

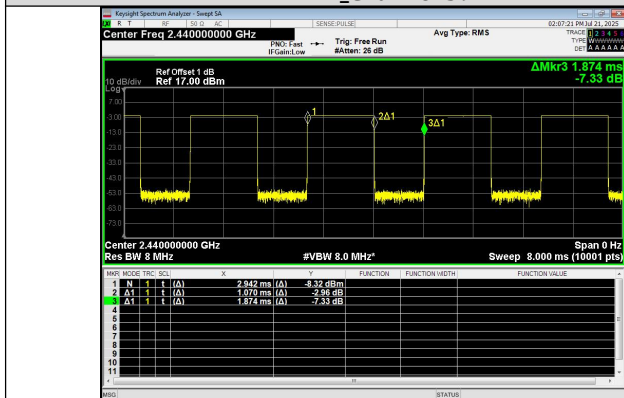
Appendix RF test data for BLE



Duty Cycle Test Result

Mode	Channel	On Time (ms)	Period (ms)	Duty Cycle (%)	Duty Cycle (linear)	Duty Cycle Factor (dB)	1/T
BLE 1M	0	2.126	2.499	85.08	0.8508	0.7017	0.4704
	19	2.125	2.498	85.07	0.8507	0.7022	0.4706
	39	2.126	2.499	85.08	0.8508	0.7017	0.4704
BLE 2M	0	1.070	1.874	57.11	0.5711	2.4329	0.9346
	19	1.070	1.874	57.11	0.5711	2.4329	0.9346
	39	1.070	1.874	57.06	0.5706	2.4367	0.9346

Test Graphs

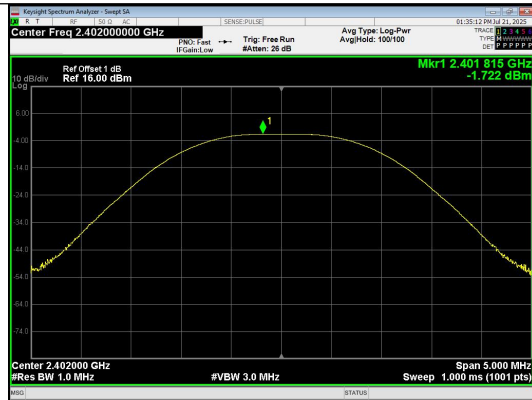
**BLE 1M_Channel 0****BLE 1M_Channel 19****BLE 1M_Channel 39****BLE 2M_Channel 0****BLE 2M_Channel 19****BLE 2M_Channel 39**

Conducted Output Power

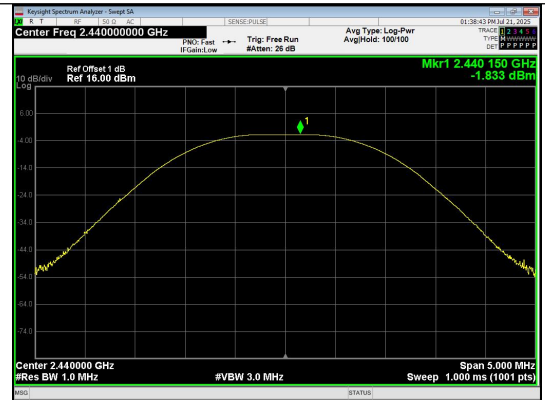
Test Result

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	-1.72	0.67	≤30	PASS
	19	-1.83	0.66	≤30	PASS
	39	-1.72	0.67	≤30	PASS
BLE 2M	0	-1.75	0.67	≤30	PASS
	19	-1.83	0.66	≤30	PASS
	39	-1.73	0.67	≤30	PASS

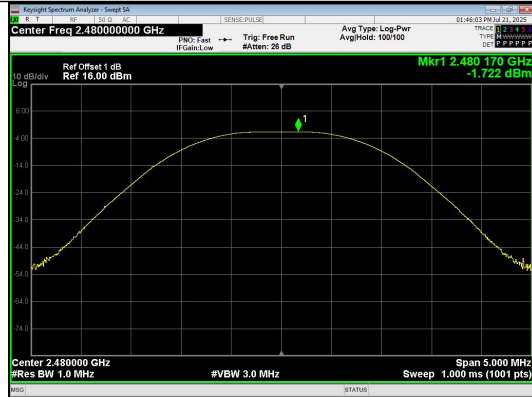
Test Graphs



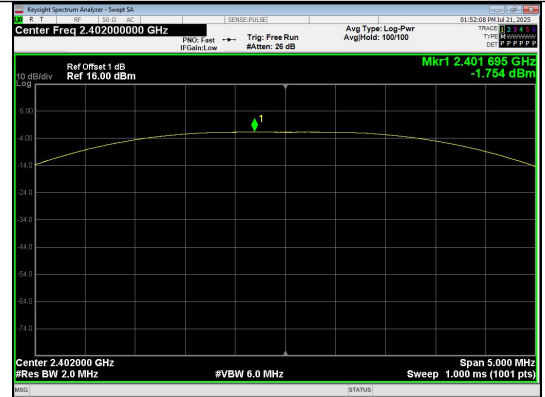
Peak Output Power
BLE 1M_Channel 0



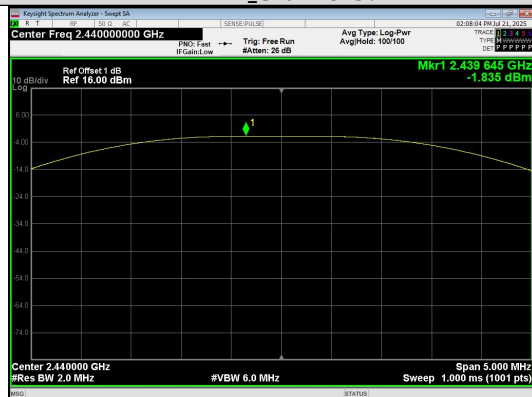
Peak Output Power
BLE 1M_Channel 19



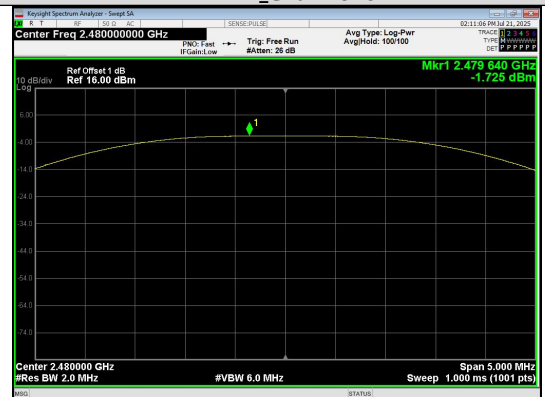
Peak Output Power
BLE 1M_Channel 39



Peak Output Power
BLE 2M_Channel 0



Peak Output Power
BLE 2M_Channel 19



Peak Output Power
BLE 2M_Channel 39

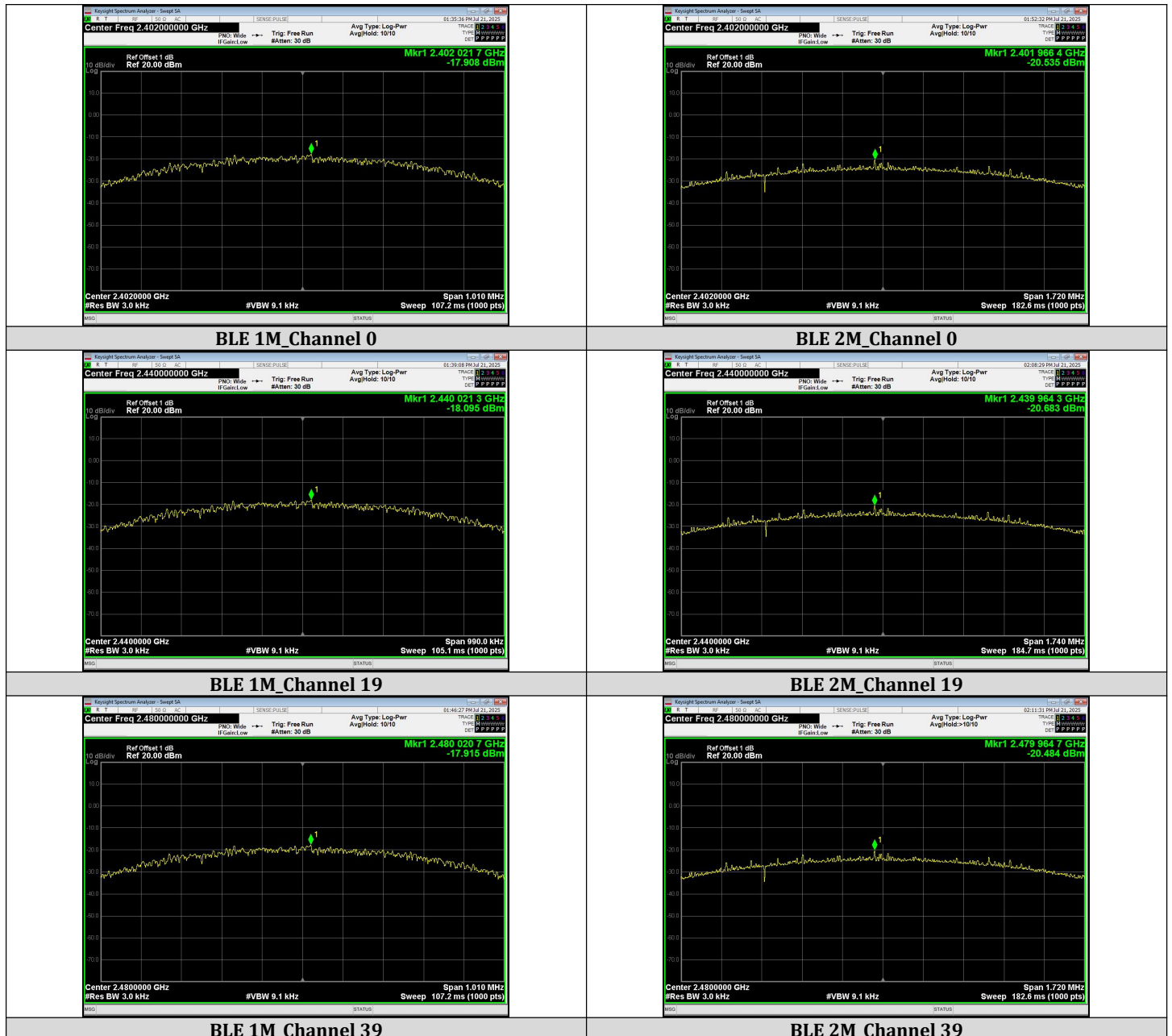


Power Spectral Density

Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-17.910	≤ 8	PASS
BLE 1M	19	-18.090	≤ 8	PASS
BLE 1M	39	-17.910	≤ 8	PASS
BLE 2M	0	-20.540	≤ 8	PASS
BLE 2M	19	-20.680	≤ 8	PASS
BLE 2M	39	-20.480	≤ 8	PASS

Test Graphs



99% Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.0403
BLE 1M	19	2440	1.0419
BLE 1M	39	2480	1.0422
BLE 2M	0	2402	2.0796
BLE 2M	19	2440	2.0762
BLE 2M	39	2480	2.0744

Test Graphs



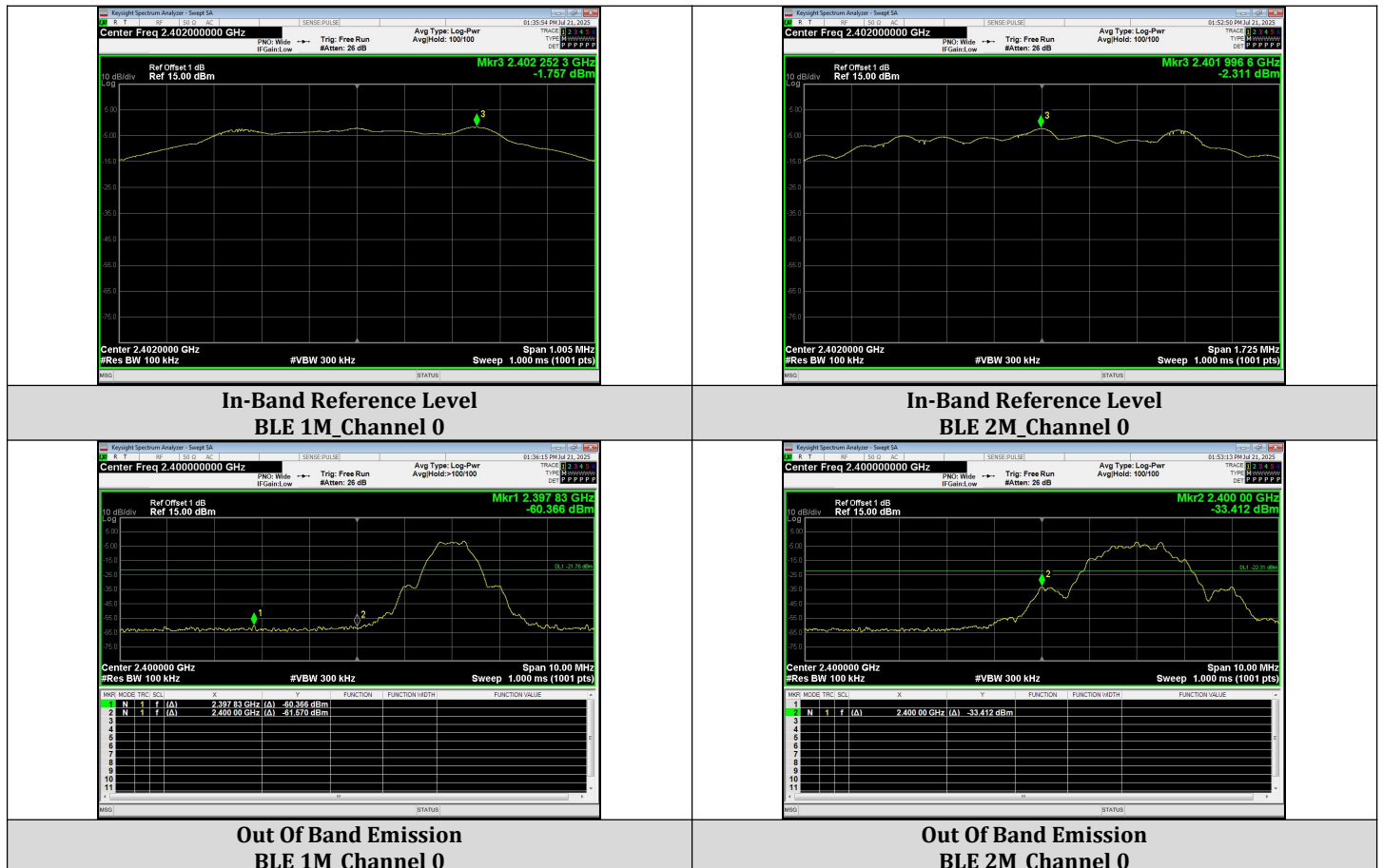
**6dB Bandwidth****Test Result**

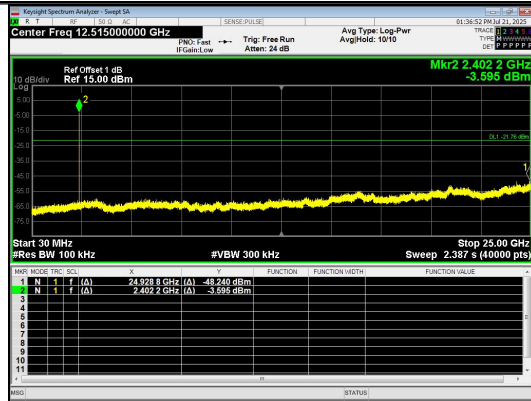
Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.6700	≥0.5	PASS
	19	2440	0.6600		PASS
	39	2480	0.6700		PASS
BLE 2M	0	2402	1.150		PASS
	19	2440	1.160		PASS
	39	2480	1.150		PASS

Test Graphs

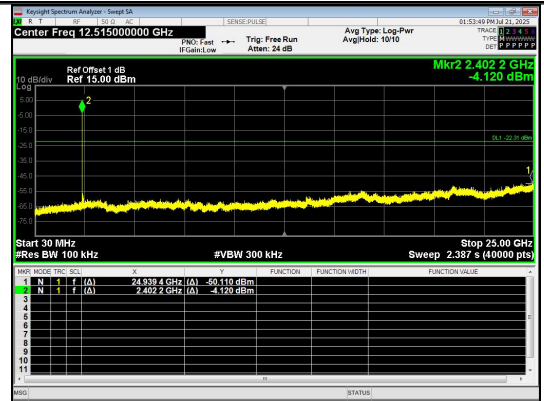
**Conducted Out Of Band Emission****Test Result**

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2397.83	-60.366	-21.76	-38.606	PASS
		2400.00	-61.570	-21.76	-39.810	PASS
		24928.8	-48.240	-21.76	-26.480	PASS
	19	24915.1	-49.406	-21.87	-27.536	PASS
		2483.50	-63.460	-21.77	-41.690	PASS
		24972.5	-49.826	-21.77	-28.056	PASS
BLE 2M	0	2400.00	-33.410	-22.31	-11.100	PASS
		24939.5	-50.110	-22.31	-27.800	PASS
	19	24956.3	-49.844	-22.46	-27.384	PASS
		2483.50	-61.440	-22.31	-39.130	PASS
	39	24390.7	-49.173	-22.31	-26.863	PASS

Test Graphs



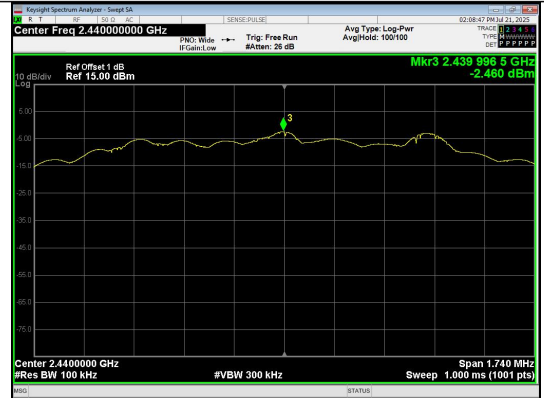
30.0 MHz - 25000.0 MHz
BLE 1M_Channel 0



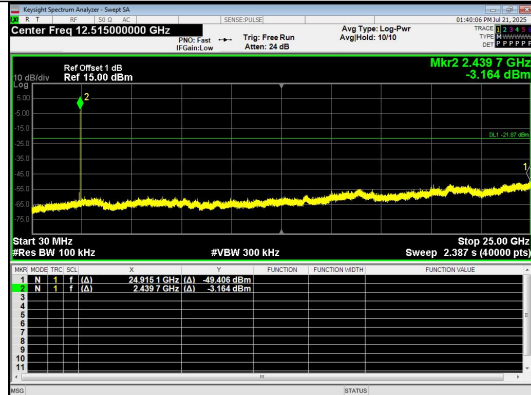
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 0



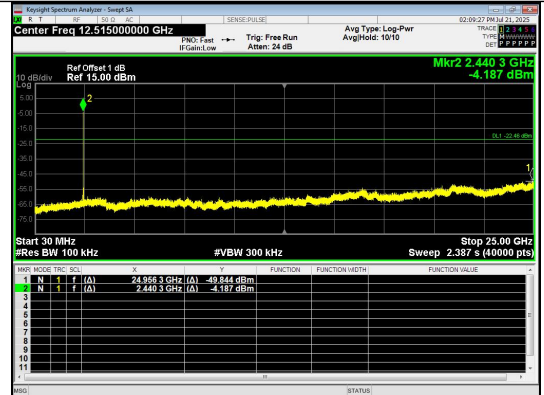
In-Band Reference Level
BLE 1M_Channel 19



In-Band Reference Level
BLE 2M_Channel 19



30.0 MHz - 25000.0 MHz
BLE 1M_Channel 19



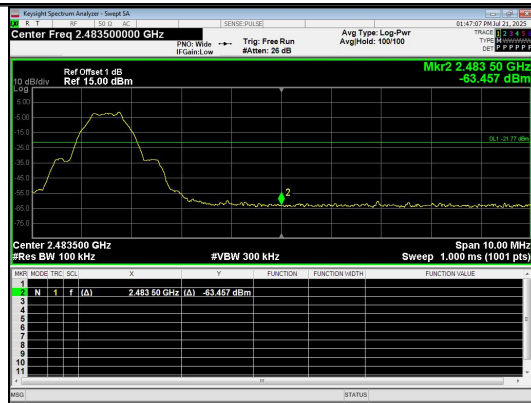
30.0 MHz - 25000.0 MHz
BLE 2M_Channel 19



In-Band Reference Level
BLE 1M_Channel 39

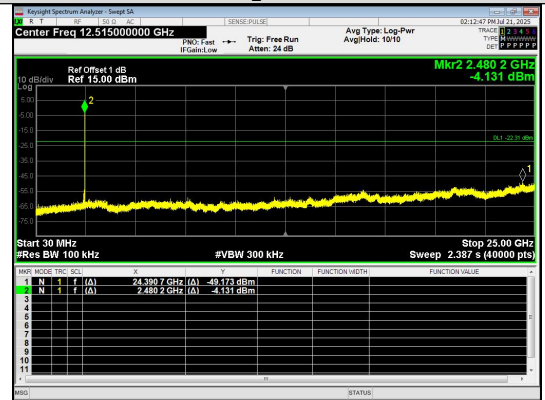
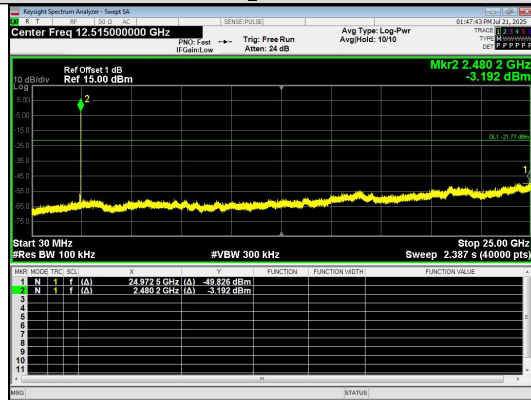


In-Band Reference Level
BLE 2M_Channel 39



Out Of Band Emission BLE 1M_Channel 39

Out Of Band Emission BLE 2M_Channel 39



30.0 MHz - 25000.0 MHz BLE 1M_Channel 39

30.0 MHz - 25000.0 MHz BLE 2M_Channel 39

***** End of Report *****