

Case No. : <u>GTS20231011022-1-5</u>
Ambient Condition: <u>23</u> °C, <u>47</u> %RH, Atmos100.1Kpa,
Test Date: <u>2023.10.25</u> Test Engineer: <u>Evan ouyang</u>

Appendix A.1: DTS Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	0.624	2401.680	2402.304	0.5	PASS
		2440	0.632	2439.684	2440.316	0.5	PASS
		2480	0.640	2479.680	2480.320	0.5	PASS

Test Graphs



BLE_Ant1_2402



BLE_Ant1_2440



Appendix A.2: Occupied Channel Bandwidth

Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE	Ant1	2402	0.80545	2401.591	2402.396	---	---
		2440	0.81106	2439.605	2440.416	---	---
		2480	0.80960	2479.596	2480.406	---	---

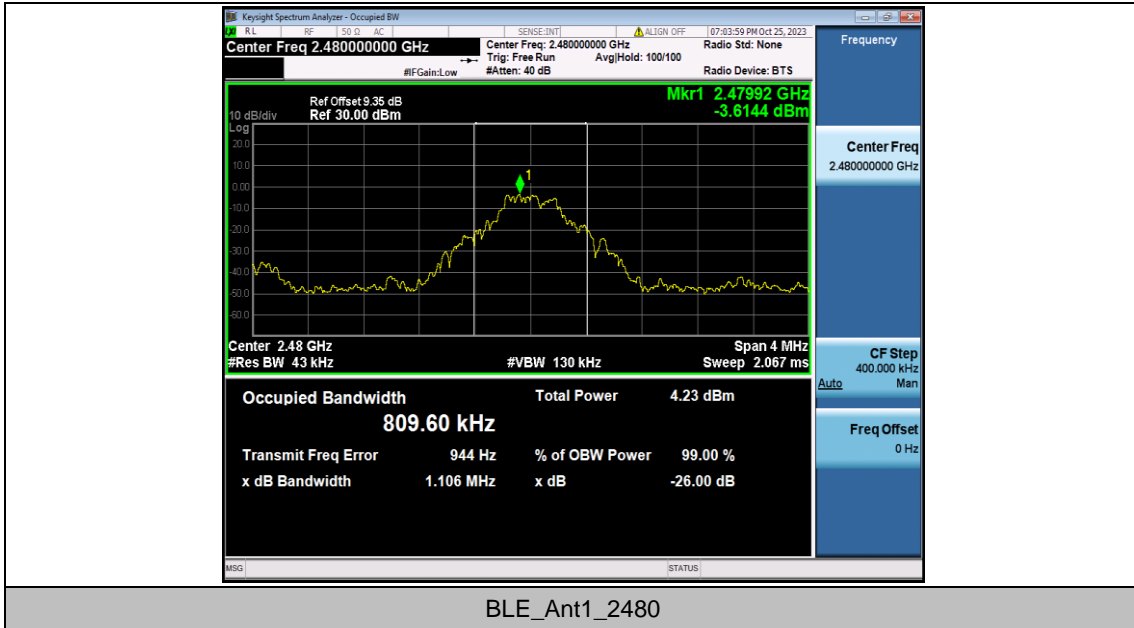
Test Graphs



BLE_Ant1_2402



BLE_Ant1_2440



Appendix A.3: Maximum conducted output power

Test Result Peak

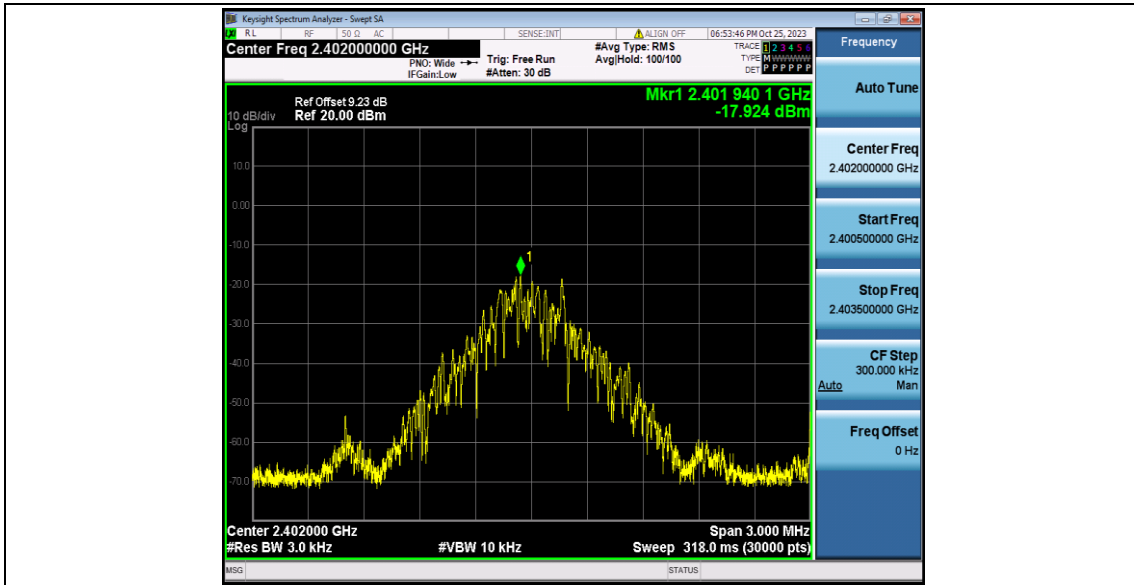
Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE	Ant1	2402	-1.67	≤30	PASS
		2440	-0.97	≤30	PASS
		2480	-0.37	≤30	PASS

Appendix A.4: Maximum power spectral density

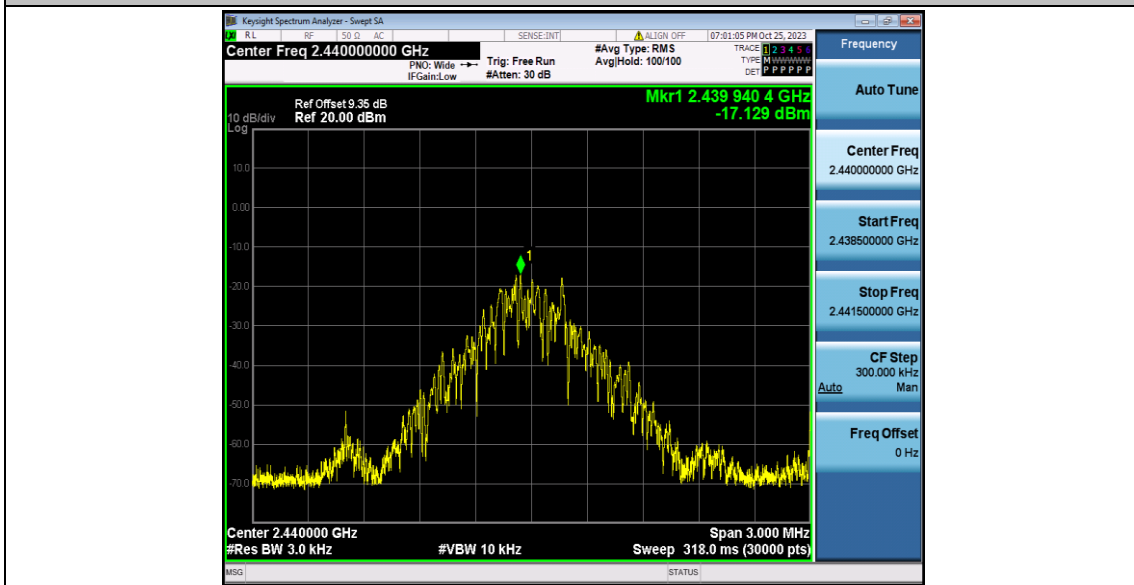
Test Result

Test Mode	Antenna	Frequency[MHz]	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE	Ant1	2402	-17.92	≤8.00	PASS
		2440	-17.13	≤8.00	PASS
		2480	-16.57	≤8.00	PASS

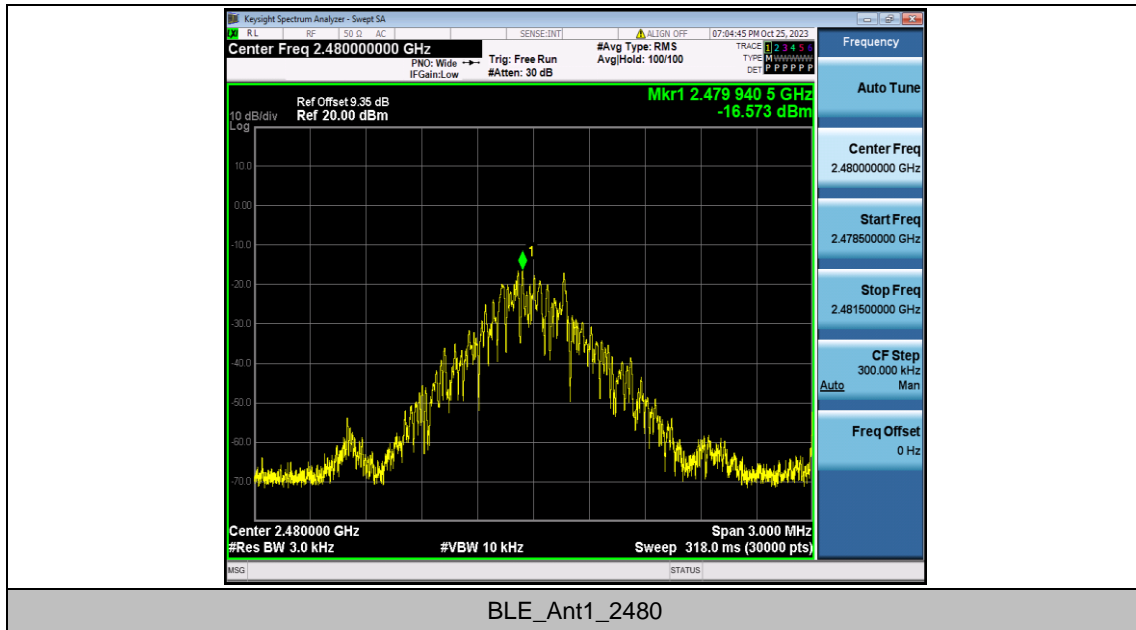
Test Graphs



BLE_Ant1_2402



BLE_Ant1_2440

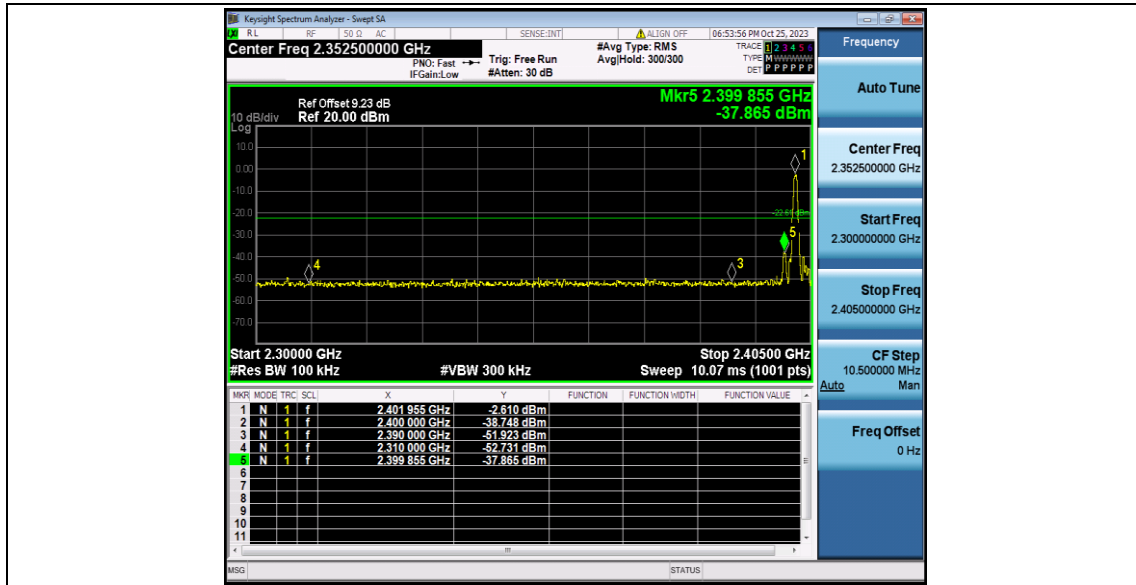


Appendix A.5: Band edge measurements

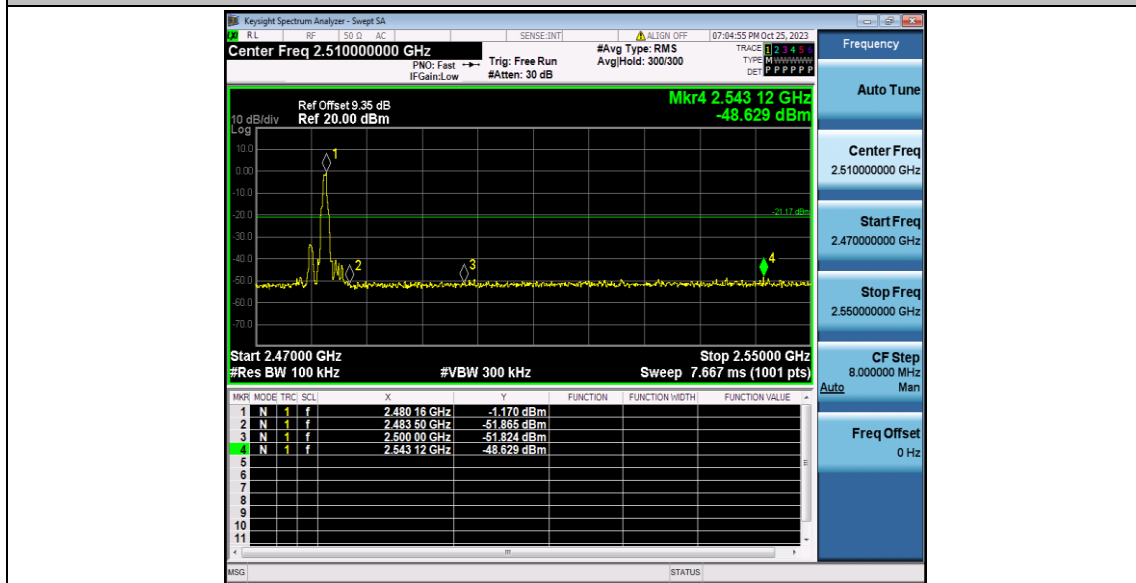
Test Result

Test Mode	Antenna	ChName	Frequency[MHz]	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	Low	2402	-2.61	-37.87	≤-22.61	PASS
		High	2480	-1.17	-48.63	≤-21.17	PASS

Test Graphs



BLE_Ant1_Low_2402



BLE_Ant1_High_2480

Appendix A.6: Conducted Spurious Emission

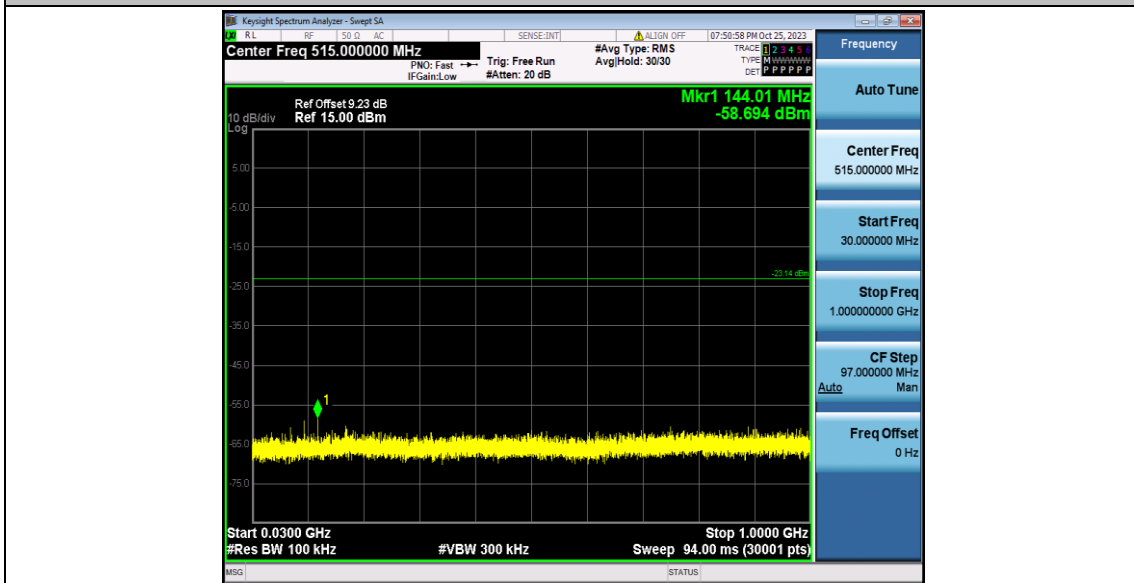
Test Result

Test Mode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE	Ant1	2402	Reference	-3.14	-3.14	---	PASS
			30~1000	-3.14	-58.69	≤ -23.14	PASS
			1000~26500	-3.14	-47.1	≤ -23.14	PASS
		2440	Reference	-1.64	-1.64	---	PASS
			30~1000	-1.64	-58.24	≤ -21.64	PASS
			1000~26500	-1.64	-47.57	≤ -21.64	PASS
		2480	Reference	-1.55	-1.55	---	PASS
			30~1000	-1.55	-56.59	≤ -21.55	PASS
			1000~26500	-1.55	-47.39	≤ -21.55	PASS

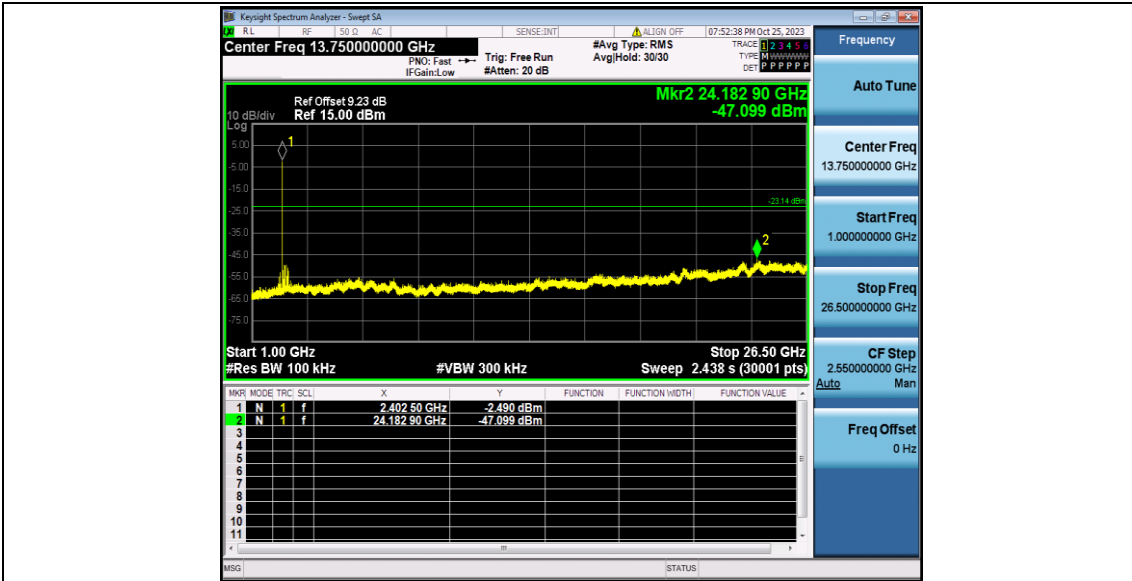
Test Graphs



BLE_Ant1_2402_0~Reference



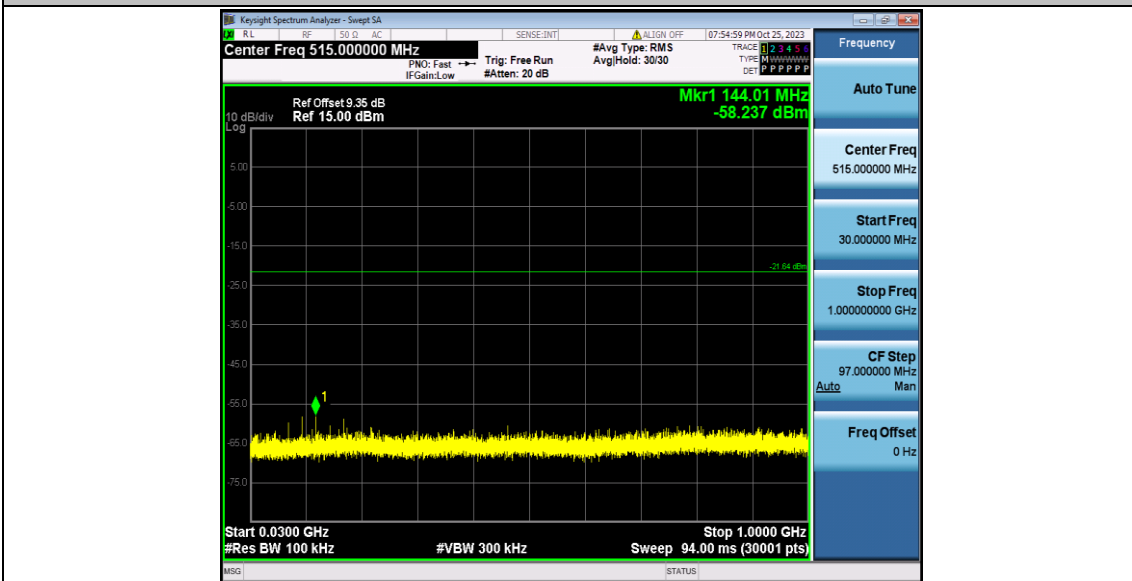
BLE_Ant1_2402_30~1000



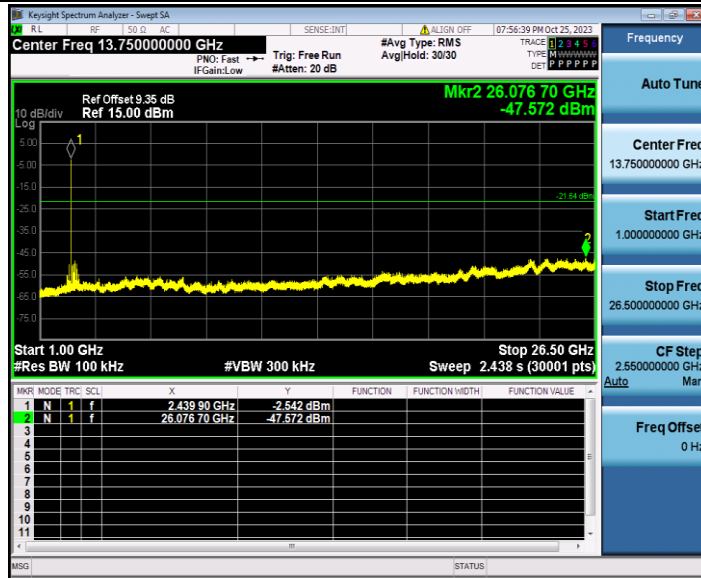
BLE_Ant1_2402_1000~26500



BLE_Ant1_2440_0~Reference



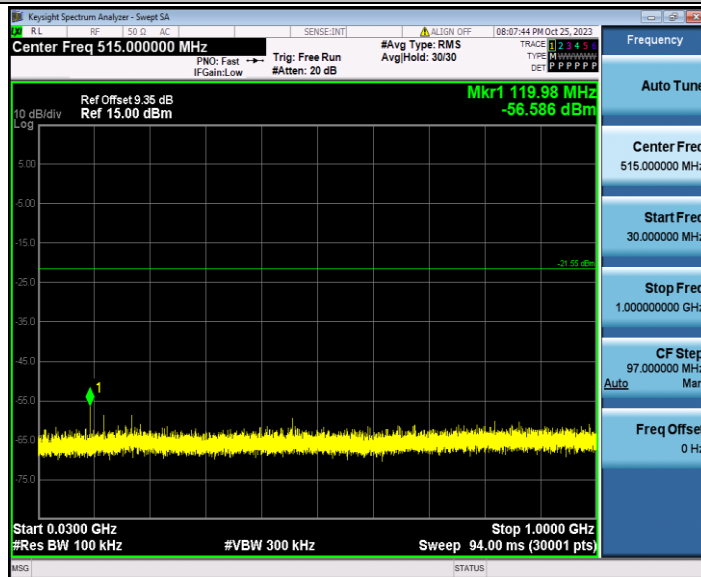
BLE_Ant1_2440_30~1000



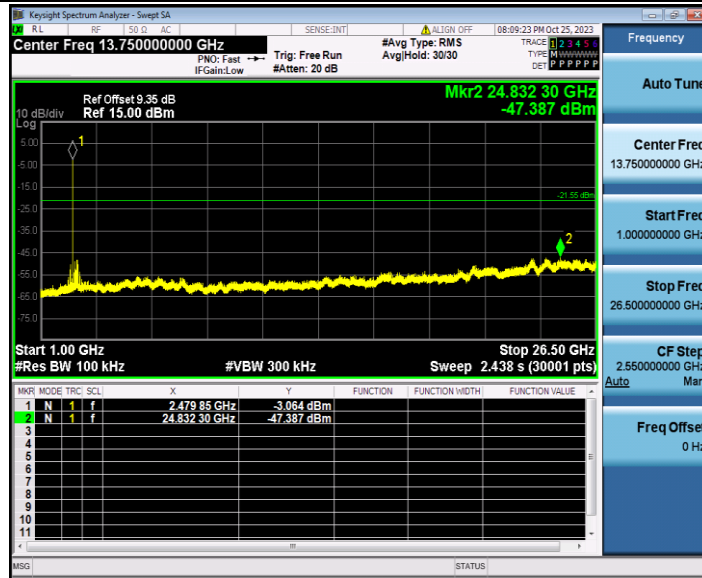
BLE_Ant1_2440_1000~26500



BLE_Ant1_2480_0~Reference



BLE_Ant1_2480_30~1000



BLE_Ant1_2480_1000~26500

Appendix A.7: Emissions in Restricted Bands

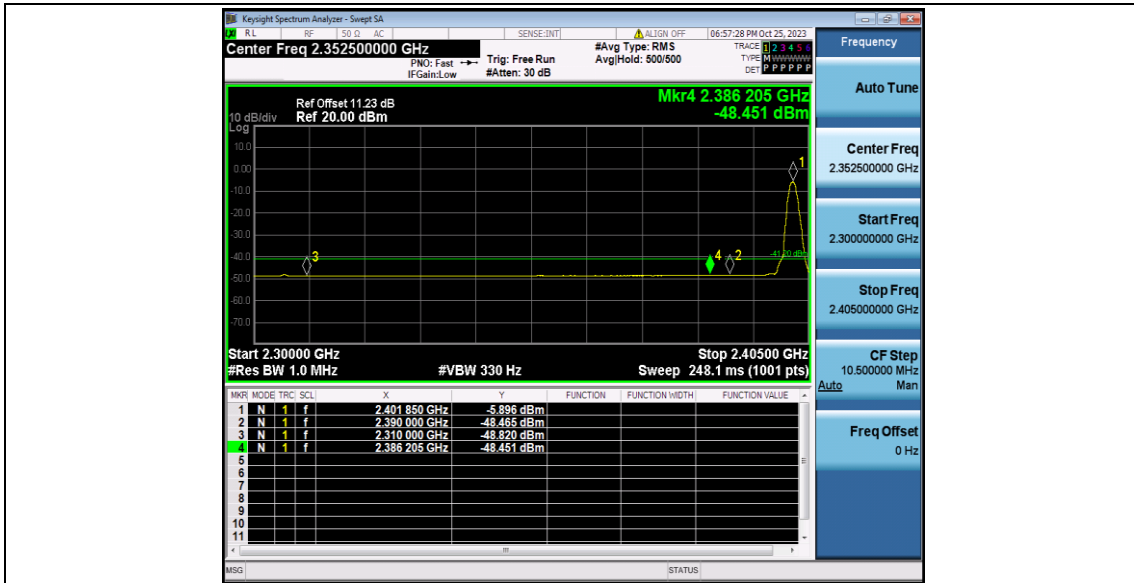
Test Result

Test Mode	Antenna	ChName	Frequency [MHz]	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE	Ant1	Low	2402	AV	2310.000	-48.82	≤-41.20	46.38	≤54	PASS
				AV	2386.205	-48.45	≤-41.20	46.75	≤54	PASS
				AV	2390.000	-48.47	≤-41.20	46.73	≤54	PASS
				Peak	2310.000	-40.45	≤-21.20	54.75	≤74	PASS
				Peak	2387.780	-38.5	≤-21.20	56.70	≤74	PASS
				Peak	2390.000	-41.18	≤-21.20	54.02	≤74	PASS
		High	2480	AV	2483.500	-48.24	≤-41.20	46.96	≤54	PASS
				AV	2499.680	-48.08	≤-41.20	47.12	≤54	PASS
				AV	2500.000	-48.23	≤-41.20	46.97	≤54	PASS
				Peak	2483.500	-40.75	≤-21.20	54.45	≤74	PASS
				Peak	2492.400	-37.61	≤-21.20	57.59	≤74	PASS
				Peak	2500.000	-41.7	≤-21.20	53.50	≤74	PASS

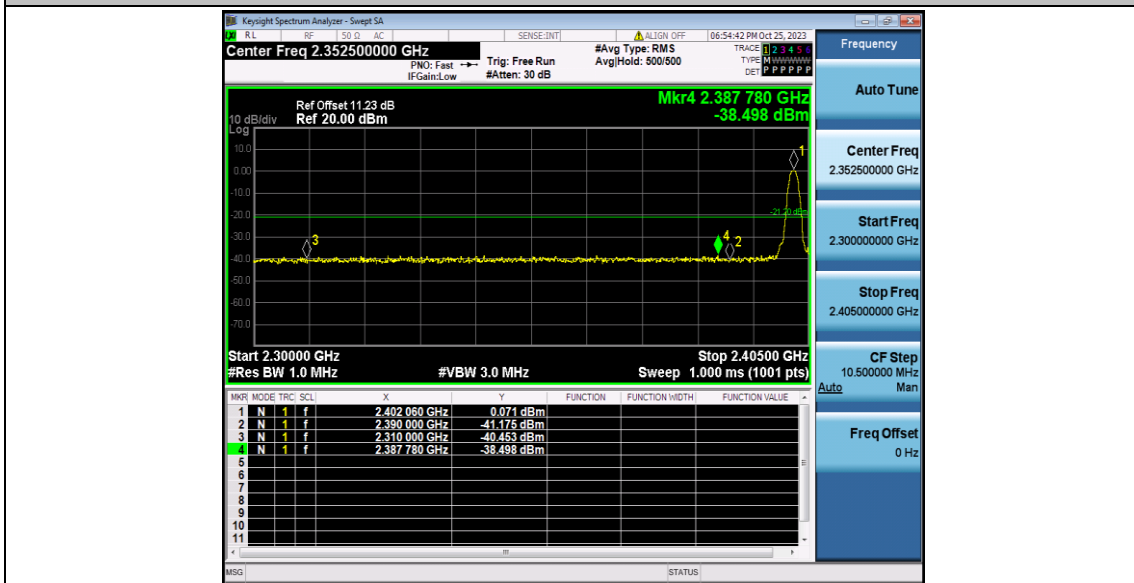
Note:

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.

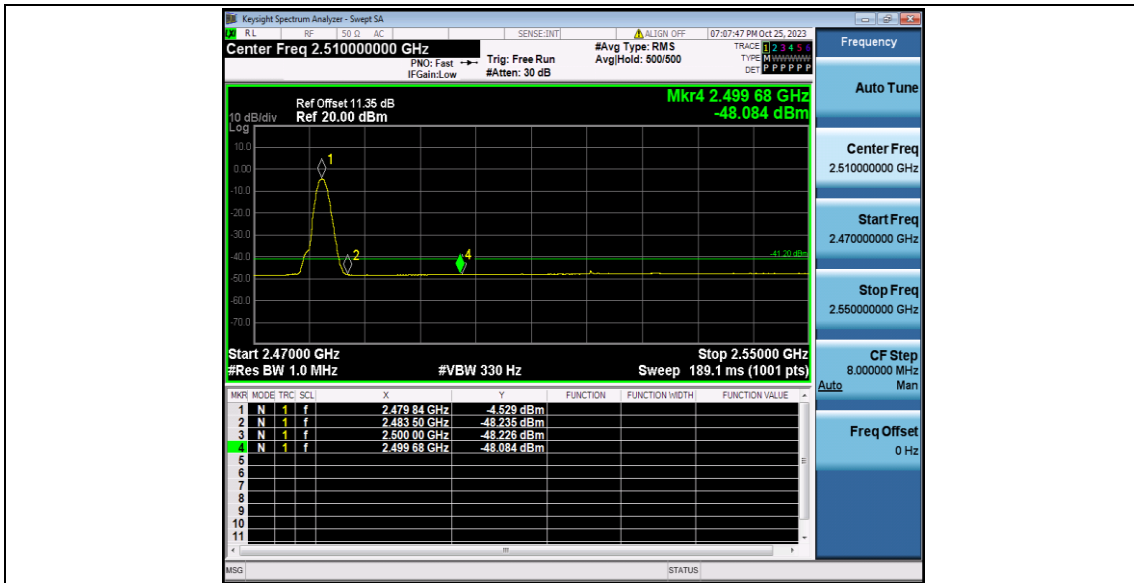
Test Graphs



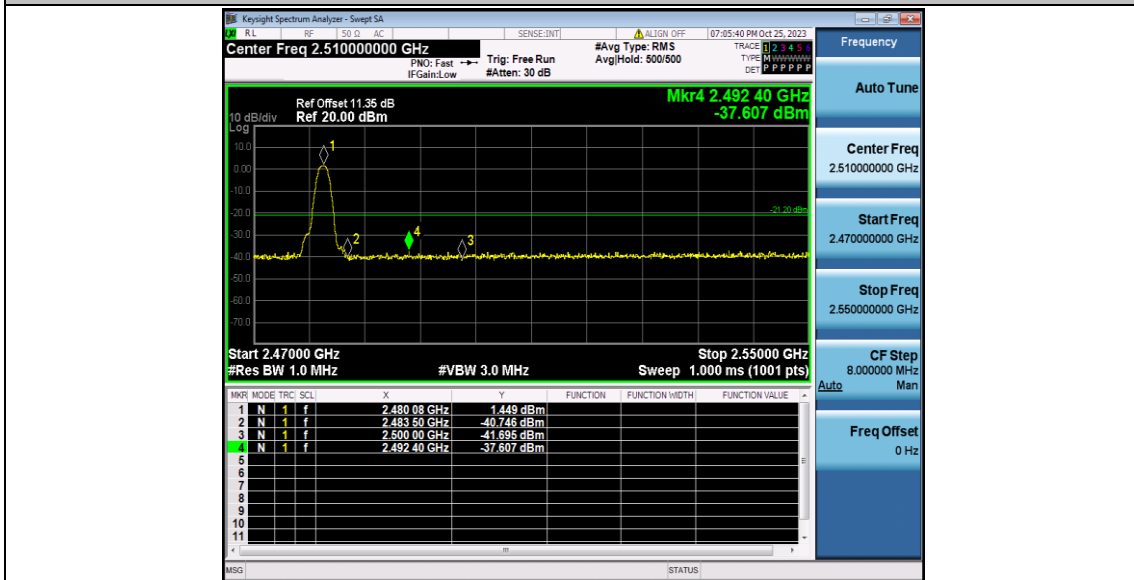
BLE_Ant1_Low_2402_AV



BLE_Ant1_Low_2402_Peak



BLE_Ant1_High_2480_AV



BLE_Ant1_High_2480_Peak