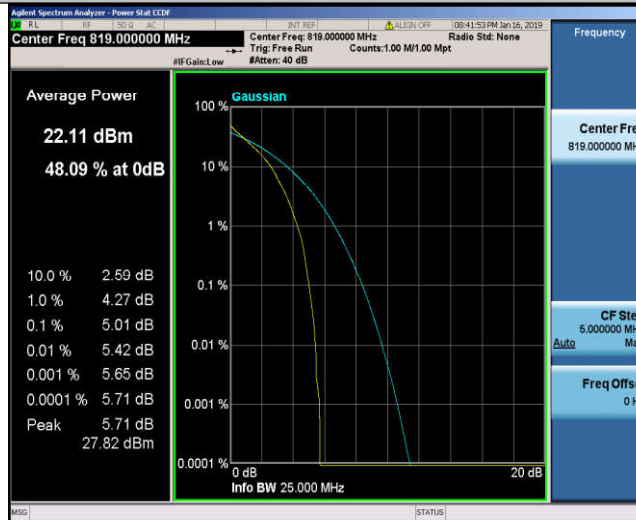
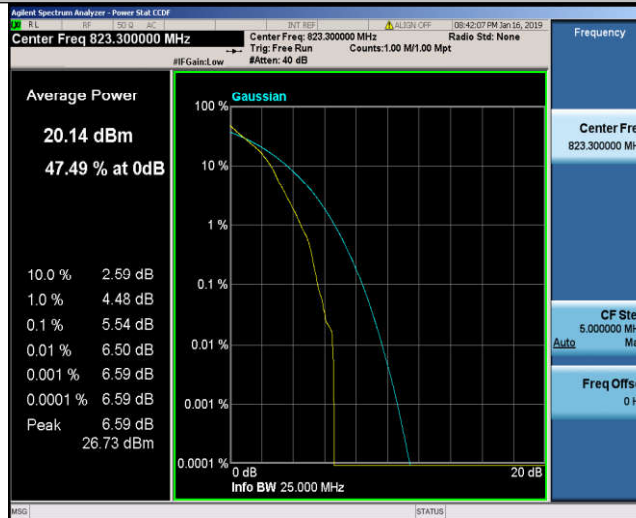


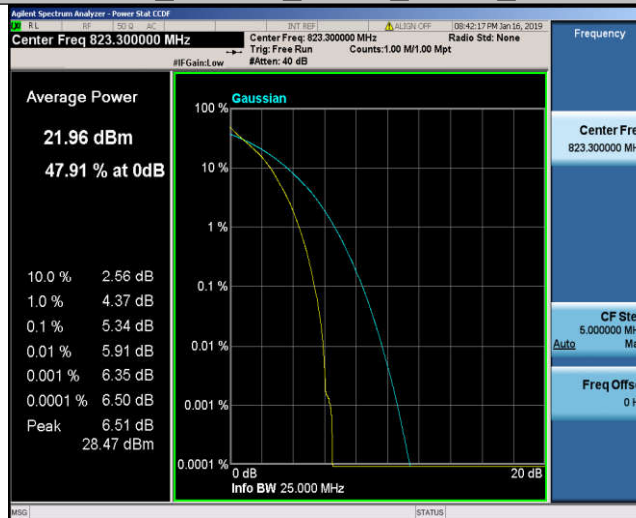
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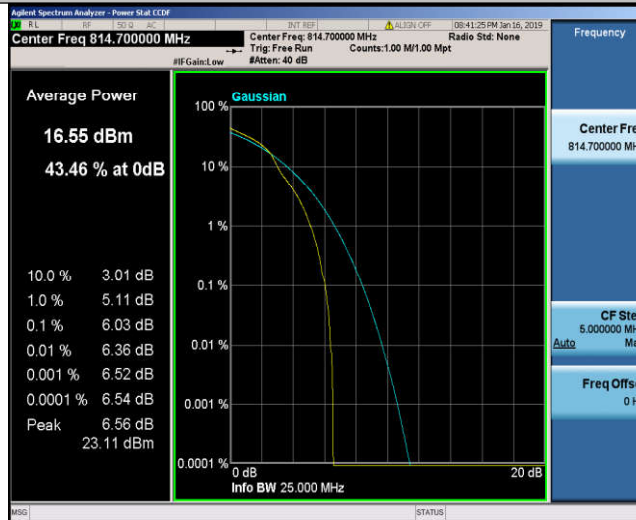
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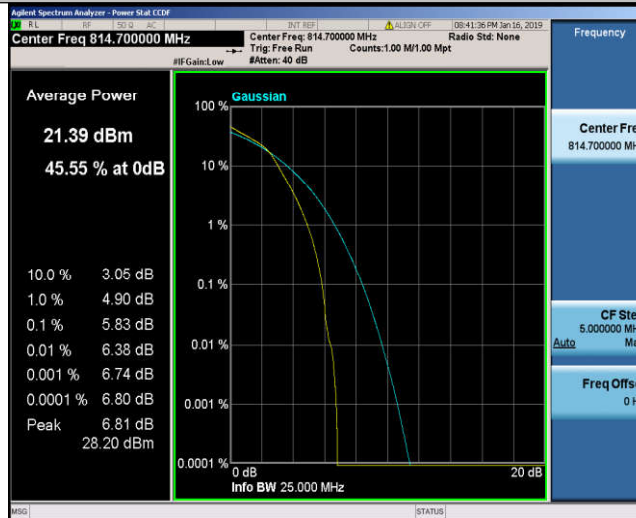
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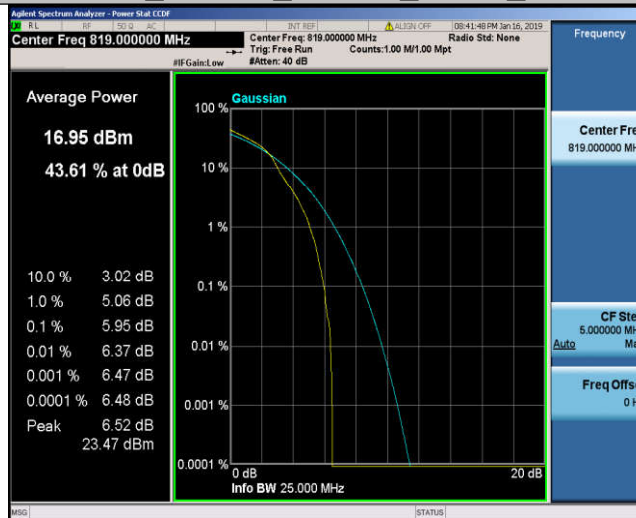
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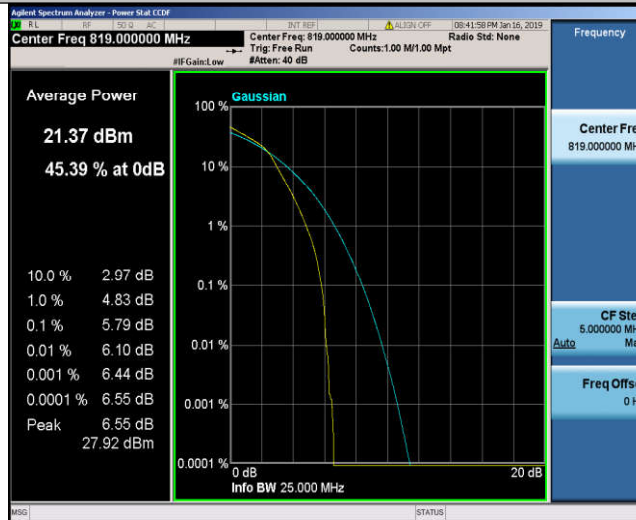
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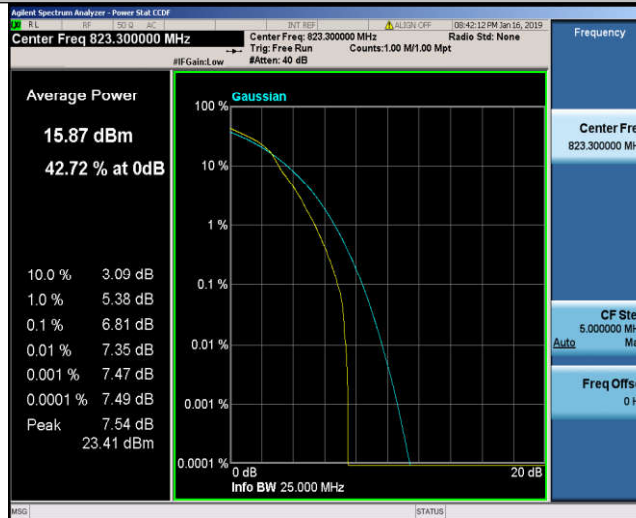
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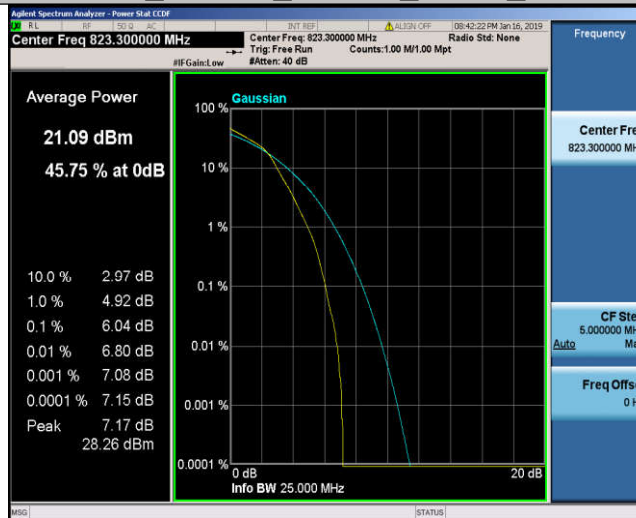
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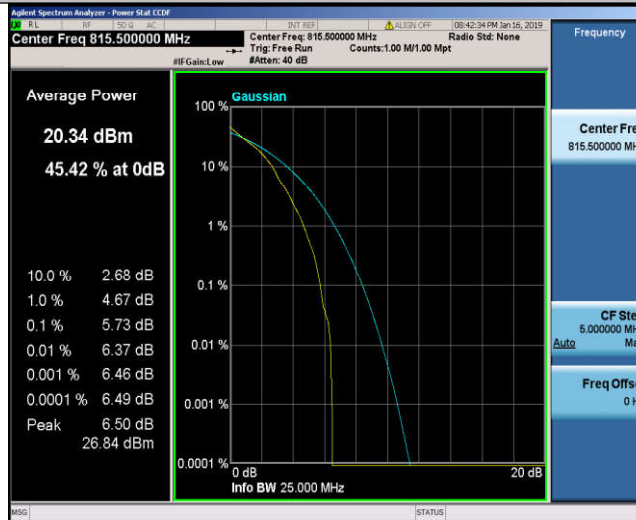
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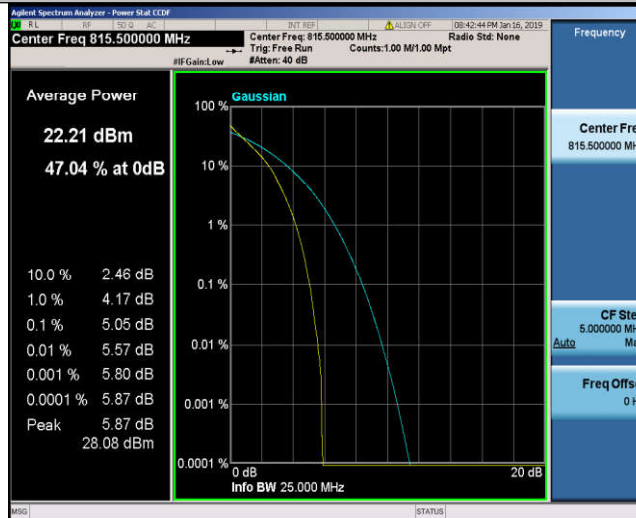
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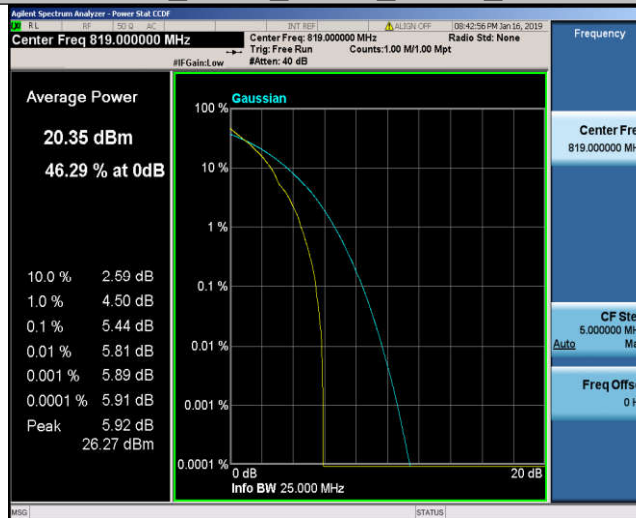
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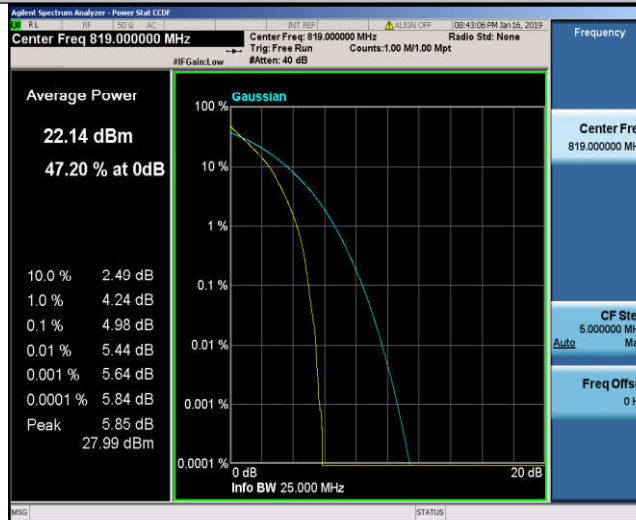
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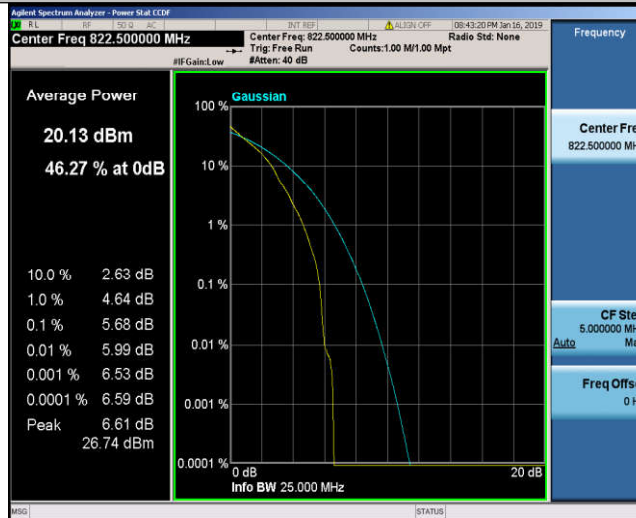
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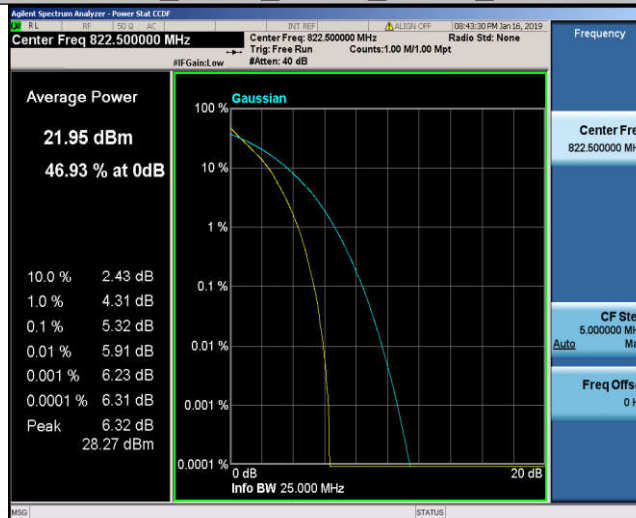
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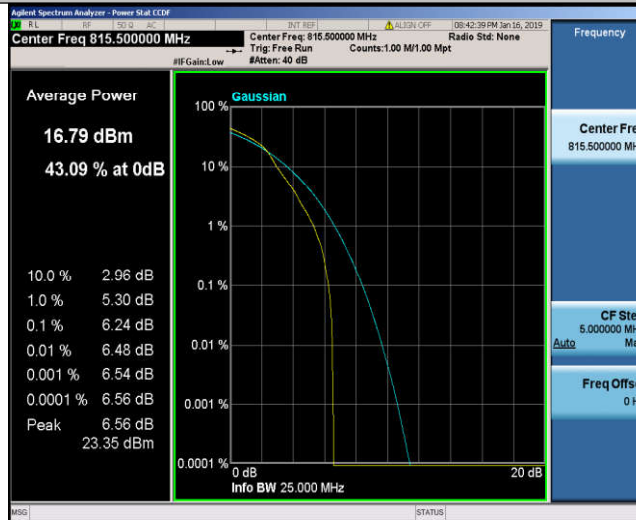
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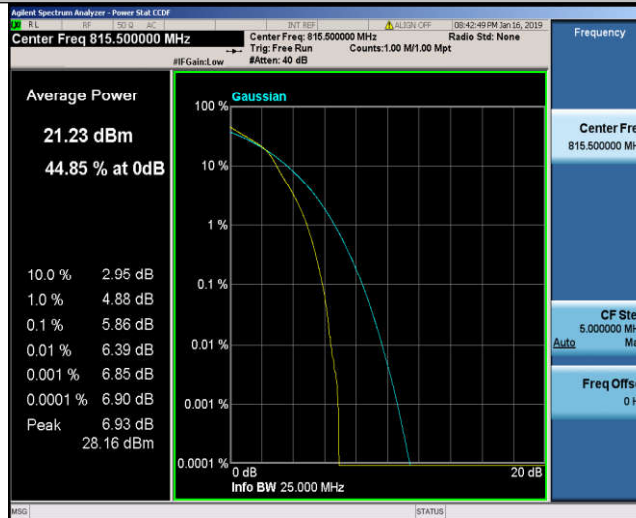
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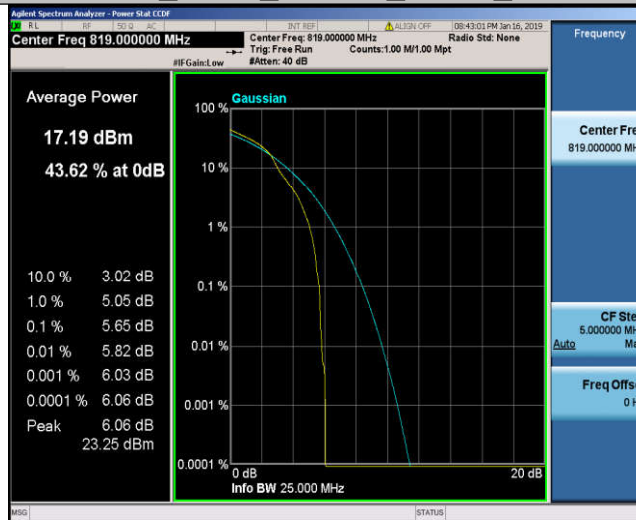
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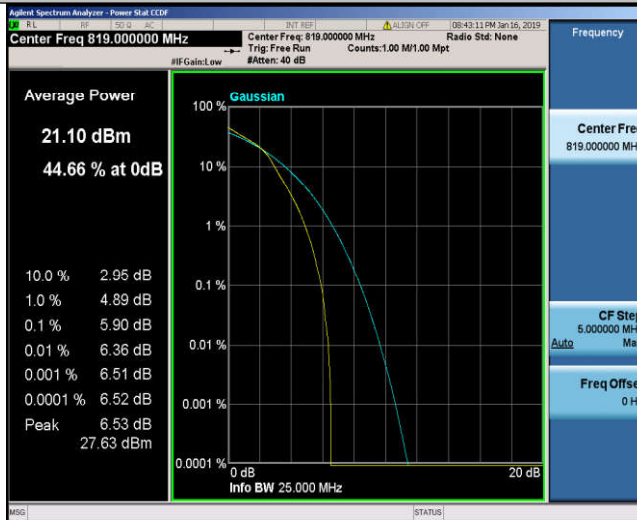
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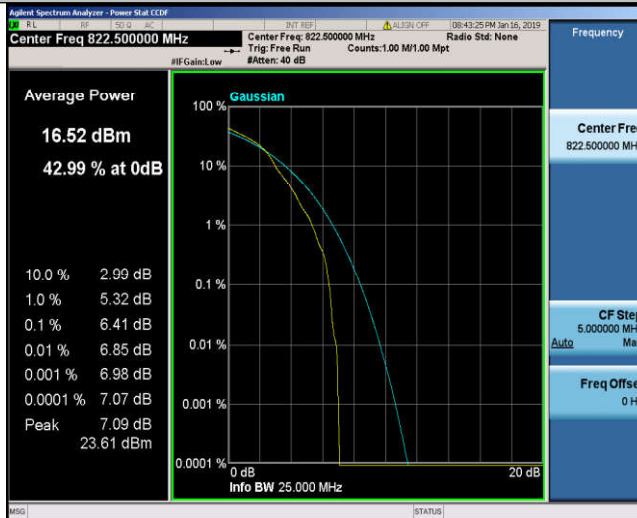
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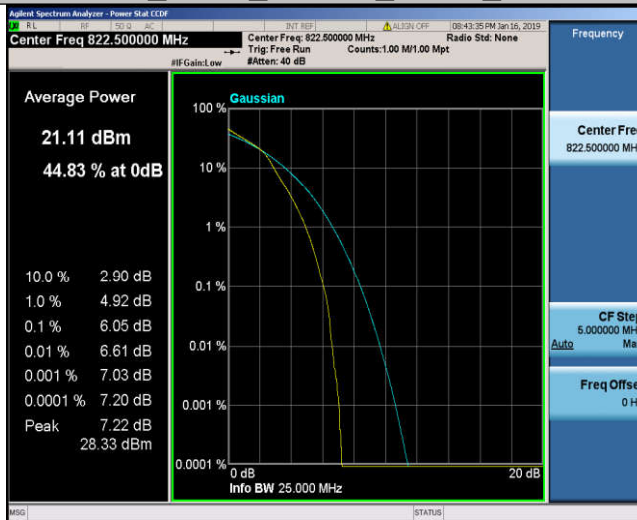
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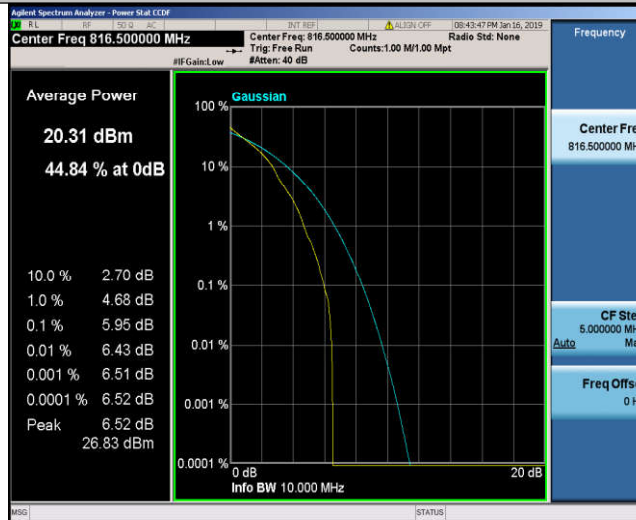
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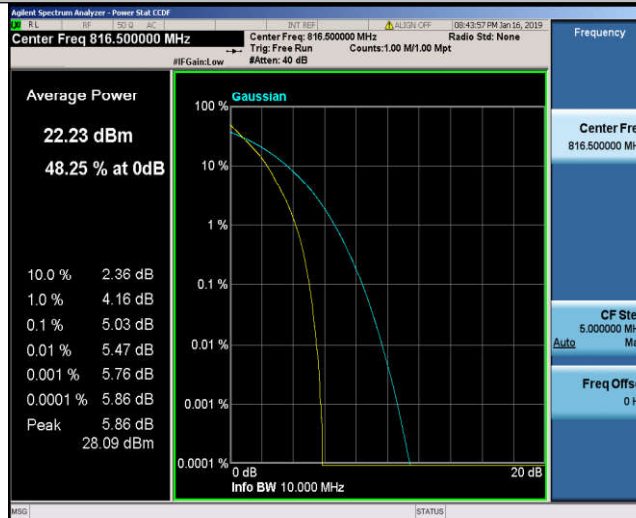
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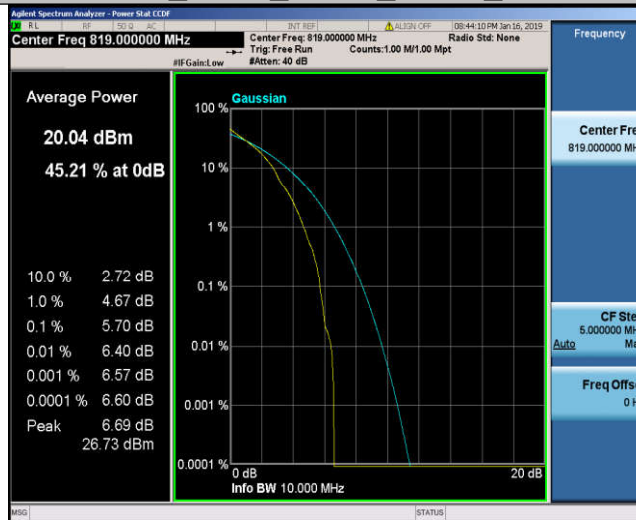
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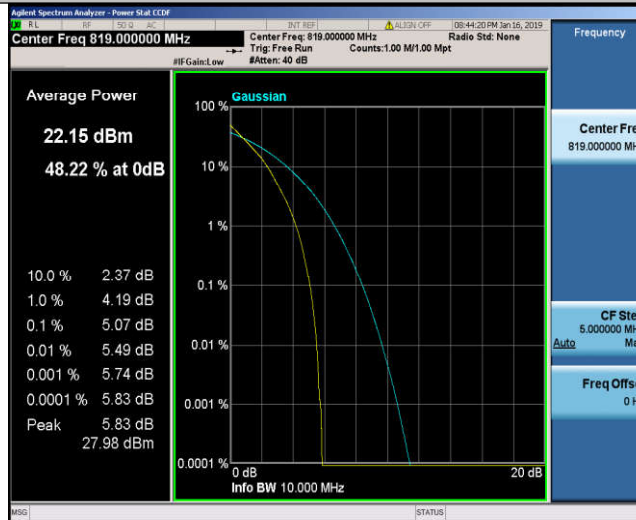
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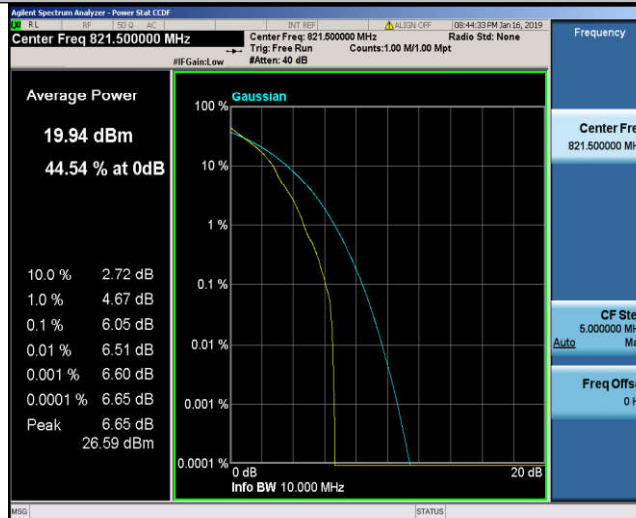
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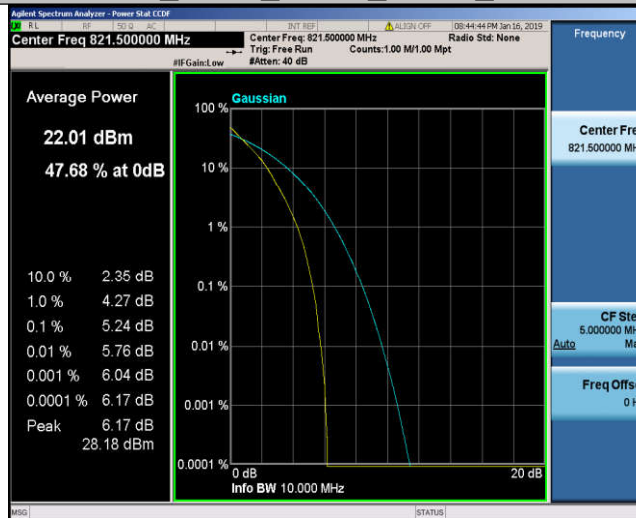
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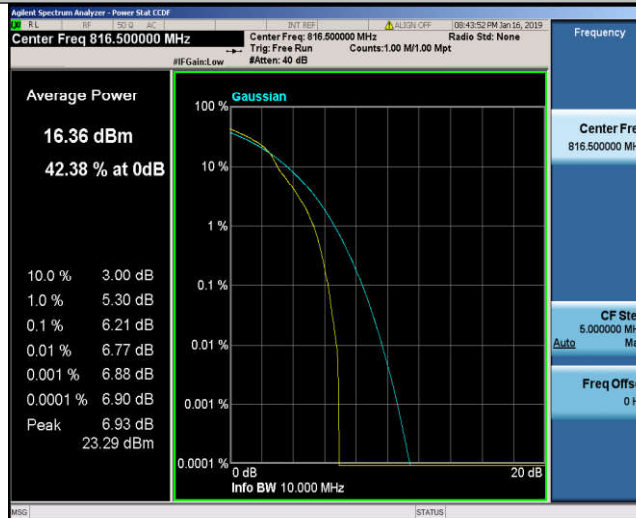
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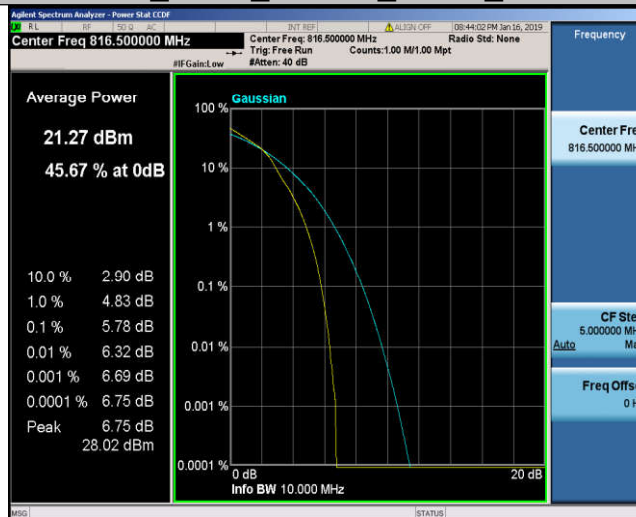
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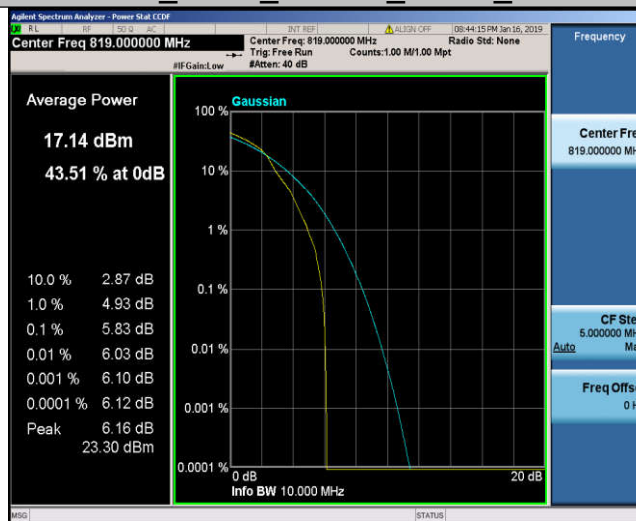
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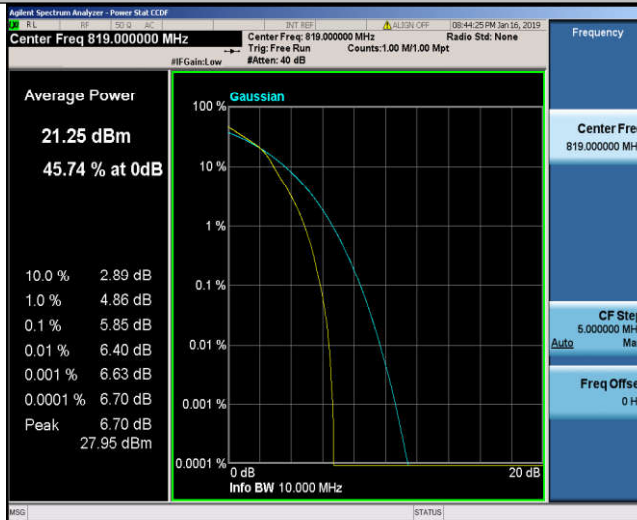
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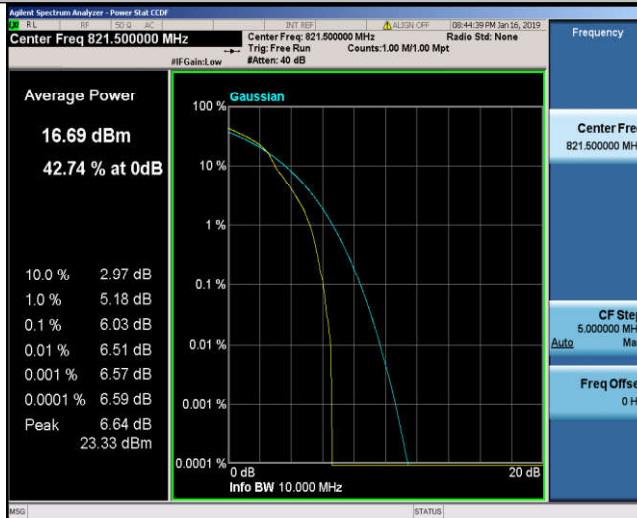
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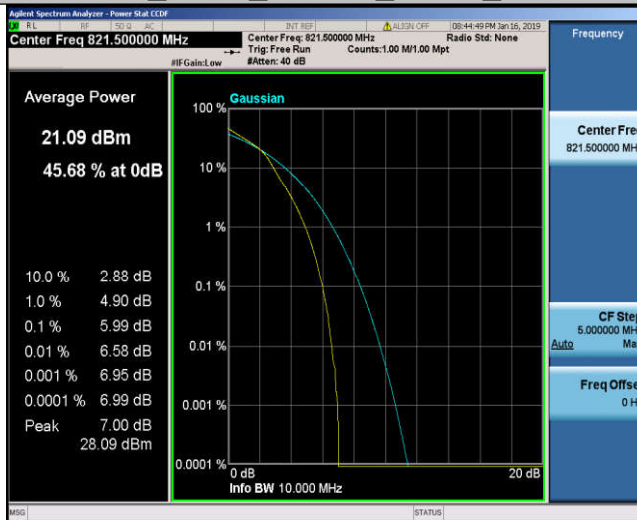
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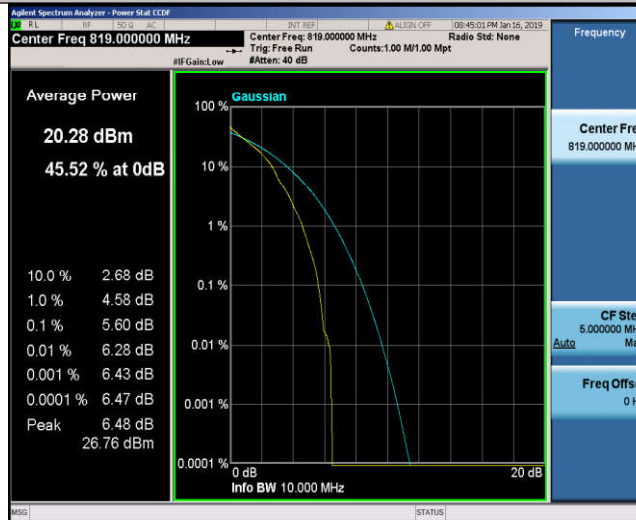
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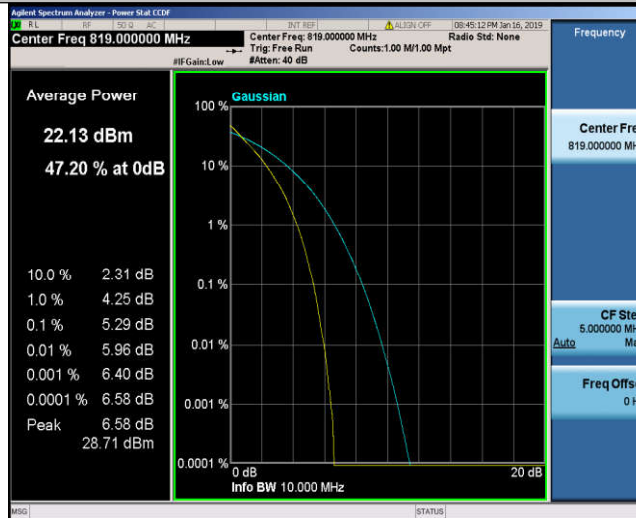
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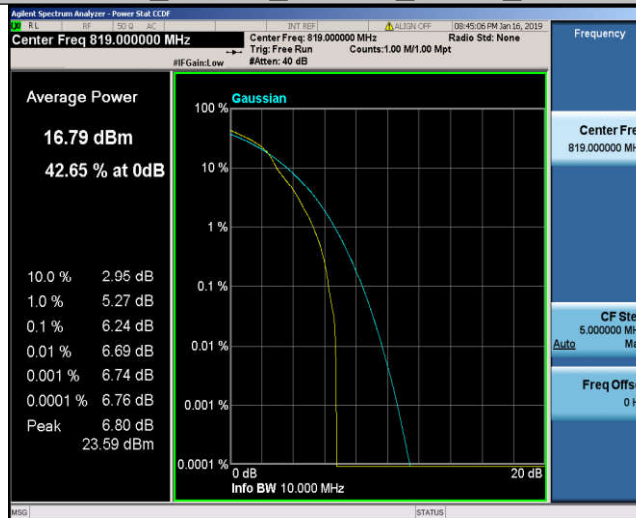
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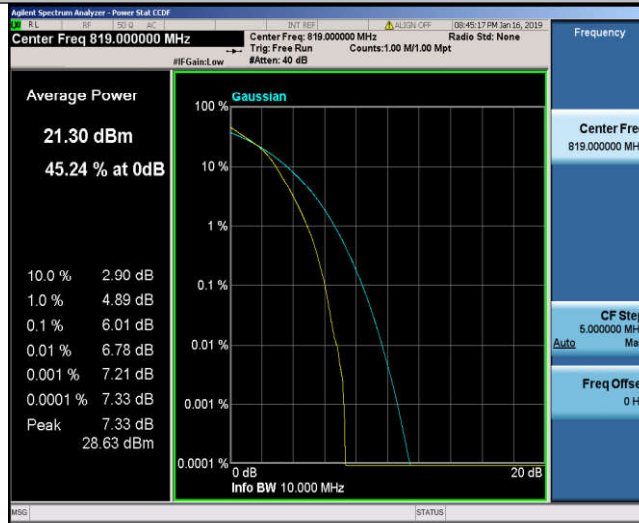
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Band26_10MHz_16QAM_26740_1RB#0



Band26_10MHz_16QAM_26740_50RB#0



5.3.Occupied Bandwidth/Emission Bandwidth

5.3.1.Test Standard

FCC: CFR Part 2.1049, CRF Part 27, CFR Part 90.209

5.3.2.Test Limit

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable.

Transmitters employing digital modulation techniques-when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated.

5.3.3.Test Procedure

1. Connect the equipment as shown in the above diagram.
 2. Adjust the settings of the Wideband Radio Communication Tester (CMW500) to set the EUT to its maximum power at the required channel.
 3. Set the spectrum analyzer to measure the 99% occupied bandwidth. Record the value.
 4. Set the spectrum analyzer to measure the -26 dB emission bandwidth. Record the value.
 5. Measurements are to be performed with the EUT set to the low, middle and high channel of each frequency band.
- Spectrum analyzer settings: Measurement bandwidth of at least 1% of the occupied bandwidth.

5.3.4. Test Data

LTE Band 12:

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.1049	1.280	PASS
	MCH	6	0	1.1103	1.263	PASS
	HCH	6	0	1.1146	1.326	PASS
16QAM	LCH	6	0	1.1113	1.299	PASS
	MCH	6	0	1.1110	1.314	PASS
	HCH	6	0	1.1132	1.299	PASS

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.7011	2.995	PASS
	MCH	15	0	2.6933	3.000	PASS
	HCH	15	0	2.7006	3.025	PASS
16QAM	LCH	15	0	2.7037	3.038	PASS
	MCH	15	0	2.6982	2.994	PASS
	HCH	15	0	2.6935	3.016	PASS

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4811	4.930	PASS
	MCH	25	0	4.4743	4.852	PASS
	HCH	25	0	4.4790	4.890	PASS
16QAM	LCH	25	0	4.4821	4.818	PASS
	MCH	25	0	4.4647	4.835	PASS
	HCH	25	0	4.4793	4.865	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9298	9.472	PASS
	MCH	50	0	8.9121	9.397	PASS
	HCH	50	0	8.9336	9.521	PASS
16QAM	LCH	50	0	8.9429	9.552	PASS
	MCH	50	0	8.9137	9.382	PASS
	HCH	50	0	8.9325	9.430	PASS

LTE Band 17:

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4741	4.861	PASS
	MCH	25	0	4.4763	4.888	PASS
	HCH	25	0	4.4831	4.859	PASS
16QAM	LCH	25	0	4.4717	4.824	PASS
	MCH	25	0	4.4721	4.777	PASS
	HCH	25	0	4.4693	4.867	PASS

Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	50	0	8.9148	9.482	PASS
	MCH	50	0	8.9257	9.440	PASS
	HCH	50	0	8.9405	9.415	PASS
16QAM	LCH	50	0	8.9196	9.471	PASS
	MCH	50	0	8.9144	9.437	PASS
	HCH	50	0	8.9339	9.463	PASS

LTE Band 26:

Channel Bandwidth: 1.4 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	6	0	1.1262	1.943	PASS
	MCH	6	0	1.1060	1.270	PASS
	HCH	6	0	1.1225	1.594	PASS
16QAM	LCH	6	0	1.1274	1.780	PASS
	MCH	6	0	1.1118	1.265	PASS
	HCH	6	0	1.1199	1.417	PASS

Channel Bandwidth: 3 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	15	0	2.7009	3.382	PASS
	MCH	15	0	2.6951	3.070	PASS
	HCH	15	0	2.7046	3.159	PASS
16QAM	LCH	15	0	2.7026	3.230	PASS
	MCH	15	0	2.7024	3.026	PASS
	HCH	15	0	2.6966	3.043	PASS

Channel Bandwidth: 5 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	LCH	25	0	4.4720	4.955	PASS
	MCH	25	0	4.4816	4.960	PASS
	HCH	25	0	4.4743	4.921	PASS
16QAM	LCH	25	0	4.4716	4.839	PASS
	MCH	25	0	4.4853	4.845	PASS
	HCH	25	0	4.4779	4.828	PASS

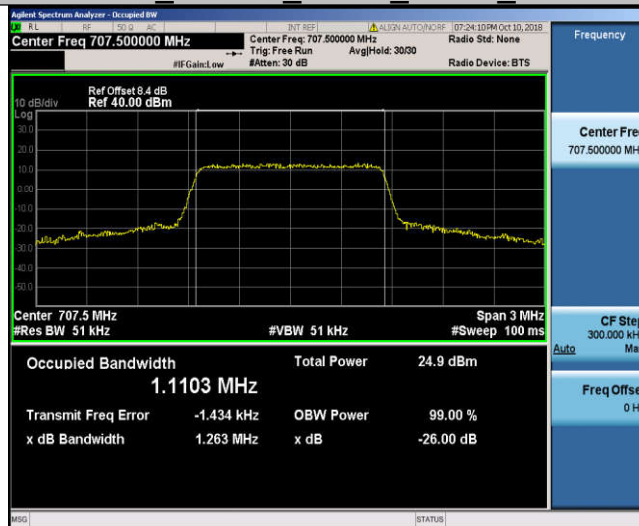
Channel Bandwidth: 10 MHz						
Modulation	Channel	RB Configuration		Occupied Bandwidth (MHz)	26dB Bandwidth (MHz)	Verdict
		Size	Offset			
QPSK	--	50	0	8.9244	9.804	PASS
16QAM	--	50	0	8.9172	9.476	PASS

Test Graphs

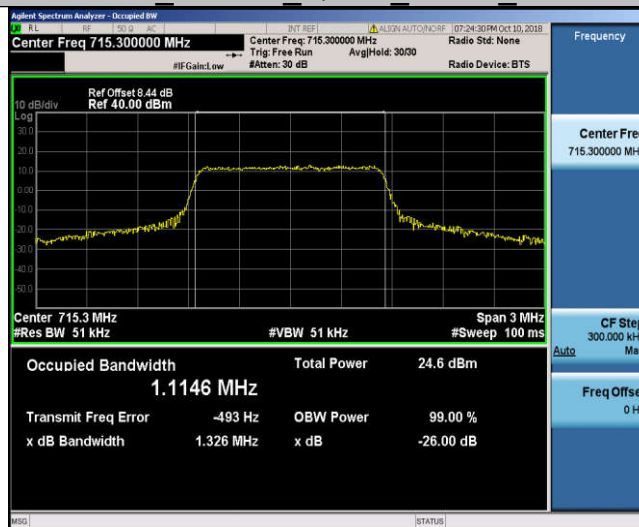
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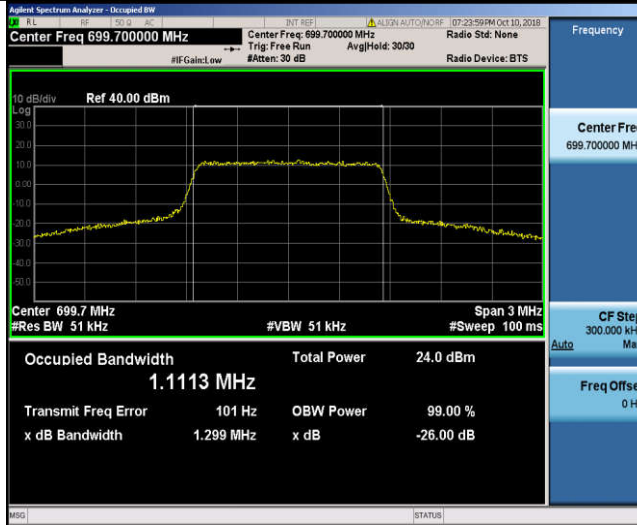
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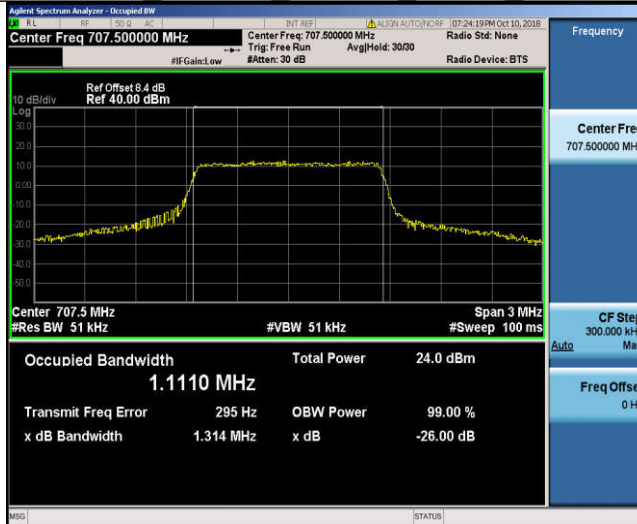
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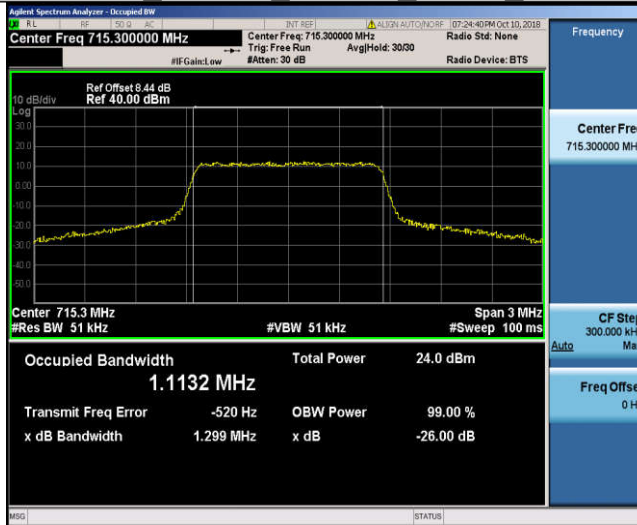
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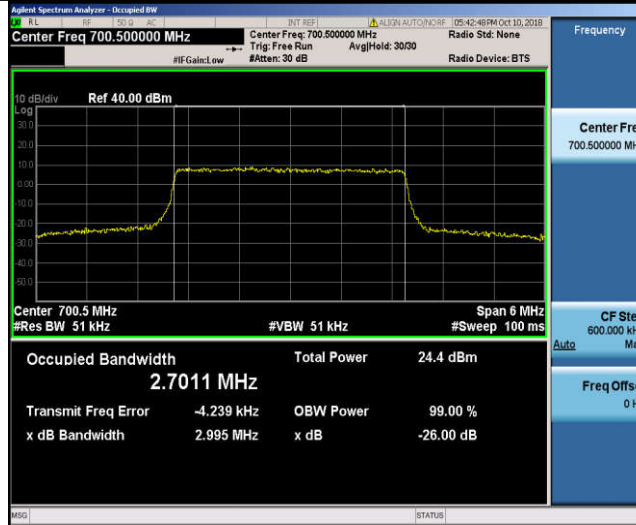
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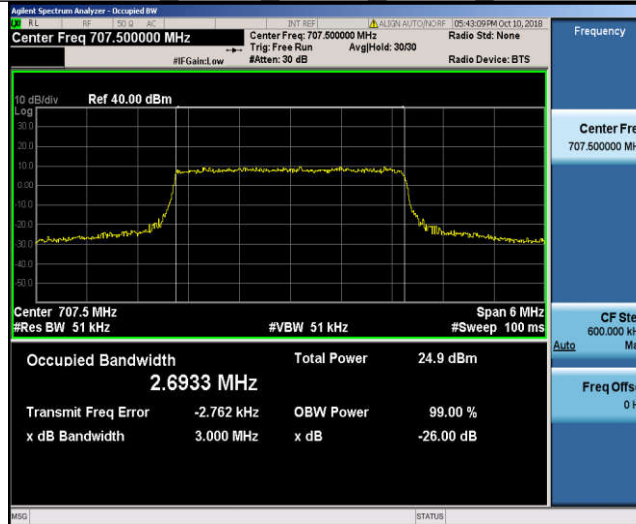
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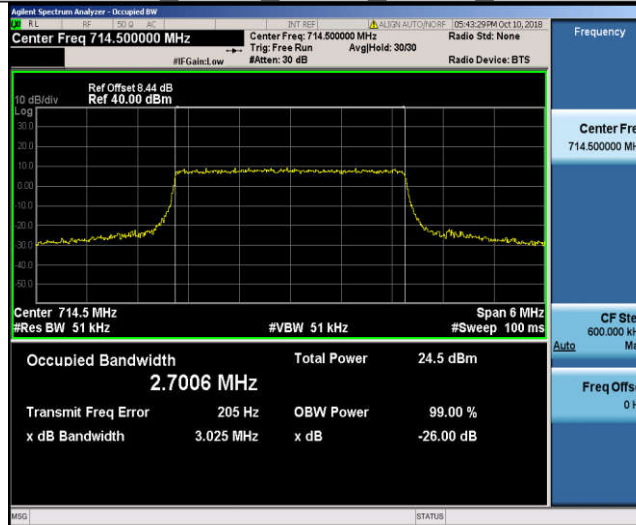
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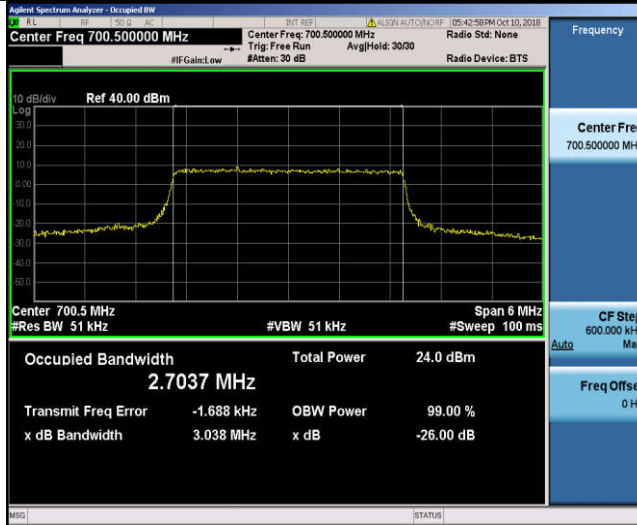
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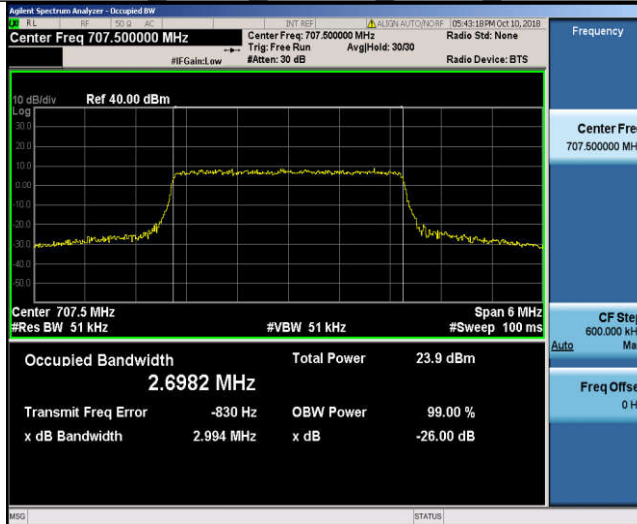
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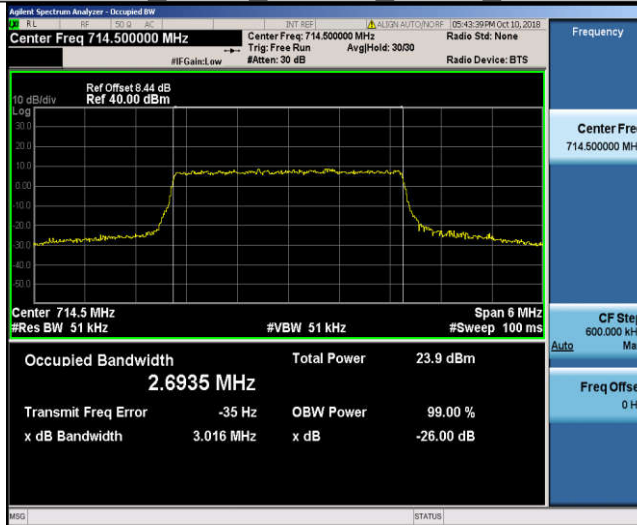
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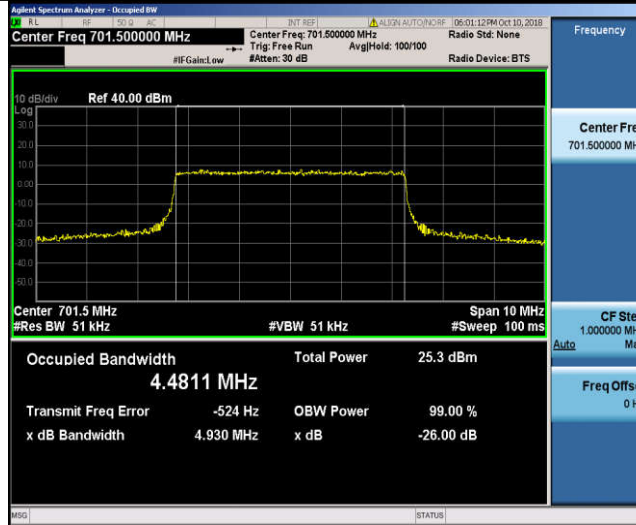
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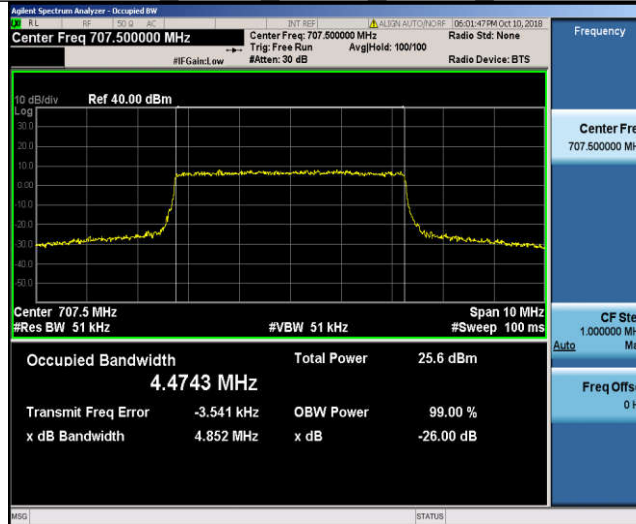
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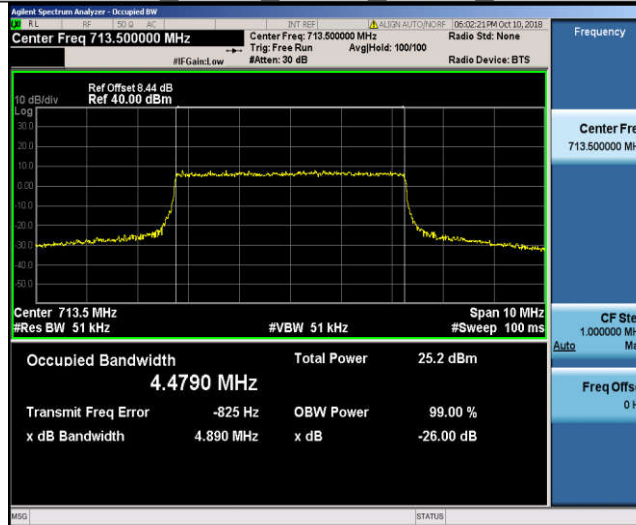
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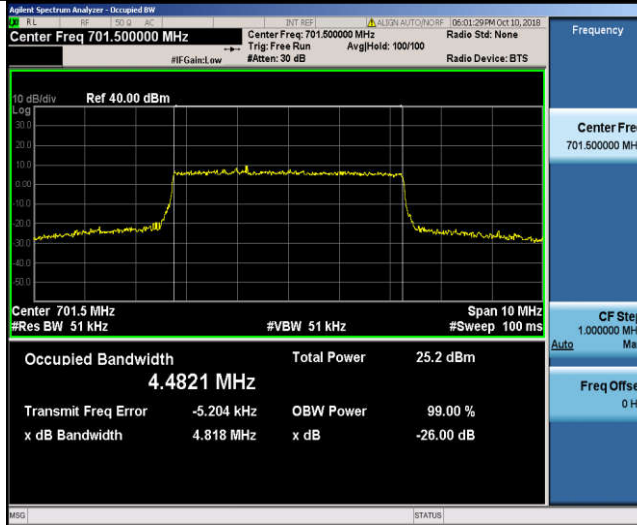
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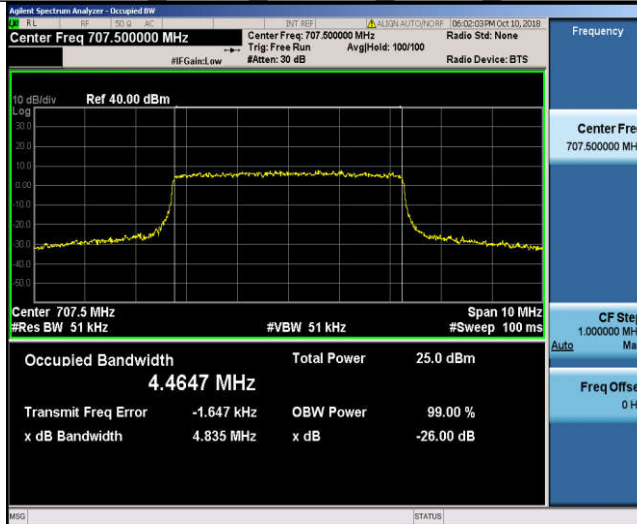
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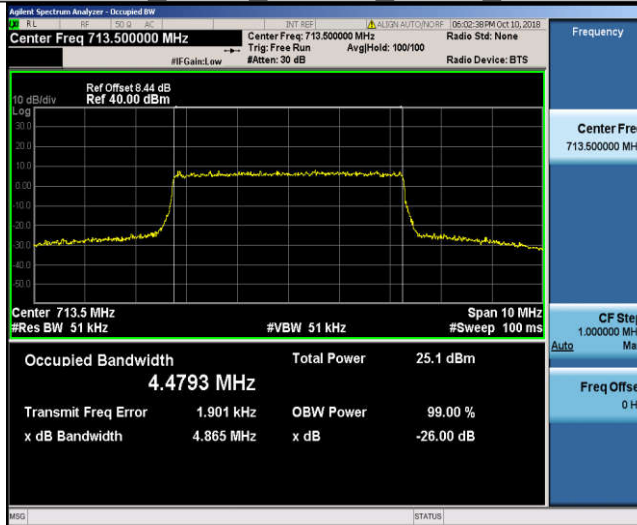
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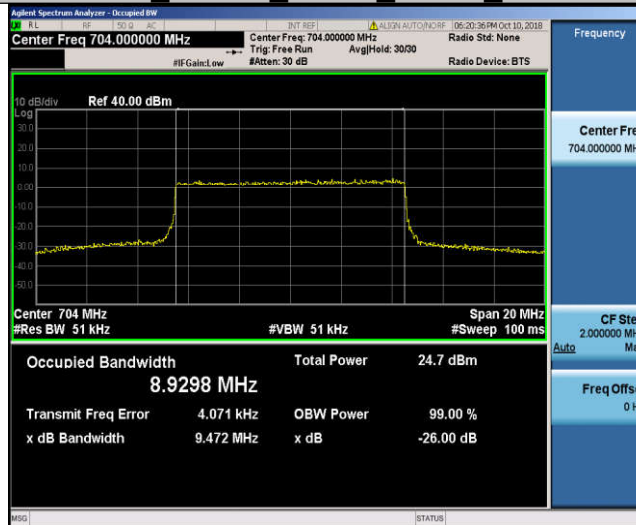
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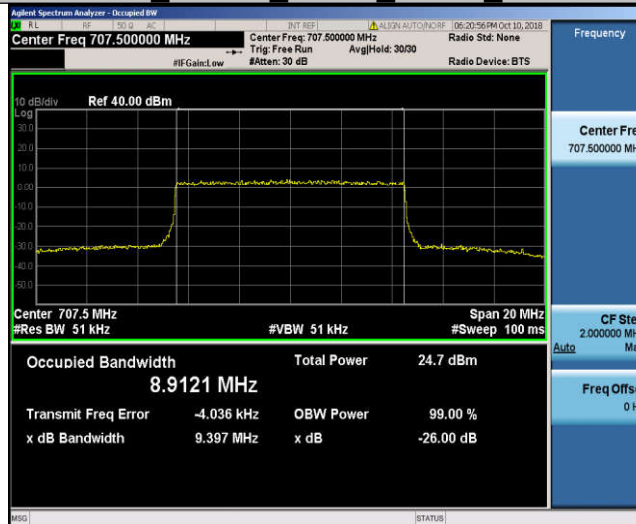
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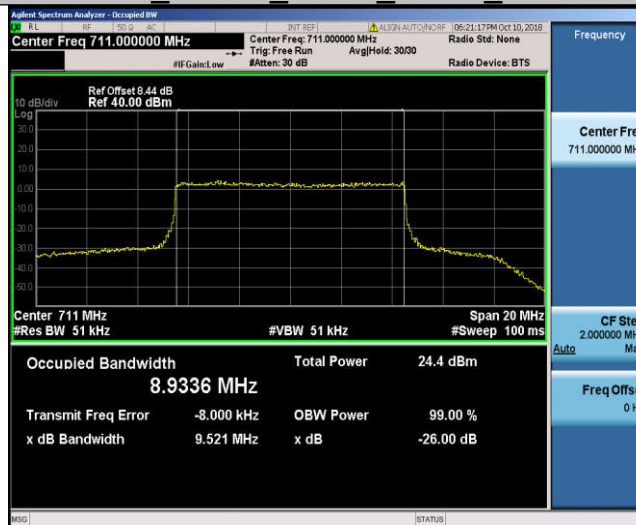
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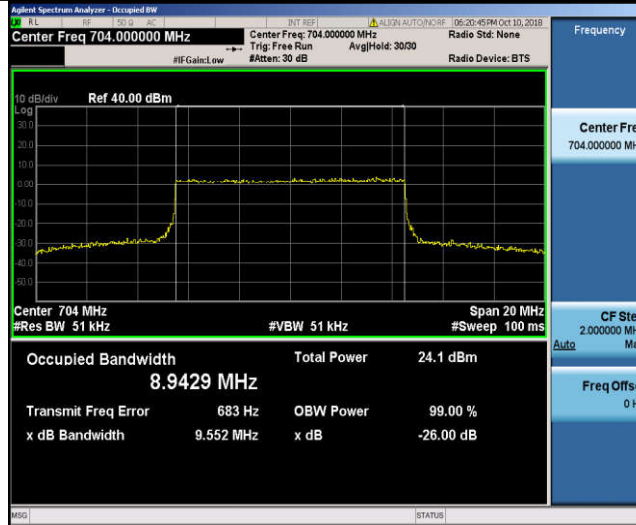
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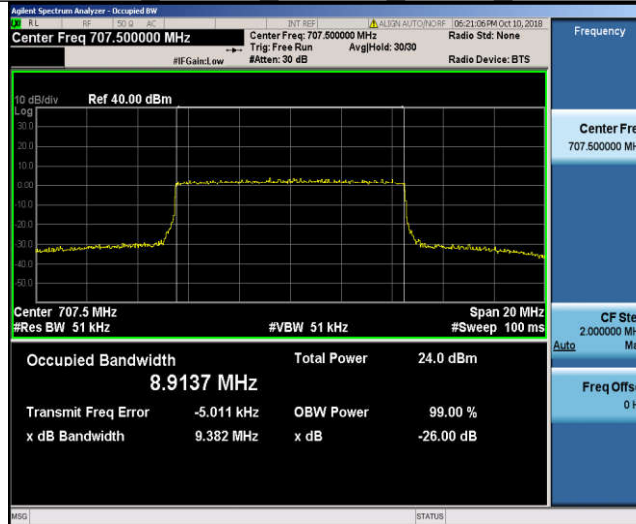
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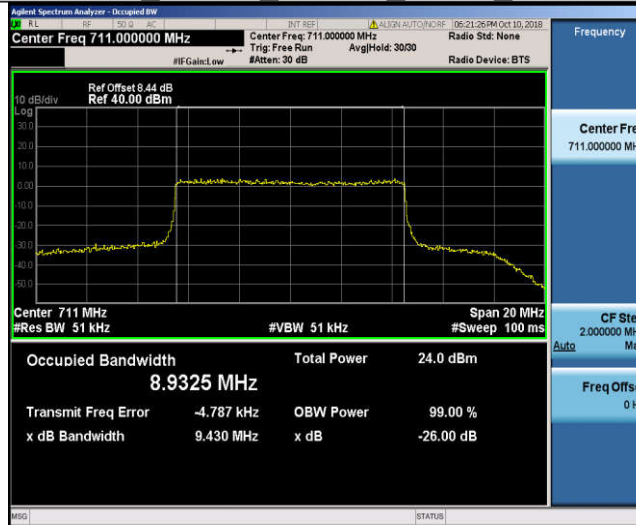
Band12 10MHz 16QAM 23060 50RB#0



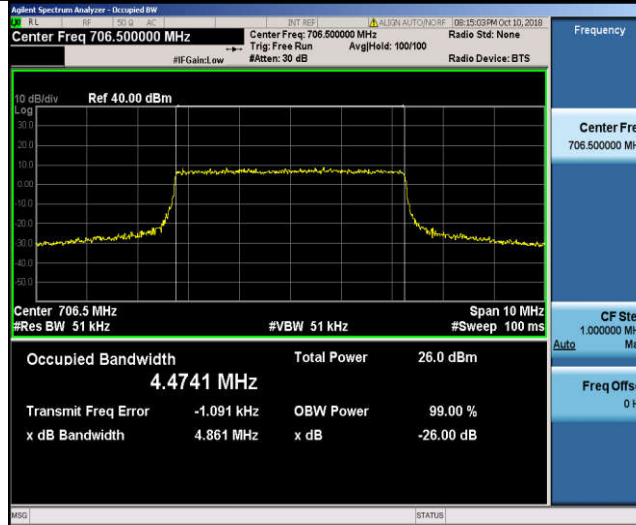
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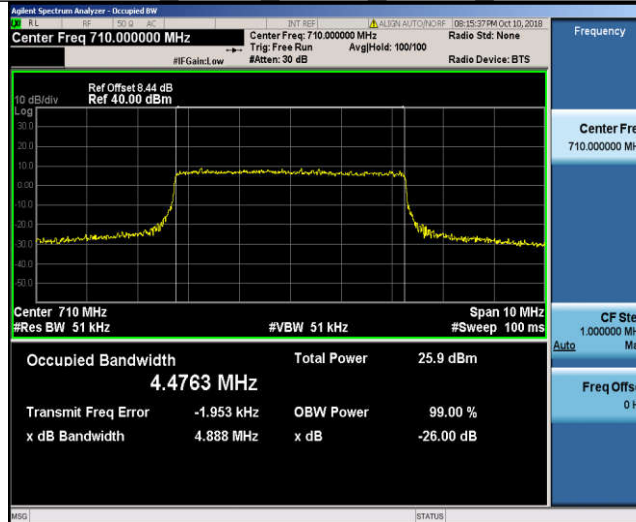
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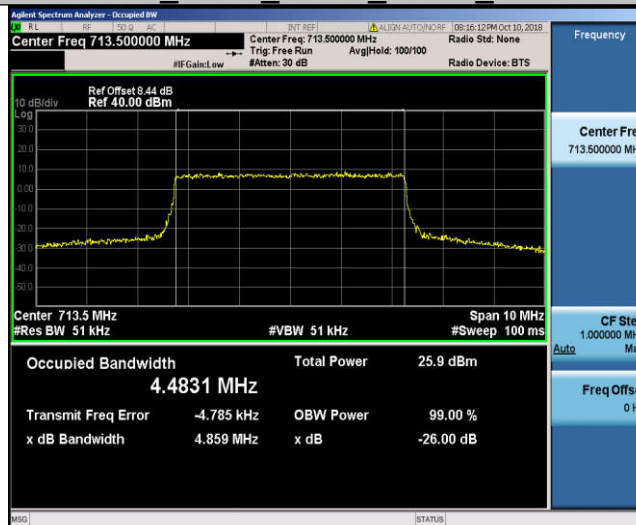
Band17 5MHz QPSK 23755 25RB#0



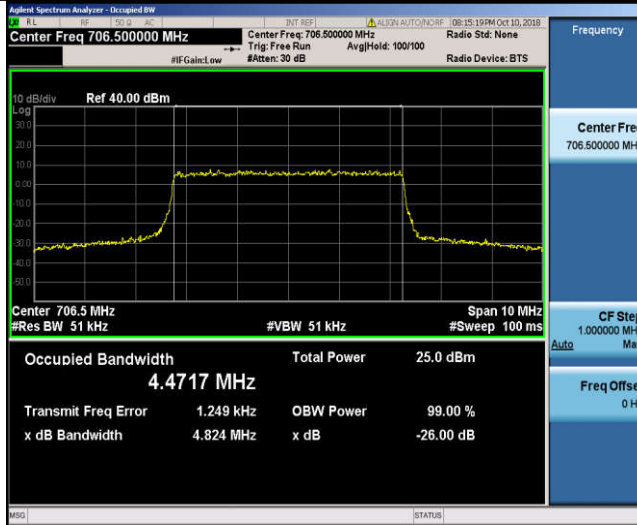
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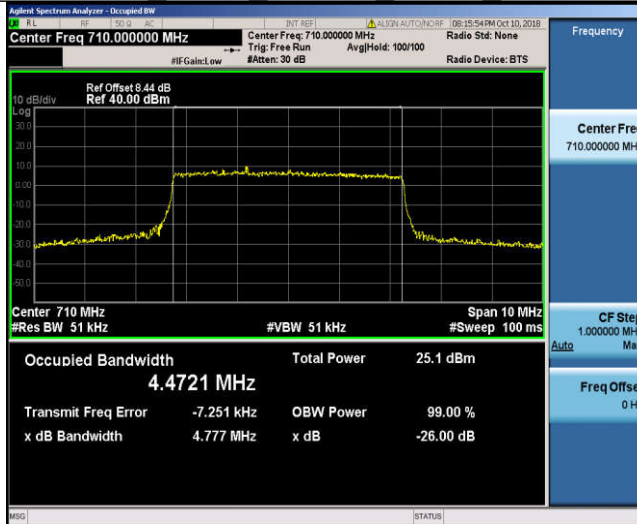
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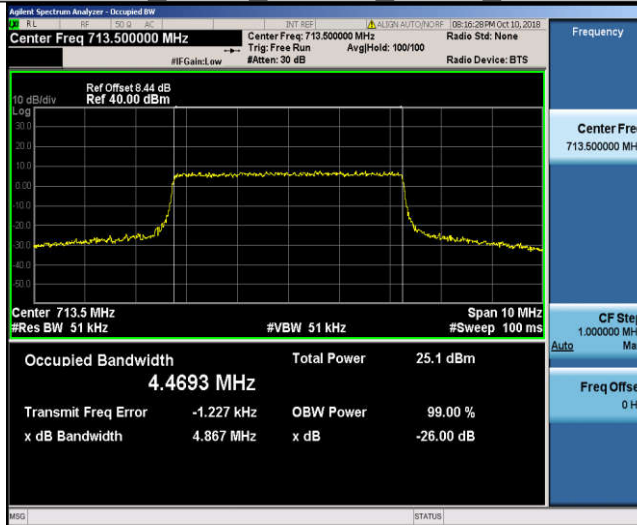
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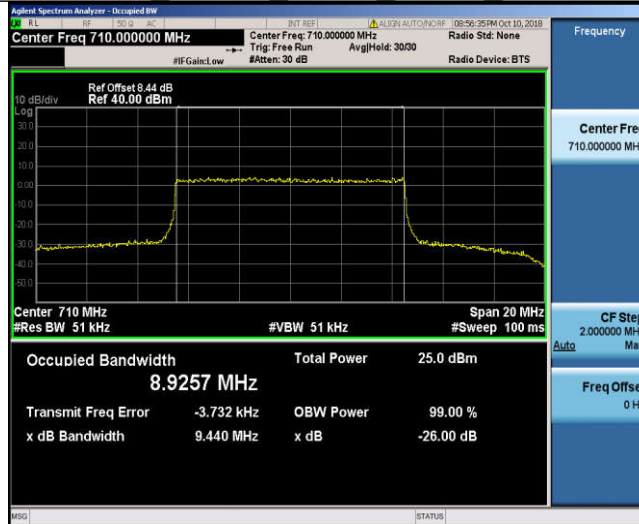
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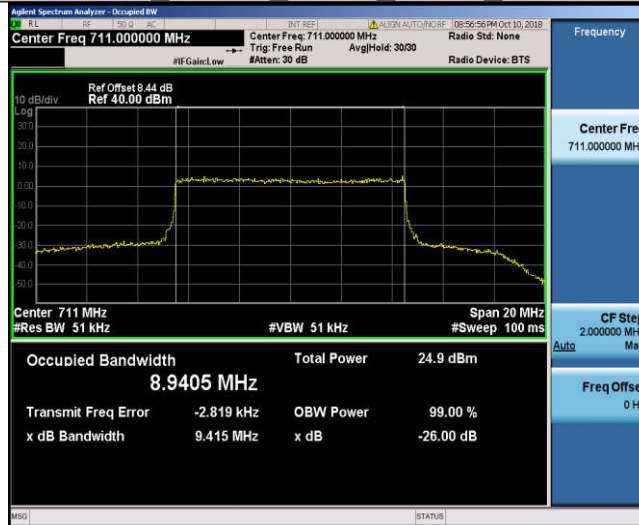
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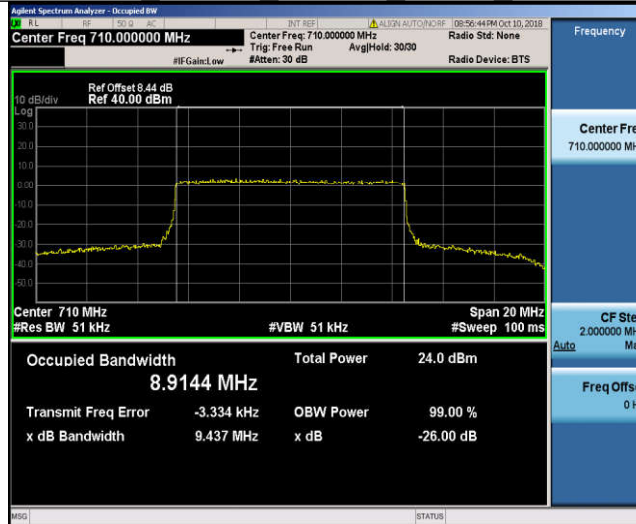
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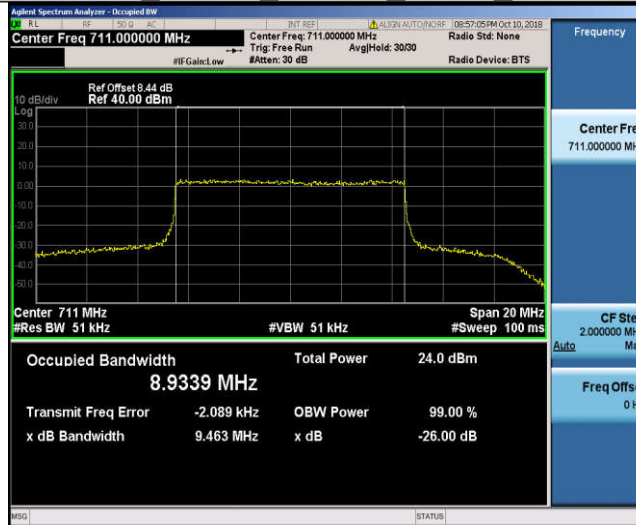
Band17 10MHz 16QAM 23780 50RB#0



Band17 10MHz 16QAM 23790 50RB#0



Band17 10MHz 16QAM 23800 50RB#0



Band26 1.4MHz QPSK 26697 6RB#0



Band26 1.4MHz QPSK 26740 6RB#0



Band26 1.4MHz QPSK 26783 6RB#0

