

FCC Appendix RF Test Data

FCC ID : 2BQZR-M202A

Company : Guangzhou Xiangyun Flavor Technology Co., Ltd.

EUT : Aroma diffuser

Model Number : M202A

Report No. : CTA25071600301

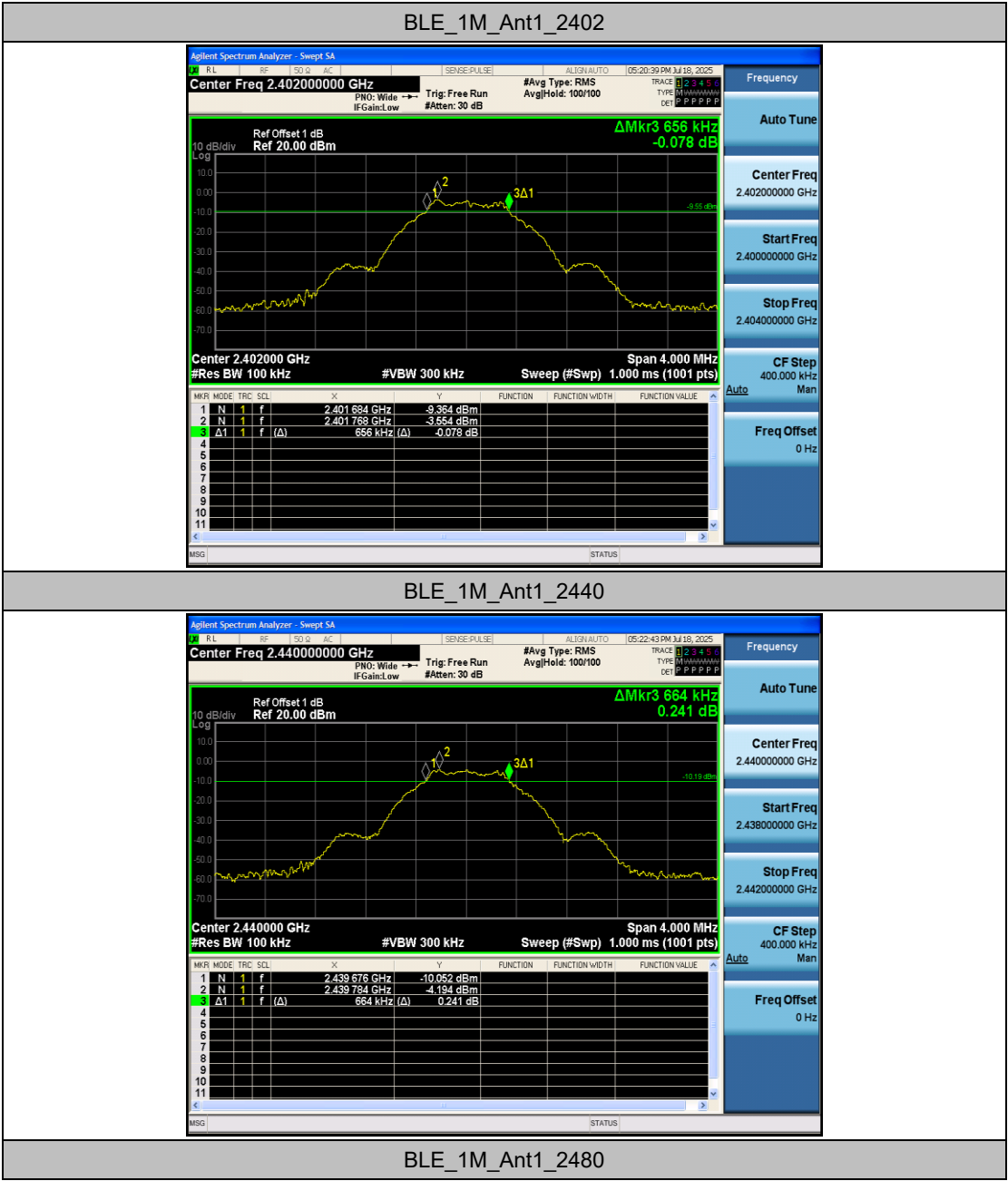
Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.656	2401.684	2402.340	0.5	PASS
		2440	0.664	2439.676	2440.340	0.5	PASS
		2480	0.636	2479.696	2480.332	0.5	PASS

Test Graphs



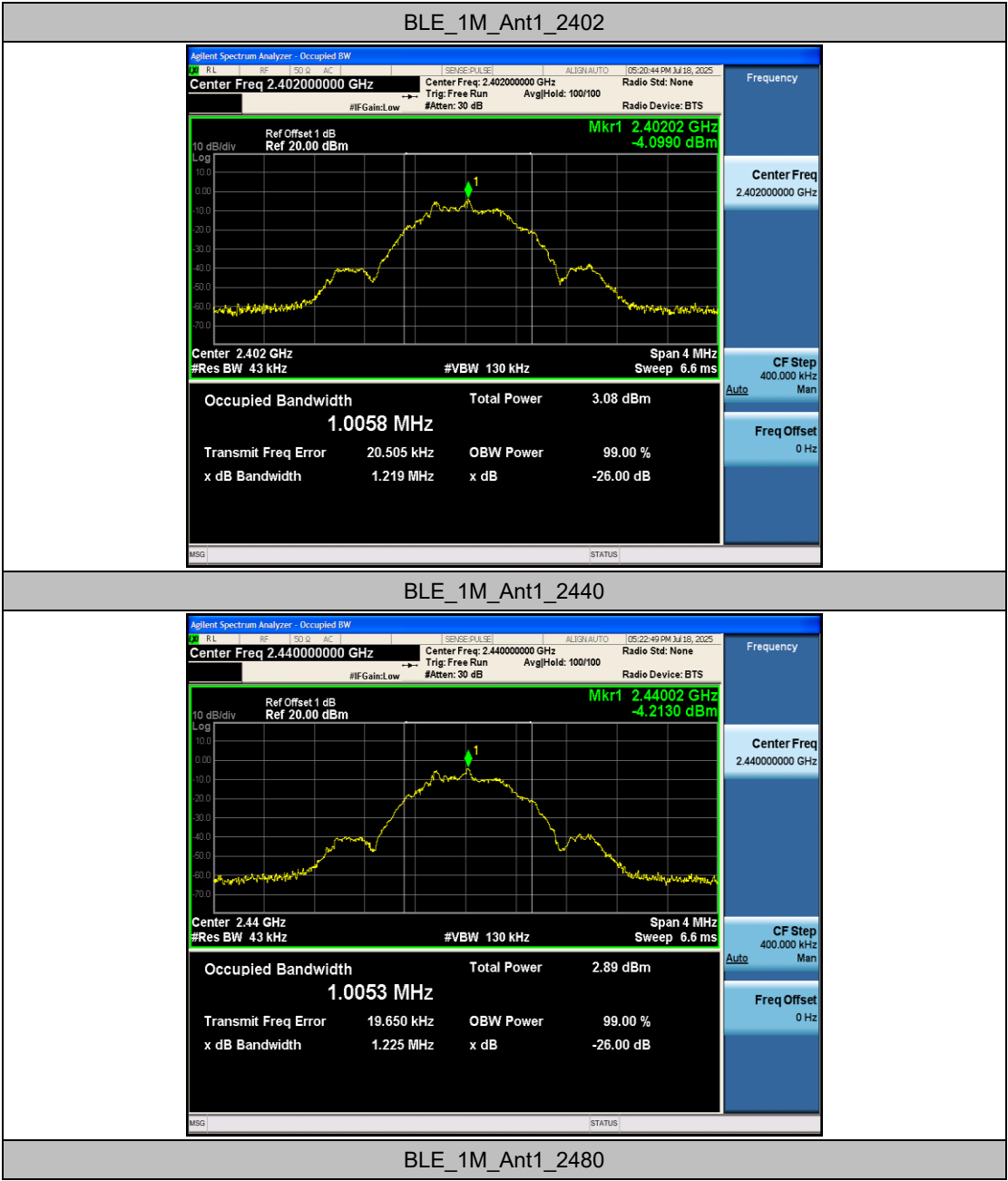


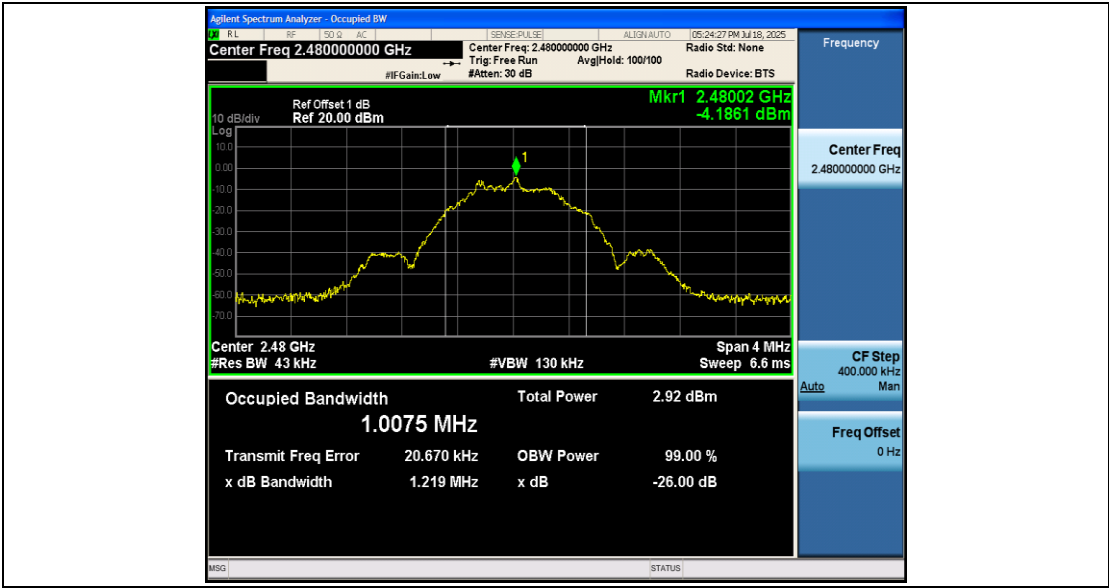
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0058	2401.5176	2402.5234	---	---
		2440	1.0053	2439.5170	2440.5223	---	---
		2480	1.0075	2479.5169	2480.5244	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-2.98	≤30	PASS
		2440	-3.20	≤30	PASS
		2480	-3.13	≤30	PASS

Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-18.78	≤8.00	PASS
		2440	-18.83	≤8.00	PASS
		2480	-18.83	≤8.00	PASS

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.40200000 GHz

Ref Offset 1 dB
Ref 10.00 dBm

Mkr1 2.402 010 824 GHz
-18.783 dBm

Span 984.0 kHz

Center 2.4020000 GHz

#Res BW 3.0 kHz

#VBW 10 kHz

Sweep (#Swp) 103.8 ms (1001 pts)

Frequency

Auto Tune

Center Freq
2.40200000 GHz

Start Freq
2.401508000 GHz

Stop Freq
2.402492000 GHz

CF Step
98.400 kHz
Man

Freq Offset
0 Hz

BLE_1M_Ant1_2402

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.440000000 GHz

Ref Offset 1 dB
Ref 10.00 dBm

Mkr1 2.439 990 0 GHz
-18.833 dBm

Span 996.0 kHz

Center 2.4400000 GHz

#Res BW 3.0 kHz

#VBW 10 kHz

Sweep (#Swp) 105.1 ms (1001 pts)

Frequency

Auto Tune

Center Freq
2.44000000 GHz

Start Freq
2.439502000 GHz

Stop Freq
2.440498000 GHz

CF Step
99.600 kHz
Man

Freq Offset
0 Hz

BLE_1M_Ant1_2440

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.480000000 GHz

Ref Offset 1 dB
Ref 10.00 dBm

Mkr1 2.479 990 0 GHz
-18.833 dBm

Span 996.0 kHz

Center 2.4800000 GHz

#Res BW 3.0 kHz

#VBW 10 kHz

Sweep (#Swp) 105.1 ms (1001 pts)

Frequency

Auto Tune

Center Freq
2.48000000 GHz

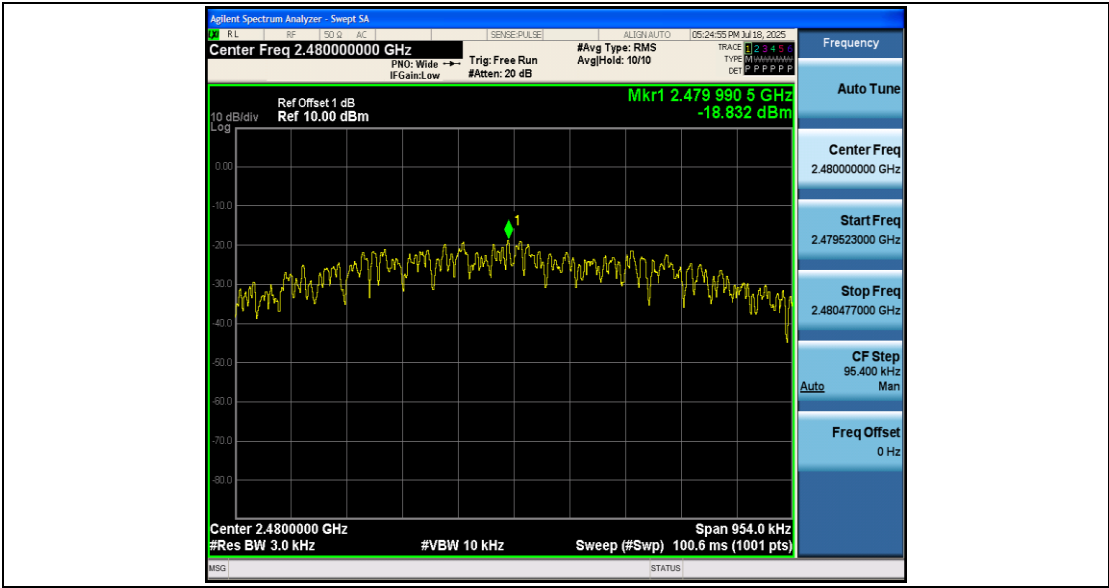
Start Freq
2.479502000 GHz

Stop Freq
2.480498000 GHz

CF Step
99.600 kHz
Man

Freq Offset
0 Hz

BLE_1M_Ant1_2480



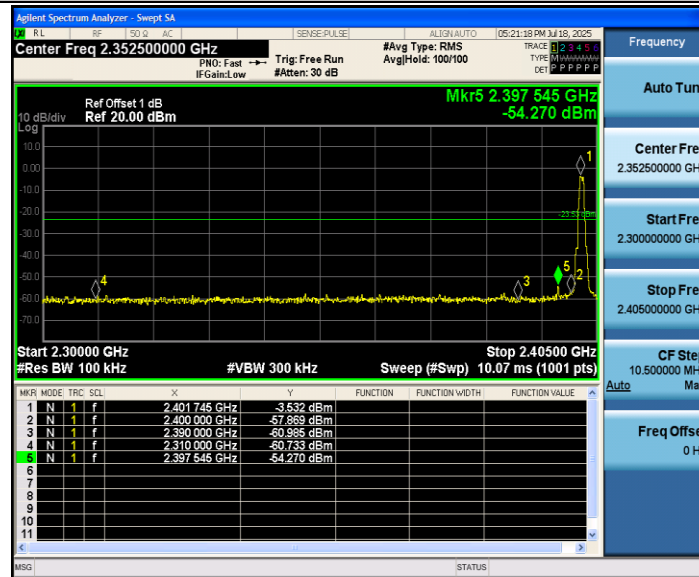
Appendix E: Band edge measurements

Test Result

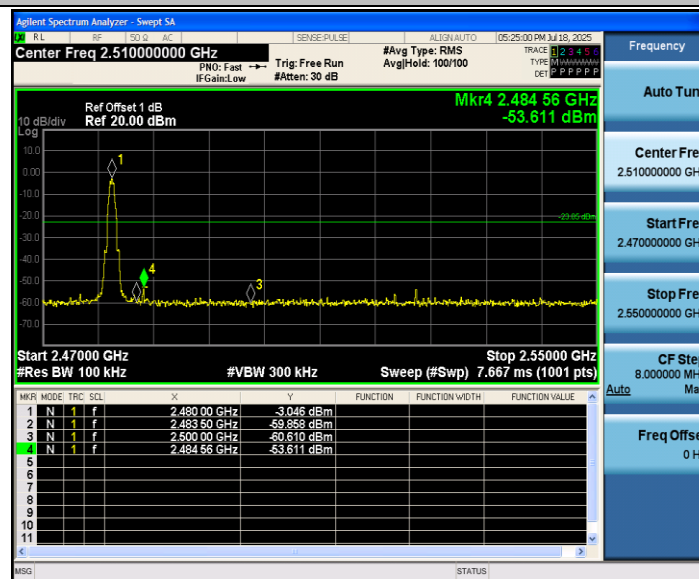
TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-3.53	-54.27	≤-23.53	PASS
		High	2480	-3.05	-53.61	≤-23.05	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

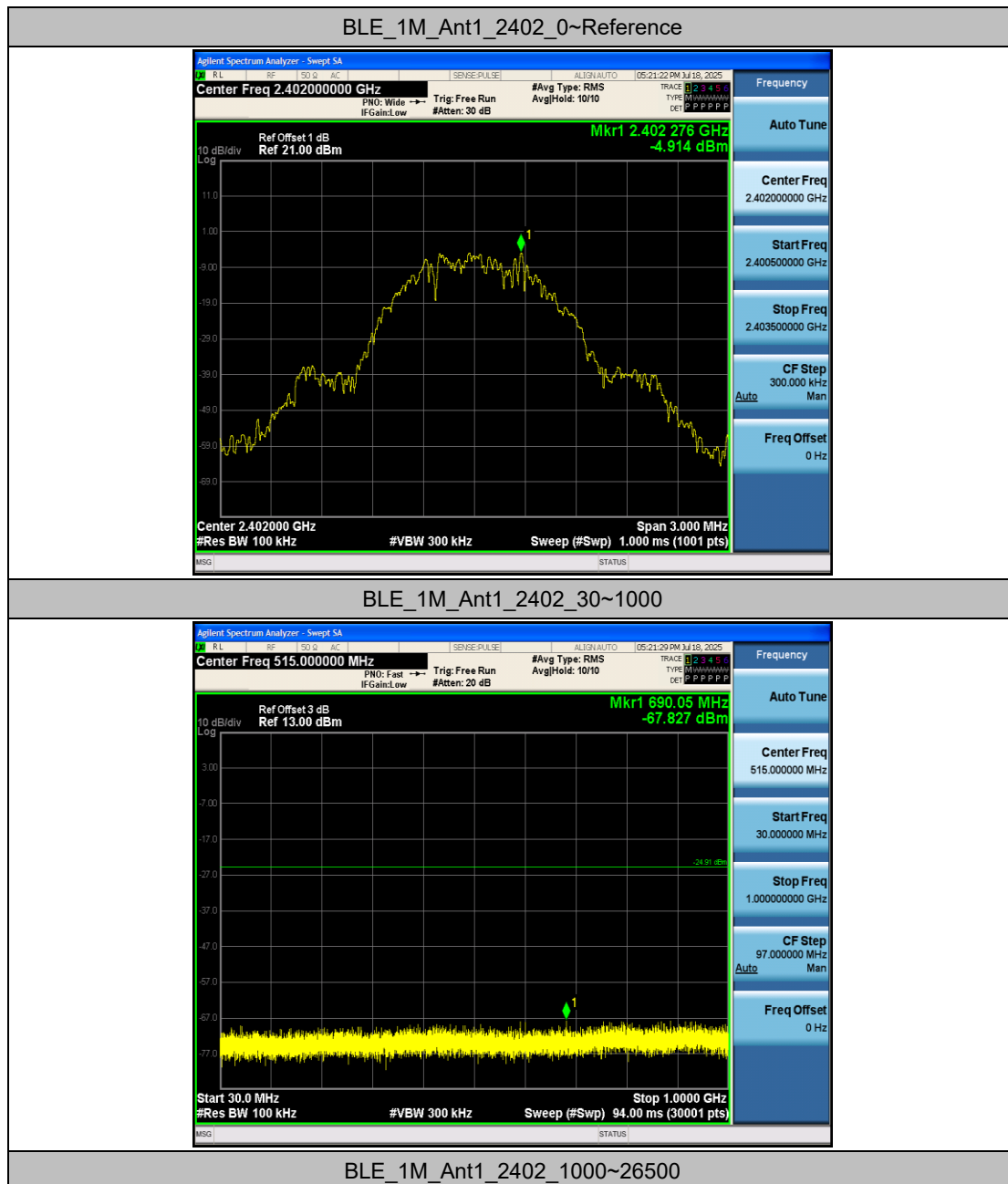


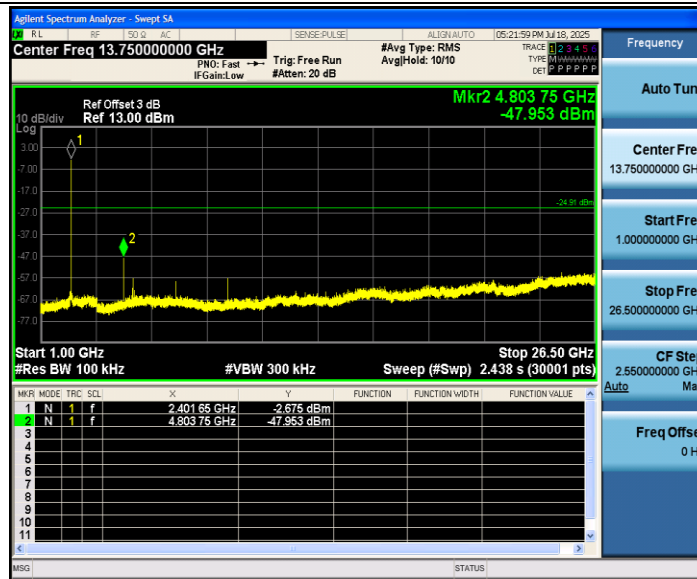
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.91	-4.91	---	PASS
			30~1000	-4.91	-67.83	≤-24.91	PASS
			1000~26500	-4.91	-47.95	≤-24.91	PASS
		2440	Reference	-4.72	-4.72	---	PASS
			30~1000	-4.72	-66.67	≤-24.72	PASS
			1000~26500	-4.72	-47.06	≤-24.72	PASS
		2480	Reference	-5.09	-5.09	---	PASS
			30~1000	-5.09	-66.94	≤-25.09	PASS
			1000~26500	-5.09	-48.91	≤-25.09	PASS

Test Graphs

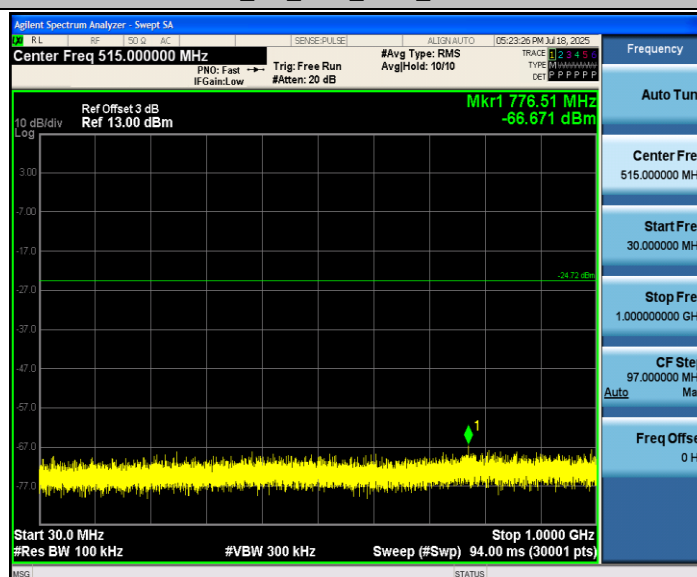




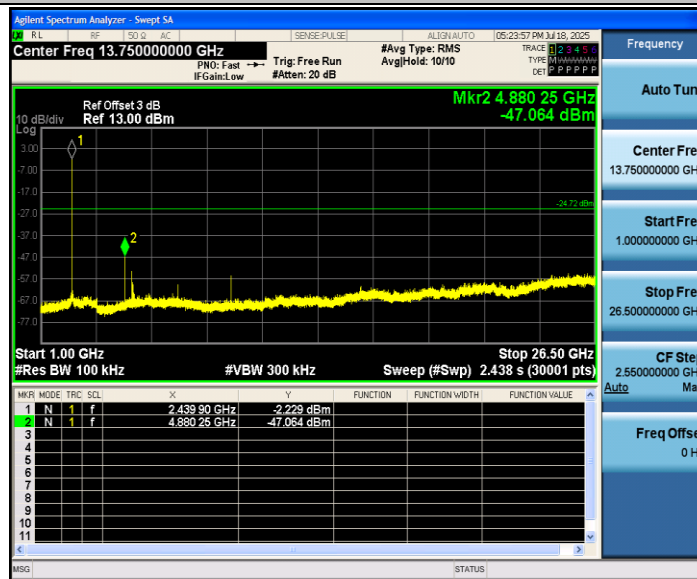
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



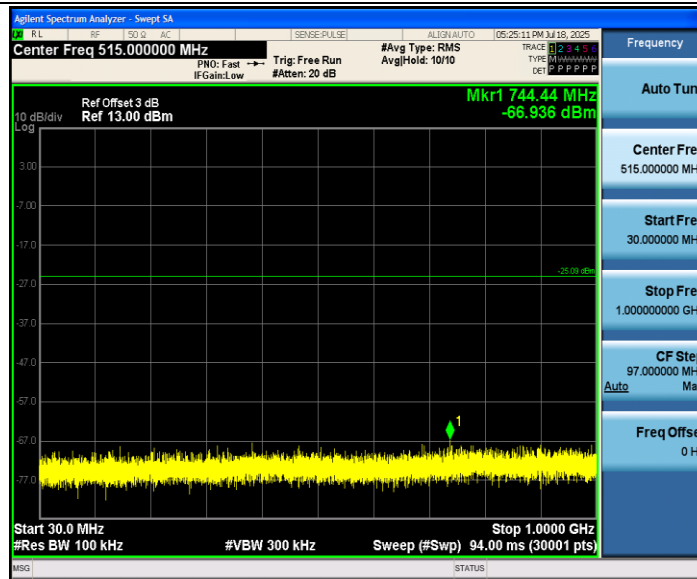
BLE_1M_Ant1_2440_1000~26500



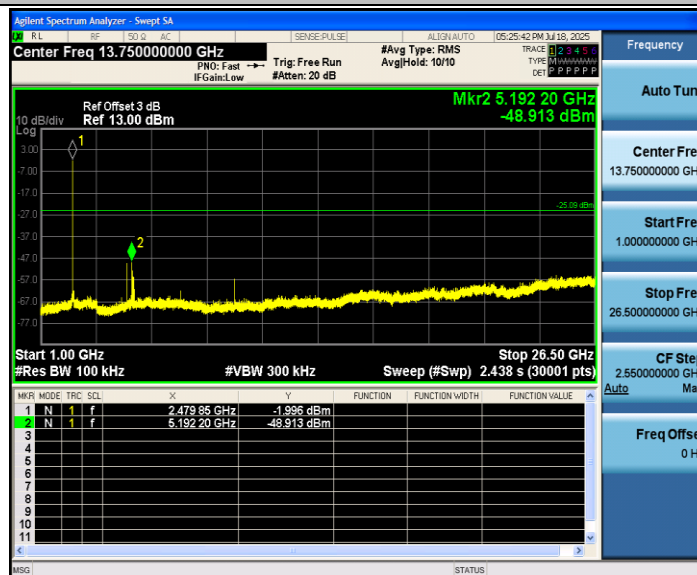
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.62	0.6613	66.13	1.80	---	---
		2440	0.41	0.63	0.6508	65.08	1.87	---	---
		2480	0.41	0.63	0.6508	65.08	1.87	---	---

Test Graphs

