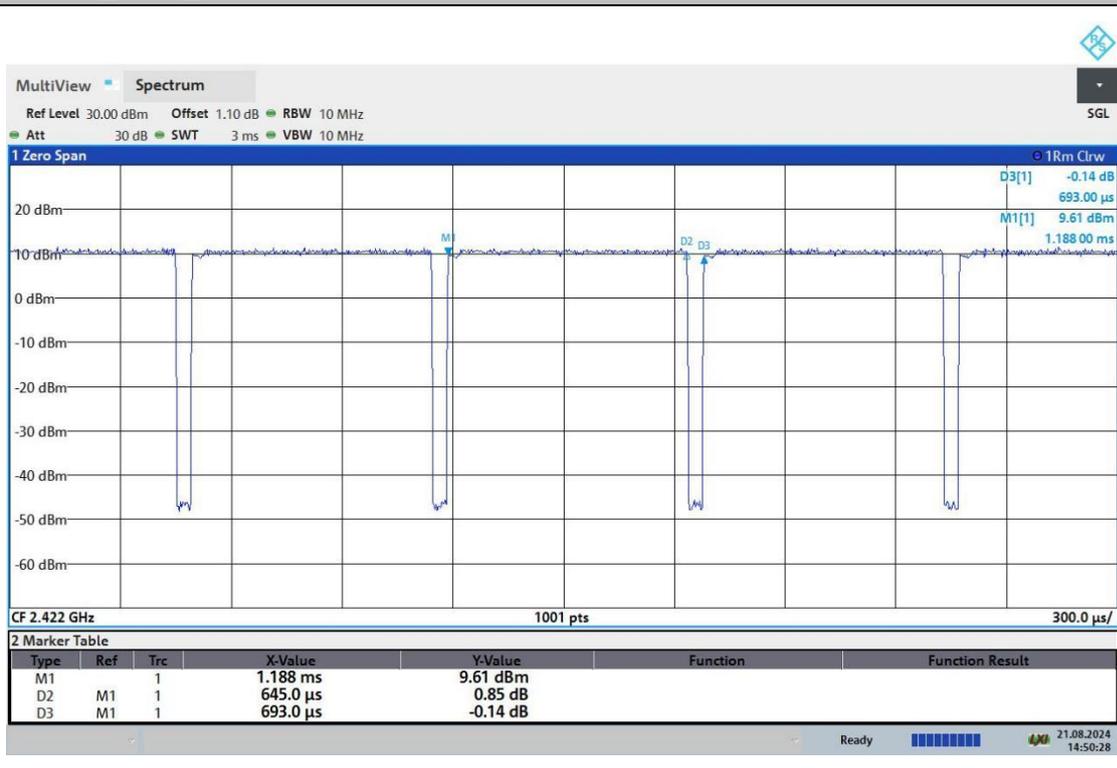


11N40_Ant0_2422





7 APPENDIX B:BLE

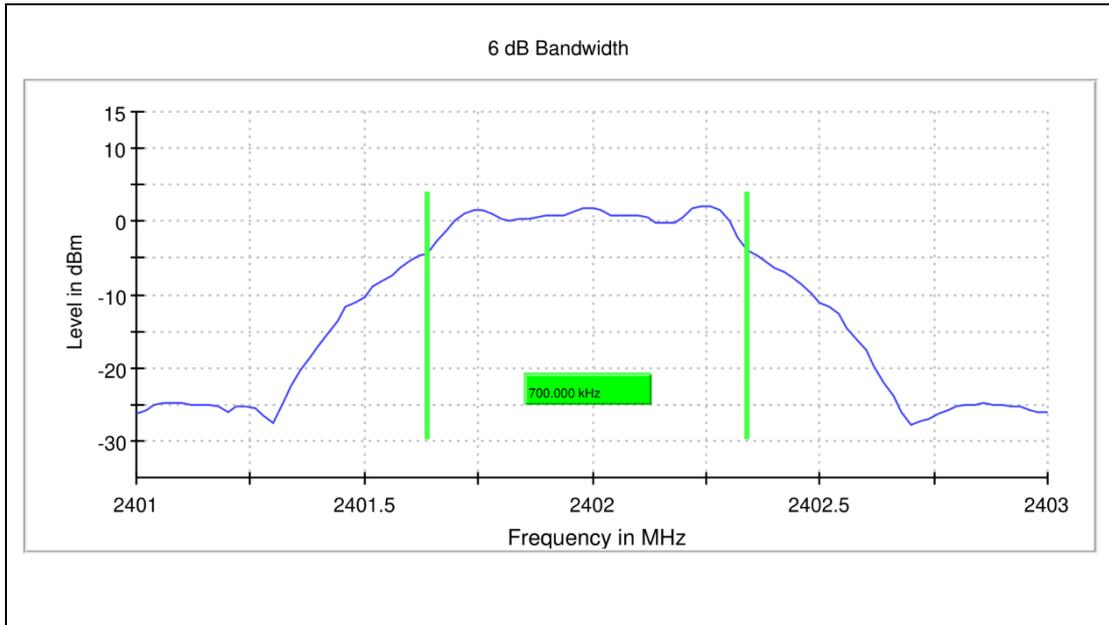
DTS BANDWIDTH

TEST RESULT

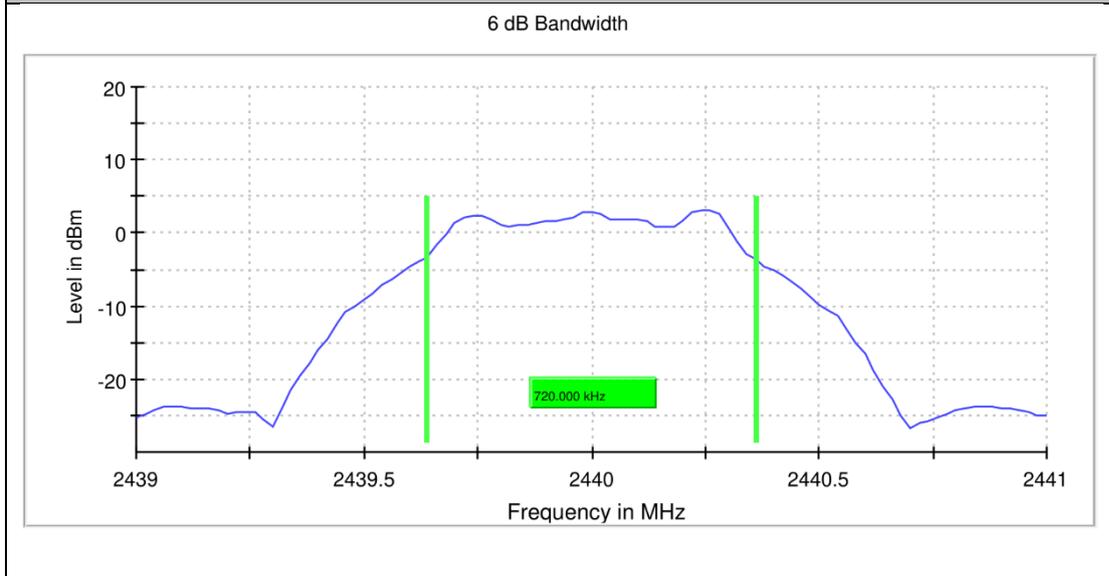
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	ANT4	2402	0.700	2401.640	2402.340	0.5	PASS
		2440	0.720	2439.640	2440.360	0.5	PASS
		2480	0.720	2439.640	2479.640	0.5	PASS
BLE_2M	ANT4	2404	1.280	2403.360	2404.640	0.5	PASS
		2440	1.280	2439.360	2440.640	0.5	PASS
		2478	1.280	2477.360	2478.640	0.5	PASS
BLE-S2	ANT4	2402	0.720	2401.640	2402.360	0.5	PASS
		2440	0.720	2439.640	2440.360	0.5	PASS
		2480	0.720	2479.640	2480.360	0.5	PASS
BLE_S8	ANT4	2402	0.740	2401.620	2402.360	0.5	PASS
		2440	0.740	2439.620	2440.360	0.5	PASS
		2480	0.740	2479.620	2480.360	0.5	PASS



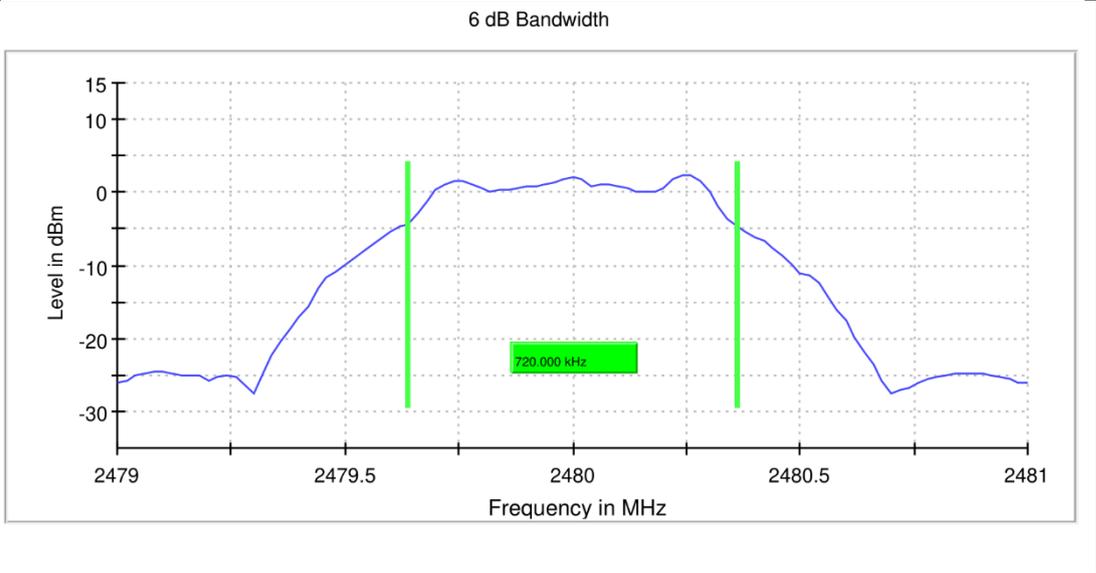
TEST GRAPHS



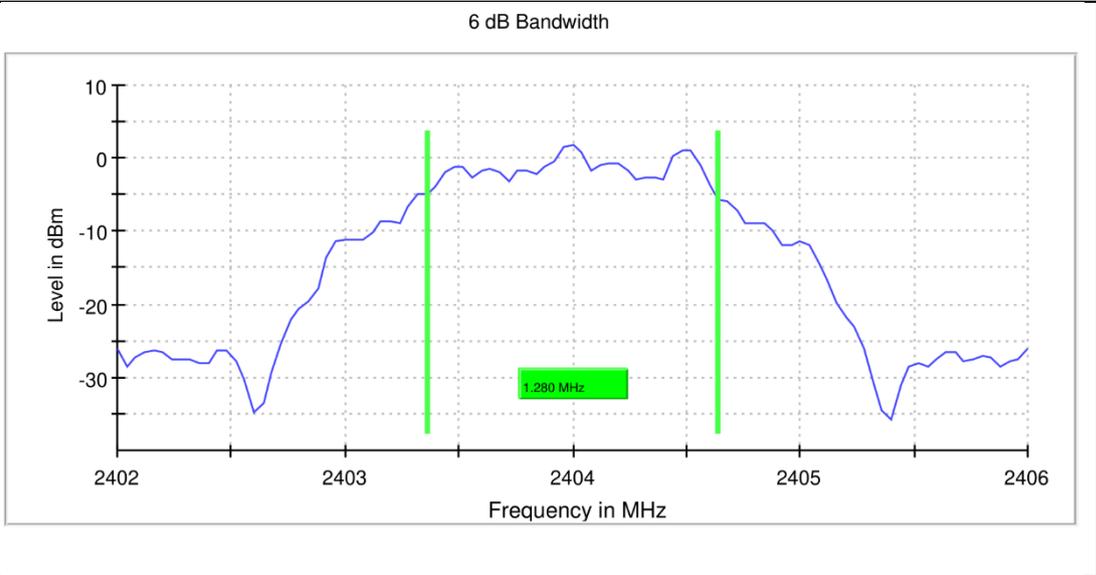
BLE_1M_ANT4_2402



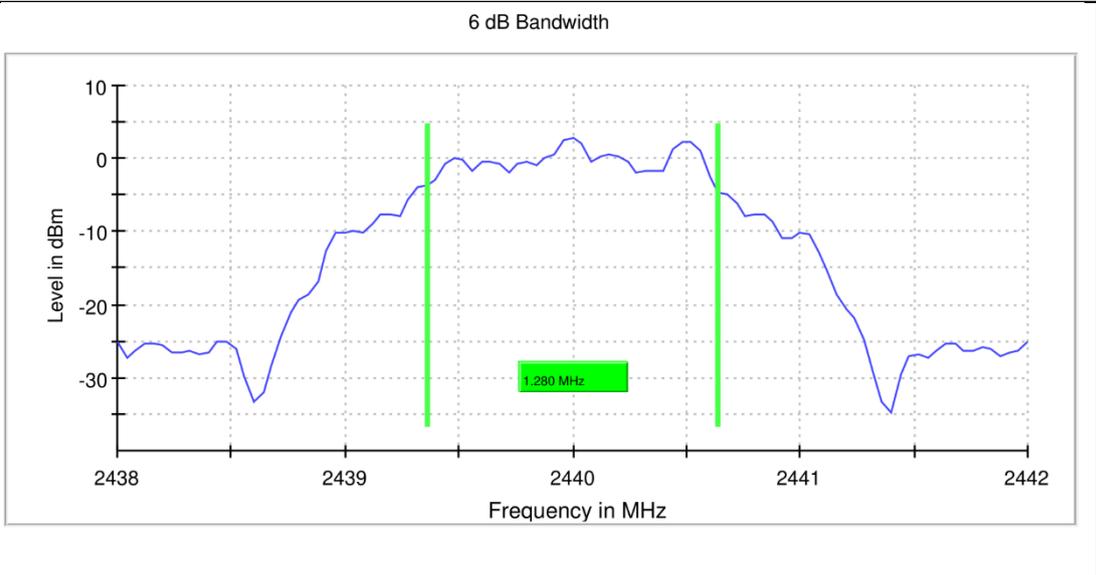
BLE_1M_ANT4_2440



BLE_1M_ANT4_2480



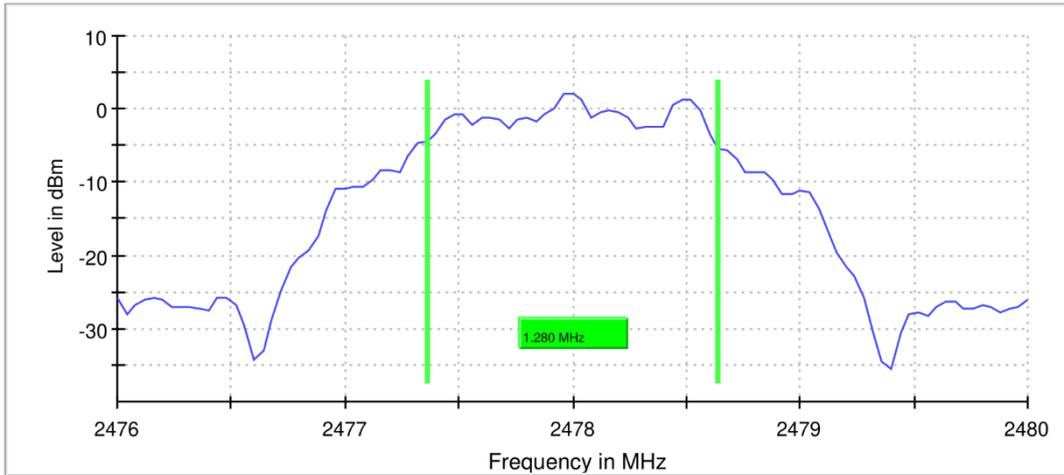
BLE_2M_ANT4_2404





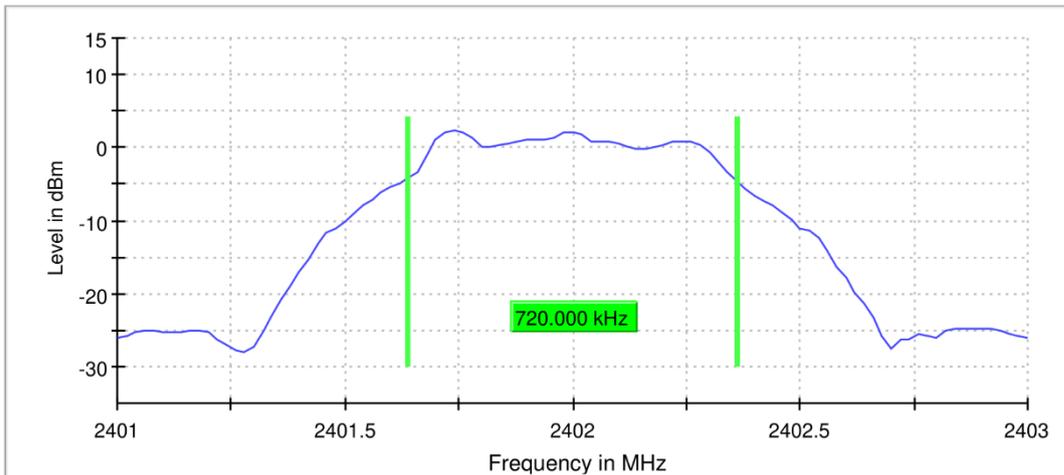
BLE_2M_ANT4_2440

6 dB Bandwidth

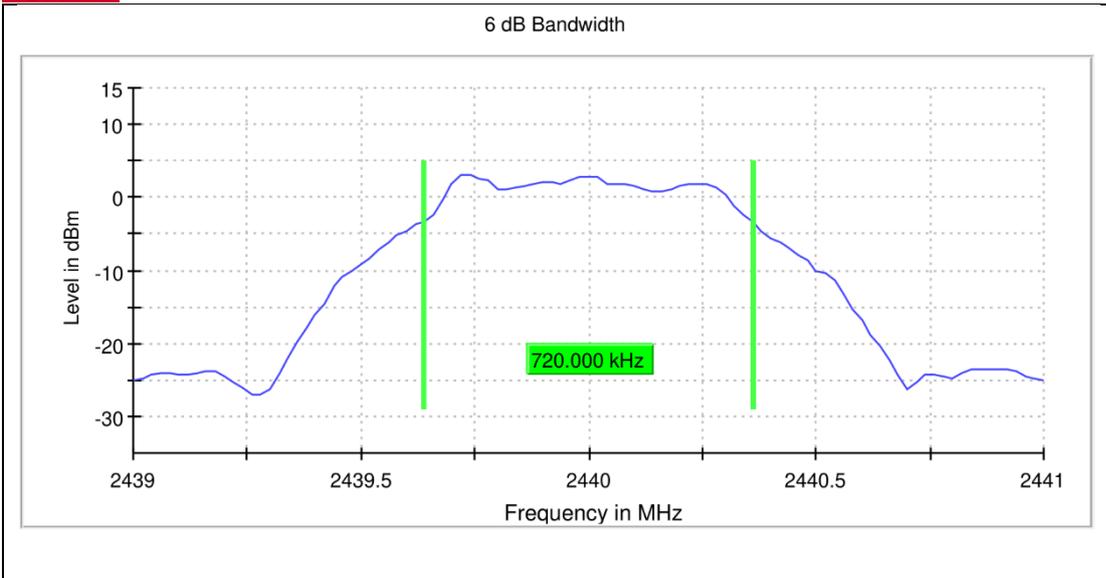


BLE_2M_ANT4_2478

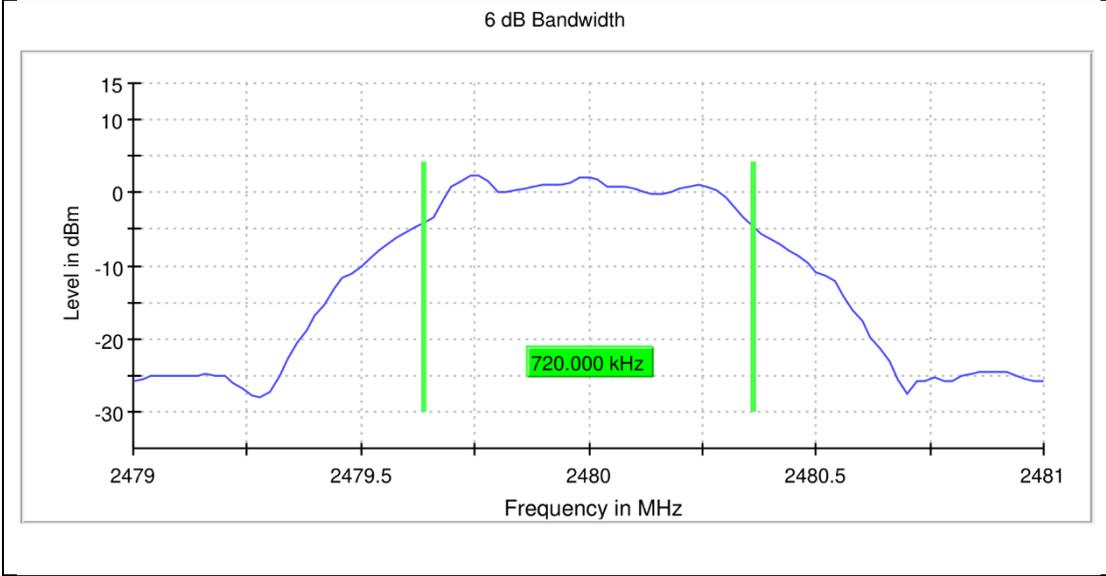
6 dB Bandwidth



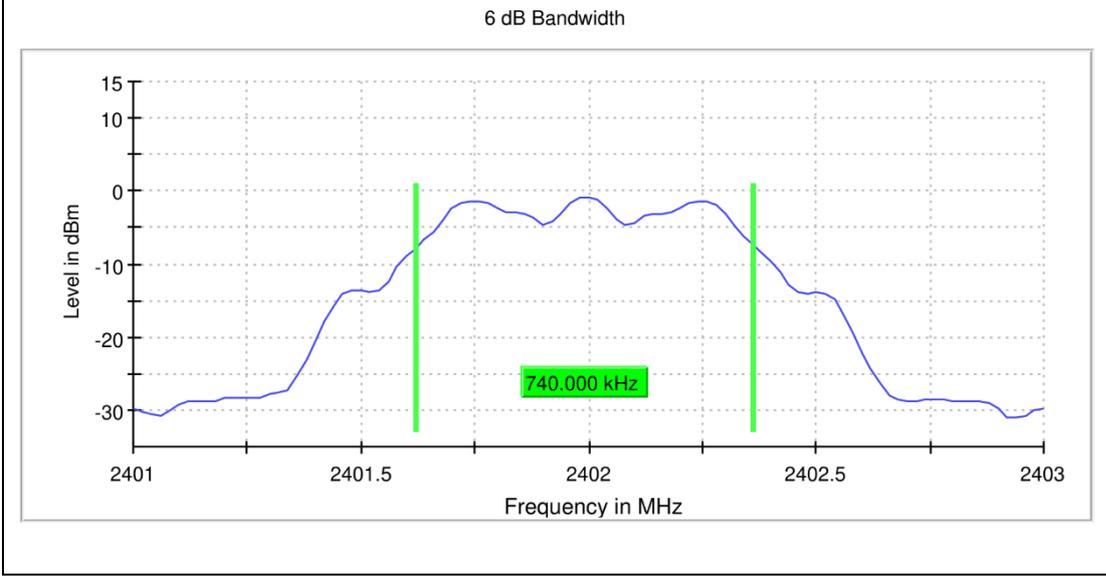
BLE_S2_ANT4_2402



BLE_S2_ANT4_2440



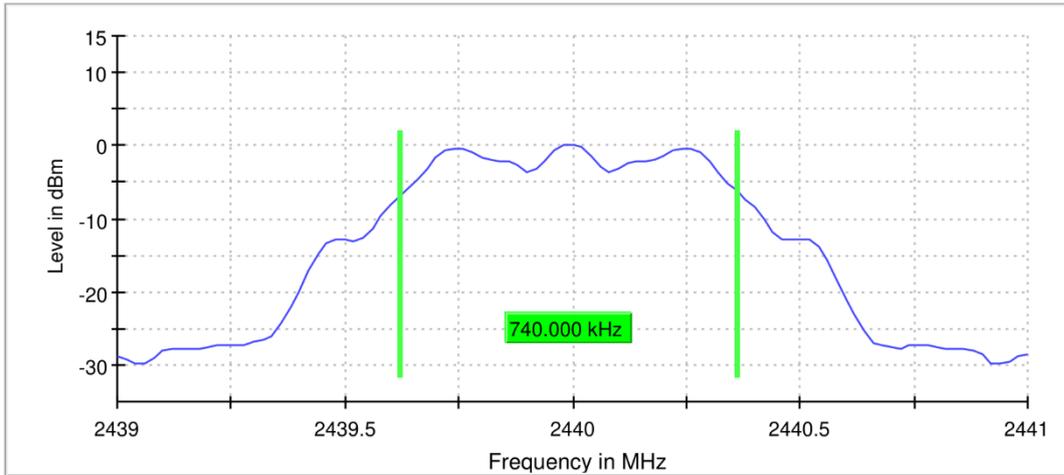
BLE_S2_ANT4_2480





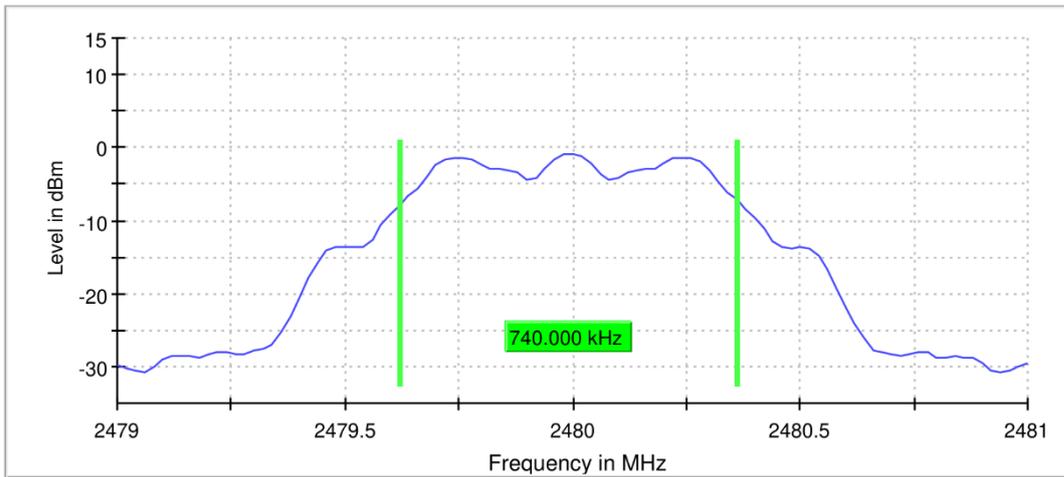
BLE_S8_ANT4_2402

6 dB Bandwidth



BLE_S8_ANT4_2440

6 dB Bandwidth



BLE_S8_ANT4_2480

RBW 100.000 kHz

VBW 300.000 kHz



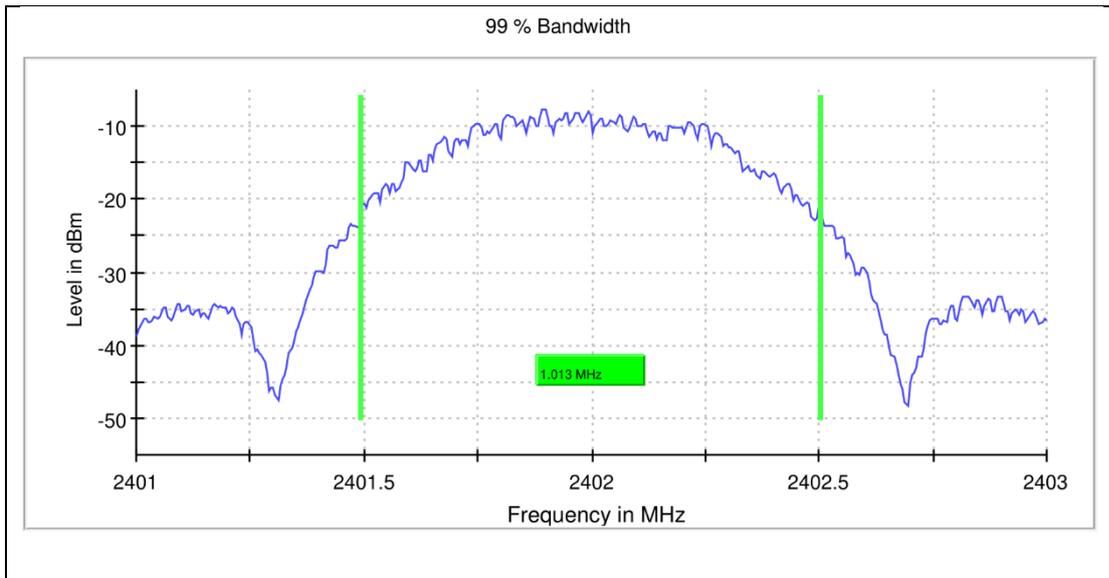
OCCUPIED CHANNEL BANDWIDTH

TEST RESULT

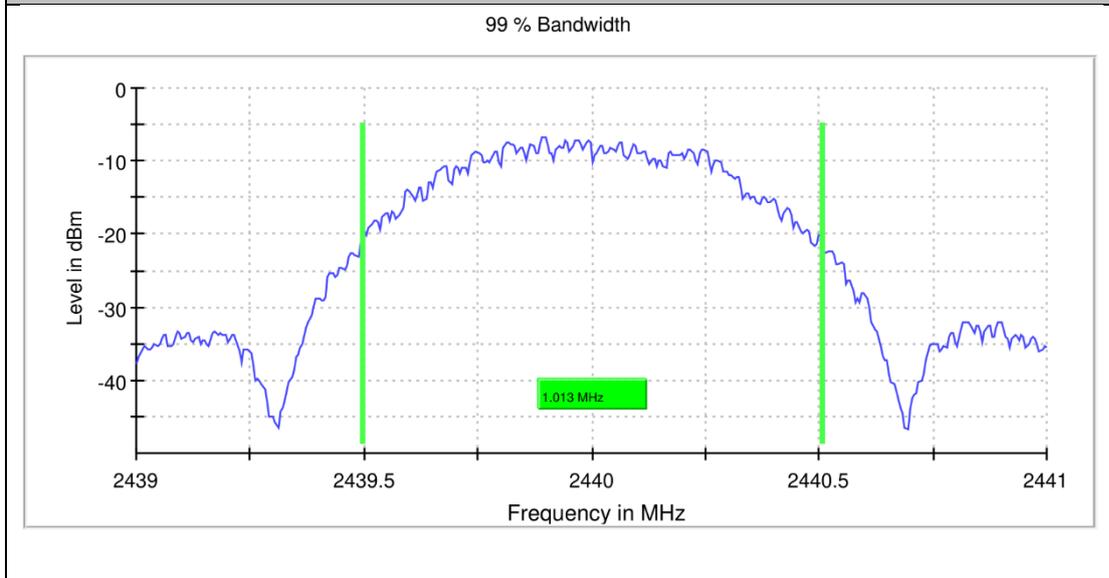
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	ANT4	2402	1.013	2401.491	2402.504	2400-24835	PASS
		2440	1.013	2439.496	2440.509	2400-24835	PASS
		2480	1.013	2479.496	2480.509	2400-24835	PASS
BLE_2M	ANT4	2404	2.035	2402.992	2405.027	2400-24835	PASS
		2440	2.035	2438.992	2441.027	2400-24835	PASS
		2478	2.045	2476.982	2479.027	2400-24835	PASS
BLE-S2	ANT4	2402	1.013	2401.491	2402.504	2400-24835	PASS
		2440	1.013	2439.491	2440.504	2400-24835	PASS
		2480	1.013	2479.491	2480.504	2400-24835	PASS
BLE_S8	ANT4	2402	1.033	2401.476	2402.509	2400-24835	PASS
		2440	1.033	2439.481	2440.514	2400-24835	PASS
		2480	1.033	2479.481	2480.514	2400-24835	PASS



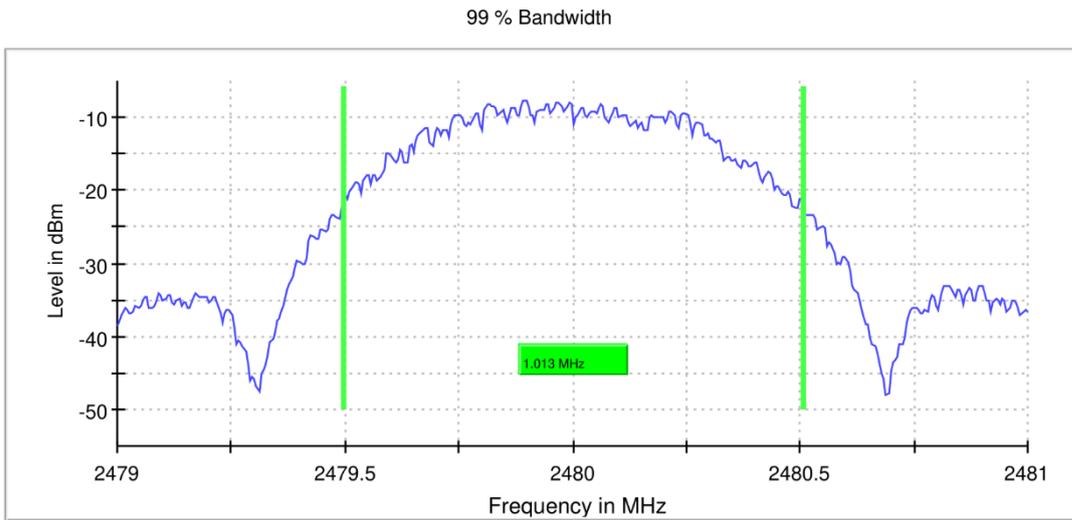
TEST GRAPHS



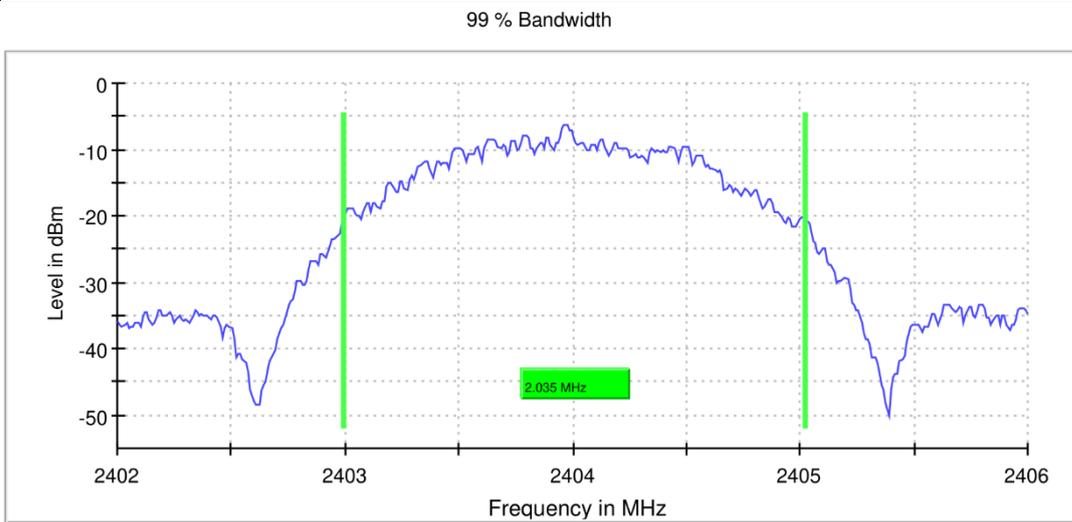
BLE_1M_ANT4_2402



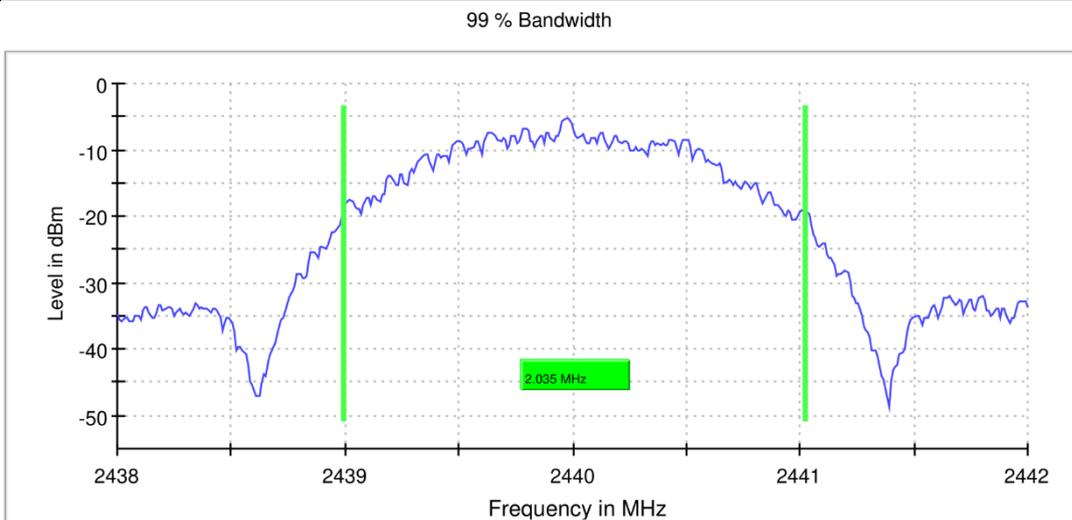
BLE_1M_ANT4_2440



BLE_1M_ANT4_2480



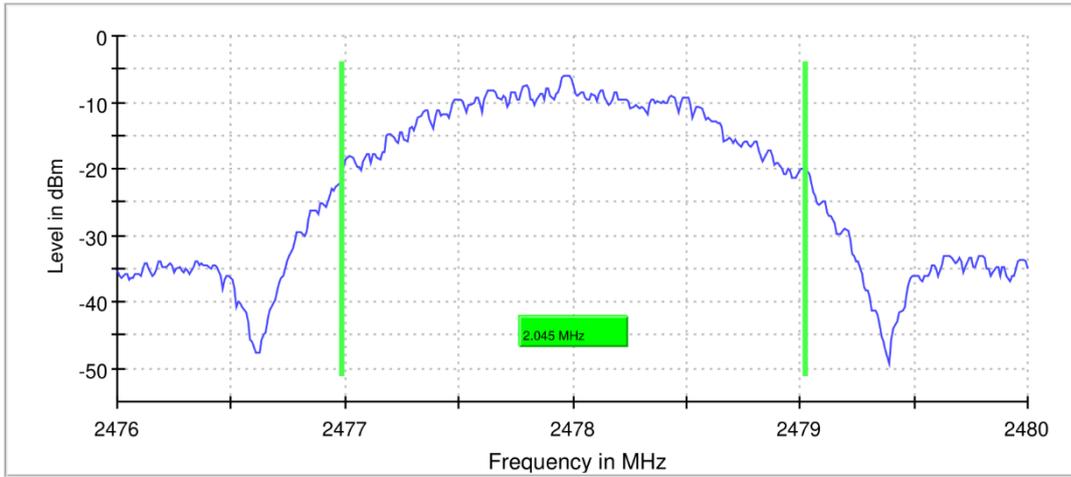
BLE_2M_ANT4_2404





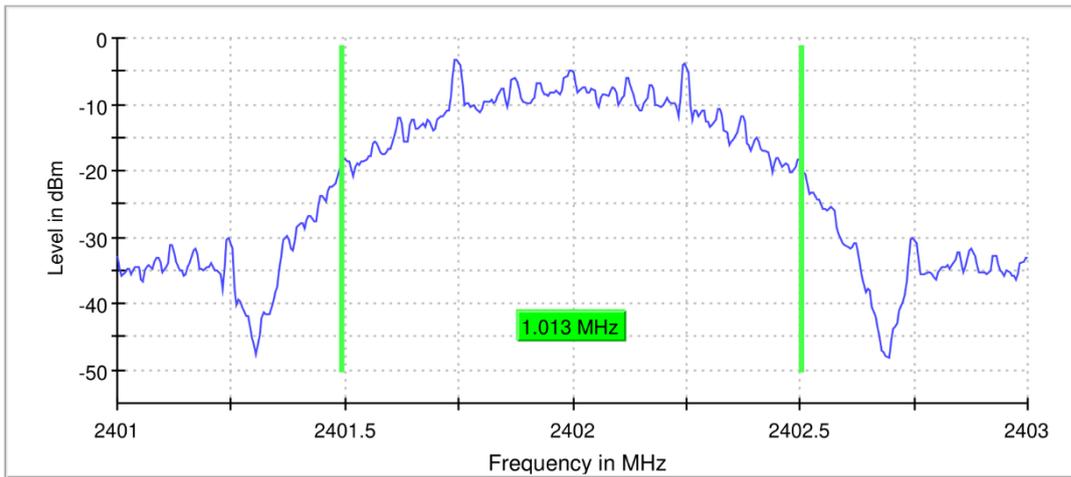
BLE_2M_ANT4_2440

99 % Bandwidth

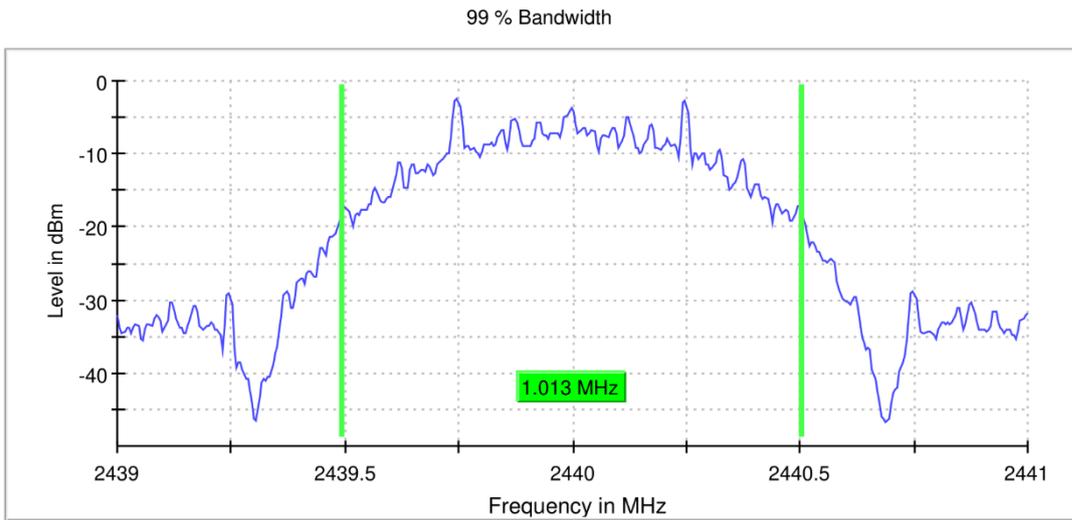


BLE_2M_ANT4_2478

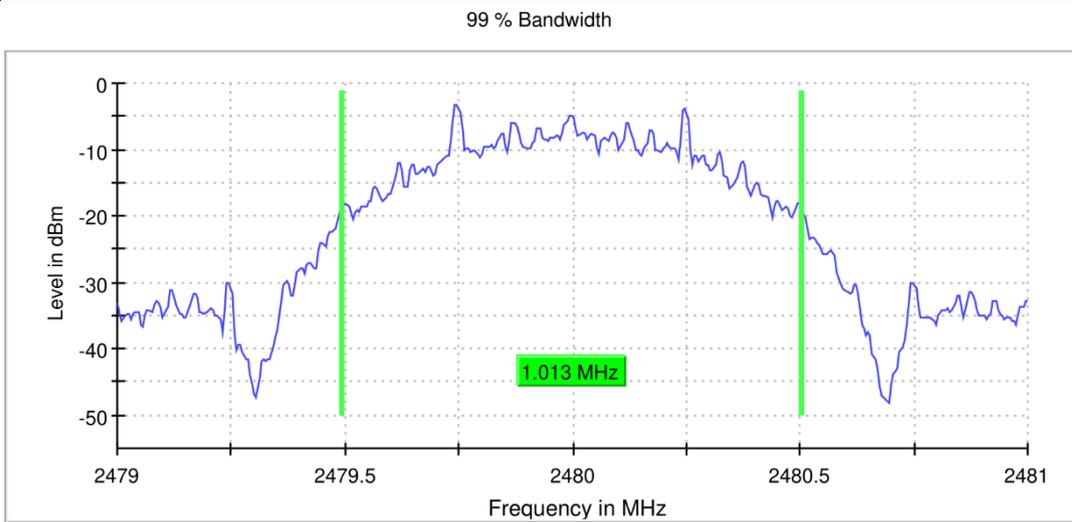
99 % Bandwidth



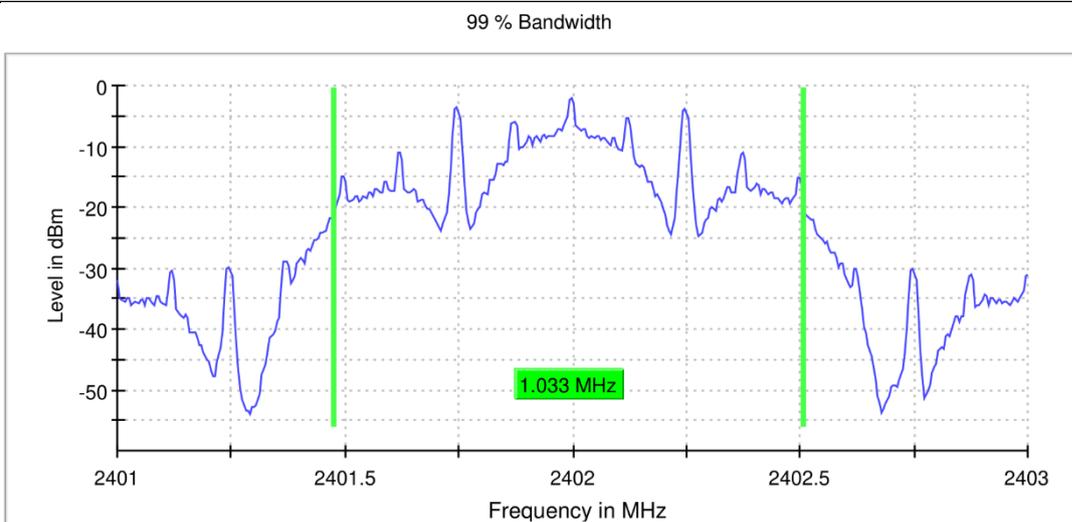
BLE_S2_ANT4_2402



BLE_S2_ANT4_2440



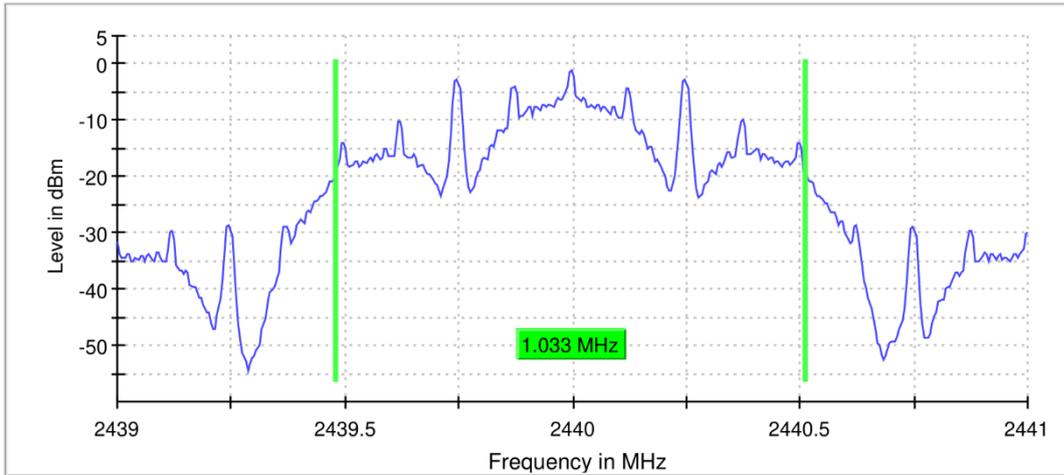
BLE_S2_ANT4_2480





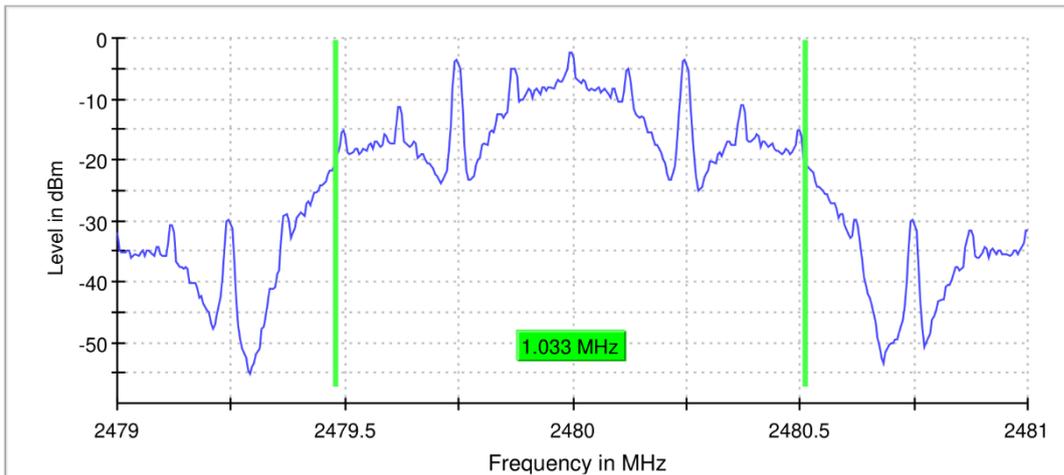
BLE_S8_ANT4_2402

99 % Bandwidth



BLE_S8_ANT4_2440

99 % Bandwidth



BLE_S8_ANT4_2480

1M

RBW 10.000 kHz

VBW 30.000 kHz

2M

RBW 20.000 kHz

VBW 100.000 kHz



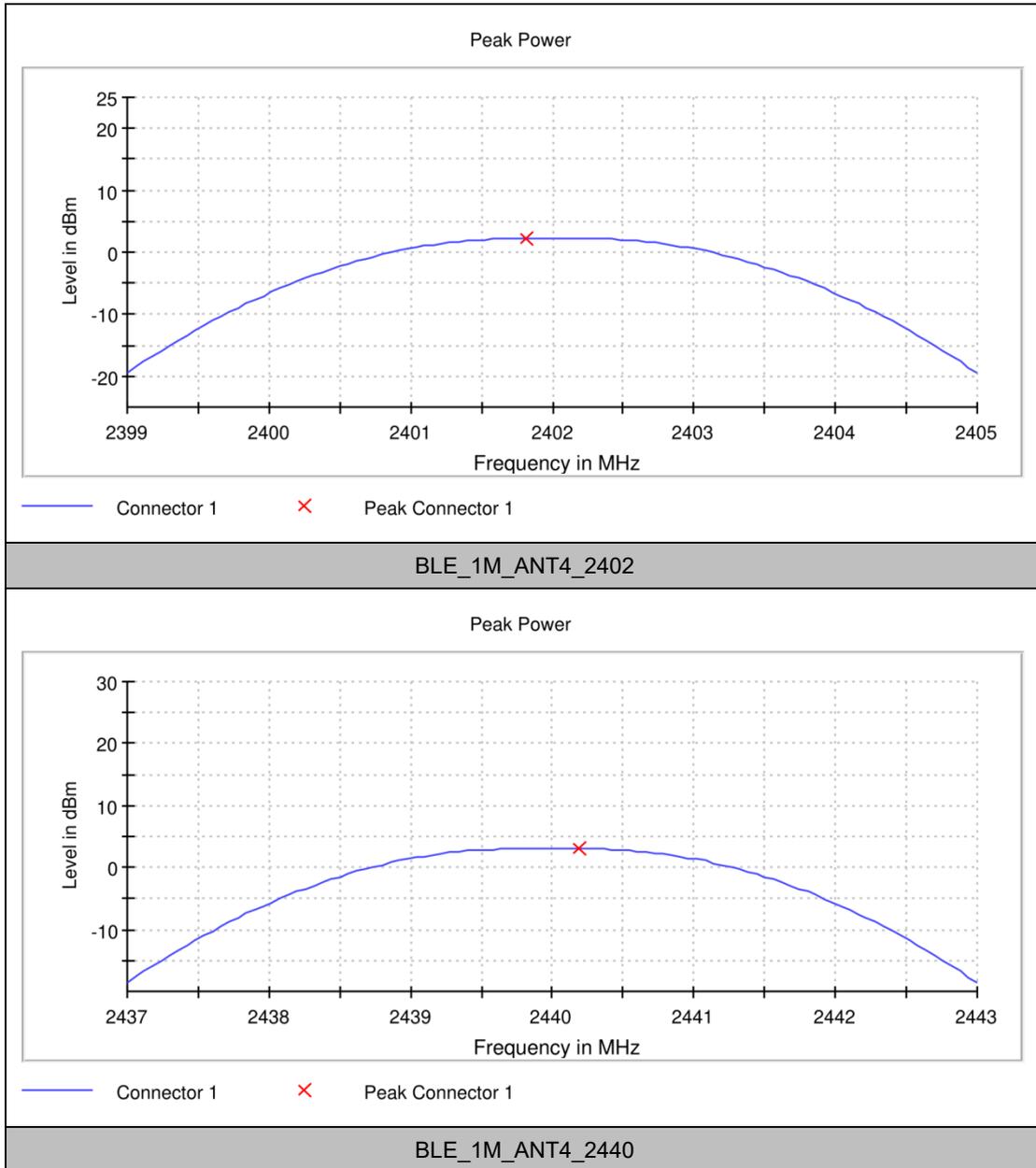
MAXIMUM CONDUCTED OUTPUT POWER

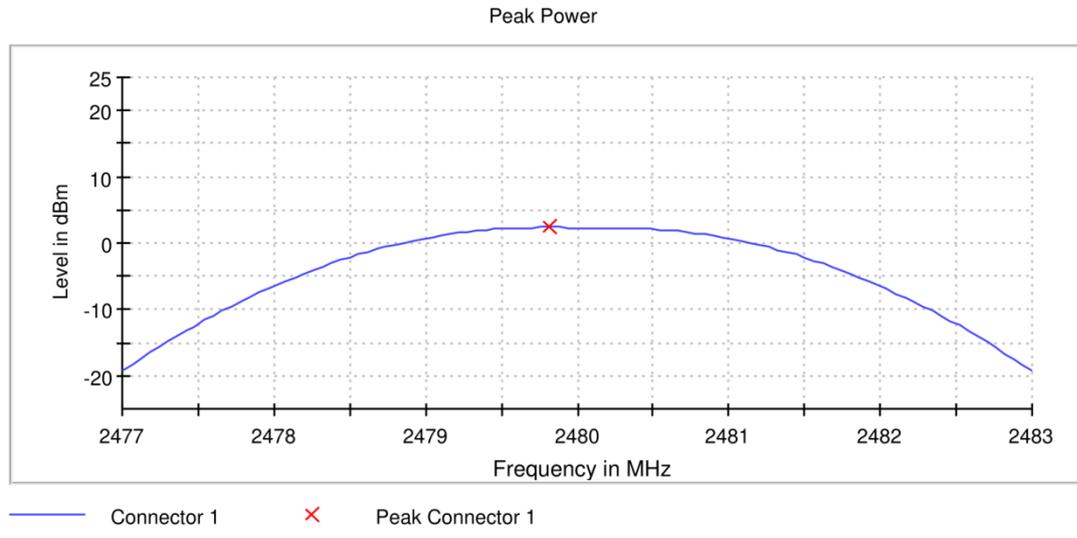
TEST RESULT

TestMode	Antenna	Channel	Average power [dBm]	Peak power [dBm]	Peak power [mw]	Limit [dBm]	Verdict	Power Setting
BLE_1M	Ant1	2402	2.00	2.24	1.67	≤30	PASS	Default
		2440	2.93	3.04	2.01	≤30	PASS	Default
		2480	2.13	2.36	1.72	≤30	PASS	Default
BLE_2M	Ant1	2402	1.91	2.12	1.63	≤30	PASS	Default
		2440	2.98	3.17	2.08	≤30	PASS	Default
		2480	2.28	2.53	1.79	≤30	PASS	Default
BLE_125k	Ant1	2402	1.95	2.22	1.67	≤30	PASS	Default
		2440	2.89	3.15	2.06	≤30	PASS	Default
		2480	2.08	2.35	1.72	≤30	PASS	Default
BLE_500K	Ant1	2402	1.97	2.27	1.69	≤30	PASS	Default
		2440	2.91	3.17	2.08	≤30	PASS	Default
		2480	2.11	2.39	1.73	≤30	PASS	Default

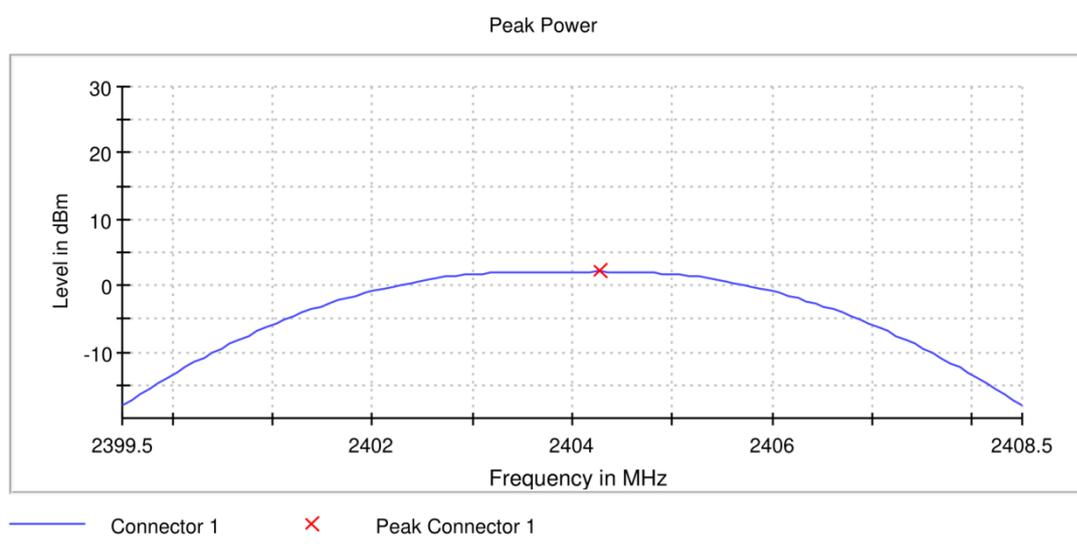


TEST GRAPHS

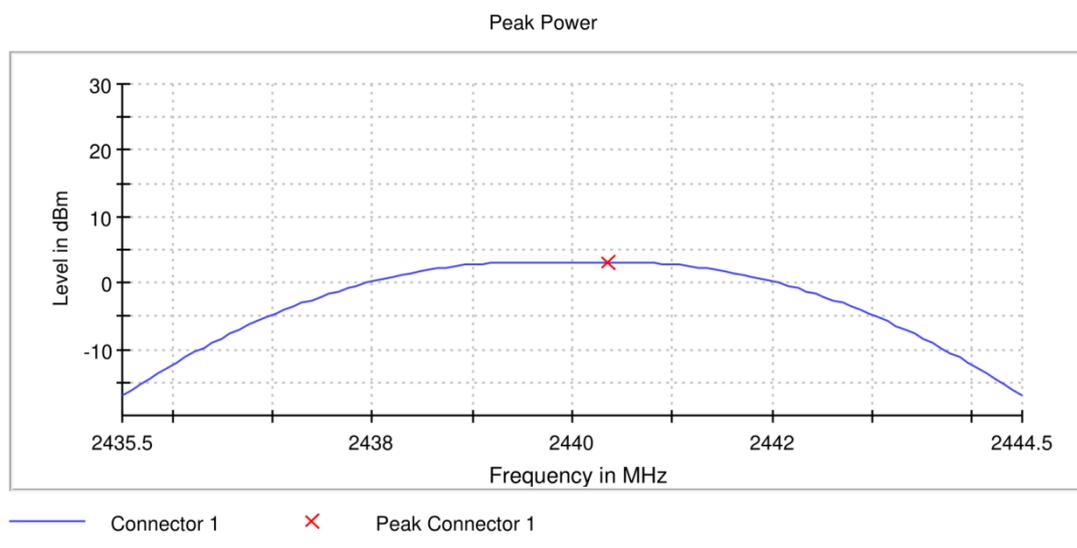




BLE_1M_ANT4_2480



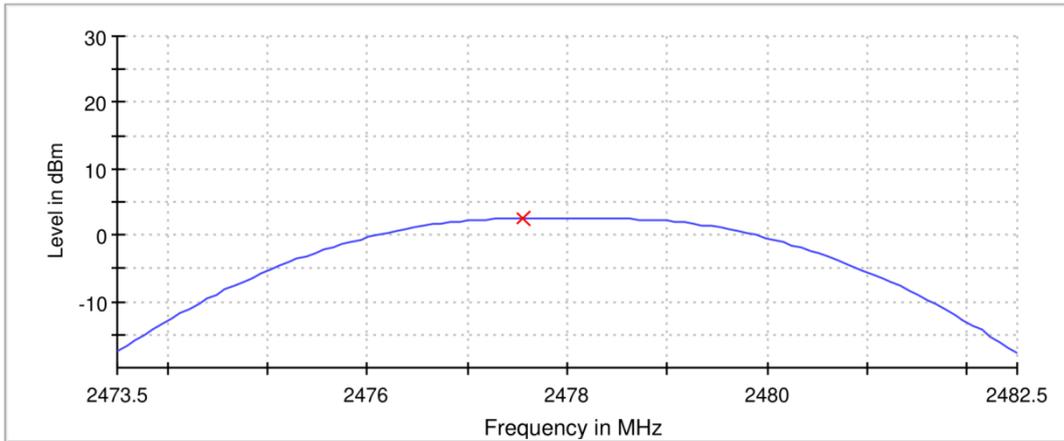
BLE_2M_ANT4_2404





BLE_2M_ANT4_2440

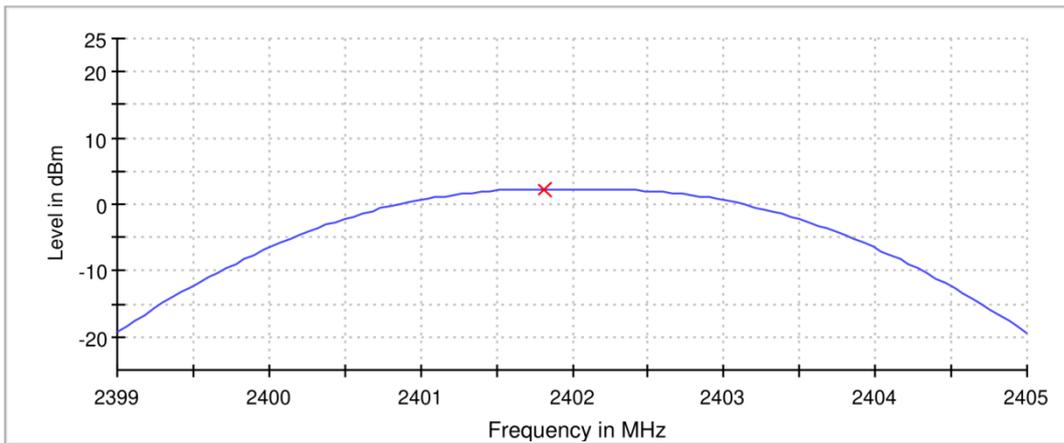
Peak Power



Connector 1 × Peak Connector 1

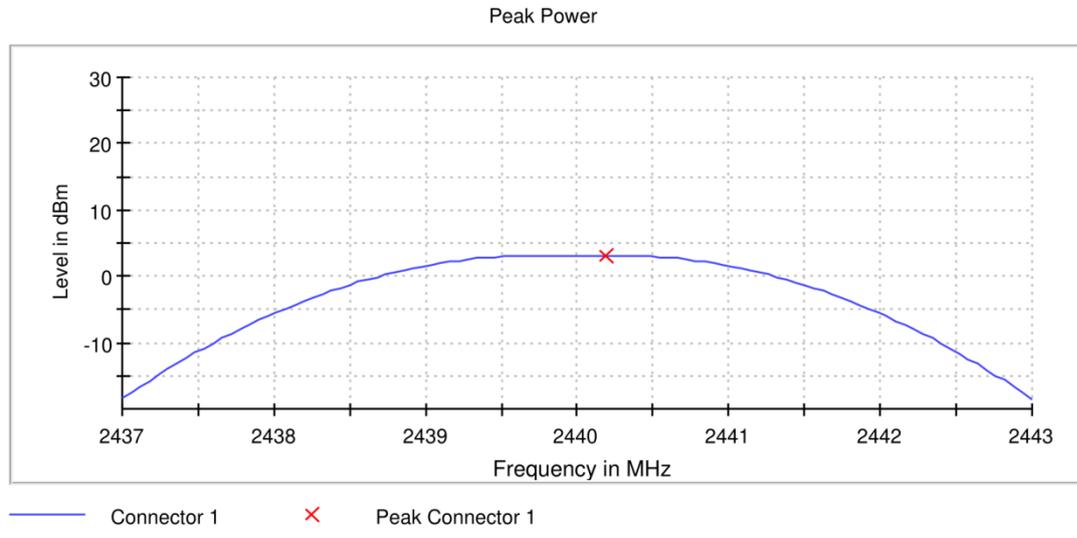
BLE_2M_ANT4_2478

Peak Power

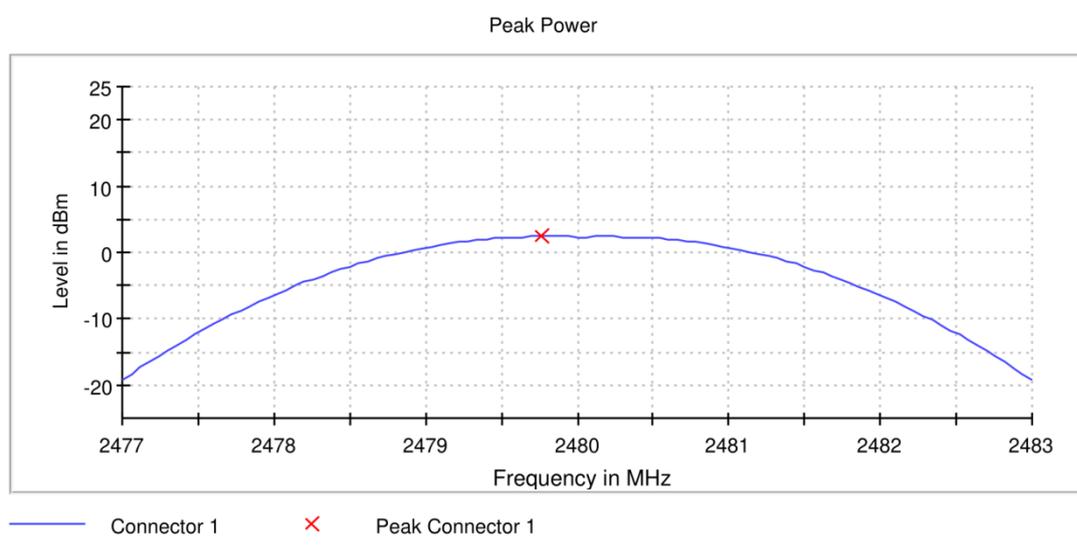


Connector 1 × Peak Connector 1

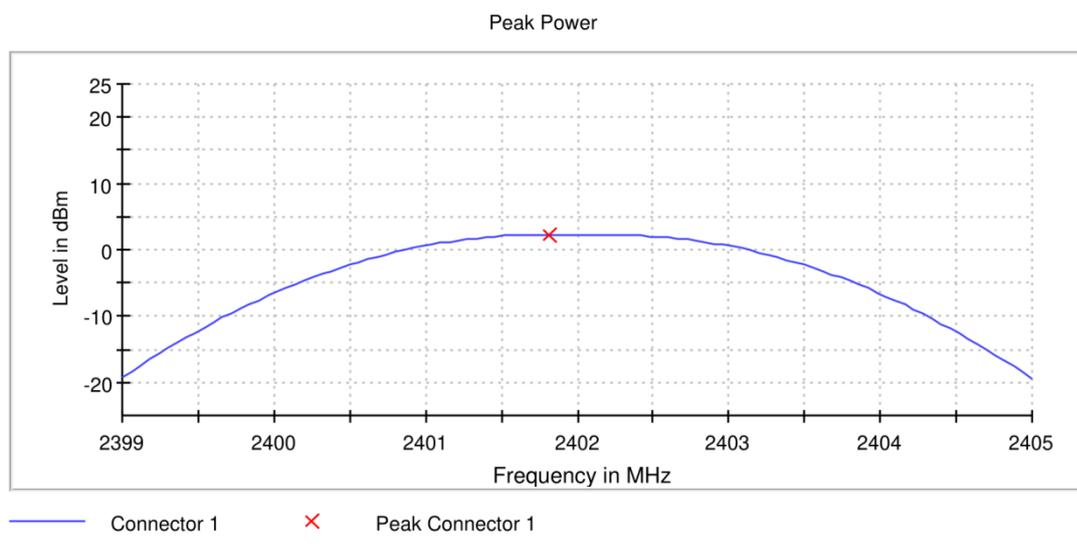
BLE_S2_ANT4_2402



BLE_S2_ANT4_2440



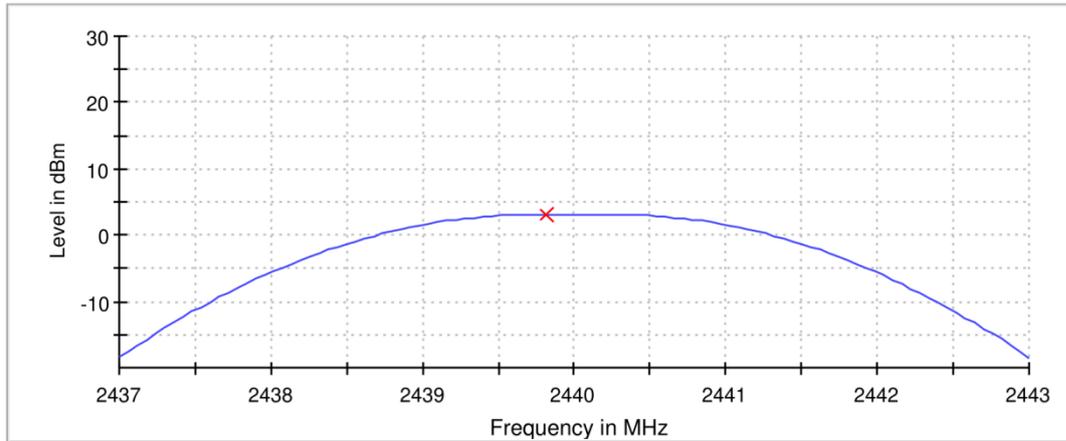
BLE_S2_ANT4_2480





BLE_S8_ANT4_2402

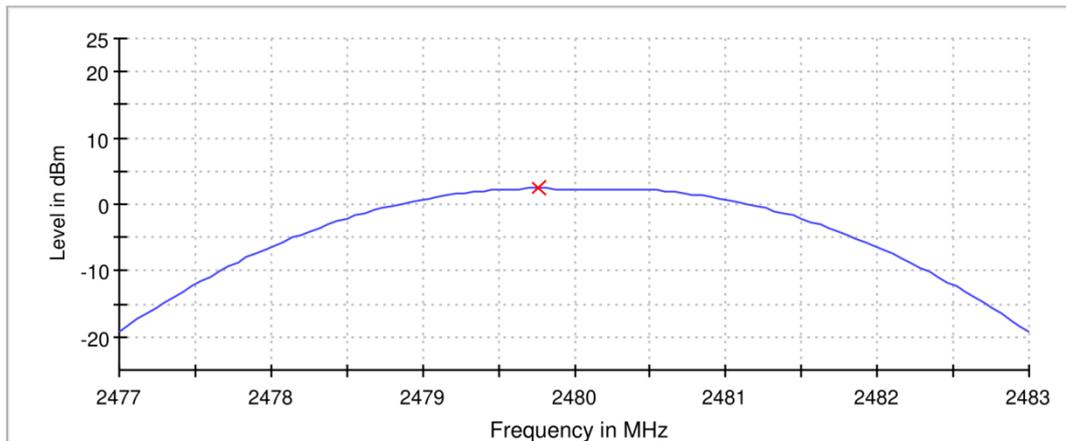
Peak Power



— Connector 1 × Peak Connector 1

BLE_S8_ANT4_2440

Peak Power



— Connector 1 × Peak Connector 1

BLE_S8_ANT4_2480

1M

RBW 2.000 MHz

VBW 10.000 MHz

2M

RBW 3.000 MHz

VBW 10.000 MHz



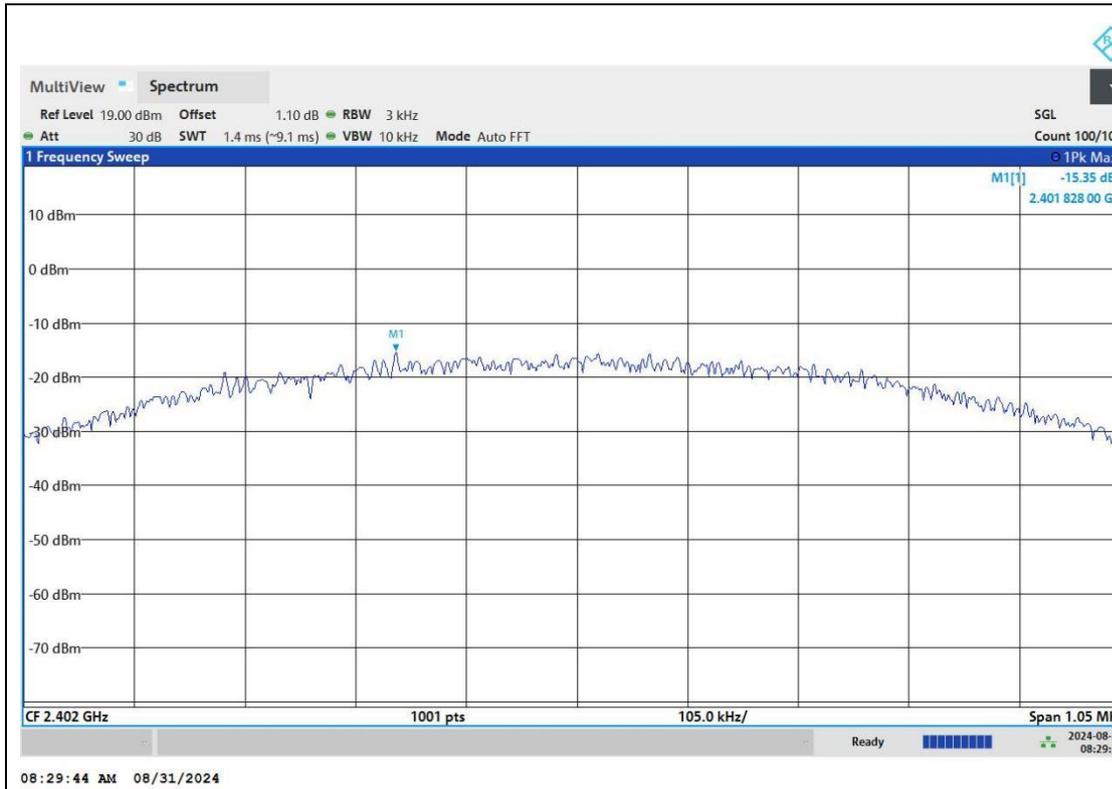
MAXIMUM POWER SPECTRAL DENSITY

TEST RESULT

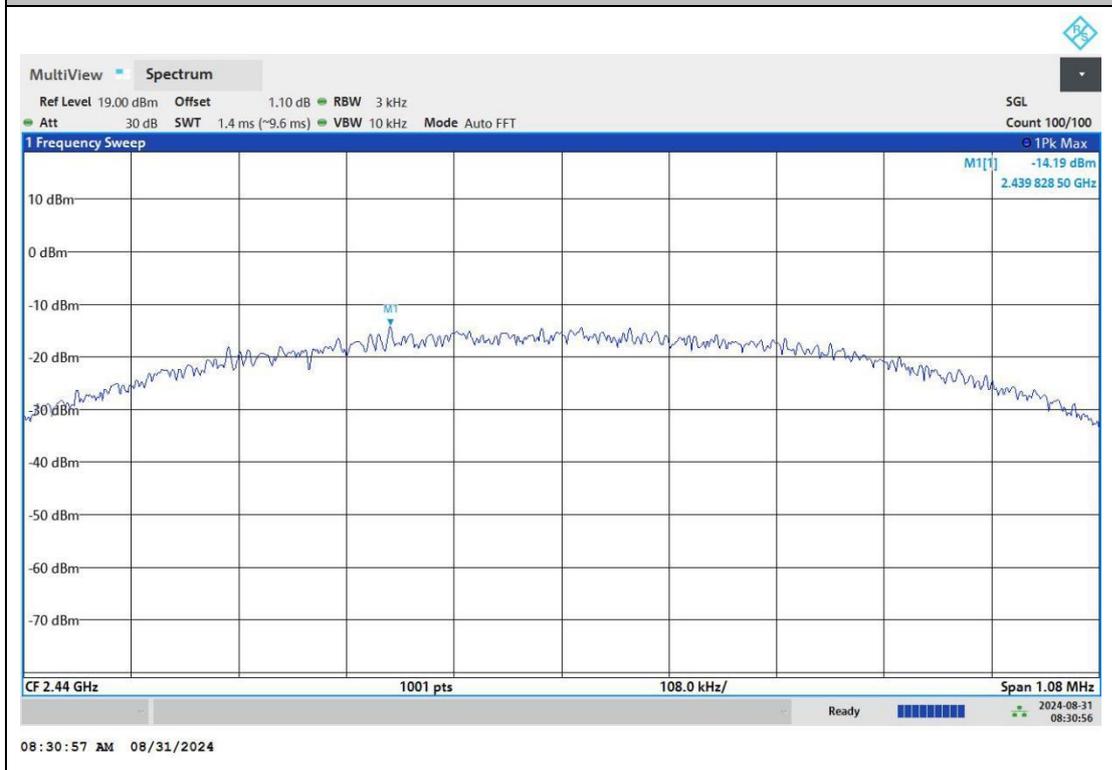
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	ANT4	2402	-15.35	≤8	PASS
		2440	-14.19	≤8	PASS
		2480	-15.07	≤8	PASS
BLE_2M	ANT4	2404	-17.48	≤8	PASS
		2440	-16.31	≤8	PASS
		2478	-17.05	≤8	PASS
BLE_S2	ANT4	2402	-8.36	≤8	PASS
		2440	-8.36	≤8	PASS
		2480	-8.30	≤8	PASS
BLE_S8	ANT4	2402	-4.95	≤8	PASS
		2440	-3.82	≤8	PASS
		2480	-4.65	≤8	PASS



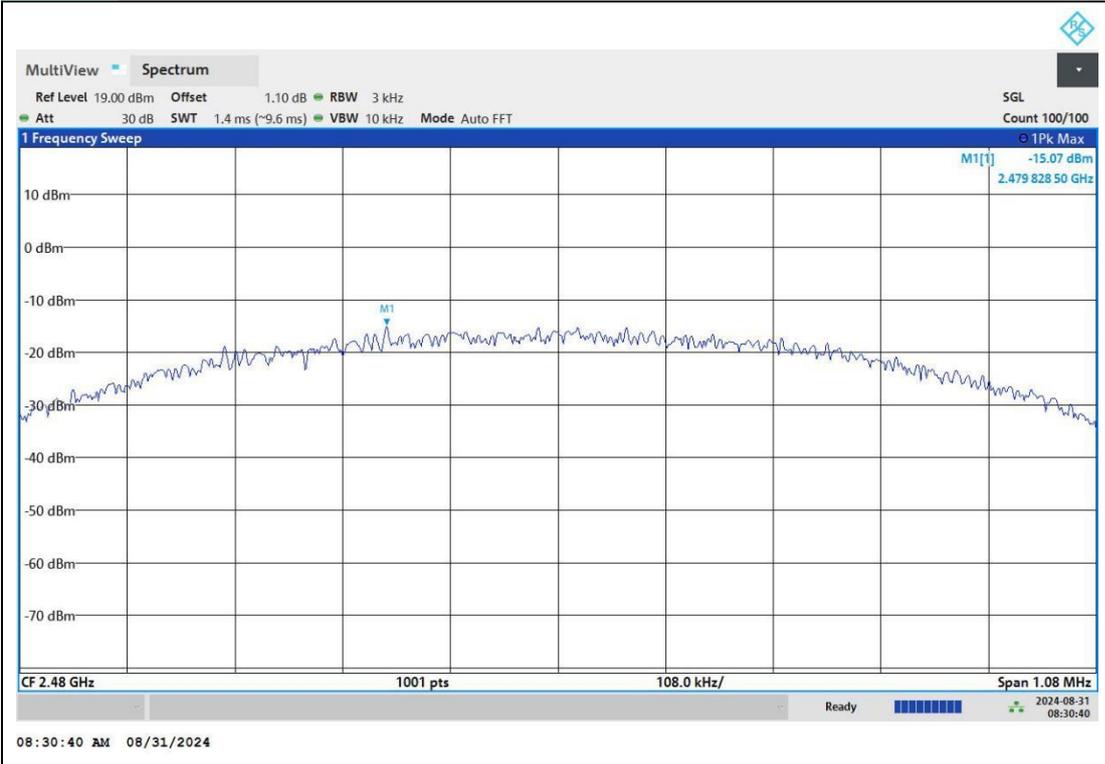
TEST GRAPHS



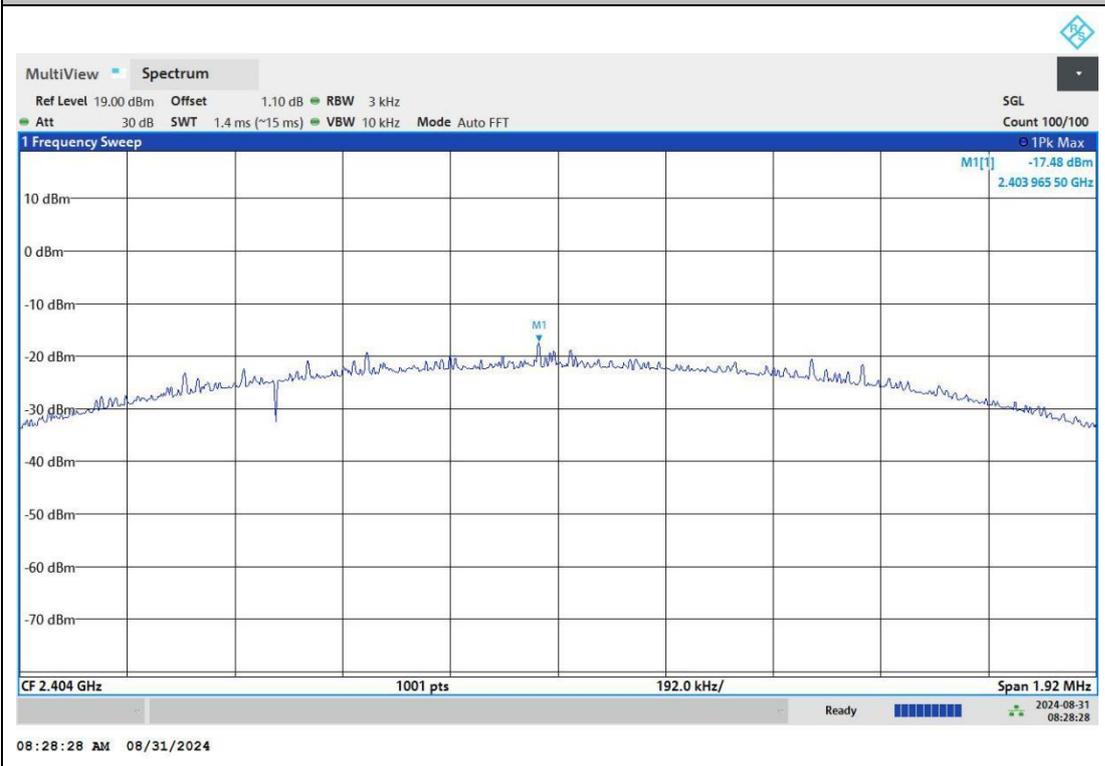
BLE_1M_ANT4_2402



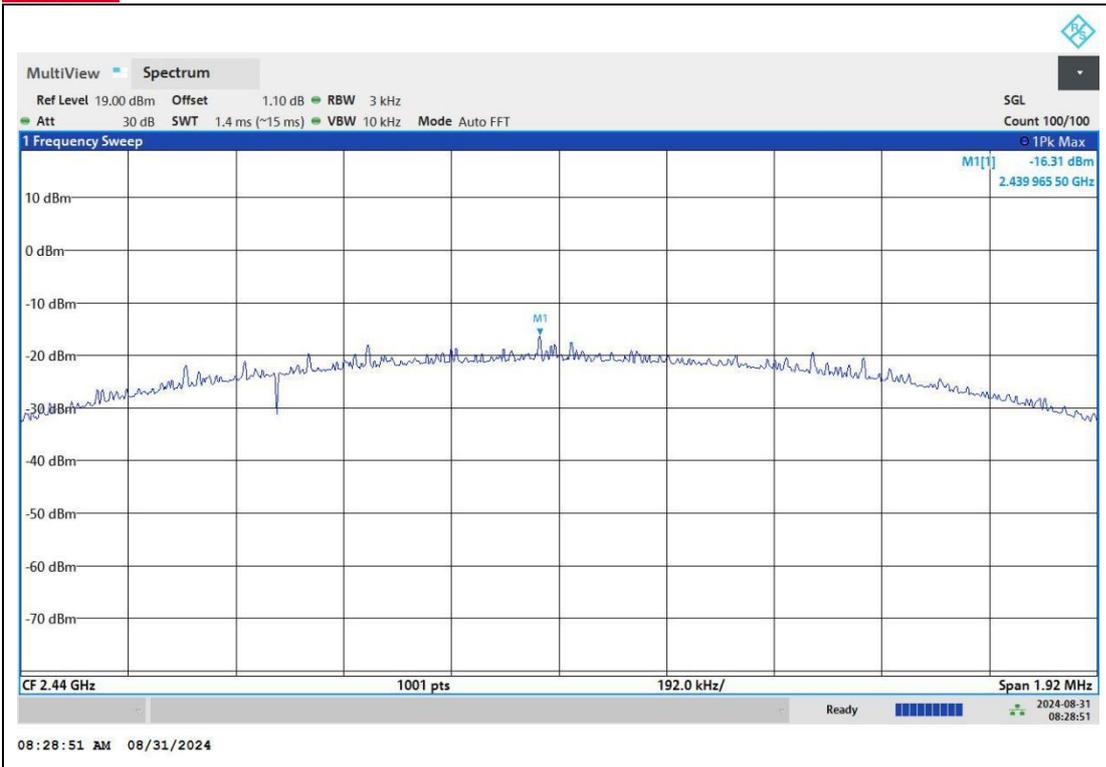
BLE_1M_ANT4_2440



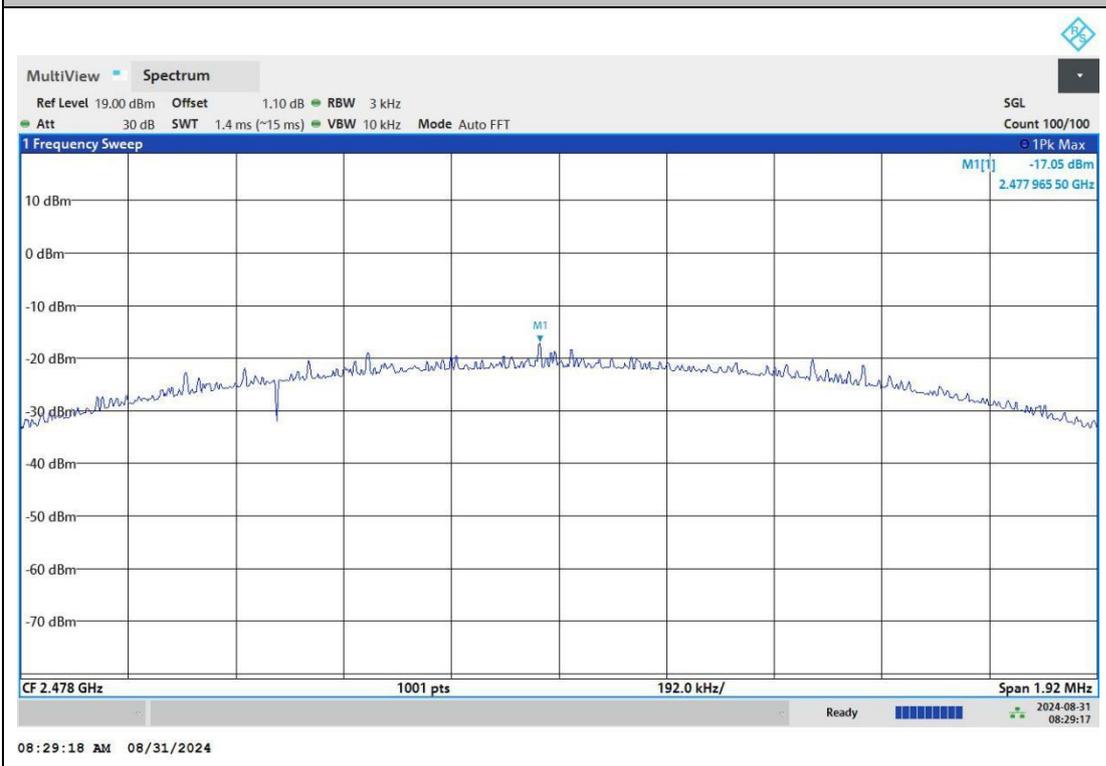
BLE_1M_ANT4_2480



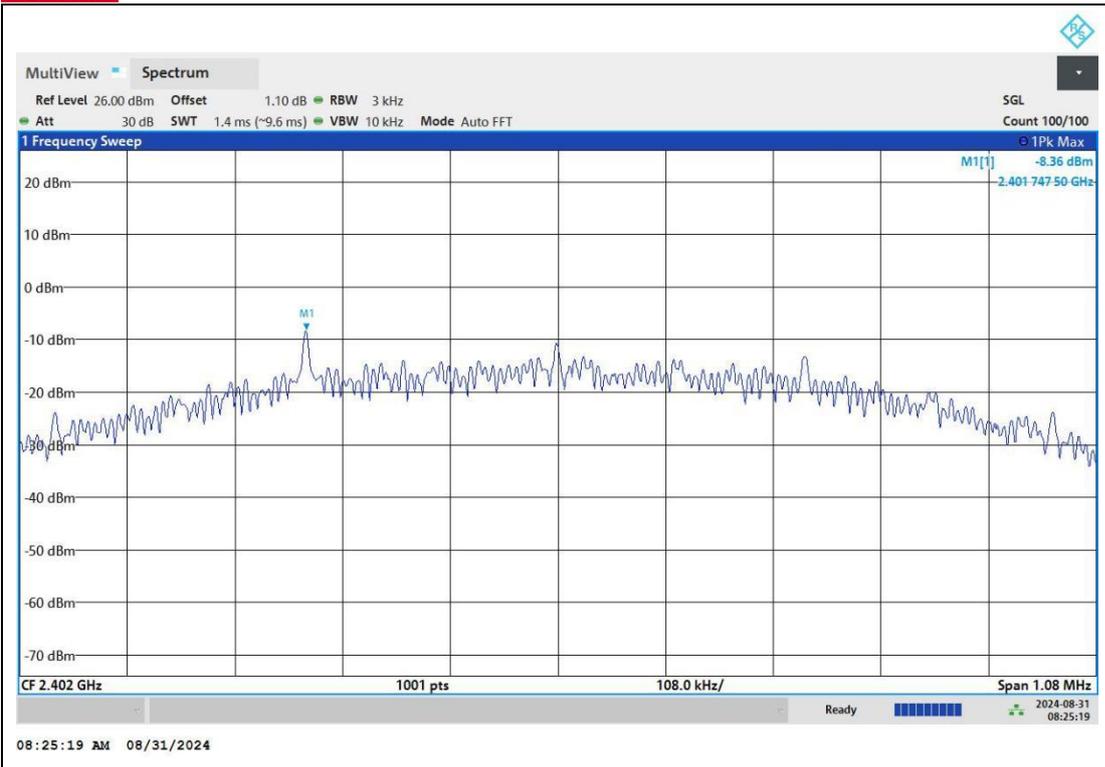
BLE_2M_ANT4_2404



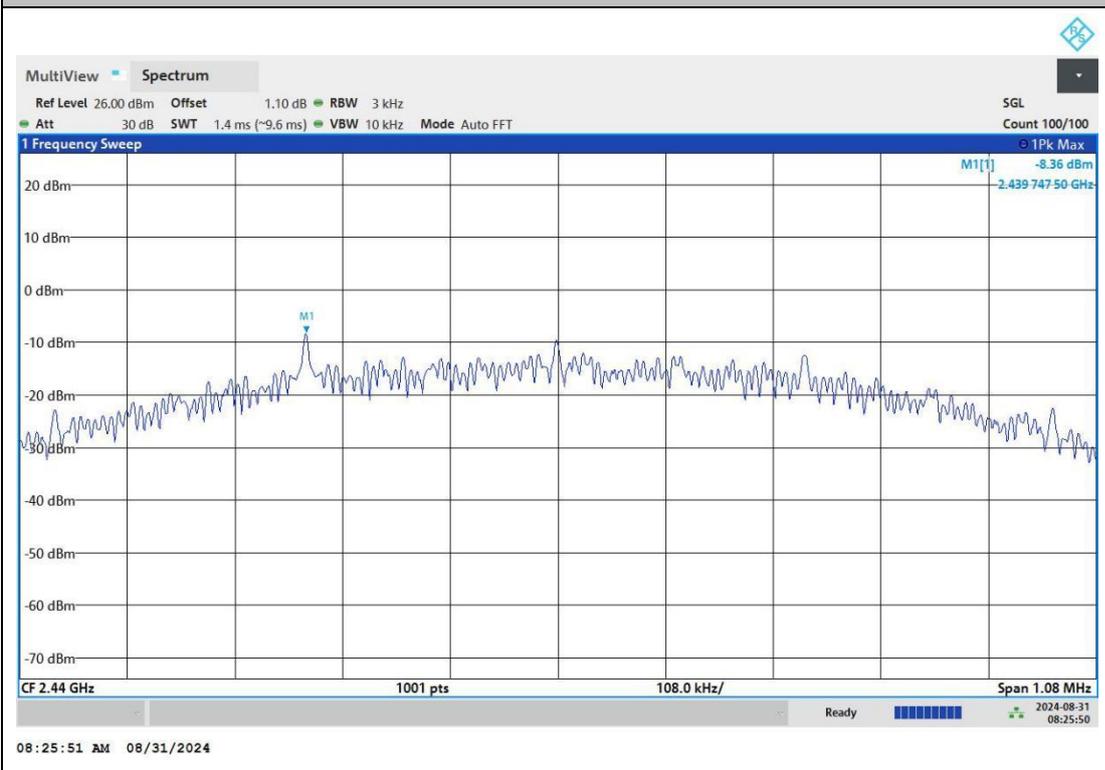
BLE_2M_ANT4_2440



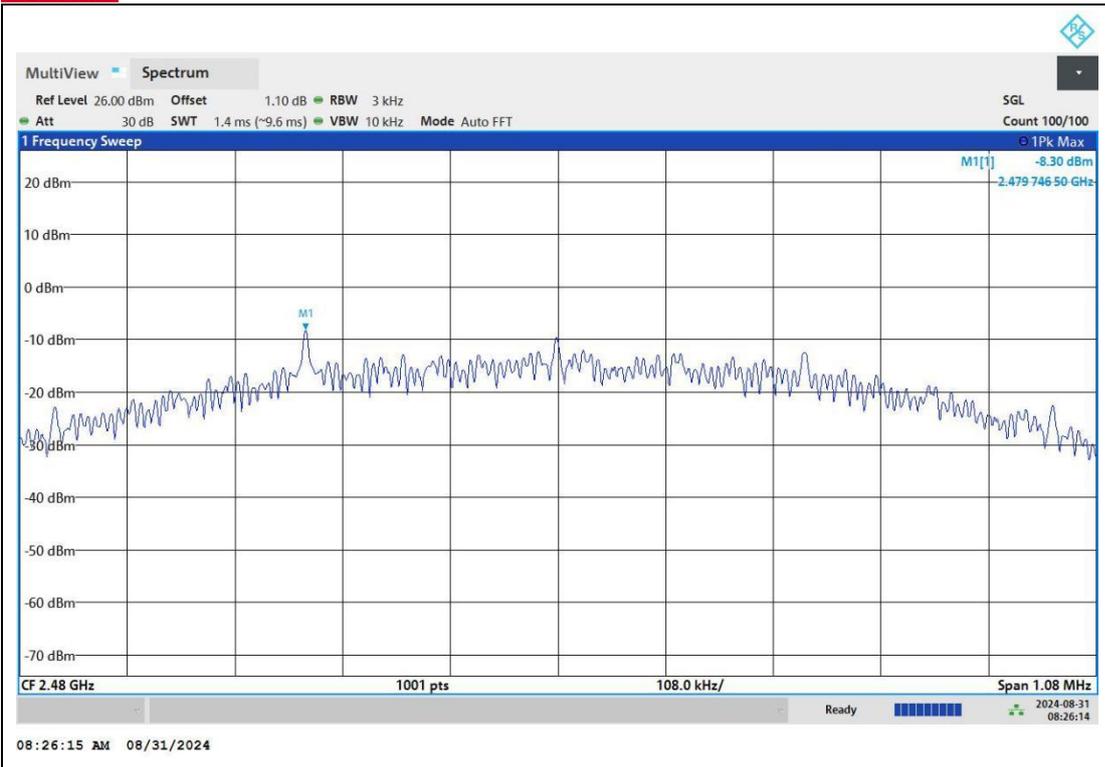
BLE_2M_ANT4_2478



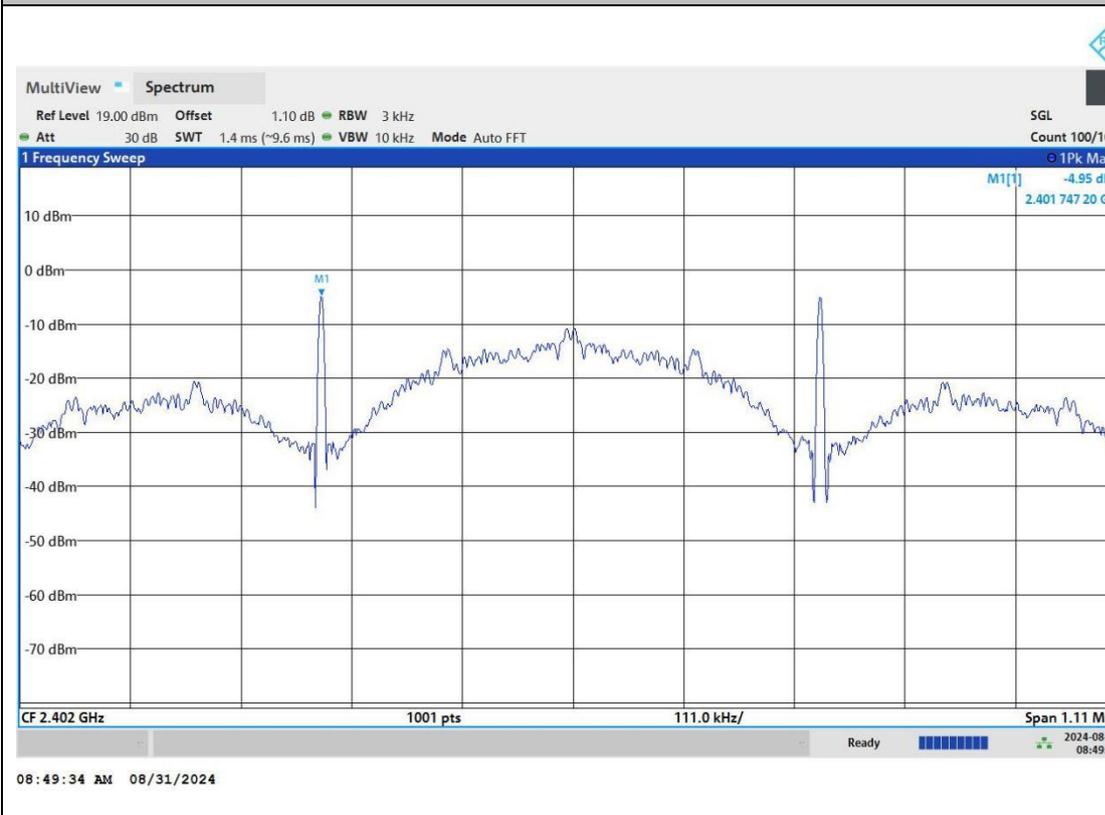
BLE_S2_ANT4_2402



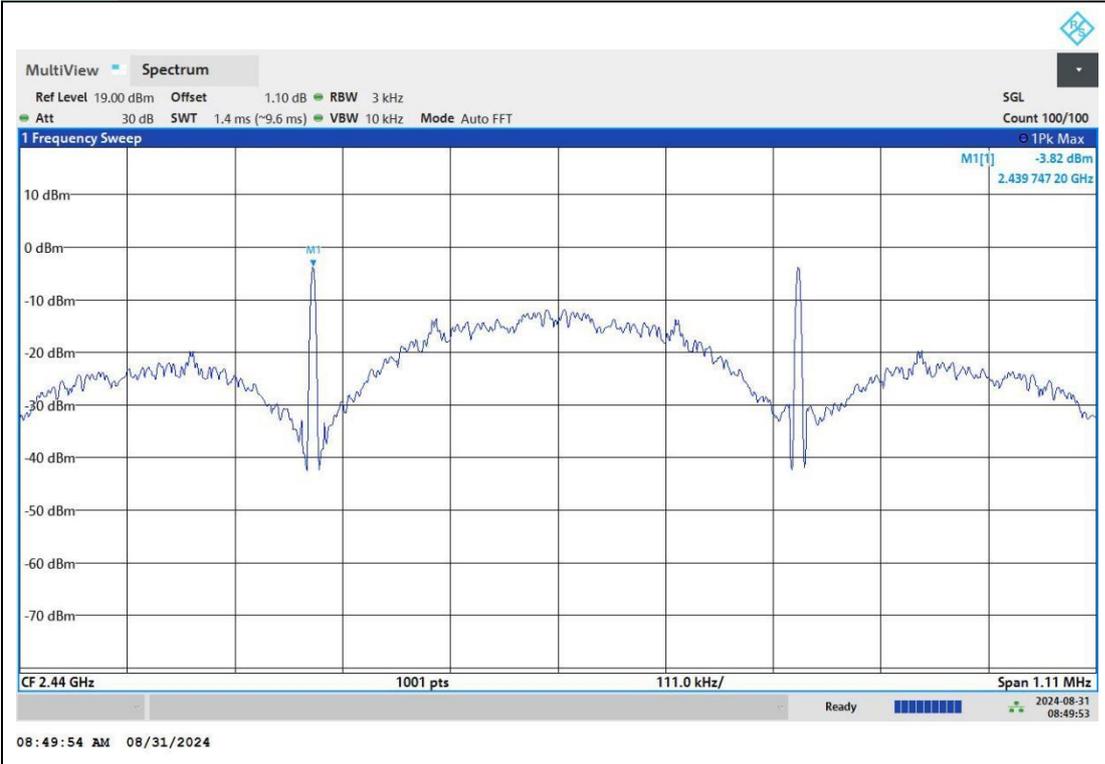
BLE_S2_ANT4_2440



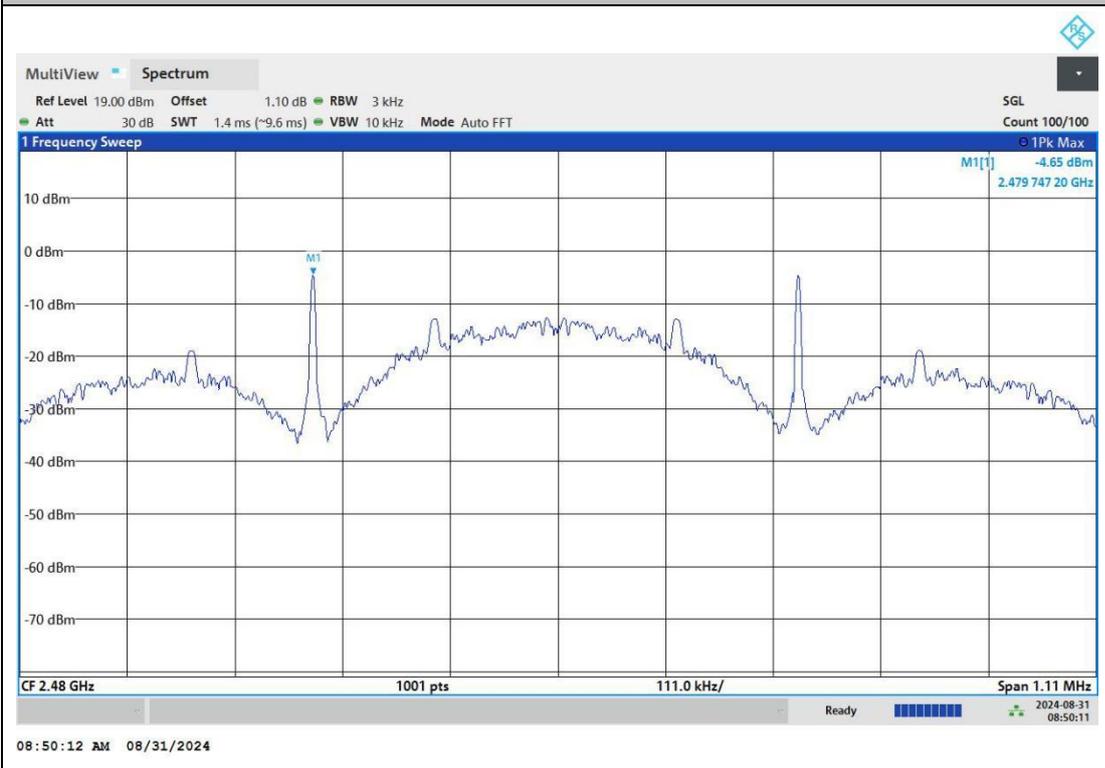
BLE_S2_ANT4_2480



BLE_S8_ANT4_2402



BLE_S8_ANT4_2440



BLE_S8_ANT4_2480



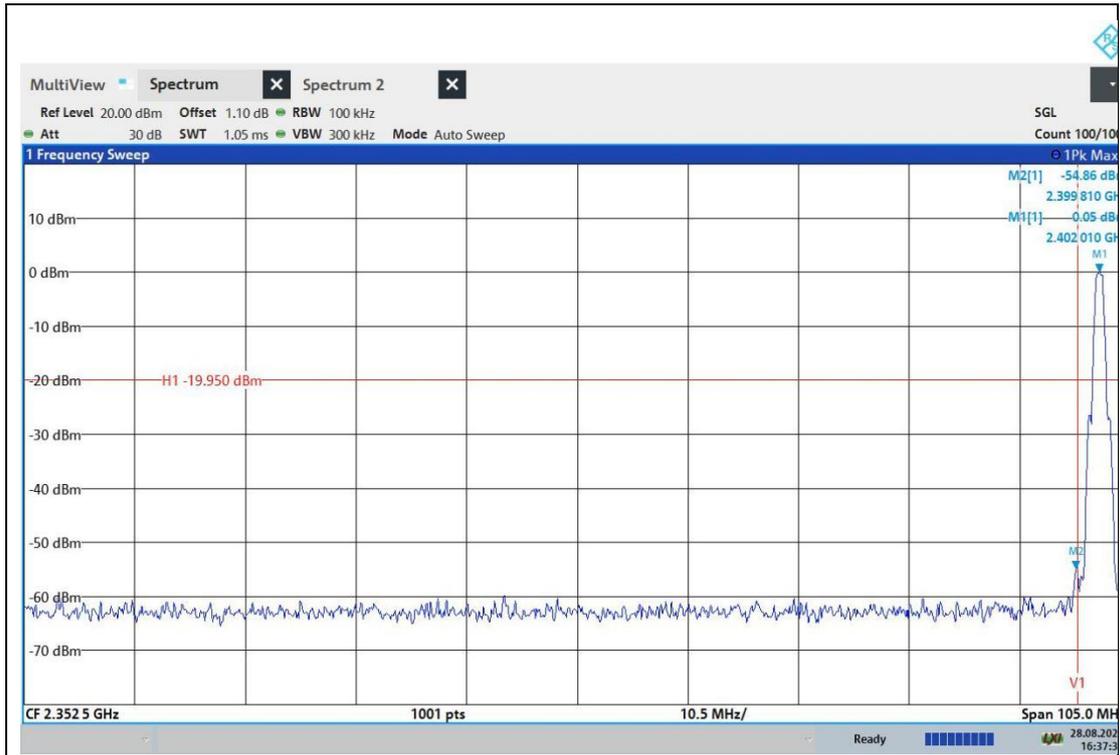
BAND EDGE MEASUREMENTS

TEST RESULT

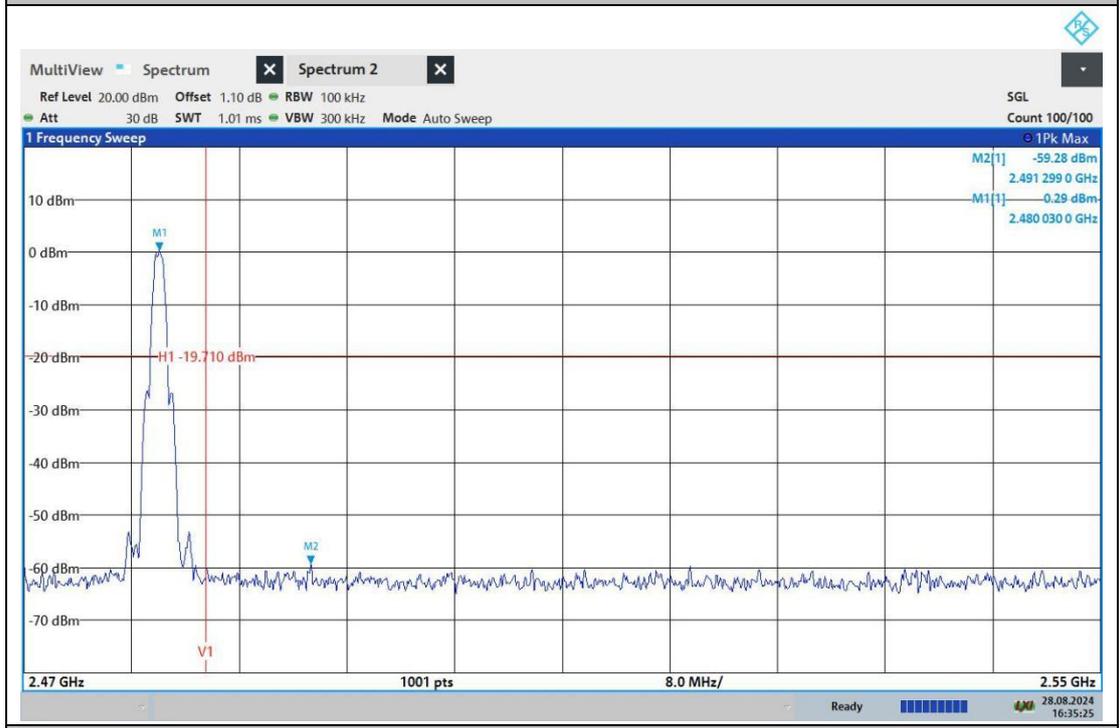
TestMode	Antenna	ChName	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	ANT4	Low	2402	See test graph	See test graph	PASS
		High	2480	See test graph	See test graph	PASS
BLE_2M	ANT4	Low	2402	See test graph	See test graph	PASS
		High	2480	See test graph	See test graph	PASS
BLE_S2	ANT4	Low	2402	See test graph	See test graph	PASS
		High	2480	See test graph	See test graph	PASS
BLE_S8	ANT4	Low	2402	See test graph	See test graph	PASS
		High	2480	See test graph	See test graph	PASS



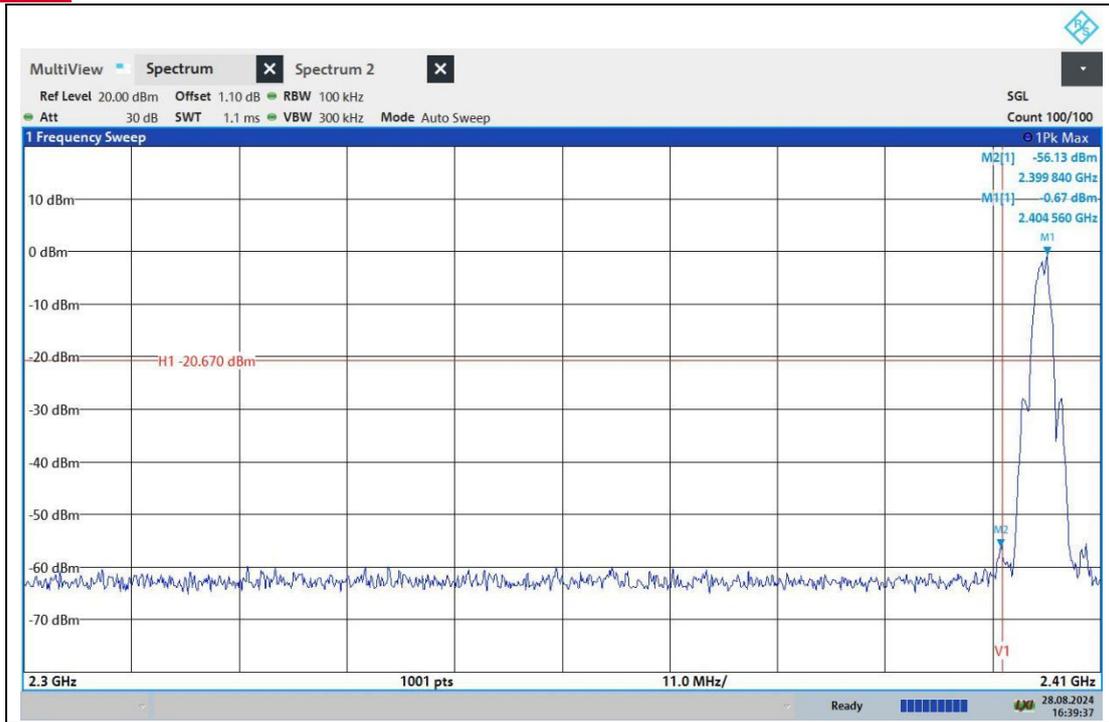
TEST GRAPHS



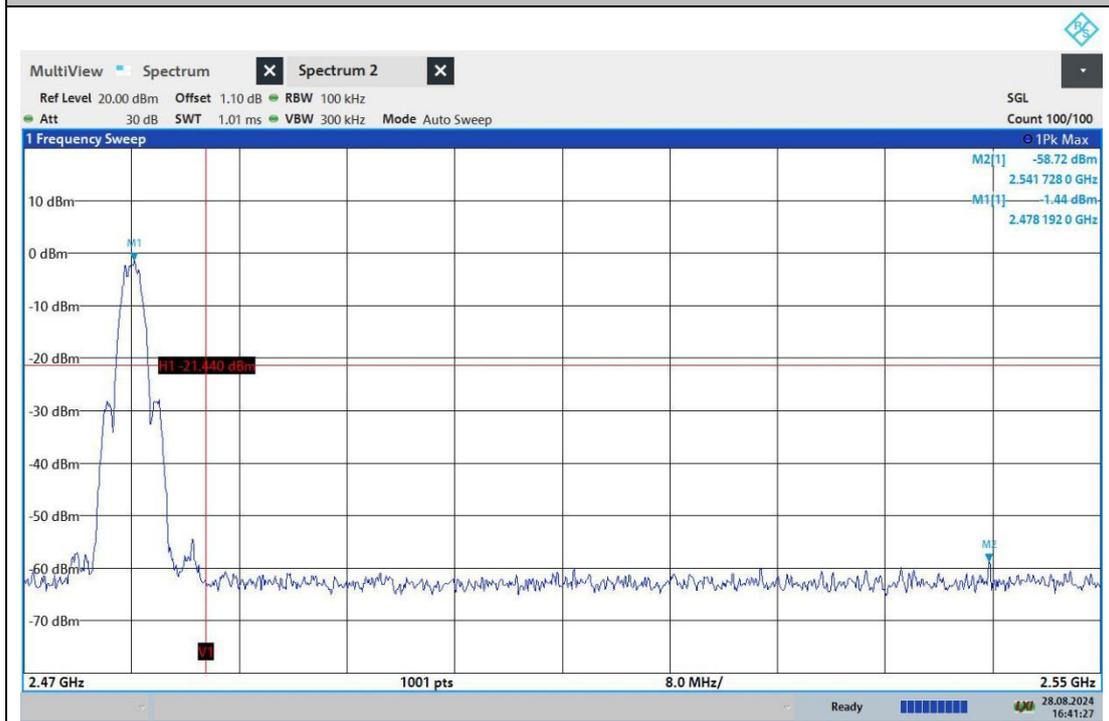
BLE_1M_ANT4_Low_2402



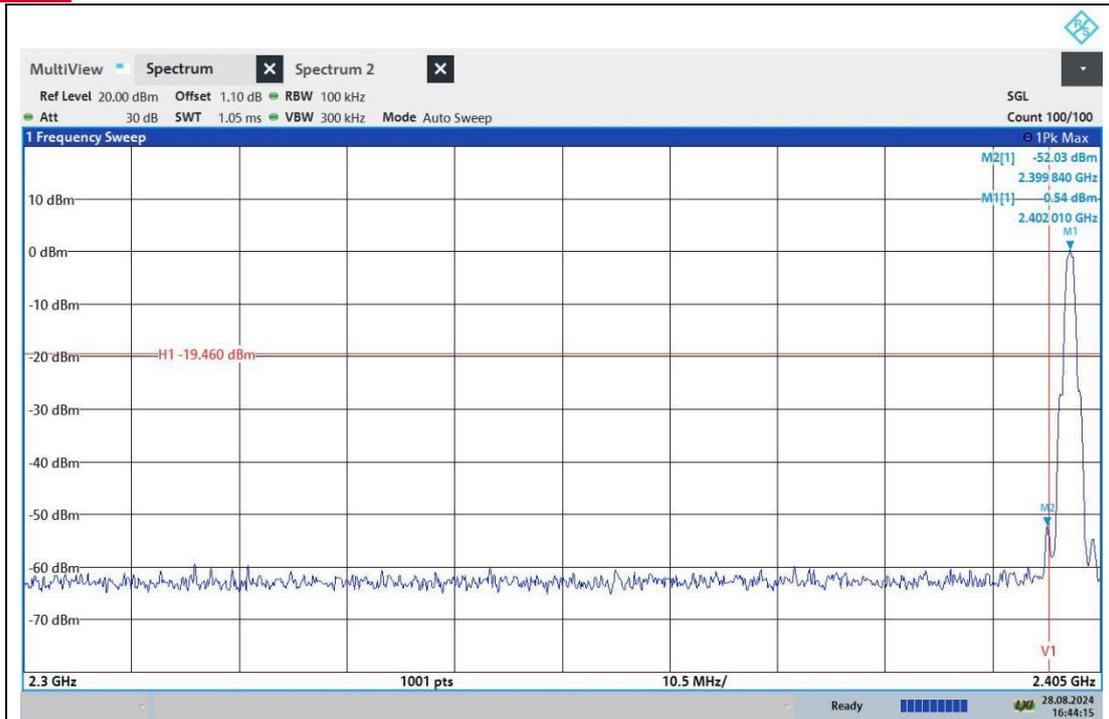
BLE_1M_ANT4_High_2480



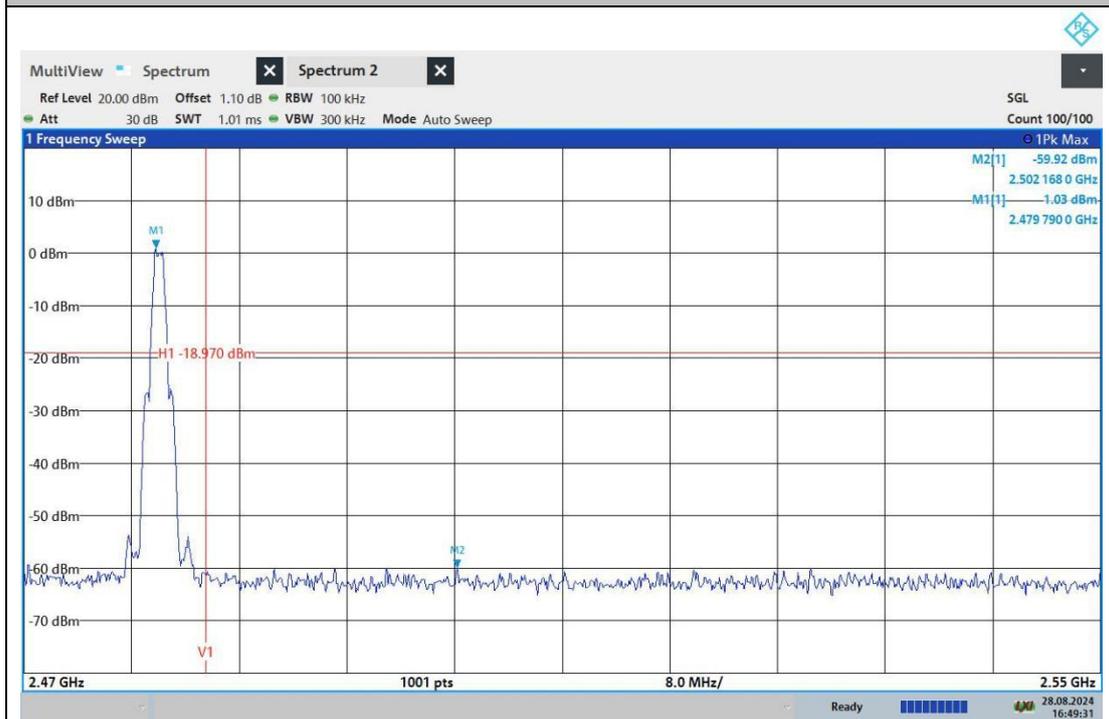
BLE_2M_ANT4_Low_2404



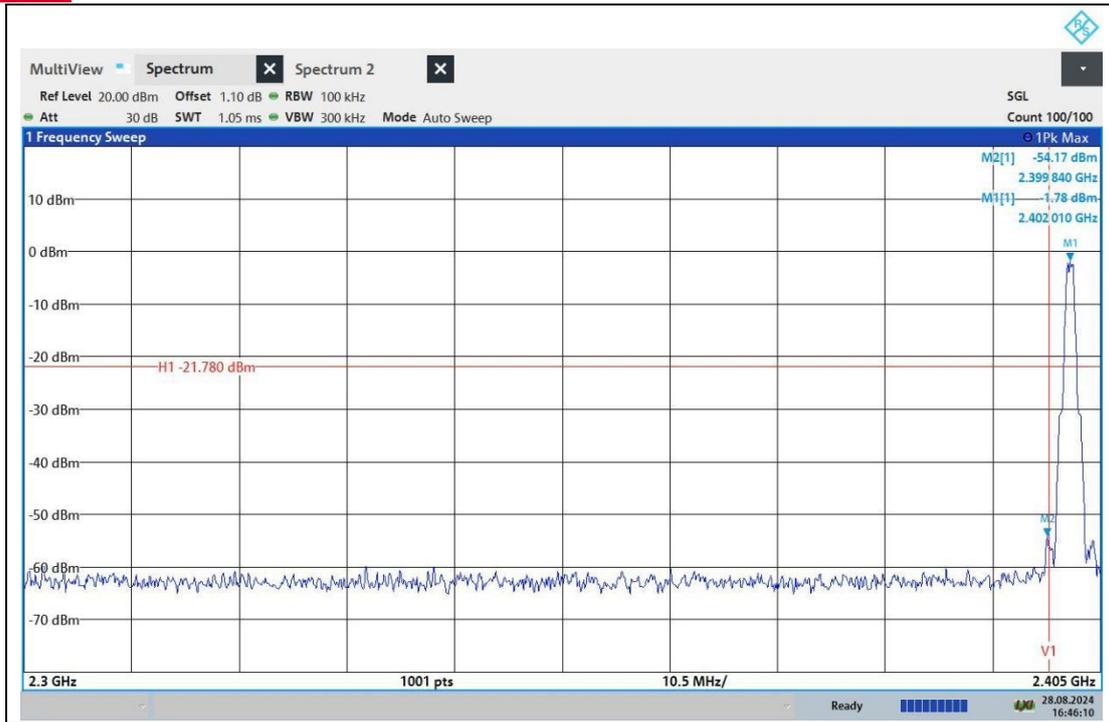
BLE_2M_ANT4_High_2478



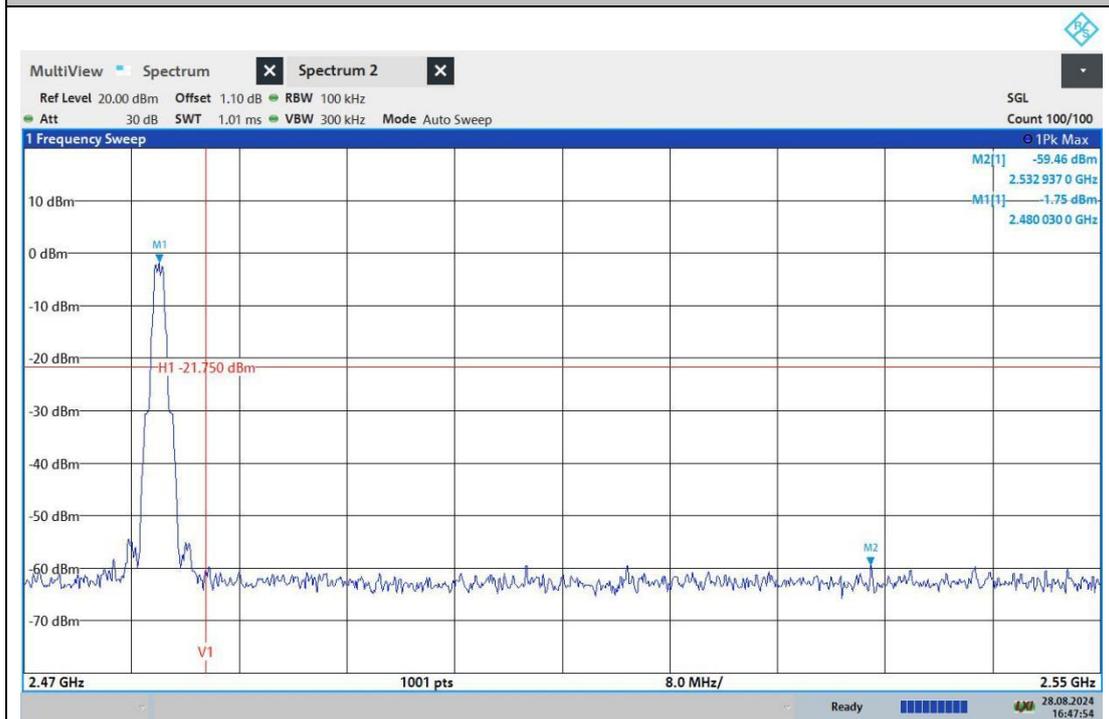
BLE_S2_ANT4_Low_2402



BLE_S2_ANT4_High_2480



BLE_S8_ANT4_Low_2402



BLE_S8_ANT4_High_2480



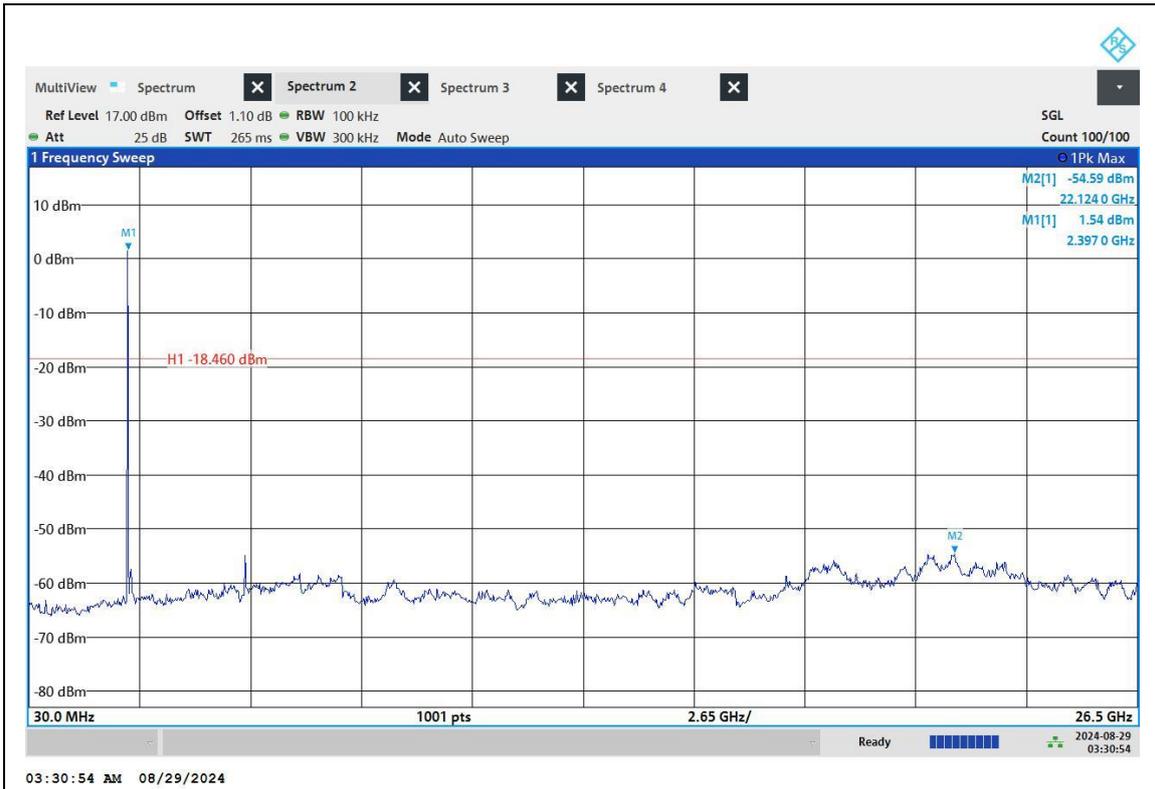
CONDUCTED SPURIOUS EMISSION

TEST RESULT

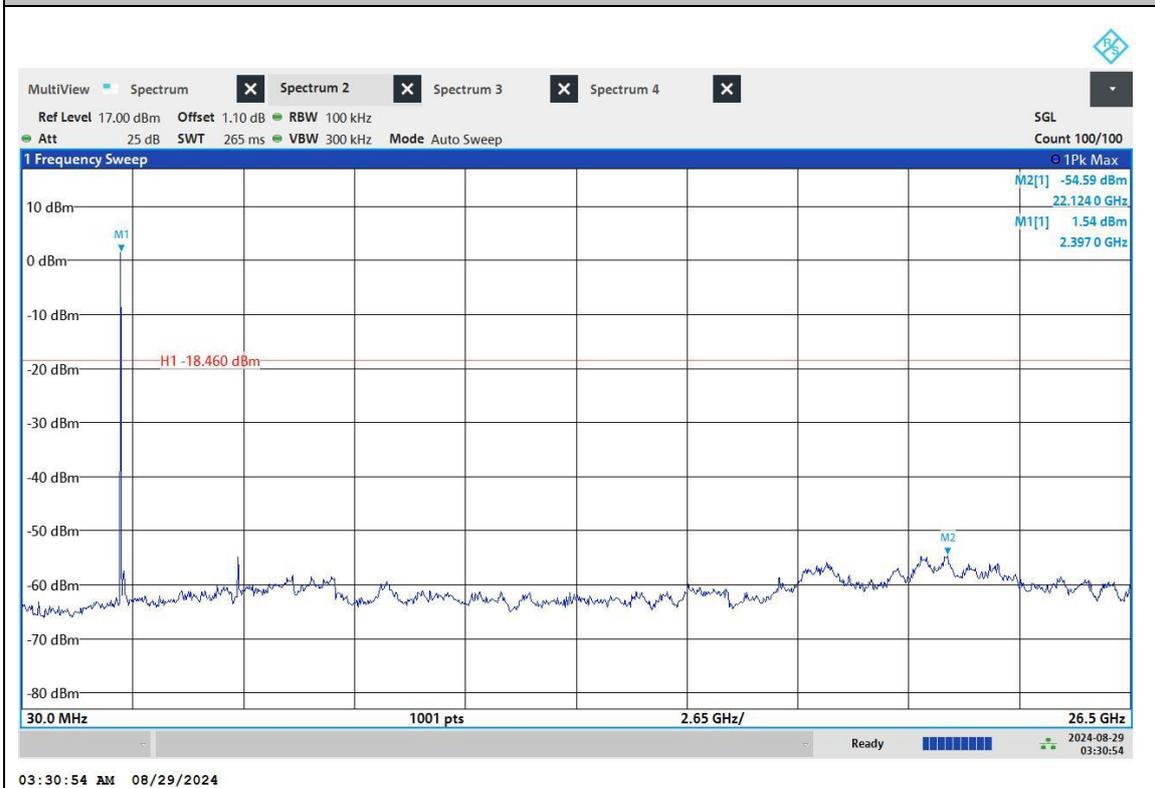
TestMode	Antenna	Channel	FreqRange [MHz]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	ANT4	2402	30~26500	See test graph	See test graph	PASS
		2440	30~26500	See test graph	See test graph	PASS
		2480	30~26500	See test graph	See test graph	PASS
BLE_2M	ANT4	2402	30~26500	See test graph	See test graph	PASS
		2440	30~26500	See test graph	See test graph	PASS
		2480	30~26500	See test graph	See test graph	PASS
BLE_S2	ANT4	2402	30~26500	See test graph	See test graph	PASS
		2440	30~26500	See test graph	See test graph	PASS
		2480	30~26500	See test graph	See test graph	PASS
BLE_S8	ANT4	2402	30~26500	See test graph	See test graph	PASS
		2440	30~26500	See test graph	See test graph	PASS
		2480	30~26500	See test graph	See test graph	PASS



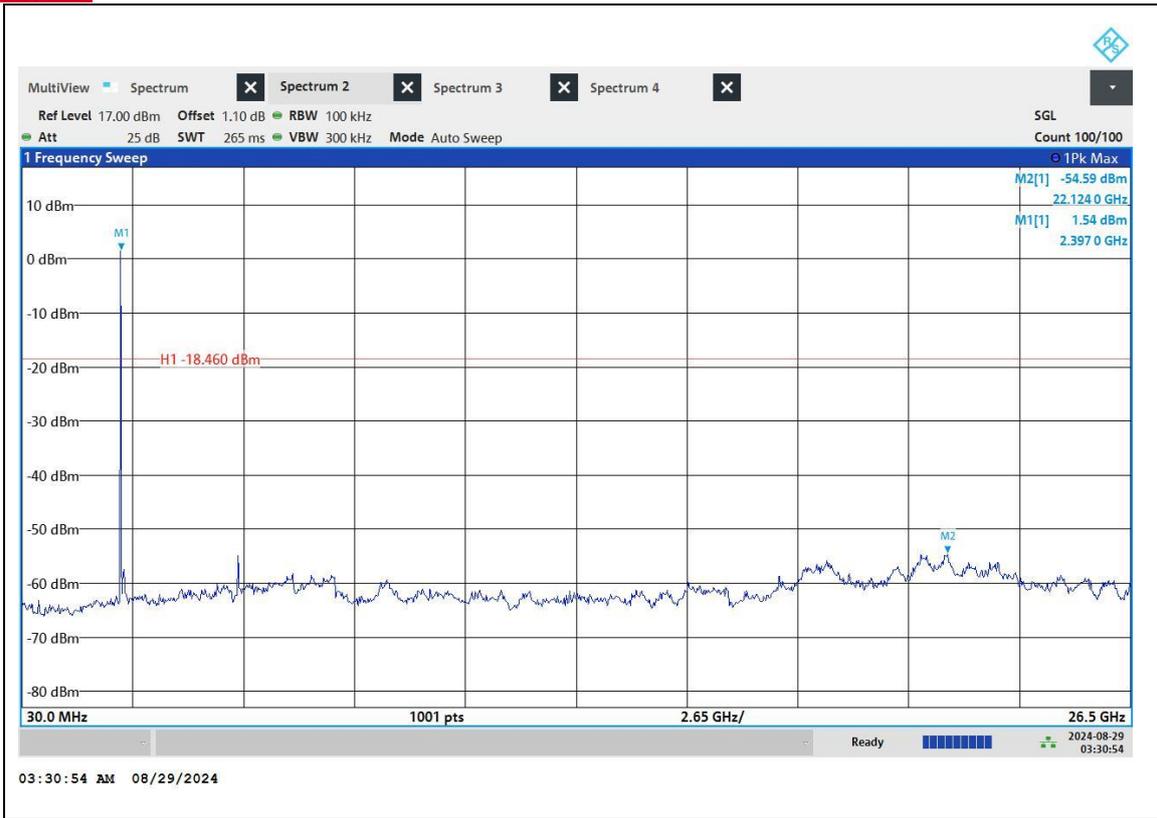
TEST GRAPHS



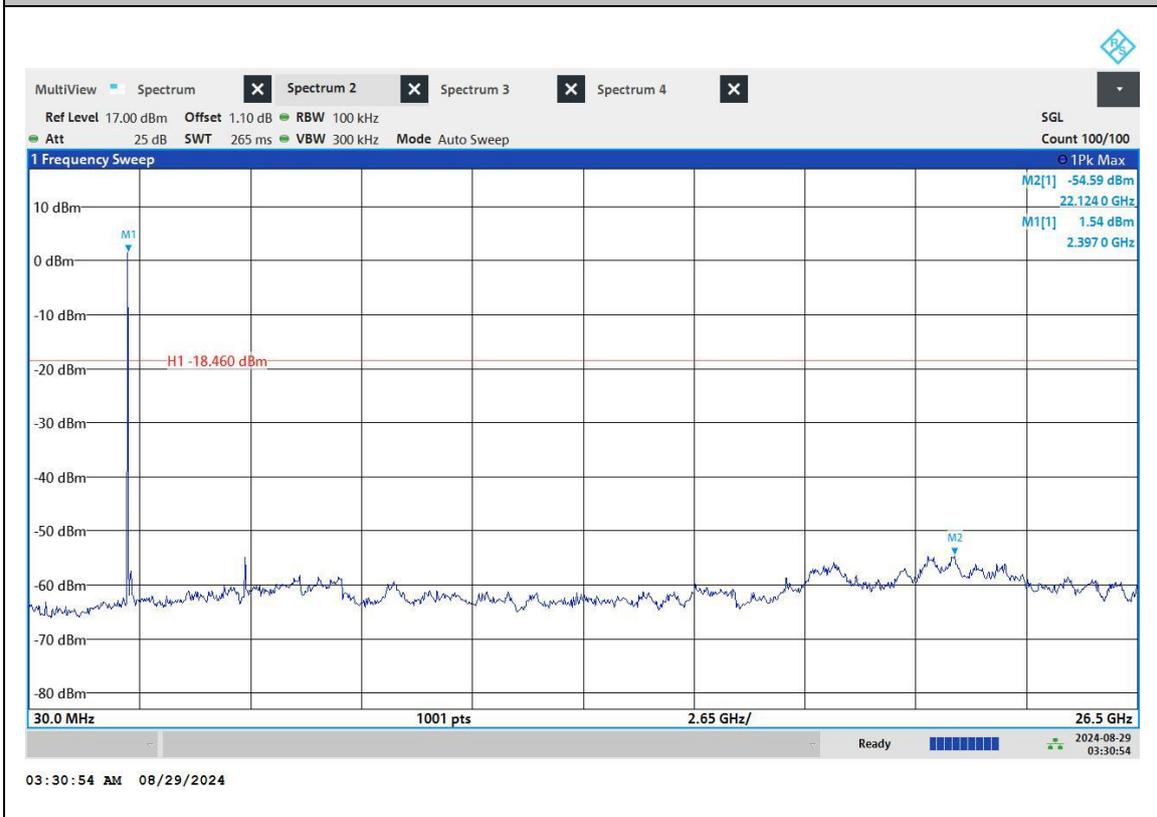
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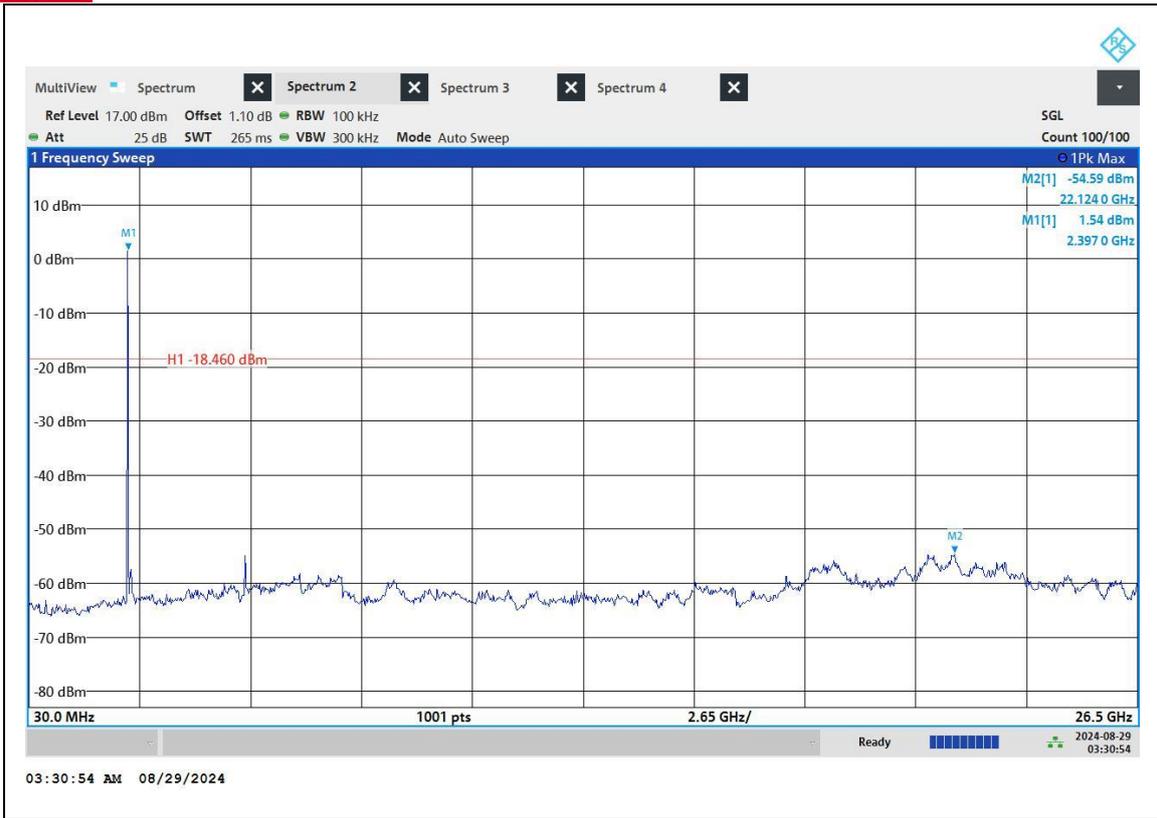
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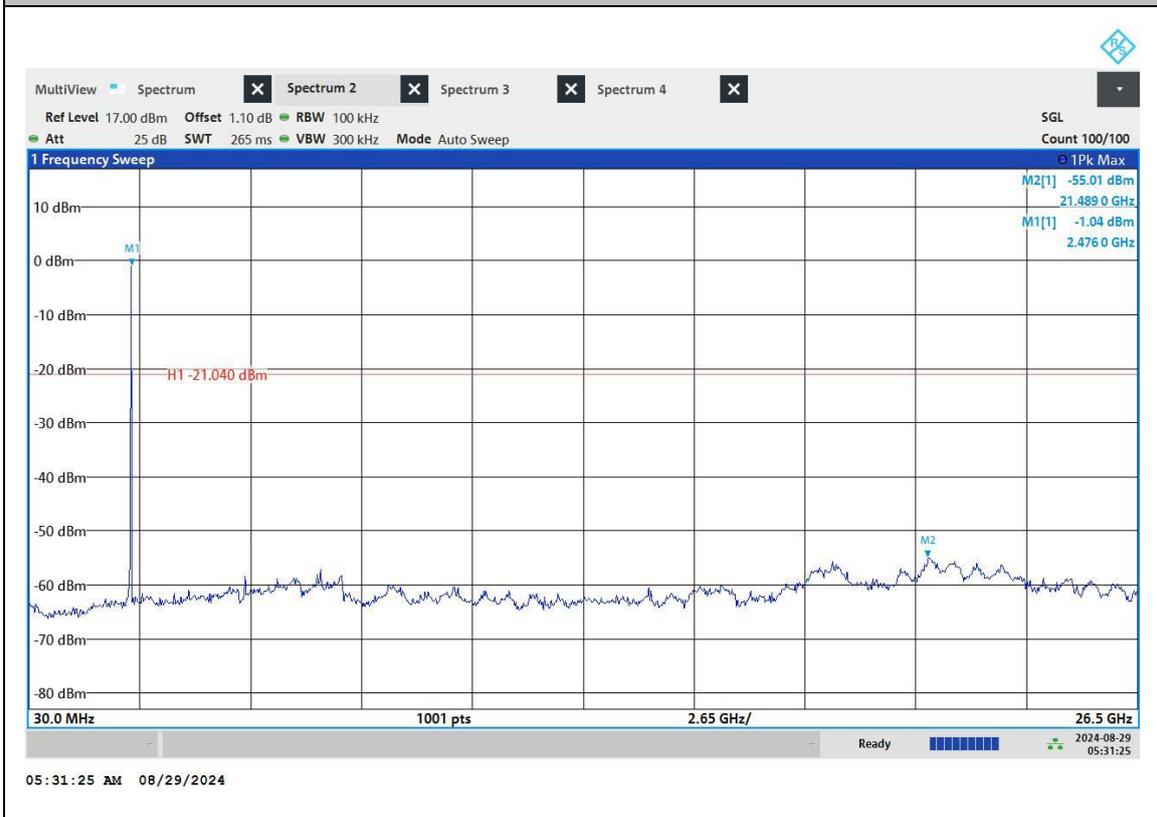
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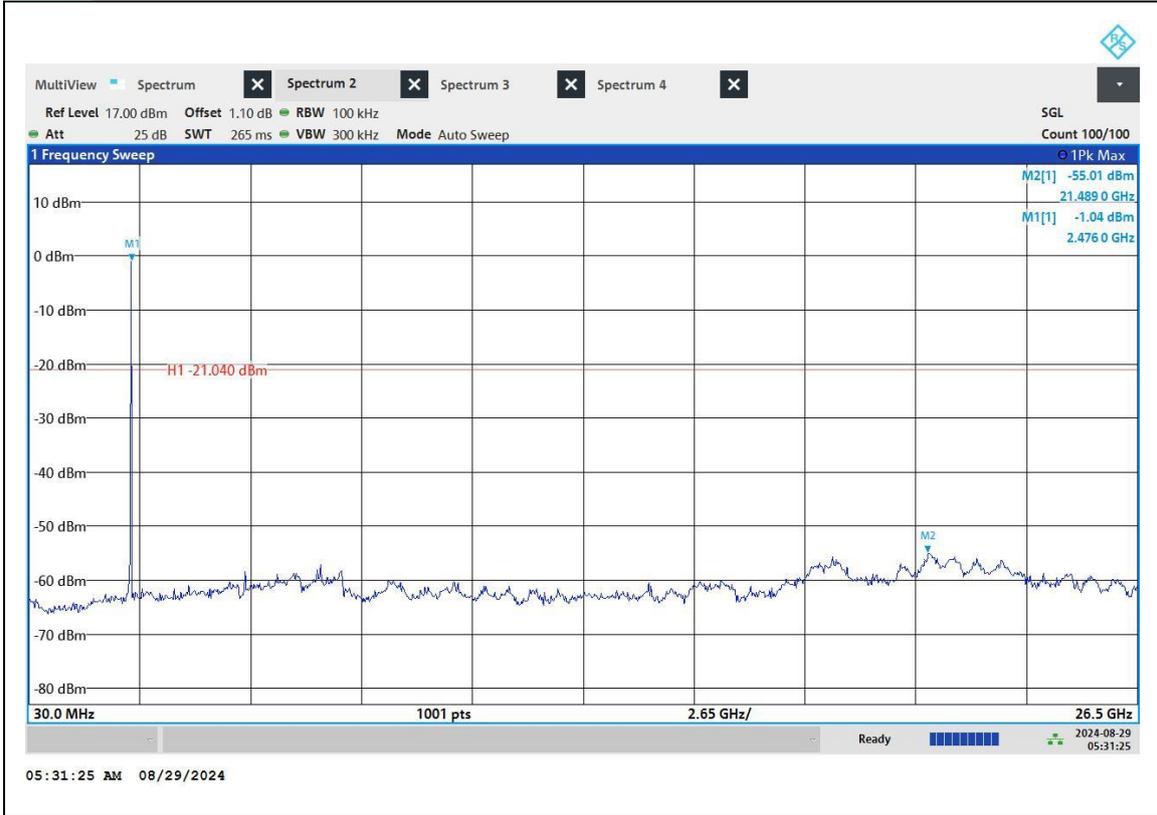
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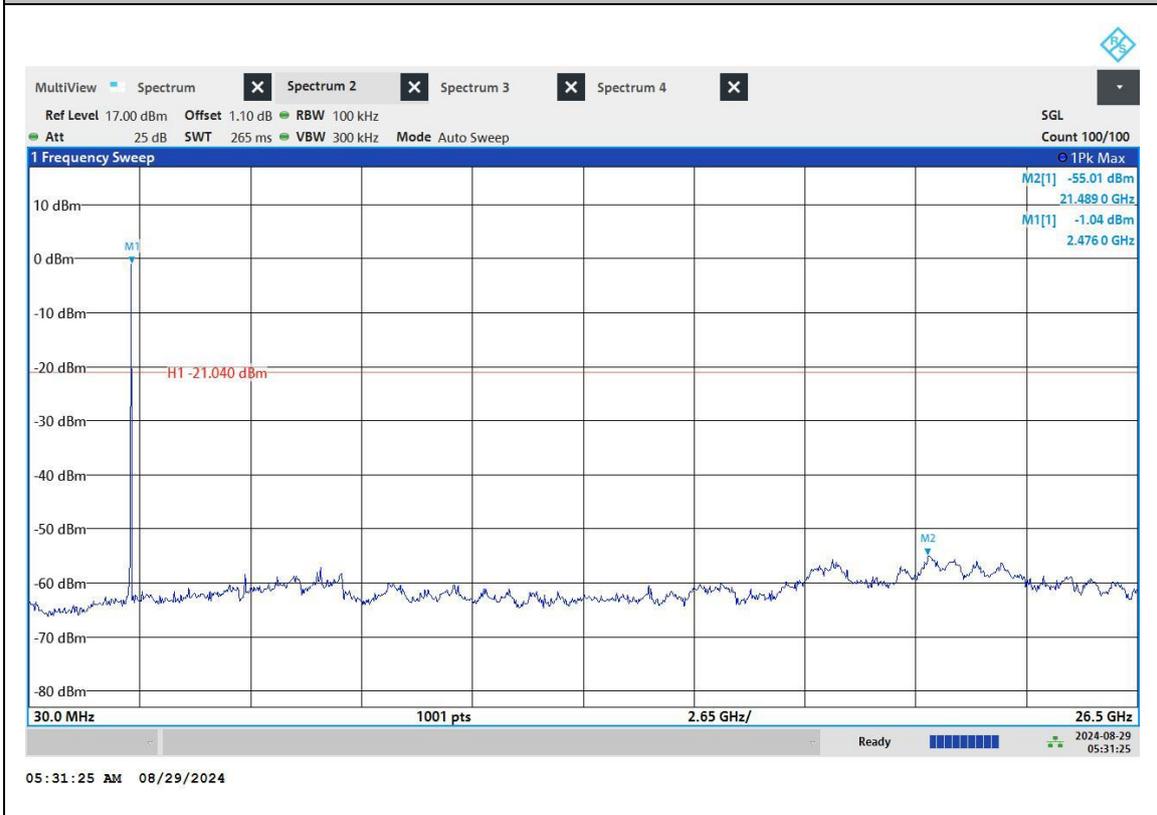
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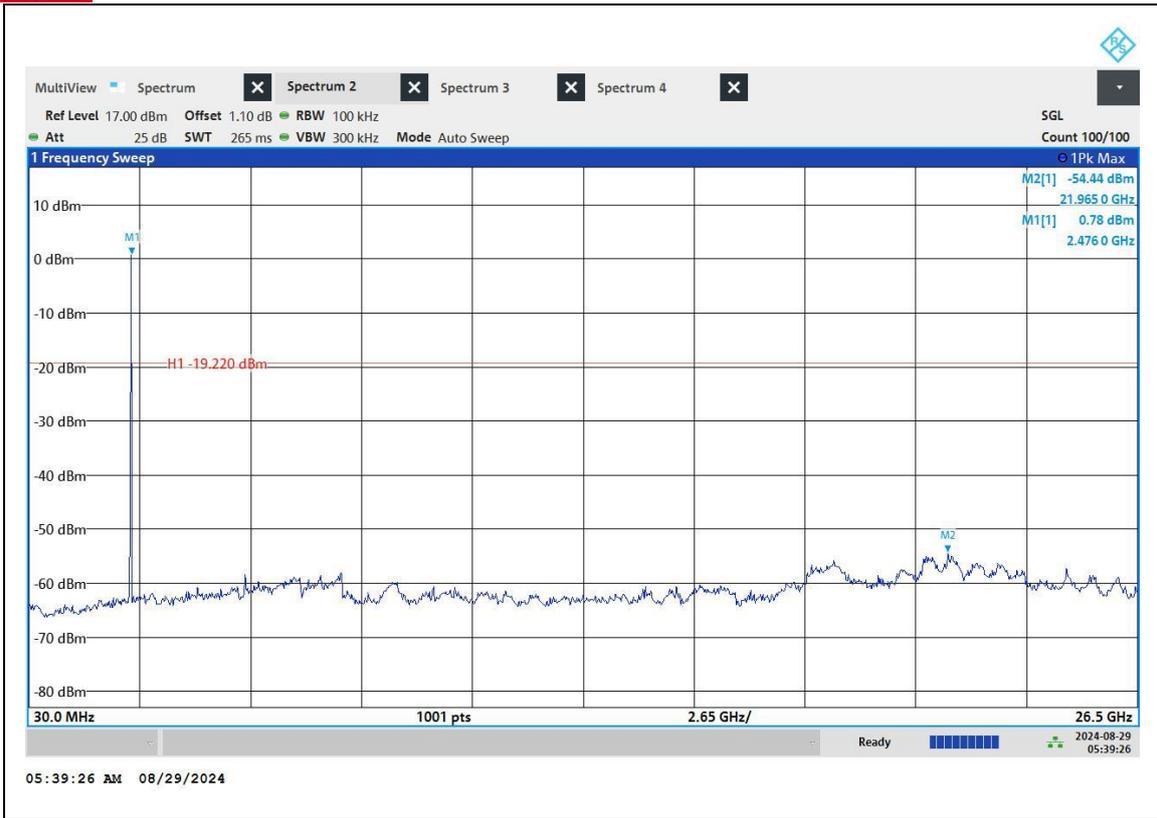
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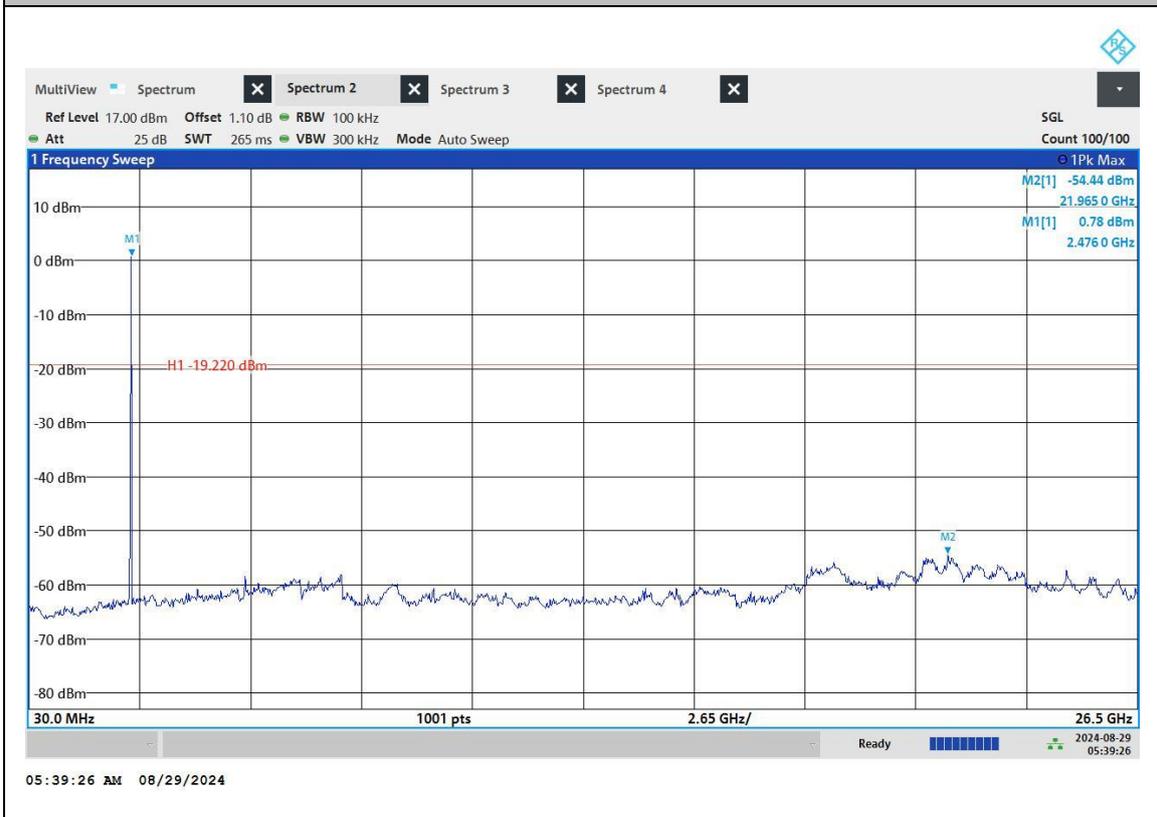
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BLE_S2_ANT4_2440_30~26500



BLE_S2_ANT4_2480_30~26500



BLE_S8_ANT4_2402_30~26500