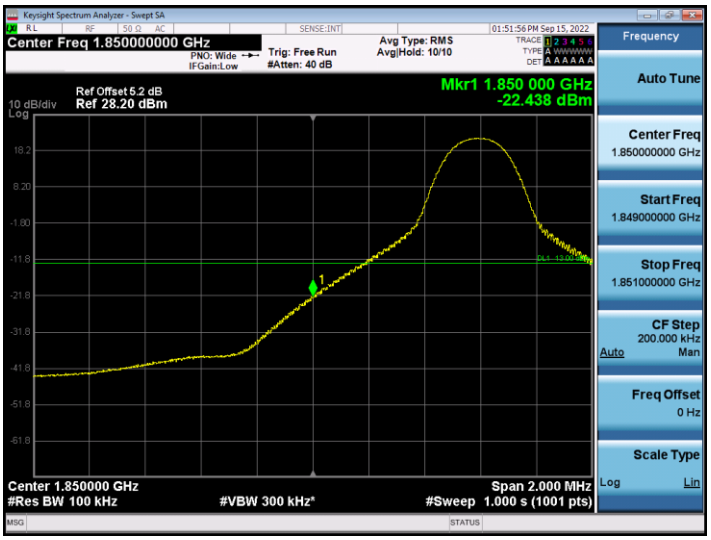
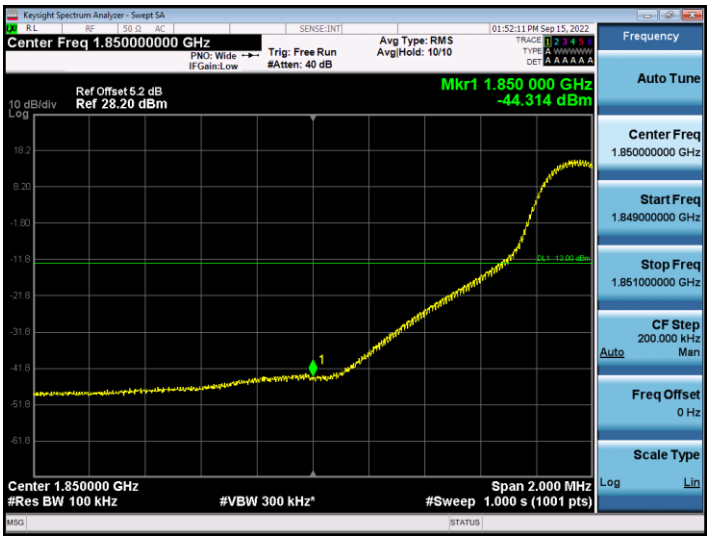
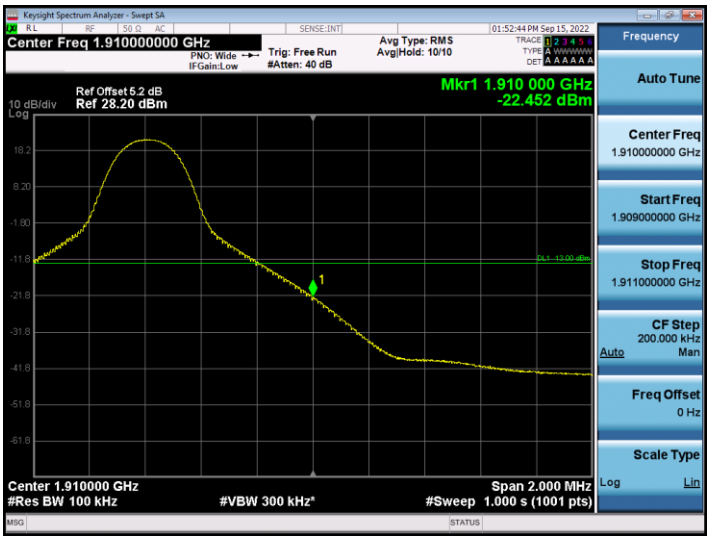


Band2-10MHz-QPSK-18650-50RB#0



Band2-10MHz-QPSK-19150-1RB#49



Band2-10MHz-QPSK-19150-50RB#0

Band2-15MHz-QPSK-18675-1RB#0

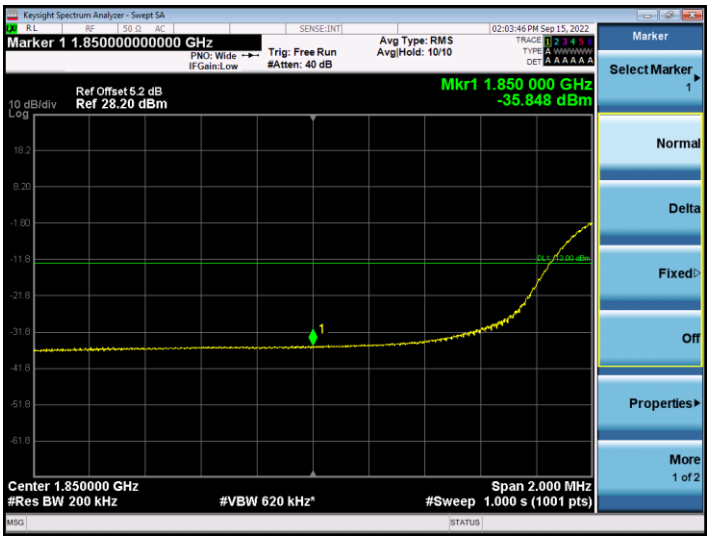
Band2-15MHz-QPSK-18675-75RB#0

Band2-15MHz-QPSK-19125-1RB#74

Band2-15MHz-QPSK-19125-75RB#0

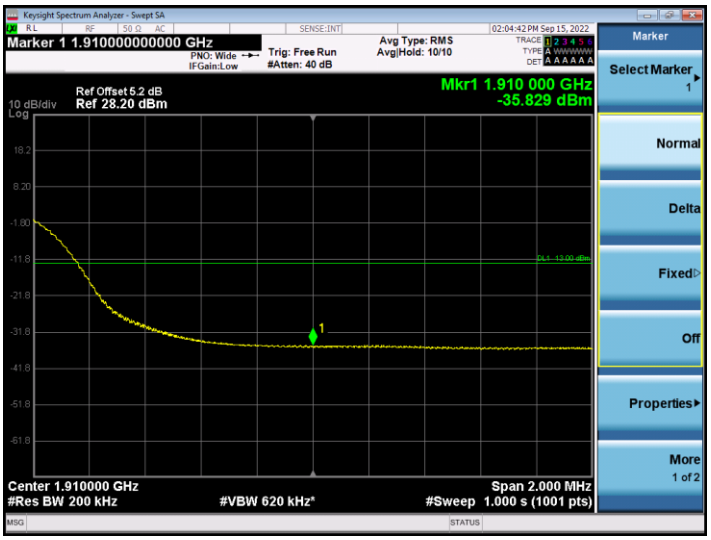
Band2-20MHz-QPSK-18700-1RB#0

Band2-20MHz-QPSK-18700-100RB#0



Band2-20MHz-QPSK-19100-1RB#99

Band2-20MHz-QPSK-19100-100RB#0



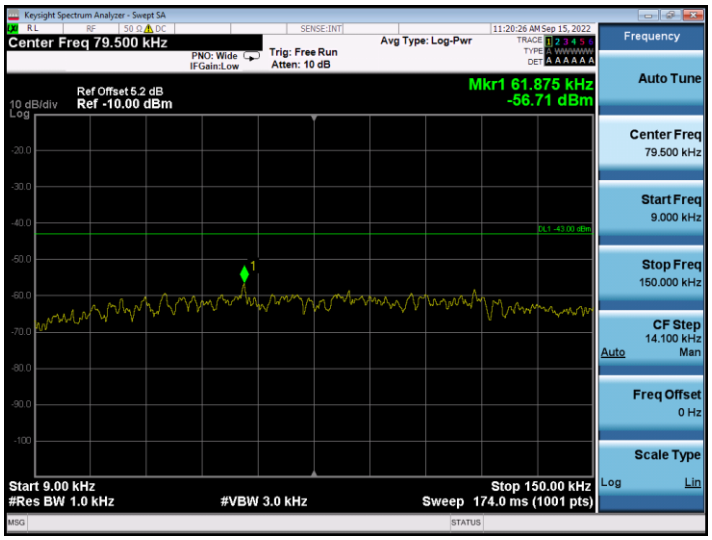
Appendix F Spurious Emission at Antenna Terminals

Test Result

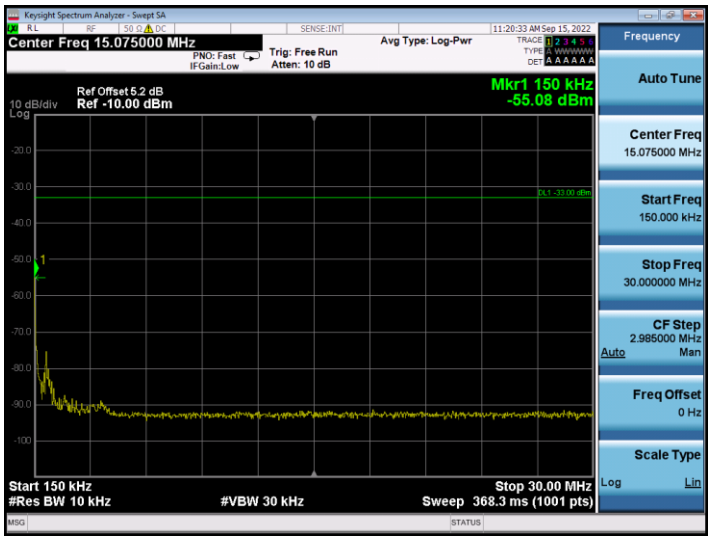
Band	Bandwidth	Modulation	Channel	RB Configuration	Frequency Range	Result (dBm)	Verdict
Band2	1.4MHz	QPSK	18900	1RB#0	Range1: 0.009~0.15MHz	-56.71	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	Range2: 0.15~30MHz	-55.08	PASS
Band2	1.4MHz	QPSK	18900	1RB#0	Range3: 30~18800MHz	-52.89	PASS
Band2	3MHz	QPSK	18900	1RB#0	Range1: 0.009~0.15MHz	-58.38	PASS
Band2	3MHz	QPSK	18900	1RB#0	Range2: 0.15~30MHz	-54.85	PASS
Band2	3MHz	QPSK	18900	1RB#0	Range3: 30~18800MHz	-52.88	PASS
Band2	5MHz	QPSK	18900	1RB#0	Range1: 0.009~0.15MHz	-57.46	PASS
Band2	5MHz	QPSK	18900	1RB#0	Range2: 0.15~30MHz	-55.08	PASS
Band2	5MHz	QPSK	18900	1RB#0	Range3: 30~18800MHz	-52.78	PASS
Band2	10MHz	QPSK	18900	1RB#0	Range1: 0.009~0.15MHz	-58.37	PASS
Band2	10MHz	QPSK	18900	1RB#0	Range2: 0.15~30MHz	-55.05	PASS
Band2	10MHz	QPSK	18900	1RB#0	Range3: 30~18800MHz	-52.80	PASS
Band2	15MHz	QPSK	18900	1RB#0	Range1: 0.009~0.15MHz	-58.62	PASS
Band2	15MHz	QPSK	18900	1RB#0	Range2: 0.15~30MHz	-56.56	PASS
Band2	15MHz	QPSK	18900	1RB#0	Range3: 30~18800MHz	-52.81	PASS
Band2	20MHz	QPSK	18900	1RB#0	Range1: 0.009~0.15MHz	-58.40	PASS
Band2	20MHz	QPSK	18900	1RB#0	Range2: 0.15~30MHz	-56.40	PASS
Band2	20MHz	QPSK	18900	1RB#0	Range3: 30~18800MHz	-53.13	PASS

Test Plots

Band2-1.4MHz-QPSK-18900-1RB#0-Range1: 0.009~0.15MHz

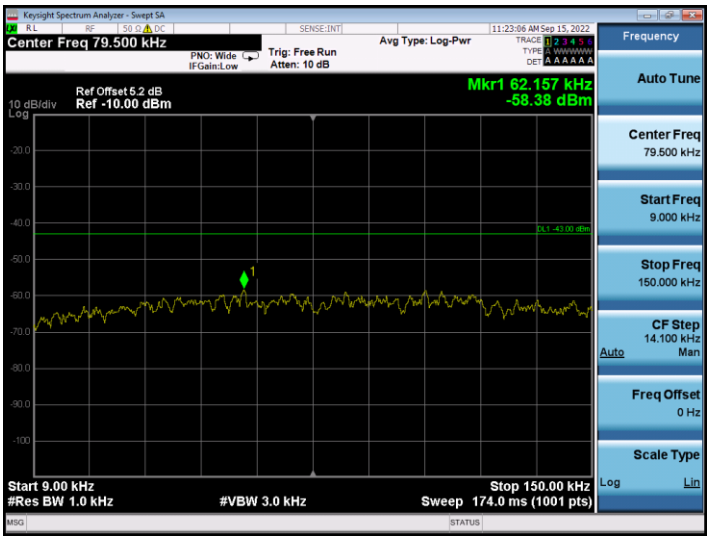


Band2-1.4MHz-QPSK-18900-1RB#0-Range2: 0.15~30MHz

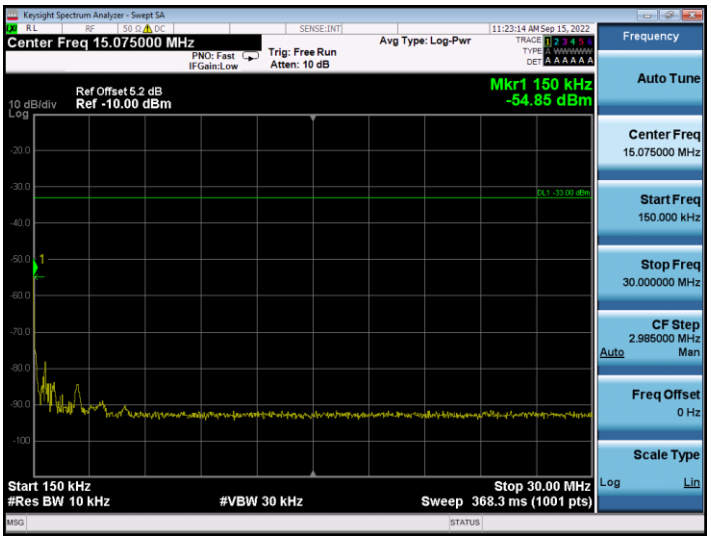


Band2-1.4MHz-QPSK-18900-1RB#0-Range3: 30~18800MHz

Band2-3MHz-QPSK-18900-1RB#0-Range1: 0.009~0.15MHz



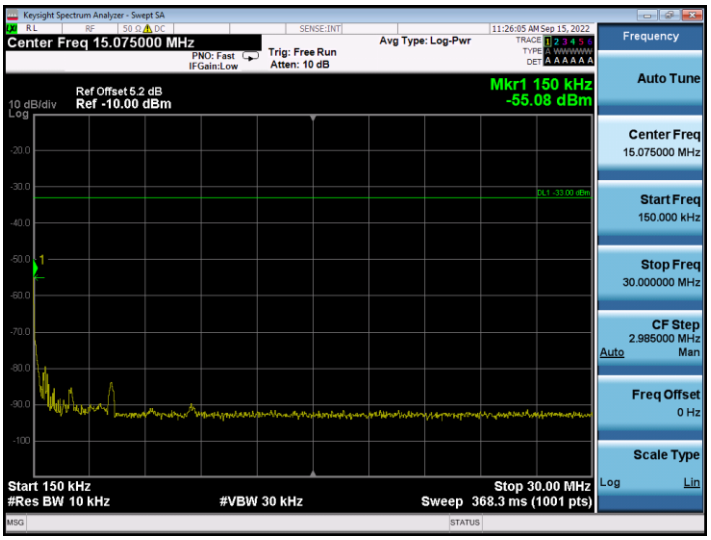
Band2-3MHz-QPSK-18900-1RB#0-Range2: 0.15~30MHz



Band2-3MHz-QPSK-18900-1RB#0-Range3: 30~18800MHz

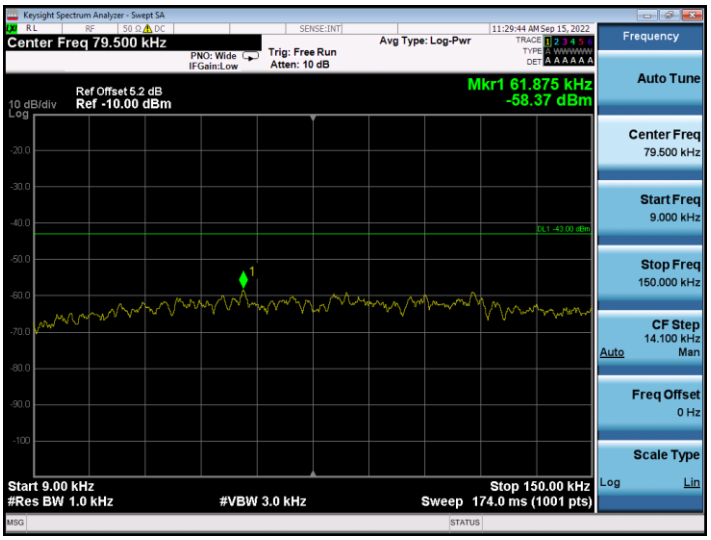
Band2-5MHz-QPSK-18900-1RB#0-Range1: 0.009~0.15MHz

Band2-5MHz-QPSK-18900-1RB#0-Range2: 0.15~30MHz

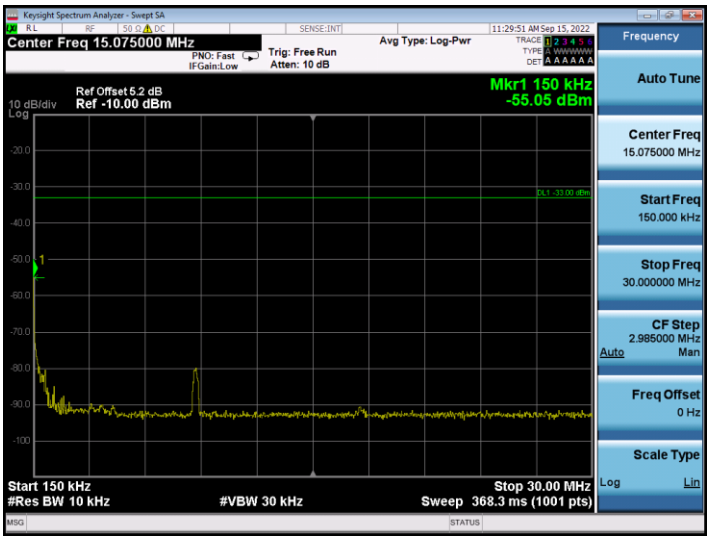


Band2-5MHz-QPSK-18900-1RB#0-Range3: 30~18800MHz

Band2-10MHz-QPSK-18900-1RB#0-Range1: 0.009~0.15MHz

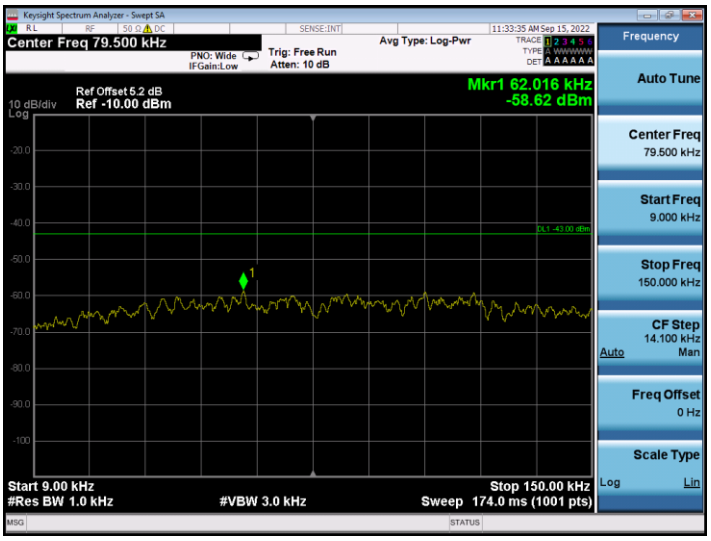


Band2-10MHz-QPSK-18900-1RB#0-Range2: 0.15~30MHz

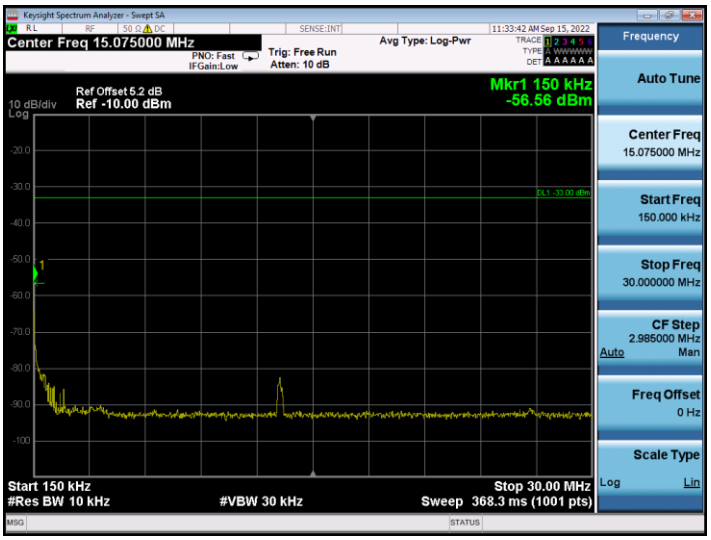


Band2-10MHz-QPSK-18900-1RB#0-Range3: 30~18800MHz

Band2-15MHz-QPSK-18900-1RB#0-Range1: 0.009~0.15MHz

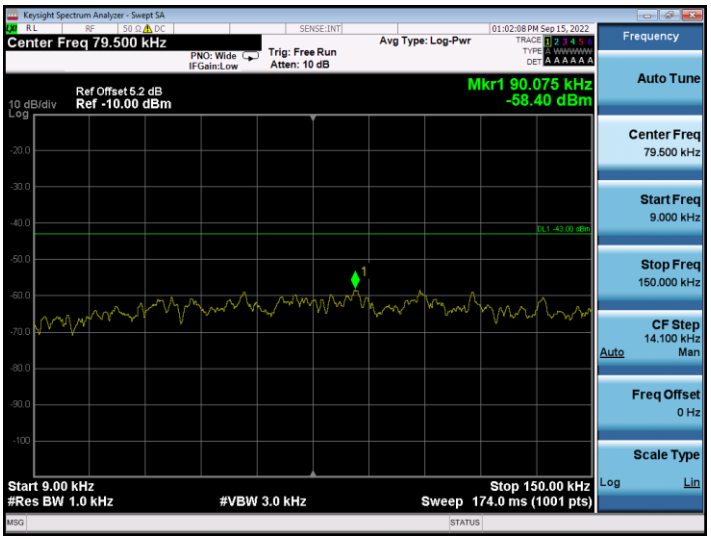


Band2-15MHz-QPSK-18900-1RB#0-Range2: 0.15~30MHz

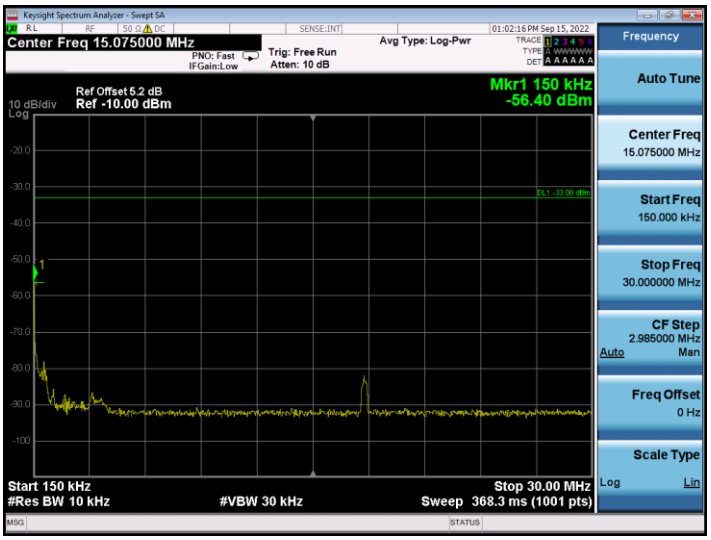


Band2-15MHz-QPSK-18900-1RB#0-Range3: 30~18800MHz

Band2-20MHz-QPSK-18900-1RB#0-Range1: 0.009~0.15MHz



Band2-20MHz-QPSK-18900-1RB#0-Range2: 0.15~30MHz



Band2-20MHz-QPSK-18900-1RB#0-Range3: 30~18800MHz

Appendix G Field Strength of Spurious Radiation

The transmitting equipment under test (EUT) is placed on a styrene turntable which is four feet in diameter and approximately 0.8 meter up to 1GHz and 1.5 meter above 1GHz in height above the ground plane. During the radiated emissions test, the turntable is rotated and any cables leaving the EUT are manipulated to find the configuration resulting in maximum emissions. The EUT is adjusted through all three orthogonal axes to obtain maximum emission levels. The antenna height and polarization are varied during the testing to search for maximum signal levels.

The frequency range scanned is from the lowest radio frequency signal generated in the device which is greater than 9 kHz to the tenth harmonic of the highest fundamental frequency or 40 GHz, whichever is lower. The emissions were very low against the limit in the frequency range 9kHz to 30MHz and 18 GHz ~ 20 GHz.

Note: We tested all modes, but the data presented below is the worst case.
9kHz~150kHz, VBW = 200Hz, VBW = 600Hz, Detector: PK
150kHz~30MHz, VBW = 9kHz, VBW = 30kHz, Detector: PK
30MHz~1GHz, RBW = 100kHz, VBW = 300kHz. Detector: RMS
Above 1GHz, RBW = 1MHz, VBW = 3MHz. Detector: RMS

Note:
The EUT is tested radiation emission at each test mode in three axes. The worst emissions are reported in all test mode and channels.

Test Plots

Test Band = BAND2
Worst Test Bandwidth = 5MHz

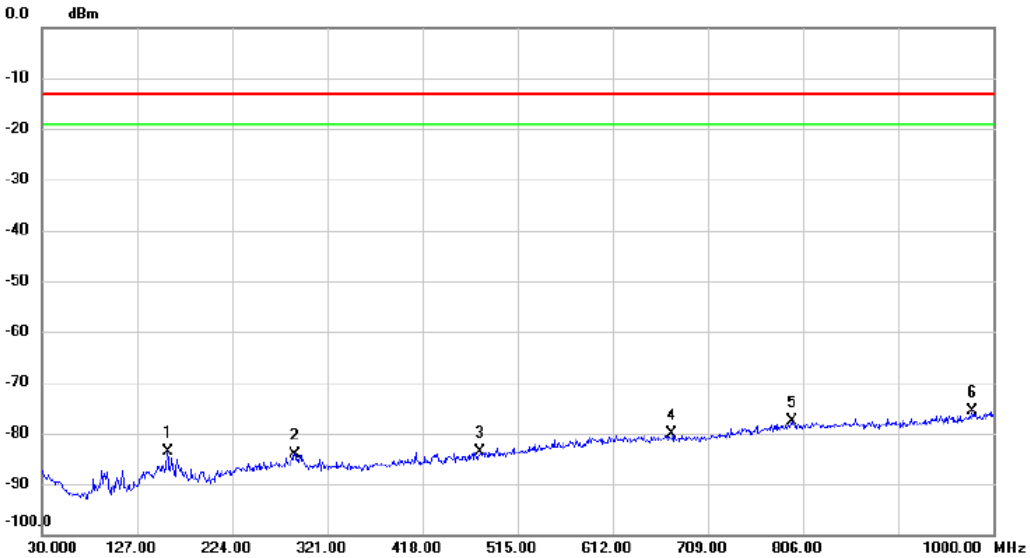
Below 1G

Middle channel Horizontal

Site:	SH-CB02	Polarization:	***Horizontal***	Temperature:	24 (C)
Limit:	FCC PART 24 EMISSION	Power:	AC 120V/60Hz	Humidity:	58 %
EUT:	LTE Module	Distance:	3m		
M/N:	EG915N-LA	Mode:	TX_LTE_B2		
Note:	5M				

Radiated Emission Measurement

File :FCCP_BELOW1G Data :#4 Date: 2022/9/19 Time: 19:35:55



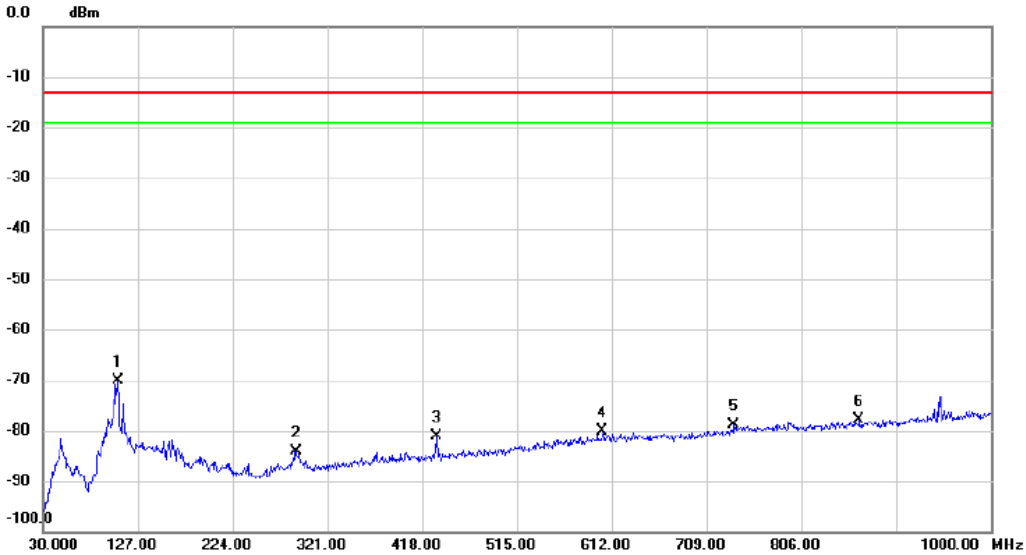
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1		158.5250	-78.47	-5.20	-83.67	-13.00	-70.67	RMS	
2		288.0200	-81.24	-2.97	-84.21	-13.00	-71.21	RMS	
3		477.1700	-82.83	-0.88	-83.71	-13.00	-70.71	RMS	
4		672.6250	-82.14	1.96	-80.18	-13.00	-67.18	RMS	
5		794.8450	-81.73	4.19	-77.54	-13.00	-64.54	RMS	
6	*	979.1450	-81.35	5.61	-75.74	-13.00	-62.74	RMS	

Middle channel Vertical

Site:	SH-CB02	Polarization:	***Vertical***	Temperature:	24 (C)
Limit:	FCC PART 24 EMISSION	Power:	AC 120V/60Hz	Humidity:	58 %
EUT:	LTE Module	Distance:	3m		
M/N:	EG915N-LA	Mode:	TX_LTE_B2		
Note:	5M				

Radiated Emission Measurement

File :FCCP_BELOW1G Data :#3 Date: 2022/9/19 Time: 19:34:04



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	106.6300	-70.37	0.17	-70.20	-13.00	-57.20	RMS	
2		289.4750	-80.01	-3.99	-84.00	-13.00	-71.00	RMS	
3		433.0350	-79.79	-1.32	-81.11	-13.00	-68.11	RMS	
4		602.7850	-82.21	2.01	-80.20	-13.00	-67.20	RMS	
5		737.1300	-81.99	3.19	-78.80	-13.00	-65.80	RMS	
6		865.1700	-81.65	3.82	-77.83	-13.00	-64.83	RMS	

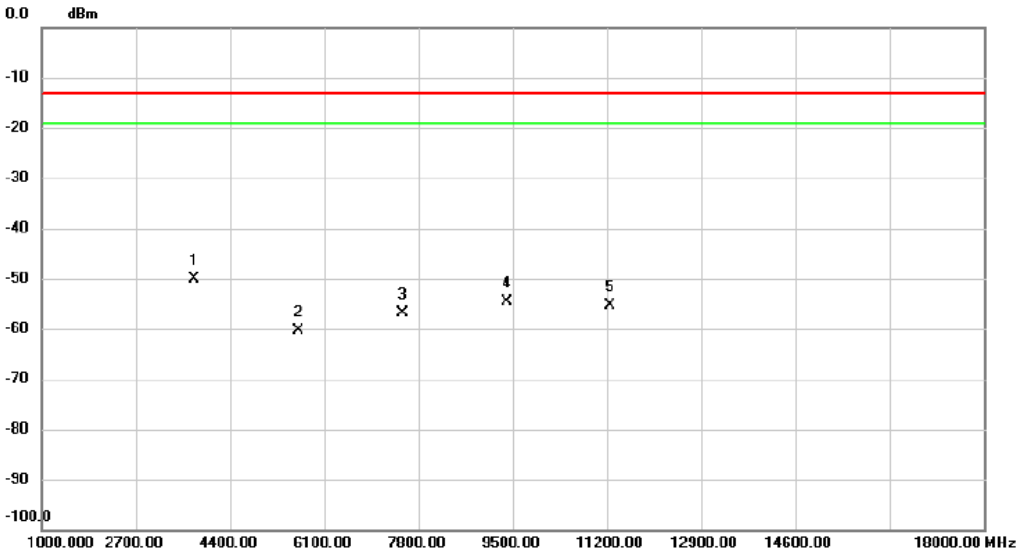
Above lG

Middle channel Horizontal

Site:	SH-CB02	Polarization:	***Horizontal***	Temperature:	24 (C)
Limit:	FCC PART 24 EMISSION	Power:	AC 120V/60Hz	Humidity:	58 %
EUT:	LTE Module	Distance:	3m		
M/N:	EG915N-LA	Mode:	TX_LTE_B2		
Note:	5M				

Radiated Emission Measurement

File :FCCP_ABOVE1G Data :#2 Date: 2022/9/16 Time: 17:43:16



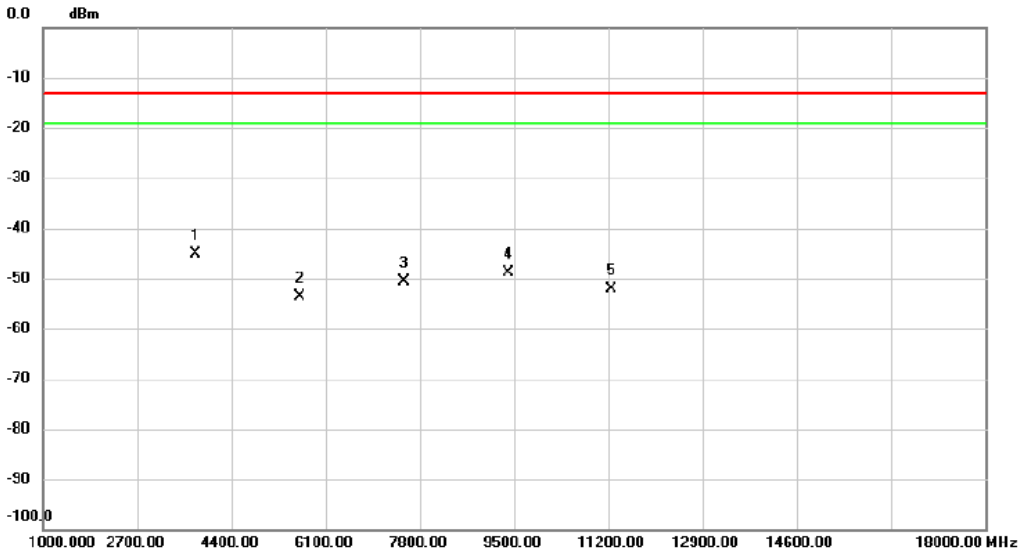
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	3755.700	-45.27	-4.73	-50.00	-13.00	-37.00	RMS	
2		5633.350	-58.21	-2.06	-60.27	-13.00	-47.27	RMS	
3		7511.000	-59.09	2.32	-56.77	-13.00	-43.77	RMS	
4		9389.500	-58.04	3.50	-54.54	-13.00	-41.54	RMS	
5		11267.15	-63.52	8.18	-55.34	-13.00	-42.34	RMS	

Middle channel Vertical

Site:	SH-CB02	Polarization:	***Vertical***	Temperature:	24 (C)
Limit:	FCC PART 24 EMISSION	Power:	AC 120V/60Hz	Humidity:	58 %
EUT:	LTE Module	Distance:	3m		
M/N:	EG915N-LA	Mode:	TX_LTE_B2		
Note:	5M				

Radiated Emission Measurement

File :FCCP_ABOVE1G Data :#1 Date: 2022/9/16 Time: 17:42:08



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Margin		
		MHz	dBm	dB	dBm	dBm	dB	Detector	Comment
1	*	3755.700	-40.16	-4.93	-45.09	-13.00	-32.09	RMS	
2		5633.350	-51.35	-2.15	-53.50	-13.00	-40.50	RMS	
3		7511.000	-52.68	2.11	-50.57	-13.00	-37.57	RMS	
4		9389.500	-52.52	3.66	-48.86	-13.00	-35.86	RMS	
5		11267.15	-60.58	8.41	-52.17	-13.00	-39.17	RMS	

Appendix H: Frequency Stability

Test Result

Frequency Error vs. Voltage:

Voltage										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	1.4MHz	QPSK	18900	6RB#0	VH	NT	7.96	0.004234043	±2.5	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	VN	NT	8.02	0.004265957	±2.5	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	VL	NT	6.71	0.003569149	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	VH	NT	9.38	0.004989362	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	VN	NT	8.21	0.004367021	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	VL	NT	9.31	0.004952128	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	VH	NT	5.90	0.003138298	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	VN	NT	7.39	0.003930851	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	VL	NT	8.48	0.004510638	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	VH	NT	9.86	0.005244681	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	VN	NT	7.13	0.003792553	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	VL	NT	8.10	0.004308511	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	VH	NT	9.95	0.005292553	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	VN	NT	9.59	0.005101064	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	VL	NT	9.75	0.00518617	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	VH	NT	8.01	0.004260638	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	VN	NT	7.62	0.004053191	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	VL	NT	9.65	0.005132979	±2.5	PASS

Frequency Error vs. Temperature:

Temperature										
Band	Bandwidth	Modulation	Channel	RB Configure	Voltage [Vdc]	Temperature (℃)	Deviation (Hz)	Deviation (ppm)	Limit (ppm)	Verdict
Band2	1.4MHz	QPSK	18900	6RB#0	NV	-30	5.22	0.002776596	±2.5	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	NV	-20	8.05	0.004281915	±2.5	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	NV	-10	-7.11	-0.003781915	±2.5	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	NV	0	6.14	0.003265957	±2.5	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	NV	10	6.32	0.003361702	±2.5	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	NV	20	7.06	0.003755319	±2.5	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	NV	30	-4.91	-0.002611702	±2.5	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	NV	40	5.10	0.002712766	±2.5	PASS
Band2	1.4MHz	QPSK	18900	6RB#0	NV	50	8.71	0.004632979	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	NV	-30	-6.99	-0.003718085	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	NV	-20	5.97	0.003175532	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	NV	-10	8.89	0.004728723	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	NV	0	7.68	0.004085106	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	NV	10	-6.37	-0.003388298	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	NV	20	8.68	0.004617021	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	NV	30	6.77	0.003601064	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	NV	40	8.84	0.004702128	±2.5	PASS
Band2	3MHz	QPSK	18900	15RB#0	NV	50	4.01	0.002132979	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	NV	-30	7.58	0.004031915	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	NV	-20	8.29	0.004409574	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	NV	-10	4.85	0.002579787	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	NV	0	-6.81	-0.00362234	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	NV	10	6.50	0.003457447	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	NV	20	5.30	0.002819149	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	NV	30	4.27	0.002271277	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	NV	40	-7.94	-0.004223404	±2.5	PASS
Band2	5MHz	QPSK	18900	25RB#0	NV	50	6.83	0.003632979	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	NV	-30	5.86	0.003117021	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	NV	-20	5.24	0.002787234	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	NV	-10	-6.06	-0.003223404	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	NV	0	7.40	0.00393617	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	NV	10	5.65	0.003005319	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	NV	20	6.69	0.003558511	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	NV	30	-5.14	-0.002734043	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	NV	40	-7.81	-0.004154255	±2.5	PASS
Band2	10MHz	QPSK	18900	50RB#0	NV	50	6.68	0.003553191	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	NV	-30	-7.94	-0.004223404	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	NV	-20	6.07	0.003228723	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	NV	-10	7.68	0.004085106	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	NV	0	7.50	0.003989362	±2.5	PASS

Band2	15MHz	QPSK	18900	75RB#0	NV	10	7.87	0.00418617	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	NV	20	8.13	0.004324468	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	NV	30	8.54	0.004542553	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	NV	40	7.88	0.004191489	±2.5	PASS
Band2	15MHz	QPSK	18900	75RB#0	NV	50	8.76	0.004659574	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	-30	-4.07	-0.002164894	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	-20	5.29	0.00281383	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	-10	6.25	0.003324468	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	0	7.43	0.003952128	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	10	8.12	0.004319149	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	20	5.06	0.002691489	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	30	-4.38	-0.002329787	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	40	4.75	0.002526596	±2.5	PASS
Band2	20MHz	QPSK	18900	100RB#0	NV	50	-6.00	-0.003191489	±2.5	PASS

END