

FCC TEST REPORT

For

LTE MODULE

Model Number: GLMM18A02

FCC ID: 2AC88-GLMM18A02

Report Number : WT188005920

Test Laboratory : Shenzhen Academy of Metrology and Quality
Inspection
Site Location : NETC Building, No.4 Tongfa Rd., Xili, Nanshan,
Shenzhen, China
Tel : 0086-755-86928965
Fax : 0086-755-86009898-31396
Web : www.smq.com.cn
E-mail : emcrf@smq.com.cn

Test report declaration

Applicant : HONGKONG UCLOUDLINK NETWORK TECHNOLOGY LIMITED
Address : Suite 603, 6/F, Laws Commercial Plaza, 788 Cheung Sha Wan Road, Kowloon, HongKong
Manufacturer : HONGKONG UCLOUDLINK NETWORK TECHNOLOGY LIMITED
Address : Suite 603, 6/F, Laws Commercial Plaza, 788 Cheung Sha Wan Road, Kowloon, HongKong
EUT Description : LTE MODULE
Model No : GLMM18A02
Trade mark : GlocalMe
FCC ID : 2AC88-GLMM18A02

Test Standards:
FCC PART 27 AND 90S

The EUT described above is tested by Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory to determine the maximum emissions from the EUT. Shenzhen Academy of Metrology and Quality Inspection EMC Laboratory is assumed full responsibility for the accuracy of the test results. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.26 (2015) & KDB971168 and the energy emitted by the sample EUT tested as described in this report is in compliance with FCC Rules Part 27and 90S.

The test report is valid for above tested sample only and shall not be reproduced in part without written approval of the laboratory.

Project Engineer:	 _____ (Chen Silin 陈司林)	Date:	Jan.17, 2019 _____
Checked by:	 _____ (Lin Yixiang 林奕翔)	Date:	Jan.17, 2019 _____
Approved by:	 _____ (Lin Bin 林斌)	Date:	Jan.17, 2019 _____

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1. TEST RESULTS SUMMARY

Table 1 Test Results Summary

FCC Measurement Specification	FCC Limits Part(s)	Description	Result
2.1046	27.50(c) 90.205 90.635	Effective Radiated Power of Transmitter	PASS
2.1046	27.50(c)	Peak to Average Ratio	PASS
2.1049	27.50(c) 90.209	Occupied Bandwidth	PASS
2.1051	27.53 90.669	Spurious Emission at Antenna Terminal	PASS
2.1053	27.53 90.210	Radiated Spurious Emissions	PASS
2.1055	27.54 90.213	Frequency Stability	PASS

Remark: "N/A" means "Not applicable."

The tests documented in this report were performed in accordance with ANSI C63.26 (2015), FCC CFR 47 Part 2, FCC CFR 47 Part 27, Part 90S.

2. GENERAL INFORMATION

2.1. Report information

This report is not a certificate of quality; it only applies to the sample of the specific product/equipment given at the time of its testing. The results are not used to indicate or imply that they are application to the similar items. In addition, such results must not be used to indicate or imply that SMQ approves recommends or endorses the manufacture, supplier or use of such product/equipment, or that SMQ in any way guarantees the later performance of the product/equipment.

The samples mentioned in this report is/are supplied by Applicant, SMQ therefore assumes no responsibility for the accuracy of information on the brand name, model number, origin of manufacture or any information supplied.

Additional copies of the report are available to the Applicant at an additional fee. No third part can obtain a copy of this report through SMQ, unless the applicant has authorized SMQ in writing to do so.

2.2. Laboratory Accreditation and Relationship to Customer

The testing report were performed by the Shenzhen Academy of Metrology and The testing report were performed by the Shenzhen Academy of Metrology and quality Inspection EMC Laboratory (Guangdong EMC compliance testing center), in their facilities located at NETC Building, No.4 Tongfa Rd., Xili, Nanshan, Shenzhen, China. At the time of testing, Laboratory is accredited by the following organizations:

China National Accreditation Service for Conformity Assessment (CNAS) accredits the Laboratory for conformance to FCC standards, EMC international standards and EN standards. The Registration Number is CNAS L0579.

The Laboratory is Accredited Testing Laboratory of FCC with Designation number CN1165 and Site registration number 582918.

The Laboratory is registered to perform emission tests with Innovation, Science and Economic Development (ISED), and the registration number is 11177A.

2.3. Measurement Uncertainty

For a 95% confidence level ($k = 2$), the measurement expanded uncertainties for defined systems, in accordance with the recommendations of ISO 17025 as following:

Radiated Emission

30MHz~1000MHz 4.5dB

1GHz~26.5GHz 4.6dB

26dB & Occupied Bandwidth: $\pm 0.39\%$

Frequency Stability: $\pm 0.42\%$

Peak to Average Ratio: 0.45 dB

Conducted power : 0.3 dB

Temperature: ± 0.698

Supply voltages: $\pm 0.15\%$

3. PRODUCT DESCRIPTION

3.1.EUT Description

Table 2 Specification of the Equipment under Test

Product Type:	LTE MODULE	
Hardware Revision :	M2_VB(manufacturer declare)	
Software Revision :	GLMM18A01_TSV1.0.000.005.180821_userdebug (manufacturer declare)	
FCC ID:	2AC88-GLMM18A02	
Frequency:	LTE Band 12: TX 699 ~ 716 MHz RX 729 ~ 746MHz LTE Band 17: TX 704 ~ 716 MHz RX 734 ~ 746MHz LTE Band 26: TX 814 ~ 849 MHz RX 859 ~ 894MHz	
Type(s) of Modulation:	LTE:QPSK, 16QAM	
Antenna Type:	External antenna Typical gain: -0.5dBi	
Operating voltage:	DC: 2.805V (Low)/3.3V (Nominal)/ 3.795V (Max)	

Table 3 Identification of the Equipment Under Test (EUT)

EUT	Serial Number/IMEI	HW Version	SW Version	Notes
1	862462040015355	M2_VB(manufacturer declare)	GLMM18A01_TSV1.0.000.005.180821_userdebug (manufacturer declare)	Conducted testing sample.
2.	868673029004798	M2_VB(manufacturer declare)	GLMM18A01_TSV1.0.000.005.180821_userdebug (manufacturer declare)	Conducted testing sample.
3	868673029004798	M2_VB(manufacturer declare)	GLMM18A01_TSV1.0.000.005.180821_userdebug (manufacturer declare)	Radiated testing sample.

Table 4 Identification of Accessory equipment

AE #	Type	Manufacturer	Model	Serial Number
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3.2. Related Submittal(s) / Grant (s)

This submittal(s) (test report) is intended for FCC ID: 2AC88-GLMM18A02 filing to comply with FCC PART 27 and 90S.

3.3. Block Diagram of EUT Configuration

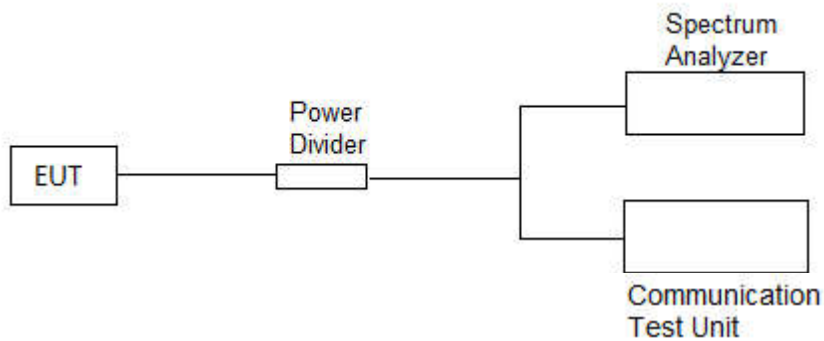


Figure 1 EUT setup of test mode 1&2

3.4. Operating Condition of EUT

During all testing, EUT is in link mode with base station emulator at maximum power level. The spurious emission measurements were carried out in semi-anechoic chamber with 3-meter test range, and EUT is rotated on three test planes to find out the worst emission (X plane).

- TM1:** LTE Mode with QPSK Modulation
- TM2:** LTE Mode with 16QAM Modulation

The maximum power levels are k, LTE Mode for QPSK link , LTE mode for 16QAM link, only these modes were used for all tests.

The conducted power tables are as follows:
 LTE Band 12(1.4MHz)

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power [dBm]
			Size	Offset	
QPSK	23017	699.7	1	0	23.18
			1	3	23.19
			1	5	23.17
			3	0	23.17
			3	2	23.15
			3	3	23.07
	23095	707.5	1	0	23.08
			1	3	23.23
			1	5	23.20
			3	0	23.11
			3	2	23.08
			3	3	23.03
	23173	715.3	6	0	22.13
			1	0	23.09
			1	3	23.20
			1	5	23.00
			3	0	23.11
			3	2	23.18
16QAM	23017	699.7	3	3	23.06
			6	0	22.34
			1	0	23.17
			1	3	23.20
			1	5	23.24
			3	0	22.27
	23095	707.5	3	2	22.28
			3	3	22.26
			6	0	21.15
			1	0	23.00
			1	3	22.76
			1	5	22.73
	23173	715.3	3	0	21.77
			3	2	21.86
			3	3	21.95
			6	0	20.94
			1	0	22.52
			1	3	22.44
23173	715.3	1	5	22.53	
		3	0	22.17	
		3	2	22.03	
		3	3	22.20	
		6	0	21.43	
		6	0	21.43	

LTE Band 12(3MHz)

Channel Bandwidth: 3 MHz					
Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power [dBm]
			Size	Offset	
QPSK	23025	700.5	1	0	22.10
			1	7	21.76
			1	14	21.44
			8	0	21.97
			8	4	21.81
			8	7	21.65
	23095	707.5	15	0	21.80
			1	0	21.98
			1	7	22.32
			1	14	22.15
			8	0	22.17
			8	4	22.31
	23165	714.5	8	7	22.29
			8	0	22.26
			1	0	21.60
			1	7	22.11
			1	14	22.08
			8	0	21.89
16QAM	23025	700.5	8	4	22.04
			8	7	22.06
			15	0	21.99
			1	0	22.34
			1	7	22.04
			1	14	21.75
	23095	707.5	8	0	21.42
			8	4	21.40
			8	7	21.39
			15	0	21.36
			1	0	22.10
			1	7	22.50
	23165	714.5	1	14	22.34
			8	0	21.28
			8	4	21.43
			8	7	21.42
			15	0	21.29
			1	0	21.80
23025	700.5	1	7	22.34	
		1	14	22.28	
		8	0	21.39	
		8	4	21.44	
		8	7	21.49	
		15	0	21.48	

LTE Band 12(5MHz)

Channel Bandwidth: 5 MHz					
Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power [dBm]
			Size	Offset	
QPSK	23035	701.5	1	0	21.79
			1	12	21.68
			1	24	21.41
			12	0	21.73
			12	6	21.66
			12	13	21.52
	23095	707.5	25	0	21.63
			1	0	21.65
			1	12	22.42
			1	24	21.54
			12	0	21.98
			12	6	22.31
	23155	713.5	12	13	22.13
			25	0	22.09
			1	0	21.39
			1	12	21.88
			1	24	21.82
			12	0	21.53
16QAM	23035	701.5	12	6	21.80
			12	13	21.90
			25	0	21.74
			1	0	21.92
			1	12	21.81
			1	24	21.63
	23095	707.5	12	0	21.45
			12	6	21.42
			12	13	21.47
			25	0	21.51
			1	0	21.71
			1	12	22.52
	23155	713.5	1	24	21.69
			12	0	21.12
			12	6	21.22
			12	13	21.17
			25	0	21.38
			1	0	21.53
23035	701.5	1	12	22.08	
		1	24	22.06	
		12	0	21.35	
		12	6	21.50	
		12	13	21.50	
		25	0	21.62	

LTE Band 12(10MHz)

Channel Bandwidth: 10 MHz					
Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power [dBm]
			Size	Offset	
QPSK	23060	704	1	0	21.76
			1	24	21.94
			1	49	22.49
			25	0	21.69
			25	12	21.92
			25	25	22.34
	23095	707.5	50	0	22.02
			1	0	21.40
			1	24	22.34
			1	49	21.51
			25	0	21.93
			25	12	22.25
	23130	711	25	25	22.13
			50	0	22.04
			1	0	21.88
			1	24	21.63
			1	49	21.88
			25	0	22.05
16QAM	23060	704	25	12	21.76
			25	25	21.75
			50	0	21.89
			1	0	22.05
			1	24	22.26
			1	49	22.80
	23095	707.5	25	0	21.49
			25	12	21.51
			25	25	21.45
			50	0	21.36
			1	0	21.57
			1	24	22.53
	23130	711	1	49	21.71
			25	0	21.37
			25	12	21.39
			25	25	21.38
			50	0	21.42
			1	0	22.06
23130	711	1	24	21.86	
		1	49	22.15	
		25	0	21.26	
		25	12	21.37	
		25	25	21.50	
		50	0	21.42	

LTE Band 17(5MHz)

Channel Bandwidth: 5 MHz					
Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power [dBm]
			Size	Offset	
QPSK	23755	706.5	1	0	23.30
			1	12	23.37
			1	24	23.31
			12	0	22.33
			12	6	22.46
			12	13	22.37
	23790	710	25	0	22.45
			1	0	23.35
			1	12	23.17
			1	24	22.36
			12	0	22.39
			12	6	22.31
	23825	713.5	12	13	22.40
			25	0	22.48
			1	0	22.70
			1	12	22.90
			1	24	22.77
			12	0	22.49
16QAM	23755	706.5	12	6	22.40
			12	13	22.45
			25	0	22.56
			1	0	22.37
			1	12	22.33
			1	24	22.43
	23790	710	12	0	21.35
			12	6	21.28
			12	13	21.24
			25	0	21.34
			1	0	22.99
			1	12	22.91
	23825	713.5	1	24	22.51
			12	0	21.37
			12	6	21.40
			12	13	21.47
			25	0	21.54
			1	0	22.12
23825	713.5	1	12	22.29	
		1	24	22.31	
		12	0	21.30	
		12	6	21.41	
		12	13	21.41	
		25	0	21.62	

LTE Band 17(10MHz)

Channel Bandwidth: 10 MHz					
Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power [dBm]
			Size	Offset	
QPSK	23780	709	1	0	22.79
			1	24	23.36
			1	49	22.38
			25	0	22.43
			25	12	22.34
			25	25	22.53
	23790	710	50	0	22.31
			1	0	22.73
			1	24	22.87
			1	49	22.66
			25	0	22.49
			25	12	22.49
	23800	711	25	25	22.44
			50	0	22.44
			1	0	22.50
			1	24	22.30
			1	49	22.45
			25	0	22.37
16QAM	23780	709	25	12	22.41
			25	25	22.32
			50	0	22.48
			1	0	23.08
			1	24	23.58
			1	49	22.68
	23790	710	25	0	21.47
			25	12	21.43
			25	25	21.52
			50	0	21.40
			1	0	22.68
			1	24	22.60
	23800	711	1	49	22.74
			25	0	21.47
			25	12	21.49
			25	25	21.46
			50	0	21.50
			1	0	22.66
23780	709	1	24	22.50	
		1	49	22.65	
		25	0	21.23	
		25	12	21.23	
		25	25	21.43	
		50	0	21.41	

LTE Band 26(1.4MHz)

Channel Bandwidth: 1.4 MHz					
Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power [dBm]
			Size	Offset	
QPSK	26697	814.7	1	0	20.01
			1	3	19.96
			1	5	19.93
			3	0	19.87
			3	2	19.82
			3	3	19.80
	26740	819	6	0	21.70
			1	0	19.90
			1	3	19.87
			1	5	19.85
			3	0	19.76
			3	2	19.83
	26783	823.3	3	3	19.79
			6	0	21.69
			1	0	19.97
			1	3	19.80
			1	5	19.81
			3	0	19.75
16QAM	26697	814.7	3	2	19.68
			3	3	19.78
			6	0	21.58
			1	0	16.19
			1	3	16.66
			1	5	16.55
	26740	819	3	0	19.82
			3	2	19.91
			3	3	19.87
			6	0	21.07
			1	0	17.12
			1	3	17.33
	26783	823.3	1	5	17.09
			3	0	19.84
			3	2	19.83
			3	3	19.79
			6	0	20.91
			1	0	16.47
26783	823.3	1	3	16.58	
		1	5	16.26	
		3	0	19.70	
		3	2	19.68	
		3	3	19.80	
		6	0	20.90	

LTE Band 26(3MHz)

		Channel Bandwidth: 3 MHz			
Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power [dBm]
			Size	Offset	
QPSK	26705	815.5	1	0	16.85
			1	7	16.88
			1	14	16.79
			8	0	16.39
			8	4	17.06
			8	7	17.22
			15	0	21.74
	26740	819	1	0	16.76
			1	7	16.96
			1	14	16.86
			8	0	17.37
			8	4	17.46
			8	7	17.18
			15	0	21.80
	26775	822.5	1	0	16.85
			1	7	16.85
			1	14	16.75
			8	0	17.19
8			4	16.98	
8			7	16.58	
		15	0	21.74	
16QAM	26705	815.5	1	0	16.29
			1	7	16.98
			1	14	17.13
			8	0	16.40
			8	4	17.07
			8	7	17.23
			15	0	20.89
	26740	819	1	0	17.29
			1	7	17.39
			1	14	17.09
			8	0	17.38
			8	4	17.48
			8	7	17.19
			15	0	20.69
	26775	822.5	1	0	17.14
			1	7	16.92
			1	14	16.49
			8	0	17.21
8			4	16.99	
8			7	16.58	
		15	0	20.82	

LTE Band 26(5MHz)

Channel Bandwidth: 5 MHz					
Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power [dBm]
			Size	Offset	
QPSK	26715	816.5	1	0	20.01
			1	12	19.92
			1	24	19.81
			12	0	21.81
			12	6	21.80
			12	13	21.70
	25	0	21.71		
	26740	819	1	0	19.70
			1	12	19.62
			1	24	19.60
			12	0	21.80
			12	6	21.73
			12	13	21.64
	25	0	21.74		
	26765	821.5	1	0	19.61
			1	12	19.75
			1	24	19.66
			12	0	21.87
12			6	21.80	
12			13	21.69	
25	0	21.70			
16QAM	26715	816.5	1	0	16.05
			1	12	17.36
			1	24	16.97
			12	0	21.73
			12	6	21.78
			12	13	21.70
	25	0	20.88		
	26740	819	1	0	16.95
			1	12	17.58
			1	24	16.68
			12	0	21.75
			12	6	21.72
			12	13	21.64
	25	0	20.67		
	26765	821.5	1	0	17.00
			1	12	17.09
			1	24	16.01
			12	0	21.81
12			6	21.79	
12			13	21.78	
25	0	20.88			

LTE Band 26(10MHz)

Channel Bandwidth: 10 MHz					
Modulation	Channel	Frequency (MHz)	RB Configuration		Average Power [dBm]
			Size	Offset	
QPSK	26740	819	1	0	19.92
			1	24	19.79
			1	49	19.67
			25	0	21.66
			25	12	21.82
			25	25	21.65
			50	0	21.67
16QAM	26740	819	1	0	16.27
			1	24	17.32
			1	49	16.59
			25	0	21.84
			25	12	21.81
			25	25	21.65
			50	0	20.75

3.5. Support Equipment List

Table 5 Support Equipment List

Name	Model No	S/N	Manufacturer
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3.6. Test Conditions

Date of test : Oct.10, 2018 – Jan.17, 2019

Date of EUT Receive : Oct.10, 2018

Temperature: -30~50 °C

Relative Humidity: 37~55%

3.7. Special Accessories

Not available for this EUT intended for grant.

3.8. Equipment Modifications

Not available for this EUT intended for grant.

4. TEST EQUIPMENT USED

Table 6 Test Equipment

No.	Equipment	Manufacturer	Model No.	Last Cal.	Cal. Interval
SB8501/09	EMI Test Receiver	Rohde & Schwarz	ESU40	Mar.20, 2018	1 Year
SB5472/02	Bilog Antenna	Schwarzbeck	VULB9163	Jun.12, 2018	1 Year
SB3435	Horn Antenna	Rohde & Schwarz	HF906	Dec.31, 2018	1 Year
SB8501/14	Preamplifier	Rohde & Schwarz	SCU-03	Mar.08, 2018	1 Year
SB8501/17	Preamplifier	Rohde & Schwarz	SCU-18	Mar.05, 2018	1 Year
SB9054/02	Wideband Radio Communication Tester	Rohde & Schwarz	CMW500	Oct.25, 2018	1 Year
SB9721/02	Signal Analyzer	Agilent	N9020A	Nov.26,2018	1 Year
SB11818	Temperature&Humidity Test chamber	EH-010U	Espec	Mar.27, 2018	1 Year
SB9721/07	DC Power Supply	Agilent	66319D	--	--
--	Power Divider	Tonscend	--	--	--
--	Test software	Tonscend	JS1120-1 LTE NEW	--	--
--	Test software	Rohde & Schwarz	EMC 32 8.50.0	--	--
--	Filter, HPF 1.2GHz	Mini-Circuits	VHF-1200+	--	--
--	Filter, HPF 3.0GHz	Wainwright Instruments GmbH	WHK3.0/18G-10 FE	--	--
--	Radiated Cable Set	Huber+Suhner	W22.01 AP5 X1	--	--
--	Radiated Cable Set	Huber+Suhner	W22.01 AP5 X1	--	--
--	Radiated Cable Set	Huber+Suhner	W11.20 CBL6112	--	--
--	Radiated Cable Set	Huber+Suhner	W11.20 CBL6112	--	--
--	Radiated Cable Set	Huber+Suhner	SUCOFLEX 100	--	--
--	Conducted Cable Set	Huber+Suhner	SUCOFLEX 104	--	--
--	Conducted Cable Set	Huber+Suhner	SUCOFLEX 104	--	--

5. TEST RESULTS

5.1. RF Power Output

5.1.1. Test Standard

FCC: CFR Part 2.1046, CFR Part 27, CFR Part 90.

5.1.2. Test Limit

27.50 (c) The following power and antenna height requirements apply to stations transmitting in the 698–746 MHz band (10) Portable stations (hand-held de-vices) are limited to 3 watts ERP.

FCC 90.635 (b) Power limits.

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw).

5.1.3. Test Procedure

ANSI C63.26:2015

KDB 971168 Section 5.6

$$\text{ERP/EIRP} = \text{PMeas} + \text{GT} - \text{LC}$$

where: ERP/EIRP = effective or equivalent radiated power, respectively (expressed in the same

units as PMeas, typically dBW or dBm);

PMeas = measured transmitter output power or PSD, in dBm or dBW;

GT = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

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

For devices utilizing multiple antennas, KDB 662911 provides guidance for determining the effective array transmit antenna gain term to be used in the above equation.

EUT includes different power levels for head use configuration and body use configuration and the below tables contain the highest of all configurations average conducted and ERP/EIRP output powers as follows:

5.1.4. Test Data

LTE Band 12(1.4MHz)

Channel Bandwidth: 1.4 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna Gain [dBi]	ERP Average [dBm]	ERP Limit [dBm]	Verdict
			Size	Offset					
QPSK	23017	699.7	1	0	23.18	-0.5	22.68	34.77	Pass
			1	3	23.19	-0.5	22.69	34.77	Pass
			1	5	23.17	-0.5	22.67	34.77	Pass
			3	0	23.17	-0.5	22.67	34.77	Pass
			3	2	23.15	-0.5	22.65	34.77	Pass
			3	3	23.07	-0.5	22.57	34.77	Pass
			6	0	22.07	-0.5	21.57	34.77	Pass
	23095	707.5	1	0	23.08	-0.5	22.58	34.77	Pass
			1	3	23.23	-0.5	22.73	34.77	Pass
			1	5	23.20	-0.5	22.7	34.77	Pass
			3	0	23.11	-0.5	22.61	34.77	Pass
			3	2	23.08	-0.5	22.58	34.77	Pass
			3	3	23.03	-0.5	22.53	34.77	Pass
			6	0	22.13	-0.5	21.63	34.77	Pass
	23173	715.3	1	0	23.09	-0.5	22.59	34.77	Pass
			1	3	23.20	-0.5	22.7	34.77	Pass
			1	5	23.00	-0.5	22.5	34.77	Pass
			3	0	23.11	-0.5	22.61	34.77	Pass
			3	2	23.18	-0.5	22.68	34.77	Pass
			3	3	23.06	-0.5	22.56	34.77	Pass
			6	0	22.34	-0.5	21.84	34.77	Pass
16QAM	23017	699.7	1	0	23.17	-0.5	22.67	34.77	Pass
			1	3	23.20	-0.5	22.7	34.77	Pass
			1	5	23.24	-0.5	22.74	34.77	Pass
			3	0	22.27	-0.5	21.77	34.77	Pass
			3	2	22.28	-0.5	21.78	34.77	Pass
			3	3	22.26	-0.5	21.76	34.77	Pass
			6	0	21.15	-0.5	20.65	34.77	Pass
	23095	707.5	1	0	23.00	-0.5	22.5	34.77	Pass
			1	3	22.76	-0.5	22.26	34.77	Pass
			1	5	22.73	-0.5	22.23	34.77	Pass
			3	0	21.77	-0.5	21.27	34.77	Pass
			3	2	21.86	-0.5	21.36	34.77	Pass
			3	3	21.95	-0.5	21.45	34.77	Pass
			6	0	20.94	-0.5	20.44	34.77	Pass
	23173	715.3	1	0	22.52	-0.5	22.02	34.77	Pass
			1	3	22.44	-0.5	21.94	34.77	Pass
			1	5	22.53	-0.5	22.03	34.77	Pass
			3	0	22.17	-0.5	21.67	34.77	Pass
			3	2	22.03	-0.5	21.53	34.77	Pass
			3	3	22.20	-0.5	21.7	34.77	Pass
			6	0	21.43	-0.5	20.93	34.77	Pass

LTE Band 12(3MHz)

Channel Bandwidth: 3 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna Gain [dBi]	ERP Average [dBm]	ERP Limit [dBm]	Verdict
			Size	Offset					
QPSK	23025	700.5	1	0	22.10	-0.5	21.6	34.77	Pass
			1	7	21.76	-0.5	21.26	34.77	Pass
			1	14	21.44	-0.5	20.94	34.77	Pass
			8	0	21.97	-0.5	21.47	34.77	Pass
			8	4	21.81	-0.5	21.31	34.77	Pass
			8	7	21.65	-0.5	21.15	34.77	Pass
	23095	707.5	15	0	21.80	-0.5	21.3	34.77	Pass
			1	0	21.98	-0.5	21.48	34.77	Pass
			1	7	22.32	-0.5	21.82	34.77	Pass
			1	14	22.15	-0.5	21.65	34.77	Pass
			8	0	22.17	-0.5	21.67	34.77	Pass
			8	4	22.31	-0.5	21.81	34.77	Pass
	23165	714.5	8	7	22.29	-0.5	21.79	34.77	Pass
			15	0	22.26	-0.5	21.76	34.77	Pass
			1	0	21.60	-0.5	21.1	34.77	Pass
			1	7	22.11	-0.5	21.61	34.77	Pass
			1	14	22.08	-0.5	21.58	34.77	Pass
			8	0	21.89	-0.5	21.39	34.77	Pass
16QAM	23025	700.5	8	4	22.04	-0.5	21.54	34.77	Pass
			8	7	22.06	-0.5	21.56	34.77	Pass
			15	0	21.99	-0.5	21.49	34.77	Pass
			1	0	22.34	-0.5	21.84	34.77	Pass
			1	7	22.04	-0.5	21.54	34.77	Pass
			1	14	21.75	-0.5	21.25	34.77	Pass
	23095	707.5	8	0	21.42	-0.5	20.92	34.77	Pass
			8	4	21.40	-0.5	20.9	34.77	Pass
			8	7	21.39	-0.5	20.89	34.77	Pass
			15	0	21.36	-0.5	20.86	34.77	Pass
			1	0	22.10	-0.5	21.6	34.77	Pass
			1	7	22.50	-0.5	22	34.77	Pass
	23165	714.5	1	14	22.34	-0.5	21.84	34.77	Pass
			8	0	21.28	-0.5	20.78	34.77	Pass
			8	4	21.43	-0.5	20.93	34.77	Pass
			8	7	21.42	-0.5	20.92	34.77	Pass
			15	0	21.29	-0.5	20.79	34.77	Pass
			1	0	21.80	-0.5	21.3	34.77	Pass
23025	700.5	1	7	22.34	-0.5	21.84	34.77	Pass	
		1	14	22.28	-0.5	21.78	34.77	Pass	
		8	0	21.39	-0.5	20.89	34.77	Pass	
		8	4	21.44	-0.5	20.94	34.77	Pass	
		8	7	21.49	-0.5	20.99	34.77	Pass	
		15	0	21.48	-0.5	20.98	34.77	Pass	

LTE Band 12(5MHz)

Channel Bandwidth: 5 MHz										
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna Gain [dBi]	ERP Average [dBm]	ERP Limit [dBm]	Verdict	
			Size	Offset						
QPSK	23035	701.5	1	0	21.79	-0.5	21.29	34.77	Pass	
			1	12	21.68	-0.5	21.18	34.77	Pass	
			1	24	21.41	-0.5	20.91	34.77	Pass	
			12	0	21.73	-0.5	21.23	34.77	Pass	
			12	6	21.66	-0.5	21.16	34.77	Pass	
			12	13	21.52	-0.5	21.02	34.77	Pass	
	23095	707.5	25	0	21.63	-0.5	21.13	34.77	Pass	
			1	0	21.65	-0.5	21.15	34.77	Pass	
			1	12	22.42	-0.5	21.92	34.77	Pass	
			1	24	21.54	-0.5	21.04	34.77	Pass	
			12	0	21.98	-0.5	21.48	34.77	Pass	
			12	6	22.31	-0.5	21.81	34.77	Pass	
	23155	713.5	12	13	22.13	-0.5	21.63	34.77	Pass	
			25	0	22.09	-0.5	21.59	34.77	Pass	
			1	0	21.39	-0.5	20.89	34.77	Pass	
			1	12	21.88	-0.5	21.38	34.77	Pass	
			1	24	21.82	-0.5	21.32	34.77	Pass	
			12	0	21.53	-0.5	21.03	34.77	Pass	
	16QAM	23035	701.5	12	6	21.80	-0.5	21.3	34.77	Pass
				12	13	21.90	-0.5	21.4	34.77	Pass
				25	0	21.74	-0.5	21.24	34.77	Pass
1				0	21.92	-0.5	21.42	34.77	Pass	
1				12	21.81	-0.5	21.31	34.77	Pass	
1				24	21.63	-0.5	21.13	34.77	Pass	
23095		707.5	12	0	21.45	-0.5	20.95	34.77	Pass	
			12	6	21.42	-0.5	20.92	34.77	Pass	
			12	13	21.47	-0.5	20.97	34.77	Pass	
			25	0	21.51	-0.5	21.01	34.77	Pass	
			1	0	21.71	-0.5	21.21	34.77	Pass	
			1	12	22.52	-0.5	22.02	34.77	Pass	
23155		713.5	1	24	21.69	-0.5	21.19	34.77	Pass	
			12	0	21.12	-0.5	20.62	34.77	Pass	
			12	6	21.22	-0.5	20.72	34.77	Pass	
			12	13	21.17	-0.5	20.67	34.77	Pass	
			25	0	21.38	-0.5	20.88	34.77	Pass	
			1	0	21.53	-0.5	21.03	34.77	Pass	
			1	12	22.08	-0.5	21.58	34.77	Pass	
			1	24	22.06	-0.5	21.56	34.77	Pass	
			12	0	21.35	-0.5	20.85	34.77	Pass	
12	6	21.50	-0.5	21	34.77	Pass				
12	13	21.50	-0.5	21	34.77	Pass				
25	0	21.62	-0.5	21.12	34.77	Pass				

LTE Band 12(10MHz)

Channel Bandwidth: 10 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna Gain [dBi]	ERP Average [dBm]	ERP Limit [dBm]	Verdict
			Size	Offset					
QPSK	23060	704	1	0	21.76	-0.5	21.26	34.77	Pass
			1	24	21.94	-0.5	21.44	34.77	Pass
			1	49	22.49	-0.5	21.99	34.77	Pass
			25	0	21.69	-0.5	21.19	34.77	Pass
			25	12	21.92	-0.5	21.42	34.77	Pass
			25	25	22.34	-0.5	21.84	34.77	Pass
			50	0	22.02	-0.5	21.52	34.77	Pass
	23095	707.5	1	0	21.40	-0.5	20.9	34.77	Pass
			1	24	22.34	-0.5	21.84	34.77	Pass
			1	49	21.51	-0.5	21.01	34.77	Pass
			25	0	21.93	-0.5	21.43	34.77	Pass
			25	12	22.25	-0.5	21.75	34.77	Pass
			25	25	22.13	-0.5	21.63	34.77	Pass
			50	0	22.04	-0.5	21.54	34.77	Pass
	23130	711	1	0	21.88	-0.5	21.38	34.77	Pass
			1	24	21.63	-0.5	21.13	34.77	Pass
			1	49	21.88	-0.5	21.38	34.77	Pass
			25	0	22.05	-0.5	21.55	34.77	Pass
			25	12	21.76	-0.5	21.26	34.77	Pass
			25	25	21.75	-0.5	21.25	34.77	Pass
			50	0	21.89	-0.5	21.39	34.77	Pass
16QAM	23060	704	1	0	22.05	-0.5	21.55	34.77	Pass
			1	24	22.26	-0.5	21.76	34.77	Pass
			1	49	22.80	-0.5	22.3	34.77	Pass
			25	0	21.49	-0.5	20.99	34.77	Pass
			25	12	21.51	-0.5	21.01	34.77	Pass
			25	25	21.45	-0.5	20.95	34.77	Pass
			50	0	21.36	-0.5	20.86	34.77	Pass
	23095	707.5	1	0	21.57	-0.5	21.07	34.77	Pass
			1	24	22.53	-0.5	22.03	34.77	Pass
			1	49	21.71	-0.5	21.21	34.77	Pass
			25	0	21.37	-0.5	20.87	34.77	Pass
			25	12	21.39	-0.5	20.89	34.77	Pass
			25	25	21.38	-0.5	20.88	34.77	Pass
			50	0	21.42	-0.5	20.92	34.77	Pass
	23130	711	1	0	22.06	-0.5	21.56	34.77	Pass
			1	24	21.86	-0.5	21.36	34.77	Pass
			1	49	22.15	-0.5	21.65	34.77	Pass
			25	0	21.26	-0.5	20.76	34.77	Pass
			25	12	21.37	-0.5	20.87	34.77	Pass
			25	25	21.50	-0.5	21	34.77	Pass
			50	0	21.42	-0.5	20.92	34.77	Pass

LTE Band 17(5MHz)

Channel Bandwidth: 5 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna Gain [dBi]	ERP Average [dBm]	ERP Limit [dBm]	Verdict
			Size	Offset					
QPSK	23755	706.5	1	0	23.30	-0.5	22.8	34.77	Pass
			1	12	23.37	-0.5	22.87	34.77	Pass
			1	24	23.31	-0.5	22.81	34.77	Pass
			12	0	22.33	-0.5	21.83	34.77	Pass
			12	6	22.46	-0.5	21.96	34.77	Pass
			12	13	22.37	-0.5	21.87	34.77	Pass
	23790	710	25	0	22.45	-0.5	21.95	34.77	Pass
			1	0	23.35	-0.5	22.85	34.77	Pass
			1	12	23.17	-0.5	22.67	34.77	Pass
			1	24	22.36	-0.5	21.86	34.77	Pass
			12	0	22.39	-0.5	21.89	34.77	Pass
			12	6	22.31	-0.5	21.81	34.77	Pass
	23825	713.5	12	13	22.40	-0.5	21.9	34.77	Pass
			25	0	22.48	-0.5	21.98	34.77	Pass
			1	0	22.70	-0.5	22.2	34.77	Pass
			1	12	22.90	-0.5	22.4	34.77	Pass
			1	24	22.77	-0.5	22.27	34.77	Pass
			12	0	22.49	-0.5	21.99	34.77	Pass
16QAM	23755	706.5	12	6	22.40	-0.5	21.9	34.77	Pass
			12	13	22.45	-0.5	21.95	34.77	Pass
			25	0	22.56	-0.5	22.06	34.77	Pass
			1	0	22.37	-0.5	21.87	34.77	Pass
			1	12	22.33	-0.5	21.83	34.77	Pass
			1	24	22.43	-0.5	21.93	34.77	Pass
	23790	710	12	0	21.35	-0.5	20.85	34.77	Pass
			12	6	21.28	-0.5	20.78	34.77	Pass
			12	13	21.24	-0.5	20.74	34.77	Pass
			25	0	21.34	-0.5	20.84	34.77	Pass
			1	0	22.99	-0.5	22.49	34.77	Pass
			1	12	22.91	-0.5	22.41	34.77	Pass
	23825	713.5	1	24	22.51	-0.5	22.01	34.77	Pass
			12	0	21.37	-0.5	20.87	34.77	Pass
			12	6	21.40	-0.5	20.9	34.77	Pass
			12	13	21.47	-0.5	20.97	34.77	Pass
			25	0	21.54	-0.5	21.04	34.77	Pass
			1	0	22.12	-0.5	21.62	34.77	Pass
23825	713.5	1	12	22.29	-0.5	21.79	34.77	Pass	
		1	24	22.31	-0.5	21.81	34.77	Pass	
		12	0	21.30	-0.5	20.8	34.77	Pass	
		12	6	21.41	-0.5	20.91	34.77	Pass	
		12	13	21.41	-0.5	20.91	34.77	Pass	
		25	0	21.62	-0.5	21.12	34.77	Pass	

LTE Band 17(10MHz)

Channel Bandwidth: 10 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna Gain [dBi]	ERP Average [dBm]	ERP Limit [dBm]	Verdict
			Size	Offset					
QPSK	23780	709	1	0	22.79	-0.5	22.29	34.77	Pass
			1	24	23.36	-0.5	22.86	34.77	Pass
			1	49	22.38	-0.5	21.88	34.77	Pass
			25	0	22.43	-0.5	21.93	34.77	Pass
			25	12	22.34	-0.5	21.84	34.77	Pass
			25	25	22.53	-0.5	22.03	34.77	Pass
	23790	710	50	0	22.31	-0.5	21.81	34.77	Pass
			1	0	22.73	-0.5	22.23	34.77	Pass
			1	24	22.87	-0.5	22.37	34.77	Pass
			1	49	22.66	-0.5	22.16	34.77	Pass
			25	0	22.49	-0.5	21.99	34.77	Pass
			25	12	22.49	-0.5	21.99	34.77	Pass
	23800	711	25	25	22.44	-0.5	21.94	34.77	Pass
			50	0	22.44	-0.5	21.94	34.77	Pass
			1	0	22.50	-0.5	22	34.77	Pass
			1	24	22.30	-0.5	21.8	34.77	Pass
			1	49	22.45	-0.5	21.95	34.77	Pass
			25	0	22.37	-0.5	21.87	34.77	Pass
16QAM	23780	709	25	12	22.41	-0.5	21.91	34.77	Pass
			25	25	22.32	-0.5	21.82	34.77	Pass
			50	0	22.48	-0.5	21.98	34.77	Pass
			1	0	23.08	-0.5	22.58	34.77	Pass
			1	24	23.58	-0.5	23.08	34.77	Pass
			1	49	22.68	-0.5	22.18	34.77	Pass
	23790	710	25	0	21.47	-0.5	20.97	34.77	Pass
			25	12	21.43	-0.5	20.93	34.77	Pass
			25	25	21.52	-0.5	21.02	34.77	Pass
			50	0	21.40	-0.5	20.9	34.77	Pass
			1	0	22.68	-0.5	22.18	34.77	Pass
			1	24	22.60	-0.5	22.1	34.77	Pass
	23800	711	1	49	22.74	-0.5	22.24	34.77	Pass
			25	0	21.47	-0.5	20.97	34.77	Pass
			25	12	21.49	-0.5	20.99	34.77	Pass
			25	25	21.46	-0.5	20.96	34.77	Pass
			50	0	21.50	-0.5	21	34.77	Pass
			1	0	22.66	-0.5	22.16	34.77	Pass
23780	709	1	24	22.50	-0.5	22	34.77	Pass	
		1	49	22.65	-0.5	22.15	34.77	Pass	
		25	0	21.23	-0.5	20.73	34.77	Pass	
		25	12	21.23	-0.5	20.73	34.77	Pass	
		25	25	21.43	-0.5	20.93	34.77	Pass	
		50	0	21.41	-0.5	20.91	34.77	Pass	

LTE Band 26(1.4MHz)

Channel Bandwidth: 1.4 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna Gain [dBi]	ERP Average [dBm]	ERP Limit [dBm]	Verdict
			Size	Offset					
QPSK	26697	814.7	1	0	20.01	-0.5	19.51	50.00	Pass
			1	3	19.96	-0.5	19.46	50.00	Pass
			1	5	19.93	-0.5	19.43	50.00	Pass
			3	0	19.87	-0.5	19.37	50.00	Pass
			3	2	19.82	-0.5	19.32	50.00	Pass
			3	3	19.80	-0.5	19.3	50.00	Pass
	6	0	21.70	-0.5	21.2	50.00	Pass		
	26740	819	1	0	19.90	-0.5	19.4	50.00	Pass
			1	3	19.87	-0.5	19.37	50.00	Pass
			1	5	19.85	-0.5	19.35	50.00	Pass
			3	0	19.76	-0.5	19.26	50.00	Pass
			3	2	19.83	-0.5	19.33	50.00	Pass
			3	3	19.79	-0.5	19.29	50.00	Pass
	6	0	21.69	-0.5	21.19	50.00	Pass		
	26783	823.3	1	0	19.97	-0.5	19.47	50.00	Pass
			1	3	19.80	-0.5	19.3	50.00	Pass
			1	5	19.81	-0.5	19.31	50.00	Pass
			3	0	19.75	-0.5	19.25	50.00	Pass
3			2	19.68	-0.5	19.18	50.00	Pass	
3			3	19.78	-0.5	19.28	50.00	Pass	
6	0	21.58	-0.5	21.08	50.00	Pass			
16QAM	26697	814.7	1	0	16.19	-0.5	15.69	50.00	Pass
			1	3	16.66	-0.5	16.16	50.00	Pass
			1	5	16.55	-0.5	16.05	50.00	Pass
			3	0	19.82	-0.5	19.32	50.00	Pass
			3	2	19.91	-0.5	19.41	50.00	Pass
			3	3	19.87	-0.5	19.37	50.00	Pass
	6	0	21.07	-0.5	20.57	50.00	Pass		
	26740	819	1	0	17.12	-0.5	16.62	50.00	Pass
			1	3	17.33	-0.5	16.83	50.00	Pass
			1	5	17.09	-0.5	16.59	50.00	Pass
			3	0	19.84	-0.5	19.34	50.00	Pass
			3	2	19.83	-0.5	19.33	50.00	Pass
			3	3	19.79	-0.5	19.29	50.00	Pass
	6	0	20.91	-0.5	20.41	50.00	Pass		
	26783	823.3	1	0	16.47	-0.5	15.97	50.00	Pass
			1	3	16.58	-0.5	16.08	50.00	Pass
			1	5	16.26	-0.5	15.76	50.00	Pass
			3	0	19.70	-0.5	19.2	50.00	Pass
3			2	19.68	-0.5	19.18	50.00	Pass	
3			3	19.80	-0.5	19.3	50.00	Pass	
6	0	20.90	-0.5	20.4	50.00	Pass			

LTE Band 26(3MHz)

Channel Bandwidth: 3 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna Gain [dBi]	ERP Average [dBm]	ERP Limit [dBm]	Verdict
			Size	Offset					
QPSK	26705	815.5	1	0	16.85	-0.5	16.35	50.00	Pass
			1	7	16.88	-0.5	16.38	50.00	Pass
			1	14	16.79	-0.5	16.29	50.00	Pass
			8	0	16.39	-0.5	15.89	50.00	Pass
			8	4	17.06	-0.5	16.56	50.00	Pass
			8	7	17.22	-0.5	16.72	50.00	Pass
			15	0	21.74	-0.5	21.24	50.00	Pass
	26740	819	1	0	16.76	-0.5	16.26	50.00	Pass
			1	7	16.96	-0.5	16.46	50.00	Pass
			1	14	16.86	-0.5	16.36	50.00	Pass
			8	0	17.37	-0.5	16.87	50.00	Pass
			8	4	17.46	-0.5	16.96	50.00	Pass
			8	7	17.18	-0.5	16.68	50.00	Pass
			15	0	21.80	-0.5	21.3	50.00	Pass
	26775	822.5	1	0	16.85	-0.5	16.35	50.00	Pass
			1	7	16.85	-0.5	16.35	50.00	Pass
			1	14	16.75	-0.5	16.25	50.00	Pass
			8	0	17.19	-0.5	16.69	50.00	Pass
			8	4	16.98	-0.5	16.48	50.00	Pass
			8	7	16.58	-0.5	16.08	50.00	Pass
			15	0	21.74	-0.5	21.24	50.00	Pass
16QAM	26705	815.5	1	0	16.29	-0.5	15.79	50.00	Pass
			1	7	16.98	-0.5	16.48	50.00	Pass
			1	14	17.13	-0.5	16.63	50.00	Pass
			8	0	16.40	-0.5	15.9	50.00	Pass
			8	4	17.07	-0.5	16.57	50.00	Pass
			8	7	17.23	-0.5	16.73	50.00	Pass
			15	0	20.89	-0.5	20.39	50.00	Pass
	26740	819	1	0	17.29	-0.5	16.79	50.00	Pass
			1	7	17.39	-0.5	16.89	50.00	Pass
			1	14	17.09	-0.5	16.59	50.00	Pass
			8	0	17.38	-0.5	16.88	50.00	Pass
			8	4	17.48	-0.5	16.98	50.00	Pass
			8	7	17.19	-0.5	16.69	50.00	Pass
			15	0	20.69	-0.5	20.19	50.00	Pass
	26775	822.5	1	0	17.14	-0.5	16.64	50.00	Pass
			1	7	16.92	-0.5	16.42	50.00	Pass
			1	14	16.49	-0.5	15.99	50.00	Pass
			8	0	17.21	-0.5	16.71	50.00	Pass
			8	4	16.99	-0.5	16.49	50.00	Pass
			8	7	16.58	-0.5	16.08	50.00	Pass
			15	0	20.82	-0.5	20.32	50.00	Pass

LTE Band 26(5MHz)

Channel Bandwidth: 5 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna Gain [dBi]	ERP Average [dBm]	ERP Limit [dBm]	Verdict
			Size	Offset					
QPSK	26715	816.5	1	0	20.01	-0.5	19.51	50.00	Pass
			1	12	19.92	-0.5	19.42	50.00	Pass
			1	24	19.81	-0.5	19.31	50.00	Pass
			12	0	21.81	-0.5	21.31	50.00	Pass
			12	6	21.80	-0.5	21.3	50.00	Pass
			12	13	21.70	-0.5	21.2	50.00	Pass
			25	0	21.71	-0.5	21.21	50.00	Pass
	26740	819	1	0	19.70	-0.5	19.2	50.00	Pass
			1	12	19.62	-0.5	19.12	50.00	Pass
			1	24	19.60	-0.5	19.1	50.00	Pass
			12	0	21.80	-0.5	21.3	50.00	Pass
			12	6	21.73	-0.5	21.23	50.00	Pass
			12	13	21.64	-0.5	21.14	50.00	Pass
			25	0	21.74	-0.5	21.24	50.00	Pass
	26765	821.5	1	0	19.61	-0.5	19.11	50.00	Pass
			1	12	19.75	-0.5	19.25	50.00	Pass
			1	24	19.66	-0.5	19.16	50.00	Pass
			12	0	21.87	-0.5	21.37	50.00	Pass
			12	6	21.80	-0.5	21.3	50.00	Pass
			12	13	21.69	-0.5	21.19	50.00	Pass
			25	0	21.70	-0.5	21.2	50.00	Pass
16QAM	26715	816.5	1	0	16.05	-0.5	15.55	50.00	Pass
			1	12	17.36	-0.5	16.86	50.00	Pass
			1	24	16.97	-0.5	16.47	50.00	Pass
			12	0	21.73	-0.5	21.23	50.00	Pass
			12	6	21.78	-0.5	21.28	50.00	Pass
			12	13	21.70	-0.5	21.2	50.00	Pass
			25	0	20.88	-0.5	20.38	50.00	Pass
	26740	819	1	0	16.95	-0.5	16.45	50.00	Pass
			1	12	17.58	-0.5	17.08	50.00	Pass
			1	24	16.68	-0.5	16.18	50.00	Pass
			12	0	21.75	-0.5	21.25	50.00	Pass
			12	6	21.72	-0.5	21.22	50.00	Pass
			12	13	21.64	-0.5	21.14	50.00	Pass
			25	0	20.67	-0.5	20.17	50.00	Pass
	26765	821.5	1	0	17.00	-0.5	16.5	50.00	Pass
			1	12	17.09	-0.5	16.59	50.00	Pass
			1	24	16.01	-0.5	15.51	50.00	Pass
			12	0	21.81	-0.5	21.31	50.00	Pass
			12	6	21.79	-0.5	21.29	50.00	Pass
			12	13	21.78	-0.5	21.28	50.00	Pass
			25	0	20.88	-0.5	20.38	50.00	Pass

LTE Band 26(10MHz)

Channel Bandwidth: 10 MHz									
Modulation	Channel	Frequency (MHz)	RB Configuration		Conducted Average Power [dBm]	Antenna Gain [dBi]	ERP Average [dBm]	ERP Limit [dBm]	Verdict
			Size	Offset					
QPSK	26740	819	1	0	19.92	-0.5	19.42	50.00	Pass
			1	24	19.79	-0.5	19.29	50.00	Pass
			1	49	19.67	-0.5	19.17	50.00	Pass
			25	0	21.66	-0.5	21.16	50.00	Pass
			25	12	21.82	-0.5	21.32	50.00	Pass
			25	25	21.65	-0.5	21.15	50.00	Pass
			50	0	21.67	-0.5	21.17	50.00	Pass
16QAM	26740	819	1	0	16.27	-0.5	15.77	50.00	Pass
			1	24	17.32	-0.5	16.82	50.00	Pass
			1	49	16.59	-0.5	16.09	50.00	Pass
			25	0	21.84	-0.5	21.34	50.00	Pass
			25	12	21.81	-0.5	21.31	50.00	Pass
			25	25	21.65	-0.5	21.15	50.00	Pass
			50	0	20.75	-0.5	20.25	50.00	Pass

5.2. Peak to Average Ratio

5.2.1. Test Standard

FCC: CFR 47 (FCC) part 2.1046, part 27

5.2.2. Test Limit

The peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

5.2.3. Test Procedure

For LTE operating mode:

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

5.2.4. Test Data

LTE Band 12:

Channel Bandwidth: 1.4MHz						
Modulation	Test Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	699.7	1	0	4.08	<13	PASS
		6	0	4.13	<13	PASS
	707.5	1	0	4.68	<13	PASS
		6	0	4.68	<13	PASS
	715.3	1	0	4.59	<13	PASS
		6	0	4.67	<13	PASS
16QAM	699.7	1	0	4.21	<13	PASS
		6	0	4.85	<13	PASS
	707.5	1	0	4.88	<13	PASS
		6	0	5.77	<13	PASS
	715.3	1	0	4.85	<13	PASS
		6	0	5.40	<13	PASS

Channel Bandwidth: 3MHz						
Modulation	Test Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	700.5	1	0	4.17	<13	PASS
		15	0	4.27	<13	PASS
	707.5	1	0	4.61	<13	PASS
		15	0	4.69	<13	PASS
	714.5	1	0	4.96	<13	PASS
		15	0	4.85	<13	PASS
16QAM	700.5	1	0	4.29	<13	PASS
		15	0	4.79	<13	PASS
	707.5	1	0	4.87	<13	PASS
		15	0	5.60	<13	PASS
	714.5	1	0	5.28	<13	PASS
		15	0	5.40	<13	PASS

Channel Bandwidth: 5MHz						
Modulation	Test Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	701.5	1	0	4.45	<13	PASS
		25	0	4.60	<13	PASS
	707.5	1	0	4.89	<13	PASS
		25	0	4.73	<13	PASS
	713.5	1	0	4.83	<13	PASS
		25	0	5.03	<13	PASS
16QAM	701.5	1	0	4.53	<13	PASS
		25	0	4.88	<13	PASS
	707.5	1	0	5.16	<13	PASS
		25	0	5.44	<13	PASS
	713.5	1	0	5.06	<13	PASS
		25	0	5.48	<13	PASS

Channel Bandwidth: 10MHz						
Modulation	Test Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	704	1	0	4.25	<13	PASS
		50	0	5.05	<13	PASS
	707.5	1	0	4.66	<13	PASS
		50	0	5.03	<13	PASS
	711	1	0	4.77	<13	PASS
		50	0	5.23	<13	PASS
16QAM	704	1	0	4.36	<13	PASS
		50	0	5.68	<13	PASS
	707.5	1	0	4.97	<13	PASS
		50	0	5.73	<13	PASS
	711	1	0	5.06	<13	PASS
		50	0	5.86	<13	PASS

LTE Band 17:

Channel Bandwidth: 5MHz						
Modulation	Test Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	706.5	1	0	4.45	<13	PASS
		25	0	5.11	<13	PASS
	710	1	0	4.40	<13	PASS
		25	0	4.94	<13	PASS
	713.5	1	0	4.28	<13	PASS
		25	0	5.01	<13	PASS
16QAM	706.5	1	0	5.28	<13	PASS
		25	0	5.97	<13	PASS
	710	1	0	4.96	<13	PASS
		25	0	5.80	<13	PASS
	713.5	1	0	5.13	<13	PASS
		25	0	5.85	<13	PASS

Channel Bandwidth: 10MHz						
Modulation	Test Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	709	1	0	4.93	<13	PASS
		50	0	5.16	<13	PASS
	710	1	0	4.75	<13	PASS
		50	0	5.28	<13	PASS
	711	1	0	4.89	<13	PASS
		50	0	5.32	<13	PASS
16QAM	709	1	0	5.18	<13	PASS
		50	0	5.65	<13	PASS
	710	1	0	5.14	<13	PASS
		50	0	5.72	<13	PASS
	711	1	0	5.13	<13	PASS
		50	0	5.76	<13	PASS

LTE Band 26:

Channel Bandwidth: 1.4MHz						
Modulation	Test Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	814.7	1	0	4.08	<13	PASS
		6	0	4.13	<13	PASS
	819.0	1	0	4.68	<13	PASS
		6	0	4.68	<13	PASS
	823.3	1	0	4.59	<13	PASS
		6	0	4.67	<13	PASS
16QAM	814.7	1	0	4.21	<13	PASS
		6	0	4.85	<13	PASS
	819.0	1	0	4.88	<13	PASS
		6	0	5.77	<13	PASS
	823.3	1	0	4.85	<13	PASS
		6	0	5.40	<13	PASS

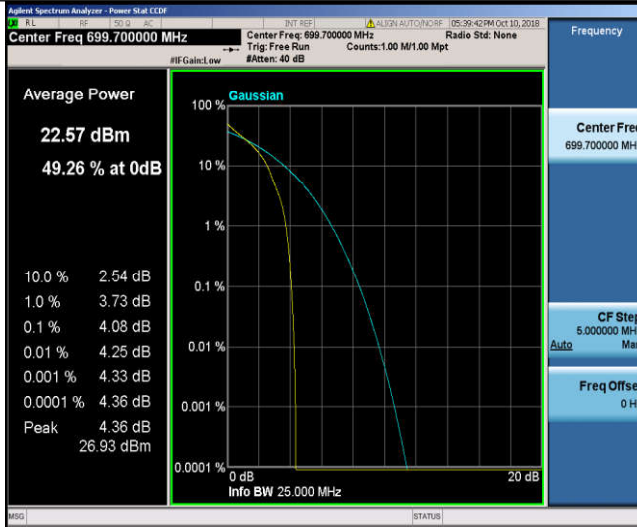
Channel Bandwidth: 3MHz						
Modulation	Test Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	815.5	1	0	4.17	<13	PASS
		15	0	4.27	<13	PASS
	819.0	1	0	4.61	<13	PASS
		15	0	4.69	<13	PASS
	822.5	1	0	4.96	<13	PASS
		15	0	4.85	<13	PASS
16QAM	815.5	1	0	4.29	<13	PASS
		15	0	4.79	<13	PASS
	819.0	1	0	4.87	<13	PASS
		15	0	5.60	<13	PASS
	822.5	1	0	5.28	<13	PASS
		15	0	5.40	<13	PASS

Channel Bandwidth: 5MHz						
Modulation	Test Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	816.5	1	0	4.45	<13	PASS
		25	0	4.60	<13	PASS
	819	1	0	4.89	<13	PASS
		25	0	4.73	<13	PASS
	821.5	1	0	4.83	<13	PASS
		25	0	5.03	<13	PASS
16QAM	816.5	1	0	4.53	<13	PASS
		25	0	4.88	<13	PASS
	819	1	0	5.16	<13	PASS
		25	0	5.44	<13	PASS
	821.5	1	0	5.06	<13	PASS
		25	0	5.48	<13	PASS

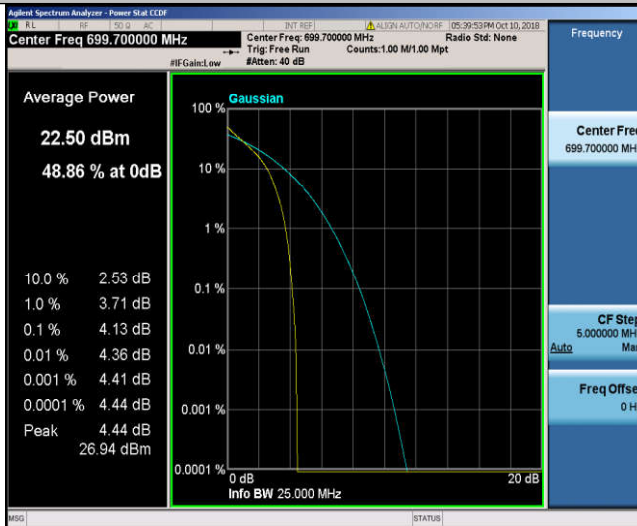
Channel Bandwidth: 10MHz						
Modulation	Test Channel	RB Configuration		Peak-to-Average Ratio (dB)	Limit (dB)	Verdict
		Size	Offset			
QPSK	819.0	1	0	4.25	<13	PASS
		50	0	5.05	<13	PASS
16QAM	819.0	1	0	4.36	<13	PASS
		50	0	5.68	<13	PASS

Test Graphs

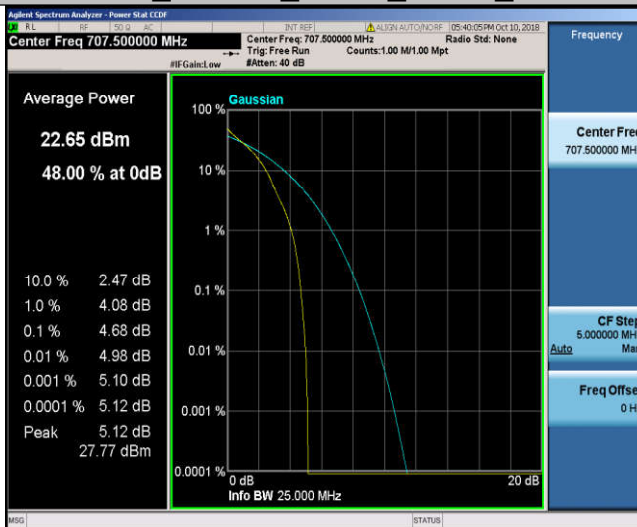
Band12_1.4MHz_QPSK_23017_1RB#0



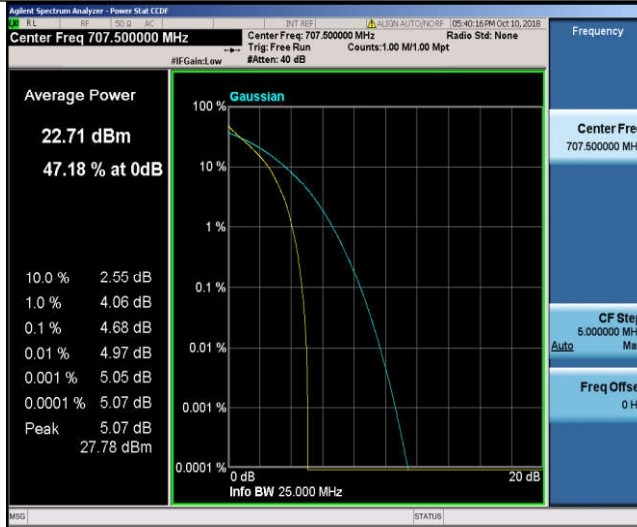
Band12_1.4MHz_QPSK_23017_6RB#0



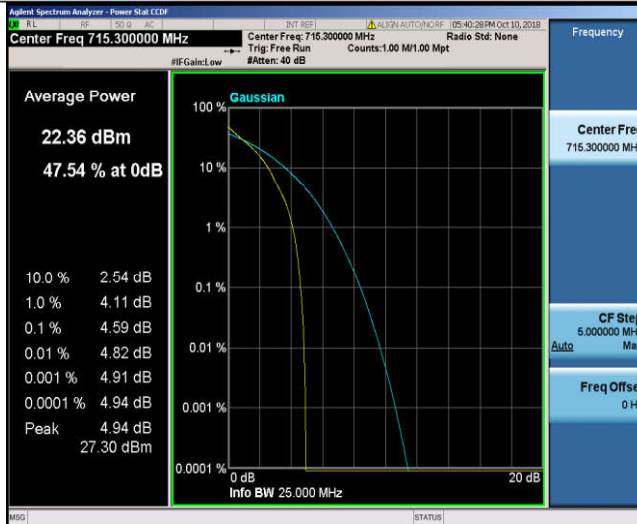
Band12_1.4MHz_QPSK_23095_1RB#0



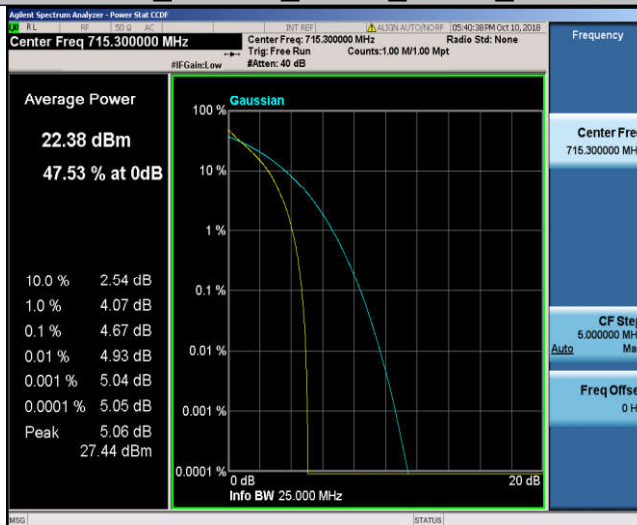
Band12_1.4MHz_QPSK_23095_6RB#0



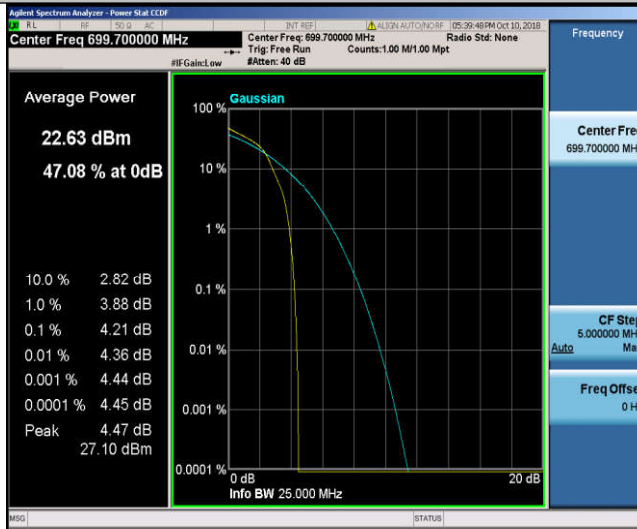
Band12_1.4MHz_QPSK_23173_1RB#0



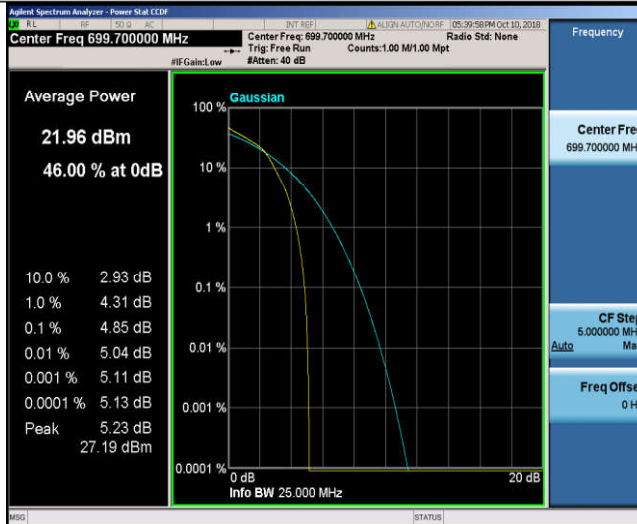
Band12_1.4MHz_QPSK_23173_6RB#0



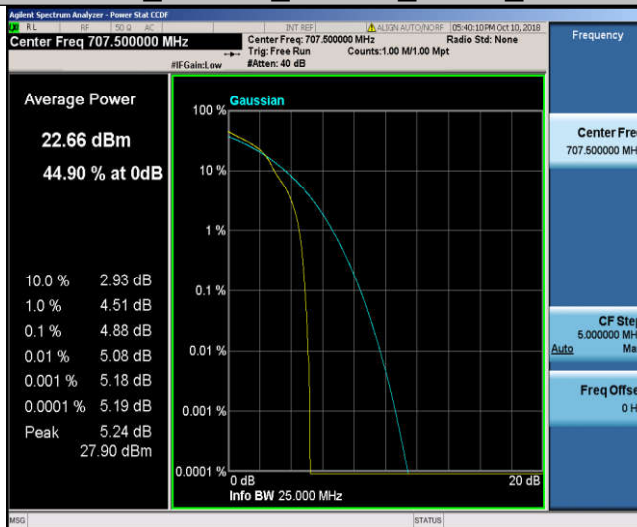
Band12_1.4MHz_16QAM_23017_1RB#0



Band12_1.4MHz_16QAM_23017_6RB#0



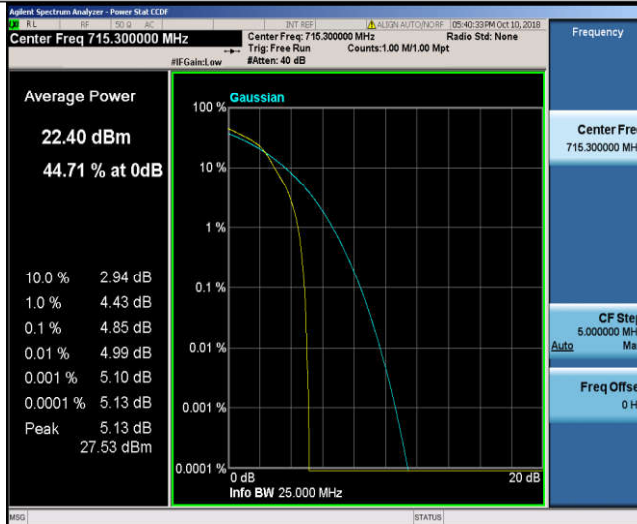
Band12_1.4MHz_16QAM_23095_1RB#0



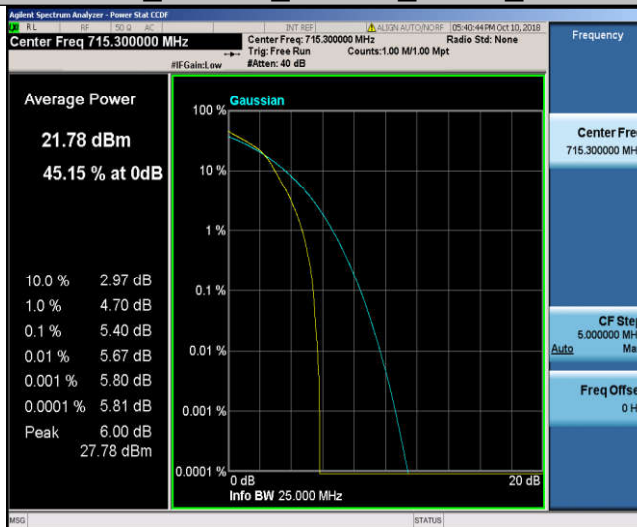
Band12_1.4MHz_16QAM_23095_6RB#0



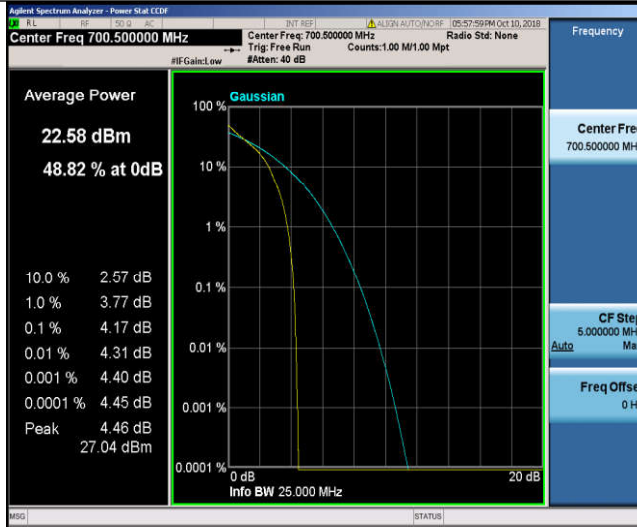
Band12_1.4MHz_16QAM_23173_1RB#0



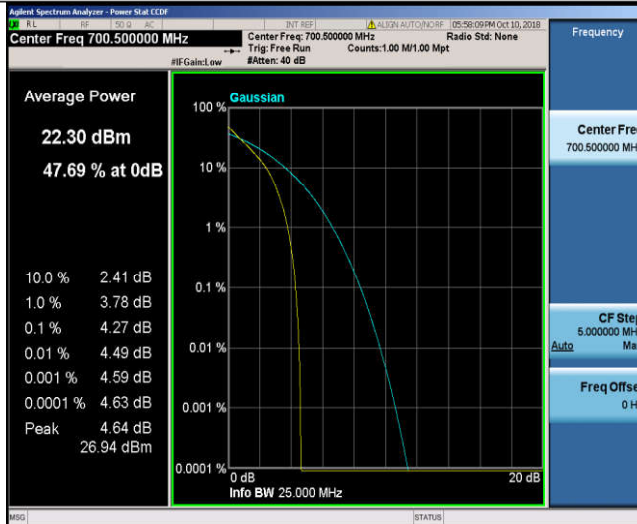
Band12_1.4MHz_16QAM_23173_6RB#0



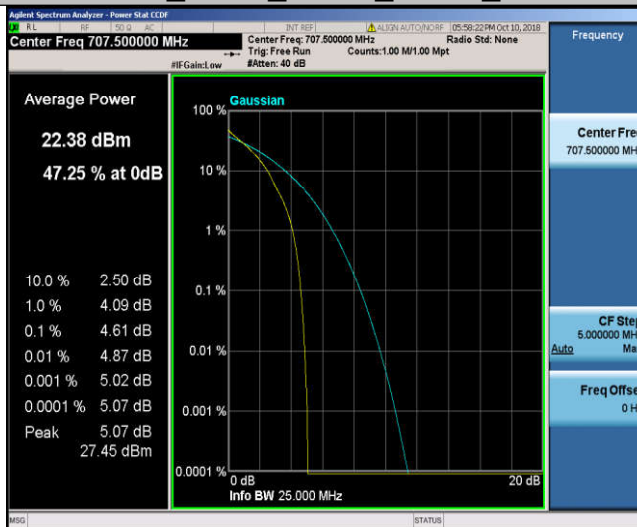
Band12_3MHz_QPSK_23025_1RB#0



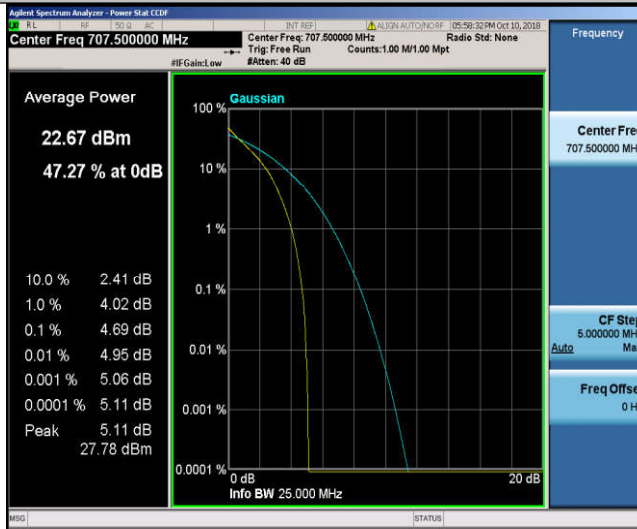
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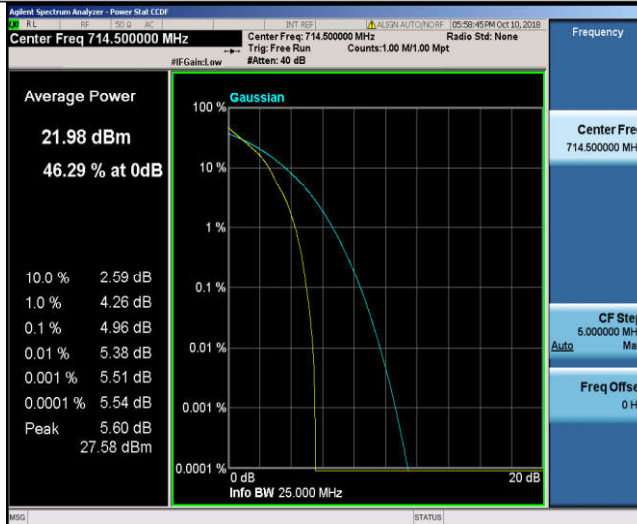
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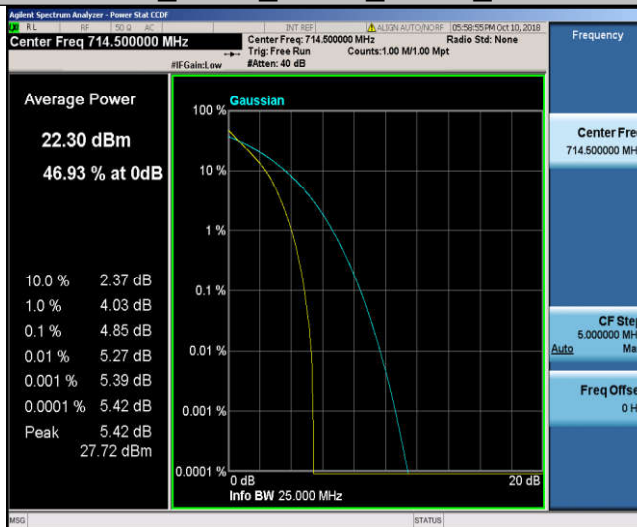
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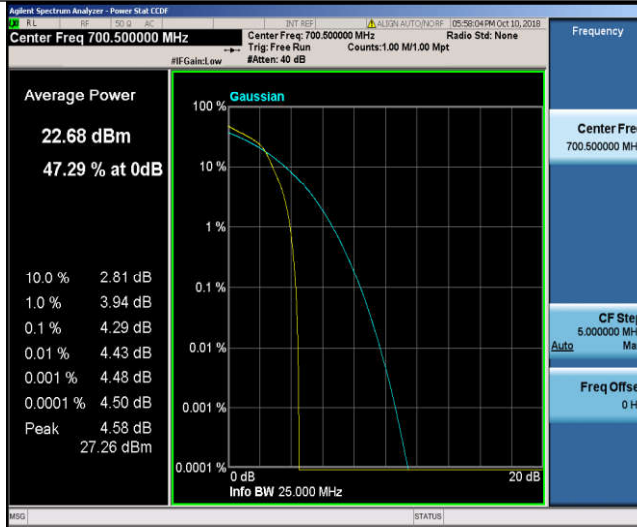
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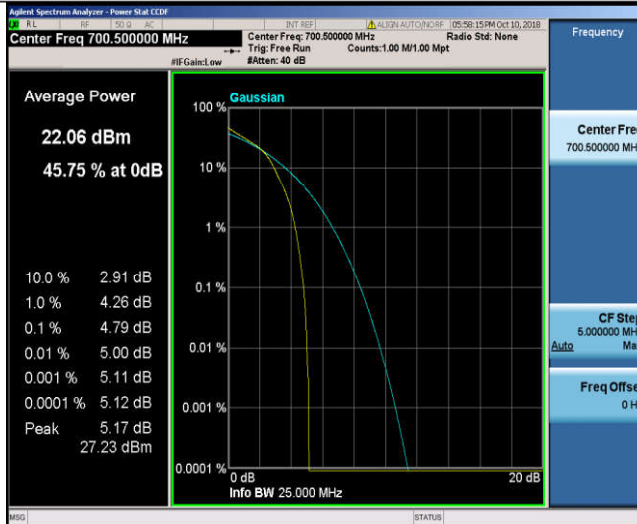
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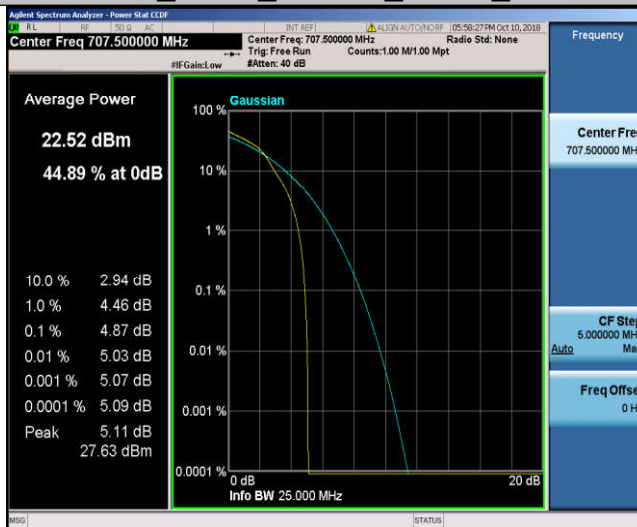
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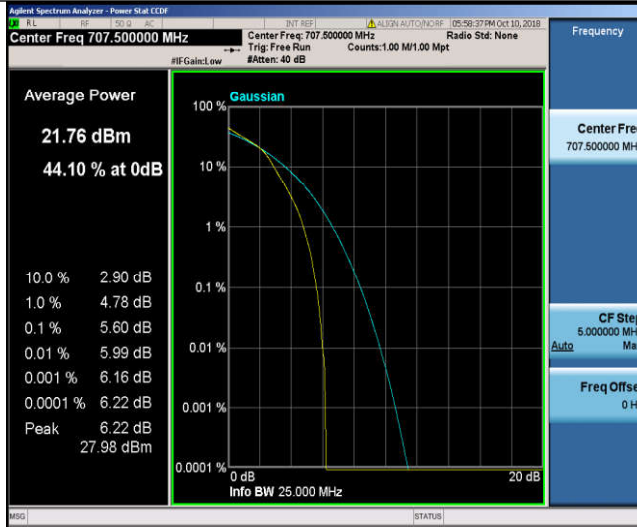
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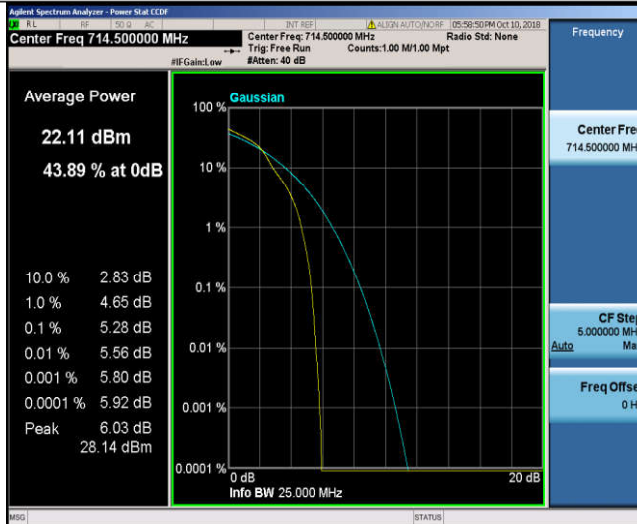
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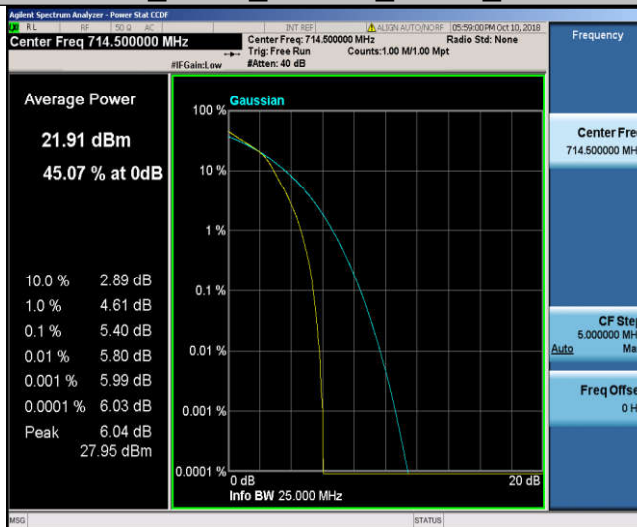
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Band12_3MHz_16QAM_23165_1RB#0



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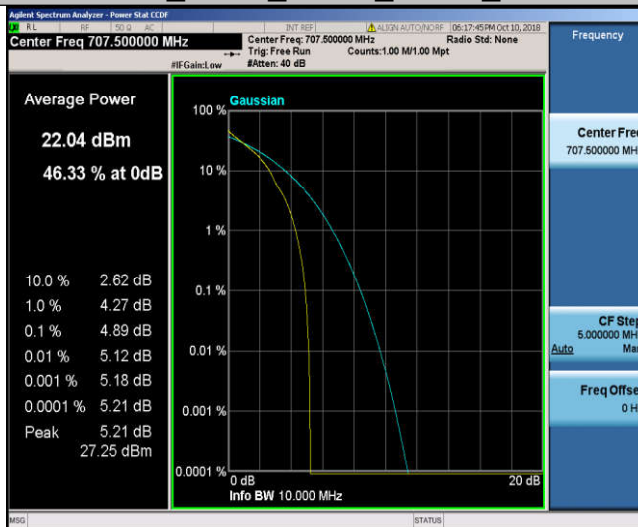
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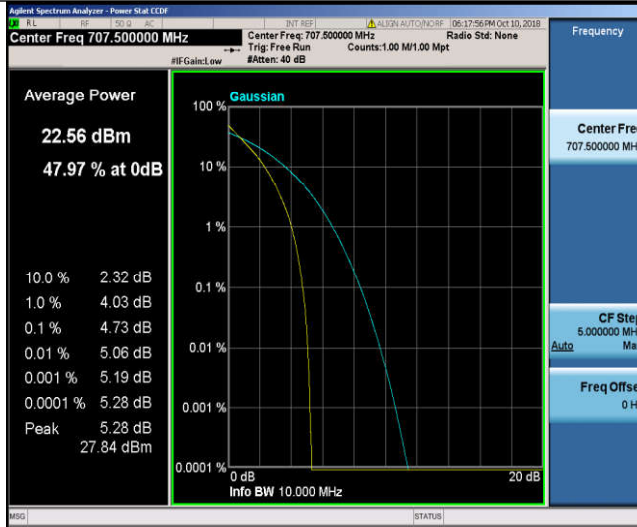
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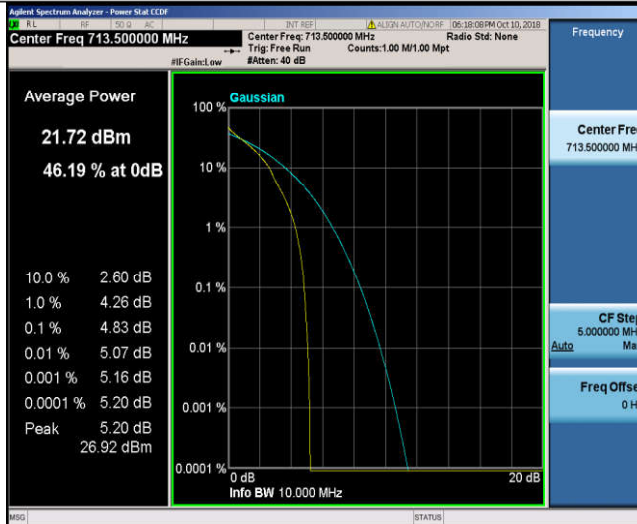
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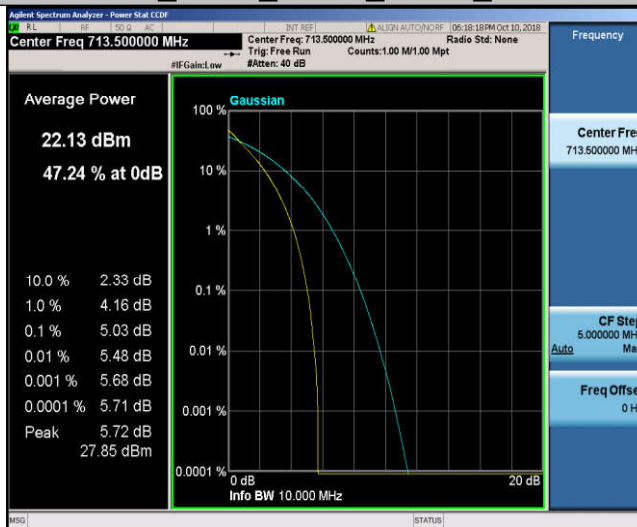
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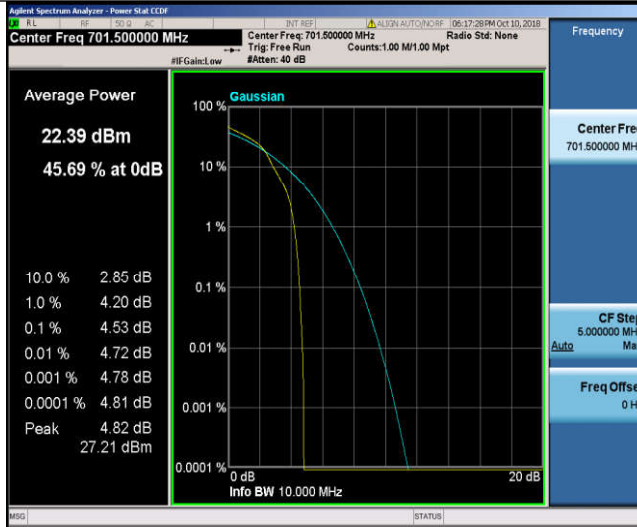
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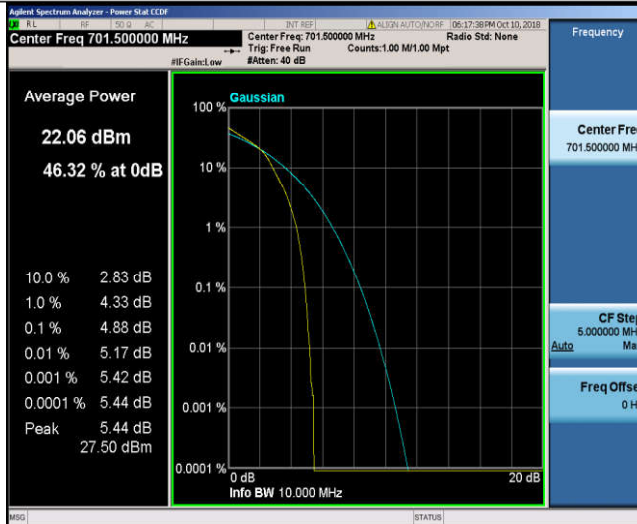
Band12_5MHz_QPSK_23155_25RB#0



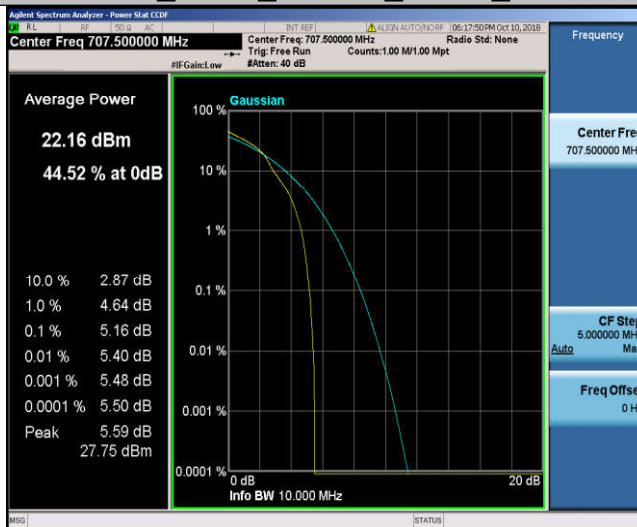
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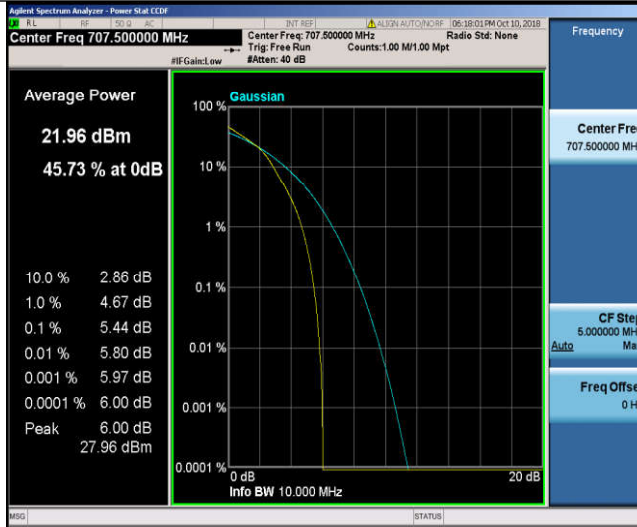
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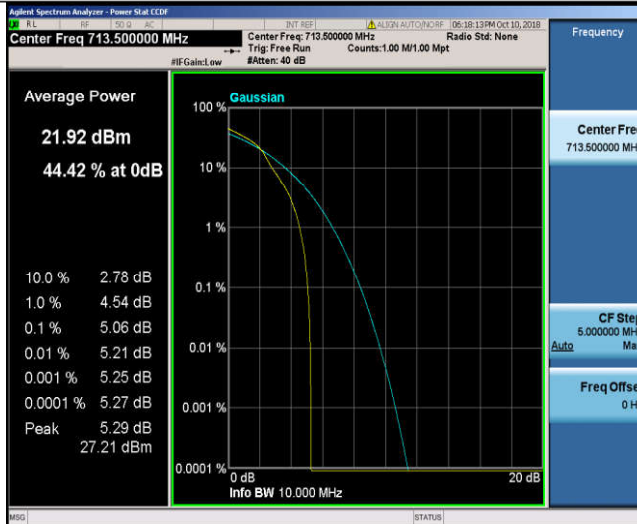
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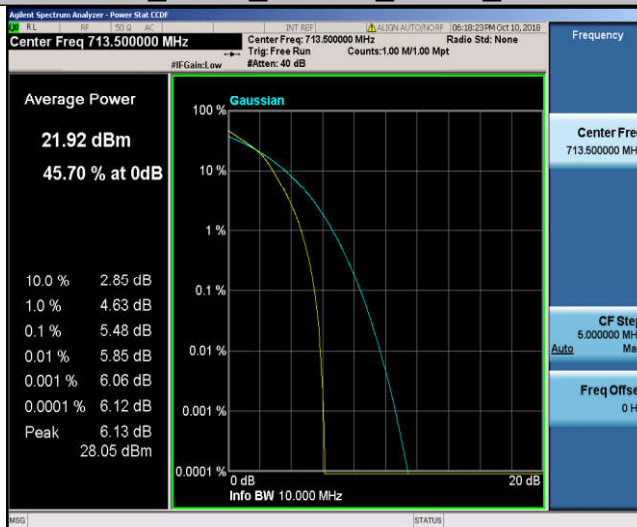
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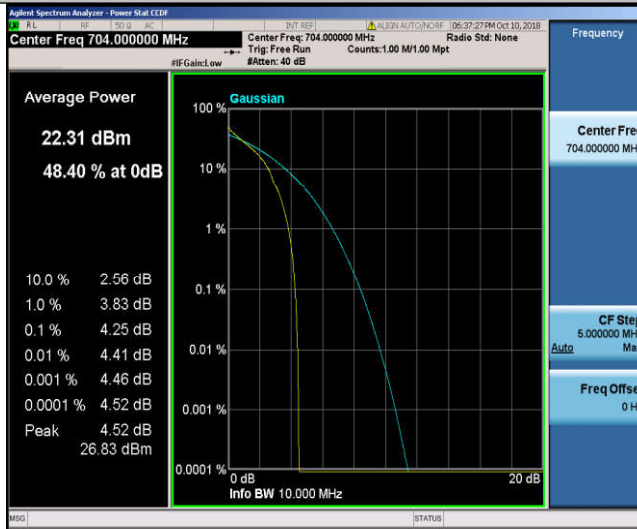
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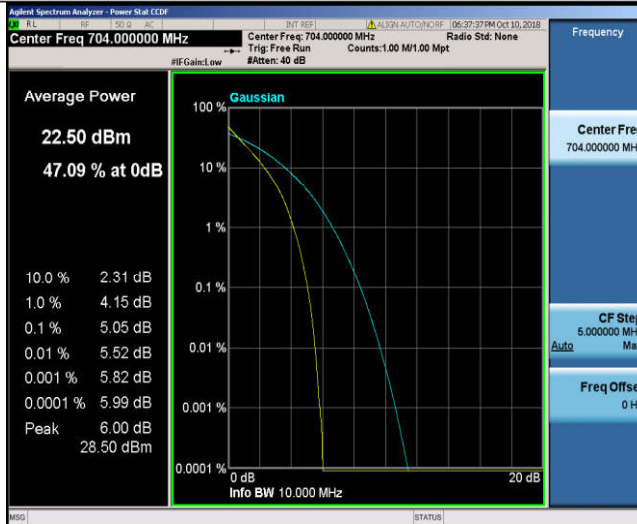
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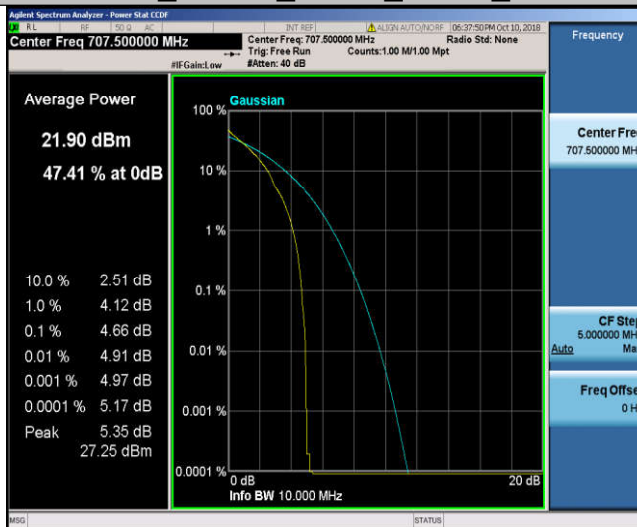
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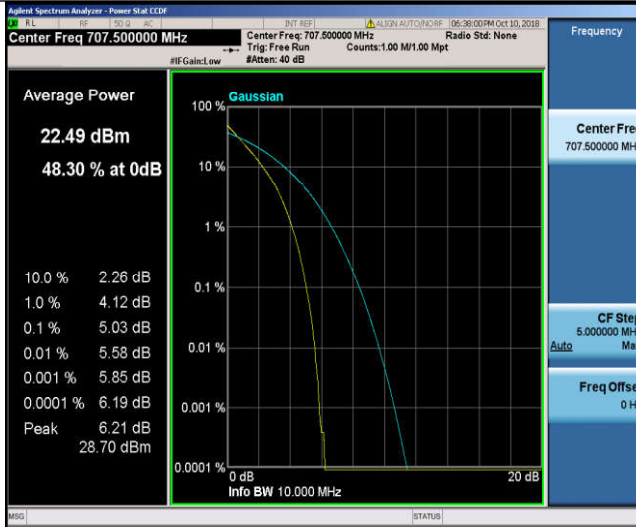
Band12_10MHz_QPSK_23060_50RB#0



Band12_10MHz_QPSK_23095_1RB#0



Band12_10MHz_QPSK_23095_50RB#0



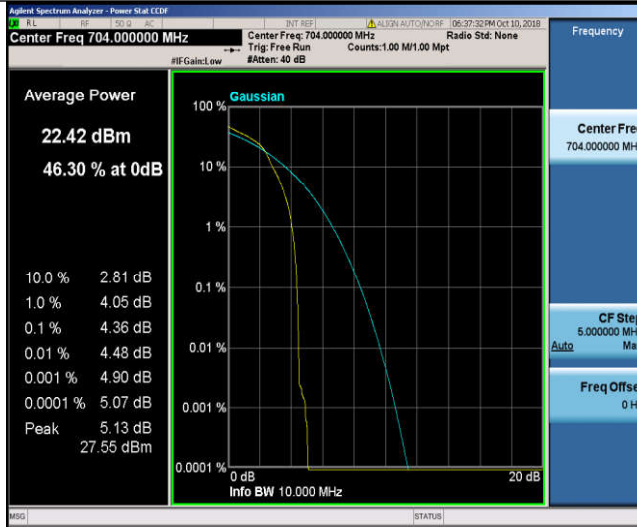
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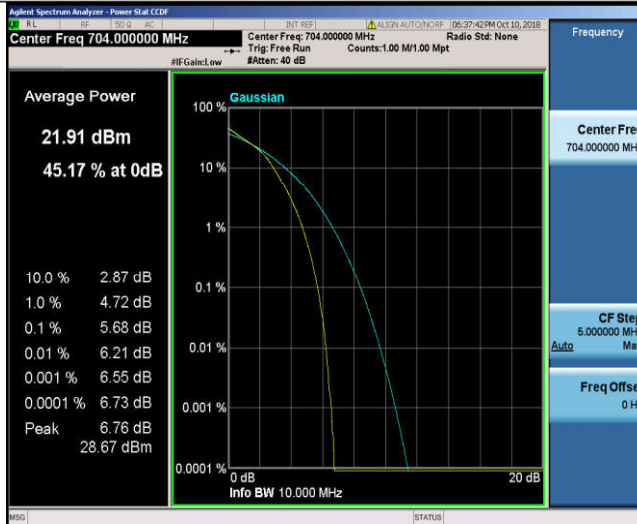
Band12_10MHz_QPSK_23130_50RB#0



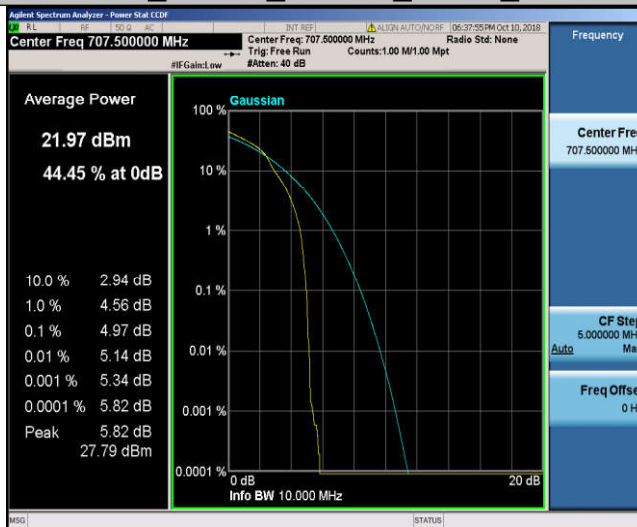
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Band12_10MHz_16QAM_23060_50RB#0



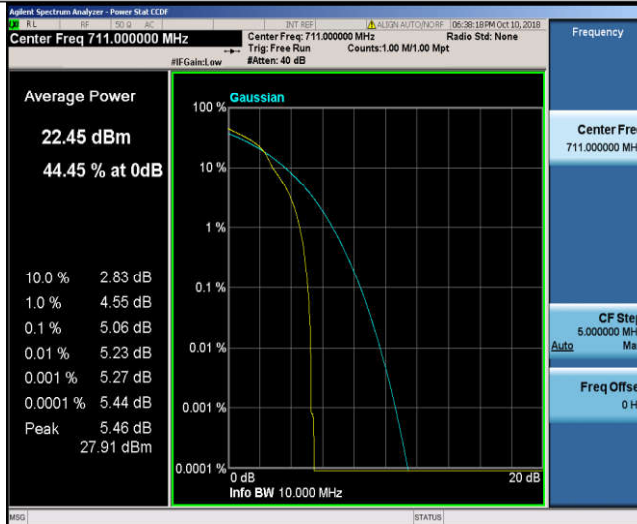
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Band12_10MHz_16QAM_23095_50RB#0



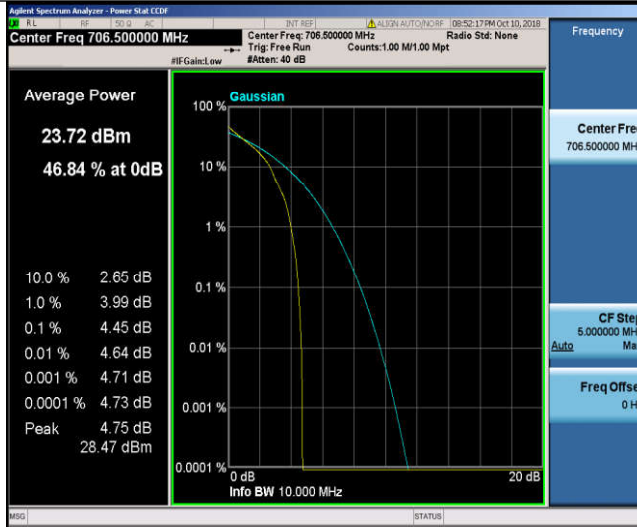
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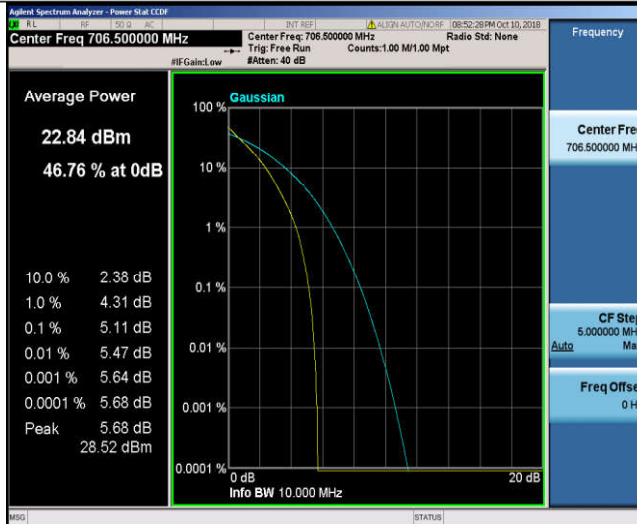
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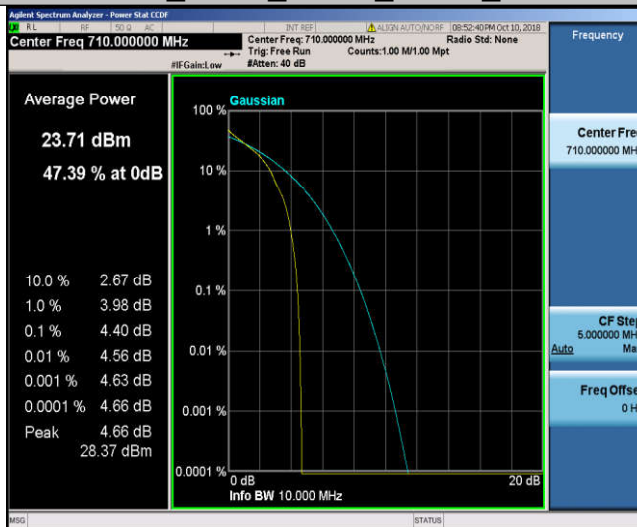
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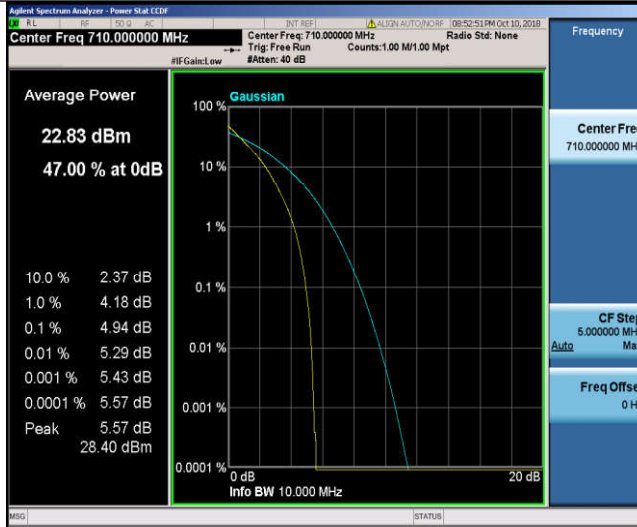
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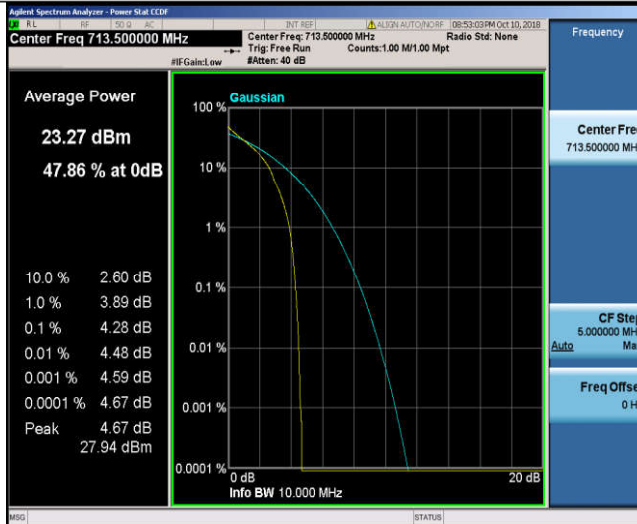
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Band17_5MHz_QPSK_23790_25RB#0



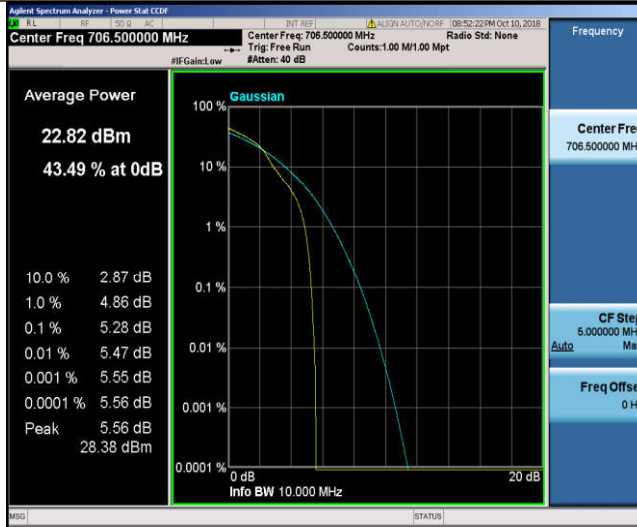
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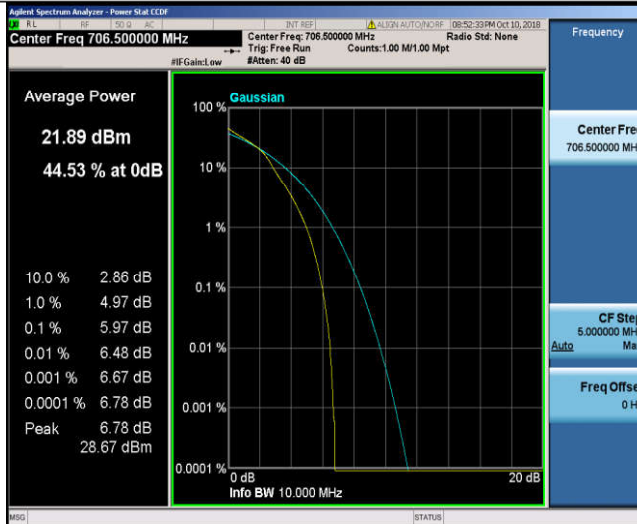
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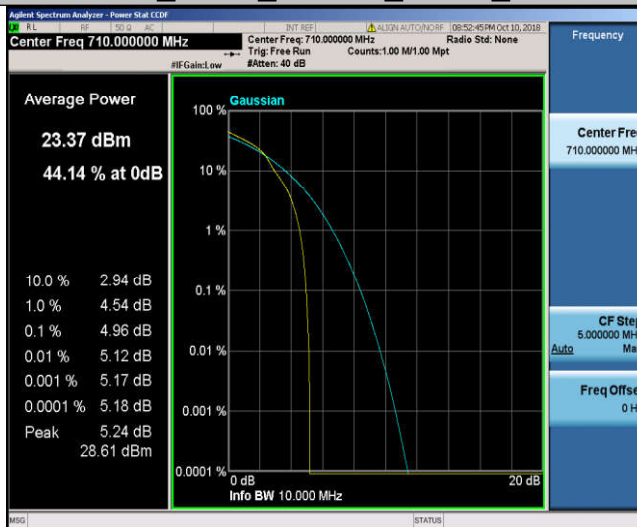
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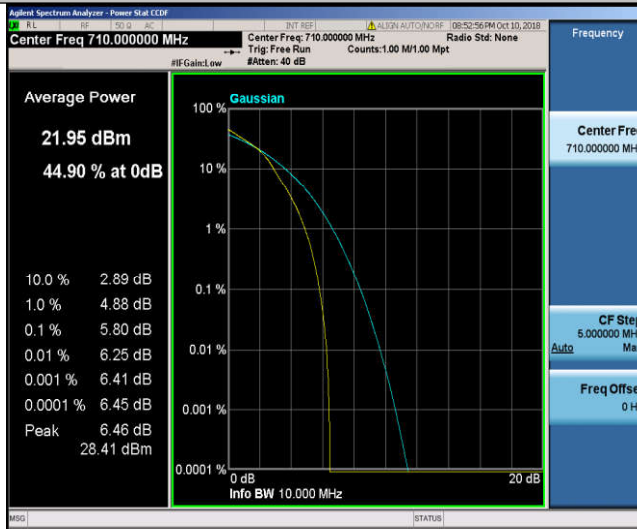
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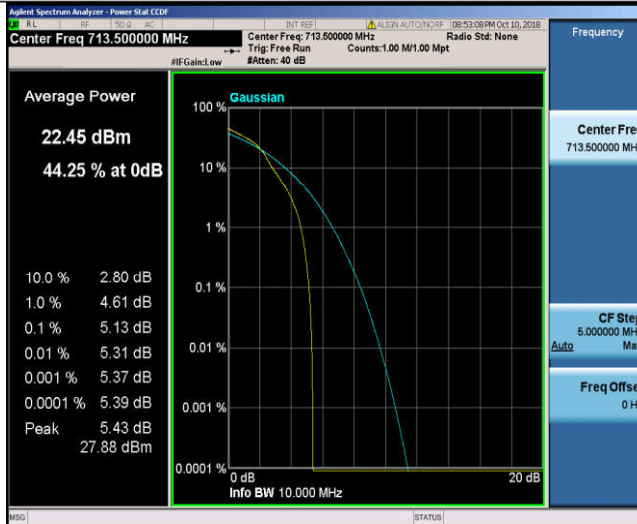
Band17_5MHz_16QAM_23790_1RB#0



Band17_5MHz_16QAM_23790_25RB#0



Band17_5MHz_16QAM_23825_1RB#0



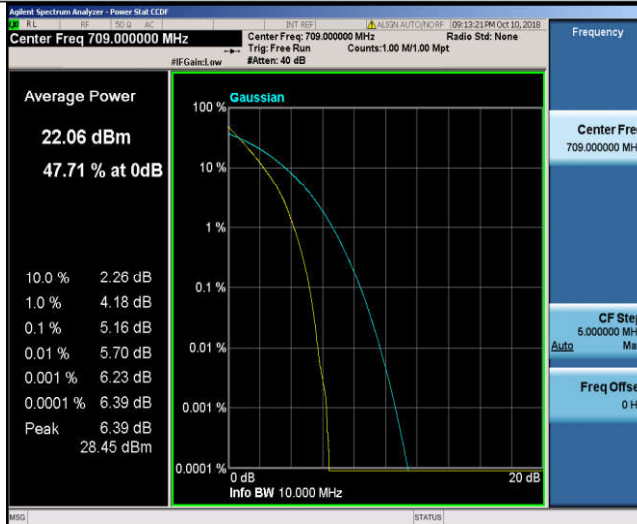
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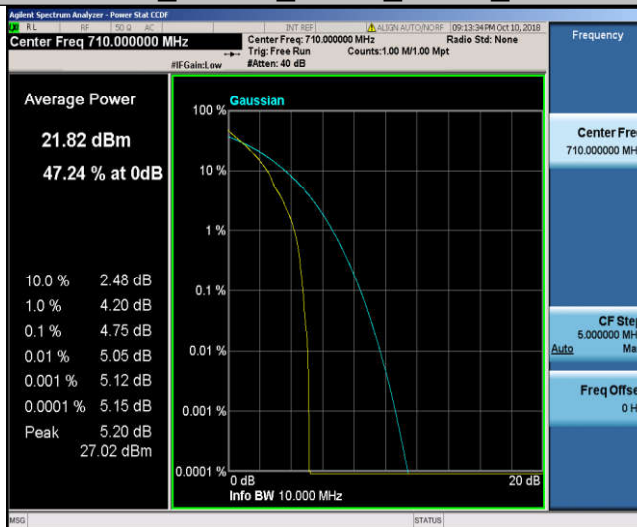
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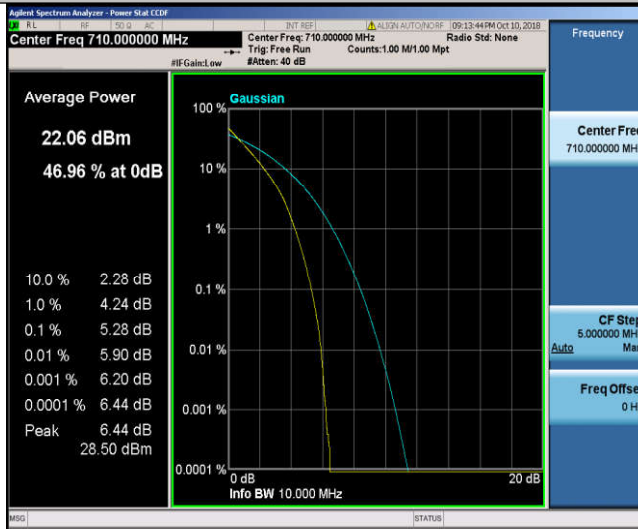
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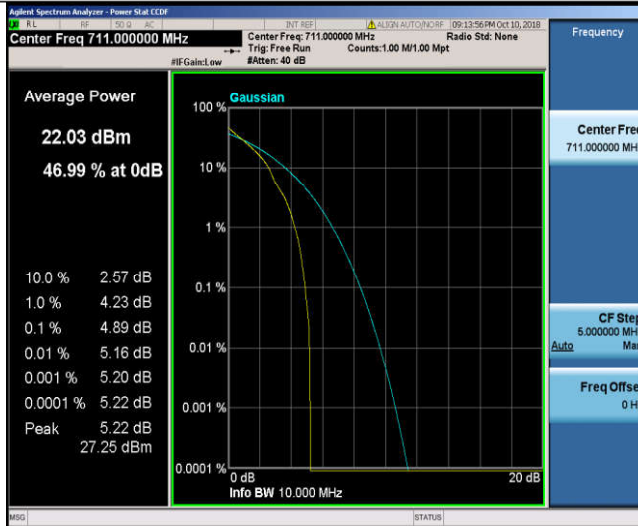
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Band17_10MHz_QPSK_23790_50RB#0



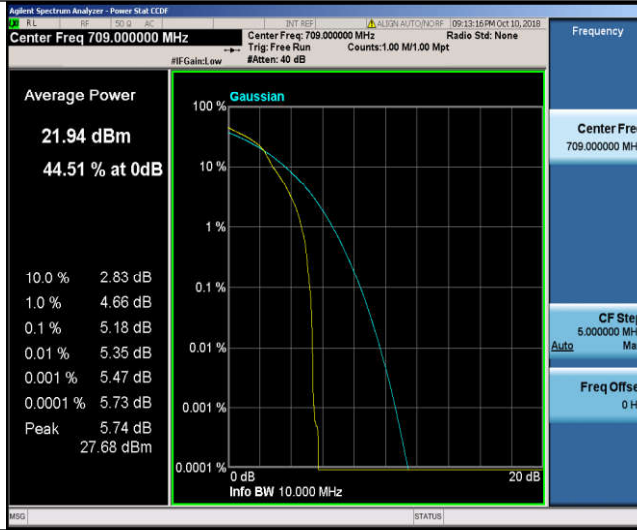
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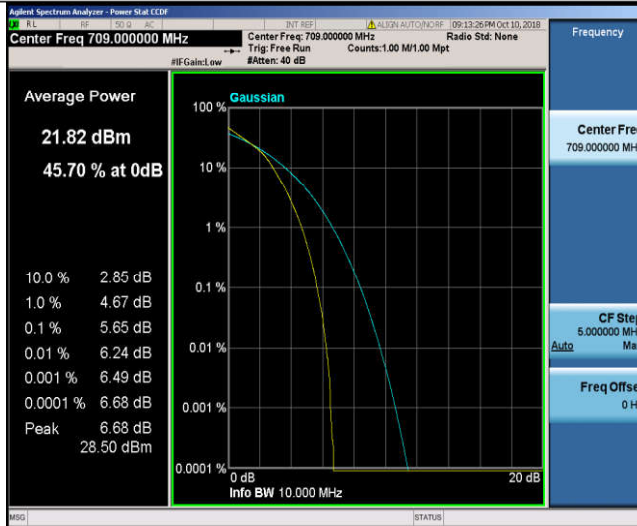
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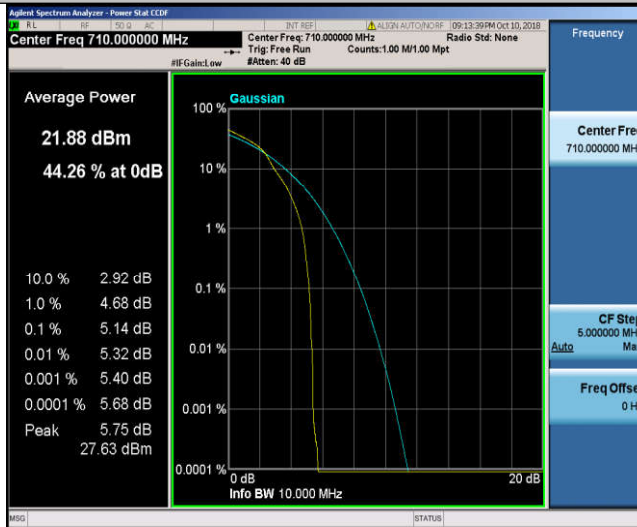
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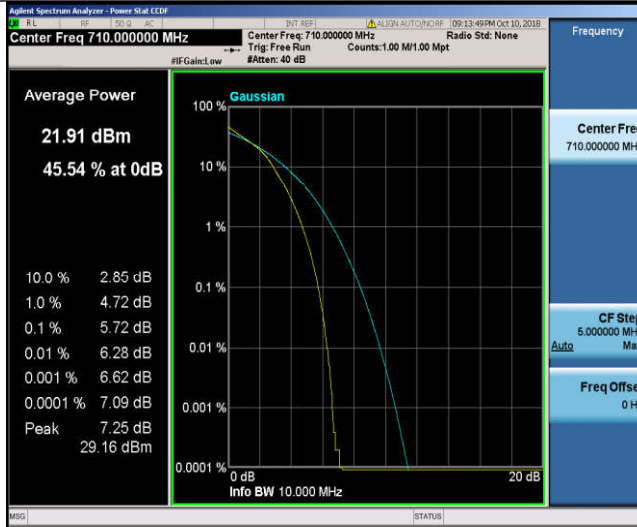
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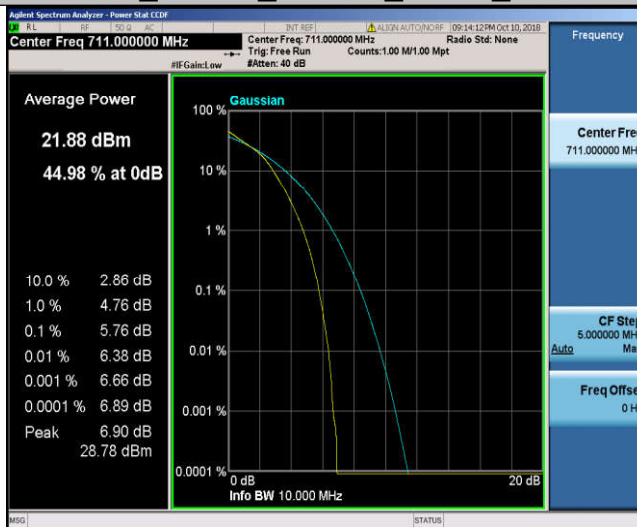
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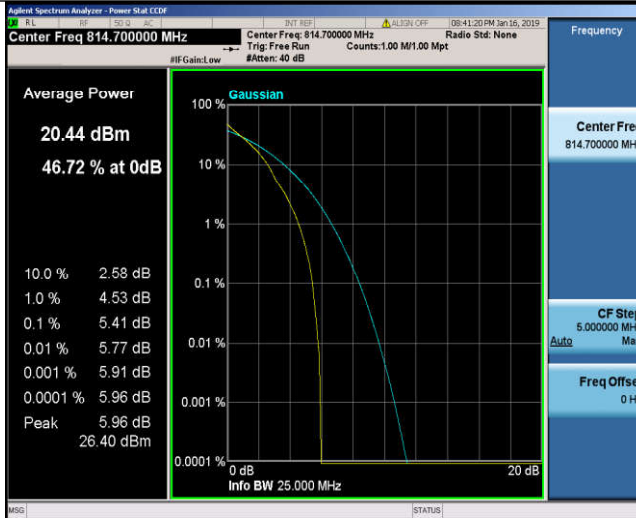
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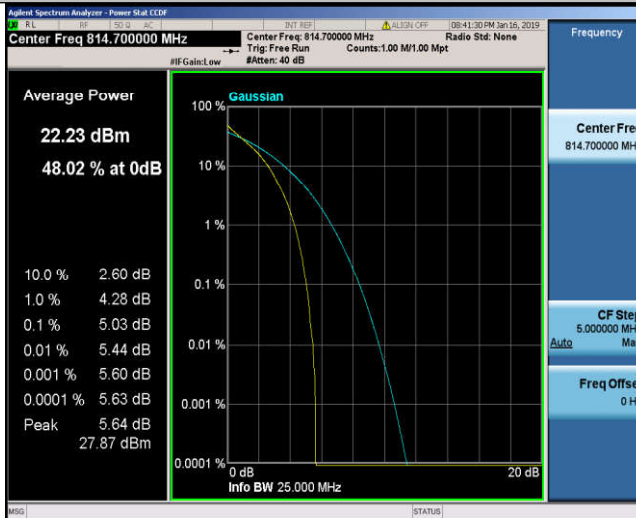
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Band26_1.4MHz_QPSK_26697_1RB#0



Band26_1.4MHz_QPSK_26697_6RB#0



Band26_1.4MHz_QPSK_26740_1RB#0

