

Partial FCC Test Report (Part 96 – LTE B42/B48)

Report No.: RFCDVB-WTW-P22100074-4

FCC ID: QYLEM9190V

Test Model: EM9190

Received Date: Nov. 15, 2022

Test Date: Nov. 30, 2022 ~ Dec. 06, 2022

Issued Date: Apr. 07, 2023

Applicant: Getac Technology Corporation.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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33383, TAIWAN

FCC Registration / 788550 / TW0003
Designation Number:



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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 Modification Record	5
3 General Information	6
3.1 General Description of EUT	6
3.2 Test Mode Applicability and Tested Channel Detail	8
3.3 Description of Support Units	10
3.3.1 Configuration of System under Test	10
3.4 General Description of Applied Standards and References	11
4 Test Types and Results	12
4.1 Maximum Output Power Measurement	12
4.1.1 Limits of Maximum Output Power Measurement	12
4.1.2 Test Setup	12
4.1.3 Test Instruments	12
4.1.4 Test Procedures	13
4.1.5 Deviation from Test Standard	13
4.1.6 EUT Operating Conditions	13
4.1.7 Test Results	14
4.2 Radiated Emission Measurement	34
4.2.1 Limits of Radiated Emission Measurement	34
4.2.2 Test Set Up	34
4.2.3 Test Instruments	35
4.2.4 Test Procedures	36
4.2.5 Deviation from Test Standard	36
4.2.6 EUT Operating Conditions	36
4.2.7 Test Results	37
5 Pictures of Test Arrangements	49
Appendix – Information of the Testing Laboratories	50

Release Control Record

Issue No.	Description	Date Issued
RFCDVB-WTW-P22100074-4	Original Release	Apr. 07, 2023

1 Certificate of Conformity

Product: Radio Module

Brand: Getac

Test Model: EM9190

Sample Status: Engineering Sample

Applicant: Getac Technology Corporation.

Test Date: Nov. 30, 2022 ~ Dec. 06, 2022

Standards: 47 CFR FCC Part 96

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 : Vera Huang, **Date:** Apr. 07, 2023

Vera Huang / Specialist

Approved by : Jeremy Lin, **Date:** Apr. 07, 2023

Jeremy Lin / Project Engineer

2 Summary of Test Results

47 CFR FCC Part 96			
FCC Clause	Test Item	Result	Remarks
2.1046 96.41(b)	Maximum Peak Output Power	Pass	Meet the requirement of limit.
2.1047 96.41(a)	Modulation Characteristics	N/A	Refer to Note
2.1046 96.41(b)	Maximum Power Spectral Density	N/A	Refer to Note
96.41(g)	Peak to Average Ration	N/A	Refer to Note
2.1049	Emission Bandwidth	N/A	Refer to Note
2.1055	Frequency Stability	N/A	Refer to Note
2.1051 96.41(e)	Conducted Spurious Emissions	N/A	Refer to Note
2.1053 96.41(e)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -0.30dB at 7120.00MHz.

Note:

1. This report is a Class II change partial report. Therefore, only test item of Radiated Spurious Emissions tests and Equivalent Isotropically Radiated Power were performed for this report. Other testing data please refer to Sporton International (Shenzhen) Inc. report no.: FG021429A_Rev. 01 for module (Brand: Airprime, Model: EM9190).
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	3.59 dB
	30 MHz ~ 1000 MHz	3.6 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Radio Module	
Brand	Getac	
Test Model	EM9190	
Status of EUT	Engineering Sample	
Power Supply Rating	3.3 Vdc (Host equipment)	
Modulation Type	QPSK, 16QAM, 64QAM, 256QAM	
Operating Frequency	LTE Band 42 (Channel Bandwidth 5MHz)	3552.5MHz ~ 3597.5MHz
	LTE Band 42 (Channel Bandwidth 10MHz)	3555.0MHz ~ 3595.0MHz
	LTE Band 42 (Channel Bandwidth 15MHz)	3557.5MHz ~ 3592.5MHz
	LTE Band 42 (Channel Bandwidth 20MHz)	3560.0MHz ~ 3590.0MHz
	LTE Band 48 (Channel Bandwidth 5MHz)	3552.5MHz ~ 3697.5MHz
	LTE Band 48 (Channel Bandwidth 10MHz)	3555.0MHz ~ 3695.0MHz
	LTE Band 48 (Channel Bandwidth 15MHz)	3557.5MHz ~ 3692.5MHz
	LTE Band 48 (Channel Bandwidth 20MHz)	3560.0MHz ~ 3690.0MHz
Max. EIRP Power	LTE Band 42 (Channel Bandwidth 5MHz)	145.546mW (21.63dBm)
	LTE Band 42 (Channel Bandwidth 10MHz)	145.546mW (21.63dBm)
	LTE Band 42 (Channel Bandwidth 15MHz)	144.877mW (21.61dBm)
	LTE Band 42 (Channel Bandwidth 20MHz)	146.218mW (21.65dBm)
	LTE Band 48 (Channel Bandwidth 5MHz)	148.936mW (21.73dBm)
	LTE Band 48 (Channel Bandwidth 10MHz)	146.893mW (21.67dBm)
	LTE Band 48 (Channel Bandwidth 15MHz)	147.911mW (21.70dBm)
	LTE Band 48 (Channel Bandwidth 20MHz)	149.968mW (21.76dBm)
Antenna Type	Refer to Note as below	
Accessory Device	N/A	
Cable Supplied	N/A	

Note:

1. The EUT is authorized for use in specific End-product.

Product	Brand	Model	Difference
Notebook	Getac	V110	For marketing purpose
		V110G7	
		V110Y (Y= 10 characters, Y can be 0 to 9, A to Z, a to z, “/”, “\”, “-”, “_” or blank for marketing purpose)	

* The model of the V110G7 was chosen for final test.

2. The antenna information is listed as below.

Antenna Type	Antenna Gain (dBi)	
	LTE B42	LTE B48
PIFA	-1.36	-1.3

* Detail antenna specification please refer to antenna datasheet or an antenna gain measurement report.

3. The End-product contains following accessory devices.

Part	Brand	Model	Specification
Adapter 1	FSP	FSP065-RBBN3	I/P: 100-240Vac, 50-60Hz, 1.5A O/P: 19.0Vdc, 3.42A 1.5m DC power cable with one core attached on adapter
Adapter 2	Getac	MTA190474W4	I/P: 100-240Vac, 50-60Hz, 1.6A O/P: 19.0Vdc, 4.74A 1.55m DC power cable with two cores attached on adapter
Battery	Getac	BP3S1P2100-S	Rating: 11.1Vdc, 2040mAh, 23Wh Typical name: 2100mAh, 24Wh
Digitizer Pen	EMpen Technology Corp	DIGITIZER PEN	-

4. The End-product has three SKUs for sale, after pre-test. SKU 3 was chosen for final test and presented in the test report.

Part	Brand	Model	Specification	Configuration		
				SKU 1	SKU 2	SKU 3
CPU	Intel	Alder Lake	i5-1235U (Non Vpro)	V		V
			i7-1265U (Vpro)		V	
DDR	Kingston	---	16GB (8GB+8GB)	V		
		---	32GB (16GB+16GB)		V	
		---	64GB (32GB+32GB)			V
SSD	SSSTC	---	256GB	V		
		---	512GB		V	
		---	1TB			V
LCD Panel	AUO	G116HAN01	11.6"	V	V	V
Finger Print	Egistec	---	---	V	V	V
WLAN Module	Intel	AX211NGW	---	V	V	V
WWAN Module	Sierra	EM9190	---	V	V	V
GPS	GlobalSat	MC1010G	---	V	V	V
RFID Module	NXP	PN-7462	---		V	V
Digitizer Module	Getac	EMR116-UA00	---		V	V
Bottom Camera	FOXLINK	FN80AF-443H	---	V	V	V
	Chicony	CKAM816	---	V	V	V
Camera	FOXLINK	FN20FF-679H	---	V	V	V
IR Camera	FOXLINK	FN23FF-678H	---		V	V
Option Bay	Honeywell	N6703	Barcode	V		V
	Getac	---	SD Card reader		V	
	Getac	---	Smart Card		V	

5. 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 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis for tablet mode, and NB mode. 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
LTE Band 42	NB mode
LTE Band 48	NB mode

LTE Band 42

Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation
Maximum Output Power	43115 to 43565	43115 (3552.5MHz), 43340 (3575.0MHz), 43565 (3597.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM
	43140 to 43540	43140 (3555.0MHz), 43340 (3575.0MHz), 43540 (3595.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM
	43165 to 43515	43165 (3557.5MHz), 43340 (3575.0MHz), 43515 (3592.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM
	43190 to 43490	43190 (3560.0MHz), 43340 (3575.0MHz), 43490 (3590.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM
Radiated Emission Below 1GHz	43190 to 43490	43190 (3560.0MHz)	20MHz	QPSK
Radiated Emission Above 1GHz	43115 to 43565	43115 (3552.5MHz), 43340 (3575.0MHz), 43565 (3597.5MHz)	5MHz	QPSK
	43190 to 43490	43190 (3560.0MHz), 43340 (3575.0MHz), 43490 (3590.0MHz)	20MHz	QPSK

Note:

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

LTE Band 48

Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation
Maximum Output Power	55265 to 56715	55265 (3552.5MHz), 55990 (3625.0MHz), 56715 (3697.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM
	55290 to 56690	55290 (3555.0MHz), 55990 (3625.0MHz), 56690 (3695.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM
	55315 to 56665	55315 (3557.5MHz), 55990 (3625.0MHz), 56665 (3692.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM
	55340 to 56640	55340 (3560.0MHz), 55990 (3625.0MHz), 56640 (3690.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM
Radiated Emission Below 1GHz	55265 to 56715	55265 (3552.5MHz)	5MHz	QPSK
Radiated Emission Above 1GHz	55265 to 56715	55265 (3552.5MHz), 55990 (3625.0MHz), 56715 (3697.5MHz)	5MHz	QPSK
	55340 to 56640	55340 (3560.0MHz), 55990 (3625.0MHz), 56640 (3690.0MHz)	20MHz	QPSK

Note:

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

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
Maximum Output Power	25deg. C, 60%RH	120Vac, 60Hz (System)	Willy Cheng
Radiated Emission	23deg. C, 67%RH	120Vac, 60Hz (System)	Rex Wang Adair Peng

3.3 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.	Notebook	Getac	V110G7	NA	NA	Provided by manufacturer
B.	Adapter	FSP	FSP065-RBBN3	NA	NA	Provided by manufacturer
C.	USB Flash x 3	SanDisk	SDDDC3-032G	NA	NA	-
D.	Monitor	ASUS	VA24EHE	LCLMTF243824	NA	-
E.	Earphone	Apple	MB77PFEB	NA	NA	-
F.	Load	NA	NA	NA	NA	-
G.	Radio Communication Analyzer	Anritsu	MT8821C	6201462755	NA	-

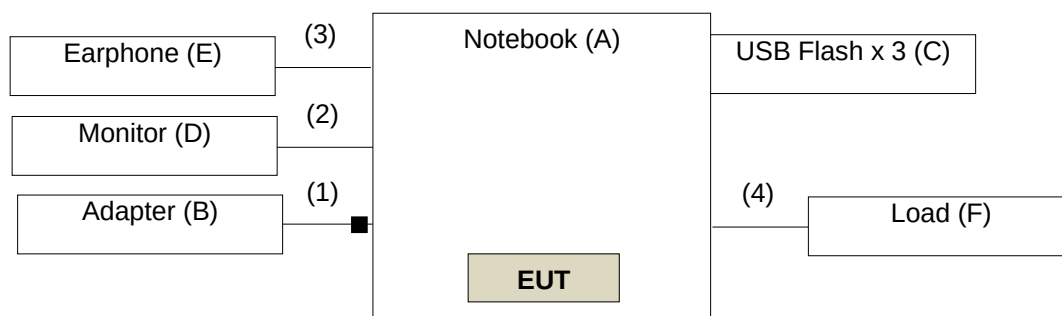
Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item G acted as a communication partner to transfer data.

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	DC Power Cable	1	1.5	N	1	Provided by manufacturer Attached on adapter
2.	HDMI Cable	1	1.0	Y	0	-
3.	Earphone Cable	1	1.5	N	0	-
4.	RJ45 Cable	1	1.5	N	0	-

Note: The core(s) is(are) originally attached to the cable(s).

3.3.1 Configuration of System under Test



Remote site



3.4 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 96

ANSI C63.26-2015

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

KDB 940660 D01 Part 96 CBRS Eqpt v03

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

4 Test Types and Results

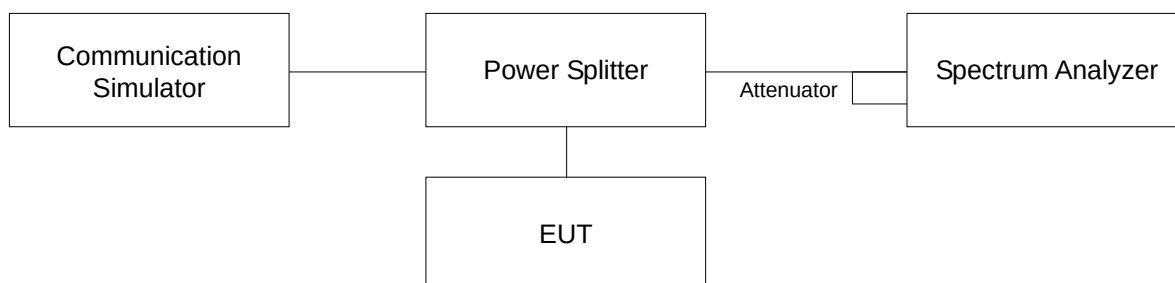
4.1 Maximum Output Power Measurement

4.1.1 Limits of Maximum Output Power Measurement

Device		Maximum EIRP (dBm/10 MHz)
☒	End User Device	23
☐	Category A CBSD	30
☐	Category B CBSD	47

4.1.2 Test Setup

Conducted Power Measurement:



4.1.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer KEYSIGHT	N9030B	MY57140953	Jul. 01, 2022	Jun. 30, 2023
Radio Communication Analyzer Anritsu	MT8821C	6272278310	Jun. 22, 2022	Jun. 21, 2023
RF cable	JB200	Cable-OVEN-02	NA	NA
DC-6GHz 20dB 50W Fixed attenuator Woken	MDC9331N-20	0724	Jul. 01, 2022	Jun. 30, 2024
Temperature & Humidity Chamber TERCHY	HRM-120RF	931022	Jan. 03, 2022	Jan. 02, 2023
AC Power Supply Extech	CFW-105	E000603	NA	NA
Digital Multimeter Fluke	87-III	70360742	Jun. 23, 2022	Jun. 22, 2023

Note: The calibration interval of the above test instruments is 12/24 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1.4 Test Procedures

Conducted output power measurement

- a. Connect the DUT transmitter output to the spectrum analyzer via coaxial cable while ensuring proper impedance matching.
- b. Set span to at least 1.5 times the OBW.
- c. Set RBW = 1-5% of the OBW, not to exceed 1 MHz.
- d. Set VBW $\geq 3 \times$ RBW.
- e. Set number of points in sweep $\geq 2 \times$ span / RBW.
- f. Sweep time = auto-couple.
- g. Detector = RMS (power averaging).
- h. If the EUT can be configured to transmit continuously (i.e., burst duty cycle $\geq 98\%$), then set the trigger to free run.
- i. If the EUT cannot be configured to transmit continuously (i.e., burst duty cycle $< 98\%$), then use a sweep trigger with the level set to enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Ensure that the sweep time is less than or equal to the transmission burst duration.
- j. Trace average at least 100 traces in power averaging (i.e., RMS) mode.
- k. Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band or channel power measurement function, with the band/channel limits set equal to the OBW band edges. If the instrument does not have a band or channel power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.
- l. Measurement method refers to ANSI C63.26 section 5.2.7 & 5.2.4.

Maximum EIRP

The relevant equation for determining the maximum ERP or EIRP from the measured RF output power is given in Equation as follows:

$$\text{ERP or EIRP} = P_{\text{Meas}} + G_T$$

where

ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (expressed in the same units as P_{Meas} , e.g., dBm or dBW)

P_{Meas} measured transmitter output power or PSD, in dBm or dBW

G_T gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP)

4.1.5 Deviation from Test Standard

No deviation.

4.1.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.1.7 Test Results

Conducted Output Power (dBm)

LTE Band 42						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		43190	43340	43490
		Frequency (MHz)		3560	3575	3590
20M	QPSK	1	0	22.86	22.95	23.01
		1	50	22.85	22.93	22.98
		1	99	22.83	22.91	22.95
		50	0	22.03	22.07	22.12
		50	25	21.95	21.98	22.08
		50	50	21.93	22.02	22.06
		100	0	21.94	21.95	22.04
20M	16QAM	1	0	22.11	22.16	22.23
		1	50	22.06	22.10	22.14
		1	99	21.96	22.01	22.06
		50	0	21.09	21.14	21.15
		50	25	20.99	21.07	21.11
		50	50	20.98	21.00	21.08
		100	0	21.00	21.02	21.04
20M	64QAM	1	0	20.98	21.00	21.08
		1	50	20.95	21.03	21.04
		1	99	20.87	20.88	20.98
		50	0	20.05	20.05	20.15
		50	25	20.01	20.03	20.13
		50	50	19.92	19.99	20.09
		100	0	19.85	19.95	20.05
20M	256QAM	1	0	18.02	18.11	18.14
		1	50	18.01	18.08	18.08
		1	99	17.92	17.95	18.04
		50	0	17.90	17.98	18.00
		50	25	17.84	17.93	17.96
		50	50	17.81	17.84	17.92
		100	0	17.83	17.83	17.90

LTE Band 42						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		43165	43340	43515
		Frequency (MHz)		3557.5	3575	3592.5
15M	QPSK	1	0	22.86	22.92	22.91
		1	37	22.84	22.86	22.97
		1	74	22.82	22.81	22.93
		36	0	22.01	22.05	22.08
		36	19	21.94	21.94	22.03
		36	39	21.91	21.97	21.98
		75	0	21.85	21.86	21.96
15M	16QAM	1	0	22.03	22.06	22.18
		1	37	22.01	22.04	22.13
		1	74	21.92	21.97	21.99
		36	0	21.03	21.05	21.05
		36	19	20.91	21.06	21.09
		36	39	20.94	20.94	21.00
		75	0	20.92	20.98	20.94
15M	64QAM	1	0	20.89	21.00	20.98
		1	37	20.93	20.98	20.99
		1	74	20.83	20.87	20.96
		36	0	20.01	20.05	20.08
		36	19	19.96	20.02	20.11
		36	39	19.89	19.94	20.09
		75	0	19.81	19.86	20.02
15M	256QAM	1	0	17.94	18.06	18.11
		1	37	18.01	17.99	18.05
		1	74	17.84	17.86	17.96
		36	0	17.86	17.98	17.97
		36	19	17.84	17.88	17.95
		36	39	17.81	17.82	17.87
		75	0	17.81	17.81	17.83

LTE Band 42						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		43140	43340	43540
		Frequency (MHz)		3555	3575	3595
10M	QPSK	1	0	22.88	22.90	22.99
		1	24	22.85	22.86	22.94
		1	49	22.83	22.82	22.85
		25	0	22.00	21.99	22.04
		25	12	21.85	21.91	21.99
		25	25	21.86	22.02	22.04
		50	0	21.93	21.85	21.95
10M	16QAM	1	0	22.07	22.12	22.21
		1	24	21.96	22.00	22.04
		1	49	21.94	21.93	21.97
		25	0	20.99	21.09	21.10
		25	12	20.93	20.99	21.05
		25	25	20.93	20.95	21.04
		50	0	20.91	21.01	21.02
10M	64QAM	1	0	20.95	20.90	21.05
		1	24	20.87	20.96	21.01
		1	49	20.81	20.86	20.92
		25	0	20.01	19.99	20.06
		25	12	20.01	20.02	20.13
		25	25	19.84	19.95	20.08
		50	0	19.83	19.86	19.97
10M	256QAM	1	0	17.95	18.10	18.04
		1	24	17.93	18.01	17.98
		1	49	17.87	17.88	18.03
		25	0	17.82	17.97	17.96
		25	12	17.84	17.84	17.95
		25	25	17.82	17.81	17.90
		50	0	17.82	17.81	17.90

LTE Band 42						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		43115	43340	43565
		Frequency (MHz)		3552.5	3575	3597.5
5M	QPSK	1	0	22.85	22.85	22.99
		1	12	22.84	22.87	22.98
		1	24	22.81	22.90	22.95
		12	0	21.97	21.98	22.03
		12	6	21.85	21.97	22.03
		12	13	21.85	22.00	21.97
		25	0	21.84	21.87	21.97
5M	16QAM	1	0	22.07	22.12	22.15
		1	12	21.99	22.07	22.12
		1	24	21.90	21.93	22.03
		12	0	21.02	21.07	21.09
		12	6	20.94	20.97	21.03
		12	13	20.95	21.00	21.00
		25	0	20.98	21.00	21.01
5M	64QAM	1	0	20.90	20.96	21.02
		1	12	20.89	20.96	20.96
		1	24	20.81	20.81	20.90
		12	0	20.01	20.02	20.10
		12	6	20.01	19.99	20.10
		12	13	19.88	19.93	20.01
		25	0	19.84	19.93	19.96
5M	256QAM	1	0	18.00	18.04	18.14
		1	12	18.01	18.00	17.98
		1	24	17.89	17.88	17.94
		12	0	17.83	17.98	17.92
		12	6	17.81	17.88	17.90
		12	13	17.83	17.84	17.86
		25	0	17.82	17.82	17.86

Conducted Output Power (dBm/10MHz)

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55340	55990	56640
		Frequency (MHz)		3560	3625	3690
20M	QPSK	1	0	22.80	22.83	22.64
		1	50	22.70	22.75	22.78
		1	99	22.59	22.87	22.61
		50	0	21.79	21.79	21.83
		50	25	21.79	21.98	21.73
		50	50	21.68	21.92	21.79
		100	0	21.81	21.80	21.73
20M	16QAM	1	0	21.95	22.11	22.04
		1	50	21.89	21.93	21.91
		1	99	21.86	22.05	21.97
		50	0	20.83	20.82	20.78
		50	25	20.90	20.91	20.93
		50	50	20.76	20.80	20.77
		100	0	20.84	20.81	20.65
20M	64QAM	1	0	20.72	20.89	20.78
		1	50	20.65	20.86	20.68
		1	99	20.65	20.90	20.81
		50	0	19.88	19.88	19.86
		50	25	19.72	19.80	19.74
		50	50	19.80	19.93	19.71
		100	0	19.69	19.80	19.82
20M	256QAM	1	0	17.97	18.05	17.96
		1	50	18.08	18.27	18.12
		1	99	17.84	17.99	18.09
		50	0	18.04	18.08	17.93
		50	25	17.86	18.09	18.05
		50	50	17.86	17.99	18.06
		100	0	17.75	17.78	17.88

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55315	55990	56665
		Frequency (MHz)		3557.5	3625	3692.5
15M	QPSK	1	0	22.61	22.78	22.80
		1	37	22.51	22.87	22.57
		1	74	22.60	22.80	22.66
		36	0	21.55	21.75	21.85
		36	19	21.56	21.67	21.78
		36	39	21.78	21.70	21.72
		75	0	21.63	21.82	21.65
15M	16QAM	1	0	22.02	21.93	21.80
		1	37	21.71	21.88	21.84
		1	74	21.75	21.89	21.95
		36	0	20.87	20.90	20.68
		36	19	20.70	20.96	20.72
		36	39	20.87	20.74	20.83
		75	0	20.58	20.84	20.84
15M	64QAM	1	0	20.77	20.94	20.58
		1	37	20.64	20.83	20.76
		1	74	20.57	20.75	20.60
		36	0	19.53	20.02	19.59
		36	19	19.86	19.75	19.62
		36	39	19.60	19.96	19.86
		75	0	19.67	19.95	19.62
15M	256QAM	1	0	18.07	18.03	18.01
		1	37	17.98	17.95	17.91
		1	74	17.68	18.05	18.02
		36	0	17.72	18.11	17.91
		36	19	17.73	17.99	17.79
		36	39	17.74	17.98	17.94
		75	0	17.68	17.96	17.75

Full Conducted Output Power (dBm/20MHz)

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55340	55990	56640
		Frequency (MHz)		3560	3625	3690
20M	QPSK	1	0	22.92	23.06	22.96
		1	50	22.91	22.98	22.92
		1	99	22.81	22.95	22.85
		50	0	21.93	22.11	22.03
		50	25	21.93	22.06	21.93
		50	50	21.90	22.03	21.93
		100	0	21.89	22.01	21.91
20M	16QAM	1	0	22.09	22.17	22.09
		1	50	21.99	22.14	22.03
		1	99	22.04	22.11	22.04
		50	0	21.01	21.15	21.03
		50	25	20.96	21.13	21.06
		50	50	21.02	21.08	21.06
		100	0	20.87	21.05	20.88
20M	64QAM	1	0	20.82	21.12	20.92
		1	50	20.93	21.08	20.94
		1	99	20.87	21.04	20.96
		50	0	19.91	20.15	19.99
		50	25	19.97	20.12	20.03
		50	50	19.97	20.08	20.01
		100	0	19.93	20.04	20.01
20M	256QAM	1	0	18.21	18.36	18.25
		1	50	18.14	18.32	18.24
		1	99	18.10	18.27	18.18
		50	0	18.12	18.23	18.16
		50	25	18.01	18.18	18.11
		50	50	18.08	18.15	18.10
		100	0	17.90	18.10	17.94

Full Conducted Output Power (dBm/15MHz)

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55315	55990	56665
		Frequency (MHz)		3557.5	3625	3692.5
15M	QPSK	1	0	22.84	23.00	22.95
		1	37	22.81	22.91	22.84
		1	74	22.81	22.92	22.82
		36	0	21.85	22.05	22.02
		36	19	21.85	21.98	21.85
		36	39	21.90	21.99	21.83
		75	0	21.89	21.91	21.90
15M	16QAM	1	0	22.05	22.07	22.05
		1	37	21.99	22.04	22.02
		1	74	22.01	22.08	22.02
		36	0	20.95	21.14	20.99
		36	19	20.96	21.12	21.05
		36	39	20.93	21.07	20.98
		75	0	20.85	21.01	20.87
15M	64QAM	1	0	20.81	21.12	20.85
		1	37	20.83	21.05	20.87
		1	74	20.83	21.03	20.93
		36	0	19.82	20.10	19.92
		36	19	19.93	20.03	19.94
		36	39	19.89	20.08	19.92
		75	0	19.88	20.03	19.95
15M	256QAM	1	0	18.20	18.28	18.19
		1	37	18.08	18.28	18.15
		1	74	18.01	18.24	18.15
		36	0	18.04	18.22	18.16
		36	19	17.95	18.16	18.04
		36	39	17.98	18.09	18.04
		75	0	17.88	18.02	17.91

Full Conducted Output Power (dBm/10MHz)

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55290	55990	56690
		Frequency (MHz)		3555	3625	3695
10M	QPSK	1	0	22.89	22.97	22.96
		1	24	22.81	22.90	22.82
		1	49	22.81	22.89	22.85
		25	0	21.93	22.04	22.00
		25	12	21.90	22.04	21.91
		25	25	21.90	21.98	21.86
		50	0	21.83	21.99	21.86
10M	16QAM	1	0	22.01	22.15	22.02
		1	24	21.96	22.04	21.96
		1	49	21.97	22.04	21.98
		25	0	20.93	21.14	20.99
		25	12	20.92	21.09	20.96
		25	25	21.02	21.05	20.96
		50	0	20.84	20.95	20.87
10M	64QAM	1	0	20.82	21.05	20.84
		1	24	20.86	21.00	20.91
		1	49	20.81	20.94	20.89
		25	0	19.84	20.11	19.98
		25	12	19.90	20.04	19.98
		25	25	19.91	19.98	19.94
		50	0	19.86	20.03	19.93
10M	256QAM	1	0	18.14	18.35	18.22
		1	24	18.04	18.22	18.19
		1	49	18.00	18.23	18.09
		25	0	18.04	18.22	18.12
		25	12	18.01	18.09	18.04
		25	25	18.02	18.11	18.07
		50	0	17.82	18.06	17.88

Full Conducted Output Power (dBm/5MHz)

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55265	55990	56715
		Frequency (MHz)		3552.5	3625	3697.5
5M	QPSK	1	0	22.88	23.03	22.92
		1	12	22.87	22.90	22.82
		1	24	22.81	22.91	22.84
		12	0	21.92	22.02	22.02
		12	6	21.92	22.05	21.90
		12	13	21.87	22.01	21.89
		25	0	21.84	21.96	21.83
5M	16QAM	1	0	22.05	22.12	22.01
		1	12	21.95	22.11	21.98
		1	24	21.99	22.06	22.04
		12	0	20.93	21.10	21.02
		12	6	20.91	21.07	20.99
		12	13	20.94	21.03	20.98
		25	0	20.87	20.97	20.87
5M	64QAM	1	0	20.83	21.11	20.85
		1	12	20.90	21.08	20.88
		1	24	20.82	21.01	20.86
		12	0	19.81	20.09	19.95
		12	6	19.96	20.03	20.01
		12	13	19.90	19.99	19.92
		25	0	19.85	19.94	20.01
5M	256QAM	1	0	18.19	18.36	18.16
		1	12	18.06	18.31	18.15
		1	24	18.06	18.27	18.11
		12	0	18.10	18.16	18.16
		12	6	17.92	18.12	18.11
		12	13	17.99	18.11	18.06
		25	0	17.89	18.07	17.88

EIRP Power (dBm)

LTE Band 42						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		43190	43340	43490
		Frequency (MHz)		3560	3575	3590
20M	QPSK	1	0	21.50	21.59	21.65
		1	50	21.49	21.57	21.62
		1	99	21.47	21.55	21.59
		50	0	20.67	20.71	20.76
		50	25	20.59	20.62	20.72
		50	50	20.57	20.66	20.70
		100	0	20.58	20.59	20.68
20M	16QAM	1	0	20.75	20.80	20.87
		1	50	20.70	20.74	20.78
		1	99	20.60	20.65	20.70
		50	0	19.73	19.78	19.79
		50	25	19.63	19.71	19.75
		50	50	19.62	19.64	19.72
		100	0	19.64	19.66	19.68
20M	64QAM	1	0	19.62	19.64	19.72
		1	50	19.59	19.67	19.68
		1	99	19.51	19.52	19.62
		50	0	18.69	18.69	18.79
		50	25	18.65	18.67	18.77
		50	50	18.56	18.63	18.73
		100	0	18.49	18.59	18.69
20M	256QAM	1	0	16.66	16.75	16.78
		1	50	16.65	16.72	16.72
		1	99	16.56	16.59	16.68
		50	0	16.54	16.62	16.64
		50	25	16.48	16.57	16.60
		50	50	16.45	16.48	16.56
		100	0	16.47	16.47	16.54

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi).

LTE Band 42						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		43165	43340	43515
		Frequency (MHz)		3557.5	3575	3592.5
15M	QPSK	1	0	21.50	21.56	21.55
		1	37	21.48	21.50	21.61
		1	74	21.46	21.45	21.57
		36	0	20.65	20.69	20.72
		36	19	20.58	20.58	20.67
		36	39	20.55	20.61	20.62
		75	0	20.49	20.50	20.60
15M	16QAM	1	0	20.67	20.70	20.82
		1	37	20.65	20.68	20.77
		1	74	20.56	20.61	20.63
		36	0	19.67	19.69	19.69
		36	19	19.55	19.70	19.73
		36	39	19.58	19.58	19.64
		75	0	19.56	19.62	19.58
15M	64QAM	1	0	19.53	19.64	19.62
		1	37	19.57	19.62	19.63
		1	74	19.47	19.51	19.60
		36	0	18.65	18.69	18.72
		36	19	18.60	18.66	18.75
		36	39	18.53	18.58	18.73
		75	0	18.45	18.50	18.66
15M	256QAM	1	0	16.58	16.70	16.75
		1	37	16.65	16.63	16.69
		1	74	16.48	16.50	16.60
		36	0	16.50	16.62	16.61
		36	19	16.48	16.52	16.59
		36	39	16.45	16.46	16.51
		75	0	16.45	16.45	16.47

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi).

LTE Band 42						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		43140	43340	43540
		Frequency (MHz)		3555	3575	3595
10M	QPSK	1	0	21.52	21.54	21.63
		1	24	21.49	21.50	21.58
		1	49	21.47	21.46	21.49
		25	0	20.64	20.63	20.68
		25	12	20.49	20.55	20.63
		25	25	20.50	20.66	20.68
		50	0	20.57	20.49	20.59
10M	16QAM	1	0	20.71	20.76	20.85
		1	24	20.60	20.64	20.68
		1	49	20.58	20.57	20.61
		25	0	19.63	19.73	19.74
		25	12	19.57	19.63	19.69
		25	25	19.57	19.59	19.68
		50	0	19.55	19.65	19.66
10M	64QAM	1	0	19.59	19.54	19.69
		1	24	19.51	19.60	19.65
		1	49	19.45	19.50	19.56
		25	0	18.65	18.63	18.70
		25	12	18.65	18.66	18.77
		25	25	18.48	18.59	18.72
		50	0	18.47	18.50	18.61
10M	256QAM	1	0	16.59	16.74	16.68
		1	24	16.57	16.65	16.62
		1	49	16.51	16.52	16.67
		25	0	16.46	16.61	16.60
		25	12	16.48	16.48	16.59
		25	25	16.46	16.45	16.54
		50	0	16.46	16.45	16.54

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi).

LTE Band 42						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		43115	43340	43565
		Frequency (MHz)		3552.5	3575	3597.5
5M	QPSK	1	0	21.49	21.49	21.63
		1	12	21.48	21.51	21.62
		1	24	21.45	21.54	21.59
		12	0	20.61	20.62	20.67
		12	6	20.49	20.61	20.67
		12	13	20.49	20.64	20.61
		25	0	20.48	20.51	20.61
5M	16QAM	1	0	20.71	20.76	20.79
		1	12	20.63	20.71	20.76
		1	24	20.54	20.57	20.67
		12	0	19.66	19.71	19.73
		12	6	19.58	19.61	19.67
		12	13	19.59	19.64	19.64
		25	0	19.62	19.64	19.65
5M	64QAM	1	0	19.54	19.60	19.66
		1	12	19.53	19.60	19.60
		1	24	19.45	19.45	19.54
		12	0	18.65	18.66	18.74
		12	6	18.65	18.63	18.74
		12	13	18.52	18.57	18.65
		25	0	18.48	18.57	18.60
5M	256QAM	1	0	16.64	16.68	16.78
		1	12	16.65	16.64	16.62
		1	24	16.53	16.52	16.58
		12	0	16.47	16.62	16.56
		12	6	16.45	16.52	16.54
		12	13	16.47	16.48	16.50
		25	0	16.46	16.46	16.50

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi).

Maximum EIRP (dBm/10MHz)

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55340	55990	56640
		Frequency (MHz)		3560	3625	3690
20M	QPSK	1	0	21.50	21.53	21.34
		1	50	21.40	21.45	21.48
		1	99	21.29	21.57	21.31
		50	0	20.49	20.49	20.53
		50	25	20.49	20.68	20.43
		50	50	20.38	20.62	20.49
		100	0	20.51	20.50	20.43
20M	16QAM	1	0	20.65	20.81	20.74
		1	50	20.59	20.63	20.61
		1	99	20.56	20.75	20.67
		50	0	19.53	19.52	19.48
		50	25	19.60	19.61	19.63
		50	50	19.46	19.50	19.47
		100	0	19.54	19.51	19.35
20M	64QAM	1	0	19.42	19.59	19.48
		1	50	19.35	19.56	19.38
		1	99	19.35	19.60	19.51
		50	0	18.58	18.58	18.56
		50	25	18.42	18.50	18.44
		50	50	18.50	18.63	18.41
		100	0	18.39	18.50	18.52
20M	256QAM	1	0	16.67	16.75	16.66
		1	50	16.78	16.97	16.82
		1	99	16.54	16.69	16.79
		50	0	16.74	16.78	16.63
		50	25	16.56	16.79	16.75
		50	50	16.56	16.69	16.76
		100	0	16.45	16.48	16.58

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi).

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55315	55990	56665
		Frequency (MHz)		3557.5	3625	3692.5
15M	QPSK	1	0	21.31	21.48	21.50
		1	37	21.21	21.57	21.27
		1	74	21.30	21.50	21.36
		36	0	20.25	20.45	20.55
		36	19	20.26	20.37	20.48
		36	39	20.48	20.40	20.42
		75	0	20.33	20.52	20.35
15M	16QAM	1	0	20.72	20.63	20.50
		1	37	20.41	20.58	20.54
		1	74	20.45	20.59	20.65
		36	0	19.57	19.60	19.38
		36	19	19.40	19.66	19.42
		36	39	19.57	19.44	19.53
		75	0	19.28	19.54	19.54
15M	64QAM	1	0	19.47	19.64	19.28
		1	37	19.34	19.53	19.46
		1	74	19.27	19.45	19.30
		36	0	18.23	18.72	18.29
		36	19	18.56	18.45	18.32
		36	39	18.30	18.66	18.56
		75	0	18.37	18.65	18.32
15M	256QAM	1	0	16.77	16.73	16.71
		1	37	16.68	16.65	16.61
		1	74	16.38	16.75	16.72
		36	0	16.42	16.81	16.61
		36	19	16.43	16.69	16.49
		36	39	16.44	16.68	16.64
		75	0	16.38	16.66	16.45

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi).

Full EIRP (dBm/20MHz)

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55340	55990	56640
		Frequency (MHz)		3560	3625	3690
20M	QPSK	1	0	21.62	21.76	21.66
		1	50	21.61	21.68	21.62
		1	99	21.51	21.65	21.55
		50	0	20.63	20.81	20.73
		50	25	20.63	20.76	20.63
		50	50	20.60	20.73	20.63
		100	0	20.59	20.71	20.61
20M	16QAM	1	0	20.79	20.87	20.79
		1	50	20.69	20.84	20.73
		1	99	20.74	20.81	20.74
		50	0	19.71	19.85	19.73
		50	25	19.66	19.83	19.76
		50	50	19.72	19.78	19.76
		100	0	19.57	19.75	19.58
20M	64QAM	1	0	19.52	19.82	19.62
		1	50	19.63	19.78	19.64
		1	99	19.57	19.74	19.66
		50	0	18.61	18.85	18.69
		50	25	18.67	18.82	18.73
		50	50	18.67	18.78	18.71
		100	0	18.63	18.74	18.71
20M	256QAM	1	0	16.91	17.06	16.95
		1	50	16.84	17.02	16.94
		1	99	16.80	16.97	16.88
		50	0	16.82	16.93	16.86
		50	25	16.71	16.88	16.81
		50	50	16.78	16.85	16.80
		100	0	16.60	16.80	16.64

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi).

Full EIRP (dBm/15MHz)

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55315	55990	56665
		Frequency (MHz)		3557.5	3625	3692.5
15M	QPSK	1	0	21.54	21.70	21.65
		1	37	21.51	21.61	21.54
		1	74	21.51	21.62	21.52
		36	0	20.55	20.75	20.72
		36	19	20.55	20.68	20.55
		36	39	20.60	20.69	20.53
		75	0	20.59	20.61	20.60
15M	16QAM	1	0	20.75	20.77	20.75
		1	37	20.69	20.74	20.72
		1	74	20.71	20.78	20.72
		36	0	19.65	19.84	19.69
		36	19	19.66	19.82	19.75
		36	39	19.63	19.77	19.68
		75	0	19.55	19.71	19.57
15M	64QAM	1	0	19.51	19.82	19.55
		1	37	19.53	19.75	19.57
		1	74	19.53	19.73	19.63
		36	0	18.52	18.80	18.62
		36	19	18.63	18.73	18.64
		36	39	18.59	18.78	18.62
		75	0	18.58	18.73	18.65
15M	256QAM	1	0	16.90	16.98	16.89
		1	37	16.78	16.98	16.85
		1	74	16.71	16.94	16.85
		36	0	16.74	16.92	16.86
		36	19	16.65	16.86	16.74
		36	39	16.68	16.79	16.74
		75	0	16.58	16.72	16.61

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi).

Full EIRP (dBm/10MHz)

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55290	55990	56690
		Frequency (MHz)		3555	3625	3695
10M	QPSK	1	0	21.59	21.67	21.66
		1	24	21.51	21.60	21.52
		1	49	21.51	21.59	21.55
		25	0	20.63	20.74	20.70
		25	12	20.60	20.74	20.61
		25	25	20.60	20.68	20.56
		50	0	20.53	20.69	20.56
10M	16QAM	1	0	20.71	20.85	20.72
		1	24	20.66	20.74	20.66
		1	49	20.67	20.74	20.68
		25	0	19.63	19.84	19.69
		25	12	19.62	19.79	19.66
		25	25	19.72	19.75	19.66
		50	0	19.54	19.65	19.57
10M	64QAM	1	0	19.52	19.75	19.54
		1	24	19.56	19.70	19.61
		1	49	19.51	19.64	19.59
		25	0	18.54	18.81	18.68
		25	12	18.60	18.74	18.68
		25	25	18.61	18.68	18.64
		50	0	18.56	18.73	18.63
10M	256QAM	1	0	16.84	17.05	16.92
		1	24	16.74	16.92	16.89
		1	49	16.70	16.93	16.79
		25	0	16.74	16.92	16.82
		25	12	16.71	16.79	16.74
		25	25	16.72	16.81	16.77
		50	0	16.52	16.76	16.58

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi).

Full EIRP (dBm/5MHz)

LTE Band 48						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55265	55990	56715
		Frequency (MHz)		3552.5	3625	3697.5
5M	QPSK	1	0	21.58	21.73	21.62
		1	12	21.57	21.60	21.52
		1	24	21.51	21.61	21.54
		12	0	20.62	20.72	20.72
		12	6	20.62	20.75	20.60
		12	13	20.57	20.71	20.59
		25	0	20.54	20.66	20.53
5M	16QAM	1	0	20.75	20.82	20.71
		1	12	20.65	20.81	20.68
		1	24	20.69	20.76	20.74
		12	0	19.63	19.80	19.72
		12	6	19.61	19.77	19.69
		12	13	19.64	19.73	19.68
		25	0	19.57	19.67	19.57
5M	64QAM	1	0	19.53	19.81	19.55
		1	12	19.60	19.78	19.58
		1	24	19.52	19.71	19.56
		12	0	18.51	18.79	18.65
		12	6	18.66	18.73	18.71
		12	13	18.60	18.69	18.62
		25	0	18.55	18.64	18.71
5M	256QAM	1	0	16.89	17.06	16.86
		1	12	16.76	17.01	16.85
		1	24	16.76	16.97	16.81
		12	0	16.80	16.86	16.86
		12	6	16.62	16.82	16.81
		12	13	16.69	16.81	16.76
		25	0	16.59	16.77	16.58

*EIRP (dBm) = Conducted Output Power (dBm) + Antenna Gain (dBi).

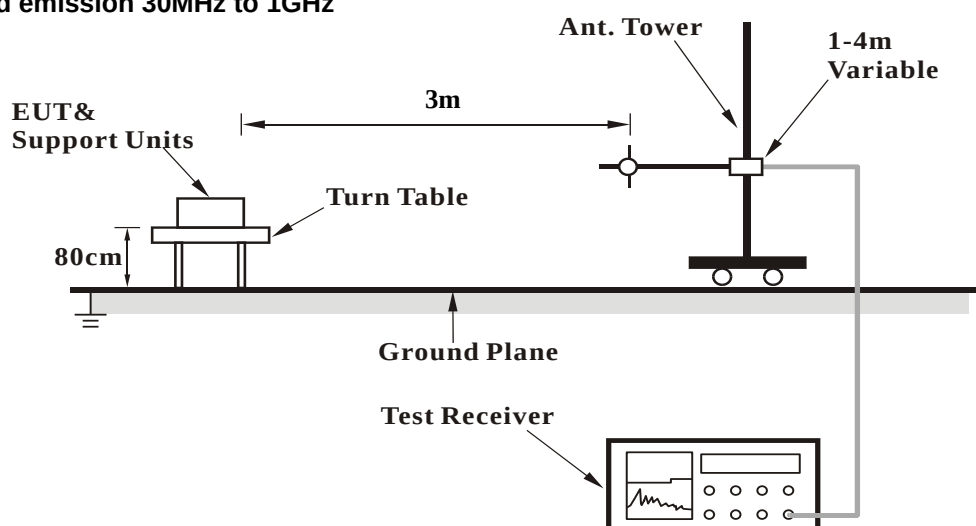
4.2 Radiated Emission Measurement

4.2.1 Limits of Radiated Emission Measurement

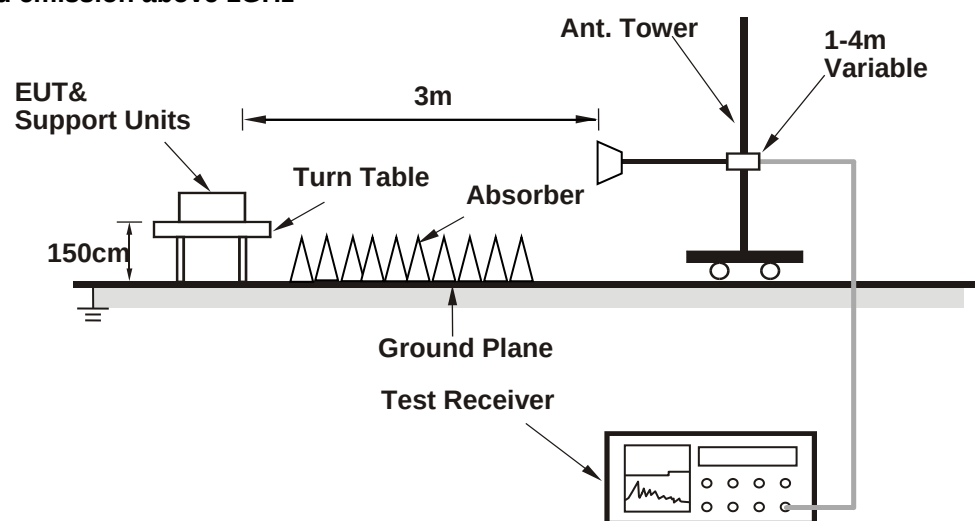
The power of any emissions below 3530 MHz or above 3720 MHz shall not exceed -40dBm/MHz .

4.2.2 Test Set Up

For radiated emission 30MHz to 1GHz



For radiated emission above 1GHz



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

4.2.3 Test Instruments

Description & Manufacturer	Model no.	Serial No.	Calibrated Date	Calibrated Until
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
Test Receiver KEYSIGHT	N9038A	MY55420137	Apr. 27, 2022	Apr. 26, 2023
Spectrum Analyzer R&S	FSW43	101867	Jan. 07, 2022	Jan. 06, 2023
Loop Antenna TESEQ	HLA 6121	45745	Jul. 27, 2022	Jul. 26, 2023
Loop Antenna EMCI	EM-6879	269	Sep. 19, 2022	Sep. 18, 2023
Pre-amplifier EMCI	EMC001340	980201	Sep. 23, 2022	Sep. 22, 2023
RF Coaxial Cable EMCI	5D-NM-BM	140903+140902	Jan. 15, 2022	Jan. 14, 2023
Preamplifier Agilent	8447D	2944A10638	May 14, 2022	May 13, 2023
Bi_Log Antenna Schwarzbeck	VULB9168	9168-160	Oct. 20, 2022	Oct. 19, 2023
RF Coaxial Cable WOKEN	8D-FB	Cable-CH9-01	May 14, 2022	May 13, 2023
Horn Antenna Schwarzbeck	9120D	9120D-1169	Nov. 13, 2022	Nov. 12, 2023
Preamplifier Agilent	8449B	3008A02367	Feb. 16, 2022	Feb. 15, 2023
RF Coaxial Cable HUBER+SUHNER&EMCI	SUCOFLEX 104& EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	Jan. 15, 2022	Jan. 14, 2023
RF Coaxial Cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9- (250795/4)	Jan. 15, 2022	Jan. 14, 2023
RF FLITER MICRO-TRONICS	BRM50716	060	Jan. 10, 2022	Jan. 09, 2023
RF FLITER MICRO-TRONICS	BRM17690	004	Jan. 10, 2022	Jan. 09, 2023
Boresight antenna tower fixture BV	BAF-02	5	NA	NA
Pre-Amplifier EMCI	EMC 184045	980116	Oct. 01, 2022	Sep. 30, 2023
Horn Antenna Schwarzbeck	BBHA 9170	9170-480	Nov. 13, 2022	Nov. 12, 2023
Horn Antenna Schwarzbeck	BBHA 9170	BBHA9170243	Nov. 13, 2022	Nov. 12, 2023
RF Coaxial Cable EMCI	EMC102-KM-KM-3000	150929	Jul. 09, 2022	Jul. 08, 2023
RF Coaxial Cable EMCI	EMC102-KM-KM-600	150928	Jul. 09, 2022	Jul. 08, 2023
Boresight antenna tower fixture BV	BAF-02	5	NA	NA
Radio Communication Analyzer Anritsu	MT8821C	6201462755	Mar. 03, 2022	Mar. 02, 2023

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HY - 966 chamber 4.

4.2.4 Test Procedures

- a. 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 height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- c. Perform a field strength measurement and record the worse read value, is the field strength value via a spectrum reading obtained corrected for antenna factor, cable loss and pre-amplifier factor and then mathematically convert the measured field strength level to EIRP/ERP level.
- d. Following C63.26 section 5.5 and 5.2.7.
$$\text{EIRP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 20\log(D) - 104.8;$$
 where D is the measurement distance (in the far field region) in m.
$$\text{ERP (dBm)} = E \text{ (dB}\mu\text{V/m)} + 20\log(D) - 104.8 - 2.15;$$
 where D is the measurement distance (in the far field region) in m.

Note:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

4.2.5 Deviation from Test Standard

No deviation.

4.2.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.2.7 Test Results

Below 1GHz

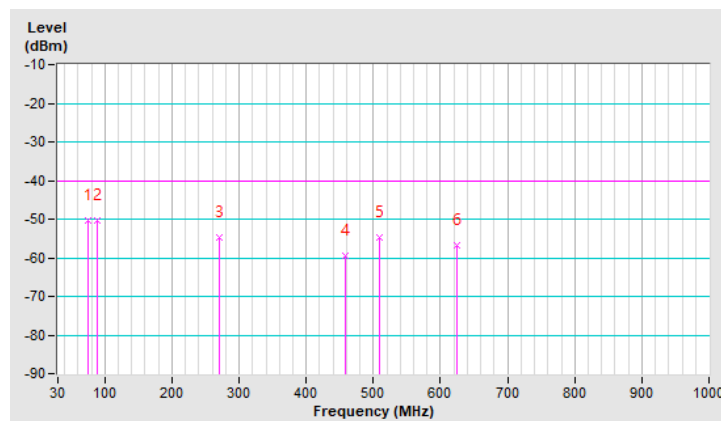
LTE Band 42, Channel Bandwidth 20MHz

Mode	TX channel 43190 (3560.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	75.59	-50.45	-40.00	-10.45	1.00 H	281	57.24	-107.69
2	88.20	-50.36	-40.00	-10.36	2.00 H	221	59.65	-110.01
3	269.59	-54.85	-40.00	-14.85	1.00 H	247	48.35	-103.20
4	458.74	-59.62	-40.00	-19.62	2.00 H	160	38.94	-98.56
5	509.18	-54.68	-40.00	-14.68	1.50 H	192	42.94	-97.62
6	624.61	-56.62	-40.00	-16.62	1.00 H	129	38.61	-95.23

Remarks:

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

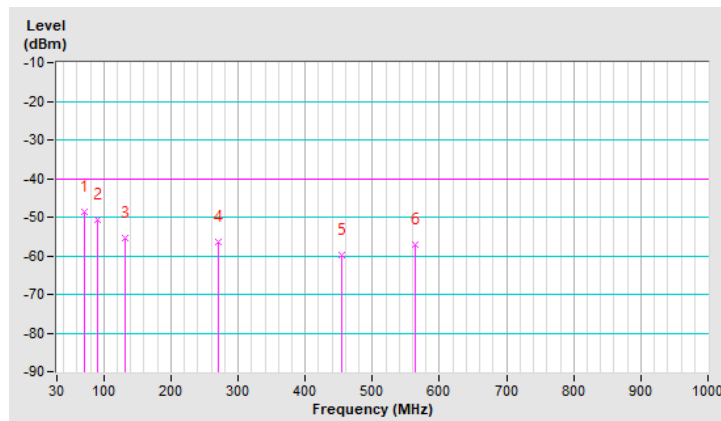


Mode	TX channel 43190 (3560.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	70.74	-48.54	-40.00	-8.54	1.00 V	18	57.95	-106.49
2	91.11	-50.84	-40.00	-10.84	1.50 V	95	59.11	-109.95
3	130.88	-55.59	-40.00	-15.59	1.50 V	132	49.82	-105.41
4	269.59	-56.30	-40.00	-16.30	1.00 V	160	46.90	-103.20
5	454.86	-59.97	-40.00	-19.97	1.00 V	100	38.61	-98.58
6	564.47	-57.02	-40.00	-17.02	1.50 V	160	39.68	-96.70

Remarks:

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



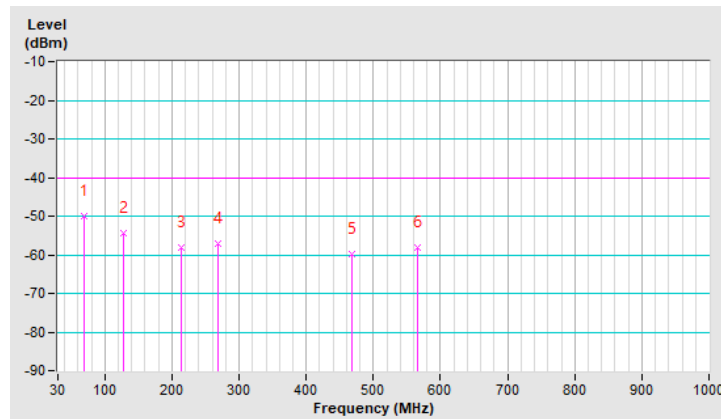
LTE Band 48, Channel Bandwidth 5MHz

Mode	TX channel 55265 (3552.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	69.77	-50.12	-40.00	-10.12	1.50 H	92	56.19	-106.31
2	127.00	-54.50	-40.00	-14.50	1.00 H	40	51.38	-105.88
3	213.33	-58.03	-40.00	-18.03	1.50 H	255	48.50	-106.53
4	268.62	-57.00	-40.00	-17.00	2.00 H	160	46.28	-103.28
5	468.44	-59.94	-40.00	-19.94	1.00 H	208	38.45	-98.39
6	566.41	-58.11	-40.00	-18.11	1.00 H	234	38.57	-96.68

Remarks:

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

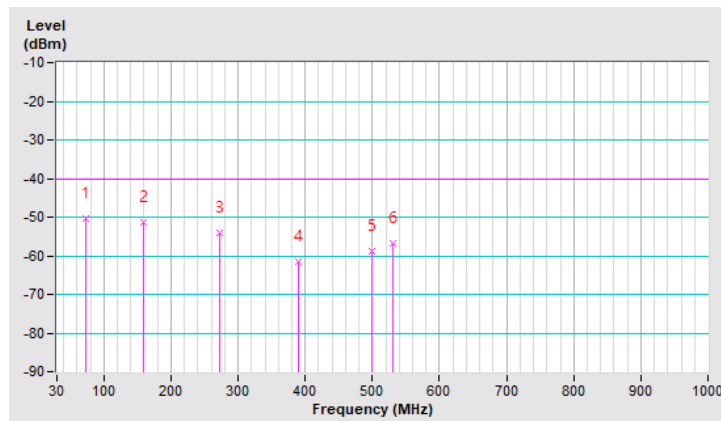


Mode	TX channel 55265 (3552.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	73.65	-50.35	-40.00	-10.35	1.00 V	208	56.91	-107.26
2	159.01	-51.24	-40.00	-11.24	2.00 V	148	52.66	-103.90
3	271.53	-54.05	-40.00	-14.05	1.00 V	350	49.04	-103.09
4	388.90	-61.61	-40.00	-21.61	1.50 V	250	38.78	-100.39
5	498.51	-58.89	-40.00	-18.89	1.00 V	264	39.03	-97.92
6	530.52	-56.84	-40.00	-16.84	1.50 V	164	40.39	-97.23

Remarks:

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



Above 1GHz

LTE Band 42, Channel Bandwidth 5MHz

Mode	TX channel 43115 (3552.5MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7105.00	-41.87	-40.00	-1.87	3.26 H	129	42.57	-84.44
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7105.00	-40.57	-40.00	-0.57	2.58 V	273	43.87	-84.44

Remarks:

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

Mode	TX channel 43340 (3575.0MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7150.00	-41.50	-40.00	-1.50	3.23 H	132	42.97	-84.47
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7150.00	-41.40	-40.00	-1.40	2.53 V	274	43.07	-84.47

Remarks:

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

Mode	TX channel 43565 (3597.5MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7195.00	-41.56	-40.00	-1.56	3.25 H	136	42.72	-84.28
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7195.00	-40.85	-40.00	-0.85	2.58 V	277	43.43	-84.28

Remarks:

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

LTE Band 42, Channel Bandwidth 20MHz

Mode	TX channel 43190 (3560.0MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7120.00	-42.00	-40.00	-2.00	3.25 H	133	42.45	-84.45
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7120.00	-40.30	-40.00	-0.30	2.49 V	272	44.15	-84.45

Remarks:

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

Mode	TX channel 43340 (3575.00MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7150.00	-41.40	-40.00	-1.40	3.29 H	139	43.07	-84.47
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7150.00	-40.89	-40.00	-0.89	2.48 V	270	43.58	-84.47

Remarks:

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

Mode	TX channel 43490 (3590.00MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Adair Peng		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7180.00	-41.27	-40.00	-1.27	3.39 H	134	43.08	-84.35
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7180.00	-40.40	-40.00	-0.40	2.52 V	273	43.95	-84.35

Remarks:

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

LTE Band 48, Channel Bandwidth 5MHz

Mode	TX channel 55265 (3552.5MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7105.00	-42.97	-40.00	-2.97	1.65 H	248	41.47	-84.44
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7105.00	-40.54	-40.00	-0.54	1.93 V	19	43.90	-84.44

Remarks:

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

Mode	TX channel 55990 (3625.0MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7250.00	-42.45	-40.00	-2.45	1.71 H	249	41.66	-84.11
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7250.00	-40.94	-40.00	-0.94	1.91 V	19	43.17	-84.11

Remarks:

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

Mode	TX channel 56715 (3697.5MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7395.00	-41.85	-40.00	-1.85	1.73 H	246	42.10	-83.95
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7395.00	-40.93	-40.00	-0.93	1.98 V	22	43.02	-83.95

Remarks:

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

LTE Band 48, Channel Bandwidth 20MHz

Mode	TX channel 55340 (3560.0MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7120.00	-42.37	-40.00	-2.37	1.68 H	251	42.08	-84.45
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7120.00	-41.52	-40.00	-1.52	1.91 V	17	42.93	-84.45

Remarks:

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

Mode	TX channel 55990 (3625.00MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7250.00	-41.79	-40.00	-1.79	1.65 H	244	42.32	-84.11
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7250.00	-40.77	-40.00	-0.77	1.96 V	19	43.34	-84.11

Remarks:

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

Mode	TX channel 56640 (3690.00MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	23deg. C, 67%RH	Input Power	120Vac, 60Hz (System)
Tested By	Rex Wang		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7380.00	-42.00	-40.00	-2.00	1.64 H	248	41.98	-83.98
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	7380.00	-40.84	-40.00	-0.84	1.91 V	20	43.14	-83.98

Remarks:

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

5 Pictures of Test Arrangements

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

Appendix – Information of the Testing Laboratories

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