

Partial FCC Test Report

(PART 27)

Report No.: RFBFLF-WTW-P21070538F-2

FCC ID: MSQFM350GL

Test Model: FM350-GL

Received Date: Dec. 28, 2022

Test Date: Dec. 30, 2022 ~ Jan. 03, 2023

Issued Date: Mar. 08, 2023

Applicant: ASUSTeK COMPUTER INC.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lin Kou Laboratories

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

Test Location: No.19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City
33383, Taiwan

**FCC Registration /
Designation Number:** 788550 / TW0003



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Release Control Record

Issue No.	Description	Date Issued
RFBFLF-WTW-P21070538F-2	Original Release	Mar. 08, 2023

1 Certificate of Conformity

Product: 5G Module

Brand: Fibocom Wireless Inc

Test Model: FM350-GL

Sample Status: Engineering Sample

Applicant: ASUSTeK COMPUTER INC.

Test Date: Dec. 30, 2022 ~ Jan. 03, 2023

Standards: FCC Part 27, Subpart C, F, H, L, M, N, O

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Lena Wang , **Date:** Mar. 08, 2023
Lena Wang / Specialist

Approved by : Jeremy Lin , **Date:** Mar. 08, 2023
Jeremy Lin / Project Engineer

2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2									
FCC Clause							Test Item	Result	Remarks
WCDMA B4 / LTE B4	LTE B12	LTE B13	LTE B17	LTE B7 / LTE B41 / NR B7 / NR B38 / NR B41	LTE B66 / NR B66	NR B77 / NR B78			
2.1046 27.50 (d)(4)	2.1046 27.50 (c)	2.1046 27.50 (b)	2.1046 27.50 (c)	2.1046 27.50 (h)(2)	2.1046 27.50 (d)(4)	2.1046 27.50 (j)	Equivalent Isotropically Radiated Power / Equivalent Radiated Power	N/A	Refer to Note
2.1047	2.1047	2.1047	2.1047	2.1047	2.1047	2.1047	Modulation Characteristics	N/A	Refer to Note
27.50 (d)(5)	----	----	----	----	27.50 (d)(5)	----	Peak To Average Ratio	N/A	Refer to Note
2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	N/A	Refer to Note
2.1049	2.1049	2.1049	2.1049	2.1049	2.1049	2.1049	Occupied Bandwidth	N/A	Refer to Note
2.1051 27.53 (h)	2.1051 27.53 (g)	2.1051 27.53 (c)	2.1051 27.53 (g)	2.1051 27.53 (m)(4)(6)	2.1051 27.53 (h)	2.1051 27.53(l)	Band Edge / Out of Band Emissions Measurements	N/A	Refer to Note
2.1051 27.53 (h)	2.1051 27.53 (g)	2.1051 27.53 (c)(f)	2.1051 27.53 (g)	2.1051 27.53 (m)(4)(6)	2.1051 27.53 (h)	2.1051 27.53(l)	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 27.53 (h)	2.1053 27.53 (g)	2.1053 27.53 (c)(f)	2.1053 27.53 (g)	2.1053 27.53 (m)(4)(6)	2.1053 27.53 (h)	2.1053 27.53(l)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -24.08 dB at 5190.00 MHz.

Note:

- This report is a partial report, only test items of Radiated Spurious Emissions tests was performed. Other testing data please refer to Sporton report no.: FG051802A_R01, FG051802B_R01, FG051802C_R01, FG051802G_R01, FG051802H_R01, FG051802I_R01 for module (Brand: Fibocom, Model: FM350-GL).
- Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Radiated Emissions up to 1 GHz	9 kHz ~ 30 MHz	2.44 dB
	30 MHz ~ 200 MHz	2.95 dB
	200 MHz ~ 1000 MHz	2.95 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower & Turn Max-Full	MFA-440H	AT93021705	NA	NA
Turn Table Max-Full	MFT-201SS	NA	NA	NA
Turn Table Controller Max-Full	MG-7802	NA	NA	NA
Test Receiver KEYSIGHT	N9038A	MY55420137	Apr. 27, 2022	Apr. 26, 2023
Signal Analyzer Agilent	N9010A	MY52220207	Jan. 06, 2022	Jan. 05, 2023
Loop Antenna TESEQ	HLA 6121	45745	Jul. 27, 2022	Jul. 26, 2023
Loop Antenna EMCI	EM-6879	269	Sep. 19, 2022	Sep. 18, 2023
Pre-amplifier EMCI	EMC001340	980201	Sep. 23, 2022	Sep. 22, 2023
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	Jan. 15, 2022	Jan. 14, 2023
Pre-Amplifier EMCI	EMC 330H	980112	Oct. 01, 2022	Sep. 30, 2023
Bi_Log Antenna Schwarzbeck	VULB9168	9168-472	Oct. 21, 2022	Oct. 20, 2023
RF Coaxial Cable WORKEN	8D-FB	Cable-Ch10-01	Oct. 01, 2022	Sep. 30, 2023
Horn Antenna Schwarzbeck	BBHA 9120D	9120D-969	Nov. 13, 2022	Nov. 12, 2023
Pre-Amplifier EMCI	EMC 012645	980115	Oct. 01, 2022	Sep. 30, 2023
RF Coaxial Cable EMCI	EMC104-SM-SM- 8000+3000	171005	Oct. 01, 2022	Sep. 30, 2023
RF Coaxial Cable HUBER SUHNER	SUCOFLEX 104	EMC104-SM-SM- 1000(140807)	Oct. 01, 2022	Sep. 30, 2023
RF FLITER MICRO-TRONICS	BRM50716	060	Jan. 10, 2022	Jan. 09, 2023
RF FLITER MICRO-TRONICS	BRM17690	004	Jan. 10, 2022	Jan. 09, 2023
Boresight antenna tower fixture BV	BAF-02	7	NA	NA
Radio Communication Analyzer Anritsu	MT8821C	6201462755	Mar. 03, 2022	Mar. 02, 2023
Pre-Amplifier EMCI	EMC 184045	980116	Oct. 01, 2022	Sep. 30, 2023
Horn Antenna Schwarzbeck	BBHA 9170	148	Nov. 13, 2022	Nov. 12, 2023
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	Jul. 09, 2022	Jul. 08, 2023
RF Coaxial Cable EMCI	EMC102-KM-KM- 3000	150929	Jul. 09, 2022	Jul. 08, 2023

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HY - 966 chamber 5.

3 General Information

3.1 General Description of EUT

Product	5G Module	
Brand	Fibocom Wireless Inc	
Test Model	FM350-GL	
Status of EUT	Engineering Sample	
Power Supply Rating	11.61 Vdc (Battery) 5 Vdc / 9Vdc / 15Vdc / 20Vdc (Adapter)	
Modulation Type	WCDMA	QPSK
	LTE	QPSK, 16QAM, 64QAM, 256QAM
	5GNR	$\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM
Frequency Range	WCDMA	1712.4 ~ 1752.6 MHz
	LTE Band 4 (Channel Bandwidth: 1.4 MHz)	1710.7 ~ 1754.3 MHz
	LTE Band 4 (Channel Bandwidth: 3 MHz)	1711.5 ~ 1753.5 MHz
	LTE Band 4 (Channel Bandwidth: 5 MHz)	1712.5 ~ 1752.5 MHz
	LTE Band 4 (Channel Bandwidth: 10 MHz)	1715.0 ~ 1750.0 MHz
	LTE Band 4 (Channel Bandwidth: 15 MHz)	1717.5 ~ 1747.5 MHz
	LTE Band 4 (Channel Bandwidth: 20 MHz)	1720.0 ~ 1745.0 MHz
	LTE Band 7 (Channel Bandwidth: 5 MHz)	2502.5 ~ 2567.5 MHz
	LTE Band 7 (Channel Bandwidth: 10 MHz)	2505 ~ 2565 MHz
	LTE Band 7 (Channel Bandwidth: 15 MHz)	2507.5 ~ 2562.5 MHz
	LTE Band 7 (Channel Bandwidth: 20 MHz)	2510 ~ 2560 MHz
	LTE Band 12 (Channel Bandwidth: 1.4 MHz)	699.7 ~ 715.3 MHz
	LTE Band 12 (Channel Bandwidth: 3 MHz)	700.5 ~ 714.5 MHz
	LTE Band 12 (Channel Bandwidth: 5 MHz)	701.5 ~ 713.5 MHz
	LTE Band 12 (Channel Bandwidth: 10 MHz)	704.0 ~ 711.0 MHz
	LTE Band 13 (Channel Bandwidth: 5 MHz)	779.5 ~ 784.5 MHz
	LTE Band 13 (Channel Bandwidth: 10 MHz)	782.0 MHz
	LTE Band 17 (Channel Bandwidth: 5 MHz)	706.5 ~ 713.5 MHz
	LTE Band 17 (Channel Bandwidth: 10 MHz)	709.0 ~ 711.0 MHz
	LTE Band 41 (Channel Bandwidth: 5 MHz)	2498.5 ~ 2687.5 MHz
	LTE Band 41 (Channel Bandwidth: 10 MHz)	2501.0 ~ 2685.0 MHz
	LTE Band 41 (Channel Bandwidth: 15 MHz)	2503.5 ~ 2682.5 MHz
	LTE Band 41 (Channel Bandwidth: 20 MHz)	2506.0 ~ 2680.0 MHz
	LTE Band 66 (Channel Bandwidth: 1.4 MHz)	1710.7 ~ 1779.3 MHz
	LTE Band 66 (Channel Bandwidth: 3 MHz)	1711.5 ~ 1778.5 MHz
	LTE Band 66 (Channel Bandwidth: 5 MHz)	1712.5 ~ 1777.5 MHz
	LTE Band 66 (Channel Bandwidth: 10 MHz)	1715.0 ~ 1775.0 MHz
	LTE Band 66 (Channel Bandwidth: 15 MHz)	1717.5 ~ 1772.5 MHz
	LTE Band 66 (Channel Bandwidth: 20 MHz)	1720.0 ~ 1770.0 MHz
	n7 (Channel Bandwidth 5MHz)	2502.5MHz ~ 2567.5MHz

	n7 (Channel Bandwidth 10MHz)	2505.0MHz ~ 2565.0MHz
	n7 (Channel Bandwidth 15MHz)	2507.5MHz ~ 2562.5MHz
	n7 (Channel Bandwidth 20MHz)	2510.0MHz ~ 2560.0MHz
	n38 (Channel Bandwidth 5MHz)	2572.5MHz ~ 2617.5MHz
	n38 (Channel Bandwidth 10MHz)	2575.0MHz ~ 2615.0MHz
	n38 (Channel Bandwidth 15MHz)	2577.5MHz ~ 2612.5MHz
	n38 (Channel Bandwidth 20MHz)	2580.0MHz ~ 2610.0MHz
	n41 (Channel Bandwidth 10MHz)	2501.01MHz ~ 2685.0MHz
	n41 (Channel Bandwidth 15MHz)	2503.5MHz ~ 2682.48MHz
	n41 (Channel Bandwidth 30MHz)	2511.00MHz ~ 2674.98MHz
	n41 (Channel Bandwidth 40MHz)	2516.01MHz ~ 2670.00MHz
	n41 (Channel Bandwidth 50MHz)	2521.02MHz ~ 2664.99MHz
	n41 (Channel Bandwidth 80MHz)	2536.02MHz ~ 2649.99MHz
	n66 (Channel Bandwidth 5MHz)	1712.5MHz ~ 1777.5MHz
	n66 (Channel Bandwidth 10MHz)	1715.0MHz ~ 1775.0MHz
	n66 (Channel Bandwidth 15MHz)	1717.5MHz ~ 1772.5MHz
	n66 (Channel Bandwidth 20MHz)	1720.0MHz ~ 1770.0MHz
	n66 (Channel Bandwidth 40MHz)	1730.0MHz ~ 1760.0MHz
	n77 (Channel Bandwidth 10MHz)	3705.0MHz ~ 3975.0MHz
	n77 (Channel Bandwidth 15MHz)	3707.52MHz ~ 3972.48MHz
	n77 (Channel Bandwidth 20MHz)	3710.01MHz ~ 3969.99MHz
	n77 (Channel Bandwidth 40MHz)	3720.00MHz ~ 3960.00MHz
	n77 (Channel Bandwidth 50MHz)	3725.01MHz ~ 3954.99MHz
	n77 (Channel Bandwidth 60MHz)	3730.02MHz ~ 3949.98MHz
	n77 (Channel Bandwidth 80MHz)	3740.01MHz ~ 3939.99MHz
	n77 (Channel Bandwidth 100MHz)	3750.00MHz ~ 3930.00MHz
	n78 (Channel Bandwidth 10MHz)	3705.0MHz ~ 3975.0MHz
	n78 (Channel Bandwidth 15MHz)	3707.52MHz ~ 3972.48MHz
	n78 (Channel Bandwidth 20MHz)	3710.01MHz ~ 3789.99MHz
	n78 (Channel Bandwidth 40MHz)	3720.00MHz ~ 3780.00MHz
	n78 (Channel Bandwidth 50MHz)	3725.01MHz ~ 3774.99MHz
	n78 (Channel Bandwidth 60MHz)	3730.02MHz ~ 3769.98MHz
	n78 (Channel Bandwidth 80MHz)	3740.01MHz ~ 3759.99MHz
	n78 (Channel Bandwidth 100MHz)	3750.00MHz
Antenna Type	Refer to Note as below	
Antenna Gain	Refer to Note as below	
Tx / Rx Function	2Tx / 4Rx	

Note:

1. The EUT is authorized for use in specific End-product. Please refer to below for more details.

Product Name	Brand	Model	Difference
Notebook PC/Expertbook	ASUS	B7402FB	For marketing purpose
		B7402F	
		B7402FV	
		B7402FVA	
		B7402FVAT	

2. The antenna information is listed as below.

WWAN Antenna								
Ant. Type	Couple							
Band	NB				Tablet			
	Antenna Peak Gain (dBi)							
	Ant 0 (TX/RX)	Ant 1 (RX)	Ant 2 (TX/RX)	Ant 3 (RX)	Ant 0 (TX/RX)	Ant 1 (RX)	Ant 2 (TX/RX)	Ant 3 (RX)
WCDMA II / LTE 2 / 5G NR n2	1.96	1.51	1.82	1.96	-1.18	1.92	0.93	-1.73
WCDMA IV / LTE 4	1.89	1.57	1.84	1.87	1.22	1.95	0.48	-0.24
WCDMA V / LTE 5 / 5G NR n5	-0.42	-	-	-0.36	-3.96	-	-	-2.49
LTE 7 / 5G NR n7	1.97	1.61	1.79	1.83	0.29	1.94	1.99	0.79
LTE 12	0.88	-	-	-0.86	-1.05	-	-	-4.13
LTE 13	1.95	-	-	1.99	0.23	-	-	-1.81
LTE 14	1.90	-	-	1.81	-0.78	-	-	-1.95
LTE 17	0.88	-	-	-0.86	-1.05	-	-	-4.13
LTE 25 / 5G NR n25	1.93	1.77	1.82	1.97	-1.04	1.92	0.93	-1.69
LTE 26	-0.03	-	-	-0.22	-3.72	-	-	-2.49
LTE 30 / 5G NR n30	1.80	1.27	1.83	1.96	0.49	1.33	0.71	1.63
LTE 38 / 5G NR n38	1.31	1.55	1.88	1.81	0.8	1.96	1.94	-0.46
LTE 41 / 5G NR n41	1.97	1.98	1.50	1.84	1.82	1.84	1.86	1.96
LTE 48	1.90	1.89	1.73	1.91	1.84	1.77	1.82	1.83
LTE 66 / 5G NR n66	1.94	1.75	1.85	1.85	1.22	1.99	0.51	-0.44
5G NR n77	1.98	1.91	1.87	1.97	1.80	1.89	1.92	1.90
5G NR n78	1.98	1.75	1.87	1.91	1.98	1.89	1.82	1.93

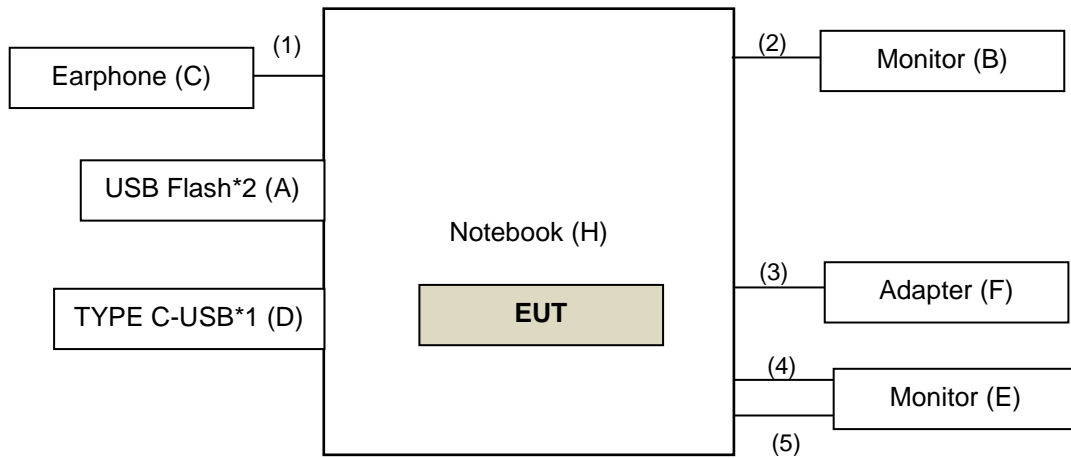
*The max antenna gain was chosen for final test.

3. Detail antenna specification please refer to antenna datasheet.

4. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Configuration of System under Test

<Radiated Emission Test>



Under Table

Remote Site

Radio Communication
Analyzer (G)

3.2.1 Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	USB*2	TRANSCEND	USB3.0 32GB	N/A	N/A	Provided by Lab
B	Monitor	Dell	A14S2421HSXmTW	CN-01KFWF-WSL00-24C-711B	N/A	Provided by Lab
C	Earphone	HTC	HTC_MAX320	N/A	N/A	Provided by Lab
D	TYPE C-USB*1	SanDisk	SDDDC3-032G	N/A	N/A	Provided by Lab
E	Monitor	Dell	A14S2421HSXmTW	CN-01KFWF-WSL00-24C-714B	N/A	Provided by Lab
F	Adapter	CHICONY	A19-065N3A	N/A	N/A	Accessory of the EUT
G	Radio Communication Analyzer	Anritsu	MT8821C	6201462755	NA	Provided by Lab
H	Notebook	ASUS	B7402FV	NA	NA	Provided by client

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Audio for Earphone Cable	1	1.2	N	0	Provided by Lab
2.	HDMI Cable	1	1.8	Y	0	Provided by Lab
3.	Adapter Cable	1	1.6	Y	0	Accessory of the EUT
4.	Mini DP TO DP Cable	1	1.5	Y	0	Provided by Lab
5.	Micro HDMI TO HDMI Cable	1	1.5	Y	0	Provided by Lab

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis of Tablet Mode and NB Mode, and antenna ports
The worst case was found when positioned on Y-axis of tablet mode for LTE Band 7 & NR Band 7/38 and NB mode for other band. Following channel(s) was (were) selected for the final test as listed below:

WCDMA

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	Radiated Emission	1312 to 1513	1413	WCDMA

LTE Band 4

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	20050 to 20300	20175	20 MHz	QPSK	1 RB / 0 RB Offset

LTE Band 7

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	20850 to 21350	21100	20 MHz	QPSK	1 RB / 0 RB Offset

LTE Band 12

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	23060 to 23130	23095	10 MHz	QPSK	1 RB / 0 RB Offset

LTE Band 13

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	23230	23230	10 MHz	QPSK	1 RB / 0 RB Offset

LTE Band 17

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	23780 to 23800	23790	10 MHz	QPSK	1 RB / 0 RB Offset

LTE Band 41

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	39750 to 41490	40620	20 MHz	QPSK	1 RB / 0 RB Offset

LTE Band 66

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	132072 to 132572	132322	20 MHz	QPSK	1 RB / 0 RB Offset

NR Band 7

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	505000 to 509000	507000	20MHz	QPSK	1 RB / 1 RB Offset

NR Band 38

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	516000 to 523000	519000	20MHz	QPSK	1 RB / 1 RB Offset

NR Band 41

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	509202 to 528000	518598	100MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset

NR Band 66

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	346000 to 352000	349000	40MHz	QPSK	1 RB / 1 RB Offset

NR Band 77

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	650000 to 662000	656000	100MHz	QPSK	1 RB / 1 RB Offset

NR Band 78

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	648334 to 651666	633334	100MHz	QPSK	1 RB / 1 RB Offset

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
Radiated Emission	24 deg. C, 66 % RH	120 Vac, 60 Hz	Thomas Cheng, Vincent Chen

3.4 EUT Operating Conditions

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency

3.5 General Description of Applied Standards and references

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards and references:

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 27

ANSI 63.26-2015

Note: All test items have been performed and recorded as per the above standards.

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

ANSI/TIA/EIA-603-E 2016

Note: All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Radiated Emission Measurement

4.1.1 Limits of Radiated Emission Measurement

For LTE Band 7, 41 and 5G NR n7, n38, n41:

According to FCC 27.53(m)(4), on any frequency outside a licensee's frequency block, The power of any emission shall be attenuated below the transmitter power (P) by at least $55 + 10 \log (P)$ dB. The emission limit equal to -25 dBm.

For LTE Band 12, 17:

According to FCC 27.53(g), for operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB. The limit of emissions is equal to -13 dBm.

For LTE Band 13:

According to FCC 27.53(c)(2), for on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB. The limit of emissions is equal to -13 dBm.

According to FCC 27.53(f), for operations in the 775-788 MHz, emissions in the band 1559-1610 MHz shall be limited to -70 dBW/MHz (EIRP). The limit of emissions is equal to -40 dBm.

For WCDMA band 4, LTE Band 4, 66 and 5G NR n66:

According to FCC 27.53(h), for operations in the 1695-1710 MHz, 1710-1755 MHz, 1755-1780 MHz bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log (P)$ dB.

For 5G NR n77, n78:

According to FCC 27.53(n), for operations in the 3450-3550 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

According to FCC 27.53(l), for operations in the 3700-3980 MHz band, the conducted power of any emission outside the licensee's authorized bandwidth shall not exceed -13 dBm/MHz.

4.1.2 Test Procedure

- a. In the semi-anechoic chamber, EUT placed on the 0.8m(below or equal 1GHz) and/or 1.5m(above 1GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- d. Following C63.26 section 5.5 and 5.2.7
EIRP (dBm) = E (dB μ V/m) + 20log(D) - 104.8; where D is the measurement distance (in the far field region) in m.
ERP (dBm) = E (dB μ V/m) + 20log(D) - 104.8 - 2.15; where D is the measurement distance (in the far field region) in m.

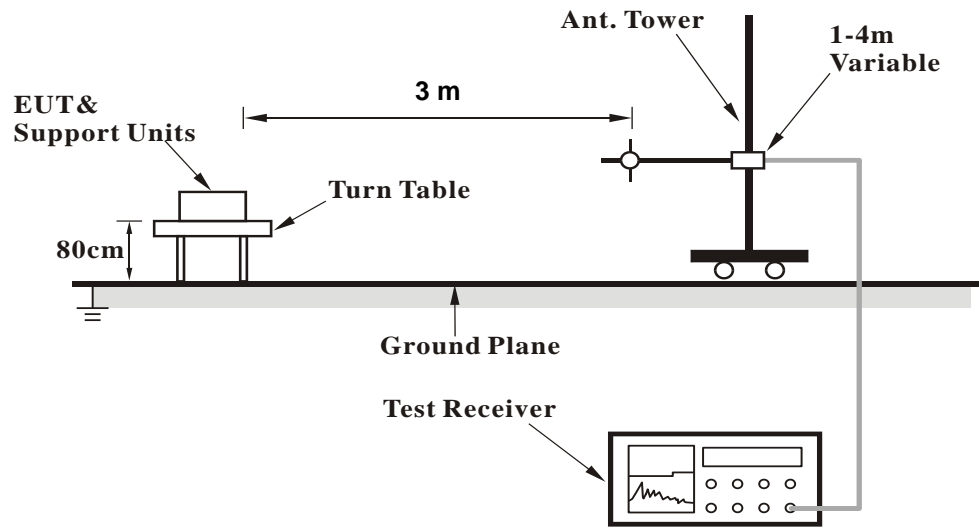
Note: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

4.1.3 Deviation from Test Standard

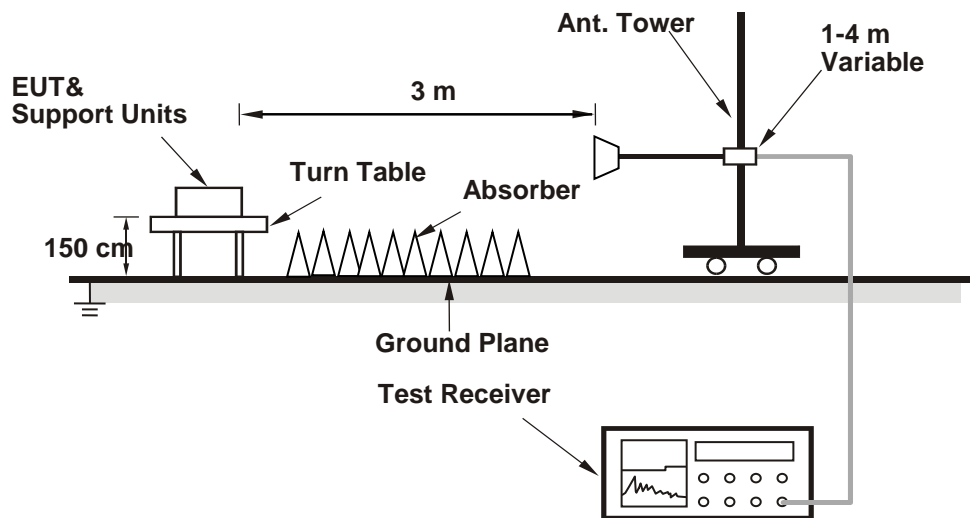
No deviation.

4.1.4 Test Setup

<Radiated Emission below or equal 1 GHz>



<Radiated Emission above 1 GHz>



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.5 Test Results

Below 1GHz

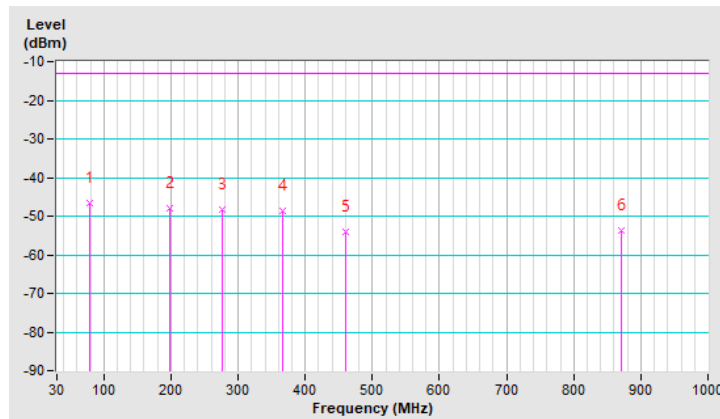
WCDMA Band 4

RF Mode	TX WCDMA Band IV	Channel	CH 1413 : 1732.6 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	78.50	-46.66	-13.00	-33.66	1.90 H	82	65.02	-111.68
2	198.78	-47.82	-13.00	-34.82	2.92 H	263	63.06	-110.88
3	277.35	-48.24	-13.00	-35.24	1.96 H	145	59.37	-107.61
4	365.62	-48.67	-13.00	-35.67	3.71 H	114	56.89	-105.56
5	460.68	-54.19	-13.00	-41.19	3.35 H	133	48.90	-103.09
6	870.02	-53.61	-13.00	-40.61	2.34 H	67	43.09	-96.70

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

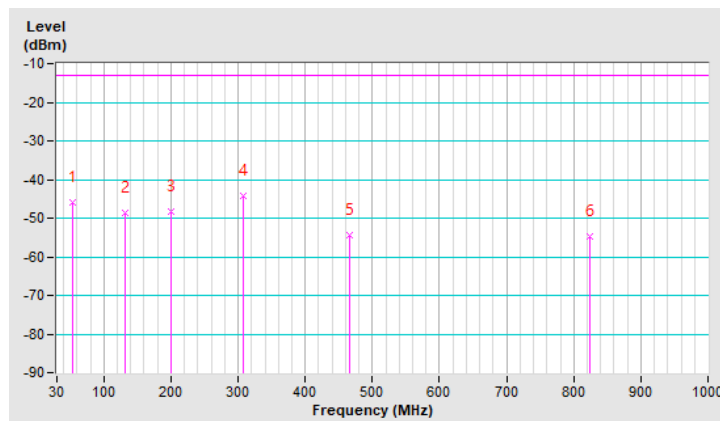


RF Mode	TX WCDMA Band IV	Channel	CH 1413 : 1732.6 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-45.89	-13.00	-32.89	2.40 V	181	61.76	-107.65
2	130.88	-48.74	-13.00	-35.74	3.72 V	37	59.92	-108.66
3	199.75	-48.36	-13.00	-35.36	1.00 V	266	62.53	-110.89
4	307.42	-44.32	-13.00	-31.32	1.44 V	298	62.53	-106.85
5	465.53	-54.32	-13.00	-41.32	2.28 V	90	48.65	-102.97
6	823.46	-54.61	-13.00	-41.61	3.07 V	242	42.12	-96.73

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



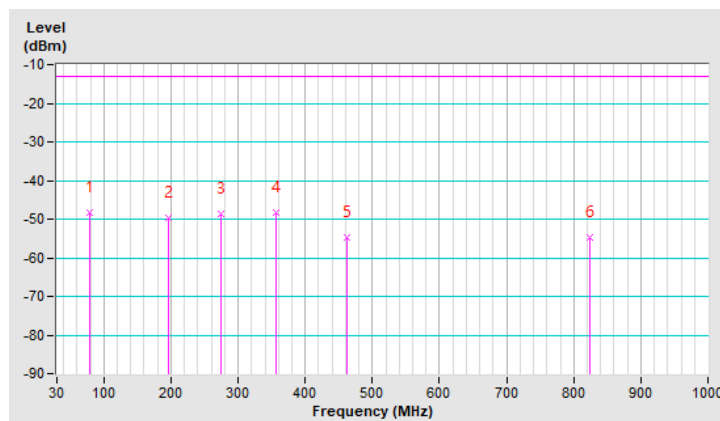
LTE Band 4

RF Mode	TX LTE Band IV-20MHz	Channel	CH 20175 : 1732.5 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	78.50	-48.24	-13.00	-35.24	2.75 H	9	63.44	-111.68
2	196.84	-49.77	-13.00	-36.77	3.01 H	181	61.04	-110.81
3	274.44	-48.69	-13.00	-35.69	1.24 H	144	59.06	-107.75
4	356.89	-48.30	-13.00	-35.30	2.33 H	59	57.54	-105.84
5	461.65	-54.82	-13.00	-41.82	3.06 H	190	48.24	-103.06
6	824.43	-54.74	-13.00	-41.74	2.64 H	120	42.00	-96.74

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

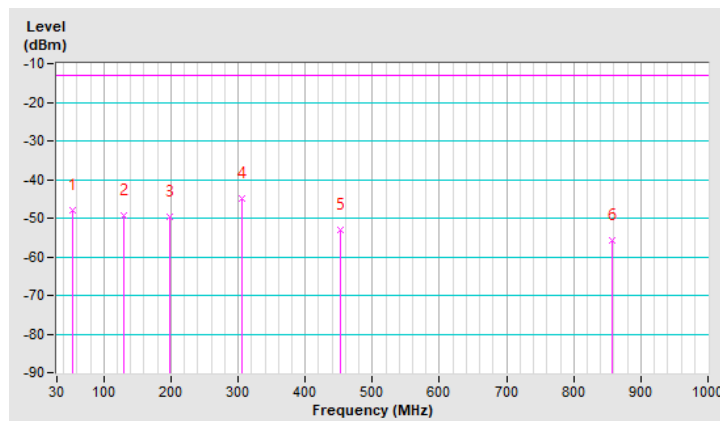


RF Mode	TX LTE Band IV-20MHz	Channel	CH 20175 : 1732.5 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-47.86	-13.00	-34.86	1.81 V	200	59.79	-107.65
2	128.94	-49.29	-13.00	-36.29	1.16 V	215	59.53	-108.82
3	197.81	-49.55	-13.00	-36.55	1.27 V	121	61.28	-110.83
4	305.48	-45.04	-13.00	-32.04	3.87 V	94	61.86	-106.90
5	451.95	-52.97	-13.00	-39.97	2.57 V	55	50.29	-103.26
6	856.44	-55.89	-13.00	-42.89	1.47 V	316	40.91	-96.80

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



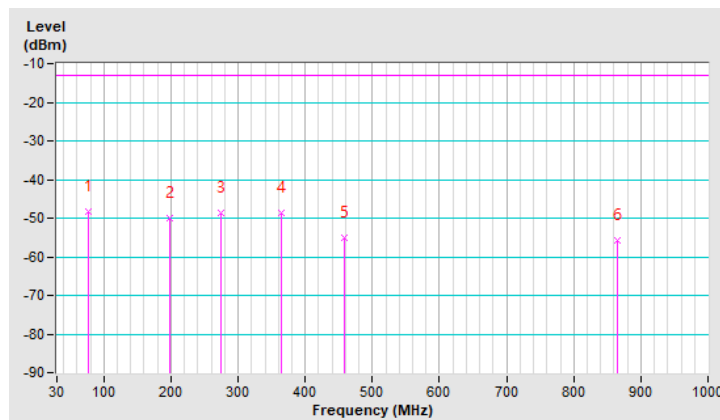
LTE Band 7

RF Mode	TX LTE Band VII-20MHz	Channel	CH 21100 : 2535.0 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	77.53	-48.33	-13.00	-35.33	1.85 H	193	63.12	-111.45
2	197.81	-49.91	-13.00	-36.91	1.93 H	179	60.92	-110.83
3	275.41	-48.54	-13.00	-35.54	1.02 H	142	59.15	-107.69
4	364.65	-48.71	-13.00	-35.71	1.83 H	96	56.90	-105.61
5	458.74	-55.24	-13.00	-42.24	3.39 H	34	47.88	-103.12
6	864.20	-55.62	-13.00	-42.62	1.22 H	73	41.18	-96.80

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

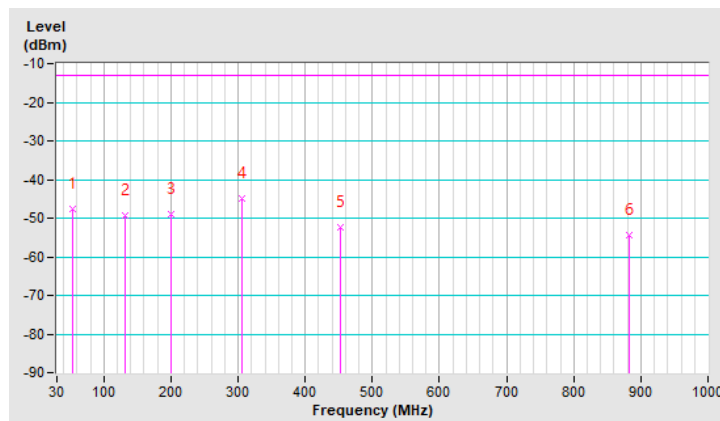


RF Mode	TX LTE Band VII-20MHz	Channel	CH 21100 : 2535.0 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-47.79	-13.00	-34.79	3.80 V	159	59.86	-107.65
2	130.88	-49.46	-13.00	-36.46	3.19 V	69	59.20	-108.66
3	200.72	-48.94	-13.00	-35.94	3.26 V	106	61.96	-110.90
4	306.45	-45.05	-13.00	-32.05	2.69 V	172	61.82	-106.87
5	451.95	-52.32	-13.00	-39.32	2.78 V	40	50.94	-103.26
6	883.60	-54.40	-13.00	-41.40	3.52 V	43	42.08	-96.48

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



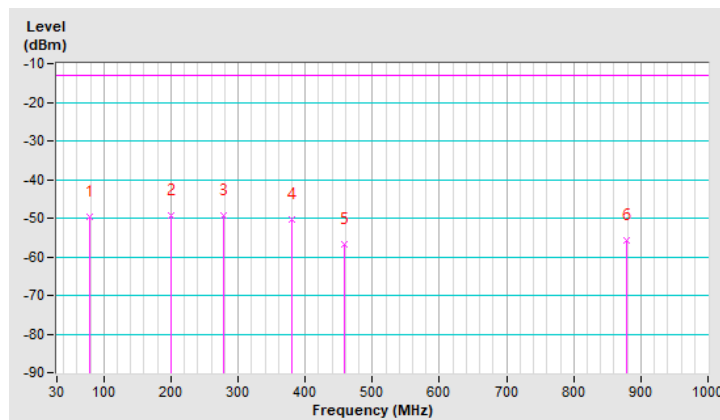
LTE Band 12

RF Mode	TX LTE Band XII-10MHz	Channel	CH 23095 : 707.5 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	78.50	-49.73	-13.00	-36.73	1.72 H	124	64.10	-113.83
2	199.75	-49.46	-13.00	-36.46	2.36 H	2	63.58	-113.04
3	279.29	-49.29	-13.00	-36.29	1.58 H	152	60.39	-109.68
4	379.20	-50.24	-13.00	-37.24	1.07 H	190	57.00	-107.24
5	458.74	-56.94	-13.00	-43.94	1.55 H	352	48.33	-105.27
6	877.78	-55.92	-13.00	-42.92	3.88 H	67	42.79	-98.71

Remarks:

1. $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

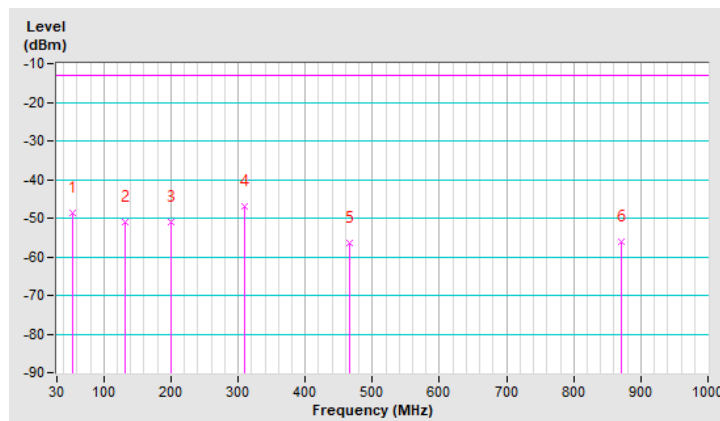


RF Mode	TX LTE Band XII-10MHz	Channel	CH 23095 : 707.5 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-48.64	-13.00	-35.64	2.95 V	200	61.16	-109.80
2	130.88	-50.98	-13.00	-37.98	3.74 V	2	59.83	-110.81
3	200.72	-51.17	-13.00	-38.17	3.02 V	65	61.88	-113.05
4	309.36	-47.06	-13.00	-34.06	2.33 V	350	61.89	-108.95
5	466.50	-56.54	-13.00	-43.54	2.91 V	95	48.56	-105.10
6	870.99	-56.08	-13.00	-43.08	1.67 V	183	42.76	-98.84

Remarks:

1. $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



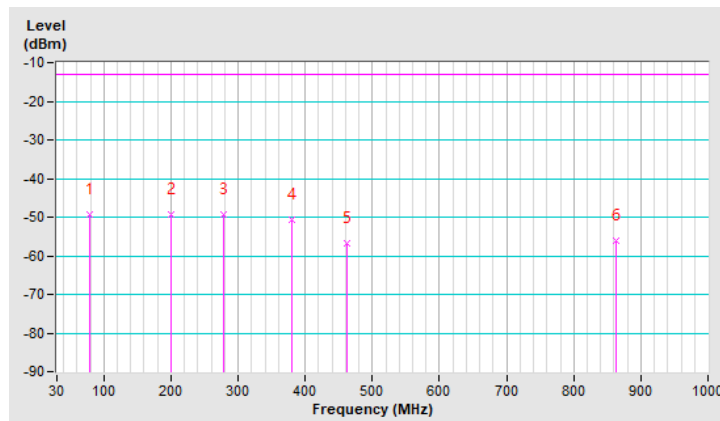
LTE Band 13

RF Mode	TX LTE Band XIII-10MHz	Channel	CH 23230 : 782.0 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	78.50	-49.25	-13.00	-36.25	1.87 H	88	64.58	-113.83
2	200.72	-49.36	-13.00	-36.36	2.38 H	62	63.69	-113.05
3	279.29	-49.37	-13.00	-36.37	3.05 H	145	60.31	-109.68
4	380.17	-50.67	-13.00	-37.67	3.57 H	70	56.55	-107.22
5	461.65	-56.75	-13.00	-43.75	3.44 H	34	48.46	-105.21
6	863.23	-56.20	-13.00	-43.20	1.91 H	115	42.74	-98.94

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

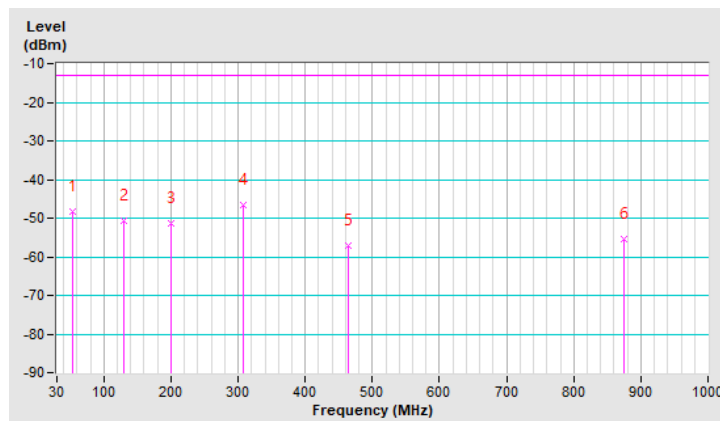


RF Mode	TX LTE Band XIII-10MHz	Channel	CH 23230 : 782.0 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-48.39	-13.00	-35.39	2.17 V	185	61.41	-109.80
2	129.91	-50.60	-13.00	-37.60	2.98 V	21	60.22	-110.82
3	199.75	-51.39	-13.00	-38.39	3.75 V	215	61.65	-113.04
4	307.42	-46.70	-13.00	-33.70	2.18 V	263	62.30	-109.00
5	463.59	-57.19	-13.00	-44.19	3.53 V	95	47.98	-105.17
6	874.87	-55.35	-13.00	-42.35	1.17 V	137	43.41	-98.76

Remarks:

1. $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.



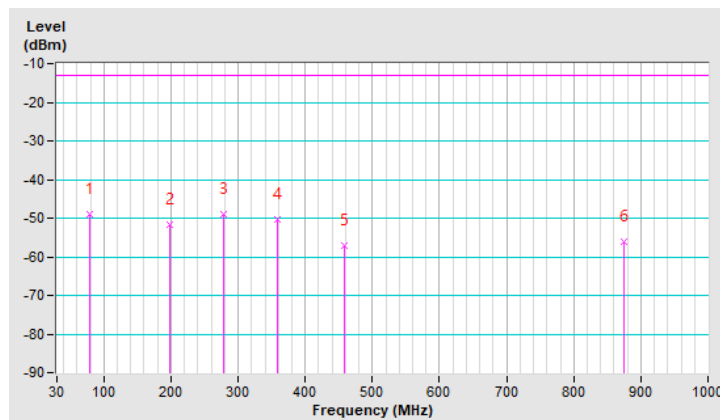
LTE Band 17

RF Mode	TX LTE Band XVII-10MHz	Channel	CH 23790 : 710.0 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	79.47	-49.15	-13.00	-36.15	1.10 H	29	64.92	-114.07
2	198.78	-51.70	-13.00	-38.70	3.61 H	313	61.33	-113.03
3	278.32	-49.15	-13.00	-36.15	1.56 H	151	60.57	-109.72
4	357.86	-50.38	-13.00	-37.38	3.48 H	195	57.58	-107.96
5	457.77	-57.09	-13.00	-44.09	3.37 H	42	48.19	-105.28
6	874.87	-55.99	-13.00	-42.99	1.34 H	269	42.77	-98.76

Remarks:

1. $ERP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8 - 2.15$
3. $Margin\ value = ERP - Limit\ value$
4. The other ERP levels were very low against the limit.

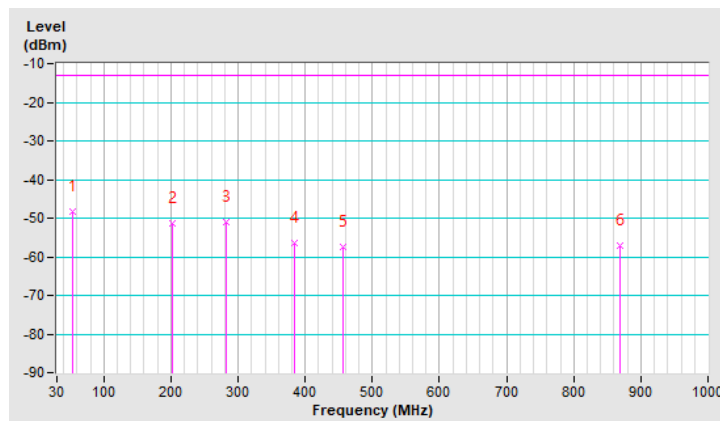


RF Mode	TX LTE Band XVII-10MHz	Channel	CH 23790 : 710.0 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-48.46	-13.00	-35.46	2.15 V	139	61.34	-109.80
2	201.69	-51.19	-13.00	-38.19	3.75 V	208	61.87	-113.06
3	282.20	-51.03	-13.00	-38.03	2.07 V	184	58.55	-109.58
4	384.05	-56.41	-13.00	-43.41	3.89 V	181	50.74	-107.15
5	456.80	-57.29	-13.00	-44.29	2.82 V	87	48.00	-105.29
6	868.08	-57.16	-13.00	-44.16	1.92 V	52	41.73	-98.89

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.



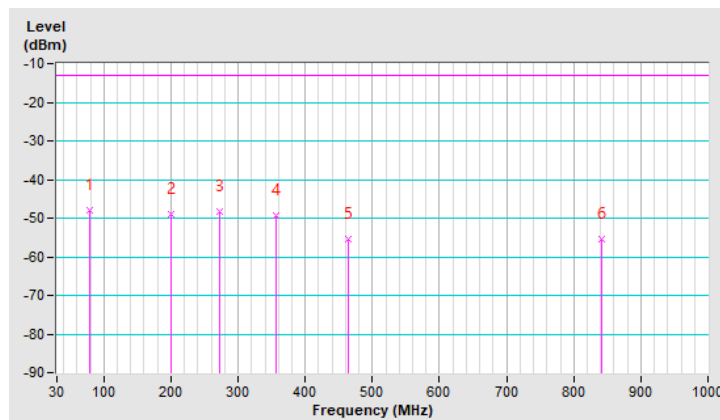
LTE Band 41

RF Mode	TX LTE Band XLI-20MHz	Channel	CH 40620 : 2593.0 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	78.50	-47.84	-13.00	-34.84	3.27 H	342	63.84	-111.68
2	199.75	-48.99	-13.00	-35.99	2.10 H	129	61.90	-110.89
3	272.50	-48.43	-13.00	-35.43	1.73 H	159	59.42	-107.85
4	356.89	-49.25	-13.00	-36.25	3.30 H	298	56.59	-105.84
5	464.56	-55.59	-13.00	-42.59	1.34 H	2	47.41	-103.00
6	840.92	-55.33	-13.00	-42.33	1.39 H	172	41.44	-96.77

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

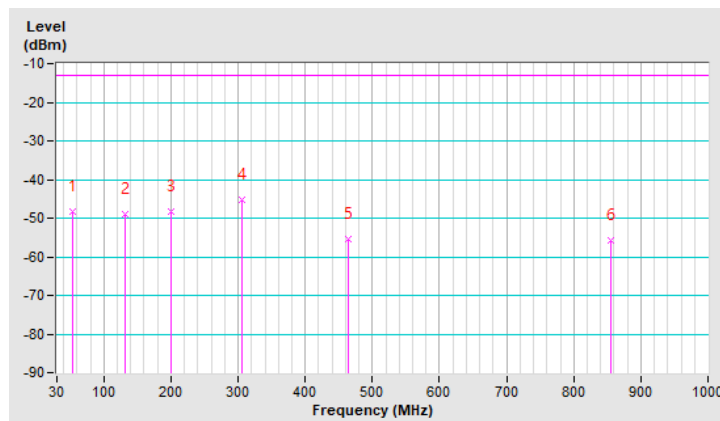


RF Mode	TX LTE Band XLI-20MHz	Channel	CH 40620 : 2593.0 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-48.22	-13.00	-35.22	1.51 V	202	59.43	-107.65
2	130.88	-48.93	-13.00	-35.93	3.84 V	18	59.73	-108.66
3	200.72	-48.45	-13.00	-35.45	1.94 V	55	62.45	-110.90
4	305.48	-45.16	-13.00	-32.16	1.55 V	288	61.74	-106.90
5	463.59	-55.55	-13.00	-42.55	3.77 V	90	47.47	-103.02
6	854.50	-55.80	-13.00	-42.80	1.12 V	208	41.01	-96.81

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



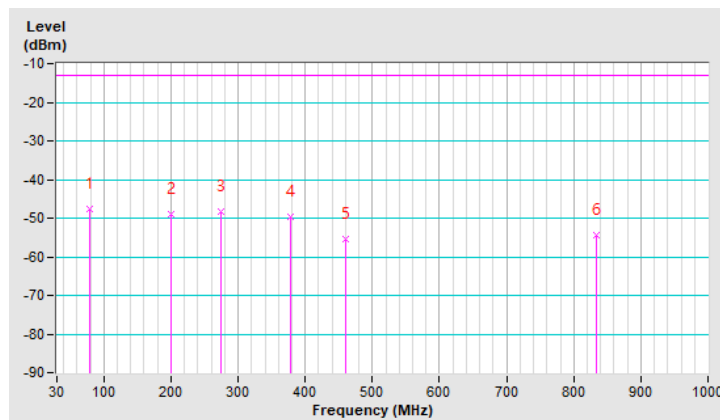
LTE Band 66

RF Mode	TX LTE Band LXVI-20MHz	Channel	CH 132322 :1745.0MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBUV)	Correction Factor (dB/m)
1	78.50	-47.46	-13.00	-34.46	2.07 H	216	64.22	-111.68
2	200.72	-49.06	-13.00	-36.06	3.03 H	4	61.84	-110.90
3	275.41	-48.34	-13.00	-35.34	1.08 H	146	59.35	-107.69
4	378.23	-49.66	-13.00	-36.66	2.87 H	8	55.46	-105.12
5	460.68	-55.58	-13.00	-42.58	1.88 H	37	47.51	-103.09
6	833.16	-54.31	-13.00	-41.31	2.02 H	158	42.44	-96.75

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

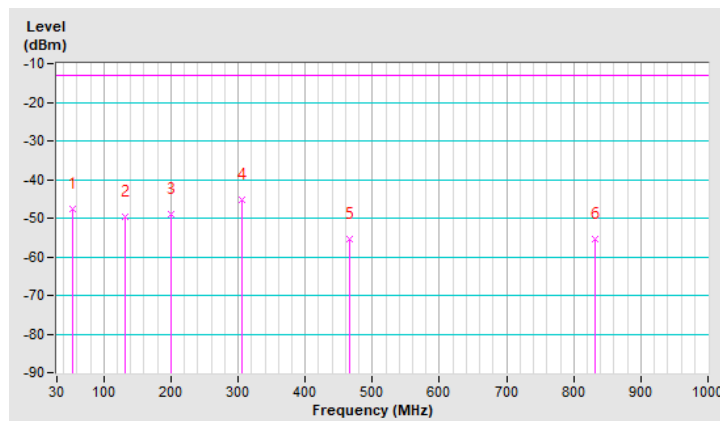


RF Mode	TX LTE Band LXVI-20MHz	Channel	CH 132322 :1745.0MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-47.58	-13.00	-34.58	2.55 V	356	60.07	-107.65
2	131.85	-49.74	-13.00	-36.74	3.65 V	18	58.89	-108.63
3	200.72	-48.90	-13.00	-35.90	2.68 V	76	62.00	-110.90
4	305.48	-45.31	-13.00	-32.31	2.55 V	269	61.59	-106.90
5	466.50	-55.40	-13.00	-42.40	1.81 V	97	47.55	-102.95
6	832.19	-55.58	-13.00	-42.58	1.32 V	210	41.18	-96.76

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



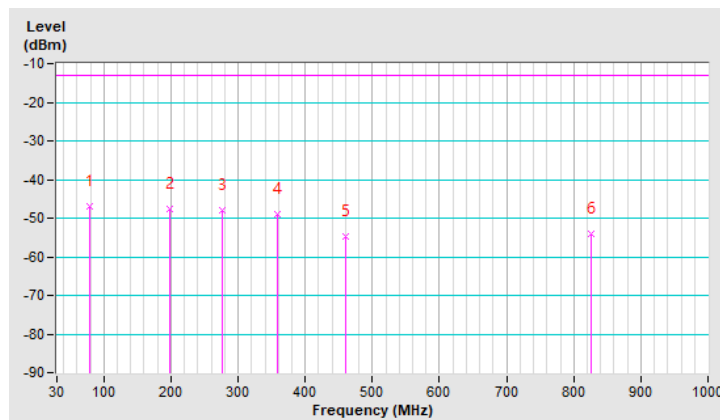
n7

RF Mode	TX 5GNR Band VII-20MHz	Channel	CH 507000 :2535.0MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	79.47	-47.00	-13.00	-34.00	2.60 H	119	64.92	-111.92
2	198.78	-47.68	-13.00	-34.68	1.65 H	55	63.20	-110.88
3	277.35	-47.83	-13.00	-34.83	1.56 H	142	59.78	-107.61
4	357.86	-48.96	-13.00	-35.96	1.85 H	193	56.85	-105.81
5	460.68	-54.78	-13.00	-41.78	3.18 H	137	48.31	-103.09
6	826.37	-53.91	-13.00	-40.91	1.36 H	166	42.84	-96.75

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

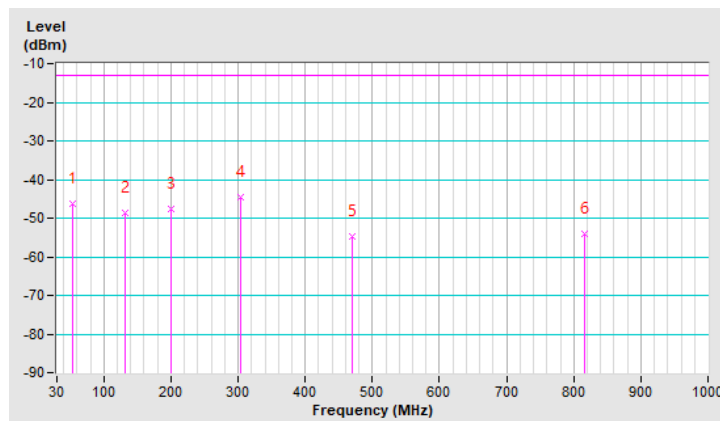


RF Mode	TX 5GNR Band VII-20MHz	Channel	CH 507000 :2535.0MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	53.28	-46.32	-13.00	-33.32	3.18 V	356	61.33	-107.65
2	130.88	-48.65	-13.00	-35.65	2.41 V	176	60.01	-108.66
3	200.72	-47.63	-13.00	-34.63	2.45 V	52	63.27	-110.90
4	304.51	-44.41	-13.00	-31.41	3.69 V	68	62.50	-106.91
5	469.41	-54.79	-13.00	-41.79	1.62 V	231	48.08	-102.87
6	816.67	-54.17	-13.00	-41.17	2.69 V	53	42.58	-96.75

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



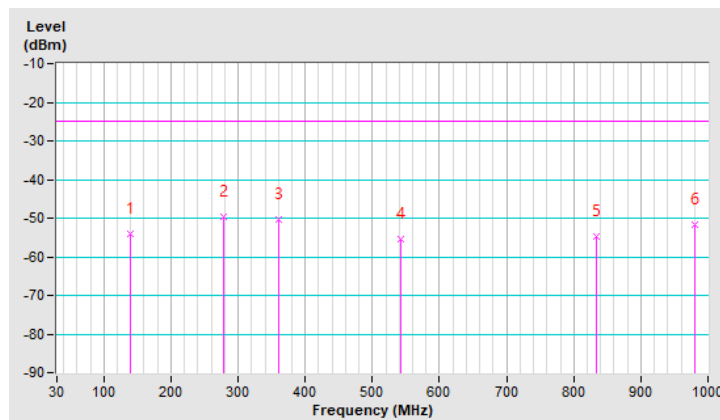
n38

RF Mode	TX 5GNR Band XXXVIII-20MHz	Channel	CH 591000 :2595.0MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	139.61	-54.09	-25.00	-29.09	2.00 H	133	53.96	-108.05
2	279.29	-49.79	-25.00	-24.79	1.50 H	18	57.74	-107.53
3	359.80	-50.39	-25.00	-25.39	1.00 H	294	55.37	-105.76
4	542.16	-55.31	-25.00	-30.31	1.50 H	82	46.25	-101.56
5	833.16	-54.78	-25.00	-29.78	1.00 H	306	41.97	-96.75
6	979.63	-51.80	-25.00	-26.80	1.00 H	306	43.41	-95.21

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

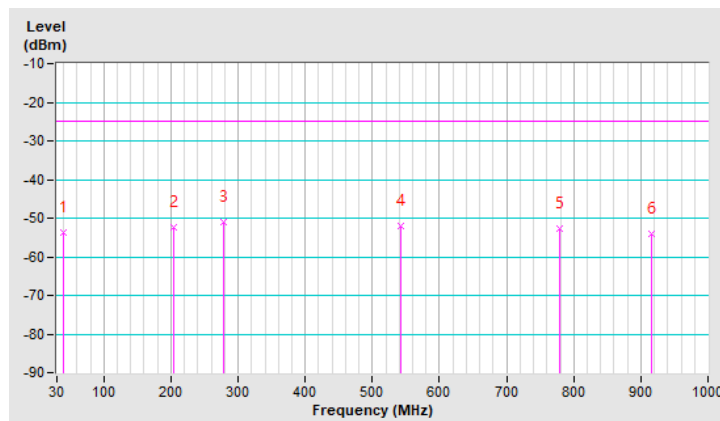


RF Mode	TX 5GNR Band XXXVIII-20MHz	Channel	CH 591000 :2595.0MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	39.70	-53.57	-25.00	-28.57	1.00 V	15	54.26	-107.83
2	203.63	-52.50	-25.00	-27.50	1.00 V	114	58.43	-110.93
3	279.29	-50.96	-25.00	-25.96	1.50 V	172	56.57	-107.53
4	543.13	-52.19	-25.00	-27.19	2.00 V	46	49.37	-101.56
5	779.81	-52.55	-25.00	-27.55	2.00 V	46	44.27	-96.82
6	915.61	-53.95	-25.00	-28.95	1.50 V	2	42.17	-96.12

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



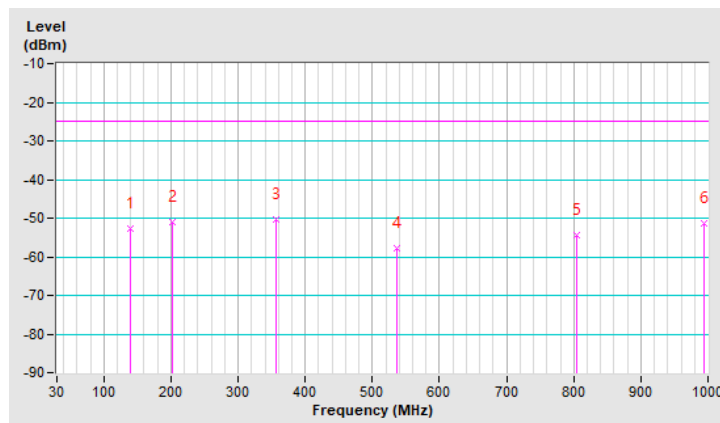
n41

RF Mode	TX 5GNR Band XLI-100MHz	Channel	CH 518598 :2592.99MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	139.61	-52.64	-25.00	-27.64	2.00 H	131	55.41	-108.05
2	202.66	-51.17	-25.00	-26.17	2.00 H	4	59.75	-110.92
3	356.89	-50.23	-25.00	-25.23	1.00 H	358	55.61	-105.84
4	537.31	-57.71	-25.00	-32.71	2.00 H	18	43.86	-101.57
5	804.06	-54.42	-25.00	-29.42	1.00 H	157	42.36	-96.78
6	993.21	-51.30	-25.00	-26.30	1.50 H	2	43.95	-95.25

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

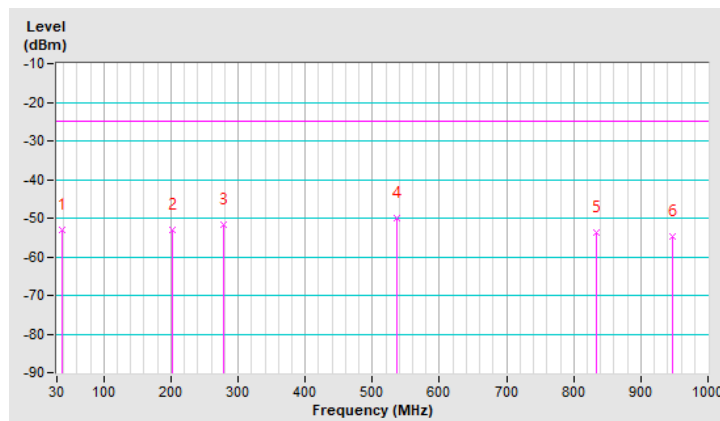


RF Mode	TX 5GNR Band XLI-100MHz	Channel	CH 518598 :2592.99MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	38.73	-53.11	-25.00	-28.11	1.00 V	16	54.67	-107.78
2	201.69	-53.17	-25.00	-28.17	1.00 V	116	57.74	-110.91
3	279.29	-51.58	-25.00	-26.58	1.50 V	156	55.95	-107.53
4	537.31	-49.93	-25.00	-24.93	2.00 V	2	51.64	-101.57
5	833.16	-53.69	-25.00	-28.69	2.00 V	2	43.06	-96.75
6	947.62	-54.77	-25.00	-29.77	1.50 V	213	40.94	-95.71

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



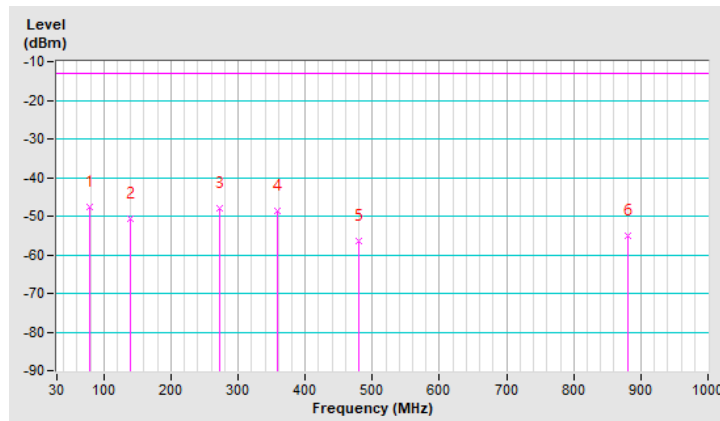
n66

RF Mode	TX 5GNR Band LXVI-40MHz	Channel	CH 349000 :1745.0MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	78.50	-47.77	-13.00	-34.77	2.27 H	146	63.91	-111.68
2	139.61	-50.61	-13.00	-37.61	2.71 H	123	57.44	-108.05
3	272.50	-47.86	-13.00	-34.86	2.42 H	146	59.99	-107.85
4	358.83	-48.62	-13.00	-35.62	2.96 H	340	57.16	-105.78
5	479.11	-56.37	-13.00	-43.37	1.28 H	200	46.30	-102.67
6	880.69	-55.22	-13.00	-42.22	3.96 H	32	41.30	-96.52

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

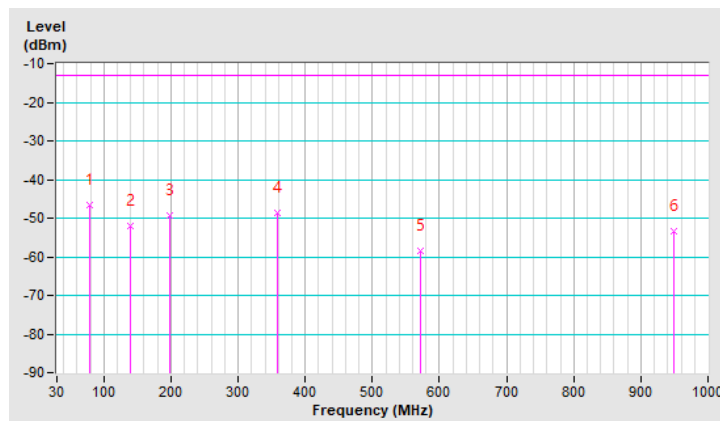


RF Mode	TX 5GNR Band LXVI-40MHz	Channel	CH 349000 :1745.0MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	79.47	-46.53	-13.00	-33.53	1.14 V	208	65.39	-111.92
2	138.64	-52.01	-13.00	-39.01	3.42 V	124	56.06	-108.07
3	197.81	-49.41	-13.00	-36.41	2.77 V	166	61.42	-110.83
4	358.83	-48.59	-13.00	-35.59	1.85 V	2	57.19	-105.78
5	572.23	-58.37	-13.00	-45.37	2.01 V	17	42.86	-101.23
6	949.56	-53.28	-13.00	-40.28	1.49 V	187	42.39	-95.67

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



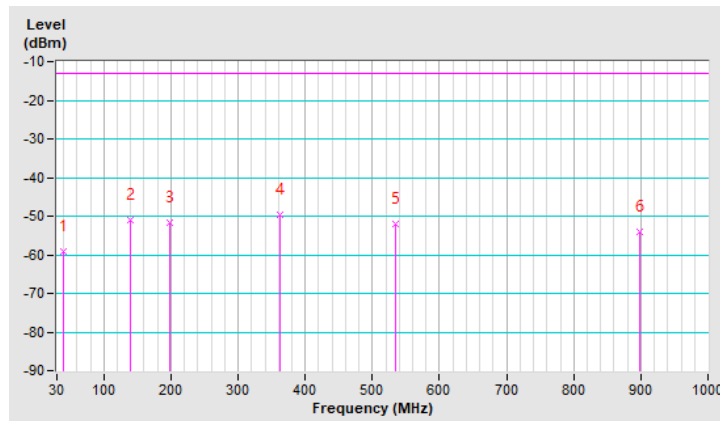
n77

RF Mode	TX 5GNR Band LXXVII-100MHz	Channel	CH 656000 :3840.0MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	39.70	-59.28	-13.00	-46.28	2.00 H	2	48.55	-107.83
2	138.64	-51.15	-13.00	-38.15	2.00 H	304	56.92	-108.07
3	198.78	-51.85	-13.00	-38.85	2.00 H	2	59.03	-110.88
4	362.71	-49.53	-13.00	-36.53	1.00 H	6	56.14	-105.67
5	534.40	-51.95	-13.00	-38.95	1.00 H	58	49.62	-101.57
6	898.15	-54.08	-13.00	-41.08	1.00 H	245	42.26	-96.34

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

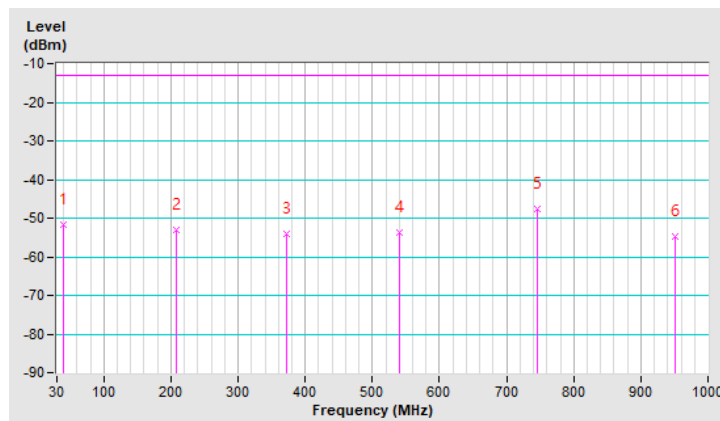


RF Mode	TX 5GNR Band LXXVII-100MHz	Channel	CH 656000 :3840.0MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	39.70	-51.74	-13.00	-38.74	1.00 V	18	56.09	-107.83
2	208.48	-53.10	-13.00	-40.10	1.00 V	124	57.82	-110.92
3	372.41	-53.90	-13.00	-40.90	2.00 V	187	51.40	-105.30
4	541.19	-53.74	-13.00	-40.74	2.00 V	172	47.82	-101.56
5	745.86	-47.60	-13.00	-34.60	1.50 V	2	49.74	-97.34
6	950.53	-54.64	-13.00	-41.64	2.00 V	346	41.03	-95.67

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



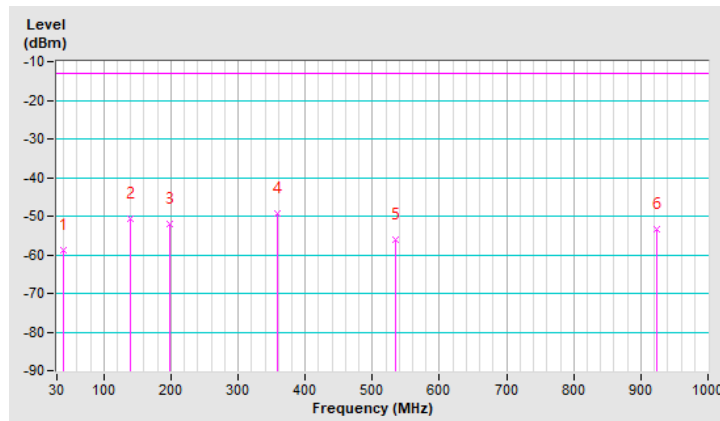
n78

RF Mode	TX 5GNR Band LXXVIII-100MHz	Channel	CH 633334 : 3500.01 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	39.70	-58.95	-13.00	-45.95	1.50 H	41	48.88	-107.83
2	139.61	-50.65	-13.00	-37.65	2.00 H	118	57.40	-108.05
3	197.81	-52.13	-13.00	-39.13	1.50 H	2	58.70	-110.83
4	357.86	-49.43	-13.00	-36.43	1.00 H	1	56.38	-105.81
5	534.40	-55.99	-13.00	-42.99	2.00 H	116	45.58	-101.57
6	923.37	-53.41	-13.00	-40.41	1.50 H	179	42.62	-96.03

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

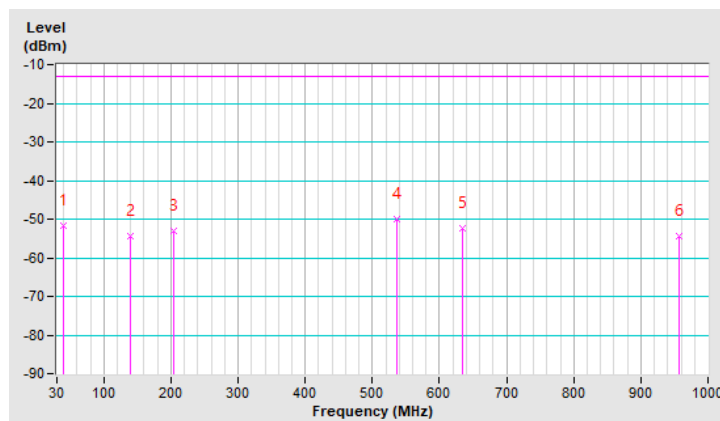


RF Mode	TX 5GNR Band LXXVIII-100MHz	Channel	CH 633334 : 3500.01 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	40.67	-51.81	-13.00	-38.81	1.00 V	100	55.89	-107.70
2	139.61	-54.38	-13.00	-41.38	2.00 V	253	53.67	-108.05
3	203.63	-53.17	-13.00	-40.17	1.00 V	111	57.76	-110.93
4	537.31	-50.01	-13.00	-37.01	2.00 V	17	51.56	-101.57
5	634.31	-52.53	-13.00	-39.53	2.00 V	2	47.28	-99.81
6	957.32	-54.55	-13.00	-41.55	2.00 V	17	41.01	-95.56

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.



Above 1GHz
WCDMA Band 4

RF Mode	TX WCDMA Band IV	Channel	CH 1413 : 1732.6 MHz
Frequency Range	1GHz ~ 18GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.20	-53.16	-13.00	-40.16	1.46 H	163	56.29	-109.45
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.20	-52.95	-13.00	-39.95	2.11 V	85	56.50	-109.45

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

LTE Band 4

RF Mode	TX LTE Band IV-20MHz	Channel	CH 20175 : 1732.5 MHz
Frequency Range	1GHz ~ 18GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-50.90	-13.00	-37.90	2.05 H	242	58.56	-109.46
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3465.00	-49.58	-13.00	-36.58	2.48 V	107	59.88	-109.46

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

LTE Band 7

RF Mode	TX LTE Band VII-20MHz	Channel	CH 21100 : 2535.0 MHz
Frequency Range	1GHz ~ 27GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-50.28	-25.00	-25.28	3.14 H	188	55.43	-105.71
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-49.25	-25.00	-24.25	1.75 V	114	56.46	-105.71

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

LTE Band 12

RF Mode	TX LTE Band XII-10MHz	Channel	CH 23095 : 707.5 MHz
Frequency Range	1GHz ~ 18GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-60.86	-13.00	-47.86	3.75 H	288	56.96	-117.82
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1415.00	-60.07	-13.00	-47.07	1.79 V	358	57.75	-117.82

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

LTE Band 13

RF Mode	TX LTE Band XIII-10MHz	Channel	CH 23230 : 782.0 MHz
Frequency Range	1GHz ~ 18GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-59.07	-13.00	-46.07	1.46 H	248	56.82	-115.89
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1564.00	-58.40	-13.00	-45.40	3.66 V	182	57.49	-115.89

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

LTE Band 17

RF Mode	TX LTE Band XVII- 10MHz	Channel	CH 23790 : 710.0 MHz
Frequency Range	1GHz ~ 18GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1420.00	-60.97	-13.00	-47.97	2.73 H	120	56.86	-117.83

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1420.00	-60.17	-13.00	-47.17	3.02 V	198	57.66	-117.83

Remarks:

1. ERP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8 – 2.15
3. Margin value = ERP – Limit value
4. The other ERP levels were very low against the limit.

LTE Band 41

RF Mode	TX LTE Band XLI- 20MHz	Channel	CH 40620 : 2593.0 MHz
Frequency Range	1GHz ~ 27GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-50.75	-25.00	-25.75	1.51 H	235	55.38	-106.13

Antenna Polarity & Test Distance : Vertical at 3 m

No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5186.00	-49.52	-25.00	-24.52	2.53 V	7	56.61	-106.13

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

LTE Band 66

RF Mode	TX LTE Band LXVI-20MHz	Channel	CH 132322 :1745.0MHz
Frequency Range	1GHz ~ 18GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-53.32	-13.00	-40.32	2.25 H	139	55.81	-109.13
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-52.25	-13.00	-39.25	1.82 V	173	56.88	-109.13

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

n7

RF Mode	TX 5GNR Band VII-20MHz	Channel	CH 507000 :2535.0MHz
Frequency Range	1GHz ~ 27GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-50.20	-25.00	-25.20	1.39 H	271	55.51	-105.71
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5070.00	-50.73	-25.00	-25.73	1.79 V	229	54.98	-105.71

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. $Margin\ value = EIRP - Limit\ value$
4. The other EIRP levels were very low against the limit.

n38

RF Mode	TX 5GNR Band XXXVIII-20MHz	Channel	CH 591000 :2595.0MHz
Frequency Range	1GHz ~ 27GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5190.00	-49.08	-25.00	-24.08	2.09 H	174	57.09	-106.17
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5190.00	-49.43	-25.00	-24.43	1.65 V	102	56.74	-106.17

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

n41

RF Mode	TX 5GNR Band XLI-80MHz	Channel	CH 518598 :2592.99MHz
Frequency Range	1GHz ~ 27GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5185.95	-49.63	-25.00	-24.63	1.20 H	226	56.50	-106.13
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	5185.95	-50.49	-25.00	-25.49	3.25 V	145	55.64	-106.13

Remarks:

1. EIRP(dBm) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB) + 20log(D) – 104.8
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

n66

RF Mode	TX 5GNR Band LXVI-40MHz	Channel	CH 349000 :1745.0MHz
Frequency Range	1GHz ~ 18GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-52.60	-13.00	-39.60	1.89 H	47	56.53	-109.13
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-52.75	-13.00	-39.75	2.08 V	125	56.38	-109.13

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

n77

RF Mode	TX 5GNR Band LXXVII-100MHz	Channel	CH 656000 :3840.0MHz
Frequency Range	1GHz ~ 40GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7680.00	-43.78	-13.00	-30.78	1.23 H	157	55.12	-98.90
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7680.00	-44.41	-13.00	-31.41	2.10 V	226	54.49	-98.90

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

n78

RF Mode	TX 5GNR Band LXXVIII-100MHz	Channel	CH 633334 : 3500.01 MHz
Frequency Range	1GHz ~ 40GHz		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7000.02	-43.66	-13.00	-30.66	1.35 H	316	57.26	-100.92
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7000.02	-44.14	-13.00	-31.14	2.06 V	142	56.78	-100.92

Remarks:

1. $EIRP(dBm) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$
2. $Correction\ Factor(dB/m) = Antenna\ Factor(dB/m) + Cable\ Factor(dB) - Pre-Amplifier\ Factor(dB) + 20\log(D) - 104.8$
3. Margin value = EIRP – Limit value
4. The other EIRP levels were very low against the limit.

5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

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The address and road map of all our labs can be found in our web site also.

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