FCC Test Report (PART 22)

Report No.:	RFBCKS-WTW-P21010640-2
FCC ID:	NKR-WLD92
Test Model:	WLD92
Received Date:	Jan. 21, 2021
Test Date:	Jan. 29 to Feb. 05, 2021
Issued Date:	Apr. 06, 2021
Applicant:	Wistron NeWeb Corporation
Address:	20 Park Avenue II, Hsinchu Science Park, Hsinchu 308, Taiwan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / Designation Number:	723255 / TW2022

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Release Control Record

Issue No.	Description	Date Issued
RFBCKS-WTW-P21010640-2	Original release.	Apr. 06, 2021

1 Certificate of Conformity

Product: LTE Indoor Router

Brand: Wistron NeWeb Corporation

Test Model: WLD92

Sample Status: Engineering sample

Applicant: Wistron NeWeb Corporation

Test Date: Jan. 29 to Feb. 05, 2021

Standards: FCC Part 22, Subpart H

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 EMC characteristics under the conditions specified in this report.

Prepared by : Vivian Huang , **Date:** Apr. 06, 2021

Vivian Huang / Specialist

Approved by : , **Date:** Apr. 06, 2021

Clark Lin / Technical Manager

2 Summary of Test Results

Applied Standard: FCC Part 22 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 22.913 (a)	Effective radiated power	PASS	Meet the requirement of limit.
22.913(d)	Peak to Average Ratio	N/A	Refer to Note 2 below
2.1047	Modulation characteristics	N/A	Refer to Note 2 below
2.1055 22.355	Frequency Stability	N/A	Refer to Note 2 below
2.1049	Occupied Bandwidth	N/A	Refer to Note 2 below
22.917	Band Edge Measurements	N/A	Refer to Note 2 below
2.1051 22.917	Conducted Spurious Emissions	N/A	Refer to Note 2 below
2.1053 22.917	Radiated Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -48.43 dB at 3719.25 MHz.

Note:
1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. Effective radiated power and Radiated Spurious Emissions were performed for this addendum. The others testing data refer to original test report.

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	3.1 dB
	30MHz ~ 1GHz	5.4 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	5.0 dB
	18GHz ~ 40GHz	5.3 dB

2.2 Test Site and Instruments

For radiated spurious emissions test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESR7	102026	Apr. 22, 2020	Apr. 21, 2021
Spectrum Analyzer Keysight	N9030B	MY57141948	May 22, 2020	May 21, 2021
Pre-Amplifier EMCI	EMC001340	980142	May 25, 2020	May 24, 2021
Loop Antenna Electro-Metrics	EM-6879	264	Feb. 18, 2020	Feb. 17, 2021
RF Cable	5D-FB	LOOPCAB-001	Jan. 07, 2021	Jan. 06, 2022
RF Cable	5D-FB	LOOPCAB-002	Jan. 07, 2021	Jan. 06, 2022
Pre-Amplifier EMCI	EMC330N	980538	Apr. 28, 2020	Apr. 27, 2021
Trilog Broadband Antenna SCHWARZBECK	VULB9168	9168-0842	Nov. 03, 2020	Nov. 02, 2021
RF Cable	8D	966-5-1	Apr. 29, 2020	Apr. 28, 2021
RF Cable	8D	966-5-2	Apr. 29, 2020	Apr. 28, 2021
RF Cable	8D	966-5-3	Apr. 29, 2020	Apr. 28, 2021
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-02	Jan. 11, 2021	Jan. 10, 2022
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-1819	Nov. 22, 2020	Nov. 21, 2021
Pre-Amplifier EMCI	EMC12630SE	980509	Apr. 29, 2020	Apr. 28, 2021
RF Cable EMCI	EMC104-SM-SM-1500	180503	Apr. 29, 2020	Apr. 28, 2021
RF Cable EMCI	EMC104-SM-SM-2000	180501	Apr. 29, 2020	Apr. 28, 2021
RF Cable EMCI	EMC104-SM-SM-6000	180506	Apr. 29, 2020	Apr. 28, 2021
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 11, 2021	Jan. 10, 2022
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 22, 2020	Nov. 21, 2021
RF Cable	EMC102-KM-KM-1200	160924	Jan. 11, 2021	Jan. 10, 2022
RF Cable	EMC-KM-KM-4000	200214	Mar. 11, 2020	Mar. 10, 2021
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	NA	NA

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 966 Chamber No. 5.
3. Tested Date: Jan. 29, 2021

For radiated power test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power meter Anritsu	ML2495A	1529002	July 22, 2020	July 21, 2021
Power sensor Anritsu	MA2411B	1339443	July 22, 2020	July 21, 2021
Fixed Attenuator Mini-Circuits	MDCS18N-10	MDCS18N-10-01	Apr. 14, 2020	Apr. 13, 2021

Note: 1. The test was performed in Oven room 2.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. Tested Date: Feb. 05, 2021

3 General Information

3.1 General Description of EUT

Product	LTE Indoor Router	
Brand	Wistron NeWeb Corporation	
Test Model	WLD92	
Status of EUT	Engineering sample	
Power Supply Rating	12Vdc from power adapter	
Modulation Type	LTE Band 5	QPSK, 16QAM, 64QAM
Operating Frequency	LTE Band 5	824.7 MHz ~ 848.3 MHz
Max. ERP Power	LTE Band 5 (Channel Bandwidth 1.4MHz)	22.62 dBm
	LTE Band 5 (Channel Bandwidth 3MHz)	22.56 dBm
	LTE Band 5 (Channel Bandwidth 5MHz)	22.53 dBm
	LTE Band 5 (Channel Bandwidth 10MHz)	22.54 dBm
Antenna Type	Refer to Note	
Antenna Connector	Refer to Note	
Accessory Device	Power adapter x 1	
Cable Supplied	RJ45 cable x 1 (Unshielded, 1.8 m)	

Note:

1. Effective Radiated Power and Radiated Spurious Emission tests were performed. Other testing please refer to original test report, FCC ID: XMR201807EG06A (Brand: Quectel, Model: EG-06A)
2. The WWAN module supports more bands than have been reported for this application as following, these bands have been permanently disabled by software.

   Disabled bands: WCDMA B2/ B4/ B5, LTE B7/ B13/ B25/ B26/ B30.
3. Simultaneously transmission condition.

Condition	Technology		
1	WLAN (2.4GHz)	WLAN (5GHz)	WWAN
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.			

4. The EUT must be supplied with a power adapter as following table:

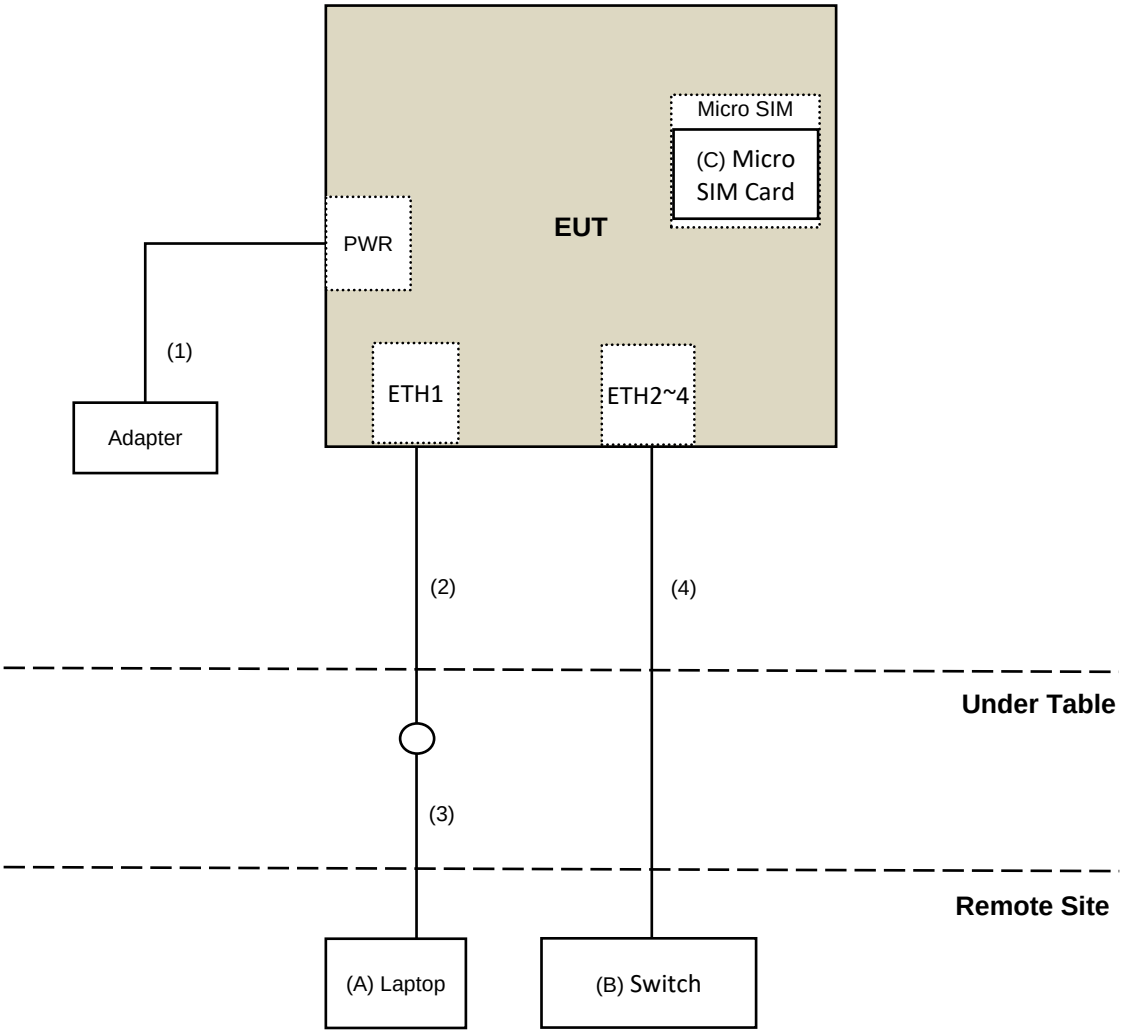
Brand	Model No.	Spec.
SHENZHEN FRECOM	F12L30-120100SPAU	Input: 100-240 Vac, 0.3 A, 50/60 Hz Output: 12 Vdc, 1.0 A DC output cable (unshielded, 1.5 m)

5. The antennas provided to the EUT, please refer to the following table:

Antenna No.	RF Chain No.	Antenna Net Gain (dBi)	Frequency Range	Antenna Type	Connector Type
1 (LTE)	Chain0	2.3	1850~1910 MHz	PIFA	None
		1.9	1710~1755 MHz		
		1.8	824~849 MHz		
		0.4	698~716 MHz		
		1.9	1710~1780 MHz		
2 (LTE)	Chain1 (RX only)	-	-	PIFA	None
3 (WLAN)	Chain0	2.1	2.4~2.4835 GHz	PIFA	None
		3.7	5.15~5.85 GHz		
4 (WLAN)	Chain1	2.9	2.4~2.4835 GHz	PIFA	None
		4.7	5.15~5.85 GHz		

6. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.
7. The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

3.2 Configuration of System under Test



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.	Laptop	DELL	Inspiron 7570	DW3CSJ2	NA	Provided by Lab
B.	Switch	D-Link	DGS-1005D	DR8WC92000523	NA	Provided by Lab
C.	SIM Card	R&S	CRT-Z3	NA	NA	Provided by Lab

Note:

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	DC Cable	1	1.5	No	0	Supplied by client
2.	RJ-45 Cable	1	1.8	No	0	Supplied by client
3.	RJ-45 Cable	1	10	No	0	Provided by Lab
4.	RJ-45 Cable	3	10	No	0	Provided by Lab

3.3 Test Mode Applicability and Tested Channel Detail

LTE Band 5

TEST ITEM	AVAILABLE CHANNEL	TESTED CHANNEL	CHANNEL BANDWIDTH	MODULATION	MODE
ERP	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20415 to 20635	20415, 20525, 20635	3MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20425 to 20625	20425, 20525, 20625	5MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK/16QAM/64QAM	1RB / 0 RB offset
Radiated Emission	20407 to 20643	20407, 20525, 20643	1.4MHz	QPSK	1RB / 0 RB offset
	20415 to 20635	20415, 20525, 20635	3MHz	QPSK	1RB / 0 RB offset
	20425 to 20625	20425, 20525, 20625	5MHz	QPSK	1RB / 0 RB offset
	20450 to 20600	20450, 20525, 20600	10MHz	QPSK	1RB / 0 RB offset

Note:

1. All supported modulation types were evaluated. The Worst case of QPSK was selected. Therefore, the Radiated Emission was presented under QPSK mode only.
2. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on Y-plane.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
ERP	25deg. C, 60%RH	120Vac, 60Hz	Jyunchun Lin
Radiated Emission Below 1GHz	25deg. C, 75%RH	120Vac, 60Hz	Ryan Du
Radiated Emission Above 1GHz	25deg. C, 75%RH	120Vac, 60Hz	Ryan Du

3.4 EUT Operating Conditions

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 22, Subpart H

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

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

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

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

Mobile / Portable station are limited to 7 watts e.r.p.

4.1.2 Test Procedures

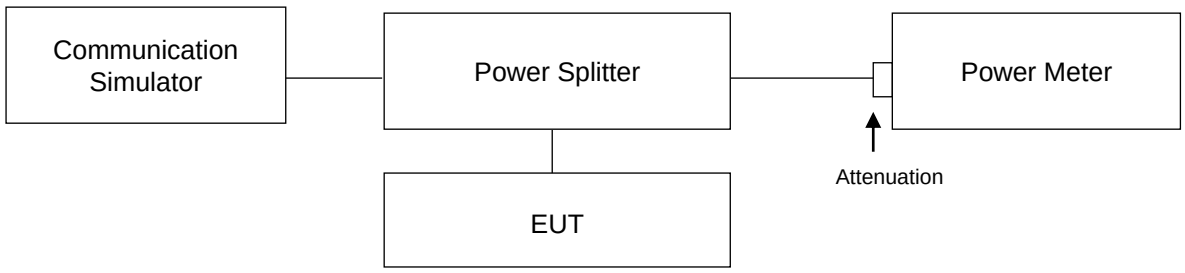
Conducted Power Measurement:

The EUT was set up for the maximum power with LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and difference RB size/ RB offset for difference bandwidth record the power level shown on power meter.

EIRP / ERP Measurement:

a. EIRP = Conducted Output power level + Antenna gain.
b. ERP power can be calculated form EIRP power by subtracting the gain of dipole, ERP power = EIRP power - 2.15dBi.
c. ERP = Conducted Output power level + Antenna gain (dBi) - Isotropically Factor (2.15dB).

4.1.3 Test Setup



4.1.4 Test Results

CONDUCTED OUTPUT POWER (dBm)

LTE Band 5

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20407	20525	20643		20407	20525	20643		20407	20525	20643	
			824.7	836.5	848.3		824.7	836.5	848.3		824.7	836.5	848.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
5 / 1.4M	1	0	22.81	22.68	22.82	0	22.16	21.86	22.10	1	22.05	21.90	20.81	2
	1	2	22.84	22.70	22.91	0	22.11	22.01	22.05	1	22.10	22.02	22.11	2
	1	5	22.75	22.68	22.89	0	22.00	21.93	22.16	1	21.93	21.88	20.00	2
	3	0	22.79	22.71	22.93	0	21.95	21.86	22.02	1	22.01	22.02	21.86	2
	3	1	22.81	22.77	22.95	0	21.93	21.81	22.10	1	22.00	21.85	22.12	2
	3	3	22.80	22.70	22.97	0	21.89	21.84	22.08	1	21.92	21.87	22.10	2
	6	0	21.85	21.81	21.97	1	20.96	20.91	21.05	2	20.94	20.85	21.02	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20415	20525	20635		20415	20525	20635		20415	20525	20635	
			825.5	836.5	847.5		825.5	836.5	847.5		825.5	836.5	847.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
5 / 3M	1	0	22.85	22.65	22.85	0	22.05	21.88	22.25	1	22.08	21.85	22.05	2
	1	7	22.79	22.71	22.91	0	22.02	22.02	22.12	1	22.01	21.99	22.16	2
	1	14	21.80	21.70	21.85	0	20.96	20.92	21.14	1	21.00	20.88	21.02	2
	8	0	21.94	21.83	22.07	1	20.99	20.90	21.10	2	20.98	20.95	21.15	3
	8	3	21.96	21.85	22.09	1	20.97	20.92	21.23	2	21.08	20.97	21.24	3
	8	7	21.97	21.84	22.03	1	21.00	20.89	21.10	2	21.01	20.92	21.12	3
	15	0	21.90	21.86	22.02	1	20.93	20.84	21.02	2	21.05	20.94	21.11	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20425	20525	20625		20425	20525	20625		20425	20525	20625	
			826.5	836.5	846.5		826.5	836.5	846.5		826.5	836.5	846.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
5 / 5M	1	0	22.77	22.80	22.83	0	22.09	22.04	22.11	1	22.00	22.01	22.03	2
	1	12	22.82	22.75	22.88	0	22.02	22.02	22.15	1	21.99	21.95	22.11	2
	1	24	22.71	22.74	22.83	0	22.00	22.06	22.12	1	21.90	21.83	22.04	2
	12	0	21.89	21.83	22.01	1	20.92	20.85	21.05	2	21.02	20.86	21.05	3
	12	6	22.00	21.86	22.06	1	21.08	20.95	21.08	2	21.06	20.89	21.08	3
	12	13	21.83	21.84	22.02	1	20.89	20.88	21.05	2	20.92	20.95	21.04	3
	1	0	21.91	21.80	22.03	0	20.92	20.82	21.02	1	20.95	20.96	21.05	3

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20450	20525	20600		20450	20525	20600		20450	20525	20600	
			829	836.5	844		829	836.5	844		829	836.5	844	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
5 / 10M	1	0	22.79	22.73	22.68	0	22.04	22.02	22.12	1	22.00	22.01	21.92	2
	1	24	22.75	22.77	22.83	0	21.99	21.88	22.15	1	21.98	21.92	22.04	2
	1	49	22.63	22.63	22.89	0	21.06	21.89	22.12	1	21.88	21.82	21.93	2
	25	0	22.02	21.94	22.00	1	20.95	20.85	20.94	2	21.06	21.01	21.08	3
	25	12	21.94	21.91	22.03	1	20.92	20.86	20.99	2	21.02	20.96	21.05	3
	25	25	21.83	21.88	22.06	1	20.75	20.87	21.04	2	20.92	21.01	21.06	3
	50	0	21.90	22.00	22.01	1	20.90	20.90	20.96	2	20.99	21.03	21.03	3

ERP POWER

LTE Band 5

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20407	20525	20643		20407	20525	20643		20407	20525	20643	
			824.7	836.5	848.3		824.7	836.5	848.3		824.7	836.5	848.3	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
5 / 1.4M	1	2	22.84	22.77	22.97	0	22.16	22.01	22.16	1	22.10	22.02	22.12	2
Gain (dBi)			1.8	1.8	1.8		1.8	1.8	1.8		1.8	1.8	1.8	
Isotropically Factor (dB)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max. ERP Power (dBm)			22.49	22.42	22.62		21.81	21.66	21.81		21.75	21.67	21.77	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20415	20525	20635		20415	20525	20635		20415	20525	20635	
			825.5	836.5	847.5		825.5	836.5	847.5		825.5	836.5	847.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
5 / 3M	1	7	22.85	22.71	22.91	0	22.05	22.02	22.25	1	22.08	21.99	22.16	2
Gain (dBi)			1.8	1.8	1.8		1.8	1.8	1.8		1.8	1.8	1.8	
Isotropically Factor (dB)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max. ERP Power (dBm)			22.50	22.36	22.56		21.70	21.67	21.90		21.73	21.64	21.81	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20425	20525	20625		20425	20525	20625		20425	20525	20625	
			826.5	836.5	846.5		826.5	836.5	846.5		826.5	836.5	846.5	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
5 / 5M	1	12	22.82	22.80	22.88	0	22.09	22.06	22.15	1	22.00	22.01	22.11	2
Gain (dBi)			1.8	1.8	1.8		1.8	1.8	1.8		1.8	1.8	1.8	
Isotropically Factor (dB)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max. ERP Power (dBm)			22.47	22.45	22.53		21.74	21.71	21.80		21.65	21.66	21.76	

Band / BW	RB Size	RB Offset	QPSK			3GPP MPR (dB)	16QAM			3GPP MPR (dB)	64QAM			3GPP MPR (dB)
			Low CH	Mid CH	High CH		Low CH	Mid CH	High CH		Low CH	Mid CH	High CH	
			20450	20525	20600		20450	20525	20600		20450	20525	20600	
			829	836.5	844		829	836.5	844		829	836.5	844	
			MHz	MHz	MHz		MHz	MHz	MHz		MHz	MHz	MHz	
5 / 10M	1	49	22.79	22.77	22.89	0	22.04	22.02	22.15	1	22.00	22.01	22.04	2
Gain (dBi)			1.8	1.8	1.8		1.8	1.8	1.8		1.8	1.8	1.8	
Isotropically Factor (dB)			2.15	2.15	2.15		2.15	2.15	2.15		2.15	2.15	2.15	
Max. ERP Power (dBm)			22.44	22.42	22.54		21.69	21.67	21.80		21.65	21.66	21.69	

4.2 Radiated Emission Measurement

4.2.1 Limits of Radiated Emission Measurement

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB. The emission limit equal to –13dBm.

4.2.2 Test Procedure

a. The field strength was measured with Spectrum Analyzer.

b. Measurement in the semi-anechoic chamber, EUT placed on the 0.8m/1.5m 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 field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor.

c. Perform a field strength measurement and then mathematically convert the measured field strength level to EIRP level.

d. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = Read Value (dBμV/m) - Correction Factor @ 3m

e. Correction Factor (dB) @ 3m = 20log(D) − 104.8; where D is the measurement distance @3m =-95.26dB

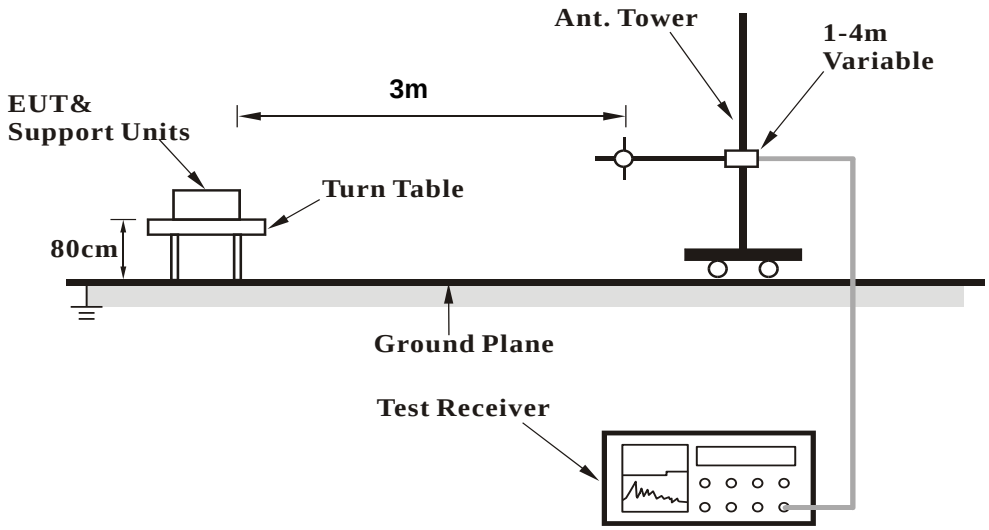
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.

4.2.3 Deviation from Test Standard

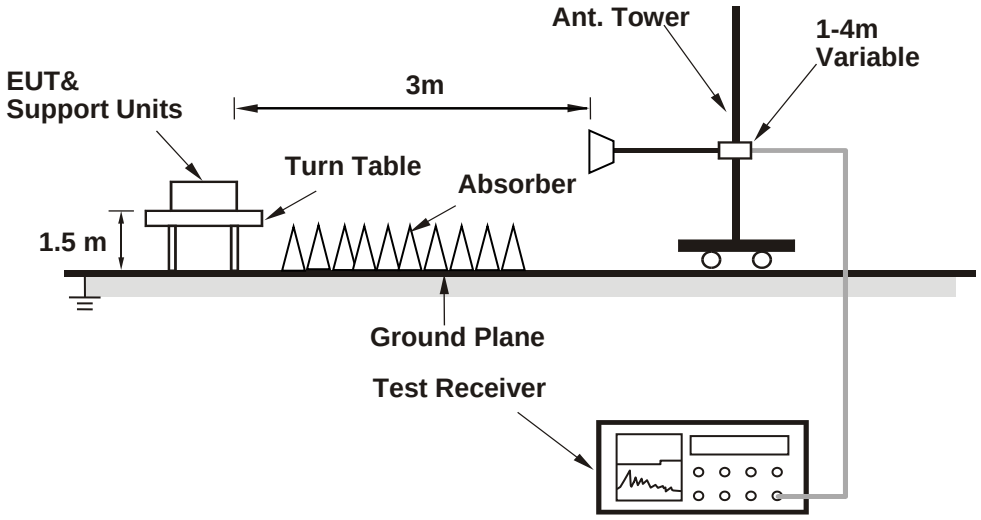
No deviation.

4.2.4 Test Setup

For Below 1GHz



For Above 1GHz:



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

4.2.5 Test Results

Below 1GHz

LTE Band 5: 1.4MHz

Mode	TX channel 20407	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.59	29.01	-95.26	-66.25	-13	-53.25
2	109.01	22.46	-95.26	-72.80	-13	-59.80
3	148.93	23.35	-95.26	-71.91	-13	-58.91
4	197.33	26.49	-95.26	-68.77	-13	-55.77
5	310.57	23.6	-95.26	-71.66	-13	-58.66
6	485.6	27.88	-95.26	-67.38	-13	-54.38
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.41	32.07	-95.26	-63.19	-13	-50.19
2	48.41	29.37	-95.26	-65.89	-13	-52.89
3	105.68	24.95	-95.26	-70.31	-13	-57.31
4	159.64	25.44	-95.26	-69.82	-13	-56.82
5	197.4	22.29	-95.26	-72.97	-13	-59.97
6	379.51	25.64	-95.26	-69.62	-13	-56.62

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20525	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.76	29	-95.26	-66.26	-13	-53.26
2	109.16	23.88	-95.26	-71.38	-13	-58.38
3	148.85	23.94	-95.26	-71.32	-13	-58.32
4	197.06	26.92	-95.26	-68.34	-13	-55.34
5	310.41	23.51	-95.26	-71.75	-13	-58.75
6	485.71	27.25	-95.26	-68.01	-13	-55.01
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.5	32.71	-95.26	-62.55	-13	-49.55
2	48.29	30.05	-95.26	-65.21	-13	-52.21
3	105.22	24.4	-95.26	-70.86	-13	-57.86
4	159.82	25.48	-95.26	-69.78	-13	-56.78
5	197.83	22.53	-95.26	-72.73	-13	-59.73
6	379.6	25.78	-95.26	-69.48	-13	-56.48

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20643	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.81	29.22	-95.26	-66.04	-13	-53.04
2	109.34	23.62	-95.26	-71.64	-13	-58.64
3	148.55	22.87	-95.26	-72.39	-13	-59.39
4	196.97	26.51	-95.26	-68.75	-13	-55.75
5	310.68	23.71	-95.26	-71.55	-13	-58.55
6	485.93	27.89	-95.26	-67.37	-13	-54.37
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.65	31.16	-95.26	-64.10	-13	-51.10
2	48.1	29.54	-95.26	-65.72	-13	-52.72
3	105.54	24.37	-95.26	-70.89	-13	-57.89
4	160.1	25.26	-95.26	-70.00	-13	-57.00
5	197.9	22.58	-95.26	-72.68	-13	-59.68
6	379.97	25.35	-95.26	-69.91	-13	-56.91

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

LTE Band 5: 3MHz

Mode	TX channel 20415	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.7	29.35	-95.26	-65.91	-13	-52.91
2	108.73	22.94	-95.26	-72.32	-13	-59.32
3	149.25	23.07	-95.26	-72.19	-13	-59.19
4	197.78	26.62	-95.26	-68.64	-13	-55.64
5	310.81	23.54	-95.26	-71.72	-13	-58.72
6	486.01	27.92	-95.26	-67.34	-13	-54.34
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.51	31.9	-95.26	-63.36	-13	-50.36
2	48.29	29.6	-95.26	-65.66	-13	-52.66
3	105.74	24.92	-95.26	-70.34	-13	-57.34
4	159.24	25.1	-95.26	-70.16	-13	-57.16
5	197.05	22.78	-95.26	-72.48	-13	-59.48
6	379.13	25.51	-95.26	-69.75	-13	-56.75

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20525	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.76	28.74	-95.26	-66.52	-13	-53.52
2	108.96	23.73	-95.26	-71.53	-13	-58.53
3	148.61	24.18	-95.26	-71.08	-13	-58.08
4	197.43	26.69	-95.26	-68.57	-13	-55.57
5	310.07	23.56	-95.26	-71.70	-13	-58.70
6	485.68	27.02	-95.26	-68.24	-13	-55.24
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.65	32.46	-95.26	-62.80	-13	-49.80
2	47.95	30.45	-95.26	-64.81	-13	-51.81
3	105.58	24.34	-95.26	-70.92	-13	-57.92
4	159.3	25.86	-95.26	-69.40	-13	-56.40
5	197.27	22.5	-95.26	-72.76	-13	-59.76
6	379.92	25.88	-95.26	-69.38	-13	-56.38

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20635	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.84	28.98	-95.26	-66.28	-13	-53.28
2	109.15	23.94	-95.26	-71.32	-13	-58.32
3	148.74	23.29	-95.26	-71.97	-13	-58.97
4	197.37	26.52	-95.26	-68.74	-13	-55.74
5	310.35	23.85	-95.26	-71.41	-13	-58.41
6	486.05	28.08	-95.26	-67.18	-13	-54.18
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.63	31.41	-95.26	-63.85	-13	-50.85
2	48.2	29.38	-95.26	-65.88	-13	-52.88
3	105.55	24.87	-95.26	-70.39	-13	-57.39
4	159.66	25.74	-95.26	-69.52	-13	-56.52
5	197.73	22.64	-95.26	-72.62	-13	-59.62
6	379.6	24.93	-95.26	-70.33	-13	-57.33

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

LTE Band 5: 5MHz

Mode	TX channel 20425	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.68	29.24	-95.26	-66.02	-13	-53.02
2	108.78	22.86	-95.26	-72.40	-13	-59.40
3	148.74	23.49	-95.26	-71.77	-13	-58.77
4	197.74	26.16	-95.26	-69.10	-13	-56.10
5	310.43	23.63	-95.26	-71.63	-13	-58.63
6	485.51	27.7	-95.26	-67.56	-13	-54.56
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.48	32.35	-95.26	-62.91	-13	-49.91
2	48.15	29.72	-95.26	-65.54	-13	-52.54
3	105.3	25.19	-95.26	-70.07	-13	-57.07
4	160.03	25.8	-95.26	-69.46	-13	-56.46
5	196.98	21.85	-95.26	-73.41	-13	-60.41
6	379.1	25.39	-95.26	-69.87	-13	-56.87

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBµV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20525	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.77	29.18	-95.26	-66.08	-13	-53.08
2	109.24	24.01	-95.26	-71.25	-13	-58.25
3	148.47	23.52	-95.26	-71.74	-13	-58.74
4	197.5	27.01	-95.26	-68.25	-13	-55.25
5	310.42	23.4	-95.26	-71.86	-13	-58.86
6	485.22	27.23	-95.26	-68.03	-13	-55.03
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.5	32.65	-95.26	-62.61	-13	-49.61
2	48.14	30.06	-95.26	-65.20	-13	-52.20
3	105.89	24.87	-95.26	-70.39	-13	-57.39
4	159.38	25.28	-95.26	-69.98	-13	-56.98
5	197.33	22.75	-95.26	-72.51	-13	-59.51
6	379.82	25.99	-95.26	-69.27	-13	-56.27

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20625	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.82	29.21	-95.26	-66.05	-13	-53.05
2	109.12	23.13	-95.26	-72.13	-13	-59.13
3	148.67	23.11	-95.26	-72.15	-13	-59.15
4	197	26.95	-95.26	-68.31	-13	-55.31
5	310.43	23.61	-95.26	-71.65	-13	-58.65
6	486.01	27.45	-95.26	-67.81	-13	-54.81
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.64	30.77	-95.26	-64.49	-13	-51.49
2	48.02	29.87	-95.26	-65.39	-13	-52.39
3	106.1	24.71	-95.26	-70.55	-13	-57.55
4	159.2	25.18	-95.26	-70.08	-13	-57.08
5	197.64	22.82	-95.26	-72.44	-13	-59.44
6	379.46	24.87	-95.26	-70.39	-13	-57.39

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

LTE Band 5: 10MHz

Mode	TX channel 20450	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.7	29.16	-95.26	-66.10	-13	-53.10
2	108.96	22.73	-95.26	-72.53	-13	-59.53
3	148.89	23.84	-95.26	-71.42	-13	-58.42
4	197.51	26.79	-95.26	-68.47	-13	-55.47
5	311.02	23.13	-95.26	-72.13	-13	-59.13
6	485.95	27.46	-95.26	-67.80	-13	-54.80
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.45	32.3	-95.26	-62.96	-13	-49.96
2	48.23	29.66	-95.26	-65.60	-13	-52.60
3	105.67	24.88	-95.26	-70.38	-13	-57.38
4	159.19	25.73	-95.26	-69.53	-13	-56.53
5	197.89	22.02	-95.26	-73.24	-13	-60.24
6	379.45	25.83	-95.26	-69.43	-13	-56.43

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20525	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.73	29.42	-95.26	-65.84	-13	-52.84
2	108.86	23.96	-95.26	-71.30	-13	-58.30
3	148.88	24.35	-95.26	-70.91	-13	-57.91
4	197.5	27.38	-95.26	-67.88	-13	-54.88
5	310.82	23.54	-95.26	-71.72	-13	-58.72
6	485.28	26.98	-95.26	-68.28	-13	-55.28
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.61	33.18	-95.26	-62.08	-13	-49.08
2	48.02	30.14	-95.26	-65.12	-13	-52.12
3	105.9	24.77	-95.26	-70.49	-13	-57.49
4	159.29	25.65	-95.26	-69.61	-13	-56.61
5	197.67	22.5	-95.26	-72.76	-13	-59.76
6	379.93	25.52	-95.26	-69.74	-13	-56.74

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20600	Frequency Range	Below 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.82	29.64	-95.26	-65.62	-13	-52.62
2	109.24	23.67	-95.26	-71.59	-13	-58.59
3	148.85	23.08	-95.26	-72.18	-13	-59.18
4	197.71	26.84	-95.26	-68.42	-13	-55.42
5	310.4	23.61	-95.26	-71.65	-13	-58.65
6	485.25	28.28	-95.26	-66.98	-13	-53.98
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	30.59	30.7	-95.26	-64.56	-13	-51.56
2	48.18	29.36	-95.26	-65.90	-13	-52.90
3	105.5	24.25	-95.26	-71.01	-13	-58.01
4	159.81	24.83	-95.26	-70.43	-13	-57.43
5	197.05	22.4	-95.26	-72.86	-13	-59.86
6	379.17	24.99	-95.26	-70.27	-13	-57.27

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Above 1GHz

LTE Band 5: 1.4MHz

Mode	TX channel 20407	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1649.4	31.38	-95.26	-63.88	-13	-50.88
2	2061.75	31.81	-95.26	-63.45	-13	-50.45
3	2474.1	32.46	-95.26	-62.80	-13	-49.80
4	2886.45	32.84	-95.26	-62.42	-13	-49.42
5	3298.8	32.28	-95.26	-62.98	-13	-49.98
6	3711.15	33.36	-95.26	-61.90	-13	-48.90
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1649.4	31.45	-95.26	-63.81	-13	-50.81
2	2061.75	32.4	-95.26	-62.86	-13	-49.86
3	2474.1	32.52	-95.26	-62.74	-13	-49.74
4	2886.45	32.17	-95.26	-63.09	-13	-50.09
5	3298.8	32.53	-95.26	-62.73	-13	-49.73
6	3711.15	32.68	-95.26	-62.58	-13	-49.58

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20525	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1673	31.81	-95.26	-63.45	-13	-50.45
2	2091.25	32.56	-95.26	-62.70	-13	-49.70
3	2509.5	32.21	-95.26	-63.05	-13	-50.05
4	2927.75	32.38	-95.26	-62.88	-13	-49.88
5	3346	32.81	-95.26	-62.45	-13	-49.45
6	3764.25	33.38	-95.26	-61.88	-13	-48.88
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1673	31.35	-95.26	-63.91	-13	-50.91
2	2091.25	31.81	-95.26	-63.45	-13	-50.45
3	2509.5	32.47	-95.26	-62.79	-13	-49.79
4	2927.75	32.57	-95.26	-62.69	-13	-49.69
5	3346	32.38	-95.26	-62.88	-13	-49.88
6	3764.25	33.47	-95.26	-61.79	-13	-48.79

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20643	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1696.6	31.84	-95.26	-63.42	-13	-50.42
2	2120.75	32.31	-95.26	-62.95	-13	-49.95
3	2544.9	31.98	-95.26	-63.28	-13	-50.28
4	2969.05	32.27	-95.26	-62.99	-13	-49.99
5	3393.2	32.6	-95.26	-62.66	-13	-49.66
6	3817.35	32.99	-95.26	-62.27	-13	-49.27
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1696.6	31.36	-95.26	-63.90	-13	-50.90
2	2120.75	32.23	-95.26	-63.03	-13	-50.03
3	2544.9	32.71	-95.26	-62.55	-13	-49.55
4	2969.05	32.32	-95.26	-62.94	-13	-49.94
5	3393.2	32.88	-95.26	-62.38	-13	-49.38
6	3817.35	33.3	-95.26	-61.96	-13	-48.96

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

LTE Band 5: 3MHz

Mode	TX channel 20415	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1651	31.51	-95.26	-63.75	-13	-50.75
2	2063.75	31.4	-95.26	-63.86	-13	-50.86
3	2476.5	32.23	-95.26	-63.03	-13	-50.03
4	2889.25	33.31	-95.26	-61.95	-13	-48.95
5	3302	32.53	-95.26	-62.73	-13	-49.73
6	3714.75	32.96	-95.26	-62.30	-13	-49.30
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1651	31.58	-95.26	-63.68	-13	-50.68
2	2063.75	32.44	-95.26	-62.82	-13	-49.82
3	2476.5	32.58	-95.26	-62.68	-13	-49.68
4	2889.25	32.29	-95.26	-62.97	-13	-49.97
5	3302	32.62	-95.26	-62.64	-13	-49.64
6	3714.75	32.68	-95.26	-62.58	-13	-49.58

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20525	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1673	31.93	-95.26	-63.33	-13	-50.33
2	2091.25	32.75	-95.26	-62.51	-13	-49.51
3	2509.5	32.22	-95.26	-63.04	-13	-50.04
4	2927.75	32.45	-95.26	-62.81	-13	-49.81
5	3346	33.01	-95.26	-62.25	-13	-49.25
6	3764.25	33.51	-95.26	-61.75	-13	-48.75
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1673	31.38	-95.26	-63.88	-13	-50.88
2	2091.25	31.87	-95.26	-63.39	-13	-50.39
3	2509.5	32.55	-95.26	-62.71	-13	-49.71
4	2927.75	32.8	-95.26	-62.46	-13	-49.46
5	3346	32.53	-95.26	-62.73	-13	-49.73
6	3764.25	33.57	-95.26	-61.69	-13	-48.69

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20635	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1695	32.01	-95.26	-63.25	-13	-50.25
2	2118.75	32.36	-95.26	-62.90	-13	-49.90
3	2542.5	32.19	-95.26	-63.07	-13	-50.07
4	2966.25	32.5	-95.26	-62.76	-13	-49.76
5	3390	32.77	-95.26	-62.49	-13	-49.49
6	3813.75	33.03	-95.26	-62.23	-13	-49.23
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1695	31.54	-95.26	-63.72	-13	-50.72
2	2118.75	32.39	-95.26	-62.87	-13	-49.87
3	2542.5	32.75	-95.26	-62.51	-13	-49.51
4	2966.25	32.4	-95.26	-62.86	-13	-49.86
5	3390	33.03	-95.26	-62.23	-13	-49.23
6	3813.75	33.5	-95.26	-61.76	-13	-48.76

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

LTE Band 5: 5MHz

Mode	TX channel 20425	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1653	31.61	-95.26	-63.65	-13	-50.65
2	2066.25	31.9	-95.26	-63.36	-13	-50.36
3	2479.5	32.11	-95.26	-63.15	-13	-50.15
4	2892.75	33.17	-95.26	-62.09	-13	-49.09
5	3306	31.89	-95.26	-63.37	-13	-50.37
6	**3719.25**	**33.83**	**-95.26**	**-61.43**	**-13**	**-48.43**
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1653	31.68	-95.26	-63.58	-13	-50.58
2	2066.25	32.55	-95.26	-62.71	-13	-49.71
3	2479.5	32.65	-95.26	-62.61	-13	-49.61
4	2892.75	32.18	-95.26	-63.08	-13	-50.08
5	3306	32.65	-95.26	-62.61	-13	-49.61
6	3719.25	32.91	-95.26	-62.35	-13	-49.35

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20525	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1673	31.86	-95.26	-63.40	-13	-50.40
2	2091.25	32.75	-95.26	-62.51	-13	-49.51
3	2509.5	32.33	-95.26	-62.93	-13	-49.93
4	2927.75	32.52	-95.26	-62.74	-13	-49.74
5	3346	32.98	-95.26	-62.28	-13	-49.28
6	3764.25	33.55	-95.26	-61.71	-13	-48.71
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1673	31.53	-95.26	-63.73	-13	-50.73
2	2091.25	32.05	-95.26	-63.21	-13	-50.21
3	2509.5	32.55	-95.26	-62.71	-13	-49.71
4	2927.75	32.77	-95.26	-62.49	-13	-49.49
5	3346	32.53	-95.26	-62.73	-13	-49.73
6	3764.25	33.62	-95.26	-61.64	-13	-48.64

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20625	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1693	32.03	-95.26	-63.23	-13	-50.23
2	2116.25	32.5	-95.26	-62.76	-13	-49.76
3	2539.5	31.99	-95.26	-63.27	-13	-50.27
4	2962.75	32.38	-95.26	-62.88	-13	-49.88
5	3386	32.83	-95.26	-62.43	-13	-49.43
6	3809.25	33.21	-95.26	-62.05	-13	-49.05
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1693	31.6	-95.26	-63.66	-13	-50.66
2	2116.25	32.24	-95.26	-63.02	-13	-50.02
3	2539.5	32.77	-95.26	-62.49	-13	-49.49
4	2962.75	32.41	-95.26	-62.85	-13	-49.85
5	3386	33.02	-95.26	-62.24	-13	-49.24
6	3809.25	33.48	-95.26	-61.78	-13	-48.78

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

LTE Band 5: 10MHz

Mode	TX channel 20450	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1658	31.43	-95.26	-63.83	-13	-50.83
2	2072.5	31.85	-95.26	-63.41	-13	-50.41
3	2487	32.61	-95.26	-62.65	-13	-49.65
4	2901.5	33.31	-95.26	-61.95	-13	-48.95
5	3316	32.73	-95.26	-62.53	-13	-49.53
6	3730.5	33.69	-95.26	-61.57	-13	-48.57
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1658	31.64	-95.26	-63.62	-13	-50.62
2	2072.5	32.53	-95.26	-62.73	-13	-49.73
3	2487	32.69	-95.26	-62.57	-13	-49.57
4	2901.5	32.34	-95.26	-62.92	-13	-49.92
5	3316	32.69	-95.26	-62.57	-13	-49.57
6	3730.5	32.79	-95.26	-62.47	-13	-49.47

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20525	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1673	31.97	-95.26	-63.29	-13	-50.29
2	2091.25	32.8	-95.26	-62.46	-13	-49.46
3	2509.5	32.4	-95.26	-62.86	-13	-49.86
4	2927.75	32.46	-95.26	-62.80	-13	-49.80
5	3346	32.82	-95.26	-62.44	-13	-49.44
6	3764.25	33.58	-95.26	-61.68	-13	-48.68
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dB μ V/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1673	31.38	-95.26	-63.88	-13	-50.88
2	2091.25	31.84	-95.26	-63.42	-13	-50.42
3	2509.5	32.57	-95.26	-62.69	-13	-49.69
4	2927.75	32.62	-95.26	-62.64	-13	-49.64
5	3346	32.53	-95.26	-62.73	-13	-49.73
6	3764.25	33.68	-95.26	-61.58	-13	-48.58

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

Mode	TX channel 20600	Frequency Range	Above 1000 MHz

Antenna Polarity & Test Distance: Horizontal at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1688	31.85	-95.26	-63.41	-13	-50.41
2	2110	32.55	-95.26	-62.71	-13	-49.71
3	2532	32.2	-95.26	-63.06	-13	-50.06
4	2954	32.32	-95.26	-62.94	-13	-49.94
5	3376	32.71	-95.26	-62.55	-13	-49.55
6	3798	33.2	-95.26	-62.06	-13	-49.06
Antenna Polarity & Test Distance: Vertical at 3 M						
No.	Freq. (MHz)	Reading (dBμV/m)	Correction Factor (dB)	Emission Value (dBm)	Limit (dBm)	Margin (dB)
1	1688	31.43	-95.26	-63.83	-13	-50.83
2	2110	32.47	-95.26	-62.79	-13	-49.79
3	2532	32.79	-95.26	-62.47	-13	-49.47
4	2954	32.33	-95.26	-62.93	-13	-49.93
5	3376	32.94	-95.26	-62.32	-13	-49.32
6	3798	33.31	-95.26	-61.95	-13	-48.95

Remarks:

1. Follow ANSI 63.26 section 5.2.7 d), Emission Value (dBm) = E (dBμV/m) - Correction Factor @3m.
2. Correction Factor (dB) = 20log(D) − 104.8; where D is the measurement distance @3m.

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 accredited and approved 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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