

Case No. : <u>GTS20241227012-29-01</u>
Ambient Condition: <u>22</u> °C, <u>48</u> %RH
According Standard: ■Part15C
Test Date: <u>2025.7.28-2025.8.11</u> Test Engineer: <u>Evan ouyang</u>

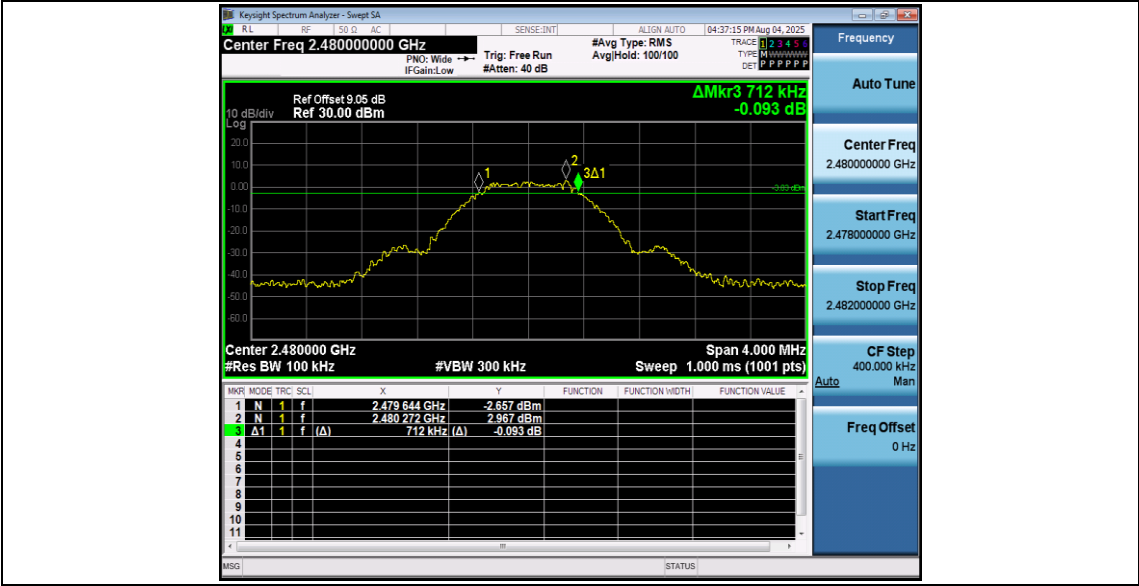
AppendixA.1: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	0.684	2401.660	2402.344	0.5	PASS
		2440	0.652	2439.692	2440.344	0.5	PASS
		2480	0.712	2479.644	2480.356	0.5	PASS

Test Graphs





AppendixA.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	1.0433	2401.4885	2402.5318	---	---
		2440	1.0343	2439.4967	2440.5310	---	---
		2480	1.0447	2479.4851	2480.5298	---	---

Test Graphs





AppendixA.3: Maximum conducted output power

Test Result Peak

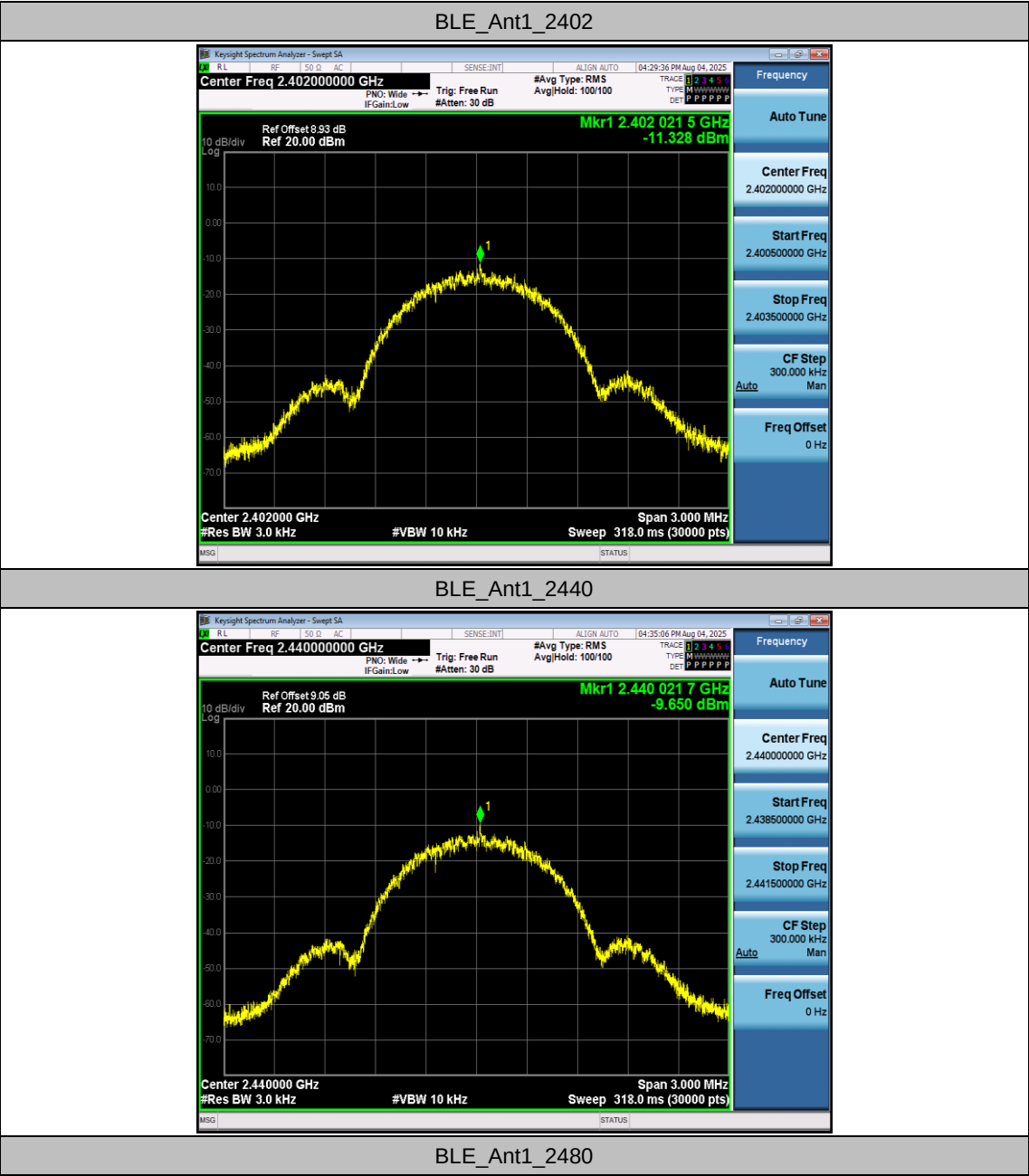
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE	Ant1	2402	3.98	≤30	PASS
		2440	5.25	≤30	PASS
		2480	5.13	≤30	PASS

AppendixA.4: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant1	2402	-11.33	≤8.00	PASS
		2440	-9.65	≤8.00	PASS
		2480	-10.04	≤8.00	PASS

Test Graphs



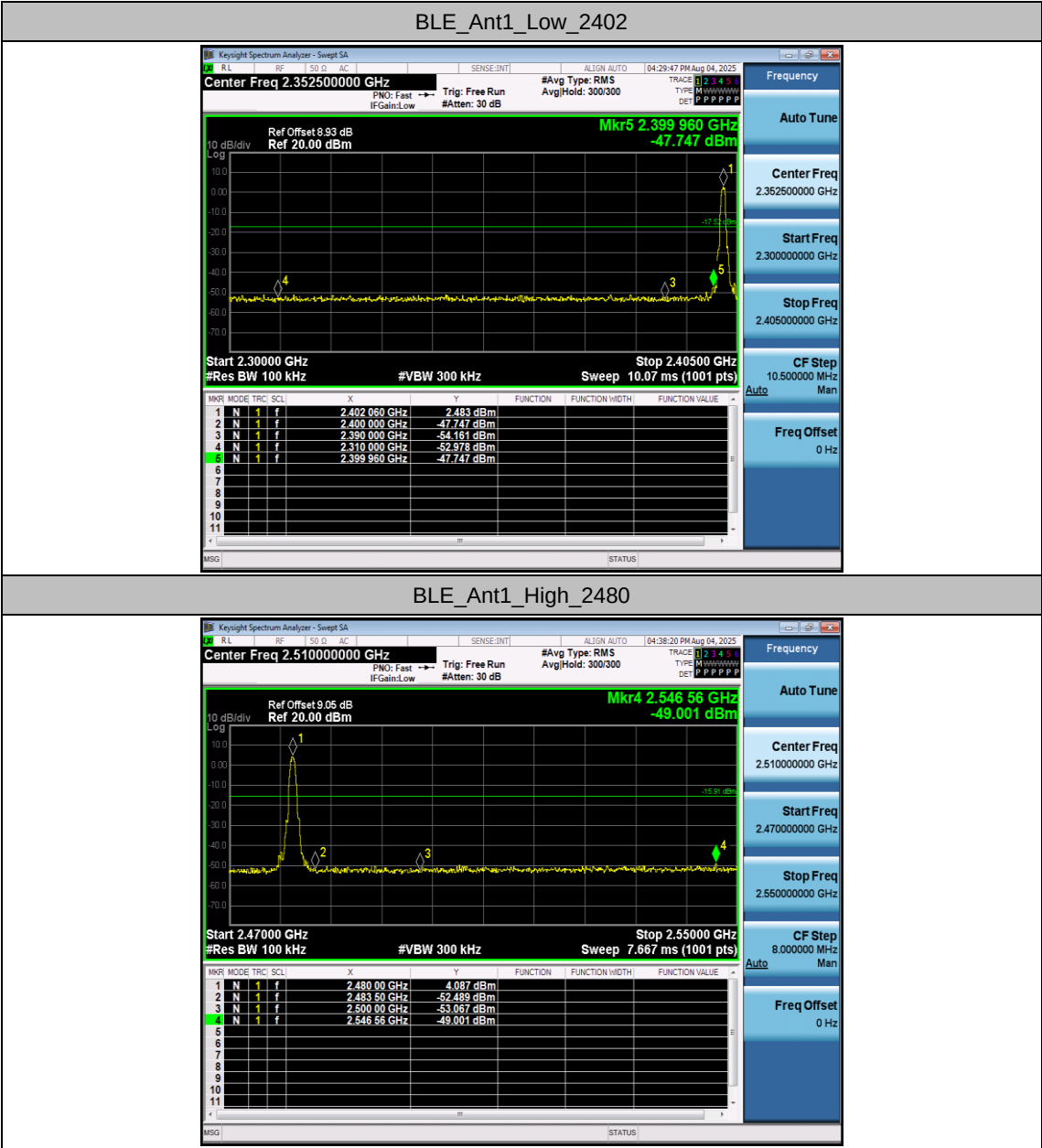


Appendix A.5: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	Low	2402	2.48	-47.75	≤ -17.52	PASS
		High	2480	4.09	-49	≤ -15.91	PASS

Test Graphs

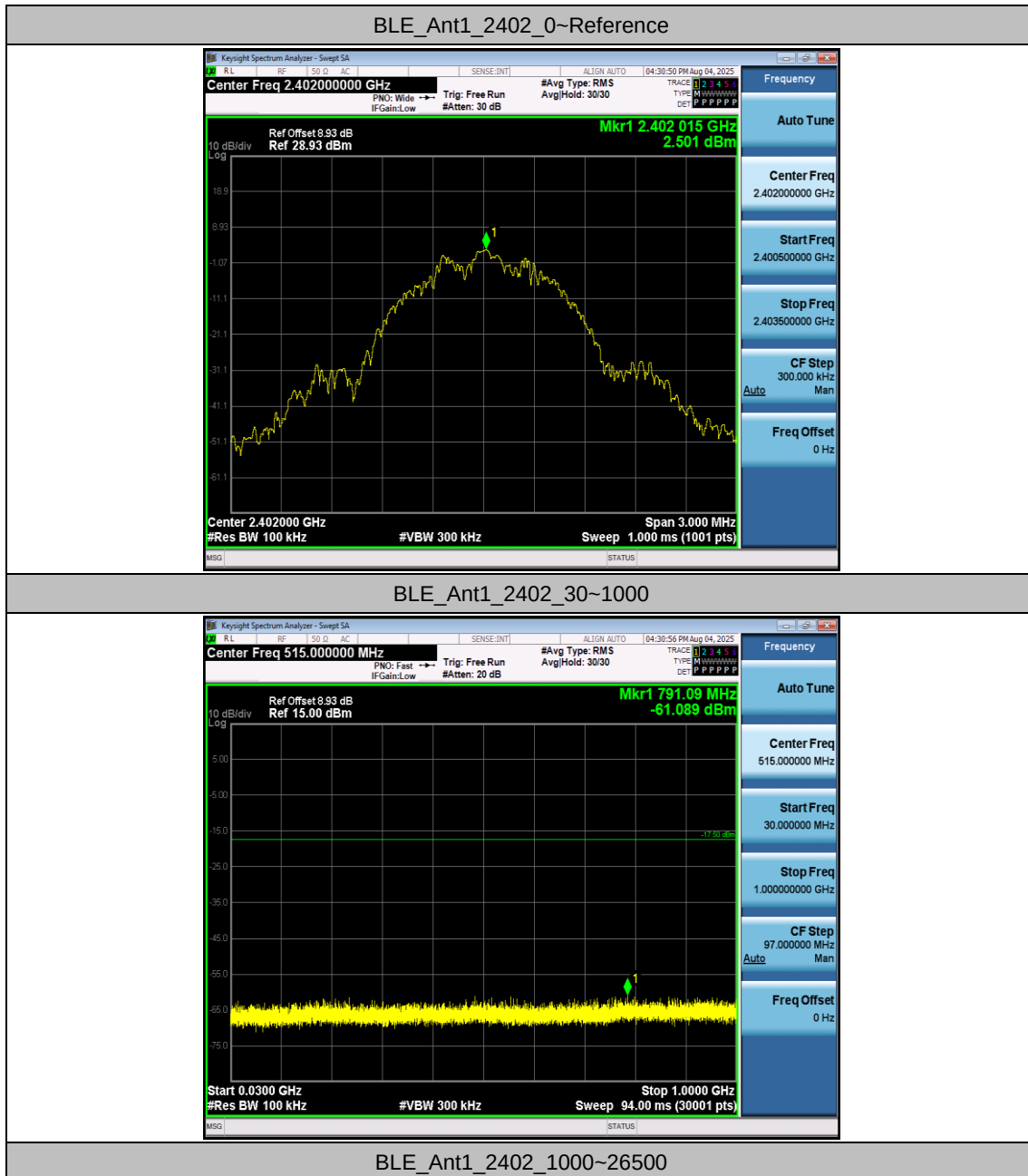


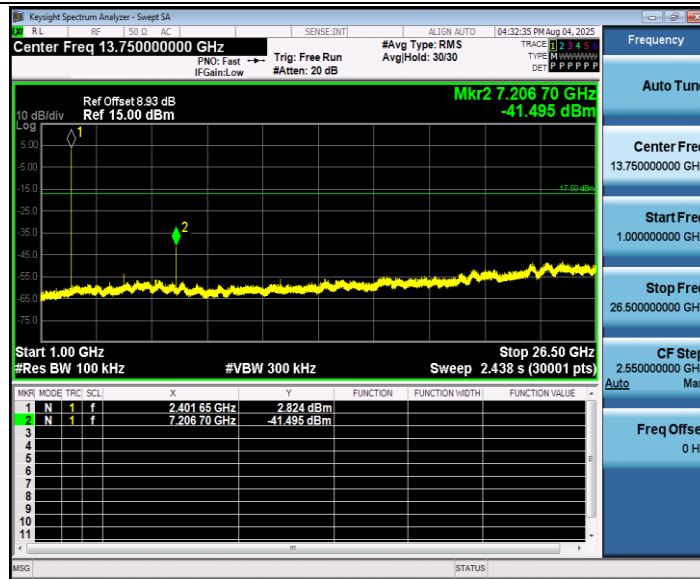
Appendix A.6: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	Reference	2.50	2.50	---	PASS
			30~1000	2.50	-61.09	≤ -17.5	PASS
			1000~26500	2.50	-41.5	≤ -17.5	PASS
		2440	Reference	2.41	2.41	---	PASS
			30~1000	2.41	-60.22	≤ -17.59	PASS
			1000~26500	2.41	-39.4	≤ -17.59	PASS
		2480	Reference	3.64	3.64	---	PASS
			30~1000	3.64	-60.61	≤ -16.36	PASS
			1000~26500	3.64	-43.24	≤ -16.36	PASS

Test Graphs

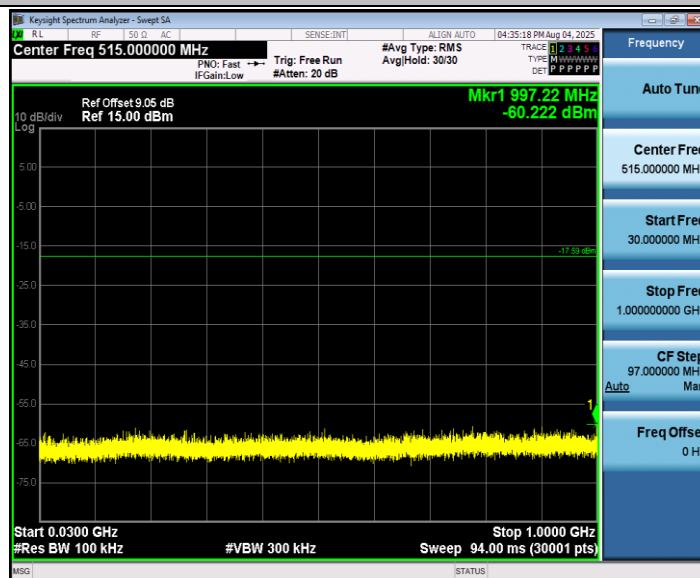


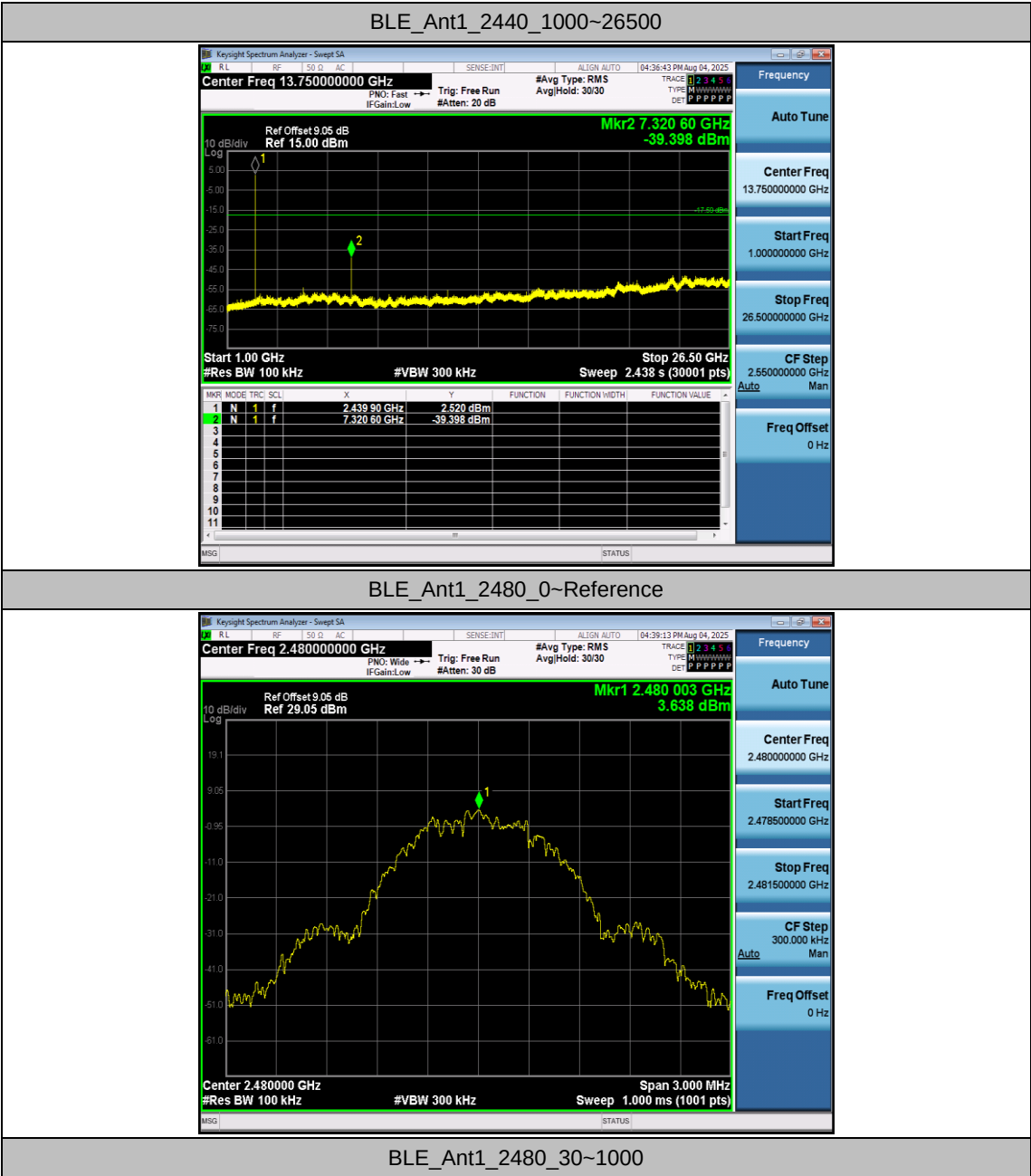


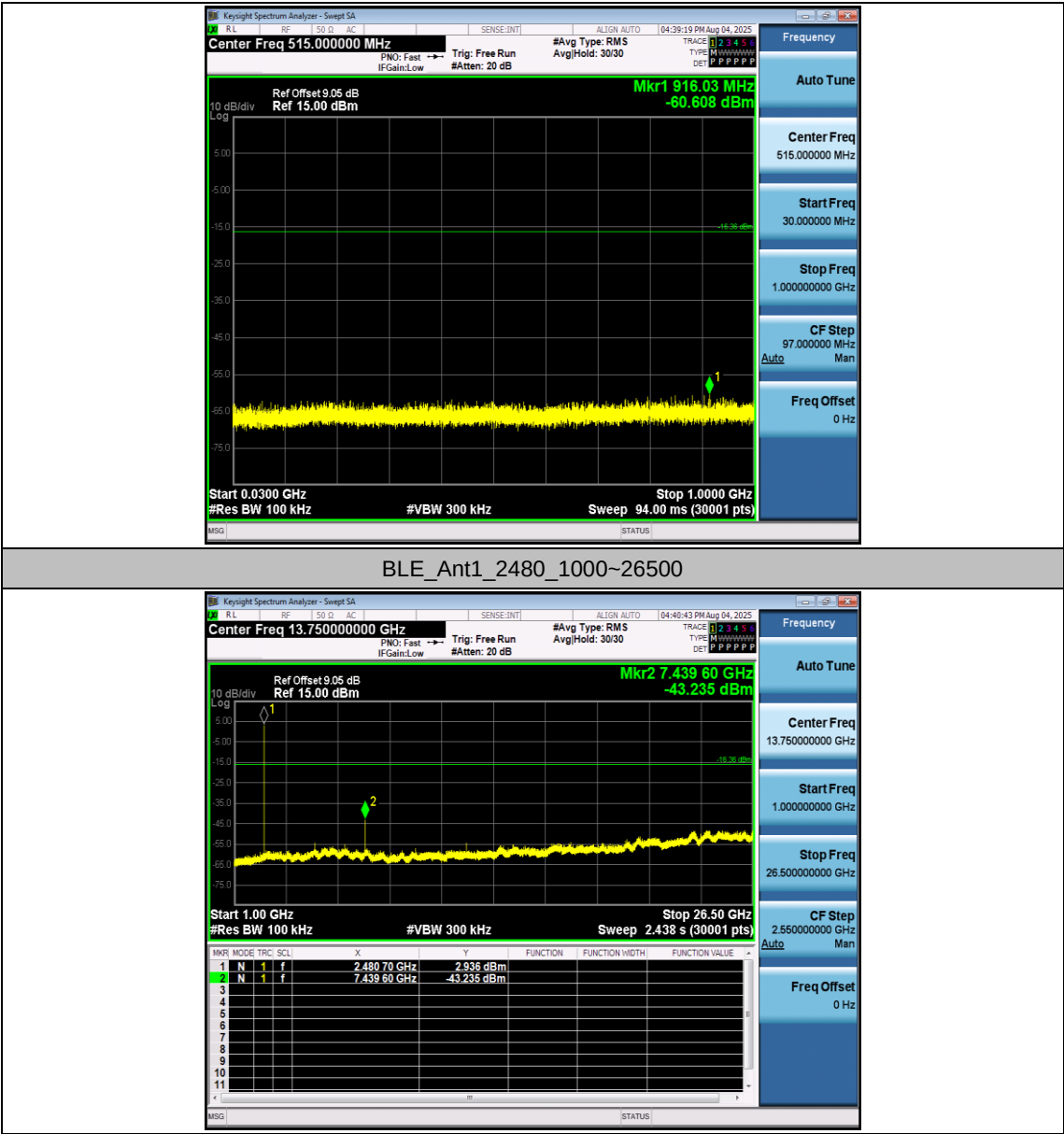
BLE_Ant1_2440_0~Reference



BLE_Ant1_2440_30~1000





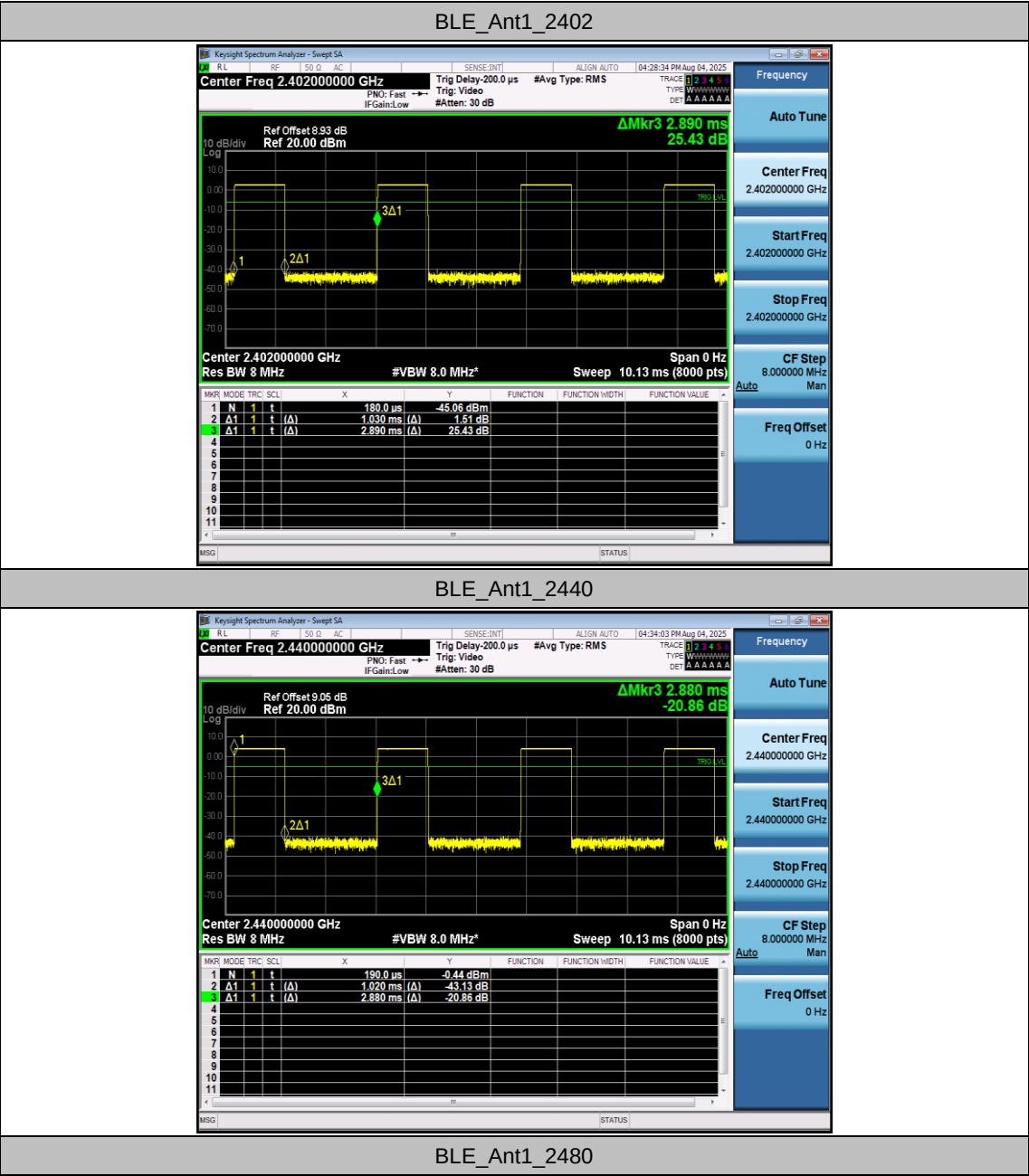


AppendixA.7: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	Duty Cycle Factor[dB]	1/T Factor[KHz]
BLE	Ant1	2402	1.03	2.89	0.3564	35.64	4.48	0.97
		2440	1.02	2.88	0.3542	35.42	4.51	0.98
		2480	1.02	2.89	0.3529	35.29	4.52	0.98

Test Graphs



Appendix A.8: Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE	Ant1	Low	2402	AV	2310.000	-49.88	≤-41.20	45.32	≤54	PASS
				AV	2386.310	-49.52	≤-41.20	45.68	≤54	PASS
				AV	2390.000	-49.64	≤-41.20	45.56	≤54	PASS
				Peak	2310.000	-41.65	≤-21.20	53.55	≤74	PASS
				Peak	2332.445	-39.12	≤-21.20	56.08	≤74	PASS
				Peak	2390.000	-41.36	≤-21.20	53.84	≤74	PASS
		High	2480	AV	2483.500	-47.92	≤-41.20	47.28	≤54	PASS
				AV	2483.520	-47.92	≤-41.20	47.28	≤54	PASS
				AV	2500.000	-48.77	≤-41.20	46.43	≤54	PASS
				Peak	2483.500	-42.17	≤-21.20	53.03	≤74	PASS
				Peak	2495.920	-39.34	≤-21.20	55.86	≤74	PASS
				Peak	2500.000	-40.83	≤-21.20	54.37	≤74	PASS

Note:

1. The Antenna Gain is compensated in the graph.
2. The Duty Cycle Factor and RBW Factor is compensated in the graph.
3. 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

