

FCC Test Report (ENDC: n48+B2/B5/B13/B66)

Report No.: RFBFJZ-WTW-P21050403-14 R1

FCC ID: V65C6930

Test Model: C6930

Received Date: May 18, 2021

Test Date: Jun. 26 ~ Aug. 06, 2021

Issued Date: May 05, 2023

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

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



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Release Control Record

Issue No.	Description	Date Issued
RFBFJZ-WTW-P21050403-14	Original release	Aug. 12, 2021
RFBFJZ-WTW-P21050403-14 R1	Revise report title	May 05, 2023

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. 26 ~ Aug. 06, 2021

Standards: FCC Part 22, Subpart H
FCC Part 24, Subpart E
FCC Part 27, Subpart C, F, L
47 CFR FCC Part 96

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's RF characteristics under the conditions specified in this report.

Prepared by : Pettie Chen, **Date:** May 05, 2023
Pettie Chen / Senior Specialist

Approved by : Jeremy Lin, **Date:** May 05, 2023
Jeremy Lin / Project Engineer

2 Summary of Test Results

For 5GNR n48:

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.
96.41(g)	Peak to Average Ratio	Pass	Meet the requirement of limit.
2.1049	Emission Bandwidth	Pass	Meet the requirement of limit.
2.1055	Frequency Stability	Pass	Meet the requirement of limit.
2.1051 96.41(e)	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
2.1053 96.41(e)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -1.89dB at 7249.98MHz.

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 -34.70dB at 3800.00MHz.

Note:

1. This report is a partial report. Therefore, only test item of Equivalent 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 5:

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	Refer to Note 1
22.913 (d)	Peak To Average Ratio	Pass	Refer to Note 1
2.1055 22.355	Frequency Stability	Pass	Refer to Note 1
2.1049	Occupied Bandwidth	Pass	Refer to Note 1
22.917	Band Edge Measurements	Pass	Refer to Note 1
2.1051 22.917	Conducted Spurious Emissions	Pass	Refer to Note 1
2.1053 22.917	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -28.64dB at 72.68MHz.

Note:

1. This report is a partial report. Therefore, only test item of Effective radiated power and Radiated Spurious Emissions tests were performed for this report. Other testing data please refer to BV CPS report no.: RFBFJZ-WTW-P21050403-8.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

For LTE Band 13, LTE Band 66

Applied Standard: FCC Part 27 & Part 2				
FCC Clause		Test Item	Result	Remarks
LTE B13	LTE B66			
2.1046 27.50(b)	2.1046 27.50 (d)(4)	Equivalent Isotropically Radiated Power / Equivalent Radiated Power	Pass	Meet the requirement of limit.
2.1047	2.1047	Modulation Characteristics	Pass	Refer to Note 1
----	27.50 (d)(5)	Peak To Average Ratio	Pass	Refer to Note 1
2.1055 27.54	2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	Pass	Refer to Note 1
2.1049	2.1049	Occupied Bandwidth	Pass	Refer to Note 1
2.1051 27.53(c)	2.1051 27.53 (h)	Band Edge / Out of Band Emissions Measurements	Pass	Refer to Note 1
2.1051 27.53 (c)(f)	2.1051 27.53 (h)	Conducted Spurious Emissions	Pass	Refer to Note 1
2.1053 27.53(c)(f)	2.1053 27.53 (h)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -16.40dB at 1564.00MHz.

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.

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
5G Wireless Test Platforms Keysight	E7515B	MY58300759	Apr. 23, 2021	Apr. 22, 2022
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
Preamplifier EMCI	EMC 184045	980116	Oct. 07, 2020	Oct. 06, 2021
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

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	3.87Vdc from battery
Rating	5Vdc / 9Vdc / 12Vdc from adapter

n48

Modulation Type	$\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM					
Waveform Type	CP-OFDM, DFT-s-OFDM					
Operating Frequency	n48 (Channel Bandwidth 10MHz)	3555.00MHz ~ 3694.98MHz				
	n48 (Channel Bandwidth 20MHz)	3560.01MHz ~ 3690.00MHz				
	n48 (Channel Bandwidth 40MHz)	3570.00MHz ~ 3679.98MHz				
Max. EIRP Power (Per 10M)		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n48 (Channel Bandwidth 10MHz)	138.676mW (21.42dBm /10MHz)	153.462mW (21.86dBm /10MHz)	118.032mW (20.72dBm /10MHz)	90.991mW (19.59dBm /10MHz)	73.282mW (18.65dBm /10MHz)
	n48 (Channel Bandwidth 20MHz)	114.551mW (20.59dBm /10MHz)	120.504mW (20.81dBm /10MHz)	97.499mW (19.89dBm /10MHz)	79.983mW (19.03dBm /10MHz)	70.958mW (18.51dBm /10MHz)
	n48 (Channel Bandwidth 40MHz)	113.501mW (20.55dBm /10MHz)	123.595mW (20.92dBm /10MHz)	103.753mW (20.16dBm /10MHz)	85.310mW (19.31dBm /10MHz)	64.565mW (18.10dBm /10MHz)
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
Max. EIRP Power (Full Power)	n48 (Channel Bandwidth 10MHz)	138.676mW (21.42dBm)	153.462mW (21.86dBm)	118.032mW (20.72dBm)	90.991mW (19.59dBm)	73.282mW (18.65dBm)
	n48 (Channel Bandwidth 20MHz)	137.404mW (21.38dBm)	158.489mW (22.00dBm)	124.738mW (20.96dBm)	104.713mW (20.20dBm)	80.353mW (19.05dBm)
	n48 (Channel Bandwidth 40MHz)	141.579mW (21.51dBm)	155.597mW (21.92dBm)	125.893mW (21.00dBm)	100.462mW (20.02dBm)	87.700mW (19.43dBm)
Emission Designator		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n48 (Channel Bandwidth 10MHz)	8M61G7D	8M60G7D	8M58D7W	8M60D7W	8M60D7W
	n48 (Channel Bandwidth 20MHz)	18M0G7D	18M2G7D	18M3D7W	18M3D7W	18M3D7W
	n48 (Channel Bandwidth 40MHz)	37M6G7D	37M8G7D	37M8D7W	37M9D7W	37M9D7W

LTE Band

Modulation Type	QPSK, 16QAM, 64QAM, 256QAM				
Operating Frequency	LTE Band 2	Channel Bandwidth 1.4MHz	1850.7MHz ~ 1909.3MHz		
		Channel Bandwidth 3MHz	1851.5MHz ~ 1908.5MHz		
		Channel Bandwidth 5MHz	1852.5MHz ~ 1907.5MHz		
		Channel Bandwidth 10MHz	1855.0MHz ~ 1905.0MHz		
		Channel Bandwidth 15MHz	1857.5MHz ~ 1902.5MHz		
		Channel Bandwidth 20MHz	1860.0MHz ~ 1900.0MHz		
	LTE Band 5	Channel Bandwidth 5MHz	2502.5MHz ~ 2567.5MHz		
		Channel Bandwidth 10MHz	2505.0MHz ~ 2565.0MHz		
		Channel Bandwidth 15MHz	2507.5MHz ~ 2562.5MHz		
		Channel Bandwidth 20MHz	2510.0MHz ~ 2560.0MHz		
	LTE Band 13	Channel Bandwidth 5MHz	779.5MHz ~ 784.5MHz		
		Channel Bandwidth 10MHz	782.0MHz		
	LTE Band 66	Channel Bandwidth 1.4MHz	1710.7MHz ~ 1779.3MHz		
		Channel Bandwidth 3MHz	1711.5MHz ~ 1778.5MHz		
		Channel Bandwidth 5MHz	1712.5MHz ~ 1777.5MHz		
		Channel Bandwidth 10MHz	1715.0MHz ~ 1775.0MHz		
		Channel Bandwidth 15MHz	1717.5MHz ~ 1772.5MHz		
		Channel Bandwidth 20MHz	1720.0MHz ~ 1770.0MHz		
Max. EIRP Power			QPSK	16QAM	64QAM
	LTE Band 2	Channel Bandwidth 1.4MHz	167.880mW (22.25dBm)	148.252mW (21.71dBm)	116.681mW (20.67dBm)
		Channel Bandwidth 3MHz	163.682mW (22.14dBm)	140.281mW (21.47dBm)	111.429mW (20.47dBm)
		Channel Bandwidth 5MHz	160.694mW (22.06dBm)	131.826mW (21.20dBm)	108.893mW (20.37dBm)
		Channel Bandwidth 10MHz	162.181mW (22.10dBm)	130.017mW (21.14dBm)	106.414mW (20.27dBm)
		Channel Bandwidth 15MHz	164.059mW (22.15dBm)	146.893mW (21.67dBm)	116.950mW (20.68dBm)
		Channel Bandwidth 20MHz	172.187mW (22.36dBm)	141.906mW (21.52dBm)	119.124mW (20.76dBm)
	LTE Band 66	Channel Bandwidth 1.4MHz	380.189mW (25.80dBm)	300.608mW (24.78dBm)	231.739mW (23.65dBm)
		Channel Bandwidth 3MHz	369.828mW (25.68dBm)	321.366mW (25.07dBm)	208.449mW (23.19dBm)
		Channel Bandwidth 5MHz	370.681mW (25.69dBm)	298.538mW (24.75dBm)	214.289mW (23.31dBm)
		Channel Bandwidth 10MHz	378.443mW (25.78dBm)	294.442mW (24.69dBm)	209.411mW (23.21dBm)
		Channel Bandwidth 15MHz	377.572mW (25.77dBm)	300.608mW (24.78dBm)	218.776mW (23.40dBm)
		Channel Bandwidth 20MHz	387.258mW (25.88dBm)	306.196mW (24.86dBm)	223.872mW (23.50dBm)
Max. ERP Power	LTE Band 5	Channel Bandwidth 1.4MHz	59.429mW (17.74dBm)	47.206mW (16.74dBm)	36.983mW (15.68dBm)
		Channel Bandwidth 3MHz	59.429mW (17.74dBm)	47.753mW (16.79dBm)	36.983mW (15.68dBm)
		Channel Bandwidth 5MHz	59.020mW (17.71dBm)	48.084mW (16.82dBm)	38.194mW (15.82dBm)
		Channel Bandwidth 10MHz	59.566mW (17.75dBm)	48.417mW (16.85dBm)	38.905mW (15.90dBm)
	LTE Band 13	Channel Bandwidth 5MHz	59.156mW (17.72dBm)	49.204mW (16.92dBm)	48.529mW (16.86dBm)
		Channel Bandwidth 10MHz	62.373mW (17.95dBm)	42.462mW (16.28dBm)	34.277mW (15.35dBm)

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.

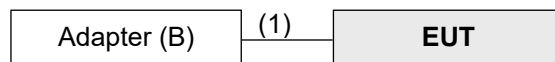
Band	Freq. Range (MHz)	Gain (dBi)
n48	3555 ~ 3694.98	-0.4 (Tx2)
n77	3710.01 ~ 3969.99	-0.4
LTE Band 2	1850.7 ~ 1909.3	-0.8 (Tx1), -1.3 (Tx2) (diversity)
LTE Band 5	824.7 ~ 848.3	-3.5 (Tx1)
LTE Band 13	779.5 ~ 784.5	-3.4 (Tx1)
LTE Band 66	1710.7 ~ 1779.3	2.3 (Tx1), -0.5 (Tx2) (diversity)

* 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.

5G NR	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
	n48	30kHz	10/20/40	Band 2/5/13/66
	n66	15kHz	5/10/15/20	Band 5/13
	n71	15kHz	5/10/15/20	Band 2/66
	n77	30kHz	30/40/60/80/100	Band 2/5/13/66

3.2 Configuration of System under Test



Remote site



3.2.1 Description of Support Units

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
n48	X-plane
LTE Band 2	X-plane
LTE Band 5	X-plane
LTE Band 13	X-plane
LTE Band 66	X-plane

n48

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	637000 to 646333	637000 (3555.00MHz), 641666 (3624.99MHz), 646333 (3694.98MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		637334 to 646000	637334 (3560.01MHz), 641666 (3624.99MHz), 646000 (3690.00MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		638000 to 642000	638000 (3570.00MHz), 641666 (3624.99MHz), 645332 (3679.98MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
-	Modulation Characteristics	638000 to 642000	641666 (3624.99MHz)	40MHz	QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset
-	Frequency Stability	637000 to 646333	637000 (3555.00MHz), 646333 (3694.98MHz)	10MHz	QPSK	24 RB / 0 RB Offset
		637334 to 646000	637334 (3560.01MHz), 646000 (3690.00MHz)	20MHz	QPSK	75 RB / 0 RB Offset
		638000 to 642000	638000 (3570.00MHz), 645332 (3679.98MHz)	40MHz	QPSK	100 RB / 0 RB Offset
-	Emission Bandwidth	637000 to 646333	637000 (3555.00MHz), 641666 (3624.99MHz), 646333 (3694.98MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	24 RB / 0 RB Offset
		637334 to 646000	637334 (3560.01MHz), 641666 (3624.99MHz), 646000 (3690.00MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	75 RB / 0 RB Offset
		638000 to 642000	638000 (3570.00MHz), 641666 (3624.99MHz), 645332 (3679.98MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	100 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Peak to Average Ratio	637000 to 646333	637000 (3555.00MHz), 641666 (3624.99MHz), 646333 (3694.98MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		637334 to 646000	637334 (3560.01MHz), 641666 (3624.99MHz), 646000 (3690.00MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		638000 to 642000	638000 (3570.00MHz), 641666 (3624.99MHz), 645332 (3679.98MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
-	Conducted Emission	637000 to 646333	637000 (3555.00MHz), 641666 (3624.99MHz), 646333 (3694.98MHz)	10MHz	QPSK	1 RB / 1 RB Offset
		637334 to 646000	637334 (3560.01MHz), 641666 (3624.99MHz), 646000 (3690.00MHz)	20MHz	QPSK	1 RB / 1 RB Offset
		638000 to 642000	638000 (3570.00MHz), 641666 (3624.99MHz), 645332 (3679.98MHz)	40MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Below 1GHz	637334 to 646000	641666 (3624.99MHz)	20MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	637000 to 646333	637000 (3555.00MHz), 641666 (3624.99MHz), 646333 (3694.98MHz)	10MHz	QPSK	1 RB / 1 RB Offset
		637334 to 646000	637334 (3560.01MHz), 641666 (3624.99MHz), 646000 (3690.00MHz)	20MHz	QPSK	1 RB / 1 RB Offset
		638000 to 642000	638000 (3570.00MHz), 641666 (3624.99MHz), 645332 (3679.98MHz)	40MHz	QPSK	1 RB / 1 RB Offset

Note:

1. 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 worst mode according to the maximum output power.
2. For radiated emission above 1GHz, according to 3GPP 38.521-1 Section 6.5.3.1.4, choose the lowest, mid and highest channel bandwidth for final test.
3. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.

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	18700 to 19100	19100 (1900.0MHz)	20MHz	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. 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.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
3. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.

LTE Band 5

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	20407 to 20643	20407 (824.7MHz), 20525 (836.5MHz), 20643 (848.3MHz)	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
		20415 to 20635	20415 (825.5MHz), 20525 (836.5MHz), 20635 (847.5MHz)	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
		20425 to 20625	20425 (826.5MHz), 20525 (836.5MHz), 20625 (846.5MHz)	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
		20450 to 20600	20450 (829.0MHz), 20525 (836.5MHz), 20600 (844.0MHz)	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
-	Radiated Emission Below 1GHz	20407 to 20643	20643 (848.3MHz)	1.4MHz	QPSK	3 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	20407 to 20643	20407 (824.7MHz), 20525 (836.5MHz), 20643 (848.3MHz)	1.4MHz	QPSK	3 RB / 1 RB Offset
		20425 to 20625	20425 (826.5MHz), 20525 (836.5MHz), 20625 (846.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset
		20450 to 20600	20450 (829.0MHz), 20525 (836.5MHz), 20600 (844.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset

Note:

1. 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.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
3. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.

LTE Band 13

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	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
		23230	23230 (782.0MHz)	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
-	Radiated Emission Below 1GHz	23230	23230 (782.0MHz)	10MHz	QPSK	1 RB / 24 RB Offset
-	Radiated Emission Above 1GHz	23205 to 23255	23205 (779.5MHz), 23230 (782.0MHz), 23255 (784.5MHz)	5MHz	QPSK	1 RB / 12 RB Offset
		23230	23230 (782.0MHz)	10MHz	QPSK	1 RB / 24 RB Offset

Note:

1. 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.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
3. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest & highest channel bandwidth for final test.

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	131997 to 132647	132647 (1777.5MHz)	5MHz	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. 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.
2. For radiated emission below 1GHz, select the worst radiated emission channel (above 1GHz) for final testing.
3. For radiated emission above 1GHz, according to 3GPP 36.521 Section 6.6.3.1.4, choose the lowest, 5MHz & highest channel bandwidth for final test.

Test Condition:

Test Item	Environmental Conditions	Input Power (system)	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 and References:

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-E 2016

ANSI 63.26-2015

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

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

KDB 971168 D02 Misc Rev Approv License Devices v02r01

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

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

For n48:

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

For LTE Band 2:

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

For LTE Band 5:

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

For LTE Band 13:

Control and mobile stations in the 698-746 MHz, 746-757 MHz, 787-788 MHz and 805-806 MHz band are limited to 30 watts ERP.

Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink, 746-757 MHz, 787-788 MHz and 805-806 MHz band are limited to 3 watts ERP.

For LTE Band 66:

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

4.1.2 Test Procedures

For n48:

- a. Set span to at least 1.5 times the OBW.
- b. Set RBW = 1-5% of the OBW, not to exceed 1 MHz.
- c. Set VBW $\geq 3 \times$ RBW.
- d. Set number of points in sweep $\geq 2 \times$ span / RBW.
- e. Sweep time = auto-couple.
- f. Detector = RMS (power averaging).
- g. If the EUT can be configured to transmit continuously (i.e., burst duty cycle $\geq 98\%$), then set the trigger to free run.
- h. If the EUT cannot be configured to transmit continuously (i.e., burst duty cycle $< 98\%$), then use a sweep trigger with the level set to enable triggering only on full power bursts and configure the EUT to transmit at full power for the entire duration of each sweep. Ensure that the sweep time is less than or equal to the transmission burst duration.
- i. Trace average at least 100 traces in power averaging (i.e., RMS) mode.
- j. Compute the power by integrating the spectrum across the OBW of the signal using the instrument's band or channel power measurement function, with the band/channel limits set equal to the OBW band edges. If the instrument does not have a band or channel power function, then sum the spectrum levels (in linear power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.
- k. For per 10MHz method, channel power integrating bandwidth 10MHz is used for bandwidth 10M, 20M and 40M. For full power method, channel power integrating bandwidth 10MHz is used for bandwidth 10M, integrating bandwidth 20MHz is used for bandwidth 20M, integrating bandwidth 40MHz is used for bandwidth 40M.
- l. Substitution method is used for E.I.R.P measurement. In the semi-anechoic chamber, EUT placed on the 0.8 m (below or equal 1 GHz) and/or 1.5 m (above 1 GHz) height of Turn Table, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1 m to 4 m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- m. EIRP = Output power level of S.G – TX cable loss + Antenna gain of substitution horn. E.R.P power can be calculated form E.I.R.P power by subtracting the gain of dipole, E.R.P power = E.I.R.P power - 2.15 dB. Correction Factor (includes EIRP and ERP unit conversion factor) = Antenna gain of substitution horn. – Tx cable loss.
- n. Measurement method refers to ANSI C63.26 section 5.2.7 & 5.2.4.

For LTE Band 2, 5, 13, 66

Conducted Power Measurement:

The EUT was set up for the maximum power with LTE link data modulation and link up with simulator. Set the EUT to transmit under low, middle and high channel and 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)

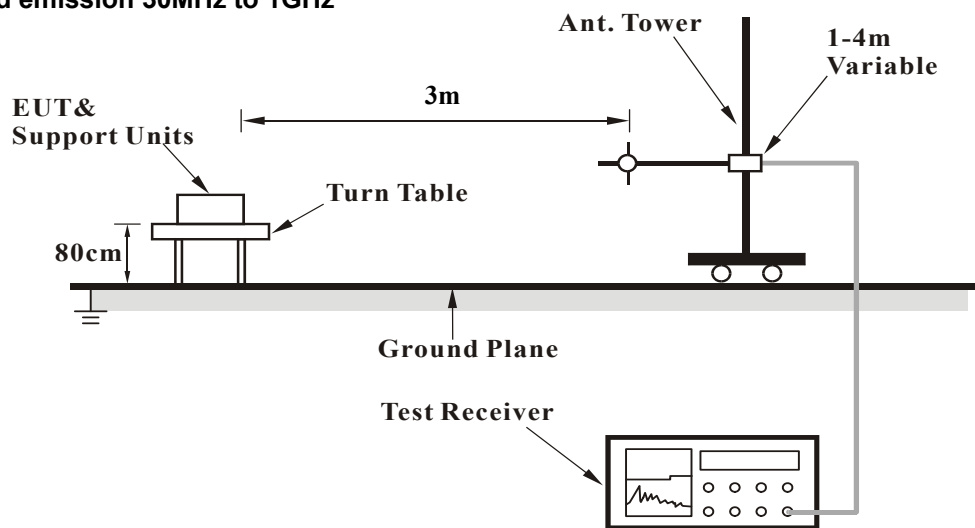
P_{Meas} measured transmitter output power or PSD, in dBm or dBW

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

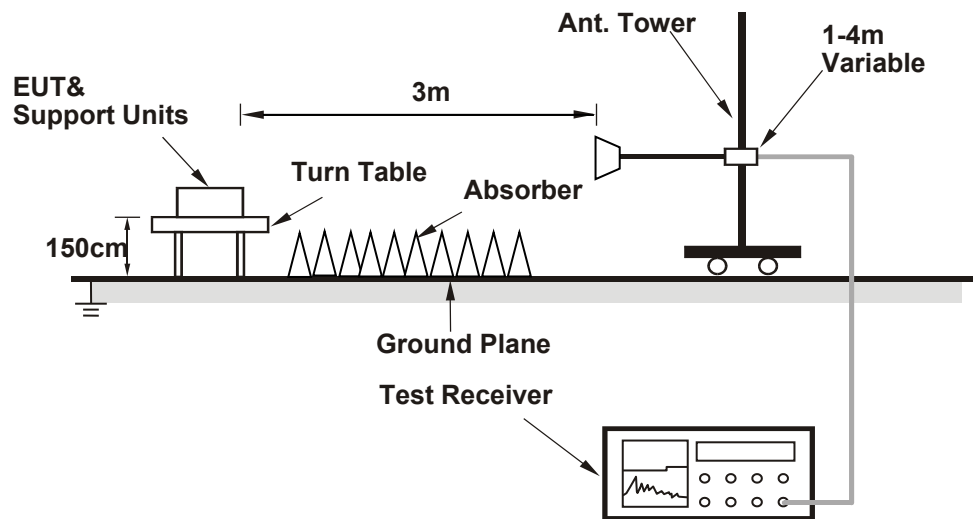
4.1.3 Test Setup

For n48:

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).

For LTE Band 2, 5, 13, 66

Conducted Power Measurement:



4.1.4 Test Results

Conducted Output Power (dBm)

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	23.11	23.13	23.16
		1	50	22.78	22.87	22.85
		1	99	23.00	22.78	23.01
		50	0	22.00	22.36	21.98
		50	25	22.23	21.92	22.27
		50	50	21.86	21.88	21.85
		100	0	21.85	22.21	22.30
20M	16QAM	1	0	22.07	22.22	22.02
		1	50	22.22	22.23	22.26
		1	99	22.32	22.20	22.01
		50	0	21.46	21.01	21.42
		50	25	21.46	20.96	21.32
		50	50	21.10	21.05	21.20
		100	0	21.10	20.86	20.90
20M	64QAM	1	0	21.56	21.32	21.25
		1	50	21.19	21.10	20.87
		1	99	21.22	21.28	20.92
		50	0	20.36	19.98	20.23
		50	25	20.24	20.16	19.99
		50	50	19.91	20.04	20.28
		100	0	20.10	20.33	19.92
20M	256QAM	1	0	18.53	18.17	18.50
		1	50	18.53	18.35	18.32
		1	99	18.42	18.45	18.36
		50	0	18.10	18.12	17.90
		50	25	18.11	18.35	17.86
		50	50	18.04	17.96	18.10
		100	0	17.92	18.13	18.12

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	22.95	22.94	22.95
		1	37	22.88	22.87	22.74
		1	74	22.88	22.94	22.85
		36	0	22.16	22.13	22.18
		36	19	21.93	21.89	21.92
		36	39	21.77	21.97	21.99
		75	0	22.29	22.12	21.78
15M	16QAM	1	0	22.09	22.47	22.11
		1	37	22.44	22.34	21.87
		1	74	21.96	22.24	22.29
		36	0	21.19	21.04	21.28
		36	19	21.08	21.10	21.07
		36	39	21.28	20.90	21.13
		75	0	20.80	21.29	21.29
15M	64QAM	1	0	21.17	21.28	21.08
		1	37	21.48	20.94	21.36
		1	74	21.31	21.20	21.01
		36	0	20.02	20.29	19.87
		36	19	20.26	20.17	20.15
		36	39	19.86	20.31	19.73
		75	0	19.88	19.83	19.92
15M	256QAM	1	0	18.18	18.03	18.13
		1	37	18.22	18.01	18.21
		1	74	17.96	17.92	18.22
		36	0	18.22	18.16	18.12
		36	19	17.89	18.07	18.24
		36	39	18.03	18.08	18.02
		75	0	17.87	18.28	17.87

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	22.78	22.78	22.90
		1	24	22.76	22.74	22.73
		1	49	22.72	22.72	22.75
		25	0	22.09	21.94	21.79
		25	12	22.12	22.28	21.98
		25	25	22.06	21.83	22.19
		50	0	21.98	22.38	22.21
10M	16QAM	1	0	21.86	21.77	21.88
		1	24	21.84	21.80	21.94
		1	49	21.94	21.83	21.77
		25	0	20.97	21.09	20.85
		25	12	20.90	20.91	20.88
		25	25	20.86	20.97	20.93
		50	0	21.00	20.78	21.05
10M	64QAM	1	0	20.93	20.98	20.91
		1	24	20.99	21.01	20.94
		1	49	21.07	21.02	20.95
		25	0	20.30	19.78	19.78
		25	12	20.16	20.17	20.02
		25	25	19.88	19.89	19.84
		50	0	20.09	20.14	20.20
10M	256QAM	1	0	18.20	18.25	18.20
		1	24	18.05	17.99	18.27
		1	49	18.23	18.30	17.88
		25	0	18.23	18.19	18.07
		25	12	17.84	17.99	18.00
		25	25	17.83	18.19	17.83
		50	0	18.09	18.25	18.22

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	22.86	22.77	22.85
		1	12	22.80	22.72	22.79
		1	24	22.81	22.75	22.79
		12	0	21.94	21.81	21.98
		12	6	21.77	21.76	22.00
		12	13	21.75	21.91	22.03
		25	0	21.76	21.72	21.76
5M	16QAM	1	0	21.87	21.87	22.00
		1	12	21.90	21.90	21.91
		1	24	21.96	21.97	21.99
		12	0	20.82	20.89	20.98
		12	6	20.84	21.09	20.85
		12	13	20.85	20.86	20.93
		25	0	20.91	20.94	20.73
5M	64QAM	1	0	21.17	20.80	21.16
		1	12	21.02	20.90	21.15
		1	24	20.89	20.91	21.10
		12	0	19.79	19.96	19.81
		12	6	19.96	19.95	19.99
		12	13	19.88	20.10	19.83
		25	0	20.05	20.10	19.93
5M	256QAM	1	0	18.18	18.24	18.12
		1	12	18.02	18.41	18.31
		1	24	18.11	18.44	17.88
		12	0	18.42	18.08	18.18
		12	6	18.14	17.93	18.24
		12	13	18.29	18.43	17.96
		25	0	17.89	18.30	17.75

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	22.82	22.88	22.86
		1	7	22.87	22.94	22.80
		1	14	22.93	22.85	22.90
		8	0	22.38	21.83	21.96
		8	3	22.23	22.17	21.81
		8	7	21.88	21.78	22.09
		15	0	22.23	22.32	22.25
3M	16QAM	1	0	22.21	22.04	22.14
		1	7	22.17	22.24	22.27
		1	14	21.97	22.17	21.73
		8	0	21.37	21.19	20.79
		8	3	21.03	21.13	20.77
		8	7	21.17	21.16	20.79
		15	0	20.92	21.13	20.84
3M	64QAM	1	0	21.11	21.21	21.21
		1	7	20.88	21.04	21.22
		1	14	21.27	20.80	21.15
		8	0	20.21	20.38	19.99
		8	3	19.89	20.12	20.17
		8	7	20.11	20.32	20.09
		15	0	20.15	20.11	20.01
3M	256QAM	1	0	18.11	18.52	17.92
		1	7	18.50	18.08	18.19
		1	14	18.30	18.16	18.13
		8	0	18.24	18.08	18.48
		8	3	18.32	18.05	17.88
		8	7	18.27	18.16	18.19
		15	0	18.25	18.33	18.01

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	23.05	22.90	22.85
		1	2	22.96	22.71	22.76
		1	5	22.93	22.80	22.84
		3	0	23.04	22.93	22.71
		3	1	22.98	22.90	22.85
		3	3	22.84	22.76	22.78
		6	0	22.24	22.17	22.12
1.4M	16QAM	1	0	22.43	22.51	22.09
		1	2	22.06	22.08	22.10
		1	5	22.06	21.80	22.03
		3	0	21.85	22.01	22.06
		3	1	21.79	21.93	21.80
		3	3	22.15	21.81	21.85
		6	0	20.81	20.86	20.82
1.4M	64QAM	1	0	21.47	21.00	21.31
		1	2	21.09	20.84	21.20
		1	5	20.82	21.18	20.85
		3	0	21.22	21.09	20.91
		3	1	21.06	20.80	21.01
		3	3	21.10	20.82	20.88
		6	0	20.08	20.14	20.01
1.4M	256QAM	1	0	17.94	18.29	17.80
		1	2	18.09	18.20	17.76
		1	5	18.01	18.31	18.33
		3	0	18.21	17.91	18.17
		3	1	18.12	17.86	17.98
		3	3	17.87	17.83	18.14
		6	0	17.89	18.03	18.21

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20450	20525	20600
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	23.40	23.34	23.35
		1	24	23.27	23.21	23.27
		1	49	23.27	23.22	23.25
		25	0	22.63	22.32	22.75
		25	12	22.79	22.42	22.39
		25	25	22.73	22.67	22.42
		50	0	22.70	22.59	22.44
10M	16QAM	1	0	22.30	22.50	22.24
		1	24	22.38	22.27	22.26
		1	49	22.40	22.29	22.50
		25	0	21.87	21.79	21.67
		25	12	21.32	21.45	21.37
		25	25	21.34	21.76	21.67
		50	0	21.67	21.86	21.28
10M	64QAM	1	0	21.05	21.28	21.28
		1	24	21.55	21.11	21.40
		1	49	21.01	21.22	21.26
		25	0	20.44	20.33	20.60
		25	12	20.34	20.36	20.62
		25	25	20.59	20.47	20.50
		50	0	20.60	20.42	20.55
10M	256QAM	1	0	18.62	18.35	18.38
		1	24	18.52	18.55	18.39
		1	49	18.66	18.50	18.54
		25	0	18.66	18.35	18.60
		25	12	18.52	18.26	18.39
		25	25	18.57	18.21	18.50
		50	0	18.31	18.26	18.35

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20425	20525	20625
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	23.32	23.35	23.36
		1	12	23.24	23.30	23.03
		1	24	23.04	23.26	23.06
		12	0	22.58	22.21	22.11
		12	6	22.20	22.28	22.28
		12	13	22.20	22.10	22.09
		25	0	22.21	22.26	22.16
5M	16QAM	1	0	22.17	22.36	22.12
		1	12	22.33	22.46	22.47
		1	24	22.39	22.12	22.37
		12	0	21.32	21.40	21.22
		12	6	21.05	21.49	21.36
		12	13	21.34	21.24	21.56
		25	0	21.25	21.27	21.33
5M	64QAM	1	0	20.94	20.93	21.04
		1	12	21.14	21.47	21.43
		1	24	21.30	21.28	21.23
		12	0	20.65	20.11	20.62
		12	6	20.06	19.99	20.07
		12	13	20.15	20.53	20.24
		25	0	20.60	20.26	20.27
5M	256QAM	1	0	18.34	18.34	18.47
		1	12	18.17	18.30	18.26
		1	24	18.43	18.47	18.36
		12	0	18.53	18.33	18.54
		12	6	18.05	18.13	18.37
		12	13	18.10	18.17	18.15
		25	0	18.18	18.27	18.22

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20415	20525	20635
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	23.31	23.33	23.39
		1	7	23.30	23.39	23.26
		1	14	23.04	23.37	23.32
		8	0	22.58	22.37	22.13
		8	3	22.21	22.42	22.39
		8	7	22.69	22.12	22.26
		15	0	22.12	22.11	22.51
3M	16QAM	1	0	22.44	22.40	22.39
		1	7	22.30	22.31	22.36
		1	14	22.12	22.16	22.26
		8	0	21.53	21.54	21.29
		8	3	21.50	21.55	21.14
		8	7	21.16	21.46	21.53
		15	0	21.55	21.43	21.50
3M	64QAM	1	0	21.32	21.32	21.23
		1	7	20.86	21.22	21.10
		1	14	21.26	21.02	21.33
		8	0	20.30	20.31	20.05
		8	3	20.27	20.30	20.22
		8	7	20.15	20.27	20.32
		15	0	20.40	20.19	20.36
3M	256QAM	1	0	18.49	18.48	18.38
		1	7	18.55	18.42	18.51
		1	14	18.47	18.62	18.15
		8	0	18.21	18.11	18.37
		8	3	18.19	18.24	18.20
		8	7	18.41	18.02	17.95
		15	0	18.36	18.33	18.18

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20407	20525	20643
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	23.30	23.34	23.27
		1	2	23.29	23.07	23.30
		1	5	23.07	23.25	23.33
		3	0	23.35	23.29	23.33
		3	1	23.20	23.20	23.39
		3	3	23.13	23.25	23.35
		6	0	22.26	22.21	22.20
1.4M	16QAM	1	0	22.21	22.23	22.23
		1	2	22.25	22.23	22.39
		1	5	22.04	22.24	22.27
		3	0	22.31	22.35	22.22
		3	1	22.34	22.25	22.15
		3	3	22.19	22.25	22.29
		6	0	21.19	21.28	21.16
1.4M	64QAM	1	0	21.20	21.13	21.23
		1	2	21.07	21.23	21.27
		1	5	21.27	21.24	21.18
		3	0	21.24	21.29	21.07
		3	1	21.29	21.25	21.33
		3	3	21.08	21.26	21.32
		6	0	20.47	20.59	20.61
1.4M	256QAM	1	0	18.65	18.62	18.42
		1	2	18.28	18.56	17.99
		1	5	18.48	18.70	18.12
		3	0	18.09	18.23	18.41
		3	1	18.49	18.34	18.11
		3	3	18.39	18.38	18.36
		6	0	18.31	18.70	18.48

LTE Band 13				
BW	MCS Index	RB Size	RB Offset	Mid
		Channel		23230
		Frequency (MHz)		782
10M	QPSK	1	0	22.87
		1	24	23.50
		1	49	22.78
		25	0	21.76
		25	12	22.20
		25	25	21.72
		50	0	21.93
10M	16QAM	1	0	21.79
		1	24	21.83
		1	49	21.81
		25	0	20.85
		25	12	20.84
		25	25	20.91
		50	0	20.89
10M	64QAM	1	0	20.77
		1	24	20.74
		1	49	20.90
		25	0	20.68
		25	12	20.60
		25	25	20.62
		50	0	20.44
10M	256QAM	1	0	17.92
		1	24	18.20
		1	49	18.21
		25	0	18.39
		25	12	18.33
		25	25	18.23
		50	0	18.31

LTE Band 13						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
5M	QPSK	1	0	22.76	22.86	22.86
		1	12	22.99	23.27	23.07
		1	24	22.73	22.71	22.72
		12	0	21.77	21.76	21.77
		12	6	21.87	21.86	22.04
		12	13	21.87	21.89	21.79
		25	0	21.83	21.85	21.88
5M	16QAM	1	0	22.25	22.41	22.30
		1	12	22.21	22.44	22.47
		1	24	21.73	21.74	21.77
		12	0	20.93	20.95	20.96
		12	6	20.79	21.23	21.03
		12	13	20.75	20.77	20.73
		25	0	20.82	20.73	20.82
5M	64QAM	1	0	22.19	22.23	22.29
		1	12	22.19	22.41	22.29
		1	24	20.91	20.89	20.90
		12	0	20.79	20.62	20.43
		12	6	20.64	21.26	20.77
		12	13	20.69	20.57	20.67
		25	0	20.07	20.36	20.21
5M	256QAM	1	0	18.00	18.05	18.05
		1	12	18.36	18.46	18.38
		1	24	18.31	18.46	18.37
		12	0	17.92	18.21	18.11
		12	6	18.22	18.33	18.34
		12	13	18.26	18.05	18.07
		25	0	18.18	18.56	18.25

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	23.58	23.51	23.20
		1	50	23.50	23.30	23.26
		1	99	23.19	23.02	23.19
		50	0	22.58	22.22	22.04
		50	25	22.14	22.50	22.42
		50	50	22.29	22.54	22.42
		100	0	22.11	22.49	22.45
20M	16QAM	1	0	22.31	22.42	22.30
		1	50	21.94	22.45	22.56
		1	99	22.00	22.56	22.47
		50	0	21.14	21.29	21.14
		50	25	21.18	21.26	21.52
		50	50	20.87	21.43	21.09
		100	0	21.46	21.40	21.50
20M	64QAM	1	0	20.78	21.14	21.20
		1	50	20.83	20.76	20.80
		1	99	20.77	20.79	20.76
		50	0	20.02	20.04	19.79
		50	25	19.86	19.96	20.00
		50	50	19.88	19.77	19.75
		100	0	19.80	19.75	19.72
20M	256QAM	1	0	18.13	18.44	18.40
		1	50	18.24	18.37	18.33
		1	99	18.35	18.35	18.41
		50	0	18.26	18.35	18.18
		50	25	17.81	18.38	18.07
		50	50	18.43	18.20	18.09
		100	0	18.00	18.28	18.29

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	23.39	23.15	23.40
		1	37	23.34	23.47	23.04
		1	74	22.96	23.20	23.20
		36	0	22.33	22.18	22.29
		36	19	22.15	22.22	22.34
		36	39	22.11	22.15	22.09
		75	0	22.02	22.38	22.40
15M	16QAM	1	0	22.26	22.48	22.40
		1	37	22.22	22.46	22.40
		1	74	22.10	22.42	22.23
		36	0	21.05	21.58	21.12
		36	19	20.86	21.09	20.99
		36	39	21.16	21.38	21.30
		75	0	21.34	21.62	21.59
15M	64QAM	1	0	20.87	21.10	21.05
		1	37	20.74	20.85	20.78
		1	74	20.84	20.83	20.86
		36	0	19.76	20.00	20.05
		36	19	19.80	19.83	19.88
		36	39	19.88	19.94	19.86
		75	0	19.79	19.77	19.79
15M	256QAM	1	0	18.35	18.53	18.45
		1	37	18.14	18.57	18.44
		1	74	18.50	18.20	18.31
		36	0	18.11	18.46	18.09
		36	19	18.21	18.13	18.45
		36	39	18.32	18.53	18.38
		75	0	17.88	18.26	18.17

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	23.48	23.37	23.21
		1	24	23.37	23.27	22.91
		1	49	22.85	23.21	23.03
		25	0	22.17	22.35	22.37
		25	12	21.72	22.20	22.14
		25	25	21.88	22.30	22.24
		50	0	21.84	22.41	22.05
10M	16QAM	1	0	22.20	22.32	22.19
		1	24	22.29	22.13	22.37
		1	49	21.91	22.39	22.34
		25	0	21.09	21.20	21.52
		25	12	21.15	21.48	21.20
		25	25	21.02	21.37	21.00
		50	0	21.07	21.40	21.06
10M	64QAM	1	0	20.74	20.75	20.75
		1	24	20.76	20.91	20.85
		1	49	20.76	20.80	20.81
		25	0	19.72	20.04	20.26
		25	12	19.72	19.78	19.72
		25	25	19.76	19.79	19.76
		50	0	19.72	19.78	19.73
10M	256QAM	1	0	17.97	18.20	18.30
		1	24	18.34	18.16	18.33
		1	49	18.46	18.30	18.49
		25	0	18.03	18.21	18.44
		25	12	18.04	18.18	18.24
		25	25	18.08	18.40	18.02
		50	0	18.36	18.16	17.92

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	23.39	23.33	23.17
		1	12	23.30	23.23	22.92
		1	24	23.30	23.38	22.75
		12	0	21.83	22.34	22.01
		12	6	22.22	22.58	21.91
		12	13	22.20	22.25	22.17
		25	0	22.01	22.37	21.96
5M	16QAM	1	0	22.07	22.28	22.25
		1	12	21.92	22.26	22.45
		1	24	22.23	22.14	22.18
		12	0	20.94	21.07	21.15
		12	6	20.95	21.37	21.08
		12	13	20.70	21.23	20.89
		25	0	21.16	21.14	21.39
5M	64QAM	1	0	20.83	20.83	21.01
		1	12	20.85	20.72	20.78
		1	24	20.77	20.80	20.73
		12	0	19.90	20.10	19.72
		12	6	19.73	19.77	19.88
		12	13	19.85	19.76	19.81
		25	0	19.74	20.04	19.83
5M	256QAM	1	0	18.34	18.42	18.42
		1	12	18.04	18.41	18.38
		1	24	18.00	18.35	18.34
		12	0	18.14	18.02	18.38
		12	6	18.26	18.19	18.00
		12	13	17.95	18.06	18.08
		25	0	18.18	18.16	18.14

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	23.35	23.38	23.38
		1	7	23.14	23.08	23.04
		1	14	23.06	23.34	23.25
		8	0	22.20	22.58	22.16
		8	3	22.02	22.48	22.49
		8	7	21.80	22.54	22.18
		15	0	22.06	22.19	22.05
3M	16QAM	1	0	22.02	22.77	22.49
		1	7	22.08	22.73	22.64
		1	14	21.92	22.32	21.98
		8	0	20.97	21.29	21.04
		8	3	20.72	21.49	21.36
		8	7	20.74	21.54	20.95
		15	0	20.73	21.21	21.22
3M	64QAM	1	0	20.85	20.83	20.79
		1	7	20.87	20.88	20.76
		1	14	20.77	20.87	20.89
		8	0	19.80	19.74	20.06
		8	3	19.74	19.74	19.92
		8	7	19.73	19.75	19.74
		15	0	19.75	19.77	19.75
3M	256QAM	1	0	18.49	18.29	18.39
		1	7	18.32	18.28	18.29
		1	14	18.05	18.19	18.37
		8	0	18.16	18.25	18.25
		8	3	18.24	18.39	18.05
		8	7	17.91	18.39	18.38
		15	0	17.84	18.09	18.20

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	23.50	23.42	23.35
		1	2	23.40	23.39	23.22
		1	5	22.85	22.96	22.99
		3	0	22.99	23.05	23.02
		3	1	23.10	23.35	23.23
		3	3	23.00	23.14	23.15
		6	0	21.81	22.44	22.26
1.4M	16QAM	1	0	22.12	22.47	22.13
		1	2	21.83	22.46	22.33
		1	5	22.12	22.48	22.18
		3	0	22.22	22.19	21.93
		3	1	21.98	22.04	22.33
		3	3	21.77	21.98	22.22
		6	0	20.81	21.58	21.66
1.4M	64QAM	1	0	20.75	20.88	20.83
		1	2	20.73	20.82	20.77
		1	5	20.76	20.86	20.83
		3	0	20.71	21.17	21.35
		3	1	20.76	20.86	20.87
		3	3	20.81	20.84	20.88
		6	0	19.75	19.86	19.80
1.4M	256QAM	1	0	18.10	18.23	18.28
		1	2	18.42	18.24	18.21
		1	5	17.91	18.12	18.10
		3	0	17.90	18.15	18.26
		3	1	18.03	18.22	18.05
		3	3	17.93	18.12	18.09
		6	0	18.13	18.53	18.10

EIRP Power (dBm/10MHz)

Modulation Type: $\pi/2$ BPSK

NR Band 48, Channel Bandwidth 10MHz

Mode		TX channel 637000, 641666, 646333						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	21.05	23.00	-1.95	1.47 H	211	78.92	-57.87
2	3624.99	21.26	23.00	-1.74	1.43 H	205	78.87	-57.61
3	3694.98	21.42	23.00	-1.58	1.37 H	202	78.78	-57.36
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	17.82	23.00	-5.18	1.74 V	113	75.69	-57.87
2	3624.99	18.24	23.00	-4.76	1.74 V	121	75.85	-57.61
3	3694.98	18.48	23.00	-4.52	1.70 V	114	75.84	-57.36

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	19.82	23.00	-3.18	1.38 H	209	77.68	-57.86
2	3624.99	20.05	23.00	-2.95	1.43 H	214	77.66	-57.61
3	3690.00	20.59	23.00	-2.41	1.47 H	201	77.97	-57.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	16.81	23.00	-6.19	1.79 V	113	74.67	-57.86
2	3624.99	17.02	23.00	-5.98	1.79 V	115	74.63	-57.61
3	3690.00	17.33	23.00	-5.67	1.71 V	114	74.71	-57.38

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	20.21	23.00	-2.79	1.41 H	205	78.03	-57.82
2	3624.99	20.22	23.00	-2.78	1.34 H	202	77.83	-57.61
3	3679.98	20.55	23.00	-2.45	1.36 H	214	77.97	-57.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	16.94	23.00	-6.06	1.67 V	115	74.76	-57.82
2	3624.99	17.01	23.00	-5.99	1.71 V	117	74.62	-57.61
3	3679.98	17.17	23.00	-5.83	1.61 V	114	74.59	-57.42

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

Modulation Type: QPSK

NR Band 48, Channel Bandwidth 10MHz

Mode		TX channel 637000, 641666, 646333						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	21.52	23.00	-1.48	1.35 H	212	79.39	-57.87
2	3624.99	21.75	23.00	-1.25	1.42 H	214	79.36	-57.61
3	3694.98	21.86	23.00	-1.14	1.45 H	214	79.22	-57.36
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	18.31	23.00	-4.69	1.71 V	114	76.18	-57.87
2	3624.99	18.73	23.00	-4.27	1.72 V	118	76.34	-57.61
3	3694.98	18.98	23.00	-4.02	1.68 V	112	76.34	-57.36

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	20.20	23.00	-2.80	1.39 H	208	78.06	-57.86
2	3624.99	20.45	23.00	-2.55	1.44 H	213	78.06	-57.61
3	3690.00	20.81	23.00	-2.19	1.41 H	207	78.19	-57.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	17.26	23.00	-5.74	1.73 V	119	75.12	-57.86
2	3624.99	17.44	23.00	-5.56	1.75 V	199	75.05	-57.61
3	3690.00	17.66	23.00	-5.34	1.72 V	112	75.04	-57.38

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	20.62	23.00	-2.38	1.43 H	207	78.44	-57.82
2	3624.99	20.60	23.00	-2.40	1.38 H	208	78.21	-57.61
3	3679.98	20.92	23.00	-2.08	1.35 H	213	78.34	-57.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	17.05	23.00	-5.95	1.70 V	114	74.87	-57.82
2	3624.99	17.41	23.00	-5.59	1.68 V	115	75.02	-57.61
3	3679.98	17.54	23.00	-5.46	1.68 V	117	74.96	-57.42

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

Modulation Type: 16QAM

NR Band 48, Channel Bandwidth 10MHz

Mode		TX channel 637000, 641666, 646333						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	20.45	23.00	-2.55	1.37 H	213	78.32	-57.87
2	3624.99	20.58	23.00	-2.42	1.42 H	208	78.19	-57.61
3	3694.98	20.72	23.00	-2.28	1.45 H	214	78.08	-57.36
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	17.30	23.00	-5.70	1.72 V	115	75.17	-57.87
2	3624.99	17.58	23.00	-5.42	1.73 V	117	75.19	-57.61
3	3694.98	17.85	23.00	-5.15	1.71 V	114	75.21	-57.36

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	19.38	23.00	-3.62	1.38 H	210	77.24	-57.86
2	3624.99	19.58	23.00	-3.42	1.41 H	212	77.19	-57.61
3	3690.00	19.89	23.00	-3.11	1.39 H	208	77.27	-57.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	16.08	23.00	-6.92	1.72 V	119	73.94	-57.86
2	3624.99	16.41	23.00	-6.59	1.73 V	119	74.02	-57.61
3	3690.00	16.73	23.00	-6.27	1.71 V	115	74.11	-57.38

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	19.57	23.00	-3.43	1.42 H	210	77.39	-57.82
2	3624.99	19.71	23.00	-3.29	1.40 H	209	77.32	-57.61
3	3679.98	20.16	23.00	-2.84	1.36 H	207	77.58	-57.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	16.12	23.00	-6.88	1.71 V	119	73.94	-57.82
2	3624.99	16.43	23.00	-6.57	1.65 V	118	74.04	-57.61
3	3679.98	16.61	23.00	-6.39	1.74 V	113	74.03	-57.42

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

Modulation Type: 64QAM

NR Band 48, Channel Bandwidth 10MHz

Mode		TX channel 637000, 641666, 646333						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	19.40	23.00	-3.60	1.42 H	212	77.27	-57.87
2	3624.99	19.48	23.00	-3.52	1.41 H	210	77.09	-57.61
3	3694.98	19.59	23.00	-3.41	1.38 H	209	76.95	-57.36
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	16.15	23.00	-6.85	1.71 V	118	74.02	-57.87
2	3624.99	16.63	23.00	-6.37	1.75 V	115	74.24	-57.61
3	3694.98	16.87	23.00	-6.13	1.66 V	119	74.23	-57.36

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	18.42	23.00	-4.58	1.36 H	211	76.28	-57.86
2	3624.99	18.55	23.00	-4.45	1.39 H	213	76.16	-57.61
3	3690.00	19.03	23.00	-3.97	1.37 H	116	76.41	-57.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	15.23	23.00	-7.77	1.65 V	118	73.09	-57.86
2	3624.99	15.51	23.00	-7.49	1.67 V	116	73.12	-57.61
3	3690.00	15.63	23.00	-7.37	1.70 V	119	73.01	-57.38

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	18.70	23.00	-4.30	1.45 H	214	76.52	-57.82
2	3624.99	18.74	23.00	-4.26	1.41 H	211	76.35	-57.61
3	3679.98	19.31	23.00	-3.69	1.39 H	212	76.73	-57.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	15.24	23.00	-7.76	1.68 V	119	73.06	-57.82
2	3624.99	15.48	23.00	-7.52	1.71 V	115	73.09	-57.61
3	3679.98	15.53	23.00	-7.47	1.75 V	117	72.95	-57.42

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

Modulation Type: 256QAM

NR Band 48, Channel Bandwidth 10MHz

Mode		TX channel 637000, 641666, 646333						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	18.20	23.00	-4.80	1.41 H	212	76.07	-57.87
2	3624.99	18.65	23.00	-4.35	1.35 H	208	76.26	-57.61
3	3694.98	18.52	23.00	-4.48	1.38 H	214	75.88	-57.36
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3555.00	14.95	23.00	-8.05	1.75 V	119	72.82	-57.87
2	3624.99	15.57	23.00	-7.43	1.75 V	119	73.18	-57.61
3	3694.98	15.88	23.00	-7.12	1.73 V	118	73.24	-57.36

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	17.78	23.00	-5.22	1.32 H	203	75.64	-57.86
2	3624.99	17.77	23.00	-5.23	1.37 H	214	75.38	-57.61
3	3690.00	18.51	23.00	-4.49	1.33 H	210	75.89	-57.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	14.11	23.00	-8.89	1.68 V	114	71.97	-57.86
2	3624.99	14.50	23.00	-8.50	1.67 V	116	72.11	-57.61
3	3690.00	14.59	23.00	-8.41	1.67 V	112	71.97	-57.38

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	17.42	23.00	-5.58	1.32 H	210	75.24	-57.82
2	3624.99	17.50	23.00	-5.50	1.43 H	205	75.11	-57.61
3	3679.98	18.10	23.00	-4.90	1.36 H	213	75.52	-57.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/10MHz)	Limit (dBm/10MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	14.39	23.00	-8.61	1.73 V	116	72.21	-57.82
2	3624.99	14.61	23.00	-8.39	1.70 V	115	72.22	-57.61
3	3679.98	14.75	23.00	-8.25	1.68 V	117	72.17	-57.42

Remarks:

1. $EIRP(dBm/10MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

EIRP Full Power (dBm/20MHz or dBm/40MHz)

Modulation Type: $\pi/2$ BPSK

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

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	20.88	23.00	-2.12	1.37 H	214	78.74	-57.86
2	3624.99	21.23	23.00	-1.77	1.41 H	209	78.84	-57.61
3	3690.00	21.38	23.00	-1.62	1.40 H	217	78.76	-57.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	17.97	23.00	-5.03	1.72 V	113	75.83	-57.86
2	3624.99	18.06	23.00	-4.94	1.67 V	108	75.67	-57.61
3	3690.00	18.46	23.00	-4.54	1.71 V	109	75.84	-57.38

Remarks:

1. $EIRP(dBm/20MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	21.24	23.00	-1.76	1.44 H	212	79.06	-57.82
2	3624.99	21.28	23.00	-1.72	1.41 H	208	78.89	-57.61
3	3679.98	21.51	23.00	-1.49	1.39 H	207	78.93	-57.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	17.91	23.00	-5.09	1.64 V	107	75.73	-57.82
2	3624.99	18.02	23.00	-4.98	1.68 V	121	75.63	-57.61
3	3679.98	18.29	23.00	-4.71	1.69 V	113	75.71	-57.42

Remarks:

1. $EIRP(dBm/40MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

Modulation Type: QPSK

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

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	21.35	23.00	-1.65	1.41 H	209	79.21	-57.86
2	3624.99	22.00	23.00	-1.00	1.42 H	213	79.61	-57.61
3	3690.00	21.89	23.00	-1.11	1.44 H	212	79.27	-57.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	18.43	23.00	-4.57	1.67 V	119	76.29	-57.86
2	3624.99	18.47	23.00	-4.53	1.69 V	112	76.08	-57.61
3	3690.00	18.76	23.00	-4.24	1.73 V	113	76.14	-57.38

Remarks:

1. $EIRP(dBm/20MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	21.71	23.00	-1.29	1.42 H	207	79.53	-57.82
2	3624.99	21.72	23.00	-1.28	1.43 H	212	79.33	-57.61
3	3679.98	21.92	23.00	-1.08	1.36 H	212	79.34	-57.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	18.39	23.00	-4.61	1.68 V	114	76.21	-57.82
2	3624.99	18.48	23.00	-4.52	1.71 V	119	76.09	-57.61
3	3679.98	18.74	23.00	-4.26	1.65 V	115	76.16	-57.42

Remarks:

1. $EIRP(dBm/40MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

Modulation Type: 16QAM

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

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	20.52	23.00	-2.48	1.38 H	209	78.38	-57.86
2	3624.99	20.73	23.00	-2.27	1.36 H	210	78.34	-57.61
3	3690.00	20.96	23.00	-2.04	1.37 H	210	78.34	-57.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	17.53	23.00	-5.47	1.65 V	119	75.39	-57.86
2	3624.99	17.41	23.00	-5.59	1.74 V	112	75.02	-57.61
3	3690.00	17.87	23.00	-5.13	1.75 V	114	75.25	-57.38

Remarks:

1. $EIRP(dBm/20MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	20.71	23.00	-2.29	1.40 H	207	78.53	-57.82
2	3624.99	20.82	23.00	-2.18	1.38 H	213	78.43	-57.61
3	3679.98	21.00	23.00	-2.00	1.44 H	0	78.42	-57.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	17.54	23.00	-5.46	1.75 V	119	75.36	-57.82
2	3624.99	17.65	23.00	-5.35	1.69 V	112	75.26	-57.61
3	3679.98	17.60	23.00	-5.40	1.74 V	119	75.02	-57.42

Remarks:

1. $EIRP(dBm/40MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

Modulation Type: 64QAM

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

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	19.26	23.00	-3.74	1.35 H	208	77.12	-57.86
2	3624.99	20.00	23.00	-3.00	1.44 H	212	77.61	-57.61
3	3690.00	20.20	23.00	-2.80	1.32 H	206	77.58	-57.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	16.72	23.00	-6.28	1.74 V	118	74.58	-57.86
2	3624.99	16.31	23.00	-6.69	1.65 V	114	73.92	-57.61
3	3690.00	16.85	23.00	-6.15	1.72 V	112	74.23	-57.38

Remarks:

1. $EIRP(dBm/20MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	19.44	23.00	-3.56	1.37 H	210	77.26	-57.82
2	3624.99	19.75	23.00	-3.25	1.39 H	207	77.36	-57.61
3	3679.98	20.02	23.00	-2.98	1.39 H	209	77.44	-57.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	16.07	23.00	-6.93	1.74 V	118	73.89	-57.82
2	3624.99	16.47	23.00	-6.53	1.75 V	115	74.08	-57.61
3	3679.98	16.85	23.00	-6.15	1.70 V	113	74.27	-57.42

Remarks:

1. $EIRP(dBm/40MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

Modulation Type: 256QAM

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

NR Band 48, Channel Bandwidth 20MHz

Mode		TX channel 637334, 641666, 646000						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	18.43	23.00	-4.57	1.45 H	214	76.29	-57.86
2	3624.99	18.88	23.00	-4.12	1.36 H	212	76.49	-57.61
3	3690.00	19.05	23.00	-3.95	1.44 H	214	76.43	-57.38
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/20MHz)	Limit (dBm/20MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3560.01	15.68	23.00	-7.32	1.73 V	113	73.54	-57.86
2	3624.99	15.45	23.00	-7.55	1.68 V	114	73.06	-57.61
3	3690.00	15.89	23.00	-7.11	1.68 V	119	73.27	-57.38

Remarks:

1. $EIRP(dBm/20MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

NR Band 48, Channel Bandwidth 40MHz

Mode		TX channel 638000, 641666, 645332						
Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	18.89	23.00	-4.11	1.38 H	211	76.71	-57.82
2	3624.99	18.94	23.00	-4.06	1.39 H	207	76.55	-57.61
3	3679.98	19.43	23.00	-3.57	1.44 H	212	76.85	-57.42
Antenna Polarity & Test Distance : Vertical at 3m								
No	Frequency (MHz)	EIRP (dBm/40MHz)	Limit (dBm/40MHz)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	3570.00	15.19	23.00	-7.81	1.74 V	118	73.01	-57.82
2	3624.99	15.42	23.00	-7.58	1.71 V	115	73.03	-57.61
3	3679.98	15.35	23.00	-7.65	1.67 V	114	72.77	-57.42

Remarks:

1. $EIRP(dBm/40MHz) = Raw\ Value(dBuV) + Correction\ Factor(dB/m)$.
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.

EIRP / ERP Power (dBm)

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	22.31	22.33	22.36
		1	50	21.98	22.07	22.05
		1	99	22.20	21.98	22.21
		50	0	21.20	21.56	21.18
		50	25	21.43	21.12	21.47
		50	50	21.06	21.08	21.05
		100	0	21.05	21.41	21.50
20M	16QAM	1	0	21.27	21.42	21.22
		1	50	21.42	21.43	21.46
		1	99	21.52	21.40	21.21
		50	0	20.66	20.21	20.62
		50	25	20.66	20.16	20.52
		50	50	20.30	20.25	20.40
		100	0	20.30	20.06	20.10
20M	64QAM	1	0	20.76	20.52	20.45
		1	50	20.39	20.30	20.07
		1	99	20.42	20.48	20.12
		50	0	19.56	19.18	19.43
		50	25	19.44	19.36	19.19
		50	50	19.11	19.24	19.48
		100	0	19.30	19.53	19.12
20M	256QAM	1	0	17.73	17.37	17.70
		1	50	17.73	17.55	17.52
		1	99	17.62	17.65	17.56
		50	0	17.30	17.32	17.10
		50	25	17.31	17.55	17.06
		50	50	17.24	17.16	17.30
		100	0	17.12	17.33	17.32

*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	22.15	22.14	22.15
		1	37	22.08	22.07	21.94
		1	74	22.08	22.14	22.05
		36	0	21.36	21.33	21.38
		36	19	21.13	21.09	21.12
		36	39	20.97	21.17	21.19
		75	0	21.49	21.32	20.98
15M	16QAM	1	0	21.29	21.67	21.31
		1	37	21.64	21.54	21.07
		1	74	21.16	21.44	21.49
		36	0	20.39	20.24	20.48
		36	19	20.28	20.30	20.27
		36	39	20.48	20.10	20.33
		75	0	20.00	20.49	20.49
15M	64QAM	1	0	20.37	20.48	20.28
		1	37	20.68	20.14	20.56
		1	74	20.51	20.40	20.21
		36	0	19.22	19.49	19.07
		36	19	19.46	19.37	19.35
		36	39	19.06	19.51	18.93
		75	0	19.08	19.03	19.12
15M	256QAM	1	0	17.38	17.23	17.33
		1	37	17.42	17.21	17.41
		1	74	17.16	17.12	17.42
		36	0	17.42	17.36	17.32
		36	19	17.09	17.27	17.44
		36	39	17.23	17.28	17.22
		75	0	17.07	17.48	17.07

*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	21.98	21.98	22.10
		1	24	21.96	21.94	21.93
		1	49	21.92	21.92	21.95
		25	0	21.29	21.14	20.99
		25	12	21.32	21.48	21.18
		25	25	21.26	21.03	21.39
		50	0	21.18	21.58	21.41
10M	16QAM	1	0	21.06	20.97	21.08
		1	24	21.04	21.00	21.14
		1	49	21.14	21.03	20.97
		25	0	20.17	20.29	20.05
		25	12	20.10	20.11	20.08
		25	25	20.06	20.17	20.13
		50	0	20.20	19.98	20.25
10M	64QAM	1	0	20.13	20.18	20.11
		1	24	20.19	20.21	20.14
		1	49	20.27	20.22	20.15
		25	0	19.50	18.98	18.98
		25	12	19.36	19.37	19.22
		25	25	19.08	19.09	19.04
		50	0	19.29	19.34	19.40
10M	256QAM	1	0	17.40	17.45	17.40
		1	24	17.25	17.19	17.47
		1	49	17.43	17.50	17.08
		25	0	17.43	17.39	17.27
		25	12	17.04	17.19	17.20
		25	25	17.03	17.39	17.03
		50	0	17.29	17.45	17.42

*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	22.06	21.97	22.05
		1	12	22.00	21.92	21.99
		1	24	22.01	21.95	21.99
		12	0	21.14	21.01	21.18
		12	6	20.97	20.96	21.20
		12	13	20.95	21.11	21.23
		25	0	20.96	20.92	20.96
5M	16QAM	1	0	21.07	21.07	21.20
		1	12	21.10	21.10	21.11
		1	24	21.16	21.17	21.19
		12	0	20.02	20.09	20.18
		12	6	20.04	20.29	20.05
		12	13	20.05	20.06	20.13
		25	0	20.11	20.14	19.93
5M	64QAM	1	0	20.37	20.00	20.36
		1	12	20.22	20.10	20.35
		1	24	20.09	20.11	20.30
		12	0	18.99	19.16	19.01
		12	6	19.16	19.15	19.19
		12	13	19.08	19.30	19.03
		25	0	19.25	19.30	19.13
5M	256QAM	1	0	17.38	17.44	17.32
		1	12	17.22	17.61	17.51
		1	24	17.31	17.64	17.08
		12	0	17.62	17.28	17.38
		12	6	17.34	17.13	17.44
		12	13	17.49	17.63	17.16
		25	0	17.09	17.50	16.95

*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	22.02	22.08	22.06
		1	7	22.07	22.14	22.00
		1	14	22.13	22.05	22.10
		8	0	21.58	21.03	21.16
		8	3	21.43	21.37	21.01
		8	7	21.08	20.98	21.29
		15	0	21.43	21.52	21.45
3M	16QAM	1	0	21.41	21.24	21.34
		1	7	21.37	21.44	21.47
		1	14	21.17	21.37	20.93
		8	0	20.57	20.39	19.99
		8	3	20.23	20.33	19.97
		8	7	20.37	20.36	19.99
		15	0	20.12	20.33	20.04
3M	64QAM	1	0	20.31	20.41	20.41
		1	7	20.08	20.24	20.42
		1	14	20.47	20.00	20.35
		8	0	19.41	19.58	19.19
		8	3	19.09	19.32	19.37
		8	7	19.31	19.52	19.29
		15	0	19.35	19.31	19.21
3M	256QAM	1	0	17.31	17.72	17.12
		1	7	17.70	17.28	17.39
		1	14	17.50	17.36	17.33
		8	0	17.44	17.28	17.68
		8	3	17.52	17.25	17.08
		8	7	17.47	17.36	17.39
		15	0	17.45	17.53	17.21

*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	22.25	22.10	22.05
		1	2	22.16	21.91	21.96
		1	5	22.13	22.00	22.04
		3	0	22.24	22.13	21.91
		3	1	22.18	22.10	22.05
		3	3	22.04	21.96	21.98
		6	0	21.44	21.37	21.32
1.4M	16QAM	1	0	21.63	21.71	21.29
		1	2	21.26	21.28	21.30
		1	5	21.26	21.00	21.23
		3	0	21.05	21.21	21.26
		3	1	20.99	21.13	21.00
		3	3	21.35	21.01	21.05
		6	0	20.01	20.06	20.02
1.4M	64QAM	1	0	20.67	20.20	20.51
		1	2	20.29	20.04	20.40
		1	5	20.02	20.38	20.05
		3	0	20.42	20.29	20.11
		3	1	20.26	20.00	20.21
		3	3	20.30	20.02	20.08
		6	0	19.28	19.34	19.21
1.4M	256QAM	1	0	17.14	17.49	17.00
		1	2	17.29	17.40	16.96
		1	5	17.21	17.51	17.53
		3	0	17.41	17.11	17.37
		3	1	17.32	17.06	17.18
		3	3	17.07	17.03	17.34
		6	0	17.09	17.23	17.41

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

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20450	20525	20600
		Frequency (MHz)		829	836.5	844
10M	QPSK	1	0	17.75	17.69	17.70
		1	24	17.62	17.56	17.62
		1	49	17.62	17.57	17.60
		25	0	16.98	16.67	17.10
		25	12	17.14	16.77	16.74
		25	25	17.08	17.02	16.77
		50	0	17.05	16.94	16.79
10M	16QAM	1	0	16.65	16.85	16.59
		1	24	16.73	16.62	16.61
		1	49	16.75	16.64	16.85
		25	0	16.22	16.14	16.02
		25	12	15.67	15.80	15.72
		25	25	15.69	16.11	16.02
		50	0	16.02	16.21	15.63
10M	64QAM	1	0	15.40	15.63	15.63
		1	24	15.90	15.46	15.75
		1	49	15.36	15.57	15.61
		25	0	14.79	14.68	14.95
		25	12	14.69	14.71	14.97
		25	25	14.94	14.82	14.85
		50	0	14.95	14.77	14.90
10M	256QAM	1	0	12.97	12.70	12.73
		1	24	12.87	12.90	12.74
		1	49	13.01	12.85	12.89
		25	0	13.01	12.70	12.95
		25	12	12.87	12.61	12.74
		25	25	12.92	12.56	12.85
		50	0	12.66	12.61	12.70

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

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20425	20525	20625
		Frequency (MHz)		826.5	836.5	846.5
5M	QPSK	1	0	17.67	17.70	17.71
		1	12	17.59	17.65	17.38
		1	24	17.39	17.61	17.41
		12	0	16.93	16.56	16.46
		12	6	16.55	16.63	16.63
		12	13	16.55	16.45	16.44
		25	0	16.56	16.61	16.51
5M	16QAM	1	0	16.52	16.71	16.47
		1	12	16.68	16.81	16.82
		1	24	16.74	16.47	16.72
		12	0	15.67	15.75	15.57
		12	6	15.40	15.84	15.71
		12	13	15.69	15.59	15.91
		25	0	15.60	15.62	15.68
5M	64QAM	1	0	15.29	15.28	15.39
		1	12	15.49	15.82	15.78
		1	24	15.65	15.63	15.58
		12	0	15.00	14.46	14.97
		12	6	14.41	14.34	14.42
		12	13	14.50	14.88	14.59
		25	0	14.95	14.61	14.62
5M	256QAM	1	0	12.69	12.69	12.82
		1	12	12.52	12.65	12.61
		1	24	12.78	12.82	12.71
		12	0	12.88	12.68	12.89
		12	6	12.40	12.48	12.72
		12	13	12.45	12.52	12.50
		25	0	12.53	12.62	12.57

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

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20415	20525	20635
		Frequency (MHz)		825.5	836.5	847.5
3M	QPSK	1	0	17.66	17.68	17.74
		1	7	17.65	17.74	17.61
		1	14	17.39	17.72	17.67
		8	0	16.93	16.72	16.48
		8	3	16.56	16.77	16.74
		8	7	17.04	16.47	16.61
		15	0	16.47	16.46	16.86
3M	16QAM	1	0	16.79	16.75	16.74
		1	7	16.65	16.66	16.71
		1	14	16.47	16.51	16.61
		8	0	15.88	15.89	15.64
		8	3	15.85	15.90	15.49
		8	7	15.51	15.81	15.88
		15	0	15.90	15.78	15.85
3M	64QAM	1	0	15.67	15.67	15.58
		1	7	15.21	15.57	15.45
		1	14	15.61	15.37	15.68
		8	0	14.65	14.66	14.40
		8	3	14.62	14.65	14.57
		8	7	14.50	14.62	14.67
		15	0	14.75	14.54	14.71
3M	256QAM	1	0	12.84	12.83	12.73
		1	7	12.90	12.77	12.86
		1	14	12.82	12.97	12.50
		8	0	12.56	12.46	12.72
		8	3	12.54	12.59	12.55
		8	7	12.76	12.37	12.30
		15	0	12.71	12.68	12.53

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

LTE Band 5						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		20407	20525	20643
		Frequency (MHz)		824.7	836.5	848.3
1.4M	QPSK	1	0	17.65	17.69	17.62
		1	2	17.64	17.42	17.65
		1	5	17.42	17.60	17.68
		3	0	17.70	17.64	17.68
		3	1	17.55	17.55	17.74
		3	3	17.48	17.60	17.70
		6	0	16.61	16.56	16.55
1.4M	16QAM	1	0	16.56	16.58	16.58
		1	2	16.60	16.58	16.74
		1	5	16.39	16.59	16.62
		3	0	16.66	16.70	16.57
		3	1	16.69	16.60	16.50
		3	3	16.54	16.60	16.64
		6	0	15.54	15.63	15.51
1.4M	64QAM	1	0	15.55	15.48	15.58
		1	2	15.42	15.58	15.62
		1	5	15.62	15.59	15.53
		3	0	15.59	15.64	15.42
		3	1	15.64	15.60	15.68
		3	3	15.43	15.61	15.67
		6	0	14.82	14.94	14.96
1.4M	256QAM	1	0	13.00	12.97	12.77
		1	2	12.63	12.91	12.34
		1	5	12.83	13.05	12.47
		3	0	12.44	12.58	12.76
		3	1	12.84	12.69	12.46
		3	3	12.74	12.73	12.71
		6	0	12.66	13.05	12.83

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

LTE Band 13				
BW	MCS Index	RB Size	RB Offset	Mid
		Channel		23230
		Frequency (MHz)		782
10M	QPSK	1	0	17.32
		1	24	17.95
		1	49	17.23
		25	0	16.21
		25	12	16.65
		25	25	16.17
		50	0	16.38
10M	16QAM	1	0	16.24
		1	24	16.28
		1	49	16.26
		25	0	15.30
		25	12	15.29
		25	25	15.36
		50	0	15.34
10M	64QAM	1	0	15.22
		1	24	15.19
		1	49	15.35
		25	0	15.13
		25	12	15.05
		25	25	15.07
		50	0	14.89
10M	256QAM	1	0	12.37
		1	24	12.65
		1	49	12.66
		25	0	12.84
		25	12	12.78
		25	25	12.68
		50	0	12.76

*ERP = Conducted + antenna gain (-3.4dBi)-2.15

LTE Band 13						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		23205	23230	23255
		Frequency (MHz)		779.5	782	784.5
5M	QPSK	1	0	17.21	17.31	17.31
		1	12	17.44	17.72	17.52
		1	24	17.18	17.16	17.17
		12	0	16.22	16.21	16.22
		12	6	16.32	16.31	16.49
		12	13	16.32	16.34	16.24
		25	0	16.28	16.30	16.33
5M	16QAM	1	0	16.70	16.86	16.75
		1	12	16.66	16.89	16.92
		1	24	16.18	16.19	16.22
		12	0	15.38	15.40	15.41
		12	6	15.24	15.68	15.48
		12	13	15.20	15.22	15.18
		25	0	15.27	15.18	15.27
5M	64QAM	1	0	16.64	16.68	16.74
		1	12	16.64	16.86	16.74
		1	24	15.36	15.34	15.35
		12	0	15.24	15.07	14.88
		12	6	15.09	15.71	15.22
		12	13	15.14	15.02	15.12
		25	0	14.52	14.81	14.66
5M	256QAM	1	0	12.45	12.50	12.50
		1	12	12.81	12.91	12.83
		1	24	12.76	12.91	12.82
		12	0	12.37	12.66	12.56
		12	6	12.67	12.78	12.79
		12	13	12.71	12.50	12.52
		25	0	12.63	13.01	12.70

*ERP = Conducted + antenna gain (-3.4dBi)-2.15

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	25.88	25.81	25.50
		1	50	25.80	25.60	25.56
		1	99	25.49	25.32	25.49
		50	0	24.88	24.52	24.34
		50	25	24.44	24.80	24.72
		50	50	24.59	24.84	24.72
		100	0	24.41	24.79	24.75
20M	16QAM	1	0	24.61	24.72	24.60
		1	50	24.24	24.75	24.86
		1	99	24.30	24.86	24.77
		50	0	23.44	23.59	23.44
		50	25	23.48	23.56	23.82
		50	50	23.17	23.73	23.39
		100	0	23.76	23.70	23.80
20M	64QAM	1	0	23.08	23.44	23.50
		1	50	23.13	23.06	23.10
		1	99	23.07	23.09	23.06
		50	0	22.32	22.34	22.09
		50	25	22.16	22.26	22.30
		50	50	22.18	22.07	22.05
		100	0	22.10	22.05	22.02
20M	256QAM	1	0	20.43	20.74	20.70
		1	50	20.54	20.67	20.63
		1	99	20.65	20.65	20.71
		50	0	20.56	20.65	20.48
		50	25	20.11	20.68	20.37
		50	50	20.73	20.50	20.39
		100	0	20.30	20.58	20.59

*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	25.69	25.45	25.70
		1	37	25.64	25.77	25.34
		1	74	25.26	25.50	25.50
		36	0	24.63	24.48	24.59
		36	19	24.45	24.52	24.64
		36	39	24.41	24.45	24.39
		75	0	24.32	24.68	24.70
15M	16QAM	1	0	24.56	24.78	24.70
		1	37	24.52	24.76	24.70
		1	74	24.40	24.72	24.53
		36	0	23.35	23.88	23.42
		36	19	23.16	23.39	23.29
		36	39	23.46	23.68	23.60
		75	0	23.64	23.92	23.89
15M	64QAM	1	0	23.17	23.40	23.35
		1	37	23.04	23.15	23.08
		1	74	23.14	23.13	23.16
		36	0	22.06	22.30	22.35
		36	19	22.10	22.13	22.18
		36	39	22.18	22.24	22.16
		75	0	22.09	22.07	22.09
15M	256QAM	1	0	20.65	20.83	20.75
		1	37	20.44	20.87	20.74
		1	74	20.80	20.50	20.61
		36	0	20.41	20.76	20.39
		36	19	20.51	20.43	20.75
		36	39	20.62	20.83	20.68
		75	0	20.18	20.56	20.47

*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	25.78	25.67	25.51
		1	24	25.67	25.57	25.21
		1	49	25.15	25.51	25.33
		25	0	24.47	24.65	24.67
		25	12	24.02	24.50	24.44
		25	25	24.18	24.60	24.54
		50	0	24.14	24.71	24.35
10M	16QAM	1	0	24.50	24.62	24.49
		1	24	24.59	24.43	24.67
		1	49	24.21	24.69	24.64
		25	0	23.39	23.50	23.82
		25	12	23.45	23.78	23.50
		25	25	23.32	23.67	23.30
		50	0	23.37	23.70	23.36
10M	64QAM	1	0	23.04	23.05	23.05
		1	24	23.06	23.21	23.15
		1	49	23.06	23.10	23.11
		25	0	22.02	22.34	22.56
		25	12	22.02	22.08	22.02
		25	25	22.06	22.09	22.06
		50	0	22.02	22.08	22.03
10M	256QAM	1	0	20.27	20.50	20.60
		1	24	20.64	20.46	20.63
		1	49	20.76	20.60	20.79
		25	0	20.33	20.51	20.74
		25	12	20.34	20.48	20.54
		25	25	20.38	20.70	20.32
		50	0	20.66	20.46	20.22

*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	25.69	25.63	25.47
		1	12	25.60	25.53	25.22
		1	24	25.60	25.68	25.05
		12	0	24.13	24.64	24.31
		12	6	24.52	24.88	24.21
		12	13	24.50	24.55	24.47
		25	0	24.31	24.67	24.26
5M	16QAM	1	0	24.37	24.58	24.55
		1	12	24.22	24.56	24.75
		1	24	24.53	24.44	24.48
		12	0	23.24	23.37	23.45
		12	6	23.25	23.67	23.38
		12	13	23.00	23.53	23.19
		25	0	23.46	23.44	23.69
5M	64QAM	1	0	23.13	23.13	23.31
		1	12	23.15	23.02	23.08
		1	24	23.07	23.10	23.03
		12	0	22.20	22.40	22.02
		12	6	22.03	22.07	22.18
		12	13	22.15	22.06	22.11
		25	0	22.04	22.34	22.13
5M	256QAM	1	0	20.64	20.72	20.72
		1	12	20.34	20.71	20.68
		1	24	20.30	20.65	20.64
		12	0	20.44	20.32	20.68
		12	6	20.56	20.49	20.30
		12	13	20.25	20.36	20.38
		25	0	20.48	20.46	20.44

*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	25.65	25.68	25.68
		1	7	25.44	25.38	25.34
		1	14	25.36	25.64	25.55
		8	0	24.50	24.88	24.46
		8	3	24.32	24.78	24.79
		8	7	24.10	24.84	24.48
		15	0	24.36	24.49	24.35
3M	16QAM	1	0	24.32	25.07	24.79
		1	7	24.38	25.03	24.94
		1	14	24.22	24.62	24.28
		8	0	23.27	23.59	23.34
		8	3	23.02	23.79	23.66
		8	7	23.04	23.84	23.25
		15	0	23.03	23.51	23.52
3M	64QAM	1	0	23.15	23.13	23.09
		1	7	23.17	23.18	23.06
		1	14	23.07	23.17	23.19
		8	0	22.10	22.04	22.36
		8	3	22.04	22.04	22.22
		8	7	22.03	22.05	22.04
		15	0	22.05	22.07	22.05
3M	256QAM	1	0	20.79	20.59	20.69
		1	7	20.62	20.58	20.59
		1	14	20.35	20.49	20.67
		8	0	20.46	20.55	20.55
		8	3	20.54	20.69	20.35
		8	7	20.21	20.69	20.68
		15	0	20.14	20.39	20.50

*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	25.80	25.72	25.65
		1	2	25.70	25.69	25.52
		1	5	25.15	25.26	25.29
		3	0	25.29	25.35	25.32
		3	1	25.40	25.65	25.53
		3	3	25.30	25.44	25.45
		6	0	24.11	24.74	24.56
1.4M	16QAM	1	0	24.42	24.77	24.43
		1	2	24.13	24.76	24.63
		1	5	24.42	24.78	24.48
		3	0	24.52	24.49	24.23
		3	1	24.28	24.34	24.63
		3	3	24.07	24.28	24.52
		6	0	23.11	23.88	23.96
1.4M	64QAM	1	0	23.05	23.18	23.13
		1	2	23.03	23.12	23.07
		1	5	23.06	23.16	23.13
		3	0	23.01	23.47	23.65
		3	1	23.06	23.16	23.17
		3	3	23.11	23.14	23.18
		6	0	22.05	22.16	22.10
1.4M	256QAM	1	0	20.40	20.53	20.58
		1	2	20.72	20.54	20.51
		1	5	20.21	20.42	20.40
		3	0	20.20	20.45	20.56
		3	1	20.33	20.52	20.35
		3	3	20.23	20.42	20.39
		6	0	20.43	20.83	20.40

*EIRP = Conducted + antenna gain (2.3dBi)

4.2 Modulation Characteristics Measurement

4.2.1 Limits of Modulation Characteristics

N/A

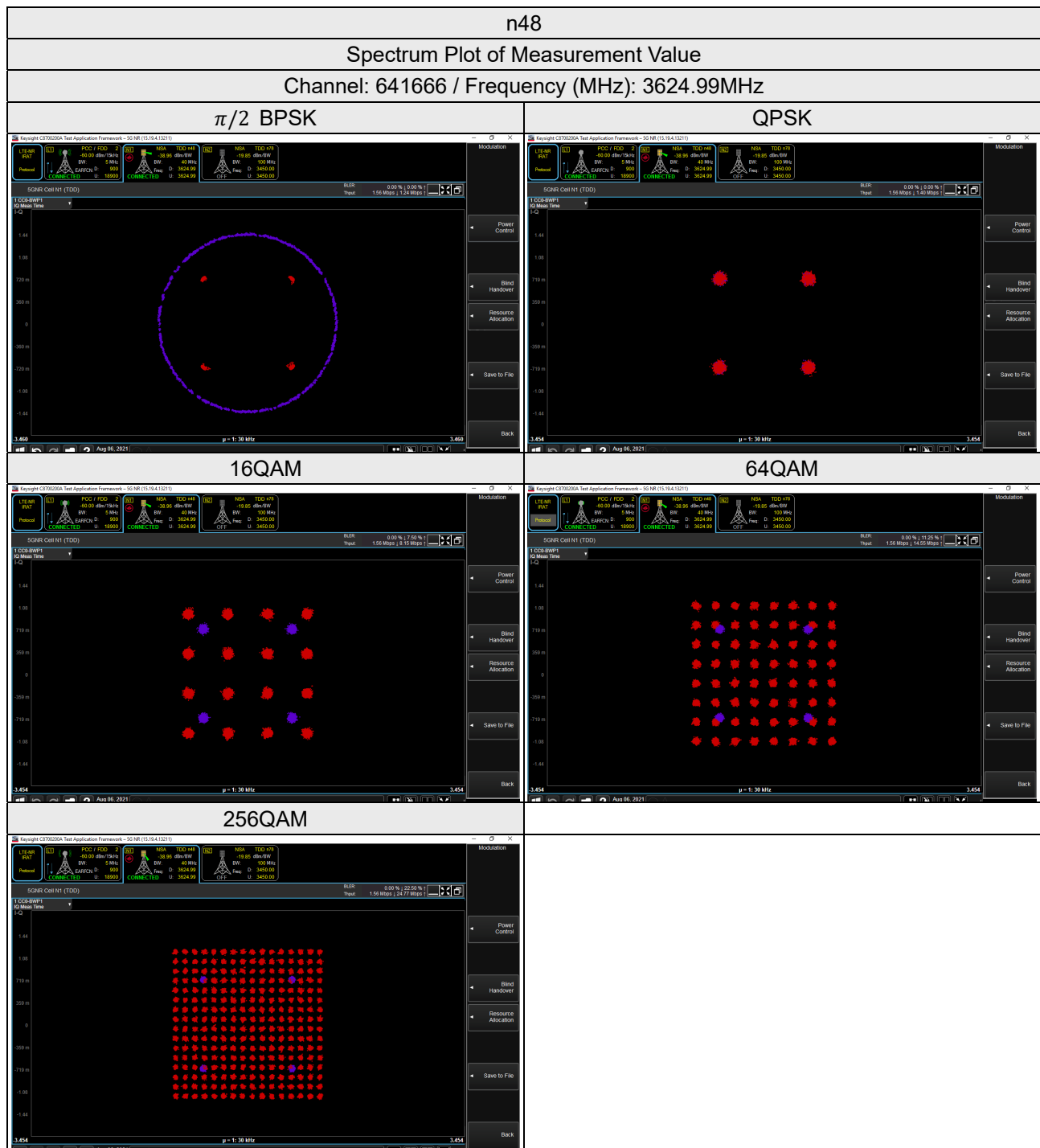
4.2.2 Test Procedure

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

The frequency stability shall be sufficient to ensure that the fundamental emissions stay within the authorized bands of operation.

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.

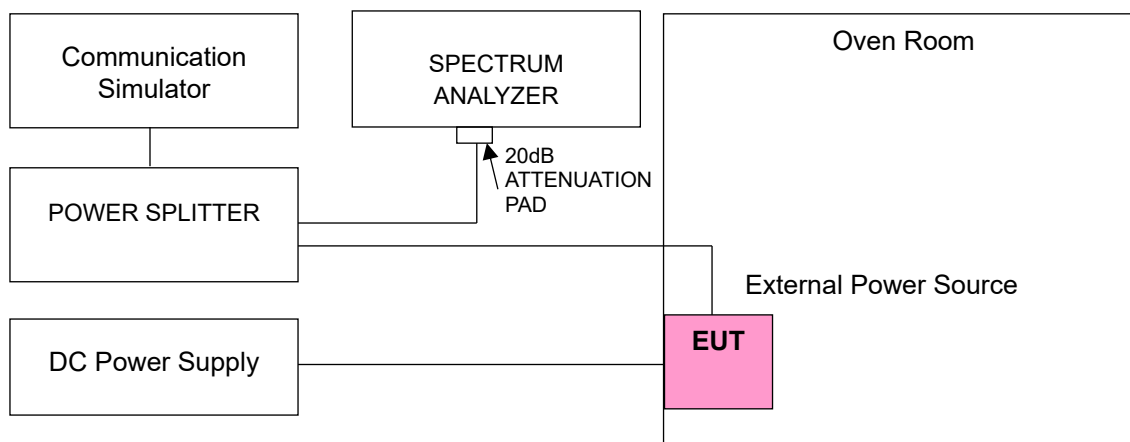
Note: The frequency error was recorded frequency error from the communication simulator.

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	70360742	Jun. 24, 2021	Jun. 23, 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)	n48			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
3.87	3555.000030	0.008	3694.980033	0.009
3.28	3555.000040	0.011	3694.980016	0.004
4.45	3555.000020	0.006	3694.980027	0.007

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

Frequency Error vs. Temperature

Temp. (°C)	n48			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3555.000023	0.006	3694.980012	0.003
-20	3555.000020	0.006	3694.980010	0.003
-10	3555.000025	0.007	3694.980028	0.008
0	3555.000014	0.004	3694.980024	0.006
10	3554.999989	-0.003	3694.979962	-0.010
20	3554.999982	-0.005	3694.979964	-0.010
30	3554.999978	-0.006	3694.979982	-0.005
40	3554.999982	-0.005	3694.979970	-0.008
50	3554.999971	-0.008	3694.979962	-0.010
60	3554.999965	-0.010	3694.979971	-0.008

Frequency Error vs. Voltage

Voltage (Vdc)	n48			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
3.87	3560.010030	0.008	3690.000023	0.006
3.28	3560.010017	0.005	3690.000020	0.005
4.45	3560.010039	0.011	3690.000026	0.007

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

Frequency Error vs. Temperature

Temp. (°C)	n48			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3560.010034	0.010	3690.000015	0.004
-20	3560.010040	0.011	3690.000011	0.003
-10	3560.010042	0.012	3690.000050	0.014
0	3560.010022	0.006	3690.000021	0.006
10	3560.009971	-0.008	3689.999958	-0.011
20	3560.009989	-0.003	3689.999953	-0.013
30	3560.009977	-0.006	3689.999978	-0.006
40	3560.009962	-0.011	3689.999955	-0.012
50	3560.009966	-0.010	3689.999973	-0.007
60	3560.009977	-0.006	3689.999978	-0.006

Frequency Error vs. Voltage

Voltage (Vdc)	n48			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
3.87	3570.000022	0.006	3679.980048	0.013
3.28	3570.000049	0.014	3679.980048	0.013
4.45	3570.000012	0.003	3679.980018	0.005

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

Frequency Error vs. Temperature

Temp. (°C)	n48			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3570.000036	0.010	3679.980025	0.007
-20	3570.000044	0.012	3679.980033	0.009
-10	3570.000033	0.009	3679.980047	0.013
0	3570.000014	0.004	3679.980024	0.006
10	3569.999990	-0.003	3679.979981	-0.005
20	3569.999971	-0.008	3679.979970	-0.008
30	3569.999990	-0.003	3679.979950	-0.014
40	3569.999961	-0.011	3679.979957	-0.012
50	3569.999963	-0.010	3679.979986	-0.004
60	3569.999982	-0.005	3679.979975	-0.007

4.4 Occupied Bandwidth Measurement

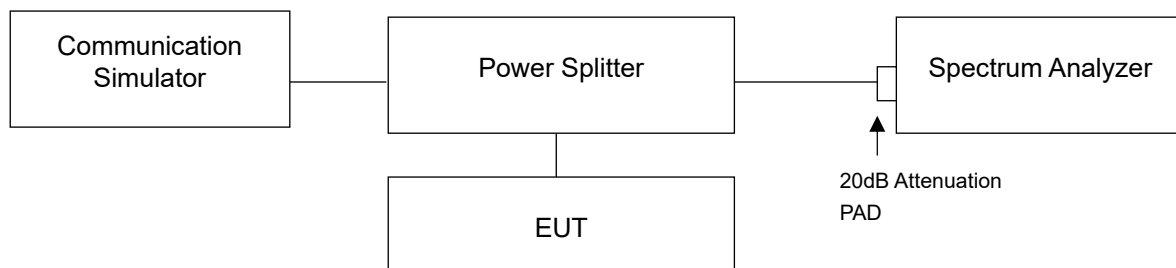
4.4.1 Test Procedure

The occupied bandwidth (OBW), that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 % of the total mean power radiated by a given emission.

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

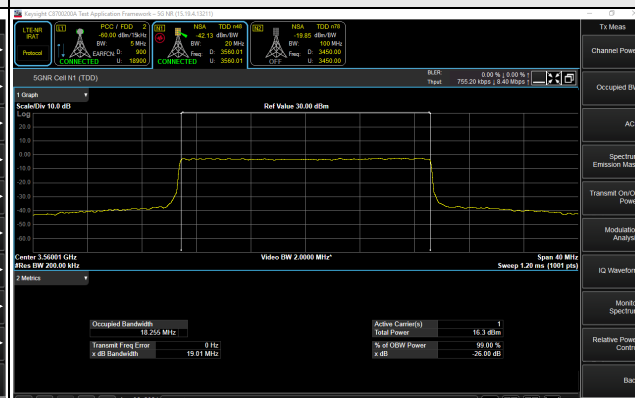
n48, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
637000	3555.00	8.6044	8.6001	8.5783	8.5778	8.6003
641666	3624.99	8.6054	8.6020	8.5773	8.5800	8.5797
646333	3694.98	8.6046	8.6009	8.5783	8.6004	8.5791
n48, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
637334	3560.01	18.033	18.243	18.247	18.255	18.248
641666	3624.99	18.039	18.245	18.244	18.255	18.251
646000	3690.00	18.027	18.243	18.255	18.251	18.247
n48, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
638000	3570.00	37.511	37.835	37.832	37.840	37.920
641666	3624.99	37.622	37.839	37.836	37.924	37.927
645332	3679.98	37.518	37.839	37.834	37.922	37.926

Spectrum Plot of Worst Value

10MHz / $\pi/2$ BPSK



20MHz / 64QAM



40MHz / 256QAM

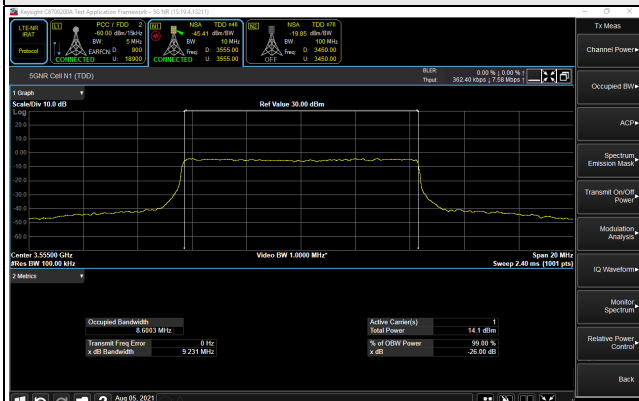


26dB Bandwidth

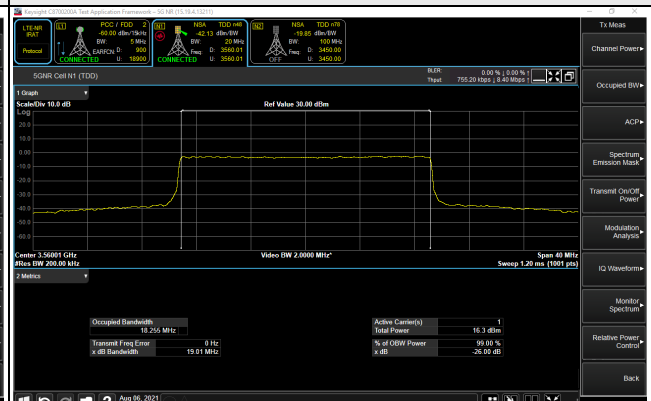
n48, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
637000	3555.00	9.158	9.149	9.158	9.135	9.231
641666	3624.99	9.180	9.170	9.089	9.135	9.196
646333	3694.98	9.173	9.181	9.158	9.184	9.211
n48, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
637334	3560.01	18.58	18.93	18.97	19.01	18.96
641666	3624.99	18.57	18.99	18.95	19.00	18.92
646000	3690.00	18.58	18.93	19.01	18.92	18.97
n48, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	26dB Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
638000	3570.00	37.05	39.21	39.21	39.18	39.18
641666	3624.99	37.06	39.22	39.21	39.19	39.20
645332	3679.98	37.07	39.21	39.22	39.19	39.19

Spectrum Plot of Worst Value

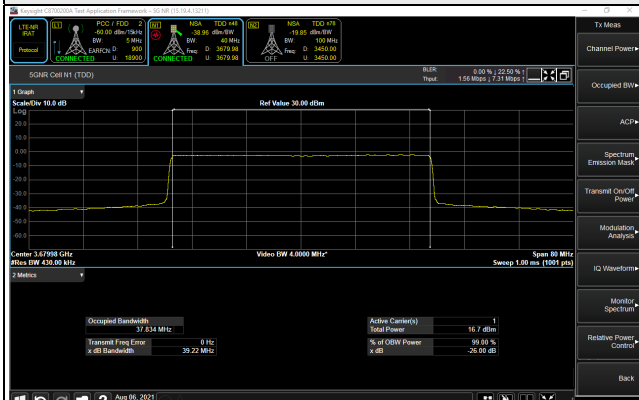
10MHz / 256QAM



20MHz / 64QAM



40MHz / 16QAM

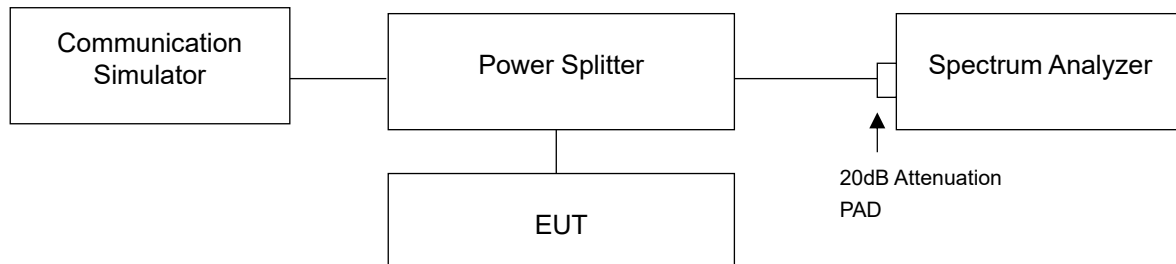


4.5 Peak to Average Ratio

4.5.1 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

4.5.2 Test Setup



4.5.3 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%.

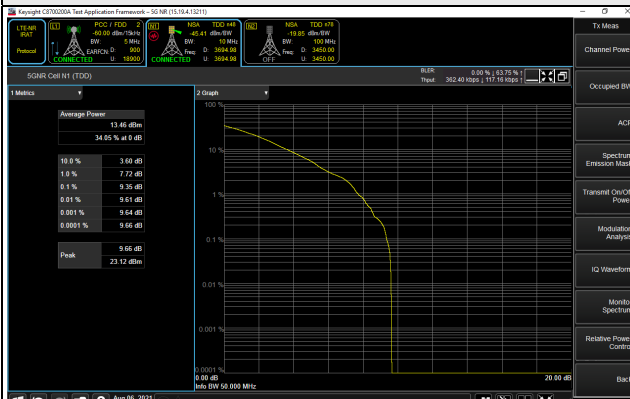
4.5.4 Test Results

n48

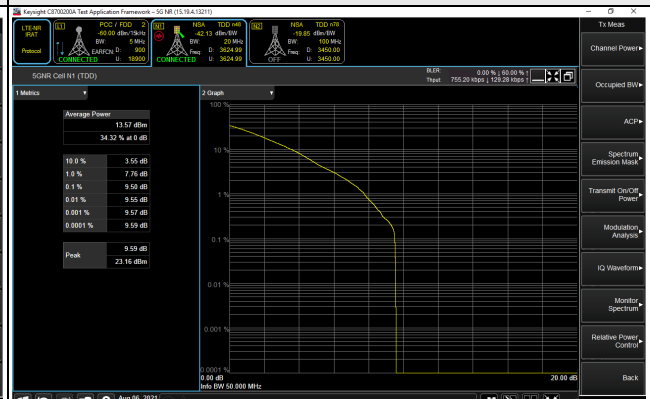
n48, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
637000	3555.00	3.78	6.77	6.79	7.67	9.16
641666	3624.99	3.78	6.37	6.62	7.26	9.31
646333	3694.98	3.66	5.99	7.30	7.72	9.35
n48, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
637334	3560.01	3.80	6.60	6.47	7.14	9.48
641666	3624.99	3.79	6.02	7.38	7.96	9.50
646000	3690.00	3.71	6.60	6.60	7.38	7.96
n48, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
638000	3570.00	3.82	6.62	8.04	7.95	9.50
641666	3624.99	3.78	7.36	7.51	7.95	9.37
645332	3679.98	3.76	7.23	7.37	7.88	9.21

Spectrum Plot of Worst Value

10MHz / 256QAM



20MHz / 256QAM



40MHz / 256QAM

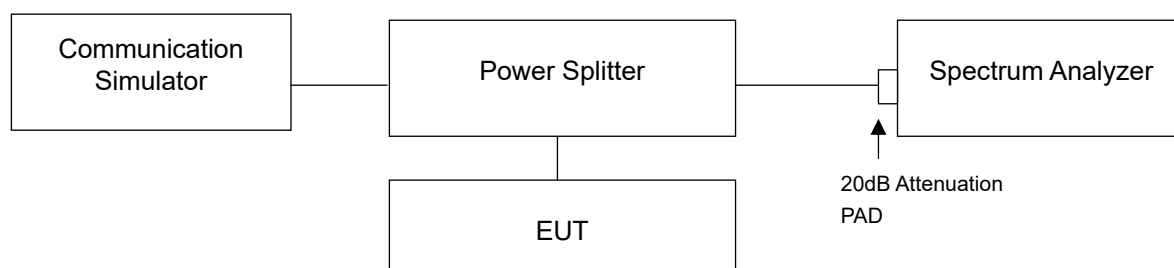


4.6 Conducted Spurious Emissions

4.6.1 Limits of Conducted Spurious Emissions Measurement

Power of any emissions outside the Fundamental	Limit
Within 0-10MHz above the Assigned Channel	-13 dBm/MHz
Within 0-10MHz below the Assigned Channel	
Greater than 10MHz above the Assigned Channel	-25 dBm/MHz
Greater than 10MHz below the Assigned Channel	
Power of any emission below 3530MHz	-40 dBm/MHz
Power of any emission above 3720MHz	

4.6.2 Test Setup



4.6.3 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 are from 9 kHz to 40GHz. 20dB attenuation pad is connected with spectrum. RBW=1MHz and VBW=3MHz is used for conducted emission measurement.
- Measuring frequency band edge, 20dB attenuation pad is connected with spectrum. 1% of the fundamental emission bandwidth is used for conducted emission measurement.

4.6.4 Test Results

n48

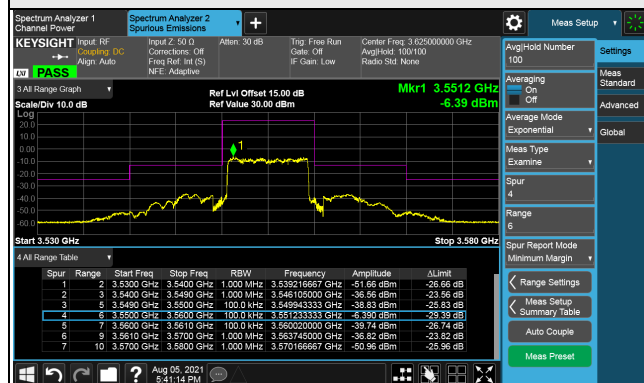
n48, Channel Bandwidth 10MHz

Channel 637000 (3555.00MHz)

1RB



Full RB



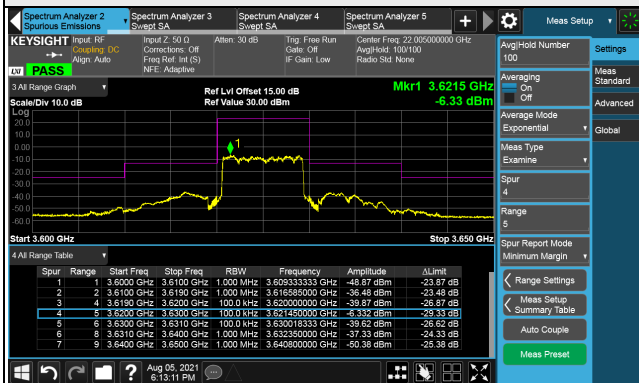
n48, Channel Bandwidth 10MHz

Channel 641666 (3624.99MHz)

1RB



Full RB



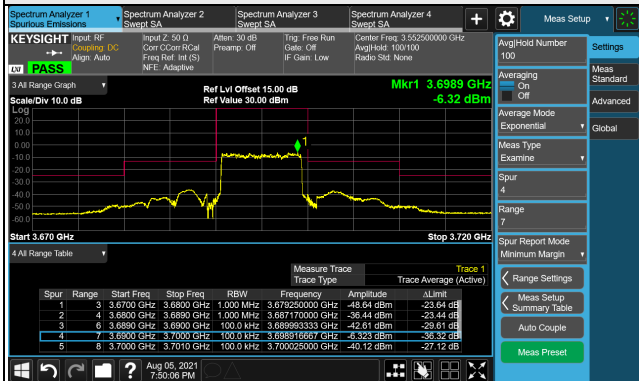
n48, Channel Bandwidth 10MHz

Channel 646333 (3694.98MHz)

1RB



Full RB



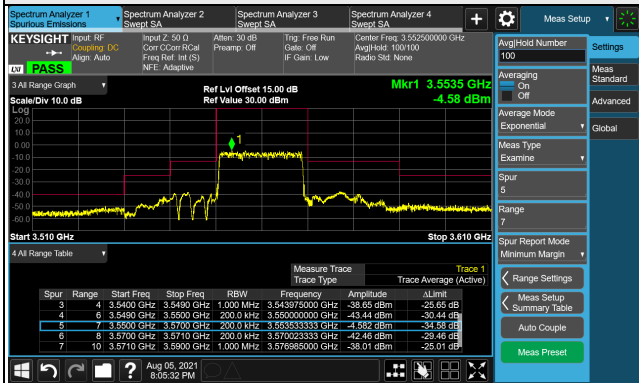
n48, Channel Bandwidth 20MHz

Channel 637334 (3560.01MHz)

1RB



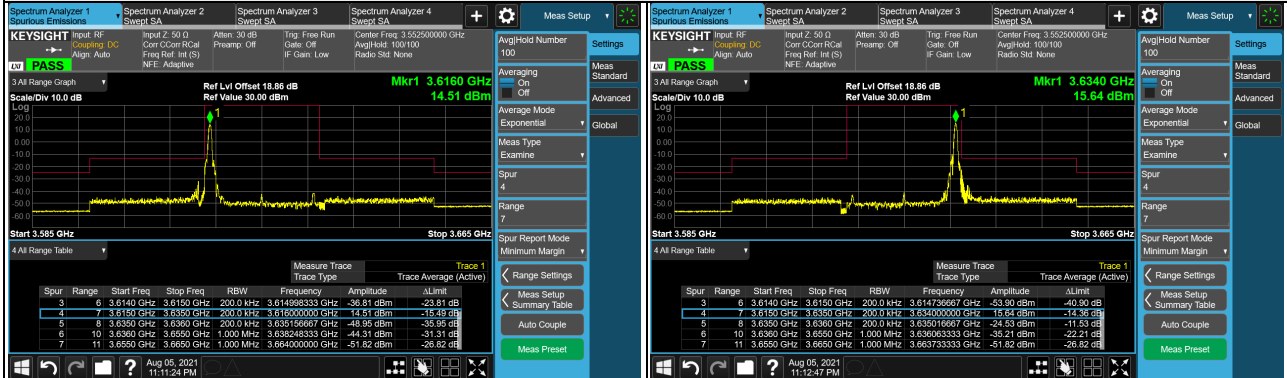
Full RB



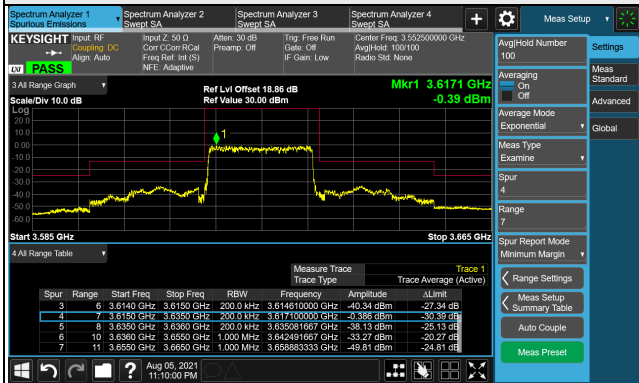
n48, Channel Bandwidth 20MHz

Channel 641666 (3624.99MHz)

1RB



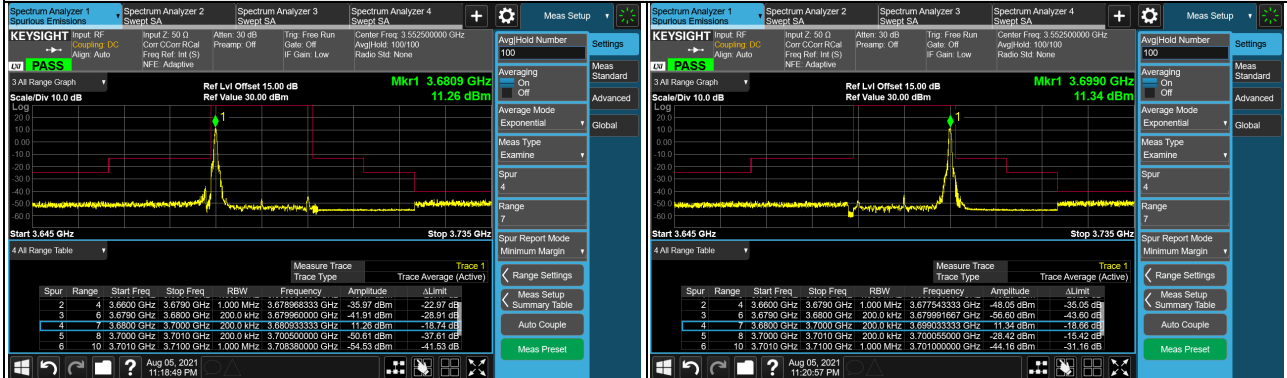
Full RB



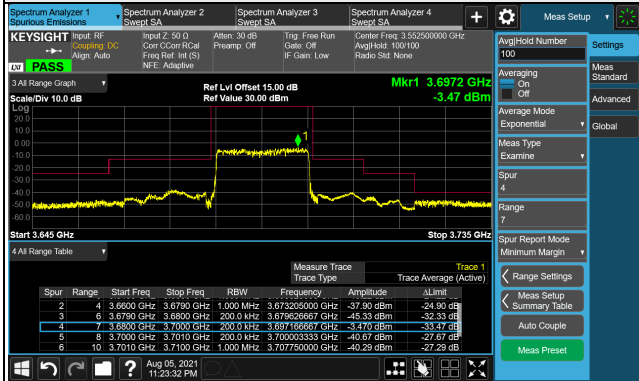
n48, Channel Bandwidth 20MHz

Channel 646000 (3690.00MHz)

1RB



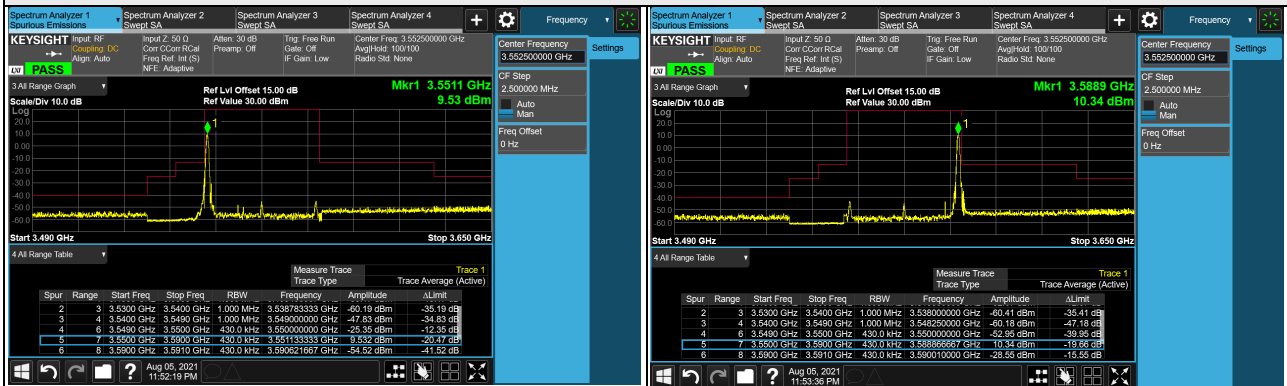
Full RB



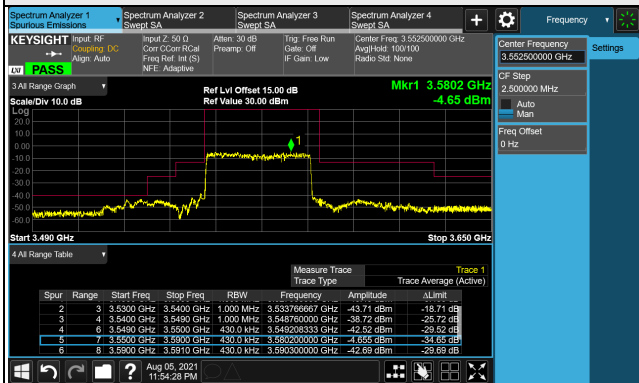
n48, Channel Bandwidth 40MHz

Channel 638000 (3570.00MHz)

1RB



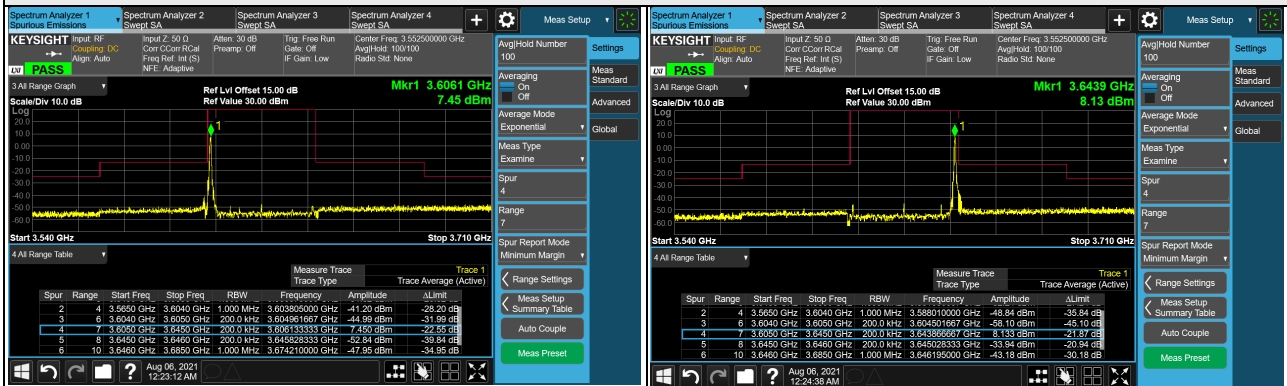
Full RB



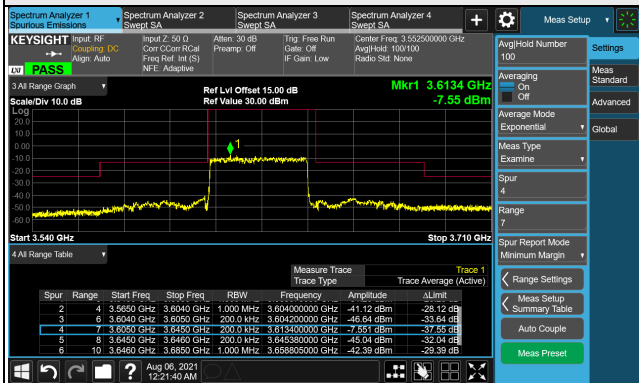
n48, Channel Bandwidth 40MHz

Channel 641666 (3624.99MHz)

1RB



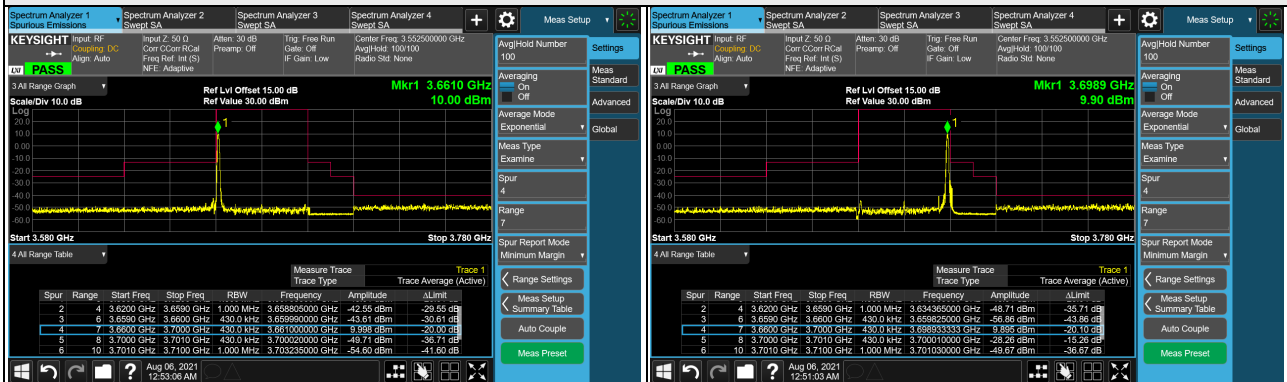
Full RB



n48, Channel Bandwidth 40MHz

Channel 645332 (3679.98MHz)

1RB



Full RB

