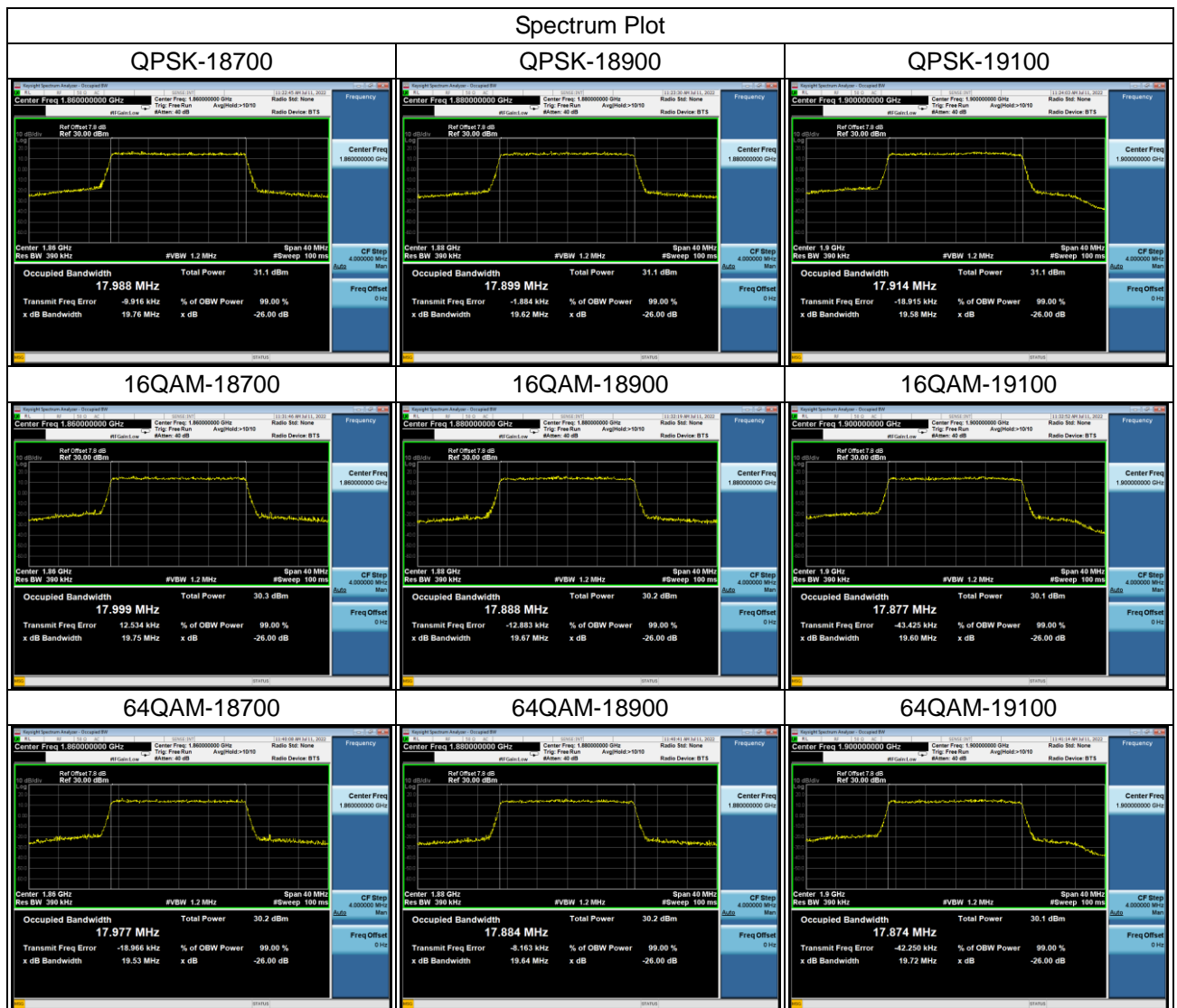
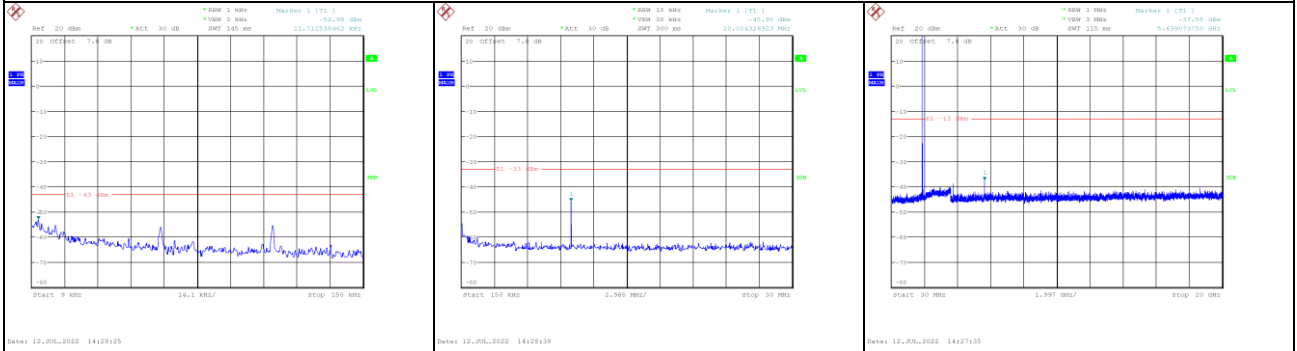


LTE Band 2_20MHz							
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)			26dB Bandwidth (MHz)		
		QPSK	16QAM	64QAM	QPSK	16QAM	64QAM
18700	1860	17.988	17.999	17.977	19.76	19.75	19.53
18900	1880	17.899	17.888	17.884	19.62	19.67	19.64
19100	1900	17.914	17.877	17.874	19.58	19.60	19.72

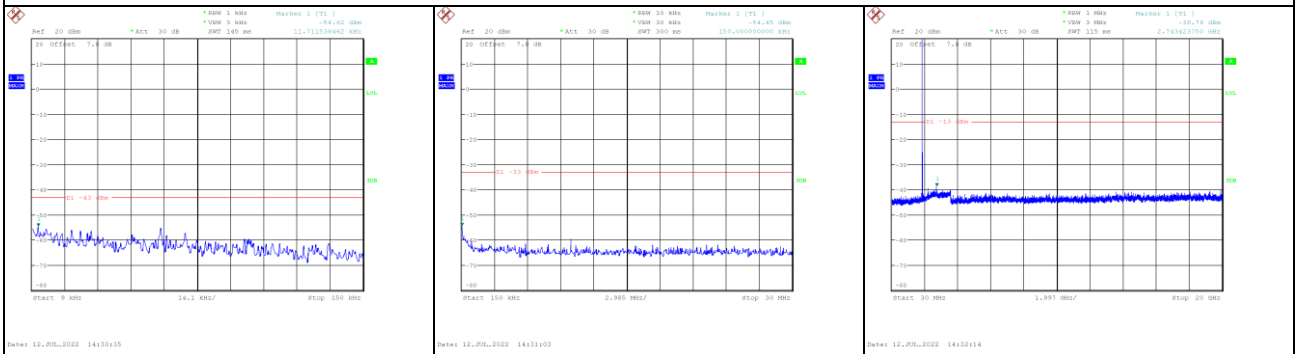


## **APPENDIX C - CONDUCTED SPURIOUS EMISSIONS**

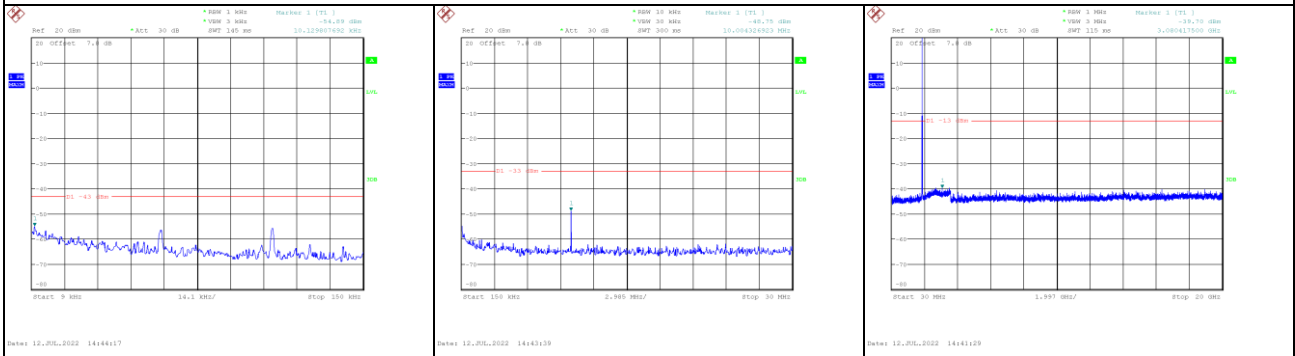
## PCS1900\_GPRS\_CH661 Spectrum Plot



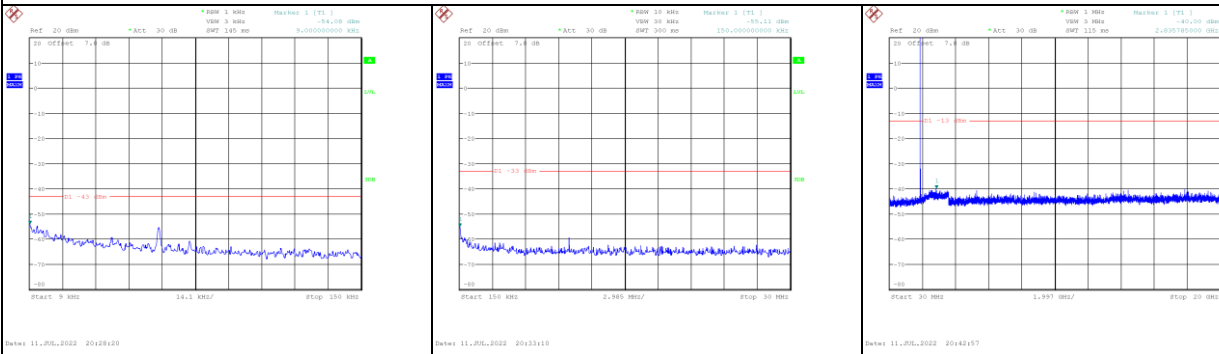
## PCS1900\_EDGE\_CH661 Spectrum Plot



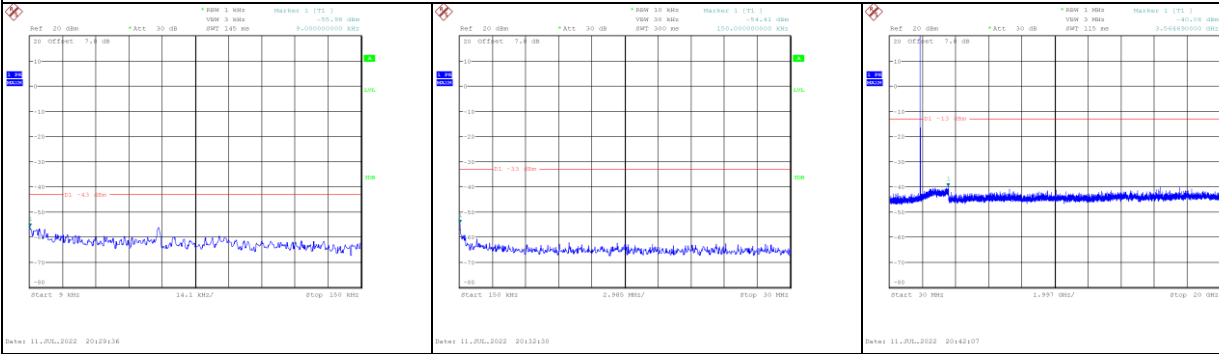
## WCDMA Band II\_WCDMA\_CH9400 Spectrum Plot



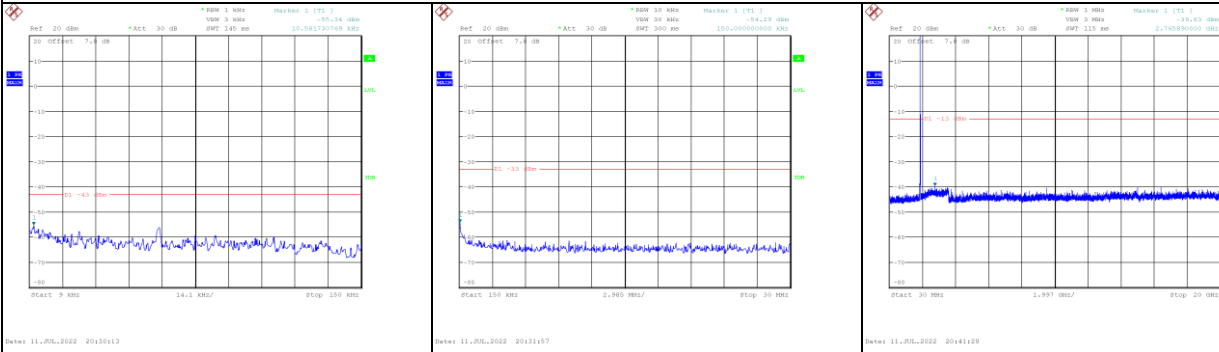
### LTE Band 2\_1.4MHz\_CH18900 Spectrum Plot



### LTE Band 2\_5MHz\_CH18900 Spectrum Plot



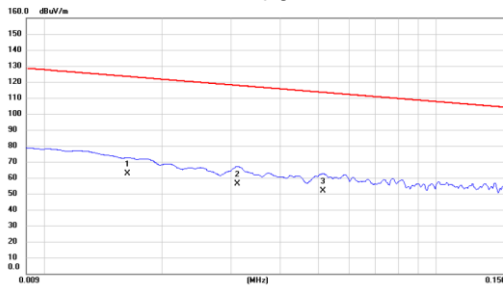
### LTE Band 2\_20MHz\_CH18900 Spectrum Plot



## **APPENDIX D - RADIATED SPURIOUS EMISSIONS (9KHZ TO 30MHZ)**

Test Mode : TX Mode

Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1	*	0.0163	47.06	15.45	62.51	123.36	-60.85	AVG		
2		0.0311	41.98	14.03	56.01	117.75	-61.74	AVG		
3		0.0514	38.27	13.60	51.87	113.39	-61.52	AVG		

Test Mode : TX Mode

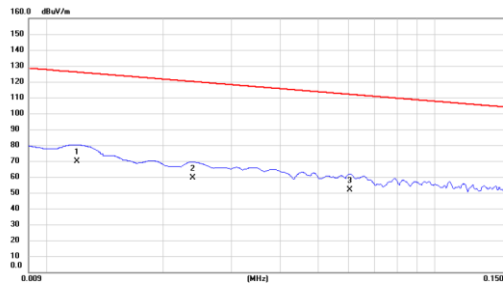
Ant 0°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		0.3291	41.23	13.74	54.97	97.26	-42.29	AVG		
2	*	2.1201	34.56	12.52	47.08	69.54	-22.46	QP		
3		18.6674	17.35	13.05	30.40	69.54	-39.14	QP		

Test Mode : TX Mode

Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1	*	0.0120	52.95	16.81	69.76	128.02	-56.26	AVG		
2		0.0238	45.02	14.20	59.22	120.07	-60.85	AVG		
3		0.0603	38.14	13.61	51.75	112.00	-60.25	AVG		

Test Mode : TX Mode

Ant 90°



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		0.3291	39.25	13.74	52.99	97.26	-44.27	AVG		
2	*	2.1500	34.24	12.51	46.75	69.54	-22.79	QP		
3		4.3887	23.45	12.33	35.78	69.54	-33.76	QP		

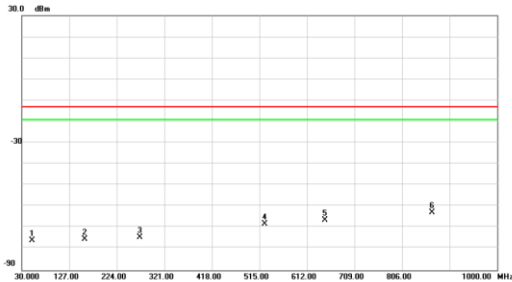
## **APPENDIX E - RADIATED SPURIOUS EMISSIONS (30MHZ TO 1000MHZ)**



Test Mode : PCS1900\_TX CH661\_GPRS

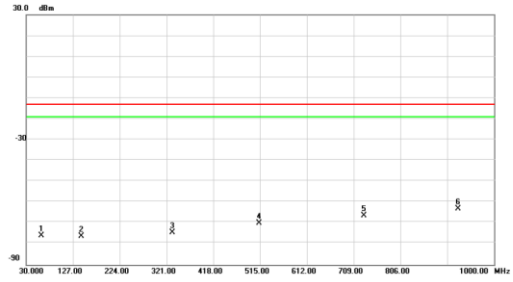
Test Mode : PCS1900\_TX CH661\_GPRS

### Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	51.825	-73.59	-2.54	-76.13	-13.00	-63.13	peak	
2	159.010	-73.21	-2.14	-75.35	-13.00	-62.35	peak	
3	270.560	-71.88	-2.75	-74.63	-13.00	-61.63	peak	
4	526.155	-71.50	3.31	-68.19	-13.00	-55.19	peak	
5	648.375	-72.48	5.96	-68.52	-13.00	-55.52	peak	
6 *	867.110	-71.32	8.55	-62.77	-13.00	-49.77	peak	

### Horizontal

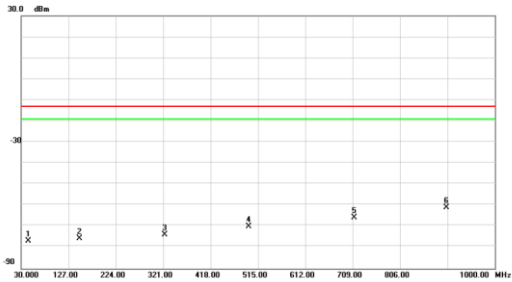


No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	61.525	-72.82	-3.25	-76.07	-13.00	-63.07	peak	
2	143.975	-73.79	-2.64	-76.43	-13.00	-63.43	peak	
3	332.640	-73.49	-0.93	-74.42	-13.00	-61.42	peak	
4	512.575	-73.24	3.10	-70.14	-13.00	-57.14	peak	
5	729.855	-73.48	7.02	-66.46	-13.00	-53.46	peak	
6 *	925.310	-72.39	9.29	-63.10	-13.00	-50.10	peak	

Test Mode : WCDMA Band II\_TX CH9400

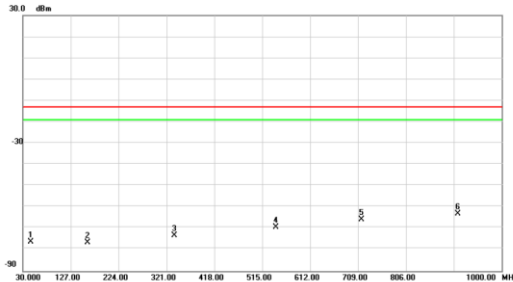
Test Mode : WCDMA Band II\_TX CH9400

### Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	44.550	-74.30	-2.68	-76.98	-13.00	-63.98	peak	
2	149.310	-73.44	-2.29	-75.73	-13.00	-62.73	peak	
3	323.910	-72.95	-1.10	-74.05	-13.00	-61.05	peak	
4	496.085	-72.90	2.83	-70.07	-13.00	-57.07	peak	
5	711.910	-72.43	6.44	-65.99	-13.00	-52.99	peak	
6 *	901.545	-69.96	9.03	-60.93	-13.00	-47.93	peak	

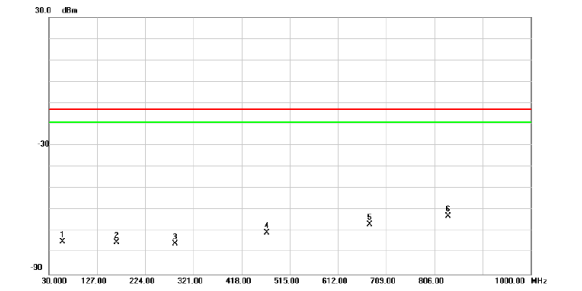
### Horizontal



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	46.450	-73.69	-2.59	-76.28	-13.00	-63.28	peak	
2	161.435	-74.44	-2.19	-76.63	-13.00	-63.63	peak	
3	337.490	-72.47	-0.84	-73.31	-13.00	-60.31	peak	
4	542.160	-72.90	3.55	-69.35	-13.00	-56.35	peak	
5	716.275	-72.48	6.59	-65.89	-13.00	-52.89	peak	
6 *	910.760	-72.14	9.13	-63.01	-13.00	-50.01	peak	

Test Mode : LTE Band 2\_TX CH18900\_1.4MHz

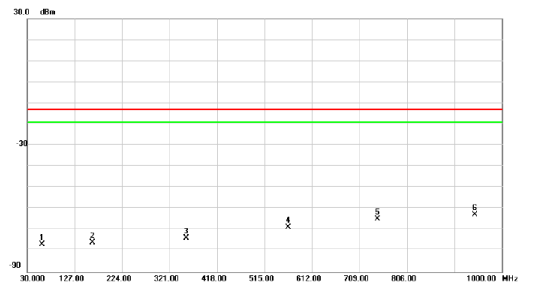
### Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	57.160	-72.10	-2.80	-74.90	-13.00	-61.90	peak	
2	166.285	-72.67	-2.39	-75.06	-13.00	-62.06	peak	
3	284.140	-73.71	-2.16	-75.87	-13.00	-62.87	peak	
4	469.410	-72.99	2.34	-70.65	-13.00	-57.65	peak	
5	676.020	-72.82	6.03	-66.79	-13.00	-53.79	peak	
6 *	834.130	-70.99	8.12	-62.87	-13.00	-49.87	peak	

Test Mode : LTE Band 2\_TX CH18900\_1.4MHz

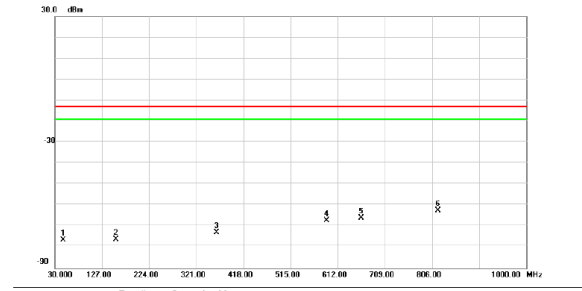
### Horizontal



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	60.555	-73.98	-3.12	-77.10	-13.00	-64.10	peak	
2	164.345	-73.67	-2.30	-75.97	-13.00	-62.97	peak	
3	354.950	-73.30	-0.57	-73.87	-13.00	-60.87	peak	
4	563.500	-72.91	4.04	-68.87	-13.00	-55.87	peak	
5	746.345	-72.63	7.55	-65.08	-13.00	-52.08	peak	
6 *	945.195	-72.40	9.52	-62.88	-13.00	-49.88	peak	

Test Mode : LTE Band 2\_TX CH18900\_5MHz

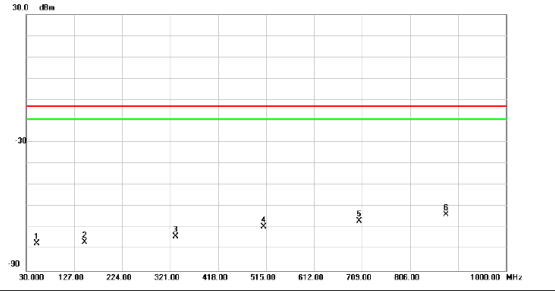
### Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	47.945	-73.95	-2.56	-76.51	-13.00	-63.51	peak	
2	155.615	-74.23	-2.18	-76.41	-13.00	-63.41	peak	
3	362.710	-72.68	-0.41	-73.09	-13.00	-60.09	peak	
4	589.690	-72.07	4.75	-67.32	-13.00	-54.32	peak	
5	660.500	-72.26	6.00	-66.26	-13.00	-53.26	peak	
6 *	818.610	-70.47	7.95	-62.52	-13.00	-49.52	peak	

Test Mode : LTE Band 2\_TX CH18900\_5MHz

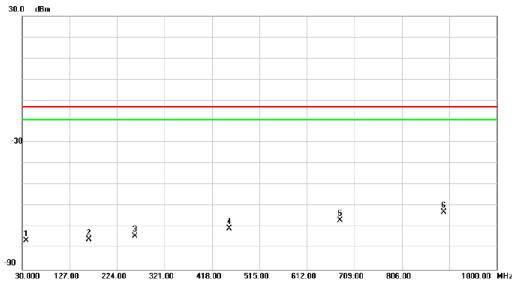
### Horizontal



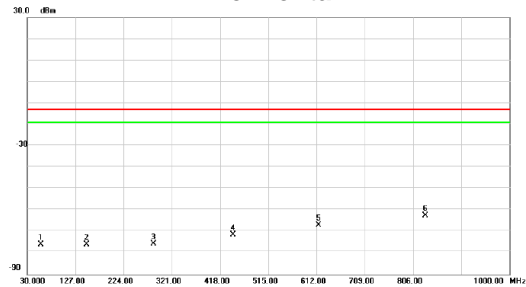
No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	51.340	-74.64	-2.53	-77.17	-13.00	-64.17	peak	
2	148.340	-74.27	-2.35	-76.62	-13.00	-63.62	peak	
3	332.155	-73.01	-0.94	-73.95	-13.00	-60.95	peak	
4	510.150	-72.67	3.07	-69.60	-13.00	-56.60	peak	
5	703.665	-72.92	6.18	-66.74	-13.00	-53.74	peak	
6 *	878.750	-72.45	8.71	-63.74	-13.00	-50.74	peak	

Test Mode : LTE Band 2\_TX CH18900\_20MHz

Test Mode : LTE Band 2\_TX CH18900\_20MHz

**Vertical**


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1		37.760	-73.05	-3.33	-76.38	-13.00	-63.38	peak	
2		165.800	-73.47	-2.37	-75.84	-13.00	-62.84	peak	
3		261.345	-71.05	-3.21	-74.26	-13.00	-61.26	peak	
4		453.405	-72.57	2.05	-70.52	-13.00	-57.52	peak	
5		679.900	-72.69	6.04	-66.65	-13.00	-53.65	peak	
6 *		891.360	-71.75	8.89	-62.86	-13.00	-49.86	peak	

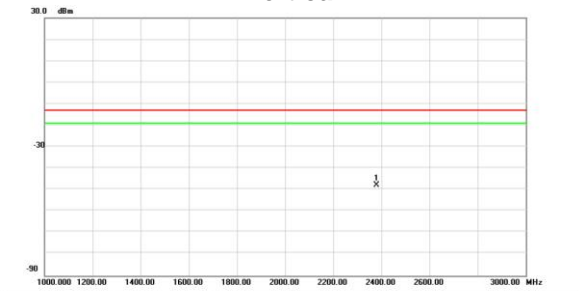
**Horizontal**


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1		57.645	-73.28	-2.85	-76.13	-13.00	-63.13	peak	
2		149.310	-73.80	-2.29	-76.09	-13.00	-63.09	peak	
3		283.655	-73.52	-2.17	-75.69	-13.00	-62.69	peak	
4		444.190	-73.22	1.81	-71.41	-13.00	-58.41	peak	
5		616.850	-72.54	5.35	-67.19	-13.00	-54.19	peak	
6 *		830.735	-70.69	8.09	-62.60	-13.00	-49.60	peak	

## **APPENDIX F - RADIATED SPURIOUS EMISSIONS (ABOVE 1000MHZ)**

Test Mode : PCS1900\_TX CH661\_GPRS

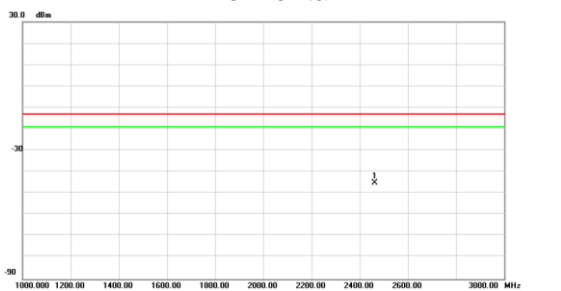
### Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	2378.667	-67.33	19.42	-47.91	-13.00	-34.91	peak	

Test Mode : PCS1900\_TX CH661\_GPRS

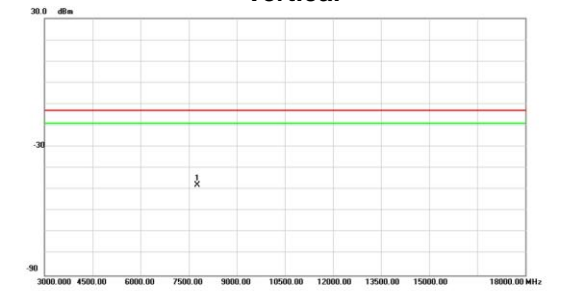
### Horizontal



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	2462.000	-64.94	19.88	-45.06	-13.00	-32.06	peak	

Test Mode : PCS1900\_TX CH661\_GPRS

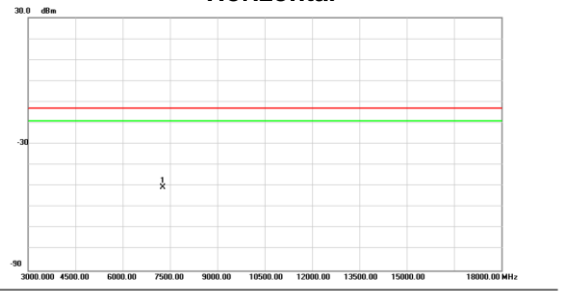
### Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	7762.500	-68.89	21.01	-47.88	-13.00	-34.88	peak	

Test Mode : PCS1900\_TX CH661\_GPRS

### Horizontal

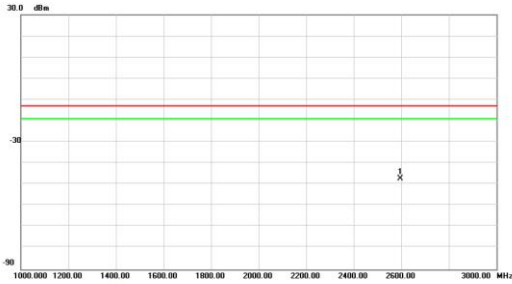


No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	7275.000	-70.12	19.45	-50.67	-13.00	-37.67	peak	

Test Mode : WCDMA Band II\_TX CH9400

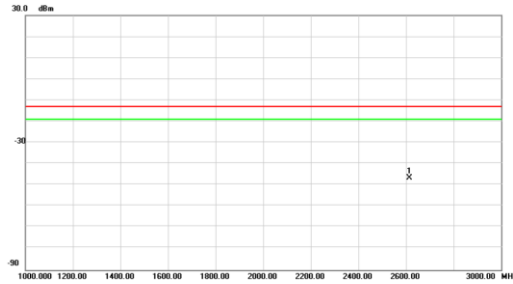
Test Mode : WCDMA Band II\_TX CH9400

**Vertical**



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	2595.000	-53.22	6.01	-47.21	-13.00	-34.21	peak	

**Horizontal**

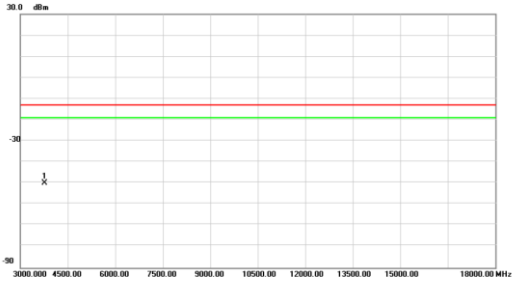


No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	2815.000	-52.84	6.07	-46.77	-13.00	-33.77	peak	

Test Mode : WCDMA Band II\_TX CH9400

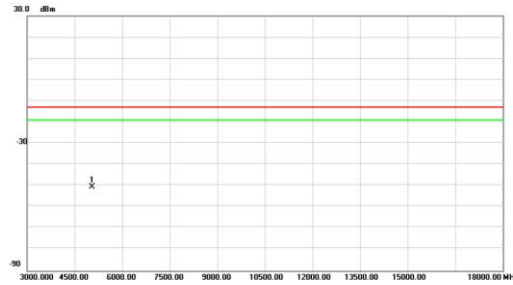
Test Mode : WCDMA Band II\_TX CH9400

**Vertical**



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	3765.000	-51.79	1.73	-50.06	-13.00	-37.06	peak	

**Horizontal**

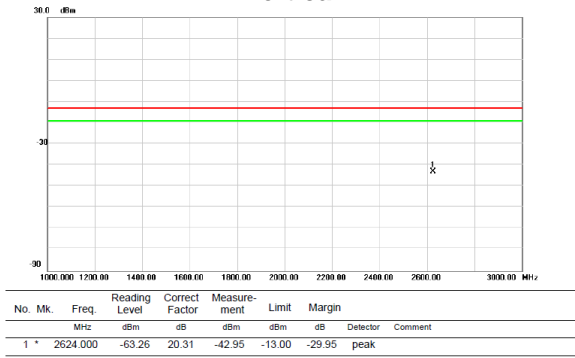


No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	5047.500	-55.43	4.83	-50.60	-13.00	-37.60	peak	

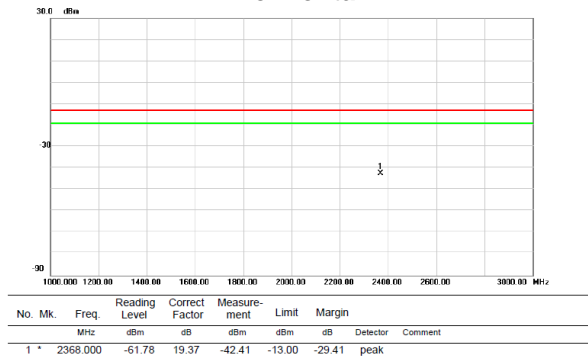
Test Mode : LTE Band 2\_TX CH18900\_1.4MHz

Test Mode : LTE Band 2\_TX CH18900\_1.4MHz

**Vertical**



**Horizontal**



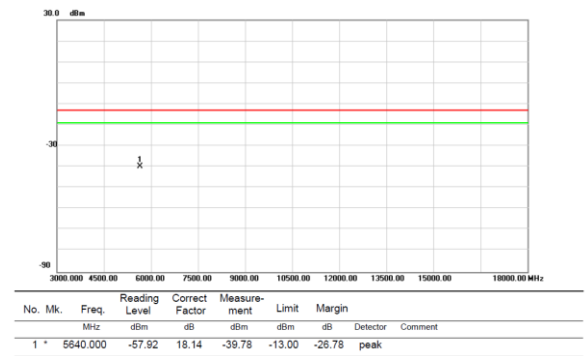
Test Mode : LTE Band 2\_TX CH18900\_1.4MHz

Test Mode : LTE Band 2\_TX CH18900\_1.4MHz

**Vertical**



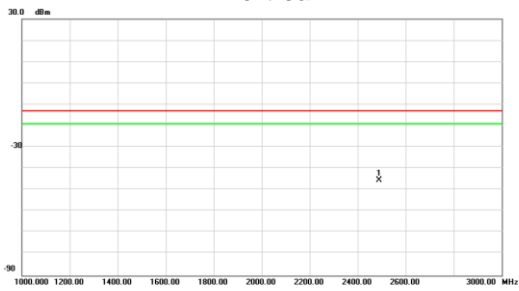
**Horizontal**



Test Mode : LTE Band 2\_TX CH18900\_5MHz

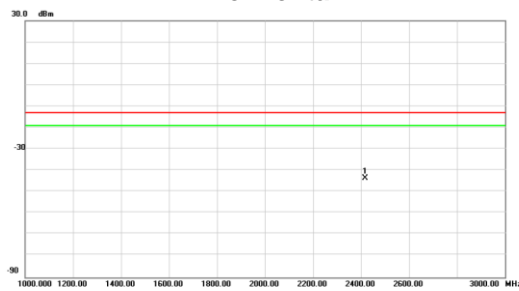
Test Mode : LTE Band 2\_TX CH18900\_5MHz

**Vertical**



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	2488.000	-65.42	20.02	-45.40	-13.00	-32.40	peak	

**Horizontal**

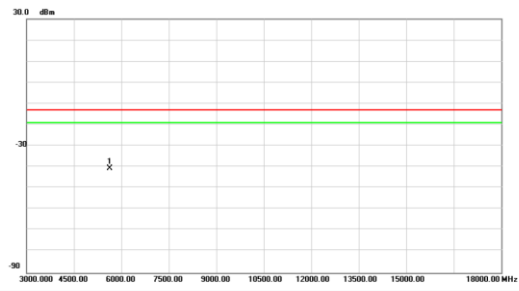


No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	2416.000	-63.35	19.63	-43.72	-13.00	-30.72	peak	

Test Mode : LTE Band 2\_TX CH18900\_5MHz

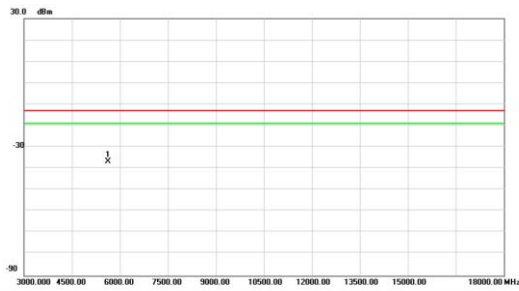
Test Mode : LTE Band 2\_TX CH18900\_5MHz

**Vertical**



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	5632.500	-58.67	18.15	-40.52	-13.00	-27.52	peak	

**Horizontal**



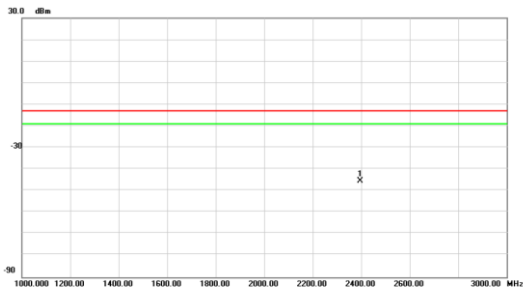
No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	5632.500	-54.93	18.15	-36.78	-13.00	-23.78	peak	



Test Mode : LTE Band 2\_TX CH18900\_20MHz

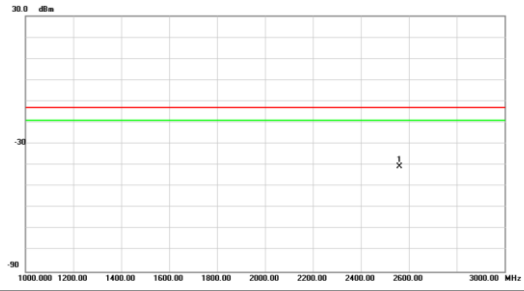
Test Mode : LTE Band 2\_TX CH18900\_20MHz

Vertical



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	2397.000	-64.84	19.53	-45.31	-13.00	-32.31	peak	

Horizontal

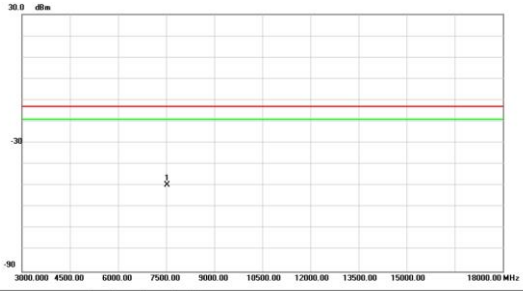


No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	2560.000	-60.71	20.19	-40.52	-13.00	-27.52	peak	

Test Mode : LTE Band 2\_TX CH18900\_20MHz

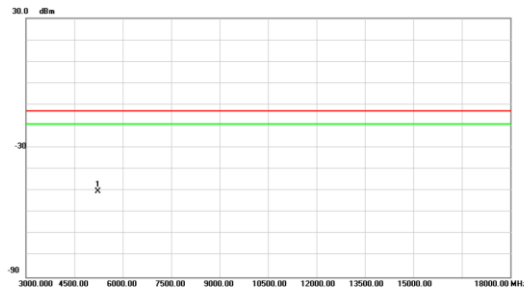
Test Mode : LTE Band 2\_TX CH18900\_20MHz

Vertical



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	7522.500	-70.11	20.43	-49.68	-13.00	-36.68	peak	

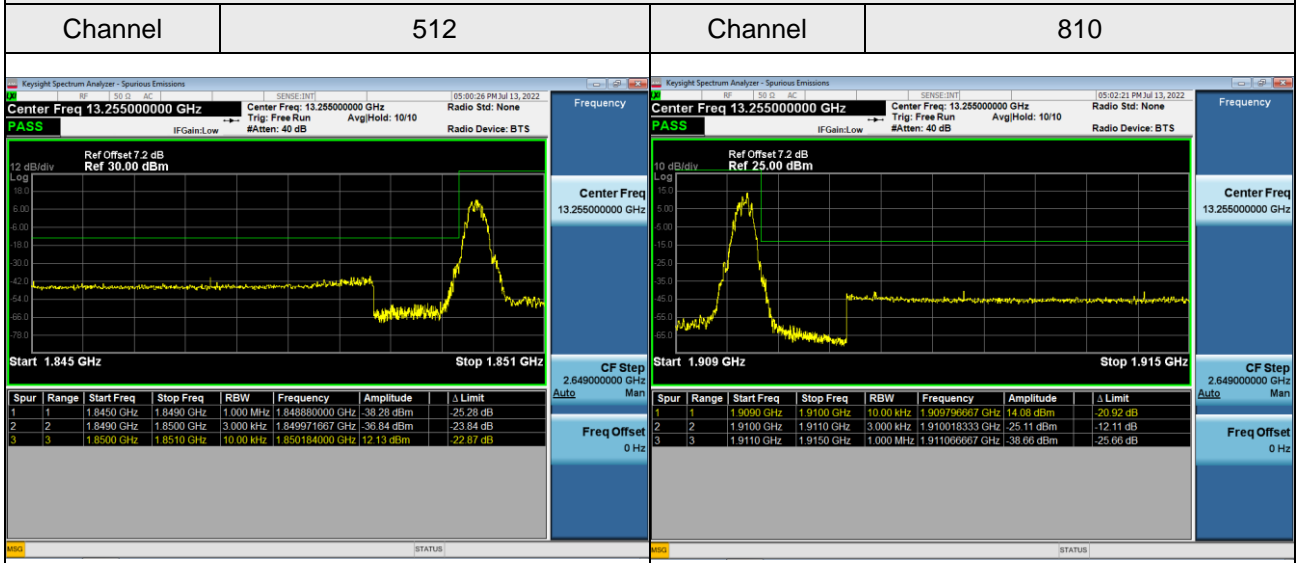
Horizontal



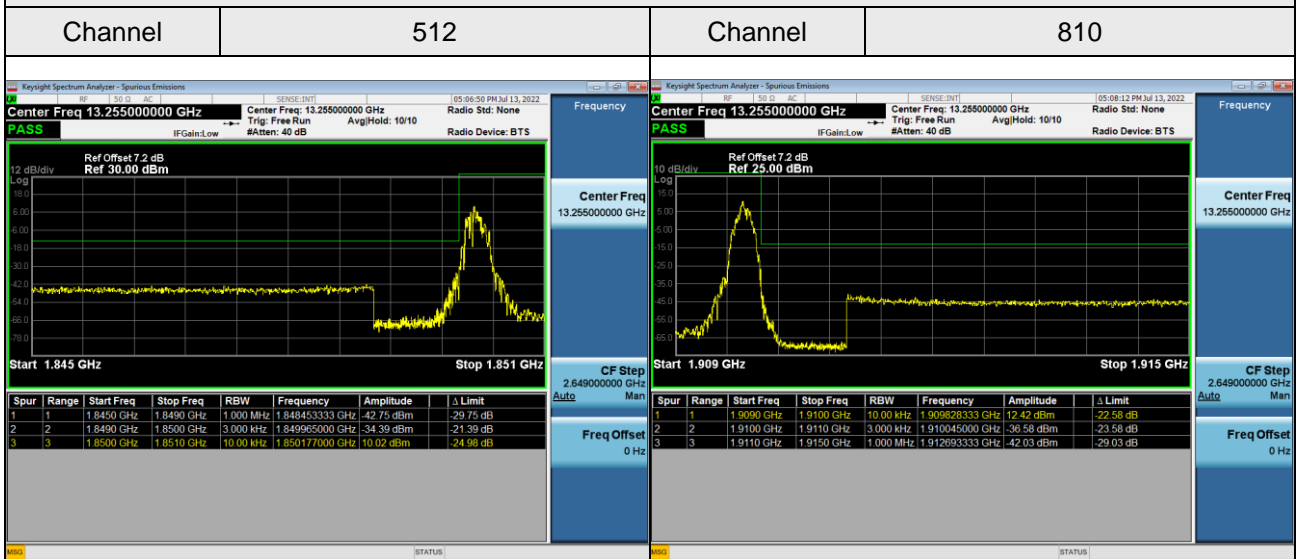
No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	5227.500	-67.46	17.29	-50.17	-13.00	-37.17	peak	

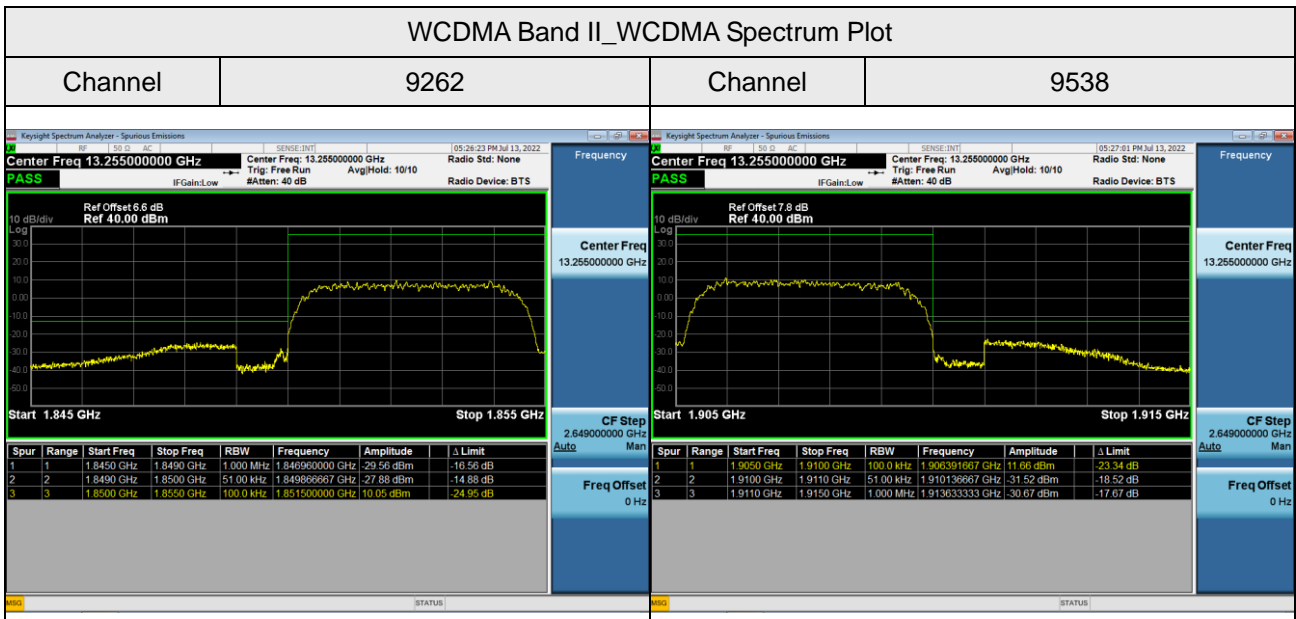
## APPENDIX G - BAND EDGE

## PCS1900\_GPRS Spectrum Plot



## EDGE





## LTE Band 2\_1.4MHz Spectrum Plot

1RB#0

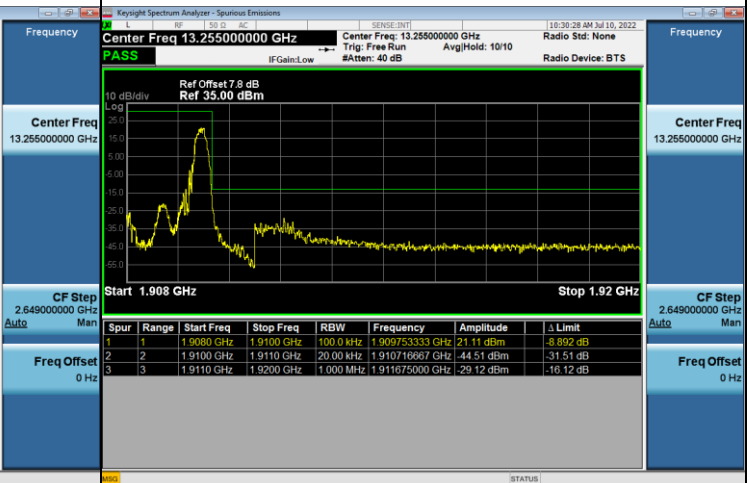
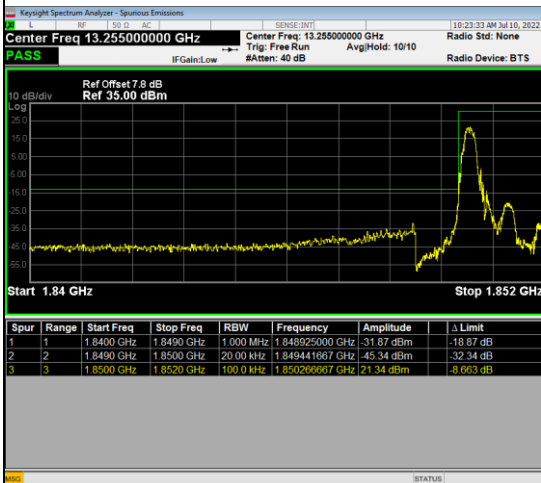
1RB#5

Channel

18607

Channel

19193



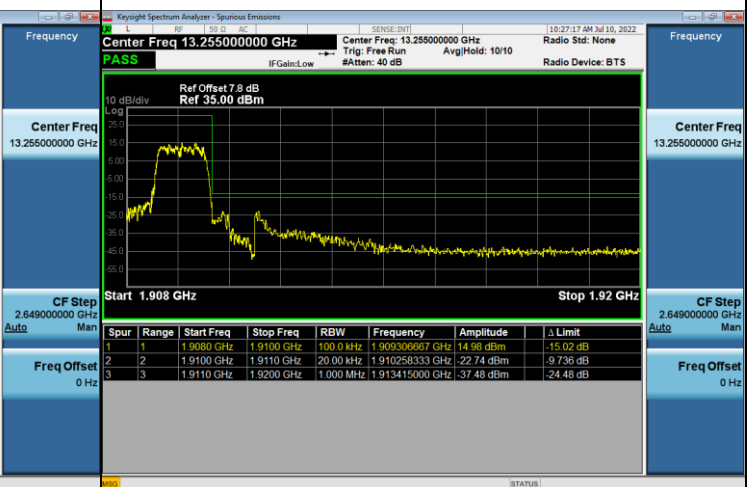
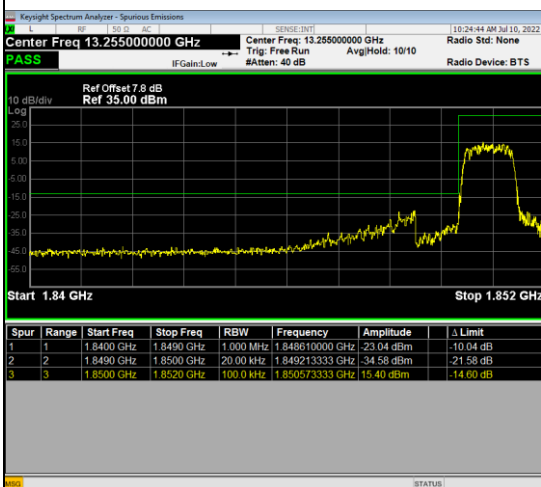
6RB#0

Channel

18607

Channel

19193



## LTE Band 2\_3MHz Spectrum Plot

1RB#0

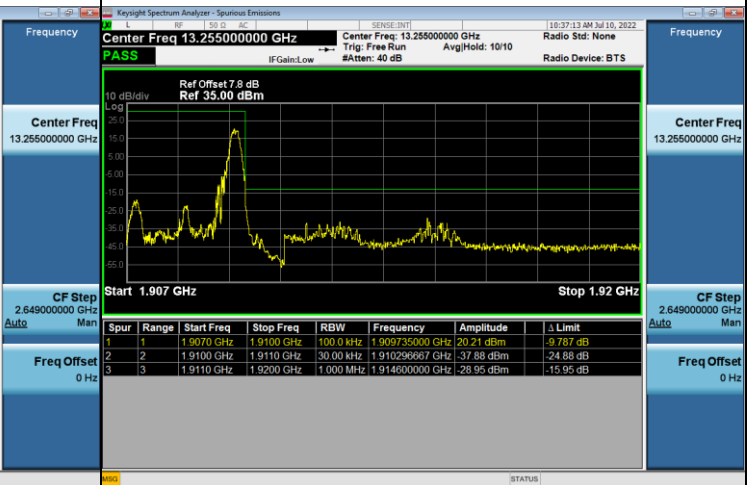
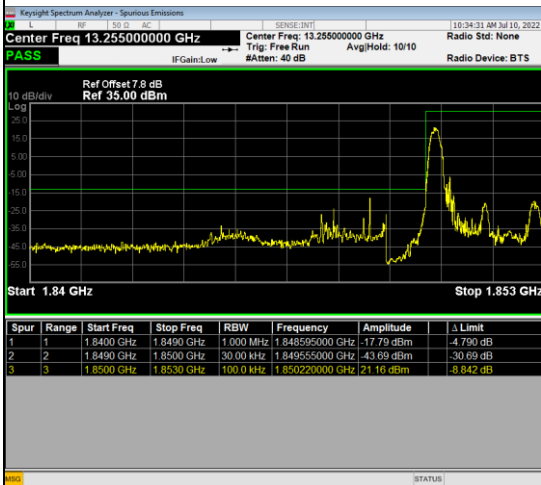
1RB#14

Channel

18615

Channel

19185



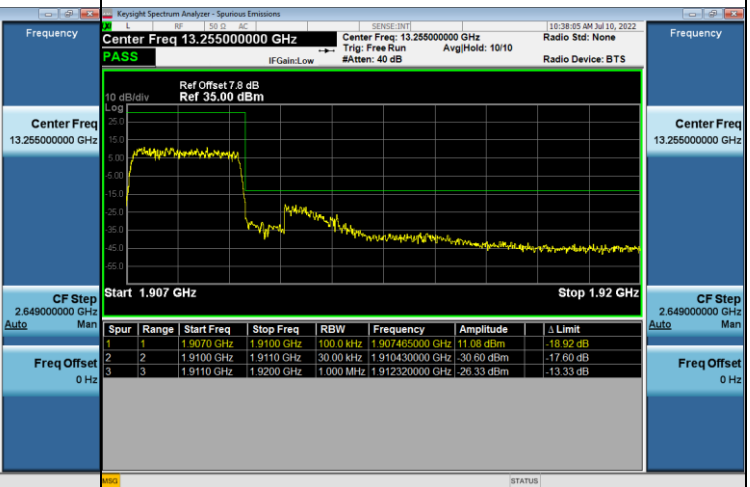
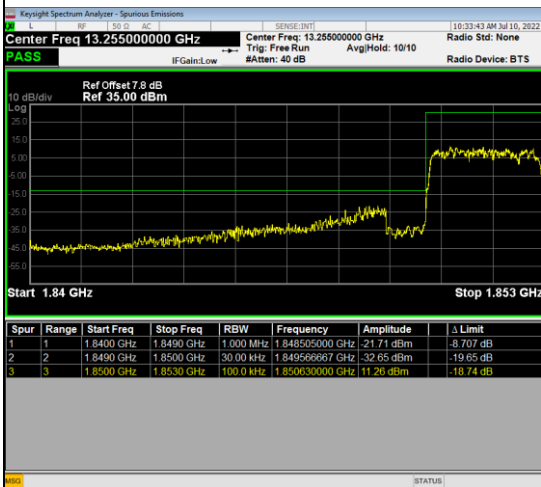
## 15RB#0

Channel

18615

Channel

19185



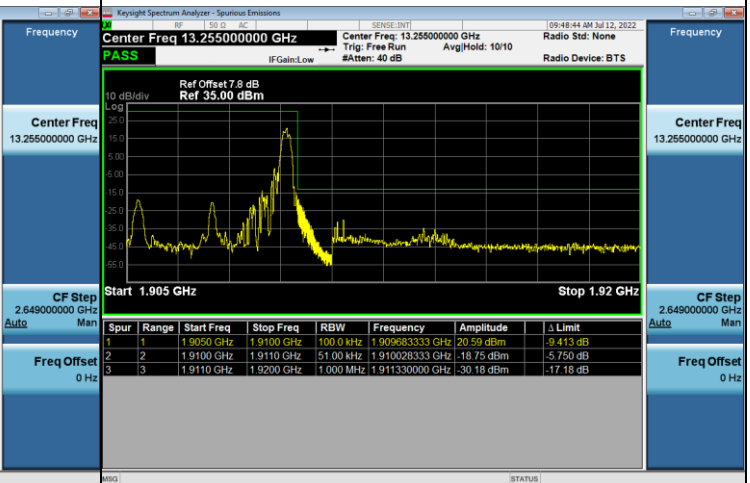
## LTE Band 2\_5MHz Spectrum Plot

1RB#0

1RB#24

Channel 18625

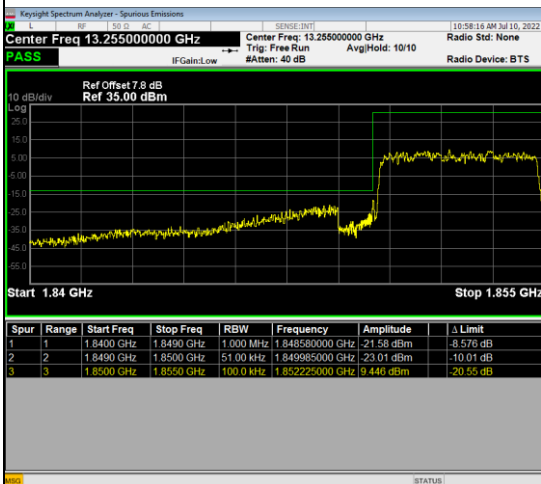
Channel 19175



## 25RB#0

Channel 18625

Channel 19175



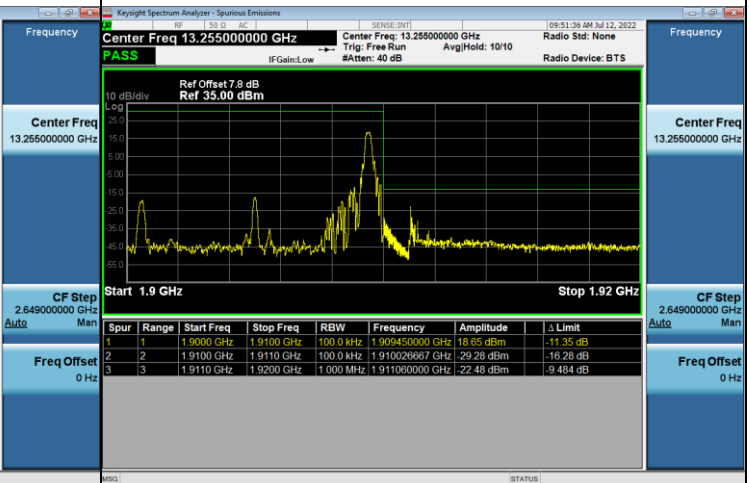
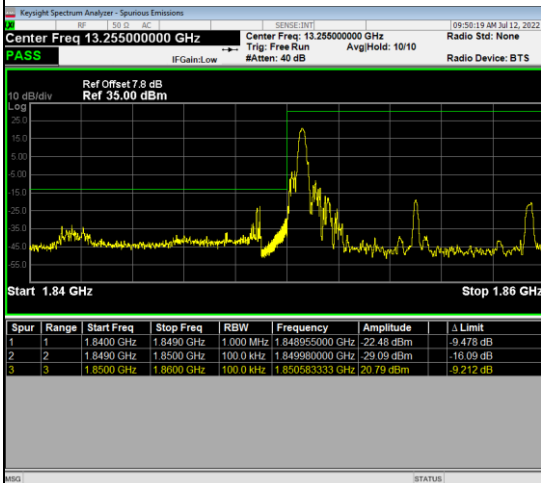
## LTE Band 2\_10MHz Spectrum Plot

1RB#0

1RB#49

Channel 18650

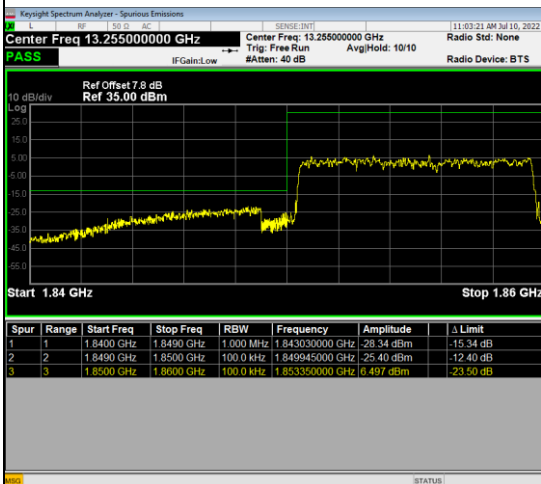
Channel 19150



## 50RB#0

Channel 18650

Channel 19150





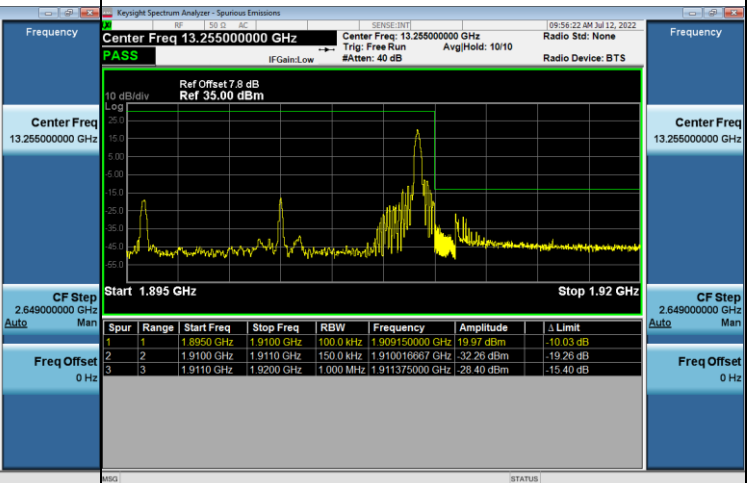
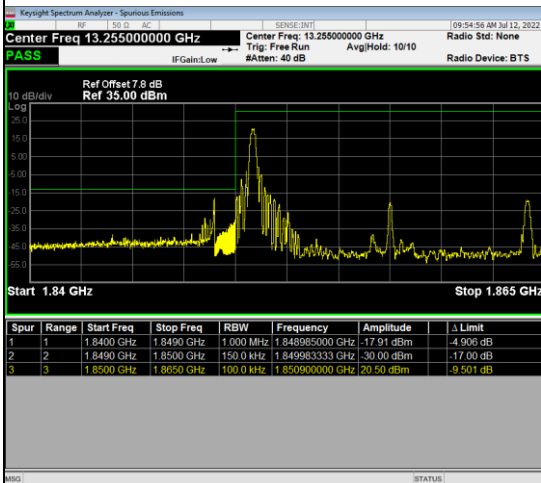
## LTE Band 2\_15MHz Spectrum Plot

1RB#0

1RB#74

Channel 18675

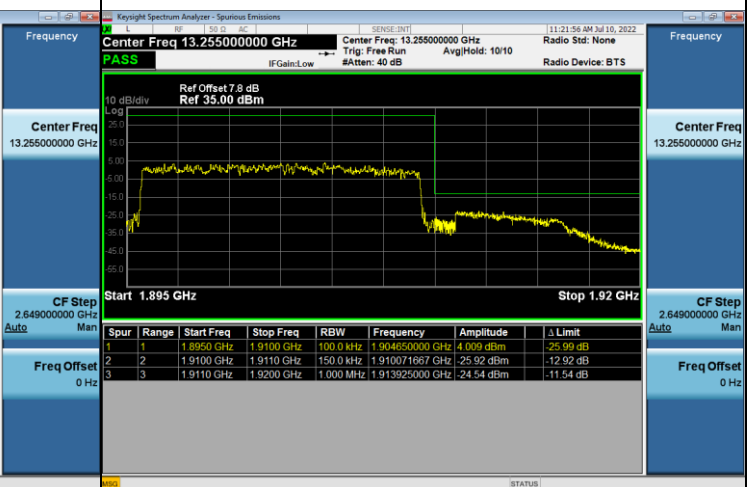
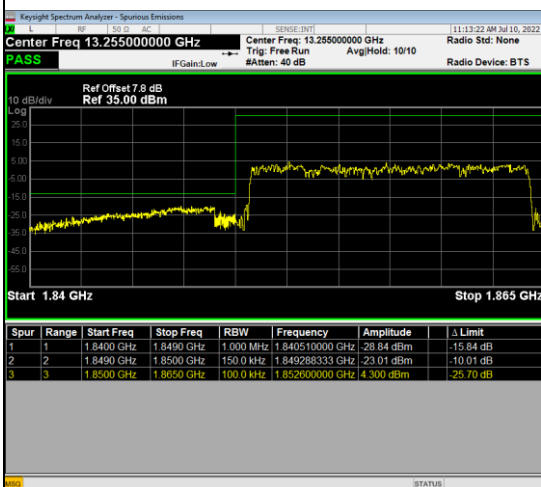
Channel 19125



## 75RB#0

Channel 18675

Channel 19125



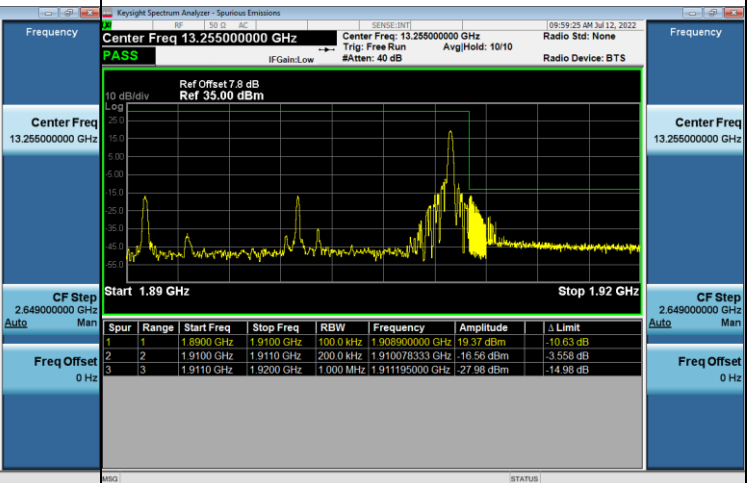
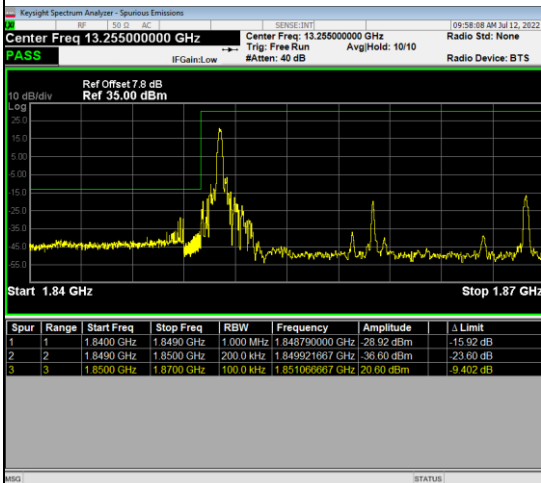
## LTE Band 2\_20MHz Spectrum Plot

1RB#0

1RB#99

Channel 18700

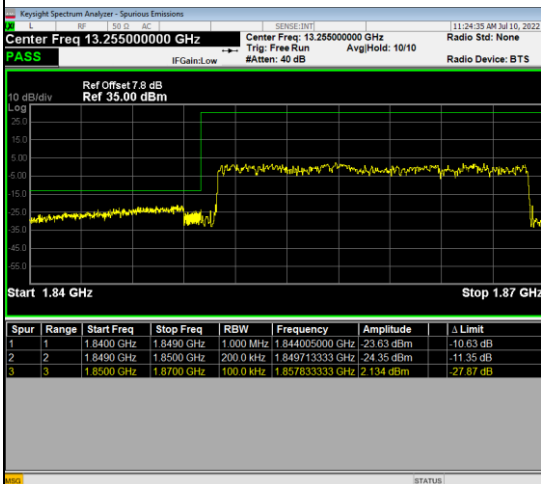
Channel 19100



100RB#0

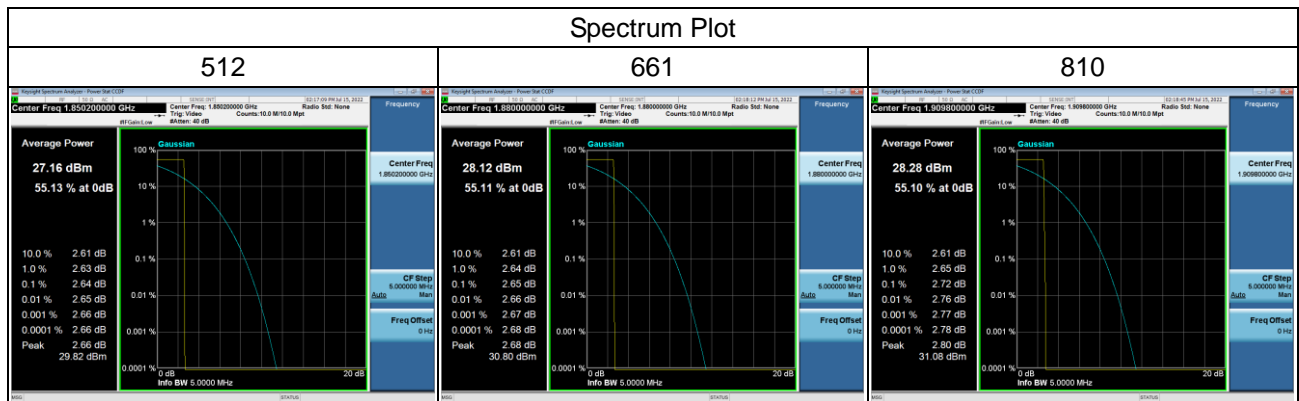
Channel 18700

Channel 19100

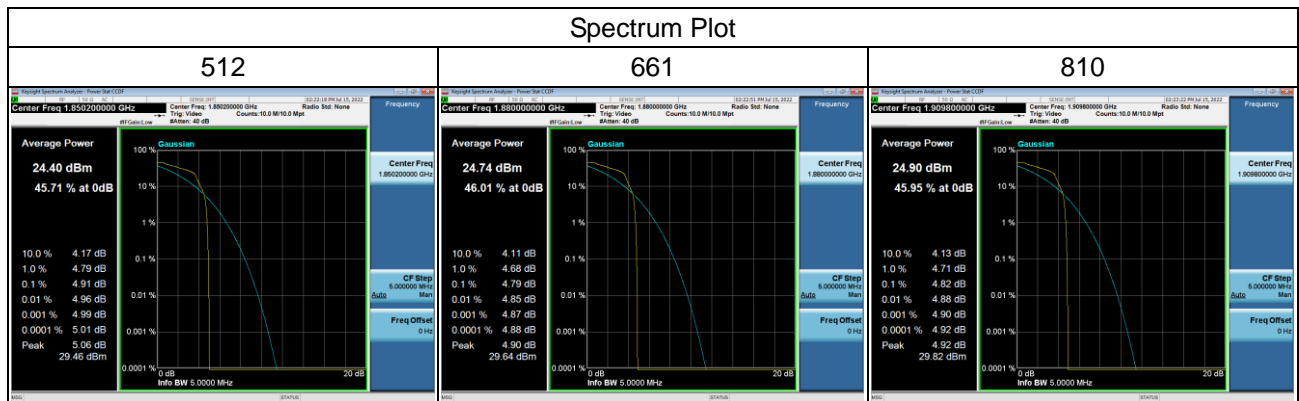


## APPENDIX H - PEAK TO AVERAGE RATIO

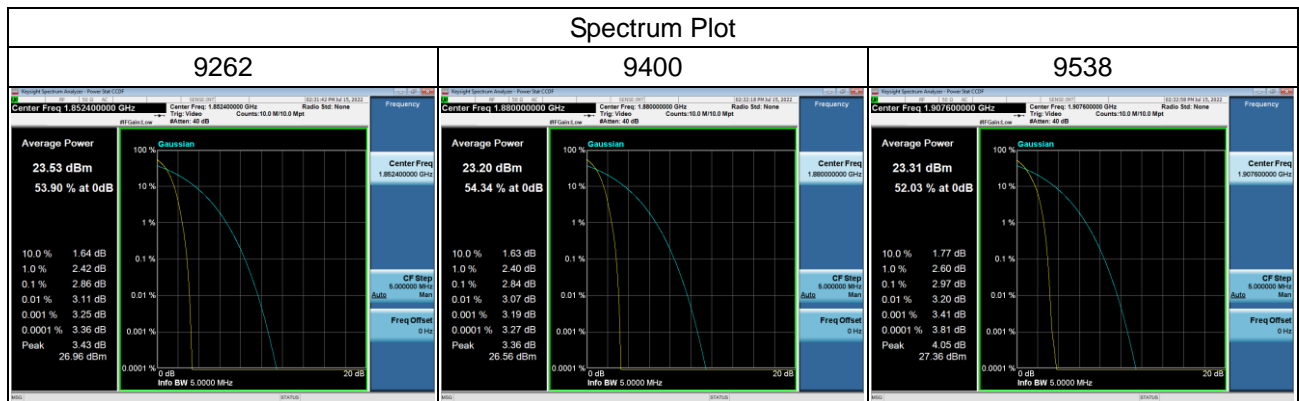
PCS1900_GPRS					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK			
512	1850.2	2.64		13	Pass
661	1880	2.65		13	Pass
810	1909.8	2.72		13	Pass



PCS1900_EDGE					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK			
512	1850.2	4.91		13	Pass
661	1880	4.79		13	Pass
810	1909.8	4.82		13	Pass

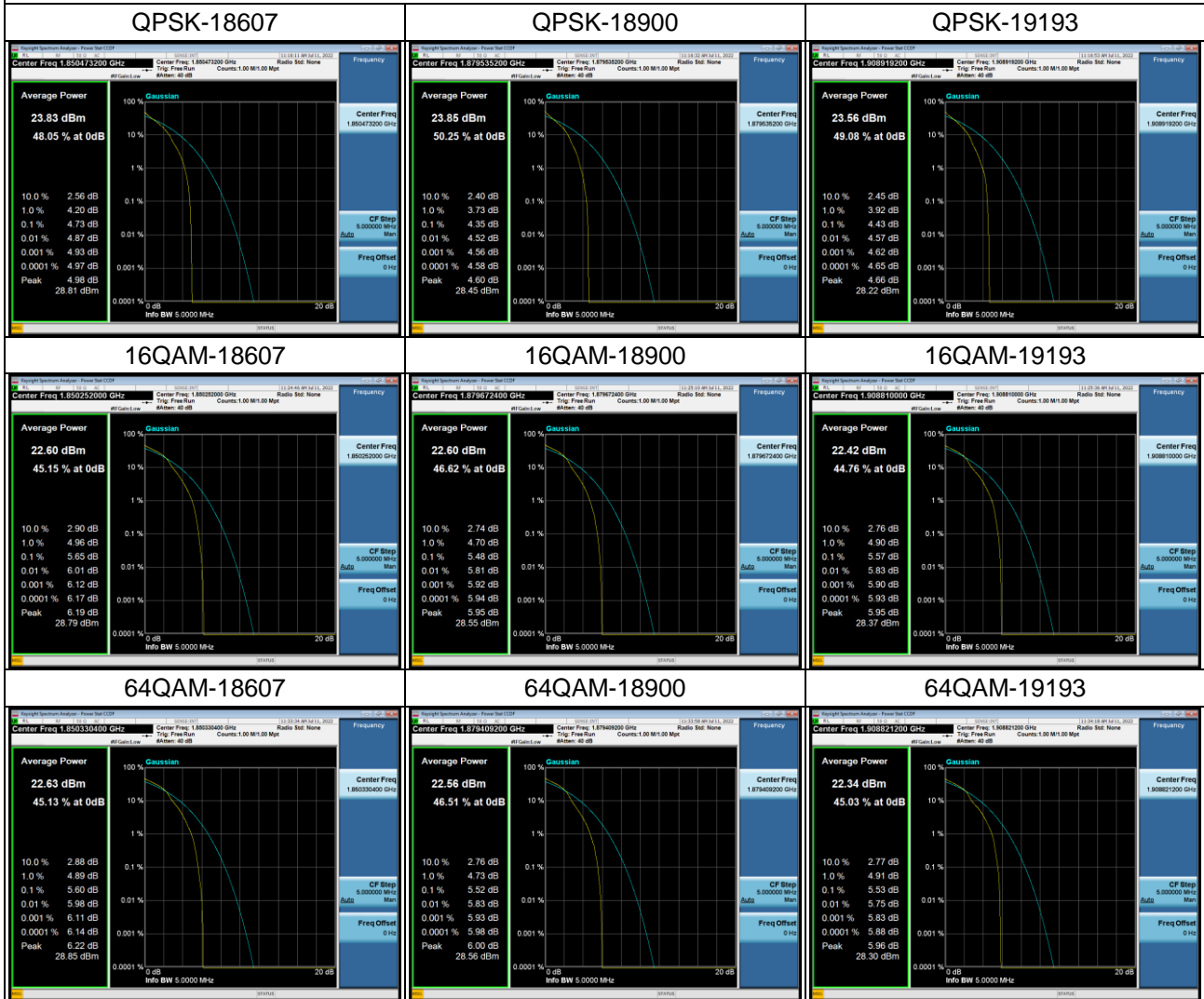


WCDMA Band II_WCDMA					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK			
9262	1852.4	2.86		13	Pass
9400	1880	2.84		13	Pass
9538	1907.6	2.97		13	Pass



LTE Band 2_1.4MHz							
Channel	Frequency (MHz)	Peak To Average Ratio (dB)			Max. Limit (dB)	Result	
		QPSK	16QAM	64QAM			
18607	1850.7	4.73	5.65	5.60	13	Pass	
18900	1880	4.35	5.48	5.52	13	Pass	
19193	1909.3	4.43	5.57	5.53	13	Pass	

## Spectrum Plot



LTE Band 2_3MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)			Max. Limit (dB)	Result
		QPSK	16QAM	64QAM		
18615	1851.5	4.78	5.67	5.63	13	Pass
18900	1880	4.47	5.20	5.24	13	Pass
19185	1908.5	4.71	5.49	5.48	13	Pass

## Spectrum Plot

