

FCC Test Report

(Part 27 – 5G NR n7/n12/n13/n30/n38/n41/n66/n71/n77/n78)

Report No.: RFBFLF-WTW-P21010278-16

FCC ID: MSQI007D

Test Model: ASUS_I007D

Received Date: Jan. 04, 2021

Test Date: Jan. 25 ~ Apr. 09, 2021

Issued Date: Apr. 09, 2021

Applicant: ASUSTeK COMPUTER INC.

Address: 1F., No. 15, Lide Rd., Beitou Dist., Taipei City 112, Taiwan

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

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

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

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



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

Table of Contents

Release Control Record	4
1 Certificate of Conformity	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty.....	6
2.2 Test Site and Instruments.....	7
3 General Information	9
3.1 General Description of EUT.....	9
3.2 Configuration of System under Test.....	17
3.2.1 Description of Support Units.....	17
3.3 Test Mode Applicability and Tested Channel Detail.....	18
3.4 EUT Operating Conditions.....	52
3.5 General Description of Applied Standards and References.....	52
4 Test Types and Results	53
4.1 Output Power Measurement.....	53
4.1.1 Limits of Output Power Measurement.....	53
4.1.2 Test Procedures.....	54
4.1.3 Test Setup.....	54
4.1.4 Test Results.....	55
4.2 Modulation Characteristics Measurement.....	103
4.2.1 Limits of Modulation Characteristics.....	103
4.2.2 Test Procedure.....	103
4.2.3 Test Setup.....	103
4.2.4 Test Results.....	104
4.3 Frequency Stability Measurement.....	113
4.3.1 Limits of Frequency Stability Measurement.....	113
4.3.2 Test Procedure.....	113
4.3.3 Test Instruments.....	113
4.3.4 Test Setup.....	113
4.3.5 Test Results.....	114
4.4 Occupied Bandwidth Measurement.....	159
4.4.1 Limits of Occupied Bandwidth Measurement.....	159
4.4.2 Test Procedure.....	159
4.4.3 Test Setup.....	159
4.4.4 Test Result.....	160
4.5 Channel Edge / Out-of-Band Emissions Measurement.....	202
4.5.1 Limits of Band Edge / Out-of-Band Emissions Measurement.....	202
4.5.2 Test Setup.....	203
4.5.3 Test Procedures.....	203
4.5.4 Test Results.....	204
4.6 Peak to Average Ratio.....	249
4.6.1 Limits of Peak to Average Ratio Measurement.....	249
4.6.2 Test Setup.....	249
4.6.3 Test Procedures.....	249
4.6.4 Test Results.....	250
4.7 Conducted Spurious Emissions.....	270
4.7.1 Limits of Conducted Spurious Emissions Measurement.....	270
4.7.2 Test Setup.....	271
4.7.3 Test Procedure.....	271
4.7.4 Test Results.....	272
4.8 Radiated Emission Measurement.....	381
4.8.1 Limits of Radiated Emission Measurement.....	381
4.8.2 Test Procedure.....	382
4.8.3 Deviation from Test Standard.....	382

4.8.4 Test Setup.....	383
4.8.5 Test Results	384
5 Pictures of Test Arrangements.....	444
Appendix – Information of the Testing Laboratories	445

Release Control Record

Issue No.	Description	Date Issued
RFBFLF-WTW-P21010278-16	Original release	Apr. 09, 2021

1 Certificate of Conformity

Product: EXP21 Smartphone

Brand: ASUS

Test Model: ASUS_I007D

Sample Status: Engineering sample

Applicant: ASUSTeK COMPUTER INC.

Test Date: Jan. 25 ~ Apr. 09, 2021

Standards: FCC Part 27, Subpart C, D, F, H, L, M, N, O

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 : Celine Chou , **Date:** Apr. 09, 2021
Celine Chou / Senior Specialist

Approved by : Bruce Chen , **Date:** Apr. 09, 2021
Bruce Chen / Senior Project Engineer

2 Summary of Test Results

Applied Standard: FCC Part 27 & Part 2								
FCC Clause						Test Item	Result	Remarks
n7 / n38 / n41	n12 / n71	n13	n30	n66	n77 / n78			
2.1046 27.50 (h)(2)	2.1046 27.50 (c)	2.1046 27.50 (b)	2.1046 27.50 (a)(3)	2.1046 27.50 (d)(4)	2.1046 27.50 (j)	Equivalent Isotropically Radiated Power / Equivalent Radiated Power	Pass	Meet the requirement of limit.
2.1047	2.1047	2.1047	2.1047	2.1047	2.1047	Modulation Characteristics	Pass	Meet the requirement of limit.
----	----	----	----	27.50 (d)(5)	----	Peak To Average Ratio	Pass	Meet the requirement of limit.
2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	2.1055 27.54	Frequency Stability Stay with the authorized bands of operation	Pass	Meet the requirement of limit.
2.1049	2.1049	2.1049	2.1049	2.1049	2.1049	Occupied Bandwidth	Pass	Meet the requirement of limit.
2.1051 27.53 (m)(4)(6)	2.1051 27.53 (g)	2.1051 27.53 (c)	2.1051 27.53 (a)(4)	2.1051 27.53 (h)	2.1051 27.53(l)	Band Edge / Out of Band Emissions Measurements	Pass	Meet the requirement of limit.
2.1051 27.53 (m)(4)(6)	2.1051 27.53 (g)	2.1051 27.53 (c)(f)	2.1051 27.53 (a)(4)	2.1051 27.53 (h)	2.1051 27.53(l)	Conducted Spurious Emissions	Pass	Meet the requirement of limit.
2.1053 27.53 (m)(4)(6)	2.1053 27.53 (g)	2.1053 27.53 (c)(f)	2.1053 27.53 (a)(4)	2.1053 27.53 (h)	2.1053 27.53(l)	Radiated Spurious Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -9.09dB at 4615.00MHz.

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

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	Frequency	Expanded Uncertainty (k=2) (\pm)
Radiated Emissions up to 1 GHz	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. 16, 2020	Apr. 15, 2021
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Jun. 12, 2020	Jun. 11, 2021
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
5G Wireless Test Platforms Keysight	E7515B	MY60102114	May 28, 2020	May 27, 2021
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Nov. 06, 2020	Nov. 05, 2021
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-969	Nov. 22, 2020	Nov. 21, 2021
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Nov. 06, 2020	Nov. 05, 2021
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1169	Nov. 22, 2020	Nov. 21, 2021
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 22, 2020	Nov. 21, 2021
Preamplifier Agilent (Below 1GHz)	8447D	2944A10638	Jun. 08, 2020	Jun. 07, 2021
Preamplifier Agilent (Above 1GHz)	8449B	3008A02367	Feb. 18, 2020	Feb. 17, 2021
			Feb. 17, 2021	Feb. 16, 2022
RF signal cable HUBER+SUHNER&EMCI	SUCOFLEX 104 & EMC104-SM-SM80 00	CABLE-CH9-02 (248780+171006)	Jan. 16, 2021	Jan. 15, 2022
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	Jan. 16, 2021	Jan. 15, 2022
RF signal cable Woken	8D-FB	Cable-CH9-01	Jun. 08, 2020	Jun. 07, 2021
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. 06, 2020	Jun. 05, 2021
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	EXP21 Smartphone	
Brand	ASUS	
Test Model	ASUS_I007D	
Sample Status	Engineering sample	
Power Supply Rating	7.74 Vdc (Battery) 5 Vdc / 9 Vdc / 12 Vdc / 15Vdc / 20Vdc (Adapter)	
Modulation Type	$\pi/2$ BPSK, QPSK, 16QAM, 64QAM, 256QAM	
Waveform Type	CP-OFDM, DFT-s-OFDM	
Operating Frequency	n7 (Channel Bandwidth 5MHz)	2502.5MHz ~ 2567.5MHz
	n7 (Channel Bandwidth 10MHz)	2505.0MHz ~ 2565.0MHz
	n7 (Channel Bandwidth 15MHz)	2507.5MHz ~ 2562.5MHz
	n7 (Channel Bandwidth 20MHz)	2510.0MHz ~ 2560.0MHz
	n7 (Channel Bandwidth 25MHz)	2512.5MHz ~ 2557.5MHz
	n7 (Channel Bandwidth 30MHz)	2515.0MHz ~ 2555.0MHz
	n7 (Channel Bandwidth 40MHz)	2520.0MHz ~ 2550.0MHz
	n7 (Channel Bandwidth 50MHz)	2525.0MHz ~ 2545.0MHz
	n12 (Channel Bandwidth 5MHz)	701.5MHz ~ 713.5MHz
	n12 (Channel Bandwidth 10MHz)	704.0MHz ~ 711.0MHz
	n12 (Channel Bandwidth 15MHz)	706.5MHz ~ 708.5MHz
	n13 (Channel Bandwidth 5MHz)	779.5MHz ~ 784.5MHz
	n13 (Channel Bandwidth 10MHz)	782.0MHz
	n30 (Channel Bandwidth 5MHz)	2307.5MHz ~ 2312.5MHz
	n30 (Channel Bandwidth 10MHz)	2310.0MHz
	n38 (Channel Bandwidth 20MHz)	2580.0MHz ~ 2610.0MHz
	n38 (Channel Bandwidth 30MHz)	2585.0MHz ~ 2605.0MHz
	n38 (Channel Bandwidth 40MHz)	2590.0MHz ~ 2600.0MHz
	n41 (Channel Bandwidth 20MHz)	2506.02MHz ~ 2679.99MHz
	n41 (Channel Bandwidth 30MHz)	2511.00MHz ~ 2674.98MHz
	n41 (Channel Bandwidth 40MHz)	2516.01MHz ~ 2670.00MHz
	n41 (Channel Bandwidth 50MHz)	2521.02MHz ~ 2664.99MHz
	n41 (Channel Bandwidth 60MHz)	2526.00MHz ~ 2659.98MHz
	n41 (Channel Bandwidth 80MHz)	2536.02MHz ~ 2649.99MHz
	n41 (Channel Bandwidth 90MHz)	2541.00MHz ~ 2644.98MHz
	n41 (Channel Bandwidth 100MHz)	2546.01MHz ~ 2640.00MHz
	n66 (Channel Bandwidth 5MHz)	1712.5MHz ~ 1777.5MHz
	n66 (Channel Bandwidth 10MHz)	1715.0MHz ~ 1775.0MHz
n66 (Channel Bandwidth 15MHz)	1717.5MHz ~ 1772.5MHz	
n66 (Channel Bandwidth 20MHz)	1720.0MHz ~ 1770.0MHz	
n66 (Channel Bandwidth 30MHz)	1725.0MHz ~ 1765.0MHz	
n66 (Channel Bandwidth 40MHz)	1730.0MHz ~ 1760.0MHz	

Operating Frequency	n71 (Channel Bandwidth 5MHz)	665.5MHz ~ 695.5MHz				
	n71 (Channel Bandwidth 10MHz)	668.0MHz ~ 693.0MHz				
	n71 (Channel Bandwidth 15MHz)	670.5MHz ~ 690.5MHz				
	n71 (Channel Bandwidth 20MHz)	673.0MHz ~ 688.0MHz				
	n77 (Channel Bandwidth 20MHz)	3710.01MHz ~ 3969.99MHz				
	n77 (Channel Bandwidth 30MHz)	3715.02MHz ~ 3964.98MHz				
	n77 (Channel Bandwidth 40MHz)	3720.00MHz ~ 3960.00MHz				
	n77 (Channel Bandwidth 50MHz)	3725.01MHz ~ 3954.99MHz				
	n77 (Channel Bandwidth 60MHz)	3730.02MHz ~ 3949.98MHz				
	n77 (Channel Bandwidth 70MHz)	3750.00MHz ~ 3945.00MHz				
	n77 (Channel Bandwidth 80MHz)	3740.01MHz ~ 3939.99MHz				
	n77 (Channel Bandwidth 90MHz)	3745.02MHz ~ 3934.98MHz				
	n77 (Channel Bandwidth 100MHz)	3750.00MHz ~ 3930.00MHz				
	n78 (Channel Bandwidth 20MHz)	3710.01MHz ~ 3789.99MHz				
	n78 (Channel Bandwidth 30MHz)	3715.02MHz ~ 3784.98MHz				
	n78 (Channel Bandwidth 40MHz)	3720.00MHz ~ 3780.00MHz				
	n78 (Channel Bandwidth 50MHz)	3725.01MHz ~ 3774.99MHz				
	n78 (Channel Bandwidth 60MHz)	3730.02MHz ~ 3769.98MHz				
	n78 (Channel Bandwidth 70MHz)	3750.00MHz ~ 3765.00MHz				
	n78 (Channel Bandwidth 80MHz)	3740.01MHz ~ 3759.99MHz				
n78 (Channel Bandwidth 90MHz)	3745.02MHz ~ 3754.98MHz					
n78 (Channel Bandwidth 100MHz)	3750.00MHz					
Max. EIRP Power		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n7 (Channel Bandwidth 5MHz)	252.348mW (24.02dBm)	258.821mW (24.13dBm)	199.067mW (22.99dBm)	142.233mW (21.53dBm)	89.743mW (19.53dBm)
	n7 (Channel Bandwidth 10MHz)	250.035mW (23.98dBm)	255.270mW (24.07dBm)	194.984mW (22.90dBm)	142.233mW (21.53dBm)	88.920mW (19.49dBm)
	n7 (Channel Bandwidth 15MHz)	247.742mW (23.94dBm)	254.683mW (24.06dBm)	199.526mW (23.00dBm)	142.561mW (21.54dBm)	88.716mW (19.48dBm)
	n7 (Channel Bandwidth 20MHz)	250.611mW (23.99dBm)	255.270mW (24.07dBm)	196.789mW (22.94dBm)	143.549mW (21.57dBm)	89.536mW (19.52dBm)
	n7 (Channel Bandwidth 25MHz)	252.930mW (24.03dBm)	255.270mW (24.07dBm)	199.067mW (22.99dBm)	141.906mW (21.52dBm)	90.365mW (19.56dBm)
	n7 (Channel Bandwidth 30MHz)	252.930mW (24.03dBm)	257.632mW (24.11dBm)	196.336mW (22.93dBm)	141.906mW (21.52dBm)	89.125mW (19.50dBm)
	n7 (Channel Bandwidth 40MHz)	248.886mW (23.96dBm)	258.821mW (24.13dBm)	195.884mW (22.92dBm)	141.579mW (21.51dBm)	89.743mW (19.53dBm)
	n7 (Channel Bandwidth 50MHz)	252.930mW (24.03dBm)	259.418mW (24.14dBm)	198.153mW (22.97dBm)	141.579mW (21.51dBm)	90.157mW (19.55dBm)
	n30 (Channel Bandwidth 5MHz)	181.970mW (22.60dBm/5MHz)	180.717mW (22.57dBm/5MHz)	179.473mW (22.54dBm/5MHz)	103.753mW (20.16dBm/5MHz)	65.013mW (18.13dBm/5MHz)
	n30 (Channel Bandwidth 10MHz)	183.654mW (22.64dBm/5MHz)	180.717mW (22.57dBm/5MHz)	144.877mW (21.61dBm/5MHz)	82.414mW (19.16dBm/5MHz)	65.013mW (18.13dBm/5MHz)

Max. EIRP Power		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n38 (Channel Bandwidth 20MHz)	289.734mW (24.62dBm)	290.402mW (24.63dBm)	225.424mW (23.53dBm)	162.930mW (22.12dBm)	100.925mW (20.04dBm)
	n38 (Channel Bandwidth 30MHz)	287.078mW (24.58dBm)	291.743mW (24.65dBm)	226.464mW (23.55dBm)	161.436mW (22.08dBm)	101.859mW (20.08dBm)
	n38 (Channel Bandwidth 40MHz)	290.402mW (24.63dBm)	295.121mW (24.70dBm)	227.510mW (23.57dBm)	161.808mW (22.09dBm)	100.693mW (20.03dBm)
	n41 (Channel Bandwidth 20MHz)	595.662mW (27.75dBm)	586.138mW (27.68dBm)	488.652mW (26.89dBm)	322.107mW (25.08dBm)	205.589mW (23.13dBm)
	n41 (Channel Bandwidth 30MHz)	595.662mW (27.75dBm)	601.174mW (27.79dBm)	484.172mW (26.85dBm)	334.195mW (25.24dBm)	202.302mW (23.06dBm)
	n41 (Channel Bandwidth 40MHz)	603.949mW (27.81dBm)	594.292mW (27.74dBm)	472.063mW (26.74dBm)	319.154mW (25.04dBm)	190.985mW (22.81dBm)
	n41 (Channel Bandwidth 50MHz)	608.135mW (27.84dBm)	610.942mW (27.86dBm)	468.813mW (26.71dBm)	298.538mW (24.75dBm)	200.909mW (23.03dBm)
	n41 (Channel Bandwidth 60MHz)	615.177mW (27.89dBm)	592.925mW (27.73dBm)	453.942mW (26.57dBm)	314.051mW (24.97dBm)	208.930mW (23.20dBm)
	n41 (Channel Bandwidth 80MHz)	586.138mW (27.68dBm)	578.096mW (27.62dBm)	424.620mW (26.28dBm)	286.418mW (24.57dBm)	179.061mW (22.53dBm)
	n41 (Channel Bandwidth 90MHz)	583.445mW (27.66dBm)	578.096mW (27.62dBm)	442.588mW (26.46dBm)	307.610mW (24.88dBm)	208.930mW (23.20dBm)
	n41 (Channel Bandwidth 100MHz)	619.441mW (27.92dBm)	605.341mW (27.82dBm)	449.780mW (26.53dBm)	332.660mW (25.22dBm)	198.153mW (22.97dBm)
	n66 (Channel Bandwidth 5MHz)	161.808mW (22.09dBm)	168.655mW (22.27dBm)	127.938mW (21.07dBm)	72.611mW (18.61dBm)	57.544mW (17.60dBm)
	n66 (Channel Bandwidth 10MHz)	162.181mW (22.10dBm)	168.655mW (22.27dBm)	126.474mW (21.02dBm)	71.945mW (18.57dBm)	57.412mW (17.59dBm)
	n66 (Channel Bandwidth 15MHz)	160.694mW (22.06dBm)	166.725mW (22.22dBm)	125.893mW (21.00dBm)	72.111mW (18.58dBm)	57.677mW (17.61dBm)
	n66 (Channel Bandwidth 20MHz)	161.065mW (22.07dBm)	168.655mW (22.27dBm)	125.314mW (20.98dBm)	71.945mW (18.57dBm)	57.148mW (17.57dBm)
	n66 (Channel Bandwidth 30MHz)	161.436mW (22.08dBm)	165.577mW (22.19dBm)	127.350mW (21.05dBm)	73.114mW (18.64dBm)	57.544mW (17.60dBm)
	n66 (Channel Bandwidth 40MHz)	161.065mW (22.07dBm)	167.880mW (22.25dBm)	125.314mW (20.98dBm)	72.778mW (18.62dBm)	57.677mW (17.61dBm)

Max. EIRP Power		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n77 (Channel Bandwidth 20MHz)	402.717mW (26.05dBm)	408.319mW (26.11dBm)	316.228mW (25.00dBm)	229.615mW (23.61dBm)	143.549mW (21.57dBm)
	n77 (Channel Bandwidth 30MHz)	406.443mW (26.09dBm)	410.204mW (26.13dBm)	317.687mW (25.02dBm)	229.087mW (23.60dBm)	142.889mW (21.55dBm)
	n77 (Channel Bandwidth 40MHz)	403.645mW (26.06dBm)	414.000mW (26.17dBm)	314.775mW (24.98dBm)	230.675mW (23.63dBm)	143.219mW (21.56dBm)
	n77 (Channel Bandwidth 50MHz)	406.443mW (26.09dBm)	414.000mW (26.17dBm)	314.775mW (24.98dBm)	231.206mW (23.64dBm)	142.889mW (21.55dBm)
	n77 (Channel Bandwidth 60MHz)	406.443mW (26.09dBm)	414.954mW (26.18dBm)	311.889mW (24.94dBm)	231.206mW (23.64dBm)	142.561mW (21.54dBm)
	n77 (Channel Bandwidth 70MHz)	405.509mW (26.08dBm)	414.000mW (26.17dBm)	313.329mW (24.96dBm)	230.675mW (23.63dBm)	143.880mW (21.58dBm)
	n77 (Channel Bandwidth 80MHz)	405.509mW (26.08dBm)	409.261mW (26.12dBm)	311.889mW (24.94dBm)	229.615mW (23.61dBm)	144.212mW (21.59dBm)
	n77 (Channel Bandwidth 90MHz)	405.509mW (26.08dBm)	408.319mW (26.11dBm)	316.957mW (25.01dBm)	228.560mW (23.59dBm)	143.880mW (21.58dBm)
	n77 (Channel Bandwidth 100MHz)	406.443mW (26.09dBm)	411.150mW (26.14dBm)	317.687mW (25.02dBm)	226.986mW (23.56dBm)	143.219mW (21.56dBm)
Max. ERP Power		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n12 (Channel Bandwidth 5MHz)	113.240mW (20.54dBm)	115.878mW (20.64dBm)	90.365mW (19.56dBm)	63.826mW (18.05dBm)	39.811mW (16.00dBm)
	n12 (Channel Bandwidth 10MHz)	114.025mW (20.57dBm)	115.611mW (20.63dBm)	88.920mW (19.49dBm)	63.680mW (18.04dBm)	40.458mW (16.07dBm)
	n12 (Channel Bandwidth 15MHz)	114.025mW (20.57dBm)	115.878mW (20.64dBm)	90.782mW (19.58dBm)	62.806mW (17.98dBm)	40.458mW (16.07dBm)
	n13 (Channel Bandwidth 5MHz)	51.642mW (17.13dBm)	51.523mW (17.12dBm)	41.495mW (16.18dBm)	32.961mW (15.18dBm)	23.335mW (13.68dBm)
	n13 (Channel Bandwidth 10MHz)	51.642mW (17.13dBm)	51.880mW (17.15dBm)	41.495mW (16.18dBm)	32.961mW (15.18dBm)	23.335mW (13.68dBm)
	n71 (Channel Bandwidth 5MHz)	46.559mW (16.68dBm)	46.452mW (16.67dBm)	35.400mW (15.49dBm)	25.468mW (14.06dBm)	15.704mW (11.96dBm)
	n71 (Channel Bandwidth 10MHz)	46.666mW (16.69dBm)	46.666mW (16.69dBm)	35.237mW (15.47dBm)	25.293mW (14.03dBm)	15.776mW (11.98dBm)
	n71 (Channel Bandwidth 15MHz)	46.345mW (16.66dBm)	46.666mW (16.69dBm)	35.481mW (15.50dBm)	25.351mW (14.04dBm)	15.812mW (11.99dBm)
n71 (Channel Bandwidth 20MHz)	46.666mW (16.69dBm)	46.774mW (16.70dBm)	35.318mW (15.48dBm)	25.293mW (14.03dBm)	15.704mW (11.96dBm)	

Emission Designator		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
	n7 (Channel Bandwidth 5MHz)	4M48G7D	4M47G7D	4M47D7W	4M47D7W	4M47D7W
n7 (Channel Bandwidth 10MHz)	9M20G7D	9M29G7D	9M29D7W	9M30D7W	9M29D7W	
n7 (Channel Bandwidth 15MHz)	14M0G7D	14M1G7D	14M1D7W	14M1D7W	14M1D7W	
n7 (Channel Bandwidth 20MHz)	18M7G7D	18M9G7D	19M0D7W	18M9D7W	18M9D7W	
n7 (Channel Bandwidth 25MHz)	23M3G7D	24M1G7D	24M1D7W	24M1D7W	24M0D7W	
n7 (Channel Bandwidth 30MHz)	26M8G7D	27M8G7D	27M8D7W	27M8D7W	27M8D7W	
n7 (Channel Bandwidth 40MHz)	35M7G7D	37M8G7D	37M8D7W	37M8D7W	37M8D7W	
n7 (Channel Bandwidth 50MHz)	45M7G7D	47M5G7D	47M5D7W	47M5D7W	47M5D7W	
n12 (Channel Bandwidth 5MHz)	4M48G7D	4M47G7D	4M47D7W	4M47D7W	4M47D7W	
n12 (Channel Bandwidth 10MHz)	9M24G7D	9M29G7D	9M29D7W	9M28D7W	9M28D7W	
n12 (Channel Bandwidth 15MHz)	14M0G7D	14M1G7D	14M1D7W	14M1D7W	14M1D7W	
n13 (Channel Bandwidth 5MHz)	4M47G7D	4M46G7D	4M46D7W	4M46D7W	4M46D7W	
n13 (Channel Bandwidth 10MHz)	8M90G7D	8M90G7D	8M89D7W	8M90D7W	8M90D7W	
n30 (Channel Bandwidth 5MHz)	4M47G7D	4M47G7D	4M47D7W	4M47D7W	4M48D7W	
n30 (Channel Bandwidth 10MHz)	9M16G7D	9M29G7D	9M29D7W	9M28D7W	9M29D7W	
n38 (Channel Bandwidth 20MHz)	18M1G7D	18M2G7D	18M2D7W	18M2D7W	18M2D7W	
n38 (Channel Bandwidth 30MHz)	27M6G7D	27M9G7D	27M9D7W	27M9D7W	27M9D7W	
n38 (Channel Bandwidth 40MHz)	37M5G7D	37M8G7D	37M8D7W	37M8D7W	37M8D7W	
n41 (Channel Bandwidth 20MHz)	18M0G7D	18M2G7D	18M2D7W	18M2D7W	18M2D7W	
n41 (Channel Bandwidth 30MHz)	27M5G7D	27M9G7D	27M9D7W	27M9D7W	27M9D7W	
n41 (Channel Bandwidth 40MHz)	37M5G7D	37M8G7D	37M8D7W	37M8D7W	37M8D7W	
n41 (Channel Bandwidth 50MHz)	47M1G7D	47M5G7D	47M6D7W	47M5D7W	47M5D7W	
n41 (Channel Bandwidth 60MHz)	57M9G7D	57M9G7D	57M9D7W	57M9D7W	57M9D7W	
n41 (Channel Bandwidth 80MHz)	77M1G7D	77M5G7D	77M5D7W	77M5D7W	77M5D7W	
n41 (Channel Bandwidth 90MHz)	86M6G7D	87M6G7D	87M6D7W	87M6D7W	87M6D7W	
n41 (Channel Bandwidth 100MHz)	96M6G7D	97M7G7D	97M6D7W	97M6D7W	97M6D7W	
n66 (Channel Bandwidth 5MHz)	4M48G7D	4M47G7D	4M47D7W	4M47D7W	4M47D7W	
n66 (Channel Bandwidth 10MHz)	9M20G7D	9M29G7D	9M29D7W	9M29D7W	9M29D7W	
n66 (Channel Bandwidth 15MHz)	14M0G7D	14M1G7D	14M1D7W	14M1D7W	14M1D7W	
n66 (Channel Bandwidth 20MHz)	18M8G7D	18M9G7D	18M9D7W	18M9D7W	18M9D7W	
n66 (Channel Bandwidth 30MHz)	28M6G7D	28M6G7D	28M6D7W	28M6D7W	28M6D7W	
n66 (Channel Bandwidth 40MHz)	38M3G7D	38M5G7D	38M5D7W	38M5D7W	38M5D7W	
n71 (Channel Bandwidth 5MHz)	4M47G7D	4M47G7D	4M47D7W	4M47D7W	4M47D7W	
n71 (Channel Bandwidth 10MHz)	9M21G7D	9M29G7D	9M29D7W	9M28D7W	9M29D7W	
n71 (Channel Bandwidth 15MHz)	14M0G7D	14M1G7D	14M1D7W	14M1D7W	14M1D7W	
n71 (Channel Bandwidth 20MHz)	18M7G7D	18M9G7D	18M9D7W	18M9D7W	18M9D7W	

	n77 (Channel Bandwidth 20MHz)	18M1G7D	18M2G7D	18M2D7W	18M2D7W	18M2D7W
	n77 (Channel Bandwidth 30MHz)	27M6G7D	27M9G7D	27M9D7W	27M9D7W	27M9D7W
	n77 (Channel Bandwidth 40MHz)	37M5G7D	37M8G7D	37M8D7W	37M8D7W	37M8D7W
	n77 (Channel Bandwidth 50MHz)	47M0G7D	47M5G7D	47M5D7W	47M5D7W	47M5D7W
	n77 (Channel Bandwidth 60MHz)	57M9G7D	57M9G7D	57M9D7W	57M9D7W	57M9D7W
	n77 (Channel Bandwidth 70MHz)	67M0G7D	67M5G7D	67M6D7W	67M6D7W	67M5D7W
	n77 (Channel Bandwidth 80MHz)	77M2G7D	77M5G7D	77M5D7W	77M5D7W	77M5D7W
	n77 (Channel Bandwidth 90MHz)	86M9G7D	87M6G7D	87M6D7W	87M6D7W	87M6D7W
	n77 (Channel Bandwidth 100MHz)	96M8G7D	97M6G7D	97M7D7W	97M6D7W	97M6D7W
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:

- The EUT contains following accessory devices.

Product	Brand	Model	Description
Battery	SCUD	C21P2002	Rating: 7.74Vdc, 15.2Wh
Adapter	AOHAI	A320Q-200325C-US	I/P: 100-240Vac, 50/60Hz, 1.5A O/P: 5Vdc, 3A; 9Vdc, 3A; 12Vdc, 3A; 15Vdc, 3A; 20Vdc, 3.25A
Type A to Type C USB Cable	Luxshare	LA9U2026-CS-R	0.5m
Type C to Type C Cable	Luxshare	LA9UC006-CS-R	1.2m
Bluetooth Earphone	Bang & Olufsen	EQ Earbud R	FCC ID: TTUBEOPLAYEQR IC: 3775B-BEOPLAYEQR
		EQ Earbud L	FCC ID: TTUBEOPLAYEQL IC: 3775B-BEOPLAYEQL
Bluetooth Earphone Charging Case	Bang & Olufsen	EQ Charging case	I/P: 5Vdc/500mA O/P: 5Vdc/ R170mA; L170mA

- 5G NR n77 overlaps the entire frequency range of 5G NR n78. Therefore, test data provided in this report covers 5G NR n77 as well as 5G NR n78.

3. The following antennas were provided to the EUT.

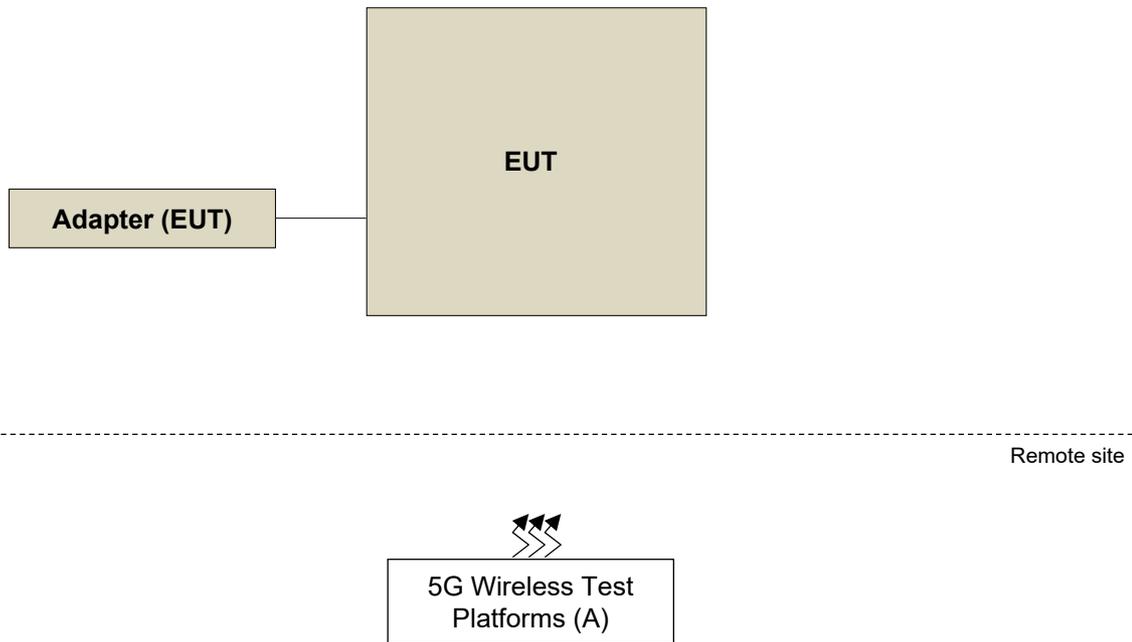
Ant. No.	Brand	Model	Ant. Type	Connector	Frequency Range
Ant 0	ASUS	ZS675KW	PIFA	LCP+IpeX	610-960MHz, 1710-2690MHz
Ant 1	ASUS	ZS675KW	PIFA	LCP+IpeX	1427-1510MHz, 1710-2690MHz
Ant 2	ASUS	ZS675KW	PIFA	LCP+IpeX	610-960MHz, 1427-1510MHz, 1710-2690MHz
Ant 3	INPAQ	ZS675KW	PIFA	IpeX	1575-1610MHz, 2400-2500MHz, 5150-5850MHz, 5925-7125MHz
Ant 4	INPAQ	ZS675KW	PIFA	IpeX	1176±10MHz, 2400-2500MHz, 5150-5850MHz, 5925-7125MHz
Ant 5	INPAQ	ZS675KW	PIFA	LCP+IpeX	3300-4000MHz, 4400-5000MHz
Ant 6	INPAQ	ZS675KW	PIFA	IpeX	1427-1510MHz, 2400-2500MHz, 5150-5850MHz, 5925-7125MHz
Ant 7	INPAQ	ZS675KW	PIFA	LCP+IpeX	3300-4000MHz, 4400-5000MHz
Ant 8	ASUS	ZS675KW	PIFA	LCP+IpeX	1427-1510MHz, 1710-2690MHz
Ant 9	ASUS	ZS675KW	PIFA	LCP+IpeX	1710-2690MHz
Ant 10	INPAQ	ZS675KW	PIFA	IpeX	3300-4000MHz, 4400-5000MHz
Ant 11	INPAQ	ZS675KW	PIFA	IpeX	3300-4000MHz, 4400-5000MHz

2G / 3G Band													
Band	Freq. Range (MHz)	Gain (dBi)											
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Ant. 4	Ant. 5	Ant. 6	Ant. 7	Ant. 8	Ant. 9	Ant. 10	Ant. 11
GSM-850	824 ~ 849	-1.891		-4.526									
GSM-1900	1850 ~ 1910		-1.887	-1.394						-2.89579			
WCDMA B2	1850 ~ 1910		-1.887	-1.394						-2.89579			
WCDMA B4	1710 ~ 1755		-2.884	-3.228						-3.13552			
WCDMA B5	824 ~ 849	-1.891		-4.526									
CDMA BC0	815 ~ 849	-1.891		-4.526									
CDMA BC1	1850 ~ 1910		-1.887	-1.394						-2.89579			
CDMA BC10	806 ~ 901	-1.891		-4.526									

LTE Band													
Band	Freq. Range (MHz)	Gain (dBi)											
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Ant. 4	Ant. 5	Ant. 6	Ant. 7	Ant. 8	Ant. 9	Ant. 10	Ant. 11
LTE B2	1850 ~ 1910		-1.887	-1.394						-2.89579	-1.804		
LTE B4	1710 ~ 1755		-2.884	-3.228						-3.13552	-1.706		
LTE B5	824 ~ 849	-1.891		-4.526									
LTE B7	2500 ~ 2570		0.185	-0.657						-0.50837	-1.117		
LTE B12	698 ~ 716	-2.135		-4.343									
LTE B13	777 ~ 787	-4.37		-8.13									
LTE B14	788 ~ 798	-4.37		-7.931									
LTE B17	704 ~ 716	-2.135		-4.343									
LTE B25	1850 ~ 1915		-1.887	-1.394						-2.89579			
LTE B26	814 ~ 849	-1.891		-4.526									
LTE B30	2305 ~ 2315		-1.326	-2.669						-1.28433			
LTE B66	1710 ~ 1780		-2.884	-2.478						-3.0668	-1.685		
LTE B71	663 ~ 698	-5.741		-7.388									
T-LTE B38	2570 ~ 2620		0.724	-0.912						-0.59557			
T-LTE B40	2300 ~ 2400		-1.326	-2.669						-1.28433			
T-LTE B41	2496 ~ 2690		1.143	-0.657						-0.59557			
T-LTE B42	3400 ~ 3600						0.313		0.5277			-2.493	-0.35195
T-LTE B43	3600 ~ 3800						-0.434		0.5277			-0.477	-0.161
T-LTE B48	3550 ~ 3700						-0.434		0.5277			-0.477	-0.161
5G FR1 Band													
Band	Freq. Range (MHz)	Gain (dBi)											
		Ant. 0	Ant. 1	Ant. 2	Ant. 3	Ant. 4	Ant. 5	Ant. 6	Ant. 7	Ant. 8	Ant. 9	Ant. 10	Ant. 11
n2	1850 ~ 1910		-1.887	-1.394						-2.89579	-1.804		
n5	824 ~ 849	-1.891		-4.526									
n7	2500 ~ 2570		0.185	-0.657						-0.50837	-1.117		
n12	699 ~ 716	-2.135		-4.343									
n13	777 ~ 787	-4.37		-8.13									
n14	788 ~ 798	-4.37		-7.931									
n25	1850 ~ 1915		-1.887	-1.394						-2.89579	-1.627		
n26	814 ~ 849	-1.891		-4.526									
n30	2305 ~ 2315		-1.326	-2.669						-1.28433			
n38	2570 ~ 2620		0.724	-0.912						-0.59557	-1.3		
n41	2496 ~ 2690		1.143	-0.657						-0.59557	-0.076		
n66	1710 ~ 1780		-2.884	-2.478						-3.0668	-1.685		
n71	663 ~ 698	-5.741		-7.388									
n77	3300 ~ 4200						0.313		0.5277			2.017	0.19902
n78	3300 ~ 3800						0.313		0.5277			2.017	-0.161

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

3.2 Configuration of System under Test



3.2.1 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	5G Wireless Test Platforms	Keysight	E7515B	MY58300759	NA	-

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.

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
n7	Y-plane
n12	Y-plane
n13	Y-plane
n30	Y-plane
n38	Y-plane
n41	Y-plane
n66	Y-plane
n71	Y-plane
n77	Y-plane

n7

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	500500 to 513500	500500 (2502.5MHz), 507000 (2535.0MHz), 513500 (2567.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 13 RB Offset 1 RB / 23 RB Offset 12 RB / 0 RB Offset 12 RB / 7 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		501000 to 513000	501000 (2505.0MHz), 507000 (2535.0MHz), 513000 (2565.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 26 RB Offset 1 RB / 50 RB Offset 25 RB / 0 RB Offset 25 RB / 14 RB Offset 25 RB / 27 RB Offset 50 RB / 0 RB Offset
		501500 to 512500	501500 (2507.5MHz), 507000 (2535.0MHz), 512500 (2562.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 40 RB Offset 1 RB / 77 RB Offset 36 RB / 0 RB Offset 36 RB / 22 RB Offset 36 RB / 43 RB Offset 75 RB / 0 RB Offset
		502000 to 512000	502000 (2510.0MHz), 507000 (2535.0MHz), 512000 (2560.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 53 RB Offset 1 RB / 104 RB Offset 50RB / 0 RB Offset 50 RB / 28 RB Offset 50 RB / 56 RB Offset 100 RB / 0 RB Offset
		502500 to 511500	502500 (2512.5MHz), 507000 (2535.0MHz), 511500 (2557.5MHz)	25MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 67 RB Offset 1 RB / 131 RB Offset 64RB / 0 RB Offset 64 RB / 35 RB Offset 64 RB / 69 RB Offset 128 RB / 0 RB Offset
		503000 to 511000	503000 (2515.0MHz), 507000 (2535.0MHz), 511000 (2555.0MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 80 RB Offset 1 RB / 158 RB Offset 80RB / 0 RB Offset 80 RB / 40 RB Offset 80 RB / 80 RB Offset 160 RB / 0 RB Offset
		504000 to 510000	504000 (2520.0MHz), 507000 (2535.0MHz), 510000 (2550.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 108 RB Offset 1 RB / 214 RB Offset 108RB / 0 RB Offset 108 RB / 54 RB Offset 108 RB / 108 RB Offset 216 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	505000 to 509000	505000 (2525.0MHz), 507000 (2535.0MHz), 509000 (2545.0MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 135 RB Offset 1 RB / 268 RB Offset 135RB / 0 RB Offset 135 RB / 68 RB Offset 135 RB / 135 RB Offset 270 RB / 0 RB Offset
-	Modulation Characteristics	505000 to 509000	507000 (2535.0MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	270 RB / 0 RB Offset
-	Frequency Stability	500500 to 513500	500500 (2502.5MHz), 513500 (2567.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		501000 to 513000	501000 (2505.0MHz), 513000 (2565.0MHz)	10MHz	QPSK	52 RB / 0 RB Offset
		501500 to 512500	501500 (2507.5MHz), 512500 (2562.5MHz)	15MHz	QPSK	79 RB / 0 RB Offset
		502000 to 512000	502000 (2510.0MHz), 512000 (2560.0MHz)	20MHz	QPSK	106 RB / 0 RB Offset
		502500 to 511500	502500 (2512.5MHz), 511500 (2557.5MHz)	25MHz	QPSK	133 RB / 0 RB Offset
		503000 to 511000	503000 (2515.0MHz), 511000 (2555.0MHz)	30MHz	QPSK	160 RB / 0 RB Offset
		504000 to 510000	504000 (2520.0MHz), 510000 (2550.0MHz)	40MHz	QPSK	216 RB / 0 RB Offset
		505000 to 509000	505000 (2525.0MHz), 509000 (2545.0MHz)	50MHz	QPSK	270 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Emission Bandwidth	500500 to 513500	500500 (2502.5MHz), 507000 (2535.0MHz), 513500 (2567.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		501000 to 513000	501000 (2505.0MHz), 507000 (2535.0MHz), 513000 (2565.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	52 RB / 0 RB Offset
		501500 to 512500	501500 (2507.5MHz), 507000 (2535.0MHz), 512500 (2562.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	79 RB / 0 RB Offset
		502000 to 512000	502000 (2510.0MHz), 507000 (2535.0MHz), 512000 (2560.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
		502500 to 511500	502500 (2512.5MHz), 507000 (2535.0MHz), 511500 (2557.5MHz)	25MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	133 RB / 0 RB Offset
		503000 to 511000	503000 (2515.0MHz), 507000 (2535.0MHz), 511000 (2555.0MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	160 RB / 0 RB Offset
		504000 to 510000	504000 (2520.0MHz), 507000 (2535.0MHz), 510000 (2550.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	216 RB / 0 RB Offset
		505000 to 509000	505000 (2525.0MHz), 507000 (2535.0MHz), 509000 (2545.0MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	270 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Out-of-Band Emissions	500500 to 513500	500500 (2502.5MHz), 513500 (2567.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		501000 to 513000	501000 (2505.0MHz), 513000 (2565.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 51 RB Offset 52 RB / 0 RB Offset
		501500 to 512500	501500 (2507.5MHz), 512500 (2562.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 78 RB Offset 79 RB / 0 RB Offset
		502000 to 512000	502000 (2510.0MHz), 512000 (2560.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 105 RB Offset 106 RB / 0 RB Offset
		502500 to 511500	502500 (2512.5MHz), 511500 (2557.5MHz)	25MHz	QPSK	1 RB / 0 RB Offset 1 RB / 132 RB Offset 133 RB / 0 RB Offset
		503000 to 511000	503000 (2515.0MHz), 511000 (2555.0MHz)	30MHz	QPSK	1 RB / 0 RB Offset 1 RB / 159 RB Offset 160 RB / 0 RB Offset
		504000 to 510000	504000 (2520.0MHz), 510000 (2550.0MHz)	40MHz	QPSK	1 RB / 0 RB Offset 1 RB / 215 RB Offset 216 RB / 0 RB Offset
		505000 to 509000	505000 (2525.0MHz), 509000 (2545.0MHz)	50MHz	QPSK	1 RB / 0 RB Offset 1 RB / 269 RB Offset 270 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Peak to Average Ratio	500500 to 513500	500500 (2502.5MHz), 507000 (2535.0MHz), 513500 (2567.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		501000 to 513000	501000 (2505.0MHz), 507000 (2535.0MHz), 513000 (2565.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		501500 to 512500	501500 (2507.5MHz), 507000 (2535.0MHz), 512500 (2562.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		502000 to 512000	502000 (2510.0MHz), 507000 (2535.0MHz), 512000 (2560.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		502500 to 511500	502500 (2512.5MHz), 507000 (2535.0MHz), 511500 (2557.5MHz)	25MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		503000 to 511000	503000 (2515.0MHz), 507000 (2535.0MHz), 511000 (2555.0MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		504000 to 510000	504000 (2520.0MHz), 507000 (2535.0MHz), 510000 (2550.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		505000 to 509000	505000 (2525.0MHz), 507000 (2535.0MHz), 509000 (2545.0MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	500500 to 513500	500500 (2502.5MHz), 507000 (2535.0MHz), 513500 (2567.5MHz)	5MHz	QPSK	1 RB / 1 RB Offset
		501000 to 513000	501000 (2505.0MHz), 507000 (2535.0MHz), 513000 (2565.0MHz)	10MHz	QPSK	1 RB / 1 RB Offset
		501500 to 512500	501500 (2507.5MHz), 507000 (2535.0MHz), 512500 (2562.5MHz)	15MHz	QPSK	1 RB / 1 RB Offset
		502000 to 512000	502000 (2510.0MHz), 507000 (2535.0MHz), 512000 (2560.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset
		502500 to 511500	502500 (2512.5MHz), 507000 (2535.0MHz), 511500 (2557.5MHz)	25MHz	QPSK	1 RB / 1 RB Offset
		503000 to 511000	503000 (2515.0MHz), 507000 (2535.0MHz), 511000 (2555.0MHz)	30MHz	QPSK	1 RB / 1 RB Offset
		504000 to 510000	504000 (2520.0MHz), 507000 (2535.0MHz), 510000 (2550.0MHz)	40MHz	QPSK	1 RB / 1 RB Offset
		505000 to 509000	505000 (2525.0MHz), 507000 (2535.0MHz), 509000 (2545.0MHz)	50MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Below 1GHz	502000 to 512000	507000 (2535.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	500500 to 513500	500500 (2502.5MHz), 507000 (2535.0MHz), 513500 (2567.5MHz)	5MHz	QPSK	1 RB / 1 RB Offset
		502000 to 512000	502000 (2510.0MHz), 507000 (2535.0MHz), 512000 (2560.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset
		505000 to 509000	505000 (2525.0MHz), 507000 (2535.0MHz), 509000 (2545.0MHz)	50MHz	QPSK	1 RB / 1 RB Offset

Note:

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

n12

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	140300 to 142700	140300 (701.5MHz), 141500 (707.5MHz), 142700 (713.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 13 RB Offset 1 RB / 23 RB Offset 12 RB / 0 RB Offset 12 RB / 7 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		140800 to 142700	140800 (704.0MHz), 141500 (707.5MHz), 142200 (711.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 26 RB Offset 1 RB / 50 RB Offset 25 RB / 0 RB Offset 25 RB / 14 RB Offset 25 RB / 27 RB Offset 50 RB / 0 RB Offset
		141300 to 142700	141300 (706.5MHz), 141500 (707.5MHz), 141700 (708.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 40 RB Offset 1 RB / 77 RB Offset 36 RB / 0 RB Offset 36 RB / 22 RB Offset 36 RB / 43 RB Offset 75 RB / 0 RB Offset
-	Modulation characteristics	141300 to 142700	141500 (707.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	79 RB / 0 RB Offset
-	Frequency Stability	140300 to 142700	140300 (701.5MHz), 142700 (713.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		140800 to 142700	140800 (704.0MHz), 142200 (711.0MHz)	10MHz	QPSK	52 RB / 0 RB Offset
		141300 to 142700	141300 (706.5MHz), 141700 (708.5MHz)	15MHz	QPSK	79 RB / 0 RB Offset
-	Emission Bandwidth	140300 to 142700	140300 (701.5MHz), 141500 (707.5MHz), 142700 (713.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		140800 to 142700	140800 (704.0MHz), 141500 (707.5MHz), 142200 (711.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	52 RB / 0 RB Offset
		141300 to 142700	141300 (706.5MHz), 141500 (707.5MHz), 141700 (708.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	79 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Band Edge	140300 to 142700	140300 (701.5MHz), 142700 (713.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		140800 to 142700	140800 (704.0MHz), 142200 (711.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 51 RB Offset 52 RB / 0 RB Offset
		141300 to 142700	141300 (706.5MHz), 141700 (708.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 78 RB Offset 79 RB / 0 RB Offset
-	Peak to Average Ratio	140300 to 142700	140300 (701.5MHz), 141500 (707.5MHz), 142700 (713.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		140800 to 142700	140800 (704.0MHz), 141500 (707.5MHz), 142200 (711.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		141300 to 142700	141300 (706.5MHz), 141500 (707.5MHz), 141700 (708.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
-	Conducted Emission	140300 to 142700	140300 (701.5MHz), 141500 (707.5MHz), 142700 (713.5MHz)	5MHz	QPSK	1 RB / 1 RB Offset
		140800 to 142700	140800 (704.0MHz), 141500 (707.5MHz), 142200 (711.0MHz)	10MHz	QPSK	1 RB / 1 RB Offset
		141300 to 142700	141300 (706.5MHz), 141500 (707.5MHz), 141700 (708.5MHz)	15MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Below 1GHz	140300 to 142700	141500 (707.5MHz)	5MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	140300 to 142700	140300 (701.5MHz), 141500 (707.5MHz), 142700 (713.5MHz)	5MHz	QPSK	1 RB / 1 RB Offset
		141300 to 142700	141300 (706.5MHz), 141500 (707.5MHz), 141700 (708.5MHz)	15MHz	QPSK	1 RB / 1 RB Offset

Note:

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

n13

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	155900 to 156900	155900 (779.5MHz), 156400 (782.0MHz), 156900 (784.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 13 RB Offset 1 RB / 23 RB Offset 12 RB / 0 RB Offset 12 RB / 7 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		156400	156400 (782.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 26 RB Offset 1 RB / 50 RB Offset 25 RB / 0 RB Offset 25 RB / 14 RB Offset 25 RB / 27 RB Offset 50 RB / 0 RB Offset
-	Modulation characteristics	156400	156400 (782.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	52 RB / 0 RB Offset
-	Frequency Stability	155900 to 156900	155900 (779.5MHz), 156900 (784.5MHz)	5MHz	$\pi/2$ BPSK	25 RB / 0 RB Offset
		156400	156400 (782.0MHz)	10MHz	QPSK	52 RB / 0 RB Offset
-	Emission Bandwidth	155900 to 156900	155900 (779.5MHz), 156400 (782.0MHz), 156900 (784.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		156400	156400 (782.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	52 RB / 0 RB Offset
-	Band Edge	155900 to 156900	155900 (779.5MHz), 156900 (784.5MHz)	5MHz	$\pi/2$ BPSK	25 RB / 0 RB Offset
		156400	156400 (782.0MHz)	10MHz	QPSK	52 RB / 0 RB Offset
-	Peak to Average Ratio	155900 to 156900	155900 (779.5MHz), 156400 (782.0MHz), 156900 (784.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		156400	156400 (782.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
-	Conducted Emission	155900 to 156900	155900 (779.5MHz), 156400 (782.0MHz), 156900 (784.5MHz)	5MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		156400	156400 (782.0MHz)	10MHz	QPSK	1 RB / 1 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	156400	156400 (782.0MHz)	10MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	155900 to 156900	155900 (779.5MHz), 156400 (782.0MHz), 156900 (784.5MHz)	5MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		156400	156400 (782.0MHz)	10MHz	QPSK	1 RB / 1 RB Offset

Note:

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

n30

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	461500 to 462500	461500 (2307.5MHz), 462000 (2310.0MHz), 462500 (2312.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 13 RB Offset 1 RB / 23 RB Offset 12 RB / 0 RB Offset 12 RB / 7 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		462000	462000 (2310.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 26 RB Offset 1 RB / 50 RB Offset 25 RB / 0 RB Offset 25 RB / 14 RB Offset 25 RB / 27 RB Offset 50 RB / 0 RB Offset
-	Modulation characteristics	462000	462000 (2310.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	52 RB / 0 RB Offset
-	Frequency Stability	461500 to 462500	461500 (2307.5MHz), 462500 (2312.5MHz)	5MHz	$\pi/2$ BPSK	25 RB / 0 RB Offset
		462000	462000 (2310.0MHz)	10MHz	$\pi/2$ BPSK	52 RB / 0 RB Offset
-	Emission Bandwidth	461500 to 462500	461500 (2307.5MHz), 462000 (2310.0MHz), 462500 (2312.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		462000	462000 (2310.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	52 RB / 0 RB Offset
-	Emission Mask	461500 to 462500	461500 (2307.5MHz), 462500 (2312.5MHz)	5MHz	$\pi/2$ BPSK	25 RB / 0 RB Offset
		462000	462000 (2310.0MHz)	10MHz	$\pi/2$ BPSK	52 RB / 0 RB Offset
-	Conducted Emission	461500 to 462500	461500 (2307.5MHz), 462000 (2310.0MHz), 462500 (2312.5MHz)	5MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		462000	462000 (2310.0MHz)	10MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Radiated Emission Below 1GHz	461500 to 462500	461500 (2307.5MHz)	5MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	461500 to 462500	461500 (2307.5MHz), 462000 (2310.0MHz), 462500 (2312.5MHz)	5MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		462000	462000 (2310.0MHz)	10MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset

Note:

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

n38

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	516000 to 523000	516000 (2580.0MHz), 519000 (2595.0MHz), 522000 (2610.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 26 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 13 RB Offset 25 RB / 26 RB Offset 50 RB / 0 RB Offset
		517000 to 521000	517000 (2585.0MHz), 519000 (2595.0MHz), 521000 (2605.0MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 39 RB Offset 1 RB / 76 RB Offset 36 RB / 0 RB Offset 36 RB / 21 RB Offset 36 RB / 42 RB Offset 75 RB / 0 RB Offset
		518000 to 520000	518000 (2590.0MHz), 519000 (2595.0MHz), 520000 (2600.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 53 RB Offset 1 RB / 104 RB Offset 50 RB / 0 RB Offset 50 RB / 28 RB Offset 50 RB / 56 RB Offset 100 RB / 0 RB Offset
-	Modulation Characteristics	518000 to 520000	519000 (2595.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
-	Frequency Stability	516000 to 523000	516000 (2580.0MHz), 522000 (2610.0MHz)	20MHz	QPSK	51 RB / 0 RB Offset
		517000 to 521000	517000 (2585.0MHz), 521000 (2605.0MHz)	30MHz	QPSK	78 RB / 0 RB Offset
		518000 to 520000	518000 (2590.0MHz), 520000 (2600.0MHz)	40MHz	QPSK	106 RB / 0 RB Offset
-	Emission Bandwidth	516000 to 523000	516000 (2580.0MHz), 519000 (2595.0MHz), 522000 (2610.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	51 RB / 0 RB Offset
		517000 to 521000	517000 (2585.0MHz), 519000 (2595.0MHz), 521000 (2605.0MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	78 RB / 0 RB Offset
		518000 to 520000	518000 (2590.0MHz), 519000 (2595.0MHz), 520000 (2600.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
-	Out-of-Band Emissions	516000 to 523000	516000 (2580.0MHz), 522000 (2610.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 50 RB Offset 51 RB / 0 RB Offset
		517000 to 521000	517000 (2585.0MHz), 521000 (2605.0MHz)	30MHz	QPSK	1 RB / 0 RB Offset 1 RB / 77 RB Offset 78 RB / 0 RB Offset
		518000 to 520000	518000 (2590.0MHz), 520000 (2600.0MHz)	40MHz	QPSK	1 RB / 0 RB Offset 1 RB / 105 RB Offset 106 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Peak to Average Ratio	516000 to 523000	516000 (2580.0MHz), 519000 (2595.0MHz), 522000 (2610.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		517000 to 521000	517000 (2585.0MHz), 519000 (2595.0MHz), 521000 (2605.0MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		518000 to 520000	518000 (2590.0MHz), 519000 (2595.0MHz), 520000 (2600.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
-	Conducted Emission	516000 to 523000	516000 (2580.0MHz), 519000 (2595.0MHz), 522000 (2610.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset
		517000 to 521000	517000 (2585.0MHz), 519000 (2595.0MHz), 521000 (2605.0MHz)	30MHz	QPSK	1 RB / 1 RB Offset
		518000 to 520000	518000 (2590.0MHz), 519000 (2595.0MHz), 520000 (2600.0MHz)	40MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Below 1GHz	516000 to 523000	519000 (2595.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	516000 to 523000	516000 (2580.0MHz), 519000 (2595.0MHz), 522000 (2610.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset
		518000 to 520000	518000 (2590.0MHz), 519000 (2595.0MHz), 520000 (2600.0MHz)	40MHz	QPSK	1 RB / 1 RB Offset

Note:

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

n41

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 26 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 13 RB Offset 25 RB / 26 RB Offset 50 RB / 0 RB Offset
		502200 to 534996	502200 (2511.00MHz), 518598 (2592.99MHz), 534996 (2674.98MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 39 RB Offset 1 RB / 76 RB Offset 36 RB / 0 RB Offset 36 RB / 21 RB Offset 36 RB / 42 RB Offset 75 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 53 RB Offset 1 RB / 104 RB Offset 50 RB / 0 RB Offset 50 RB / 28 RB Offset 50 RB / 56 RB Offset 100 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 67 RB Offset 1 RB / 131 RB Offset 64 RB / 0 RB Offset 64 RB / 35 RB Offset 64 RB / 69 RB Offset 128 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 81 RB Offset 1 RB / 160 RB Offset 81 RB / 0 RB Offset 81 RB / 41 RB Offset 81 RB / 81 RB Offset 162 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 109 RB Offset 1 RB / 215 RB Offset 108 RB / 0 RB Offset 108 RB / 55 RB Offset 108 RB / 109 RB Offset 216 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 123 RB Offset 1 RB / 243 RB Offset 120 RB / 0 RB Offset 120 RB / 63 RB Offset 120 RB / 125 RB Offset 243 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 137 RB Offset 1 RB / 271 RB Offset 135 RB / 0 RB Offset 135 RB / 69 RB Offset 135 RB / 138 RB Offset 270 RB / 0 RB Offset
-	Modulation Characteristics	509202 to 528000	518598 (2592.99MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	273 RB / 0 RB Offset
-	Frequency Stability	501204 to 535998	501204 (2506.02MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK	51 RB / 0 RB Offset
		502200 to 534996	502200 (2511.00MHz), 534996 (2674.98MHz)	30MHz	QPSK	78 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK	106 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 532998 (2664.99MHz)	50MHz	QPSK	133 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK	162 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK	217 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK	245 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK	273 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Emission Bandwidth	501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	51 RB / 0 RB Offset
		502200 to 534996	502200 (2511.00MHz), 518598 (2592.99MHz), 534996 (2674.98MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	78 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	133 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	162 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	217 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	245 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	273 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Out-of-Band Emissions	501204 to 535998	501204 (2506.02MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 50 RB Offset 51 RB / 0 RB Offset
		502200 to 534996	502200 (2511.00MHz), 534996 (2674.98MHz)	30MHz	QPSK	1 RB / 0 RB Offset 1 RB / 77 RB Offset 78 RB / 0 RB Offset
		503202 to 534000	503202 (2516.01MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 105 RB Offset 106 RB / 0 RB Offset
		504204 to 532998	504204 (2521.02MHz), 532998 (2664.99MHz)	50MHz	QPSK	1 RB / 0 RB Offset 1 RB / 132 RB Offset 133 RB / 0 RB Offset
		505200 to 531996	505200 (2526.00MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 161 RB Offset 162 RB / 0 RB Offset
		507204 to 529998	507204 (2536.02MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 216 RB Offset 217 RB / 0 RB Offset
		508200 to 528996	508200 (2541.00MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 244 RB Offset 245 RB / 0 RB Offset
		509202 to 528000	509202 (2546.01MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 272 RB Offset 273 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Peak to Average Ratio	501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		502200 to 534996	502200 (2511.00MHz), 518598 (2592.99MHz), 534996 (2674.98MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		502200 to 534996	502200 (2511.00MHz), 518598 (2592.99MHz), 534996 (2674.98MHz)	30MHz	QPSK	1 RB / 1 RB Offset
		503202 to 534000	503202 (2516.01MHz), 518598 (2592.99MHz), 534000 (2670.00MHz)	40MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	QPSK	1 RB / 1 RB Offset
		505200 to 531996	505200 (2526.00MHz), 518598 (2592.99MHz), 531996 (2659.98MHz)	60MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		507204 to 529998	507204 (2536.02MHz), 518598 (2592.99MHz), 529998 (2649.99MHz)	80MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		508200 to 528996	508200 (2541.00MHz), 518598 (2592.99MHz), 528996 (2644.98MHz)	90MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
-	Radiated Emission Below 1GHz	509202 to 528000	518598 (2592.99MHz)	100MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	501204 to 535998	501204 (2506.02MHz), 518598 (2592.99MHz), 535998 (2679.99MHz)	20MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		504204 to 532998	504204 (2521.02MHz), 518598 (2592.99MHz), 532998 (2664.99MHz)	50MHz	QPSK	1 RB / 1 RB Offset
		509202 to 528000	509202 (2546.01MHz), 518598 (2592.99MHz), 528000 (2640.00MHz)	100MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset

Note:

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

n66

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	342500 to 355500	342500 (1712.5MHz), 349000 (1745.0MHz), 355500 (1777.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 13 RB Offset 1 RB / 23 RB Offset 12 RB / 0 RB Offset 12 RB / 7 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		343000 to 355000	343000 (1715.0MHz), 349000 (1745.0MHz), 355000 (1775.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 26 RB Offset 1 RB / 50 RB Offset 25 RB / 0 RB Offset 25 RB / 14 RB Offset 25 RB / 27 RB Offset 50 RB / 0 RB Offset
		343500 to 354500	343500 (1717.5MHz), 349000 (1745.0MHz), 354500 (1772.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 40 RB Offset 1 RB / 77 RB Offset 36 RB / 0 RB Offset 36 RB / 22 RB Offset 36 RB / 43 RB Offset 75 RB / 0 RB Offset
		344000 to 354000	344000 (1720.0MHz), 349000 (1745.0MHz), 354000 (1770.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 53 RB Offset 1 RB / 104 RB Offset 50RB / 0 RB Offset 50 RB / 28 RB Offset 50 RB / 56 RB Offset 100 RB / 0 RB Offset
		345000 to 353000	345000 (1725.0MHz), 349000 (1745.0MHz), 353000 (1765.0MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 80 RB Offset 1 RB / 158 RB Offset 80RB / 0 RB Offset 80 RB / 40 RB Offset 80 RB / 80 RB Offset 160 RB / 0 RB Offset
		346000 to 352000	346000 (1730.0MHz), 349000 (1745.0MHz), 352000 (1760.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 108 RB Offset 1 RB / 214 RB Offset 108RB / 0 RB Offset 108 RB / 54 RB Offset 108 RB / 108 RB Offset 216 RB / 0 RB Offset
-	Modulation characteristics	346000 to 352000	349000 (1745.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	216 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Frequency Stability	342500 to 355500	342500 (1712.5MHz), 355500 (1777.5MHz)	5MHz	QPSK	25 RB / 0 RB Offset
		343000 to 355000	343000 (1715.0MHz), 355000 (1775.0MHz)	10MHz	QPSK	52 RB / 0 RB Offset
		343500 to 354500	343500 (1717.5MHz), 354500 (1772.5MHz)	15MHz	QPSK	79 RB / 0 RB Offset
		344000 to 354000	344000 (1720.0MHz), 354000 (1770.0MHz)	20MHz	QPSK	106 RB / 0 RB Offset
		345000 to 353000	345000 (1725.0MHz), 353000 (1765.0MHz)	30MHz	QPSK	160 RB / 0 RB Offset
		346000 to 352000	346000 (1730.0MHz), 352000 (1760.0MHz)	40MHz	QPSK	216 RB / 0 RB Offset
-	Occupied Bandwidth	342500 to 355500	342500 (1712.5MHz), 349000 (1745.0MHz), 355500 (1777.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		343000 to 355000	343000 (1715.0MHz), 349000 (1745.0MHz), 355000 (1775.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	52 RB / 0 RB Offset
		343500 to 354500	343500 (1717.5MHz), 349000 (1745.0MHz), 354500 (1772.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	79 RB / 0 RB Offset
		344000 to 354000	344000 (1720.0MHz), 349000 (1745.0MHz), 354000 (1770.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
		345000 to 353000	345000 (1725.0MHz), 349000 (1745.0MHz), 353000 (1765.0MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	160 RB / 0 RB Offset
		346000 to 352000	346000 (1730.0MHz), 349000 (1745.0MHz), 352000 (1760.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	216 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Band Edge	342500 to 355500	342500 (1712.5MHz), 355500 (1777.5MHz)	5MHz	QPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		343000 to 355000	343000 (1715.0MHz), 355000 (1775.0MHz)	10MHz	QPSK	1 RB / 0 RB Offset 1 RB / 51 RB Offset 52 RB / 0 RB Offset
		343500 to 354500	343500 (1717.5MHz), 354500 (1772.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 78 RB Offset 79 RB / 0 RB Offset
		344000 to 354000	344000 (1720.0MHz), 354000 (1770.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 105 RB Offset 106 RB / 0 RB Offset
		345000 to 353000	345000 (1725.0MHz), 353000 (1765.0MHz)	30MHz	QPSK	1 RB / 0 RB Offset 1 RB / 159 RB Offset 160 RB / 0 RB Offset
		346000 to 352000	346000 (1730.0MHz), 352000 (1760.0MHz)	40MHz	QPSK	1 RB / 0 RB Offset 1 RB / 215 RB Offset 216 RB / 0 RB Offset
-	Peak to Average Ratio	342500 to 355500	342500 (1712.5MHz), 349000 (1745.0MHz), 355500 (1777.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		343000 to 355000	343000 (1715.0MHz), 349000 (1745.0MHz), 355000 (1775.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		343500 to 354500	343500 (1717.5MHz), 349000 (1745.0MHz), 354500 (1772.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		344000 to 354000	344000 (1720.0MHz), 349000 (1745.0MHz), 354000 (1770.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		345000 to 353000	345000 (1725.0MHz), 349000 (1745.0MHz), 353000 (1765.0MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		346000 to 352000	346000 (1730.0MHz), 349000 (1745.0MHz), 352000 (1760.0MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	342500 to 355500	342500 (1712.5MHz), 349000 (1745.0MHz), 355500 (1777.5MHz)	5MHz	QPSK	1 RB / 1 RB Offset
		343000 to 355000	343000 (1715.0MHz), 349000 (1745.0MHz), 355000 (1775.0MHz)	10MHz	QPSK	1 RB / 1 RB Offset
		343500 to 354500	343500 (1717.5MHz), 349000 (1745.0MHz), 354500 (1772.5MHz)	15MHz	QPSK	1 RB / 1 RB Offset
		344000 to 354000	344000 (1720.0MHz), 349000 (1745.0MHz), 354000 (1770.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset
		345000 to 353000	345000 (1725.0MHz), 349000 (1745.0MHz), 353000 (1765.0MHz)	30MHz	QPSK	1 RB / 1 RB Offset
		346000 to 352000	346000 (1730.0MHz), 349000 (1745.0MHz), 352000 (1760.0MHz)	40MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Below 1GHz	342500 to 355500	342500 (1712.5MHz)	5MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	342500 to 355500	342500 (1712.5MHz), 349000 (1745.0MHz), 355500 (1777.5MHz)	5MHz	QPSK	1 RB / 1 RB Offset
		344000 to 354000	344000 (1720.0MHz), 349000 (1745.0MHz), 354000 (1770.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset
		346000 to 352000	346000 (1730.0MHz), 349000 (1745.0MHz), 352000 (1760.0MHz)	40MHz	QPSK	1 RB / 1 RB Offset

Note:

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

n71

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	ERP	133100 to 139100	133100 (665.5MHz), 136100 (680.5MHz), 139100 (695.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 13 RB Offset 1 RB / 23 RB Offset 12 RB / 0 RB Offset 12 RB / 7 RB Offset 12 RB / 13 RB Offset 25 RB / 0 RB Offset
		133600 to 138600	133600 (668.0MHz), 136100 (680.5MHz), 138600 (693.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 26 RB Offset 1 RB / 50 RB Offset 25 RB / 0 RB Offset 25 RB / 14 RB Offset 25 RB / 27 RB Offset 50 RB / 0 RB Offset
		134100 to 138100	134100 (670.5MHz), 136100 (680.5MHz), 138100 (690.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 40 RB Offset 1 RB / 77 RB Offset 36 RB / 0 RB Offset 36 RB / 22 RB Offset 36 RB / 43 RB Offset 75 RB / 0 RB Offset
		134600 to 137600	134600 (673.0MHz), 136100 (680.5MHz), 137600 (688.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 53 RB Offset 1 RB / 104 RB Offset 50RB / 0 RB Offset 50 RB / 28 RB Offset 50 RB / 56 RB Offset 100 RB / 0 RB Offset
-	Modulation Characteristics	134600 to 137600	136100 (680.5MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
-	Frequency Stability	133100 to 139100	133100 (665.5MHz), 139100 (695.5MHz)	5MHz	$\pi/2$ BPSK	25 RB / 0 RB Offset
		133600 to 138600	133600 (668.0MHz), 138600 (693.0MHz)	10MHz	$\pi/2$ BPSK	52 RB / 0 RB Offset
		134100 to 138100	134100 (670.5MHz), 138100 (690.5MHz)	15MHz	QPSK	79 RB / 0 RB Offset
		134600 to 137600	134600 (673.0MHz), 137600 (688.0MHz)	20MHz	QPSK	106 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Emission Bandwidth	133100 to 139100	133100 (665.5MHz), 136100 (680.5MHz), 139100 (695.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	25 RB / 0 RB Offset
		133600 to 138600	133600 (668.0MHz), 136100 (680.5MHz), 138600 (693.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	52 RB / 0 RB Offset
		134100 to 138100	134100 (670.5MHz), 136100 (680.5MHz), 138100 (690.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	79 RB / 0 RB Offset
		134600 to 137600	134600 (673.0MHz), 136100 (680.5MHz), 137600 (688.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
-	Band Edge	133100 to 139100	133100 (665.5MHz), 139100 (695.5MHz)	5MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 24 RB Offset 25 RB / 0 RB Offset
		133600 to 138600	133600 (668.0MHz), 138600 (693.0MHz)	10MHz	$\pi/2$ BPSK	1 RB / 0 RB Offset 1 RB / 51 RB Offset 52 RB / 0 RB Offset
		134100 to 138100	134100 (670.5MHz), 138100 (690.5MHz)	15MHz	QPSK	1 RB / 0 RB Offset 1 RB / 78 RB Offset 79 RB / 0 RB Offset
		134600 to 137600	134600 (673.0MHz), 137600 (688.0MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 105 RB Offset 106 RB / 0 RB Offset
-	Peak to Average Ratio	133100 to 139100	133100 (665.5MHz), 136100 (680.5MHz), 139100 (695.5MHz)	5MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		133600 to 138600	133600 (668.0MHz), 136100 (680.5MHz), 138600 (693.0MHz)	10MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		134100 to 138100	134100 (670.5MHz), 136100 (680.5MHz), 138100 (690.5MHz)	15MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		134600 to 137600	134600 (673.0MHz), 136100 (680.5MHz), 137600 (688.0MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	133100 to 139100	133100 (665.5MHz), 136100 (680.5MHz), 139100 (695.5MHz)	5MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		133600 to 138600	133600 (668.0MHz), 136100 (680.5MHz), 138600 (693.0MHz)	10MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		134100 to 138100	134100 (670.5MHz), 136100 (680.5MHz), 138100 (690.5MHz)	15MHz	QPSK	1 RB / 1 RB Offset
		134600 to 137600	134600 (673.0MHz), 136100 (680.5MHz), 137600 (688.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Below 1GHz	134600 to 137600	137600 (688.0MHz)	20MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	133100 to 139100	133100 (665.5MHz), 136100 (680.5MHz), 139100 (695.5MHz)	5MHz	$\pi/2$ BPSK	1 RB / 1 RB Offset
		134600 to 137600	134600 (673.0MHz), 136100 (680.5MHz), 137600 (688.0MHz)	20MHz	QPSK	1 RB / 1 RB Offset

Note:

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

n77

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	647334 to 664666	647334 (3710.01MHz), 656000 (3840.00MHz), 664666 (3969.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 26 RB Offset 1 RB / 49 RB Offset 25 RB / 0 RB Offset 25 RB / 13 RB Offset 25 RB / 26 RB Offset 50 RB / 0 RB Offset
		647668 to 664332	647668 (3715.02MHz), 656000 (3840.00MHz), 665666 (3964.98MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 39 RB Offset 1 RB / 76 RB Offset 36 RB / 0 RB Offset 36 RB / 21 RB Offset 36 RB / 42 RB Offset 75 RB / 0 RB Offset
		648000 to 664000	648000 (3720.00MHz), 656000 (3840.00MHz), 664000 (3960.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 53 RB Offset 1 RB / 104 RB Offset 50 RB / 0 RB Offset 50 RB / 28 RB Offset 50 RB / 56 RB Offset 100 RB / 0 RB Offset
		648334 to 663666	648334 (3725.01MHz), 656000 (3840.00MHz), 663666 (3954.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 67 RB Offset 1 RB / 131 RB Offset 64 RB / 0 RB Offset 64 RB / 35 RB Offset 64 RB / 69 RB Offset 128 RB / 0 RB Offset
		648668 to 663332	648668 (3730.02MHz), 656000 (3840.00MHz), 663332 (3949.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 81 RB Offset 1 RB / 160 RB Offset 81 RB / 0 RB Offset 81 RB / 41 RB Offset 81 RB / 81 RB Offset 162 RB / 0 RB Offset
		649000 to 663332	649000 (3735.00MHz), 656000 (3840.00MHz), 663000 (3945.00MHz)	70MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 95 RB Offset 1 RB / 187 RB Offset 90 RB / 0 RB Offset 90 RB / 50 RB Offset 90 RB / 99 RB Offset 180 RB / 0 RB Offset
		649334 to 662666	649334 (3740.01MHz), 656000 (3840.00MHz), 662666 (3939.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 109 RB Offset 1 RB / 215 RB Offset 108 RB / 0 RB Offset 108 RB / 55 RB Offset 108 RB / 109 RB Offset 216 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	EIRP	649668 to 662332	649668 (3745.02MHz), 656000 (3840.00MHz), 662332 (3934.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 123 RB Offset 1 RB / 243 RB Offset 120 RB / 0 RB Offset 120 RB / 63 RB Offset 120 RB / 125 RB Offset 243 RB / 0 RB Offset
		650000 to 662000	650000 (3750.00MHz), 656000 (3840.00MHz), 662000 (3930.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset 1 RB / 137 RB Offset 1 RB / 271 RB Offset 135 RB / 0 RB Offset 135 RB / 69 RB Offset 135 RB / 138 RB Offset 270 RB / 0 RB Offset
-	Modulation Characteristics	650000 to 662000	656000 (3840.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	273 RB / 0 RB Offset
-	Frequency Stability	647334 to 664666	647334 (3710.01MHz), 664666 (3969.99MHz)	20MHz	QPSK	51 RB / 0 RB Offset
		647668 to 664332	647668 (3715.02MHz), 665666 (3964.98MHz)	30MHz	QPSK	78 RB / 0 RB Offset
		648000 to 664000	648000 (3720.00MHz), 664000 (3960.00MHz)	40MHz	QPSK	106 RB / 0 RB Offset
		648334 to 663666	648334 (3725.01MHz), 663666 (3954.99MHz)	50MHz	QPSK	133 RB / 0 RB Offset
		648668 to 663332	648668 (3730.02MHz), 663332 (3949.98MHz)	60MHz	QPSK	162 RB / 0 RB Offset
		649000 to 663332	649000 (3735.00MHz), 663000 (3945.00MHz)	70MHz	QPSK	189 RB / 0 RB Offset
		649334 to 662666	649334 (3740.01MHz), 662666 (3939.99MHz)	80MHz	QPSK	217 RB / 0 RB Offset
		649668 to 662332	649668 (3745.02MHz), 662332 (3934.98MHz)	90MHz	QPSK	245 RB / 0 RB Offset
		650000 to 662000	650000 (3750.00MHz), 662000 (3930.00MHz)	100MHz	QPSK	273 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Emission Bandwidth	647334 to 664666	647334 (3710.01MHz), 656000 (3840.00MHz), 664666 (3969.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	51 RB / 0 RB Offset
		647668 to 664332	647668 (3715.02MHz), 656000 (3840.00MHz), 665666 (3964.98MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	78 RB / 0 RB Offset
		648000 to 664000	648000 (3720.00MHz), 656000 (3840.00MHz), 664000 (3960.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	106 RB / 0 RB Offset
		648334 to 663666	648334 (3725.01MHz), 656000 (3840.00MHz), 663666 (3954.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	133 RB / 0 RB Offset
		648668 to 663332	648668 (3730.02MHz), 656000 (3840.00MHz), 663332 (3949.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	162 RB / 0 RB Offset
		649000 to 663332	649000 (3735.00MHz), 656000 (3840.00MHz), 663000 (3945.00MHz)	70MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	189 RB / 0 RB Offset
		649334 to 662666	649334 (3740.01MHz), 656000 (3840.00MHz), 662666 (3939.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	217 RB / 0 RB Offset
		649668 to 662332	649668 (3745.02MHz), 656000 (3840.00MHz), 662332 (3934.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	245 RB / 0 RB Offset
		650000 to 662000	650000 (3750.00MHz), 656000 (3840.00MHz), 662000 (3930.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	273 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Out-of-Band Emissions	647334 to 664666	647334 (3710.01MHz), 664666 (3969.99MHz)	20MHz	QPSK	1 RB / 0 RB Offset 1 RB / 50 RB Offset 51 RB / 0 RB Offset
		647668 to 664332	647668 (3715.02MHz), 665666 (3964.98MHz)	30MHz	QPSK	1 RB / 0 RB Offset 1 RB / 77 RB Offset 78 RB / 0 RB Offset
		648000 to 664000	648000 (3720.00MHz), 664000 (3960.00MHz)	40MHz	QPSK	1 RB / 0 RB Offset 1 RB / 105 RB Offset 106 RB / 0 RB Offset
		648334 to 663666	648334 (3725.01MHz), 663666 (3954.99MHz)	50MHz	QPSK	1 RB / 0 RB Offset 1 RB / 132 RB Offset 133 RB / 0 RB Offset
		648668 to 663332	648668 (3730.02MHz), 663332 (3949.98MHz)	60MHz	QPSK	1 RB / 0 RB Offset 1 RB / 161 RB Offset 162 RB / 0 RB Offset
		649000 to 663332	649000 (3735.00MHz), 663000 (3945.00MHz)	70MHz	QPSK	1 RB / 0 RB Offset 1 RB / 188 RB Offset 189 RB / 0 RB Offset
		649334 to 662666	649334 (3740.01MHz), 662666 (3939.99MHz)	80MHz	QPSK	1 RB / 0 RB Offset 1 RB / 216 RB Offset 217 RB / 0 RB Offset
		649668 to 662332	649668 (3745.02MHz), 662332 (3934.98MHz)	90MHz	QPSK	1 RB / 0 RB Offset 1 RB / 244 RB Offset 245 RB / 0 RB Offset
		650000 to 662000	650000 (3750.00MHz), 662000 (3930.00MHz)	100MHz	QPSK	1 RB / 0 RB Offset 1 RB / 272 RB Offset 273 RB / 0 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Peak to Average Ratio	647334 to 664666	647334 (3710.01MHz), 656000 (3840.00MHz), 664666 (3969.99MHz)	20MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		647668 to 664332	647668 (3715.02MHz), 656000 (3840.00MHz), 665666 (3964.98MHz)	30MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		648000 to 664000	648000 (3720.00MHz), 656000 (3840.00MHz), 664000 (3960.00MHz)	40MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		648334 to 663666	648334 (3725.01MHz), 656000 (3840.00MHz), 663666 (3954.99MHz)	50MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		648668 to 663332	648668 (3730.02MHz), 656000 (3840.00MHz), 663332 (3949.98MHz)	60MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		649000 to 663332	649000 (3735.00MHz), 656000 (3840.00MHz), 663000 (3945.00MHz)	70MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		649334 to 662666	649334 (3740.01MHz), 656000 (3840.00MHz), 662666 (3939.99MHz)	80MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		649668 to 662332	649668 (3745.02MHz), 656000 (3840.00MHz), 662332 (3934.98MHz)	90MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset
		650000 to 662000	650000 (3750.00MHz), 656000 (3840.00MHz), 662000 (3930.00MHz)	100MHz	$\pi/2$ BPSK / QPSK / 16QAM / 64QAM / 256QAM	1 RB / 1 RB Offset

EUT Configure Mode	Test item	Available channel	Tested channel	Channel Bandwidth	Modulation	Mode
-	Conducted Emission	647334 to 664666	647334 (3710.01MHz), 656000 (3840.00MHz), 664666 (3969.99MHz)	20MHz	QPSK	1 RB / 1 RB Offset
		647668 to 664332	647668 (3715.02MHz), 656000 (3840.00MHz), 665666 (3964.98MHz)	30MHz	QPSK	1 RB / 1 RB Offset
		648000 to 664000	648000 (3720.00MHz), 656000 (3840.00MHz), 664000 (3960.00MHz)	40MHz	QPSK	1 RB / 1 RB Offset
		648334 to 663666	648334 (3725.01MHz), 656000 (3840.00MHz), 663666 (3954.99MHz)	50MHz	QPSK	1 RB / 1 RB Offset
		648668 to 663332	648668 (3730.02MHz), 656000 (3840.00MHz), 663332 (3949.98MHz)	60MHz	QPSK	1 RB / 1 RB Offset
		649000 to 663332	649000 (3735.00MHz), 656000 (3840.00MHz), 663000 (3945.00MHz)	70MHz	QPSK	1 RB / 1 RB Offset
		649334 to 662666	649334 (3740.01MHz), 656000 (3840.00MHz), 662666 (3939.99MHz)	80MHz	QPSK	1 RB / 1 RB Offset
		649668 to 662332	649668 (3745.02MHz), 656000 (3840.00MHz), 662332 (3934.98MHz)	90MHz	QPSK	1 RB / 1 RB Offset
		650000 to 662000	650000 (3750.00MHz), 656000 (3840.00MHz), 662000 (3930.00MHz)	100MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Below 1GHz	647334 to 664666	664666 (3969.99MHz)	20MHz	QPSK	1 RB / 1 RB Offset
-	Radiated Emission Above 1GHz	647334 to 664666	647334 (3710.01MHz), 656000 (3840.00MHz), 664666 (3969.99MHz)	20MHz	QPSK	1 RB / 1 RB Offset
		648334 to 663666	648334 (3725.01MHz), 656000 (3840.00MHz), 663666 (3954.99MHz)	50MHz	QPSK	1 RB / 1 RB Offset
		650000 to 662000	650000 (3750.00MHz), 656000 (3840.00MHz), 662000 (3930.00MHz)	100MHz	QPSK	1 RB / 1 RB Offset

Note:

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

Test Condition:

Test Item	Environmental Conditions	Input Power	Tested By
EIRP / ERP	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Modulation Characteristics	25deg. C, 60%RH	120Vac, 60Hz	James Yang
Frequency Stability	25deg. C, 60%RH	7.74Vdc	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	23deg. C, 67%RH 25deg. C, 65%RH	120Vac, 60Hz	Adair Peng Noah Chang

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 27

ANSI/TIA/EIA-603-E 2016

ANSI 63.26-2015

References Test Guidance:

KDB 971168 D01 Power Meas License Digital Systems v03r01

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

4 Test Types and Results

4.1 Output Power Measurement

4.1.1 Limits of Output Power Measurement

For n7, n38, n41:

Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.

For n12, n13, n71:

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 n30:

For mobile and portable stations compliant with 3GPP LTE standards or another advanced mobile broadband protocol that avoids concentrating energy at the edge of the operating band the average EIRP must not exceed 250 milliwatts within any 5 megahertz of authorized bandwidth but may exceed 50 milliwatts within any 1 megahertz of authorized bandwidth.

For n66:

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

For n77:

Mobile and portable stations are limited to 1 Watt EIRP. Mobile and portable stations operating in these bands must employ a means for limiting power to the minimum necessary for successful communications.

4.1.2 Test Procedures

Conducted Power Measurement:

For all test band except n30:

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

For n30:

Measurement method refers to ANSI C63.26 section 5.2.7 & 5.2.4.

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:

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

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

where

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

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

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

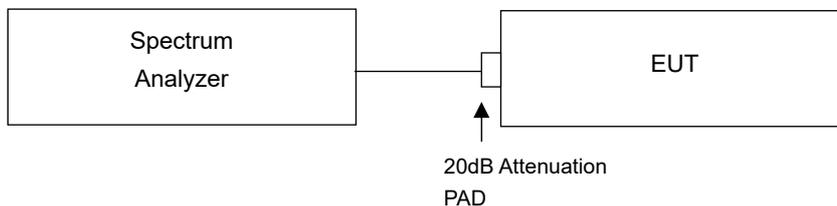
4.1.3 Test Setup

Conducted Power Measurement:

For all test band except n30:



For n30:



4.1.4 Test Results

Conducted Output Power (dBm, dBm/5MHz for n30 only)

NR Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		505000	507000	509000
		Frequency (MHz)		2525	2535	2545
50M	$\pi/2$ BPSK	1	1	23.27	23.84	23.63
		1	135	23.02	23.61	23.26
		1	268	23.21	23.55	23.44
		135	0	22.86	23.37	22.97
		135	68	23.07	23.51	23.38
		135	135	22.81	23.22	23.10
		270	0	22.85	23.20	23.14
50M	QPSK	1	1	23.61	23.95	23.72
		1	135	23.05	23.55	23.36
		1	268	23.18	23.75	23.59
		135	0	22.34	22.81	22.71
		135	68	23.80	23.82	23.74
		135	135	22.34	22.73	22.68
		270	0	22.35	22.76	22.59
50M	16QAM	1	1	22.28	22.78	22.61
50M	64QAM	1	1	20.78	21.32	21.19
50M	256QAM	1	1	18.84	19.36	19.22
BW	MCS Index	Channel		504000	507000	510000
		Frequency (MHz)		2520	2535	2550
40M	$\pi/2$ BPSK	1	1	23.29	23.77	23.63
		1	108	23.05	23.56	23.31
		1	214	23.20	23.61	23.39
		108	0	22.83	23.32	23.07
		108	54	23.05	23.55	23.31
		108	108	22.84	23.21	23.16
		216	0	22.85	23.30	23.12
40M	QPSK	1	1	23.58	23.94	23.66
		1	108	23.08	23.60	23.35
		1	214	23.11	23.76	23.53
		108	0	22.25	22.81	22.66
		108	54	23.74	23.80	23.81
		108	108	22.35	22.80	22.68
		216	0	22.35	22.82	22.61
40M	16QAM	1	1	22.28	22.73	22.63
40M	64QAM	1	1	20.81	21.32	21.18
40M	256QAM	1	1	18.86	19.34	19.16

NR Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		503000	507000	511000
		Frequency (MHz)		2515	2535	2555
30M	$\pi/2$ BPSK	1	1	23.23	23.84	23.65
		1	80	22.96	23.53	23.35
		1	158	23.17	23.52	23.44
		80	0	22.79	23.30	22.97
		80	40	23.01	23.58	23.29
		80	80	22.81	23.22	23.15
		160	0	22.84	23.27	23.08
30M	QPSK	1	1	23.51	23.92	23.63
		1	80	23.05	23.56	23.35
		1	158	23.12	23.66	23.59
		80	0	22.34	22.76	22.72
		80	40	23.78	23.80	23.75
		80	80	22.40	22.73	22.67
		160	0	22.36	22.85	22.62
30M	16QAM	1	1	22.26	22.74	22.70
30M	64QAM	1	1	20.86	21.33	21.19
30M	256QAM	1	1	18.81	19.31	19.14
BW	MCS Index	Channel		502500	507000	511500
		Frequency (MHz)		2512.5	2535	2557.5
25M	$\pi/2$ BPSK	1	1	23.30	23.84	23.63
		1	67	23.02	23.56	23.33
		1	131	23.16	23.55	23.43
		64	0	22.78	23.34	22.97
		64	35	22.97	23.60	23.36
		64	69	22.86	23.19	23.15
		128	0	22.87	23.25	23.15
25M	QPSK	1	1	23.56	23.85	23.61
		1	67	23.08	23.56	23.40
		1	131	23.21	23.68	23.56
		64	0	22.29	22.75	22.70
		64	35	23.77	23.88	23.78
		64	69	22.40	22.79	22.69
		128	0	22.37	22.77	22.57
25M	16QAM	1	1	22.29	22.80	22.65
25M	64QAM	1	1	20.82	21.33	21.18
25M	256QAM	1	1	18.86	19.37	19.18

NR Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		502000	507000	512000
		Frequency (MHz)		2510	2535	2560
20M	$\pi/2$ BPSK	1	1	23.31	23.80	23.62
		1	53	22.98	23.53	23.28
		1	104	23.15	23.53	23.39
		50	0	22.84	23.33	23.05
		50	28	23.02	23.54	23.34
		50	56	22.84	23.18	23.12
		100	0	22.86	23.28	23.07
20M	QPSK	1	1	23.57	23.88	23.69
		1	53	23.07	23.62	23.34
		1	104	23.14	23.75	23.58
		50	0	22.26	22.73	22.66
		50	28	23.79	23.81	23.79
		50	56	22.38	22.75	22.72
		100	0	22.33	22.80	22.64
20M	16QAM	1	1	22.31	22.75	22.69
20M	64QAM	1	1	20.80	21.38	21.24
20M	256QAM	1	1	18.78	19.33	19.22
BW	MCS Index	Channel		501500	507000	512500
		Frequency (MHz)		2507.5	2535	2562.5
15M	$\pi/2$ BPSK	1	1	23.23	23.75	23.63
		1	40	23.00	23.62	23.30
		1	77	23.16	23.62	23.46
		36	0	22.83	23.39	23.03
		36	22	23.02	23.59	23.34
		36	43	22.82	23.22	23.17
		75	0	22.83	23.22	23.15
15M	QPSK	1	1	23.58	23.86	23.65
		1	40	23.00	23.53	23.37
		1	77	23.11	23.76	23.58
		36	0	22.25	22.78	22.68
		36	22	23.73	23.87	23.82
		36	43	22.38	22.77	22.74
		75	0	22.38	22.78	22.65
15M	16QAM	1	1	22.23	22.81	22.68
15M	64QAM	1	1	20.83	21.35	21.25
15M	256QAM	1	1	18.81	19.29	19.23

NR Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		501000	507000	513000
		Frequency (MHz)		2505	2535	2565
10M	$\pi/2$ BPSK	1	1	23.30	23.79	23.61
		1	26	23.02	23.54	23.35
		1	50	23.18	23.62	23.38
		25	0	22.83	23.37	23.07
		25	14	22.97	23.58	23.29
		25	27	22.79	23.27	23.17
		50	0	22.82	23.29	23.12
10M	QPSK	1	1	23.53	23.86	23.71
		1	26	23.07	23.53	23.38
		1	50	23.20	23.72	23.54
		25	0	22.27	22.72	22.73
		25	14	23.75	23.88	23.76
		25	27	22.34	22.77	22.68
		50	0	22.34	22.85	22.61
10M	16QAM	1	1	22.25	22.71	22.68
10M	64QAM	1	1	20.80	21.34	21.25
10M	256QAM	1	1	18.82	19.30	19.15
BW	MCS Index	Channel		500500	507000	513500
		Frequency (MHz)		2502.5	2535	2567.5
5M	$\pi/2$ BPSK	1	1	23.25	23.83	23.65
		1	13	23.03	23.60	23.28
		1	23	23.17	23.59	23.46
		12	0	22.77	23.35	23.02
		12	7	22.99	23.57	23.31
		12	13	22.86	23.19	23.12
		25	0	22.81	23.24	23.08
5M	QPSK	1	1	23.57	23.94	23.67
		1	13	23.00	23.59	23.36
		1	23	23.12	23.68	23.55
		12	0	22.31	22.80	22.70
		12	7	23.75	23.83	23.78
		12	13	22.39	22.82	22.72
		25	0	22.29	22.83	22.61
5M	16QAM	1	1	22.28	22.80	22.65
5M	64QAM	1	1	20.79	21.34	21.21
5M	256QAM	1	1	18.86	19.34	19.15

NR Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		141300	141500	141700
		Frequency (MHz)		706.5	707.5	708.5
15M	$\pi/2$ BPSK	1	1	24.67	24.85	24.76
		1	40	24.71	24.76	24.73
		1	77	24.58	24.85	24.59
		36	0	23.95	24.19	24.10
		36	22	24.66	24.78	24.68
		36	43	23.98	24.26	24.06
		75	0	24.02	24.24	24.14
15M	QPSK	1	1	24.82	24.92	24.82
		1	40	24.76	24.86	24.75
		1	77	24.73	24.83	24.67
		36	0	23.54	23.86	23.64
		36	22	24.66	24.88	24.76
		36	43	23.51	23.83	23.65
		75	0	23.51	23.70	23.69
15M	16QAM	1	1	23.43	23.86	23.58
15M	64QAM	1	1	21.92	22.26	22.05
15M	256QAM	1	1	19.96	20.35	20.11
BW	MCS Index	Channel		140800	141500	142200
		Frequency (MHz)		704	707.5	711
10M	$\pi/2$ BPSK	1	1	24.73	24.85	24.78
		1	26	24.64	24.75	24.74
		1	50	24.58	24.81	24.64
		25	0	23.93	24.23	24.08
		25	14	24.64	24.77	24.73
		25	27	24.04	24.29	24.02
		50	0	24.03	24.21	24.13
10M	QPSK	1	1	24.78	24.86	24.86
		1	26	24.67	24.91	24.78
		1	50	24.74	24.84	24.66
		25	0	23.51	23.86	23.73
		25	14	24.67	24.88	24.80
		25	27	23.55	23.88	23.68
		50	0	23.56	23.75	23.67
10M	16QAM	1	1	23.44	23.77	23.58
10M	64QAM	1	1	21.92	22.32	22.10
10M	256QAM	1	1	19.97	20.35	20.08

NR Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		140300	141500	142700
		Frequency (MHz)		701.5	707.5	713.5
5M	$\pi/2$ BPSK	1	1	24.69	24.81	24.77
		1	13	24.66	24.74	24.73
		1	23	24.59	24.82	24.63
		12	0	23.93	24.29	24.17
		12	7	24.65	24.81	24.68
		12	13	24.01	24.27	24.06
		25	0	23.97	24.25	24.11
5M	QPSK	1	1	24.81	24.87	24.84
		1	13	24.67	24.92	24.81
		1	23	24.71	24.88	24.68
		12	0	23.54	23.84	23.73
		12	7	24.68	24.90	24.77
		12	13	23.49	23.81	23.69
		25	0	23.58	23.76	23.66
5M	16QAM	1	1	23.50	23.84	23.58
5M	64QAM	1	1	22.00	22.33	22.09
5M	256QAM	1	1	19.95	20.28	20.12

NR Band 13						
BW	MCS Index	RB Size	RB Offset	Mid		
		Channel		156400		
		Frequency (MHz)		782		
10M	$\pi/2$ BPSK	1	1	23.63		
		1	26	23.61		
		1	50	23.65		
		25	0	22.95		
		25	14	23.64		
		25	27	23.43		
		50	0	23.57		
10M	QPSK	1	1	23.67		
		1	26	23.62		
		1	50	23.63		
		25	0	23.10		
		25	14	23.58		
		25	27	22.98		
		50	0	23.08		
10M	16QAM	1	1	22.70		
10M	64QAM	1	1	21.70		
10M	256QAM	1	1	20.20		
BW	MCS Index	Channel		155900	156400	156900
		Frequency (MHz)		779.5	782	784.5
5M	$\pi/2$ BPSK	1	1	23.63	23.57	23.65
		1	13	23.57	23.61	23.59
		1	23	23.54	23.64	23.59
		12	0	23.61	22.88	22.95
		12	7	22.85	23.55	23.62
		12	13	23.56	23.34	23.39
		25	0	23.34	23.57	23.55
5M	QPSK	1	1	23.49	23.62	23.64
		1	13	23.64	23.55	23.57
		1	23	23.56	23.62	23.53
		12	0	23.57	23.03	23.01
		12	7	23.04	23.53	23.48
		12	13	23.56	22.90	22.89
		25	0	22.98	23.07	23.07
5M	16QAM	1	1	22.65	22.70	22.67
5M	64QAM	1	1	21.63	21.70	21.61
5M	256QAM	1	1	20.15	20.20	20.12

NR Band 30						
BW	MCS Index	RB Size	RB Offset	Mid		
		Channel		462000		
		Frequency (MHz)		2310		
10M	$\pi/2$ BPSK	1	1	23.86		
		1	26	23.92		
		1	50	23.8		
		25	0	23.35		
		25	14	23.72		
		25	27	23.34		
		50	0	23.4		
10M	QPSK	1	1	23.85		
		1	26	23.82		
		1	50	23.79		
		25	0	22.87		
		25	14	23.84		
		25	27	22.91		
		50	0	22.96		
10M	16QAM	1	1	22.89		
10M	64QAM	1	1	20.44		
10M	256QAM	1	1	19.41		
BW	MCS Index	Channel		461500	462000	462500
		Frequency (MHz)		2307.5	2310	2312.5
5M	$\pi/2$ BPSK	1	1	23.86	23.81	23.73
		1	13	23.88	23.75	23.80
		1	23	23.82	23.75	23.72
		12	0	23.29	23.27	23.26
		12	7	23.83	23.75	23.77
		12	13	23.31	23.25	23.24
		25	0	23.40	23.35	23.34
5M	QPSK	1	1	23.85	23.79	23.81
		1	13	23.79	23.75	23.81
		1	23	23.84	23.73	23.71
		12	0	22.87	22.86	22.86
		12	7	23.78	23.71	23.71
		12	13	22.87	22.83	22.82
		25	0	22.87	22.83	22.81
5M	16QAM	1	1	22.89	23.82	23.79
5M	64QAM	1	1	21.42	21.31	21.44
5M	256QAM	1	1	19.41	19.35	19.35

NR Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		518000	519000	520000
		Frequency (MHz)		2590	2595	2600
40M	$\pi/2$ BPSK	1	1	23.81	23.91	23.82
		1	53	23.80	23.87	23.84
		1	104	23.80	23.77	23.82
		50	0	23.19	23.30	23.22
		50	28	23.83	23.74	23.74
		50	56	23.25	23.24	23.25
		100	0	23.29	23.24	23.22
40M	QPSK	1	1	23.98	23.87	23.86
		1	53	23.85	23.88	23.92
		1	104	23.84	23.86	23.88
		50	0	22.81	22.83	22.74
		50	28	23.85	23.81	23.85
		50	56	22.83	22.66	22.81
		100	0	22.88	22.82	22.80
40M	16QAM	1	1	22.73	22.76	22.85
40M	64QAM	1	1	21.37	21.31	21.26
40M	256QAM	1	1	19.30	19.28	19.31
BW	MCS Index	Channel		517000	519000	521000
		Frequency (MHz)		2585	2595	2605
30M	$\pi/2$ BPSK	1	1	23.84	23.84	23.86
		1	39	23.82	23.85	23.79
		1	76	23.86	23.71	23.84
		36	0	23.21	23.28	23.15
		36	21	23.83	23.75	23.72
		36	42	23.31	23.18	23.23
		75	0	23.36	23.20	23.24
30M	QPSK	1	1	23.93	23.91	23.92
		1	39	23.87	23.86	23.84
		1	76	23.90	23.80	23.82
		36	0	22.82	22.80	22.78
		36	21	23.87	23.87	23.84
		36	42	22.81	22.69	22.86
		75	0	22.87	22.78	22.84
30M	16QAM	1	1	22.72	22.83	22.76
30M	64QAM	1	1	21.36	21.36	21.27
30M	256QAM	1	1	19.28	19.22	19.36

NR Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		516000	519000	522000
		Frequency (MHz)		2580	2595	2610
20M	$\pi/2$ BPSK	1	1	23.88	23.86	23.90
		1	26	23.87	23.83	23.78
		1	49	23.79	23.75	23.82
		25	0	23.20	23.26	23.13
		25	13	23.88	23.68	23.70
		25	26	23.26	23.24	23.24
		50	0	23.37	23.26	23.29
20M	QPSK	1	1	23.88	23.90	23.88
		1	26	23.86	23.82	23.87
		1	49	23.84	23.77	23.91
		25	0	22.79	22.74	22.72
		25	13	23.89	23.77	23.82
		25	26	22.87	22.71	22.80
		50	0	22.83	22.75	22.89
20M	16QAM	1	1	22.75	22.81	22.78
20M	64QAM	1	1	21.40	21.30	21.29
20M	256QAM	1	1	19.29	19.28	19.32

NR Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		509202	518598	528000
		Frequency (MHz)		2546.01	2592.99	2640
100M	$\pi/2$ BPSK	1	1	26.62	26.78	26.44
		1	137	26.45	26.14	26.03
		1	271	26.48	26.34	25.86
		135	0	25.87	25.68	25.65
		135	69	26.25	26.62	26.24
		135	138	25.56	25.94	25.74
		270	0	25.52	26.26	25.77
100M	QPSK	1	1	26.45	26.68	26.05
		1	137	26.48	26.47	26.28
		1	271	26.45	26.57	26.15
		135	0	25.40	25.39	25.34
		135	69	26.41	26.34	26.35
		135	138	25.19	25.34	25.24
		270	0	25.19	25.58	25.19
100M	16QAM	1	1	25.34	25.39	25.19
100M	64QAM	1	1	23.55	24.07	23.44
100M	256QAM	1	1	21.82	21.83	21.49
BW	MCS Index	Channel		508200	518598	528996
		Frequency (MHz)		2541	2592.99	2644.98
90M	$\pi/2$ BPSK	1	1	26.52	26.41	26.19
		1	123	26.27	26.41	25.88
		1	243	26.29	26.26	26.07
		120	0	25.64	25.77	25.32
		120	63	26.21	26.31	25.76
		120	125	25.77	25.69	25.82
		243	0	25.74	25.73	25.62
90M	QPSK	1	1	26.36	26.48	26.07
		1	123	26.42	26.43	26.36
		1	243	26.39	26.44	25.99
		120	0	25.22	25.63	24.98
		120	63	26.38	26.34	26.19
		120	125	25.34	25.47	25.07
		243	0	25.51	25.64	25.23
90M	16QAM	1	1	25.31	25.24	25.31
90M	64QAM	1	1	23.66	23.74	23.69
90M	256QAM	1	1	22.06	21.58	21.32

NR Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		507204	518598	529998
		Frequency (MHz)		2536.02	2592.99	2649.99
80M	$\pi/2$ BPSK	1	1	26.50	26.34	25.92
		1	109	26.02	26.14	25.96
		1	215	26.37	26.54	26.00
		108	0	25.80	25.86	25.35
		108	55	26.45	26.24	26.10
		108	109	25.55	25.80	25.43
		216	0	25.90	26.24	25.61
80M	QPSK	1	1	26.48	26.34	26.24
		1	109	26.41	26.48	25.96
		1	215	26.18	26.19	26.18
		108	0	25.43	25.52	25.02
		108	55	26.40	26.34	26.09
		108	109	25.00	25.34	25.36
		216	0	25.11	25.75	25.31
80M	16QAM	1	1	24.98	25.14	24.70
80M	64QAM	1	1	23.28	23.43	23.02
80M	256QAM	1	1	21.39	21.32	21.06
BW	MCS Index	Channel		505200	518598	531996
		Frequency (MHz)		2526	2592.99	2659.98
60M	$\pi/2$ BPSK	1	1	26.59	26.75	26.31
		1	81	26.10	26.53	26.01
		1	160	26.07	26.01	26.06
		81	0	25.64	25.80	25.54
		81	41	26.12	26.48	25.80
		81	81	25.34	26.11	25.46
		162	0	25.84	25.74	25.40
60M	QPSK	1	1	26.58	26.54	25.87
		1	81	26.22	26.50	26.37
		1	160	26.45	26.01	26.03
		81	0	25.19	25.52	25.19
		81	41	26.35	26.48	25.91
		81	81	25.34	25.40	25.08
		162	0	25.16	25.37	25.47
60M	16QAM	1	1	25.19	25.43	25.02
60M	64QAM	1	1	23.65	23.83	23.27
60M	256QAM	1	1	21.91	22.05	21.34

NR Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		504204	518598	532998
		Frequency (MHz)		2521.02	2592.99	2664.99
50M	$\pi/2$ BPSK	1	1	26.56	26.69	25.97
		1	67	26.00	26.32	26.23
		1	131	26.25	26.56	25.79
		64	0	25.87	25.89	25.25
		64	35	26.46	26.38	26.29
		64	69	25.59	25.75	25.44
		128	0	25.40	26.25	25.65
50M	QPSK	1	1	26.72	26.61	26.40
		1	67	26.09	26.28	26.27
		1	131	26.25	26.50	26.24
		64	0	25.12	25.57	24.86
		64	35	26.17	26.20	26.26
		64	69	25.06	25.56	25.09
		128	0	25.46	25.44	24.89
50M	16QAM	1	1	25.57	25.56	25.17
50M	64QAM	1	1	23.60	23.61	23.45
50M	256QAM	1	1	21.87	21.89	21.73
BW	MCS Index	Channel		503202	518598	534000
		Frequency (MHz)		2516.01	2592.99	2670
40M	$\pi/2$ BPSK	1	1	26.38	26.67	25.85
		1	53	26.18	26.06	26.08
		1	104	26.20	26.43	26.06
		50	0	25.54	25.82	25.66
		50	28	26.64	26.55	26.17
		50	56	25.74	25.67	25.84
		100	0	25.61	26.21	25.70
40M	QPSK	1	1	26.60	26.60	26.28
		1	53	26.30	26.54	26.30
		1	104	26.18	26.26	25.87
		50	0	25.23	25.43	25.05
		50	28	26.23	26.47	26.00
		50	56	25.30	25.67	25.25
		100	0	25.37	25.72	24.96
40M	16QAM	1	1	25.04	25.60	24.98
40M	64QAM	1	1	23.89	23.73	23.47
40M	256QAM	1	1	21.55	21.66	21.43

NR Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		502200	518598	534996
		Frequency (MHz)		2511	2592.99	2674.98
30M	$\pi/2$ BPSK	1	1	26.16	26.61	26.00
		1	39	26.46	26.47	25.86
		1	76	26.37	26.03	26.10
		36	0	25.64	25.97	25.27
		36	21	26.42	26.54	25.79
		36	42	25.55	25.95	25.39
		75	0	25.53	25.81	25.48
30M	QPSK	1	1	26.45	26.45	25.93
		1	39	26.47	26.29	26.08
		1	76	26.09	25.99	26.22
		36	0	25.42	25.44	25.30
		36	21	26.64	26.65	26.01
		36	42	25.04	25.78	25.45
		75	0	25.11	25.58	25.14
30M	16QAM	1	1	25.35	25.70	25.17
30M	64QAM	1	1	24.00	24.10	23.56
30M	256QAM	1	1	21.43	21.92	21.29
BW	MCS Index	Channel		501204	518598	535998
		Frequency (MHz)		2506.02	2592.99	2679.99
		20M	$\pi/2$ BPSK	1	1	26.55
1	26			26.37	26.61	26.19
1	49			26.52	26.27	26.29
25	0			25.56	25.87	25.80
25	13			26.46	26.32	25.74
25	26			25.61	26.12	25.73
50	0			25.51	26.03	25.65
20M	QPSK	1	1	26.28	26.46	26.19
		1	26	26.48	26.33	25.77
		1	49	26.10	26.53	26.03
		25	0	24.94	25.35	25.20
		25	13	26.53	26.20	25.97
		25	26	25.27	25.64	25.52
		50	0	25.48	25.74	25.08
20M	16QAM	1	1	25.75	25.54	25.14
20M	64QAM	1	1	23.90	23.94	23.52
20M	256QAM	1	1	21.99	21.61	21.59

NR Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		346000	349000	352000
		Frequency (MHz)		1730	1745	1760
40M	$\pi/2$ BPSK	1	1	23.65	23.63	23.68
		1	108	23.68	23.73	23.61
		1	214	23.75	23.58	23.64
		108	0	23.17	23.15	23.11
		108	54	23.68	23.75	23.64
		108	108	23.27	23.17	23.08
		216	0	23.23	23.19	23.30
40M	QPSK	1	1	23.87	23.93	23.88
		1	108	23.73	23.74	23.65
		1	214	23.62	23.68	23.59
		108	0	22.84	22.84	22.87
		108	54	23.76	23.84	23.75
		108	108	22.69	22.65	22.77
		216	0	22.84	22.84	22.85
40M	16QAM	1	1	22.66	22.60	22.65
40M	64QAM	1	1	20.30	20.28	20.21
40M	256QAM	1	1	19.28	19.20	19.29
BW	MCS Index	Channel		345000	349000	353000
		Frequency (MHz)		1725	1745	1765
30M	$\pi/2$ BPSK	1	1	23.70	23.67	23.64
		1	80	23.76	23.65	23.68
		1	158	23.74	23.66	23.59
		80	0	23.16	23.12	23.10
		80	40	23.74	23.72	23.65
		80	80	23.24	23.25	23.14
		160	0	23.25	23.24	23.21
30M	QPSK	1	1	23.86	23.87	23.84
		1	80	23.74	23.66	23.62
		1	158	23.61	23.65	23.61
		80	0	22.81	22.84	22.86
		80	40	23.76	23.82	23.81
		80	80	22.78	22.71	22.72
		160	0	22.86	22.87	22.79
30M	16QAM	1	1	22.73	22.68	22.59
30M	64QAM	1	1	20.32	20.20	20.26
30M	256QAM	1	1	19.28	19.28	19.22

NR Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		344000	349000	354000
		Frequency (MHz)		1720	1745	1770
20M	$\pi/2$ BPSK	1	1	23.72	23.68	23.62
		1	53	23.71	23.70	23.66
		1	104	23.74	23.63	23.56
		50	0	23.22	23.10	23.19
		50	28	23.75	23.74	23.59
		50	56	23.18	23.20	23.17
		100	0	23.28	23.26	23.28
20M	QPSK	1	1	23.87	23.95	23.94
		1	53	23.76	23.72	23.65
		1	104	23.65	23.67	23.65
		50	0	22.86	22.93	22.82
		50	28	23.86	23.86	23.83
		50	56	22.76	22.64	22.72
		100	0	22.79	22.90	22.86
20M	16QAM	1	1	22.65	22.65	22.66
20M	64QAM	1	1	20.25	20.18	20.22
20M	256QAM	1	1	19.25	19.24	19.23
BW	MCS Index	Channel		343500	349000	354500
		Frequency (MHz)		1717.5	1745	1772.5
15M	$\pi/2$ BPSK	1	1	23.69	23.69	23.66
		1	40	23.71	23.74	23.67
		1	77	23.67	23.61	23.58
		36	0	23.18	23.15	23.17
		36	22	23.67	23.66	23.59
		36	43	23.24	23.20	23.12
		75	0	23.28	23.24	23.31
15M	QPSK	1	1	23.84	23.90	23.89
		1	40	23.73	23.73	23.63
		1	77	23.61	23.63	23.62
		36	0	22.91	22.89	22.81
		36	22	23.83	23.85	23.78
		36	43	22.74	22.63	22.78
		75	0	22.76	22.90	22.81
15M	16QAM	1	1	22.66	22.68	22.60
15M	64QAM	1	1	20.26	20.26	20.21
15M	256QAM	1	1	19.29	19.23	19.29

NR Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		343000	349000	355000
		Frequency (MHz)		1715	1745	1775
10M	$\pi/2$ BPSK	1	1	23.67	23.60	23.61
		1	26	23.78	23.73	23.70
		1	50	23.71	23.61	23.55
		25	0	23.14	23.13	23.20
		25	14	23.71	23.72	23.59
		25	27	23.19	23.16	23.11
		50	0	23.27	23.24	23.31
10M	QPSK	1	1	23.84	23.95	23.89
		1	26	23.77	23.65	23.70
		1	50	23.70	23.65	23.57
		25	0	22.87	22.90	22.78
		25	14	23.85	23.80	23.82
		25	27	22.70	22.64	22.69
		50	0	22.85	22.88	22.85
10M	16QAM	1	1	22.70	22.65	22.65
10M	64QAM	1	1	20.24	20.19	20.25
10M	256QAM	1	1	19.19	19.27	19.25
BW	MCS Index	Channel		342500	349000	355500
		Frequency (MHz)		1712.5	1745	1777.5
5M	$\pi/2$ BPSK	1	1	23.75	23.69	23.66
		1	13	23.77	23.74	23.71
		1	23	23.75	23.61	23.62
		12	0	23.14	23.10	23.12
		12	7	23.68	23.70	23.59
		12	13	23.21	23.24	23.09
		25	0	23.31	23.25	23.28
5M	QPSK	1	1	23.83	23.95	23.87
		1	13	23.68	23.69	23.65
		1	23	23.66	23.69	23.57
		12	0	22.81	22.90	22.84
		12	7	23.79	23.89	23.81
		12	13	22.78	22.71	22.75
		25	0	22.78	22.90	22.84
5M	16QAM	1	1	22.75	22.64	22.58
5M	64QAM	1	1	20.24	20.23	20.29
5M	256QAM	1	1	19.28	19.21	19.27

NR Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		134600	136100	137600
		Frequency (MHz)		673	680.5	688
20M	$\pi/2$ BPSK	1	1	24.50	24.58	24.52
		1	53	24.42	24.46	24.41
		1	104	24.45	24.53	24.43
		50	0	23.91	23.95	23.90
		50	28	24.30	24.24	24.28
		50	56	23.83	23.88	23.80
		100	0	23.80	23.85	23.79
20M	QPSK	1	1	24.55	24.59	24.48
		1	53	24.43	24.45	24.40
		1	104	24.41	24.49	24.44
		50	0	23.43	23.50	23.52
		50	28	24.34	24.39	24.28
		50	56	23.37	23.39	23.37
		100	0	23.45	23.55	23.52
20M	16QAM	1	1	23.33	23.37	23.28
20M	64QAM	1	1	21.91	21.90	21.92
20M	256QAM	1	1	19.85	19.85	19.79
BW	MCS Index	Channel		134100	136100	138100
		Frequency (MHz)		670.5	680.5	690.5
15M	$\pi/2$ BPSK	1	1	24.54	24.50	24.49
		1	40	24.42	24.52	24.40
		1	77	24.48	24.55	24.49
		36	0	23.88	23.89	23.83
		36	22	24.21	24.33	24.23
		36	43	23.84	23.89	23.78
		75	0	23.86	23.86	23.88
15M	QPSK	1	1	24.54	24.54	24.58
		1	40	24.44	24.42	24.43
		1	77	24.37	24.42	24.34
		36	0	23.46	23.47	23.48
		36	22	24.33	24.38	24.28
		36	43	23.33	23.37	23.36
		75	0	23.55	23.53	23.43
15M	16QAM	1	1	23.31	23.39	23.29
15M	64QAM	1	1	21.90	21.93	21.87
15M	256QAM	1	1	19.81	19.84	19.88

NR Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133600	136100	138600
		Frequency (MHz)		668	680.5	693
10M	$\pi/2$ BPSK	1	1	24.47	24.58	24.43
		1	26	24.42	24.51	24.46
		1	50	24.46	24.50	24.42
		25	0	23.86	23.87	23.90
		25	14	24.24	24.34	24.24
		25	27	23.86	23.91	23.78
		50	0	23.81	23.85	23.86
10M	QPSK	1	1	24.50	24.58	24.58
		1	26	24.45	24.41	24.35
		1	50	24.43	24.49	24.41
		25	0	23.52	23.52	23.49
		25	14	24.38	24.38	24.29
		25	27	23.35	23.36	23.33
		50	0	23.48	23.56	23.44
10M	16QAM	1	1	23.28	23.36	23.34
10M	64QAM	1	1	21.87	21.92	21.84
10M	256QAM	1	1	19.80	19.86	19.87
BW	MCS Index	Channel		133100	136100	139100
		Frequency (MHz)		665.5	680.5	695.5
5M	$\pi/2$ BPSK	1	1	24.54	24.57	24.48
		1	13	24.43	24.44	24.38
		1	23	24.51	24.50	24.40
		12	0	23.86	23.93	23.83
		12	7	24.30	24.28	24.27
		12	13	23.81	23.83	23.81
		25	0	23.81	23.88	23.84
5M	QPSK	1	1	24.50	24.53	24.56
		1	13	24.41	24.44	24.39
		1	23	24.45	24.46	24.41
		12	0	23.51	23.50	23.44
		12	7	24.34	24.34	24.38
		12	13	23.39	23.33	23.34
		25	0	23.48	23.56	23.47
5M	16QAM	1	1	23.34	23.38	23.33
5M	64QAM	1	1	21.95	21.95	21.83
5M	256QAM	1	1	19.81	19.85	19.79

NR Band 77						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		650000	656000	662000
		Frequency (MHz)		3750	3840	3930
100M	$\pi/2$ BPSK	1	1	24.07	24.01	23.98
		1	137	24.00	23.99	23.96
		1	271	23.99	24.03	24.01
		135	0	23.63	23.62	23.53
		135	69	24.03	23.92	23.91
		135	138	23.54	23.48	23.44
		270	0	23.53	23.45	23.40
100M	QPSK	1	1	24.12	24.09	24.08
		1	137	24.00	24.02	23.93
		1	271	24.01	24.09	23.98
		135	0	23.15	23.12	23.01
		135	69	23.99	24.03	23.97
		135	138	23.04	23.10	23.02
		270	0	22.93	22.89	22.97
100M	16QAM	1	1	23.00	22.94	22.89
100M	64QAM	1	1	21.53	21.54	21.48
100M	256QAM	1	1	19.54	19.51	19.50
BW	MCS Index	Channel		649668	656000	662332
		Frequency (MHz)		3745.02	3840	3934.98
90M	$\pi/2$ BPSK	1	1	24.02	24.06	24.03
		1	123	23.97	24.01	24.00
		1	243	24.02	24.00	24.00
		120	0	23.63	23.55	23.59
		120	63	24.02	24.02	23.94
		120	125	23.53	23.56	23.46
		243	0	23.49	23.51	23.49
90M	QPSK	1	1	24.06	24.07	24.08
		1	123	23.99	24.06	24.00
		1	243	24.04	24.09	23.96
		120	0	23.14	23.15	23.01
		120	63	23.98	24.00	24.01
		120	125	23.07	23.09	23.05
		243	0	22.92	22.92	22.88
90M	16QAM	1	1	22.99	22.93	22.93
90M	64QAM	1	1	21.57	21.56	21.49
90M	256QAM	1	1	19.56	19.49	19.49

NR Band 77						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		649334	656000	662666
		Frequency (MHz)		3740.01	3840	3939.99
80M	$\pi/2$ BPSK	1	1	23.99	24.04	23.99
		1	109	24.03	24.01	23.91
		1	215	24.06	24.03	23.97
		108	0	23.62	23.58	23.51
		108	55	24.00	23.99	23.96
		108	109	23.46	23.54	23.43
		216	0	23.45	23.54	23.48
80M	QPSK	1	1	24.06	24.10	24.09
		1	109	24.07	24.03	23.95
		1	215	24.10	24.09	23.98
		108	0	23.13	23.12	23.09
		108	55	24.01	23.97	23.98
		108	109	23.09	23.11	23.06
		216	0	22.99	22.90	22.90
80M	16QAM	1	1	22.92	22.91	22.88
80M	64QAM	1	1	21.59	21.53	21.55
80M	256QAM	1	1	19.57	19.50	19.44
BW	MCS Index	Channel		649000	6560000	663000
		Frequency (MHz)		3735	3840	3945
70M	$\pi/2$ BPSK	1	1	24.06	24.00	23.93
		1	95	24.01	23.98	23.94
		1	187	23.97	24.00	24.00
		90	0	23.55	23.60	23.50
		90	50	24.00	23.96	24.00
		90	99	23.55	23.52	23.41
		180	0	23.54	23.46	23.43
70M	QPSK	1	1	24.15	24.15	24.09
		1	95	23.99	23.98	23.99
		1	187	24.04	24.05	23.99
		90	0	23.12	23.11	23.10
		90	50	24.00	23.97	24.00
		90	99	23.10	23.12	23.06
		180	0	22.93	22.93	22.95
70M	16QAM	1	1	22.94	22.94	22.93
70M	64QAM	1	1	21.57	21.61	21.49
70M	256QAM	1	1	19.56	19.49	19.44

NR Band 77						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		648668	656000	663332
		Frequency (MHz)		3730.02	3840	3949.98
60M	$\pi/2$ BPSK	1	1	24.00	24.03	24.03
		1	81	23.99	24.05	24.00
		1	160	24.07	24.03	23.95
		81	0	23.64	23.54	23.49
		81	41	24.03	23.92	23.95
		81	81	23.50	23.55	23.48
		162	0	23.52	23.55	23.40
60M	QPSK	1	1	24.14	24.16	24.02
		1	81	24.02	24.02	23.98
		1	160	24.01	24.01	23.97
		81	0	23.11	23.12	23.11
		81	41	24.00	24.00	23.96
		81	81	23.14	23.07	23.03
		162	0	22.97	22.89	22.93
60M	16QAM	1	1	22.91	22.91	22.92
60M	64QAM	1	1	21.61	21.62	21.53
60M	256QAM	1	1	19.51	19.52	19.49
BW	MCS Index	Channel		648334	656000	663666
		Frequency (MHz)		3725.01	3840	3954.99
50M	$\pi/2$ BPSK	1	1	24.06	23.99	24.00
		1	67	24.02	24.00	23.95
		1	131	24.05	24.07	23.96
		64	0	23.62	23.61	23.57
		64	35	23.99	23.96	23.98
		64	69	23.54	23.52	23.45
		128	0	23.54	23.49	23.49
50M	QPSK	1	1	24.15	24.07	24.02
		1	67	24.00	24.08	23.97
		1	131	24.01	24.02	23.97
		64	0	23.11	23.12	23.03
		64	35	23.98	24.06	23.98
		64	69	23.04	23.13	23.08
		128	0	22.92	22.84	22.98
50M	16QAM	1	1	22.96	22.90	22.91
50M	64QAM	1	1	21.62	21.55	21.55
50M	256QAM	1	1	19.53	19.53	19.53

NR Band 77						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		648000	656000	664000
		Frequency (MHz)		3720	3840	3960
40M	$\pi/2$ BPSK	1	1	24.04	24.03	23.94
		1	53	23.97	23.98	23.92
		1	104	24.00	24.03	23.98
		50	0	23.54	23.55	23.53
		50	28	24.00	23.98	23.98
		50	56	23.54	23.53	23.51
		100	0	23.46	23.48	23.41
40M	QPSK	1	1	24.15	24.12	24.11
		1	53	23.98	24.08	23.94
		1	104	24.10	24.10	24.00
		50	0	23.06	23.07	23.08
		50	28	24.04	23.98	23.98
		50	56	23.13	23.05	23.05
		100	0	22.98	22.94	22.88
40M	16QAM	1	1	22.95	22.96	22.87
40M	64QAM	1	1	21.61	21.59	21.49
40M	256QAM	1	1	19.54	19.52	19.52
BW	MCS Index	Channel		647668	656000	664332
		Frequency (MHz)		3715.02	3840	3964.98
30M	$\pi/2$ BPSK	1	1	24.06	24.02	23.96
		1	39	23.97	23.96	23.92
		1	76	24.07	24.01	23.94
		36	0	23.62	23.54	23.55
		36	21	23.99	24.01	23.93
		36	42	23.47	23.47	23.50
		75	0	23.49	23.48	23.48
30M	QPSK	1	1	24.09	24.07	24.08
		1	39	23.99	24.05	23.99
		1	76	24.01	24.11	23.96
		36	0	23.09	23.10	23.03
		36	21	24.01	23.98	24.00
		36	42	23.04	23.12	23.03
		75	0	23.00	22.90	22.96
30M	16QAM	1	1	22.94	23.00	22.86
30M	64QAM	1	1	21.58	21.55	21.55
30M	256QAM	1	1	19.53	19.53	19.52

NR Band 77						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		647334	656000	664666
		Frequency (MHz)		3710.01	3840	3969.99
20M	$\pi/2$ BPSK	1	1	24.02	24.03	23.98
		1	26	23.97	23.97	23.99
		1	49	23.97	23.99	23.99
		25	0	23.61	23.58	23.52
		25	13	24.03	23.97	23.98
		25	26	23.48	23.56	23.49
		50	0	23.54	23.47	23.40
20M	QPSK	1	1	24.09	24.08	24.07
		1	26	24.07	24.06	23.93
		1	49	24.05	24.02	24.03
		25	0	23.14	23.15	23.04
		25	13	24.01	24.02	23.96
		25	26	23.04	23.08	23.06
		50	0	22.92	22.84	22.97
20M	16QAM	1	1	22.91	22.98	22.87
20M	64QAM	1	1	21.53	21.59	21.51
20M	256QAM	1	1	19.50	19.55	19.48

EIRP / ERP Power (dBm, dBm/5MHz for n30 only)

NR Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		505000	507000	509000
		Frequency (MHz)		2525	2535	2545
50M	$\pi/2$ BPSK	1	1	23.46	24.03	23.82
		1	135	23.21	23.80	23.45
		1	268	23.40	23.74	23.63
		135	0	23.05	23.56	23.16
		135	68	23.26	23.70	23.57
		135	135	23.00	23.41	23.29
		270	0	23.04	23.39	23.33
50M	QPSK	1	1	23.80	24.14	23.91
		1	135	23.24	23.74	23.55
		1	268	23.37	23.94	23.78
		135	0	22.53	23.00	22.90
		135	68	23.99	24.01	23.93
		135	135	22.53	22.92	22.87
		270	0	22.54	22.95	22.78
50M	16QAM	1	1	22.47	22.97	22.80
50M	64QAM	1	1	20.97	21.51	21.38
50M	256QAM	1	1	19.03	19.55	19.41
BW	MCS Index	Channel		504000	507000	510000
		Frequency (MHz)		2520	2535	2550
		40M	$\pi/2$ BPSK	1	1	23.48
1	108			23.24	23.75	23.50
1	214			23.39	23.80	23.58
108	0			23.02	23.51	23.26
108	54			23.24	23.74	23.50
108	108			23.03	23.40	23.35
216	0			23.04	23.49	23.31
40M	QPSK	1	1	23.77	24.13	23.85
		1	108	23.27	23.79	23.54
		1	214	23.30	23.95	23.72
		108	0	22.44	23.00	22.85
		108	54	23.93	23.99	24.00
		108	108	22.54	22.99	22.87
		216	0	22.54	23.01	22.80
40M	16QAM	1	1	22.47	22.92	22.82
40M	64QAM	1	1	21.00	21.51	21.37
40M	256QAM	1	1	19.05	19.53	19.35

NR Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		503000	507000	511000
		Frequency (MHz)		2515	2535	2555
30M	$\pi/2$ BPSK	1	1	23.42	24.03	23.84
		1	80	23.15	23.72	23.54
		1	158	23.36	23.71	23.63
		80	0	22.98	23.49	23.16
		80	40	23.20	23.77	23.48
		80	80	23.00	23.41	23.34
		160	0	23.03	23.46	23.27
30M	QPSK	1	1	23.70	24.11	23.82
		1	80	23.24	23.75	23.54
		1	158	23.31	23.85	23.78
		80	0	22.53	22.95	22.91
		80	40	23.97	23.99	23.94
		80	80	22.59	22.92	22.86
		160	0	22.55	23.04	22.81
30M	16QAM	1	1	22.45	22.93	22.89
30M	64QAM	1	1	21.05	21.52	21.38
30M	256QAM	1	1	19.00	19.50	19.33
BW	MCS Index	Channel		502500	507000	511500
		Frequency (MHz)		2512.5	2535	2557.5
25M	$\pi/2$ BPSK	1	1	23.49	24.03	23.82
		1	67	23.21	23.75	23.52
		1	131	23.35	23.74	23.62
		64	0	22.97	23.53	23.16
		64	35	23.16	23.79	23.55
		64	69	23.05	23.38	23.34
		128	0	23.06	23.44	23.34
25M	QPSK	1	1	23.75	24.04	23.80
		1	67	23.27	23.75	23.59
		1	131	23.40	23.87	23.75
		64	0	22.48	22.94	22.89
		64	35	23.96	24.07	23.97
		64	69	22.59	22.98	22.88
		128	0	22.56	22.96	22.76
25M	16QAM	1	1	22.48	22.99	22.84
25M	64QAM	1	1	21.01	21.52	21.37
25M	256QAM	1	1	19.05	19.56	19.37

NR Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		502000	507000	512000
		Frequency (MHz)		2510	2535	2560
20M	$\pi/2$ BPSK	1	1	23.50	23.99	23.81
		1	53	23.17	23.72	23.47
		1	104	23.34	23.72	23.58
		50	0	23.03	23.52	23.24
		50	28	23.21	23.73	23.53
		50	56	23.03	23.37	23.31
		100	0	23.05	23.47	23.26
20M	QPSK	1	1	23.76	24.07	23.88
		1	53	23.26	23.81	23.53
		1	104	23.33	23.94	23.77
		50	0	22.45	22.92	22.85
		50	28	23.98	24.00	23.98
		50	56	22.57	22.94	22.91
		100	0	22.52	22.99	22.83
20M	16QAM	1	1	22.50	22.94	22.88
20M	64QAM	1	1	20.99	21.57	21.43
20M	256QAM	1	1	18.97	19.52	19.41
BW	MCS Index	Channel		501500	507000	512500
		Frequency (MHz)		2507.5	2535	2562.5
15M	$\pi/2$ BPSK	1	1	23.42	23.94	23.82
		1	40	23.19	23.81	23.49
		1	77	23.35	23.81	23.65
		36	0	23.02	23.58	23.22
		36	22	23.21	23.78	23.53
		36	43	23.01	23.41	23.36
		75	0	23.02	23.41	23.34
15M	QPSK	1	1	23.77	24.05	23.84
		1	40	23.19	23.72	23.56
		1	77	23.30	23.95	23.77
		36	0	22.44	22.97	22.87
		36	22	23.92	24.06	24.01
		36	43	22.57	22.96	22.93
		75	0	22.57	22.97	22.84
15M	16QAM	1	1	22.42	23.00	22.87
15M	64QAM	1	1	21.02	21.54	21.44
15M	256QAM	1	1	19.00	19.48	19.42

NR Band 7						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		501000	507000	513000
		Frequency (MHz)		2505	2535	2565
10M	$\pi/2$ BPSK	1	1	23.49	23.98	23.80
		1	26	23.21	23.73	23.54
		1	50	23.37	23.81	23.57
		25	0	23.02	23.56	23.26
		25	14	23.16	23.77	23.48
		25	27	22.98	23.46	23.36
		50	0	23.01	23.48	23.31
10M	QPSK	1	1	23.72	24.05	23.90
		1	26	23.26	23.72	23.57
		1	50	23.39	23.91	23.73
		25	0	22.46	22.91	22.92
		25	14	23.94	24.07	23.95
		25	27	22.53	22.96	22.87
		50	0	22.53	23.04	22.80
10M	16QAM	1	1	22.44	22.90	22.87
10M	64QAM	1	1	20.99	21.53	21.44
10M	256QAM	1	1	19.01	19.49	19.34
BW	MCS Index	Channel		500500	507000	513500
		Frequency (MHz)		2502.5	2535	2567.5
5M	$\pi/2$ BPSK	1	1	23.44	24.02	23.84
		1	13	23.22	23.79	23.47
		1	23	23.36	23.78	23.65
		12	0	22.96	23.54	23.21
		12	7	23.18	23.76	23.50
		12	13	23.05	23.38	23.31
		25	0	23.00	23.43	23.27
5M	QPSK	1	1	23.76	24.13	23.86
		1	13	23.19	23.78	23.55
		1	23	23.31	23.87	23.74
		12	0	22.50	22.99	22.89
		12	7	23.94	24.02	23.97
		12	13	22.58	23.01	22.91
		25	0	22.48	23.02	22.80
5M	16QAM	1	1	22.47	22.99	22.84
5M	64QAM	1	1	20.98	21.53	21.40
5M	256QAM	1	1	19.05	19.53	19.34

NR Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		141300	141500	141700
		Frequency (MHz)		706.5	707.5	708.5
15M	$\pi/2$ BPSK	1	1	20.39	20.57	20.48
		1	40	20.43	20.48	20.45
		1	77	20.30	20.57	20.31
		36	0	19.67	19.91	19.82
		36	22	20.38	20.50	20.40
		36	43	19.70	19.98	19.78
		75	0	19.74	19.96	19.86
15M	QPSK	1	1	20.54	20.64	20.54
		1	40	20.48	20.58	20.47
		1	77	20.45	20.55	20.39
		36	0	19.26	19.58	19.36
		36	22	20.38	20.60	20.48
		36	43	19.23	19.55	19.37
		75	0	19.23	19.42	19.41
15M	16QAM	1	1	19.15	19.58	19.30
15M	64QAM	1	1	17.64	17.98	17.77
15M	256QAM	1	1	15.68	16.07	15.83
BW	MCS Index	Channel		140800	141500	142200
		Frequency (MHz)		704	707.5	711
10M	$\pi/2$ BPSK	1	1	20.45	20.57	20.50
		1	26	20.36	20.47	20.46
		1	50	20.30	20.53	20.36
		25	0	19.65	19.95	19.80
		25	14	20.36	20.49	20.45
		25	27	19.76	20.01	19.74
		50	0	19.75	19.93	19.85
10M	QPSK	1	1	20.50	20.58	20.58
		1	26	20.39	20.63	20.50
		1	50	20.46	20.56	20.38
		25	0	19.23	19.58	19.45
		25	14	20.39	20.60	20.52
		25	27	19.27	19.60	19.40
		50	0	19.28	19.47	19.39
10M	16QAM	1	1	19.16	19.49	19.30
10M	64QAM	1	1	17.64	18.04	17.82
10M	256QAM	1	1	15.69	16.07	15.80

NR Band 12						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		140300	141500	142700
		Frequency (MHz)		701.5	707.5	713.5
5M	$\pi/2$ BPSK	1	1	20.41	20.53	20.49
		1	13	20.38	20.46	20.45
		1	23	20.31	20.54	20.35
		12	0	19.65	20.01	19.89
		12	7	20.37	20.53	20.40
		12	13	19.73	19.99	19.78
		25	0	19.69	19.97	19.83
5M	QPSK	1	1	20.53	20.59	20.56
		1	13	20.39	20.64	20.53
		1	23	20.43	20.60	20.40
		12	0	19.26	19.56	19.45
		12	7	20.40	20.62	20.49
		12	13	19.21	19.53	19.41
		25	0	19.30	19.48	19.38
5M	16QAM	1	1	19.22	19.56	19.30
5M	64QAM	1	1	17.72	18.05	17.81
5M	256QAM	1	1	15.67	16.00	15.84

NR Band 13						
BW	MCS Index	RB Size	RB Offset	Mid		
		Channel		156400		
		Frequency (MHz)		782		
10M	$\pi/2$ BPSK	1	1	17.11		
		1	26	17.09		
		1	50	17.13		
		25	0	16.43		
		25	14	17.12		
		25	27	16.91		
		50	0	17.05		
10M	QPSK	1	1	17.15		
		1	26	17.10		
		1	50	17.11		
		25	0	16.58		
		25	14	17.06		
		25	27	16.46		
		50	0	16.56		
10M	16QAM	1	1	16.18		
10M	64QAM	1	1	15.18		
10M	256QAM	1	1	13.68		
BW	MCS Index	Channel		155900	156400	156900
		Frequency (MHz)		779.5	782	784.5
5M	$\pi/2$ BPSK	1	1	17.11	17.05	17.13
		1	13	17.05	17.09	17.07
		1	23	17.02	17.12	17.07
		12	0	17.09	16.36	16.43
		12	7	16.33	17.03	17.10
		12	13	17.04	16.82	16.87
		25	0	16.82	17.05	17.03
5M	QPSK	1	1	16.97	17.10	17.12
		1	13	17.12	17.03	17.05
		1	23	17.04	17.10	17.01
		12	0	17.05	16.51	16.49
		12	7	16.52	17.01	16.96
		12	13	17.04	16.38	16.37
		25	0	16.46	16.55	16.55
5M	16QAM	1	1	16.13	16.18	16.15
5M	64QAM	1	1	15.11	15.18	15.09
5M	256QAM	1	1	13.63	13.68	13.60

NR Band 30						
BW	MCS Index	RB Size	RB Offset	Mid		
		Channel		462000		
		Frequency (MHz)		2310		
10M	$\pi/2$ BPSK	1	1	22.58		
		1	26	22.64		
		1	50	22.52		
		25	0	22.07		
		25	14	22.44		
		25	27	22.06		
		50	0	22.12		
10M	QPSK	1	1	22.57		
		1	26	22.54		
		1	50	22.51		
		25	0	21.59		
		25	14	22.56		
		25	27	21.63		
		50	0	21.68		
10M	16QAM	1	1	21.61		
10M	64QAM	1	1	19.16		
10M	256QAM	1	1	18.13		
BW	MCS Index	Channel		461500	462000	462500
		Frequency (MHz)		2307.5	2310	2312.5
5M	$\pi/2$ BPSK	1	1	22.58	22.53	22.45
		1	13	22.60	22.47	22.52
		1	23	22.54	22.47	22.44
		12	0	22.01	21.99	21.98
		12	7	22.55	22.47	22.49
		12	13	22.03	21.97	21.96
		25	0	22.12	22.07	22.06
5M	QPSK	1	1	22.57	22.51	22.53
		1	13	22.51	22.47	22.53
		1	23	22.56	22.45	22.43
		12	0	21.59	21.58	21.58
		12	7	22.50	22.43	22.43
		12	13	21.59	21.55	21.54
		25	0	21.59	21.55	21.53
5M	16QAM	1	1	21.61	22.54	22.51
5M	64QAM	1	1	20.14	20.03	20.16
5M	256QAM	1	1	18.13	18.07	18.07

NR Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		518000	519000	520000
		Frequency (MHz)		2590	2595	2600
40M	$\pi/2$ BPSK	1	1	24.53	24.63	24.54
		1	53	24.52	24.59	24.56
		1	104	24.52	24.49	24.54
		50	0	23.91	24.02	23.94
		50	28	24.55	24.46	24.46
		50	56	23.97	23.96	23.97
		100	0	24.01	23.96	23.94
40M	QPSK	1	1	24.70	24.59	24.58
		1	53	24.57	24.60	24.64
		1	104	24.56	24.58	24.60
		50	0	23.53	23.55	23.46
		50	28	24.57	24.53	24.57
		50	56	23.55	23.38	23.53
		100	0	23.60	23.54	23.52
40M	16QAM	1	1	23.45	23.48	23.57
40M	64QAM	1	1	22.09	22.03	21.98
40M	256QAM	1	1	20.02	20.00	20.03
BW	MCS Index	Channel		517000	519000	521000
		Frequency (MHz)		2585	2595	2605
30M	$\pi/2$ BPSK	1	1	24.56	24.56	24.58
		1	39	24.54	24.57	24.51
		1	76	24.58	24.43	24.56
		36	0	23.93	24.00	23.87
		36	21	24.55	24.47	24.44
		36	42	24.03	23.90	23.95
		75	0	24.08	23.92	23.96
30M	QPSK	1	1	24.65	24.63	24.64
		1	39	24.59	24.58	24.56
		1	76	24.62	24.52	24.54
		36	0	23.54	23.52	23.50
		36	21	24.59	24.59	24.56
		36	42	23.53	23.41	23.58
		75	0	23.59	23.50	23.56
30M	16QAM	1	1	23.44	23.55	23.48
30M	64QAM	1	1	22.08	22.08	21.99
30M	256QAM	1	1	20.00	19.94	20.08

NR Band 38						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		516000	519000	522000
		Frequency (MHz)		2580	2595	2610
20M	$\pi/2$ BPSK	1	1	24.60	24.58	24.62
		1	26	24.59	24.55	24.50
		1	49	24.51	24.47	24.54
		25	0	23.92	23.98	23.85
		25	13	24.60	24.40	24.42
		25	26	23.98	23.96	23.96
		50	0	24.09	23.98	24.01
20M	QPSK	1	1	24.60	24.62	24.60
		1	26	24.58	24.54	24.59
		1	49	24.56	24.49	24.63
		25	0	23.51	23.46	23.44
		25	13	24.61	24.49	24.54
		25	26	23.59	23.43	23.52
		50	0	23.55	23.47	23.61
20M	16QAM	1	1	23.47	23.53	23.50
20M	64QAM	1	1	22.12	22.02	22.01
20M	256QAM	1	1	20.01	20.00	20.04

NR Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		509202	518598	528000
		Frequency (MHz)		2546.01	2592.99	2640
100M	$\pi/2$ BPSK	1	1	27.77	27.92	27.58
		1	137	27.59	27.28	27.17
		1	271	27.63	27.48	27.01
		135	0	27.01	26.83	26.79
		135	69	27.39	27.76	27.39
		135	138	26.70	27.09	26.89
		270	0	26.67	27.40	26.91
100M	QPSK	1	1	27.60	27.82	27.19
		1	137	27.63	27.61	27.42
		1	271	27.59	27.71	27.30
		135	0	26.54	26.54	26.48
		135	69	27.55	27.48	27.49
		135	138	26.33	26.48	26.38
		270	0	26.33	26.72	26.34
100M	16QAM	1	1	26.48	26.53	26.34
100M	64QAM	1	1	24.69	25.22	24.59
100M	256QAM	1	1	22.96	22.97	22.63
BW	MCS Index	Channel		508200	518598	528996
		Frequency (MHz)		2541	2592.99	2644.98
90M	$\pi/2$ BPSK	1	1	27.66	27.55	27.33
		1	123	27.41	27.55	27.02
		1	243	27.43	27.40	27.22
		120	0	26.78	26.91	26.46
		120	63	27.35	27.45	26.91
		120	125	26.91	26.83	26.96
		243	0	26.89	26.87	26.76
90M	QPSK	1	1	27.51	27.62	27.21
		1	123	27.56	27.58	27.50
		1	243	27.53	27.58	27.13
		120	0	26.36	26.78	26.13
		120	63	27.52	27.48	27.33
		120	125	26.48	26.61	26.21
		243	0	26.65	26.79	26.37
90M	16QAM	1	1	26.46	26.38	26.45
90M	64QAM	1	1	24.80	24.88	24.84
90M	256QAM	1	1	23.20	22.72	22.47

NR Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		507204	518598	529998
		Frequency (MHz)		2536.02	2592.99	2649.99
80M	$\pi/2$ BPSK	1	1	27.64	27.48	27.06
		1	109	27.17	27.28	27.11
		1	215	27.51	27.68	27.14
		108	0	26.95	27.00	26.49
		108	55	27.59	27.39	27.24
		108	109	26.70	26.95	26.58
		216	0	27.04	27.38	26.75
80M	QPSK	1	1	27.62	27.49	27.39
		1	109	27.55	27.62	27.11
		1	215	27.32	27.33	27.32
		108	0	26.57	26.66	26.16
		108	55	27.54	27.48	27.23
		108	109	26.15	26.48	26.51
		216	0	26.26	26.89	26.45
80M	16QAM	1	1	26.12	26.28	25.84
80M	64QAM	1	1	24.42	24.57	24.16
80M	256QAM	1	1	22.53	22.46	22.20
BW	MCS Index	Channel		505200	518598	531996
		Frequency (MHz)		2526	2592.99	2659.98
60M	$\pi/2$ BPSK	1	1	27.73	27.89	27.46
		1	81	27.24	27.68	27.15
		1	160	27.21	27.16	27.20
		81	0	26.79	26.95	26.68
		81	41	27.27	27.62	26.94
		81	81	26.49	27.26	26.60
		162	0	26.98	26.88	26.54
60M	QPSK	1	1	27.73	27.69	27.01
		1	81	27.36	27.65	27.52
		1	160	27.59	27.16	27.17
		81	0	26.33	26.66	26.33
		81	41	27.50	27.62	27.05
		81	81	26.48	26.54	26.22
		162	0	26.30	26.51	26.61
60M	16QAM	1	1	26.33	26.57	26.16
60M	64QAM	1	1	24.79	24.97	24.42
60M	256QAM	1	1	23.06	23.20	22.48

NR Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		504204	518598	532998
		Frequency (MHz)		2521.02	2592.99	2664.99
50M	$\pi/2$ BPSK	1	1	27.71	27.84	27.12
		1	67	27.15	27.46	27.37
		1	131	27.40	27.70	26.93
		64	0	27.01	27.03	26.39
		64	35	27.60	27.52	27.44
		64	69	26.74	26.89	26.58
		128	0	26.55	27.39	26.79
50M	QPSK	1	1	27.86	27.76	27.55
		1	67	27.23	27.42	27.41
		1	131	27.40	27.64	27.38
		64	0	26.26	26.71	26.00
		64	35	27.32	27.34	27.40
		64	69	26.21	26.71	26.23
		128	0	26.60	26.59	26.03
50M	16QAM	1	1	26.71	26.71	26.31
50M	64QAM	1	1	24.74	24.75	24.60
50M	256QAM	1	1	23.01	23.03	22.87
BW	MCS Index	Channel		503202	518598	534000
		Frequency (MHz)		2516.01	2592.99	2670
40M	$\pi/2$ BPSK	1	1	27.52	27.81	27.00
		1	53	27.32	27.20	27.23
		1	104	27.35	27.57	27.20
		50	0	26.68	26.96	26.80
		50	28	27.78	27.69	27.31
		50	56	26.88	26.81	26.98
		100	0	26.75	27.35	26.84
40M	QPSK	1	1	27.74	27.74	27.42
		1	53	27.44	27.68	27.44
		1	104	27.33	27.40	27.01
		50	0	26.38	26.57	26.19
		50	28	27.37	27.61	27.14
		50	56	26.44	26.81	26.39
		100	0	26.51	26.86	26.10
40M	16QAM	1	1	26.19	26.74	26.13
40M	64QAM	1	1	25.04	24.88	24.61
40M	256QAM	1	1	22.69	22.81	22.57

NR Band 41						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		502200	518598	534996
		Frequency (MHz)		2511	2592.99	2674.98
30M	$\pi/2$ BPSK	1	1	27.30	27.75	27.14
		1	39	27.60	27.61	27.01
		1	76	27.51	27.18	27.24
		36	0	26.78	27.11	26.42
		36	21	27.57	27.68	26.93
		36	42	26.69	27.09	26.53
		75	0	26.68	26.95	26.63
30M	QPSK	1	1	27.59	27.59	27.08
		1	39	27.61	27.43	27.22
		1	76	27.23	27.13	27.37
		36	0	26.56	26.59	26.45
		36	21	27.78	27.79	27.15
		36	42	26.18	26.92	26.60
		75	0	26.26	26.72	26.28
30M	16QAM	1	1	26.49	26.85	26.31
30M	64QAM	1	1	25.14	25.24	24.70
30M	256QAM	1	1	22.57	23.06	22.44
BW	MCS Index	Channel		501204	518598	535998
		Frequency (MHz)		2506.02	2592.99	2679.99
		20M	$\pi/2$ BPSK	1	1	27.69
1	26			27.51	27.75	27.34
1	49			27.66	27.41	27.43
25	0			26.71	27.02	26.95
25	13			27.60	27.46	26.89
25	26			26.75	27.26	26.87
50	0			26.66	27.17	26.79
20M	QPSK	1	1	27.42	27.60	27.33
		1	26	27.62	27.47	26.91
		1	49	27.25	27.68	27.18
		25	0	26.08	26.50	26.34
		25	13	27.68	27.35	27.12
		25	26	26.41	26.78	26.66
		50	0	26.62	26.88	26.22
20M	16QAM	1	1	26.89	26.69	26.29
20M	64QAM	1	1	25.04	25.08	24.67
20M	256QAM	1	1	23.13	22.76	22.73

NR Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		346000	349000	352000
		Frequency (MHz)		1730	1745	1760
40M	$\pi/2$ BPSK	1	1	21.97	21.95	22.00
		1	108	22.00	22.05	21.93
		1	214	22.07	21.90	21.96
		108	0	21.49	21.47	21.43
		108	54	22.00	22.07	21.96
		108	108	21.59	21.49	21.40
		216	0	21.55	21.51	21.62
40M	QPSK	1	1	22.19	22.25	22.20
		1	108	22.05	22.06	21.97
		1	214	21.94	22.00	21.91
		108	0	21.16	21.16	21.19
		108	54	22.08	22.16	22.07
		108	108	21.01	20.97	21.09
		216	0	21.16	21.16	21.17
40M	16QAM	1	1	20.98	20.92	20.97
40M	64QAM	1	1	18.62	18.60	18.53
40M	256QAM	1	1	17.60	17.52	17.61
BW	MCS Index	Channel		345000	349000	353000
		Frequency (MHz)		1725	1745	1765
30M	$\pi/2$ BPSK	1	1	22.02	21.99	21.96
		1	80	22.08	21.97	22.00
		1	158	22.06	21.98	21.91
		80	0	21.48	21.44	21.42
		80	40	22.06	22.04	21.97
		80	80	21.56	21.57	21.46
		160	0	21.57	21.56	21.53
30M	QPSK	1	1	22.18	22.19	22.16
		1	80	22.06	21.98	21.94
		1	158	21.93	21.97	21.93
		80	0	21.13	21.16	21.18
		80	40	22.08	22.14	22.13
		80	80	21.10	21.03	21.04
		160	0	21.18	21.19	21.11
30M	16QAM	1	1	21.05	21.00	20.91
30M	64QAM	1	1	18.64	18.52	18.58
30M	256QAM	1	1	17.60	17.60	17.54

NR Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		344000	349000	354000
		Frequency (MHz)		1720	1745	1770
20M	$\pi/2$ BPSK	1	1	22.04	22.00	21.94
		1	53	22.03	22.02	21.98
		1	104	22.06	21.95	21.88
		50	0	21.54	21.42	21.51
		50	28	22.07	22.06	21.91
		50	56	21.50	21.52	21.49
		100	0	21.60	21.58	21.60
20M	QPSK	1	1	22.19	22.27	22.26
		1	53	22.08	22.04	21.97
		1	104	21.97	21.99	21.97
		50	0	21.18	21.25	21.14
		50	28	22.18	22.18	22.15
		50	56	21.08	20.96	21.04
		100	0	21.11	21.22	21.18
20M	16QAM	1	1	20.97	20.97	20.98
20M	64QAM	1	1	18.57	18.50	18.54
20M	256QAM	1	1	17.57	17.56	17.55
BW	MCS Index	Channel		343500	349000	354500
		Frequency (MHz)		1717.5	1745	1772.5
15M	$\pi/2$ BPSK	1	1	22.01	22.01	21.98
		1	40	22.03	22.06	21.99
		1	77	21.99	21.93	21.90
		36	0	21.50	21.47	21.49
		36	22	21.99	21.98	21.91
		36	43	21.56	21.52	21.44
		75	0	21.60	21.56	21.63
15M	QPSK	1	1	22.16	22.22	22.21
		1	40	22.05	22.05	21.95
		1	77	21.93	21.95	21.94
		36	0	21.23	21.21	21.13
		36	22	22.15	22.17	22.10
		36	43	21.06	20.95	21.10
		75	0	21.08	21.22	21.13
15M	16QAM	1	1	20.98	21.00	20.92
15M	64QAM	1	1	18.58	18.58	18.53
15M	256QAM	1	1	17.61	17.55	17.61

NR Band 66						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		343000	349000	355000
		Frequency (MHz)		1715	1745	1775
10M	$\pi/2$ BPSK	1	1	21.99	21.92	21.93
		1	26	22.10	22.05	22.02
		1	50	22.03	21.93	21.87
		25	0	21.46	21.45	21.52
		25	14	22.03	22.04	21.91
		25	27	21.51	21.48	21.43
		50	0	21.59	21.56	21.63
10M	QPSK	1	1	22.16	22.27	22.21
		1	26	22.09	21.97	22.02
		1	50	22.02	21.97	21.89
		25	0	21.19	21.22	21.10
		25	14	22.17	22.12	22.14
		25	27	21.02	20.96	21.01
		50	0	21.17	21.20	21.17
10M	16QAM	1	1	21.02	20.97	20.97
10M	64QAM	1	1	18.56	18.51	18.57
10M	256QAM	1	1	17.51	17.59	17.57
BW	MCS Index	Channel		342500	349000	355500
		Frequency (MHz)		1712.5	1745	1777.5
5M	$\pi/2$ BPSK	1	1	22.07	22.01	21.98
		1	13	22.09	22.06	22.03
		1	23	22.07	21.93	21.94
		12	0	21.46	21.42	21.44
		12	7	22.00	22.02	21.91
		12	13	21.53	21.56	21.41
		25	0	21.63	21.57	21.60
5M	QPSK	1	1	22.15	22.27	22.19
		1	13	22.00	22.01	21.97
		1	23	21.98	22.01	21.89
		12	0	21.13	21.22	21.16
		12	7	22.11	22.21	22.13
		12	13	21.10	21.03	21.07
		25	0	21.10	21.22	21.16
5M	16QAM	1	1	21.07	20.96	20.90
5M	64QAM	1	1	18.56	18.55	18.61
5M	256QAM	1	1	17.60	17.53	17.59

NR Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		134600	136100	137600
		Frequency (MHz)		673	680.5	688
20M	$\pi/2$ BPSK	1	1	16.61	16.69	16.63
		1	53	16.53	16.57	16.52
		1	104	16.56	16.64	16.54
		50	0	16.02	16.06	16.01
		50	28	16.41	16.35	16.39
		50	56	15.94	15.99	15.91
		100	0	15.91	15.96	15.90
20M	QPSK	1	1	16.66	16.70	16.59
		1	53	16.54	16.56	16.51
		1	104	16.52	16.60	16.55
		50	0	15.54	15.61	15.63
		50	28	16.45	16.50	16.39
		50	56	15.48	15.50	15.48
		100	0	15.56	15.66	15.63
20M	16QAM	1	1	15.44	15.48	15.39
20M	64QAM	1	1	14.02	14.01	14.03
20M	256QAM	1	1	11.96	11.96	11.90
BW	MCS Index	Channel		134100	136100	138100
		Frequency (MHz)		670.5	680.5	690.5
15M	$\pi/2$ BPSK	1	1	16.65	16.61	16.60
		1	40	16.53	16.63	16.51
		1	77	16.59	16.66	16.60
		36	0	15.99	16.00	15.94
		36	22	16.32	16.44	16.34
		36	43	15.95	16.00	15.89
		75	0	15.97	15.97	15.99
15M	QPSK	1	1	16.65	16.65	16.69
		1	40	16.55	16.53	16.54
		1	77	16.48	16.53	16.45
		36	0	15.57	15.58	15.59
		36	22	16.44	16.49	16.39
		36	43	15.44	15.48	15.47
		75	0	15.66	15.64	15.54
15M	16QAM	1	1	15.42	15.50	15.40
15M	64QAM	1	1	14.01	14.04	13.98
15M	256QAM	1	1	11.92	11.95	11.99

NR Band 71						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		133600	136100	138600
		Frequency (MHz)		668	680.5	693
10M	$\pi/2$ BPSK	1	1	16.58	16.69	16.54
		1	26	16.53	16.62	16.57
		1	50	16.57	16.61	16.53
		25	0	15.97	15.98	16.01
		25	14	16.35	16.45	16.35
		25	27	15.97	16.02	15.89
		50	0	15.92	15.96	15.97
10M	QPSK	1	1	16.61	16.69	16.69
		1	26	16.56	16.52	16.46
		1	50	16.54	16.60	16.52
		25	0	15.63	15.63	15.60
		25	14	16.49	16.49	16.40
		25	27	15.46	15.47	15.44
		50	0	15.59	15.67	15.55
10M	16QAM	1	1	15.39	15.47	15.45
10M	64QAM	1	1	13.98	14.03	13.95
10M	256QAM	1	1	11.91	11.97	11.98
BW	MCS Index	Channel		133100	136100	139100
		Frequency (MHz)		665.5	680.5	695.5
5M	$\pi/2$ BPSK	1	1	16.65	16.68	16.59
		1	13	16.54	16.55	16.49
		1	23	16.62	16.61	16.51
		12	0	15.97	16.04	15.94
		12	7	16.41	16.39	16.38
		12	13	15.92	15.94	15.92
		25	0	15.92	15.99	15.95
5M	QPSK	1	1	16.61	16.64	16.67
		1	13	16.52	16.55	16.50
		1	23	16.56	16.57	16.52
		12	0	15.62	15.61	15.55
		12	7	16.45	16.45	16.49
		12	13	15.50	15.44	15.45
		25	0	15.59	15.67	15.58
5M	16QAM	1	1	15.45	15.49	15.44
5M	64QAM	1	1	14.06	14.06	13.94
5M	256QAM	1	1	11.92	11.96	11.90

NR Band 77						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		650000	656000	662000
		Frequency (MHz)		3750	3840	3930
100M	$\pi/2$ BPSK	1	1	26.09	26.03	26.00
		1	137	26.02	26.01	25.98
		1	271	26.01	26.05	26.03
		135	0	25.65	25.64	25.55
		135	69	26.05	25.94	25.93
		135	138	25.56	25.50	25.46
		270	0	25.55	25.47	25.42
100M	QPSK	1	1	26.14	26.11	26.10
		1	137	26.02	26.04	25.95
		1	271	26.03	26.11	26.00
		135	0	25.17	25.14	25.03
		135	69	26.01	26.05	25.99
		135	138	25.06	25.12	25.04
		270	0	24.95	24.91	24.99
100M	16QAM	1	1	25.02	24.96	24.91
100M	64QAM	1	1	23.55	23.56	23.50
100M	256QAM	1	1	21.56	21.53	21.52
BW	MCS Index	Channel		649668	656000	662332
		Frequency (MHz)		3745.02	3840	3934.98
90M	$\pi/2$ BPSK	1	1	26.04	26.08	26.05
		1	123	25.99	26.03	26.02
		1	243	26.04	26.02	26.02
		120	0	25.65	25.57	25.61
		120	63	26.04	26.04	25.96
		120	125	25.55	25.58	25.48
		243	0	25.51	25.53	25.51
90M	QPSK	1	1	26.08	26.09	26.10
		1	123	26.01	26.08	26.02
		1	243	26.06	26.11	25.98
		120	0	25.16	25.17	25.03
		120	63	26.00	26.02	26.03
		120	125	25.09	25.11	25.07
		243	0	24.94	24.94	24.90
90M	16QAM	1	1	25.01	24.95	24.95
90M	64QAM	1	1	23.59	23.58	23.51
90M	256QAM	1	1	21.58	21.51	21.51

NR Band 77						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		649334	656000	662666
		Frequency (MHz)		3740.01	3840	3939.99
80M	$\pi/2$ BPSK	1	1	26.01	26.06	26.01
		1	109	26.05	26.03	25.93
		1	215	26.08	26.05	25.99
		108	0	25.64	25.60	25.53
		108	55	26.02	26.01	25.98
		108	109	25.48	25.56	25.45
		216	0	25.47	25.56	25.50
80M	QPSK	1	1	26.08	26.12	26.11
		1	109	26.09	26.05	25.97
		1	215	26.12	26.11	26.00
		108	0	25.15	25.14	25.11
		108	55	26.03	25.99	26.00
		108	109	25.11	25.13	25.08
		216	0	25.01	24.92	24.92
80M	16QAM	1	1	24.94	24.93	24.90
80M	64QAM	1	1	23.61	23.55	23.57
80M	256QAM	1	1	21.59	21.52	21.46
BW	MCS Index	Channel		649000	6560000	663000
		Frequency (MHz)		3735	3840	3945
70M	$\pi/2$ BPSK	1	1	26.08	26.02	25.95
		1	95	26.03	26.00	25.96
		1	187	25.99	26.02	26.02
		90	0	25.57	25.62	25.52
		90	50	26.02	25.98	26.02
		90	99	25.57	25.54	25.43
		180	0	25.56	25.48	25.45
70M	QPSK	1	1	26.17	26.17	26.11
		1	95	26.01	26.00	26.01
		1	187	26.06	26.07	26.01
		90	0	25.14	25.13	25.12
		90	50	26.02	25.99	26.02
		90	99	25.12	25.14	25.08
		180	0	24.95	24.95	24.97
70M	16QAM	1	1	24.96	24.96	24.95
70M	64QAM	1	1	23.59	23.63	23.51
70M	256QAM	1	1	21.58	21.51	21.46

NR Band 77						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		648668	656000	663332
		Frequency (MHz)		3730.02	3840	3949.98
60M	$\pi/2$ BPSK	1	1	26.02	26.05	26.05
		1	81	26.01	26.07	26.02
		1	160	26.09	26.05	25.97
		81	0	25.66	25.56	25.51
		81	41	26.05	25.94	25.97
		81	81	25.52	25.57	25.50
		162	0	25.54	25.57	25.42
60M	QPSK	1	1	26.16	26.18	26.04
		1	81	26.04	26.04	26.00
		1	160	26.03	26.03	25.99
		81	0	25.13	25.14	25.13
		81	41	26.02	26.02	25.98
		81	81	25.16	25.09	25.05
		162	0	24.99	24.91	24.95
60M	16QAM	1	1	24.93	24.93	24.94
60M	64QAM	1	1	23.63	23.64	23.55
60M	256QAM	1	1	21.53	21.54	21.51
BW	MCS Index	Channel		648334	656000	663666
		Frequency (MHz)		3725.01	3840	3954.99
50M	$\pi/2$ BPSK	1	1	26.08	26.01	26.02
		1	67	26.04	26.02	25.97
		1	131	26.07	26.09	25.98
		64	0	25.64	25.63	25.59
		64	35	26.01	25.98	26.00
		64	69	25.56	25.54	25.47
		128	0	25.56	25.51	25.51
50M	QPSK	1	1	26.17	26.09	26.04
		1	67	26.02	26.10	25.99
		1	131	26.03	26.04	25.99
		64	0	25.13	25.14	25.05
		64	35	26.00	26.08	26.00
		64	69	25.06	25.15	25.10
		128	0	24.94	24.86	25.00
50M	16QAM	1	1	24.98	24.92	24.93
50M	64QAM	1	1	23.64	23.57	23.57
50M	256QAM	1	1	21.55	21.55	21.55

NR Band 77						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		648000	656000	664000
		Frequency (MHz)		3720	3840	3960
40M	$\pi/2$ BPSK	1	1	26.06	26.05	25.96
		1	53	25.99	26.00	25.94
		1	104	26.02	26.05	26.00
		50	0	25.56	25.57	25.55
		50	28	26.02	26.00	26.00
		50	56	25.56	25.55	25.53
		100	0	25.48	25.50	25.43
40M	QPSK	1	1	26.17	26.14	26.13
		1	53	26.00	26.10	25.96
		1	104	26.12	26.12	26.02
		50	0	25.08	25.09	25.10
		50	28	26.06	26.00	26.00
		50	56	25.15	25.07	25.07
		100	0	25.00	24.96	24.90
40M	16QAM	1	1	24.97	24.98	24.89
40M	64QAM	1	1	23.63	23.61	23.51
40M	256QAM	1	1	21.56	21.54	21.54
BW	MCS Index	Channel		647668	656000	664332
		Frequency (MHz)		3715.02	3840	3964.98
30M	$\pi/2$ BPSK	1	1	26.08	26.04	25.98
		1	39	25.99	25.98	25.94
		1	76	26.09	26.03	25.96
		36	0	25.64	25.56	25.57
		36	21	26.01	26.03	25.95
		36	42	25.49	25.49	25.52
		75	0	25.51	25.50	25.50
30M	QPSK	1	1	26.11	26.09	26.10
		1	39	26.01	26.07	26.01
		1	76	26.03	26.13	25.98
		36	0	25.11	25.12	25.05
		36	21	26.03	26.00	26.02
		36	42	25.06	25.14	25.05
		75	0	25.02	24.92	24.98
30M	16QAM	1	1	24.96	25.02	24.88
30M	64QAM	1	1	23.60	23.57	23.57
30M	256QAM	1	1	21.55	21.55	21.54

NR Band 77						
BW	MCS Index	RB Size	RB Offset	Low	Mid	High
		Channel		647334	656000	664666
		Frequency (MHz)		3710.01	3840	3969.99
20M	$\pi/2$ BPSK	1	1	26.04	26.05	26.00
		1	26	25.99	25.99	26.01
		1	49	25.99	26.01	26.01
		25	0	25.63	25.60	25.54
		25	13	26.05	25.99	26.00
		25	26	25.50	25.58	25.51
		50	0	25.56	25.49	25.42
20M	QPSK	1	1	26.11	26.10	26.09
		1	26	26.09	26.08	25.95
		1	49	26.07	26.04	26.05
		25	0	25.16	25.17	25.06
		25	13	26.03	26.04	25.98
		25	26	25.06	25.10	25.08
		50	0	24.94	24.86	24.99
20M	16QAM	1	1	24.93	25.00	24.89
20M	64QAM	1	1	23.55	23.61	23.53
20M	256QAM	1	1	21.52	21.57	21.50

4.2 Modulation Characteristics Measurement

4.2.1 Limits of Modulation Characteristics

N/A

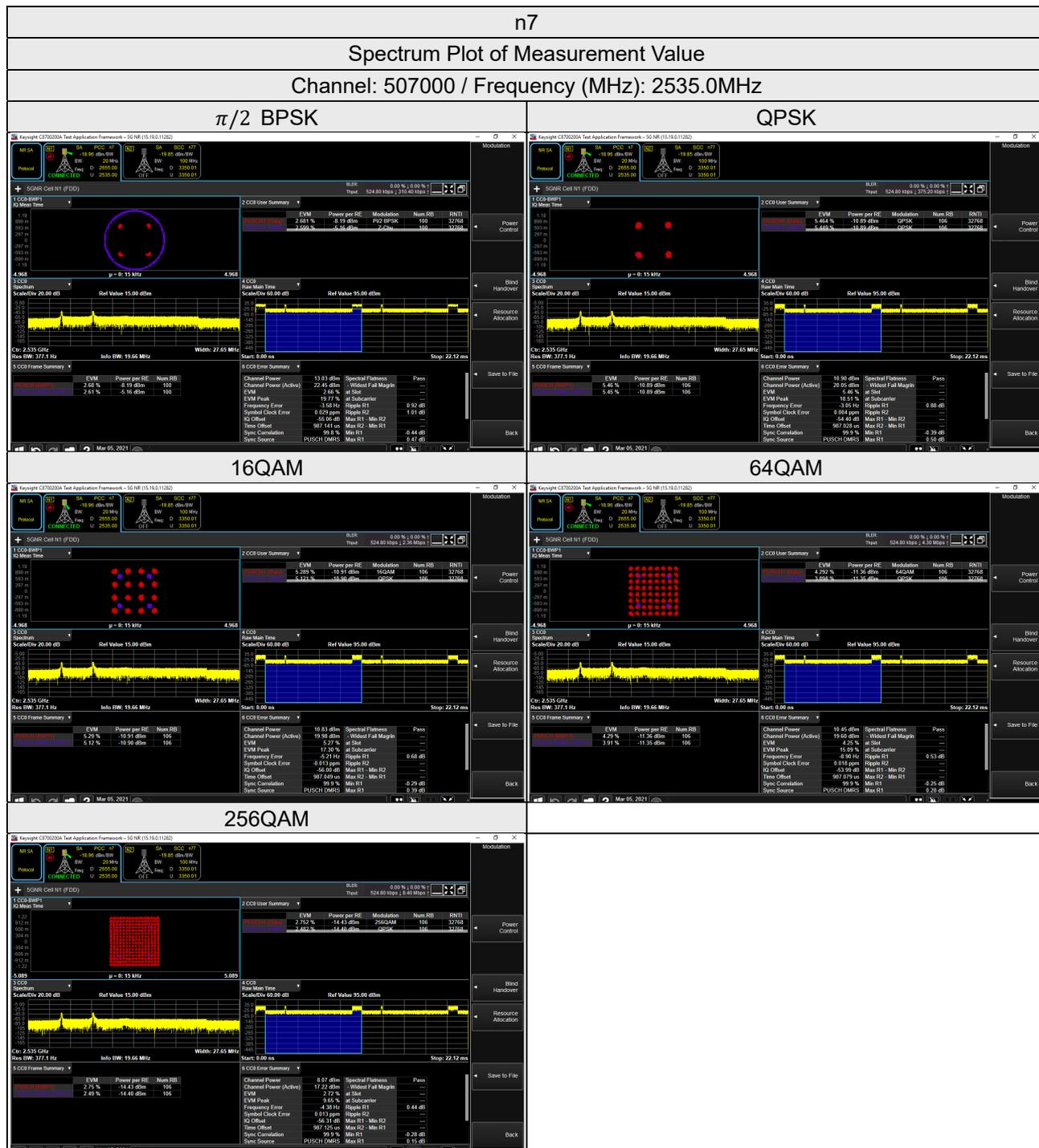
4.2.2 Test Procedure

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



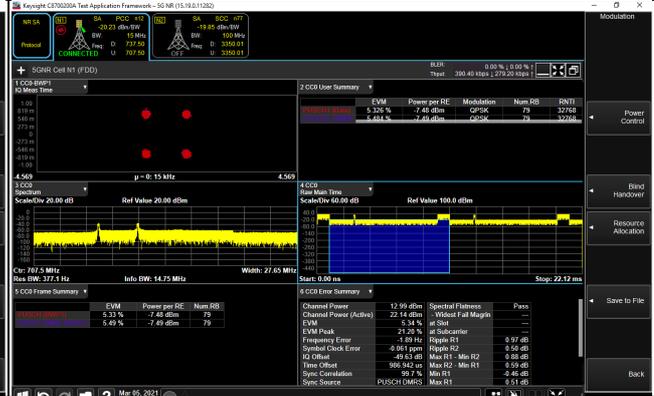
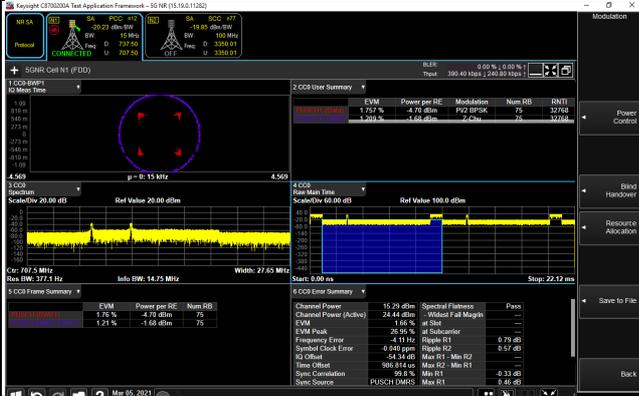
n12

Spectrum Plot of Measurement Value

Channel: 141500 / Frequency (MHz): 707.5MHz

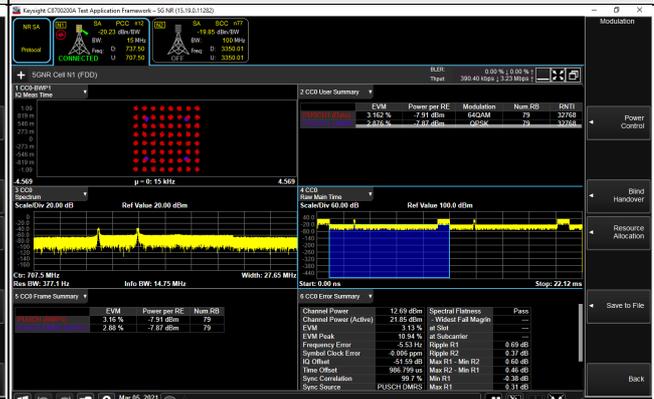
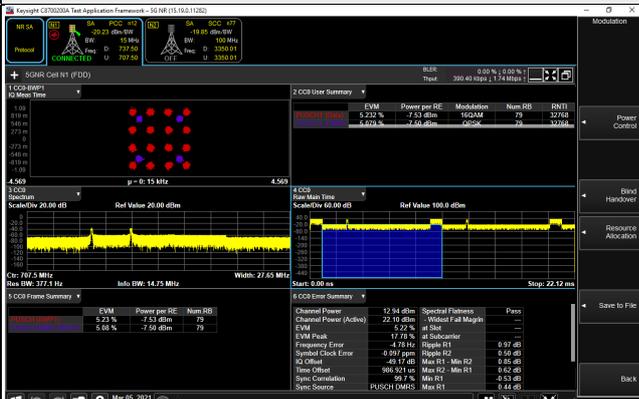
$\pi/2$ BPSK

QPSK

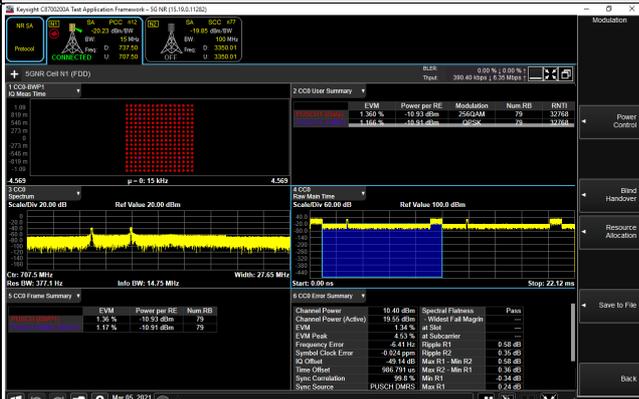


16QAM

64QAM



256QAM



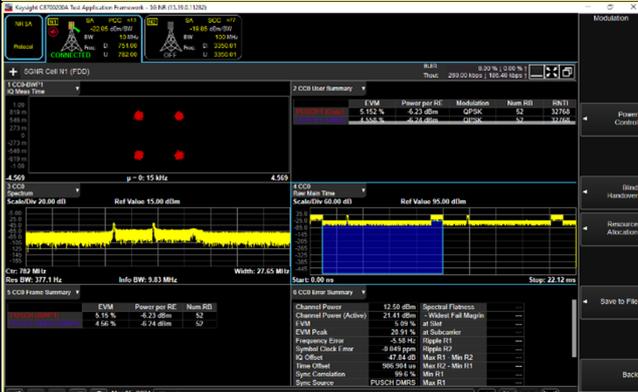
n13

Spectrum Plot of Measurement Value

Channel: 156400 / Frequency (MHz): 782.0MHz

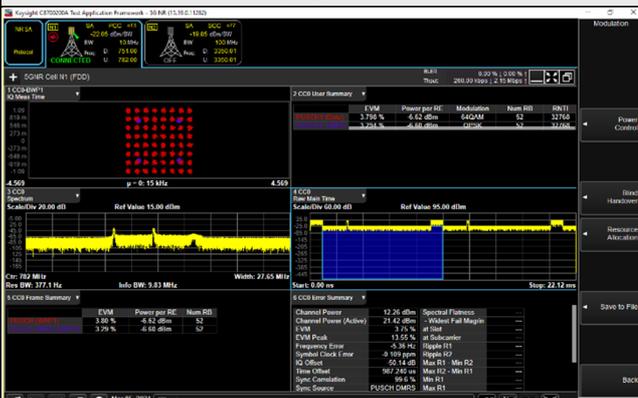
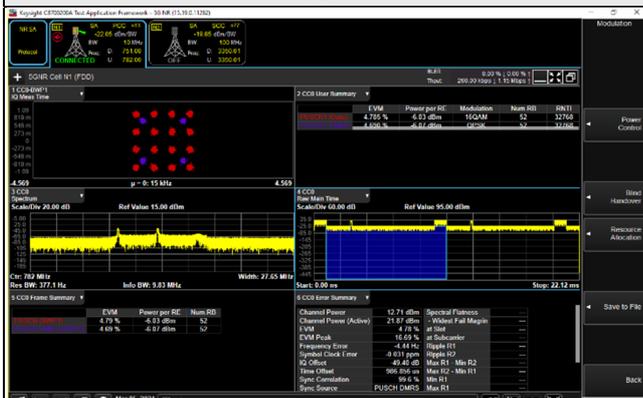
$\pi/2$ BPSK

QPSK

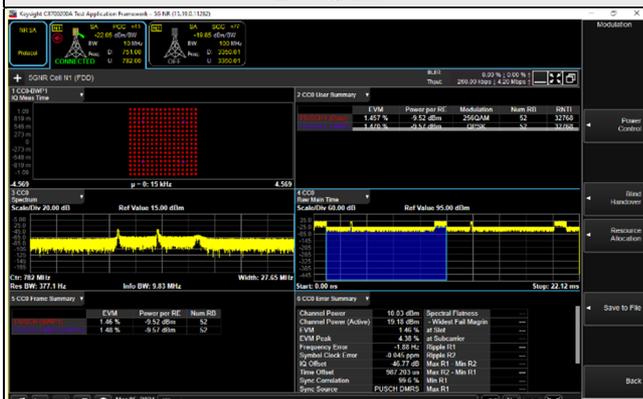


16QAM

64QAM



256QAM



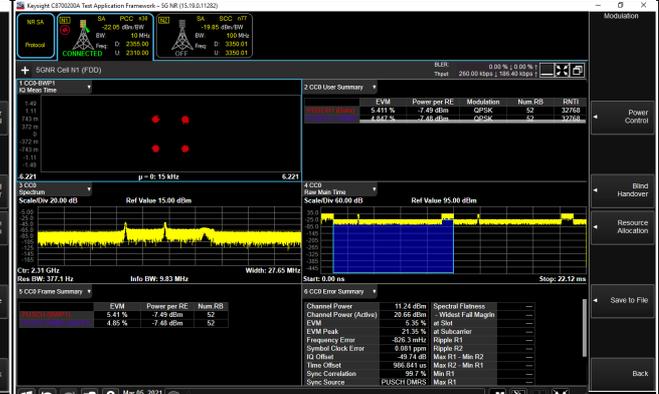
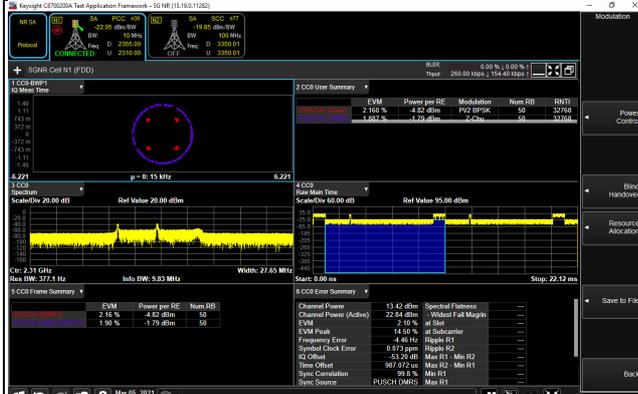
n30

Spectrum Plot of Measurement Value

Channel: 462000 / Frequency (MHz): 2310.0MHz

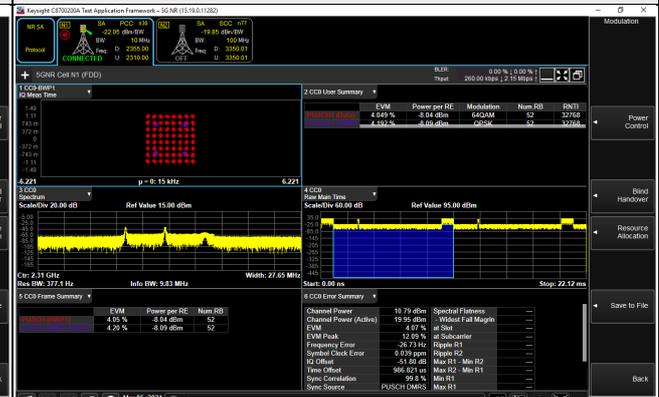
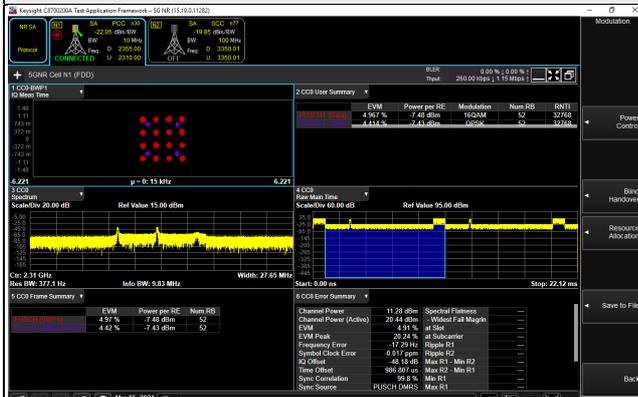
$\pi/2$ BPSK

QPSK



16QAM

64QAM



256QAM



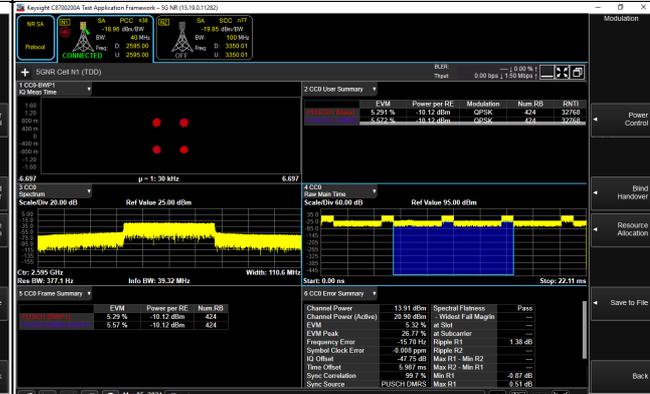
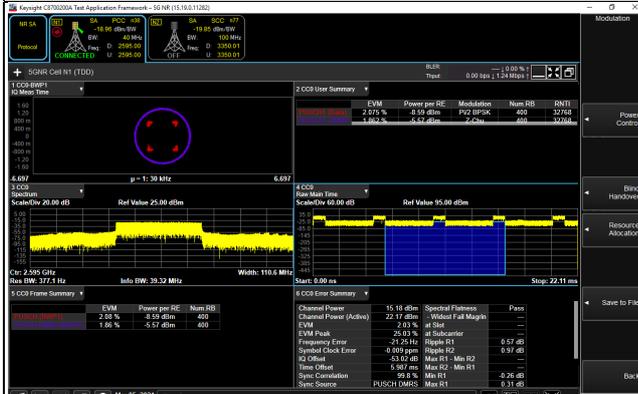
n38

Spectrum Plot of Measurement Value

Channel: 519000 / Frequency (MHz): 2595.0MHz

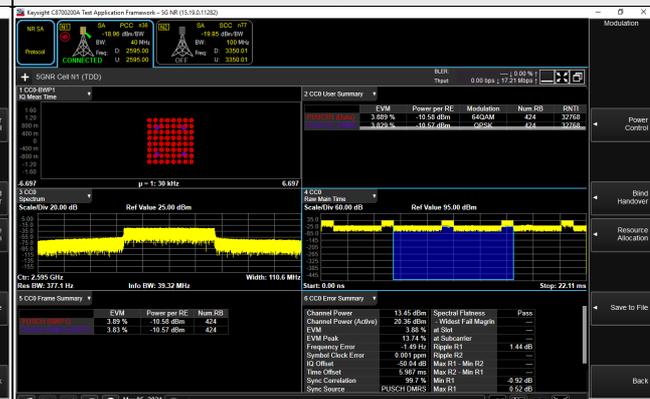
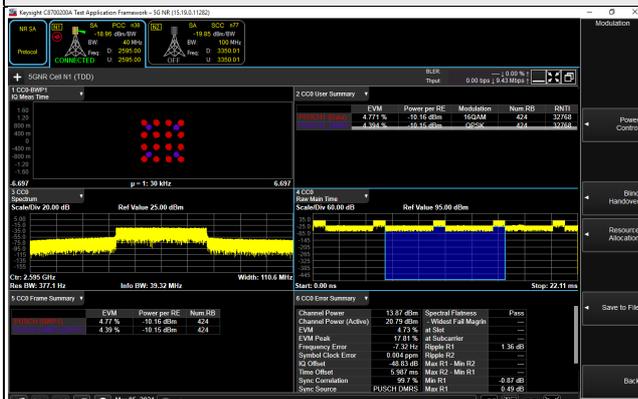
$\pi/2$ BPSK

QPSK

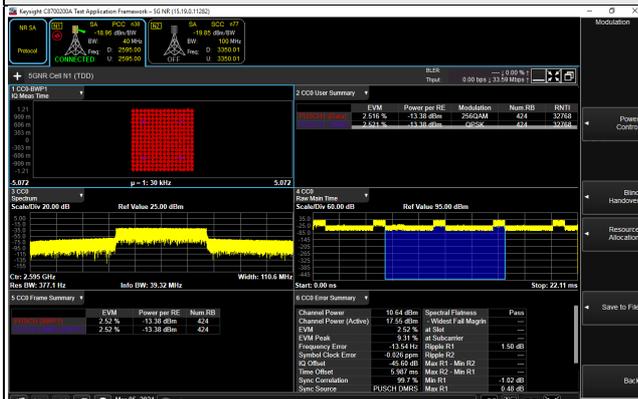


16QAM

64QAM



256QAM



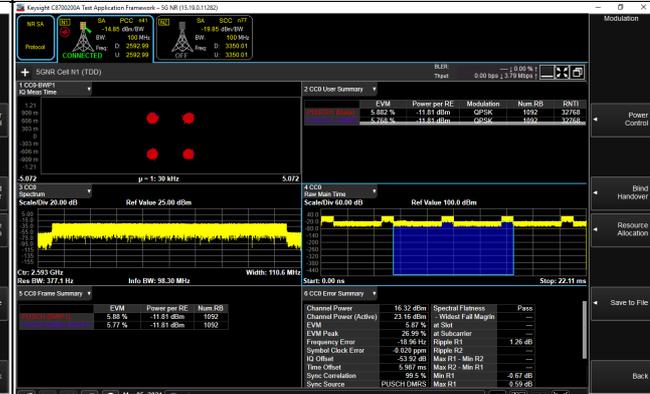
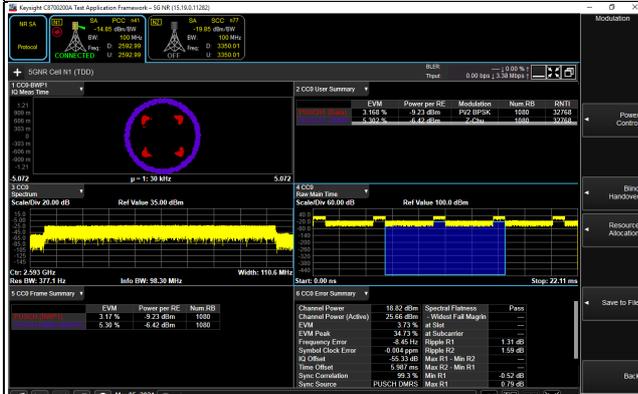
n41

Spectrum Plot of Measurement Value

Channel: 518598 / Frequency (MHz): 2592.99MHz

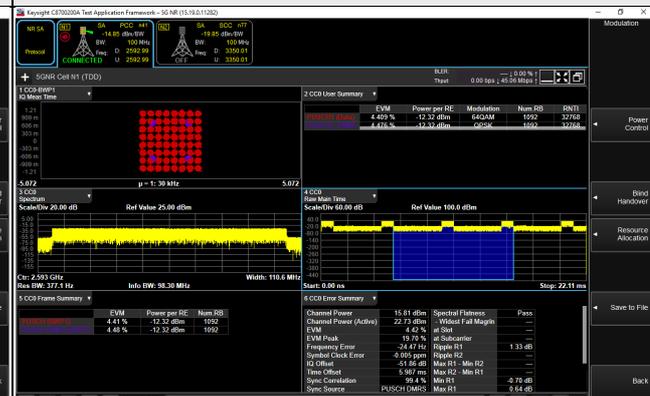
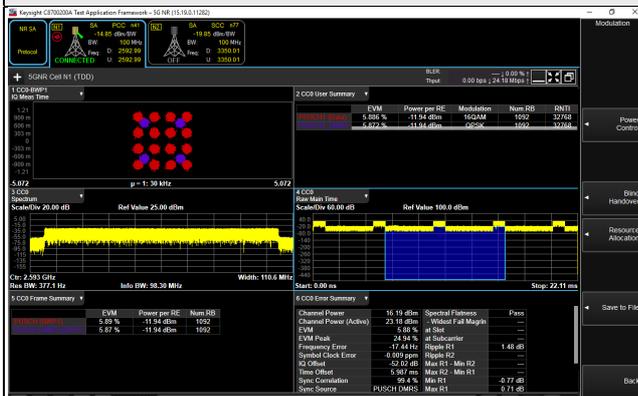
$\pi/2$ BPSK

QPSK

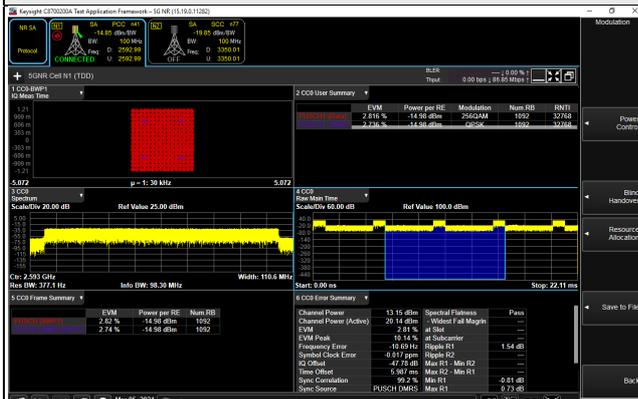


16QAM

64QAM



256QAM



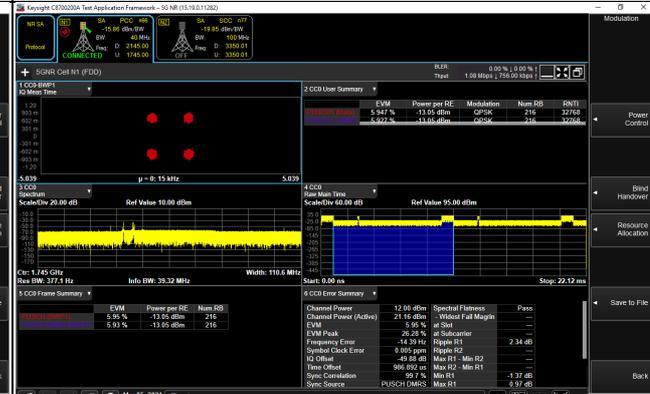
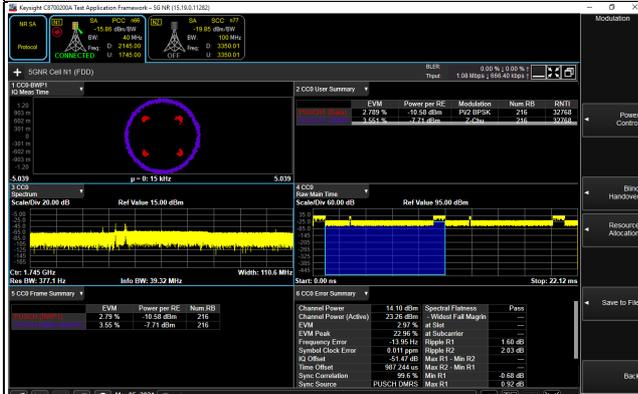
n66

Spectrum Plot of Measurement Value

Channel: 349000 / Frequency (MHz): 1745.0MHz

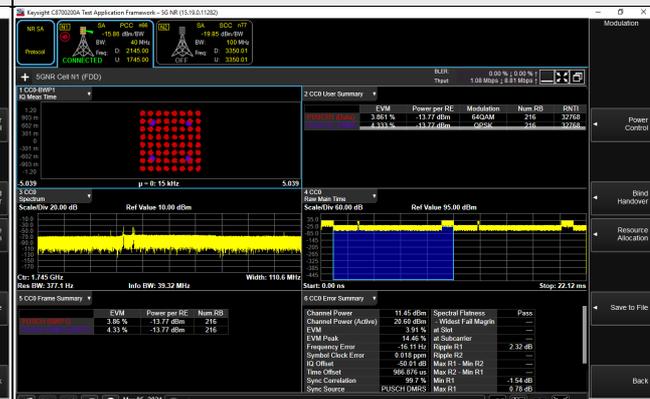
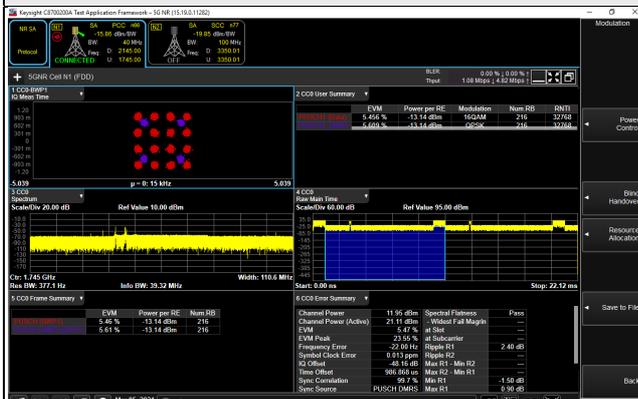
$\pi/2$ BPSK

QPSK

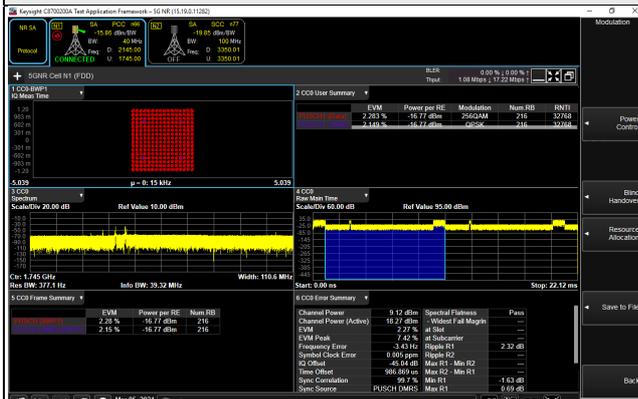


16QAM

64QAM



256QAM



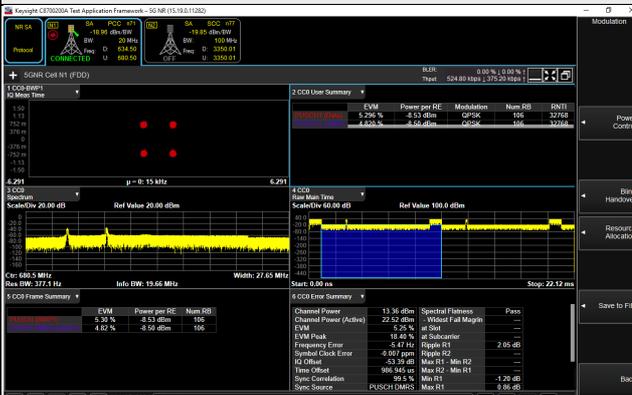
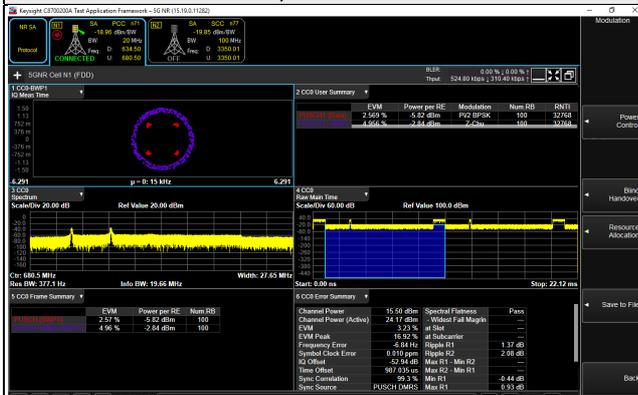
n71

Spectrum Plot of Measurement Value

Channel: 136100 / Frequency (MHz): 680.5MHz

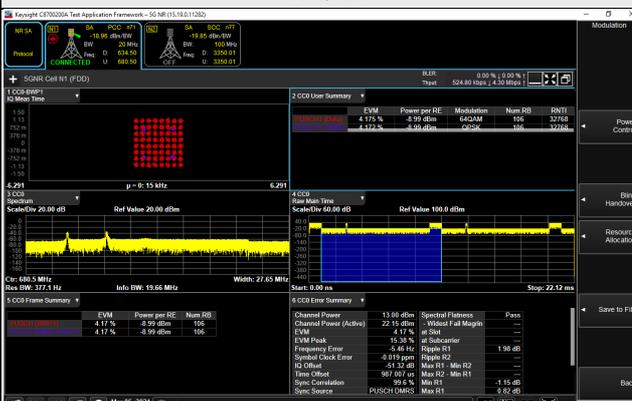
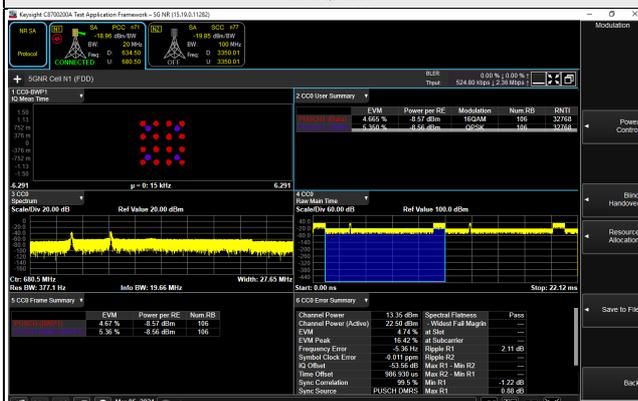
$\pi/2$ BPSK

QPSK

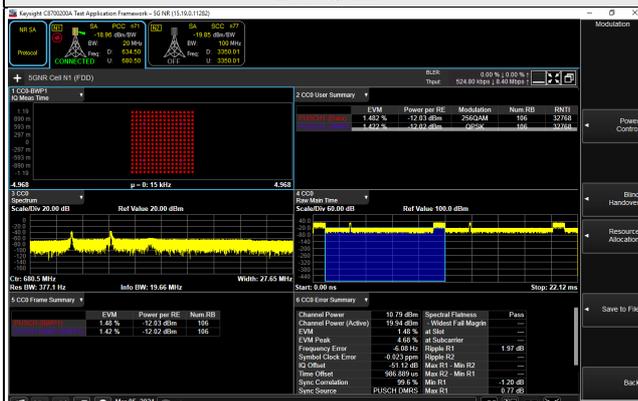


16QAM

64QAM



256QAM



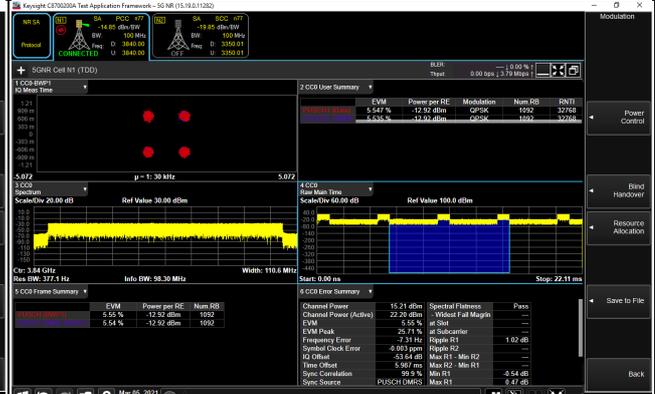
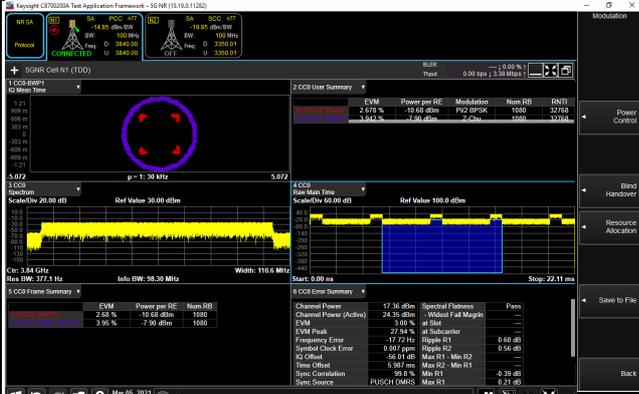
n77

Spectrum Plot of Measurement Value

Channel: 656000 / Frequency (MHz): 3840.00MHz

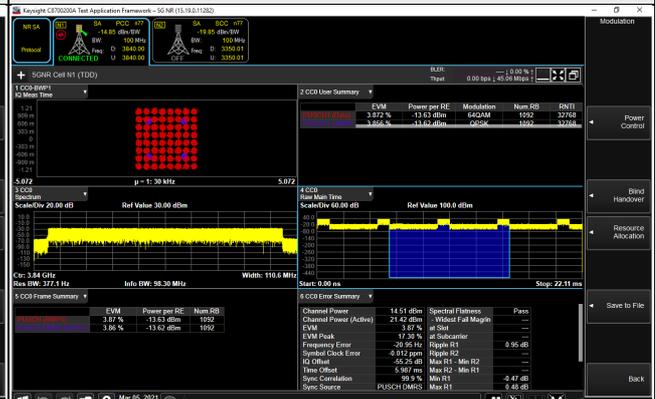
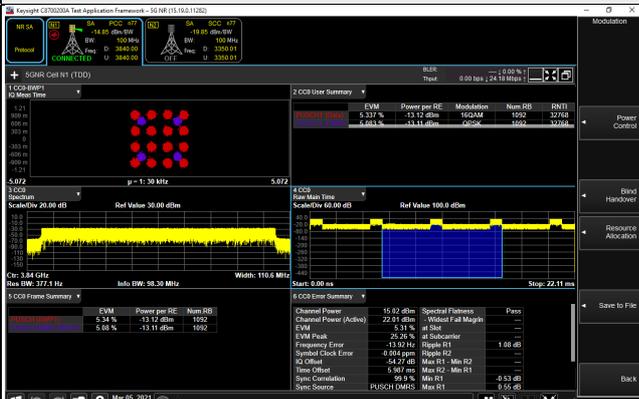
$\pi/2$ BPSK

QPSK

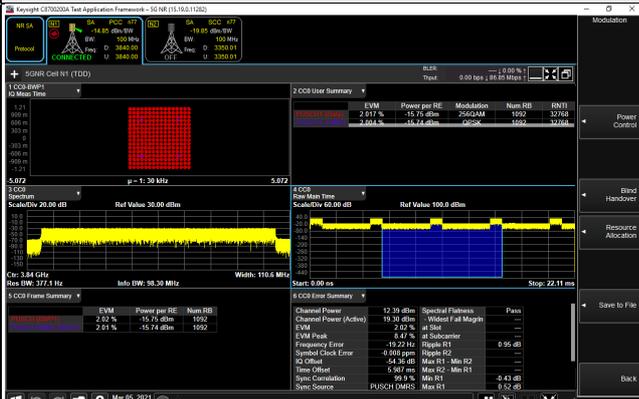


16QAM

64QAM



256QAM



4.3 Frequency Stability Measurement

4.3.1 Limits of Frequency Stability Measurement

According to the FCC part 2.1055 shall be tested the frequency stability. The rule is defined that "The frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block." The test extreme voltage is according to the 2.1055(d)(1) Vary primary supply voltage from 85 to 115 percent of the nominal value for other than hand carried battery equipment and the extreme temperature rule is comply with specification of EUT $-30^{\circ}\text{C} \sim 50^{\circ}\text{C}$.

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.

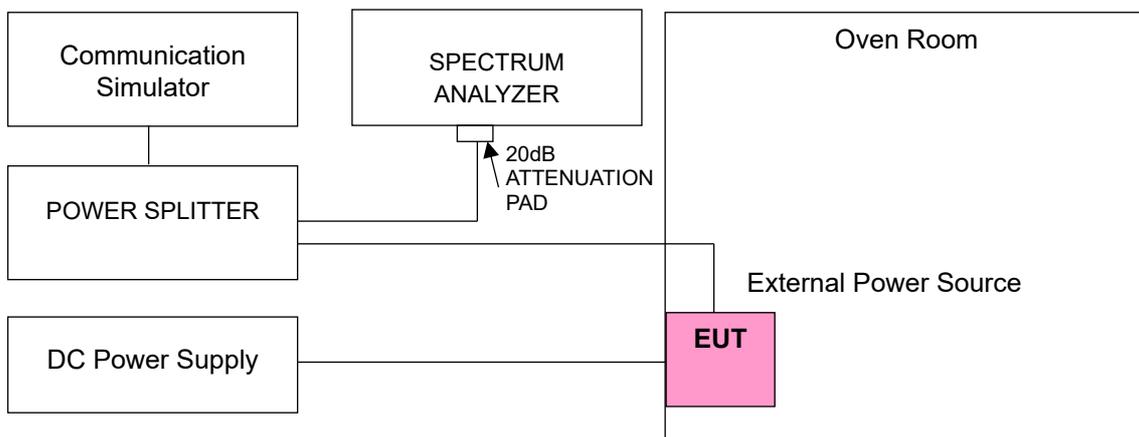
Note: The frequency error was recorded frequency error from the communication simulator.

4.3.3 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
5G Wireless Test Platforms Keysight	E7515B	MY60102114	May 28, 2020	May 27, 2021
Temperature & Humidity Chamber TERCHY	HRM-120RF	931022	Dec. 24, 2020	Dec. 23, 2021
Digital Multimeter Fluke	87-III	70360742	Jun. 23, 2020	Jun. 22, 2021
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)	n7			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2502.500001	0.001	2567.500000	0.001
7.74	2502.500001	0.000	2567.500000	0.001
6.58	2502.500002	0.001	2567.500000	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n7			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2502.500003	0.001	2567.500000	0.001
-20	2502.500001	0.001	2567.500000	0.000
-10	2502.500002	0.001	2567.500000	0.001
0	2502.500004	0.001	2567.500000	0.002
10	2502.499999	-0.001	2567.500000	-0.001
20	2502.499997	-0.001	2567.500000	-0.001
30	2502.499999	-0.001	2567.500000	-0.001
40	2502.499996	-0.001	2567.500000	-0.001
50	2502.499998	-0.001	2567.500000	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n7			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2505.000002	0.001	2565.000004	0.002
7.74	2505.000004	0.002	2565.000004	0.001
6.58	2505.000001	0.001	2565.000002	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n7			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2505.000001	0.000	2565.000003	0.001
-20	2505.000003	0.001	2565.000001	0.000
-10	2505.000002	0.001	2565.000003	0.001
0	2505.000003	0.001	2565.000001	0.000
10	2504.999999	0.000	2564.999997	-0.001
20	2504.999997	-0.001	2564.999999	-0.001
30	2504.999997	-0.001	2564.999998	-0.001
40	2504.999997	-0.001	2564.999996	-0.002
50	2504.999998	-0.001	2564.999997	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n7			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2507.500001	0.000	2562.500001	0.000
7.74	2507.500003	0.001	2562.500004	0.001
6.58	2507.500002	0.001	2562.500004	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n7			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2507.500004	0.002	2562.500002	0.001
-20	2507.500003	0.001	2562.500003	0.001
-10	2507.500003	0.001	2562.500003	0.001
0	2507.500004	0.001	2562.500003	0.001
10	2507.499996	-0.001	2562.499997	-0.001
20	2507.499998	-0.001	2562.499996	-0.002
30	2507.499997	-0.001	2562.499997	-0.001
40	2507.499997	-0.001	2562.499999	0.000
50	2507.499997	-0.001	2562.499996	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n7			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2510.000001	0.000	2560.000002	0.001
7.74	2510.000001	0.000	2560.000003	0.001
6.58	2510.000003	0.001	2560.000001	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n7			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2510.000002	0.001	2560.000002	0.001
-20	2510.000002	0.001	2560.000004	0.001
-10	2510.000002	0.001	2560.000002	0.001
0	2510.000003	0.001	2560.000002	0.001
10	2509.999997	-0.001	2559.999998	-0.001
20	2509.999996	-0.001	2559.999998	-0.001
30	2509.999997	-0.001	2559.999998	-0.001
40	2509.999998	-0.001	2559.999996	-0.001
50	2509.999999	-0.001	2559.999997	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n7			
	Channel Bandwidth 25 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2512.500002	0.001	2557.500003	0.001
7.74	2512.500001	0.001	2557.500002	0.001
6.58	2512.500003	0.001	2557.500003	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n7			
	Channel Bandwidth 25 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2512.500002	0.001	2557.500003	0.001
-20	2512.500001	0.001	2557.500001	0.000
-10	2512.500004	0.001	2557.500003	0.001
0	2512.500002	0.001	2557.500003	0.001
10	2512.499997	-0.001	2557.499998	-0.001
20	2512.499999	-0.001	2557.499997	-0.001
30	2512.499999	-0.001	2557.499997	-0.001
40	2512.499998	-0.001	2557.499998	-0.001
50	2512.499996	-0.001	2557.499998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n7			
	Channel Bandwidth 30 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2515.000004	0.001	2555.000002	0.001
7.74	2515.000004	0.001	2555.000002	0.001
6.58	2515.000003	0.001	2555.000003	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n7			
	Channel Bandwidth 30 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2515.000003	0.001	2555.000004	0.002
-20	2515.000003	0.001	2555.000002	0.001
-10	2515.000002	0.001	2555.000003	0.001
0	2515.000002	0.001	2555.000002	0.001
10	2514.999998	-0.001	2554.999999	0.000
20	2514.999998	-0.001	2554.999996	-0.001
30	2514.999998	-0.001	2554.999998	-0.001
40	2514.999996	-0.002	2554.999999	0.000
50	2514.999998	-0.001	2554.999999	0.000

Frequency Error vs. Voltage

Voltage (Vdc)	n7			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2520.000004	0.002	2550.000003	0.001
7.74	2520.000003	0.001	2550.000002	0.001
6.58	2520.000002	0.001	2550.000002	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n7			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2520.000002	0.001	2550.000001	0.001
-20	2520.000002	0.001	2550.000003	0.001
-10	2520.000003	0.001	2550.000003	0.001
0	2520.000001	0.001	2550.000002	0.001
10	2519.999997	-0.001	2549.999998	-0.001
20	2519.999998	-0.001	2549.999997	-0.001
30	2519.999997	-0.001	2549.999997	-0.001
40	2519.999997	-0.001	2549.999999	-0.001
50	2519.999997	-0.001	2549.999998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n7			
	Channel Bandwidth 50 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2525.000004	0.002	2545.000003	0.001
7.74	2525.000002	0.001	2545.000001	0.000
6.58	2525.000004	0.002	2545.000002	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n7			
	Channel Bandwidth 50 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2525.000002	0.001	2545.000002	0.001
-20	2525.000003	0.001	2545.000003	0.001
-10	2525.000002	0.001	2545.000004	0.001
0	2525.000002	0.001	2545.000003	0.001
10	2524.999998	-0.001	2544.999997	-0.001
20	2524.999998	-0.001	2544.999998	-0.001
30	2524.999997	-0.001	2544.999997	-0.001
40	2524.999997	-0.001	2544.999997	-0.001
50	2524.999997	-0.001	2544.999997	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n12			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	701.500002	0.003	713.500000	0.005
7.74	701.500003	0.004	713.500000	0.004
6.58	701.500002	0.002	713.500000	0.005

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n12			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	701.500001	0.001	713.500000	0.004
-20	701.500004	0.005	713.500000	0.004
-10	701.500003	0.004	713.500000	0.004
0	701.500003	0.004	713.500000	0.002
10	701.499997	-0.005	713.500000	-0.002
20	701.499998	-0.003	713.500000	-0.002
30	701.499998	-0.003	713.500000	-0.003
40	701.499998	-0.003	713.500000	-0.005
50	701.499997	-0.004	713.500000	-0.003

Frequency Error vs. Voltage

Voltage (Vdc)	n12			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	704.000002	0.003	711.000003	0.004
7.74	704.000004	0.005	711.000003	0.004
6.58	704.000004	0.005	711.000003	0.004

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n12			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	704.000003	0.004	711.000002	0.002
-20	704.000003	0.004	711.000003	0.004
-10	704.000004	0.006	711.000003	0.004
0	704.000002	0.003	711.000003	0.005
10	703.999997	-0.005	710.999997	-0.004
20	703.999997	-0.004	710.999996	-0.005
30	703.999997	-0.005	710.999997	-0.005
40	703.999998	-0.003	710.999999	-0.002
50	703.999998	-0.003	710.999999	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	n12			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	706.500003	0.004	708.500001	0.002
7.74	706.500003	0.005	708.500002	0.003
6.58	706.500003	0.004	708.500002	0.003

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n12			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	706.500004	0.005	708.500004	0.005
-20	706.500003	0.004	708.500002	0.003
-10	706.500003	0.004	708.500001	0.002
0	706.500004	0.005	708.500003	0.004
10	706.499996	-0.005	708.499998	-0.003
20	706.499998	-0.004	708.499996	-0.005
30	706.499997	-0.004	708.499999	-0.001
40	706.499997	-0.004	708.499999	-0.002
50	706.499999	-0.002	708.499996	-0.005

Frequency Error vs. Voltage

Voltage (Vdc)	n13			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	779.500003	0.004	784.500000	0.003
7.74	779.500002	0.003	784.500000	0.003
6.58	779.500002	0.002	784.500000	0.004

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n13			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	779.500002	0.003	784.500000	0.005
-20	779.500003	0.004	784.500000	0.003
-10	779.500002	0.002	784.500000	0.003
0	779.500003	0.004	784.500000	0.004
10	779.499999	-0.001	784.500000	-0.003
20	779.499998	-0.003	784.500000	-0.004
30	779.499996	-0.005	784.500000	-0.003
40	779.499999	-0.001	784.500000	-0.004
50	779.499998	-0.002	784.500000	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n13	
	Channel Bandwidth 10 MHz	
	Frequency (MHz)	Frequency Error (ppm)
8.90	782.000003	0.004
7.74	782.000002	0.002
6.58	782.000001	0.002

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n13	
	Channel Bandwidth 10 MHz	
	Frequency (MHz)	Frequency Error (ppm)
-30	782.000002	0.003
-20	782.000001	0.001
-10	782.000004	0.004
0	782.000002	0.002
10	781.999996	-0.005
20	781.999999	-0.002
30	781.999997	-0.004
40	781.999999	-0.002
50	781.999998	-0.003

Frequency Error vs. Voltage

Voltage (Vdc)	n30			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2307.500001	0.001	2312.500000	0.001
7.74	2307.500002	0.001	2312.500000	0.001
6.58	2307.500001	0.001	2312.500000	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n30			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2307.500002	0.001	2312.500000	0.001
-20	2307.500003	0.001	2312.500000	0.001
-10	2307.500002	0.001	2312.500000	0.001
0	2307.500003	0.001	2312.500000	0.001
10	2307.499998	-0.001	2312.500000	-0.002
20	2307.499998	-0.001	2312.500000	-0.002
30	2307.499998	-0.001	2312.500000	0.000
40	2307.499998	-0.001	2312.500000	-0.001
50	2307.499997	-0.001	2312.500000	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n30	
	Channel Bandwidth 10 MHz	
	Frequency (MHz)	Frequency Error (ppm)
8.90	2310.000003	0.001
7.74	2310.000002	0.001
6.58	2310.000003	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n30	
	Channel Bandwidth 10 MHz	
	Frequency (MHz)	Frequency Error (ppm)
-30	2310.000003	0.001
-20	2310.000003	0.001
-10	2310.000001	0.001
0	2310.000003	0.001
10	2309.999997	-0.001
20	2309.999997	-0.001
30	2309.999999	-0.001
40	2309.999998	-0.001
50	2309.999998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n38			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2580.000001	0.000	2610.000000	0.001
7.74	2580.000004	0.001	2610.000000	0.001
6.58	2580.000001	0.000	2610.000000	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n38			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2580.000003	0.001	2610.000000	0.001
-20	2580.000001	0.001	2610.000000	0.001
-10	2580.000003	0.001	2610.000000	0.001
0	2580.000001	0.000	2610.000000	0.001
10	2579.999997	-0.001	2610.000000	-0.001
20	2579.999997	-0.001	2610.000000	-0.001
30	2579.999999	-0.001	2610.000000	0.000
40	2579.999998	-0.001	2610.000000	-0.001
50	2579.999999	0.000	2610.000000	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	n38			
	Channel Bandwidth 30 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2585.000003	0.001	2605.000000	0.001
7.74	2585.000002	0.001	2605.000000	0.001
6.58	2585.000002	0.001	2605.000000	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n38			
	Channel Bandwidth 30 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2585.000002	0.001	2605.000000	0.001
-20	2585.000003	0.001	2605.000000	0.001
-10	2585.000001	0.000	2605.000000	0.001
0	2585.000001	0.000	2605.000000	0.001
10	2584.999999	-0.001	2605.000000	-0.001
20	2584.999999	0.000	2605.000000	0.000
30	2584.999999	-0.001	2605.000000	-0.001
40	2584.999998	-0.001	2605.000000	-0.001
50	2584.999996	-0.001	2605.000000	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n38			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2590.000002	0.001	2600.000000	0.001
7.74	2590.000001	0.001	2600.000000	0.001
6.58	2590.000004	0.001	2600.000000	0.000

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n38			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2590.000003	0.001	2600.000000	0.001
-20	2590.000001	0.000	2600.000000	0.000
-10	2590.000003	0.001	2600.000000	0.002
0	2590.000003	0.001	2600.000000	0.001
10	2589.999996	-0.001	2600.000000	-0.001
20	2589.999997	-0.001	2600.000000	-0.001
30	2589.999998	-0.001	2600.000000	-0.001
40	2589.999999	0.000	2600.000000	-0.001
50	2589.999998	-0.001	2600.000000	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n41			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2506.020001	0.000	2679.990000	0.000
7.74	2506.020003	0.001	2679.990000	0.001
6.58	2506.020002	0.001	2679.990000	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n41			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2506.020001	0.001	2679.990000	0.001
-20	2506.020001	0.000	2679.990000	0.001
-10	2506.020003	0.001	2679.990000	0.001
0	2506.020002	0.001	2679.990000	0.001
10	2506.019997	-0.001	2679.990000	0.000
20	2506.019996	-0.001	2679.990000	0.000
30	2506.019998	-0.001	2679.990000	-0.001
40	2506.019998	-0.001	2679.990000	-0.001
50	2506.019997	-0.001	2679.990000	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n41			
	Channel Bandwidth 30 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2511.000004	0.001	2674.980001	0.000
7.74	2511.000002	0.001	2674.980004	0.001
6.58	2511.000004	0.002	2674.980001	0.000

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n41			
	Channel Bandwidth 30 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2511.000001	0.000	2674.980004	0.001
-20	2511.000003	0.001	2674.980003	0.001
-10	2511.000001	0.000	2674.980004	0.001
0	2511.000004	0.002	2674.980003	0.001
10	2510.999997	-0.001	2674.979996	-0.001
20	2510.999999	-0.001	2674.979997	-0.001
30	2510.999996	-0.001	2674.979997	-0.001
40	2510.999997	-0.001	2674.979999	-0.001
50	2510.999998	-0.001	2674.979997	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n41			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2516.010003	0.001	2670.000003	0.001
7.74	2516.010003	0.001	2670.000003	0.001
6.58	2516.010001	0.001	2670.000001	0.000

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n41			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2516.010004	0.001	2670.000003	0.001
-20	2516.010001	0.000	2670.000003	0.001
-10	2516.010003	0.001	2670.000002	0.001
0	2516.010003	0.001	2670.000002	0.001
10	2516.009997	-0.001	2669.999999	0.000
20	2516.009996	-0.001	2669.999998	-0.001
30	2516.009997	-0.001	2669.999996	-0.001
40	2516.009998	-0.001	2669.999997	-0.001
50	2516.009998	-0.001	2669.999999	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n41			
	Channel Bandwidth 50 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2521.020001	0.001	2664.990003	0.001
7.74	2521.020003	0.001	2664.990004	0.001
6.58	2521.020001	0.001	2664.990003	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n41			
	Channel Bandwidth 50 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2521.020004	0.002	2664.990003	0.001
-20	2521.020004	0.001	2664.990004	0.001
-10	2521.020001	0.000	2664.990003	0.001
0	2521.020002	0.001	2664.990003	0.001
10	2521.019997	-0.001	2664.989996	-0.001
20	2521.019998	-0.001	2664.989998	-0.001
30	2521.019998	-0.001	2664.989999	0.000
40	2521.019998	-0.001	2664.989999	0.000
50	2521.019996	-0.002	2664.989998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n41			
	Channel Bandwidth 60 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2526.000004	0.002	2659.980002	0.001
7.74	2526.000001	0.000	2659.980001	0.000
6.58	2526.000002	0.001	2659.980002	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n41			
	Channel Bandwidth 60 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2526.000002	0.001	2659.980003	0.001
-20	2526.000002	0.001	2659.980003	0.001
-10	2526.000002	0.001	2659.980002	0.001
0	2526.000003	0.001	2659.980001	0.000
10	2525.999998	-0.001	2659.979997	-0.001
20	2525.999997	-0.001	2659.979997	-0.001
30	2525.999998	-0.001	2659.979998	-0.001
40	2525.999998	-0.001	2659.979999	-0.001
50	2525.999996	-0.001	2659.979998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n41			
	Channel Bandwidth 80 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2536.020003	0.001	2649.990003	0.001
7.74	2536.020003	0.001	2649.990004	0.001
6.58	2536.020004	0.002	2649.990003	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n41			
	Channel Bandwidth 80 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2536.020002	0.001	2649.990004	0.001
-20	2536.020004	0.001	2649.990002	0.001
-10	2536.020002	0.001	2649.990003	0.001
0	2536.020003	0.001	2649.990003	0.001
10	2536.019997	-0.001	2649.989997	-0.001
20	2536.019997	-0.001	2649.989999	-0.001
30	2536.019999	0.000	2649.989998	-0.001
40	2536.019998	-0.001	2649.989996	-0.001
50	2536.019997	-0.001	2649.989998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n41			
	Channel Bandwidth 90 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2541.000001	0.001	2644.980002	0.001
7.74	2541.000002	0.001	2644.980002	0.001
6.58	2541.000004	0.002	2644.980004	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n41			
	Channel Bandwidth 90 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2541.000002	0.001	2644.980001	0.000
-20	2541.000002	0.001	2644.980003	0.001
-10	2541.000001	0.001	2644.980002	0.001
0	2541.000001	0.000	2644.980004	0.001
10	2540.999999	-0.001	2644.979996	-0.001
20	2540.999998	-0.001	2644.979997	-0.001
30	2540.999997	-0.001	2644.979998	-0.001
40	2540.999997	-0.001	2644.979998	-0.001
50	2540.999998	-0.001	2644.979999	0.000

Frequency Error vs. Voltage

Voltage (Vdc)	n41			
	Channel Bandwidth 100 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	2546.010003	0.001	2640.000002	0.001
7.74	2546.010003	0.001	2640.000004	0.001
6.58	2546.010004	0.001	2640.000004	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n41			
	Channel Bandwidth 100 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	2546.010004	0.002	2640.000004	0.001
-20	2546.010003	0.001	2640.000003	0.001
-10	2546.010002	0.001	2640.000002	0.001
0	2546.010001	0.000	2640.000001	0.000
10	2546.009997	-0.001	2639.999997	-0.001
20	2546.009999	-0.001	2639.999996	-0.001
30	2546.009999	-0.001	2639.999998	-0.001
40	2546.009996	-0.001	2639.999997	-0.001
50	2546.009999	0.000	2639.999999	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n66			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	1712.500004	0.002	1777.500000	0.001
7.74	1712.500002	0.001	1777.500000	0.001
6.58	1712.500003	0.002	1777.500000	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n66			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1712.500003	0.002	1777.500000	0.002
-20	1712.500004	0.002	1777.500000	0.002
-10	1712.500002	0.001	1777.500000	0.001
0	1712.500002	0.001	1777.500000	0.002
10	1712.499998	-0.001	1777.500000	-0.002
20	1712.499996	-0.002	1777.500000	-0.002
30	1712.499997	-0.002	1777.500000	-0.002
40	1712.499997	-0.002	1777.500000	-0.002
50	1712.499997	-0.002	1777.500000	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	n66			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	1715.000002	0.001	1775.000001	0.001
7.74	1715.000004	0.002	1775.000002	0.001
6.58	1715.000002	0.001	1775.000003	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n66			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1715.000003	0.002	1775.000003	0.002
-20	1715.000001	0.001	1775.000004	0.002
-10	1715.000002	0.001	1775.000003	0.002
0	1715.000004	0.002	1775.000002	0.001
10	1714.999998	-0.001	1774.999999	-0.001
20	1714.999996	-0.002	1774.999998	-0.001
30	1714.999996	-0.002	1774.999996	-0.002
40	1714.999996	-0.002	1774.999996	-0.002
50	1714.999997	-0.002	1774.999998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n66			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	1717.500001	0.001	1772.500003	0.001
7.74	1717.500002	0.001	1772.500002	0.001
6.58	1717.500002	0.001	1772.500004	0.002

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n66			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1717.500002	0.001	1772.500001	0.001
-20	1717.500003	0.002	1772.500002	0.001
-10	1717.500004	0.002	1772.500004	0.002
0	1717.500002	0.001	1772.500002	0.001
10	1717.499998	-0.001	1772.499998	-0.001
20	1717.499997	-0.002	1772.499998	-0.001
30	1717.499999	-0.001	1772.499997	-0.002
40	1717.499996	-0.002	1772.499999	-0.001
50	1717.499996	-0.002	1772.499997	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	n66			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	1719.999998	-0.001	1770.000004	0.002
7.74	1719.999997	-0.002	1770.000003	0.002
6.58	1719.999999	-0.001	1770.000004	0.002

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n66			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1719.999997	-0.002	1770.000003	0.002
-20	1719.999996	-0.002	1770.000003	0.002
-10	1719.999998	-0.001	1770.000003	0.002
0	1719.999997	-0.002	1770.000002	0.001
10	1720.000003	0.002	1769.999999	-0.001
20	1720.000002	0.001	1769.999997	-0.002
30	1720.000001	0.001	1769.999999	-0.001
40	1720.000003	0.002	1769.999997	-0.002
50	1720.000001	0.001	1769.999998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n66			
	Channel Bandwidth 30 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	1725.000003	0.002	1765.000003	0.002
7.74	1725.000002	0.001	1765.000004	0.002
6.58	1725.000002	0.001	1765.000003	0.002

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n66			
	Channel Bandwidth 30 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1725.000002	0.001	1765.000002	0.001
-20	1725.000002	0.001	1765.000002	0.001
-10	1725.000004	0.002	1765.000002	0.001
0	1725.000003	0.002	1765.000004	0.002
10	1724.999996	-0.002	1764.999997	-0.002
20	1724.999998	-0.001	1764.999997	-0.002
30	1724.999997	-0.002	1764.999997	-0.002
40	1724.999999	-0.001	1764.999998	-0.001
50	1724.999998	-0.001	1764.999996	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	n66			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	1730.000003	0.002	1760.000001	0.001
7.74	1730.000002	0.001	1760.000003	0.001
6.58	1730.000004	0.002	1760.000004	0.002

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n66			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	1730.000001	0.001	1760.000001	0.001
-20	1730.000002	0.001	1760.000001	0.001
-10	1730.000002	0.001	1760.000004	0.002
0	1730.000003	0.002	1760.000001	0.001
10	1729.999999	-0.001	1759.999999	-0.001
20	1729.999997	-0.002	1759.999997	-0.002
30	1729.999998	-0.001	1759.999996	-0.002
40	1729.999997	-0.002	1759.999997	-0.002
50	1729.999996	-0.002	1759.999998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n71			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	665.500003	0.005	695.500000	0.004
7.74	665.500003	0.005	695.500000	0.004
6.58	665.500002	0.003	695.500000	0.004

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n71			
	Channel Bandwidth 5 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	665.500003	0.004	695.500000	0.004
-20	665.500004	0.006	695.500000	0.003
-10	665.500003	0.004	695.500000	0.005
0	665.500004	0.006	695.500000	0.004
10	665.499997	-0.005	695.500000	-0.005
20	665.499997	-0.005	695.500000	-0.005
30	665.499997	-0.004	695.500000	-0.004
40	665.499996	-0.006	695.500000	-0.005
50	665.499997	-0.004	695.500000	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	n71			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	668.000003	0.004	693.000002	0.002
7.74	668.000002	0.002	693.000004	0.006
6.58	668.000001	0.002	693.000004	0.006

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n71			
	Channel Bandwidth 10 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	668.000004	0.005	693.000004	0.006
-20	668.000004	0.006	693.000003	0.004
-10	668.000001	0.002	693.000001	0.002
0	668.000004	0.005	693.000004	0.005
10	667.999997	-0.004	692.999996	-0.005
20	667.999998	-0.003	692.999999	-0.002
30	667.999997	-0.004	692.999998	-0.003
40	667.999996	-0.006	692.999997	-0.004
50	667.999998	-0.003	692.999999	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	n71			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	670.500002	0.002	690.500004	0.006
7.74	670.500003	0.005	690.500004	0.006
6.58	670.500002	0.003	690.500003	0.004

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n71			
	Channel Bandwidth 15 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	670.500004	0.006	690.500003	0.004
-20	670.500003	0.005	690.500002	0.002
-10	670.500004	0.006	690.500004	0.005
0	670.500003	0.004	690.500002	0.003
10	670.499997	-0.005	690.499998	-0.003
20	670.499996	-0.006	690.499996	-0.006
30	670.499998	-0.003	690.499998	-0.003
40	670.499997	-0.004	690.499997	-0.004
50	670.499998	-0.003	690.499997	-0.005

Frequency Error vs. Voltage

Voltage (Vdc)	n71			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	673.000004	0.006	688.000003	0.004
7.74	673.000001	0.002	688.000003	0.004
6.58	673.000001	0.002	688.000003	0.004

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n71			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	673.000001	0.002	688.000003	0.004
-20	673.000002	0.003	688.000004	0.006
-10	673.000001	0.002	688.000004	0.005
0	673.000002	0.002	688.000002	0.002
10	672.999999	-0.002	687.999998	-0.003
20	672.999998	-0.003	687.999998	-0.003
30	672.999999	-0.002	687.999999	-0.002
40	672.999999	-0.002	687.999997	-0.004
50	672.999999	-0.002	687.999999	-0.002

Frequency Error vs. Voltage

Voltage (Vdc)	n77			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	3710.010003	0.001	3969.990000	0.000
7.74	3710.010002	0.001	3969.990000	0.001
6.58	3710.010002	0.000	3969.990000	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n77			
	Channel Bandwidth 20 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3710.010001	0.000	3969.990000	0.000
-20	3710.010003	0.001	3969.990000	0.000
-10	3710.010003	0.001	3969.990000	0.000
0	3710.010003	0.001	3969.990000	0.000
10	3710.009997	-0.001	3969.990000	0.000
20	3710.009996	-0.001	3969.990000	0.000
30	3710.009998	-0.001	3969.990000	-0.001
40	3710.009998	-0.001	3969.990000	-0.001
50	3710.009998	-0.001	3969.990000	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n77			
	Channel Bandwidth 30 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	3715.020003	0.001	3964.980003	0.001
7.74	3715.020002	0.001	3964.980002	0.000
6.58	3715.020002	0.000	3964.980002	0.000

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n77			
	Channel Bandwidth 30 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3715.020003	0.001	3964.980003	0.001
-20	3715.020001	0.000	3964.980001	0.000
-10	3715.020002	0.000	3964.980001	0.000
0	3715.020002	0.000	3964.980001	0.000
10	3715.019998	-0.001	3964.979996	-0.001
20	3715.019999	0.000	3964.979998	-0.001
30	3715.019997	-0.001	3964.979999	0.000
40	3715.019998	-0.001	3964.979997	-0.001
50	3715.019997	-0.001	3964.979999	0.000

Frequency Error vs. Voltage

Voltage (Vdc)	n77			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	3720.000003	0.001	3960.000001	0.000
7.74	3720.000004	0.001	3960.000003	0.001
6.58	3720.000004	0.001	3960.000003	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n77			
	Channel Bandwidth 40 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3720.000003	0.001	3960.000002	0.000
-20	3720.000002	0.001	3960.000003	0.001
-10	3720.000003	0.001	3960.000001	0.000
0	3720.000002	0.001	3960.000002	0.000
10	3719.999997	-0.001	3959.999996	-0.001
20	3719.999998	0.000	3959.999997	-0.001
30	3719.999996	-0.001	3959.999997	-0.001
40	3719.999998	-0.001	3959.999997	-0.001
50	3719.999998	-0.001	3959.999996	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n77			
	Channel Bandwidth 50 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	3725.010003	0.001	3954.990003	0.001
7.74	3725.010001	0.000	3954.990003	0.001
6.58	3725.010003	0.001	3954.990003	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n77			
	Channel Bandwidth 50 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3725.010002	0.001	3954.990001	0.000
-20	3725.010002	0.001	3954.990004	0.001
-10	3725.010003	0.001	3954.990001	0.000
0	3725.010002	0.001	3954.990002	0.001
10	3725.009999	0.000	3954.989997	-0.001
20	3725.009999	0.000	3954.989999	0.000
30	3725.009997	-0.001	3954.989997	-0.001
40	3725.009996	-0.001	3954.989997	-0.001
50	3725.009999	0.000	3954.989999	0.000

Frequency Error vs. Voltage

Voltage (Vdc)	n77			
	Channel Bandwidth 60 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	3730.020003	0.001	3949.980001	0.000
7.74	3730.020003	0.001	3949.980004	0.001
6.58	3730.020002	0.000	3949.980003	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n77			
	Channel Bandwidth 60 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3730.020004	0.001	3949.980002	0.000
-20	3730.020002	0.000	3949.980002	0.001
-10	3730.020003	0.001	3949.980002	0.000
0	3730.020004	0.001	3949.980001	0.000
10	3730.019996	-0.001	3949.979999	0.000
20	3730.019998	0.000	3949.979997	-0.001
30	3730.019999	0.000	3949.979998	-0.001
40	3730.019998	-0.001	3949.979997	-0.001
50	3730.019997	-0.001	3949.979999	0.000

Frequency Error vs. Voltage

Voltage (Vdc)	n77			
	Channel Bandwidth 70 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	3735.000002	0.001	3945.000001	0.000
7.74	3735.000002	0.001	3945.000002	0.000
6.58	3735.000004	0.001	3945.000004	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n77			
	Channel Bandwidth 70 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3735.000003	0.001	3945.000002	0.001
-20	3735.000002	0.001	3945.000003	0.001
-10	3735.000004	0.001	3945.000003	0.001
0	3735.000002	0.001	3945.000001	0.000
10	3734.999999	0.000	3944.999999	0.000
20	3734.999996	-0.001	3944.999996	-0.001
30	3734.999997	-0.001	3944.999997	-0.001
40	3734.999999	0.000	3944.999997	-0.001
50	3734.999997	-0.001	3944.999998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n77			
	Channel Bandwidth 80 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	3740.010004	0.001	3939.990003	0.001
7.74	3740.010001	0.000	3939.990002	0.000
6.58	3740.010003	0.001	3939.990001	0.000

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n77			
	Channel Bandwidth 80 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3740.010002	0.001	3939.990003	0.001
-20	3740.010002	0.001	3939.990002	0.001
-10	3740.010002	0.001	3939.990002	0.000
0	3740.010003	0.001	3939.990004	0.001
10	3740.009998	-0.001	3939.989998	-0.001
20	3740.009996	-0.001	3939.989997	-0.001
30	3740.009997	-0.001	3939.989997	-0.001
40	3740.009998	-0.001	3939.989997	-0.001
50	3740.009997	-0.001	3939.989998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n77			
	Channel Bandwidth 90 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	3745.020004	0.001	3934.980003	0.001
7.74	3745.020002	0.001	3934.980002	0.001
6.58	3745.020003	0.001	3934.980002	0.000

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n77			
	Channel Bandwidth 90 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3745.020003	0.000	3934.980003	0.001
-20	3745.020003	0.001	3934.980003	0.001
-10	3745.020003	0.001	3934.980002	0.001
0	3745.020002	0.001	3934.980004	0.001
10	3745.019998	-0.001	3934.979998	-0.001
20	3745.019996	-0.001	3934.979998	-0.001
30	3745.019999	0.000	3934.979999	0.000
40	3745.019997	-0.001	3934.979996	-0.001
50	3745.019996	-0.001	3934.979998	-0.001

Frequency Error vs. Voltage

Voltage (Vdc)	n77			
	Channel Bandwidth 100 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
8.90	3750.000003	0.001	3930.000003	0.001
7.74	3750.000001	0.000	3930.000003	0.001
6.58	3750.000001	0.000	3930.000003	0.001

Note: The applicant defined the normal working voltage is from 6.58Vdc to 8.90Vdc.

Frequency Error vs. Temperature

Temp. (°C)	n77			
	Channel Bandwidth 100 MHz			
	Low Channel		High Channel	
	Frequency (MHz)	Frequency Error (ppm)	Frequency (MHz)	Frequency Error (ppm)
-30	3750.000002	0.001	3930.000002	0.001
-20	3750.000002	0.001	3930.000002	0.001
-10	3750.000002	0.001	3930.000004	0.001
0	3750.000004	0.001	3930.000002	0.001
10	3749.999997	-0.001	3929.999999	0.000
20	3749.999998	0.000	3929.999999	0.000
30	3749.999996	-0.001	3929.999999	0.000
40	3749.999998	-0.001	3929.999998	-0.001
50	3749.999997	-0.001	3929.999998	0.000

4.4 Occupied Bandwidth Measurement

4.4.1 Limits of Occupied Bandwidth Measurement

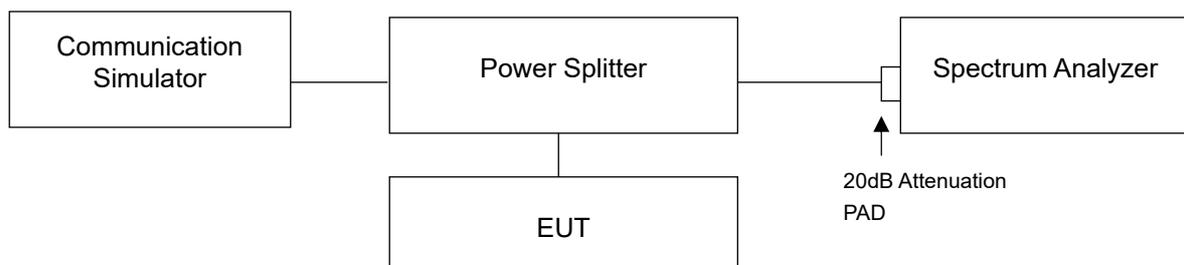
The occupied bandwidth (OBW), that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 % of the total mean power radiated by a given emission.

4.4.2 Test Procedure

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

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

4.4.3 Test Setup



4.4.4 Test Result

Occupied Bandwidth

n7, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
500500	2502.5	4.48	4.47	4.47	4.46	4.46
507000	2535.0	4.47	4.47	4.47	4.47	4.47
513500	2567.5	4.46	4.47	4.47	4.47	4.46
n7, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501000	2505.0	9.18	9.29	9.29	9.28	9.28
507000	2535.0	9.18	9.29	9.29	9.29	9.29
513000	2565.0	9.20	9.29	9.29	9.30	9.29
n7, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
501500	2507.5	13.99	14.11	14.11	14.11	14.11
507000	2535.0	14.00	14.12	14.12	14.12	14.11
512500	2562.5	14.00	14.11	14.11	14.11	14.11
n7, Channel Bandwidth 20MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
502000	2510.0	18.60	18.89	18.90	18.89	18.89
507000	2535.0	18.73	18.92	18.96	18.91	18.92
512000	2560.0	18.74	18.90	18.90	18.90	18.89
n7, Channel Bandwidth 25MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
502500	2512.5	23.28	24.05	24.06	24.06	23.98
507000	2535.0	23.28	24.06	24.07	24.06	23.98
511500	2557.5	23.28	24.07	24.08	24.06	23.98

n7, Channel Bandwidth 30MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
503000	2515.0	26.76	27.83	27.83	27.82	27.83
507000	2535.0	26.74	27.79	27.80	27.79	27.79
511000	2555.0	26.73	27.78	27.78	27.79	27.76
n7, Channel Bandwidth 40MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
504000	2520.0	35.67	37.81	37.82	37.82	37.81
507000	2535.0	35.64	37.74	37.73	37.73	37.74
510000	2550.0	35.61	37.73	37.72	37.72	37.71
n7, Channel Bandwidth 50MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
505000	2525.0	45.72	47.49	47.50	47.49	47.51
507000	2535.0	45.63	47.39	47.50	47.35	47.38
509000	2545.0	45.59	47.37	47.39	47.35	47.34

Spectrum Plot of Worst Value

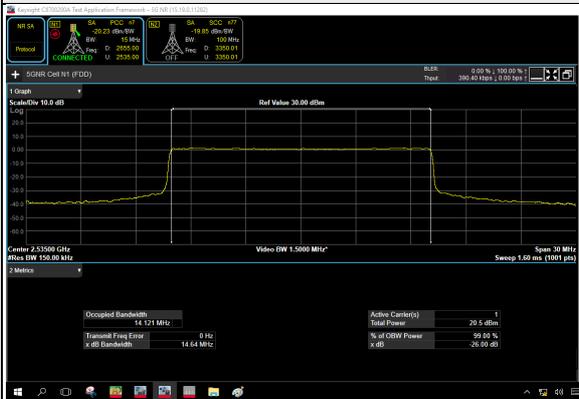
5MHz / $\pi/2$ BPSK



10MHz / 64QAM



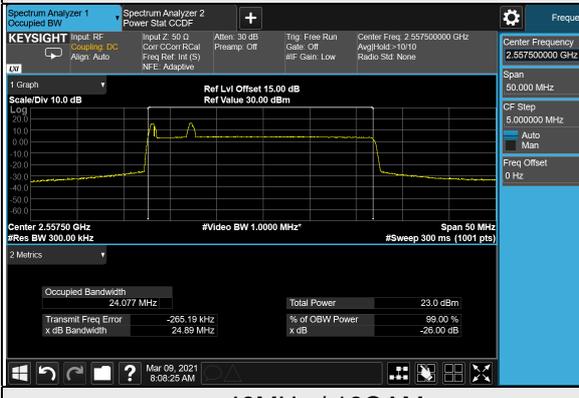
15MHz / 16QAM



20MHz / 16QAM



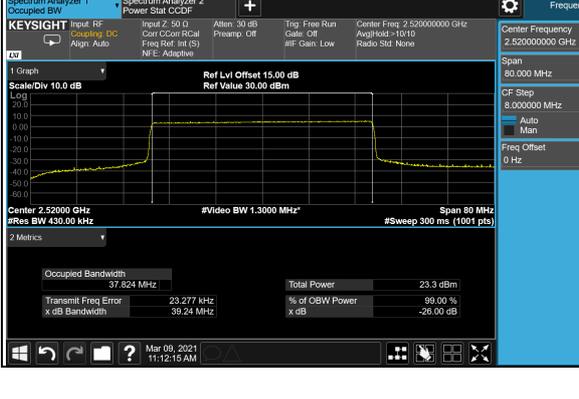
25MHz / 16QAM



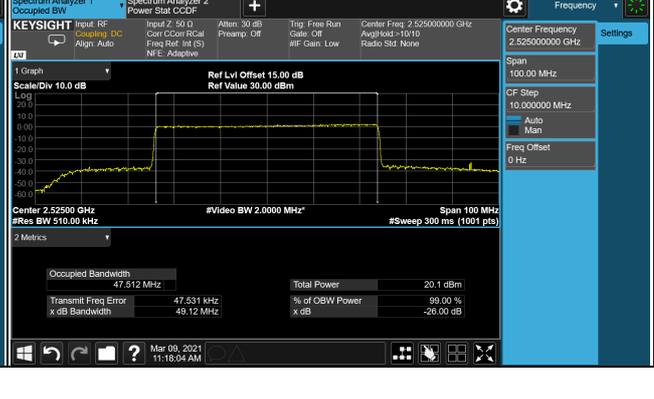
30MHz / 16QAM



40MHz / 16QAM



50MHz / 256QAM



n12, Channel Bandwidth 5MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
140300	701.5	4.47	4.47	4.47	4.47	4.47
141500	707.5	4.47	4.47	4.47	4.46	4.47
142700	713.5	4.48	4.47	4.47	4.46	4.47
n12, Channel Bandwidth 10MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
140800	704.0	9.24	9.29	9.29	9.28	9.26
141500	707.5	9.21	9.28	9.29	9.26	9.28
142200	711.0	9.18	9.28	9.26	9.26	9.28
n12, Channel Bandwidth 15MHz						
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)				
		$\pi/2$ BPSK	QPSK	16QAM	64QAM	256QAM
141300	706.5	13.94	14.11	14.10	14.11	14.11
141500	707.5	13.99	14.11	14.12	14.10	14.10
141700	708.5	14.04	14.11	14.11	14.11	14.11

Spectrum Plot of Worst Value

5MHz / $\pi/2$ BPSK



10MHz / QPSK



15MHz / 16QAM

