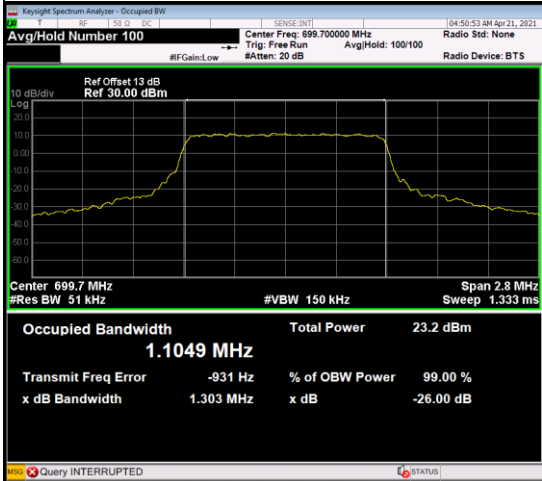
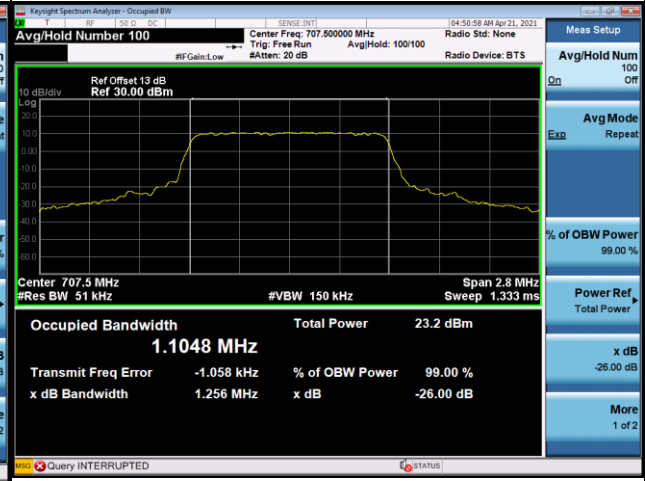


Spectrum Plot

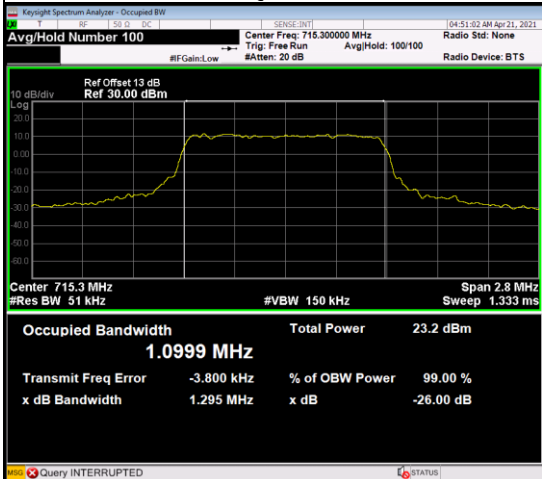
QPSK-23017



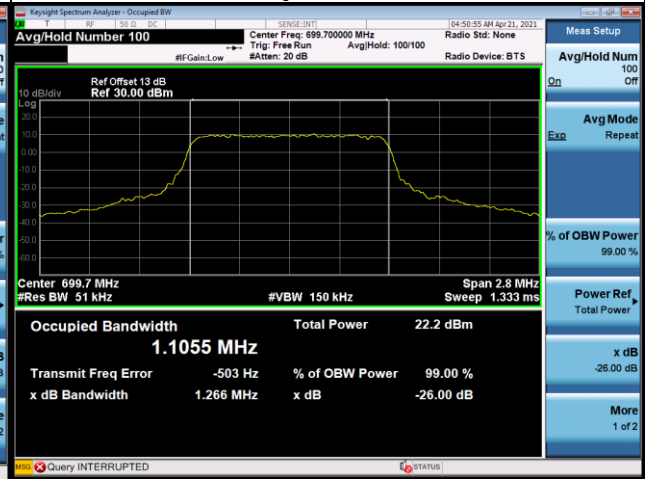
QPSK-23095



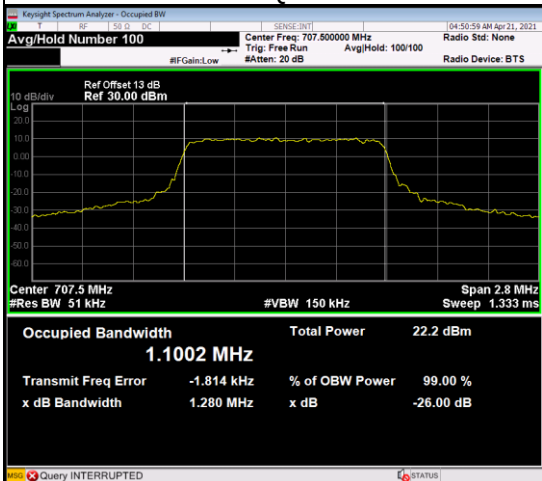
QPSK-23173



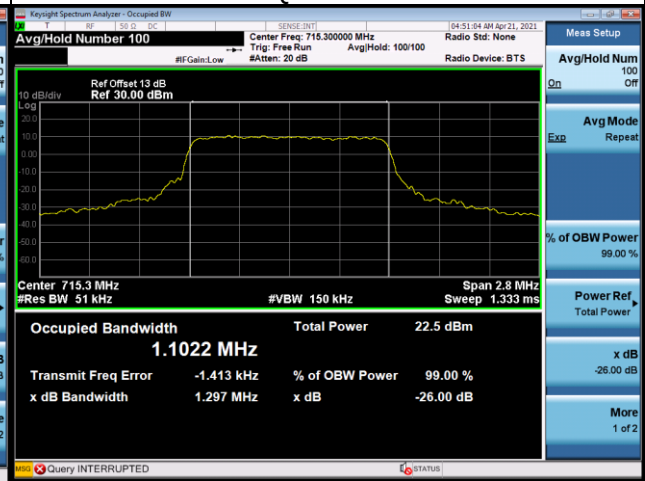
16QAM-23017



16QAM-23095



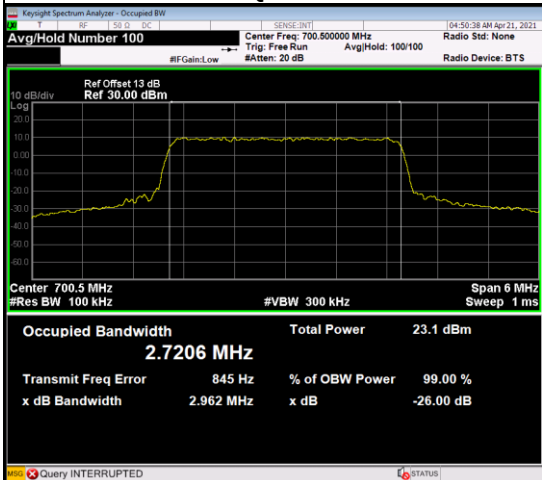
16QAM-23173



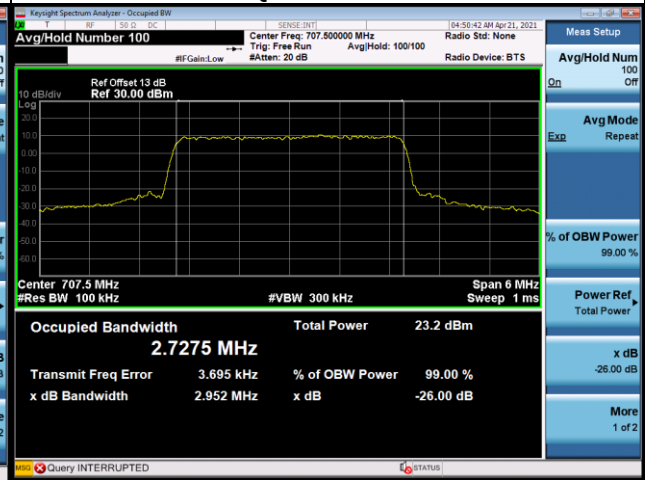
LTE Band 12_3M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23025	700.5	2.7206	23025	700.5	2.962
23095	707.5	2.7275	23095	707.5	2.952
23165	714.5	2.7240	23165	714.5	2.957
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23025	700.5	2.7149	23025	700.5	2.956
23095	707.5	2.7191	23095	707.5	2.966
23165	714.5	2.7223	23165	714.5	2.959

Spectrum Plot

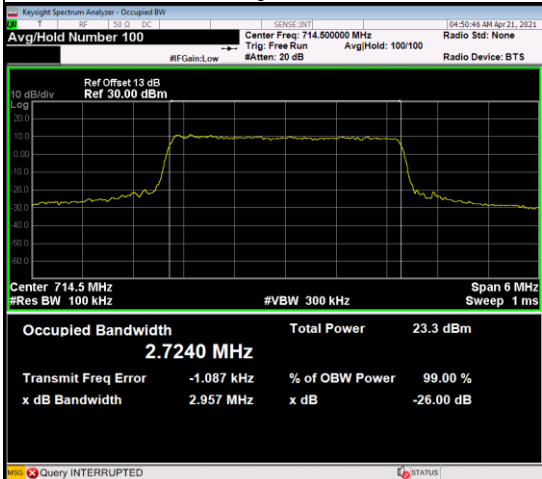
QPSK-23025



QPSK-23095



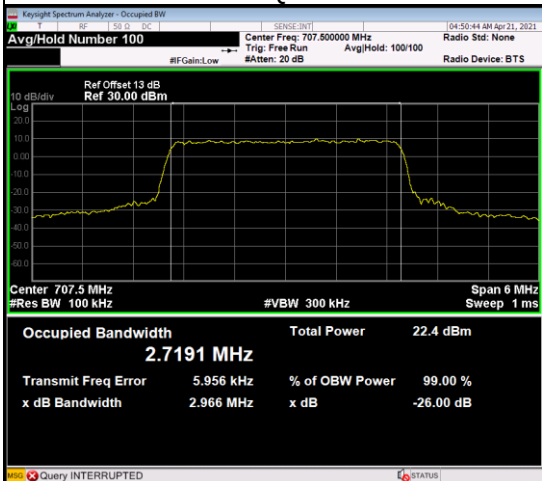
QPSK-23165



16QAM-23025



16QAM-23095



16QAM-23165



LTE Band 12_5M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23035	701.5	4.5056	23035	701.5	4.864
23095	707.5	4.5030	23095	707.5	4.872
23155	713.5	4.5045	23155	713.5	4.878
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23035	701.5	4.4933	23035	701.5	4.860
23095	707.5	4.5006	23095	707.5	4.855
23155	713.5	4.4921	23155	713.5	4.869

Spectrum Plot

QPSK-23035



QPSK-23095



QPSK-23155



16QAM-23035



16QAM-23095



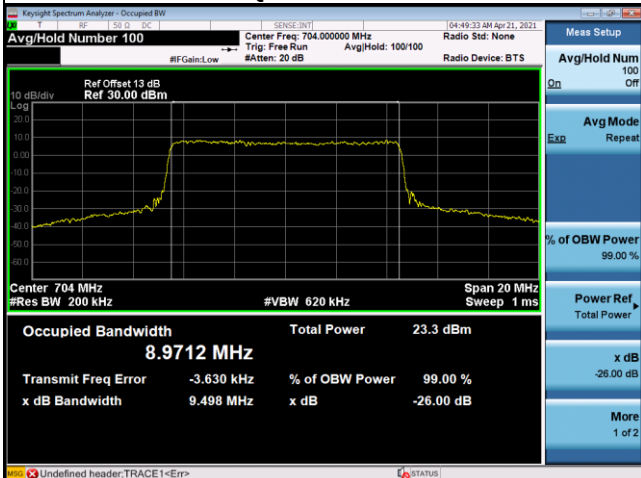
16QAM-23155



LTE Band 12_10M					
QPSK					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23060	704.0	8.9712	23060	704.0	9.498
23095	707.5	8.9568	23095	707.5	9.544
23130	711.0	8.9409	23130	711.0	9.489
16QAM					
Channel	Frequency (MHz)	99% Occupied Bandwidth (MHz)	Channel	Frequency (MHz)	26dB Bandwidth (MHz)
23060	704.0	8.9714	23060	704.0	9.505
23095	707.5	8.9511	23095	707.5	9.502
23130	711.0	8.9198	23130	711.0	9.483

Spectrum Plot

QPSK-23060



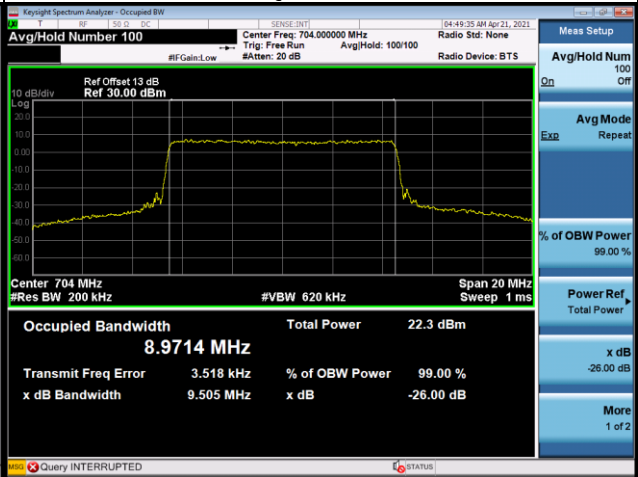
QPSK-23095



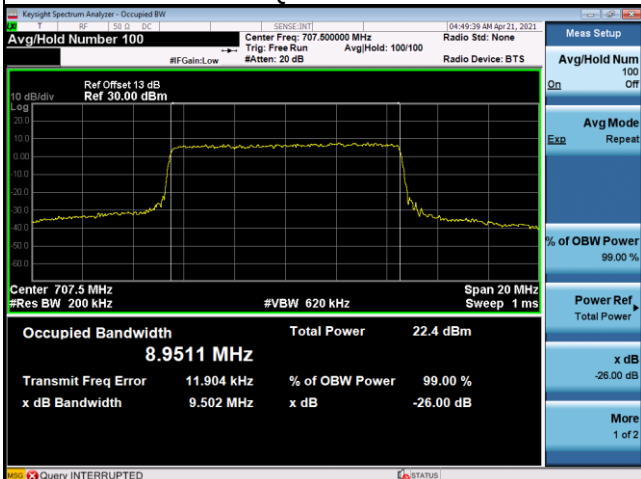
QPSK-23130



16QAM-23060



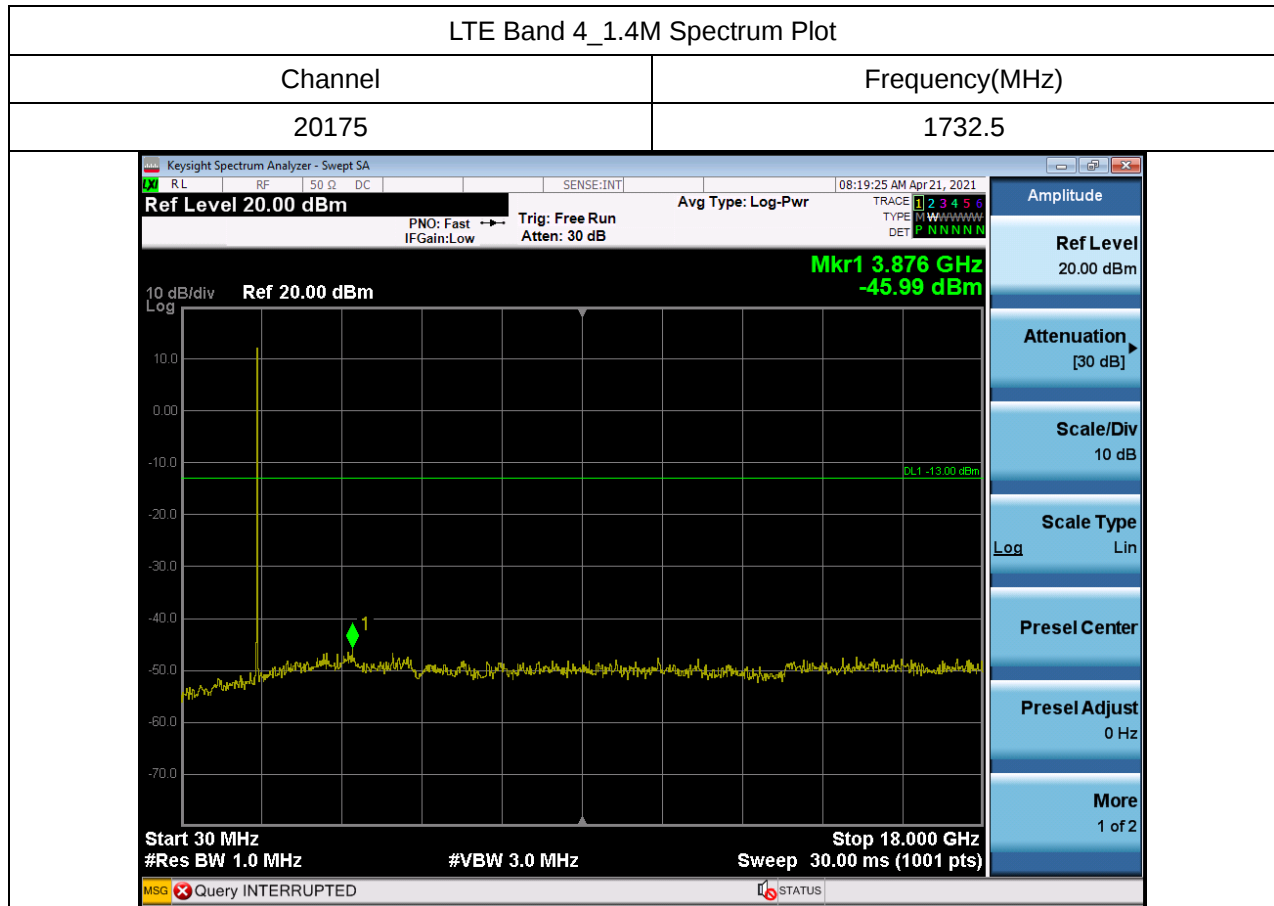
16QAM-23095

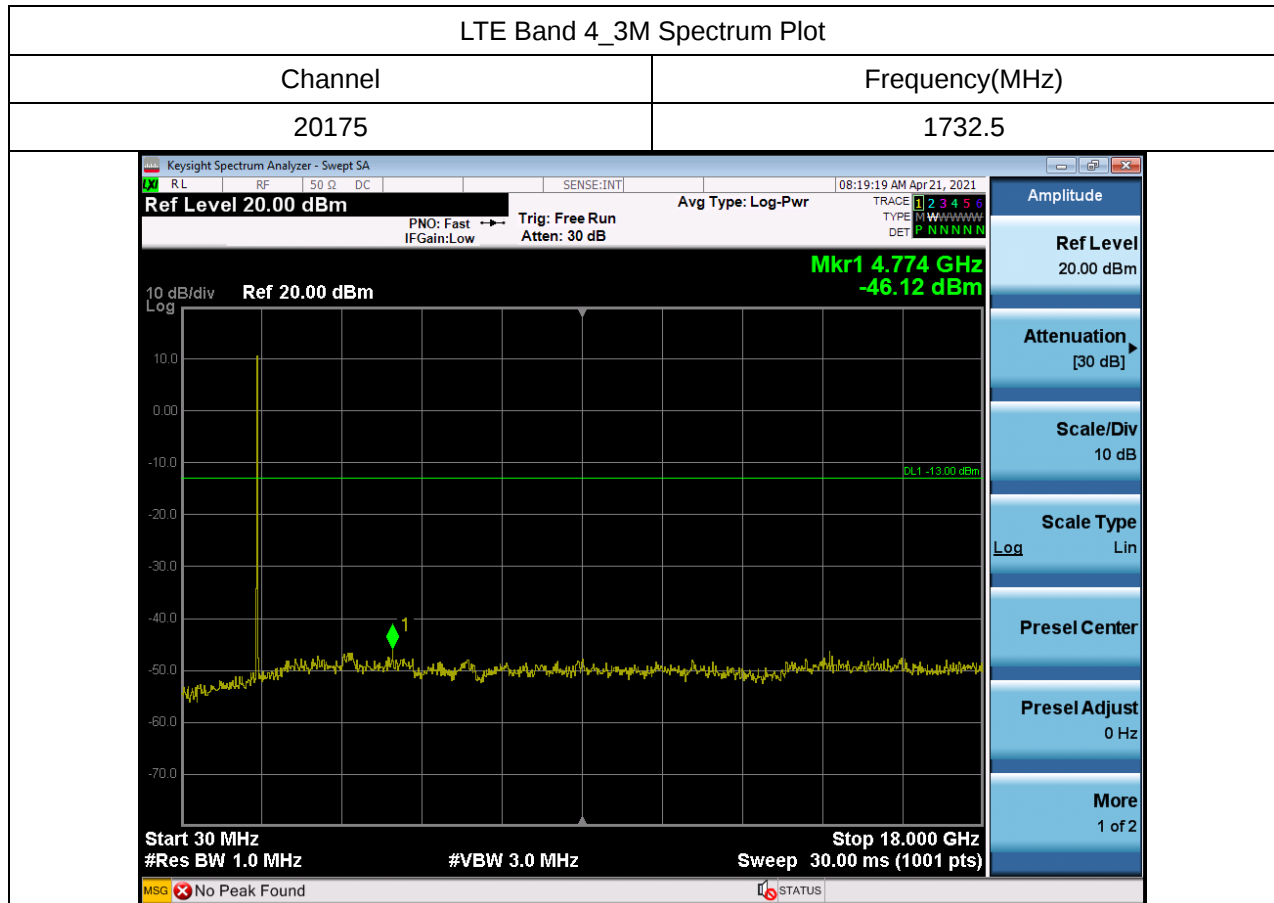


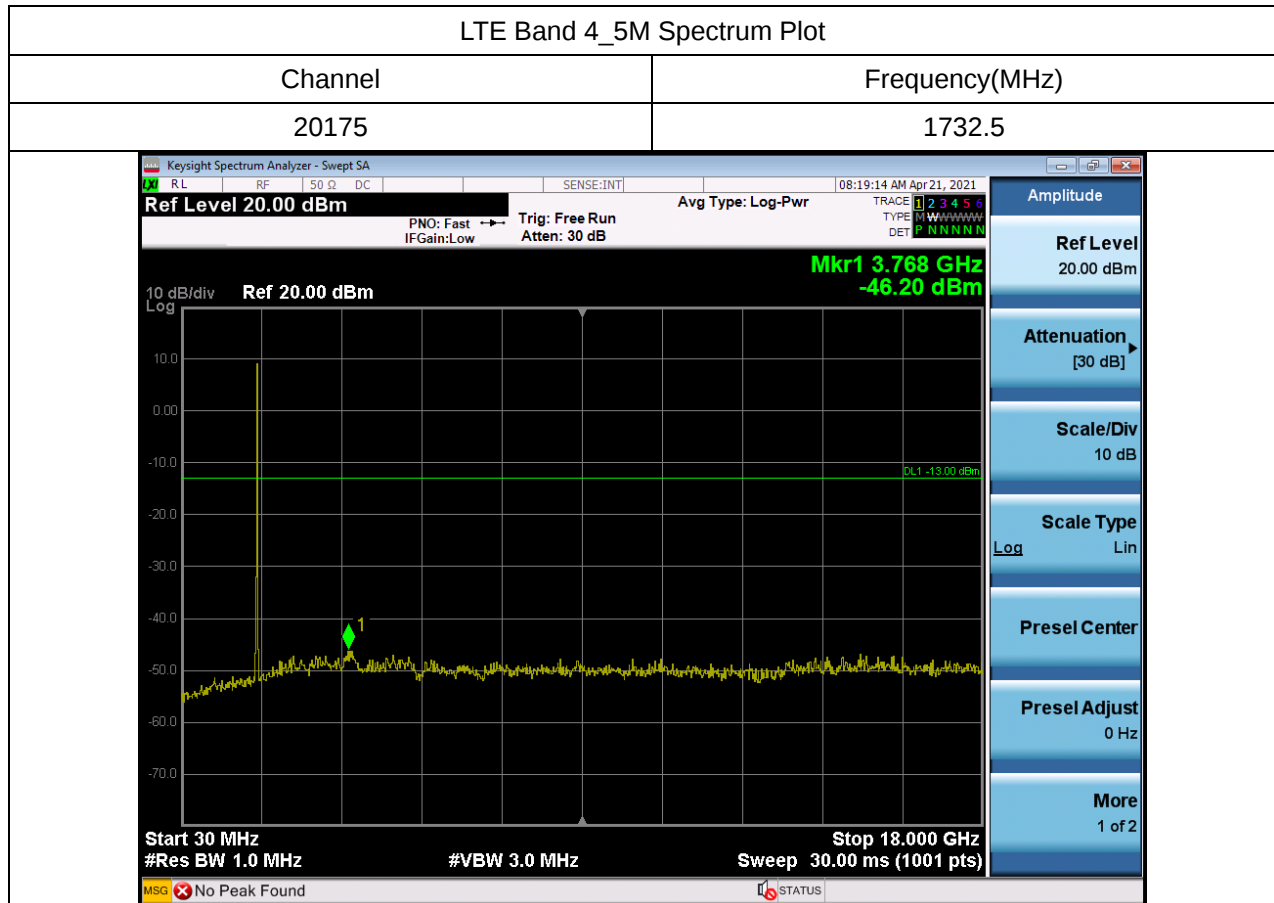
16QAM-23130

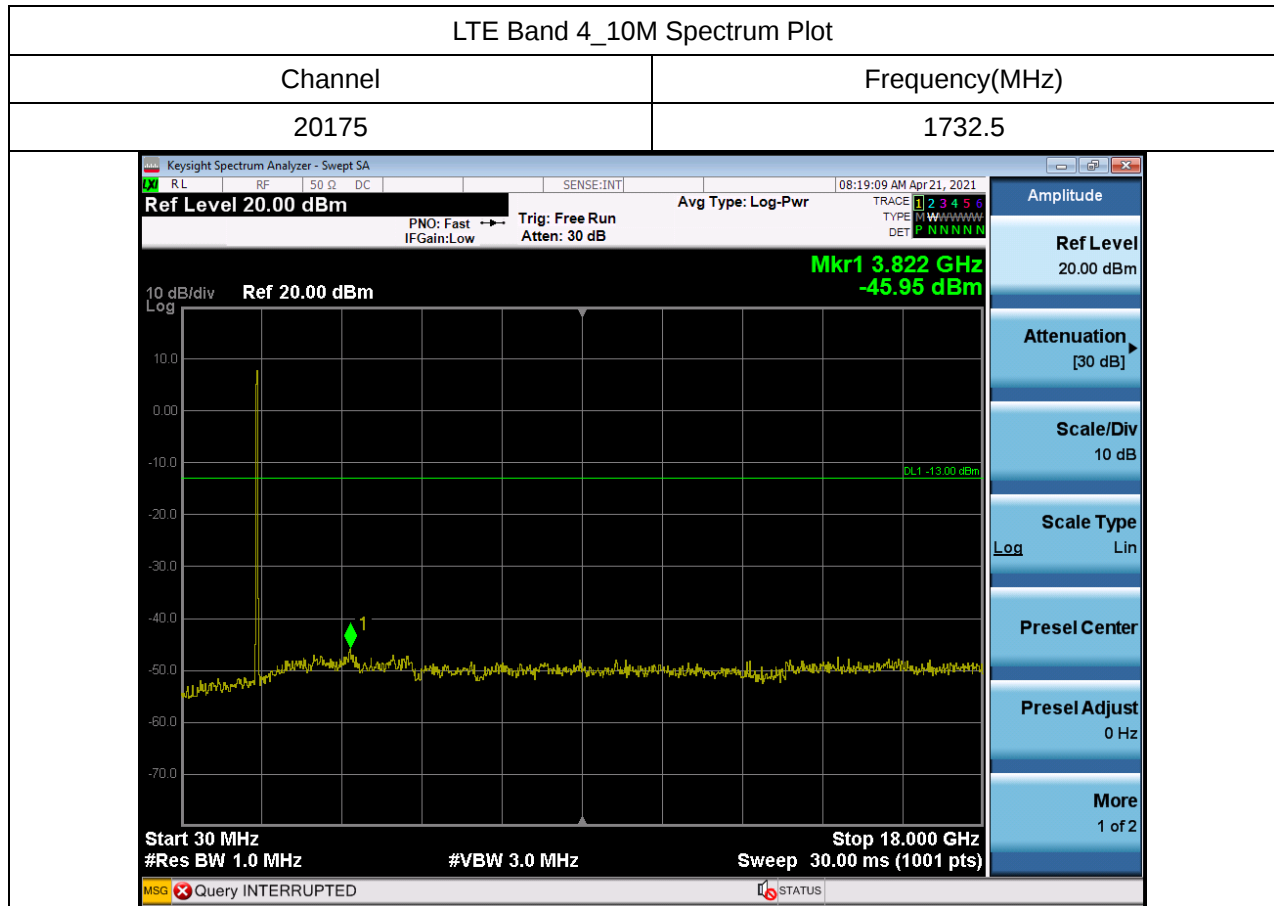


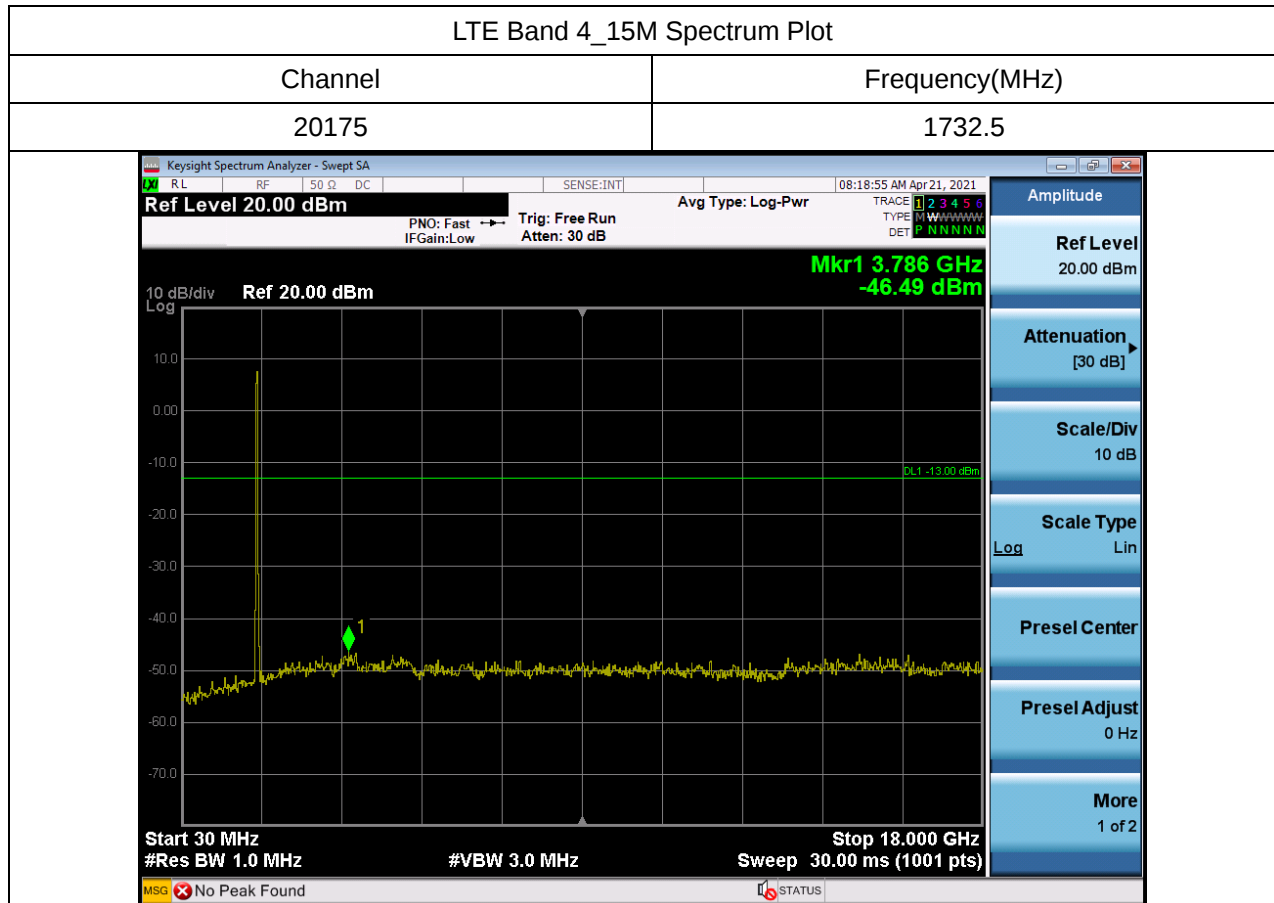
APPENDIX C CONDUCTED SPURIOUS EMISSIONS

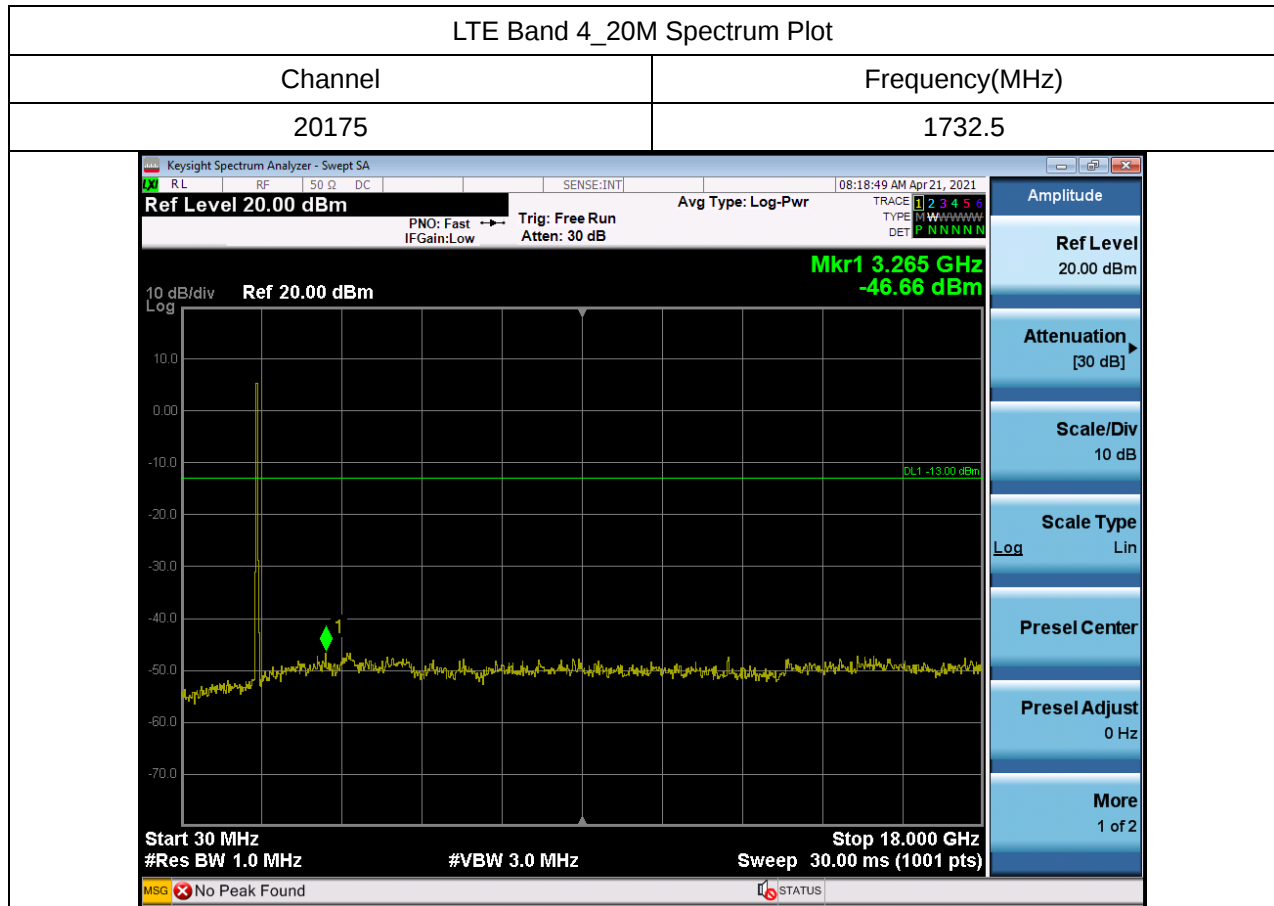


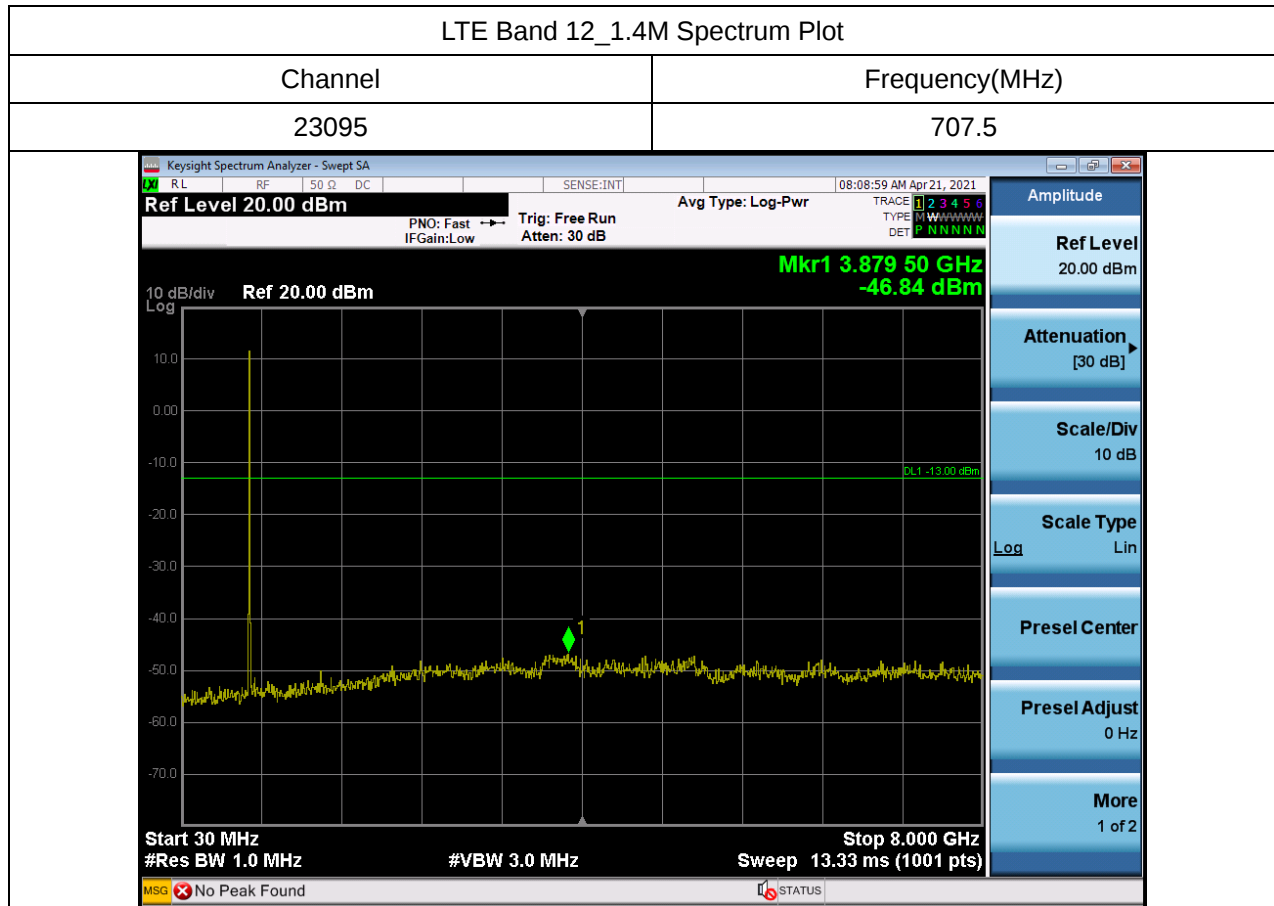


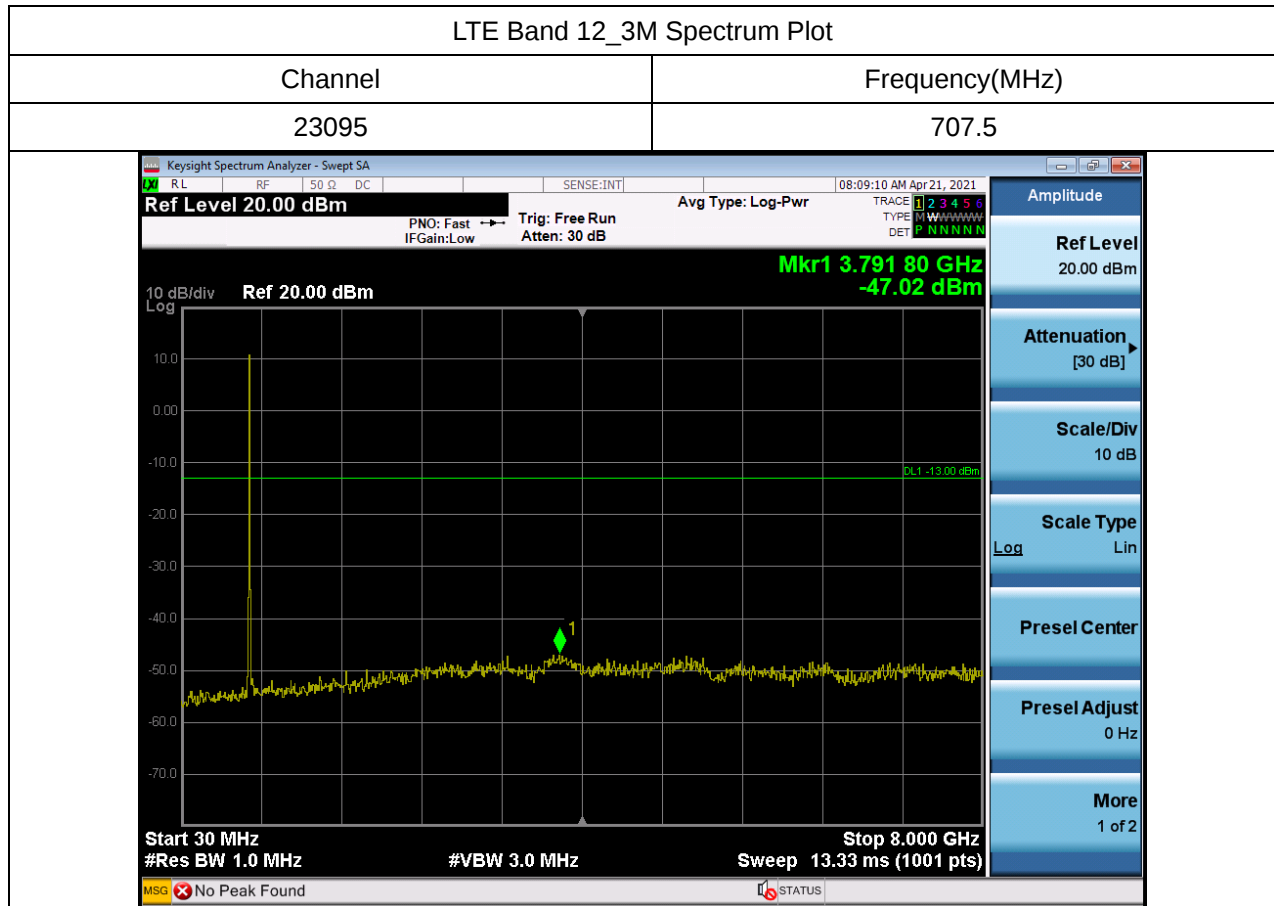


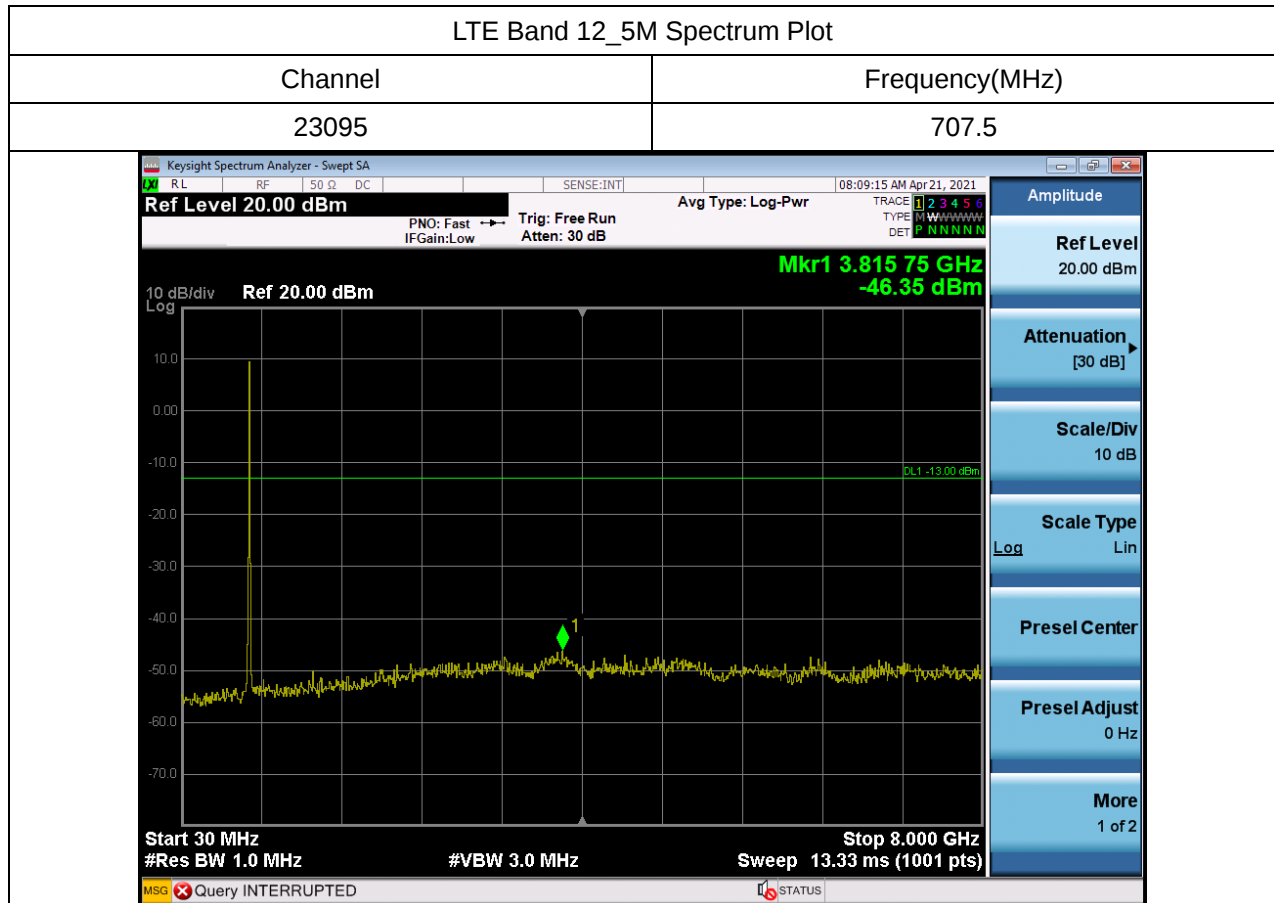


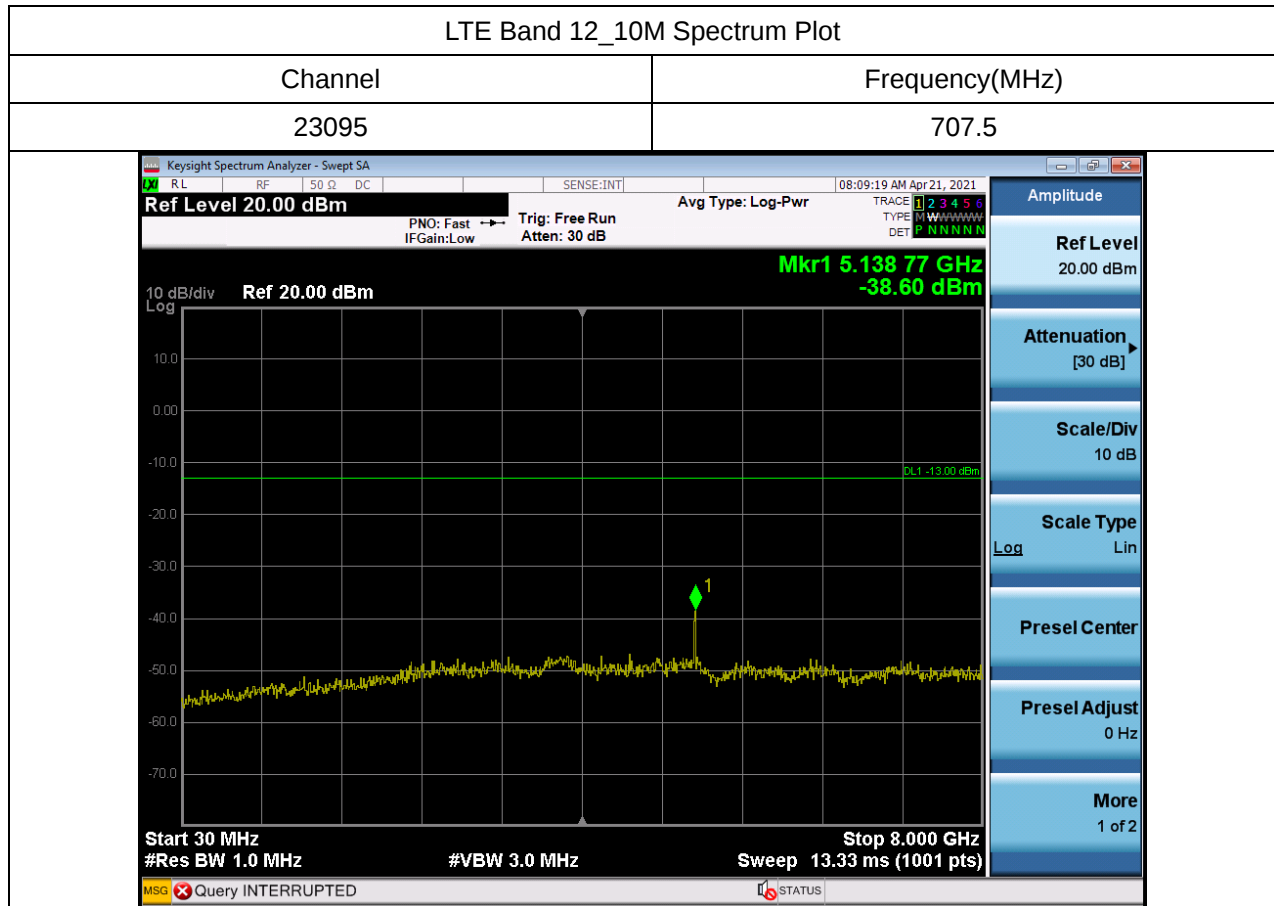








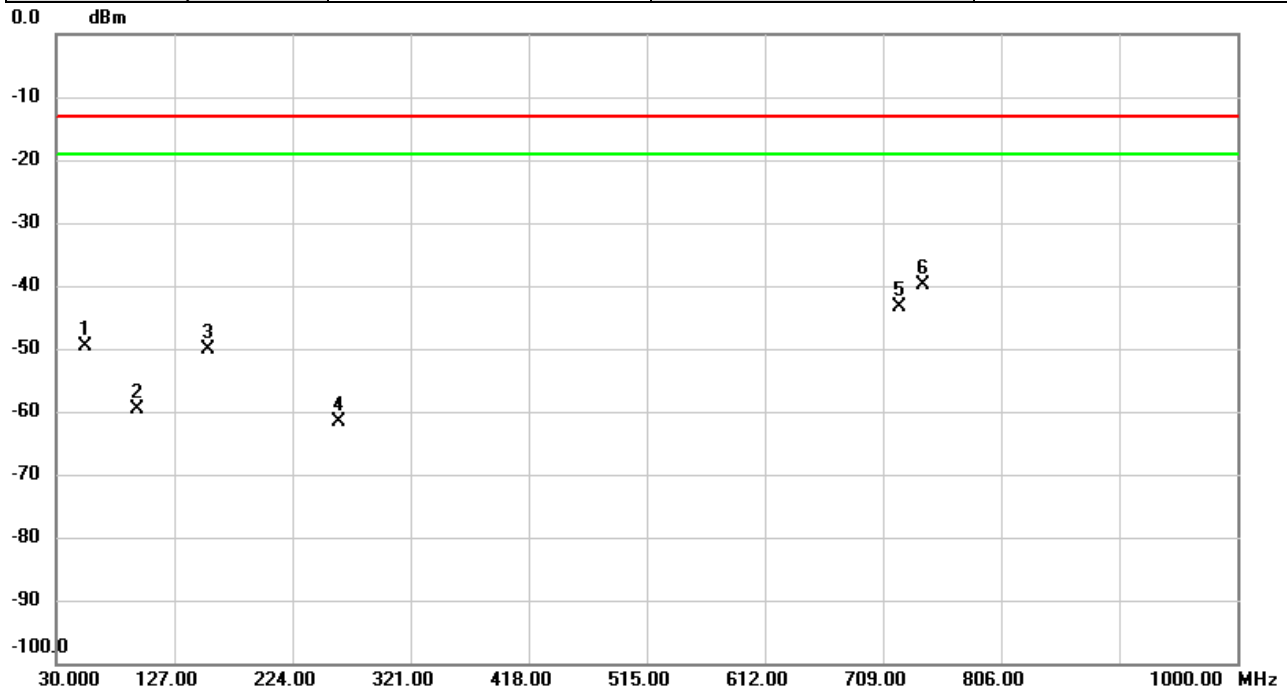




APPENDIX D RADIATED SPURIOUS EMISSIONS

For External antenna:

Test Mode	LTE Band 4	Test Date	2021/4/15
Test Channel	CH 20175	Polarization	Vertical
Temp	22°C	Hum.	61%

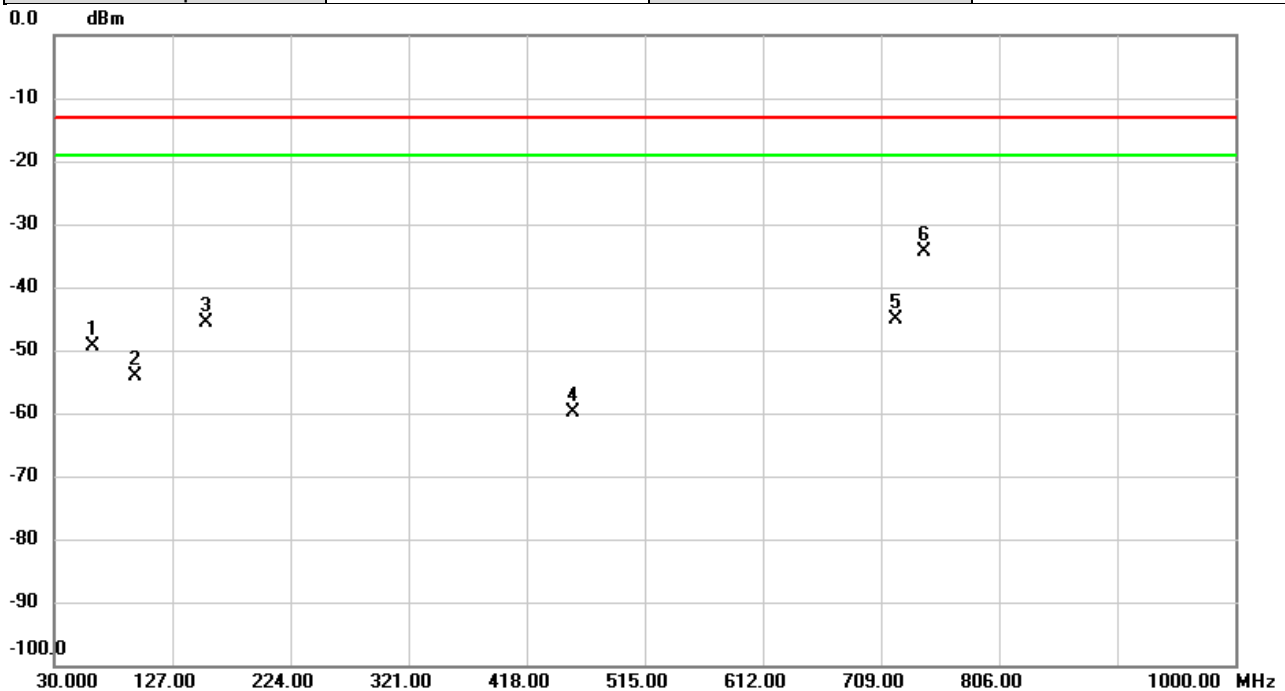


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		54.2177	-49.23	-0.49	-49.72	-13.00	-36.72	peak	
2		96.7682	-59.72	0.03	-59.69	-13.00	-46.69	peak	
3		154.2893	-53.48	3.31	-50.17	-13.00	-37.17	peak	
4		262.5736	-69.35	7.70	-61.65	-13.00	-48.65	peak	
5		721.9657	-55.62	12.18	-43.44	-13.00	-30.44	peak	
6	*	742.0770	-51.72	11.73	-39.99	-13.00	-26.99	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 4	Test Date	2021/4/15
Test Channel	CH 20175	Polarization	Horizontal
Temp	22°C	Hum.	61%

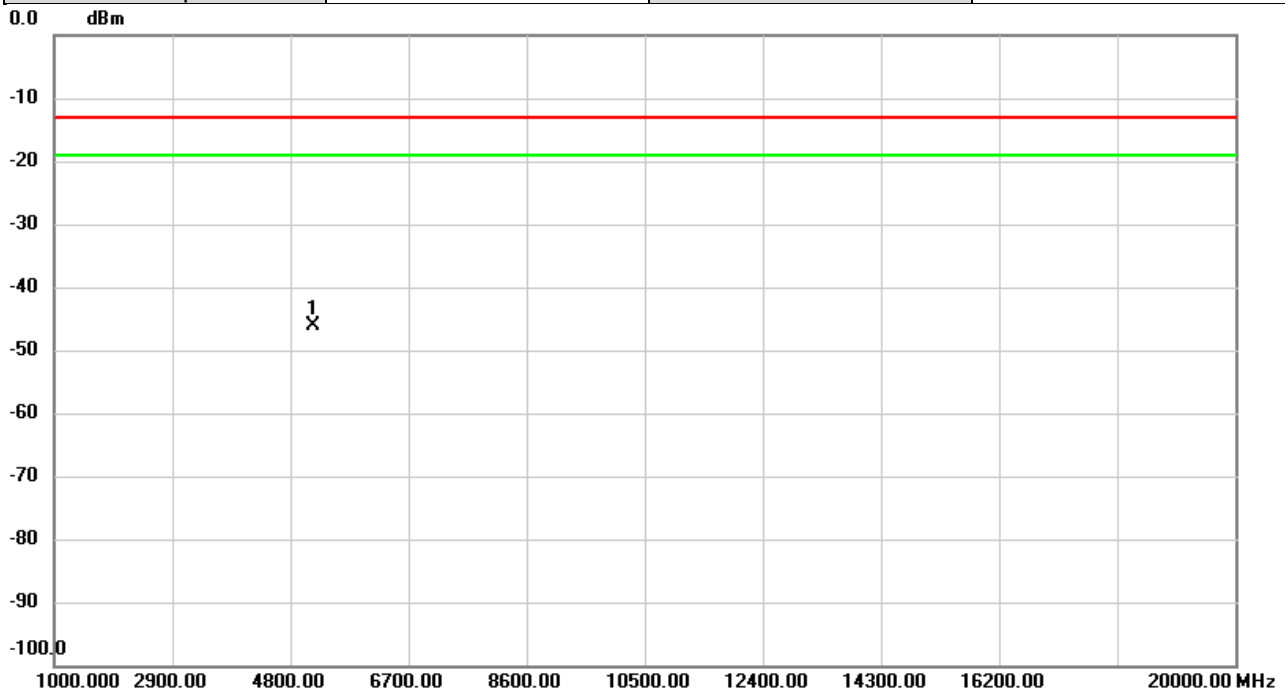


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		61.8160	-55.76	6.47	-49.29	-13.00	-36.29	peak	
2		96.7360	-57.47	3.46	-54.01	-13.00	-41.01	peak	
3		154.3540	-48.39	2.79	-45.60	-13.00	-32.60	peak	
4		456.0240	-72.35	12.40	-59.95	-13.00	-46.95	peak	
5		721.8363	-55.98	10.86	-45.12	-13.00	-32.12	peak	
6	*	744.5990	-46.67	12.39	-34.28	-13.00	-21.28	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 4	Test Date	2021/4/15
Test Channel	CH 20175	Polarization	Vertical
Temp	22°C	Hum.	61%

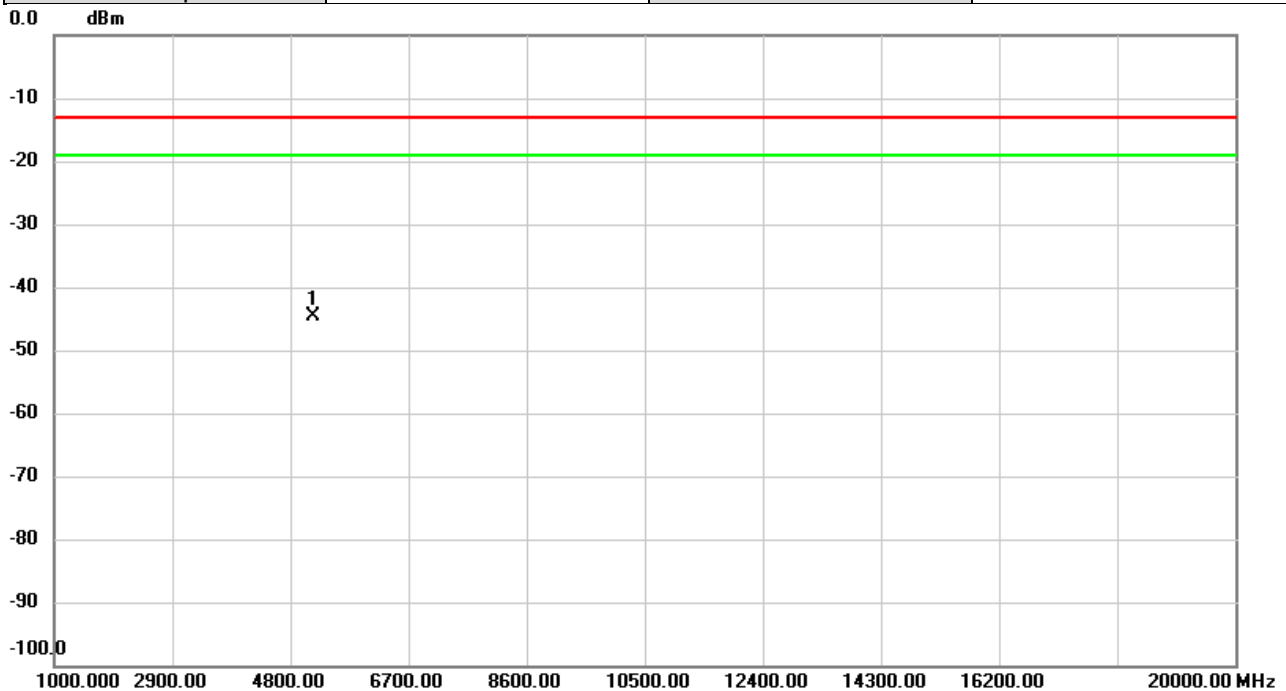


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1	*	5171.133	-48.65	2.41	-46.24	-13.00	-33.24	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 4	Test Date	2021/4/15
Test Channel	CH 20175	Polarization	Horizontal
Temp	22°C	Hum.	61%

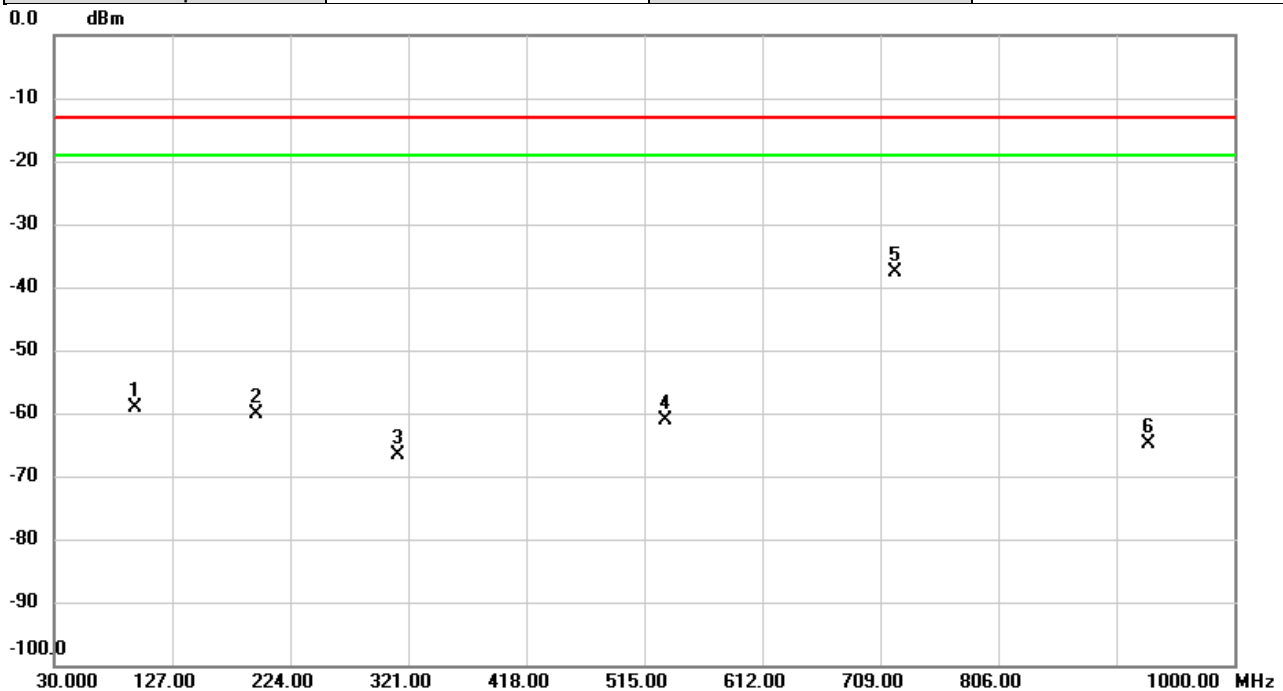


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	5171.133	-46.93	2.39	-44.54	-13.00	-31.54	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 12	Test Date	2021/8/30
Test Channel	CH23095	Polarization	Vertical
Temp	23°C	Hum.	58%

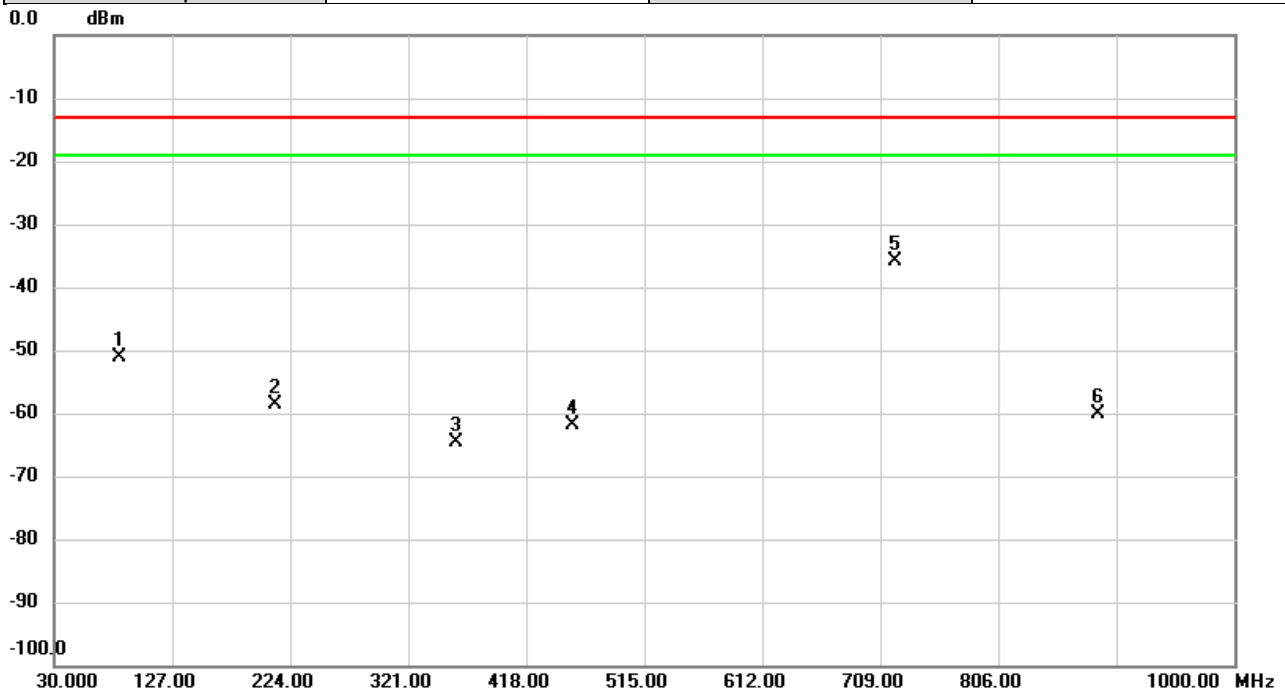


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		95.9923	-58.94	-0.20	-59.14	-13.00	-46.14	peak	
2		195.6113	-63.65	3.54	-60.11	-13.00	-47.11	peak	
3		312.0113	-74.02	7.51	-66.51	-13.00	-53.51	peak	
4		533.1065	-68.59	7.38	-61.21	-13.00	-48.21	peak	
5	*	720.6723	-49.87	12.27	-37.60	-13.00	-24.60	peak	
6		929.9336	-76.64	11.87	-64.77	-13.00	-51.77	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 12	Test Date	2021/8/30
Test Channel	CH23095	Polarization	Horizontal
Temp	23°C	Hum.	58%

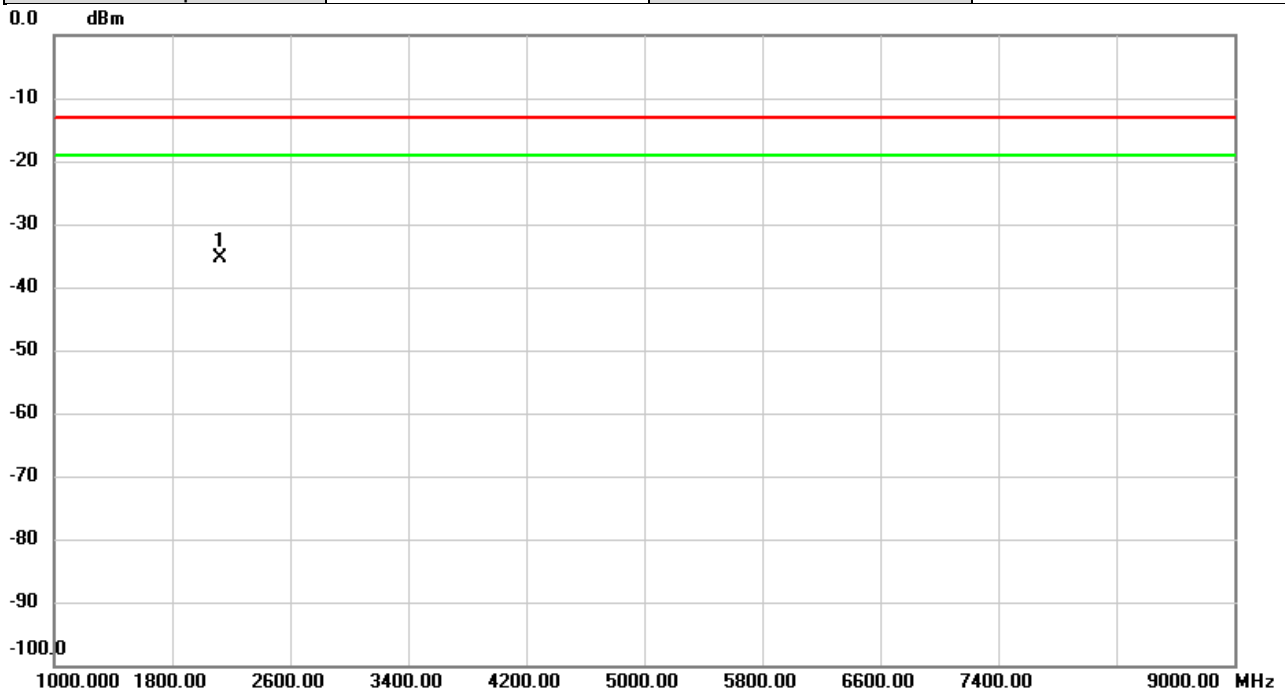


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1		84.0290	-56.02	4.91	-51.11	-13.00	-38.11	peak	
2		211.9396	-56.77	-1.89	-58.66	-13.00	-45.66	peak	
3		359.9940	-69.19	4.50	-64.69	-13.00	-51.69	peak	
4		456.0240	-74.32	12.40	-61.92	-13.00	-48.92	peak	
5	*	720.7693	-46.58	10.78	-35.80	-13.00	-22.80	peak	
6		887.9973	-76.00	15.89	-60.11	-13.00	-47.11	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 12	Test Date	2021/8/30
Test Channel	CH23095	Polarization	Vertical
Temp	23°C	Hum.	58%

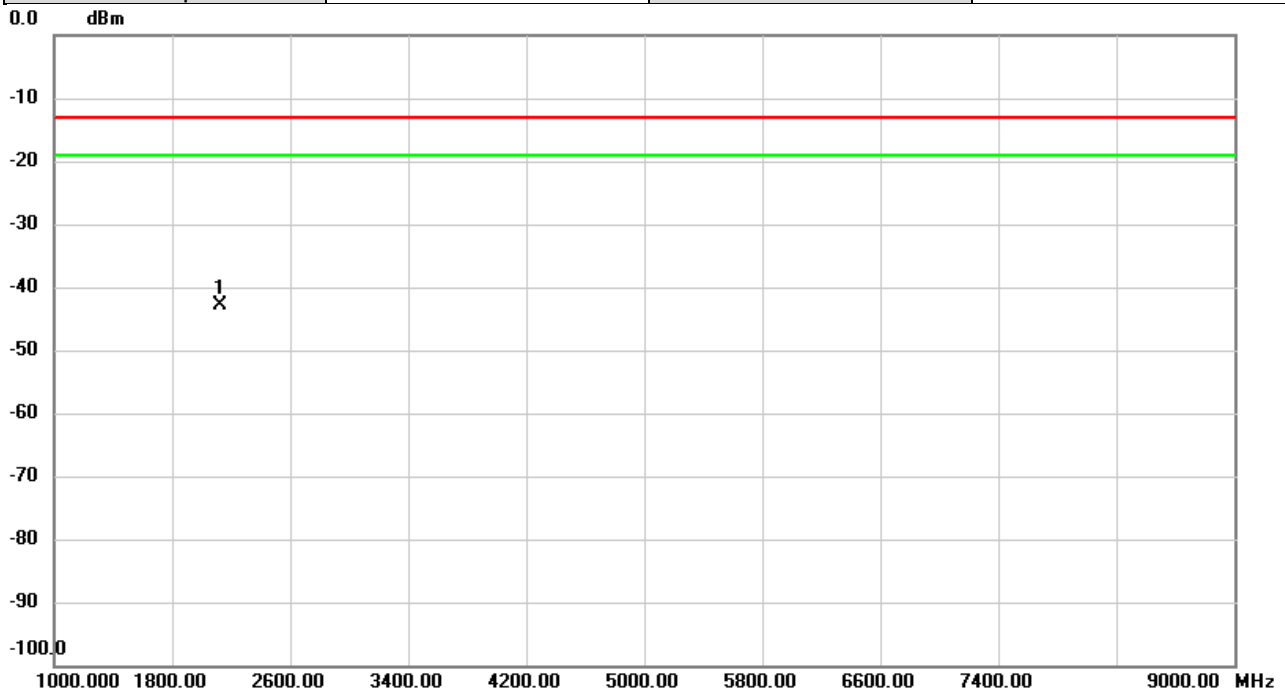


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2122.500	-30.41	-5.03	-35.44	-13.00	-22.44	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 12	Test Date	2021/8/30
Test Channel	CH23095	Polarization	Horizontal
Temp	23°C	Hum.	58%



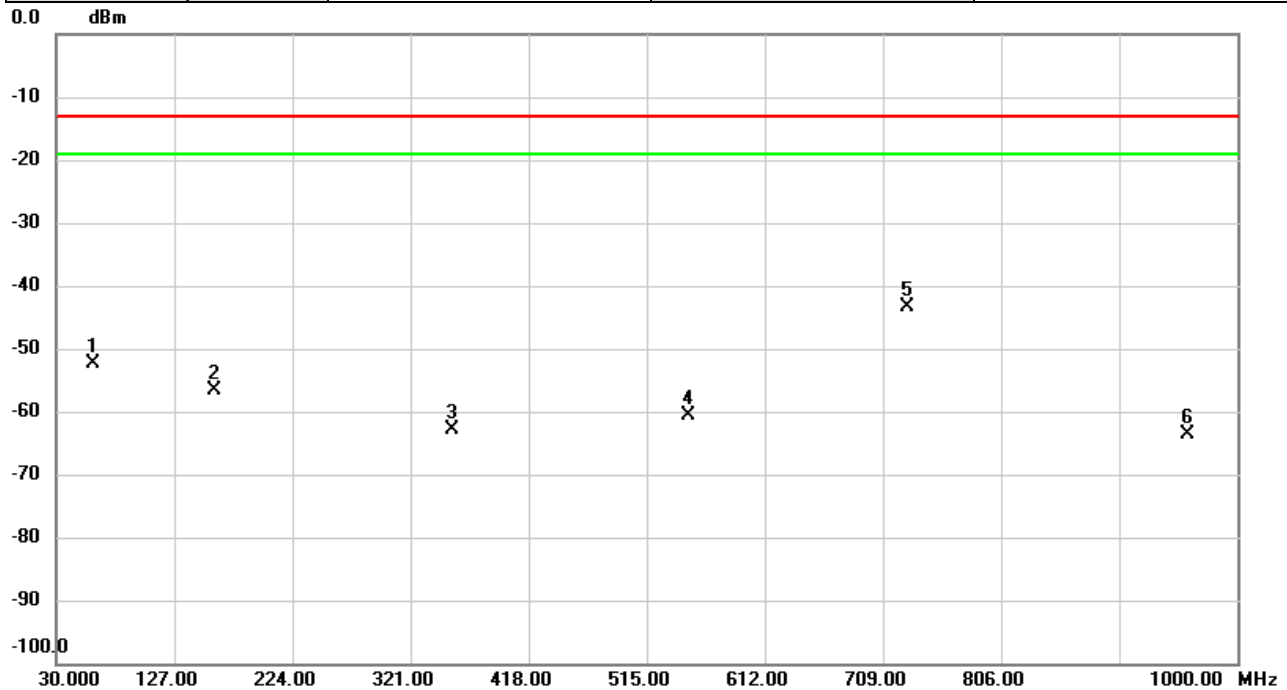
No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2122.500	-37.92	-5.04	-42.96	-13.00	-29.96	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

For Built-in antenna:

Test Mode	LTE Band 4	Test Date	2021/5/8
Test Channel	CH 20175	Polarization	Vertical
Temp	24°C	Hum.	58%

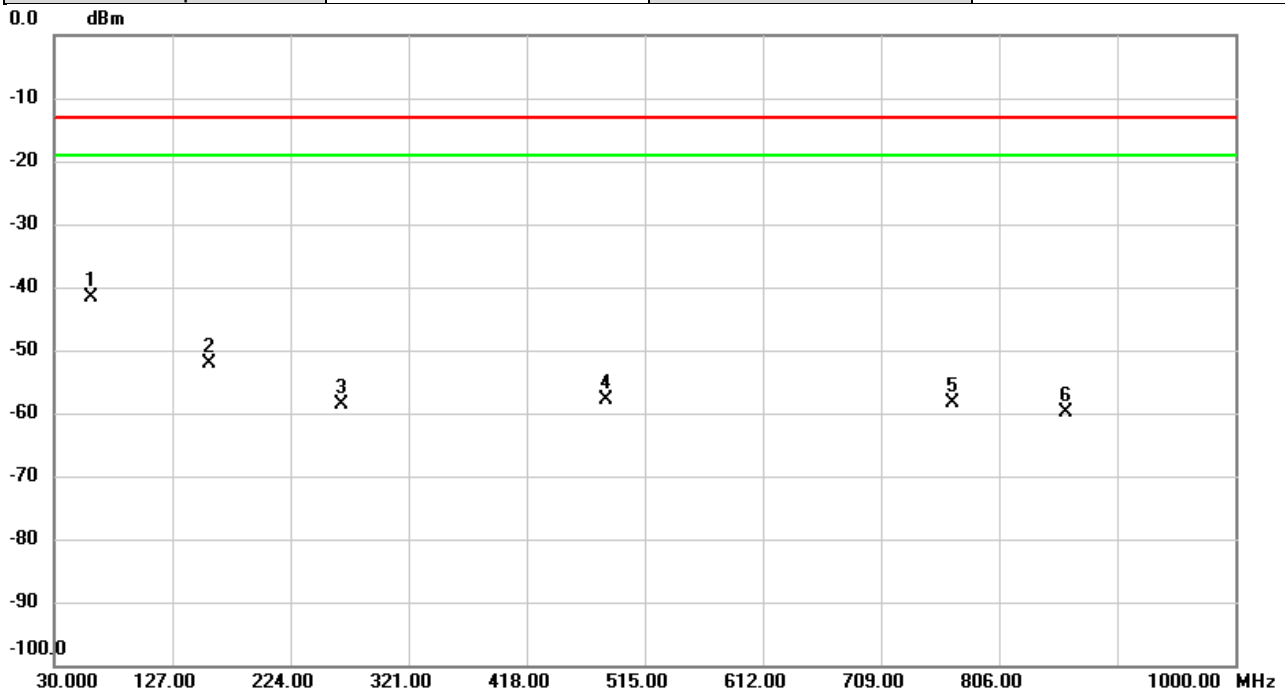


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Detector	Comment
		MHz	dBm	dB	dBm	dBm	dB		
1		59.9730	-50.93	-1.33	-52.26	-13.00	-39.26	peak	
2		160.4003	-60.25	3.55	-56.70	-13.00	-43.70	peak	
3		355.2732	-69.03	6.19	-62.84	-13.00	-49.84	peak	
4		548.6267	-69.55	8.88	-60.67	-13.00	-47.67	peak	
5	*	729.3053	-55.34	12.02	-43.32	-13.00	-30.32	peak	
6		959.2600	-76.69	13.02	-63.67	-13.00	-50.67	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 4	Test Date	2021/5/8
Test Channel	CH 20175	Polarization	Horizontal
Temp	24°C	Hum.	58%



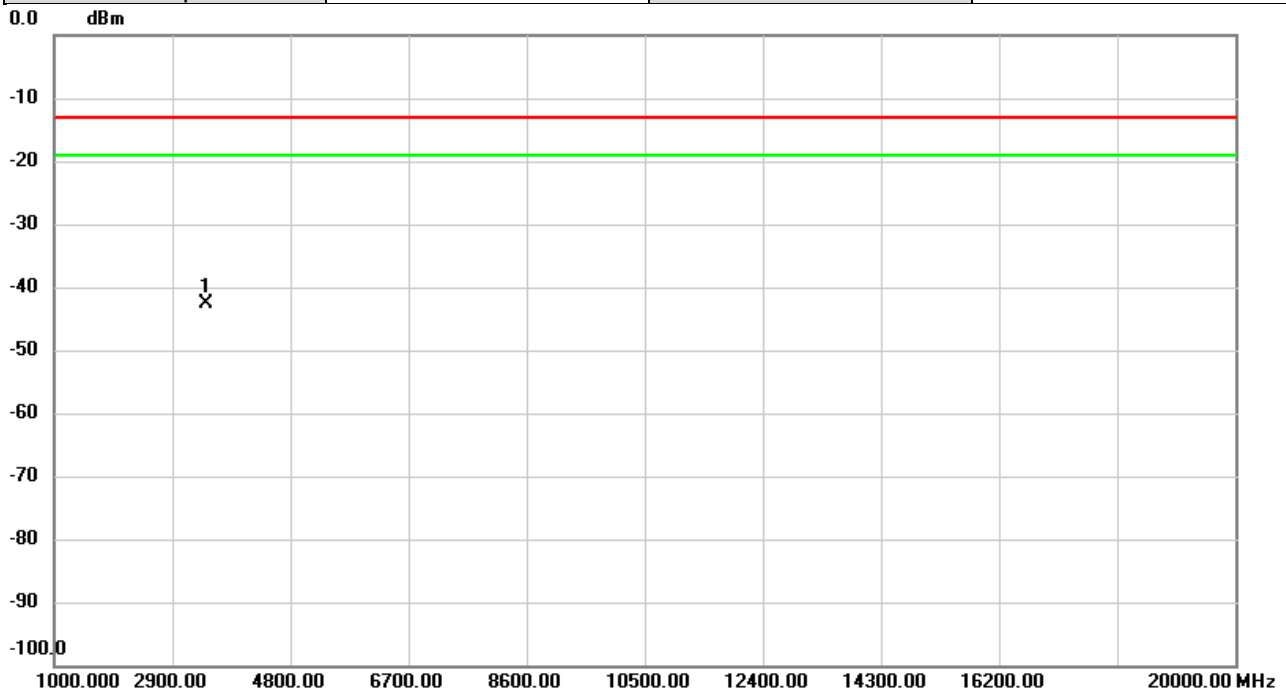
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	60.0376	-48.62	6.96	-41.66	-13.00	-28.66	peak	
2		157.7166	-54.93	2.70	-52.23	-13.00	-39.23	peak	
3		266.0656	-58.31	-0.20	-58.51	-13.00	-45.51	peak	
4		483.0546	-69.54	11.58	-57.96	-13.00	-44.96	peak	
5		768.0406	-71.94	13.64	-58.30	-13.00	-45.30	peak	
6		860.7080	-76.22	16.27	-59.95	-13.00	-46.95	peak	

REMARKS:

(1) Measurement Value = Reading Level + Correct Factor.

(2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 4	Test Date	2021/5/7
Test Channel	CH 20175	Polarization	Vertical
Temp	24°C	Hum.	58%

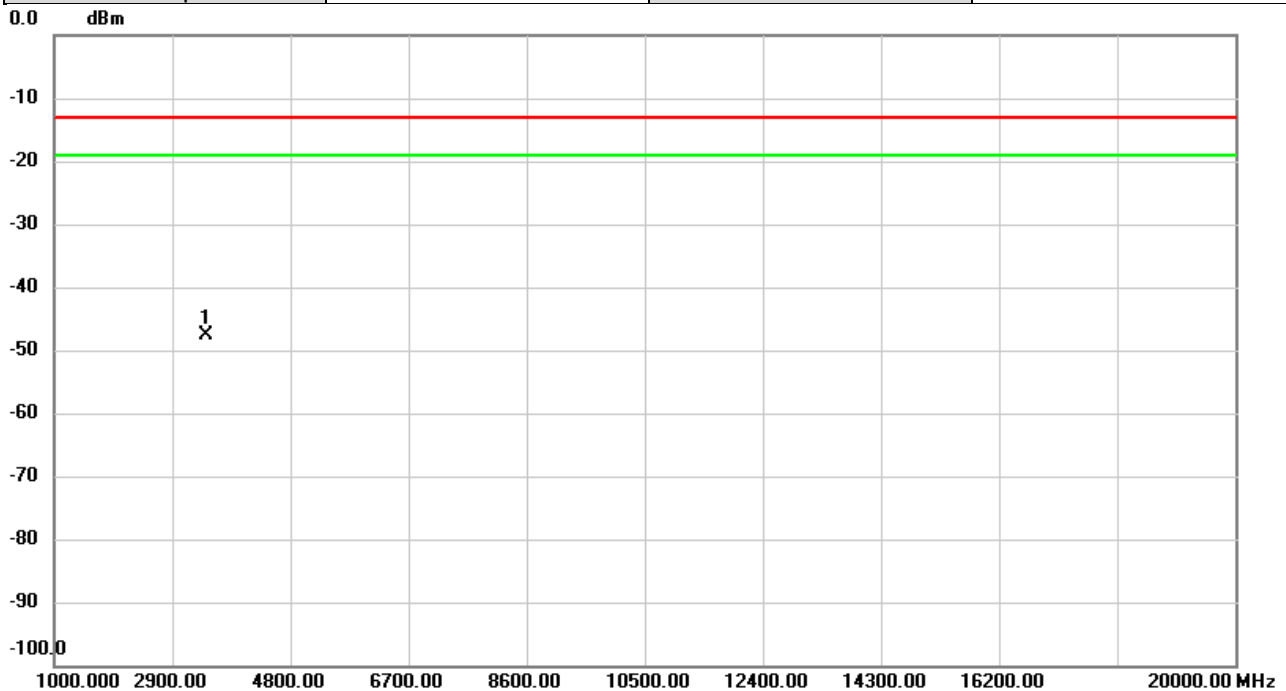


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	3447.200	-40.40	-2.18	-42.58	-13.00	-29.58	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 4	Test Date	2021/5/7
Test Channel	CH 20175	Polarization	Horizontal
Temp	24°C	Hum.	58%

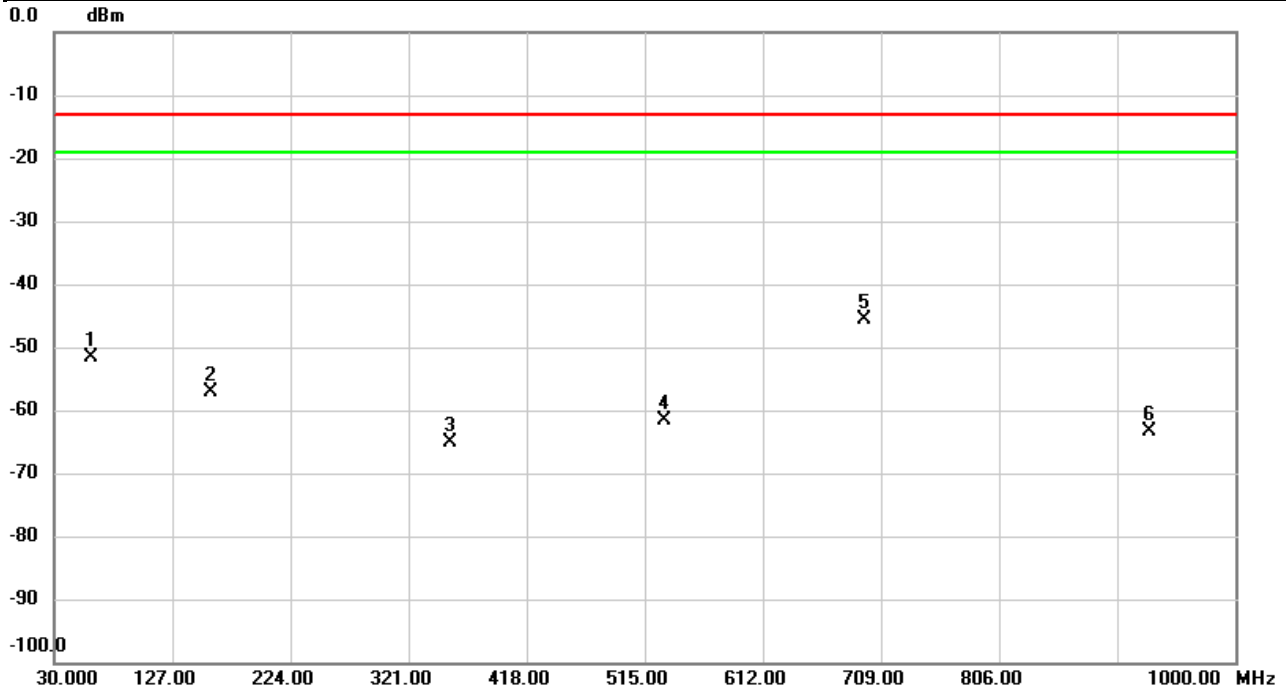


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	3447.200	-45.46	-2.06	-47.52	-13.00	-34.52	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 12	Test Date	2021/5/8
Test Channel	CH 23095	Polarization	Vertical
Temp	24°C	Hum.	58%

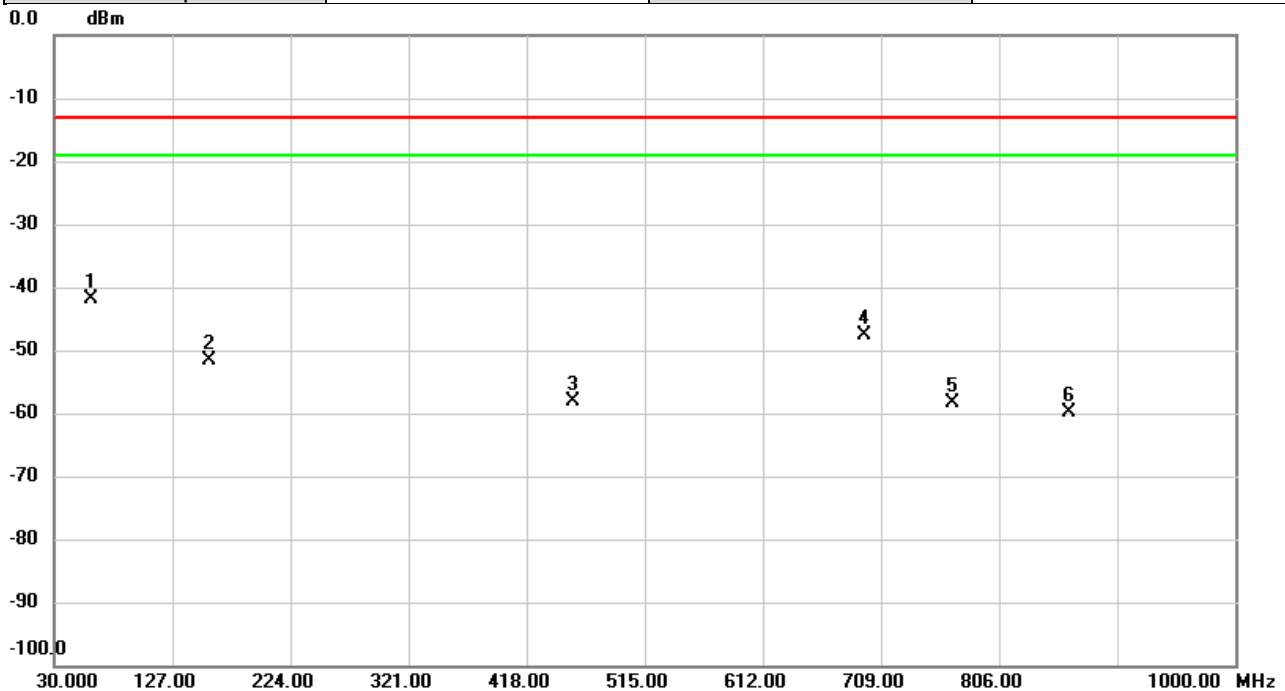


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1		60.0377	-50.35	-1.33	-51.68	-13.00	-38.68	peak	
2		158.8160	-60.62	3.52	-57.10	-13.00	-44.10	peak	
3		354.8207	-71.25	6.23	-65.02	-13.00	-52.02	peak	
4		531.8133	-68.84	7.14	-61.70	-13.00	-48.70	peak	
5	*	695.2582	-58.40	12.66	-45.74	-13.00	-32.74	peak	
6		929.9337	-75.15	11.88	-63.27	-13.00	-50.27	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 12	Test Date	2021/5/8
Test Channel	CH 23095	Polarization	Horizontal
Temp	24°C	Hum.	58%

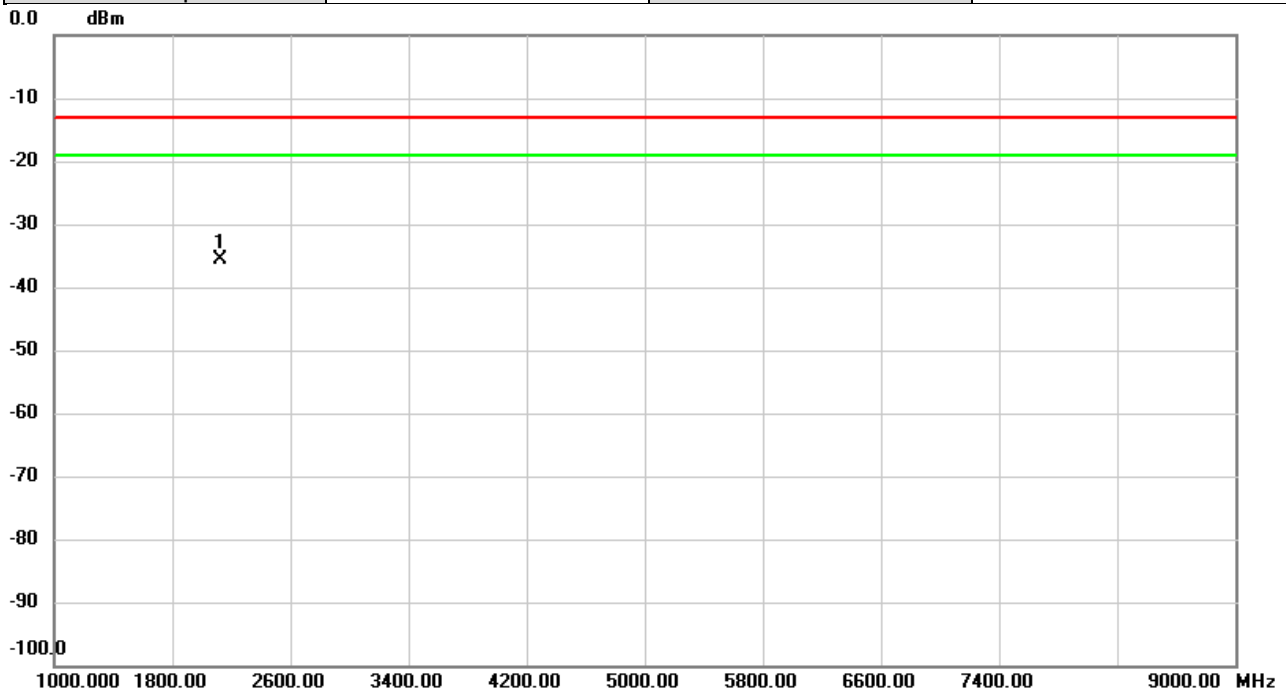


No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	60.0376	-48.76	6.96	-41.80	-13.00	-28.80	peak	
2		157.6843	-54.38	2.70	-51.68	-13.00	-38.68	peak	
3		455.9916	-70.61	12.40	-58.21	-13.00	-45.21	peak	
4		694.9026	-56.83	9.15	-47.68	-13.00	-34.68	peak	
5		768.0406	-71.91	13.64	-58.27	-13.00	-45.27	peak	
6		863.5210	-76.15	16.23	-59.92	-13.00	-46.92	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 12	Test Date	2021/5/8
Test Channel	CH 23095	Polarization	Vertical
Temp	24°C	Hum.	58%

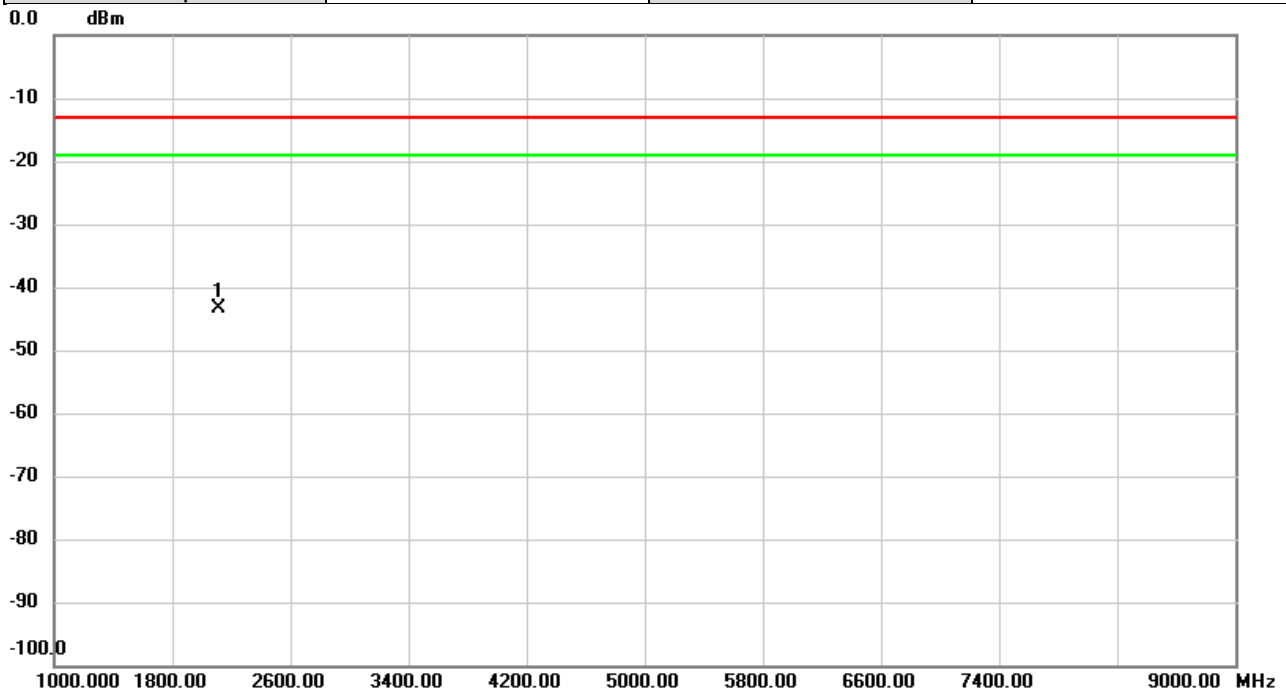


No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2120.267	-30.63	-4.99	-35.62	-13.00	-22.62	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

Test Mode	LTE Band 12	Test Date	2021/5/8
Test Channel	CH 23095	Polarization	Horizontal
Temp	24°C	Hum.	58%



No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	2119.733	-37.83	-5.49	-43.32	-13.00	-30.32	peak	

REMARKS:

- (1) Measurement Value = Reading Level + Correct Factor.
- (2) Margin Level = Measurement Value - Limit Value.

APPENDIX E BAND EDGE

LTE Band 4_1.4M Spectrum Plot

1RB#0

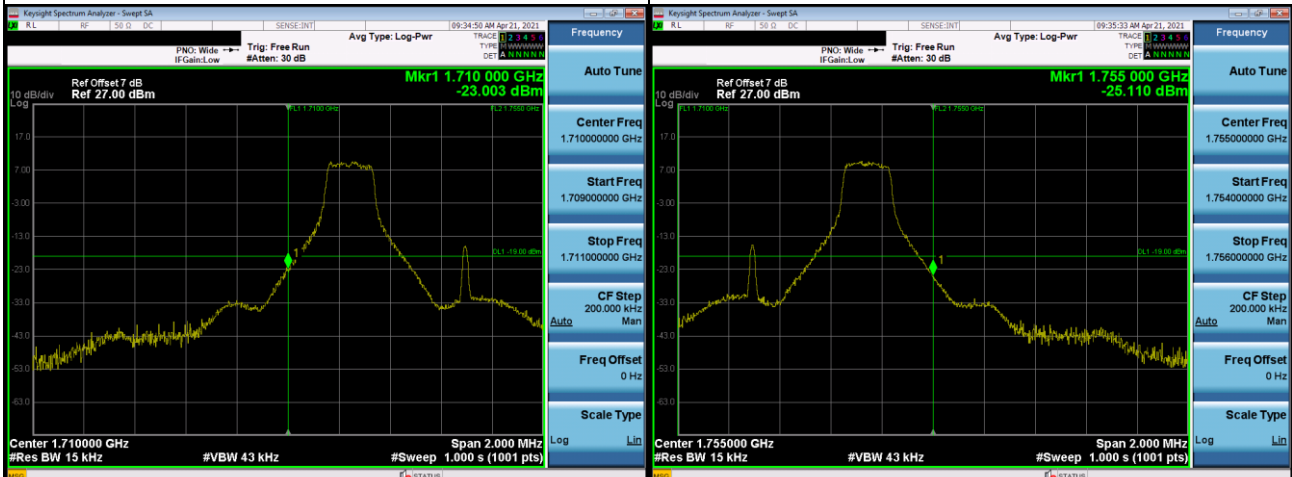
1RB#5

Channel

19957

Channel

20393



6RB#0

Channel

19957

Channel

20393



LTE Band 4_3M Spectrum Plot

1RB#0

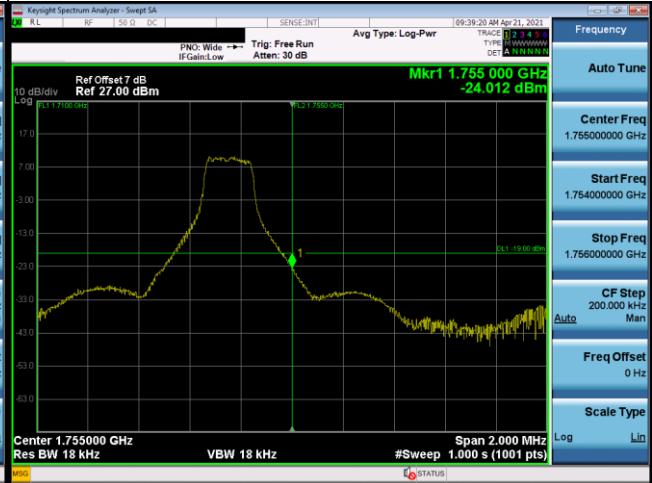
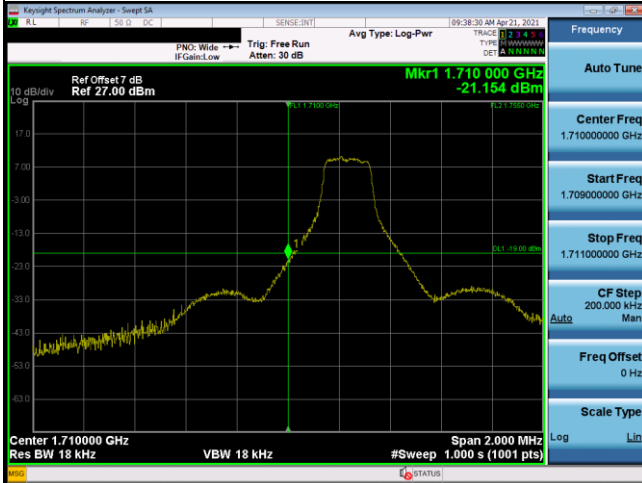
1RB#14

Channel

19965

Channel

20385



15RB#0

Channel

19965

Channel

20385



LTE Band 4_5M Spectrum Plot

1RB#0

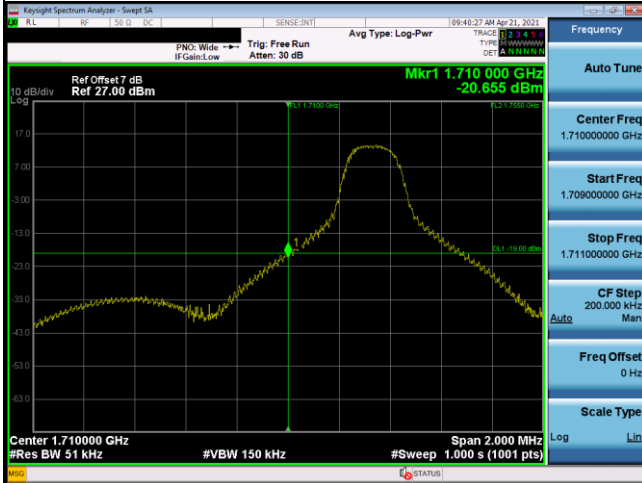
1RB#24

Channel

19975

Channel

20375



25RB#0

Channel

19975

Channel

20375



LTE Band 4_10M Spectrum Plot

1RB#0

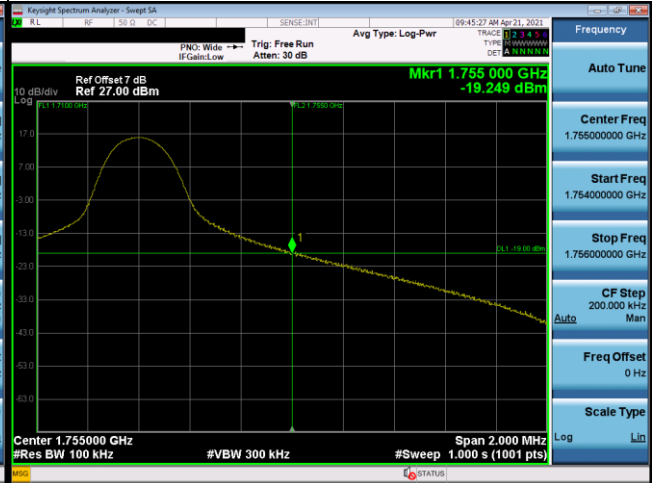
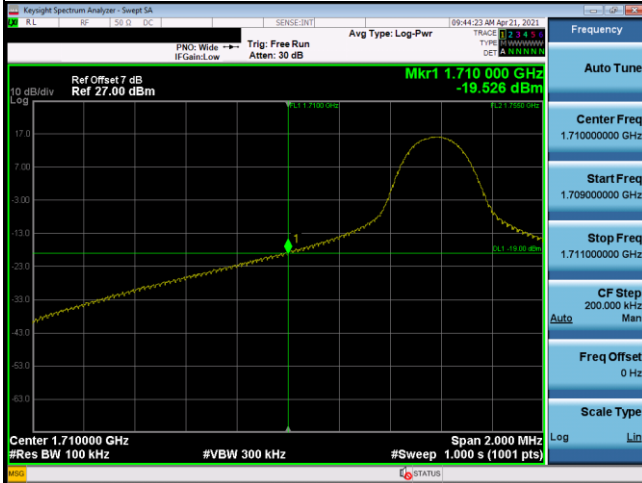
1RB#49

Channel

20000

Channel

20350



50RB#0

Channel

20000

Channel

20350



LTE Band 4_15M Spectrum Plot

1RB#0

1RB#74

Channel

20025

Channel

20325



75RB#0

Channel

20025

Channel

20325

