

FCC Appendix RF Test Data

FCC ID : 2A4G4-XM-BT-26A

Company : Shenzhen Xeme Communication Co., Ltd.

EUT : XEME Bluetooth Remote Control

Model Number : XM-BT-26A

Report No. : CTA25072101001

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	0.644	2401.688	2402.332	0.5	PASS
		2440	0.648	2439.692	2440.340	0.5	PASS
		2480	0.648	2479.688	2480.336	0.5	PASS

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.402000000 GHz

Ref Offset 0.5 dB
Ref 20.00 dBm

Trig: Free Run
#Atten: 30 dB

#Avg Type: RMS
Avg/Hold: 100/100

Span 4.000 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

ΔMkr3 644 kHz
0.599 dB

10 dB/div
Log

Center Freq 2.402000000 GHz
Start Freq 2.400000000 GHz
Stop Freq 2.404000000 GHz
CF Step 400.000 kHz
Freq Offset 0 Hz

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.401 688 GHz	-9.619 dBm			
2	N	1	f	2.402 000 GHz	-3.855 dBm			
3	Δ	1	f (Δ)	644 kHz (Δ)	0.599 dB			

BLE_1M_Ant1_2402

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.440000000 GHz

Ref Offset 0.5 dB
Ref 20.00 dBm

Trig: Free Run
#Atten: 30 dB

#Avg Type: RMS
Avg/Hold: 100/100

Span 4.000 MHz
#Res BW 100 kHz
#VBW 300 kHz
Sweep (#Swp) 1.000 ms (1001 pts)

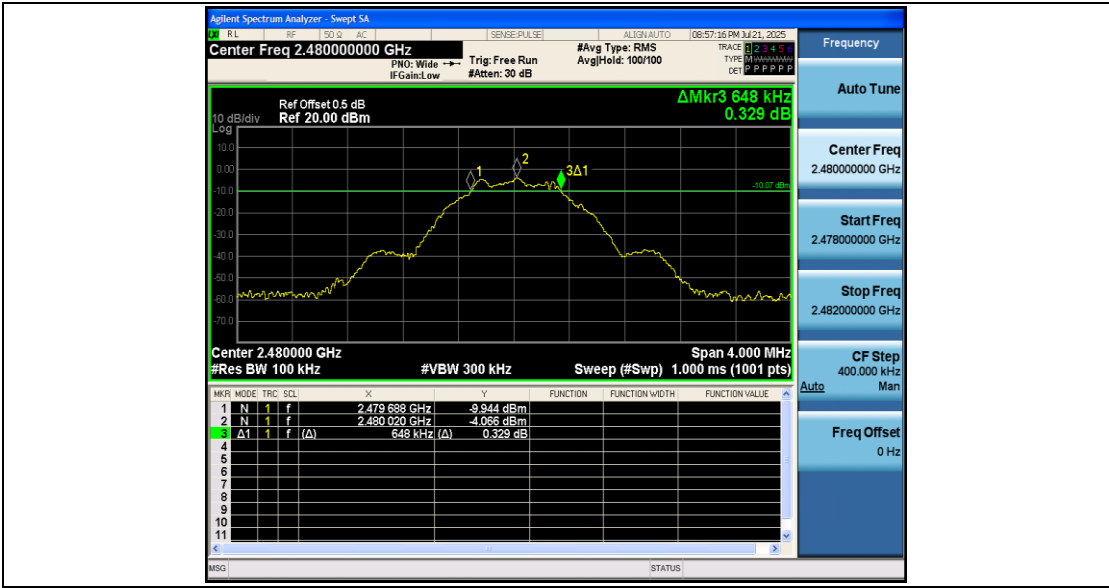
ΔMkr3 648 kHz
-0.253 dB

10 dB/div
Log

Center Freq 2.440000000 GHz
Start Freq 2.438000000 GHz
Stop Freq 2.442000000 GHz
CF Step 400.000 kHz
Freq Offset 0 Hz

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.439 692 GHz	-10.011 dBm			
2	N	1	f	2.440 032 GHz	-4.289 dBm			
3	Δ	1	f (Δ)	648 kHz (Δ)	-0.253 dB			

BLE_1M_Ant1_2440



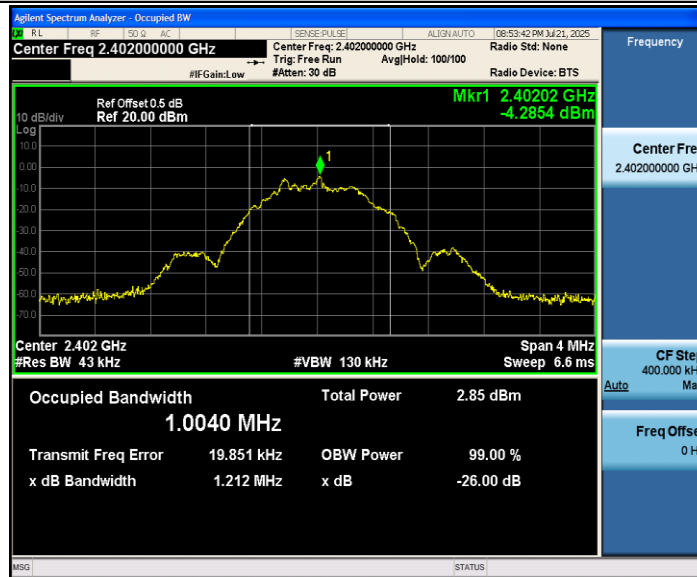
Appendix B: Occupied Channel Bandwidth

Test Result

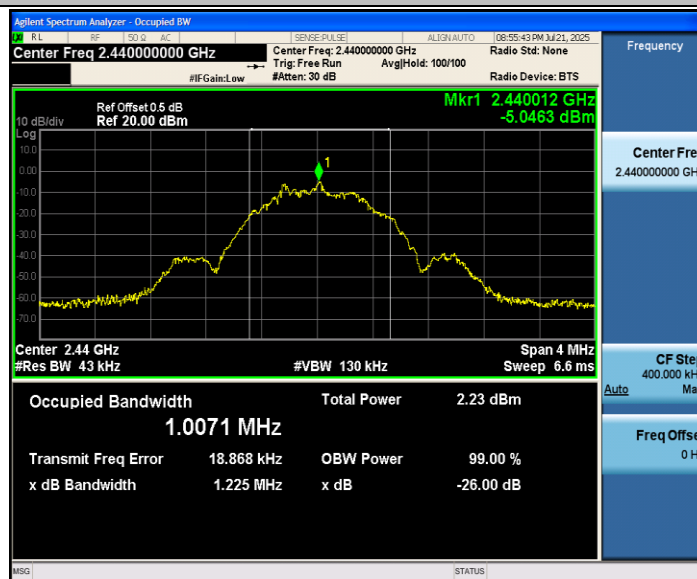
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0040	2401.5179	2402.5219	---	---
		2440	1.0071	2439.5153	2440.5224	---	---
		2480	1.0050	2479.5165	2480.5215	---	---

Test Graphs

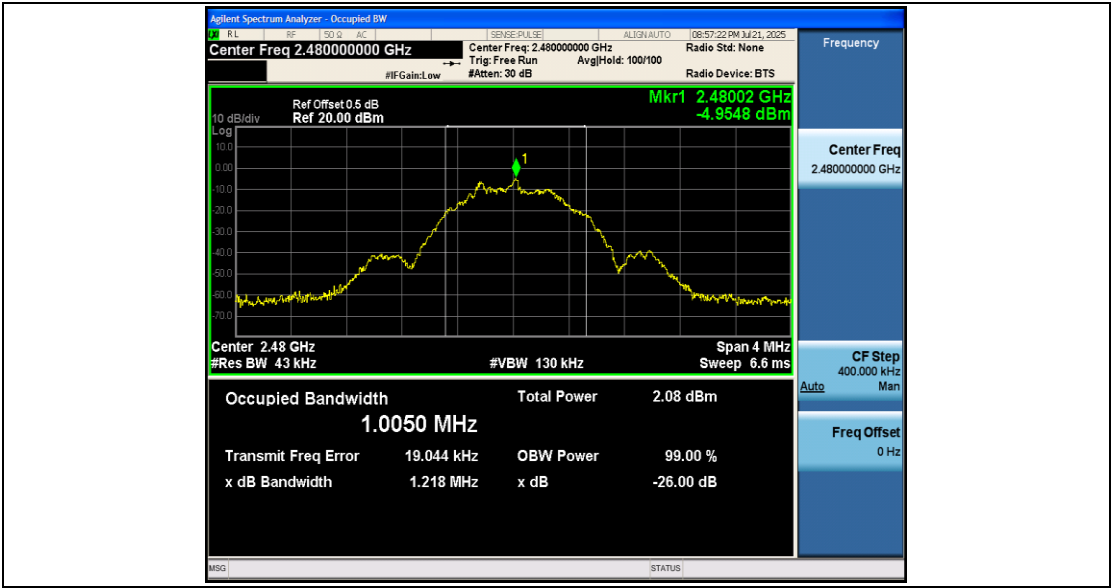
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



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	-3.29	≤30	PASS
		2440	-3.78	≤30	PASS
		2480	-3.97	≤30	PASS

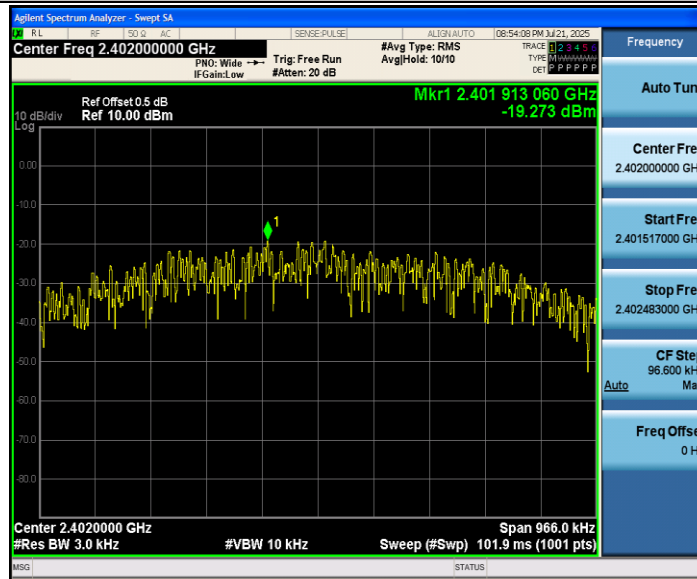
Appendix D: Maximum power spectral density

Test Result

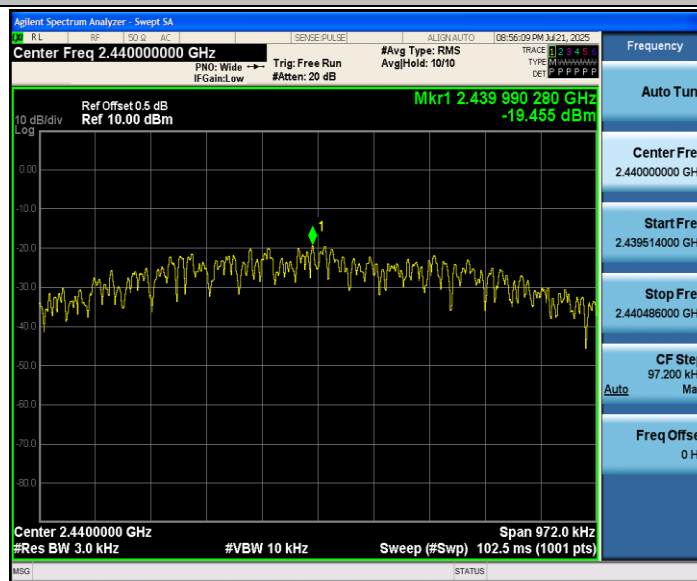
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.27	≤8.00	PASS
		2440	-19.46	≤8.00	PASS
		2480	-19.70	≤8.00	PASS

Test Graphs

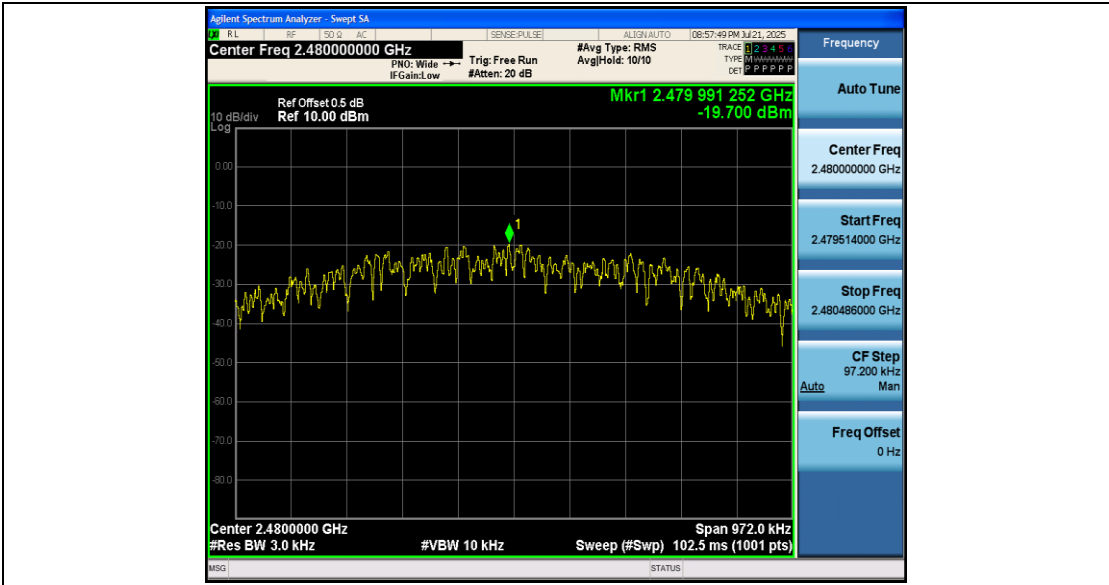
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

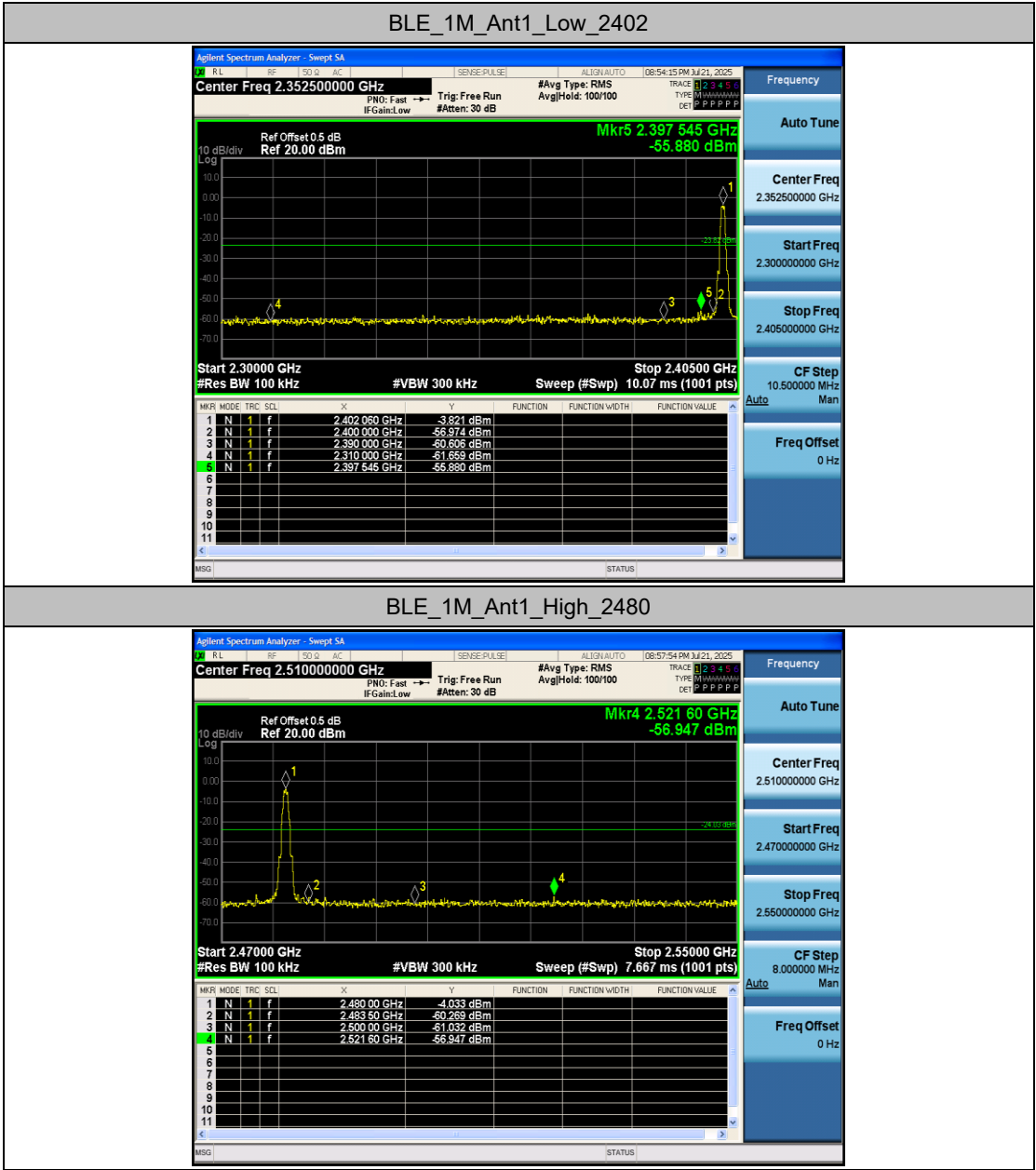


Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-3.82	-55.88	≤-23.82	PASS
		High	2480	-4.03	-56.95	≤-24.03	PASS

Test Graphs

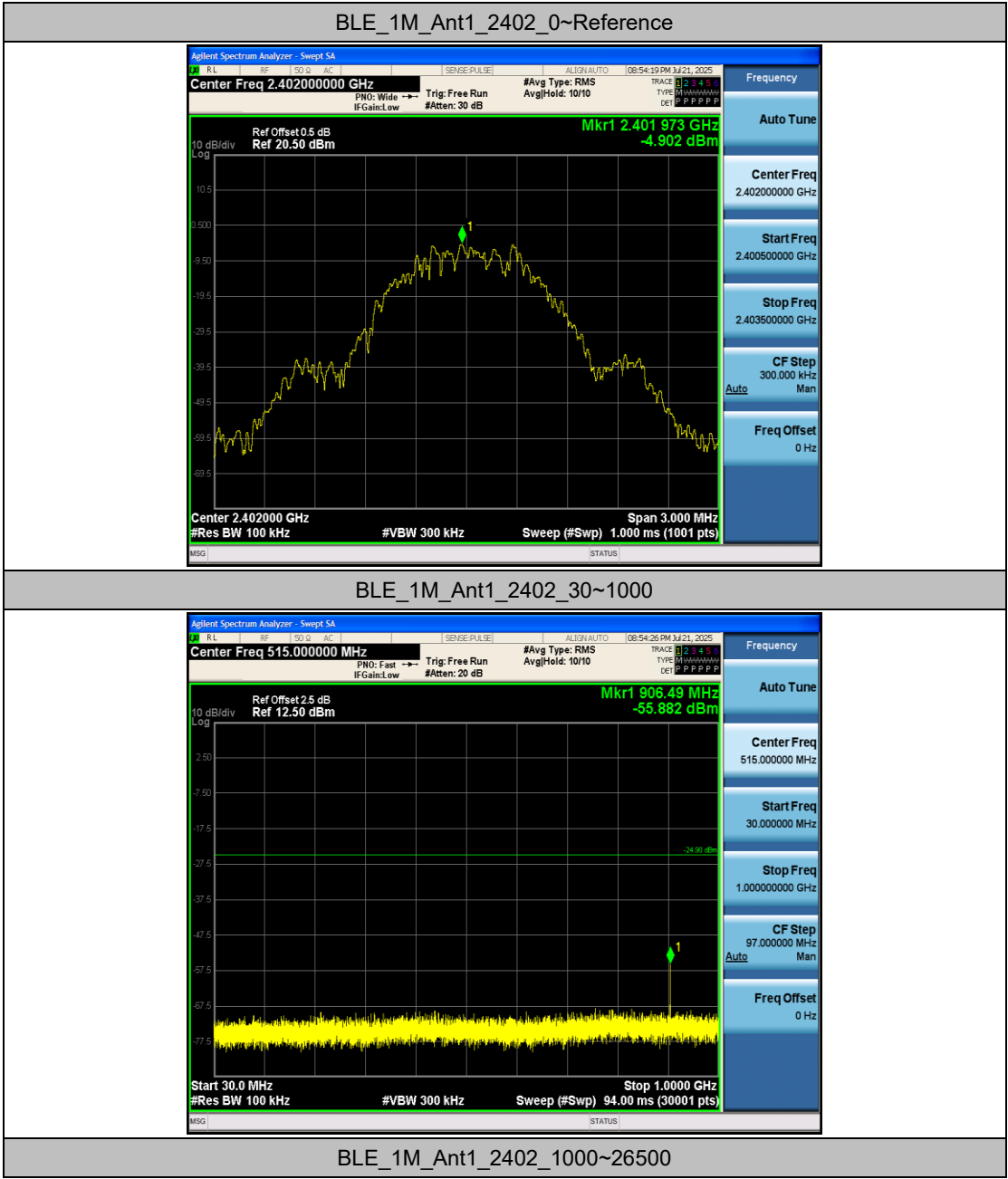


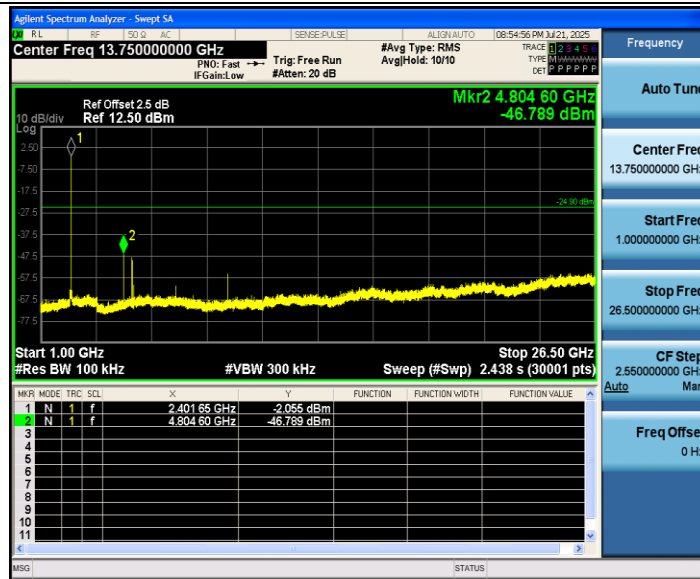
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.90	-4.90	---	PASS
			30~1000	-4.90	-55.88	≤-24.9	PASS
			1000~26500	-4.90	-46.79	≤-24.9	PASS
		2440	Reference	-5.92	-5.92	---	PASS
			30~1000	-5.92	-58.95	≤-25.92	PASS
			1000~26500	-5.92	-48.28	≤-25.92	PASS
		2480	Reference	-5.07	-5.07	---	PASS
			30~1000	-5.07	-67.98	≤-25.07	PASS
			1000~26500	-5.07	-48.88	≤-25.07	PASS

Test Graphs

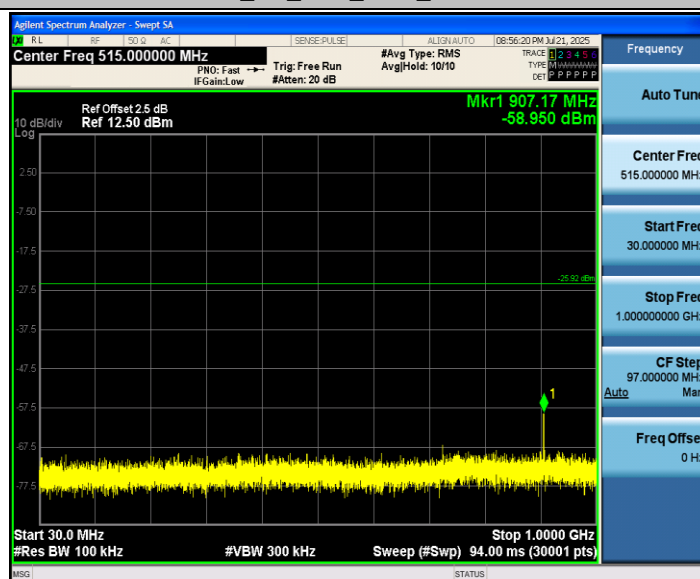




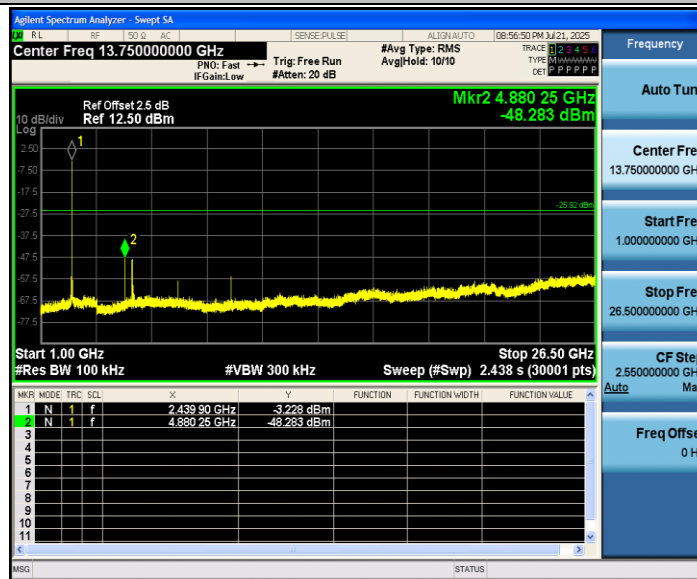
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



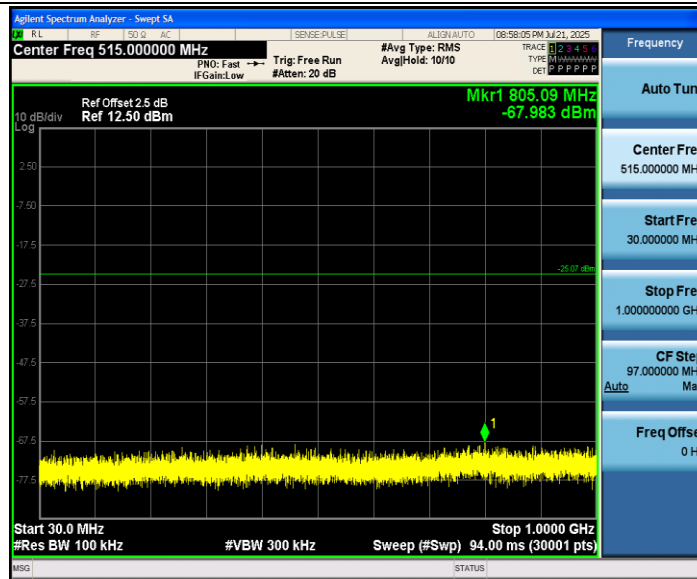
BLE_1M_Ant1_2440_1000~26500



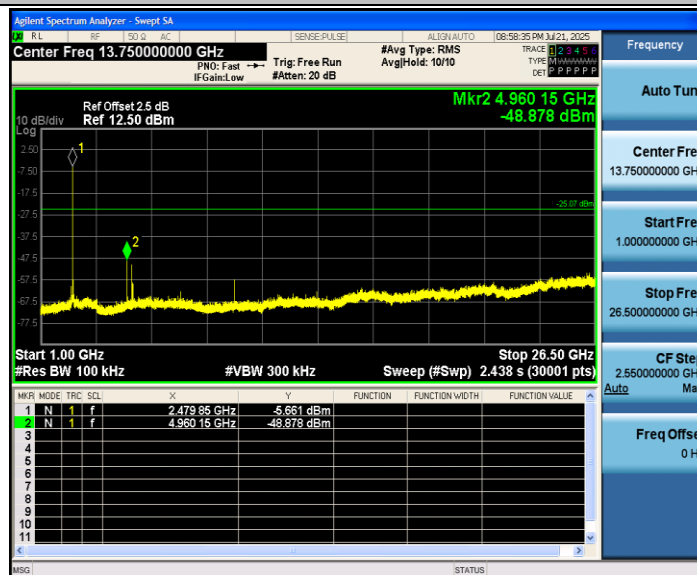
BLE_1M_Ant1_2480_0~Reference



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	0.63	0.6508	65.08	1.87	---	---
		2440	0.41	0.63	0.6508	65.08	1.87	---	---
		2480	0.41	0.63	0.6508	65.08	1.87	---	---

Test Graphs

