

Partial FCC Test Report

(PART 22)

Report No.: RFBHDI-WTW-P21060617

FCC ID: 2ATM8EG25G

Test Model: EG25G MINPCIE

Received Date: Jun. 21, 2021

Test Date: Jun. 28 ~ Jul. 22, 2021

Issued Date: Jul. 30, 2021

Applicant: Hawkeye Tech Co., Ltd.

Address: 13F. No.736, Zhongzheng Rd., Zhonghe Dist., New Taipei City 235, Taiwan

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

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

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

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



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specifically mentioned, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification.

Table of Contents

Release Control Record	3
1 Certificate of Conformity	4
2 Summary of Test Results	5
2.1 Measurement Uncertainty	5
2.2 Test Site and Instruments	6
3 General Information	7
3.1 General Description of EUT	7
3.2 Configuration of System under Test	9
3.2.1 Description of Support Units	9
3.3 Test Mode Applicability and Tested Channel Detail	10
3.4 EUT Operating Conditions	11
3.5 General Description of Applied Standards and references	11
4 Test Types and Results	12
4.1 Output Power Measurement	12
4.1.1 Limits of Output Power Measurement	12
4.1.2 Test Procedures	12
4.1.3 Test Setup	13
4.1.4 Test Results	14
4.2 Radiated Emission Measurement	26
4.2.1 Limits of Radiated Emission Measurement	26
4.2.2 Test Procedure	26
4.2.3 Deviation from Test Standard	26
4.2.4 Test Setup	27
4.2.5 Test Results	28
5 Pictures of Test Arrangements	60
Appendix – Information of the Testing Laboratories	61



Release Control Record

Issue No.	Description	Date Issued
RFBHDI-WTW-P21060617	Original Release	Jul. 30, 2021


1 Certificate of Conformity

Product: LTE Module
Brand: Quectel
Test Model: EG25G MINPCIE
Sample Status: Engineering Sample
Applicant: Hawkeye Tech Co., Ltd.
Test Date: Jun. 28 ~ Jul. 22, 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 RF characteristics under the conditions specified in this report.

Prepared by :  , Date: Jul. 30, 2021

Lena Wang / Specialist

Approved by :  , Date: Jul. 30, 2021

Dylan Chiou / Project Engineer

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.
2.1047	Modulation Characteristics	N/A	Refer to Note
2.1046 22.913 (d)	Peak to Average Ratio	N/A	Refer to Note
2.1055 22.355	Frequency Stability	N/A	Refer to Note
2.1049	Occupied Bandwidth	N/A	Refer to Note
22.917	Band Edge Measurements	N/A	Refer to Note
2.1051 22.917	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 22.917	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -29.1 dB at 1672.80 MHz.

Note:

1. This report is a partial report. Therefore, only test item of Effective Radiated Power and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer to SGS report no.: HR/2019/1001601 for module (Brand: Quectel, Model: EG25G MINPCIE)
2. 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) (\pm)
Radiated Emissions up to 1 GHz	9 kHz ~ 30 MHz	3.0400 dB
	30 MHz ~ 200 MHz	2.0153 dB
	200 MHz ~ 1000 MHz	2.0224 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	1.0121 dB
	18 GHz ~ 40 GHz	1.1508 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver KEYSIGHT	N9038A	MY55420137	Apr. 09, 2021	Apr. 08, 2022
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Jun. 10, 2021	Jun. 09, 2022
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Nov. 06, 2020	Nov. 05, 2021
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1169	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 22, 2020	Nov. 21, 2021
Preamplifier Agilent (Below 1GHz)	8447D	2944A10638	Jun. 05, 2021	Jun. 04, 2022
Preamplifier Agilent (Above 1GHz)	8449B	3008A02367	Feb. 17, 2021	Feb. 16, 2022
RF signal cable HUBER+SUHNER&EMCI	SUCOFLEX 104 & EMC104-SM- SM8000	CABLE-CH9-02 (248780+171006)	Jan. 16, 2021	Jan. 15, 2022
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9- (250795/4)	Jan. 16, 2021	Jan. 15, 2022
RF signal cable Woken	8D-FB	Cable-CH9-01	Jun. 05, 2021	Jun. 04, 2022
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower & Turn BV ADT	AT100	AT93021705	NA	NA
Turn Table BV ADT	TT100	TT93021705	NA	NA
Turn Table Controller BV ADT	SC100	SC93021705	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 01, 2021	May 31, 2022
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
True RMS Clamp Meter Fluke	325	31130711WS	Jun. 02, 2021	Jun. 01, 2022
Radio Communication Analyzer Anritsu	MT8820C	6201010284	Dec. 28, 2020	Dec. 27, 2021
Temperature & Humidity Chamber	GTH-120-40-CP-AR	MAA1306-019	Sep. 09, 2020	Sep. 08, 2021
DC Power Supply Topward	33010D	807748	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 HwaYa Chamber 9.

3 General Information


3.1 General Description of EUT

Product	LTE Module		
Brand	Quectel		
Test Model	EG25G MINPCIE		
Status of EUT	Engineering Sample		
Power Supply Rating	48 Vdc (POE)		
Modulation Type	GSM/GPRS	GMSK	
	EDGE	GMSK, 8PSK	
	WCDMA	QPSK	
	LTE	QPSK, 16QAM	
Frequency Range	GSM/GPRS/EDGE	824.2 ~ 848.8 MHz	
	WCDMA	826.4 ~ 846.6 MHz	
	LTE 5 (Channel Bandwidth: 1.4 MHz)	824.7 ~ 848.3 MHz	
	LTE 5 (Channel Bandwidth: 3 MHz)	825.5 ~ 847.5 MHz	
	LTE 5 (Channel Bandwidth: 5 MHz)	826.5 ~ 846.5 MHz	
	LTE 5 (Channel Bandwidth: 10 MHz)	829 ~ 844 MHz	
	LTE 26 (Channel Bandwidth: 1.4 MHz)	824.7 ~ 848.3 MHz	
	LTE 26 (Channel Bandwidth: 3 MHz)	825.5 ~ 847.5 MHz	
	LTE 26 (Channel Bandwidth: 5 MHz)	826.5 ~ 846.5 MHz	
	LTE 26 (Channel Bandwidth: 10 MHz)	829 ~ 844 MHz	
LTE 26 (Channel Bandwidth: 15 MHz)	831.5 ~ 841.5 MHz		
Max. ERP Power	GSM/GPRS	1640.590 mW (32.15dBm)	
	WCDMA	198.153 mW (22.97dBm)	
		QPSK	16QAM
	LTE 5 (Channel Bandwidth: 1.4 MHz)	225.424 mW (23.53dBm)	155.597 mW (21.92dBm)
	LTE 5 (Channel Bandwidth: 3 MHz)	224.388 mW (23.51dBm)	155.239 mW (21.91dBm)
	LTE 5 (Channel Bandwidth: 5 MHz)	222.331 mW (23.47dBm)	149.624 mW (21.75dBm)
	LTE 5 (Channel Bandwidth: 10 MHz)	224.905 mW (23.52dBm)	151.008 mW (21.79dBm)
	LTE 26 (Channel Bandwidth: 1.4 MHz)	216.272 mW (23.35dBm)	149.968 mW (21.76dBm)
	LTE 26 (Channel Bandwidth: 3 MHz)	213.304 mW (23.29dBm)	155.955 mW (21.93dBm)
	LTE 26 (Channel Bandwidth: 5 MHz)	206.538 mW (23.15dBm)	148.936 mW (21.73dBm)
	LTE 26 (Channel Bandwidth: 10 MHz)	207.014 mW (23.16dBm)	152.405 mW (21.83dBm)
	LTE 26 (Channel Bandwidth: 15 MHz)	209.894 mW	147.571 mW

		(23.22dBm)	(21.69dBm)
Antenna Type	Dipole Antenna with 1.6 dBi gain		
Accessory Device	N/A		
Data Cable Supplied	N/A		

Note:

1. The EUT was installed in a specific End-product.

Product	Brand	Model	FCC ID
veeaHub		VHE10XXXXX (X=A-Z, 0-9, blank or "-")	2ARXKVHE10

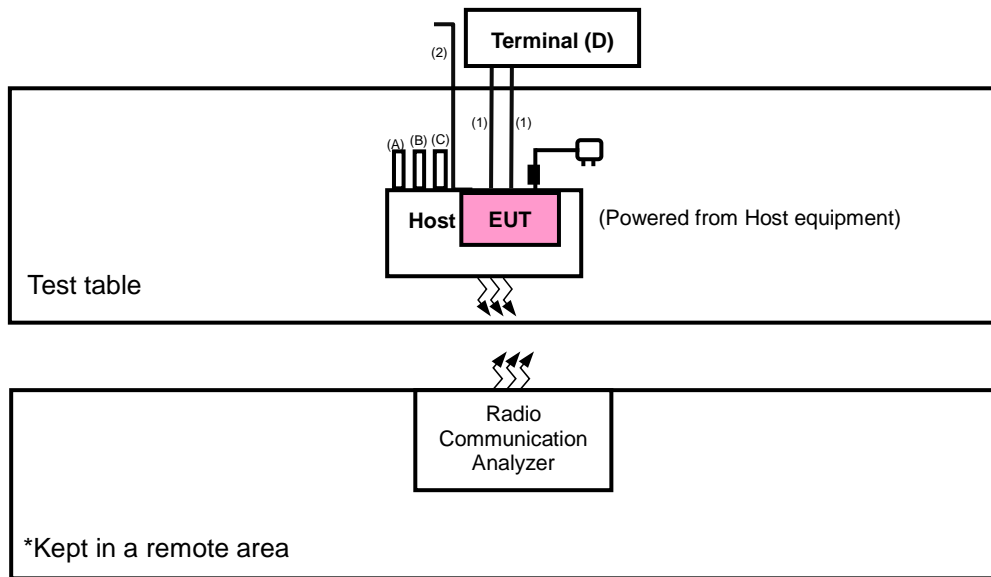
2. The End-product contains following accessory devices.

Product	Brand	Model	Description
Adapter	EDACPOWER ELEC.	EA1062SGR-480	I/P: 100-240 Vac, 50/60 Hz, 2.5A O/P: 48 Vdc, 1.35 A 1.2m DC cable with 1 core

3. 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.
4. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.

3.2 Configuration of System under Test

<Radiated Emission Test> & <E.R.P. 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.

No.	Product	Brand	Model No.	Serial No.	FCC ID
A	FLASH	HP	v250W	09	N/A
B	FLASH	HP	v250W	05	N/A
C	FLASH	HP	v250W	03	N/A
D	Terminal	N/A	N/A	N/A	N/A

No.	Signal Cable Description Of The Above Support Units
1.	LAN Cable: 1.5m
2.	RS232 to A 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, antenna degree 90° and 180°, and antenna ports.

The worst case was found when positioned as the table below. Following channel(s) was (were) selected for the final test as listed below:

Band	Radiated Emission
GSM	X-axis
WCDMA	X-axis
LTE Band 5	X-axis
LTE Band 26	X-axis

GSM

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	ERP	128 to 251	128, 189, 251	GSM, EDGE
-	Radiated Emission	128 to 251	128, 189, 251	GSM, EDGE

WCDMA

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Mode
-	ERP	4132 to 4233	4132, 4182, 4233	WCDMA
-	Radiated Emission	4132 to 4233	4132, 4182, 4233	WCDMA

LTE Band 5

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	ERP	20407 to 20643	20407, 20525, 20643	1.4 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20415 to 20635	20415, 20525, 20635	3 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20425 to 20625	20425, 20525, 20625	5 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		20450 to 20600	20450, 20525, 20600	10 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
-	Radiated Emission	20407 to 20643	20407, 20525, 20643	1.4 MHz	QPSK	1 RB / 0 RB Offset
		20425 to 20625	20425, 20525, 20625	5 MHz	QPSK	1 RB / 0 RB Offset
		20450 to 20600	20450, 20525, 20600	10 MHz	QPSK	1 RB / 0 RB Offset

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation and RB configurations according to Module report worst maximum output power.
2. For radiated emission above 1 GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5 MHz & highest channel bandwidth for final test.
3. For radiated emissions below 1 GHz, select the worst radiated emission channel for final testing.

LTE Band 26

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	ERP	26797 to 27033	26797, 26915, 27033	1.4 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		26805 to 27025	26805, 26915, 27025	3 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		26815 to 27015	26815, 26915, 27015	5 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		26840 to 26990	26840, 26915, 26990	10 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
		26865 to 26965	26865, 26915, 26965	15 MHz	QPSK, 16QAM	1 RB / 0 RB Offset
-	Radiated Emission	26797 to 27033	26797, 26915, 27033	1.4 MHz	QPSK	1 RB / 0 RB Offset
		26815 to 27015	26815, 26915, 27015	5 MHz	QPSK	1 RB / 0 RB Offset
		26865 to 26965	26865, 26915, 26965	15 MHz	QPSK	1 RB / 0 RB Offset

Note:

1. This device was tested under all bandwidths, RB configurations and modulations. The worst case was found in QPSK modulation. Therefore, only ERP items had been tested under QPSK, 16QAM mode, the other items were performed under QPSK mode only.
2. For radiated emission above 1 GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5 MHz & highest channel bandwidth for final test.
3. For radiated emissions below 1 GHz, select the worst radiated emission channel for final testing.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
ERP	25 deg. C, 65 % RH	120 Vac, 60 Hz	Rex Wang
Radiated Emission	25 deg. C, 65 % RH	120 Vac, 60 Hz	Rex Wang

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:

Test Standard:

FCC 47 CFR Part 2

FCC 47 CFR Part 22

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 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

EIRP / ERP Measurement:

- a. All measurements were done at low, middle and high operational frequency range. RBW is 1 MHz for GSM, GPRS & EDGE, and 5 MHz for WCDMA and 1.4 MHz 、 5 MHz 、 10 MHz 、 15 MHz for LTE mode, and VBW $\geq 3 \times$ RBW.
- b. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) 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 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- c. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a tx cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step b. Record the power level of S.G.
- d. $EIRP = \text{Output power level of S.G} - \text{TX cable loss} + \text{Antenna gain of substitution horn}$. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, $E.R.P \text{ power} = E.I.R.P \text{ power} - 2.15 \text{ dB}$.

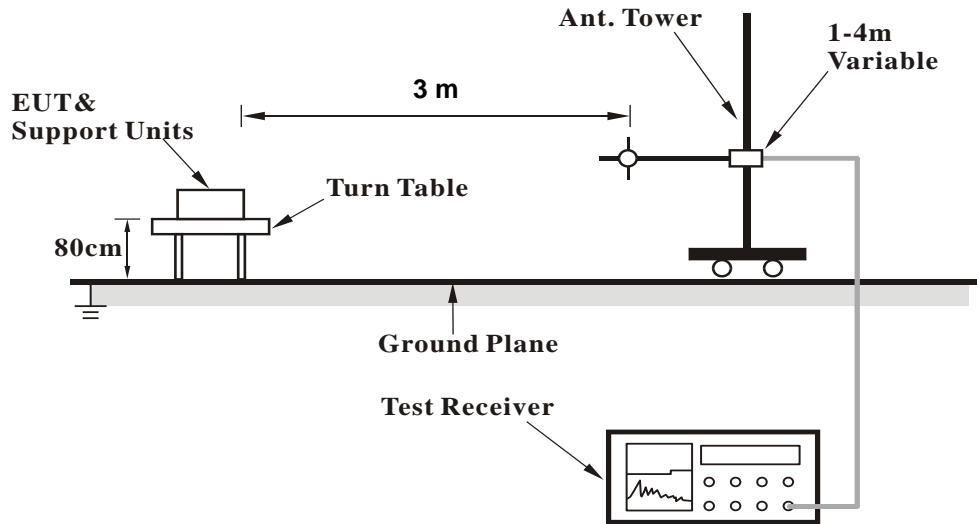
Conducted Power Measurement:

The EUT was set up for the maximum power with GSM, WCDMA and LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and record the power level shown on simulator.

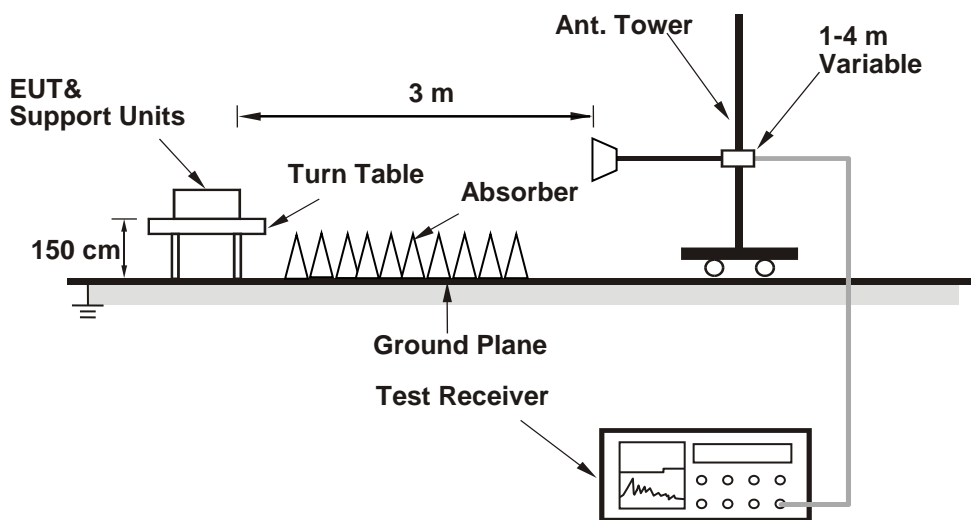
4.1.3 Test Setup

EIRP / ERP Measurement:

<Radiated Emission below or equal 1 GHz>

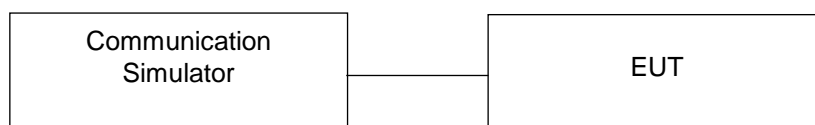


<Radiated Emission above 1 GHz>



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

Conducted Power Measurement:



4.1.4 Test Results

Conducted Output Power (dBm)

Band	GSM850		
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
GPRS (GMSK, 1Tx-slot)	32.70	32.63	32.64
EDGE (8PSK, 1Tx-slot)	31.98	31.90	31.94

Band	WCDMA V		
Channel	4132	4182	4233
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	23.52	23.44	23.47
HSDPA Subtest-1	22.73	22.68	22.61
HSUPA Subtest-1	21.88	21.82	21.79

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20407	20525	20643
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	23.84	23.48	23.40
		1	2	24.08	23.52	23.94
		1	5	23.20	23.82	23.90
		3	0	22.55	22.46	22.87
		3	1	22.42	22.62	22.63
		3	3	22.33	22.53	22.81
		6	0	22.35	22.34	22.58
	16QAM	1	0	22.20	22.35	21.94
		1	2	22.29	22.12	22.47
		1	5	21.97	22.35	22.25
		3	0	21.77	21.52	21.81
		3	1	21.78	21.31	21.67
		3	3	21.64	21.67	21.83
		6	0	21.73	21.23	21.72
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20415	20525	20635
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	23.68	23.27	23.68
		1	7	23.88	23.55	24.06
		1	14	23.43	23.67	23.99
		8	0	22.59	22.35	22.67
		8	3	22.51	22.50	22.78
		8	7	22.54	22.59	22.88
		15	0	22.48	22.47	22.88
	16QAM	1	0	22.29	22.13	22.15
		1	7	22.34	22.19	22.39
		1	14	22.14	22.46	22.15
		8	0	21.48	21.37	21.53
		8	3	21.60	21.47	21.71
		8	7	21.73	21.64	21.57
		15	0	21.42	21.49	21.56

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20425	20525	20625
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	23.65	23.30	23.63
		1	12	23.87	23.55	24.00
		1	24	23.29	23.50	24.02
		12	0	22.82	22.17	22.57
		12	6	22.63	22.36	22.63
		12	13	22.45	22.48	22.87
		25	0	22.58	22.26	22.58
	16QAM	1	0	22.12	22.14	22.22
		1	12	22.17	22.13	22.15
		1	24	21.85	22.10	22.30
		12	0	21.49	21.44	21.77
		12	6	21.76	21.55	21.76
		12	13	21.74	21.45	21.65
		25	0	21.49	21.44	21.66
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20450	20525	20600
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	23.80	23.39	23.56
		1	24	24.05	23.66	24.07
		1	49	23.38	23.67	23.87
		25	0	22.66	22.28	22.70
		25	12	22.58	22.45	22.74
		25	25	22.39	22.47	22.76
		50	0	22.48	22.38	22.68
	16QAM	1	0	22.17	22.22	22.03
		1	24	22.30	22.01	22.34
		1	49	21.95	22.30	22.29
		25	0	21.60	21.50	21.72
		25	12	21.75	21.41	21.76
		25	25	21.64	21.58	21.65
		50	0	21.60	21.33	21.58

LTE Band 26						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26797	26915	27033
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	23.77	23.13	23.90
		1	2	23.66	23.43	23.72
		1	5	23.39	23.65	23.63
		3	0	22.86	22.00	22.40
		3	1	22.76	22.36	22.33
		3	3	22.57	22.34	22.62
		6	0	22.68	22.26	22.71
	16QAM	1	0	22.29	22.21	22.17
		1	2	22.06	21.84	21.98
		1	5	22.31	22.10	22.09
		3	0	21.71	21.12	21.50
		3	1	21.57	20.97	21.44
		3	3	21.72	21.56	21.23
		6	0	21.61	21.16	21.43
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26805	26915	27025
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	23.61	23.15	23.62
		1	7	23.84	23.58	23.76
		1	14	23.36	23.63	23.43
		8	0	22.68	22.27	22.64
		8	3	22.48	22.18	22.55
		8	7	22.63	22.62	22.57
		15	0	22.59	22.18	22.71
	16QAM	1	0	22.48	22.17	21.86
		1	7	22.04	21.65	22.24
		1	14	22.29	22.06	22.32
		8	0	21.79	21.13	21.49
		8	3	21.36	21.15	21.30
		8	7	21.64	21.45	21.28
		15	0	21.68	21.43	21.35

LTE Band 26						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26815	26915	27015
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	23.65	23.13	23.70
		1	12	23.66	23.46	23.64
		1	24	23.52	23.57	23.52
		12	0	22.70	22.17	22.53
		12	6	22.68	22.35	22.47
		12	13	22.64	22.42	22.49
		25	0	22.65	22.34	22.58
	16QAM	1	0	22.28	22.02	22.03
		1	12	22.20	21.80	22.14
		1	24	22.17	22.00	22.18
		12	0	21.62	21.15	21.34
		12	6	21.47	21.10	21.33
		12	13	21.54	21.36	21.22
		25	0	21.50	21.25	21.48
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26840	26915	26990
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	23.59	23.07	23.70
		1	24	23.64	23.34	23.71
		1	49	23.70	23.47	23.47
		25	0	22.78	22.07	22.43
		25	12	22.81	22.28	22.54
		25	25	22.79	22.28	22.62
		50	0	22.50	22.38	22.50
	16QAM	1	0	22.14	22.02	22.14
		1	24	22.23	21.93	22.14
		1	49	22.19	21.90	22.38
		25	0	21.72	21.21	21.18
		25	12	21.53	20.91	21.23
		25	25	21.34	21.55	21.25
		50	0	21.64	21.24	21.46

LTE Band 26						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26865	26915	26965
		Frequency (MHz)		831.5	836.5	841.5
15M	QPSK	1	0	23.77	23.28	23.61
		1	37	23.70	23.60	23.71
		1	74	23.66	23.40	23.48
		36	0	22.90	22.05	22.52
		36	19	22.60	22.35	22.39
		36	39	22.52	22.29	22.41
		75	0	22.74	22.43	22.45
	16QAM	1	0	22.24	21.91	22.20
		1	37	22.19	21.99	21.96
		1	74	22.17	21.98	22.20
		36	0	21.66	21.34	21.14
		36	19	21.38	21.09	21.48
		36	39	21.50	21.47	21.32
		75	0	21.36	21.25	21.65

ERP Power (dBm)

Band	GSM850		
Channel	128	189	251
Frequency (MHz)	824.2	836.4	848.8
GPRS (GMSK, 1Tx-slot)	32.15	32.08	32.09
EDGE (8PSK, 1Tx-slot)	31.43	31.35	31.39

*ERP = Conducted + antenna gain (1.6dBi)-2.15

Band	WCDMA V		
Channel	4132	4182	4233
Frequency (MHz)	826.4	836.4	846.6
RMC 12.2K	22.97	22.89	22.92
HSDPA Subtest-1	22.18	22.13	22.06
HSUPA Subtest-1	21.33	21.27	21.24

*ERP = Conducted + antenna gain (1.6dBi)-2.15

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20407	20525	20643
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	23.29	22.93	22.85
		1	2	23.53	22.97	23.39
		1	5	22.65	23.27	23.35
		3	0	22.00	21.91	22.32
		3	1	21.87	22.07	22.08
		3	3	21.78	21.98	22.26
		6	0	21.80	21.79	22.03
	16QAM	1	0	21.65	21.80	21.39
		1	2	21.74	21.57	21.92
		1	5	21.42	21.80	21.70
		3	0	21.22	20.97	21.26
		3	1	21.23	20.76	21.12
		3	3	21.09	21.12	21.28
		6	0	21.18	20.68	21.17
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20415	20525	20635
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	23.13	22.72	23.13
		1	7	23.33	23.00	23.51
		1	14	22.88	23.12	23.44
		8	0	22.04	21.80	22.12
		8	3	21.96	21.95	22.23
		8	7	21.99	22.04	22.33
		15	0	21.93	21.92	22.33
	16QAM	1	0	21.74	21.58	21.60
		1	7	21.79	21.64	21.84
		1	14	21.59	21.91	21.60
		8	0	20.93	20.82	20.98
		8	3	21.05	20.92	21.16
		8	7	21.18	21.09	21.02
		15	0	20.87	20.94	21.01

*ERP = Conducted + antenna gain (1.6dBi)-2.15

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20425	20525	20625
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	23.10	22.75	23.08
		1	12	23.32	23.00	23.45
		1	24	22.74	22.95	23.47
		12	0	22.27	21.62	22.02
		12	6	22.08	21.81	22.08
		12	13	21.90	21.93	22.32
		25	0	22.03	21.71	22.03
	16QAM	1	0	21.57	21.59	21.67
		1	12	21.62	21.58	21.60
		1	24	21.30	21.55	21.75
		12	0	20.94	20.89	21.22
		12	6	21.21	21.00	21.21
		12	13	21.19	20.90	21.10
		25	0	20.94	20.89	21.11
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20450	20525	20600
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	23.25	22.84	23.01
		1	24	23.50	23.11	23.52
		1	49	22.83	23.12	23.32
		25	0	22.11	21.73	22.15
		25	12	22.03	21.90	22.19
		25	25	21.84	21.92	22.21
		50	0	21.93	21.83	22.13
	16QAM	1	0	21.62	21.67	21.48
		1	24	21.75	21.46	21.79
		1	49	21.40	21.75	21.74
		25	0	21.05	20.95	21.17
		25	12	21.20	20.86	21.21
		25	25	21.09	21.03	21.10
		50	0	21.05	20.78	21.03

*ERP = Conducted + antenna gain (1.6dBi)-2.15

LTE Band 26						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26797	26915	27033
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	23.22	22.58	23.35
		1	2	23.11	22.88	23.17
		1	5	22.84	23.10	23.08
		3	0	22.31	21.45	21.85
		3	1	22.21	21.81	21.78
		3	3	22.02	21.79	22.07
		6	0	22.13	21.71	22.16
	16QAM	1	0	21.74	21.66	21.62
		1	2	21.51	21.29	21.43
		1	5	21.76	21.55	21.54
		3	0	21.16	20.57	20.95
		3	1	21.02	20.42	20.89
		3	3	21.17	21.01	20.68
		6	0	21.06	20.61	20.88
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26805	26915	27025
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	23.06	22.60	23.07
		1	7	23.29	23.03	23.21
		1	14	22.81	23.08	22.88
		8	0	22.13	21.72	22.09
		8	3	21.93	21.63	22.00
		8	7	22.08	22.07	22.02
		15	0	22.04	21.63	22.16
	16QAM	1	0	21.93	21.62	21.31
		1	7	21.49	21.10	21.69
		1	14	21.74	21.51	21.77
		8	0	21.24	20.58	20.94
		8	3	20.81	20.60	20.75
		8	7	21.09	20.90	20.73
		15	0	21.13	20.88	20.80

*ERP = Conducted + antenna gain (1.6dBi)-2.15

LTE Band 26						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26815	26915	27015
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	23.10	22.58	23.15
		1	12	23.11	22.91	23.09
		1	24	22.97	23.02	22.97
		12	0	22.15	21.62	21.98
		12	6	22.13	21.80	21.92
		12	13	22.09	21.87	21.94
		25	0	22.10	21.79	22.03
	16QAM	1	0	21.73	21.47	21.48
		1	12	21.65	21.25	21.59
		1	24	21.62	21.45	21.63
		12	0	21.07	20.60	20.79
		12	6	20.92	20.55	20.78
		12	13	20.99	20.81	20.67
		25	0	20.95	20.70	20.93
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26840	26915	26990
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	23.04	22.52	23.15
		1	24	23.09	22.79	23.16
		1	49	23.15	22.92	22.92
		25	0	22.23	21.52	21.88
		25	12	22.26	21.73	21.99
		25	25	22.24	21.73	22.07
		50	0	21.95	21.83	21.95
	16QAM	1	0	21.59	21.47	21.59
		1	24	21.68	21.38	21.59
		1	49	21.64	21.35	21.83
		25	0	21.17	20.66	20.63
		25	12	20.98	20.36	20.68
		25	25	20.79	21.00	20.70
		50	0	21.09	20.69	20.91

*ERP = Conducted + antenna gain (1.6dBi)-2.15

LTE Band 26						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		26865	26915	26965
		Frequency (MHz)		831.5	836.5	841.5
15M	QPSK	1	0	23.22	22.73	23.06
		1	37	23.15	23.05	23.16
		1	74	23.11	22.85	22.93
		36	0	22.35	21.50	21.97
		36	19	22.05	21.80	21.84
		36	39	21.97	21.74	21.86
		75	0	22.19	21.88	21.90
	16QAM	1	0	21.69	21.36	21.65
		1	37	21.64	21.44	21.41
		1	74	21.62	21.43	21.65
		36	0	21.11	20.79	20.59
		36	19	20.83	20.54	20.93
		36	39	20.95	20.92	20.77
		75	0	20.81	20.70	21.10

*ERP = Conducted + antenna gain (1.6dBi)-2.15

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 is equal to -13 dBm.

4.2.2 Test Procedure

- a. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) 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 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- b. The substitution horn antenna is substituted for EUT at the same position and signals generator export the CW signal to the substitution antenna via a TX cable. Rotated the Turn Table and moved receiving antenna to find the maximum radiation power. Adjust output power level of S.G to get a Value of spectrum reading equal to "Read Value" of step a. Record the power level of S.G
- c. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn.
- d. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.R.P power - 2.15 dB.

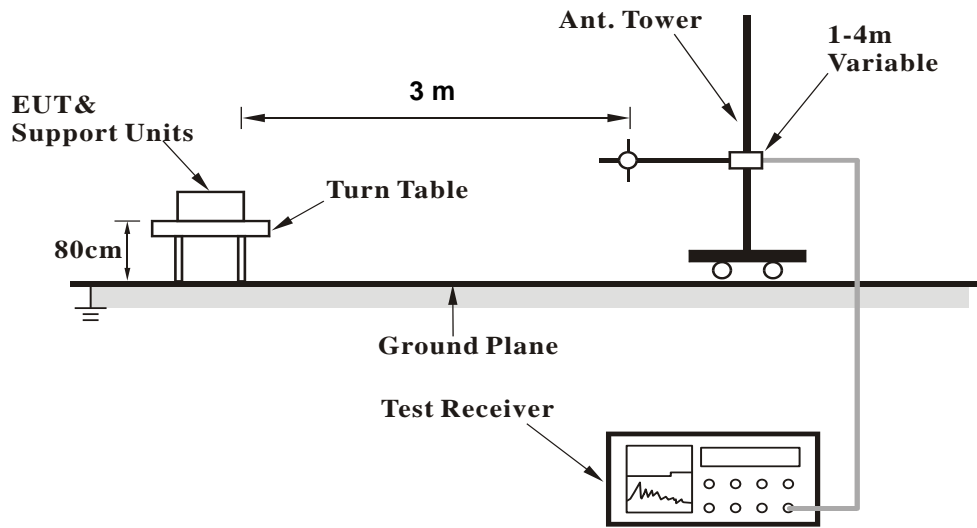
NOTE: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz/3 MHz.

4.2.3 Deviation from Test Standard

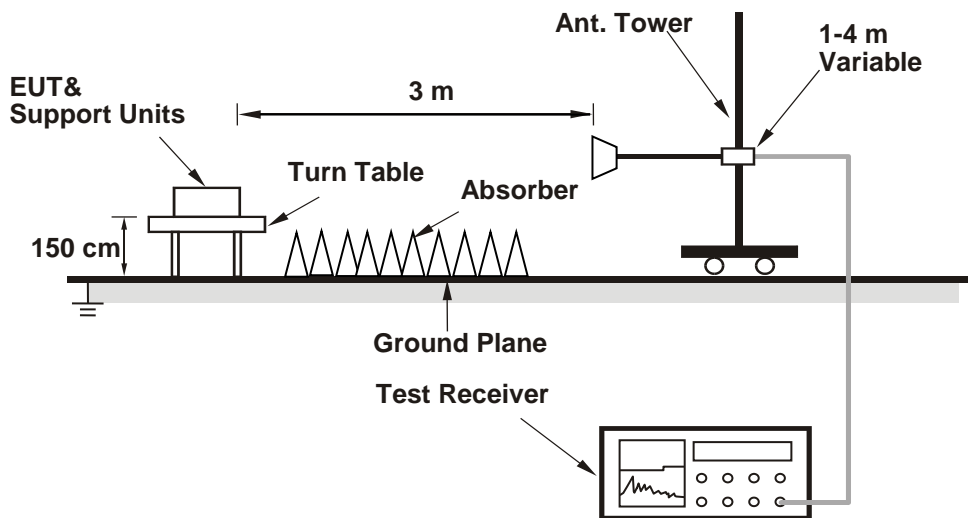
No deviation.

4.2.4 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).

4.2.5 Test Results

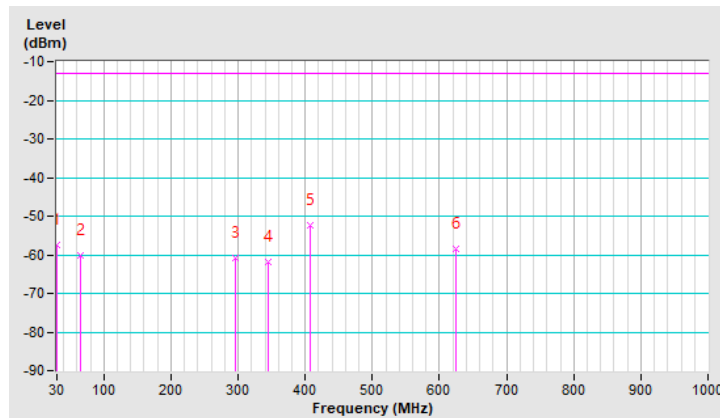
Below 1GHz

RF Mode	TX GSM 850	Channel	CH 189 : 836.4 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	30.00	-57.6	-13.0	-44.6	1.50 H	78	59.8	-117.4
2	65.89	-60.3	-13.0	-47.3	1.00 H	63	57.4	-117.7
3	296.75	-61.0	-13.0	-48.0	1.25 H	278	54.4	-115.4
4	345.25	-61.8	-13.0	-48.8	1.25 H	259	52.4	-114.2
5	407.33	-52.4	-13.0	-39.4	1.00 H	267	60.3	-112.7
6	624.61	-58.5	-13.0	-45.5	2.00 H	198	49.2	-107.8

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.

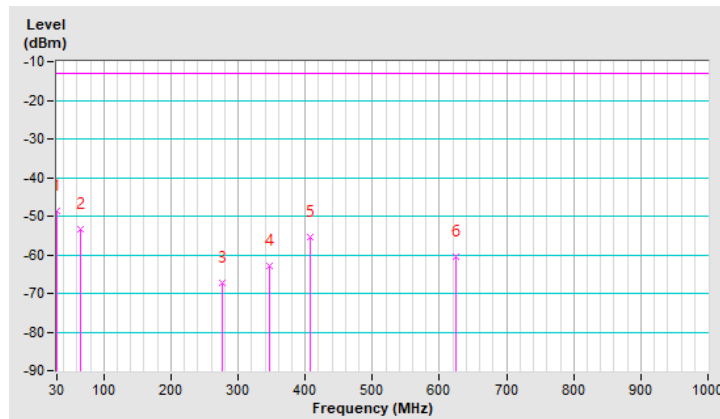


RF Mode	TX GSM 850	Channel	CH 189 : 836.4 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.00	-48.6	-13.0	-35.6	1.25 V	5	68.8	-117.4
2	65.89	-53.5	-13.0	-40.5	1.00 V	207	64.2	-117.7
3	276.38	-67.4	-13.0	-54.4	1.25 V	164	48.5	-115.9
4	346.22	-62.7	-13.0	-49.7	1.50 V	334	51.4	-114.2
5	408.30	-55.4	-13.0	-42.4	2.00 V	0	57.2	-112.6
6	624.61	-60.4	-13.0	-47.4	1.00 V	264	47.4	-107.8

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.

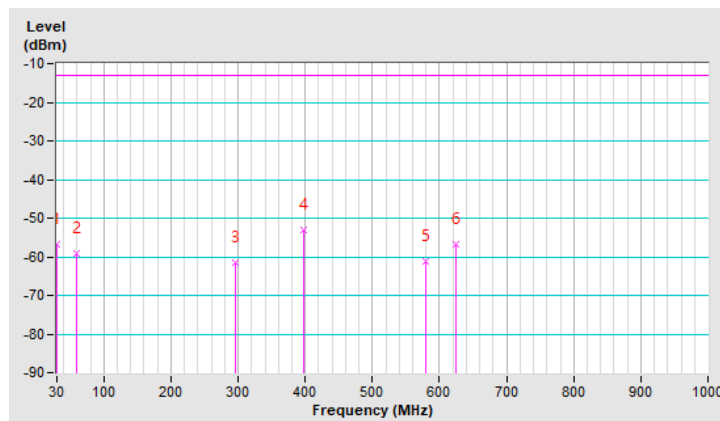


RF Mode	TX WCDMA Band V	Channel	CH 4182 : 836.4 MHz
Frequency Range	30MHz ~ 1GHz		

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	30.00	-56.7	-13.0	-43.7	1.50 H	77	60.6	-117.4
2	59.10	-59.2	-13.0	-46.2	1.00 H	49	57.6	-116.7
3	295.78	-61.4	-13.0	-48.4	1.25 H	261	54.0	-115.4
4	398.60	-53.0	-13.0	-40.0	1.00 H	257	59.9	-112.8
5	579.02	-61.2	-13.0	-48.2	1.25 H	52	47.5	-108.7
6	624.61	-56.9	-13.0	-43.9	1.00 H	193	50.9	-107.8

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.

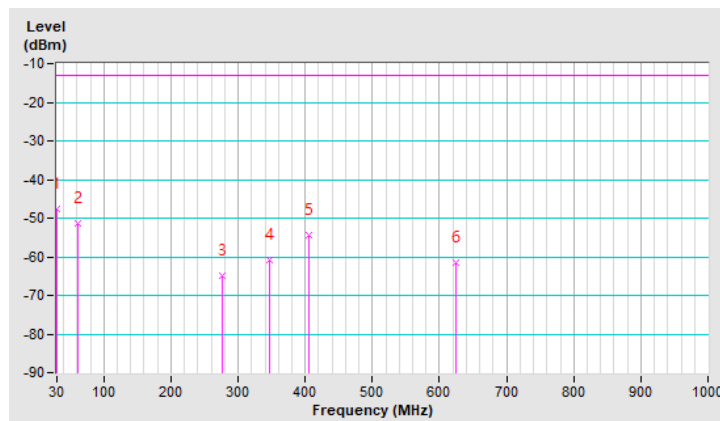


RF Mode	TX WCDMA Band V	Channel	CH 4182 : 836.4 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.00	-47.6	-13.0	-34.6	1.00 V	89	69.8	-117.4
2	62.01	-51.4	-13.0	-38.4	1.00 V	137	65.8	-117.3
3	276.38	-65.0	-13.0	-52.0	1.25 V	190	50.9	-115.9
4	347.19	-60.9	-13.0	-47.9	1.00 V	341	53.3	-114.1
5	406.36	-54.3	-13.0	-41.3	1.50 V	352	58.4	-112.7
6	624.61	-61.4	-13.0	-48.4	1.00 V	253	46.4	-107.8

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.

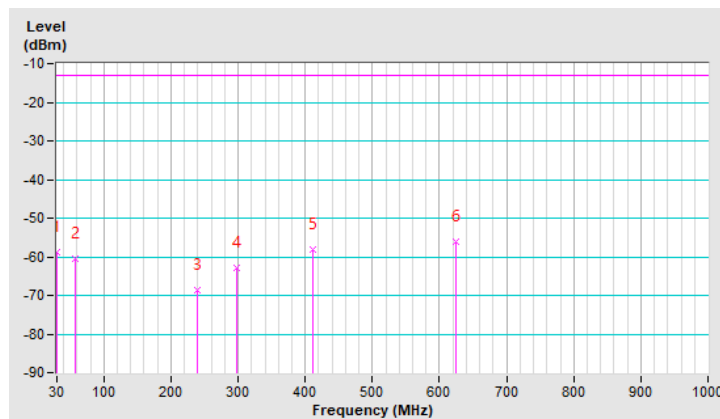


RF Mode	TX LTE Band V-5MHz	Channel	CH 20525 : 836.5 MHz
Frequency Range	30MHz ~ 1GHz		

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	30.00	-58.9	-13.0	-45.9	1.25 H	132	58.4	-117.4
2	58.13	-60.5	-13.0	-47.5	1.25 H	5	56.2	-116.7
3	238.55	-68.5	-13.0	-55.5	1.50 H	221	48.9	-117.4
4	297.72	-62.9	-13.0	-49.9	1.00 H	79	52.4	-115.3
5	411.21	-58.0	-13.0	-45.0	1.50 H	83	54.6	-112.6
6	624.61	-56.3	-13.0	-43.3	1.00 H	159	51.5	-107.8

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.

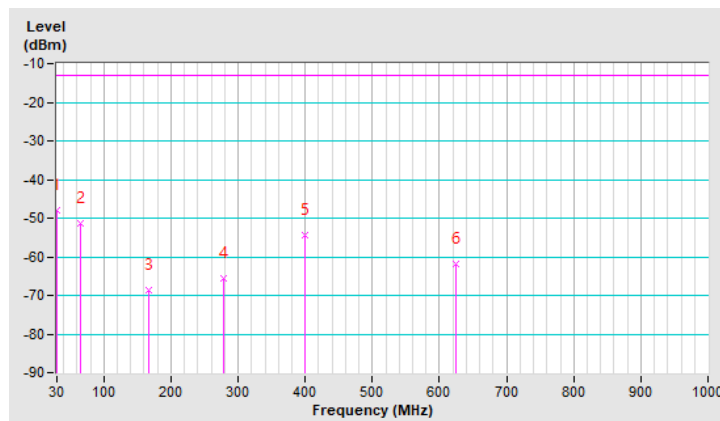


RF Mode	TX LTE Band V-5MHz	Channel	CH 20525 : 836.5 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.00	-48.0	-13.0	-35.0	1.50 V	113	69.4	-117.4
2	65.89	-51.5	-13.0	-38.5	1.50 V	174	66.2	-117.7
3	167.74	-68.7	-13.0	-55.7	1.00 V	82	47.3	-116.1
4	278.32	-65.5	-13.0	-52.5	1.00 V	205	50.3	-115.8
5	400.54	-54.6	-13.0	-41.6	1.25 V	352	58.2	-112.8
6	624.61	-61.9	-13.0	-48.9	1.00 V	258	45.9	-107.8

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.

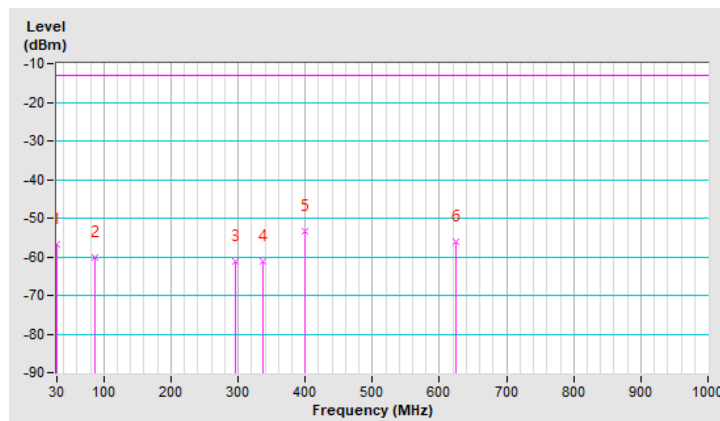


RF Mode	TX LTE Band XXVI-15MHz	Channel	CH 26865 : 831.5 MHz
Frequency Range	30MHz ~ 1GHz		

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	30.00	-56.8	-13.0	-43.8	1.00 H	78	60.5	-117.4
2	86.26	-60.0	-13.0	-47.0	1.00 H	25	61.5	-121.5
3	295.78	-61.1	-13.0	-48.1	1.50 H	292	54.3	-115.4
4	336.52	-61.3	-13.0	-48.3	1.25 H	276	52.9	-114.2
5	399.57	-53.5	-13.0	-40.5	2.00 H	263	59.3	-112.8
6	624.61	-56.2	-13.0	-43.2	1.00 H	3	51.6	-107.8

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.

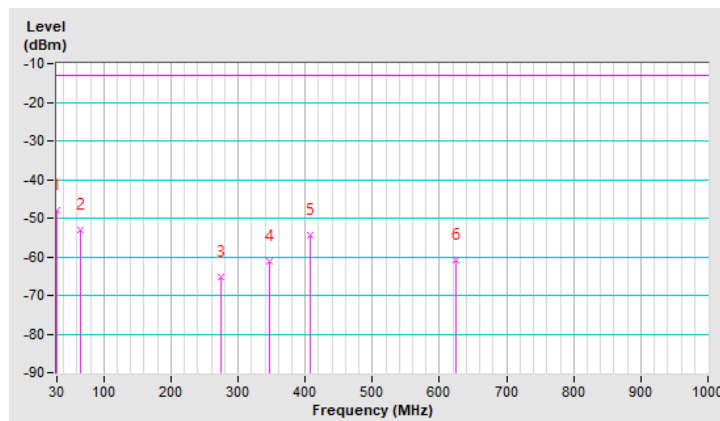


RF Mode	TX LTE Band XXVI-15MHz	Channel	CH 26865 : 831.5 MHz
Frequency Range	30MHz ~ 1GHz		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	30.97	-48.0	-13.0	-35.0	1.00 V	110	69.6	-117.6
2	65.89	-53.0	-13.0	-40.0	1.25 V	168	64.7	-117.7
3	275.41	-65.2	-13.0	-52.2	1.50 V	203	50.7	-115.9
4	347.19	-61.1	-13.0	-48.1	1.00 V	327	53.1	-114.1
5	407.33	-54.3	-13.0	-41.3	1.25 V	357	58.4	-112.7
6	624.61	-60.9	-13.0	-47.9	1.00 V	251	46.8	-107.8

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.



Above 1GHz

RF Mode	TX GSM 850	Channel	CH 128 : 824.2 MHz
Frequency Range	1GMHz ~ 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	1648.40	-45.5	-13.0	-32.5	3.31 H	14	58.0	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1648.40	-42.2	-13.0	-29.2	1.17 V	246	61.3	-103.5

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 GSM 850	Channel	CH 189 : 836.4 MHz
Frequency Range	1GMHz ~ 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	1672.80	-45.5	-13.0	-32.5	3.30 H	15	58.0	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1672.80	-42.1	-13.0	-29.1	1.19 V	248	61.4	-103.5

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 GSM 850	Channel	CH 251 : 848.8 MHz
Frequency Range	1GMHz ~ 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	1697.60	-44.6	-13.0	-31.6	3.39 H	16	58.9	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1697.60	-42.2	-13.0	-29.2	1.15 V	244	61.3	-103.5

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 WCDMA Band V	Channel	CH 4132 : 826.4 MHz
Frequency Range	1GMHz ~ 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	1652.80	-57.5	-13.0	-44.5	3.87 H	47	46.0	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1652.80	-55.0	-13.0	-42.0	1.44 V	251	48.5	-103.5

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 WCDMA Band V	Channel	CH 4182 : 836.4 MHz
Frequency Range	1GMHz ~ 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	1673.20	-57.4	-13.0	-44.4	3.67 H	46	46.1	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.20	-54.9	-13.0	-41.9	1.51 V	281	48.6	-103.5

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 WCDMA Band V	Channel	CH 4233 : 846.6 MHz
Frequency Range	1GMHz ~ 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	1693.20	-57.5	-13.0	-44.5	3.76 H	49	46.0	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.20	-55.1	-13.0	-42.1	1.49 V	277	48.4	-103.5

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 V-1.4MHz	Channel	CH 20407 : 824.7 MHz
Frequency Range	1GMHz ~ 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	1649.40	-53.6	-13.0	-40.6	3.26 H	8	49.9	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1649.40	-50.8	-13.0	-37.8	1.04 V	263	52.7	-103.5

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 V-1.4MHz	Channel	CH 20525 : 836.5 MHz
Frequency Range	1GMHz ~ 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	1673.00	-53.8	-13.0	-40.8	3.31 H	12	49.7	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-50.7	-13.0	-37.7	1.02 V	266	52.8	-103.5

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 V-1.4MHz	Channel	CH 20643 : 848.3 MHz
Frequency Range	1GMHz ~ 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	1696.60	-53.8	-13.0	-40.8	3.31 H	11	49.7	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1696.60	-50.5	-13.0	-37.5	1.04 V	266	53.0	-103.5

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 V-5MHz	Channel	CH 20425 : 826.5 MHz
Frequency Range	1GMHz ~ 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	1653.00	-53.6	-13.0	-40.6	3.27 H	10	49.9	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1653.00	-50.4	-13.0	-37.4	1.01 V	269	53.1	-103.5

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 V-5MHz	Channel	CH 20525 : 836.5 MHz
Frequency Range	1GMHz ~ 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	1673.00	-53.8	-13.0	-40.8	3.26 H	10	49.7	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-50.0	-13.0	-37.0	1.00 V	267	53.5	-103.5

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 V-5MHz	Channel	CH 20625 : 846.5 MHz
Frequency Range	1GMHz ~ 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	1693.00	-53.9	-13.0	-40.9	3.24 H	5	49.7	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.00	-50.2	-13.0	-37.2	1.06 V	258	53.3	-103.5

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 V-10MHz	Channel	CH 20450 : 829 MHz
Frequency Range	1GMHz ~ 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	1658.00	-53.7	-13.0	-40.7	3.28 H	16	49.8	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1658.00	-50.0	-13.0	-37.0	1.00 V	265	53.5	-103.5

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 V-10MHz	Channel	CH 20525 : 836.5 MHz
Frequency Range	1GMHz ~ 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	1673.00	-53.6	-13.0	-40.6	3.26 H	8	49.9	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-50.5	-13.0	-37.5	1.00 V	269	53.0	-103.5

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 V-10MHz	Channel	CH 20600 : 844 MHz
Frequency Range	1GMHz ~ 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	1688.00	-53.4	-13.0	-40.4	3.25 H	13	50.1	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1688.00	-50.5	-13.0	-37.5	1.01 V	270	53.0	-103.5

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 XXVI- 1.4MHz	Channel	CH 26797 : 824.7 MHz
Frequency Range	1GMHz ~ 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	1649.40	-55.8	-13.0	-42.8	3.35 H	27	47.7	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1649.40	-52.8	-13.0	-39.8	1.00 V	257	50.7	-103.5

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 XXVI- 1.4MHz	Channel	CH 26915 : 836.5 MHz
Frequency Range	1GMHz ~ 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	1673.00	-55.2	-13.0	-42.2	3.27 H	21	48.3	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-52.9	-13.0	-39.9	1.03 V	261	50.6	-103.5

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 XXVI-1.4MHz	Channel	CH 27033 : 848.3 MHz
Frequency Range	1GMHz ~ 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	1696.60	-55.9	-13.0	-42.9	3.29 H	20	47.6	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1696.60	-52.7	-13.0	-39.7	1.08 V	259	50.8	-103.5

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 XXVI-5MHz	Channel	CH 26815 : 826.5 MHz
Frequency Range	1GMHz ~ 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	1653.00	-55.3	-13.0	-42.3	3.30 H	26	48.2	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1653.00	-53.1	-13.0	-40.1	1.00 V	259	50.4	-103.5

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 XXVI-5MHz	Channel	CH 26915 : 836.5 MHz
Frequency Range	1GMHz ~ 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	1673.00	-55.2	-13.0	-42.2	3.30 H	23	48.3	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-52.3	-13.0	-39.3	1.00 V	260	51.3	-103.5

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 XXVI-5MHz	Channel	CH 27015 : 846.5 MHz
Frequency Range	1GMHz ~ 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	1693.00	-55.6	-13.0	-42.6	3.32 H	25	47.9	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1693.00	-52.8	-13.0	-39.8	1.00 V	258	50.7	-103.5

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 XXVI-15MHz	Channel	CH 26865 : 831.5 MHz
Frequency Range	1GMHz ~ 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	1663.00	-56.2	-13.0	-43.2	3.26 H	26	47.4	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1663.00	-52.2	-13.0	-39.2	1.05 V	260	51.3	-103.5

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 XXVI-15MHz	Channel	CH 26915 : 836.5 MHz
Frequency Range	1GMHz ~ 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	1673.00	-55.8	-13.0	-42.8	3.34 H	23	47.7	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1673.00	-52.8	-13.0	-39.8	1.07 V	258	50.8	-103.5

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 XXVI-15MHz	Channel	CH 26965 : 841.5 MHz
Frequency Range	1GMHz ~ 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	1683.00	-56.0	-13.0	-43.0	3.28 H	22	47.5	-103.5
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	ERP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1683.00	-52.6	-13.0	-39.6	1.00 V	257	50.9	-103.5

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.

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:

Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

--- END ---