



Keyway Testing Technology (Guangdong) Co., Ltd
21 Floor,Building 6,Dongyi Intelligent Equipment New Energy Vehicle Park,N.30
of Tangxia District,Dongshen Road,Tangxia Town,Dongguan City,Guangdong,China

E.U.T:	Stage One
Model Number:	S1
Trade Name:	SKAA
Sample Number:	250106084
Date of Receipt:	Feb. 28, 2025
Date of Test:	Feb. 28, 2025 ~ Aug. 29, 2025
FCC ID:	2BRDB-S1
IC:	34372-S1

A.1 CONDUCTED OUTPUT POWER

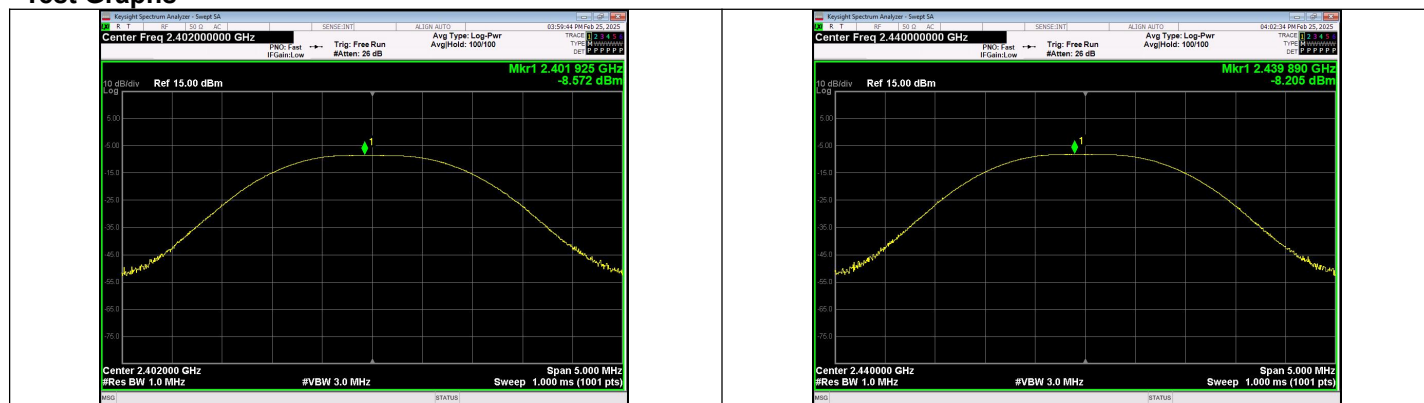
Test Result

Modulation	Channel	Peak Output Power (dBm)	Peak Output Power (mW)	Max. Avg. Power (dBm)	Limit (dBm)	Result
BLE 1M	0	-8.57	0.14	None	≤30	PASS
	19	-8.21	0.15	None		PASS
	39	-8.20	0.15	None		PASS
BLE 2M	0	-12.07	0.06	None		PASS
	19	-8.18	0.15	None		PASS
	39	-8.25	0.15	None		PASS

Modulation	Channel	Peak Output Power (dBm)	Peak Power Limit (dBm)	Antenna Gain (dBi)	ISED EIRP (dBm)	ISED EIRP Limit (dBm)	Max. Avg. Power (dBm)	Result
BLE 1M	0	-8.57	≤30	2.11	-6.46	≤36.02	None	PASS
	19	-8.21	≤30	2.11	-6.10	≤36.02	None	PASS
	39	-8.20	≤30	2.11	-6.09	≤36.02	None	PASS
BLE 2M	0	-12.07	≤30	2.11	-9.96	≤36.02	None	PASS
	19	-8.18	≤30	2.11	-6.07	≤36.02	None	PASS
	39	-8.25	≤30	2.11	-6.14	≤36.02	None	PASS

Note: ISED EIRP (dBm) =Peak Output Power (dBm) +Antenna Gain (dBi)

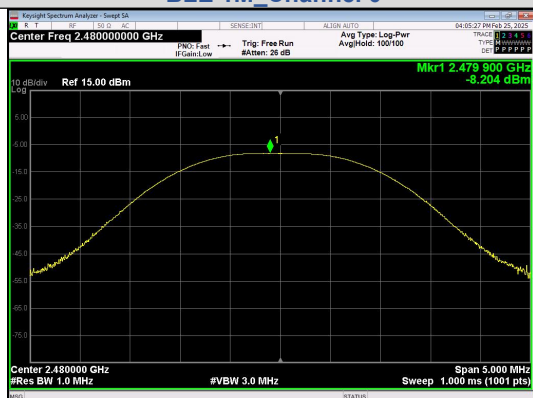
Test Graphs





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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



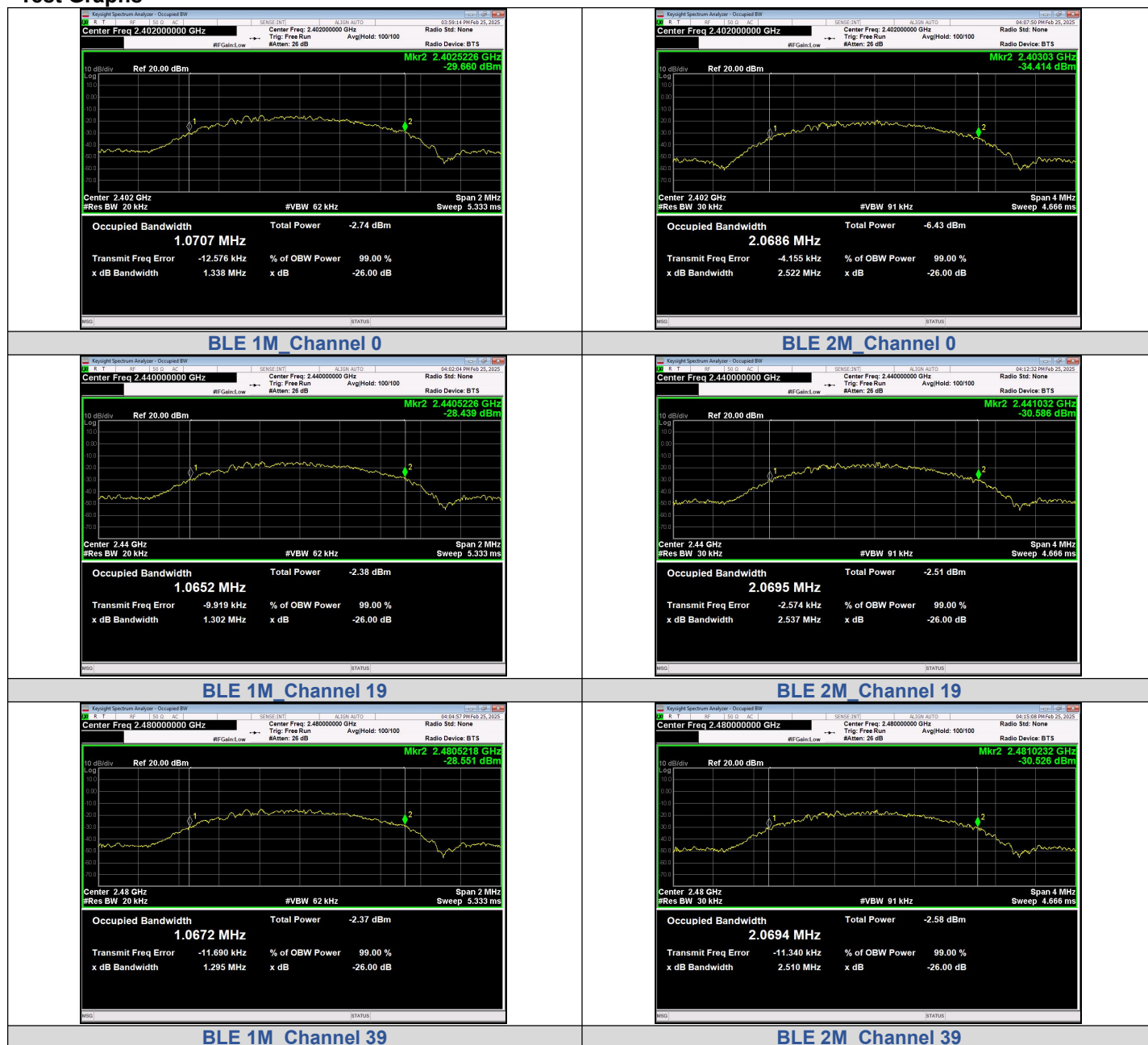
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A.2 99% BANDWIDTH

Test Result

Mode	Channel	Center Frequency (MHz)	99% BW (MHz)
BLE 1M	0	2402	1.0707
BLE 1M	19	2440	1.0652
BLE 1M	39	2480	1.0672
BLE 2M	0	2402	2.0686
BLE 2M	19	2440	2.0695
BLE 2M	39	2480	2.0694

Test Graphs





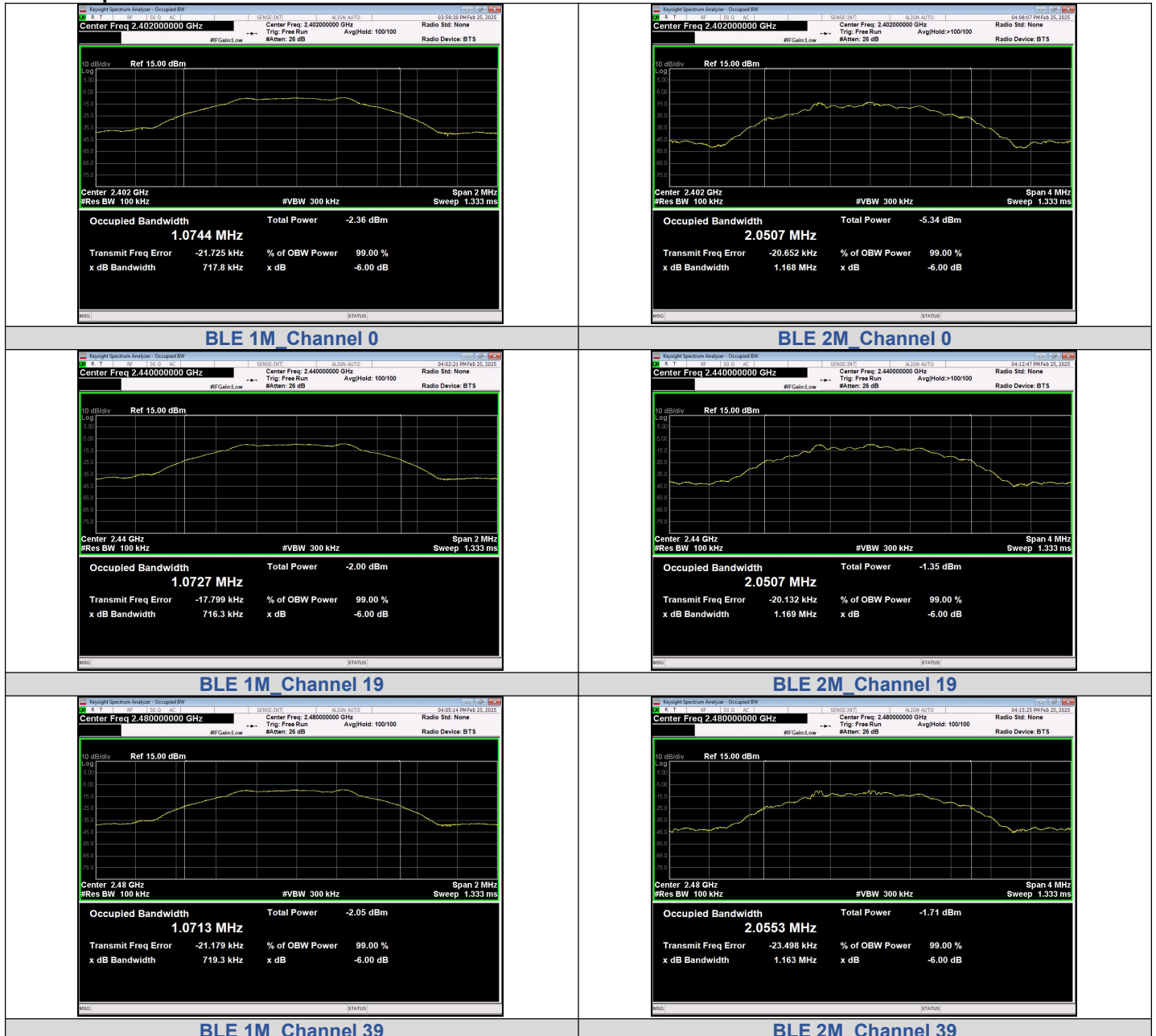
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A.3 6DB BANDWIDTH

Test Result

Mode	Channel	Center Frequency (MHz)	6 dB Bandwidth (MHz)	Limit (MHz)	Result
BLE 1M	0	2402	0.7178	≥0.5	PASS
	19	2440	0.7163		PASS
	39	2480	0.7193		PASS
BLE 2M	0	2402	1.168		PASS
	19	2440	1.169		PASS
	39	2480	1.163		PASS

Test Graphs





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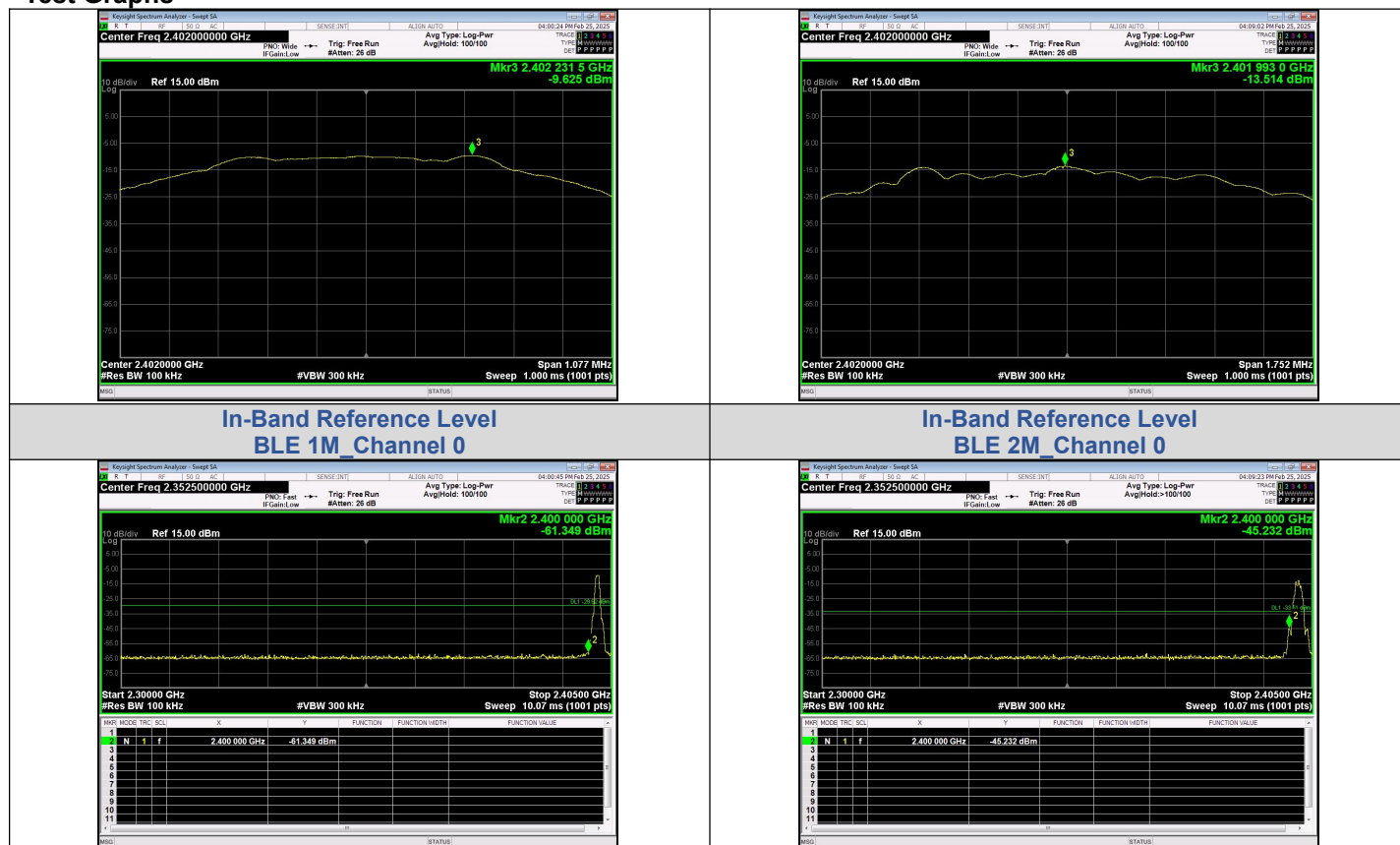
A.4 CONDUCTED OUT OF BAND EMISSION

Test Result

Mode	Channel	OOB Emission Frequency (MHz)	OOB Emission Level (dBm)	Limit (dBm)	Over Limit (dB)	Result
BLE 1M	0	2400.00	-61.349	-29.62	-31.729	PASS
		4803.64	-61.593	-29.62	-31.973	PASS
		7205.75	-61.715	-29.62	-32.095	PASS
		9609.12	-62.862	-29.62	-33.242	PASS
	19	21574.1	-48.507	-29.62	-18.887	PASS
		4881.05	-60.252	-29.29	-30.962	PASS
		7321.24	-61.790	-29.29	-32.500	PASS
		9760.18	-61.814	-29.29	-32.524	PASS
	39	21586.6	-49.246	-29.29	-19.956	PASS
		2483.50	-61.829	-29.3	-32.529	PASS
		4959.08	-60.618	-29.3	-31.318	PASS
		7439.85	-61.754	-29.3	-32.454	PASS
BLE 2M	0	9918.12	-58.975	-29.3	-29.675	PASS
		21614.1	-48.570	-29.3	-19.270	PASS
	19	2400.00	-45.232	-33.51	-11.722	PASS
		4803.64	-61.385	-33.51	-27.875	PASS
		7207.63	-60.750	-33.51	-27.240	PASS
		9608.49	-63.124	-33.51	-29.614	PASS
	39	21595.3	-48.327	-33.51	-14.817	PASS
		4879.80	-59.784	-29.63	-30.154	PASS
		7321.86	-61.559	-29.63	-31.929	PASS
		9758.94	-62.902	-29.63	-33.272	PASS
		21130.9	-48.695	-29.63	-19.065	PASS
		2483.50	-62.767	-29.68	-33.087	PASS

Note: input compensation coefficient (dB)= Cable Loss (dB)

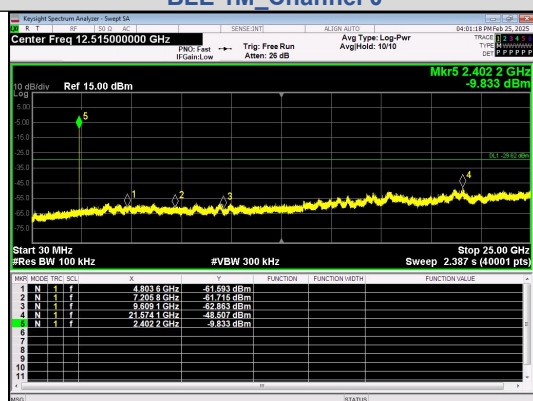
Test Graphs



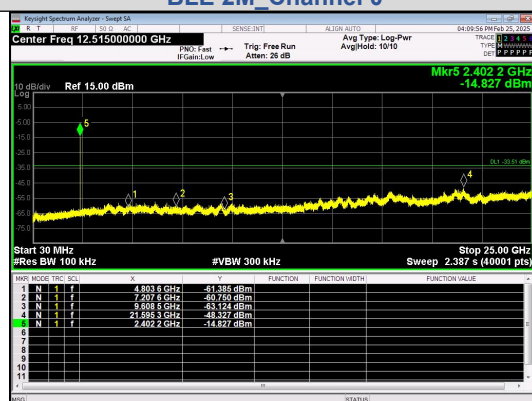


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Out Of Band Emission BLE 1M_Channel 0



Out Of Band Emission BLE 2M_Channel 0



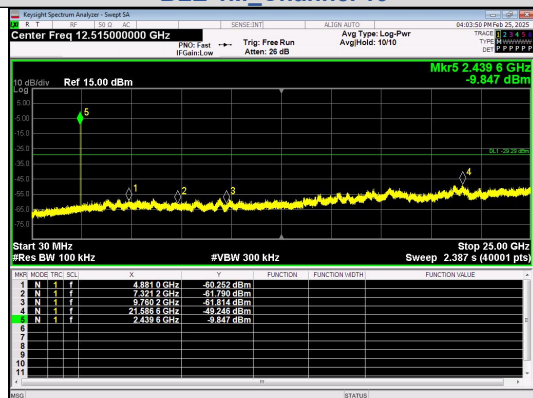
30.0 MHz - 25000.0 MHz BLE 1M_Channel 0



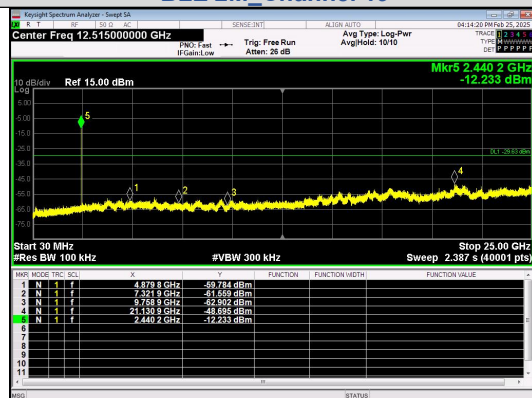
30.0 MHz - 25000.0 MHz BLE 2M_Channel 0



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

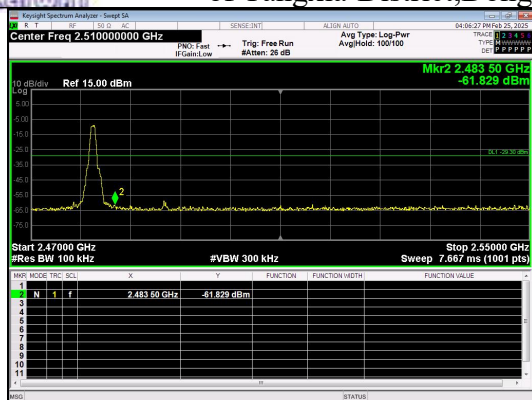


In-Band Reference Level BLE 1M_Channel 39

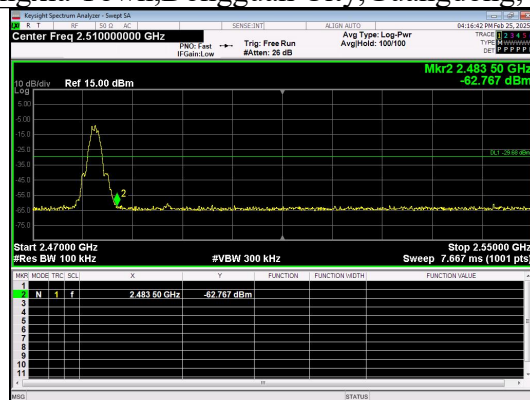
In-Band Reference Level BLE 2M_Channel 39



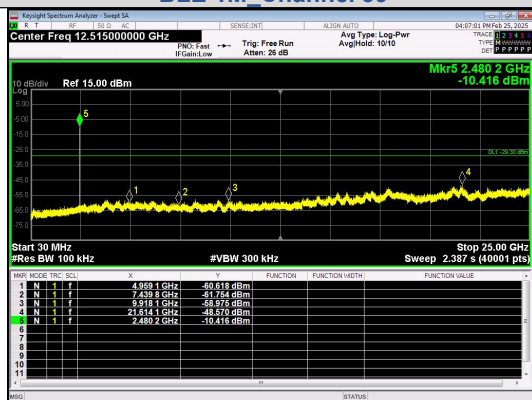
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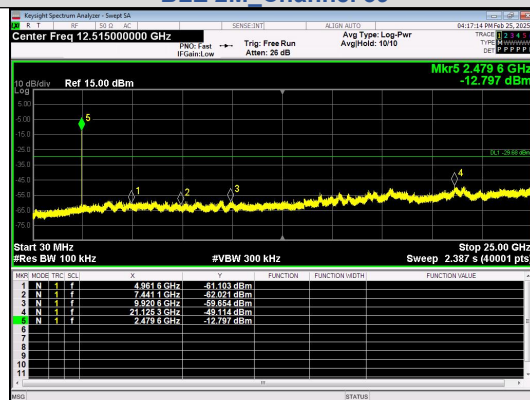
Out Of Band Emission
BLE 1M_Channel 39



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



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A.5 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	2.126	2.499	85.08	0.8508	0.7017	0.4704
	39	2.126	2.499	85.08	0.8508	0.7017	0.4704
BLE 2M	0	1.073	1.250	85.83	0.8583	0.6636	0.9320
	19	1.072	1.250	85.79	0.8579	0.6656	0.9328
	39	1.072	1.250	85.79	0.8579	0.6656	0.9328

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A.6 POWER SPECTRAL DENSITY

Test Result

Mode	Channel	PSD (dBm/3kHz)	Limit (dBm/3kHz)	Result
BLE 1M	0	-24.915	≤8	PASS
BLE 1M	19	-24.296	≤8	PASS
BLE 1M	39	-24.450	≤8	PASS
BLE 2M	0	-31.473	≤8	PASS
BLE 2M	19	-27.393	≤8	PASS
BLE 2M	39	-27.358	≤8	PASS

Test Graphs

