



Appendix B

RF Test Data for BLE (Conducted Measurement)

Product Name: H1 Tablet / H1

Test Model: H1

Environmental Conditions

Temperature:	23.7° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling.zhu
Supervised by:	Lih

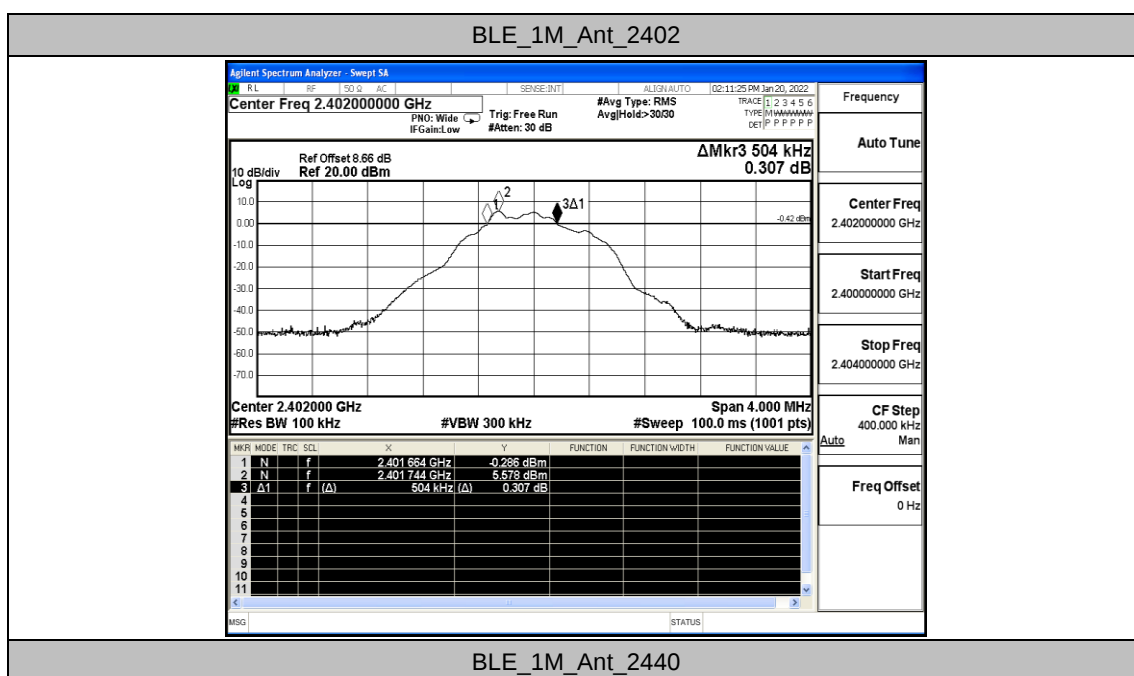


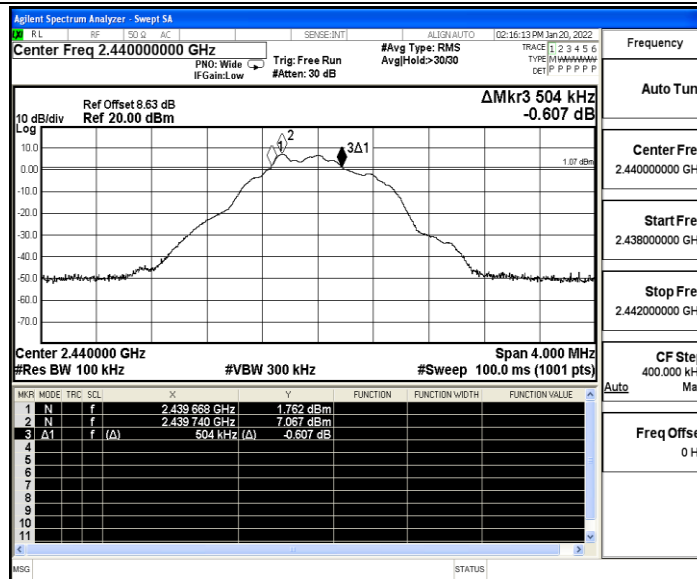
B.1 6dB Bandwidth

Test Result

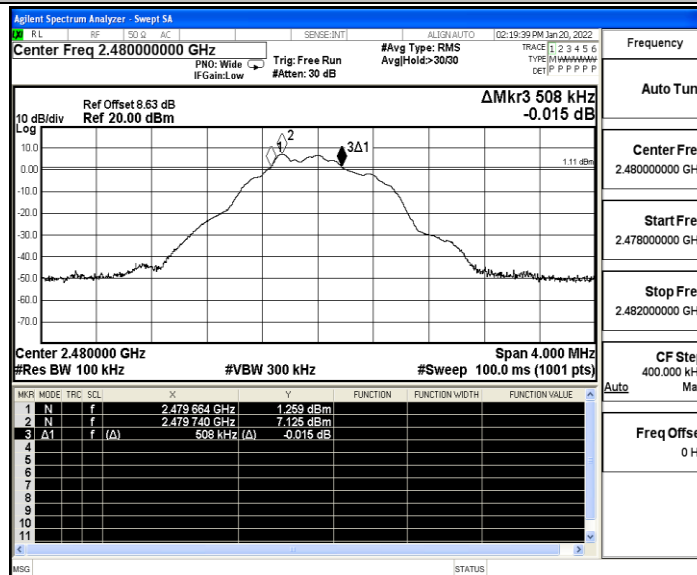
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant	2402	0.504	2401.664	2402.168	0.5	PASS
		2440	0.504	2439.668	2440.172	0.5	PASS
		2480	0.508	2479.664	2480.172	0.5	PASS
BLE_2M	Ant	2402	0.860	2401.408	2402.268	0.5	PASS
		2440	0.868	2439.408	2440.276	0.5	PASS
		2480	0.864	2479.408	2480.272	0.5	PASS

Test Graphs

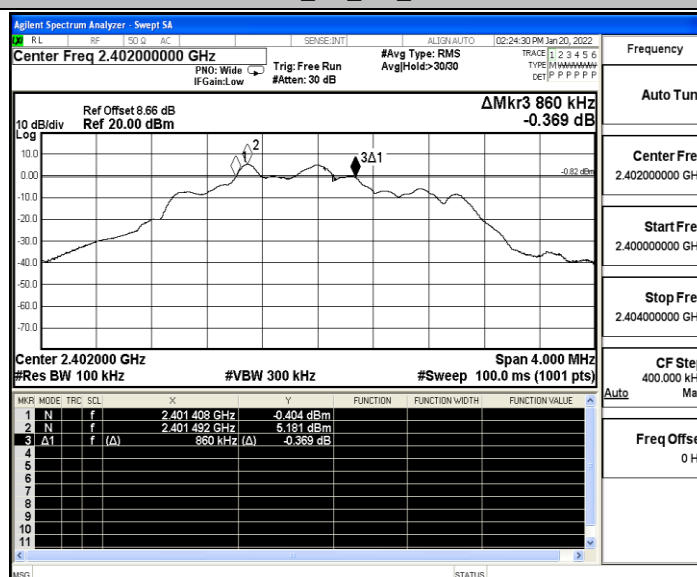




BLE_1M_Ant_2480

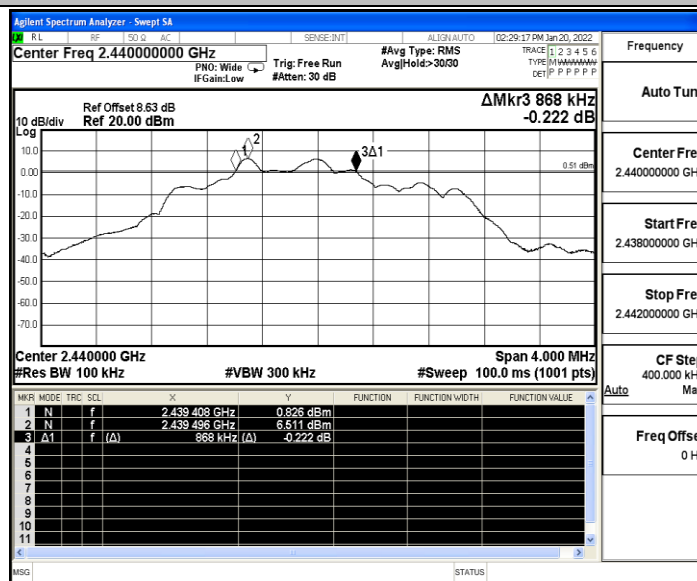


BLE_2M_Ant_2402

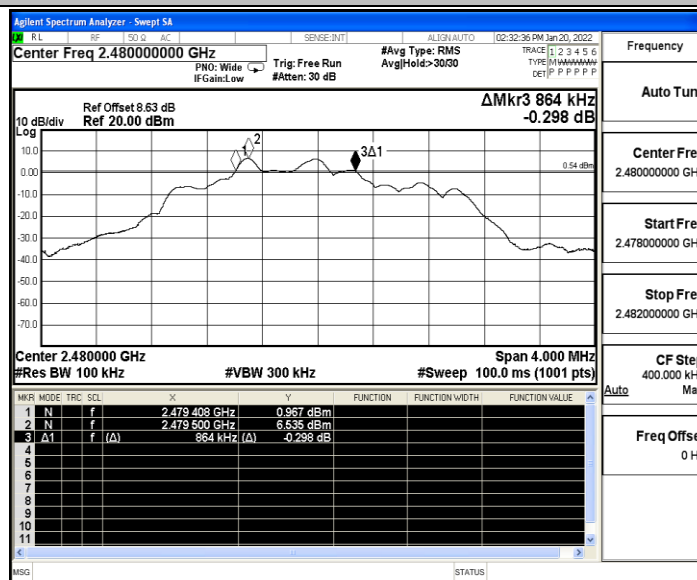




BLE_2M_Ant_2440



BLE_2M_Ant_2480



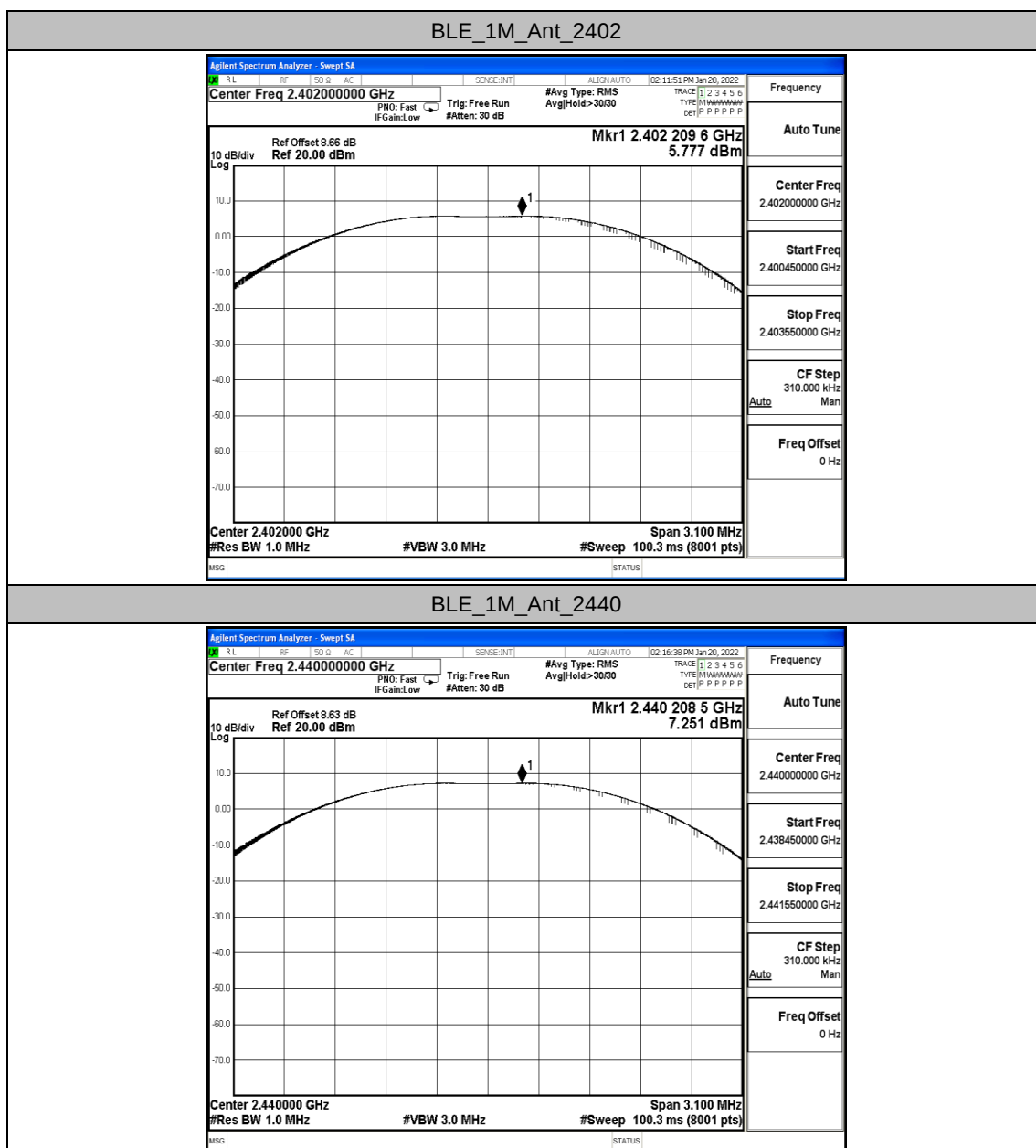


B.2 Maximum conducted output power

Test Result

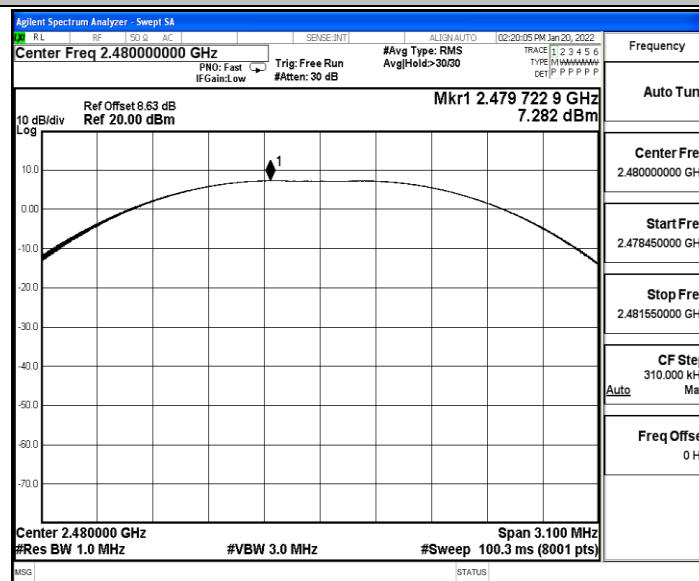
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant	2402	5.78	≤30	PASS
		2440	7.25	≤30	PASS
		2480	7.28	≤30	PASS
BLE_2M	Ant	2402	5.96	≤30	PASS
		2440	7.31	≤30	PASS
		2480	7.36	≤30	PASS

Test Graphs

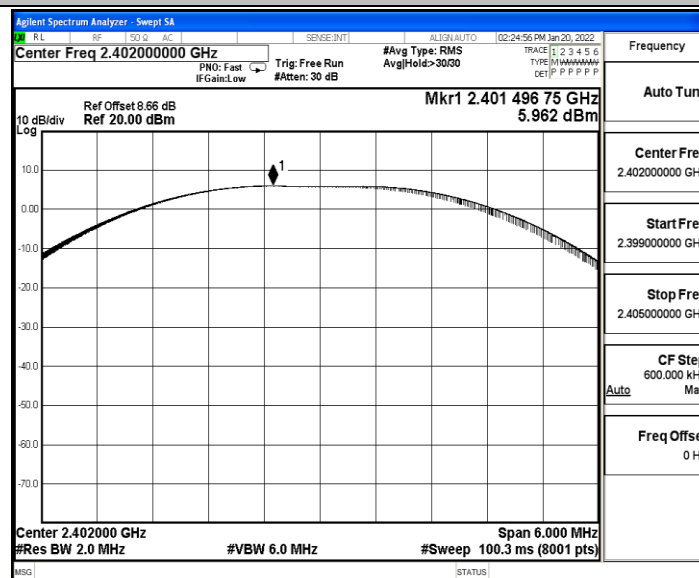




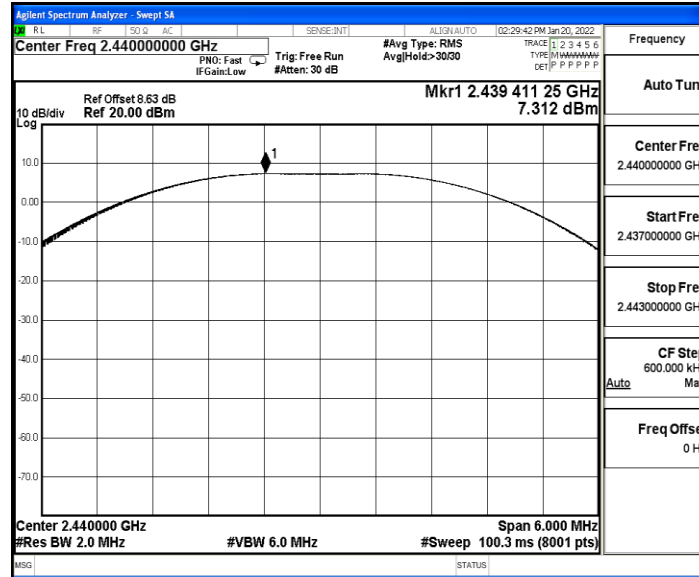
BLE_1M_Ant_2480



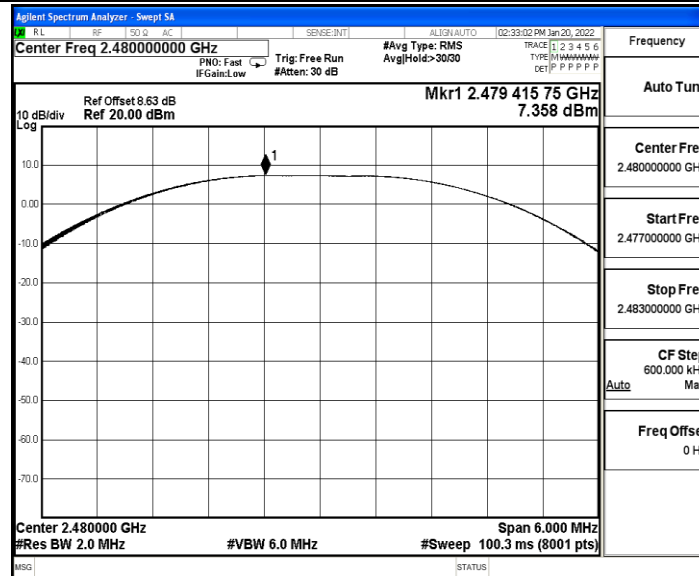
BLE_2M_Ant_2402



BLE_2M_Ant_2440



BLE_2M_Ant_2480



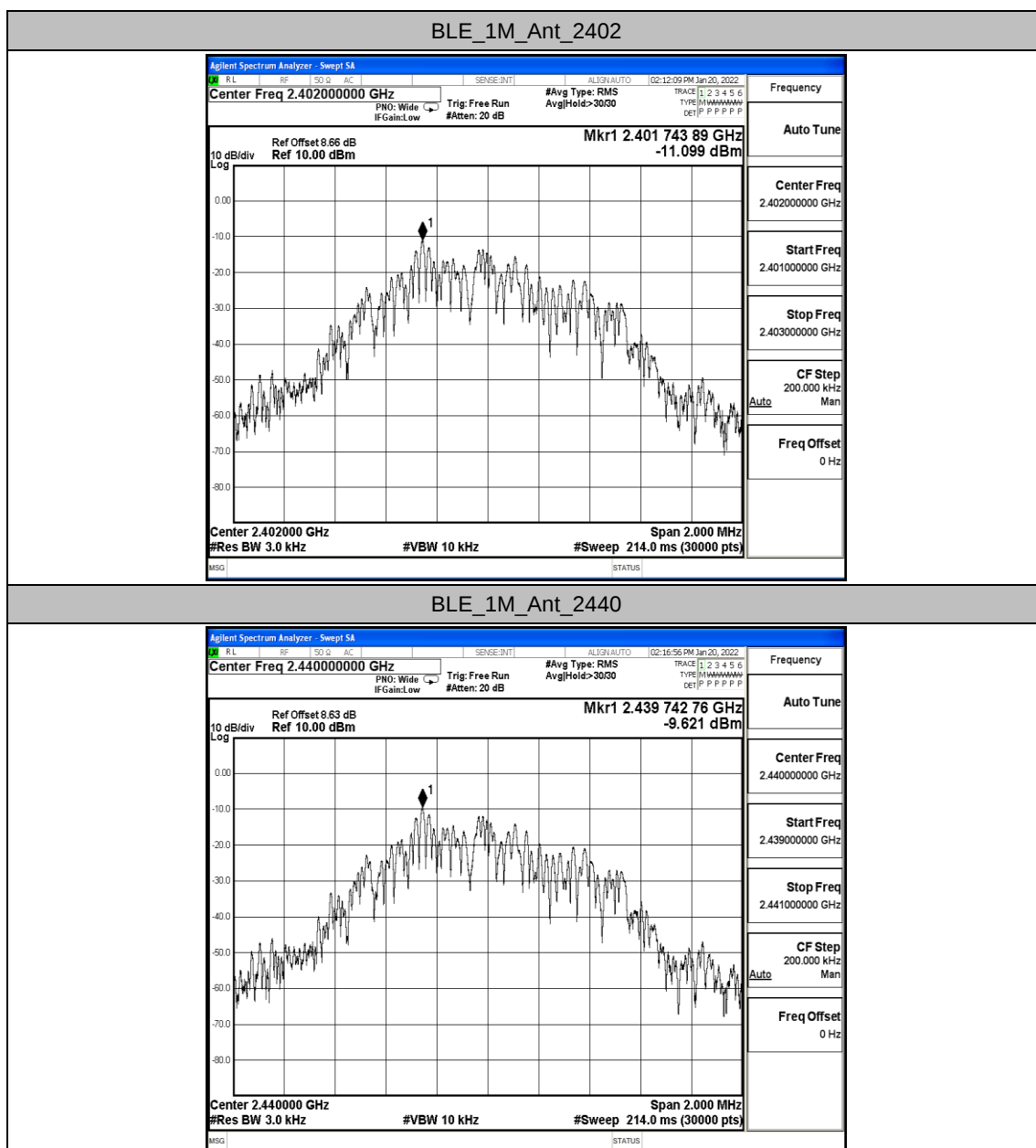


B.3 Maximum power spectral density

Test Result

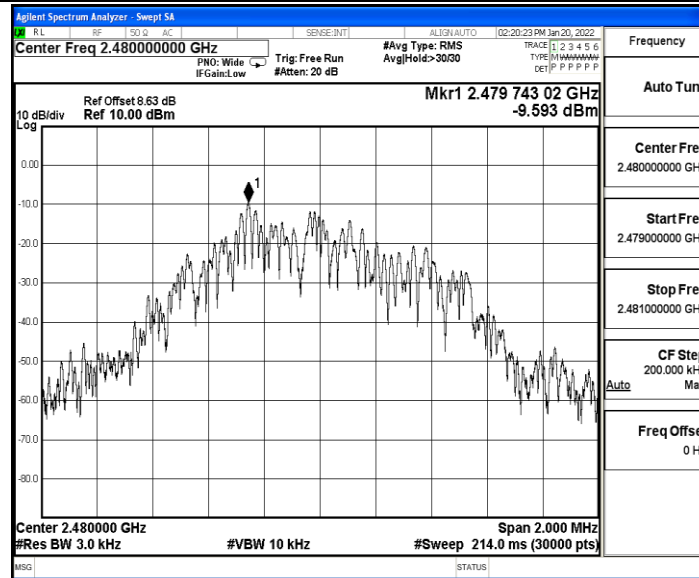
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant	2402	-11.10	≤8.00	PASS
		2440	-9.62	≤8.00	PASS
		2480	-9.59	≤8.00	PASS
BLE_2M	Ant	2402	-16.28	≤8.00	PASS
		2440	-14.92	≤8.00	PASS
		2480	-14.94	≤8.00	PASS

Test Graphs

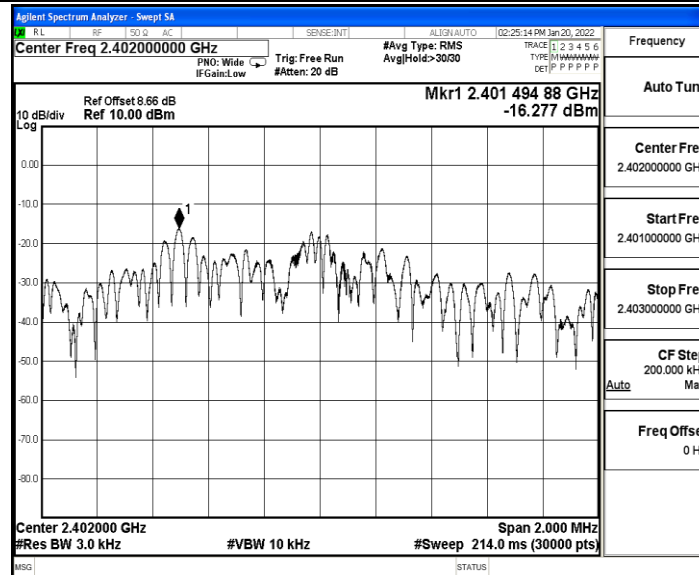




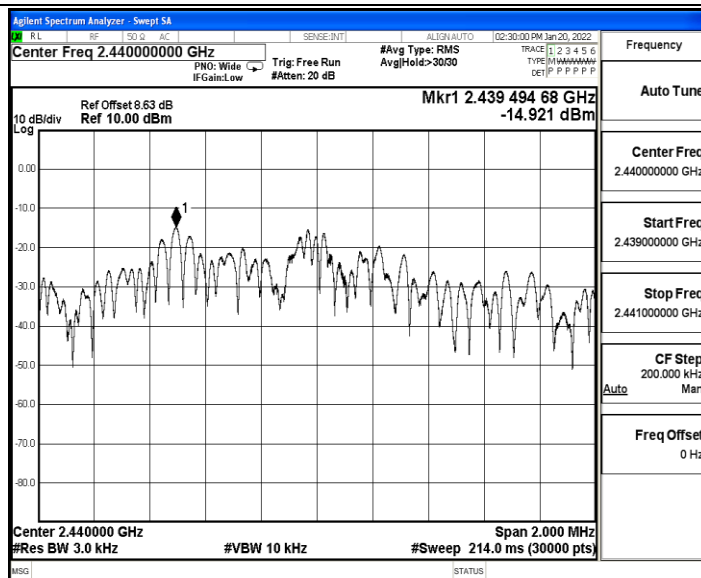
BLE_1M_Ant_2480



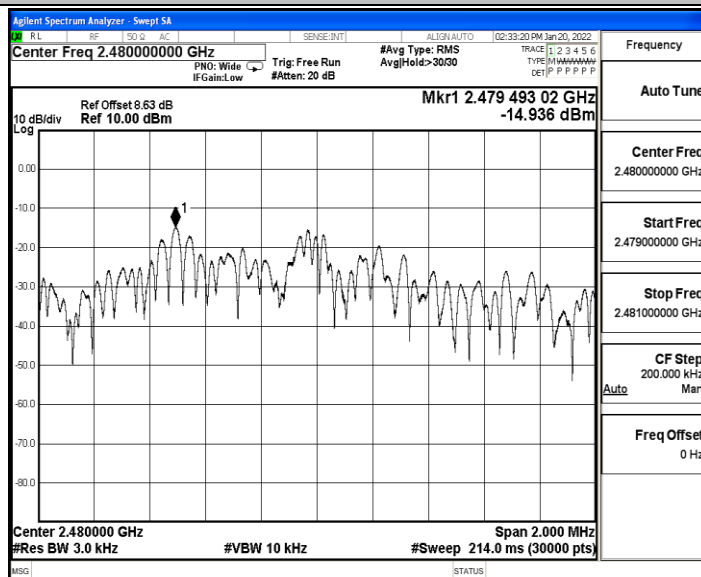
BLE_2M_Ant_2402



BLE_2M_Ant_2440



BLE_2M_Ant_2480



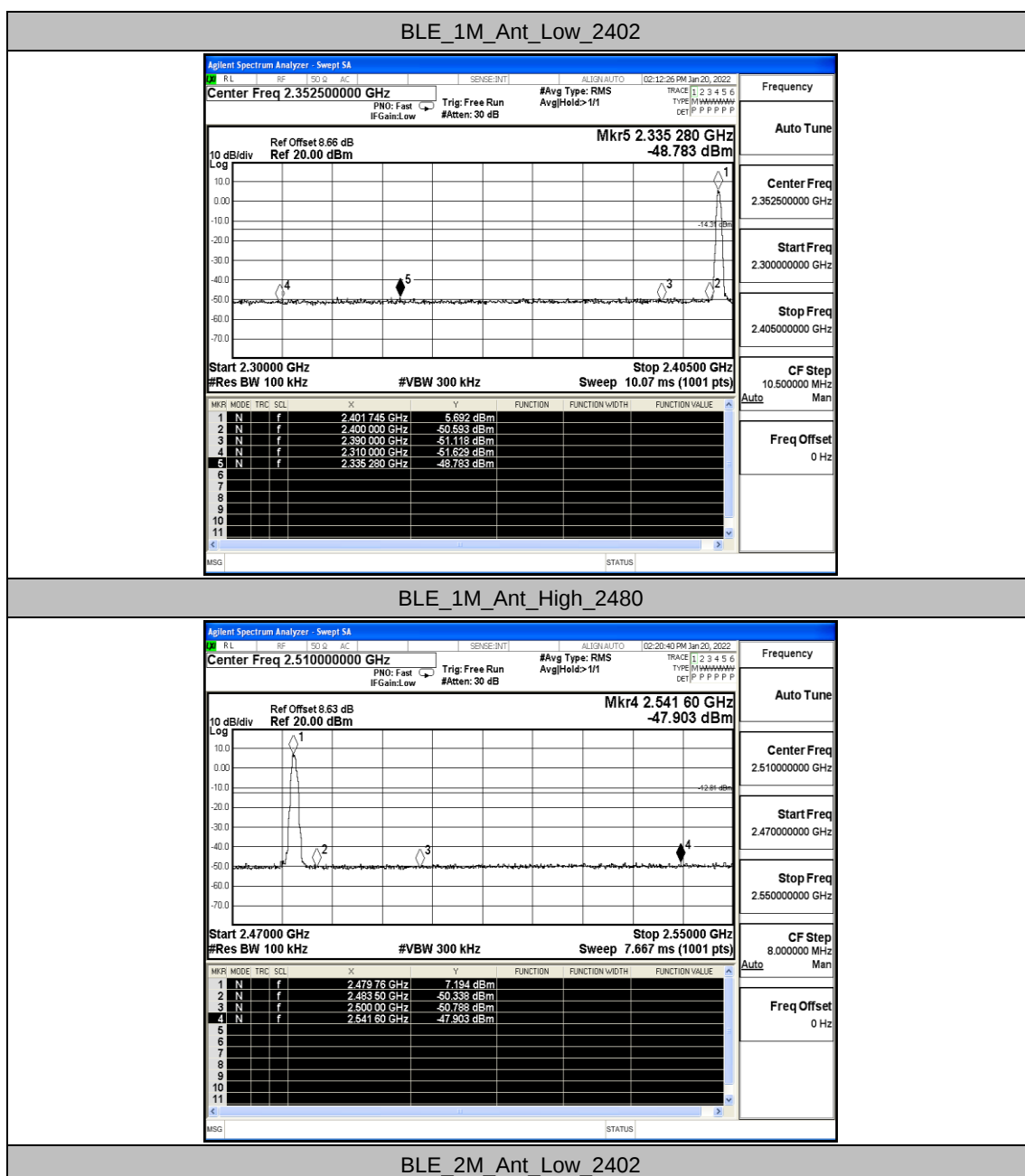


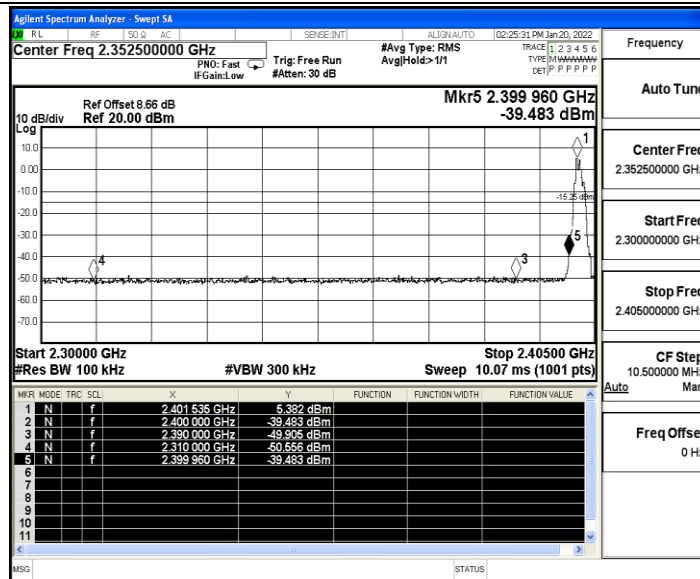
B.4 Band edge measurements

Test Result

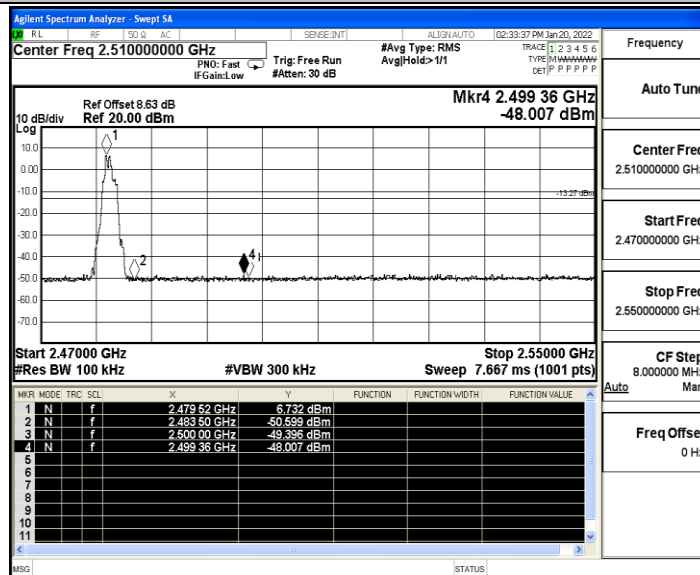
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant	Low	2402	5.69	-48.78	≤-14.31	PASS
		High	2480	7.19	-47.9	≤-12.81	PASS
BLE_2M	Ant	Low	2402	4.75	-39.48	≤-15.25	PASS
		High	2480	6.73	-48.01	≤-13.27	PASS

Test Graphs





BLE_2M_Ant_High_2480





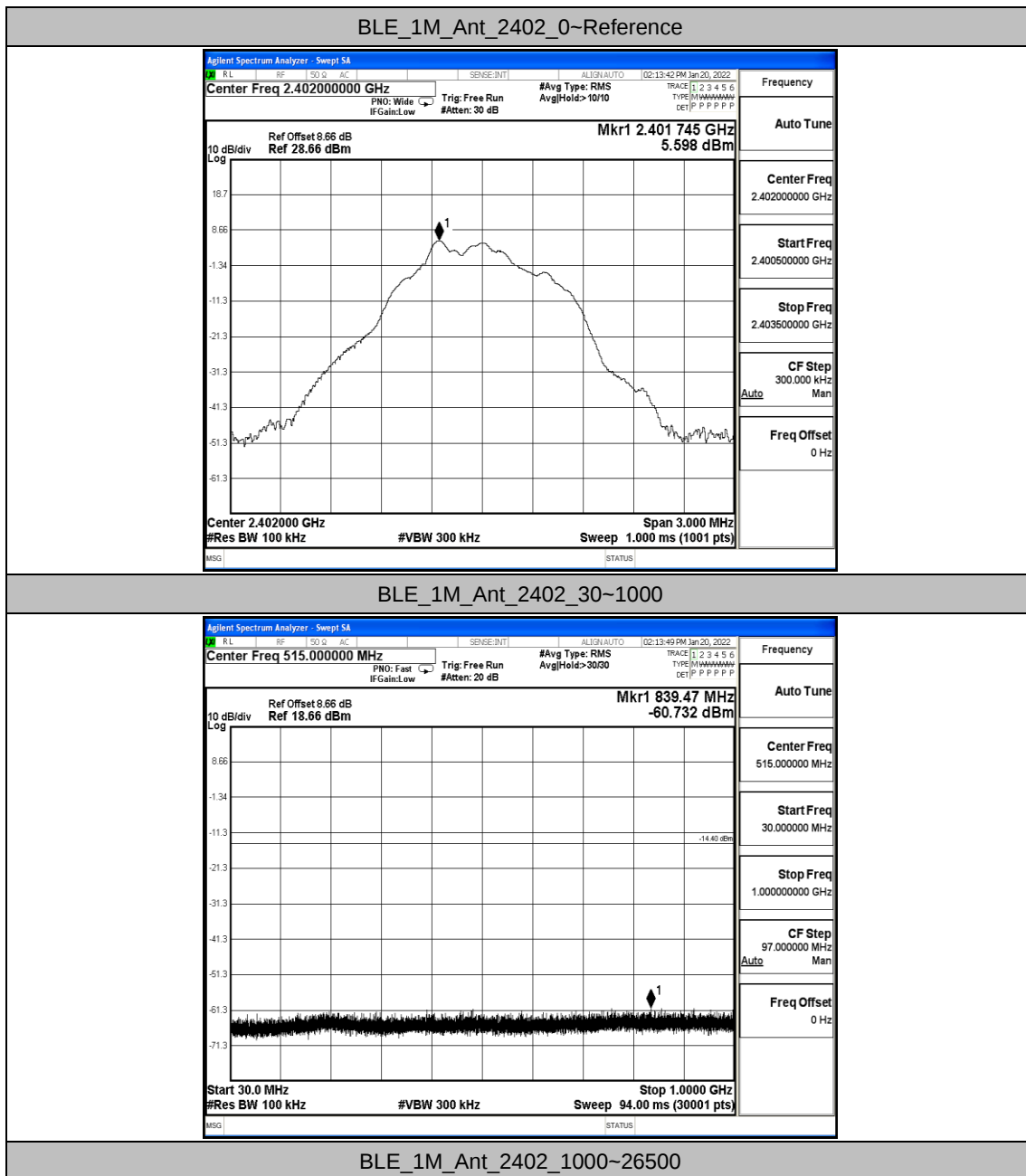
B.5 Conducted Spurious Emission

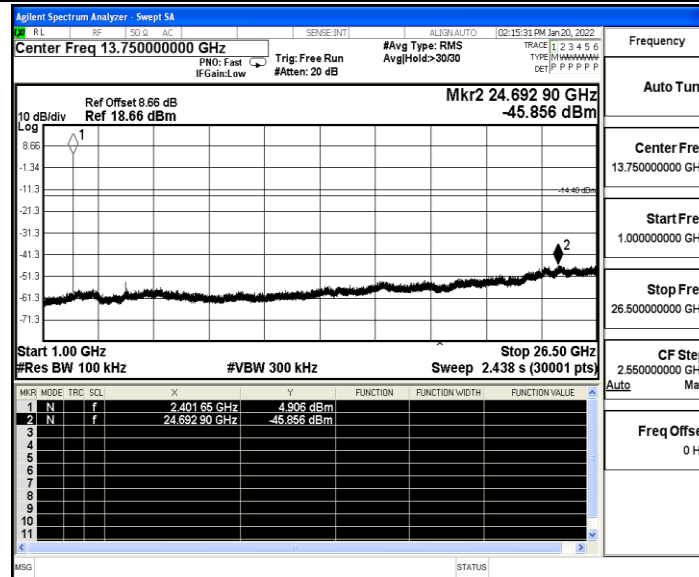
Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant	2402	Reference	5.60	5.60	---	PASS
			30~1000	5.60	-60.73	≤ -14.4	PASS
			1000~26500	5.60	-45.86	≤ -14.4	PASS
		2440	Reference	7.08	7.08	---	PASS
			30~1000	7.08	-60.34	≤ -12.92	PASS
			1000~26500	7.08	-45.89	≤ -12.92	PASS
		2480	Reference	7.15	7.15	---	PASS
			30~1000	7.15	-60.36	≤ -12.85	PASS
			1000~26500	7.15	-46.01	≤ -12.85	PASS
BLE_2M	Ant	2402	Reference	5.17	5.17	---	PASS
			30~1000	5.17	-60.74	≤ -14.83	PASS
			1000~26500	5.17	-46.21	≤ -14.83	PASS
		2440	Reference	6.53	6.53	---	PASS
			30~1000	6.53	-60.73	≤ -13.47	PASS
			1000~26500	6.53	-46.29	≤ -13.47	PASS
		2480	Reference	6.53	6.53	---	PASS
			30~1000	6.53	-59.96	≤ -13.47	PASS
			1000~26500	6.53	-45.54	≤ -13.47	PASS

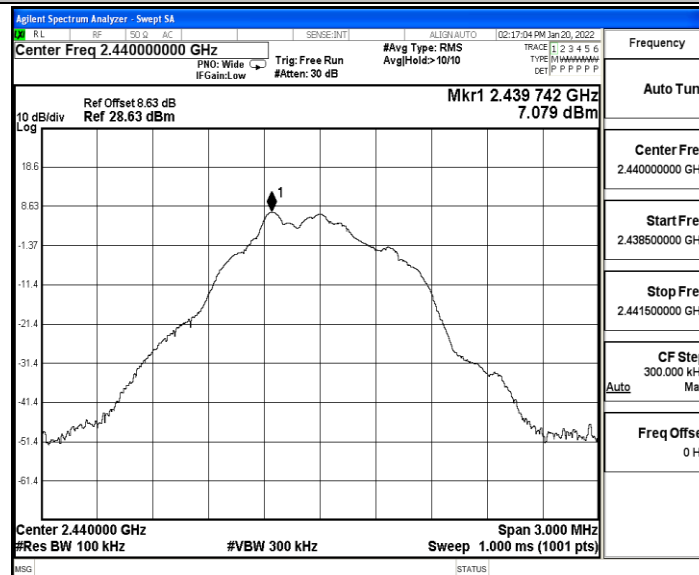


Test Graphs

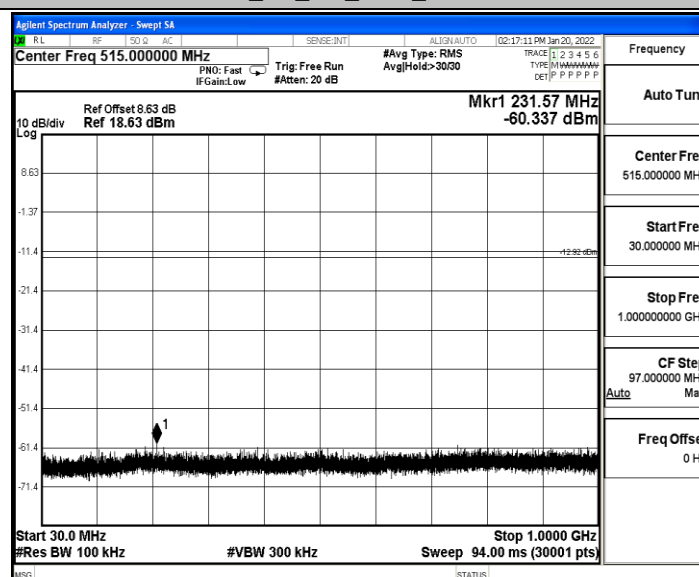




BLE_1M_Ant_2440_0-Reference

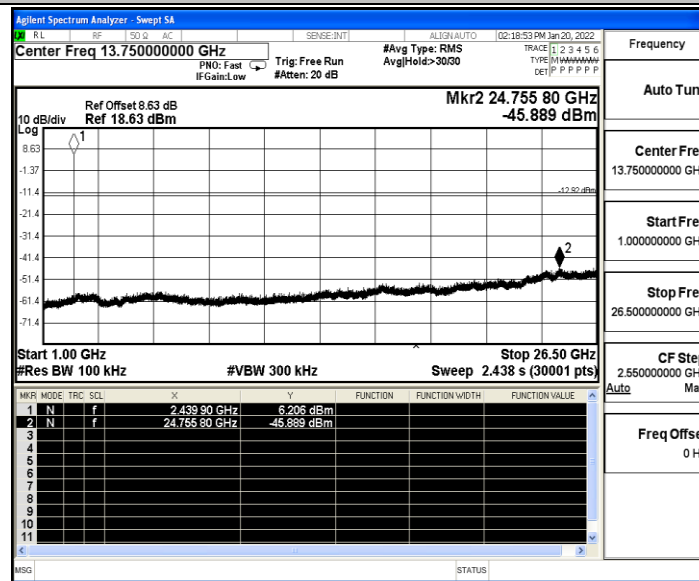


BLE_1M_Ant_2440_30-1000

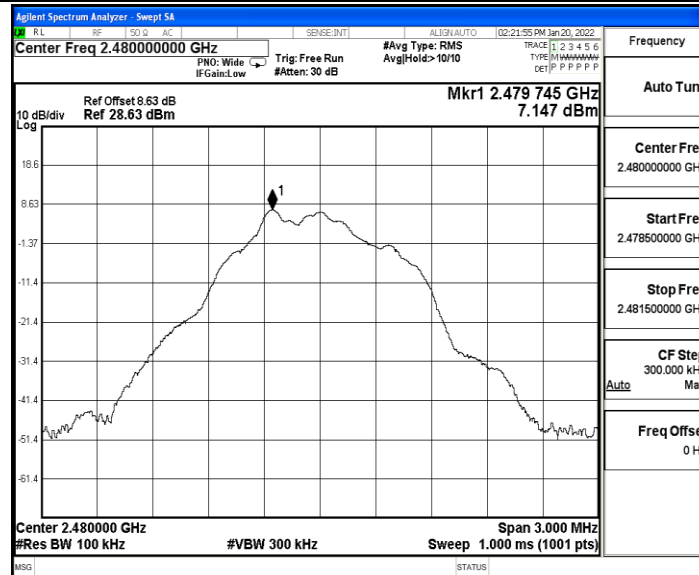




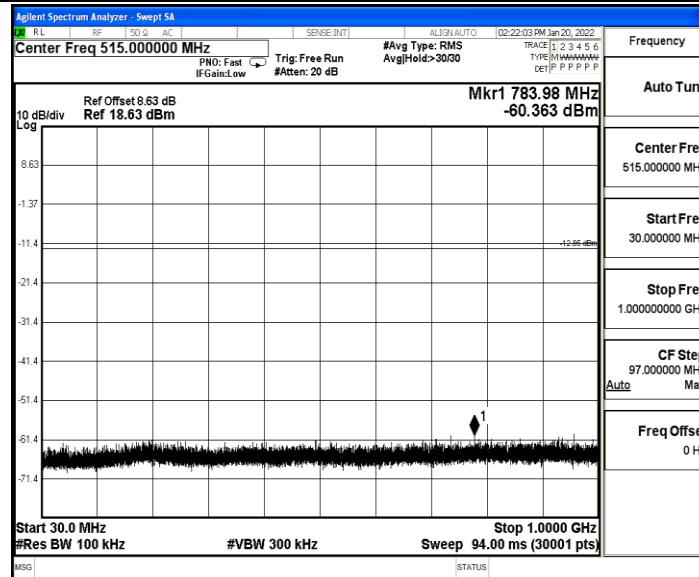
BLE_1M_Ant_2440_1000~26500



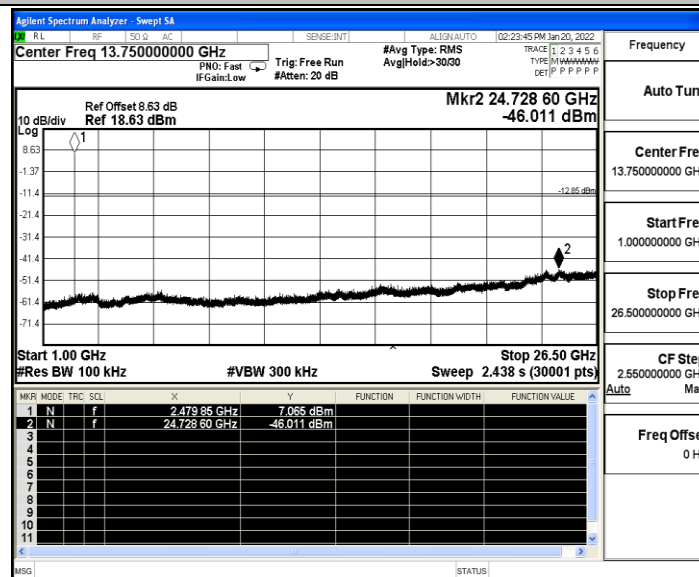
BLE_1M_Ant_2480_0~Reference



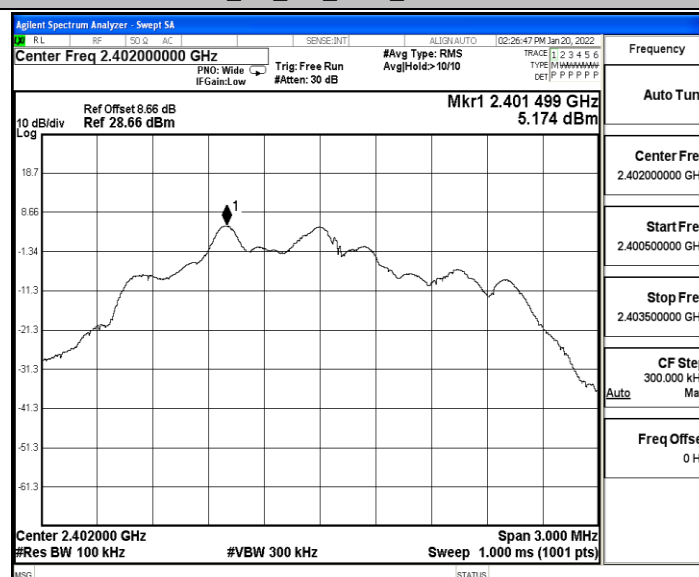
BLE_1M_Ant_2480_30~1000



BLE_1M_Ant_2480_1000~26500

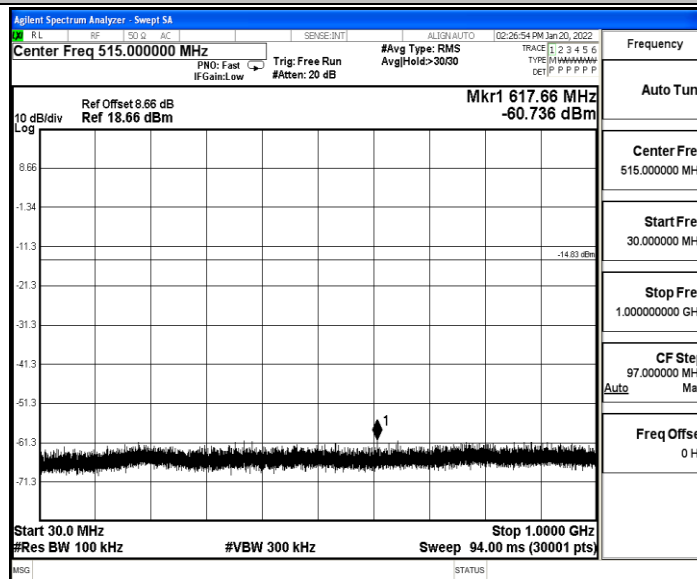


BLE_2M_Ant_2402_0~Reference

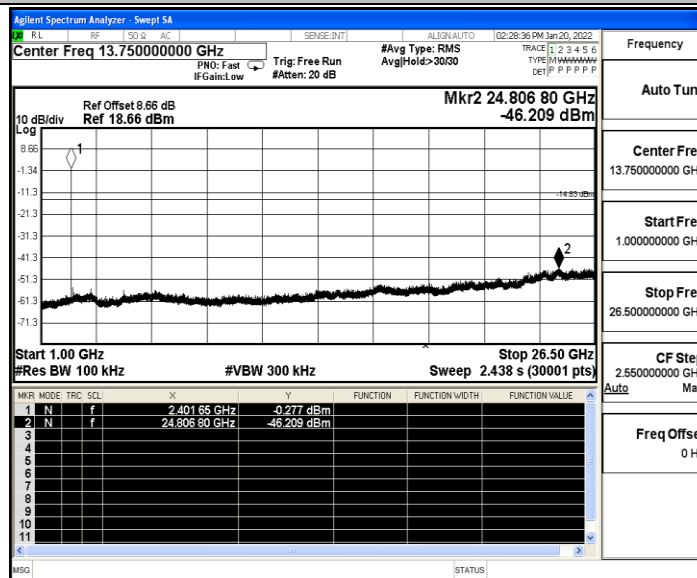




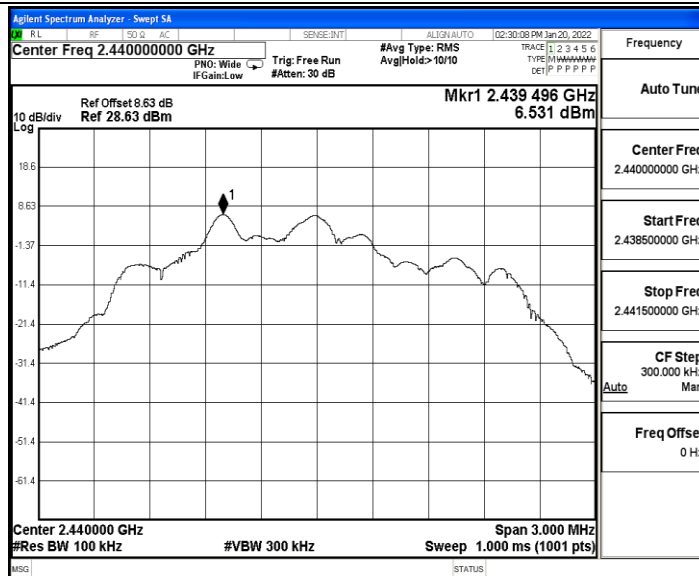
BLE_2M_Ant_2402_30~1000



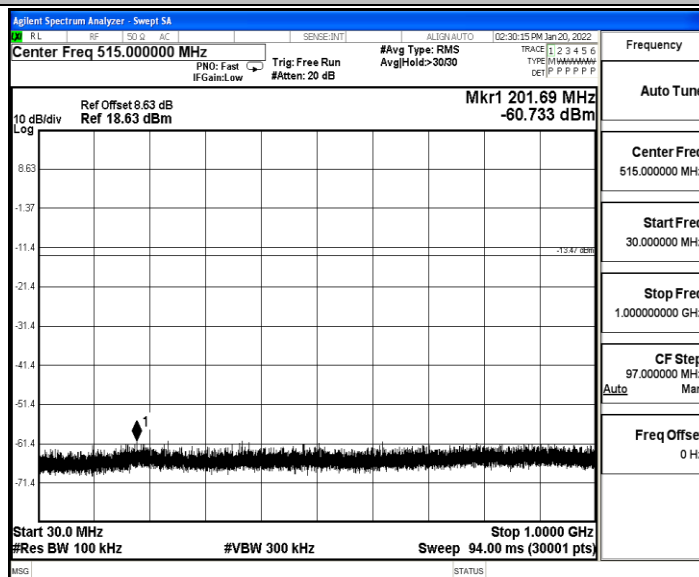
BLE_2M_Ant_2402_1000~26500



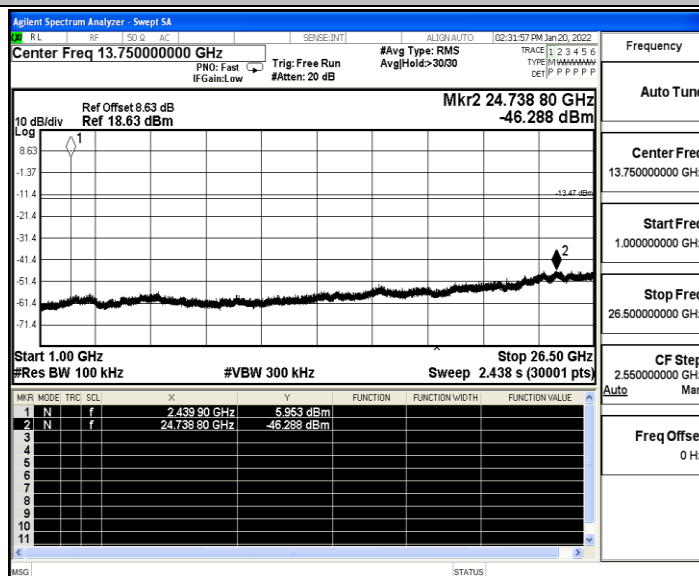
BLE_2M_Ant_2440_0~Reference



BLE_2M_Ant_2440_30~1000

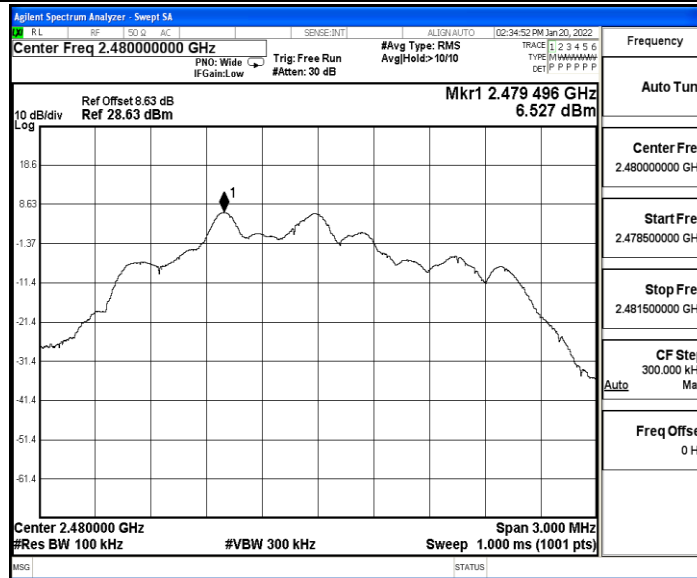


BLE_2M_Ant_2440_1000~26500

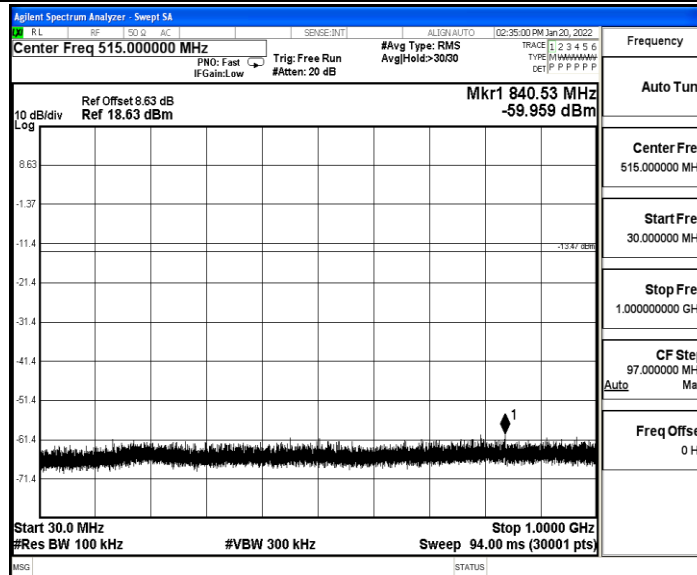




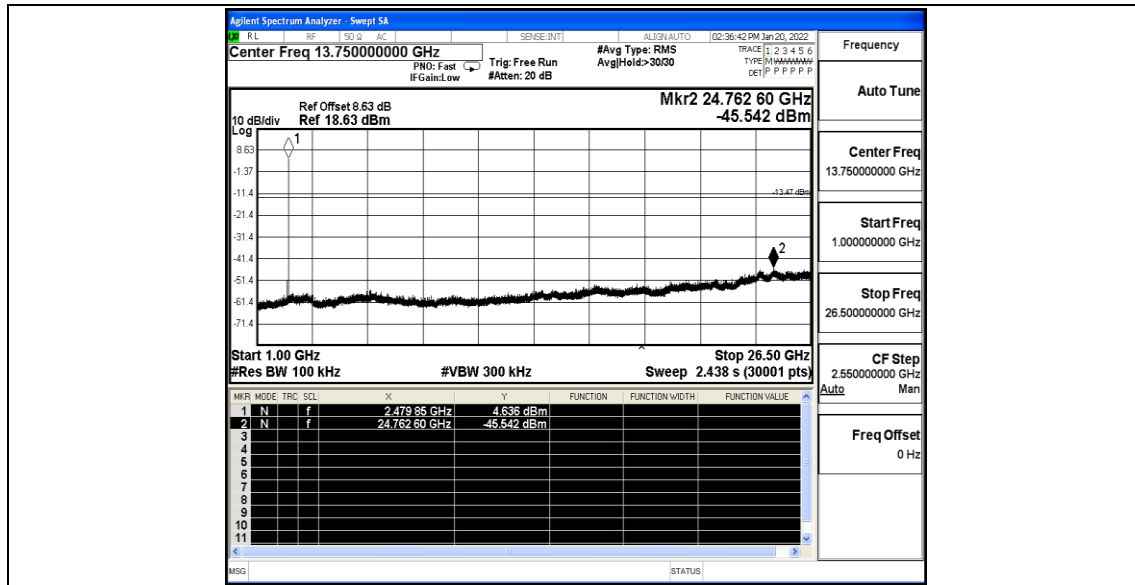
BLE_2M_Ant_2480_0-Reference



BLE_2M_Ant_2480_30~1000



BLE_2M_Ant_2480_1000~26500





B.6 Duty Cycle

Test Result

TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	Limit	Verdict
BLE_1M	Ant	2402	0.38	0.62	0.6129	61.29	---	---
		2440	0.38	0.63	0.6032	60.32	---	---
		2480	0.38	0.63	0.6032	60.32	---	---
BLE_2M	Ant	2402	0.39	0.63	0.6190	61.90	---	---
		2440	0.39	0.63	0.6190	61.90	---	---
		2480	0.39	0.63	0.6190	61.90	---	---



B.7 Emissions in Restricted Bands

Test Result

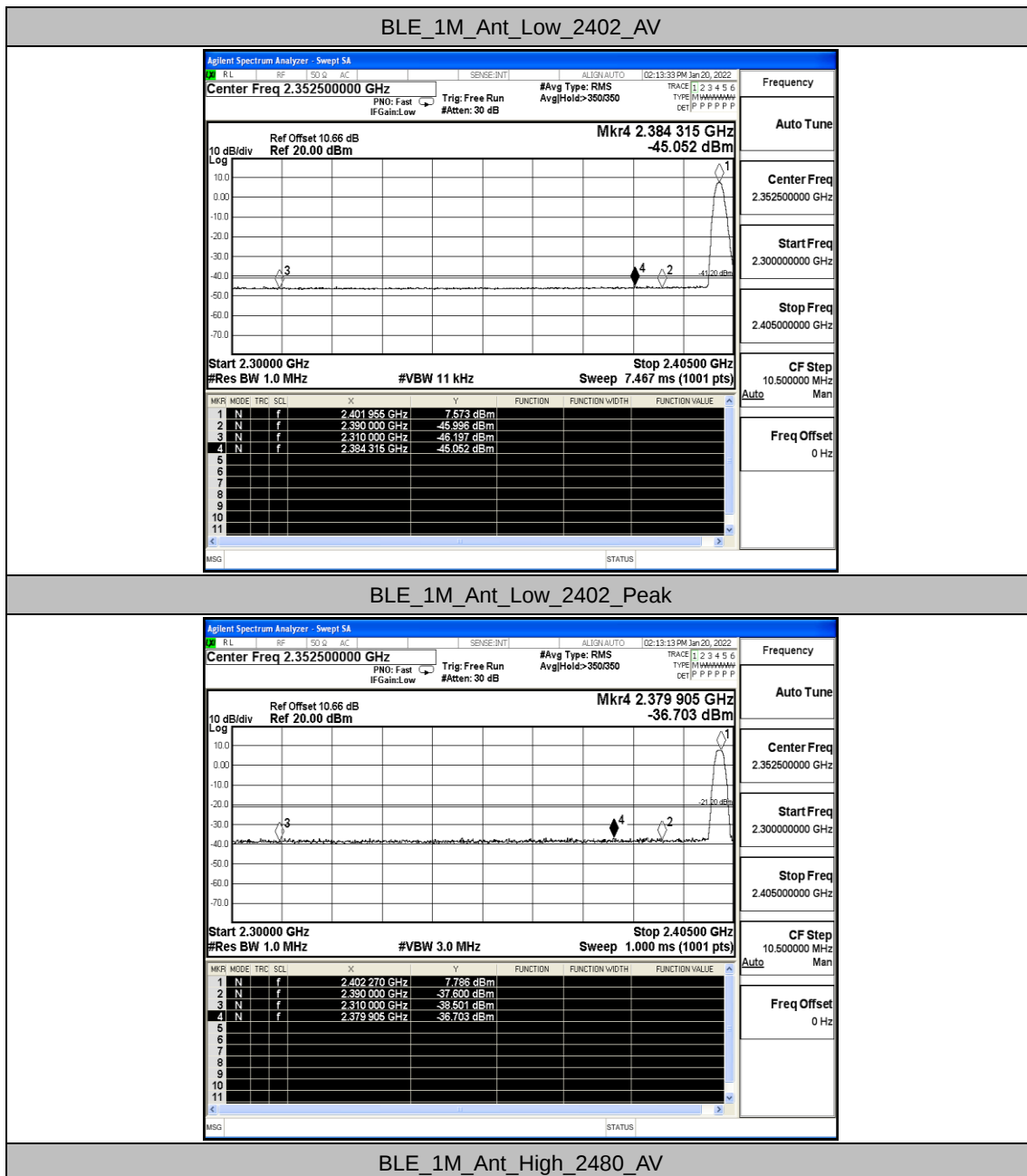
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant	Low	2402	AV	2310.000	-46.2	≤-41.20	49.00	≤54	PASS
				AV	2384.315	-45.05	≤-41.20	50.15	≤54	PASS
				AV	2390.000	-46.06	≤-41.20	49.14	≤54	PASS
				Peak	2310.000	-38.5	≤-21.20	56.70	≤74	PASS
				Peak	2379.905	-36.7	≤-21.20	58.50	≤74	PASS
				Peak	2390.000	-37.6	≤-21.20	57.60	≤74	PASS
		High	2480	AV	2483.500	-44.34	≤-41.20	50.86	≤54	PASS
				AV	2483.520	-44.34	≤-41.20	50.86	≤54	PASS
				AV	2500.000	-45.33	≤-41.20	49.87	≤54	PASS
				Peak	2483.500	-37.67	≤-21.20	57.53	≤74	PASS
				Peak	2487.680	-36.12	≤-21.20	59.08	≤74	PASS
				Peak	2500.000	-37.24	≤-21.20	57.96	≤74	PASS
BLE_2M	Ant	Low	2402	AV	2310.000	-45.44	≤-41.20	49.76	≤54	PASS
				AV	2335.070	-44.2	≤-41.20	51.00	≤54	PASS
				AV	2390.000	-45.74	≤-41.20	49.46	≤54	PASS
				Peak	2310.000	-38.36	≤-21.20	56.84	≤74	PASS
				Peak	2353.025	-36.21	≤-21.20	58.99	≤74	PASS
				Peak	2390.000	-37.83	≤-21.20	57.37	≤74	PASS
		High	2480	AV	2483.500	-42.99	≤-41.20	52.21	≤54	PASS
				AV	2483.520	-42.99	≤-41.20	52.21	≤54	PASS
				AV	2500.000	-44.86	≤-41.20	50.34	≤54	PASS
				Peak	2483.500	-37.15	≤-21.20	58.05	≤74	PASS
				Peak	2496.000	-35.55	≤-21.20	59.65	≤74	PASS
				Peak	2500.000	-36.87	≤-21.20	58.33	≤74	PASS

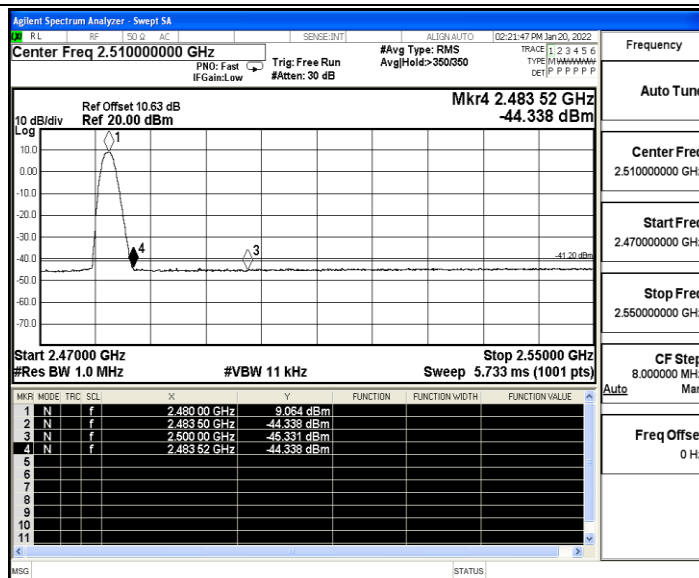
Note:

1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

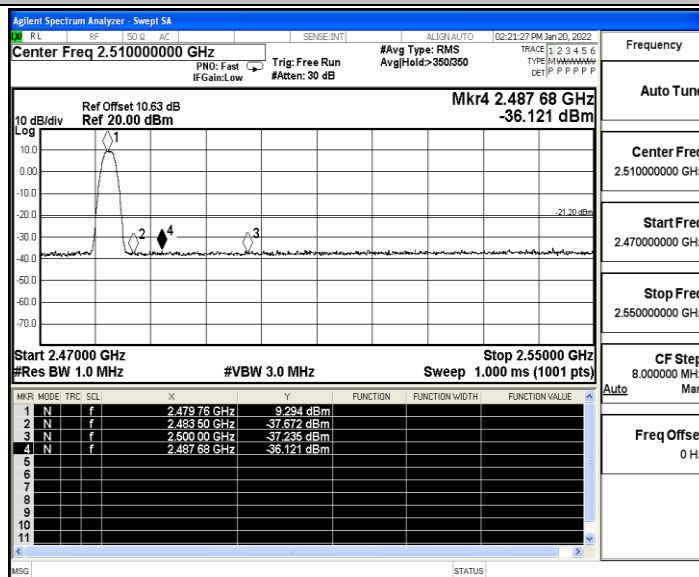


Test Graphs

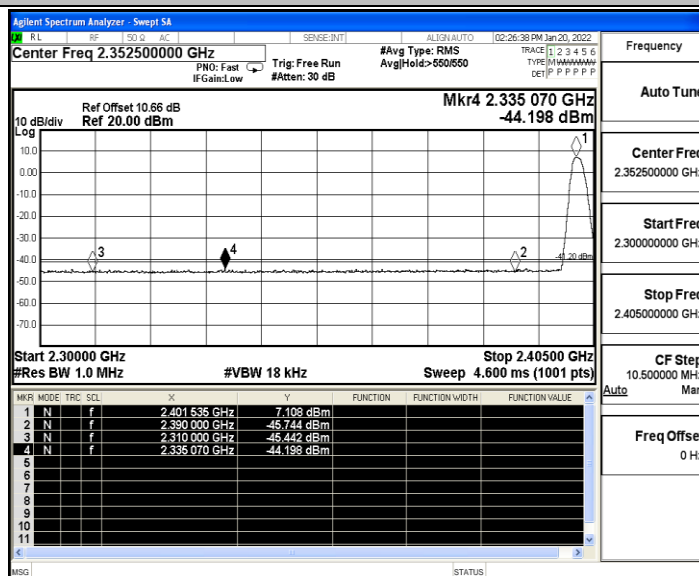




BLE_1M_Ant_High_2480_Peak

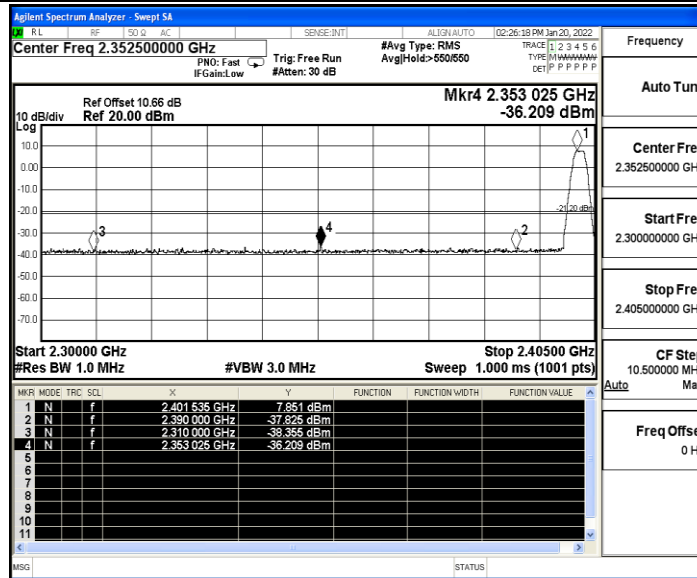


BLE_2M_Ant_Low_2402_AV

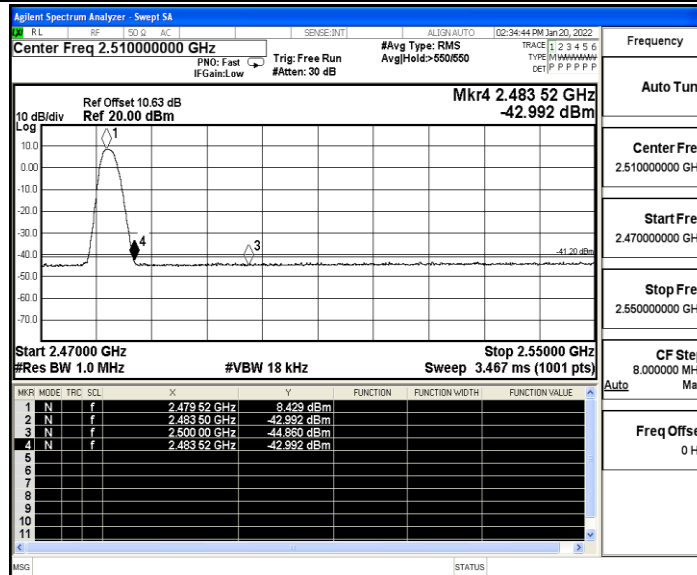




BLE_2M_Ant_Low_2402_Peak



BLE_2M_Ant_High_2480_AV



BLE_2M_Ant_High_2480_Peak

