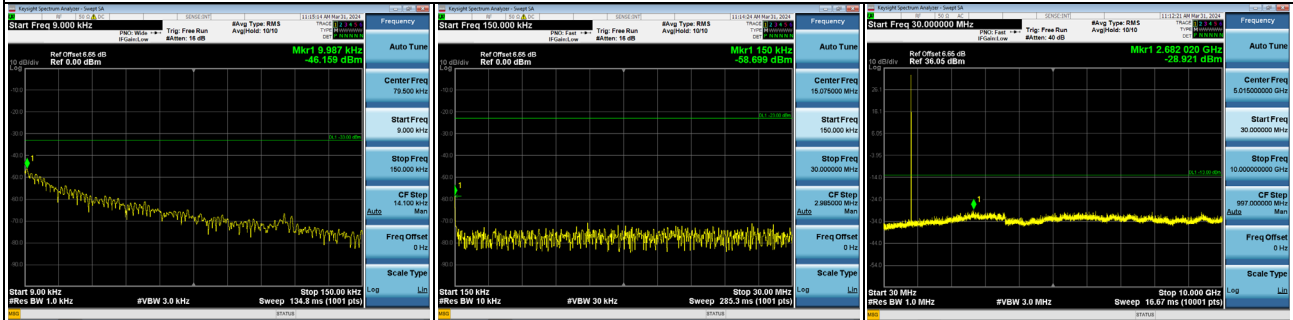
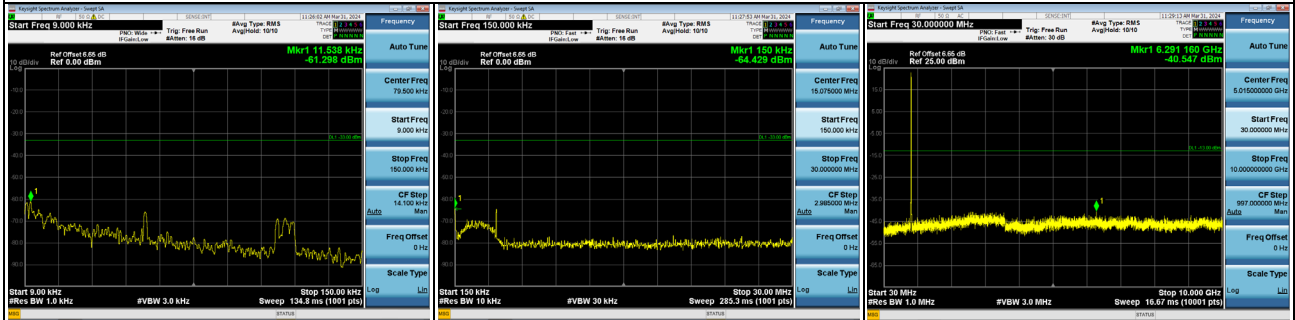


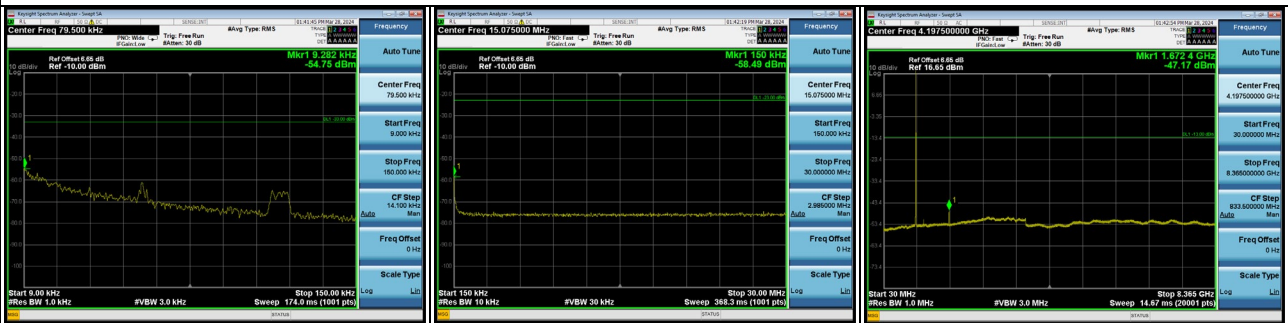
## GSM850\_EDGE\_CH190 Spectrum Plot



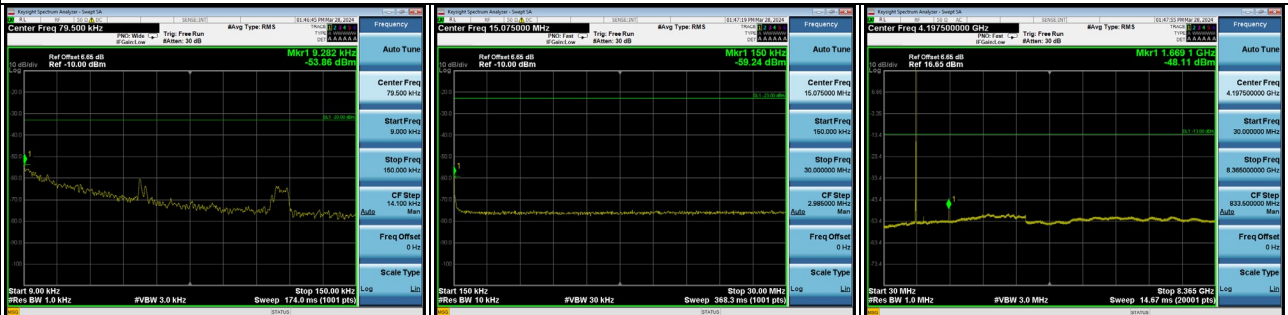
## WCDMA Band V\_WCDMA\_CH4182 Spectrum Plot



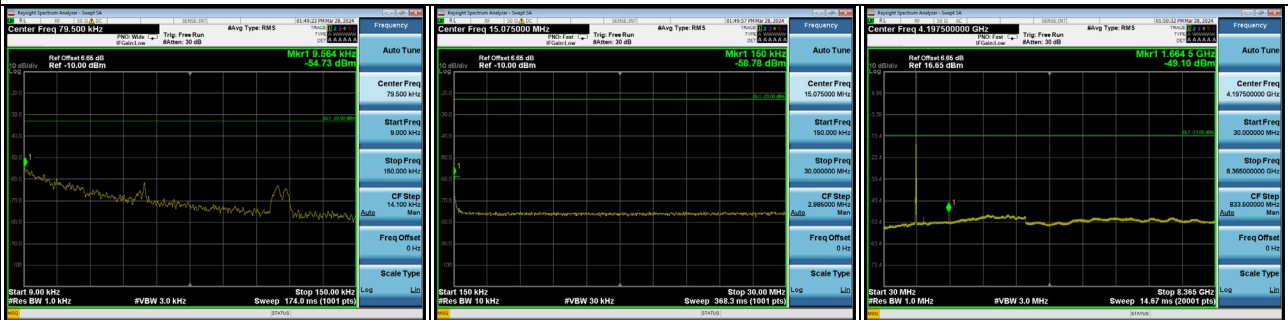
## LTE Band 5\_1.4MHz\_CH20525 Spectrum Plot



## LTE Band 5\_5MHz\_CH20525 Spectrum Plot



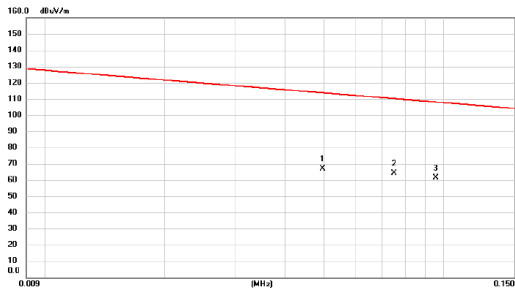
## LTE Band 5\_10M\_CH20525 Spectrum Plot



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

Test Mode : TX Mode

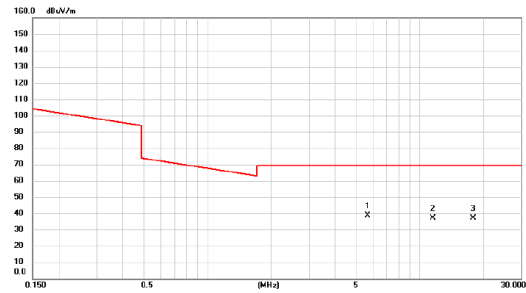
Ant 0°



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0.0497	45.56	21.30	66.86	113.68	-46.82	AVG	
2 *	0.0750	42.84	21.30	64.14	110.10	-45.96	AVG	
3	0.0954	39.89	21.33	61.22	108.01	-46.79	AVG	

Test Mode : TX Mode

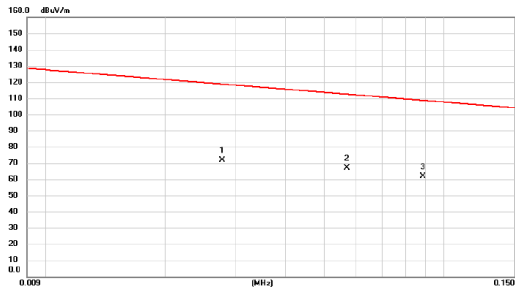
Ant 0°



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	5.8723	17.22	21.44	38.66	69.54	-30.88	QP	
2	11.5230	15.31	21.55	36.86	69.54	-32.68	QP	
3	17.7914	15.02	21.89	36.91	69.54	-32.63	QP	

Test Mode : TX Mode

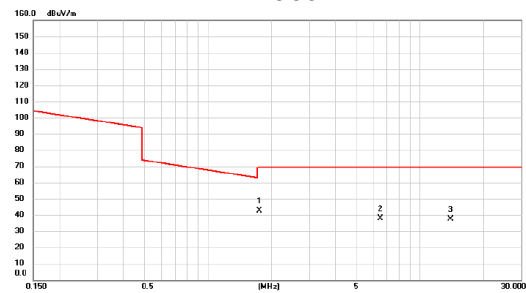
Ant 90°



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1	0.0278	50.65	21.17	71.82	118.72	-46.90	AVG	
2 *	0.0571	45.81	21.30	67.11	112.47	-45.36	AVG	
3	0.0885	40.32	21.30	61.62	108.67	-47.05	AVG	

Test Mode : TX Mode

Ant 90°

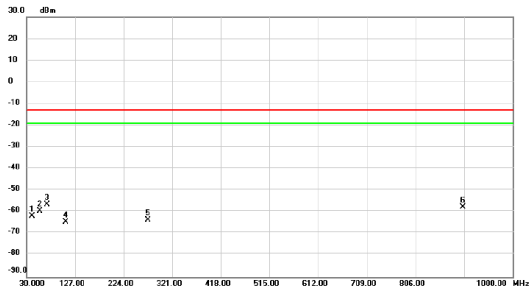


No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	Comment
1 *	1.7470	21.54	21.18	42.72	69.54	-26.82	QP	
2	6.4782	16.25	21.48	37.73	69.54	-31.81	QP	
3	13.8960	15.85	21.74	37.59	69.54	-31.95	QP	

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

Test Mode : GSM850\_TX CH190\_EDGE

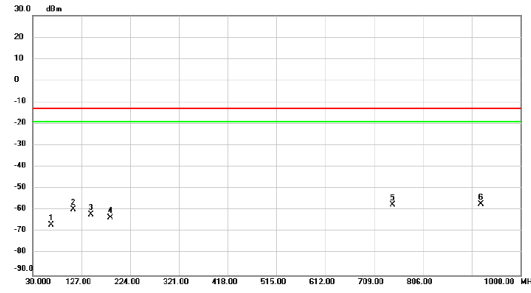
### Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	40.6700	-70.73	8.75	-61.98	-13.00	-48.98	peak	
2	56.6750	-68.59	8.91	-59.68	-13.00	-46.68	peak	
3 *	70.2550	-63.49	6.94	-56.55	-13.00	-43.55	peak	
4	107.6000	-70.33	5.62	-64.71	-13.00	-51.71	peak	
5	272.5000	-72.19	8.47	-63.72	-13.00	-50.72	peak	
6	900.5750	-76.87	19.02	-57.85	-13.00	-44.85	peak	

Test Mode : GSM850\_TX CH190\_EDGE

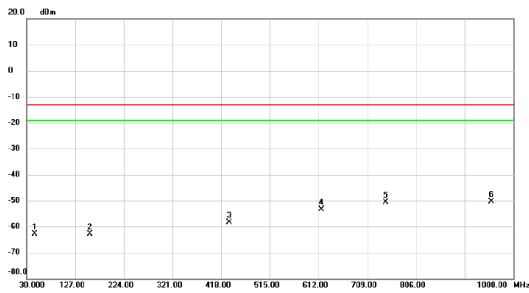
### Horizontal



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	67.3450	-74.17	7.48	-66.69	-13.00	-53.69	peak	
2	110.9950	-65.65	6.04	-59.61	-13.00	-46.61	peak	
3	145.9150	-70.91	8.94	-61.97	-13.00	-48.97	peak	
4	184.7150	-70.68	7.17	-63.51	-13.00	-50.51	peak	
5	745.8600	-75.59	18.07	-57.52	-13.00	-44.52	peak	
6 *	921.9150	-76.45	19.25	-57.20	-13.00	-44.20	peak	

Test Mode : WCDMA Band V\_TX CH4182

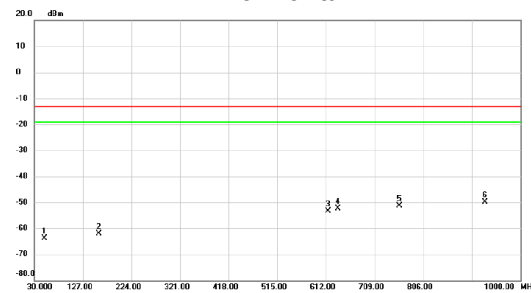
### Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	45.5200	-60.71	-2.09	-62.80	-13.00	-49.80	peak	
2	156.5850	-61.18	-1.71	-62.89	-13.00	-49.89	peak	
3	434.4900	-60.67	2.19	-58.48	-13.00	-45.48	peak	
4	617.3350	-59.47	6.08	-53.39	-13.00	-40.39	peak	
5	746.3450	-59.40	8.71	-50.69	-13.00	-37.69	peak	
6 *	956.8350	-60.65	10.37	-50.28	-13.00	-37.28	peak	

Test Mode : WCDMA Band V\_TX CH4182

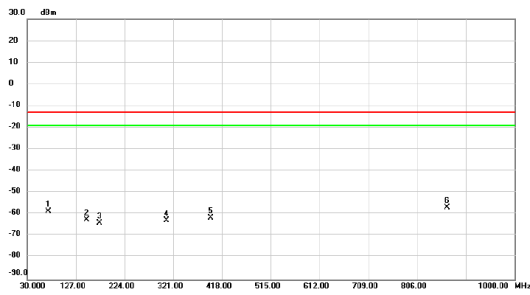
### Horizontal



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	49.4000	-61.83	-1.97	-63.80	-13.00	-50.80	peak	
2	158.0400	-60.44	-1.69	-62.13	-13.00	-49.13	peak	
3	616.8500	-59.32	6.07	-53.25	-13.00	-40.25	peak	
4	635.2800	-58.76	6.39	-52.37	-13.00	-39.37	peak	
5	758.9550	-60.14	8.87	-51.27	-13.00	-38.27	peak	
6 *	929.1900	-59.88	10.10	-49.78	-13.00	-36.78	peak	

Test Mode : LTE Band 5\_TX CH20525\_1.4MHz

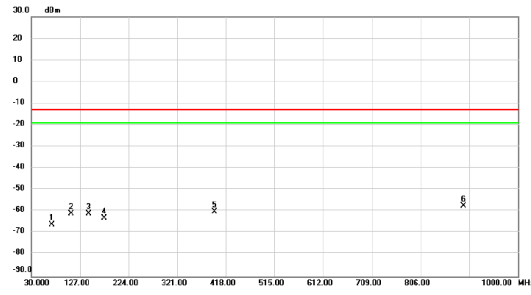
### Vertical



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1	71.7100	-53.57	-5.14	-58.71	-13.00	-45.71	peak	
2	148.3400	-59.95	-2.63	-62.58	-13.00	-49.58	peak	
3	174.0450	-60.64	-3.32	-63.96	-13.00	-50.96	peak	
4	307.4200	-60.70	-2.23	-62.93	-13.00	-49.93	peak	
5	395.2050	-61.08	-0.43	-61.51	-13.00	-48.51	peak	
6 *	866.6250	-63.58	6.86	-56.72	-13.00	-43.72	peak	

Test Mode : LTE Band 5\_TX CH20525\_1.4MHz

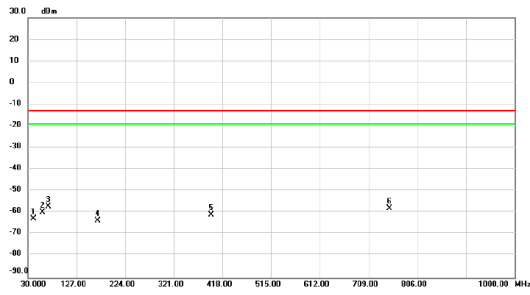
### Horizontal



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1	70.2550	-61.39	-4.80	-66.19	-13.00	-53.19	peak	
2	109.0550	-55.17	-5.91	-61.08	-13.00	-48.08	peak	
3	144.9450	-58.18	-2.87	-61.05	-13.00	-48.05	peak	
4	175.0150	-59.87	-3.43	-63.30	-13.00	-50.30	peak	
5	395.2050	-59.71	-0.43	-60.14	-13.00	-47.14	peak	
6 *	892.3300	-64.71	7.18	-57.53	-13.00	-44.53	peak	

Test Mode : LTE Band 5\_TX CH20525\_5MHz

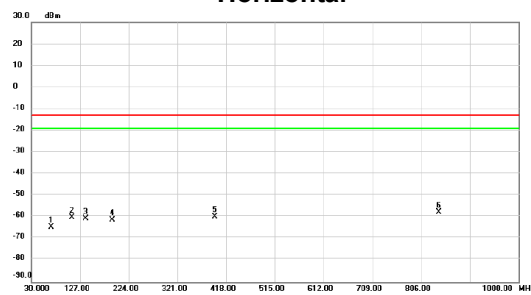
### Vertical



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1	40.8700	-59.79	-2.99	-62.78	-13.00	-49.78	peak	
2	58.6150	-56.77	-3.01	-59.78	-13.00	-46.78	peak	
3 *	71.2250	-52.15	-5.03	-57.18	-13.00	-44.18	peak	
4	169.1950	-60.98	-2.83	-63.81	-13.00	-50.81	peak	
5	395.2050	-60.53	-0.43	-60.96	-13.00	-47.96	peak	
6	750.7100	-64.41	6.44	-57.97	-13.00	-44.97	peak	

Test Mode : LTE Band 5\_TX CH20525\_5MHz

### Horizontal



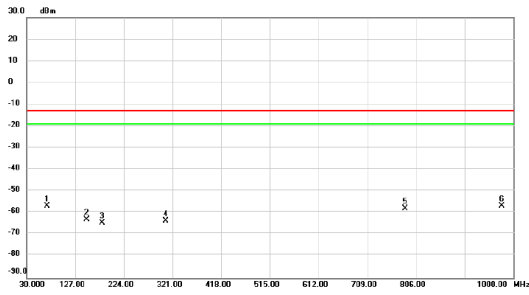
No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1	69.2850	-60.02	-4.61	-64.63	-13.00	-51.63	peak	
2	110.5100	-54.51	-5.75	-60.26	-13.00	-47.26	peak	
3	138.6400	-57.43	-3.29	-60.72	-13.00	-47.72	peak	
4	191.0200	-56.02	-5.27	-61.29	-13.00	-48.29	peak	
5	395.2050	-59.48	-0.43	-59.91	-13.00	-46.91	peak	
6 *	841.8900	-64.52	6.65	-57.87	-13.00	-44.87	peak	



Test Mode : LTE Band 5\_TX CH20525\_10MHz

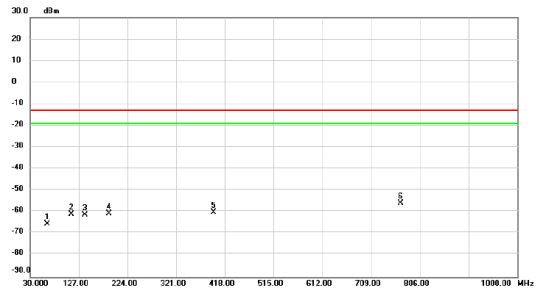
Test Mode : LTE Band 5\_TX CH20525\_10MHz

### Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	71.2250	-51.80	-5.03	-56.83	-13.00	-43.83	peak	
2	149.3100	-60.66	-2.57	-63.23	-13.00	-50.23	peak	
3	180.8350	-60.49	-4.10	-64.59	-13.00	-51.59	peak	
4	307.4200	-61.64	-2.23	-63.87	-13.00	-50.87	peak	
5	785.1450	-64.48	6.54	-57.94	-13.00	-44.94	peak	
6 *	976.7200	-64.60	7.88	-56.72	-13.00	-43.72	peak	

### Horizontal



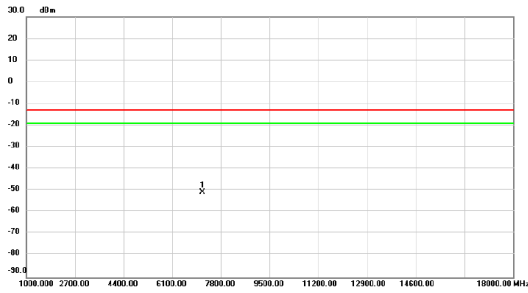
No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	64.4350	-61.89	-3.74	-65.63	-13.00	-52.63	peak	
2	112.4500	-55.35	-5.56	-60.91	-13.00	-47.91	peak	
3	139.6100	-58.07	-3.22	-61.29	-13.00	-48.29	peak	
4	186.6550	-56.00	-4.80	-60.80	-13.00	-47.80	peak	
5	395.2050	-59.68	-0.43	-60.11	-13.00	-47.11	peak	
6 *	768.1700	-62.44	6.49	-55.95	-13.00	-42.95	peak	

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

Test Mode : GSM850\_TX CH190\_EDGE

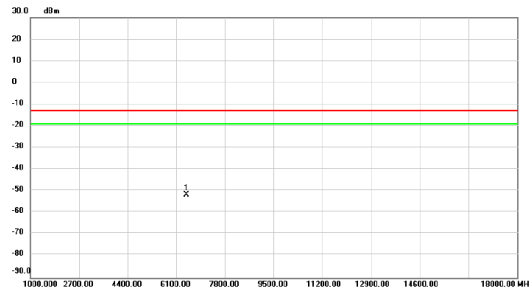
Test Mode : GSM850\_TX CH190\_EDGE

### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	7145.500	-56.91	6.03	-50.88	-13.00	-37.88	peak	

### Horizontal

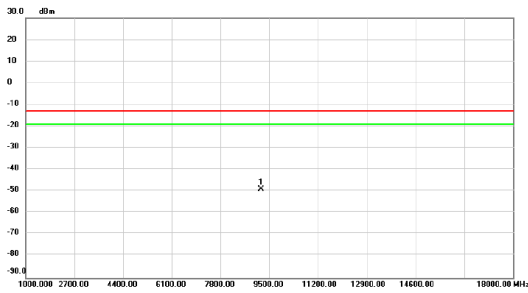


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	6457.000	-57.42	5.58	-51.84	-13.00	-38.84	peak	

Test Mode : WCDMA Band V\_TX CH4182

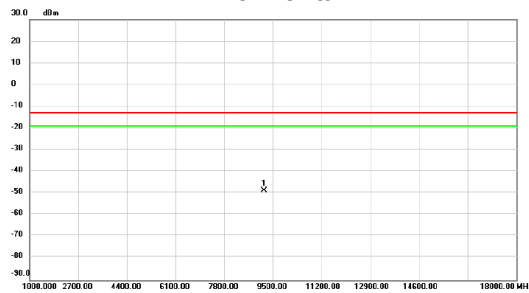
Test Mode : WCDMA Band V\_TX CH4182

### Vertical



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	9211.000	-56.13	7.09	-49.04	-13.00	-36.04	peak	

### Horizontal

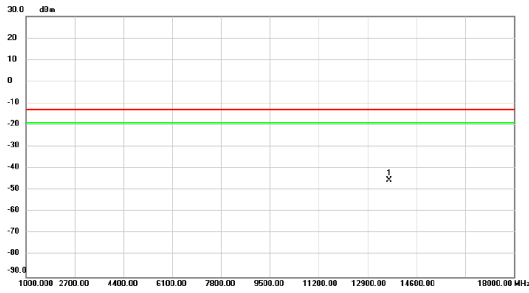


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	9194.000	-55.93	7.09	-48.84	-13.00	-35.84	peak	

Test Mode : LTE Band 5\_TX CH20525\_1.4MHz

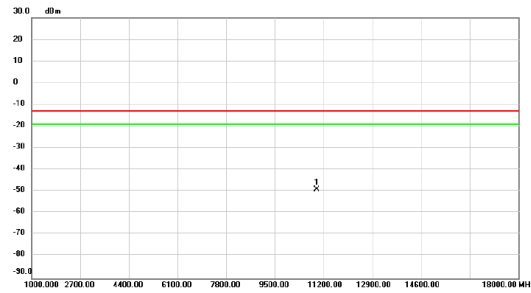
Test Mode : LTE Band 5\_TX CH20525\_1.4MHz

### Vertical



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	13665.00	-55.95	10.51	-45.44	-13.00	-32.44	peak	

### Horizontal

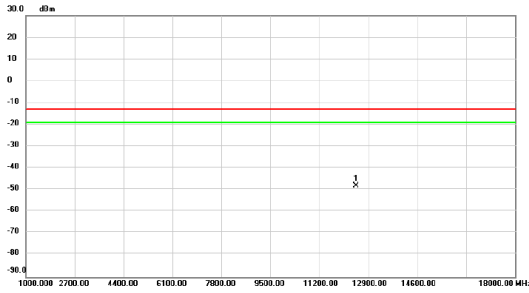


No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	10962.00	-57.16	8.20	-48.96	-13.00	-35.96	peak	

Test Mode : LTE Band 5\_TX CH20525\_5MHz

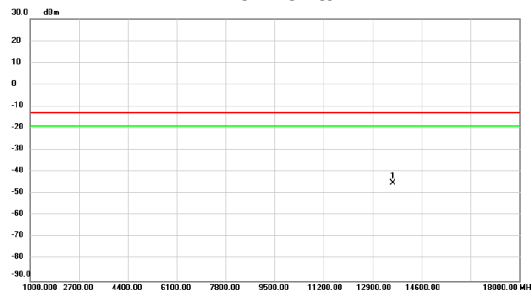
Test Mode : LTE Band 5\_TX CH20525\_5MHz

### Vertical



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	12483.50	-57.22	9.19	-48.03	-13.00	-35.03	peak	

### Horizontal

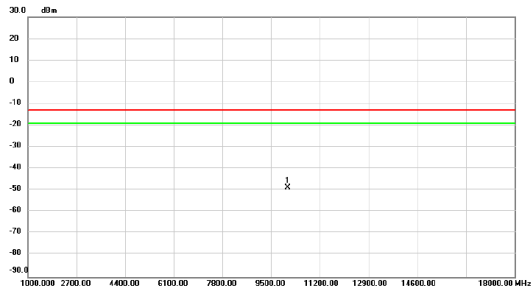


No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	13614.00	-55.79	10.52	-45.27	-13.00	-32.27	peak	

Test Mode : LTE Band 5\_TX CH20525\_10MHz

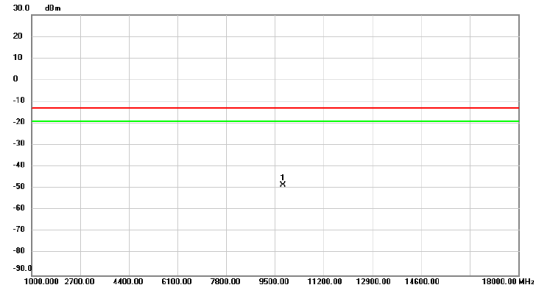
Test Mode : LTE Band 5\_TX CH20525\_10MHz

### Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	10078.00	-56.83	8.03	-48.80	-13.00	-35.80	peak	

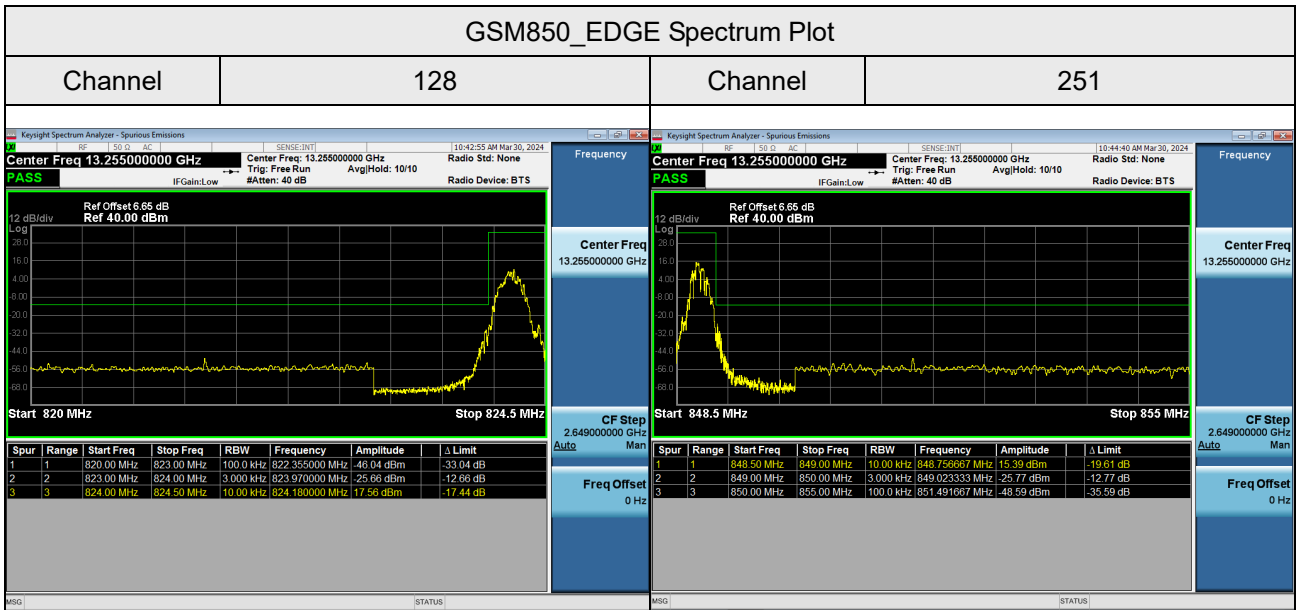
### Horizontal



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1 *	9789.000	-56.41	7.99	-48.42	-13.00	-35.42	peak	

## APPENDIX G - BAND EDGE

## GSM850\_EDGE Spectrum Plot

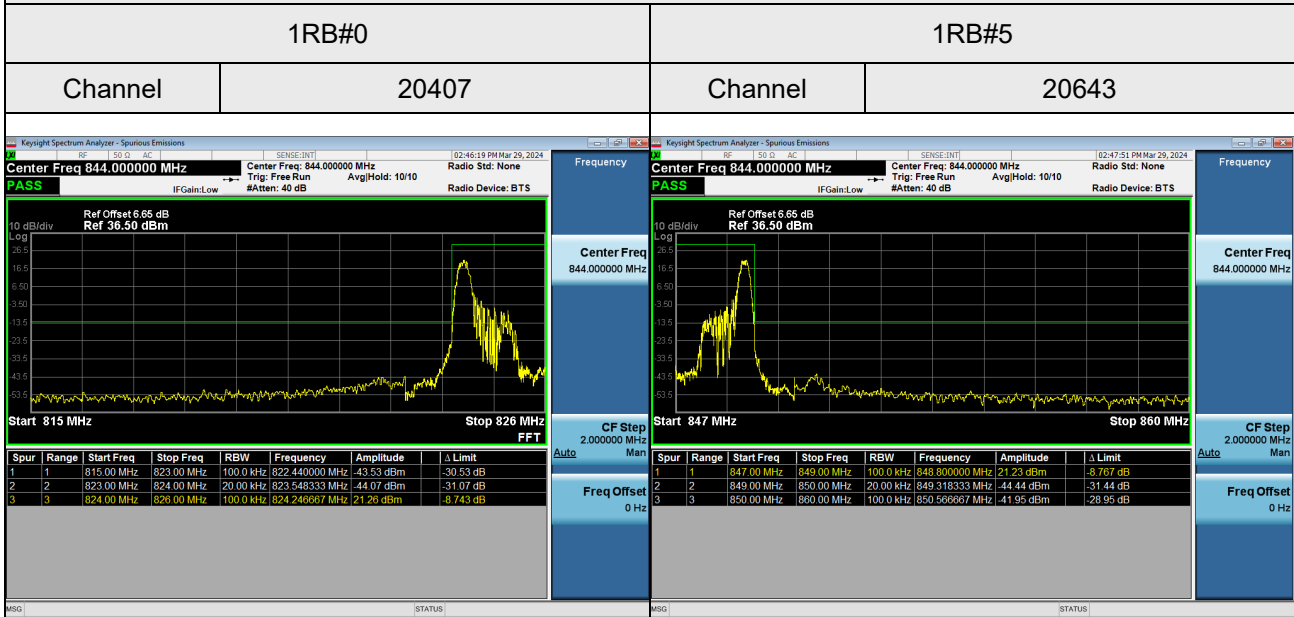


## WCDMA Band V\_WCDMA Spectrum Plot

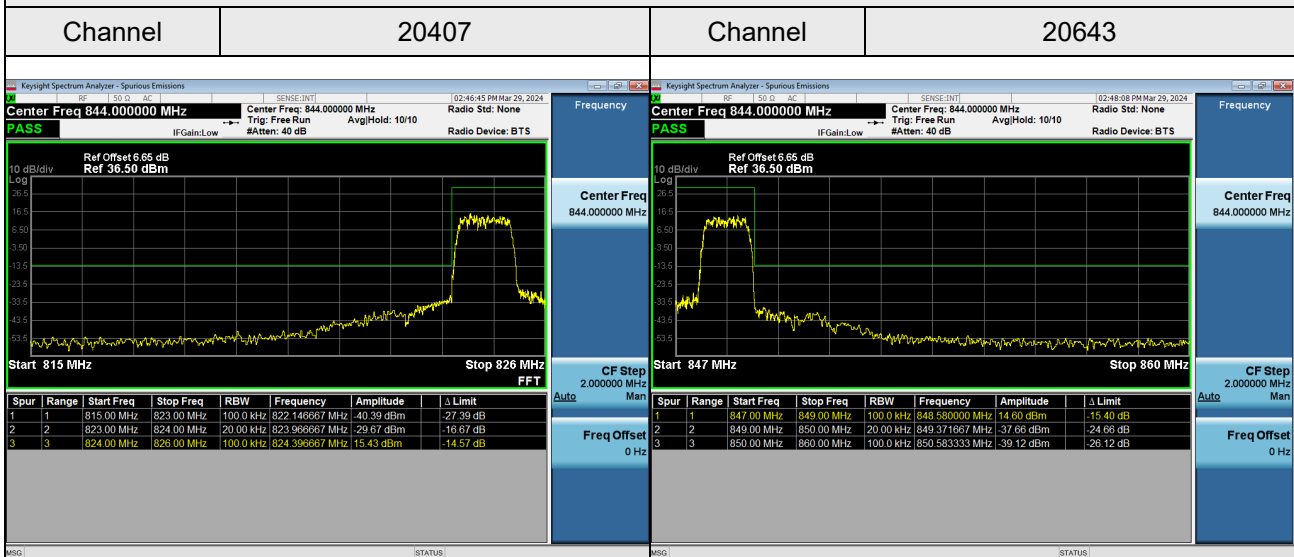




### LTE Band 5\_1.4MHz Spectrum Plot



### 6RB#0



## LTE Band 5\_3MHz Spectrum Plot

1RB#0

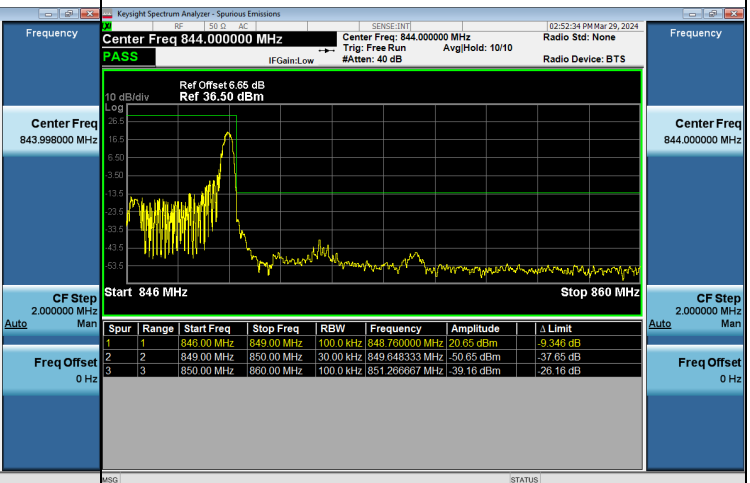
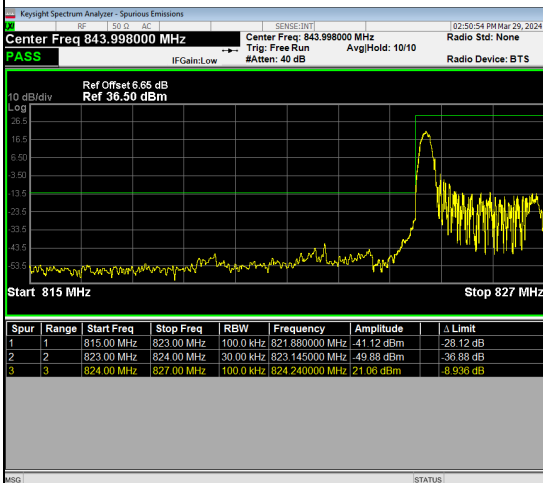
1RB#14

Channel

20415

Channel

20635



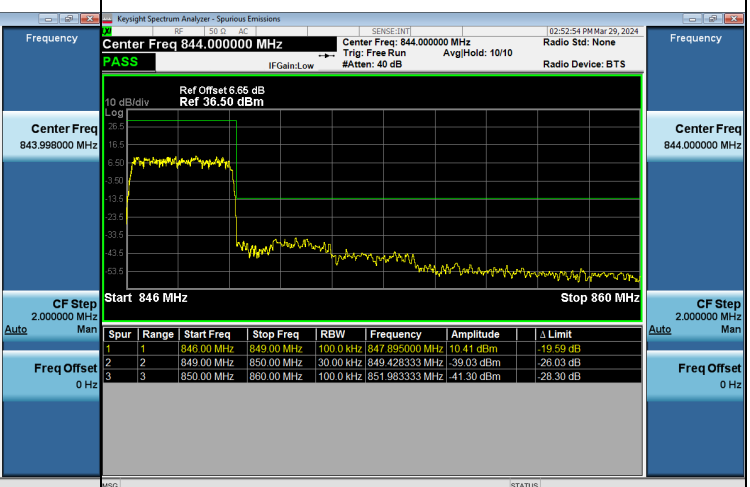
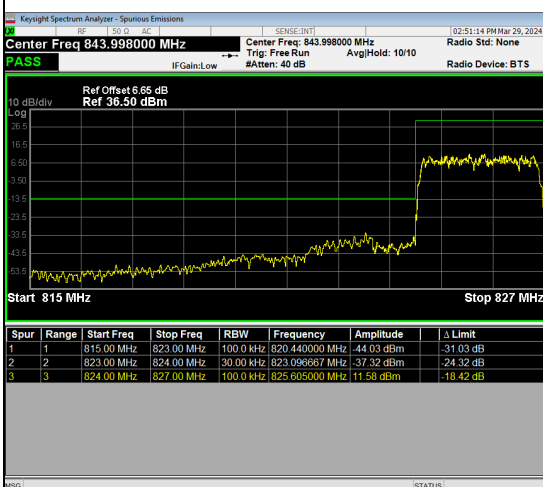
## 15RB#0

Channel

20415

Channel

20635



## LTE Band 5\_5MHz Spectrum Plot

1RB#0

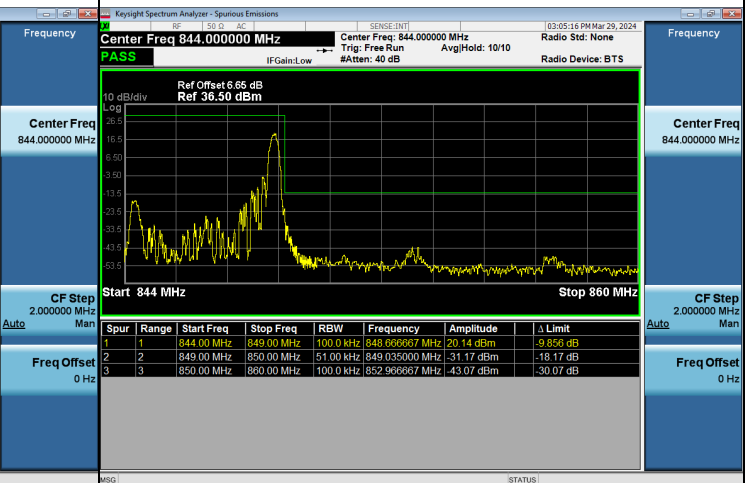
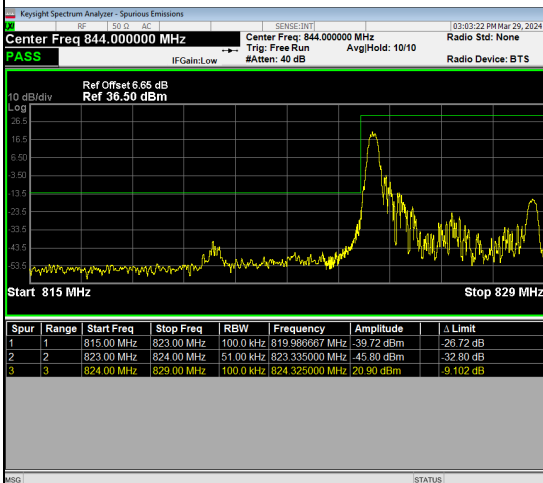
1RB#24

Channel

20425

Channel

20625



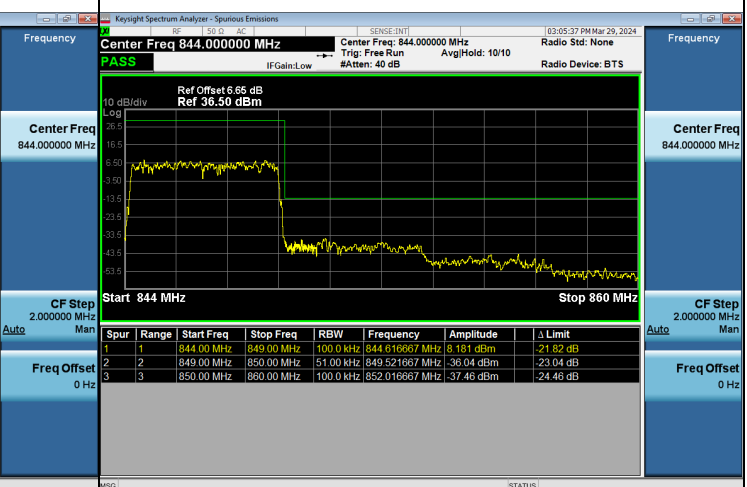
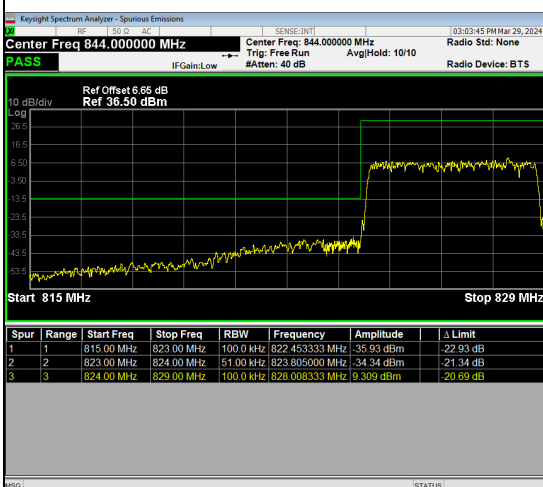
## 25RB#0

Channel

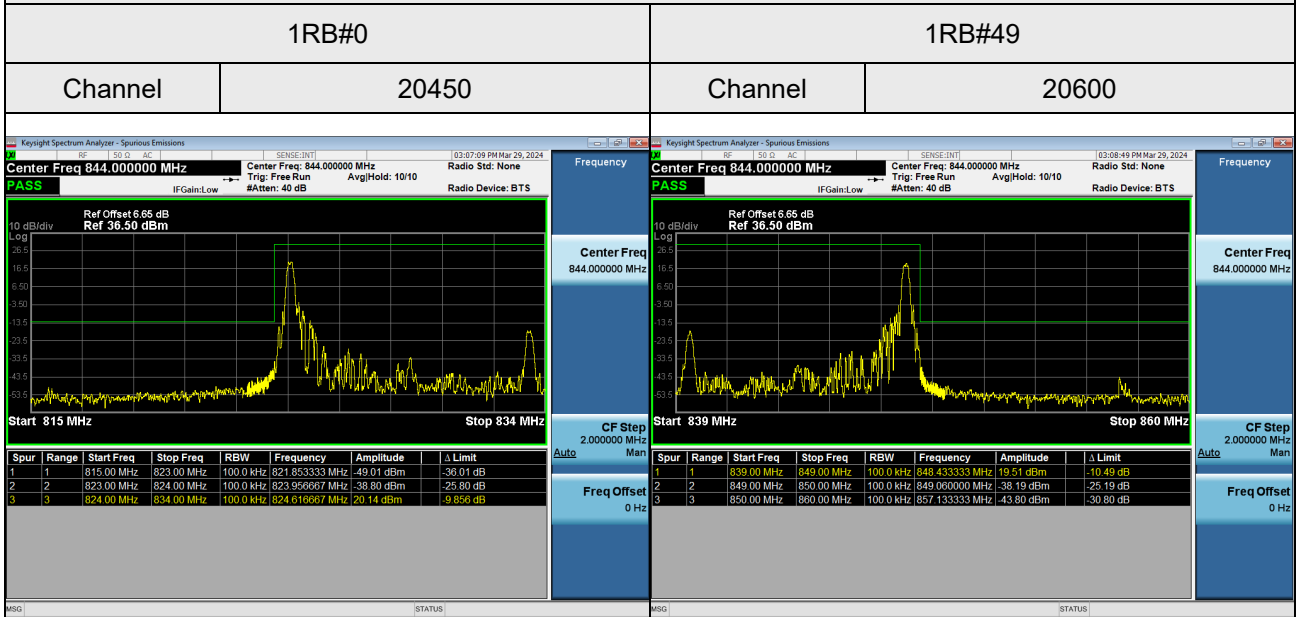
20425

Channel

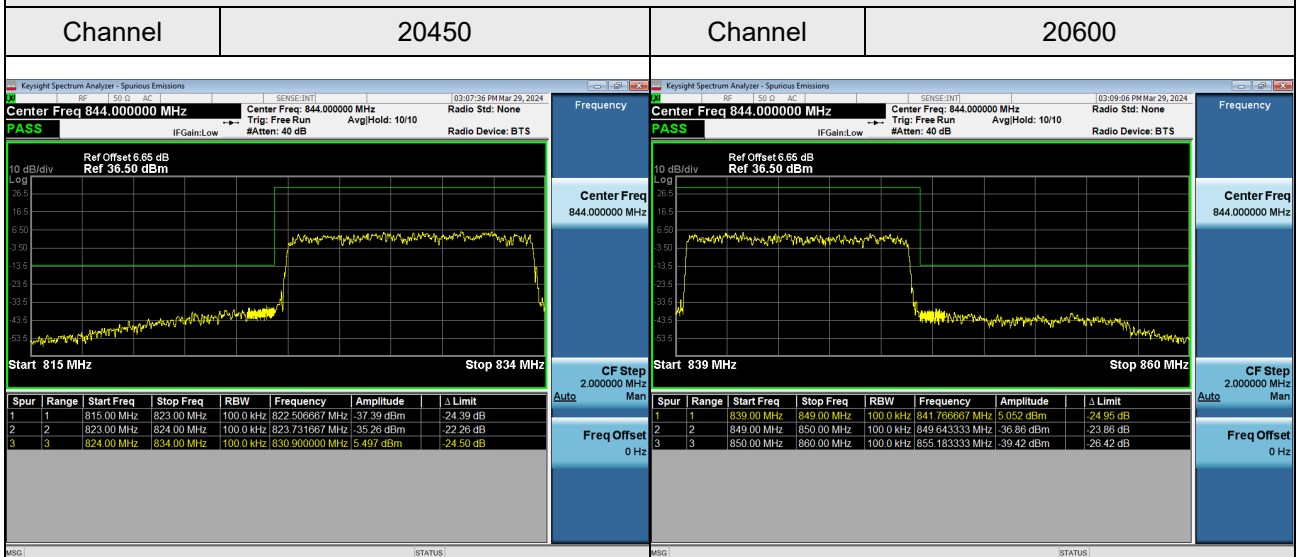
20625



### LTE Band 5\_10MHz Spectrum Plot

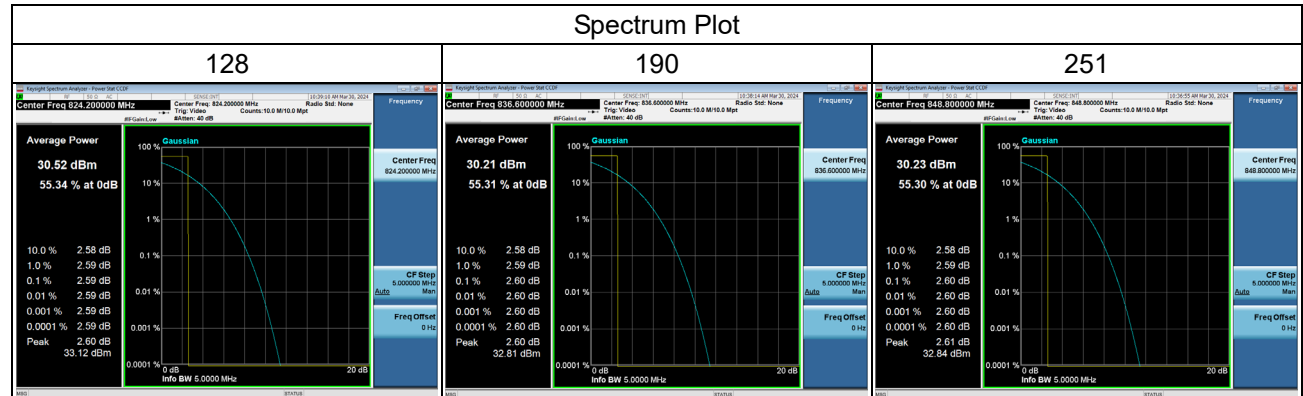


### 50RB#0

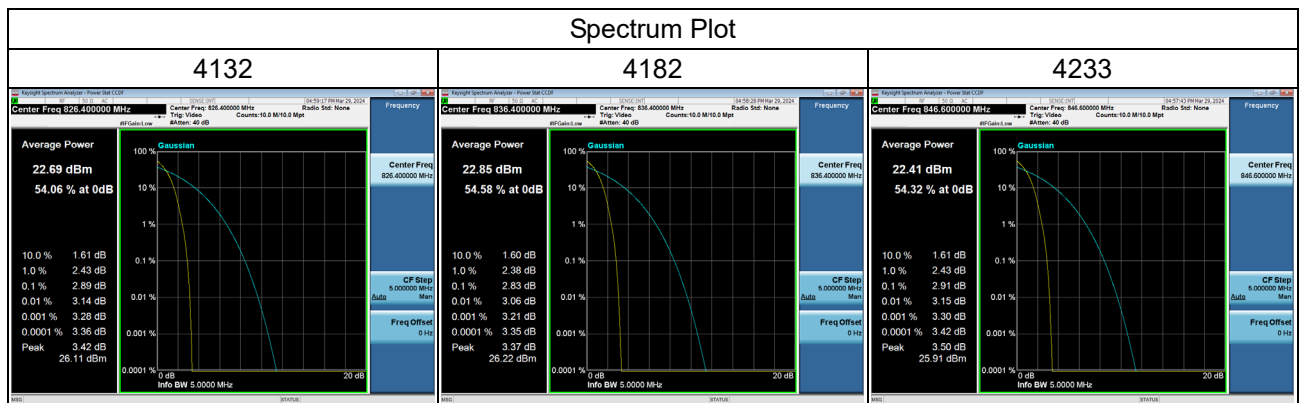


## APPENDIX H - PEAK TO AVERAGE RATIO

GSM 850_EDGE					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK			
128	824.2	2.59		13	Pass
190	836.6	2.60		13	Pass
251	848.8	2.60		13	Pass

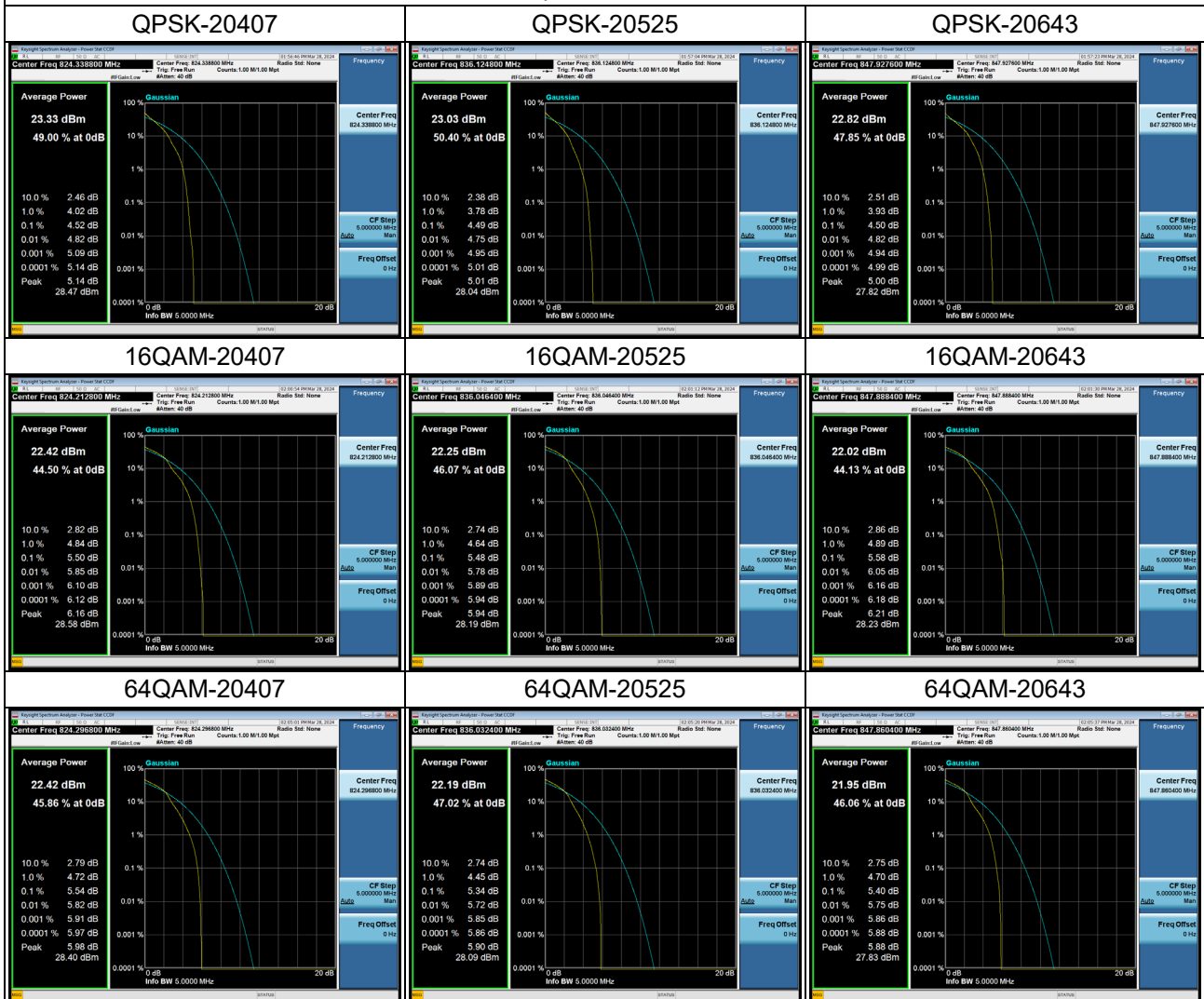


WCDMA Band V_WCDMA					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK			
4132	826.4	2.89		13	Pass
4182	836.4	2.83		13	Pass
4233	846.6	2.91		13	Pass



LTE Band 5_1.4MHz						
Channel	Frequency (MHz)	Peak To Average Ratio (dB)			Max. Limit (dB)	Result
		QPSK	16QAM	64QAM		
20407	824.7	4.52	5.50	5.54	13	Pass
20525	836.5	4.49	5.48	5.34	13	Pass
20643	848.3	4.50	5.58	5.40	13	Pass

## Spectrum Plot





LTE Band 5_3MHz							
Channel	Frequency (MHz)	Peak To Average Ratio (dB)			Max. Limit (dB)	Result	
		QPSK	16QAM	64QAM			
20415	825.5	4.70	5.62	5.61	13	Pass	
20525	836.5	4.55	5.50	5.43	13	Pass	
20635	847.5	4.68	5.71	5.39	13	Pass	

## Spectrum Plot

