

FCC Appendix RF Test Data for BLE

FCC ID : 2BUDJ-SSHUB01

Company : BINER INC

EUT : Audio HUB

Model Number : SSHUB-001

Report No. : CTA26010601401

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	0.640	2401.696	2402.336	0.5	PASS
		2440	0.648	2439.692	2440.340	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 0.2 dB
Ref 30.00 dBm

Span 4.000 MHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 1.000 ms (1001 pts)

10 dB/div

Log

Ref: Free Run

#Atten: 40 dB

#Avg Type: RMS

Avg/Hold: 100/100

05:34:13 PM Jan 15, 2026

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

1

2

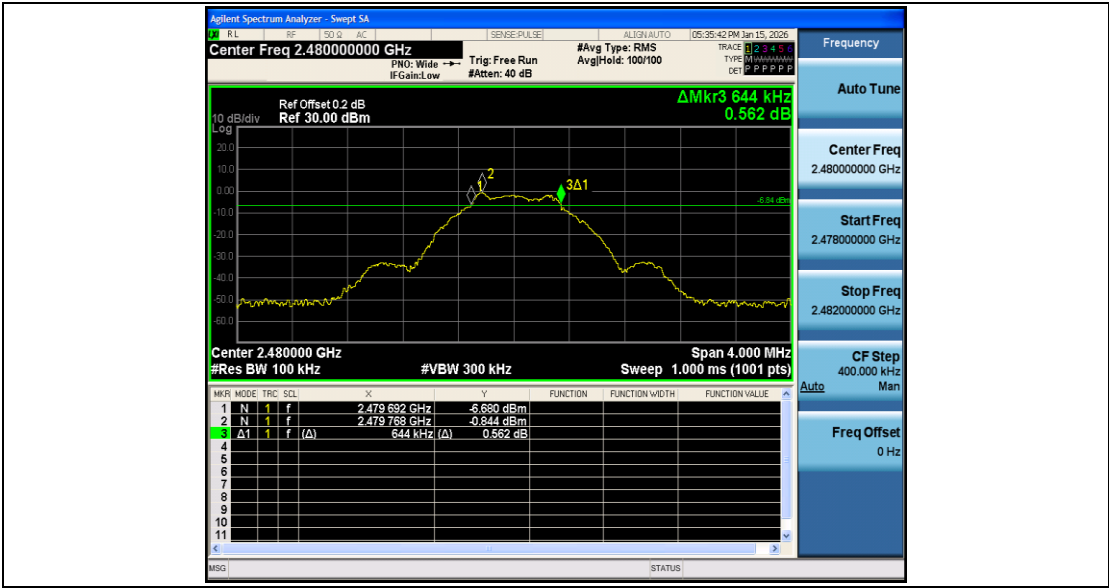
3Δ1

ΔMkr3 648 kHz
-0.143 dB

-6.47 dBm

MNR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.439692 GHz	-5.275 dBm			
2	N	1	f	2.440024 GHz	-0.474 dBm			
Δ1	Δ	1	f (Δ)	648 kHz (Δ)	-0.143 dB			

BLE_1M_Ant1_2480

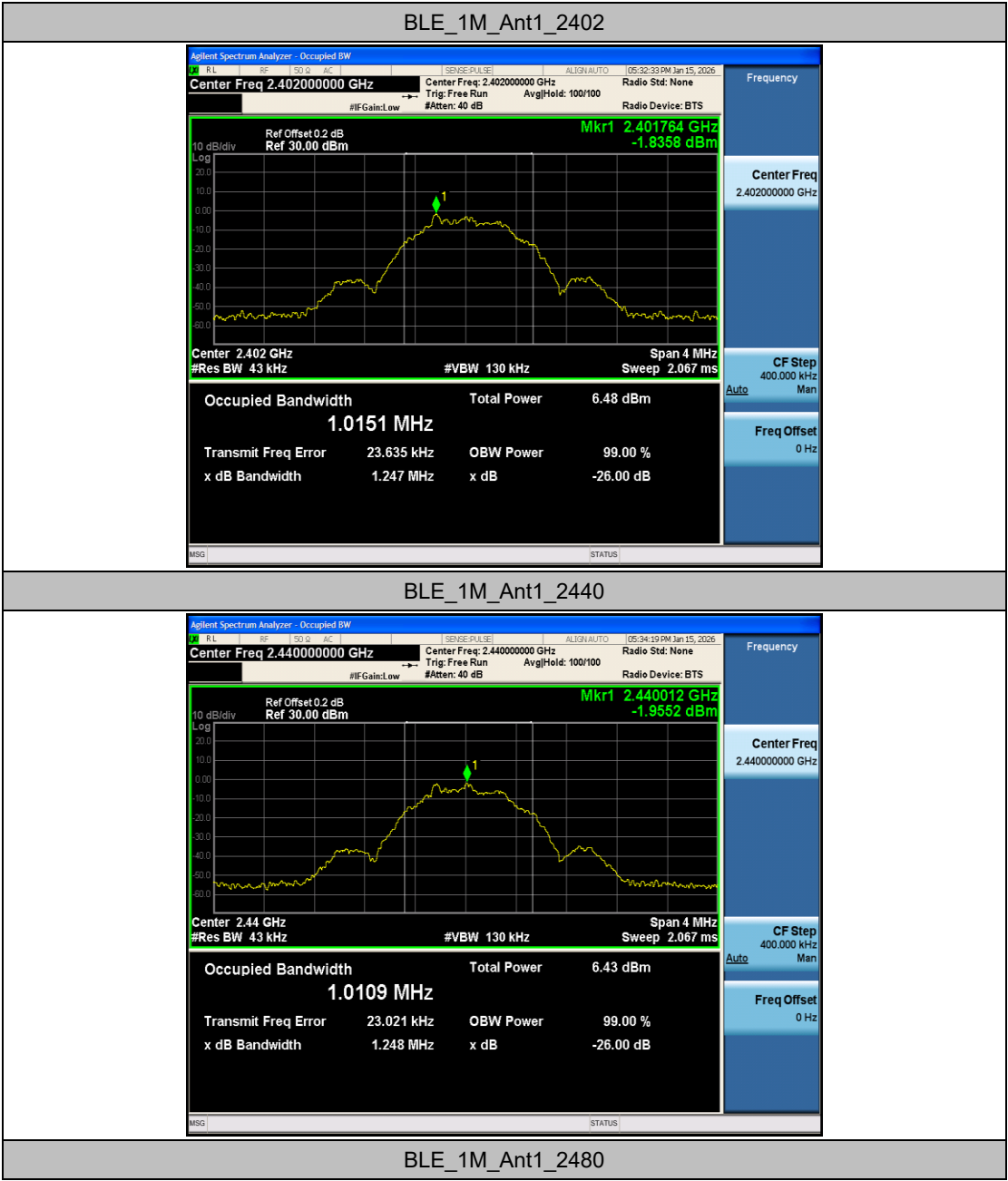


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0151	2401.5161	2402.5312	---	---
		2440	1.0109	2439.5176	2440.5285	---	---
		2480	1.0040	2479.5215	2480.5255	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

Module 1

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.02	≤30	PASS
		2440	-0.30	≤30	PASS
		2480	-0.35	≤30	PASS

Module 2

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.15	≤30	PASS
		2440	-0.09	≤30	PASS
		2480	-0.46	≤30	PASS

Module 3

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.17	≤30	PASS
		2440	-0.22	≤30	PASS
		2480	-0.56	≤30	PASS

Module 4

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-0.29	≤30	PASS
		2440	-0.04	≤30	PASS
		2480	-0.19	≤30	PASS

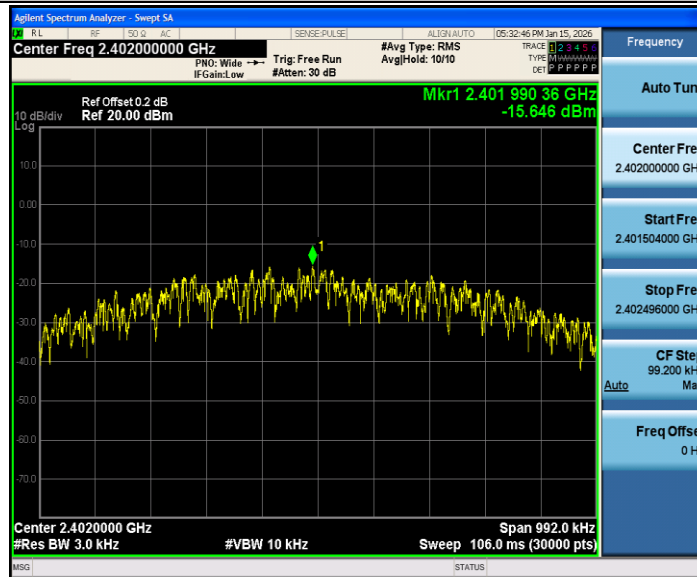
Appendix D: Maximum power spectral density

Test Result

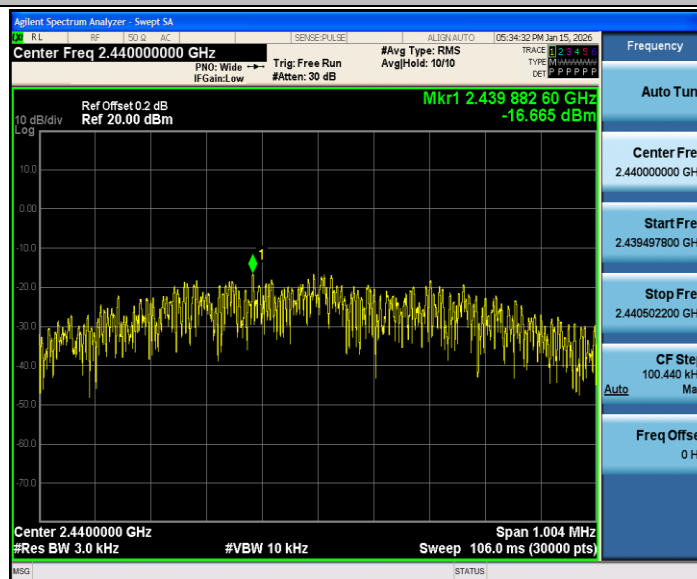
TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-15.65	≤8.00	PASS
		2440	-16.67	≤8.00	PASS
		2480	-15.74	≤8.00	PASS

Test Graphs

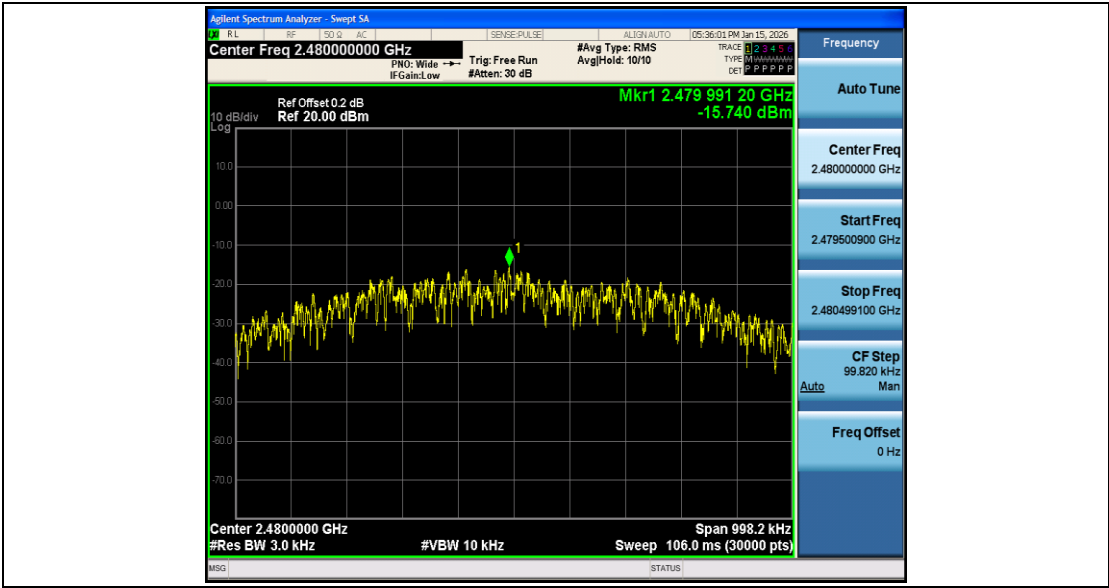
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



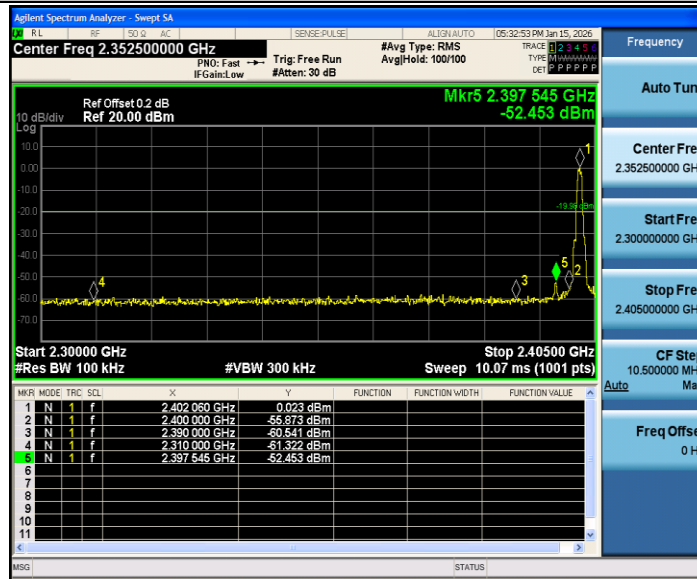
Appendix E: Band edge measurements

Test Result

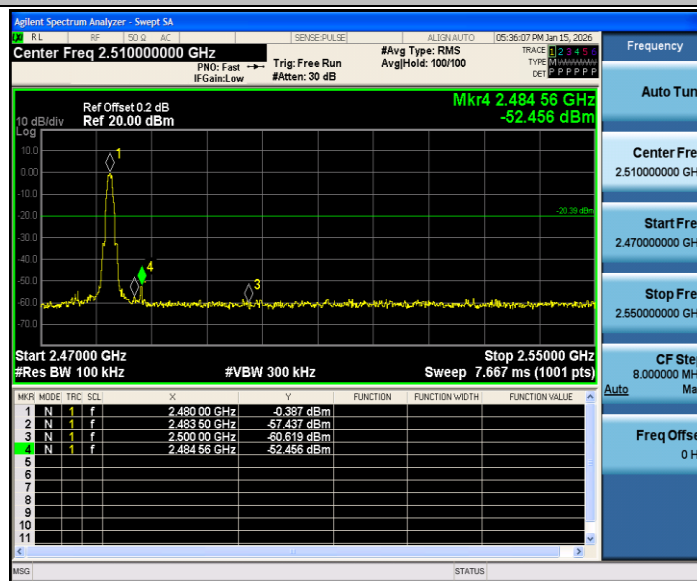
TestMod e	Antenn a	ChNam e	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdic t
BLE_1M	Ant1	Low	2402	0.02	-52.45	≤-19.98	PASS
		High	2480	-0.39	-52.46	≤-20.39	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

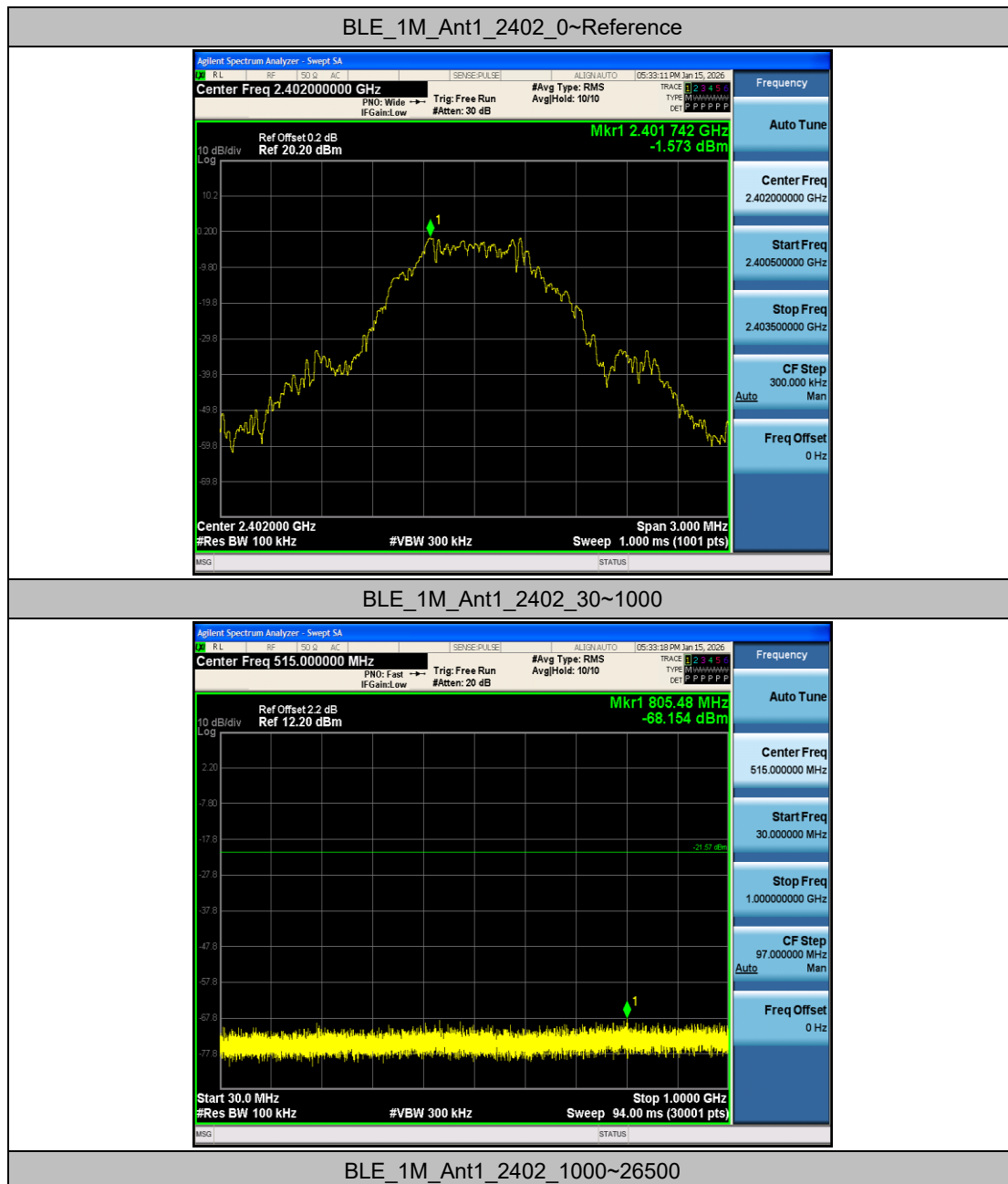


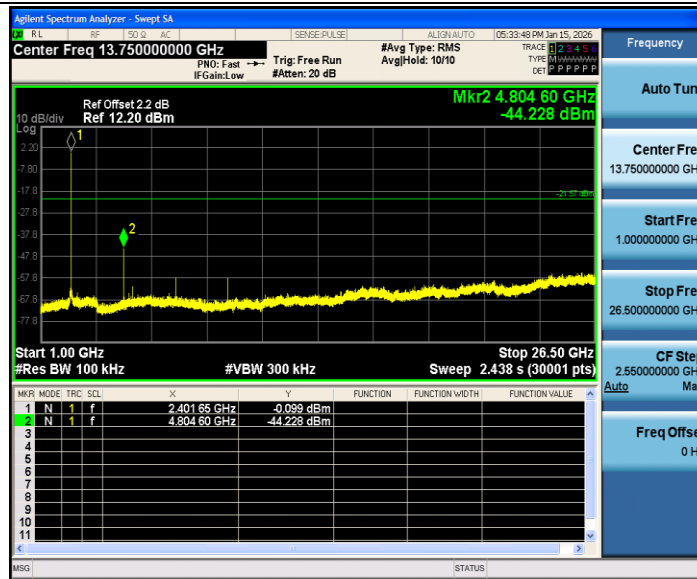
Appendix F: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-1.57	-1.57	---	PASS
			30~1000	-1.57	-68.15	≤-21.57	PASS
			1000~26500	-1.57	-44.23	≤-21.57	PASS
		2440	Reference	-1.75	-1.75	---	PASS
			30~1000	-1.75	-67.5	≤-21.75	PASS
			1000~26500	-1.75	-44.44	≤-21.75	PASS
		2480	Reference	-1.20	-1.20	---	PASS
			30~1000	-1.20	-67.71	≤-21.2	PASS
			1000~26500	-1.20	-44.18	≤-21.2	PASS

Test Graphs

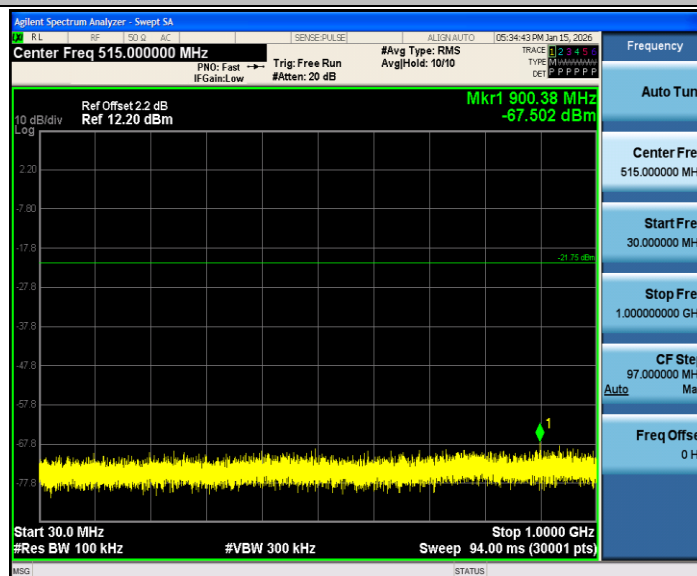




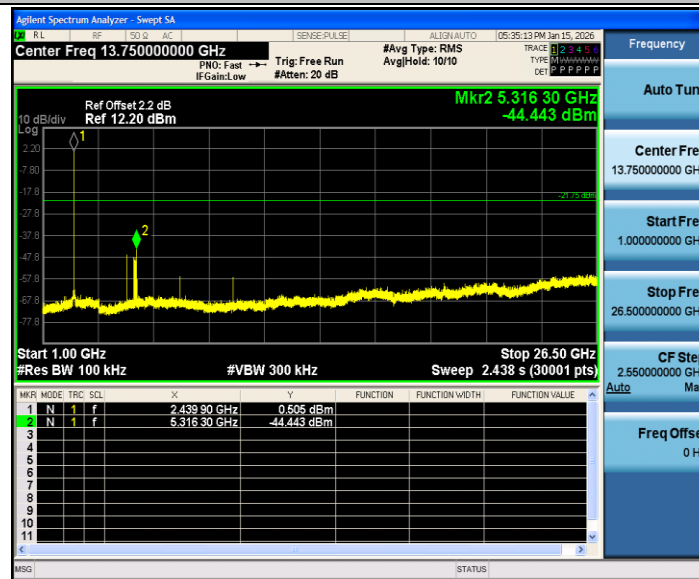
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



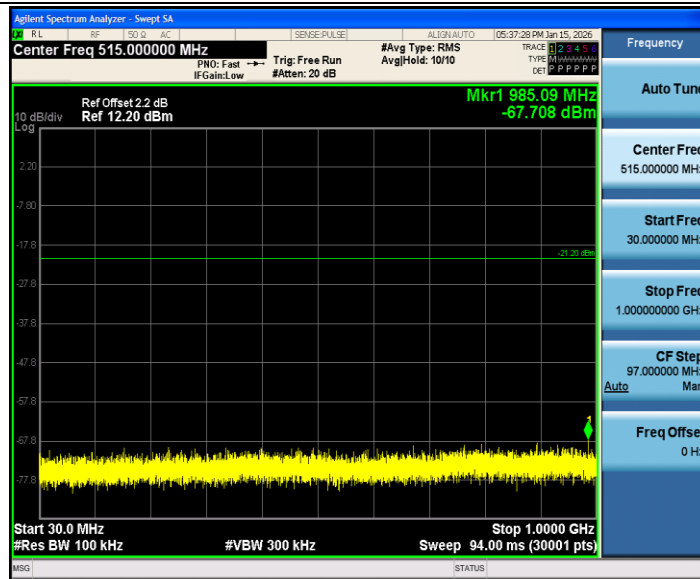
BLE_1M_Ant1_2440_1000~26500



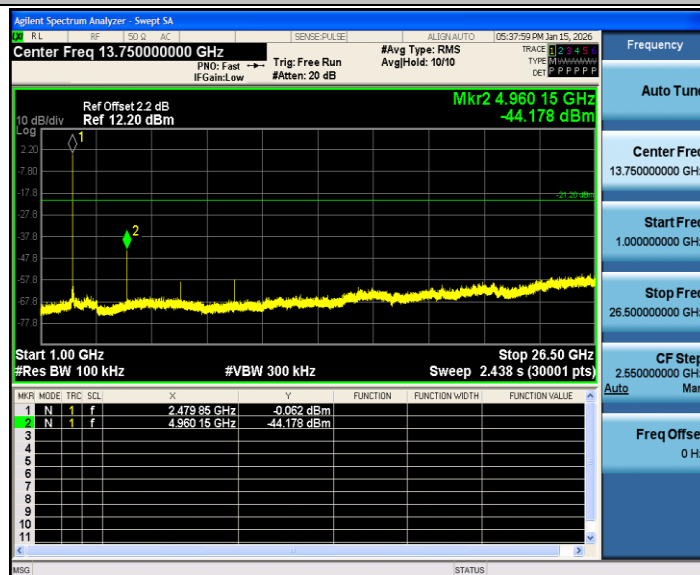
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

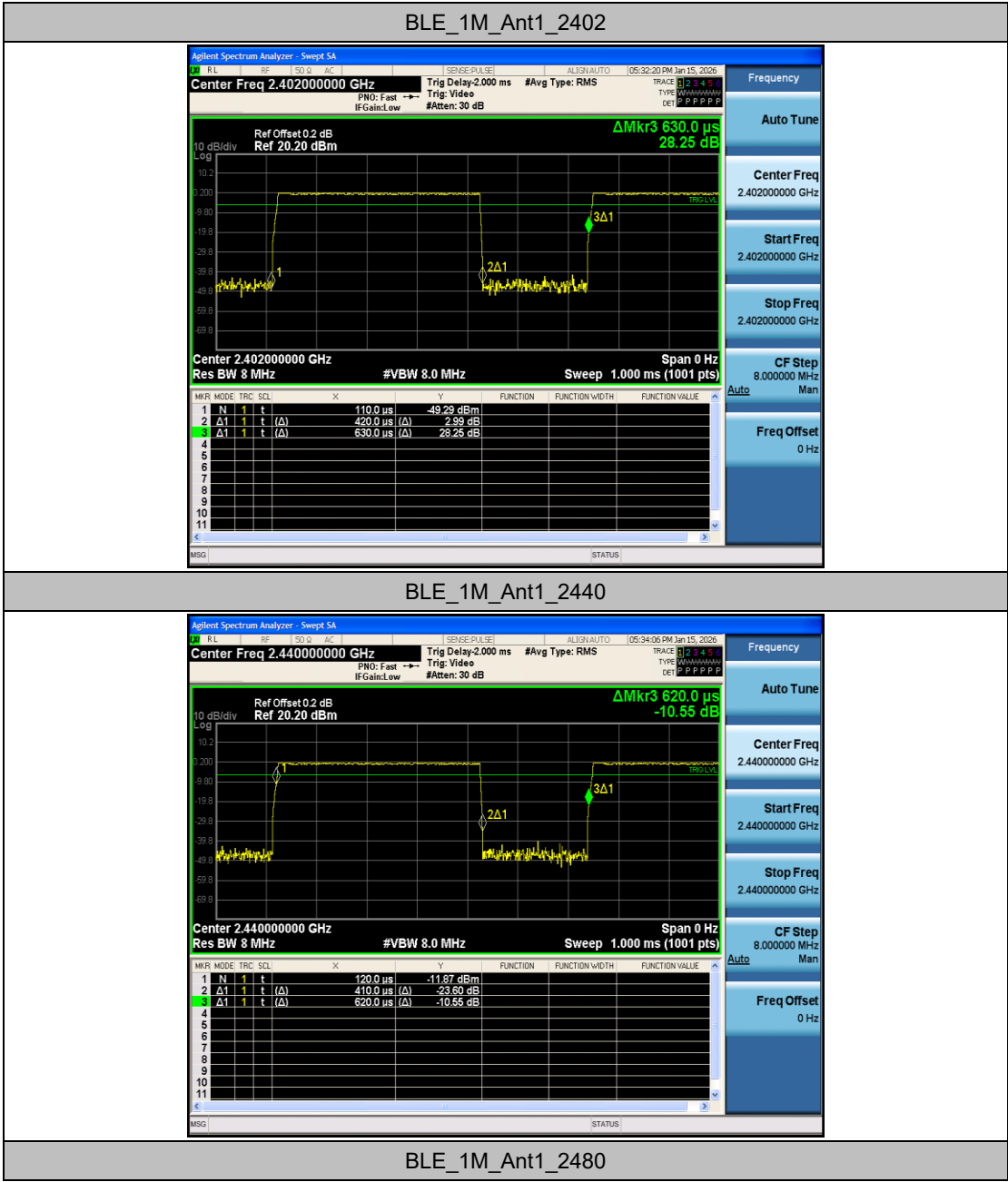


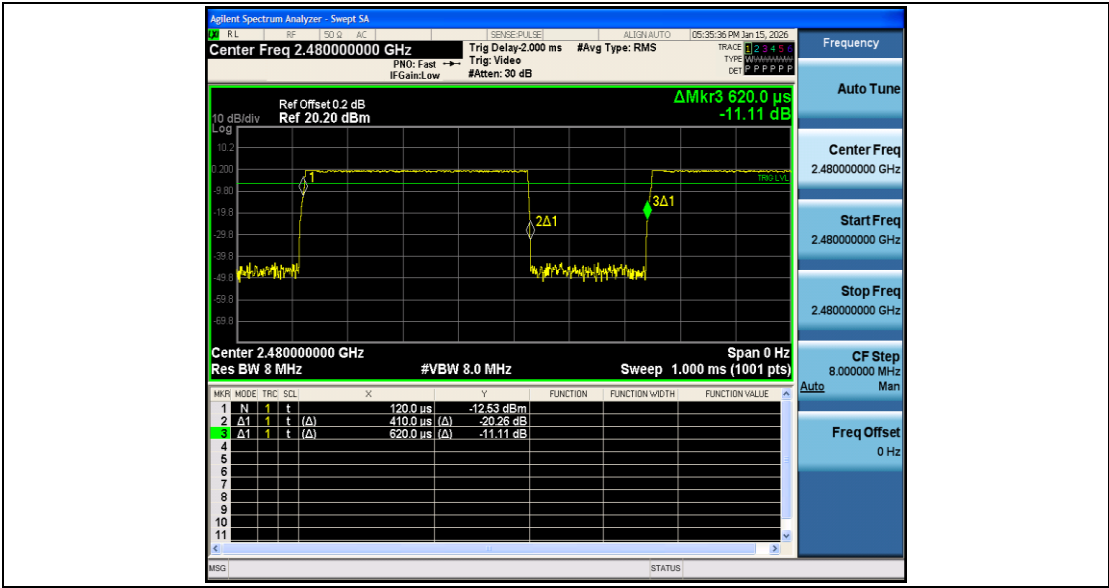
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.42	0.63	0.6667	66.67	1.76	---	---
		2440	0.41	0.62	0.6613	66.13	1.80	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---

Test Graphs





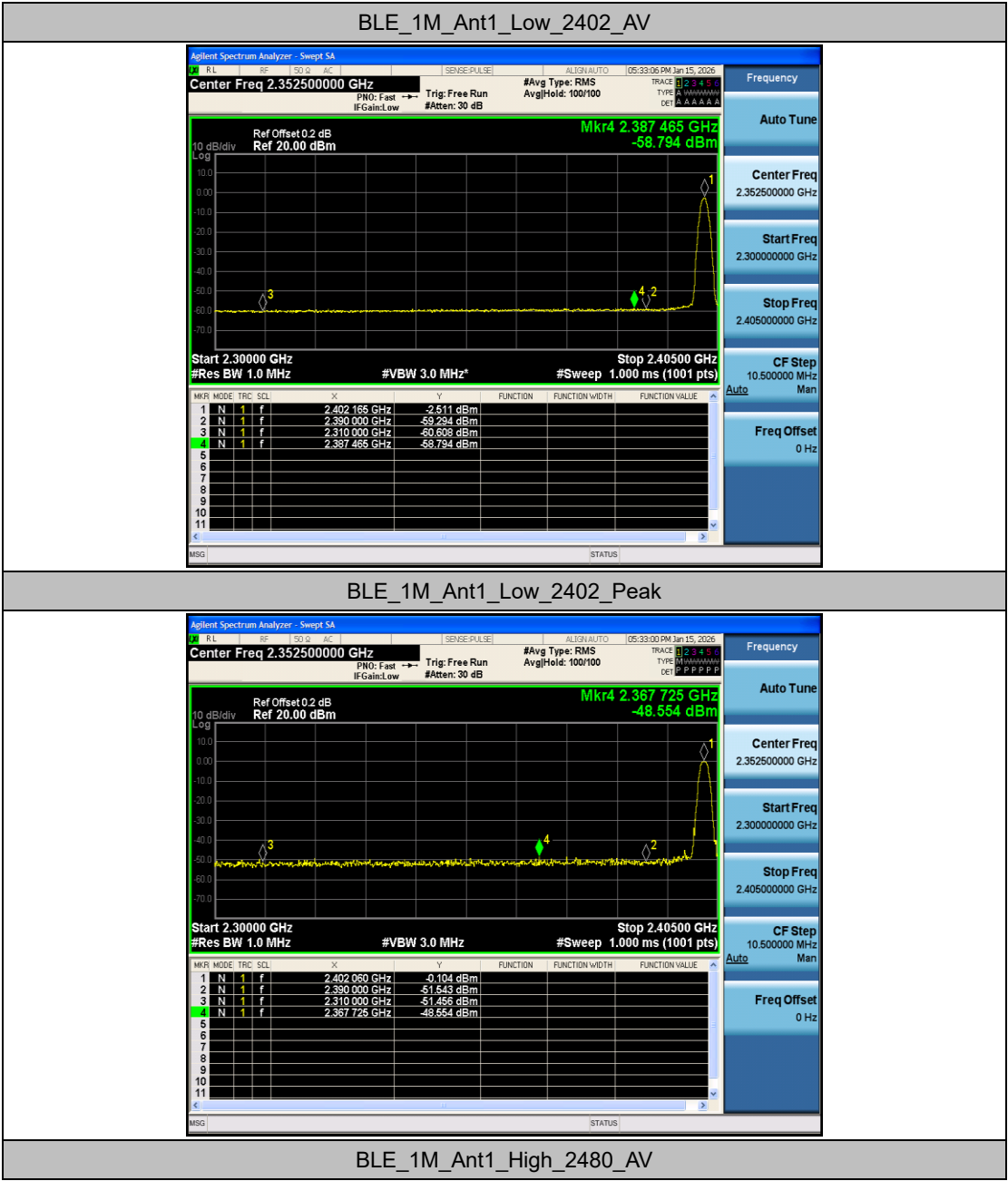
Appendix H: Emissions in Restricted Bands

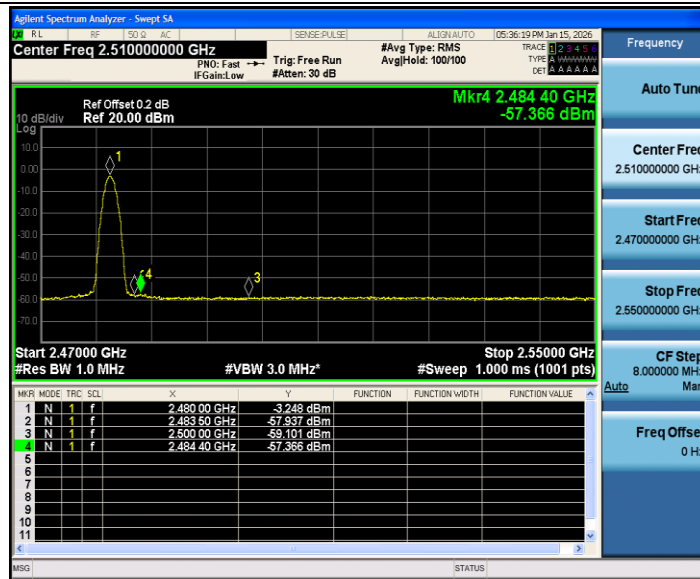
Test Result

TestMod e	Antenn a	ChNam e	Freq(MH z)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.61	3.00	1.76	39.35	≤54	PASS
				AV	2387.465	-58.79	3.00	1.76	41.17	≤54	PASS
				AV	2390.000	-59.29	3.00	1.76	40.67	≤54	PASS
				Peak	2310.000	-51.46	3.00	0.00	46.74	≤74	PASS
				Peak	2367.725	-48.55	3.00	0.00	49.65	≤74	PASS
				Peak	2390.000	-51.54	3.00	0.00	46.66	≤74	PASS
		High	2480	AV	2483.500	-57.94	3.00	1.80	42.06	≤54	PASS
				AV	2484.400	-57.37	3.00	1.80	42.63	≤54	PASS
				AV	2500.000	-59.1	3.00	1.80	40.9	≤54	PASS
				Peak	2483.500	-50.22	3.00	0.00	47.98	≤74	PASS
				Peak	2484.480	-43.42	3.00	0.00	54.78	≤74	PASS
				Peak	2500.000	-51.21	3.00	0.00	46.99	≤74	PASS

Note: 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_1M_Ant1_High_2480_Peak

