

FCC Appendix RF Test Data

FCC ID : 2BCTS-ES-FM11

Company : Shenzhen Enersmart Technology Development Co., Ltd.

EUT : Find Tag

Model Number : ES-FM11

Report No. : CTA25061700801

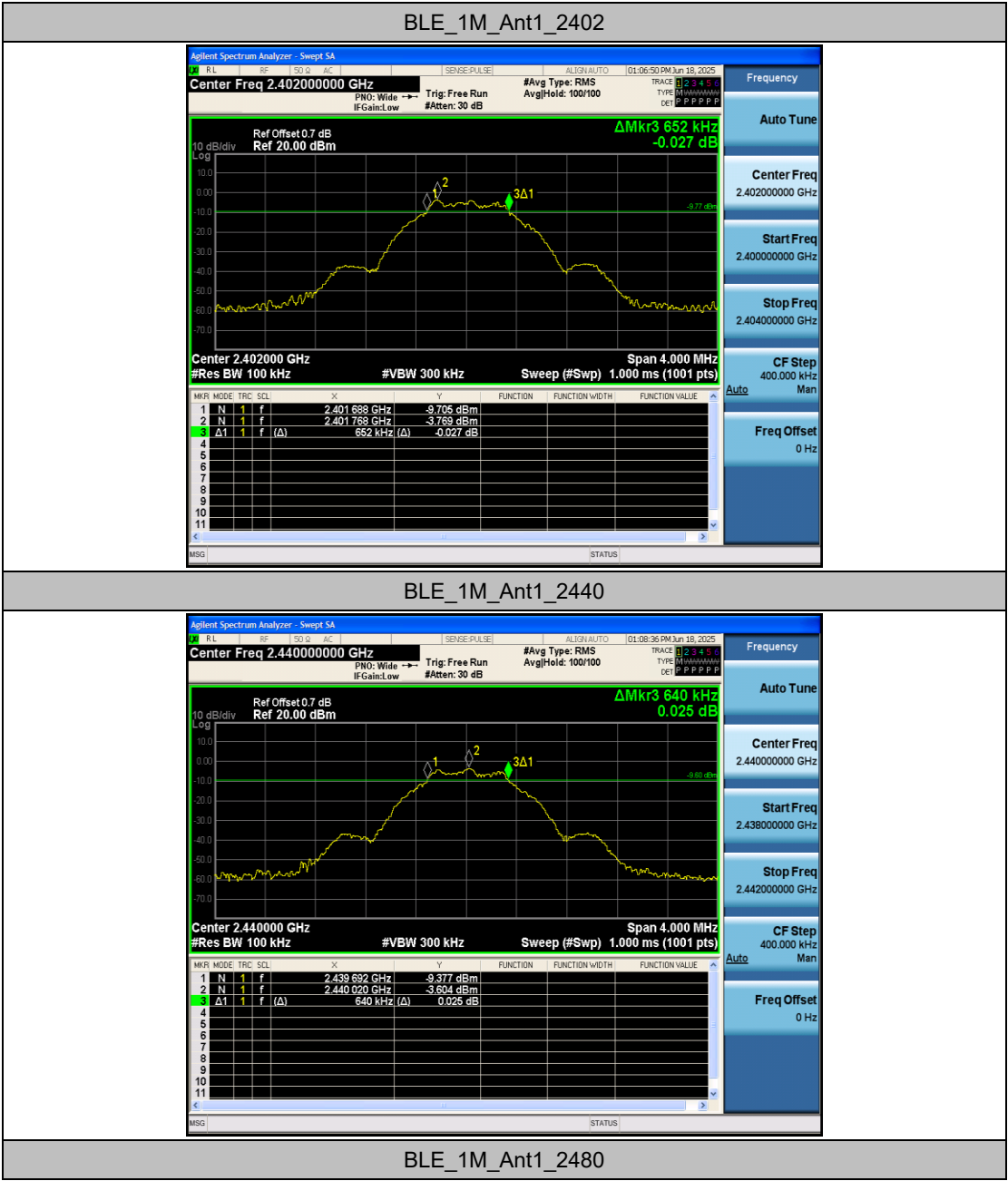
Reviewed By : Eric Wang

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.652	2401.688	2402.340	0.5	PASS
		2440	0.640	2439.692	2440.332	0.5	PASS
		2480	0.644	2479.692	2480.336	0.5	PASS

Test Graphs



BLE_1M_Ant1_2440

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.440000000 GHz

Ref Offset 0.7 dB
Ref 20.00 dBm

10 dB/div
Log

Span 4.000 MHz

Center 2.440000 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep (#Swp) 1.000 ms (1001 pts)

Trig: Free Run

#Att: 30 dB

#Avg Type: RMS

Avg/Hold: 100/100

01:08:36 PM Jun 18, 2025

Frequency

Auto Tune

Center Freq
2.440000000 GHz

Start Freq
2.438000000 GHz

Stop Freq
2.442000000 GHz

CF Step
400.000 kHz
Man

Freq Offset
0 Hz

MSG

STATUS

MR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.439692 GHz	-9.377 dBm			
2	N	1	f	2.440020 GHz	-3.604 dBm			
3	Δ	1	f (Δ)	640 kHz (Δ)	0.025 dB			

BLE_1M_Ant1_2480

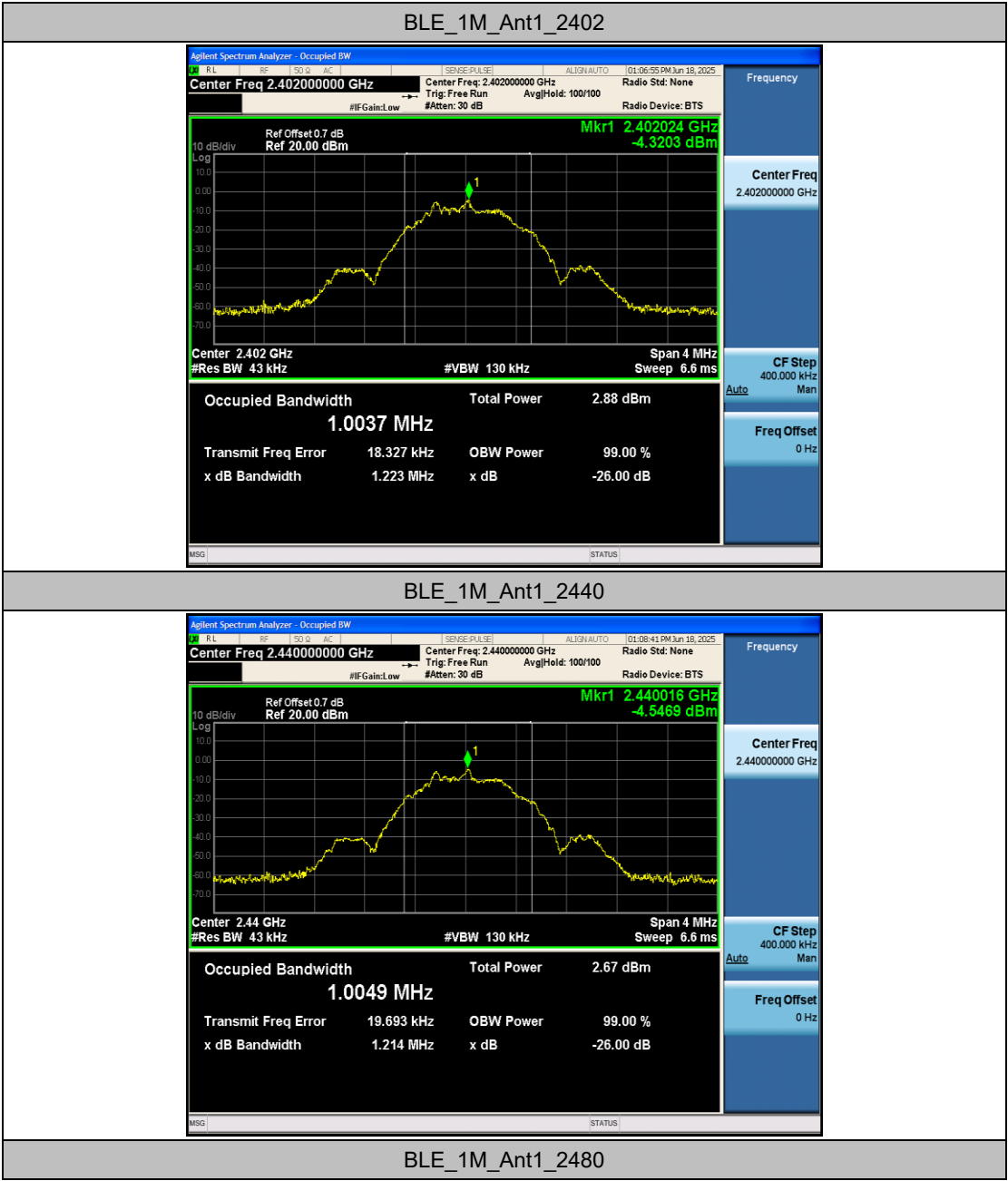


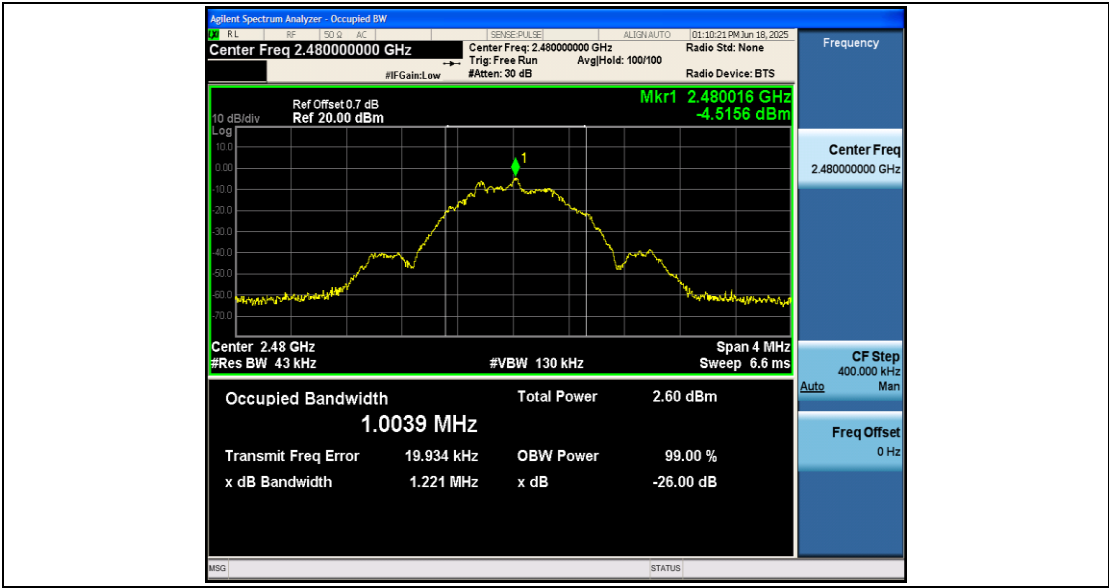
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0037	2401.5165	2402.5202	---	---
		2440	1.0049	2439.5172	2440.5221	---	---
		2480	1.0039	2479.5180	2480.5219	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

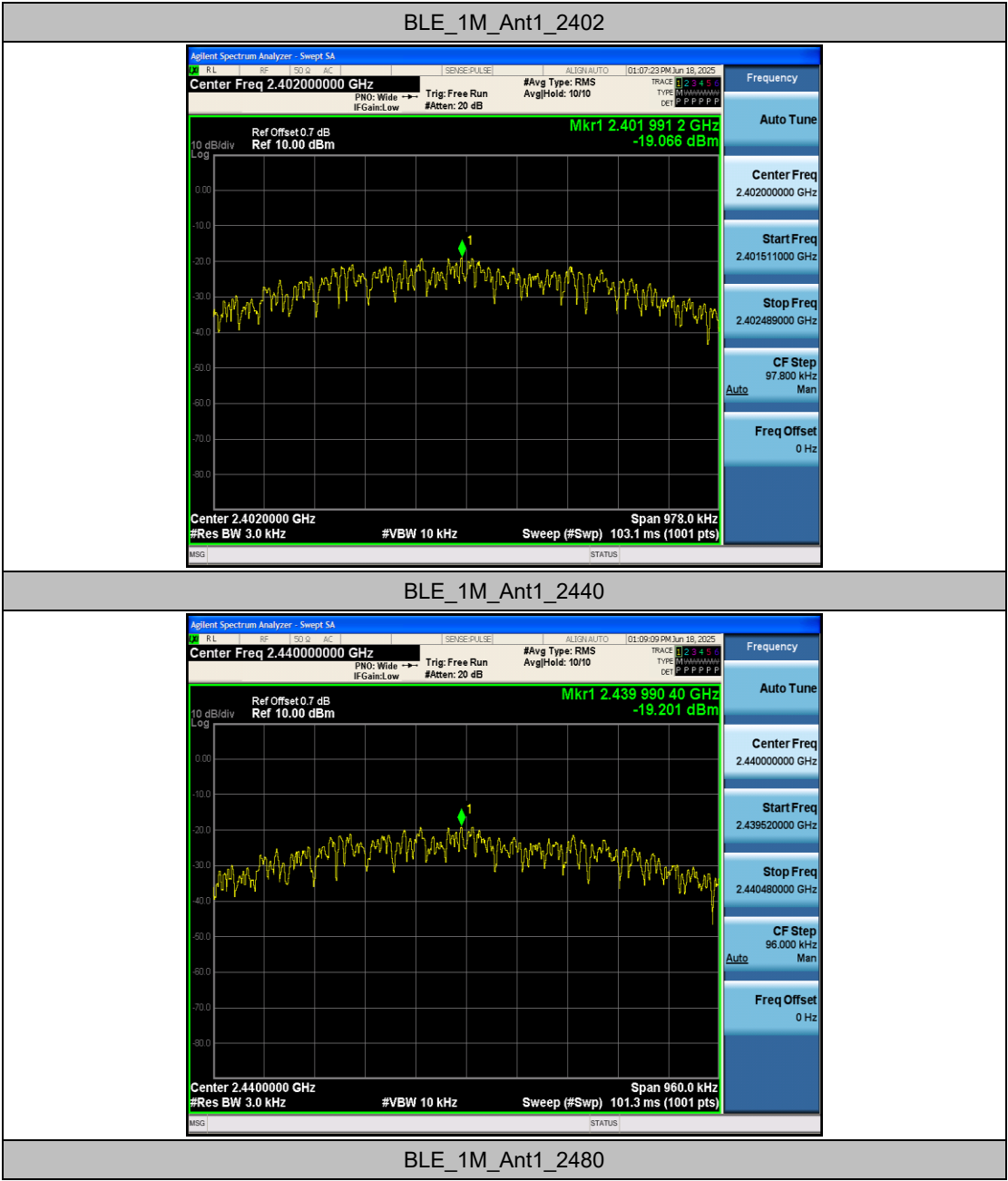
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.17	≤30	PASS
		2440	-3.49	≤30	PASS
		2480	-3.44	≤30	PASS

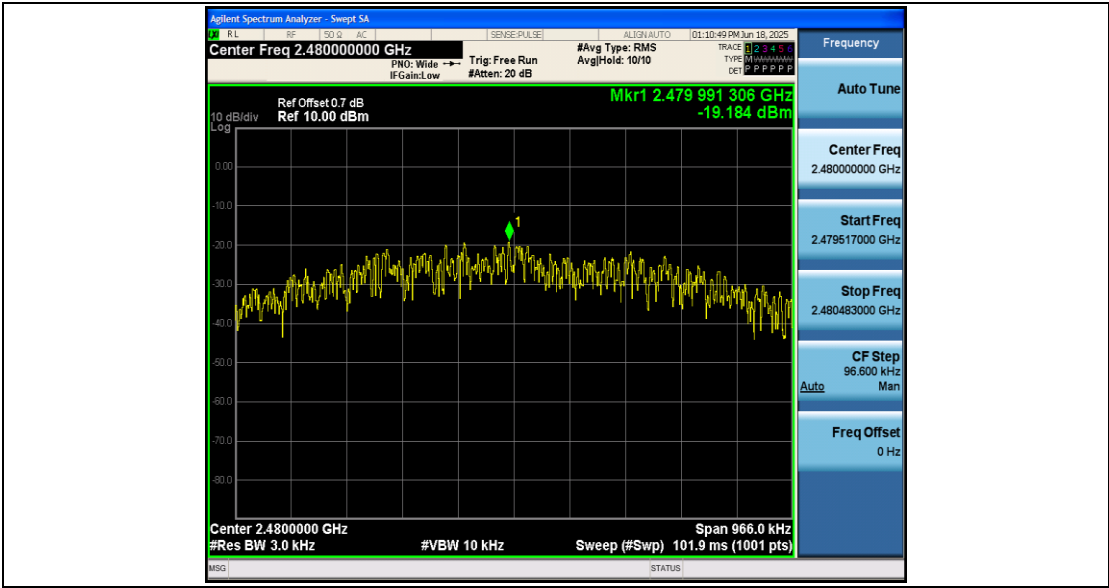
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.07	≤8.00	PASS
		2440	-19.20	≤8.00	PASS
		2480	-19.18	≤8.00	PASS

Test Graphs



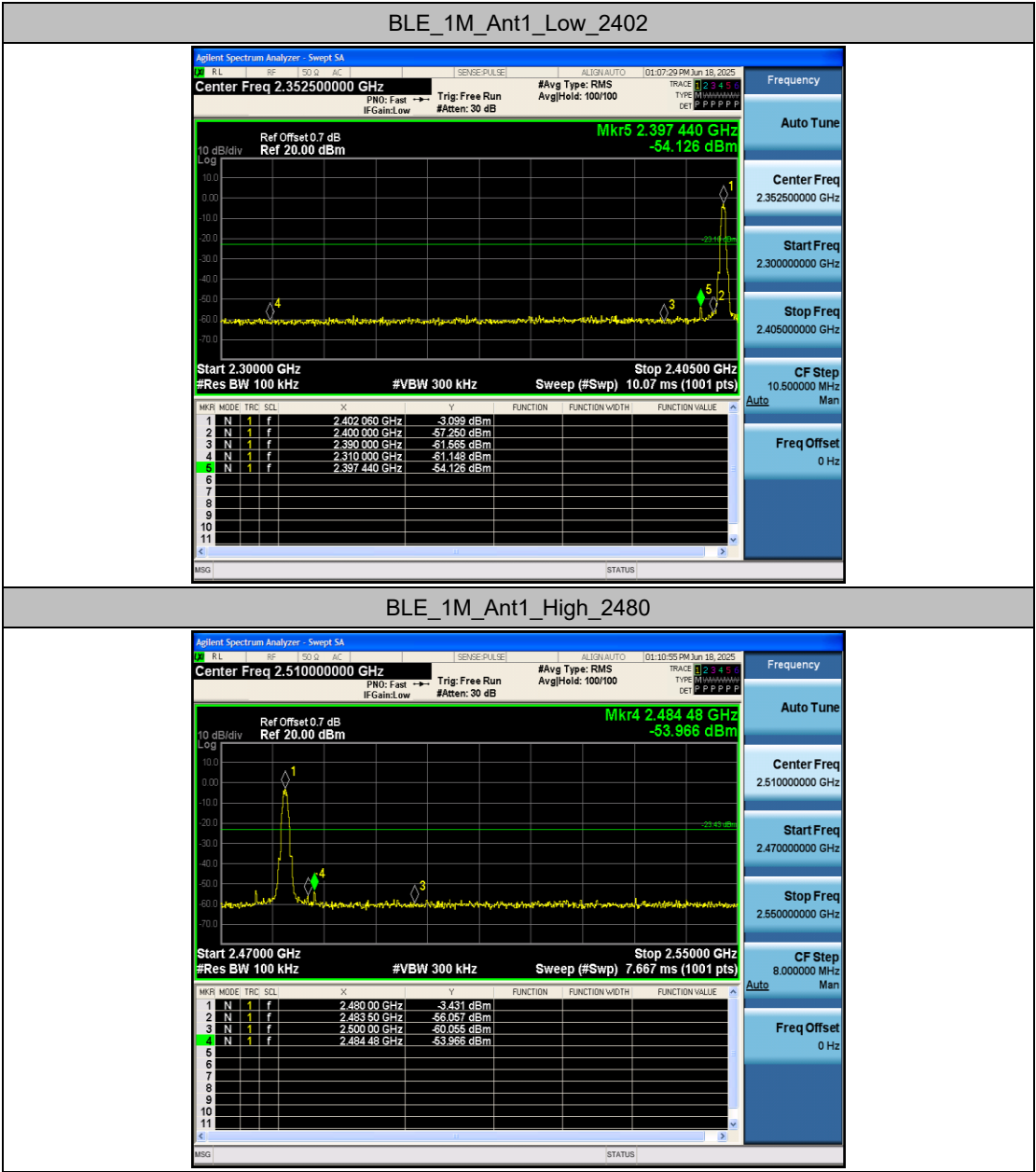


Appendix E: Band edge measurements

Test Result

TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	-3.10	-54.13	≤-23.1	PASS
		High	2480	-3.43	-53.97	≤-23.43	PASS

Test Graphs

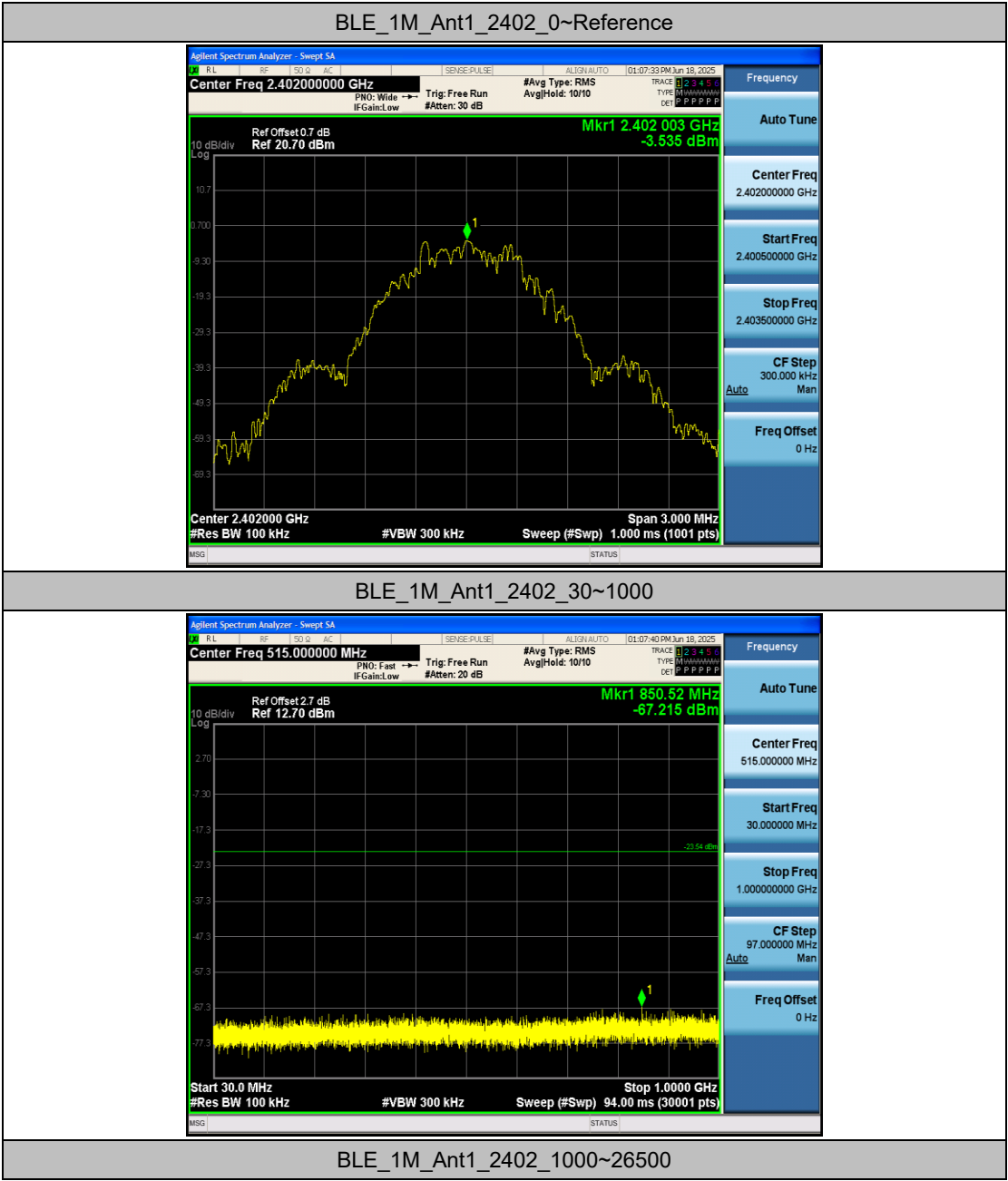


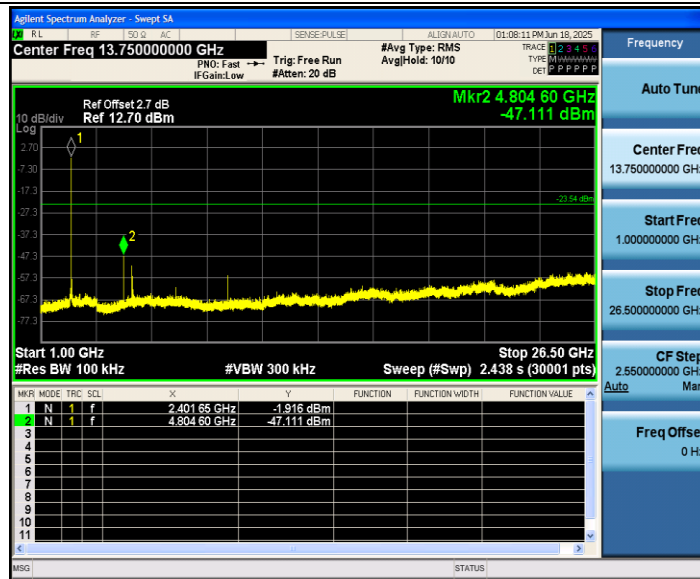
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-3.54	-3.54	---	PASS
			30~1000	-3.54	-67.22	≤-23.54	PASS
			1000~26500	-3.54	-47.11	≤-23.54	PASS
		2440	Reference	-3.90	-3.90	---	PASS
			30~1000	-3.90	-67.03	≤-23.9	PASS
			1000~26500	-3.90	-48.96	≤-23.9	PASS
		2480	Reference	-4.24	-4.24	---	PASS
			30~1000	-4.24	-68.15	≤-24.24	PASS
			1000~26500	-4.24	-50.15	≤-24.24	PASS

Test Graphs

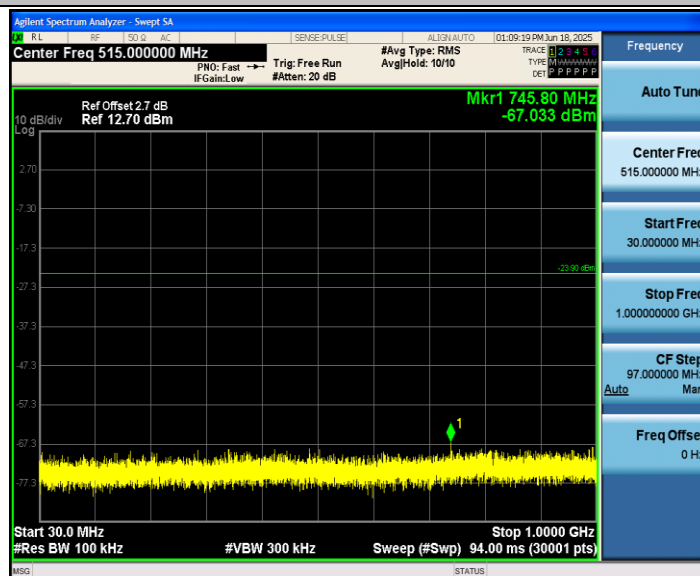




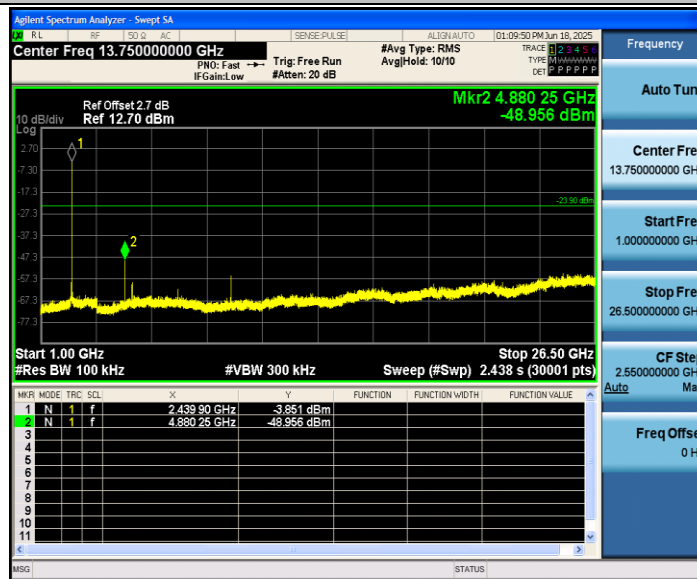
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



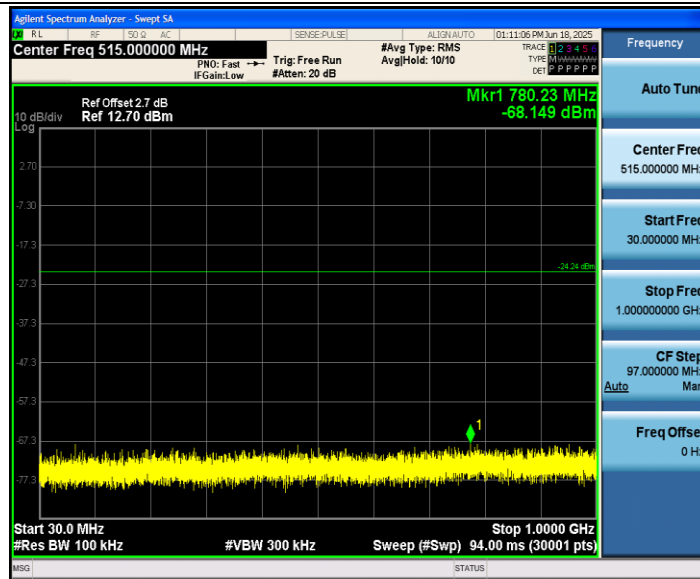
BLE_1M_Ant1_2440_1000~26500



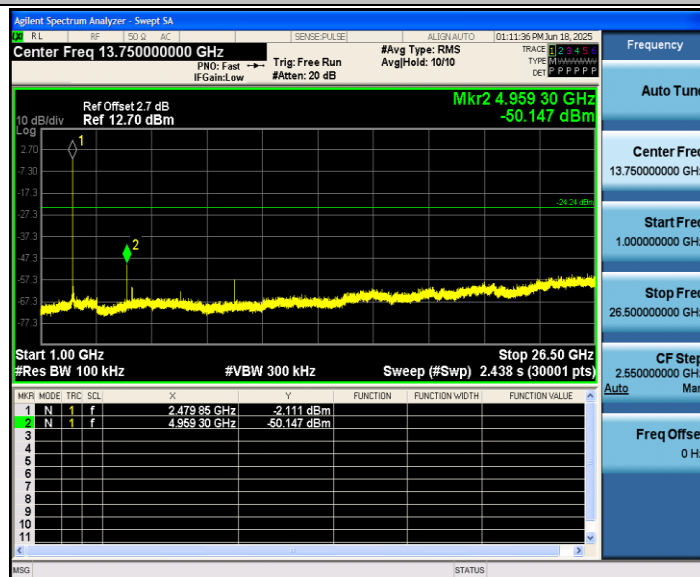
BLE_1M_Ant1_2480_0~Reference



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

