



RF TEST REPORT

Report No.: SET2021-13727

Product: Smart Minipos Terminal

FCC ID: SWSI2000

Model No.: i2000

Applicant: UROVO TECHNOLOGY CO., LTD.

Address: 36F, High-Tech Zone Union Tower, No. 63, Xuefu Road, Nanshan District, Shenzhen, Guangdong, China

Dates of Testing: 10/08/2021 — 11/15/2021

Issued by: CCIC Southern Testing Co., Ltd.

Lab Location: Electronic Testing Building, No. 43 Shahe Road, Xili Street, Nanshan District, Shenzhen, Guangdong, China.

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Test Report

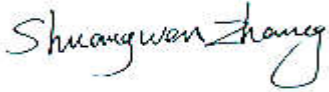
Product : Smart Minipos Terminal
Brand Name : UROVO
Trade Name : UROVO
Applicant : UROVO TECHNOLOGY CO., LTD.
Applicant Address : 36F, High-Tech Zone Union Tower, No.63, Xuefu Road,
Nanshan District, Shenzhen, Guangdong, China.
Manufacturer : UROVO TECHNOLOGY CO., LTD.
Manufacturer Address : 36F, High-Tech Zone Union Tower, No.63, Xuefu Road,
Nanshan District, Shenzhen, Guangdong, China.
Test Standards : 47 CFR Part 2/22/24/27/90
Test Result : PASS

Tested by :  2021.11.19

Sun, Test Engineer

Reviewed by :  2021.11.19

Chris You, Senior Engineer

Approved by :  2021.11.19

Shuangwen Zhang, Manager



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Change History		
Issue	Date	Reason for change
1.0	2021.11.19	First edition

1. GENERAL INFORMATION

1.1 EUT Description

EUT Type	Smart Minipos Terminal
EUT supports Radios application	LTE Band 2/4/5/7/12/17/25/26/41/66
Frequency Range(Tx)	LTE Band 2: 1850.7MHz~1909.3MHz LTE Band 4: 1710.7MHz~1754.3MHz LTE Band 5: 824.7MHz~848.3MHz LTE Band 7: 2502.5MHz~2567.5MHz LTE Band 12: 699.7MHz~715.3MHz LTE Band 17: 706.5MHz~713.5MHz LTE Band 25: 1850.7MHz~1914.3MHz LTE Band 26: 814.7MHz~848.3MHz LTE Band 41: 2537.5MHz~2652.5MHz LTE Band 66: 1710.7MHz~1779.3MHz
Maximum Output Power to Antenna	LTE Band 2: 23.50dBm LTE Band 4: 23.68dBm LTE Band 5: 23.78dBm LTE Band 7: 23.57dBm LTE Band 12: 23.15dBm LTE Band 17: 23.21dBm LTE Band 25: 22.99dBm LTE Band 26: 22.63dBm LTE Band 41: 22.25dBm LTE Band 66: 22.70dBm
Bandwidth	LTE Band 2: 1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz LTE Band 4: 1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz LTE Band 5: 1.4MHz/3MHz/5MHz/10MHz LTE Band 7: 5MHz/10MHz/15MHz/20MHz LTE Band 12: 1.4MHz/3MHz/5MHz/10MHz LTE Band 17: 5MHz/10MHz LTE Band 25: 1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz LTE Band 26: 1.4MHz/3MHz/5MHz/10MHz/15MHz LTE Band 41: 5MHz/10MHz/15MHz/20MHz LTE Band 66: 1.4MHz/3MHz/5MHz/10MHz/15MHz/20MHz



Modulation Type	QPSK/16QAM/64QAM(downlink only)
Antenna Type	Internal Antenna
Power supply	DC 3.8V from battery DC 5V from adapter

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

Band	Type of Modulation	BW (MHz)	Emission Designator	Frequency Tolerance (ppm)	Maximum ERP/EIRP(W)
LTE Band 2	QPSK	1.4	1M09G7D	—	0.189
LTE Band 2	16QAM	1.4	1M09W7D	—	0.153
LTE Band 2	QPSK	3	2M68G7D	—	0.187
LTE Band 2	16QAM	3	2M68W7D	—	0.147
LTE Band 2	QPSK	5	4M49G7D	—	0.171
LTE Band 2	16QAM	5	4M49W7D	—	0.136
LTE Band 2	QPSK	10	8M91G7D	-0.014	0.158
LTE Band 2	16QAM	10	8M90W7D	—	0.148
LTE Band 2	QPSK	15	13M4G7D	—	0.188
LTE Band 2	16QAM	15	13M4W7D	—	0.151
LTE Band 2	QPSK	20	17M8G7D	—	0.193
LTE Band 2	16QAM	20	17M8W7D	—	0.144
LTE Band 4	QPSK	1.4	1M09G7D	—	0.158
LTE Band 4	16QAM	1.4	1M09W7D	—	0.127
LTE Band 4	QPSK	3	2M68G7D	—	0.160
LTE Band 4	16QAM	3	2M68W7D	—	0.181
LTE Band 4	QPSK	5	4M49G7D	—	0.213
LTE Band 4	16QAM	5	4M49W7D	—	0.184
LTE Band 4	QPSK	10	8M91G7D	0.008	0.169
LTE Band 4	16QAM	10	8M90W7D	—	0.146
LTE Band 4	QPSK	15	13M4G7D	—	0.132
LTE Band 4	16QAM	15	13M4W7D	—	0.107
LTE Band 4	QPSK	20	17M8G7D	—	0.135
LTE Band 4	16QAM	20	17M8W7D	—	0.112



LTE Band 5	QPSK	1.4	1M09G7D	—	0.145
LTE Band 5	16QAM	1.4	1M09W7D	—	0.152
LTE Band 5	QPSK	3	2M68G7D	—	0.148
LTE Band 5	16QAM	3	2M68W7D	—	0.156
LTE Band 5	QPSK	5	4M49G7D	—	0.114
LTE Band 5	16QAM	5	4M49W7D	—	0.118
LTE Band 5	QPSK	10	8M92G7D	-0.006	0.117
LTE Band 5	16QAM	10	8M92W7D	—	0.115
LTE Band 7	QPSK	5	4M48G7D	—	0.164
LTE Band 7	16QAM	5	4M49W7D	—	0.166
LTE Band 7	QPSK	10	8M92G7D	-0.012	0.163
LTE Band 7	16QAM	10	8M91W7D	—	0.175
LTE Band 7	QPSK	15	13M4G7D	—	0.166
LTE Band 7	16QAM	15	13M4W7D	—	0.138
LTE Band 7	QPSK	20	17M8G7D	—	0.136
LTE Band 7	16QAM	20	17M8W7D	—	0.135
LTE Band 12	QPSK	1.4	1M09G7D	—	0.110
LTE Band 12	16QAM	1.4	1M09W7D	—	0.091
LTE Band 12	QPSK	3	2M68G7D	—	0.157
LTE Band 12	16QAM	3	2M68W7D	—	0.092
LTE Band 12	QPSK	5	4M49G7D	—	0.114
LTE Band 12	16QAM	5	4M49W7D	—	0.094
LTE Band 12	QPSK	10	8M91G7D	-0.015	0.127
LTE Band 12	16QAM	10	8M90W7D	—	0.104
LTE Band 17	QPSK	5	4M48G7D	—	0.129
LTE Band 17	16QAM	5	4M49W7D	—	0.082
LTE Band 17	QPSK	10	8M91G7D	-0.016	0.128
LTE Band 17	16QAM	10	8M9W7D	—	0.086

LTE Band 25	QPSK	1.4	1M09G7D	—	0.153
LTE Band 25	16QAM	1.4	1M09W7D	—	0.129
LTE Band 25	QPSK	3	2M68G7D	—	0.156
LTE Band 25	16QAM	3	2M68W7D	—	0.138
LTE Band 25	QPSK	5	4M49G7D	—	0.167
LTE Band 25	16QAM	5	4M49W7D	—	0.134
LTE Band 25	QPSK	10	8M91G7D	-0.014	0.190
LTE Band 25	16QAM	10	8M91W7D	—	0.152
LTE Band 25	QPSK	15	13M4G7D	—	0.193
LTE Band 25	16QAM	15	13M4W7D	—	0.155
LTE Band 25	QPSK	20	17M8G7D	—	0.196
LTE Band 25	16QAM	20	17M8W7D	—	0.157
LTE Band 26	QPSK	1.4	1M09G7D	—	0.140
LTE Band 26	16QAM	1.4	1M09W7D	—	0.117
LTE Band 26	QPSK	3	2M68G7D	—	0.143
LTE Band 26	16QAM	3	2M68W7D	—	0.126
LTE Band 26	QPSK	5	4M49G7D	—	0.153
LTE Band 26	16QAM	5	4M49W7D	—	0.122
LTE Band 26	QPSK	10	8M92G7D	-0.015	0.173
LTE Band 26	16QAM	10	8M91W7D	—	0.138
LTE Band 26	QPSK	15	13M4G7D	—	0.176
LTE Band 26	16QAM	15	13M4W7D	—	0.141
LTE Band 41	QPSK	5	4M48G7D	—	0.178
LTE Band 41	16QAM	5	4M48W7D	—	0.226
LTE Band 41	QPSK	10	8M90G7D	0.015	0.229
LTE Band 41	16QAM	10	8M91W7D	—	0.230
LTE Band 41	QPSK	15	13M4G7D	—	0.233
LTE Band 41	16QAM	15	13M4W7D	—	0.186



LTE Band 41	QPSK	20	17M8G7D	—	0.175
LTE Band 41	16QAM	20	17M8W7D	—	0.176
LTE Band 66	QPSK	1.4	1M09G7D	—	0.195
LTE Band 66	16QAM	1.4	1M09W7D	—	0.150
LTE Band 66	QPSK	3	2M68G7D	—	0.202
LTE Band 66	16QAM	3	2M68W7D	—	0.162
LTE Band 66	QPSK	5	4M49G7D	—	0.200
LTE Band 66	16QAM	5	4M49W7D	—	0.164
LTE Band 66	QPSK	10	8M91G7D	-0.017	0.199
LTE Band 66	16QAM	10	8M90W7D	—	0.136
LTE Band 66	QPSK	15	13M4G7D	—	0.196
LTE Band 66	16QAM	15	13M4W7D	—	0.158
LTE Band 66	QPSK	20	17M8G7D	—	0.204
LTE Band 66	16QAM	20	17M8W7D	—	0.163



1.3 Test Standards and Results

The objective of the report is to perform testing according to FCC ID Certification:

1. 47 CFR Part 2/22/24/27/ 90
2. ANSI/TIA/EIA-603-D-2010
3. FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01

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

No.	Section	Description	Limit	Result
1	2.1046	Conducted RF Output Power	Reporting Only	PASS
2	§24.232(d)	Peak to Average Ratio	< 13dB	PASS
3	§22.913(a)(2)	Effective Radiated Power (Band 5/26)	ERP < 7 Watt	PASS
	§24.232(c) §27.50(h)(2) §27.50(a)(3)	Equivalent Isotropic Radiated Power (Band 2/7/25/41)	EIRP < 2Watt EIRP < 250mW/5MHz	PASS
	§27.50(b)(10) §27.50(c)(10)	Effective Radiated Power (Band 12/17)	ERP < 3 Watt	PASS
	§27.50(d)(4)	Equivalent Isotropic Radiated Power (Band 4) (Band 66)	EIRP < 1Watt	PASS
4	2.1049	Occupied Bandwidth	Reporting Only	PASS
5	§2.1051 §22.917(a) §24.238(a) §27.53(c)(2) §27.53(g) §27.53(h) §90.691 2.1051	Conducted Band Edge Measurement (Band 2/4/5/12/17/25/26/66) Band 7/41	< 43+10log ₁₀ (P[watt]) Refer to 27.53(m)(4) (Band7)	PASS



	27.53(m)(4)			
6	2.1051 §22.917(a) 24.238(a) 27.53(c) 27.53(g) 27.53(h)	Conducted Spurious Emission Measurement (Band 2/4/5/12/17/25/26)	$<43+10\log_{10}(P[\text{watt}])$	PASS
	2.1051 27.53(m)(4) 27.53(i)(4)	Conducted Spurious Emission (Band 7/41)	$<55+10\log_{10}(P[\text{watt}])$	PASS
7	2.1053 §22.917(a) 24.238(a) 27.53(c) 27.53(g) 27.53(h) §90.691	Radiated Spurious Emission (Band 2/4/5/12/17/25/26)	$<43+10\log_{10}(P[\text{watt}])$	PASS
	2.1053 27.53(m)(4) §90.691 27.53(i)(4)	Radiated Spurious Emission (Band 7/41)	$<55+10\log_{10}(P[\text{watt}])$	PASS
8	2.1055 22.335 24.235 27.54 90.691	Frequency Stability	$<2.5\text{ppm}$	PASS

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
2. This EUT has also been tested and complied with the requirements of FCC Part 15, Subpart B, recorded in a separate test report.



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#			Test Channel		
		1.4	3	5	10	15	20	QPSK	16QAM	1	Half	Full	L	M	H
Max. Output Power	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	5	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	7			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	12	✓	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	17			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	25	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	26	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	/														
	41			✓	✓	✓	✓		✓	✓		✓	✓	✓	✓
	66	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Peak-to-Average Ratio	2				✓				✓	✓		✓	✓	✓	✓
	4				✓				✓	✓		✓	✓	✓	✓
	5				✓				✓	✓		✓	✓	✓	✓
	7				✓				✓	✓		✓	✓	✓	✓
	12				✓				✓	✓		✓	✓	✓	✓
	17				✓				✓	✓		✓	✓	✓	✓
	25				✓				✓	✓		✓	✓	✓	✓
	26				✓				✓	✓		✓	✓	✓	✓
	/														
	41				✓				✓	✓		✓	✓	✓	✓
	66				✓				✓	✓		✓	✓	✓	✓
26dB and 99% Bandwidth	2	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	
	4	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	
	5	✓	✓	✓	✓			✓	✓			✓		✓	
	7			✓	✓	✓	✓	✓	✓			✓		✓	
	12	✓	✓	✓	✓			✓	✓			✓		✓	
	17			✓	✓	✓	✓	✓	✓			✓		✓	
	25	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	
	26	✓	✓	✓	✓	✓		✓	✓			✓		✓	



	/														
	41			✓	✓	✓	✓	✓	✓			✓		✓	
	66	✓	✓	✓	✓	✓	✓	✓	✓			✓		✓	
Conducted Band Edge	2	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	5	✓	✓	✓	✓			✓	✓	✓		✓	✓		✓
	7			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	12	✓	✓	✓	✓			✓	✓	✓		✓	✓		✓
	17			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	25	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	26	✓	✓	✓	✓	✓		✓	✓	✓		✓	✓		✓
	/														
	41			✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
	66	✓	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓		✓
Conducted Spurious Emission	2	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	5	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓
	7			✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	12	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓
	17			✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	25	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	26	✓	✓	✓	✓	✓		✓	✓	✓			✓	✓	✓
	/														
	41			✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	66	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
Frequency Stability	2				✓			✓				✓		✓	
	4				✓			✓				✓		✓	
	5				✓			✓				✓		✓	
	7				✓			✓				✓		✓	
	12				✓			✓				✓		✓	
	17				✓			✓				✓		✓	
	25				✓			✓				✓		✓	
	26				✓			✓				✓		✓	
	/														
	41				✓			✓				✓		✓	
	66				✓			✓				✓		✓	
ERP/EIRP	2	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	5	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓
	7			✓	✓	✓	✓	✓	✓	✓			✓	✓	✓



	12	✓	✓	✓	✓			✓	✓	✓			✓	✓	✓
	17			✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	25	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	26	✓	✓	✓	✓	✓		✓	✓	✓			✓	✓	✓
	/														
	41			✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
	66	✓	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓
Radiated Spurious Emission	2	Worst case												✓	
	4	Worst case												✓	
	5	Worst case												✓	
	7	Worst case												✓	
	12	Worst case												✓	
	17	Worst case												✓	
	25	Worst case												✓	
	26	Worst case												✓	
	41	Worst case												✓	
	66	Worst case												✓	

Note:1. The mark “ ✓ ” means that this configuration is chosen for testing.

2.The EUT has two WWAN antennas , upper antenna and primary antenna. The antenna which has the maximum power were used for all the tests.

3.For ERP/EIRP, all the antennas (upper antenna and primary antenna) have been tested, the worst data reported only.

4. LTE Band26 transmit frequency for part22 rule is 824MHz-849MHz, for part90 rule is 814MHz-824MHz, ERP over 15MHz bandwidth complies the ERP limit line of part 22 rule, therefore ERP of the partial frequency spectrum which falls within part 22 also complied

1.5 Measurement Results Explanation Example

For all conducted test items:

The offset level is set in the spectrum analyzer to compensate the RF cable loss and attenuator factor between EUT conducted output port and spectrum analyzer. With the offset compensation, the spectrum analyzer reading level is exactly the EUT RF output level.

The spectrum analyzer offset is derived from RF cable loss and attenuator factor.

Offset = RF cable loss + attenuator factor.

Following shows an offset computation example with cable loss 7dB and 10dB attenuator.

Example:

$$\begin{aligned}\text{Offset (dB)} &= \text{RF cable loss(dB)} + \text{attenuator factor(dB)} \\ &= 7 + 10 = 17 \text{ (dB)}\end{aligned}$$



1.6 Facilities and Accreditations

1.6.1 Test Facilities

CNAS-Lab Code: L1659

CCIC-SET is a third party testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L1659.

FCC-Registration No.: 406086

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 April 19th, 2023.

ISED Registration: 11185A-1

CAB identifier: CN0064

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-1 on Aug. 04, 2016, valid time is until Jun. 30th, 2023.

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.

1.6.2 Test Environment Conditions

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

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

2. 47 CFR PART 2 REQUIREMENTS

2.1 Conducted RF Output Power

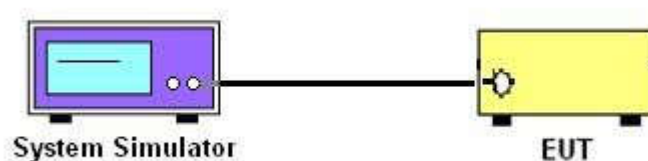
2.1.1 Requirement

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).

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

Please refer to Appendix A for detail

2.2 Peak to Average Ratio

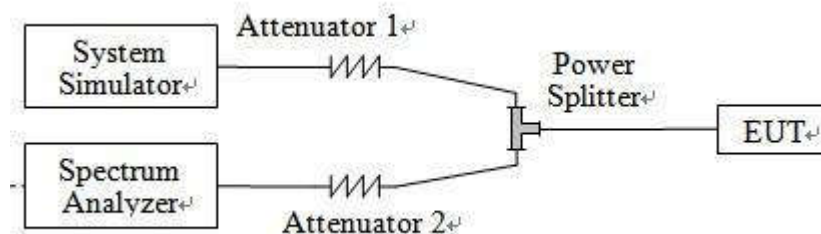
2.2.1 Definition

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 ratio (PAR) of the transmission may not exceed 13 dB.

2.2.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

2.2.3 Test Description



2.2.4 Test Procedures

1. The EUT was connected to spectrum and system simulator via a power divider.
2. Set the CCDF (Complementary Cumulative Distribution Function) option in spectrum analyzer.
3. The highest RF powers were measured and recorded the maximum PAPR level associated with a probability of 0.1 %.
4. Record the deviation as Peak to Average Ratio.



2.2.5 Test Results of Peak-to-Average Ratio

Please refer to Appendix A for detail

2.3 99% Occupied Bandwidth and 26dB Bandwidth

2.3.1 Definition

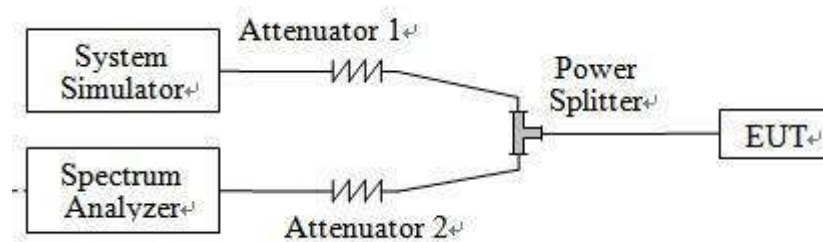
According to FCC section 2.1049, the occupied bandwidth is the width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5% of the total mean transmitted power.

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 4 of this test report.

2.3.3 Test Setup



2.3.4 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The 26dB and 99% occupied bandwidth (BW) of the middle channel for the highest RF power with full RB sizes were measured.



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

Please refer to Appendix A for detail

2.4 Frequency Stability

2.4.1 Requirement

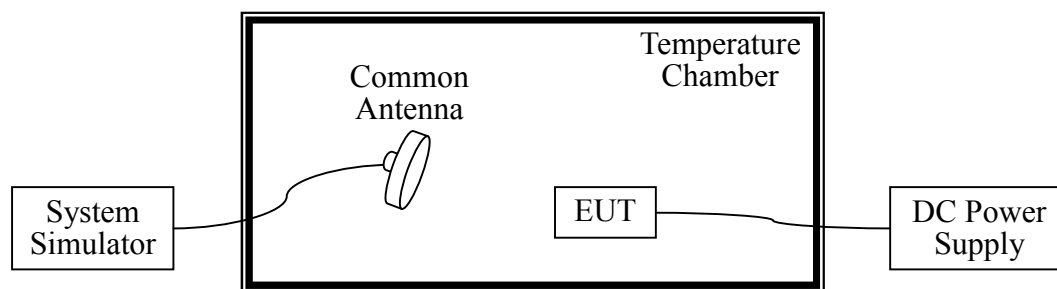
According to FCC requirement, the frequency stability shall be sufficient to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability shall be measured by variation of ambient temperature and variation of primary supply voltage to ensure that the fundamental emission stays within the authorized frequency block. The frequency stability of the transmitter shall be maintained within $\pm 0.00025\%$ ($\pm 2.5\text{ppm}$) of the center frequency. According to FCC section 2.1055, the test conditions are:

- (a) The temperature is varied from -30°C to $+50^{\circ}\text{C}$ at intervals of not more than 10°C .
- (b) For hand carried battery powered equipment, the primary supply voltage is reduced to the battery operating end point which shall be specified by the manufacture. The supply voltage shall be measured at the input to the cable normally provided with the equipment, or at the power supply terminals if cables are not normally provided.

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 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 25°C.
5. The variation in frequency was measured for the worst case.



2.4.5 Test Result of Frequency Stability

Please refer to Appendix A for detail

2.5 Conducted Out of Band Emissions

2.5.1 Requirement

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:

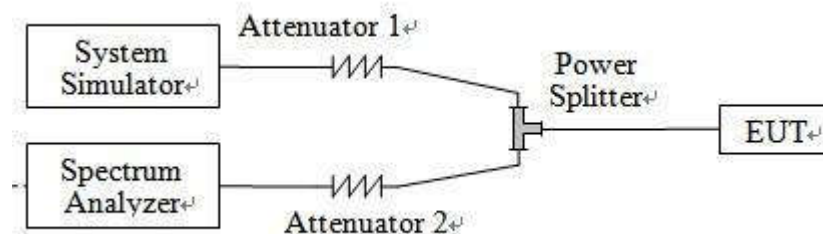
The power of any emission outside of the authorized operating frequency ranges must be lower than the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

It is measured by means of a calibrated spectrum analyzer and scanned from 30 MHz up to a frequency including its 10th harmonic.

2.5.2 Measuring Instruments

The measuring equipment is listed in the section 4 of this test report.

2.5.3 Test Setup



2.5.4 Test Procedures

1. The EUT was connected to spectrum analyzer and system simulator via a power divider.
2. The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator.
The path loss was compensated to the results for each measurement.
3. The middle channel for the highest RF power within the transmitting frequency was measured.
4. The conducted spurious emission for the whole frequency range was taken.

5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
7. The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P(Watts)
$$= P(W) - [43 + 10\log(P)] \text{ (dB)}$$
$$= [30 + 10\log(P)] \text{ (dBm)} - [43 + 10\log(P)] \text{ (dB)}$$
$$= -13\text{dBm}.$$
8. For Band 7
The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P(Watts)
$$= P(W) - [55 + 10\log(P)] \text{ (dB)}$$
$$= [30 + 10\log(P)] \text{ (dBm)} - [55 + 10\log(P)] \text{ (dB)}$$
$$= -25\text{dBm}.$$
9. For 9KHz to 30MHz: the amplitude of spurious emissions which are attenuated by more than 20dB below the permissible value has no need to be reported.



2.5.5 Test Result of Conducted Spurious Emission

Please refer to Appendix A for detail

2.6 Conducted Band Edge

2.6.1 Description of Conducted Band Edge Measurement

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.

24.238(a)

For operations in the 1850 -1910 MHz band, the FCC limit is $43 + 10 \log_{10}(P [\text{Watts}])$ dB below the transmitter power P(Watts) in a 1MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(h)

For operations in the 1710 – 1755 MHz band, the FCC limit is $43 + 10 \log_{10}(P[\text{Watts}])$ dB below the transmitter power P(Watts) in a 1 MHz bandwidth. However, in the 1MHz bands immediately outside and adjacent to the licensee's frequency block, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed.

27.53(g)

For operations in the 698 – 746 MHz band, the FCC limit is $43 + 10 \log_{10}(P[\text{Watts}])$ 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.

27.53m(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 than $43 + 10 \log (P)$ 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.

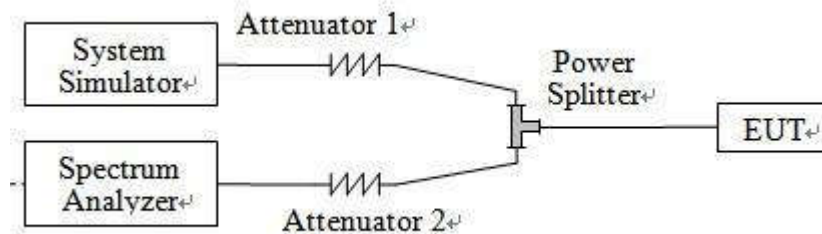
90.691(a)(2)

For any frequency removed from assigned frequency by out of the authorized bandwidth by at least $43 + 10\log(P)\text{dB}$, it is measured by means of a calibrated spectrum analyzer and scanned from 30MHz up to a frequency including its 10^{th} harmonic.

2.6.2 Measuring Instruments

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

2.6.3 Test Setup



2.6.4 Test Procedures

1. The testing follows FCC KDB 971168 v03r01 Section 6.0.
2. The EUT was connected to spectrum analyzer and system simulator via a power divider.
3. The band edges of low and high channels for the highest RF powers were measured.
4. Set RBW $\geq 1\%$ EBW in the 1MHz band immediately outside and adjacent to the band edge.
5. Beyond the 1 MHz band from the band edge, RBW=1MHz was used.
6. Set spectrum analyzer with RMS detector.
7. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.
8. Checked that all the results comply with the emission limit line.
The limit line is derived from $43 + 10\log(P)\text{dB}$ below the transmitter power P(Watts)
9. For LTE Band 7 the other 40 dB, and 55 dB have additionally applied same calculation above.

2.6.5 Test Result of Conducted Band Edge

Please refer to Appendix A for detail

2.7 Transmitter Radiated Power (EIRP/ERP)

2.7.1 Requirement

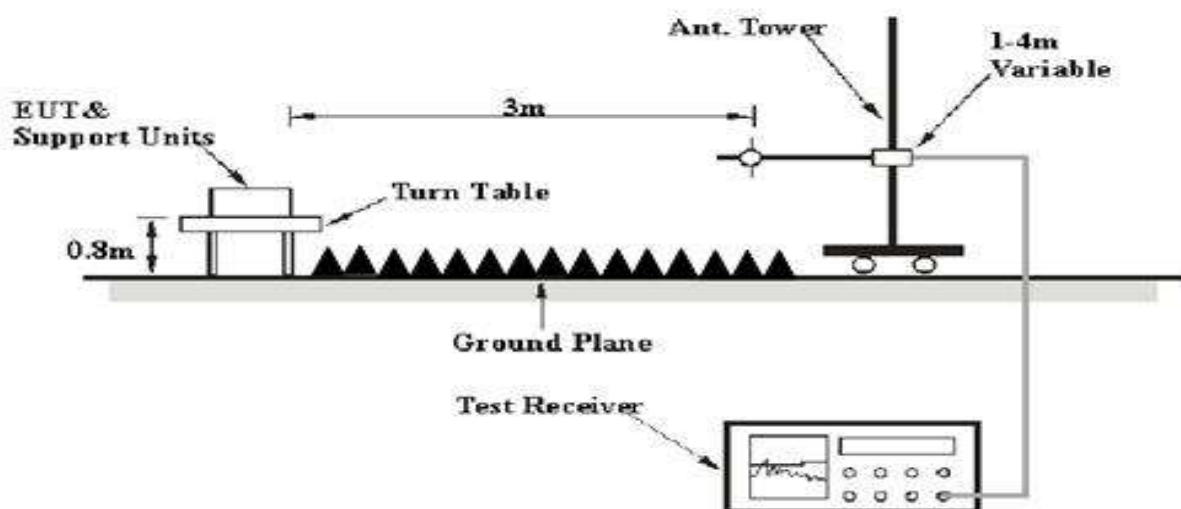
Effective radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-D-2010, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v03r01. Mobile and portable (hand-held) stations operating are limited to average ERP of 7 watts with LTE band 5/26 and 3 watts with LTE band 12/17.

Equivalent isotropic radiated power output measurements by substitution method according to ANSI / TIA / EIA-603-D-2010, and the spectrum analyzer configuration follows KDB 971168 D01 Power Meas. License Digital Systems v03r01. Mobile and portable (hand-held) stations operating are limited to average EIRP of 2 watts with LTE band 2 / 25 / 7 and 1 watt with LTE band 4 and 66.

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 placed on a turntable with 1.5 meter height in a fully anechoic chamber.
2. The EUT was set at 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The radiated emission at the fundamental frequency was measured at 3 m with a test antenna and a spectrum analyzer which used a channel power option across EUT's signal bandwidth per section 4.0 of KDB 971168 D01v03r01.
4. The table was rotated 360 degrees to determine the position of the highest radiated power.
5. The height of the receiving antenna is adjusted to look for the maximum ERP/EIRP.
6. Taking the record of maximum ERP/EIRP.
7. A dipole antenna was substituted in place of the EUT and was driven by a signal generator.
8. The conducted power at the terminal of the dipole antenna is measured.
9. Repeat step 3 to step 5 to get the maximum ERP/EIRP of the substitution antenna.
10. $ERP/EIRP = P_s + E_t - E_s + G_s = P_s + R_t - R_s + G_s$

P_s (dBm): Input power to substitution antenna.

G_s (dBi or dBd): Substitution antenna Gain.

$E_t = R_t + AF$

$E_s = R_s + AF$

AF (dB/m): Receive antenna factor

R_t : The highest received signal in spectrum analyzer for EUT.

R_s : The highest received signal in spectrum analyzer for substitution antenna.

**2.7.5 Test Result of ERP/EIRP****1. LTE Band 2 Test Verdict:**

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	Verdict
			RB Size	RB Offset			
2	1.4	QPSK	1	3	1850.7	22.72	PASS
2	1.4	QPSK	1	3	1880	22.09	PASS
2	1.4	QPSK	1	3	1909.3	22.77	PASS
2	1.4	16QAM	1	0	1850.7	21.86	PASS
2	1.4	16QAM	1	0	1880	21.36	PASS
2	1.4	16QAM	1	0	1909.3	21.03	PASS
2	3	QPSK	1	8	1851.5	22.40	PASS
2	3	QPSK	1	8	1880	22.44	PASS
2	3	QPSK	1	8	1908.5	22.72	PASS
2	3	16QAM	1	0	1851.5	21.68	PASS
2	3	16QAM	1	0	1880	21.65	PASS
2	3	16QAM	1	0	1908.5	21.66	PASS
2	5	QPSK	1	0	1852.5	22.32	PASS
2	5	QPSK	1	0	1880	22.29	PASS
2	5	QPSK	1	0	1907.5	22.31	PASS
2	5	16QAM	1	24	1852.5	21.35	PASS
2	5	16QAM	1	24	1880	21.34	PASS
2	5	16QAM	1	24	1907.5	21.32	PASS
2	10	QPSK	1	49	1855	21.98	PASS
2	10	QPSK	1	49	1880	21.87	PASS
2	10	QPSK	1	49	1905	21.88	PASS
2	10	16QAM	1	0	1855	21.12	PASS
2	10	16QAM	1	0	1880	21.27	PASS
2	10	16QAM	1	0	1905	21.70	PASS
2	15	QPSK	1	74	1857.5	22.73	PASS
2	15	QPSK	1	74	1880	22.70	PASS
2	15	QPSK	1	74	1902.5	22.75	PASS
2	15	16QAM	1	0	1857.5	21.77	PASS
2	15	16QAM	1	0	1880	21.75	PASS
2	15	16QAM	1	0	1902.5	21.78	PASS
2	20	QPSK	1	0	1860	22.85	PASS
2	20	QPSK	1	0	1880	22.82	PASS
2	20	QPSK	1	0	1900	22.72	PASS
2	20	16QAM	1	0	1860	21.45	PASS
2	20	16QAM	1	0	1880	21.24	PASS
2	20	16QAM	1	0	1900	21.57	PASS



2. LTE Band 4 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	Verdict
			RB Size	RB Offset			
4	1.4	QPSK	1	0	1710.7	21.91	PASS
4	1.4	QPSK	1	0	1732.5	21.99	PASS
4	1.4	QPSK	1	0	1754.3	21.94	PASS
4	1.4	16QAM	1	3	1710.7	21.01	PASS
4	1.4	16QAM	1	3	1732.5	21.04	PASS
4	1.4	16QAM	1	3	1754.3	21.01	PASS
4	3	QPSK	1	0	1711.5	22.02	PASS
4	3	QPSK	1	0	1732.5	22.03	PASS
4	3	QPSK	1	0	1753.5	22.01	PASS
4	3	16QAM	1	14	1711.5	22.57	PASS
4	3	16QAM	1	14	1732.5	22.55	PASS
4	3	16QAM	1	14	1753.5	22.53	PASS
4	5	QPSK	1	0	1712.5	23.26	PASS
4	5	QPSK	1	0	1732.5	23.25	PASS
4	5	QPSK	1	0	1752.5	23.28	PASS
4	5	16QAM	1	0	1712.5	22.64	PASS
4	5	16QAM	1	0	1732.5	22.60	PASS
4	5	16QAM	1	0	1752.5	22.62	PASS
4	10	QPSK	1	0	1715	22.27	PASS
4	10	QPSK	1	0	1732.5	22.25	PASS
4	10	QPSK	1	0	1750	22.24	PASS
4	10	16QAM	1	24	1715	21.61	PASS
4	10	16QAM	1	24	1732.5	21.63	PASS
4	10	16QAM	1	24	1750	21.60	PASS
4	15	QPSK	1	74	1717.5	21.17	PASS
4	15	QPSK	1	74	1732.5	21.20	PASS
4	15	QPSK	1	74	1747.5	21.18	PASS
4	15	16QAM	1	74	1717.5	20.31	PASS
4	15	16QAM	1	74	1732.5	20.26	PASS
4	15	16QAM	1	74	1747.5	20.28	PASS
4	20	QPSK	1	0	1720	21.24	PASS
4	20	QPSK	1	0	1732.5	21.27	PASS
4	20	QPSK	1	0	1745	21.29	PASS
4	20	16QAM	1	0	1720	20.38	PASS
4	20	16QAM	1	0	1732.5	20.41	PASS
4	20	16QAM	1	0	1745	20.48	PASS



3. LTE Band 5 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	Verdict
			RB Size	RB Offset			
5	1.4	QPSK	1	3	824.7	21.58	PASS
5	1.4	QPSK	1	3	836.5	21.61	PASS
5	1.4	QPSK	1	3	848.3	21.60	PASS
5	1.4	16QAM	1	3	824.7	21.65	PASS
5	1.4	16QAM	1	3	836.5	21.63	PASS
5	1.4	16QAM	1	3	848.3	21.82	PASS
5	3	QPSK	1	0	825.5	21.65	PASS
5	3	QPSK	1	0	836.5	21.69	PASS
5	3	QPSK	1	0	847.5	21.67	PASS
5	3	16QAM	1	0	825.5	21.93	PASS
5	3	16QAM	1	0	836.5	21.90	PASS
5	3	16QAM	1	0	847.5	21.91	PASS
5	5	QPSK	1	0	826.5	20.58	PASS
5	5	QPSK	1	0	836.5	20.55	PASS
5	5	QPSK	1	0	846.5	20.56	PASS
5	5	16QAM	1	0	826.5	20.73	PASS
5	5	16QAM	1	0	836.5	20.70	PASS
5	5	16QAM	1	0	846.5	20.71	PASS
5	10	QPSK	1	49	829.0	20.43	PASS
5	10	QPSK	1	49	836.5	20.44	PASS
5	10	QPSK	1	49	844.0	20.70	PASS
5	10	16QAM	1	0	829.0	20.03	PASS
5	10	16QAM	1	0	836.5	20.62	PASS
5	10	16QAM	1	0	844.0	20.49	PASS



4. LTE Band 7 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	Verdict
			RB Size	RB Offset			
7	5	QPSK	1	12	2502.5	22.04	PASS
7	5	QPSK	1	0	2535	22.08	PASS
7	5	QPSK	1	24	2567.5	22.14	PASS
7	5	16QAM	1	24	2502.5	22.20	PASS
7	5	16QAM	1	24	2535	22.13	PASS
7	5	16QAM	1	0	2567.5	22.18	PASS
7	10	QPSK	1	24	2505	22.11	PASS
7	10	QPSK	1	49	2535	22.06	PASS
7	10	QPSK	1	24	2565	22.01	PASS
7	10	16QAM	1	24	2505	22.42	PASS
7	10	16QAM	1	49	2535	22.35	PASS
7	10	16QAM	1	24	2565	22.33	PASS
7	15	QPSK	1	37	2507.5	21.23	PASS
7	15	QPSK	1	74	2535	21.25	PASS
7	15	QPSK	1	0	2562.5	22.19	PASS
7	15	16QAM	1	37	2507.5	21.36	PASS
7	15	16QAM	1	18	2535	21.41	PASS
7	15	16QAM	1	0	2562.5	21.39	PASS
7	20	QPSK	1	0	2510	21.25	PASS
7	20	QPSK	1	0	2535	21.33	PASS
7	20	QPSK	1	0	2560	21.31	PASS
7	20	16QAM	1	0	2510	21.29	PASS
7	20	16QAM	1	0	2535	20.42	PASS
7	20	16QAM	1	0	2560	20.35	PASS



5.LTE Band 12 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	Verdict
			RB Size	RB Offset			
12	1.4	QPSK	1	0	699.7	20.42	PASS
12	1.4	QPSK	1	0	707.5	20.40	PASS
12	1.4	QPSK	1	0	715.3	20.43	PASS
12	1.4	16QAM	1	0	699.7	19.58	PASS
12	1.4	16QAM	1	0	707.5	19.57	PASS
12	1.4	16QAM	1	0	715.3	19.55	PASS
12	3	QPSK	1	0	700.5	20.98	PASS
12	3	QPSK	1	0	707.5	21.97	PASS
12	3	QPSK	1	0	714.5	21.95	PASS
12	3	16QAM	1	8	700.5	19.63	PASS
12	3	16QAM	1	8	707.5	19.65	PASS
12	3	16QAM	1	8	714.5	19.66	PASS
12	5	QPSK	1	24	701.5	20.58	PASS
12	5	QPSK	1	24	707.5	20.56	PASS
12	5	QPSK	1	24	713.5	20.54	PASS
12	5	16QAM	1	0	701.5	19.68	PASS
12	5	16QAM	1	0	707.5	19.71	PASS
12	5	16QAM	1	0	713.5	19.70	PASS
12	10	QPSK	1	49	704	20.99	PASS
12	10	QPSK	1	49	707.5	21.01	PASS
12	10	QPSK	1	49	711	21.03	PASS
12	10	16QAM	1	0	704	20.16	PASS
12	10	16QAM	1	0	707.5	20.15	PASS
12	10	16QAM	1	0	711	20.12	PASS



5.LTE Band 17 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	Verdict
			RB Size	RB Offset			
17	5	QPSK	1	24	706.5	20.99	PASS
17	5	QPSK	1	24	710	21.03	PASS
17	5	QPSK	1	12	713.5	21.09	PASS
17	5	16QAM	1	24	706.5	19.15	PASS
17	5	16QAM	1	24	710	19.08	PASS
17	5	16QAM	1	12	713.5	19.13	PASS
17	10	QPSK	1	49	709	21.06	PASS
17	10	QPSK	1	49	710	21.01	PASS
17	10	QPSK	1	49	711	20.96	PASS
17	10	16QAM	1	24	709	19.37	PASS
17	10	16QAM	1	49	710	19.30	PASS
17	10	16QAM	1	24	711	19.28	PASS



6.LTE Band 25 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	Verdict
			RB Size	RB Offset			
25	1.4	QPSK	1	0	1850.7	21.83	PASS
25	1.4	QPSK	1	0	1882.5	21.86	PASS
25	1.4	QPSK	1	0	1914.3	21.85	PASS
25	1.4	16QAM	1	3	1850.7	21.10	PASS
25	1.4	16QAM	1	3	1882.5	21.08	PASS
25	1.4	16QAM	1	3	1914.3	21.07	PASS
25	3	QPSK	1	0	1851.5	21.90	PASS
25	3	QPSK	1	0	1882.5	21.94	PASS
25	3	QPSK	1	0	1913.5	21.92	PASS
25	3	16QAM	1	0	1851.5	21.40	PASS
25	3	16QAM	1	0	1882.5	21.37	PASS
25	3	16QAM	1	0	1913.5	21.38	PASS
25	5	QPSK	1	0	1852.5	22.24	PASS
25	5	QPSK	1	0	1882.5	22.21	PASS
25	5	QPSK	1	0	1912.5	22.23	PASS
25	5	16QAM	1	24	1852.5	21.27	PASS
25	5	16QAM	1	24	1882.5	21.26	PASS
25	5	16QAM	1	24	1912.5	21.24	PASS
25	10	QPSK	1	0	1855.0	22.77	PASS
25	10	QPSK	1	0	1882.5	22.79	PASS
25	10	QPSK	1	0	1910.0	22.76	PASS
25	10	16QAM	1	0	1855.0	21.80	PASS
25	10	16QAM	1	0	1882.5	21.78	PASS
25	10	16QAM	1	0	1910.0	21.81	PASS
25	15	QPSK	1	74	1857.5	22.84	PASS
25	15	QPSK	1	74	1882.5	22.81	PASS
25	15	QPSK	1	74	1907.5	22.86	PASS
25	15	16QAM	1	0	1857.5	21.88	PASS
25	15	16QAM	1	0	1882.5	21.86	PASS
25	15	16QAM	1	0	1907.5	21.89	PASS
25	20	QPSK	1	0	1860.0	22.91	PASS
25	20	QPSK	1	0	1882.5	22.93	PASS
25	20	QPSK	1	0	1905.0	22.92	PASS
25	20	16QAM	1	0	1860.0	21.96	PASS
25	20	16QAM	1	0	1882.5	21.93	PASS
25	20	16QAM	1	0	1905.0	21.94	PASS



7.LTE Band 26 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	ERP (dBm)	Verdict
			RB Size	RB Offset			
26	1.4	QPSK	1	0	814.7	21.43	PASS
26	1.4	QPSK	1	0	819.0	21.46	PASS
26	1.4	QPSK	1	0	823.3	21.45	PASS
26	1.4	16QAM	1	0	814.7	20.70	PASS
26	1.4	16QAM	1	0	819.0	20.68	PASS
26	1.4	16QAM	1	0	823.3	20.67	PASS
26	3	QPSK	1	8	815.5	21.50	PASS
26	3	QPSK	1	8	819.0	21.54	PASS
26	3	QPSK	1	8	822.5	21.52	PASS
26	3	16QAM	1	0	815.5	21.00	PASS
26	3	16QAM	1	0	819.0	20.97	PASS
26	3	16QAM	1	0	822.5	20.98	PASS
26	5	QPSK	1	24	816.5	21.84	PASS
26	5	QPSK	1	24	819.0	21.81	PASS
26	5	QPSK	1	24	821.5	21.83	PASS
26	5	16QAM	1	0	816.5	20.87	PASS
26	5	16QAM	1	0	819.0	20.86	PASS
26	5	16QAM	1	0	821.5	20.84	PASS
26	10	QPSK	1	0	819.0	22.37	PASS
26	10	QPSK	1	0	831.5	22.39	PASS
26	10	QPSK	1	0	844.0	22.36	PASS
26	10	16QAM	1	49	819.0	21.40	PASS
26	10	16QAM	1	49	831.5	21.38	PASS
26	10	16QAM	1	49	844.0	21.41	PASS
26	15	QPSK	1	74	821.5	22.44	PASS
26	15	QPSK	1	74	831.5	22.41	PASS
26	15	QPSK	1	74	841.5	22.46	PASS
26	15	16QAM	1	0	821.5	21.48	PASS
26	15	16QAM	1	0	831.5	21.46	PASS
26	15	16QAM	1	0	841.5	21.49	PASS



8.LTE Band 41 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	Verdict
			RB Size	RB Offset			
41	5	QPSK	1	0	2537.5	22.51	PASS
41	5	QPSK	1	0	2595.0	22.48	PASS
41	5	QPSK	1	0	2652.5	22.50	PASS
41	5	16QAM	1	0	2537.5	23.54	PASS
41	5	16QAM	1	0	2595.0	23.53	PASS
41	5	16QAM	1	0	2652.5	23.51	PASS
41	10	QPSK	1	49	2540.0	23.58	PASS
41	10	QPSK	1	49	2595.0	23.60	PASS
41	10	QPSK	1	49	2650.0	23.57	PASS
41	10	16QAM	1	0	2540.0	23.61	PASS
41	10	16QAM	1	0	2595.0	23.59	PASS
41	10	16QAM	1	0	2650.0	23.62	PASS
41	15	QPSK	1	0	2542.5	23.65	PASS
41	15	QPSK	1	0	2595.0	23.62	PASS
41	15	QPSK	1	0	2647.5	23.67	PASS
41	15	16QAM	1	74	2542.5	22.69	PASS
41	15	16QAM	1	74	2595.0	22.67	PASS
41	15	16QAM	1	74	2647.5	22.70	PASS
41	20	QPSK	1	0	2545.0	22.40	PASS
41	20	QPSK	1	0	2595.0	22.42	PASS
41	20	QPSK	1	0	2645.0	22.41	PASS
41	20	16QAM	1	49	2545.0	22.45	PASS
41	20	16QAM	1	49	2595.0	22.42	PASS
41	20	16QAM	1	49	2645.0	22.43	PASS



9. LTE Band 66 Test Verdict:

LTE Band	BW (MHz)	Modulation	RB Configuration		Freq. (MHz)	EIRP (dBm)	Verdict
			RB Size	RB Offset			
66	1.4	QPSK	1	0	1710.7	22.91	PASS
66	1.4	QPSK	1	0	1745	22.71	PASS
66	1.4	QPSK	1	0	1779.3	22.66	PASS
66	1.4	16QAM	1	3	1710.7	21.73	PASS
66	1.4	16QAM	1	3	1745	21.76	PASS
66	1.4	16QAM	1	3	1779.3	21.73	PASS
66	3	QPSK	1	0	1711.5	23.04	PASS
66	3	QPSK	1	0	1745	23.05	PASS
66	3	QPSK	1	0	1778.5	22.73	PASS
66	3	16QAM	1	14	1711.5	22.09	PASS
66	3	16QAM	1	14	1745	22.07	PASS
66	3	16QAM	1	14	1778.5	22.05	PASS
66	5	QPSK	1	0	1712.5	22.98	PASS
66	5	QPSK	1	0	1745	22.97	PASS
66	5	QPSK	1	0	1777.5	23.00	PASS
66	5	16QAM	1	0	1712.5	22.16	PASS
66	5	16QAM	1	0	1745	22.02	PASS
66	5	16QAM	1	0	1777.5	22.04	PASS
66	10	QPSK	1	0	1715	22.99	PASS
66	10	QPSK	1	0	1745	22.97	PASS
66	10	QPSK	1	0	1775	22.96	PASS
66	10	16QAM	1	24	1715	21.33	PASS
66	10	16QAM	1	24	1745	21.35	PASS
66	10	16QAM	1	24	1775	21.32	PASS
66	15	QPSK	1	74	1717.5	22.89	PASS
66	15	QPSK	1	74	1745	22.92	PASS
66	15	QPSK	1	74	1772.5	22.90	PASS
66	15	16QAM	1	74	1717.5	21.93	PASS
66	15	16QAM	1	74	1745	21.98	PASS
66	15	16QAM	1	74	1772.5	22.00	PASS
66	20	QPSK	1	0	1720	23.06	PASS
66	20	QPSK	1	0	1745	23.09	PASS
66	20	QPSK	1	0	1770	23.01	PASS
66	20	16QAM	1	0	1720	22.00	PASS
66	20	16QAM	1	0	1745	22.13	PASS
66	20	16QAM	1	0	1770	22.12	PASS

2.8 Radiated Out of Band Emissions

2.8.1 Requirement

The radiated spurious emission was measured by substitution method according to ANSI / TIA /EIA-603-C-2004. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $43 + 10 \log (P)$ dB.

For Band 7

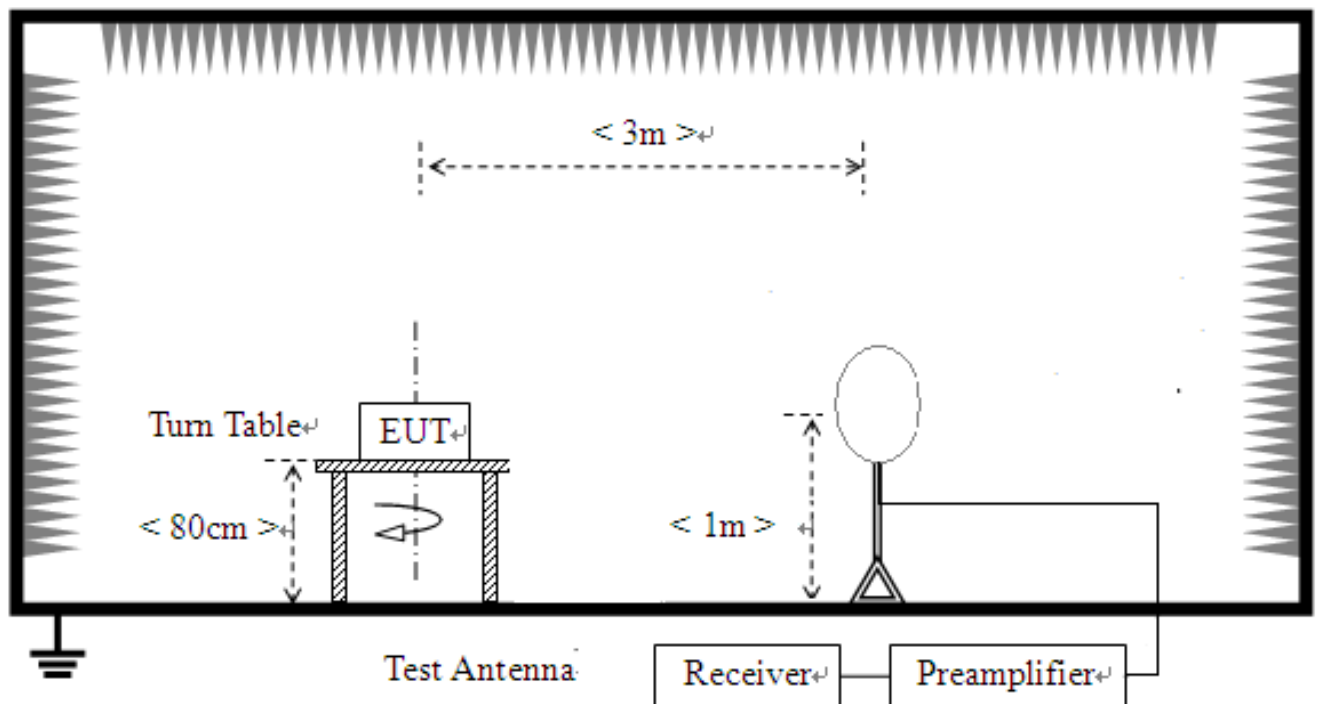
The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least $55 + 10 \log (P)$ dB.

2.8.2 Measuring Instruments

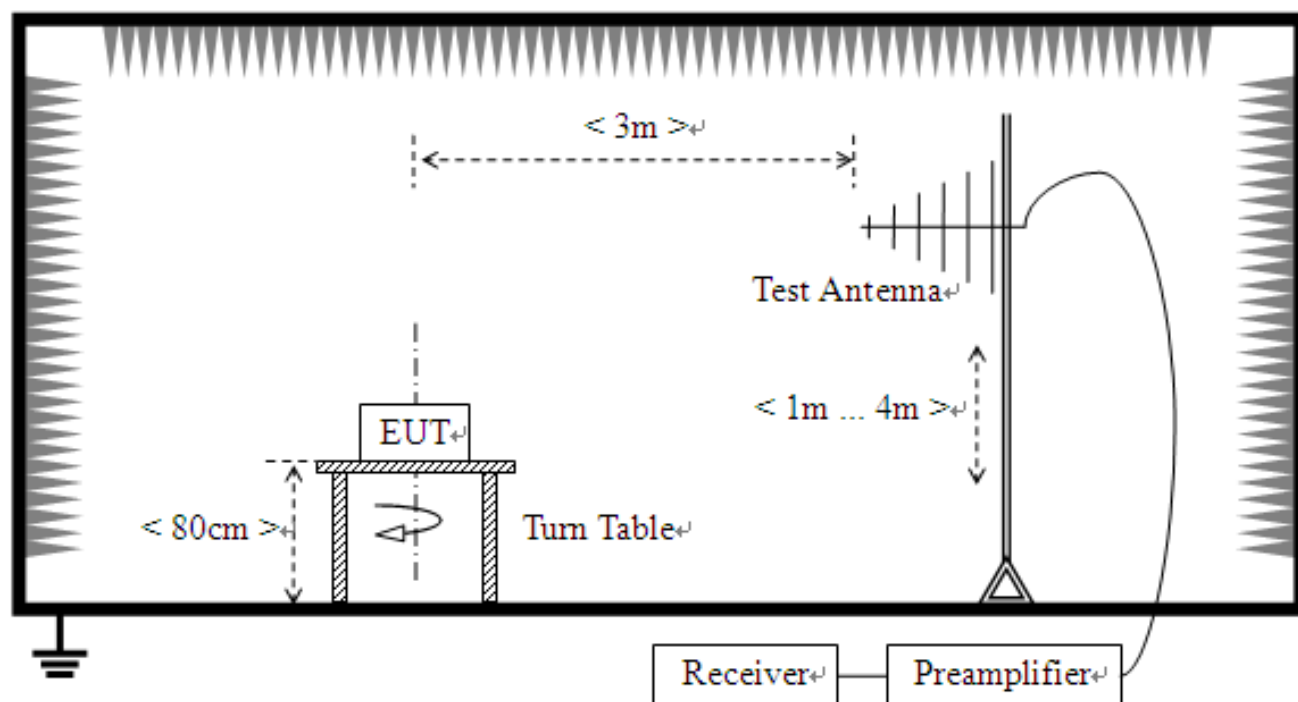
The measuring equipment is listed in the section 3 of this test report.

2.8.3 Test Setup

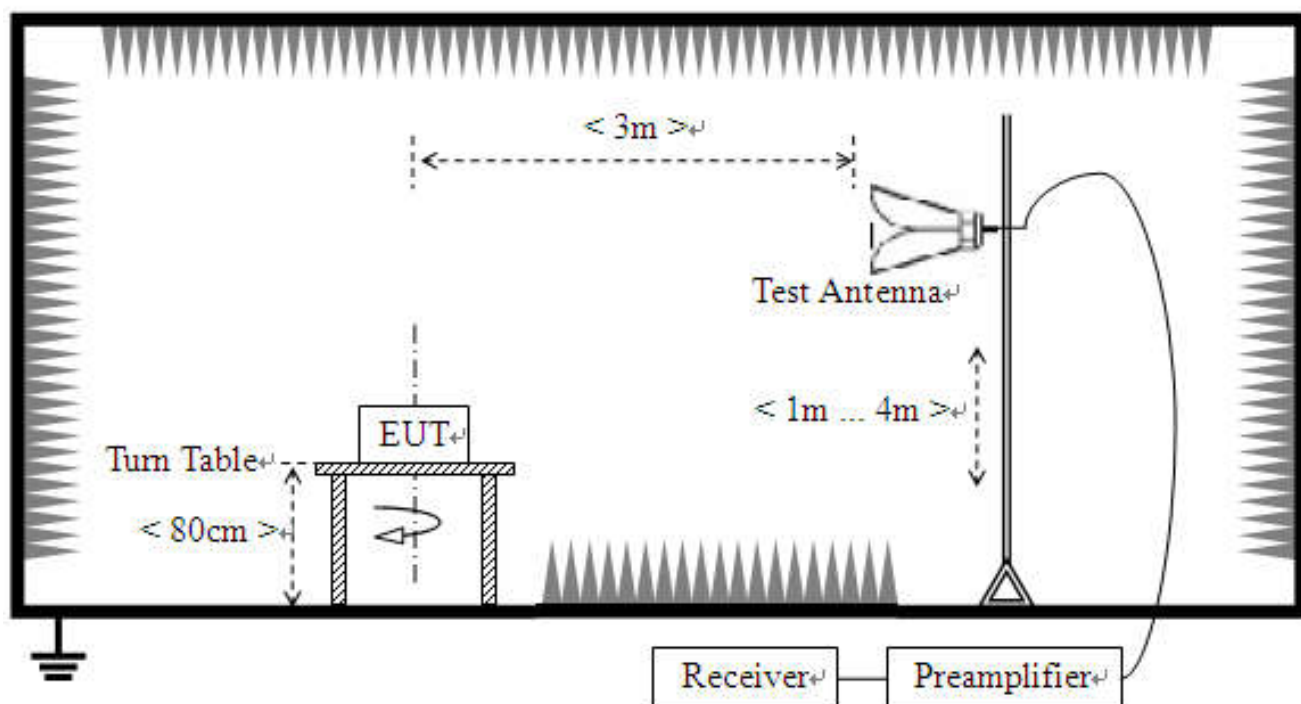
For radiated emissions from 9kHz to 30MHz



For radiated emissions from 30MHz to 1GHz



For radiated emissions above 1GHz



2.8.4 Test Procedures

1. The EUT was placed on a rotatable wooden table with 0.8 meter 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.

The limit line is derived from $43 + 10\log(P)$ dB below the transmitter power P (Watts)
 $= P(W) - [43 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[43 + 10\log(P)]$ (dB)
 $= -13$ dBm.

<For Band 7/41>

The limit line is derived from $55 + 10\log(P)$ dB below the transmitter power P (Watts)
 $= P(W) - [55 + 10\log(P)]$ (dB)
 $= [30 + 10\log(P)]$ (dBm) - $[55 + 10\log(P)]$ (dB)
 $= -25$ dBm.

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 1,
RB Offset 0

2.8.5 Test Result (Plots) of Radiated Spurious Emission

Note: 1. within 30MHz-1GHz were found more than 20dB below limit line

Note: 2. Absolute Level=Reading Level + Factor

LTE Band 2 QPSK 20MHz BW Middle Channel

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7934	-85.40	-63.75	-13.00	50.75	21.65	Horizontal
2	71.2456	-93.81	-75.40	-13.00	62.40	18.41	Horizontal
3	329.394	-100.35	-74.56	-13.00	61.56	25.79	Horizontal
4	1222.11	-60.57	-63.85	-13.00	50.85	-3.28	Horizontal
5	1274.13	-57.48	-60.34	-13.00	47.34	-2.86	Horizontal
6	2709.85	-56.61	-48.79	-13.00	35.79	7.82	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	102.786	-90.07	-66.91	-13.00	53.91	23.16	Vertical
2	472.541	-87.82	-60.40	-13.00	47.40	27.42	Vertical
3	2713.85	-56.65	-47.78	-13.00	34.78	8.87	Vertical
4	5093.54	-59.59	-45.37	-13.00	32.37	14.22	Vertical
5	6316.65	-56.81	-41.77	-13.00	28.77	15.04	Vertical
6	10271.1	-61.34	-37.67	-13.00	24.67	23.67	Vertical

LTE Band 4 QPSK 20MHz BW Middle Channel

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	35.3377	-93.39	-70.53	-13.00	57.53	22.86	Horizontal
2	62.0260	-88.35	-68.82	-13.00	55.82	19.53	Horizontal
3	72.7014	-89.09	-69.50	-13.00	56.50	19.59	Horizontal
4	1298.14	-57.42	-59.55	-13.00	46.55	-2.13	Horizontal
5	5378.68	-62.53	-47.77	-13.00	34.77	14.76	Horizontal
6	8762.88	-61.13	-35.81	-13.00	22.81	25.32	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7934	-92.66	-71.90	-13.00	58.90	20.76	Vertical
2	73.6718	-92.49	-70.66	-13.00	57.66	21.83	Vertical
3	247.388	-103.47	-78.75	-13.00	65.75	24.72	Vertical
4	5221.11	-58.70	-44.57	-13.00	31.57	14.13	Vertical
5	9723.36	-66.79	-36.47	-13.00	23.47	30.32	Vertical
6	16349.1	-73.26	-25.24	-13.00	12.24	48.02	Vertical

LTE Band 5 QPSK 10MHz BW Middle Channel

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7934	-89.18	-66.66	-13.00	53.66	22.52	Horizontal
2	73.1866	-84.84	-65.27	-13.00	52.27	19.57	Horizontal
3	2160.58	-56.07	-53.27	-13.00	40.27	2.80	Horizontal
4	3217.60	-58.63	-49.26	-13.00	36.26	9.37	Horizontal
5	5806.40	-56.91	-40.73	-13.00	27.73	16.18	Horizontal
6	9723.36	-62.28	-31.38	-13.00	18.38	30.90	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	60.0850	-86.06	-65.82	-13.00	52.82	20.24	Vertical
2	73.6718	-85.89	-64.06	-13.00	51.06	21.83	Vertical
3	1175.08	-56.78	-58.56	-13.00	45.56	-1.78	Vertical
4	2651.82	-57.64	-52.54	-13.00	39.54	5.10	Vertical
5	5513.75	-57.93	-42.78	-13.00	29.78	15.15	Vertical
6	9700.85	-62.32	-31.44	-13.00	18.44	30.88	Vertical

LTE Band 7 QPSK 20MHz BW Middle Channel

NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7914	-82.90	-60.55	-25.00	35.55	22.35	Horizontal
2	53.4787	-79.00	-59.74	-25.00	34.74	19.26	Horizontal
3	62.0164	-89.67	-70.33	-25.00	45.33	19.34	Horizontal
4	3707.9916	-58.42	-48.06	-25.00	23.06	10.36	Horizontal
5	4989.3979	-59.63	-48.01	-25.00	23.01	11.62	Horizontal
6	5601.8204	-60.57	-45.13	-25.00	20.13	15.44	Horizontal

NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7914	-81.30	-60.71	-25.00	35.71	20.59	Vertical
2	52.8966	-79.92	-60.73	-25.00	35.73	19.19	Vertical
3	62.0164	-86.74	-66.45	-25.00	41.45	20.29	Vertical
4	3596.8194	-58.43	-49.33	-25.00	24.33	9.10	Vertical
5	5051.8104	-59.03	-44.93	-25.00	19.93	14.10	Vertical
6	5820.2641	-60.52	-44.14	-25.00	19.14	16.38	Vertical

· LTE Band 12 QPSK 10MHz BW Middle Channel

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7934	-86.22	-63.71	-13.00	50.71	22.51	Horizontal
2	62.0260	-82.84	-63.29	-13.00	50.29	19.55	Horizontal
3	1728.36	-55.19	-55.79	-13.00	42.79	-0.60	Horizontal
4	3720.36	-59.67	-49.29	-13.00	36.29	10.38	Horizontal
5	6309.15	-60.19	-42.33	-13.00	29.33	17.86	Horizontal
6	9670.83	-63.23	-32.30	-13.00	19.30	30.93	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	34.8524	-87.69	-66.68	-13.00	53.68	21.01	Vertical
2	62.0260	-82.87	-62.36	-13.00	49.36	20.51	Vertical
3	107.638	-97.40	-73.30	-13.00	60.30	24.10	Vertical
4	1711.35	-52.86	-53.94	-13.00	40.94	-1.08	Vertical
5	3705.35	-59.31	-48.94	-13.00	35.94	10.37	Vertical
6	9685.84	-62.99	-32.33	-13.00	19.33	30.66	Vertical

· LTE Band 17 QPSK 10MHz BW Middle Channel

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	58.6293	-99.16	-79.63	-13.00	66.63	19.53	Horizontal
2	121.225	-103.43	-83.14	-13.00	70.14	20.29	Horizontal
3	338.614	-105.62	-76.85	-13.00	63.85	28.77	Horizontal
4	1812.40	-56.09	-56.22	-13.00	43.22	-0.13	Horizontal
5	3780.39	-59.74	-49.23	-13.00	36.23	10.51	Horizontal
6	9700.85	-64.06	-32.45	-13.00	19.45	31.61	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	60.0850	-97.14	-76.86	-13.00	63.86	20.28	Vertical
2	128.019	-99.19	-76.99	-13.00	63.99	22.20	Vertical
3	249.814	-101.14	-76.37	-13.00	63.37	24.77	Vertical
4	1140.07	-57.06	-59.29	-13.00	46.29	-2.23	Vertical
5	3802.90	-59.75	-49.42	-13.00	36.42	10.33	Vertical
6	7172.08	-61.04	-41.06	-13.00	28.06	19.98	Vertical

LTE Band 25 QPSK 20MHz BW Middle Channel

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7968	-80.32	-57.97	-13.00	44.97	22.35	Horizontal
2	52.3323	-79.06	-59.81	-13.00	46.81	19.25	Horizontal
3	156.226	-93.54	-72.24	-13.00	59.24	21.30	Horizontal
4	3302.40	-57.73	-49.02	-13.00	36.02	8.71	Horizontal
5	3824.28	-58.42	-48.14	-13.00	35.14	10.28	Horizontal
6	5297.27	-59.42	-44.55	-13.00	31.55	14.87	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7968	-80.08	-59.49	-13.00	46.49	20.59	Vertical
2	53.3033	-79.96	-60.73	-13.00	47.73	19.23	Vertical
3	63.9840	-89.32	-68.80	-13.00	55.80	20.52	Vertical
4	2681.84	-57.42	-50.98	-13.00	37.98	6.44	Vertical
5	3692.59	-59.13	-48.85	-13.00	35.85	10.28	Vertical
6	4994.87	-59.85	-45.60	-13.00	32.60	14.25	Vertical

LTE Band 26 QPSK 15MHz BW Middle Channel

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	56.2031	-86.71	-64.96	-13.00	51.96	21.75	Horizontal
2	85.3177	-84.85	-63.23	-13.00	50.23	21.62	Horizontal
3	505.052	-88.53	-54.81	-13.00	41.81	33.72	Horizontal
4	1945.47	-55.12	-55.04	-13.00	42.04	0.08	Horizontal
5	2867.93	-56.39	-49.06	-13.00	36.06	7.33	Horizontal
6	9985.99	-61.92	-38.23	-13.00	25.23	23.69	Horizontal
Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	88.2291	-86.30	-60.78	-13.00	47.78	25.52	Vertical
2	447.793	-85.46	-55.20	-13.00	42.20	30.26	Vertical
3	3157.57	-58.82	-50.09	-13.00	37.09	8.73	Vertical
4	3975.48	-57.35	-47.98	-13.00	34.98	9.37	Vertical
5	5093.54	-58.15	-43.93	-13.00	30.93	14.22	Vertical
6	10593.7	-62.50	-38.10	-13.00	25.10	24.40	Vertical

LTE Band 41 QPSK 20MHz BW Middle Channel

NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7968	-92.90	-67.96	-25.00	54.96	24.94	Horizontal
2	330.0300	-100.70	-71.71	-25.00	58.71	28.99	Horizontal
3	872.8028	-102.19	-64.15	-25.00	51.15	38.04	Horizontal
4	3889.945	-57.93	-48.31	-25.00	35.31	9.62	Horizontal
5	5101.050	-58.28	-46.11	-25.00	33.11	12.17	Horizontal
6	10610.30	-61.26	-37.18	-25.00	24.18	24.08	Horizontal
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	36.7968	-94.48	-71.30	-25.00	58.30	23.18	Vertical
2	100.8809	-102.97	-76.40	-25.00	63.40	26.57	Vertical
3	364.0140	-100.19	-72.27	-25.00	59.27	27.92	Vertical
4	1193.096	-57.63	-60.03	-25.00	47.03	-2.40	Vertical
5	5057.528	-59.00	-45.12	-25.00	32.12	13.88	Vertical
6	10400.20	-61.35	-37.28	-25.00	24.28	24.07	Vertical

LTE Band 66 QPSK 20MHz BW Middle Channel

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	196.438	-87.65	-62.53	-13.00	49.53	25.12	Horizontal
2	345.892	-88.50	-58.57	-13.00	45.57	29.93	Horizontal
3	513.301	-87.17	-53.64	-13.00	40.64	33.53	Horizontal
4	3892.94	-57.54	-47.89	-13.00	34.89	9.65	Horizontal
5	7179.58	-60.11	-43.21	-13.00	30.21	16.90	Horizontal
6	10383.6	-63.16	-38.66	-13.00	25.66	24.50	Horizontal

Suspected List							
NO.	Freq. [MHz]	Reading Level [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Polarity
1	55.7179	-85.55	-63.56	-13.00	50.56	21.99	Vertical
2	84.3472	-84.35	-59.26	-13.00	46.26	25.09	Vertical
3	795.227	-89.79	-52.65	-13.00	39.65	37.14	Vertical
4	5093.54	-57.90	-43.68	-13.00	30.68	14.22	Vertical
5	7997.49	-60.62	-42.41	-13.00	29.41	18.21	Vertical
6	9813.40	-61.14	-38.76	-13.00	25.76	22.38	Vertical



3. LIST OF MEASURING EQUIPMENT

Description	Manufacturer	Model	Serial No.	Cal. Date	Due Date	Remark
EMI Test Receiver	R&S	ESR3	A181103297	2021.06.25	2022.06.24	Radiation
Loop Antenna	Schwarz beck	HFH2-Z2	100047	2019.04.26	2022.04.25	Radiation
Broadband antenna (30MHz~1GHz)	Schwarbeck	BBHA 9120 J	A190503537	2019.01.07	2022.01.06	Radiation
Broadband antenna (30MHz~1GHz)	R&S	VULB9160	A0805560	2019.05.24	2022.05.23	Radiation
Double ridge horn antenna (1GHz~18GHz)	R&S	HF906	100150	2019.04.27	2022.04.26	Radiation
Double ridge horn antenna (1GHz~18GHz)	R&S	HF906	100149	2019.04.17	2022.04.16	Radiation
Horn antenna (18GHz~26.5GHz)	AR	AT4510	A0804450	2020.06.19	2023.06.18	Radiation
Horn antenna (18GHz~26.5GHz)	AR	AT4003A	0329293	2020.09.17	2022.08.16	Radiation
Amplifier 30M~1GHz	MILMEGA	80RF1000-10004	A140101634	2020.09.22	2023.09.21	Radiation
Amplifier 1G~18GHz	MILMEGA	AS0104R-800/40 0	A160302517	2021.01.26	2022.01.25	Radiation
Spectrum Analyzer	KEYSIGHT	N9030A	A160702554	2021.04.26	2022.04.25	Conducted
Test Receiver	R&S	ESIB7	A0501375	2021.05.24	2022.05.23	Conducted
Temperature chamber	TABAI	PS-232	A8708054	2020.10.30	2021.10.29	Conducted
Wideband Radio Communication tester	R&S	CMW500	A130101034	2021.01.26	2023.01.25	Conducted
Power Supply	R&S	WYJ-60100	A141102031	2020.01.16	2023.01.15	Conducted
Test software	ECIT	Eagle	V2.0	N/A	N/A	Conducted

APPENDIX A

Conducted RF (Average) Output Power

Test Result and Data

1. LTE Band 2 Conducted Power Test Verdict

LTE FDD Band 2				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				18607/1850.7	18900/1880	19193/1909.3
1.4MHz	QPSK	1	0	22.56	22.61	22.42
		1	3	22.43	22.51	22.3
		1	5	22.45	22.5	22.29
		3	0	21.73	21.79	21.57
		3	2	21.74	21.78	21.54
		3	3	21.75	21.8	21.55
		6	0	21.61	21.67	21.44
	16QAM	1	0	21.43	21.46	21.31
		1	3	21.28	21.35	21.18
		1	5	21.41	21.43	21.3
		3	0	20.5	20.54	20.49
		3	2	20.58	20.64	20.52
		3	3	20.6	20.65	20.46
		6	0	20.48	20.55	20.31
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				18615/1851.5	18900/1880	19185/1908.5
3MHz	QPSK	1	0	22.78	22.95	22.85
		1	7	22.65	22.85	22.73
		1	14	22.67	22.84	22.72
		8	0	21.95	22.13	22.00
		8	4	21.96	22.12	21.97
		8	7	21.97	22.14	21.98
		15	0	21.83	22.01	21.87
	16QAM	1	0	21.65	21.80	21.74
		1	7	21.50	21.69	21.61
		1	14	21.63	21.77	21.73
		8	0	20.72	20.88	20.92
		8	4	20.80	20.98	20.95



		8	7	20.82	20.99	20.89
		15	0	20.70	20.89	20.74
LTE FDD Band 2				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				18625/1852.5	18900/1880	19175/1907.5
5MHz	QPSK	1	0	22.89	23.01	22.79
		1	13	22.76	22.91	22.67
		1	24	22.78	22.90	22.66
		12	0	22.06	22.19	21.94
		12	6	22.07	22.18	21.91
		12	13	22.08	22.20	21.92
		25	0	21.94	22.07	21.81
	16QAM	1	0	21.76	21.86	21.68
		1	13	21.61	21.75	21.55
		1	24	21.74	21.83	21.67
		12	0	20.83	20.94	20.86
		12	6	20.91	21.04	20.89
		12	13	20.93	21.05	20.83
		25	0	20.81	20.95	20.68
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				18650/1855	18900/1880	19150/1905
10MHz	QPSK	1	0	23.23	23.05	23.11
		1	25	23.10	22.95	22.99
		1	49	23.12	22.94	22.98
		25	0	22.40	22.23	22.26
		25	13	22.41	22.22	22.23
		25	25	22.42	22.24	22.24
		50	0	22.28	22.11	22.13
	16QAM	1	0	22.10	21.90	22.00
		1	25	21.95	21.79	21.87
		1	49	22.08	21.87	21.99
		25	0	21.17	20.98	21.18
		25	13	21.25	21.08	21.21
		25	25	21.27	21.09	21.15
		50	0	21.15	20.99	21.00



LTE FDD Band 2				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				18675/1857.5	18900/1880	19125/1902.5
15MHz	QPSK	1	0	22.35	22.26	22.15
		1	38	22.22	22.16	22.03
		1	74	22.24	22.15	22.02
		36	0	21.52	21.44	21.30
		36	18	21.53	21.43	21.27
		36	39	21.54	21.45	21.28
		75	0	21.40	21.32	21.17
	16QAM	1	0	21.22	21.11	21.04
		1	38	21.07	21.00	20.91
		1	74	21.20	21.08	21.03
		36	0	20.29	20.19	20.22
		36	18	20.37	20.29	20.25
		36	39	20.39	20.30	20.19
		75	0	20.27	20.20	20.04
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				18700/1860	18900/1880	19100/1900
20MHz	QPSK	1	0	23.42	23.50	23.25
		1	50	23.23	23.35	23.15
		1	99	23.25	23.34	23.14
		50	0	22.73	22.68	22.72
		50	25	22.64	22.56	22.66
		50	50	22.59	22.78	22.51
		100	0	22.41	22.66	22.38
	16QAM	1	0	22.23	22.30	22.16
		1	50	22.08	22.19	22.03
		1	99	22.21	22.27	22.15
		50	0	21.30	21.38	21.34
		50	25	21.38	21.48	21.37
		50	50	21.40	21.49	21.31
		100	0	21.28	21.39	21.16

2. LTE Band 4 Conducted Power Test Verdict:

LTE FDD Band 4				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				19957/1710.7	20175/1732.5	20393/1754.3
1.4MHz	QPSK	1	0	22.02	22.25	22.16
		1	3	21.89	22.15	22.04
		1	5	21.91	22.14	22.03
		3	0	21.19	21.43	21.31
		3	2	21.20	21.42	21.28
		3	3	21.21	21.44	21.29
		6	0	21.07	21.31	21.18
	16QAM	1	0	20.89	21.10	21.05
		1	3	20.74	20.99	20.92
		1	5	20.87	21.07	21.04
		3	0	19.96	20.18	20.23
		3	2	20.04	20.28	20.26
		3	3	20.06	20.29	20.2
		6	0	19.94	20.19	20.05
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				19965/1711.5	20175/1732.5	20385/1753.5
3MHz	QPSK	1	0	22.12	22.43	22.36
		1	7	21.99	22.33	22.24
		1	14	22.01	22.32	22.23
		8	0	21.29	21.61	21.51
		8	4	21.30	21.60	21.48
		8	7	21.31	21.62	21.49
		15	0	21.17	21.49	21.38
	16QAM	1	0	20.99	21.28	21.25
		1	7	20.84	21.17	21.12
		1	14	20.97	21.25	21.24
		8	0	20.06	20.36	20.43
		8	4	20.14	20.46	20.46
		8	7	20.16	20.47	20.40
		15	0	20.04	20.37	20.25



LTE FDD Band 4				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				19975/1712.5	20175/1732.5	20375/1752.5
5MHz	QPSK	1	0	22.55	22.34	22.46
		1	13	22.42	22.24	22.34
		1	24	22.44	22.23	22.33
		12	0	21.72	21.52	21.61
		12	6	21.73	21.51	21.58
		12	13	21.74	21.53	21.59
		25	0	21.60	21.40	21.48
	16QAM	1	0	21.42	21.19	21.35
		1	13	21.27	21.08	21.22
		1	24	21.40	21.16	21.34
		12	0	20.49	20.27	20.53
		12	6	20.57	20.37	20.56
		12	13	20.59	20.38	20.50
		25	0	20.47	20.28	20.35
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20000/1715	20175/1732.5	20350/1750
10MHz	QPSK	1	0	22.89	22.72	22.85
		1	25	22.76	22.62	22.73
		1	49	22.78	22.61	22.72
		25	0	22.06	21.90	22.00
		25	13	22.07	21.89	21.97
		25	25	22.08	21.91	21.98
		50	0	21.94	21.78	21.87
	16QAM	1	0	21.76	21.57	21.74
		1	25	21.61	21.46	21.61
		1	49	21.74	21.54	21.73
		25	0	20.83	20.65	20.92
		25	13	20.91	20.75	20.95
		25	25	20.93	20.76	20.89
		50	0	20.81	20.66	20.74



LTE FDD Band 4				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20025/1717.5	20175/1732.5	20325/1747.5
15MHz	QPSK	1	0	22.78	22.85	22.65
		1	38	22.65	22.75	22.53
		1	74	22.67	22.74	22.52
		36	0	21.95	22.03	21.80
		36	18	21.96	22.02	21.77
		36	39	21.97	22.04	21.78
		75	0	21.83	21.91	21.67
	16QAM	1	0	21.65	21.70	21.54
		1	38	21.50	21.59	21.41
		1	74	21.63	21.67	21.53
		36	0	20.72	20.78	20.72
		36	18	20.80	20.88	20.75
		36	39	20.82	20.89	20.69
		75	0	20.70	20.79	20.54
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20050/1720	20175/1732.5	20300/1745
20MHz	QPSK	1	0	23.15	23.27	23.10
		1	50	23.13	23.68	23.44
		1	99	23.15	23.67	23.43
		50	0	22.21	22.16	22.26
		50	25	22.27	22.24	22.31
		50	50	22.33	22.28	22.34
		100	0	22.04	22.10	22.12
	16QAM	1	0	22.13	22.63	22.45
		1	50	21.98	22.52	22.32
		1	99	22.11	22.60	22.44
		50	0	21.20	21.71	21.63
		50	25	21.28	21.81	21.66
		50	50	21.30	21.82	21.60
		100	0	21.18	21.72	21.45

3. LTE Band 5 Conducted Power Test Verdict:

LTE FDD Band 5				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20407/824.7	20525/836.5	20643/848.3
1.4MHz	QPSK	1	0	22.56	22.81	22.65
		1	3	22.43	22.70	22.54
		1	5	22.41	22.66	22.51
		3	0	21.75	21.95	21.79
		3	2	21.71	21.98	21.83
		3	3	21.72	21.97	21.78
		6	0	21.57	21.78	21.68
	16QAM	1	0	21.43	21.69	21.50
		1	3	21.32	21.54	21.39
		1	5	21.41	21.65	21.48
		3	0	20.52	20.77	20.67
		3	2	20.55	20.86	20.73
		3	3	20.61	20.88	20.64
		6	0	20.47	20.70	20.43
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20415/825.5	20525/836.5	20635/847.5
3MHz	QPSK	1	0	22.76	22.96	23.01
		1	7	22.61	22.82	22.87
		1	14	22.65	22.83	22.86
		8	0	21.94	22.11	22.18
		8	4	21.95	22.14	22.20
		8	7	21.96	22.12	22.13
		15	0	21.78	21.99	22.02
	16QAM	1	0	21.64	21.83	21.84
		1	7	21.49	21.68	21.69
		1	14	21.61	21.77	21.81
		8	0	20.72	20.89	21.03
		8	4	20.78	21.01	21.12
		8	7	20.83	20.99	21.01
		15	0	20.68	20.83	20.77



LTE FDD Band 5				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20425/826.5	20525/836.5	20625/846.5
5MHz	QPSK	1	0	23.23	23.17	23.02
		1	13	23.08	23.02	22.91
		1	24	23.10	23.05	22.87
		12	0	22.41	22.34	22.21
		12	6	22.42	22.33	22.18
		12	13	22.40	22.30	22.17
		25	0	22.26	22.18	22.23
	16QAM	1	0	22.09	22.05	21.86
		1	13	21.96	21.91	21.72
		1	24	22.04	22.03	21.79
		12	0	21.15	21.13	21.01
		12	6	21.28	21.19	21.14
		12	13	21.27	21.22	21.00
		25	0	21.12	21.11	20.76
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20450/829	20525/836.5	20600/844
10MHz	QPSK	1	0	23.65	23.78	23.55
		1	25	23.39	23.60	23.28
		1	49	23.41	23.60	23.32
		25	0	22.46	22.53	22.55
		25	13	22.18	22.32	22.25
		25	25	22.03	22.13	21.91
		50	0	22.39	22.27	22.35
	16QAM	1	0	22.44	22.57	22.28
		1	25	22.33	22.46	22.17
		1	49	22.39	22.49	22.25
		25	0	21.53	21.63	21.44
		25	13	21.58	21.68	21.52
		25	25	21.59	21.71	21.40
		50	0	21.46	21.54	21.18



4. LTE Band 7 Conducted Power Test Verdict:

LTE FDD Band 7				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20775/2502.5	21100/2535	21425/2567.5
5MHz	QPSK	1	0	23.02	22.56	22.69
		1	13	22.91	22.41	22.54
		1	24	22.89	22.43	22.58
		12	0	22.14	21.71	21.86
		12	6	22.17	21.75	21.83
		12	13	22.19	21.73	21.84
		25	0	22.03	21.53	21.75
	16QAM	1	0	21.91	21.44	21.53
		1	13	21.79	21.31	21.42
		1	24	21.86	21.39	21.52
		12	0	21.00	20.46	20.68
		12	6	21.03	20.60	20.77
		12	13	21.05	20.55	20.70
		25	0	20.94	20.40	20.58
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20800/2505	21100/2535	21400/2565
10MHz	QPSK	1	0	23.10	22.76	23.01
		1	25	22.99	22.61	22.86
		1	49	22.97	22.63	22.90
		25	0	22.22	21.91	22.18
		25	13	22.25	21.95	22.15
		25	25	22.27	21.93	22.16
		50	0	22.11	21.73	22.07
	16QAM	1	0	21.99	21.64	21.85
		1	25	21.87	21.51	21.74
		1	49	21.94	21.59	21.84
		25	0	21.08	20.66	21.00
		25	13	21.11	20.80	21.09
		25	25	21.13	20.75	21.02
		50	0	21.02	20.60	20.90



LTE FDD Band 7				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20825/2507.5	21100/2535	21375/2562.5
15MHz	QPSK	1	0	23.23	23.02	23.17
		1	38	23.12	22.87	23.02
		1	74	23.10	22.89	23.06
		36	0	22.35	22.17	22.34
		36	18	22.38	22.21	22.31
		36	39	22.4	22.19	22.32
		75	0	22.24	21.99	22.23
	16QAM	1	0	22.12	21.90	22.01
		1	38	22.00	21.77	21.90
		1	74	22.07	21.85	22.00
		36	0	21.21	20.92	21.16
		36	18	21.24	21.06	21.25
		36	39	21.26	21.01	21.18
		75	0	21.15	20.86	21.06
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				20850/2510	21100/2535	21350/2560
20MHz	QPSK	1	0	23.62	23.57	23.43
		1	50	23.51	23.42	23.28
		1	99	23.49	23.44	23.32
		50	0	22.65	22.45	22.60
		50	25	22.77	22.96	22.72
		50	50	22.69	22.74	22.58
		100	0	22.63	22.88	22.49
	16QAM	1	0	22.51	22.45	22.27
		1	50	22.39	22.32	22.16
		1	99	22.46	22.40	22.26
		50	0	21.60	21.47	21.42
		50	25	21.63	21.61	21.51
		50	50	21.65	21.56	21.44
		100	0	21.54	21.41	21.32

5. LTE Band 12 Conducted Power Test Verdict:

LTE FDD Band 12				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				23017/699.7	23095/707.5	23173/715.3
1.4MHz	QPSK	1	0	22.35	22.52	22.66
		1	3	22.23	22.40	22.54
		1	5	22.24	22.41	22.53
		3	0	21.50	21.70	21.84
		3	2	21.53	21.67	21.82
		3	3	21.47	21.71	21.83
		6	0	21.37	21.57	21.69
	16QAM	1	0	21.22	21.37	21.54
		1	3	21.11	21.26	21.41
		1	5	21.20	21.34	21.49
		3	0	20.27	20.42	20.70
		3	2	20.39	20.55	20.81
		3	3	20.38	20.52	20.73
		6	0	20.20	20.39	20.51
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				23025/700.5	23095/707.5	23165/714.5
3MHz	QPSK	1	0	22.45	22.64	22.75
		1	7	22.33	22.52	22.63
		1	14	22.34	22.53	22.62
		8	0	21.60	21.82	21.93
		8	4	21.63	21.79	21.91
		8	7	21.57	21.83	21.92
		15	0	21.47	21.69	21.78
	16QAM	1	0	21.32	21.49	21.63
		1	7	21.21	21.38	21.50
		1	14	21.30	21.46	21.58
		8	0	20.37	20.54	20.79
		8	4	20.49	20.67	20.90
		8	7	20.48	20.64	20.82
		15	0	20.30	20.51	20.60

LTE FDD Band 12				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				23035/701.5	23095/707.5	23155/713.5
5MHz	QPSK	1	0	22.89	22.96	22.91
		1	13	22.77	22.84	22.79
		1	24	22.78	22.85	22.78
		12	0	22.04	22.14	22.09
		12	6	22.07	22.11	22.07
		12	13	22.01	22.15	22.08
		25	0	21.91	22.01	21.94
	16QAM	1	0	21.76	21.81	21.79
		1	13	21.65	21.70	21.66
		1	24	21.74	21.78	21.74
		12	0	20.81	20.86	20.95
		12	6	20.93	20.99	21.06
		12	13	20.92	20.96	20.98
		25	0	20.74	20.83	20.76
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				23060/704	23095/707.5	23130/711
10MHz	QPSK	1	0	23.10	23.15	23.05
		1	25	22.93	23.00	22.89
		1	49	22.94	23.01	22.88
		25	0	22.20	22.05	22.23
		25	13	22.10	21.81	22.15
		25	25	22.16	22.27	22.24
		50	0	22.07	21.92	22.11
	16QAM	1	0	21.92	21.97	21.89
		1	25	21.81	21.86	21.76
		1	49	21.90	21.94	21.84
		25	0	20.97	21.02	21.05
		25	13	21.09	21.15	21.16
		25	25	21.08	21.12	21.08
		50	0	20.90	20.99	20.86

6. LTE Band 17 Conducted Power Test Verdict:

LTE FDD Band 17				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				23755/706.5	23790/710	23825/713.5
5MHz	QPSK	1	0	23.02	23.13	22.88
		1	13	22.91	23.00	22.74
		1	24	22.87	23.01	22.73
		12	0	22.37	22.47	22.05
		12	6	22.14	22.28	22.00
		12	13	22.18	22.31	22.07
		25	0	22.20	22.34	21.88
	16QAM	1	0	21.90	22.00	21.74
		1	13	21.79	21.85	21.59
		1	24	21.89	21.97	21.71
		12	0	20.99	21.05	20.89
		12	6	21.02	21.18	20.96
		12	13	21.04	21.16	20.85
		25	0	20.90	21.04	20.73
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				23780/709	23790/710	23800/711
10MHz	QPSK	1	0	23.08	23.21	23.02
		1	25	23.00	23.15	22.83
		1	49	22.98	23.02	22.81
		25	0	22.24	22.32	22.27
		25	13	21.97	21.95	22.15
		25	25	21.72	21.72	22.24
		50	0	21.19	21.64	22.29
	16QAM	1	0	21.99	22.00	21.85
		1	25	21.85	21.89	21.69
		1	49	21.97	21.98	21.80
		25	0	21.05	21.05	21.00
		25	13	21.16	20.97	21.11
		25	25	21.17	21.07	21.03
		50	0	21.06	20.17	20.80

7. LTE Band 25 Conducted Power Test Verdict:

LTE FDD Band 25				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26047/1850.7	26365/1882.5	26683/1914.3
1.4MHz	QPSK	1	0	22.68	22.84	22.93
		1	3	22.53	22.71	22.78
		1	5	22.50	22.69	22.74
		3	0	21.85	22.00	22.08
		3	2	21.80	22.01	22.04
		3	3	21.79	22.02	22.05
		6	0	21.74	21.85	21.94
	16QAM	1	0	21.56	21.67	21.80
		1	3	21.41	21.54	21.67
		1	5	21.51	21.62	21.72
		3	0	20.60	20.74	20.99
		3	2	20.71	20.63	21.04
		3	3	20.69	20.69	20.95
		6	0	20.56	19.82	20.71
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26055/1851.5	26365/1882.5	26675/1913.5
3MHz	QPSK	1	0	21.78	22.02	22.09
		1	7	21.63	21.89	21.94
		1	14	21.6	21.87	21.9
		8	0	20.95	21.18	21.24
		8	4	20.9	21.19	21.2
		8	7	20.89	21.2	21.21
		15	0	20.84	21.03	21.1
	16QAM	1	0	20.66	20.85	20.96
		1	7	20.51	20.72	20.83
		1	14	20.61	20.8	20.88
		8	0	19.7	19.92	20.15
		8	4	19.81	19.81	20.2
		8	7	19.79	19.87	20.11
		15	0	19.66	19	19.87



LTE FDD Band 25				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26065/1852.5	26365/1882.5	26665/1912.5
5MHz	QPSK	1	0	22.02	22.11	22.16
		1	13	21.87	21.99	22.05
		1	24	21.83	21.96	22.04
		12	0	21.17	21.25	21.33
		12	6	21.11	21.24	21.21
		12	13	21.09	21.25	21.21
		25	0	21.04	21.07	21.2
	16QAM	1	0	20.87	20.97	21.02
		1	13	20.69	20.86	20.87
		1	24	20.83	20.92	20.94
		12	0	19.91	20.04	20.19
		12	6	20.02	19.98	20.31
		12	13	20.04	19.99	20.17
		25	0	19.9	19.19	19.88
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26090/1855	26365/1882.5	26640/1910
10MHz	QPSK	1	0	22.12	22.25	22.26
		1	25	22.00	22.10	22.13
		1	49	21.98	22.12	22.11
		25	0	21.31	21.40	21.42
		25	13	21.27	21.44	21.35
		25	25	21.26	21.41	21.34
		50	0	21.19	21.28	21.30
	16QAM	1	0	20.99	21.10	21.15
		1	25	20.85	20.99	20.99
		1	49	20.97	21.08	21.10
		25	0	20.05	20.15	20.3
		25	13	20.16	20.07	20.41
		25	25	20.17	20.17	20.33
		50	0	20.06	19.27	20.10



LTE FDD Band 25				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26115/1857.5	26365/1882.5	26615/1907.5
15MHz	QPSK	1	0	22.27	22.32	22.33
		1	38	22.12	22.20	22.22
		1	74	22.08	22.17	22.21
		36	0	21.42	21.46	21.50
		36	18	21.36	21.45	21.38
		36	39	21.34	21.46	21.38
		75	0	21.29	21.28	21.37
	16QAM	1	0	21.12	21.18	21.19
		1	38	20.94	21.07	21.04
		1	74	21.08	21.13	21.11
		36	0	20.16	20.25	20.36
		36	18	20.27	20.19	20.48
		36	39	20.29	20.20	20.34
		75	0	20.15	19.40	20.05
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26140/1860	26365/1882.5	26590/1905
20MHz	QPSK	1	0	22.72	22.99	22.69
		1	50	22.43	22.48	22.37
		1	99	22.16	22.24	22.25
		50	0	21.57	21.73	21.60
		50	25	21.44	21.52	21.42
		50	50	21.42	21.23	21.35
		100	0	21.37	21.31	21.41
	16QAM	1	0	20.20	21.25	21.23
		1	50	20.02	21.14	21.08
		1	99	20.16	21.20	21.15
		50	0	19.24	20.32	20.40
		50	25	19.35	20.26	20.52
		50	50	19.37	20.27	20.38
		100	0	19.23	19.47	20.09



8. LTE Band 26 Conducted Power Test Verdict

LTE FDD Band 26				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26697/814.7	26865/831.5	27033/848.3
1.4MHz	QPSK	1	0	21.75	21.89	21.79
		1	3	21.60	21.76	21.64
		1	5	21.57	21.74	21.60
		3	0	20.92	21.05	20.94
		3	2	20.87	21.06	20.90
		3	3	20.86	21.07	20.91
		6	0	20.81	20.90	20.80
	16QAM	1	0	20.63	20.72	20.66
		1	3	20.48	20.59	20.53
		1	5	20.58	20.67	20.58
		3	0	19.67	19.79	19.85
		3	2	19.78	19.68	19.90
		3	3	19.76	19.74	19.81
		6	0	19.63	18.87	19.57
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26705/815.5	26865/831.5	27025/847.5
3MHz	QPSK	1	0	22.00	22.12	22.05
		1	7	21.85	22.00	21.94
		1	14	21.81	21.97	21.93
		8	0	21.15	21.26	21.22
		8	4	21.09	21.25	21.10
		8	7	21.07	21.26	21.10
		15	0	21.02	21.08	21.09
	16QAM	1	0	20.85	20.98	20.91
		1	7	20.67	20.87	20.76
		1	14	20.81	20.93	20.83
		8	0	19.89	20.05	20.08
		8	4	20.00	19.99	20.20
		8	7	20.02	20.00	20.06
		15	0	19.88	19.20	19.77



LTE FDD Band 26				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26715/816.5	26865/831.5	27015/846.5
5MHz	QPSK	1	0	22.13	22.25	22.24
		1	13	21.98	22.13	22.13
		1	24	21.94	22.10	22.12
		12	0	21.28	21.39	21.41
		12	6	21.22	21.38	21.29
		12	13	21.20	21.39	21.29
		25	0	21.15	21.21	21.28
	16QAM	1	0	20.98	21.11	21.10
		1	13	20.80	21.00	20.95
		1	24	20.94	21.06	21.02
		12	0	20.02	20.18	20.27
		12	6	20.13	20.12	20.39
		12	13	20.15	20.13	20.25
		25	0	20.01	19.33	19.96
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26740/819	26865/831.5	26990/844
10MHz	QPSK	1	0	22.25	22.34	22.35
		1	25	22.10	22.22	22.24
		1	49	22.06	22.19	22.23
		25	0	21.40	21.48	21.52
		25	13	21.34	21.47	21.40
		25	25	21.32	21.48	21.40
		50	0	21.27	21.30	21.39
	16QAM	1	0	21.10	21.20	21.21
		1	25	20.92	21.09	21.06
		1	49	21.06	21.15	21.13
		25	0	20.14	20.27	20.38
		25	13	20.25	20.21	20.50
		25	25	20.27	20.22	20.36
		50	0	20.13	19.42	20.07



LTE FDD Band 26				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				26765/821.5	26865/831.52	26965/841.5
15MHz	QPSK	1	0	22.42	22.63	22.46
		1	38	22.20	22.30	22.29
		1	74	22.16	22.27	22.28
		36	0	21.57	21.79	21.63
		36	18	21.44	21.55	21.45
		36	39	21.42	21.56	21.45
		75	0	21.37	21.38	21.44
	16QAM	1	0	21.20	21.28	21.26
		1	38	21.02	21.17	21.11
		1	74	21.16	21.23	21.18
		36	0	20.24	20.35	20.43
		36	18	20.35	20.29	20.55
		36	39	20.37	20.30	20.41
		75	0	20.23	19.50	20.12



9. LTE Band 41 Conducted Power Test Verdict

LTE TDD Band 41				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				40065/2537.5	40640/2595.0	41215/2652.5
5MHz	QPSK	1	0	22.02	22.09	21.85
		1	13	21.87	21.97	21.74
		1	24	21.83	21.94	21.73
		12	0	21.17	21.23	21.02
		12	6	21.11	21.22	20.90
		12	13	21.09	21.23	20.90
		25	0	21.04	21.05	20.89
	16QAM	1	0	20.87	20.95	20.71
		1	13	20.69	20.84	20.56
		1	24	20.83	20.90	20.63
		12	0	19.91	20.02	19.88
		12	6	20.02	19.96	20.00
		12	13	20.04	19.97	19.86
		25	0	19.90	19.17	19.57
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				40090/2540.0	40640/2595.0	41190/2650.0
10MHz	QPSK	1	0	22.08	22.13	21.96
		1	25	21.93	22.01	21.85
		1	49	21.89	21.98	21.84
		25	0	21.23	21.27	21.13
		25	13	21.17	21.26	21.01
		25	25	21.15	21.27	21.01
		50	0	21.10	21.09	21.00
	16QAM	1	0	20.93	20.99	20.82
		1	25	20.75	20.88	20.67
		1	49	20.89	20.94	20.74
		25	0	19.97	20.06	19.99
		25	13	20.08	20.00	20.11
		25	25	20.10	20.01	19.97
		50	0	19.96	19.21	19.68



LTE TDD Band 41				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				40115/2542.5	40640/2595.0	41165/2647.5
15MHz	QPSK	1	0	22.12	22.17	22.02
		1	38	21.97	22.05	21.91
		1	74	21.93	22.02	21.9
		36	0	21.27	21.31	21.19
		36	18	21.21	21.3	21.07
		36	39	21.19	21.31	21.07
		75	0	21.14	21.13	21.06
	16QAM	1	0	20.97	21.03	20.88
		1	38	20.79	20.92	20.73
		1	74	20.93	20.98	20.8
		36	0	20.01	20.1	20.05
		36	18	20.12	20.04	20.17
		36	39	20.14	20.05	20.03
		75	0	20.00	19.25	19.74
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				40140/2545.0	40640/2595.0	41140/2645.0
20MHz	QPSK	1	0	22.18	22.25	22.16
		1	50	22.00	22.09	21.95
		1	99	21.96	22.06	21.94
		50	0	21.33	21.39	21.33
		50	25	21.24	21.34	21.11
		50	50	21.22	21.35	21.11
		100	0	21.17	21.17	21.10
	16QAM	1	0	21.00	21.07	20.92
		1	50	20.82	20.96	20.77
		1	99	20.96	21.02	20.84
		50	0	20.04	20.14	20.09
		50	25	20.15	20.08	20.21
		50	50	20.17	20.09	20.07
		100	0	20.03	19.29	19.78



10. LTE Band 66 Conducted Power Test Verdict

LTE FDD Band 66				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				131979/1710.7	132322/1745	132665/1779.3
1.4MHz	QPSK	1	0	21.75	21.67	21.45
		1	3	21.62	21.57	21.33
		1	5	21.64	21.56	21.32
		3	0	20.92	20.85	20.60
		3	2	20.93	20.84	20.57
		3	3	20.94	20.86	20.58
		6	0	20.80	20.73	20.47
	16QAM	1	0	20.62	20.52	20.34
		1	3	20.47	20.41	20.21
		1	5	20.60	20.49	20.33
		3	0	19.69	19.60	19.52
		3	2	19.77	19.70	19.55
		3	3	19.79	19.71	19.49
		6	0	19.67	19.61	19.34
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				131987/1711.5	12322/1745	132657/1778.5
3MHz	QPSK	1	0	21.79	21.85	21.66
		1	7	21.66	21.75	21.54
		1	14	21.68	21.74	21.53
		8	0	20.96	21.03	20.81
		8	4	20.97	21.02	20.78
		8	7	20.98	21.04	20.79
		15	0	20.84	20.91	20.68
	16QAM	1	0	20.66	20.70	20.55
		1	7	20.51	20.59	20.42
		1	14	20.64	20.67	20.54
		8	0	19.73	19.78	19.73
		8	4	19.81	19.88	19.76
		8	7	19.83	19.89	19.70
		15	0	19.71	19.79	19.55



LTE FDD Band 66				Conducted Power(dBm)		
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				131997/1712.5	132322/1745	132647/1777.5
5MHz	QPSK	1	0	22.02	22.16	22.07
		1	13	21.89	22.06	21.95
		1	24	21.91	22.05	21.94
		12	0	21.19	21.34	21.22
		12	6	21.20	21.33	21.19
		12	13	21.21	21.35	21.2
		25	0	21.07	21.22	21.09
	16QAM	1	0	20.89	21.01	20.96
		1	13	20.74	20.90	20.83
		1	24	20.87	20.98	20.95
		12	0	19.96	20.09	20.14
		12	6	20.04	20.19	20.17
		12	13	20.06	20.2	20.11
		25	0	19.94	20.10	19.96
Bandwidth	Modulation	RB size	RB offset	Channel/Frequency		
				132022/1715	132322/1745	132622/1775
10MHz	QPSK	1	0	22.15	22.24	22.13
		1	25	22.02	22.14	22.01
		1	49	22.04	22.13	22.00
		25	0	21.32	21.42	21.28
		25	13	21.33	21.41	21.25
		25	25	21.34	21.43	21.26
		50	0	21.20	21.30	21.15
	16QAM	1	0	21.02	21.09	21.02
		1	25	20.87	20.98	20.89
		1	49	21.62	21.06	21.01
		25	0	20.09	20.17	20.20
		25	13	20.17	20.27	20.23
		25	25	20.19	20.28	20.17
		50	0	20.07	20.18	20.02



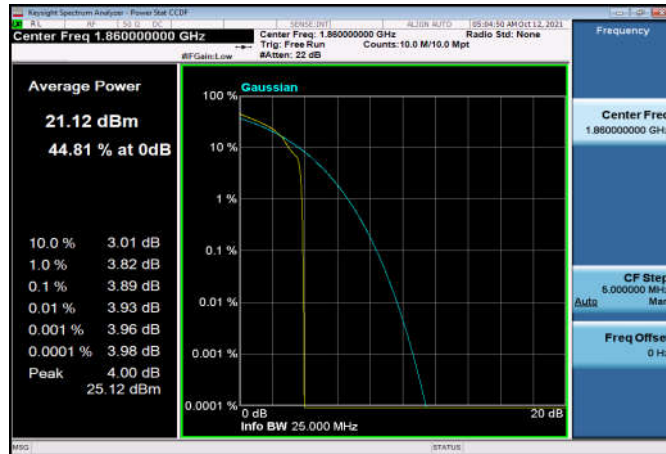
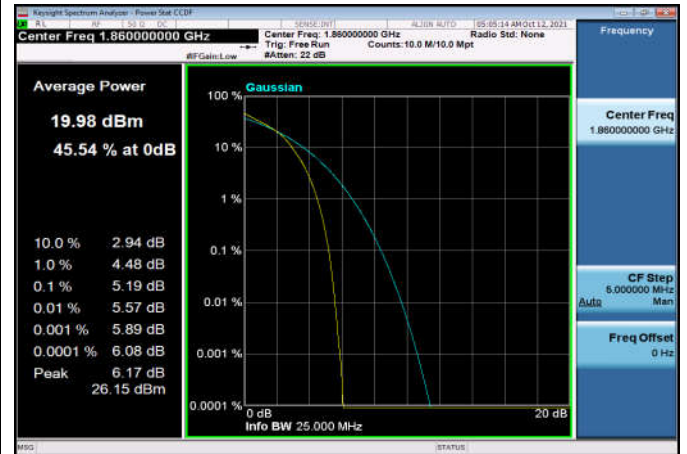
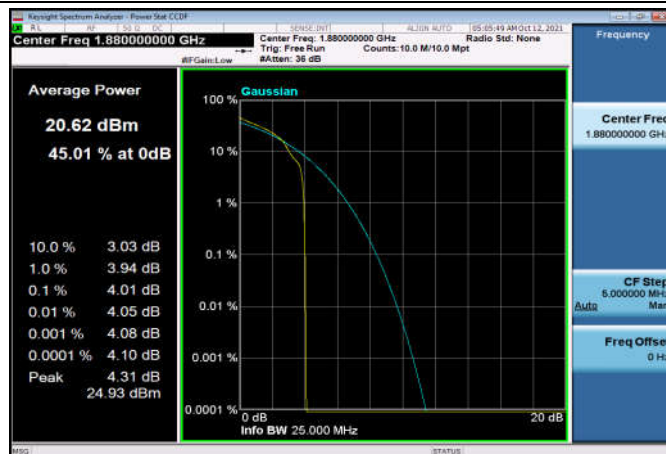
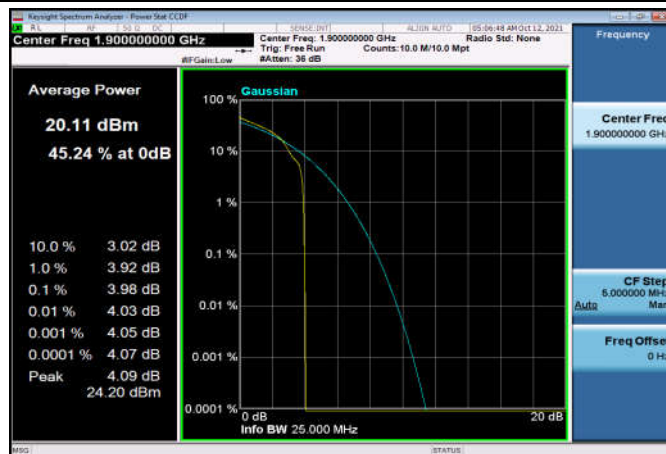
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132047	132322	132597
15MHz	QPSK	1	0	22.35	22.41	22.26
		1	38	22.22	22.31	22.14
		1	74	22.24	22.30	22.13
		36	0	21.52	21.59	21.41
		36	18	21.53	21.58	21.38
		36	39	21.54	21.60	21.39
		75	0	21.40	21.47	21.28
	16QAM	1	0	21.22	21.26	21.15
		1	38	21.07	21.15	21.02
		1	74	21.20	21.23	21.14
		36	0	20.29	20.34	20.33
		36	18	20.37	20.44	20.36
		36	39	20.39	20.45	20.30
		75	0	20.27	20.35	20.15
Bandwidth	Modulation	RB size	RB offset	Channel	Channel	Channel
				132072	132322	132572
20MHz	QPSK	1	0	22.65	22.70	22.67
		1	50	22.52	22.60	22.55
		1	99	22.54	22.59	22.54
		50	0	21.82	21.88	21.82
		50	25	21.83	21.87	21.79
		50	50	21.84	21.89	21.80
		100	0	21.70	21.76	21.69
	16QAM	1	0	21.52	21.55	21.56
		1	50	21.37	21.44	21.43
		1	99	21.50	21.52	21.55
		50	0	20.59	20.63	20.74
		50	25	20.67	20.73	20.77
		50	50	20.69	20.74	20.71
		100	0	20.57	20.64	20.56

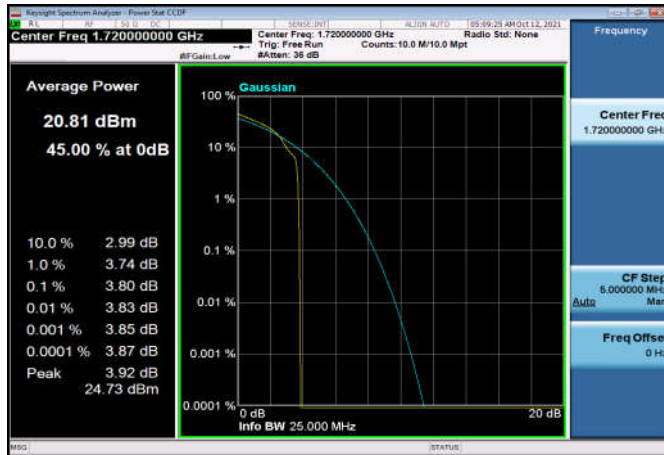
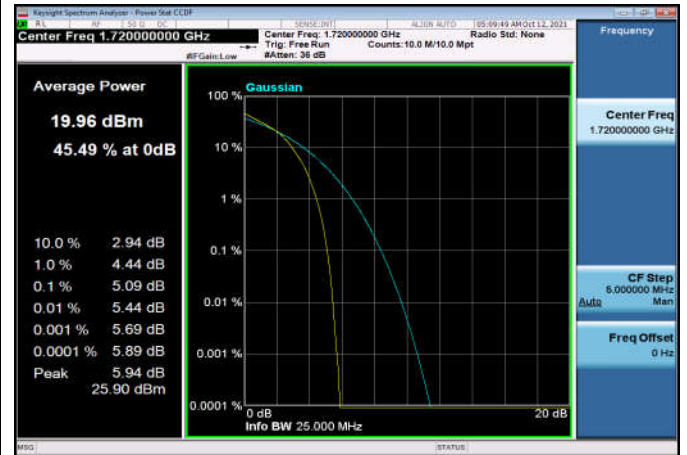
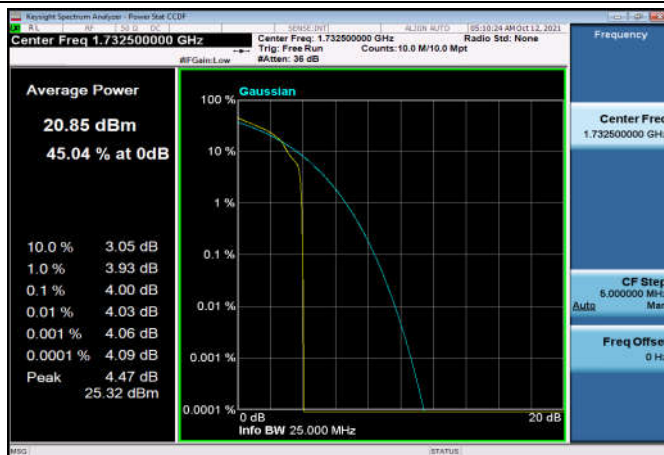
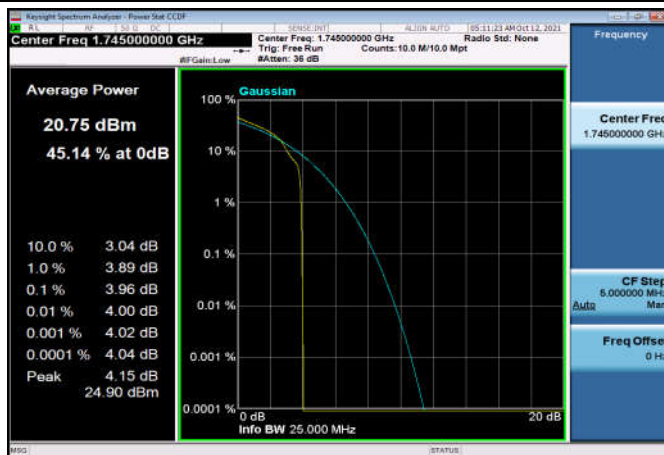
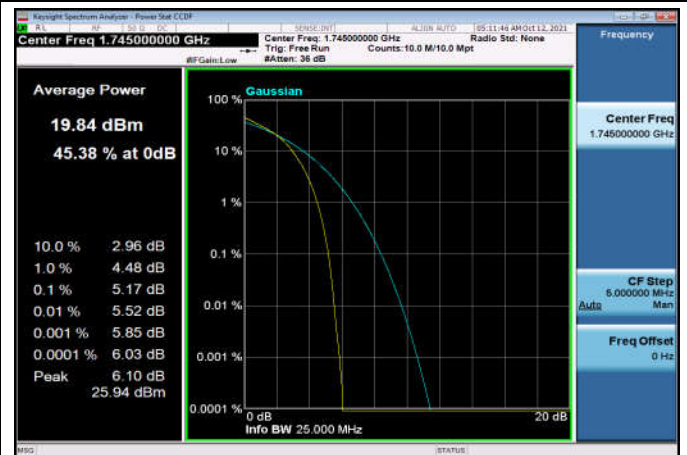
**Peak To Average Ratio****Test Result and Data**

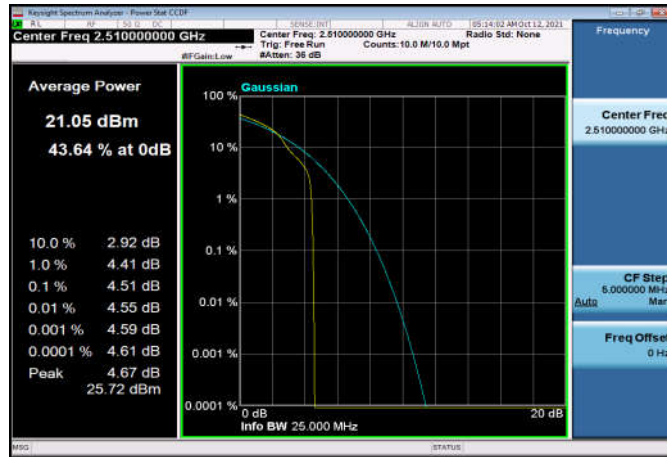
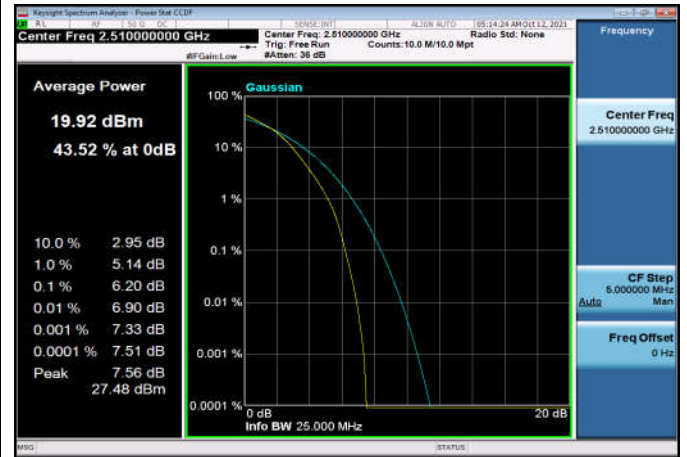
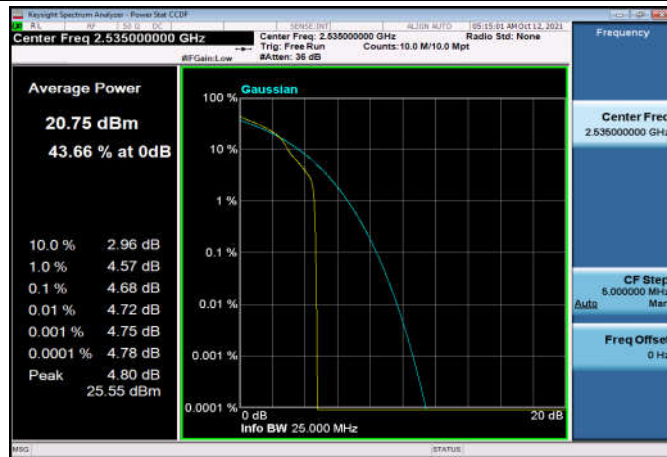
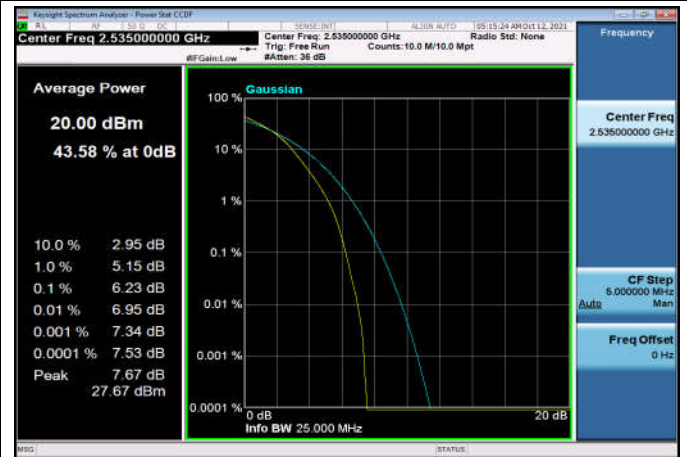
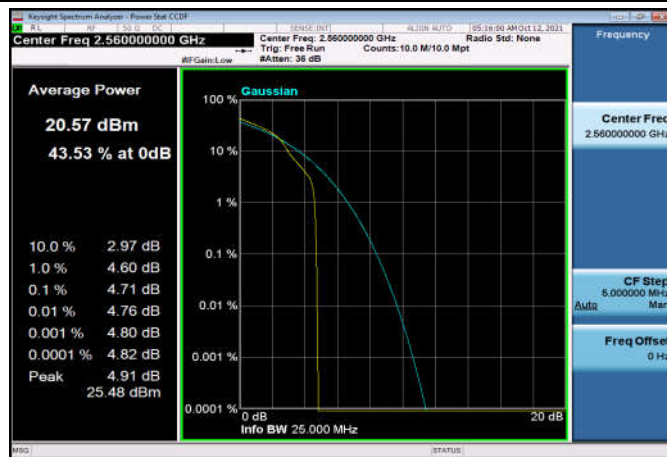
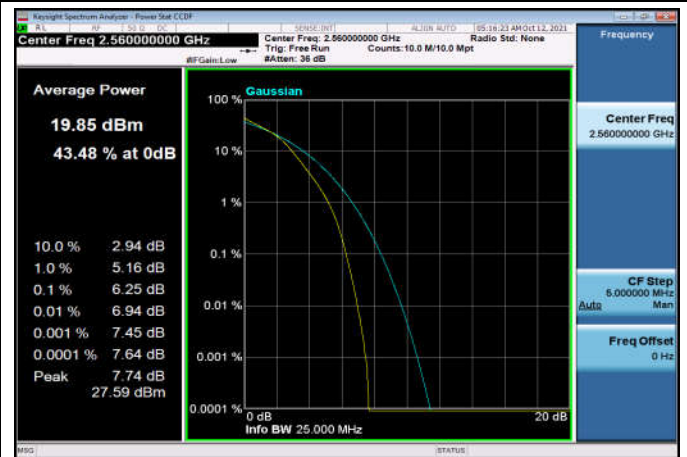
PeakToAveragePowerRatio NormalTC_NormalVol							
Band	Range	BandWidth	RbMode	Modulation	PAPR (dBm)	Limit (dBm)	Result
FDD02	LowRange	20	OneRB_high	Q16	3.89	13.00	Pass
FDD02	LowRange	20	fullRB	Q16	5.19	13.00	Pass
FDD02	MidRange	20	OneRB_high	Q16	4.01	13.00	Pass
FDD02	MidRange	20	fullRB	Q16	5.15	13.00	Pass
FDD02	HighRange	20	OneRB_high	Q16	3.98	13.00	Pass
FDD02	HighRange	20	fullRB	Q16	5.24	13.00	Pass
FDD04	LowRange	20	OneRB_high	Q16	3.80	13.00	Pass
FDD04	LowRange	20	fullRB	Q16	5.09	13.00	Pass
FDD04	MidRange	20	OneRB_high	Q16	4.00	13.00	Pass
FDD04	MidRange	20	fullRB	Q16	5.11	13.00	Pass
FDD04	HighRange	20	OneRB_high	Q16	3.96	13.00	Pass
FDD04	HighRange	20	fullRB	Q16	5.17	13.00	Pass
FDD07	LowRange	20	OneRB_high	Q16	4.51	13.00	Pass
FDD07	LowRange	20	fullRB	Q16	6.20	13.00	Pass
FDD07	MidRange	20	OneRB_high	Q16	4.68	13.00	Pass
FDD07	MidRange	20	fullRB	Q16	6.23	13.00	Pass
FDD07	HighRange	20	OneRB_high	Q16	4.71	13.00	Pass
FDD07	HighRange	20	fullRB	Q16	6.25	13.00	Pass
TDD41	LowRange	20	OneRB_high	Q16	6.95	13.00	Pass
TDD41	LowRange	20	fullRB	Q16	7.45	13.00	Pass
TDD41	MidRange	20	OneRB_high	Q16	7.26	13.00	Pass
TDD41	MidRange	20	fullRB	Q16	7.68	13.00	Pass
TDD41	HighRange	20	OneRB_high	Q16	7.08	13.00	Pass
TDD41	HighRange	20	fullRB	Q16	7.53	13.00	Pass
FDD66	LowRange	20	OneRB_high	Q16	5.33	13.00	Pass
FDD66	LowRange	20	fullRB	Q16	5.97	13.00	Pass
FDD66	MidRange	20	OneRB_high	Q16	5.52	13.00	Pass

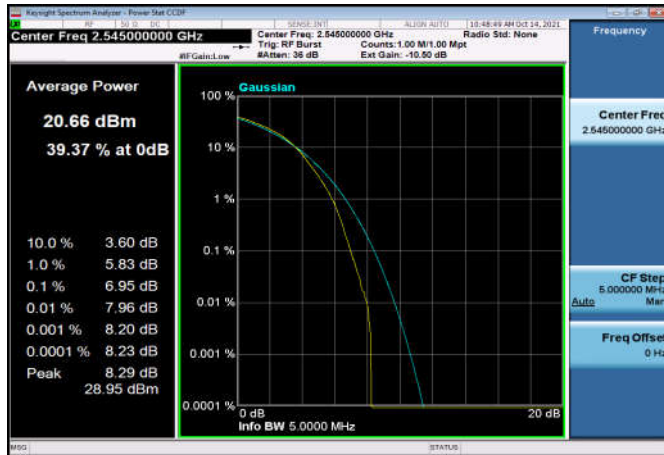
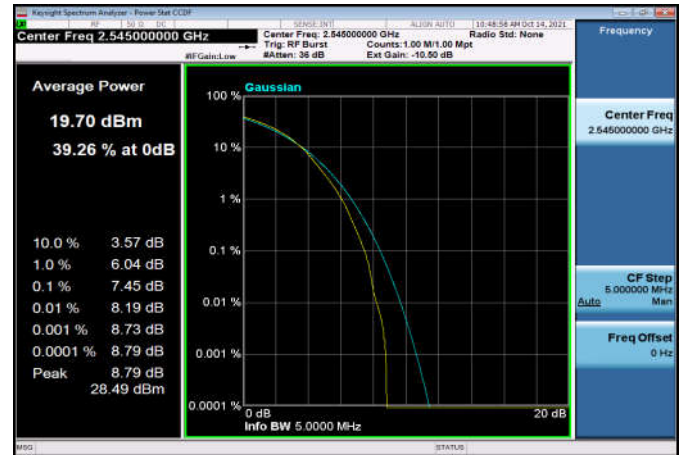
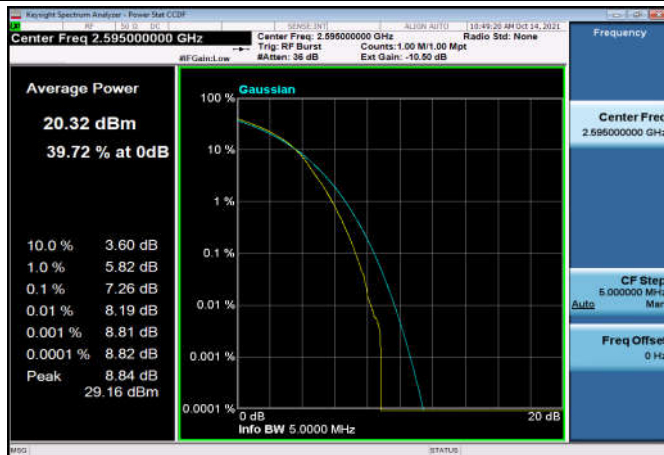
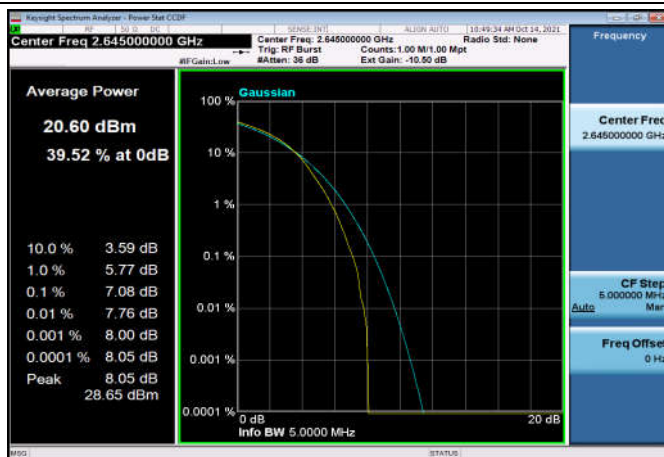


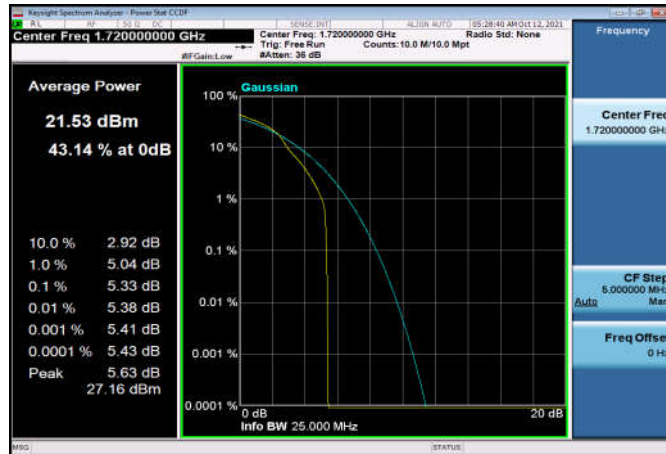
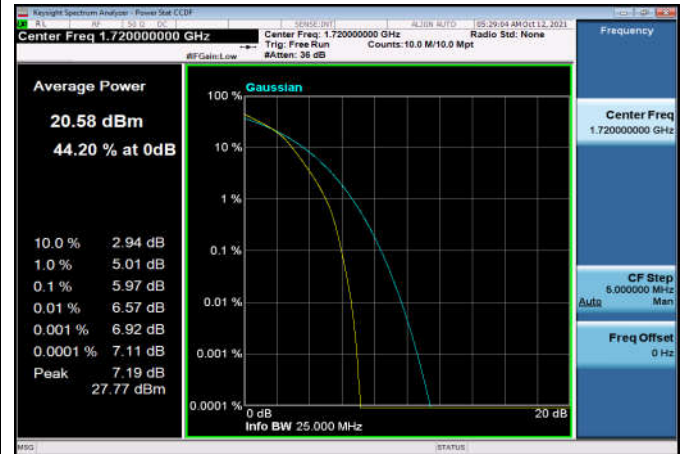
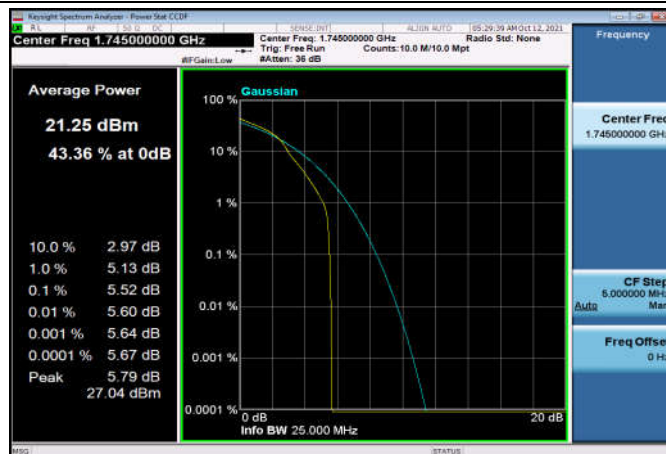
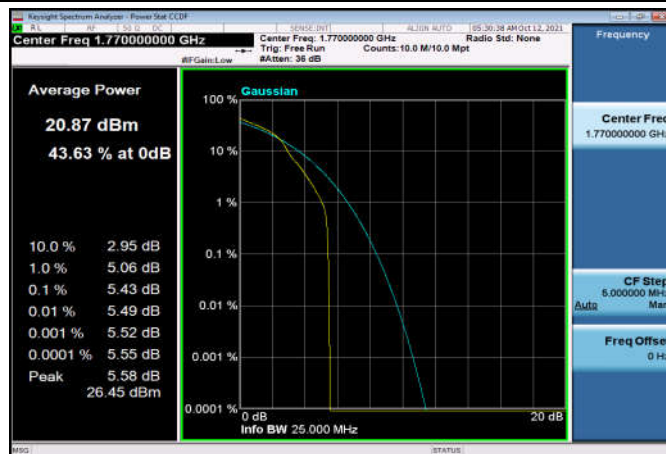
FDD66	MidRange	20	fullRB	Q16	6.03	13.00	Pass
FDD66	HighRange	20	OneRB_high	Q16	5.43	13.00	Pass
FDD66	HighRange	20	fullRB	Q16	6.01	13.00	Pass
FDD25	LowRange	20	OneRB_high	Q16	5.63	13.00	Pass
FDD25	LowRange	20	fullRB	Q16	6.07	13.00	Pass
FDD25	MidRange	20	OneRB_high	Q16	5.73	13.00	Pass
FDD25	MidRange	20	fullRB	Q16	6.03	13.00	Pass
FDD25	HighRange	20	OneRB_high	Q16	5.65	13.00	Pass
FDD25	HighRange	20	fullRB	Q16	6.01	13.00	Pass
FDD26	LowRange	15	OneRB_high	Q16	5.68	13.00	Pass
FDD26	LowRange	15	fullRB	Q16	6.16	13.00	Pass
FDD26	MidRange	15	OneRB_high	Q16	5.77	13.00	Pass
FDD26	MidRange	15	fullRB	Q16	6.19	13.00	Pass
FDD26	HighRange	15	OneRB_high	Q16	5.36	13.00	Pass
FDD26	HighRange	15	fullRB	Q16	6.17	13.00	Pass

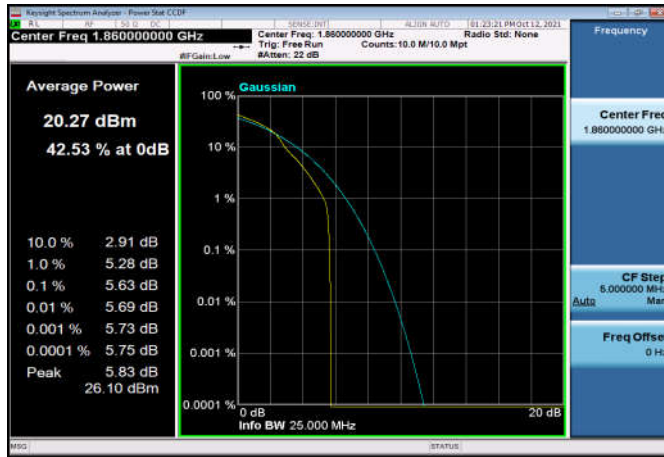
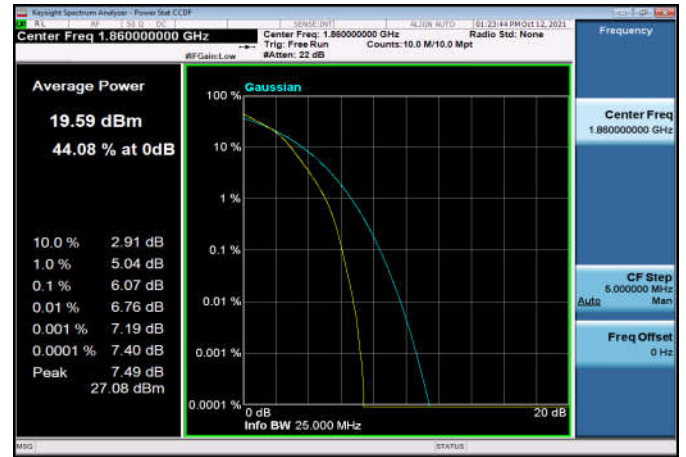
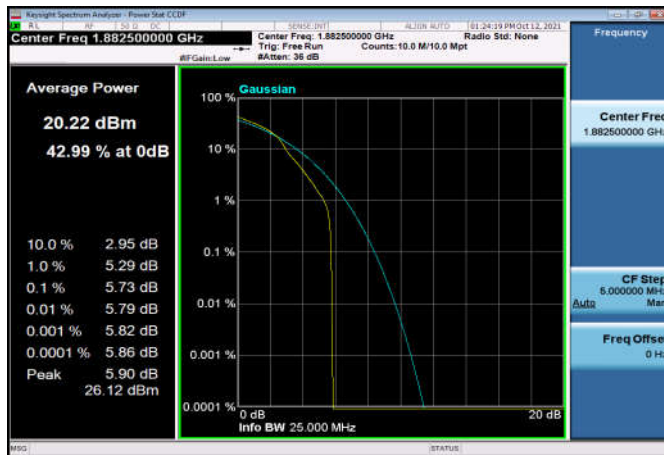
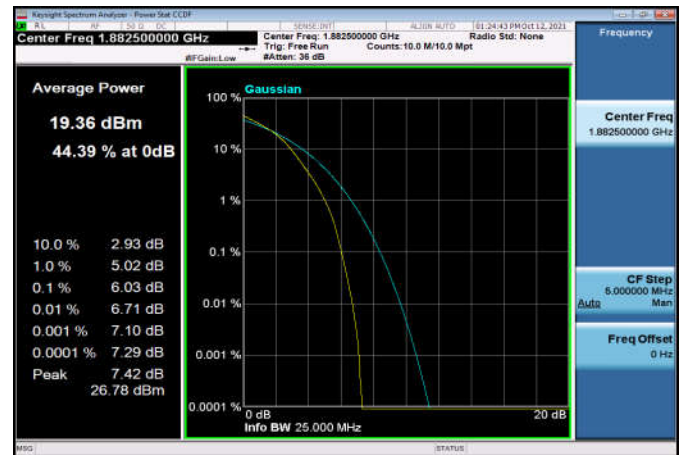
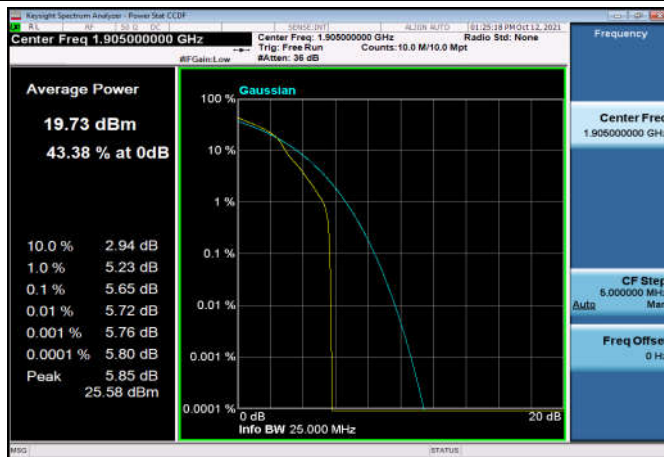
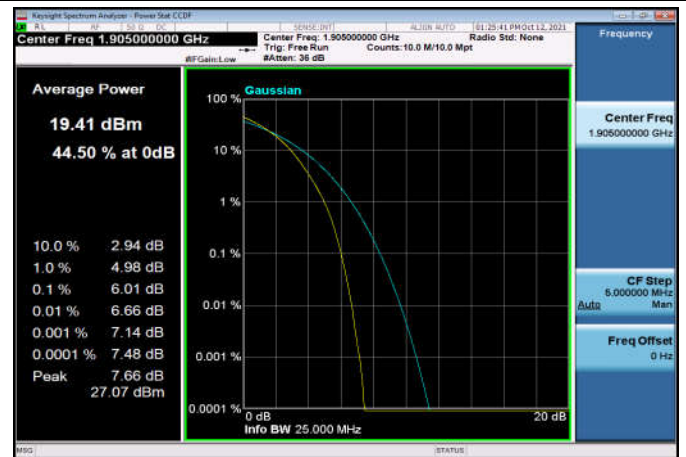
FDD02_LowRange_20MHz_1860_OneRB
_high_Q16FDD02_LowRange_20MHz_1860_fullIRB
_Q16FDD02_MidRange_20MHz_1880_OneRB
_high_Q16FDD02_MidRange_20MHz_1880_fullIRB
_Q16FDD02_HighRange_20MHz_1900_OneRB
_high_Q16FDD02_HighRange_20MHz_1900_fullIRB
_Q16

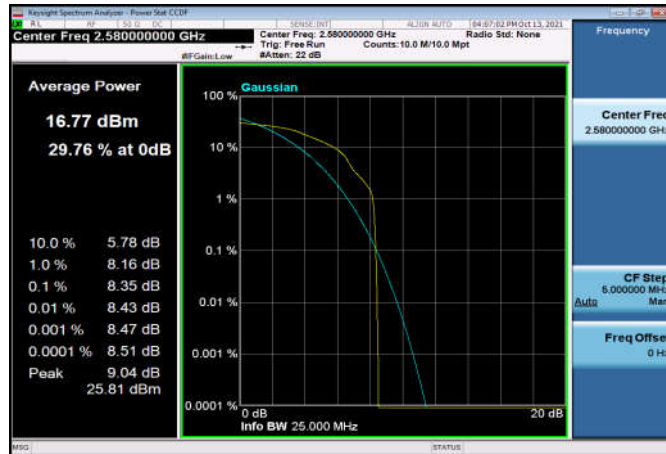
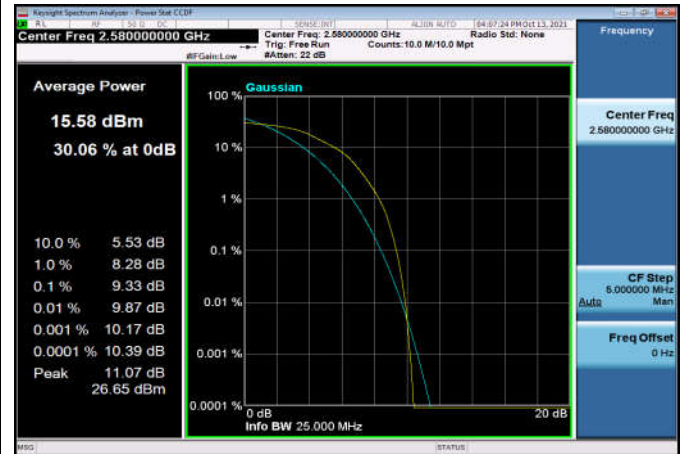
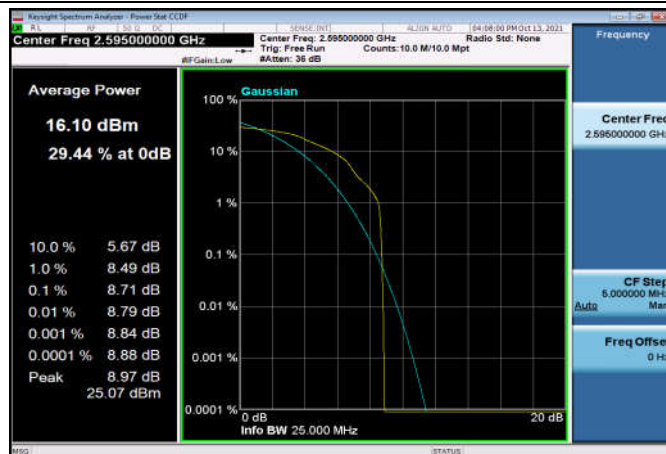
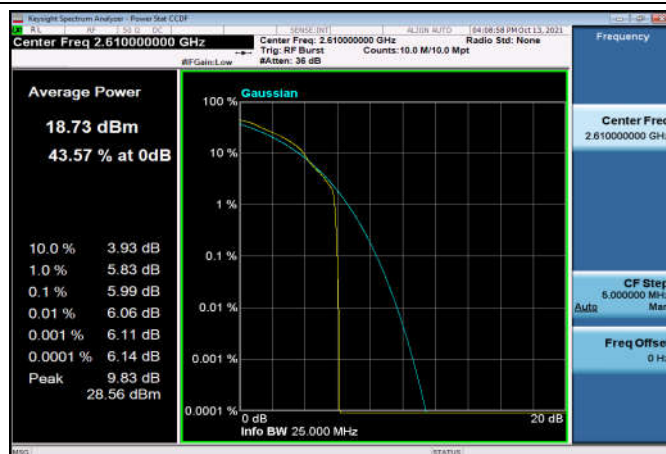
FDD04_LowRange_20MHz_1720_OneRB
_high_Q16FDD04_LowRange_20MHz_1720_fullRB
_Q16FDD04_MidRange_20MHz_1732.5_OneRB
_high_Q16FDD04_MidRange_20MHz_1732.5_fullRB
_Q16FDD04_HighRange_20MHz_1745_OneRB
_high_Q16FDD04_HighRange_20MHz_1745_fullRB
_Q16

FDD07_LowRange_20MHz_2510_OneRB
_high_Q16FDD07_LowRange_20MHz_2510_fullIRB
_Q16FDD07_MidRange_20MHz_2535_OneRB
_high_Q16FDD07_MidRange_20MHz_2535_fullIRB
_Q16FDD07_HighRange_20MHz_2560_OneRB
_high_Q16FDD07_HighRange_20MHz_2560_fullIRB
_Q16

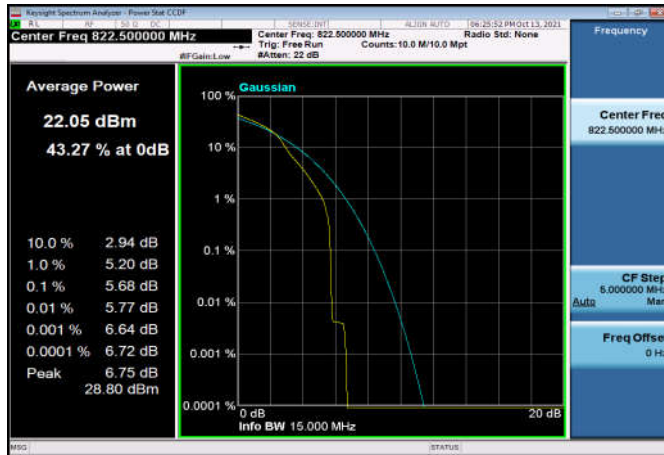
TDD41_LowRange_20MHz_2545_OneRB
_high_Q16TDD41_LowRange_20MHz_2545_fullRB
_Q16TDD41_MidRange_20MHz_2595_OneRB
_high_Q16TDD41_MidRange_20MHz_2595_fullRB
_Q16TDD41_HighRange_20MHz_2645_OneRB
_high_Q16TDD41_HighRange_20MHz_2645_fullRB
_Q16

FDD66_LowRange_20MHz_1720_OneRB
_high_Q16FDD66_LowRange_20MHz_1720_fullIRB
_Q16FDD66_MidRange_20MHz_1745_OneRB
_high_Q16FDD66_MidRange_20MHz_1745_fullIRB
_Q16FDD66_HighRange_20MHz_1770_OneRB
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_Q16

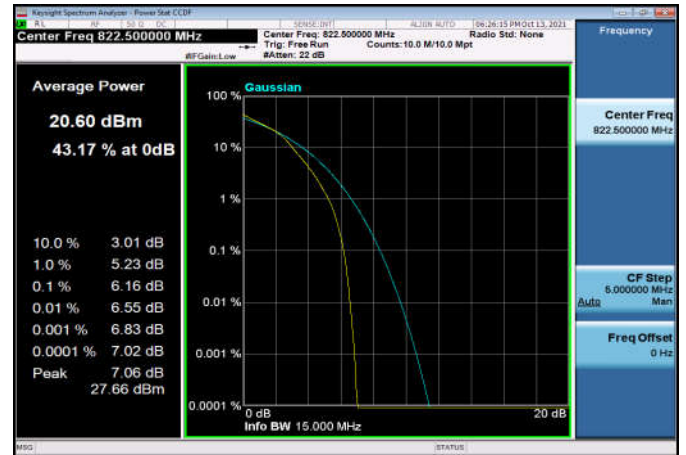
FDD25_LowRange_20MHz_1860_OneRB
_high_Q16

FDD25_LowRange_20MHz_1860_fullRB
_Q16

FDD25_MidRange_20MHz_1882.5_OneRB
_high_Q16

FDD25_MidRange_20MHz_1882.5_fullRB
_Q16

FDD25_HighRange_20MHz_1905_OneRB
_high_Q16

FDD25_HighRange_20MHz_1905_fullRB
_Q16


TDD38_LowRange_20MHz_2580_OneRB
_high_Q16TDD38_LowRange_20MHz_2580_fullIRB
_Q16TDD38_MidRange_20MHz_2595_OneRB
_high_Q16TDD38_MidRange_20MHz_2595_fullIRB
_Q16TDD38_HighRange_20MHz_2610_OneRB
_high_Q16TDD38_HighRange_20MHz_2610_fullIRB
_Q16

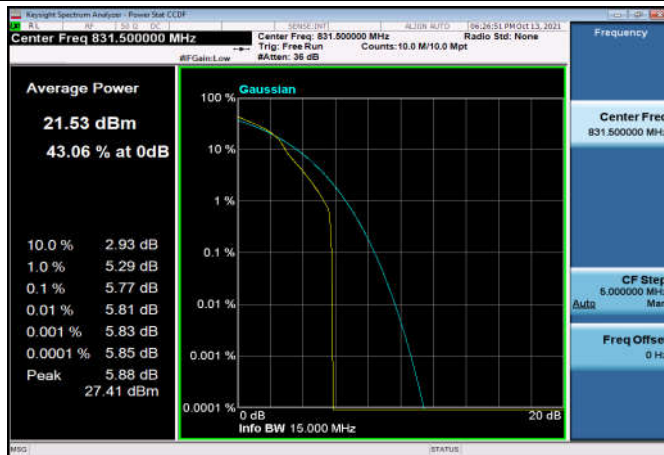
FDD26_LowRange_15MHz_822.5_OneRB
_high_Q16



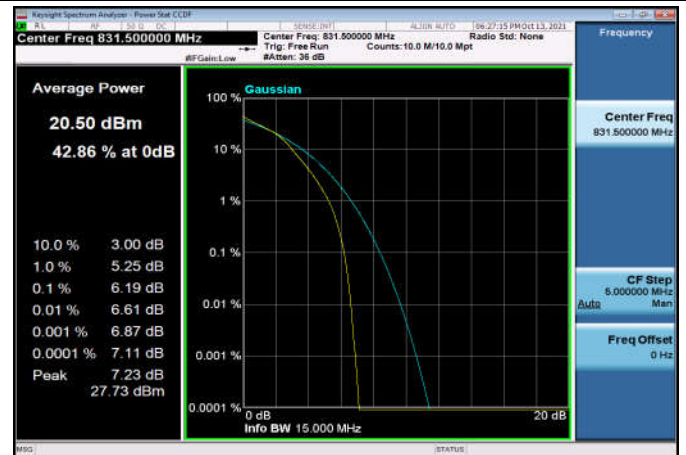
FDD26_LowRange_15MHz_822.5_fullRB
_Q16



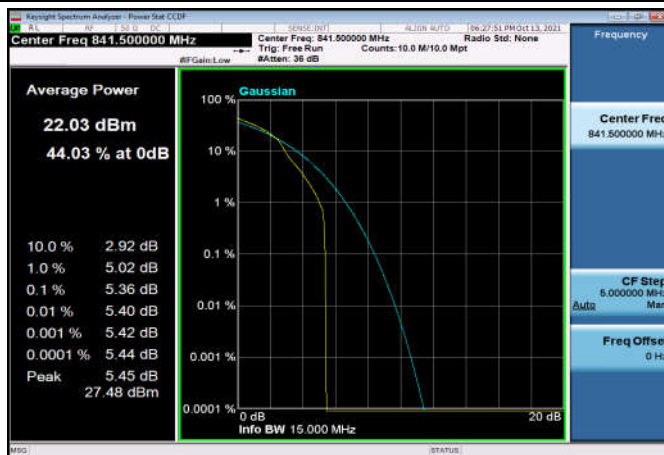
FDD26_MidRange_15MHz_831.5_OneRB
_high_Q16



FDD26_MidRange_15MHz_831.5_fullRB
_Q16



FDD26_HighRange_15MHz_841.5_OneRB
_high_Q16



FDD26_HighRange_15MHz_841.5_fullRB
_Q16



**99% Occupied Bandwidth****Test Result and Data**

Occupied Bandwidth NormalTC_NormalVol					
Band	Range	BandWidth	Frequency (MHz)	Modulation	Occupied Bandwidth(99%) (MHz)
FDD02	MidRange	1.4	1880	QPSK	1.09
FDD02	MidRange	1.4	1880	Q16	1.087
FDD02	MidRange	3	1880	QPSK	2.679
FDD02	MidRange	3	1880	Q16	2.677
FDD02	MidRange	5	1880	QPSK	4.489
FDD02	MidRange	5	1880	Q16	4.487
FDD02	MidRange	10	1880	QPSK	8.908
FDD02	MidRange	10	1880	Q16	8.901
FDD02	MidRange	15	1880	QPSK	13.396
FDD02	MidRange	15	1880	Q16	13.396
FDD02	MidRange	20	1880	QPSK	17.802
FDD02	MidRange	20	1880	Q16	17.8
FDD04	MidRange	1.4	1732.5	QPSK	1.086
FDD04	MidRange	1.4	1732.5	Q16	1.086
FDD04	MidRange	3	1732.5	QPSK	2.678
FDD04	MidRange	3	1732.5	Q16	2.677
FDD04	MidRange	5	1732.5	QPSK	4.49
FDD04	MidRange	5	1732.5	Q16	4.487
FDD04	MidRange	10	1732.5	QPSK	8.906
FDD04	MidRange	10	1732.5	Q16	8.902
FDD04	MidRange	15	1732.5	QPSK	13.405
FDD04	MidRange	15	1732.5	Q16	13.408
FDD04	MidRange	20	1732.5	QPSK	17.821
FDD04	MidRange	20	1732.5	Q16	17.821
FDD05	MidRange	1.4	836.5	QPSK	1.086
FDD05	MidRange	1.4	836.5	Q16	1.085



FDD05	MidRange	3	836.5	QPSK	2.679
FDD05	MidRange	3	836.5	Q16	2.678
FDD05	MidRange	5	836.5	QPSK	4.49
FDD05	MidRange	5	836.5	Q16	4.487
FDD05	MidRange	10	836.5	QPSK	8.923
FDD05	MidRange	10	836.5	Q16	8.917
FDD07	MidRange	5	2535	QPSK	4.482
FDD07	MidRange	5	2535	Q16	4.485
FDD07	MidRange	10	2535	QPSK	8.915
FDD07	MidRange	10	2535	Q16	8.905
FDD07	MidRange	15	2535	QPSK	13.416
FDD07	MidRange	15	2535	Q16	13.418
FDD07	MidRange	20	2535	QPSK	17.833
FDD07	MidRange	20	2535	Q16	17.833
FDD12	MidRange	1.4	707.5	QPSK	1.085
FDD12	MidRange	1.4	707.5	Q16	1.086
FDD12	MidRange	3	707.5	QPSK	2.679
FDD12	MidRange	3	707.5	Q16	2.678
FDD12	MidRange	5	707.5	QPSK	4.488
FDD12	MidRange	5	707.5	Q16	4.486
FDD12	MidRange	10	707.5	QPSK	8.907
FDD12	MidRange	10	707.5	Q16	8.903
FDD17	MidRange	5	710	QPSK	4.48
FDD17	MidRange	5	710	Q16	4.485
FDD17	MidRange	10	710	QPSK	8.905
FDD17	MidRange	10	710	Q16	8.9
TDD41	MidRange	5	2595	QPSK	4.48
TDD41	MidRange	5	2595	Q16	4.484
TDD41	MidRange	10	2595	QPSK	8.897
TDD41	MidRange	10	2595	Q16	8.906
TDD41	MidRange	15	2595	QPSK	13.416
TDD41	MidRange	15	2595	Q16	13.409



TDD41	MidRange	20	2595	QPSK	17.83
TDD41	MidRange	20	2595	Q16	17.824
FDD66	MidRange	1.4	1745	QPSK	1.091
FDD66	MidRange	1.4	1745	Q16	1.088
FDD66	MidRange	3	1745	QPSK	2.679
FDD66	MidRange	3	1745	Q16	2.678
FDD66	MidRange	5	1745	QPSK	4.489
FDD66	MidRange	5	1745	Q16	4.488
FDD66	MidRange	10	1745	QPSK	8.914
FDD66	MidRange	10	1745	Q16	8.904
FDD66	MidRange	15	1745	QPSK	13.413
FDD66	MidRange	15	1745	Q16	13.416
FDD66	MidRange	20	1745	QPSK	17.835
FDD66	MidRange	20	1745	Q16	17.832
FDD25	MidRange	1.4	1882.5	QPSK	1.091
FDD25	MidRange	1.4	1882.5	Q16	1.087
FDD25	MidRange	3	1882.5	QPSK	2.677
FDD25	MidRange	3	1882.5	Q16	2.677
FDD25	MidRange	5	1882.5	QPSK	4.49
FDD25	MidRange	5	1882.5	Q16	4.487
FDD25	MidRange	10	1882.5	QPSK	8.909
FDD25	MidRange	10	1882.5	Q16	8.902
FDD25	MidRange	15	1882.5	QPSK	13.396
FDD25	MidRange	15	1882.5	Q16	13.394
FDD25	MidRange	20	1882.5	QPSK	17.804
FDD25	MidRange	20	1882.5	Q16	17.799
FDD26	MidRange	1.4	831.5	QPSK	1.09
FDD26	MidRange	1.4	831.5	Q16	1.087
FDD26	MidRange	3	831.5	QPSK	2.679
FDD26	MidRange	3	831.5	Q16	2.677
FDD26	MidRange	5	831.5	QPSK	4.489
FDD26	MidRange	5	831.5	Q16	4.485



FDD26	MidRange	10	831.5	QPSK	8.917
FDD26	MidRange	10	831.5	Q16	8.91
FDD26	MidRange	15	831.5	QPSK	13.419
FDD26	MidRange	15	831.5	Q16	13.418

**26dB Bandwidth****Test Result and Data**

Emission Bandwidth NormalTC_NormalVol					
Band	Range	BandWidth	Frequency (MHz)	Modulation	EmissionBandwidth (MHz)
FDD02	MidRange	1.4	1880	QPSK	1.26
FDD02	MidRange	1.4	1880	Q16	1.27
FDD02	MidRange	3	1880	QPSK	2.97
FDD02	MidRange	3	1880	Q16	2.97
FDD02	MidRange	5	1880	QPSK	4.89
FDD02	MidRange	5	1880	Q16	4.84
FDD02	MidRange	10	1880	QPSK	9.44
FDD02	MidRange	10	1880	Q16	9.39
FDD02	MidRange	15	1880	QPSK	14.27
FDD02	MidRange	15	1880	Q16	14.23
FDD02	MidRange	20	1880	QPSK	18.74
FDD02	MidRange	20	1880	Q16	18.73
FDD04	MidRange	1.4	1732.5	QPSK	1.28
FDD04	MidRange	1.4	1732.5	Q16	1.27
FDD04	MidRange	3	1732.5	QPSK	2.98
FDD04	MidRange	3	1732.5	Q16	2.97
FDD04	MidRange	5	1732.5	QPSK	4.9
FDD04	MidRange	5	1732.5	Q16	4.83
FDD04	MidRange	10	1732.5	QPSK	9.48
FDD04	MidRange	10	1732.5	Q16	9.42
FDD04	MidRange	15	1732.5	QPSK	14.3
FDD04	MidRange	15	1732.5	Q16	14.26
FDD04	MidRange	20	1732.5	QPSK	18.77
FDD04	MidRange	20	1732.5	Q16	18.76
FDD05	MidRange	1.4	836.5	QPSK	1.25
FDD05	MidRange	1.4	836.5	Q16	1.26
FDD05	MidRange	3	836.5	QPSK	2.96



FDD05	MidRange	3	836.5	Q16	2.97
FDD05	MidRange	5	836.5	QPSK	4.84
FDD05	MidRange	5	836.5	Q16	4.81
FDD05	MidRange	10	836.5	QPSK	9.37
FDD05	MidRange	10	836.5	Q16	9.38
FDD07	MidRange	5	2535	QPSK	4.83
FDD07	MidRange	5	2535	Q16	4.83
FDD07	MidRange	10	2535	QPSK	9.36
FDD07	MidRange	10	2535	Q16	9.35
FDD07	MidRange	15	2535	QPSK	14.24
FDD07	MidRange	15	2535	Q16	14.23
FDD07	MidRange	20	2535	QPSK	18.73
FDD07	MidRange	20	2535	Q16	18.72
FDD12	MidRange	1.4	707.5	QPSK	1.26
FDD12	MidRange	1.4	707.5	Q16	1.27
FDD12	MidRange	3	707.5	QPSK	2.97
FDD12	MidRange	3	707.5	Q16	2.97
FDD12	MidRange	5	707.5	QPSK	4.86
FDD12	MidRange	5	707.5	Q16	4.82
FDD12	MidRange	10	707.5	QPSK	9.34
FDD12	MidRange	10	707.5	Q16	9.35
FDD17	MidRange	10	710	QPSK	9.34
FDD17	MidRange	10	710	Q16	9.36
TDD41	MidRange	5	2595	QPSK	4.79
TDD41	MidRange	5	2595	Q16	4.81
TDD41	MidRange	10	2595	QPSK	9.34
TDD41	MidRange	10	2595	Q16	9.33
TDD41	MidRange	15	2595	QPSK	14.23
TDD41	MidRange	15	2595	Q16	14.22
TDD41	MidRange	20	2595	QPSK	18.72
TDD41	MidRange	20	2595	Q16	18.72
FDD66	MidRange	1.4	1745	QPSK	1.27



FDD66	MidRange	1.4	1745	Q16	1.27
FDD66	MidRange	3	1745	QPSK	2.97
FDD66	MidRange	3	1745	Q16	2.97
FDD66	MidRange	5	1745	QPSK	4.84
FDD66	MidRange	5	1745	Q16	4.81
FDD66	MidRange	10	1745	QPSK	9.36
FDD66	MidRange	10	1745	Q16	9.36
FDD66	MidRange	15	1745	QPSK	14.23
FDD66	MidRange	15	1745	Q16	14.21
FDD66	MidRange	20	1745	QPSK	18.72
FDD66	MidRange	20	1745	Q16	18.72
FDD25	MidRange	1.4	1882.5	QPSK	1.25
FDD25	MidRange	1.4	1882.5	Q16	1.25
FDD25	MidRange	3	1882.5	QPSK	2.97
FDD25	MidRange	3	1882.5	Q16	2.97
FDD25	MidRange	5	1882.5	QPSK	4.86
FDD25	MidRange	5	1882.5	Q16	4.82
FDD25	MidRange	10	1882.5	QPSK	9.39
FDD25	MidRange	10	1882.5	Q16	9.35
FDD25	MidRange	15	1882.5	QPSK	14.21
FDD25	MidRange	15	1882.5	Q16	14.21
FDD25	MidRange	20	1882.5	QPSK	18.7
FDD25	MidRange	20	1882.5	Q16	18.71
FDD26	MidRange	1.4	831.5	QPSK	1.25
FDD26	MidRange	1.4	831.5	Q16	1.26
FDD26	MidRange	3	831.5	QPSK	2.97
FDD26	MidRange	3	831.5	Q16	2.97
FDD26	MidRange	5	831.5	QPSK	4.85
FDD26	MidRange	5	831.5	Q16	4.82
FDD26	MidRange	10	831.5	QPSK	9.39
FDD26	MidRange	10	831.5	Q16	9.36
FDD26	MidRange	15	831.5	QPSK	14.24



FDD26

MidRange

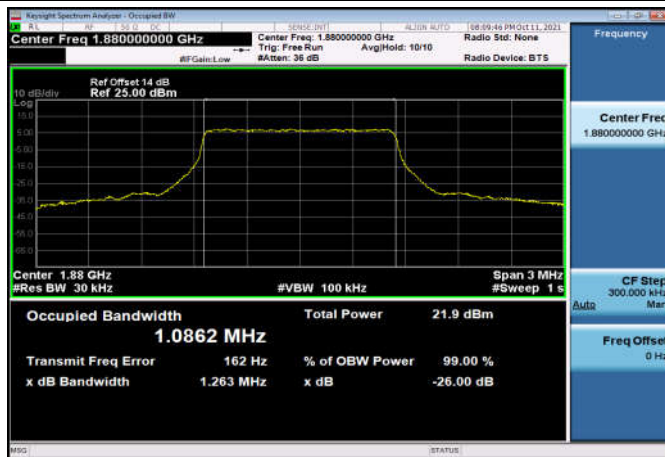
15

831.5

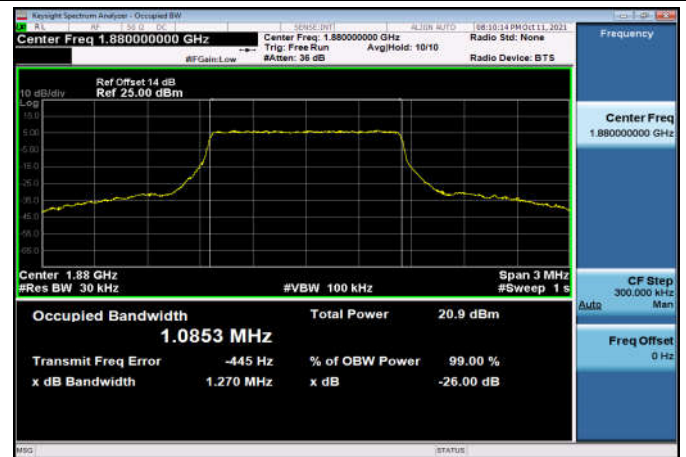
Q16

14.23

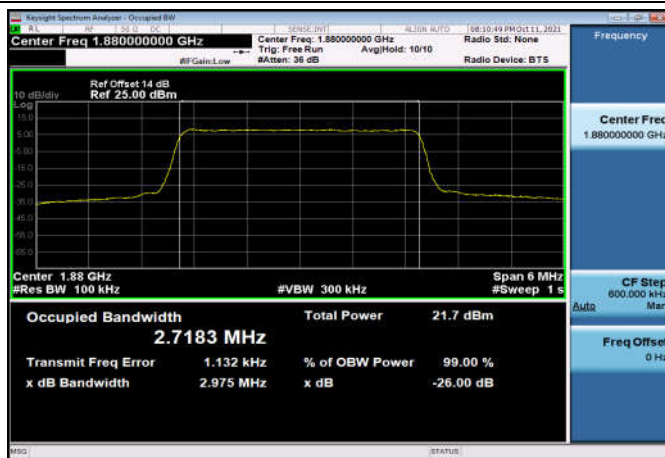
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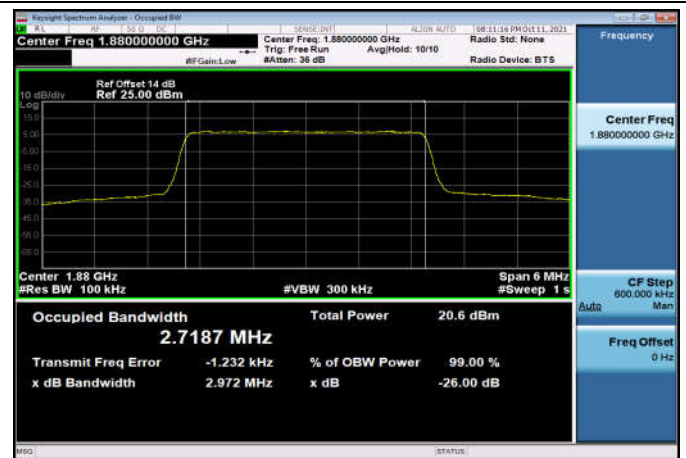
FDD02_MidRange_1.4MHz_1880MHz_Q16



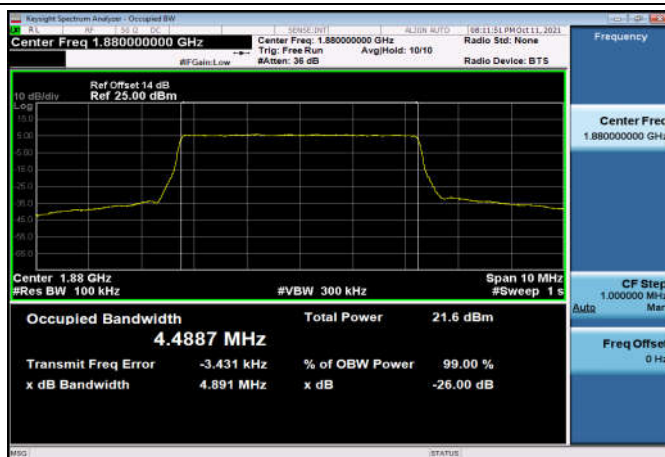
FDD02_MidRange_3MHz_1880MHz_QPSK



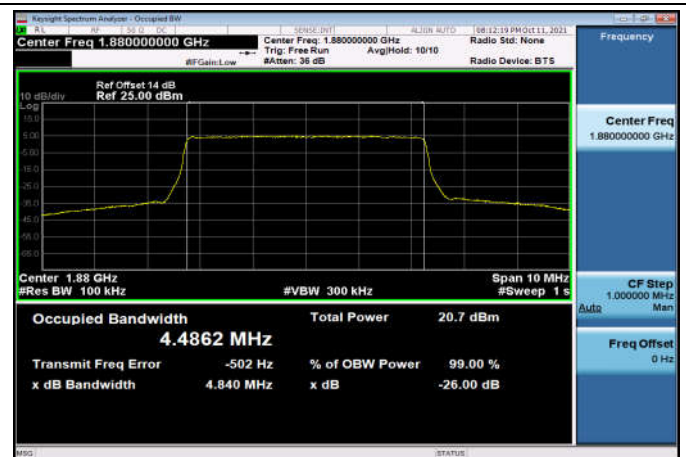
FDD02_MidRange_3MHz_1880MHz_Q16



FDD02_MidRange_5MHz_1880MHz_QPSK

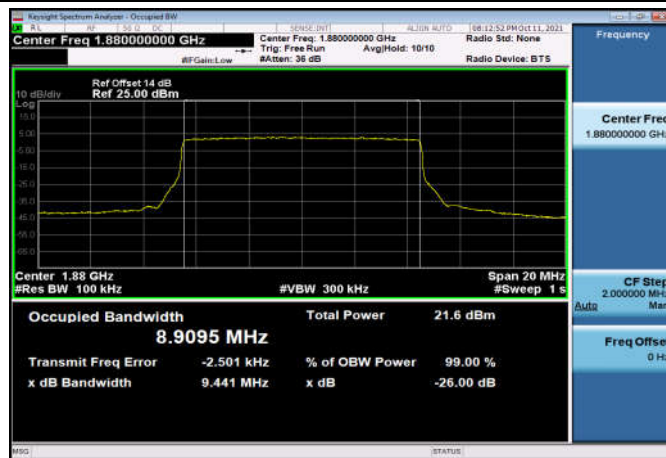


FDD02_MidRange_5MHz_1880MHz_Q16

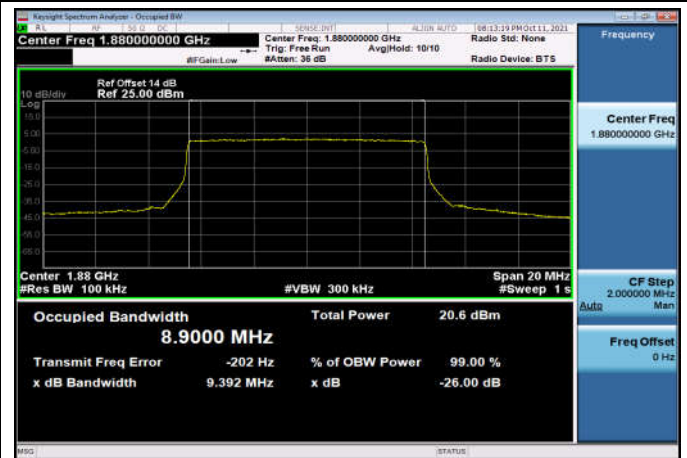




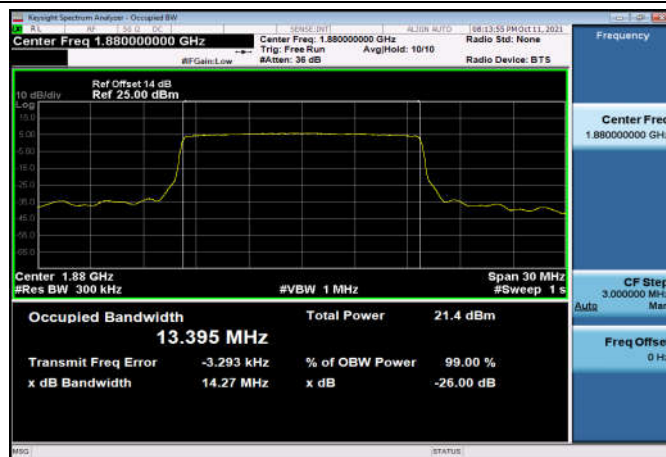
FDD02_MidRange_10MHz_1880MHz_QPSK



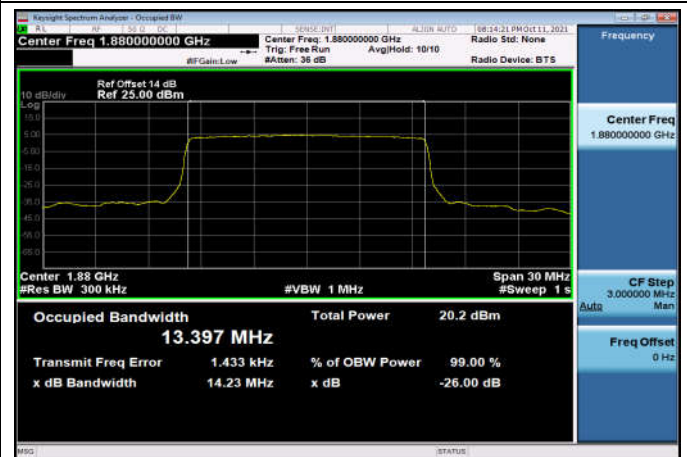
FDD02_MidRange_10MHz_1880MHz_Q16



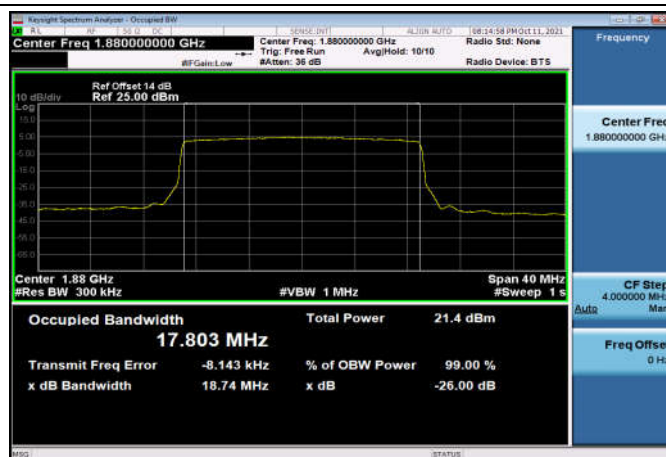
FDD02_MidRange_15MHz_1880MHz_QPSK



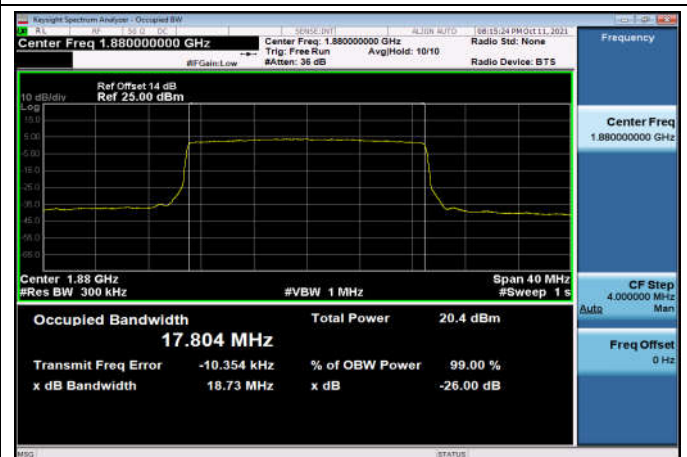
FDD02_MidRange_15MHz_1880MHz_Q16

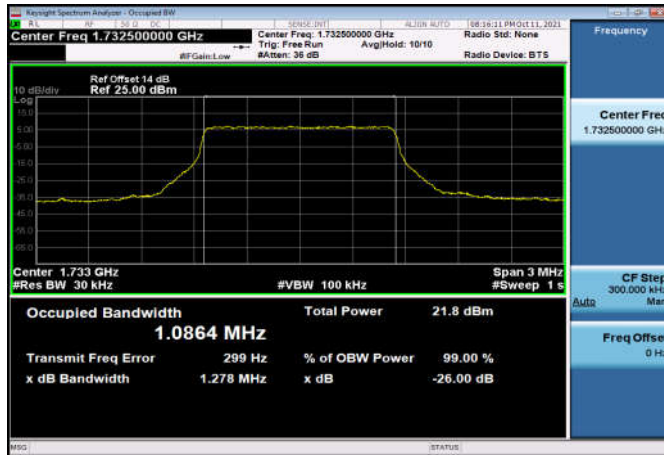
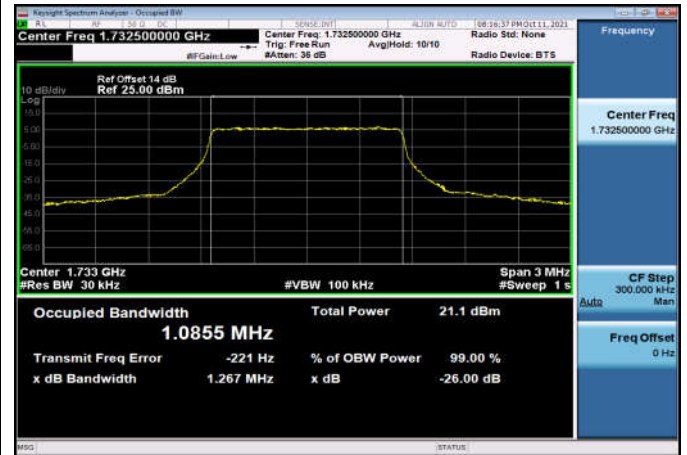


FDD02_MidRange_20MHz_1880MHz_QPSK

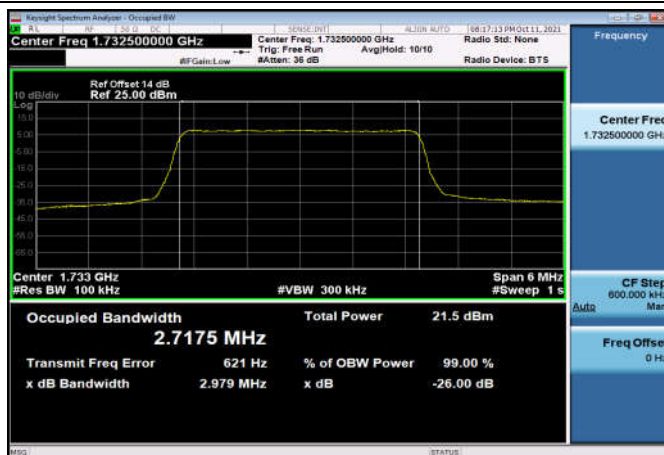


FDD02_MidRange_20MHz_1880MHz_Q16

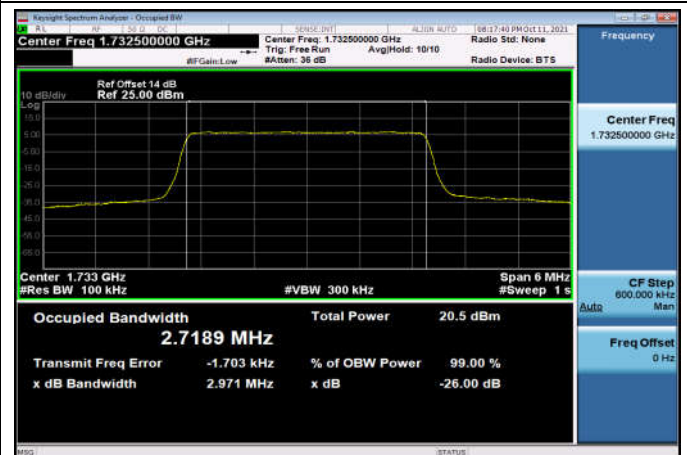


FDD04_MidRange_1.4MHz_1732.5MHz
_QPSKFDD04_MidRange_1.4MHz_1732.5MHz
_Q16

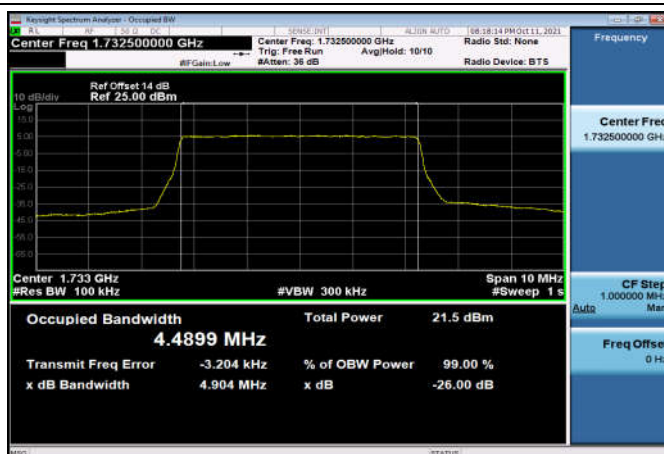
FDD04_MidRange_3MHz_1732.5MHz_QPSK



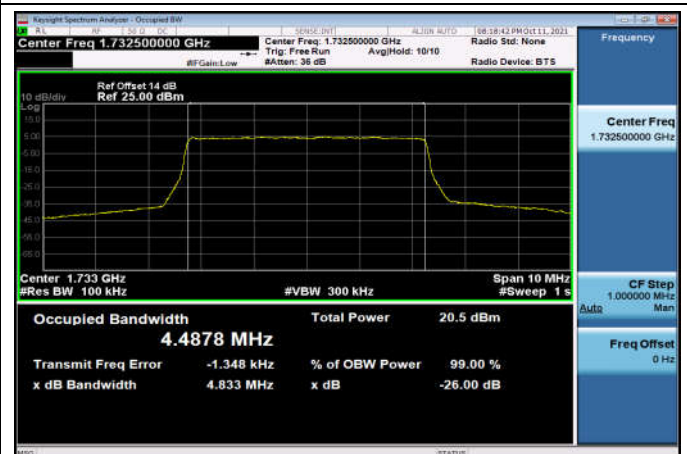
FDD04_MidRange_3MHz_1732.5MHz_Q16

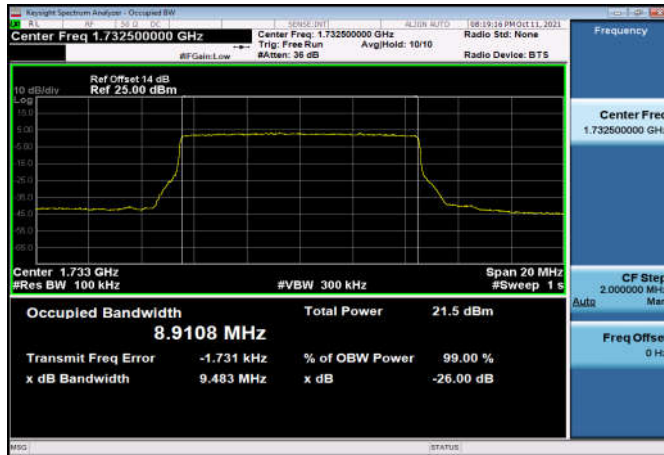
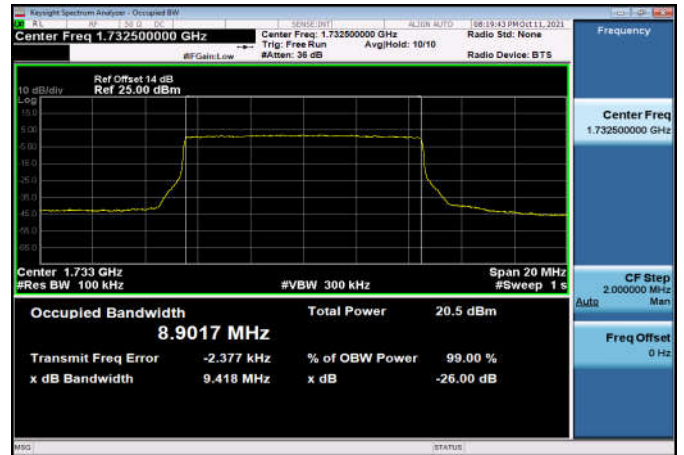
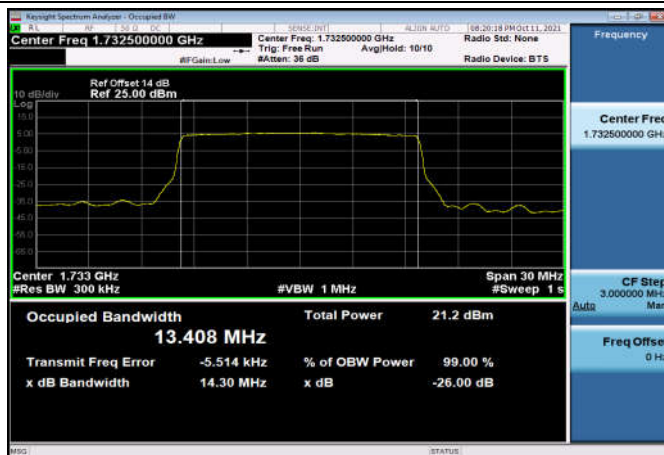
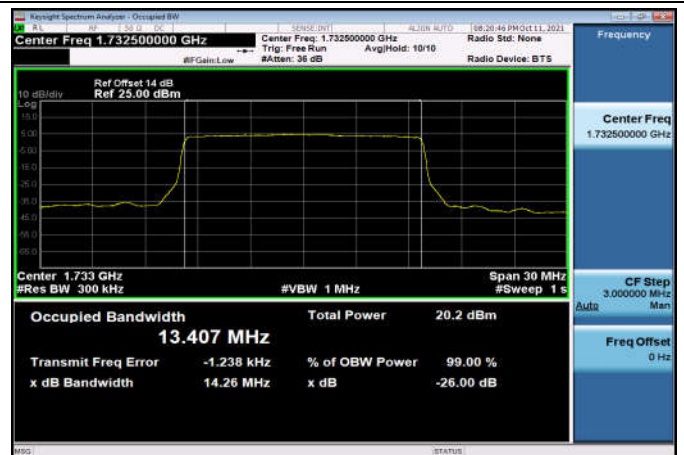
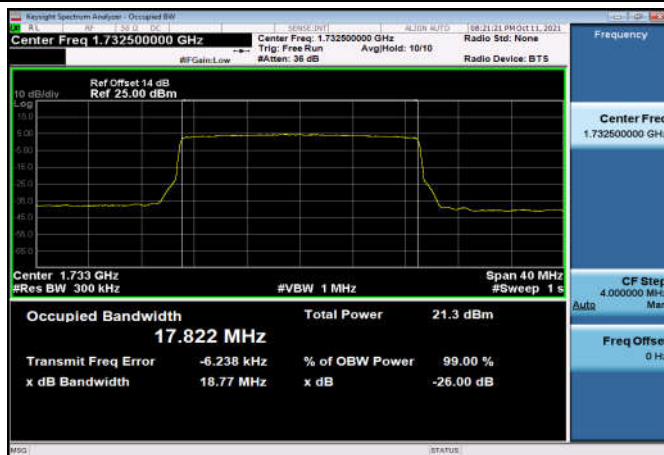
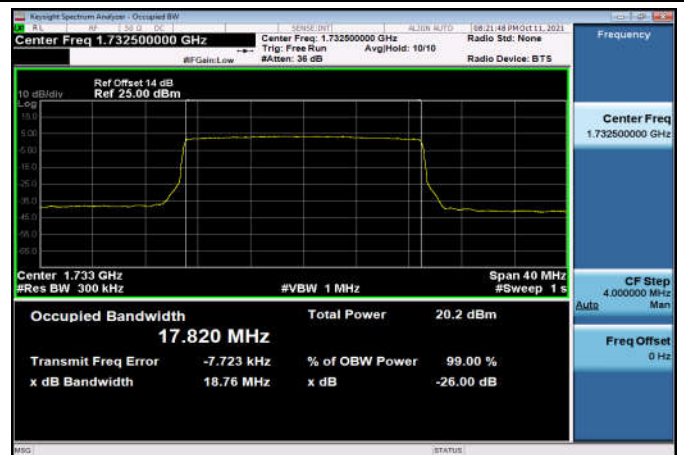


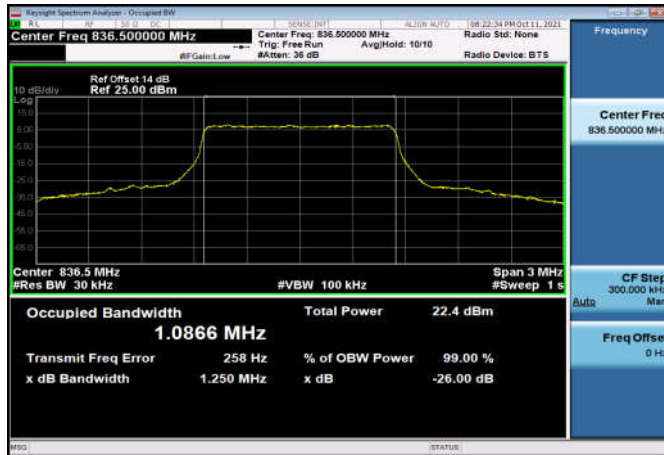
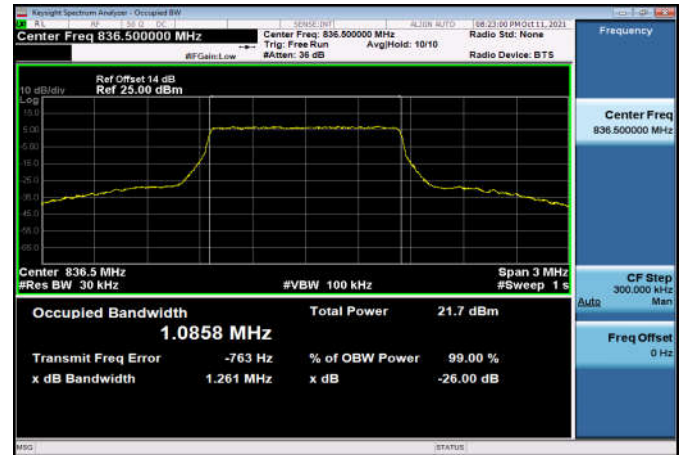
FDD04_MidRange_5MHz_1732.5MHz_QPSK



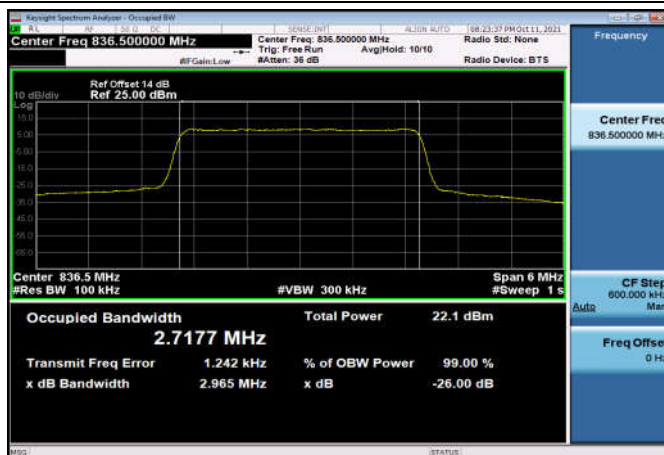
FDD04_MidRange_5MHz_1732.5MHz_Q16



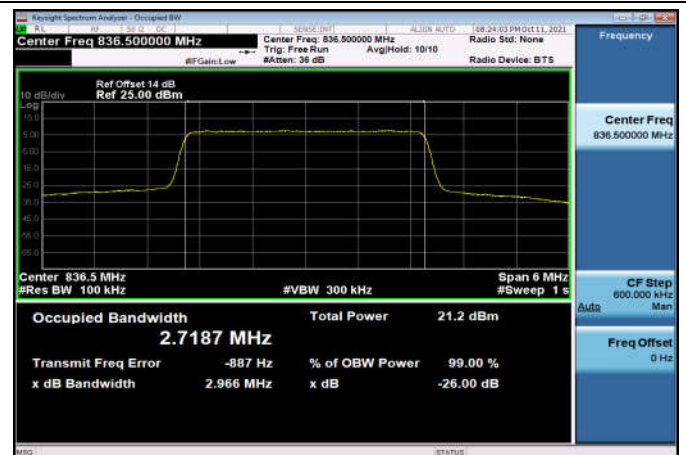
FDD04_MidRange_10MHz_1732.5MHz
_QPSKFDD04_MidRange_10MHz_1732.5MHz
_Q16FDD04_MidRange_15MHz_1732.5MHz
_QPSKFDD04_MidRange_15MHz_1732.5MHz
_Q16FDD04_MidRange_20MHz_1732.5MHz
_QPSKFDD04_MidRange_20MHz_1732.5MHz
_Q16

FDD05_MidRange_1.4MHz_836.5MHz
_QPSKFDD05_MidRange_1.4MHz_836.5MHz
_Q16

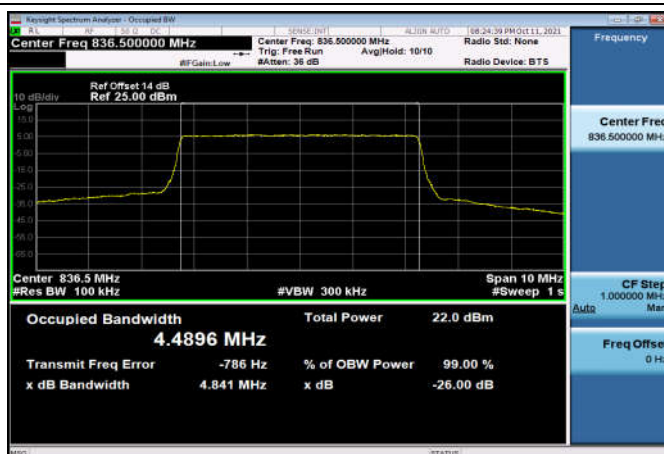
FDD05_MidRange_3MHz_836.5MHz_QPSK



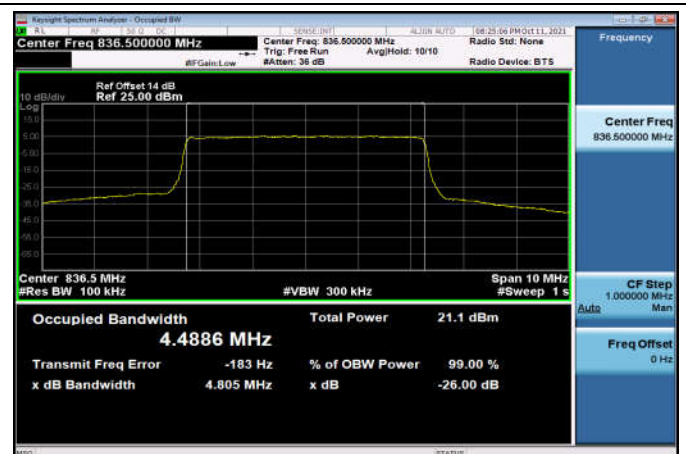
FDD05_MidRange_3MHz_836.5MHz_Q16



FDD05_MidRange_5MHz_836.5MHz_QPSK

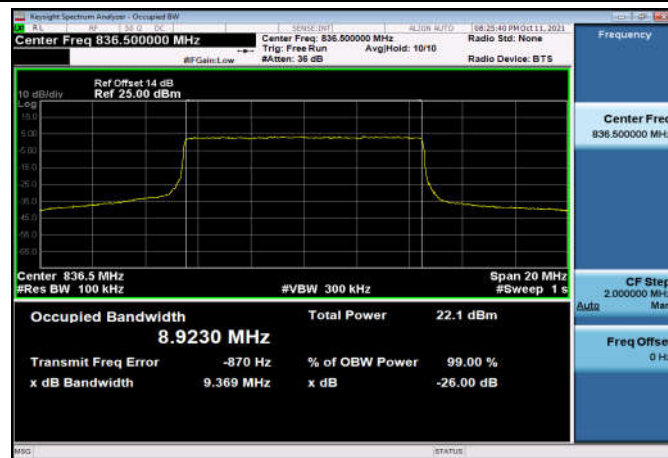


FDD05_MidRange_5MHz_836.5MHz_Q16

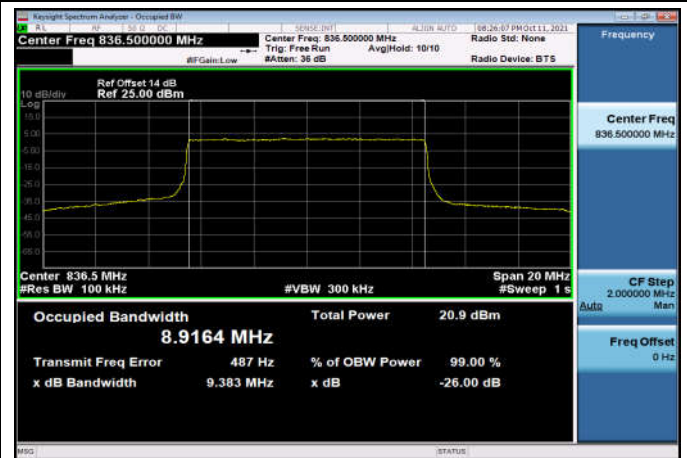




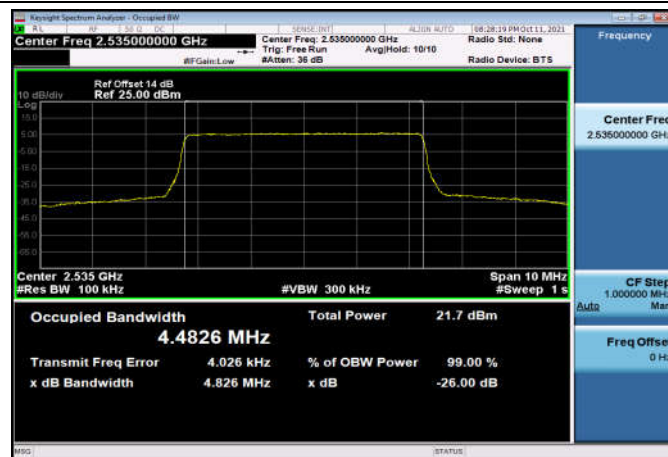
FDD05_MidRange_10MHz_836.5MHz_QPSK



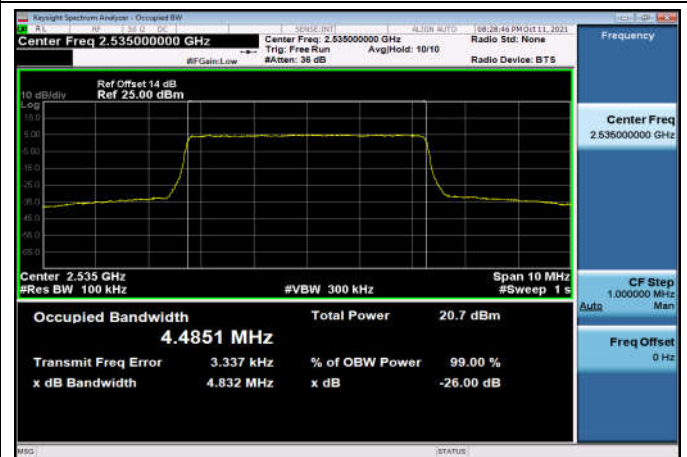
FDD05_MidRange_10MHz_836.5MHz_Q16



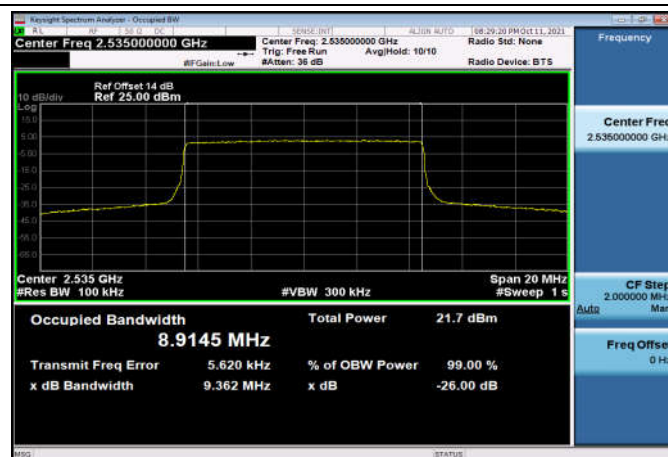
FDD07_MidRange_5MHz_2535MHz_QPSK



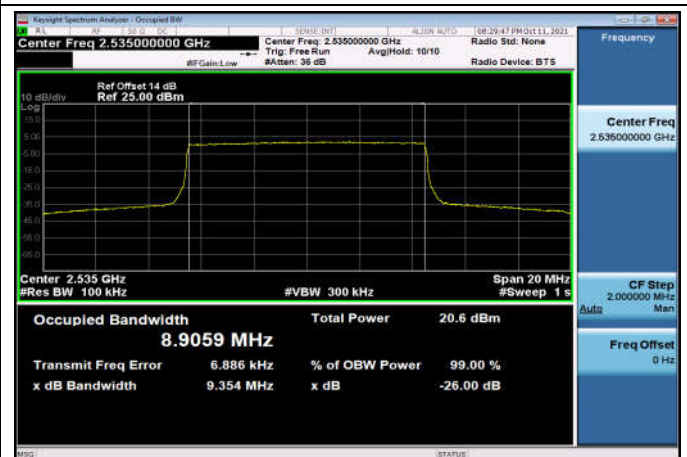
FDD07_MidRange_5MHz_2535MHz_Q16



FDD07_MidRange_10MHz_2535MHz_QPSK

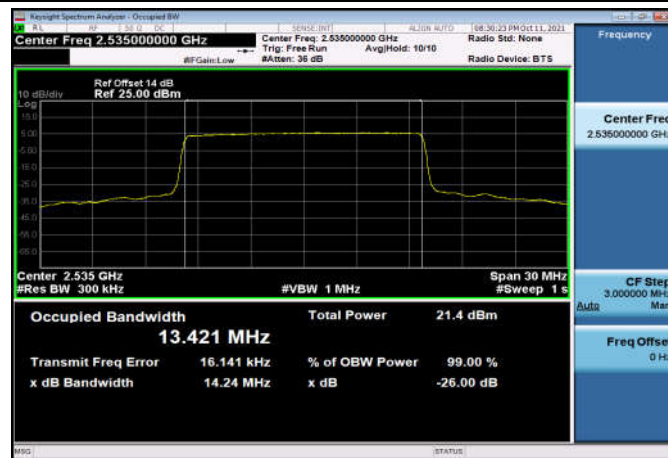


FDD07_MidRange_10MHz_2535MHz_Q16

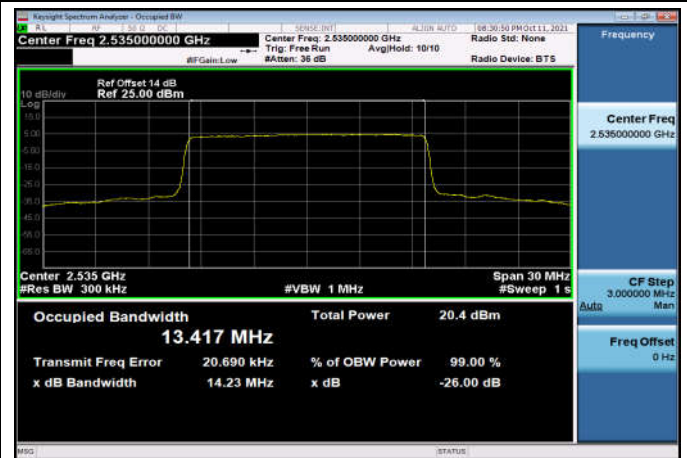




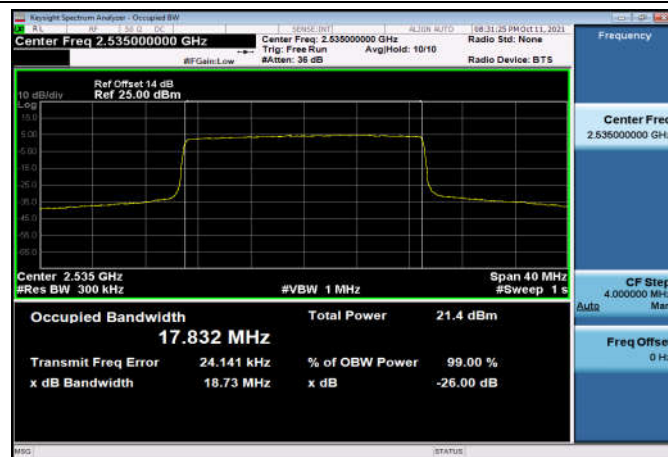
FDD07_MidRange_15MHz_2535MHz_QPSK



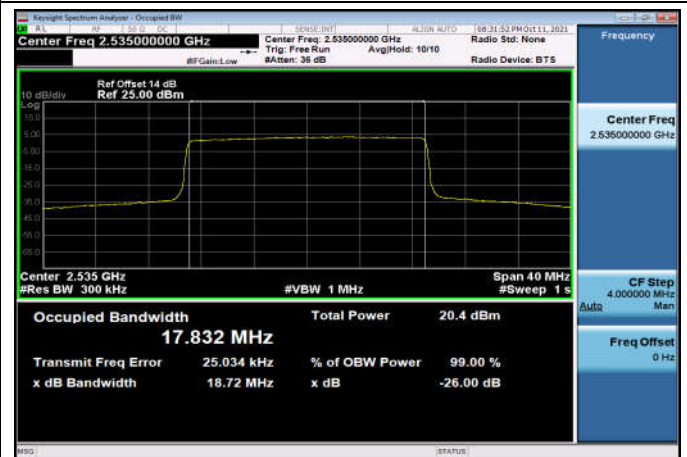
FDD07_MidRange_15MHz_2535MHz_Q16



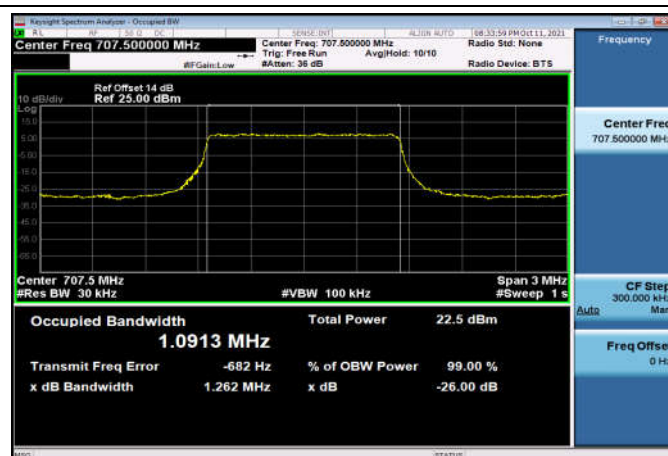
FDD07_MidRange_20MHz_2535MHz_QPSK



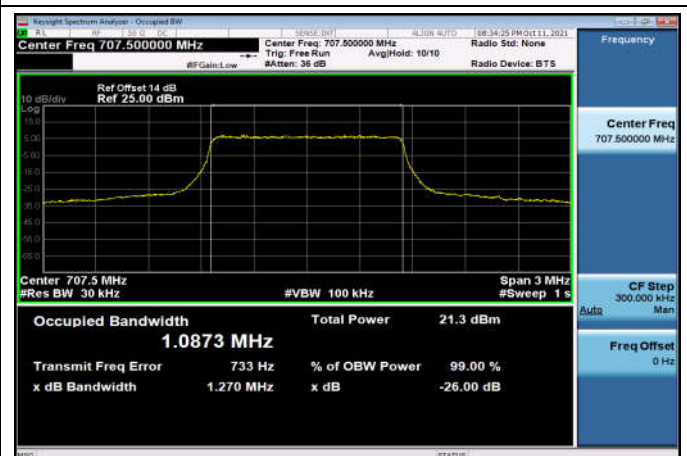
FDD07_MidRange_20MHz_2535MHz_Q16



FDD12_MidRange_1.4MHz_707.5MHz_QPSK

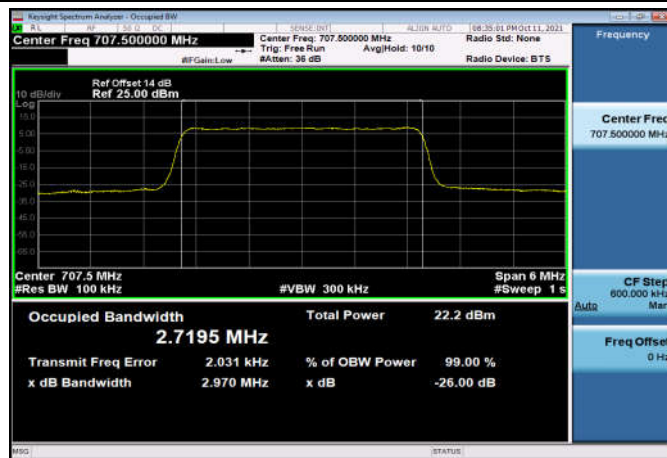


FDD12_MidRange_1.4MHz_707.5MHz_Q16

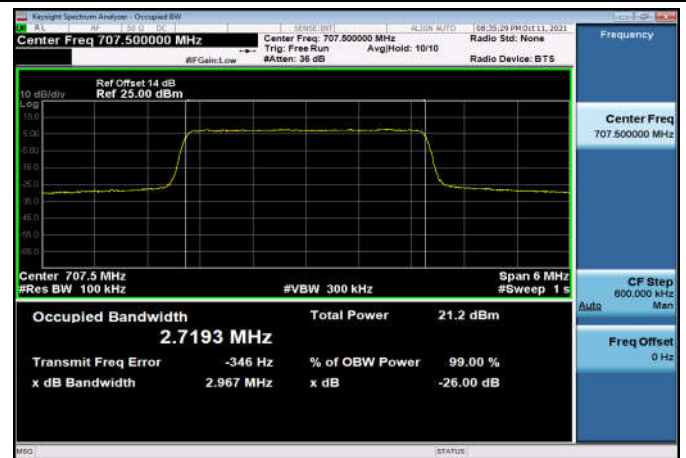




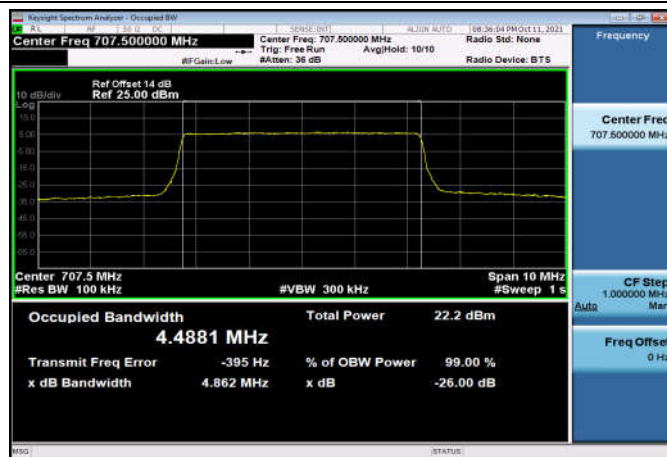
FDD12_MidRange_3MHz_707.5MHz_QPSK



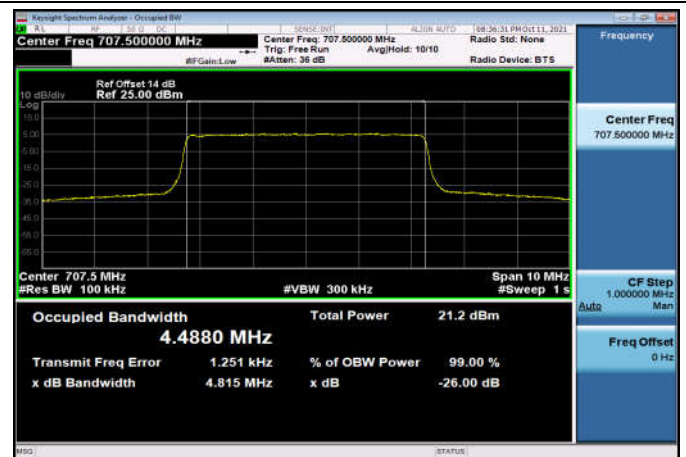
FDD12_MidRange_3MHz_707.5MHz_Q16



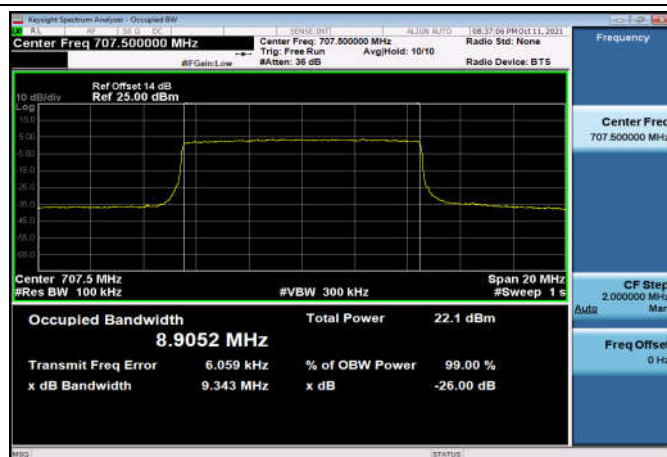
FDD12_MidRange_5MHz_707.5MHz_QPSK



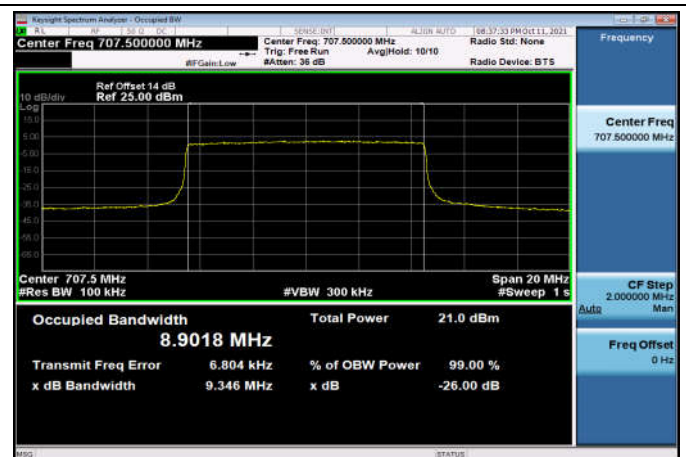
FDD12_MidRange_5MHz_707.5MHz_Q16



FDD12_MidRange_10MHz_707.5MHz_QPSK

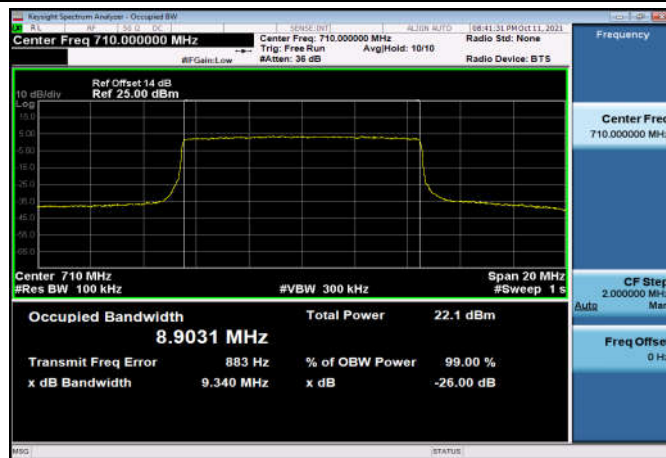


FDD12_MidRange_10MHz_707.5MHz_Q16

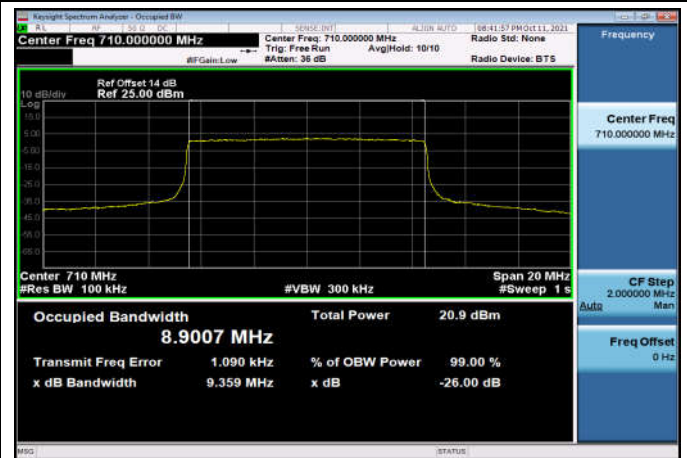




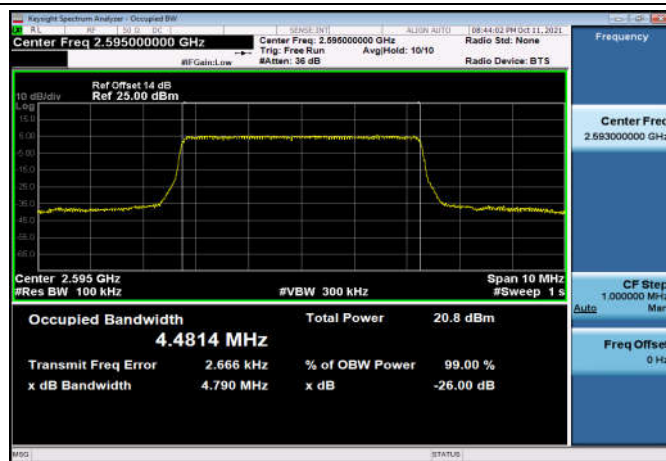
FDD17_MidRange_10MHz_710MHz_QPSK



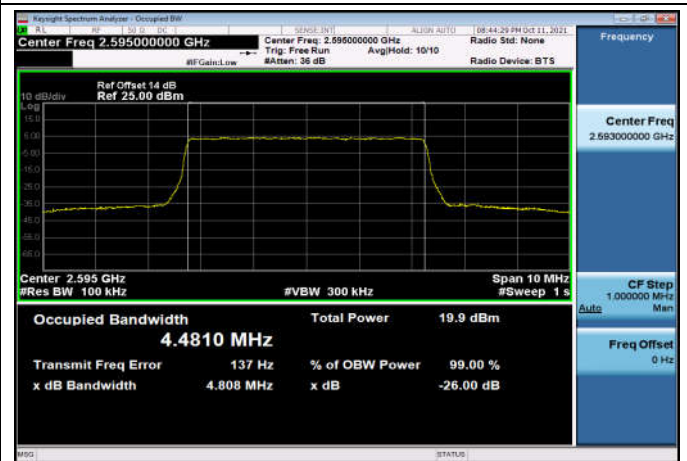
FDD17_MidRange_10MHz_710MHz_Q16



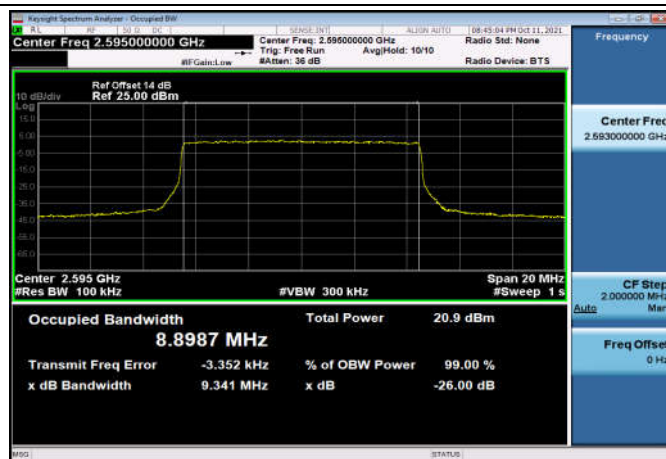
TDD41_MidRange_5MHz_2595MHz_QPSK



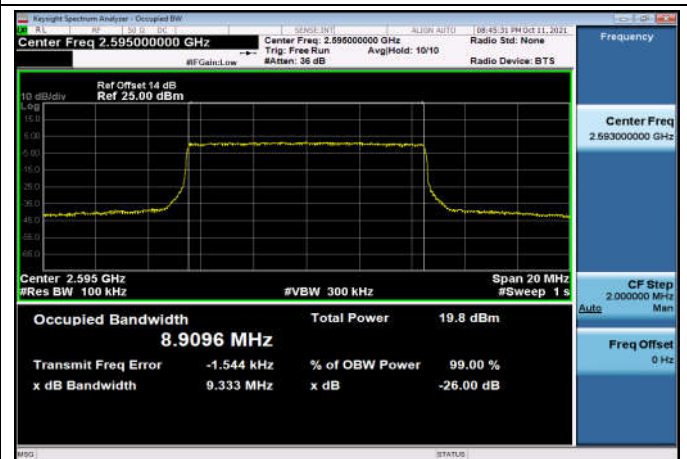
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TDD41_MidRange_10MHz_2595MHz_QPSK

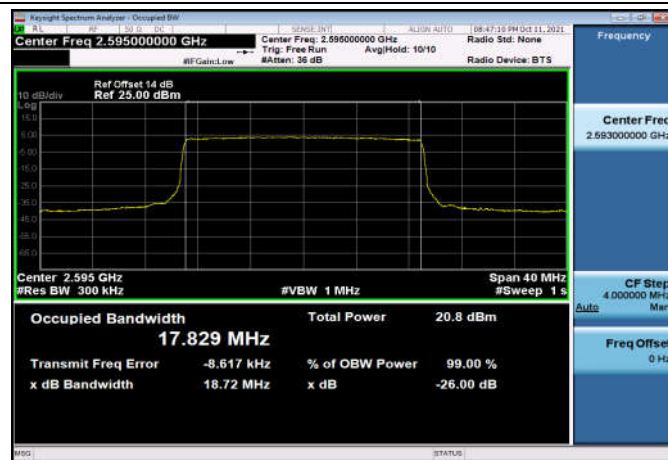


TDD41_MidRange_10MHz_2595MHz_Q16

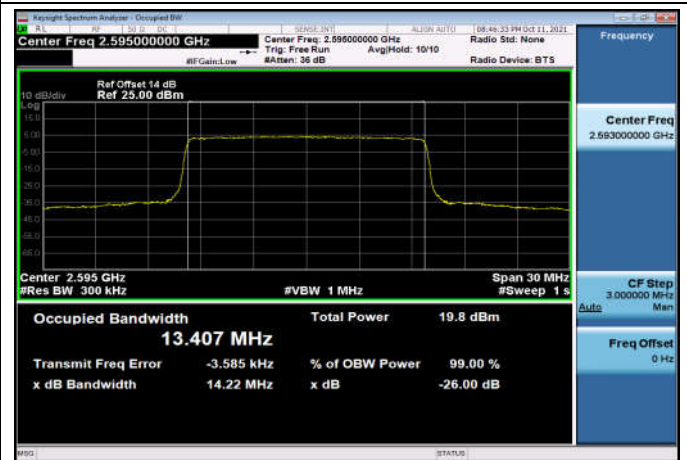




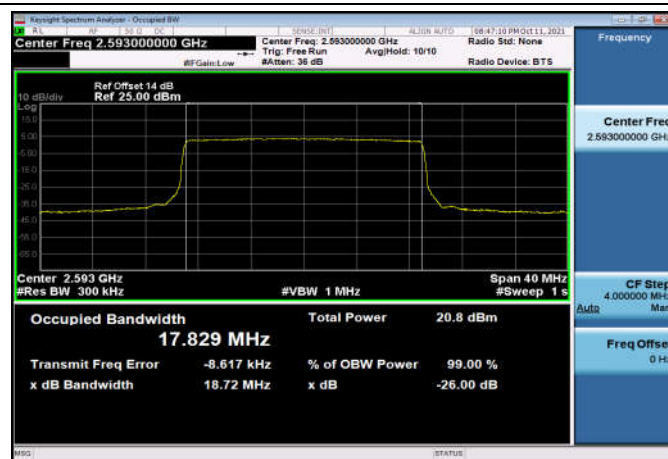
TDD41_MidRange_15MHz_2595MHz_QPSK



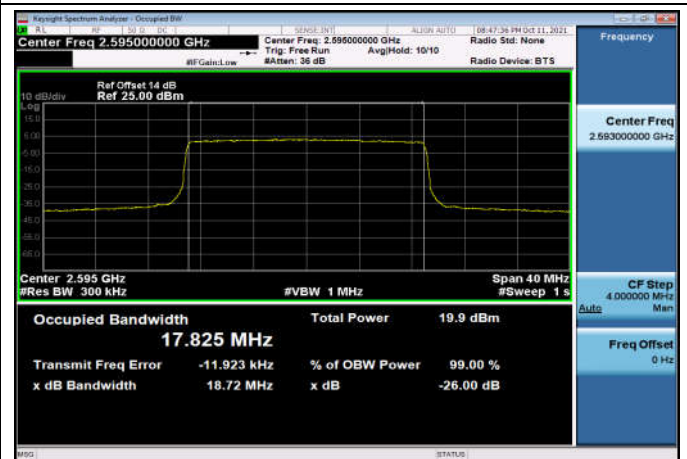
TDD41_MidRange_15MHz_2595MHz_Q16



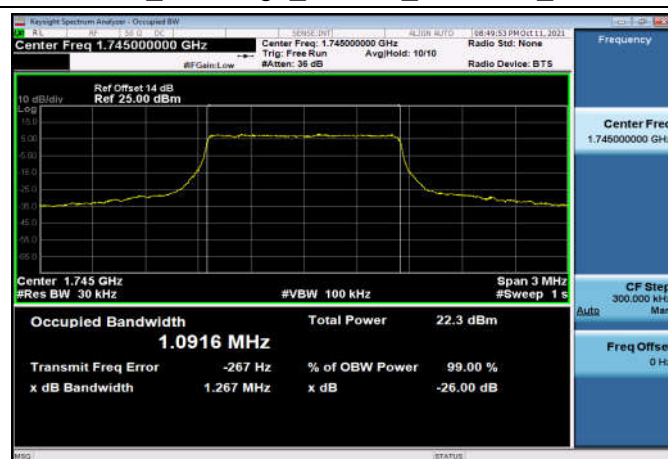
TDD41_MidRange_20MHz_2595MHz_QPSK



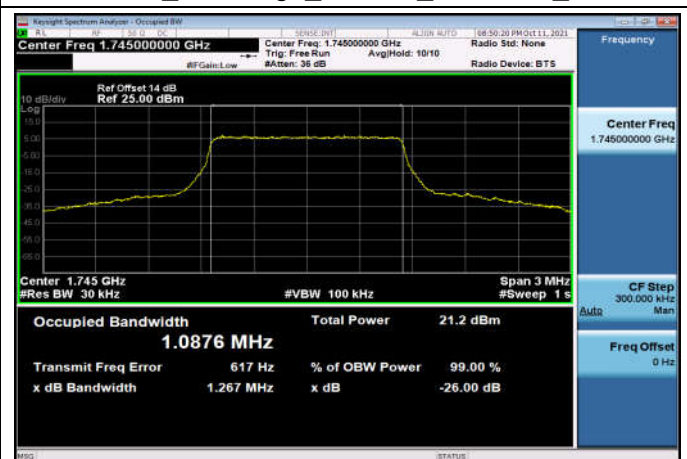
TDD41_MidRange_20MHz_2595MHz_Q16



FDD66_MidRange_1.4MHz_1745MHz_QPSK

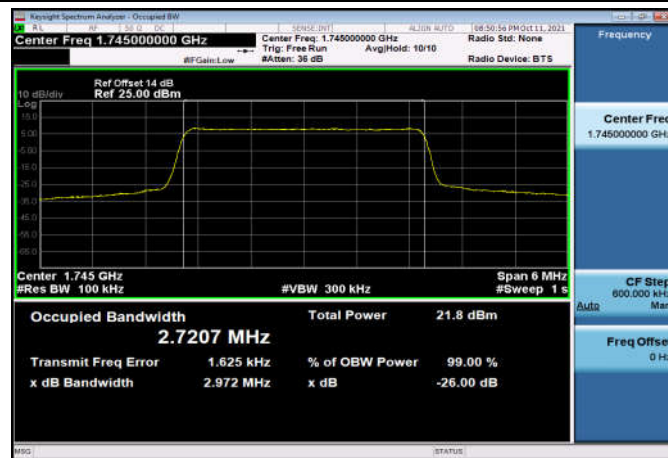


FDD66_MidRange_1.4MHz_1745MHz_Q16

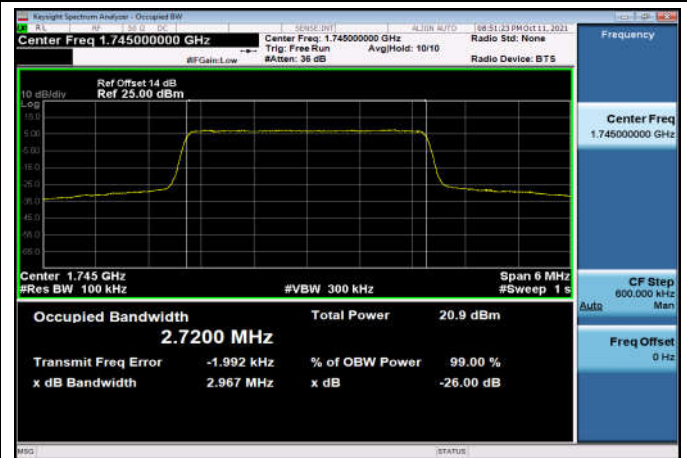




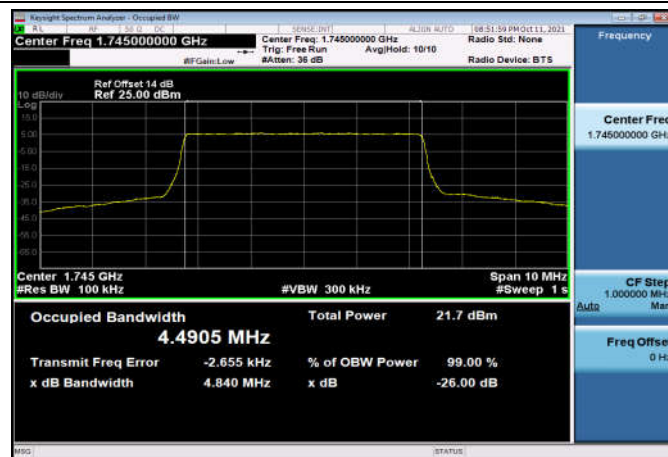
FDD66_MidRange_3MHz_1745MHz_QPSK



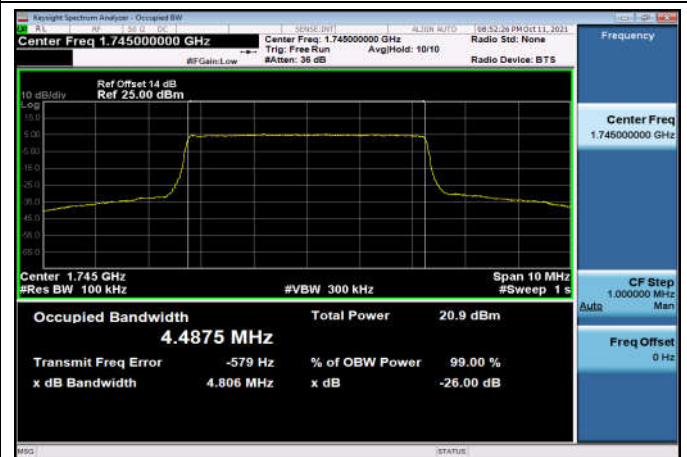
FDD66_MidRange_3MHz_1745MHz_Q16



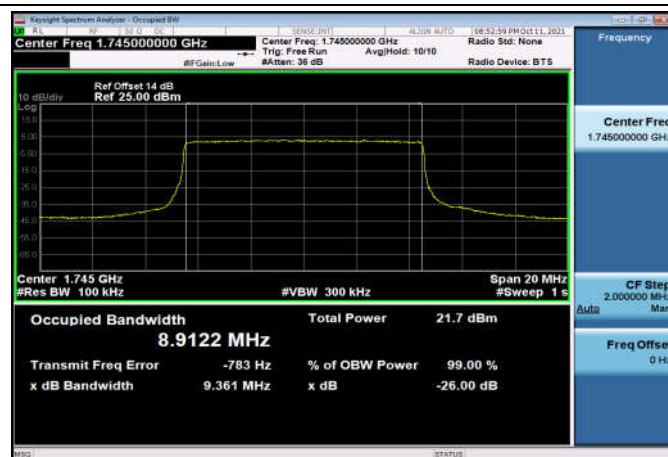
FDD66_MidRange_5MHz_1745MHz_QPSK



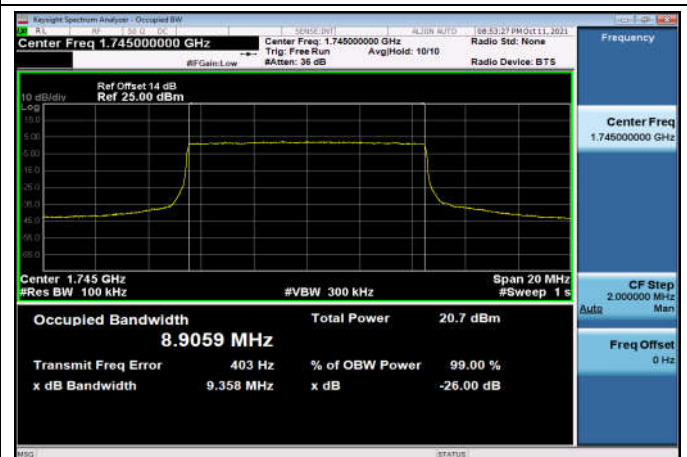
FDD66_MidRange_5MHz_1745MHz_Q16



FDD66_MidRange_10MHz_1745MHz_QPSK

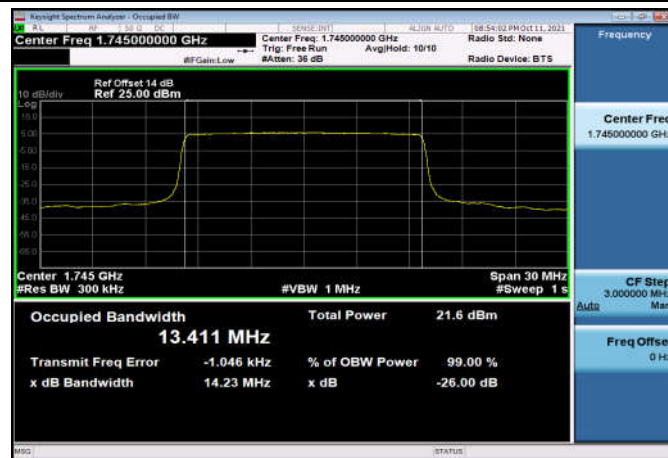


FDD66_MidRange_10MHz_1745MHz_Q16

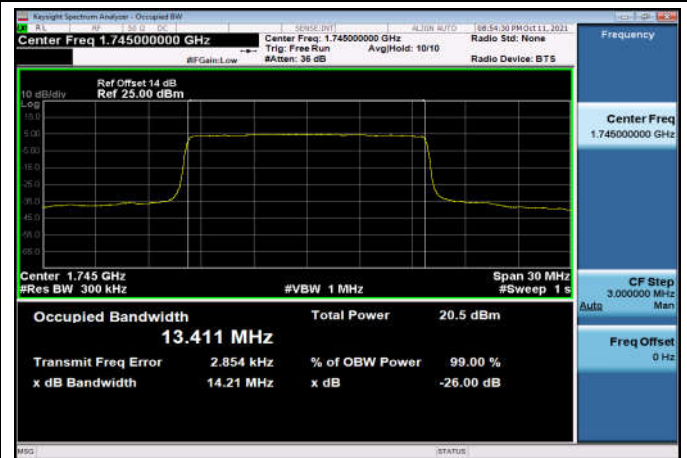




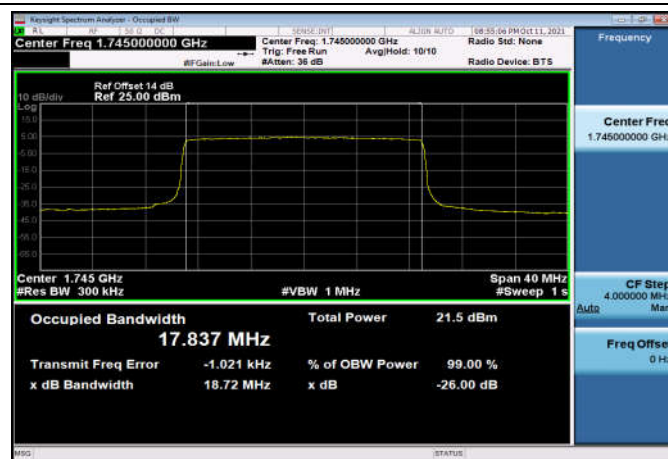
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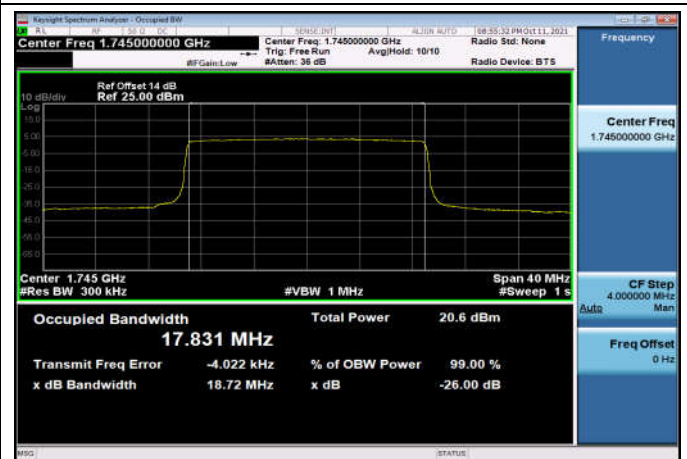
FDD66_MidRange_15MHz_1745MHz_Q16



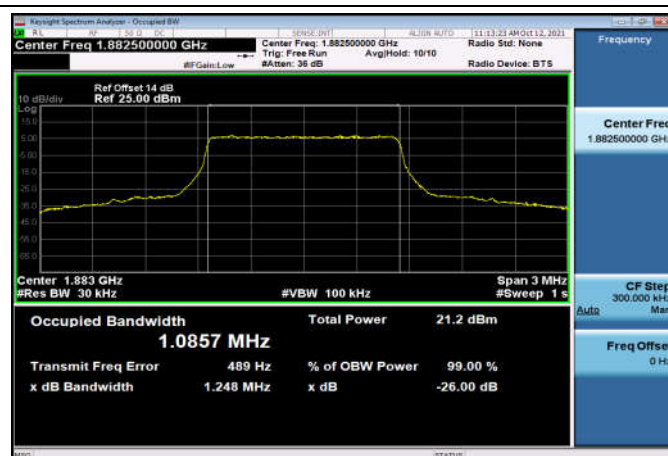
FDD66_MidRange_20MHz_1745MHz_QPSK



FDD66_MidRange_20MHz_1745MHz_Q16



FDD25_MidRange_1.4MHz_1882.5MHz_QPSK



FDD25_MidRange_1.4MHz_1882.5MHz_Q16

