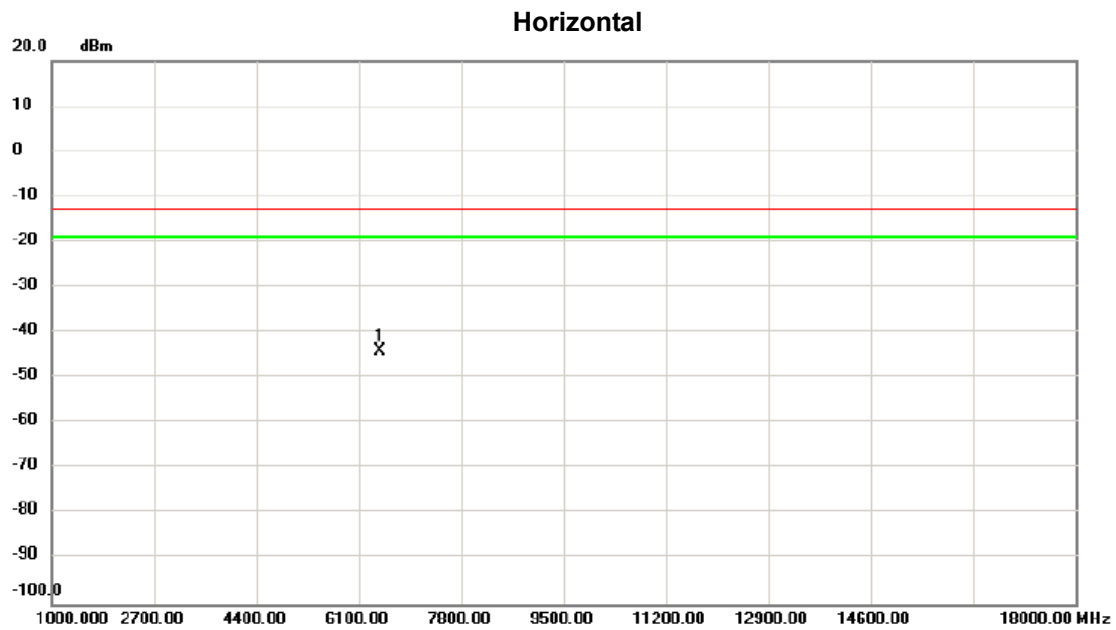
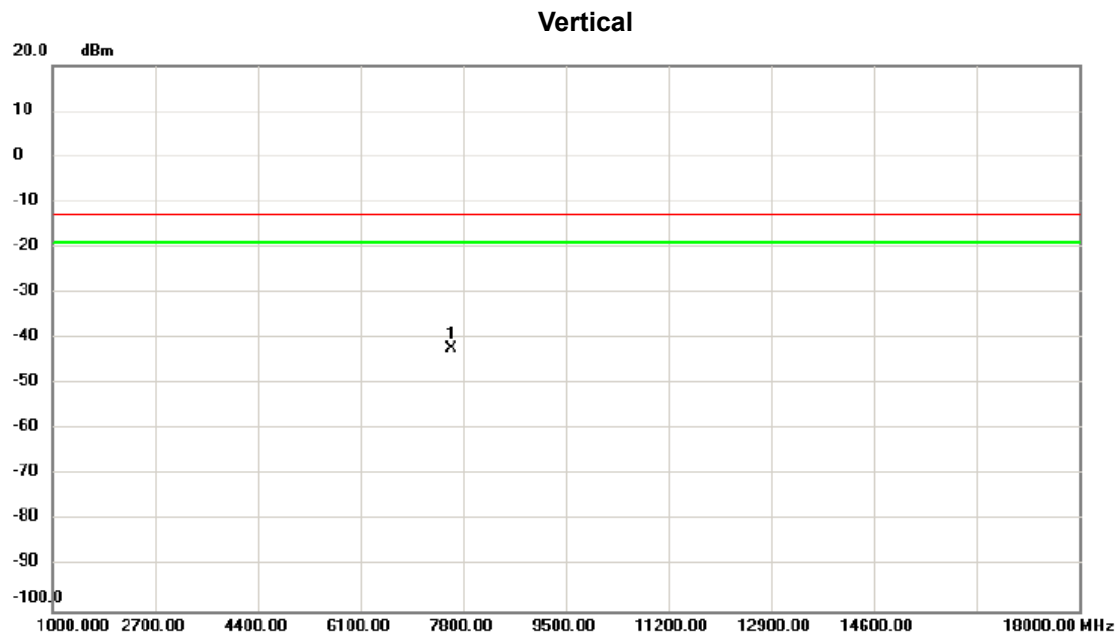


Test Mode	LTE Band 5_TX CH20525_1.4M_Main Antenna
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No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	6440.000	-59.14	15.19	-43.95	-13.00	-30.95	peak	

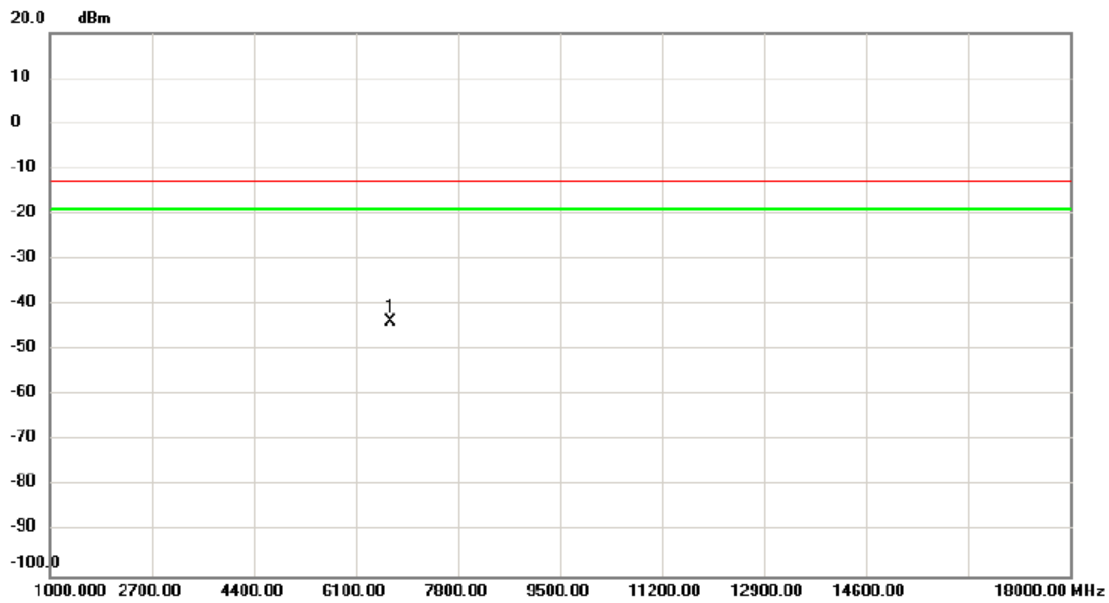
Test Mode LTE Band 5_TX CH20525_5M_Main Antenna



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1 *	7596.000	-59.64	17.45	-42.19	-13.00	-29.19	peak	

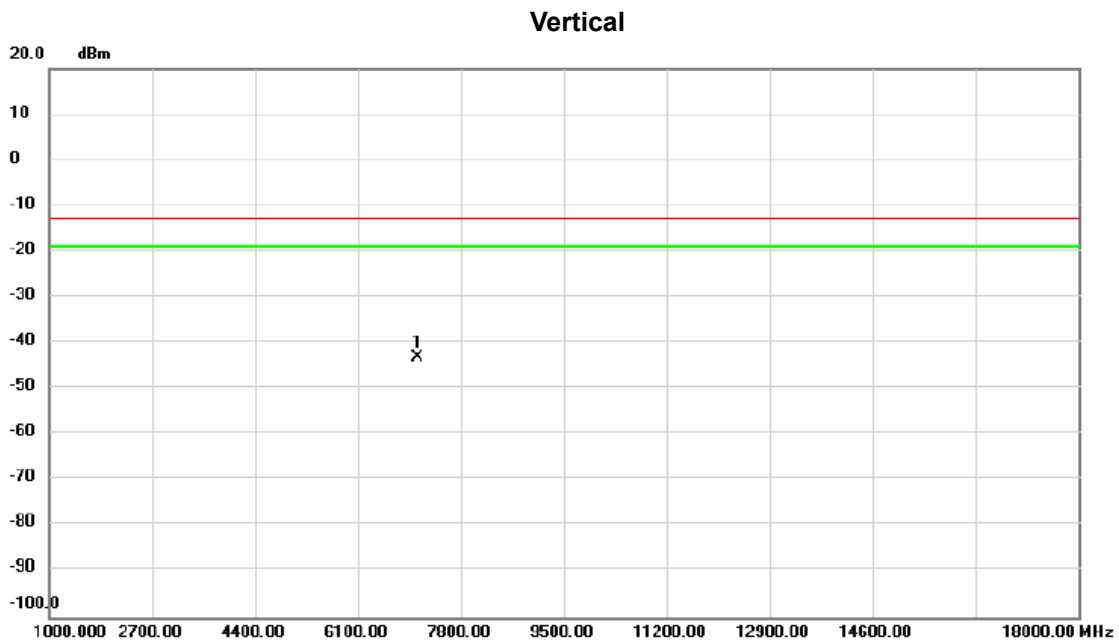
Test Mode LTE Band 5_TX CH20525_5M_Main Antenna

Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	6678.000	-59.69	15.86	-43.83	-13.00	-30.83	peak	

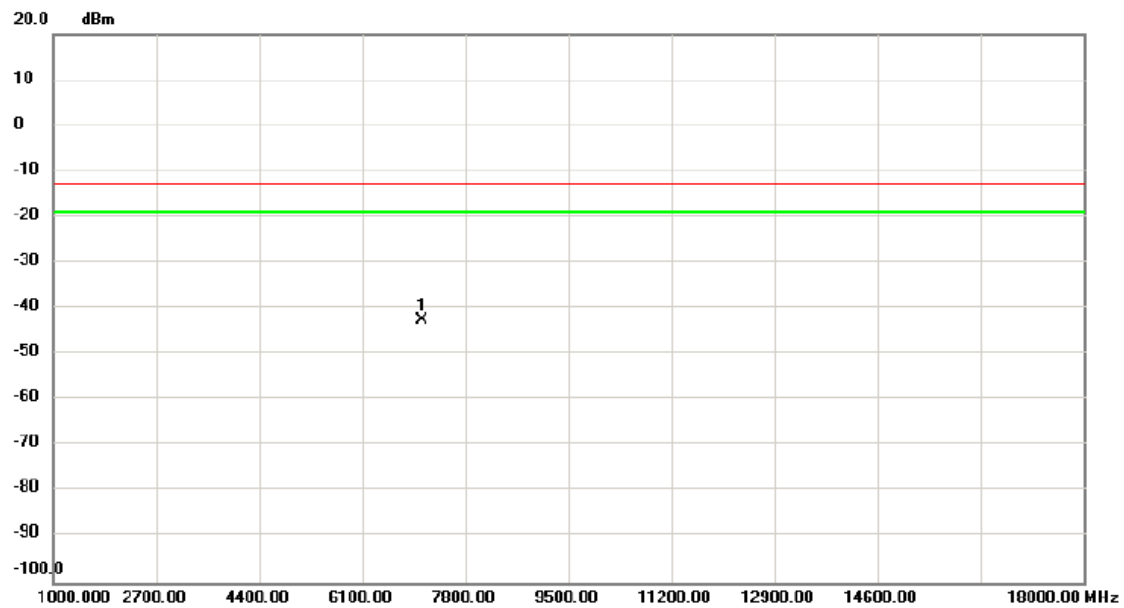
Test Mode	LTE Band 5_TX CH20525_10M_Main Antenna
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No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	7086.000	-59.83	16.69	-43.14	-13.00	-30.14	peak	

Test Mode	LTE Band 5_TX CH20525_10M_Main Antenna
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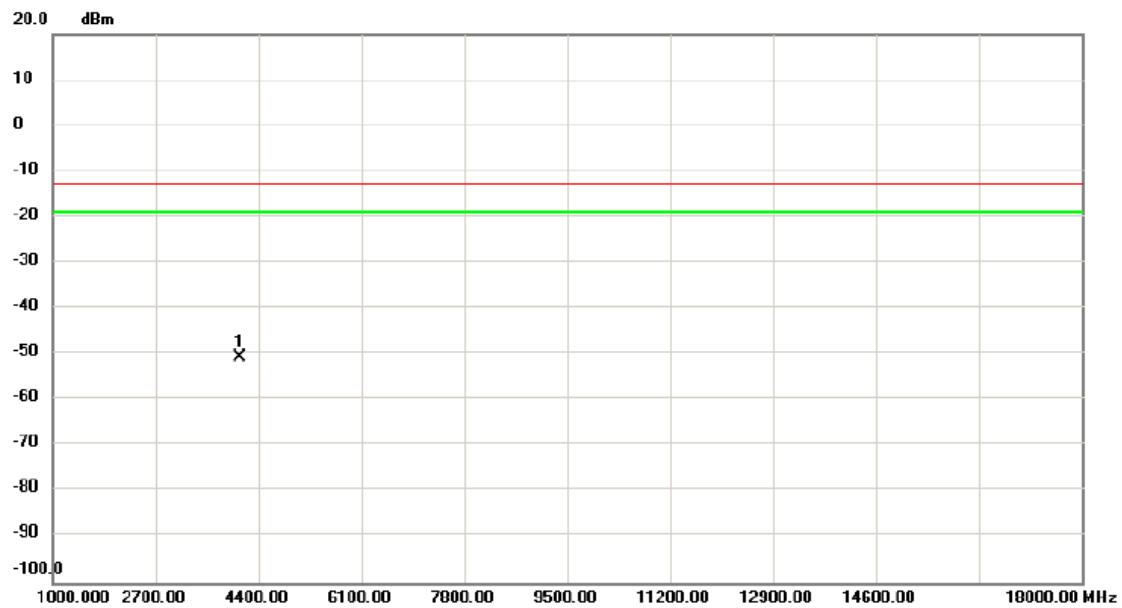
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	7086.000	-59.37	16.69	-42.68	-13.00	-29.68	peak	

Test Mode	LTE Band 5_TX CH20525_1.4M_Second Antenna
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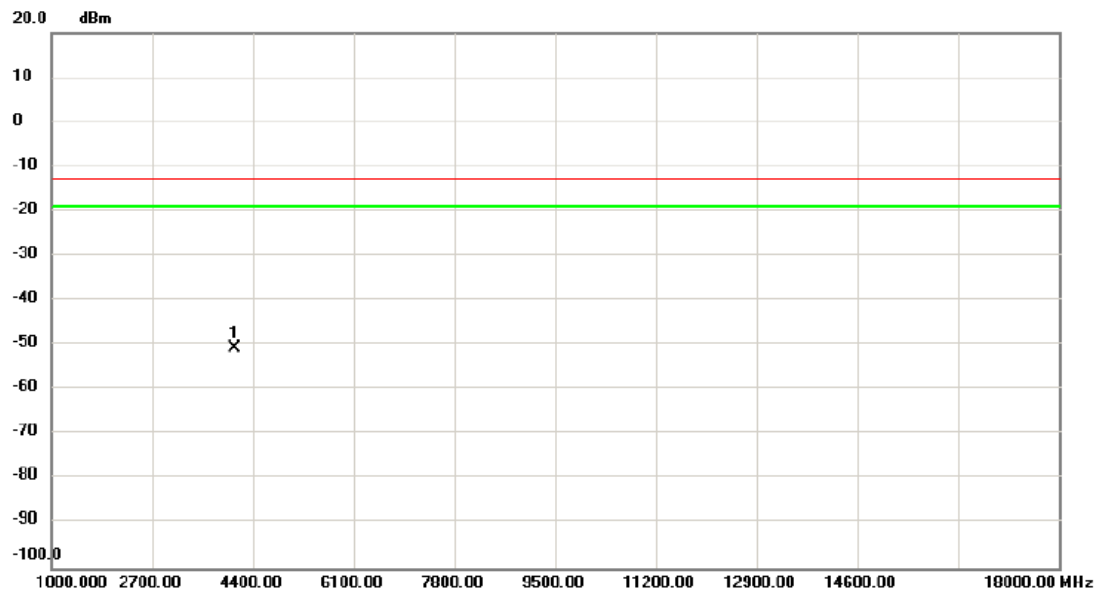
Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	4094.000	-57.19	6.52	-50.67	-13.00	-37.67	peak	

Test Mode	LTE Band 5_TX CH20525_1.4M_Second Antenna
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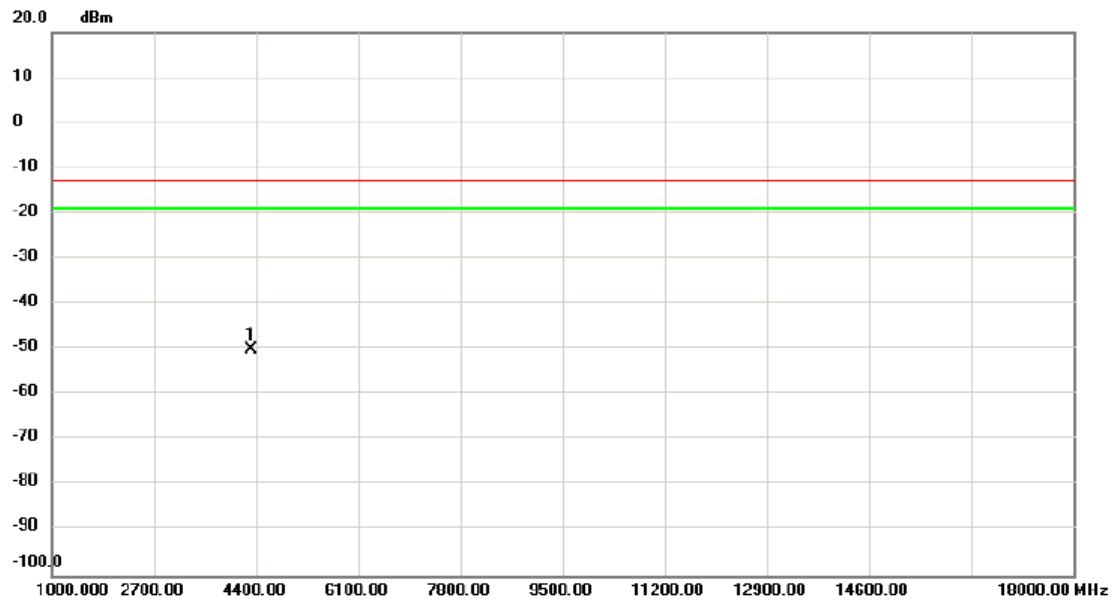
Horizontal



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	4094.000	-57.10	6.52	-50.58	-13.00	-37.58	peak	

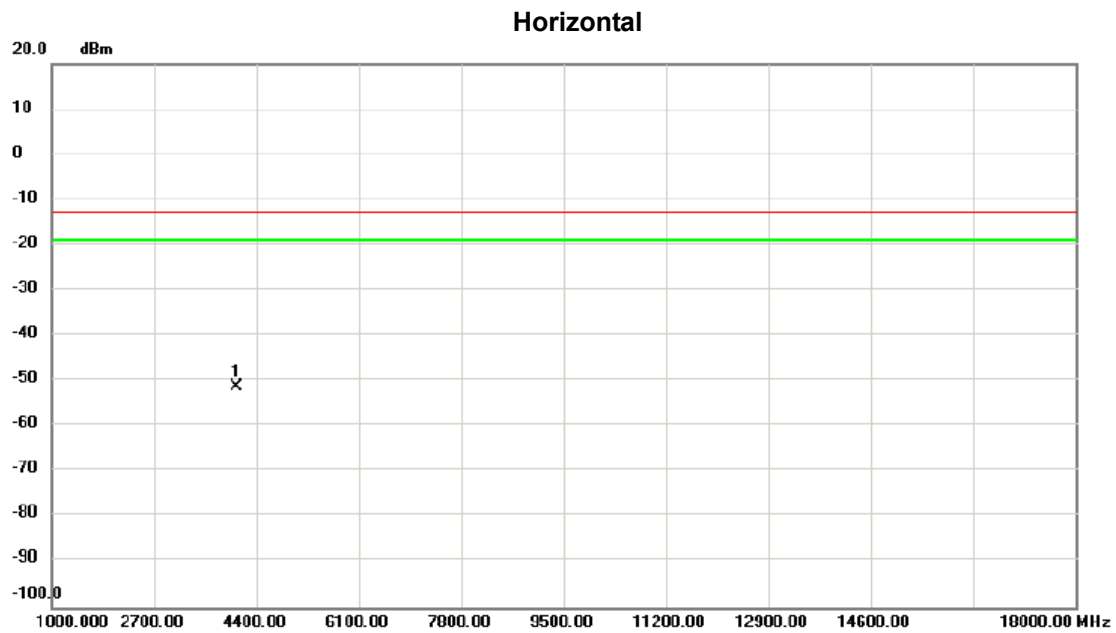
Test Mode LTE Band 5_TX CH20525_5M_Second Antenna

Vertical



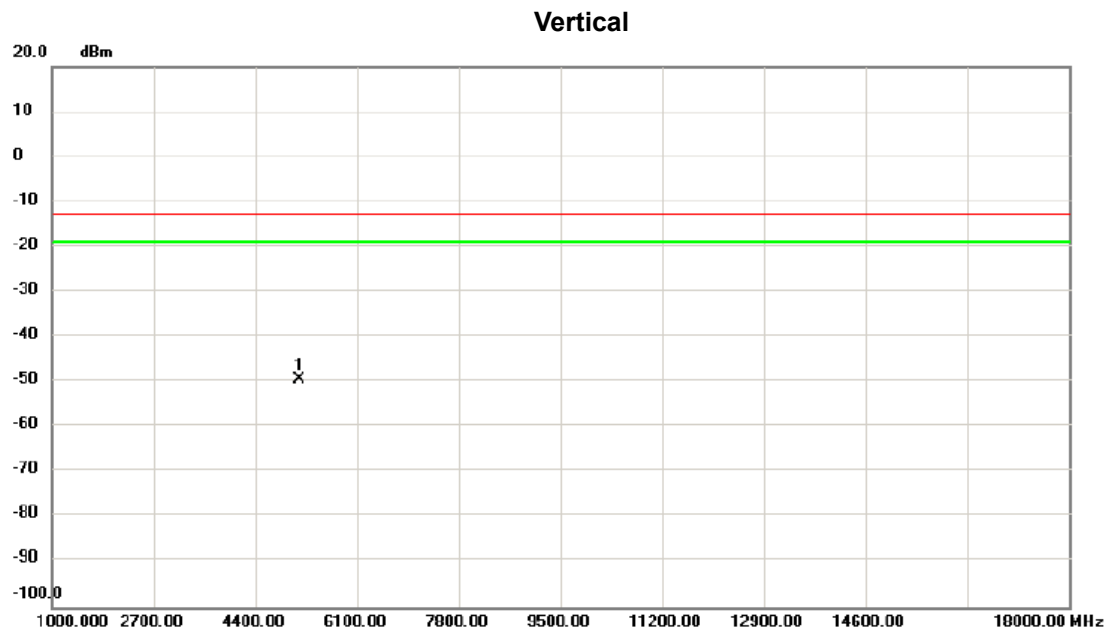
No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1 *	4315.000	-56.91	6.75	-50.16	-13.00	-37.16	peak	

Test Mode	LTE Band 5_TX CH20525_5M_Second Antenna
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No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	4077.000	-57.60	6.49	-51.11	-13.00	-38.11	peak	

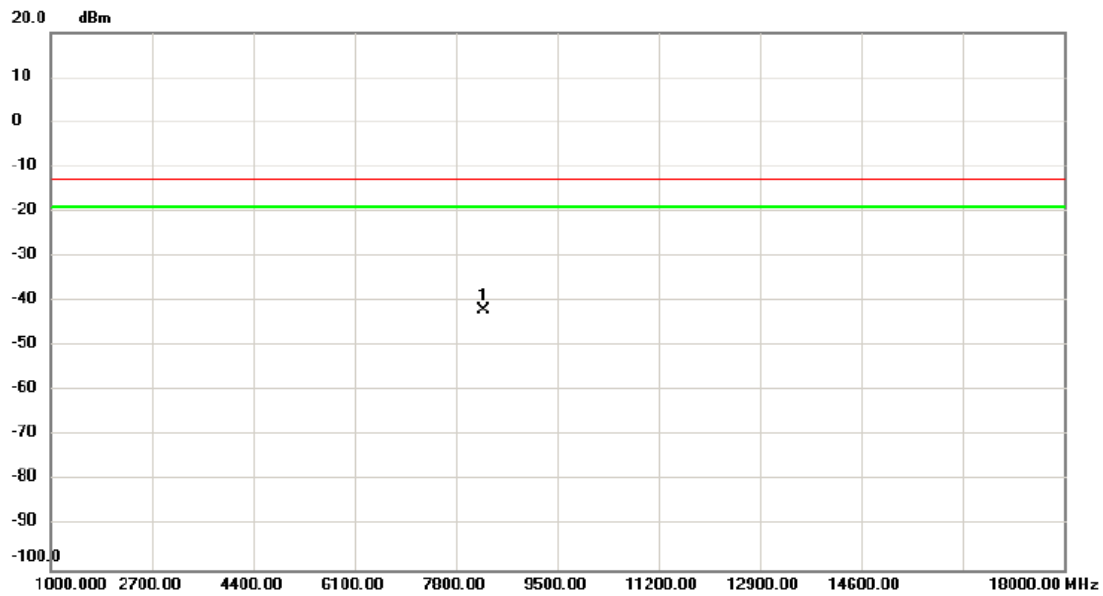
Test Mode	LTE Band 5_TX CH20525_10M_Second Antenna
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No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	5131.000	-58.60	9.11	-49.49	-13.00	-36.49	peak	

Test Mode LTE Band 5_TX CH20525_10M_Second Antenna

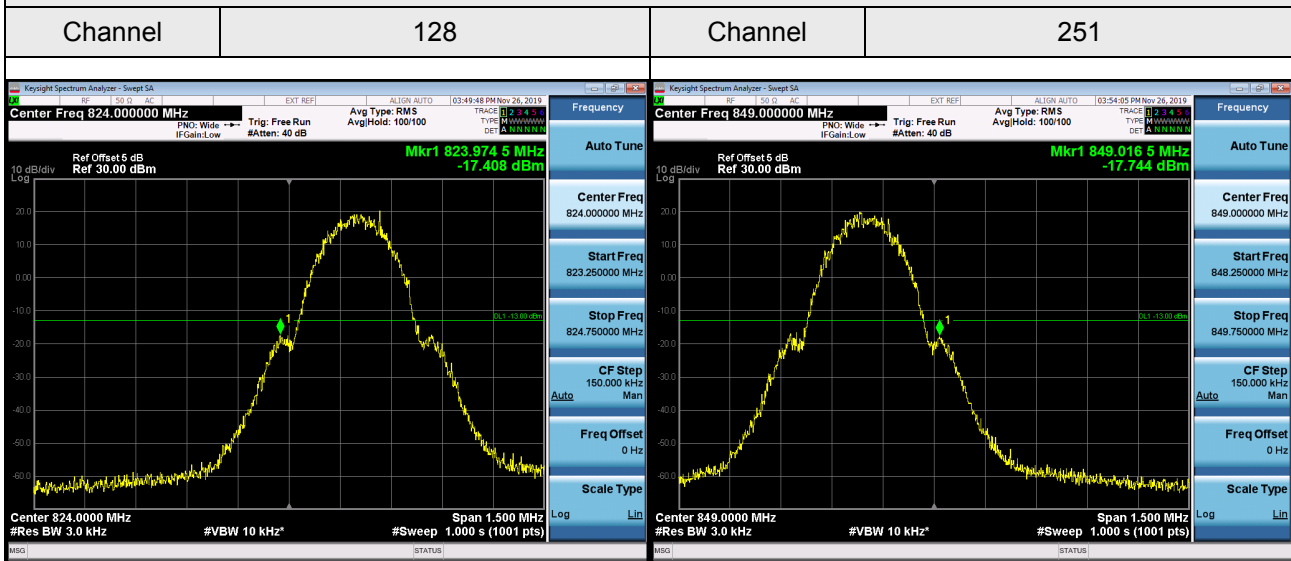
Horizontal



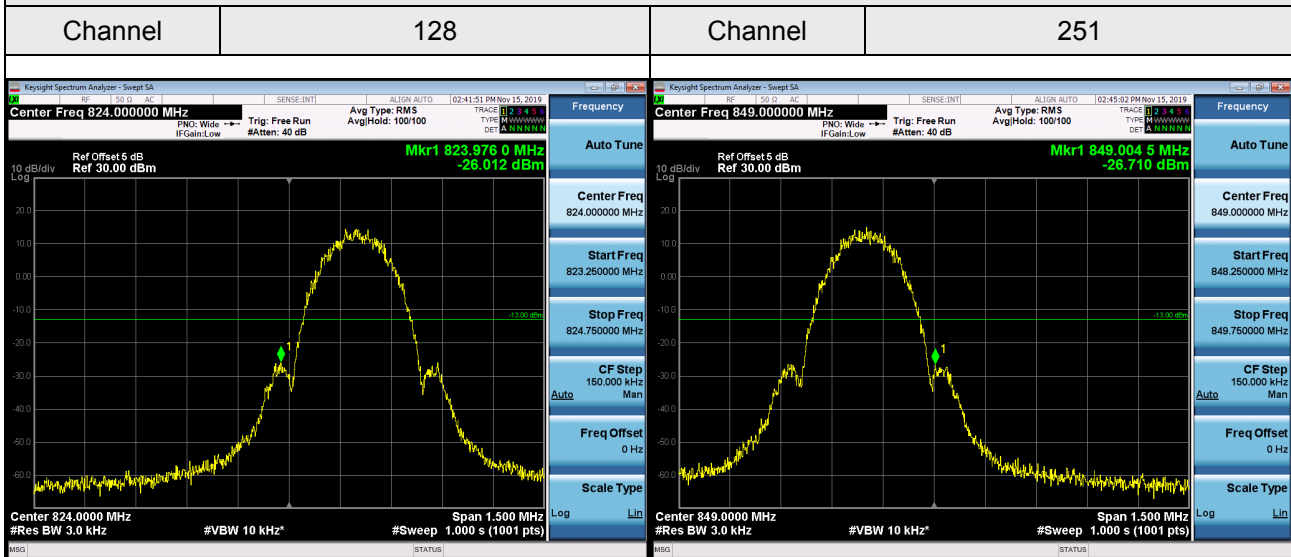
No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1 *	8259.000	-59.76	17.90	-41.86	-13.00	-28.86	peak	

APPENDIX G - BAND EDGE

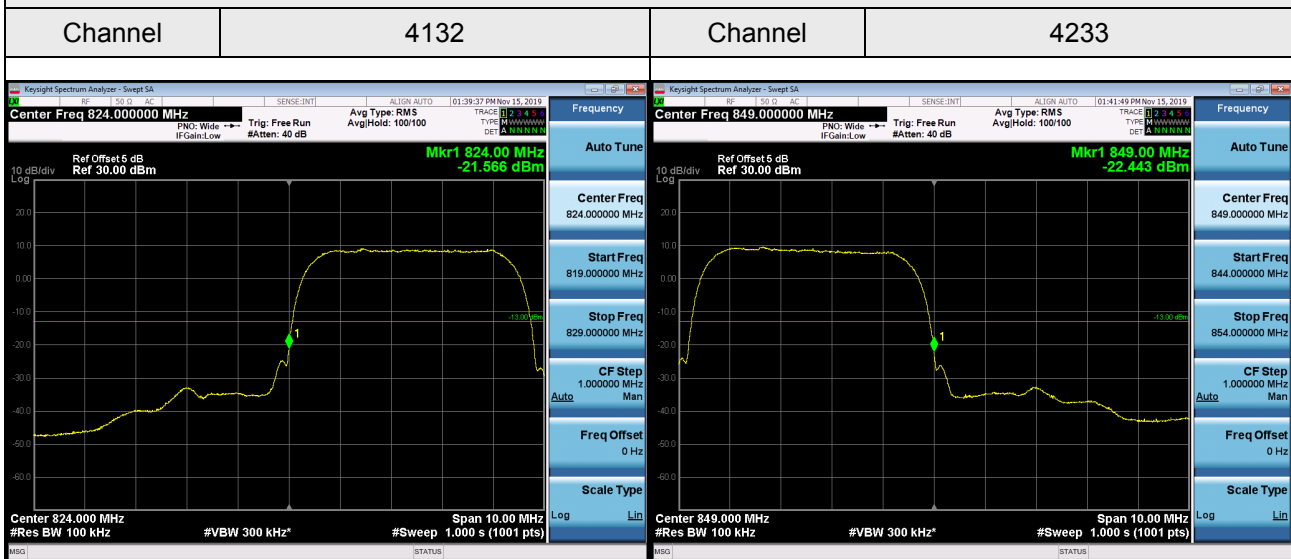
GSM850_GSM Spectrum Plot



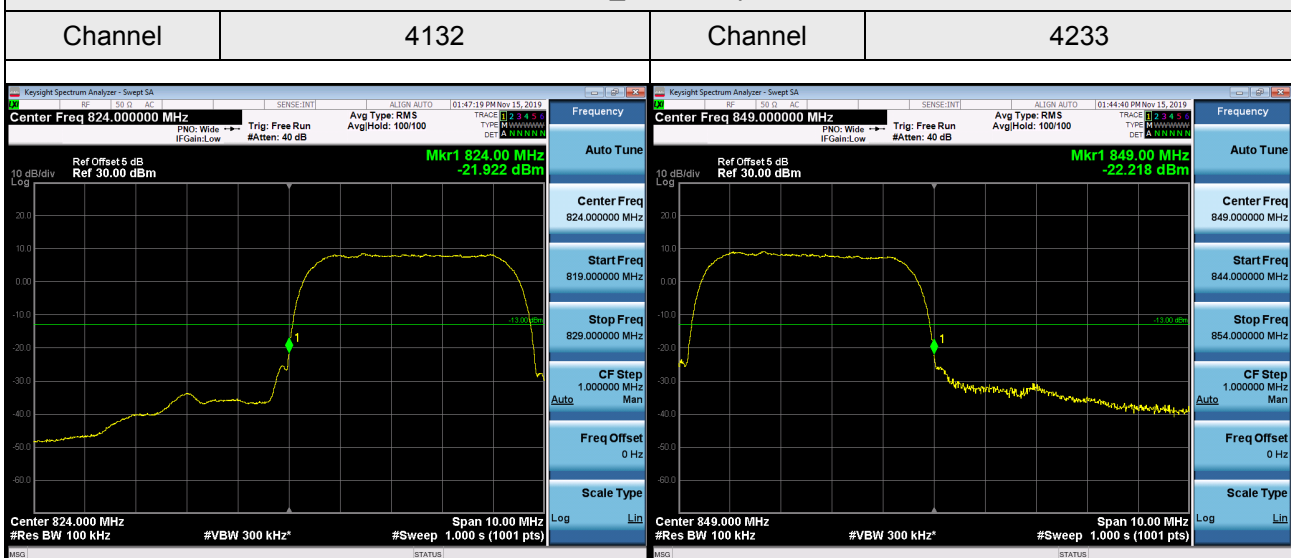
GSM850_EDGE Spectrum Plot



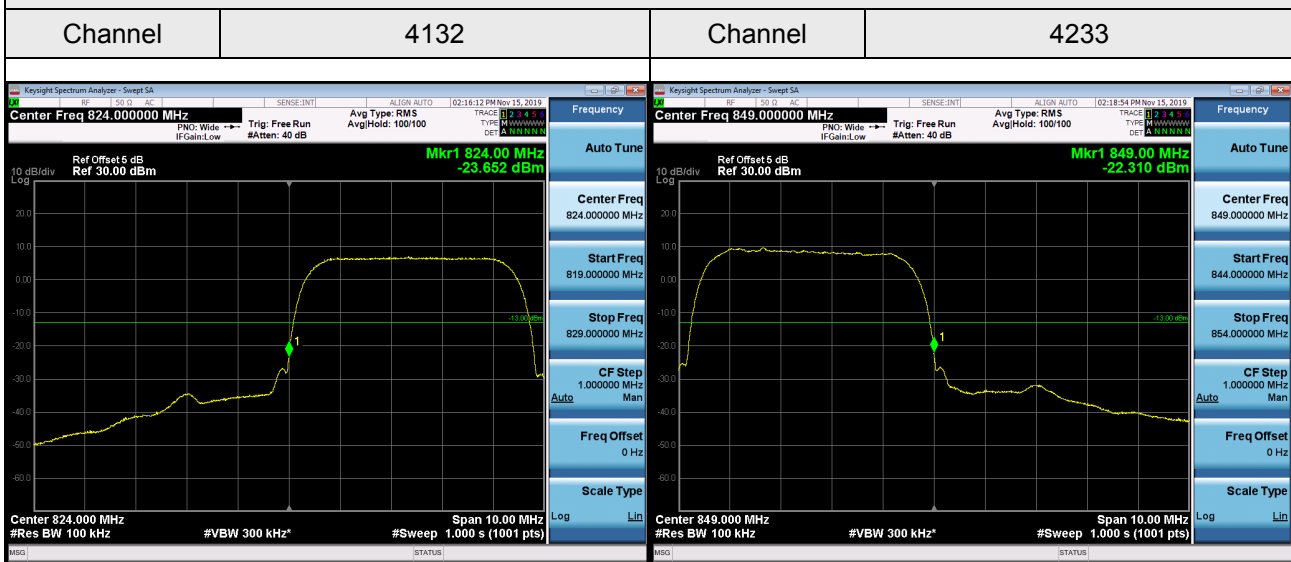
WCDMA Band V_WCDMA Spectrum Plot



WCDMA Band V_HSDPA Spectrum Plot



WCDMA Band V_HSUPA Spectrum Plot



LTE Band 5_1.4M Spectrum Plot

1RB#0

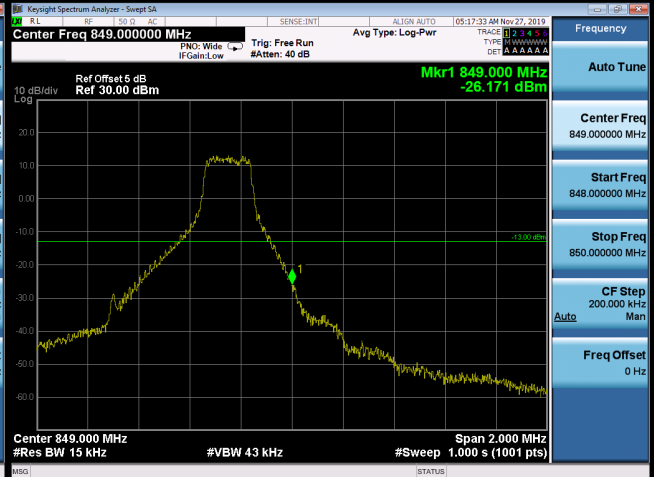
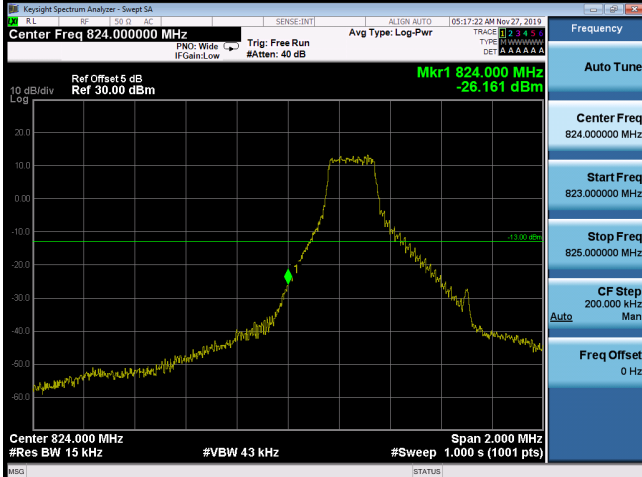
1RB#5

Channel

20407

Channel

20643



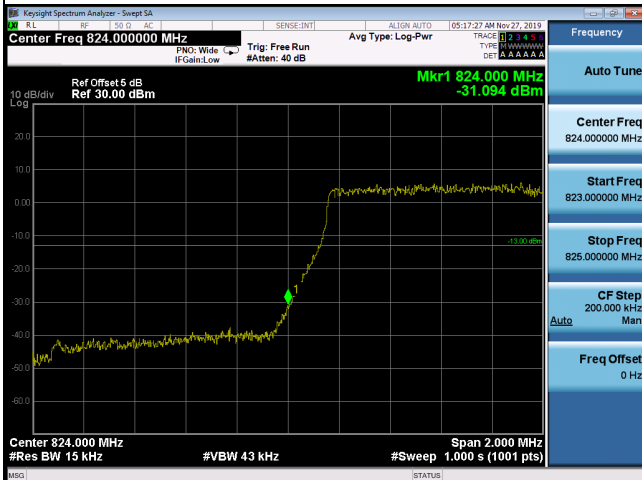
6RB#0

Channel

20407

Channel

20643



LTE Band 5_3M Spectrum Plot

1RB#0

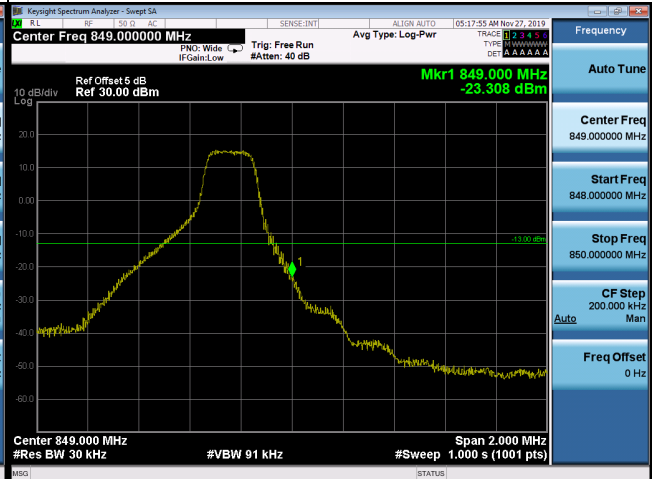
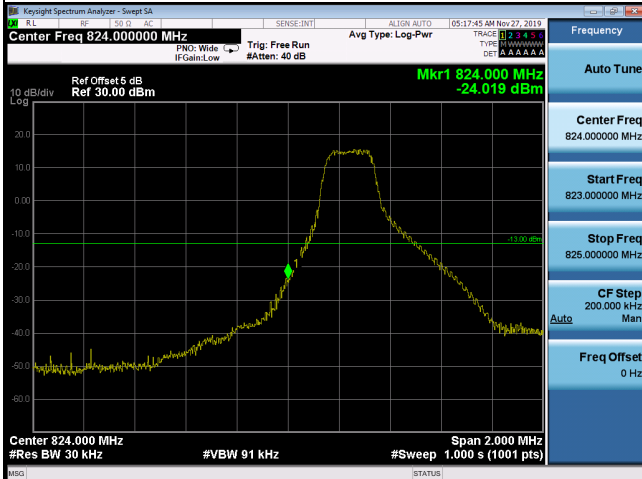
1RB#14

Channel

20415

Channel

20635



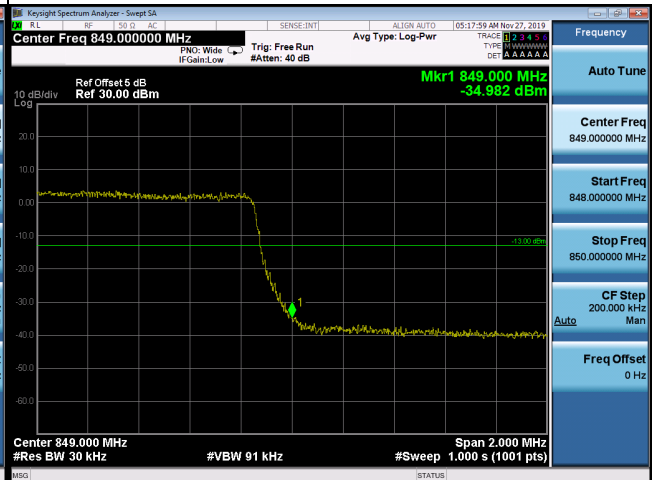
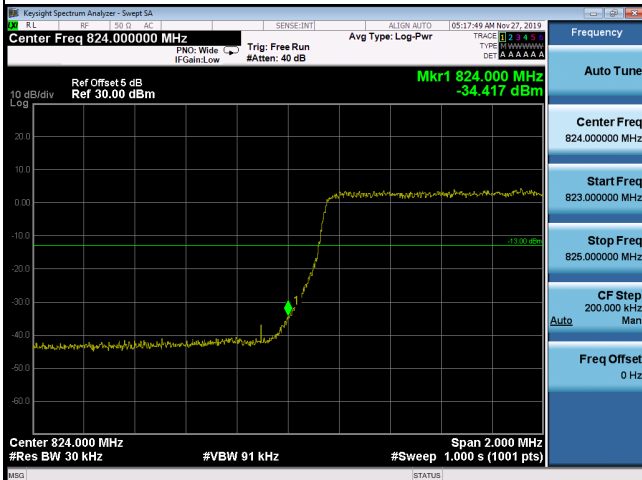
15RB#0

Channel

20415

Channel

20635



LTE Band 5_5M Spectrum Plot

1RB#0

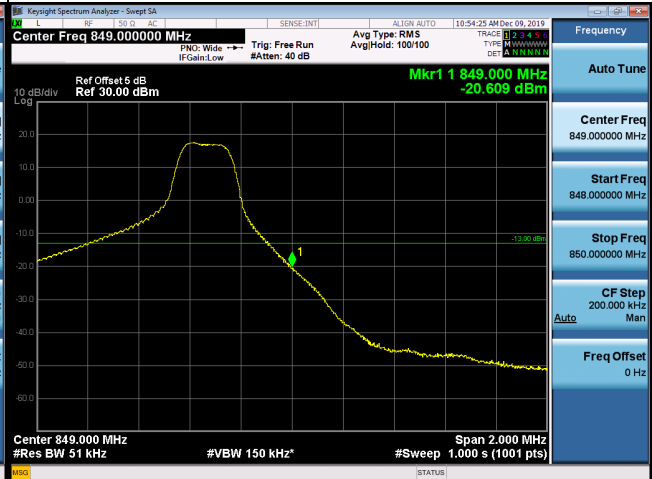
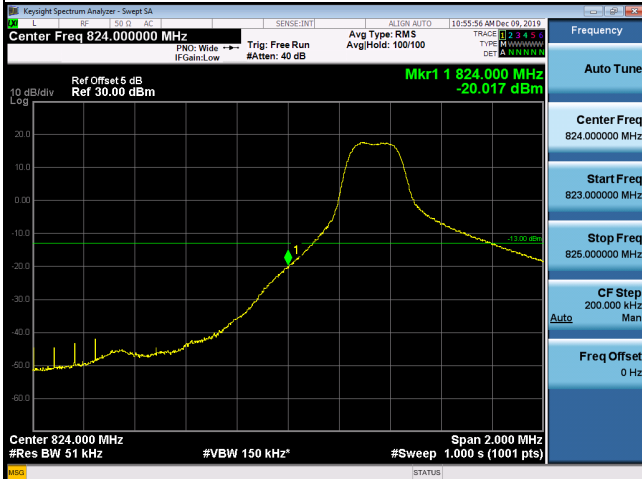
1RB#24

Channel

20425

Channel

20625



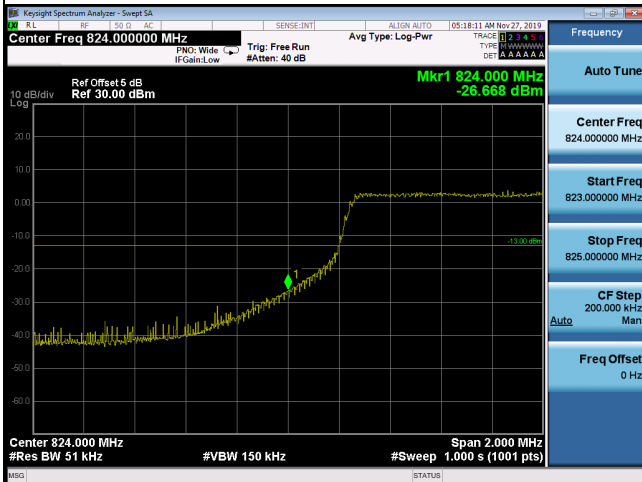
25RB#0

Channel

20425

Channel

20625



LTE Band 5_10M Spectrum Plot

1RB#0

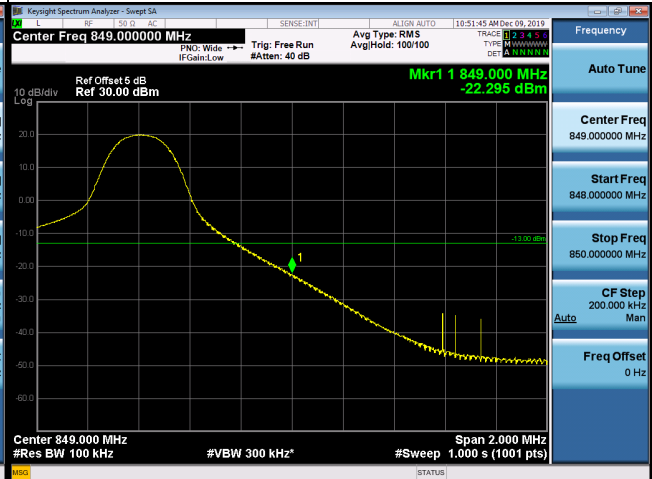
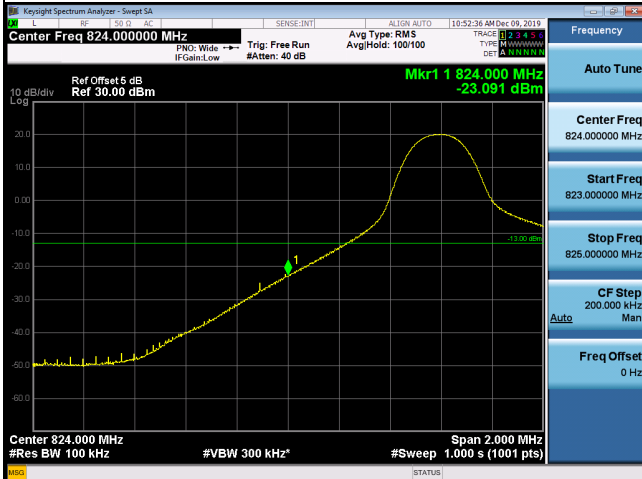
1RB#49

Channel

20450

Channel

20600



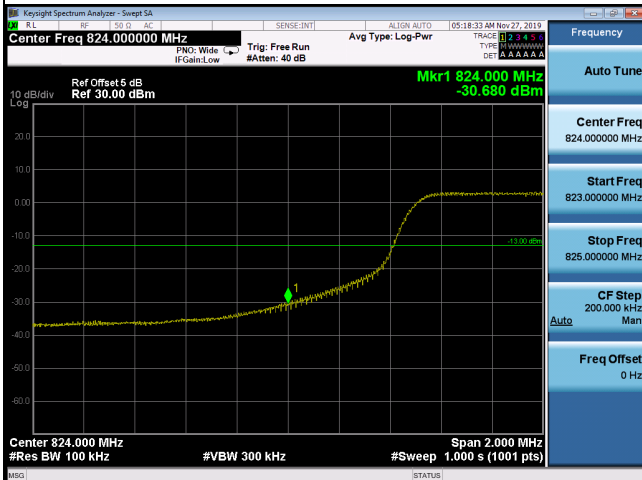
50RB#0

Channel

20450

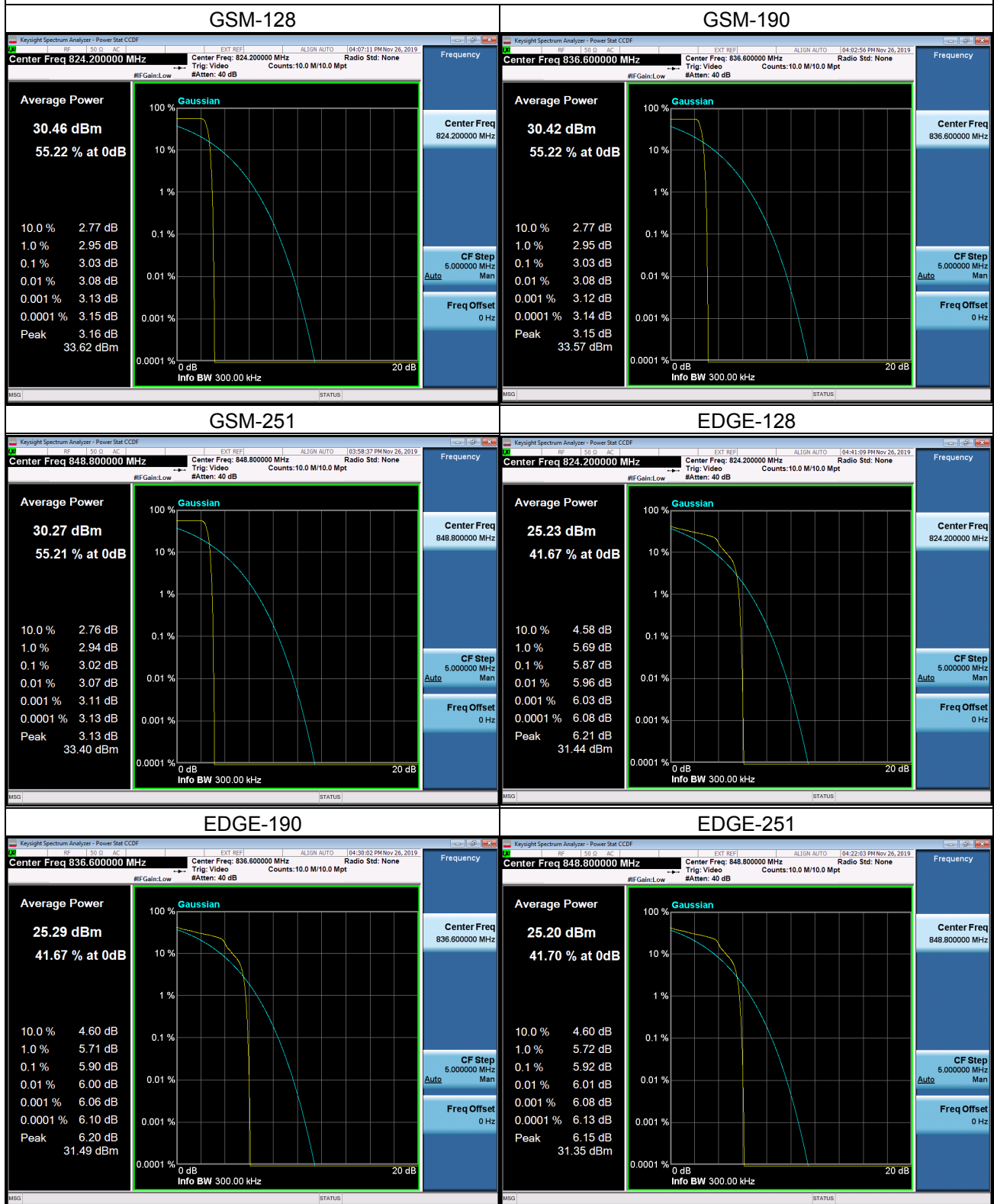
Channel

20600



APPENDIX H - PEAK TO AVERAGE RATIO

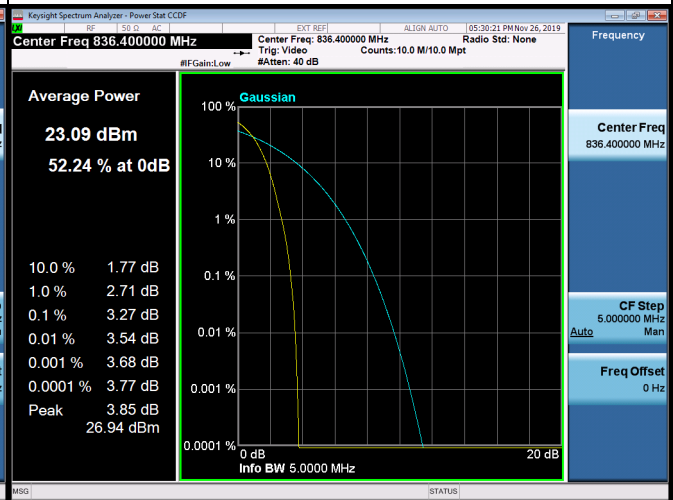
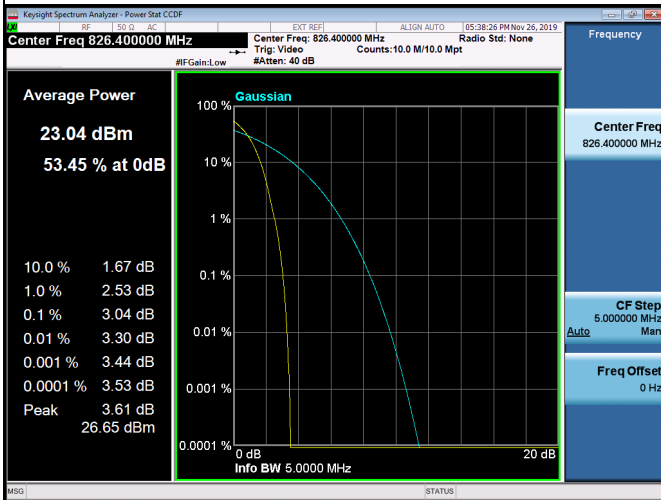
GSM 850 Spectrum Plot



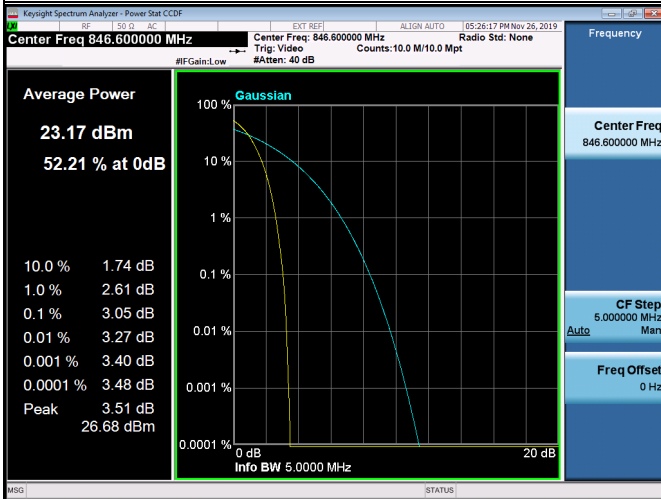
WCDMA Band V_WCDMA Spectrum Plot

4132

4182

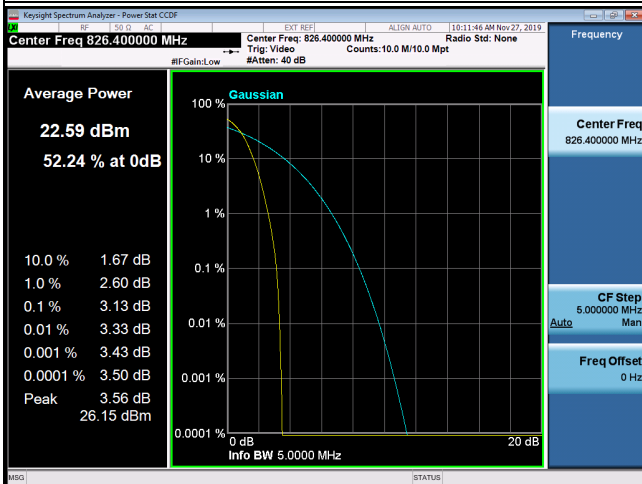


4233

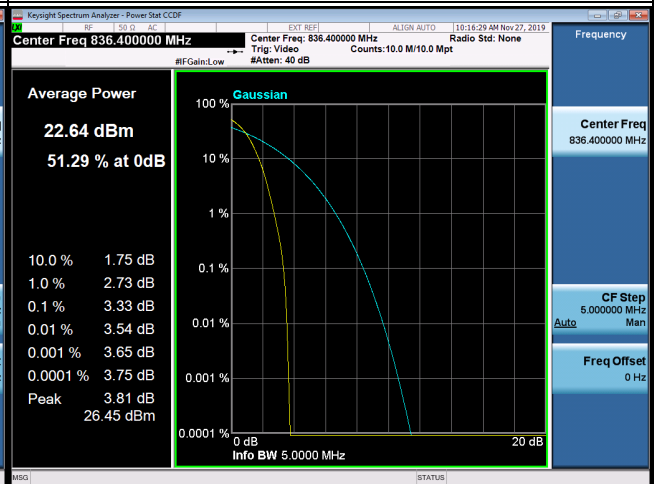


WCDMA Band V_HSDPA Spectrum Plot

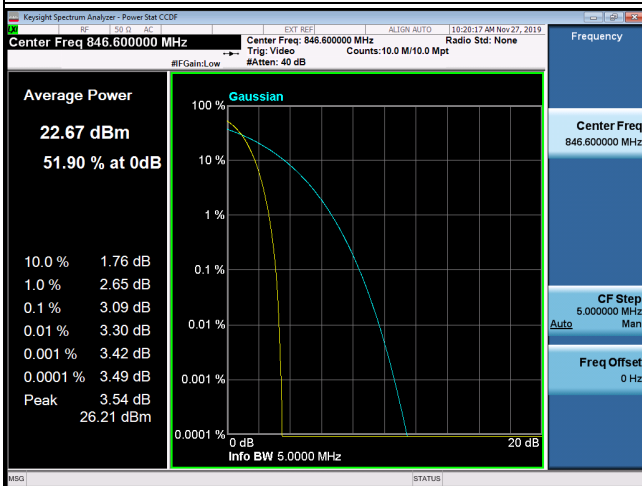
4132



4182



4233

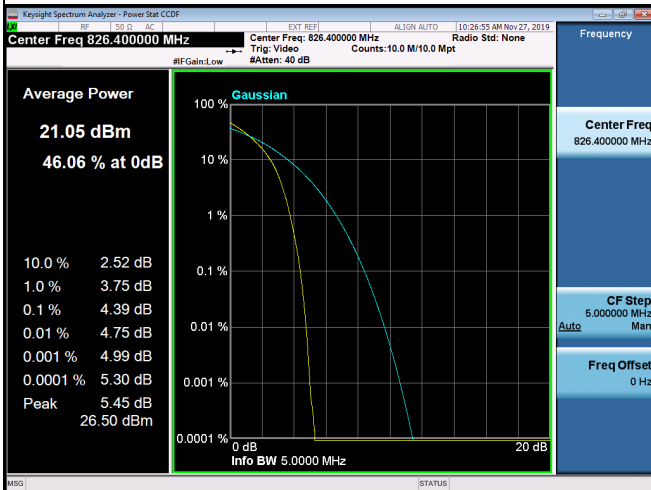


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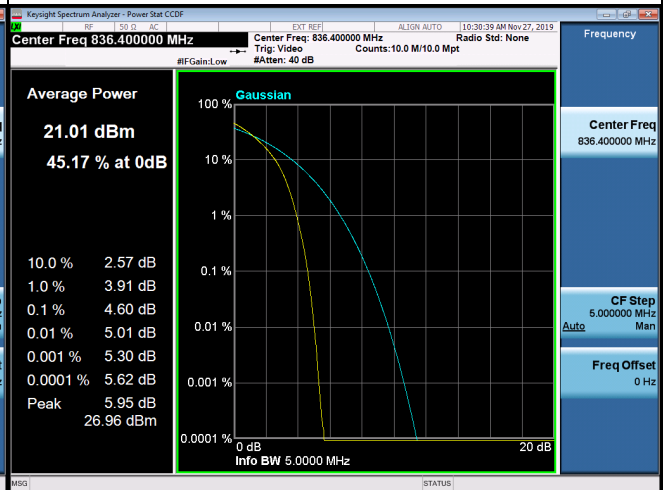
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WCDMA Band V_HSUPA Spectrum Plot

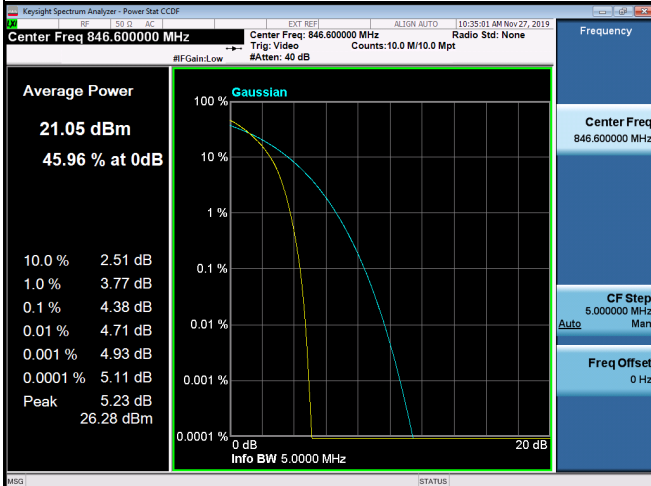
4132



4182



4233

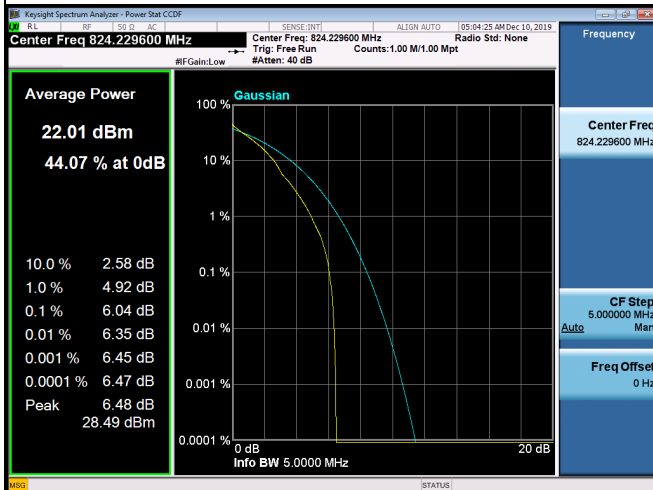


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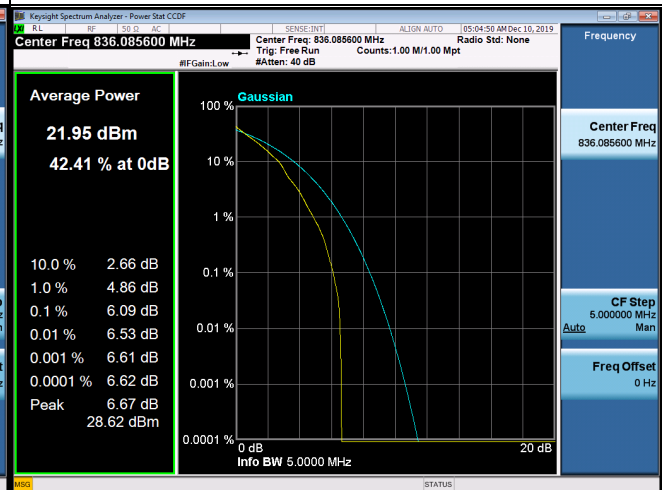
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LTE Band 5_1.4M Spectrum Plot

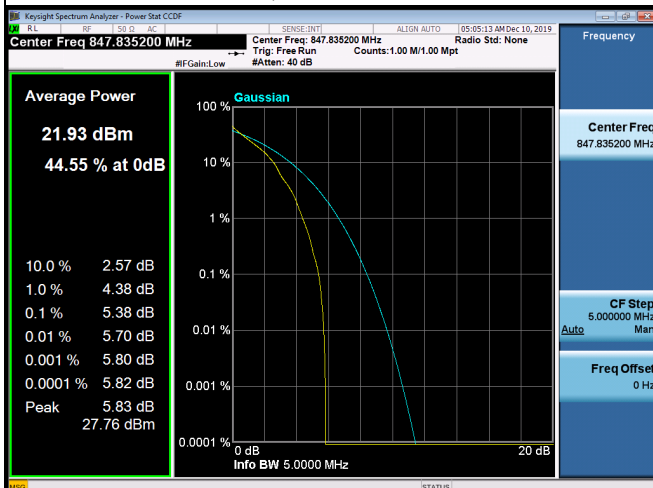
QPSK-20407



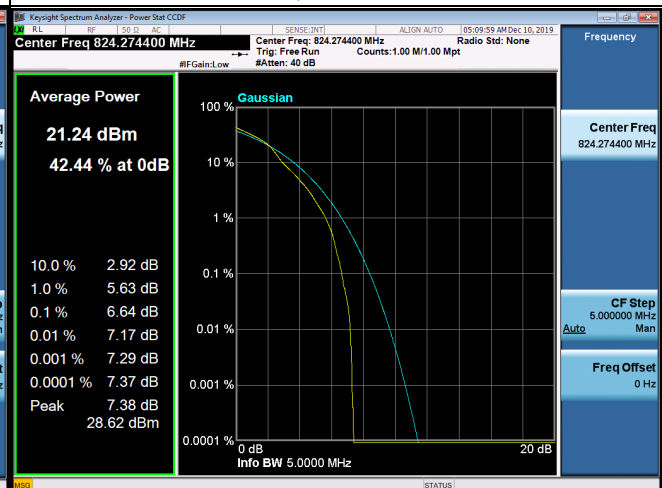
QPSK-20525



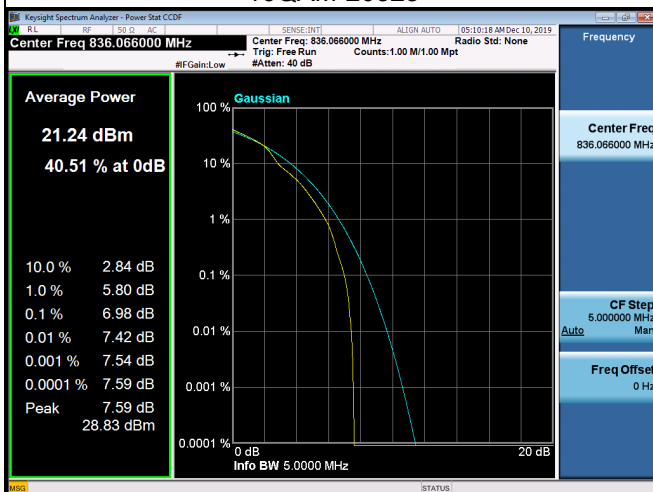
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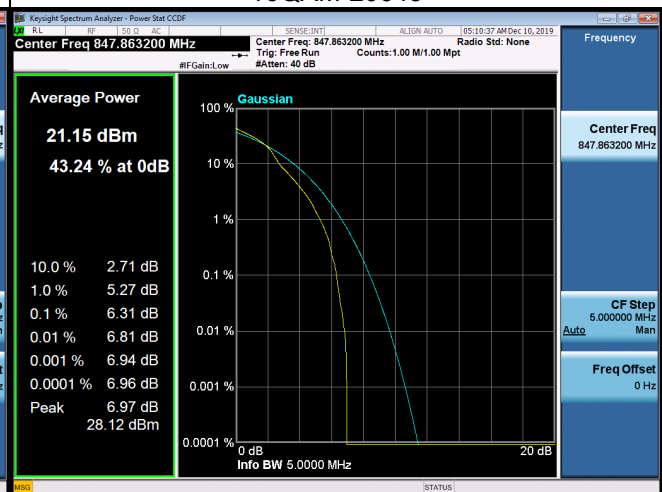
16QAM-20407



16QAM-20525

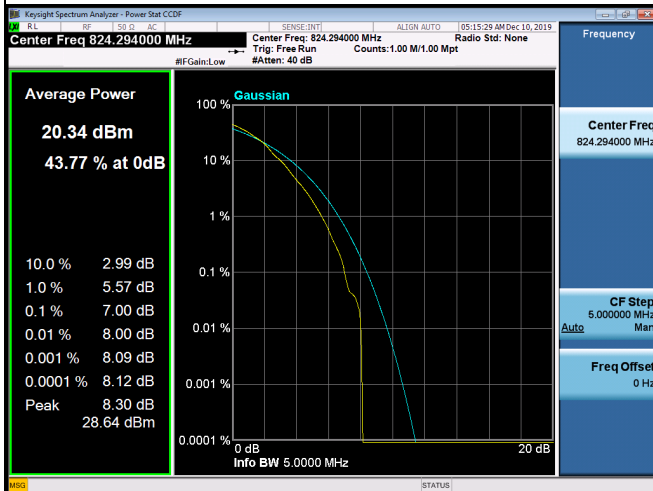


16QAM-20643

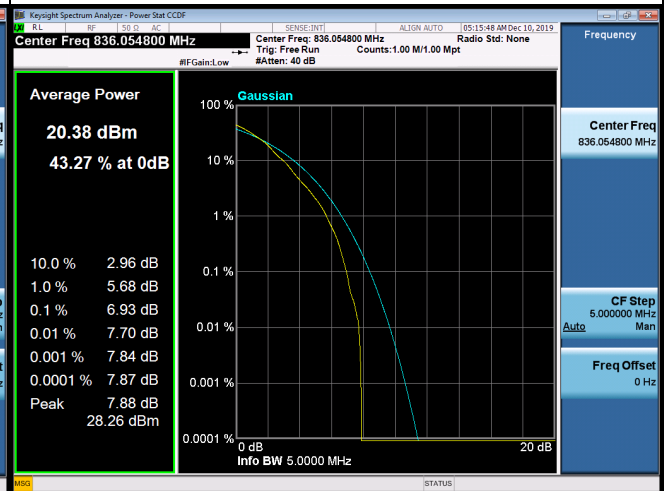


LTE Band 5_1.4M Spectrum Plot

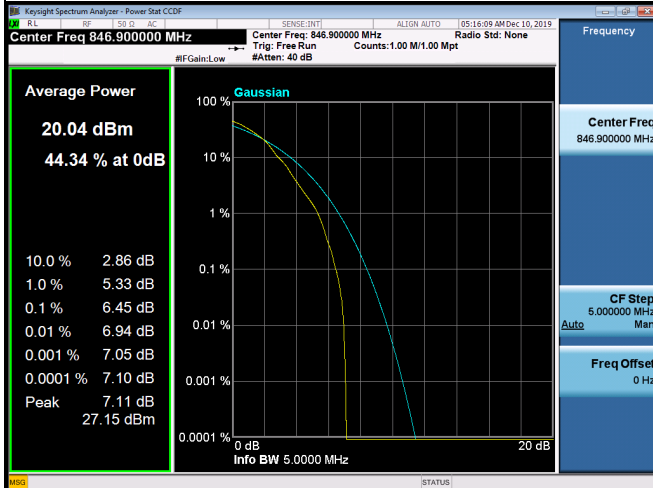
64QAM-20407



64QAM-20525

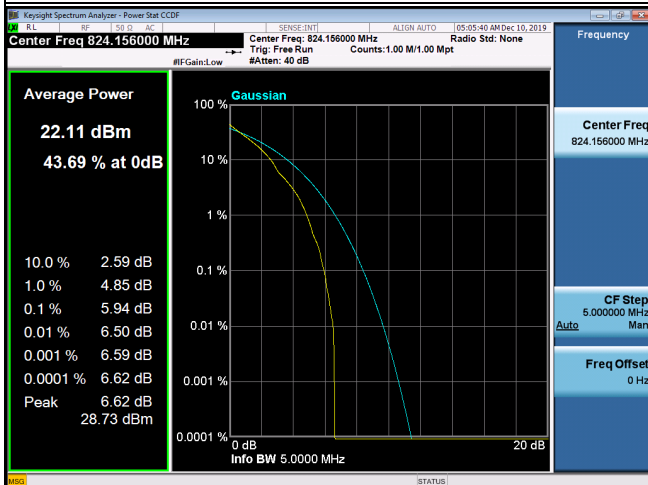


64QAM-20643

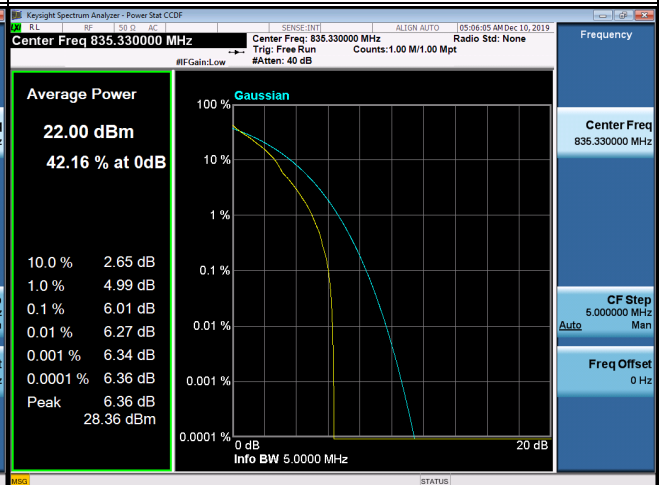


LTE Band 5_3M Spectrum Plot

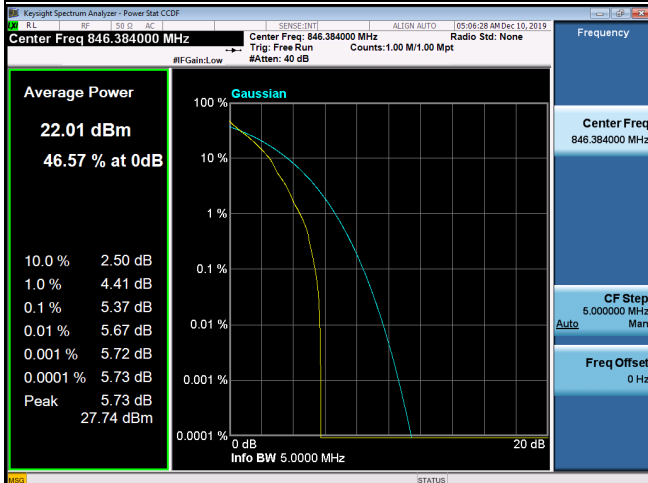
QPSK-20415



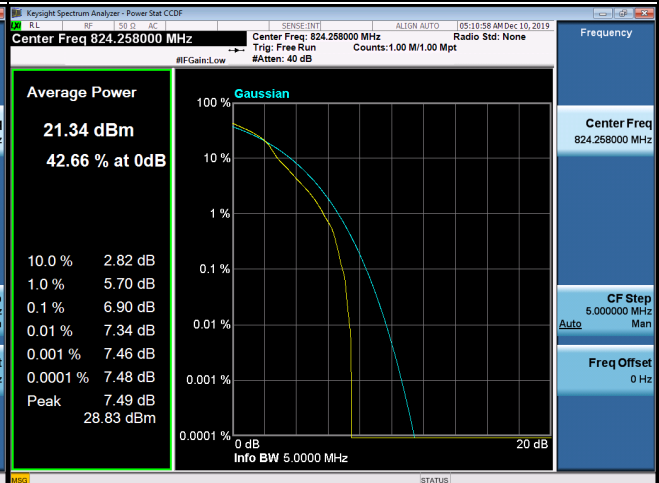
QPSK-20525



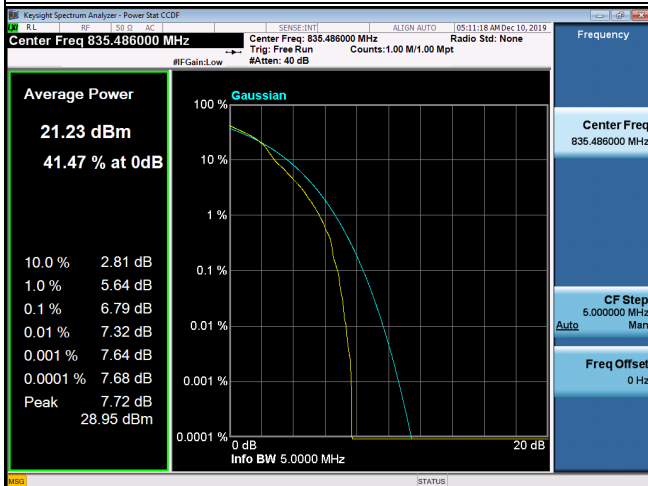
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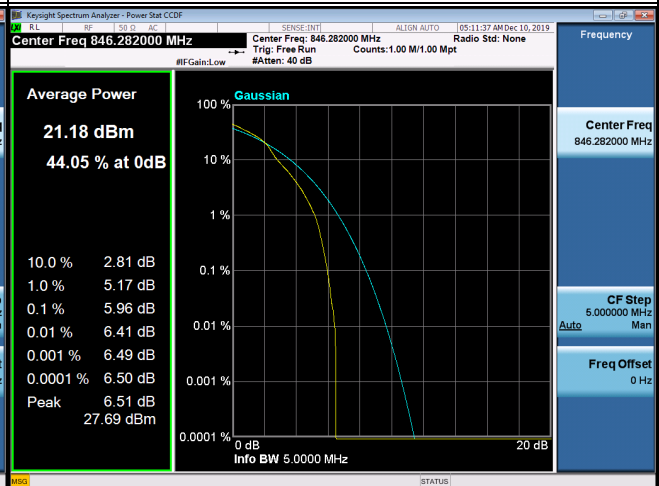
16QAM-20415



16QAM-20525

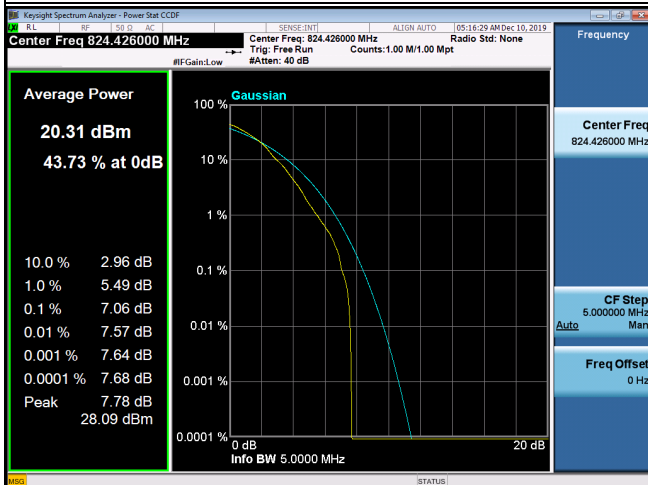


16QAM-20635

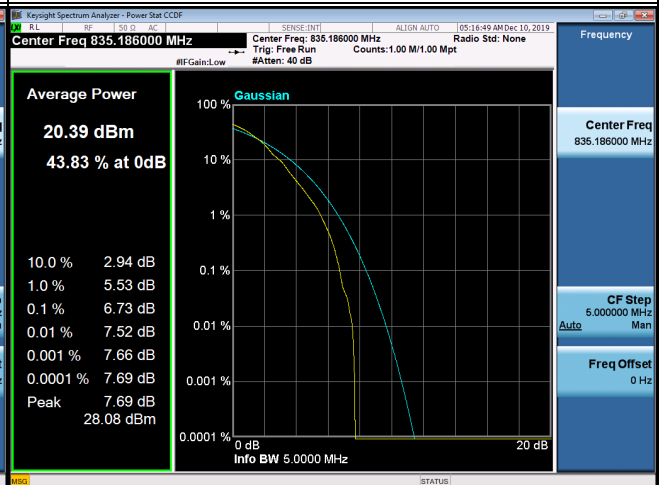


LTE Band 5_3M Spectrum Plot

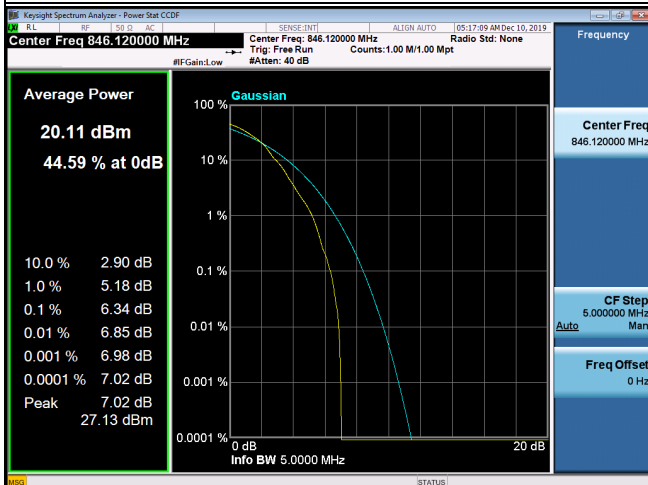
64QAM-20415



64QAM-20525

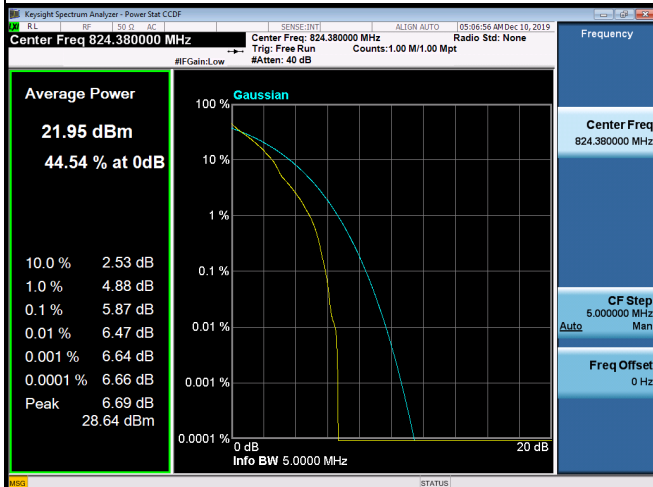


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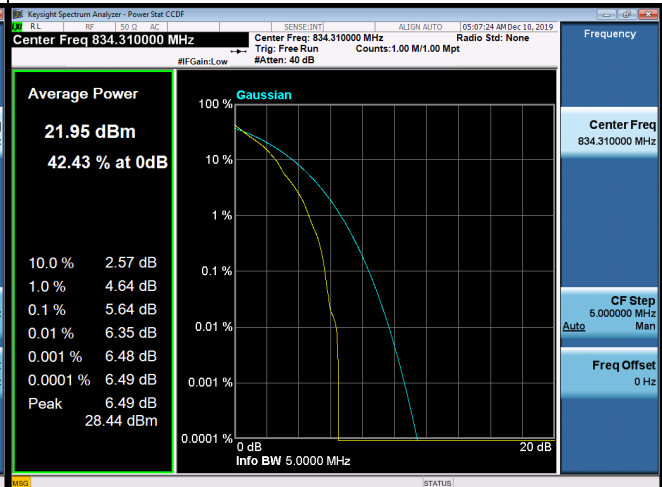


LTE Band 5_5M Spectrum Plot

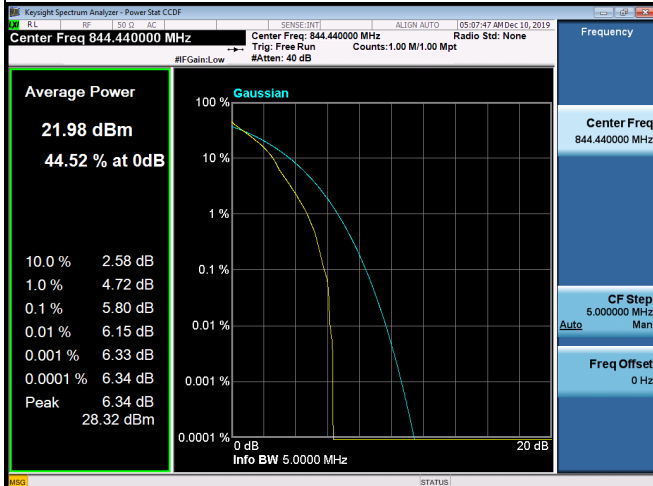
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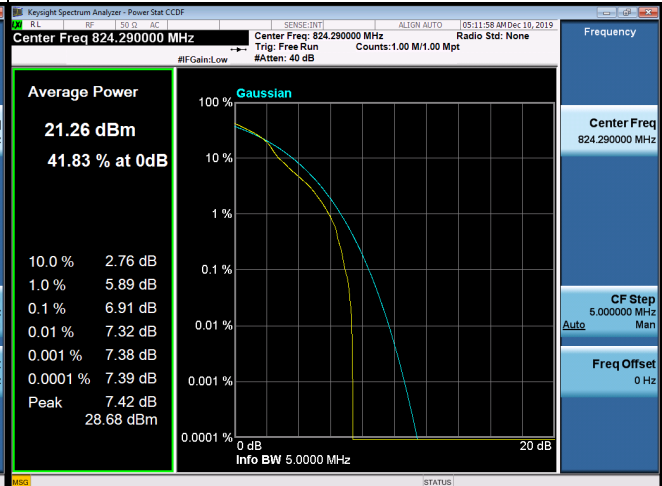
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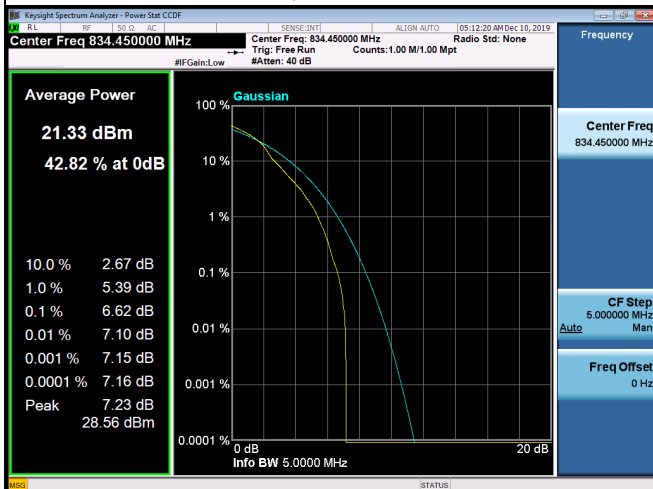
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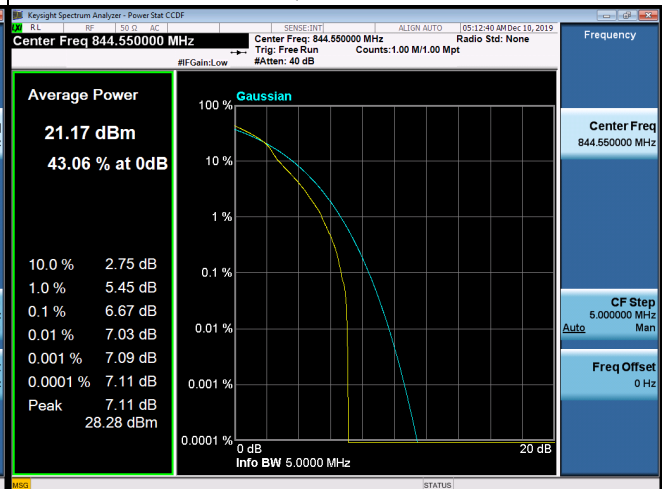
16QAM-20425



16QAM-20525

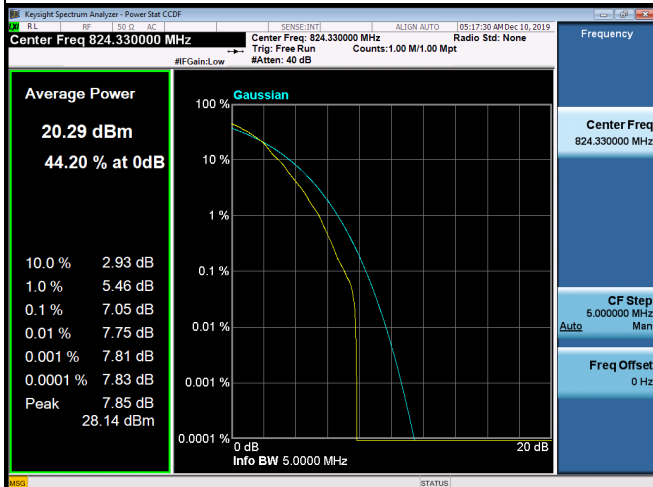


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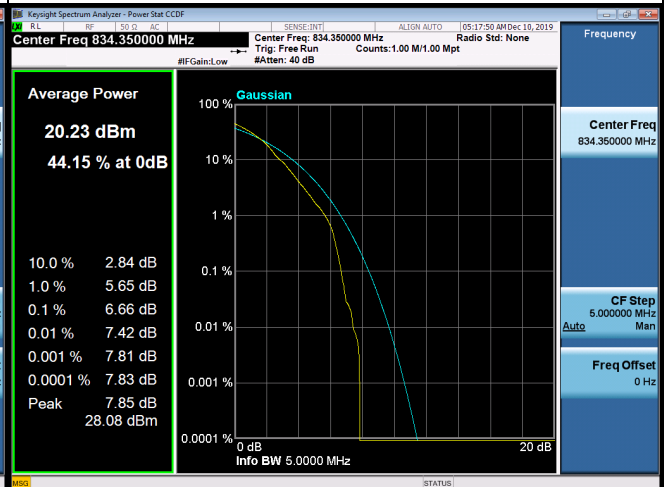


LTE Band 5_5M Spectrum Plot

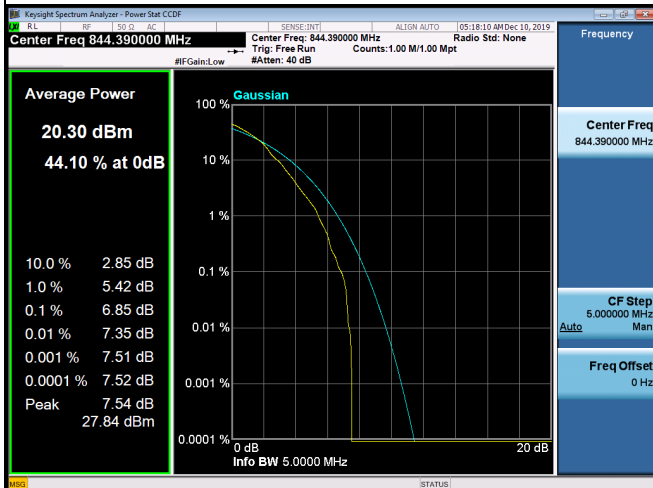
64QAM-20425



64QAM-20525

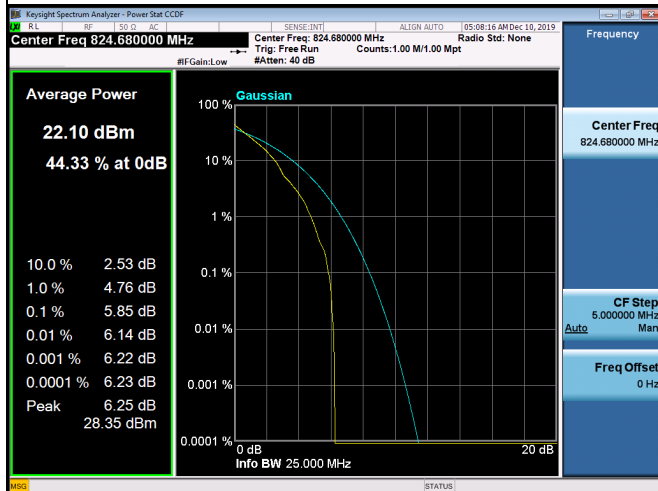


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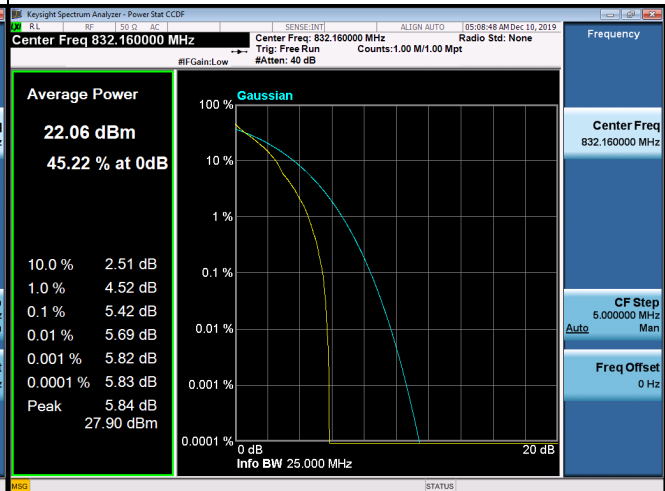


LTE Band 5_10M Spectrum Plot

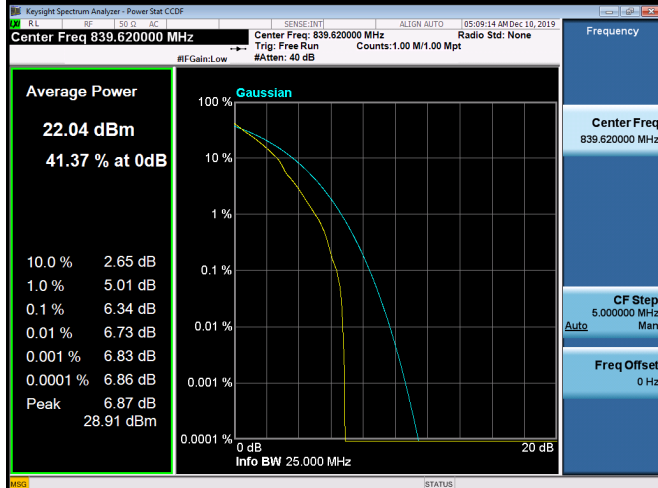
QPSK-20450



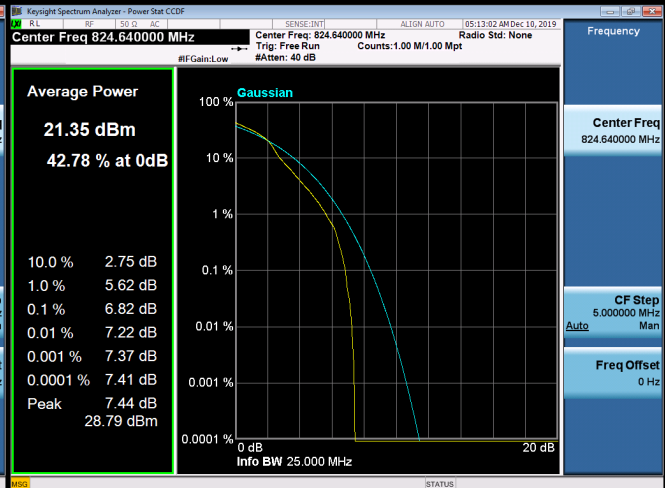
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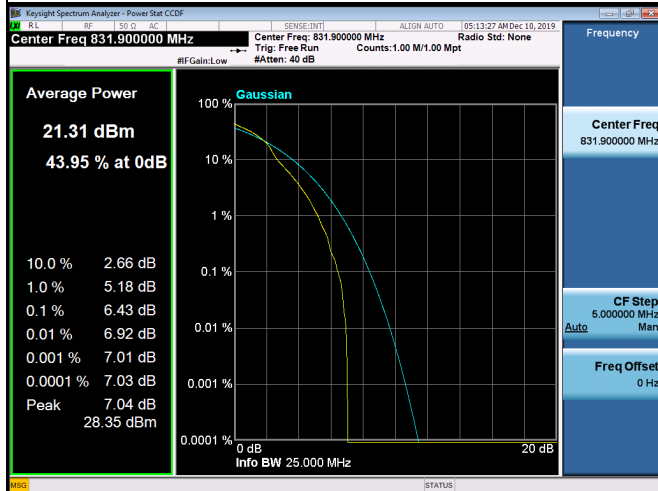
QPSK-20600



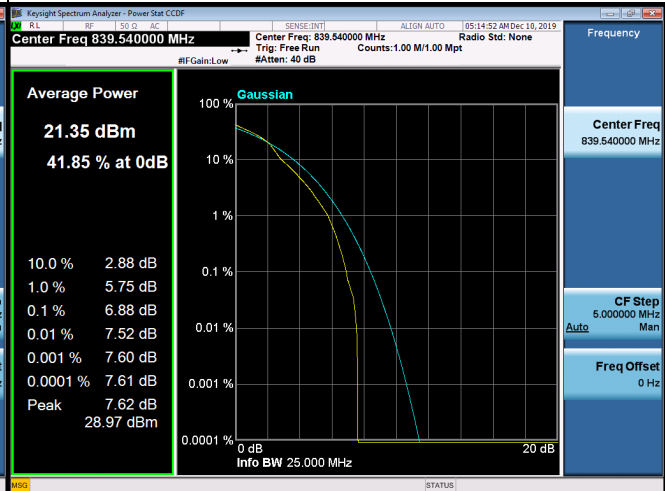
16QAM-20450



16QAM-20525

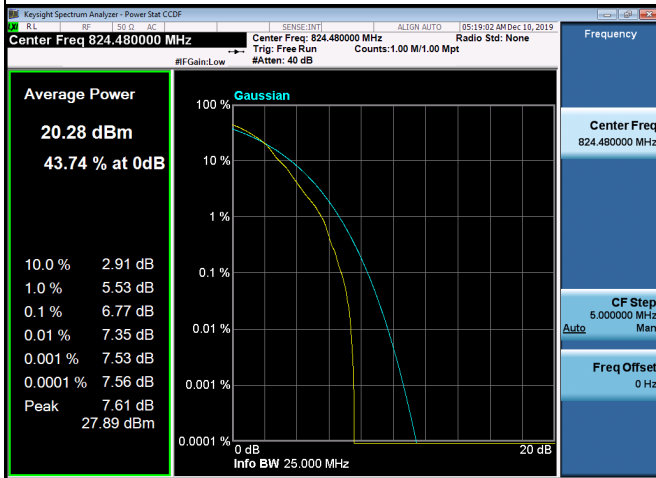


16QAM-20600

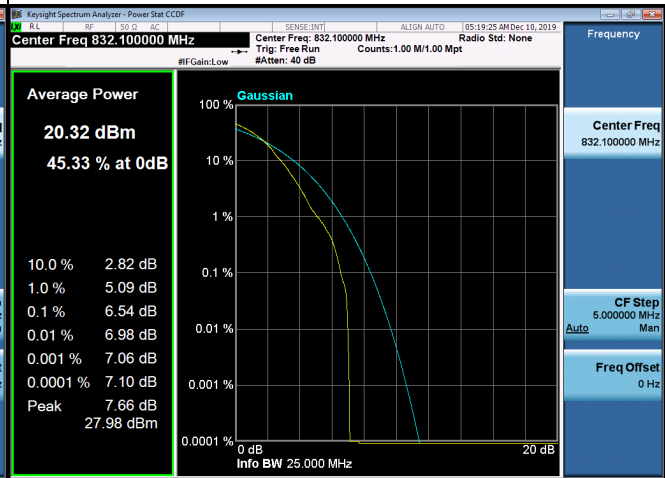


LTE Band 5_10M Spectrum Plot

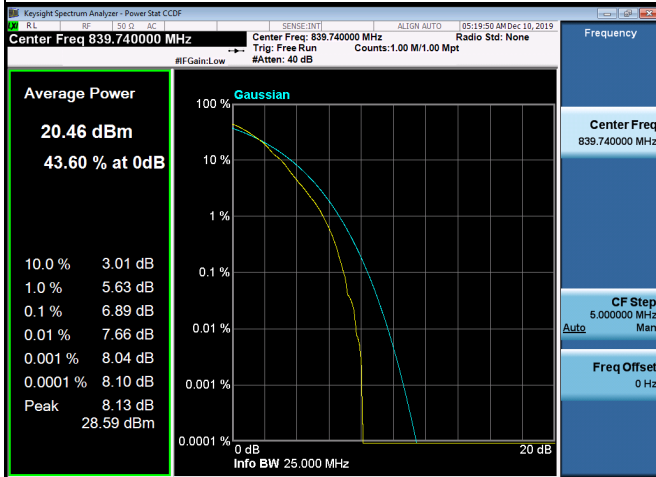
64QAM-20450



64QAM-20525



64QAM-20600



APPENDIX I - FREQUENCY STABILITY

Test Mode	GSM850_CH190
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	2.82	0.003370787	± 2.5
5	3.77	0.004506335	
15	4.95	0.005916806	
25	6.83	0.008163997	
35	2.76	0.003299068	
Max. Deviation (ppm)	6.83	0.008163997	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	1.03	0.001231174	± 2.5
3.85	2.92	0.003490318	
3.5	4.31	0.005151805	
Max. Deviation (ppm)	4.31	0.005151805	

Test Mode	WCDMA Band V_CH4182
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	6.76	0.008082257	±2.5
5	1.07	0.001279292	
15	3.16	0.003778097	
25	1.64	0.001960784	
35	3.93	0.004698709	
Max. Deviation (ppm)	6.76	0.008082257	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	4.96	0.005930177	±2.5
3.85	2.95	0.003527021	
3.5	2.16	0.002582496	
Max. Deviation (ppm)	4.96	0.005930177	

Test Mode	LTE Band 5_CH20525_1.4M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-4.77	-0.005702331	±2.5
5	3.09	0.003693963	
15	-7.82	-0.009348476	
25	6.60	0.007890018	
35	-7.71	-0.009216975	
Max. Deviation (ppm)	-7.82	-0.009348476	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	4.80	0.005738195	±2.5
3.85	-5.47	-0.006539151	
3.5	3.24	0.003873282	
Max. Deviation (ppm)	-5.47	-0.006539151	

Test Mode	LTE Band 5_CH20525_3M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	1.26	0.001506276	±2.5
5	7.65	0.009145248	
15	-4.19	-0.005008966	
25	-4.30	-0.005140466	
35	-2.30	-0.002749552	
Max. Deviation (ppm)	7.65	0.009145248	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	2.17	0.002594142	±2.5
3.85	5.82	0.006957561	
3.5	-0.93	-0.001111775	
Max. Deviation (ppm)	5.82	0.006957561	

Test Mode	LTE Band 5_CH20525_5M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-4.65	-0.005558876	±2.5
5	-6.70	-0.008009564	
15	-5.96	-0.007124925	
25	-7.22	-0.008631201	
35	7.93	0.009479976	
Max. Deviation (ppm)	7.93	0.009479976	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-4.13	-0.004937238	±2.5
3.85	-2.55	-0.003048416	
3.5	-1.79	-0.002139868	
Max. Deviation (ppm)	-4.13	-0.004937238	

Test Mode	LTE Band 5_CH20525_10M
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Temperature vs. Frequency Stability

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	3.08	0.003682008	±2.5
5	-1.31	-0.001566049	
15	-2.71	-0.003239689	
25	-3.76	-0.004494919	
35	0.50	0.000597729	
Max. Deviation (ppm)	-3.76	-0.004494919	

Voltage vs. Frequency Stability

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
4.45	-1.06	-0.001267185	±2.5
3.85	-6.25	-0.007471608	
3.5	6.69	0.007997609	
Max. Deviation (ppm)	6.69	0.007997609	

End of Test Report