



Appendix B

RF Test Data for BLE (Conducted Measurement)

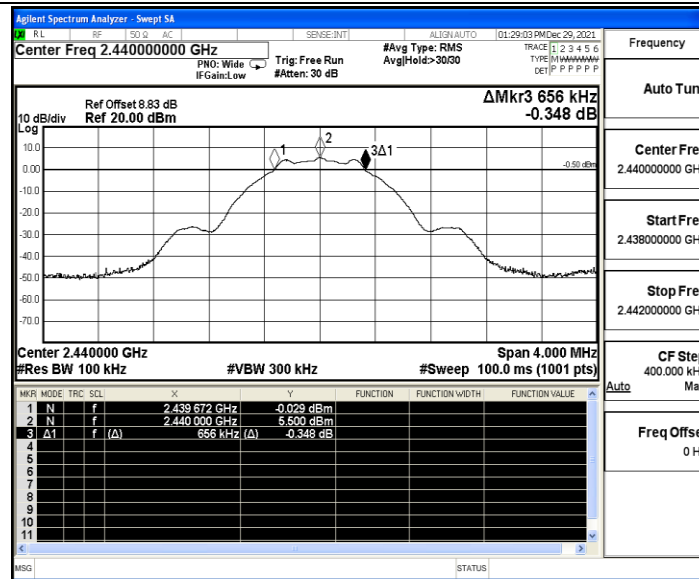
Product Name: AMD R1305G Player

Test Model: SMPA-R1305G

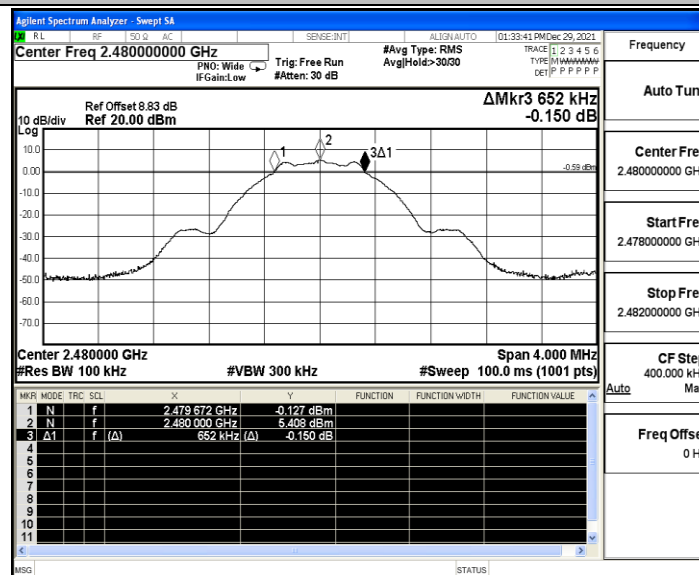
Environmental Conditions

Temperature:	23.5° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Bill Zhu
Supervised by:	Li Huan

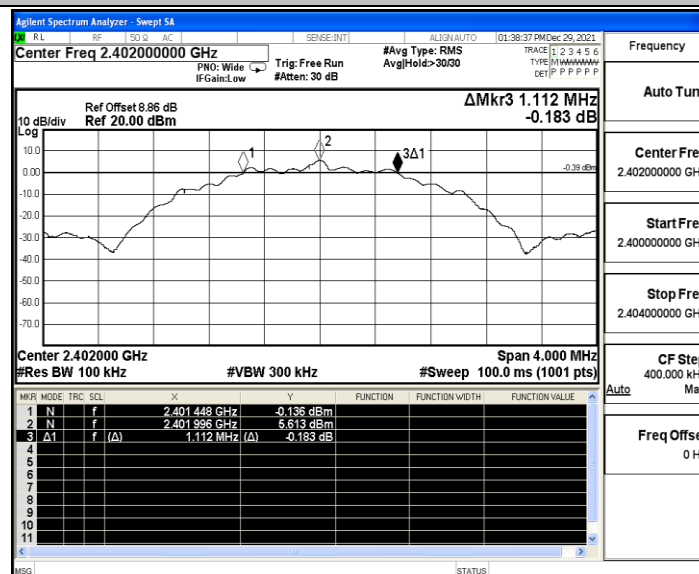




BLE_1M_Ant1_2480

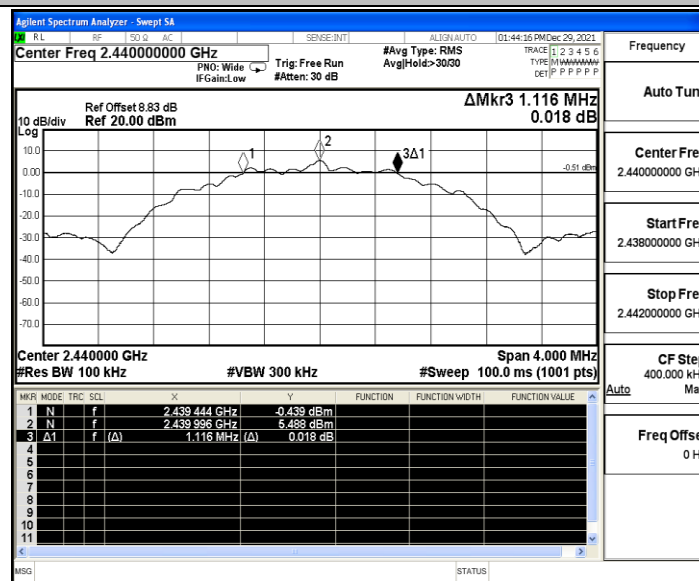


BLE_2M_Ant1_2402

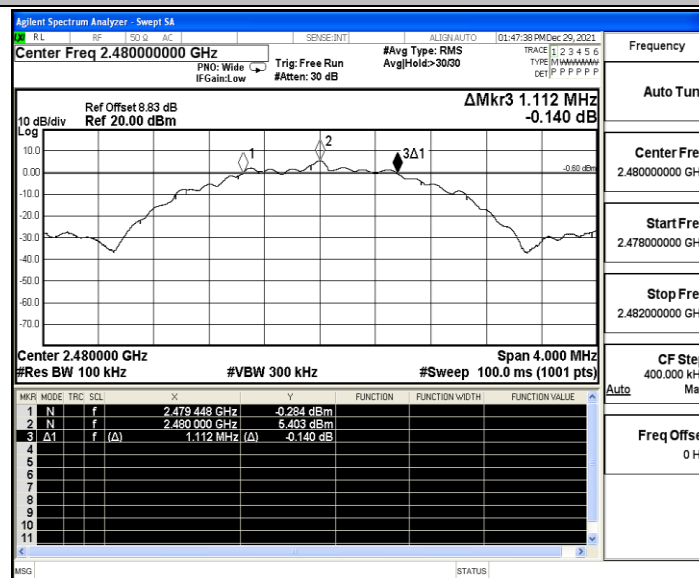




BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



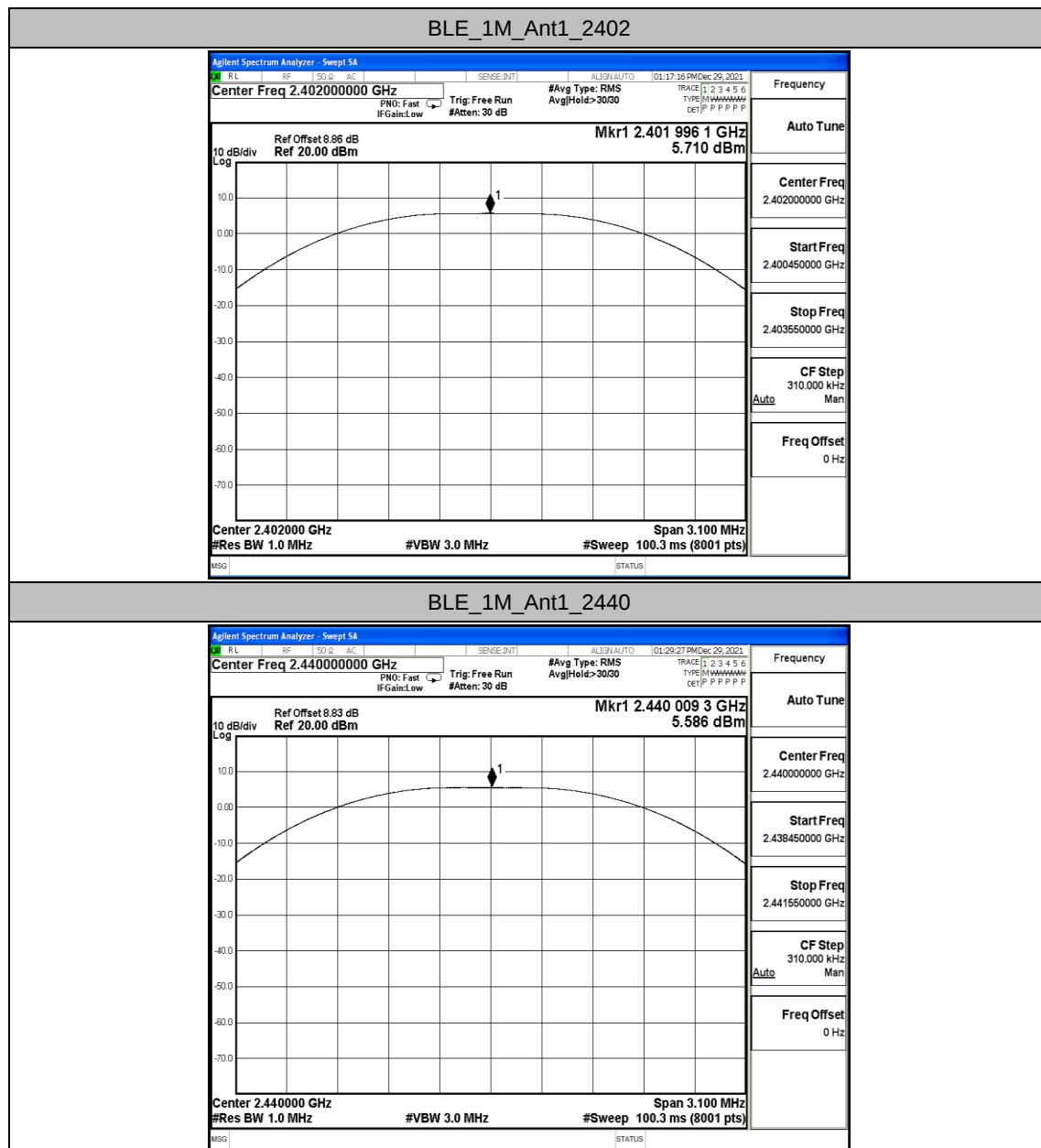


B.2 Maximum conducted output power

Test Result

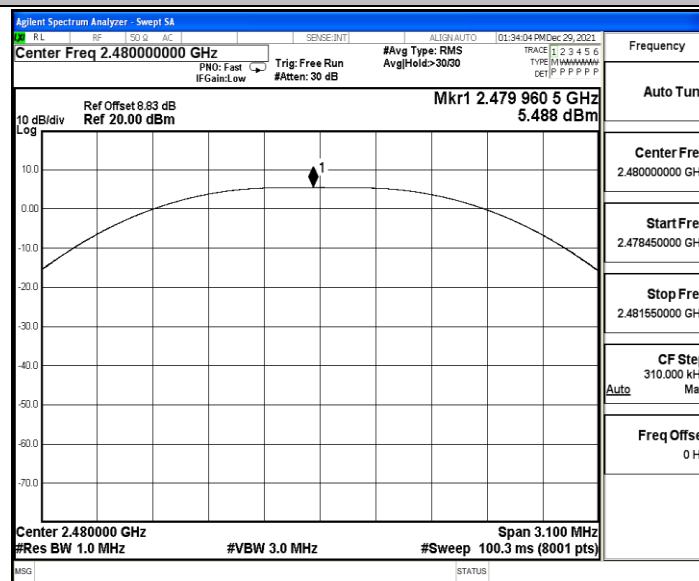
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	5.71	≤30	PASS
		2440	5.59	≤30	PASS
		2480	5.49	≤30	PASS
BLE_2M	Ant1	2402	5.82	≤30	PASS
		2440	5.7	≤30	PASS
		2480	5.6	≤30	PASS

Test Graphs

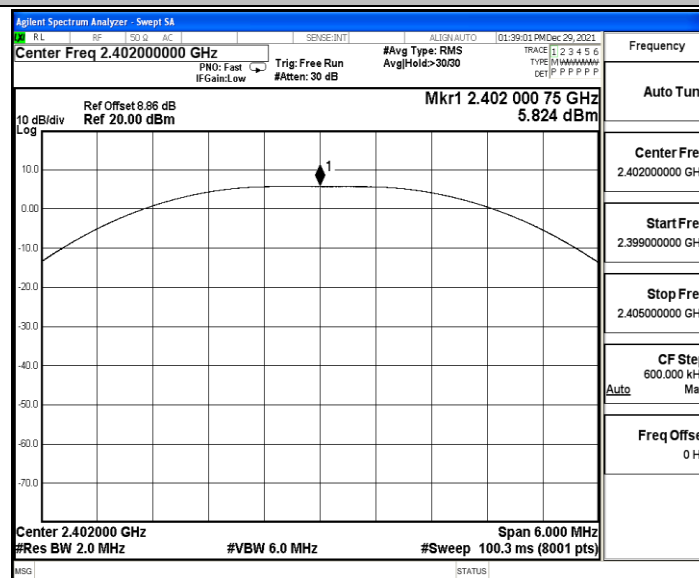




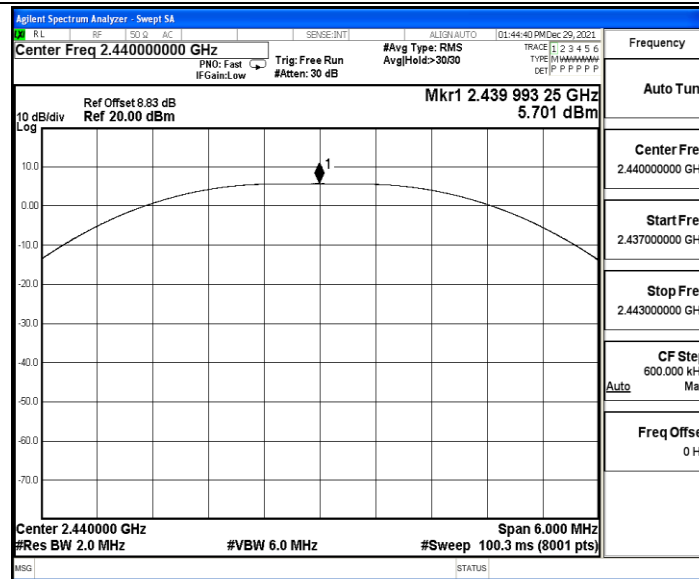
BLE_1M_Ant1_2480



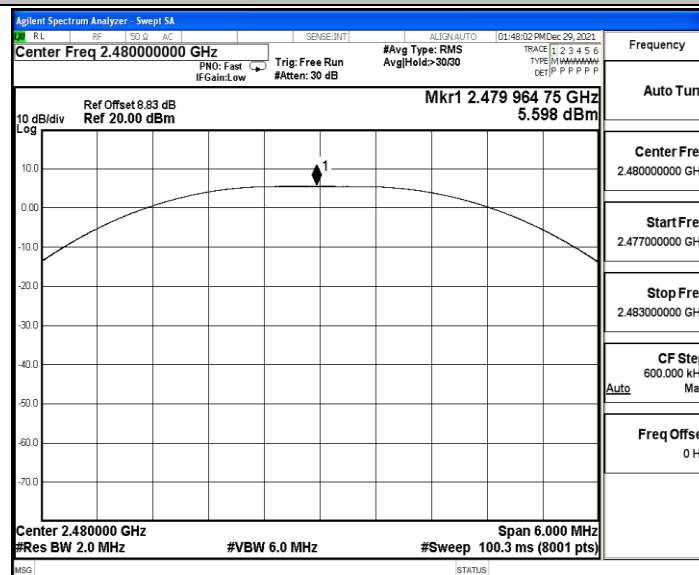
BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



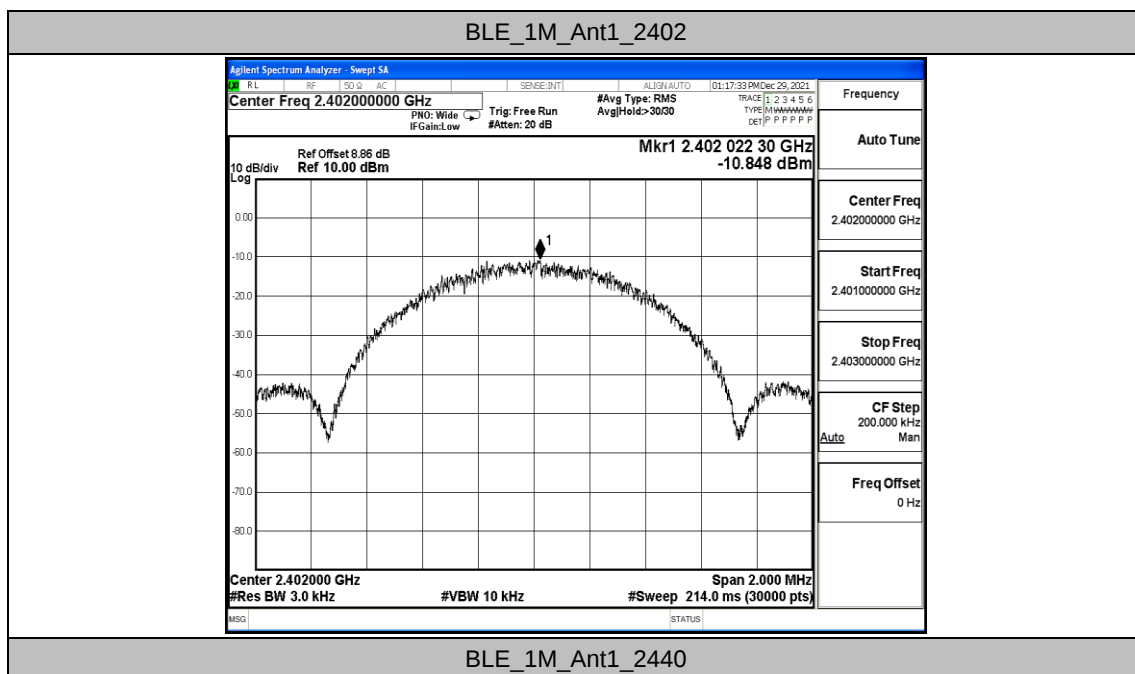


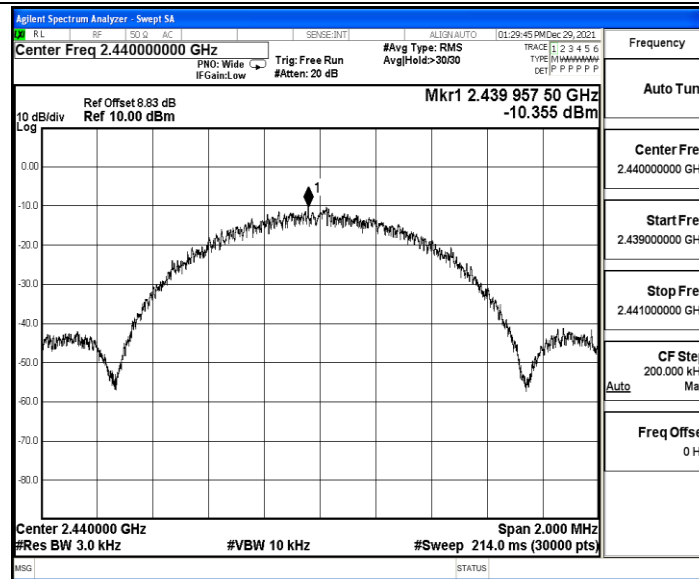
B.3 Maximum power spectral density

Test Result

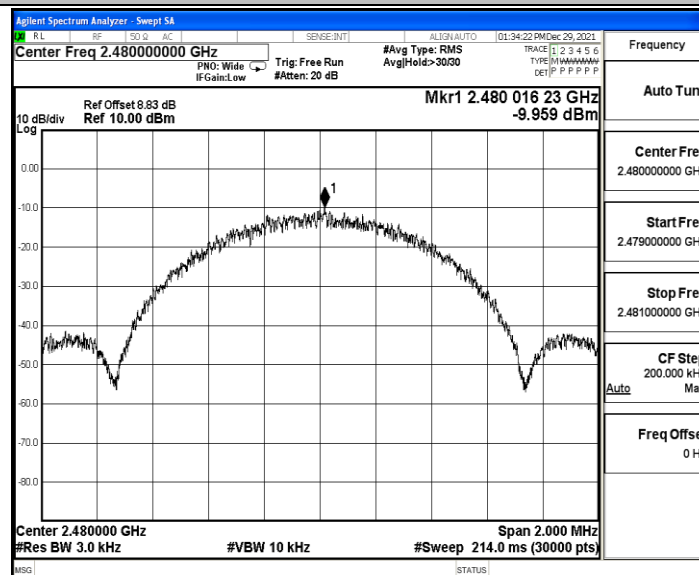
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-10.85	≤8.00	PASS
		2440	-10.36	≤8.00	PASS
		2480	-9.96	≤8.00	PASS
BLE_2M	Ant1	2402	-11.66	≤8.00	PASS
		2440	-12.11	≤8.00	PASS
		2480	-12.83	≤8.00	PASS

Test Graphs

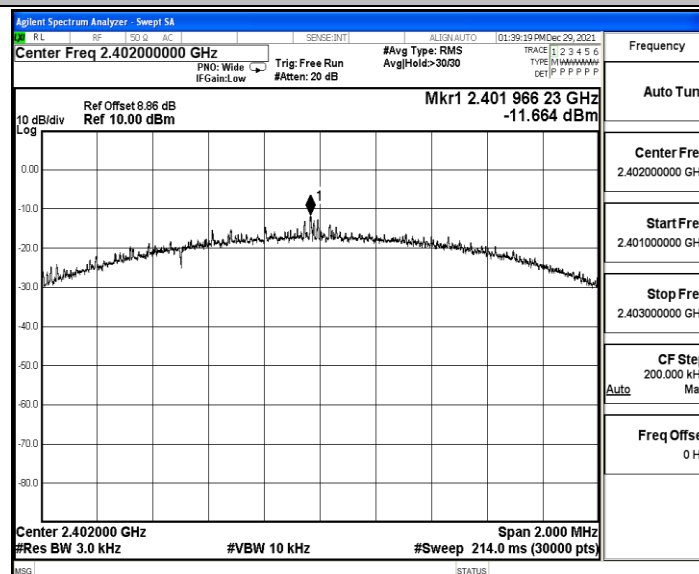




BLE_1M_Ant1_2480

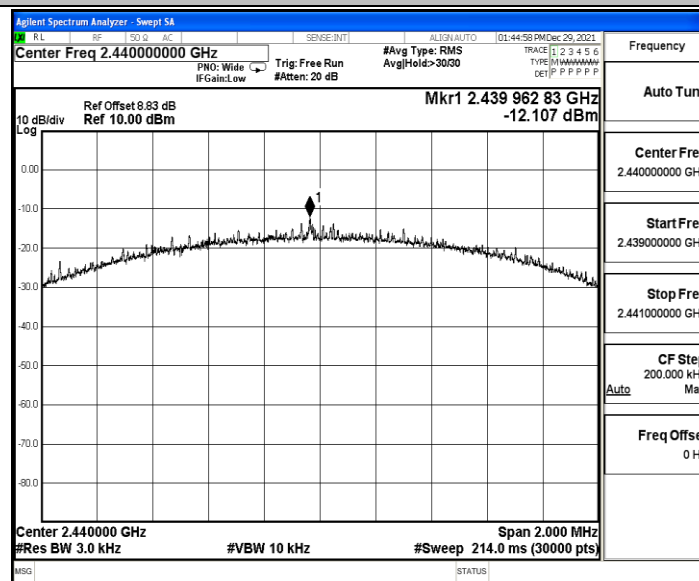


BLE_2M_Ant1_2402

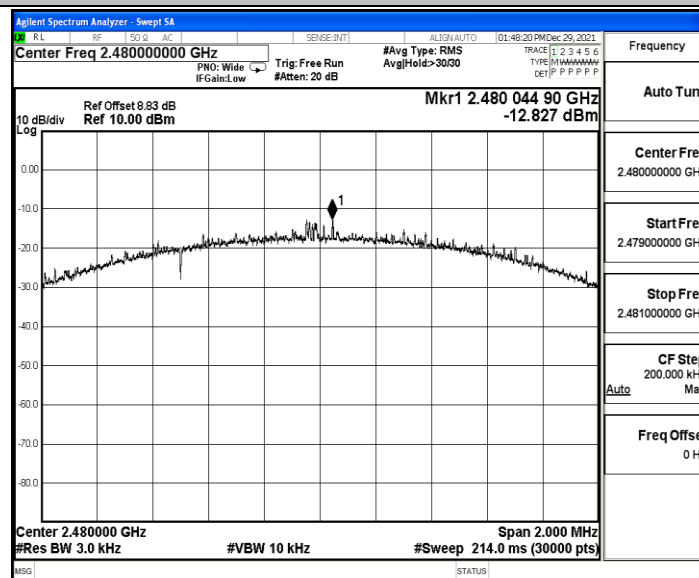




BLE_2M_Ant1_2440



BLE_2M_Ant1_2480



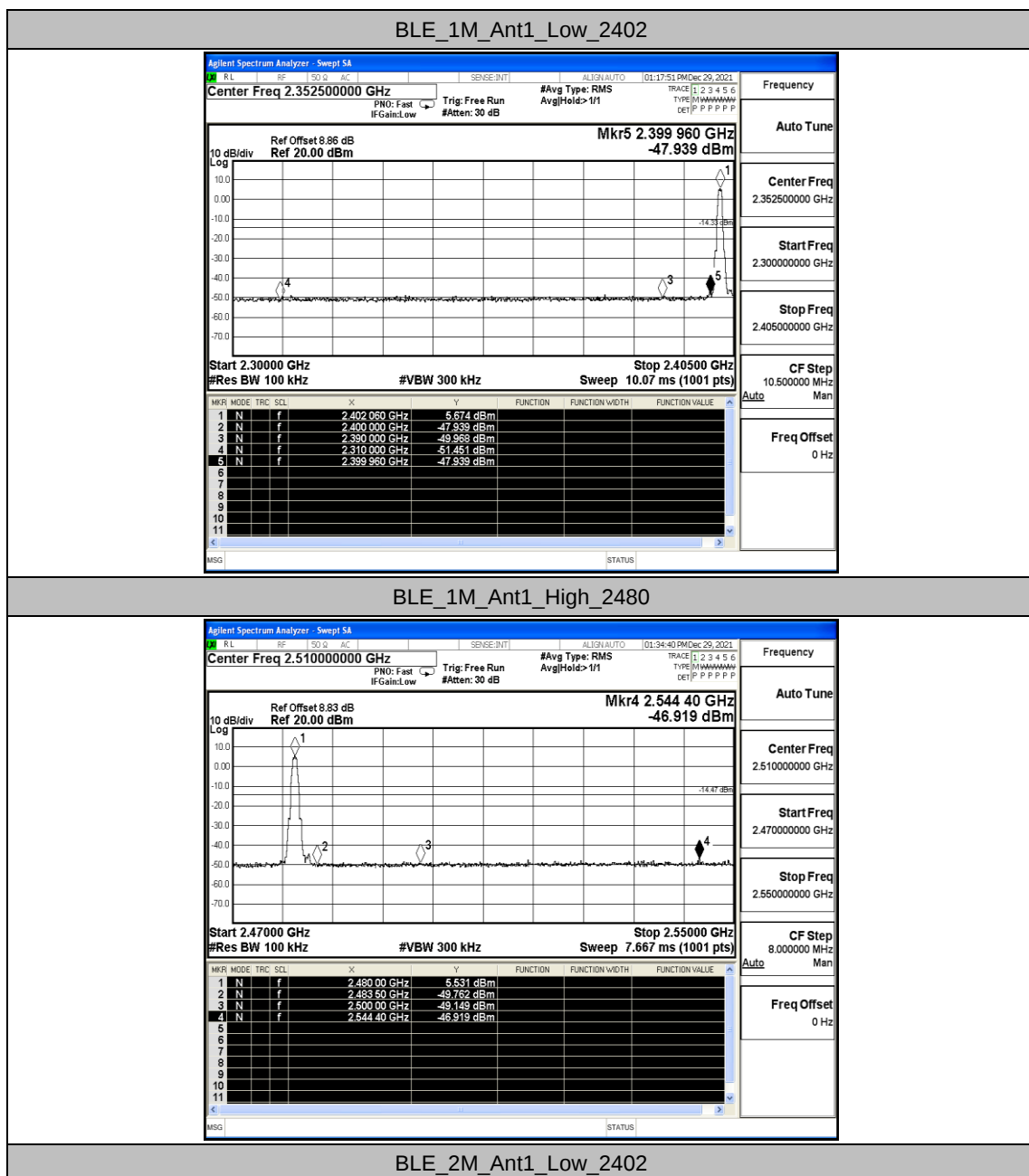


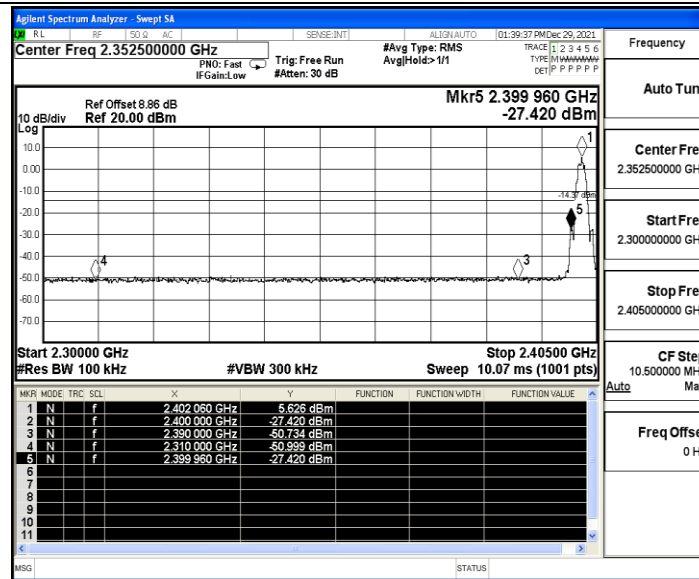
B.4 Band edge measurements

Test Result

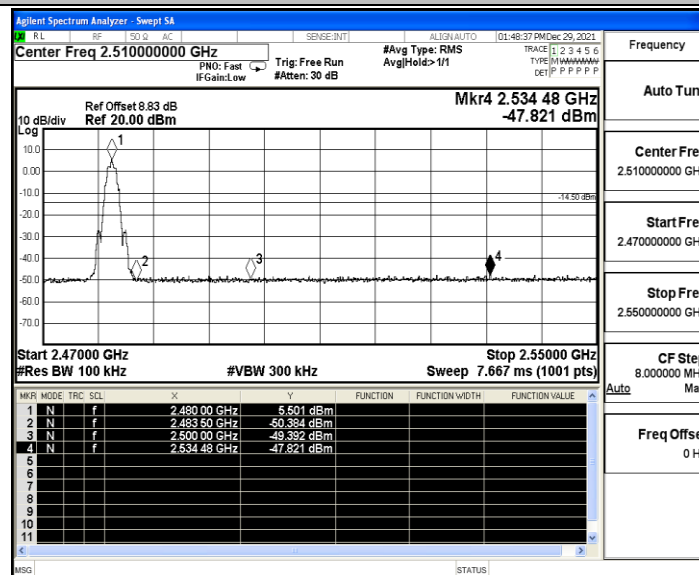
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	5.67	-47.94	≤-14.33	PASS
		High	2480	5.53	-46.92	≤-14.47	PASS
BLE_2M	Ant1	Low	2402	5.63	-27.42	≤-14.37	PASS
		High	2480	5.50	-47.82	≤-14.5	PASS

Test Graphs





BLE_2M_Ant1_High_2480



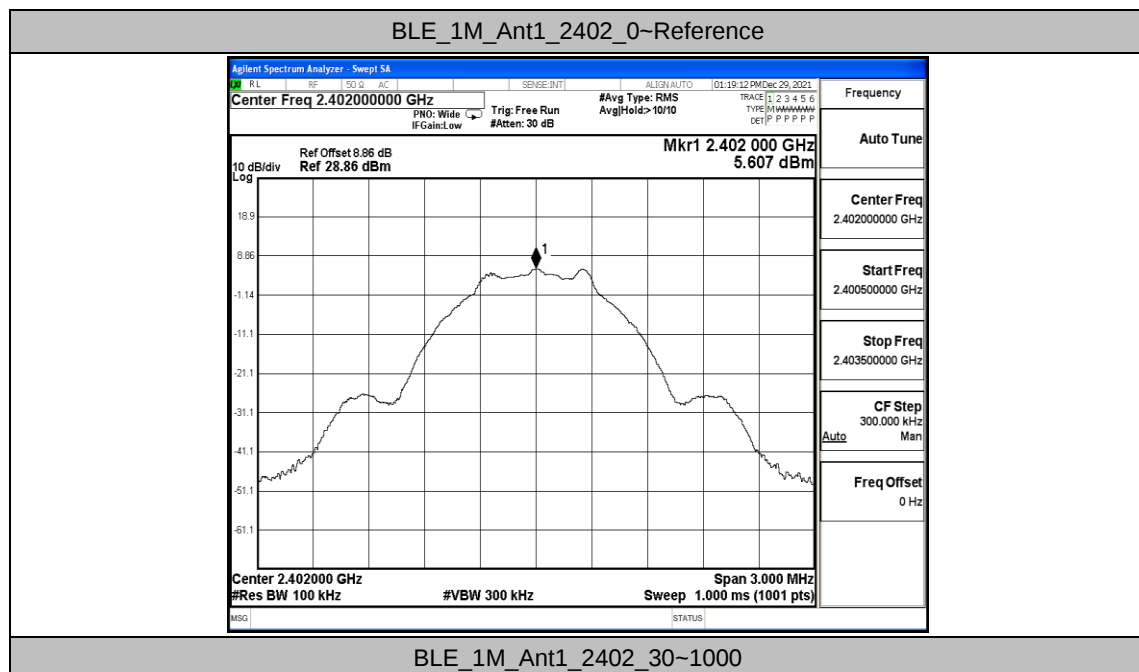


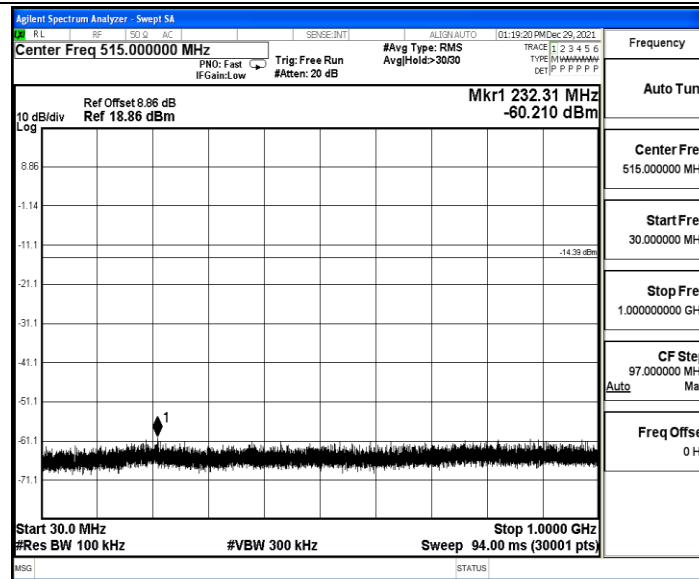
B.5 Conducted Spurious Emission

Test Result

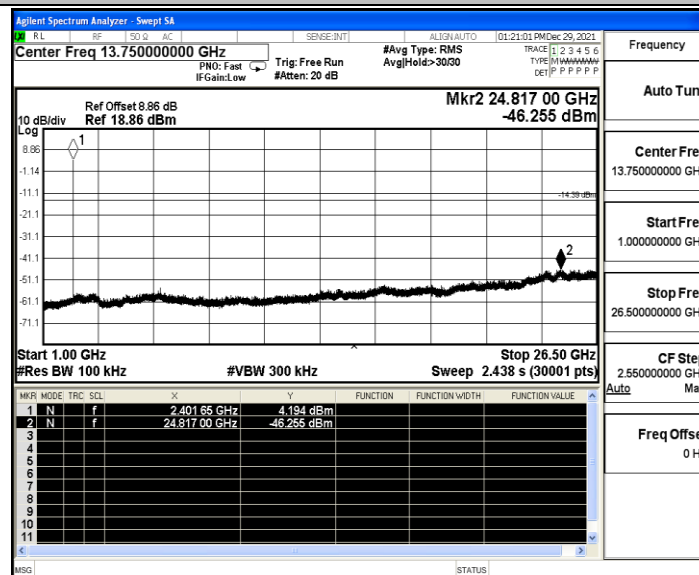
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	5.61	5.61	---	PASS
			30~1000	5.61	-60.21	≤-14.39	PASS
			1000~26500	5.61	-46.26	≤-14.39	PASS
		2440	Reference	5.26	5.26	---	PASS
			30~1000	5.26	-60.99	≤-14.74	PASS
			1000~26500	5.26	-45.45	≤-14.74	PASS
		2480	Reference	5.23	5.23	---	PASS
			30~1000	5.23	-60.72	≤-14.77	PASS
			1000~26500	5.23	-45.43	≤-14.77	PASS
BLE_2M	Ant1	2402	Reference	5.60	5.60	---	PASS
			30~1000	5.60	-60.31	≤-14.4	PASS
			1000~26500	5.60	-46.04	≤-14.4	PASS
		2440	Reference	5.48	5.48	---	PASS
			30~1000	5.48	-60.45	≤-14.52	PASS
			1000~26500	5.48	-46.49	≤-14.52	PASS
		2480	Reference	5.38	5.38	---	PASS
			30~1000	5.38	-60.04	≤-14.62	PASS
			1000~26500	5.38	-45.9	≤-14.62	PASS

Test Graphs

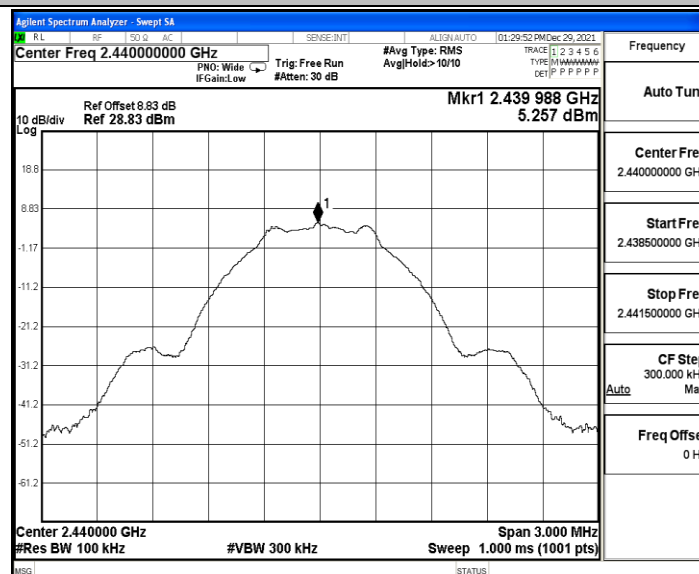




BLE_1M_Ant1_2402_1000~26500

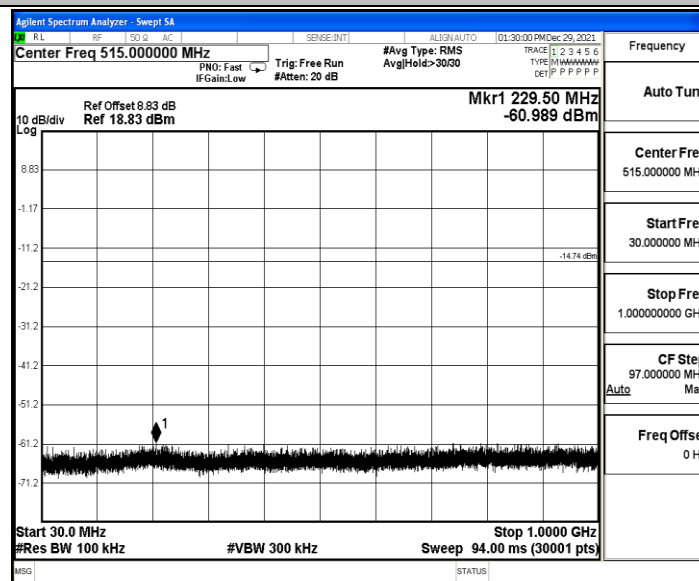


BLE_1M_Ant1_2440_0~Reference

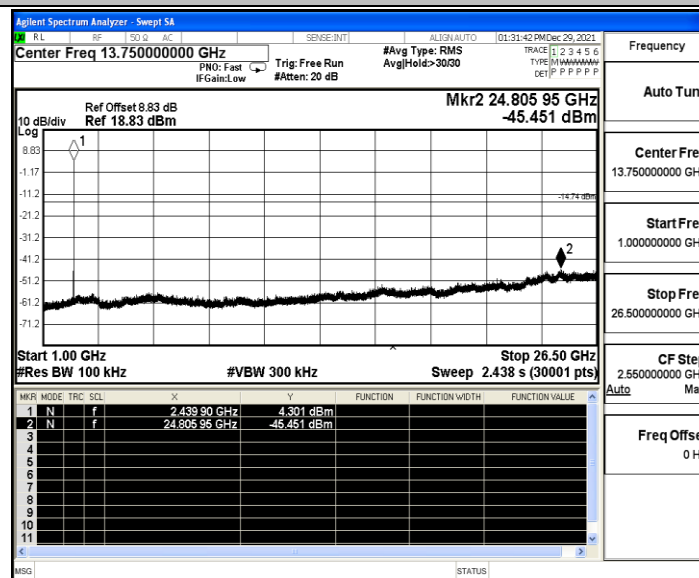




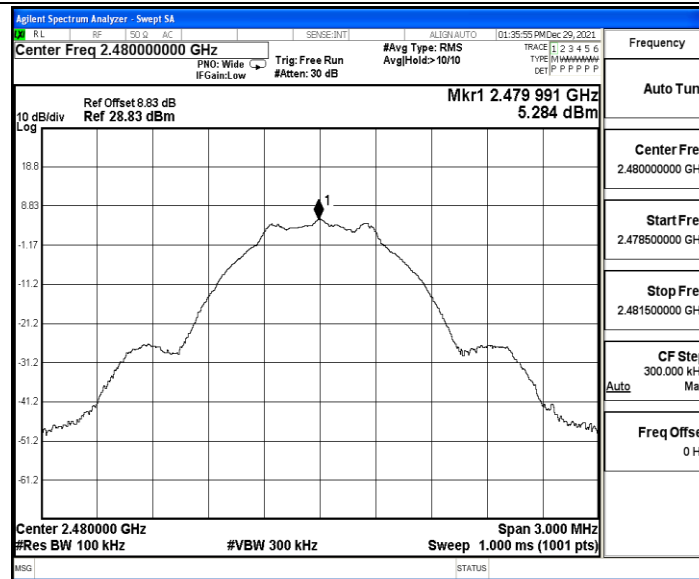
BLE_1M_Ant1_2440_30~1000



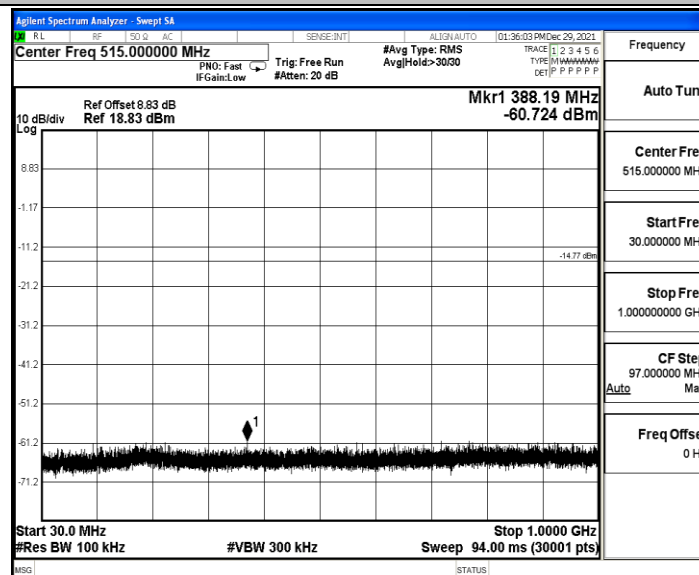
BLE_1M_Ant1_2440_1000~26500



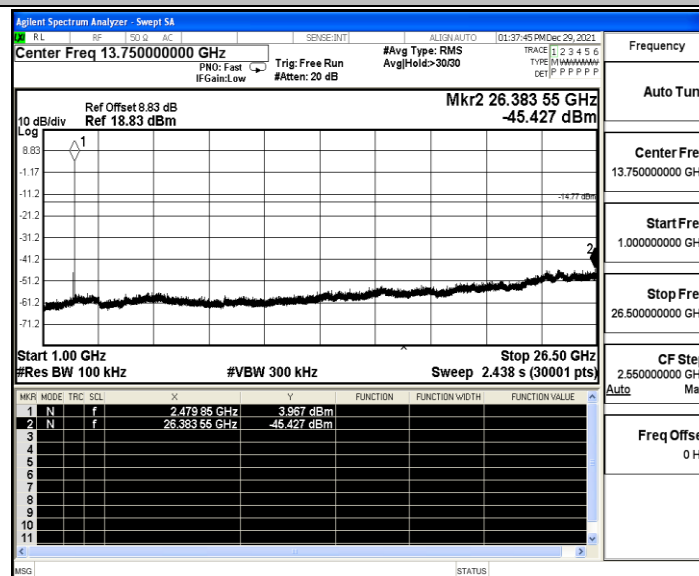
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000

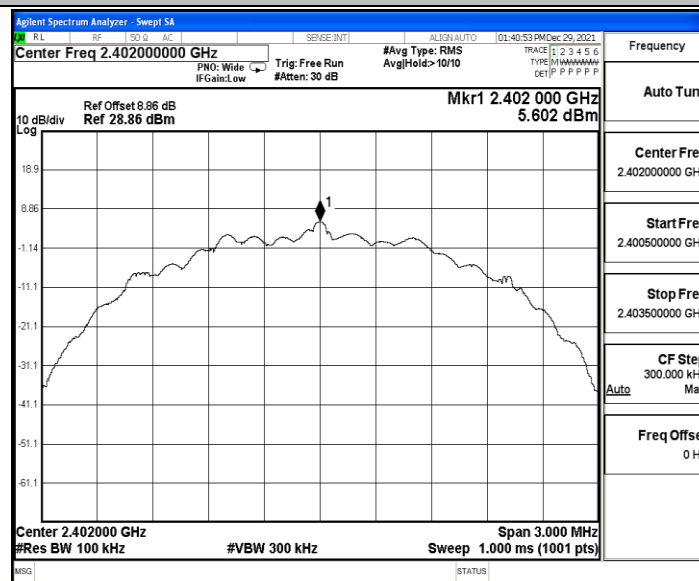


BLE_1M_Ant1_2480_1000~26500

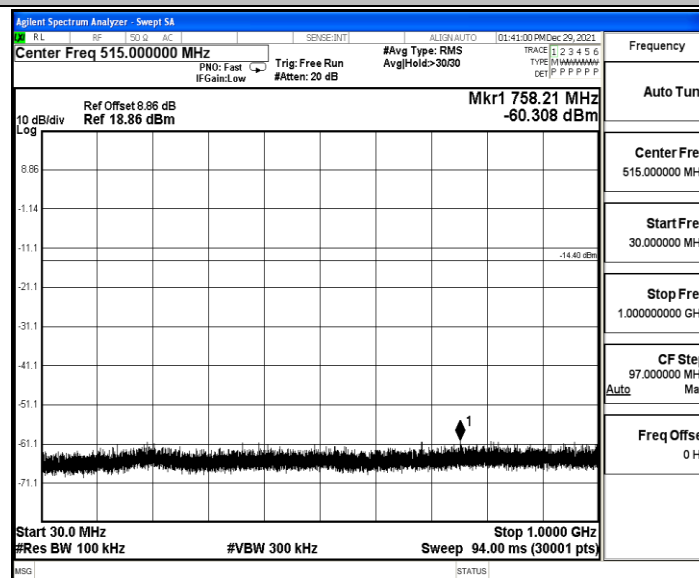




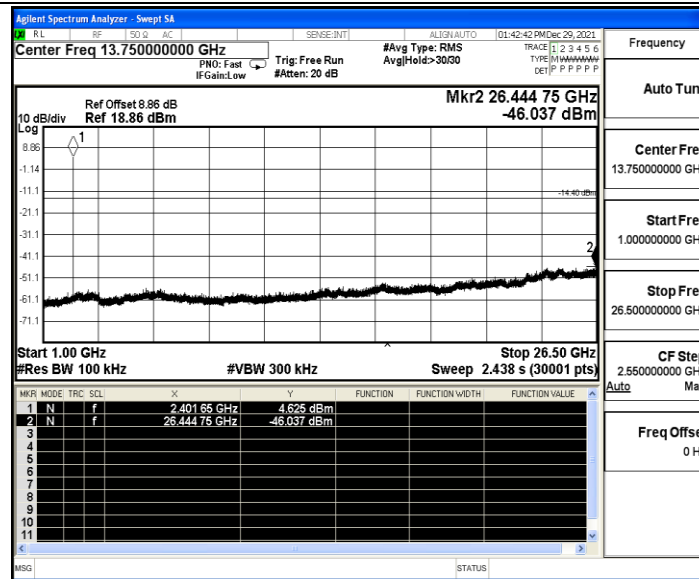
BLE_2M_Ant1_2402_0~Reference



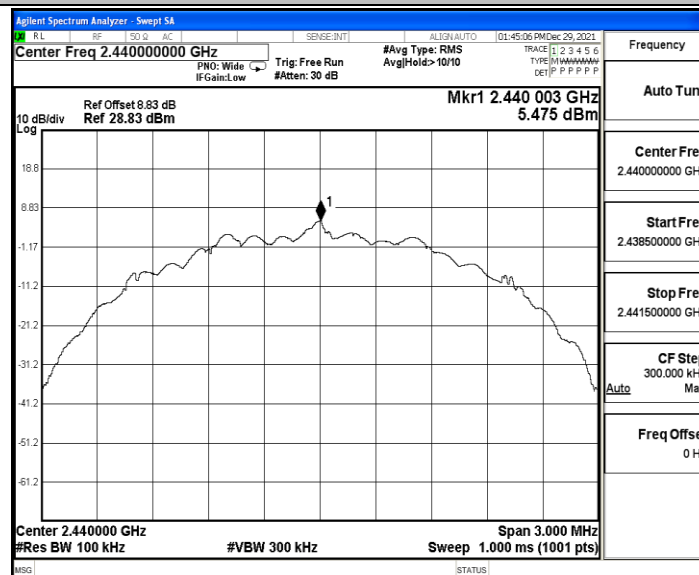
BLE_2M_Ant1_2402_30~1000



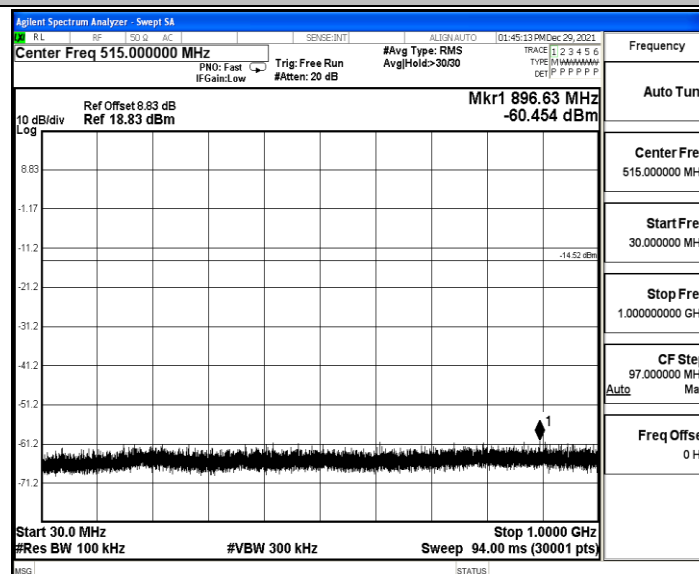
BLE_2M_Ant1_2402_1000~26500



BLE_2M_Ant1_2440_0~Reference

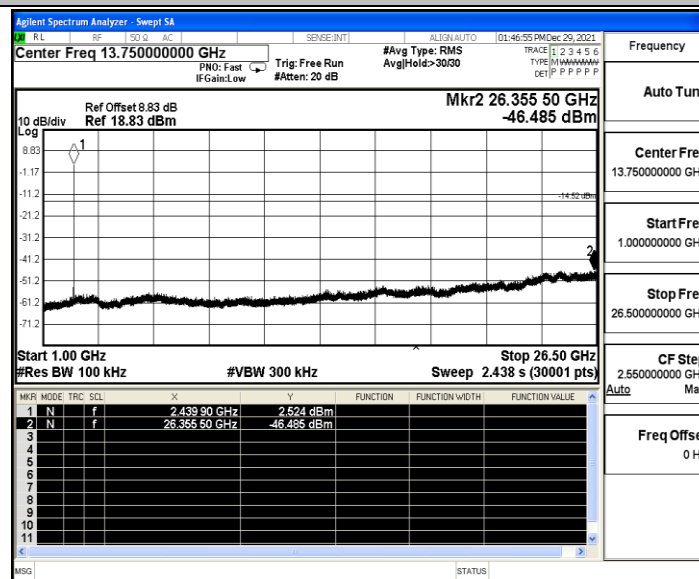


BLE_2M_Ant1_2440_30~1000

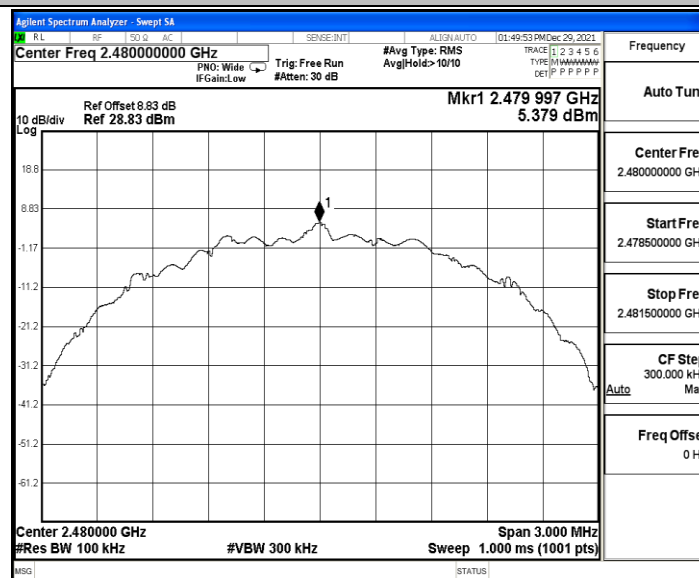




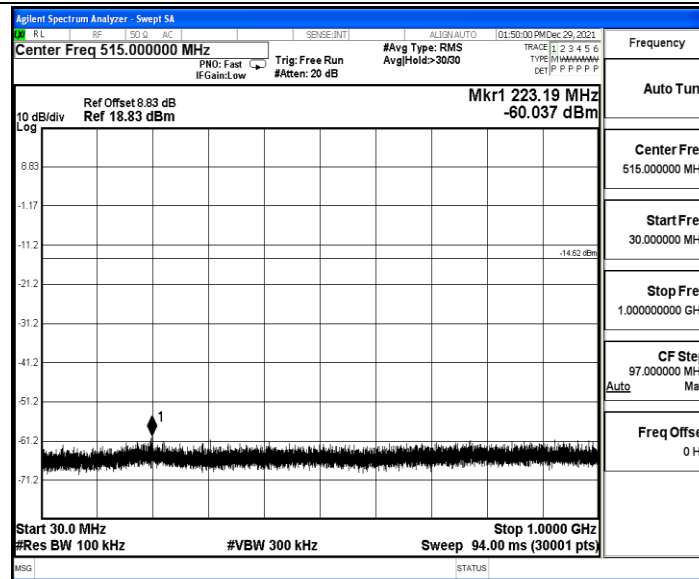
BLE_2M_Ant1_2440_1000~26500



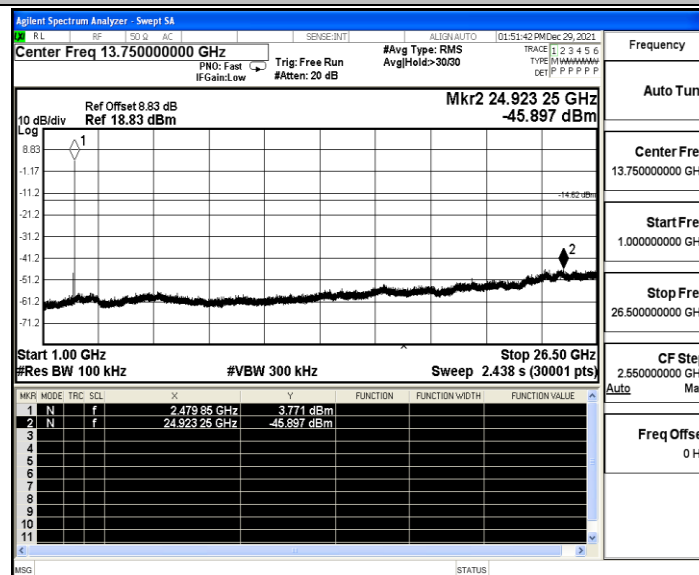
BLE_2M_Ant1_2480_0~Reference



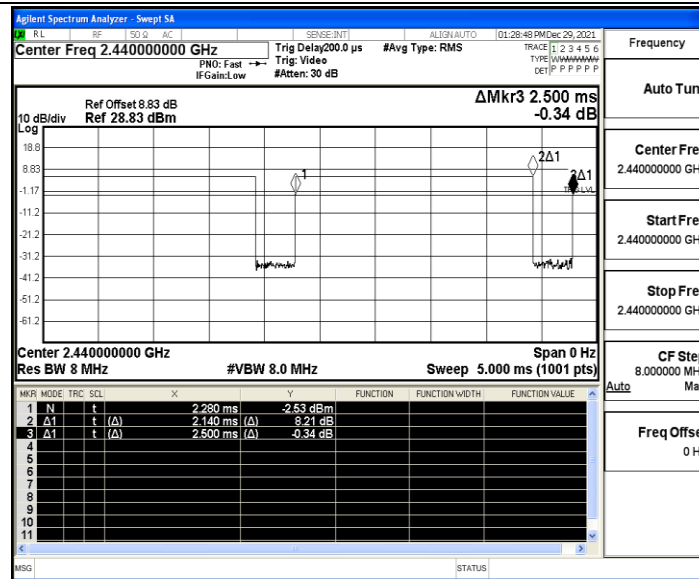
BLE_2M_Ant1_2480_30~1000



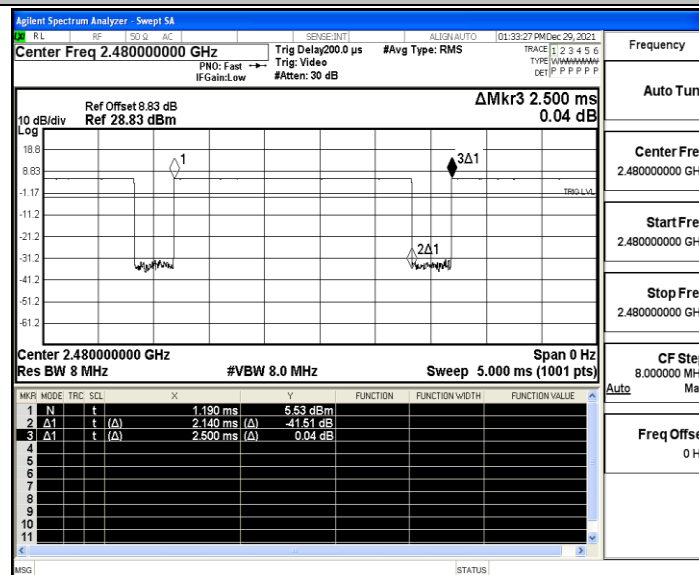
BLE_2M_Ant1_2480_1000-26500



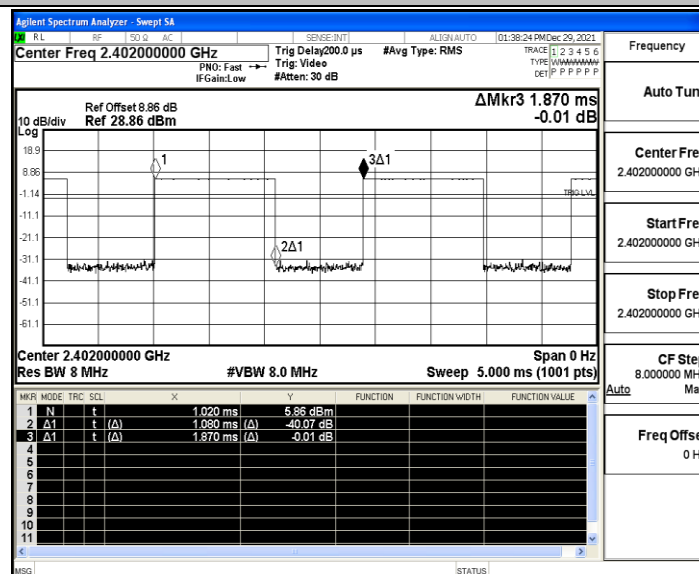




BLE_1M_Ant1_2480

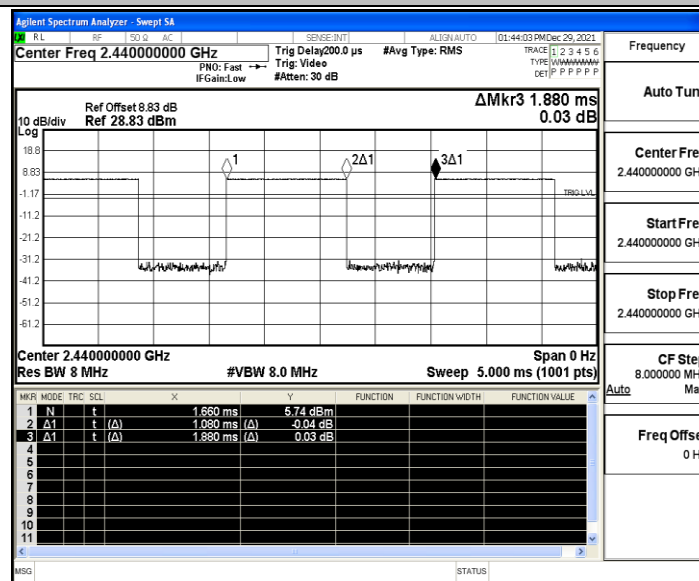


BLE_2M_Ant1_2402

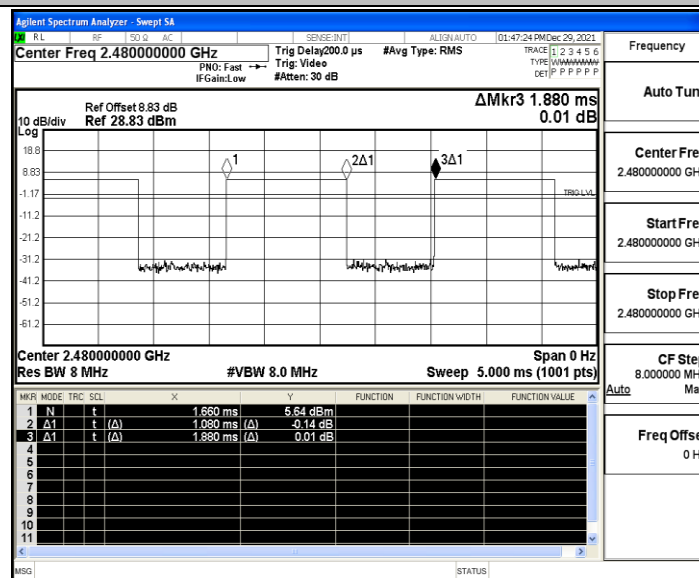




BLE_2M_Ant1_2440



BLE_2M_Ant1_2480





B.7 Emissions in Restricted Bands

Test Result

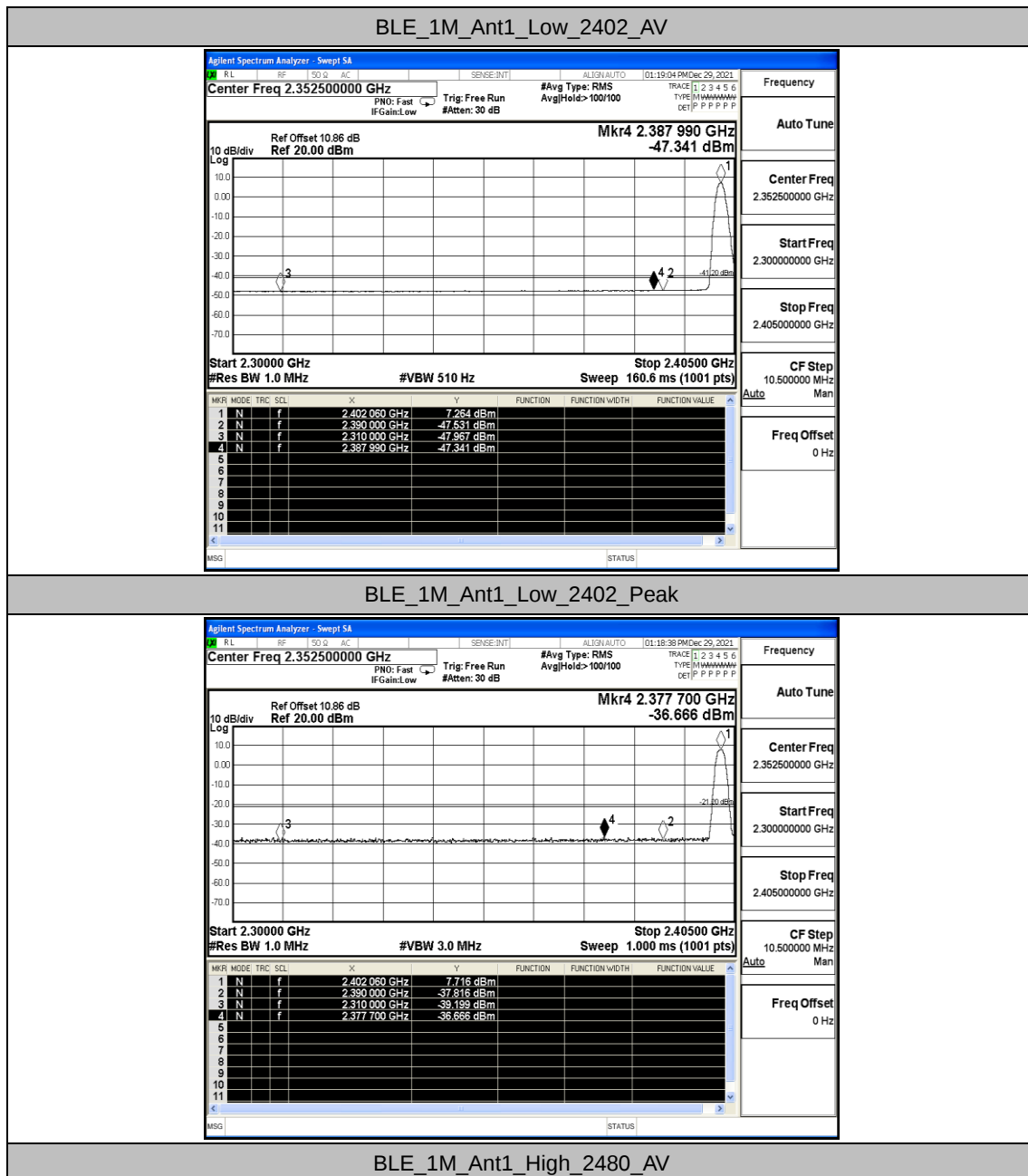
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-47.97	≤-41.20	47.23	≤54	PASS
				AV	2387.990	-47.34	≤-41.20	47.86	≤54	PASS
				AV	2390.000	-47.53	≤-41.20	47.67	≤54	PASS
				Peak	2310.000	-39.2	≤-21.20	56.00	≤74	PASS
				Peak	2377.700	-36.67	≤-21.20	58.53	≤74	PASS
				Peak	2390.000	-37.82	≤-21.20	57.38	≤74	PASS
		High	2480	AV	2483.500	-45.88	≤-41.20	49.32	≤54	PASS
				AV	2483.520	-45.88	≤-41.20	49.32	≤54	PASS
				AV	2500.000	-47	≤-41.20	48.20	≤54	PASS
				Peak	2483.500	-38.03	≤-21.20	57.17	≤74	PASS
				Peak	2498.720	-35.62	≤-21.20	59.58	≤74	PASS
				Peak	2500.000	-37.46	≤-21.20	57.74	≤74	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-47.59	≤-41.20	47.61	≤54	PASS
				AV	2384.210	-47.14	≤-41.20	48.06	≤54	PASS
				AV	2390.000	-47.32	≤-41.20	47.88	≤54	PASS
				Peak	2310.000	-38.42	≤-21.20	56.78	≤74	PASS
				Peak	2368.880	-36.17	≤-21.20	59.03	≤74	PASS
				Peak	2390.000	-38.04	≤-21.20	57.16	≤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	-46.85	≤-41.20	48.35	≤54	PASS
				Peak	2483.500	-36.47	≤-21.20	58.73	≤74	PASS
				Peak	2495.840	-35.93	≤-21.20	59.27	≤74	PASS
				Peak	2500.000	-37.36	≤-21.20	57.84	≤74	PASS

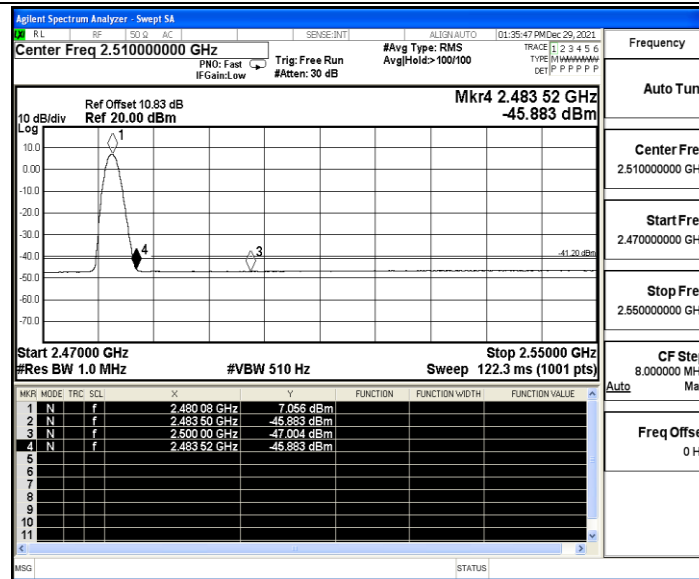
Note:

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.

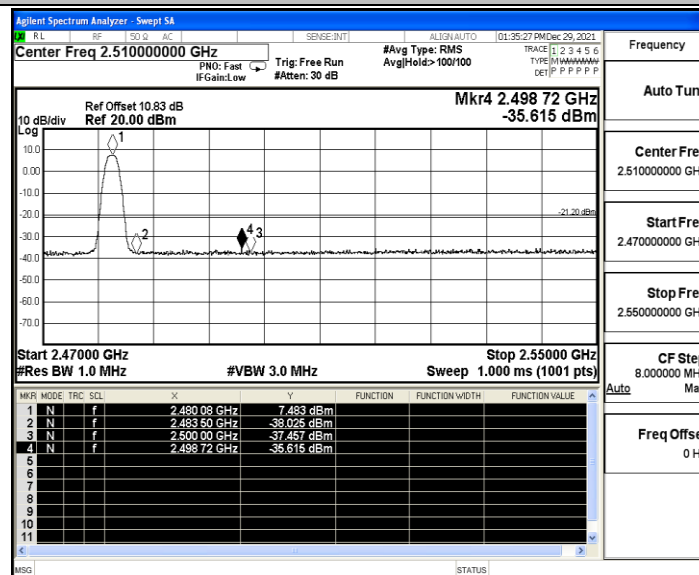


Test Graphs

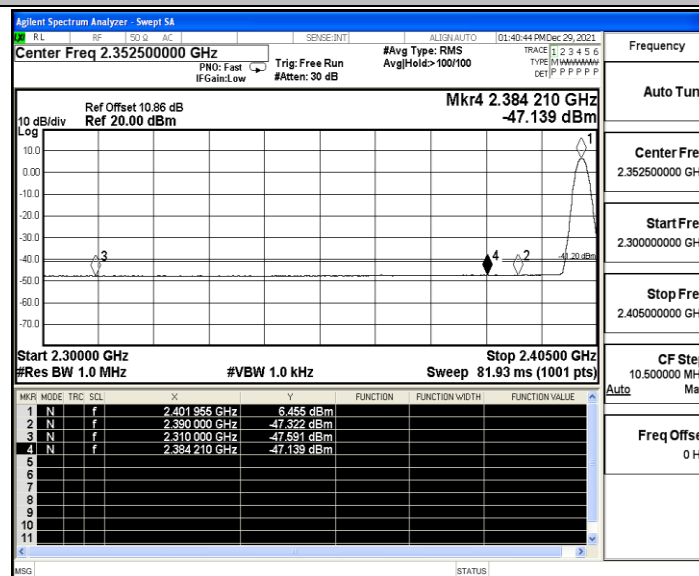




BLE_1M_Ant1_High_2480_Peak

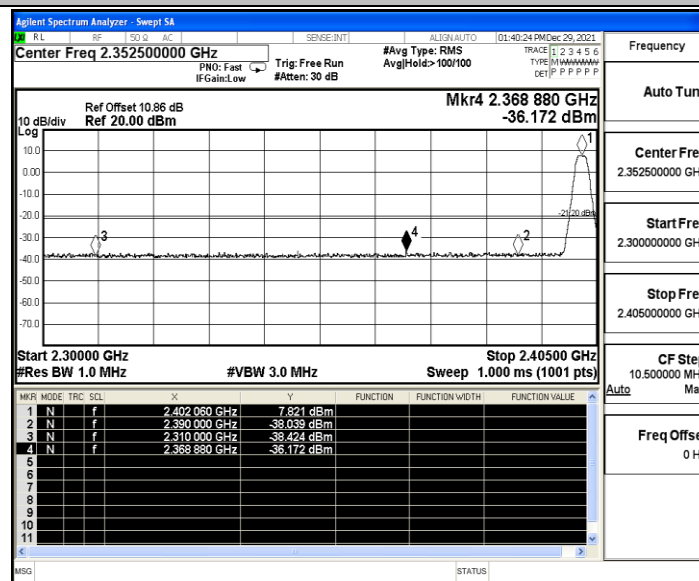


BLE_2M_Ant1_Low_2402_AV

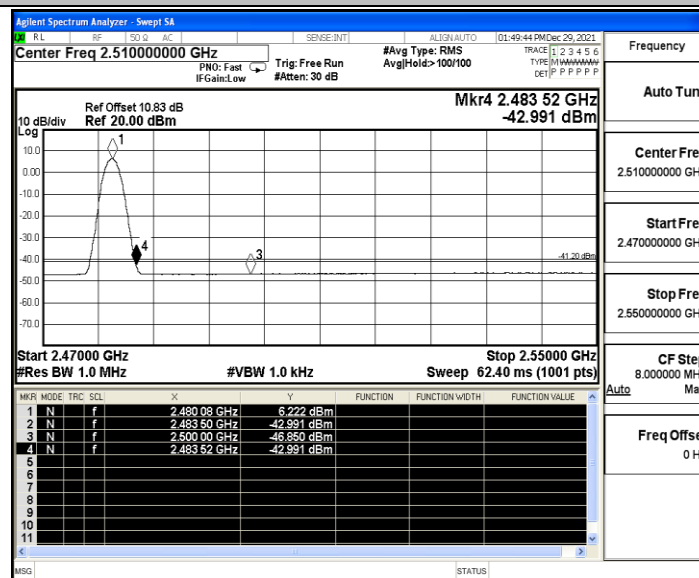




BLE_2M_Ant1_Low_2402_Peak



BLE_2M_Ant1_High_2480_AV



BLE_2M_Ant1_High_2480_Peak

