RF TEST REPORT

Report No.:	20241017G21838X-W2
Product Name:	LTE Wireless Data Module
Model No. :	SIM6600-eM2
FCC ID:	2AJYU-8MH0012
Applicant:	SIMCom Wireless Solutions Limited
Address:	Building 3,No. 289, Linhong Road, Changning District, Shanghai, P.R.China
Dates of Testing:	10/30/2024 - 11/14/2024
Issued by:	CCIC Southern Testing Co., Ltd.
Lab Location:	Electronic Testing Building, No.43, Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China.
	Tel： 86-755-26627338 **E-Mail：** manager@ccic-set.com

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Test Report

Product.....:	LTE Wireless Data Module
Trade Name .....:	SIMCom
Applicant.....:	SIMCom Wireless Solutions Limited
Applicant Address.....:	Building 3,No. 289, Linhong Road, Changning District, Shanghai, P.R.China
Manufacturer.....:	SIMCom Wireless Solutions Limited
Manufacturer Address.....:	Building 3,No. 289, Linhong Road, Changning District, Shanghai, P.R.China
Test Standards.....:	47 CFR Part 2/22/24/27/90
Test Result.....:	Pass

Tested by .....: Chuiwang Zhang 2024.11.14

Chuiwang Zhang, Test Engineer

Reviewed by.....: Sun Jiaohui 2024.11.14

Sun Jiaohui, Senior Engineer

Approved by.....: Chris You 2024.11.14

Chris You, Manager

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Change History		
Issue	Date	Reason for change
1.0	2024.11.14	First edition

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	LTE Wireless Data Module	
Model No.	SIM6600-eM2	
EUT supports Radios application	LTE Band 2/4/5/7/12/13/17/25/26/41/66/71	
Frequency Range(UL)	LTE Band 2: 1850MHz~1910MHz LTE Band 4: 1710MHz~1755MHz LTE Band 5: 824MHz~849MHz LTE Band 7: 2500MHz~2570MHz LTE Band 12: 699MHz~716MHz LTE Band 13: 777MHz~787MHz LTE Band 17: 704MHz~716MHz LTE Band 25: 1850MHz~1915MHz	LTE Band 26(Part 90): 814MHz~824MHz LTE Band 26(Part 22): 824MHz~849MHz LTE Band 41: 2496MHz~2690MHz LTE Band 66: 1710MHz~1780MHz LTE Band 71: 663MHz~698MHz
Channel Bandwidth	LTE Band 2/4/25/66: 1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz LTE Band 5/12: 1.4MHz/3MHz/5MHz/10MHz LTE Band 26(Part 22): 1.4MHz/3MHz/5MHz/10MHz/15MHz LTE Band 7/41/71: 5MHz/10MHz/15MHz/20MHz LTE Band 13/17: 5MHz/10MHz LTE Band 26(Part 90): 1.4MHz/3MHz/5MHz/10MHz	
Modulation Type	QPSK/16QAM/64QAM(downlink only)	
Maximum ERP/EIRP	LTE Band 2: 25.54dBm LTE Band 4: 26.76dBm LTE Band 5: 22.23dBm LTE Band 7: 26.02dBm LTE Band 12: 22.41dBm LTE Band 13: 23.72dBm LTE Band 17: 21.82dBm	LTE Band 25: 25.11dBm LTE Band 26(Part 22): 21.97dBm LTE Band 26(Part 90): 22.17dBm LTE Band 41: 26.44dBm LTE Band 66: 26.70dBm LTE Band 71: 21.05dBm
Antenna Type	External Antenna	
Antenna gain	LTE Band 2/25: 1.87dBi LTE Band 4/66: 3.12dBi LTE Band 5: 0.64dBi LTE Band 7/41: 2.90dBi LTE Band 12/17: 0.95dBi	LTE Band 13: 2.23dBi LTE Band 26(Part 22): 0.64dBi LTE Band 26(Part 90): 0.91dBi LTE Band 71: -0.48dBi
Power supply	DC 3.7V	

Note 1: The information of antenna gain and cable loss is provided by the manufacturer and our lab is not responsible for the accuracy of the antenna gain and cable loss information.

1.2. Maximum ERP/EIRP, Frequency Tolerance and Emission Designator

LTE Bands	Type of Modulation	Bandwidth (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum EIRP(W)
LTE Band 2	QPSK	1.4	1M09G7D	—	0.341
LTE Band 2	16QAM	1.4	1M10W7D	—	0.264
LTE Band 2	QPSK	3	2M68G7D	—	0.358
LTE Band 2	16QAM	3	2M67W7D	—	0.292
LTE Band 2	QPSK	5	4M50G7D	—	0.332
LTE Band 2	16QAM	5	4M48W7D	—	0.259
LTE Band 2	QPSK	10	8M95G7D	-0.028213	0.326
LTE Band 2	16QAM	10	8M94W7D	—	0.261
LTE Band 2	QPSK	15	13M5G7D	—	0.317
LTE Band 2	16QAM	15	13M5W7D	—	0.254
LTE Band 2	QPSK	20	17M9G7D	—	0.321
LTE Band 2	16QAM	20	17M9W7D	—	0.248
LTE Band 4	QPSK	1.4	1M09G7D	—	0.474
LTE Band 4	16QAM	1.4	1M10W7D	—	0.360
LTE Band 4	QPSK	3	2M68G7D	—	0.438
LTE Band 4	16QAM	3	2M67W7D	—	0.352
LTE Band 4	QPSK	5	4M49G7D	—	0.446
LTE Band 4	16QAM	5	4M49W7D	—	0.352
LTE Band 4	QPSK	10	8M94G7D	-0.014476	0.450
LTE Band 4	16QAM	10	8M94W7D	—	0.359
LTE Band 4	QPSK	15	13M5G7D	—	0.440
LTE Band 4	16QAM	15	13M5W7D	—	0.357
LTE Band 4	QPSK	20	17M9G7D	—	0.452
LTE Band 4	16QAM	20	17M9W7D	—	0.367
LTE Band 7	QPSK	5	4M50G7D	—	0.400
LTE Band 7	16QAM	5	4M49W7D	—	0.309
LTE Band 7	QPSK	10	8M94G7D	0.009487	0.397
LTE Band 7	16QAM	10	8M94W7D	—	0.302
LTE Band 7	QPSK	15	13M5G7D	—	0.378
LTE Band 7	16QAM	15	13M5W7D	—	0.308
LTE Band 7	QPSK	20	17M9G7D	—	0.390
LTE Band 7	16QAM	20	17M9W7D	—	0.316
LTE Band 25	QPSK	1.4	1M09G7D	—	0.316
LTE Band 25	16QAM	1.4	1M10W7D	—	0.242
LTE Band 25	QPSK	3	2M68G7D	—	0.306
LTE Band 25	16QAM	3	2M68W7D	—	0.247
LTE Band 25	QPSK	5	4M52G7D	—	0.310
LTE Band 25	16QAM	5	4M51W7D	—	0.246

LTE Band 25	QPSK	10	8M96G7D	-0.010911	0.318
LTE Band 25	16QAM	10	8M94W7D	—	0.254
LTE Band 25	QPSK	15	13M5G7D	—	0.316
LTE Band 25	16QAM	15	13M5W7D	—	0.252
LTE Band 25	QPSK	20	17M9G7D	—	0.324
LTE Band 25	16QAM	20	18M0W7D	—	0.255
LTE Band 41	QPSK	5	4M50G7D	—	0.411
LTE Band 41	16QAM	5	4M50W7D	—	0.347
LTE Band 41	QPSK	10	8M96G7D	-0.010911	0.441
LTE Band 41	16QAM	10	8M94W7D	—	0.354
LTE Band 41	QPSK	15	13M5G7D	—	0.420
LTE Band 41	16QAM	15	13M5W7D	—	0.341
LTE Band 41	QPSK	20	17M9G7D	—	0.440
LTE Band 41	16QAM	20	17M9W7D	—	0.340
LTE Band 66	QPSK	1.4	1M09G7D	—	0.449
LTE Band 66	16QAM	1.4	1M10W7D	—	0.366
LTE Band 66	QPSK	3	2M68G7D	—	0.444
LTE Band 66	16QAM	3	2M67W7D	—	0.356
LTE Band 66	QPSK	5	4M52G7D	—	0.451
LTE Band 66	16QAM	5	4M52W7D	—	0.351
LTE Band 66	QPSK	10	8M96G7D	-0.014648	0.468
LTE Band 66	16QAM	10	8M94W7D	—	0.375
LTE Band 66	QPSK	15	13M6G7D	—	0.429
LTE Band 66	16QAM	15	13M5W7D	—	0.347
LTE Band 66	QPSK	20	17M9G7D	—	0.445
LTE Band 66	16QAM	20	18M0W7D	—	0.349

LTE Band	Type of Modulation	Bandwidth (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum ERP(W)
LTE Band 5	QPSK	1.4	1M09G7D	—	0.167
LTE Band 5	16QAM	1.4	1M10W7D	—	0.134
LTE Band 5	QPSK	3	2M68G7D	—	0.155
LTE Band 5	16QAM	3	2M67W7D	—	0.121
LTE Band 5	QPSK	5	4M50G7D	—	0.153
LTE Band 5	16QAM	5	4M49W7D	—	0.124
LTE Band 5	QPSK	10	8M95G7D	-0.025631	0.160
LTE Band 5	16QAM	10	8M95W7D	—	0.127
LTE Band 12	QPSK	1.4	1M09G7D	—	0.174
LTE Band 12	16QAM	1.4	1M10W7D	—	0.132
LTE Band 12	QPSK	3	2M68G7D	—	0.154
LTE Band 12	16QAM	3	2M67W7D	—	0.123
LTE Band 12	QPSK	5	4M52G7D	—	0.157
LTE Band 12	16QAM	5	4M52W7D	—	0.123
LTE Band 12	QPSK	10	8M93G7D	-0.021074	0.156
LTE Band 12	16QAM	10	8M93W7D	—	0.125
LTE Band 13	QPSK	5	4M52G7D	—	0.236
LTE Band 13	16QAM	5	4M52W7D	—	0.190
LTE Band 13	QPSK	10	8M96G7D	-0.017506	0.217
LTE Band 13	16QAM	10	8M95W7D	—	0.172
LTE Band 17	QPSK	5	4M51G7D	—	0.151
LTE Band 17	16QAM	5	4M51W7D	—	0.121
LTE Band 17	QPSK	10	8M94G7D	-0.025310	0.152
LTE Band 17	16QAM	10	8M93W7D	—	0.123
LTE Band 26(Part 22)	QPSK	1.4	1M09G7D	—	0.157
LTE Band 26(Part 22)	16QAM	1.4	1M10W7D	—	0.117
LTE Band 26(Part 22)	QPSK	3	2M68G7D	—	0.154
LTE Band 26(Part 22)	16QAM	3	2M67W7D	—	0.119
LTE Band 26(Part 22)	QPSK	5	4M50G7D	—	0.154
LTE Band 26(Part 22)	16QAM	5	4M49W7D	—	0.123
LTE Band 26(Part 22)	QPSK	10	8M95G7D	-0.018458	0.156
LTE Band 26(Part 22)	16QAM	10	8M94W7D	—	0.121
LTE Band 26(Part 22)	QPSK	15	13M5G7D	—	0.152
LTE Band 26(Part 22)	16QAM	15	13M5W7D	—	0.122
LTE Band 26(Part 90)	QPSK	1.4	1M09G7D	—	0.165
LTE Band 26(Part 90)	16QAM	1.4	1M10W7D	—	0.128
LTE Band 26(Part 90)	QPSK	3	2M68G7D	—	0.161
LTE Band 26(Part 90)	16QAM	3	2M68W7D	—	0.127
LTE Band 26(Part 90)	QPSK	5	4M50G7D	—	0.162

LTE Band 26(Part 90)	16QAM	5	4M49W7D	—	0.130
LTE Band 26(Part 90)	QPSK	10	8M96G7D	-0.017167	0.160
LTE Band 26(Part 90)	16QAM	10	8M96W7D	—	0.129
LTE Band 71	QPSK	5	4M53G7D	—	0.127
LTE Band 71	16QAM	5	4M53W7D	—	0.101
LTE Band 71	QPSK	10	8M99G7D	-0.020573	0.126
LTE Band 71	16QAM	10	8M97W7D	—	0.095
LTE Band 71	QPSK	15	13M6G7D	—	0.111
LTE Band 71	16QAM	15	13M6W7D	—	0.092
LTE Band 71	QPSK	20	17M9G7D	—	0.121
LTE Band 71	16QAM	20	17M9W7D	—	0.091

1.3. Test Standards and Results

The purpose of the report is to conduct testing according to the following FCC certification standards:

No.	Identity	Document Title
1	47 CFR Part 2	Frequency Allocations and Radio Treaty Matters; General Rules and Regulations
2	47 CFR Part 22	Public Mobile Services
3	47 CFR Part 24	Personal Communications Services
4	47 CFR Part 27	Miscellaneous Wireless Communications Services
5	47 CFR Part 90	Private Land Mobile Radio Services
6	KDB 971168 D01 Power Meas License Digital Systems v03r01	Measurement Guidance For Certification of Licensed Digital Transmitters
7	KDB 412172 D01 Determining ERP and EIRP v01r01	Guidelines for Determining the Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) of an RF Transmitting Systems
8	ANSI/TIA-603-E-2016	Land Mobile FM or PM Communications Equipment Measurement and Performance Standards
9	ANSI C63.26-2015	American National Standard for Compliance Testing of Transmitters Used in Licensed Radio Services

Test detailed items/section required by FCC rules and results are as below:

No.	FCC Rule	Description	Limit	Result
1	2.1046	Conducted Output Power	Reporting Only	PASS
2	22.913(d) 24.232 (d) 27.50 (d)(5)	Peak to Average Radio	< 13dB	PASS
3	24.232 (c)	Equivalent Isotropic Radiated Power (Band 2/25)	EIRP < 2W	PASS
	22.913 (a)(5)	Effective Radiated Power (Band 5/26_Part 22)	ERP < 7W	PASS
	27.50 (c)(10)	Effective Radiated Power (Band 12/17/71)	ERP < 3W	PASS
	27.50 (b)(10)	Effective Radiated Power (Band 13)	ERP < 3W	PASS
	27.50 (d)(4)	Equivalent Isotropic Radiated Power (Band 4/66)	EIRP < 1W	PASS
	27.50 (h)(2)	Equivalent Isotropic Radiated Power (Band 7/41)	EIRP < 2W	PASS
	90.635 (b)	Effective Radiated Power (Band 26_Part 90)	ERP < 100W	PASS
4	2.1049	Occupied Bandwidth	Reporting Only	PASS
5	2.1051 22.917 (a) 24.238 (a) 27.53 (c) 27.53 (g) 27.53 (h) 27.53 (m)(4) 27.53 (c)(f) 90.691 (a)	Conducted Spurious Emission and Conducted Band Edge (Band 2/4/5/12/13/17/25/26/66/71)	< $43+10\log_{10}$ (P[watt])	PASS
		Conducted Spurious Emission and Conducted Band Edge (Band 7/41)	Refer to 27.53(m)(4)	PASS
6	2.1053 22.917 (a) 24.238 (a) 27.53 (c) 27.53 (g) 27.53 (h) 27.53 (m)(4) 27.53 (c)(f) 90.691 (a)	Radiated Spurious Emission (Band 2/4/5/12/13/17/25/26/66/71)	< $43+10\log_{10}$ (P[Watts])	PASS
		Radiated Spurious Emission (Band 7/41)	< $55+10\log_{10}$ (P[watt])	PASS
7	2.1055 22.335	Frequency Stability (Band 5/26)	< ±2.5ppm	PASS

	24.235 27.54 90.213(a)	Frequency Stability (Band 2/4/7/12/13/17/25/41/66/71)	Within the Authorized Band	PASS

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.

1.4. Test Configuration of Equipment Under Test

Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas License Digital Systems v03r01 with maximum output power.

Radiated measurements are performed by rotating the EUT in three different orthogonal test planes to find the maximum emission.

Test Items	Band	Bandwidth(MHz)						Modulation		RB Configuration			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Conducted Output Power and ERP/EIRP	2/25	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	4/66	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	5/12	√	√	√	√			√	√	√	√	√	√	√	√
	7/41			√	√	√	√	√	√	√	√	√	√	√	√
	13/17			√	√			√	√	√	√	√	√	√	√
	26 (Part 22)	√	√	√	√	√		√	√	√	√	√	√	√	√
	26 (Part 90)	√	√	√	√			√	√	√	√	√	√	√	√
	71			√	√	√	√	√	√	√	√	√	√	√	√
Peak-to-Average Ratio	2/25						√		√	√		√	√	√	√
	4/66						√		√	√		√	√	√	√
	5/12				√				√	√		√	√	√	√
	7/41						√		√	√		√	√	√	√
	13/17				√				√	√		√	√	√	√
	26 (Part 22)				√				√	√		√	√	√	√
	26 (Part 90)			√	√				√	√		√	√	√	√
	71						√		√	√		√	√	√	√
99% OBW and 26dB EBW	2/25	√	√	√	√	√	√	√	√			√		√	
	4/66	√	√	√	√	√	√	√	√			√		√	
	5/12	√	√	√	√			√	√			√		√	
	7/41			√	√	√	√	√	√			√		√	
	13/17			√	√			√	√			√		√	
	26 (Part 22)	√	√	√	√	√		√	√			√		√	
	26 (Part 90)	√	√	√	√			√	√			√		√	
	71			√	√	√	√	√	√			√		√	
Conducted Band Edge	2/25	√	√	√	√	√	√	√		√		√	√		√
	4/66	√	√	√	√	√	√	√		√		√	√		√
	5/12	√	√	√	√			√		√		√	√		√
	7/41			√	√	√	√	√		√		√	√		√
	13/17			√	√			√		√		√	√		√
	26 (Part 22)	√	√	√	√	√		√		√		√	√		√

	26 (Part 90)	√	√	√	√			√		√		√	√		√
	71			√	√	√	√	√	√	√		√	√		√
Conducted Spurious Emission	2/25						√	√		√			√	√	√
	4/66						√	√		√			√	√	√
	5/12				√			√		√			√	√	√
	7/41						√	√		√			√	√	√
	13/17				√			√		√			√	√	√
	26 (Part 22)					√		√		√			√	√	√
	26 (Part 90)			√	√			√		√			√	√	√
	71						√	√		√			√	√	√
Frequency Stability	2/25				√			√				√		√	
	4/66				√			√				√		√	
	5/12				√			√				√		√	
	7/41				√			√				√		√	
	13/17				√			√				√		√	
	26 (Part 22)				√			√				√		√	
	26 (Part 90)				√			√				√		√	
	71				√			√				√		√	
Radiated Spurious Emission	2	Worst case												√	
	4	Worst case												√	
	5	Worst case												√	
	7	Worst case												√	
	12	Worst case												√	
	13	Worst case												√	
	17	Worst case												√	
	25	Worst case												√	
	26 (Part 22)	Worst case												√	
	26 (Part 90)	Worst case												√	
	41	Worst case												√	
	66	Worst case												√	
	71	Worst case												√	

Note 1: The mark "√" means that this configuration is chosen for testing.

Note 2: The EUT performs radiated spurious emission tests from 30MHz to 10 times the fundamental signal under different RB configurations and modulation types. Only worst-case data is reported.

1.5. Laboratory Facilities

FCC-Registration No.: CN1283

CCIC Southern Testing Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files. Designation Number: CN1283, valid time is until Jun. 30th, 2025.

ISED Registration: 11185A

CCIC Southern Testing Co., Ltd. EMC Laboratory has been registered by Certification and Engineering Bureau of Industry Canada for the performance of radiated measurements with Registration No. 11185A on Aug. 04, 2016, valid time is until Jun. 30th, 2025.

CAB number: CN0064

A2LA Code: 5721.01

CCIC-SET is a third party testing organization accredited by A2LA according to ISO/IEC 17025. The accreditation certificate number is 5721.01.

1.6. Test Environment Conditions

During the measurement, the environmental conditions were within the listed ranges:

Temperature (°C):	15℃- 35℃
Relative Humidity (%):	30% -60%
Atmospheric Pressure (kPa):	86kPa-106kPa

2. 47 CFR Part 2 Requirements

2.1. Conducted Output Power and ERP/EIRP

2.1.1. Requirement

According to FCC section 2.1046(a), for transmitters other than single sideband, independent sideband and controlled carrier radiotelephone, power output shall be measured at the RF output terminals when the transmitter is adjusted in accordance with the tune-up procedure to give the values of current and voltage on the circuit elements specified in FCC section 2.1033(c)(8).

The EIRP of mobile transmitters must not exceed 2 Watts for LTE Band 2/7/25/41.

The EIRP of mobile transmitters must not exceed 1 Watts for LTE Band 4/66.

The ERP of mobile transmitters must not exceed 7 Watts for LTE Band 5/26_Part 22.

The ERP of mobile transmitters must not exceed 100 Watts for LTE Band 26_Part 90.

The ERP of mobile transmitters must not exceed 3 Watts for LTE Band 12/13/17/71.

According to KDB 412172 D01 Determining ERP and EIRP v01r01.

EIRP = $P_T + {}_{GT} - L_C$, ERP = EIRP - 2.15, where

P_T = transmitter output power in dBm;

G_T = gain of the transmitting antenna in dBi;

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB.

2.1.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.1.3. Test Setup

2.1.4. Test Procedures

1. The transmitter output port was connected to the system simulator.

2. Set EUT at maximum power through system simulator.

3. Select lowest, middle, and highest channels for each band and different modulation.

4. Measure and record the power level from the system simulator.

2.1.5. Test Results of Conducted Output Power and ERP/EIRP

Please refer to Appendix A for detail.

2.2. Peak-to-average power ratio (PAPR)

2.2.1. Requirement

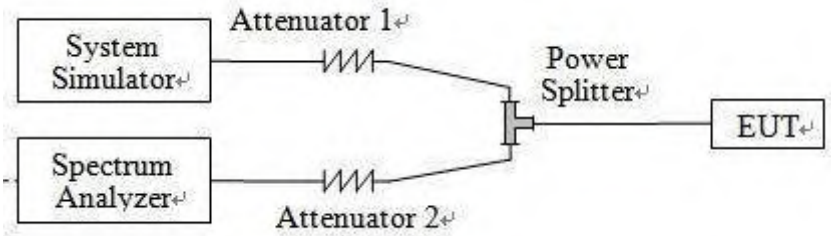
Power Complementary Cumulative Distribution Function (CCDF) curves provide a means for characterizing the power peaks of a digitally modulated signal on a statistical basis. A CCDF curve depicts the probability of the peak signal amplitude exceeding the average power level. Most contemporary measurement instrumentation include the capability to produce CCDF curves for an input signal provided that the instrument's resolution bandwidth can be set wide enough to accommodate the entire input signal bandwidth.

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

2.2.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.2.3. Test Description



2.2.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 5.7.2 and ANSI C63.26-2015 Section 5.2.3.4.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
4. Set resolution/measurement bandwidth ≥ OBW or specified reference bandwidth.
5. Set the number of counts to a value that stabilizes the measured CCDF curve.
6. Set the EUT working in highest power level, measured and recorded the 0.1% as PAPR level.
7. Repeat step 3~6 at other frequency and modulations.

2.2.5. Test Results of Peak-to-average power ratio (PAPR)

Please refer to Appendix A for detail.

2.3. 99% Occupied Bandwidth and 26dB Emission Bandwidth

2.3.1. Requirement

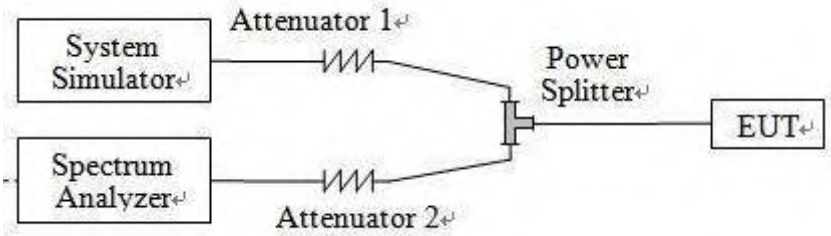
The Occupied Bandwidth is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers are each equal to 0.5% of the total mean power of the given emission.

The 26 dB emission bandwidth is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated 26 dB below the maximum in-band spectral density of the modulated signal Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth equal to approximately 1.0% of the emission bandwidth.

2.3.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.3.3. Test Setup



2.3.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 4 and ANSI C63.26-2015 Section 5.4.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. The spectrum analyzer center frequency is set to the nominal EUT channel center frequency.
4. Set span to be approximately 1.5 to 5 times the OBW.
5. The nominal RBW shall be in the range of 1% to 5% of the anticipated OBW.
6. Set VBW ≥ 3 × RBW.
7. Set Detection mode = peak.
8. Set Trace mode = max hold.
9. Allow trace to stabilize.
10. Repeat step 3~9 at other frequency and modulations.

2.3.5. Test Result of 99% Occupied Bandwidth and 26dB Emission Bandwidth

Please refer to Appendix A for detail.

2.4. Conducted Band Edge

2.4.1. Requirement

For Band 2 & 25 [Part 24.238 (a)]:

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.he power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For Band 4 & 66 [Part 27.53 (h)]:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For Band 5 & 26 [Part 22.917(a)]:

Out of band emissions. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least 43 + 10 log(P) dB.
In the spectrum below 1 GHz, instrumentation should employ a reference bandwidth of 100 kHz or greater. In the 1 MHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy, provided that the measured power is integrated over the full required reference bandwidth (i.e., 100 kHz or 1 percent of emission bandwidth, as specified).

For Band 12 & 17 & 71 [Part 27.53 (g)]:

For operations in the 698 - 746 MHz band, the FCC limit is 43 + 10log10(P[Watts]) dB below the transmitter power P(Watts) in a 100 kHz bandwidth. However, in the 100kHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least 30kHz may be employed.

For Band 7 & 41 [Part 27.53 (m)(4)]:

For mobile digital stations, the attenuation factor shall be not less than 40 + 10 log (P) dB on all frequencies between the channel edge and 5 megahertz from the channel edge, 43 + 10 log (P) dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and 55 + 10 log (P) dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less that 43 + 10 log (P) dB on all frequencies between 2490.5 MHz and 2496 MHz and 55 + 10 log (P) dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

For Band 26 [Part 90.691 (a)]:

Out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 116 Log10(f/6.1) decibels or 50 + 10 Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least 43 + 10Log10(P) decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

For Band 13 [Part 27.53 (c)]:

For operations in the 746-758 MHz band and the 776-788 MHz band, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(2) On any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least 43 + 10 log (P) dB;

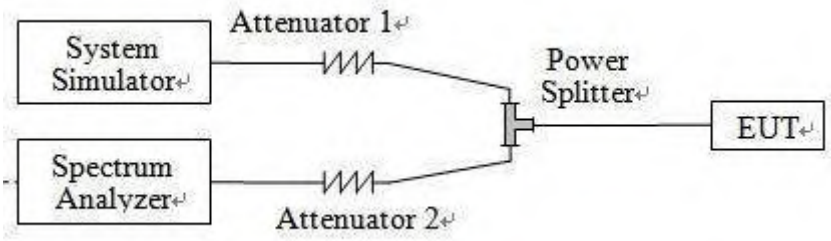
(4) On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than 65 + 10 log (P) dB in a 6.25 kHz band segment, for mobile and portable stations;

(5) Compliance with the provisions of paragraphs (c)(1) and (c)(2) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of at least 30 kHz may be employed;

2.4.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.4.3. Test Setup



2.4.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 6 and ANSI C63.26-2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. Span was set large enough so as to capture all out of band emissions near the Channel Edge.
4. Use RBW ≥ 1% EBW in the 1 megahertz bands immediately outside and adjacent to the licensee's authorized frequency channel, and use RBW = 1 MHz outside 1 MHz of the authorized frequency channel.
5. Set VBW ≥ 3 × RBW
6. Set Detector = power averaging (rms).
7. Set the number of points in sweep ≥ 2 × span / RBW.
8. Set sweep trigger to “free run.”
9. Set the Sweep time > (number of points in sweep) × (transmitter period) (i.e., the transmit on-time + the off-time).
10. Perform a trace average of at least 100 traces.
11. Repeat step 3~10 at other frequency and modulations.

2.4.5. Test Result of Conducted Band Edge

Please refer to Appendix A for detail.

2.5. Conducted Spurious Emission

2.5.1. Requirement

For Band 2 & 4 & 5 & 12 & 13 & 17 & 25 & 26 & 66 & 71:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

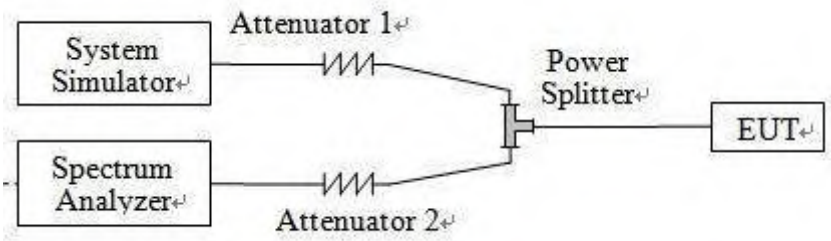
For Band 7 & 41:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 55 + 10 log (P) dB.

2.5.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.5.3. Test Setup



2.5.4. Test Procedures

1. The testing follows the of KDB 971168 D01 v03r01 Section 6 and ANSI C63.26-2015 Section 5.7.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider, Path loss compensation is then performed on the spectrum analyzer and the system simulator respectively.
3. Set the spectrum analyzer start frequency to 9kHz and stop frequency to the tenth harmonic of the highest fundamental frequency.
4. Set RBW = 1kHz (9kHz~150kHz), 10kHz (150kHz~30MHz),100kHz (30MHz~1GHz), 1MHz (Above 1 GHz), VBW ≥ 3 × RBW
5. Set Detector = RMS, Trace mode = Averaging.
6. For duty cycle ≥ 98%, set Sweep time = (number of points in sweep) × (symbol period).
7. For duty cycle < 98%, set Sweep time = (number of points in sweep) × (transmitter period).
8. Identify and measure the highest spurious emission levels in each frequency range.
9. Compare the results with the corresponding limit in the applicable regulation.

10. Repeat step 3~9 at other frequency and modulations.

Note: For 9 kHz to 30MHz: the amplitude of spurious emissions is attenuated by more than 20dB below the permissible value, so we not provide the test result here.

2.5.5. Test Result of Conducted Spurious Emission

Please refer to Appendix A for detail.

2.6. Radiated Spurious Emission

2.6.1. Requirement

The radiated spurious emission was measured by substitution method according to ANSI/TIA-603-E-2016.

For Band 2 & 4 & 5 & 12 & 13 & 17 & 25 & 26 & 66 & 71:

The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 43 + 10 log (P) dB.

For Band 7 & 41:

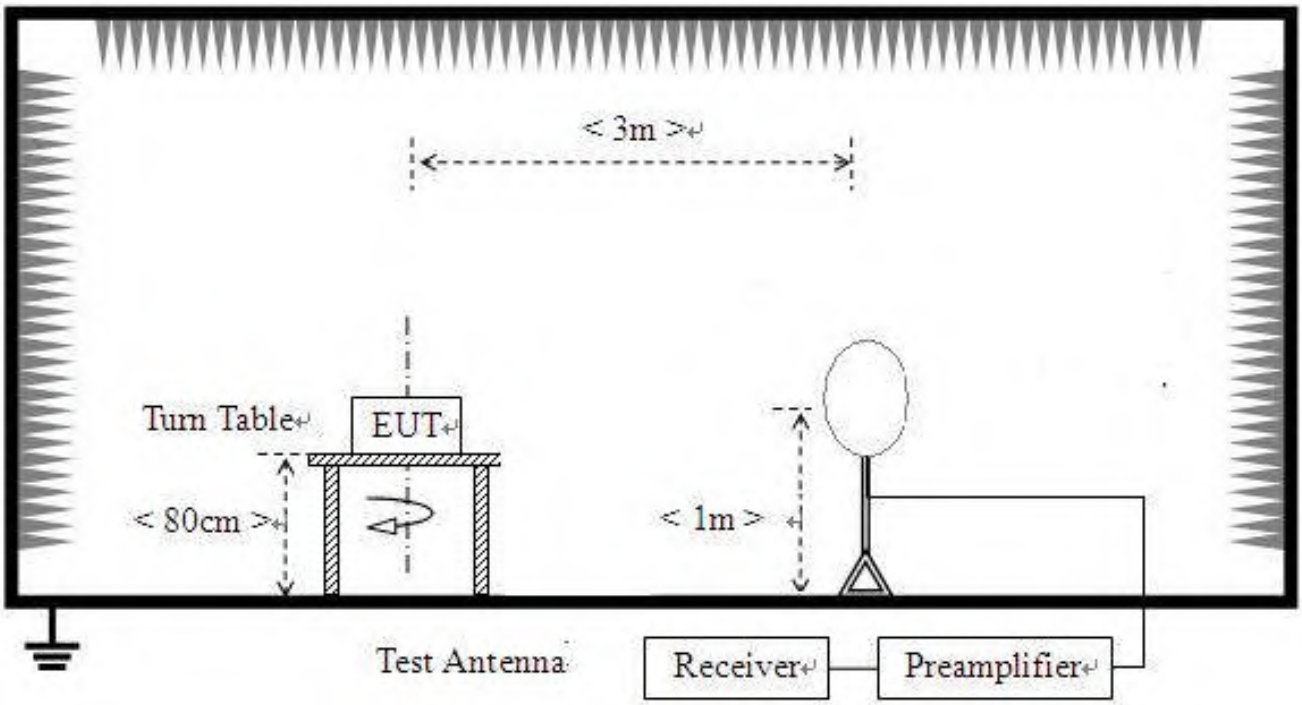
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least 55 + 10 log (P) dB.

2.6.2. Measuring Instruments

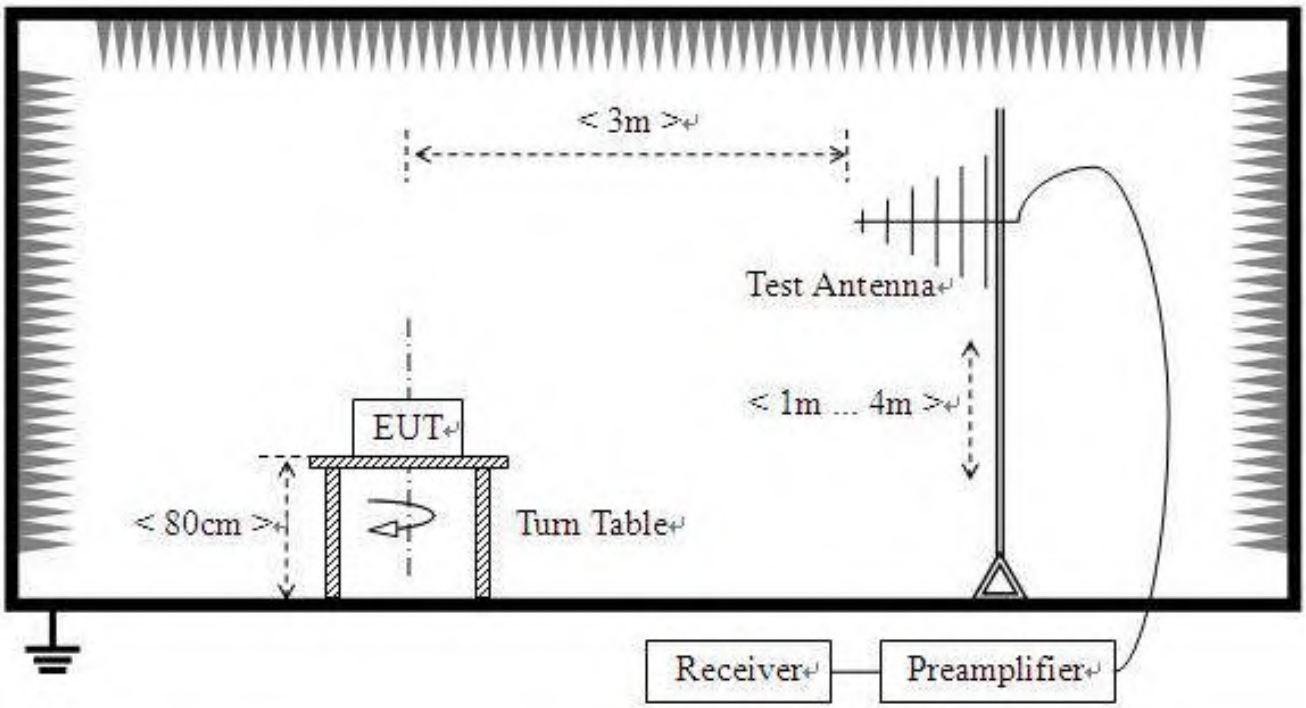
The measuring equipment is listed in the section 3 of this test report.

2.6.3. Test Setup

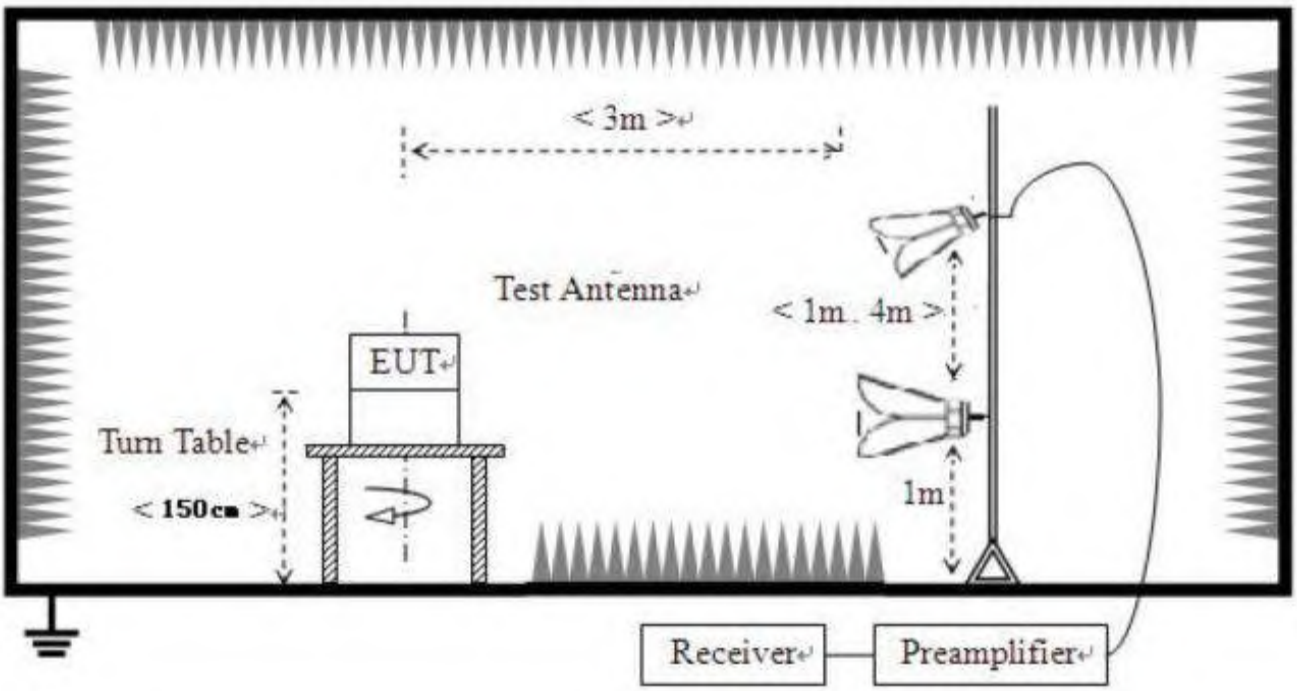
For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.6.4. Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter (for below 1GHz) / 1.5 meters (for above 1GHz) above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. A horn antenna was substituted in place of the EUT and was driven by a signal generator.
7. Tune the output power of signal generator to the same emission level with EUT maximum spurious emission.
8. Taking the record of output power at antenna port.
9. Repeat step 7 to step 8 for another polarization.
10. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
11. All Spurious Emission tests were performed in X, Y, Z axis direction and low, middle, high channel. And only the worst axis test condition was recorded in this test report.
12. The spectrum is measured from 9 kHz to the 10th harmonic of the fundamental frequency of the transmitter using CISPR quasi peak detector below 1GHz. The worst case emissions are reported however emissions whose levels were not within 20dB of the respective limits were not reported.
13. The maximum RB configurations of the Radiated Spurious Emissions as RB Size full, RB Offset 0.

2.6.5. Test Result of Radiated Spurious Emission

Note: 1. The emission levels of above 18GHz are lower than the limit 20dB and not show in test report.

Note: 2. Absolute Level = Reading Level + Factor.

LTE Band 2 QPSK 20MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	59.76	-92.14	-72.81	-13.00	59.81	19.33	Horizontal
2	362.82	-95.58	-67.05	-13.00	54.05	28.53	Horizontal
3	506.43	-101.67	-69.06	-13.00	56.06	32.61	Horizontal
4	4568.52	-58.51	-46.29	-13.00	33.29	12.22	Horizontal
5	7661.89	-60.29	-40.87	-13.00	27.87	19.42	Horizontal
6	11876.1	-62.78	-39.03	-13.00	26.03	23.75	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	62.02	-91.75	-71.46	-13.00	58.46	20.29	Vertical
2	104.07	-90.43	-66.37	-13.00	53.37	24.06	Vertical
3	362.82	-94.48	-67.67	-13.00	54.67	26.81	Vertical
4	2454.48	-54.45	-47.15	-13.00	34.15	7.30	Vertical
5	4800.77	-59.61	-44.87	-13.00	31.87	14.74	Vertical
6	11856.9	-62.34	-38.65	-13.00	25.65	23.69	Vertical

LTE Band 4 QPSK 20MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	61.05	-91.03	-71.70	-13.00	58.70	19.33	Horizontal
2	507.08	-100.54	-67.94	-13.00	54.94	32.60	Horizontal
3	826.96	-101.96	-64.92	-13.00	51.92	37.04	Horizontal
4	4881.29	-59.26	-44.51	-13.00	31.51	14.75	Horizontal
5	7642.71	-60.54	-41.05	-13.00	28.05	19.49	Horizontal
6	11051.6	-61.72	-38.93	-13.00	25.93	22.79	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	60.73	-90.18	-70.04	-13.00	57.04	20.14	Vertical
2	99.54	-98.94	-74.55	-13.00	61.55	24.39	Vertical
3	506.43	-100.84	-70.12	-13.00	57.12	30.72	Vertical
4	4892.96	-59.70	-44.96	-13.00	31.96	14.74	Vertical
5	7523.84	-60.73	-41.07	-13.00	28.07	19.66	Vertical
6	12313.2	-62.13	-39.42	-13.00	26.42	22.71	Vertical

LTE Band 5 QPSK 10MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	61.37	-90.38	-71.04	-13.00	58.04	19.34	Horizontal
2	300.07	-94.93	-69.04	-13.00	56.04	25.89	Horizontal
3	495.11	-99.59	-67.31	-13.00	54.31	32.28	Horizontal
4	4792.60	-59.78	-45.15	-13.00	32.15	14.63	Horizontal
5	7865.12	-60.47	-41.03	-13.00	28.03	19.44	Horizontal
6	11895.3	-62.23	-38.43	-13.00	25.43	23.80	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	43.26	-98.75	-79.03	-13.00	66.03	19.72	Vertical
2	363.79	-96.17	-69.31	-13.00	56.31	26.86	Vertical
3	506.11	-100.57	-69.86	-13.00	56.86	30.71	Vertical
4	1898.30	-52.36	-48.53	-13.00	35.53	3.83	Vertical
5	7650.38	-61.14	-41.67	-13.00	28.67	19.47	Vertical
6	11983.4	-60.88	-38.23	-13.00	25.23	22.65	Vertical

LTE Band 7 QPSK 20MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	60.73	-90.37	-71.04	-25.00	46.04	19.33	Horizontal
2	104.07	-84.03	-64.68	-25.00	39.68	19.35	Horizontal
3	504.81	-100.54	-67.92	-25.00	42.92	32.62	Horizontal
4	4936.15	-58.39	-43.85	-25.00	18.85	14.54	Horizontal
5	7404.97	-59.69	-40.00	-25.00	15.00	19.69	Horizontal
6	13153.0	-61.42	-38.17	-25.00	13.17	23.25	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	62.02	-90.16	-69.87	-25.00	44.87	20.29	Vertical
2	111.18	-97.73	-74.33	-25.00	49.33	23.40	Vertical
3	363.79	-95.71	-68.85	-25.00	43.85	26.86	Vertical
4	7577.53	-60.71	-41.07	-25.00	16.07	19.64	Vertical
5	12175.2	-61.74	-39.04	-25.00	14.04	22.70	Vertical
6	17348.1	-64.03	-34.96	-25.00	9.96	29.07	Vertical

LTE Band 12 QPSK 10MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	57.82	-95.26	-75.95	-13.00	62.95	19.31	Horizontal
2	115.71	-95.80	-76.01	-13.00	63.01	19.79	Horizontal
3	511.60	-105.40	-72.86	-13.00	59.86	32.54	Horizontal
4	7550.68	-60.56	-40.91	-13.00	27.91	19.65	Horizontal
5	11101.5	-61.47	-38.58	-13.00	25.58	22.89	Horizontal
6	17252.2	-64.86	-36.33	-13.00	23.33	28.53	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	57.49	-93.51	-73.77	-13.00	60.77	19.74	Vertical
2	73.99	-91.49	-69.93	-13.00	56.93	21.56	Vertical
3	239.91	-99.15	-75.62	-13.00	62.62	23.53	Vertical
4	1850.95	-56.56	-53.03	-13.00	40.03	3.53	Vertical
5	5386.63	-58.85	-44.95	-13.00	31.95	13.90	Vertical
6	10921.3	-61.85	-38.85	-13.00	25.85	23.00	Vertical

LTE Band 13 QPSK 10MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	57.82	-95.70	-76.39	-13.00	63.39	19.31	Horizontal
2	114.09	-93.62	-73.89	-13.00	60.89	19.73	Horizontal
3	337.59	-103.90	-75.61	-13.00	62.61	28.29	Horizontal
4	2462.49	-50.73	-43.38	-13.00	30.38	7.35	Horizontal
5	7508.50	-60.51	-40.84	-13.00	27.84	19.67	Horizontal
6	14932.3	-62.52	-38.90	-13.00	25.90	23.62	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	31.94	-99.56	-78.29	-13.00	65.29	21.27	Vertical
2	70.43	-97.14	-75.89	-13.00	62.89	21.25	Vertical
3	108.92	-99.37	-75.76	-13.00	62.76	23.61	Vertical
4	2459.15	-55.50	-48.18	-13.00	35.18	7.32	Vertical
5	7481.66	-61.00	-41.33	-13.00	28.33	19.67	Vertical
6	13735.9	-61.85	-37.94	-13.00	24.94	23.91	Vertical

LTE Band 17 QPSK 10MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	56.52	-96.17	-76.87	-13.00	63.87	19.30	Horizontal
2	93.07	-91.21	-72.00	-13.00	59.00	19.21	Horizontal
3	368.64	-106.75	-78.46	-13.00	65.46	28.29	Horizontal
4	2524.51	-57.74	-50.04	-13.00	37.04	7.70	Horizontal
5	5103.03	-59.74	-45.13	-13.00	32.13	14.61	Horizontal
6	11201.2	-60.93	-38.66	-13.00	25.66	22.27	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	57.82	-95.57	-75.78	-13.00	62.78	19.79	Vertical
2	114.09	-94.11	-70.95	-13.00	57.95	23.16	Vertical
3	239.91	-98.04	-74.51	-13.00	61.51	23.53	Vertical
4	5322.44	-59.86	-46.00	-13.00	33.00	13.86	Vertical
5	11051.6	-61.65	-38.86	-13.00	25.86	22.79	Vertical
6	13682.2	-62.44	-38.60	-13.00	25.60	23.84	Vertical

LTE Band 25 QPSK 20MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	57.82	-96.05	-76.74	-13.00	63.74	19.31	Horizontal
2	93.07	-91.31	-72.10	-13.00	59.10	19.21	Horizontal
3	363.14	-103.44	-74.92	-13.00	61.92	28.52	Horizontal
4	1882.96	-63.66	-59.93	-13.00	46.93	3.73	Horizontal
5	11147.5	-61.19	-38.59	-13.00	25.59	22.60	Horizontal
6	14380.1	-63.48	-39.06	-13.00	26.06	24.42	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	57.82	-92.94	-73.15	-13.00	60.15	19.79	Vertical
2	95.98	-97.64	-73.66	-13.00	60.66	23.98	Vertical
3	239.91	-97.40	-73.87	-13.00	60.87	23.53	Vertical
4	1250.75	-57.86	-58.39	-13.00	45.39	-0.53	Vertical
5	4853.28	-59.91	-45.17	-13.00	32.17	14.74	Vertical
6	10587.7	-61.31	-38.64	-13.00	25.64	22.67	Vertical

LTE Band 26(Part 22) QPSK 15MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	30.32	-100.91	-76.99	-13.00	63.99	23.92	Horizontal
2	105.04	-98.13	-78.74	-13.00	65.74	19.39	Horizontal
3	239.91	-98.93	-77.02	-13.00	64.02	21.91	Horizontal
4	2079.03	-58.38	-53.04	-13.00	40.04	5.34	Horizontal
5	5026.01	-59.19	-44.89	-13.00	31.89	14.30	Horizontal
6	12819.4	-61.95	-38.82	-13.00	25.82	23.13	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	58.79	-96.58	-76.67	-13.00	63.67	19.91	Vertical
2	70.11	-94.18	-72.96	-13.00	59.96	21.22	Vertical
3	104.39	-98.04	-74.01	-13.00	61.01	24.03	Vertical
4	2033.01	-60.27	-55.04	-13.00	42.04	5.23	Vertical
5	4804.27	-59.57	-44.84	-13.00	31.84	14.73	Vertical
6	12811.7	-61.38	-38.28	-13.00	25.28	23.10	Vertical

LTE Band 26(Part 90) QPSK 10MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	31.94	-98.87	-75.34	-13.00	62.34	23.53	Horizontal
2	57.49	-94.61	-75.31	-13.00	62.31	19.30	Horizontal
3	362.82	-103.07	-74.54	-13.00	61.54	28.53	Horizontal
4	2980.66	-58.95	-48.62	-13.00	35.62	10.33	Horizontal
5	4797.27	-59.79	-45.10	-13.00	32.10	14.69	Horizontal
6	12677.5	-62.16	-39.16	-13.00	26.16	23.00	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	37.12	-96.36	-75.81	-13.00	62.81	20.55	Vertical
2	114.74	-98.05	-74.95	-13.00	61.95	23.10	Vertical
3	282.28	-104.45	-79.52	-13.00	66.52	24.93	Vertical
4	1788.26	-58.39	-55.28	-13.00	42.28	3.11	Vertical
5	7286.10	-60.39	-41.62	-13.00	28.62	18.77	Vertical
6	11910.6	-61.50	-37.84	-13.00	24.84	23.66	Vertical

LTE Band 41 QPSK 20MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	60.57	-90.67	-71.33	-25.00	46.33	19.34	Horizontal
2	81.92	-98.65	-79.53	-25.00	54.53	19.12	Horizontal
3	506.02	-101.54	-68.93	-25.00	43.93	32.61	Horizontal
4	2459.89	-48.40	-42.09	-25.00	17.09	6.31	Horizontal
5	7169.43	-60.37	-41.62	-25.00	16.62	18.75	Horizontal
6	12223.5	-61.63	-38.87	-25.00	13.87	22.76	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	61.06	-89.10	-68.92	-25.00	43.92	20.18	Vertical
2	104.24	-86.60	-62.56	-25.00	37.56	24.04	Vertical
3	362.88	-94.86	-68.04	-25.00	43.04	26.82	Vertical
4	4904.38	-59.75	-45.03	-25.00	20.03	14.72	Vertical
5	8878.68	-60.49	-41.25	-25.00	16.25	19.24	Vertical
6	14277.8	-63.67	-39.02	-25.00	14.02	24.65	Vertical

LTE Band 66 QPSK 20MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	31.94	-100.13	-76.60	-13.00	63.60	23.53	Horizontal
2	70.11	-95.64	-76.28	-13.00	63.28	19.36	Horizontal
3	363.14	-103.77	-75.25	-13.00	62.25	28.52	Horizontal
4	4869.62	-59.96	-45.21	-13.00	32.21	14.75	Horizontal
5	7508.50	-60.70	-41.03	-13.00	28.03	19.67	Horizontal
6	12677.5	-62.41	-39.41	-13.00	26.41	23.00	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	59.43	-98.35	-78.36	-13.00	65.36	19.99	Vertical
2	71.40	-95.88	-74.54	-13.00	61.54	21.34	Vertical
3	111.83	-94.93	-71.58	-13.00	58.58	23.35	Vertical
4	4882.46	-59.56	-44.82	-13.00	31.82	14.74	Vertical
5	7523.84	-60.47	-40.81	-13.00	27.81	19.66	Vertical
6	13172.2	-62.65	-39.38	-13.00	26.38	23.27	Vertical

LTE Band 71 QPSK 20MHz BW Middle Channel							
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	57.82	-95.38	-76.07	-13.00	63.07	19.31	Horizontal
2	114.09	-93.84	-74.11	-13.00	61.11	19.73	Horizontal
3	319.80	-101.98	-74.83	-13.00	61.83	27.15	Horizontal
4	2809.94	-57.68	-48.47	-13.00	35.47	9.21	Horizontal
5	7600.53	-61.21	-41.59	-13.00	28.59	19.62	Horizontal
6	11040.1	-61.50	-38.73	-13.00	25.73	22.77	Horizontal
NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	60.40	-97.77	-77.67	-13.00	64.67	20.10	Vertical
2	70.11	-95.23	-74.01	-13.00	61.01	21.22	Vertical
3	239.91	-98.71	-75.18	-13.00	62.18	23.53	Vertical
4	4868.46	-59.50	-44.76	-13.00	31.76	14.74	Vertical
5	7531.51	-60.36	-40.71	-13.00	27.71	19.65	Vertical
6	12704.4	-62.04	-39.03	-13.00	26.03	23.01	Vertical

2.7. Frequency Stability

2.7.1. Requirement

Frequency stability is a measure of frequency drift due to temperature and supply voltage variations, with reference to the frequency measured at an appropriate reference temperature and the rated supply voltage.

For licensed devices, the following measurement conditions apply:

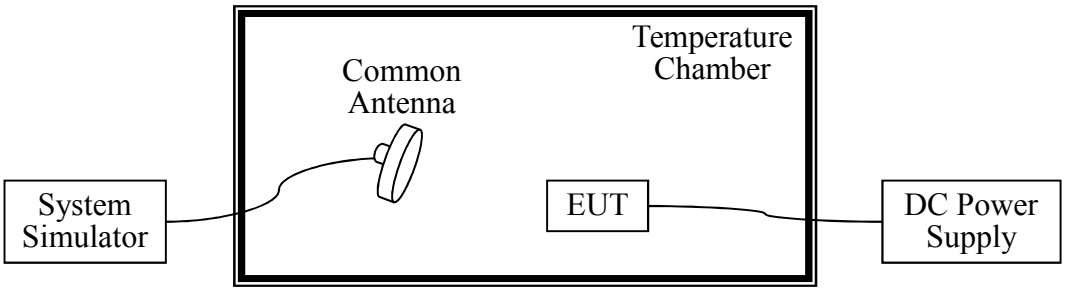
a. at the temperatures of -30°C (-22°F), +20°C (+68°F) and +50°C (+122°F), and at the manufacturer's rated supply voltage.

b. at the temperature of +20°C (+68°F) and at ±15% of the manufacturer's rated supply voltage.

2.7.2. Measuring Instruments

The measuring equipment is listed in the section 3 of this test report.

2.7.3. Test Setup



2.7.4. Test Procedures

1. The EUT was set up in the thermal chamber and connected with the system simulator.
2. With power OFF, the temperature was decreased to -30°C and the EUT was stabilized before testing. Power was applied and the maximum change in frequency was recorded within one minute.
3. With power OFF, the temperature was raised in 10°C step up to 50°C. The EUT was stabilized at each step for at least half an hour. Power was applied and the maximum frequency change was recorded within one minute.
4. The nominal, highest and lowest extreme voltages were tested, which are specified by the applicant; the normal temperature here used is 20°C.
5. The variation in frequency was measured for the worst case.

2.7.5. Test Result of Frequency Stability

Please refer to Appendix A for detail

3. List of measuring equipment

Item	Test Equipment	Manufacturer	Model No.	Serial No.	Cal Date	Due Date
1	EMI Test Receiver	ROHDE&SCHWARZ	ESW26	A180502935	2024.05.23	2025.05.22
2	5M Anechoic Chamber	Albatross	SAC-5MAC 12.8x6.8x6.4m	A0304210	2022.06.09	2026.06.08
3	Loop Antenna	Schwarz beck	HFH2-Z2	A0304220	2022.05.02	2025.05.01
4	Broadband antenna (30MHz~1GHz)	R&S	HL562	A0304224	2023.06.08	2026.06.07
5	EMI Horn Ant. (1-18G)	ETC	MCTD-1209	A150402241	2023.05.16	2026.05.15
6	Horn antenna (18GHz~26.5GHz)	AR	AT4510	A0804450	2023.06.01	2026.05.31
7	Amplifier 30M~1GHz	MILMEGA	80RF1000-1000	A140101634	2023.11.27	2024.11.26
8	Amplifier 1G~18GHz	MILMEGA	AS0104R-800/400	A160302517	2024.05.25	2025.05.24
9	Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2024.01.18	2025.01.17
10	Test Receiver	R&S	ESIB7	A0501375	2024.02.28	2025.02.27
11	Broadband Ant.	ETC	MCTD 2786	A150402240	2023.05.22	2026.05.21
12	3M Anechoic Chamber	Albatross	SAC-3MAC 9*6*6m	A0412375	2024.02.27	2027.02.26
13	Constant Temperature Humidity Chamber	ESPEC	SU-642	A150802409	2024.02.22	2025.02.21
14	Wideband Radio Communication tester	R&S	CMW500	A130101034	2024.06.18	2025.06.17
15	Wideband Radio Communication tester	R&S	CMW500	A150802214	2024.03.27	2025.03.26
16	Power Supply	R&S	WYJ-60100	A141102031	2023.07.12	2026.07.11

4. Uncertainty of Evaluation

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.10-2013. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence . The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Emission Measurement (150kHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	2.8dB

Uncertainty of Radiated Emission Measurement (9kHz~30MHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	3.5dB

Uncertainty of Radiated Emission Measurement (30MHz~1GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	3.91dB

Uncertainty of Radiated Emission Measurement (1GHz~18GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	4.5dB

Uncertainty of Radiated Emission Measurement (18GHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	4.9dB

Uncertainty of RF Conducted Measurement (9kHz~40GHz)

Measuring Uncertainty for a level of confidence of 95%(U=2Uc(y))	1.2dB

APPENDIX A

Conducted Output Power and ERP/EIRP

Test Result and Data

LTE Band 2 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			18607	18900	19193			
			1850.7MHz	1880.0MHz	1909.3MHz			
QPSK	1	0	23.33	22.63	22.43	1.87	25.33	33.00
	1	2	23.34	22.68	22.62			
	1	5	23.35	22.64	22.41			
	3	0	23.46	22.70	22.50			
	3	1	23.45	22.73	22.46			
	3	2	23.00	22.74	22.47			
	6	0	21.94	21.72	21.54			
16QAM	1	0	22.27	21.45	21.32	1.87	24.21	33.00
	1	2	22.24	21.60	21.37			
	1	5	22.25	21.41	21.31			
	3	0	22.34	21.48	21.28			
	3	1	22.33	21.49	21.27			
	3	2	21.82	21.48	21.26			
	6	0	20.83	20.71	20.50			

LTE Band 2 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			18615	18900	19185			
			1851.5MHz	1880.0MHz	1908.5MHz			
QPSK	1	0	23.59	23.36	22.67	1.87	25.54	33.00
	1	8	23.65	22.95	22.66			
	1	14	23.67	22.93	22.69			
	8	0	22.58	21.91	21.74			
	8	4	22.60	21.86	21.71			
	8	7	22.67	21.87	21.72			
	15	0	22.62	21.87	21.69			
16QAM	1	0	22.70	21.75	21.70	1.87	24.66	33.00
	1	8	22.68	21.77	21.68			
	1	14	22.79	21.75	21.72			
	8	0	21.65	20.84	20.72			
	8	4	21.66	20.88	20.67			
	8	7	21.67	20.86	20.73			
	15	0	21.63	20.80	20.69			

LTE Band 2 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			18625	18900	19175			
			1852.5MHz	1880.0MHz	1907.5MHz			
QPSK	1	0	23.20	22.79	22.56	1.87	25.21	33.00
	1	12	23.34	22.91	22.69			
	1	24	23.18	22.81	22.59			
	12	0	22.20	21.89	21.58			
	12	7	22.25	21.90	21.59			
	12	13	22.15	21.84	21.58			
	25	0	22.21	21.83	21.55			
16QAM	1	0	22.08	21.88	21.52	1.87	24.14	33.00
	1	12	22.27	21.94	21.62			
	1	24	22.11	21.87	21.50			
	12	0	21.19	20.87	20.55			
	12	7	21.13	20.87	20.54			
	12	13	21.05	20.86	20.56			
	25	0	21.21	20.83	20.62			

LTE Band 2 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			18650	18900	19150			
			1855.0MHz	1880.0MHz	1905.0MHz			
QPSK	1	0	23.07	22.88	22.60	1.87	25.13	33.00
	1	24	23.26	22.94	22.74			
	1	49	23.14	22.88	22.55			
	25	0	22.24	21.89	21.64			
	25	24	22.23	21.90	21.64			
	25	49	22.18	21.87	21.59			
	50	0	22.15	21.87	21.61			
16QAM	1	0	22.13	21.74	21.65	1.87	24.17	33.00
	1	24	22.30	21.85	21.66			
	1	49	22.22	21.71	21.60			
	25	0	21.20	20.89	20.62			
	25	24	21.24	20.89	20.59			
	25	49	21.19	20.87	20.57			
	50	0	21.21	20.84	20.58			

LTE Band 2 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			18675	18900	19125			
			1857.5MHz	1880.0MHz	1902.5MHz			
QPSK	1	0	22.98	22.69	22.63	1.87	25.01	33.00
	1	38	23.14	22.69	22.58			
	1	74	23.01	22.69	22.43			
	38	0	22.15	21.81	21.66			
	38	18	22.17	21.83	21.67			
	38	37	22.16	21.82	21.66			
	75	0	22.19	21.84	21.66			
16QAM	1	0	21.99	21.83	21.65	1.87	24.05	33.00
	1	38	22.11	21.90	21.58			
	1	74	22.01	21.88	21.49			
	38	0	22.14	21.85	21.62			
	38	18	22.18	21.89	21.67			
	38	37	22.16	21.87	21.67			
	75	0	21.10	20.82	20.55			

LTE Band 2 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			18700	18900	19100			
			1860.0MHz	1880.0MHz	1900.0MHz			
QPSK	1	0	22.89	22.76	22.70	1.87	25.07	33.00
	1	49	23.20	22.80	22.71			
	1	99	22.87	22.76	22.44			
	50	0	22.18	21.71	21.66			
	50	25	22.15	21.77	21.70			
	50	50	21.98	21.79	21.49			
	100	0	22.10	21.72	21.60			
16QAM	1	0	21.84	21.92	21.63	1.87	23.95	33.00
	1	49	22.08	22.01	21.63			
	1	99	21.75	21.88	21.35			
	50	0	21.20	20.76	20.65			
	50	25	21.15	20.74	20.65			
	50	50	21.02	20.77	20.52			
	100	0	21.14	20.69	20.52			

LTE Band 4 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			19957	20175	20393			
			1710.7MHz	1732.5MHz	1754.3MHz			
QPSK	1	0	23.24	23.64	23.16	3.12	26.76	30.00
	1	2	23.26	23.30	23.15			
	1	5	23.35	23.21	23.13			
	3	0	23.50	23.27	23.32			
	3	1	23.48	23.26	23.31			
	3	2	23.55	23.31	23.27			
	6	0	22.51	22.27	22.33			
16QAM	1	0	22.29	22.17	22.13	3.12	25.56	30.00
	1	2	22.44	22.15	22.27			
	1	5	22.26	21.97	22.13			
	3	0	22.27	22.13	22.14			
	3	1	22.31	22.08	22.13			
	3	2	22.32	22.15	22.10			
	6	0	21.49	21.10	21.30			

LTE Band 4 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			19965	20175	20385			
			1711.5MHz	1732.5MHz	1753.5MHz			
QPSK	1	0	23.02	23.26	23.25	3.12	26.41	30.00
	1	8	23.00	23.29	23.23			
	1	14	23.08	23.23	23.29			
	8	0	21.98	22.24	22.25			
	8	4	22.01	22.26	22.31			
	8	7	22.12	22.22	22.28			
	15	0	22.02	22.23	22.26			
16QAM	1	0	22.01	22.14	22.32	3.12	25.46	30.00
	1	8	22.00	22.09	22.34			
	1	14	22.00	22.10	22.32			
	8	0	21.07	21.25	21.31			
	8	4	21.07	21.21	21.29			
	8	7	21.06	21.28	21.30			
	15	0	21.03	21.16	21.24			

LTE Band 4 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			19975	20175	20375			
			1712.5MHz	1732.5MHz	1752.5MHz			
QPSK	1	0	22.96	23.18	23.23	3.12	26.49	30.00
	1	12	23.17	23.27	23.37			
	1	24	23.17	23.20	23.26			
	12	0	22.14	22.27	22.34			
	12	7	22.08	22.28	22.32			
	12	13	22.05	22.29	22.30			
	25	0	22.08	22.32	22.25			
16QAM	1	0	21.96	22.28	22.16	3.12	25.46	30.00
	1	12	22.04	22.34	22.25			
	1	24	22.02	22.26	22.23			
	12	0	21.09	21.28	21.29			
	12	7	21.00	21.31	21.25			
	12	13	21.11	21.27	21.23			
	25	0	21.12	21.32	21.29			

LTE Band 4 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20000	20175	20350			
			1715.0MHz	1732.5MHz	1750.0MHz			
QPSK	1	0	23.04	23.27	23.25	3.12	26.53	30.00
	1	24	23.29	23.41	23.41			
	1	49	23.21	23.35	23.33			
	25	0	22.21	22.33	22.36			
	25	24	22.23	22.35	22.32			
	25	49	22.24	22.36	22.30			
	50	0	22.19	22.32	22.32			
16QAM	1	0	22.08	22.17	22.27	3.12	25.55	30.00
	1	24	22.24	22.26	22.43			
	1	49	22.32	22.12	22.33			
	25	0	21.23	21.32	21.38			
	25	24	21.19	21.33	21.37			
	25	49	21.18	21.37	21.30			
	50	0	21.22	21.38	21.31			

LTE Band 4 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20025	20175	20325			
			1717.5MHz	1732.5MHz	1747.5MHz			
QPSK	1	0	22.95	23.12	23.13	3.12	26.43	30.00
	1	38	23.20	23.24	23.31			
	1	74	23.25	23.16	23.21			
	38	0	22.31	22.40	22.35			
	38	18	22.35	22.39	22.37			
	38	37	22.34	22.41	22.33			
	75	0	22.30	22.40	22.37			
16QAM	1	0	21.98	22.26	22.14	3.12	25.53	30.00
	1	38	22.30	22.41	22.32			
	1	74	22.30	22.36	22.22			
	38	0	22.31	22.38	22.37			
	38	18	22.32	22.38	22.34			
	38	37	22.25	22.39	22.36			
	75	0	21.26	21.39	21.32			

LTE Band 4 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20050	20175	20300			
			1720.0MHz	1732.5MHz	1745.0MHz			
QPSK	1	0	22.92	23.17	23.08	3.12	26.55	30.00
	1	49	23.36	23.43	23.41			
	1	99	23.18	23.26	23.27			
	50	0	22.24	22.20	22.26			
	50	25	22.31	22.25	22.26			
	50	50	22.37	22.38	22.21			
	100	0	22.28	22.34	22.25			
16QAM	1	0	21.89	22.30	21.99	3.12	25.65	30.00
	1	49	22.28	22.53	22.33			
	1	99	22.15	22.36	22.19			
	50	0	21.25	21.25	21.22			
	50	25	21.27	21.29	21.18			
	50	50	21.41	21.42	21.26			
	100	0	21.27	21.35	21.19			

LTE Band 5 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			20407	20525	20643			
			824.7MHz	836.5MHz	848.3MHz			
QPSK	1	0	23.56	23.36	23.06	0.64	22.23	38.45
	1	2	23.74	23.51	23.21			
	1	5	23.50	23.34	23.02			
	3	0	23.32	23.45	23.21			
	3	1	23.33	23.44	23.20			
	3	2	23.27	23.43	23.18			
	6	0	22.24	22.37	22.17			
16QAM	1	0	22.55	22.28	21.86	0.64	21.26	38.45
	1	2	22.77	22.37	22.05			
	1	5	22.11	22.21	21.89			
	3	0	22.13	22.28	22.02			
	3	1	22.15	22.26	21.95			
	3	2	22.04	22.28	21.91			
	6	0	21.27	21.25	21.18			

LTE Band 5 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			20415	20525	20635			
			825.5MHz	836.5MHz	847.5MHz			
QPSK	1	0	23.18	23.40	23.11	0.64	21.89	38.45
	1	8	23.23	23.37	23.13			
	1	14	23.29	23.34	23.10			
	8	0	22.13	22.39	22.22			
	8	4	22.11	22.31	22.21			
	8	7	22.28	22.34	22.20			
	15	0	22.24	22.35	22.15			
16QAM	1	0	22.22	22.33	21.98	0.64	20.82	38.45
	1	8	22.27	22.30	21.96			
	1	14	22.24	22.18	21.90			
	8	0	21.24	21.32	21.23			
	8	4	21.26	21.35	21.18			
	8	7	21.24	21.34	21.18			
	15	0	21.28	21.29	21.09			

LTE Band 5 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			20425	20525	20625			
			826.5MHz	836.5MHz	846.5MHz			
QPSK	1	0	23.16	23.26	23.08	0.64	21.86	38.45
	1	12	23.33	23.37	23.23			
	1	24	23.30	23.17	23.04			
	12	0	22.09	22.32	22.23			
	12	7	22.12	22.33	22.20			
	12	13	22.28	22.40	22.18			
	25	0	22.19	22.39	22.23			
16QAM	1	0	22.16	22.39	22.05	0.64	20.92	38.45
	1	12	22.28	22.43	22.16			
	1	24	22.21	22.31	22.03			
	12	0	21.10	21.34	21.26			
	12	7	21.13	21.37	21.27			
	12	13	21.19	21.44	21.15			
	25	0	21.25	21.42	21.28			

LTE Band 5 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			20450	20525	20600			
			829.0MHz	836.5MHz	844.0MHz			
QPSK	1	0	23.25	23.30	23.22	0.64	22.03	38.45
	1	24	23.43	23.54	23.27			
	1	49	23.34	23.21	23.06			
	25	0	22.26	22.40	22.33			
	25	24	22.28	22.35	22.38			
	25	49	22.38	22.41	22.21			
	50	0	22.33	22.39	22.31			
16QAM	1	0	22.19	22.24	22.06	0.64	21.05	38.45
	1	24	22.56	22.38	22.07			
	1	49	22.39	22.09	21.89			
	25	0	21.32	21.40	21.42			
	25	24	21.30	21.42	21.45			
	25	49	21.43	21.45	21.26			
	50	0	21.36	21.47	21.32			

LTE Band 7 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20775	21100	21425			
			2502.5MHz	2535.0MHz	2567.5MHz			
QPSK	1	0	23.12	22.64	22.79	2.90	26.02	33.00
	1	12	22.75	22.77	23.01			
	1	24	22.66	22.68	22.87			
	12	0	21.71	21.71	21.93			
	12	7	21.69	21.66	21.95			
	12	13	21.73	21.68	21.88			
	25	0	21.75	21.72	21.93			
16QAM	1	0	21.59	21.56	21.81	2.90	24.90	33.00
	1	12	21.72	21.69	22.00			
	1	24	21.58	21.59	21.92			
	12	0	20.62	20.66	20.99			
	12	7	20.64	20.68	20.95			
	12	13	20.71	20.62	20.90			
	25	0	20.72	20.74	20.94			

LTE Band 7 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20800	21100	21400			
			2505.0MHz	2535.0MHz	2565.0MHz			
QPSK	1	0	22.76	22.68	22.89	2.90	25.99	33.00
	1	24	22.81	22.83	23.09			
	1	49	22.75	22.74	22.99			
	25	0	21.80	21.80	22.01			
	25	24	21.75	21.78	21.97			
	25	49	21.78	21.71	21.88			
	50	0	21.81	21.75	21.92			
16QAM	1	0	21.73	21.70	21.67	2.90	24.80	33.00
	1	24	21.90	21.81	21.83			
	1	49	21.79	21.70	21.75			
	25	0	20.77	20.74	21.04			
	25	24	20.73	20.75	21.02			
	25	49	20.72	20.64	20.94			
	50	0	20.75	20.74	20.93			

LTE Band 7 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20825	21100	21375			
			2507.5MHz	2535.0MHz	2562.5MHz			
QPSK	1	0	22.54	22.53	22.67	2.90	25.77	33.00
	1	38	22.62	22.69	22.87			
	1	74	22.55	22.63	22.78			
	38	0	21.75	21.83	21.99			
	38	18	21.80	21.84	21.98			
	38	37	21.76	21.84	21.98			
	75	0	21.76	21.85	21.98			
16QAM	1	0	21.60	21.58	21.77	2.90	24.89	33.00
	1	38	21.69	21.65	21.88			
	1	74	21.63	21.67	21.88			
	38	0	21.76	21.86	21.99			
	38	18	21.77	21.83	21.95			
	38	37	21.79	21.84	21.97			
	75	0	20.71	20.70	20.95			

LTE Band 7 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			20850	21100	21350			
			2510.0MHz	2535.0MHz	2560.0MHz			
QPSK	1	0	22.60	22.59	22.72	2.90	25.91	33.00
	1	49	22.97	22.89	23.01			
	1	99	22.65	22.71	22.88			
	50	0	21.78	21.64	21.82			
	50	25	21.74	21.67	21.83			
	50	50	21.75	21.65	21.76			
	100	0	21.71	21.61	21.79			
16QAM	1	0	21.56	21.52	21.81	2.90	25.00	33.00
	1	49	21.76	21.72	22.10			
	1	99	21.62	21.66	21.93			
	50	0	20.75	20.63	20.90			
	50	25	20.72	20.66	20.86			
	50	50	20.73	20.61	20.75			
	100	0	20.73	20.56	20.80			

LTE Band 12 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23017	23095	23173			
			699.7MHz	707.5MHz	715.3MHz			
QPSK	1	0	23.48	22.89	22.80	0.95	22.41	33.77
	1	2	23.61	22.98	22.87			
	1	5	22.94	22.86	22.73			
	3	0	23.10	22.94	22.90			
	3	1	23.11	22.93	22.96			
	3	2	23.08	22.95	22.92			
	6	0	22.05	21.86	21.90			
16QAM	1	0	22.34	21.73	21.59	0.95	21.20	33.77
	1	2	22.40	21.92	21.69			
	1	5	21.86	21.67	21.57			
	3	0	21.86	21.75	21.71			
	3	1	21.88	21.75	21.68			
	3	2	21.94	21.75	21.64			
	6	0	21.00	20.70	20.82			

LTE Band 12 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23025	23095	23165			
			700.5MHz	707.5MHz	714.5MHz			
QPSK	1	0	23.05	23.01	22.86	0.95	21.88	33.77
	1	8	23.08	22.97	22.96			
	1	14	23.02	22.90	22.83			
	8	0	22.11	21.91	21.89			
	8	4	22.11	21.92	21.90			
	8	7	22.13	21.90	21.89			
	15	0	22.12	21.88	21.87			
16QAM	1	0	22.06	21.85	21.63	0.95	20.89	33.77
	1	8	22.09	21.79	21.70			
	1	14	22.06	21.70	21.69			
	8	0	21.12	20.90	20.92			
	8	4	21.11	20.93	20.91			
	8	7	21.10	20.89	20.89			
	15	0	21.09	20.79	20.81			

LTE Band 12 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23035	23095	23155			
			701.5MHz	707.5MHz	713.5MHz			
QPSK	1	0	23.06	22.87	22.76	0.95	21.95	33.77
	1	12	23.15	22.91	22.95			
	1	24	23.01	22.81	22.82			
	12	0	22.08	21.91	21.93			
	12	7	22.08	21.86	21.95			
	12	13	22.05	21.97	21.95			
	25	0	22.12	21.95	21.97			
16QAM	1	0	21.97	22.01	21.67	0.95	20.91	33.77
	1	12	22.11	22.02	21.80			
	1	24	21.94	21.86	21.78			
	12	0	21.10	20.86	20.94			
	12	7	21.07	20.84	20.93			
	12	13	21.02	20.88	20.91			
	25	0	21.11	20.88	20.96			

LTE Band 12 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23060	23095	23130			
			704.0MHz	707.5MHz	711.0MHz			
QPSK	1	0	23.05	22.99	22.97	0.95	21.93	33.77
	1	24	23.13	22.97	22.97			
	1	49	22.84	22.91	22.84			
	25	0	22.01	21.80	21.84			
	25	24	22.07	21.82	21.81			
	25	49	22.30	21.88	21.85			
	50	0	22.18	21.82	21.86			
16QAM	1	0	22.05	21.88	21.72	0.95	20.98	33.77
	1	24	22.18	21.92	21.77			
	1	49	21.87	21.69	21.62			
	25	0	21.07	20.84	20.82			
	25	24	21.02	20.84	20.86			
	25	49	21.29	20.91	20.89			
	50	0	21.19	20.84	20.78			

LTE Band 13 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23205	23230	23255			
			779.5MHz	782.0MHz	784.5MHz			
QPSK	1	0	23.51	23.04	23.06	2.23	23.72	33.77
	1	12	23.64	23.19	23.18			
	1	24	23.53	23.05	23.03			
	12	0	22.56	22.17	22.14			
	12	7	22.60	22.09	22.13			
	12	13	22.64	22.12	22.10			
	25	0	22.09	22.16	22.13			
16QAM	1	0	22.61	21.98	21.99	2.23	22.79	33.77
	1	12	22.71	22.03	22.15			
	1	24	22.56	21.95	21.94			
	12	0	21.65	21.20	21.13			
	12	7	21.66	21.18	21.09			
	12	13	21.21	21.17	21.10			
	25	0	21.10	21.22	21.13			

LTE Band 13 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	23230	/			
			/	782.0MHz	/			
QPSK	1	0	/	23.13	/	2.23	23.37	33.77
	1	24	/	23.29	/			
	1	49	/	23.10	/			
	25	0	/	22.11	/			
	25	24	/	22.14	/			
	25	49	/	22.20	/			
	50	0	/	22.14	/			
16QAM	1	0	/	22.15	/	2.23	22.36	33.77
	1	24	/	22.28	/			
	1	49	/	22.08	/			
	25	0	/	21.13	/			
	25	24	/	21.10	/			
	25	49	/	21.20	/			
	50	0	/	21.17	/			

LTE Band 17 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23755	23790	23825			
			706.5MHz	710.0MHz	713.5MHz			
QPSK	1	0	22.93	22.76	22.77	0.95	21.79	33.77
	1	12	22.99	22.89	22.93			
	1	24	22.93	22.74	22.82			
	12	0	21.83	21.87	21.98			
	12	7	21.82	21.83	21.93			
	12	13	22.09	21.81	21.92			
	25	0	22.05	21.84	21.92			
16QAM	1	0	21.93	21.95	21.76	0.95	20.81	33.77
	1	12	22.01	21.99	21.90			
	1	24	21.88	21.89	21.84			
	12	0	20.93	20.86	20.97			
	12	7	20.88	20.85	20.94			
	12	13	21.08	20.79	20.90			
	25	0	21.13	20.76	20.91			

LTE Band 17 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			23780	23790	23800			
			709.0MHz	710.0MHz	711.0MHz			
QPSK	1	0	22.92	22.92	22.91	0.95	21.82	33.77
	1	24	22.96	23.02	23.02			
	1	49	22.87	22.88	22.90			
	25	0	21.68	21.73	21.77			
	25	24	21.73	21.73	21.80			
	25	49	21.84	21.86	21.90			
	50	0	21.78	21.80	21.89			
16QAM	1	0	22.03	21.84	21.75	0.95	20.91	33.77
	1	24	22.11	22.03	21.79			
	1	49	21.86	21.77	21.72			
	25	0	20.71	20.75	20.85			
	25	24	20.68	20.76	20.85			
	25	49	20.80	20.87	20.93			
	50	0	20.80	20.81	20.87			

LTE Band 25 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			26047	26365	26683			
			1850.7MHz	1882.5MHz	1914.3MHz			
QPSK	1	0	22.92	22.68	22.54	1.87	24.99	33.00
	1	2	23.12	22.90	22.73			
	1	5	23.01	22.76	22.54			
	3	0	23.06	22.80	22.57			
	3	1	23.03	22.82	22.53			
	3	2	23.07	22.85	22.56			
	6	0	22.01	21.81	21.67			
16QAM	1	0	21.82	21.52	21.38	1.87	23.83	33.00
	1	2	21.96	21.70	21.43			
	1	5	21.79	21.51	21.36			
	3	0	21.87	21.55	21.36			
	3	1	21.86	21.55	21.35			
	3	2	21.84	21.56	21.32			
	6	0	20.89	20.76	20.61			

LTE Band 25 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			26055	26365	26675			
			1851.5MHz	1882.5MHz	1913.5MHz			
QPSK	1	0	22.95	22.73	22.53	1.87	24.86	33.00
	1	8	22.97	22.77	22.54			
	1	14	22.99	22.83	22.57			
	8	0	22.02	21.75	21.55			
	8	4	22.00	21.70	21.54			
	8	7	21.98	21.73	21.57			
	15	0	21.97	21.70	21.49			
16QAM	1	0	21.98	21.64	21.49	1.87	23.93	33.00
	1	8	22.02	21.61	21.49			
	1	14	22.06	21.57	21.49			
	8	0	21.04	20.72	20.51			
	8	4	20.99	20.69	20.54			
	8	7	21.01	20.71	20.54			
	15	0	20.96	20.64	20.49			

LTE Band 25 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			26065	26365	26665			
			1852.5MHz	1882.5MHz	1912.5MHz			
QPSK	1	0	22.91	22.59	22.42	1.87	24.92	33.00
	1	12	23.05	22.76	22.59			
	1	24	23.02	22.66	22.51			
	12	0	21.99	21.70	21.48			
	12	7	22.02	21.81	21.48			
	12	13	21.96	21.79	21.48			
	25	0	22.04	21.78	21.50			
16QAM	1	0	21.87	21.72	21.37	1.87	23.91	33.00
	1	12	22.04	21.86	21.49			
	1	24	21.97	21.73	21.43			
	12	0	21.01	20.76	20.45			
	12	7	20.89	20.78	20.49			
	12	13	20.95	20.77	20.42			
	25	0	20.96	20.73	20.48			

LTE Band 25 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			26090	26365	26640			
			1855.0MHz	1882.5MHz	1910.0MHz			
QPSK	1	0	22.99	22.74	22.45	1.87	25.03	33.00
	1	24	23.16	22.83	22.50			
	1	49	23.04	22.83	22.56			
	25	0	22.14	21.83	21.50			
	25	24	22.13	21.80	21.55			
	25	49	22.04	21.80	21.51			
	50	0	22.10	21.82	21.50			
16QAM	1	0	21.98	21.66	21.48	1.87	24.05	33.00
	1	24	22.18	21.69	21.53			
	1	49	22.09	21.67	21.52			
	25	0	21.07	20.85	20.52			
	25	24	21.10	20.85	20.51			
	25	49	21.01	20.85	20.49			
	50	0	21.03	20.82	20.48			

LTE Band 25 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			26115	26365	26615			
			1857.5MHz	1882.5MHz	1907.5MHz			
QPSK	1	0	22.94	22.66	22.46	1.87	24.99	33.00
	1	38	23.12	22.70	22.52			
	1	74	22.95	22.66	22.51			
	38	0	22.14	21.89	21.66			
	38	18	22.15	21.87	21.60			
	38	37	22.17	21.87	21.60			
	75	0	22.15	21.88	21.62			
16QAM	1	0	21.95	21.82	21.52	1.87	24.02	33.00
	1	38	22.14	21.83	21.56			
	1	74	22.02	21.85	21.47			
	38	0	22.13	21.89	21.63			
	38	18	22.15	21.88	21.67			
	38	37	22.11	21.86	21.67			
	75	0	21.08	20.80	20.53			

LTE Band 25 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			26140	26365	26590			
			1860.0MHz	1882.5MHz	1905.0MHz			
QPSK	1	0	22.90	22.73	22.61	1.87	25.11	33.00
	1	49	23.24	22.92	22.67			
	1	99	22.80	22.70	22.55			
	50	0	22.10	21.83	21.59			
	50	25	22.11	21.75	21.52			
	50	50	22.01	21.74	21.48			
	100	0	22.07	21.71	21.47			
16QAM	1	0	21.80	21.80	21.54	1.87	24.07	33.00
	1	49	22.20	22.04	21.57			
	1	99	21.77	21.88	21.31			
	50	0	21.09	20.81	20.55			
	50	25	21.17	20.79	20.57			
	50	50	21.08	20.77	20.47			
	100	0	21.10	20.72	20.46			

LTE Band 26 (Part 22) - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			26797	26915	27033			
			824.7MHz	836.5MHz	848.3MHz			
QPSK	1	0	23.20	23.32	23.04	0.64	21.97	38.45
	1	2	23.26	23.43	23.21			
	1	5	23.22	23.27	23.09			
	3	0	23.31	23.45	23.17			
	3	1	23.29	23.44	23.18			
	3	2	23.32	23.48	23.16			
	6	0	22.24	22.40	22.24			
16QAM	1	0	22.02	22.11	22.04	0.64	20.69	38.45
	1	2	22.17	22.14	22.16			
	1	5	22.09	22.05	21.98			
	3	0	22.16	22.19	22.02			
	3	1	22.17	22.20	22.00			
	3	2	22.12	22.20	21.98			
	6	0	21.07	21.37	21.22			

LTE Band 26(Part 22) - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			26805	26915	27025			
			825.5MHz	836.5MHz	847.5MHz			
QPSK	1	0	23.15	23.34	23.09	0.64	21.87	38.45
	1	8	23.25	23.38	23.08			
	1	14	23.24	23.32	23.08			
	8	0	22.08	22.34	22.14			
	8	4	22.12	22.31	22.11			
	8	7	22.23	22.28	22.16			
	15	0	22.18	22.37	22.11			
16QAM	1	0	22.14	22.22	21.90	0.64	20.77	38.45
	1	8	22.28	22.18	21.92			
	1	14	22.24	22.17	21.89			
	8	0	21.23	21.31	21.16			
	8	4	21.22	21.31	21.18			
	8	7	21.26	21.29	21.19			
	15	0	21.23	21.27	21.05			

LTE Band 26 (Part 22) - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			26815	26915	27015			
			826.5MHz	836.5MHz	846.5MHz			
QPSK	1	0	23.02	23.16	23.07	0.64	21.87	38.45
	1	12	23.28	23.38	23.15			
	1	24	23.21	23.15	23.02			
	12	0	22.08	22.34	22.20			
	12	7	22.09	22.30	22.22			
	12	13	22.23	22.42	22.15			
	25	0	22.18	22.32	22.20			
16QAM	1	0	22.12	22.31	22.02	0.64	20.90	38.45
	1	12	22.33	22.41	22.15			
	1	24	22.17	22.29	21.95			
	12	0	21.05	21.36	21.24			
	12	7	21.04	21.37	21.20			
	12	13	21.16	21.35	21.14			
	25	0	21.22	21.36	21.29			

LTE Band 26 (Part 22) - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			26840	26915	26990			
			829.0MHz	836.5MHz	844.0MHz			
QPSK	1	0	23.15	23.28	23.17	0.64	21.94	38.45
	1	24	23.43	23.45	23.26			
	1	49	23.37	23.20	23.09			
	25	0	22.22	22.37	22.35			
	25	24	22.25	22.36	22.37			
	25	49	22.33	22.39	22.15			
	50	0	22.24	22.38	22.24			
16QAM	1	0	22.13	22.21	22.00	0.64	20.83	38.45
	1	24	22.32	22.30	22.02			
	1	49	22.34	22.05	21.89			
	25	0	21.26	21.42	21.40			
	25	24	21.26	21.39	21.40			
	25	49	21.34	21.42	21.20			
	50	0	21.26	21.42	21.30			

LTE Band 26 (Part 22) - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			26865	26915	26965			
			831.5MHz	836.5MHz	841.5MHz			
QPSK	1	0	23.07	23.11	23.23	0.64	21.82	38.45
	1	38	23.33	23.28	23.17			
	1	74	23.17	23.00	23.01			
	38	0	22.40	22.33	22.21			
	38	18	22.38	22.27	22.23			
	38	37	22.35	22.31	22.16			
	75	0	22.39	22.33	22.27			
16QAM	1	0	22.07	22.29	22.04	0.64	20.88	38.45
	1	38	22.33	22.39	21.96			
	1	74	22.23	22.22	21.84			
	38	0	22.36	22.32	22.19			
	38	18	22.33	22.30	22.25			
	38	37	22.39	22.35	22.20			
	75	0	21.32	21.32	21.18			

LTE Band 26 (Part 90) - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			26697	26740	26783			
			814.7MHz	819.0MHz	823.3MHz			
QPSK	1	0	23.22	23.20	23.16	0.91	22.17	50.00
	1	2	23.37	23.41	23.31			
	1	5	23.23	23.18	23.16			
	3	0	23.34	23.38	23.29			
	3	1	23.28	23.32	23.28			
	3	2	23.36	23.39	23.28			
	6	0	22.24	22.27	22.25			
16QAM	1	0	22.08	22.05	22.13	0.91	21.07	50.00
	1	2	22.28	22.08	22.31			
	1	5	22.07	22.04	22.15			
	3	0	22.17	22.07	22.09			
	3	1	22.16	22.10	22.08			
	3	2	22.13	22.12	22.09			
	6	0	21.14	21.17	21.28			

LTE Band 26 (Part 90) - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			26705	26740	26775			
			815.5MHz	819.0MHz	822.5MHz			
QPSK	1	0	23.23	23.22	23.21	0.91	22.06	50.00
	1	7	23.25	23.21	23.22			
	1	14	23.22	23.30	23.20			
	8	0	22.24	22.20	22.12			
	8	4	22.23	22.21	22.15			
	8	7	22.24	22.22	22.18			
	15	0	22.18	22.22	22.20			
16QAM	1	0	22.24	22.14	21.96	0.91	21.05	50.00
	1	7	22.29	22.08	22.02			
	1	14	22.29	22.09	22.04			
	8	0	21.25	21.22	21.18			
	8	4	21.26	21.22	21.14			
	8	7	21.28	21.20	21.18			
	15	0	21.20	21.16	21.10			

LTE Band 26 (Part 90) - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			26715	26740	26765			
			816.5MHz	819.0MHz	821.5MHz			
QPSK	1	0	23.18	23.09	23.12	0.91	22.10	50.00
	1	12	23.34	23.22	23.29			
	1	24	23.20	23.08	23.21			
	12	0	22.26	22.14	22.16			
	12	6	22.29	22.15	22.17			
	12	11	22.21	22.23	22.22			
	25	0	22.31	22.23	22.20			
16QAM	1	0	22.13	22.24	22.12	0.91	21.15	50.00
	1	12	22.29	22.39	22.18			
	1	24	22.10	22.19	22.07			
	12	0	21.25	21.19	21.14			
	12	6	21.26	21.23	21.16			
	12	11	21.22	21.32	21.24			
	25	0	21.33	21.26	21.27			

LTE Band 26 (Part 90) - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. ERP (dBm)	ERP Limit (dBm)
			/	26740	/			
			/	819.0MHz	/			
QPSK	1	0	/	23.21	/	0.91	22.05	50.00
	1	24	/	23.29	/			
	1	49	/	23.20	/			
	25	0	/	22.27	/			
	25	12	/	22.26	/			
	25	24	/	22.47	/			
	50	0	/	22.32	/			
16QAM	1	0	/	22.22	/	0.91	21.10	50.00
	1	24	/	22.34	/			
	1	49	/	22.23	/			
	25	0	/	21.30	/			
	25	12	/	21.30	/			
	25	24	/	21.44	/			
	50	0	/	21.36	/			

LTE Band 41 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			40265	40740	41215			
			2557.5MHz	2605.0MHz	2652.5MHz			
QPSK	1	0	23.11	23.11	23.11	2.90	26.14	33.00
	1	12	23.22	23.24	23.23			
	1	24	23.14	23.09	23.11			
	12	0	22.12	22.20	22.18			
	12	7	22.11	22.16	22.21			
	12	13	22.02	22.19	22.17			
	25	0	22.01	22.22	22.20			
16QAM	1	0	22.12	22.37	22.14	2.90	25.40	33.00
	1	12	22.20	22.50	22.23			
	1	24	22.11	22.23	22.15			
	12	0	21.11	21.28	21.14			
	12	7	21.08	21.30	0.00			
	12	13	21.05	21.27	21.17			
	25	0	21.07	21.26	21.26			

LTE Band 41 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			40290	40740	41190			
			2560.0MHz	2605.0MHz	2650.0MHz			
QPSK	1	0	23.09	23.34	23.25	2.90	26.44	33.00
	1	24	23.36	23.54	23.49			
	1	49	23.07	23.32	23.21			
	25	0	22.12	22.38	22.45			
	25	24	22.10	22.38	22.30			
	25	49	22.21	22.31	22.28			
	50	0	22.08	22.33	22.33			
16QAM	1	0	22.27	22.51	21.96	2.90	25.49	33.00
	1	24	22.48	22.59	22.08			
	1	49	22.26	22.44	21.92			
	25	0	21.23	21.50	21.41			
	25	24	21.21	21.48	21.41			
	25	49	21.31	21.41	21.32			
	50	0	21.20	21.36	21.41			

LTE Band 41 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			40315	40740	41165			
			2562.5MHz	2605.0MHz	2647.5MHz			
QPSK	1	0	23.05	23.19	23.24	2.90	26.23	33.00
	1	38	23.14	23.33	23.33			
	1	74	23.05	23.20	23.22			
	38	0	22.11	22.34	22.35			
	38	18	22.10	22.38	22.37			
	38	37	22.11	22.34	22.34			
	75	0	22.11	22.39	22.34			
16QAM	1	0	21.79	22.32	22.06	2.90	25.33	33.00
	1	38	21.91	22.43	22.14			
	1	74	21.82	22.33	21.95			
	38	0	22.13	22.36	22.37			
	38	18	22.13	22.36	22.32			
	38	37	22.12	22.37	22.37			
	75	0	21.16	21.35	21.36			

LTE Band 41 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			40340	40740	41140			
			2565.0MHz	2605.0MHz	2645.0MHz			
QPSK	1	0	22.99	23.18	23.07	2.90	26.43	33.00
	1	49	23.25	23.53	23.30			
	1	99	22.97	23.23	23.03			
	50	0	21.93	22.31	22.32			
	50	25	21.95	22.32	22.35			
	50	50	22.02	22.25	22.24			
	100	0	21.99	22.28	22.30			
16QAM	1	0	22.02	22.16	21.69	2.90	25.31	33.00
	1	49	22.24	22.41	21.88			
	1	99	21.95	22.19	21.65			
	50	0	21.05	21.38	21.42			
	50	25	20.99	21.39	21.43			
	50	50	21.09	21.30	21.34			
	100	0	21.09	21.32	21.35			

LTE Band 66 - 1.4MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			131979	132322	132665			
			1710.7MHz	1745.0MHz	1779.3MHz			
QPSK	1	0	22.99	23.14	23.25	3.12	26.52	30.00
	1	2	23.10	23.29	23.39			
	1	5	22.97	23.20	23.32			
	3	0	23.07	23.29	23.40			
	3	1	23.07	23.30	23.38			
	3	2	23.07	23.30	23.40			
	6	0	22.03	22.34	22.45			
16QAM	1	0	21.81	22.12	22.22	3.12	25.63	30.00
	1	2	22.00	22.18	22.51			
	1	5	21.86	22.12	22.22			
	3	0	21.91	22.10	22.22			
	3	1	21.94	22.08	22.21			
	3	2	21.90	22.09	22.21			
	6	0	20.89	21.30	21.36			

LTE Band 66 - 3MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			131987	132322	132657			
			1711.5MHz	1745.0MHz	1778.5MHz			
QPSK	1	0	23.00	23.17	23.30	3.12	26.47	30.00
	1	7	23.07	23.27	23.34			
	1	14	23.09	23.28	23.35			
	8	0	22.06	22.27	22.37			
	8	4	22.05	22.31	22.39			
	8	7	22.10	22.31	22.42			
	15	0	22.01	22.29	22.33			
16QAM	1	0	22.06	22.30	22.35	3.12	25.52	30.00
	1	7	22.05	22.29	22.36			
	1	14	22.14	22.32	22.40			
	8	0	21.09	21.27	21.39			
	8	4	21.07	21.31	21.40			
	8	7	21.11	21.32	21.37			
	15	0	21.04	21.29	21.38			

LTE Band 66 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			131997	132322	132647			
			1712.5MHz	1745.0MHz	1777.5MHz			
QPSK	1	0	22.99	23.17	23.28	3.12	26.54	30.00
	1	12	23.15	23.36	23.42			
	1	24	23.15	23.33	23.38			
	12	0	22.05	22.25	22.41			
	12	6	22.05	22.28	22.39			
	12	11	22.06	22.31	22.34			
	25	0	22.08	22.25	22.37			
16QAM	1	0	21.98	22.16	22.21	3.12	25.45	30.00
	1	12	22.07	22.30	22.33			
	1	24	22.04	22.26	22.27			
	12	0	21.09	21.27	21.31			
	12	6	21.06	21.21	21.35			
	12	11	21.11	21.21	21.34			
	25	0	21.10	21.30	21.38			

LTE Band 66 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			132022	132322	132622			
			1715.0MHz	1745.0MHz	1775.0MHz			
QPSK	1	0	23.21	23.01	23.00	3.12	26.70	30.00
	1	24	23.47	23.25	23.36			
	1	49	23.58	23.15	23.22			
	25	0	22.50	22.15	22.20			
	25	12	22.52	22.15	22.20			
	25	24	22.60	22.18	22.25			
	50	0	22.08	22.18	22.24			
16QAM	1	0	22.31	22.04	22.13	3.12	25.74	30.00
	1	24	22.62	22.30	22.29			
	1	49	22.61	22.17	22.23			
	25	0	21.54	21.14	21.19			
	25	12	21.56	21.15	21.17			
	25	24	21.10	21.16	21.21			
	50	0	21.12	21.15	21.21			

LTE Band 66 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			132047	132322	132597			
			1717.5MHz	1745.0MHz	1772.5MHz			
QPSK	1	0	22.82	22.97	23.02	3.12	26.32	30.00
	1	37	23.16	23.18	23.20			
	1	74	23.16	23.11	23.18			
	36	0	22.21	22.25	22.25			
	36	16	22.22	22.23	22.27			
	36	35	22.21	22.21	22.25			
	75	0	22.20	22.22	22.26			
16QAM	1	0	21.85	22.04	22.06	3.12	25.40	30.00
	1	37	22.16	22.21	22.21			
	1	74	22.21	22.12	22.19			
	36	0	22.27	22.22	22.28			
	36	16	22.23	22.21	22.27			
	36	35	22.21	22.22	22.25			
	75	0	21.17	21.15	21.14			

LTE Band 66 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			132072	132322	132572			
			1720.0MHz	1745.0MHz	1770.0MHz			
QPSK	1	0	22.83	22.95	22.99	3.12	26.48	30.00
	1	49	23.36	23.35	23.20			
	1	99	23.14	23.14	23.17			
	50	0	22.18	22.09	22.06			
	50	24	22.15	22.09	22.05			
	50	49	22.27	22.18	22.16			
	100	0	22.24	22.12	22.08			
16QAM	1	0	21.74	21.86	21.91	3.12	25.43	30.00
	1	49	22.31	22.21	22.17			
	1	99	22.01	21.99	22.08			
	50	0	21.18	21.12	21.05			
	50	24	21.17	21.08	21.09			
	50	49	21.30	21.12	21.16			
	100	0	21.24	21.08	21.07			

LTE Band 71 - 5MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			133147	133297	133447			
			665.5MHz	680.5MHz	695.5MHz			
QPSK	1	0	23.59	22.87	23.03	-0.48	21.05	30.00
	1	12	23.68	22.91	23.17			
	1	24	23.52	22.83	23.10			
	12	0	22.23	21.93	22.17			
	12	7	22.22	21.99	22.19			
	12	13	22.32	22.00	22.12			
	25	0	22.37	22.03	22.21			
16QAM	1	0	22.57	21.93	21.91	-0.48	20.05	30.00
	1	12	22.68	22.02	22.05			
	1	24	22.17	21.95	22.00			
	12	0	21.31	20.97	21.14			
	12	7	21.29	21.00	21.13			
	12	13	21.46	21.08	21.14			
	25	0	21.55	20.98	21.20			

LTE Band 71 - 10MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			133172	133297	133422			
			668.0MHz	680.5MHz	693.0MHz			
QPSK	1	0	23.62	22.97	23.02	-0.48	20.99	30.00
	1	24	23.28	23.01	23.30			
	1	49	23.10	22.92	23.23			
	25	0	22.23	22.11	22.27			
	25	24	22.22	22.08	22.29			
	25	49	22.43	22.17	22.07			
	50	0	22.39	22.18	22.19			
16QAM	1	0	22.43	21.99	21.84	-0.48	19.80	30.00
	1	24	22.15	22.08	22.11			
	1	49	21.93	22.01	22.06			
	25	0	21.42	21.12	21.29			
	25	24	21.41	21.10	21.26			
	25	49	21.59	21.19	21.12			
	50	0	21.55	21.18	21.18			

LTE Band 71 - 15MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			133197	133297	133397			
			670.5MHz	680.5MHz	690.5MHz			
QPSK	1	0	23.05	23.00	22.79	-0.48	20.47	30.00
	1	38	23.00	22.96	23.02			
	1	74	22.82	22.92	23.10			
	38	0	22.23	21.77	21.86			
	38	18	22.28	21.73	22.05			
	38	37	22.05	21.72	22.11			
	75	0	22.11	22.19	22.04			
16QAM	1	0	22.20	21.75	21.90	-0.48	19.65	30.00
	1	38	22.27	21.76	22.01			
	1	74	22.02	21.70	22.14			
	38	0	22.22	21.75	21.92			
	38	18	22.28	21.77	22.05			
	38	37	22.04	21.74	22.14			
	75	0	21.15	21.18	21.04			

LTE Band 71 - 20MHz Bandwidth								
Modulation	RB Size	RB Offset	Average Power (dBm)			Ant. Gain (dBi)	Max. EIRP (dBm)	EIRP Limit (dBm)
			133222	133322	133372			
			673.0MHz	683.0MHz	688.0MHz			
QPSK	1	0	23.47	22.93	22.81	-0.48	20.84	30.00
	1	49	23.15	22.98	23.16			
	1	99	22.78	23.06	23.13			
	50	0	21.91	22.01	21.68			
	50	25	21.90	22.00	21.68			
	50	50	21.95	22.18	21.87			
	100	0	22.01	22.05	21.74			
16QAM	1	0	21.87	21.87	22.03	-0.48	19.61	30.00
	1	49	22.06	21.98	22.24			
	1	99	21.73	21.89	22.21			
	50	0	21.04	21.02	20.72			
	50	25	21.09	21.06	20.72			
	50	50	20.97	21.06	20.83			
	100	0	20.99	21.04	20.78			

Peak-to-Average Ratio(CCDF)

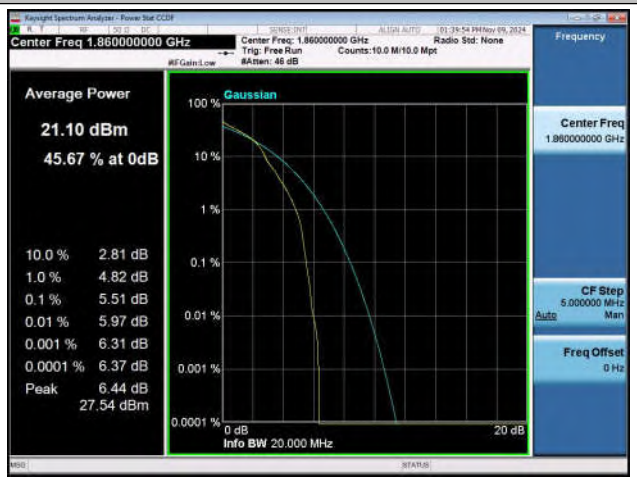
Test Result and Data

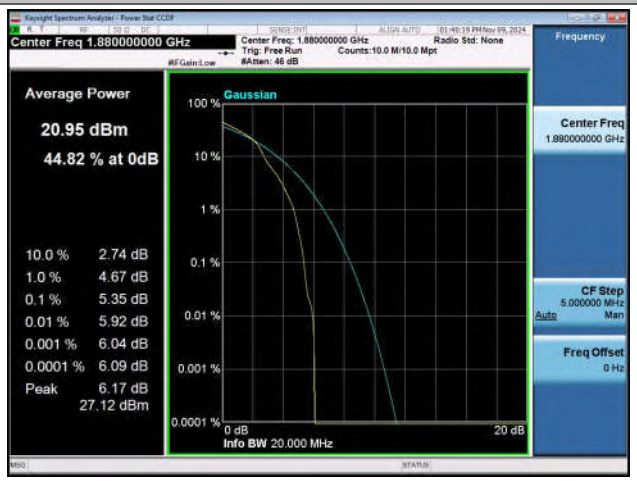
Band	Bandwidth	Modulation	Channel	RB Configuration	Result(dB)	Limit(dB)	Verdict
Band2	20MHz	16QAM	18700	1RB#0	5.51	13	PASS
Band2	20MHz	16QAM	18700	100RB#0	6.26	13	PASS
Band2	20MHz	16QAM	18900	1RB#0	5.35	13	PASS
Band2	20MHz	16QAM	18900	100RB#0	6.12	13	PASS
Band2	20MHz	16QAM	19100	1RB#0	5.79	13	PASS
Band2	20MHz	16QAM	19100	100RB#0	6.06	13	PASS
Band4	20MHz	16QAM	20050	1RB#0	5.27	13	PASS
Band4	20MHz	16QAM	20050	100RB#0	6.22	13	PASS
Band4	20MHz	16QAM	20175	1RB#0	5.78	13	PASS
Band4	20MHz	16QAM	20175	100RB#0	6.13	13	PASS
Band4	20MHz	16QAM	20300	1RB#0	5.42	13	PASS
Band4	20MHz	16QAM	20300	100RB#0	6.10	13	PASS
Band5	10MHz	16QAM	20450	1RB#0	5.61	13	PASS
Band5	10MHz	16QAM	20450	50RB#0	6.33	13	PASS
Band5	10MHz	16QAM	20525	1RB#0	5.92	13	PASS
Band5	10MHz	16QAM	20525	50RB#0	6.37	13	PASS
Band5	10MHz	16QAM	20600	1RB#0	5.33	13	PASS
Band5	10MHz	16QAM	20600	50RB#0	6.21	13	PASS
Band7	20MHz	16QAM	20850	1RB#0	4.67	13	PASS
Band7	20MHz	16QAM	20850	100RB#0	6.06	13	PASS
Band7	20MHz	16QAM	21100	1RB#0	5.33	13	PASS
Band7	20MHz	16QAM	21100	100RB#0	5.73	13	PASS
Band7	20MHz	16QAM	21350	1RB#0	4.83	13	PASS
Band7	20MHz	16QAM	21350	100RB#0	5.85	13	PASS
Band12	10MHz	16QAM	23060	1RB#0	5.14	13	PASS
Band12	10MHz	16QAM	23060	50RB#0	6.47	13	PASS
Band12	10MHz	16QAM	23095	1RB#0	6.12	13	PASS
Band12	10MHz	16QAM	23095	50RB#0	6.34	13	PASS
Band12	10MHz	16QAM	23130	1RB#0	5.90	13	PASS
Band12	10MHz	16QAM	23130	50RB#0	6.34	13	PASS
Band13	5MHz	16QAM	23205	1RB#0	5.71	13	PASS
Band13	5MHz	16QAM	23205	25RB#0	6.31	13	PASS
Band13	5MHz	16QAM	23230	1RB#0	5.53	13	PASS
Band13	5MHz	16QAM	23230	25RB#0	6.23	13	PASS
Band13	5MHz	16QAM	23255	1RB#0	5.28	13	PASS
Band13	5MHz	16QAM	23255	25RB#0	6.17	13	PASS
Band13	10MHz	16QAM	23230	1RB#0	5.83	13	PASS
Band13	10MHz	16QAM	23230	50RB#0	6.26	13	PASS

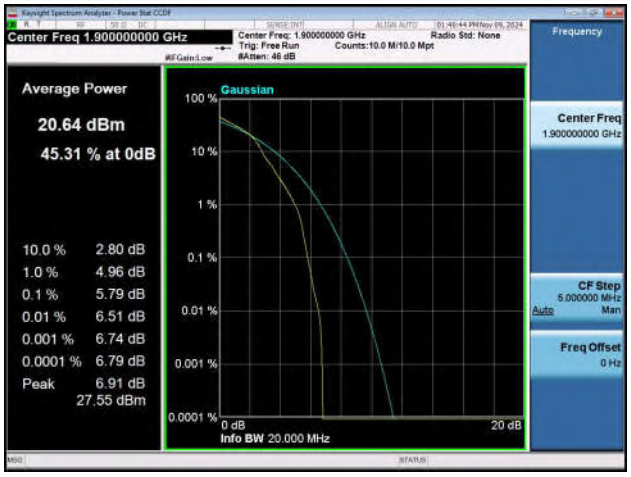
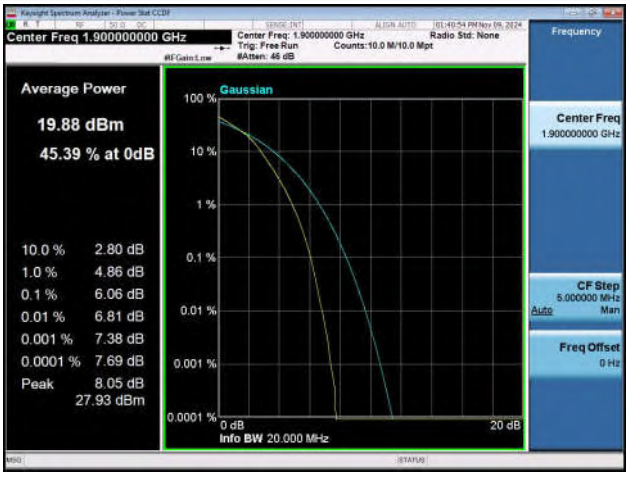
Band17	10MHz	16QAM	23780	1RB#0	6.60	13	PASS
Band17	10MHz	16QAM	23780	50RB#0	6.33	13	PASS
Band17	10MHz	16QAM	23790	1RB#0	6.43	13	PASS
Band17	10MHz	16QAM	23790	50RB#0	6.36	13	PASS
Band17	10MHz	16QAM	23800	1RB#0	6.56	13	PASS
Band17	10MHz	16QAM	23800	50RB#0	6.35	13	PASS
Band25	20MHz	16QAM	26140	1RB#0	5.23	13	PASS
Band25	20MHz	16QAM	26140	100RB#0	6.25	13	PASS
Band25	20MHz	16QAM	26365	1RB#0	5.30	13	PASS
Band25	20MHz	16QAM	26365	100RB#0	6.11	13	PASS
Band25	20MHz	16QAM	26590	1RB#0	5.62	13	PASS
Band25	20MHz	16QAM	26590	100RB#0	6.01	13	PASS
Band26(814-824)	5MHz	16QAM	26715	1RB#0	5.53	13	PASS
Band26(814-824)	5MHz	16QAM	26715	25RB#0	6.49	13	PASS
Band26(814-824)	5MHz	16QAM	26740	1RB#0	5.97	13	PASS
Band26(814-824)	5MHz	16QAM	26740	25RB#0	6.50	13	PASS
Band26(814-824)	5MHz	16QAM	26765	1RB#0	6.05	13	PASS
Band26(814-824)	5MHz	16QAM	26765	25RB#0	6.37	13	PASS
Band26(814-824)	10MHz	16QAM	26740	1RB#0	5.78	13	PASS
Band26(814-824)	10MHz	16QAM	26740	50RB#0	6.49	13	PASS
Band26(824-849)	15MHz	16QAM	26865	1RB#0	5.72	13	PASS
Band26(824-849)	15MHz	16QAM	26865	75RB#0	6.47	13	PASS
Band26(824-849)	15MHz	16QAM	26915	1RB#0	5.85	13	PASS
Band26(824-849)	15MHz	16QAM	26915	75RB#0	6.35	13	PASS
Band26(824-849)	15MHz	16QAM	26965	1RB#0	6.24	13	PASS
Band26(824-849)	15MHz	16QAM	26965	75RB#0	6.32	13	PASS
Band41	20MHz	16QAM	39750	1RB#0	4.92	13	PASS
Band41	20MHz	16QAM	39750	100RB#0	6.06	13	PASS
Band41	20MHz	16QAM	40620	1RB#0	4.51	13	PASS
Band41	20MHz	16QAM	40620	100RB#0	5.85	13	PASS
Band41	20MHz	16QAM	41490	1RB#0	5.23	13	PASS
Band41	20MHz	16QAM	41490	100RB#0	6.16	13	PASS
Band66	20MHz	16QAM	132072	1RB#0	5.30	13	PASS
Band66	20MHz	16QAM	132072	100RB#0	6.26	13	PASS
Band66	20MHz	16QAM	132322	1RB#0	5.40	13	PASS
Band66	20MHz	16QAM	132322	100RB#0	6.08	13	PASS
Band66	20MHz	16QAM	132572	1RB#0	5.72	13	PASS
Band66	20MHz	16QAM	132572	100RB#0	6.06	13	PASS
Band71	20MHz	16QAM	133222	1RB#0	4.95	13	PASS
Band71	20MHz	16QAM	133222	100RB#0	6.13	13	PASS
Band71	20MHz	16QAM	133322	1RB#0	4.91	13	PASS
Band71	20MHz	16QAM	133322	100RB#0	6.08	13	PASS
Band71	20MHz	16QAM	133372	1RB#0	5.49	13	PASS

Band71	20MHz	16QAM	133372	100RB#0	6.03	13	PASS

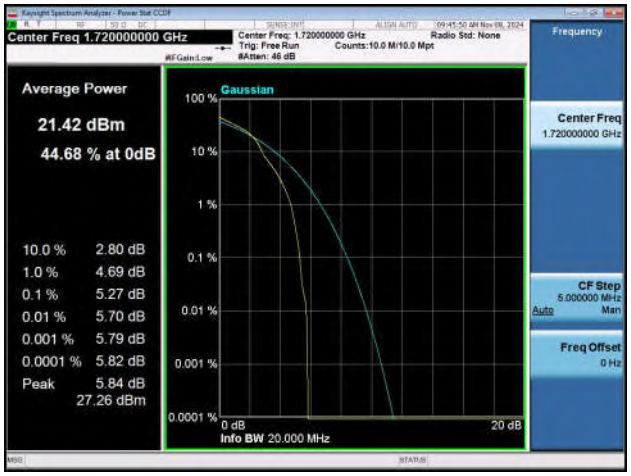
Test Graphs

Band2-20MHz-16QAM-18700-1RB#0-PASS	Band2-20MHz-16QAM-18700-100RB#0-PASS
	

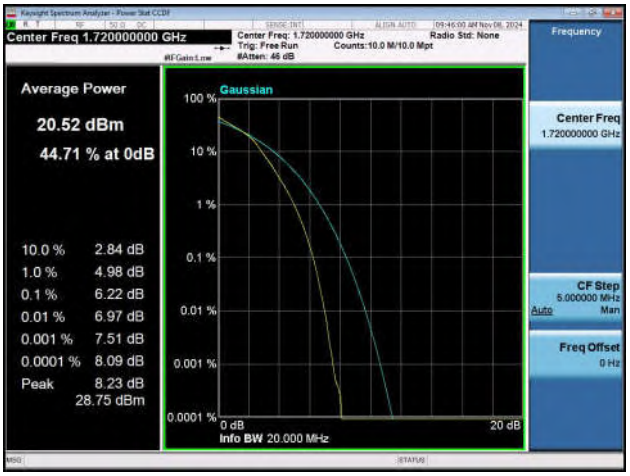
Band2-20MHz-16QAM-18900-1RB#0-PASS	Band2-20MHz-16QAM-18900-100RB#0-PASS
	

Band2-20MHz-16QAM-19100-1RB#0-PASS	Band2-20MHz-16QAM-19100-100RB#0-PASS
	

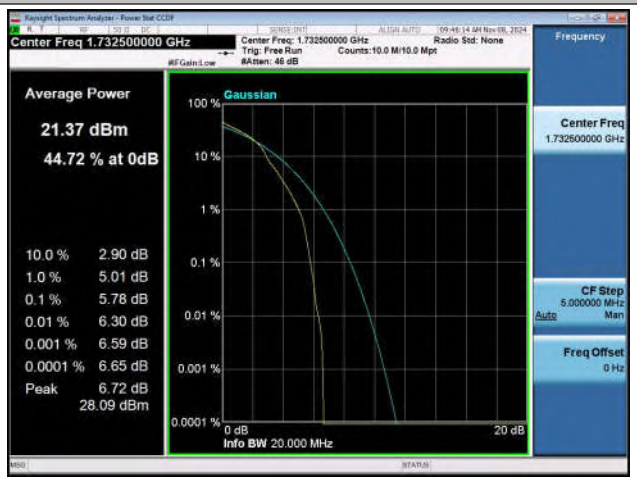
Band4-20MHz-16QAM-20050-1RB#0-PASS



Band4-20MHz-16QAM-20050-100RB#0-PASS



Band4-20MHz-16QAM-20175-1RB#0-PASS

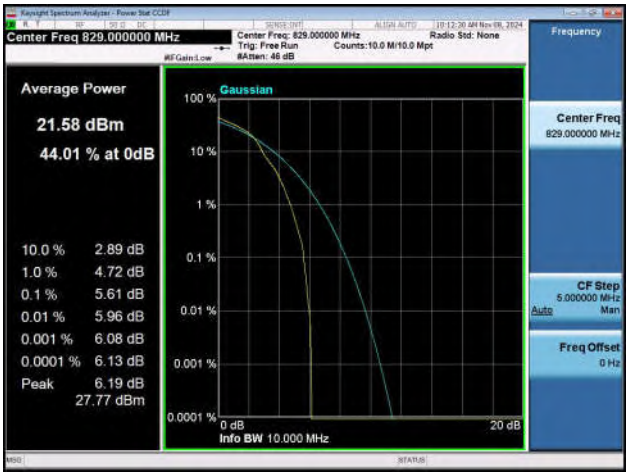


Band4-20MHz-16QAM-20175-100RB#0-PASS

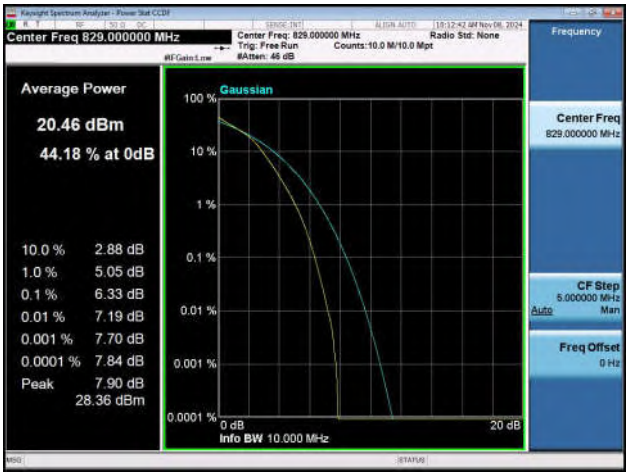
Band4-20MHz-16QAM-20300-1RB#0-PASS

Band4-20MHz-16QAM-20300-100RB#0-PASS

Band5-10MHz-16QAM-20450-1RB#0-PASS



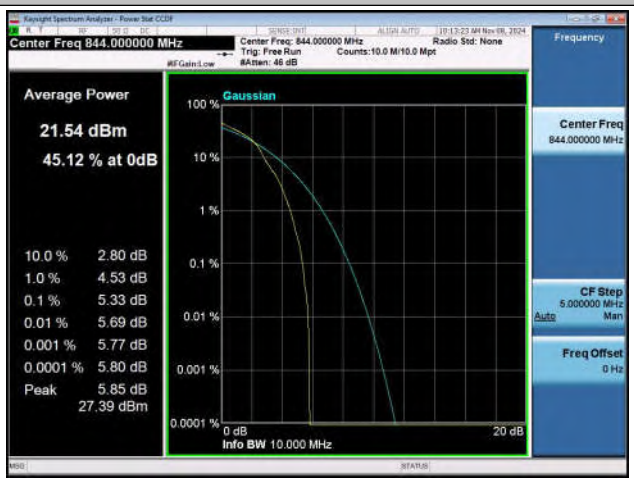
Band5-10MHz-16QAM-20450-50RB#0-PASS



Band5-10MHz-16QAM-20525-1RB#0-PASS

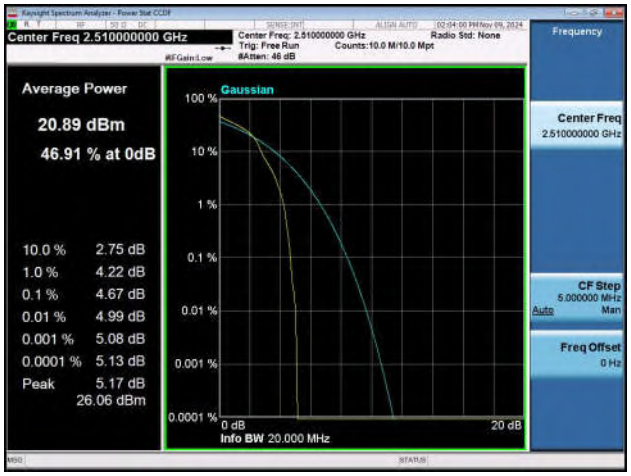
Band5-10MHz-16QAM-20525-50RB#0-PASS

Band5-10MHz-16QAM-20600-1RB#0-PASS

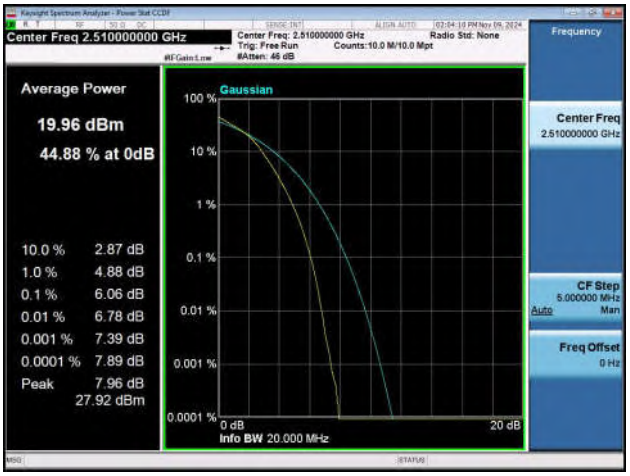


Band5-10MHz-16QAM-20600-50RB#0-PASS

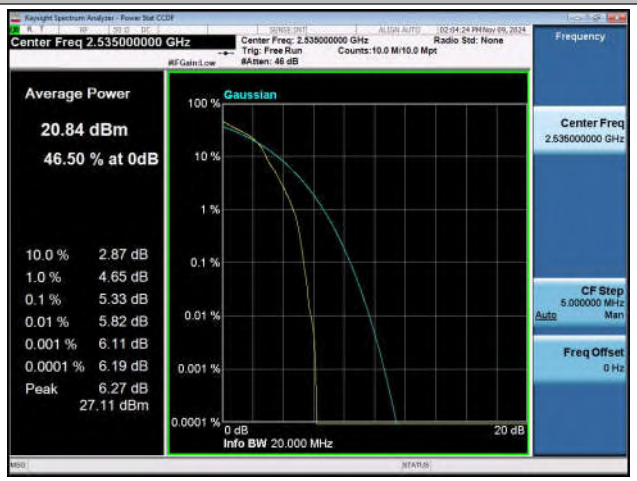
Band7-20MHz-16QAM-20850-1RB#0-PASS



Band7-20MHz-16QAM-20850-100RB#0-PASS

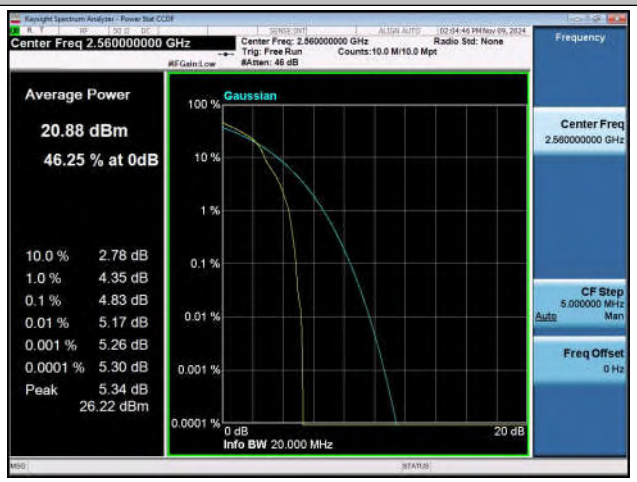


Band7-20MHz-16QAM-21100-1RB#0-PASS



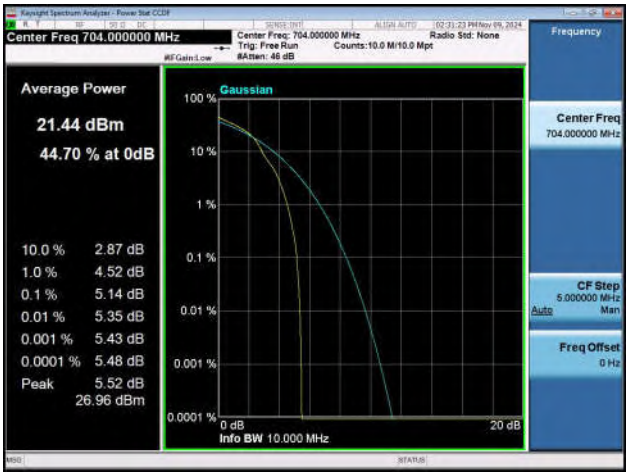
Band7-20MHz-16QAM-21100-100RB#0-PASS

Band7-20MHz-16QAM-21350-1RB#0-PASS

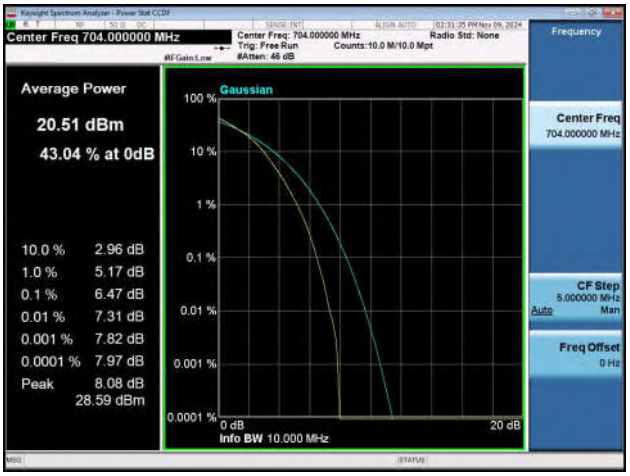


Band7-20MHz-16QAM-21350-100RB#0-PASS

Band12-10MHz-16QAM-23060-1RB#0-PASS



Band12-10MHz-16QAM-23060-50RB#0-PASS



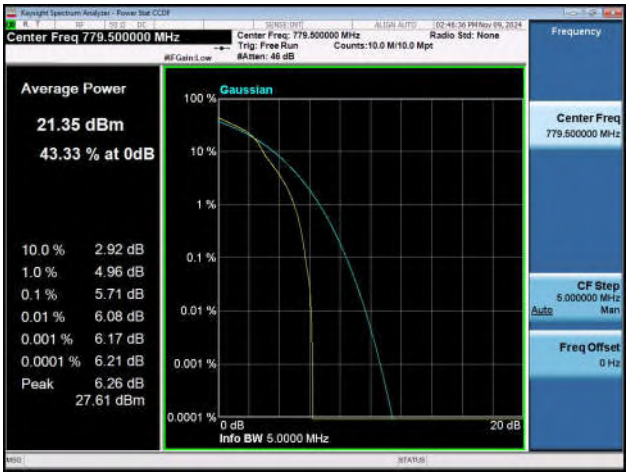
Band12-10MHz-16QAM-23095-1RB#0-PASS

Band12-10MHz-16QAM-23095-50RB#0-PASS

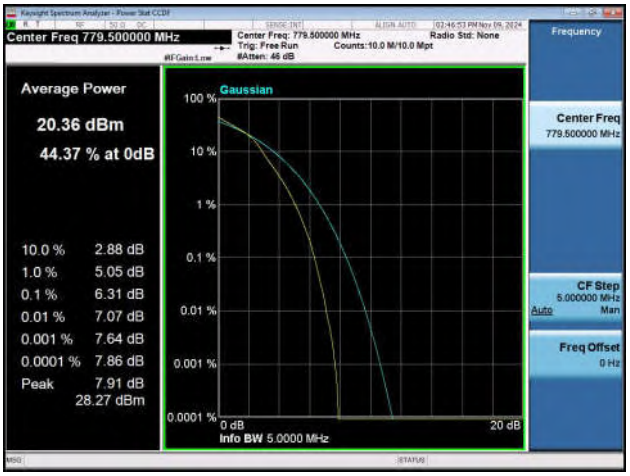
Band12-10MHz-16QAM-23130-1RB#0-PASS

Band12-10MHz-16QAM-23130-50RB#0-PASS

Band13-5MHz-16QAM-23205-1RB#0-PASS



Band13-5MHz-16QAM-23205-25RB#0-PASS



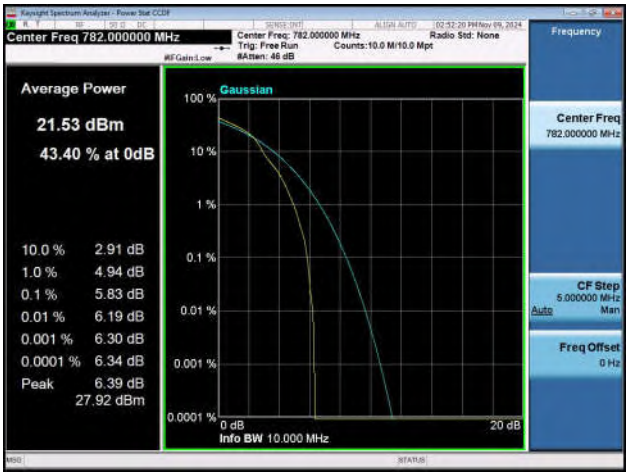
Band13-5MHz-16QAM-23230-1RB#0-PASS

Band13-5MHz-16QAM-23230-25RB#0-PASS

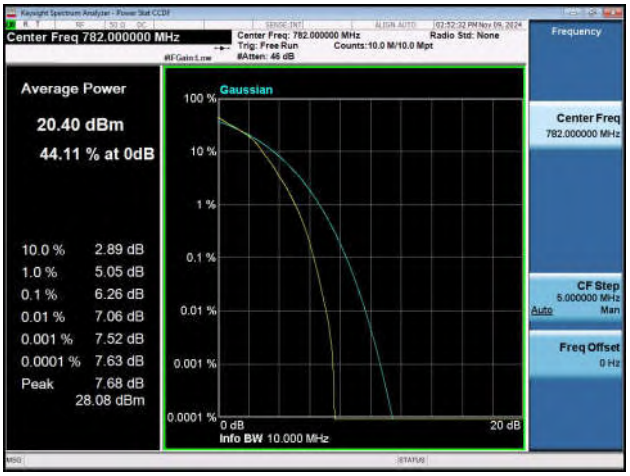
Band13-5MHz-16QAM-23255-1RB#0-PASS

Band13-5MHz-16QAM-23255-25RB#0-PASS

Band13-10MHz-16QAM-23230-1RB#0-PASS



Band13-10MHz-16QAM-23230-50RB#0-PASS



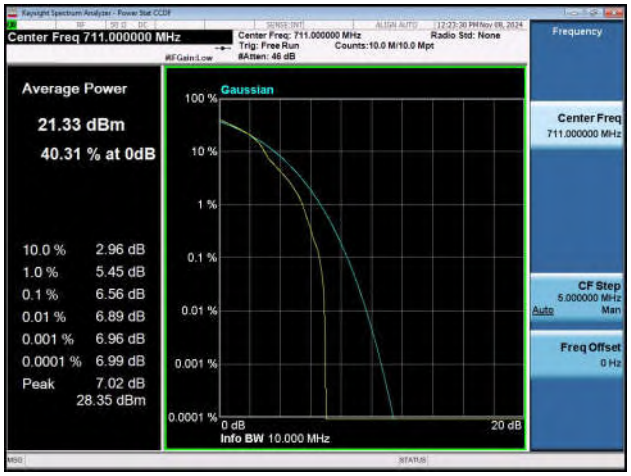
Band17-10MHz-16QAM-23780-1RB#0-PASS

Band17-10MHz-16QAM-23780-50RB#0-PASS

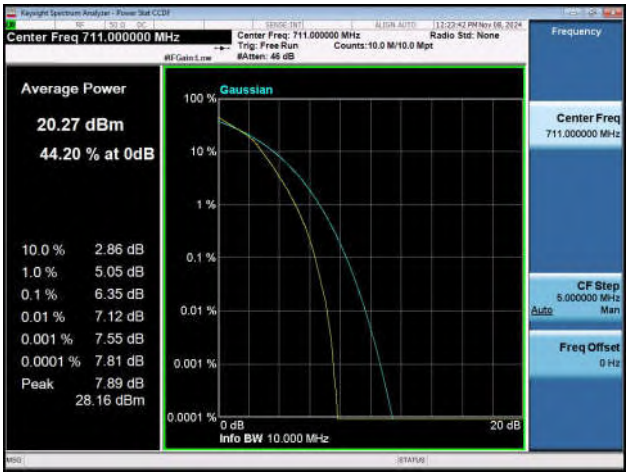
Band17-10MHz-16QAM-23790-1RB#0-PASS

Band17-10MHz-16QAM-23790-50RB#0-PASS

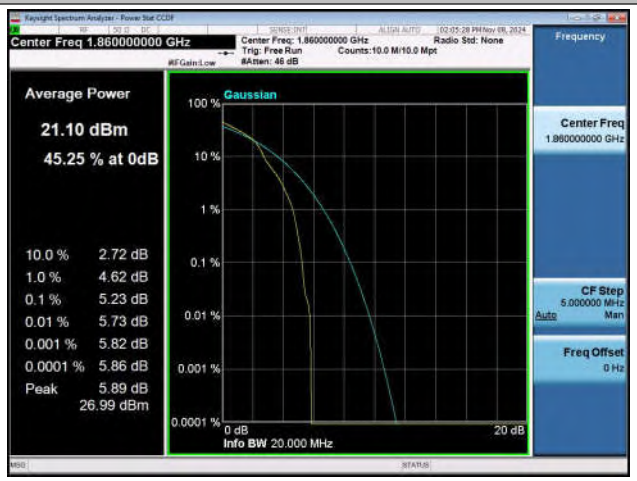
Band17-10MHz-16QAM-23800-1RB#0-PASS



Band17-10MHz-16QAM-23800-50RB#0-PASS



Band25-20MHz-16QAM-26140-1RB#0-PASS

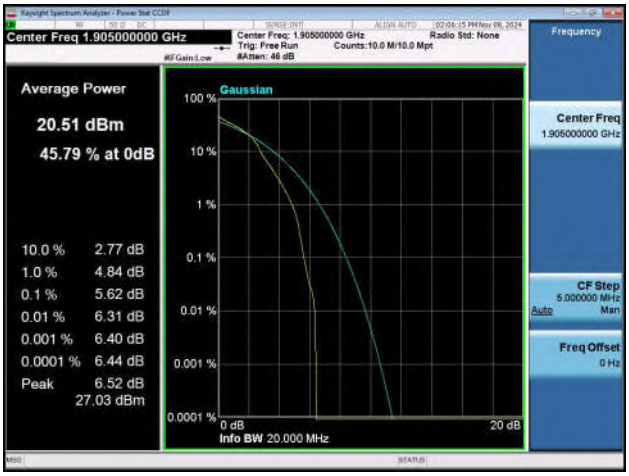


Band25-20MHz-16QAM-26140-100RB#0-PASS

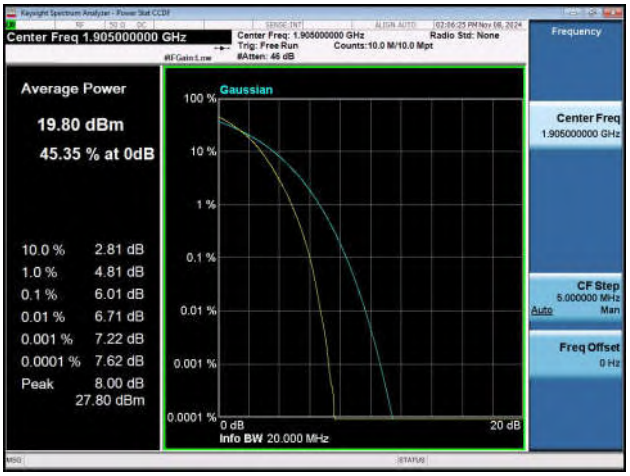
Band25-20MHz-16QAM-26365-1RB#0-PASS

Band25-20MHz-16QAM-26365-100RB#0-PASS

Band25-20MHz-16QAM-26590-1RB#0-PASS



Band25-20MHz-16QAM-26590-100RB#0-PASS



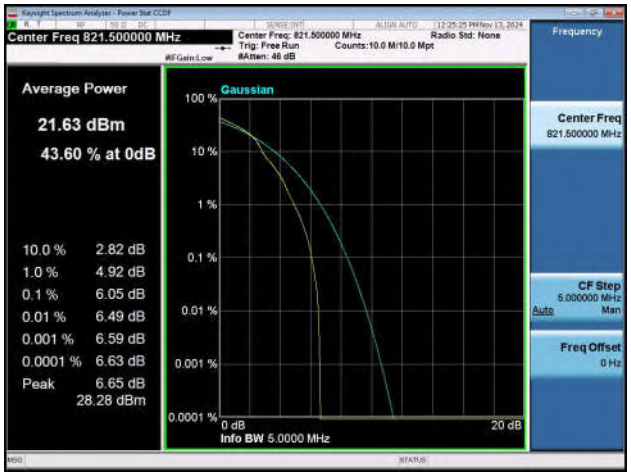
Band26(814-824)-5MHz-16QAM-26715-1RB#0-PASS

Band26(814-824)-5MHz-16QAM-26715-25RB#0-PASS

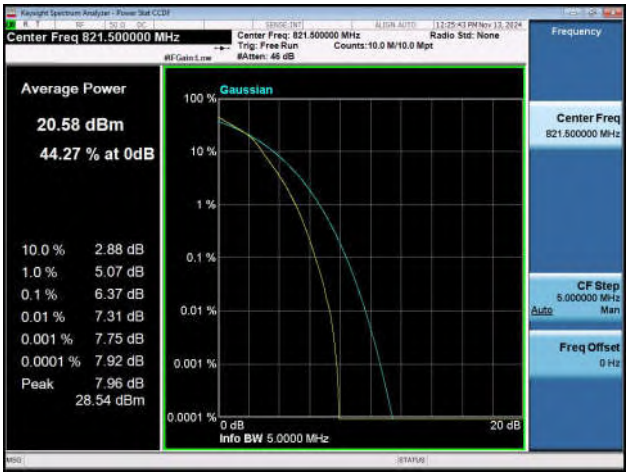
Band26(814-824)-5MHz-16QAM-26740-1RB#0-PASS

Band26(814-824)-5MHz-16QAM-26740-25RB#0-PASS

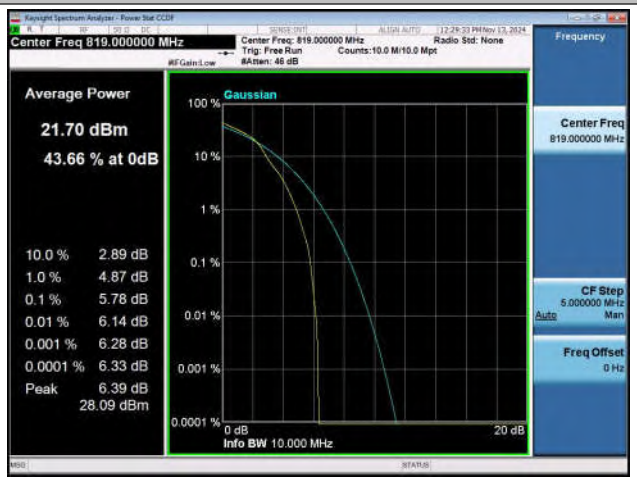
Band26(814-824)-5MHz-16QAM-26765-1RB#0-PASS



Band26(814-824)-5MHz-16QAM-26765-25RB#0-PASS

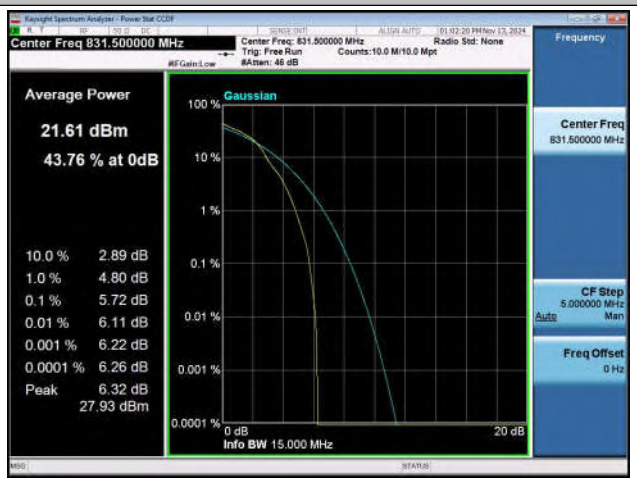


Band26(814-824)-10MHz-16QAM-26740-1RB#0-PASS



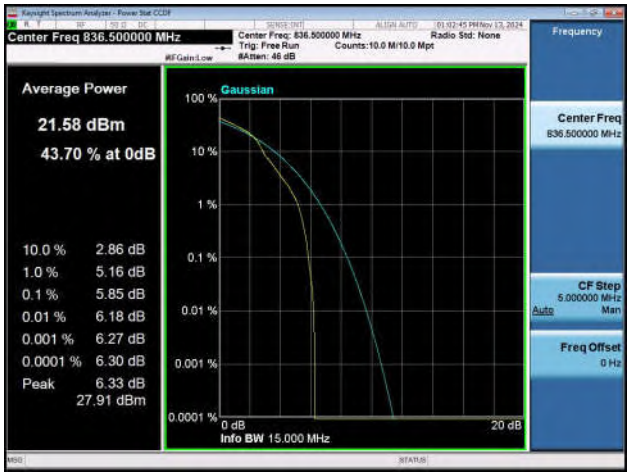
Band26(814-824)-10MHz-16QAM-26740-50RB#0-PASS

Band26(824-849)-15MHz-16QAM-26865-1RB#0-PASS

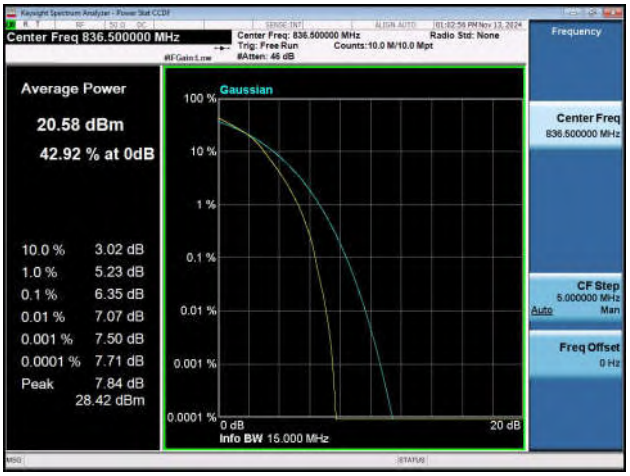


Band26(824-849)-15MHz-16QAM-26865-75RB#0-PASS

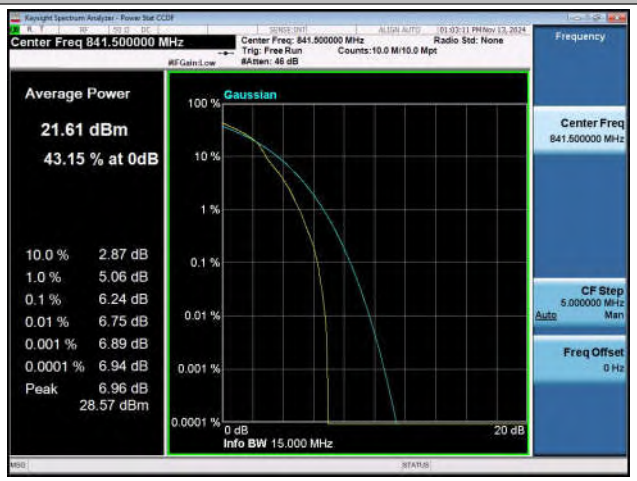
Band26(824-849)-15MHz-16QAM-26915-1RB#0-PASS



Band26(824-849)-15MHz-16QAM-26915-75RB#0-PASS

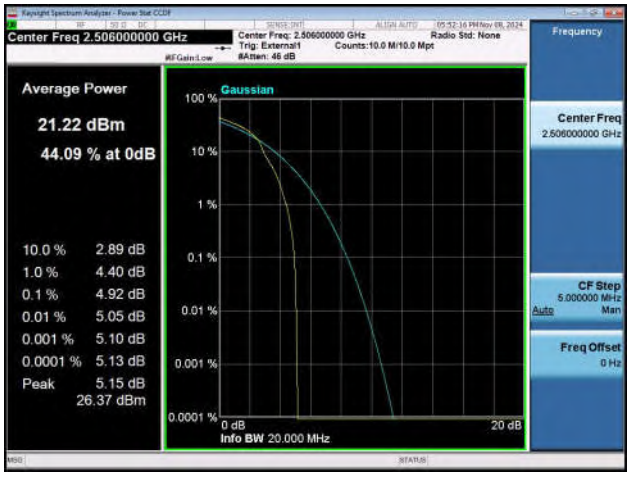


Band26(824-849)-15MHz-16QAM-26965-1RB#0-PASS

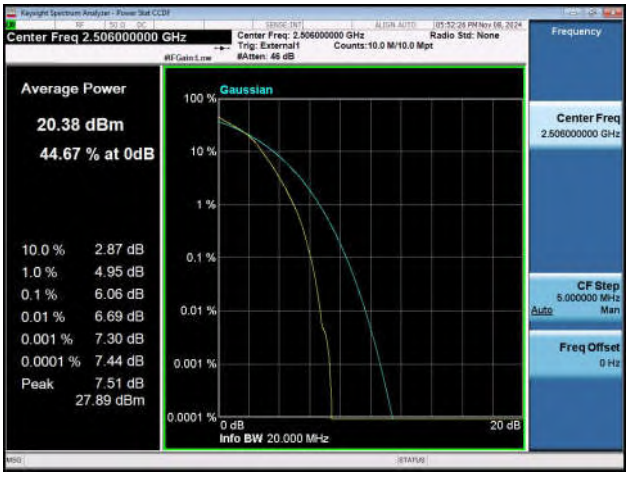


Band26(824-849)-15MHz-16QAM-26965-75RB#0-PASS

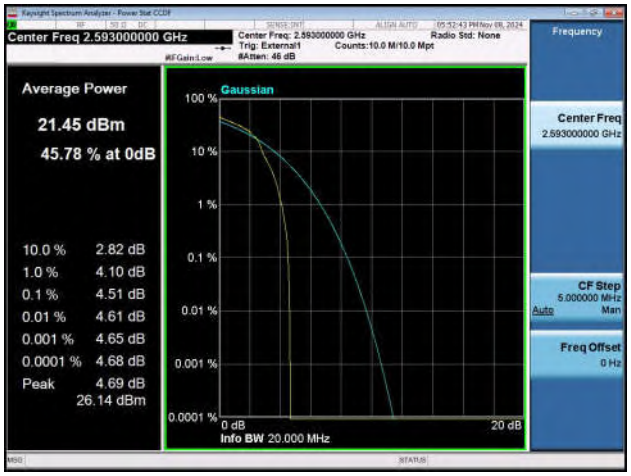
Band41-20MHz-16QAM-39750-1RB#0-PASS



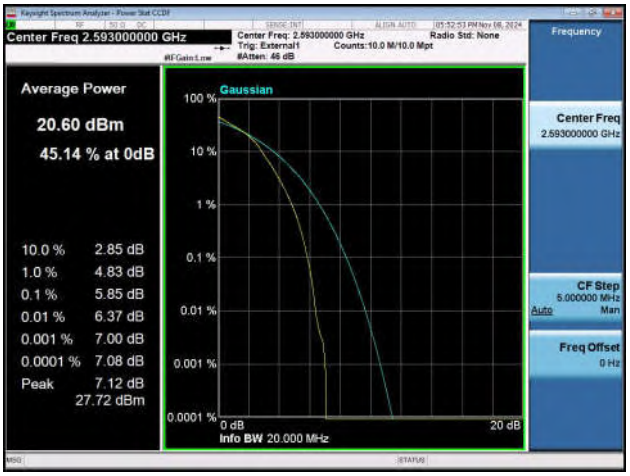
Band41-20MHz-16QAM-39750-100RB#0-PASS



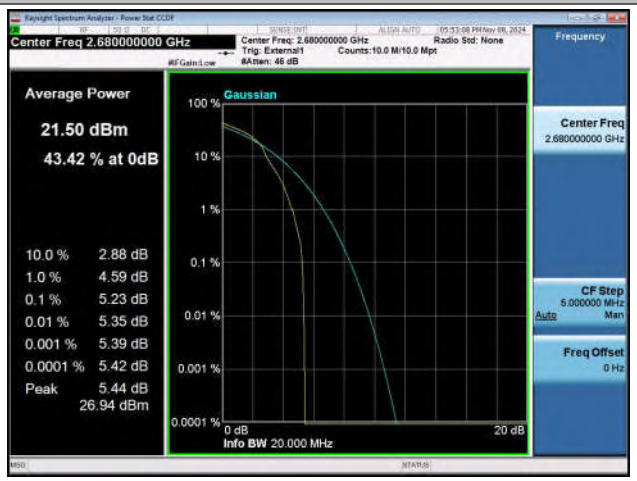
Band41-20MHz-16QAM-40620-1RB#0-PASS



Band41-20MHz-16QAM-40620-100RB#0-PASS

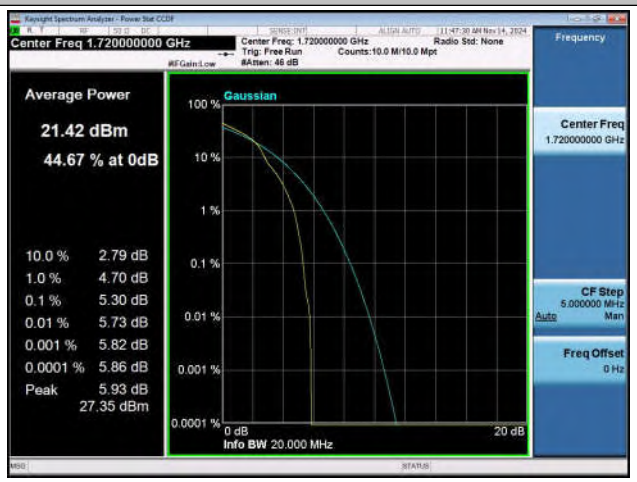


Band41-20MHz-16QAM-41490-1RB#0-PASS



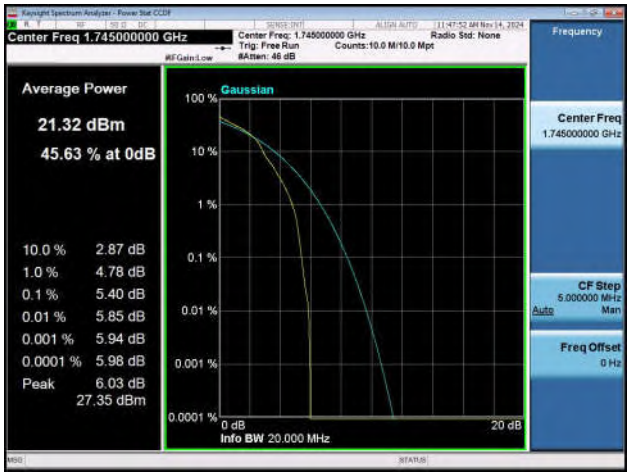
Band41-20MHz-16QAM-41490-100RB#0-PASS

Band66-20MHz-16QAM-132072-1RB#0-PASS

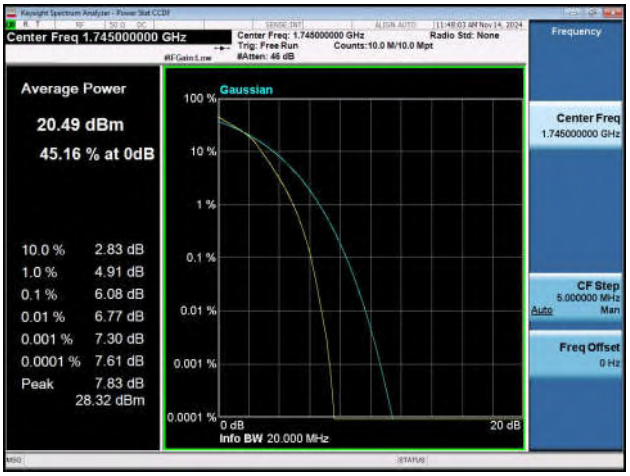


Band66-20MHz-16QAM-132072-100RB#0-PASS

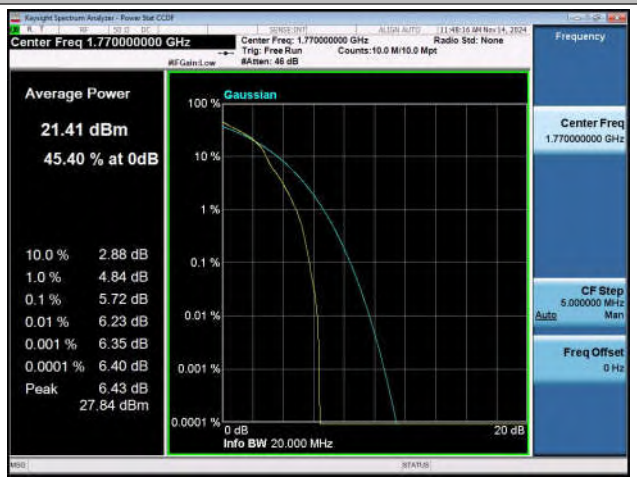
Band66-20MHz-16QAM-132322-1RB#0-PASS



Band66-20MHz-16QAM-132322-100RB#0-PASS

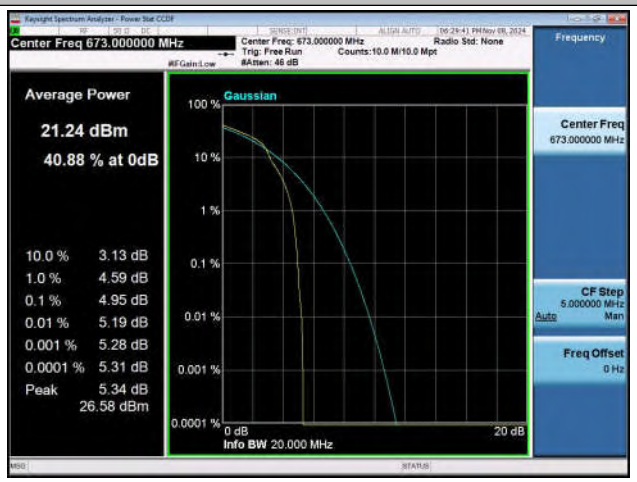


Band66-20MHz-16QAM-132572-1RB#0-PASS

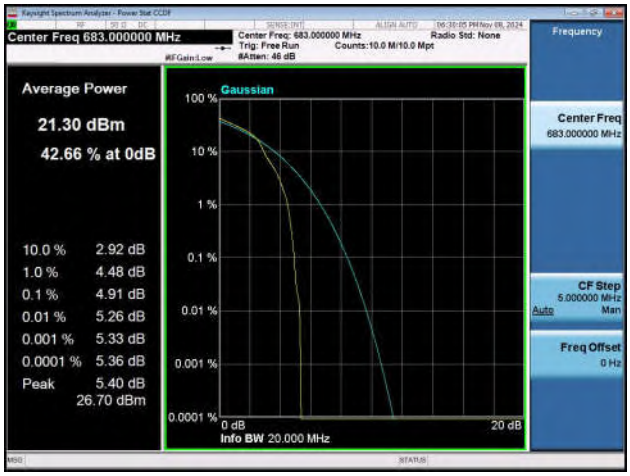
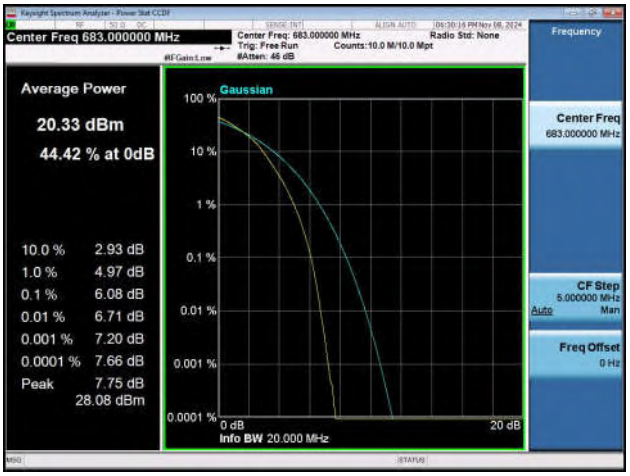
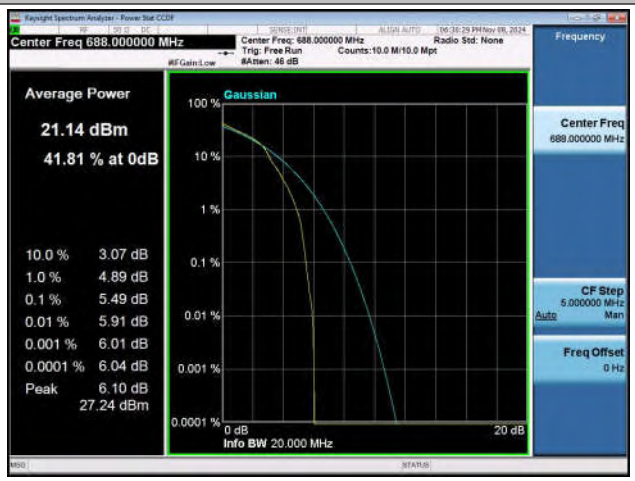


Band66-20MHz-16QAM-132572-100RB#0-PASS

Band71-20MHz-16QAM-133222-1RB#0-PASS



Band71-20MHz-16QAM-133222-100RB#0-PASS

Band71-20MHz-16QAM-133322-1RB#0-PASS	Band71-20MHz-16QAM-133322-100RB#0-PASS
	
Band71-20MHz-16QAM-133372-1RB#0-PASS	Band71-20MHz-16QAM-133372-100RB#0-PASS
	

26dB Emission Bandwidth and 99% Occupied Bandwidth

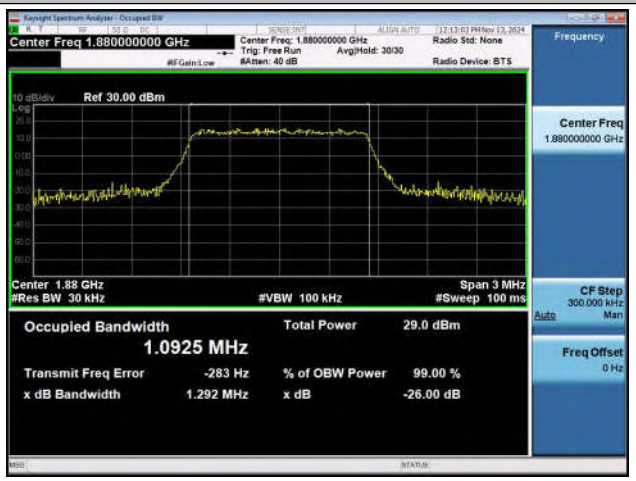
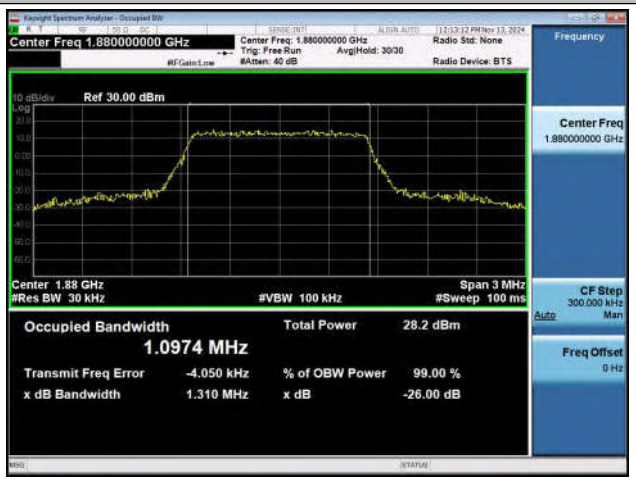
Test Result and Data

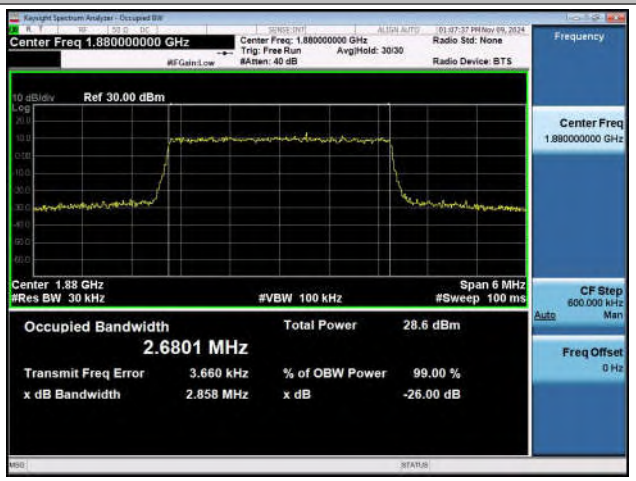
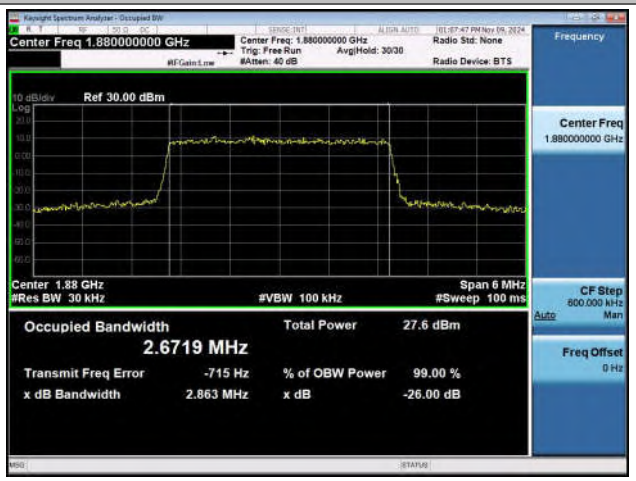
Band	Bandwidth	Modulation	Channel	RB Configuration	26dB EBW (MHz)	99% OBW (MHz)	Verdict
Band2	1.4MHz	QPSK	18900	6RB#0	1.292	1.0925	PASS
Band2	1.4MHz	16QAM	18900	6RB#0	1.310	1.0974	PASS
Band2	3MHz	QPSK	18900	15RB#0	2.858	2.6801	PASS
Band2	3MHz	16QAM	18900	15RB#0	2.863	2.6719	PASS
Band2	5MHz	QPSK	18900	25RB#0	4.942	4.4960	PASS
Band2	5MHz	16QAM	18900	25RB#0	4.903	4.4859	PASS
Band2	10MHz	QPSK	18900	50RB#0	9.655	8.9469	PASS
Band2	10MHz	16QAM	18900	50RB#0	9.505	8.9369	PASS
Band2	15MHz	QPSK	18900	75RB#0	14.70	13.472	PASS
Band2	15MHz	16QAM	18900	75RB#0	14.61	13.458	PASS
Band2	20MHz	QPSK	18900	100RB#0	19.17	17.899	PASS
Band2	20MHz	16QAM	18900	100RB#0	19.17	17.902	PASS
Band4	1.4MHz	QPSK	20175	6RB#0	1.302	1.0901	PASS
Band4	1.4MHz	16QAM	20175	6RB#0	1.298	1.0958	PASS
Band4	3MHz	QPSK	20175	15RB#0	2.864	2.6787	PASS
Band4	3MHz	16QAM	20175	15RB#0	2.873	2.6702	PASS
Band4	5MHz	QPSK	20175	25RB#0	4.933	4.4939	PASS
Band4	5MHz	16QAM	20175	25RB#0	4.907	4.4871	PASS
Band4	10MHz	QPSK	20175	50RB#0	9.617	8.9415	PASS
Band4	10MHz	16QAM	20175	50RB#0	9.466	8.9447	PASS
Band4	15MHz	QPSK	20175	75RB#0	14.64	13.482	PASS
Band4	15MHz	16QAM	20175	75RB#0	14.67	13.490	PASS
Band4	20MHz	QPSK	20175	100RB#0	19.25	17.920	PASS
Band4	20MHz	16QAM	20175	100RB#0	19.31	17.907	PASS
Band5	1.4MHz	QPSK	20525	6RB#0	1.292	1.0917	PASS
Band5	1.4MHz	16QAM	20525	6RB#0	1.309	1.0962	PASS
Band5	3MHz	QPSK	20525	15RB#0	2.855	2.6806	PASS
Band5	3MHz	16QAM	20525	15RB#0	2.854	2.6720	PASS
Band5	5MHz	QPSK	20525	25RB#0	4.944	4.5010	PASS
Band5	5MHz	16QAM	20525	25RB#0	4.900	4.4880	PASS
Band5	10MHz	QPSK	20525	50RB#0	9.535	8.9529	PASS
Band5	10MHz	16QAM	20525	50RB#0	9.744	8.9533	PASS
Band7	5MHz	QPSK	21100	25RB#0	4.965	4.4989	PASS
Band7	5MHz	16QAM	21100	25RB#0	4.928	4.4886	PASS
Band7	10MHz	QPSK	21100	50RB#0	9.601	8.9416	PASS
Band7	10MHz	16QAM	21100	50RB#0	9.560	8.9415	PASS
Band7	15MHz	QPSK	21100	75RB#0	14.69	13.486	PASS

Band7	15MHz	16QAM	21100	75RB#0	14.57	13.465	PASS
Band7	20MHz	QPSK	21100	100RB#0	19.18	17.884	PASS
Band7	20MHz	16QAM	21100	100RB#0	19.13	17.919	PASS
Band12	1.4MHz	QPSK	23095	6RB#0	1.286	1.0909	PASS
Band12	1.4MHz	16QAM	23095	6RB#0	1.302	1.0962	PASS
Band12	3MHz	QPSK	23095	15RB#0	2.852	2.6757	PASS
Band12	3MHz	16QAM	23095	15RB#0	2.861	2.6721	PASS
Band12	5MHz	QPSK	23095	25RB#0	5.170	4.5197	PASS
Band12	5MHz	16QAM	23095	25RB#0	5.143	4.5152	PASS
Band12	10MHz	QPSK	23095	50RB#0	9.830	8.9309	PASS
Band12	10MHz	16QAM	23095	50RB#0	9.566	8.9327	PASS
Band13	5MHz	QPSK	23230	25RB#0	5.194	4.5163	PASS
Band13	5MHz	16QAM	23230	25RB#0	5.122	4.5182	PASS
Band13	10MHz	QPSK	23230	50RB#0	9.840	8.9572	PASS
Band13	10MHz	16QAM	23230	50RB#0	9.737	8.9482	PASS
Band17	5MHz	QPSK	23790	25RB#0	5.192	4.5143	PASS
Band17	5MHz	16QAM	23790	25RB#0	5.087	4.5129	PASS
Band17	10MHz	QPSK	23790	50RB#0	9.872	8.9364	PASS
Band17	10MHz	16QAM	23790	50RB#0	9.692	8.9295	PASS
Band25	1.4MHz	QPSK	26365	6RB#0	1.291	1.0931	PASS
Band25	1.4MHz	16QAM	26365	6RB#0	1.306	1.0996	PASS
Band25	3MHz	QPSK	26365	15RB#0	2.860	2.6780	PASS
Band25	3MHz	16QAM	26365	15RB#0	2.863	2.6760	PASS
Band25	5MHz	QPSK	26365	25RB#0	5.202	4.5217	PASS
Band25	5MHz	16QAM	26365	25RB#0	5.152	4.5170	PASS
Band25	10MHz	QPSK	26365	50RB#0	9.939	8.9620	PASS
Band25	10MHz	16QAM	26365	50RB#0	9.785	8.9409	PASS
Band25	15MHz	QPSK	26365	75RB#0	15.15	13.544	PASS
Band25	15MHz	16QAM	26365	75RB#0	15.02	13.509	PASS
Band25	20MHz	QPSK	26365	100RB#0	19.58	17.906	PASS
Band25	20MHz	16QAM	26365	100RB#0	19.57	17.955	PASS
Band26(814-824)	1.4MHz	QPSK	26740	6RB#0	1.284	1.0911	PASS
Band26(814-824)	1.4MHz	16QAM	26740	6RB#0	1.317	1.0972	PASS
Band26(814-824)	3MHz	QPSK	26740	15RB#0	2.862	2.6830	PASS
Band26(814-824)	3MHz	16QAM	26740	15RB#0	2.855	2.6773	PASS
Band26(814-824)	5MHz	QPSK	26740	25RB#0	4.951	4.5003	PASS
Band26(814-824)	5MHz	16QAM	26740	25RB#0	4.908	4.4913	PASS
Band26(814-824)	10MHz	QPSK	26740	50RB#0	9.614	8.9590	PASS
Band26(814-824)	10MHz	16QAM	26740	50RB#0	9.422	8.9646	PASS
Band26(824-849)	1.4MHz	QPSK	26915	6RB#0	1.281	1.0884	PASS
Band26(824-849)	1.4MHz	16QAM	26915	6RB#0	1.305	1.0967	PASS
Band26(824-849)	3MHz	QPSK	26915	15RB#0	2.856	2.6772	PASS
Band26(824-849)	3MHz	16QAM	26915	15RB#0	2.866	2.6728	PASS

Band26(824-849)	5MHz	QPSK	26915	25RB#0	4.941	4.4960	PASS
Band26(824-849)	5MHz	16QAM	26915	25RB#0	4.909	4.4855	PASS
Band26(824-849)	10MHz	QPSK	26915	50RB#0	9.592	8.9508	PASS
Band26(824-849)	10MHz	16QAM	26915	50RB#0	9.491	8.9355	PASS
Band26(824-849)	15MHz	QPSK	26915	75RB#0	14.66	13.473	PASS
Band26(824-849)	15MHz	16QAM	26915	75RB#0	15.07	13.462	PASS
Band41	5MHz	QPSK	40620	25RB#0	4.982	4.4949	PASS
Band41	5MHz	16QAM	40620	25RB#0	5.199	4.4929	PASS
Band41	10MHz	QPSK	40620	50RB#0	9.571	8.9559	PASS
Band41	10MHz	16QAM	40620	50RB#0	9.502	8.9395	PASS
Band41	15MHz	QPSK	40620	75RB#0	16.15	13.498	PASS
Band41	15MHz	16QAM	40620	75RB#0	15.62	13.479	PASS
Band41	20MHz	QPSK	40620	100RB#0	20.15	17.935	PASS
Band41	20MHz	16QAM	40620	100RB#0	19.39	17.884	PASS
Band66	1.4MHz	QPSK	132322	6RB#0	1.275	1.0923	PASS
Band66	1.4MHz	16QAM	132322	6RB#0	1.301	1.0978	PASS
Band66	3MHz	QPSK	132322	15RB#0	2.856	2.6794	PASS
Band66	3MHz	16QAM	132322	15RB#0	2.856	2.6701	PASS
Band66	5MHz	QPSK	132322	25RB#0	5.227	4.5181	PASS
Band66	5MHz	16QAM	132322	25RB#0	5.155	4.5196	PASS
Band66	10MHz	QPSK	132322	50RB#0	9.891	8.9595	PASS
Band66	10MHz	16QAM	132322	50RB#0	9.787	8.9428	PASS
Band66	15MHz	QPSK	132322	75RB#0	15.10	13.514	PASS
Band66	15MHz	16QAM	132322	75RB#0	14.99	13.489	PASS
Band66	20MHz	QPSK	132322	100RB#0	19.61	17.899	PASS
Band66	20MHz	16QAM	132322	100RB#0	19.56	17.957	PASS
Band71	5MHz	QPSK	133297	25RB#0	5.208	4.5276	PASS
Band71	5MHz	16QAM	133297	25RB#0	5.151	4.5250	PASS
Band71	10MHz	QPSK	133297	50RB#0	9.892	8.9874	PASS
Band71	10MHz	16QAM	133297	50RB#0	9.816	8.9695	PASS
Band71	15MHz	QPSK	133297	75RB#0	15.27	13.593	PASS
Band71	15MHz	16QAM	133297	75RB#0	15.11	13.566	PASS
Band71	20MHz	QPSK	133322	100RB#0	19.61	17.942	PASS
Band71	20MHz	16QAM	133322	100RB#0	19.57	17.911	PASS

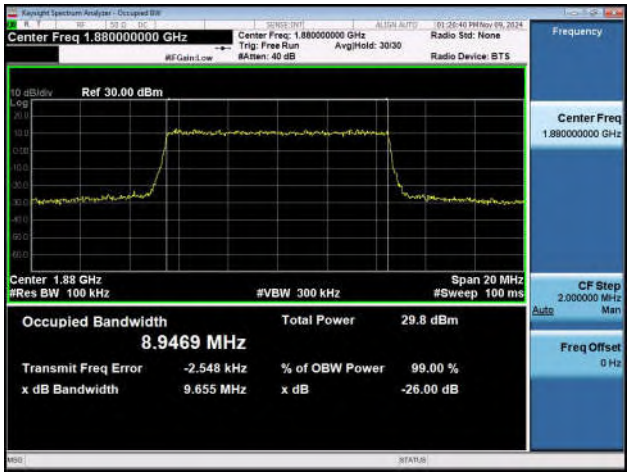
Test Graphs

Band2-1.4MHz-QPSK-18900-6RB#0-PASS	Band2-1.4MHz-16QAM-18900-6RB#0-PASS
	

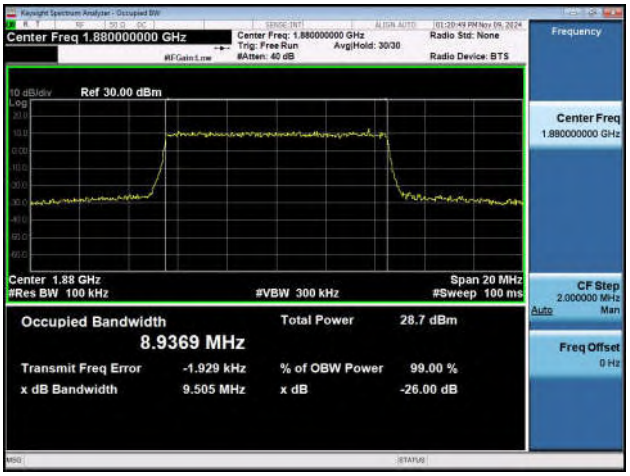
Band2-3MHz-QPSK-18900-15RB#0-PASS	Band2-3MHz-16QAM-18900-15RB#0-PASS
	

Band2-5MHz-QPSK-18900-25RB#0-PASS	Band2-5MHz-16QAM-18900-25RB#0-PASS

Band2-10MHz-QPSK-18900-50RB#0-PASS



Band2-10MHz-16QAM-18900-50RB#0-PASS



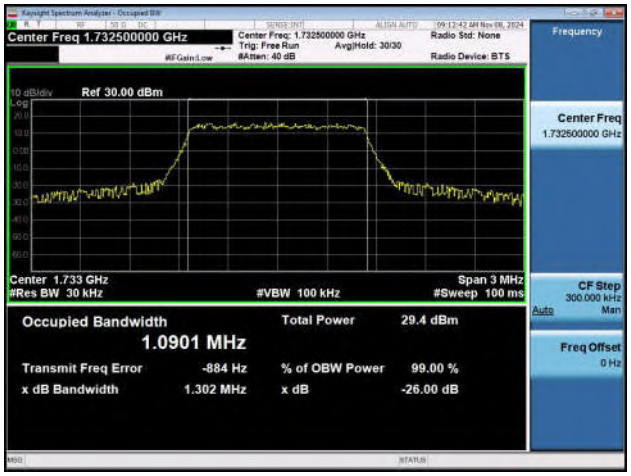
Band2-15MHz-QPSK-18900-75RB#0-PASS

Band2-15MHz-16QAM-18900-75RB#0-PASS

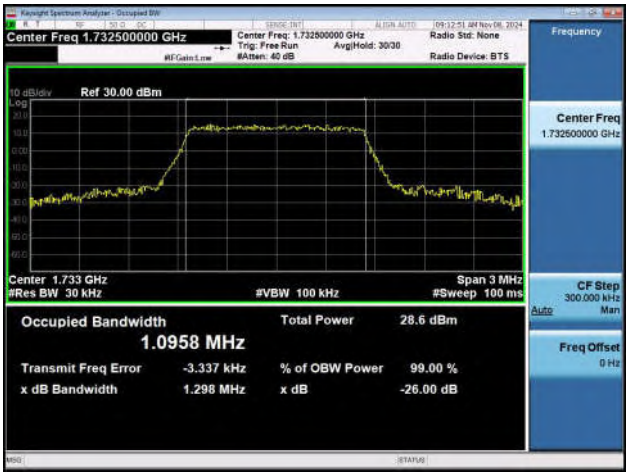
Band2-20MHz-QPSK-18900-100RB#0-PASS

Band2-20MHz-16QAM-18900-100RB#0-PASS

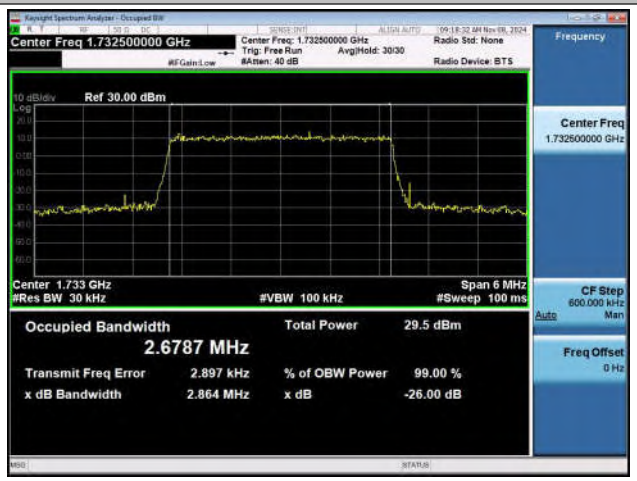
Band4-1.4MHz-QPSK-20175-6RB#0-PASS



Band4-1.4MHz-16QAM-20175-6RB#0-PASS

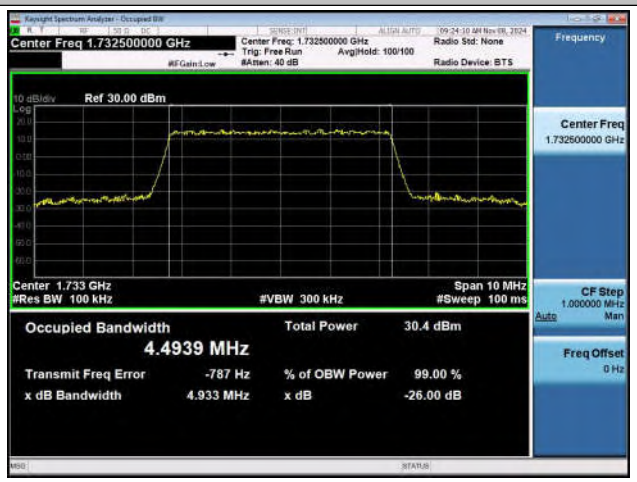


Band4-3MHz-QPSK-20175-15RB#0-PASS



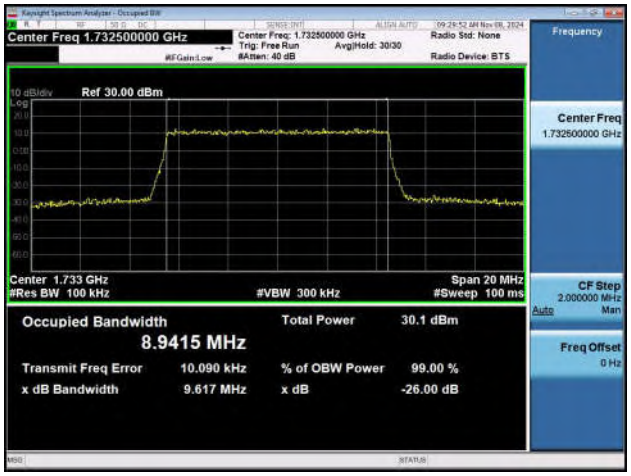
Band4-3MHz-16QAM-20175-15RB#0-PASS

Band4-5MHz-QPSK-20175-25RB#0-PASS

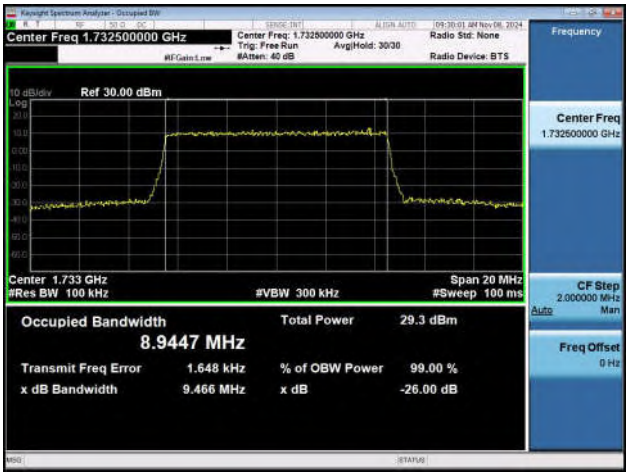


Band4-5MHz-16QAM-20175-25RB#0-PASS

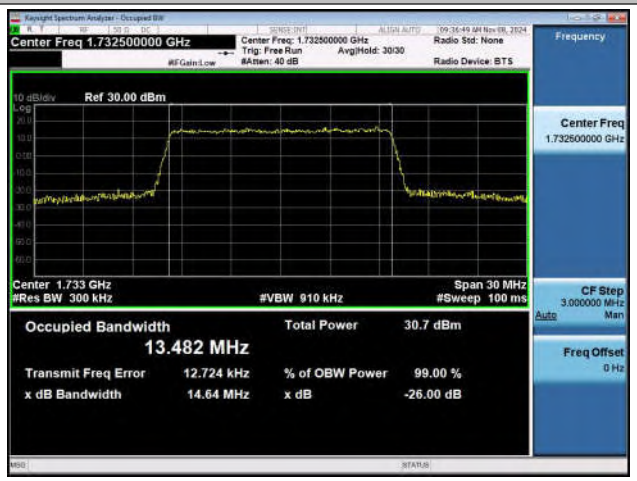
Band4-10MHz-QPSK-20175-50RB#0-PASS



Band4-10MHz-16QAM-20175-50RB#0-PASS



Band4-15MHz-QPSK-20175-75RB#0-PASS

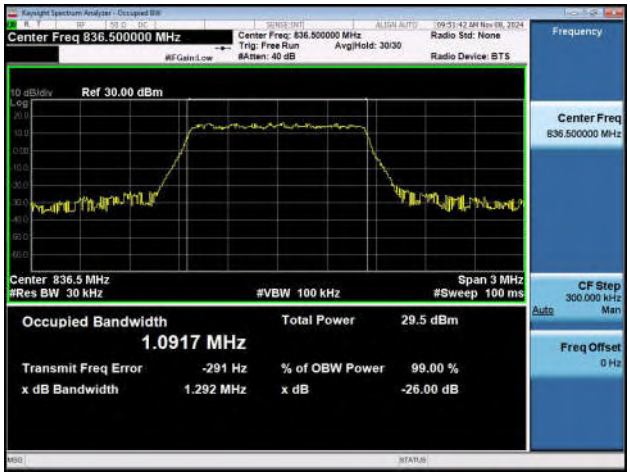


Band4-15MHz-16QAM-20175-75RB#0-PASS

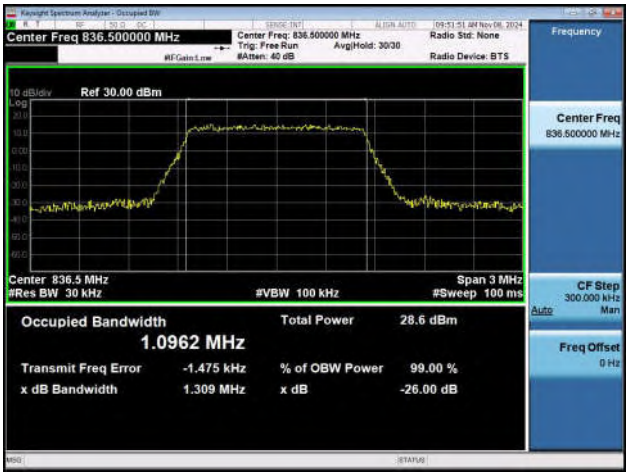
Band4-20MHz-QPSK-20175-100RB#0-PASS

Band4-20MHz-16QAM-20175-100RB#0-PASS

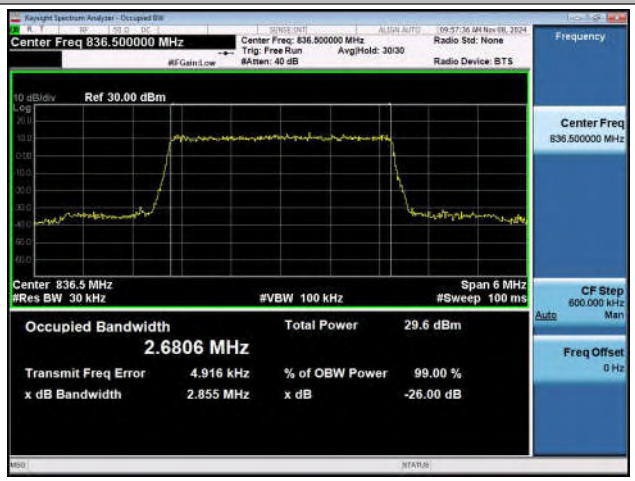
Band5-1.4MHz-QPSK-20525-6RB#0-PASS



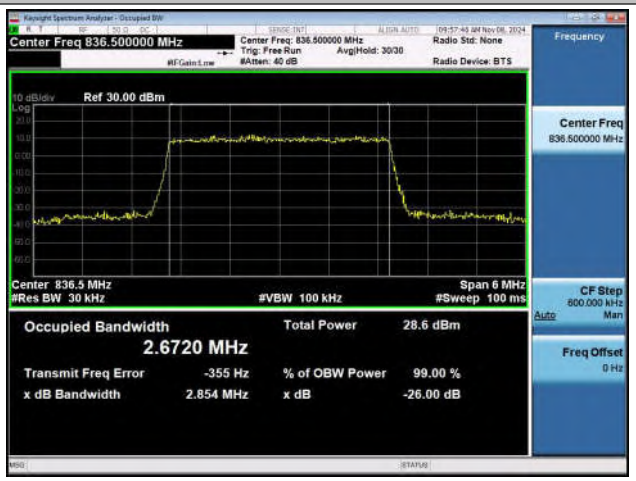
Band5-1.4MHz-16QAM-20525-6RB#0-PASS



Band5-3MHz-QPSK-20525-15RB#0-PASS



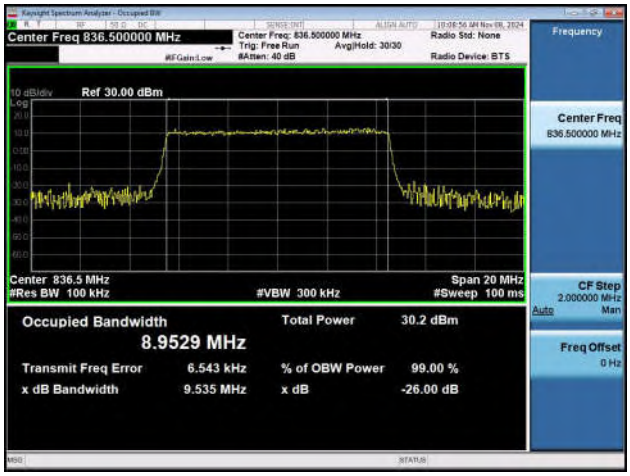
Band5-3MHz-16QAM-20525-15RB#0-PASS



Band5-5MHz-QPSK-20525-25RB#0-PASS

Band5-5MHz-16QAM-20525-25RB#0-PASS

Band5-10MHz-QPSK-20525-50RB#0-PASS



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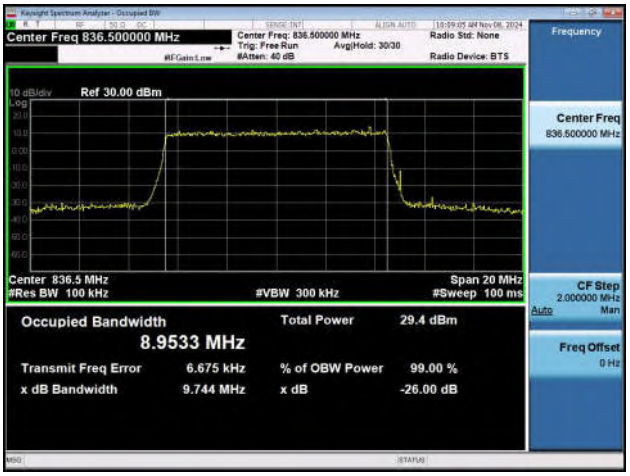
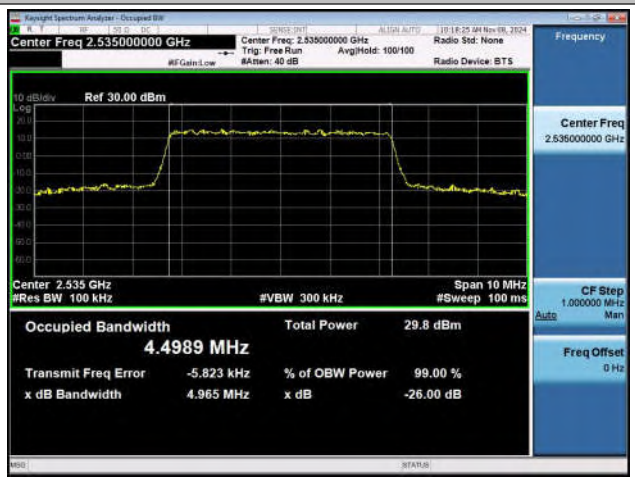


Band7-5MHz-QPSK-21100-25RB#0-PASS



Band7-5MHz-16QAM-21100-25RB#0-PASS

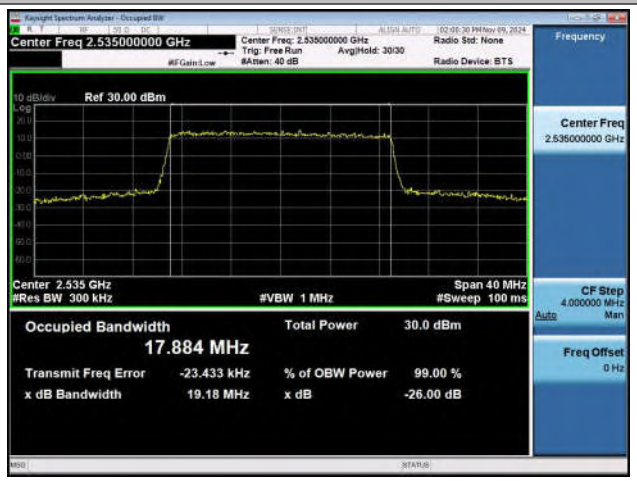
Band7-10MHz-QPSK-21100-50RB#0-PASS

Band7-10MHz-16QAM-21100-50RB#0-PASS

Band7-15MHz-QPSK-21100-75RB#0-PASS

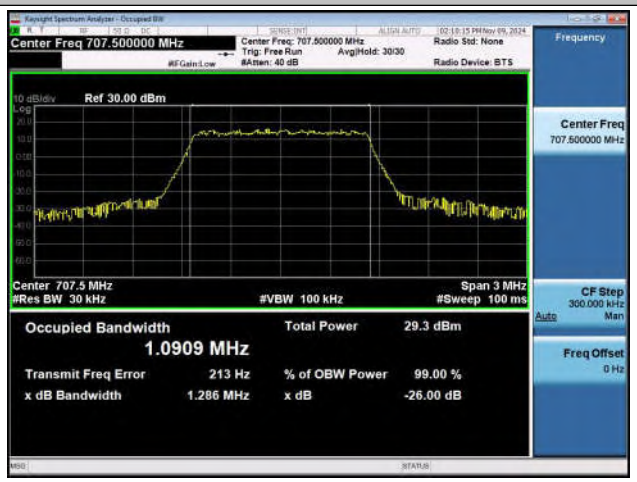
Band7-15MHz-16QAM-21100-75RB#0-PASS

Band7-20MHz-QPSK-21100-100RB#0-PASS

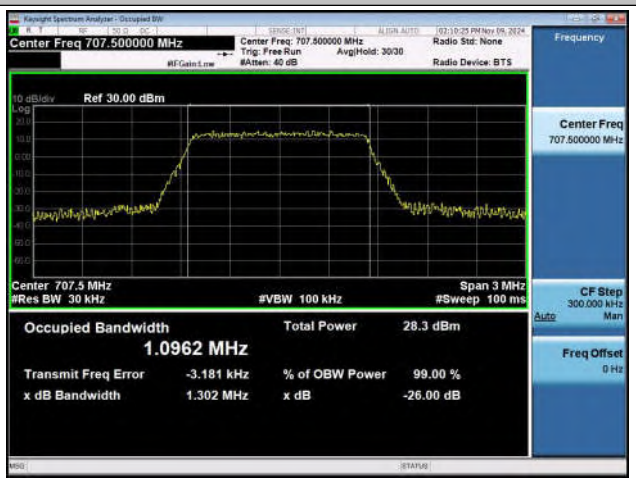


Band7-20MHz-16QAM-21100-100RB#0-PASS

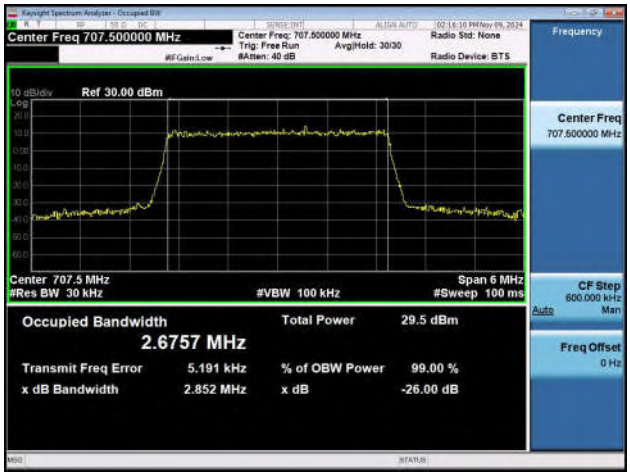
Band12-1.4MHz-QPSK-23095-6RB#0-PASS



Band12-1.4MHz-16QAM-23095-6RB#0-PASS



Band12-3MHz-QPSK-23095-15RB#0-PASS



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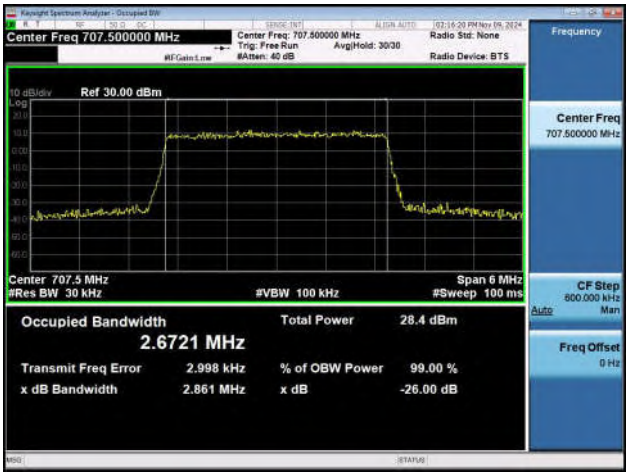
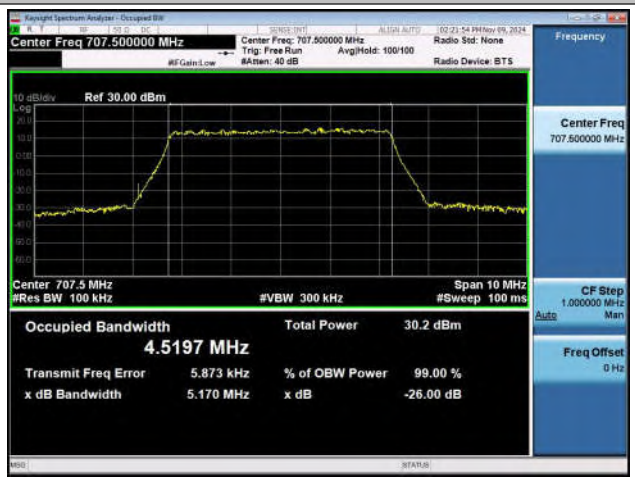
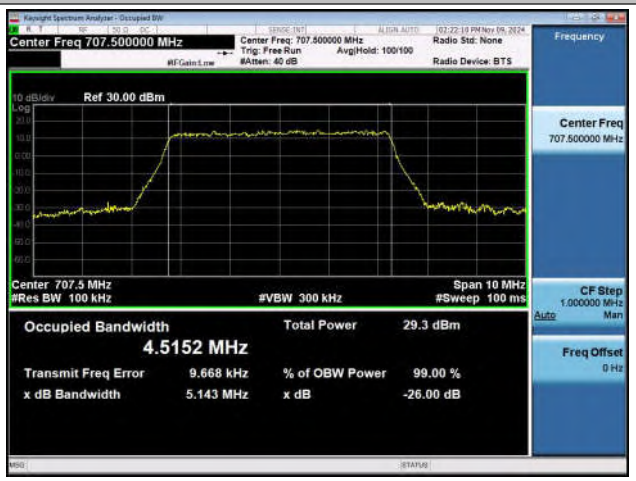


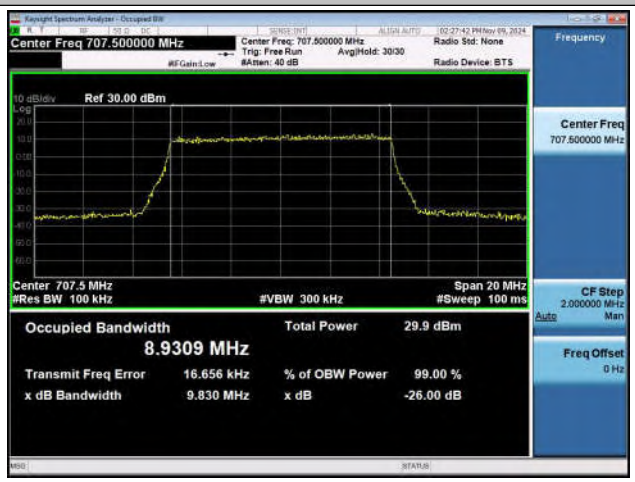
Band12-5MHz-QPSK-23095-25RB#0-PASS



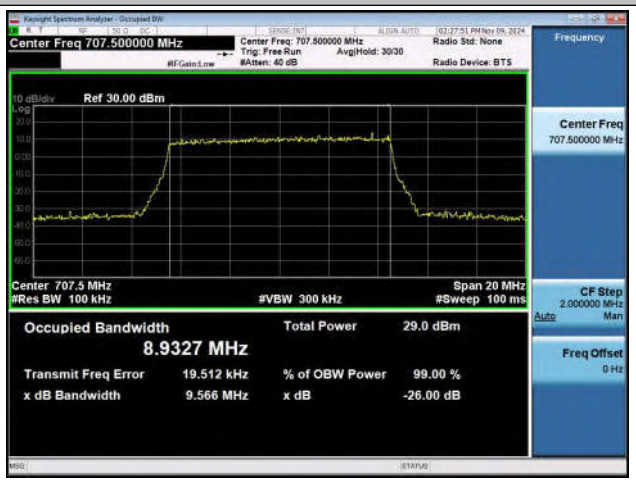
Band12-5MHz-16QAM-23095-25RB#0-PASS



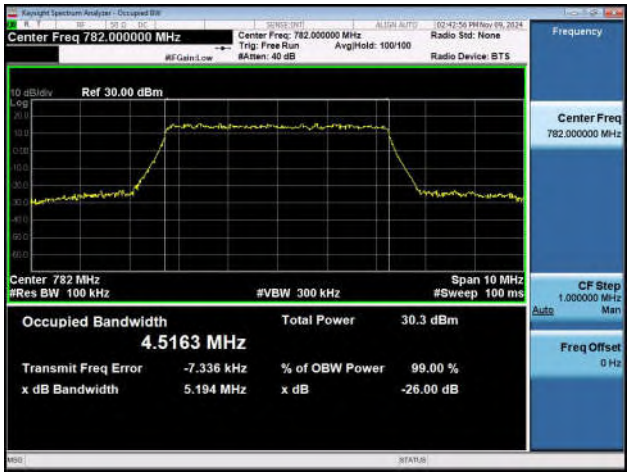
Band12-10MHz-QPSK-23095-50RB#0-PASS



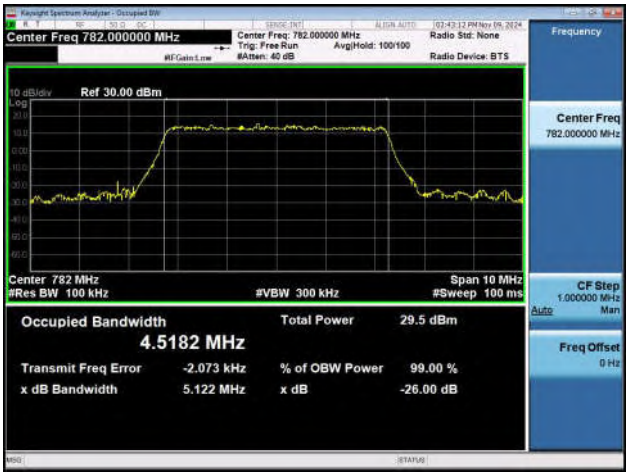
Band12-10MHz-16QAM-23095-50RB#0-PASS



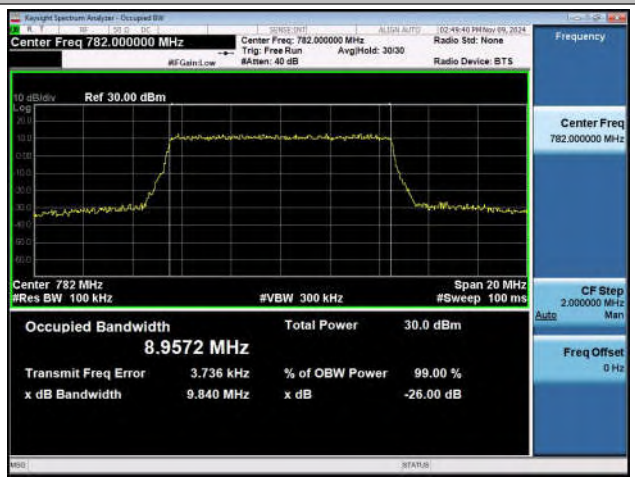
Band13-5MHz-QPSK-23230-25RB#0-PASS



Band13-5MHz-16QAM-23230-25RB#0-PASS



Band13-10MHz-QPSK-23230-50RB#0-PASS

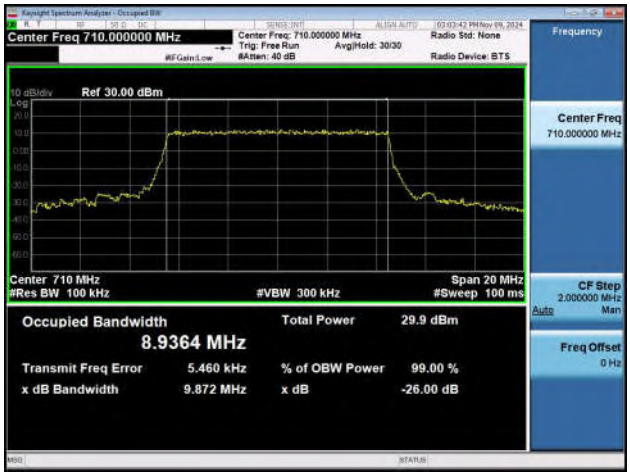


Band13-10MHz-16QAM-23230-50RB#0-PASS

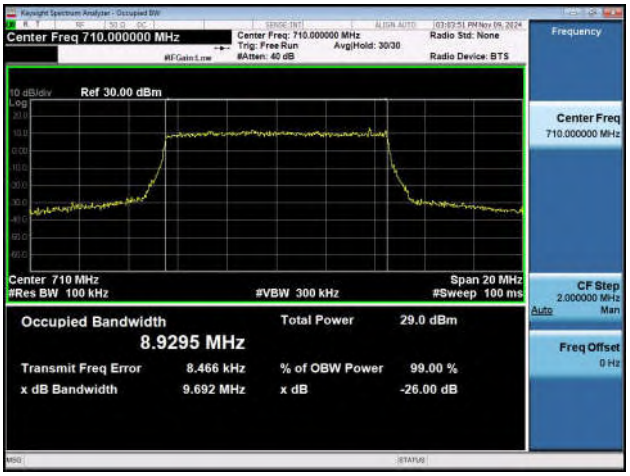
Band17-5MHz-QPSK-23790-25RB#0-PASS

Band17-5MHz-16QAM-23790-25RB#0-PASS

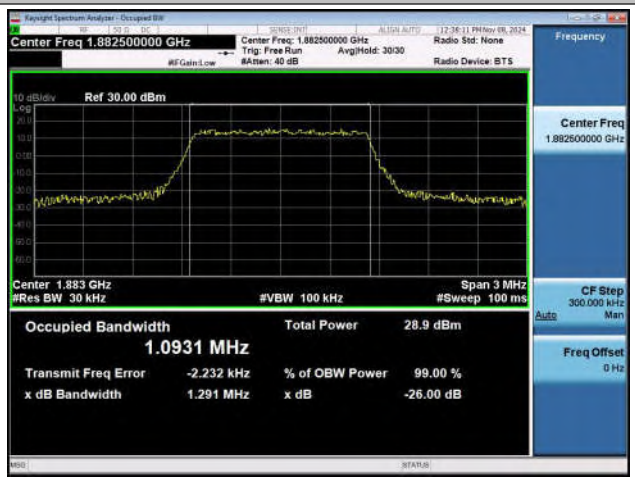
Band17-10MHz-QPSK-23790-50RB#0-PASS



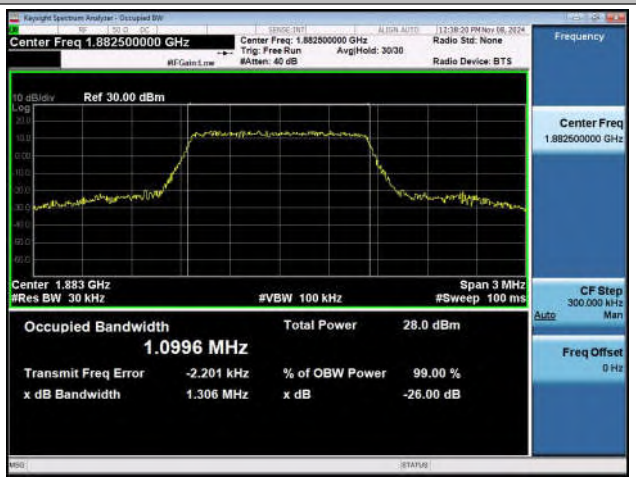
Band17-10MHz-16QAM-23790-50RB#0-PASS

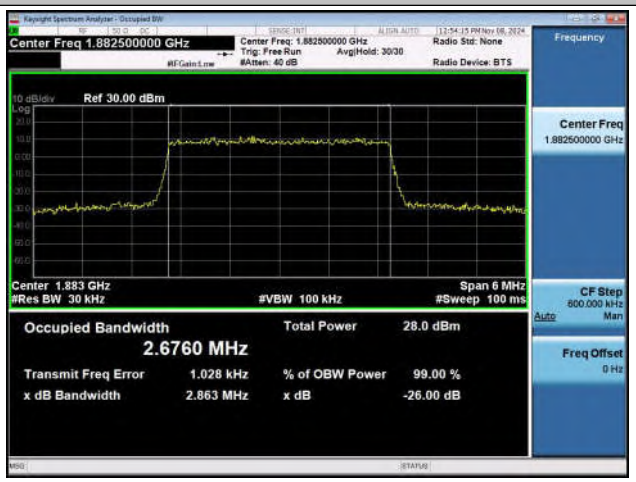


Band25-1.4MHz-QPSK-26365-6RB#0-PASS



Band25-1.4MHz-16QAM-26365-6RB#0-PASS



Band25-3MHz-QPSK-26365-15RB#0-PASS

Band25-3MHz-16QAM-26365-15RB#0-PASS