, 66A, 2A, 12A
94	LTE CA	3	CA_2A-12B	CA_2A-12A, 2A, 12A
95	LTE CA	3	CA_2A-13A-48A	CA_2A-48A, 48A, 2A, 13A
96	LTE CA	3	CA_2A-13A-66A	CA_2A-66A, CA_2A-13A, CA_13A-66A, 66A, 2A, 13A
97	LTE CA	3	CA_2A-2A-12A	2A, 12A
98	LTE CA	3	CA_2A-2A-13A	CA_2A-13A, 2A, 13A
99	LTE CA	3	CA_2A-2A-30A	30A, 2A
100	LTE CA	3	CA_2A-2A-71A	71A, 2A
101	LTE CA	3	CA_2A-2A-7A	7A
102	LTE CA	3	CA_2A-2A-7A	2A
103	LTE CA	3	CA_2A-30A-66A	66A, 30A, 2A
104	LTE CA	3	CA_2A-48A-48A	CA_2A-48A, 48A, 2A
105	LTE CA	3	CA_2A-2A-4A	4A
106	LTE CA	3	CA_2A-2A-4A	2A
107	LTE CA	3	CA_2A-2A-5A	5A, 2A
108	LTE CA	3	CA_2A-2A-66A	66A
109	LTE CA	3	CA_2A-2A-66A	CA_2A-66A, 2A
110	LTE CA	3	CA_2A-4A-4A	4A, 2A
111	LTE CA	3	CA_2A-4A-5A	CA_2A-4A, 5A, 4A, 2A
112	LTE CA	3	CA_2A-4A-7A	CA_2A-4A, 7A, 4A, 2A
113	LTE CA	3	CA_2A-5A-66A	CA_2A-66A, 66A, 5A, 2A
114	LTE CA	3	CA_2A-5A-7A	7A, 5A, 2A
115	LTE CA	3	CA_2A-66A-66A	CA_2A-66A, 66A, 2A
116	LTE CA	3	CA_2A-7A-66A	7A, 66A, 2A
117	LTE CA	3	CA_2A-7C	CA_7C, 7A, 2A
118	LTE CA	3	CA_2C-66A	66A, 2A
119	LTE CA	3	CA_3A-3A-7A	7A
120	LTE CA	3	CA_3A-7A-7A	3A
121	LTE CA	3	CA_4A-4A-5A	5A, 4A
122	LTE CA	3	CA_4A-4A-7A	7A, 4A
123	LTE CA	3	CA_4A-7C	CA_4A-7A, 7A, 4A
124	LTE CA	3	CA_5A-5A-66A	CA_5A-66A, 66A, 5A
125	LTE CA	3	CA_5A-66A-66A	CA_5A-66A, 66A, 5A
126	LTE CA	3	CA_5A-66C	66A, 5A
127	LTE CA	3	CA_5A-7A-66A	7A, 66A, 5A
128	LTE CA	3	CA_5A-7C	7A, 5A
129	LTE CA	3	CA_7A-26A-66A	7A, 66A, 26A
130	LTE CA	3	CA_7A-38A-66A	66A
131	LTE CA	3	CA_7A-40C	7A, 40A
132	LTE CA	3	CA_7A-66A-66A	7A, 66A
133	LTE CA	3	CA_7A-7A-66A	66A
134	LTE CA	3	CA_7C-66A	CA_7C, 7A, 66A
135	LTE CA	3	CA_38A-40C	40A, 38A
136	LTE CA	3	CA_3A-3A-41A	41A
137	LTE CA	3	CA_40D	CA_40C, 40A
138	LTE CA	3	CA_41A-41C	CA_41C, 41A
139	LTE CA	3	CA_41A-42C	CA_42C, 42A, 41A
140	LTE CA	3	CA_41C-42A	CA_41C, 42A, 41A
141	LTE CA	3	CA_41D	CA_41C, 41A
142	LTE CA	3	CA_42D	CA_42C, 42A
143	LTE CA	3	CA_5A-40C	5A, 40A
144	LTE CA	3	CA_7A-8A-38A	8A
145	LTE CA	3	CA_1A-11A	1A, 11A
146	LTE CA	3	CA_2A-48A-66A	CA_48A-66A, CA_2A-66A, CA_2A-48A, 66A, 48A, 2A

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

No.	Type	Total	Combo	Uplinks
147	LTE CA	3	CA 2A-48C	CA 48C, CA 2A-48A, 48A, 2A
148	LTE CA	3	CA 2A-4A-12A	CA 4A-12A, CA 2A-4A, 4A, 2A, 12A
149	LTE CA	3	CA 2A-4A-13A	CA 4A-13A, CA 2A-13A, 4A, 2A, 13A
150	LTE CA	3	CA 2A-4A-30A	4A, 30A, 2A
151	LTE CA	3	CA 2A-4A-71A	71A, 4A, 2A
152	LTE CA	3	CA 2A-5A-30A	5A, 30A, 2A
153	LTE CA	3	CA 2A-5A-48A	CA 2A-48A, 5A, 48A, 2A
154	LTE CA	3	CA 2A-5B	CA 2A-5A, 5A, 2A
155	LTE CA	3	CA 2A-66A-71A	71A, 66A, 2A
156	LTE CA	3	CA 2A-66B	CA 66B, 66A, 2A
157	LTE CA	3	CA 2A-66C	66A, 2A
158	LTE CA	3	CA 2A-7A-13A	7A, 2A, 13A
159	LTE CA	3	CA 2A-7A-7A	2A
160	LTE CA	3	CA 2A-7A-7A	7A
161	LTE CA	3	CA 2C-12A	2A, 12A
162	LTE CA	3	CA 30A-66A-66A	66A, 30A
163	LTE CA	3	CA 48A-48A-66A	66A, 48A
164	LTE CA	3	CA 48A-48C	48A
165	LTE CA	3	CA 48A-66A-66A	66A, 48A
166	LTE CA	3	CA 48A-66B	66A, 48A
167	LTE CA	3	CA 48A-66C	66A, 48A
168	LTE CA	3	CA 48C-66A	66A, 48A
169	LTE CA	3	CA 48D	CA 48C, 48A
170	LTE CA	3	CA 4A-12A-30A	CA 4A-12A, 4A, 30A, 12A
171	LTE CA	3	CA 4A-12B	CA 4A-12A, 4A, 12A
172	LTE CA	3	CA 4A-48C	4A, 48A
173	LTE CA	3	CA 4A-4A-12A	4A, 12A
174	LTE CA	3	CA 4A-4A-13A	4A, 13A
175	LTE CA	3	CA 4A-4A-71A	71A, 4A
176	LTE CA	3	CA 4A-5A-30A	5A, 4A, 30A
177	LTE CA	3	CA 4A-5B	CA 5B, 5A, 4A
178	LTE CA	3	CA 4A-7A-7A	4A
179	LTE CA	3	CA 4A-7A-7A	7A
180	LTE CA	3	CA 5A-30A-66A	CA 5A-66A, 66A, 5A, 30A
181	LTE CA	3	CA 5A-48A-48A	5A, 48A
182	LTE CA	3	CA 5A-48A-66A	CA 5A-66A, CA 48A-66A, 66A, 5A, 48A
183	LTE CA	3	CA 5A-48C	5A, 48A
184	LTE CA	3	CA 5A-66B	CA 66B, 66A, 5A
185	LTE CA	3	CA 5A-7A-7A	7A, 5A
186	LTE CA	3	CA 5B-30A	5A, 30A
187	LTE CA	3	CA 5B-66A	CA 5B, 66A, 5A
188	LTE CA	3	CA 66A-66A-66A	66A
189	LTE CA	3	CA 66A-66A-71A	71A, 66A
190	LTE CA	3	CA 66A-66B	66A
191	LTE CA	3	CA 66A-66C	66A
192	LTE CA	3	CA 66C-71A	71A, 66A
193	LTE CA	3	CA 7A-13A-66A	7A, 66A, 13A
194	LTE CA	3	CA 7A-25A-25A	7A
195	LTE CA	3	CA 7A-25A-25A	25A
196	LTE CA	3	CA 7A-25A-66A	7A, 66A, 25A
197	LTE CA	3	CA 7A-7A-13A	7A, 13A
198	LTE CA	3	CA 7A-7A-25A	25A
199	LTE CA	3	CA 7A-7A-25A	7A
200	LTE CA	3	CA 7C-13A	7A, 13A

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

LTE 2x2 MIMO (Downlink)

Per FCC Guidance, SAR for downlink 2x2 MIMO was not needed since the maximum average output power in 4x4 downlink MIMO mode was not > 0.25 dB higher than the maximum output power with downlink 2x2 MIMO inactive. When carrier aggregation is applicable, power measurements were performed with the downlink carrier aggregation and 2x2 DL MIMO active for the configuration with highest measured maximum conducted power with downlink carrier aggregation inactive measured among the channel bandwidth, modulation, and RB combinations in each frequency band.

4.1.4. 5G NR Configuration and Testing

The device supports both SA and NSA operation modes, The EN-DC combinations declared by the manufacturer are as follows:

No.	Type	Total	Combo	Uplinks
1	FR1 ENDC	2	DC_26A_n78A	DC_26A_n78A
2	FR1 ENDC	2	DC_2A_n66A	DC_2A_n66A
3	FR1 ENDC	2	DC_2A_n78A	DC_2A_n78A
4	FR1 ENDC	2	DC_2A_n7A	DC_2A_n7A
5	FR1 ENDC	2	DC_38A_n78A	DC_38A_n78A
6	FR1 ENDC	2	DC_40A_n78A	DC_40A_n78A
7	FR1 ENDC	2	DC_41A_n78A	DC_41A_n78A
8	FR1 ENDC	2	DC_4A_n38A	DC_4A_n38A
9	FR1 ENDC	2	DC_4A_n41A	DC_4A_n41A
10	FR1 ENDC	2	DC_4A_n78A	DC_4A_n78A
11	FR1 ENDC	2	DC_4A_n7A	DC_4A_n7A
12	FR1 ENDC	2	DC_5A_n66A	DC_5A_n66A
13	FR1 ENDC	2	DC_5A_n78A	DC_5A_n78A
14	FR1 ENDC	2	DC_5A_n7A	DC_5A_n7A
15	FR1 ENDC	2	DC_66A_n38A	DC_66A_n38A
16	FR1 ENDC	2	DC_66A_n41A	DC_66A_n41A
17	FR1 ENDC	2	DC_66A_n78A	DC_66A_n78A
18	FR1 ENDC	2	DC_66A_n7A	DC_66A_n7A
19	FR1 ENDC	2	DC_7A_n40A	DC_7A_n40A
20	FR1 ENDC	2	DC_7A_n66A	DC_7A_n66A
21	FR1 ENDC	2	DC_7A_n78A	DC_7A_n78A
22	FR1 ENDC	2	DC_2A_n5A	DC_2A_n5A
23	FR1 ENDC	2	DC_5A_n40A	DC_5A_n40A
24	FR1 ENDC	2	DC_7A_n5A	DC_7A_n5A
25	FR1 ENDC	2	DC_7A_n77A	DC_7A_n77A
26	FR1 ENDC	2	DC_7A_n8A	DC_7A_n8A
27	FR1 ENDC	2	DC_12A_n25A	DC_12A_n25A
28	FR1 ENDC	2	DC_12A_n2A	DC_12A_n2A
29	FR1 ENDC	2	DC_12A_n41A	DC_12A_n41A
30	FR1 ENDC	2	DC_12A_n66A	DC_12A_n66A
31	FR1 ENDC	2	DC_12A_n77A	DC_12A_n77A
32	FR1 ENDC	2	DC_12A_n78A	DC_12A_n78A
33	FR1 ENDC	2	DC_12A_n7A	DC_12A_n7A
34	FR1 ENDC	2	DC_13A_n2A	DC_13A_n2A
35	FR1 ENDC	2	DC_13A_n66A	DC_13A_n66A
36	FR1 ENDC	2	DC_13A_n77A	DC_13A_n77A
37	FR1 ENDC	2	DC_13A_n78A	DC_13A_n78A
38	FR1 ENDC	2	DC_25A_n41A	DC_25A_n41A
39	FR1 ENDC	2	DC_25A_n77A	DC_25A_n77A
40	FR1 ENDC	2	DC_25A_n78A	DC_25A_n78A
41	FR1 ENDC	2	DC_26A_n25A	DC_26A_n25A
42	FR1 ENDC	2	DC_26A_n41A	DC_26A_n41A
43	FR1 ENDC	2	DC_26A_n77A	DC_26A_n77A
44	FR1 ENDC	2	DC_2A_n12A	DC_2A_n12A
45	FR1 ENDC	2	DC_2A_n41A	DC_2A_n41A
46	FR1 ENDC	2	DC_2A_n71A	DC_2A_n71A
47	FR1 ENDC	2	DC_2A_n77A	DC_2A_n77A

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

No.	Type	Total	Combo	Uplinks
48	FR1 ENDC	2	DC_30A_n2A	DC_30A_n2A
49	FR1 ENDC	2	DC_30A_n5A	DC_30A_n5A
50	FR1 ENDC	2	DC_30A_n66A	DC_30A_n66A
51	FR1 ENDC	2	DC_30A_n77A	DC_30A_n77A
52	FR1 ENDC	2	DC_48A_n2A	DC_48A_n2A
53	FR1 ENDC	2	DC_48A_n5A	DC_48A_n5A
54	FR1 ENDC	2	DC_48A_n66A	DC_48A_n66A
55	FR1 ENDC	2	DC_48A_n71A	DC_48A_n71A
56	FR1 ENDC	2	DC_4A_n5A	DC_4A_n5A
57	FR1 ENDC	2	DC_5A_n2A	DC_5A_n2A
58	FR1 ENDC	2	DC_5A_n77A	DC_5A_n77A
59	FR1 ENDC	2	DC_66A_n12A	DC_66A_n12A
60	FR1 ENDC	2	DC_66A_n25A	DC_66A_n25A
61	FR1 ENDC	2	DC_66A_n2A	DC_66A_n2A
62	FR1 ENDC	2	DC_66A_n5A	DC_66A_n5A
63	FR1 ENDC	2	DC_66A_n71A	DC_66A_n71A
64	FR1 ENDC	2	DC_66A_n77A	DC_66A_n77A
65	FR1 ENDC	2	DC_71A_n2A	DC_71A_n2A
66	FR1 ENDC	2	DC_71A_n41A	DC_71A_n41A
67	FR1 ENDC	2	DC_71A_n66A	DC_71A_n66A
68	FR1 ENDC	2	DC_71A_n78A	DC_71A_n78A
69	FR1 ENDC	2	DC_7A_n25A	DC_7A_n25A
70	FR1 ENDC	2	DC_7A_n2A	DC_7A_n2A
71	FR1 ENDC	2	DC_7A_n71A	DC_7A_n71A
72	FR1 ENDC	2	DC_2A_n38A	DC_2A_n38A
73	FR1 NR CA	2	CA_n40A-n78A	n78A, n40A
74	FR1 NR CA	2	CA_n66(2A)	n66A
75	FR1 NR CA	2	CA_n66B	n66A
76	FR1 NR CA	2	CA_n7A-n78A	n7A, n78A
77	FR1 NR CA	2	CA_n40B	n40A
78	FR1 NR CA	2	CA_n41A-n78A	n78A, n41A
79	FR1 NR CA	2	CA_n5A-n78A	n78A, n5A
80	FR1 NR CA	2	CA_n5A-n7A	n7A, n5A
81	FR1 NR CA	2	CA_n71(2A)	n71A
82	FR1 NR CA	2	CA_n71A-n77A	n77A, n71A
83	FR1 NR CA	2	CA_n71A-n78A	n78A, n71A
84	FR1 NR CA	2	CA_n77C	n77A
85	FR1 NR CA	2	CA_n78C	n78A
86	FR1 NR CA	2	CA_n7A-n77A	n7A, n77A
87	FR1 NR CA	2	CA_n7B	n7A
88	FR1 NR CA	2	CA_n8A-n40A	n8A, n40A
89	FR1 NR CA	2	CA_n8A-n78A	n8A, n78A
90	FR1 NR CA	2	CA_n2A-n5A	n5A, n2A
91	FR1 NR CA	2	CA_n2A-n77A	n77A, n2A
92	FR1 NR CA	2	CA_n12A-n66A	n66A, n12A
93	FR1 NR CA	2	CA_n12A-n77A	n77A
94	FR1 NR CA	2	CA_n2(2A)	n2A
95	FR1 NR CA	2	CA_n25(2A)	n25A
96	FR1 NR CA	2	CA_n25A-n41A	n41A, n25A
97	FR1 NR CA	2	CA_n25A-n66A	n66A, n25A
98	FR1 NR CA	2	CA_n25A-n71A	n71A, n25A
99	FR1 NR CA	2	CA_n25A-n77A	n77A, n25A
100	FR1 NR CA	2	CA_n25A-n78A	n78A, n25A
101	FR1 NR CA	2	CA_n26A-n66A	n66A
102	FR1 NR CA	2	CA_n2A-n12A	n2A, n12A
103	FR1 NR CA	2	CA_n2A-n66A	n66A, n2A
104	FR1 NR CA	2	CA_n41(2A)	n41A
105	FR1 NR CA	2	CA_n41A-n66A	n66A, n41A
106	FR1 NR CA	2	CA_n41A-n71A	n71A, n41A
107	FR1 NR CA	2	CA_n41A-n77A	n77A, n41A
108	FR1 NR CA	2	CA_n41C	n41A

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

No.	Type	Total	Combo	Uplinks
109	FR1 NR CA	2	CA_n5(2A)	n5A
110	FR1 NR CA	2	CA_n5A-n66A	n66A, n5A
111	FR1 NR CA	2	CA_n5A-n77A	n77A, n5A
112	FR1 NR CA	2	CA_n5B	n5A
113	FR1 NR CA	2	CA_n66A-n71A	n71A, n66A
114	FR1 NR CA	2	CA_n66A-n77A	n77A, n66A
115	FR1 NR CA	2	CA_n66A-n78A	n78A, n66A
116	FR1 NR CA	2	CA_n71B	n71A
117	FR1 ENDC	3	DC_2A-5A_n78A	DC_5A_n78A, DC_2A_n78A
118	FR1 ENDC	3	DC_2A-66A_n38A	DC_66A_n38A, DC_2A_n38A
119	FR1 ENDC	3	DC_2A-66A_n66A	DC_2A_n66A
120	FR1 ENDC	3	DC_2A-66A_n78A	DC_66A_n78A, DC_2A_n78A
121	FR1 ENDC	3	DC_2A-66A_n7A	DC_66A_n7A, DC_2A_n7A
122	FR1 ENDC	3	DC_2A-7A_n66A	DC_7A_n66A, DC_2A_n66A
123	FR1 ENDC	3	DC_2A-7A_n78A	DC_7A_n78A, DC_2A_n78A
124	FR1 ENDC	3	DC_40C_n78A	DC_40A_n78A
125	FR1 ENDC	3	DC_5A-66A_n78A	DC_66A_n78A, DC_5A_n78A
126	FR1 ENDC	3	DC_5A-7A_n78A	DC_7A_n78A, DC_5A_n78A
127	FR1 ENDC	3	DC_66A-66A_n78A	DC_66A_n78A
128	FR1 ENDC	3	DC_66A-66A_n7A	DC_66A_n7A
129	FR1 ENDC	3	DC_7A-66A_n66A	DC_7A_n66A
130	FR1 ENDC	3	DC_7A-66A_n78A	DC_7A_n78A, DC_66A_n78A
131	FR1 ENDC	3	DC_7A-66A_n7A	DC_66A_n7A
132	FR1 ENDC	3	DC_7C_n78A	DC_7A_n78A
133	FR1 ENDC	3	DC_41C_n77A	DC_41A_n77A
134	FR1 ENDC	3	DC_41C_n78A	DC_41A_n78A
135	FR1 ENDC	3	DC_7A-40A_n78A	DC_7A_n78A, DC_40A_n78A
136	FR1 ENDC	3	DC_7A-7A_n78A	DC_7A_n78A
137	FR1 ENDC	3	DC_7C_n5A	DC_7A_n5A
138	FR1 ENDC	3	DC_12A-30A_n2A	DC_30A_n2A, DC_12A_n2A
139	FR1 ENDC	3	DC_12A-30A_n66A	DC_30A_n66A, DC_12A_n66A
140	FR1 ENDC	3	DC_12A-30A_n77A	DC_30A_n77A, DC_12A_n77A
141	FR1 ENDC	3	DC_12A-48A_n2A	DC_48A_n2A, DC_12A_n2A
142	FR1 ENDC	3	DC_12A-66A_n25A	DC_66A_n25A, DC_12A_n25A
143	FR1 ENDC	3	DC_12A-66A_n2A	DC_66A_n2A, DC_12A_n2A
144	FR1 ENDC	3	DC_12A-66A_n41A	DC_66A_n41A, DC_12A_n41A
145	FR1 ENDC	3	DC_12A-66A_n66A	DC_12A_n66A
146	FR1 ENDC	3	DC_12A-66A_n77A	DC_66A_n77A, DC_12A_n77A
147	FR1 ENDC	3	DC_12A-66A_n78A	DC_66A_n78A, DC_12A_n78A
148	FR1 ENDC	3	DC_13A-48A_n2A	DC_13A_n2A
149	FR1 ENDC	3	DC_13A-48A_n66A	DC_13A_n66A
150	FR1 ENDC	3	DC_13A-66A_n2A	DC_66A_n2A, DC_13A_n2A
151	FR1 ENDC	3	DC_13A-66A_n66A	DC_13A_n66A
152	FR1 ENDC	3	DC_13A-66A_n77A	DC_66A_n77A, DC_13A_n77A
153	FR1 ENDC	3	DC_25A-25A_n41A	DC_25A_n41A
154	FR1 ENDC	3	DC_25A-25A_n77A	DC_25A_n77A
155	FR1 ENDC	3	DC_25A-25A_n78A	DC_25A_n78A
156	FR1 ENDC	3	DC_25A-66A_n77A	DC_66A_n77A, DC_25A_n77A
157	FR1 ENDC	3	DC_25A-66A_n78A	DC_66A_n78A, DC_25A_n78A
158	FR1 ENDC	3	DC_2A-12A_n2A	DC_12A_n2A
159	FR1 ENDC	3	DC_2A-12A_n41A	DC_2A_n41A, DC_12A_n41A
160	FR1 ENDC	3	DC_2A-12A_n66A	DC_2A_n66A, DC_12A_n66A
161	FR1 ENDC	3	DC_2A-12A_n77A	DC_2A_n77A, DC_12A_n77A
162	FR1 ENDC	3	DC_2A-12A_n78A	DC_2A_n78A, DC_12A_n78A
163	FR1 ENDC	3	DC_2A-13A_n2A	DC_13A_n2A
164	FR1 ENDC	3	DC_2A-13A_n66A	DC_2A_n66A, DC_13A_n66A
165	FR1 ENDC	3	DC_2A-13A_n77A	DC_2A_n77A, DC_13A_n77A
166	FR1 ENDC	3	DC_2A-2A_n41A	DC_2A_n41A
167	FR1 ENDC	3	DC_2A-2A_n5A	DC_2A_n5A
168	FR1 ENDC	3	DC_2A-2A_n66A	DC_2A_n66A
169	FR1 ENDC	3	DC_2A-2A_n71A	DC_2A_n71A

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

No.	Type	Total	Combo	Uplinks
170	FR1 ENDC	3	DC_2A-2A_n77A	DC_2A_n77A
171	FR1 ENDC	3	DC_2A-2A_n78A	DC_2A_n78A
172	FR1 ENDC	3	DC_2A-30A_n2A	DC_30A_n2A
173	FR1 ENDC	3	DC_2A-30A_n5A	DC_30A_n5A, DC_2A_n5A
174	FR1 ENDC	3	DC_2A-30A_n66A	DC_30A_n66A, DC_2A_n66A
175	FR1 ENDC	3	DC_2A-30A_n77A	DC_30A_n77A, DC_2A_n77A
176	FR1 ENDC	3	DC_2A-48A_n2A	DC_48A_n2A
177	FR1 ENDC	3	DC_2A-48A_n5A	DC_48A_n5A, DC_2A_n5A
178	FR1 ENDC	3	DC_2A-48A_n66A	DC_48A_n66A, DC_2A_n66A
179	FR1 ENDC	3	DC_2A-4A_n41A	DC_4A_n41A, DC_2A_n41A
180	FR1 ENDC	3	DC_2A-5A_n2A	DC_5A_n2A
181	FR1 ENDC	3	DC_2A-5A_n66A	DC_5A_n66A, DC_2A_n66A
182	FR1 ENDC	3	DC_2A-5A_n77A	DC_5A_n77A, DC_2A_n77A
183	FR1 ENDC	3	DC_2A-5A_n7A	DC_5A_n7A, DC_2A_n7A
184	FR1 ENDC	3	DC_2A-66A_n12A	DC_66A_n12A, DC_2A_n12A
185	FR1 ENDC	3	DC_2A-66A_n25A	DC_66A_n25A
186	FR1 ENDC	3	DC_2A-66A_n2A	DC_66A_n2A
187	FR1 ENDC	3	DC_2A-66A_n41A	DC_66A_n41A, DC_2A_n41A
188	FR1 ENDC	3	DC_2A-66A_n5A	DC_66A_n5A, DC_2A_n5A
189	FR1 ENDC	3	DC_2A-66A_n71A	DC_66A_n71A, DC_2A_n71A
190	FR1 ENDC	3	DC_2A-66A_n77A	DC_66A_n77A, DC_2A_n77A
191	FR1 ENDC	3	DC_2A-71A_n2A	DC_71A_n2A
192	FR1 ENDC	3	DC_2A-71A_n41A	DC_71A_n41A, DC_2A_n41A
193	FR1 ENDC	3	DC_2A-71A_n66A	DC_71A_n66A, DC_2A_n66A
194	FR1 ENDC	3	DC_2A-71A_n71A	DC_2A_n71A
195	FR1 ENDC	3	DC_2A-71A_n78A	DC_71A_n78A, DC_2A_n78A
196	FR1 ENDC	3	DC_2A-7A_n5A	DC_7A_n5A, DC_2A_n5A
197	FR1 ENDC	3	DC_2A-7A_n71A	DC_7A_n71A, DC_2A_n71A
198	FR1 ENDC	3	DC_2A-7A_n77A	DC_7A_n77A, DC_2A_n77A
199	FR1 ENDC	3	DC_2A-7A_n7A	DC_2A_n7A
200	FR1 ENDC	3	DC_2C_n41A	DC_2A_n41A
201	FR1 ENDC	3	DC_2C_n71A	DC_2A_n71A
202	FR1 ENDC	3	DC_30A-66A_n2A	DC_30A_n2A
203	FR1 ENDC	3	DC_30A-66A_n5A	DC_66A_n5A, DC_30A_n5A
204	FR1 ENDC	3	DC_30A-66A_n66A	DC_30A_n66A
205	FR1 ENDC	3	DC_30A-66A_n77A	DC_66A_n77A, DC_30A_n77A
206	FR1 ENDC	3	DC_48A-48A_n71A	DC_48A_n71A
207	FR1 ENDC	3	DC_48A-66A_n2A	DC_66A_n2A
208	FR1 ENDC	3	DC_48A-66A_n5A	DC_66A_n5A
209	FR1 ENDC	3	DC_48A-66A_n66A	DC_48A_n66A
210	FR1 ENDC	3	DC_48A-66A_n71A	DC_66A_n71A, DC_48A_n71A
211	FR1 ENDC	3	DC_48B_n71A	DC_48A_n71A
212	FR1 ENDC	3	DC_48C_n5A	DC_48A_n5A
213	FR1 ENDC	3	DC_48C_n66A	DC_48A_n66A
214	FR1 ENDC	3	DC_5A-30A_n2A	DC_5A_n2A, DC_30A_n2A
215	FR1 ENDC	3	DC_5A-30A_n66A	DC_5A_n66A, DC_30A_n66A
216	FR1 ENDC	3	DC_5A-30A_n77A	DC_5A_n77A, DC_30A_n77A
217	FR1 ENDC	3	DC_5A-5A_n2A	DC_5A_n2A
218	FR1 ENDC	3	DC_5A-5A_n66A	DC_5A_n66A
219	FR1 ENDC	3	DC_5A-66A_n2A	DC_66A_n2A, DC_5A_n2A
220	FR1 ENDC	3	DC_5A-66A_n66A	DC_5A_n66A
221	FR1 ENDC	3	DC_5A-66A_n77A	DC_66A_n77A, DC_5A_n77A
222	FR1 ENDC	3	DC_5A-66A_n7A	DC_66A_n7A, DC_5A_n7A
223	FR1 ENDC	3	DC_5A-7A_n66A	DC_7A_n66A, DC_5A_n66A
224	FR1 ENDC	3	DC_5A-7A_n77A	DC_7A_n77A, DC_5A_n77A
225	FR1 ENDC	3	DC_5A-7A_n7A	DC_5A_n7A
226	FR1 ENDC	3	DC_5B_n2A	DC_5A_n2A
227	FR1 ENDC	3	DC_5B_n66A	DC_5A_n66A
228	FR1 ENDC	3	DC_66A-66A_n2A	DC_66A_n2A
229	FR1 ENDC	3	DC_66A-66A_n5A	DC_66A_n5A
230	FR1 ENDC	3	DC_66A-66A_n71A	DC_66A_n71A

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

No.	Type	Total	Combo	Uplinks
231	FR1 ENDC	3	DC_66A-66A_n77A	DC_66A_n77A
232	FR1 ENDC	3	DC_66A-71A_n41A	DC_71A_n41A, DC_66A_n41A
233	FR1 ENDC	3	DC_66A-71A_n66A	DC_71A_n66A
234	FR1 ENDC	3	DC_66A-71A_n71A	DC_66A_n71A
235	FR1 ENDC	3	DC_66A-71A_n78A	DC_71A_n78A, DC_66A_n78A
236	FR1 ENDC	3	DC_66B_n2A	DC_66A_n2A
237	FR1 ENDC	3	DC_66B_n5A	DC_66A_n5A
238	FR1 ENDC	3	DC_66C_n2A	DC_66A_n2A
239	FR1 ENDC	3	DC_66C_n5A	DC_66A_n5A
240	FR1 ENDC	3	DC_66C_n71A	DC_66A_n71A
241	FR1 ENDC	3	DC_7A-12A_n66A	DC_7A_n66A, DC_12A_n66A
242	FR1 ENDC	3	DC_7A-12A_n78A	DC_7A_n78A, DC_12A_n78A
243	FR1 ENDC	3	DC_7A-13A_n66A	DC_7A_n66A, DC_13A_n66A
244	FR1 ENDC	3	DC_7A-25A_n77A	DC_7A_n77A, DC_25A_n77A
245	FR1 ENDC	3	DC_7A-25A_n78A	DC_7A_n78A
246	FR1 ENDC	3	DC_7A-66A_n25A	DC_7A_n25A, DC_66A_n25A
247	FR1 ENDC	3	DC_7A-66A_n5A	DC_7A_n5A, DC_66A_n5A
248	FR1 ENDC	3	DC_7A-66A_n71A	DC_7A_n71A, DC_66A_n71A
249	FR1 ENDC	3	DC_7A-66A_n77A	DC_7A_n77A, DC_66A_n77A
250	FR1 ENDC	3	DC_7A-71A_n66A	DC_7A_n66A, DC_71A_n66A
251	FR1 ENDC	3	DC_7A-71A_n78A	DC_7A_n78A, DC_71A_n78A
252	FR1 ENDC	3	DC_7A-7A_n5A	DC_7A_n5A
253	FR1 ENDC	3	DC_7A-7A_n66A	DC_7A_n66A
254	FR1 ENDC	3	DC_7A-7A_n77A	DC_7A_n77A
255	FR1 ENDC	3	DC_7C_n66A	DC_7A_n66A

Antenna configuration of the uplink ENDC combination:

ENDC Combo	LTE Uplink Antenna	5G NR Uplink Antenna
DC_2A_n5A	4	0
DC_2A_n7A	4	0
DC_2A_n12A	4	0
DC_2A_n38A	1	4
DC_2A_n41A, DC_25A_n41A	1	4
DC_2A_n66A	4	1
DC_2A_n71A	4	0
DC_2A_n77A, DC_25A_n77A	1	3
DC_2A_n78A, DC_25A_n78A	1	3
DC_4A_n5A	4	0
DC_4A_n7A	4	0
DC_4A_n38A	1	4
DC_4A_n41A	1	4
DC_4A_n78A	1	3
DC_5A_n2A, DC_26A_n25A	0	4
DC_5A_n7A	0	4
DC_5A_n66A	0	4
DC_5A_n77A, DC_26A_n77A	0	3
DC_5A_n78A, DC_26A_n78A	0	3
DC_7A_n2A	4	1
DC_7A_n5A	4	0
DC_7A_n25A	4	1
DC_7A_n66A	4	1
DC_7A_n71A	4	0
DC_7A_n77A	0	3
DC_7A_n78A	0	3
DC_12A_n2A	0	4
DC_12A_n7A	0	4
DC_12A_n25A	0	4
DC_12A_n41A	0	4
DC_12A_n66A	0	4
DC_12A_n77A	0	3

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

ENDC Combo	LTE Uplink Antenna	5G NR Uplink Antenna
DC_12A_n78A	0	3
DC_13A_n2A	0	4
DC_13A_n66A	0	4
DC_13A_n77A	0	3
DC_13A_n78A	0	3
DC_26A_n41A	0	4
DC_30A_n2A	0	4
DC_30A_n66A	0	4
DC_30A_n77A	0	3
DC_41A_n77A	0	3
DC_38A_n78A, DC_41A_n78A	0	3
DC_48A_n2A	3	1
DC_48A_n5A	3	0
DC_48A_n66A	3	1
DC_48A_n71A	3	0
DC_66A_n12A	4	0
DC_66A_n25A	4	1
DC_66A_n2A	4	1
DC_66A_n38A	1	4
DC_66A_n41A	1	4
DC_66A_n5A	4	0
DC_66A_n71A	4	0
DC_66A_n77A	1	3
DC_66A_n78A	1	3
DC_66A_n7A	4	0
DC_71A_n2A	0	4
DC_71A_n41A	0	4
DC_71A_n66A	0	4
DC_71A_n78A	0	3

Due to test setup limitations and declared for the client, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform the SAR test at the following transmission.

5G NR Band	Mode	Duty cycle
n41/77/78	SRS	6.6%
n41/77/78	SA&ENDC_PC3	100%
n41/77/78	SA&ENDC_PC2	57%
Others	SA&ENDC	100%

For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.

SAR should be executed separately in NSA mode and SA mode. The maximum power of NSA mode is the same as the total power level of SA. Therefore, except for this part of the frequency band with different power, SA SAR can represent SAR of NSA mode.

5G NR supports CP-OFDM and DFT-s-OFDM modulation, for DFT-s-OFDM power is higher than CP-OFDM, so only show DFT-s-OFDM power table and chose DFT-s-OFDM to perform SAR testing.

For DFT-s-OFDM and CP-OFDM output power measurement reduction, according to 38.101 maximum power reduction for the CP-OFDM mode will not higher than DFT-s-OFDM mode, therefore, CP-OFDM measurement is unnecessary.

5G NR supports 4x4 DL MIMO mode only limit to SA mode. For per chain power of MIMO mode power level is SISO mode power level (standalone SA mode).

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

4.1.5. WLAN Configuration and Testing

In general, various vendor specific external test software and chipset based internal test modes are typically used for SAR measurement. These chipset-based test mode utilities are generally hardware and manufacturer dependent, and often include substantial flexibility to reconfigure or reprogram a device. 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. The test frequencies established using test mode must correspond to the actual channel frequencies. When 802.11 frame gaps are accounted for in the transmission, a maximum transmission duty factor of 92 - 96% is typically achievable in most test mode configurations. A minimum transmission duty factor of 85% is required to avoid certain hardware and device implementation issues related to wide range SAR scaling. In addition, a periodic transmission duty factor is required for current generation SAR systems to measure SAR correctly. The reported SAR must be scaled to 100% transmission duty factor to determine compliance at the maximum tune-up tolerance limit.

According to KDB 248227 D01, this device has installed WLAN engineering testing software which can provide continuous transmitting RF signal. During WLAN SAR testing, this device was operated to transmit continuously at the maximum transmission duty with specified transmission mode, operating frequency, lowest data rate, and maximum output power.

Initial Test Configuration

An initial test configuration is determined for OFDM transmission modes in 2.4 GHz and 5 GHz bands 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. When the same maximum power is specified for multiple transmission modes in a frequency band, the largest channel bandwidth, lowest order modulation, lowest data rate and lowest order 802.11a/g/n/ac mode is used for SAR measurement, on the highest measured output power channel in the initial test configuration, for each frequency band.

Subsequent Test Configuration

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. Additional power measurements may be required to determine if SAR measurements are required for subsequent highest output power channels in a subsequent test configuration. When the highest reported SAR for the initial test configuration according to the initial test position or fixed exposure position requirements, is adjusted by the ratio of the subsequent test configuration to initial test configuration specified maximum output power and the adjusted SAR is ≤ 1.2 W/kg, SAR is not required for that subsequent test configuration.

SAR Test Configuration and Channel Selection

When multiple channel bandwidth configurations in a frequency band have the same specified maximum output power, the initial test configuration is using largest channel bandwidth, lowest order modulation, lowest data rate, and lowest order 802.11 mode (i.e., 802.11a is chosen over 802.11n then 802.11ac or 802.11g is chosen over 802.11n). After an initial test configuration is determined, if multiple test channels have the same measured maximum output power, the channel chosen for SAR measurement is determined according to the following.

- 1) The channel closest to mid-band frequency is selected for SAR measurement.
- 2) For channels with equal separation from mid-band frequency; for example, high and low channels or two mid-band channels, the higher frequency (number) channel is selected for SAR measurement.

Test Reduction for U-NII-1 (5.2 GHz) and U-NII-2A (5.3 GHz) Bands

For devices that operate in both U-NII bands using the same transmitter and antenna(s), SAR test reduction is determined according to the following.

- 1) When the same maximum output power is specified for both bands, begin SAR measurement in U-NII-2A band by applying the OFDM SAR requirements. If the highest reported SAR for a test configuration is ≤ 1.2 W/kg, SAR is not required for U-NII-1 band for that configuration (802.11 mode and exposure condition).
- 2) When different maximum output power is specified for the bands, begin SAR measurement in the band with higher specified maximum output power. The highest reported SAR for the tested configuration is adjusted by the ratio of lower to higher specified maximum output power for the two bands. When the adjusted SAR is ≤ 1.2

W/kg, SAR is not required for the band with lower maximum output power in that test configuration.

4.1.6. Bluetooth Configuration and Testing

For Bluetooth SAR testing was selected 1Mbps (DH5), due to its highest average power

The Bluetooth duty cycle is 76.80% for Antenna 5, According to 2016 Oct. TCB workshop for Bluetooth SAR consideration and the theoretical duty cycle is 83.3%, Therefore the duty cycle scaling factor 1.085 should be used to calculating the reported SAR.

4.1.7. Device State Index (DSI) Information

Usage scenario configuration

Usage Scenario	
DSI-0	Receiver off + Hotspot off /on+ Sensor off + Simultaneous off/on
DSI-1 (Head)	Receiver on + Hotspot off/on + Sensor off + Simultaneous off
DSI-2 (Head)	Receiver on + Hotspot off/on + Sensor off + Simultaneous on
DSI-3 (Body)	Receiver off + Hotspot off/on + Sensor on + Simultaneous off
DSI-4 (Body)	Receiver off + Hotspot off/on + Sensor on + Simultaneous on

Note:

- 1). under the same frequency band and the same antenna, the power relationship is $DSI-0 \geq DSI-1/DSI-3 \geq DSI-2/DSI-4$. To simplify the test, a higher power DSI may be adopted in some SAR tests.
- 2). DSI-0 is the maximum power state for all RF technologies.

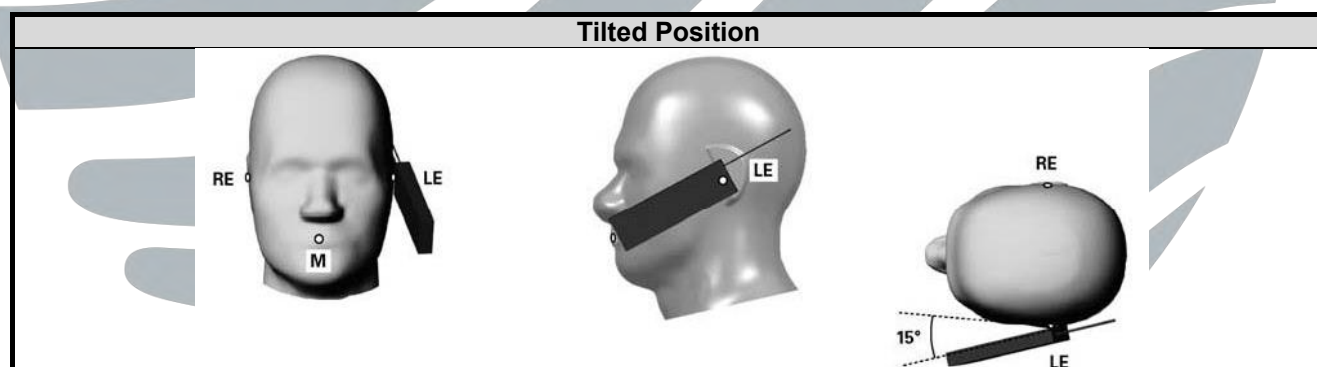
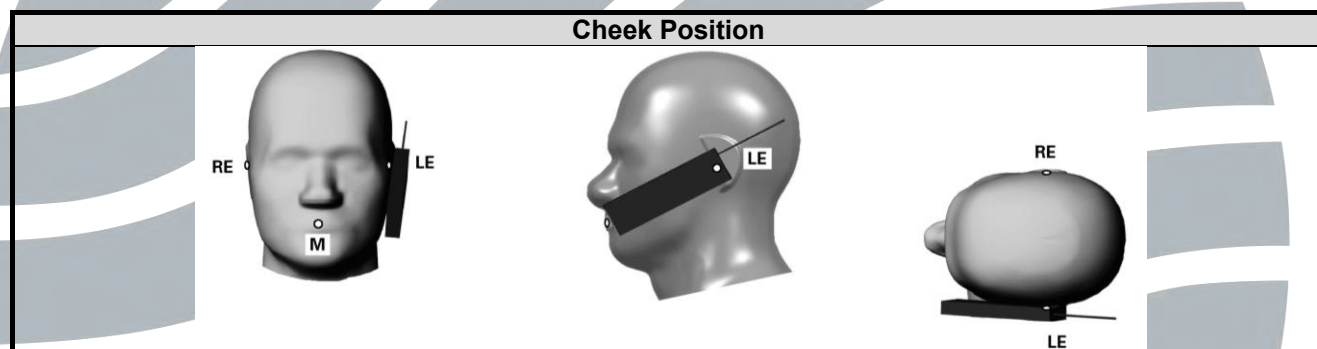
4.2. EUT TESTING POSITION

4.2.1. Head Exposure Conditions

RF Exposure Conditions	Test Position	Separation Distance	SAR test exclusion
Head	Right Cheek	0 cm	N/A
	Right Tilted		
	Left Cheek		
	Left Tilted		

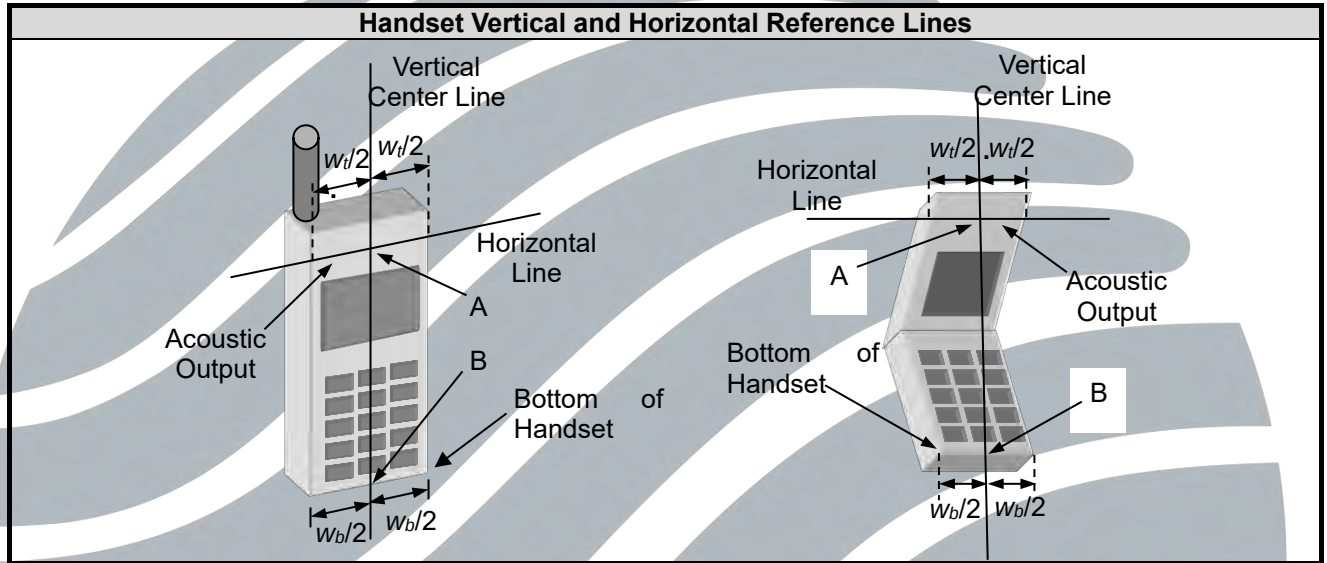
Note:

- 1) Head exposure for voice mode of handset is limited to next to the ear exposure conditions.
- 2) Devices that are designed to transmit next to the ear must be tested using the SAM phantom.
- 3) Other head exposure conditions, for example, in-front-of the face, should be tested using a flat phantom according to the required published RF exposure KDB procedures.
- 4) When data mode operates in next to the ear configurations, either data alone or in conjunction with voice transmissions, SAR evaluation is required for such use conditions.
- 5) When device supports VoIP, SAR evaluation for head Exposure Conditions using the most appropriate wireless data mode configurations is required.



Define two imaginary lines on the handset

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

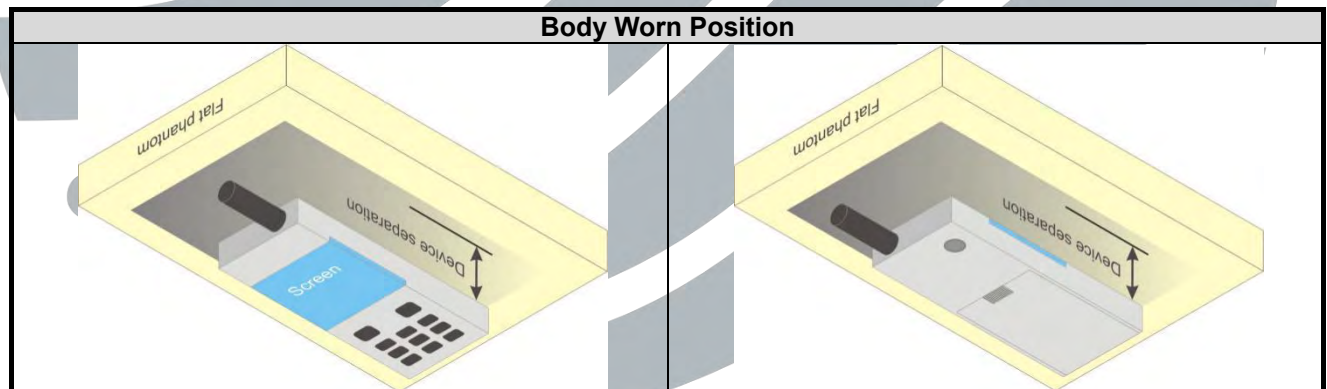


4.2.2. Body-worn Accessory Exposure Conditions

RF Exposure Conditions	Test Position	Separation Distance	SAR test exclusion
Body-worn	Front Face	0 ~ 2.5 cm	N/A
	Rear Face		

Note:

- 1) Body-worn accessories that do not contain metallic or conductive components may be tested according to worst-case exposure configurations, typically according to the smallest test separation distance required for the group of body-worn accessories with similar operating and exposure characteristics. All body-worn accessories containing metallic components are tested in conjunction with the host device.
- 2) Body-worn accessory SAR compliance is based on a single minimum test separation distance for all wireless and operating modes applicable to each body-worn accessory used by the host, and according to the relevant voice and/or data mode transmissions and operations. If a body-worn accessory supports voice only operations in its normal and expected use conditions, testing of data mode for body-worn compliance is not required.
- 3) A conservative minimum test separation distance for supporting off-the-shelf body-worn accessories that may be acquired by users of consumer handsets should be used to test for body-worn accessory SAR compliance. This distance is determined by the handset manufacturer according to the typical body-worn accessories users may acquire at the time of equipment certification, but not more than 2.5 cm, to enable users to purchase aftermarket body-worn accessories with the required minimum separation.
- 4) Devices that are designed to operate on the body of users using lanyards and straps or without requiring additional body-worn accessories must be tested for SAR compliance using a conservative minimum test separation distance ≤ 5 mm to support compliance.
- 5) When device supports VoIP, SAR evaluation for body-worn accessory Exposure Conditions using the most appropriate wireless data mode configurations is required.
- 6) Body-worn accessory exposure is typically related to voice mode operations when handsets are carried in body-worn accessories.
- 7) When the reported SAR for a body-worn accessory, measured without a headset connected to the handset, is > 1.2 W/kg, the highest reported SAR configuration for that wireless mode and frequency band should be repeated for the body-worn accessory with a headset attached to the handset.

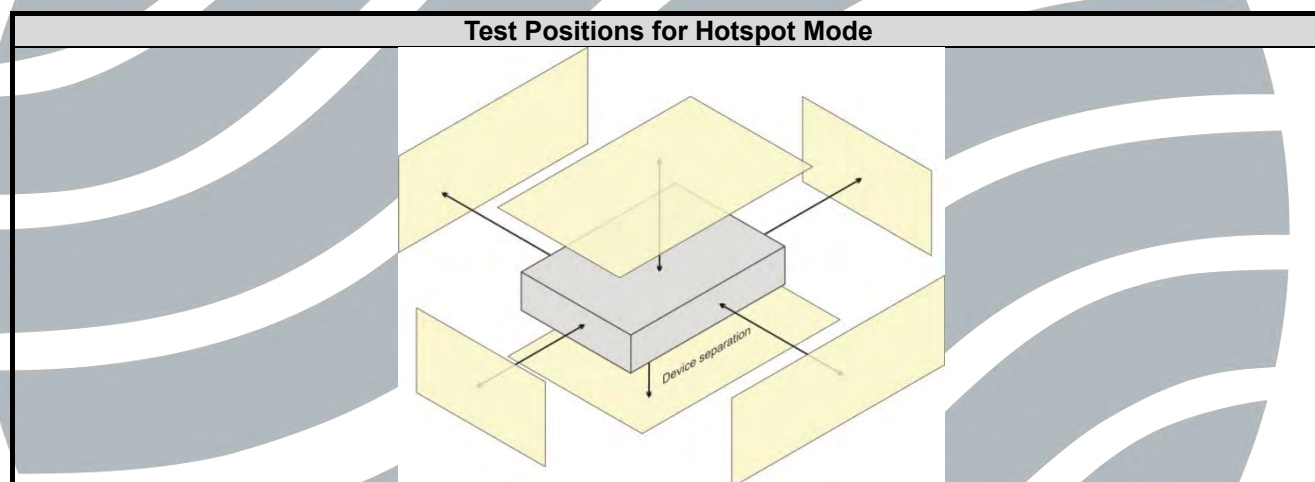


4.2.3. Hotspot Accessory Exposure Conditions

RF Exposure Conditions	Test Position	Separation Distance	SAR test exclusion
Hotspot	Front Face	1 cm	Note 2/3
	Rear Face		
	Left Side		
	Right Side		
	Top Side		
	Bottom Side		

Note:

- 1) The SAR test separation distance for hotspot mode is determined according to device form factor. When the overall length and width of a device is $> 9\text{ cm} \times 5\text{ cm}$ ($\sim 3.5'' \times 2''$), a test separation distance of 10 mm is required for hotspot mode SAR measurements. A test separation distance of 5 mm or less is required for smaller devices. The SAR test separation distance for hotspot mode is determined according to device form factor.
- 2) Hotspot mode SAR is measured for all edges and surfaces of the device with a transmitting antenna located within 25 mm from that surface or edge.
- 3) Based on the antenna location shown on appendix D of this report, the SAR testing required for hotspot mode is listed on section 4.5.1.



4.2.4. Extremity Exposure Conditions

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

a) The normally required head and body-worn accessory SAR test procedures for handsets, including hotspot mode, must be applied.

b) The UMPC mini-tablet procedures must also be applied to test the SAR of all surfaces and edges with an antenna located at ≤ 25 mm from that surface or edge, in direct contact with a flat phantom, for 10-g extremity SAR according to the body-equivalent tissue dielectric parameters in KDB Publication 865664 D01 to address interactive hand use exposure conditions. The 1-g SAR at 5 mm for UMPC mini-tablets is not required. When hotspot mode applies, 10-g extremity SAR is required only for the surfaces and edges with hotspot mode 1-g reported SAR > 1.2 W/kg. however, when power reduction applies to hotspot mode the measured SAR must be scaled to the maximum output power, including tolerance, allowed for phablet modes to compare with the 1.2 W/kg SAR test reduction threshold. The normal tablet procedures in KDB Publication 616217 are required when the overall diagonal dimension of the device is > 20.0 cm. Hotspot mode SAR is not required when normal tablet procedures are applied. Extremity 10-g SAR is also not required for the front (top) surface of larger form factor full size tablets. The more conservative normal tablet SAR results can be used to support phablet mode 10-g extremity SAR.

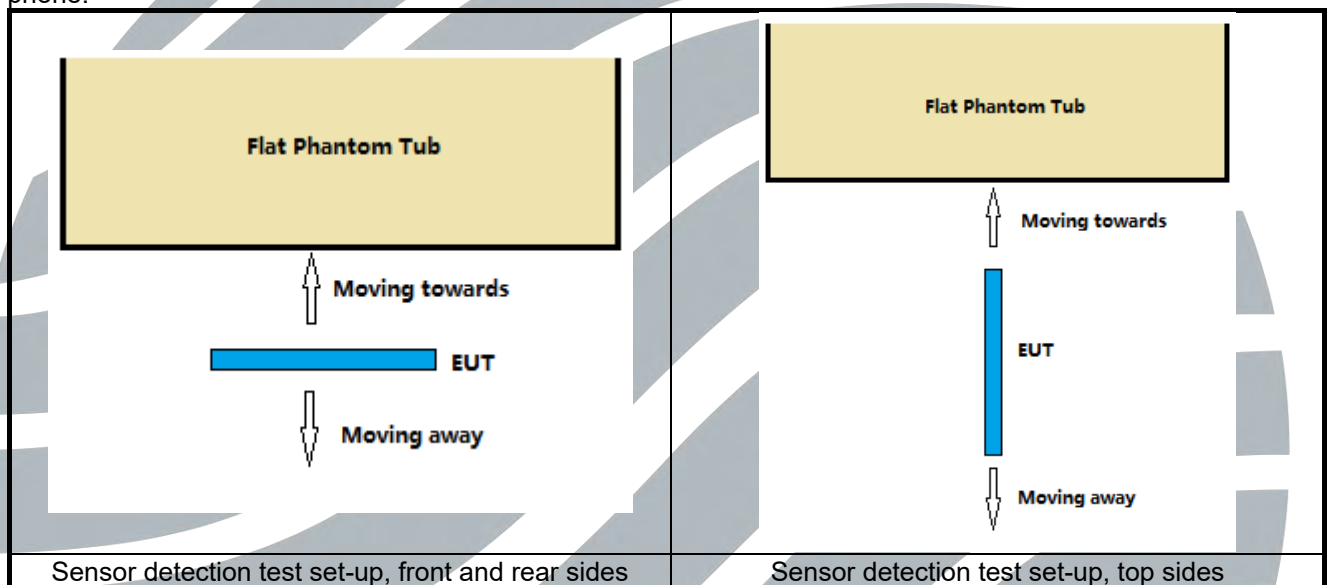
4.3. PROXIMITY SENSORS TRIGGERING DISTANCES

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

Proximity sensor triggering distance testing was performed according and EUT moving further away from the flat phantom and EUT moving toward the flat phantom were both assessed and the tissue-equivalent medium for Full frequency (600-10000MHz) was used for proximity sensor triggering testing.

4.3.1. Triggering distance for perpendicular DUT orientation

Both the proximity sensor and WWAN antenna 1 are located at the top of the smartphone and are only available for WCDMA band I/IV and LTE Band 1/4/66(WWAN antenna 1). The distance sensor is triggered when an object approaches the receiver while answering the phone, and is only effective on the front of the phone.



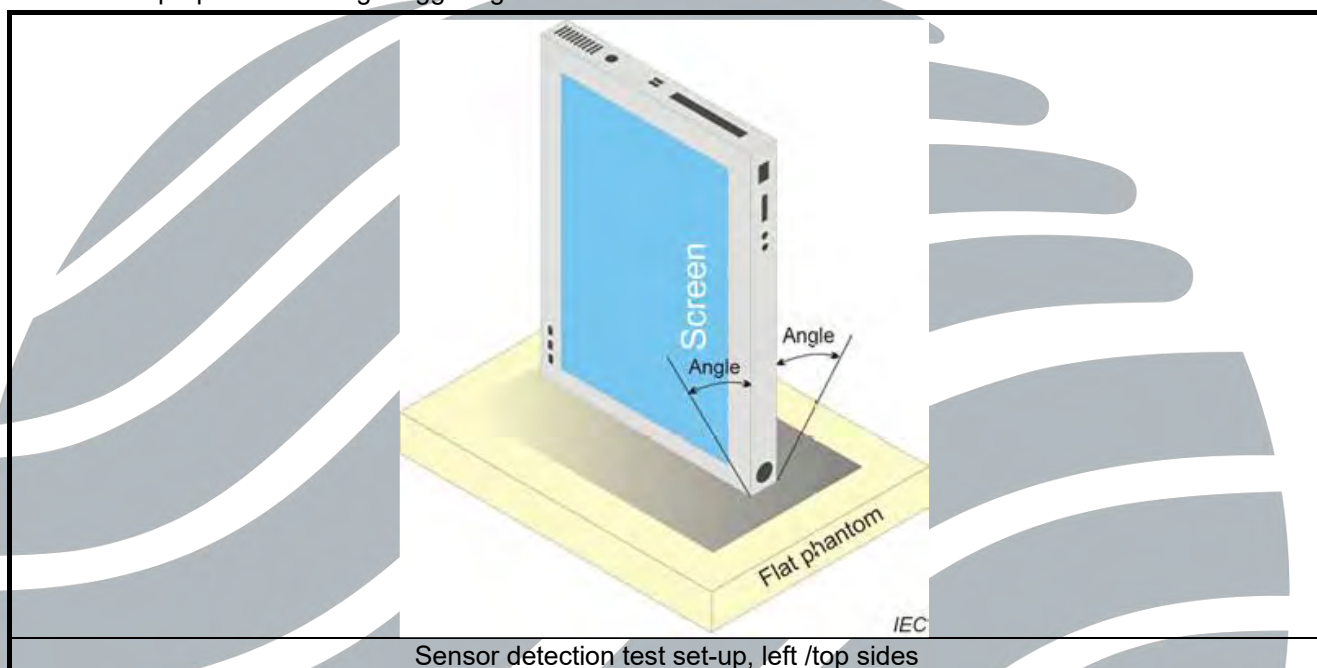
The trigger distance shown in the sections below.

P-Sensor< Sensor for WWAN&WLAN Antenna>

Ant.	Position	Front		Rear		Left		Right Side		Top Side		Bottom	
		Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Ant.0	Triggering Distance	24	25	26	27	N/A	N/A	25	25	N/A	N/A	37	37
Ant.1		14	14	16	16	15	15	N/A	N/A	N/A	N/A	17	17
Ant.3/4		20	21	20	20	29	30	N/A	N/A	32	32	N/A	N/A
Ant.5/7		14	15	14	14	N/A	N/A	21	21	22	23	N/A	N/A
Ant.7		14	15	14	14	N/A	N/A	21	21	22	23	N/A	N/A

4.3.2. Triggering distance for tilted DUT orientation

- Position the DUT edge at the minimum triggering distance determined.
- Ensure that the proximity sensor is triggered when the DUT is in the perpendicular orientation specified.
- Rotate the DUT, The angle shall vary by $\pm 40^\circ$ from the perpendicular orientation in increments of 10° . At each of these angles, ensure that the proximity sensor is still triggered.
- Reduce the edge distance to the phantom by 1 mm and go back to step b) if sensor triggering is released or normal maximum output power is restored in step c).
- The smallest separation distance determined in steps a) and b) is the sensor triggering distance for non-perpendicular edge triggering conditions.



The trigger distance shown in the sections below.

P-Sensor< Sensor for WWAN & WLAN Antenna >

Ant.	Left		Right Side		Top Side		Bottom	
	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away	Moving towards	Moving away
Ant. 0	N/A	N/A	25	26	N/A	N/A	37	38
Ant. 1	15	15	N/A	N/A	N/A	N/A	17	17
Ant. 3/4	29	30	N/A	N/A	32	32	N/A	N/A
Ant. 5/7	N/A	N/A	21	22	22	22	N/A	N/A

4.3.3. Procedure for determining proximity sensor coverage area

Capacitive proximity sensor placed coincident with antenna elements at the top/bottom end of the Tablet are utilized to determine when the device comes in proximity of the user's body or finger or hand at the front or back or bottom or left or right or top side of the device. There is no need to do sensor coverage testing for the proximity sensor is designed to support sufficient detection range and sensitivity to cover regions of the sensors in all applicable directions since the proximity sensor entirely covers the antenna.

4.4. MEASURED CONDUCTED POWER RESULT

4.4.1. Conducted Power of GSM Bands

The measuring conducted average power (Unit: dBm) is shown as below.

Band	GSM 850(All DSI)			PCS 1900(DSI-0)		
Channel	128	190	251	512	661	810
Frequency (MHz)	824.2	836.6	848.8	1850.2	1880.0	1909.8
Maximum Burst-Averaged Output Power						
GSM (GMSK, 1Tx-slot)	33.13	33.21	33.13	30.32	30.38	30.35
GPRS (GMSK, 1Tx-slot)	33.18	33.08	32.99	30.33	30.34	30.29
GPRS (GMSK, 2Tx-slot)	32.01	32.02	31.96	29.23	29.26	29.21
GPRS (GMSK, 3Tx-slot)	29.81	29.87	29.83	27.28	27.31	27.30
GPRS (GMSK, 4Tx-slot)	28.60	28.69	28.71	26.15	26.19	26.18
EDGE (8PSK, 1Tx-slot)	27.59	27.20	26.87	26.68	26.32	26.15
EDGE (8PSK, 2Tx-slot)	26.32	26.20	25.79	25.63	25.40	25.21
EDGE (8PSK, 3Tx-slot)	24.23	23.98	23.63	23.64	23.35	23.10
EDGE (8PSK, 4Tx-slot)	22.83	22.44	22.52	22.55	22.05	22.29
Maximum Frame-Averaged Output Power						
GSM (GMSK, 1Tx-slot)	24.13	24.21	24.13	21.32	21.38	21.35
GPRS (GMSK, 1Tx-slot)	24.18	24.08	23.99	21.33	21.34	21.29
GPRS (GMSK, 2Tx-slot)	26.01	26.02	25.96	23.23	23.26	23.21
GPRS (GMSK, 3Tx-slot)	25.55	25.61	25.57	23.02	23.05	23.04
GPRS (GMSK, 4Tx-slot)	25.60	25.69	25.71	23.15	23.19	23.18
EDGE (8PSK, 1Tx-slot)	18.59	18.20	17.87	17.68	17.32	17.15
EDGE (8PSK, 2Tx-slot)	20.32	20.20	19.79	19.63	19.40	19.21
EDGE (8PSK, 3Tx-slot)	19.97	19.72	19.37	19.38	19.09	18.84
EDGE (8PSK, 4Tx-slot)	19.83	19.44	19.52	19.55	19.05	19.29

Note:

- 1) SAR testing was performed on the maximum frame-averaged power mode.
- 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:
- 3) Frame-averaged power = 10 x log (Burst-averaged power mW x Slot used / 8)

4.4.2. Conducted Power of WCDMA Bands

The measuring conducted average power (Unit: dBm) is shown as below.

Band	WCDMA Band II (All DSI)			WCDMA Band V (All DSI)			WCDMA Band IV (DSI-0/1/2/3)		
Channel	9262	9400	9538	4132	4182	4233	1312	1413	1513
Frequency (MHz)	1852.4	1880.0	1907.6	826.4	836.4	846.6	1712.4	1732.6	1752.6
RMC 12.2K	23.44	24.26	23.79	23.62	23.64	23.56	23.46	23.58	23.40
HSDPA Subtest-1	22.49	23.29	22.86	22.67	22.70	22.61	22.62	22.50	22.43
HSDPA Subtest-2	21.98	22.82	22.42	22.20	22.18	22.11	22.10	22.01	21.96
HSDPA Subtest-3	22.04	22.83	22.43	22.23	22.21	22.12	22.17	22.06	22.01
HSDPA Subtest-4	22.00	22.80	22.43	22.23	22.19	22.09	22.13	22.05	21.94
HSUPA Subtest-1	20.46	21.29	20.89	20.67	20.66	20.56	20.60	20.50	20.43
HSUPA Subtest-2	20.48	21.23	20.92	20.69	20.69	20.60	20.61	20.53	20.47
HSUPA Subtest-3	21.48	22.32	21.90	20.68	21.71	20.60	20.63	21.52	21.44
HSUPA Subtest-4	20.03	20.80	20.44	20.23	20.22	20.12	20.14	20.04	19.94
HSUPA Subtest-5	21.42	22.34	21.93	21.65	21.67	21.59	21.57	21.49	21.38

Power Reduction

Band	WCDMA Band IV (DSI-4)		
Channel	1312	1413	1513
Frequency (MHz)	1712.4	1732.6	1752.6
RMC 12.2K	21.62	21.69	21.58
HSDPA Subtest-1	20.89	20.83	20.74
HSDPA Subtest-2	20.37	20.34	20.27
HSDPA Subtest-3	20.44	20.39	20.32
HSDPA Subtest-4	20.40	20.38	20.25
HSUPA Subtest-1	18.93	18.81	18.70
HSUPA Subtest-2	18.94	18.84	18.74
HSUPA Subtest-3	18.96	19.83	19.71
HSUPA Subtest-4	18.47	18.35	18.21
HSUPA Subtest-5	19.90	19.80	19.65

4.4.3. Conducted Power of LTE Bands

The measuring conducted average power (Unit: dBm) is shown as below.

Note: The MPR of DSI-1/2/3/4 is consistent with that of DSI-0. To simplify the report, the power of DSI-1/2/3/4 only shows the result of QPSK.

➤ LTE Band 7_Ant. 0_DSI-0/1/2

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth (MHz)	RB	20775	21100	21425	20775	21100	21425	20775	21100	21425	20775	21100	21425
			2502.5 MHz	2535 MHz	2567.5 MHz	2502.5 MHz	2535 MHz	2567.5 MHz	2502.5 MHz	2535 MHz	2567.5 MHz	2502.5 MHz	2535 MHz	2567.5 MHz
7	5	1RB#0	23.60	23.49	23.48	22.39	22.49	22.32	21.56	22.53	22.19	18.96	19.18	19.15
		1RB#12	23.49	23.37	23.31	22.41	22.52	22.40	21.62	22.51	22.16	18.98	19.45	19.20
		1RB#24	23.56	23.46	23.43	22.50	22.42	22.34	20.83	21.09	21.11	18.98	19.31	19.09
		12RB#0	22.48	22.42	22.39	21.44	21.48	21.41	20.83	21.10	21.09	18.73	19.15	19.12
		12RB#6	22.47	22.40	22.39	21.47	21.47	21.36	20.79	21.21	21.07	18.72	19.14	19.03
		12RB#13	22.48	22.35	22.36	21.44	21.44	21.40	20.82	21.07	21.11	18.75	19.18	19.06
		25RB#0	22.51	22.44	22.44	21.48	21.39	21.41	20.82	21.09	21.11	18.75	19.15	19.09
7	10	20800	21100	21400	20800	21100	21400	20800	21100	21400	20800	21100	21400	21400
		2505 MHz	2535 MHz	2565 MHz	2505 MHz	2535 MHz	2565 MHz	2505 MHz	2535 MHz	2565 MHz	2505 MHz	2535 MHz	2565 MHz	2565 MHz
		1RB#0	23.64	23.45	23.39	22.45	22.34	22.22	21.40	21.78	22.38	18.79	19.04	18.90
		1RB#24	23.49	23.45	23.37	22.36	22.51	22.40	21.54	22.11	22.36	18.62	19.35	18.78
		1RB#49	23.45	23.42	23.38	22.45	22.28	22.16	20.72	21.13	21.08	18.80	19.21	18.78
		25RB#0	22.47	22.42	22.40	21.42	21.41	21.41	20.71	21.14	21.10	18.72	19.10	19.17
		25RB#12	22.47	22.39	22.41	21.44	21.40	21.39	20.75	21.11	21.10	18.77	19.15	19.17
7	15	25RB#25	22.48	22.38	22.39	21.42	21.38	21.38	20.72	21.13	21.12	18.75	19.20	19.13
		50RB#0	22.45	22.39	22.43	21.42	21.39	21.40	20.71	21.14	21.10	18.77	19.15	19.08
		20825	21100	21375	20825	21100	21375	20825	21100	21375	20825	21100	21375	21375
		2507.5 MHz	2535 MHz	2562.5 MHz	2507.5 MHz	2535 MHz	2562.5 MHz	2507.5 MHz	2535 MHz	2562.5 MHz	2507.5 MHz	2535 MHz	2562.5 MHz	2562.5 MHz
		1RB#0	23.54	23.36	23.37	22.43	22.46	22.21	21.59	22.05	22.47	18.80	19.02	19.00
		1RB#38	23.45	23.51	23.40	22.36	22.43	22.40	20.73	22.37	22.37	18.63	19.43	18.84
		1RB#74	23.47	23.33	23.32	22.44	22.41	22.18	20.73	21.17	21.16	18.75	19.37	18.77
7	20	38RB#0	22.46	22.40	22.36	22.44	22.39	22.37	20.74	21.19	21.17	20.72	21.18	21.16
		38RB#18	22.41	22.36	22.36	21.42	21.40	21.33	20.74	21.12	21.12	18.77	19.14	19.14
		38RB#37	22.45	22.39	22.35	22.45	22.39	22.35	20.74	21.09	21.17	20.75	21.08	21.14
		75RB#0	22.45	22.38	22.35	21.42	21.39	21.38	20.75	21.08	21.15	18.76	19.17	19.13
		20850	21100	21350	20850	21100	21350	20850	21100	21350	20850	21100	21350	21350
		2510 MHz	2535 MHz	2560 MHz	2510 MHz	2535 MHz	2560 MHz	2510 MHz	2535 MHz	2560 MHz	2510 MHz	2535 MHz	2560 MHz	2560 MHz
		1RB#0	23.65	23.48	23.38	22.43	22.59	22.30	21.85	22.04	22.08	18.76	19.06	19.34
7	20	1RB#49	23.39	23.41	23.51	22.55	22.65	22.26	20.73	22.45	21.81	18.89	19.18	19.17
		1RB#99	23.58	23.48	23.33	22.42	22.68	22.34	20.71	21.17	21.22	18.84	19.29	19.10
		50RB#0	22.48	22.45	22.41	21.46	21.46	21.44	20.71	21.18	21.21	18.74	19.14	19.25
		50RB#25	22.47	22.46	22.44	21.43	21.47	21.43	20.70	21.19	21.26	18.73	19.34	19.25
		50RB#50	22.44	22.44	22.43	21.44	21.42	21.46	20.67	21.20	21.21	18.73	19.17	19.16
		100RB#0	22.47	22.44	22.43	21.43	21.43	21.41	20.67	21.19	21.22	18.73	19.10	19.26

➤ LTE Band 7_Ant. 4_DSI-0

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth	RB	20775	21100	21425	20775	21100	21425	20775	21100	21425	20775	21100	21425
	(MHz)		2502.5 MHz	2535 MHz	2567.5 MHz	2502.5 MHz	2535 MHz	2567.5 MHz	2502.5 MHz	2535 MHz	2567.5 MHz	2502.5 MHz	2535 MHz	2567.5 MHz
7	5	1RB#0	23.86	24.12	23.85	22.96	22.97	22.68	21.99	21.72	22.17	18.92	19.09	18.85
		1RB#12	23.76	24.18	23.81	22.89	23.05	22.88	20.91	21.84	22.14	19.01	19.17	19.05
		1RB#24	23.95	24.21	23.83	22.96	23.05	22.81	20.94	20.97	20.73	18.96	19.12	18.95
		12RB#0	22.95	22.98	22.81	21.94	22.05	21.84	20.94	20.96	20.73	18.92	18.90	18.80
		12RB#6	22.93	22.96	22.83	21.95	22.00	21.79	20.90	20.95	20.85	18.87	18.86	18.79
		12RB#13	22.93	22.93	22.81	21.95	21.99	21.85	20.95	20.97	20.74	18.94	18.83	18.80
		25RB#0	22.99	22.99	22.86	21.98	21.96	21.88	20.95	20.96	20.74	18.90	18.87	18.78
Band	Bandwidth	RB	20800	21100	21400	20800	21100	21400	20800	21100	21400	20800	21100	21400
	(MHz)		2505 MHz	2535 MHz	2565 MHz	2505 MHz	2535 MHz	2565 MHz	2505 MHz	2535 MHz	2565 MHz	2505 MHz	2535 MHz	2565 MHz
7	10	1RB#0	23.80	24.09	23.95	22.91	22.86	22.61	21.66	21.61	21.96	18.95	18.86	18.56
		1RB#24	23.85	24.14	23.88	22.80	22.94	22.73	20.93	21.83	22.00	18.83	19.09	18.48
		1RB#49	23.92	24.18	23.74	23.00	22.84	22.65	20.93	20.89	20.79	19.02	18.83	18.62
		25RB#0	22.95	23.00	22.83	21.91	22.00	21.84	20.94	20.89	20.81	18.90	18.92	18.84
		25RB#12	22.97	22.99	22.80	21.93	21.97	21.80	20.93	20.90	20.77	18.92	18.92	18.81
		25RB#25	23.00	22.97	22.84	21.96	21.98	21.85	20.94	20.91	20.80	18.96	18.88	18.86
		50RB#0	22.98	22.98	22.84	21.97	21.97	21.85	20.95	20.91	20.80	18.95	18.89	18.78
Band	Bandwidth	RB	20825	21100	21375	20825	21100	21375	20825	21100	21375	20825	21100	21375
	(MHz)		2507.5 MHz	2535 MHz	2562.5 MHz	2507.5 MHz	2535 MHz	2562.5 MHz	2507.5 MHz	2535 MHz	2562.5 MHz	2507.5 MHz	2535 MHz	2562.5 MHz
7	15	1RB#0	23.85	23.98	23.99	22.95	23.02	22.59	21.79	22.01	21.90	19.01	18.94	18.51
		1RB#38	23.92	24.19	23.89	22.99	23.08	22.83	21.87	22.15	22.06	18.92	19.22	18.56
		1RB#74	23.97	24.10	23.77	22.97	22.97	22.60	21.00	20.96	20.86	18.99	18.89	18.59
		38RB#0	22.99	22.96	22.83	22.98	22.96	22.81	21.01	20.95	20.87	21.01	20.98	20.85
		38RB#18	22.96	22.96	22.81	21.99	22.00	21.83	21.02	20.96	20.86	19.02	18.93	18.87
		38RB#37	22.99	22.95	22.81	22.98	22.96	22.81	21.01	20.89	20.86	21.00	20.90	20.88
		75RB#0	22.99	22.97	22.81	21.97	21.99	21.86	21.01	20.91	20.88	19.02	18.96	18.83
Band	Bandwidth	RB	20850	21100	21350	20850	21100	21350	20850	21100	21350	20850	21100	21350
	(MHz)		2510 MHz	2535 MHz	2560 MHz	2510 MHz	2535 MHz	2560 MHz	2510 MHz	2535 MHz	2560 MHz	2510 MHz	2535 MHz	2560 MHz
7	20	1RB#0	23.86	24.11	24.01	22.87	23.17	22.73	22.39	22.10	21.95	18.97	18.99	18.88
		1RB#49	23.92	24.23	24.03	23.07	23.22	22.79	22.11	21.60	21.94	19.21	19.00	19.07
		1RB#99	24.10	24.17	23.80	23.01	23.04	22.75	21.02	20.97	20.86	19.02	18.94	18.92
		50RB#0	23.01	23.04	22.88	22.02	22.06	21.95	21.01	20.98	20.86	19.00	18.96	18.86
		50RB#25	23.06	23.05	22.93	22.06	22.06	21.92	21.08	21.03	20.90	19.03	18.88	18.91
		50RB#50	23.04	23.00	22.86	22.01	22.01	21.90	21.01	20.98	20.86	19.01	19.07	18.86
		100RB#0	23.03	23.01	22.88	22.01	22.01	21.89	21.02	20.98	20.86	19.02	18.92	18.89

➤ LTE Band 7_Ant. 0&4_DSI-1/2/3/4

Conducted Power(dBm)											
			Ant 0_DSI-3/4			Ant 4_DSI-1/2			Ant 4_DSI-3/4		
Modulation			QPSK			QPSK			QPSK		
Band	Bandwidth	RB	20775	21100	21425	20775	21100	21425	20775	21100	21425
	(MHz)		2502.5 MHz	2535 MHz	2567.5 MHz	2502.5 MHz	2535 MHz	2567.5 MHz	2502.5 MHz	2535 MHz	2567.5 MHz
7	5	1RB#0	16.82	16.71	16.84	16.36	16.20	16.19	17.35	17.82	17.34
		1RB#12	16.75	16.61	16.63	16.25	16.21	16.26	17.21	17.78	17.41
		1RB#24	16.73	16.83	16.90	16.44	16.14	16.38	17.47	17.81	17.28
		12RB#0	15.80	15.78	15.71	15.35	15.53	15.13	16.65	16.63	16.38
		12RB#6	15.76	15.62	15.73	15.23	15.26	15.15	16.38	16.56	16.28
		12RB#13	15.89	15.47	15.78	15.25	15.25	15.21	16.33	16.33	16.41
		25RB#0	15.93	15.91	15.56	15.33	15.54	15.21	16.54	16.64	16.26
Band	Bandwidth	RB	20800	21100	21400	20800	21100	21400	20800	21100	21400
	(MHz)		2505 MHz	2535 MHz	2565 MHz	2505 MHz	2535 MHz	2565 MHz	2505 MHz	2535 MHz	2565 MHz
7	10	1RB#0	16.81	16.81	16.56	16.10	16.39	16.37	17.30	17.79	17.47
		1RB#24	16.75	16.77	16.66	16.35	16.56	16.27	17.42	17.73	17.58
		1RB#49	16.72	16.69	16.74	16.27	16.63	16.01	17.37	17.63	17.16
		25RB#0	15.84	15.74	15.81	15.44	15.45	15.03	16.35	16.50	16.47
		25RB#12	15.81	15.58	15.63	15.47	15.33	15.05	16.54	16.56	16.27
		25RB#25	15.89	15.50	15.56	15.32	15.32	15.39	16.54	16.62	16.39
		50RB#0	15.62	15.66	15.72	15.25	15.38	15.18	16.62	16.63	16.38
Band	Bandwidth	RB	20825	21100	21375	20825	21100	21375	20825	21100	21375
	(MHz)		2507.5 MHz	2535 MHz	2562.5 MHz	2507.5 MHz	2535 MHz	2562.5 MHz	2507.5 MHz	2535 MHz	2562.5 MHz
7	15	1RB#0	16.81	16.60	16.69	16.12	16.42	16.39	17.44	17.40	17.48
		1RB#38	16.87	16.77	16.87	16.36	16.59	16.21	17.39	17.59	17.36
		1RB#74	16.59	16.75	16.68	16.31	16.59	16.19	17.44	17.62	17.29
		38RB#0	15.77	15.77	15.63	15.36	15.21	15.25	16.39	16.38	16.32
		38RB#18	15.72	15.65	15.58	15.28	15.16	15.01	16.48	16.51	16.41
		38RB#37	15.81	15.65	15.62	15.26	15.35	15.18	16.54	16.30	16.28
		75RB#0	15.81	15.75	15.69	15.48	15.39	15.18	16.48	16.57	16.30
Band	Bandwidth	RB	20850	21100	21350	20850	21100	21350	20850	21100	21350
	(MHz)		2510 MHz	2535 MHz	2560 MHz	2510 MHz	2535 MHz	2560 MHz	2510 MHz	2535 MHz	2560 MHz
7	20	1RB#0	17.07	16.95	16.80	16.30	16.55	16.51	17.51	17.51	17.46
		1RB#49	16.75	16.88	16.77	16.41	16.78	16.68	17.46	17.93	17.48
		1RB#99	16.95	16.89	16.80	16.37	16.66	16.07	17.69	17.81	17.34
		50RB#0	15.95	15.79	15.63	15.36	15.29	15.23	16.43	16.63	16.40
		50RB#25	15.94	15.87	15.86	15.40	15.30	15.30	16.65	16.65	16.43
		50RB#50	15.70	15.75	15.74	15.29	15.49	15.23	16.64	16.57	16.43
		100RB#0	15.71	15.70	15.67	15.43	15.51	15.43	16.55	16.41	16.38

➤ LTECA_7C_Ant. 0 & 4

Band	BW (MHz)	RB Configuration	Ant. 1						Ant. 4					
			QPSK-QPSK			16QAM-16QAM			QPSK-QPSK			16QAM-16QAM		
Channel			20805-20949	21006-21150	21206-21350	20805-20949	21006-21150	21206-21350	20805-20949	21006-21150	21206-21350	20805-20949	21006-21150	21206-21350
7C	10-20	1RB#0-0RB#0	23.20	23.22	23.19	22.31	22.31	22.40	23.66	23.65	23.67	22.76	22.79	22.88
7C	10-20	1RB#0-1RB#99	14.78	14.77	14.66	15.43	14.88	14.94	15.24	15.23	15.17	15.91	15.30	15.45
7C	10-20	1RB#49-0RB#0	23.31	23.19	23.21	22.37	22.27	22.50	23.73	23.65	23.72	22.77	22.78	22.92
7C	10-20	12RB#0-0RB#0	23.30	13.44	23.27	22.46	22.13	22.23	23.76	13.95	23.70	22.83	22.66	22.74
7C	10-20	50RB#0-100RB#0	21.22	21.23	21.29	20.30	20.26	20.33	21.68	21.66	21.74	20.72	20.72	20.76
Channel			20825-20945	21051-21171	20825-20945	21051-21171	21277-21397	20825-20945	20825-20945	21051-21171	20825-20945	21051-21171	21277-21397	20825-20945
7C	15-10	1RB#0-0RB#0	23.16	23.14	23.21	23.21	22.56	22.91	23.67	23.54	23.67	23.64	22.98	23.36
7C	15-10	1RB#0-1RB#49	23.33	14.69	14.64	15.27	15.33	15.53	23.73	15.20	15.15	15.70	15.78	15.96
7C	15-10	1RB#74-0RB#0	23.24	23.21	23.26	22.95	22.79	22.99	23.75	23.69	23.74	23.38	23.16	23.44
7C	15-10	16RB#0-0RB#0	22.16	22.15	22.24	21.35	21.21	21.39	22.69	22.63	22.69	21.80	21.74	21.87
7C	15-10	75RB#0-50RB#0	21.20	21.23	21.33	20.37	20.18	20.29	21.73	21.74	21.76	20.77	20.66	20.72
Channel			20825-20975	21025-21175	20825-20975	21025-21175	21225-21375	20825-20975	20825-20975	21025-21175	20825-20975	21025-21175	21225-21375	20825-20975
7C	15-15	1RB#0-0RB#0	23.18	23.28	23.27	22.62	23.00	22.58	23.69	23.74	23.80	23.07	23.40	23.09
7C	15-15	1RB#0-1RB#74	14.84	14.77	14.82	15.30	15.52	15.13	15.26	15.25	15.30	15.81	15.94	15.56
7C	15-15	1RB#74-0RB#0	23.19	23.35	23.31	22.59	22.92	22.49	23.67	23.80	23.82	23.07	23.43	23.00
7C	15-15	16RB#0-0RB#0	23.40	23.37	23.38	22.43	22.41	22.40	23.80	23.77	23.81	22.83	22.89	22.86
7C	15-15	75RB#0-75RB#0	21.34	21.42	22.31	20.30	20.29	19.50	21.79	21.79	22.82	20.76	20.80	20.01
Channel			20828-20999	21003-21174	20828-20999	21003-21174	21179-21350	20828-20999	20828-20999	21003-21174	20828-20999	21003-21174	21179-21350	20828-20999
7C	15-20	1RB#0-0RB#0	23.20	23.27	23.36	20.31	20.38	23.00	23.71	23.72	23.78	20.76	20.81	23.48
7C	15-20	1RB#0-1RB#99	15.55	14.83	14.71	23.04	15.33	15.48	16.01	15.23	15.14	23.50	15.78	15.91
7C	15-20	1RB#74-0RB#0	22.56	23.39	23.38	15.59	22.75	23.02	23.04	23.79	23.86	16.02	23.21	23.42
7C	15-20	16RB#0-0RB#0	22.26	23.41	23.36	22.96	22.34	22.47	22.79	23.83	23.81	23.44	22.87	22.90
7C	15-20	75RB#0-100RB#0	19.64	21.29	21.37	22.53	20.26	20.34	20.04	21.75	21.77	23.01	20.71	20.79
Channel			20850-20994	21051-21195	20850-20994	21051-21195	21251-21395	20850-20994	20850-20994	21051-21195	20850-20994	21051-21195	21251-21395	20850-20994
7C	20-10	1RB#0-0RB#0	23.27	23.32	23.40	23.10	22.77	22.76	23.78	23.83	23.80	23.61	23.20	23.16
7C	20-10	1RB#0-1RB#49	23.40	14.94	14.85	15.43	15.43	15.23	23.80	15.42	15.33	15.94	15.80	15.68
7C	20-10	1RB#99-0RB#0	23.31	23.42	23.38	22.97	22.84	22.59	23.82	23.90	23.80	23.48	23.27	23.10
7C	20-10	18RB#0-0RB#0	22.39	22.35	22.34	21.44	21.46	21.43	22.82	22.75	22.85	21.90	21.86	21.85
7C	20-10	100RB#0-50RB#0	21.39	21.36	21.36	20.32	20.32	20.39	21.84	21.84	21.82	20.83	20.78	20.84
Channel			20850-21021	21026-21197	20850-21021	21026-21197	21201-21372	20850-21021	20850-21021	21026-21197	20850-21021	21026-21197	21201-21372	20850-21021
7C	20-15	1RB#0-0RB#0	23.38	23.27	23.36	22.67	22.96	22.91	23.80	23.78	23.78	23.07	23.42	23.39
7C	20-15	1RB#0-1RB#74	14.87	14.87	14.78	15.24	15.44	15.32	15.35	15.27	15.21	15.72	15.87	15.78
7C	20-15	1RB#99-0RB#0	23.42	23.34	23.43	22.76	22.98	23.06	23.82	23.80	23.85	23.13	23.38	23.57
7C	20-15	18RB#0-0RB#0	22.34	22.38	22.36	21.31	21.46	21.36	22.79	22.78	22.78	21.82	21.86	21.81
7C	20-15	100RB#0-75RB#0	21.39	21.36	21.44	20.28	20.36	20.38	21.85	21.82	21.81	20.79	20.81	20.81
Channel			20850-21048	21001-21199	20850-21048	21001-21199	21152-21350	20850-21048	20850-21048	21001-21199	20850-21048	21001-21199	21152-21350	20850-21048
7C	20-20	1RB#0-0RB#0	23.36	23.31	23.26	22.63	22.70	22.96	23.84	23.82	23.77	23.14	23.18	23.36
7C	20-20	1RB#0-1RB#99	14.85	14.97	14.81	15.38	15.32	15.17	15.31	15.34	15.26	15.81	15.72	15.65
7C	20-20	1RB#99-0RB#0	23.31	23.39	23.39	22.69	22.74	22.92	23.79	23.87	23.82	23.17	23.17	23.38
7C	20-20	18RB#0-0RB#0	23.28	23.32	23.22	22.50	22.34	22.25	23.79	23.78	23.70	22.87	22.79	22.73
7C	20-20	100RB#0-100RB#0	21.36	21.33	22.39	20.32	20.28	20.21	21.76	21.78	22.79	20.75	20.76	20.74

➤ LTE Band 12_All DSI

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth	RB	23017	23095	23173	23017	23095	23173	23017	23095	23173	23017	23095	23173
	(MHz)		699.7 MHz	707.5 MHz	715.3 MHz	699.7 MHz	707.5 MHz	715.3 MHz	699.7 MHz	707.5 MHz	715.3 MHz	699.7 MHz	707.5 MHz	715.3 MHz
12	1.4	1RB#0	24.18	24.26	24.23	23.12	23.07	23.02	22.60	22.31	22.30	19.11	19.49	19.49
		1RB#2	24.27	24.28	24.23	23.18	23.33	23.14	22.58	22.47	22.44	19.36	19.15	19.66
		1RB#5	24.21	24.35	24.20	23.14	23.15	22.95	21.36	21.24	21.44	19.41	19.20	19.54
		3RB#0	24.13	24.19	24.22	22.99	22.99	23.05	21.38	21.24	21.45	19.31	19.26	19.27
		3RB#1	24.18	24.14	24.23	23.10	23.05	23.10	22.52	22.48	22.29	19.39	19.27	19.28
		3RB#3	24.10	24.20	24.21	22.97	23.04	23.03	21.36	21.25	21.45	19.35	19.29	19.26
		6RB#0	23.21	23.18	23.22	22.21	22.04	22.17	21.37	21.29	21.44	19.40	19.43	19.53
Band	Bandwidth	RB	23025	23095	23165	23025	23095	23165	23025	23095	23165	23025	23095	23165
	(MHz)		700.5 MHz	707.5 MHz	714.5 MHz	700.5 MHz	707.5 MHz	714.5 MHz	700.5 MHz	707.5 MHz	714.5 MHz	700.5 MHz	707.5 MHz	714.5 MHz
12	3	1RB#0	24.26	24.22	24.21	23.16	23.07	22.97	22.28	22.25	22.69	19.49	19.48	19.17
		1RB#8	24.31	24.31	24.25	23.14	23.33	23.22	22.42	22.52	22.72	19.34	19.71	19.12
		1RB#14	24.28	24.32	24.15	23.23	23.12	22.96	21.43	21.48	21.35	19.50	19.48	19.20
		8RB#0	23.24	23.23	23.28	22.26	22.23	22.24	21.44	21.49	21.38	19.48	19.39	19.58
		8RB#4	23.24	23.25	23.25	22.23	22.20	22.17	21.52	21.41	21.43	19.49	19.46	19.51
		8RB#7	23.28	23.25	23.26	22.28	22.27	22.27	21.43	21.50	21.33	19.50	19.42	19.57
		15RB#0	23.26	23.25	23.23	22.30	22.15	22.15	21.43	21.54	21.36	19.54	19.48	19.45
Band	Bandwidth	RB	23035	23095	23155	23035	23095	23155	23035	23095	23155	23035	23095	23155
	(MHz)		701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz	701.5 MHz	707.5 MHz	713.5 MHz
12	5	1RB#0	24.36	24.34	24.38	23.28	23.36	23.28	22.40	23.05	22.74	19.80	19.70	19.57
		1RB#12	24.31	24.33	24.25	23.26	23.50	23.31	22.50	23.02	22.55	19.93	19.89	19.61
		1RB#24	24.35	24.37	24.43	23.37	23.38	23.23	21.63	21.47	21.57	19.91	19.73	19.59
		12RB#0	23.31	23.26	23.31	22.29	22.33	22.31	21.64	21.48	21.57	19.55	19.50	19.57
		12RB#6	23.26	23.30	23.31	22.28	22.32	22.23	21.62	21.57	21.54	19.52	19.54	19.49
		12RB#13	23.30	23.25	23.28	22.30	22.34	22.29	21.63	21.48	21.55	19.54	19.52	19.60
		25RB#0	23.30	23.31	23.31	22.27	22.27	22.32	21.62	21.47	21.54	19.56	19.57	19.56
Band	Bandwidth	RB	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130
	(MHz)		704 MHz	707.5 MHz	711 MHz	704 MHz	707.5 MHz	711 MHz	704 MHz	707.5 MHz	711 MHz	704 MHz	707.5 MHz	711 MHz
12	10	1RB#0	24.35	24.33	24.25	23.34	23.27	23.02	22.42	22.43	22.73	19.61	19.62	19.28
		1RB#24	24.46	24.36	24.28	23.34	23.40	23.22	22.53	22.60	22.79	19.45	19.75	19.26
		1RB#49	24.39	24.35	24.26	23.41	23.23	23.07	21.59	21.54	21.56	19.65	19.62	19.26
		25RB#0	23.32	23.28	23.35	22.26	22.27	22.35	21.59	21.54	21.53	19.59	19.56	19.61
		25RB#12	23.32	23.30	23.31	22.31	22.30	22.28	21.62	21.57	21.53	19.60	19.56	19.61
		25RB#25	23.38	23.29	23.32	22.33	22.30	22.29	21.59	21.56	21.52	19.61	19.56	19.62
		50RB#0	23.34	23.32	23.31	22.32	22.30	22.29	21.60	21.54	21.52	19.64	19.56	19.54

➤ LTE Band 13_All DSI

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth	RB	23205	23230	23255	23205	23230	23255	23205	23230	23255	23205	23230	23255
	(MHz)		779.5 MHz	782 MHz	784.5 MHz	779.5 MHz	782 MHz	784.5 MHz	779.5 MHz	782 MHz	784.5 MHz	779.5 MHz	782 MHz	784.5 MHz
13	5	1RB#0	24.29	24.30	24.31	23.19	23.34	23.21	22.33	23.06	22.71	19.78	19.73	19.62
		1RB#12	24.13	24.23	24.21	23.17	23.35	23.23	22.43	22.96	22.54	19.84	19.85	19.61
		1RB#24	24.19	24.21	24.31	23.24	23.34	23.17	21.57	21.44	21.55	19.83	19.68	19.53
		12RB#0	23.24	23.26	23.24	22.25	22.33	22.27	21.57	21.46	21.55	19.48	19.57	19.56
		12RB#6	23.23	23.23	23.23	22.22	22.32	22.21	21.57	21.55	21.52	19.46	19.51	19.49
		12RB#13	23.23	23.20	23.22	22.19	22.28	22.23	21.54	21.45	21.53	19.48	19.49	19.51
		25RB#0	23.25	23.26	23.29	22.23	22.21	22.28	21.56	21.44	21.54	19.49	19.52	19.55
Band	Bandwidth	RB		23230			23230			23230			23230	
	(MHz)			782 MHz			782 MHz			782 MHz			782 MHz	
13	10	1RB#0		24.25			23.30			22.20			19.59	
		1RB#24		24.34			23.15			22.45			19.38	
		1RB#49		24.20			23.27			21.54			19.64	
		25RB#0		23.27			22.25			21.56			19.56	
		25RB#12		23.25			22.24			21.55			19.55	
		25RB#25		23.27			22.22			21.56			19.57	
		50RB#0		23.29			22.25			21.54			19.59	

➤ LTE Band 25_Ant. 1_DSI-0

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	BW (MHz)	RB	26047	26365	26683	26047	26365	26683	26047	26365	26683	26047	26365	26683
			1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz
25	1.4	1RB#0	23.70	24.14	24.16	22.65	23.45	22.94	22.09	22.50	22.60	18.91	19.85	19.19
		1RB#2	23.83	24.21	24.23	22.71	23.63	23.20	21.96	22.66	22.60	18.61	20.07	19.18
		1RB#5	23.74	24.16	24.13	22.64	23.45	22.99	20.62	21.68	21.11	18.70	19.78	19.18
		3RB#0	23.64	24.11	24.10	22.48	23.37	22.95	20.64	21.68	21.11	18.74	19.55	19.22
		3RB#1	23.67	24.08	24.19	22.58	23.39	23.09	21.80	22.45	22.33	18.75	19.58	19.17
		3RB#3	23.63	24.06	24.17	22.50	23.34	22.90	20.64	21.65	21.12	18.74	19.54	19.22
		6RB#0	22.73	23.31	23.16	21.67	22.40	22.14	20.59	21.63	21.12	18.89	19.83	19.40
Band	BW (MHz)	RB	26055	26365	26675	26055	26365	26675	26055	26365	26675	26055	26365	26675
			1851.5 MHz	1882.5 MHz	1913.5 MHz	1851.5 MHz	1882.5 MHz	1913.5 MHz	1851.5 MHz	1882.5 MHz	1913.5 MHz	1851.5 MHz	1882.5 MHz	1913.5 MHz
25	3	1RB#0	23.80	24.22	24.22	22.73	23.50	23.12	21.70	22.51	22.46	19.02	19.85	19.21
		1RB#8	23.83	24.24	24.23	22.65	23.69	23.32	21.70	22.59	22.55	18.83	20.00	19.11
		1RB#14	23.82	24.15	24.16	22.78	23.32	23.19	20.77	21.66	21.20	19.10	19.67	19.19
		8RB#0	22.77	23.52	23.24	21.76	22.58	22.23	20.74	21.70	21.24	18.90	19.75	19.59
		8RB#4	22.73	23.56	23.15	21.72	22.52	22.12	20.86	21.63	21.26	18.94	19.77	19.47
		8RB#7	22.82	23.48	23.17	21.75	22.49	22.13	20.74	21.73	21.19	18.93	19.71	19.49
		15RB#0	22.73	23.44	23.21	21.77	22.53	22.05	20.79	21.66	21.18	19.02	19.76	19.40
Band	BW (MHz)	RB	26065	26365	26665	26065	26365	26665	26065	26365	26665	26065	26365	26665
			1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz
25	5	1RB#0	23.95	24.22	24.22	22.83	23.74	23.27	21.78	23.26	22.57	19.29	20.08	19.63
		1RB#12	23.81	24.25	24.24	22.82	23.82	23.36	21.94	23.22	22.43	19.36	20.18	19.69
		1RB#24	24.06	24.24	24.25	22.95	23.59	23.21	21.03	21.67	21.45	19.44	19.95	19.62
		12RB#0	22.80	23.58	23.27	21.78	22.70	22.30	21.03	21.67	21.45	19.00	19.89	19.56
		12RB#6	22.80	23.54	23.24	21.79	22.64	22.23	20.98	21.82	21.42	19.01	19.86	19.50
		12RB#13	22.90	23.52	23.26	21.86	22.59	22.24	21.04	21.66	21.43	19.08	19.80	19.49
		25RB#0	22.88	23.56	23.29	21.84	22.54	22.29	21.02	21.69	21.46	19.08	19.82	19.53
Band	BW (MHz)	RB	26090	26365	26640	26090	26365	26640	26090	26365	26640	26090	26365	26640
			1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz
25	10	1RB#0	23.87	24.26	24.15	22.86	23.69	23.00	21.78	22.69	22.52	19.08	20.02	19.19
		1RB#24	23.97	24.21	24.24	22.93	23.69	23.26	21.95	22.77	22.69	18.97	20.03	19.16
		1RB#49	24.14	24.12	24.18	23.33	23.38	23.09	21.08	21.74	21.38	19.52	19.71	19.29
		25RB#0	22.88	23.58	23.23	21.86	22.66	22.25	21.08	21.73	21.38	19.05	19.89	19.52
		25RB#12	22.92	23.66	23.22	21.91	22.57	22.19	21.03	21.72	21.34	19.12	19.84	19.51
		25RB#25	23.14	23.58	23.26	22.07	22.54	22.24	21.08	21.74	21.38	19.27	19.79	19.51
		50RB#0	22.97	23.61	23.25	21.95	22.58	22.23	21.08	21.73	21.37	19.20	19.83	19.46
Band	BW (MHz)	RB	26115	26365	26615	26115	26365	26615	26115	26365	26615	26115	26365	26615
			1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz
25	15	1RB#0	23.90	24.22	24.11	22.87	23.86	22.97	21.84	23.09	22.57	19.08	20.08	19.15
		1RB#38	24.23	24.24	24.25	23.12	23.69	23.22	22.16	22.97	22.67	19.25	20.11	19.19
		1RB#74	24.25	24.16	24.24	23.63	23.46	23.01	21.30	21.79	21.42	19.89	19.68	19.25
		38RB#0	23.16	23.54	23.23	23.18	23.60	23.22	21.30	21.78	21.42	21.29	21.79	21.40
		38RB#18	23.11	23.56	23.17	22.11	22.61	22.18	21.24	21.76	21.35	19.33	19.85	19.46
		38RB#37	23.18	23.54	23.21	23.16	23.59	23.21	21.25	21.74	21.35	21.23	21.73	21.34
		75RB#0	23.19	23.48	23.21	22.12	22.60	22.24	21.22	21.71	21.37	19.38	19.87	19.48
Band	BW (MHz)	RB	26140	26365	26590	26140	26365	26590	26140	26365	26590	26140	26365	26590
			1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz
25	20	1RB#0	23.98	24.22	24.13	22.80	24.05	23.05	22.55	23.12	22.57	19.08	20.09	19.75
		1RB#49	24.23	24.24	24.16	23.47	23.83	23.11	22.00	22.90	22.68	19.50	20.05	19.72
		1RB#99	24.58	24.51	24.48	23.82	23.56	23.22	21.49	21.78	21.45	20.02	19.62	19.86
		50RB#0	23.09	23.62	23.27	22.10	22.76	22.29	21.47	21.78	21.41	19.25	20.00	19.50
		50RB#25	23.36	23.57	23.24	22.33	22.66	22.24	21.48	21.82	21.41	19.54	19.86	19.46
		50RB#50	23.64	23.53	23.29	22.62	22.50	22.31	21.48	21.80	21.45	19.81	19.75	19.53
		100RB#0	23.36	23.55	23.25	22.36	22.61	22.25	21.45	21.78	21.46	19.53	19.87	19.51

➤ LTE Band 25_Ant. 4_DSI-0

			Conducted Power(dBm)											
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	BW (MHz)	RB	26047 1850.7 MHz	26365 1882.5 MHz	26683 1914.3 MHz	26047 1850.7 MHz	26365 1882.5 MHz	26683 1914.3 MHz	26047 1850.7 MHz	26365 1882.5 MHz	26683 1914.3 MHz	26047 1850.7 MHz	26365 1882.5 MHz	26683 1914.3 MHz
25	1.4	1RB#0	23.81	24.09	23.91	22.76	22.87	22.64	21.74	22.20	21.71	18.99	19.01	19.00
		1RB#2	23.82	24.09	23.99	22.79	23.15	22.88	20.99	22.22	21.86	19.22	18.98	19.21
		1RB#5	23.82	24.11	24.00	22.76	22.92	22.76	20.98	20.98	20.96	19.01	19.06	19.06
		3RB#0	23.71	24.02	23.86	22.57	22.80	22.73	20.97	20.98	21.00	18.82	18.98	18.77
		3RB#1	23.75	23.96	23.90	22.66	22.87	22.81	21.60	22.09	21.80	18.86	19.04	18.79
		3RB#3	23.72	24.03	23.92	22.52	22.78	22.68	20.91	21.00	20.95	18.89	18.96	18.82
		6RB#0	22.83	22.97	22.96	21.75	21.78	21.93	20.89	21.01	20.98	18.89	18.98	19.02
25	3	1RB#0	23.87	24.09	23.89	22.82	22.92	22.64	21.64	21.94	22.13	19.07	19.17	18.74
		1RB#8	23.84	24.07	23.83	22.71	23.12	22.88	20.93	22.02	22.16	18.93	19.34	18.63
		1RB#14	23.85	24.11	24.00	22.84	22.87	22.76	20.94	21.10	20.92	19.11	19.09	18.83
		8RB#0	22.88	23.03	22.94	21.87	21.99	21.95	20.93	21.12	20.94	18.97	19.01	19.13
		8RB#4	22.82	22.97	22.88	21.82	21.93	21.84	21.03	21.02	21.00	18.99	19.01	19.06
		8RB#7	22.88	23.00	22.98	21.89	22.01	21.97	20.92	21.13	20.96	18.96	19.01	19.15
25	5	15RB#0	22.84	23.03	22.96	21.80	21.95	21.88	20.94	21.11	20.90	19.06	19.06	19.00
		26065	26365	26665	26065	26365	26665	26065	26365	26665	26065	26365	26665	26665
		1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz	1852.5 MHz	1882.5 MHz	1912.5 MHz	1912.5 MHz
		1RB#0	24.01	24.18	24.16	22.90	23.15	23.03	21.83	22.58	22.26	19.35	19.33	19.20
		1RB#12	23.92	24.16	24.03	22.82	23.22	23.10	21.97	22.67	22.20	19.38	19.47	19.26
		1RB#24	24.10	24.16	24.21	22.98	23.22	22.92	21.13	21.07	21.16	19.34	19.35	19.15
25	10	12RB#0	22.89	23.09	23.07	21.89	22.14	22.08	21.15	21.09	21.16	19.04	19.18	19.15
		12RB#6	22.89	23.06	23.05	21.90	22.12	22.01	21.14	21.20	21.11	19.04	19.17	19.11
		12RB#13	22.91	23.08	23.06	21.90	22.12	22.05	21.14	21.10	21.16	19.05	19.15	19.11
		25RB#0	22.95	23.13	23.06	21.94	22.04	22.10	21.16	21.06	21.13	19.12	19.12	19.08
		26090	26365	26640	26090	26365	26640	26090	26365	26640	26090	26365	26640	26640
		1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz	1855 MHz	1882.5 MHz	1910 MHz	1910 MHz
25	15	1RB#0	23.97	24.18	23.99	22.99	23.03	22.79	21.81	22.06	22.24	19.09	19.21	18.82
		1RB#24	24.04	24.19	24.02	22.90	23.27	23.03	21.97	22.21	22.41	18.87	19.35	18.78
		1RB#49	24.09	24.18	24.07	23.02	23.03	22.80	21.08	21.17	21.10	19.09	19.16	18.88
		25RB#0	22.97	23.15	23.05	21.91	22.14	22.07	21.09	21.18	21.09	19.09	19.17	19.12
		25RB#12	22.99	23.12	23.06	21.97	22.13	22.08	21.10	21.15	21.12	19.06	19.18	19.17
		25RB#25	23.02	23.13	23.08	21.96	22.14	22.07	21.07	21.17	21.13	19.09	19.16	19.14
25	20	50RB#0	23.01	23.16	23.07	21.99	22.13	22.04	21.09	21.16	21.10	19.15	19.17	19.06
		26115	26365	26615	26115	26365	26615	26115	26365	26615	26115	26365	26615	26615
		1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz	1857.5 MHz	1882.5 MHz	1907.5 MHz	1907.5 MHz
		1RB#0	23.98	24.05	23.98	22.95	23.22	22.74	21.85	22.27	22.17	19.16	19.25	18.72
		1RB#38	24.06	24.15	24.01	22.92	23.22	22.98	21.95	22.28	22.35	18.92	19.41	18.74
		1RB#74	24.04	24.04	24.03	23.03	23.15	22.83	21.07	21.16	21.06	19.14	19.18	18.80
25	25	38RB#0	22.97	23.11	23.02	22.95	23.10	23.01	21.07	21.19	21.05	21.07	21.18	21.06
		38RB#18	22.91	23.06	22.98	21.93	22.09	21.98	21.09	21.14	21.04	19.08	19.11	19.07
		38RB#37	22.98	23.10	23.02	22.97	23.09	23.01	21.07	21.07	21.07	21.09	21.08	21.06
		75RB#0	22.95	23.09	23.00	21.95	22.12	22.04	21.08	21.09	21.08	19.11	19.14	19.05
		26140	26365	26590	26140	26365	26590	26140	26365	26590	26140	26365	26590	26590
		1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz	1860 MHz	1882.5 MHz	1905 MHz	1905 MHz
25	20	1RB#0	24.04	24.16	23.94	22.93	23.33	22.81	22.55	22.40	22.27	19.14	19.49	19.29
		1RB#49	23.98	24.23	24.03	23.10	23.31	22.82	22.12	22.49	22.31	19.20	19.50	19.32
		1RB#99	24.20	24.09	23.99	23.01	23.27	23.02	21.07	21.21	21.11	19.18	19.44	19.42
		50RB#0	23.01	23.20	22.98	21.96	22.17	21.99	21.04	21.22	21.10	19.04	19.21	19.01
		50RB#25	23.02	23.14	22.99	22.00	22.15	21.99	21.09	21.20	21.05	19.08	19.15	19.03
		50RB#50	23.04	23.13	23.08	22.02	22.14	22.14	21.03	21.12	21.04	19.10	19.12	19.04
25	20	100RB#0	23.02	23.13	23.00	21.99	22.13	22.02	21.07	21.15	21.03	19.05	19.14	19.03

➤ LTE Band 25_Ant 1&4_DSI-1/2/3/4

Conducted Power(dBm)											
			Ant. 1 DSI-3/4			Ant. 4 DSI-1/2			Ant. 4 DSI-3/4		
Modulation			QPSK			QPSK			QPSK		
Band	BW	RB	26047	26365	26683	26047	26365	26683	26047	26365	26683
	(MHz)		1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz	1850.7 MHz	1882.5 MHz	1914.3 MHz
25	1.4	1RB#0	21.22	21.74	21.73	17.52	17.74	17.44	15.76	15.76	15.66
		1RB#2	21.52	21.90	21.75	17.49	17.57	17.45	15.49	16.04	15.78
		1RB#5	21.29	21.76	21.80	17.55	17.80	17.75	15.56	15.85	15.74
		3RB#0	21.16	21.70	21.85	16.52	16.72	16.51	15.38	15.77	15.53
		3RB#1	21.26	21.77	21.71	16.27	16.49	16.57	15.57	15.71	15.85
		3RB#3	21.23	21.56	21.72	16.47	16.54	16.50	15.32	15.82	15.87
		6RB#0	20.18	20.93	20.71	16.43	16.48	16.53	14.43	14.87	14.70
25	3	1RB#0	21.44	21.79	21.97	17.61	17.70	17.70	15.54	15.74	15.79
		1RB#8	21.47	21.93	21.85	17.62	17.91	17.67	15.61	15.96	15.60
		1RB#14	21.39	21.67	21.68	17.65	17.63	17.66	15.45	15.85	15.72
		8RB#0	20.22	21.14	20.74	16.46	16.73	16.77	14.68	14.80	14.74
		8RB#4	20.42	21.21	20.67	16.44	16.58	16.64	14.72	14.87	14.65
		8RB#7	20.46	21.00	20.74	16.43	16.63	16.76	14.62	14.60	14.68
		15RB#0	20.48	21.04	20.86	16.65	16.88	16.58	14.66	14.82	14.56
25	5	1RB#0	21.45	21.79	21.81	17.62	17.82	17.59	15.91	16.08	15.76
		1RB#12	21.33	21.92	21.74	17.69	17.64	17.77	15.69	15.86	15.80
		1RB#24	21.68	21.83	21.85	17.71	17.87	17.77	15.84	15.83	15.96
		12RB#0	20.42	21.22	20.82	16.42	16.90	16.57	14.59	14.76	14.77
		12RB#6	20.25	20.99	20.76	16.58	16.62	16.66	14.61	14.66	14.82
		12RB#13	20.40	21.14	20.96	16.52	16.88	16.58	14.73	14.83	14.90
		25RB#0	20.33	21.26	20.94	16.63	16.70	16.47	14.80	15.08	14.95
25	10	1RB#0	21.47	21.81	21.70	17.38	17.60	17.60	15.71	15.95	15.84
		1RB#24	21.42	21.71	21.83	17.81	17.85	17.61	15.88	16.08	15.72
		1RB#49	21.74	21.69	21.82	17.54	17.68	17.48	15.81	16.08	16.02
		25RB#0	20.57	21.38	20.82	16.47	16.56	16.47	14.57	14.97	14.70
		25RB#12	20.47	21.30	20.92	16.61	16.61	16.50	14.78	14.92	14.80
		25RB#25	20.94	21.23	20.96	16.57	16.80	16.72	14.74	15.08	14.88
		50RB#0	20.59	21.18	20.75	16.35	16.78	16.59	14.78	15.00	14.77
25	15	1RB#0	21.47	21.86	21.75	17.43	17.54	17.41	15.87	15.87	15.80
		1RB#38	21.83	21.86	22.00	17.36	17.63	17.59	15.95	15.97	15.71
		1RB#74	21.87	21.81	21.74	17.32	17.80	17.69	15.79	15.99	15.82
		38RB#0	20.75	21.24	20.75	17.46	17.47	17.55	14.72	14.93	14.91
		38RB#18	20.73	21.36	20.79	17.20	17.56	17.50	14.76	14.95	14.78
		38RB#37	20.77	21.29	20.76	17.41	17.60	17.44	14.83	14.95	14.91
		75RB#0	20.79	21.23	20.83	16.45	16.51	16.36	14.79	14.86	14.75
25	20	1RB#0	21.78	22.02	21.68	17.56	17.86	17.64	15.99	15.96	15.64
		1RB#49	21.88	21.94	21.86	17.55	17.93	17.72	15.83	16.12	15.88
		1RB#99	22.20	22.08	22.12	17.72	17.79	17.53	16.05	15.93	15.88
		50RB#0	20.71	21.31	20.82	16.48	16.79	16.52	14.85	15.04	14.70
		50RB#25	21.05	21.37	20.83	16.54	16.78	16.53	14.82	14.74	14.81
		50RB#50	21.34	21.22	20.84	16.63	16.77	16.62	14.88	14.80	14.93
		100RB#0	21.05	21.10	20.84	16.77	16.58	16.40	14.69	14.85	14.60

➤ LTE Band 26 (All DSI)

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth	RB	26697	26915	27033	26697	26915	27033	26697	26915	27033	26697	26915	27033
	(MHz)		814.7 MHz	836.5 MHz	848.3 MHz	814.7 MHz	836.5 MHz	848.3 MHz	814.7 MHz	836.5 MHz	848.3 MHz	814.7 MHz	836.5 MHz	848.3 MHz
26	1.4	1RB#0	24.13	24.02	24.01	23.05	22.94	23.01	22.79	22.69	22.69	19.37	19.31	19.26
		1RB#2	24.18	24.11	24.08	23.33	23.06	23.12	23.83	22.61	22.51	19.08	19.32	19.30
		1RB#5	24.20	24.07	24.00	23.10	22.91	22.98	21.29	21.38	21.28	19.18	19.35	19.21
		3RB#0	24.09	23.96	23.94	22.99	22.92	22.89	21.30	21.35	21.28	19.32	19.33	19.29
		3RB#1	24.00	23.97	24.01	23.11	23.03	22.98	22.51	22.48	22.45	19.30	19.37	19.36
		3RB#3	24.11	23.93	23.92	23.03	22.88	22.82	21.33	21.34	21.30	19.30	19.33	19.27
		6RB#0	23.20	23.18	23.10	22.05	22.08	22.11	21.32	21.35	21.32	19.44	19.32	19.28
Band	Bandwidth	RB	27025	26915	27025	27025	26915	27025	27025	26915	27025	27025	26915	27025
	(MHz)		847.5 MHz	836.5 MHz	847.5 MHz	847.5 MHz	836.5 MHz	847.5 MHz	847.5 MHz	836.5 MHz	847.5 MHz	847.5 MHz	836.5 MHz	847.5 MHz
26	3	1RB#0	24.17	24.14	24.03	23.19	23.12	22.91	22.35	22.31	22.26	19.59	19.42	19.49
		1RB#8	24.13	24.07	24.01	23.09	23.39	23.07	22.36	22.34	22.41	19.11	19.30	19.58
		1RB#14	24.21	24.16	24.06	23.18	23.08	22.83	21.35	21.38	21.39	19.17	19.39	19.36
		8RB#0	23.22	23.19	23.22	22.22	22.29	22.21	21.39	21.39	21.44	19.57	19.39	19.38
		8RB#4	23.20	23.16	23.15	22.22	22.19	22.05	21.44	21.44	21.32	19.53	19.40	19.38
		8RB#7	23.24	23.13	23.14	22.22	22.25	22.13	21.38	21.38	21.42	19.59	19.47	19.32
		15RB#0	23.24	23.20	23.14	22.23	22.16	22.04	21.37	21.29	21.43	19.46	19.41	19.38
Band	Bandwidth	RB	26715	26915	27015	26715	26915	27015	26715	26915	27015	26715	26915	27015
	(MHz)		816.5 MHz	836.5 MHz	846.5 MHz	816.5 MHz	836.5 MHz	846.5 MHz	816.5 MHz	836.5 MHz	846.5 MHz	816.5 MHz	836.5 MHz	846.5 MHz
26	5	1RB#0	24.28	24.12	24.21	23.29	23.19	23.14	22.44	22.37	22.64	19.84	19.80	19.57
		1RB#12	24.28	24.15	24.19	23.21	23.13	23.25	22.52	22.42	22.57	19.96	19.90	19.66
		1RB#24	24.26	24.14	24.21	23.27	23.25	23.11	21.61	21.62	21.49	19.88	19.84	19.47
		12RB#0	23.28	23.17	23.27	22.28	22.20	22.25	21.63	21.63	21.49	19.57	19.53	19.53
		12RB#6	23.27	23.14	23.23	22.26	22.17	22.21	21.62	21.57	21.54	19.56	19.46	19.47
		12RB#13	23.30	23.15	23.17	22.25	22.18	22.16	21.64	21.62	21.48	19.50	19.46	19.45
		25RB#0	23.30	23.22	23.25	22.27	22.23	22.25	21.66	21.59	21.48	19.59	19.52	19.51
Band	Bandwidth	RB	26740	26915	26990	26740	26915	26990	26740	26915	26990	26740	26915	26990
	(MHz)		819 MHz	836.5 MHz	844 MHz	819 MHz	836.5 MHz	844 MHz	819 MHz	836.5 MHz	844 MHz	819 MHz	836.5 MHz	844 MHz
26	10	1RB#0	24.26	24.18	24.25	23.34	23.20	23.03	22.16	22.46	22.65	19.68	19.59	19.19
		1RB#24	24.27	24.16	24.14	23.15	23.16	23.17	22.38	22.54	22.74	19.46	19.37	19.05
		1RB#49	24.24	24.17	24.11	23.31	23.18	22.93	21.58	21.57	21.44	19.75	19.52	19.13
		25RB#0	23.31	23.21	23.22	22.26	22.16	22.26	21.57	21.58	21.44	19.64	19.56	19.51
		25RB#12	23.28	23.19	23.22	22.26	22.16	22.19	21.56	21.61	21.45	19.62	19.53	19.50
		25RB#25	23.30	23.19	23.20	22.26	22.15	22.21	21.57	21.57	21.43	19.64	19.53	19.48
		50RB#0	23.30	23.21	23.20	22.30	22.18	22.19	21.56	21.57	21.42	19.69	19.56	19.40
Band	Bandwidth	RB	26765	26915	26965	26765	26915	26965	26765	26915	26965	26765	26915	26965
	(MHz)		821.5 MHz	831.5 MHz	841.5 MHz	821.5 MHz	831.5 MHz	841.5 MHz	821.5 MHz	831.5 MHz	841.5 MHz	821.5 MHz	831.5 MHz	841.5 MHz
26	15	1RB#0	24.27	24.25	24.24	23.30	23.24	23.02	22.43	22.15	22.68	19.56	19.64	19.18
		1RB#38	24.24	24.32	24.21	23.21	23.20	23.18	22.47	22.44	22.76	19.42	19.54	19.17
		1RB#74	24.24	24.25	24.13	23.26	23.23	22.94	21.56	21.55	21.52	19.58	19.51	19.12
		38RB#0	23.26	23.26	23.21	23.25	23.26	23.21	21.57	21.57	21.49	21.58	21.55	21.51
		38RB#18	23.23	23.26	23.19	22.26	22.26	22.21	21.58	21.59	21.47	19.61	19.56	19.51
		38RB#37	23.26	23.26	23.25	23.28	23.25	23.22	21.59	21.59	21.52	21.58	21.56	21.51
		75RB#0	23.26	23.27	23.22	22.25	22.24	22.22	21.56	21.59	21.52	19.60	19.59	19.49

➤ **LTE Band 30 (DSI-0/1/2)**

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth	RB	27685	27710	27735	27685	27710	27735	27685	27710	27735	27685	27710	27735
	(MHz)		2307.5 MHz	2310 MHz	2312.5 MHz	2307.5 MHz	2310 MHz	2312.5 MHz	2307.5 MHz	2310 MHz	2312.5 MHz	2307.5 MHz	2310 MHz	2312.5 MHz
30	5	1RB#0	23.55	23.74	23.71	22.62	22.78	22.94	21.77	21.75	22.37	18.96	18.82	19.36
		1RB#2	19.94	22.11	22.37	20.06	22.35	21.96	19.98	22.04	22.02	18.91	19.26	19.18
		1RB#5	19.99	20.15	20.25	19.96	20.14	20.32	20.02	20.13	20.22	19.12	19.40	19.31
		3RB#0	20.00	20.19	20.25	19.94	20.25	20.26	19.97	20.18	20.20	18.51	18.52	18.68
		3RB#1	20.44	20.64	20.78	20.40	20.64	20.86	20.48	20.62	20.79	18.56	18.59	18.67
		3RB#3	20.04	20.16	20.22	19.99	20.19	20.21	19.91	20.16	20.24	18.54	18.74	18.79
		6RB#0	19.96	20.11	20.35	20.01	20.26	20.27	19.95	20.20	20.18	17.91	18.13	18.29
Band	Bandwidth	RB	27710			27710			27710			27710		
	(MHz)		2310 MHz			2310 MHz			2310 MHz			2310 MHz		
30	10	1RB#0	23.84			22.76			21.74			19.12		
		1RB#8	21.89			21.90			21.83			19.04		
		1RB#14	18.02			17.95			17.97			19.12		
		8RB#0	20.19			17.95			17.96			18.02		
		8RB#4	20.23			20.15			20.34			18.09		
		8RB#7	20.07			17.94			17.97			18.22		
		15RB#0	20.03			18.01			18.01			15.95		

➤ **LTE Band 30 (DSI-3/4)**

Conducted Power(dBm)														
Modulation			DSI-3			DSI-4								
Band	Bandwidth	RB	QPSK			QPSK								
	(MHz)		27685	27710	27735	27685	27710	27735						
30	5	1RB#0	22.57	22.67	22.73	17.16	17.18	17.29						
		1RB#2	18.91	21.08	21.42	16.93	15.77	16.03						
		1RB#5	19.01	19.12	19.25	13.70	13.83	13.68						
		3RB#0	18.92	19.21	19.23	13.39	13.62	13.71						
		3RB#1	19.34	19.66	19.78	13.97	14.10	14.54						
		3RB#3	19.02	19.18	19.19	13.60	13.75	14.00						
		6RB#0	18.91	19.03	19.32	13.69	13.84	13.93						
Band	Bandwidth	RB	27710			27710								
	(MHz)		2310 MHz			2310 MHz								
30	10	1RB#0	22.75			17.58								
		1RB#8	20.79			16.88								
		1RB#14	17.14			15.19								
		8RB#0	19.16			13.67								
		8RB#4	19.16			14.51								
		8RB#7	19.00			13.56								
		15RB#0	19.05			11.57								

➤ LTE Band 41_Ant. 0_DSI-0/1/2

Modulation			QPSK					16QAM				
Band	Bandwidth	RB	39675	40148	40620	41093	41565	39675	40148	40620	41093	41565
	(MHz)		2498.5	2545.8	2593	2640.3	2687.5	2498.5	2545.8	2593	2640.3	2687.5
Band41	5MHz	1RB#0	23.62	23.38	23.49	23.54	23.51	22.87	22.64	22.67	22.83	22.72
		1RB#12	23.51	23.41	23.57	23.48	23.49	23.11	22.70	22.75	23.03	22.73
		1RB#24	23.62	23.36	23.49	23.57	23.52	22.88	22.61	22.66	22.81	22.73
		12RB#0	22.54	22.36	22.49	22.41	22.43	21.57	21.39	21.45	21.44	21.49
		12RB#6	22.58	22.41	22.46	22.42	22.46	21.52	21.41	21.43	21.42	21.47
		12RB#13	22.52	22.42	22.44	22.50	22.44	21.48	21.45	21.38	21.47	21.48
		25RB#0	22.58	22.42	22.47	22.49	22.48	21.58	21.40	21.45	21.46	21.48
Band	Bandwidth	RB	39700	40160	40620	41080	41540	39700	40160	40620	41080	41540
	(MHz)		2501	2547	2593	2639	2685	2501	2547	2593	2639	2685
Band41	10MHz	1RB#0	23.58	23.49	23.54	23.55	23.54	22.89	22.31	22.52	22.86	22.36
		1RB#24	23.57	23.46	23.54	23.53	23.53	23.00	22.39	22.65	22.97	22.48
		1RB#49	23.56	23.54	23.60	23.54	23.62	22.87	22.38	22.53	22.86	22.46
		25RB#0	22.59	22.43	22.52	22.51	22.45	21.65	21.40	21.52	21.57	21.44
		25RB#12	22.58	22.47	22.48	22.50	22.45	21.58	21.42	21.47	21.47	21.42
		25RB#25	22.57	22.49	22.50	22.51	22.48	21.63	21.47	21.50	21.56	21.46
		50RB#0	22.59	22.48	22.51	22.48	22.47	21.58	21.46	21.46	21.47	21.45
Band	Bandwidth	RB	39725	40173	40620	41068	41515	39725	40173	40620	41068	41515
	(MHz)		2503.5	2548.3	2593	2637.8	2682.5	2503.5	2548.3	2593	2637.8	2682.5
Band41	15MHz	1RB#0	23.46	23.44	23.53	23.47	23.49	22.89	22.46	22.51	22.84	22.48
		1RB#38	23.49	23.43	23.56	23.57	23.50	23.03	22.66	22.69	22.96	22.69
		1RB#74	23.45	23.50	23.56	23.54	23.56	22.90	22.50	22.52	22.87	22.60
		38RB#0	22.53	22.41	22.45	22.46	22.40	21.59	21.40	21.55	21.56	21.37
		38RB#18	22.52	22.44	22.46	22.50	22.48	21.57	21.42	21.55	21.53	21.42
		38RB#37	22.53	22.43	22.46	22.48	22.45	21.57	21.39	21.57	21.54	21.43
		75RB#0	22.54	22.44	22.47	22.49	22.45	21.56	21.46	21.45	21.52	21.46
Band	Bandwidth	RB	39750	40185	40620	41055	41490	39750	40185	40620	41055	41490
	(MHz)		2506	2549.5	2593	2636.5	2680	2506	2549.5	2593	2636.5	2680
Band41	20MHz	1RB#0	23.61	23.57	23.55	23.56	23.64	22.67	22.07	22.48	22.70	22.08
		1RB#49	23.64	23.51	23.61	23.62	23.56	22.71	22.65	22.72	22.78	22.66
		1RB#99	23.75	23.60	23.66	23.64	23.69	22.65	22.14	22.46	22.71	22.15
		50RB#0	22.48	22.38	22.49	22.50	22.38	21.53	21.41	21.49	21.53	21.41
		50RB#25	22.45	22.41	22.47	22.52	22.40	21.52	21.46	21.46	21.55	21.44
		50RB#50	22.54	22.43	22.47	22.49	22.41	21.47	21.46	21.43	21.52	21.48
		100RB#0	22.45	22.41	22.45	22.46	22.44	21.47	21.43	21.49	21.48	21.45
Modulation			64QAM					256QAM				
Band	Bandwidth	RB	39675	40148	40620	41093	41565	39675	40148	40620	41093	41565
	(MHz)		2498.5	2545.8	2593	2640.3	2687.5	2498.5	2545.8	2593	2640.3	2687.5
Band41	5MHz	1RB#0	23.17	22.71	22.75	23.05	22.77	23.17	22.70	22.75	23.04	22.77
		1RB#12	23.14	22.70	22.73	23.04	22.77	23.16	22.74	22.72	23.03	22.80
		1RB#24	23.17	22.72	22.73	23.05	22.79	23.16	22.71	22.72	22.99	22.79
		12RB#0	21.61	21.44	21.43	21.36	21.53	21.59	21.41	21.46	21.46	21.51
		12RB#6	21.59	21.40	21.41	21.44	21.52	21.58	21.47	21.35	21.44	21.47
		12RB#13	21.57	21.46	21.39	21.44	21.48	21.55	21.49	21.38	21.45	21.55
		25RB#0	21.57	21.42	21.48	21.43	21.47	21.61	21.40	21.50	21.46	21.48
Band	Bandwidth	RB	39700	40160	40620	41080	41540	39700	40160	40620	41080	41540
	(MHz)		2501	2547	2593	2639	2685	2501	2547	2593	2639	2685
Band41	10MHz	1RB#0	23.05	22.33	22.63	22.98	22.41	23.03	22.36	22.63	22.96	22.40
		1RB#24	22.97	22.34	22.67	23.01	22.45	22.93	22.34	22.68	22.96	22.45
		1RB#49	23.01	22.41	22.66	23.01	22.50	22.94	22.43	22.66	23.02	22.47
		25RB#0	21.52	21.39	21.48	21.51	21.44	21.53	21.40	21.48	21.52	21.42
		25RB#12	21.51	21.38	21.48	21.49	21.43	21.54	21.39	21.48	21.47	21.43
		25RB#25	21.50	21.44	21.48	21.51	21.44	21.51	21.42	21.48	21.52	21.46
		50RB#0	21.53	21.39	21.50	21.50	21.40	21.54	21.40	21.53	21.51	21.40
Band	Bandwidth	RB	39725	40173	40620	41068	41515	39725	40173	40620	41068	41515
	(MHz)		2503.5	2548.3	2593	2637.8	2682.5	2503.5	2548.3	2593	2637.8	2682.5
Band41	15MHz	1RB#0	22.99	22.59	22.67	23.01	22.63	23.04	22.61	22.66	23.03	22.61
		1RB#38	22.99	22.63	22.73	23.01	22.68	22.99	22.62	22.72	23.01	22.66
		1RB#74	22.97	22.65	22.67	23.01	22.72	23.01	22.65	22.69	23.01	22.73
		38RB#0	21.55	21.35	21.55	21.60	21.37	21.52	21.36	21.55	21.60	21.38
		38RB#18	21.52	21.37	21.54	21.55	21.40	21.53	21.37	21.53	21.56	21.40
		38RB#37	21.52	21.40	21.54	21.56	21.43	21.52	21.39	21.54	21.58	21.44
		75RB#0	21.49	21.45	21.45	21.52	21.47	21.48	21.46	21.46	21.49	21.47
Band	Bandwidth	RB	39750	40185	40620	41055	41490	39750	40185	40620	41055	41490
	(MHz)		2506	2549.5	2593	2636.5	2680	2506	2549.5	2593	2636.5	2680
Band41	20MHz	1RB#0	22.72	22.68	22.78	22.73	22.72	22.70	22.66	22.77	22.73	22.70
		1RB#49	22.69	22.70	22.80	22.71	22.73	22.69	22.67	22.78	22.75	22.74
		1RB#99	22.69	22.75	22.73	22.77	22.81	22.69	22.73	22.74	22.76	22.78
		50RB#0	21.51	21.42	21.54	21.53	21.43	21.50	21.44	21.55	21.52	21.45
		50RB#25	21.47	21.50	21.53	21.51	21.48	21.45	21.50	21.54	21.52	21.47
		50RB#50	21.47	21.49	21.50	21.51	21.47	21.46	21.49	21.51	21.50	21.49
		100RB#0	21.49	21.44	21.51	21.50	21.46	21.48	21.46	21.51	21.51	21.46

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

➤ **LTE Band 41_Ant. 4_DSI-0**

Modulation			QPSK					16QAM				
Band	Bandwidth	RB	39675	40148	40620	41093	41565	39675	40148	40620	41093	41565
	(MHz)		2498.5	2545.8	2593	2640.3	2687.5	2498.5	2545.8	2593	2640.3	2687.5
Band41	5MHz	1RB#0	23.24	23.32	23.15	23.25	23.30	22.31	22.63	22.24	22.24	22.65
		1RB#12	23.28	23.30	23.19	23.26	23.32	22.29	22.68	22.24	22.26	22.72
		1RB#24	23.29	23.36	23.15	23.28	23.38	22.28	22.56	22.29	22.27	22.67
		12RB#0	22.31	22.29	22.13	22.23	22.30	21.23	21.26	21.27	21.16	21.30
		12RB#6	22.28	22.27	22.12	22.25	22.36	21.17	21.27	21.16	21.14	21.27
		12RB#13	22.28	22.36	22.15	22.27	22.32	21.17	21.26	21.18	21.15	21.38
		25RB#0	22.28	22.36	22.18	22.26	22.36	21.24	21.30	21.15	21.22	21.29
Band	Bandwidth	RB	39700	40160	40620	41080	41540	39700	40160	40620	41080	41540
	(MHz)		2501	2547	2593	2639	2685	2501	2547	2593	2639	2685
Band41	10MHz	1RB#0	23.27	23.34	23.24	23.27	23.34	22.39	22.03	22.10	22.41	21.96
		1RB#24	23.20	23.24	23.13	23.19	23.20	22.31	21.89	22.08	22.31	21.88
		1RB#49	23.32	23.30	23.19	23.25	23.33	22.48	22.00	22.10	22.42	21.99
		25RB#0	22.23	22.28	22.20	22.21	22.28	21.27	21.24	21.16	21.25	21.27
		25RB#12	22.24	22.30	22.17	22.20	22.28	21.22	21.27	21.16	21.17	21.24
		25RB#25	22.26	22.30	22.12	22.22	22.26	21.25	21.24	21.10	21.27	21.25
		50RB#0	22.23	22.32	22.19	22.23	22.27	21.26	21.32	21.14	21.21	21.29
Band	Bandwidth	RB	39725	40173	40620	41068	41515	39725	40173	40620	41068	41515
	(MHz)		2503.5	2548.3	2593	2637.8	2682.5	2503.5	2548.3	2593	2637.8	2682.5
Band41	15MHz	1RB#0	23.24	23.45	23.18	23.25	23.36	22.43	22.13	22.10	22.40	22.15
		1RB#38	23.27	23.32	23.19	23.19	23.26	22.36	22.13	22.08	22.34	22.12
		1RB#74	23.31	23.34	23.20	23.22	23.38	22.51	22.07	22.08	22.40	22.11
		38RB#0	22.22	22.27	22.11	22.17	22.25	22.21	22.26	22.14	22.17	22.25
		38RB#18	22.19	22.25	22.14	22.18	22.26	21.23	21.18	21.19	21.18	21.18
		38RB#37	22.21	22.27	22.11	22.18	22.26	22.20	22.22	22.11	22.17	22.26
		75RB#0	22.21	22.27	22.12	22.17	22.25	21.27	21.29	21.15	21.22	21.29
Band	Bandwidth	RB	39750	40185	40620	41055	41490	39750	40185	40620	41055	41490
	(MHz)		2506	2549.5	2593	2636.5	2680	2506	2549.5	2593	2636.5	2680
Band41	20MHz	1RB#0	23.55	23.52	23.61	23.20	23.23	22.24	21.83	21.93	22.24	21.82
		1RB#49	23.66	23.61	23.51	23.22	23.29	22.31	22.28	22.15	22.24	22.24
		1RB#99	23.80	23.53	23.61	23.27	23.29	22.37	21.83	21.93	22.29	21.84
		50RB#0	22.57	22.61	22.47	22.20	22.31	21.29	21.31	21.18	21.18	21.32
		50RB#25	22.61	22.56	22.43	22.20	22.30	21.31	21.31	21.12	21.24	21.33
		50RB#50	22.63	22.59	22.43	22.23	22.26	21.35	21.30	21.11	21.20	21.29
		100RB#0	22.62	22.60	22.48	22.18	22.28	21.31	21.27	21.19	21.18	21.27
Modulation			64QAM					256QAM				
Band	Bandwidth	RB	39675	40148	40620	41093	41565	39675	40148	40620	41093	41565
	(MHz)		2498.5	2545.8	2593	2640.3	2687.5	2498.5	2545.8	2593	2640.3	2687.5
Band41	5MHz	1RB#0	21.63	21.37	21.60	21.63	21.23	18.24	18.21	18.47	18.28	18.08
		1RB#12	21.64	21.38	21.54	21.60	21.22	18.07	18.10	18.48	18.01	17.98
		1RB#24	20.29	20.47	20.35	20.34	20.28	18.30	18.25	18.53	18.29	18.09
		12RB#0	20.29	20.48	20.39	20.33	20.30	18.37	18.43	18.46	18.34	18.27
		12RB#6	20.47	20.52	20.34	20.47	20.29	18.30	18.50	18.35	18.29	18.29
		12RB#13	20.30	20.46	20.36	20.29	20.31	18.34	18.47	18.33	18.34	18.28
		25RB#0	20.34	20.47	20.36	20.28	20.29	18.36	18.54	18.35	18.36	18.34
Band	Bandwidth	RB	39700	40160	40620	41080	41540	39700	40160	40620	41080	41540
	(MHz)		2501	2547	2593	2639	2685	2501	2547	2593	2639	2685
Band41	10MHz	1RB#0	21.54	21.22	21.71	21.56	21.02	18.23	18.21	18.51	18.30	18.01
		1RB#24	21.71	21.12	21.51	21.70	20.89	18.38	18.25	18.12	18.42	18.05
		1RB#49	20.33	20.49	20.33	20.28	20.21	18.35	18.18	18.50	18.25	17.99
		25RB#0	20.35	20.46	20.32	20.30	20.23	18.35	18.47	18.34	18.33	18.26
		25RB#12	20.31	20.40	20.36	20.24	20.15	18.38	18.46	18.36	18.32	18.20
		25RB#25	20.36	20.42	20.32	20.28	20.20	18.37	18.49	18.29	18.32	18.23
		50RB#0	20.36	20.44	20.29	20.29	20.19	18.36	18.50	18.35	18.31	18.25
Band	Bandwidth	RB	39725	40173	40620	41068	41515	39725	40173	40620	41068	41515
	(MHz)		2503.5	2548.3	2593	2637.8	2682.5	2503.5	2548.3	2593	2637.8	2682.5
Band41	15MHz	1RB#0	21.51	21.70	21.46	21.67	21.53	18.28	18.48	18.25	18.51	18.22
		1RB#38	21.76	21.87	21.74	21.48	21.65	18.50	18.56	18.31	18.08	18.41
		1RB#74	20.37	20.50	20.34	20.34	20.26	18.37	18.46	18.20	18.46	18.24
		38RB#0	20.39	20.48	20.35	20.35	20.26	22.31	20.50	20.32	20.37	20.27
		38RB#18	20.31	20.48	20.34	20.28	20.23	18.30	18.48	18.35	18.26	18.28
		38RB#37	20.35	20.43	20.36	20.29	20.26	20.35	20.43	20.35	20.29	20.21
		75RB#0	20.33	20.43	20.35	20.33	20.19	18.31	18.51	18.35	18.27	18.32
Band	Bandwidth	RB	39750	40185	40620	41055	41490	39750	40185	40620	41055	41490
	(MHz)		2506	2549.5	2593	2636.5	2680	2506	2549.5	2593	2636.5	2680
Band41	20MHz	1RB#0	21.16	21.46	21.48	21.27	21.29	18.06	18.08	18.75	18.06	17.90
		1RB#49	21.31	21.49	21.61	21.22	21.24	18.04	18.54	18.60	17.95	18.31
		1RB#99	20.39	20.52	20.36	20.30	20.29	18.21	18.09	18.72	18.09	17.90
		50RB#0	20.38	20.51	20.36	20.30	20.31	18.33	18.52	18.41	18.29	18.31
		50RB#25	20.38	20.57	20.35	20.31	20.34	18.35	18.52	18.34	18.28	18.33
		50RB#50	20.38	20.52	20.38	20.28	20.31	18.42	18.50	18.35	18.28	18.30
		100RB#0	20.39	20.51	20.37	20.31	20.28	18.41	18.51	18.40	18.30	18.29

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

➤ **LTE Band 41_Ant. 0&4_DSI-1/2/3/4**

Modulation			QPSK					QPSK				
Band	Bandwidth (MHz)	RB	Ant. 0 DSI-3/4					Ant. 4 DSI-1/2				
			39675	40148	40620	41093	41565	39675	40148	40620	41093	41565
			2498.5	2545.8	2593	2640.3	2687.5	2498.5	2545.8	2593	2640.3	2687.5
Band41	5MHz	1RB#0	18.01	17.96	17.62	17.96	17.91	18.90	19.08	18.61	18.93	19.08
		1RB#12	18.04	18.01	17.90	17.73	18.14	18.74	18.88	18.85	18.99	19.02
		1RB#24	17.98	18.13	17.79	17.85	18.15	18.87	19.01	18.85	18.96	19.00
		12RB#0	16.98	16.93	16.70	16.92	17.12	18.01	17.92	17.73	18.01	18.13
		12RB#6	17.00	16.84	16.71	16.86	17.12	17.88	17.87	17.75	17.93	18.13
		12RB#13	17.10	16.88	16.84	16.91	16.93	17.81	18.07	17.78	17.99	18.15
		25RB#0	16.90	16.95	16.84	16.80	17.18	17.81	17.99	17.81	17.89	18.09
Band	Bandwidth (MHz)	RB	39700	40160	40620	41080	41540	39700	40160	40620	41080	41540
			2501	2547	2593	2639	2685	2501	2547	2593	2639	2685
Band41	10MHz	1RB#0	17.96	18.16	18.06	18.03	17.98	18.88	19.05	18.84	18.75	19.07
		1RB#24	17.79	17.86	17.80	18.01	17.91	18.66	18.89	18.59	18.96	18.98
		1RB#49	17.96	17.94	17.96	17.79	18.04	18.87	19.00	18.80	18.88	19.01
		25RB#0	16.95	16.89	16.84	16.82	16.87	17.74	17.76	17.66	17.83	17.98
		25RB#12	16.83	16.91	16.86	16.86	16.80	17.90	17.91	17.72	17.80	17.93
		25RB#25	16.80	16.96	16.89	16.81	16.73	17.81	17.93	17.77	18.05	17.86
		50RB#0	16.92	16.94	16.76	16.94	17.09	17.93	17.85	17.79	17.78	17.99
Band	Bandwidth (MHz)	RB	39725	40173	40620	41068	41515	39725	40173	40620	41068	41515
			2503.5	2548.3	2593	2637.8	2682.5	2503.5	2548.3	2593	2637.8	2682.5
Band41	15MHz	1RB#0	17.93	18.17	17.79	17.89	18.02	18.85	19.08	18.66	18.78	18.84
		1RB#38	17.91	17.89	17.95	17.73	17.85	18.98	18.93	18.70	18.67	18.98
		1RB#74	17.97	18.06	17.81	17.98	17.90	18.82	18.85	18.61	18.77	18.98
		38RB#0	16.99	16.99	16.82	16.94	16.79	17.70	17.97	17.67	17.90	17.85
		38RB#18	16.80	16.84	16.68	16.89	16.97	17.70	17.85	17.72	17.88	17.89
		38RB#37	16.90	16.94	16.58	16.77	16.88	17.77	17.73	17.66	17.71	18.03
		75RB#0	16.87	16.91	16.59	16.74	16.87	17.84	17.68	17.60	17.80	18.03
Band	Bandwidth (MHz)	RB	39750	40185	40620	41055	41490	39750	40185	40620	41055	41490
			2506	2549.5	2593	2636.5	2680	2506	2549.5	2593	2636.5	2680
Band41	20MHz	1RB#0	17.97	17.70	17.88	17.87	17.84	18.84	18.64	18.83	18.88	19.01
		1RB#49	18.04	17.98	17.76	17.98	17.81	18.90	18.98	18.70	18.87	18.96
		1RB#99	18.23	17.81	17.74	17.84	18.11	19.11	18.95	18.98	18.99	19.02
		50RB#0	17.05	17.00	16.73	16.77	16.88	17.94	17.93	17.90	17.97	17.94
		50RB#25	17.04	16.97	16.67	16.97	16.77	18.03	17.89	17.76	17.87	18.13
		50RB#50	17.09	16.98	16.91	17.05	16.80	18.04	17.92	17.71	17.88	17.91
		100RB#0	16.96	16.84	17.02	16.70	16.85	17.82	18.08	17.90	17.83	17.88

Modulation			QPSK				
Band	Bandwidth	RB	Ant. 4_DSI-3/4				
	(MHz)		39675	40148	40620	41093	41565
Band41	5MHz	1RB#0	2498.5	2545.8	2593	2640.3	2687.5
		1RB#12	18.01	17.96	17.62	17.96	17.91
		1RB#24	18.04	18.01	17.90	17.73	18.14
		1RB#24	17.98	18.13	17.79	17.85	18.15
		12RB#0	16.98	16.93	16.70	16.92	17.12
		12RB#6	17.00	16.84	16.71	16.86	17.12
		12RB#13	17.10	16.88	16.84	16.91	16.93
Band	10MHz	25RB#0	16.90	16.95	16.84	16.80	17.18
		39700	2501	2547	2593	2639	2685
		1RB#0	17.96	18.16	18.06	18.03	17.98
		1RB#24	17.79	17.86	17.80	18.01	17.91
		1RB#49	17.96	17.94	17.96	17.79	18.04
		25RB#0	16.95	16.89	16.84	16.82	16.87
		25RB#12	16.83	16.91	16.86	16.86	16.80
Band41	15MHz	25RB#25	16.80	16.96	16.89	16.81	16.73
		50RB#0	16.92	16.94	16.76	16.94	17.09
		39725	2503.5	2548.3	2593	2637.8	2682.5
		1RB#0	17.93	18.17	17.79	17.89	18.02
		1RB#38	17.91	17.89	17.95	17.73	17.85
		1RB#74	17.97	18.06	17.81	17.98	17.90
		38RB#0	16.99	16.99	16.82	16.94	16.79
Band	20MHz	38RB#18	16.80	16.84	16.68	16.89	16.97
		38RB#37	16.90	16.94	16.58	16.77	16.88
		75RB#0	16.87	16.91	16.59	16.74	16.87
		39750	2506	2549.5	2593	2636.5	2680
		1RB#0	17.97	17.70	17.88	17.87	17.84
		1RB#49	18.04	17.98	17.76	17.98	17.81
		1RB#99	18.23	17.81	17.74	17.84	18.11
Band41	25MHz	50RB#0	17.05	17.00	16.73	16.77	16.88
		50RB#25	17.04	16.97	16.67	16.97	16.77
		50RB#50	17.09	16.98	16.91	17.05	16.80
		100RB#0	16.96	16.84	17.02	16.70	16.85

➤ **LTE CA_41C_Ant. 4_DSI-0**

Band	BW (MHz)	RB Configuration	QPSK-QPSK			16QAM-16QAM		
Channel			39683-39800	40528-40645	41373-41490	39683-39800	40528-40645	41373-41490
41C	5+20	1RB#0-0RB#0	23.57	23.27	24.10	22.76	22.31	23.18
41C	5+20	1RB#0-1RB#99	14.90	16.48	17.21	15.15	14.82	15.52
41C	5+20	1RB#24-0RB#0	23.54	23.34	24.12	22.75	22.36	23.16
41C	5+20	8RB#0-0RB#0	23.50	23.27	24.10	22.49	22.28	23.06
41C	5+20	25RB#0-100RB#0	21.62	21.36	22.18	20.63	20.34	21.18
Channel			39703-39823	40549-40669	41395-41515	39703-39823	40549-40669	41395-41515
41C	10+15	1RB#0-0RB#0	23.52	23.24	24.14	22.27	21.96	22.80
41C	10+15	1RB#0-1RB#74	14.97	16.39	17.19	14.89	14.75	15.41
41C	10+15	1RB#49-0RB#0	23.49	23.32	24.14	22.45	22.06	22.85
41C	10+15	12RB#0-0RB#0	23.52	23.27	24.13	22.48	22.23	23.10
41C	10+15	50RB#0-75RB#0	21.57	21.35	22.15	20.54	20.31	21.15
Channel			39705-39849	40526-40670	41346-41490	39705-39849	40526-40670	41346-41490
41C	10+20	1RB#0-0RB#0	23.57	23.24	24.08	22.72	21.94	22.75
41C	10+20	1RB#0-1RB#99	14.89	16.33	17.07	14.80	14.66	15.40
41C	10+20	1RB#49-0RB#0	23.42	23.23	24.03	22.39	21.95	22.74
41C	10+20	12RB#0-0RB#0	23.50	23.27	24.01	22.43	22.19	22.98
41C	10+20	50RB#0-100RB#0	21.49	21.28	22.03	20.46	20.27	21.03
Channel			39725-39845	40571-40691	41417-41537	39725-39845	40571-40691	41417-41537
41C	15+10	1RB#0-0RB#0	23.58	23.32	24.11	22.38	22.05	22.93
41C	15+10	1RB#0-1RB#49	14.91	16.37	17.13	14.84	14.69	15.45
41C	15+10	1RB#74-0RB#0	23.50	23.43	24.16	22.42	22.16	22.89

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

Band	BW (MHz)	RB Configuration	QPSK-QPSK			16QAM-16QAM		
41C	15+10	16RB#0-0RB#0	22.52	22.22	23.08	21.55	21.21	22.14
41C	15+10	75RB#0-50RB#0	21.46	21.33	22.09	20.44	20.34	21.08
Channel			39725-39875	40545-40695	41365-41515	39725-39875	40545-40695	41365-41515
41C	15+15	1RB#0-0RB#0	23.60	23.38	24.22	22.73	22.14	22.98
41C	15+15	1RB#0-1RB#74	14.92	16.36	17.13	15.16	14.70	15.44
41C	15+15	1RB#74-0RB#0	23.48	23.41	24.22	22.65	22.15	22.94
41C	15+15	16RB#0-0RB#0	23.62	23.29	24.08	22.65	22.26	23.06
41C	15+15	75RB#0-75RB#0	21.46	21.30	22.09	20.45	20.35	21.08
Channel			39728-39899	40523-40694	41319-41490	39728-39899	40523-40694	41319-41490
41C	15+20	1RB#0-0RB#0	23.65	23.32	24.21	22.46	22.12	22.96
41C	15+20	1RB#0-1RB#99	14.84	16.37	17.10	14.83	14.78	15.42
41C	15+20	1RB#74-0RB#0	23.58	23.39	24.21	22.40	22.15	22.98
41C	15+20	16RB#0-0RB#0	23.58	23.30	24.07	22.65	22.26	23.08
41C	15+20	75RB#0-100RB#0	21.47	21.37	22.09	20.44	20.34	21.08
Channel			39750-39867	40595-40712	41440-41557	39750-39867	40595-40712	41440-41557
41C	20+5	1RB#0-0RB#0	23.47	23.12	24.02	22.50	21.77	22.65
41C	20+5	1RB#0-1RB#24	15.02	16.33	17.11	14.76	14.58	15.30
41C	20+5	1RB#99-0RB#0	23.38	23.22	23.89	22.09	21.85	22.52
41C	20+5	18RB#0-0RB#0	22.47	22.19	23.03	21.46	21.18	22.00
41C	20+5	100RB#0-25RB#0	21.48	21.32	22.04	20.46	20.35	21.08
Channel			39750-39894	40571-40715	41391-41535	39750-39894	40571-40715	41391-41535
41C	20+10	1RB#0-0RB#0	23.50	23.32	24.05	22.55	21.97	22.64
41C	20+10	1RB#0-1RB#49	14.86	16.35	17.06	14.82	14.55	15.28
41C	20+10	1RB#99-0RB#0	23.40	23.36	23.96	22.41	22.03	22.55
41C	20+10	18RB#0-0RB#0	22.56	22.21	23.03	21.52	21.20	22.00
41C	20+10	100RB#0-50RB#0	21.43	21.31	22.03	20.41	20.33	21.05
Channel			39750-39921	40546-40717	41341-41512	39750-39921	40546-40717	41341-41512
41C	20+15	1RB#0-0RB#0	23.54	23.14	23.98	22.59	21.80	22.62
41C	20+15	1RB#0-1RB#74	14.87	16.32	17.04	14.80	14.55	15.21
41C	20+15	1RB#99-0RB#0	23.45	23.25	24.01	22.46	21.87	22.61
41C	20+15	18RB#0-0RB#0	22.56	22.24	23.04	21.58	21.23	22.06
41C	20+15	100RB#0-75RB#0	21.41	21.34	22.02	20.39	20.38	21.04
Channel			39750-39948	40521-40719	41292-41490	39750-39948	40521-40719	41292-41490
41C	20+20	1RB#0-0RB#0	23.51	23.11	23.92	22.52	21.72	22.55
41C	20+20	1RB#0-1RB#99	14.83	16.23	16.93	14.76	14.56	15.22
41C	20+20	1RB#99-0RB#0	23.39	23.16	23.94	22.43	21.77	22.55
41C	20+20	18RB#0-0RB#0	23.53	23.10	23.93	22.51	22.08	22.88
41C	20+20	100RB#0-100RB#0	21.42	21.27	21.93	20.36	20.24	20.93

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

➤ **LTE Band 42_Ant. 3_DSI-0**

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth	RB	42115	42590	43065	42115	42590	43065	42115	42590	43065	42115	42590	43065
	(MHz)		3452.5 MHz	3500 MHz	3547.5 MHz	3452.5 MHz	3500 MHz	3547.5 MHz	3452.5 MHz	3500 MHz	3547.5 MHz	3452.5 MHz	3500 MHz	3547.5 MHz
42	5	1RB#0	23.94	24.01	23.57	22.93	23.36	22.68	22.48	22.15	22.04	19.09	18.96	18.95
		1RB#12	23.93	24.10	23.58	23.01	23.42	22.77	22.46	22.11	22.01	18.90	18.83	19.08
		1RB#24	23.92	24.08	23.58	23.00	23.26	22.71	21.17	21.17	20.92	19.17	18.92	19.03
		12RB#0	22.88	22.94	22.59	22.04	22.15	21.86	21.16	21.17	20.90	19.14	19.20	18.91
		12RB#6	22.83	22.92	22.61	22.04	22.13	21.74	21.29	21.17	20.85	19.13	19.18	18.83
		12RB#13	22.96	22.95	22.64	22.10	22.13	21.81	21.19	21.18	20.89	19.17	19.16	18.86
		25RB#0	22.92	22.98	22.66	22.06	22.15	21.79	21.18	21.17	20.90	19.18	19.19	18.90
42	10	42140	42590	43040	42140	42590	43040	42140	42590	43040	42140	42590	43040	
		3455 MHz	3500 MHz	3545 MHz	3455 MHz	3500 MHz	3545 MHz	3455 MHz	3500 MHz	3545 MHz	3455 MHz	3500 MHz	3545 MHz	
		1RB#0	24.12	24.03	23.84	23.31	22.68	22.75	22.55	21.87	22.29	19.25	18.86	19.09
		1RB#24	24.08	24.03	23.82	23.23	22.58	22.66	22.78	21.77	22.10	19.45	18.99	18.72
		1RB#49	24.11	24.13	23.90	23.41	22.65	22.79	21.33	21.10	20.97	19.31	18.79	19.19
		25RB#0	23.11	22.97	22.78	22.29	22.10	21.95	21.34	21.05	20.97	19.35	19.15	18.94
		25RB#12	23.14	22.96	22.82	22.27	22.10	21.92	21.33	21.06	21.03	19.38	19.09	18.99
42	15	25RB#25	23.19	22.96	22.88	22.37	22.09	21.97	21.37	21.07	20.96	19.40	19.08	18.99
		50RB#0	23.11	22.98	22.85	22.29	22.14	21.97	21.37	21.06	20.97	19.36	19.14	18.99
		42165	42590	43015	42165	42590	43015	42165	42590	43015	42165	42590	43015	
		3457.5 MHz	3500 MHz	3542.5 MHz	3457.5 MHz	3500 MHz	3542.5 MHz	3457.5 MHz	3500 MHz	3542.5 MHz	3457.5 MHz	3500 MHz	3542.5 MHz	
		1RB#0	24.01	23.99	23.55	23.05	22.85	22.46	22.33	22.30	22.08	19.01	19.06	18.88
		1RB#38	23.96	24.11	23.60	23.17	22.86	22.46	22.54	22.52	21.93	19.28	19.07	18.53
		1RB#74	23.97	24.18	23.68	23.24	22.77	22.60	21.19	21.15	20.86	19.18	18.97	19.03
42	20	38RB#0	22.96	22.96	22.58	22.95	22.96	22.57	21.18	21.15	20.81	19.18	19.13	20.81
		38RB#18	22.92	22.94	22.51	22.17	22.10	21.73	21.14	21.13	20.79	19.13	19.12	18.76
		38RB#37	22.97	22.95	22.57	22.96	22.93	22.57	21.13	21.12	20.77	19.13	19.11	20.77
		75RB#0	22.96	22.94	22.57	22.19	22.15	21.74	21.13	21.13	20.77	19.18	19.14	18.75
		42190	42590	42990	42190	42590	42990	42190	42590	42990	42190	42590	42990	
		3460 MHz	3500 MHz	3540 MHz	3460 MHz	3500 MHz	3540 MHz	3460 MHz	3500 MHz	3540 MHz	3460 MHz	3500 MHz	3540 MHz	
		1RB#0	24.09	23.98	23.76	23.11	22.59	22.45	22.28	22.26	22.07	19.10	19.21	19.33
42	20	1RB#49	24.16	24.15	23.82	23.29	23.00	22.81	21.39	22.19	22.17	19.06	19.17	19.16
		1RB#99	23.94	24.19	23.87	23.31	22.43	22.54	21.39	21.16	20.95	19.26	19.15	19.40
		50RB#0	23.17	22.99	22.77	22.30	22.18	21.85	21.42	21.17	20.97	19.31	19.16	18.93
		50RB#25	23.26	22.95	22.80	22.46	22.15	21.88	21.38	21.23	20.98	19.36	19.21	18.98
		50RB#50	23.27	22.95	22.84	22.43	22.13	21.93	21.39	21.17	20.95	19.39	19.04	19.01
		100RB#0	23.21	22.95	22.82	22.38	22.12	21.92	21.38	21.18	20.96	19.37	19.28	18.97

➤ LTE Band 42_Ant. 3_DSI-1/2/3/4

Conducted Power(dBm)									
DSI			DSI-1/2			DSI-3/4			
Modulation			QPSK			QPSK			
Band	Bandwidth	RB	42115	42590	43065	42115	42590	43065	
	(MHz)		3452.5 MHz	3500 MHz	3547.5 MHz	3452.5 MHz	3500 MHz	3547.5 MHz	
42	5	1RB#0	19.35	19.55	19.21	19.43	19.49	19.21	
		1RB#12	19.44	19.59	19.01	19.47	19.74	19.11	
		1RB#24	19.46	19.56	18.87	19.61	19.42	19.04	
		12RB#0	18.24	18.30	18.08	18.27	18.33	18.12	
		12RB#6	18.36	18.45	18.02	18.22	18.56	18.07	
		12RB#13	18.32	18.46	17.93	18.42	18.58	18.15	
		25RB#0	18.36	18.41	18.17	18.46	18.47	18.20	
Band	Bandwidth	RB	42140	42590	43040	42140	42590	43040	
	(MHz)		3455 MHz	3500 MHz	3545 MHz	3455 MHz	3500 MHz	3545 MHz	
42	10	1RB#0	19.56	19.67	19.43	19.65	19.37	19.18	
		1RB#24	19.57	19.51	19.18	19.77	19.54	19.21	
		1RB#49	19.60	19.57	19.26	19.69	19.59	19.39	
		25RB#0	18.69	18.43	18.12	18.80	18.41	18.32	
		25RB#12	18.53	18.54	18.18	18.48	18.30	18.38	
		25RB#25	18.68	18.54	18.46	18.53	18.55	18.22	
		50RB#0	18.55	18.57	18.33	18.67	18.54	18.33	
Band	Bandwidth	RB	42165	42590	43015	42165	42590	43015	
	(MHz)		3457.5 MHz	3500 MHz	3542.5 MHz	3457.5 MHz	3500 MHz	3542.5 MHz	
42	15	1RB#0	19.45	19.42	19.13	19.35	19.47	18.94	
		1RB#38	19.44	19.59	19.14	19.54	19.55	19.04	
		1RB#74	19.33	19.71	19.07	19.61	19.77	19.31	
		38RB#0	18.60	18.55	18.06	18.37	18.44	18.12	
		38RB#18	18.51	18.28	17.87	18.26	18.57	18.15	
		38RB#37	18.40	18.43	18.03	18.45	18.54	18.05	
		75RB#0	18.50	18.48	18.05	18.50	18.43	18.15	
Band	Bandwidth	RB	42190	42590	42990	42190	42590	42990	
	(MHz)		3460 MHz	3500 MHz	3540 MHz	3460 MHz	3500 MHz	3540 MHz	
42	20	1RB#0	19.45	19.56	19.29	19.63	19.61	19.45	
		1RB#49	19.45	19.61	19.16	19.60	19.74	19.23	
		1RB#99	19.47	19.73	19.46	19.58	19.83	19.43	
		50RB#0	18.76	18.38	18.25	18.73	18.38	18.46	
		50RB#25	18.85	18.46	18.44	18.95	18.39	18.43	
		50RB#50	18.78	18.34	18.27	18.78	18.44	18.35	
		100RB#0	18.64	18.24	18.41	18.67	18.44	18.45	

➤ LTE CA_42C_Ant. 3_DSI-0

Band	Bandwidth (MHz)	RB Configuration	Result (MHz)					
			QPSK-QPSK			16QAM-16QAM		
Channel			42123-42240	42748-42865	43373-43490	42123-42240	42748-42865	43373-43490
CA_42C	5+20	1RB#0-0RB#0	23.71	23.14	23.14	23.08	22.26	22.54
CA_42C	5+20	1RB#0-1RB#99	15.10	16.47	14.91	15.28	14.57	15.08
CA_42C	5+20	1RB#24-0RB#0	23.67	23.14	23.23	23.05	22.27	22.66
CA_42C	5+20	8RB#0-0RB#0	23.69	23.14	23.21	22.77	22.19	22.23
CA_42C	5+20	25RB#0-100RB#0	21.77	21.24	21.52	20.78	20.21	20.52
Channel			42145-42289	42746-42890	43346-43490	42145-42289	42746-42890	43346-43490
CA_42C	10+20	1RB#0-0RB#0	23.68	23.13	23.05	22.69	22.38	22.04
CA_42C	10+20	1RB#0-1RB#99	15.02	14.58	14.84	14.87	14.78	14.79
CA_42C	10+20	1RB#49-0RB#0	23.55	23.12	23.28	22.56	22.41	22.29
CA_42C	10+20	12RB#0-0RB#0	23.64	23.08	23.08	22.64	22.08	22.02
CA_42C	10+20	50RB#0-100RB#0	21.60	21.16	21.40	20.60	20.17	20.41
Channel			42168-42339	42744-42915	43319-43490	42168-42339	42744-42915	43319-43490
CA_42C	15+20	1RB#0-0RB#0	23.70	23.14	23.04	22.70	22.13	22.00
CA_42C	15+20	1RB#0-1RB#99	15.00	14.57	14.83	14.83	14.45	14.78
CA_42C	15+20	1RB#74-0RB#0	23.52	23.14	23.36	22.54	22.17	22.37
CA_42C	15+20	16RB#0-0RB#0	23.66	23.10	23.05	22.68	22.10	22.03
CA_42C	15+20	75RB#0-100RB#0	21.57	21.12	21.41	20.55	20.11	20.39
Channel			42190-42307	42815-42932	43440-43557	42190-42307	42815-42932	43440-43557
CA_42C	20+5	1RB#0-0RB#0	23.70	23.09	23.16	22.78	21.78	21.80
CA_42C	20+5	1RB#0-1RB#24	15.10	14.66	16.55	14.93	14.30	14.77
CA_42C	20+5	1RB#99-0RB#0	23.50	23.01	23.56	22.55	21.70	22.24
CA_42C	20+5	18RB#0-0RB#0	22.73	22.19	22.26	21.73	21.16	21.22
CA_42C	20+5	100RB#0-25RB#0	21.61	21.21	21.68	20.64	20.23	20.71
Channel			42190-42334	42791-42935	43391-43535	42190-42334	42791-42935	43391-43535
CA_42C	20+10	1RB#0-0RB#0	23.70	23.15	23.08	22.78	22.24	21.70
CA_42C	20+10	1RB#0-1RB#49	15.05	14.61	14.89	14.92	14.51	14.64
CA_42C	20+10	1RB#99-0RB#0	23.51	23.10	23.47	22.54	22.20	22.14
CA_42C	20+10	18RB#0-0RB#0	22.69	22.14	22.15	21.74	21.16	21.08
CA_42C	20+10	100RB#0-50RB#0	21.57	21.12	21.55	20.57	20.15	20.54
Channel			42190-42361	42766-42937	43341-43512	42190-42361	42766-42937	43341-43512
CA_42C	20+15	1RB#0-0RB#0	23.67	23.24	22.98	22.78	21.93	21.60
CA_42C	20+15	1RB#0-1RB#74	15.01	14.66	14.84	14.87	14.42	14.61
CA_42C	20+15	1RB#99-0RB#0	23.46	23.20	23.37	22.50	21.96	22.03
CA_42C	20+15	18RB#0-0RB#0	22.68	22.15	22.06	21.68	21.13	21.04
CA_42C	20+15	100RB#0-75RB#0	21.52	21.17	21.48	20.48	20.13	20.48
Channel			42190-42388	42741-42939	43292-43490	42190-42388	42741-42939	43292-43490
CA_42C	20+20	1RB#0-0RB#0	23.71	23.15	22.91	22.80	22.23	21.56
CA_42C	20+20	1RB#0-1RB#99	15.04	14.65	14.83	14.87	14.53	14.59
CA_42C	20+20	1RB#99-0RB#0	23.49	23.15	23.31	22.57	22.25	21.96
CA_42C	20+20	18RB#0-0RB#0	23.65	23.10	22.98	22.72	22.14	21.95
CA_42C	20+20	100RB#0-100RB#0	21.53	21.16	21.42	20.52	20.13	20.43

➤ **LTE Band 43_Ant. 3_DSI-0**

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth	RB	44615	45090	45565	44615	45090	45565	44615	45090	45565	44615	45090	45565
	(MHz)		3702.5 MHz	3750 MHz	3797.5 MHz	3702.5 MHz	3750 MHz	3797.5 MHz	3702.5 MHz	3750 MHz	3797.5 MHz	3702.5 MHz	3750 MHz	3797.5 MHz
43	5	1RB#0	23.40	23.45	24.01	22.90	23.07	22.44	22.07	22.66	21.78	18.89	19.30	18.46
		1RB#12	23.73	23.49	23.86	22.89	23.23	22.54	22.18	22.64	21.78	19.13	19.12	18.65
		1RB#24	23.50	23.63	23.85	22.50	23.25	22.50	20.82	21.34	20.76	18.97	19.27	18.48
		12RB#0	22.59	22.38	22.99	21.63	21.97	21.69	20.87	21.23	20.91	19.03	19.40	18.84
		12RB#6	22.67	22.31	22.87	21.60	21.93	21.54	21.00	21.38	20.84	18.79	19.26	18.66
		12RB#13	22.44	22.54	22.89	21.57	21.92	21.84	21.07	21.50	20.88	19.00	19.16	18.73
		25RB#0	22.70	22.69	22.93	21.83	22.07	21.61	20.80	21.38	20.83	18.81	19.25	18.85
Band	Bandwidth	RB	44640	45090	45540	44640	45090	45540	44640	45090	45540	44640	45090	45540
	(MHz)		3705 MHz	3750 MHz	3795 MHz	3705 MHz	3750 MHz	3795 MHz	3705 MHz	3750 MHz	3795 MHz	3705 MHz	3750 MHz	3795 MHz
43	10	1RB#0	23.52	23.47	23.87	22.72	22.82	22.40	22.26	21.96	21.81	18.69	18.86	18.85
		1RB#24	23.61	23.41	23.91	22.67	22.65	22.19	22.21	21.88	22.05	18.83	19.29	18.51
		1RB#49	23.59	23.64	23.91	22.81	22.61	22.54	21.02	21.25	20.56	18.82	18.77	18.75
		25RB#0	22.53	22.55	22.95	21.83	22.13	21.51	20.76	21.06	20.81	18.81	19.37	18.61
		25RB#12	22.40	22.44	22.88	21.77	22.02	21.71	20.83	21.24	20.74	18.95	19.21	18.79
		25RB#25	22.46	22.53	22.96	21.82	21.99	21.64	20.89	21.13	20.82	18.85	19.34	18.66
		50RB#0	22.40	22.43	22.96	21.81	22.12	21.73	21.07	20.99	20.55	18.85	19.42	18.89
Band	Bandwidth	RB	44665	45090	45515	44665	45090	45515	44665	45090	45515	44665	45090	45515
	(MHz)		3707.5 MHz	3750 MHz	3792.5 MHz	3707.5 MHz	3750 MHz	3792.5 MHz	3707.5 MHz	3750 MHz	3792.5 MHz	3707.5 MHz	3750 MHz	3792.5 MHz
43	15	1RB#0	23.66	23.53	24.03	22.54	22.69	22.21	22.01	22.39	22.05	18.70	19.08	18.66
		1RB#38	23.83	23.52	23.91	22.80	22.90	22.27	22.24	22.81	21.90	19.05	19.27	18.50
		1RB#74	23.90	23.49	24.04	22.88	22.77	22.40	20.88	21.30	20.75	18.79	18.91	19.07
		38RB#0	22.55	22.50	22.84	22.49	23.02	22.69	20.96	21.30	20.73	20.94	21.31	20.86
		38RB#18	22.48	22.63	22.87	21.84	21.96	21.61	21.01	21.21	20.76	18.86	19.26	18.65
		38RB#37	22.59	22.58	22.86	22.59	22.85	22.52	20.94	21.28	20.74	20.91	21.16	20.63
		75RB#0	22.53	22.53	23.04	21.79	22.22	21.71	20.92	21.35	20.80	18.99	19.16	18.73
Band	Bandwidth	RB	44690	45090	45490	44690	45090	45490	44690	45090	45490	44690	45090	45490
	(MHz)		3710 MHz	3750 MHz	3790 MHz	3710 MHz	3750 MHz	3790 MHz	3710 MHz	3750 MHz	3790 MHz	3710 MHz	3750 MHz	3790 MHz
43	20	1RB#0	23.36	23.49	24.07	22.51	22.44	22.40	21.64	22.53	21.67	18.57	19.30	19.17
		1RB#49	23.70	23.38	24.00	22.69	23.10	22.42	21.81	22.11	21.88	18.60	19.23	18.83
		1RB#99	23.89	23.92	24.17	22.81	22.40	22.41	21.02	21.20	20.63	18.77	19.28	19.05
		50RB#0	22.69	22.56	22.99	21.89	21.96	21.73	20.91	21.33	20.76	18.85	19.44	18.77
		50RB#25	22.62	22.58	23.16	21.79	22.22	21.59	20.95	21.35	20.72	19.04	18.93	18.69
		50RB#50	22.51	22.45	23.14	21.64	22.08	21.65	21.05	21.22	20.89	18.96	18.78	18.71
		100RB#0	22.71	22.56	22.90	21.81	22.12	21.71	20.92	21.40	20.79	19.07	19.05	18.79

➤ **LTE Band 43_Ant. 3_DSI-1/2/3/4**

Conducted Power(dBm)												
Modulation			QPSK									
Band	Bandwidth	RB	44615	45090	45565							
	(MHz)		3702.5 MHz	3750 MHz	3797.5 MHz							
43	5	1RB#0	18.32	18.40	19.08							
		1RB#12	18.78	18.36	18.91							
		1RB#24	18.62	18.45	18.82							
		12RB#0	17.45	17.38	17.96							
		12RB#6	17.72	17.38	17.99							
		12RB#13	17.42	17.31	17.65							
		25RB#0	17.72	17.59	17.80							
Band	Bandwidth	RB	44640	45090	45540							
	(MHz)		3705 MHz	3750 MHz	3795 MHz							
43	10	1RB#0	18.45	18.59	18.80							
		1RB#24	18.61	18.39	18.78							
		1RB#49	18.61	18.56	18.93							
		25RB#0	17.64	17.60	17.87							
		25RB#12	17.27	17.45	17.83							
		25RB#25	17.28	17.37	17.77							
		50RB#0	17.32	17.31	17.91							
Band	Bandwidth	RB	44665	45090	45515							
	(MHz)		3707.5 MHz	3750 MHz	3792.5 MHz							
43	15	1RB#0	18.77	18.29	19.02							
		1RB#38	18.70	18.54	18.78							
		1RB#74	18.95	18.33	18.96							
		38RB#0	17.43	17.48	17.71							
		38RB#18	17.43	17.63	17.82							
		38RB#37	17.56	17.63	17.68							
		75RB#0	17.36	17.44	18.04							
Band	Bandwidth	RB	44690	45090	45490							
	(MHz)		3710 MHz	3750 MHz	3790 MHz							
43	20	1RB#0	18.41	18.49	18.89							
		1RB#49	18.53	18.27	18.90							
		1RB#99	19.01	19.05	19.23							
		50RB#0	17.62	17.44	17.99							
		50RB#25	17.62	17.58	18.16							
		50RB#50	17.45	17.22	18.01							
		100RB#0	17.54	17.42	17.73							

➤ **LTE Band 48_Ant. 3_DSI-0**

Modulation			QPSK					16QAM				
Band	Bandwidth	RB	55265	55748	55990	56232	56715	55265	55748	55990	56232	56715
	(MHz)		3552.5 MHz	3600.8 MHz	3625 MHz	3649.2 MHz	3697.5 MHz	3552.5 MHz	3600.8 MHz	3625 MHz	3649.2 MHz	3697.5 MHz
Band48	5MHz	1RB#0	23.84	23.86	24.34	24.27	24.64	23.23	23.30	23.77	23.72	23.92
		1RB#12	23.73	23.63	24.31	24.24	24.65	23.43	23.48	23.85	23.82	23.95
		1RB#24	23.80	23.75	24.38	24.50	24.59	23.19	23.21	23.81	23.79	23.89
		12RB#0	22.88	22.91	23.54	23.51	23.76	21.85	21.72	22.62	22.74	22.75
		12RB#6	22.86	22.94	23.56	23.53	23.69	21.84	21.71	22.62	22.52	22.72
		12RB#13	22.82	22.90	23.57	23.54	23.75	21.85	21.93	22.59	22.49	22.72
		25RB#0	22.92	22.95	23.62	23.54	23.79	21.88	21.93	22.58	22.53	22.74
Band	Bandwidth	RB	55290	55757	55990	56223	56690	55290	55757	55990	56223	56690
	(MHz)		3555 MHz	3601.7 MHz	3625 MHz	3648.3 MHz	3695 MHz	3555 MHz	3601.7 MHz	3625 MHz	3648.3 MHz	3695 MHz
Band48	10MHz	1RB#0	23.69	23.56	24.16	24.18	24.56	23.14	23.04	23.29	23.27	23.68
		1RB#24	23.61	23.53	24.24	24.14	24.47	23.18	23.08	23.40	23.30	23.73
		1RB#49	23.58	23.70	24.39	24.34	24.48	23.05	22.98	23.52	23.55	23.63
		25RB#0	22.76	22.66	23.37	23.40	23.67	21.80	21.73	22.35	22.28	22.66
		25RB#12	22.70	22.73	23.43	23.40	23.67	21.70	21.82	22.42	22.40	22.65
		25RB#25	22.72	22.77	23.47	23.59	23.65	21.74	21.82	22.45	22.47	22.66
		50RB#0	22.74	22.79	23.48	23.50	23.69	21.69	21.67	22.42	22.44	22.61
Band	Bandwidth	RB	55315	55765	55990	56215	56665	55315	55765	55990	56215	56665
	(MHz)		3557.5 MHz	3602.5 MHz	3625 MHz	3647.5 MHz	3692.5 MHz	3557.5 MHz	3602.5 MHz	3625 MHz	3647.5 MHz	3692.5 MHz
Band48	15MHz	1RB#0	23.71	23.74	24.26	24.21	24.68	23.15	23.02	23.39	23.44	23.76
		1RB#38	23.66	23.58	24.34	24.37	24.64	23.18	23.15	23.71	23.64	23.85
		1RB#74	23.64	23.56	24.56	24.48	24.58	22.99	22.96	23.74	23.81	23.70
		38RB#0	22.75	22.67	23.41	23.43	23.74	21.80	21.87	22.36	22.44	22.82
		38RB#18	22.73	22.81	23.49	23.36	23.72	21.74	21.86	22.44	22.46	22.82
		38RB#37	22.71	22.73	23.54	23.61	23.69	21.76	21.74	22.50	22.37	22.79
		75RB#0	22.75	22.70	23.49	23.46	23.75	21.77	21.79	22.53	22.51	22.75
Band	Bandwidth	RB	55340	55773	55990	56207	56640	55340	55773	55990	56207	56640
	(MHz)		3560 MHz	3603.3 MHz	3625 MHz	3646.7 MHz	3690 MHz	3560 MHz	3603.3 MHz	3625 MHz	3646.7 MHz	3690 MHz
Band48	20MHz	1RB#0	23.67	23.59	24.17	24.25	24.63	22.96	23.01	23.03	23.03	23.79
		1RB#49	23.62	23.67	24.33	24.35	24.69	22.97	23.04	23.71	23.61	23.99
		1RB#99	23.56	23.54	24.51	24.53	24.74	22.89	22.86	23.39	23.36	23.71
		50RB#0	22.79	22.86	23.42	23.39	23.70	21.77	21.79	22.46	22.36	22.75
		50RB#25	22.75	22.77	23.49	23.36	23.78	21.80	21.75	22.57	22.69	22.78
		50RB#50	22.74	22.69	23.58	23.55	23.77	21.74	21.71	22.61	22.61	22.73
		100RB#0	22.79	22.82	23.56	23.61	23.77	21.74	21.79	22.52	22.45	22.77

Modulation			64QAM					256QAM				
Band	Bandwidth	RB	55265	55748	55990	56232	56715	55265	55748	55990	56232	56715
	(MHz)		3552.5 MHz	3600.8 MHz	3625 MHz	3649.2 MHz	3697.5 MHz	3552.5 MHz	3600.8 MHz	3625 MHz	3649.2 MHz	3697.5 MHz
Band48	5MHz	1RB#0	22.10	22.38	22.67	22.79	22.89	20.98	21.36	21.50	21.64	21.81
		1RB#12	22.36	22.60	22.87	22.74	23.00	21.18	21.40	21.79	21.64	21.97
		1RB#24	22.12	22.19	22.76	22.79	22.81	20.92	20.96	21.58	21.66	21.73
		12RB#0	20.82	20.74	21.54	21.72	21.77	19.70	19.72	20.46	20.70	20.64
		12RB#6	20.81	20.66	21.67	21.64	21.70	19.68	19.46	20.60	20.47	20.67
		12RB#13	20.90	20.95	21.67	21.39	21.79	19.85	19.82	20.57	20.36	20.77
		25RB#0	20.95	20.85	21.65	21.55	21.77	19.93	19.83	20.60	20.40	20.67
Band	Bandwidth	RB	55290	55757	55990	56223	56690	55290	55757	55990	56223	56690
	(MHz)		3555 MHz	3601.7 MHz	3625 MHz	3648.3 MHz	3695 MHz	3555 MHz	3601.7 MHz	3625 MHz	3648.3 MHz	3695 MHz
Band48	10MHz	1RB#0	22.12	21.97	22.16	22.30	22.61	21.04	20.85	20.96	21.10	21.58
		1RB#24	22.20	22.10	22.38	22.33	22.75	21.15	21.07	21.25	21.16	21.60
		1RB#49	22.00	22.00	22.50	22.53	22.53	20.82	20.80	21.40	21.40	21.36
		25RB#0	20.75	20.65	21.42	21.30	21.59	19.58	19.42	20.40	20.22	20.36
		25RB#12	20.78	20.89	21.54	21.48	21.72	19.65	19.76	20.49	20.43	20.59
		25RB#25	20.67	20.90	21.52	21.44	21.68	19.55	19.87	20.45	20.34	20.63
		50RB#0	20.71	20.62	21.32	21.31	21.58	19.48	19.44	20.19	20.16	20.38
Band	Bandwidth	RB	55315	55765	55990	56215	56665	55315	55765	55990	56215	56665
	(MHz)		3557.5 MHz	3602.5 MHz	3625 MHz	3647.5 MHz	3692.5 MHz	3557.5 MHz	3602.5 MHz	3625 MHz	3647.5 MHz	3692.5 MHz
Band48	15MHz	1RB#0	22.08	22.10	22.29	22.44	22.68	20.95	21.05	21.17	21.31	21.65
		1RB#38	22.20	22.10	22.74	22.62	22.80	21.18	20.93	21.76	21.60	21.70
		1RB#74	22.11	21.99	22.67	22.83	22.57	20.98	20.91	21.65	21.65	21.44
		38RB#0	20.77	20.82	21.39	21.36	21.79	19.62	19.79	20.32	20.18	20.71
		38RB#18	20.64	20.89	21.31	21.43	21.72	19.62	19.76	20.28	20.35	20.67
		38RB#37	20.78	20.74	21.52	21.37	21.87	19.73	19.64	20.44	20.29	20.84
		75RB#0	20.75	20.86	21.65	21.41	21.82	19.58	19.88	20.48	20.28	20.74
Band	Bandwidth	RB	55340	55773	55990	56207	56640	55340	55773	55990	56207	56640
	(MHz)		3560 MHz	3603.3 MHz	3625 MHz	3646.7 MHz	3690 MHz	3560 MHz	3603.3 MHz	3625 MHz	3646.7 MHz	3690 MHz
Band48	20MHz	1RB#0	21.96	22.03	22.06	22.00	22.91	20.83	20.85	20.98	20.88	21.78
		1RB#49	21.99	22.06	22.68	22.58	23.07	20.91	21.01	21.60	21.38	21.95
		1RB#99	21.86	21.86	22.37	22.44	22.73	20.84	20.73	21.19	21.37	21.55
		50RB#0	20.67	20.81	21.36	21.23	21.80	19.69	19.64	20.34	20.00	20.67
		50RB#25	20.75	20.68	21.57	21.72	21.75	19.52	19.70	20.50	20.60	20.65
		50RB#50	20.82	20.79	21.64	21.58	21.76	19.79	19.71	20.54	20.56	20.64
		100RB#0	20.74	20.74	21.59	21.42	21.74	19.62	19.66	20.46	20.25	20.72

➤ **LTE Band 48_Ant. 3_DSI-1/2/3/4**

Modulation			QPSK				
Band	Bandwidth	RB	55265	55748	55990	56232	56715
	(MHz)		3552.5 MHz	3600.8 MHz	3625 MHz	3649.2 MHz	3697.5 MHz
Band48	5MHz	1RB#0	19.37	19.19	19.11	19.25	19.44
		1RB#12	19.23	18.93	19.23	19.07	19.50
		1RB#24	19.32	19.07	19.25	19.38	19.54
		12RB#0	18.50	18.29	18.51	18.46	18.61
		12RB#6	18.44	18.21	18.33	18.40	18.59
		12RB#13	18.39	18.17	18.34	18.52	18.67
		25RB#0	18.47	18.17	18.52	18.37	18.64
Band	Bandwidth	RB	55290	55757	55990	56223	56690
	(MHz)		3555 MHz	3601.7 MHz	3625 MHz	3648.3 MHz	3695 MHz
Band48	10MHz	1RB#0	19.21	18.93	19.03	19.00	19.39
		1RB#24	19.06	18.73	19.09	19.11	19.34
		1RB#49	19.05	18.93	19.29	19.26	19.41
		25RB#0	18.13	17.91	18.30	18.22	18.60
		25RB#12	18.27	17.93	18.25	18.33	18.55
		25RB#25	18.24	18.10	18.30	18.49	18.57
		50RB#0	18.26	18.09	18.30	18.47	18.64
Band	Bandwidth	RB	55315	55765	55990	56215	56665
	(MHz)		3557.5 MHz	3602.5 MHz	3625 MHz	3647.5 MHz	3692.5 MHz
Band48	15MHz	1RB#0	19.11	19.02	19.11	19.14	19.55
		1RB#38	19.18	18.85	19.27	19.32	19.46
		1RB#74	19.16	18.83	19.43	19.33	19.60
		38RB#0	18.15	18.05	18.28	18.30	18.59
		38RB#18	18.21	18.18	18.46	18.26	18.57
		38RB#37	18.33	17.96	18.41	18.44	18.49
		75RB#0	18.22	17.98	18.51	18.29	18.55
Band	Bandwidth	RB	55340	55773	55990	56207	56640
	(MHz)		3560 MHz	3603.3 MHz	3625 MHz	3646.7 MHz	3690 MHz
Band48	20MHz	1RB#0	19.20	18.92	19.05	19.23	19.57
		1RB#49	19.09	19.00	19.31	19.17	19.56
		1RB#99	19.49	19.56	19.44	19.53	19.66
		50RB#0	18.26	18.03	18.19	18.31	18.70
		50RB#25	18.15	18.14	18.31	18.13	18.80
		50RB#50	18.31	18.02	18.40	18.40	18.69
		100RB#0	18.22	18.15	18.48	18.48	18.65

➤ **LTE CA_48C_Ant. 3_DSI-0**

Band	Bandwidth	RB Configuration	Conducted Power (dBm)					
			QPSK-QPSK			16QAM-16QAM		
Channel			55273-55390	55898-56015	56523-56640	55273-55390	55898-56015	56523-56640
CA_48C	5+20	1RB#0-0RB#0	22.37	22.40	22.63	21.25	21.30	21.57
CA_48C	5+20	1RB#0-1RB#99	11.03	11.25	11.27	10.90	11.44	11.46
CA_48C	5+20	1RB#24-0RB#0	22.29	22.48	22.63	21.20	21.38	21.51
CA_48C	5+20	8RB#0-0RB#0	22.20	22.52	22.80	21.24	21.50	21.73
CA_48C	5+20	25RB#0-100RB#0	17.47	17.83	18.00	16.43	16.78	16.99
Channel			55295-55439	55896-56040	55295-55439	55896-56040	56496-56640	55295-55439
CA_48C	10+20	1RB#0-0RB#0	22.23	22.35	22.67	21.06	21.28	21.53
CA_48C	10+20	1RB#0-1RB#99	11.02	11.17	11.20	10.87	10.96	10.92
CA_48C	10+20	1RB#49-0RB#0	22.22	22.54	22.55	21.01	21.45	21.41
CA_48C	10+20	12RB#0-0RB#0	22.18	22.40	22.71	21.23	21.33	21.63
CA_48C	10+20	50RB#0-100RB#0	15.98	16.43	16.62	15.00	15.45	15.62
Channel			55318-55489	55893-56064	55318-55489	55893-56064	56469-56640	55318-55489
CA_48C	15+20	1RB#0-0RB#0	21.77	22.39	22.78	20.93	21.51	21.66
CA_48C	15+20	1RB#0-1RB#99	10.69	11.19	11.30	10.77	11.24	11.04
CA_48C	15+20	1RB#74-0RB#0	21.89	22.60	22.65	21.03	21.72	21.49
CA_48C	15+20	16RB#0-0RB#0	21.76	22.41	22.83	20.77	21.39	21.76
CA_48C	15+20	75RB#0-100RB#0	14.23	14.94	15.17	13.16	13.93	14.16

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

Channel			55340-55457	55965-56082	55340-55457	55965-56082	56590-56707	55340-55457
CA_48C	20+5	1RB#0-0RB#0	22.33	22.37	22.56	21.36	21.46	21.68
CA_48C	20+5	1RB#0-1RB#24	11.04	13.95	14.10	10.96	13.97	14.14
CA_48C	20+5	1RB#99-0RB#0	22.53	22.65	22.52	21.58	21.70	21.55
CA_48C	20+5	18RB#0-0RB#0	21.10	21.32	21.50	20.17	20.41	20.48
CA_48C	20+5	100RB#0-25RB#0	17.74	16.33	16.52	16.78	15.25	15.53
Channel			55340-55484	55941-56085	55340-55484	55941-56085	56541-56685	55340-55484
CA_48C	20+10	1RB#0-0RB#0	22.21	22.14	22.59	21.10	21.05	21.61
CA_48C	20+10	1RB#0-1RB#49	10.98	10.98	10.97	10.95	10.94	11.02
CA_48C	20+10	1RB#99-0RB#0	22.41	22.38	22.38	21.35	21.24	21.41
CA_48C	20+10	18RB#0-0RB#0	20.94	21.13	21.45	19.93	20.21	20.43
CA_48C	20+10	100RB#0-50RB#0	16.19	16.40	16.10	15.21	15.46	15.16
Channel			55340-55511	55916-56087	55340-55511	55916-56087	56491-56662	55340-55511
CA_48C	20+15	1RB#0-0RB#0	21.78	22.27	22.56	20.72	21.11	21.39
CA_48C	20+15	1RB#0-1RB#74	10.67	11.04	10.98	10.62	11.03	11.09
CA_48C	20+15	1RB#99-0RB#0	21.98	22.48	22.36	20.93	21.32	21.28
CA_48C	20+15	18RB#0-0RB#0	20.57	21.12	21.51	19.56	20.23	20.47
CA_48C	20+15	100RB#0-75RB#0	14.41	14.88	14.54	13.31	13.89	13.56
Channel			55340-55538	55891-56089	55340-55538	55891-56089	56442-56640	55340-55538
CA_48C	20+20	1RB#0-0RB#0	21.95	22.61	22.98	20.94	21.46	21.87
CA_48C	20+20	1RB#0-1RB#99	10.97	11.41	11.40	10.88	11.50	11.52
CA_48C	20+20	1RB#99-0RB#0	22.23	22.85	22.84	21.39	21.73	21.72
CA_48C	20+20	18RB#0-0RB#0	21.80	22.58	22.95	20.82	21.63	21.97
CA_48C	20+20	100RB#0-100RB#0	13.53	14.07	14.21	12.52	13.13	13.25

➤ LTE Band 66_Ant. 1_DSI-0/1/2

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	BW	RB	131979	132322	132665	131979	132322	132665	131979	132322	132665	131979	132322	132665
	(MHz)		1710.7 MHz	1745 MHz	1779.3 MHz	1710.7 MHz	1745 MHz	1779.3 MHz	1710.7 MHz	1745 MHz	1779.3 MHz	1710.7 MHz	1745 MHz	1779.3 MHz
66	1.4	1RB#0	23.82	23.65	23.53	22.75	22.36	22.44	21.78	21.90	21.91	18.97	18.59	18.66
		1RB#2	23.85	23.60	23.59	22.69	22.50	22.50	21.88	21.95	21.78	19.26	18.72	18.66
		1RB#5	23.79	23.62	23.52	22.63	22.33	22.45	20.89	20.54	20.54	19.04	18.72	18.66
		3RB#0	23.72	23.55	23.44	22.55	22.34	22.25	20.88	20.56	20.47	18.83	18.71	18.60
		3RB#1	23.72	23.51	23.42	22.63	22.47	22.33	21.70	21.71	21.73	18.84	18.66	18.43
		3RB#3	23.66	23.54	23.39	22.56	22.21	22.19	20.93	20.47	20.58	18.80	18.63	18.52
		6RB#0	22.80	22.52	22.47	21.71	21.51	21.51	20.90	20.44	20.60	19.11	18.81	18.75
Band	BW	RB	131987	132322	132657	131987	132322	132657	131987	132322	132657	131987	132322	132657
	(MHz)		1711.5 MHz	1745 MHz	1778.5 MHz	1711.5 MHz	1745 MHz	1778.5 MHz	1711.5 MHz	1745 MHz	1778.5 MHz	1711.5 MHz	1745 MHz	1778.5 MHz
66	3	1RB#0	23.80	23.67	23.50	22.80	22.47	22.23	21.80	21.49	21.71	19.04	18.92	18.39
		1RB#8	23.80	23.58	23.51	22.61	22.71	22.44	21.73	21.66	21.90	18.84	19.05	18.93
		1RB#14	23.78	23.68	23.54	22.75	22.41	22.31	20.86	20.70	20.57	19.04	18.81	18.66
		8RB#0	22.80	22.56	22.51	21.80	21.56	21.53	20.85	20.69	20.62	19.06	18.78	18.67
		8RB#4	22.75	22.51	22.45	21.73	21.50	21.36	20.90	20.56	20.56	19.06	18.80	18.68
		8RB#7	22.75	22.54	22.47	21.71	21.54	21.48	20.81	20.74	20.61	18.97	18.76	18.64
		15RB#0	22.78	22.57	22.48	21.80	21.48	21.38	20.81	20.68	20.64	19.05	18.79	18.68
Band	BW	RB	131997	132322	132647	131997	132322	132647	131997	132322	132647	131997	132322	132647
	(MHz)		1712.5 MHz	1745 MHz	1777.5 MHz	1712.5 MHz	1745 MHz	1777.5 MHz	1712.5 MHz	1745 MHz	1777.5 MHz	1712.5 MHz	1745 MHz	1777.5 MHz
66	5	1RB#0	23.91	23.73	23.62	22.85	22.72	22.48	21.91	22.22	21.78	19.36	19.04	18.84
		1RB#12	23.81	23.66	23.47	22.67	22.77	22.58	21.89	22.25	21.78	19.42	19.18	18.99
		1RB#24	23.92	23.69	23.70	22.78	22.72	22.54	21.03	20.67	20.72	19.34	19.11	18.82
		12RB#0	22.85	22.63	22.53	21.83	21.69	21.57	21.02	20.71	20.71	19.10	18.91	18.85
		12RB#6	22.81	22.62	22.53	21.82	21.67	21.51	21.01	20.83	20.68	19.06	18.88	18.77
		12RB#13	22.79	22.60	22.53	21.77	21.66	21.57	21.03	20.74	20.70	19.06	18.90	18.82
		25RB#0	22.82	22.64	22.60	21.82	21.58	21.58	21.03	20.71	20.73	19.09	18.88	18.83
Band	BW	RB	132022	132322	132622	132022	132322	132622	132022	132322	132622	132022	132322	132622
	(MHz)		1715 MHz	1745 MHz	1775 MHz	1715 MHz	1745 MHz	1775 MHz	1715 MHz	1745 MHz	1775 MHz	1715 MHz	1745 MHz	1775 MHz
66	10	1RB#0	23.89	23.72	23.69	22.86	22.59	22.46	21.83	21.71	21.99	19.15	18.96	18.68
		1RB#24	23.78	23.63	23.52	22.66	22.72	22.47	21.77	21.76	21.91	18.79	19.09	18.49
		1RB#49	23.81	23.73	23.68	22.80	22.54	22.45	20.93	20.76	20.69	19.05	18.96	18.57
		25RB#0	22.82	22.64	22.58	21.80	21.64	21.59	20.90	20.75	20.69	19.08	18.91	18.90
		25RB#12	22.75	22.61	22.49	21.73	21.59	21.48	20.90	20.72	20.63	19.02	18.89	18.83
		25RB#25	22.76	22.60	22.57	21.69	21.60	21.54	20.94	20.76	20.69	19.00	18.86	18.82
		50RB#0	22.82	22.62	22.56	21.78	21.62	21.56	20.97	20.75	20.69	19.08	18.89	18.79
Band	BW	RB	132047	132322	132597	132047	132322	132597	132047	132322	132597	132047	132322	132597
	(MHz)		1717.5 MHz	1745 MHz	1772.5 MHz	1717.5 MHz	1745 MHz	1772.5 MHz	1717.5 MHz	1745 MHz	1772.5 MHz	1717.5 MHz	1745 MHz	1772.5 MHz
66	15	1RB#0	23.79	23.74	23.65	22.93	22.49	22.64	21.85	21.96	22.01	19.09	19.07	18.68
		1RB#38	23.91	23.69	23.63	22.85	22.64	22.49	21.84	21.95	22.02	18.87	19.23	18.54
		1RB#74	23.71	23.71	23.61	22.84	22.44	22.63	20.95	20.84	20.77	19.07	19.01	18.54
		38RB#0	22.75	22.63	22.56	22.77	22.62	22.56	20.93	20.83	20.75	20.96	20.83	20.75
		38RB#18	22.71	22.61	22.54	21.75	21.61	21.53	20.94	20.78	20.71	19.07	18.91	18.91
		38RB#37	22.76	22.62	22.57	22.76	22.63	22.56	20.94	20.73	20.74	20.92	20.72	20.71
		75RB#0	22.76	22.62	22.57	21.78	21.65	21.53	20.93	20.74	20.76	19.10	18.95	18.85
Band	BW	RB	132072	132322	132572	132072	132322	132572	132072	132322	132572	132072	132322	132572
	(MHz)		1720 MHz	1745 MHz	1770 MHz	1720 MHz	1745 MHz	1770 MHz	1720 MHz	1745 MHz	1770 MHz	1720 MHz	1745 MHz	1770 MHz
66	20	1RB#0	24.12	23.92	23.97	22.83	22.94	22.48	22.57	22.10	21.59	19.15	19.28	18.89
		1RB#49	23.74	23.78	23.66	22.85	22.82	22.54	22.06	22.14	21.39	19.23	19.18	18.90
		1RB#99	23.90	23.72	23.63	22.71	22.84	22.49	20.99	20.86	20.74	19.06	19.26	18.81
		50RB#0	22.84	22.68	22.61	21.81	21.69	21.67	20.97	20.87	20.75	19.09	18.94	18.88
		50RB#25	22.78	22.67	22.62	21.75	21.72	21.60	21.00	20.87	20.79	19.06	18.96	18.91
		50RB#50	22.81	22.63	22.58	21.78	21.64	21.62	20.91	20.86	20.76	19.00	18.92	18.85
		100RB#0	22.81	22.66	22.58	21.79	21.64	21.59	20.93	20.87	20.74	19.04	18.91	18.86

➤ LTE Band 66_Ant. 1_DSI-3/4

Conducted Power(dBm)													
Modulation			QPSK										
Band	BW	RB	131979	132322	132665								
	(MHz)		1710.7 MHz	1745 MHz	1779.3 MHz								
66	1.4	1RB#0	20.27	20.22	20.07								
		1RB#2	20.37	19.95	20.06								
		1RB#5	20.43	20.14	19.97								
		3RB#0	20.22	20.09	19.86								
		3RB#1	20.17	20.21	19.77								
		3RB#3	20.16	19.89	20.04								
		6RB#0	19.22	19.09	18.89								
Band	BW	RB	131987	132322	132657								
	(MHz)		1711.5 MHz	1745 MHz	1778.5 MHz								
66	3	1RB#0	20.22	20.19	20.05								
		1RB#8	20.44	20.22	20.05								
		1RB#14	20.27	20.25	20.06								
		8RB#0	19.27	18.96	19.01								
		8RB#4	19.32	18.96	19.05								
		8RB#7	19.20	19.18	18.82								
		15RB#0	19.42	19.17	18.88								
Band	BW	RB	131997	132322	132647								
	(MHz)		1712.5 MHz	1745 MHz	1777.5 MHz								
66	5	1RB#0	20.26	20.38	20.07								
		1RB#12	20.31	20.31	19.82								
		1RB#24	20.56	20.18	20.17								
		12RB#0	19.27	19.23	19.13								
		12RB#6	19.26	19.04	19.18								
		12RB#13	19.31	19.10	19.12								
		25RB#0	19.39	18.99	19.10								
Band	BW	RB	132022	132322	132622								
	(MHz)		1715 MHz	1745 MHz	1775 MHz								
66	10	1RB#0	20.59	20.19	20.34								
		1RB#24	20.27	20.13	19.99								
		1RB#49	20.35	20.23	20.08								
		25RB#0	19.17	19.19	19.28								
		25RB#12	19.40	19.03	19.06								
		25RB#25	19.21	19.02	18.99								
		50RB#0	19.27	19.26	19.05								
Band	BW	RB	132047	132322	132597								
	(MHz)		1717.5 MHz	1745 MHz	1772.5 MHz								
66	15	1RB#0	20.36	20.34	20.25								
		1RB#38	20.46	20.39	20.08								
		1RB#74	20.06	20.18	20.10								
		38RB#0	19.32	19.08	19.13								
		38RB#18	19.26	19.26	19.14								
		38RB#37	19.40	19.32	19.22								
		75RB#0	19.23	19.07	19.11								
Band	BW	RB	132072	132322	132572								
	(MHz)		1720 MHz	1745 MHz	1770 MHz								
66	20	1RB#0	20.63	20.42	20.07								
		1RB#49	20.24	20.30	20.30								
		1RB#99	20.55	20.21	20.18								
		50RB#0	19.34	19.18	19.10								
		50RB#25	19.32	19.27	19.22								
		50RB#50	19.21	19.33	19.00								
		100RB#0	19.36	19.16	19.13								

➤ LTE CA_66C_Ant. 1_DSI-0

Band	BW (MHz)	RB Configuration	QPSK-QPSK			16QAM-16QAM		
Channel			132025-132145	132351-132471	132477-132597	132025-132145	132351-132471	132477-132597
66C	10+15	1RB#0-0RB#0	23.87	23.63	23.57	23.15	22.95	22.68
66C	10+15	1RB#0-1RB#74	15.52	15.30	15.22	15.71	15.57	15.29

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

66C	10+15	1RB#49-0RB#0	23.75	23.60	23.58	23.05	22.89	22.62
66C	10+15	12RB#0-0RB#0	23.84	23.63	23.59	22.87	22.66	22.64
66C	10+15	50RB#0-75RB#0	21.85	21.71	21.52	20.92	20.68	20.62
Channel			132027-132171	132328-132472	132428-132572	132027-132171	132328-132472	132428-132572
66C	10+20	1RB#0-0RB#0	23.88	23.63	23.63	22.93	22.73	22.69
66C	10+20	1RB#0-1RB#99	15.34	15.33	15.21	15.24	15.64	15.34
66C	10+20	1RB#49-0RB#0	23.86	23.64	23.58	23.55	22.72	22.70
66C	10+20	12RB#0-0RB#0	23.64	23.67	23.64	23.66	22.67	22.67
66C	10+20	50RB#0-100RB#0	21.68	21.70	21.67	21.64	20.77	20.72
Channel			132047-132167	132373-132493	132499-132619	132047-132167	132373-132493	132499-132619
66C	15+10	1RB#0-0RB#0	23.86	23.68	23.62	23.61	23.22	23.41
66C	15+10	1RB#0-1RB#49	15.46	15.36	15.23	15.79	15.97	16.04
66C	15+10	1RB#74-0RB#0	23.74	23.59	23.62	23.44	23.15	23.28
66C	15+10	16RB#0-0RB#0	22.89	22.72	22.66	21.91	21.77	21.78
66C	15+10	75RB#0-50RB#0	21.87	21.76	21.63	20.89	20.77	20.66
Channel			132047-132197	132347-132497	132447-132597	132047-132197	132347-132497	132447-132597
66C	15+15	1RB#0-0RB#0	23.86	23.66	23.62	23.40	23.39	22.93
66C	15+15	1RB#0-1RB#74	15.48	15.31	15.25	15.99	16.18	15.53
66C	15+15	1RB#74-0RB#0	23.72	23.66	23.63	23.27	23.40	22.91
66C	15+15	16RB#0-0RB#0	23.88	23.69	23.64	22.94	22.80	22.67
66C	15+15	75RB#0-75RB#0	21.86	21.83	21.62	20.86	20.83	20.66
Channel			132050-132221	132325-132496	132401-132572	132050-132221	132325-132496	132401-132572
66C	15+20	1RB#0-0RB#0	23.76	23.65	23.63	23.34	23.33	22.92
66C	15+20	1RB#0-1RB#99	15.44	15.24	15.27	15.98	16.07	15.55
66C	15+20	1RB#74-0RB#0	23.73	23.66	23.68	23.27	23.41	22.94
66C	15+20	16RB#0-0RB#0	23.82	23.68	23.67	22.87	22.78	22.67
66C	15+20	75RB#0-100RB#0	21.82	21.70	21.74	20.82	20.73	20.80
Channel			132072-132189	132397-132514	132522-132639	132072-132189	132397-132514	132522-132639
66C	20+5	1RB#0-0RB#0	23.90	23.73	23.71	23.69	23.43	23.15
66C	20+5	1RB#0-1RB#24	15.51	15.34	15.34	16.11	15.98	15.71
66C	20+5	1RB#99-0RB#0	23.77	23.65	23.69	23.43	23.33	23.09
66C	20+5	18RB#0-0RB#0	22.82	22.65	22.59	21.89	21.72	21.65
66C	20+5	100RB#0-25RB#0	21.83	21.69	21.63	20.83	20.69	20.63
Channel			132072-132216	132373-132517	132473-132617	132072-132216	132373-132517	132473-132617
66C	20+10	1RB#0-0RB#0	23.93	23.79	23.74	23.65	23.20	23.11
66C	20+10	1RB#0-1RB#49	15.55	15.46	15.35	15.98	15.83	15.74
66C	20+10	1RB#99-0RB#0	23.80	23.80	23.75	23.47	23.19	23.08
66C	20+10	18RB#0-0RB#0	22.83	22.66	22.67	21.91	21.72	21.67
66C	20+10	100RB#0-50RB#0	21.76	21.80	21.75	20.82	20.86	20.72
Channel			132072-132243	132348-132519	132423-132594	132072-132243	132348-132519	132423-132594
66C	20+15	1RB#0-0RB#0	23.95	23.74	20.69	23.27	23.45	20.69
66C	20+15	1RB#0-1RB#74	15.68	15.36	20.74	16.01	15.93	15.43
66C	20+15	1RB#99-0RB#0	23.89	23.74	20.70	23.16	23.44	20.69
66C	20+15	18RB#0-0RB#0	22.87	22.68	15.70	21.85	21.77	15.82
66C	20+15	100RB#0-75RB#0	21.90	21.78	15.83	20.83	21.95	21.72
Channel			132072-132270	132323-132521	132374-132572	132072-132270	132323-132521	132374-132572
66C	20+20	1RB#0-0RB#0	23.87	23.75	23.78	23.53	23.14	23.18
66C	20+20	1RB#0-1RB#99	15.47	15.40	15.38	16.01	15.95	15.92
66C	20+20	1RB#99-0RB#0	23.78	23.76	23.72	23.51	23.12	23.15
66C	20+20	18RB#0-0RB#0	23.82	23.68	23.67	22.88	22.73	22.65
66C	20+20	100RB#0-100RB#0	21.84	21.73	21.77	20.83	20.76	20.77

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

➤ **LTE Band 66_Ant. 4_DSI-0/1/2/3/4**

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	BW (MHz)	RB	131979	132322	132665	131979	132322	132665	131979	132322	132665	131979	132322	132665
			1710.7 MHz	1745 MHz	1779.3 MHz	1710.7 MHz	1745 MHz	1779.3 MHz	1710.7 MHz	1745 MHz	1779.3 MHz	1710.7 MHz	1745 MHz	1779.3 MHz
66	1.4	1RB#0	23.68	23.61	23.63	22.48	22.54	22.40	21.94	21.59	21.40	18.69	18.74	18.64
		1RB#2	23.64	23.66	23.52	22.70	22.64	22.70	21.88	22.01	21.61	18.61	18.50	18.92
		1RB#5	23.71	23.60	23.65	22.48	22.47	22.42	20.64	20.50	20.58	18.67	18.45	18.64
		3RB#0	23.62	23.50	23.56	22.44	22.34	22.39	20.66	20.47	20.64	18.65	18.44	18.45
		3RB#1	23.58	23.51	23.49	22.49	22.42	22.40	21.80	21.44	21.46	18.66	18.48	18.45
		3RB#3	23.64	23.47	23.58	22.48	22.31	22.40	20.65	20.57	20.60	18.59	18.48	18.41
		6RB#0	22.60	22.53	22.55	21.56	21.68	21.48	20.65	20.64	20.63	18.60	18.76	18.66
66	3	1RB#0	23.66	23.61	23.58	22.67	22.40	22.33	21.59	21.60	21.78	18.82	18.78	18.38
		1RB#8	23.61	23.60	23.54	22.53	22.67	22.51	21.67	21.74	21.91	18.53	18.93	18.29
		1RB#14	23.69	23.69	23.57	22.63	22.46	22.34	20.68	20.75	20.54	18.86	18.73	18.38
		8RB#0	22.67	22.56	22.64	21.79	21.77	21.73	20.69	20.71	20.51	18.73	18.61	18.75
		8RB#4	22.64	22.55	22.58	21.74	21.61	21.57	20.78	20.62	20.64	18.73	18.63	18.66
		8RB#7	22.69	22.57	22.62	21.75	21.70	21.73	20.68	20.72	20.53	18.74	18.61	18.72
		15RB#0	22.68	22.56	22.58	21.79	21.60	21.61	20.67	20.74	20.53	18.78	18.66	18.61
66	5	1RB#0	23.73	23.68	23.81	22.73	22.76	22.68	21.69	22.20	21.85	19.02	18.92	18.81
		1RB#12	23.73	23.70	23.65	22.74	22.83	22.66	21.79	22.17	21.79	19.11	19.00	18.83
		1RB#24	23.86	23.67	23.78	22.74	22.72	22.61	20.87	20.67	20.75	19.15	18.98	18.74
		12RB#0	22.78	22.62	22.70	21.86	21.86	21.78	20.85	20.65	20.78	18.77	18.77	18.77
		12RB#6	22.78	22.64	22.69	21.82	21.83	21.74	20.88	20.77	20.71	18.77	18.69	18.66
		12RB#13	22.74	22.64	22.65	21.80	21.81	21.78	20.90	20.67	20.74	18.75	18.72	18.71
		25RB#0	22.78	22.67	22.72	21.83	21.75	21.79	20.89	20.66	20.71	18.83	18.73	18.73
66	10	1RB#0	23.72	23.72	23.72	22.79	22.59	22.53	21.63	21.65	21.53	18.85	18.86	18.78
		1RB#24	23.79	23.72	23.74	22.67	22.82	22.73	21.62	21.63	21.74	18.62	18.56	18.91
		1RB#49	23.76	23.69	23.69	22.78	22.53	22.47	20.79	20.74	20.75	18.82	18.74	18.70
		25RB#0	22.79	22.71	22.77	21.79	21.83	21.78	20.77	20.73	20.75	18.78	18.76	18.76
		25RB#12	22.75	22.68	22.72	21.83	21.78	21.77	20.82	20.76	20.75	18.79	18.78	18.73
		25RB#25	22.81	22.71	22.75	21.79	21.79	21.79	20.77	20.76	20.75	18.79	18.76	18.76
		50RB#0	22.77	22.70	22.74	21.80	21.79	21.77	20.76	20.77	20.75	18.81	18.78	18.74
66	15	1RB#0	23.79	23.73	23.74	22.81	22.83	22.52	21.68	21.89	21.94	18.77	18.86	18.51
		1RB#38	23.82	23.82	23.73	22.67	22.77	22.70	21.63	21.90	22.04	18.68	19.02	18.41
		1RB#74	23.79	23.67	23.69	22.80	22.82	22.48	20.78	20.79	20.78	18.84	18.78	18.45
		38RB#0	22.76	22.68	22.71	22.78	22.70	22.72	20.77	20.77	20.75	20.76	20.78	20.77
		38RB#18	22.70	22.62	22.66	21.79	21.78	21.70	20.80	20.73	20.72	18.82	18.71	18.73
		38RB#37	22.76	22.68	22.72	22.76	22.69	22.71	20.80	20.68	20.75	20.82	20.69	20.74
		75RB#0	22.77	22.67	22.71	21.78	21.80	21.75	20.80	20.68	20.74	18.82	18.80	18.75
66	20	1RB#0	23.87	23.75	23.71	22.75	22.97	22.57	22.34	21.98	21.51	18.89	18.83	18.76
		1RB#49	23.76	23.79	23.77	22.83	22.85	22.58	21.82	21.92	21.27	18.98	19.02	18.66
		1RB#99	23.97	23.80	23.65	22.71	23.05	22.57	20.79	20.77	20.79	18.87	18.87	18.77
		50RB#0	22.81	22.74	22.74	21.82	21.82	21.84	20.82	20.78	20.78	18.79	18.80	18.80
		50RB#25	22.79	22.71	22.75	21.82	21.82	21.77	20.80	20.83	20.78	18.82	18.80	18.76
		50RB#50	22.78	22.71	22.76	21.86	21.76	21.79	20.84	20.77	20.76	18.82	18.74	18.74
		100RB#0	22.83	22.72	22.75	21.84	21.78	21.77	20.85	20.77	20.77	18.86	18.77	18.76

➤ **LTE CA_66C_Ant. 4_DSI-0**

Band	BW (MHz)	RB Configuration	QPSK-QPSK			16QAM-16QAM		
			132025-132145	132351-132471	132477-132597	132025-132145	132351-132471	132477-132597
66C	10+15	1RB#0-0RB#0	23.76	23.58	23.48	23.06	22.84	22.57
66C	10+15	1RB#0-1RB#74	15.41	15.19	15.08	15.57	15.57	15.21
66C	10+15	1RB#49-0RB#0	23.66	23.52	23.49	22.91	22.86	22.46
66C	10+15	12RB#0-0RB#0	23.73	23.63	23.48	22.76	22.61	22.55

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

66C	10+15	50RB#0-75RB#0	21.71	21.62	21.52	20.81	20.57	20.48
Channel			132027-132171	132328-132472	132027-132171	132328-132472	132428-132572	132027-132171
66C	10+20	1RB#0-0RB#0	23.85	23.55	23.54	22.87	22.59	22.61
66C	10+20	1RB#0-1RB#99	15.25	15.22	15.13	15.18	15.53	15.29
66C	10+20	1RB#49-0RB#0	23.75	23.58	23.53	23.50	22.58	22.70
66C	10+20	12RB#0-0RB#0	23.59	23.53	23.61	23.63	22.58	22.56
66C	10+20	50RB#0-100RB#0	21.52	21.64	21.56	21.50	20.71	20.66
Channel			132047-132167	132373-132493	132047-132167	132373-132493	132499-132619	132047-132167
66C	15+10	1RB#0-0RB#0	23.77	23.60	23.53	23.56	23.11	23.32
66C	15+10	1RB#0-1RB#49	15.32	15.25	15.14	15.71	15.94	15.96
66C	15+10	1RB#74-0RB#0	23.66	23.45	23.57	23.38	23.09	23.17
66C	15+10	16RB#0-0RB#0	22.78	22.69	22.58	21.88	21.71	21.72
66C	15+10	75RB#0-50RB#0	21.73	21.65	21.54	20.78	20.71	20.55
Channel			132047-132197	132347-132497	132047-132197	132347-132497	132447-132597	132047-132197
66C	15+15	1RB#0-0RB#0	23.78	23.63	23.51	23.34	23.31	22.77
66C	15+15	1RB#0-1RB#74	15.45	15.22	15.19	15.85	16.04	15.50
66C	15+15	1RB#74-0RB#0	23.69	23.50	23.55	23.13	23.31	22.82
66C	15+15	16RB#0-0RB#0	23.85	23.64	23.50	22.86	22.71	22.53
66C	15+15	75RB#0-75RB#0	21.78	21.77	21.53	20.78	20.74	20.58
Channel			132050-132221	132325-132496	132050-132221	132325-132496	132401-132572	132050-132221
66C	15+20	1RB#0-0RB#0	23.65	23.62	23.58	23.25	23.19	22.87
66C	15+20	1RB#0-1RB#99	15.30	15.13	15.24	15.92	15.96	15.52
66C	15+20	1RB#74-0RB#0	23.62	23.52	23.60	23.24	23.35	22.85
66C	15+20	16RB#0-0RB#0	23.71	23.68	23.64	22.79	22.62	22.56
66C	15+20	75RB#0-100RB#0	21.74	21.70	21.65	20.71	20.62	20.75
Channel			132072-132189	132397-132514	132072-132189	132397-132514	132522-132639	132072-132189
66C	20+5	1RB#0-0RB#0	23.82	23.67	23.65	23.55	23.37	23.09
66C	20+5	1RB#0-1RB#24	15.35	15.20	15.28	15.97	15.87	15.68
66C	20+5	1RB#99-0RB#0	23.63	23.62	23.61	23.37	23.22	22.98
66C	20+5	18RB#0-0RB#0	22.68	22.57	22.56	21.83	21.66	21.49
66C	20+5	100RB#0-25RB#0	21.75	21.61	21.57	20.75	20.55	20.52
Channel			132072-132216	132373-132517	132072-132216	132373-132517	132473-132617	132072-132216
66C	20+10	1RB#0-0RB#0	23.84	23.76	23.69	23.49	23.20	23.00
66C	20+10	1RB#0-1RB#49	15.44	15.30	15.32	15.87	15.83	15.63
66C	20+10	1RB#99-0RB#0	23.74	23.80	23.72	23.36	23.10	23.05
66C	20+10	18RB#0-0RB#0	22.80	22.58	22.51	21.80	21.66	21.62
66C	20+10	100RB#0-50RB#0	21.71	21.71	21.75	20.79	20.80	20.69
Channel			132072-132243	132348-132519	132072-132243	132348-132519	132423-132594	132072-132243
66C	20+15	1RB#0-0RB#0	23.81	23.68	20.61	23.13	23.39	20.60
66C	20+15	1RB#0-1RB#74	15.60	15.22	20.74	15.87	15.79	15.40
66C	20+15	1RB#99-0RB#0	23.75	23.63	20.56	23.13	23.33	20.55
66C	20+15	18RB#0-0RB#0	22.78	22.68	15.56	21.79	21.69	15.77
66C	20+15	100RB#0-75RB#0	21.84	21.78	15.78	20.72	21.84	21.69
Channel			132072-132270	132323-132521	132072-132270	132323-132521	132374-132572	132072-132270
66C	20+20	1RB#0-0RB#0	23.76	23.59	23.62	23.44	23.14	23.07
66C	20+20	1RB#0-1RB#99	15.47	15.37	15.27	15.93	15.81	15.89
66C	20+20	1RB#99-0RB#0	23.78	23.68	23.67	23.43	23.04	23.01
66C	20+20	18RB#0-0RB#0	23.82	23.54	23.61	22.82	22.62	22.62
66C	20+20	100RB#0-100RB#0	21.81	21.67	21.63	20.83	20.62	20.66

Shenzhen UnionTrust Quality and Technology Co., Ltd.

Address: 16/F., Block A, Building 6, Baoneng Science and Technology Park, Longhua Street, Longhua District, Shenzhen, Guangdong, China

Tel: +86-755-28230888

Fax: +86-755-28230886

E-mail: info@uttlab.com

<http://www.uttlab.com>

UTTR-SAR-IEEE Std 1528-2013-V1.1

➤ **LTE Band 71 (All DSI)**

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	BW (MHz)	RB	133147 665.5 MHz	133297 680.5 MHz	133447 695.5 MHz	133147 665.5 MHz	133297 680.5 MHz	133447 695.5 MHz	133147 665.5 MHz	133297 680.5 MHz	133447 695.5 MHz	133147 665.5 MHz	133297 680.5 MHz	133447 695.5 MHz
71	5	1RB#0	23.89	24.43	24.47	22.68	23.31	23.55	22.31	22.57	22.95	19.75	19.88	19.72
		1RB#12	24.27	24.37	24.30	22.74	23.32	23.60	22.45	22.58	23.00	19.92	20.04	19.88
		1RB#24	24.41	24.41	24.41	23.13	23.28	23.51	22.47	22.60	22.98	19.80	19.88	19.69
		12RB#0	23.28	23.40	23.36	22.30	22.36	22.39	21.58	21.66	21.60	19.50	19.60	19.56
		12RB#6	23.34	23.37	23.36	22.36	22.42	22.41	21.62	21.64	21.58	19.52	19.56	19.58
		12RB#13	23.33	23.38	23.34	22.28	22.35	22.34	21.55	21.61	21.66	19.51	19.54	19.55
		25RB#0	23.33	23.40	23.37	22.37	22.40	22.33	21.58	21.63	21.49	19.56	19.58	19.55
71	10	1RB#0	24.32	24.35	24.38	23.77	23.19	23.39	22.34	22.53	23.03	19.47	19.58	19.23
		1RB#24	24.27	24.42	24.46	22.89	23.23	23.33	22.10	22.62	22.82	19.30	19.77	19.22
		1RB#49	24.46	24.40	24.38	23.95	23.23	23.39	22.09	22.53	23.06	19.59	19.60	19.26
		25RB#0	23.30	23.42	23.40	22.33	22.47	22.43	21.60	21.55	21.52	19.55	19.60	19.62
		25RB#12	23.33	23.40	23.37	22.34	22.45	22.37	21.50	21.57	21.53	19.54	19.61	19.61
		25RB#25	23.42	23.40	23.38	22.42	22.45	22.39	21.51	21.56	21.55	19.61	19.59	19.61
		50RB#0	23.37	23.41	23.38	22.38	22.43	22.37	21.55	21.59	21.56	19.62	19.59	19.53
71	15	1RB#0	24.22	24.37	24.49	23.41	23.41	23.50	22.35	22.79	22.95	19.59	19.70	19.26
		1RB#38	24.43	24.44	24.60	23.54	23.38	23.46	22.00	22.78	22.88	19.42	19.80	19.33
		1RB#74	24.34	24.38	24.48	23.57	23.41	23.47	22.04	22.77	22.95	19.66	19.76	19.24
		38RB#0	23.41	23.39	23.51	23.38	23.37	23.52	19.44	19.73	19.26	19.50	19.70	19.23
		38RB#18	23.35	23.40	23.51	22.32	22.42	22.56	21.61	21.60	21.60	19.61	19.60	19.62
		38RB#37	23.58	24.04	23.47	23.57	24.02	23.49	19.71	19.77	19.22	19.64	19.68	19.25
		75RB#0	23.35	23.52	23.51	22.36	22.55	22.57	21.58	21.61	21.58	19.60	19.64	19.56
71	20	1RB#0	24.36	24.46	24.55	23.51	23.98	23.61	22.63	22.63	22.29	19.43	19.64	19.53
		1RB#49	24.50	24.55	24.46	23.87	23.54	23.73	22.94	22.96	22.13	19.74	19.62	19.58
		1RB#99	24.61	24.51	24.54	23.77	24.09	23.63	22.98	22.61	22.30	19.65	19.61	19.58
		50RB#0	23.45	23.54	23.51	22.43	22.53	22.49	21.63	21.63	21.59	19.52	19.62	19.58
		50RB#25	23.51	23.54	23.53	22.55	22.51	22.53	21.62	21.64	21.64	19.62	19.53	19.64
		50RB#50	23.53	23.53	23.50	22.51	22.52	22.49	21.55	21.66	21.59	19.60	19.58	19.61
		100RB#0	23.50	23.54	23.53	22.49	22.53	22.51	21.54	21.67	21.63	19.57	19.58	19.61

4.4.4. Conducted power of 5G NR Bands

The measuring conducted average power (Unit: dBm) is shown as below.

➤ 5G NR n7_Ant.0_DSI-0/1/2/3/4

5G NR n7		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				500500	507000	513500	501000	507000	513000	501500	507000	512500	502000	507000	512000
Frequency (MHz)				2502.5	2535	2567.5	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	22.89	22.98	23.09	22.99	23.01	23.03	23.00	23.01	23.06	23.04	23.00	23.04
	$\pi/2$ BPSK	1	Right	22.86	23.04	23.06	22.97	23.10	23.12	23.05	23.05	23.09	23.05	23.03	23.12
	$\pi/2$ BPSK	Innter_Full	Mid	23.04	23.09	23.21	23.10	23.14	23.24	23.11	23.13	23.23	23.24	23.21	23.29
	QPSK	1	Left	22.93	23.00	23.03	23.03	23.05	23.07	23.00	23.02	23.07	22.98	23.07	23.14
	QPSK	1	Right	22.92	23.10	23.07	23.09	23.16	23.16	23.02	23.07	23.10	23.07	23.01	23.19
	QPSK	Innter_Full	Mid	23.07	23.14	23.26	23.10	23.13	23.23	23.17	23.20	23.28	23.24	23.20	23.32
	16QAM	1	Left	22.28	22.21	22.54	22.52	22.38	22.42	22.35	22.38	22.57	22.56	22.26	22.42
	16QAM	1	Right	22.34	22.47	22.38	22.26	22.34	22.33	22.21	22.30	22.48	22.31	22.39	22.44
	16QAM	Innter_Full	Mid	22.18	22.20	22.30	22.28	22.24	22.38	22.27	22.26	22.37	22.30	22.29	22.37
	64QAM	1	Left	20.85	20.84	20.95	21.13	20.88	20.99	20.96	20.90	21.13	20.88	20.94	21.07
	64QAM	1	Right	20.83	20.86	20.95	20.86	21.16	21.13	20.91	20.86	21.13	20.89	20.93	21.13
	64QAM	Innter_Full	Mid	20.71	20.69	20.85	20.78	20.79	20.90	20.77	20.74	20.86	20.74	20.76	20.87
	256QAM	1	Left	18.89	18.78	18.90	18.94	18.84	18.93	18.92	18.74	18.86	18.87	18.77	18.84
	256QAM	1	Right	18.78	18.91	18.90	18.81	18.98	18.97	18.78	18.78	18.88	18.81	18.80	18.87
	256QAM	Innter_Full	Mid	18.73	18.69	18.81	18.70	18.67	18.75	18.74	18.72	18.80	18.70	18.73	18.83

5G NR n7_Ant.4_DSI-0

5G NR n7		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				500500	507000	513500	501000	507000	513000	501500	507000	512500	502000	507000	512000
Frequency (MHz)				2502.5	2535	2567.5	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	23.25	23.41	23.32	23.40	23.51	23.42	23.44	23.21	23.20	23.30	23.28	23.40
	$\pi/2$ BPSK	1	Right	23.51	23.48	23.53	23.56	23.31	23.38	23.45	23.38	23.28	23.31	23.36	23.57
	$\pi/2$ BPSK	Innter_Full	Mid	23.54	23.52	23.50	23.45	23.56	23.45	23.47	23.61	23.52	23.52	23.49	23.45
	QPSK	1	Left	23.34	23.28	23.50	23.21	23.23	23.45	23.44	23.40	23.47	23.26	23.37	23.45
	QPSK	1	Right	23.40	23.41	23.54	23.33	23.34	23.64	23.28	23.29	23.45	23.35	23.46	23.54
	QPSK	Innter_Full	Mid	23.50	23.61	23.55	23.40	23.65	23.48	23.64	23.56	23.65	23.71	23.48	23.72
	16QAM	1	Left	22.96	22.56	22.83	22.92	22.64	22.93	22.87	22.62	22.70	22.89	22.54	22.75
	16QAM	1	Right	22.64	22.84	22.60	22.62	22.55	22.90	22.82	22.74	22.82	22.52	22.77	22.84
	16QAM	Innter_Full	Mid	22.46	22.62	22.65	22.75	22.57	22.68	22.56	22.75	22.53	22.56	22.80	22.82
	64QAM	1	Left	21.24	21.15	21.35	21.34	21.34	21.28	21.21	21.10	21.28	21.28	21.29	21.47
	64QAM	1	Right	21.29	21.16	21.48	21.20	21.21	21.48	21.12	21.29	21.34	21.10	21.24	21.59
	64QAM	Innter_Full	Mid	21.19	20.99	21.13	21.25	21.09	21.08	21.04	20.92	21.18	21.00	21.16	21.17
	256QAM	1	Left	19.28	19.17	19.30	19.10	19.03	19.35	19.28	19.00	19.29	19.22	19.13	19.12
	256QAM	1	Right	19.14	19.25	19.28	19.07	19.11	19.15	19.26	19.06	19.03	19.26	19.31	19.32
	256QAM	Innter_Full	Mid	18.93	19.18	19.18	18.98	19.04	19.21	19.15	19.14	19.24	19.05	19.14	19.14

5G NR n7_Ant.4_DSI-1/2

5G NR n7		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				500500	507000	513500	501000	507000	513000	501500	507000	512500	502000	507000	512000
Frequency (MHz)				2502.5	2535	2567.5	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	16.40	16.25	16.17	16.17	16.15	16.35	16.34	16.06	16.40	16.40	16.56	16.49
	$\pi/2$ BPSK	1	Right	16.13	16.29	16.27	16.36	16.16	16.25	16.21	16.33	16.38	16.51	16.36	16.62
	$\pi/2$ BPSK	Innter_Full	Mid	16.37	16.47	16.38	16.37	16.47	16.33	16.45	16.29	16.44	16.67	16.57	16.62
	QPSK	1	Left	16.13	16.20	16.44	16.16	16.25	16.27	16.28	16.33	16.27	16.31	16.48	16.35
	QPSK	1	Right	16.25	16.24	16.45	16.38	16.02	16.50	16.13	16.31	16.40	16.33	16.36	16.47
	QPSK	Innter_Full	Mid	16.42	16.26	16.62	16.37	16.43	16.43	16.54	16.38	16.48	16.59	16.76	16.73
	16QAM	1	Left	15.77	15.51	15.57	15.64	15.34	15.57	15.82	15.42	15.67	15.77	15.71	15.93
	16QAM	1	Right	15.39	15.54	15.69	15.61	15.69	15.50	15.54	15.50	15.65	15.87	15.85	15.77
	16QAM	Innter_Full	Mid	15.46	15.49	15.38	15.43	15.49	15.67	15.38	15.55	15.58	15.76	15.69	15.82
	64QAM	1	Left	13.99	14.14	14.32	14.24	14.24	14.15	14.19	14.24	14.18	14.21	14.30	14.48
	64QAM	1	Right	14.20	14.19	14.14	14.25	13.94	14.29	14.19	14.01	14.19	14.35	14.31	14.59
	64QAM	Innter_Full	Mid	13.89	13.92	13.93	13.85	13.87	14.17	13.85	13.82	14.10	14.02	14.12	14.38
	256QAM	1	Left	12.17	11.98	12.05	12.18	12.13	11.90	11.93	11.98	11.97	12.22	12.22	12.40
	256QAM	1	Right	12.04	11.86	12.07	11.92	12.16	12.23	12.04	11.93	12.18	12.09	12.31	12.30
	256QAM	Innter_Full	Mid	11.78	11.81	11.98	11.78	11.88	12.19	12.01	11.84	12.01	12.05	12.18	12.24

5G NR n7_Ant.4_DSI-3/4

5G NR n7		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				500500	507000	513500	501000	507000	513000	501500	507000	512500	502000	507000	512000
Frequency (MHz)				2502.5	2535	2567.5	2505	2535	2565	2507.5	2535	2562.5	2510	2535	2560
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	17.27	17.30	17.15	17.32	17.25	17.27	17.37	17.40	17.34	17.55	17.33	17.50
	$\pi/2$ BPSK	1	Right	17.21	17.29	17.58	17.41	17.29	17.30	17.23	17.39	17.53	17.46	17.41	17.62
	$\pi/2$ BPSK	Innter_Full	Mid	17.39	17.51	17.52	17.27	17.37	17.38	17.37	17.39	17.35	17.74	17.59	17.67
	QPSK	1	Left	17.29	17.47	17.44	17.24	17.42	17.60	17.44	17.38	17.60	17.24	17.45	17.47
	QPSK	1	Right	17.28	17.41	17.37	17.47	17.29	17.50	17.28	17.42	17.35	17.28	17.22	17.57
	QPSK	Innter_Full	Mid	17.57	17.43	17.68	17.50	17.48	17.72	17.49	17.60	17.58	17.75	17.66	17.82
	16QAM	1	Left	16.72	16.56	16.63	16.84	16.67	16.75	16.77	16.54	16.73	16.94	16.57	16.73
	16QAM	1	Right	16.56	16.65	16.60	16.56	16.65	16.79	16.47	16.79	16.65	16.87	16.67	16.90
	16QAM	Innter_Full	Mid	16.48	16.69	16.83	16.51	16.40	16.58	16.71	16.55	16.78	16.76	16.80	16.58
	64QAM	1	Left	15.09	15.34	15.23	15.23	15.30	15.28	14.99	15.29	15.47	15.09	15.32	15.47
	64QAM	1	Right	15.20	15.11	15.34	15.35	15.26	15.53	15.19	15.33	15.34	15.34	15.49	15.44
	64QAM	Innter_Full	Mid	14.95	14.99	15.12	15.07	15.16	15.12	15.14	15.04	15.33	15.05	15.02	15.43
	256QAM	1	Left	13.18	12.93	13.07	13.17	13.00	13.09	13.20	13.13	13.17	13.30	13.03	13.29
	256QAM	1	Right	13.07	13.11	13.17	13.27	13.10	13.08	12.92	12.96	13.27	13.09	13.13	13.43
	256QAM	Innter_Full	Mid	13.00	12.98	13.16	12.95	13.13	13.24	12.91	12.89	13.24	13.16	13.11	13.33

5G NR n12_Ant. 0_DSI-0/1/2/3/4

5G NR n12		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz		
Channel				140300	141500	142700	140800	141500	142200	141300	141500	141700
Frequency (MHz)				701.5	707.5	713.5	704	707.5	711	706.5	707.5	708.5
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	24.14	24.12	24.14	24.13	24.12	24.03	24.08	24.04	24.00
	$\pi/2$ BPSK	1	Right	24.11	24.13	24.11	24.14	24.14	24.07	24.07	24.02	23.98
	$\pi/2$ BPSK	Innter_Full	Mid	24.18	24.13	23.78	24.24	24.24	24.25	24.17	24.16	24.21
	QPSK	1	Left	24.18	24.16	24.21	24.15	24.13	24.10	24.11	24.05	24.07
	QPSK	1	Right	24.15	24.20	24.15	24.19	24.13	24.07	24.04	24.07	24.03
	QPSK	Innter_Full	Mid	24.13	24.12	24.17	24.22	24.19	24.24	24.21	24.22	24.23
	16QAM	1	Left	23.20	23.17	23.25	23.17	23.18	23.16	23.38	23.11	23.11
	16QAM	1	Right	23.43	23.51	23.21	23.23	23.43	23.15	23.14	23.37	23.35
	16QAM	Innter_Full	Mid	23.16	23.12	23.29	23.29	23.31	23.29	23.27	23.20	23.27
	64QAM	1	Left	21.65	21.64	21.64	21.64	21.90	21.87	21.61	21.87	21.54
	64QAM	1	Right	21.59	21.65	21.92	21.93	21.62	21.61	21.89	21.84	21.56
	64QAM	Innter_Full	Mid	21.83	21.81	21.81	21.80	21.79	21.84	21.73	21.77	21.80
	256QAM	1	Left	19.70	19.83	19.68	19.82	19.65	19.76	19.76	19.53	19.60
	256QAM	1	Right	19.67	19.67	19.85	19.68	19.65	19.79	19.73	19.51	19.73
	256QAM	Innter_Full	Mid	19.80	19.80	19.81	19.71	19.68	19.75	19.69	19.68	19.75

5G NR n25_Ant. 1_DSI-0/1/2

5G NR n25		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				370500	376500	382500	371000	376500	382000	371500	376500	381500	372000	376500	381000
Frequency (MHz)				1852.5	1882.5	1912.5	1855	1882.5	1910	1857.5	1882.5	1907.5	1860	1882.5	1905
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	23.99	23.94	23.80	24.03	23.97	23.67	24.00	23.93	23.54	23.99	23.92	23.58
	$\pi/2$ BPSK	1	Right	24.04	23.89	23.71	24.02	23.86	23.74	23.95	23.80	23.73	23.93	23.81	23.75
	$\pi/2$ BPSK	Innter_Full	Mid	24.13	24.03	23.92	24.11	24.05	23.88	24.05	24.02	23.81	24.09	24.03	23.81
	QPSK	1	Left	24.10	24.00	23.80	24.06	23.91	23.65	24.00	23.91	23.62	23.96	23.93	23.58
	QPSK	1	Right	24.09	23.89	23.77	24.02	23.89	23.70	23.99	23.82	23.80	23.98	23.75	23.79
	QPSK	Innter_Full	Mid	24.10	24.08	23.96	24.08	24.01	23.85	24.10	23.99	23.82	24.15	24.06	23.80
	16QAM	1	Left	23.06	23.27	22.89	23.33	23.29	22.71	23.06	22.99	22.94	23.06	23.02	22.91
	16QAM	1	Right	23.36	23.17	22.94	23.10	23.16	22.96	23.08	23.11	23.15	23.29	22.79	23.09
	16QAM	Innter_Full	Mid	23.02	22.94	22.83	23.10	23.07	22.90	23.08	23.04	22.85	23.08	23.03	22.81
	64QAM	1	Left	21.45	21.74	21.71	21.48	21.72	21.56	21.48	21.36	21.63	21.47	21.77	21.63
	64QAM	1	Right	21.50	21.65	21.60	21.58	21.31	21.27	21.81	21.61	21.72	21.76	21.30	21.86
	64QAM	Innter_Full	Mid	21.71	21.61	21.48	21.65	21.60	21.41	21.64	21.57	21.35	21.62	21.53	21.31
	256QAM	1	Left	19.79	19.71	19.49	19.65	19.72	19.51	19.78	19.53	19.46	19.57	19.72	19.50
	256QAM	1	Right	19.81	19.68	19.68	19.66	19.47	19.53	19.77	19.43	19.62	19.59	19.66	19.71
	256QAM	Innter_Full	Mid	19.75	19.65	19.56	19.65	19.55	19.43	19.65	19.55	19.39	19.60	19.59	19.34

➤ 5G NR n25_Ant. 1_DSI-3/4

5G NR n25		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				370500	376500	382500	371000	376500	382000	371500	376500	381500	372000	376500	381000
Frequency (MHz)				1852.5	1882.5	1912.5	1855	1882.5	1910	1857.5	1882.5	1907.5	1860	1882.5	1905
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	21.69	21.62	21.25	21.59	21.69	21.30	21.67	21.57	21.13	21.79	21.70	21.26
	$\pi/2$ BPSK	1	Right	21.58	21.64	21.67	21.73	21.49	21.55	21.68	21.73	21.43	21.98	21.78	21.47
	$\pi/2$ BPSK	Innter_Full	Mid	21.77	21.80	21.71	21.91	21.85	21.94	22.02	21.85	21.83	21.89	21.80	21.99
	QPSK	1	Left	21.84	21.76	21.43	21.86	21.65	21.55	21.79	21.93	21.31	21.71	21.95	21.56
	QPSK	1	Right	21.68	21.48	21.52	21.73	21.35	21.72	21.73	21.38	21.76	21.93	21.45	21.67
	QPSK	Innter_Full	Mid	22.12	21.68	21.63	22.15	21.71	21.52	22.05	21.69	21.50	22.23	21.96	21.72
	16QAM	1	Left	20.88	20.87	20.54	20.84	20.79	20.78	20.78	20.77	20.83	20.94	21.00	20.79
	16QAM	1	Right	20.96	20.71	20.96	20.91	20.66	21.01	20.82	20.46	20.99	21.06	20.81	21.04
	16QAM	Innter_Full	Mid	21.03	20.66	20.71	20.91	20.78	20.89	20.86	20.63	20.73	21.00	20.91	20.86
	64QAM	1	Left	19.30	19.75	19.46	19.30	19.62	19.16	19.55	19.64	19.35	19.60	19.75	19.40
	64QAM	1	Right	19.59	19.05	19.66	19.51	19.05	19.43	19.54	19.05	19.49	19.73	19.17	19.63
	64QAM	Innter_Full	Mid	19.39	19.25	18.93	19.29	19.18	18.99	19.50	19.35	18.81	19.47	19.45	19.04
	256QAM	1	Left	17.19	17.54	17.22	17.17	17.60	16.93	17.24	17.67	17.15	17.27	17.77	17.33
	256QAM	1	Right	17.22	17.29	17.49	17.37	17.31	17.56	17.37	17.38	17.53	17.42	17.26	17.66
	256QAM	Innter_Full	Mid	17.40	17.37	17.12	17.53	17.51	17.24	17.42	17.54	17.32	17.40	17.77	17.27

➤ 5G NR n25_Ant. 4_DSI-0

5G NR n25		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				370500	376500	382500	371000	376500	382000	371500	376500	381500	372000	376500	381000
Frequency (MHz)				1852.5	1882.5	1912.5	1855	1882.5	1910	1857.5	1882.5	1907.5	1860	1882.5	1905
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	23.81	23.89	23.51	23.96	23.80	23.45	23.97	23.77	23.41	23.84	23.70	23.41
	$\pi/2$ BPSK	1	Right	23.85	23.78	23.68	23.75	23.64	23.48	23.91	23.84	23.53	23.91	23.94	23.72
	$\pi/2$ BPSK	Innter_Full	Mid	23.77	23.93	23.64	23.87	23.83	23.78	23.96	23.88	23.73	24.04	23.81	23.94
	QPSK	1	Left	23.88	23.66	23.50	23.64	23.68	23.46	23.83	23.85	23.55	24.09	23.85	23.48
	QPSK	1	Right	23.73	23.48	23.77	23.96	23.72	23.72	23.66	23.48	23.52	23.88	23.58	23.72
	QPSK	Innter_Full	Mid	24.08	23.74	23.93	24.02	23.79	23.96	24.07	23.96	24.00	24.18	23.96	23.81
	16QAM	1	Left	22.81	23.05	22.64	22.74	22.85	22.83	22.89	22.87	22.89	22.96	22.95	22.98
	16QAM	1	Right	23.09	22.52	22.77	23.21	22.67	22.94	23.21	22.47	23.07	23.27	22.92	22.92
	16QAM	Innter_Full	Mid	22.98	22.96	22.66	22.93	23.06	22.71	22.88	22.76	22.61	22.86	23.01	22.89
	64QAM	1	Left	21.45	21.59	21.61	21.50	21.75	21.50	21.39	21.69	21.48	21.35	21.75	21.56
	64QAM	1	Right	21.63	21.22	21.68	21.73	21.10	21.69	21.49	21.12	21.83	21.78	21.23	21.64
	64QAM	Innter_Full	Mid	21.42	21.41	21.09	21.42	21.40	21.13	21.42	21.33	21.19	21.65	21.56	21.29
	256QAM	1	Left	19.45	19.60	19.32	19.37	19.69	19.33	19.30	19.59	19.48	19.40	19.57	19.45
	256QAM	1	Right	19.57	19.58	19.69	19.57	19.54	19.49	19.27	19.63	19.54	19.44	19.79	19.64
	256QAM	Innter_Full	Mid	19.33	19.39	19.14	19.38	19.37	19.07	19.33	19.37	19.09	19.45	19.61	19.27

➤ 5G NR n25_Ant. 4_DSI-1/2

5G NR n25		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				370500	376500	382500	371000	376500	382000	371500	376500	381500	372000	376500	381000
Frequency (MHz)				1852.5	1882.5	1912.5	1855	1882.5	1910	1857.5	1882.5	1907.5	1860	1882.5	1905
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	18.44	18.52	18.03	18.57	18.60	17.96	18.54	18.59	18.20	18.62	18.57	18.23
	$\pi/2$ BPSK	1	Right	18.41	18.44	18.20	18.55	18.44	18.37	18.51	18.44	18.23	18.60	18.39	18.30
	$\pi/2$ BPSK	Innter_Full	Mid	18.64	18.51	18.38	18.66	18.65	18.36	18.67	18.61	18.44	18.87	18.66	18.44
	QPSK	1	Left	18.34	18.41	18.26	18.39	18.46	18.25	18.53	18.66	17.96	18.51	18.41	18.23
	QPSK	1	Right	18.56	18.43	18.36	18.58	18.32	18.36	18.71	18.38	18.47	18.70	18.48	18.39
	QPSK	Innter_Full	Mid	18.68	18.73	18.30	18.75	18.69	18.42	18.82	18.64	18.23	18.92	18.89	18.57
	16QAM	1	Left	17.64	17.50	17.48	17.61	17.75	17.64	17.69	17.62	17.51	17.84	17.72	17.51
	16QAM	1	Right	17.87	17.34	17.52	17.82	17.17	17.59	17.96	17.24	17.69	17.92	17.39	17.72
	16QAM	Innter_Full	Mid	17.60	17.46	17.41	17.63	17.71	17.36	17.65	17.55	17.29	17.81	17.86	17.59
	64QAM	1	Left	15.97	16.50	16.30	15.85	16.34	16.25	16.05	16.27	16.23	16.07	16.54	16.28
	64QAM	1	Right	16.34	15.82	16.29	16.26	15.75	16.24	16.21	15.78	16.49	16.36	15.85	16.53
	64QAM	Innter_Full	Mid	16.30	16.26	15.79	16.07	16.16	15.69	16.05	15.96	15.74	16.35	16.18	15.98
	256QAM	1	Left	14.02	14.30	14.12	14.00	14.25	14.05	14.00	14.10	14.02	14.27	14.25	14.13
	256QAM	1	Right	14.16	14.16	14.21	14.27	14.19	14.29	14.16	14.24	14.24	14.19	14.44	14.41
	256QAM	Innter_Full	Mid	14.17	14.04	13.97	14.13	14.07	13.82	14.17	14.21	14.01	14.20	14.14	13.82

➤ 5G NR n25_Ant. 4_DSI-3/4

5G NR n25		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				370500	376500	382500	371000	376500	382000	371500	376500	381500	372000	376500	381000
Frequency (MHz)				1852.5	1882.5	1912.5	1855	1882.5	1910	1857.5	1882.5	1907.5	1860	1882.5	1905
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	16.54	16.65	15.96	16.42	16.30	16.01	16.37	16.50	16.25	16.67	16.60	16.21
	$\pi/2$ BPSK	1	Right	16.46	16.44	16.38	16.60	16.48	16.38	16.41	16.24	16.32	16.68	16.59	16.52
	$\pi/2$ BPSK	Innter_Full	Mid	16.52	16.66	16.29	16.77	16.41	16.31	16.71	16.58	16.44	16.82	16.75	16.74
	QPSK	1	Left	16.53	16.36	15.96	16.51	16.31	16.03	16.64	16.46	16.13	16.76	16.80	16.40
	QPSK	1	Right	16.48	16.28	16.37	16.41	16.18	16.24	16.50	16.42	16.29	16.73	16.43	16.62
	QPSK	Innter_Full	Mid	16.65	16.79	16.48	16.53	16.59	16.37	16.83	16.49	16.53	17.08	16.64	16.55
	16QAM	1	Left	15.51	15.60	15.54	15.58	15.54	15.43	15.58	15.60	15.58	15.93	15.80	15.69
	16QAM	1	Right	15.89	15.39	15.54	15.86	15.47	15.52	15.84	15.32	15.61	15.87	15.56	15.97
	16QAM	Innter_Full	Mid	15.46	15.71	15.33	15.66	15.56	15.34	15.56	15.56	15.44	15.88	15.68	15.69
	64QAM	1	Left	13.90	14.29	14.23	14.04	14.37	14.06	14.00	14.22	14.20	14.40	14.55	14.31
	64QAM	1	Right	14.38	13.97	14.36	14.31	13.98	14.31	14.26	13.78	14.49	14.59	14.00	14.51
	64QAM	Innter_Full	Mid	14.20	14.21	13.94	14.24	14.01	14.04	14.12	14.16	13.93	14.30	14.33	13.96
	256QAM	1	Left	12.24	12.32	12.12	12.09	12.40	11.93	12.15	12.25	12.12	12.20	12.59	12.08
	256QAM	1	Right	12.14	12.39	12.33	12.19	12.33	12.21	12.27	12.29	12.24	12.17	12.24	12.54
	256QAM	Innter_Full	Mid	12.15	12.14	11.72	12.17	12.27	11.87	12.03	11.97	11.87	12.40	12.52	12.17

➤ 5G NR n26_Ant. 0_DSI-0/1/2/3/4

5G NR n26		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz		
Channel				163300	163800	164300	163800		
Frequency (MHz)				816.5	819	821.5	819		
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	23.90	23.97	23.97	23.89		
	$\pi/2$ BPSK	1	Right	23.99	23.97	23.95	23.98		
	$\pi/2$ BPSK	Innter_Full	Mid	23.60	24.08	24.11	24.09		
	QPSK	1	Left	23.95	24.04	24.00	23.94		
	QPSK	1	Right	24.02	24.00	24.01	23.99		
	QPSK	Innter_Full	Mid	24.07	24.16	24.12	24.16		
	16QAM	1	Left	23.12	23.34	23.37	23.08	N/A	N/A
	16QAM	1	Right	23.38	23.10	23.38	23.34		
	16QAM	Innter_Full	Mid	23.19	23.21	23.22	23.25		
	64QAM	1	Left	21.57	21.56	21.90	21.80		
	64QAM	1	Right	21.58	21.85	21.82	21.81		
	64QAM	Innter_Full	Mid	21.73	21.78	21.75	21.77		
	256QAM	1	Left	19.58	19.62	19.63	19.74		
	256QAM	1	Right	19.76	19.62	19.77	19.62		
	256QAM	Innter_Full	Mid	19.66	19.81	19.80	19.69		

5G NR n26		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				165300	167300	169300	165800	167300	168800	166300	167300	168300	166800	167300	167800
Frequency (MHz)				826.5	836.5	846.5	829	836.5	844	831.5	836.5	841.5	834	836.5	839
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	23.95	24.00	23.95	23.94	23.97	24.02	23.94	23.89	23.99	23.93	23.90	23.86
	$\pi/2$ BPSK	1	Right	23.92	23.97	23.94	24.00	23.98	23.98	23.98	23.97	23.97	23.93	23.92	23.97
	$\pi/2$ BPSK	Innter_Full	Mid	23.59	24.13	24.09	24.05	24.09	24.05	24.11	24.09	24.06	24.16	24.17	24.09
	QPSK	1	Left	24.00	24.03	24.03	23.99	24.00	24.03	23.94	23.96	23.99	23.98	23.94	23.90
	QPSK	1	Right	23.93	24.04	23.93	24.07	24.01	23.97	24.02	24.00	23.94	23.95	23.91	24.00
	QPSK	Innter_Full	Mid	24.13	24.11	24.11	24.08	24.07	24.09	24.11	24.12	24.07	24.18	24.16	24.13
	16QAM	1	Left	23.17	23.51	23.34	23.12	23.23	23.38	23.09	23.32	23.35	23.33	23.33	23.28
	16QAM	1	Right	23.17	23.17	23.30	23.43	23.37	23.33	23.10	23.22	23.26	23.11	23.35	23.22
	16QAM	Innter_Full	Mid	23.26	23.27	23.17	23.19	23.24	23.27	23.20	23.18	23.24	23.26	23.25	23.22
	64QAM	1	Left	21.89	21.90	21.85	21.81	21.69	21.56	21.55	21.79	21.55	21.55	21.83	21.77
	64QAM	1	Right	21.62	21.91	21.78	21.90	21.56	21.55	21.48	21.82	21.74	21.83	21.80	22.01
	64QAM	Innter_Full	Mid	21.83	21.80	21.78	21.77	21.78	21.80	21.69	21.74	21.76	21.76	21.72	21.73
	256QAM	1	Left	19.62	19.89	19.79	19.63	19.69	19.62	19.69	19.73	19.61	19.58	19.73	19.85
	256QAM	1	Right	19.81	19.62	19.79	19.83	19.80	19.78	19.72	19.72	19.69	19.60	19.80	19.72
	256QAM	Innter_Full	Mid	19.78	19.71	19.74	19.65	19.68	19.68	19.68	19.70	19.68	19.71	19.67	19.74

➤ 5G NR n38_Ant. 0_DSI-0/1/2

5G NR n38		RB Size	RB Offset	10MHz BW SCS = 30kHz			15MHz BW SCS = 30kHz			20MHz BW SCS = 30kHz		
Channel				51500 0	51900 0	52300 0	51550 0	51900 0	52250 0	51600 0	51900 0	52200 0
Frequency (MHz)				2575	2595	2615	2577.5	2595	2612.5	2580	2595	2610
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	22.98	23.08	23.17	23.10	23.12	23.08	23.06	23.01	23.18
	$\pi/2$ BPSK	1	Right	23.12	23.05	23.16	23.17	23.25	23.11	23.15	23.04	23.11
	$\pi/2$ BPSK	Innter_Full	Mid	23.18	23.24	23.36	23.32	23.40	23.34	23.36	23.35	23.29
	QPSK	1	Left	23.04	23.09	23.19	23.12	23.23	23.19	23.04	23.07	23.05
	QPSK	1	Right	23.00	23.12	23.16	22.99	23.14	23.11	22.99	23.11	23.18
	QPSK	Innter_Full	Mid	23.22	23.33	23.43	23.15	23.25	23.19	23.47	23.32	23.36
	16QAM	1	Left	22.39	22.48	22.23	22.44	22.48	22.31	22.29	22.13	22.10
	16QAM	1	Right	22.32	22.46	22.20	22.43	22.41	22.40	22.32	22.18	22.33
	16QAM	Innter_Full	Mid	22.15	22.15	22.24	22.27	22.27	22.19	22.26	22.23	22.28
	64QAM	1	Left	20.91	21.10	20.94	20.86	21.00	20.96	20.92	20.79	20.87
	64QAM	1	Right	20.78	20.92	20.94	20.89	21.08	21.11	20.82	20.99	20.91
	64QAM	Innter_Full	Mid	20.74	20.77	20.72	20.88	20.96	20.79	20.76	20.81	20.83
	256QAM	1	Left	18.79	18.79	18.80	18.81	18.84	18.86	18.84	18.75	18.77
	256QAM	1	Right	18.82	18.73	18.75	18.84	18.93	18.78	18.79	18.87	18.75
	256QAM	Innter_Full	Mid	18.97	18.95	18.93	18.74	18.84	18.80	18.76	18.73	18.66

➤ 5G NR n38_Ant. 0_DSI-3/4

5G NR n38		RB Size	RB Offset	10MHz BW SCS = 30kHz			15MHz BW SCS = 30kHz			20MHz BW SCS = 30kHz		
Channel				51500 0	51900 0	52300 0	51550 0	51900 0	52250 0	51600 0	51900 0	52200 0
Frequency (MHz)				2575	2595	2615	2577.5	2595	2612.5	2580	2595	2610
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	18.64	19.01	18.92	18.93	18.78	18.98	18.71	18.95	18.87
	$\pi/2$ BPSK	1	Right	18.83	18.75	18.56	18.88	18.84	18.93	18.69	18.81	18.86
	$\pi/2$ BPSK	Innter_Full	Mid	19.13	19.05	19.01	19.13	19.02	19.09	19.06	19.06	19.16
	QPSK	1	Left	18.91	18.83	18.79	18.86	18.77	18.92	18.88	18.73	18.87
	QPSK	1	Right	18.79	18.93	18.60	18.65	19.04	19.03	18.72	18.90	18.98
	QPSK	Innter_Full	Mid	19.19	19.15	19.12	19.12	19.09	19.24	19.24	19.11	18.97
	16QAM	1	Left	18.08	17.76	17.75	17.84	18.15	17.95	18.15	17.81	18.15
	16QAM	1	Right	18.03	18.07	18.16	18.11	18.02	18.02	18.09	18.00	18.10
	16QAM	Innter_Full	Mid	17.95	17.95	18.14	17.93	17.95	17.98	18.01	18.13	18.13
	64QAM	1	Left	16.68	16.67	16.58	16.63	16.53	16.68	16.84	16.45	16.45
	64QAM	1	Right	16.65	16.54	16.45	16.54	16.69	16.86	16.69	16.80	16.75
	64QAM	Innter_Full	Mid	16.64	16.39	16.46	16.67	16.44	16.63	16.49	16.79	16.78
	256QAM	1	Left	14.49	14.58	14.45	14.76	14.65	14.74	14.72	14.60	14.38
	256QAM	1	Right	14.51	14.63	14.62	14.46	14.59	14.66	14.54	14.74	14.67
	256QAM	Innter_Full	Mid	14.49	14.46	14.33	14.53	14.43	14.52	14.39	14.53	14.42

➤ 5G NR n41_Ant. 0/2/6_DSI-0

5G NR n41		RB Size	RB Offset	Ant. 0_PC3 100MHz BW SCS = 30kHz			Ant. 2_PC3 100MHz BW SCS = 30kHz			Ant. 6_PC3 100MHz BW SCS = 30kHz		
Channel				509202	518598	528000	509202	518598	528000	509202	518598	528000
Frequency (MHz)				2546.01	2592.99	2640	2546.01	2592.99	2640	2546.01	2592.99	2640
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	21.30	21.48	21.66	21.42	21.58	21.76	20.22	20.08	20.42
	$\pi/2$ BPSK	1	Right	21.77	21.06	21.08	21.69	21.14	21.30	20.49	20.40	20.45
	$\pi/2$ BPSK	Innter_Full	Mid	21.87	21.87	21.44	22.02	22.04	21.57	20.39	20.58	20.63
	QPSK	1	Left	21.39	21.71	21.53	21.46	21.63	21.66	20.28	20.61	20.42
	QPSK	1	Right	21.49	21.20	21.27	21.76	21.28	21.29	20.45	20.62	20.38
	QPSK	Innter_Full	Mid	22.08	21.63	21.48	21.86	22.05	21.53	20.61	20.87	20.65
	16QAM	1	Left	21.51	21.85	21.38	21.56	21.82	21.48	20.36	20.40	20.60
	16QAM	1	Right	21.82	21.28	21.58	21.85	21.40	21.85	20.67	20.74	20.76
	16QAM	Innter_Full	Mid	21.87	21.90	21.32	21.90	21.97	21.49	20.33	20.64	20.66
	64QAM	1	Left	20.67	21.55	21.77	20.84	21.47	21.87	20.47	20.09	20.05
	64QAM	1	Right	21.80	20.95	20.95	21.90	21.08	21.15	20.09	20.70	20.11
	64QAM	Innter_Full	Mid	21.70	21.89	21.37	21.90	21.94	21.45	20.37	20.64	20.68
	256QAM	1	Left	19.82	20.16	20.18	20.09	20.24	20.31	18.91	18.89	18.96
	256QAM	1	Right	20.19	19.69	20.22	20.29	19.76	20.25	19.19	19.17	19.14
	256QAM	Innter_Full	Mid	20.41	20.23	19.90	20.44	20.31	19.97	18.92	19.11	19.18