

Appendix: Bluetooth LE

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Appendix A: DTS Bandwidth

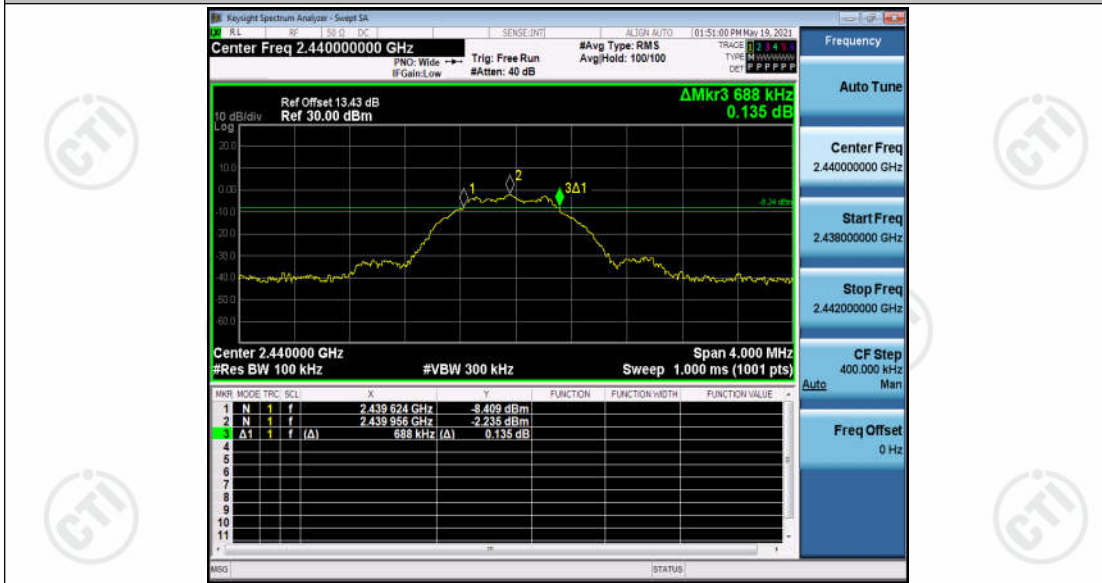
Test Result

Test Mode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.716	2401.580	2402.296	0.5	PASS
		2440	0.688	2439.624	2440.312	0.5	PASS
		2480	0.664	2479.624	2480.288	0.5	PASS

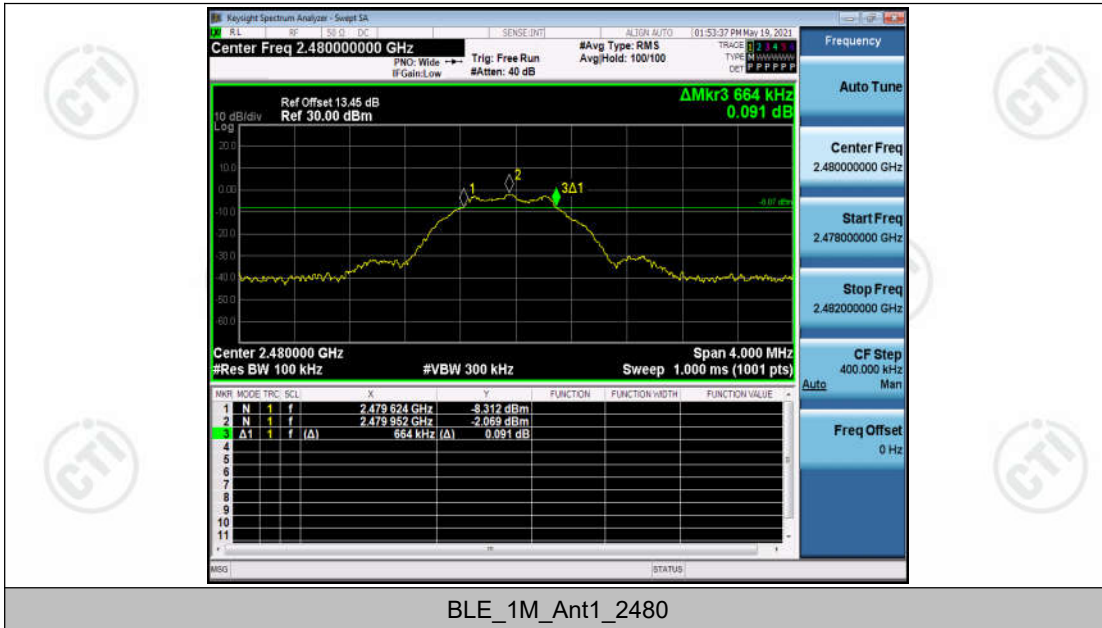
Test Graphs



BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



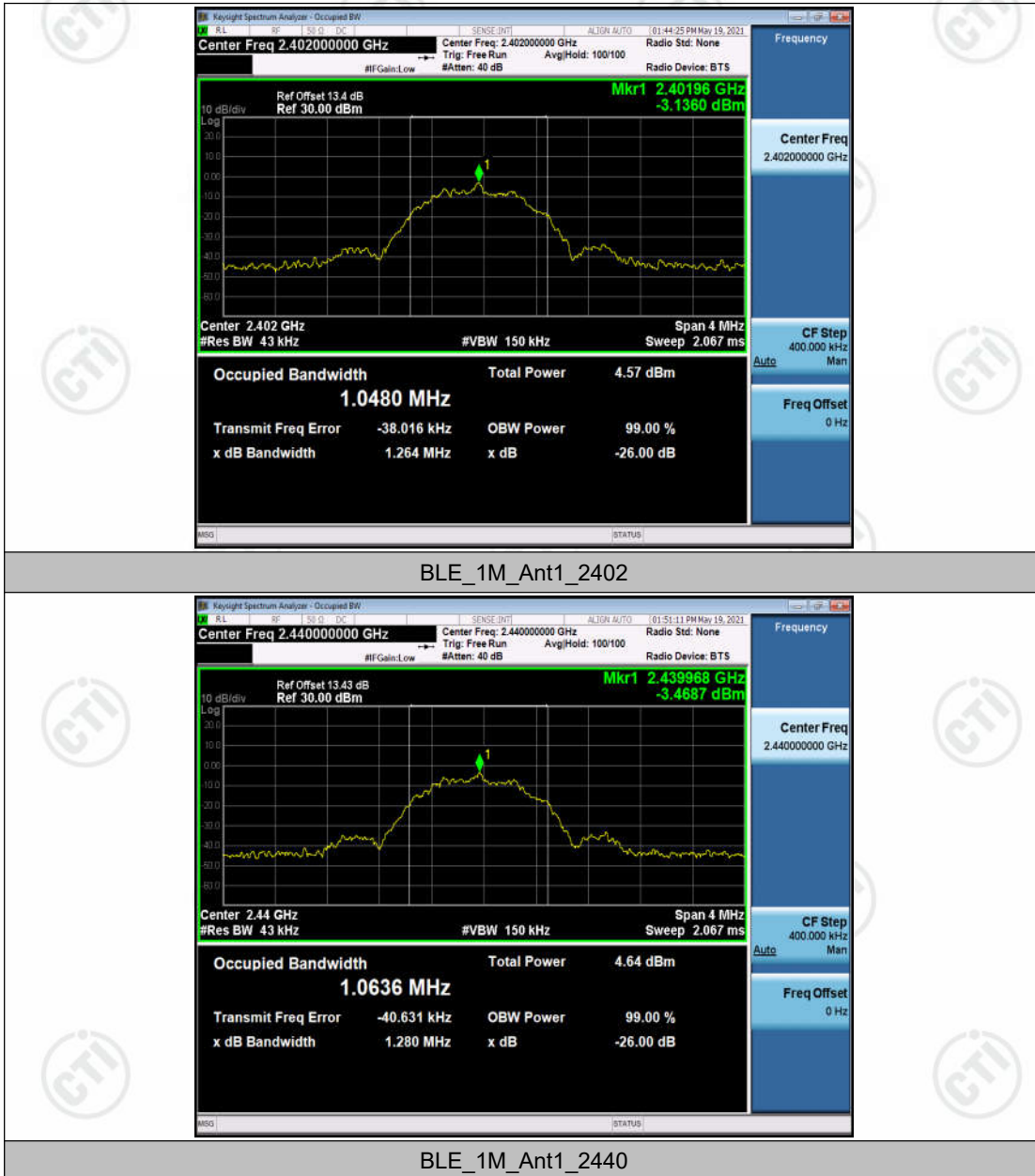
BLE_1M_Ant1_2480

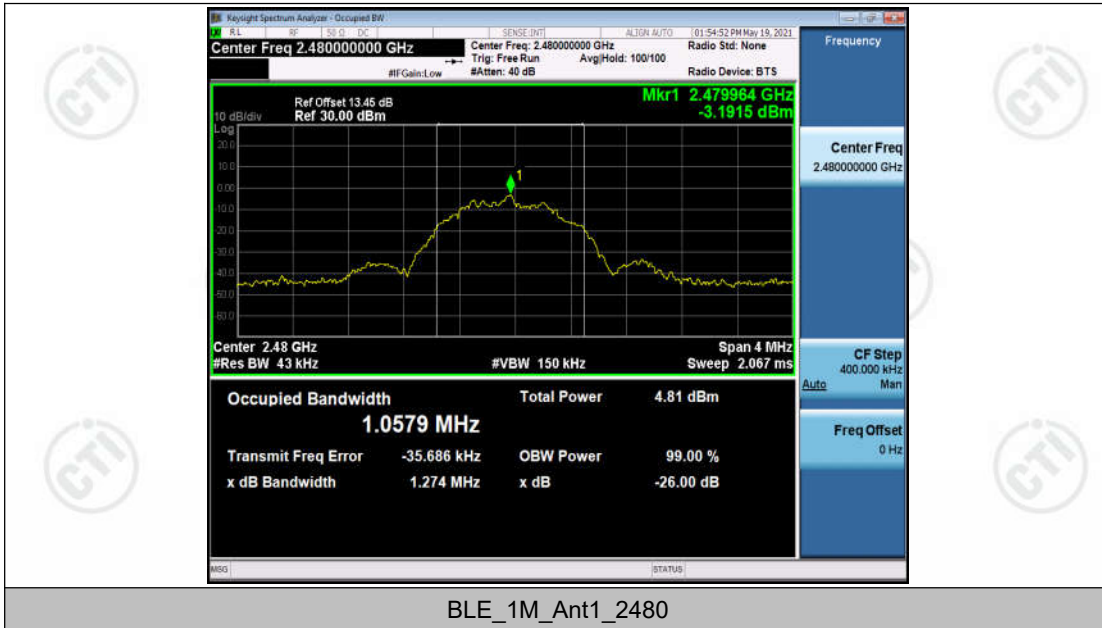
Appendix B: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0480	2401.438	2402.486	---	PASS
		2440	1.0636	2439.428	2440.491	---	PASS
		2480	1.0579	2479.435	2480.493	---	PASS

Test Graphs





BLE_1M_Ant1_2480

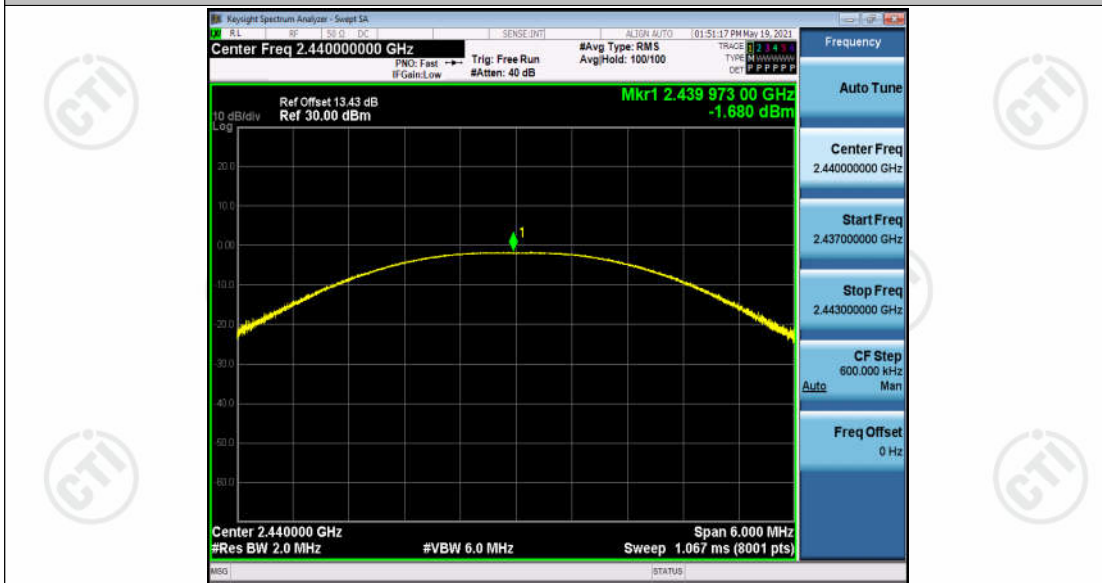
Appendix C: Maximum conducted output power**Test Result**

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-1.94	<=30	PASS
		2440	-1.68	<=30	PASS
		2480	-1.44	<=30	PASS

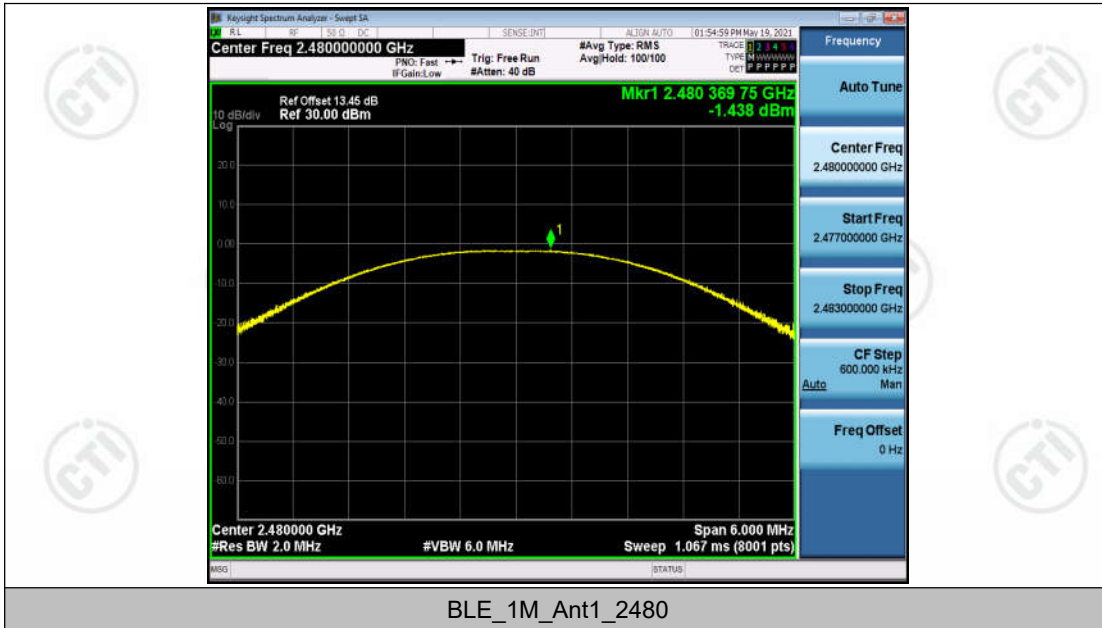
Test Graphs



BLE_1M_Ant1_2402



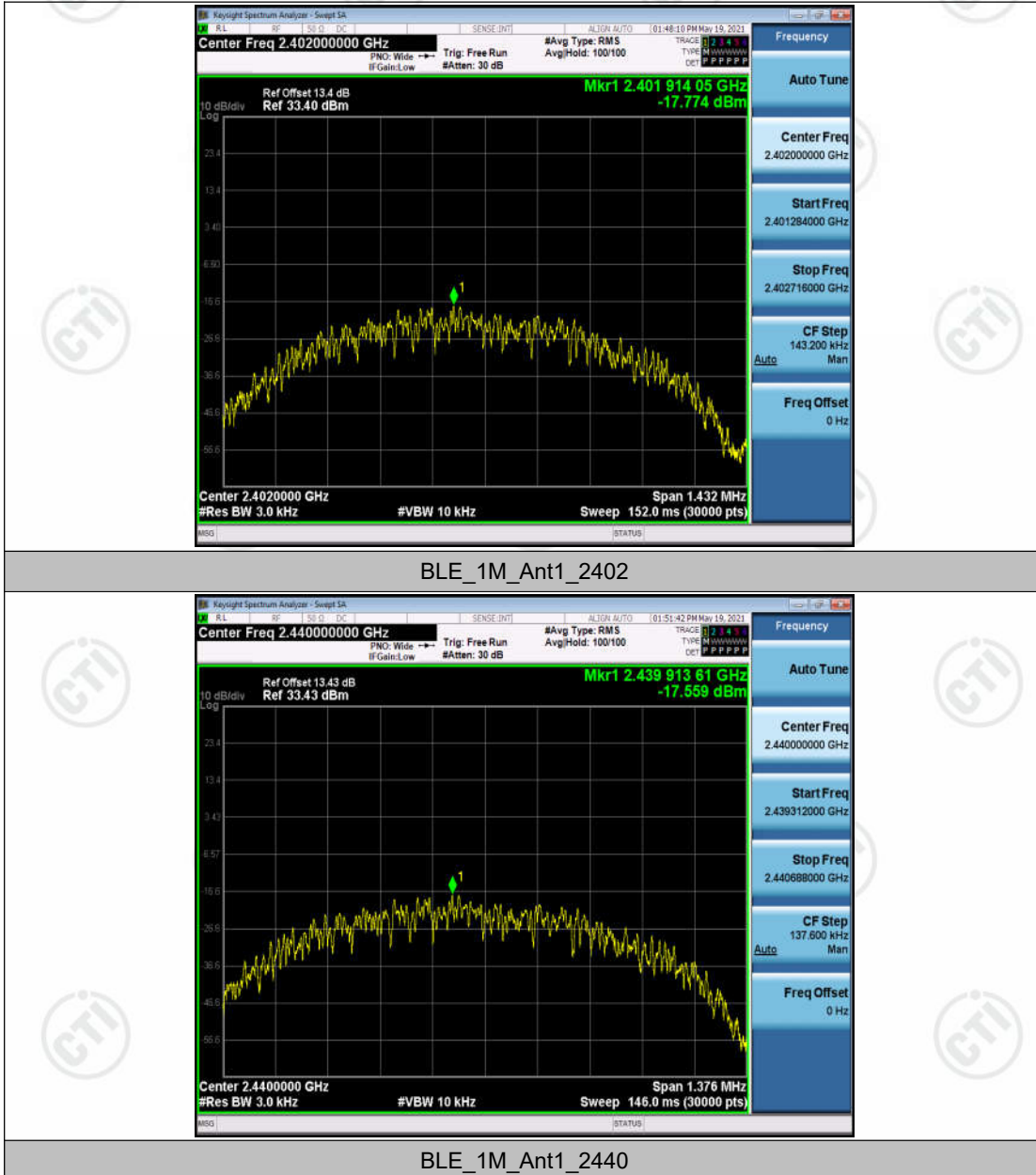
BLE_1M_Ant1_2440

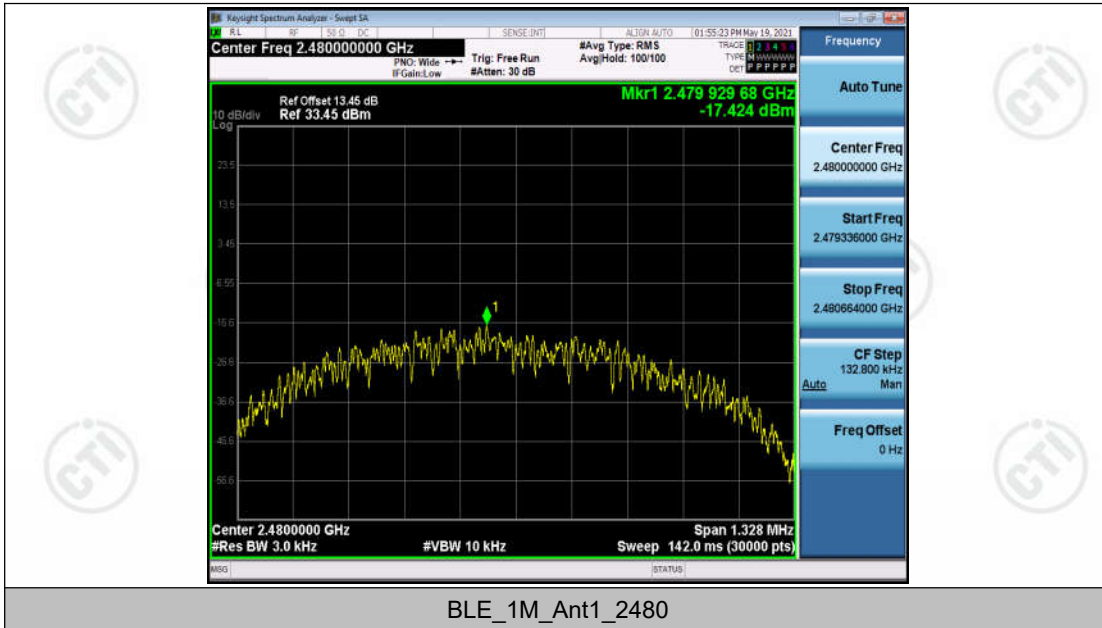


Appendix D: Maximum power spectral density**Test Result**

Test Mode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-17.77	<=8	PASS
		2440	-17.56	<=8	PASS
		2480	-17.42	<=8	PASS

Test Graphs



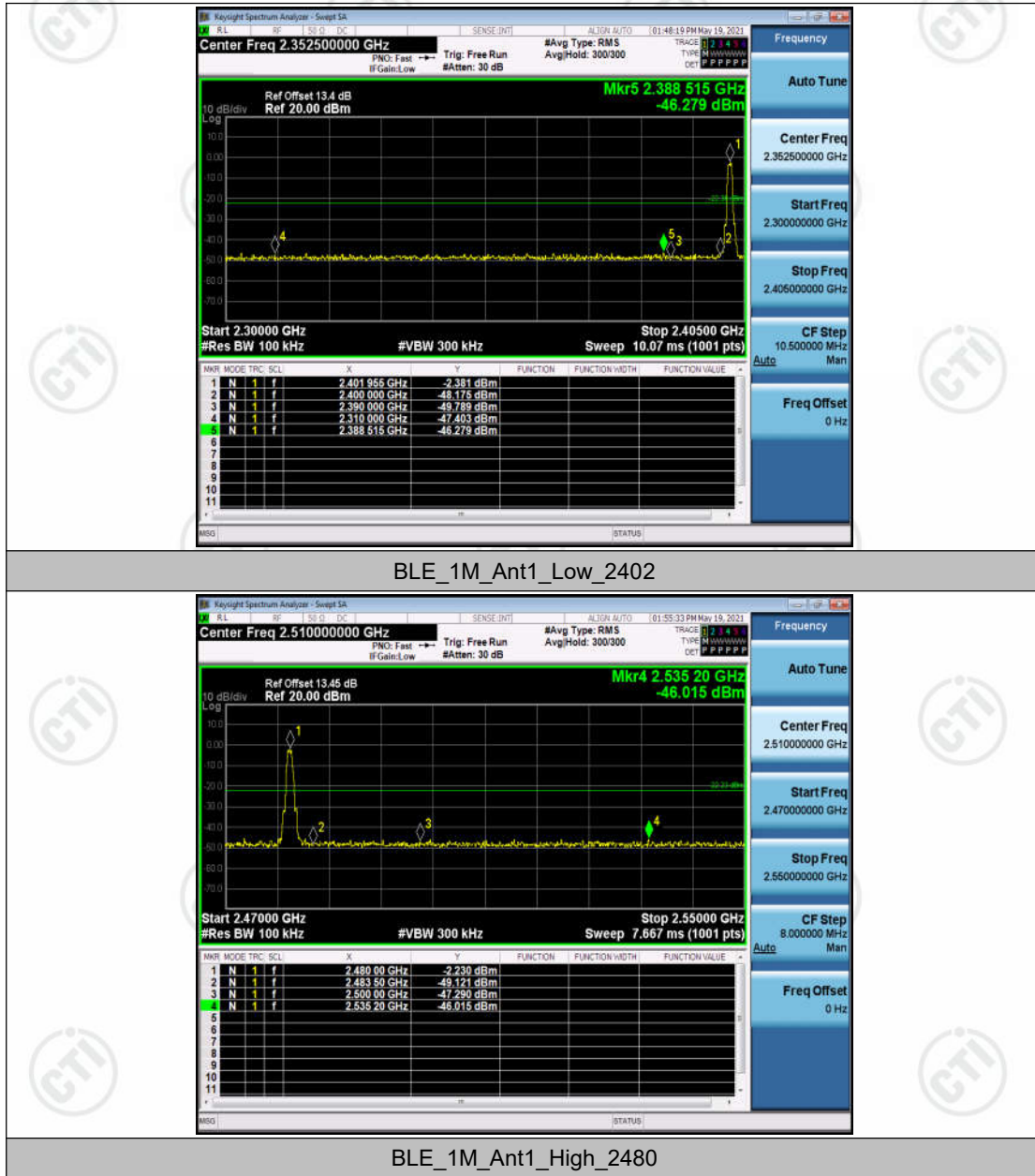


BLE_1M_Ant1_2480

Appendix E: Band edge measurements**Test Result**

Test Mode	Antenna	Ch Name	Channel	Ref Level[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-2.38	-46.28	<=-22.38	PASS
		High	2480	-2.23	-46.02	<=-22.23	PASS

Test Graphs

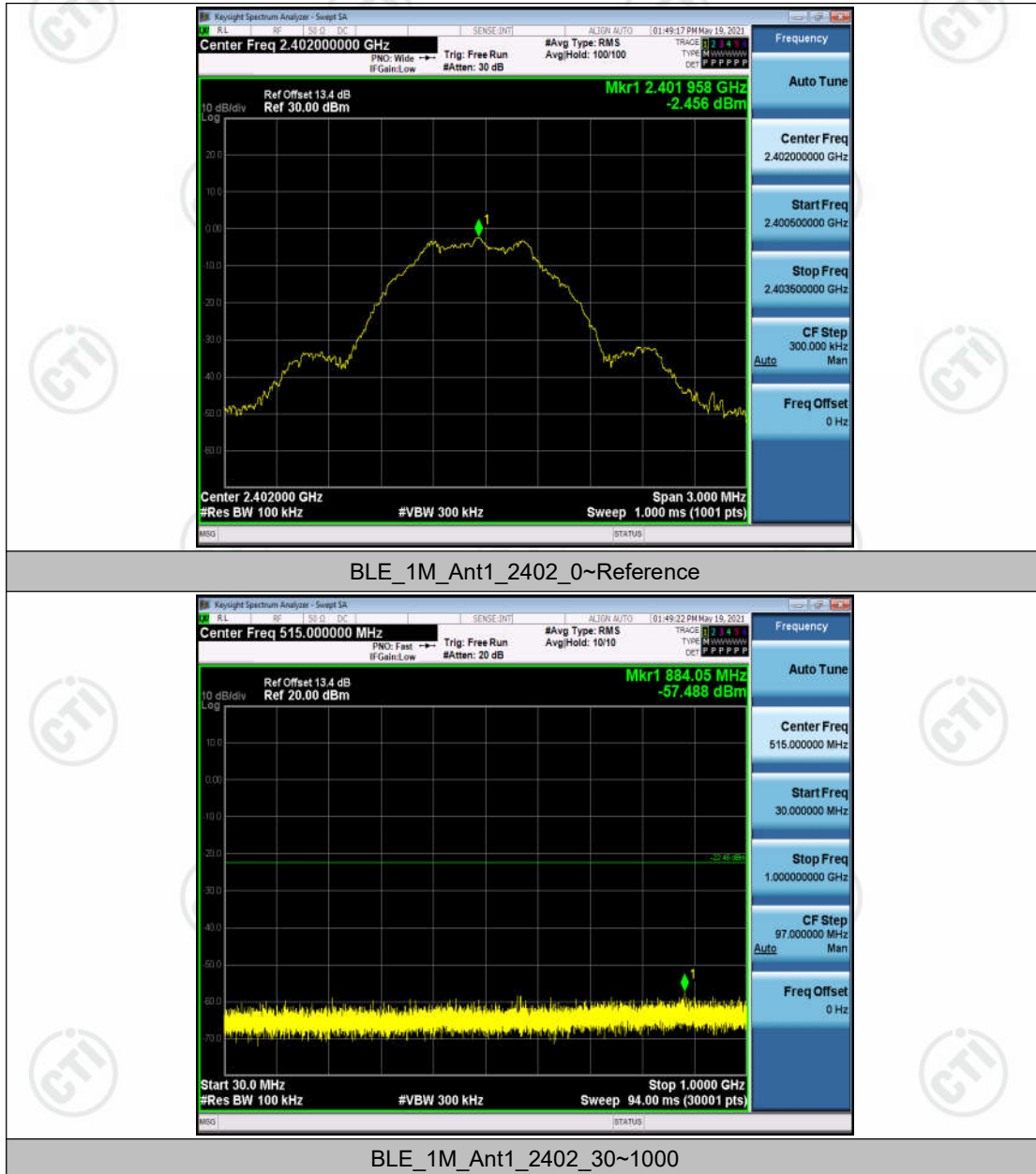


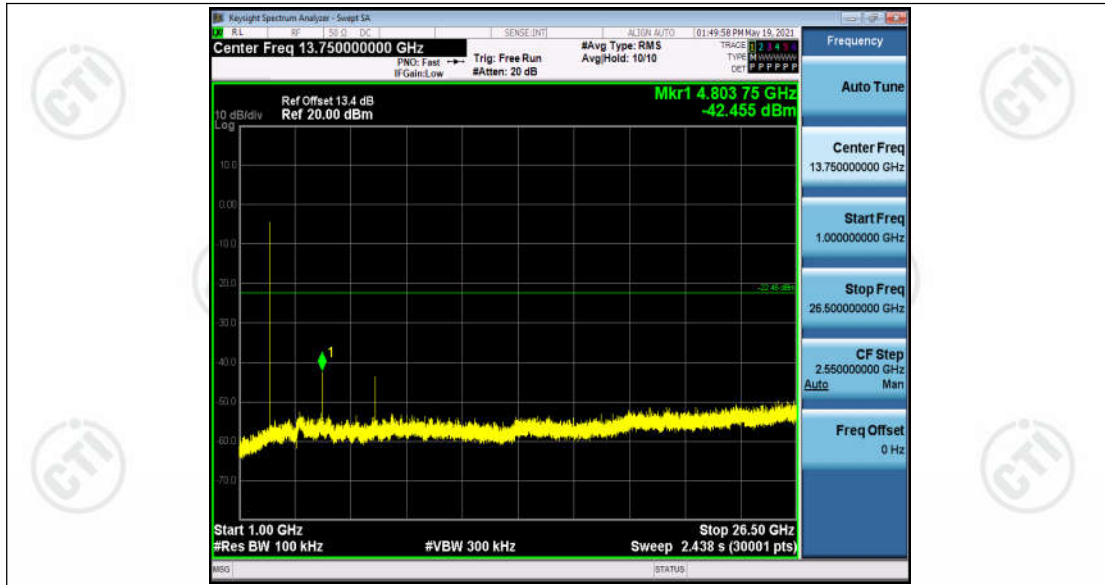
Appendix F: Conducted Spurious Emission

Test Result

Test Mode	Antenna	Channel	Freq Range [MHz]	Ref Level [dBm]	Result [dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-2.46	-2.46	---	PASS
			30~1000	30~1000	-57.488	<=-22.456	PASS
			1000~26500	1000~26500	-42.455	<=-22.456	PASS
		2440	Reference	-2.24	-2.24	---	PASS
			30~1000	30~1000	-50.841	<=-22.24	PASS
			1000~26500	1000~26500	-40.363	<=-22.24	PASS
		2480	Reference	-2.32	-2.32	---	PASS
			30~1000	30~1000	-57.995	<=-22.318	PASS
			1000~26500	1000~26500	-41.376	<=-22.318	PASS

Test Graphs

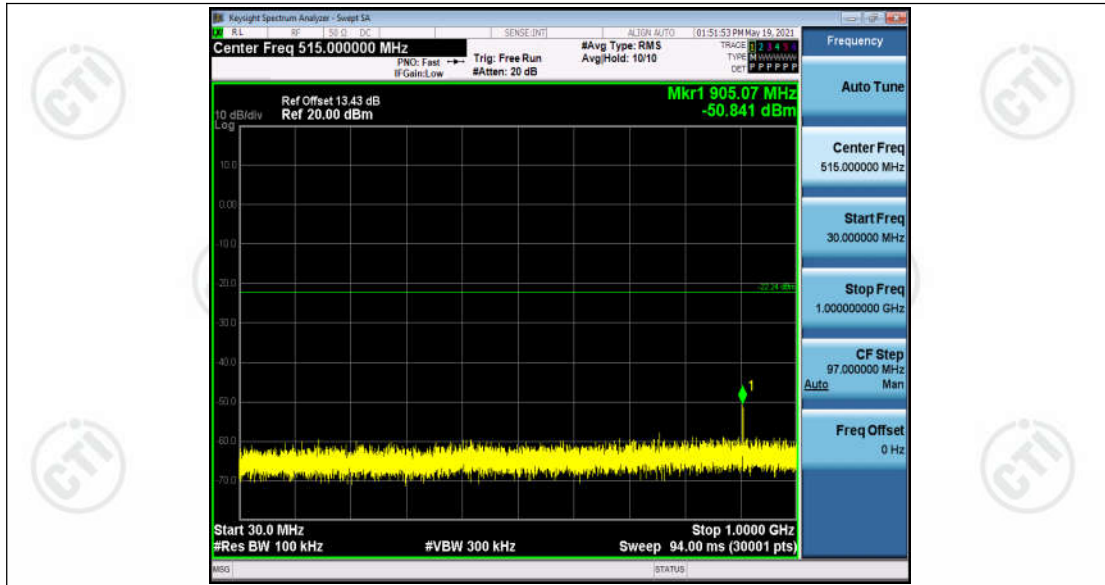




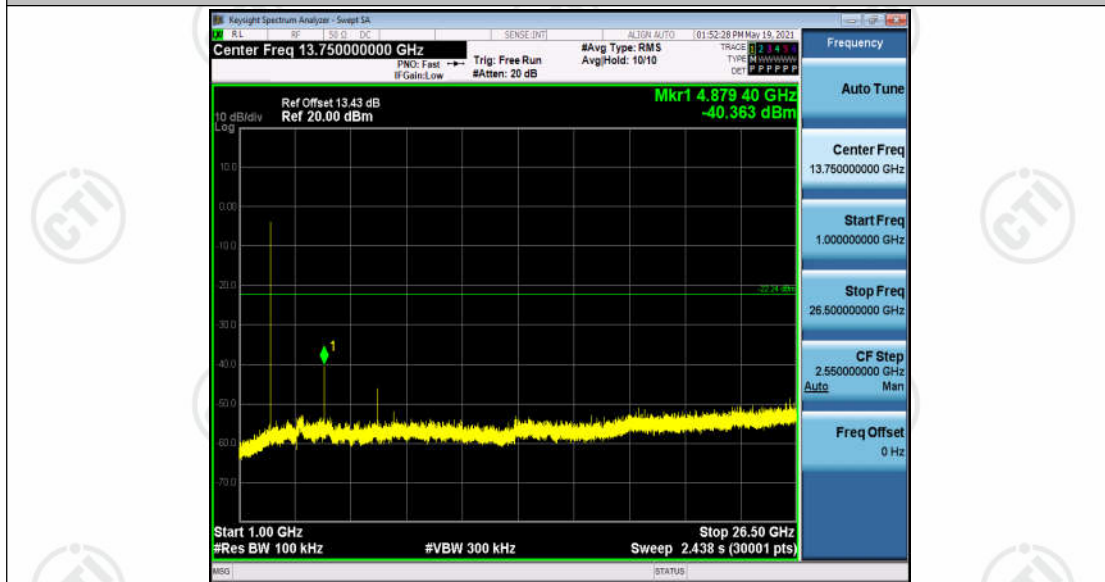
BLE_1M_Ant1_2402_1000~26500



BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



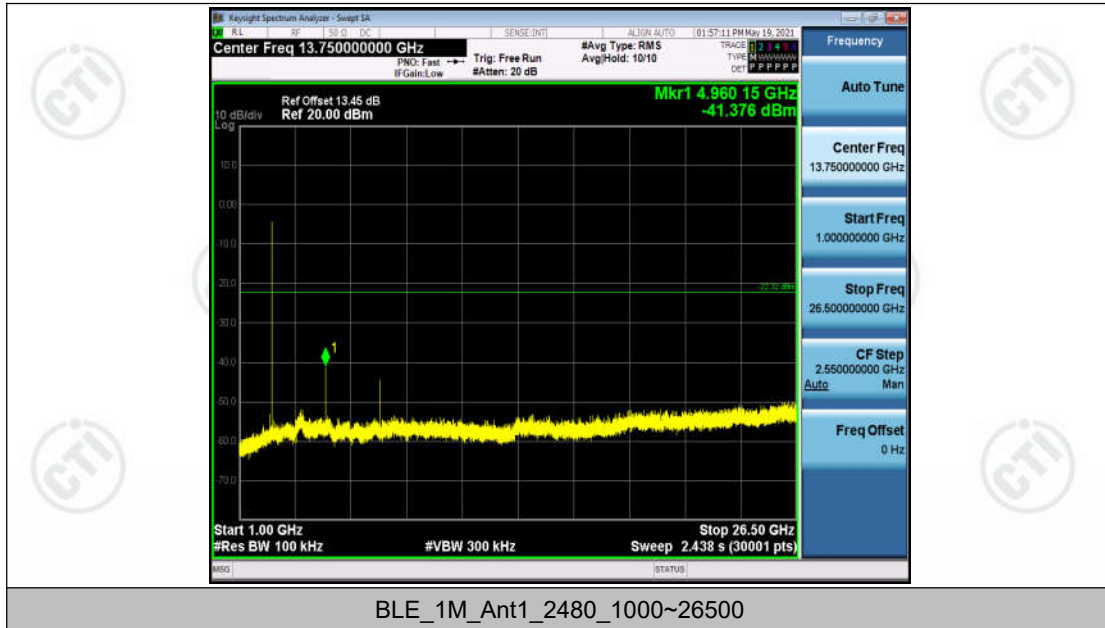
BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



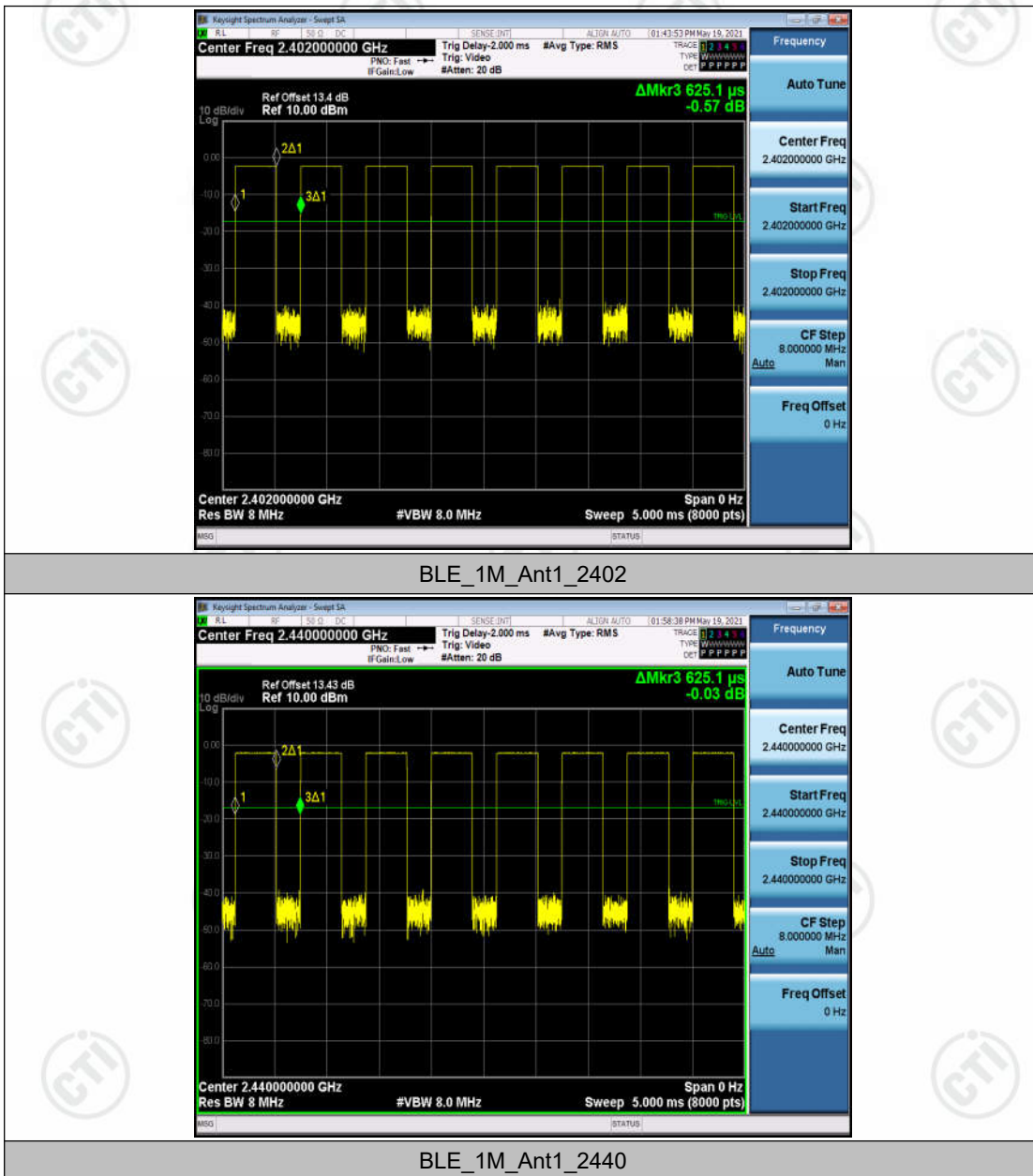
BLE_1M_Ant1_2480_30~1000

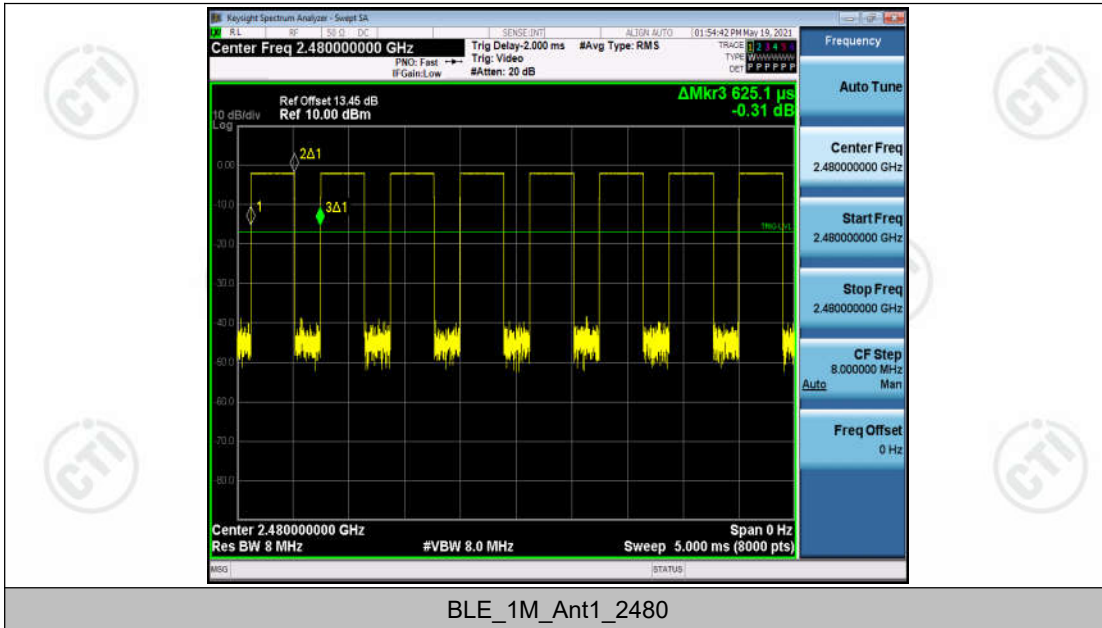


Appendix G: Duty Cycle**Test Result**

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
BLE_1M	Ant1	2402	0.39	0.63	63.00	---	PASS
		2440	0.39	0.63	63.10	---	PASS
		2480	0.39	0.63	63.00	---	PASS

Test Graphs





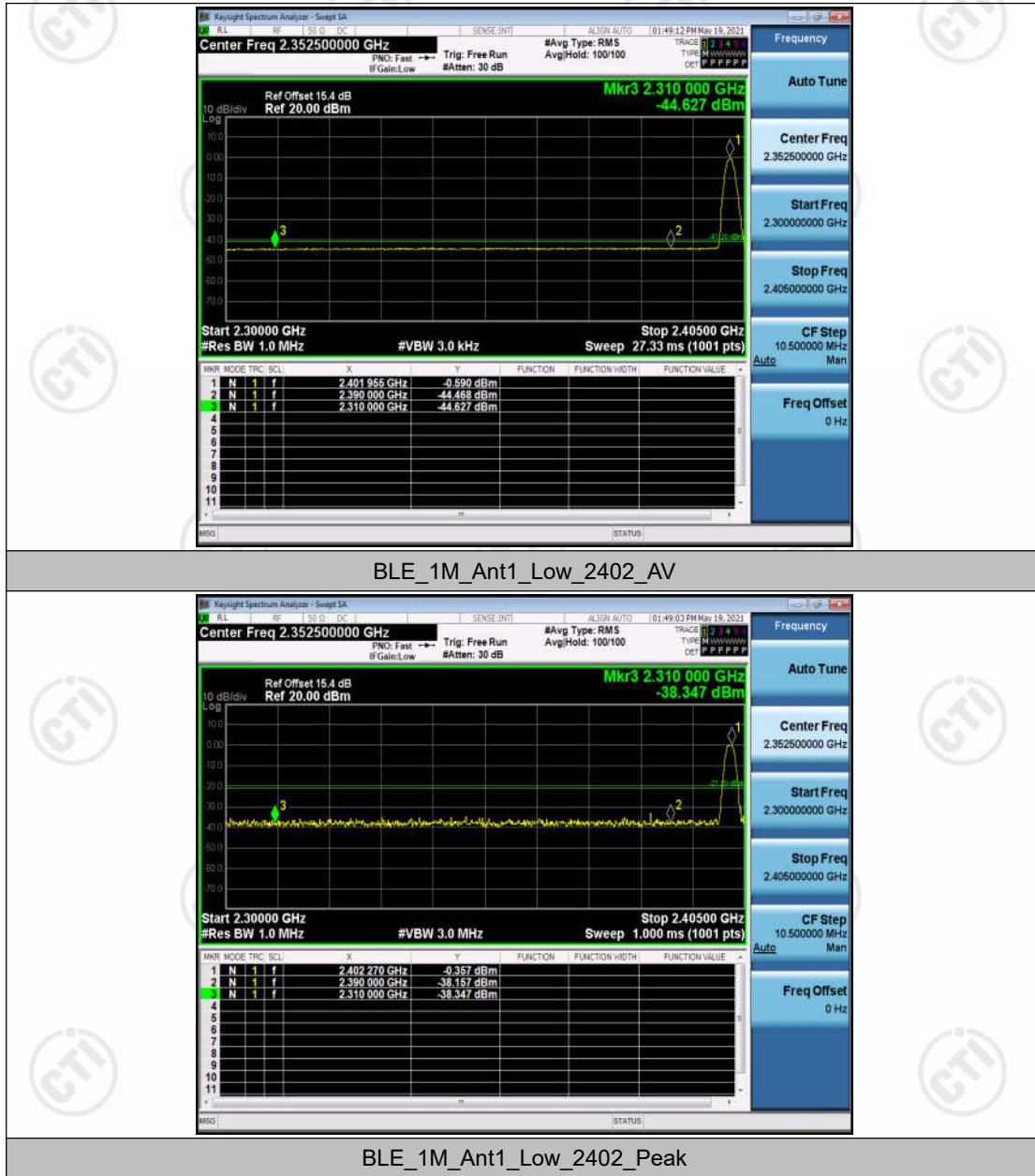
Appendix H: Emissions in Restricted Bands**Test Result**

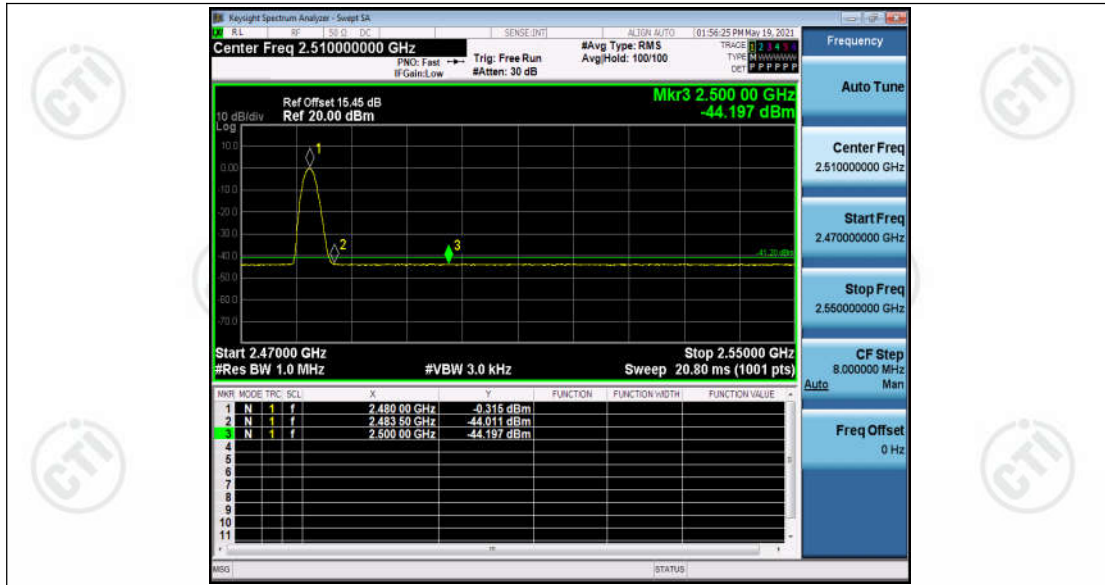
Test Mode	Antenna	Ch Name	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-44.63	<=-41.20	PASS
				AV	2390.000	-44.47	<=-41.20	PASS
				Peak	2310.000	-38.35	<=-21.20	PASS
				Peak	2390.000	-38.16	<=-21.20	PASS
		High	2480	AV	2483.500	-44.01	<=-41.20	PASS
				AV	2500.000	-44.2	<=-41.20	PASS
				Peak	2483.500	-37.49	<=-21.20	PASS
				Peak	2500.000	-36.54	<=-21.20	PASS

Note:

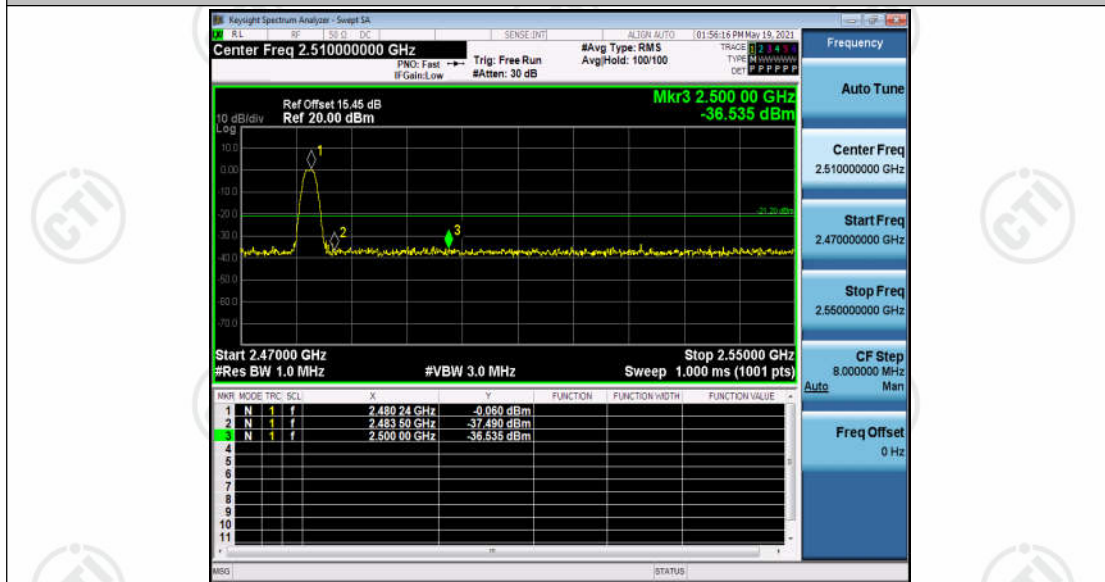
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak