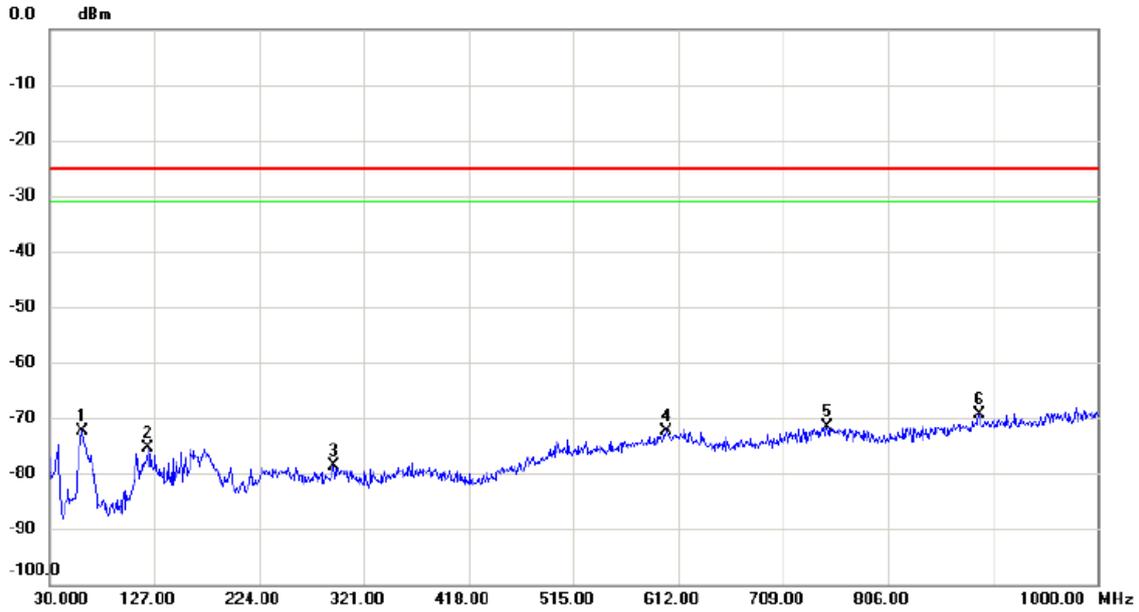


Test Mode: LTE Band 7\_TX CH21100\_20M

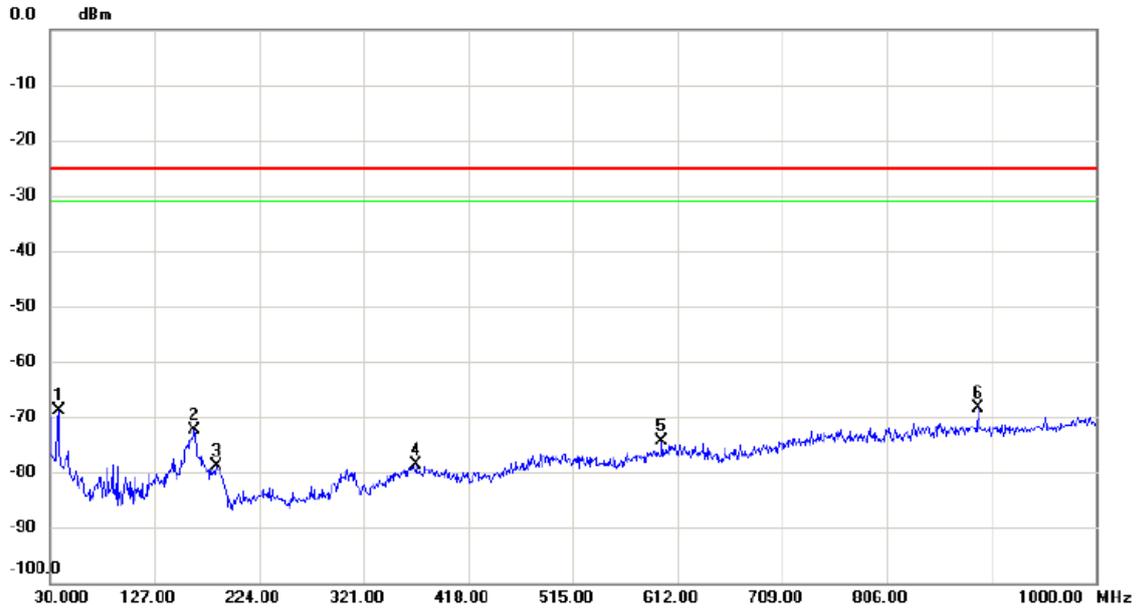
Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		60.0700	-68.24	-4.06	-72.30	-25.00	-47.30	peak	
2		121.6650	-72.77	-2.71	-75.48	-25.00	-50.48	peak	
3		292.8700	-76.48	-2.20	-78.68	-25.00	-53.68	peak	
4		600.3600	-77.92	5.60	-72.32	-25.00	-47.32	peak	
5		749.7400	-77.46	5.80	-71.66	-25.00	-46.66	peak	
6	*	890.3900	-76.68	7.34	-69.34	-25.00	-44.34	peak	

Test Mode: LTE Band 7\_TX CH2100\_20M

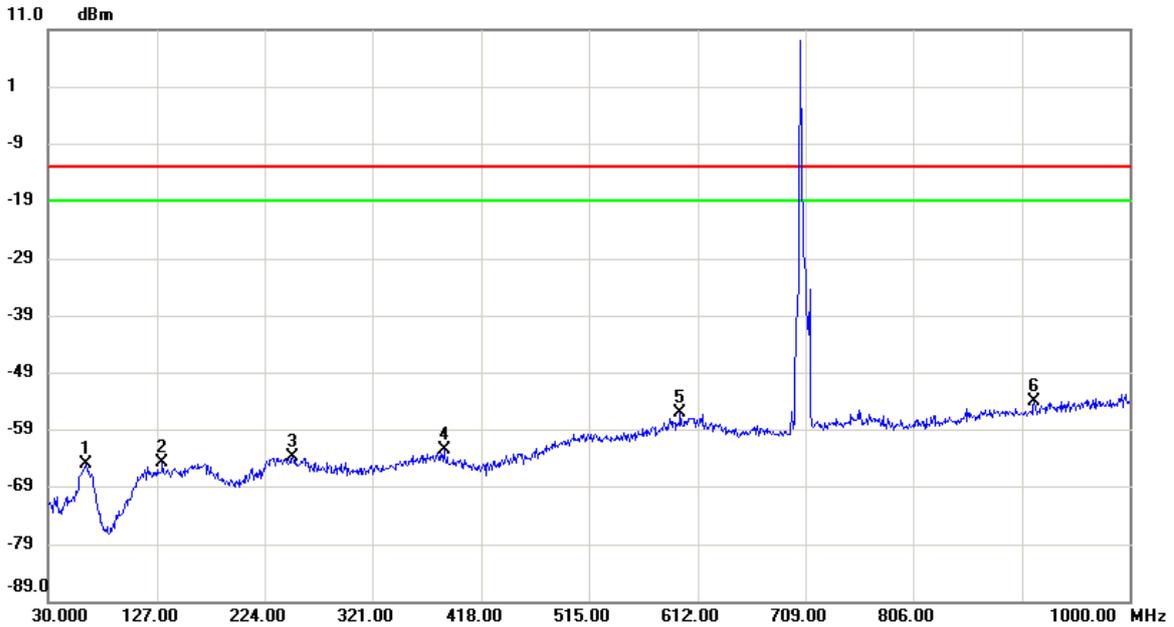
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		37.7600	-69.35	0.53	-68.82	-25.00	-43.82	peak	
2		164.3450	-67.71	-4.72	-72.43	-25.00	-47.43	peak	
3		184.2300	-71.59	-7.37	-78.96	-25.00	-53.96	peak	
4		369.9850	-78.03	-0.67	-78.70	-25.00	-53.70	peak	
5		597.4500	-76.91	2.42	-74.49	-25.00	-49.49	peak	
6	*	890.3900	-74.20	5.91	-68.29	-25.00	-43.29	peak	

Test Mode: LTE Band 17\_TX CH23755\_5M

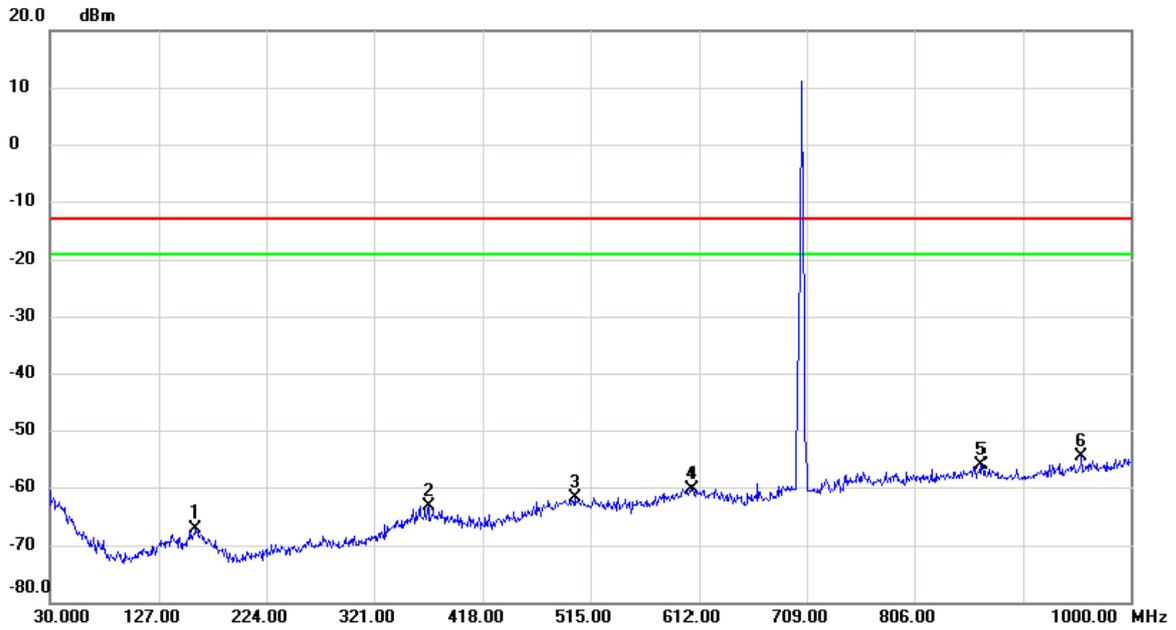
Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		63.9500	-77.02	11.94	-65.08	-13.00	-52.08	peak	
2		131.8500	-77.37	12.60	-64.77	-13.00	-51.77	peak	
3		249.2200	-78.36	14.58	-63.78	-13.00	-50.78	peak	
4		384.5350	-77.29	14.63	-62.66	-13.00	-49.66	peak	
5		597.4500	-76.58	20.49	-56.09	-13.00	-43.09	peak	
6	*	913.6700	-77.06	22.95	-54.11	-13.00	-41.11	peak	

Test Mode: LTE Band 17\_TX CH23755\_5M

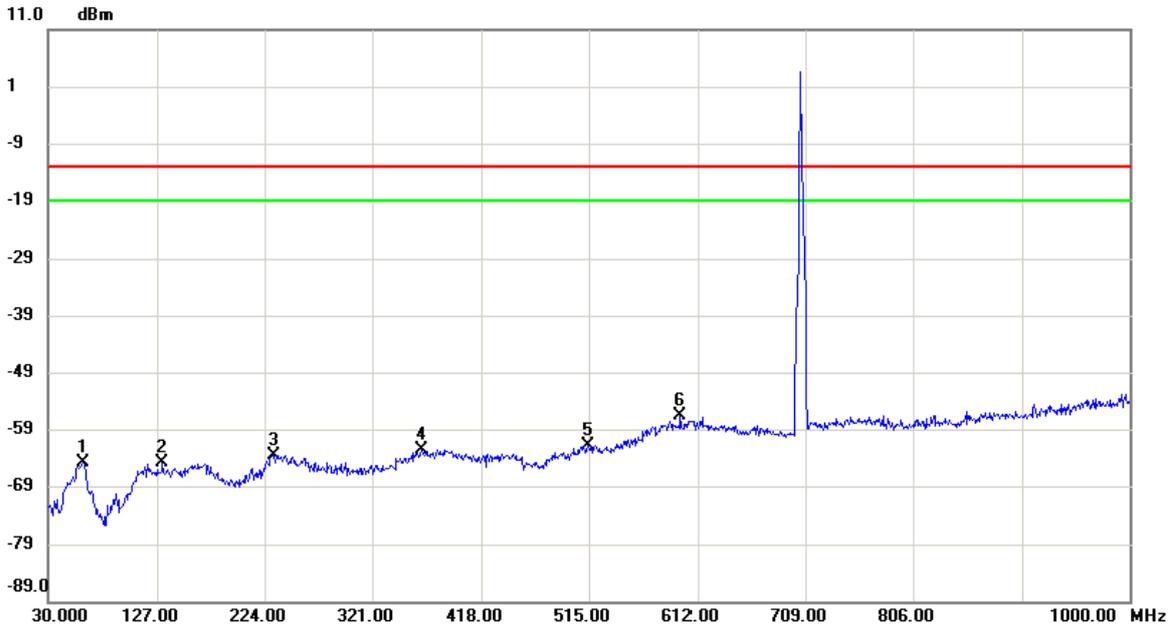
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		160.4650	-77.82	10.74	-67.08	-13.00	-54.08	peak	
2		369.0150	-77.78	14.32	-63.46	-13.00	-50.46	peak	
3		500.9350	-77.83	15.95	-61.88	-13.00	-48.88	peak	
4		606.6650	-77.60	17.28	-60.32	-13.00	-47.32	peak	
5		865.6550	-77.11	20.89	-56.22	-13.00	-43.22	peak	
6	*	955.3800	-76.85	22.15	-54.70	-13.00	-41.70	peak	

Test Mode: LTE Band 17\_TX CH23755\_10M

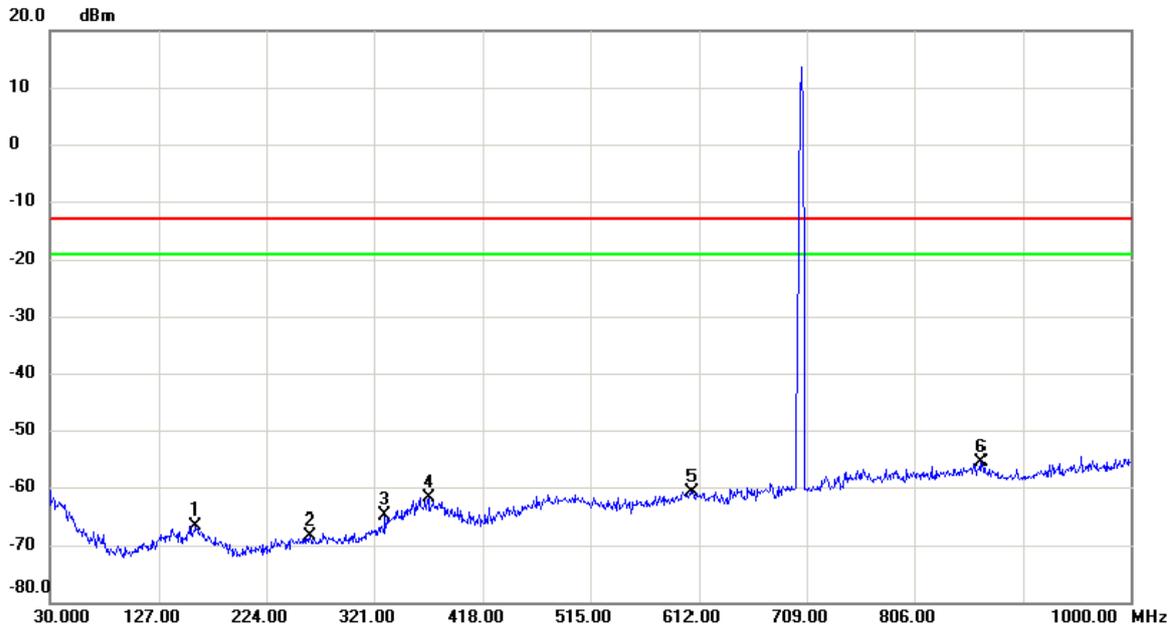
Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		61.5250	-76.13	11.31	-64.82	-13.00	-51.82	peak	
2		131.8500	-77.37	12.60	-64.77	-13.00	-51.77	peak	
3		232.2450	-77.99	14.36	-63.63	-13.00	-50.63	peak	
4		363.6800	-77.31	14.75	-62.56	-13.00	-49.56	peak	
5		514.0300	-79.53	17.74	-61.79	-13.00	-48.79	peak	
6	*	597.4500	-77.08	20.49	-56.59	-13.00	-43.59	peak	

Test Mode: LTE Band 17\_TX CH23755\_10M

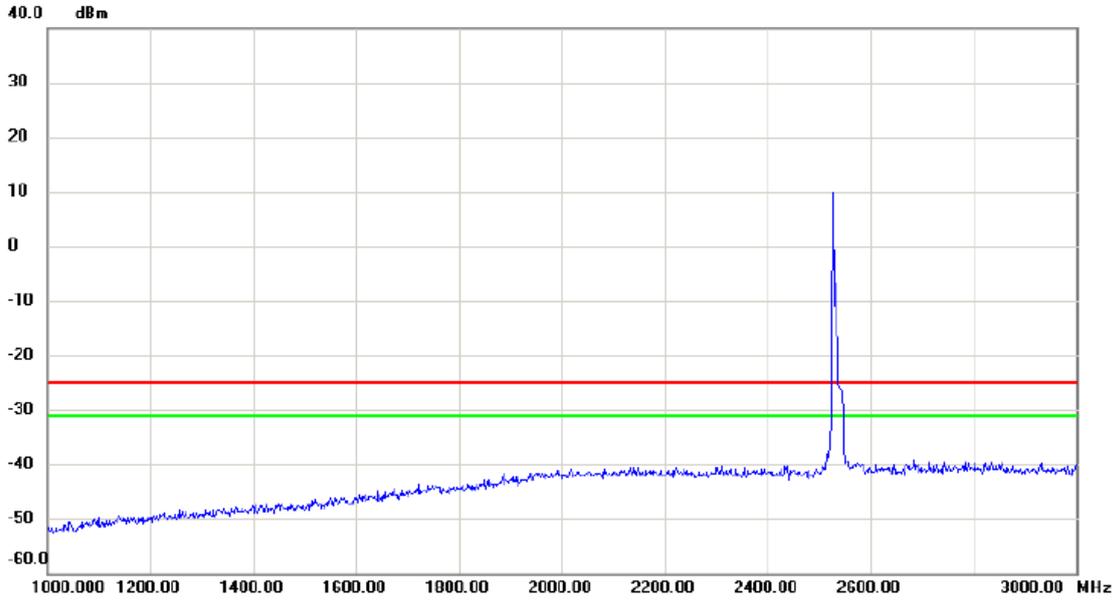
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1		160.4650	-77.32	10.74	-66.58	-13.00	-53.58	peak	
2		262.8000	-78.12	9.63	-68.49	-13.00	-55.49	peak	
3		331.1850	-76.83	11.89	-64.94	-13.00	-51.94	peak	
4		369.0150	-76.28	14.32	-61.96	-13.00	-48.96	peak	
5		606.6650	-78.10	17.28	-60.82	-13.00	-47.82	peak	
6	*	865.6550	-76.61	20.89	-55.72	-13.00	-42.72	peak	

Test Mode: LTE Band 7\_TX CH21100\_5M

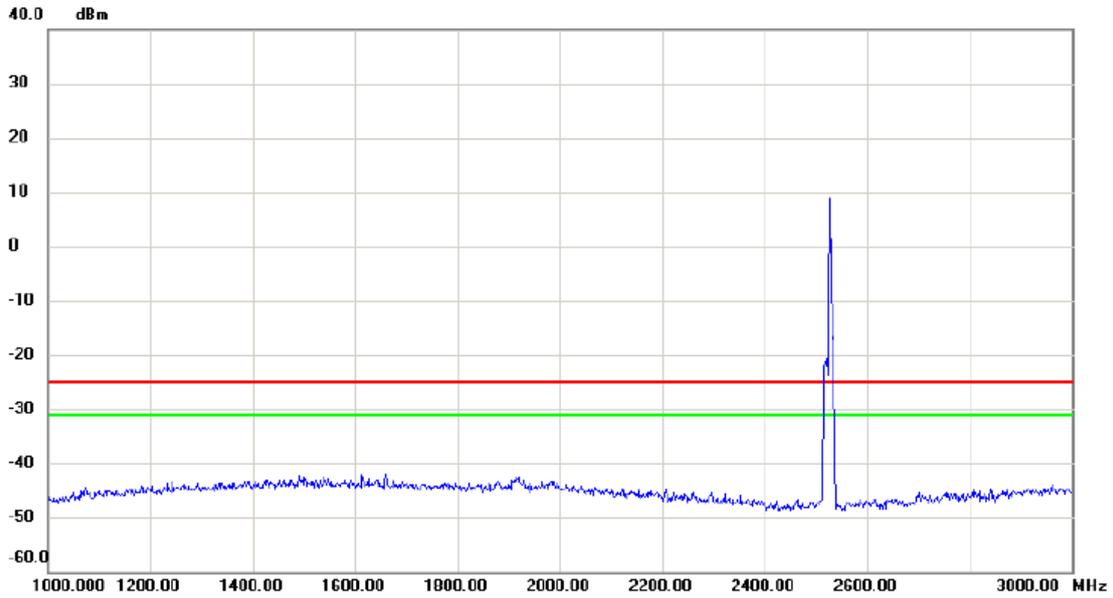
Vertical



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

Test Mode: LTE Band 7\_TX CH21100\_5M

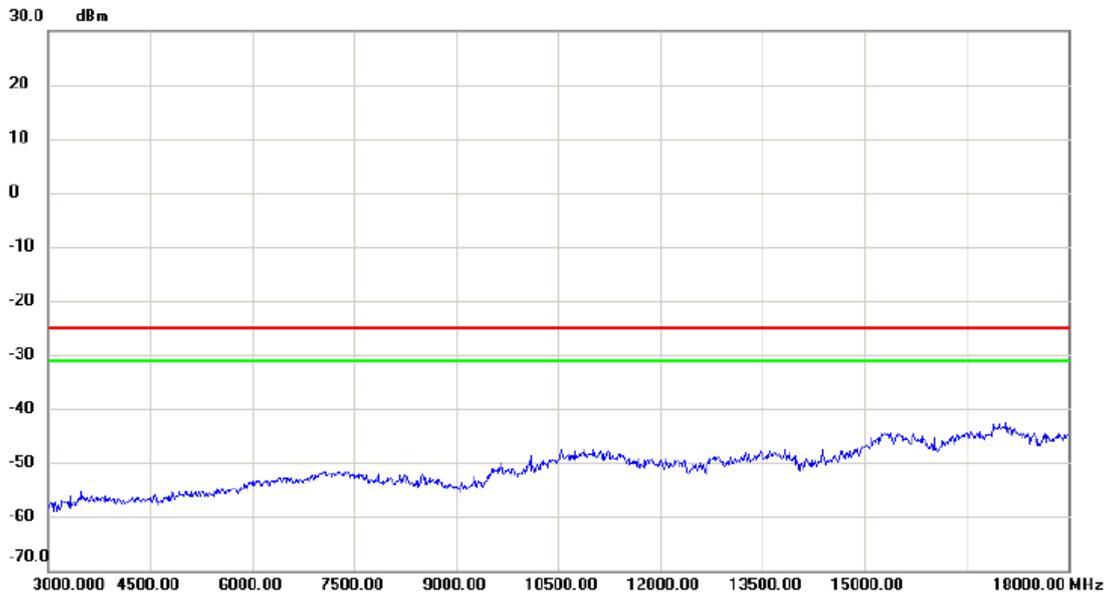
**Horizontal**



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
		2500.000	10.0	0.0	10.0	-25.0	-15.0		

Test Mode: LTE Band 7\_TX CH21100\_5M

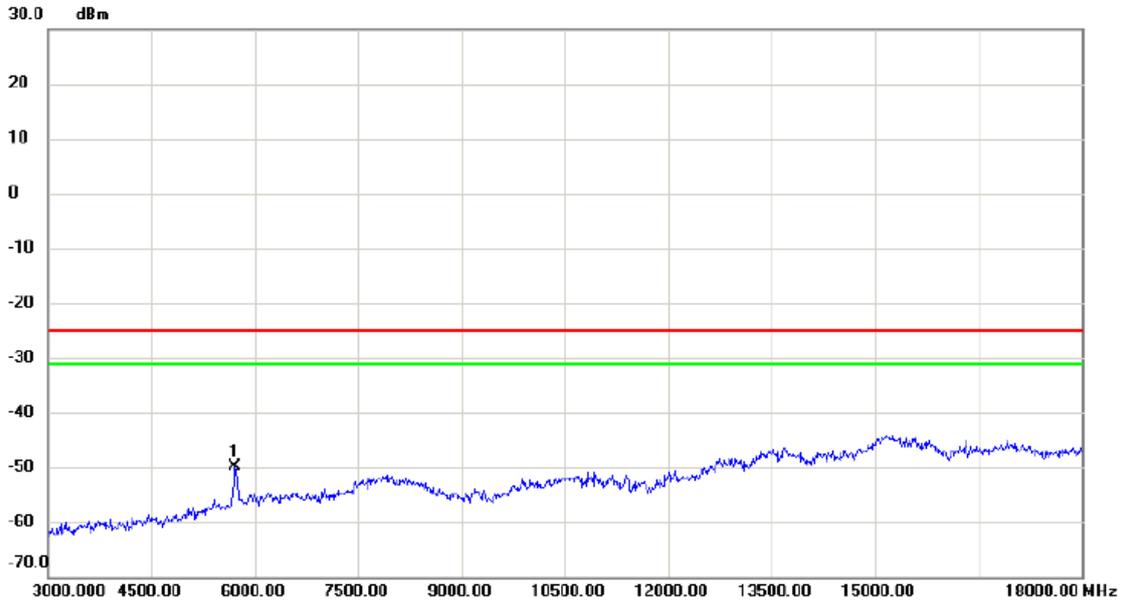
Vertical



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

Test Mode: LTE Band 7\_TX CH21100\_5M

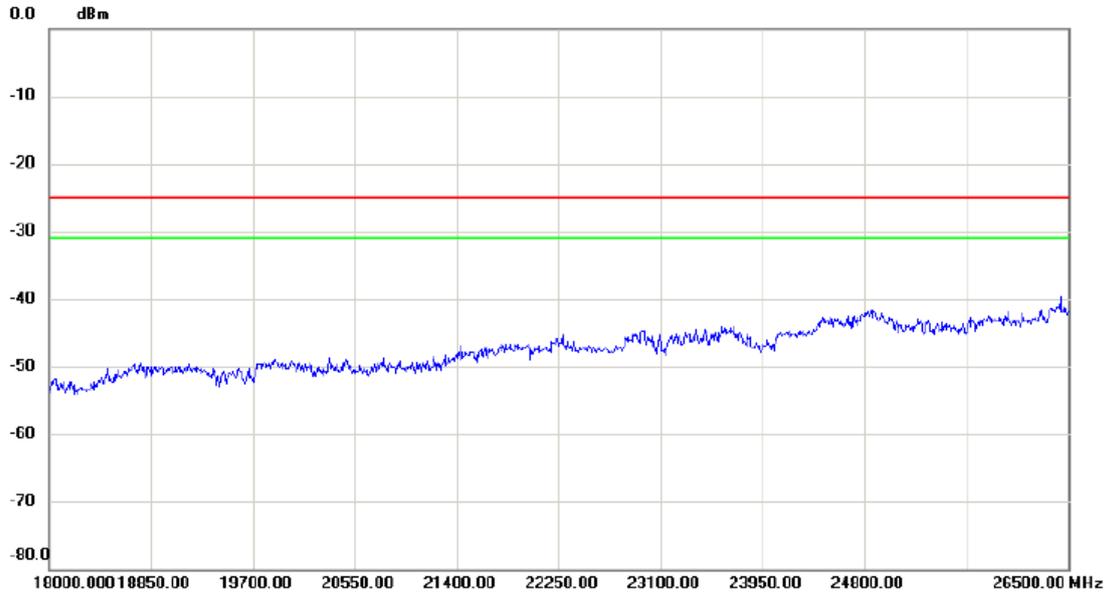
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	5715.000	-67.13	17.28	-49.85	-25.00	-24.85	peak	

Test Mode: LTE Band 7\_TX CH21100\_5M

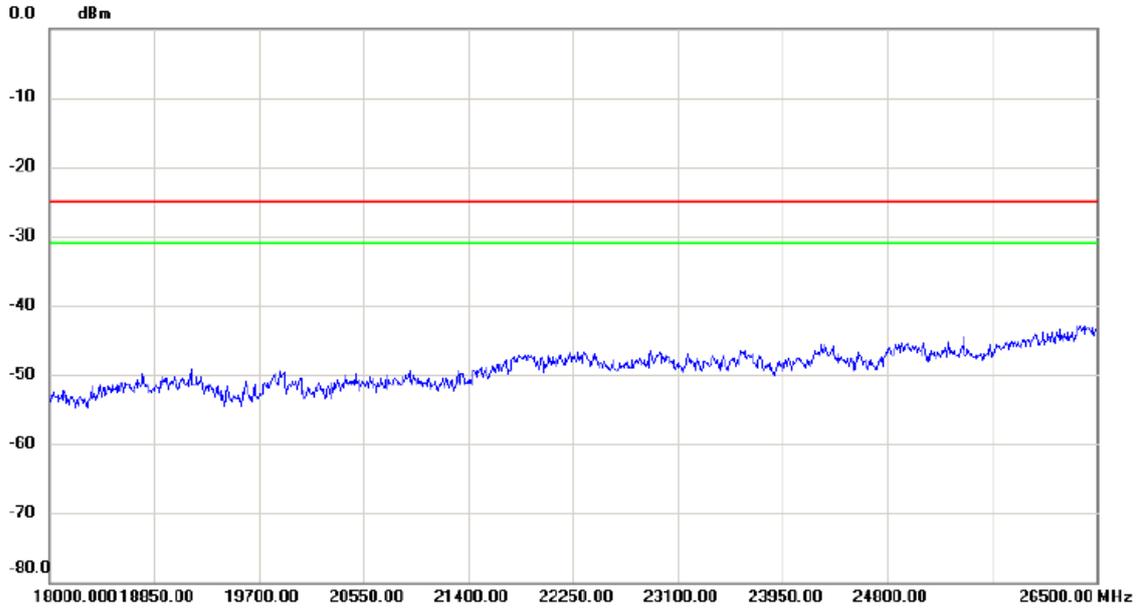
Vertical



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

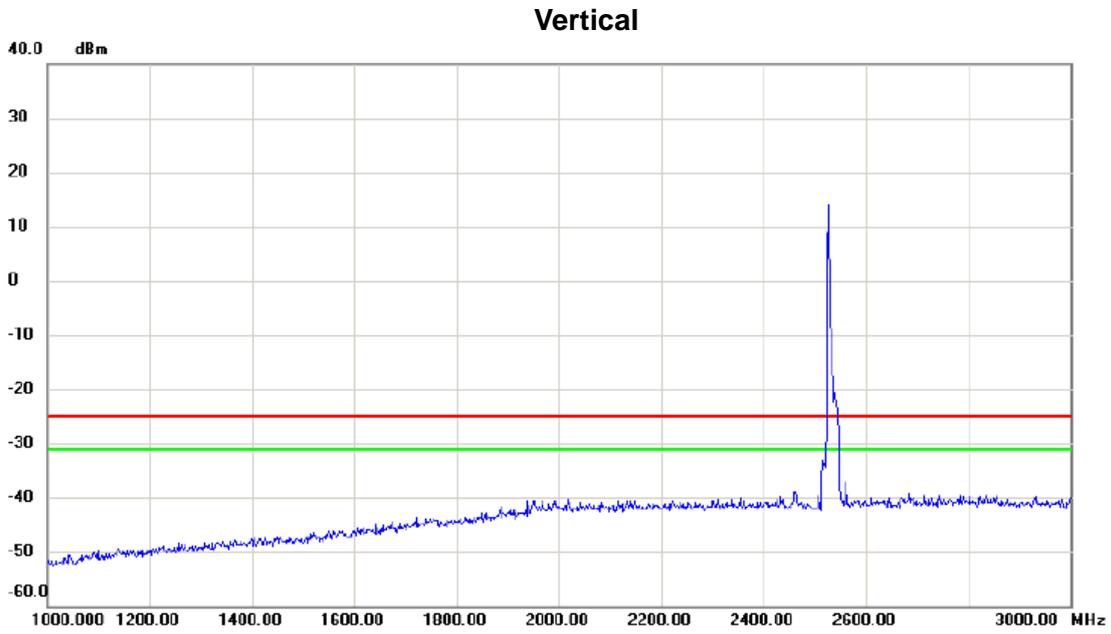
Test Mode: LTE Band 7\_TX CH2100\_5M

Horizontal



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

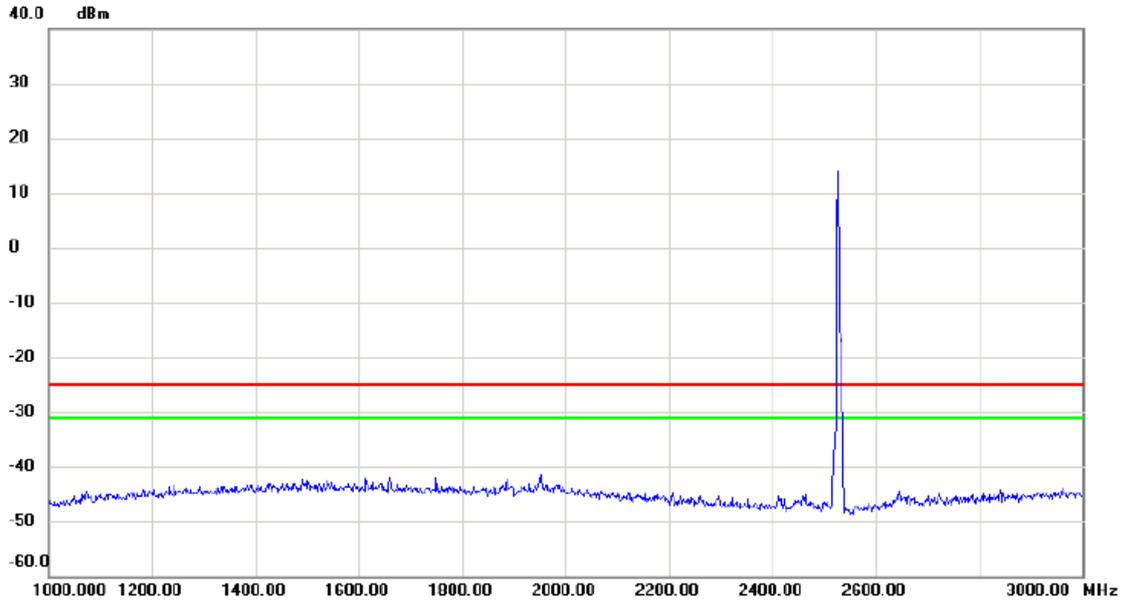
Test Mode: LTE Band 7\_TX CH21100\_20M



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
		2500.00	15.00	0.00	15.00	-25.00	40.00		

Test Mode: LTE Band 7\_TX CH2100\_20M

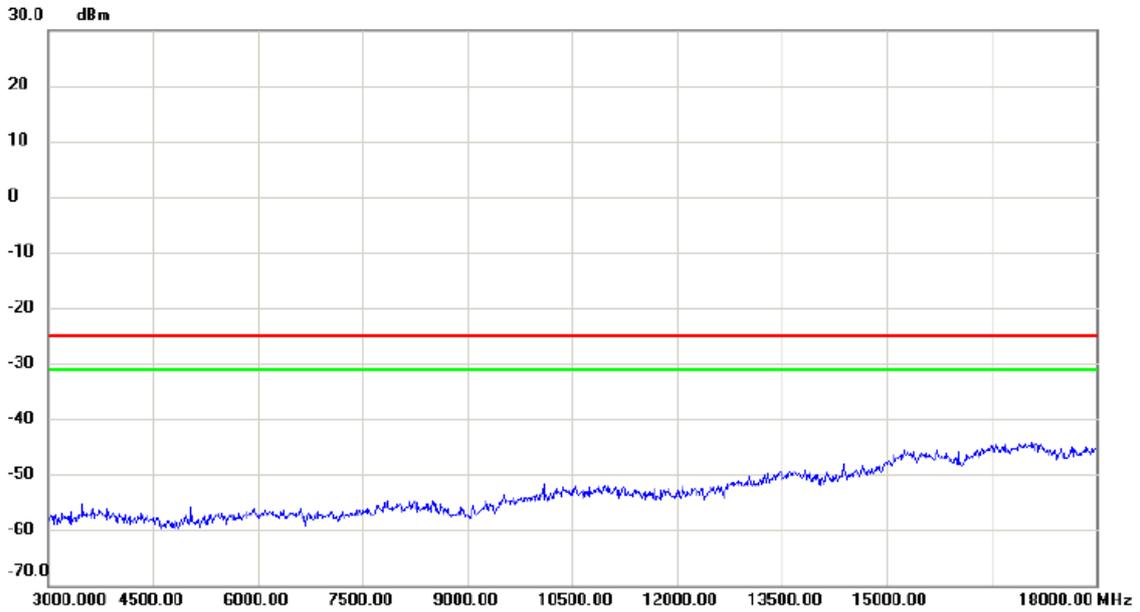
Horizontal



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
		2500.000	15.0	0.0	15.0	-25.0	40.0		

Test Mode: LTE Band 7\_TX CH21100\_20M

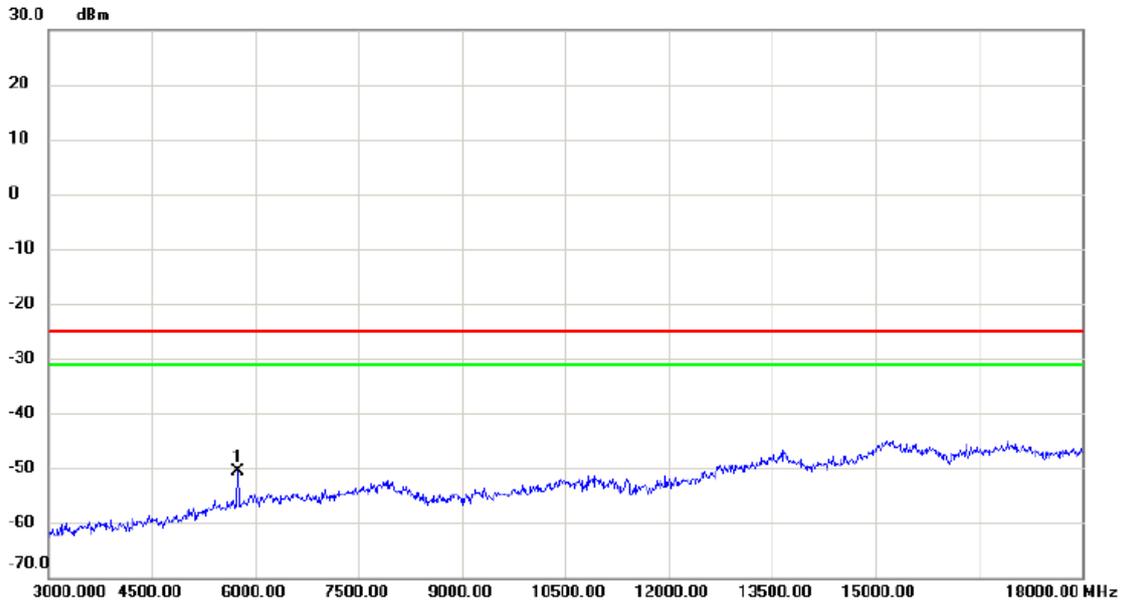
Vertical



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

Test Mode: LTE Band 7\_TX CH21100\_20M

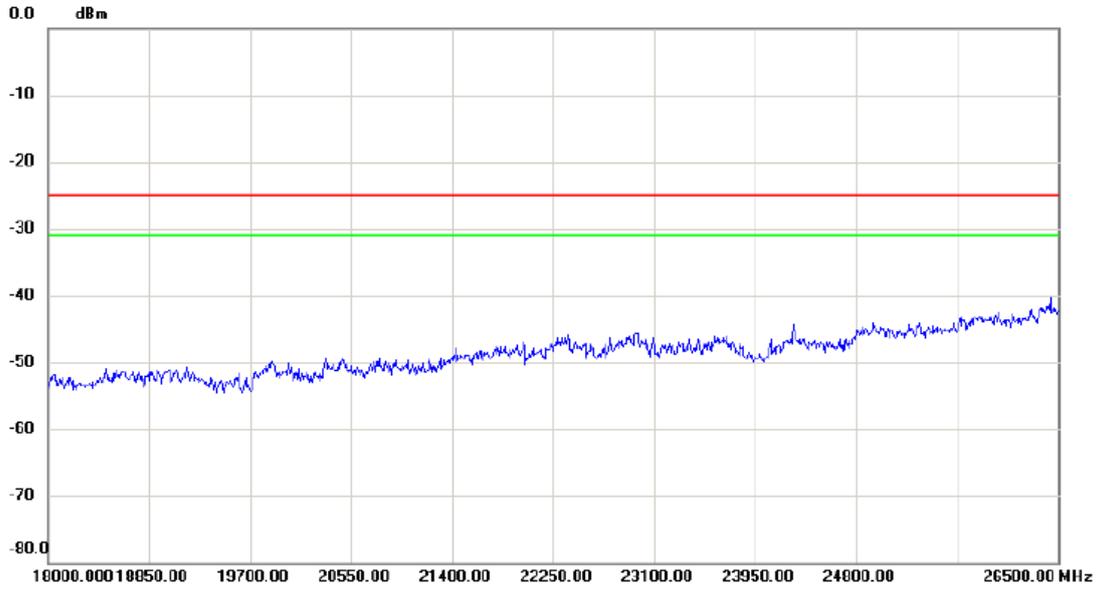
### Horizontal



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	5745.000	-67.91	17.38	-50.53	-25.00	-25.53	peak	

Test Mode: LTE Band 7\_TX CH21100\_20M

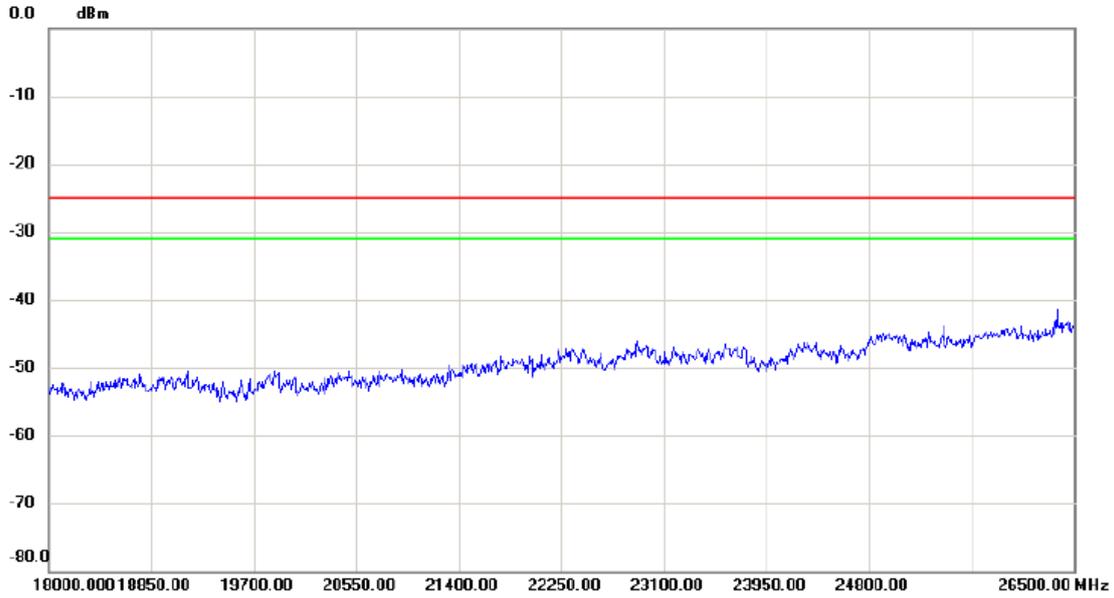
Vertical



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

Test Mode: LTE Band 7\_TX CH2100\_20M

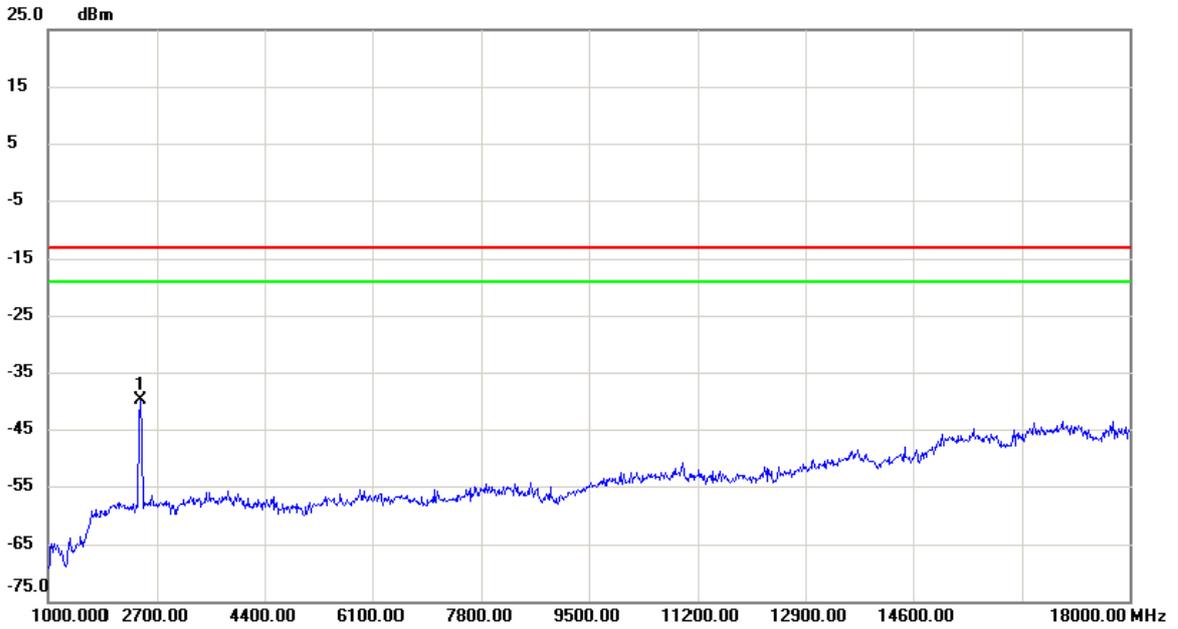
### Horizontal



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

Test Mode: LTE Band 17\_TX CH23755\_5M

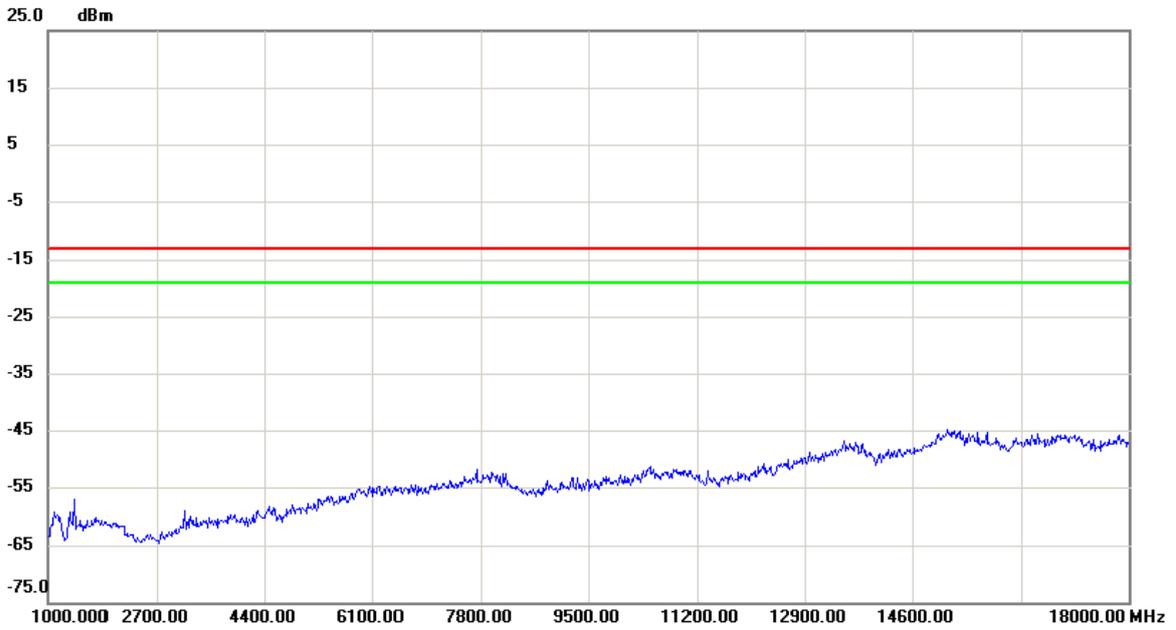
Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	2428.000	-51.89	12.02	-39.87	-13.00	-26.87	peak	

Test Mode: LTE Band 17\_TX CH23755\_5M

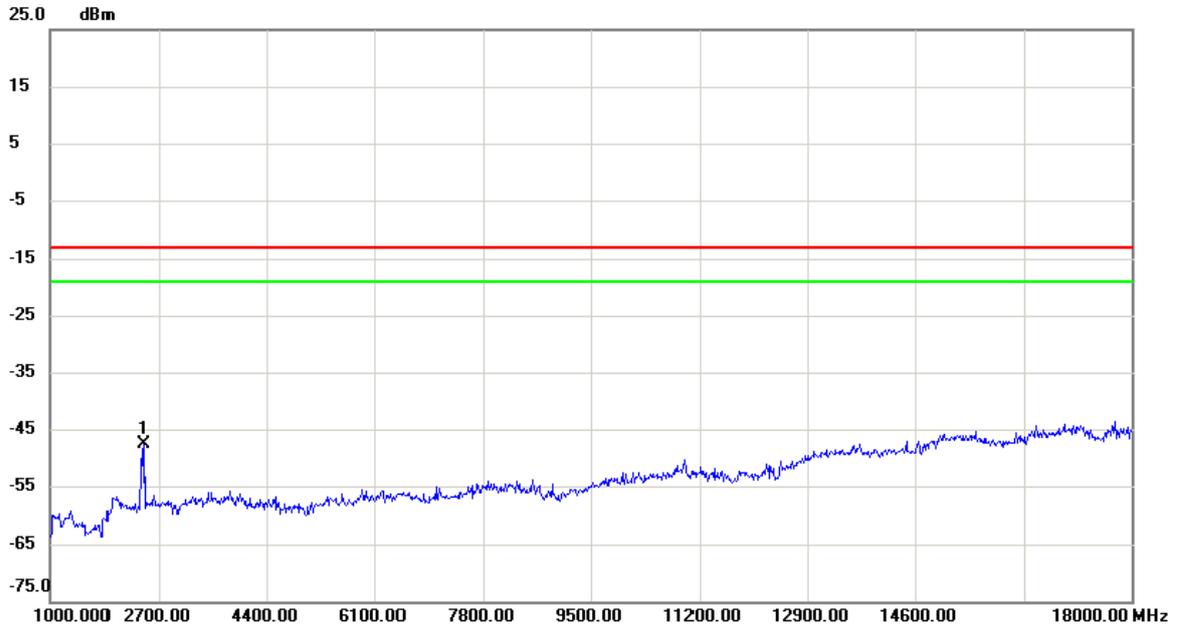
### Horizontal



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

Test Mode: LTE Band 17\_TX CH23755\_10M

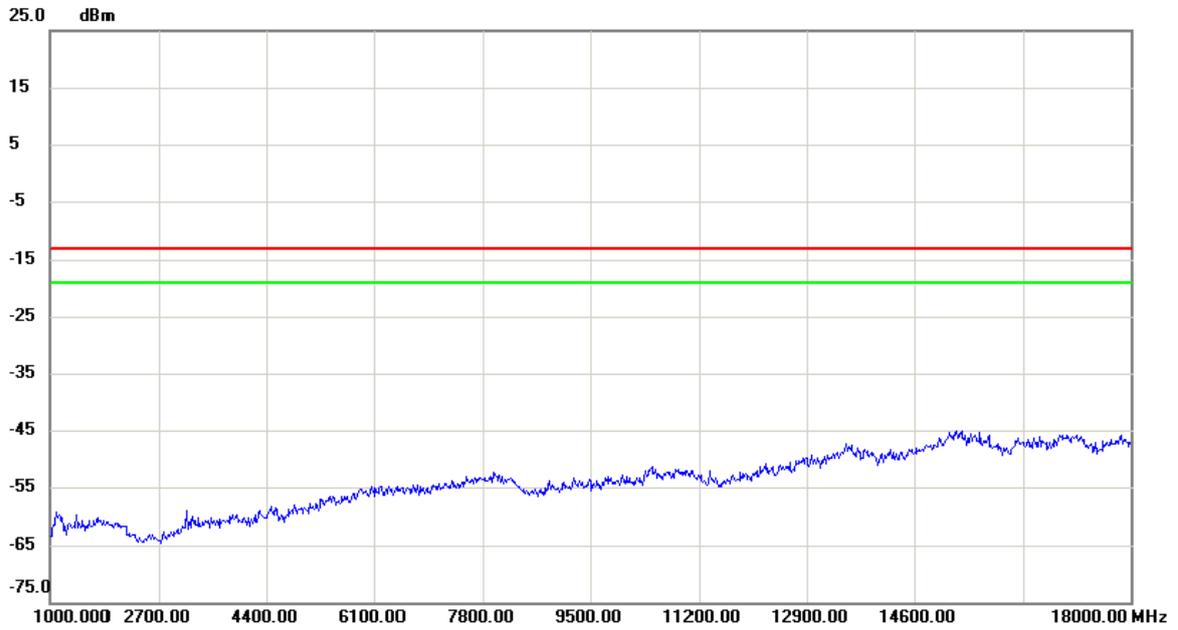
Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Margin dB	Detector	Comment
1	*	2462.000	-59.67	12.11	-47.56	-13.00	-34.56	peak	

Test Mode: LTE Band 17\_TX CH23755\_10M

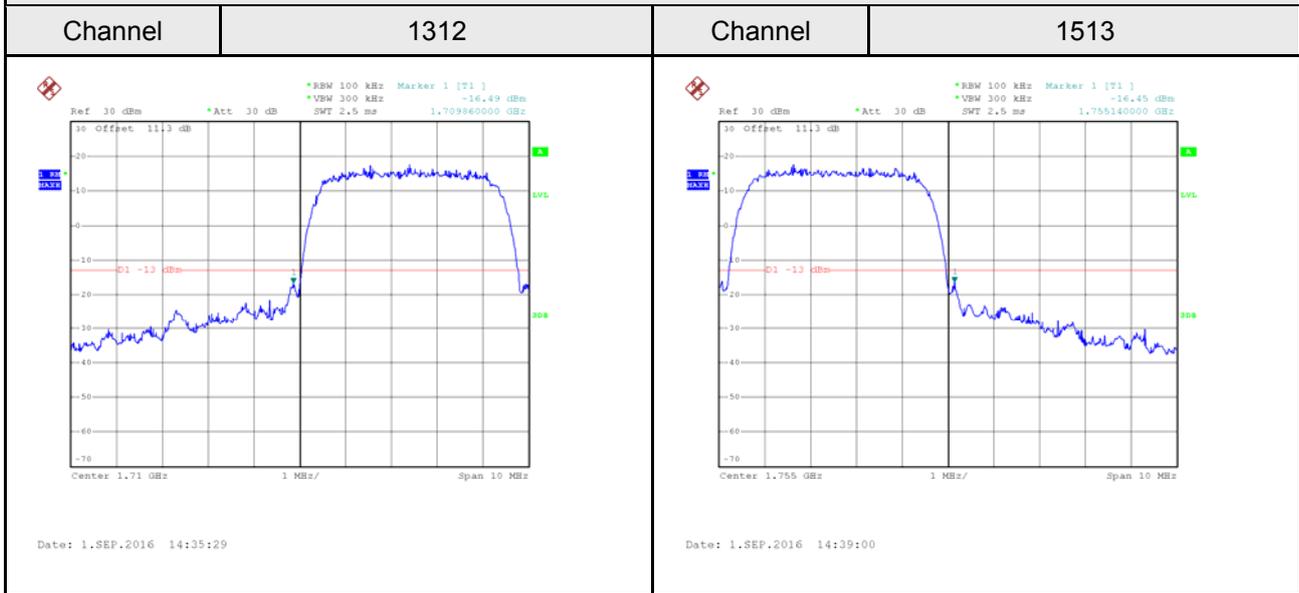
### Horizontal



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

## ATTACHMENT E - BAND EDGE

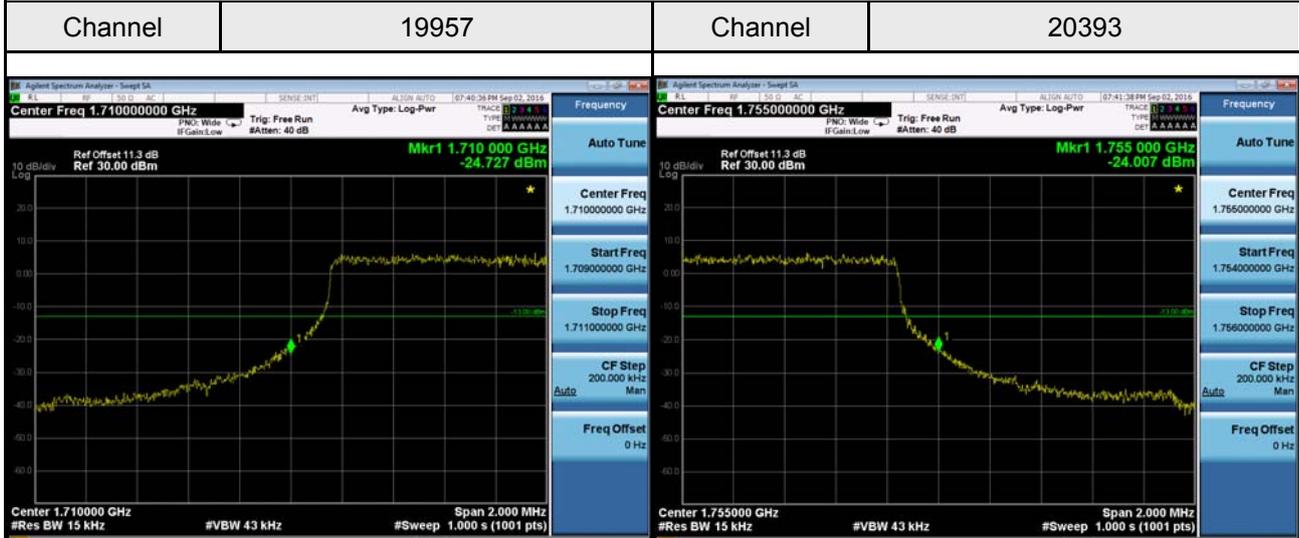
### WCDMA Band 4



LTE Band 4\_1.4M



6RB0



LTE Band 4\_3M

1RB0

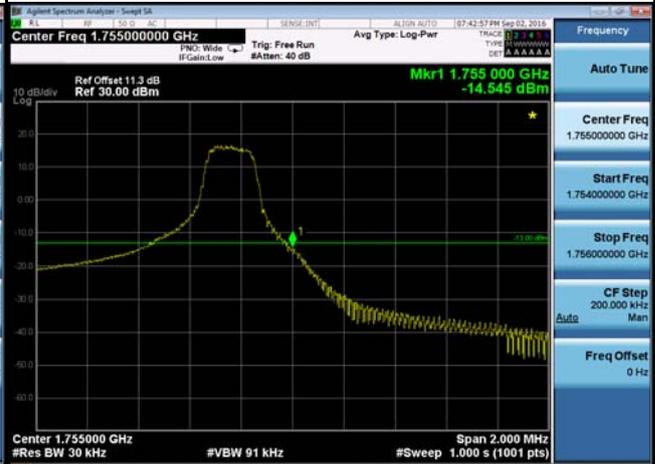
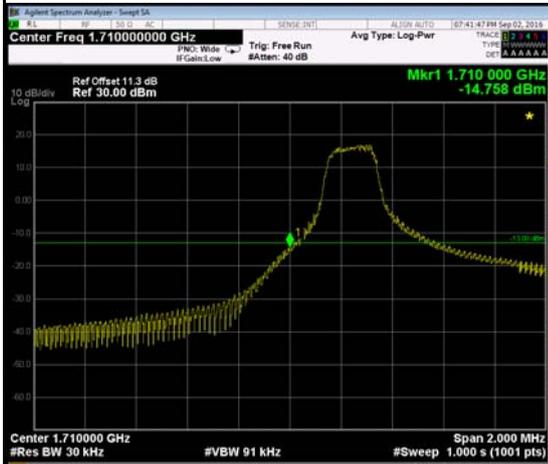
1RB14

Channel

19965

Channel

20385



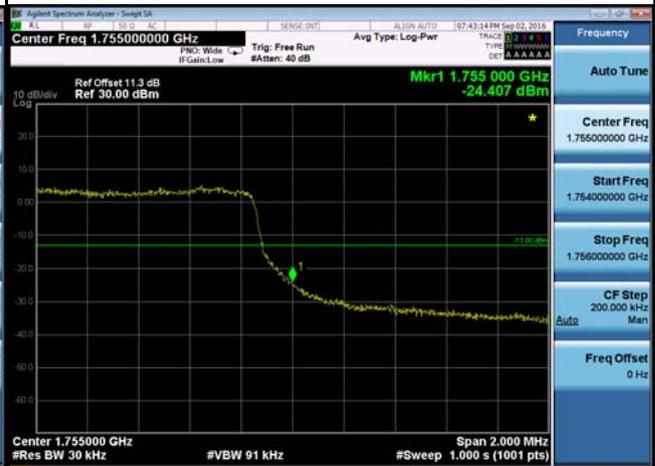
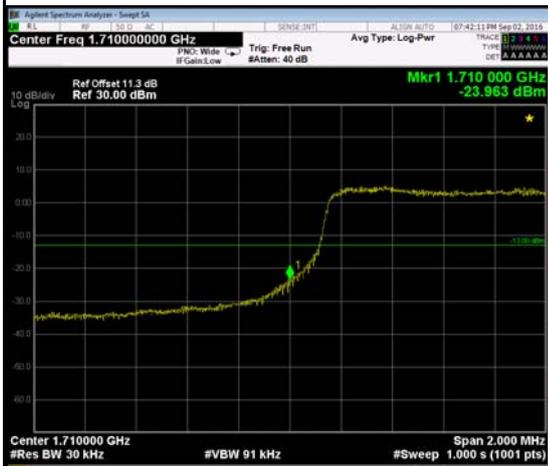
15RB0

Channel

19965

Channel

20385



LTE Band 4\_5M

1RB0

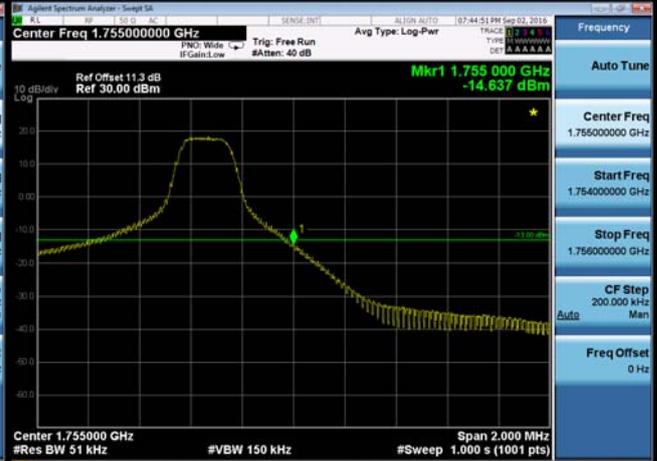
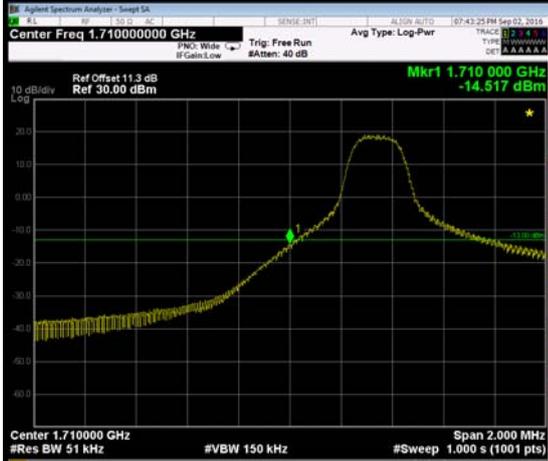
1RB24

Channel

19975

Channel

20375



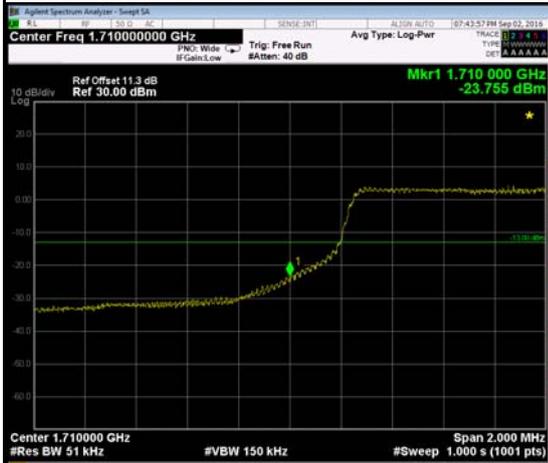
25RB0

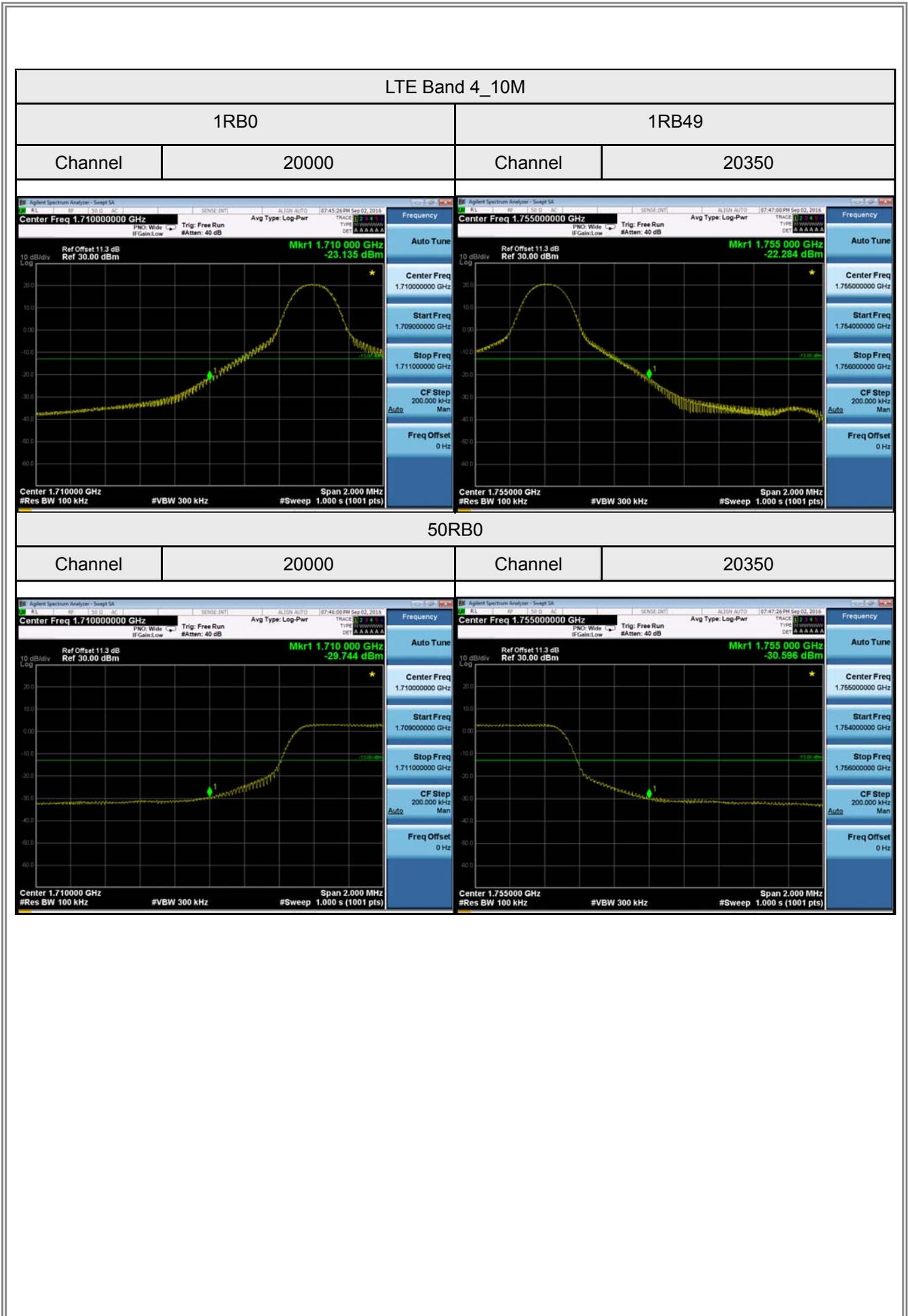
Channel

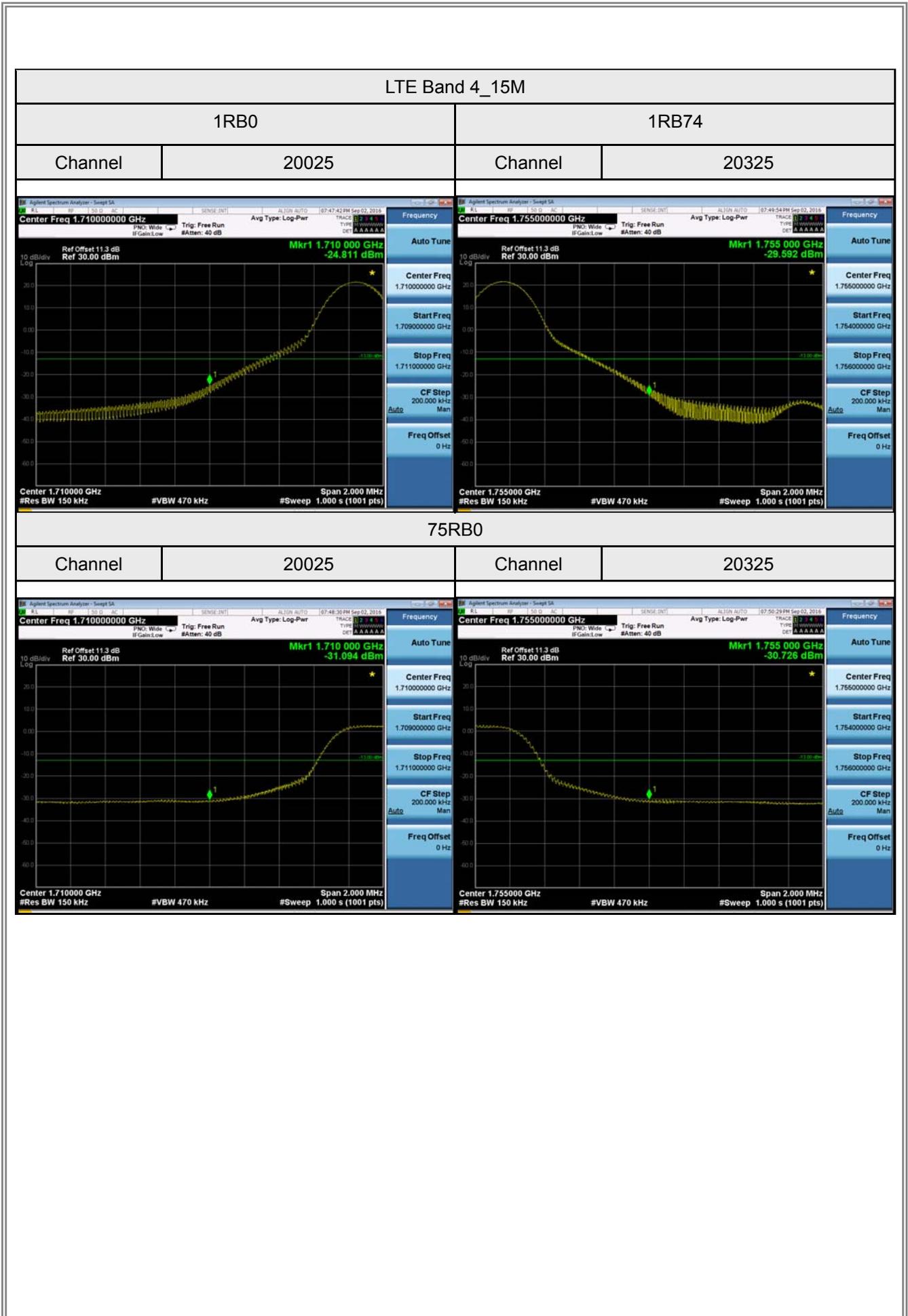
19975

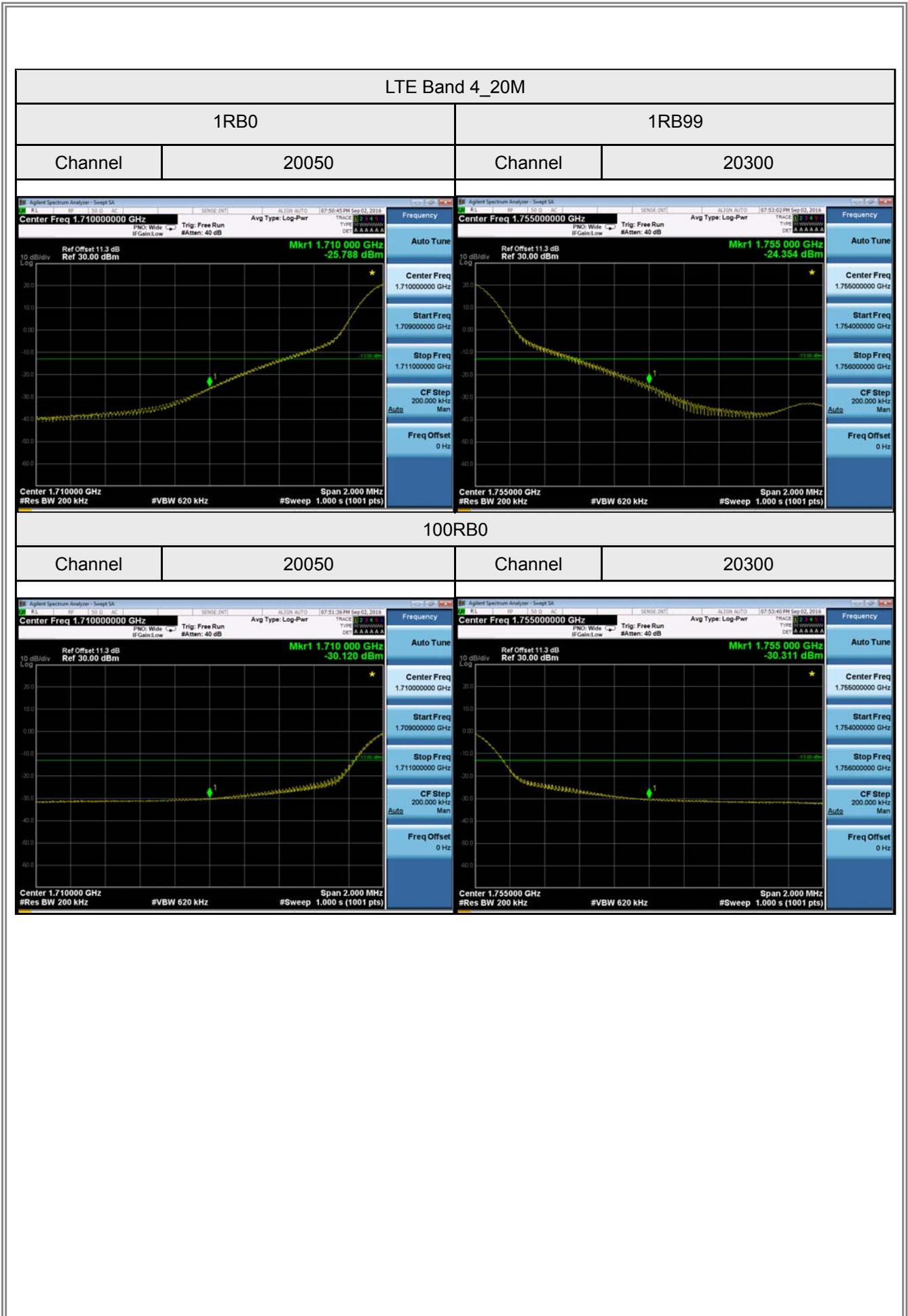
Channel

20375









LTE Band 7\_5M

1RB0

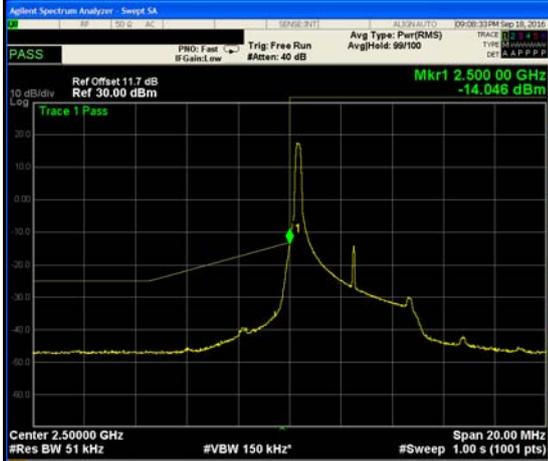
1RB24

Channel

20775

Channel

21425



25RB0

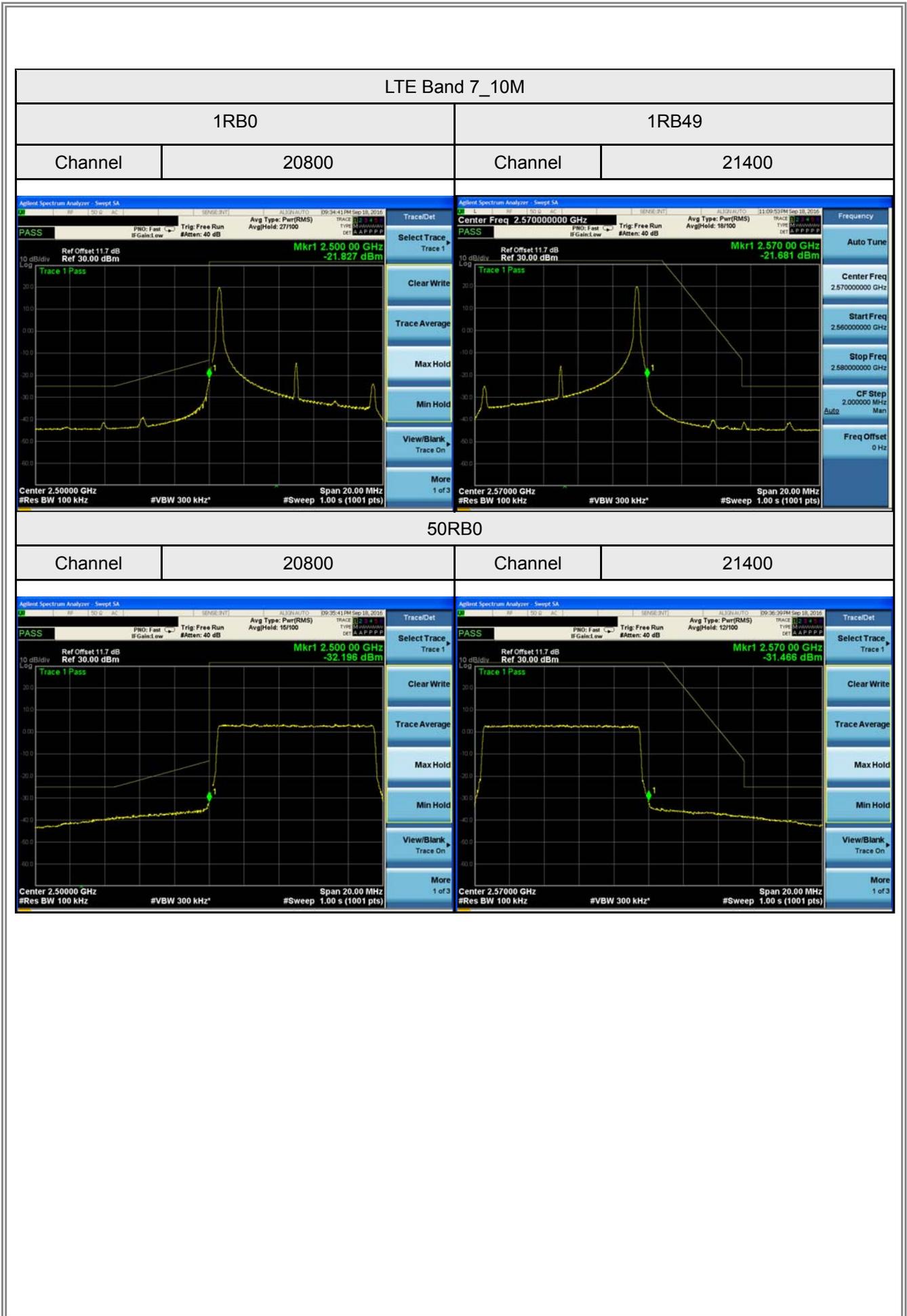
Channel

20775

Channel

21425





LTE Band 7\_15M

1RB0

1RB74

Channel

20825

Channel

21375



75RB0

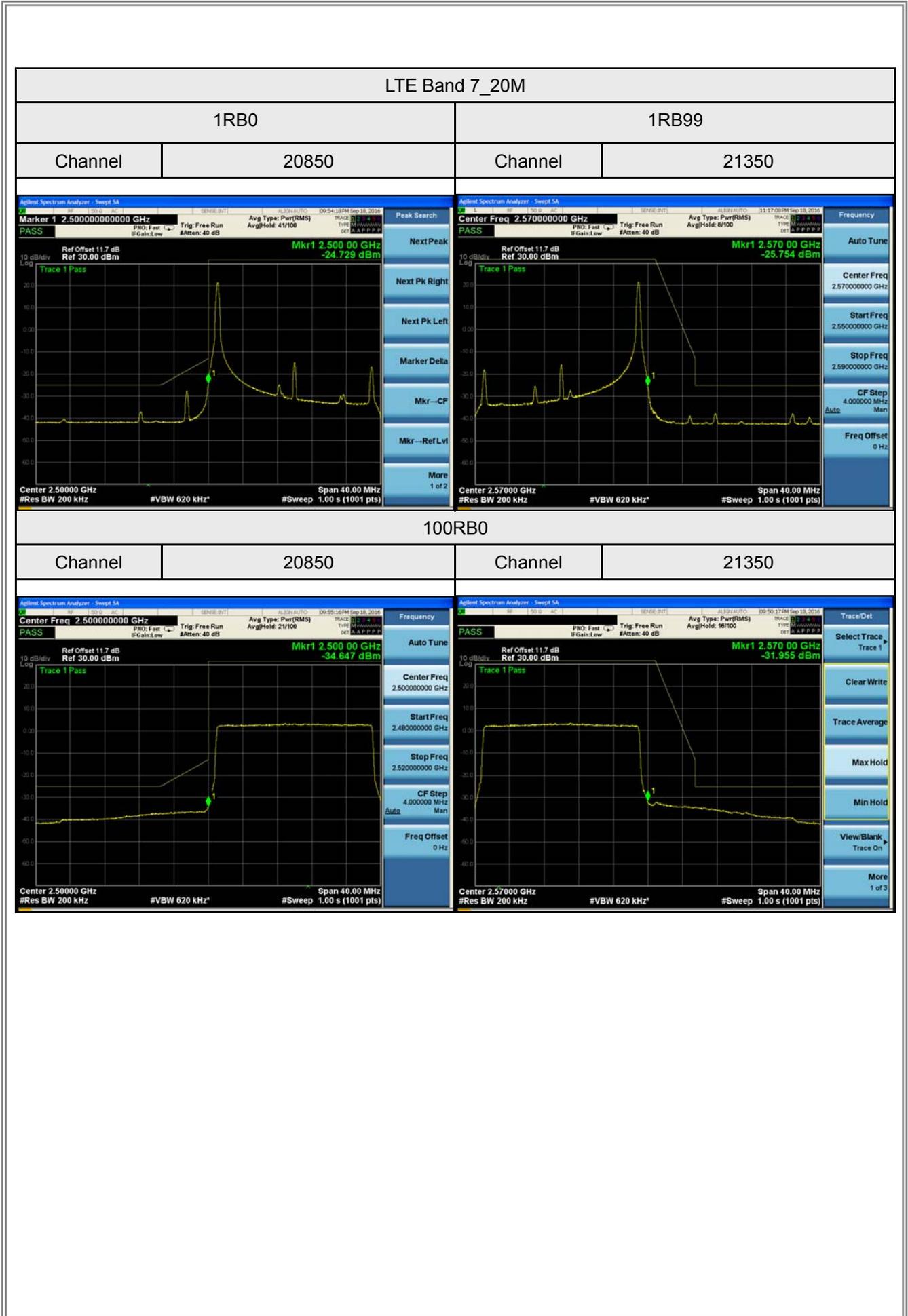
Channel

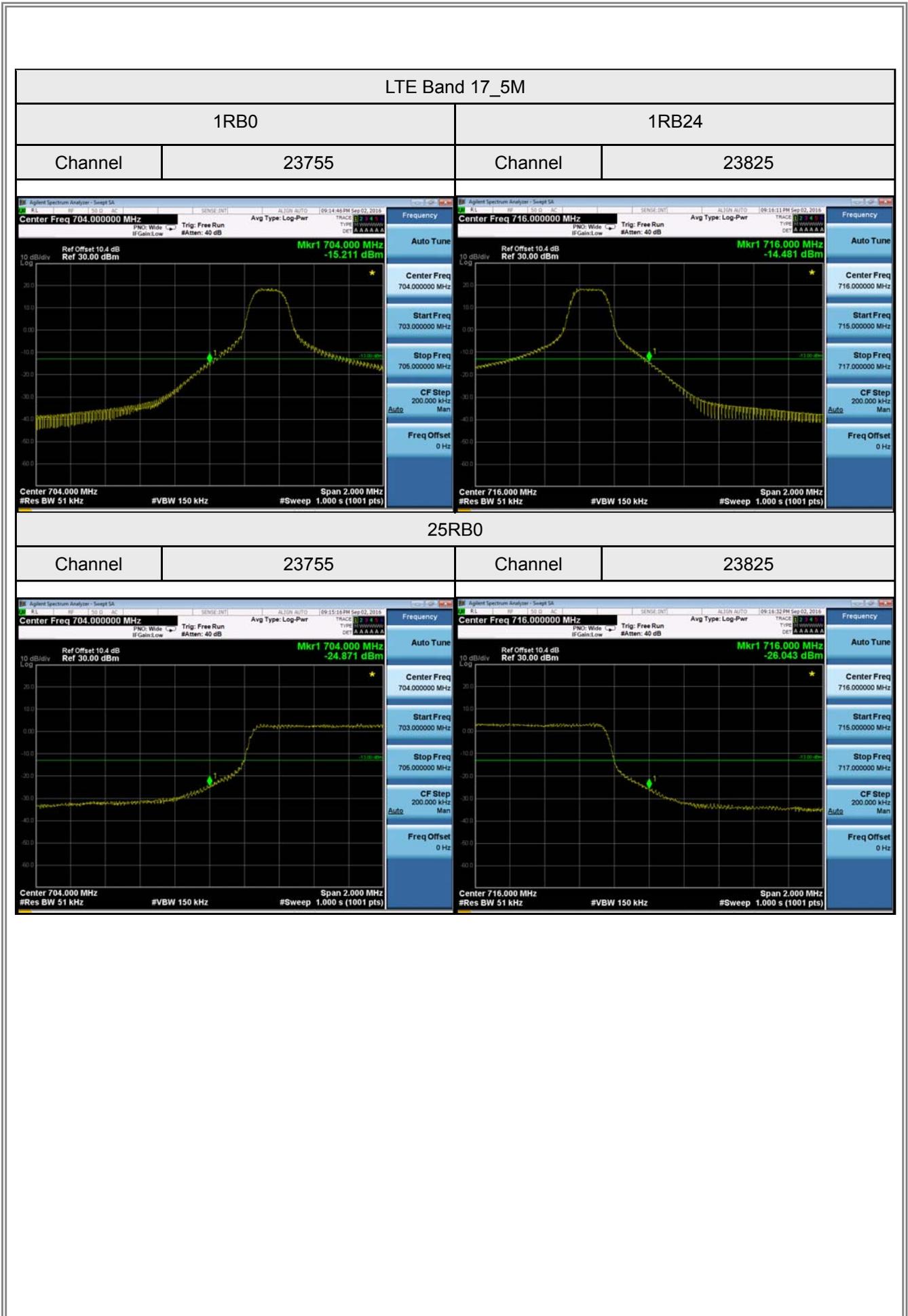
20825

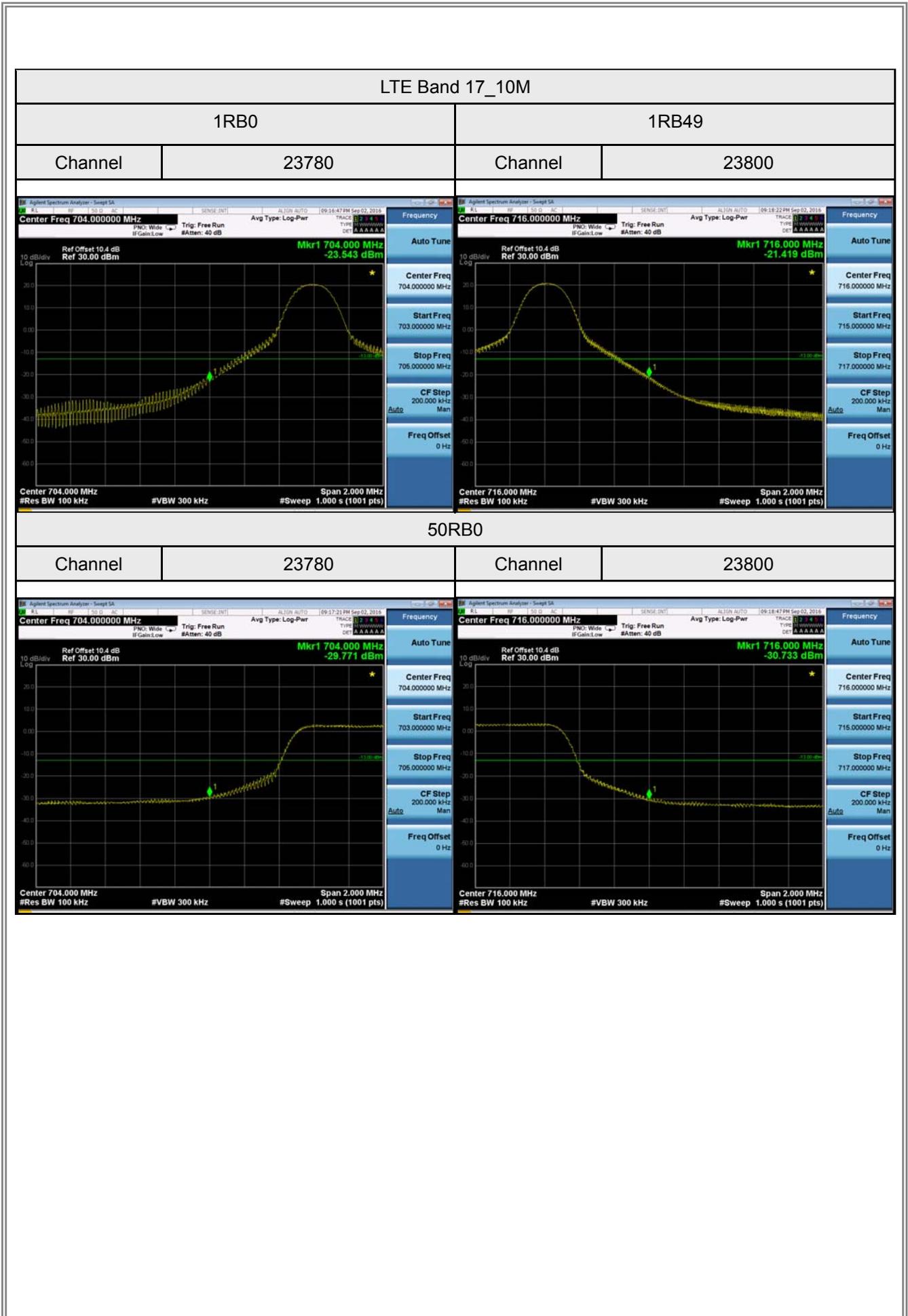
Channel

21375



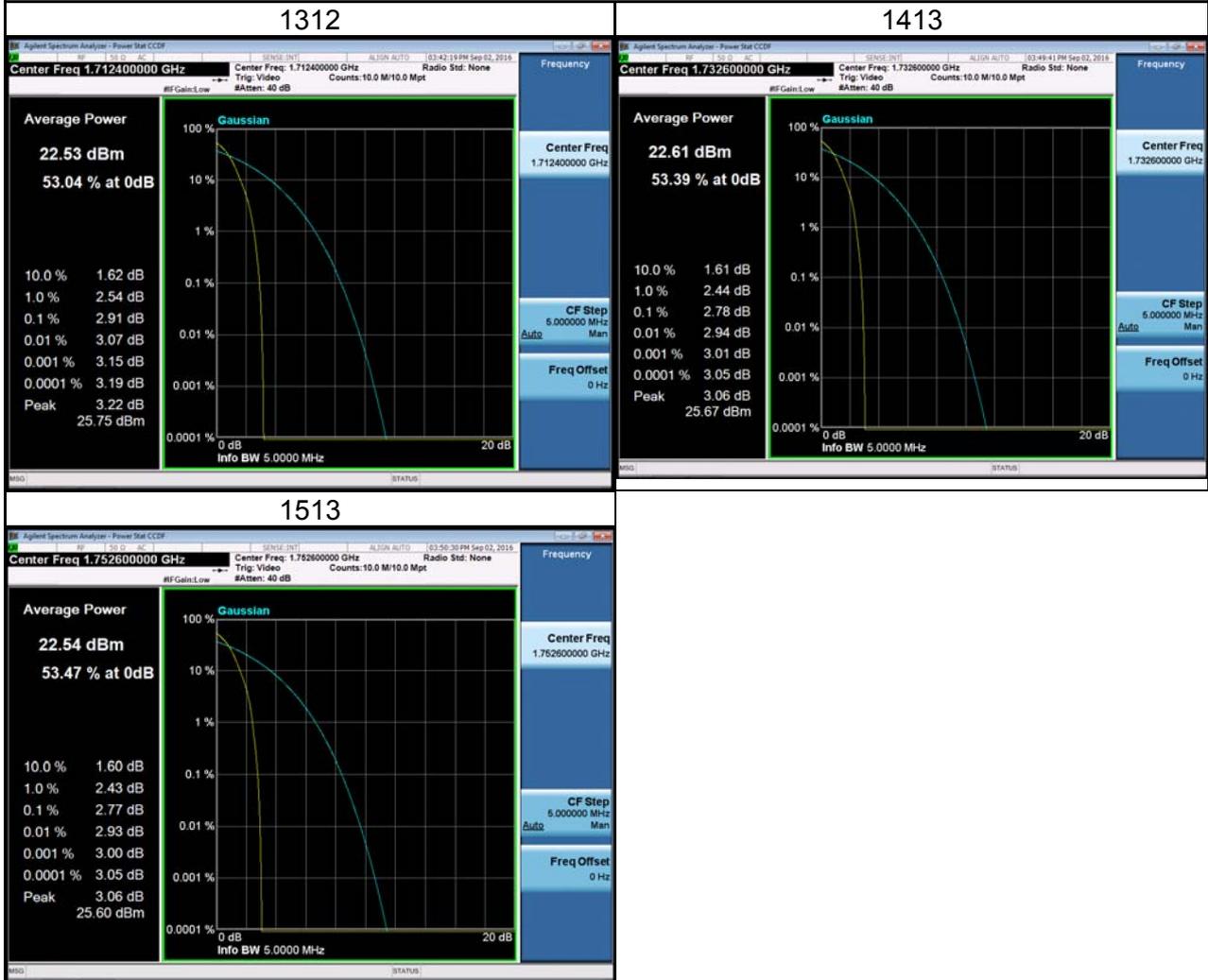




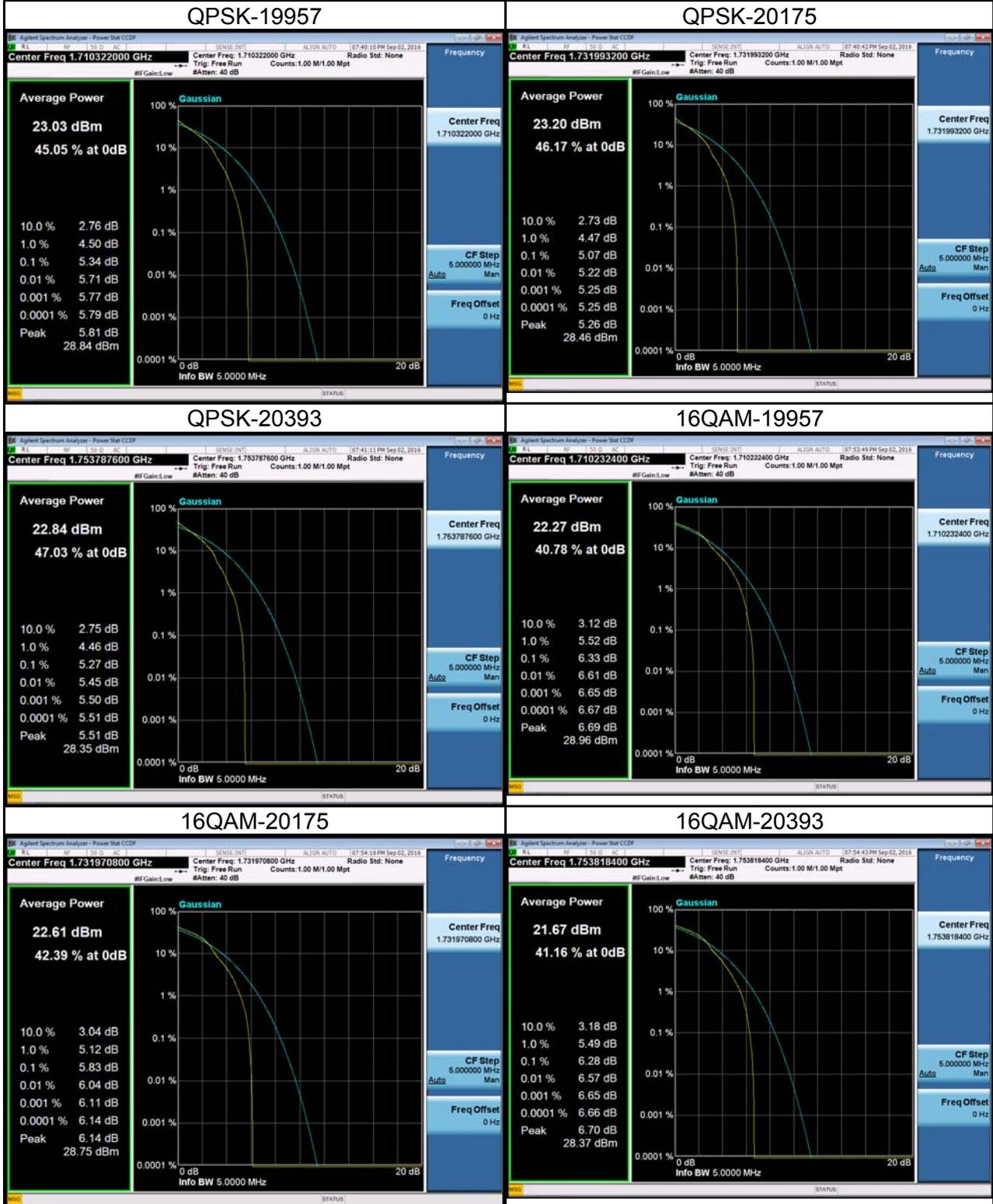


## ATTACHMENT F - PEAK TO AVERAGE RATIO

### WCDMA Band 4 Spectrum Plot



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



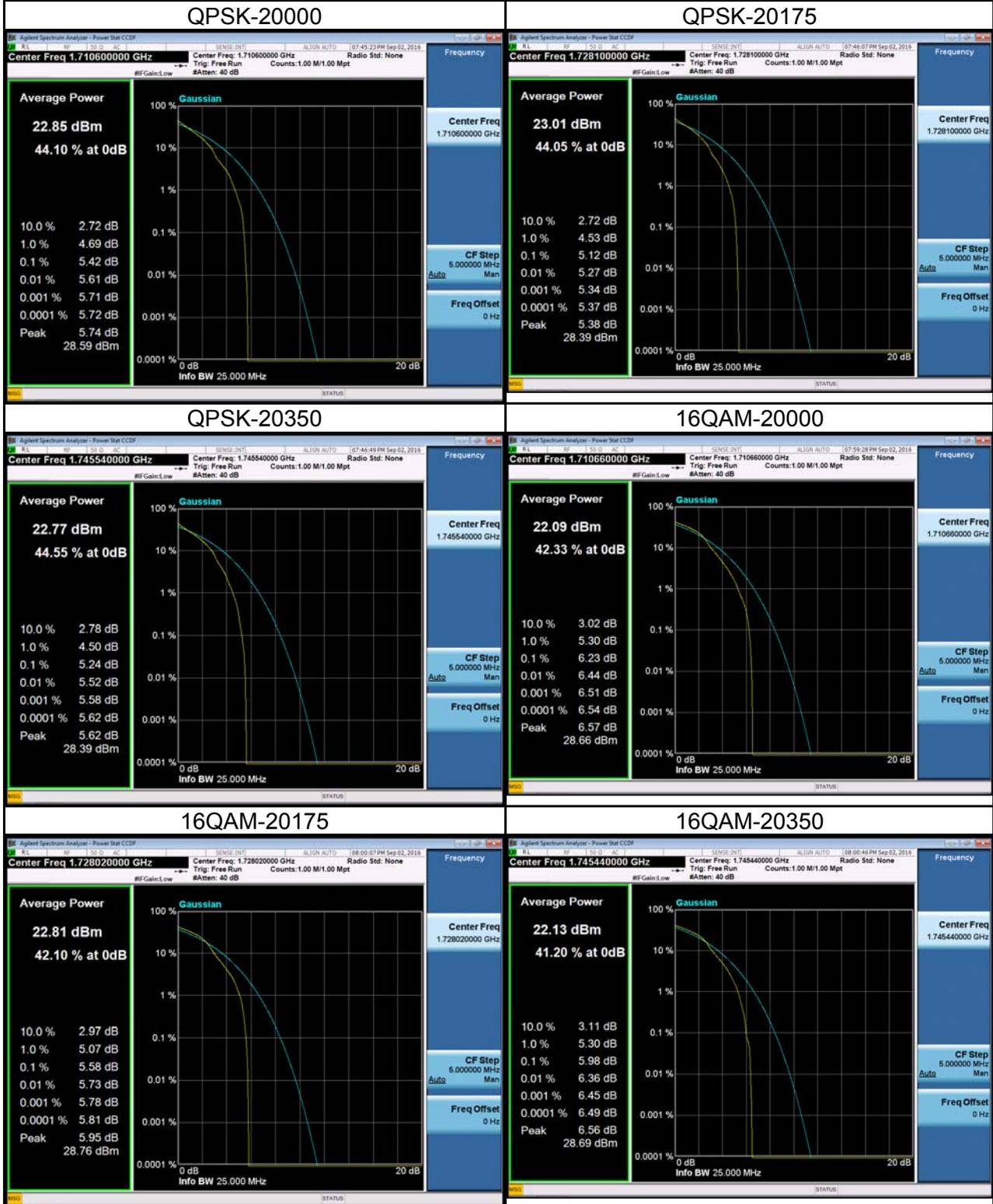
### LTE Band 4 Spectrum Plot\_3M



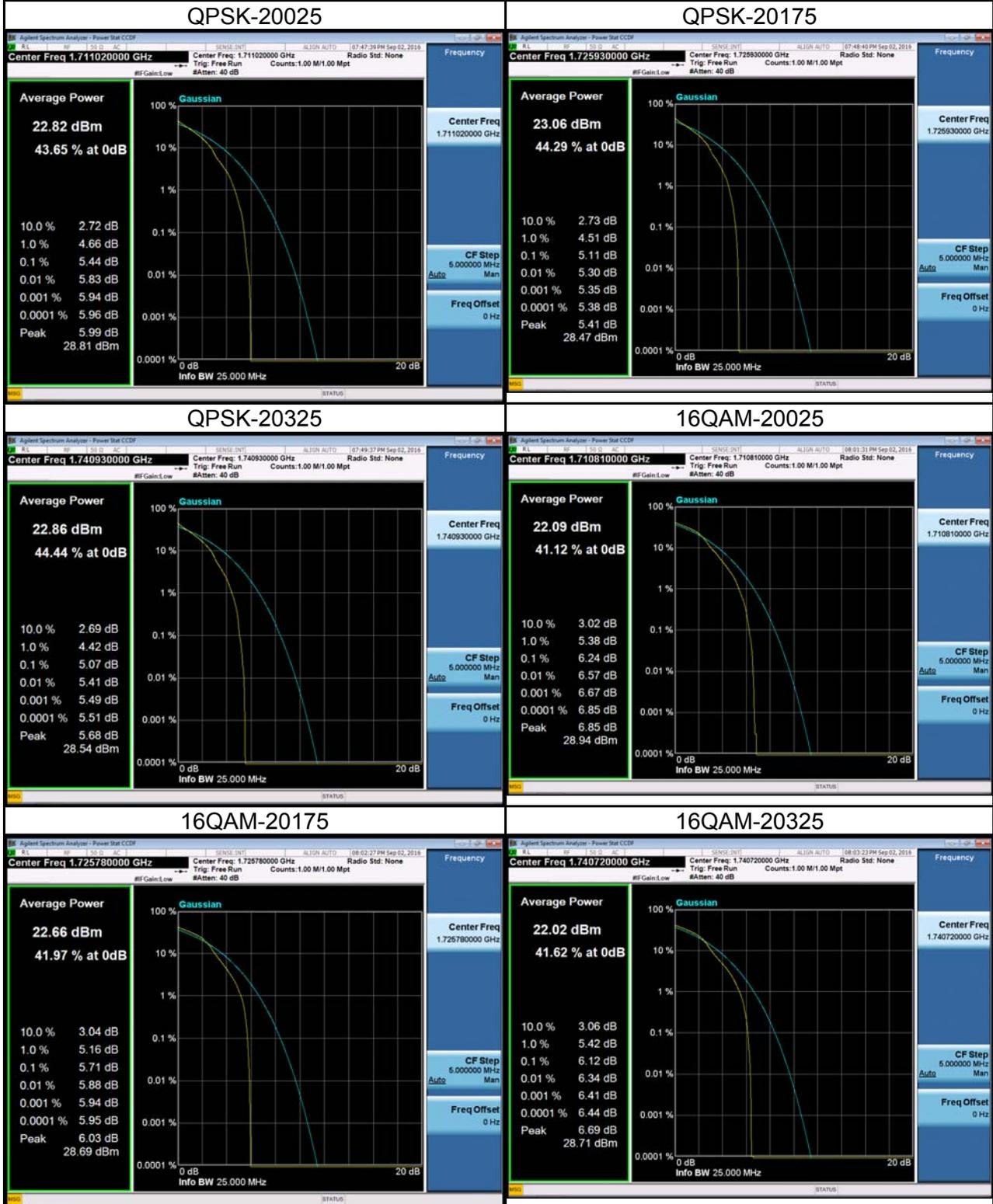
### LTE Band 4 Spectrum Plot\_5M



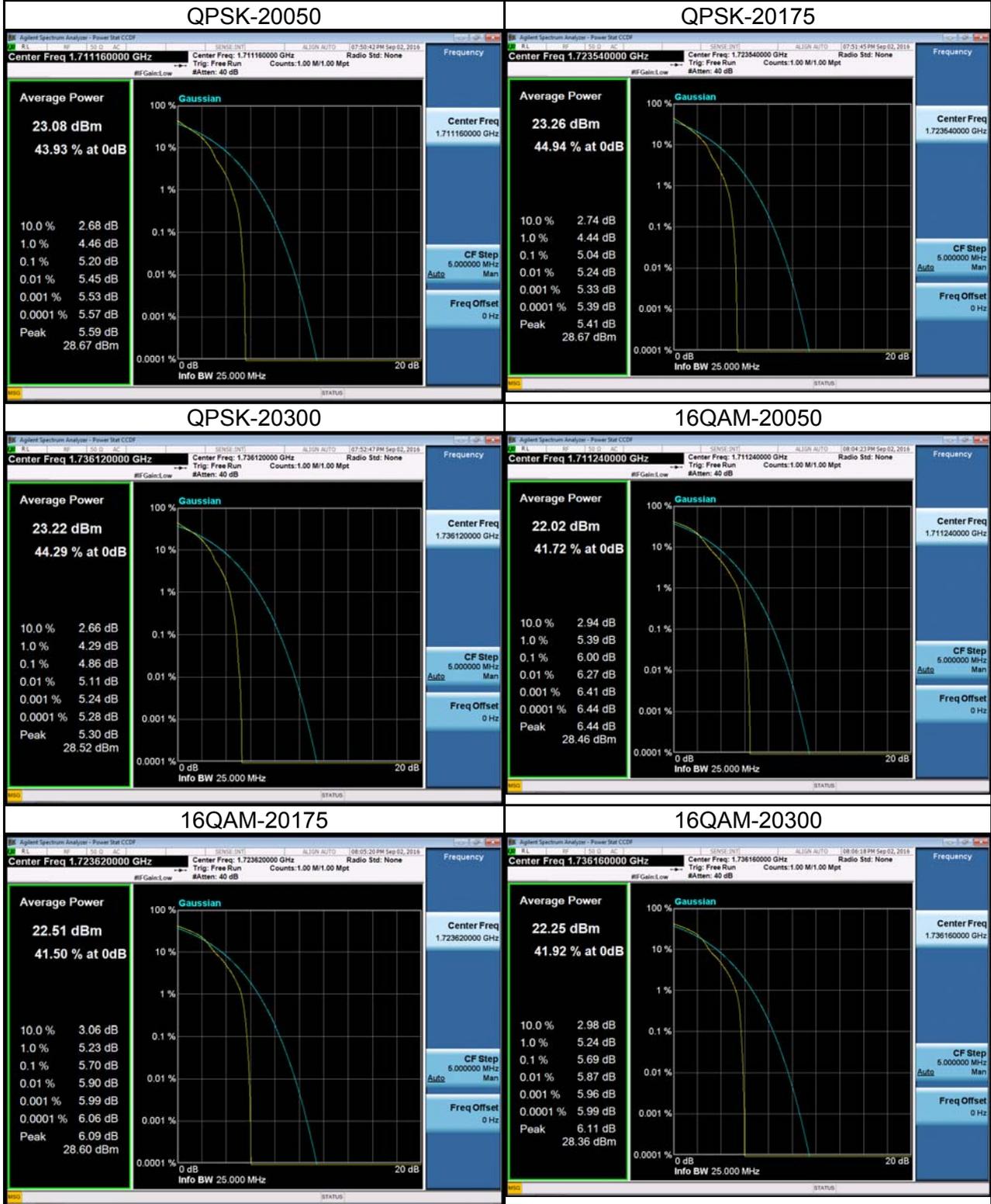
### LTE Band 4 Spectrum Plot\_10M



### LTE Band 4 Spectrum Plot\_15M



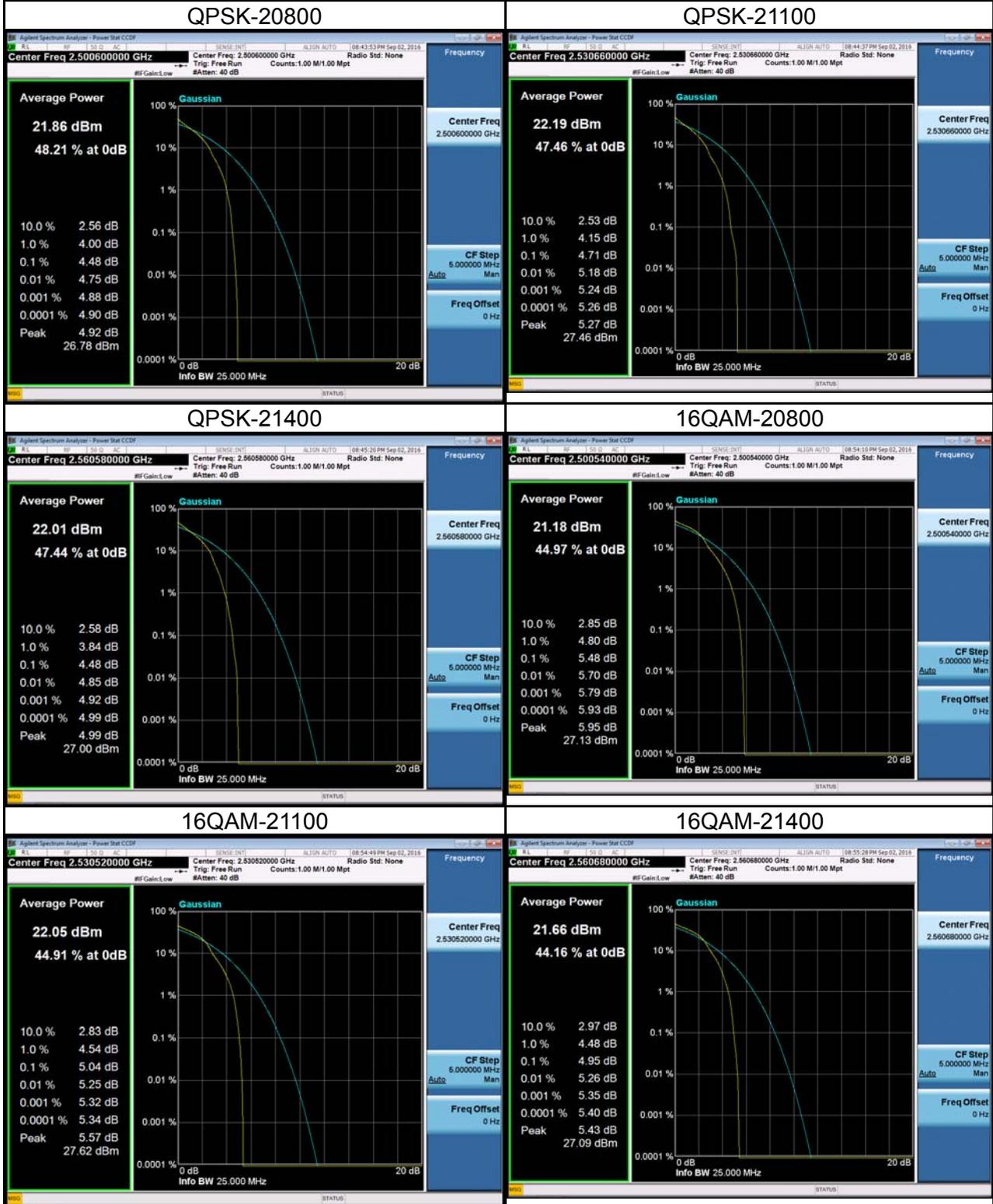
### LTE Band 4 Spectrum Plot\_20M



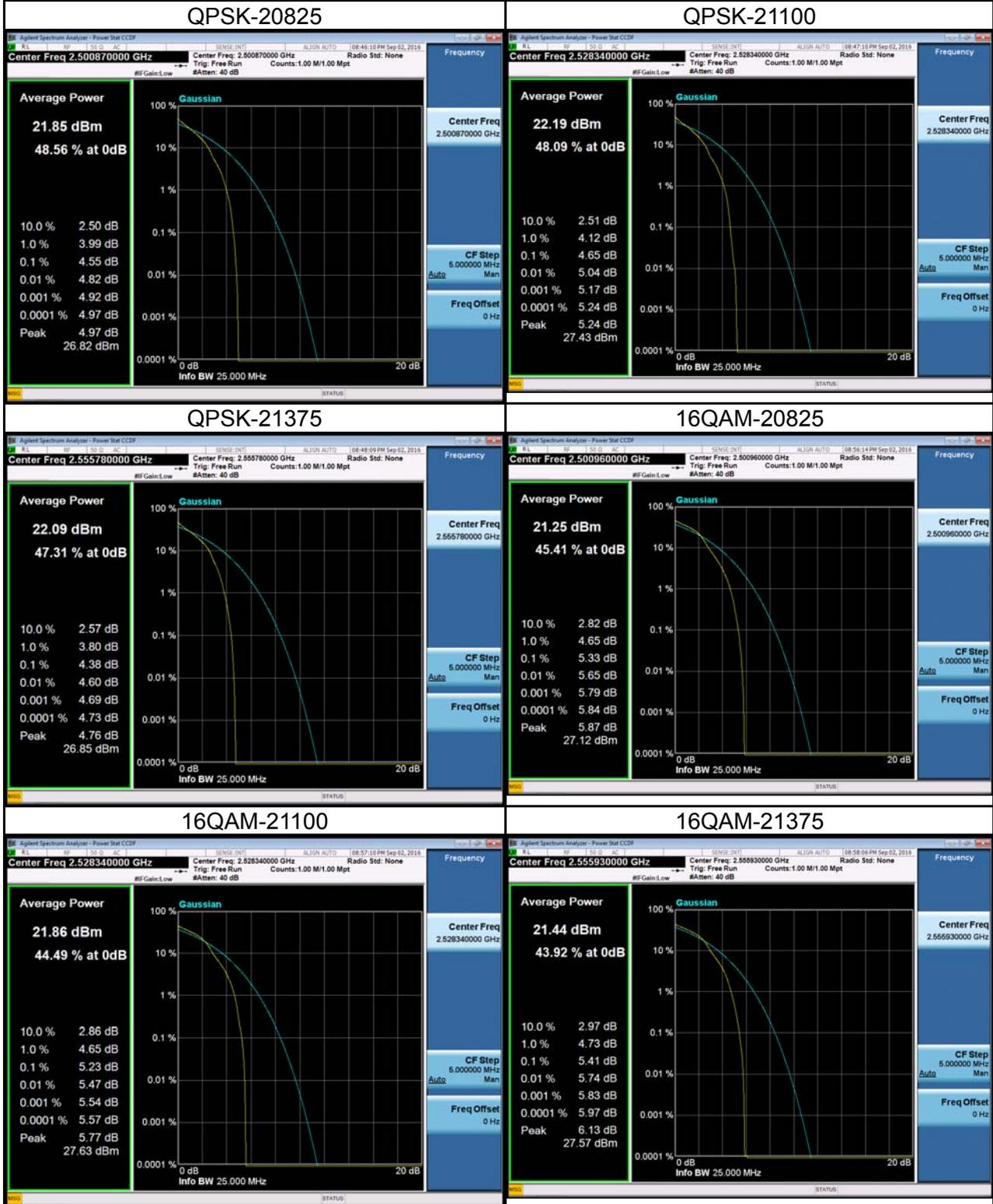
### LTE Band 7 Spectrum Plot\_5M



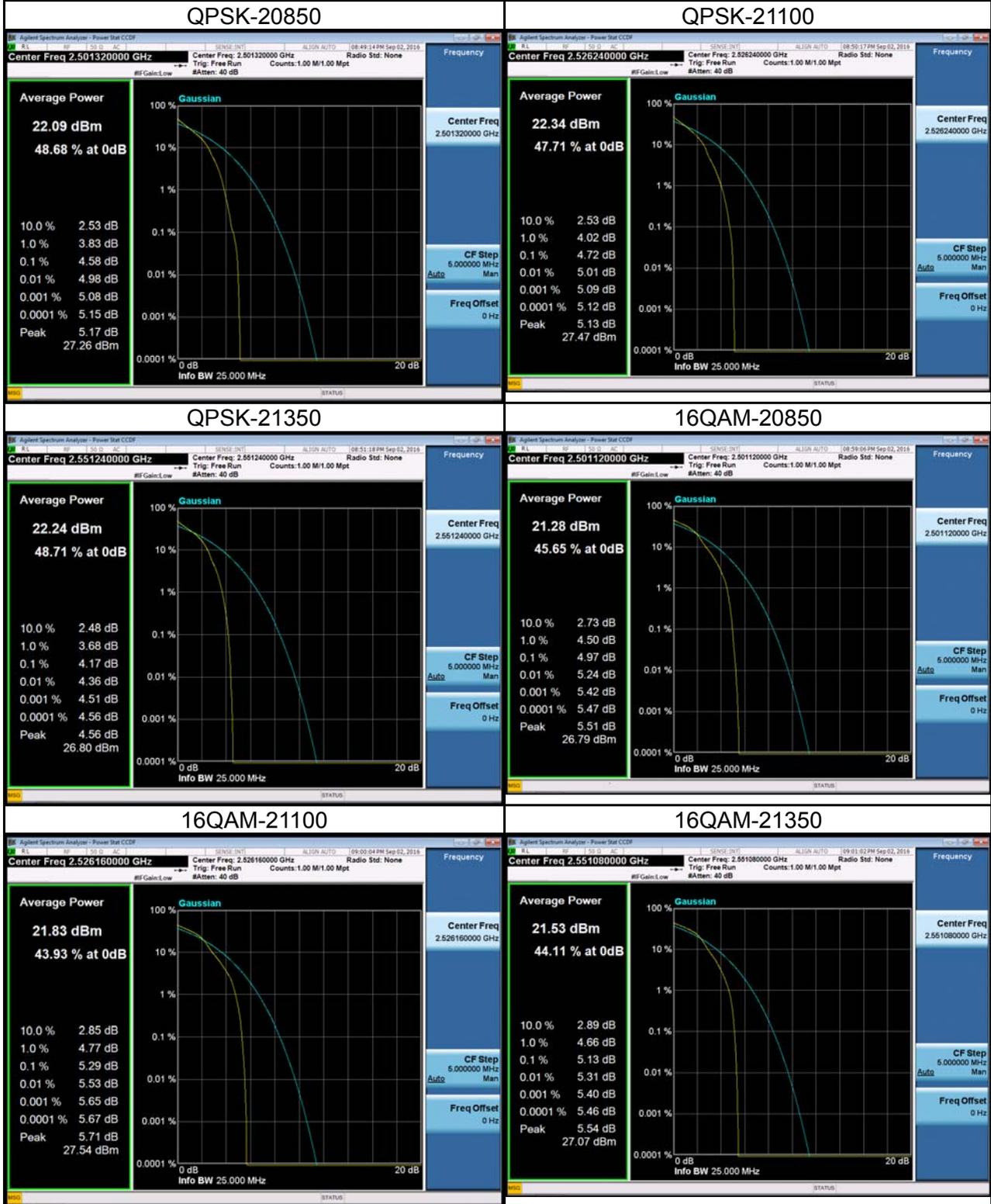
### LTE Band 7 Spectrum Plot\_10M



### LTE Band 7 Spectrum Plot\_15M



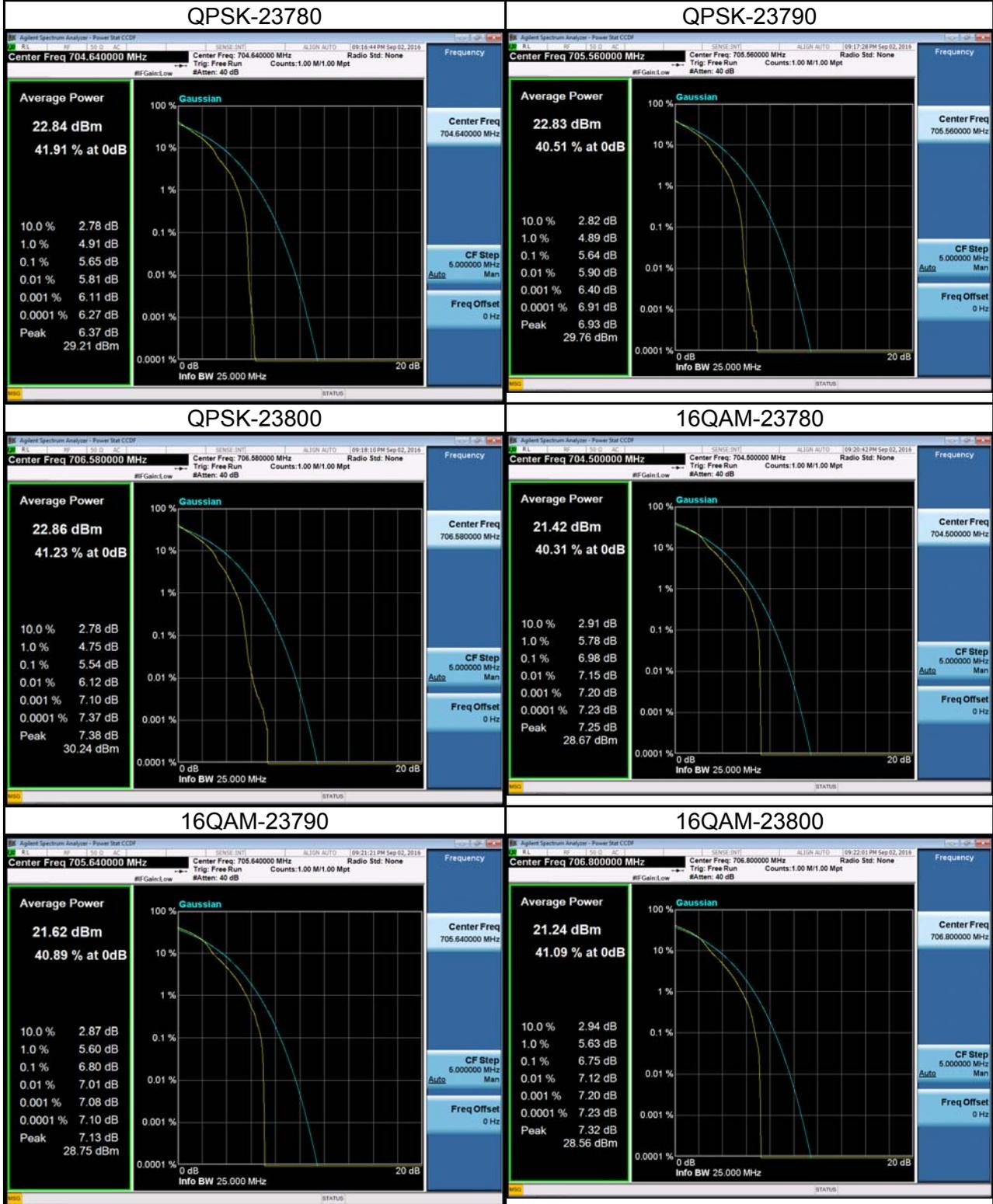
### LTE Band 7 Spectrum Plot\_20M



### LTE Band 17 Spectrum Plot\_5M



### LTE Band 17 Spectrum Plot\_10M



## ATTACHMENT G - FREQUENCY STABILITY

Test Mode:	WCDMA Band 4_CH1413
------------	---------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	5.34	0.003075683	2.5
5	4.26	0.002453634	2.5
10	4.22	0.002430596	2.5
15	3.16	0.001820067	2.5
20	2.33	0.001342011	2.5
25	1.58	0.000910033	2.5
30	3.16	0.001820067	2.5
35	5.26	0.003029605	2.5
Max. Deviation (ppm)	5.34	0.003075683	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	6.33	0.003645893	2.5
3.5	4.16	0.002396037	2.5
4.35	5.39	0.003104481	2.5
Max. Deviation (ppm)	6.33	0.003645893	2.5

Test Mode:	LTE Band 4_CH20175_1.4M
------------	-------------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	5.62	0.003243867	2.5
5	2.97	0.001714286	2.5
10	4.62	0.002666667	2.5
15	5.33	0.003076479	2.5
20	1.96	0.001131313	2.5
25	4.36	0.002516595	2.5
30	3.94	0.00227417	2.5
35	4.33	0.002499278	2.5
Max. Deviation (ppm)	5.62	0.003243867	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	2.55	0.001471861	2.5
3.5	4.16	0.002401154	2.5
4.35	5.64	0.003255411	2.5
Max. Deviation (ppm)	5.64	0.003255411	2.5

Test Mode:	LTE Band 4_CH20175_3M
------------	-----------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	1.84	0.001062049	2.5
5	2.28	0.001316017	2.5
10	-6.15	0.003549784	2.5
15	2.93	0.001691198	2.5
20	-1.66	0.000958153	2.5
25	2.99	0.00172583	2.5
30	3.60	0.002077922	2.5
35	5.76	0.003324675	2.5
Max. Deviation (ppm)	6.15	0.003549784	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	3.20	0.001847042	2.5
3.5	-2.56	0.001477633	2.5
4.35	3.66	0.002112554	2.5
Max. Deviation (ppm)	3.66	0.002112554	2.5

Test Mode:	LTE Band 4_CH20175_5M
------------	-----------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	2.23	0.001287157	2.5
5	5.48	0.003163059	2.5
10	4.10	0.002366522	2.5
15	-2.24	0.001292929	2.5
20	3.12	0.001800866	2.5
25	-1.66	0.000958153	2.5
30	2.88	0.001662338	2.5
35	2.36	0.001362193	2.5
Max. Deviation (ppm)	5.48	0.003163059	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	6.73	0.00388456	2.5
3.5	-1.64	0.000946609	2.5
4.35	4.09	0.00236075	2.5
Max. Deviation (ppm)	6.73	0.00388456	2.5

Test Mode:	LTE Band 4_CH20175_10M
------------	------------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	3.44	0.00198557	2.5
5	-2.56	0.001477633	2.5
10	5.97	0.003445887	2.5
15	2.67	0.001541126	2.5
20	1.88	0.001085137	2.5
25	-2.54	0.001466089	2.5
30	4.16	0.002401154	2.5
35	5.77	0.003330447	2.5
Max. Deviation (ppm)	5.97	0.003445887	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	2.56	0.001477633	2.5
3.5	3.14	0.00181241	2.5
4.35	2.09	0.001206349	2.5
Max. Deviation (ppm)	3.14	0.00181241	2.5

Test Mode:	LTE Band 4_CH20175_15M
------------	------------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	2.38	0.001373737	2.5
5	3.66	0.002112554	2.5
10	-1.97	0.001137085	2.5
15	2.55	0.001471861	2.5
20	-1.44	0.000831169	2.5
25	3.56	0.002054834	2.5
30	-2.84	0.00163925	2.5
35	4.19	0.00241847	2.5
Max. Deviation (ppm)	4.19	0.00241847	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	-2.53	0.001460317	2.5
3.5	1.94	0.001119769	2.5
4.35	6.73	0.00388456	2.5
Max. Deviation (ppm)	6.73	0.00388456	2.5

Test Mode:	LTE Band 4_CH20175_20M
------------	------------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	2.19	0.001264069	2.5
5	2.66	0.001535354	2.5
10	5.46	0.003151515	2.5
15	2.25	0.001298701	2.5
20	1.99	0.001148629	2.5
25	4.41	0.002545455	2.5
30	2.08	0.001200577	2.5
35	9.67	0.00558153	2.5
Max. Deviation (ppm)	9.67	0.00558153	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	5.33	0.003076479	2.5
3.5	3.46	0.001997114	2.5
4.35	4.32	0.002493506	2.5
Max. Deviation (ppm)	5.33	0.003076479	2.5

Test Mode:	LTE Band 7_CH21100_5M
------------	-----------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	-4.22	0.001664694	2.5
5	3.94	0.001554241	2.5
10	5.74	0.0022643	2.5
15	4.33	0.001708087	2.5
20	2.30	0.000907298	2.5
25	-4.66	0.001838264	2.5
30	4.92	0.001940828	2.5
35	3.75	0.00147929	2.5
Max. Deviation (ppm)	5.74	0.0022643	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	5.46	0.002153846	2.5
3.5	-4.66	0.001838264	2.5
4.35	3.77	0.001487179	2.5
Max. Deviation (ppm)	5.46	0.002153846	2.5

Test Mode:	LTE Band 7_CH21100_10M
------------	------------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	5.62	0.002216963	2.5
5	-6.21	0.002449704	2.5
10	-4.36	0.001719921	2.5
15	-2.97	0.001171598	2.5
20	3.33	0.001313609	2.5
25	2.97	0.001171598	2.5
30	3.19	0.001258383	2.5
35	-5.76	0.002272189	2.5
Max. Deviation (ppm)	5.62	0.002449704	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	5.66	0.002232742	2.5
3.5	-4.43	0.001747535	2.5
4.35	3.47	0.001368836	2.5
Max. Deviation (ppm)	5.66	0.002232742	2.5

Test Mode:	LTE Band 7_CH21100_15M
------------	------------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	6.47	0.002552268	2.5
5	-5.46	0.002153846	2.5
10	2.99	0.001179487	2.5
15	1.79	0.000706114	2.5
20	2.16	0.000852071	2.5
25	5.46	0.002153846	2.5
30	-3.79	0.001495069	2.5
35	5.55	0.002189349	2.5
Max. Deviation (ppm)	6.47	0.002552268	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	3.47	0.001368836	2.5
3.5	2.08	0.000820513	2.5
4.35	2.16	0.000852071	2.5
Max. Deviation (ppm)	3.47	0.001368836	2.5

Test Mode:	LTE Band 7_CH21100_20M
------------	------------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	1.54	0.000607495	2.5
5	-3.67	0.001447732	2.5
10	-4.58	0.001806706	2.5
15	0.66	0.000260355	2.5
20	-2.53	0.000998028	2.5
25	1.42	0.000560158	2.5
30	-4.35	0.001715976	2.5
35	-1.93	0.000761341	2.5
Max. Deviation (ppm)	4.58	0.001806706	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	0.93	0.000366864	2.5
3.5	-3.67	0.001447732	2.5
4.35	-4.84	0.00190927	2.5
Max. Deviation (ppm)	4.84	0.00190927	2.5

Test Mode:	LTE Band 17_CH23790_5M
------------	------------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	5.29	0.007450704	2.5
5	3.67	0.005169014	2.5
10	-4.33	0.006098592	2.5
15	2.97	0.004183099	2.5
20	4.63	0.006521127	2.5
25	2.46	0.003464789	2.5
30	5.31	0.007478873	2.5
35	-4.95	0.006971831	2.5
Max. Deviation (ppm)	5.29	0.007478873	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	3.97	0.005591549	2.5
3.5	2.64	0.00371831	2.5
4.35	-8.55	0.012042254	2.5
Max. Deviation (ppm)	8.55	0.012042254	2.5

Test Mode:	LTE Band 17_CH23790_10M
------------	-------------------------

**Temperature vs. Frequency Stability**

Temperature(°C)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
0	5.36	0.007549296	2.5
5	-4.72	0.006647887	2.5
10	2.68	0.003774648	2.5
15	-3.73	0.005253521	2.5
20	2.94	0.004140845	2.5
25	6.34	0.008929577	2.5
30	-2.98	0.004197183	2.5
35	5.61	0.007901408	2.5
Max. Deviation (ppm)	6.34	0.008929577	2.5

**Voltage vs. Frequency Stability**

Voltage(Volts)	Frequency Error (Hz)	Frequency Error (ppm)	Limit(ppm)
3.8	5.69	0.008014085	2.5
3.5	4.39	0.006183099	2.5
4.35	-4.33	0.006098592	2.5
Max. Deviation (ppm)	5.69	0.008014085	2.5