

Case No. : <u>CTA24051700202</u>	
Ambient Condition: <u>23</u> °C, <u>49</u> %RH	
According Standard: ■Part15C	
Test Date: <u>2024.5.24</u>	Test Engineer: <u>Evan ouyang</u>

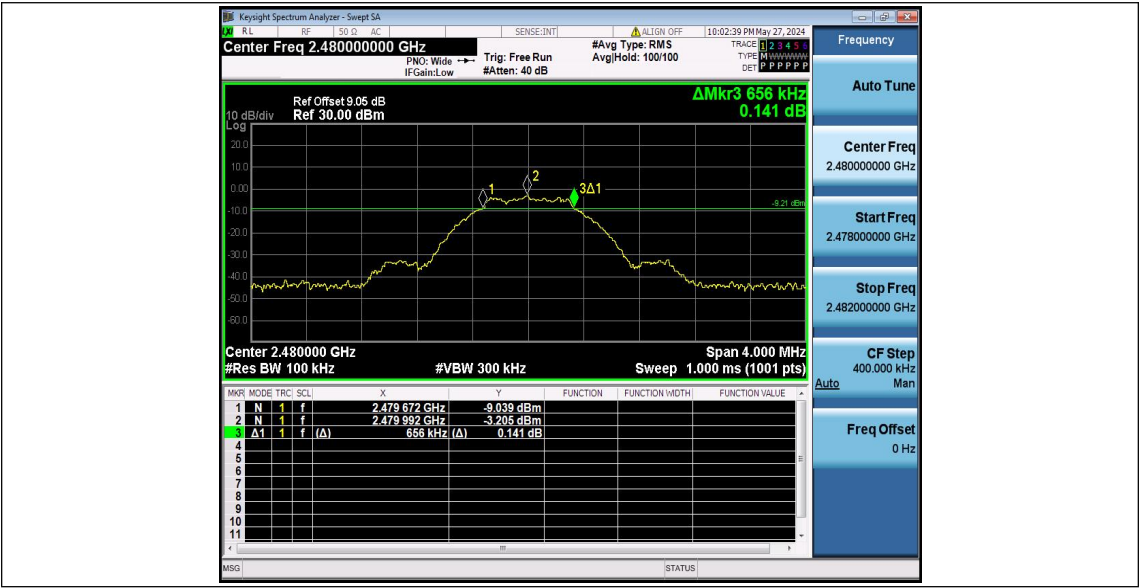
Appendix B.1: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_BT5.4	Ant0	2402	0.700	2401.644	2402.344	0.5	PASS
		2440	0.700	2439.652	2440.352	0.5	PASS
		2480	0.656	2479.672	2480.328	0.5	PASS

Test Graphs



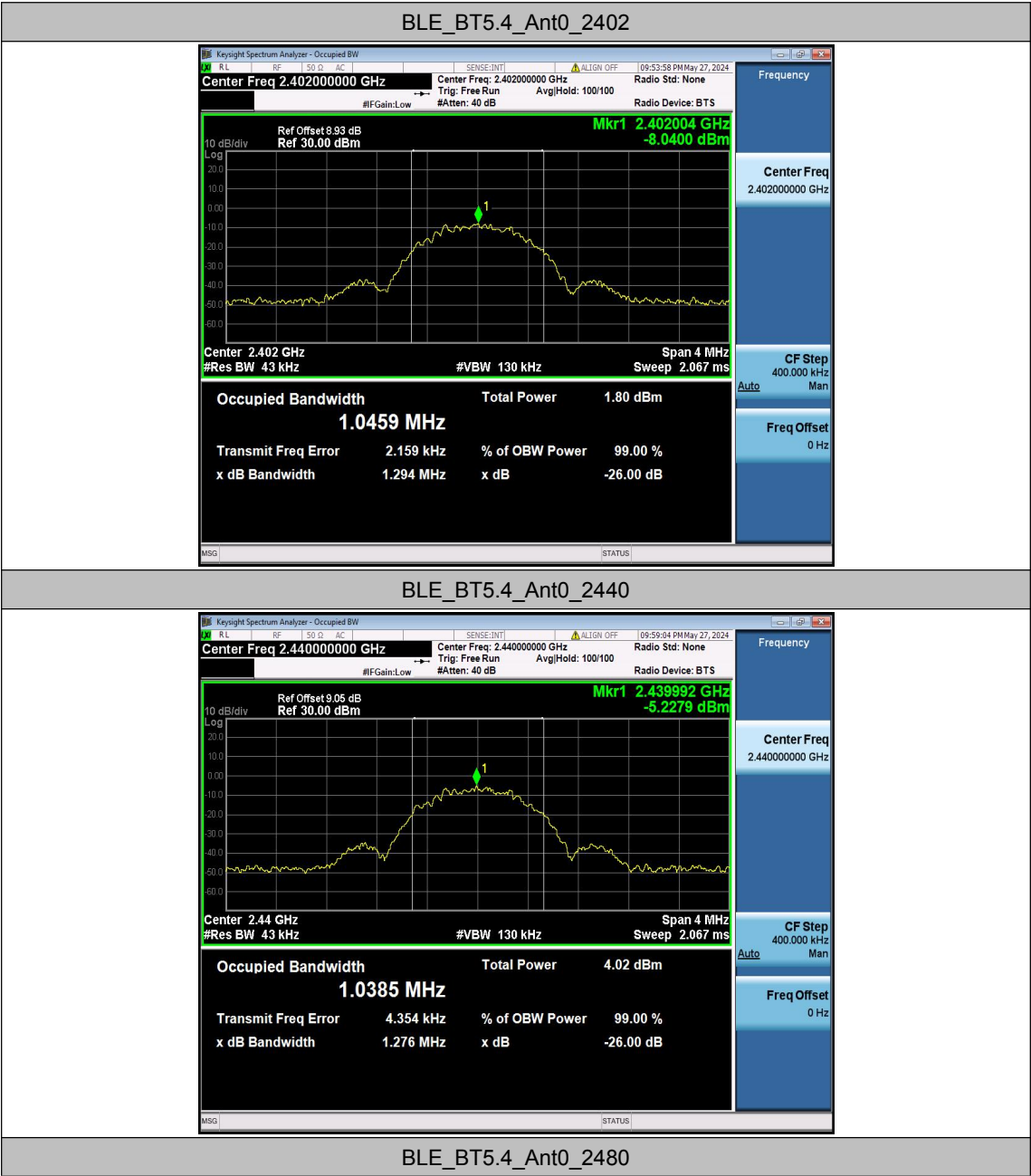


Appendix B.2: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_BT5.4	Ant0	2402	1.0459	2401.4792	2402.5251	---	---
		2440	1.0385	2439.4851	2440.5236	---	---
		2480	1.0514	2479.4796	2480.5310	---	---

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_BT5.4	Ant0	2402	-4.33	≤30	PASS
		2440	-2.33	≤30	PASS
		2480	-2.29	≤30	PASS

Note:

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

Appendix B.4: Maximum power spectral density

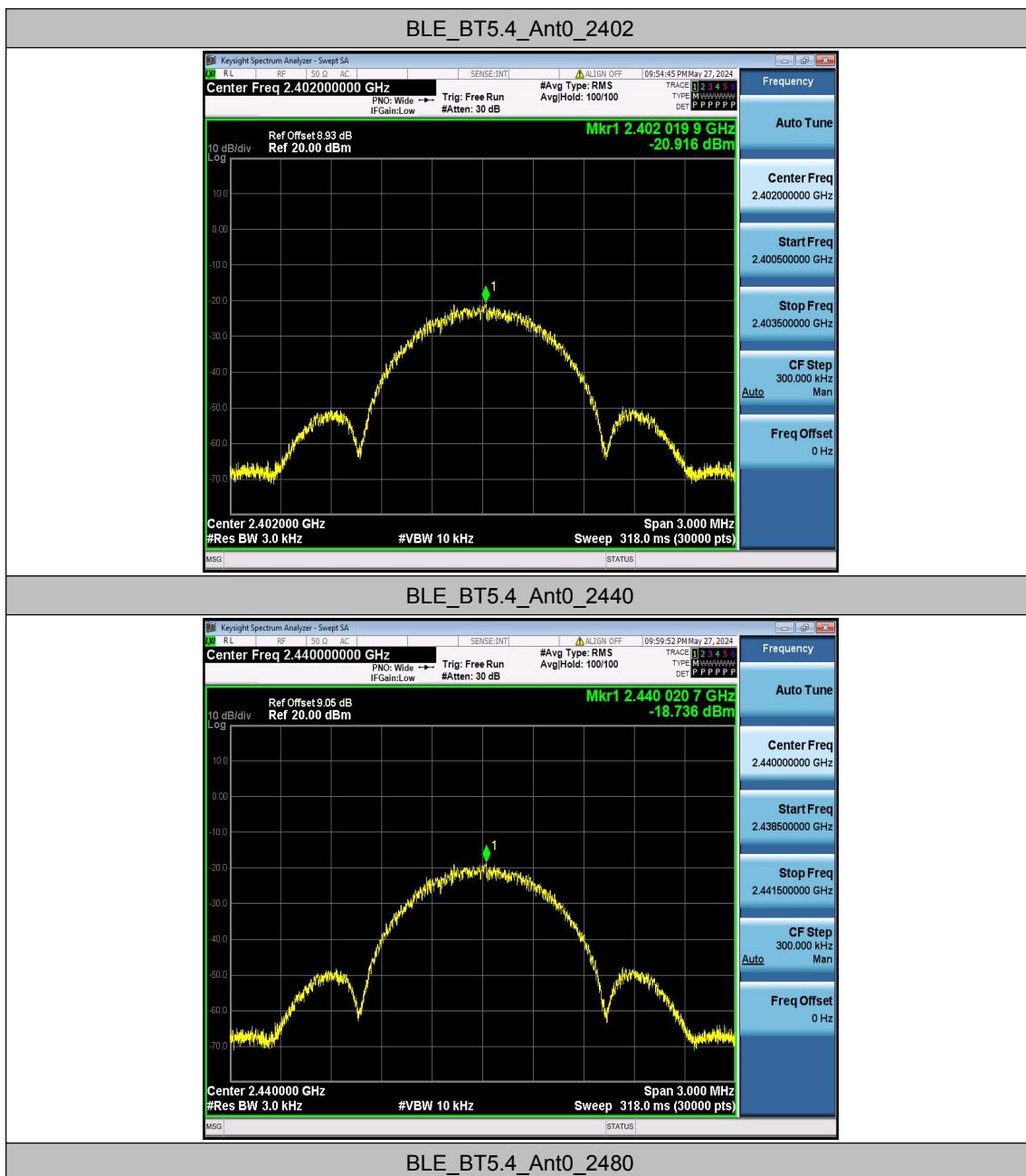
Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_BT5.4	Ant0	2402	-20.92	≤8.00	PASS
		2440	-18.74	≤8.00	PASS
		2480	-18.62	≤8.00	PASS

Note:

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

Test Graphs



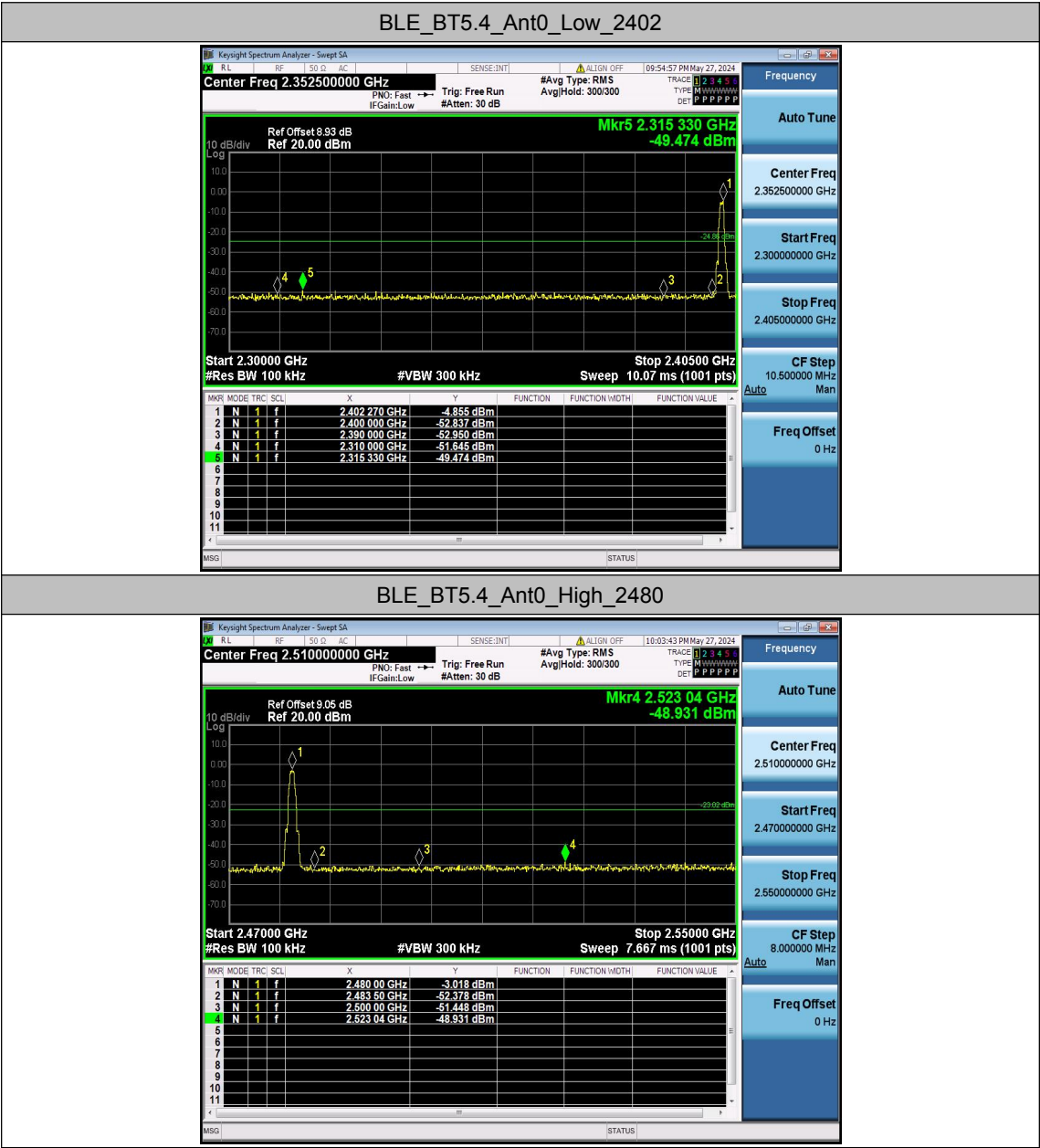


Appendix B.5: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_BT5.4	Ant0	Low	2402	-4.86	-49.47	≤-24.86	PASS
		High	2480	-3.02	-48.93	≤-23.02	PASS

Test Graphs



Appendix B.6: Conducted Spurious Emission

Test Result

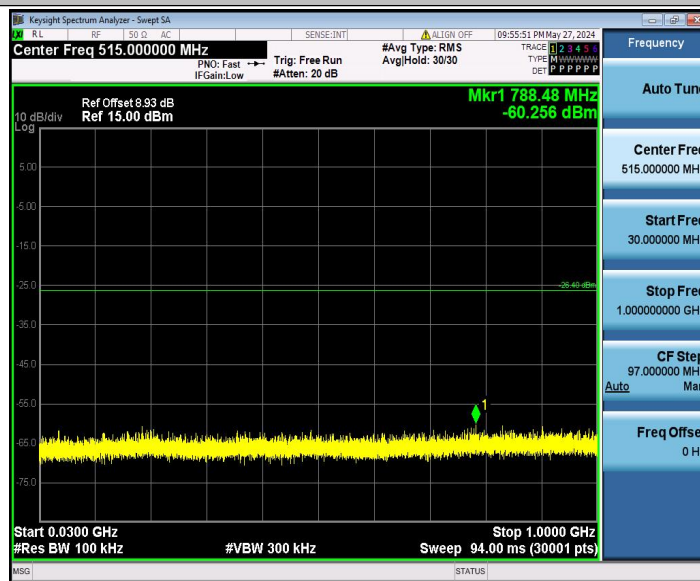
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_BT5.4	Ant0	2402	Reference	-6.40	-6.40	---	PASS
			30~1000	-6.40	-60.26	≤ -26.4	PASS
			1000~26500	-6.40	-47.94	≤ -26.4	PASS
		2440	Reference	-3.66	-3.66	---	PASS
			30~1000	-3.66	-60.12	≤ -23.66	PASS
			1000~26500	-3.66	-47.21	≤ -23.66	PASS
		2480	Reference	-2.76	-2.76	---	PASS
			30~1000	-2.76	-60.42	≤ -22.76	PASS
			1000~26500	-2.76	-47.37	≤ -22.76	PASS

Test Graphs

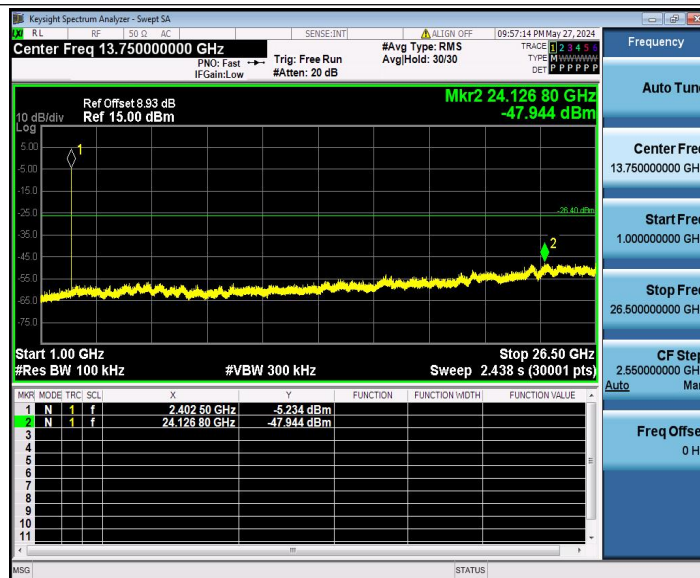
BLE_BT5.4_Ant0_2402_0~Reference



BLE_BT5.4_Ant0_2402_30~1000



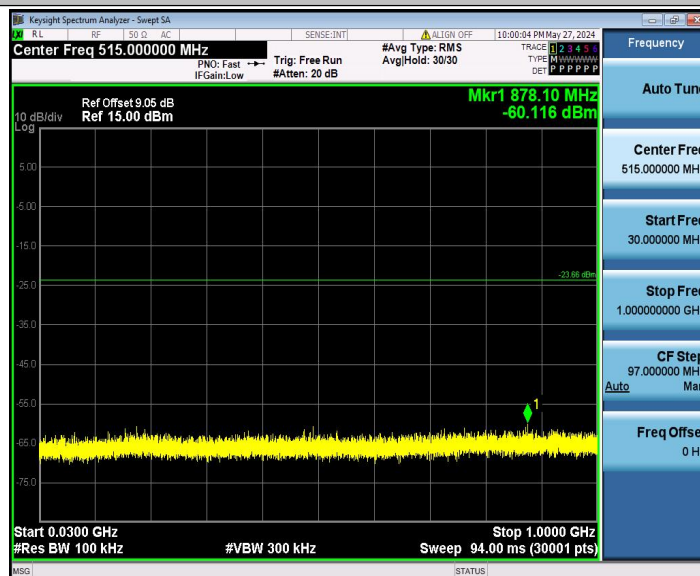
BLE_BT5.4_Ant0_2402_1000~26500

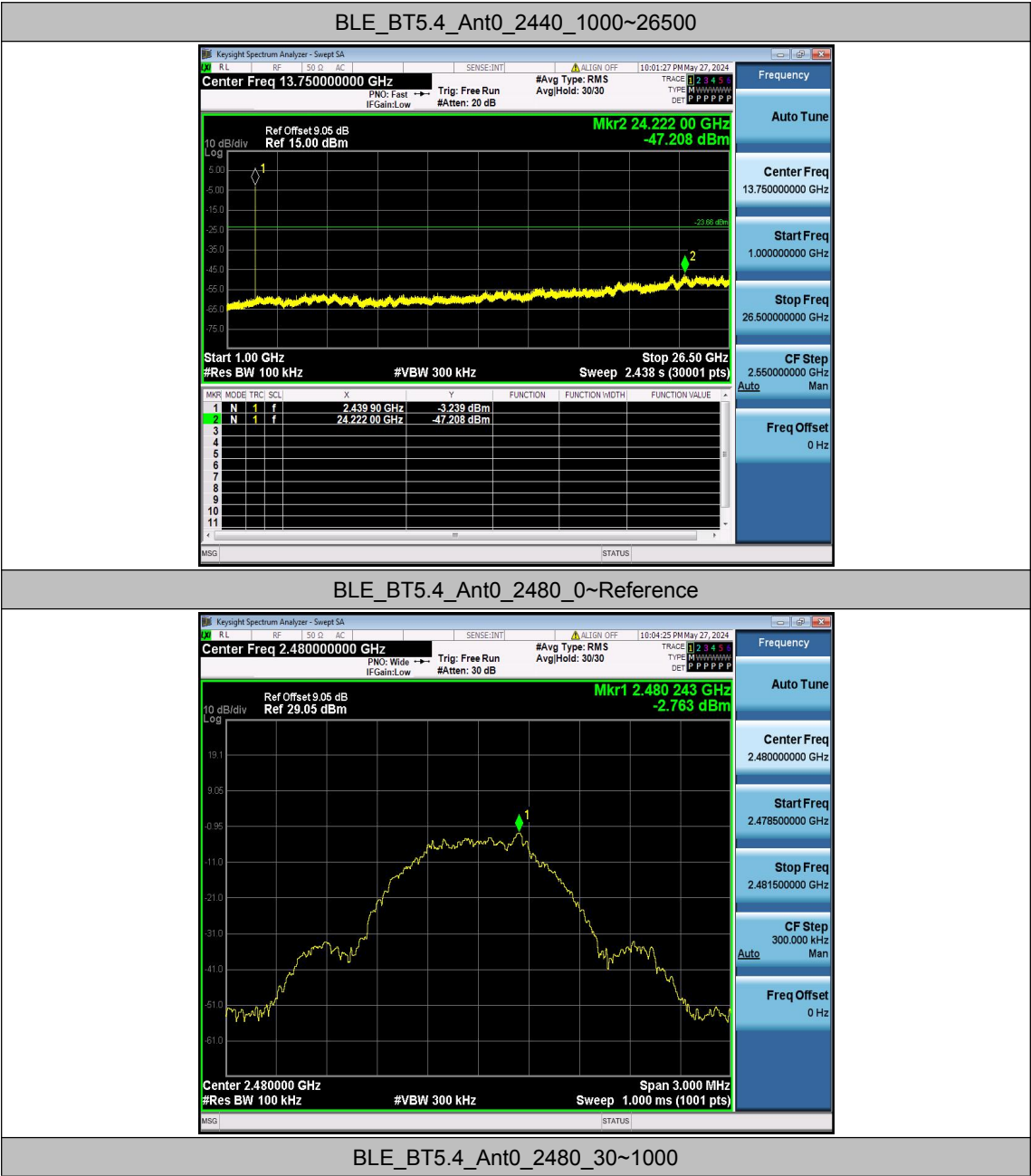


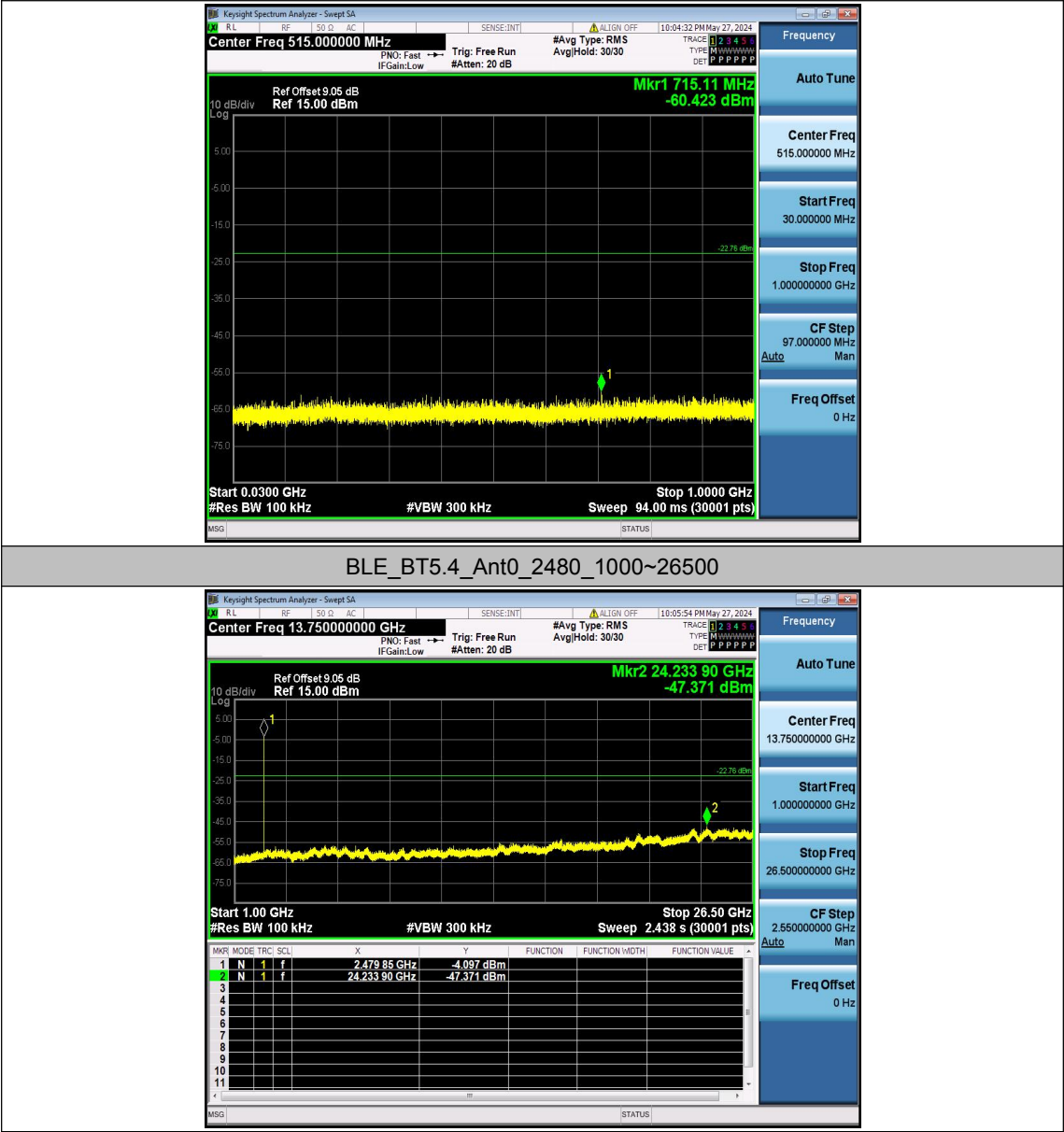
BLE_BT5.4_Ant0_2440_0~Reference



BLE_BT5.4_Ant0_2440_30~1000







Appendix B.7: Emissions in Restricted Bands

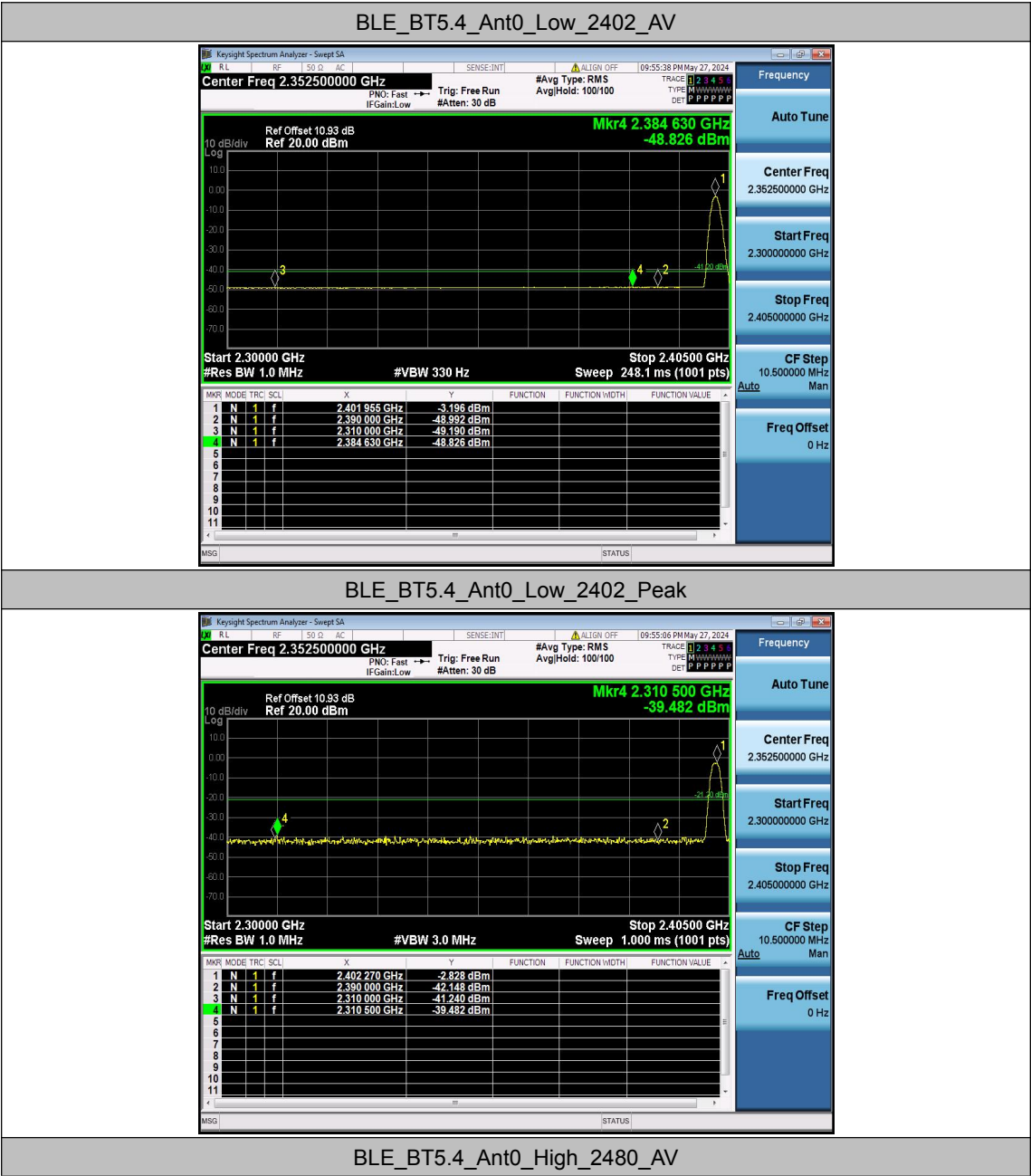
Test Result

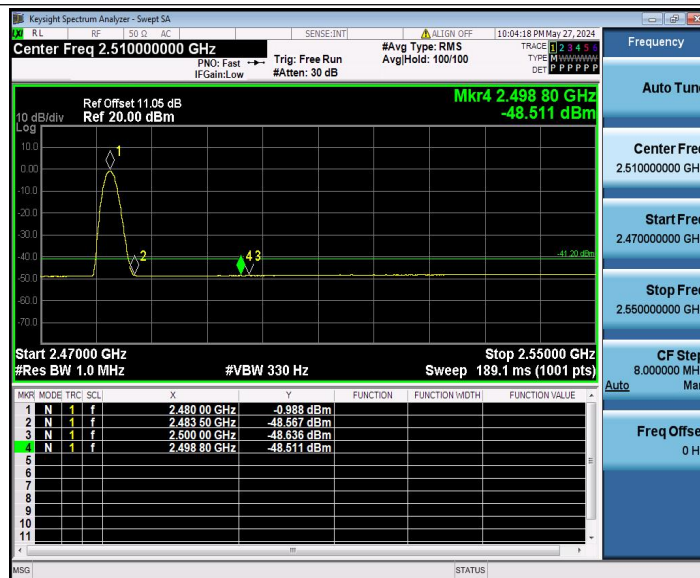
TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_BT5.4	Ant0	Low	2402	AV	2310.000	-49.19	≤-41.20	46.01	≤54	PASS
				AV	2384.630	-48.83	≤-41.20	46.37	≤54	PASS
				AV	2390.000	-48.99	≤-41.20	46.21	≤54	PASS
				Peak	2310.000	-41.24	≤-21.20	53.96	≤74	PASS
				Peak	2310.500	-39.48	≤-21.20	55.72	≤74	PASS
				Peak	2390.000	-42.15	≤-21.20	53.05	≤74	PASS
		High	2480	AV	2483.500	-48.57	≤-41.20	46.63	≤54	PASS
				AV	2498.800	-48.51	≤-41.20	46.69	≤54	PASS
				AV	2500.000	-48.64	≤-41.20	46.56	≤54	PASS
				Peak	2483.500	-42.19	≤-21.20	53.01	≤74	PASS
				Peak	2499.280	-38.91	≤-21.20	56.29	≤74	PASS
				Peak	2500.000	-41.62	≤-21.20	53.58	≤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





BLE_BT5.4_Ant0_High_2480_Peak

