

Case No. : CTA24051100202	
Ambient Condition: 22 °C, 53 %RH	
According Standard: ■Part15C	
Test Date: 2024.4.8	Test Engineer: Evan ouyang

Appendix B.1: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	0.764	2401.624	2402.388	0.5	PASS
		2440	0.724	2439.628	2440.352	0.5	PASS
		2480	0.736	2479.628	2480.364	0.5	PASS

Test Graphs



BLE_Ant1_2440

Frequency

Auto Tune

Center Freq
2.440000000 GHzStart Freq
2.438000000 GHzStop Freq
2.442000000 GHzCF Step
400.000 kHz
Auto ManFreq Offset
0 Hz

BLE_Ant1_2480

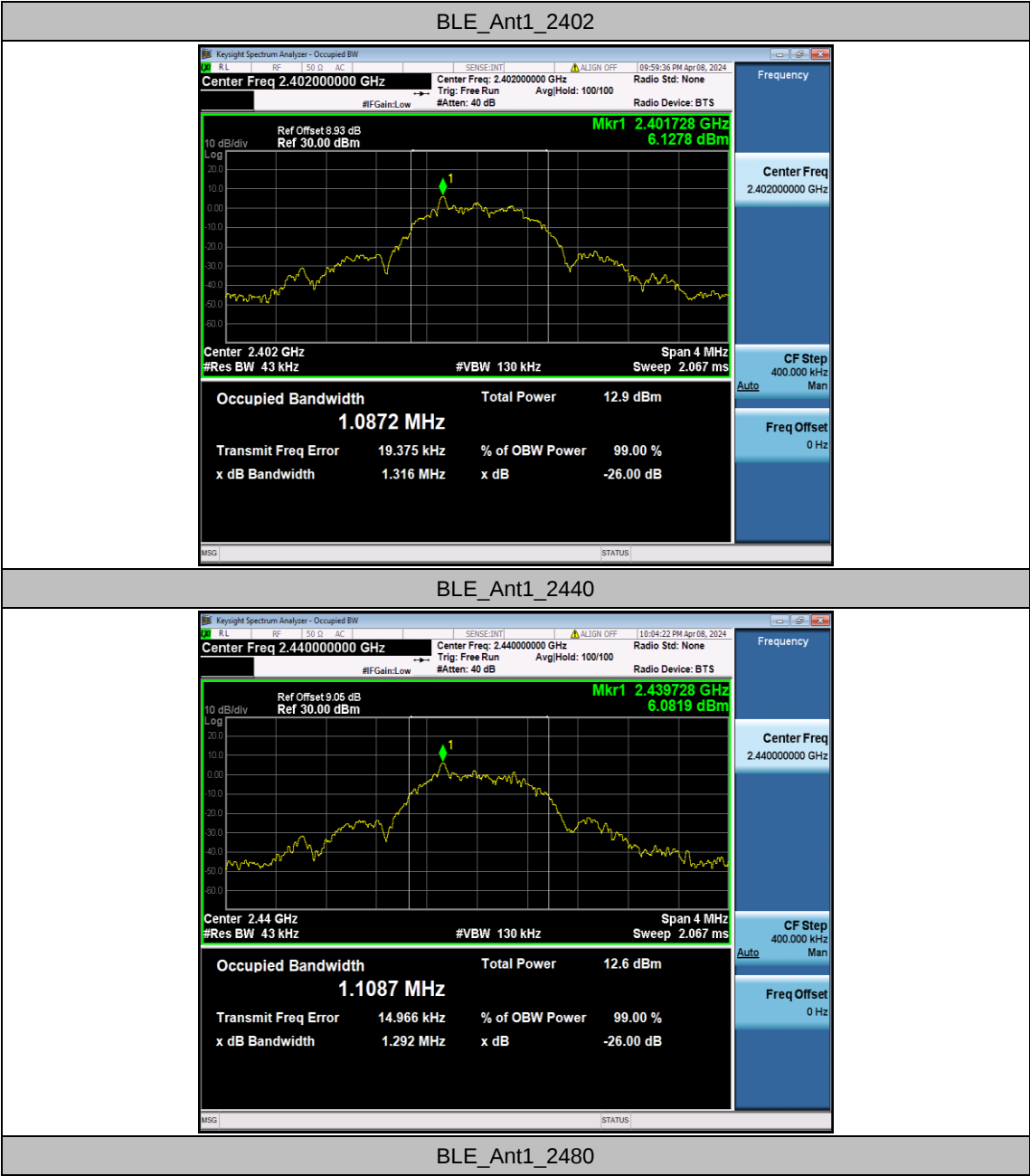


Appendix B.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	1.0872	2401.4758	2402.5630	---	---
		2440	1.1087	2439.4606	2440.5693	---	---
		2480	1.1030	2479.4650	2480.5680	---	---

Test Graphs





Appendix B.3: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE	Ant1	2402	6.45	≤30	PASS
		2440	6.35	≤30	PASS
		2480	5.56	≤30	PASS

Appendix B.4: Maximum power spectral density

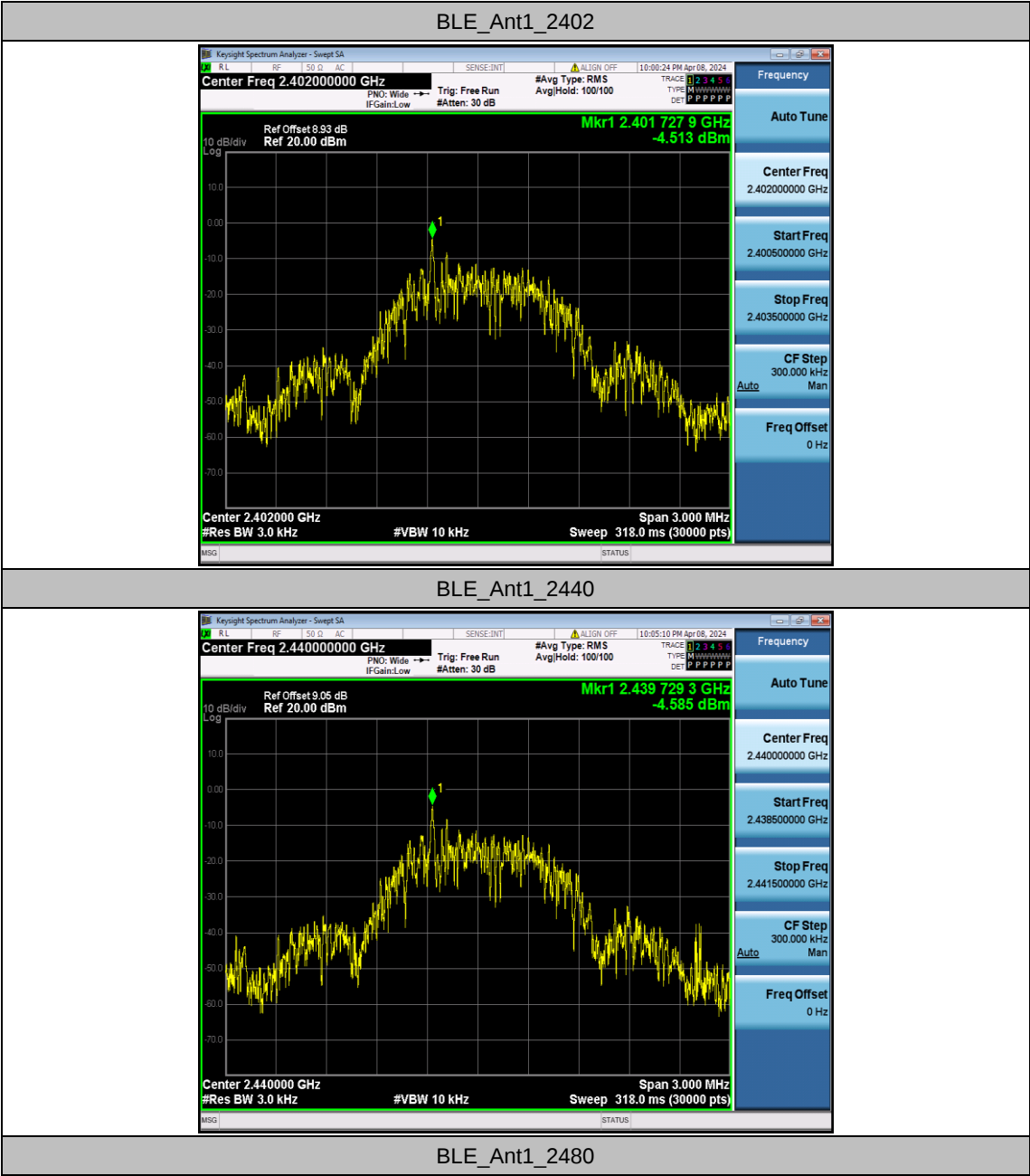
Test Result

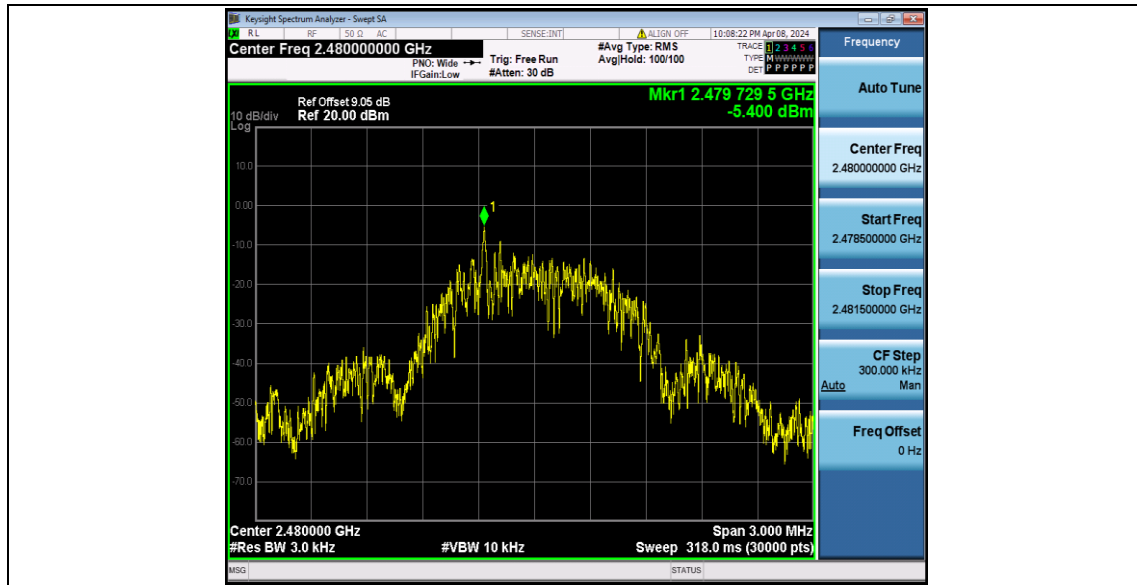
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant1	2402	-4.51	≤8.00	PASS
		2440	-4.59	≤8.00	PASS
		2480	-5.40	≤8.00	PASS

Note:

1. The Duty Cycle Factor and RBW Factor is compensated in the graph.

Test Graphs



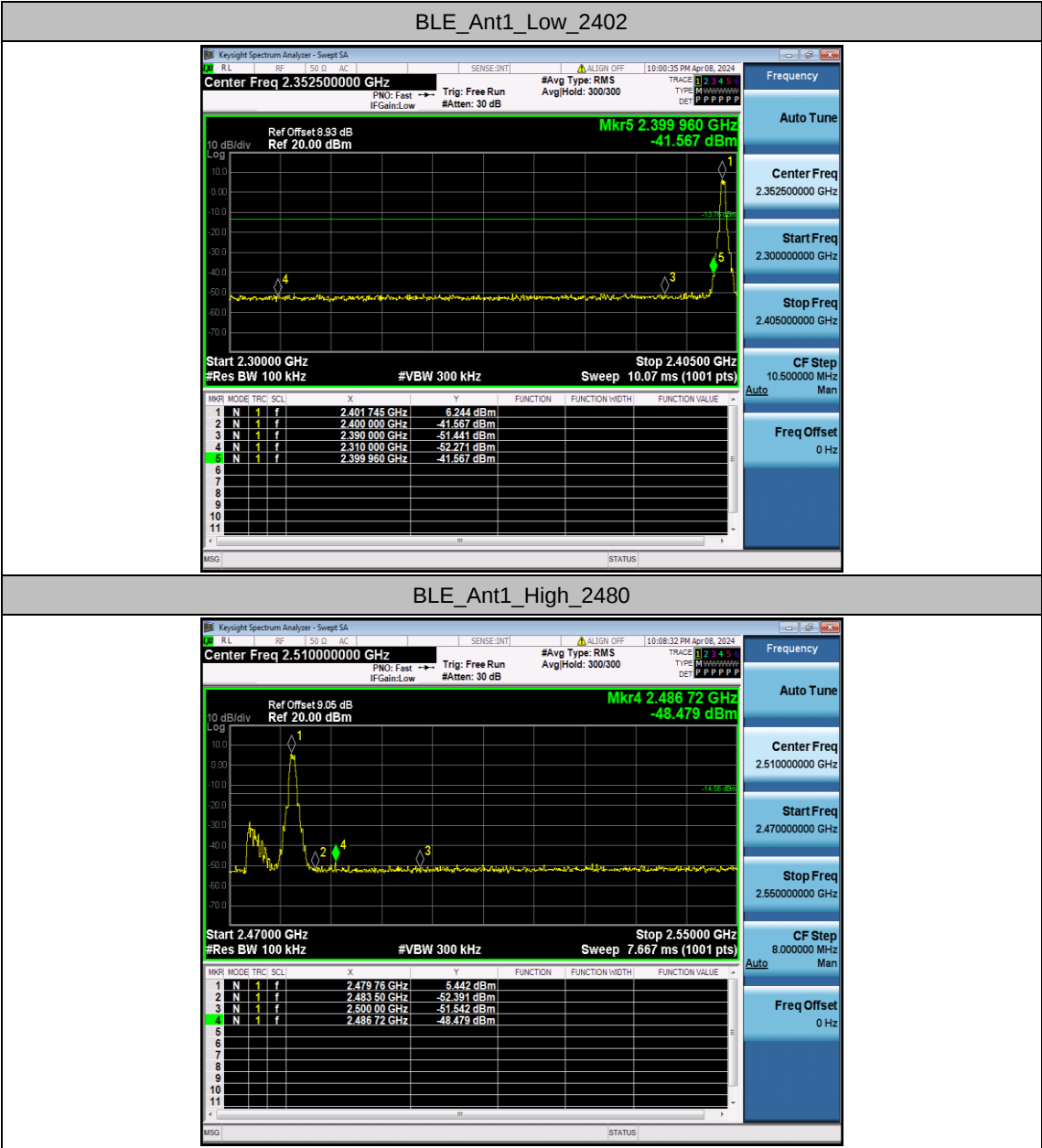


Appendix B.5: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	Low	2402	6.24	-41.57	≤-13.76	PASS
		High	2480	5.44	-48.48	≤-14.56	PASS

Test Graphs

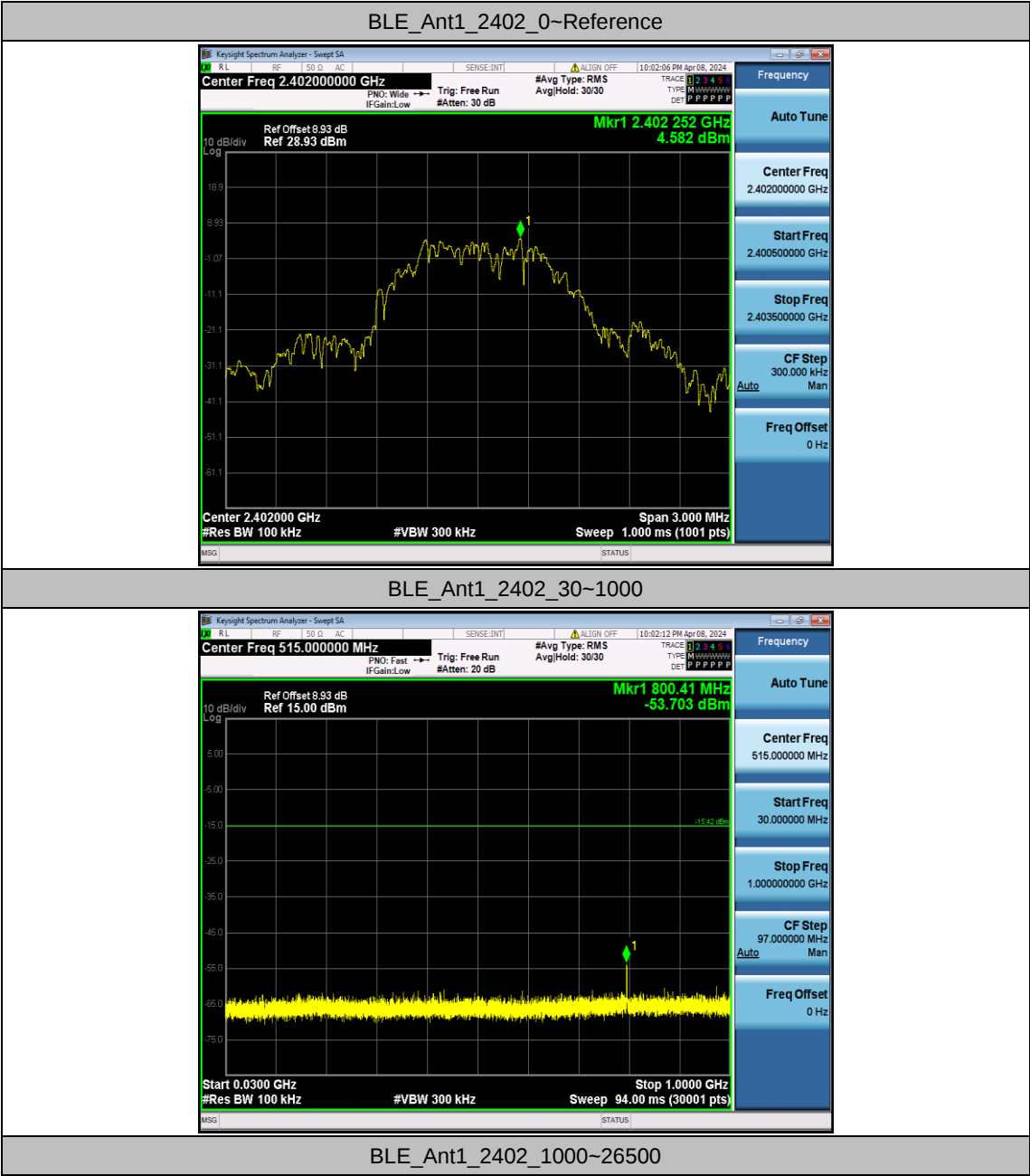


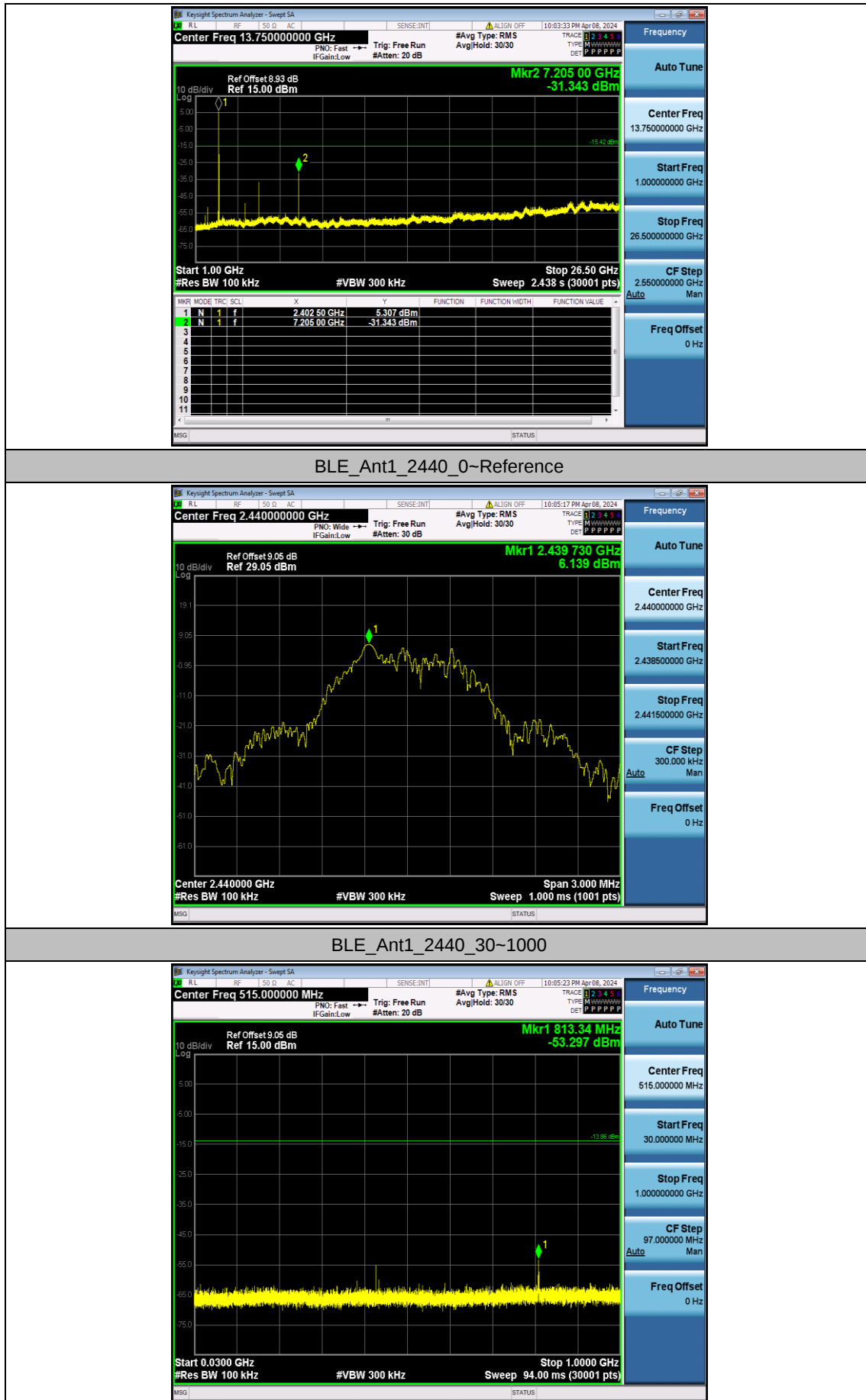
Appendix B.6: Conducted Spurious Emission

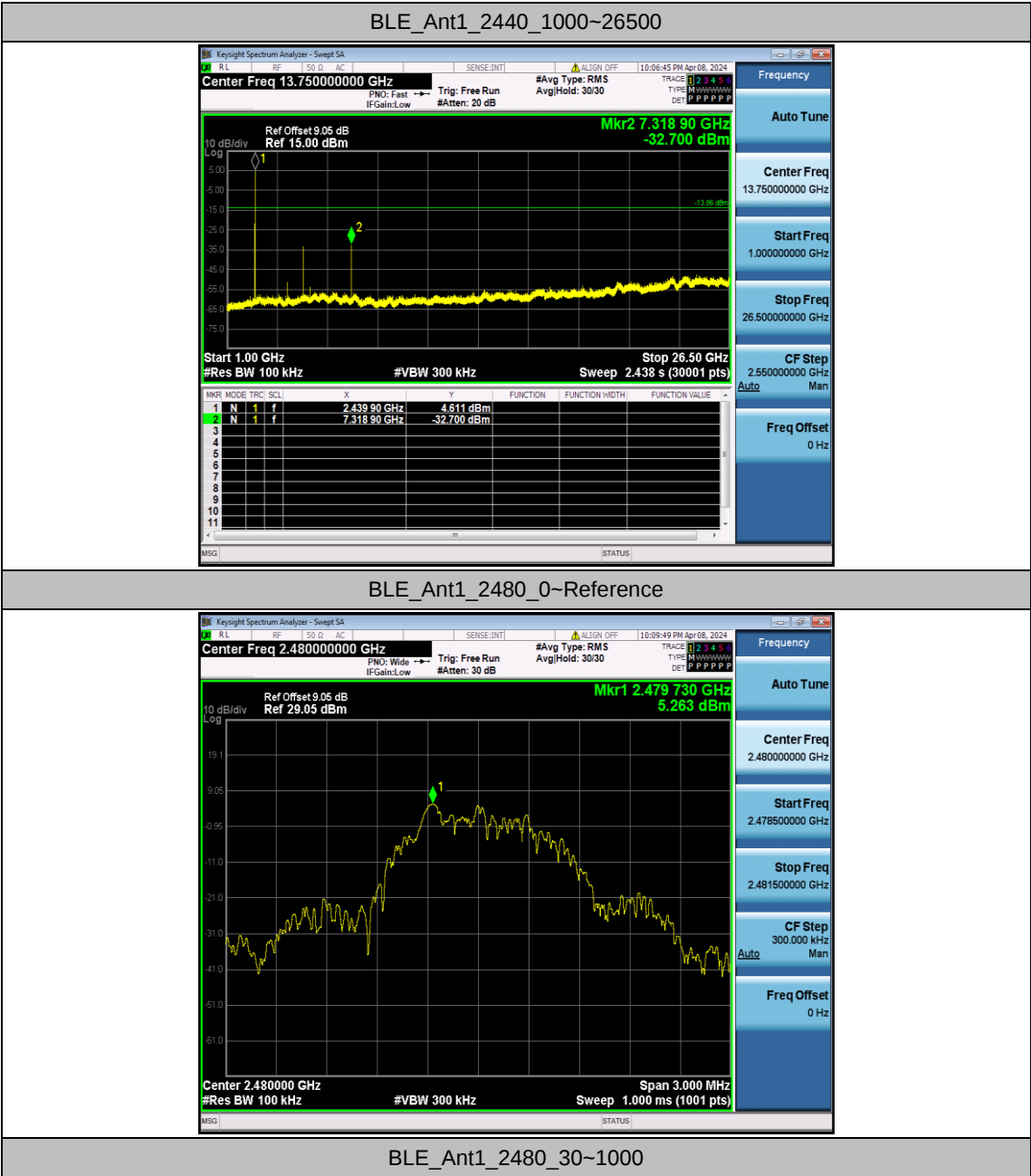
Test Result

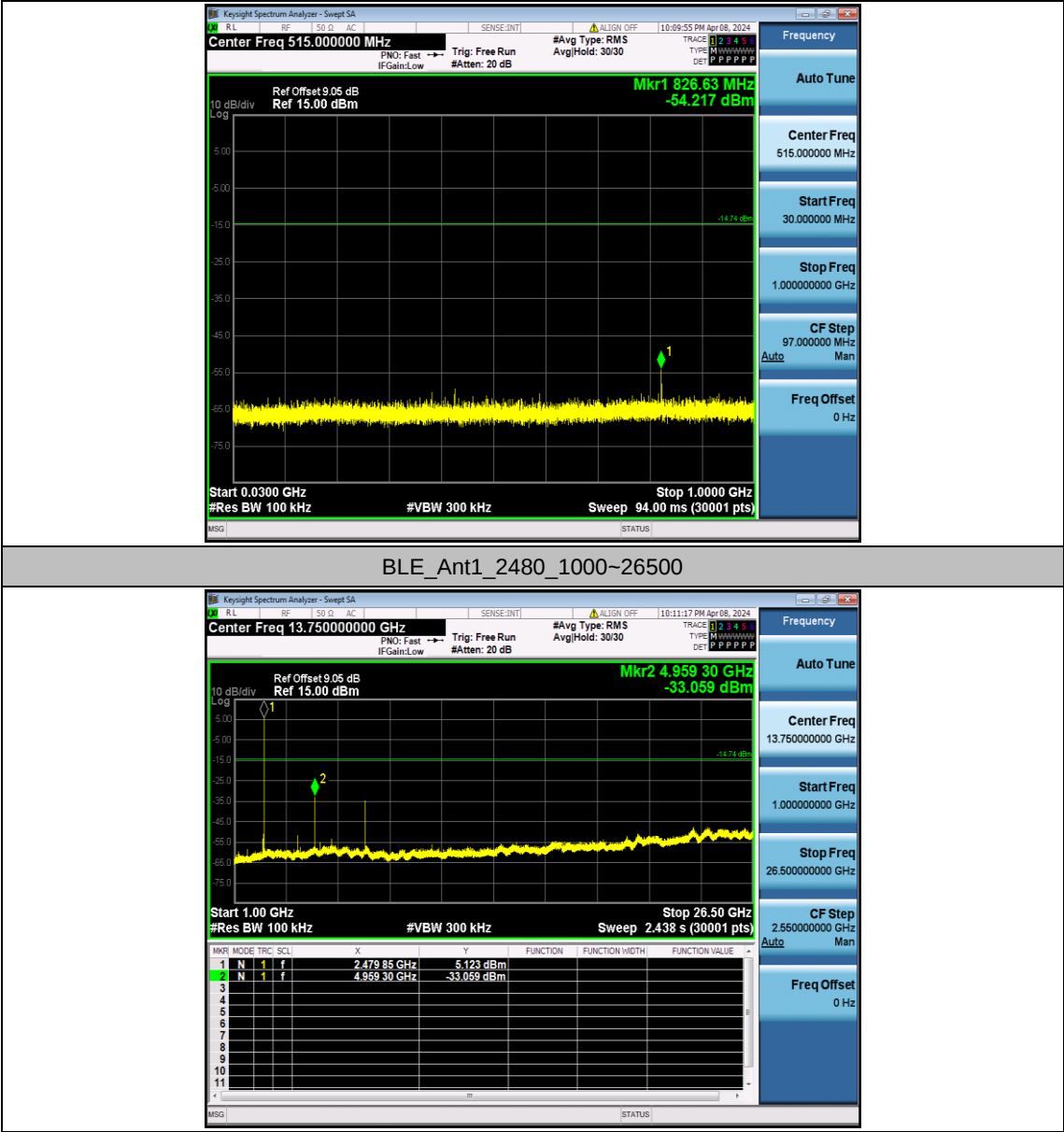
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	Reference	4.58	4.58	---	PASS
			30~1000	4.58	-53.7	≤ -15.42	PASS
			1000~26500	4.58	-31.34	≤ -15.42	PASS
		2440	Reference	6.14	6.14	---	PASS
			30~1000	6.14	-53.3	≤ -13.86	PASS
			1000~26500	6.14	-32.7	≤ -13.86	PASS
		2480	Reference	5.26	5.26	---	PASS
			30~1000	5.26	-54.22	≤ -14.74	PASS
			1000~26500	5.26	-33.06	≤ -14.74	PASS

Test Graphs









Appendix B.7: 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	-49.23	≤-41.20	45.97	≤54	PASS
				AV	2360.375	-46.11	≤-41.20	49.09	≤54	PASS
				AV	2390.000	-48.84	≤-41.20	46.36	≤54	PASS
				Peak	2310.000	-41.51	≤-21.20	53.69	≤74	PASS
				Peak	2371.715	-38.83	≤-21.20	56.37	≤74	PASS
				Peak	2390.000	-40.2	≤-21.20	55.00	≤74	PASS
		High	2480	AV	2483.500	-47.6	≤-41.20	47.60	≤54	PASS
				AV	2483.520	-47.59	≤-41.20	47.61	≤54	PASS
				AV	2500.000	-48.45	≤-41.20	46.75	≤54	PASS
				Peak	2483.500	-41.46	≤-21.20	53.74	≤74	PASS
				Peak	2499.600	-38.85	≤-21.20	56.35	≤74	PASS
				Peak	2500.000	-39.37	≤-21.20	55.83	≤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

