

Three plots showing the frequency response of the system. Each plot displays the magnitude (blue line) and phase (green line) of the system's response. The x-axis represents frequency in Hz, and the y-axis represents magnitude in dB. The plots show a resonance peak at approximately 1.797 kHz. The first plot shows the magnitude response, the second shows the phase response, and the third shows the magnitude response with a red line indicating the -3 dB bandwidth.

Three plots showing the evolution of the 100 GeV electron beam energy spread over time. Each plot shows Ref (blue), Att (green), and SLD (red) energy spread components. The x-axis is time in ns, and the y-axis is energy spread in GeV. The plots show a sharp initial rise followed by a plateau.

Plot 1 (Left): Ref 20 dBm, Att 30 dB, SLD 30 dB. The energy spread components are shown. The Ref component (blue) shows a sharp rise from 0 to approximately 1.5 GeV at 1.5 ns, followed by a plateau. The Att component (green) shows a sharp rise from 0 to approximately 1.5 GeV at 1.5 ns, followed by a plateau. The SLD component (red) shows a sharp rise from 0 to approximately 1.5 GeV at 1.5 ns, followed by a plateau.

Plot 2 (Middle): Ref 20 dBm, Att 30 dB, SLD 30 dB. The energy spread components are shown. The Ref component (blue) shows a sharp rise from 0 to approximately 1.5 GeV at 1.5 ns, followed by a plateau. The Att component (green) shows a sharp rise from 0 to approximately 1.5 GeV at 1.5 ns, followed by a plateau. The SLD component (red) shows a sharp rise from 0 to approximately 1.5 GeV at 1.5 ns, followed by a plateau.

Plot 3 (Right): Ref 20 dBm, Att 30 dB, SLD 30 dB. The energy spread components are shown. The Ref component (blue) shows a sharp rise from 0 to approximately 1.5 GeV at 1.5 ns, followed by a plateau. The Att component (green) shows a sharp rise from 0 to approximately 1.5 GeV at 1.5 ns, followed by a plateau. The SLD component (red) shows a sharp rise from 0 to approximately 1.5 GeV at 1.5 ns, followed by a plateau.

Three plots showing the frequency response of the system. The left plot shows the magnitude response (dB) versus frequency (Hz) from 0 to 100 Hz. The middle plot shows the phase response (deg) versus frequency (Hz) from 0 to 100 Hz. The right plot shows the group delay (ms) versus frequency (Hz) from 0 to 100 Hz. All plots show a sharp peak at 0 Hz and a sharp drop at 100 Hz.

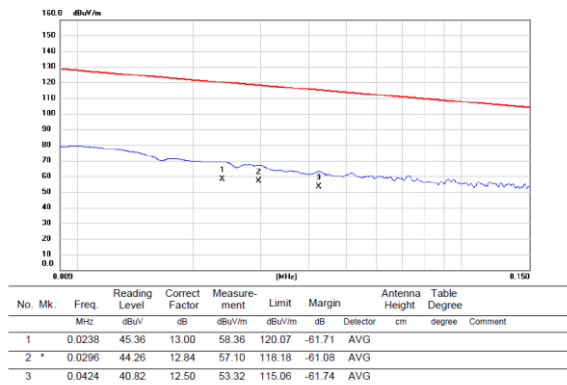
[illegible]

Three plots showing the frequency response of a 1000 Hz sine wave. Each plot displays the magnitude spectrum (blue line) and the phase spectrum (green line). The top plot shows the full frequency range from 0 to 10 kHz. The middle plot shows a zoomed-in view of the 0 to 2 kHz range. The bottom plot shows a zoomed-in view of the 0 to 2 kHz range with a different frequency resolution.

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

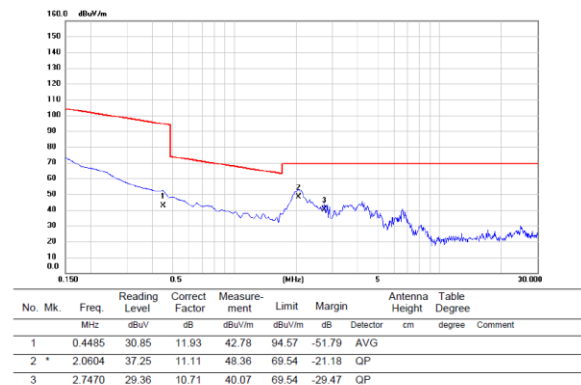
Test Mode : TX Mode

Ant 0°



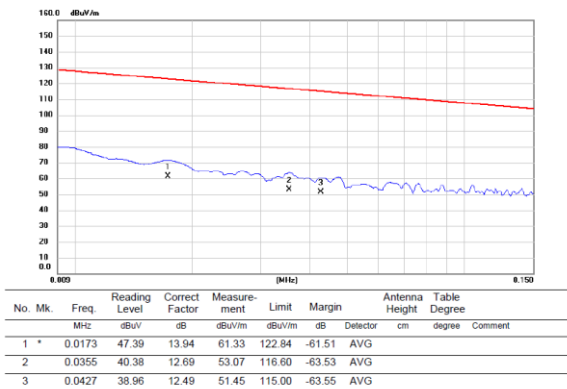
Test Mode : TX Mode

Ant 0°



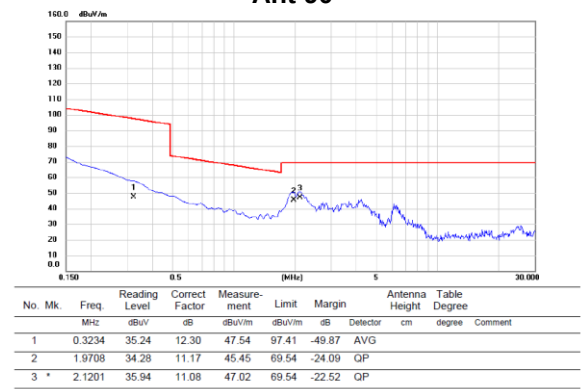
Test Mode : TX Mode

Ant 90°



Test Mode : TX Mode

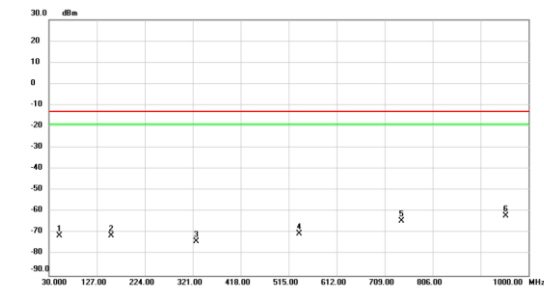
Ant 90°



APPENDIX E - RADIATED SPURIOUS EMISSIONS (30MHZ TO 1GHZ)

Test Mode : LTE Band 4_TX CH20175_1.4MHz

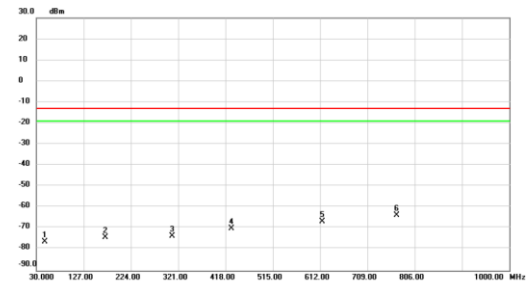
Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	50.8550	-59.64	-11.55	-71.19	-13.00	-58.19	peak	
2	155.6150	-59.55	-11.67	-71.22	-13.00	-58.22	peak	
3	328.2750	-63.54	-10.54	-74.08	-13.00	-61.08	peak	
4	536.8250	-64.15	-6.26	-70.41	-13.00	-57.41	peak	
5	743.4350	-62.22	-2.22	-64.44	-13.00	-51.44	peak	
6 *	953.4400	-61.79	-0.16	-61.95	-13.00	-48.95	peak	

Test Mode : LTE Band 4_TX CH20175_1.4MHz

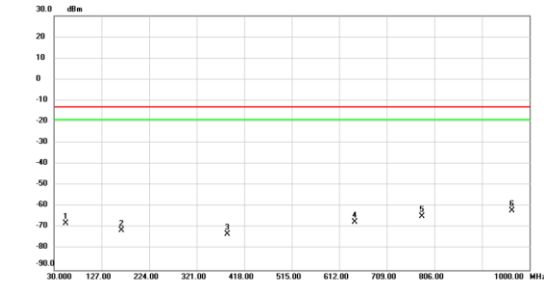
Horizontal



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	46.9750	-64.70	-11.62	-76.32	-13.00	-63.32	peak	
2	171.6200	-62.07	-12.23	-74.30	-13.00	-61.30	peak	
3	308.3900	-62.42	-11.08	-73.50	-13.00	-60.50	peak	
4	430.6100	-61.85	-8.19	-70.04	-13.00	-57.04	peak	
5	616.3650	-62.51	-4.21	-66.72	-13.00	-53.72	peak	
6 *	769.6250	-61.93	-1.96	-63.89	-13.00	-50.89	peak	

Test Mode : LTE Band 4_TX CH20175_5MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	54.2500	-56.43	-11.67	-68.10	-13.00	-55.10	peak	
2	168.2250	-59.33	-11.99	-71.32	-13.00	-58.32	peak	
3	384.0500	-63.62	-9.45	-73.07	-13.00	-60.07	peak	
4	643.5250	-63.41	-3.96	-67.37	-13.00	-54.37	peak	
5	780.2950	-62.76	-1.87	-64.63	-13.00	-51.63	peak	
6 *	964.5950	-61.94	-0.06	-62.00	-13.00	-49.00	peak	

Test Mode : LTE Band 4_TX CH20175_5MHz

Horizontal

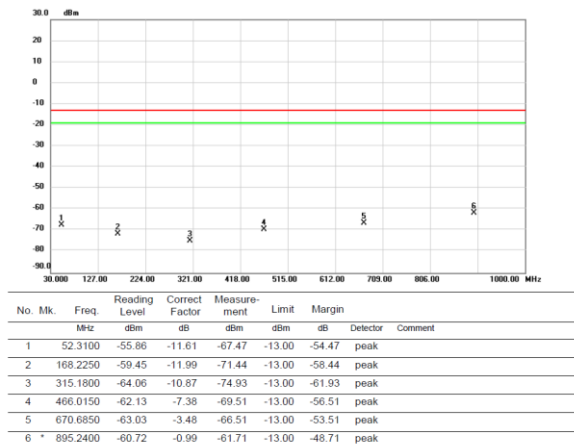


No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	40.1850	-64.33	-12.13	-76.46	-13.00	-63.46	peak	
2	154.6450	-63.27	-11.67	-74.94	-13.00	-61.94	peak	
3	323.4250	-62.94	-10.65	-73.59	-13.00	-60.59	peak	
4	501.4200	-63.07	-6.90	-69.97	-13.00	-56.97	peak	
5	707.5450	-62.49	-2.76	-65.25	-13.00	-52.25	peak	
6 *	921.4300	-61.19	-0.65	-61.84	-13.00	-48.84	peak	

Test Mode : LTE Band 4_TX CH20175_20MHz

Test Mode : LTE Band 4_TX CH20175_20MHz

Vertical



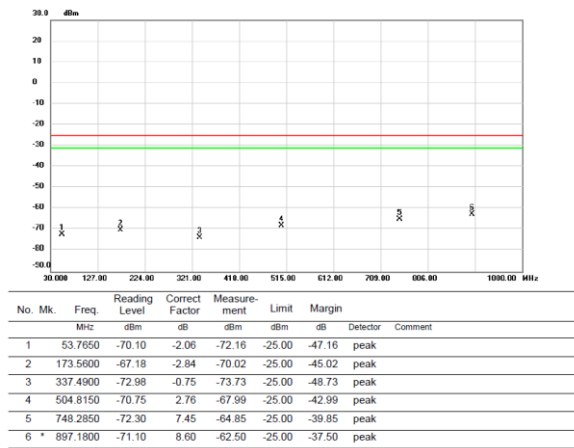
Horizontal



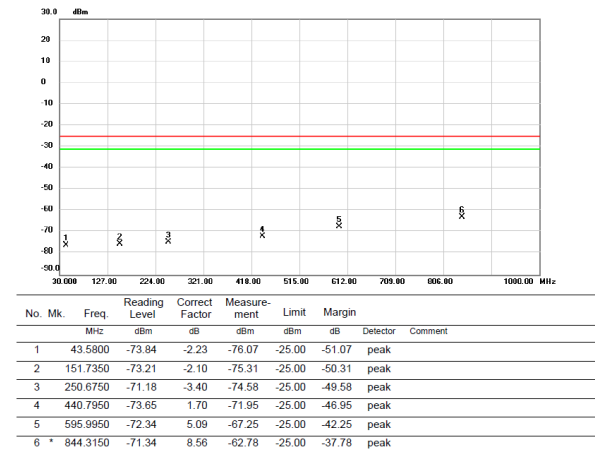
Test Mode : LTE Band 7_TX CH21100_5MHz

Test Mode : LTE Band 7_TX CH21100_5MHz

Vertical



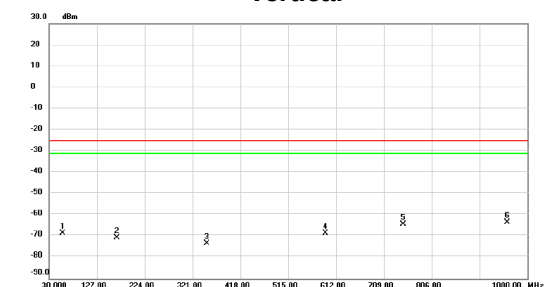
Horizontal



Test Mode : LTE Band 7_TX CH21100_20MHz

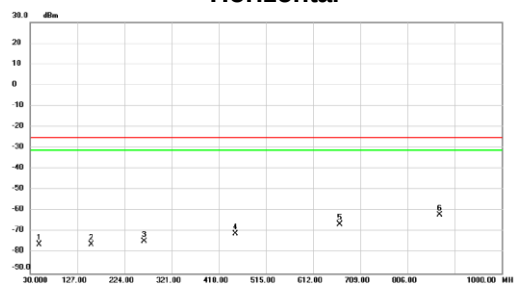
Test Mode : LTE Band 7_TX CH21100_20MHz

Vertical



No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	57.1600	-66.09	-2.32	-68.41	-25.00	-43.41	peak	
2	168.2250	-68.32	-2.40	-70.72	-25.00	-45.72	peak	
3	350.1000	-72.88	-0.61	-73.49	-25.00	-48.49	peak	
4	591.1450	-73.45	4.94	-68.51	-25.00	-43.51	peak	
5	748.2850	-71.74	7.45	-64.29	-25.00	-39.29	peak	
6 *	958.7750	-72.91	9.48	-63.43	-25.00	-38.43	peak	

Horizontal

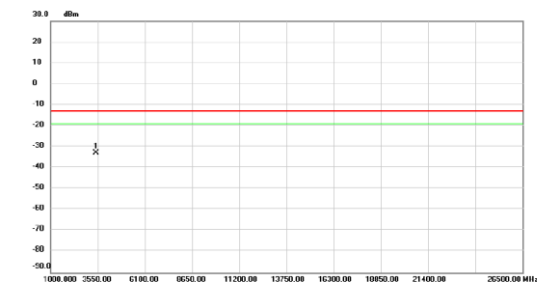


No. Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measurement dBm	Limit dBm	Margin dB	Detector	Comment
1	48.9150	-73.98	-1.98	-75.94	-25.00	-50.94	peak	
2	155.6150	-73.87	-2.08	-75.95	-25.00	-50.95	peak	
3	265.2250	-71.66	-2.87	-74.53	-25.00	-49.53	peak	
4	452.4350	-72.90	2.01	-70.89	-25.00	-45.89	peak	
5	666.3200	-72.38	6.03	-66.35	-25.00	-41.35	peak	
6 *	872.4450	-70.51	8.62	-61.89	-25.00	-36.89	peak	

APPENDIX F - RADIATED SPURIOUS EMISSIONS (ABOVE 1GHZ)

Test Mode : LTE Band 4_TX CH20175_1.4MHz

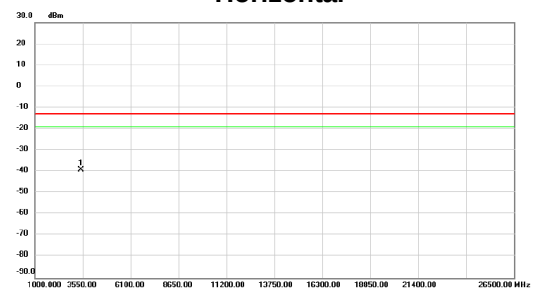
Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBm	dB	dBm	dBm	dB		
1	*	3460.750	-30.63	-2.10	-32.73	-13.00	-19.73	peak	

Test Mode : LTE Band 4_TX CH20175_1.4MHz

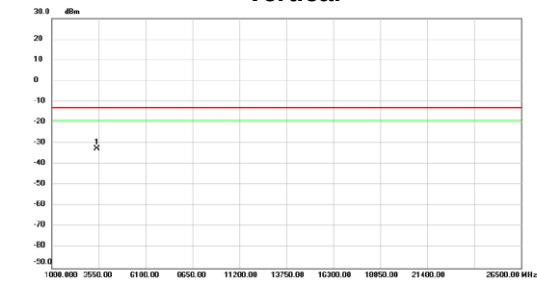
Horizontal



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBm	dB	dBm	dBm	dB		
1	*	3460.750	-36.93	-2.10	-39.03	-13.00	-26.03	peak	

Test Mode : LTE Band 4_TX CH20175_5MHz

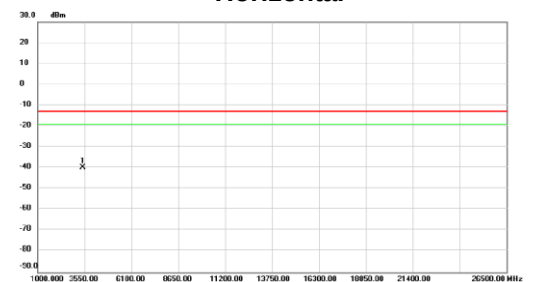
Vertical



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBm	dB	dBm	dBm	dB		
1	*	3460.750	-30.55	-2.10	-32.65	-13.00	-19.65	peak	

Test Mode : LTE Band 4_TX CH20175_5MHz

Horizontal

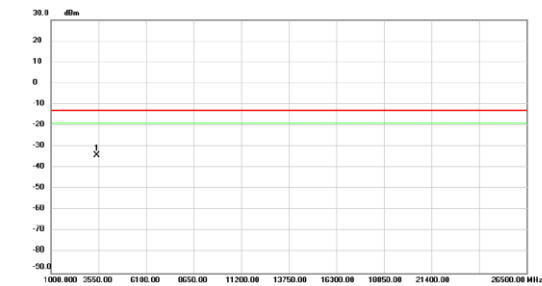


No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Margin		
		MHz	Level	Factor	ment			Detector	Comment
			dBm	dB	dBm	dBm	dB		
1	*	3460.750	-37.63	-2.10	-39.73	-13.00	-26.73	peak	

Test Mode : LTE Band 4_TX CH20175_20MHz

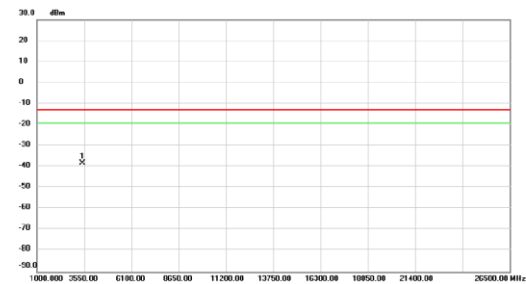
Test Mode : LTE Band 4_TX CH20175_20MHz

Vertical



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	3460.750	-31.83	-2.10	-33.93	-13.00	-20.93	peak	

Horizontal

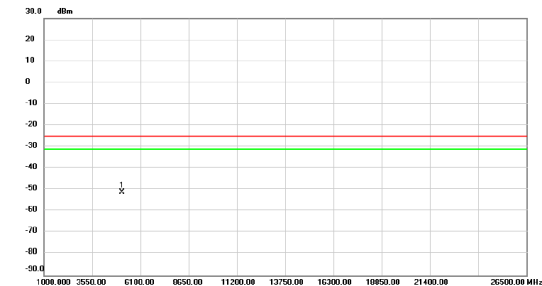


No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	3460.750	-36.25	-2.10	-38.35	-13.00	-25.35	peak	

Test Mode : LTE Band 7_TX CH21100_5MHz

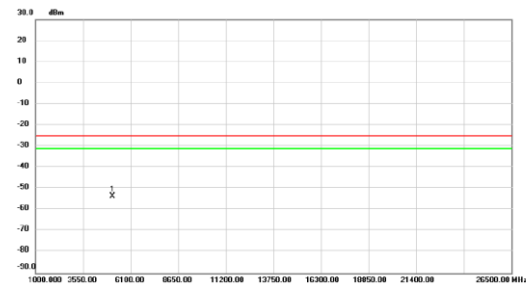
Test Mode : LTE Band 7_TX CH21100_5MHz

Vertical



No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	5118.250	-65.48	14.41	-51.07	-25.00	-26.07	peak	

Horizontal

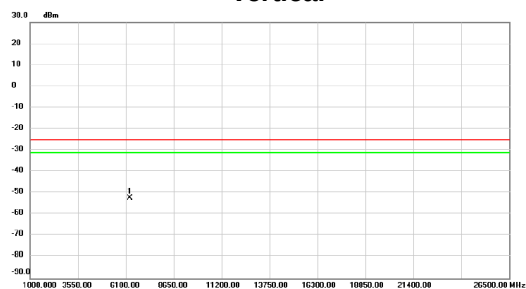


No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	5118.250	-67.96	14.41	-53.55	-25.00	-28.55	peak	

Test Mode : LTE Band 7_TX CH21100_20MHz

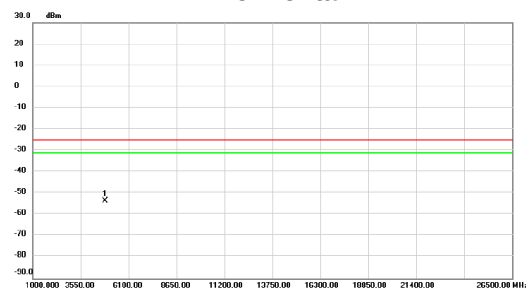
Test Mode : LTE Band 7_TX CH21100_20MHz

Vertical



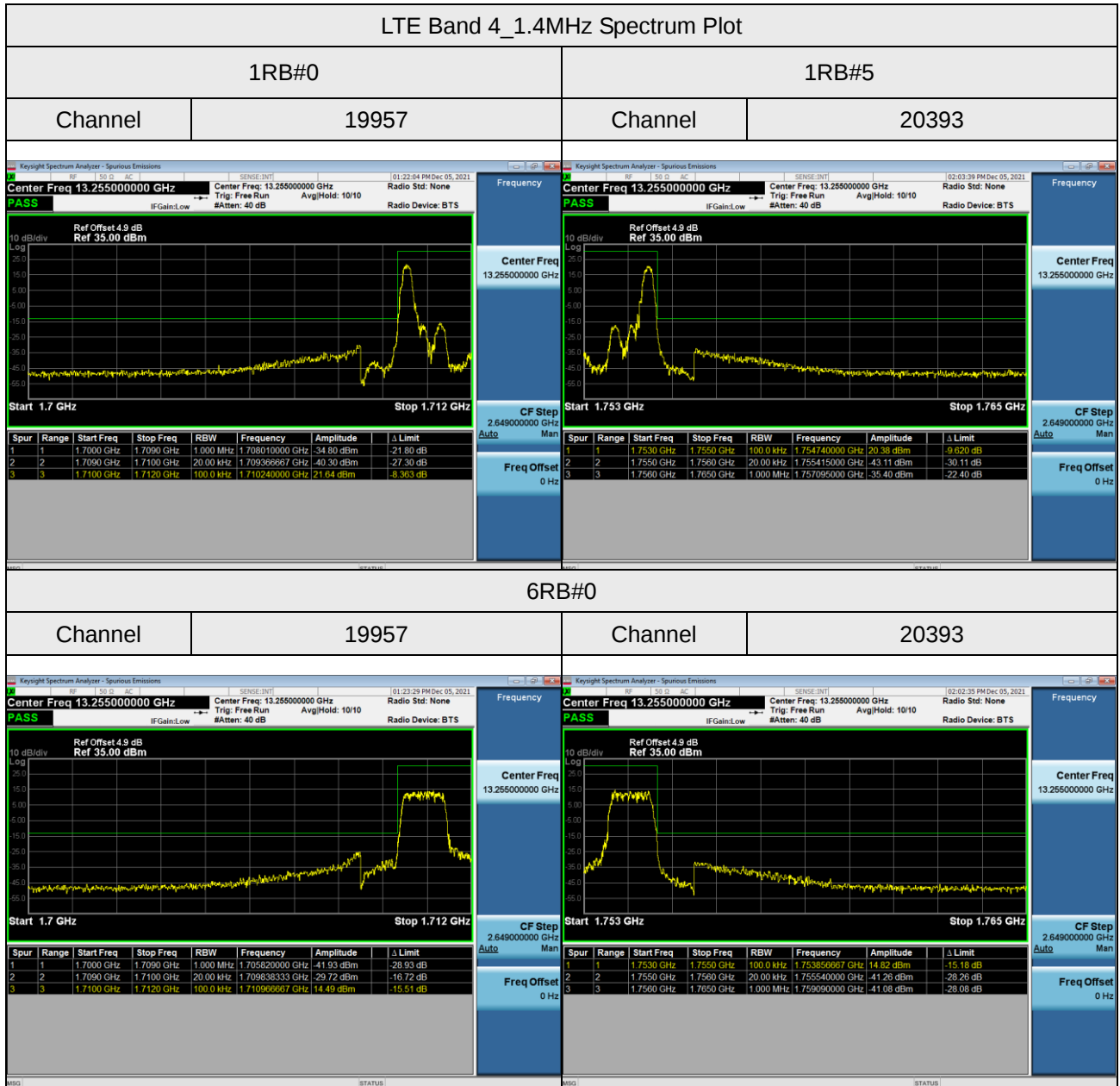
No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	6316.750	-69.96	17.74	-52.22	-25.00	-27.22	peak	

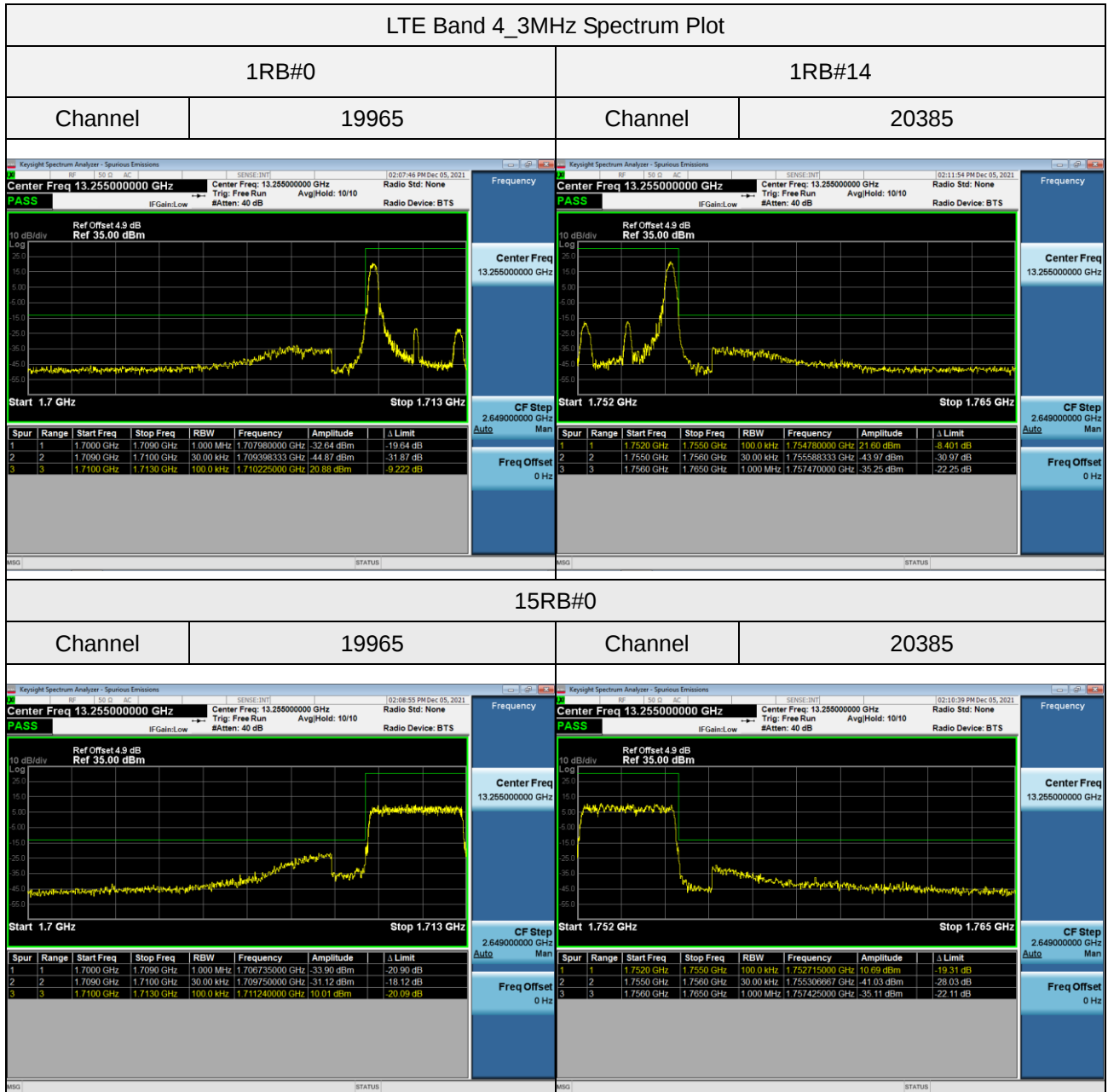
Horizontal

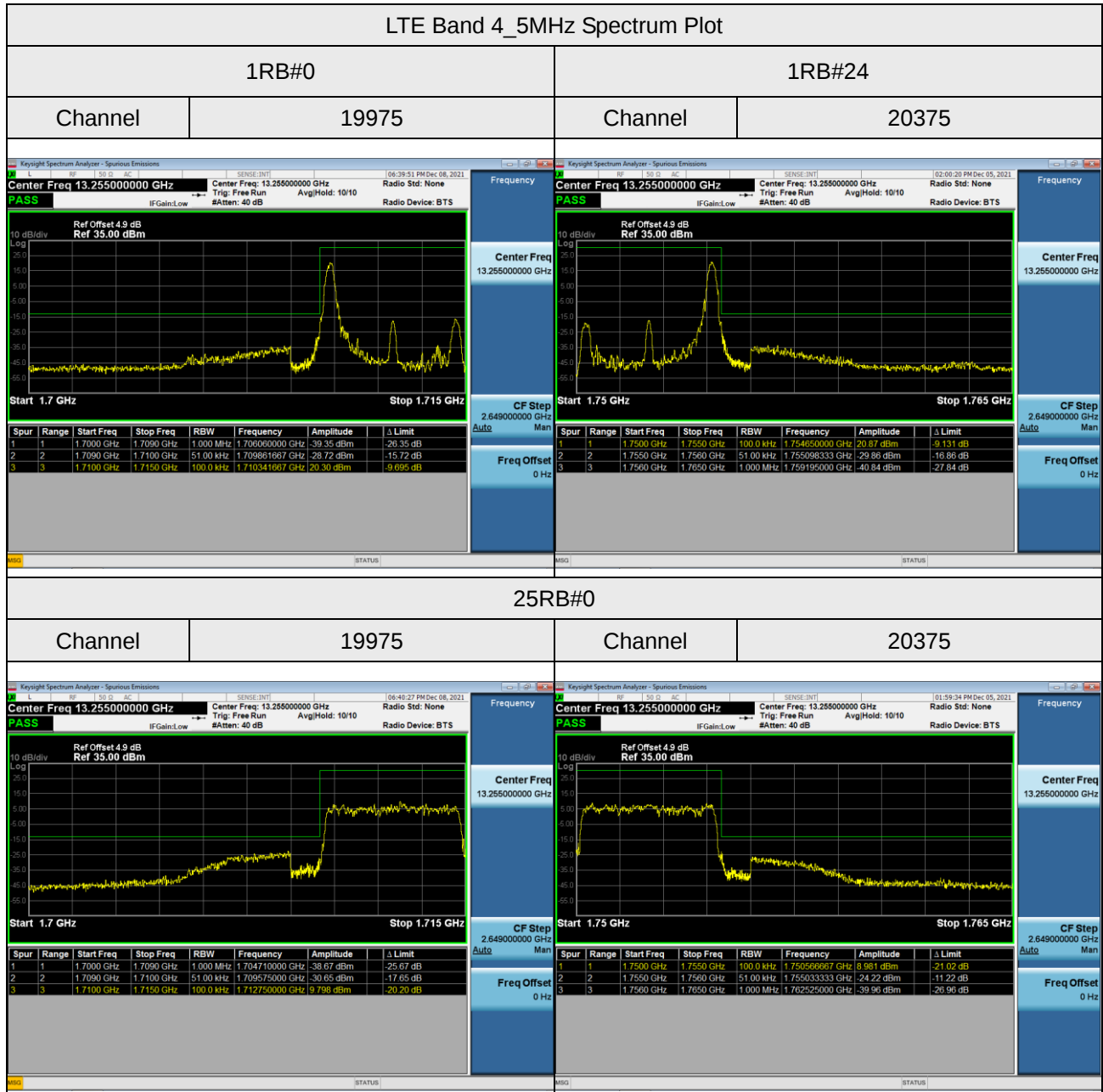


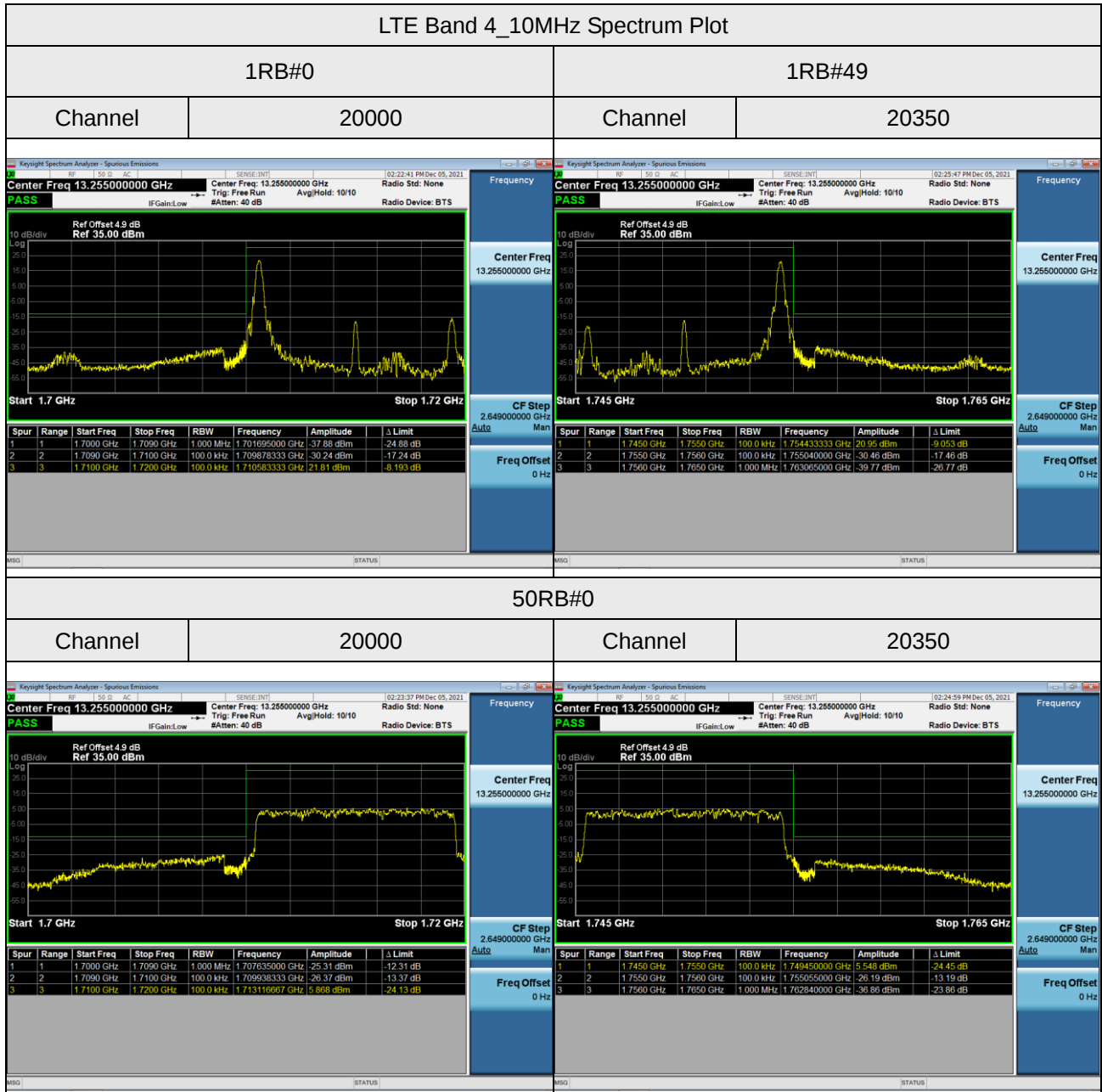
No. Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Margin	Detector	Comment
	MHz	dBm	dB	dBm	dBm	dB		
1 *	4863.250	-67.51	13.92	-53.59	-25.00	-28.59	peak	

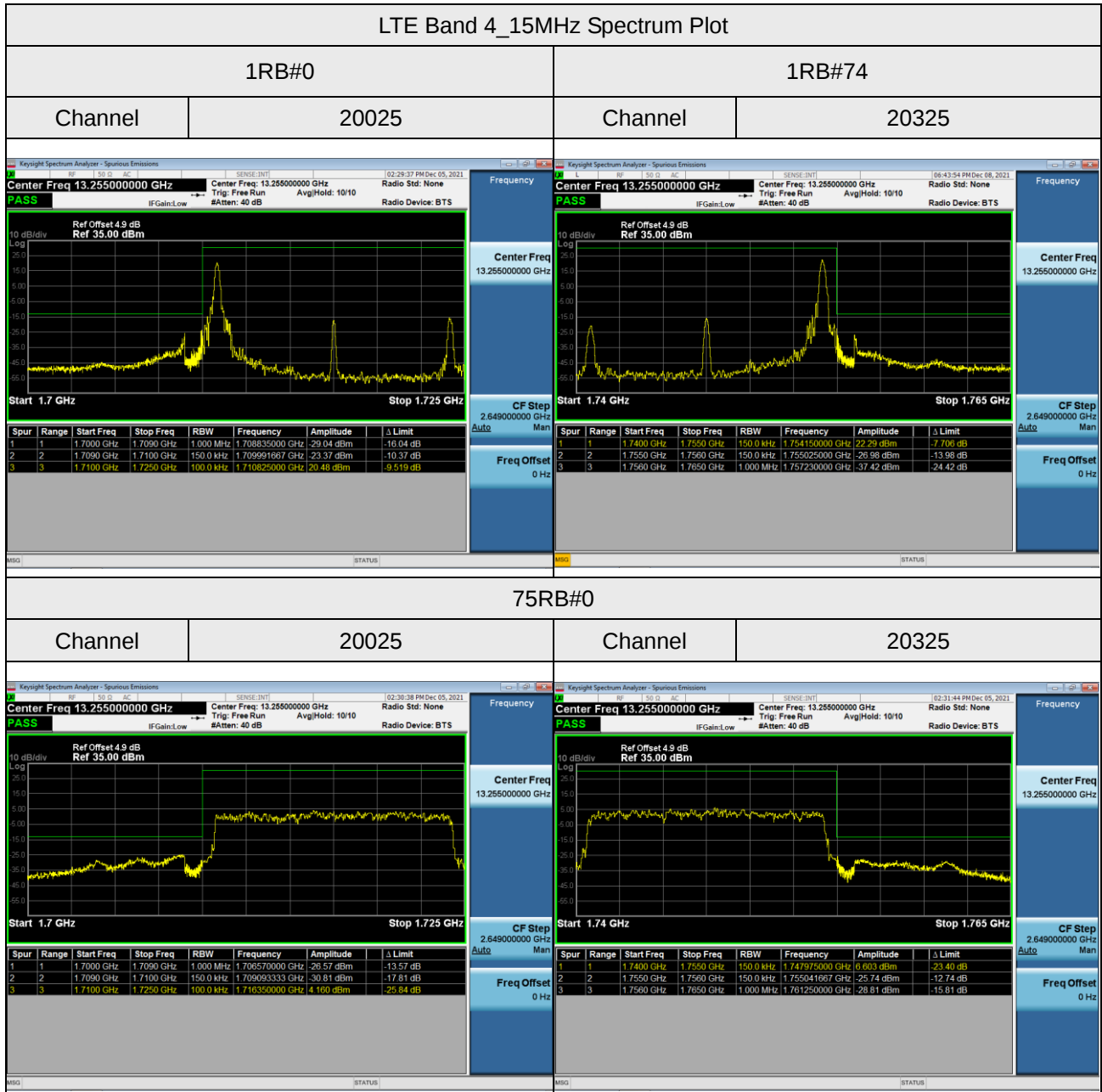
APPENDIX G - BAND EDGE

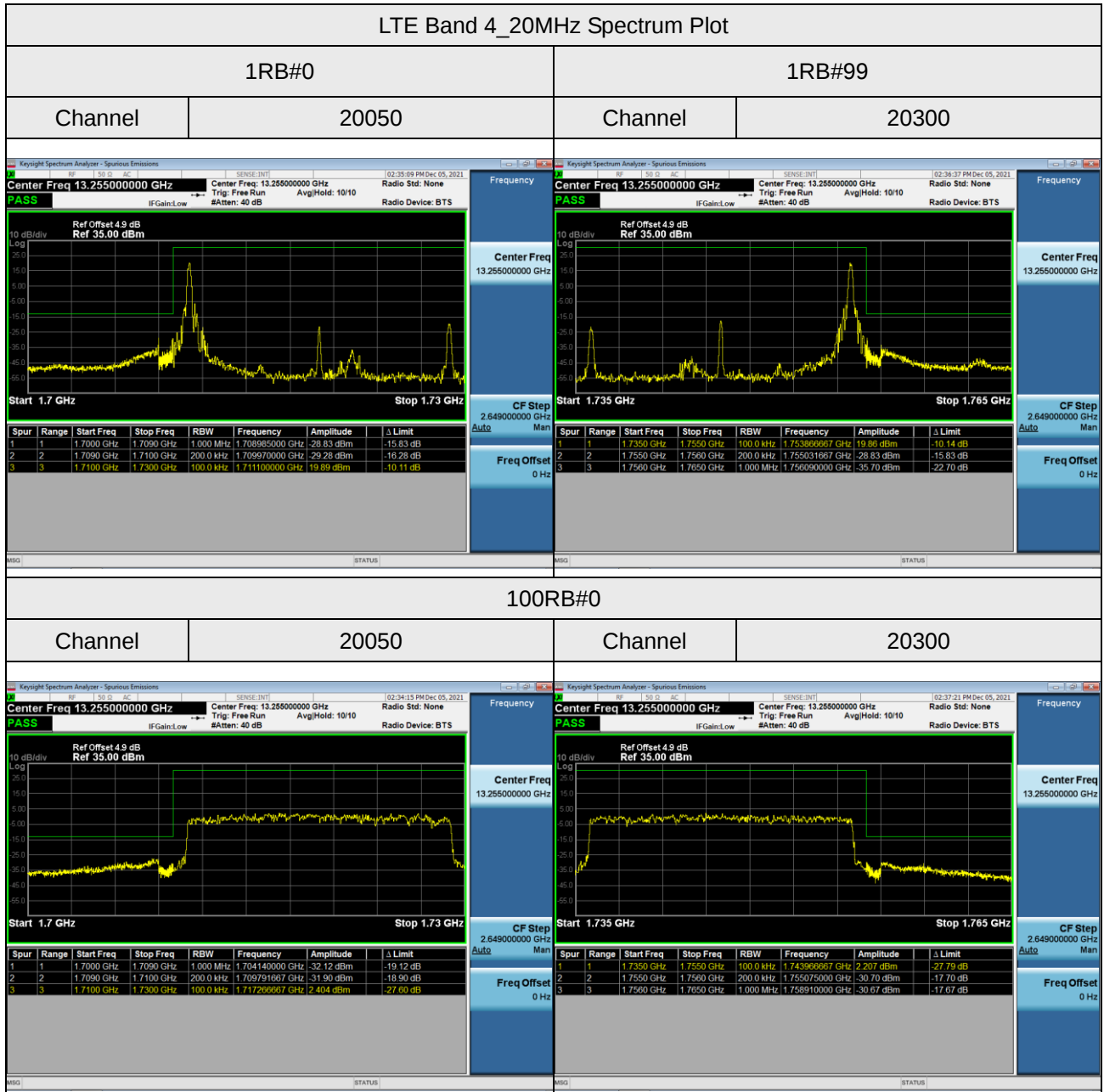


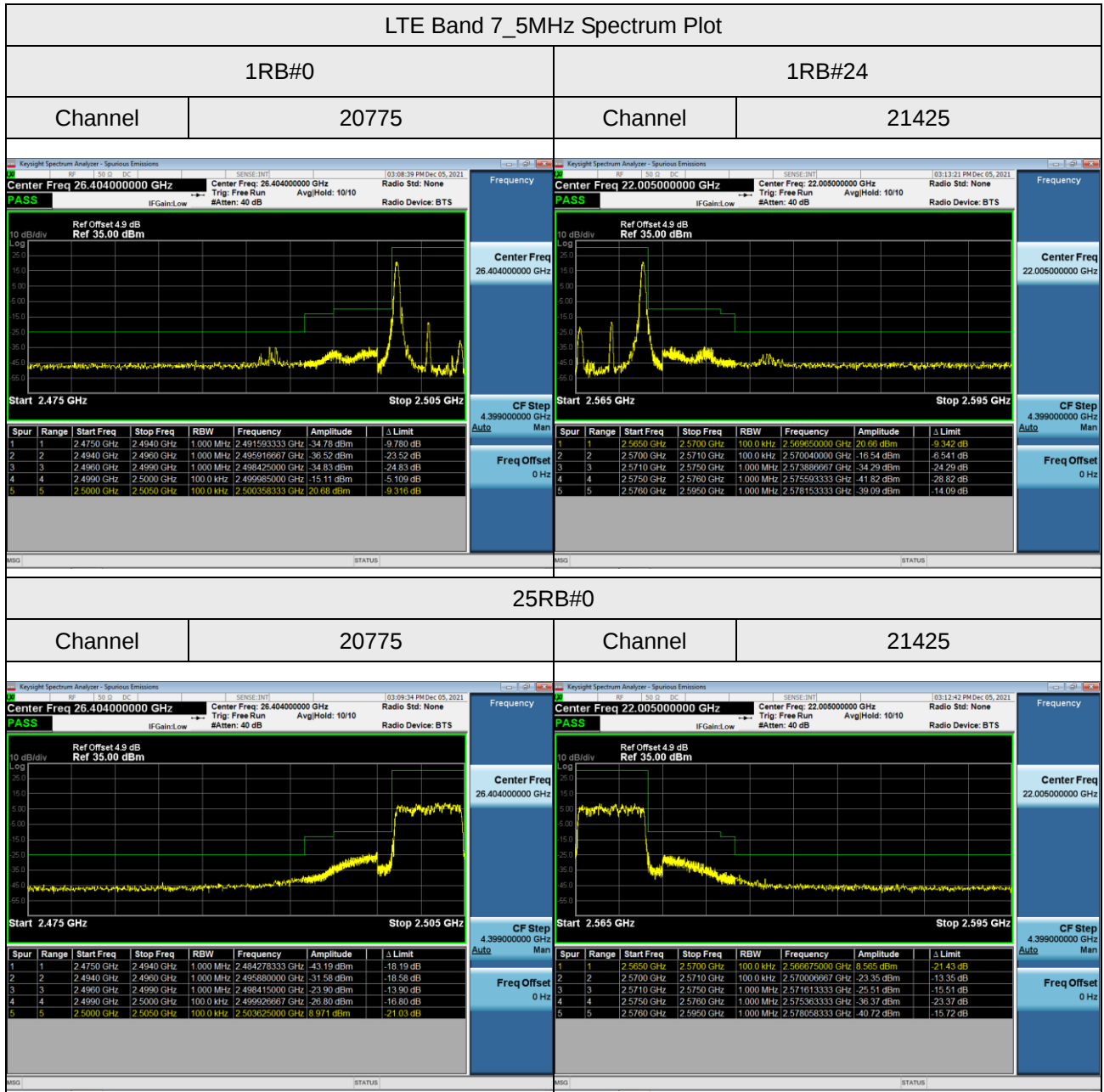


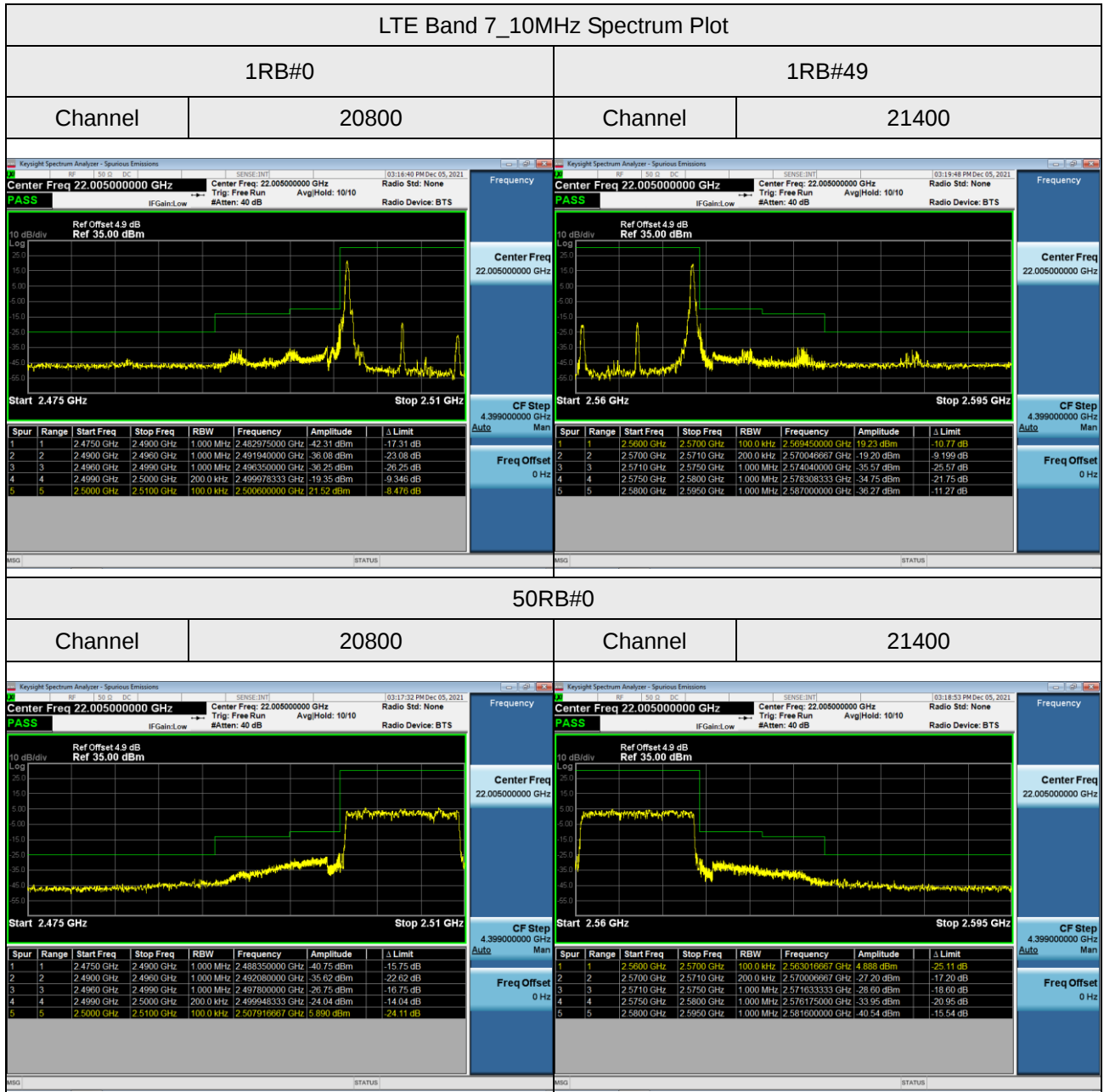


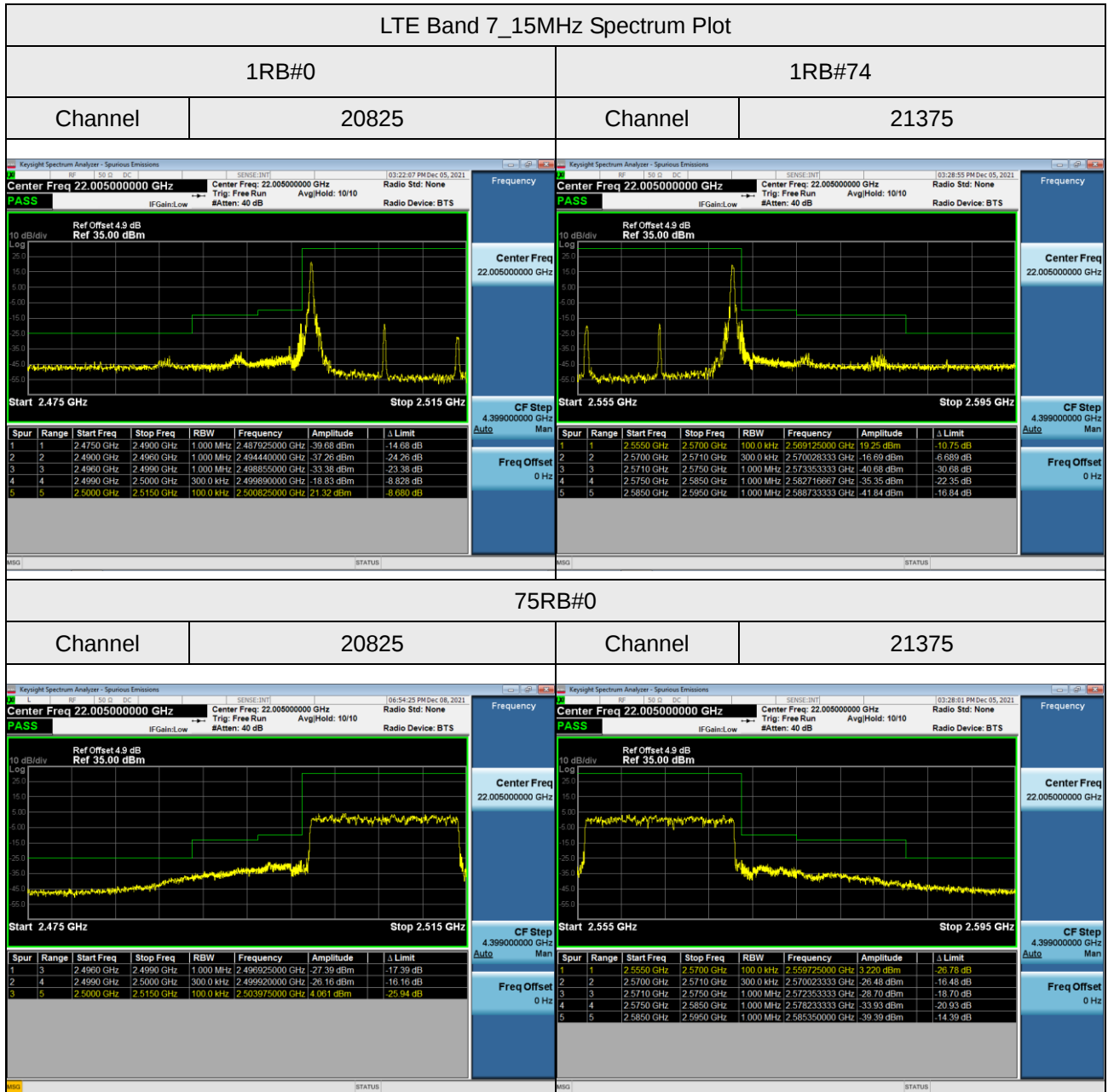


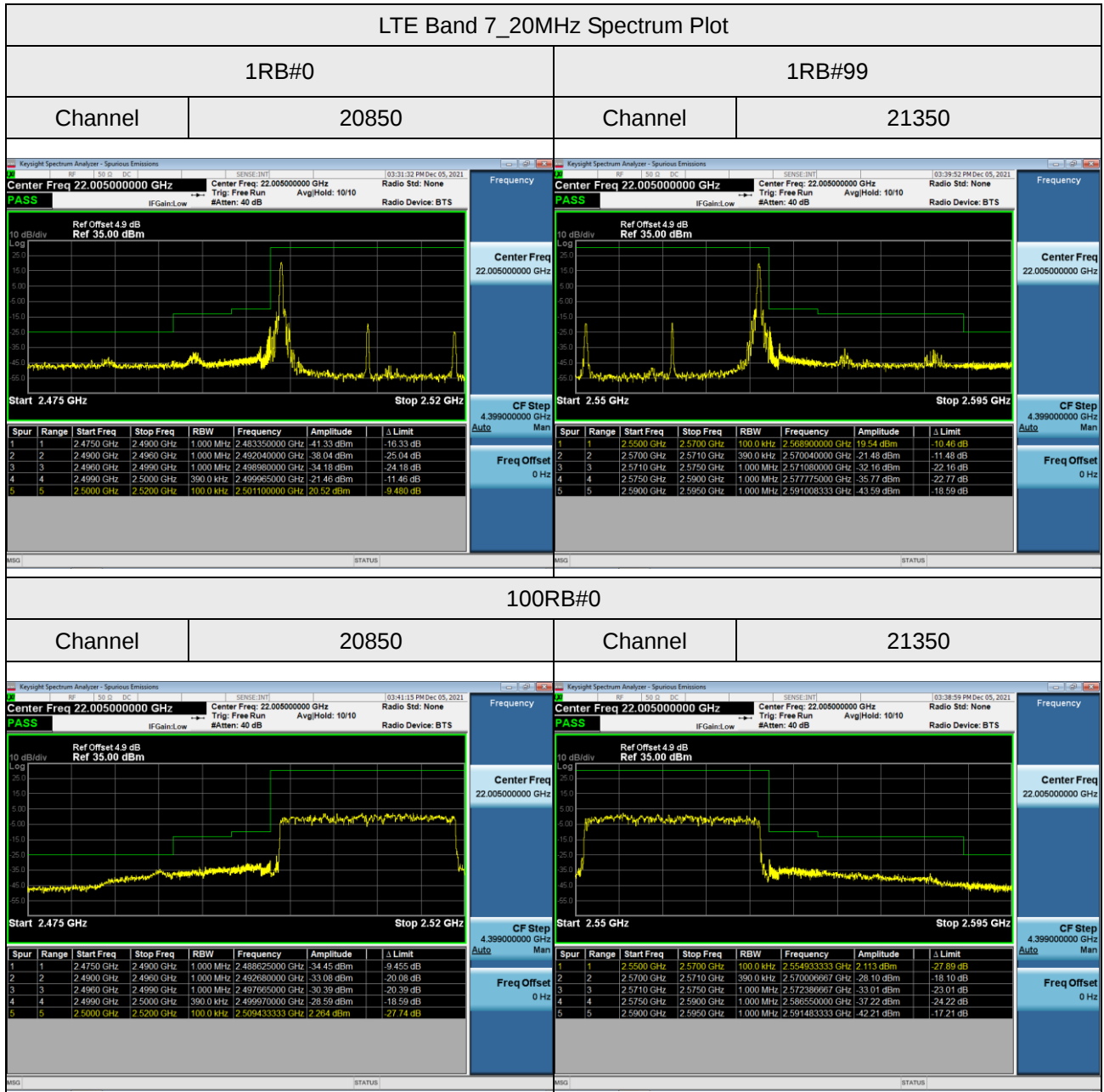






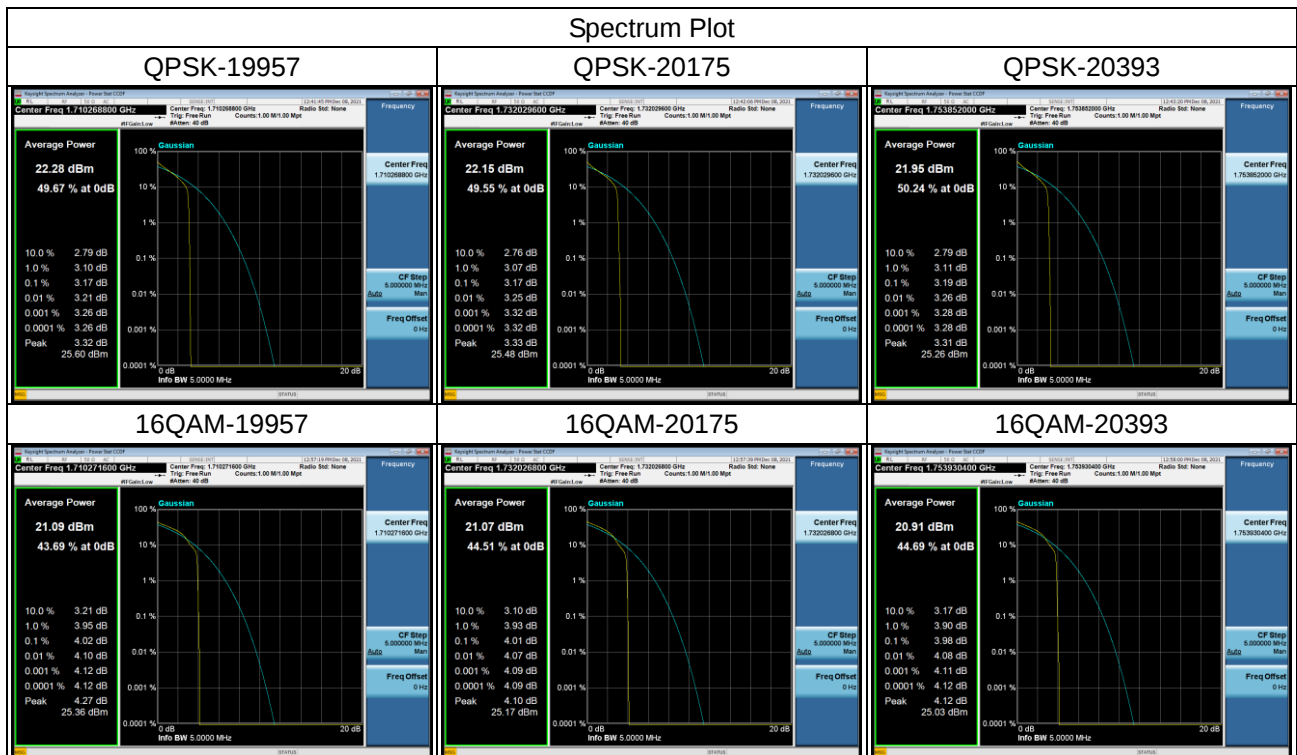




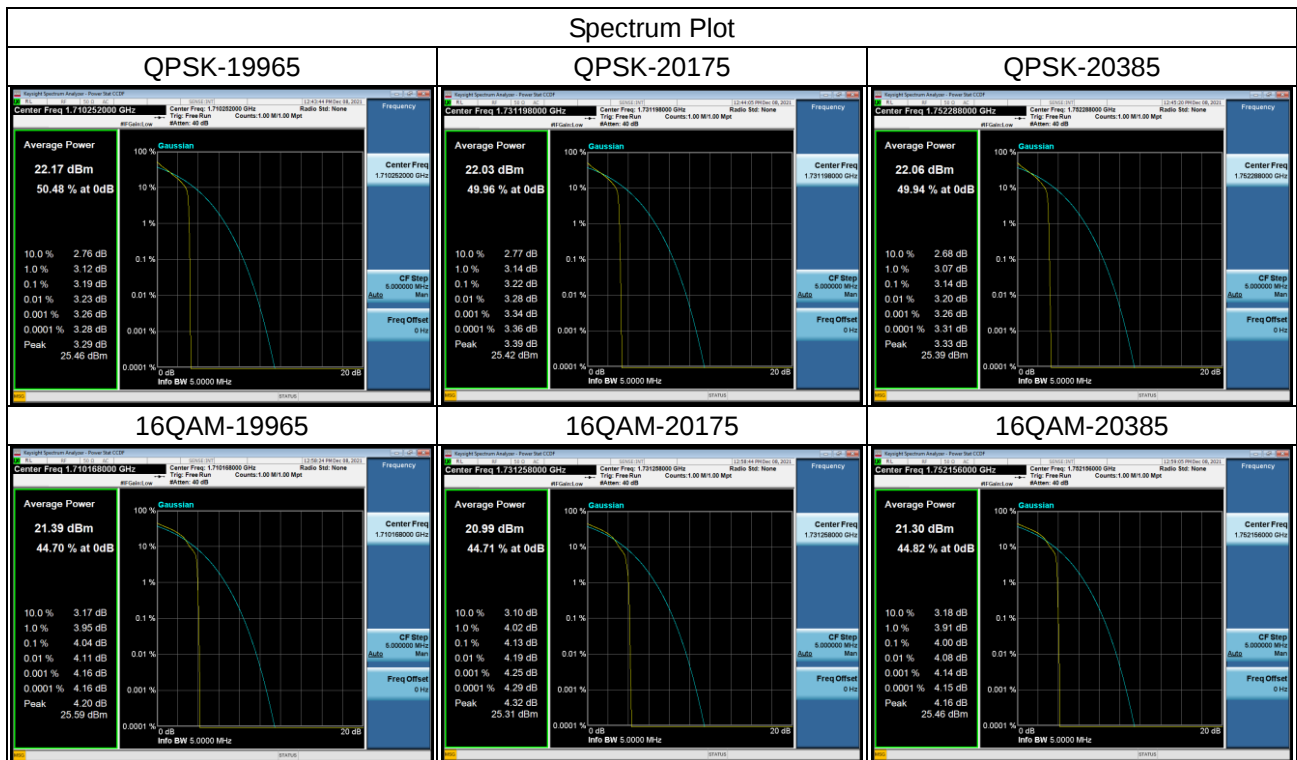


APPENDIX H - PEAK TO AVERAGE RATIO

LTE Band 4_1.4MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
19957	1710.7	3.17	4.02	13	Pass
20175	1732.5	3.17	4.01	13	Pass
20393	1754.3	3.19	3.98	13	Pass



LTE Band 4_3MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
19965	1711.5	3.19	4.04	13	Pass
20175	1732.5	3.22	4.13	13	Pass
20385	1753.5	3.14	4.00	13	Pass



LTE Band 4_5MHz					
Channel	Frequency (MHz)	Peak To Average Ratio (dB)		Max. Limit (dB)	Result
		QPSK	16QAM		
19975	1712.5	3.12	3.89	13	Pass
20175	1732.5	3.10	3.78	13	Pass
20375	1752.5	3.08	3.91	13	Pass

