

Partial FCC Test Report

(PART 27)

Report No.: RFBFLF-WTW-P22010014A-2

Test Model: B2502CB, B2502CBA, P2552CB, PX560CB, BW560CB, B2502FB,
B2502FBA, P2552FB, PX560FB, BW560FB

(refer to item 3.1 for more details)

Received Date: Dec. 20, 2021

Test Date: Jun. 24 ~ Jun. 30, 2022

Issued Date: Jul. 05, 2022

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**FCC Registration /
Designation Number:** 281270 / TW0032



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Release Control Record

Issue No.	Description	Date Issued
RFBFLF-WTW-P22010014A-2	Original Release	Jul. 05, 2022

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 B71 / NR B71	LTE B13	LTE B17	LTE B7 / LTE B38 / LTE B41 / NR B7 / NR B38 / NR B41	LTE B30 / NR B30	LTE B66 / NR B66	n77 / n78			
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 (a)(3)	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	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	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	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 (a)(4)	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 (a)(4)	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 (a)(4)	2.1053 27.53 (h)	2.1053 27.53(l)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -5.62 dB at 4620.00 MHz.

Note:

- This report is a partial report, only test items of Radiated Spurious Emissions tests was performed for this report. Other testing data please refer to Sporton report no.: FG051802A_R01, FG051802B_R01, FG051802C_R01, FG051802E_R01, FG051802G_R01, FG051802H_R01, FG051802I_R01, FG051802J_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	9kHz ~ 30MHz	3.00 dB
	30MHz ~ 200MHz	2.91 dB
	200MHz ~ 1000MHz	2.93 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	1.76 dB
	18GHz ~ 40GHz	1.77 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Rohde & Schwarz	ESR3	102783	Dec. 20, 2021	Dec. 19, 2022
Spectrum Analyzer KEYSIGHT	N9020B	MY60110513	Dec. 24, 2021	Dec. 23, 2022
BILOG Antenna SCHWARZBECK	VULB9168	1214	Oct. 27, 2021	Oct. 26, 2022
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1170	Nov. 14, 2021	Nov. 13, 2022
HORN Antenna SCHWARZBECK	BBHA 9170	995	Nov. 14, 2021	Nov. 13, 2022
Loop Antenna EMCI	EM-6879	269	Sep. 16, 2021	Sep. 15, 2022
Loop Antenna TESEQ	HLA 6121	45745	Jul. 21, 2021	Jul. 20, 2022
Preamplifier EMCI	EMC330N	980798	Jan. 17, 2022	Jan. 16, 2023
Preamplifier EMCI	EMC118A45SE	980809	Dec. 30, 2021	Dec. 29, 2022
Preamplifier EMCI	EMC184045SE	980786	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMC104-SM-SM- (9000+2000+1000)	201244+ 201232+ 210103	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMCCFD400-NM- NM-(9000+300+500)	201251+ 201249+ 201248	Jan. 17, 2022	Jan. 16, 2023
RF signal cable EMCI	EMC101G-KM-KM- (5000+3000+2000)	201261+201258+2 01249	Jan. 17, 2022	Jan. 16, 2023
Software BV ADT	ADT_Radiated_V7.6. 15.9.5	NA	NA	NA
Antenna Tower Max-Full	MFA-515BSN	NA	NA	NA
Turn Table Max-Full	MFT-201SS	NA	NA	NA
Turn Table Controller Max-Full	MF-7802BS	MF780208676	NA	NA
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY551 90004/MY55190007/ MY55210005	Jul. 12, 2021	Jul. 11, 2022
Radio Communication Test Station Anritsu	MT8000A	6262135011	Nov. 18, 2021	Nov. 17, 2022
Radio Communication Test Station Anritsu	MT8821C	6261806803	Feb. 16, 2022	Feb. 15, 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 WM Chamber 9.

3 General Information

3.1 General Description of EUT

Product	Notebook PC/ExpertBook	
Brand	ASUS	
Test Model	B2502CB, B2502CBA, P2552CB, PX560CB, BW560CB, B2502FB, B2502FBA, P2552FB, PX560FB, BW560FB	
Model Difference	Refer to Note as below	
Status of EUT	Engineering Sample	
Power Supply Rating	11.4 Vdc (Battery) 5V/9V/15V/20V Vdc (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	

Frequency Range	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 30 (Channel Bandwidth: 5 MHz)	2307.5 ~ 2312.5 MHz
	LTE Band 30 (Channel Bandwidth: 10 MHz)	2310 MHz
	LTE Band 38 (Channel Bandwidth: 5 MHz)	2572.5 ~ 2617.5 MHz
	LTE Band 38 (Channel Bandwidth: 10 MHz)	2575.0 ~ 2615.0 MHz
	LTE Band 38 (Channel Bandwidth: 15 MHz)	2577.5 ~ 2612.5 MHz
	LTE Band 38 (Channel Bandwidth: 20 MHz)	2580.0 ~ 2610.0 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
	LTE Band 71 (Channel Bandwidth: 5 MHz)	665.5 ~ 695.5 MHz
	LTE Band 71 (Channel Bandwidth: 10 MHz)	668.0 ~ 693.0 MHz

Frequency Range	LTE Band 71 (Channel Bandwidth: 15 MHz)	670.5 ~ 690.5 MHz
	LTE Band 71 (Channel Bandwidth: 20 MHz)	673.0 ~ 688.0 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
	n30 (Channel Bandwidth 5MHz)	2307.5MHz ~ 2312.5MHz
	n30 (Channel Bandwidth 10MHz)	2310.0MHz
	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
	n71 (Channel Bandwidth 5MHz)	665.5MHz ~ 695.5MHz
	n71 (Channel Bandwidth 10MHz)	668.0MHz ~ 693.0MHz
	n71 (Channel Bandwidth 15MHz)	670.5MHz ~ 690.5MHz
	n71 (Channel Bandwidth 20MHz)	673.0MHz ~ 688.0MHz
	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
Accessory Device	Refer to Note as below
Data Cable Supplied	Refer to Note as below
Tx / Rx Function	1Tx / 4Rx

Note:

1. All models are listed as below.

Brand	Model	Difference
ASUS	B2502CB	For marketing purpose
	B2502CBA	
	P2552CB	
	PX560CB	
	BW560CB	
	B2502FB	
	B2502FBA	
	P2552FB	
	PX560FB	
	BW560FB	

2. The EUT contains the following accessories.

Accessories information		
Main Board	Brand	ASUS
	Model	B2402FBA MB
LCD Panel 1	Brand	BOE
	Model	NT156WHM-N44
LCD Panel 2	spec	LCD 15.6' HD US EDP
	Brand	INNOLUX
LCD Panel 3	Model	N156BGA-EA3
	spec	LCD 15.6' HD US EDP
LCD Panel 4	Brand	BOE
	Model	NT156FHM-N62
LCD Panel 5	spec	LCD 15.6' FHD EDP
	Brand	INNOLUX
LCD Panel 6	Model	N156HGA-EA3
	spec	LCD 15.6' FHD EDP
LCD Panel 7	Brand	BOE
	Model	NE156FHM-N41
Camera 1	spec	LCD 15.6' FHD WVV EDP
	Brand	AUO
Camera 2	Model	B156HAN02.1
	spec	LCD 15.6' FHD WVV EDP
Camera 3	Brand	INNOLUX
	Model	N156HCE-EN1
Camera 4	spec	LCD 15.6' FHD WV US EDP 400NITS
	Brand	AZWAVE
CPU 1	Model	AM-9BF56EB-D
	spec	CAMERA HD RGB/IR ARRAY MIC CR
Camera 2	Brand	SUPREME
	Model	AHDFN050
Camera 3	spec	CAMERA HD FIX 3.3V ARRAYMIC CL
	Brand	AZWAVE
Camera 4	Model	AM-6SF56A2-J
	spec	CAMERA HD FIX 3.3V ARRAYMIC CL
CPU 1	Brand	SUPREME
	Model	AHDFN171
CPU 1	spec	CAMERA HD FIX 3.3V ARRAYMIC CL
	Brand	Intel/BGA1744
CPU 1	Model	I7-1260P 12C
	spec	2.1G

Accessories information		
CPU 2	Brand	Intel/BGA1744
	Model	I5-1240P 12C
	spec	1.7G
CPU 3	Brand	Intel/BGA1744
	Model	I3-1215U 6C
	spec	1.2GHz
V-Pro CPU 1	Brand	Intel/BGA1744
	Model	I5-1250P
	spec	1.7GHz
V-Pro CPU 2	Brand	Intel/BGA1744
	Model	I7-1270P
	spec	2.2GHz
M.2 SSD 1	Brand	WD
	Model	SDBPNPZ-256G-1002
	spec	256GB M2 2280 NVME
M.2 SSD 2	Brand	KST
	Model	OM8PDP3256B-AB1
	spec	256GB M2 2280 NVME
M.2 SSD 3	Brand	INT
	Model	SSDPEKNU512GZ
	spec	512GB M2 2280 NVME
M.2 SSD 4	Brand	MICRON
	Model	MTFDHBA512QFD
	spec	512G M2 2280 NVME
M.2 SSD 5	Brand	INT
	Model	SSDPEKNU010TZ
	spec	1TB M2 2280 NVME
M.2 SSD 6	Brand	MICRON
	Model	MTFDHBA1T0QFD
	spec	1TB M2 2280 NVME
M.2 SSD 7	Brand	SAMSUNG
	Model	MZVL2512HCJQ
	spec	512GB M2 2280 NVME
M.2 SSD 8	Brand	MICRON
	Model	MTFDKBA512TFH
	spec	512GB M2 2280 NVME
M.2 SSD 9	Brand	SAMSUNG
	Model	MZVL21T0HCLR
	spec	1TB M2 2280 NVME
M.2 SSD 10	Brand	MICRON
	Model	MTFDKBA1T0TFH
	spec	1TB M2 2280 NVME

Accessories information		
M.2 SSD 11	Brand	SAMSUNG
	Model	MZVL22T0HBLB
	spec	2TB M2 2280 NVME
M.2 SSD 12	Brand	MICRON
	Model	MTFDKBA2T0TFH
	spec	2TB M2 2280 NVME
HDD 1	Brand	TOSHIBA
	Model	MQ04ABF100
	spec	1 TB-5400rpm
HDD 2	Brand	SEAGATE
	Model	ST1000LM035
	spec	1 TB-5400rpm
HDD 3	Brand	SEAGATE
	Model	ST1000LM049
	spec	1 TB-7200rpm
HDD 4	Brand	SEAGATE
	Model	ST2000LM007
	spec	2 TB-5400rpm
BT/WLAN Module	Brand	INTEL
	Model	AX211D2W
WWAN Module	Brand	Fibocom
	Model	FM350-GL
Battery 1	Brand	ASUS
	Model	B31N1909
	Power Rating	CPT/GLP606080R/3S1P/11.4V/48WH
	Manufacturer	CPT
SO-DIMM	SPEC	DDR4, 3200 MHz (4G/8G/16G/32G)
AC Adapter 1	Brand	ASUS
	Model	AD10380
	AC Input	100 - 240 Vac; 50 - 60 Hz; 1.5 A
	DC Output	5Vdc; 3A / 9Vdc; 3A / 15Vdc; 3A / 20Vdc; 3.25A
	DC Output Cable	1.5m / 0 core shielding
	Manufacturer	R33164
AC Adapter 2	Brand	PI
	Model	ASUS
	AC Input	A19-065N3A
	DC Output	100 - 240 Vac; 50 - 60 Hz; 1.5 A
	DC Output Cable	5Vdc; 3A / 9Vdc; 3A / 15Vdc; 3A / 20Vdc; 3.25A
	Manufacturer	1.5m / 0 core shielding
AC power cable	Signal Line	0.8 meter / no shielding/ o core
AC Adapter 3	Brand	ASUS
	Model	ADP-65TW A
	AC Input	100 - 240 Vac; 50 - 60 Hz; 1.5 A
	DC Output	5Vdc; 3A / 9Vdc; 3A / 15Vdc; 3A / 20Vdc; 3.25A
	Manufacturer	DELTA
Type C to Type C USB Cable 1	Brand	MECIMEX
	Model	USB2.0 TYPE C TO C CABLE
	Signal Line	1.5 meter
Stylus Pen	Brand	Shenzhen qianfenyi intelligent technology co., LTD.
	Model	Active Stylus SA201H
	Manufacturer	MAXEYE

**After pretesting, Adapter 1 was the worst case and chosen for final test.

3. The antenna information is listed as below.

Ant. Type	Brand	Model
PIFA	PULSE	Ant. 0: TZ21131 (1415-08YT0A9) Ant. 1: TZ21134 (1415-08YQ0A9) Ant. 2: TZ21138 (1415-08YR0A9) Ant. 3: TZ21139 (1415-08YS0A9)

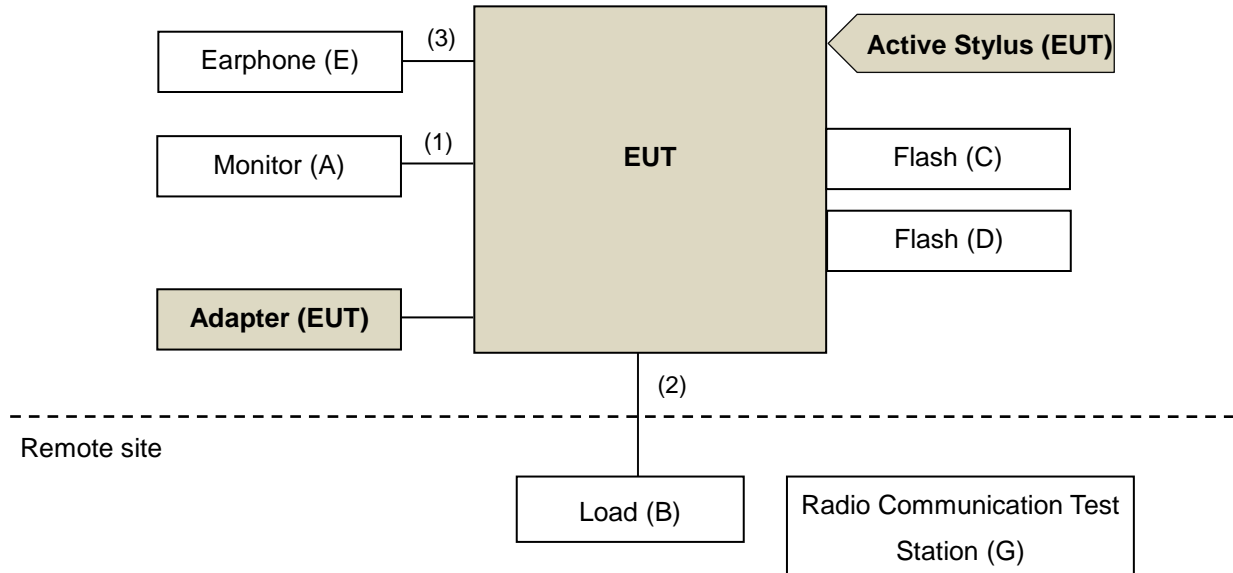
Band		WCDMA			LTE																
		II	IV	V	2	4	5	7	12	13	14	17	25	26	30	38	41	48	66	71	
Peak Gain (dBi)	NB	Ant. 0	2.1	2.33	-0.74	2.1	2.33	-0.74	1.7	0.8	1.49	1.54	0.77	2.1	0.22	3.38	2.42	2.68	1.78	2.47	1.03
		Ant. 1	0.23	2.96	-0.07	0.23	2.96	-0.07	2.72	-	0.6	0.36	-	0.23	-0.07	3.9	3.13	3.22	2.21	2.96	-
		Ant. 2	3.33	-	-	3.33	-	-	4.24	-	-	-	-	3.33	-	1.35	3.59	4.93	5.07	-	-
		Ant. 3	2.44	1.52	-	2.44	1.52	-	2.31	-	-	-	-	2.44	-	1.1	1.93	2.31	2.67	1.52	-
	TB	Ant. 0	2.21	1.35	-3.19	2.21	1.35	-3.19	0.73	-2.15	-3.91	-4.53	-2.21	2.25	-3.19	2.85	0.98	2.18	6.67	1.35	-1.81
		Ant. 1	0.35	-0.29	-3.13	0.35	-0.29	-3.13	3.92	-	-6.59	-4.41	-	0.35	-3.13	0.99	3.92	3.96	4.89	-0.29	-
		Ant. 2	1.65	-	-	1.65	-	-	2.36	-	-	-	-	1.65	-	1.42	2.25	2.86	7.94	-	-
		Ant. 3	0.79	-0.12	-	0.79	-0.12	-	0.18	-	-	-	-	1.7	-	4.16	-0.64	0.28	3.05	-0.12	-

Band		5GNR											
		2	5	7	25	30	38	41	66	71	77	78	
Peak Gain (dBi)	NB	Ant. 0	2.1	-0.74	1.7	2.1	3.38	2.42	2.68	2.47	1.03	1.78	1.08
		Ant. 1	0.23	-0.07	2.72	0.23	3.9	3.13	3.22	2.96	-	2.6	5.38
		Ant. 2	3.33	-	4.24	3.33	1.35	3.59	4.93	-	-	5.07	5.8
		Ant. 3	2.44	-	2.31	2.44	1.1	1.93	2.31	1.52	-	3.36	2.62
	TB	Ant. 0	2.21	-3.19	0.73	2.25	2.85	0.98	2.18	1.35	-1.81	7.8	6.92
		Ant. 1	0.35	-3.13	3.92	0.35	0.99	3.92	3.96	-0.29	-	5.34	4.23
		Ant. 2	1.65	-	2.36	1.65	1.42	2.25	2.86	-	-	7.94	7.55
		Ant. 3	0.79	-	0.18	1.7	4.16	-0.64	0.28	-0.12	-	4.28	2.35

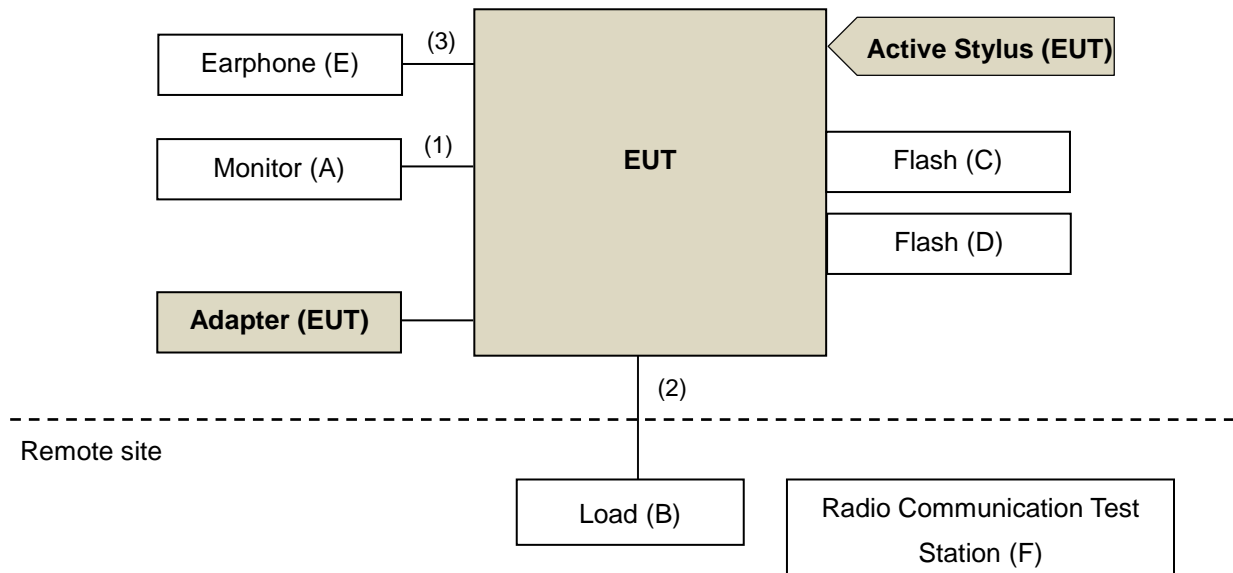
- The above Antenna information refers to the manufacturer's antenna specifications, the laboratory shall not be held responsible.
- The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
- The EUT contains certified WWAN module with FCC ID: MSQFM350GL.

3.2 Configuration of System under Test

<Radiated Emission Test> WCDMA & LTE



5GNR



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.

No.	Product	Brand	Model No.	Serial No.	FCC ID
A	Monitor	ASUS	VP247	N/A	N/A
B	Load	N/A	N/A	N/A	N/A
C	Flash	HP	v250W	05	N/A
D	Flash	SanDisk	SDDDC3-032G	N/A	N/A
E	Earphone	Apple	MB77PFEB	N/A	N/A
F	Radio Communication Test Station	Anritsu	MT8000A	6262135011	N/A
G	Radio Communication Test Station	Anritsu	MT8821C	6261806803	N/A

No.	Signal Cable Description of The Above Support Units
1.	HDMI Cable: 2m
2.	LAN Cable: 1.5m
3.	Audio Cable: 1.6m

Note:

1. All power cords of the above support units are non-shielded (1.8m).

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, and antenna ports

The worst case was found when positioned on X-plane. 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	1312	WCDMA

LTE Band 4

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	20050 to 20300	20050	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 30

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	27710	27710	10 MHz	QPSK	1 RB / 0 RB Offset

LTE Band 38

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	37850 to 38150	38000	20 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

LTE Band 71

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	133222 to 133372	133297	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 30

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	462000	462000	10MHz	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	528000	80MHz	QPSK	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 71

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission	134600 to 137600	136100	20MHz	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	659000	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	620000 to 653333	650000	100MHz	QPSK	1 RB / 1 RB Offset

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
Radiated Emission	25 deg. C, 69 % RH	120 Vac, 60 Hz	Edison Lee, Wade Huang

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, 38, 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, 71 and 5G NR n71:

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 LTE Band 30 and 5G NR n30:

According to FCC 27.53(a)(4)(ii)(iii), the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) by at least $70 + 10 \log (P)$ dB. The limit of emission 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.

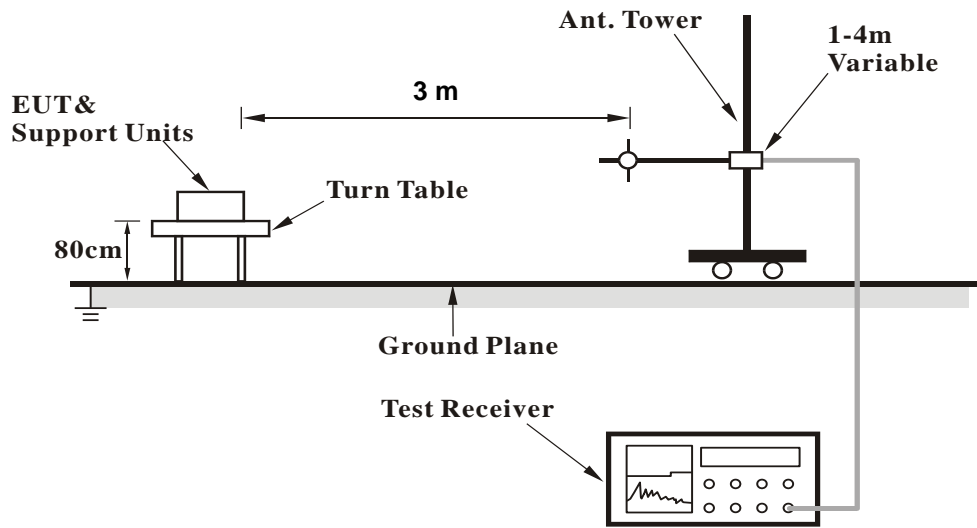
Note: The resolution bandwidth of spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz.

4.1.3 Deviation from Test Standard

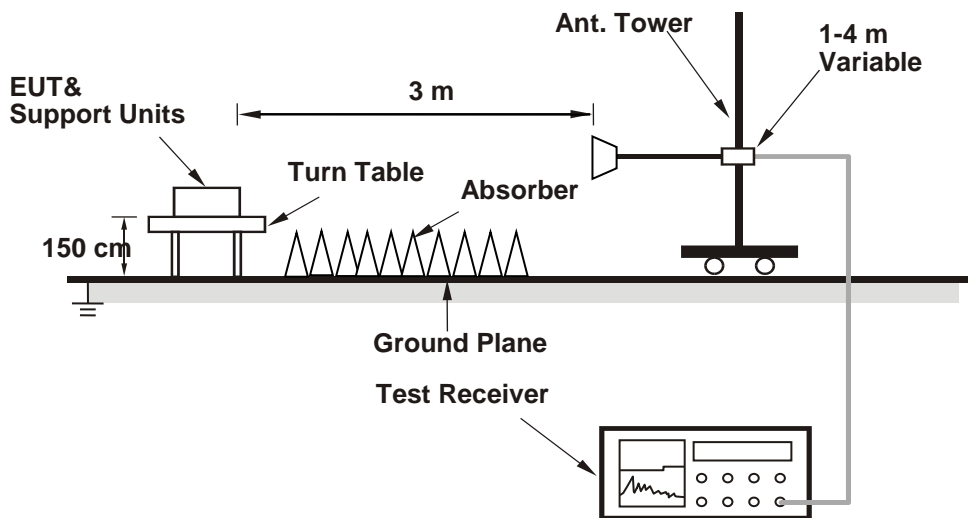
No deviation.

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

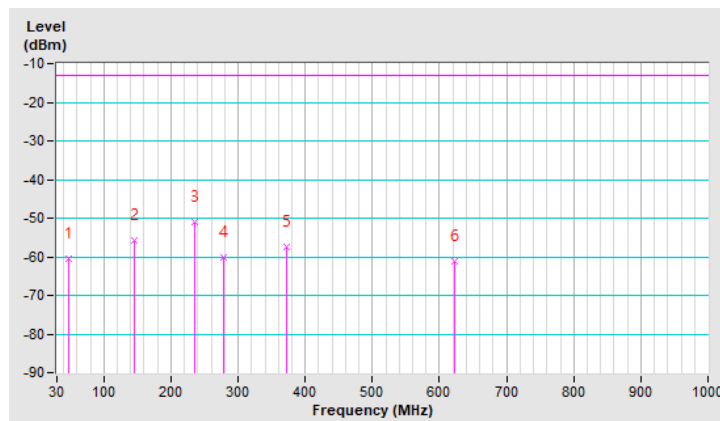
Below 1GHz
WCDMA Band 4

RF Mode	TX WCDMA Band IV	Channel	CH 1312 : 1712.4 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	48.43	-60.59	-13.00	-47.59	1.01 H	10	47.86	-108.45
2	144.46	-55.70	-13.00	-42.70	1.01 H	290	52.89	-108.59
3	234.67	-51.04	-13.00	-38.04	2.00 H	192	59.67	-110.71
4	278.32	-60.09	-13.00	-47.09	1.50 H	173	48.66	-108.75
5	371.44	-57.54	-13.00	-44.54	1.50 H	310	48.82	-106.36
6	622.67	-61.20	-13.00	-48.20	1.01 H	76	39.55	-100.75

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.

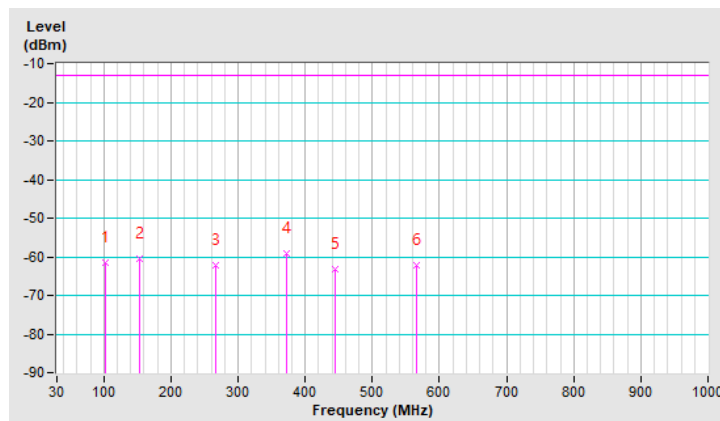


RF Mode	TX WCDMA Band IV	Channel	CH 1312 : 1712.4 MHz
Frequency Range	30MHz ~ 1GHz		

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	102.75	-61.46	-13.00	-48.46	2.00 V	174	51.08	-112.54
2	154.16	-60.66	-13.00	-47.66	1.01 V	207	47.69	-108.35
3	265.71	-62.07	-13.00	-49.07	1.01 V	337	47.32	-109.39
4	371.44	-59.09	-13.00	-46.09	1.50 V	356	47.27	-106.36
5	445.16	-63.09	-13.00	-50.09	1.01 V	311	41.26	-104.35
6	566.41	-62.26	-13.00	-49.26	1.01 V	2	39.84	-102.10

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.



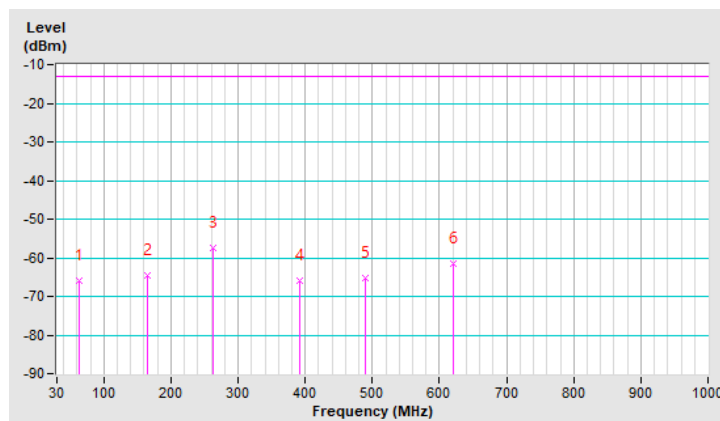
LTE Band 4

RF Mode	TX LTE Band IV-20MHz	Channel	CH 20050 : 1720.0 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	63.95	-65.79	-13.00	-52.79	1.01 H	284	43.85	-109.64
2	164.83	-64.55	-13.00	-51.55	1.01 H	200	44.19	-108.74
3	262.80	-57.51	-13.00	-44.51	1.01 H	180	52.04	-109.55
4	391.81	-65.82	-13.00	-52.82	1.01 H	10	40.04	-105.86
5	488.81	-65.30	-13.00	-52.30	1.01 H	115	38.41	-103.71
6	619.76	-61.58	-13.00	-48.58	1.01 H	179	39.21	-100.79

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.

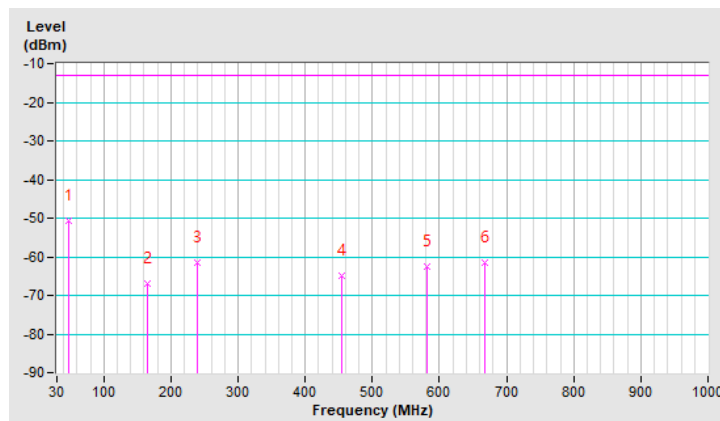


RF Mode	TX LTE Band IV-20MHz	Channel	CH 20050 : 1720.0 MHz
Frequency Range	30MHz ~ 1GHz		

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	48.43	-50.69	-13.00	-37.69	2.00 V	258	57.76	-108.45
2	165.80	-67.08	-13.00	-54.08	1.01 V	93	41.65	-108.73
3	238.55	-61.64	-13.00	-48.64	1.50 V	98	48.80	-110.44
4	454.86	-64.82	-13.00	-51.82	1.01 V	20	39.31	-104.13
5	581.93	-62.48	-13.00	-49.48	1.50 V	141	39.17	-101.65
6	668.26	-61.56	-13.00	-48.56	1.01 V	16	38.62	-100.18

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.



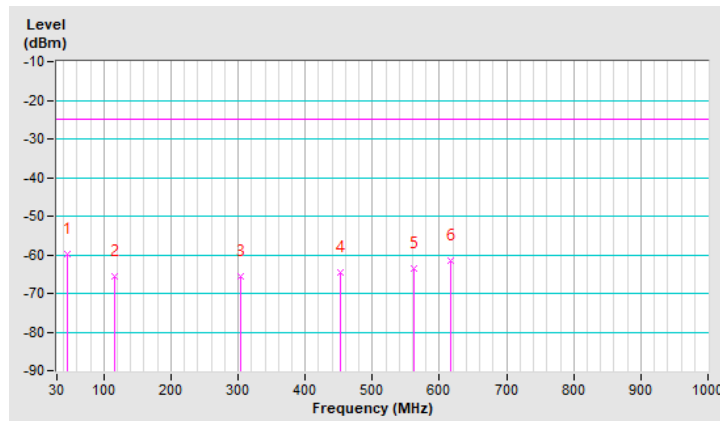
LTE Band 7

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	46.49	-59.77	-25.00	-34.77	1.01 H	120	48.75	-108.52
2	115.36	-65.72	-25.00	-40.72	1.01 H	95	45.40	-111.12
3	303.54	-65.76	-25.00	-40.76	1.50 H	326	42.45	-108.21
4	452.92	-64.45	-25.00	-39.45	2.00 H	124	39.73	-104.18
5	561.56	-63.70	-25.00	-38.70	1.01 H	282	38.50	-102.20
6	616.85	-61.51	-25.00	-36.51	1.01 H	58	39.31	-100.82

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.

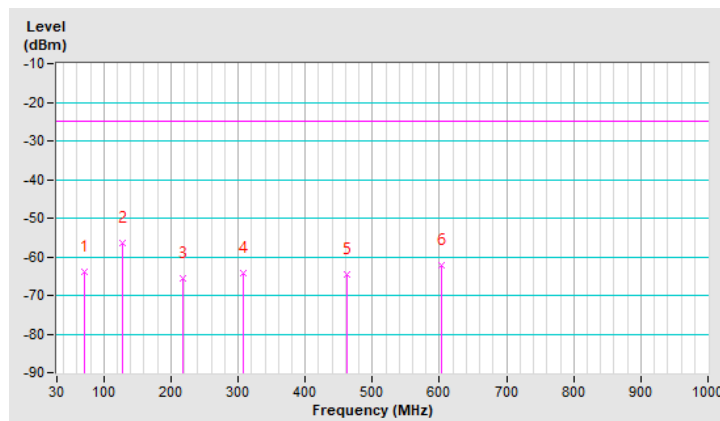


RF Mode	TX LTE Band VII-20MHz	Channel	CH 21100 : 2535.0 MHz
Frequency Range	30MHz ~ 1GHz		

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	71.71	-64.04	-25.00	-39.04	2.00 V	246	47.24	-111.28
2	127.00	-56.59	-25.00	-31.59	1.01 V	195	53.55	-110.14
3	218.18	-65.70	-25.00	-40.70	1.01 V	172	46.48	-112.18
4	308.39	-64.26	-25.00	-39.26	1.50 V	214	43.82	-108.08
5	462.62	-64.58	-25.00	-39.58	1.01 V	222	39.52	-104.10
6	602.30	-62.23	-25.00	-37.23	1.50 V	330	38.87	-101.10

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.



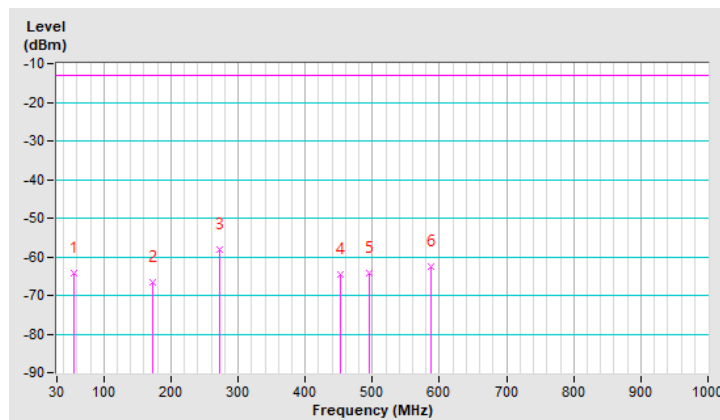
LTE Band 12

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	56.19	-64.34	-13.00	-51.34	1.50 H	164	46.54	-110.88
2	172.59	-66.53	-13.00	-53.53	1.01 H	209	44.86	-111.39
3	271.53	-58.22	-13.00	-45.22	1.01 H	158	52.99	-111.21
4	451.95	-64.43	-13.00	-51.43	1.01 H	182	41.94	-106.37
5	495.60	-64.11	-13.00	-51.11	1.50 H	42	41.61	-105.72
6	586.78	-62.61	-13.00	-49.61	1.01 H	208	41.02	-103.63

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.

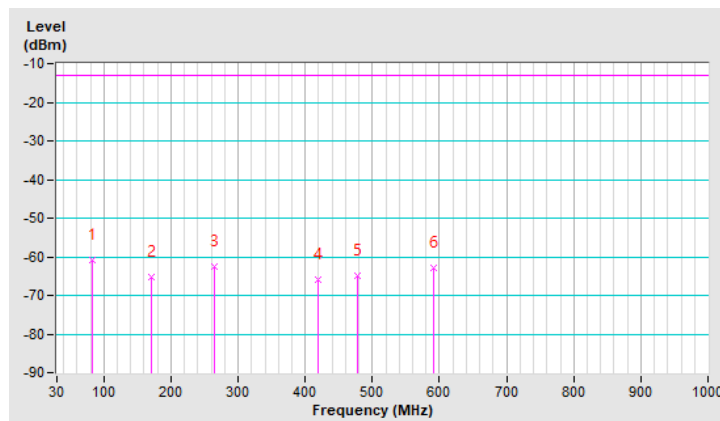


RF Mode	TX LTE Band XII-10MHz	Channel	CH 23095 : 707.5 MHz
Frequency Range	30MHz ~ 1GHz		

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	82.38	-60.93	-13.00	-47.93	1.50 V	41	55.23	-116.16
2	170.65	-65.32	-13.00	-52.32	1.01 V	108	45.83	-111.15
3	264.74	-62.55	-13.00	-49.55	1.01 V	3	49.05	-111.60
4	418.97	-66.10	-13.00	-53.10	1.50 V	19	41.27	-107.37
5	478.14	-64.88	-13.00	-51.88	2.00 V	106	41.17	-106.05
6	590.66	-62.84	-13.00	-49.84	1.01 V	154	40.65	-103.49

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.



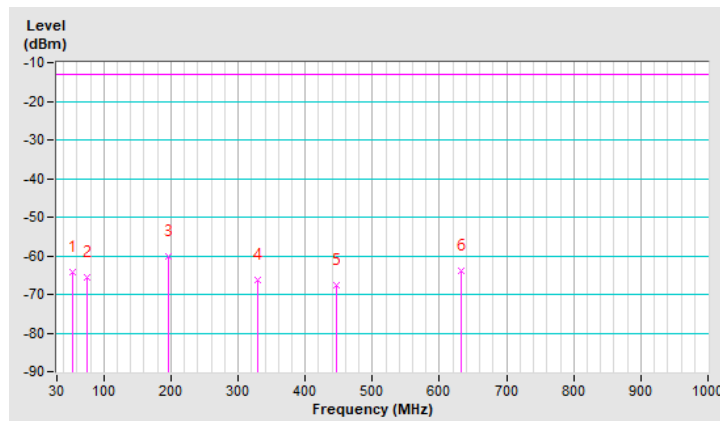
LTE Band 13

RF Mode	TX LTE Band XIII-10MHz	Channel	CH 23230 : 782.0 MHz
Frequency Range	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	54.25	-64.38	-13.00	-51.38	2.00 H	51	46.56	-110.94
2	75.59	-65.45	-13.00	-52.45	1.01 H	166	49.13	-114.58
3	196.84	-60.17	-13.00	-47.17	1.01 H	179	53.99	-114.16
4	329.73	-66.22	-13.00	-53.22	1.50 H	190	43.26	-109.48
5	446.13	-67.65	-13.00	-54.65	1.01 H	47	38.91	-106.56
6	632.37	-63.84	-13.00	-50.84	2.00 H	202	39.06	-102.90

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.

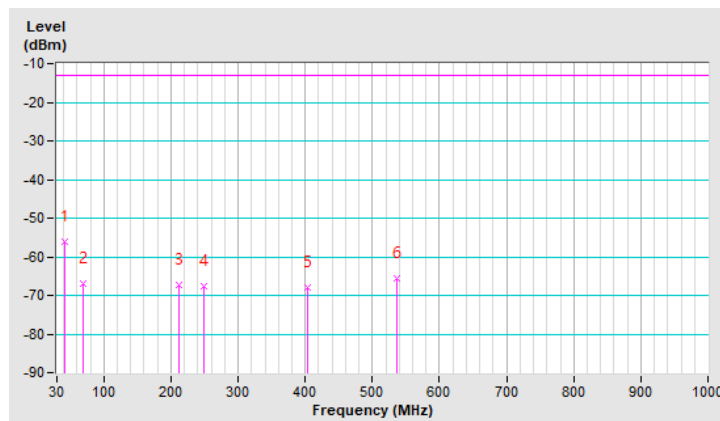


RF Mode	TX LTE Band XIII-10MHz	Channel	CH 23230 : 782.0 MHz
Frequency Range	30MHz ~ 1GHz		

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	42.61	-55.97	-13.00	-42.97	1.50 V	283	54.93	-110.90
2	69.77	-66.98	-13.00	-53.98	1.50 V	107	46.01	-112.99
3	211.39	-67.20	-13.00	-54.20	1.01 V	179	47.25	-114.45
4	249.22	-67.71	-13.00	-54.71	1.01 V	87	44.54	-112.25
5	404.42	-68.07	-13.00	-55.07	2.00 V	3	39.79	-107.86
6	536.34	-65.44	-13.00	-52.44	1.01 V	90	39.60	-105.04

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.



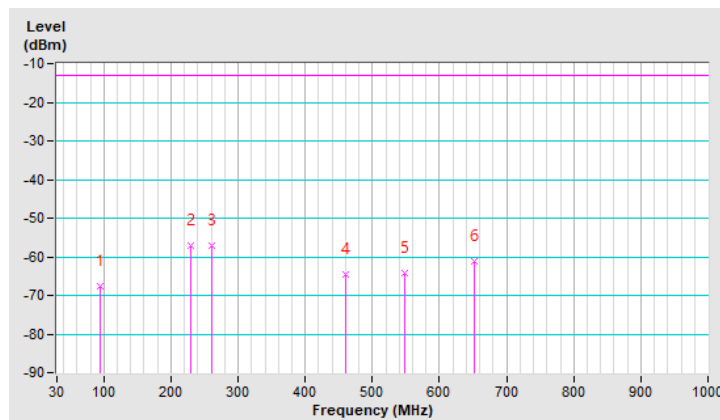
LTE Band 17

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	94.02	-67.73	-13.00	-54.73	1.50 H	131	48.38	-116.11
2	228.85	-57.27	-13.00	-44.27	1.01 H	191	56.31	-113.58
3	260.86	-57.22	-13.00	-44.22	1.01 H	175	54.60	-111.82
4	459.71	-64.73	-13.00	-51.73	2.00 H	209	41.54	-106.27
5	547.98	-64.15	-13.00	-51.15	1.01 H	19	40.59	-104.74
6	651.77	-61.32	-13.00	-48.32	1.01 H	127	41.25	-102.57

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.

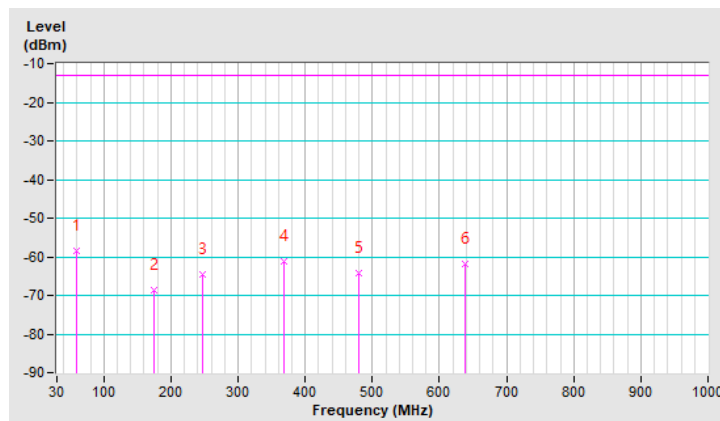


RF Mode	TX LTE Band XVII-10MHz	Channel	CH 23790 : 710.0 MHz
Frequency Range	30MHz ~ 1GHz		

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	59.10	-58.35	-13.00	-45.35	1.50 V	176	52.75	-111.10
2	175.50	-68.80	-13.00	-55.80	1.01 V	300	42.83	-111.63
3	247.28	-64.74	-13.00	-51.74	1.01 V	76	47.49	-112.23
4	368.53	-61.35	-13.00	-48.35	1.01 V	237	47.26	-108.61
5	480.08	-64.36	-13.00	-51.36	2.00 V	230	41.68	-106.04
6	638.19	-61.93	-13.00	-48.93	1.01 V	67	40.76	-102.69

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.



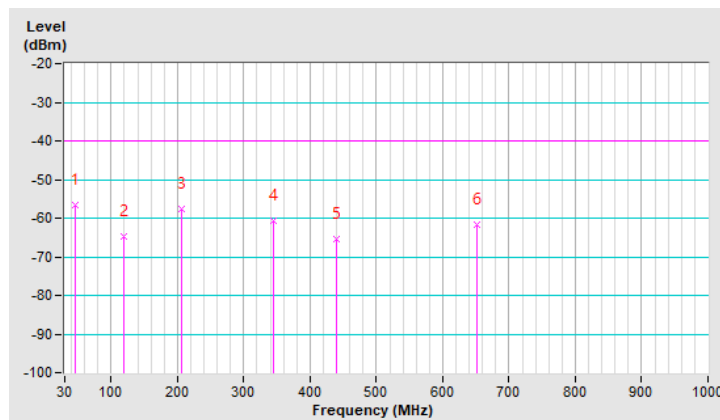
LTE Band 30

RF Mode	TX LTE Band XXX-10MHz	Channel	CH 27710 : 2310.0 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	46.49	-56.76	-40.00	-16.76	2.00 H	93	51.76	-108.52
2	118.27	-64.74	-40.00	-24.74	1.01 H	128	46.11	-110.85
3	205.57	-57.53	-40.00	-17.53	1.01 H	175	54.69	-112.22
4	344.28	-60.83	-40.00	-20.83	1.50 H	325	46.35	-107.18
5	440.31	-65.26	-40.00	-25.26	1.01 H	44	39.16	-104.42
6	651.77	-61.73	-40.00	-21.73	2.00 H	2	38.69	-100.42

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.

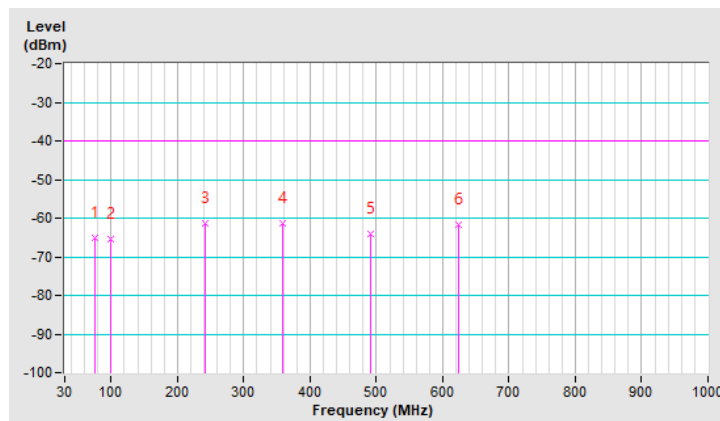


RF Mode	TX LTE Band XXX-10MHz	Channel	CH 27710 : 2310.0 MHz
Frequency Range	30MHz ~ 1GHz		

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	75.59	-65.24	-40.00	-25.24	2.00 V	236	47.14	-112.38
2	99.84	-65.49	-40.00	-25.49	1.01 V	17	47.48	-112.97
3	241.46	-61.52	-40.00	-21.52	2.00 V	104	48.76	-110.28
4	358.83	-61.33	-40.00	-21.33	1.01 V	220	45.52	-106.85
5	491.72	-64.16	-40.00	-24.16	1.50 V	336	39.49	-103.65
6	623.64	-61.61	-40.00	-21.61	1.01 V	227	39.13	-100.74

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.



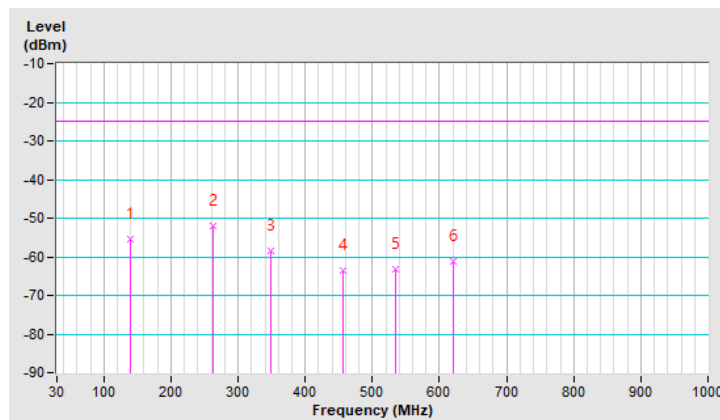
LTE Band 38

RF Mode	TX LTE Band XXXVIII-20MHz	Channel	CH 38000 : 2595.0 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	138.64	-55.37	-25.00	-30.37	1.01 H	270	53.56	-108.93
2	262.80	-52.12	-25.00	-27.12	1.01 H	174	57.43	-109.55
3	349.13	-58.41	-25.00	-33.41	1.50 H	251	48.71	-107.12
4	455.83	-63.64	-25.00	-38.64	1.01 H	263	40.50	-104.14
5	534.40	-63.13	-25.00	-38.13	2.00 H	7	39.69	-102.82
6	619.76	-61.23	-25.00	-36.23	1.50 H	287	39.56	-100.79

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.

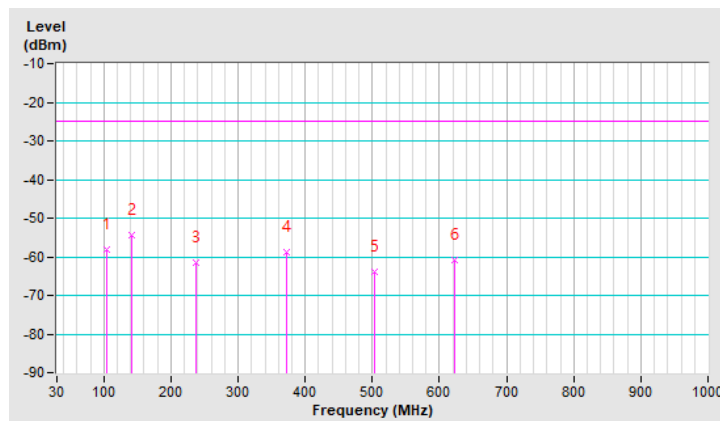


RF Mode	TX LTE Band XXXVIII-20MHz	Channel	CH 38000 : 2595.0 MHz
Frequency Range	30MHz ~ 1GHz		

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	103.72	-58.28	-25.00	-33.28	1.01 V	134	54.10	-112.38
2	141.55	-54.25	-25.00	-29.25	1.01 V	195	54.52	-108.77
3	237.58	-61.59	-25.00	-36.59	2.00 V	89	48.91	-110.50
4	371.44	-58.88	-25.00	-33.88	1.50 V	18	47.48	-106.36
5	503.36	-64.06	-25.00	-39.06	1.50 V	209	39.32	-103.38
6	621.70	-60.69	-25.00	-35.69	1.01 V	254	40.07	-100.76

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.



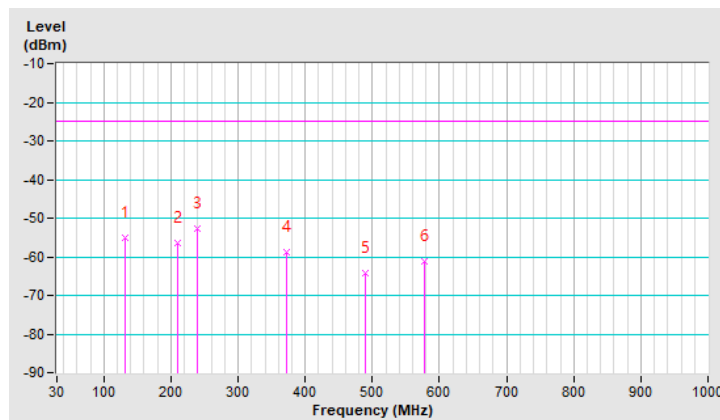
LTE Band 41

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	131.85	-55.09	-25.00	-30.09	1.50 H	278	54.58	-109.67
2	210.42	-56.57	-25.00	-31.57	1.01 H	174	55.66	-112.23
3	239.52	-52.82	-25.00	-27.82	1.01 H	190	57.55	-110.37
4	371.44	-58.70	-25.00	-33.70	1.01 H	340	47.66	-106.36
5	489.78	-64.13	-25.00	-39.13	2.00 H	75	39.55	-103.68
6	577.08	-61.22	-25.00	-36.22	1.50 H	251	40.57	-101.79

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.

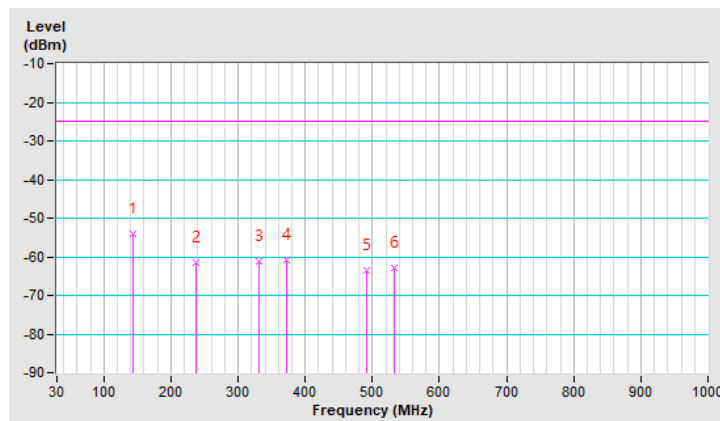


RF Mode	TX LTE Band XLI-20MHz	Channel	CH 40620 : 2593.0 MHz
Frequency Range	30MHz ~ 1GHz		

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	142.52	-54.13	-25.00	-29.13	1.01 V	188	54.59	-108.72
2	236.61	-61.45	-25.00	-36.45	1.01 V	93	49.11	-110.56
3	331.67	-61.25	-25.00	-36.25	1.50 V	213	45.97	-107.22
4	371.44	-60.74	-25.00	-35.74	1.01 V	16	45.62	-106.36
5	491.72	-63.55	-25.00	-38.55	1.50 V	142	40.10	-103.65
6	533.43	-62.82	-25.00	-37.82	2.00 V	291	40.01	-102.83

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.



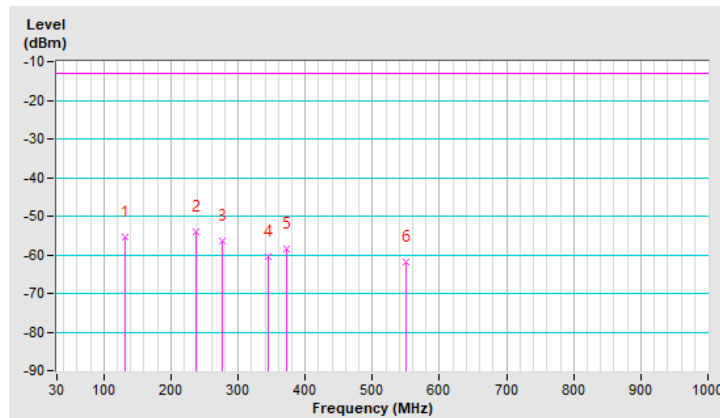
LTE Band 66

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	131.85	-55.52	-13.00	-42.52	1.01 H	284	54.15	-109.67
2	237.58	-54.03	-13.00	-41.03	1.01 H	181	56.47	-110.50
3	276.38	-56.36	-13.00	-43.36	1.50 H	158	52.47	-108.83
4	345.25	-60.45	-13.00	-47.45	1.50 H	312	46.75	-107.20
5	371.44	-58.52	-13.00	-45.52	1.01 H	349	47.84	-106.36
6	550.89	-62.02	-13.00	-49.02	2.00 H	202	40.50	-102.52

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.

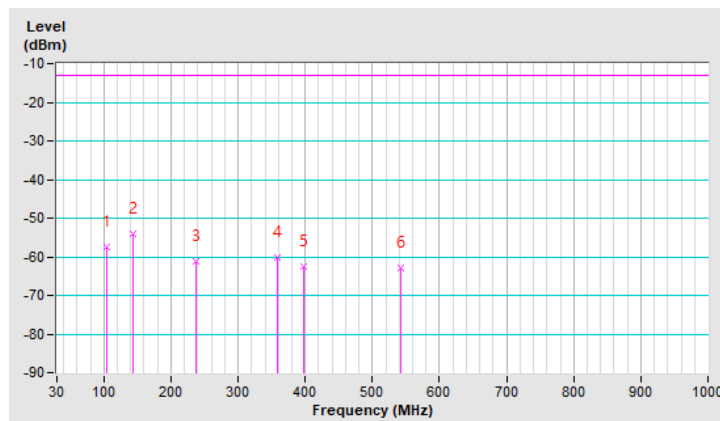


RF Mode	TX LTE Band LXVI-20MHz	Channel	CH 132322 :1745.0MHz
Frequency Range	30MHz ~ 1GHz		

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	103.72	-57.44	-13.00	-44.44	2.00 V	210	54.94	-112.38
2	142.52	-54.09	-13.00	-41.09	1.01 V	196	54.63	-108.72
3	237.58	-61.10	-13.00	-48.10	1.01 V	78	49.40	-110.50
4	357.86	-60.06	-13.00	-47.06	1.01 V	226	46.80	-106.86
5	397.63	-62.41	-13.00	-49.41	1.50 V	203	43.34	-105.75
6	543.13	-62.74	-13.00	-49.74	1.50 V	16	39.92	-102.66

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.



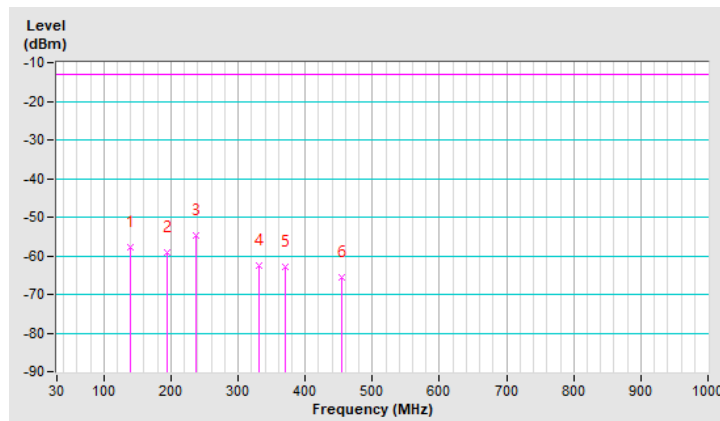
LTE Band 71

RF Mode	TX LTE Band LXVI-20MHz	Channel	CH 133297 :680.5MHz
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	139.61	-57.82	-13.00	-44.82	1.01 H	278	53.26	-111.08
2	193.93	-59.27	-13.00	-46.27	1.50 H	175	54.54	-113.81
3	236.61	-54.64	-13.00	-41.64	1.01 H	197	58.07	-112.71
4	330.70	-62.53	-13.00	-49.53	1.50 H	254	46.86	-109.39
5	370.47	-62.86	-13.00	-49.86	1.01 H	15	45.68	-108.54
6	454.86	-65.70	-13.00	-52.70	2.00 H	243	40.58	-106.28

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.

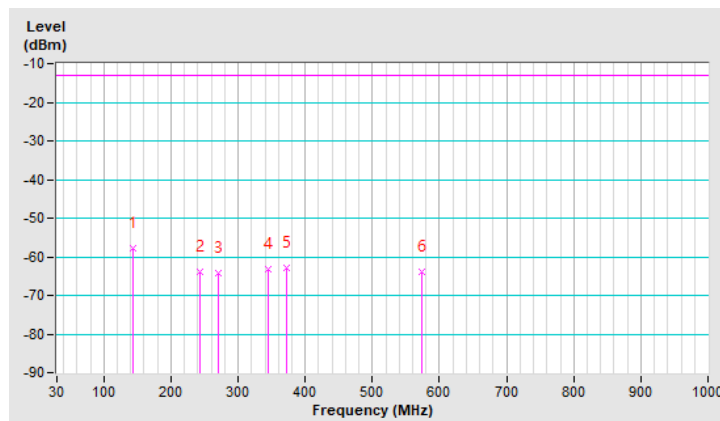


RF Mode	TX LTE Band LXVI-20MHz	Channel	CH 133297 :680.5MHz
Frequency Range	30MHz ~ 1GHz		

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	142.52	-57.70	-13.00	-44.70	1.01 V	226	53.17	-110.87
2	242.43	-63.90	-13.00	-50.90	1.01 V	98	48.49	-112.39
3	270.56	-64.36	-13.00	-51.36	2.00 V	352	46.90	-111.26
4	344.28	-63.17	-13.00	-50.17	1.50 V	228	46.16	-109.33
5	371.44	-62.84	-13.00	-49.84	1.01 V	3	45.67	-108.51
6	573.20	-63.83	-13.00	-50.83	1.50 V	265	40.22	-104.05

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.



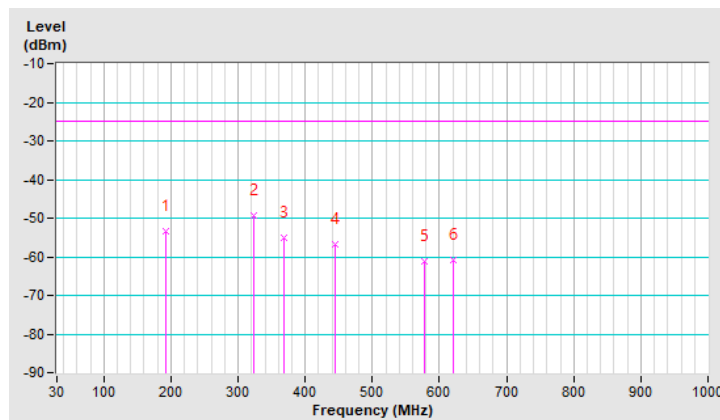
n7

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	191.99	-53.50	-25.00	-28.50	1.01 H	260	57.88	-111.38
2	322.94	-49.25	-25.00	-24.25	1.01 H	130	58.27	-107.52
3	368.53	-54.95	-25.00	-29.95	1.01 H	151	51.51	-106.46
4	444.19	-56.93	-25.00	-31.93	1.50 H	267	47.42	-104.35
5	578.05	-61.03	-25.00	-36.03	2.00 H	2	40.73	-101.76
6	619.76	-60.77	-25.00	-35.77	1.50 H	157	40.02	-100.79

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.

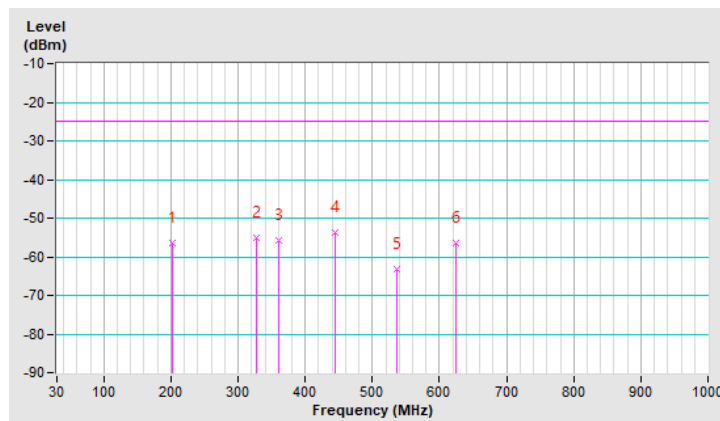


RF Mode	TX 5GNR Band VII-20MHz	Channel	CH 507000 :2535.0MHz
Frequency Range	30MHz ~ 1GHz		

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	201.69	-56.28	-25.00	-31.28	1.50 V	336	55.87	-112.15
2	327.79	-55.02	-25.00	-30.02	1.01 V	161	52.32	-107.34
3	359.80	-55.63	-25.00	-30.63	1.01 V	298	51.20	-106.83
4	444.19	-53.81	-25.00	-28.81	1.01 V	17	50.54	-104.35
5	536.34	-63.29	-25.00	-38.29	2.00 V	69	39.50	-102.79
6	623.64	-56.38	-25.00	-31.38	1.50 V	343	44.36	-100.74

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.



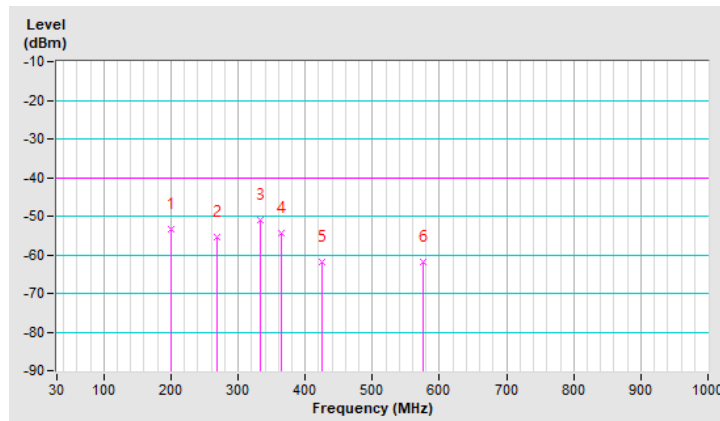
n30

RF Mode	TX 5GNR Band XXX-10MHz	Channel	CH 462000 :2310.0MHz
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	199.75	-53.37	-40.00	-13.37	1.01 H	260	58.74	-112.11
2	268.62	-55.33	-40.00	-15.33	2.00 H	211	53.89	-109.22
3	332.64	-51.00	-40.00	-11.00	1.01 H	134	56.19	-107.19
4	364.65	-54.46	-40.00	-14.46	1.01 H	152	52.18	-106.64
5	424.79	-61.77	-40.00	-21.77	1.50 H	10	43.26	-105.03
6	576.11	-61.77	-40.00	-21.77	2.00 H	239	40.04	-101.81

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.

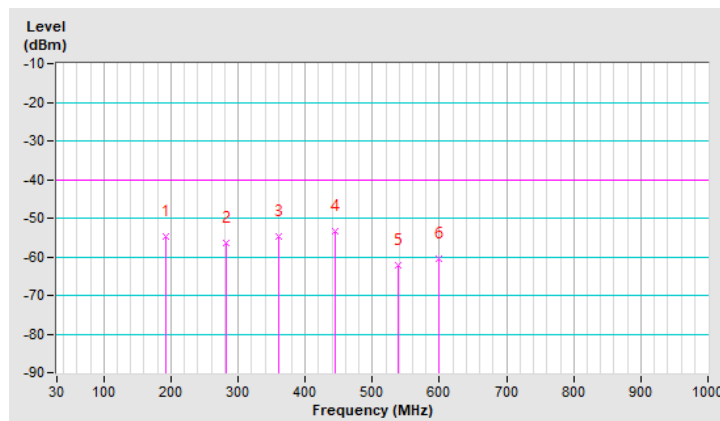


RF Mode	TX 5GNR Band XXX-10MHz	Channel	CH 462000 :2310.0MHz
Frequency Range	30MHz ~ 1GHz		

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	191.99	-54.65	-40.00	-14.65	1.01 V	323	56.73	-111.38
2	283.17	-56.55	-40.00	-16.55	1.50 V	198	52.03	-108.58
3	360.77	-54.69	-40.00	-14.69	1.01 V	278	52.11	-106.80
4	444.19	-53.39	-40.00	-13.39	1.01 V	294	50.96	-104.35
5	538.28	-62.24	-40.00	-22.24	2.00 V	41	40.53	-102.77
6	599.39	-60.43	-40.00	-20.43	1.50 V	130	40.72	-101.15

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.



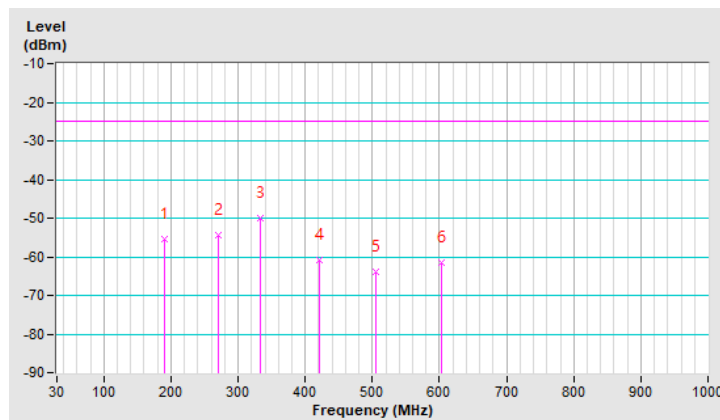
n38

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	191.02	-55.50	-25.00	-30.50	1.01 H	173	55.76	-111.26
2	270.56	-54.48	-25.00	-29.48	1.01 H	194	54.63	-109.11
3	332.64	-50.08	-25.00	-25.08	1.01 H	132	57.11	-107.19
4	421.88	-60.68	-25.00	-35.68	1.50 H	3	44.44	-105.12
5	504.33	-64.04	-25.00	-39.04	2.00 H	67	39.31	-103.35
6	602.30	-61.36	-25.00	-36.36	1.50 H	174	39.74	-101.10

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.

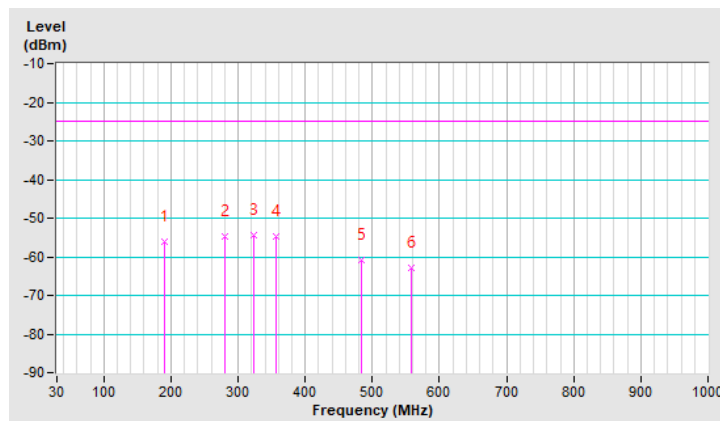


RF Mode	TX 5GNR Band XXXVIII-20MHz	Channel	CH 591000 :2595.0MHz
Frequency Range	30MHz ~ 1GHz		

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	191.02	-56.15	-25.00	-31.15	1.50 V	351	55.11	-111.26
2	280.26	-54.86	-25.00	-29.86	1.01 V	196	53.81	-108.67
3	323.91	-54.54	-25.00	-29.54	1.01 V	157	52.93	-107.47
4	356.89	-54.83	-25.00	-29.83	1.01 V	290	52.07	-106.90
5	483.96	-60.68	-25.00	-35.68	1.50 V	17	43.14	-103.82
6	557.68	-62.80	-25.00	-37.80	2.00 V	93	39.47	-102.27

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.



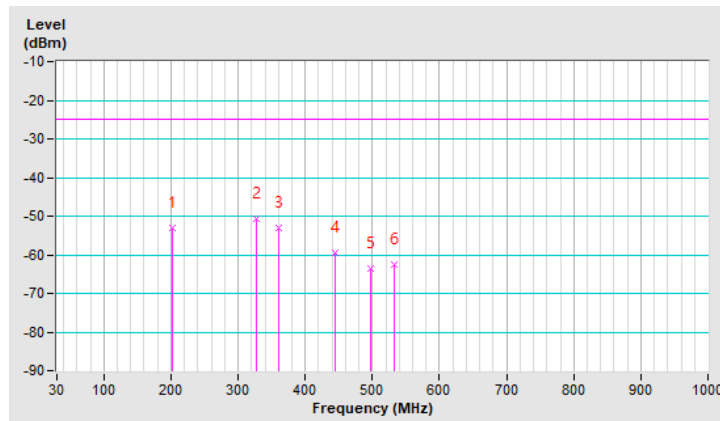
n41

RF Mode	TX 5GNR Band XLI-80MHz	Channel	CH 528000 :2640.0MHz
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	201.69	-52.95	-25.00	-27.95	1.01 H	172	59.20	-112.15
2	327.79	-50.59	-25.00	-25.59	1.01 H	114	56.75	-107.34
3	360.77	-53.19	-25.00	-28.19	1.50 H	142	53.61	-106.80
4	444.19	-59.36	-25.00	-34.36	1.01 H	26	44.99	-104.35
5	497.54	-63.71	-25.00	-38.71	2.00 H	86	39.82	-103.53
6	532.46	-62.68	-25.00	-37.68	2.00 H	254	40.14	-102.82

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.

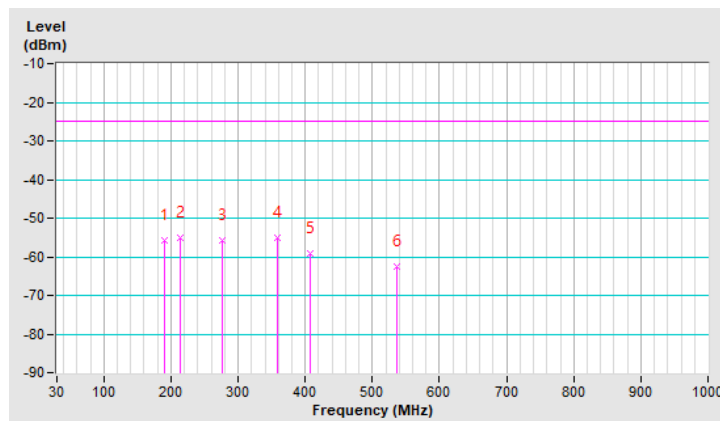


RF Mode	TX 5GNR Band XLI-80MHz	Channel	CH 528000 :2640.0MHz
Frequency Range	30MHz ~ 1GHz		

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	191.02	-55.71	-25.00	-30.71	1.50 V	347	55.55	-111.26
2	214.30	-55.11	-25.00	-30.11	1.01 V	2	57.09	-112.20
3	277.35	-55.62	-25.00	-30.62	1.01 V	191	53.18	-108.80
4	358.83	-54.99	-25.00	-29.99	1.01 V	238	51.86	-106.85
5	408.30	-59.10	-25.00	-34.10	1.50 V	198	46.44	-105.54
6	537.31	-62.62	-25.00	-37.62	2.00 V	359	40.15	-102.77

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.



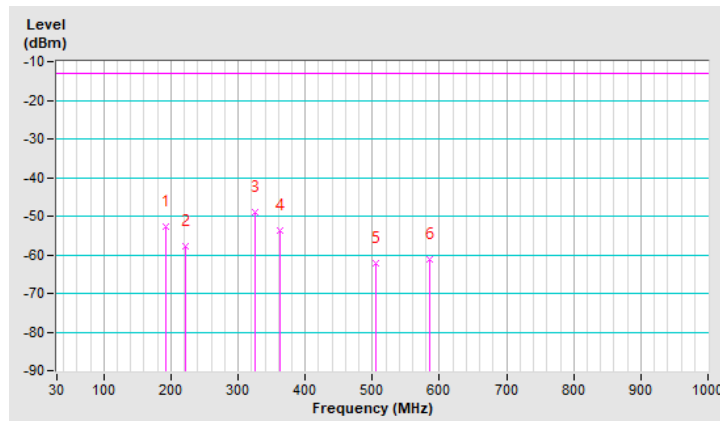
n66

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	191.99	-52.85	-13.00	-39.85	1.01 H	172	58.53	-111.38
2	222.06	-57.76	-13.00	-44.76	1.01 H	236	54.38	-112.14
3	325.85	-49.03	-13.00	-36.03	1.50 H	135	58.37	-107.40
4	361.74	-53.81	-13.00	-40.81	1.01 H	144	52.95	-106.76
5	504.33	-62.23	-13.00	-49.23	2.00 H	7	41.12	-103.35
6	584.84	-61.17	-13.00	-48.17	1.50 H	228	40.39	-101.56

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.

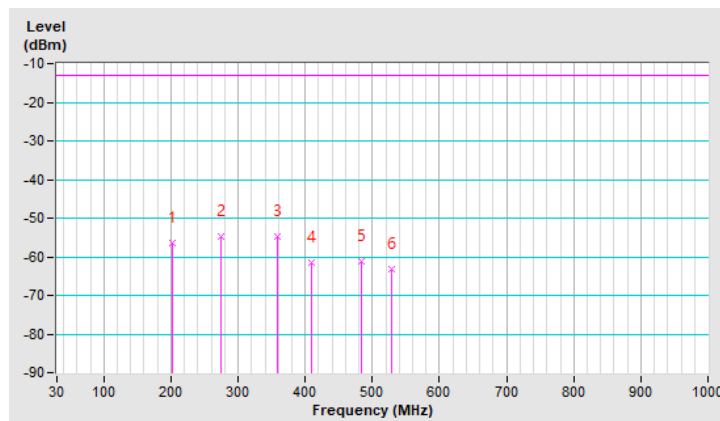


RF Mode	TX 5GNR Band LXVI-40MHz	Channel	CH 349000 :1745.0MHz
Frequency Range	30MHz ~ 1GHz		

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	201.69	-56.47	-13.00	-43.47	1.01 V	332	55.68	-112.15
2	274.44	-54.78	-13.00	-41.78	1.01 V	197	54.13	-108.91
3	358.83	-54.64	-13.00	-41.64	1.01 V	272	52.21	-106.85
4	410.24	-61.50	-13.00	-48.50	1.50 V	185	43.99	-105.49
5	482.99	-61.18	-13.00	-48.18	1.50 V	14	42.66	-103.84
6	528.58	-63.22	-13.00	-50.22	2.00 V	16	39.62	-102.84

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.



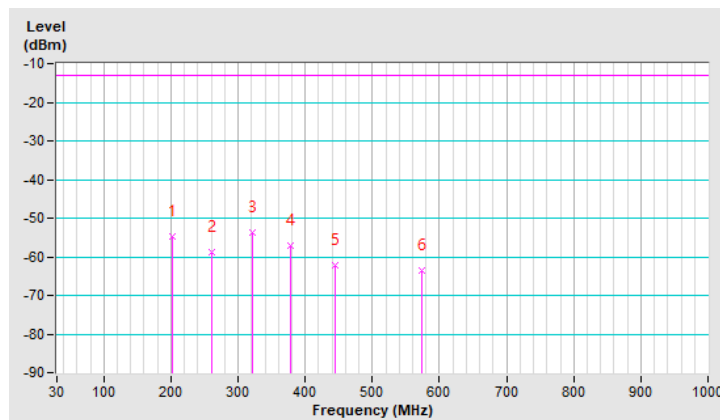
n71

RF Mode	TX 5GNR Band LXXI-20MHz	Channel	CH 136100 :680.5MHz
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	201.69	-54.81	-13.00	-41.81	1.01 H	172	59.56	-114.37
2	259.89	-58.83	-13.00	-45.83	1.50 H	59	53.13	-111.96
3	321.97	-53.71	-13.00	-40.71	1.01 H	119	56.06	-109.77
4	378.23	-57.15	-13.00	-44.15	1.01 H	346	51.30	-108.45
5	444.19	-62.33	-13.00	-49.33	1.50 H	229	44.26	-106.59
6	573.20	-63.61	-13.00	-50.61	2.00 H	242	40.54	-104.15

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.

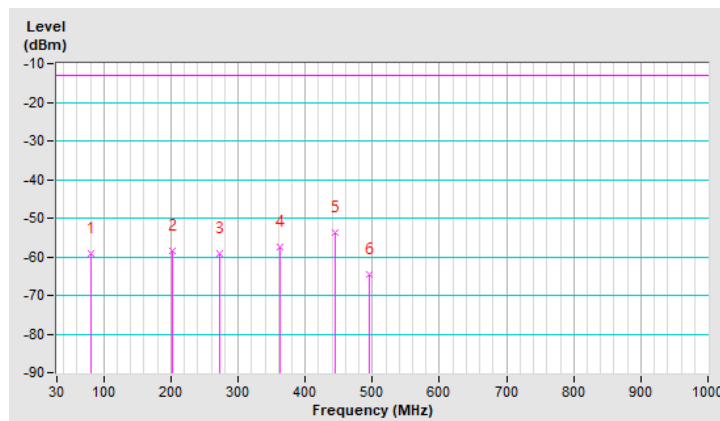


RF Mode	TX 5GNR Band LXXI-20MHz	Channel	CH 136100 :680.5MHz
Frequency Range	30MHz ~ 1GHz		

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	80.44	-59.28	-13.00	-46.28	1.50 V	53	56.58	-115.86
2	202.66	-58.63	-13.00	-45.63	1.01 V	342	55.75	-114.38
3	273.47	-59.13	-13.00	-46.13	1.50 V	210	52.09	-111.22
4	362.71	-57.33	-13.00	-44.33	1.01 V	269	51.63	-108.96
5	444.19	-53.72	-13.00	-40.72	1.01 V	12	52.87	-106.59
6	494.63	-64.70	-13.00	-51.70	2.00 V	18	41.15	-105.85

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.



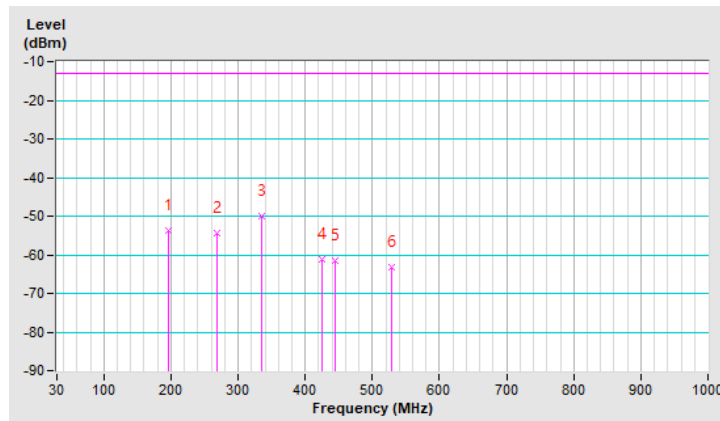
n77

RF Mode	TX 5GNR Band LXXVII-100MHz	Channel	CH 659000 :3885.0MHz
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	195.87	-53.56	-13.00	-40.56	1.01 H	261	58.35	-111.91
2	267.65	-54.52	-13.00	-41.52	1.01 H	48	54.75	-109.27
3	334.58	-50.02	-13.00	-37.02	1.01 H	143	57.14	-107.16
4	424.79	-61.29	-13.00	-48.29	1.50 H	8	43.74	-105.03
5	444.19	-61.51	-13.00	-48.51	1.50 H	278	42.84	-104.35
6	529.55	-63.15	-13.00	-50.15	2.00 H	326	39.69	-102.84

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.

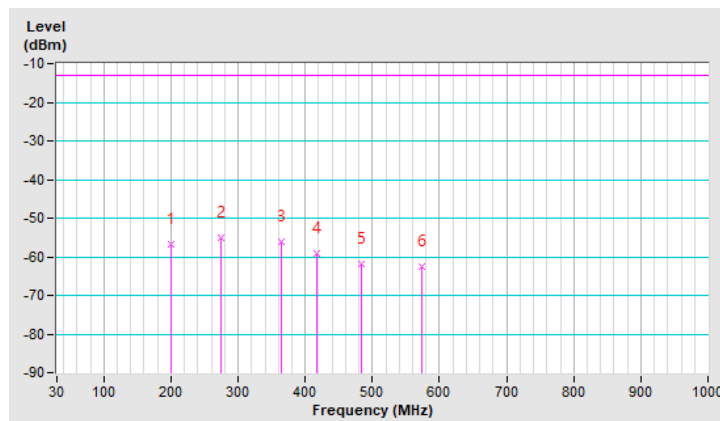


RF Mode	TX 5GNR Band LXXVII-100MHz	Channel	CH 659000 :3885.0MHz
Frequency Range	30MHz ~ 1GHz		

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	200.72	-56.68	-13.00	-43.68	1.01 V	338	55.44	-112.12
2	274.44	-54.94	-13.00	-41.94	1.01 V	186	53.97	-108.91
3	363.68	-56.17	-13.00	-43.17	1.50 V	241	50.51	-106.68
4	417.03	-59.21	-13.00	-46.21	1.01 V	192	46.09	-105.30
5	482.99	-61.94	-13.00	-48.94	1.50 V	11	41.90	-103.84
6	573.20	-62.48	-13.00	-49.48	2.00 V	241	39.42	-101.90

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.



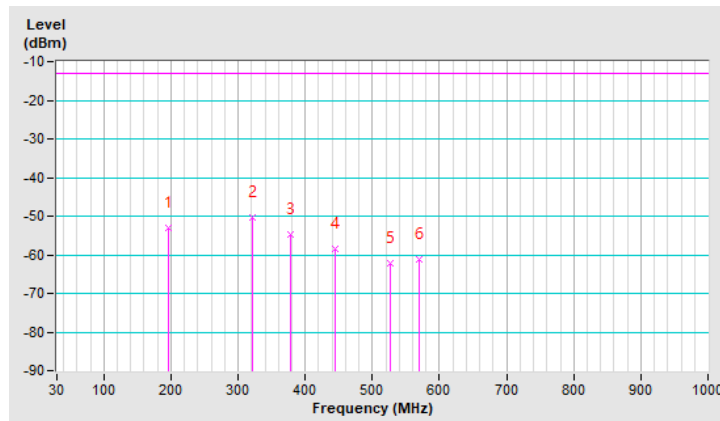
n78

RF Mode	TX 5GNR Band LXXVIII-100MHz	Channel	CH 650000 :3750.0MHz
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	195.87	-53.08	-13.00	-40.08	1.01 H	266	58.83	-111.91
2	321.00	-50.20	-13.00	-37.20	1.01 H	144	57.40	-107.60
3	377.26	-54.63	-13.00	-41.63	1.01 H	356	51.59	-106.22
4	444.19	-58.32	-13.00	-45.32	1.50 H	42	46.03	-104.35
5	527.61	-62.24	-13.00	-49.24	2.00 H	226	40.61	-102.85
6	570.29	-61.35	-13.00	-48.35	1.50 H	257	40.66	-102.01

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.

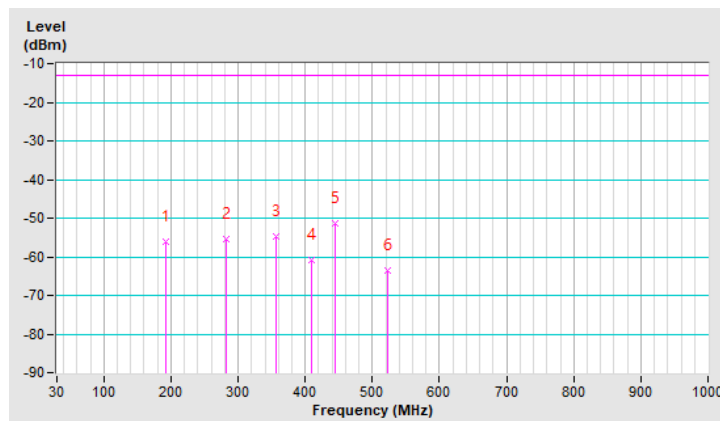


RF Mode	TX 5GNR Band LXXVIII-100MHz	Channel	CH 650000 :3750.0MHz
Frequency Range	30MHz ~ 1GHz		

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	191.99	-56.01	-13.00	-43.01	1.50 V	312	55.37	-111.38
2	282.20	-55.58	-13.00	-42.58	1.01 V	201	53.03	-108.61
3	355.92	-54.73	-13.00	-41.73	1.01 V	258	52.19	-106.92
4	409.27	-60.77	-13.00	-47.77	1.50 V	201	44.74	-105.51
5	444.19	-51.38	-13.00	-38.38	1.01 V	2	52.97	-104.35
6	522.76	-63.43	-13.00	-50.43	2.00 V	253	39.49	-102.92

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.



Above 1GHz
WCDMA Band 4

RF Mode	TX WCDMA Band IV	Channel	CH 1312 : 1712.4 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	3424.80	-50.98	-13.00	-37.98	1.00 H	59	47.28	-98.26
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	3424.80	-52.01	-13.00	-39.01	2.87 V	85	46.25	-98.26

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 4

RF Mode	TX LTE Band IV-20MHz	Channel	CH 20050 : 1720.0 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	3440.00	-51.49	-13.00	-38.49	1.91 H	301	46.76	-98.25
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	3440.00	-51.68	-13.00	-38.68	1.67 V	194	46.57	-98.25

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) + 20log(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	-47.71	-25.00	-22.71	1.56 H	119	45.99	-93.70

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	-47.92	-25.00	-22.92	2.11 V	133	45.78	-93.70

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.

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	-59.88	-13.00	-46.88	1.89 H	156	45.89	-105.77
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	-60.01	-13.00	-47.01	1.12 V	346	45.76	-105.77

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	-47.68	-40.00	-7.68	2.19 H	222	55.81	-103.49
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	-48.52	-40.00	-8.52	2.85 V	116	54.97	-103.49

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	-59.42	-13.00	-46.42	1.96 H	110	46.36	-105.78
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	-59.58	-13.00	-46.58	2.31 V	69	46.20	-105.78

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 30

RF Mode	TX LTE Band XXX-10MHz	Channel	CH 27710 : 2310.0 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	4620.00	-49.28	-40.00	-9.28	1.89 H	230	45.26	-94.54
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	4620.00	-49.43	-40.00	-9.43	2.02 V	317	45.11	-94.54

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 38

RF Mode	TX LTE Band XXXVIII-20MHz	Channel	CH 38000 : 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	-48.83	-25.00	-23.83	2.11 H	174	44.68	-93.51
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	-48.53	-25.00	-23.53	1.96 V	158	44.98	-93.51

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 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	-48.85	-25.00	-23.85	1.97 H	145	44.66	-93.51
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	-49.00	-25.00	-24.00	2.39 V	198	44.51	-93.51

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	-51.20	-13.00	-38.20	2.03 H	189	46.94	-98.14
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	-51.37	-13.00	-38.37	2.41 V	78	46.77	-98.14

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 71

RF Mode	TX LTE Band LXVI-20MHz	Channel	CH 133297 :680.5MHz
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	1361.00	-59.51	-13.00	-46.51	2.49 H	188	46.25	-105.76
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	1361.00	-59.65	-13.00	-46.65	2.74 V	126	46.11	-105.76

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.

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	-49.71	-25.00	-24.71	2.17 H	36	43.60	-93.31
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	-50.41	-25.00	-25.41	2.66 V	317	42.90	-93.31

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.

n30

RF Mode	TX 5GNR Band XXX-10MHz	Channel	CH 462000 :2310.0MHz
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	4620.00	-45.62	-40.00	-5.62	2.71 H	12	48.40	-94.02
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	4620.00	-46.32	-40.00	-6.32	2.60 V	325	47.70	-94.02

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	-47.43	-25.00	-22.43	2.44 H	61	45.74	-93.17
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	-47.54	-25.00	-22.54	2.73 V	264	45.63	-93.17

Remarks:

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

n41

RF Mode	TX 5GNR Band XLI- 80MHz	Channel	CH 528000 :2640.0MHz
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	5299.98	-47.76	-25.00	-22.76	2.49 H	58	45.70	-93.46
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	5299.98	-47.99	-25.00	-22.99	2.60 V	249	45.47	-93.46

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.

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	-51.34	-13.00	-38.34	1.71 H	6	45.70	-97.04
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	-51.44	-13.00	-38.44	2.75 V	50	45.60	-97.04

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.

n71

RF Mode	TX 5GNR Band LXXI-20MHz	Channel	CH 136100 :680.5MHz
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	1361.00	-55.02	-13.00	-42.02	2.46 H	56	49.60	-104.62
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	1361.00	-56.02	-13.00	-43.02	2.80 V	275	48.60	-104.62

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.

n77

RF Mode	TX 5GNR Band LXXVII-100MHz	Channel	CH 659000 :3885.0MHz
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	7770.00	-41.71	-13.00	-28.71	2.33 H	71	46.23	-87.94
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	7770.00	-41.83	-13.00	-28.83	2.60 V	234	46.11	-87.94

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 650000 :3750.0MHz
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	7500.00	-41.17	-13.00	-28.17	2.54 H	55	46.15	-87.32
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	7500.00	-41.35	-13.00	-28.35	2.65 V	239	45.97	-87.32

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.

If you have any comments, please feel free to contact us at the following:

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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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