

FCC Test Report (ENDC: n5 + LTE B2/B48/B66)

Report No.: RFBFJZ-WTW-P21050403-13

FCC ID: V65C6930

Test Model: C6930

Received Date: May 18, 2021

Test Date: Jun. 24 ~ Aug. 06, 2021

Issued Date: Aug. 10, 2021

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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FCC Registration / 788550 / TW0003
Designation Number:



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Release Control Record

Issue No.	Description	Date Issued
RFBFJZ-WTW-P21050403-13	Original release	Aug. 10, 2021

1 Certificate of Conformity

Product: SmartPhone

Brand: Kyocera

Test Model: C6930

Sample Status: Engineering sample

Applicant: Kyocera Corporation c/o Kyocera International, Inc.

Test Date: Jun. 24 ~ Aug. 06, 2021

Standards: FCC Part 22, Subpart H
FCC Part 24, Subpart E
FCC Part 27, Subpart C, L
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 : Pettie Chen, **Date:** Aug. 10, 2021
Pettie Chen / Senior Specialist

Approved by : Bruce Chen, **Date:** Aug. 10, 2021
Bruce Chen / Senior Engineer

2 Summary of Test Results

For n5

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	Pass	Meet the requirement
22.913 (d)	Peak To Average Ratio	Pass	Meet the requirement of limit.
2.1055 22.355	Frequency Stability	Pass	Meet the requirement of limit.
2.1049	Occupied Bandwidth	Pass	Meet the requirement of limit.
22.917	Band Edge Measurements	Pass	Meet the requirement of limit.
2.1051 22.917	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
2.1053 22.917	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -28.93dB at 65.89MHz.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 2

Applied Standard: FCC Part 24 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 24.232	Effective Isotropically Radiated Power	Pass	Meet the requirement of limit.
2.1046 24.232 (d)	Peak To Average Ratio	Pass	Refer to Note 1
2.1047	Modulation Characteristics	Pass	Refer to Note 1
2.1055 24.235	Frequency Stability	Pass	Refer to Note 1
2.1049	Occupied Bandwidth	Pass	Refer to Note 1
24.238	Band Edge Measurements	Pass	Refer to Note 1
2.1051 24.238	Conducted Spurious Emissions	Pass	Refer to Note 1
2.1053 24.238	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -34.84dB at 3815.00MHz.

Note:

1. This report is a partial report. Therefore, only test item of Transmitter Output Power and Effective Isotropically Radiated Power and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer to BV CPS report no.: RFBFJZ-WTW-P21050403-9.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 66

FCC Part 27 & Part 2			
FCC Clause	Test Item	Result	Remarks
2.1046 27.50(d)	Equivalent Isotropically radiated power	Pass	Meet the requirement of limit.
2.1047	Modulation characteristics	Pass	Refer to Note 1
2.1055 27.54	Frequency Stability	Pass	Refer to Note 1
2.1049	Emission Bandwidth	Pass	Refer to Note 1
2.1051 27.53(h)	Channel Edge Measurements	Pass	Refer to Note 1
27.50(d)(5)	Peak To Average Ratio	Pass	Refer to Note 1
2.1051 27.53(h)	Conducted Spurious Emissions	Pass	Refer to Note 1
2.1053 27.53(h)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -30.10dB at 33.88MHz.

Note:

1. This report is a partial report. Therefore, only test item of Transmitter Output Power and Equivalent Isotropically Radiated Power / Equivalent Radiated Power and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer to BV CPS report no.: RFBFJZ-WTW-P21050403-10.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 48

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.
2.1046 96.41(b)	Maximum Power Spectral Density	Pass	Refer to Note 1
96.41(g)	Peak to Average Ration	Pass	Refer to Note 1
2.1049	Emission Bandwidth	Pass	Refer to Note 1
2.1055	Frequency Stability	Pass	Refer to Note 1
2.1051 96.41(e)	Conducted Spurious Emissions	Pass	Refer to Note 1
2.1053 96.41(e)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -3.64dB at 7395.00MHz.

Note:

1. This report is a partial report. Therefore, only test item of Maximum Peak Output Power and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer to BV CPS report no.: RFBFJZ-WTW-P21050403-11.
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) (±)
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.59 dB
	200MHz ~1000MHz	3.60 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Test Site and Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	Apr. 09, 2021	Apr. 08, 2022
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Jun. 10, 2021	Jun. 09, 2022
Spectrum Analyzer ROHDE & SCHWARZ	FSW43	101866	Dec. 14, 2020	Dec. 13, 2021
MXG Vector signal generator Agilent	N5182B	MY53050430	Nov. 25, 2020	Nov. 24, 2021
Radio Communication Analyzer Anritsu	MT8821C	6261806803	Jan. 22, 2021	Jan. 21, 2022
Universal Radio Communication Tester R&S	CMU200	101095	Nov. 18, 2020	Nov. 17, 2021
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-969	Nov. 22, 2020	Nov. 21, 2021
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-SM80 00	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 EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	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
Standard Temperature And Humidity Chamber GIANT FORCE	GTH-120-40-CP-A R	MAA1306-019	Sep. 10, 2020	Sep. 09, 2021
5G Wireless Test Platforms Keysight	E7515B	MY60102114	May 21, 2021	May 20, 2022

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
JFW 20dB attenuation	50HF-020-SMA	NA	NA	NA
True RMS Clamp Meter Fluke	325	31130711WS	Jun. 02, 2021	Jun. 01, 2022
DC power supply Keysight	U8002A	MY56330015	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	SmartPhone
Brand	Kyocera
Test Model	C6930
Sample Status	Engineering sample
Power Supply Rating	3.87Vdc from battery 5Vdc / 9Vdc / 12Vdc from adapter

n5

Modulation Type	$\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM					
Waveform Type	CP-OFDM, DFT-s-OFDM					
Operating Frequency	n5 (Channel Bandwidth 5MHz)	826.5MHz ~ 846.5MHz				
	n5 (Channel Bandwidth 10MHz)	829.0MHz ~ 844.0MHz				
	n5 (Channel Bandwidth 15MHz)	831.5MHz ~ 841.5MHz				
	n5 (Channel Bandwidth 20MHz)	834.0MHz ~ 839.0MHz				
Max. ERP Power		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n5 (Channel Bandwidth 5MHz)	65.013mW (18.13dBm)	66.527mW (18.23dBm)	50.582mW (17.04dBm)	34.594mW (15.39dBm)	20.654mW (13.15dBm)
	n5 (Channel Bandwidth 10MHz)	64.863mW (18.12dBm)	66.527mW (18.23dBm)	51.050mW (17.08dBm)	34.435mW (15.37dBm)	20.559mW (13.13dBm)
	n5 (Channel Bandwidth 15MHz)	65.013mW (18.13dBm)	66.069mW (18.20dBm)	50.816mW (17.06dBm)	34.594mW (15.39dBm)	20.606mW (13.14dBm)
	n5 (Channel Bandwidth 20MHz)	65.917mW (18.19dBm)	66.681mW (18.24dBm)	51.050mW (17.08dBm)	34.834mW (15.42dBm)	20.701mW (13.16dBm)
Emission Designator		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n5 (Channel Bandwidth 5MHz)	4M47G7D	4M47G7D	4M47D7W	4M47D7W	4M47D7W
	n5 (Channel Bandwidth 10MHz)	9M22G7D	9M29G7D	9M29D7W	9M29D7W	9M29D7W
	n5 (Channel Bandwidth 15MHz)	14M0G7D	14M1G7D	14M1D7W	14M1D7W	14M1D7W
	n5 (Channel Bandwidth 20MHz)	18M8G7D	18M9G7D	18M9D7W	19M0D7W	19M0D7W

LTE Band

Modulation Type	QPSK, 16QAM, 64QAM, 256QAM			
Operating Frequency	LTE Band 2 (Channel Bandwidth 1.4MHz)	1850.7MHz ~ 1909.3MHz		
	LTE Band 2 (Channel Bandwidth 3MHz)	1851.5MHz ~ 1908.5MHz		
	LTE Band 2 (Channel Bandwidth 5MHz)	1852.5MHz ~ 1907.5MHz		
	LTE Band 2 (Channel Bandwidth 10MHz)	1855.0MHz ~ 1905.0MHz		
	LTE Band 2 (Channel Bandwidth 15MHz)	1857.5MHz ~ 1902.5MHz		
	LTE Band 2 (Channel Bandwidth 20MHz)	1860.0MHz ~ 1900.0MHz		
	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		
	LTE Band 66 (Channel Bandwidth 1.4MHz)	1710.7MHz ~ 1779.3MHz		
	LTE Band 66 (Channel Bandwidth 3MHz)	1711.5MHz ~ 1778.5MHz		
	LTE Band 66 (Channel Bandwidth 5MHz)	1712.5MHz ~ 1777.5MHz		
	LTE Band 66 (Channel Bandwidth 10MHz)	1715.0MHz ~ 1775.0MHz		
	LTE Band 66 (Channel Bandwidth 15MHz)	1717.5MHz ~ 1772.5MHz		
	LTE Band 66 (Channel Bandwidth 20MHz)	1720.0MHz ~ 1770.0MHz		
Max. EIRP Power		QPSK	16QAM	64QAM
		256QAM		
	LTE Band 2 (Channel Bandwidth 1.4MHz)	162.181mW (22.10dBm)	137.088mW (21.37dBm)	108.643mW (20.36dBm)
	LTE Band 2 (Channel Bandwidth 3MHz)	160.325mW (22.05dBm)	135.831mW (21.33dBm)	108.143mW (20.34dBm)
	LTE Band 2 (Channel Bandwidth 5MHz)	164.059mW (22.15dBm)	130.617mW (21.16dBm)	108.643mW (20.36dBm)
	LTE Band 2 (Channel Bandwidth 10MHz)	162.181mW (22.10dBm)	134.896mW (21.30dBm)	106.170mW (20.26dBm)
	LTE Band 2 (Channel Bandwidth 15MHz)	161.436mW (22.08dBm)	139.316mW (21.44dBm)	104.713mW (20.20dBm)
	LTE Band 2 (Channel Bandwidth 20MHz)	164.437mW (22.16dBm)	132.130mW (21.21dBm)	110.917mW (20.45dBm)
	LTE Band 48 (Full Power) (Channel Bandwidth 5MHz)	184.502mW (22.66dBm)	155.955mW (21.93dBm)	119.950mW (20.79dBm)
	LTE Band 48 (Full Power) (Channel Bandwidth 10MHz)	185.780mW (22.69dBm)	150.314mW (21.77dBm)	128.529mW (21.09dBm)
	LTE Band 48 (Full Power) (Channel Bandwidth 15MHz)	181.970mW (22.60dBm)	158.125mW (21.99dBm)	116.413mW (20.66dBm)
	LTE Band 48 (Full Power) (Channel Bandwidth 20MHz)	187.068mW (22.72dBm)	169.044mW (22.28dBm)	110.662mW (20.44dBm)
	LTE Band 48 (Per 10M) (Channel Bandwidth 5MHz)	184.502mW (22.66dBm)	155.955mW (21.93dBm)	119.950mW (20.79dBm)
	LTE Band 48 (Per 10M) (Channel Bandwidth 10MHz)	185.780mW (22.69dBm)	150.314mW (21.77dBm)	128.529mW (21.09dBm)
	LTE Band 48 (Per 10M) (Channel Bandwidth 15MHz)	176.604mW (22.47dBm)	152.757mW (21.84dBm)	112.980mW (20.53dBm)
	LTE Band 48 (Per 10M) (Channel Bandwidth 20MHz)	177.828mW (22.50dBm)	163.682mW (22.14dBm)	109.396mW (20.39dBm)

Max. EIRP Power	LTE Band 66 (Channel Bandwidth 1.4MHz)	362.243mW (25.59dBm)	301.301mW (24.79dBm)	209.411mW (23.21dBm)	112.202mW (20.50dBm)
	LTE Band 66 (Channel Bandwidth 3MHz)	353.997mW (25.49dBm)	287.740mW (24.59dBm)	213.304mW (23.29dBm)	127.644mW (21.06dBm)
	LTE Band 66 (Channel Bandwidth 5MHz)	331.131mW (25.20dBm)	289.068mW (24.61dBm)	208.930mW (23.20dBm)	122.462mW (20.88dBm)
	LTE Band 66 (Channel Bandwidth 10MHz)	353.183mW (25.48dBm)	302.691mW (24.81dBm)	208.449mW (23.19dBm)	116.681mW (20.67dBm)
	LTE Band 66 (Channel Bandwidth 15MHz)	359.749mW (25.56dBm)	299.226mW (24.76dBm)	207.014mW (23.16dBm)	118.850mW (20.75dBm)
	LTE Band 66 (Channel Bandwidth 20MHz)	363.915mW (25.61dBm)	313.329mW (24.96dBm)	212.814mW (23.28dBm)	117.490mW (20.70dBm)
Antenna Type	Refer to Note as below				
Antenna Connector	Refer to Note as below				
Accessory Device	Refer to Note as below				
Cable Supplied	Refer to Note as below				

Note:

1. The EUT contains following accessory devices.

Battery	
Brand	KYOCERA
Model	SCP-75LBPS
Rating	3.87 V typ / 4500 mAh/17.5 Wh typ

Adapter	
Brand	KYOCERA Corporation
Model	SCP-49ADT
Input Power	AC 100-240V, 50/60Hz 0.4A
Output Power	DC 5.0V, 1.8A / 9.0V, 1.8A / 12.0V, 1.2A

USB Cable	
Brand	KYOCERA Corporation
Model	SCP-24SDC
Signal Line	1m shielded Type A to Type C USB cable

2. The following antennas were provided to the EUT.

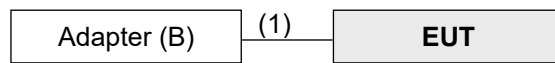
Band	Freq. Range (MHz)	Gain (dBi)
n5	826.5M ~ 846.5	-3.5 (Tx1)
LTE Band 2	1850.7 ~ 1909.3	-0.8 (Tx1), -1.3 (Tx2) (diversity)
LTE Band 48	3552.5 ~ 3697.5	-0.4 (Tx1), -0.4 (Tx2) (diversity)
LTE Band 66	1710.7 ~ 1779.3	2.3 (Tx1), -0.5 (Tx2) (diversity)

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

3. The EUT supports the following ENDC configuration.

5GNR	FCC 5G FR1			ENDC
	Band	SCS	Bandwidth (MHz)	
	n2	15kHz	5/10/15/20	Band 5/13
	n5	15kHz	5/10/15/20	Band 2/48/66
	n66	15kHz	5/10/15/20	Band 5/13
	n71	15kHz	5/10/15/20	Band 2/66

3.2 Configuration of System under Test



Remote site



3.2.1 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	5G Wireless Test Platforms	Keysight	E7515B	MY58300759	NA	-
B.	Adapter	KYOCERA	SCP-49ADT	NA	NA	Accessory

Note:

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Type A to Type C USB cable	1	1	Y	0	Accessory

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates, XYZ axis and antenna ports. The worst case was found when positioned as the table below. Following channel(s) was (were) selected for the final test as listed below:

Band	Radiated Emission
n5	X-plane
LTE Band 2	X-plane
LTE Band 48	X-plane
LTE Band 66	X-plane

n5

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	165300 to 169300	165300 (826.5MHz), 167300 (836.5MHz), 169300 (846.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 13 RB Offset 1 RB / 23 RB Offset 12 RB / 0 RB Offset 12 RB / 7 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		165800 to 168800	165800 (829.0MHz), 167300 (836.5MHz), 168800 (844.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 26 RB Offset 1 RB / 50 RB Offset 25 RB / 0 RB Offset 25 RB / 14 RB Offset 25 RB / 27 RB Offset 50 RB / 0 RB Offset
		166300 to 168300	166300 (831.5MHz), 167300 (836.5MHz), 168300 (841.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 40 RB Offset 1 RB / 77 RB Offset 36 RB / 0 RB Offset 36 RB / 22 RB Offset 36 RB / 43 RB Offset 75 RB / 0 RB Offset
		166800 to 167800	166800 (834.0MHz), 167300 (836.5MHz), 167800 (839.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 53 RB Offset 1 RB / 104 RB Offset 50RB / 0 RB Offset 50 RB / 28 RB Offset 50 RB / 56 RB Offset 100 RB / 0 RB Offset
-	Modulation characteristics	166800 to 167800	167300 (836.5MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
-	Frequency Stability	165300 to 169300	165300 (826.5MHz), 169300 (846.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		165800 to 168800	165800 (829.0MHz), 168800 (844.0MHz)	10MHz	QPSK	52 RB / 0 RB Offset
		166300 to 168300	166300 (831.5MHz), 168300 (841.5MHz)	15MHz	QPSK	79 RB / 0 RB Offset
		166800 to 167800	166800 (834.0MHz), 167800 (839.0MHz)	20MHz	QPSK	106 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Occupied Bandwidth	165300 to 169300	165300 (826.5MHz), 167300 (836.5MHz), 169300 (846.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		165800 to 168800	165800 (829.0MHz), 167300 (836.5MHz), 168800 (844.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	52 RB / 0 RB Offset
		166300 to 168300	166300 (831.5MHz), 167300 (836.5MHz), 168300 (841.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	79 RB / 0 RB Offset
		166800 to 167800	166800 (834.0MHz), 167300 (836.5MHz), 167800 (839.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
-	Band Edge	165300 to 169300	165300 (826.5MHz), 169300 (846.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		165800 to 168800	165800 (829.0MHz), 168800 (844.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 51 RB Offset 52 RB / 0 RB Offset
		166300 to 168300	166300 (831.5MHz), 168300 (841.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 78 RB Offset 79 RB / 0 RB Offset
		166800 to 167800	166800 (834.0MHz), 167800 (839.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 105 RB Offset 106 RB / 0 RB Offset
-	Peak to Average Ratio	165300 to 169300	165300 (826.5MHz), 167300 (836.5MHz), 169300 (846.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		165800 to 168800	165800 (829.0MHz), 167300 (836.5MHz), 168800 (844.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		166300 to 168300	166300 (831.5MHz), 167300 (836.5MHz), 168300 (841.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		166800 to 167800	166800 (834.0MHz), 167300 (836.5MHz), 167800 (839.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	165300 to 169300	165300 (826.5MHz), 167300 (836.5MHz), 169300 (846.5MHz)	5MHz	QPSK	1 RB / 1 RB Offset
		165800 to 168800	165800 (829.0MHz), 167300 (836.5MHz), 168800 (844.0MHz)	10MHz	QPSK	1 RB / 1 RB Offset
		166300 to 168300	166300 (831.5MHz), 167300 (836.5MHz), 168300 (841.5MHz)	15MHz	QPSK	1 RB / 1 RB Offset
		166800 to 167800	166800 (834.0MHz), 167300 (836.5MHz), 167800 (839.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Below 1GHz	166800 to 167800	167300 (836.5MHz)	20MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	165300 to 169300	165300 (826.5MHz), 167300 (836.5MHz), 169300 (846.5MHz)	5MHz	QPSK	1 RB / 1 RB Offset
		166800 to 167800	166800 (834.0MHz), 167300 (836.5MHz), 167800 (839.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 38.521-1 Section 6.5.3.1.4, choose the lowest and highest channel bandwidth for final test.
3. Only output power, modulation characteristics, occupied bandwidth and Peak to average ratio items had been tested under $\pi/2$ BPSK, QPSK, 16QAM, 64QAM and 256QAM modes, the other test items were performed under worse mode according to the maximum output power.

LTE Band 2

EUT Configure Mode	Test item	Available channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	18607 to 19193	18607 (1850.7MHz), 18900 (1880.0MHz), 19193 (1909.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 2 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 1 RB Offset 3 RB / 3 RB Offset 6 RB / 0 RB Offset
		18615 to 19185	18615 (1851.5MHz), 18900 (1880.0MHz), 19185 (1908.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 7 RB Offset 1 RB / 14 RB Offset 8 RB / 0 RB Offset 8 RB / 3 RB Offset 8 RB / 7 RB Offset 15 RB / 0 RB Offset
		18625 to 19175	18625 (1852.5MHz), 18900 (1880.0MHz), 19175 (1907.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		18650 to 19150	18650 (1855.0MHz), 18900 (1880.0MHz), 19150 (1905.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
		18675 to 19125	18675 (1857.5MHz), 18900 (1880.0MHz), 19125 (1902.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 37 RB Offset 1 RB / 74 RB Offset 36 RB / 0 RB Offset 36 RB / 19 RB Offset 36 RB / 39 RB Offset 75 RB / 0 RB Offset
		18700 to 19100	18700 (1860.0MHz), 18900 (1880.0MHz), 19100 (1900.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	18625 to 19175	19175 (1907.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	18607 to 19193	18607 (1850.7MHz), 18900 (1880.0MHz), 19193 (1909.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		18625 to 19175	18625 (1852.5MHz), 18900 (1880.0MHz), 19175 (1907.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		18700 to 19100	18700 (1860.0MHz), 18900 (1880.0MHz), 19100 (1900.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The measured output power for QPSK mode is higher than the measured output power for 16QAM, 64QAM and 256QAM modes. Therefore the radiated emission test items was performed under QPSK mode only.

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	56715 (3697.5MHz)	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. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The measured output power for QPSK mode is higher than the measured output power for 16QAM, 64QAM and 256QAM modes. Therefore the radiated emission test items was performed under QPSK mode only.

LTE Band 66

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	EIRP	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 2 RB Offset 1 RB / 5 RB Offset 3 RB / 0 RB Offset 3 RB / 1 RB Offset 3 RB / 3 RB Offset 6 RB / 0 RB Offset
		131987 to 132657	131987 (1711.5MHz), 132322 (1745.0MHz), 132657 (1778.5MHz)	3MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 7 RB Offset 1 RB / 14 RB Offset 8 RB / 0 RB Offset 8 RB / 3 RB Offset 8 RB / 7 RB Offset 15 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 12 RB Offset 1 RB / 24 RB Offset 12 RB / 0 RB Offset 12 RB / 6 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		132022 to 132622	132022 (1715.0MHz), 132322 (1745.0MHz), 132622 (1775.0MHz)	10MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 24 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 12 RB Offset 25 RB / 25 RB Offset 50 RB / 0 RB Offset
		132047 to 132597	132047 (1717.5MHz), 132322 (1745.0MHz), 132597 (1772.5MHz)	15MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 37 RB Offset 1 RB / 74 RB Offset 36 RB / 0 RB Offset 36 RB / 19 RB Offset 36 RB / 39 RB Offset 75 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK / 16QAM / 64QAM / 256QAM	1 RB / 0 RB Offset 1 RB / 50 RB Offset 1 RB / 99 RB Offset 50 RB / 0 RB Offset 50 RB / 25 RB Offset 50 RB / 50 RB Offset 100 RB / 0 RB Offset

EUT Configure Mode	Test Item	Available Channel	Tested Channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	132072 to 132572	132572 (1770.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset
-	Radiated Emission Above 1GHz	131979 to 132665	131979 (1710.7MHz), 132322 (1745.0MHz), 132665 (1779.3MHz)	1.4MHz	QPSK	1 RB / 0 RB Offset
		131997 to 132647	131997 (1712.5MHz), 132322 (1745.0MHz), 132647 (1777.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		132072 to 132572	132072 (1720.0MHz), 132322 (1745.0MHz), 132572 (1770.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset

Note:

1. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
2. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.
3. The measured output power for QPSK mode is higher than the measured output power for 16QAM, 64QAM and 256QAM modes. Therefore the radiated emission test items was performed under QPSK mode only.

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
EIRP / ERP	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Modulation Characteristics	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Frequency Stability	25deg. C, 60%RH	3.87Vdc	James Yang
Occupied Bandwidth	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Band Edge	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Peak To Average Ratio	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Conducted Emission	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Radiated Emission	22deg. C, 66%RH	120Vac, 60Hz	Greg Lin

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

FCC 47 CFR Part 24

FCC 47 CFR Part 27

FCC 47 CFR Part 96

ANSI/TIA/EIA-603-D-2010

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

KDB 971168 D02 Misc Rev Approv License Devices v02r01

KDB 940660 D01 Part 96 CBRS Eqpt v03

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

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

For n5:

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

For LTE Band 2:

Mobile / Portable station are limited to 2 watts e.i.r.p.

For LTE Band 48:

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

For LTE Band 66:

Mobile / Portable station are limited to 1 watts e.i.r.p.

4.1.2 Test Procedures

Conducted Power Measurement:

The EUT was set up for the maximum power with 5GNR 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.

Maximum EIRP / ERP

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

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

$$\text{ERP} = P_{\text{Meas}} + G_T - 2.15$$

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)

4.1.3 Test Setup

Conducted Power Measurement:



4.1.4 Test Results

Conducted Output Power (dBm)

NR Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		166800	167300	167800
		Frequency (MHz)		834	836.5	839
20M	$\pi/2$ BPSK	1	1	23.79	23.84	23.80
20M	QPSK	1	1	23.75	23.86	23.89
		1	53	23.39	23.53	23.59
		1	104	23.29	23.41	23.42
		50	0	22.55	22.63	22.77
		50	28	23.54	23.64	23.65
		50	56	22.45	22.59	22.54
		100	0	22.60	22.67	22.70
20M	16QAM	1	1	22.58	22.62	22.73
20M	64QAM	1	1	20.93	21.06	21.07
20M	256QAM	1	1	18.61	18.78	18.81
BW	MCS Index	Channel		166300	167300	168300
		Frequency (MHz)		831.5	836.5	841.5
15M	$\pi/2$ BPSK	1	1	23.74	23.77	23.78
15M	QPSK	1	1	23.75	23.81	23.85
		1	40	23.37	23.52	23.54
		1	77	23.27	23.31	23.41
		36	0	22.54	22.54	22.69
		36	22	23.50	23.61	23.56
		36	43	22.38	22.49	22.46
		75	0	22.57	22.66	22.62
15M	16QAM	1	1	22.58	22.53	22.71
15M	64QAM	1	1	20.90	21.02	21.04
15M	256QAM	1	1	18.56	18.69	18.79

NR Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		165800	167300	168800
		Frequency (MHz)		829	836.5	844
10M	$\pi/2$ BPSK	1	1	23.72	23.77	23.71
10M	QPSK	1	1	23.75	23.86	23.88
		1	26	23.31	23.51	23.50
		1	50	23.21	23.40	23.34
		25	0	22.50	22.61	22.75
		25	14	23.46	23.60	23.64
		25	27	22.39	22.58	22.52
		50	0	22.58	22.58	22.68
10M	16QAM	1	1	22.58	22.58	22.73
10M	64QAM	1	1	20.90	20.96	21.02
10M	256QAM	1	1	18.54	18.78	18.71
BW	MCS Index	Channel		165300	167300	169300
		Frequency (MHz)		826.5	836.5	846.5
5M	$\pi/2$ BPSK	1	1	23.72	23.78	23.70
5M	QPSK	1	1	23.66	23.85	23.88
		1	13	23.39	23.43	23.58
		1	23	23.22	23.41	23.40
		12	0	22.48	22.60	22.70
		12	7	23.46	23.59	23.62
		12	13	22.39	22.57	22.52
		25	0	22.50	22.60	22.62
5M	16QAM	1	1	22.58	22.59	22.69
5M	64QAM	1	1	20.91	21.03	21.04
5M	256QAM	1	1	18.61	18.78	18.80

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18700	18900	19100
		Frequency (MHz)		1860	1880	1900
20M	QPSK	1	0	22.85	22.96	22.86
		1	50	22.71	22.71	22.73
		1	99	22.73	22.73	22.72
		50	0	22.02	22.17	21.80
		50	25	21.90	21.75	21.76
		50	50	21.74	21.77	21.93
		100	0	22.04	21.89	21.91
20M	16QAM	1	0	21.91	21.83	22.01
		1	50	21.73	21.75	21.76
		1	99	21.72	21.72	21.74
		50	0	20.87	20.83	20.84
		50	25	21.16	20.97	20.98
		50	50	20.73	20.73	20.75
		100	0	20.91	20.89	20.83
20M	64QAM	1	0	20.89	21.25	20.83
		1	50	21.19	20.96	20.98
		1	99	20.73	21.04	20.75
		50	0	20.24	19.94	19.88
		50	25	20.18	19.99	19.99
		50	50	19.87	19.96	19.81
		100	0	19.86	19.83	20.17
20M	256QAM	1	0	17.95	17.93	17.83
		1	50	17.84	17.82	17.97
		1	99	17.97	17.71	17.91
		50	0	17.84	18.21	18.07
		50	25	18.21	17.74	17.73
		50	50	18.02	17.85	17.88
		100	0	17.90	18.02	17.82

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18675	18900	19125
		Frequency (MHz)		1857.5	1880	1902.5
15M	QPSK	1	0	22.81	22.88	22.80
		1	37	22.75	22.84	22.79
		1	74	22.72	22.80	22.74
		36	0	21.73	21.89	21.90
		36	19	21.75	21.80	21.82
		36	39	21.71	21.73	21.92
		75	0	21.72	21.79	21.80
15M	16QAM	1	0	21.72	21.74	22.03
		1	37	22.24	21.78	21.77
		1	74	21.77	21.82	21.92
		36	0	20.88	20.85	21.08
		36	19	20.97	20.86	21.04
		36	39	20.79	20.76	20.73
		75	0	20.76	20.73	20.75
15M	64QAM	1	0	20.78	20.95	20.77
		1	37	20.77	20.91	20.74
		1	74	20.97	20.78	21.00
		36	0	20.10	20.18	20.13
		36	19	19.88	19.86	19.73
		36	39	19.92	19.91	19.76
		75	0	19.80	19.84	20.01
15M	256QAM	1	0	17.85	17.90	17.98
		1	37	18.21	17.98	17.97
		1	74	18.17	18.12	18.02
		36	0	17.80	18.07	17.81
		36	19	18.09	17.86	17.84
		36	39	17.92	18.04	17.98
		75	0	17.89	17.73	17.73

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18650	18900	19150
		Frequency (MHz)		1855	1880	1905
10M	QPSK	1	0	22.90	22.82	22.89
		1	24	22.76	22.75	22.77
		1	49	22.75	22.78	22.77
		25	0	22.16	22.02	21.85
		25	12	21.97	21.88	21.95
		25	25	21.98	21.82	21.83
		50	0	21.89	22.00	21.90
10M	16QAM	1	0	22.10	21.89	21.88
		1	24	21.75	22.07	21.77
		1	49	21.90	21.96	21.95
		25	0	21.14	20.82	20.80
		25	12	20.77	20.84	20.78
		25	25	20.80	20.78	20.74
		50	0	21.01	20.74	20.74
10M	64QAM	1	0	20.89	20.74	20.77
		1	24	20.90	20.73	20.84
		1	49	21.06	21.02	20.97
		25	0	19.82	19.90	20.01
		25	12	19.86	19.92	20.00
		25	25	19.87	19.98	19.91
		50	0	19.85	19.82	19.81
10M	256QAM	1	0	18.17	18.13	18.26
		1	24	18.05	18.04	17.80
		1	49	17.71	18.22	17.96
		25	0	17.72	18.02	17.73
		25	12	18.03	17.87	17.76
		25	25	17.72	17.73	17.73
		50	0	17.75	17.80	18.04

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18625	18900	19175
		Frequency (MHz)		1852.5	1880	1907.5
5M	QPSK	1	0	22.90	22.93	22.95
		1	12	22.85	22.91	22.84
		1	24	22.75	22.73	22.80
		12	0	21.97	21.98	21.93
		12	6	22.02	22.08	21.87
		12	13	21.83	21.84	21.98
		25	0	21.75	21.75	21.76
5M	16QAM	1	0	21.95	21.96	21.91
		1	12	21.93	21.95	21.90
		1	24	21.83	21.87	21.88
		12	0	20.97	20.90	20.81
		12	6	21.05	20.95	20.95
		12	13	20.85	20.85	20.80
		25	0	21.00	20.81	20.80
5M	64QAM	1	0	20.85	21.16	20.87
		1	12	20.77	21.12	20.77
		1	24	20.96	20.79	20.90
		12	0	19.85	19.92	19.95
		12	6	19.78	19.79	19.89
		12	13	20.02	19.76	19.77
		25	0	19.80	19.84	19.94
5M	256QAM	1	0	18.00	18.15	18.13
		1	12	17.80	18.08	17.83
		1	24	17.77	17.75	17.76
		12	0	17.74	17.74	17.84
		12	6	17.74	18.05	17.73
		12	13	17.86	17.92	18.00
		25	0	17.87	17.81	17.84

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18615	18900	19185
		Frequency (MHz)		1851.5	1880	1908.5
3M	QPSK	1	0	22.85	22.78	22.76
		1	7	22.76	22.71	22.71
		1	14	22.76	22.72	22.71
		8	0	21.74	21.90	21.74
		8	3	21.85	21.90	21.82
		8	7	21.82	21.92	21.80
		15	0	21.89	21.98	21.73
3M	16QAM	1	0	21.89	21.86	21.74
		1	7	21.82	21.95	22.13
		1	14	22.01	22.01	21.93
		8	0	20.76	20.84	20.80
		8	3	20.99	20.74	20.74
		8	7	20.73	20.72	20.72
		15	0	20.89	20.83	20.77
3M	64QAM	1	0	20.84	21.14	20.74
		1	7	20.86	20.80	21.03
		1	14	20.76	20.74	20.86
		8	0	20.76	20.05	19.78
		8	3	20.75	20.04	19.78
		8	7	20.01	19.84	19.83
		15	0	19.79	19.81	19.84
3M	256QAM	1	0	18.03	18.06	18.00
		1	7	18.07	17.85	18.11
		1	14	17.77	17.76	17.98
		8	0	17.75	17.76	17.74
		8	3	17.75	17.75	17.75
		8	7	17.76	17.73	17.79
		15	0	17.72	17.92	17.82

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18607	18900	19193
		Frequency (MHz)		1850.7	1880	1909.3
1.4M	QPSK	1	0	22.90	22.90	22.90
		1	2	22.86	22.89	22.83
		1	5	22.79	22.73	22.74
		3	0	22.80	22.79	22.78
		3	1	22.83	22.86	22.80
		3	3	22.89	22.85	22.80
		6	0	21.87	21.74	21.74
1.4M	16QAM	1	0	22.00	21.86	21.84
		1	2	21.83	21.74	22.05
		1	5	21.85	21.83	21.84
		3	0	21.95	22.06	21.89
		3	1	21.90	22.17	21.74
		3	3	21.84	21.74	21.92
		6	0	20.86	20.80	20.86
1.4M	64QAM	1	0	21.16	21.16	20.92
		1	2	20.82	20.86	20.98
		1	5	20.80	20.83	20.76
		3	0	21.08	20.77	20.75
		3	1	20.82	21.15	21.02
		3	3	20.80	20.78	20.85
		6	0	19.97	20.09	19.90
1.4M	256QAM	1	0	18.09	17.98	17.87
		1	2	18.87	18.26	18.01
		1	5	17.99	18.09	18.08
		3	0	17.83	17.76	17.76
		3	1	17.80	18.05	17.96
		3	3	17.76	17.83	17.81
		6	0	17.86	17.80	17.85

LTE Band 48 (Full Power)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55340	55990	56640
		Frequency (MHz)		3560	3625	3690
20M	QPSK	1	0	22.87	22.95	23.12
		1	50	22.74	22.81	22.84
		1	99	22.90	22.80	22.87
		50	0	21.92	21.92	22.29
		50	25	21.81	21.97	22.80
		50	50	21.76	21.77	21.97
		100	0	21.86	21.89	22.65
20M	16QAM	1	0	22.16	22.05	22.06
		1	50	22.14	22.20	22.38
		1	99	21.89	22.07	22.68
		50	0	20.86	20.85	21.32
		50	25	20.96	20.84	21.42
		50	50	20.80	20.82	21.78
		100	0	20.99	20.85	21.17
20M	64QAM	1	0	20.78	20.79	20.74
		1	50	20.80	20.76	20.73
		1	99	20.84	20.73	20.75
		50	0	19.78	19.79	20.34
		50	25	19.83	20.79	20.36
		50	50	19.73	19.84	20.03
		100	0	19.76	19.90	20.64
20M	256QAM	1	0	17.71	18.60	18.19
		1	50	18.19	18.14	18.43
		1	99	17.96	18.18	17.73
		50	0	18.36	17.78	18.60
		50	25	18.43	18.54	18.82
		50	50	17.87	17.85	18.83
		100	0	18.09	18.02	17.72

LTE Band 48 (Full Power)						
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	22.76	22.85	22.95
		1	37	22.72	22.78	22.98
		1	74	22.77	22.96	23.00
		36	0	21.79	21.79	21.89
		36	19	21.85	21.83	22.37
		36	39	21.84	21.89	22.49
		75	0	21.87	21.89	22.39
15M	16QAM	1	0	21.76	21.95	22.08
		1	37	21.80	21.98	22.11
		1	74	21.90	21.96	22.39
		36	0	20.78	20.86	20.82
		36	19	20.82	20.85	21.02
		36	39	20.75	20.92	20.90
		75	0	20.76	20.77	20.76
15M	64QAM	1	0	20.83	20.85	20.90
		1	37	20.80	20.94	21.03
		1	74	20.80	20.81	21.06
		36	0	19.76	19.75	19.82
		36	19	19.72	19.90	19.90
		36	39	19.80	19.86	20.16
		75	0	19.75	19.77	19.71
15M	256QAM	1	0	17.80	17.82	17.79
		1	37	17.83	17.94	17.99
		1	74	17.89	18.12	17.76
		36	0	17.86	17.72	18.00
		36	19	17.80	17.86	17.90
		36	39	17.95	18.03	18.02
		75	0	17.74	18.15	18.06

LTE Band 48 (Full Power)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55290	55990	56690
		Frequency (MHz)		3555	3625	3695
10M	QPSK	1	0	22.90	22.80	23.03
		1	24	22.81	22.77	23.09
		1	49	22.73	22.74	22.85
		25	0	22.00	22.02	22.35
		25	12	21.83	21.86	22.41
		25	25	21.77	21.77	22.18
		50	0	21.76	21.76	22.26
10M	16QAM	1	0	21.84	21.82	22.02
		1	24	21.82	22.15	22.03
		1	49	21.79	21.74	22.17
		25	0	20.72	20.87	21.60
		25	12	20.82	20.85	21.43
		25	25	20.73	20.85	21.25
		50	0	20.78	20.86	20.78
10M	64QAM	1	0	20.80	21.15	21.48
		1	24	20.86	20.79	21.44
		1	49	20.79	20.71	21.49
		25	0	19.78	19.97	20.57
		25	12	19.85	19.85	20.05
		25	25	19.97	19.90	20.22
		50	0	19.93	19.73	19.85
10M	256QAM	1	0	18.89	18.05	18.07
		1	24	17.77	17.88	17.74
		1	49	17.99	17.90	18.51
		25	0	17.81	17.90	18.33
		25	12	17.85	17.75	18.45
		25	25	17.75	17.77	18.06
		50	0	17.84	17.82	18.57

LTE Band 48 (Full Power)						
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	22.86	22.83	23.00
		1	12	22.80	22.88	22.92
		1	24	22.78	22.86	23.06
		12	0	21.72	21.82	22.00
		12	6	21.71	21.73	21.94
		12	13	21.73	21.78	22.26
		25	0	21.79	21.94	21.74
5M	16QAM	1	0	21.83	21.99	22.33
		1	12	21.81	21.74	21.89
		1	24	21.78	21.86	22.10
		12	0	20.92	20.76	20.94
		12	6	20.88	20.88	21.88
		12	13	20.86	20.82	20.94
		25	0	20.89	20.83	21.08
5M	64QAM	1	0	20.76	20.89	21.19
		1	12	20.75	20.84	21.10
		1	24	20.77	20.73	21.05
		12	0	20.10	19.94	20.28
		12	6	20.12	19.77	20.14
		12	13	19.73	19.90	19.85
		25	0	20.09	19.76	20.01
5M	256QAM	1	0	17.80	17.93	18.29
		1	12	17.84	17.85	17.92
		1	24	17.77	17.83	18.12
		12	0	17.78	17.77	18.35
		12	6	17.82	17.80	18.28
		12	13	17.75	17.79	18.48
		25	0	17.74	17.99	18.29

LTE Band 48 (Per 10M)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55340	55990	56640
		Frequency (MHz)		3560	3625	3690
20M	QPSK	1	0	22.79	22.75	22.90
		1	50	22.77	22.76	22.74
		1	99	22.83	22.77	22.74
		50	0	21.73	21.88	21.93
		50	25	21.75	21.86	22.68
		50	50	21.73	21.75	21.84
		100	0	21.75	21.73	22.45
20M	16QAM	1	0	21.75	21.71	21.79
		1	50	21.75	21.78	22.14
		1	99	21.76	21.80	22.54
		50	0	20.80	20.75	21.18
		50	25	20.85	20.80	21.27
		50	50	20.73	20.74	21.31
		100	0	20.72	20.75	20.80
20M	64QAM	1	0	20.75	20.76	20.71
		1	50	20.75	20.71	20.73
		1	99	20.79	20.71	20.71
		50	0	19.72	19.72	20.06
		50	25	19.81	20.20	19.75
		50	50	19.71	19.80	19.85
		100	0	19.73	19.85	20.11
20M	256QAM	1	0	17.71	18.39	17.86
		1	50	17.74	17.96	18.15
		1	99	17.83	17.72	17.71
		50	0	17.74	17.77	18.07
		50	25	18.35	18.29	18.28
		50	50	17.77	17.76	18.18
		100	0	17.88	17.93	17.71

LTE Band 48 (Per 10M)						
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	22.75	22.82	22.86
		1	37	22.71	22.77	22.75
		1	74	22.72	22.76	22.87
		36	0	21.75	21.76	21.73
		36	19	21.82	21.76	21.79
		36	39	21.77	21.84	22.03
		75	0	21.75	21.84	21.80
15M	16QAM	1	0	21.72	21.85	21.86
		1	37	21.77	21.78	21.94
		1	74	21.84	21.83	22.24
		36	0	20.77	20.76	20.74
		36	19	20.75	20.77	20.81
		36	39	20.73	20.85	20.75
		75	0	20.74	20.75	20.71
15M	64QAM	1	0	20.78	20.80	20.79
		1	37	20.71	20.85	20.86
		1	74	20.75	20.77	20.93
		36	0	19.71	19.73	19.80
		36	19	19.71	19.88	19.85
		36	39	19.76	19.80	20.05
		75	0	19.72	19.74	19.71
15M	256QAM	1	0	17.71	17.76	17.75
		1	37	17.72	17.78	17.71
		1	74	17.76	18.05	17.74
		36	0	17.76	17.71	17.81
		36	19	17.74	17.79	17.80
		36	39	17.85	17.86	17.89
		75	0	17.71	18.05	17.90

LTE Band 48, Channel Bandwidth 5MHz and Channel Bandwidth 10MHz per 10MHz power test data, please refer to Channel Bandwidth 5MHz and Channel Bandwidth 10MHz full power.

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132072	132322	132572
		Frequency (MHz)		1720	1745	1770
20M	QPSK	1	0	23.31	23.25	23.19
		1	50	22.86	23.05	22.95
		1	99	22.89	22.98	23.19
		50	0	22.44	22.19	21.72
		50	25	21.76	21.88	22.10
		50	50	21.75	22.13	22.25
		100	0	21.86	22.04	21.77
20M	16QAM	1	0	21.86	22.66	21.75
		1	50	21.85	22.18	22.06
		1	99	21.86	22.15	22.01
		50	0	21.20	21.50	21.77
		50	25	21.11	20.94	21.21
		50	50	20.91	21.34	21.24
		100	0	20.96	21.42	21.27
20M	64QAM	1	0	20.97	20.81	20.88
		1	50	20.79	20.88	20.78
		1	99	20.85	20.98	20.83
		50	0	19.82	19.81	19.82
		50	25	19.86	19.77	19.73
		50	50	19.79	19.87	19.90
		100	0	19.77	19.84	19.76
20M	256QAM	1	0	18.19	17.98	18.12
		1	50	17.89	17.96	17.98
		1	99	17.85	17.86	18.33
		50	0	17.72	17.86	17.85
		50	25	17.83	18.35	18.16
		50	50	17.83	17.86	17.88
		100	0	18.20	18.19	18.40

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	QPSK	1	0	23.13	23.05	22.86
		1	37	23.26	22.85	22.85
		1	74	22.84	22.89	22.86
		36	0	21.92	22.26	21.98
		36	19	22.00	22.34	21.82
		36	39	22.07	21.94	21.73
		75	0	21.82	21.85	21.88
15M	16QAM	1	0	22.15	22.07	22.06
		1	37	21.71	22.46	22.44
		1	74	22.05	21.84	22.28
		36	0	20.78	21.41	20.89
		36	19	20.75	20.78	20.80
		36	39	20.78	20.96	20.71
		75	0	21.04	21.42	21.15
15M	64QAM	1	0	20.85	20.82	20.80
		1	37	20.78	20.86	20.73
		1	74	20.76	20.79	20.74
		36	0	19.98	19.80	19.94
		36	19	19.85	19.84	19.90
		36	39	19.78	19.79	19.83
		75	0	19.78	19.82	19.84
15M	256QAM	1	0	18.17	17.85	17.81
		1	37	18.03	17.72	18.45
		1	74	18.37	17.99	18.01
		36	0	18.18	17.90	18.17
		36	19	17.85	17.97	17.87
		36	39	17.94	17.85	17.76
		75	0	17.93	17.85	17.75

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	QPSK	1	0	22.89	22.82	22.77
		1	24	22.93	22.91	22.84
		1	49	22.80	22.91	23.18
		25	0	21.73	21.87	22.03
		25	12	21.87	22.05	21.85
		25	25	21.82	21.79	22.13
		50	0	21.85	21.84	21.84
10M	16QAM	1	0	22.15	22.15	22.04
		1	24	22.04	21.96	21.98
		1	49	21.81	22.51	22.05
		25	0	20.84	21.22	21.10
		25	12	20.80	20.88	21.22
		25	25	20.74	20.91	21.10
		50	0	20.93	21.06	20.95
10M	64QAM	1	0	20.84	20.85	20.88
		1	24	20.89	20.80	20.83
		1	49	20.85	20.83	20.82
		25	0	19.90	19.85	19.82
		25	12	19.80	19.73	19.78
		25	25	19.80	19.90	19.77
		50	0	19.79	19.92	19.72
10M	256QAM	1	0	17.92	18.37	18.32
		1	24	17.74	18.12	17.85
		1	49	17.75	18.23	17.78
		25	0	17.76	17.76	17.84
		25	12	18.10	18.35	17.97
		25	25	17.85	17.84	17.82
		50	0	17.75	18.22	18.01

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	QPSK	1	0	22.81	22.87	22.86
		1	12	22.75	22.79	22.86
		1	24	22.90	22.79	22.81
		12	0	21.84	22.28	21.78
		12	6	22.03	22.04	22.04
		12	13	21.88	21.72	22.11
		25	0	21.85	22.13	21.86
5M	16QAM	1	0	21.84	21.99	22.05
		1	12	22.07	21.86	22.26
		1	24	21.82	22.31	21.86
		12	0	20.90	20.96	21.30
		12	6	20.73	21.00	21.10
		12	13	20.83	20.71	20.73
		25	0	20.79	21.19	21.13
5M	64QAM	1	0	20.85	20.82	20.80
		1	12	20.87	20.73	20.90
		1	24	20.78	20.85	20.78
		12	0	19.91	19.89	19.72
		12	6	19.83	19.78	19.86
		12	13	19.93	19.80	19.77
		25	0	19.90	19.74	19.77
5M	256QAM	1	0	17.71	18.58	17.82
		1	12	18.17	17.96	18.14
		1	24	17.96	17.88	17.90
		12	0	17.88	17.79	18.37
		12	6	17.80	17.86	18.13
		12	13	17.77	17.78	17.86
		25	0	17.79	17.77	18.15

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	QPSK	1	0	23.00	23.10	23.19
		1	7	23.06	23.07	22.96
		1	14	22.77	22.87	23.11
		8	0	21.76	21.85	22.22
		8	3	21.77	21.89	22.18
		8	7	21.90	21.77	21.74
		15	0	21.91	22.35	21.77
3M	16QAM	1	0	21.71	22.16	21.75
		1	7	21.74	21.99	22.03
		1	14	21.85	22.29	21.95
		8	0	20.88	20.82	21.15
		8	3	20.84	21.00	21.17
		8	7	20.84	20.87	21.51
		15	0	20.82	21.12	21.12
3M	64QAM	1	0	20.84	20.83	20.73
		1	7	20.97	20.89	20.99
		1	14	20.86	20.86	20.92
		8	0	19.98	19.91	20.02
		8	3	19.86	19.82	19.81
		8	7	19.94	19.81	19.80
		15	0	19.83	19.98	19.84
3M	256QAM	1	0	18.22	18.47	18.29
		1	7	18.10	18.76	18.39
		1	14	17.84	18.37	17.77
		8	0	17.85	17.79	17.87
		8	3	17.88	17.72	18.28
		8	7	17.87	17.73	17.85
		15	0	17.82	17.87	17.79

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	QPSK	1	0	22.80	23.22	23.17
		1	2	23.29	23.19	23.12
		1	5	22.77	23.17	22.72
		3	0	22.78	22.73	23.02
		3	1	22.74	22.72	23.21
		3	3	22.95	23.12	23.06
		6	0	21.97	22.38	22.25
1.4M	16QAM	1	0	22.00	22.05	21.82
		1	2	21.89	22.49	22.40
		1	5	21.90	22.09	21.93
		3	0	21.86	22.05	21.98
		3	1	21.88	22.03	21.94
		3	3	21.87	21.95	21.86
		6	0	20.75	20.88	21.46
1.4M	64QAM	1	0	20.86	20.83	20.77
		1	2	20.77	20.86	20.78
		1	5	20.72	20.86	20.80
		3	0	20.75	20.76	20.90
		3	1	20.84	20.86	20.73
		3	3	20.71	20.83	20.91
		6	0	19.97	19.95	19.73
1.4M	256QAM	1	0	17.72	18.13	17.84
		1	2	17.79	18.12	18.10
		1	5	17.87	18.13	17.97
		3	0	17.83	17.81	17.85
		3	1	17.95	17.84	18.08
		3	3	17.77	18.20	18.15
		6	0	17.78	17.84	17.79

EIRP / ERP Power (dBm)

NR Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		166800	167300	167800
		Frequency (MHz)		834	836.5	839
20M	$\pi/2$ BPSK	1	1	18.14	18.19	18.15
20M	QPSK	1	1	18.10	18.21	18.24
		1	53	17.74	17.88	17.94
		1	104	17.64	17.76	17.77
		50	0	16.90	16.98	17.12
		50	28	17.89	17.99	18.00
		50	56	16.80	16.94	16.89
		100	0	16.95	17.02	17.05
20M	16QAM	1	1	16.93	16.97	17.08
20M	64QAM	1	1	15.28	15.41	15.42
20M	256QAM	1	1	12.96	13.13	13.16
BW	MCS Index	Channel		166300	167300	168300
		Frequency (MHz)		831.5	836.5	841.5
15M	$\pi/2$ BPSK	1	1	18.09	18.12	18.13
15M	QPSK	1	1	18.10	18.16	18.20
		1	40	17.72	17.87	17.89
		1	77	17.62	17.66	17.76
		36	0	16.89	16.89	17.04
		36	22	17.85	17.96	17.91
		36	43	16.73	16.84	16.81
		75	0	16.92	17.01	16.97
15M	16QAM	1	1	16.93	16.88	17.06
15M	64QAM	1	1	15.25	15.37	15.39
15M	256QAM	1	1	12.91	13.04	13.14

*ERP = Conducted + antenna gain (-3.5dBi)-2.15

NR Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		165800	167300	168800
		Frequency (MHz)		829	836.5	844
10M	$\pi/2$ BPSK	1	1	18.07	18.12	18.06
10M	QPSK	1	1	18.10	18.21	18.23
		1	26	17.66	17.86	17.85
		1	50	17.56	17.75	17.69
		25	0	16.85	16.96	17.10
		25	14	17.81	17.95	17.99
		25	27	16.74	16.93	16.87
		50	0	16.93	16.93	17.03
10M	16QAM	1	1	16.93	16.93	17.08
10M	64QAM	1	1	15.25	15.31	15.37
10M	256QAM	1	1	12.89	13.13	13.06
BW	MCS Index	Channel		165300	167300	169300
		Frequency (MHz)		826.5	836.5	846.5
5M	$\pi/2$ BPSK	1	1	18.07	18.13	18.05
5M	QPSK	1	1	18.01	18.20	18.23
		1	13	17.74	17.78	17.93
		1	23	17.57	17.76	17.75
		12	0	16.83	16.95	17.05
		12	7	17.81	17.94	17.97
		12	13	16.74	16.92	16.87
		25	0	16.85	16.95	16.97
5M	16QAM	1	1	16.93	16.94	17.04
5M	64QAM	1	1	15.26	15.38	15.39
5M	256QAM	1	1	12.96	13.13	13.15

*ERP = Conducted + antenna gain (-3.5dBi)-2.15

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18700	18900	19100
		Frequency (MHz)		1860	1880	1900
20M	QPSK	1	0	22.05	22.16	22.06
		1	50	21.91	21.91	21.93
		1	99	21.93	21.93	21.92
		50	0	21.22	21.37	21.00
		50	25	21.10	20.95	20.96
		50	50	20.94	20.97	21.13
		100	0	21.24	21.09	21.11
20M	16QAM	1	0	21.11	21.03	21.21
		1	50	20.93	20.95	20.96
		1	99	20.92	20.92	20.94
		50	0	20.07	20.03	20.04
		50	25	20.36	20.17	20.18
		50	50	19.93	19.93	19.95
		100	0	20.11	20.09	20.03
20M	64QAM	1	0	20.09	20.45	20.03
		1	50	20.39	20.16	20.18
		1	99	19.93	20.24	19.95
		50	0	19.44	19.14	19.08
		50	25	19.38	19.19	19.19
		50	50	19.07	19.16	19.01
		100	0	19.06	19.03	19.37
20M	256QAM	1	0	17.15	17.13	17.03
		1	50	17.04	17.02	17.17
		1	99	17.17	16.91	17.11
		50	0	17.04	17.41	17.27
		50	25	17.41	16.94	16.93
		50	50	17.22	17.05	17.08
		100	0	17.10	17.22	17.02

*EIRP = Conducted + antenna gain (-0.8dBi)

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18675	18900	19125
		Frequency (MHz)		1857.5	1880	1902.5
15M	QPSK	1	0	22.01	22.08	22.00
		1	37	21.95	22.04	21.99
		1	74	21.92	22.00	21.94
		36	0	20.93	21.09	21.10
		36	19	20.95	21.00	21.02
		36	39	20.91	20.93	21.12
		75	0	20.92	20.99	21.00
15M	16QAM	1	0	20.92	20.94	21.23
		1	37	21.44	20.98	20.97
		1	74	20.97	21.02	21.12
		36	0	20.08	20.05	20.28
		36	19	20.17	20.06	20.24
		36	39	19.99	19.96	19.93
		75	0	19.96	19.93	19.95
15M	64QAM	1	0	19.98	20.15	19.97
		1	37	19.97	20.11	19.94
		1	74	20.17	19.98	20.20
		36	0	19.30	19.38	19.33
		36	19	19.08	19.06	18.93
		36	39	19.12	19.11	18.96
		75	0	19.00	19.04	19.21
15M	256QAM	1	0	17.05	17.10	17.18
		1	37	17.41	17.18	17.17
		1	74	17.37	17.32	17.22
		36	0	17.00	17.27	17.01
		36	19	17.29	17.06	17.04
		36	39	17.12	17.24	17.18
		75	0	17.09	16.93	16.93

*EIRP = Conducted + antenna gain (-0.8dBi)

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18650	18900	19150
		Frequency (MHz)		1855	1880	1905
10M	QPSK	1	0	22.10	22.02	22.09
		1	24	21.96	21.95	21.97
		1	49	21.95	21.98	21.97
		25	0	21.36	21.22	21.05
		25	12	21.17	21.08	21.15
		25	25	21.18	21.02	21.03
		50	0	21.09	21.20	21.10
10M	16QAM	1	0	21.30	21.09	21.08
		1	24	20.95	21.27	20.97
		1	49	21.10	21.16	21.15
		25	0	20.34	20.02	20.00
		25	12	19.97	20.04	19.98
		25	25	20.00	19.98	19.94
		50	0	20.21	19.94	19.94
10M	64QAM	1	0	20.09	19.94	19.97
		1	24	20.10	19.93	20.04
		1	49	20.26	20.22	20.17
		25	0	19.02	19.10	19.21
		25	12	19.06	19.12	19.20
		25	25	19.07	19.18	19.11
		50	0	19.05	19.02	19.01
10M	256QAM	1	0	17.37	17.33	17.46
		1	24	17.25	17.24	17.00
		1	49	16.91	17.42	17.16
		25	0	16.92	17.22	16.93
		25	12	17.23	17.07	16.96
		25	25	16.92	16.93	16.93
		50	0	16.95	17.00	17.24

*EIRP = Conducted + antenna gain (-0.8dBi)

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18625	18900	19175
		Frequency (MHz)		1852.5	1880	1907.5
5M	QPSK	1	0	22.10	22.13	22.15
		1	12	22.05	22.11	22.04
		1	24	21.95	21.93	22.00
		12	0	21.17	21.18	21.13
		12	6	21.22	21.28	21.07
		12	13	21.03	21.04	21.18
		25	0	20.95	20.95	20.96
5M	16QAM	1	0	21.15	21.16	21.11
		1	12	21.13	21.15	21.10
		1	24	21.03	21.07	21.08
		12	0	20.17	20.10	20.01
		12	6	20.25	20.15	20.15
		12	13	20.05	20.05	20.00
		25	0	20.20	20.01	20.00
5M	64QAM	1	0	20.05	20.36	20.07
		1	12	19.97	20.32	19.97
		1	24	20.16	19.99	20.10
		12	0	19.05	19.12	19.15
		12	6	18.98	18.99	19.09
		12	13	19.22	18.96	18.97
		25	0	19.00	19.04	19.14
5M	256QAM	1	0	17.20	17.35	17.33
		1	12	17.00	17.28	17.03
		1	24	16.97	16.95	16.96
		12	0	16.94	16.94	17.04
		12	6	16.94	17.25	16.93
		12	13	17.06	17.12	17.20
		25	0	17.07	17.01	17.04

*EIRP = Conducted + antenna gain (-0.8dBi)

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18615	18900	19185
		Frequency (MHz)		1851.5	1880	1908.5
3M	QPSK	1	0	22.05	21.98	21.96
		1	7	21.96	21.91	21.91
		1	14	21.96	21.92	21.91
		8	0	20.94	21.10	20.94
		8	3	21.05	21.10	21.02
		8	7	21.02	21.12	21.00
		15	0	21.09	21.18	20.93
3M	16QAM	1	0	21.09	21.06	20.94
		1	7	21.02	21.15	21.33
		1	14	21.21	21.21	21.13
		8	0	19.96	20.04	20.00
		8	3	20.19	19.94	19.94
		8	7	19.93	19.92	19.92
		15	0	20.09	20.03	19.97
3M	64QAM	1	0	20.04	20.34	19.94
		1	7	20.06	20.00	20.23
		1	14	19.96	19.94	20.06
		8	0	19.96	19.25	18.98
		8	3	19.95	19.24	18.98
		8	7	19.21	19.04	19.03
		15	0	18.99	19.01	19.04
3M	256QAM	1	0	17.23	17.26	17.20
		1	7	17.27	17.05	17.31
		1	14	16.97	16.96	17.18
		8	0	16.95	16.96	16.94
		8	3	16.95	16.95	16.95
		8	7	16.96	16.93	16.99
		15	0	16.92	17.12	17.02

*EIRP = Conducted + antenna gain (-0.8dBi)

LTE Band 2						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		18607	18900	19193
		Frequency (MHz)		1850.7	1880	1909.3
1.4M	QPSK	1	0	22.10	22.10	22.10
		1	2	22.06	22.09	22.03
		1	5	21.99	21.93	21.94
		3	0	22.00	21.99	21.98
		3	1	22.03	22.06	22.00
		3	3	22.09	22.05	22.00
		6	0	21.07	20.94	20.94
1.4M	16QAM	1	0	21.20	21.06	21.04
		1	2	21.03	20.94	21.25
		1	5	21.05	21.03	21.04
		3	0	21.15	21.26	21.09
		3	1	21.10	21.37	20.94
		3	3	21.04	20.94	21.12
		6	0	20.06	20.00	20.06
1.4M	64QAM	1	0	20.36	20.36	20.12
		1	2	20.02	20.06	20.18
		1	5	20.00	20.03	19.96
		3	0	20.28	19.97	19.95
		3	1	20.02	20.35	20.22
		3	3	20.00	19.98	20.05
		6	0	19.17	19.29	19.10
1.4M	256QAM	1	0	17.29	17.18	17.07
		1	2	18.07	17.46	17.21
		1	5	17.19	17.29	17.28
		3	0	17.03	16.96	16.96
		3	1	17.00	17.25	17.16
		3	3	16.96	17.03	17.01
		6	0	17.06	17.00	17.05

*EIRP = Conducted + antenna gain (-0.8dBi)

LTE Band 48 (Full Power)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55340	55990	56640
		Frequency (MHz)		3560	3625	3690
20M	QPSK	1	0	22.47	22.55	22.72
		1	50	22.34	22.41	22.44
		1	99	22.50	22.40	22.47
		50	0	21.52	21.52	21.89
		50	25	21.41	21.57	22.40
		50	50	21.36	21.37	21.57
		100	0	21.46	21.49	22.25
20M	16QAM	1	0	21.76	21.65	21.66
		1	50	21.74	21.80	21.98
		1	99	21.49	21.67	22.28
		50	0	20.46	20.45	20.92
		50	25	20.56	20.44	21.02
		50	50	20.40	20.42	21.38
		100	0	20.59	20.45	20.77
20M	64QAM	1	0	20.38	20.39	20.34
		1	50	20.40	20.36	20.33
		1	99	20.44	20.33	20.35
		50	0	19.38	19.39	19.94
		50	25	19.43	20.39	19.96
		50	50	19.33	19.44	19.63
		100	0	19.36	19.50	20.24
20M	256QAM	1	0	17.31	18.20	17.79
		1	50	17.79	17.74	18.03
		1	99	17.56	17.78	17.33
		50	0	17.96	17.38	18.20
		50	25	18.03	18.14	18.42
		50	50	17.47	17.45	18.43
		100	0	17.69	17.62	17.32

*EIRP = Conducted + antenna gain (-0.4dBi)

LTE Band 48 (Full Power)						
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	22.36	22.45	22.55
		1	37	22.32	22.38	22.58
		1	74	22.37	22.56	22.60
		36	0	21.39	21.39	21.49
		36	19	21.45	21.43	21.97
		36	39	21.44	21.49	22.09
		75	0	21.47	21.49	21.99
15M	16QAM	1	0	21.36	21.55	21.68
		1	37	21.40	21.58	21.71
		1	74	21.50	21.56	21.99
		36	0	20.38	20.46	20.42
		36	19	20.42	20.45	20.62
		36	39	20.35	20.52	20.50
		75	0	20.36	20.37	20.36
15M	64QAM	1	0	20.43	20.45	20.50
		1	37	20.40	20.54	20.63
		1	74	20.40	20.41	20.66
		36	0	19.36	19.35	19.42
		36	19	19.32	19.50	19.50
		36	39	19.40	19.46	19.76
		75	0	19.35	19.37	19.31
15M	256QAM	1	0	17.40	17.42	17.39
		1	37	17.43	17.54	17.59
		1	74	17.49	17.72	17.36
		36	0	17.46	17.32	17.60
		36	19	17.40	17.46	17.50
		36	39	17.55	17.63	17.62
		75	0	17.34	17.75	17.66

*EIRP = Conducted + antenna gain (-0.4dBi)

LTE Band 48 (Full Power)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55290	55990	56690
		Frequency (MHz)		3555	3625	3695
10M	QPSK	1	0	22.50	22.40	22.63
		1	24	22.41	22.37	22.69
		1	49	22.33	22.34	22.45
		25	0	21.60	21.62	21.95
		25	12	21.43	21.46	22.01
		25	25	21.37	21.37	21.78
		50	0	21.36	21.36	21.86
10M	16QAM	1	0	21.44	21.42	21.62
		1	24	21.42	21.75	21.63
		1	49	21.39	21.34	21.77
		25	0	20.32	20.47	21.20
		25	12	20.42	20.45	21.03
		25	25	20.33	20.45	20.85
		50	0	20.38	20.46	20.38
10M	64QAM	1	0	20.40	20.75	21.08
		1	24	20.46	20.39	21.04
		1	49	20.39	20.31	21.09
		25	0	19.38	19.57	20.17
		25	12	19.45	19.45	19.65
		25	25	19.57	19.50	19.82
		50	0	19.53	19.33	19.45
10M	256QAM	1	0	18.49	17.65	17.67
		1	24	17.37	17.48	17.34
		1	49	17.59	17.50	18.11
		25	0	17.41	17.50	17.93
		25	12	17.45	17.35	18.05
		25	25	17.35	17.37	17.66
		50	0	17.44	17.42	18.17

*EIRP = Conducted + antenna gain (-0.4dBi)

LTE Band 48 (Full Power)						
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	22.46	22.43	22.60
		1	12	22.40	22.48	22.52
		1	24	22.38	22.46	22.66
		12	0	21.32	21.42	21.60
		12	6	21.31	21.33	21.54
		12	13	21.33	21.38	21.86
		25	0	21.39	21.54	21.34
5M	16QAM	1	0	21.43	21.59	21.93
		1	12	21.41	21.34	21.49
		1	24	21.38	21.46	21.70
		12	0	20.52	20.36	20.54
		12	6	20.48	20.48	21.48
		12	13	20.46	20.42	20.54
		25	0	20.49	20.43	20.68
5M	64QAM	1	0	20.36	20.49	20.79
		1	12	20.35	20.44	20.70
		1	24	20.37	20.33	20.65
		12	0	19.70	19.54	19.88
		12	6	19.72	19.37	19.74
		12	13	19.33	19.50	19.45
		25	0	19.69	19.36	19.61
5M	256QAM	1	0	17.40	17.53	17.89
		1	12	17.44	17.45	17.52
		1	24	17.37	17.43	17.72
		12	0	17.38	17.37	17.95
		12	6	17.42	17.40	17.88
		12	13	17.35	17.39	18.08
		25	0	17.34	17.59	17.89

*EIRP = Conducted + antenna gain (-0.4dBi)

LTE Band 48 (Per 10M)						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		55340	55990	56640
		Frequency (MHz)		3560	3625	3690
20M	QPSK	1	0	22.39	22.35	22.50
		1	50	22.37	22.36	22.34
		1	99	22.43	22.37	22.34
		50	0	21.33	21.48	21.53
		50	25	21.35	21.46	22.28
		50	50	21.33	21.35	21.44
		100	0	21.35	21.33	22.05
20M	16QAM	1	0	21.35	21.31	21.39
		1	50	21.35	21.38	21.74
		1	99	21.36	21.40	22.14
		50	0	20.40	20.35	20.78
		50	25	20.45	20.40	20.87
		50	50	20.33	20.34	20.91
		100	0	20.32	20.35	20.40
20M	64QAM	1	0	20.35	20.36	20.31
		1	50	20.35	20.31	20.33
		1	99	20.39	20.31	20.31
		50	0	19.32	19.32	19.66
		50	25	19.41	19.80	19.35
		50	50	19.31	19.40	19.45
		100	0	19.33	19.45	19.71
20M	256QAM	1	0	17.31	17.99	17.46
		1	50	17.34	17.56	17.75
		1	99	17.43	17.32	17.31
		50	0	17.34	17.37	17.67
		50	25	17.95	17.89	17.88
		50	50	17.37	17.36	17.78
		100	0	17.48	17.53	17.31

*EIRP = Conducted + antenna gain (-0.4dBi)

LTE Band 48 (Per 10M)						
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	22.35	22.42	22.46
		1	37	22.31	22.37	22.35
		1	74	22.32	22.36	22.47
		36	0	21.35	21.36	21.33
		36	19	21.42	21.36	21.39
		36	39	21.37	21.44	21.63
		75	0	21.35	21.44	21.40
15M	16QAM	1	0	21.32	21.45	21.46
		1	37	21.37	21.38	21.54
		1	74	21.44	21.43	21.84
		36	0	20.37	20.36	20.34
		36	19	20.35	20.37	20.41
		36	39	20.33	20.45	20.35
		75	0	20.34	20.35	20.31
15M	64QAM	1	0	20.38	20.40	20.39
		1	37	20.31	20.45	20.46
		1	74	20.35	20.37	20.53
		36	0	19.31	19.33	19.40
		36	19	19.31	19.48	19.45
		36	39	19.36	19.40	19.65
		75	0	19.32	19.34	19.31
15M	256QAM	1	0	17.31	17.36	17.35
		1	37	17.32	17.38	17.31
		1	74	17.36	17.65	17.34
		36	0	17.36	17.31	17.41
		36	19	17.34	17.39	17.40
		36	39	17.45	17.46	17.49
		75	0	17.31	17.65	17.50

*EIRP = Conducted + antenna gain (-0.4dBi)

LTE Band 48, Channel Bandwidth 5MHz and Channel Bandwidth 10MHz per 10MHz power test data, please refer to Channel Bandwidth 5MHz and Channel Bandwidth 10MHz full power.

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132072	132322	132572
		Frequency (MHz)		1720	1745	1770
20M	QPSK	1	0	25.61	25.55	25.49
		1	50	25.16	25.35	25.25
		1	99	25.19	25.28	25.49
		50	0	24.74	24.49	24.02
		50	25	24.06	24.18	24.40
		50	50	24.05	24.43	24.55
		100	0	24.16	24.34	24.07
20M	16QAM	1	0	24.16	24.96	24.05
		1	50	24.15	24.48	24.36
		1	99	24.16	24.45	24.31
		50	0	23.50	23.80	24.07
		50	25	23.41	23.24	23.51
		50	50	23.21	23.64	23.54
		100	0	23.26	23.72	23.57
20M	64QAM	1	0	23.27	23.11	23.18
		1	50	23.09	23.18	23.08
		1	99	23.15	23.28	23.13
		50	0	22.12	22.11	22.12
		50	25	22.16	22.07	22.03
		50	50	22.09	22.17	22.20
		100	0	22.07	22.14	22.06
20M	256QAM	1	0	20.49	20.28	20.42
		1	50	20.19	20.26	20.28
		1	99	20.15	20.16	20.63
		50	0	20.02	20.16	20.15
		50	25	20.13	20.65	20.46
		50	50	20.13	20.16	20.18
		100	0	20.50	20.49	20.70

*EIRP = Conducted + antenna gain (2.3dBi)

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132047	132322	132597
		Frequency (MHz)		1717.5	1745	1772.5
15M	QPSK	1	0	25.43	25.35	25.16
		1	37	25.56	25.15	25.15
		1	74	25.14	25.19	25.16
		36	0	24.22	24.56	24.28
		36	19	24.30	24.64	24.12
		36	39	24.37	24.24	24.03
		75	0	24.12	24.15	24.18
15M	16QAM	1	0	24.45	24.37	24.36
		1	37	24.01	24.76	24.74
		1	74	24.35	24.14	24.58
		36	0	23.08	23.71	23.19
		36	19	23.05	23.08	23.10
		36	39	23.08	23.26	23.01
		75	0	23.34	23.72	23.45
15M	64QAM	1	0	23.15	23.12	23.10
		1	37	23.08	23.16	23.03
		1	74	23.06	23.09	23.04
		36	0	22.28	22.10	22.24
		36	19	22.15	22.14	22.20
		36	39	22.08	22.09	22.13
		75	0	22.08	22.12	22.14
15M	256QAM	1	0	20.47	20.15	20.11
		1	37	20.33	20.02	20.75
		1	74	20.67	20.29	20.31
		36	0	20.48	20.20	20.47
		36	19	20.15	20.27	20.17
		36	39	20.24	20.15	20.06
		75	0	20.23	20.15	20.05

*EIRP = Conducted + antenna gain (2.3dBi)

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		132022	132322	132622
		Frequency (MHz)		1715	1745	1775
10M	QPSK	1	0	25.19	25.12	25.07
		1	24	25.23	25.21	25.14
		1	49	25.10	25.21	25.48
		25	0	24.03	24.17	24.33
		25	12	24.17	24.35	24.15
		25	25	24.12	24.09	24.43
		50	0	24.15	24.14	24.14
10M	16QAM	1	0	24.45	24.45	24.34
		1	24	24.34	24.26	24.28
		1	49	24.11	24.81	24.35
		25	0	23.14	23.52	23.40
		25	12	23.10	23.18	23.52
		25	25	23.04	23.21	23.40
		50	0	23.23	23.36	23.25
10M	64QAM	1	0	23.14	23.15	23.18
		1	24	23.19	23.10	23.13
		1	49	23.15	23.13	23.12
		25	0	22.20	22.15	22.12
		25	12	22.10	22.03	22.08
		25	25	22.10	22.20	22.07
		50	0	22.09	22.22	22.02
10M	256QAM	1	0	20.22	20.67	20.62
		1	24	20.04	20.42	20.15
		1	49	20.05	20.53	20.08
		25	0	20.06	20.06	20.14
		25	12	20.40	20.65	20.27
		25	25	20.15	20.14	20.12
		50	0	20.05	20.52	20.31

*EIRP = Conducted + antenna gain (2.3dBi)

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131997	132322	132647
		Frequency (MHz)		1712.5	1745	1777.5
5M	QPSK	1	0	25.11	25.17	25.16
		1	12	25.05	25.09	25.16
		1	24	25.20	25.09	25.11
		12	0	24.14	24.58	24.08
		12	6	24.33	24.34	24.34
		12	13	24.18	24.02	24.41
		25	0	24.15	24.43	24.16
5M	16QAM	1	0	24.14	24.29	24.35
		1	12	24.37	24.16	24.56
		1	24	24.12	24.61	24.16
		12	0	23.20	23.26	23.60
		12	6	23.03	23.30	23.40
		12	13	23.13	23.01	23.03
		25	0	23.09	23.49	23.43
5M	64QAM	1	0	23.15	23.12	23.10
		1	12	23.17	23.03	23.20
		1	24	23.08	23.15	23.08
		12	0	22.21	22.19	22.02
		12	6	22.13	22.08	22.16
		12	13	22.23	22.10	22.07
		25	0	22.20	22.04	22.07
5M	256QAM	1	0	20.01	20.88	20.12
		1	12	20.47	20.26	20.44
		1	24	20.26	20.18	20.20
		12	0	20.18	20.09	20.67
		12	6	20.10	20.16	20.43
		12	13	20.07	20.08	20.16
		25	0	20.09	20.07	20.45

*EIRP = Conducted + antenna gain (2.3dBi)

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131987	132322	132657
		Frequency (MHz)		1711.5	1745	1778.5
3M	QPSK	1	0	25.30	25.40	25.49
		1	7	25.36	25.37	25.26
		1	14	25.07	25.17	25.41
		8	0	24.06	24.15	24.52
		8	3	24.07	24.19	24.48
		8	7	24.20	24.07	24.04
		15	0	24.21	24.65	24.07
3M	16QAM	1	0	24.01	24.46	24.05
		1	7	24.04	24.29	24.33
		1	14	24.15	24.59	24.25
		8	0	23.18	23.12	23.45
		8	3	23.14	23.30	23.47
		8	7	23.14	23.17	23.81
		15	0	23.12	23.42	23.42
3M	64QAM	1	0	23.14	23.13	23.03
		1	7	23.27	23.19	23.29
		1	14	23.16	23.16	23.22
		8	0	22.28	22.21	22.32
		8	3	22.16	22.12	22.11
		8	7	22.24	22.11	22.10
		15	0	22.13	22.28	22.14
3M	256QAM	1	0	20.52	20.77	20.59
		1	7	20.40	21.06	20.69
		1	14	20.14	20.67	20.07
		8	0	20.15	20.09	20.17
		8	3	20.18	20.02	20.58
		8	7	20.17	20.03	20.15
		15	0	20.12	20.17	20.09

*EIRP = Conducted + antenna gain (2.3dBi)

LTE Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		131979	132322	132665
		Frequency (MHz)		1710.7	1745	1779.3
1.4M	QPSK	1	0	25.10	25.52	25.47
		1	2	25.59	25.49	25.42
		1	5	25.07	25.47	25.02
		3	0	25.08	25.03	25.32
		3	1	25.04	25.02	25.51
		3	3	25.25	25.42	25.36
		6	0	24.27	24.68	24.55
1.4M	16QAM	1	0	24.30	24.35	24.12
		1	2	24.19	24.79	24.70
		1	5	24.20	24.39	24.23
		3	0	24.16	24.35	24.28
		3	1	24.18	24.33	24.24
		3	3	24.17	24.25	24.16
		6	0	23.05	23.18	23.76
1.4M	64QAM	1	0	23.16	23.13	23.07
		1	2	23.07	23.16	23.08
		1	5	23.02	23.16	23.10
		3	0	23.05	23.06	23.20
		3	1	23.14	23.16	23.03
		3	3	23.01	23.13	23.21
		6	0	22.27	22.25	22.03
1.4M	256QAM	1	0	20.02	20.43	20.14
		1	2	20.09	20.42	20.40
		1	5	20.17	20.43	20.27
		3	0	20.13	20.11	20.15
		3	1	20.25	20.14	20.38
		3	3	20.07	20.50	20.45
		6	0	20.08	20.14	20.09

*EIRP = Conducted + antenna gain (2.3dBi)

4.2 Modulation Characteristics Measurement

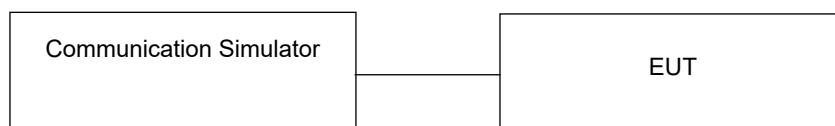
4.2.1 Limits of Modulation Characteristics

N/A

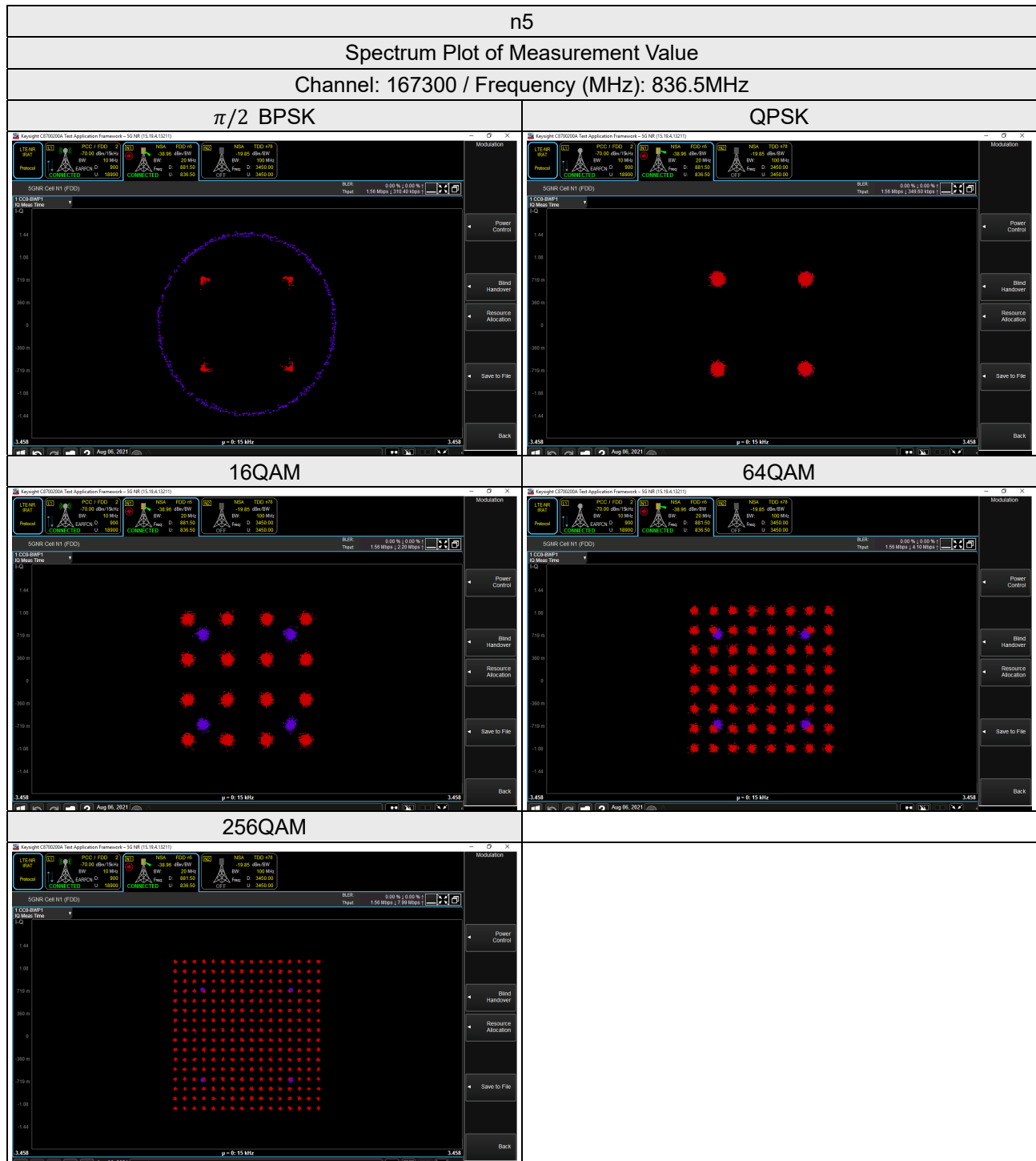
4.2.2 Test Procedure

Connect the EUT to Communication Simulator via the antenna connector, The frequency band is set as EUT supported Modulation and Channels, the EUT output is matched with 50 ohm load, the waveform quality and constellation of the EUT was tested.

4.2.3 Test Setup



4.2.4 Test Results



4.3 Frequency Stability Measurement

4.3.1 Limits of Frequency Stability Measurement

1.5 ppm is for base and fixed station. 2.5 ppm is for mobile station.

4.3.2 Test Procedure

- Device is placed at the oven room. The oven room could control the temperatures and humidity. Power warm up is at least 15 min and power applied should perform before recording frequency error.
- EUT is connected the external power supply to control the DC input power. The test voltage range is from minimum to maximum working voltage. Each step shall be record the frequency error rate.
- The temperature range step is 10 degrees in this test items. All temperature levels shall be hold the $\pm 0.5^{\circ}\text{C}$ during the measurement testing. The each temperature step shall be at least 0.5 hours, consider the EUT could be test under the stability condition.

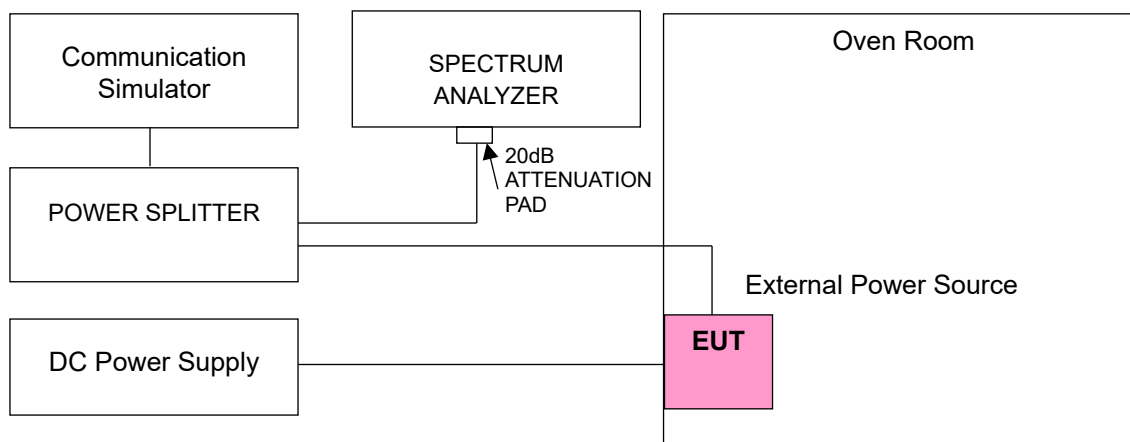
Note: The frequency error was recorded frequency error from the communication simulator.

4.3.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
5G Wireless Test Platforms Keysight	E7515B	MY60102114	May 21, 2021	May 20, 2022
Temperature & Humidity Chamber TERCHY	HRM-120RF	931022	Dec. 24, 2020	Dec. 23, 2021
Digital Multimeter Fluke	87-III	70360755	Jul. 10, 2020 Jul. 08, 2021	Jul. 09, 2021 Jul. 07, 2022
DC Power Supply Topward	6306A	727263	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.

4.3.4 Test Setup



4.3.5 Test Results

Frequency Error vs. Voltage

Voltage (Vdc)	n5			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
3.87	826.500031	0.038	846.500015	0.018
3.28	826.500019	0.023	846.500014	0.017
4.45	826.500018	0.022	846.500037	0.044

Note: The applicant defined the normal working voltage is from 3.28Vdc to 4.45Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n5			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	826.500016	0.019	846.500028	0.033
-20	826.500014	0.017	846.500034	0.040
-10	826.500019	0.023	846.500024	0.028
0	826.500025	0.030	846.500028	0.033
10	826.500012	0.015	846.500038	0.045
20	826.499979	-0.025	846.499968	-0.038
30	826.499973	-0.033	846.499969	-0.037
40	826.499990	-0.012	846.499982	-0.021
50	826.499988	-0.015	846.499968	-0.038
60	826.499976	-0.029	846.499963	-0.044

Frequency Error vs. Voltage

Voltage (Vdc)	n5			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
3.87	829.000032	0.039	844.000029	0.034
3.28	829.000010	0.012	844.000017	0.020
4.45	829.000040	0.048	844.000037	0.044

Note: The applicant defined the normal working voltage is from 3.28Vdc to 4.45Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n5			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	829.000022	0.027	844.000021	0.025
-20	829.000018	0.022	844.000017	0.020
-10	829.000010	0.012	844.000022	0.026
0	829.000028	0.034	844.000017	0.020
10	829.000022	0.027	844.000025	0.030
20	828.999962	-0.046	843.999983	-0.020
30	828.999965	-0.042	843.999960	-0.047
40	828.999973	-0.033	843.999967	-0.039
50	828.999979	-0.025	843.999970	-0.035
60	828.999961	-0.047	843.999975	-0.030

Frequency Error vs. Voltage

Voltage (Vdc)	n5			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
3.87	831.500017	0.021	841.500012	0.014
3.28	831.500014	0.017	841.500019	0.022
4.45	831.500017	0.021	841.500021	0.025

Note: The applicant defined the normal working voltage is from 3.28Vdc to 4.45Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n5			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	831.500025	0.030	841.500017	0.020
-20	831.500021	0.025	841.500014	0.017
-10	831.500027	0.033	841.500023	0.027
0	831.500040	0.048	841.500021	0.025
10	831.500016	0.019	841.500026	0.031
20	831.499990	-0.012	841.499961	-0.046
30	831.499986	-0.017	841.499968	-0.038
40	831.499989	-0.013	841.499983	-0.020
50	831.499978	-0.027	841.499977	-0.027
60	831.499961	-0.047	841.499976	-0.028

Frequency Error vs. Voltage

Voltage (Vdc)	n5			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
3.87	834.000015	0.018	839.000033	0.039
3.28	834.000029	0.035	839.000024	0.028
4.45	834.000030	0.036	839.000035	0.041

Note: The applicant defined the normal working voltage is from 3.28Vdc to 4.45Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n5			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	834.000000	0.000	839.000018	0.021
-20	834.000011	0.013	839.000011	0.013
-10	834.000034	0.041	839.000027	0.032
0	834.000038	0.046	839.000030	0.035
10	834.000025	0.030	839.000018	0.021
20	833.999979	-0.025	838.999981	-0.022
30	833.999986	-0.017	838.999970	-0.035
40	833.999976	-0.029	838.999967	-0.039
50	833.999984	-0.019	838.999968	-0.038
60	833.999973	-0.033	838.999975	-0.030

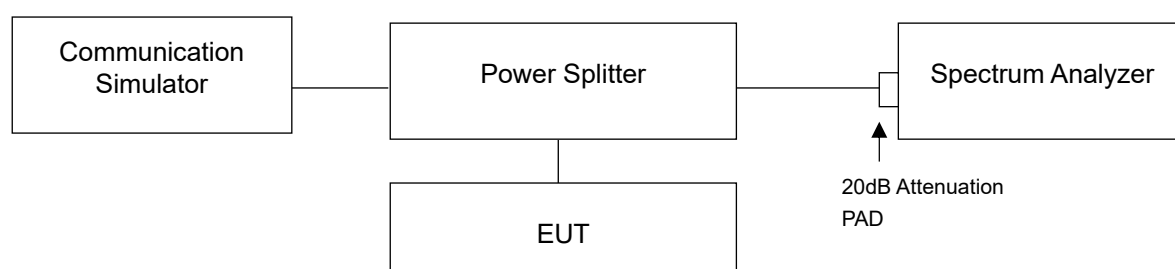
4.4 Occupied Bandwidth Measurement

4.4.1 Test Procedure

The EUT makes a call to the communication simulator. All measurements were done at low, middle and high operational frequency range. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency. Measurement method, please refer to section 5.4.4 of ANSI C63.26. Use OBW measurement function of Spectrum analyzer to measure 99 % occupied bandwidth.

For the 26dBc bandwidth measurement method, please refer to section 5.4.3 of ANSI C63.26.

4.4.2 Test Setup



4.4.3 Test Result

Occupied Bandwidth

n5, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
165300	826.5	4.46	4.47	4.47	4.47	4.47
167300	836.5	4.47	4.47	4.47	4.47	4.47
169300	846.5	4.46	4.47	4.47	4.47	4.47
n5, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
165800	829.0	9.21	9.29	9.28	9.29	9.29
167300	836.5	9.18	9.22	9.24	9.21	9.22
168800	844.0	9.22	9.29	9.29	9.29	9.29
n5, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
166300	831.5	14.04	14.12	14.12	14.12	14.12
167300	836.5	14.00	14.12	14.12	14.12	14.12
168300	841.5	13.99	14.00	14.00	13.99	14.00
n5, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
166800	834.0	18.82	18.92	18.92	18.92	18.96
167300	836.5	18.75	18.91	18.91	18.92	18.92
167800	839.0	18.76	18.91	18.91	18.91	18.91

Spectrum Plot of Worst Value

5MHz / $\pi/2$ BPSK



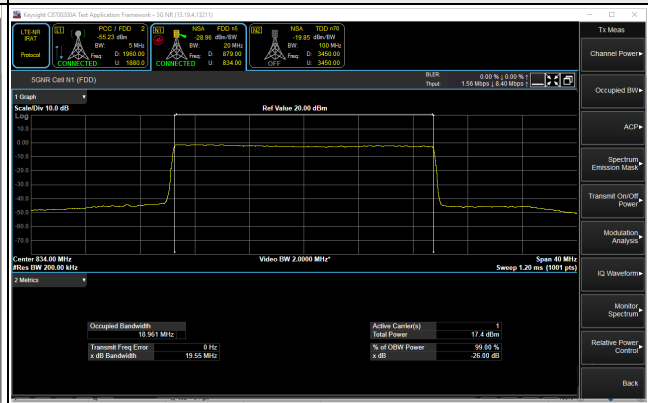
10MHz / 256QAM



15MHz / QPSK



20MHz / 256QAM

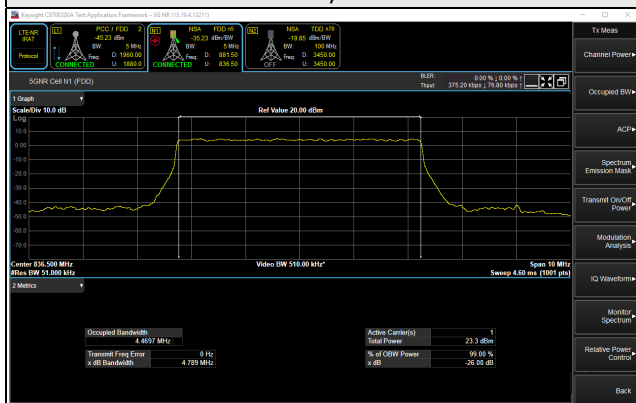


26dB Bandwidth

n5, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
165300	826.5	4.73	4.72	4.75	4.74	4.72
167300	836.5	4.79	4.78	4.76	4.71	4.69
169300	846.5	4.72	4.77	4.77	4.74	4.71
n5, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
165800	829.0	9.31	9.66	9.63	9.65	9.65
167300	836.5	9.30	9.34	9.33	9.33	9.30
168800	844.0	9.26	9.66	9.62	9.63	9.65
n5, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
166300	831.5	13.91	14.60	14.63	14.60	14.58
167300	836.5	13.89	14.62	14.62	14.61	14.59
168300	841.5	13.89	13.90	13.91	13.89	13.87
n5, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
166800	834.0	18.49	19.58	19.58	19.56	19.55
167300	836.5	18.49	19.57	19.59	19.56	19.56
167800	839.0	18.48	19.58	19.57	19.55	19.56

Spectrum Plot of Worst Value

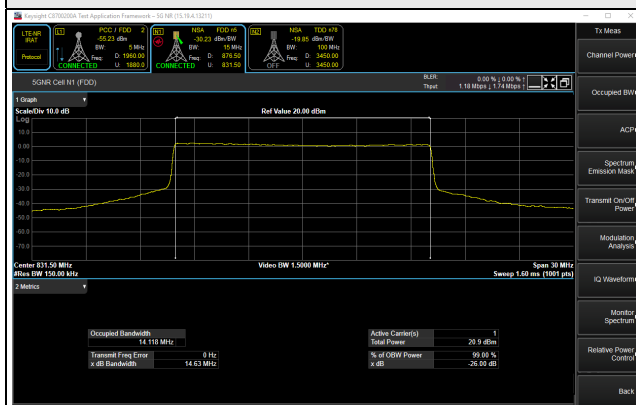
5MHz / $\pi/2$ BPSK



10MHz / QPSK



15MHz / 16QAM



20MHz / 16QAM

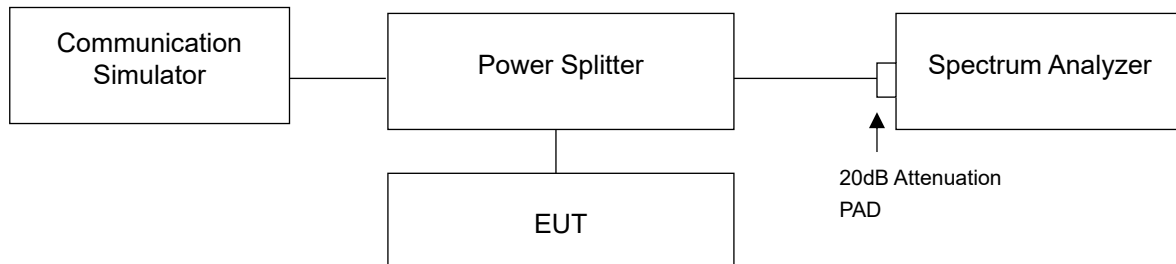


4.5 Band Edge Measurement

4.5.1 Limits of Band Edge Measurement

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. In the 1 MHz bands immediately outside and adjacent to the frequency block a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

4.5.2 Test Setup

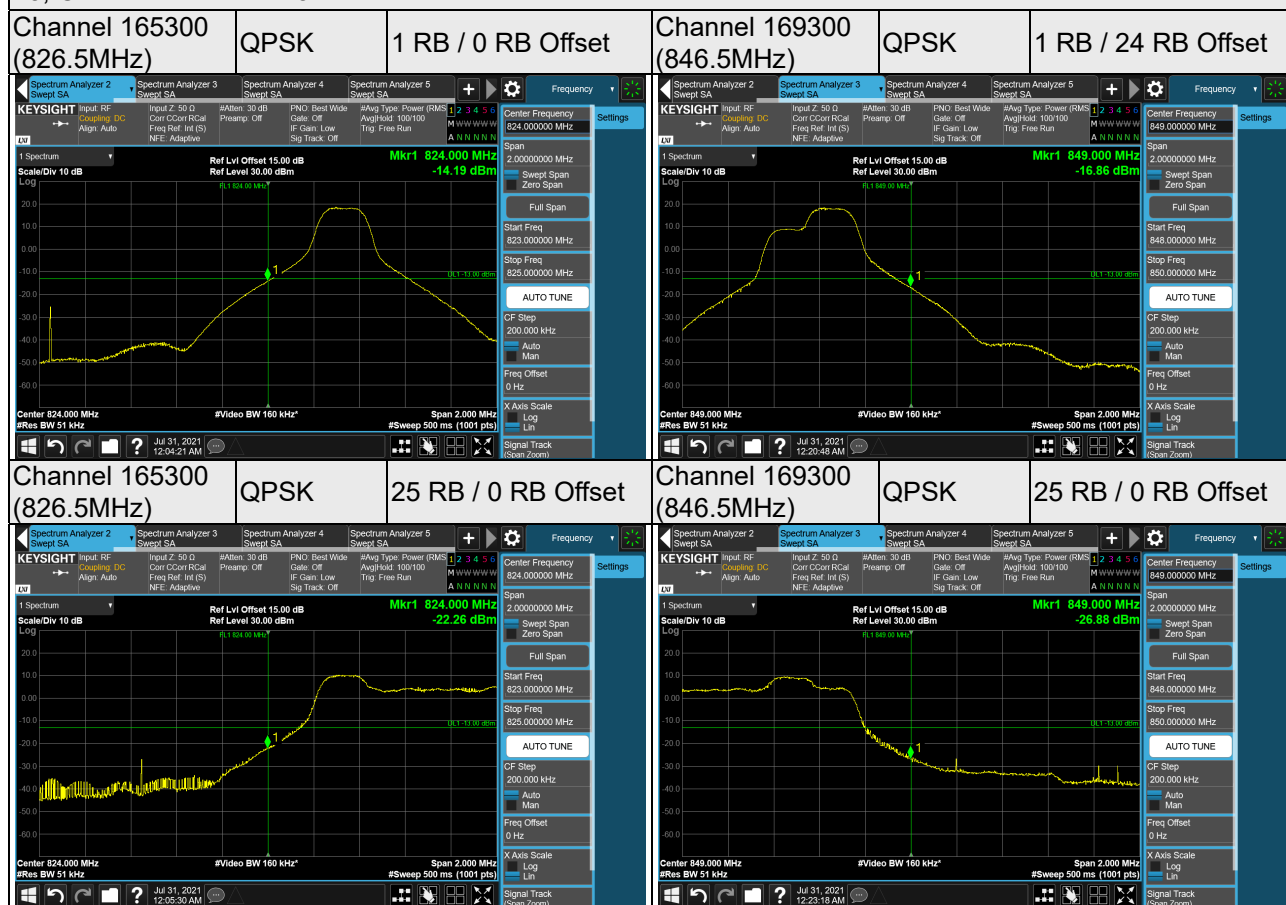


4.5.3 Test Procedures

- All measurements were done at low and high operational frequency range.
- The center frequency of spectrum is the band edge frequency and span is 2MHz. RB of the spectrum is 51kHz and VB of the spectrum is 160kHz (Channel Bandwidth 5MHz).
- The center frequency of spectrum is the band edge frequency and span is 2MHz. RB of the spectrum is 100kHz and VB of the spectrum is 300kHz (Channel Bandwidth 10MHz).
- The center frequency of spectrum is the band edge frequency and span is 2MHz. RB of the spectrum is 150kHz and VB of the spectrum is 470kHz (Channel Bandwidth 15MHz).
- The center frequency of spectrum is the band edge frequency and span is 2MHz. RB of the spectrum is 200kHz and VB of the spectrum is 620kHz (Channel Bandwidth 20MHz).
- Record the max trace plot into the test report.

4.5.4 Test Results

n5, Channel Bandwidth 5MHz



n5, Channel Bandwidth 10MHz

Channel 165800
(829.0MHz)

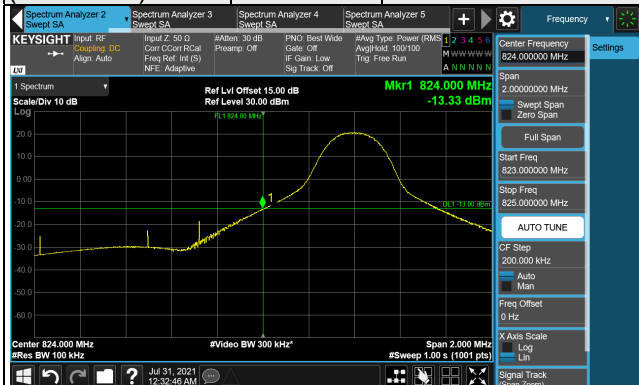
QPSK

1 RB / 0 RB Offset

Channel 168800
(844.0MHz)

QPSK

1 RB / 51 RB Offset



Channel 165800
(829.0MHz)

QPSK

52 RB / 0 RB Offset

Channel 168800
(844.0MHz)

QPSK

52 RB / 0 RB Offset



n5, Channel Bandwidth 15MHz

Channel 166300
(831.5MHz)

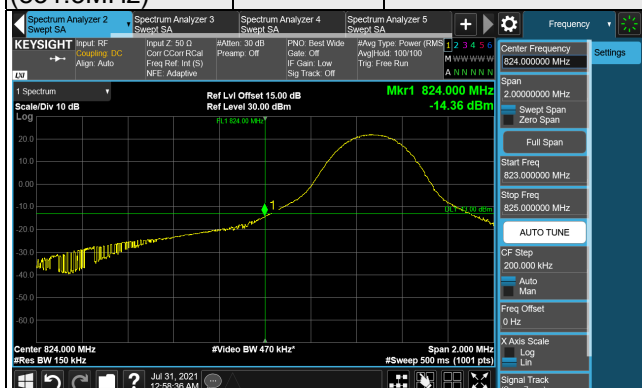
QPSK

1 RB / 0 RB Offset

Channel 168300
(841.5MHz)

QPSK

1 RB / 78 RB Offset



Channel 166300
(831.5MHz)

QPSK

79 RB / 0 RB Offset

Channel 168300
(841.5MHz)

QPSK

79 RB / 0 RB Offset



n5, Channel Bandwidth 20MHz

Channel 166800
(834.0MHz)

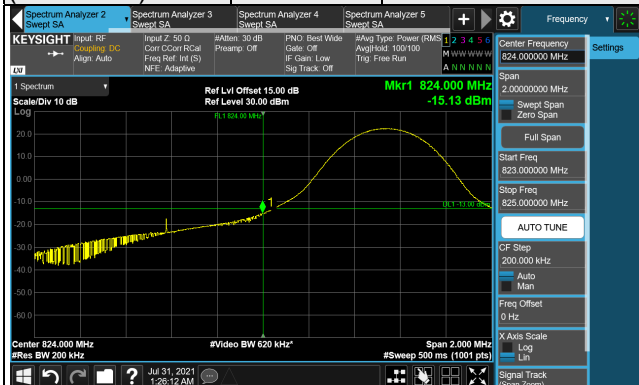
QPSK

1 RB / 0 RB Offset

Channel 167800
(839.0MHz)

QPSK

1 RB / 105 RB Offset



Channel 166800
(834.0MHz)

QPSK

106 RB / 0 RB Offset

Channel 167800
(839.0MHz)

QPSK

106 RB / 0 RB Offset

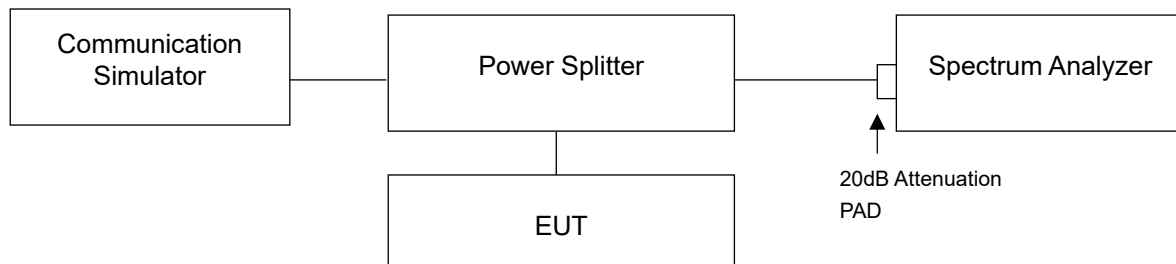


4.6 Peak to Average Ratio

4.6.1 Limits of Peak to Average Ratio Measurement

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB

4.6.2 Test Setup



4.6.3 Test Procedures

- Set resolution/measurement bandwidth $\geq$ signal's occupied bandwidth;
- Set the number of counts to a value that stabilizes the measured CCDF curve;
- Record the maximum PAPR level associated with a probability of 0.1%.

4.6.4 Test Results

n5, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
165300	826.5	3.46	6.65	6.70	6.77	9.74
167300	836.5	3.43	6.65	6.55	7.34	8.80
169300	846.5	3.41	6.55	6.60	6.59	9.42
n5, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
165800	829.0	3.51	5.88	6.50	6.51	8.76
167300	836.5	3.45	5.91	6.16	7.02	8.66
168800	844.0	3.46	5.95	6.34	6.39	8.58
n5, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
166300	831.5	3.66	6.10	6.91	7.09	9.33
167300	836.5	3.48	5.80	6.11	7.05	8.58
168300	841.5	3.54	5.95	6.25	7.20	8.98
n5, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
166800	834.0	3.50	5.90	6.29	6.27	8.86
167300	836.5	3.51	6.01	6.86	6.25	9.08
167800	839.0	3.44	5.95	6.28	6.73	8.75

Spectrum Plot of Worst Value

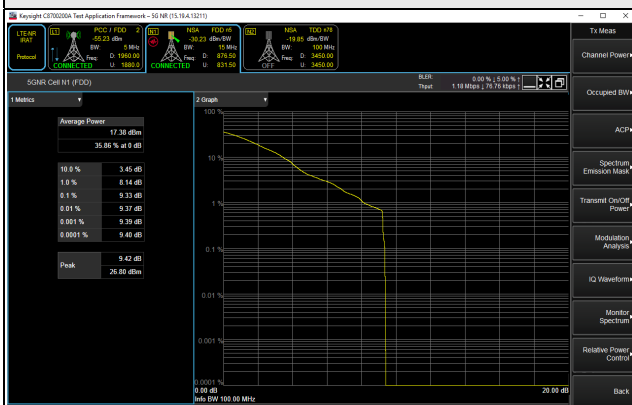
5MHz / 256QAM



10MHz / 256QAM



15MHz / 256QAM



20MHz / 256QAM

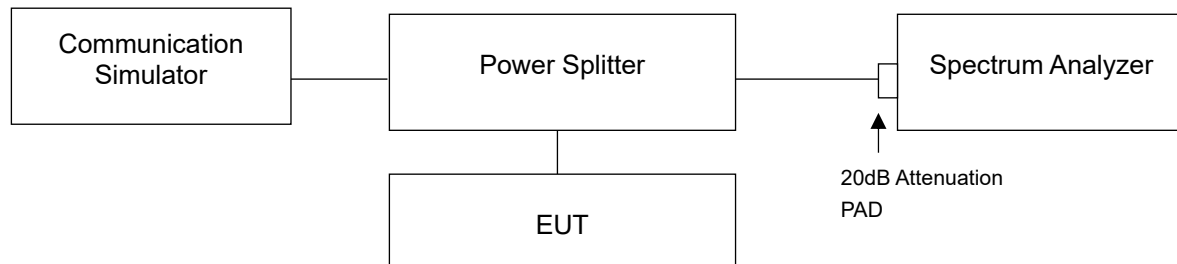


4.7 Conducted Spurious Emissions

4.7.1 Limits of Conducted Spurious Emissions Measurement

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

4.7.2 Test Setup



4.7.3 Test Procedure

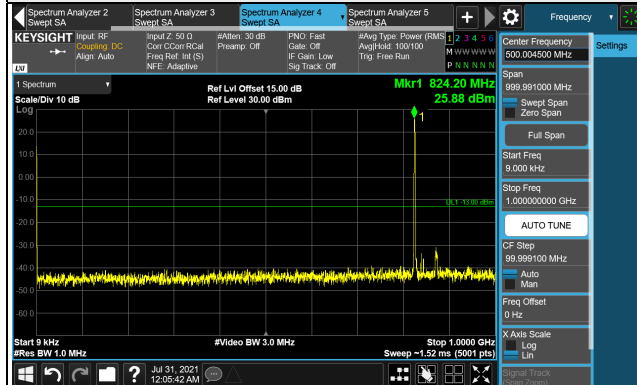
- The EUT makes a phone call to the communication simulator. All measurements were done at low, middle and high operational frequency range.
- Measuring frequency range is from 9kHz to 10GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz are used conducted emission measurement.

4.7.4 Test Results

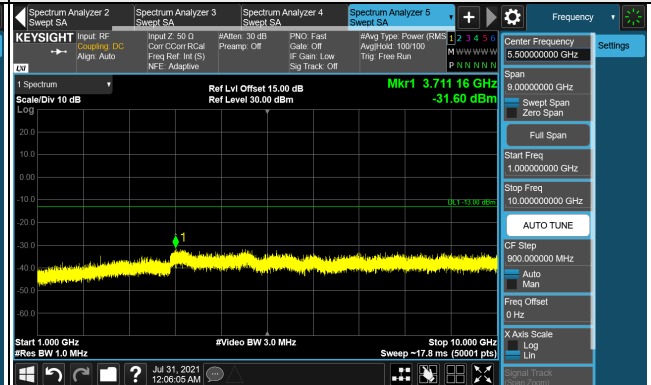
n5, Channel Bandwidth 5MHz

Channel 165300 (826.5MHz)

Frequency Range : 9kHz ~ 1GHz

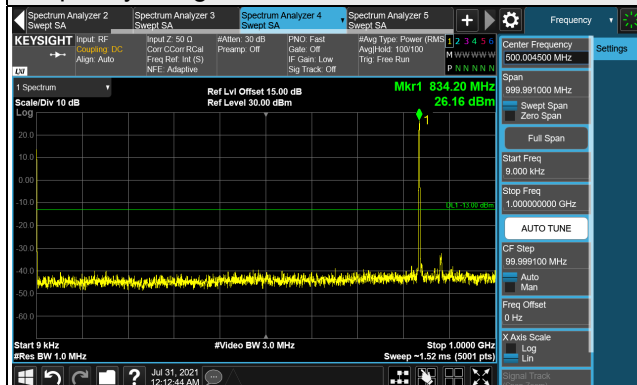


Frequency Range : 1GHz ~ 10GHz

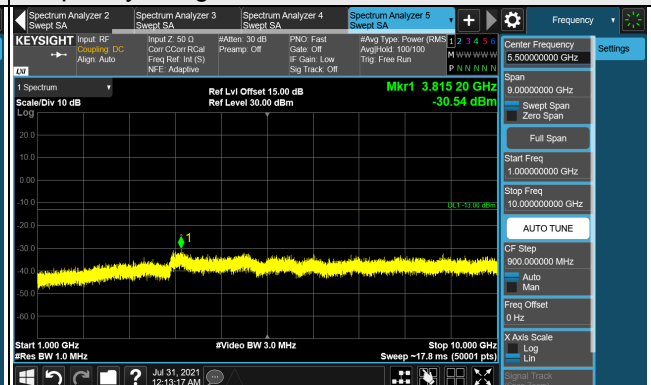


Channel 167300 (836.5MHz)

Frequency Range : 9kHz ~ 1GHz

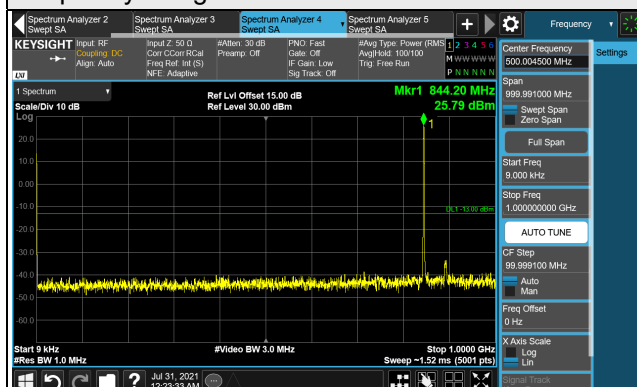


Frequency Range : 1GHz ~ 10GHz

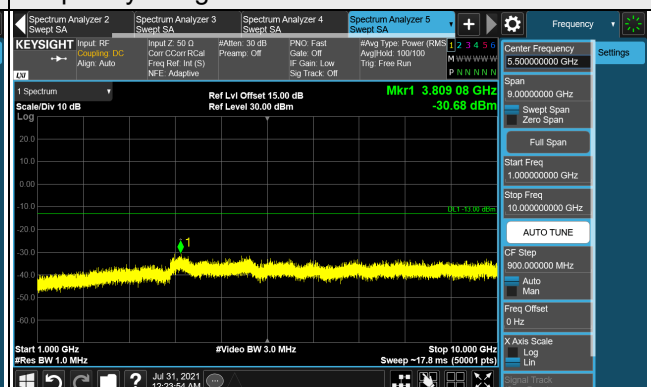


Channel 169300 (846.5MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 10GHz

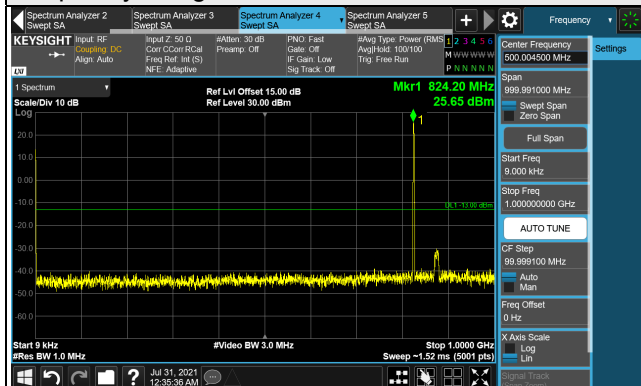


*The 9 kHz tone is from the spectrum analyzer.

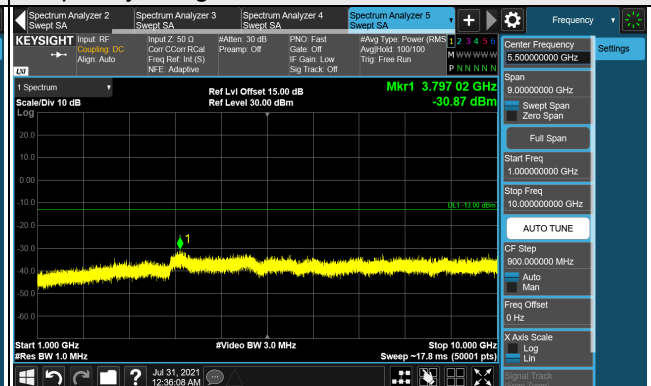
n5, Channel Bandwidth 10MHz

Channel 165800 (829.0MHz)

Frequency Range : 9kHz ~ 1GHz

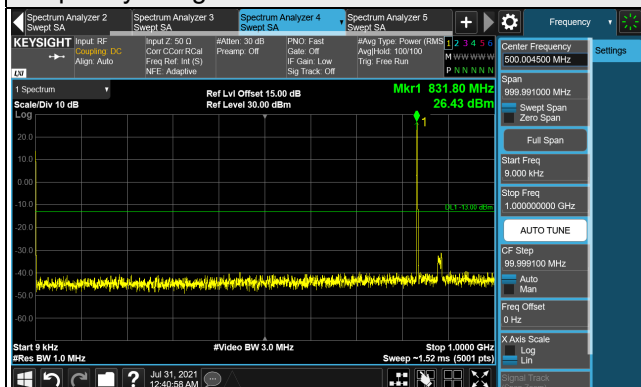


Frequency Range : 1GHz ~ 10GHz

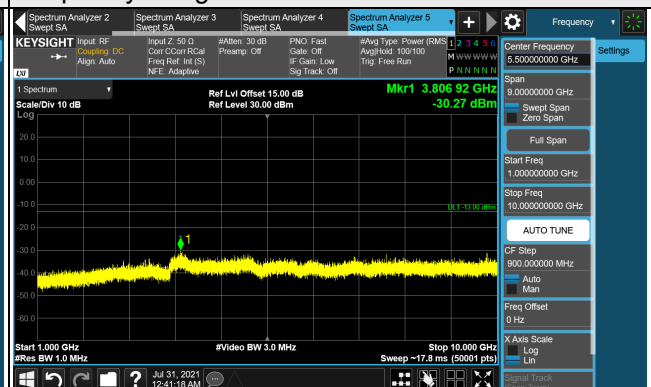


Channel 167300 (836.5MHz)

Frequency Range : 9kHz ~ 1GHz

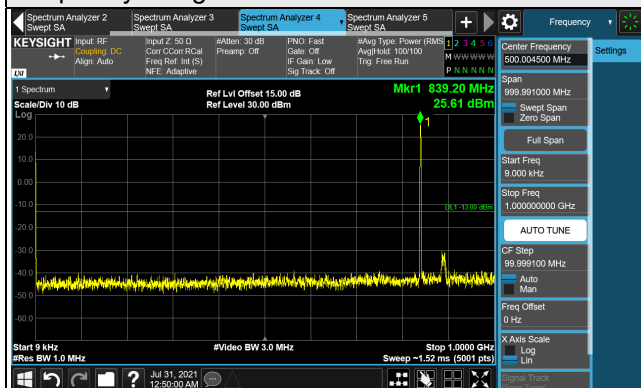


Frequency Range : 1GHz ~ 10GHz

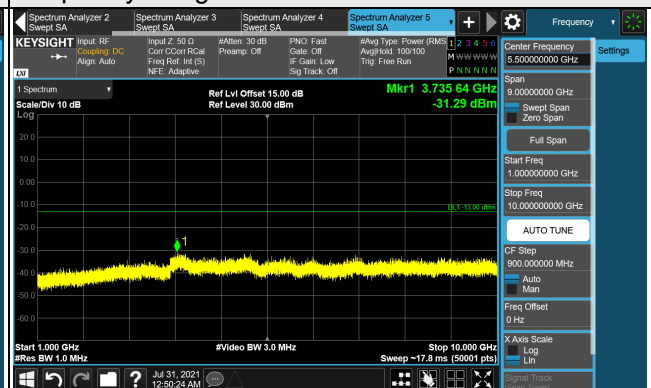


Channel 168800 (844.0MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 10GHz

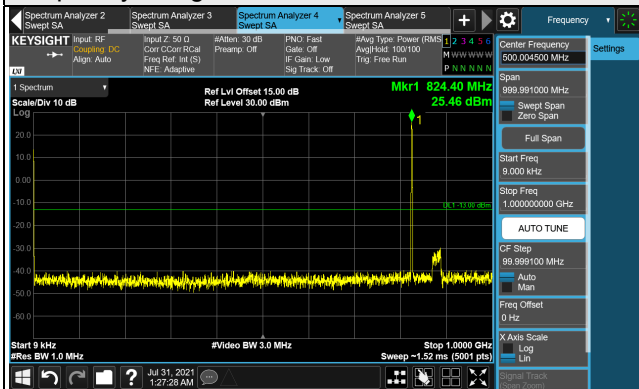


*The 9 kHz tone is from the spectrum analyzer.

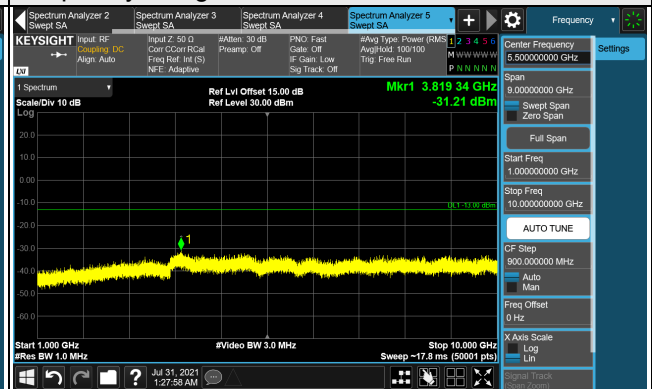
n5, Channel Bandwidth 20MHz

Channel 166800 (834.0MHz)

Frequency Range : 9kHz ~ 1GHz

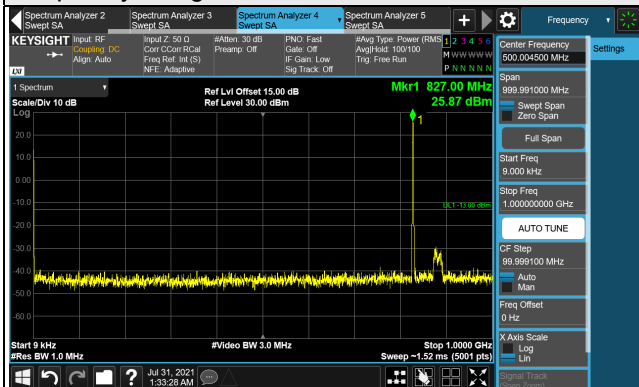


Frequency Range : 1GHz ~ 10GHz

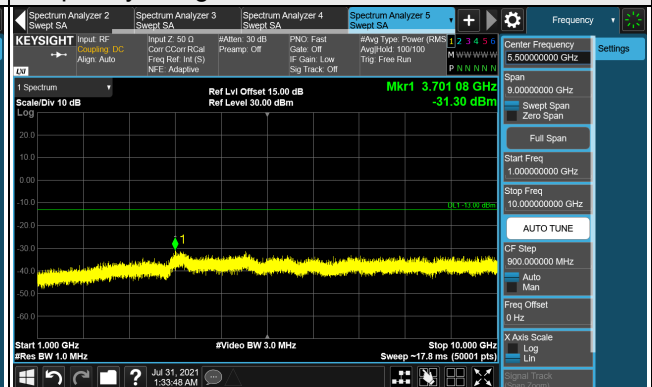


Channel 167300 (836.5MHz)

Frequency Range : 9kHz ~ 1GHz

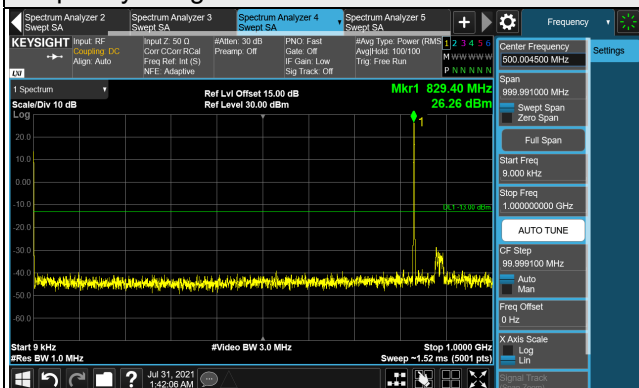


Frequency Range : 1GHz ~ 10GHz

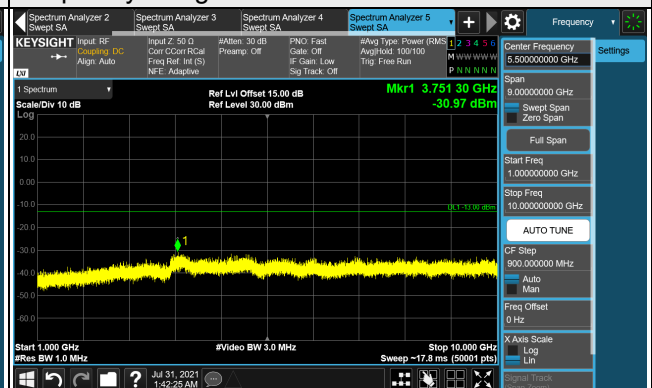


Channel 167800 (839.0MHz)

Frequency Range : 9kHz ~ 1GHz



Frequency Range : 1GHz ~ 10GHz



*The 9 kHz tone is from the spectrum analyzer.

4.8 Radiated Emission Measurement

4.8.1 Limits of Radiated Emission Measurement

For n5, LTE Band 2:

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

For LTE Band 48:

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

For LTE Band 66:

According to FCC 27.53(h) for operations in the 1695-1710MHz, 1710-1755MHz, 1755-1780 MHz, 1915-1920MHz, 1995-2000 MHz, 2000-2020MHz, 2110-2155MHz, 2155-2180 MHz, and 2180-2200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log(P)$ dB.

4.8.2 Test Procedure

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

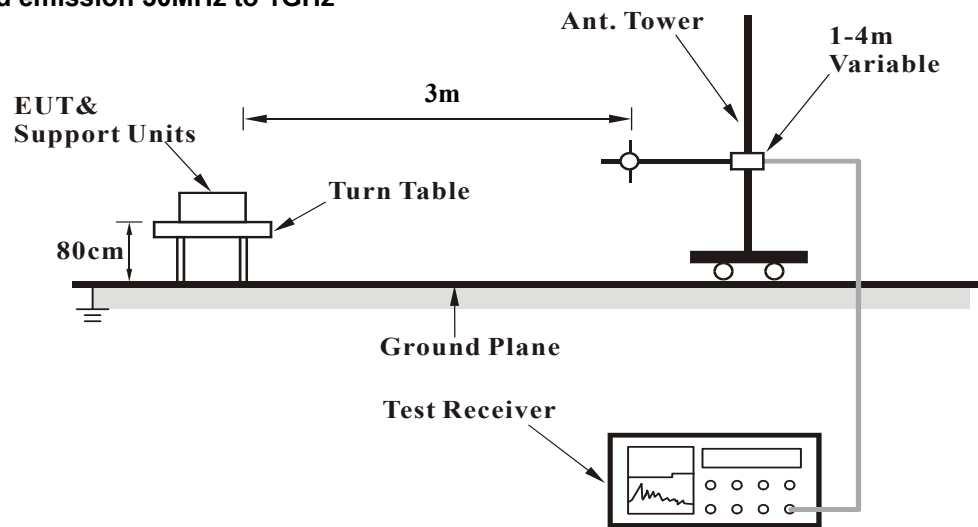
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1MHz/3MHz.
2. The emission levels were against the limit of frequency range 9 kHz ~ 30 MHz:
The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

4.8.3 Deviation from Test Standard

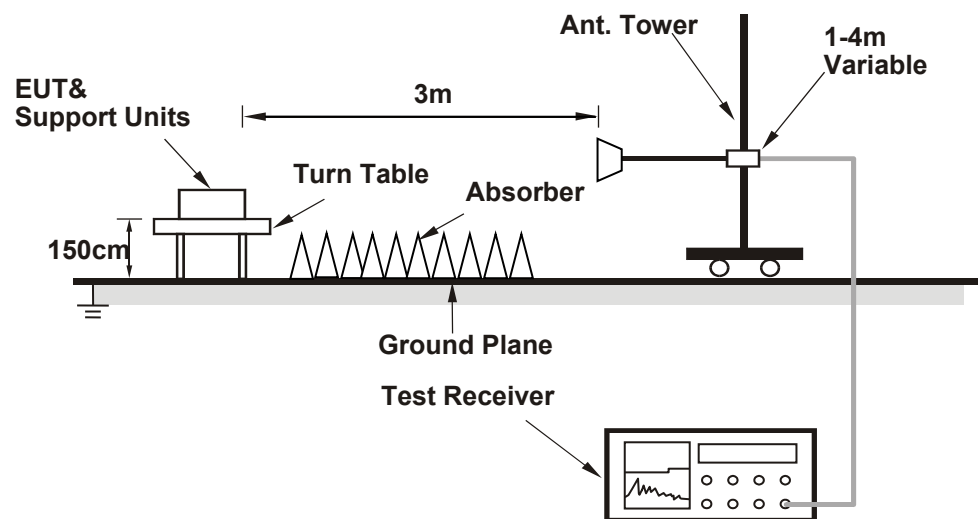
No deviation.

4.8.4 Test Setup

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).

4.8.5 Test Results

Below 1GHz

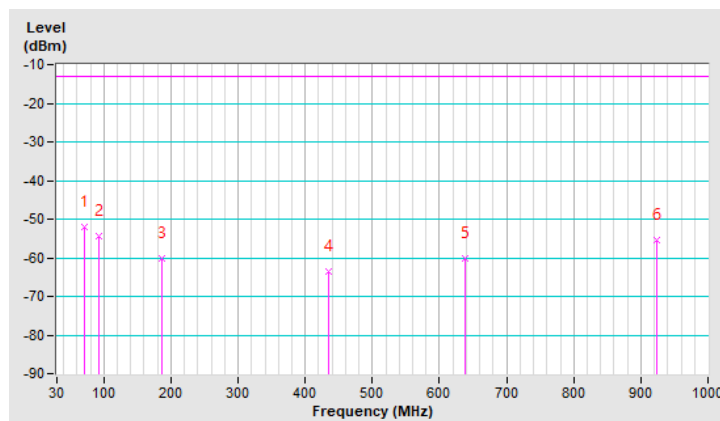
n5, Channel Bandwidth 20MHz

Mode	TX channel 167300 (836.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	70.74	-51.93	-13.00	-38.93	1.25 H	223	56.52	-108.45
2	92.08	-54.35	-13.00	-41.35	1.50 H	322	57.44	-111.79
3	186.17	-60.13	-13.00	-47.13	1.00 H	280	48.05	-108.18
4	435.46	-63.59	-13.00	-50.59	1.25 H	238	37.35	-100.94
5	639.16	-60.25	-13.00	-47.25	1.00 H	209	36.66	-96.91
6	924.34	-55.41	-13.00	-42.41	1.50 H	81	35.78	-91.19

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.

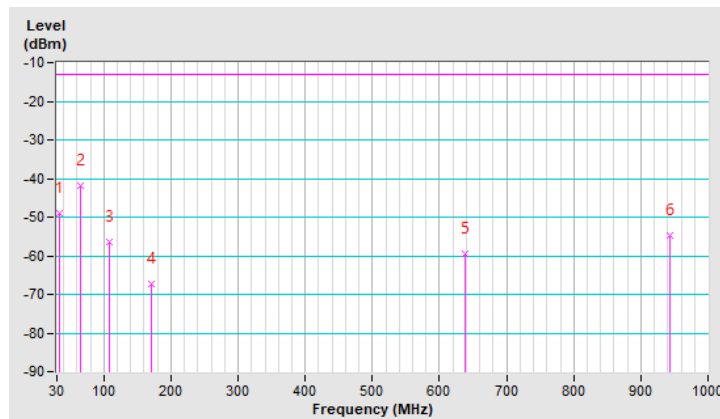


Mode	TX channel 167300 (836.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	33.88	-48.88	-13.00	-35.88	1.00 V	14	58.57	-107.45
2	65.89	-41.93	-13.00	-28.93	1.50 V	118	65.73	-107.66
3	108.57	-56.44	-13.00	-43.44	1.50 V	137	53.02	-109.46
4	170.65	-67.36	-13.00	-54.36	1.00 V	274	39.00	-106.36
5	639.16	-59.65	-13.00	-46.65	1.25 V	288	37.26	-96.91
6	943.74	-54.68	-13.00	-41.68	1.00 V	211	36.34	-91.02

Remarks:

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



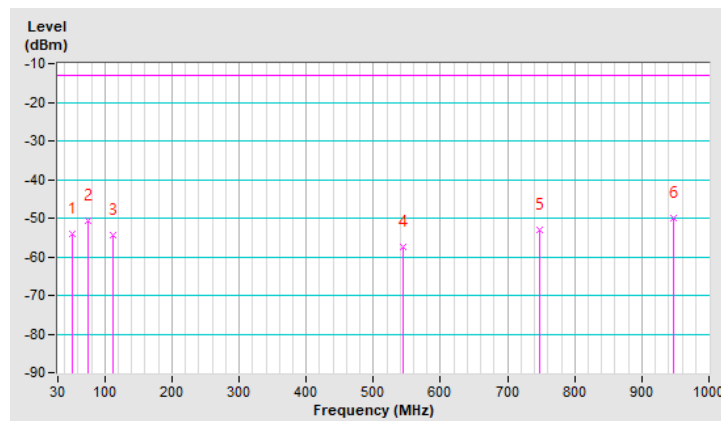
LTE Band 2, Channel Bandwidth 5MHz

Mode	TX channel 19175 (1907.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	51.34	-53.93	-13.00	-40.93	1.00 H	10	50.23	-104.16
2	74.62	-50.62	-13.00	-37.62	1.50 H	282	56.70	-107.32
3	111.48	-54.33	-13.00	-41.33	1.25 H	293	52.77	-107.10
4	545.07	-57.29	-13.00	-44.29	1.00 H	16	39.50	-96.79
5	746.83	-53.11	-13.00	-40.11	1.25 H	295	39.90	-93.01
6	946.65	-49.91	-13.00	-36.91	1.00 H	358	38.89	-88.80

Remarks:

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

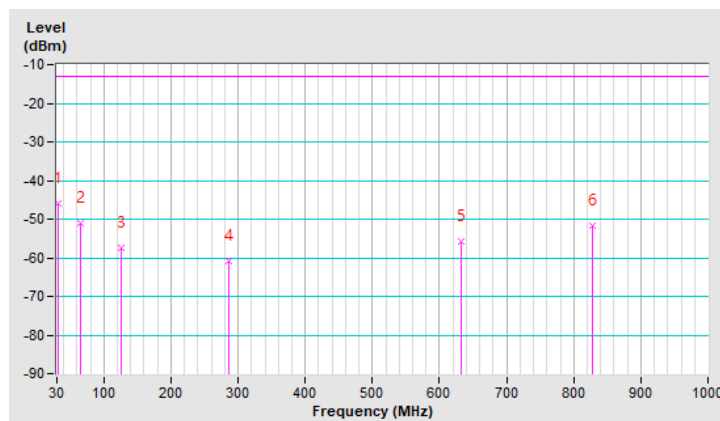


Mode	TX channel 19175 (1907.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	32.91	-45.77	-13.00	-32.77	1.25 V	17	59.86	-105.63
2	65.89	-51.09	-13.00	-38.09	1.00 V	352	54.42	-105.51
3	125.06	-57.35	-13.00	-44.35	1.00 V	59	48.46	-105.81
4	287.05	-60.91	-13.00	-47.91	1.00 V	5	41.42	-102.33
5	632.37	-55.70	-13.00	-42.70	1.50 V	17	39.15	-94.85
6	827.34	-51.85	-13.00	-38.85	1.00 V	213	39.46	-91.31

Remarks:

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



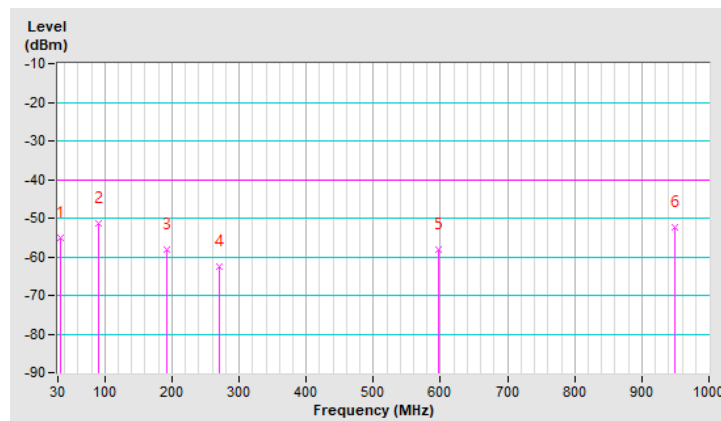
LTE Band 48, Channel Bandwidth 5MHz

Mode	TX channel 56715 (3697.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	33.88	-54.99	-40.00	-14.99	1.50 H	352	50.31	-105.30
2	91.11	-51.45	-40.00	-11.45	1.00 H	6	58.36	-109.81
3	192.96	-58.27	-40.00	-18.27	1.25 H	107	48.33	-106.60
4	269.59	-62.64	-40.00	-22.64	1.00 H	91	40.34	-102.98
5	597.45	-58.27	-40.00	-18.27	1.50 H	173	37.23	-95.50
6	949.56	-52.33	-40.00	-12.33	1.00 H	39	36.45	-88.78

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.

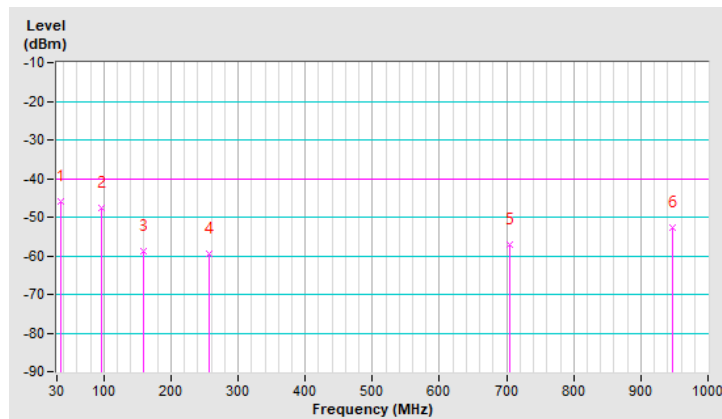


Mode	TX channel 56715 (3697.5MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	35.82	-46.01	-40.00	-6.01	1.00 V	227	59.25	-105.26
2	95.96	-47.60	-40.00	-7.60	1.00 V	227	61.78	-109.38
3	159.98	-58.78	-40.00	-18.78	1.25 V	227	45.01	-103.79
4	256.98	-59.61	-40.00	-19.61	1.50 V	227	44.19	-103.80
5	705.12	-57.27	-40.00	-17.27	1.50 V	328	36.73	-94.00
6	947.62	-52.87	-40.00	-12.87	1.25 V	59	35.93	-88.80

Remarks:

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



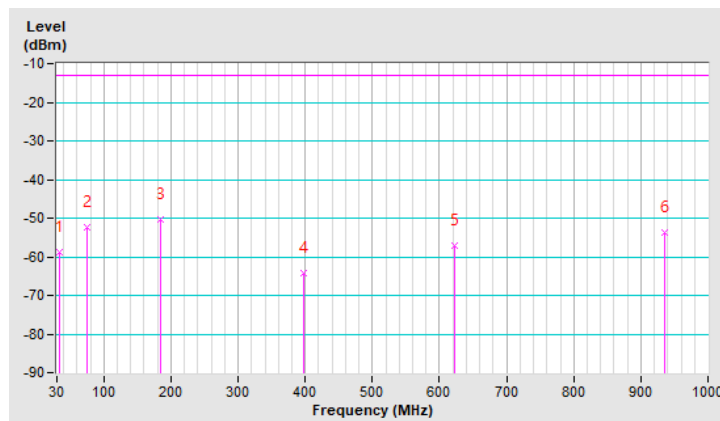
LTE Band 66, Channel Bandwidth 20MHz

Mode	TX channel 132572 (1770.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	33.88	-58.77	-13.00	-45.77	1.00 H	209	46.53	-105.30
2	74.62	-52.46	-13.00	-39.46	1.25 H	192	54.86	-107.32
3	184.23	-50.27	-13.00	-37.27	1.50 H	255	55.53	-105.80
4	398.60	-64.31	-13.00	-51.31	1.00 H	6	35.69	-100.00
5	622.67	-57.09	-13.00	-44.09	1.25 H	152	37.94	-95.03
6	935.01	-53.78	-13.00	-40.78	1.50 H	217	35.12	-88.90

Remarks:

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

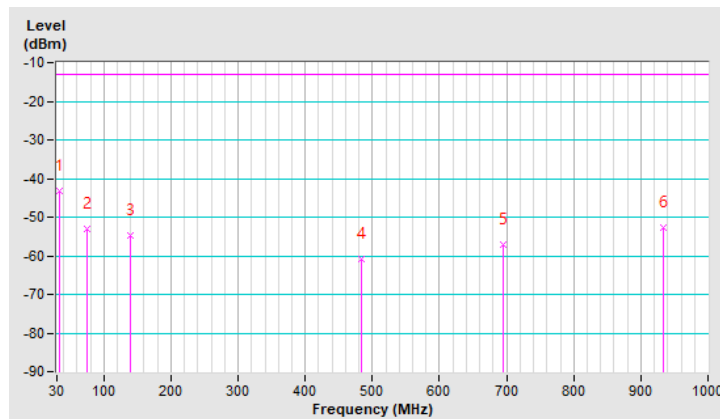


Mode	TX channel 132572 (1770.0MHz)	Frequency Range	Below 1000 MHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	33.88	-43.10	-13.00	-30.10	1.00 V	103	62.20	-105.30
2	75.59	-53.07	-13.00	-40.07	1.00 V	229	54.50	-107.57
3	138.64	-54.72	-13.00	-41.72	1.50 V	10	49.77	-104.49
4	482.99	-60.71	-13.00	-47.71	1.25 V	324	37.21	-97.92
5	695.42	-57.02	-13.00	-44.02	1.50 V	27	37.08	-94.10
6	933.07	-52.66	-13.00	-39.66	1.00 V	340	36.25	-88.91

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

n5, Channel Bandwidth 5MHz

Mode	TX channel 165300 (826.5MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	-54.19	-13.00	-41.19	1.89 H	64	47.84	-102.03
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	-56.31	-13.00	-43.31	3.91 V	204	45.72	-102.03

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.

Mode	TX channel 167300 (836.5MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	-53.88	-13.00	-40.88	1.89 H	65	48.08	-101.96
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	-56.18	-13.00	-43.18	3.93 V	208	45.78	-101.96

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.

Mode	TX channel 169300 (846.5MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	-54.08	-13.00	-41.08	1.87 H	68	47.82	-101.90
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	-56.69	-13.00	-43.69	3.90 V	211	45.21	-101.90

Remarks:

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

n5, Channel Bandwidth 20MHz

Mode	TX channel 166800 (834.0MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	1668.00	-53.90	-13.00	-40.90	1.92 H	63	48.08	-101.98
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	1668.00	-56.62	-13.00	-43.62	3.86 V	209	45.36	-101.98

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.

Mode	TX channel 167300 (836.5MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	-53.64	-13.00	-40.64	1.94 H	63	48.32	-101.96
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	-56.25	-13.00	-43.25	3.87 V	206	45.71	-101.96

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.

Mode	TX channel 167800 (839.0MHz)	Frequency Range	1GHz ~ 10GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	1678.00	-53.82	-13.00	-40.82	1.89 H	69	48.13	-101.95
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	1678.00	-56.68	-13.00	-43.68	3.81 V	210	45.27	-101.95

Remarks:

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

LTE Band 2, Channel Bandwidth 1.4MHz

Mode	TX channel 18607 (1850.7MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3701.40	-48.37	-13.00	-35.37	2.28 H	152	43.26	-91.63
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3701.40	-49.59	-13.00	-36.59	1.71 V	207	42.04	-91.63

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 18900 (1880.0MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3760.00	-49.09	-13.00	-36.09	2.36 H	150	42.33	-91.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-49.67	-13.00	-36.67	1.73 V	212	41.75	-91.42

Remarks:

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

Mode	TX channel 19193 (1909.3MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3818.60	-47.97	-13.00	-34.97	2.32 H	150	43.12	-91.09
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3818.60	-49.21	-13.00	-36.21	1.71 V	210	41.88	-91.09

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 2, Channel Bandwidth 5MHz

Mode	TX channel 18625 (1852.5MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3705.00	-48.44	-13.00	-35.44	2.29 H	152	43.18	-91.62
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3705.00	-49.55	-13.00	-36.55	1.78 V	212	42.07	-91.62

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 18900 (1880.0MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3760.00	-48.46	-13.00	-35.46	2.28 H	153	42.96	-91.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-49.75	-13.00	-36.75	1.70 V	209	41.67	-91.42

Remarks:

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

Mode	TX channel 19175 (1907.5MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3815.00	-47.84	-13.00	-34.84	2.32 H	157	43.26	-91.10
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3815.00	-49.28	-13.00	-36.28	1.71 V	211	41.82	-91.10

Remarks:

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

LTE Band 2, Channel Bandwidth 20MHz

Mode	TX channel 18700 (1860.0MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3720.00	-48.32	-13.00	-35.32	2.29 H	153	43.25	-91.57
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3720.00	-49.76	-13.00	-36.76	1.73 V	214	41.81	-91.57

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 18900 (1880.0MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3760.00	-48.49	-13.00	-35.49	2.31 H	155	42.93	-91.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3760.00	-49.53	-13.00	-36.53	1.69 V	213	41.89	-91.42

Remarks:

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

Mode	TX channel 19100 (1900.0MHz)	Frequency Range	1GHz ~ 20GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3800.00	-48.61	-13.00	-35.61	2.37 H	156	42.53	-91.14
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3800.00	-49.15	-13.00	-36.15	1.74 V	217	41.99	-91.14

Remarks:

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

LTE Band 48, Channel Bandwidth 5MHz

Mode	TX channel 55265 (3552.5MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	-44.22	-40.00	-4.22	2.01 H	330	38.96	-83.18
Antenna Polarity & Test Distance : Vertical at 3m								
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	-44.71	-40.00	-4.71	2.59 V	312	38.47	-83.18

Remarks:

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

Mode	TX channel 55990 (3625.0MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	-43.84	-40.00	-3.84	2.00 H	333	38.98	-82.82
Antenna Polarity & Test Distance : Vertical at 3m								
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	-44.41	-40.00	-4.41	2.63 V	310	38.41	-82.82

Remarks:

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

Mode	TX channel 56715 (3697.5MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	-43.64	-40.00	-3.64	1.99 H	334	39.02	-82.66
Antenna Polarity & Test Distance : Vertical at 3m								
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	-44.37	-40.00	-4.37	2.59 V	307	38.29	-82.66

Remarks:

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

LTE Band 48, Channel Bandwidth 20MHz

Mode	TX channel 55340 (3560.0MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	-44.09	-40.00	-4.09	1.98 H	329	39.08	-83.17
Antenna Polarity & Test Distance : Vertical at 3m								
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	-44.40	-40.00	-4.40	2.61 V	314	38.77	-83.17

Remarks:

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

Mode	TX channel 55990 (3625.00MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	-43.97	-40.00	-3.97	1.96 H	333	38.85	-82.82
Antenna Polarity & Test Distance : Vertical at 3m								
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	-44.10	-40.00	-4.10	2.56 V	312	38.72	-82.82

Remarks:

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

Mode	TX channel 56640 (3690.00MHz)	Frequency Range	1GHz ~ 40GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	-43.80	-40.00	-3.80	1.94 H	330	38.91	-82.71
Antenna Polarity & Test Distance : Vertical at 3m								
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	-44.23	-40.00	-4.23	2.54 V	313	38.48	-82.71

Remarks:

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

LTE Band 66, Channel Bandwidth 1.4MHz

Mode	TX channel 131979 (1710.7MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3421.40	-44.98	-13.00	-31.98	2.45 H	202	48.22	-93.20
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3421.40	-46.33	-13.00	-33.33	2.95 V	99	46.87	-93.20

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 132322 (1745.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-44.34	-13.00	-31.34	2.44 H	201	48.32	-92.66
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-46.25	-13.00	-33.25	2.91 V	93	46.41	-92.66

Remarks:

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

Mode	TX channel 132665 (1779.3MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3558.60	-44.08	-13.00	-31.08	2.47 H	203	48.13	-92.21
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3558.60	-45.58	-13.00	-32.58	2.90 V	103	46.63	-92.21

Remarks:

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

LTE Band 66, Channel Bandwidth 5MHz

Mode	TX channel 131997 (1712.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3425.00	-45.35	-13.00	-32.35	2.44 H	200	47.82	-93.17
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3425.00	-46.60	-13.00	-33.60	2.92 V	103	46.57	-93.17

Remarks:

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

Mode	TX channel 132322 (1745.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-44.87	-13.00	-31.87	2.45 H	199	47.79	-92.66
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-46.22	-13.00	-33.22	2.94 V	107	46.44	-92.66

Remarks:

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

Mode	TX channel 132647 (1777.5MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3555.00	-44.09	-13.00	-31.09	2.49 H	192	48.13	-92.22
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	-45.85	-13.00	-32.85	2.89 V	102	46.37	-92.22

Remarks:

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

LTE Band 66, Channel Bandwidth 20MHz

Mode	TX channel 132072 (1720.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-44.99	-13.00	-31.99	2.52 H	204	48.09	-93.08
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3440.00	-46.24	-13.00	-33.24	2.96 V	104	46.84	-93.08

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 132322 (1745.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-44.39	-13.00	-31.39	2.51 H	197	48.27	-92.66
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3490.00	-45.84	-13.00	-32.84	2.96 V	102	46.82	-92.66

Remarks:

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

Mode	TX channel 132572 (1770.0MHz)	Frequency Range	1GHz ~ 18GHz
Environmental Conditions	22deg. C, 66%RH	Input Power	120Vac, 60Hz
Tested By	Greg Lin		

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	3540.00	-44.04	-13.00	-31.04	2.47 H	197	48.26	-92.30
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3540.00	-45.88	-13.00	-32.88	2.95 V	94	46.42	-92.30

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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