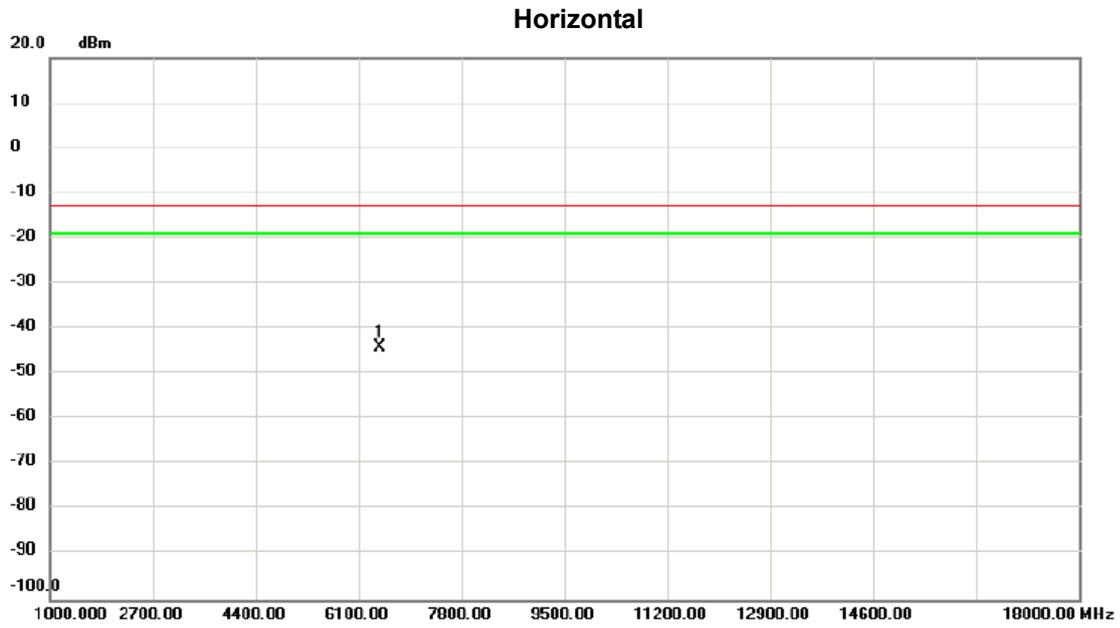
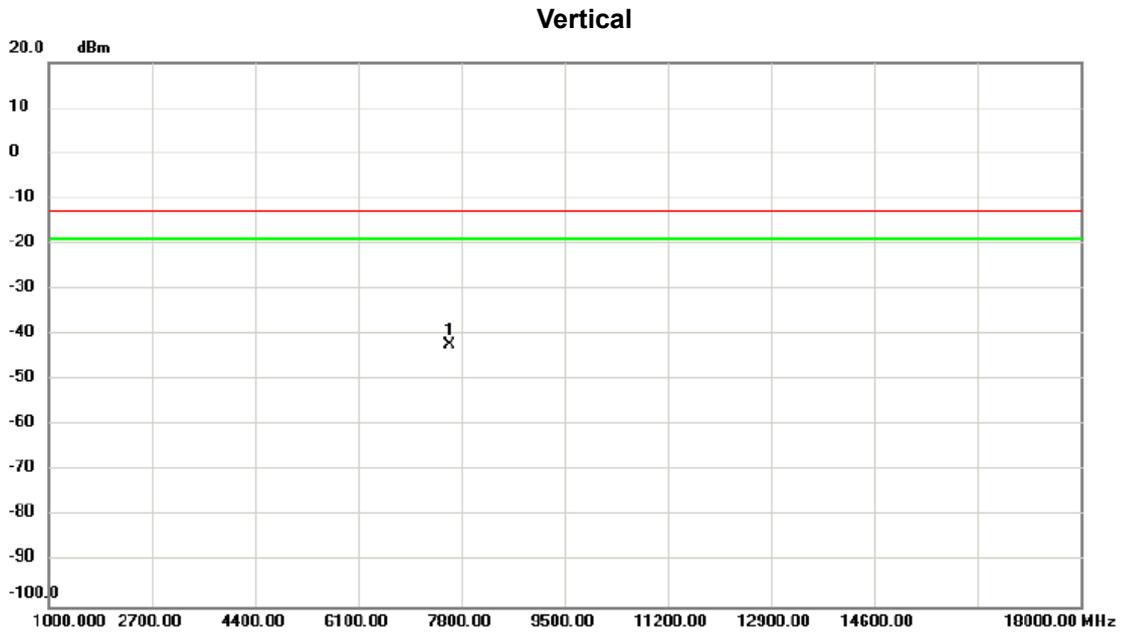


Test Mode LTE Band 5\_TX CH20525\_1.4M\_Main Antenna



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	6440.000	-59.14	15.19	-43.95	-13.00	-30.95	peak	

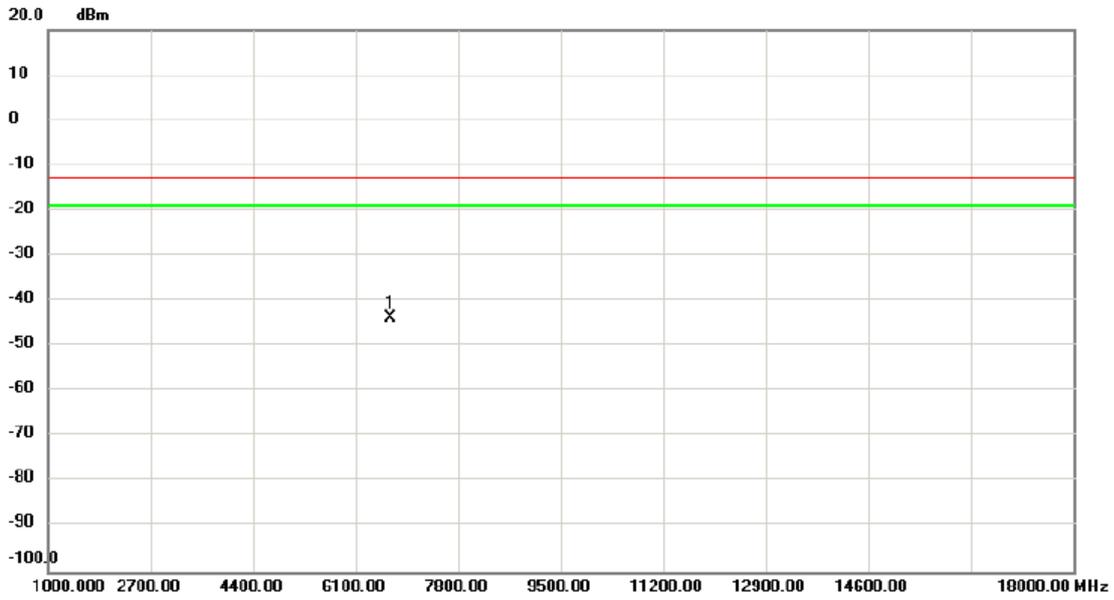
Test Mode | LTE Band 5\_TX CH20525\_5M\_Main Antenna



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

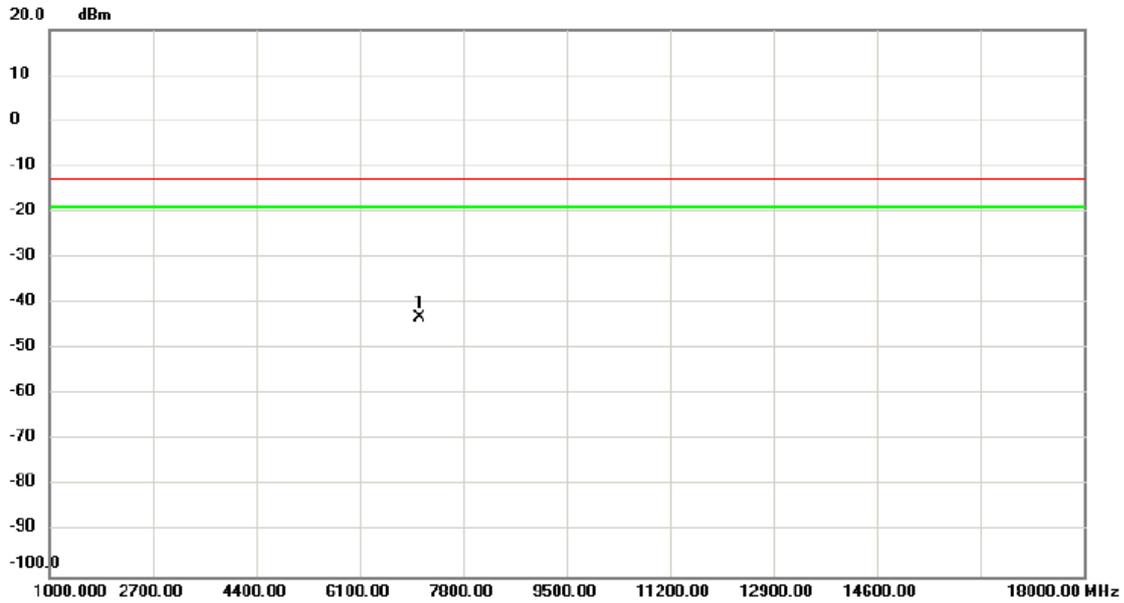
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin 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

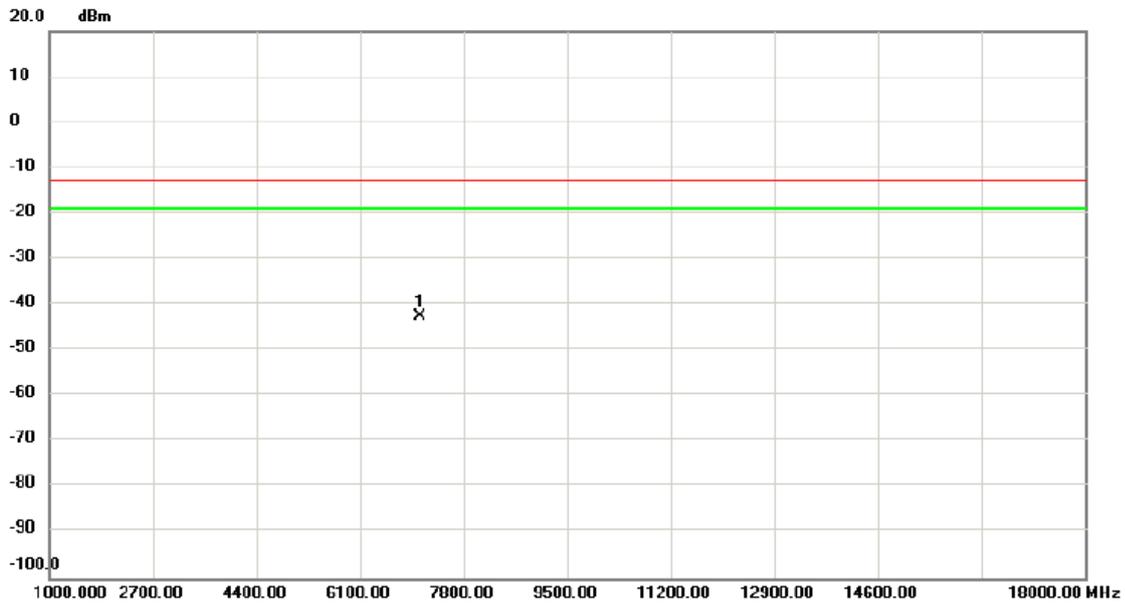
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin 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

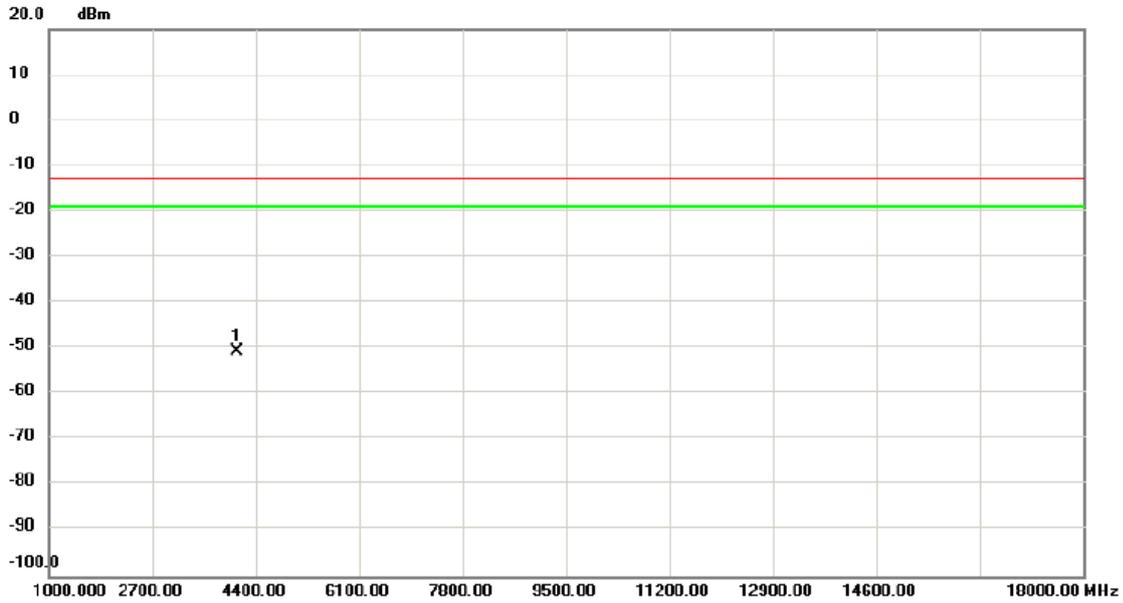
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin 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

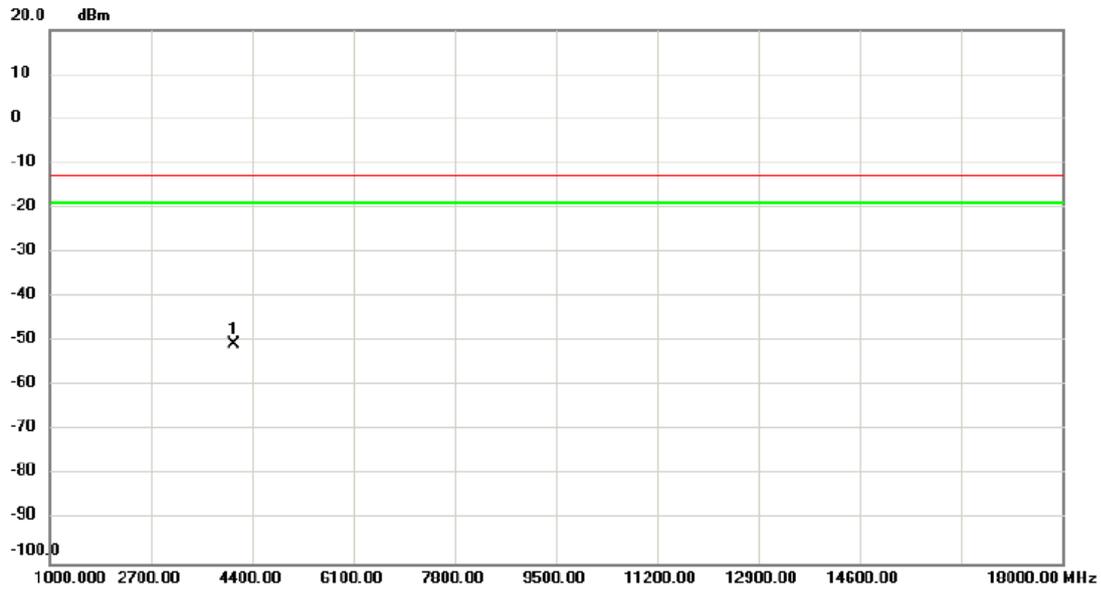
### Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin 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

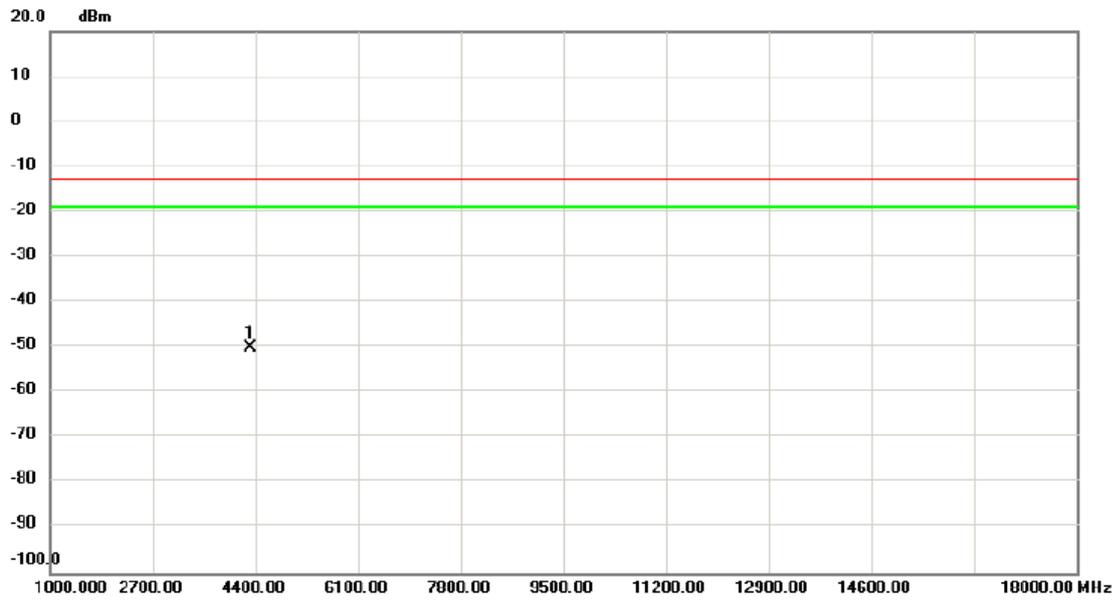
### Horizontal



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin 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

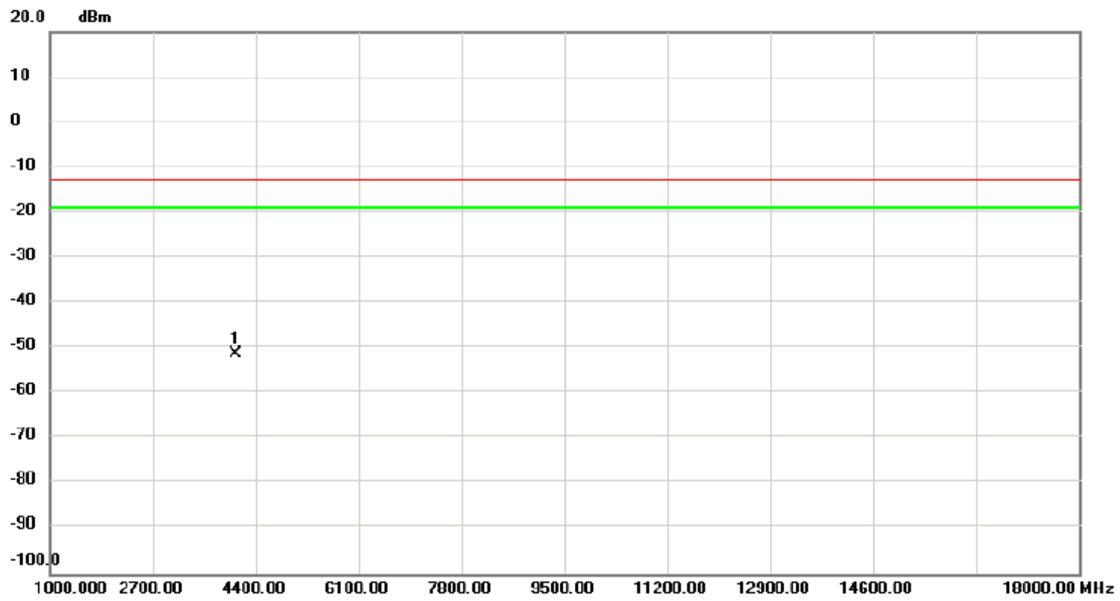
### Vertical



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	

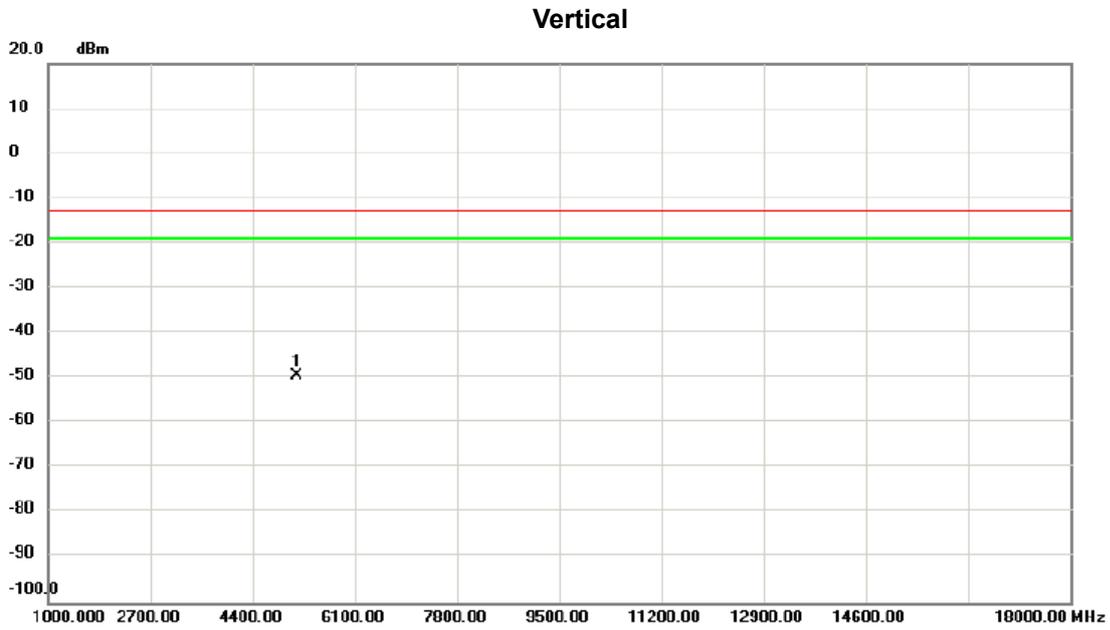
Test Mode LTE Band 5\_TX CH20525\_5M\_Second Antenna

### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	4077.000	-57.60	6.49	-51.11	-13.00	-38.11	peak	

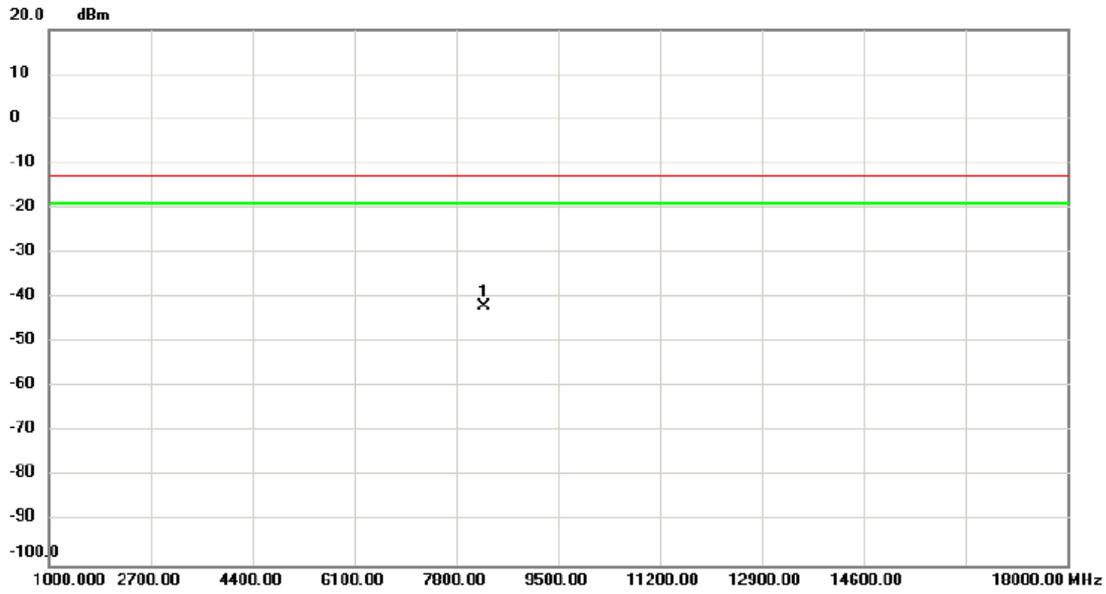
Test Mode      LTE Band 5\_TX CH20525\_10M\_Second Antenna



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin 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

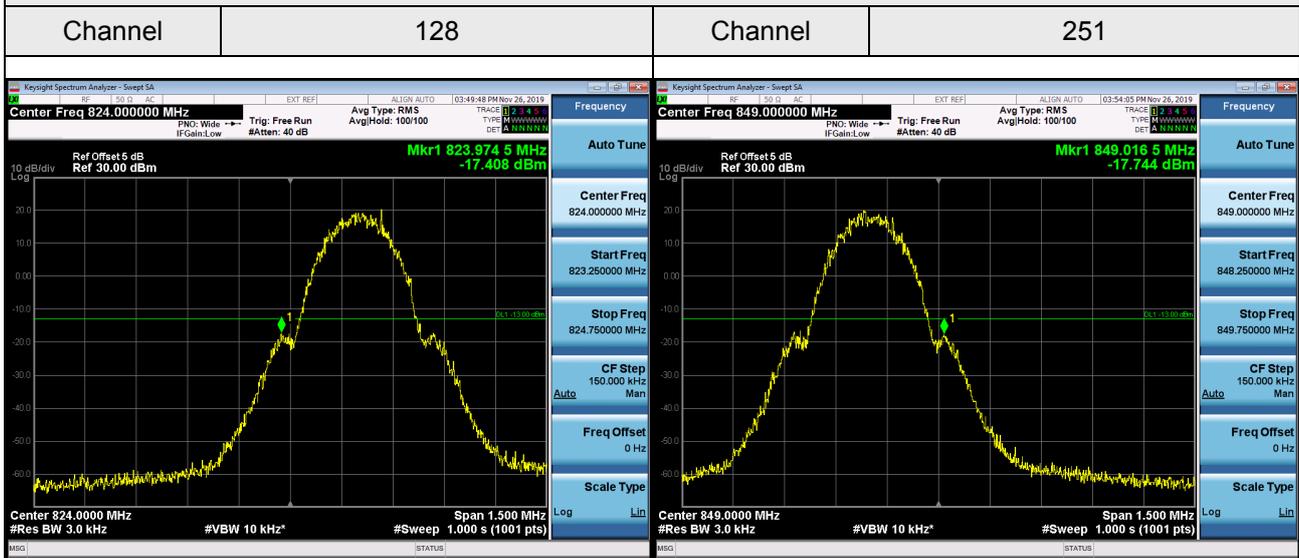
### Horizontal



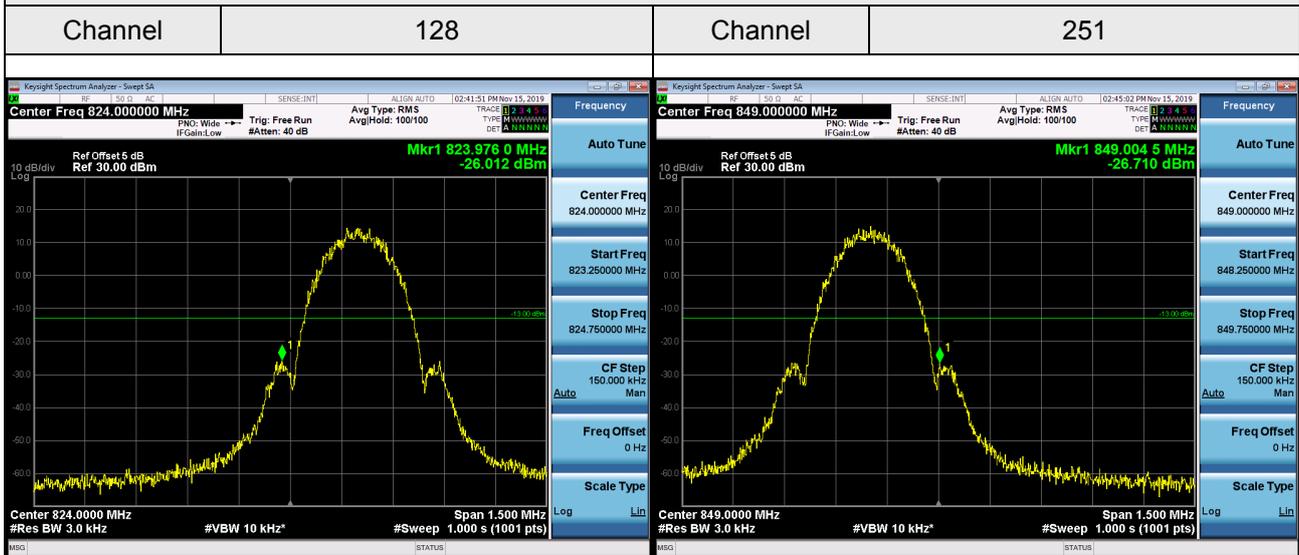
No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	8259.000	-59.76	17.90	-41.86	-13.00	-28.86	peak	

## APPENDIX G - BAND EDGE

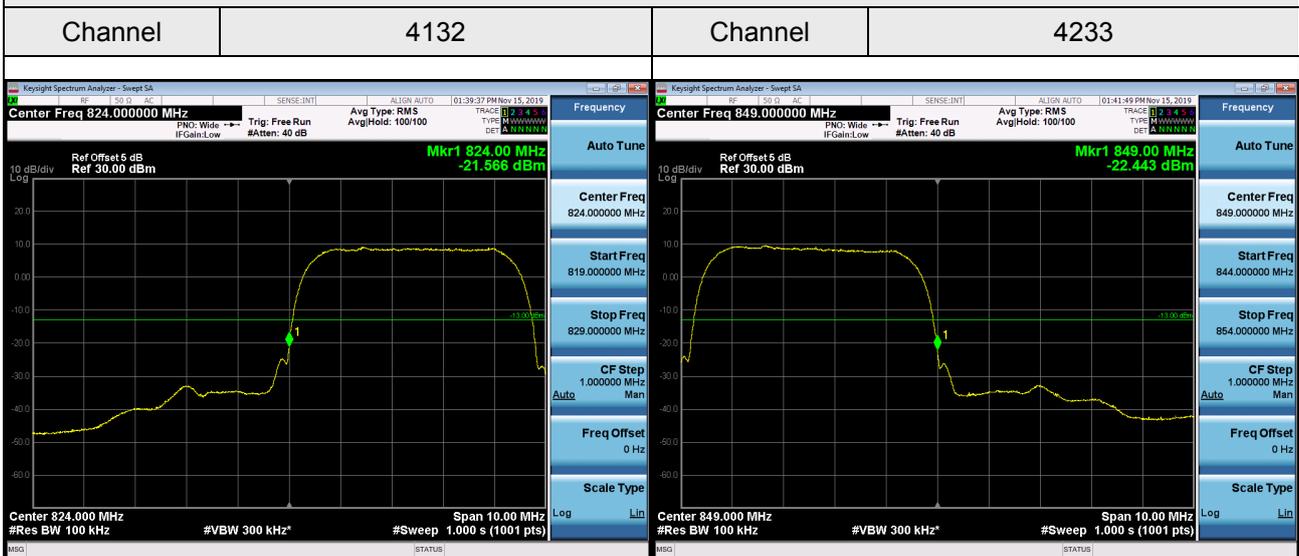
## GSM850\_GSM Spectrum Plot



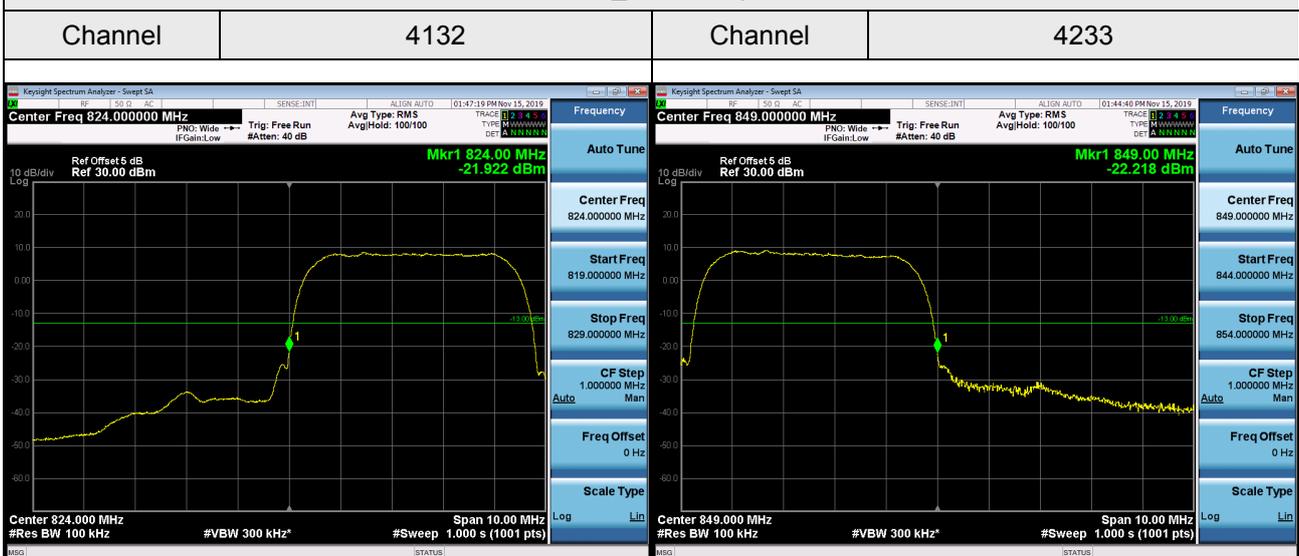
## GSM850\_EDGE Spectrum Plot



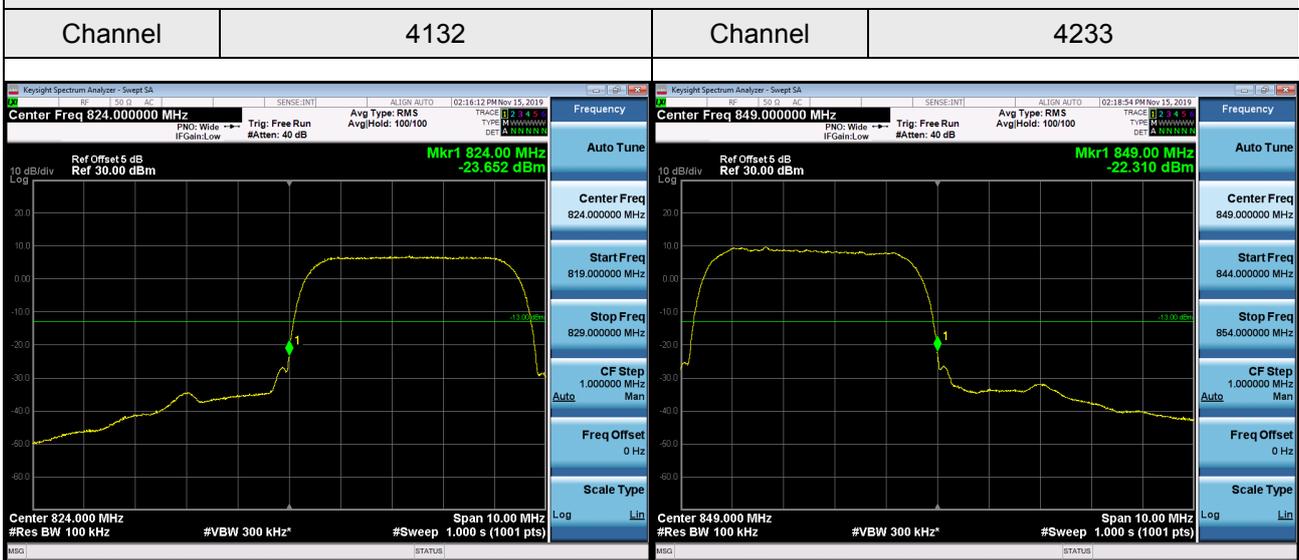
## WCDMA Band V\_WCDMA Spectrum Plot



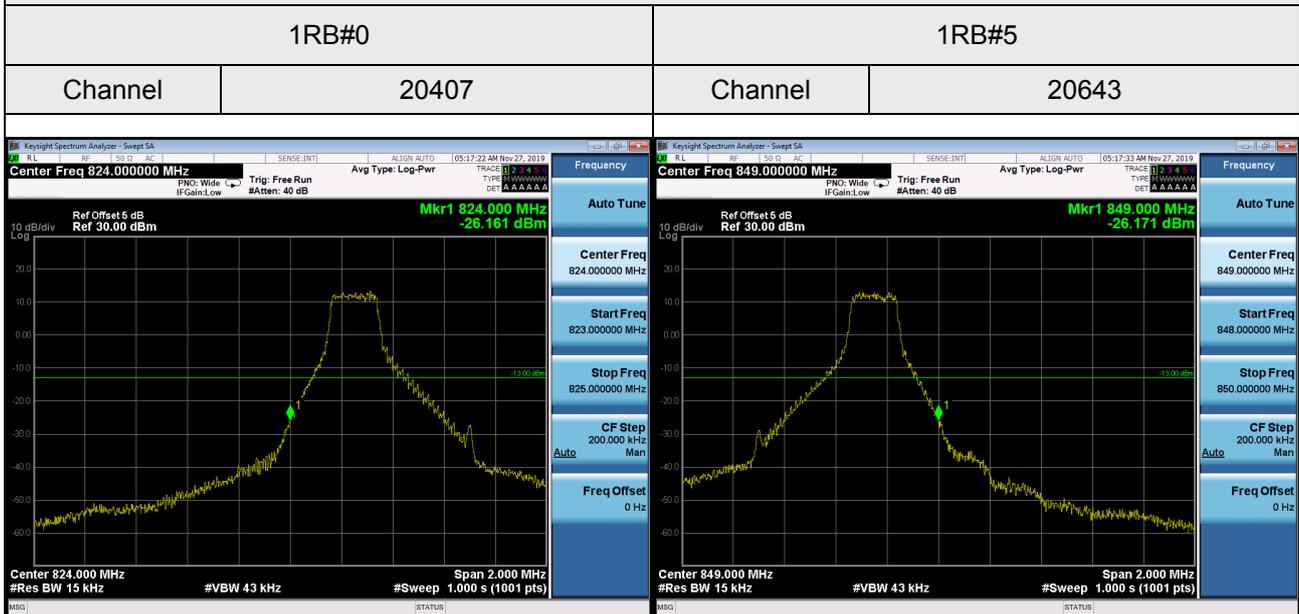
## WCDMA Band V\_HSDPA Spectrum Plot



## WCDMA Band V\_HSUPA Spectrum Plot



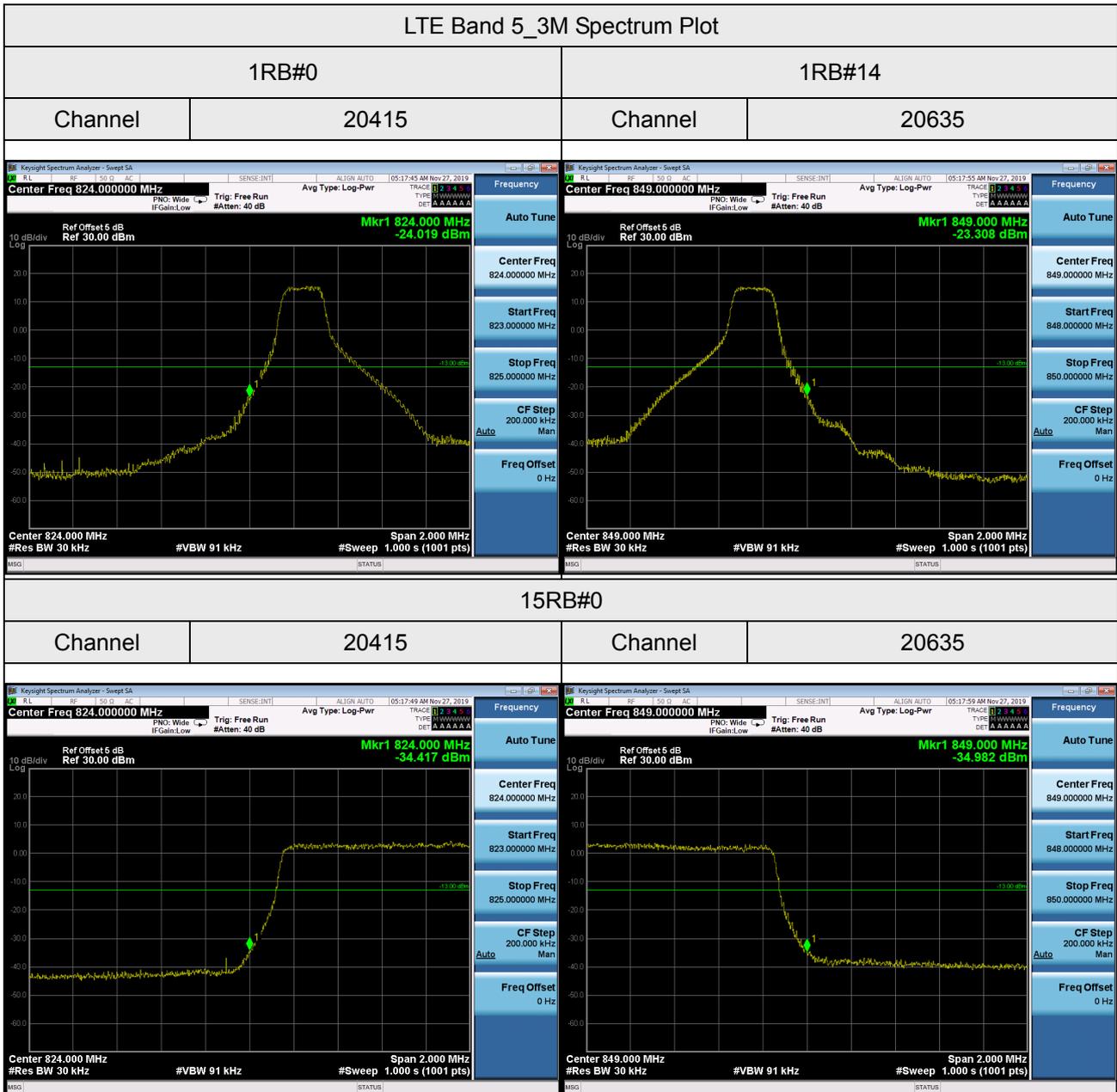
## LTE Band 5\_1.4M Spectrum Plot



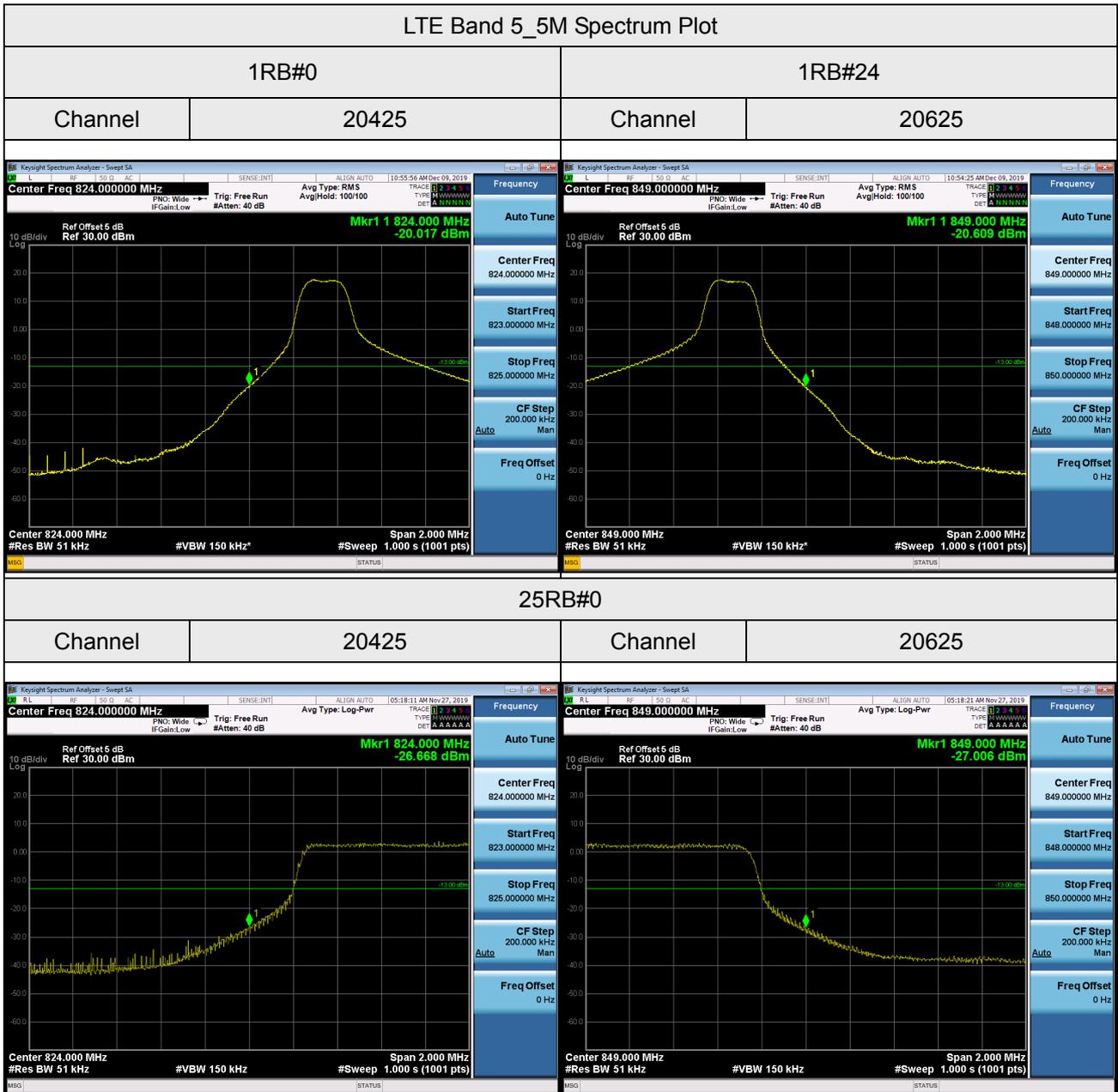
## 6RB#0



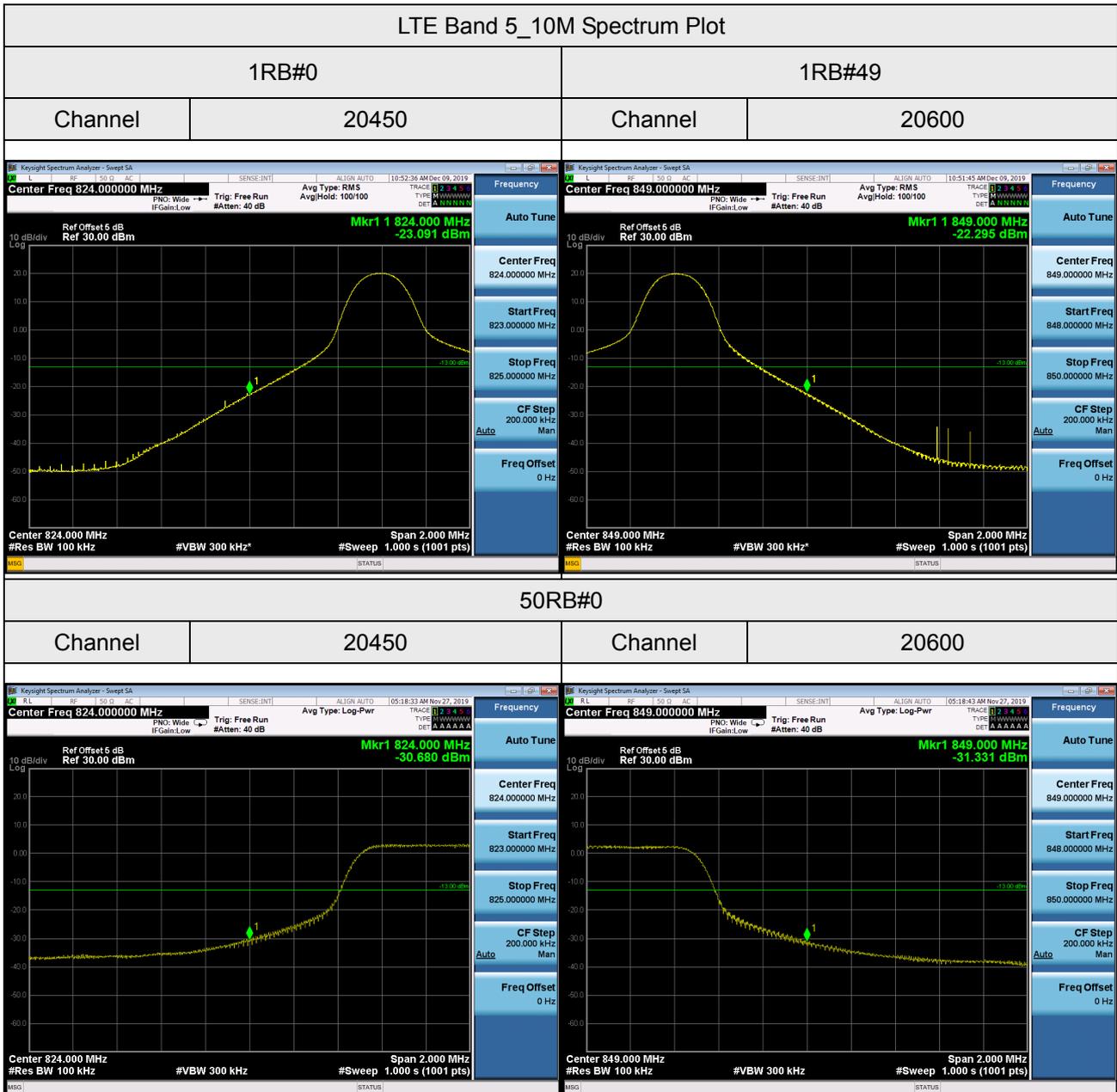
## LTE Band 5\_3M Spectrum Plot



## LTE Band 5\_5M Spectrum Plot

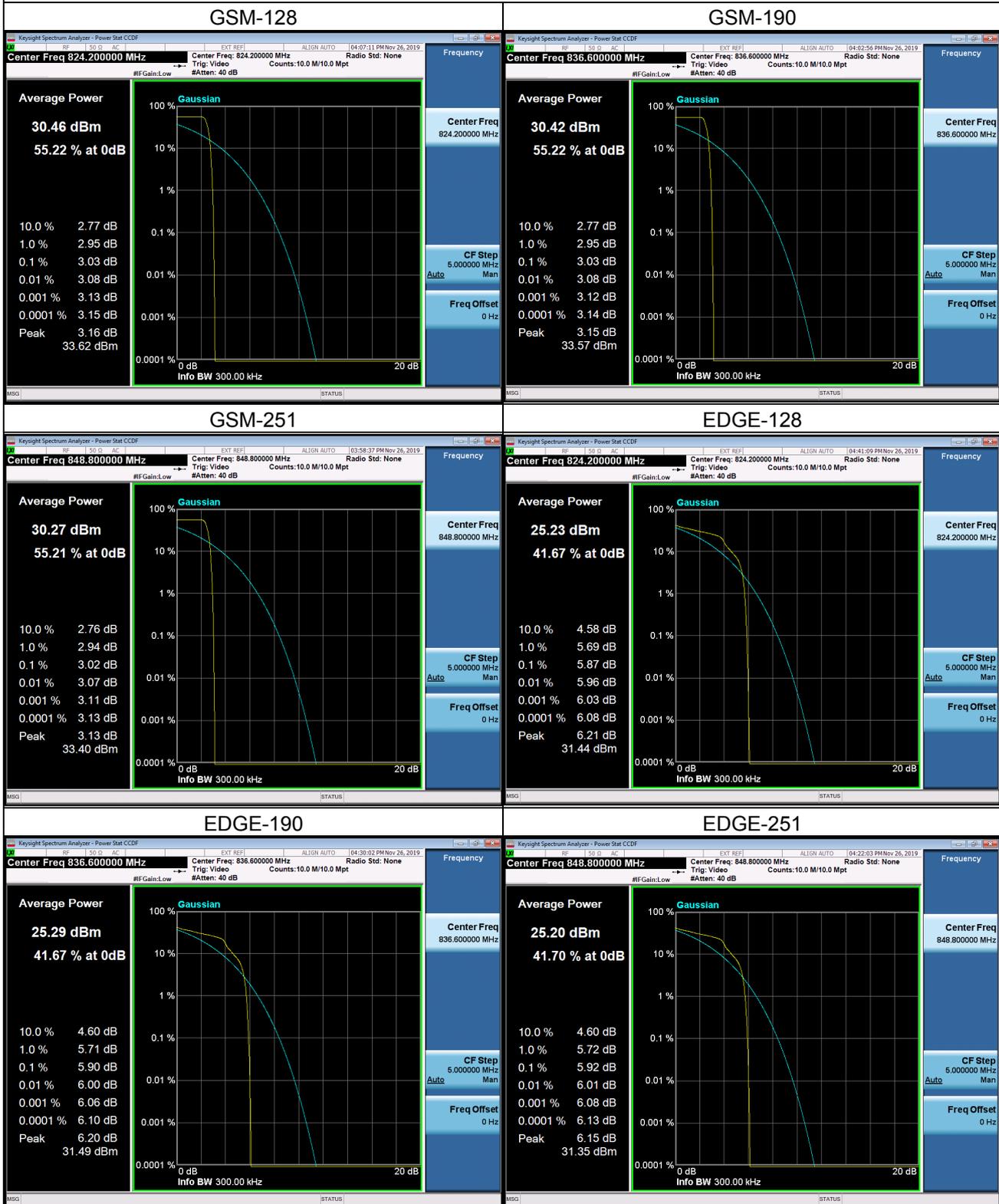


## LTE Band 5\_10M Spectrum Plot



## APPENDIX H - PEAK TO AVERAGE RATIO

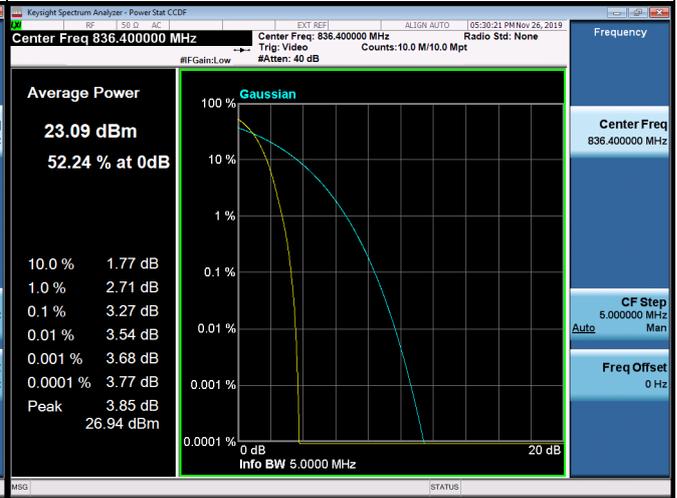
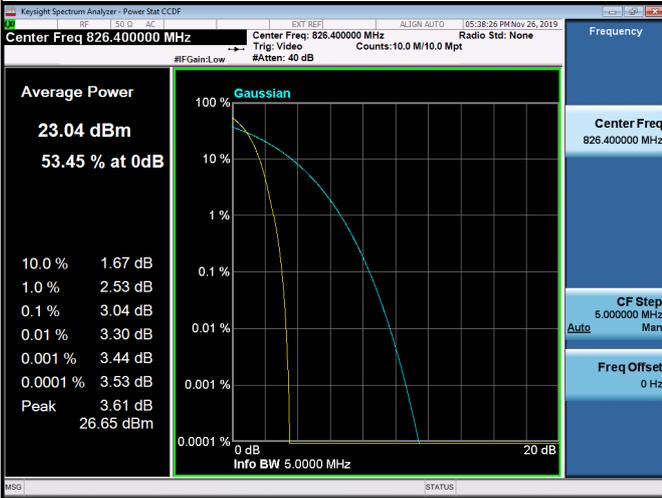
## GSM 850 Spectrum Plot



## WCDMA Band V\_WCDMA Spectrum Plot

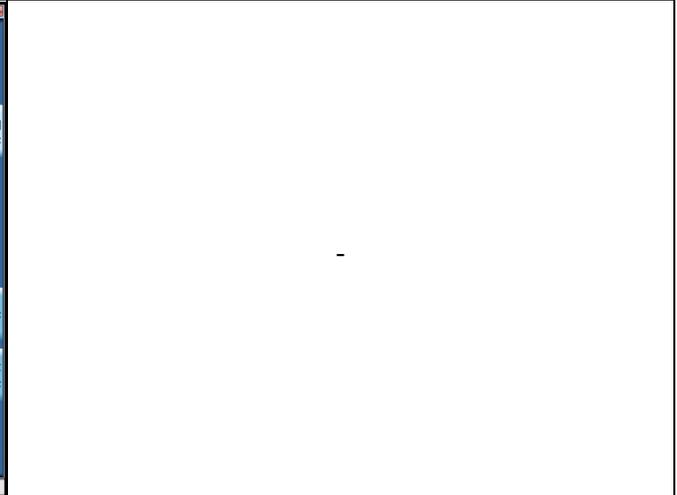
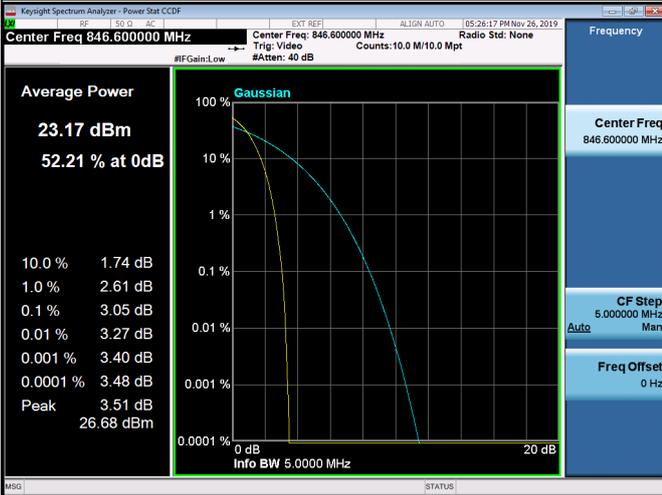
4132

4182



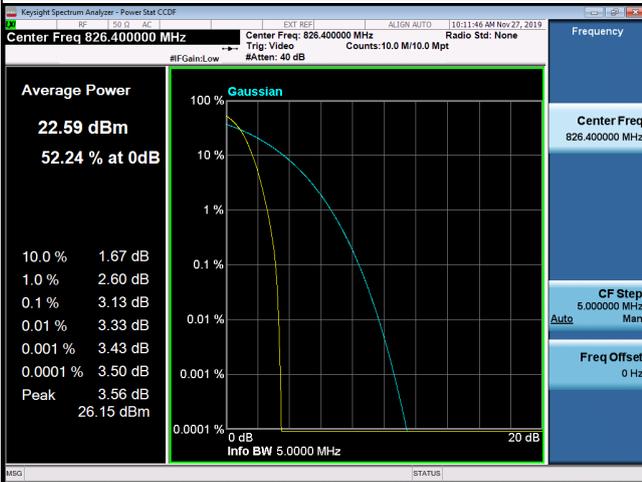
4233

-

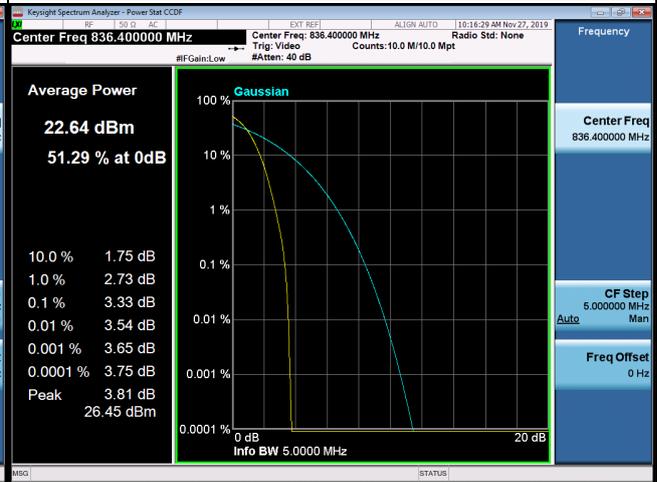


## WCDMA Band V\_HSDPA Spectrum Plot

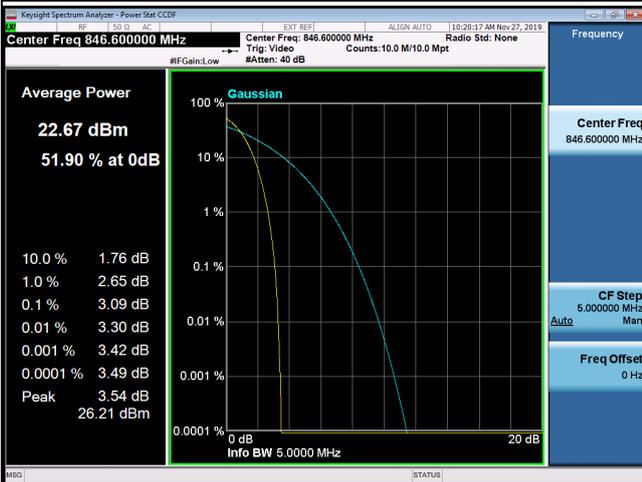
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4182



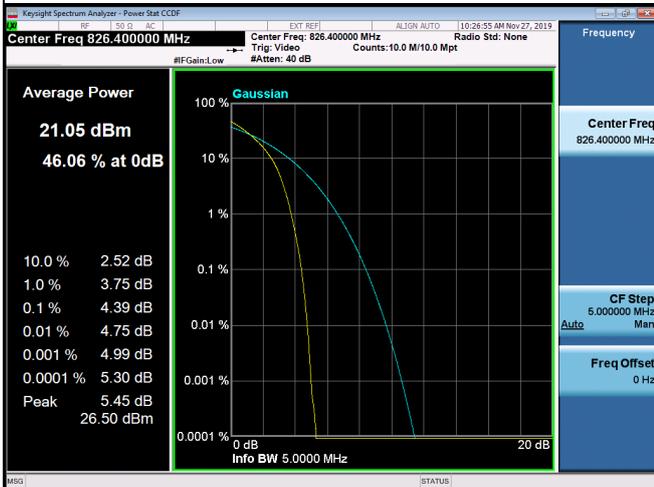
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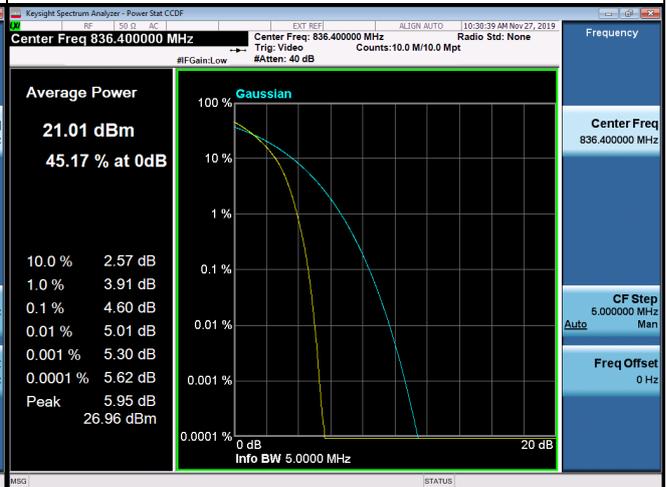
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## WCDMA Band V\_HSUPA Spectrum Plot

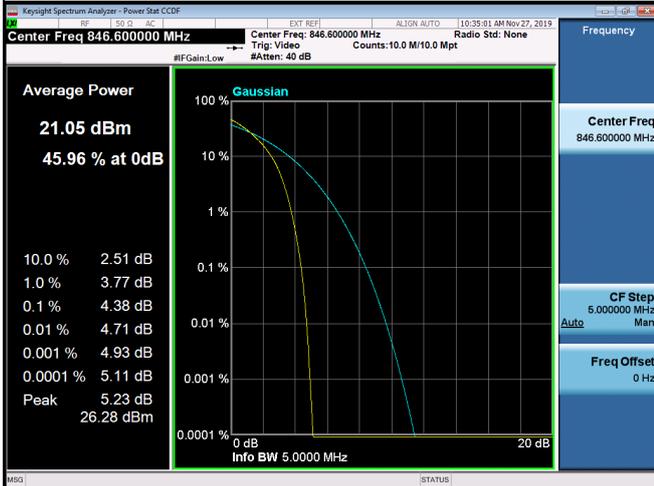
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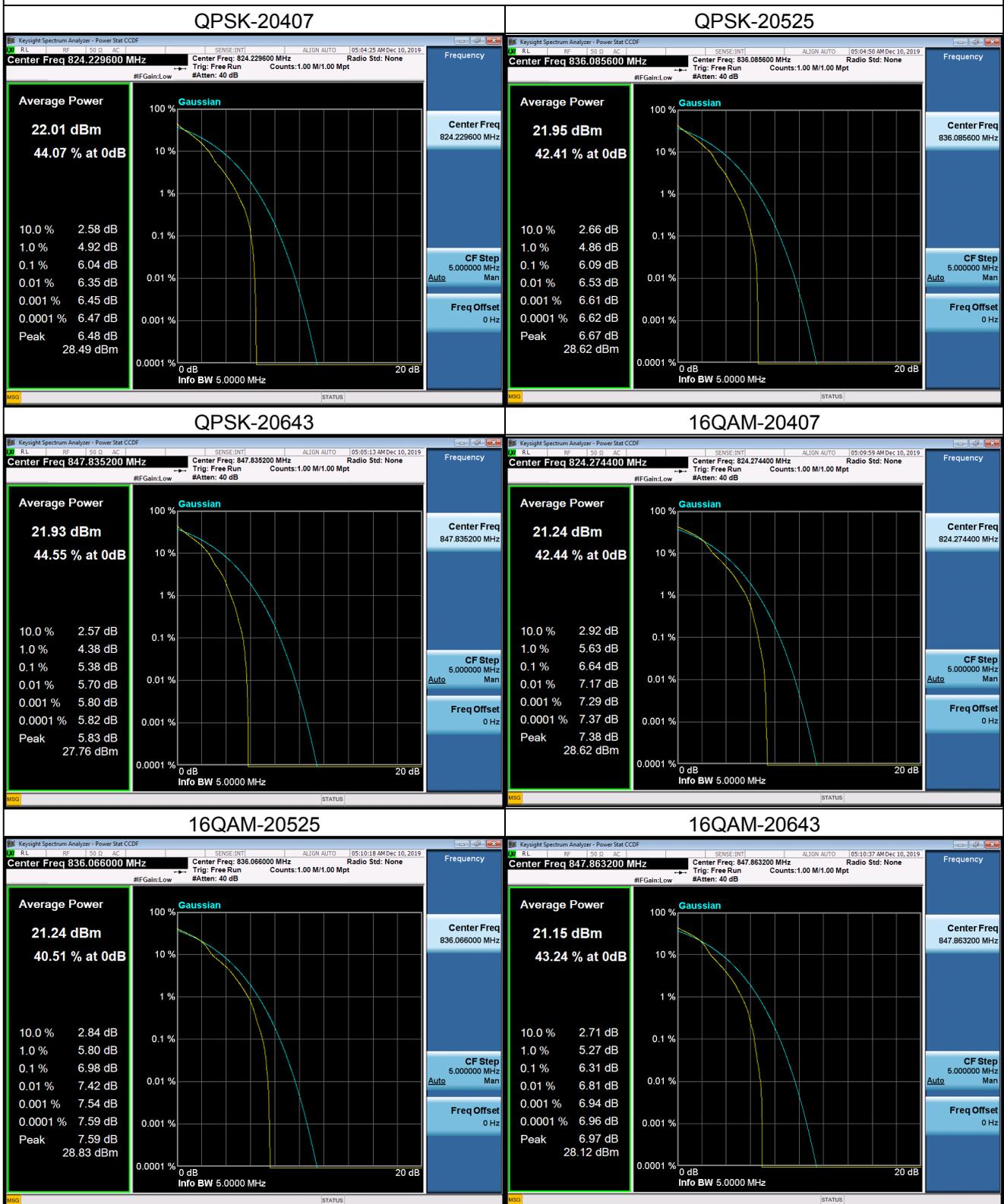
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4233

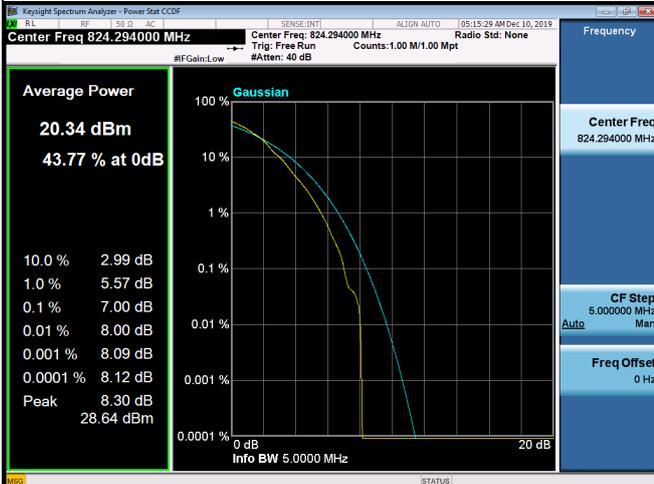


## LTE Band 5\_1.4M Spectrum Plot

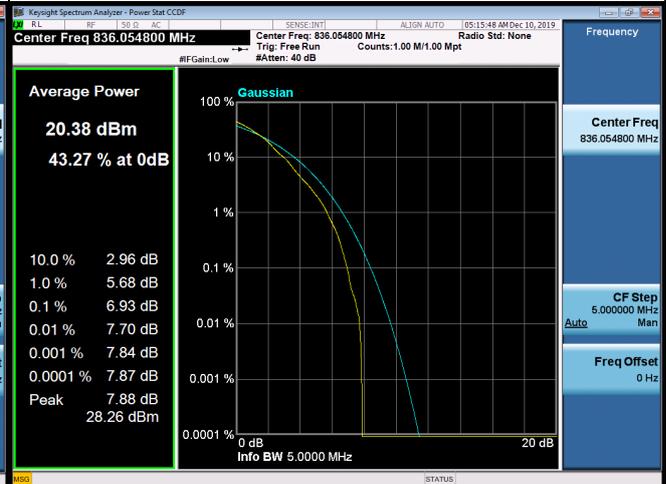


## LTE Band 5\_1.4M Spectrum Plot

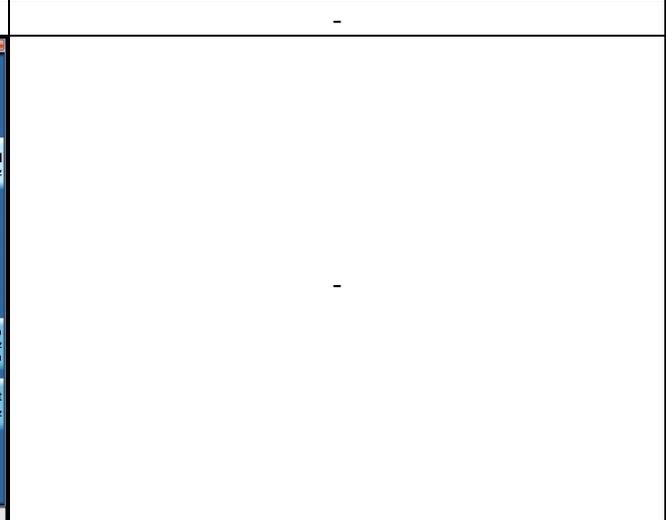
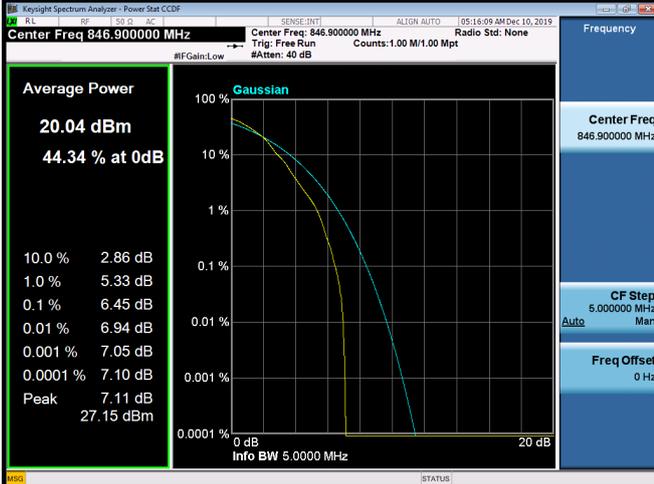
### 64QAM-20407



### 64QAM-20525



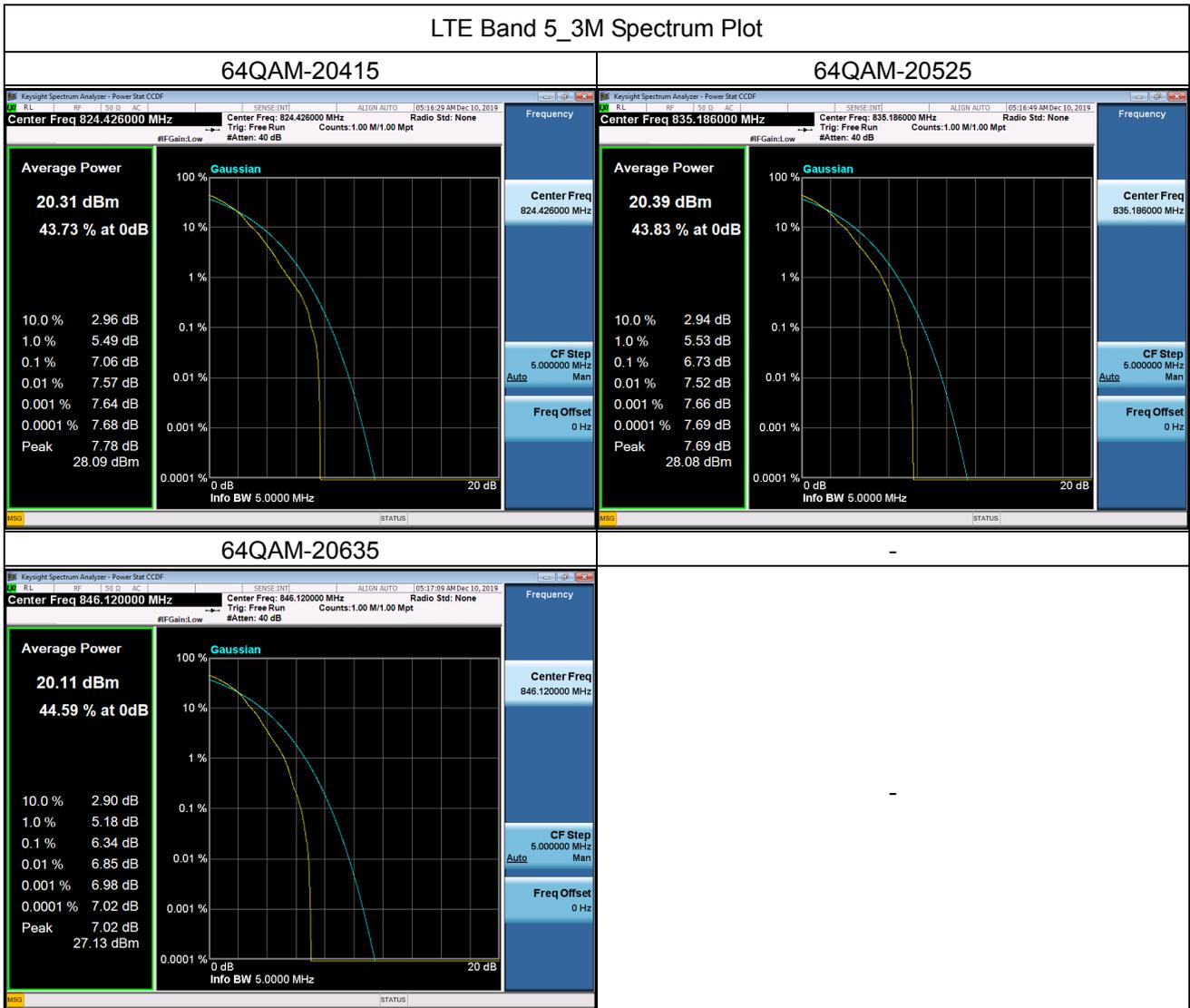
### 64QAM-20643



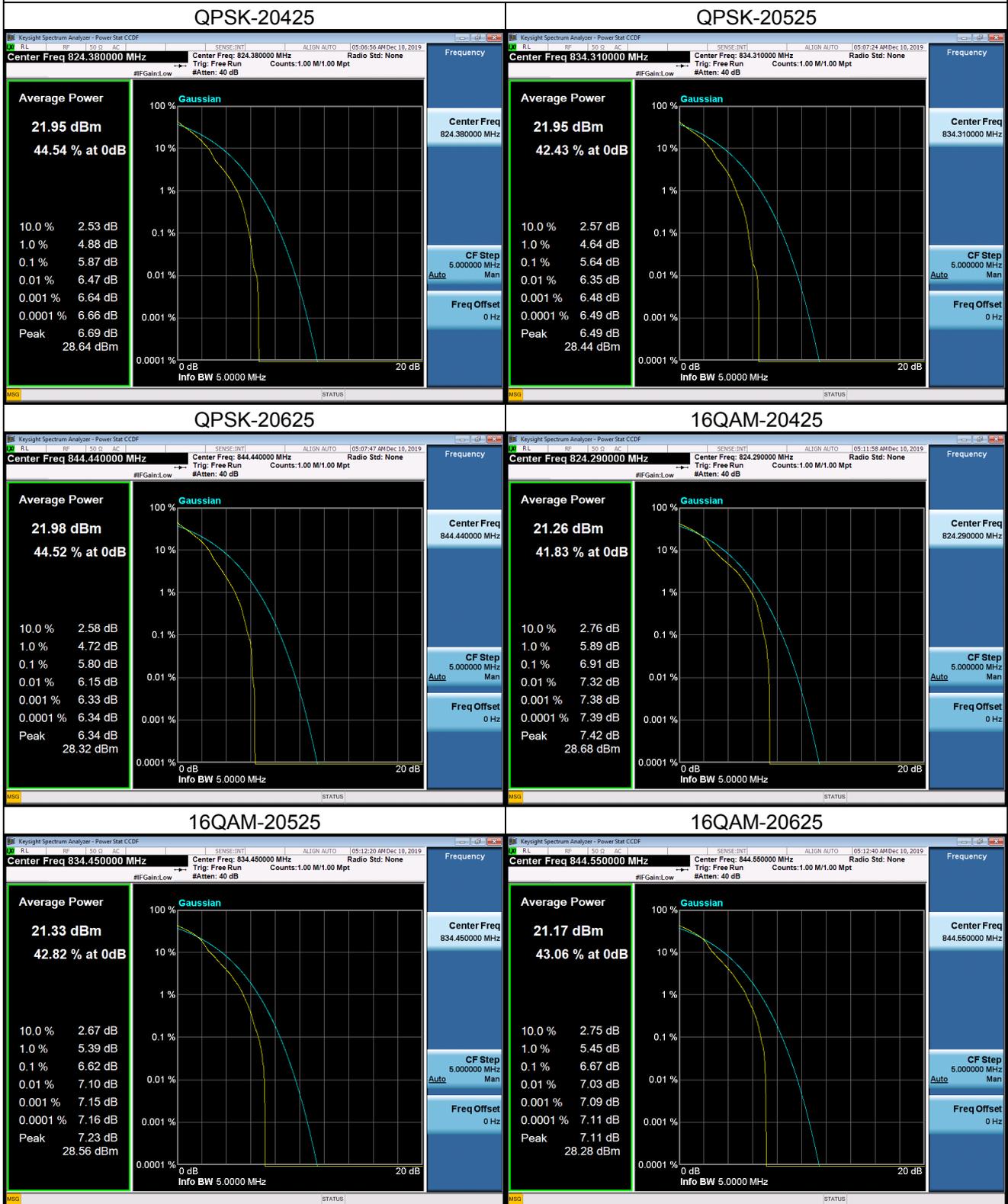
## LTE Band 5\_3M Spectrum Plot



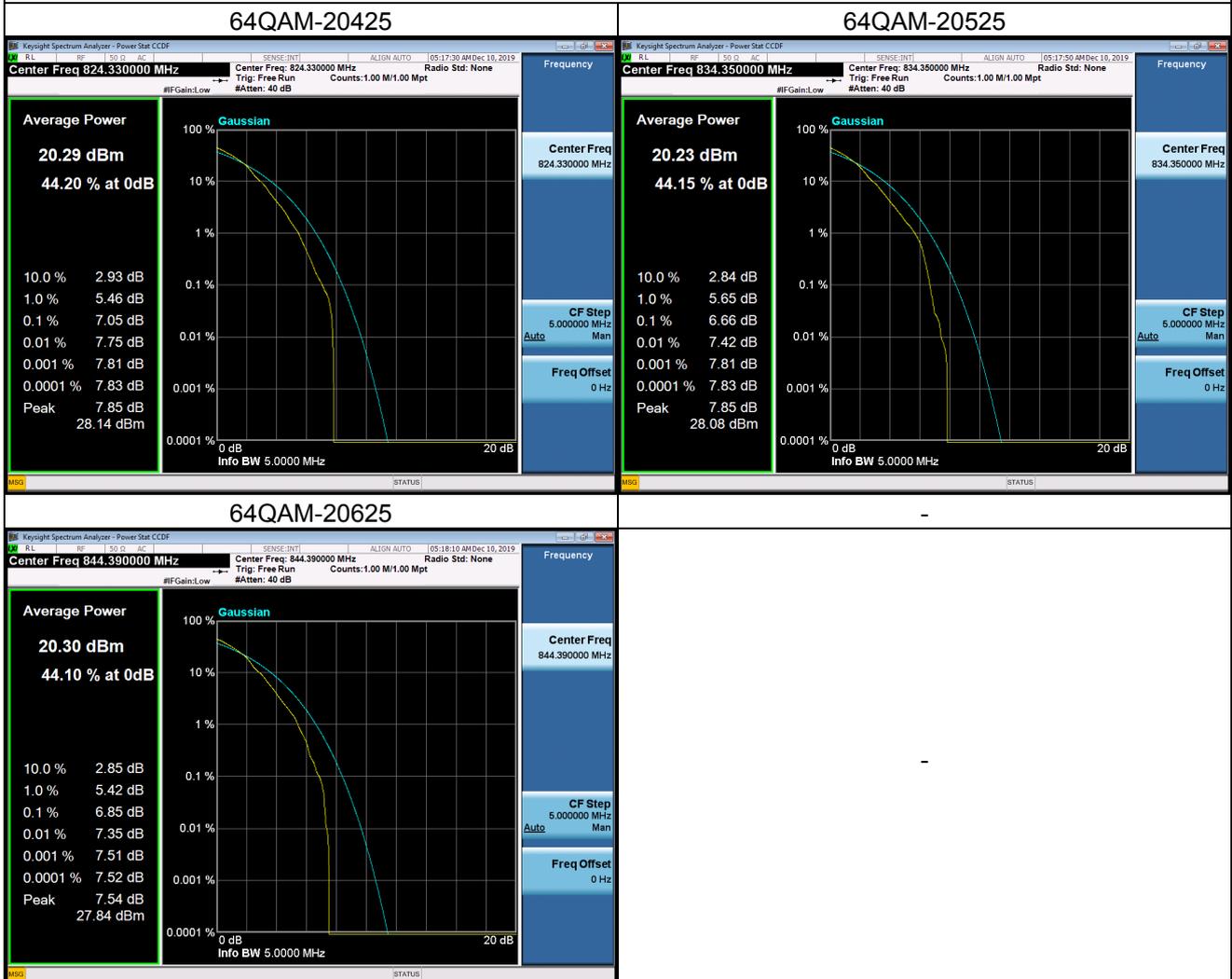
## LTE Band 5\_3M Spectrum Plot



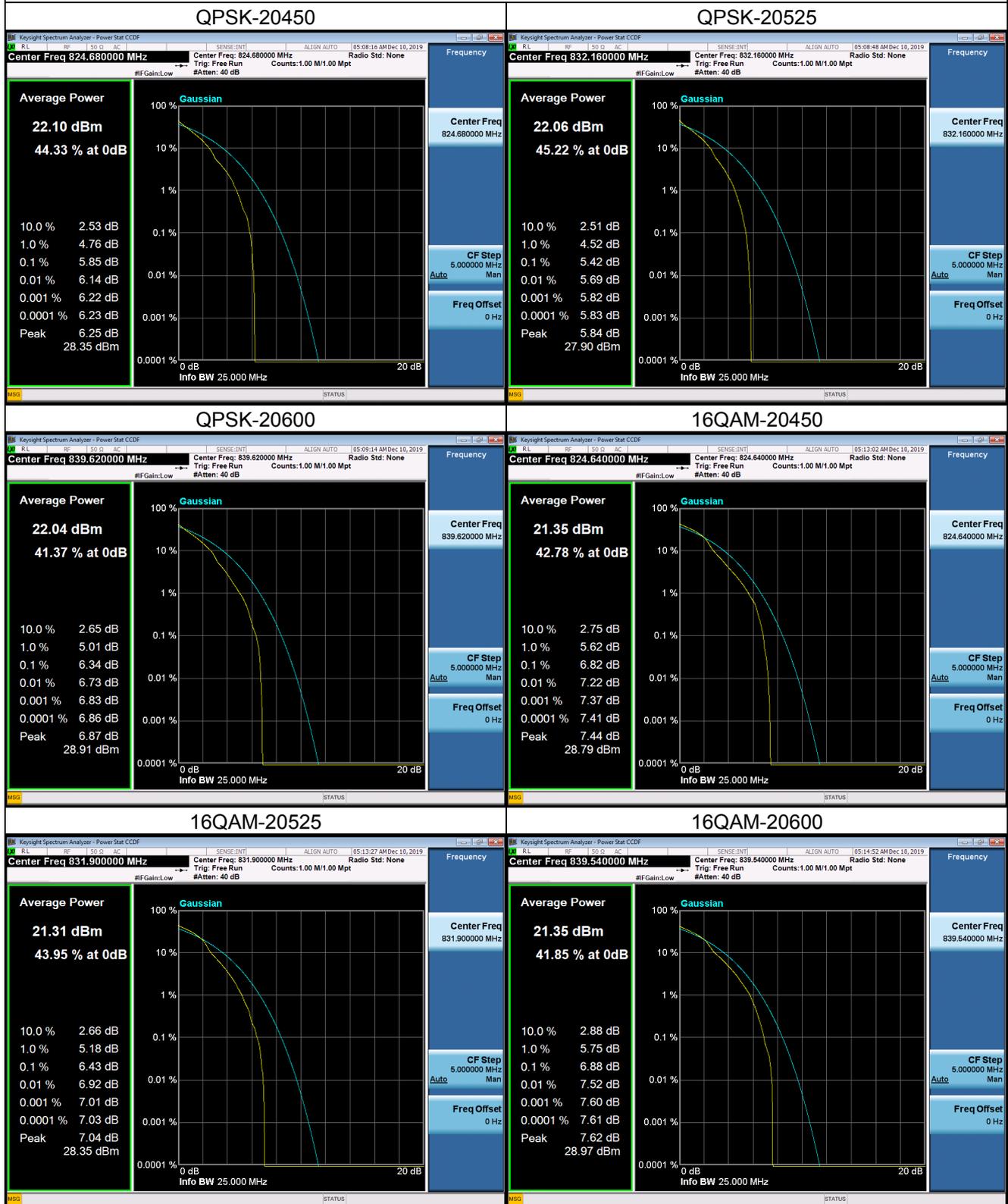
## LTE Band 5\_5M Spectrum Plot



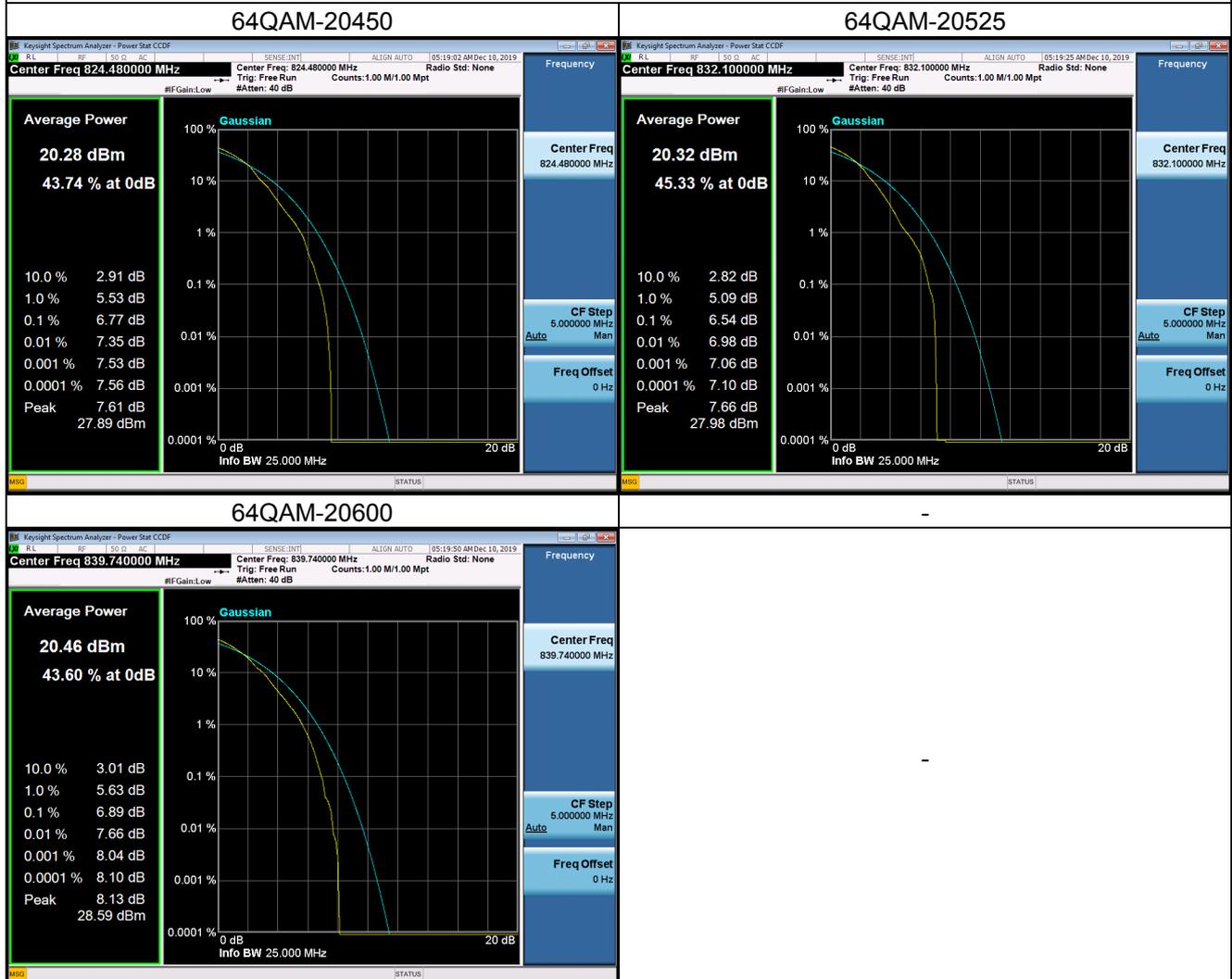
## LTE Band 5\_5M Spectrum Plot



## LTE Band 5\_10M Spectrum Plot



## LTE Band 5\_10M Spectrum Plot



## 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