

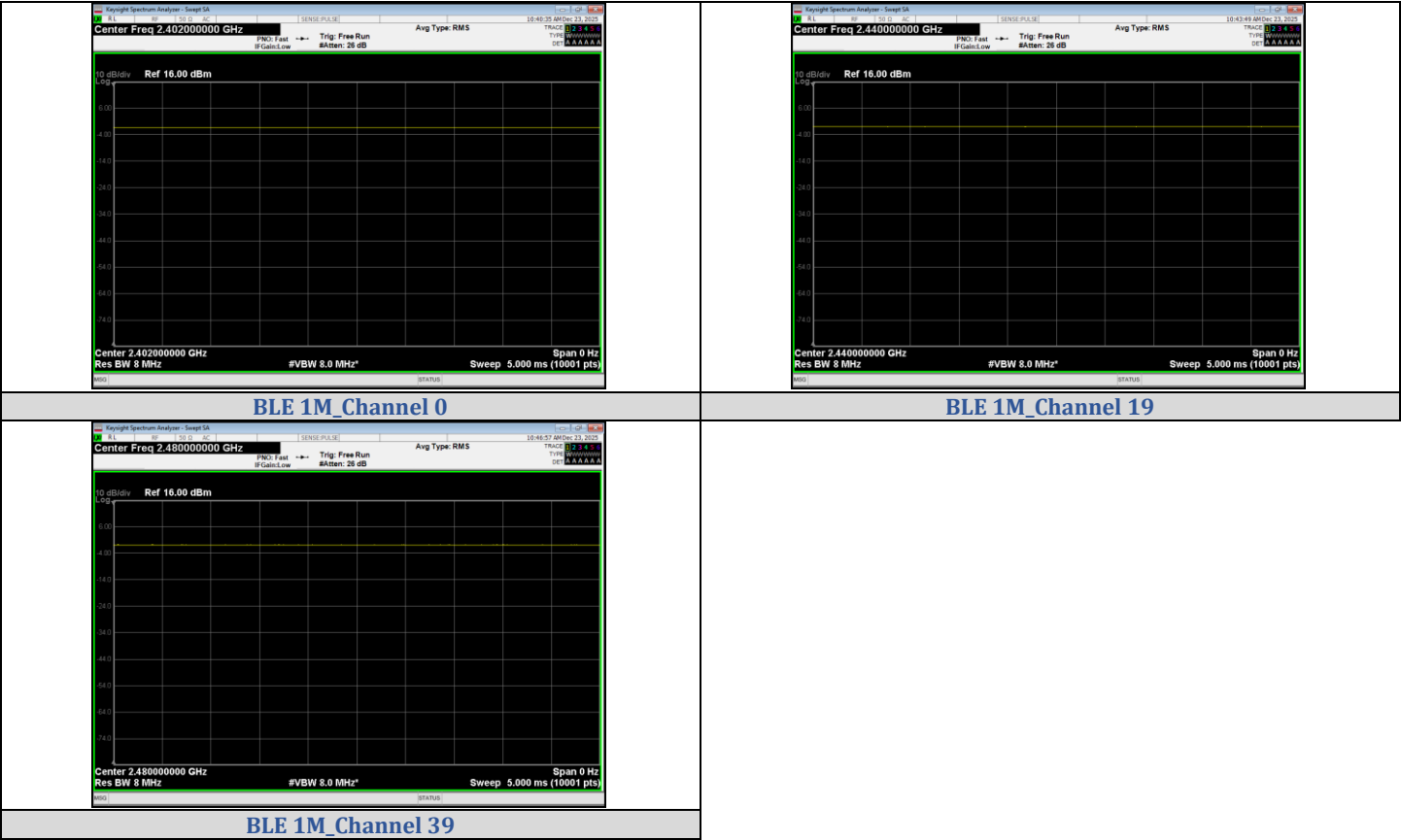
Appendix RF test data for BLE

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	5.000	5.000	100	1	0.0	0.2000
	19	5.000	5.000	100	1	0.0	0.2000
	39	5.000	5.000	100	1	0.0	0.2000

Test Graphs

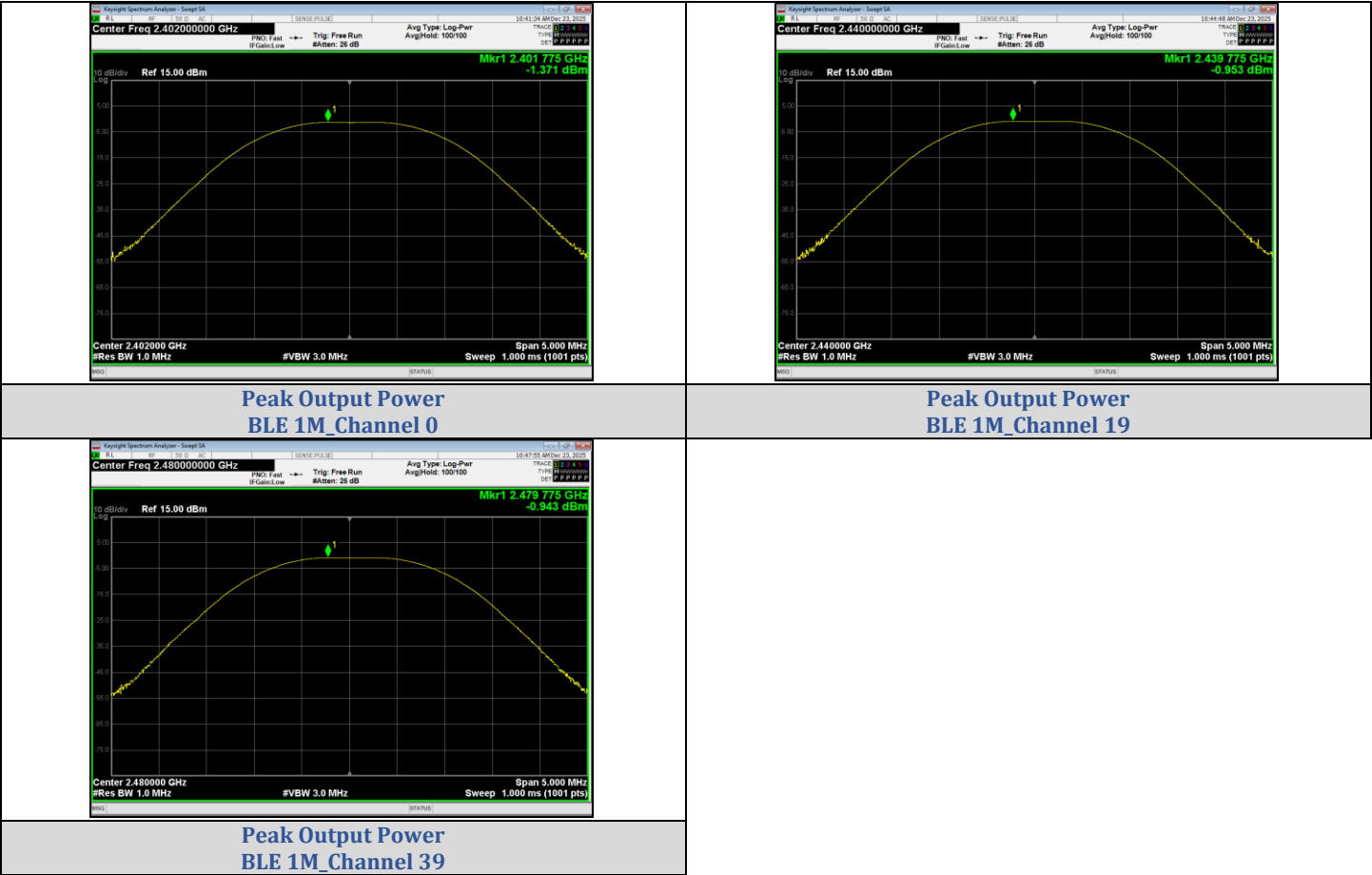


Conducted Output Power

Test Result

Mode	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Limit (dBm)	Result
BLE 1M	0	-1.37	0.73	≤30	PASS
	19	-0.95	0.8	≤30	PASS
	39	-0.94	0.81	≤30	PASS

Test Graphs

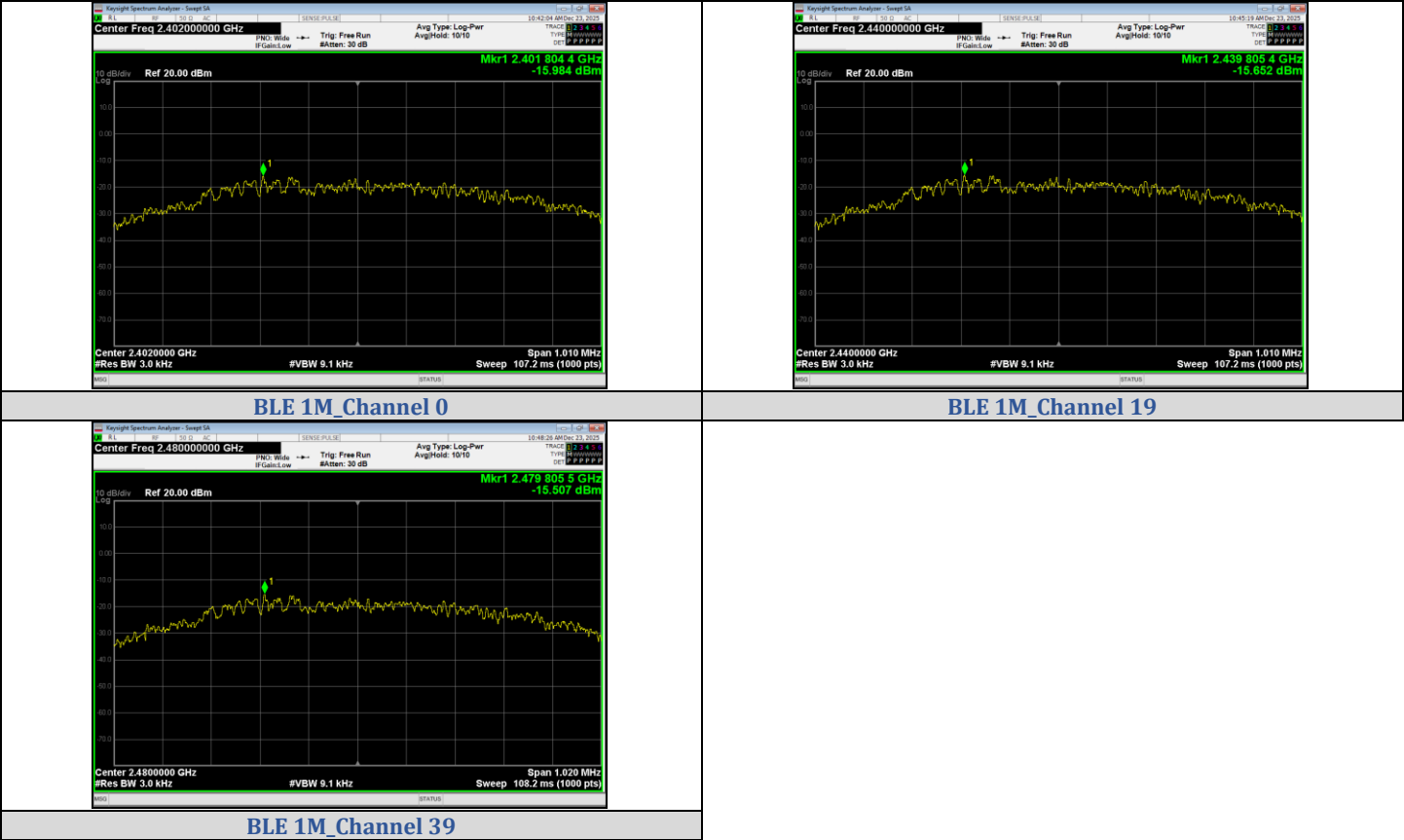


Power Spectral Density

Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-15.980	≤8	PASS
BLE 1M	19	-15.650	≤8	PASS
BLE 1M	39	-15.510	≤8	PASS

Test Graphs

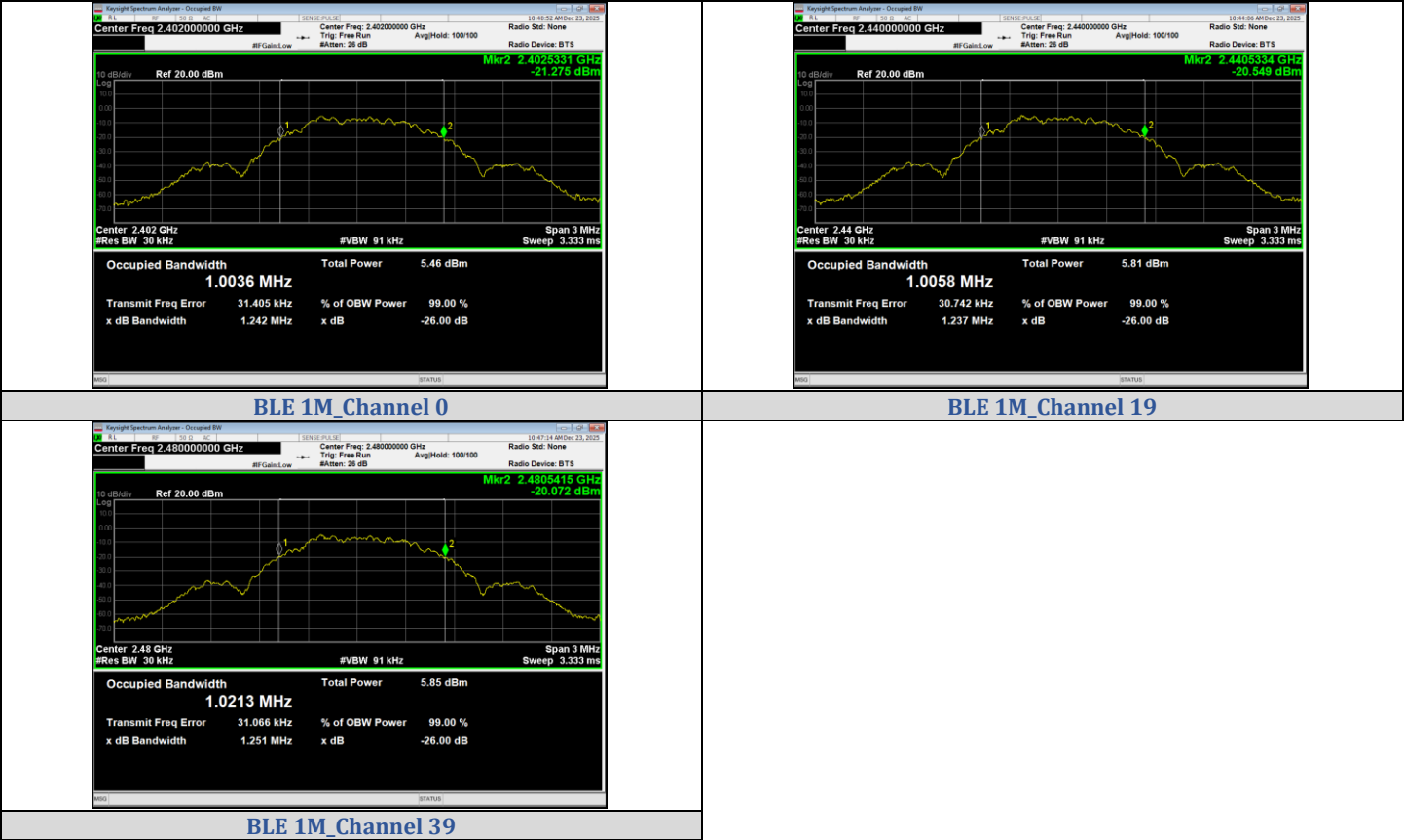


99% Bandwidth

Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.0036
BLE 1M	19	2440	1.0058
BLE 1M	39	2480	1.0213

Test Graphs

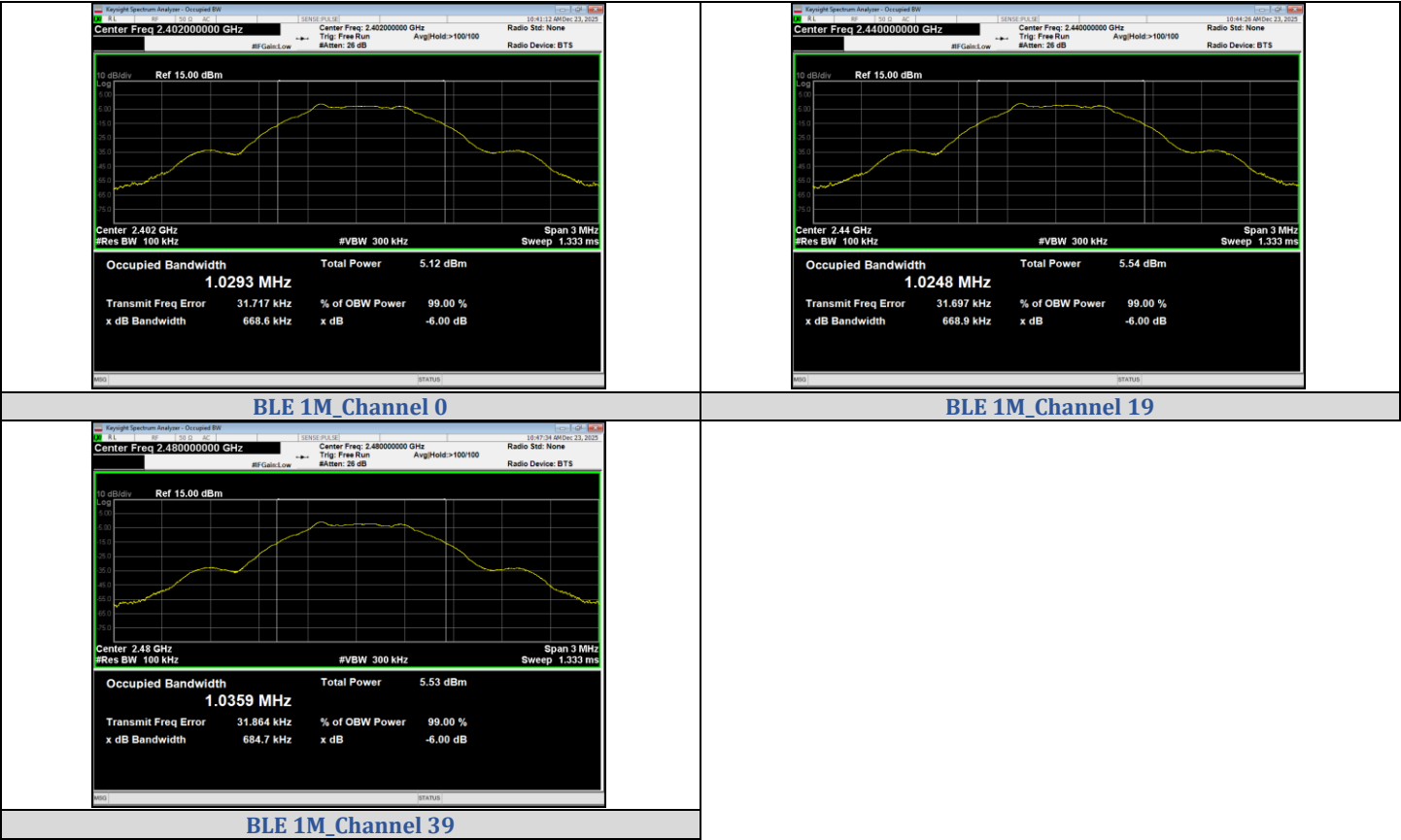


6dB Bandwidth

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	0.6700		PASS
	39	2480	0.6800		PASS

Test Graphs

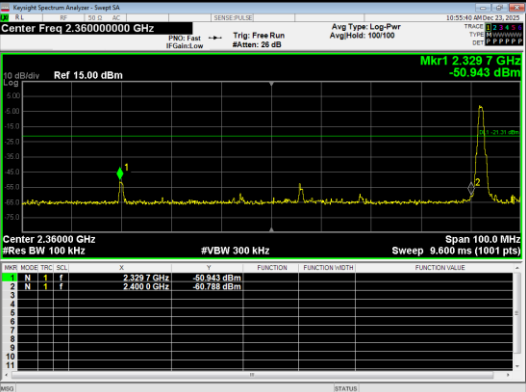
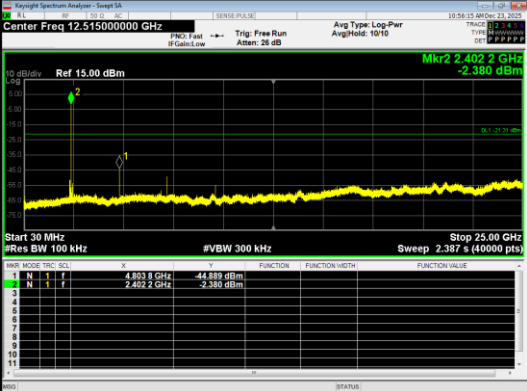
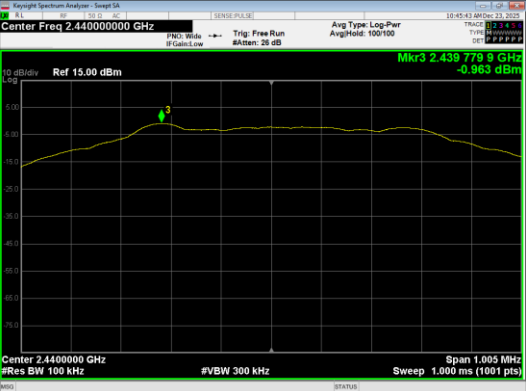
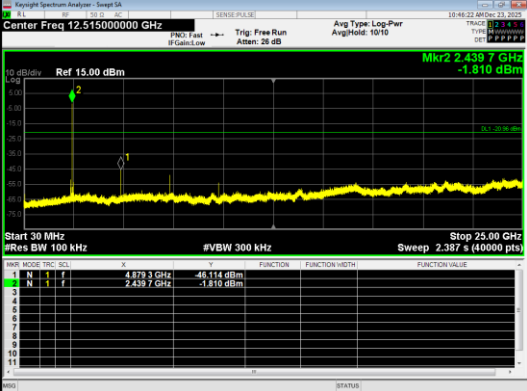
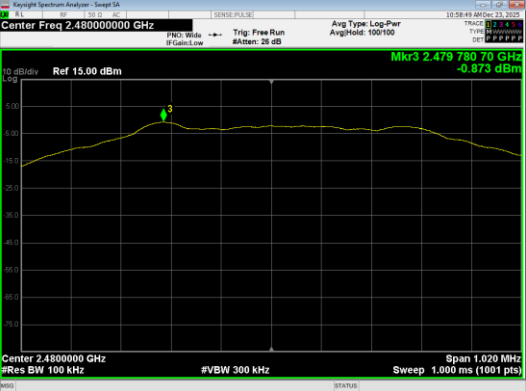


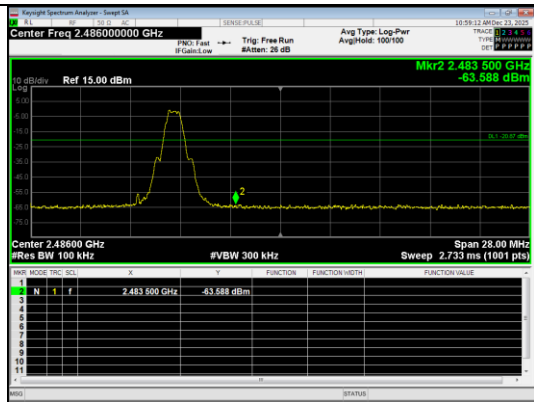
Conducted Out Of Band Emission

Test Result

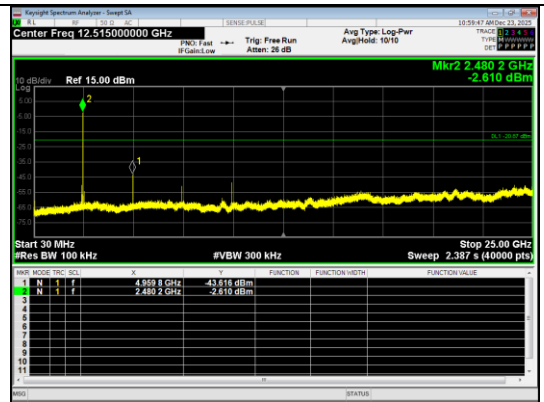
Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2329.70	-50.943	-21.31	-29.633	PASS
		2400.00	-60.790	-21.31	-39.480	PASS
		4803.80	-44.889	-21.31	-23.579	PASS
	19	4879.30	-46.114	-20.96	-25.154	PASS
	39	2483.50	-63.590	-20.87	-42.720	PASS
		4959.83	-43.616	-20.87	-22.746	PASS

Test Graphs

 Copyright Spectrum Analyzer - Swept SA Center Freq 2.40200000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.000 ms (1001 pts) Mkr3 2.4017809 GHz -1.310 dBm	 Copyright Spectrum Analyzer - Swept SA Center Freq 2.36000000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 9.600 ms (1001 pts) Mkr1 2.3297 GHz -50.943 dBm
In-Band Reference Level BLE 1M_Channel 0	Out Of Band Emission BLE 1M_Channel 0
 Copyright Spectrum Analyzer - Swept SA Center Freq 12.51500000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.307 s (40000 pts) Mkr2 2.4022 GHz -2.380 dBm	 Copyright Spectrum Analyzer - Swept SA Center Freq 2.44000000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.000 ms (1001 pts) Mkr3 2.439779 GHz -0.963 dBm
30.0 MHz - 25000.0 MHz BLE 1M_Channel 0	In-Band Reference Level BLE 1M_Channel 19
 Copyright Spectrum Analyzer - Swept SA Center Freq 12.51500000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 2.387 s (40000 pts) Mkr2 2.4397 GHz -1.810 dBm	 Copyright Spectrum Analyzer - Swept SA Center Freq 2.48000000 GHz #Res BW 100 kHz #VBW 300 kHz Sweep 1.000 ms (1001 pts) Mkr3 2.4797807 GHz -0.873 dBm
30.0 MHz - 25000.0 MHz BLE 1M_Channel 19	In-Band Reference Level BLE 1M_Channel 39



Out Of Band Emission
BLE 1M_Channel 39



30.0 MHz - 25000.0 MHz
BLE 1M_Channel 39

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