

FCC SAR TEST REPORT

Product Name: Hybrid Full-Touch Handheld computer

Trade Mark: 

Model No.: X40

Add. Model No.: N/A

Report Number: 26051324500SAR-1

Test Standards: FCC 47 CFR Part 2 §2.1093
ANSI/IEEE C95.1-1992
IEEE Std 1528-2013

FCC ID: VTVX40

Test Result: PASS

Date of Issue: September 29, 2026

Prepared for:

TSC Auto ID Technology Co., Ltd.

9F., No. 95, Minquan Rd. Xindian Dist., New Taipei City, Taiwan

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:

Kevin Liang

Assistant Manager

Date:

September 29, 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 29, 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	31
4.1.5. WLAN CONFIGURATION AND TESTING	31
4.1.6. RFID CONFIGURATION AND TESTING	32
4.1.7. BLUETOOTH CONFIGURATION AND TESTING	32
4.1.8. DEVICE STATE INDEX (DSI) DESCRIPTION	33
4.2. EUT TESTING POSITION	34
4.2.1. HEAD EXPOSURE CONDITIONS	34
4.2.2. BODY-WORN ACCESSORY EXPOSURE CONDITIONS	36
4.2.3. HOTSPOT ACCESSORY EXPOSURE CONDITIONS	37
4.2.4. EXTREMITY EXPOSURE CONDITIONS	38

4.3. MEASURED CONDUCTED POWER RESULT	39
4.3.1. CONDUCTED POWER OF GSM BANDS	39
4.3.2. CONDUCTED POWER OF WCDMA BANDS	39
4.3.3. CONDUCTED POWER OF LTE BANDS	40
4.3.4. CONDUCTED POWER OF 5G NR BANDS	51
4.3.5. CONDUCTED POWER OF WLAN	60
4.3.6. CONDUCTED POWER OF BT	62
4.4. SAR TEST EXCLUSION EVALUATIONS	63
4.4.1. STANDALONE SAR TEST EXCLUSION CONSIDERATIONS	63
4.4.2. ESTIMATED SAR CALCULATION	65
4.5. SAR TESTING RESULTS	66
4.5.1. SAR TEST REDUCTION CONSIDERATIONS	66
4.5.2. SAR RESULTS FOR HEAD EXPOSURE CONDITION	69
4.5.3. SAR RESULTS FOR BODY-WORN EXPOSURE CONDITION (SEPARATION DISTANCE IS 1.0 CM)	78
4.5.4. SAR RESULTS FOR HOTSPOT EXPOSURE CONDITION (SEPARATION DISTANCE IS 1.0 CM)	84
4.5.5. SAR RESULTS FOR EXTREMITY EXPOSURE CONDITION (SEPARATION DISTANCE IS 0 CM)	96
4.6. SAR MEASUREMENT VARIABILITY	97
4.6.1. REPEATED MEASUREMENT	97
4.7. SIMULTANEOUS MULTI-BAND TRANSMISSION EVALUATION	98
4.7.1. SIMULTANEOUS TRANSMISSION SAR TEST EXCLUSION CONSIDERATIONS	98
4.7.2. SIMULTANEOUS TRANSMISSION POSSIBILITIES	99
4.7.3. MAX. STANDALONE SAR	100
4.7.4. SUM OF SAR	101
4.7.5. SAR TO PEAK LOCATION SEPARATION RATIO ANALYSIS	106

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	0.091	0.161	0.161	N/A
	PCS 1900	0.046	0.300	0.300	N/A
	WCDMA Band II	0.168	0.452	0.452	N/A
	WCDMA Band IV	0.105	0.290	0.290	N/A
	WCDMA Band V	0.120	0.242	0.242	N/A
	LTE Band 7	0.395	0.778	0.778	N/A
	LTE Band 12(17)	0.120	0.273	0.273	N/A
	LTE Band 13	0.182	0.252	0.252	N/A
	LTE Band 14	0.141	0.177	0.177	N/A
	LTE Band 25(2)	0.396	1.021	1.021	N/A
	LTE Band 26(5)	0.267	0.334	0.334	N/A
	LTE Band 41(38)	0.305	0.630	0.630	N/A
	LTE Band 48	0.185	0.500	0.500	N/A
	LTE Band 66(4)	0.341	0.691	0.691	N/A
	LTE Band 71	0.099	0.271	0.271	N/A
	5G NR n7	0.337	0.690	0.690	N/A
	5G NR n12	0.109	0.254	0.254	N/A
	5G NR n13	0.181	0.217	0.217	N/A
	5G NR n14	0.160	0.180	0.180	N/A
	5G NR n25(2)	0.425	1.030	1.030	N/A
	5G NR n26(5)	0.274	0.288	0.288	N/A
	5G NR n41(38)	0.488	1.181	1.181	N/A
	5G NR n48	0.205	0.728	0.793	N/A
	5G NR n66	0.304	0.782	0.782	N/A
	5G NR n71	0.092	0.229	0.229	N/A
	5G NR n77(78)	0.304	0.772	0.781	N/A
DTS	2.4G WLAN	0.795	0.250	0.276	N/A
NII-1	5G WLAN	0.317	0.247	0.361	N/A
NII-2A	5G WLAN	0.207	0.166	N/A	0.490
NII-2C	5G WLAN	0.117	0.215	N/A	0.356
NII-3	5G WLAN	0.234	0.214	0.220	N/A
NII-5/6/7/8	6G WLAN ^{Note 1)}	0.044	0.049	N/A	0.042
DSS	RFID	N/A	0.364	0.364	0.602
DSS	Bluetooth	0.007	0.010	0.010	N/A
DTS	2 nd BLE	0.003	0.005	0.005	N/A
DXX	NFC	N/A	N/A	N/A	N/A
UWB	UWB	N/A	N/A	N/A	N/A
Max. SAR		0.795	1.181	1.181	0.602
Highest Simultaneous Transmission SAR		Head (W/kg)	Body-worn (W/kg)	Hotspot (W/kg)	Extremity (W/kg)

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

WWAN+WLAN+RFID	1.28	1.43	1.43	N/A
WWAN+Bluetooth+RFID+2nd BLE	0.49	1.55	1.55	N/A
ENDC+Bluetooth+2nd BLE	0.57	1.29	1.29	N/A
ENDC+WLAN	1.36	1.53	1.53	N/A

Note:

1). The test results of 6G WLAN are based on the Report No.: FA660302 issued by Sporton International Inc. (Shenzhen).

1.2. CLIENT INFORMATION

Applicant:	TSC Auto ID Technology Co., Ltd.
Address of Applicant:	9F., No. 95, Minquan Rd. Xindian Dist., New Taipei City, Taiwan
Manufacturer:	TSC Auto ID Technology Co., Ltd.
Address of Manufacturer:	9F., No. 95, Minquan Rd. Xindian Dist., New Taipei City, Taiwan

1.3. EUT INFORMATION

1.3.1. General Description of EUT

Product Name:	Hybrid Full-Touch Handheld computer
Trade Mark:	
Model No.:	X40
Add. Model No.:	N/A
DUT Stage:	Identical Prototype
Sample No:	Sample 1: S202605138612-ZJA02/26 Sample 2: S202605138612-ZJA23/26
Software Version:	R2.00 (Provided by the customer)
Hardware Version:	REV0.3 (Provided by the customer)
Sample Received Date:	May 13, 2026
Sample Tested Date:	May 16, 2026 to August 23, 2026

1.3.2. Description of Accessories

Refer to Report 26051324500EMC-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 14:	788 - 798
	LTE Band 17:	704 - 716
	LTE Band 25:	1850 - 1915
	LTE Band 26:	814 - 849
	LTE Band 38:	2570 - 2620
	LTE Band 41:	2496 - 2690
	LTE Band 48:	3550 - 3700
	LTE Band 66:	1710 - 1780
	LTE Band 71:	663 - 698
5G NR	5G NR n 2:	1850 - 1910
	5G NR n 5:	824 - 849
	5G NR n 7:	2500 - 2570
	5G NR n 12:	699 - 716
	5G NR n 13:	777 - 787
	5G NR n 14:	788 - 798
	5G NR n 25:	1850 - 1915
	5G NR n 26:	814 - 849
	5G NR n 38:	2570 - 2620
	5G NR n 41:	2496 - 2690
	5G NR n 48:	3550 - 3700
	5G NR n 66:	1710 - 1780
	5G NR n 71:	663 - 698
	5G NR n 77:	3450-3550, 3700-3980
	5G NR n 78:	3450-3550, 3700-3800
WLAN	2.4 GHz:	2412 - 2462
	U-NII-1:	5180 - 5240
	U-NII-2A:	5260 - 5320
	U-NII-2C:	5500 - 5720
	U-NII-3:	5745 - 5825
	U-NII-5/6/7/8:	5955 - 7115
RFID	902-928MHz	902-928
UWB	6.0-8.5GHz	7987.2
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).

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

1.3.4. Wireless Technologies

GSM	Voice GPRS (Multi-Slot Class: 33-4UP) EDGE (Multi-Slot Class: 33-4UP)
WCDMA	RMC HSDPA HSUPA HSPA+
LTE	QPSK, 16QAM, 64QAM, 256QAM 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/HT40) 802.11ax (HE20/HE40) 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/VHT160) 802.11ax (HE20/HE40/HE80/HE160) Note: SAR testing for WLAN was performed on the maximum power mode.
6G WLAN	802.11ax (HE20/HE40/HE80/HE160) Note: SAR testing for WLAN was performed on the maximum power mode.
Bluetooth	BR+EDR LE, 2LE, LE Code 2nd BLE
Others	NFC, GPS/ Galileo/ GLONASS/ BDS, UWB, RFID
Device Class (GSM)	B
Antenna Type	WWAN/ WLAN / Bluetooth/ RFID: LDS Antenna NFC: Loop Antenna UWB: PIFA Antenna
Power Reduction	Support The power selection depends on whether it is in SA mode or NSA mode.
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: 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 (All DSI)	DCS 1900 (All DSI)
GSM (GMSK, 1Tx-slot)	32.5	28.5
GPRS (GMSK, 1Tx-slot)	32.5	28.5
GPRS (GMSK, 2Tx-slot)	33.0	30.0
GPRS (GMSK, 3Tx-slot)	30.5	29.0
GPRS (GMSK, 4Tx-slot)	30.0	26.5
EDGE (8PSK, 1Tx-slot)	27.0	25.5
EDGE (8PSK, 2Tx-slot)	26.0	25.5
EDGE (8PSK, 3Tx-slot)	24.0	23.5
EDGE (8PSK, 4Tx-slot)	23.5	22.5

Mode	Source-Based Time-Averaged Power (dBm)	
	GSM 850 (All DSI)	DCS 1900 (All DSI)
GSM (GMSK, 1Tx-slot)	23.5	19.5
GPRS (GMSK, 1Tx-slot)	23.5	19.5
GPRS (GMSK, 2Tx-slot)	27.0	24.0
GPRS (GMSK, 3Tx-slot)	26.2	24.7
GPRS (GMSK, 4Tx-slot)	27.0	23.5
EDGE (8PSK, 1Tx-slot)	18.0	16.5
EDGE (8PSK, 2Tx-slot)	20.0	19.5
EDGE (8PSK, 3Tx-slot)	19.7	19.2
EDGE (8PSK, 4Tx-slot)	20.5	19.5

➤ WCDMA

Mode	Maximum conducted average power (dBm)		
	WCDMA Band II (All DSI)	WCDMA Band V (All DSI)	WCDMA Band IV (All DSI)
RMC 12.2K	22.5	24.5	22.5
HSDPA Subtest-1	21.5	23.5	21.5
HSDPA Subtest-2	21.0	23.0	21.0
HSDPA Subtest-3	21.0	23.0	21.0
HSDPA Subtest-4	21.0	23.0	21.0
HSUPA Subtest-1	21.5	23.5	21.5
HSUPA Subtest-2	19.5	21.5	19.5
HSUPA Subtest-3	20.5	22.5	20.5
HSUPA Subtest-4	19.5	21.5	19.5
HSUPA Subtest-5	21.5	23.5	21.5

➤ LTE

Band	Ant.	Maximum conducted average power (dBm)	
		(DSI-0)	(DSI-1)
LTE Band 7	0	23.0	20.0
LTE Band 12(17)	0	23.5	N/A
LTE Band 13	0	23.5	N/A
LTE Band 14	0	23.5	N/A
LTE Band 25(2)	0	24.0	21.0
LTE Band 26(5)	0	24.0	N/A
LTE Band 41(38)	0	24.5	N/A
LTE Band 48	1	23.0	N/A
LTE Band 66(4)	0	23.5	N/A
LTE Band 71	0	23.0	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)
5G NR n7	0	23.0	N/A
5G NR n12	0	23.0	N/A
5G NR n13	0	23.5	N/A
5G NR n14	0	23.5	N/A
5G NR n25(2)	0	23.0	20.0
5G NR n26(5)	0	23.5	N/A
5G NR n41(38)	0	24.0	21.0
5G NR n48	1	23.0	N/A
5G NR n66	0	23.0	N/A
5G NR n71	0	23.5	N/A
5G NR n77(78)	1	22.5	20.0

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**

Mode	Maximum conducted average power (dBm) (All DSI)		
	Ant. 5	Ant. 6	Total
802.11b	16.0	16.0	N/A
802.11g	15.5	15.5	N/A
802.11n-HT20	13.0	11.0	15.0
802.11n-HT40	12.5	12.0	15.0
802.11ax-HE20_SU	12.5	11.5	15.0
802.11ax-HE40_SU	12.5	11.5	15.0

➤ **5GHz WLAN**

Test Mode	RU&Index	Freq. [MHz]	Maximum conducted average power (dBm) (All DSI)		
			Ant. 5	Ant. 6	Total
802.11a	---	5180	13.50	13.50	
802.11a	---	5200			
802.11a	---	5240			
802.11a	---	5260			
802.11a	---	5280	13.50	13.50	
802.11a	---	5320			
802.11a	---	5500			
802.11a	---	5600			
802.11a	---	5700	13.50	13.50	
802.11a	---	5745			
802.11a	---	5785			
802.11a	---	5825			
802.11n20	---	5180	11.50	8.50	13.00
802.11n20	---	5200			
802.11n20	---	5240			
802.11n20	---	5260	11.00	10.00	13.00
802.11n20	---	5280			
802.11n20	---	5320			
802.11n20	---	5500	11.00	9.50	13.00
802.11n20	---	5600			
802.11n20	---	5700			
802.11n20	---	5745	11.50	9.50	13.00
802.11n20	---	5785			
802.11n20	---	5825			
802.11n40	---	5190	11.00	8.00	12.50
802.11n40	---	5230			
802.11n40	---	5270			
802.11n40	---	5310	10.50	9.00	12.50
802.11n40	---	5510			

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

Test Mode	RU&Index	Freq. [MHz]	Maximum conducted average power (dBm) (All DSI)		
			Ant. 5	Ant. 6	Total
802.11n40	---	5590			
802.11n40	---	5670			
802.11n40	---	5755			
802.11n40	---	5795	10.50	8.50	12.50
802.11ac20	---	5180			
802.11ac20	---	5200	11.50	8.00	13.00
802.11ac20	---	5240			
802.11ac20	---	5260			
802.11ac20	---	5280	10.50	10.00	13.00
802.11ac20	---	5320			
802.11ac20	---	5500			
802.11ac20	---	5600	11.50	10.00	13.00
802.11ac20	---	5700			
802.11ac20	---	5745			
802.11ac20	---	5785	11.50	9.50	13.00
802.11ac20	---	5825			
802.11ac40	---	5190			
802.11ac40	---	5230	11.00	8.00	12.50
802.11ac40	---	5270			
802.11ac40	---	5310	10.50	9.50	12.50
802.11ac40	---	5510			
802.11ac40	---	5590	11.00	9.00	12.50
802.11ac40	---	5670			
802.11ac40	---	5755			
802.11ac40	---	5795	10.50	9.00	12.50
802.11ac80	---	5210	11.00	7.50	12.50
802.11ac80	---	5290	10.00	8.50	12.50
802.11ac80	---	5530			
802.11ac80	---	5610	10.50	9.00	12.50
802.11ac80	---	5775	10.50	8.00	12.50
802.11ac160	---	5250	10.50	8.00	12.50
802.11ac160	---	5570	10.00	8.50	12.50
802.11ax20	SU	5180			
802.11ax20	SU	5200	11.00	8.00	12.50
802.11ax20	SU	5240			
802.11ax20	SU	5260			
802.11ax20	SU	5280	10.50	9.50	12.50
802.11ax20	SU	5320			
802.11ax20	SU	5500			
802.11ax20	SU	5600	11.00	9.50	12.50
802.11ax20	SU	5700			
802.11ax20	SU	5745			
802.11ax20	SU	5785	11.00	8.50	12.50
802.11ax20	SU	5825			
802.11ax40	SU	5190			
802.11ax40	SU	5230	11.00	8.00	12.50
802.11ax40	SU	5270			
802.11ax40	SU	5310	10.50	9.50	12.50
802.11ax40	SU	5510			
802.11ax40	SU	5590	11.00	9.50	12.50
802.11ax40	SU	5670			
802.11ax40	SU	5755			
802.11ax40	SU	5795	10.50	9.00	12.50
802.11ax80	SU	5210	11.00	8.00	12.50
802.11ax80	SU	5290	10.00	8.50	12.50
802.11ax80	SU	5530			
802.11ax80	SU	5610	10.50	9.00	12.50
802.11ax80	SU	5775	10.00	8.00	12.50
802.11ax160	SU	5250	10.50	8.00	12.50
802.11ax160	SU	5570	10.00	9.00	12.50

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: +86-755-28230886

Fax: +86-755-28230886

E-mail: info@uttlab.com
<http://www.uttlab.com>

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

➤ **Bluetooth**

Mode	Modulation	Maximum conducted average power (dBm) (All DSI)
BR + EDR	GFSK	7.5
	$\pi/4$ -DQPSK	4.0
	8-DPSK	4.0
LE	GFSK	2.5
2LE	GFSK	-0.5
LE Code (125k)	GFSK	3.5
LE Code (500k)	GFSK	2.0
2 nd BLE	GFSK	2.0

➤ **RFID**

Mode	Modulation	Channel	Maximum Conducted Avg. Power (dBm)
RFID	ASK	1	19.5
		25	19.5
		50	19.5

➤ **UWB**

Channel	Maximum mean e.i.r.p.
Channel 9	-48.0 dBm/MHz

➤ **NFC**

Frequency (MHz)	Maximum Field Strength
13.56	58.0 dB μ V/m at 3 meter

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

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

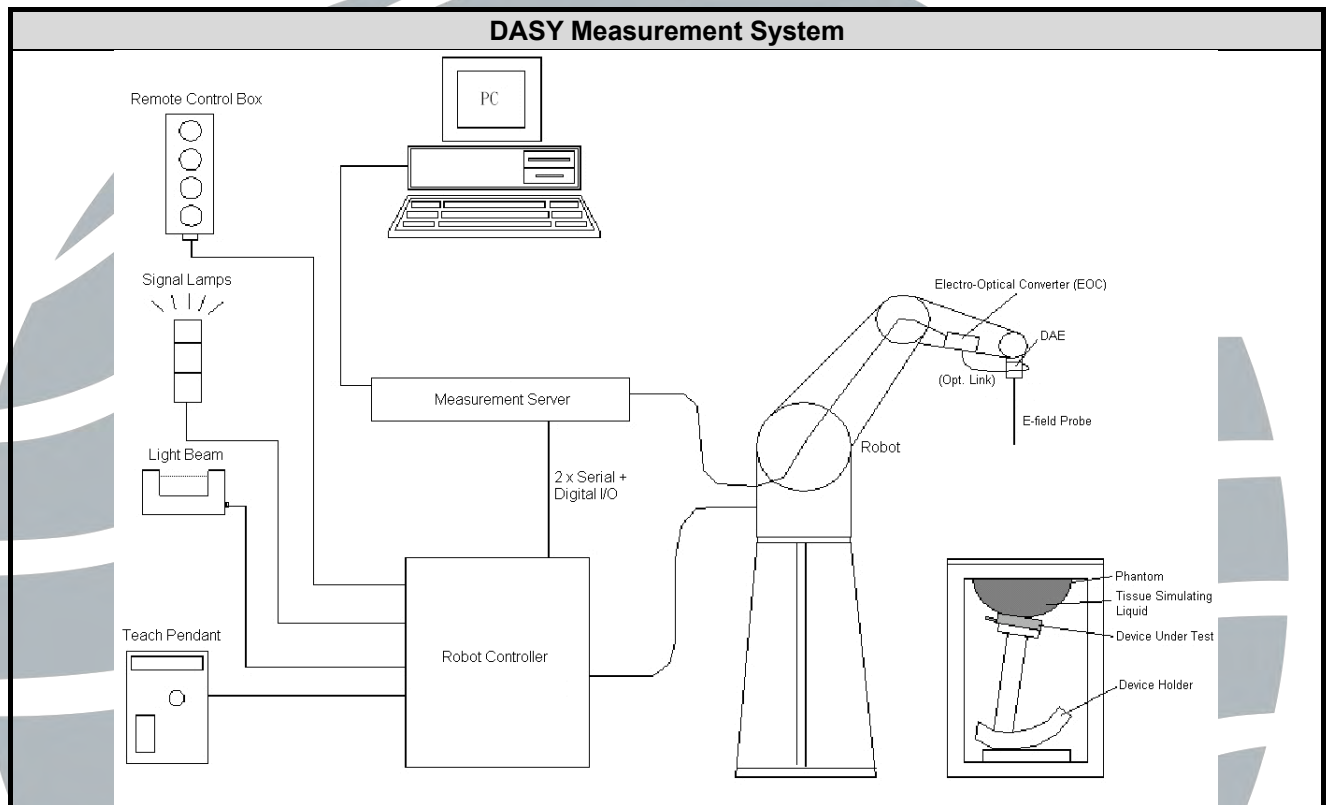
Note:

- 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°
Maximum area scans spatial resolution: Δx_{Area} , Δy_{Area}	≤ 2 GHz: ≤ 15 mm 2 – 3 GHz: ≤ 12 mm	3 – 4 GHz: ≤ 12 mm 4 – 6 GHz: ≤ 10 mm
	When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be $\leq$ the corresponding x or y dimension of the test device with at least one measurement point on the test device.	

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	$\leq 1.5 \cdot \Delta Z_{Zoom}(n-1)$ 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	D835V2	4d242	Jun. 07, 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	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

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

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

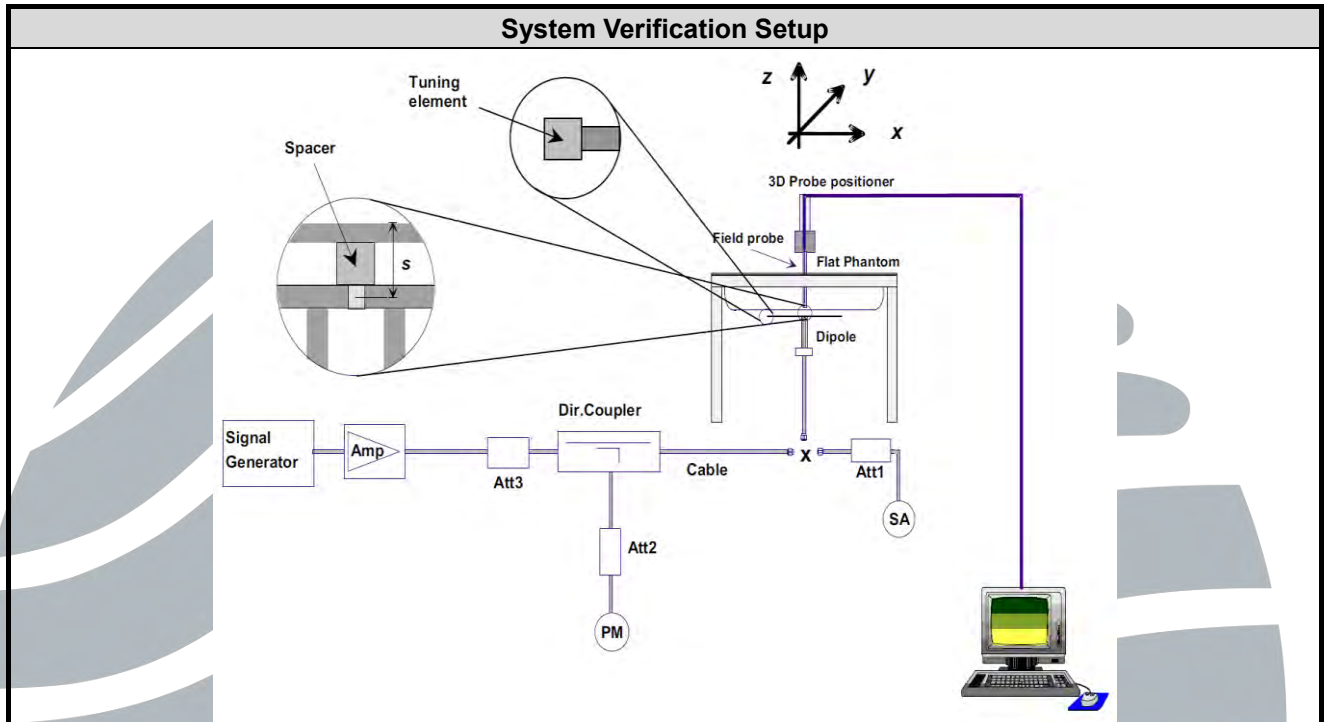
E-mail: info@uttlab.com

<http://www.uttlab.com>

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

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 (%)
May 19, 2026	Head	750	21.3	0.891	41.112	0.90	42.00	-1.00	-2.11
May 23, 2026	Head	750	21.6	0.896	40.590	0.90	42.00	-0.44	-3.36
May 28, 2026	Head	750	21.8	0.901	40.512	0.90	42.00	0.11	-3.54
May 29, 2026	Head	750	21.6	0.869	40.142	0.90	42.00	-3.44	-4.42
May 17, 2026	Head	835	21.7	0.922	40.887	0.90	41.50	2.44	-1.48
Jun. 03, 2026	Head	835	21.9	0.895	41.685	0.90	41.50	-0.56	0.45
Jun. 03, 2026	Head	900	21.9	0.946	40.694	0.97	41.50	-2.47	-1.94
May 16, 2026	Head	1750	21.4	1.325	40.082	1.37	40.10	-3.28	-0.04
Jun. 01, 2026	Head	1750	21.2	1.367	40.752	1.37	40.10	-0.22	1.63
May 18, 2026	Head	1900	21.6	1.404	39.761	1.40	40.00	0.29	-0.60
Jun. 01, 2026	Head	1900	21.2	1.403	39.734	1.40	40.00	0.21	-0.66
Aug. 22, 2026	Head	1900	21.7	1.403	40.019	1.40	40.00	0.21	0.05
May 24, 2026	Head	2450	21.7	1.844	39.408	1.80	39.20	2.44	0.53
May 22, 2026	Head	2600	21.1	2.039	38.932	1.96	39.00	4.03	-0.17
May 27, 2026	Head	2600	21.6	1.989	38.319	1.96	39.00	1.48	-1.75
Aug. 23, 2026	Head	2600	21.4	1.897	39.689	1.96	39.00	-3.21	1.77
May 26, 2026	Head	3500	21.3	2.826	38.461	2.91	37.90	-2.89	1.48
Aug. 21, 2026	Head	3500	21.5	2.917	37.930	2.91	37.90	0.24	0.08
Aug. 20, 2026	Head	3700	21.5	3.123	38.864	3.12	37.70	0.10	3.09
May 25, 2026	Head	5250	21.6	4.561	37.438	4.71	35.90	-3.16	4.28
May 30, 2026	Head	5600	21.7	4.938	36.734	5.07	35.50	-2.60	3.48
May 30, 2026	Head	5800	21.7	5.145	36.469	5.27	35.30	-2.37	3.31

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
May 19, 2026	Head	750	8.60	5.64	2.110	1.390	8.44	5.56	-1.86	-1.42	1066	3090	662
May 23, 2026	Head	750	8.60	5.64	2.100	1.380	8.40	5.52	-2.33	-2.13	1066	3090	662
May 28, 2026	Head	750	8.60	5.64	2.150	1.460	8.60	5.84	0.00	3.55	1066	3090	662
May 29, 2026	Head	750	8.60	5.64	2.080	1.370	8.32	5.48	-3.26	-2.84	1066	3090	662
May 17, 2026	Head	835	9.75	6.32	2.530	1.660	10.12	6.64	3.79	5.06	4d242	3090	662
Jun. 03, 2026	Head	835	9.75	6.32	2.400	1.590	9.60	6.36	-1.54	0.63	4d242	3090	662
Jun. 03, 2026	Head	900	11.00	7.03	2.680	1.750	10.72	7.00	-2.55	-0.43	136	3090	662
May 16, 2026	Head	1750	36.80	19.50	9.070	5.110	36.28	20.44	-1.41	4.82	1086	3090	662
Jun. 01, 2026	Head	1750	36.80	19.50	9.320	4.990	37.28	19.96	1.30	2.36	1086	3090	662
May 18, 2026	Head	1900	40.00	20.90	10.300	5.340	41.20	21.36	3.00	2.20	509	3090	662
Jun. 01, 2026	Head	1900	40.00	20.90	9.930	5.100	39.72	20.40	-0.70	-2.39	509	3090	662
Aug. 22, 2026	Head	1900	40.00	20.90	9.760	5.010	39.04	20.04	-2.40	-4.11	509	3090	662
May 24, 2026	Head	2450	53.70	24.80	13.300	6.160	53.20	24.64	-0.93	-0.65	883	3090	662
May 22, 2026	Head	2600	56.10	24.80	14.500	6.500	58.00	26.00	3.39	4.84	1082	3090	662
May 27, 2026	Head	2600	56.10	24.80	14.600	6.610	58.40	26.44	4.10	6.61	1082	3090	662
Aug. 23, 2026	Head	2600	56.10	24.80	13.600	6.070	54.40	24.28	-3.03	-2.10	1082	7506	662
May 26, 2026	Head	3500	65.10	24.60	6.430	2.530	64.30	25.30	-1.23	2.85	1063	7506	662
Aug. 21, 2026	Head	3500	65.10	24.60	6.310	2.490	63.10	24.90	-3.07	1.22	1063	7506	662
Aug. 20, 2026	Head	3700	67.40	24.70	6.510	2.500	65.10	25.00	-3.41	1.21	1020	7506	662
May 25, 2026	Head	5250	78.60	22.30	8.040	2.330	80.40	23.30	2.29	4.48	1115	7506	662
May 30, 2026	Head	5600	81.90	23.10	7.900	2.230	79.00	22.30	-3.54	-3.46	1115	7506	662
May 30, 2026	Head	5800	78.60	22.00	8.130	2.300	81.30	23.00	3.44	4.55	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, DPCCCH, HS-DPCCCH, E-DPDCH and E-DPCCCH 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

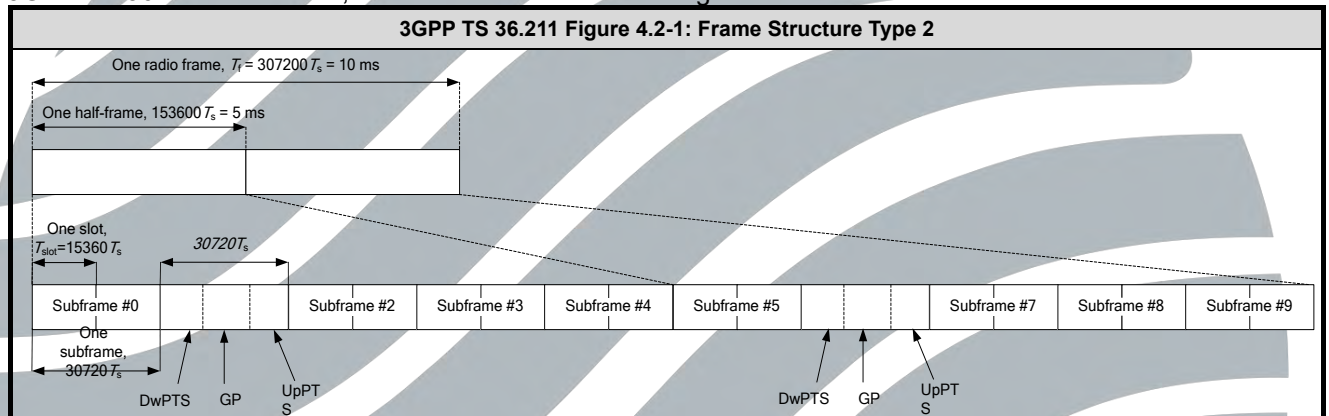
UE power class is category 3. The LTE maximum power reduction (MPR) in accordance with 3GPP TS 36.101 is active all times during LTE operation. The allowed MPR for the maximum output power please refer to the tune up procedure.

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			7680·Ts		
5	6592·Ts	4384·Ts	5120·Ts	20480·Ts	4384·Ts	5120·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 not supports UL CA.

LTE DL CA

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

No.	E-UTRA CA Configuration (2CC)
1	B2A+B4A
2	B2A+B7A
3	B2A+B12A
4	B2A+B17A
5	B4A+B12A
6	B4A+B71A
7	B4A+B17A
8	B5A+B25A
9	B4A+B5A
10	B4A+B12A
11	B2A+B5A
12	B2A+B66A
13	B2A+B12A
14	B2A+B71A
15	B5A+B66A
16	B12A+B66A
17	B12A+B25A
18	B13A+B66A
19	B66A+B71A

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:

EN-DC Combinations		
DC_B2A+N78A	DC_B66A+n5A	DC_B2A+B7A+n78A
DC_B4A+N78A	DC_B5A+n66A	DC_B2A+B66A+n78A
DC_B2A+N12A	DC_B2A+n71AA	DC_B2A+B5A+n78A
DC_B12A+N77A	DC_B66A+n71AA	DC_B2A+B12A+n78A
DC_B13A+N77A	DC_B66A+N12A	DC_B13A+B66A+n77A
DC_B38A+N78A	DC_B12A+N66A	DC_B2A+B13A+n77A
DC_B12A+N78A	DC_B71A+N66A	DC_B2A+B5A+n77A
DC_B25A+N78A	DC_B2A+N71A	DC_B2A+B66A+n77A
DC_B25A+N77A	DC_B66A+N71A	DC_B5A+B66A+n77A
DC_B2A+N5A	DC_12A+n41A	DC_B2A+B66A+n12A
DC_B13A+N66A	DC_B26A+N41A	DC_B7A+B66A+n5A
DC_B5A+N2A	DC_B13A+N2A	DC_B2A+B7A+n71A
DC_B66A+n78A	DC_B48A+N5A	DC_B2A+B66A+n71A
DC_B66A+n77A	DC_B48A+N66A	DC_B2A+B66A+n71AA
		DC_B2A+B66A+n5A

Due to test setup limitations, SAR testing for NR was performed using Factory Test Mode software to establish the connection and perform SAR with 100% transmission.

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. Except for LTE Band 2/7/25 and 5G NR n2/25/38/41/77/78, 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).

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. RFID Configuration and Testing

According to KDB 775926 D01v01, When a SAR test exemption is not permitted or when the criteria of section 3.2.1 cannot be met, SAR testing is required to show device compliance. Scanners that are designed to be held in the hand and do not typically transmit continuously require, at a minimum, SAR testing of extremities. Scanners may also contain other radios connected to omnidirectional antennas that transmit more often. If the scanner contain such other radios, body-worn SAR also needs to be evaluated.

Since the duty cycle adopted by RFID(902-928MHz) in actual use does not exceed 48.37%, the reported value is not extrapolated to 100% in this report.

4.1.7. Bluetooth Configuration and Testing

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

The Bluetooth duty cycle is 77.33% 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 1.08 should be used to calculating the reported SAR.

4.1.8. Device State Index (DSI) description

Usage scenario configuration

DSI	Usage Scenario
DSI-0	SA mode
DSI-1	NSA mode



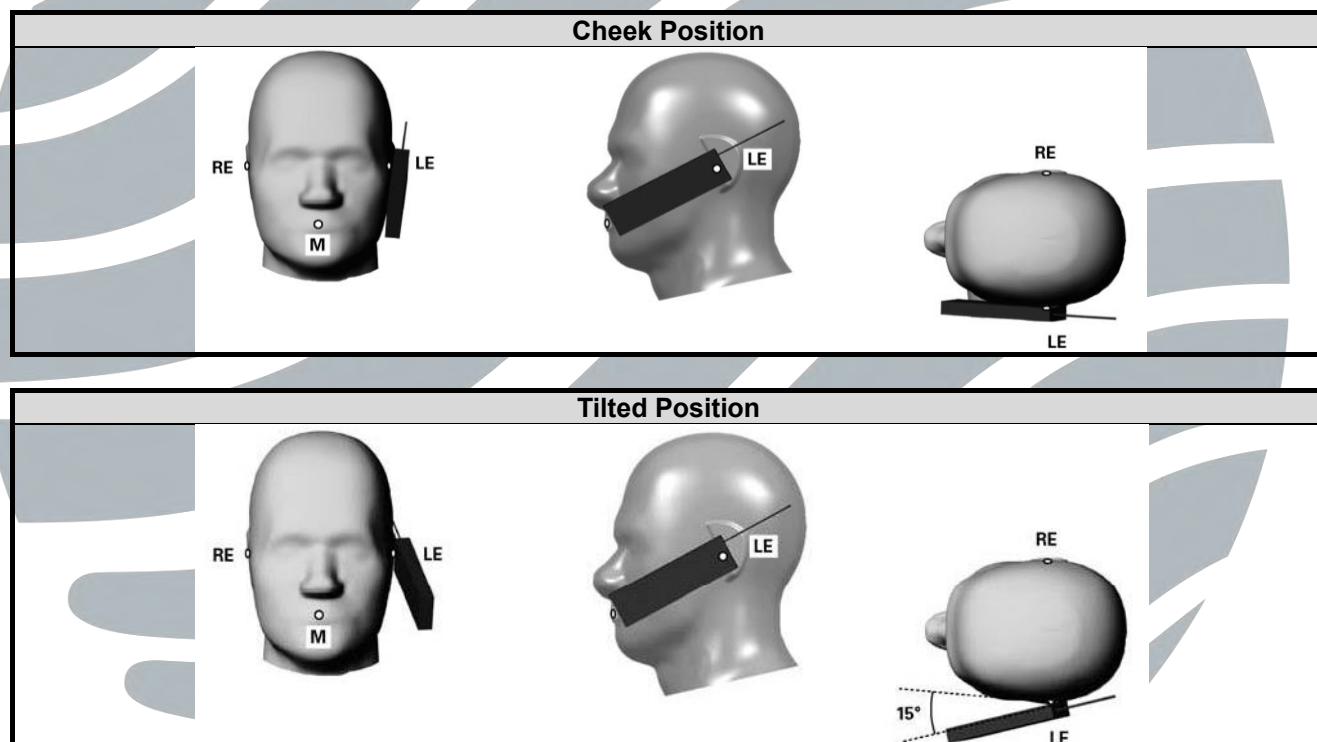
4.2. EUT TESTING POSITION

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		

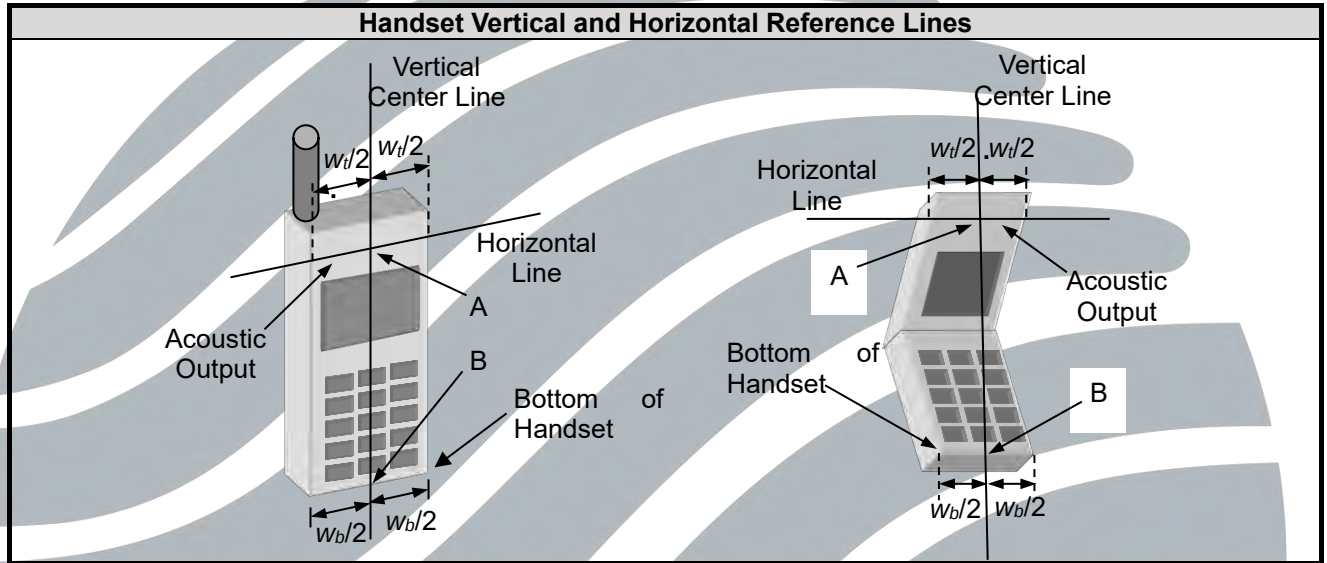
Note:

- 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.

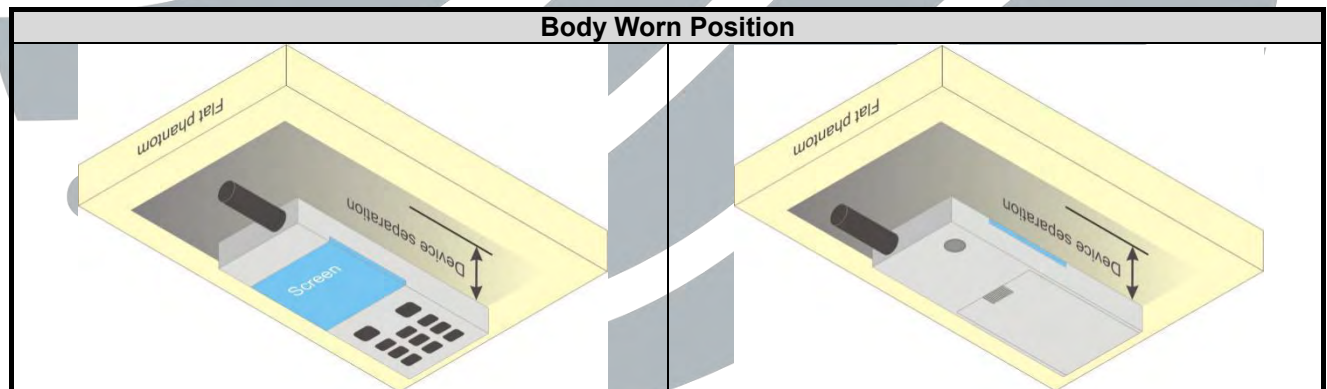


4.2.2. Body-worn Accessory Exposure Conditions

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.

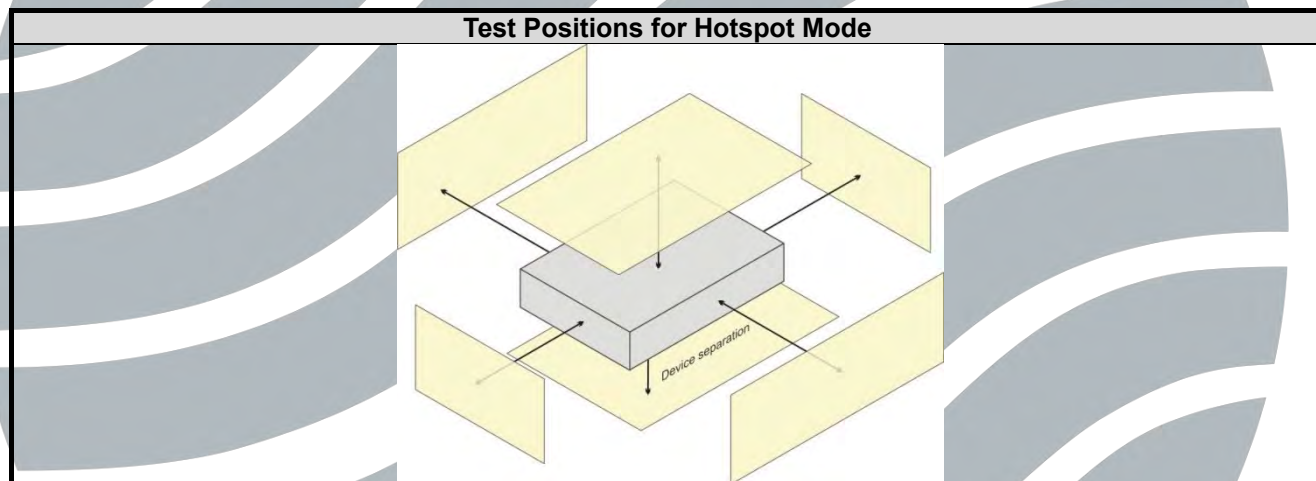


4.2.3. Hotspot Accessory Exposure Conditions

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. MEASURED CONDUCTED POWER RESULT

4.3.1. Conducted Power of GSM Bands

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

Band	GSM 850 (all DSI)			PCS 1900 (all DSI)		
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)	32.25	32.22	31.99	28.01	27.79	28.05
GPRS (GMSK, 1Tx-slot)	32.24	32.14	31.90	28.10	27.77	28.02
GPRS (GMSK, 2Tx-slot)	32.41	31.55	31.38	29.28	29.05	28.95
GPRS (GMSK, 3Tx-slot)	29.87	29.65	30.17	28.41	28.16	28.12
GPRS (GMSK, 4Tx-slot)	29.45	29.21	28.90	26.02	25.72	25.87
EDGE (8PSK, 1Tx-slot)	26.29	26.22	25.73	24.99	24.90	24.70
EDGE (8PSK, 2Tx-slot)	25.54	25.34	25.03	25.14	24.83	24.94
EDGE (8PSK, 3Tx-slot)	23.57	23.33	23.04	23.09	22.82	22.86
EDGE (8PSK, 4Tx-slot)	23.03	22.75	22.42	21.93	21.64	21.83
Maximum Frame-Averaged Output Power						
GSM (GMSK, 1Tx-slot)	23.25	23.22	22.99	19.01	18.79	19.05
GPRS (GMSK, 1Tx-slot)	23.24	23.14	22.90	19.10	18.77	19.02
GPRS (GMSK, 2Tx-slot)	26.41	25.55	25.38	23.28	23.05	22.95
GPRS (GMSK, 3Tx-slot)	25.61	25.39	25.91	24.15	23.90	23.86
GPRS (GMSK, 4Tx-slot)	26.45	26.21	25.90	23.02	22.72	22.87
EDGE (8PSK, 1Tx-slot)	17.29	17.22	16.73	15.99	15.90	15.70
EDGE (8PSK, 2Tx-slot)	19.54	19.34	19.03	19.14	18.83	18.94
EDGE (8PSK, 3Tx-slot)	19.31	19.07	18.78	18.83	18.56	18.60
EDGE (8PSK, 4Tx-slot)	20.03	19.75	19.42	18.93	18.64	18.83

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)

4.3.2. 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 (all DSI)		
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	22.07	21.90	22.09	23.92	23.85	23.79	21.86	22.03	22.20
HSDPA Subtest-1	21.04	20.84	21.07	22.98	22.84	22.78	20.94	21.00	21.21
HSDPA Subtest-2	20.59	20.40	20.56	22.42	22.30	22.29	20.41	20.52	20.74
HSDPA Subtest-3	20.51	20.36	20.61	22.45	22.36	22.31	20.39	20.51	20.70
HSDPA Subtest-4	20.51	20.40	20.58	22.47	22.38	22.31	20.35	20.48	20.71
HSUPA Subtest-1	21.01	20.85	21.11	22.94	22.85	22.80	20.81	21.07	21.20
HSUPA Subtest-2	19.02	18.82	19.06	20.92	20.84	20.78	18.87	19.03	19.16
HSUPA Subtest-3	20.00	19.85	19.97	21.98	21.84	21.73	19.90	20.02	20.20
HSUPA Subtest-4	19.00	18.83	19.07	20.94	20.88	20.68	18.97	19.03	19.15
HSUPA Subtest-5	21.00	20.85	21.09	22.97	22.89	22.78	20.83	20.96	21.19

4.3.3. Conducted Power of LTE Bands

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

➤ LTE Band 7 (DSI-0)

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	21.83	22.03	22.56	20.77	21.14	21.42	20.41	21.29	21.64	17.79	17.89	18.52
		1RB#12	21.65	21.94	22.38	20.71	21.13	21.47	20.49	21.51	21.57	17.92	18.13	18.69
		1RB#24	21.74	22.00	22.49	20.73	21.05	21.44	19.63	19.79	20.44	17.79	18.03	18.39
		12RB#0	20.75	20.92	21.52	19.71	19.99	20.55	19.67	19.81	20.45	17.51	17.77	18.40
		12RB#6	20.77	21.01	21.57	19.80	20.03	20.59	19.66	19.91	20.49	17.57	17.90	18.44
		12RB#13	20.73	20.99	21.53	19.77	20.05	20.50	19.63	19.82	20.43	17.54	17.88	18.47
		25RB#0	20.74	20.99	21.53	19.70	19.99	20.56	19.63	19.79	20.50	17.59	17.88	18.46
7	10	20800	21100	21400	20800	21100	21400	20800	21100	21400	20800	21100	21400	
		2505	2535	2565	2505	2535	2565	2505	2535	2565	2505	2535	2565	
		1RB#0	21.72	22.03	22.44	20.81	20.91	21.25	20.14	20.61	21.46	17.47	17.52	17.73
		1RB#24	21.76	22.07	22.49	20.67	21.12	21.53	20.37	20.84	21.72	17.42	18.08	18.19
		1RB#49	21.72	22.09	22.32	20.76	21.04	21.23	19.52	19.91	20.39	17.49	17.69	17.95
		25RB#0	20.87	20.97	21.48	19.76	19.97	20.50	19.50	19.85	20.36	17.48	17.83	18.33
		25RB#12	20.74	21.06	21.52	19.82	20.08	20.55	19.52	19.94	20.40	17.55	17.97	18.49
7	15	25RB#25	20.78	21.08	21.57	19.73	20.02	20.61	19.53	19.91	20.38	17.44	17.90	18.44
		50RB#0	20.70	20.96	21.45	19.67	19.97	20.46	19.52	19.85	20.37	17.56	17.90	18.31
		20825	21100	21375	20825	21100	21375	20825	21100	21375	20825	21100	21375	
		2507.5	2535	2562.5	2507.5	2535	2562.5	2507.5	2535	2562.5	2507.5	2535	2562.5	
		1RB#0	21.63	21.73	22.21	20.70	20.92	21.12	20.24	20.72	21.25	17.19	17.47	17.74
		1RB#38	21.59	21.94	22.34	20.55	20.83	21.40	20.33	20.89	21.59	17.33	17.93	18.01
		1RB#74	21.56	21.72	22.21	20.71	21.14	21.15	19.41	19.77	20.19	17.43	17.81	17.90
7	20	38RB#0	20.62	20.84	21.30	20.63	20.85	21.31	19.41	19.75	20.27	19.48	19.76	20.22
		38RB#18	20.68	20.84	21.41	19.70	19.87	20.35	19.50	19.72	20.31	17.53	17.74	18.25
		38RB#37	20.63	20.83	21.27	20.61	20.80	21.25	19.49	19.64	20.30	19.42	19.68	20.33
		75RB#0	20.67	20.82	21.25	19.60	19.88	20.33	19.46	19.65	20.34	17.43	17.74	18.23
		20850	21100	21350	20850	21100	21350	20850	21100	21350	20850	21100	21350	
		2510	2535	2560	2510	2535	2560	2510	2535	2560	2510	2535	2560	
		1RB#0	21.63	21.87	22.58	20.62	21.01	21.01	20.86	20.84	20.80	17.05	17.66	17.82
7	20	1RB#49	21.47	21.83	22.41	20.55	20.98	21.17	20.36	21.12	20.84	17.48	17.80	18.23
		1RB#99	21.62	21.94	22.36	20.59	21.06	21.13	19.37	19.77	20.12	17.30	17.81	18.02
		50RB#0	20.63	20.91	21.19	19.62	19.87	20.25	19.38	19.80	20.11	17.33	17.72	18.05
		50RB#25	20.66	20.95	21.34	19.64	19.97	20.37	19.47	19.83	20.34	17.48	17.82	18.31
		50RB#50	20.65	20.94	21.32	19.65	19.96	20.42	19.38	19.77	20.11	17.42	18.23	18.19
		100RB#0	20.62	20.88	21.21	19.60	19.83	20.18	19.37	19.79	20.09	17.44	18.02	18.14

➤ **LTE Band 7 (DSI-1)**

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	18.73	18.93	19.43	17.67	18.01	18.37	17.31	18.13	18.59	14.77	14.81	15.39
		1RB#12	18.49	18.76	19.22	17.53	17.97	18.37	17.33	18.43	18.46	14.84	15.06	15.67
		1RB#24	18.61	18.90	19.31	17.71	17.97	18.34	16.50	16.63	17.31	14.63	14.90	15.29
		12RB#0	17.65	17.90	18.45	16.58	16.81	17.47	16.56	16.68	17.34	14.35	14.72	15.24
		12RB#6	17.75	17.99	18.47	16.67	17.01	17.46	16.53	16.83	17.38	14.52	14.85	15.39
		12RB#13	17.60	17.94	18.42	16.70	16.95	17.45	16.50	16.74	17.33	14.36	14.77	15.42
		25RB#0	17.56	17.91	18.48	16.57	16.83	17.43	16.52	16.77	17.39	14.54	14.75	15.41
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	18.62	18.90	19.26	17.65	17.81	18.23	17.04	17.48	18.33	14.31	14.34	14.65
		1RB#24	18.71	18.97	19.36	17.57	18.04	18.51	17.32	17.79	18.59	14.40	15.03	15.08
		1RB#49	18.61	19.02	19.27	17.65	17.93	18.05	16.50	16.80	17.26	14.41	14.67	14.84
		25RB#0	17.82	17.86	18.32	16.60	16.87	17.40	16.37	16.75	17.29	14.30	14.70	15.17
		25RB#12	17.64	17.90	18.41	16.69	16.92	17.48	16.34	16.89	17.29	14.44	14.86	15.39
		25RB#25	17.67	17.95	18.47	16.60	16.97	17.48	16.42	16.83	17.20	14.37	14.72	15.37
		50RB#0	17.62	17.86	18.32	16.57	16.79	17.28	16.47	16.72	17.21	14.46	14.80	15.29
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	18.50	18.63	19.11	17.52	17.79	18.04	17.19	17.67	18.14	14.06	14.40	14.58
		1RB#38	18.46	18.83	19.27	17.50	17.81	18.22	17.28	17.81	18.48	14.17	14.91	14.85
		1RB#74	18.45	18.67	19.10	17.60	18.07	17.99	16.39	16.66	17.03	14.33	14.65	14.83
		38RB#0	17.51	17.66	18.12	17.61	17.67	18.23	16.36	16.59	17.14	16.35	16.71	17.14
		38RB#18	17.61	17.71	18.34	16.60	16.74	17.24	16.40	16.67	17.15	14.45	14.69	15.17
		38RB#37	17.47	17.73	18.22	17.53	17.64	18.17	16.33	16.51	17.19	16.34	16.55	17.25
		75RB#0	17.51	17.66	18.12	16.47	16.80	17.31	16.36	16.52	17.18	14.33	14.64	15.12
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	18.56	18.71	19.51	17.60	17.90	17.91	17.73	17.74	17.64	13.97	14.53	14.69
		1RB#49	18.39	18.70	19.34	17.42	17.85	18.15	17.20	18.05	17.74	14.37	14.67	15.10
		1RB#99	18.51	18.89	19.31	17.46	18.01	18.00	16.21	16.75	17.04	14.25	14.68	15.00
		50RB#0	17.50	17.83	18.09	16.52	16.77	17.23	16.20	16.73	16.98	14.23	14.64	14.89
		50RB#25	17.61	17.82	18.26	16.59	16.84	17.21	16.31	16.70	17.26	14.35	14.69	15.18
		50RB#50	17.58	17.87	18.16	16.52	16.86	17.40	16.22	16.64	17.09	14.37	15.15	15.08
		100RB#0	17.46	17.86	18.16	16.52	16.73	17.16	16.24	16.68	16.99	14.31	14.92	14.96

➤ **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	22.66	22.67	22.79	21.53	21.76	21.66	21.59	21.00	21.41	18.21	18.26	17.97
		1RB#2	22.59	22.59	22.80	21.59	21.88	21.94	20.14	21.26	21.66	18.17	18.49	18.26
		1RB#5	22.56	22.60	22.67	21.46	21.63	21.63	20.18	20.17	20.17	18.03	18.19	18.11
		3RB#0	22.66	22.64	22.71	21.51	21.48	21.60	20.18	20.20	20.15	18.07	17.92	18.07
		3RB#1	22.74	22.71	22.73	21.60	21.72	21.66	21.19	20.88	21.29	18.15	17.95	18.12
		3RB#3	22.56	22.58	22.65	21.45	21.57	21.67	20.06	20.19	20.08	18.05	18.01	18.04
		6RB#0	21.67	21.80	21.75	20.63	20.72	20.61	20.05	20.15	20.04	18.10	18.24	18.20
12	3	23025	23095	23165	23025	23095	23165	23025	23095	23165	23025	23095	23165	23025
		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	700.5 MHz
		1RB#0	22.66	22.82	22.84	21.79	21.70	21.61	21.11	20.97	21.41	18.33	18.26	18.08
		1RB#8	22.73	22.81	22.91	21.72	22.00	21.81	20.23	21.30	21.64	18.21	18.55	18.08
		1RB#14	22.58	22.75	22.76	21.73	21.62	21.61	20.22	20.24	20.24	18.26	18.26	17.98
		8RB#0	21.80	21.75	21.89	20.78	20.74	20.93	20.19	20.26	20.23	18.30	18.10	18.33
		8RB#4	21.80	21.86	21.88	20.81	20.79	20.73	20.25	20.24	20.29	18.21	18.26	18.35
12	5	8RB#7	21.73	21.78	21.81	20.74	20.79	20.88	20.20	20.24	20.19	18.15	18.14	18.32
		15RB#0	21.79	21.77	21.82	20.75	20.67	20.64	20.23	20.24	20.20	18.29	18.24	18.21
		23035	23095	23155	23035	23095	23155	23035	23095	23155	23035	23095	23155	23035
		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	701.5 MHz
		1RB#0	22.76	22.75	22.82	21.71	21.97	21.86	20.85	21.61	21.44	18.43	18.29	18.28
		1RB#12	22.61	22.73	22.67	21.62	21.74	21.82	20.36	21.86	21.36	18.49	18.55	18.49
		1RB#24	22.67	22.80	22.79	21.76	22.00	21.68	20.21	20.16	20.26	18.35	18.45	18.37
12	10	12RB#0	21.72	21.79	21.79	20.73	20.83	20.83	20.23	20.11	20.21	18.23	18.23	18.23
		12RB#6	21.78	21.80	21.83	20.83	20.80	20.79	20.39	20.31	20.29	18.27	18.25	18.28
		12RB#13	21.75	21.83	21.83	20.74	20.84	20.84	20.20	20.11	20.21	18.22	18.26	18.29
		25RB#0	21.79	21.78	21.80	20.77	20.75	20.86	20.19	20.11	20.30	18.23	18.20	18.22
		23060	23095	23130	23060	23095	23130	23060	23095	23130	23060	23095	23130	23060
		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	704 MHz
		1RB#0	22.67	22.72	22.74	21.84	21.64	21.59	21.03	21.05	21.08	18.39	18.12	18.18
12	10	1RB#24	22.69	22.76	22.70	21.68	21.85	21.78	20.32	21.25	21.20	18.17	18.19	18.38
		1RB#49	22.72	22.92	22.71	21.90	21.65	21.52	20.28	20.23	20.30	18.57	18.56	18.32
		25RB#0	21.80	21.83	21.82	20.78	20.82	20.86	20.33	20.26	20.33	18.28	18.31	18.31
		25RB#12	21.82	21.74	21.80	20.89	20.84	20.84	20.34	20.30	20.37	18.33	18.25	18.35
		25RB#25	21.81	21.81	21.83	20.79	20.89	20.91	20.30	20.25	20.32	18.29	18.36	18.38
		50RB#0	21.82	21.76	21.82	20.84	20.77	20.83	20.31	20.29	20.31	18.33	18.30	18.31

➤ **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	23.00	22.99	22.99	21.96	21.97	22.06	21.69	21.42	21.15	18.67	18.78	18.77
		1RB#12	22.83	22.82	22.92	21.99	21.79	21.93	21.60	21.55	21.51	18.69	18.73	18.58
		1RB#24	22.95	22.96	22.87	21.95	22.00	21.91	20.55	21.60	20.50	18.60	18.52	18.72
		12RB#0	22.01	21.99	21.91	21.10	21.00	21.04	20.60	20.43	20.50	18.55	18.46	18.46
		12RB#6	22.06	22.01	22.01	21.00	21.01	21.05	20.59	20.48	20.42	18.60	18.48	18.49
		12RB#13	21.97	22.01	21.94	21.05	20.97	21.01	20.67	20.48	20.48	18.50	18.48	18.45
		25RB#0	22.07	21.94	21.90	21.11	20.99	20.89	20.58	20.54	20.50	18.59	18.51	18.54
Band	Bandwidth	RB	23230			23230			23230			23230		
	(MHz)		782 MHz			782 MHz			782 MHz			782 MHz		
13	10	1RB#0		23.03			22.18			21.23			18.81	
		1RB#24		22.90			21.96			21.25			18.34	
		1RB#49		22.89			22.02			20.61			18.66	
		25RB#0		22.03			21.10			20.62			18.61	
		25RB#12		22.09			21.01			20.55			18.53	
		25RB#25		22.06			20.96			20.60			18.51	
		50RB#0		22.09			21.12			20.65			18.68	

➤ **LTE Band 14 (All DSI)**

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth	RB	23305	23330	23355	23305	23330	23355	23305	23330	23355	23305	23330	23355
	(MHz)		790.5 MHz	793 MHz	795.5 MHz	790.5 MHz	793 MHz	795.5 MHz	790.5 MHz	793 MHz	795.5 MHz	790.5 MHz	793 MHz	795.5 MHz
14	5	1RB#0	23.06	23.04	23.10	22.06	22.15	22.03	21.39	21.93	21.63	18.68	18.58	18.51
		1RB#12	22.86	22.97	22.80	21.88	22.07	21.99	21.43	22.10	21.57	18.81	18.87	18.72
		1RB#24	23.01	22.97	22.96	22.02	22.15	21.95	20.62	20.30	20.51	18.78	18.65	18.51
		12RB#0	22.12	22.05	21.96	21.07	21.10	21.07	20.62	20.38	20.45	18.63	18.48	18.45
		12RB#6	22.14	22.08	22.02	21.10	21.12	21.01	20.68	20.59	20.51	18.59	18.52	18.49
		12RB#13	22.00	22.04	21.98	20.96	21.10	21.05	20.68	20.45	20.50	18.54	18.49	18.47
		25RB#0	22.09	21.97	21.98	21.07	20.99	21.04	20.65	20.38	20.41	18.54	18.39	18.47
Band	Bandwidth	RB	23330			23330			23330			23330		
	(MHz)		793			793			793			793		
14	10	1RB#0		23.12			22.14			21.22			18.61	
		1RB#24		23.03			22.03			21.40			18.38	
		1RB#49		22.94			22.04			20.48			18.69	
		25RB#0		22.05			21.08			20.49			18.52	
		25RB#12		22.08			21.10			20.49			18.47	
		25RB#25		22.05			21.05			20.49			18.57	
		50RB#0		22.11			21.03			20.53			18.53	

➤ **LTE Band 25 (DSI-0)**

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	BW	RB	26047	26365	26683	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	1850.7 MHz	1882.5 MHz	1914.3 MHz
25	1.4	1RB#0	23.03	22.85	23.08	21.83	21.75	22.10	21.07	21.09	20.82	17.90	17.84	18.01
		1RB#2	23.07	22.87	23.16	22.12	21.91	22.32	19.77	20.89	21.07	17.77	17.78	18.24
		1RB#5	23.05	22.93	23.07	21.87	21.76	22.02	19.85	19.71	19.95	17.74	17.72	18.05
		3RB#0	22.98	22.95	23.15	21.98	21.80	21.92	19.75	19.68	19.93	17.63	17.68	17.83
		3RB#1	22.95	22.94	23.23	21.95	22.03	22.20	21.01	20.85	20.82	17.81	17.59	17.67
		3RB#3	23.01	22.94	23.07	21.91	21.77	22.00	19.66	19.65	19.91	17.64	17.72	17.80
		6RB#0	21.98	21.90	22.23	20.87	20.98	21.16	19.76	19.76	19.95	17.75	17.78	18.03
Band	BW	RB	26055	26365	26675	26055	26365	26675	26055	26365	26675	26055	26365	26675
	(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	1851.5 MHz	1882.5 MHz	1913.5 MHz
25	3	1RB#0	23.08	23.15	23.29	22.27	22.01	21.99	20.73	20.68	20.89	17.98	17.91	18.17
		1RB#8	23.14	23.07	23.25	22.10	22.21	22.28	19.88	20.90	21.16	17.87	18.12	18.42
		1RB#14	23.06	23.08	23.28	22.09	21.85	22.05	19.87	19.91	20.09	17.94	17.89	18.10
		8RB#0	22.10	22.04	22.34	21.07	21.04	21.31	19.89	19.90	20.09	17.79	17.78	17.96
		8RB#4	22.17	22.05	22.31	21.09	21.03	21.19	19.95	19.82	20.03	17.76	17.80	18.03
		8RB#7	22.11	22.08	22.26	21.12	21.06	21.35	19.87	19.88	20.12	17.93	17.80	17.97
		15RB#0	22.12	22.07	22.30	21.17	20.95	21.23	19.87	19.87	20.12	17.92	17.89	18.08
Band	BW	RB	26065	26365	26665	26065	26365	26665	26065	26365	26665	26065	26365	26665
	(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	1852.5 MHz	1882.5 MHz	1912.5 MHz
25	5	1RB#0	23.15	23.13	23.40	22.11	22.10	22.25	20.83	21.39	21.25	18.21	18.04	18.19
		1RB#12	22.96	22.94	23.11	21.88	22.02	22.26	20.04	21.45	21.01	18.18	18.12	18.34
		1RB#24	23.15	23.09	23.31	22.05	22.21	22.29	20.00	19.86	20.20	18.22	18.07	18.39
		12RB#0	22.16	22.13	22.29	21.07	21.13	21.35	20.04	19.85	20.17	17.92	17.89	18.11
		12RB#6	22.15	22.08	22.32	21.15	21.12	21.28	20.01	19.99	20.15	17.92	17.85	18.07
		12RB#13	22.12	22.10	22.33	21.10	21.16	21.30	20.01	19.85	20.19	17.94	17.88	18.05
		25RB#0	22.11	22.10	22.29	21.10	21.03	21.33	20.03	19.82	20.17	17.90	17.88	18.07
Band	BW	RB	26090	26365	26640	26090	26365	26640	26090	26365	26640	26090	26365	26640
	(MHz)		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	23.03	23.06	23.16	22.13	21.96	22.05	20.70	20.70	20.77	18.02	17.89	17.92
		1RB#24	23.07	23.00	23.24	21.99	22.11	22.29	19.89	20.81	21.01	17.76	18.03	18.24
		1RB#49	22.98	23.02	23.22	22.05	21.89	22.11	19.89	19.96	20.06	17.93	17.80	18.03
		25RB#0	22.16	22.13	22.26	21.13	21.16	21.28	19.87	19.95	20.05	18.01	17.95	18.07
		25RB#12	22.08	22.13	22.28	21.11	21.16	21.32	19.90	19.95	20.05	17.89	17.95	18.01
		25RB#25	22.11	22.17	22.35	21.06	21.18	21.36	19.89	19.94	20.08	17.81	17.95	18.10
50RB#0	22.10	22.15	22.25	21.08	21.17	21.24	19.88	19.96	20.07	17.94	17.99	18.07		
Band	BW	RB	26115	26365	26615	26115	26365	26615	26115	26365	26615	26115	26365	26615
	(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	1857.5 MHz	1882.5 MHz	1907.5 MHz
25	15	1RB#0	22.94	22.80	23.00	22.02	22.07	21.89	20.67	20.88	20.97	17.89	17.88	17.63
		1RB#38	22.90	22.89	23.03	21.85	21.88	22.05	19.83	20.81	21.09	17.62	17.94	17.52
		1RB#74	22.86	22.71	22.99	21.96	22.01	21.89	19.85	19.85	19.94	17.71	17.76	17.70
		38RB#0	22.00	21.96	22.09	22.04	21.98	22.16	19.84	19.83	19.95	19.85	19.83	19.89
		38RB#18	22.01	21.95	22.10	21.01	20.99	21.11	19.89	19.81	19.92	17.83	17.79	17.96
		38RB#37	22.01	21.98	22.14	21.97	21.99	22.14	19.83	19.76	19.88	19.90	19.76	19.93
		75RB#0	22.02	21.94	22.10	21.05	20.99	21.10	19.89	19.76	19.93	17.83	17.80	17.91
Band	BW	RB	26140	26365	26590	26140	26365	26590	26140	26365	26590	26140	26365	26590
	(MHz)		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	22.93	22.96	23.45	21.91	22.09	21.88	20.89	21.07	20.60	17.92	18.12	17.90
		1RB#49	22.79	22.78	23.27	21.90	21.99	22.01	19.74	21.01	20.42	17.85	18.00	17.88
		1RB#99	22.91	22.92	23.31	21.83	22.10	21.87	19.78	19.86	20.03	17.79	18.13	18.02
		50RB#0	22.03	21.96	22.06	21.01	21.00	21.14	19.73	19.86	19.96	17.83	17.87	17.90
		50RB#25	21.96	22.01	22.20	20.92	21.08	21.22	19.79	19.81	20.00	17.80	17.82	17.98
		50RB#50	21.90	21.97	22.14	20.87	20.99	21.22	19.77	19.84	20.03	17.75	17.88	17.95
		100RB#0	21.94	21.96	22.19	20.92	21.01	21.22	19.78	19.91	19.99	17.77	17.82	17.99

➤ LTE Band 25 (DSI-1)

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	20.03	19.77	19.97	18.67	18.70	19.10	17.96	18.09	17.76	14.87	14.79	15.01
		1RB#2	20.02	19.84	20.10	19.01	18.75	19.29	16.71	17.86	17.99	14.69	14.72	15.10
		1RB#5	20.05	19.88	19.93	18.73	18.68	18.91	16.79	16.60	16.95	14.65	14.66	15.00
		3RB#0	19.82	19.87	20.01	18.92	18.72	18.78	16.69	16.54	16.88	14.58	14.57	14.75
		3RB#1	19.89	19.80	20.14	18.84	18.89	19.12	17.96	17.80	17.79	14.75	14.48	14.58
		3RB#3	19.96	19.86	20.01	18.77	18.74	18.86	16.50	16.54	16.77	14.59	14.61	14.69
		6RB#0	18.89	18.79	19.12	17.78	17.92	18.13	16.62	16.65	16.95	14.67	14.69	14.92
25	3	26055	26365	26675	26055	26365	26675	26055	26365	26675	26055	26365	26675	26055
		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	1851.5 MHz
		1RB#0	20.05	20.06	20.29	19.18	18.92	18.90	17.59	17.68	17.84	14.82	14.80	15.01
		1RB#8	20.03	19.93	20.16	19.01	19.18	19.22	16.74	17.85	18.10	14.76	15.04	15.26
		1RB#14	19.97	19.97	20.12	18.98	18.85	18.89	16.76	16.85	17.03	14.91	14.78	14.99
		8RB#0	19.02	18.96	19.28	18.01	17.96	18.20	16.78	16.74	16.98	14.68	14.72	14.87
		8RB#4	19.14	18.89	19.26	18.03	17.92	18.14	16.84	16.76	16.87	14.71	14.80	14.94
25	5	8RB#7	19.03	19.05	19.20	18.04	18.06	18.26	16.76	16.88	17.01	14.79	14.72	14.88
		15RB#0	19.03	19.01	19.16	18.09	17.86	18.18	16.76	16.73	17.09	14.89	14.81	15.08
		26065	26365	26665	26065	26365	26665	26065	26365	26665	26065	26365	26665	26065
		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	1852.5 MHz
		1RB#0	20.04	19.97	20.19	19.00	19.04	19.17	17.80	18.31	18.16	15.21	14.90	15.11
		1RB#12	19.90	19.85	20.06	18.77	18.91	19.10	17.04	18.42	17.95	15.15	15.07	15.25
		1RB#24	20.06	20.09	20.20	18.96	19.18	19.15	16.97	16.80	17.12	15.11	15.04	15.36
25	10	12RB#0	19.13	19.10	19.15	17.99	18.02	18.27	16.98	16.77	17.14	14.92	14.78	15.08
		12RB#6	19.10	19.02	19.27	18.01	18.01	18.22	16.96	16.91	16.99	14.83	14.79	15.01
		12RB#13	19.09	19.02	19.22	18.02	18.07	18.19	16.90	16.77	17.13	14.83	14.83	14.91
		25RB#0	18.95	19.07	19.15	18.02	17.89	18.25	16.97	16.71	17.06	14.76	14.79	15.04
		26090	26365	26640	26090	26365	26640	26090	26365	26640	26090	26365	26640	26090
		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	1855 MHz
		1RB#0	19.95	20.03	20.02	19.04	18.85	18.96	17.65	17.59	17.66	14.86	14.86	14.81
25	15	1RB#24	20.02	19.86	20.15	18.88	19.06	19.18	16.80	17.81	17.95	14.73	14.95	15.18
		1RB#49	19.95	19.88	20.13	18.94	18.75	19.03	16.73	16.93	17.03	14.82	14.80	14.92
		25RB#0	19.13	19.10	19.20	18.04	18.13	18.20	16.71	16.86	17.05	15.01	14.81	15.01
		25RB#12	19.00	19.07	19.28	18.06	18.10	18.29	16.79	16.87	16.99	14.75	14.90	14.96
		25RB#25	19.02	19.06	19.24	17.98	18.04	18.27	16.80	16.80	17.03	14.72	14.89	15.02
		50RB#0	19.04	19.01	19.20	17.92	18.14	18.13	16.85	16.85	16.96	14.80	14.90	14.96
		26115	26365	26615	26115	26365	26615	26115	26365	26615	26115	26365	26615	26115
25	20	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	1857.5 MHz
		1RB#0	19.85	19.69	19.84	18.91	18.93	18.73	17.59	17.79	17.83	14.78	14.82	14.55
		1RB#38	19.74	19.86	19.87	18.76	18.74	19.02	16.77	17.75	17.95	14.51	14.83	14.46
		1RB#74	19.75	19.65	19.91	18.85	18.92	18.86	16.77	16.74	16.85	14.57	14.60	14.56
		38RB#0	18.97	18.93	19.09	18.93	18.92	19.02	16.73	16.83	16.81	16.77	16.77	16.89
		38RB#18	18.98	18.81	19.02	17.85	17.91	18.05	16.75	16.75	16.89	14.72	14.68	14.82
		38RB#37	18.92	18.95	19.03	18.91	18.93	19.05	16.83	16.60	16.88	16.79	16.60	16.90
25	25	75RB#0	18.96	18.78	19.10	18.00	17.88	18.07	16.89	16.65	16.87	14.80	14.77	14.75
		26140	26365	26590	26140	26365	26590	26140	26365	26590	26140	26365	26590	26140
		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	1860 MHz
		1RB#0	19.84	19.87	20.36	18.85	18.95	18.72	17.78	17.93	17.46	14.89	15.09	14.87
		1RB#49	19.73	19.75	20.16	18.87	18.91	18.85	16.65	17.93	17.39	14.82	14.97	14.72
		1RB#99	19.80	19.81	20.22	18.72	18.99	18.71	16.70	16.81	16.95	14.73	15.02	14.96
		50RB#0	18.94	18.90	19.00	17.98	17.97	18.09	16.70	16.83	16.91	14.69	14.81	14.84
25	25	50RB#25	18.88	18.90	19.10	17.92	18.02	18.08	16.73	16.75	16.92	14.77	14.68	14.89
		50RB#50	18.85	18.86	19.08	17.87	17.88	18.14	16.69	16.76	17.00	14.64	14.88	14.87
		100RB#0	18.91	18.90	19.08	17.81	17.95	18.13	16.64	16.77	16.91	14.77	14.76	14.88

➤ **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	22.92	23.15	23.28	21.77	21.98	22.26	20.59	21.22	21.63	17.91	17.91	18.35
		1RB#2	22.95	23.18	23.30	21.98	22.36	22.49	20.82	21.24	21.34	18.08	18.11	17.96
		1RB#5	22.92	23.18	23.27	21.75	22.01	22.26	19.79	19.91	20.08	17.96	18.07	17.95
		3RB#0	23.00	23.05	23.32	21.81	22.05	22.20	19.84	19.88	20.07	17.66	17.81	18.14
		3RB#1	23.02	23.19	23.35	21.93	22.23	22.32	20.75	21.18	21.28	17.69	18.08	18.12
		3RB#3	22.90	23.06	23.27	21.81	22.09	22.23	19.88	19.96	20.12	17.65	17.96	18.08
		6RB#0	22.03	22.12	22.43	20.96	20.99	21.37	19.81	19.89	20.12	17.89	17.92	18.24
26	3	27025	26915	27025	27025	26915	27025	27025	26915	27025	27025	26915	27025	27025
		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	847.5 MHz
		1RB#0	23.08	23.26	23.32	21.86	22.18	22.52	21.09	20.84	21.13	17.68	18.09	18.36
		1RB#8	23.12	23.25	23.37	22.13	22.44	22.47	21.28	21.22	21.26	17.64	18.45	18.41
		1RB#14	23.00	23.23	23.34	21.82	22.01	22.38	19.88	20.09	20.30	17.68	18.12	18.37
		8RB#0	22.07	22.21	22.49	21.07	21.18	21.48	19.87	20.08	20.31	17.97	17.96	18.31
		8RB#4	22.12	22.20	22.49	20.97	21.16	21.47	19.93	20.05	20.38	17.97	18.04	18.27
26	5	8RB#7	22.09	22.25	22.48	21.10	21.23	21.46	19.87	20.10	20.33	18.02	17.98	18.32
		15RB#0	22.11	22.21	22.45	21.03	21.13	21.55	19.85	20.11	20.34	17.92	18.08	18.38
		26715	26915	27015	26715	26915	27015	26715	26915	27015	26715	26915	27015	27015
		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	846.5 MHz
		1RB#0	23.13	23.22	23.39	22.03	22.39	22.34	21.13	21.49	20.92	17.99	18.09	18.48
		1RB#12	22.82	23.20	23.34	22.02	22.46	22.29	21.02	21.68	21.29	18.29	18.39	18.46
		1RB#24	23.05	23.19	23.33	22.01	22.40	22.29	19.95	19.98	20.40	17.96	18.20	18.58
26	10	12RB#0	22.10	22.14	22.43	21.07	21.19	21.43	19.94	19.98	20.41	17.92	18.07	18.33
		12RB#6	22.15	22.22	22.49	21.11	21.28	21.48	20.03	20.18	20.46	17.96	18.10	18.36
		12RB#13	22.10	22.19	22.45	21.12	21.30	21.39	19.95	19.95	20.41	17.94	18.08	18.31
		25RB#0	22.10	22.19	22.46	21.15	21.16	21.42	19.91	19.94	20.40	17.95	17.99	18.28
		26740	26915	26990	26740	26915	26990	26740	26915	26990	26740	26915	26990	26990
		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	844 MHz
		1RB#0	23.17	23.26	23.40	21.94	22.16	22.50	21.22	20.96	21.16	17.34	17.80	18.10
26	15	1RB#24	23.08	23.23	23.29	22.10	22.28	22.31	21.22	21.12	21.09	17.72	18.32	18.14
		1RB#49	22.98	23.17	23.28	21.88	22.03	22.44	19.90	20.00	20.27	17.49	17.85	18.19
		25RB#0	21.98	22.14	22.31	20.98	21.16	21.29	19.86	20.04	20.24	17.90	17.95	18.21
		25RB#12	22.06	22.18	22.42	21.10	21.19	21.43	19.92	20.06	20.34	18.00	18.10	18.31
		25RB#25	22.05	22.21	22.37	21.12	21.22	21.31	19.89	20.01	20.26	18.01	18.06	18.24
		50RB#0	22.00	22.12	22.32	21.03	21.12	21.35	19.85	20.01	20.25	17.87	18.01	18.24
		26765	26915	26965	26765	26915	26965	26765	26915	26965	26765	26915	26965	26965
26	15	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	841.5 MHz
		1RB#0	23.02	22.97	23.42	21.85	22.25	22.26	21.00	21.08	20.94	17.41	17.85	17.89
		1RB#38	22.85	23.06	23.31	22.00	22.05	22.05	21.12	21.03	20.91	17.55	18.17	17.97
		1RB#74	22.80	22.77	23.25	21.66	22.03	22.16	19.80	19.91	20.14	17.42	17.82	17.97
		38RB#0	21.88	21.94	22.16	21.86	21.94	22.18	19.81	19.84	20.10	19.83	19.91	20.08
		38RB#18	22.07	22.01	22.27	21.01	21.07	21.23	19.94	19.97	20.19	17.93	17.94	18.13
		38RB#37	21.83	21.97	22.16	21.86	21.94	22.17	19.93	19.85	20.20	19.96	19.86	20.19
26	15	75RB#0	21.88	21.93	22.16	20.87	20.96	21.14	19.93	19.89	20.19	17.72	17.85	18.09

➤ **LTE Band 41 (All DSI)**

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth h	RB	39675	40620	41565	39675	40620	41565	39675	40620	41565	39675	40620	41565
	(MHz)		2498.5 MHz	2593 MHz	2687.5 MHz	2498.5 MHz	2593 MHz	2687.5 MHz	2498.5 MHz	2593 MHz	2687.5 MHz	2498.5 MHz	2593 MHz	2687.5 MHz
Band4 1	5MHz	1RB#0	22.54	23.23	22.98	21.92	22.44	21.93	21.58	22.71	21.61	18.54	19.33	18.36
		1RB#12	22.51	23.44	22.93	21.81	22.51	21.91	21.61	22.91	21.63	18.62	19.27	18.48
		1RB#24	22.55	23.19	23.03	21.82	22.29	21.95	20.44	21.41	20.59	18.63	19.41	18.42
		12RB#0	21.61	22.45	21.97	20.57	21.47	20.93	20.42	21.46	20.66	18.46	19.49	18.55
		12RB#6	21.61	22.44	21.97	20.57	21.43	20.95	20.46	21.58	20.71	18.46	19.57	18.72
		12RB#13	21.59	22.42	21.96	20.52	21.40	20.95	20.41	21.40	20.61	18.43	19.49	18.51
Band4 1	10MHz	25RB#0	21.55	22.41	21.96	20.58	21.43	20.97	20.43	21.43	20.63	18.46	19.45	18.70
		1RB#0	22.55	23.46	22.95	21.84	22.25	21.95	21.64	22.18	21.97	18.45	19.15	18.65
		1RB#24	22.50	23.44	22.88	21.64	22.12	21.89	21.85	22.23	21.82	18.45	19.32	18.43
		1RB#49	22.48	23.35	22.83	21.80	22.08	21.91	20.39	21.45	20.56	18.40	19.00	18.69
		25RB#0	21.59	22.44	21.88	20.69	21.43	20.93	20.40	21.38	20.60	18.43	19.52	18.62
		25RB#12	21.62	22.46	22.02	20.59	21.49	21.00	20.43	21.43	20.65	18.45	19.50	18.73
Band4 1	15MHz	25RB#25	21.56	22.41	21.97	20.66	21.38	20.98	20.40	21.42	20.56	18.50	19.46	18.66
		50RB#0	21.56	22.45	21.93	20.59	21.49	20.86	20.38	21.33	20.62	18.41	19.53	18.64
		1RB#0	22.33	23.49	22.72	21.66	22.28	21.80	21.43	22.58	21.83	18.25	19.10	18.67
		1RB#38	22.26	23.26	22.67	21.51	22.05	21.59	21.58	22.61	21.61	18.29	19.10	18.12
		1RB#74	22.42	23.28	22.71	21.65	22.06	21.75	20.33	21.27	20.57	18.26	19.00	18.71
		38RB#0	21.48	22.29	21.86	21.44	22.29	21.89	20.33	21.27	20.55	18.33	19.27	18.54
Band4 1	20MHz	38RB#18	21.48	22.30	21.83	20.52	21.26	20.86	20.29	21.28	20.53	18.34	19.29	18.53
		38RB#37	21.48	22.30	21.81	21.45	22.29	21.88	20.30	21.32	20.54	18.30	19.33	18.54
		75RB#0	21.44	22.30	21.83	20.46	21.36	20.84	20.28	21.34	20.56	18.33	19.32	18.49
		1RB#0	22.40	23.31	22.85	21.52	21.92	21.53	21.01	22.28	21.48	18.03	19.09	18.12
		1RB#49	22.39	23.17	22.65	21.54	22.28	21.69	20.31	22.12	21.41	17.81	18.95	18.46
		1RB#99	22.56	23.03	22.78	21.53	21.60	21.47	20.32	21.30	20.57	18.24	18.89	18.14
Band4 1	25MHz	50RB#0	21.47	22.39	21.79	20.48	21.44	20.73	20.33	21.32	20.53	18.20	19.27	18.50
		50RB#25	21.56	22.33	21.81	20.61	21.41	20.84	20.27	21.32	20.57	18.29	19.27	18.54
		50RB#50	21.59	22.24	21.83	20.57	21.29	20.77	20.31	21.30	20.50	18.35	19.20	18.52
		100RB#0	21.56	22.35	21.82	20.58	21.36	20.86	20.29	21.32	20.53	18.36	19.28	18.53

➤ **LTE Band 48 (All DSI)**

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	Bandwidth (MHz)	RB	55265 3552.5 MHz	55990 3625 MHz	56715 3697.5 MHz	55265 3552.5 MHz	55990 3625 MHz	56715 3697.5 MHz	55265 3552.5 MHz	55990 3625 MHz	56715 3697.5 MHz	55265 3552.5 MHz	55990 3625 MHz	55265 3552.5 MHz
48	5	1RB#0	22.06	22.19	22.45	21.42	21.50	21.64	20.53	20.74	20.95	17.99	18.18	18.46
		1RB#12	22.09	22.07	22.43	21.43	21.52	21.57	20.67	20.81	20.78	18.19	18.30	18.17
		1RB#24	22.08	22.13	22.45	21.56	21.36	21.57	20.77	20.62	20.79	18.13	18.08	18.21
		12RB#0	21.35	21.13	21.39	20.23	20.18	20.44	19.42	19.32	19.68	16.98	16.71	17.24
		12RB#6	21.26	21.15	21.41	20.26	20.22	20.52	19.48	19.39	19.78	16.87	16.83	17.15
		12RB#13	21.29	21.05	21.47	20.23	20.13	20.54	19.39	19.34	19.86	16.83	16.86	17.32
		25RB#0	21.18	21.14	21.55	20.28	20.12	20.42	19.49	19.38	19.68	16.95	16.85	17.14
48	10	55290 3555 MHz	55990 3625 MHz	56690 3695 MHz	55290 3555 MHz	55990 3625 MHz	56690 3695 MHz	55290 3555 MHz	55990 3625 MHz	56690 3695 MHz	55290 3555 MHz	55990 3625 MHz	55290 3555 MHz	55290 3555 MHz
		1RB#0	22.40	22.41	22.61	21.64	21.50	21.75	20.80	20.64	20.86	18.19	18.08	18.22
		1RB#24	22.34	22.26	22.51	21.65	21.44	21.57	20.96	20.70	20.71	18.38	18.11	18.27
		1RB#49	22.46	22.24	22.58	21.83	21.28	21.51	21.12	20.50	20.62	18.58	17.86	18.14
		25RB#0	21.47	21.35	21.64	20.70	20.49	20.65	20.02	19.80	19.89	17.58	17.21	17.35
		25RB#12	21.59	21.37	21.70	20.62	20.40	20.76	19.78	19.61	20.08	17.27	17.05	17.47
		25RB#25	21.43	21.44	21.83	20.72	20.48	20.71	19.83	19.74	19.92	17.34	17.25	17.31
48	15	50RB#0	21.54	21.29	21.73	20.54	20.27	20.74	19.90	19.51	20.05	17.36	16.82	17.39
		55315 3557.5 MHz	55990 3625 MHz	56665 3692.5 MHz	55315 3557.5 MHz	55990 3625 MHz	56665 3692.5 MHz	55315 3557.5 MHz	55990 3625 MHz	56665 3692.5 MHz	55315 3557.5 MHz	55990 3625 MHz	55315 3557.5 MHz	55315 3557.5 MHz
		1RB#0	22.08	22.21	22.40	21.36	21.18	21.12	20.60	20.37	20.41	17.97	17.83	17.90
		1RB#38	22.20	21.99	22.22	21.45	21.39	21.45	20.64	20.60	20.56	18.10	18.12	18.07
		1RB#74	22.26	21.81	22.20	21.50	20.96	20.96	20.77	20.22	20.17	18.21	17.74	17.68
		38RB#0	21.23	21.19	21.37	20.27	20.17	20.40	19.48	19.44	19.59	17.04	16.78	16.98
		38RB#18	21.33	21.09	21.43	20.37	20.16	20.33	19.58	19.32	19.62	17.04	16.73	16.96
48	20	38RB#37	21.34	21.12	21.38	20.37	20.15	20.42	19.58	19.31	19.63	17.10	16.73	17.14
		75RB#0	21.26	21.07	21.39	20.27	20.11	20.38	19.58	19.25	19.55	16.89	16.59	16.96
		55340 3560 MHz	55990 3625 MHz	56640 3690 MHz	55340 3560 MHz	55990 3625 MHz	56640 3690 MHz	55340 3560 MHz	55990 3625 MHz	56640 3690 MHz	55340 3560 MHz	55990 3625 MHz	55340 3560 MHz	55340 3560 MHz
		1RB#0	22.26	22.36	22.59	21.67	21.30	21.68	20.86	20.57	20.89	18.28	17.98	18.41
		1RB#49	22.35	22.41	22.66	21.75	21.43	21.62	20.91	20.75	20.79	18.33	18.16	18.25
		1RB#99	22.30	22.08	22.51	21.83	21.17	21.59	21.05	20.38	20.81	18.41	17.79	18.30
		50RB#0	21.45	21.37	21.58	20.48	20.43	20.60	19.62	19.64	19.86	17.08	17.16	17.30
48	20	50RB#25	21.41	21.28	21.55	20.48	20.40	20.48	19.69	19.51	19.79	17.00	17.00	17.23
		50RB#50	21.45	21.34	21.56	20.42	20.41	20.48	19.56	19.67	19.75	16.90	17.14	17.22
		100RB#0	21.52	21.13	21.68	20.28	20.38	20.76	19.39	19.57	19.97	16.75	16.93	17.31

➤ LTE Band 66 (All DSI)

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	22.36	22.45	22.88	21.27	21.53	21.69	21.33	21.00	21.71	17.93	18.17	18.34
		1RB#2	22.42	22.42	22.93	21.39	21.76	22.13	19.94	21.23	21.69	18.00	18.39	18.49
		1RB#5	22.36	22.49	22.86	21.25	21.45	21.89	19.90	20.12	20.34	18.00	18.13	18.42
		3RB#0	22.37	22.51	22.83	21.23	21.34	21.73	19.96	20.16	20.34	17.94	18.01	18.40
		3RB#1	22.50	22.64	22.91	21.41	21.40	21.77	21.16	21.04	21.49	18.07	17.90	18.40
		3RB#3	22.38	22.44	22.82	21.23	21.37	21.79	19.90	20.09	20.38	17.96	17.95	18.33
		6RB#0	21.48	21.66	21.89	20.45	20.51	20.79	20.00	20.08	20.30	17.93	18.20	18.48
66	3	131987	132322	132657	131987	132322	132657	131987	132322	132657	131987	132322	132657	132657
		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	1778.5 MHz
		1RB#0	22.46	22.72	22.93	21.54	21.55	21.59	20.96	20.97	21.38	18.19	18.28	18.62
		1RB#8	22.62	22.66	23.04	21.55	21.85	21.97	20.12	21.33	21.47	18.17	18.54	18.46
		1RB#14	22.42	22.69	22.90	21.47	21.40	21.90	20.12	20.36	20.54	18.08	18.26	18.52
		8RB#0	21.51	21.60	21.97	20.50	20.60	21.08	20.05	20.34	20.53	18.14	18.05	18.53
		8RB#4	21.54	21.69	22.00	20.49	20.67	20.86	20.15	20.17	20.60	18.02	18.17	18.50
66	5	8RB#7	21.53	21.70	21.97	20.50	20.60	21.01	20.10	20.31	20.47	18.15	18.13	18.59
		15RB#0	21.52	21.68	21.96	20.54	20.61	20.86	20.12	20.30	20.45	18.11	18.23	18.48
		131997	132322	132647	131997	132322	132647	131997	132322	132647	131997	132322	132647	132647
		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	1777.5 MHz
		1RB#0	22.58	22.67	22.93	21.55	21.73	22.02	20.99	21.65	21.76	18.41	18.34	18.71
		1RB#12	22.36	22.58	22.77	21.34	21.71	22.00	20.26	21.89	21.63	18.39	18.49	18.63
		1RB#24	22.52	22.69	22.95	21.51	21.79	21.88	20.27	20.19	21.68	18.41	18.42	18.69
66	10	12RB#0	21.55	21.64	22.02	20.55	20.67	21.07	20.27	20.19	20.60	18.17	18.22	18.57
		12RB#6	21.58	21.73	22.06	20.58	20.80	21.01	20.26	20.35	20.64	18.21	18.32	18.59
		12RB#13	21.59	21.65	22.00	20.53	20.75	20.99	20.23	20.16	20.63	18.13	18.27	18.51
		25RB#0	21.59	21.68	22.01	20.55	20.66	21.06	20.25	20.22	20.61	18.20	18.24	18.60
		132022	132322	132622	132022	132322	132622	132022	132322	132622	132022	132322	132622	132622
		1715 MHz	1745 MHz	1775 MHz	1715 MHz	1745 MHz	1775 MHz	1715 MHz	1745 MHz	1775 MHz	1715 MHz	1745 MHz	1775 MHz	1775 MHz
		1RB#0	22.40	22.57	22.89	21.57	21.50	21.70	20.93	20.92	21.79	18.25	18.18	18.20
66	15	1RB#24	22.44	22.59	22.89	21.40	21.69	21.95	20.18	21.17	21.78	17.99	18.44	18.34
		1RB#49	22.40	22.63	22.83	21.45	21.52	21.62	20.18	20.34	20.58	18.17	18.24	18.29
		25RB#0	21.56	21.62	21.99	20.56	20.63	20.99	20.16	20.29	20.60	18.15	18.28	18.56
		25RB#12	21.55	21.72	21.97	20.59	20.68	20.92	20.20	20.37	20.53	18.21	18.36	18.66
		25RB#25	21.52	21.77	22.00	20.45	20.70	20.98	20.17	20.31	20.59	18.21	18.36	18.64
		50RB#0	21.55	21.67	21.96	20.53	20.67	20.96	20.16	20.31	20.57	18.26	18.28	18.53
		132047	132322	132597	132047	132322	132597	132047	132322	132597	132047	132322	132597	132597
66	20	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	1772.5 MHz
		1RB#0	22.33	22.39	22.70	21.46	21.57	21.67	20.86	20.99	21.49	18.03	18.10	18.30
		1RB#38	22.39	22.62	22.84	21.31	21.52	21.85	20.04	21.00	21.60	17.71	18.04	18.61
		1RB#74	22.21	22.41	22.73	21.31	21.70	21.61	20.02	20.18	20.38	17.69	18.26	18.52
		38RB#0	21.42	21.55	21.82	21.42	21.53	21.80	20.01	20.15	20.41	20.03	20.22	20.38
		38RB#18	21.44	21.61	21.84	20.43	20.61	20.82	20.07	20.21	20.43	18.03	18.20	18.36
		38RB#37	21.43	21.52	21.78	21.42	21.55	21.79	20.07	20.19	20.34	20.07	20.25	20.37
66	25	75RB#0	21.43	21.56	21.79	20.37	20.59	20.79	20.08	20.21	20.35	18.01	18.17	18.39
		132072	132322	132572	132072	132322	132572	132072	132322	132572	132072	132322	132572	132572
		1720 MHz	1745 MHz	1770 MHz	1720 MHz	1745 MHz	1770 MHz	1720 MHz	1745 MHz	1770 MHz	1720 MHz	1745 MHz	1770 MHz	1770 MHz
		1RB#0	22.46	22.46	23.05	21.39	21.62	21.58	21.47	21.32	21.04	18.02	18.31	18.25
		1RB#49	22.30	22.48	23.04	21.40	21.66	21.66	21.01	21.47	20.96	18.11	18.38	18.35
		1RB#99	22.44	22.59	22.89	21.37	21.75	21.57	20.02	20.19	20.35	18.08	18.48	18.36
		50RB#0	21.39	21.55	21.79	20.36	20.54	20.83	20.02	20.24	20.37	17.98	18.08	18.34
66	30	50RB#25	21.46	21.62	21.78	20.46	20.67	20.79	20.05	20.19	20.34	18.05	18.17	18.36
		50RB#50	21.47	21.60	21.82	20.44	20.62	20.91	20.04	20.18	20.39	17.99	18.18	18.45
		100RB#0	21.46	21.58	21.80	20.45	20.57	20.79	20.03	20.23	20.34	18.00	18.13	18.34

➤ **LTE Band 71 (All DSI)**

Conducted Power(dBm)														
Modulation			QPSK			16QAM			64QAM			256QAM		
Band	BW	RB	133147	133297	133447	133147	133297	133447	133147	133297	133447	133147	133297	133447
	(MHz)		665.5 MHz	680.5 MHz	695.5 MHz	665.5 MHz	680.5 MHz	695.5 MHz	665.5 MHz	680.5 MHz	695.5 MHz	665.5 MHz	680.5 MHz	695.5 MHz
71	5	1RB#0	22.56	22.56	22.63	21.86	21.66	21.63	21.30	21.58	21.51	20.63	20.23	20.13
		1RB#12	22.40	22.55	22.44	21.70	21.75	21.44	21.61	21.89	21.36	20.55	20.53	20.48
		1RB#24	22.51	22.38	22.52	21.81	21.68	21.52	21.53	21.59	21.63	20.47	20.31	20.18
		12RB#0	21.91	21.66	21.61	20.90	20.72	20.69	20.40	20.26	20.16	19.35	19.18	19.09
		12RB#6	21.89	21.80	21.68	20.90	20.78	20.67	20.47	20.36	20.16	19.43	19.21	19.14
		12RB#13	21.86	21.73	21.70	20.87	20.76	20.71	20.48	20.21	20.14	19.34	19.22	19.18
		25RB#0	21.86	21.71	21.64	20.91	20.65	20.68	20.46	20.17	20.12	19.34	19.22	19.13
71	10	1RB#0	22.44	22.43	22.49	22.00	22.32	22.22	21.15	20.97	21.55	19.94	19.69	19.33
		1RB#24	22.50	22.63	22.41	22.25	22.11	22.25	21.20	21.23	21.43	19.56	19.87	19.43
		1RB#49	22.34	22.63	22.38	21.93	22.22	21.94	21.80	21.11	21.52	19.42	19.60	19.31
		25RB#0	21.89	21.65	21.65	21.39	21.11	21.18	20.27	20.21	20.16	19.35	19.25	19.15
		25RB#12	21.88	21.75	21.60	21.40	21.27	21.20	20.29	20.29	20.10	19.26	19.28	19.16
		25RB#25	21.75	21.70	21.68	21.32	21.17	21.21	20.31	20.20	20.13	19.25	19.15	19.15
		50RB#0	21.82	21.72	21.64	21.32	21.21	21.14	20.30	20.28	20.12	19.24	19.25	19.14
71	15	1RB#0	22.60	22.56	22.47	22.07	22.15	22.20	21.23	21.37	21.18	19.66	19.34	19.57
		1RB#38	22.59	22.56	22.61	22.03	21.97	22.06	21.29	21.32	21.19	19.77	19.23	19.75
		1RB#74	22.50	22.41	22.34	21.85	22.09	22.13	21.30	21.38	21.20	19.66	19.35	19.70
		38RB#0	21.43	21.68	21.62	21.52	21.76	21.64	20.19	19.79	20.05	19.14	18.79	19.05
		38RB#18	21.68	21.63	21.52	20.71	20.61	20.55	20.16	20.13	20.07	19.15	19.14	19.06
		38RB#37	21.30	21.60	21.61	21.38	21.58	21.57	20.26	20.24	20.12	19.21	19.23	19.18
		75RB#0	21.65	21.59	21.52	20.69	20.55	20.52	20.19	20.10	20.06	19.19	19.15	19.05
71	20	1RB#0	22.62	22.73	22.53	22.05	22.03	22.24	21.24	21.29	20.74	19.87	19.64	19.51
		1RB#49	22.54	22.64	22.37	22.04	22.04	22.08	21.08	21.11	20.67	19.86	19.61	19.63
		1RB#99	22.45	22.58	22.47	21.84	21.96	22.12	21.12	21.22	20.76	19.99	19.55	19.65
		50RB#0	21.62	21.55	21.57	21.20	21.08	21.06	20.06	20.10	20.06	19.18	19.15	19.14
		50RB#25	21.65	21.63	21.50	21.18	21.04	21.07	20.07	20.19	20.17	19.19	19.01	19.08
		50RB#50	21.56	21.50	21.46	21.15	21.05	21.04	20.04	20.21	20.06	19.16	19.13	19.08
		100RB#0	21.69	21.61	21.54	21.20	21.08	21.04	20.04	20.28	20.18	19.22	19.15	19.02

4.3.4. Conducted Power of 5G NR Bands

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

➤ 5G NR n7 (All DSI)

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	21.60	21.70	22.19	21.59	21.66	22.24	21.45	21.47	21.84	21.69	21.73	22.14
	$\pi/2$ BPSK	1	Right	21.69	21.89	22.35	21.52	21.91	22.26	21.35	21.62	22.09	21.73	22.07	22.44
	$\pi/2$ BPSK	Innter_Full	Mid	21.65	21.82	22.29	21.62	21.76	22.27	21.48	21.70	22.19	21.77	21.92	22.41
	QPSK	1	Left	21.57	21.63	22.19	21.48	21.61	22.14	21.34	21.47	21.93	21.65	21.75	21.97
	QPSK	1	Right	21.65	21.80	22.24	21.43	21.89	22.32	21.39	21.55	22.01	21.72	22.14	22.41
	QPSK	Innter_Full	Mid	21.69	21.96	22.38	21.66	21.98	22.32	21.52	21.74	22.20	21.75	22.02	22.46
	16QAM	1	Left	20.84	20.71	21.44	20.61	20.77	21.25	20.46	20.67	21.12	20.84	20.93	21.03
	16QAM	1	Right	20.58	20.95	21.49	20.50	20.86	21.25	20.28	20.88	21.28	20.67	21.23	21.62
	16QAM	Innter_Full	Mid	20.72	21.00	21.45	20.74	20.97	21.48	20.54	20.83	21.20	20.83	21.06	21.48
	64QAM	1	Left	19.19	19.34	19.89	19.18	19.24	19.78	19.05	19.00	19.39	19.19	19.24	19.60
	64QAM	1	Right	19.21	19.40	19.88	19.03	19.44	19.85	18.84	19.08	19.68	19.20	19.55	19.92
	64QAM	Innter_Full	Mid	19.24	19.45	19.91	19.19	19.41	19.88	19.10	19.26	19.70	19.34	19.63	20.09
	256QAM	1	Left	17.12	17.28	17.80	17.18	17.26	17.79	16.94	17.01	17.47	17.22	17.34	17.65
	256QAM	1	Right	17.20	17.41	17.85	17.09	17.46	17.84	16.95	17.24	17.62	17.28	17.73	18.01
	256QAM	Innter_Full	Mid	17.18	17.46	17.79	17.12	17.29	17.84	17.06	17.24	17.73	17.22	17.48	18.00

➤ 5G NR n12 (All DSI)

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	22.69	22.45	22.51	22.62	22.64	22.49	22.74	22.74	22.70
	$\pi/2$ BPSK	1	Right	22.67	22.55	22.54	22.61	22.47	22.38	22.60	22.50	22.55
	$\pi/2$ BPSK	Innter_Full	Mid	22.74	22.72	22.52	22.61	22.58	22.57	22.77	22.68	22.69
	QPSK	1	Left	22.60	22.59	22.61	22.67	22.60	22.54	22.78	22.76	22.77
	QPSK	1	Right	22.56	22.66	22.52	22.52	22.52	22.43	22.56	22.54	22.46
	QPSK	Innter_Full	Mid	22.78	22.66	22.53	22.61	22.64	22.59	22.73	22.71	22.71
	16QAM	1	Left	21.74	21.61	21.60	21.71	21.68	21.65	21.87	21.82	21.88
	16QAM	1	Right	21.67	21.59	21.51	21.62	21.51	21.51	21.57	21.51	21.50
	16QAM	Innter_Full	Mid	21.75	21.76	21.60	21.65	21.68	21.55	21.73	21.73	21.73
	64QAM	1	Left	20.22	20.23	20.21	20.20	20.40	20.28	20.32	20.46	20.51
	64QAM	1	Right	20.38	20.36	20.25	20.05	20.21	20.14	20.04	20.23	20.26
	64QAM	Innter_Full	Mid	20.23	20.21	20.13	20.19	20.13	20.10	20.23	20.20	20.25
	256QAM	1	Left	18.13	17.99	17.95	18.13	18.01	17.91	18.27	18.27	18.16
	256QAM	1	Right	18.09	18.00	17.88	18.09	17.98	17.92	18.08	18.00	17.98
	256QAM	Innter_Full	Mid	18.14	18.09	17.97	18.14	18.20	18.06	18.16	18.13	18.21

➤ 5G NR n13 (All DSI)

5G NR n13		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz		
Channel				155900	156400	156900			
Frequency (MHz)				779.5	782	784.5			
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	23.14	23.06	23.01	N/A	N/A	23.07
	$\pi/2$ BPSK	1	Right	23.05	23.06	22.92			22.86
	$\pi/2$ BPSK	Innter_Full	Mid	23.15	23.08	23.02			22.99
	QPSK	1	Left	23.15	23.11	22.94			23.23
	QPSK	1	Right	23.05	23.02	22.93			22.98
	QPSK	Innter_Full	Mid	23.22	23.13	23.09			23.01
	16QAM	1	Left	22.32	22.11	22.07			22.10
	16QAM	1	Right	22.12	22.01	22.01			21.85
	16QAM	Innter_Full	Mid	22.21	22.21	22.17			22.03
	64QAM	1	Left	21.03	20.85	20.64			20.81
	64QAM	1	Right	20.87	20.82	20.59			20.60
	64QAM	Innter_Full	Mid	20.72	20.63	20.67			20.52
	256QAM	1	Left	18.62	18.58	18.61			18.61
	256QAM	1	Right	18.61	18.57	18.49			18.40
	256QAM	Innter_Full	Mid	18.60	18.55	18.48			18.40

➤ 5G NR n14 (All DSI)

5G NR n14		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz	
Channel				158100	158600	159100	158600	
Frequency (MHz)				790.5	793	795.5	793	
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	23.32	23.16	23.14	23.02	
	$\pi/2$ BPSK	1	Right	23.15	23.08	23.01	22.92	
	$\pi/2$ BPSK	Innter_Full	Mid	23.27	23.23	23.21	23.04	
	QPSK	1	Left	23.33	23.35	23.17	23.37	
	QPSK	1	Right	23.14	23.20	23.13	22.89	
	QPSK	Innter_Full	Mid	23.21	23.28	23.26	23.05	
	16QAM	1	Left	22.47	22.37	22.22	22.14	
	16QAM	1	Right	22.23	22.21	22.15	21.97	
	16QAM	Innter_Full	Mid	22.41	22.36	22.24	22.13	
	64QAM	1	Left	20.98	21.03	20.77	20.76	
	64QAM	1	Right	20.85	20.86	20.64	20.60	
	64QAM	Innter_Full	Mid	20.87	20.80	20.75	20.58	
	256QAM	1	Left	18.74	18.67	18.67	18.52	
	256QAM	1	Right	18.66	18.62	18.57	18.38	
	256QAM	Innter_Full	Mid	18.77	18.71	18.66	18.45	

➤ 5G NR n25 (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	22.31	22.14	22.28	22.14	22.03	22.22	22.24	22.20	22.09	22.36	22.25	22.33
	$\pi/2$ BPSK	1	Right	22.22	22.15	22.24	22.16	22.08	22.23	22.23	22.07	22.22	22.27	22.29	22.38
	$\pi/2$ BPSK	Innter_Full	Mid	22.18	22.19	22.31	22.23	22.14	22.35	22.25	22.20	22.33	22.35	22.38	22.35
	QPSK	1	Left	22.20	22.11	22.26	22.19	22.12	22.19	22.30	22.20	22.16	22.30	22.19	22.31
	QPSK	1	Right	22.19	22.14	22.25	22.13	22.05	22.23	22.23	22.17	22.14	22.32	22.25	22.36
	QPSK	Innter_Full	Mid	22.19	22.15	22.39	22.23	22.19	22.39	22.37	22.27	22.31	22.40	22.35	22.47
	16QAM	1	Left	21.26	21.10	21.26	21.15	21.12	21.29	21.29	21.22	21.20	21.24	21.24	21.33
	16QAM	1	Right	21.17	21.08	21.28	21.08	21.07	21.32	21.22	21.08	21.16	21.26	21.25	21.39
	16QAM	Innter_Full	Mid	21.32	21.20	21.47	21.20	21.19	21.39	21.33	21.25	21.31	21.36	21.34	21.47
	64QAM	1	Left	20.03	19.65	20.05	19.90	19.66	19.90	19.85	20.05	19.85	19.98	19.71	19.79
	64QAM	1	Right	19.92	19.69	20.00	19.83	19.55	20.00	19.74	19.93	19.95	19.97	19.77	20.01
	64QAM	Innter_Full	Mid	19.84	19.71	19.90	19.75	19.70	19.84	19.78	19.80	19.81	19.93	19.92	20.03
	256QAM	1	Left	17.78	17.73	17.80	17.60	17.59	17.74	17.79	17.64	17.67	17.83	17.80	17.91
	256QAM	1	Right	17.68	17.71	17.82	17.58	17.52	17.76	17.72	17.63	17.71	17.80	17.98	17.97
	256QAM	Innter_Full	Mid	17.76	17.68	17.84	17.71	17.67	17.88	17.70	17.70	17.75	17.88	17.79	18.04

➤ 5G NR n25 (DSI-1)

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	19.33	19.16	19.35	19.19	19.08	19.29	19.28	19.27	19.14	19.38	19.27	19.37
	$\pi/2$ BPSK	1	Right	19.19	19.12	19.23	19.20	19.18	19.22	19.28	19.20	19.21	19.31	19.37	19.43
	$\pi/2$ BPSK	Innter_Full	Mid	19.23	19.21	19.36	19.27	19.22	19.37	19.24	19.28	19.34	19.45	19.43	19.42
	QPSK	1	Left	19.25	19.21	19.36	19.29	19.11	19.26	19.32	19.19	19.15	19.35	19.23	19.35
	QPSK	1	Right	19.27	19.18	19.30	19.23	19.09	19.27	19.33	19.21	19.24	19.37	19.30	19.38
	QPSK	Innter_Full	Mid	19.27	19.20	19.41	19.27	19.26	19.38	19.36	19.35	19.35	19.37	19.37	19.46
	16QAM	1	Left	18.23	18.09	18.28	18.28	18.19	18.36	18.28	18.19	18.25	18.23	18.32	18.46
	16QAM	1	Right	18.19	18.13	18.41	18.10	18.06	18.39	18.29	18.13	18.23	18.31	18.30	18.38
	16QAM	Innter_Full	Mid	18.45	18.19	18.49	18.19	18.24	18.49	18.40	18.27	18.33	18.49	18.33	18.51
	64QAM	1	Left	17.08	16.75	17.12	16.92	16.68	16.98	16.82	17.10	16.84	17.08	16.70	16.86
	64QAM	1	Right	16.97	16.71	17.04	16.93	16.59	17.05	16.71	16.92	17.03	17.04	16.79	17.11
	64QAM	Innter_Full	Mid	16.91	16.81	16.95	16.85	16.80	16.86	16.80	16.84	16.83	16.97	16.99	17.08
	256QAM	1	Left	14.77	14.86	14.79	14.67	14.72	14.84	14.81	14.72	14.74	14.82	14.93	14.98
	256QAM	1	Right	14.78	14.70	14.87	14.71	14.62	14.86	14.82	14.68	14.75	14.85	15.03	14.99
	256QAM	Innter_Full	Mid	14.78	14.78	14.91	14.73	14.71	14.93	14.74	14.77	14.74	14.98	14.89	15.17

➤ 5G NR n26 (All DSI)

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	22.80	22.75	22.72	22.67	
	$\pi/2$ BPSK	1	Right	22.81	22.83	22.81	22.59	
	$\pi/2$ BPSK	Innter_Full	Mid	22.89	22.89	22.85	22.68	
	QPSK	1	Left	22.84	22.75	22.78	22.78	
	QPSK	1	Right	22.76	22.90	22.77	22.57	
	QPSK	Innter_Full	Mid	22.94	22.94	22.81	22.68	
	16QAM	1	Left	21.80	21.80	21.88	21.64	N/A
	16QAM	1	Right	21.85	21.99	21.78	21.57	N/A
	16QAM	Innter_Full	Mid	21.93	22.01	21.97	21.70	
	64QAM	1	Left	20.60	20.59	20.38	20.34	
	64QAM	1	Right	20.55	20.65	20.44	20.25	
	64QAM	Innter_Full	Mid	20.40	20.42	20.51	20.16	
	256QAM	1	Left	18.33	18.29	18.32	18.26	
	256QAM	1	Right	18.28	18.31	18.42	18.18	
	256QAM	Innter_Full	Mid	18.27	18.36	18.34	18.18	

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	22.71	22.61	22.50	22.64	22.68	22.57	22.60	22.54	22.47	22.79	22.76	22.70
	$\pi/2$ BPSK	1	Right	22.67	22.53	22.47	22.65	22.55	22.50	22.40	22.26	22.21	22.65	22.57	22.44
	$\pi/2$ BPSK	Innter_Full	Mid	22.73	22.73	22.57	22.64	22.69	22.51	22.59	22.52	22.42	22.69	22.71	22.67
	QPSK	1	Left	22.66	22.68	22.53	22.64	22.71	22.54	22.66	22.55	22.39	22.86	22.68	22.82
	QPSK	1	Right	22.59	22.57	22.54	22.67	22.51	22.44	22.32	22.27	22.20	22.63	22.58	22.39
	QPSK	Innter_Full	Mid	22.74	22.67	22.69	22.73	22.64	22.55	22.52	22.59	22.48	22.80	22.75	22.62
	16QAM	1	Left	21.54	21.51	21.49	21.75	21.73	21.59	21.72	21.63	21.58	21.62	21.62	21.74
	16QAM	1	Right	21.55	21.43	21.47	21.78	21.89	21.54	21.43	21.39	21.29	21.36	21.35	21.44
	16QAM	Innter_Full	Mid	21.83	21.74	21.49	21.81	21.70	21.58	21.65	21.52	21.46	21.79	21.73	21.61
	64QAM	1	Left	20.33	20.31	20.47	20.24	20.19	20.32	20.33	20.10	20.02	20.56	20.36	20.40
	64QAM	1	Right	20.29	20.25	20.35	20.23	20.18	20.28	20.15	19.94	19.84	20.19	19.98	20.05
	64QAM	Innter_Full	Mid	20.23	20.17	20.05	20.19	20.21	20.11	20.16	20.06	19.92	20.18	20.20	20.15
	256QAM	1	Left	18.17	18.22	18.12	18.21	18.20	18.09	18.17	18.09	17.99	18.27	18.29	18.20
	256QAM	1	Right	18.14	18.08	18.02	18.18	18.06	17.97	18.01	17.94	17.77	18.07	18.18	17.95
256QAM	Innter_Full	Mid	18.24	18.31	18.20	18.23	18.23	18.11	18.12	17.96	17.89	18.19	18.21	18.13	
CP-OFDM	QPSK	1	Left	21.21	21.17	21.13	21.10	21.06	21.12	21.22	21.16	20.86	21.26	21.16	21.11
	QPSK	1	Right	21.20	20.98	21.35	21.09	20.93	21.08	20.95	20.87	20.63	20.86	21.00	20.77
	QPSK	Innter_Full	Mid	21.25	21.23	21.03	21.26	21.23	21.12	21.08	20.99	20.97	21.16	21.15	21.12
	16QAM	1	Left	21.03	20.92	20.70	20.64	20.70	20.50	20.62	20.51	20.50	20.98	20.98	19.52
	16QAM	1	Right	20.91	20.88	20.74	20.73	20.53	20.51	20.48	20.42	20.32	20.82	20.69	19.49
	16QAM	Innter_Full	Mid	20.84	20.89	20.70	20.72	20.68	20.53	20.65	20.50	20.40	20.63	20.61	19.52
	64QAM	1	Left	19.56	19.43	19.42	19.41	19.43	18.76	18.98	19.25	19.19	19.26	19.47	19.53
	64QAM	1	Right	19.40	19.38	19.41	19.42	19.26	18.86	18.67	19.04	18.94	19.03	19.24	19.50
	64QAM	Innter_Full	Mid	19.21	19.10	19.10	19.17	19.15	19.02	19.12	19.01	18.89	19.13	19.00	19.63
	256QAM	1	Left	16.52	16.67	16.05	16.52	16.63	16.42	16.54	16.46	16.51	16.70	16.41	16.36
	256QAM	1	Right	16.47	16.36	15.96	16.53	16.36	16.34	16.53	16.31	16.22	16.55	16.16	16.26
	256QAM	Innter_Full	Mid	16.43	16.33	16.21	16.17	16.14	15.98	16.09	16.08	15.93	16.15	16.06	16.05

➤ 5G NR n41 (DSI-0)

5G NR n41		RB Size	RB Offset	20MHz BW SCS = 30kHz			30MHz BW SCS = 30kHz			40MHz BW SCS = 30kHz			50MHz BW SCS = 30kHz		
Channel				501204	518598	535998	502200	518598	534996	503202	518598	534000	504204	518598	532998
Frequency (MHz)				2506.02	2592.99	2679.99	2511	2592.99	2674.98	2516.01	2592.99	2670	2521.02	2592.99	2664.99
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	22.68	23.61	23.00	22.32	23.47	22.79	22.39	23.46	22.78	22.38	23.30	22.95
	$\pi/2$ BPSK	1	Right	22.78	23.56	22.90	22.62	23.55	22.99	22.80	23.54	22.96	22.96	23.29	22.99
	$\pi/2$ BPSK	Innter_Full	Mid	22.61	23.62	23.04	22.54	23.58	22.99	22.47	23.58	22.95	22.62	23.47	22.97
	QPSK	1	Left	22.67	23.64	22.98	22.52	23.52	22.85	22.50	23.41	22.87	22.33	23.34	23.00
	QPSK	1	Right	22.69	23.63	23.08	22.69	23.61	23.02	22.87	23.52	22.97	23.07	23.41	23.12
	QPSK	Innter_Full	Mid	22.56	23.63	23.09	22.49	23.66	22.96	22.53	23.62	22.97	22.55	23.54	22.97
	16QAM	1	Left	22.87	23.53	23.46	22.65	23.56	23.37	22.71	23.55	23.35	22.61	23.42	23.42
	16QAM	1	Right	22.95	23.46	23.47	22.92	23.62	23.61	22.97	23.58	23.60	23.17	23.46	23.16
	16QAM	Innter_Full	Mid	22.55	23.54	23.07	22.57	23.64	22.98	22.49	23.58	22.93	22.60	23.51	23.00
	64QAM	1	Left	21.20	22.31	23.46	21.05	22.08	21.43	21.12	22.05	21.50	21.14	22.06	21.77
	64QAM	1	Right	21.39	22.21	23.28	21.33	22.09	21.62	21.52	22.05	21.62	21.75	22.07	21.72
	64QAM	Innter_Full	Mid	21.11	22.18	23.28	21.05	22.00	21.38	21.00	22.08	21.46	21.14	22.02	21.51
	256QAM	1	Left	18.87	19.95	23.29	18.62	19.77	19.03	18.70	19.70	19.16	18.62	19.70	19.20
	256QAM	1	Right	18.88	19.78	23.28	18.92	19.93	19.32	19.01	19.76	19.32	19.18	19.66	19.21
	256QAM	Innter_Full	Mid	19.01	20.11	23.28	18.95	19.95	19.43	18.96	20.12	19.41	19.01	19.99	19.41

5G NR n41		RB Size	RB Offset	60MHz BW SCS = 30kHz			70MHz BW SCS = 30kHz			80MHz BW SCS = 30kHz			90MHz BW SCS = 30kHz		
Channel				505200	518598	531996	506202	518598	531000	507204	518598	529998	508200	518598	528996
Frequency (MHz)				2526	2592.99	2659.98	2531.01	2592.99	2655	2536.02	2592.99	2649.99	2541	2592.99	2644.98
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	22.30	23.33	23.14	22.19	23.20	23.27	22.23	23.10	23.24	22.28	23.00	23.25
	$\pi/2$ BPSK	1	Right	23.31	23.25	22.71	23.21	23.14	22.69	23.23	23.08	22.91	23.48	23.07	22.89
	$\pi/2$ BPSK	Innter_Full	Mid	22.73	23.52	22.97	22.61	23.51	22.88	22.73	23.44	22.94	22.84	23.50	22.97
	QPSK	1	Left	22.27	23.34	23.10	22.25	23.19	23.36	22.27	23.18	23.27	22.33	22.95	23.34
	QPSK	1	Right	23.36	23.23	22.74	23.18	23.13	22.76	23.27	22.97	22.82	23.61	22.99	22.87
	QPSK	Innter_Full	Mid	22.75	23.58	22.88	22.62	23.52	22.91	22.75	23.58	22.85	22.85	23.47	23.01
	16QAM	1	Left	22.51	23.49	23.30	22.76	23.48	23.19	22.53	23.35	23.56	22.55	23.33	23.45
	16QAM	1	Right	23.49	23.43	22.90	22.78	23.38	23.19	23.53	23.25	22.95	23.56	23.45	23.25
	16QAM	Innter_Full	Mid	22.65	23.43	22.87	22.53	23.44	22.86	22.70	23.51	22.83	22.91	23.52	23.02
	64QAM	1	Left	21.10	21.98	21.86	20.85	21.90	21.91	20.96	21.78	22.00	21.00	21.66	22.04
	64QAM	1	Right	22.05	21.90	21.49	21.87	21.83	21.46	21.98	21.79	21.54	22.22	21.74	21.63
	64QAM	Innter_Full	Mid	21.14	21.97	21.31	21.15	21.99	21.31	21.18	21.83	21.35	21.43	22.06	21.49
	256QAM	1	Left	18.55	19.52	19.37	18.46	19.45	19.44	18.55	19.39	19.55	18.51	19.17	19.58
	256QAM	1	Right	19.44	19.37	18.99	19.50	19.82	19.07	19.49	19.32	19.04	19.71	19.28	19.13
	256QAM	Innter_Full	Mid	19.10	20.02	19.38	19.00	19.95	19.27	19.22	19.96	19.33	19.33	19.96	19.38

5G NR n41		RB Size	RB Offset	100MHz BW SCS = 30kHz		
Channel				509202	518598	528000
Frequency (MHz)				2546.01	2592.99	2640
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	22.41	23.00	23.55
	$\pi/2$ BPSK	1	Right	23.62	23.15	23.02
	$\pi/2$ BPSK	Innter_Full	Mid	23.11	23.62	23.25
	QPSK	1	Left	22.45	23.14	23.43
	QPSK	1	Right	23.69	23.39	23.26
	QPSK	Innter_Full	Mid	23.13	23.38	23.21
	16QAM	1	Left	22.59	23.49	23.48
	16QAM	1	Right	23.56	23.42	23.38
	16QAM	Innter_Full	Mid	23.04	23.46	23.15
	64QAM	1	Left	21.14	21.85	22.35
	64QAM	1	Right	22.36	21.88	21.77
	64QAM	Innter_Full	Mid	21.61	22.22	21.70
	256QAM	1	Left	18.63	19.25	19.78
	256QAM	1	Right	19.92	19.32	19.29
	256QAM	Innter_Full	Mid	19.57	20.13	19.72

➤ 5G NR n41 (DSI-1)

5G NR n41		RB Size	RB Offset	20MHz BW SCS = 30kHz			30MHz BW SCS = 30kHz			40MHz BW SCS = 30kHz			50MHz BW SCS = 30kHz		
Channel				501204	518598	535998	502200	518598	534996	503202	518598	534000	504204	518598	532998
Frequency (MHz)				2506.02	2592.99	2679.99	2511	2592.99	2674.98	2516.01	2592.99	2670	2521.02	2592.99	2664.99
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	19.86	20.76	20.13	19.52	20.68	19.84	19.45	20.49	19.83	19.54	20.33	20.16
	$\pi/2$ BPSK	1	Right	19.93	20.72	20.03	19.80	20.61	20.04	19.93	20.60	20.16	20.06	20.44	20.05
	$\pi/2$ BPSK	Innter_Full	Mid	19.69	20.72	20.10	19.67	20.63	20.20	19.50	20.63	20.06	19.78	20.62	20.10
	QPSK	1	Left	19.85	20.69	19.98	19.63	20.67	19.91	19.55	20.66	19.93	19.53	20.34	20.15
	QPSK	1	Right	19.77	20.78	20.28	19.85	20.61	20.20	20.03	20.62	20.10	20.22	20.51	20.22
	QPSK	Innter_Full	Mid	19.59	20.73	20.09	19.54	20.84	20.21	19.68	20.72	20.18	19.75	20.79	20.12
	16QAM	1	Left	19.92	20.71	20.59	19.78	20.62	20.48	19.87	20.55	20.60	19.64	20.47	20.55
	16QAM	1	Right	20.20	20.67	20.58	20.17	20.65	20.61	19.97	20.68	20.63	20.17	20.61	20.36
	16QAM	Innter_Full	Mid	19.55	20.62	20.25	19.67	20.72	20.19	19.62	20.69	20.14	19.76	20.76	20.15
	64QAM	1	Left	18.20	19.41	20.61	18.20	19.33	18.48	18.30	19.15	18.75	18.34	19.16	18.92
	64QAM	1	Right	18.59	19.37	20.48	18.53	19.19	18.83	18.62	19.08	18.75	18.75	19.18	18.85
	64QAM	Innter_Full	Mid	18.21	19.24	20.46	18.26	19.13	18.53	18.18	19.11	18.59	18.25	19.18	18.66
	256QAM	1	Left	15.90	16.95	20.29	15.75	16.90	16.19	15.81	16.80	16.26	15.65	16.81	16.40
	256QAM	1	Right	16.01	16.88	20.31	15.95	17.14	16.50	16.07	16.79	16.45	16.21	16.79	16.36
	256QAM	Innter_Full	Mid	16.19	17.31	20.38	16.06	17.20	16.43	16.14	17.17	16.66	16.11	17.10	16.59

5G NR n41		RB Size	RB Offset	60MHz BW SCS = 30kHz			70MHz BW SCS = 30kHz			80MHz BW SCS = 30kHz			90MHz BW SCS = 30kHz		
Channel				505200	518598	531996	506202	518598	531000	507204	518598	529998	508200	518598	528996
Frequency (MHz)				2526	2592.99	2659.98	2531.01	2592.99	2655	2536.02	2592.99	2649.99	2541	2592.99	2644.98
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	19.41	20.53	20.19	19.34	20.38	20.43	19.29	20.23	20.39	19.49	20.25	20.45
	$\pi/2$ BPSK	1	Right	20.52	20.35	19.86	20.36	20.17	19.69	20.28	20.23	19.96	20.58	20.13	20.04
	$\pi/2$ BPSK	Innter_Full	Mid	19.83	20.58	20.02	19.76	20.70	19.94	19.73	20.55	19.97	20.04	20.58	19.97
	QPSK	1	Left	19.37	20.40	20.20	19.40	20.32	20.51	19.33	20.23	20.27	19.36	20.06	20.44
	QPSK	1	Right	20.54	20.48	19.84	20.43	20.24	19.86	20.32	20.18	20.00	20.67	20.04	19.87
	QPSK	Innter_Full	Mid	19.81	20.76	20.08	19.80	20.73	19.99	19.78	20.63	19.95	19.95	20.65	20.16
	16QAM	1	Left	19.56	20.62	20.51	19.91	20.68	20.29	19.73	20.38	20.62	19.65	20.36	20.56
	16QAM	1	Right	20.67	20.56	19.98	19.91	20.54	20.44	20.61	20.25	20.00	20.64	20.60	20.40
	16QAM	Innter_Full	Mid	19.75	20.58	20.02	19.74	20.69	19.96	19.76	20.54	19.98	20.09	20.62	20.07
	64QAM	1	Left	18.15	19.19	18.96	17.95	19.00	18.99	18.09	18.98	19.21	18.20	18.84	19.25
	64QAM	1	Right	19.23	18.96	18.64	19.02	18.91	18.71	19.06	18.94	18.62	19.47	18.82	18.79
	64QAM	Innter_Full	Mid	18.34	19.02	18.41	18.26	19.09	18.31	18.39	18.98	18.38	18.53	19.24	18.55
	256QAM	1	Left	15.75	16.72	16.57	15.46	16.65	16.69	15.76	16.44	16.80	15.57	16.38	16.74
	256QAM	1	Right	16.55	16.42	16.14	16.65	17.07	16.18	16.55	16.42	16.20	16.84	16.43	16.26
	256QAM	Innter_Full	Mid	16.10	17.10	16.63	16.15	17.01	16.42	16.37	17.06	16.48	16.49	17.06	16.59

5G NR n41		RB Size	RB Offset	100MHz BW SCS = 30kHz		
Channel				509202	518598	528000
Frequency (MHz)				2546.01	2592.99	2640
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	19.57	20.15	20.60
	$\pi/2$ BPSK	1	Right	20.67	20.23	20.20
	$\pi/2$ BPSK	Innter_Full	Mid	20.16	20.66	20.28
	QPSK	1	Left	19.55	20.22	20.56
	QPSK	1	Right	20.68	20.24	20.06
	QPSK	Innter_Full	Mid	20.16	20.43	20.34
	16QAM	1	Left	19.74	20.59	20.51
	16QAM	1	Right	20.67	20.63	20.63
	16QAM	Innter_Full	Mid	20.10	20.52	20.33
	64QAM	1	Left	18.39	19.01	19.46
	64QAM	1	Right	19.54	19.03	18.98
	64QAM	Innter_Full	Mid	18.74	19.27	18.91
	256QAM	1	Left	15.78	16.33	16.94
	256QAM	1	Right	17.17	16.53	16.44
	256QAM	Innter_Full	Mid	16.70	17.19	16.75

➤ 5G NR n48 (All DSI)

5G NR n48		RB Size	RB Offset	10MHz BW SCS = 30kHz			20MHz BW SCS = 30kHz			40MHz BW SCS = 30kHz		
Channel				637000	641666	646332	637334	641666	646000	638000	641666	645332
Frequency (MHz)				3555	3624.99	3694.98	3560.01	3624.99	3690	3570	3624.99	3679.98
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	21.86	21.58	21.85	21.81	21.61	21.48	22.03	21.81	21.52
	$\pi/2$ BPSK	1	Right	21.98	21.58	21.91	21.97	21.22	21.81	22.09	21.55	21.87
	$\pi/2$ BPSK	Innter_Full	Mid	22.05	21.66	22.00	21.98	21.56	21.68	22.09	21.58	21.70
	QPSK	1	Left	21.89	21.64	21.85	21.89	21.59	21.60	22.06	21.73	21.56
	QPSK	1	Right	22.03	21.51	21.97	21.86	21.38	21.82	22.03	21.60	22.02
	QPSK	Innter_Full	Mid	22.07	21.68	21.94	22.01	21.77	21.73	22.10	21.87	21.85
	16QAM	1	Left	20.93	20.80	21.04	20.89	20.67	20.46	20.80	21.07	20.80
	16QAM	1	Right	20.99	20.68	21.12	21.11	20.42	20.85	21.13	20.80	21.16
	16QAM	Innter_Full	Mid	21.13	20.77	21.07	20.82	20.53	20.79	21.03	20.76	20.76
	64QAM	1	Left	19.51	19.38	19.61	19.60	19.12	19.06	19.69	19.44	18.93
	64QAM	1	Right	19.52	19.26	19.68	19.72	18.88	19.27	19.81	19.18	19.54
	64QAM	Innter_Full	Mid	19.51	19.17	19.49	19.39	18.99	19.18	19.55	19.04	19.29
	256QAM	1	Left	17.40	17.05	17.37	17.16	16.98	16.98	17.19	17.10	16.58
	256QAM	1	Right	17.43	16.94	17.32	17.31	16.73	17.25	17.45	16.81	17.06
	256QAM	Innter_Full	Mid	17.49	17.07	17.40	17.34	16.96	17.16	17.48	17.05	17.18

➤ 5G NR n66 (All DSI)

5G NR n66		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				342500	349000	355500	343000	349000	355000	343500	349000	354500	344000	349000	354000
Frequency (MHz)				1712.5	1745	1777.5	1715	1745	1775	1717.5	1745	1772.5	1720	1745	1770
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	22.20	22.49	22.56	22.24	22.31	22.50	22.17	22.27	22.46	22.34	22.52	22.40
	$\pi/2$ BPSK	1	Right	22.21	22.39	22.49	22.17	22.38	22.45	22.09	22.39	22.24	22.43	22.48	22.42
	$\pi/2$ BPSK	Innter_Full	Mid	22.30	22.52	22.48	22.21	22.44	22.54	22.14	22.29	22.38	22.37	22.55	22.55
	QPSK	1	Left	22.23	22.39	22.56	22.18	22.28	22.54	22.11	22.26	22.32	22.37	22.45	22.50
	QPSK	1	Right	22.23	22.31	22.49	22.19	22.30	22.54	22.09	22.31	22.38	22.37	22.44	22.57
	QPSK	Innter_Full	Mid	22.27	22.48	22.57	22.23	22.42	22.52	22.17	22.27	22.48	22.30	22.55	22.59
	16QAM	1	Left	21.20	21.36	21.58	21.15	21.32	21.60	21.09	21.42	21.41	21.34	21.54	21.47
	16QAM	1	Right	21.21	21.39	21.54	21.21	21.58	21.57	21.07	21.34	21.40	21.42	21.49	21.63
	16QAM	Innter_Full	Mid	21.39	21.60	21.75	21.20	21.46	21.66	21.15	21.30	21.43	21.29	21.49	21.59
	64QAM	1	Left	20.00	20.21	20.30	19.93	20.10	20.32	19.85	20.01	20.00	20.19	20.22	20.16
	64QAM	1	Right	19.97	20.10	20.22	19.94	20.13	20.21	19.77	19.93	19.99	20.20	20.21	20.31
	64QAM	Innter_Full	Mid	19.94	20.01	20.45	19.73	20.01	20.11	19.72	19.77	19.86	19.87	20.12	20.07
	256QAM	1	Left	17.70	17.83	18.00	17.63	17.79	18.03	17.57	17.67	17.75	17.79	17.89	17.84
	256QAM	1	Right	17.73	17.91	18.04	17.60	17.76	18.00	17.53	17.70	17.67	17.80	17.84	17.99
	256QAM	Innter_Full	Mid	17.81	17.90	18.01	17.74	17.94	18.11	17.62	17.68	17.94	17.80	18.03	18.08

➤ 5G NR n71 (All DSI)

5G NR n71		RB Size	RB Offset	5MHz BW SCS = 15kHz			10MHz BW SCS = 15kHz			15MHz BW SCS = 15kHz			20MHz BW SCS = 15kHz		
Channel				133100	136100	139100	133600	136100	138600	134100	136100	138100	134600	136100	137600
Frequency (MHz)				665.5	680.5	695.5	668	680.5	693	670.5	680.5	690.5	673	680.5	688
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	22.76	22.63	22.48	22.86	22.69	22.71	22.68	22.63	22.46	22.77	22.66	22.62
	$\pi/2$ BPSK	1	Right	22.77	22.72	22.45	22.65	22.70	22.51	22.61	22.42	22.24	22.58	22.48	22.37
	$\pi/2$ BPSK	Innter_Full	Mid	22.80	22.83	22.55	22.87	22.77	22.56	22.77	22.69	22.51	22.71	22.67	22.55
	QPSK	1	Left	22.85	22.65	22.51	22.88	22.68	22.72	22.78	22.55	22.46	22.90	22.79	22.64
	QPSK	1	Right	22.83	22.68	22.48	22.69	22.70	22.53	22.58	22.52	22.35	22.64	22.50	22.32
	QPSK	Innter_Full	Mid	22.80	22.86	22.59	22.89	22.82	22.66	22.70	22.67	22.54	22.73	22.67	22.49
	16QAM	1	Left	21.94	21.68	21.36	22.00	21.80	21.53	21.95	21.71	21.34	21.94	21.74	21.66
	16QAM	1	Right	21.85	21.70	21.25	21.86	21.69	21.34	21.73	21.60	21.13	21.65	21.57	21.38
	16QAM	Innter_Full	Mid	22.04	21.93	21.66	21.91	21.82	21.68	21.81	21.70	21.53	21.76	21.68	21.49
	64QAM	1	Left	20.45	20.28	20.17	20.41	20.31	20.26	20.35	20.17	20.19	20.44	20.36	20.33
	64QAM	1	Right	20.40	20.20	20.07	20.34	20.30	20.07	20.24	20.15	20.00	20.25	20.19	20.02
	64QAM	Innter_Full	Mid	20.50	20.34	20.05	20.25	20.22	20.14	20.24	20.17	20.03	20.30	20.20	20.13
	256QAM	1	Left	18.30	18.20	18.05	18.39	18.22	18.22	18.38	18.21	17.89	18.19	18.00	18.00
	256QAM	1	Right	18.31	18.25	17.94	18.30	18.25	17.90	18.27	18.21	17.82	18.06	17.98	17.82
	256QAM	Innter_Full	Mid	18.34	18.30	18.16	18.39	18.32	18.14	18.35	18.20	18.07	18.20	18.17	17.98

➤ 5G NR n77_Block A (DSI-0)

5G NR n77		RB Size	RB Offset	20MHz BW SCS = 30kHz			30MHz BW SCS = 30kHz			40MHz BW SCS = 30kHz			60MHz BW SCS = 30kHz		
Channel				630666	633334	636000	631000	633334	635666	631334	633334	635334	632000	633334	634666
Frequency (MHz)				3459.99	3500.01	3540	3465	3500.01	3534.99	3470.01	3500.01	3530.01	3480	3500.01	3519.99
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	21.82	22.03	21.95	21.84	22.07	21.81	21.73	22.05	22.06	21.45	21.63	21.72
	$\pi/2$ BPSK	1	Right	21.97	22.02	22.10	21.92	21.80	22.04	22.00	21.98	21.99	21.72	21.81	21.79
	$\pi/2$ BPSK	Innater_Full	Mid	21.82	22.05	22.01	21.89	22.01	21.83	21.97	22.03	21.97	21.69	21.83	21.80
	QPSK	1	Left	21.85	22.03	22.13	21.92	22.17	22.05	21.89	22.11	21.86	21.59	21.81	21.75
	QPSK	1	Right	22.02	22.00	21.98	21.85	22.14	22.05	22.14	22.05	21.87	21.78	21.69	21.77
	QPSK	Innater_Full	Mid	21.92	22.21	21.98	21.92	22.07	21.92	21.83	21.98	21.93	21.85	21.91	21.85
	16QAM	1	Left	21.97	22.16	22.11	22.10	21.84	22.06	21.98	22.09	22.02	21.69	21.58	21.89
	16QAM	1	Right	22.12	22.11	22.19	22.11	21.96	22.16	22.13	22.08	22.12	21.79	21.81	21.82
	16QAM	Innater_Full	Mid	21.91	21.96	22.11	21.94	21.96	21.98	21.94	21.87	21.93	21.67	21.69	21.85
	64QAM	1	Left	20.70	20.85	20.60	20.48	20.67	20.61	20.65	20.85	20.69	20.36	20.53	20.58
	64QAM	1	Right	20.76	20.77	20.58	20.63	20.62	20.81	20.88	20.74	20.78	20.54	20.46	20.58
	64QAM	Innater_Full	Mid	20.41	20.48	20.53	20.30	20.54	20.25	20.45	20.58	20.54	20.34	20.35	20.33
	256QAM	1	Left	18.40	18.47	18.32	18.17	18.37	18.32	18.19	18.43	18.39	18.03	18.24	18.20
	256QAM	1	Right	18.48	18.49	18.39	18.31	18.36	18.45	18.54	18.46	18.58	18.12	18.12	18.22
	256QAM	Innater_Full	Mid	18.34	18.60	18.54	18.40	18.33	18.53	18.20	18.35	18.32	18.13	18.40	18.25

5G NR n77		RB Size	RB Offset	80MHz BW SCS = 30kHz			100MHz BW SCS = 30kHz		
Channel				632666	633334	634000	N/A	633334	N/A
Frequency (MHz)				3489.99	3500.01	3510		3500.01	
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	21.71	21.65	21.82		21.99	
	$\pi/2$ BPSK	1	Right	21.78	21.92	21.92		22.03	
	$\pi/2$ BPSK	Innater_Full	Mid	21.97	21.98	21.94		22.21	
	QPSK	1	Left	21.57	21.83	21.88		21.86	
	QPSK	1	Right	21.84	21.80	21.85		22.23	
	QPSK	Innater_Full	Mid	21.94	21.78	22.11		22.22	
	16QAM	1	Left	21.95	21.96	22.10		21.85	
	16QAM	1	Right	22.03	22.10	22.06		22.08	
	16QAM	Innater_Full	Mid	21.93	21.85	22.03		22.06	
	64QAM	1	Left	20.26	20.60	20.66		20.54	
	64QAM	1	Right	20.34	20.68	20.63		20.77	
	64QAM	Innater_Full	Mid	20.31	20.54	20.54		20.67	
	256QAM	1	Left	18.16	18.28	18.29		18.57	
	256QAM	1	Right	18.28	18.33	18.38		18.71	
	256QAM	Innater_Full	Mid	18.45	18.46	18.45		18.58	

➤ 5G NR n77_Block A (DSI-1)

5G NR n77		RB Size	RB Offset	20MHz BW SCS = 30kHz			30MHz BW SCS = 30kHz			40MHz BW SCS = 30kHz			60MHz BW SCS = 30kHz		
Channel				630666	633334	636000	631000	633334	635666	631334	633334	635334	632000	633334	634666
Frequency (MHz)				3459.99	3500.01	3540	3465	3500.01	3534.99	3470.01	3500.01	3530.01	3480	3500.01	3519.99
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	19.02	19.19	19.10	18.94	19.22	18.91	18.93	19.15	19.14	18.45	18.78	18.88
	$\pi/2$ BPSK	1	Right	19.17	19.05	19.18	19.08	18.96	19.17	19.15	19.11	19.19	18.72	18.81	18.85
	$\pi/2$ BPSK	Innater_Full	Mid	18.87	19.10	19.26	19.04	19.16	18.86	19.15	19.28	19.22	18.85	19.03	18.85
	QPSK	1	Left	18.90	19.16	19.24	19.17	19.31	19.18	18.89	19.16	19.01	18.77	18.92	18.90
	QPSK	1	Right	19.22	19.20	19.19	19.00	19.20	19.10	19.34	19.23	18.97	18.99	18.94	18.82
	QPSK	Innater_Full	Mid	19.05	19.21	19.19	19.00	19.15	19.00	18.86	18.98	19.18	19.00	19.02	19.10
	16QAM	1	Left	19.07	19.34	19.26	19.26	18.90	19.14	19.13	19.09	19.17	18.79	18.83	18.97
	16QAM	1	Right	19.15	19.31	19.19	19.21	19.01	19.29	19.29	19.33	19.26	18.94	18.94	19.00
	16QAM	Innater_Full	Mid	19.06	19.01	19.14	19.15	18.99	19.11	19.14	19.05	19.08	18.82	18.89	18.88
	64QAM	1	Left	17.75	17.95	17.66	17.68	17.75	17.76	17.80	17.91	17.77	17.42	17.61	17.74
	64QAM	1	Right	17.97	17.88	17.69	17.71	17.65	17.91	18.03	17.89	17.83	17.74	17.64	17.73
	64QAM	Innater_Full	Mid	17.57	17.73	17.78	17.45	17.75	17.30	17.65	17.83	17.74	17.54	17.45	17.44
	256QAM	1	Left	15.58	15.62	15.47	15.33	15.48	15.45	15.34	15.58	15.50	15.14	15.37	15.38
	256QAM	1	Right	15.59	15.74	15.54	15.39	15.49	15.60	15.75	15.49	15.71	15.20	15.25	15.38
	256QAM	Innater_Full	Mid	15.44	15.85	15.72	15.51	15.33	15.63	15.31	15.53	15.53	15.23	15.51	15.46

5G NR n77		RB Size	RB Offset	80MHz BW SCS = 30kHz			100MHz BW SCS = 30kHz	
Channel				632666	633334	634000	633334	
Frequency (MHz)				3489.99	3500.01	3510	3500.01	
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	18.81	18.81	18.85	18.99	
	$\pi/2$ BPSK	1	Right	18.96	19.02	19.13	19.16	
	$\pi/2$ BPSK	Innter_Full	Mid	19.18	19.01	19.19	19.36	
	QPSK	1	Left	18.68	18.86	18.93	18.91	
	QPSK	1	Right	18.94	18.85	18.95	19.28	
	QPSK	Innter_Full	Mid	19.00	18.98	19.26	19.38	
	16QAM	1	Left	19.10	19.21	19.20	18.85	
	16QAM	1	Right	19.08	19.23	19.14	19.19	
	16QAM	Innter_Full	Mid	19.01	19.06	19.09	19.31	
	64QAM	1	Left	17.31	17.75	17.81	17.60	
	64QAM	1	Right	17.39	17.76	17.74	17.88	
	64QAM	Innter_Full	Mid	17.31	17.79	17.75	17.73	
	256QAM	1	Left	15.31	15.46	15.49	15.72	
	256QAM	1	Right	15.34	15.39	15.38	15.84	
	256QAM	Innter_Full	Mid	15.61	15.64	15.48	15.69	

➤ 5G NR n77_Block C (DSI-0)

5G NR n77		RB Size	RB Offset	20MHz BW SCS = 30kHz			30MHz BW SCS = 30kHz			40MHz BW SCS = 30kHz			60MHz BW SCS = 30kHz		
Channel				647334	656000	664666	647666	656000	664332	648000	656000	664000	648668	656000	663334
Frequency (MHz)				3710.01	3840	3969.99	3714.99	3840	3964.98	3720	3840	3960	3730.02	3840	3950.01
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	22.08	22.00	21.73	21.86	22.06	22.06	21.89	21.99	21.92	21.98	21.92	21.62
	$\pi/2$ BPSK	1	Right	22.08	22.08	21.95	22.12	22.00	22.13	22.01	21.92	22.02	22.08	21.86	21.97
	$\pi/2$ BPSK	Innter_Full	Mid	22.09	22.11	21.99	22.01	22.08	22.08	22.02	22.00	21.96	22.11	21.97	21.97
	QPSK	1	Left	22.13	22.10	21.84	21.96	22.10	22.10	21.95	22.07	21.82	21.83	21.98	21.62
	QPSK	1	Right	22.11	22.11	22.06	22.14	22.09	22.06	22.10	21.94	21.94	22.14	21.96	21.94
	QPSK	Innter_Full	Mid	22.14	22.15	21.99	22.03	22.13	22.05	21.93	22.07	21.95	22.13	22.02	21.98
	16QAM	1	Left	22.10	22.14	21.95	21.73	22.09	21.98	22.04	21.98	21.93	21.85	22.13	22.08
	16QAM	1	Right	22.10	22.11	21.96	22.05	22.13	22.13	22.08	21.95	22.06	22.07	22.09	22.11
	16QAM	Innter_Full	Mid	22.01	21.97	21.89	21.98	22.03	22.05	22.07	21.98	22.01	22.13	22.05	21.96
	64QAM	1	Left	21.01	20.80	20.62	20.63	20.75	20.74	20.47	20.72	20.53	20.64	20.50	20.18
	64QAM	1	Right	21.04	20.78	20.71	20.82	20.96	20.81	20.75	20.48	20.78	20.94	20.63	20.63
	64QAM	Innter_Full	Mid	20.74	20.58	20.49	20.60	20.65	20.80	20.50	20.49	20.41	20.78	20.51	20.48
	256QAM	1	Left	18.75	18.31	18.06	18.34	18.84	18.76	18.18	18.83	18.65	18.11	18.23	17.91
	256QAM	1	Right	18.78	18.28	18.32	18.42	18.66	18.77	18.28	18.63	18.70	18.44	18.22	18.23
	256QAM	Innter_Full	Mid	18.74	18.56	18.49	18.51	18.62	18.71	18.48	18.52	18.41	18.72	18.48	18.41

5G NR n77		RB Size	RB Offset	80MHz BW SCS = 30kHz			100MHz BW SCS = 30kHz		
Channel				649334	656000	662666	650000	656000	662000
Frequency (MHz)				3740.01	3840	3939.99	3750	3840	3930
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	21.77	21.71	21.54	21.70	21.80	21.42
	$\pi/2$ BPSK	1	Right	22.13	21.65	21.81	21.98	21.83	21.82
	$\pi/2$ BPSK	Innter_Full	Mid	22.10	21.88	21.94	22.16	22.00	21.91
	QPSK	1	Left	21.74	21.76	21.43	21.89	21.78	21.62
	QPSK	1	Right	22.07	21.72	21.72	22.25	21.96	21.79
	QPSK	Innter_Full	Mid	22.00	21.80	21.66	22.14	21.86	21.71
	16QAM	1	Left	21.83	22.04	22.00	22.06	22.06	21.75
	16QAM	1	Right	22.13	21.90	22.08	22.04	22.01	21.94
	16QAM	Innter_Full	Mid	22.05	21.91	21.94	22.01	21.73	21.82
	64QAM	1	Left	20.17	20.48	19.99	20.36	20.35	20.29
	64QAM	1	Right	20.72	20.29	20.27	20.60	20.21	20.46
	64QAM	Innter_Full	Mid	20.61	20.33	20.34	20.51	20.18	20.24
	256QAM	1	Left	18.19	18.15	17.82	18.41	17.98	17.84
	256QAM	1	Right	18.52	18.03	18.11	18.66	17.76	17.98
	256QAM	Innter_Full	Mid	18.59	18.12	18.19	18.34	18.24	18.25

➤ 5G NR n77_Block C (DSI-1)

5G NR n77		RB Size	RB Offset	20MHz BW SCS = 30kHz			30MHz BW SCS = 30kHz			40MHz BW SCS = 30kHz			60MHz BW SCS = 30kHz		
Channel				647334	656000	664666	647666	656000	664332	648000	656000	664000	648668	656000	663334
Frequency (MHz)				3710.01	3840	3969.99	3714.99	3840	3964.98	3720	3840	3960	3730.02	3840	3950.01
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	18.73	19.08	19.24	18.97	19.14	19.14	19.14	19.02	19.14	19.18	19.12	18.72
	$\pi/2$ BPSK	1	Right	19.03	19.29	19.22	19.25	19.15	19.14	18.98	19.12	19.16	19.26	18.96	19.08
	$\pi/2$ BPSK	Innater_Full	Mid	19.09	19.16	19.29	19.06	19.16	19.26	19.15	19.07	19.18	19.21	19.00	19.12
	QPSK	1	Left	18.95	19.21	19.24	19.06	19.25	19.25	19.23	18.95	19.08	18.93	19.08	18.73
	QPSK	1	Right	19.24	19.32	19.16	19.17	19.24	19.19	18.99	18.97	19.25	19.24	19.12	19.05
	QPSK	Innater_Full	Mid	19.09	19.20	19.25	19.28	19.24	19.10	19.27	19.13	19.01	19.28	19.17	19.13
	16QAM	1	Left	19.10	19.32	19.23	18.84	19.20	19.18	19.08	19.06	19.19	18.95	19.23	19.23
	16QAM	1	Right	19.12	19.27	19.15	19.23	19.26	19.16	19.13	19.06	19.13	19.18	19.23	19.22
	16QAM	Innater_Full	Mid	19.10	19.22	19.16	19.09	19.11	19.26	19.13	19.04	19.07	19.21	19.20	18.96
	64QAM	1	Left	17.72	17.90	18.07	17.66	17.85	17.89	17.93	17.61	17.58	17.75	17.50	17.39
	64QAM	1	Right	17.84	17.86	18.25	17.97	18.01	17.87	17.68	17.86	17.90	18.10	17.71	17.69
	64QAM	Innater_Full	Mid	17.62	17.73	17.80	17.70	17.75	18.00	17.52	17.41	17.75	17.84	17.71	17.56
	256QAM	1	Left	15.12	15.41	15.81	15.34	15.84	15.79	15.89	15.90	15.33	15.26	15.48	15.12
	256QAM	1	Right	15.47	15.48	15.88	15.60	15.82	15.87	15.79	15.70	15.49	15.54	15.38	15.23
	256QAM	Innater_Full	Mid	15.52	15.71	15.87	15.64	15.65	15.71	15.65	15.51	15.69	15.83	15.54	15.62

5G NR n77		RB Size	RB Offset	80MHz BW SCS = 30kHz			100MHz BW SCS = 30kHz		
Channel				649334	656000	662666	650000	656000	662000
Frequency (MHz)				3740.01	3840	3939.99	3750	3840	3930
DFT-s-OFDM	$\pi/2$ BPSK	1	Left	18.83	18.86	18.72	18.95	18.95	18.57
	$\pi/2$ BPSK	1	Right	19.20	18.90	18.99	19.08	18.88	19.07
	$\pi/2$ BPSK	Innater_Full	Mid	19.23	18.98	19.14	19.24	19.21	19.02
	QPSK	1	Left	18.99	18.81	18.49	18.99	18.81	18.72
	QPSK	1	Right	19.21	18.85	18.85	19.31	19.04	18.89
	QPSK	Innater_Full	Mid	19.24	18.93	18.72	19.19	18.91	18.81
	16QAM	1	Left	19.03	19.10	19.08	19.06	19.11	18.88
	16QAM	1	Right	19.13	19.11	19.18	19.07	19.16	19.04
	16QAM	Innater_Full	Mid	19.21	19.12	19.09	19.21	18.88	18.88
	64QAM	1	Left	17.20	17.51	17.04	17.36	17.45	17.47
	64QAM	1	Right	17.92	17.50	17.30	17.70	17.32	17.71
	64QAM	Innater_Full	Mid	17.64	17.41	17.54	17.51	17.29	17.45
	256QAM	1	Left	15.29	15.30	15.03	15.62	15.08	15.09
	256QAM	1	Right	15.58	15.14	15.26	15.91	14.79	15.23
	256QAM	Innater_Full	Mid	15.69	15.15	15.34	15.50	15.27	15.25