



Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: Tablet PC

Test Model: IX90_CQA1103

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Ling Zhu
Supervised by:	Li Huan



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B.1 DTS Bandwidth

Test Result

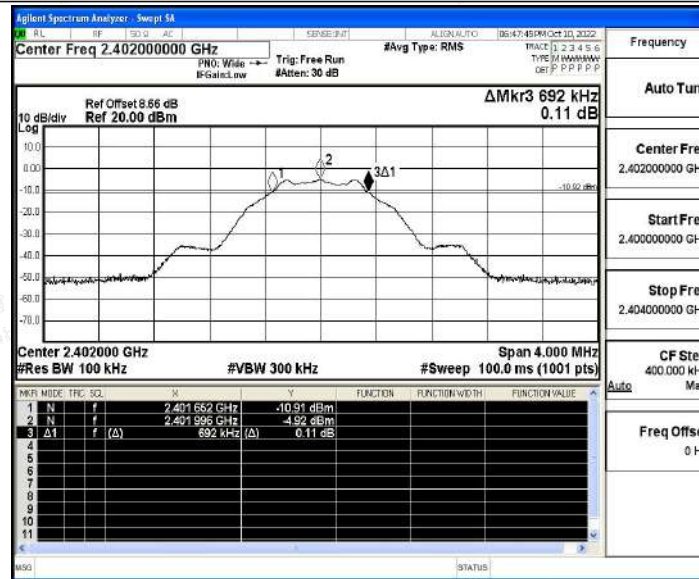
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.692	2401.652	2402.344	0.5	PASS
		2440	0.688	2439.652	2440.340	0.5	PASS
		2480	0.688	2479.652	2480.340	0.5	PASS
BLE_2M	Ant1	2402	1.148	2401.428	2402.576	0.5	PASS
		2440	1.148	2439.428	2440.576	0.5	PASS
		2480	1.152	2479.424	2480.576	0.5	PASS



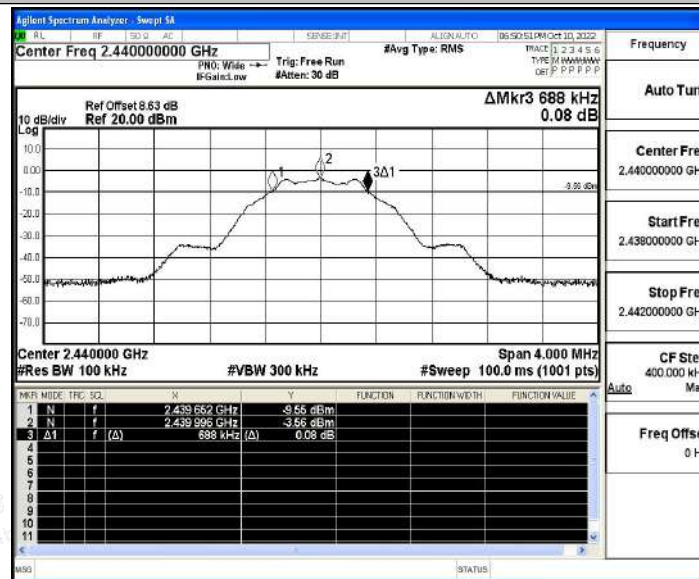


Test Graphs

BLE_1M_Ant1_2402

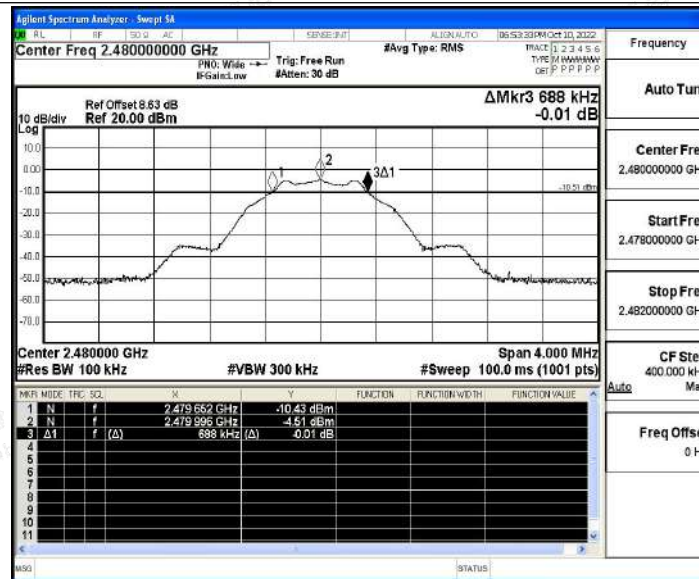


BLE_1M_Ant1_2440

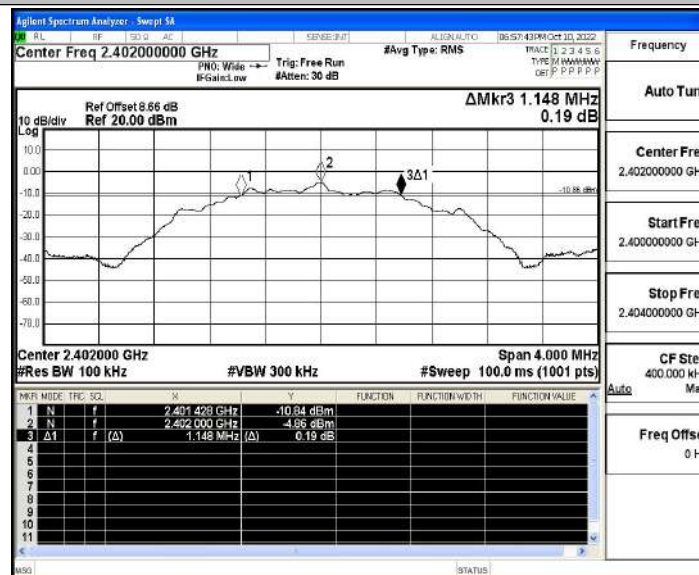


BLE_1M_Ant1_2480



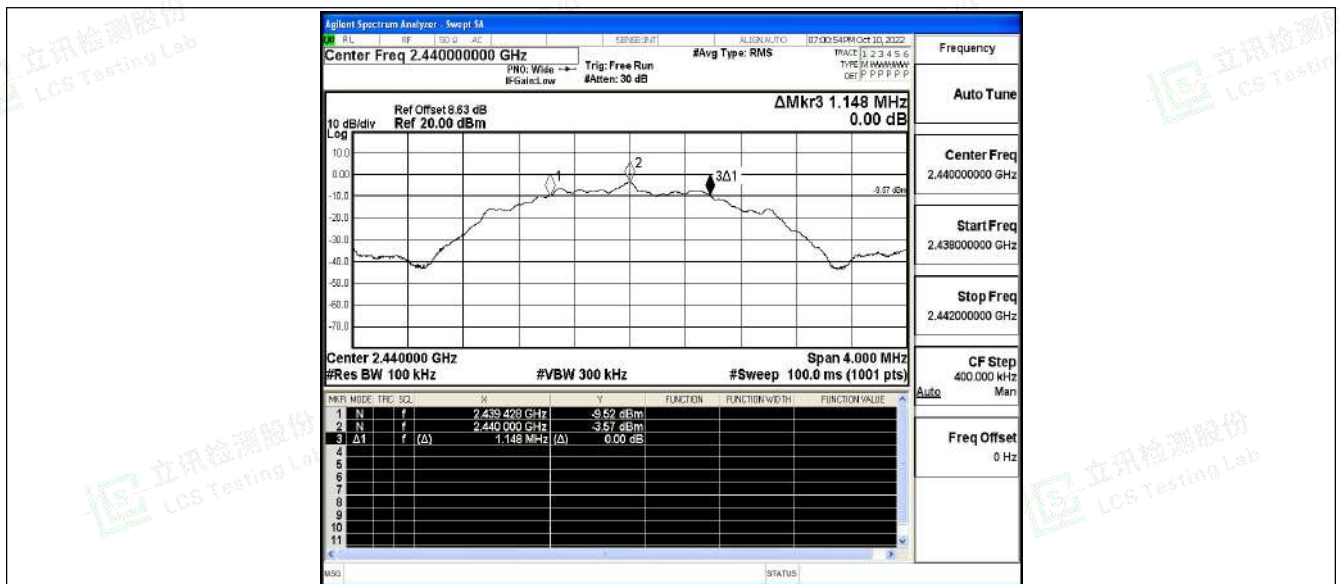


BLE_2M_Ant1_2402

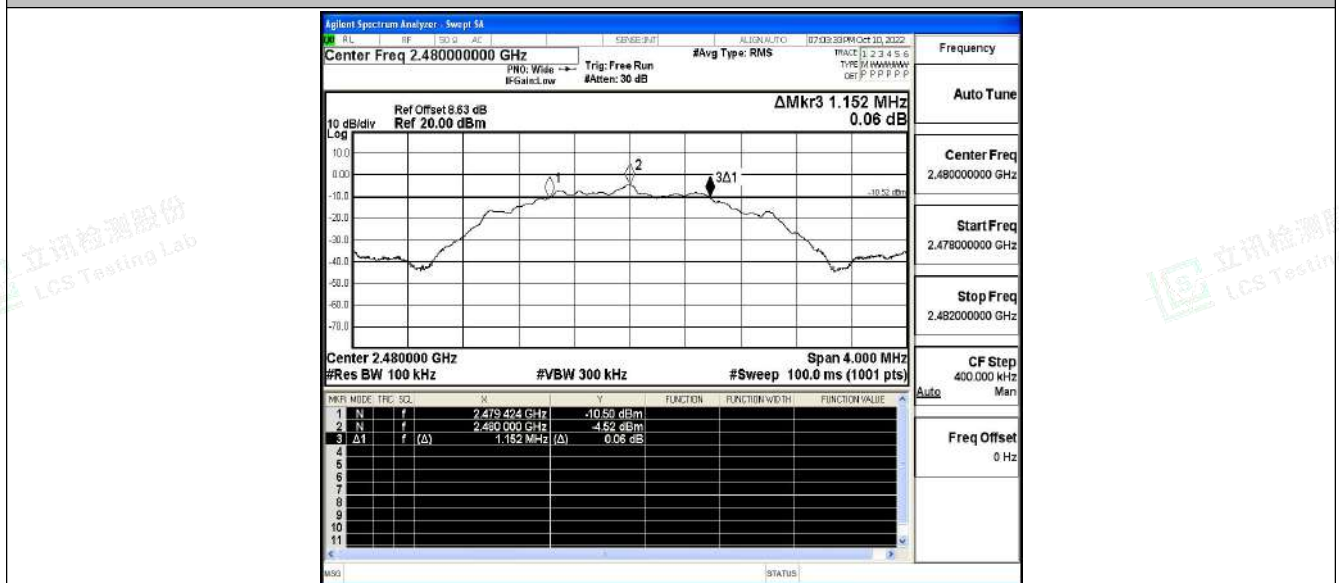


BLE_2M_Ant1_2440





BLE_2M_Ant1_2480





B.2 Maximum conducted output power

Test Result

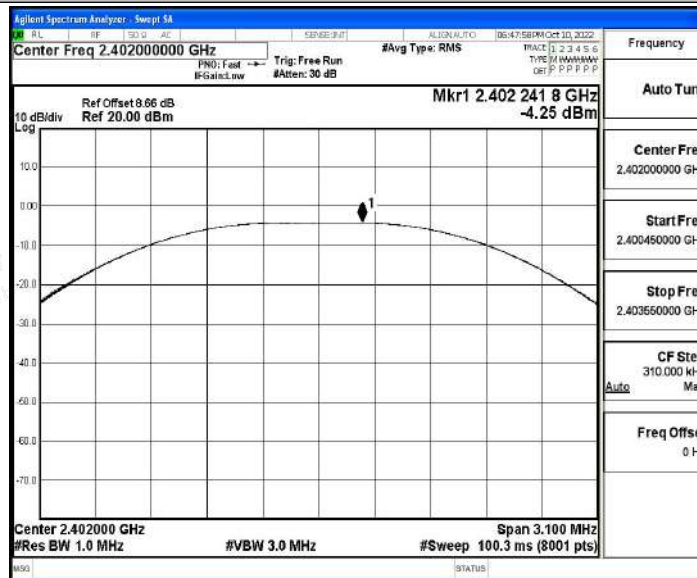
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-4.25	≤30	PASS
		2440	-2.94	≤30	PASS
		2480	-3.83	≤30	PASS
BLE_2M	Ant1	2402	-4.01	≤30	PASS
		2440	-2.79	≤30	PASS
		2480	-3.7	≤30	PASS



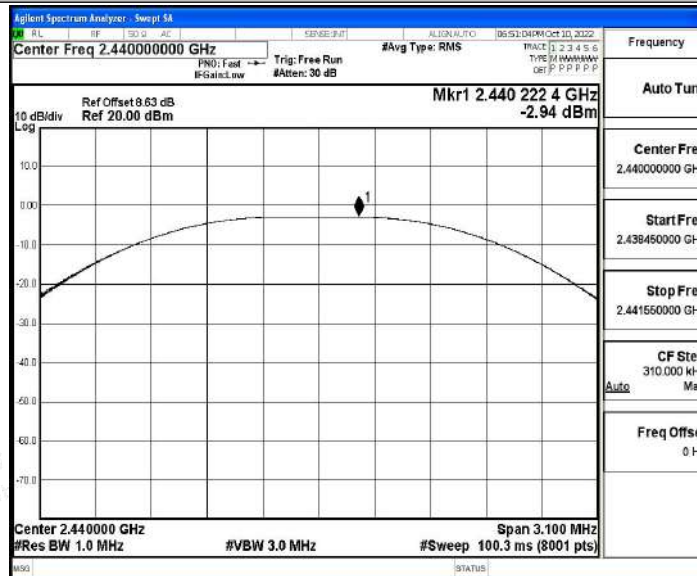


Test Graphs

BLE_1M_Ant1_2402

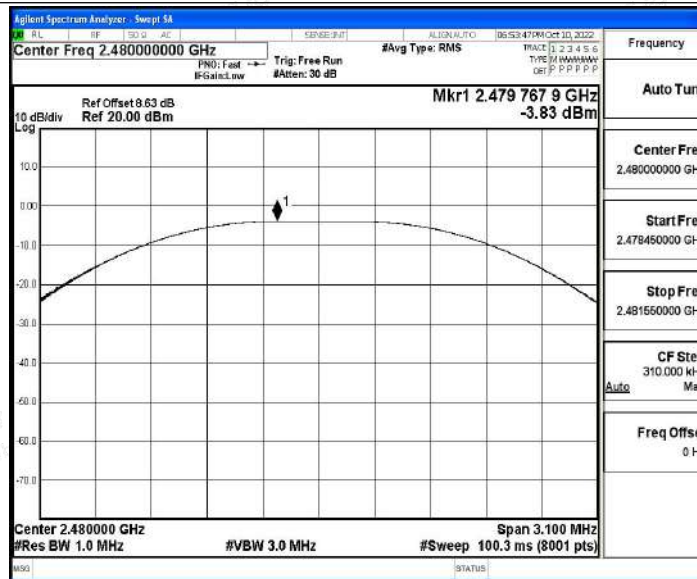


BLE_1M_Ant1_2440

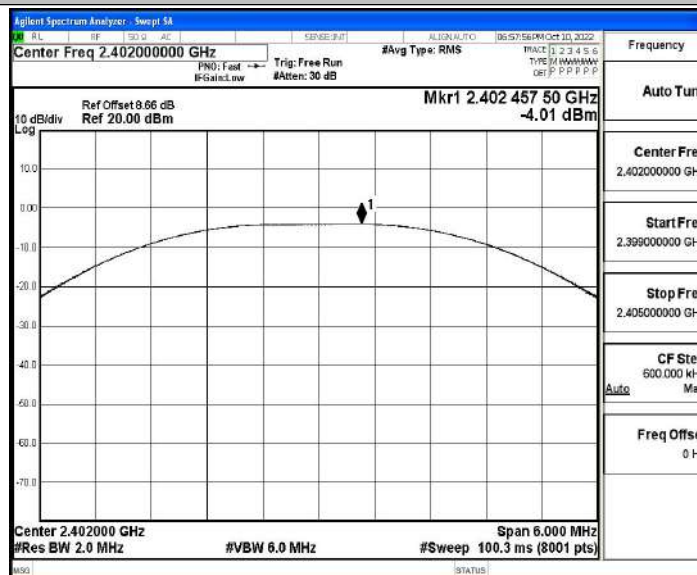


BLE_1M_Ant1_2480



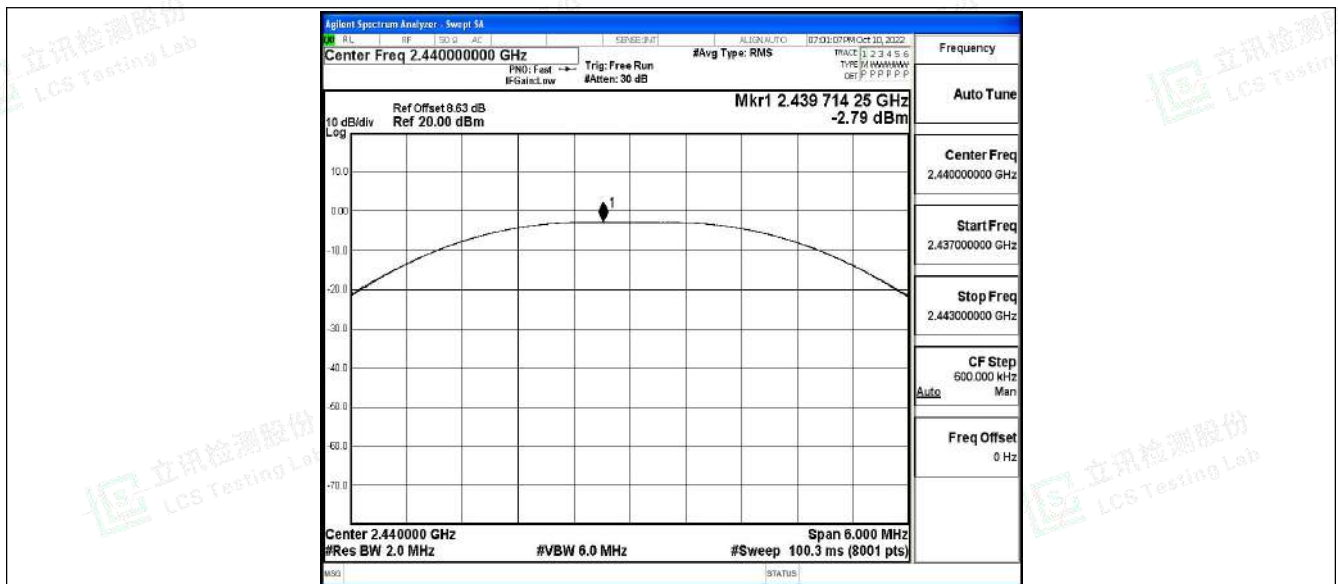


BLE_2M_Ant1_2402

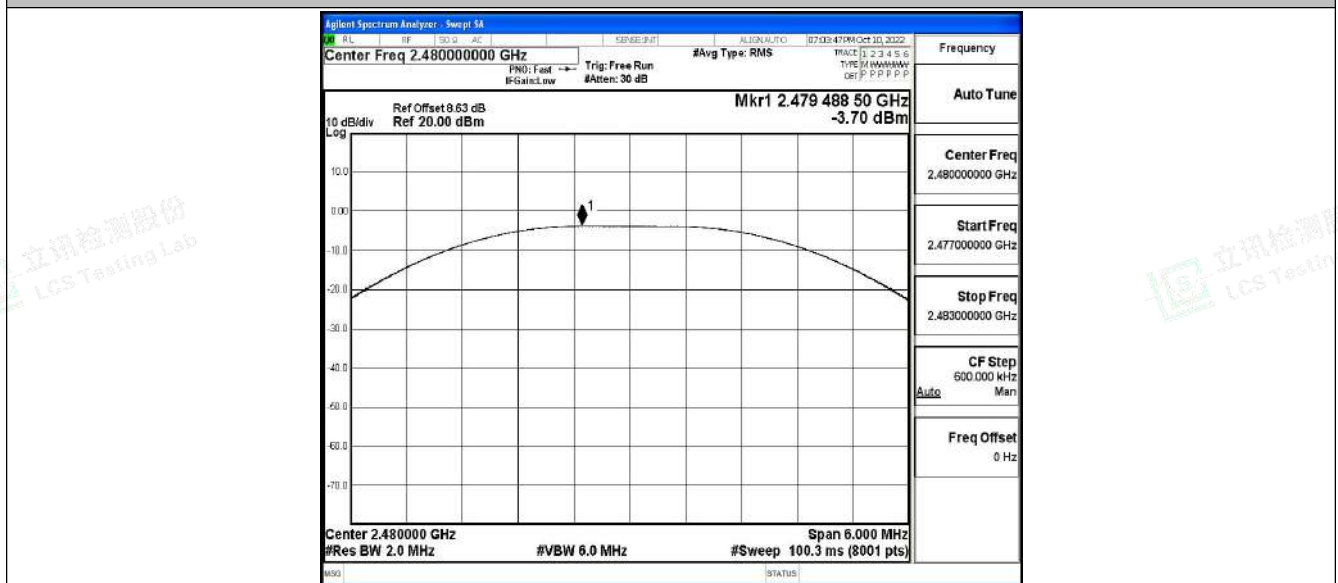


BLE_2M_Ant1_2440





BLE_2M_Ant1_2480





B.3 Maximum power spectral density

Test Result

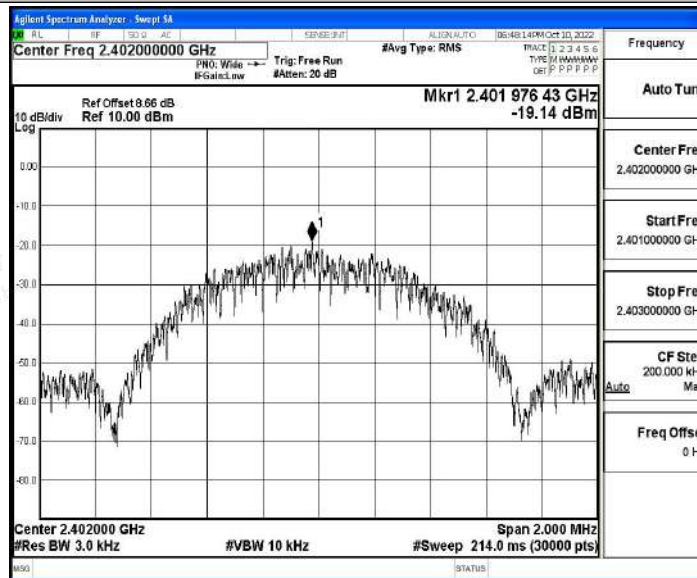
TestMode	Antenna	Channel	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.14	≤8.00	PASS
		2440	-17.79	≤8.00	PASS
		2480	-18.69	≤8.00	PASS
BLE_2M	Ant1	2402	-21.21	≤8.00	PASS
		2440	-20.06	≤8.00	PASS
		2480	-20.94	≤8.00	PASS



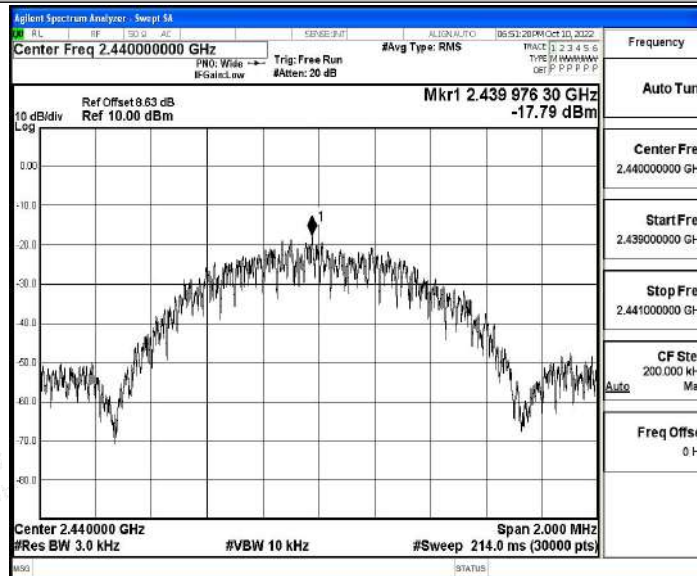


Test Graphs

BLE_1M_Ant1_2402

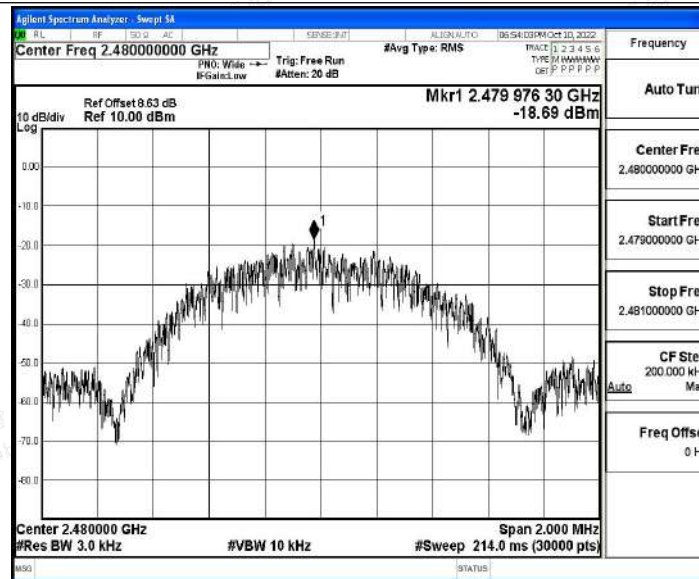


BLE_1M_Ant1_2440

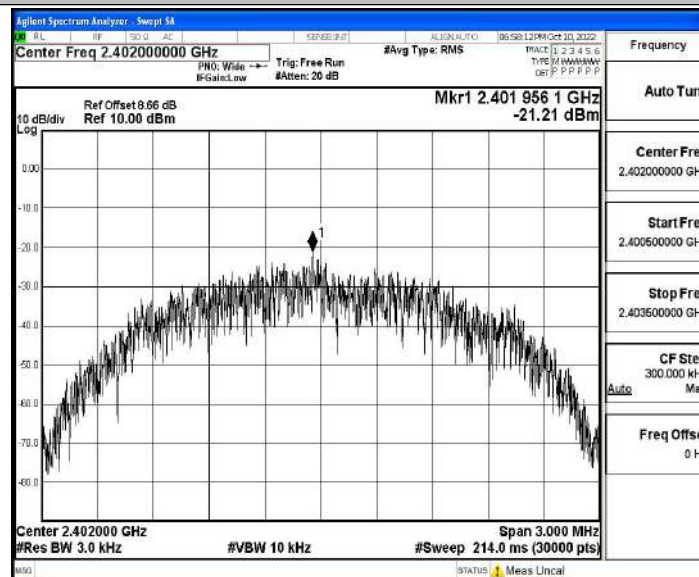


BLE_1M_Ant1_2480



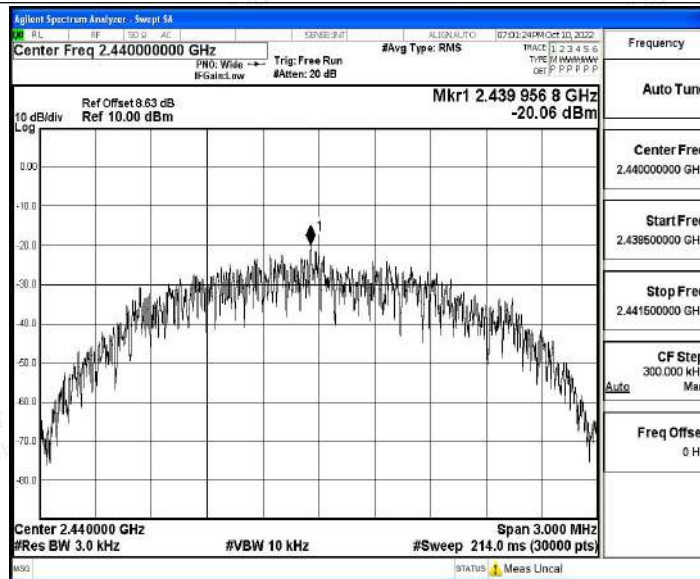


BLE_2M_Ant1_2402

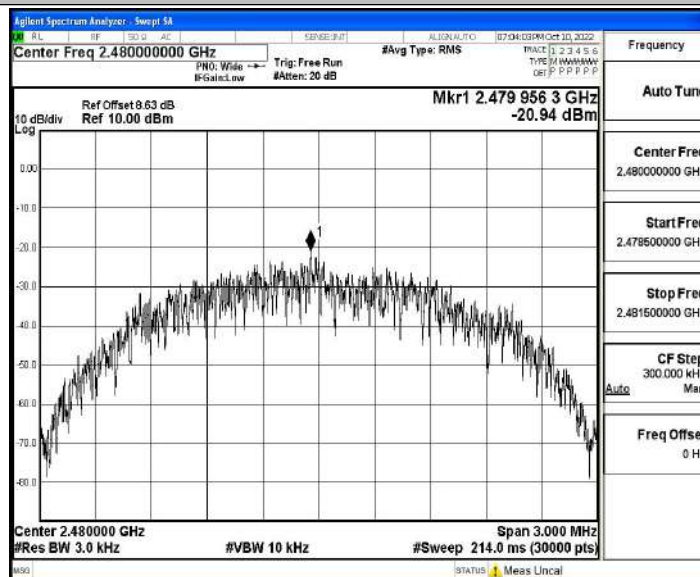


BLE_2M_Ant1_2440





BLE_2M_Ant1_2480





B.4 Band edge measurements

Test Result

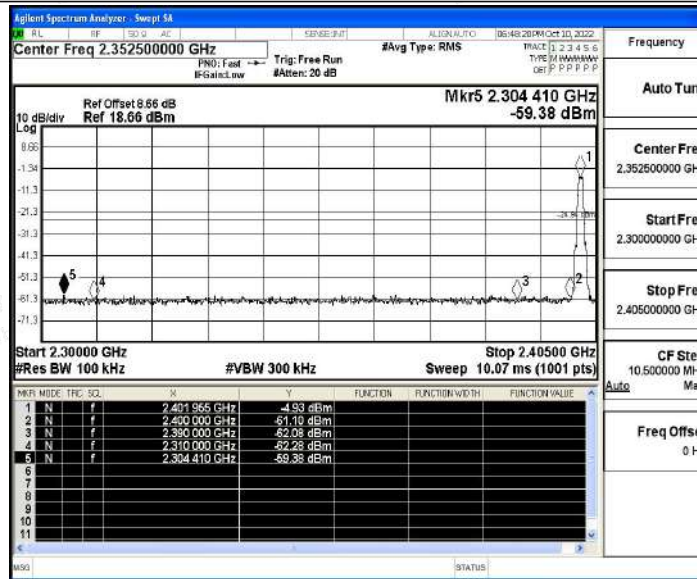
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-4.94	-59.38	≤-24.94	PASS
		High	2480	-4.76	-58.46	≤-24.76	PASS
BLE_2M	Ant1	Low	2402	-4.85	-36.56	≤-24.85	PASS
		High	2480	-4.51	-58.53	≤-24.51	PASS



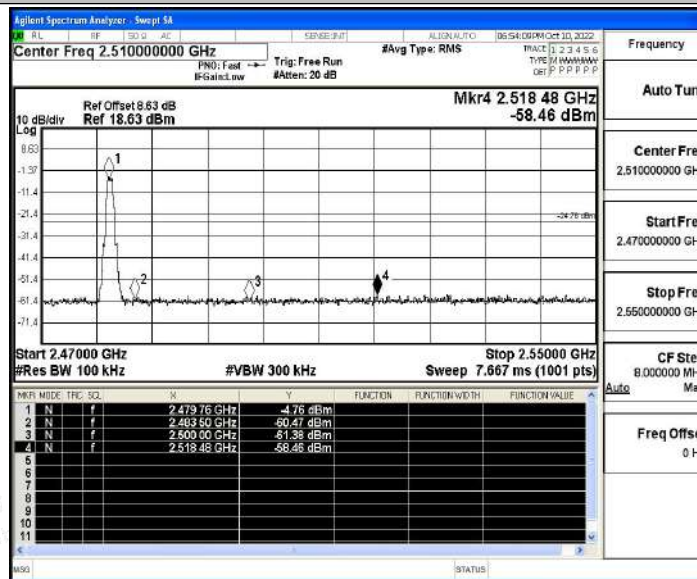


Test Graphs

BLE_1M_Ant1_Low_2402

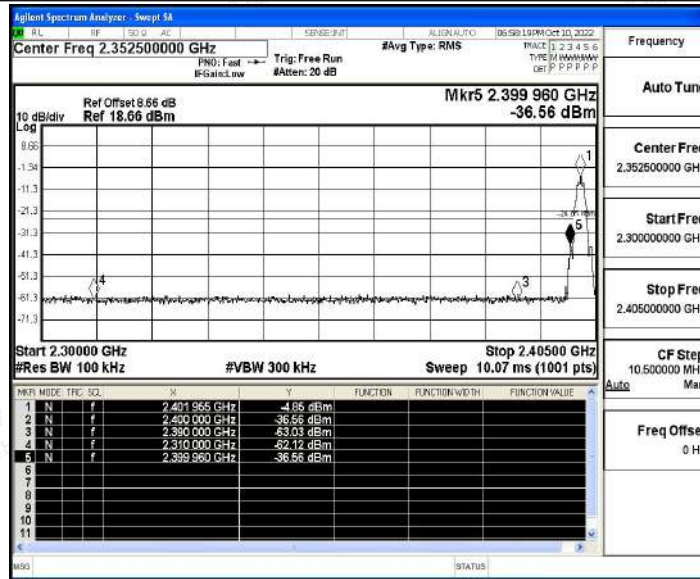


BLE_1M_Ant1_High_2480

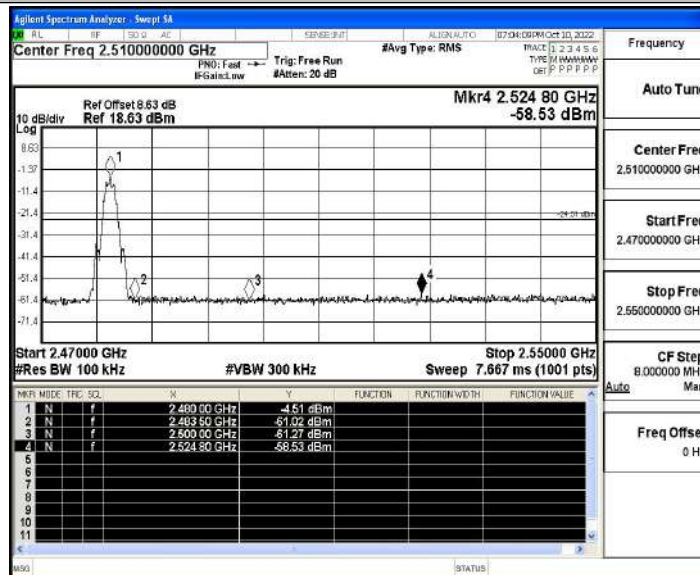


BLE_2M_Ant1_Low_2402





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	-5.31	-5.31	---	PASS
			30~1000	-5.31	-61.23	≤-25.31	PASS
			1000~26500	-5.31	-46.06	≤-25.31	PASS
		2440	Reference	-4.27	-4.27	---	PASS
			30~1000	-4.27	-60.6	≤-24.27	PASS
			1000~26500	-4.27	-46.43	≤-24.27	PASS
		2480	Reference	-5.56	-5.56	---	PASS
			30~1000	-5.56	-60.79	≤-25.56	PASS
			1000~26500	-5.56	-46.35	≤-25.56	PASS
BLE_2M	Ant1	2402	Reference	-8.36	-8.36	---	PASS
			30~1000	-8.36	-59.75	≤-28.36	PASS
			1000~26500	-8.36	-45.94	≤-28.36	PASS
		2440	Reference	-4.20	-4.20	---	PASS
			30~1000	-4.20	-60.26	≤-24.2	PASS
			1000~26500	-4.20	-46.03	≤-24.2	PASS
		2480	Reference	-8.05	-8.05	---	PASS
			30~1000	-8.05	-60.08	≤-28.05	PASS
			1000~26500	-8.05	-45.64	≤-28.05	PASS



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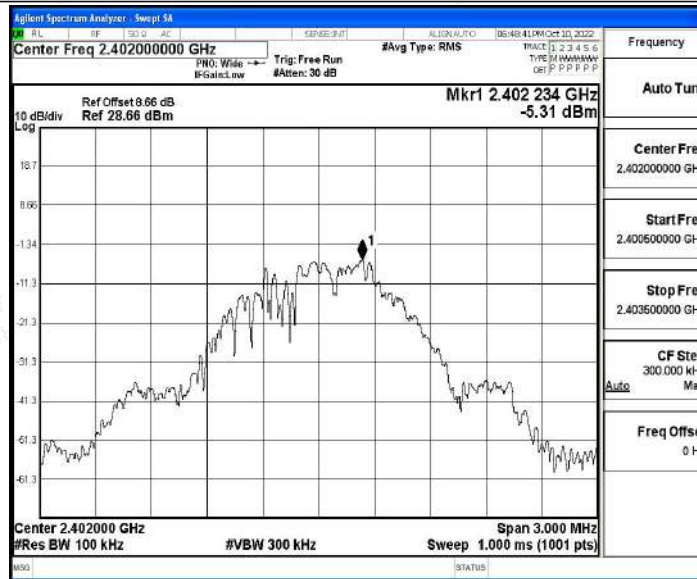
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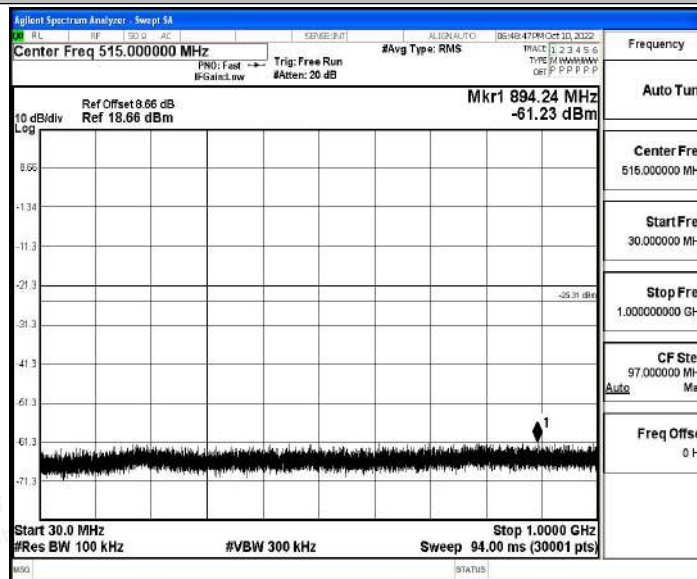


Test Graphs

BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



BLE_1M_Ant1_2402_1000~26500

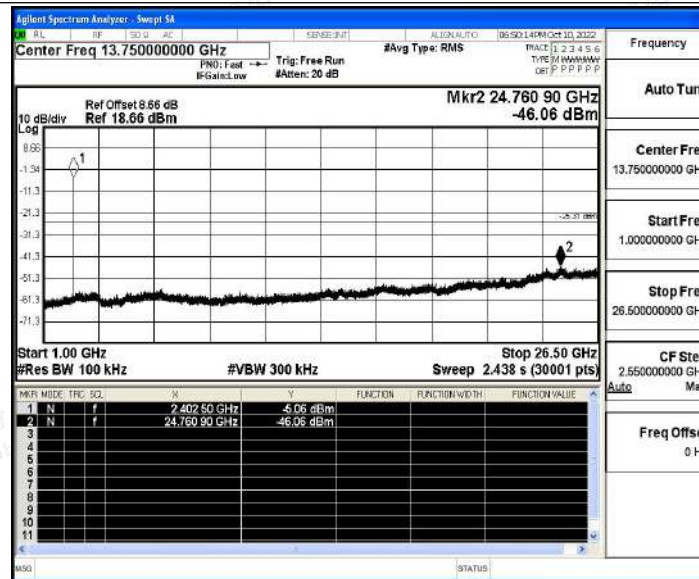


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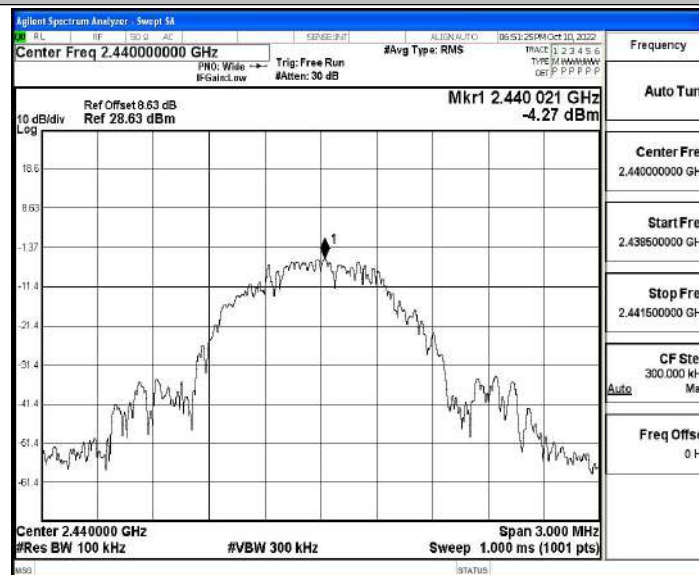
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Scan code to check authenticity

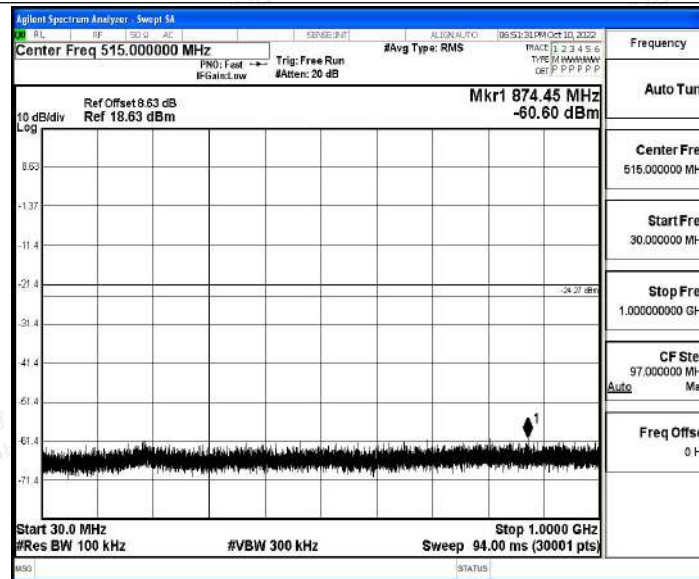


BLE_1M_Ant1_2440_0~Reference

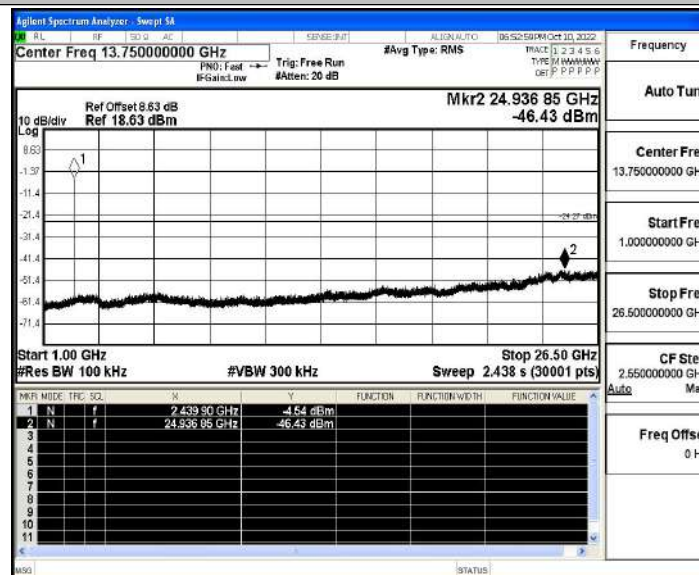


BLE_1M_Ant1_2440_30~1000



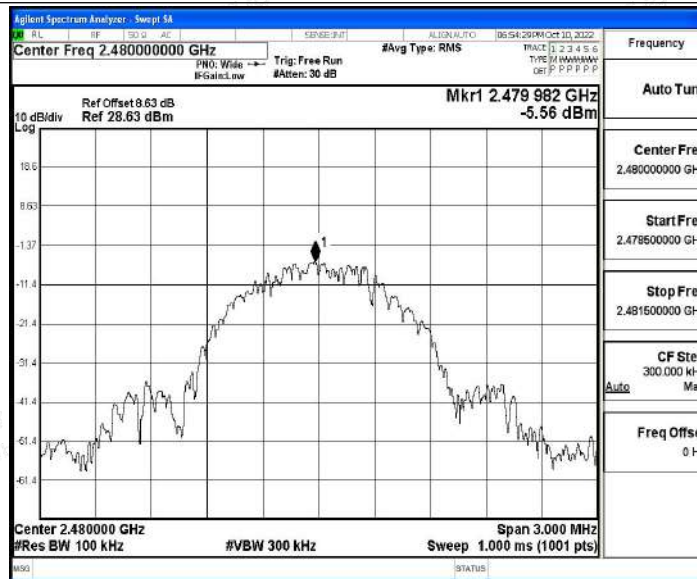


BLE_1M_Ant1_2440_1000~26500

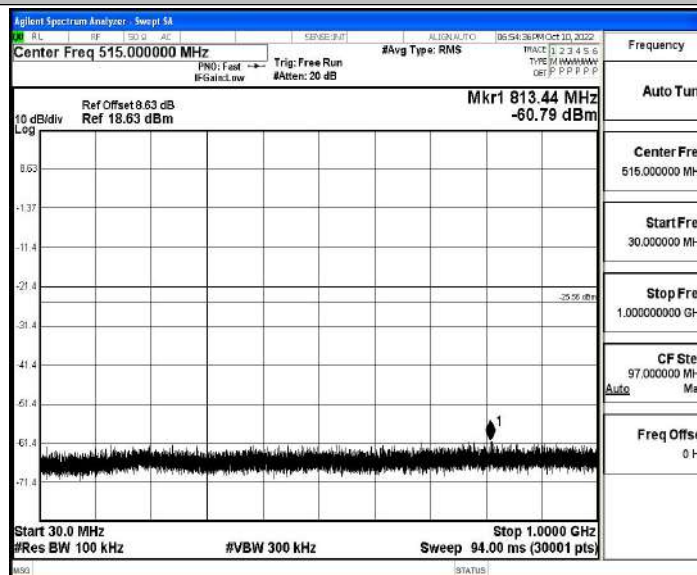


BLE_1M_Ant1_2480_0~Reference



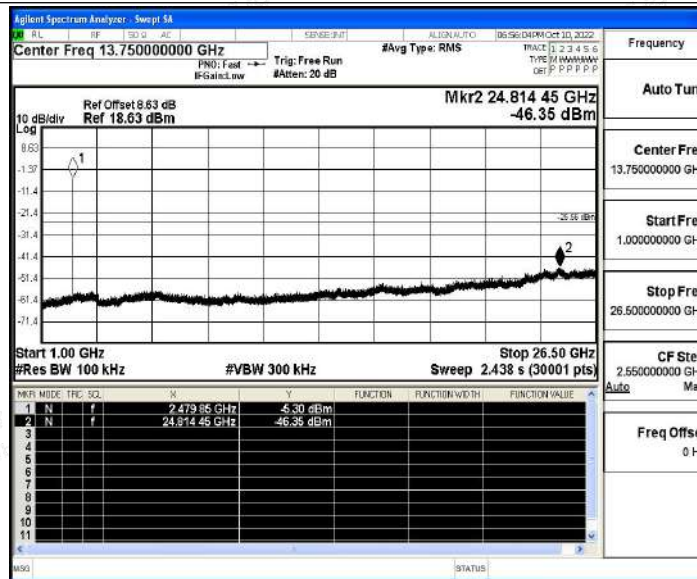


BLE_1M_Ant1_2480_30~1000

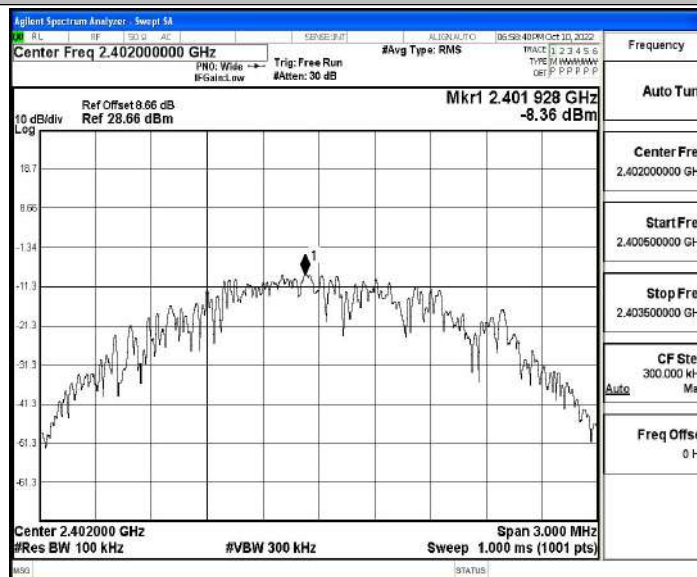


BLE_1M_Ant1_2480_1000~26500



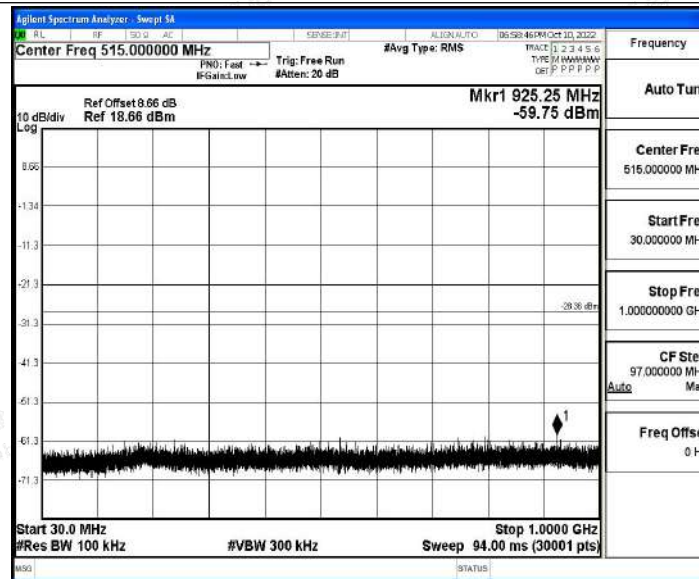


BLE_2M_Ant1_2402_0~Reference

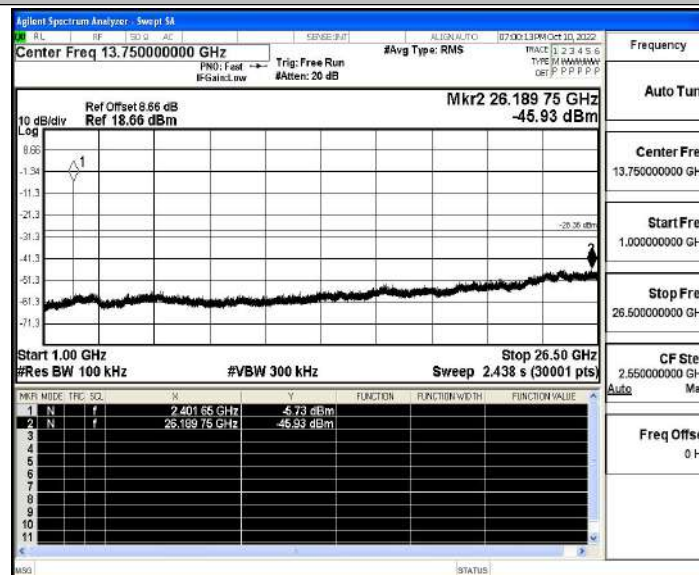


BLE_2M_Ant1_2402_30~1000



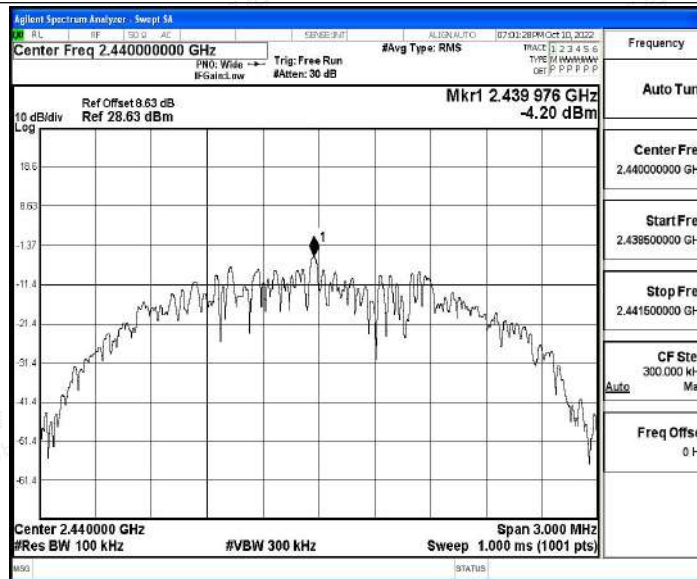


BLE_2M_Ant1_2402_1000~26500

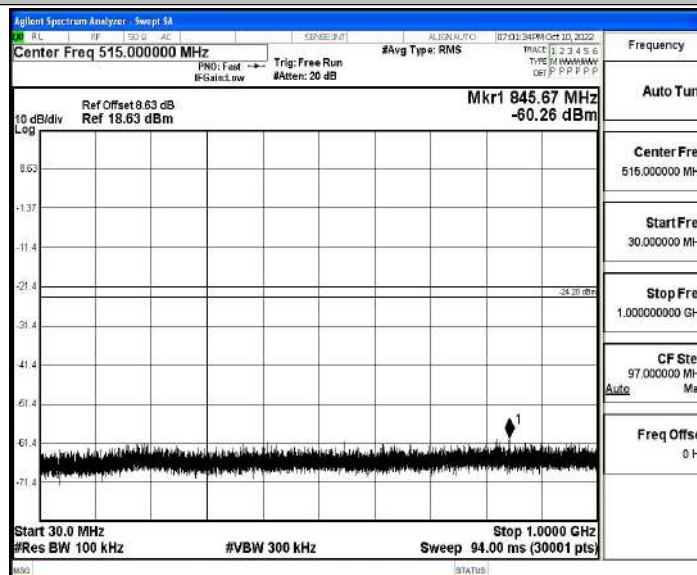


BLE_2M_Ant1_2440_0~Reference



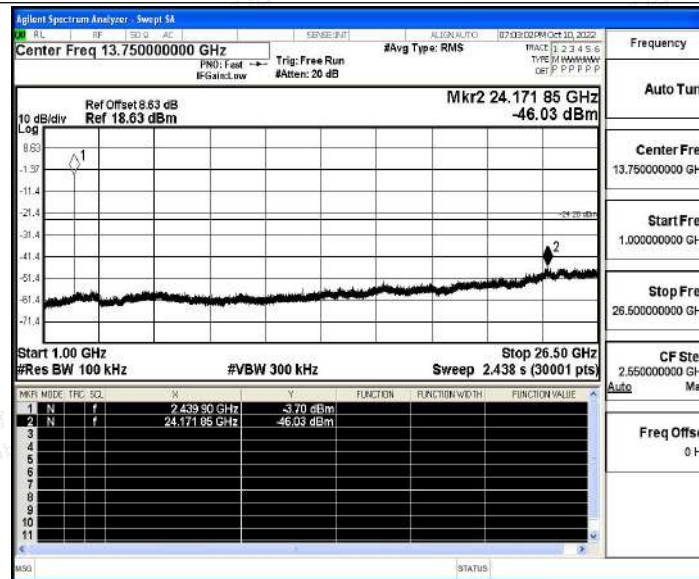


BLE_2M_Ant1_2440_30~1000

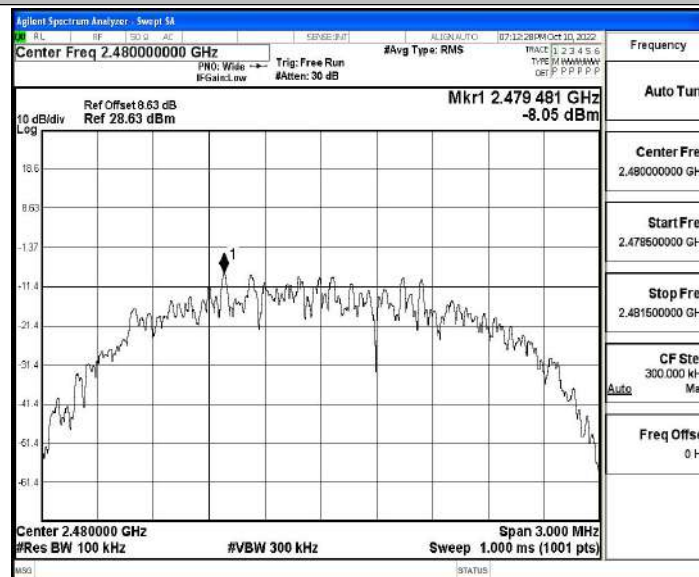


BLE_2M_Ant1_2440_1000~26500



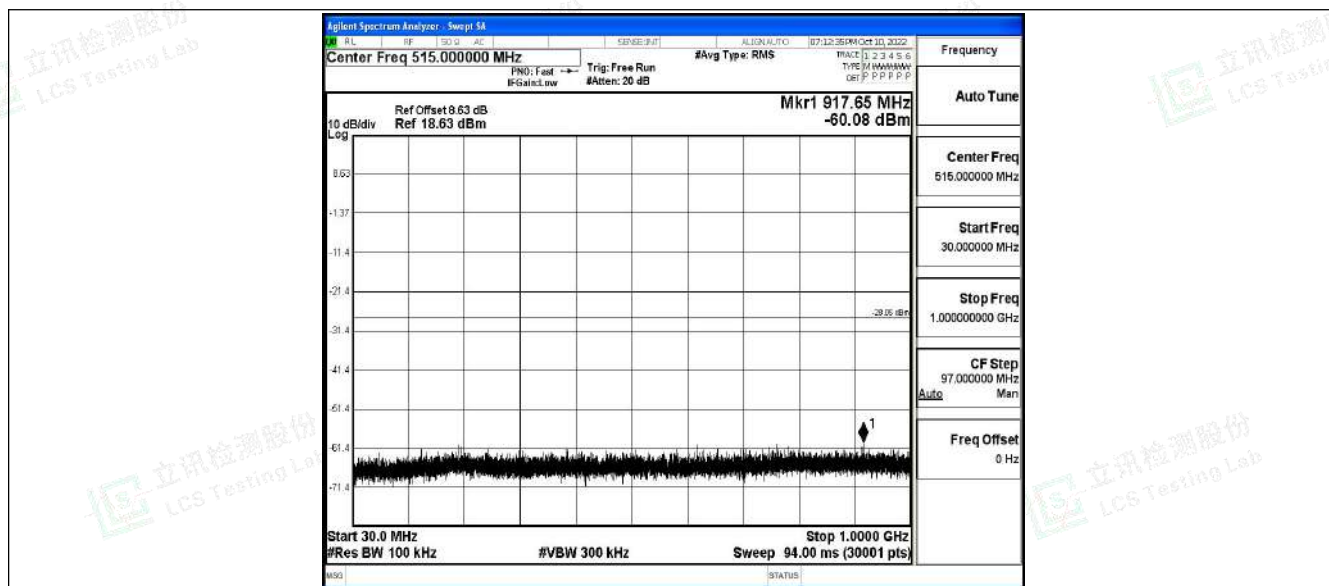


BLE_2M_Ant1_2480_0~Reference

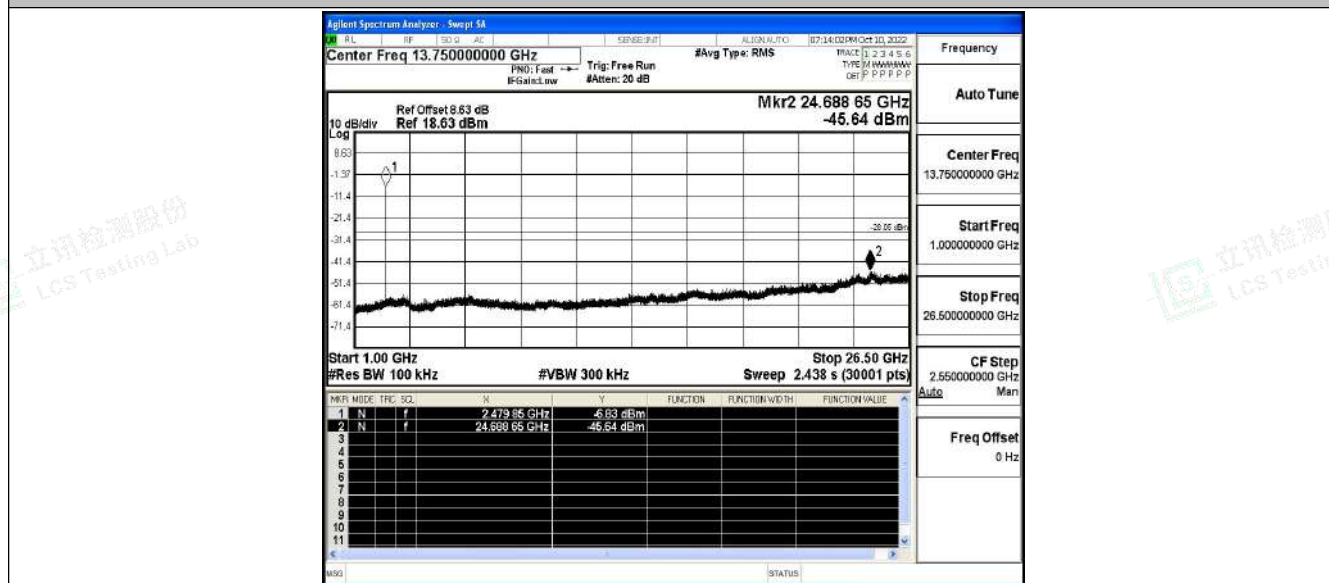


BLE_2M_Ant1_2480_30~1000





BLE_2M_Ant1_2480_1000~26500





B.6 Duty Cycle

Test Result

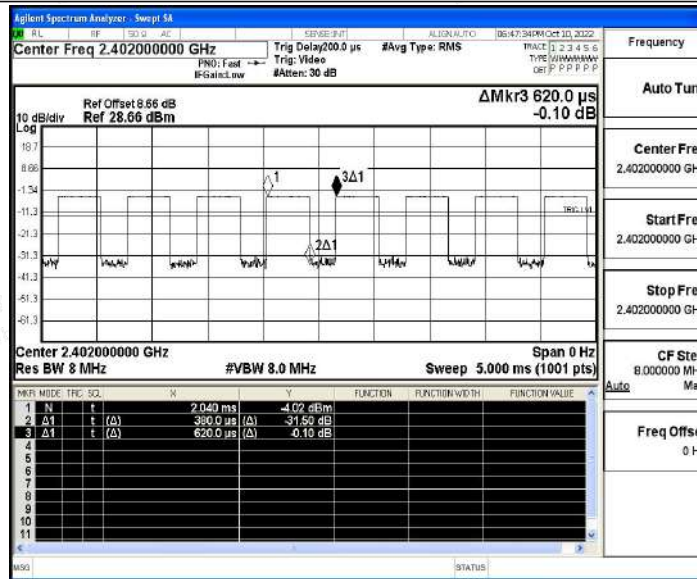
TestMode	Antenna	Channel	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	1/T[kHz]
BLE_1M	Ant1	2402	0.38	0.62	0.6129	61.29	2.13	2.63
		2440	0.38	0.62	0.6129	61.29	2.13	2.63
		2480	0.38	0.63	0.6032	60.32	2.20	2.63
BLE_2M	Ant1	2402	0.20	0.63	0.3175	31.75	4.98	5.00
		2440	0.20	0.63	0.3175	31.75	4.98	5.00
		2480	0.20	0.63	0.3175	31.75	4.98	5.00



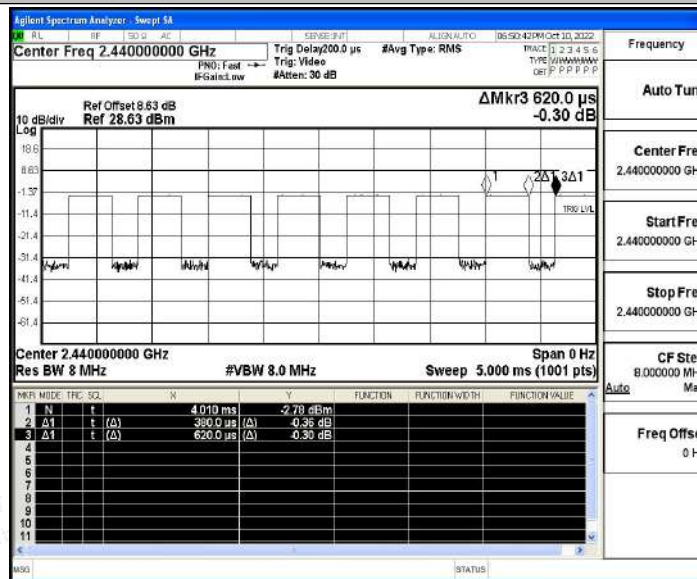


Test Graphs

BLE_1M_Ant1_2402

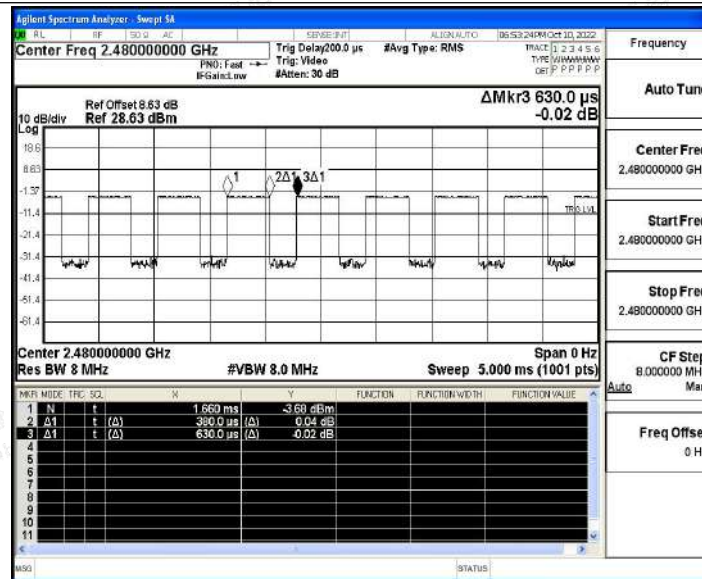


BLE_1M_Ant1_2440

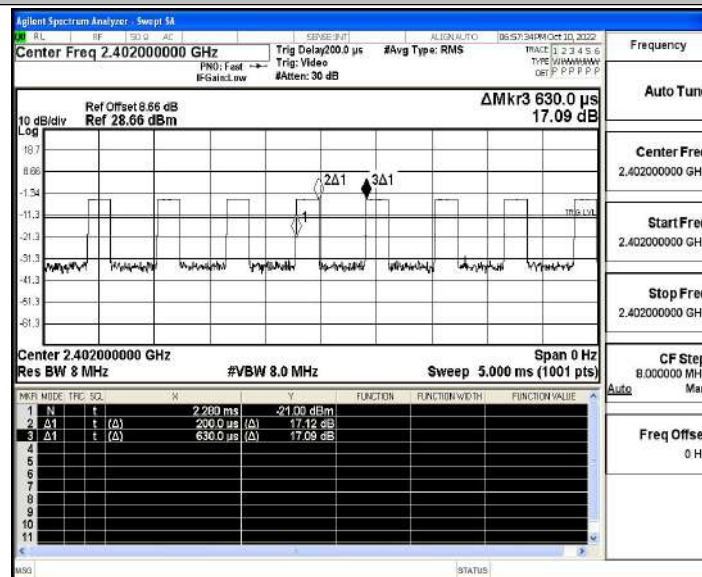


BLE_1M_Ant1_2480



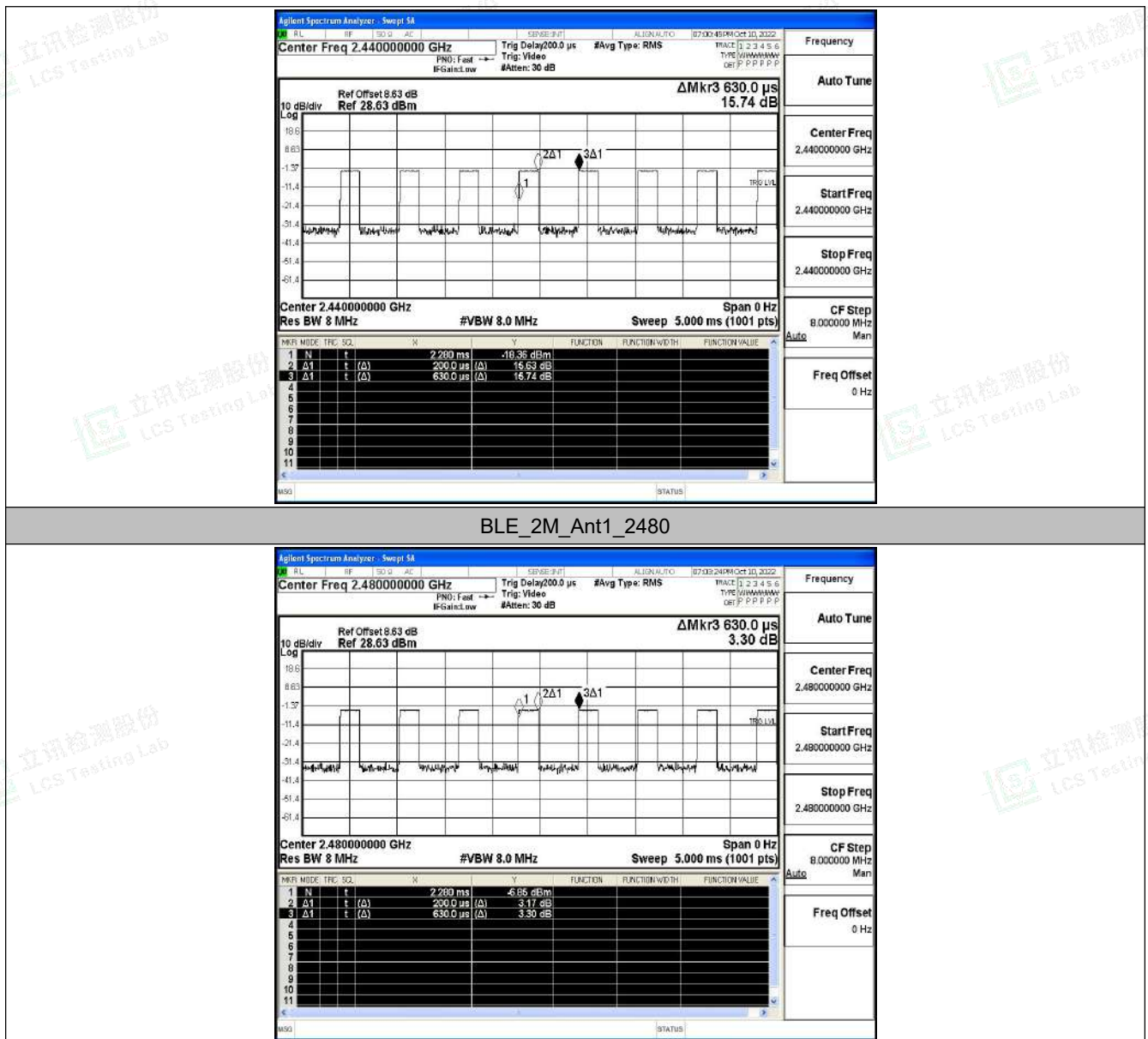


BLE_2M_Ant1_2402



BLE_2M_Ant1_2440







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	-57.31	≤-41.20	37.89	≤54	PASS
				AV	2378.435	-56.62	≤-41.20	38.58	≤54	PASS
				AV	2390.000	-57.15	≤-41.20	38.05	≤54	PASS
				Peak	2310.000	-51.95	≤-21.20	43.25	≤74	PASS
				Peak	2351.555	-47.68	≤-21.20	47.52	≤74	PASS
				Peak	2390.000	-52	≤-21.20	43.20	≤74	PASS
		High	2480	AV	2483.500	-55.44	≤-41.20	39.76	≤54	PASS
				AV	2483.520	-55.44	≤-41.20	39.76	≤54	PASS
				AV	2500.000	-56.42	≤-41.20	38.78	≤54	PASS
				Peak	2483.500	-49.52	≤-21.20	45.68	≤74	PASS
				Peak	2494.400	-47.21	≤-21.20	47.99	≤74	PASS
				Peak	2500.000	-50.98	≤-21.20	44.22	≤74	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-56.69	≤-41.20	38.51	≤54	PASS
				AV	2348.930	-56.01	≤-41.20	39.19	≤54	PASS
				AV	2390.000	-56.55	≤-41.20	38.65	≤54	PASS
				Peak	2310.000	-50.29	≤-21.20	44.91	≤74	PASS
				Peak	2361.005	-47.43	≤-21.20	47.77	≤74	PASS
				Peak	2390.000	-49.69	≤-21.20	45.51	≤74	PASS
		High	2480	AV	2483.500	-53.22	≤-41.20	41.98	≤54	PASS
				AV	2483.520	-53.22	≤-41.20	41.98	≤54	PASS
				AV	2500.000	-56.3	≤-41.20	38.90	≤54	PASS
				Peak	2483.500	-49.12	≤-21.20	46.08	≤74	PASS
				Peak	2498.960	-46.89	≤-21.20	48.31	≤74	PASS
				Peak	2500.000	-49.87	≤-21.20	45.33	≤74	PASS

Note:

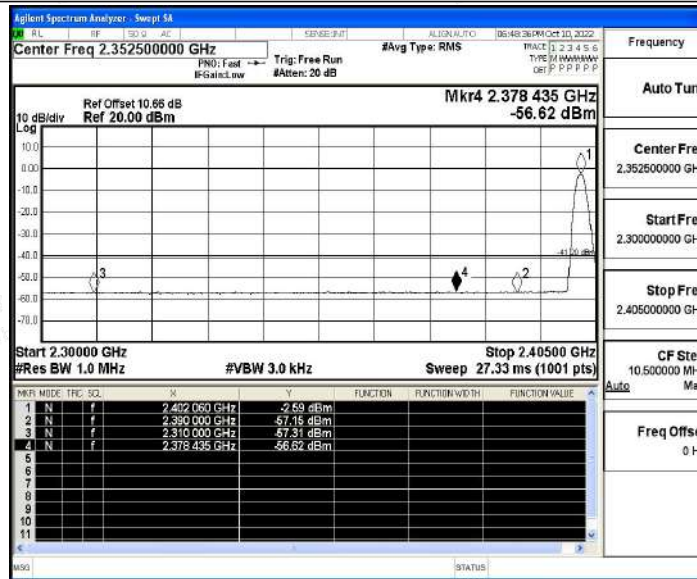
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



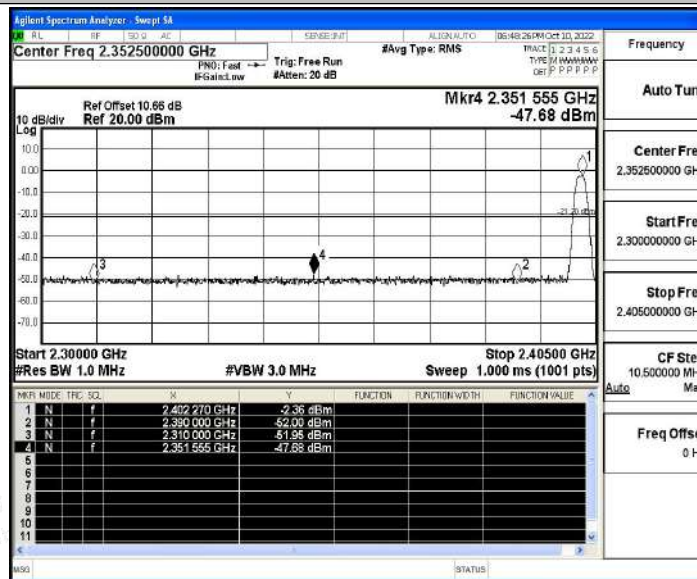


Test Graphs

BLE_1M_Ant1_Low_2402_AV

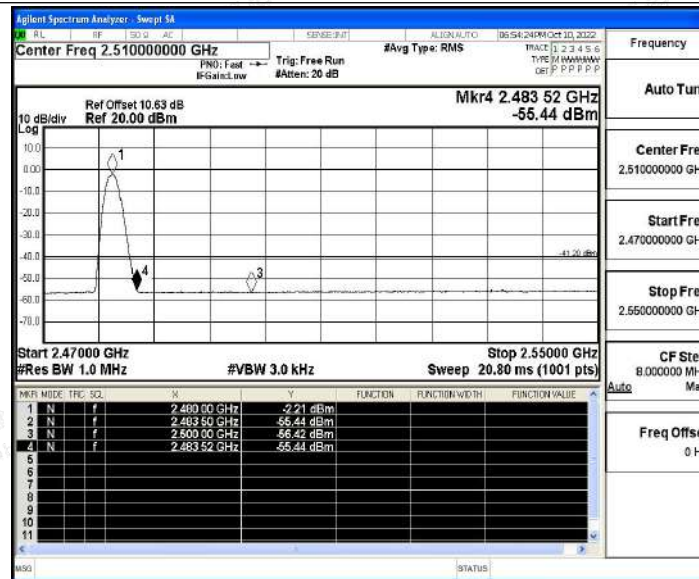


BLE_1M_Ant1_Low_2402_Peak

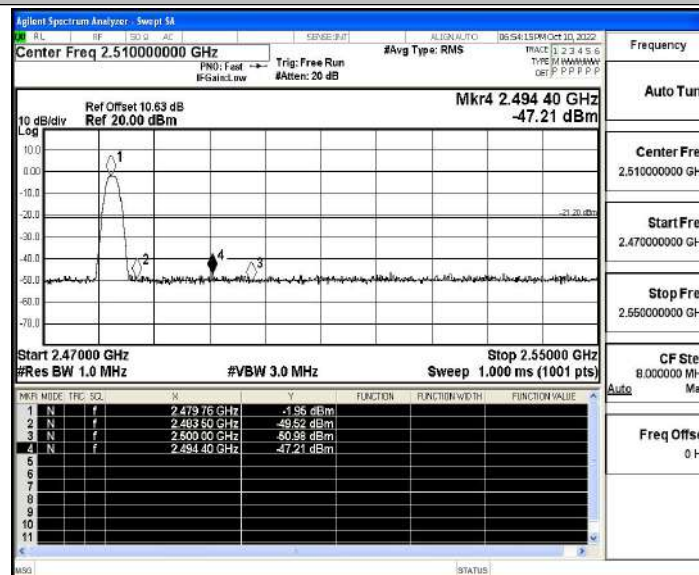


BLE_1M_Ant1_High_2480_AV





BLE_1M_Ant1_High_2480_Peak



BLE_2M_Ant1_Low_2402_AV

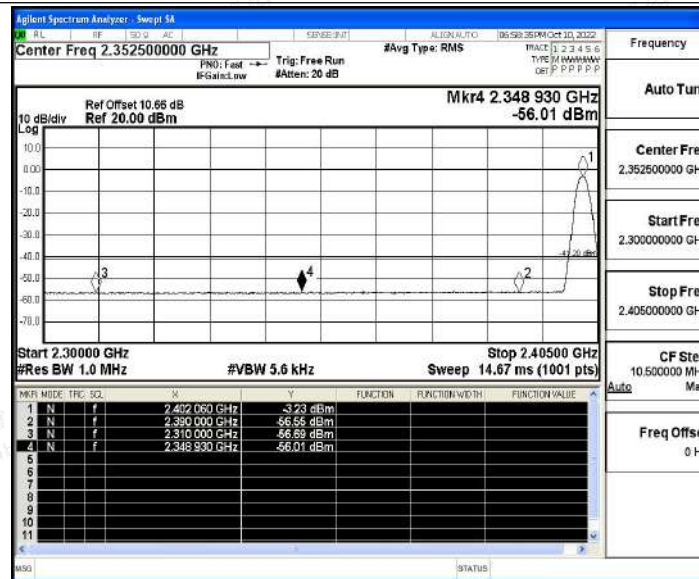


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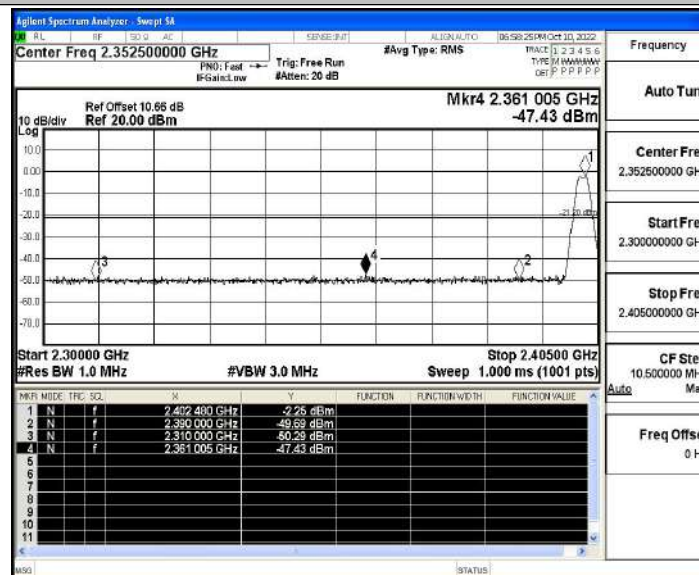
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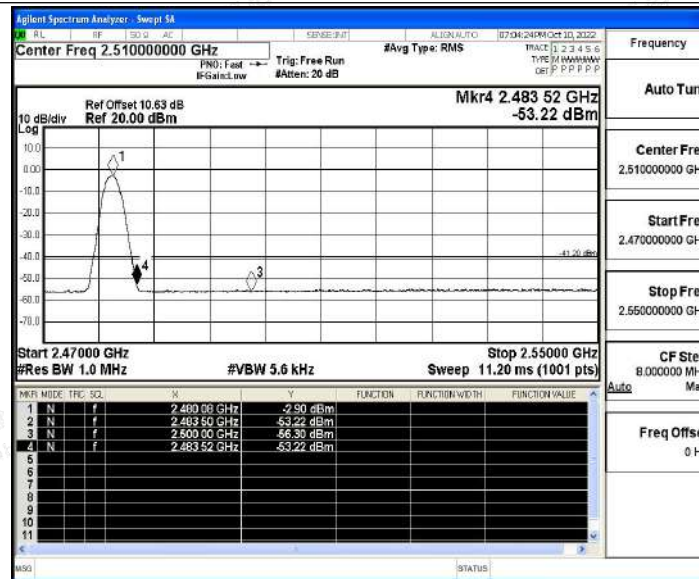


BLE_2M_Ant1_Low_2402_Peak



BLE_2M_Ant1_High_2480_AV





BLE_2M_Ant1_High_2480_Peak

