

FCC Appendix RF Test Data for BLE

FCC ID : 2BUT8-XSLEEP-3

Company : Dongguan Weizhisheng Technology Co., Ltd.

EUT : Sleep treasure stereo

Model Number : XSLEEP-3

Report No. : CTA26012100101

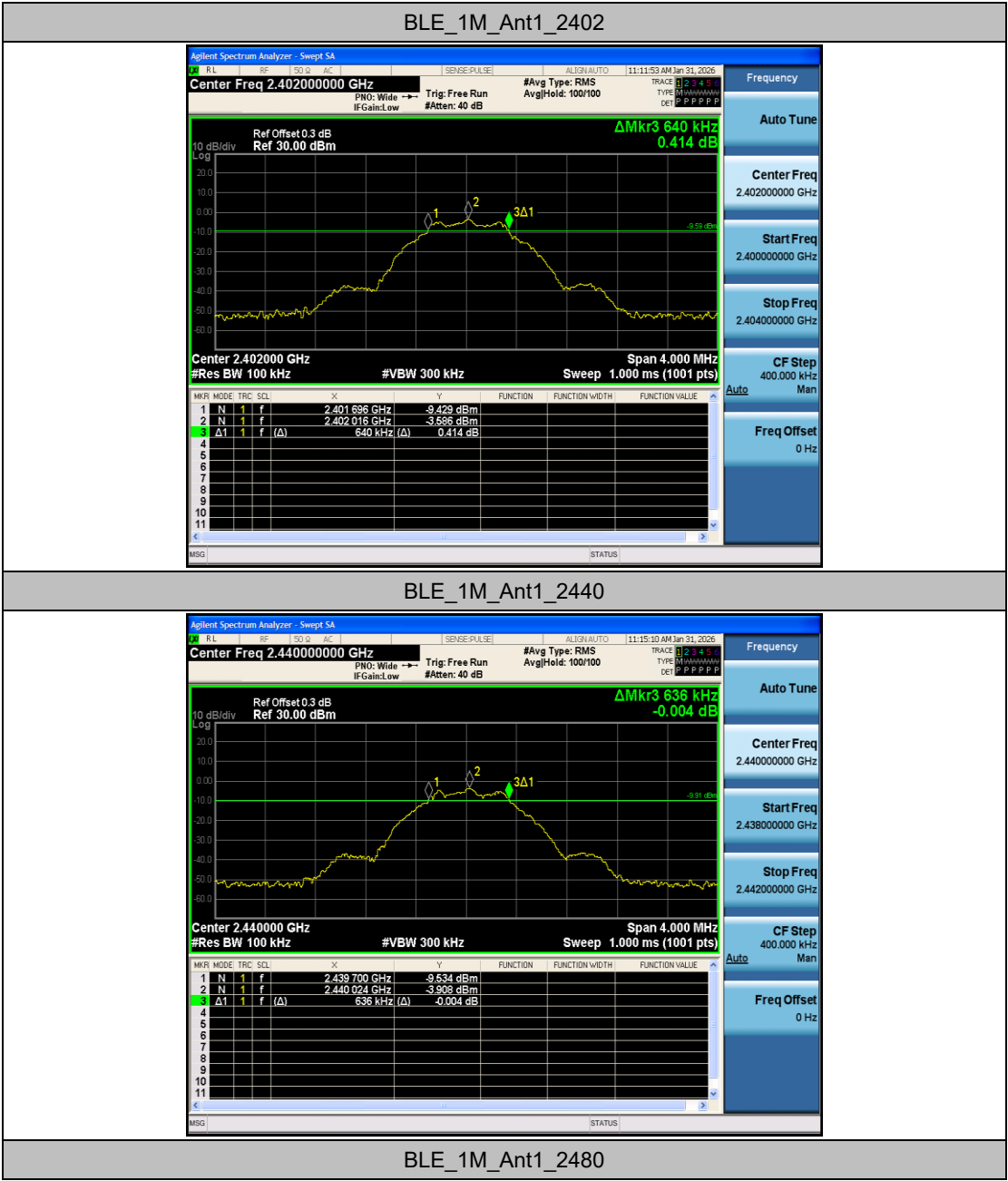
Reviewed By : Eric Wang

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	0.636	2439.700	2440.336	0.5	PASS
		2480	0.652	2479.692	2480.344	0.5	PASS

Test Graphs



BLE_1M_Ant1_2440

Agilent Spectrum Analyzer - Swept SA

Center Freq 2.440000000 GHz

Ref Offset 0.3 dB
Ref 30.00 dBm

10 dB/div
Log

Span 4.000 MHz

Center 2.440000 GHz

#Res BW 100 kHz

#VBW 300 kHz

Sweep 1.000 ms (1001 pts)

Trig: Free Run

#Atten: 40 dB

#Avg Type: RMS

Avg/Hold: 100/100

11:15:10 AM Jan 31, 2026

TYPE: M

DET: P

Auto Tune

Center Freq 2.440000000 GHz

Start Freq 2.438000000 GHz

Stop Freq 2.442000000 GHz

CF Step 400.000 kHz

Man

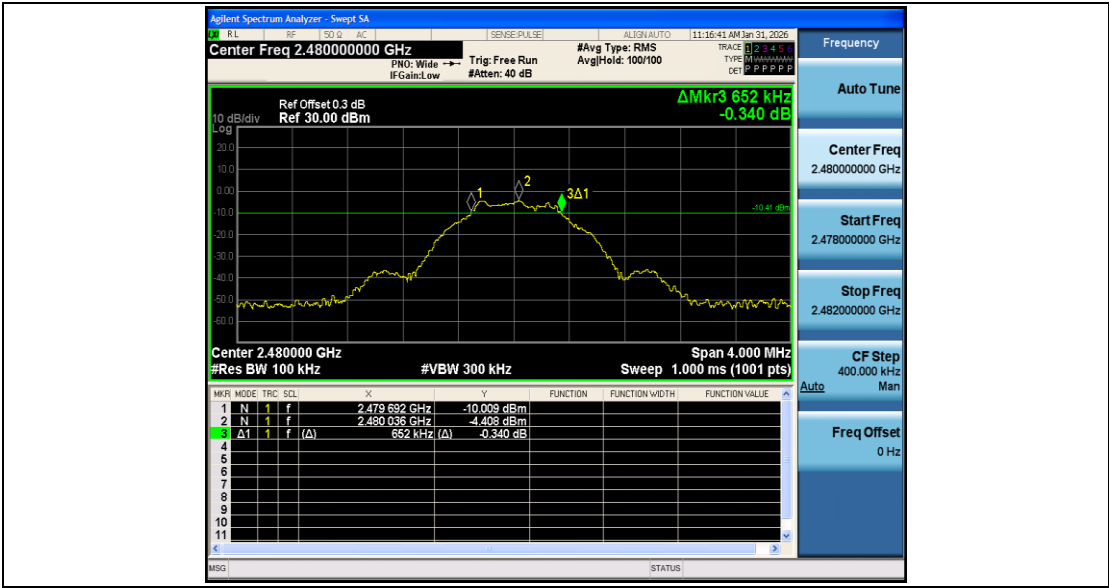
Freq Offset 0 Hz

MSG

STATUS

MR	MODE	TRC	SCL	X	Y	FUNCTION	FUNCTION WIDTH	FUNCTION VALUE
1	N	1	f	2.439700 GHz	-9.534 dBm			
2	N	1	f	2.440024 GHz	-3.908 dBm			
3	Δ	1	f (Δ)	636 kHz (Δ)	-0.004 dB			

BLE_1M_Ant1_2480

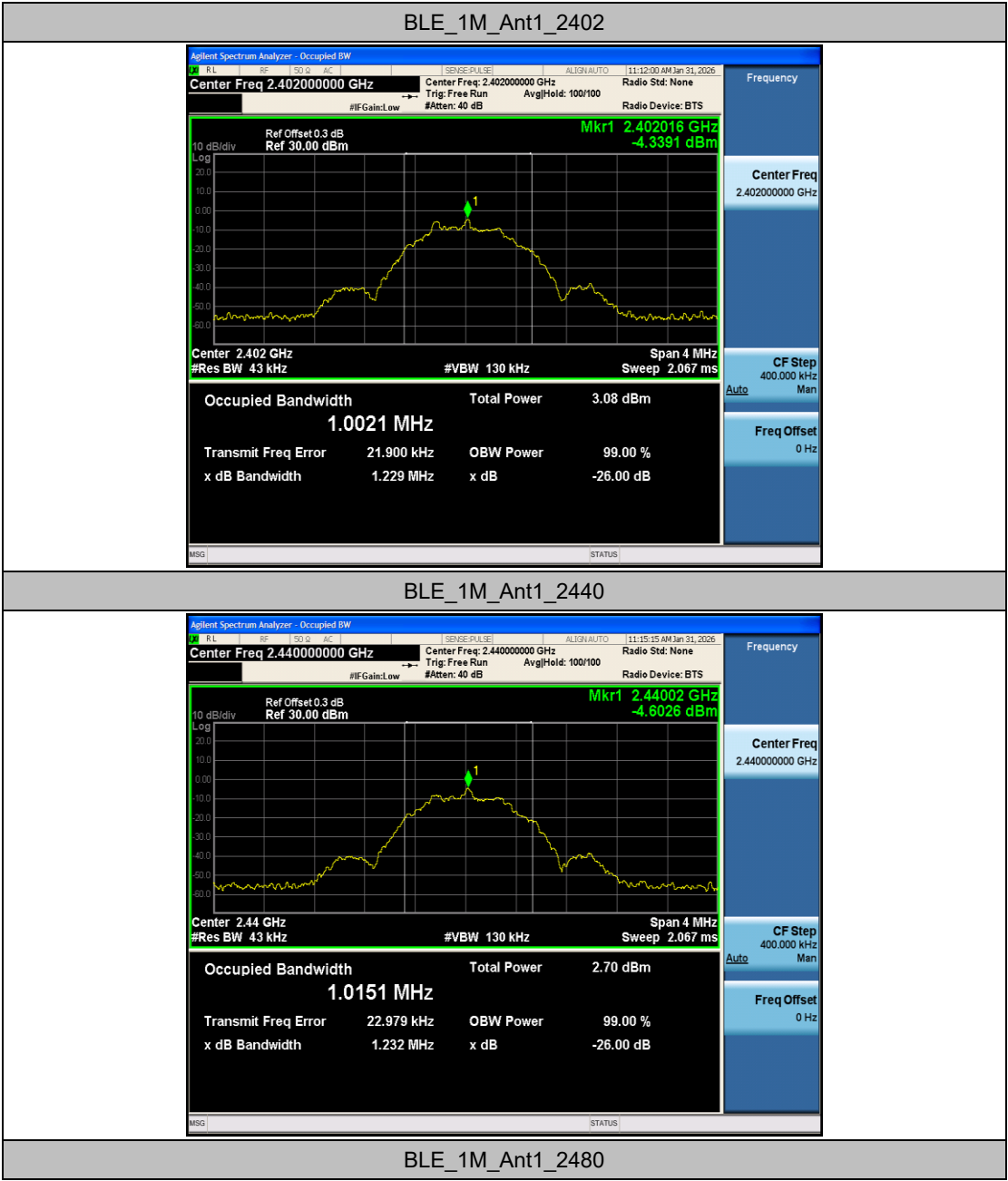


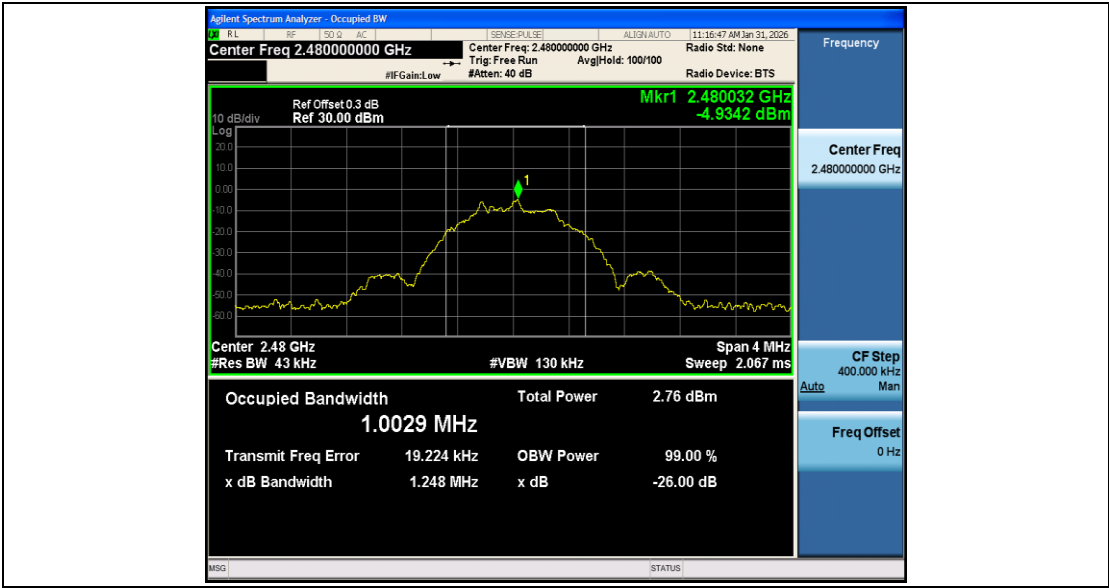
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0021	2401.5209	2402.5230	---	---
		2440	1.0151	2439.5154	2440.5305	---	---
		2480	1.0029	2479.5178	2480.5207	---	---

Test Graphs





Appendix C: Maximum conducted output power

Test Result Peak

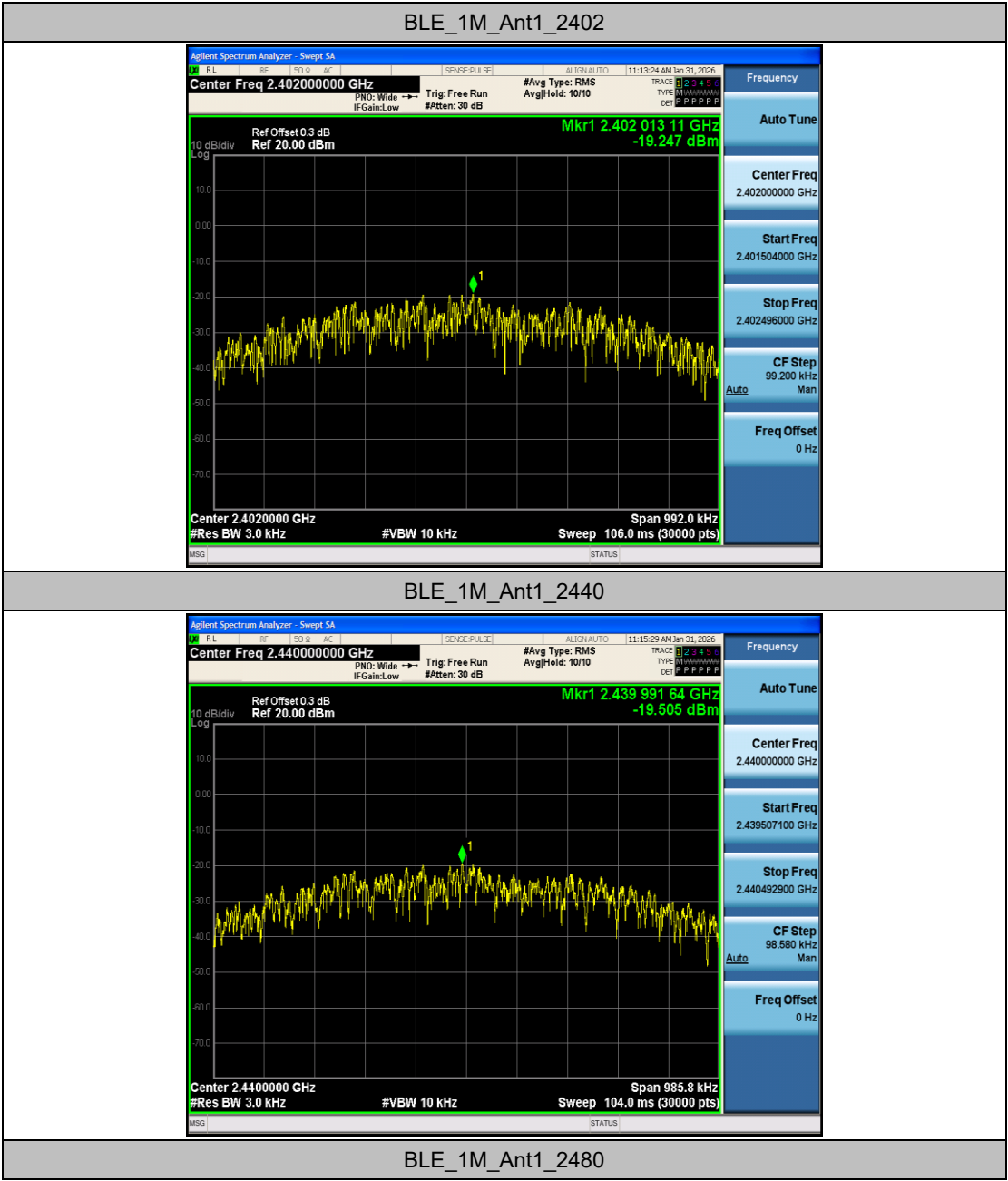
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-3.43	≤30	PASS
		2440	-3.71	≤30	PASS
		2480	-3.71	≤30	PASS

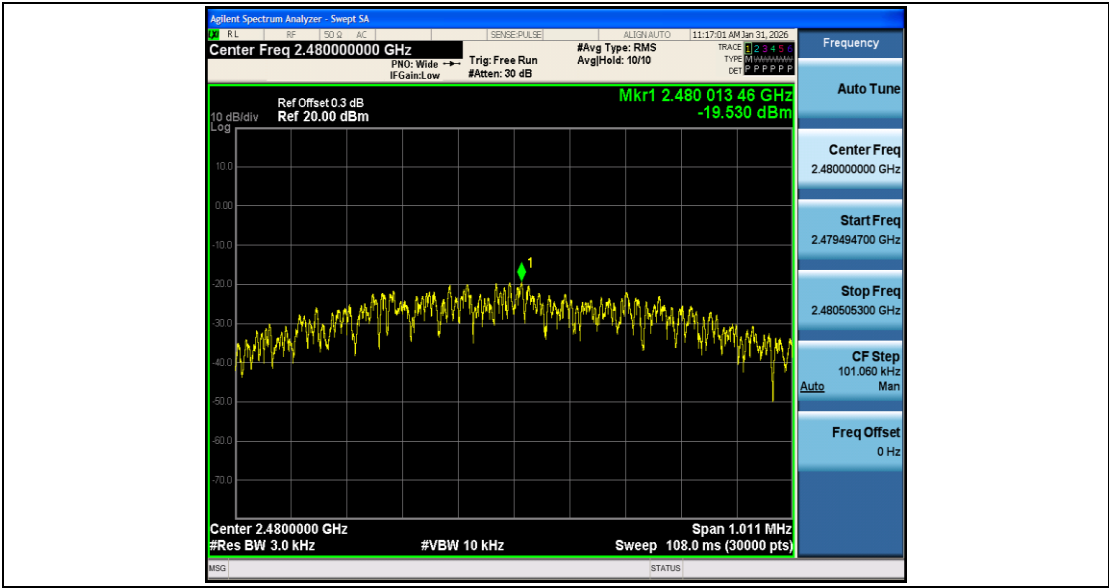
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.25	≤8.00	PASS
		2440	-19.51	≤8.00	PASS
		2480	-19.53	≤8.00	PASS

Test Graphs



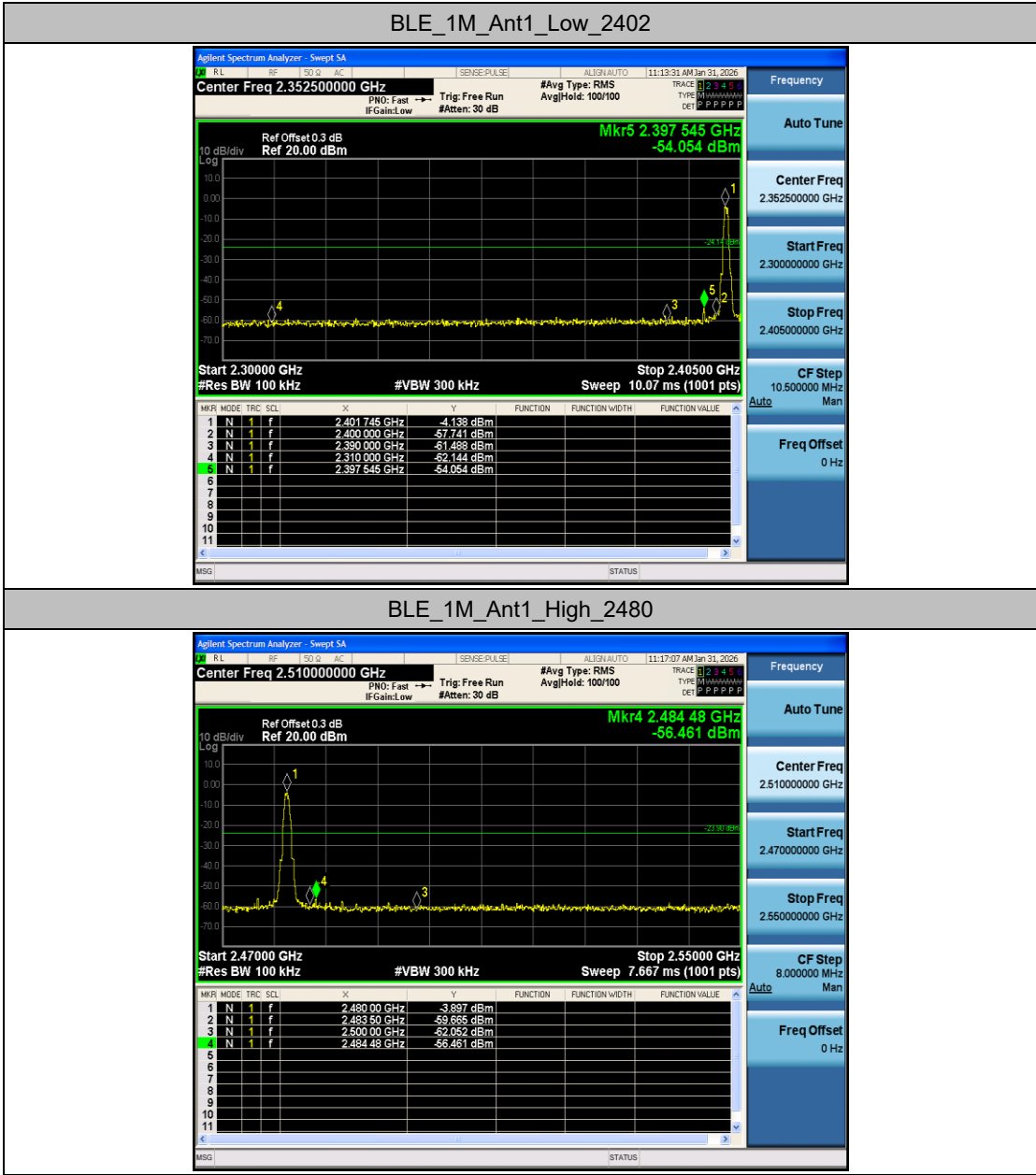


Appendix E: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-4.14	-54.05	≤-24.14	PASS
		High	2480	-3.90	-56.46	≤-23.9	PASS

Test Graphs



Appendix F: Conducted Spurious Emission

Test Result

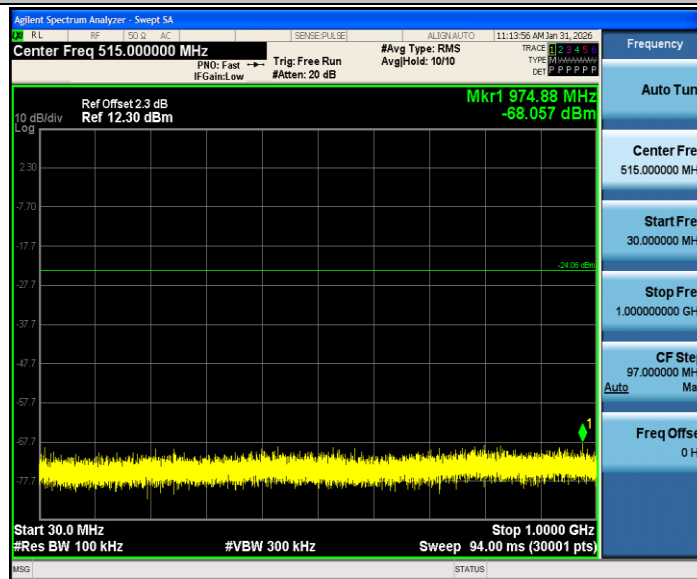
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-4.06	-4.06	---	PASS
			30~1000	-4.06	-68.06	≤-24.06	PASS
			1000~26500	-4.06	-47.75	≤-24.06	PASS
		2440	Reference	-4.50	-4.50	---	PASS
			30~1000	-4.50	-68.09	≤-24.5	PASS
			1000~26500	-4.50	-46.81	≤-24.5	PASS
		2480	Reference	-4.42	-4.42	---	PASS
			30~1000	-4.42	-67.88	≤-24.42	PASS
			1000~26500	-4.42	-48.97	≤-24.42	PASS

Test Graphs

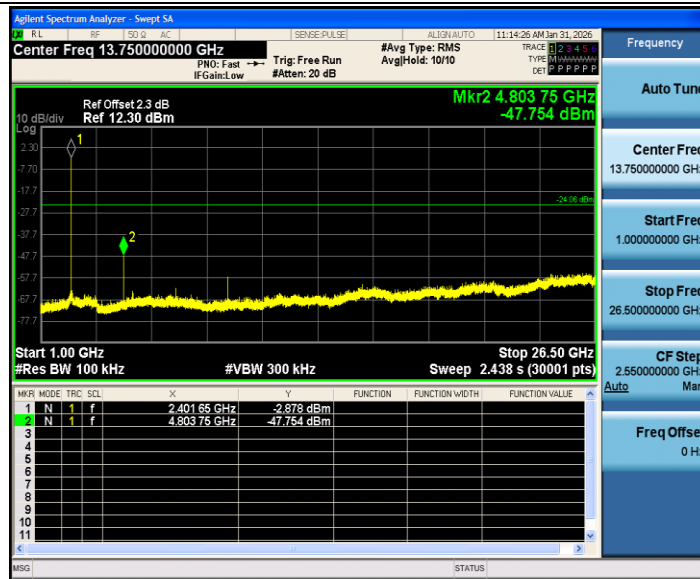
BLE_1M_Ant1_2402_0~Reference



BLE_1M_Ant1_2402_30~1000



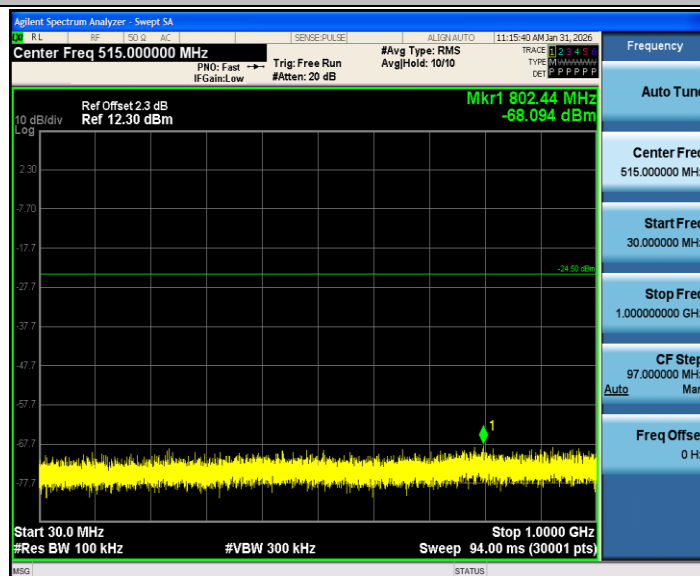
BLE_1M_Ant1_2402_1000~26500



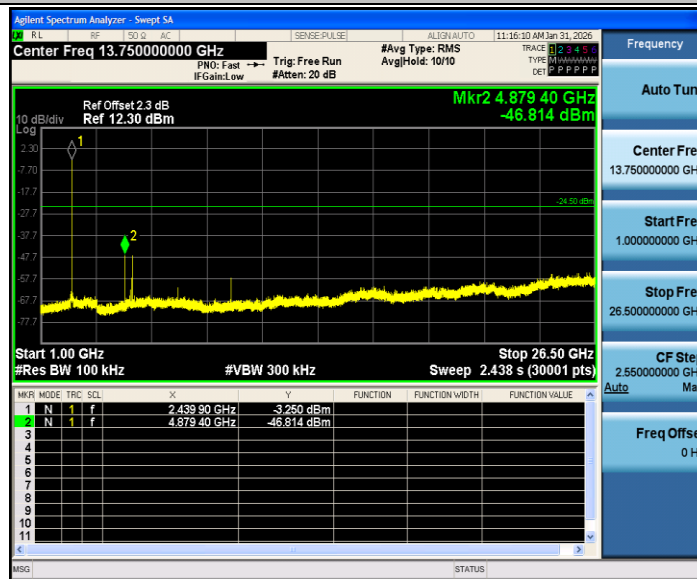
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



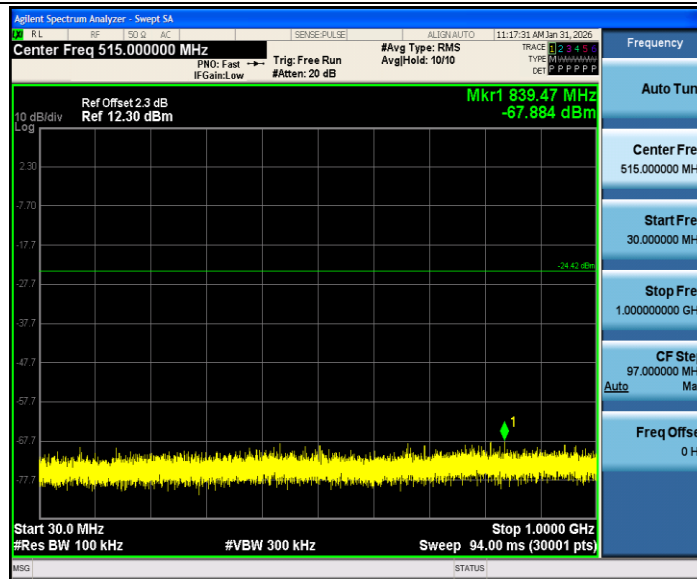
BLE_1M_Ant1_2440_1000~26500



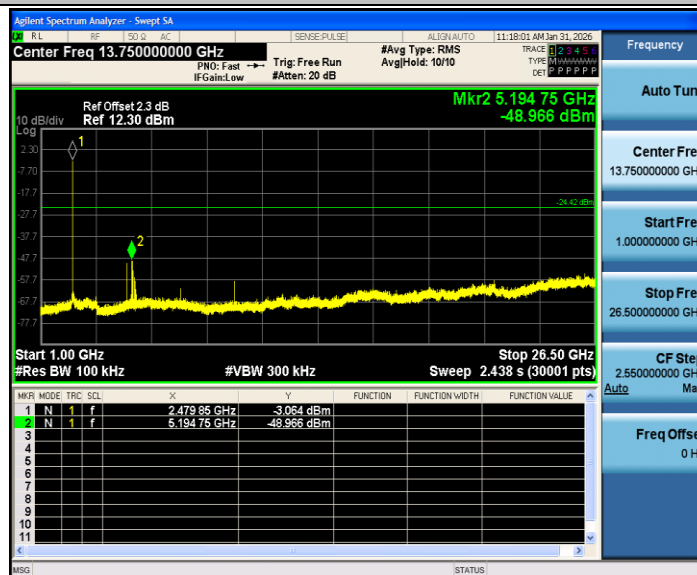
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



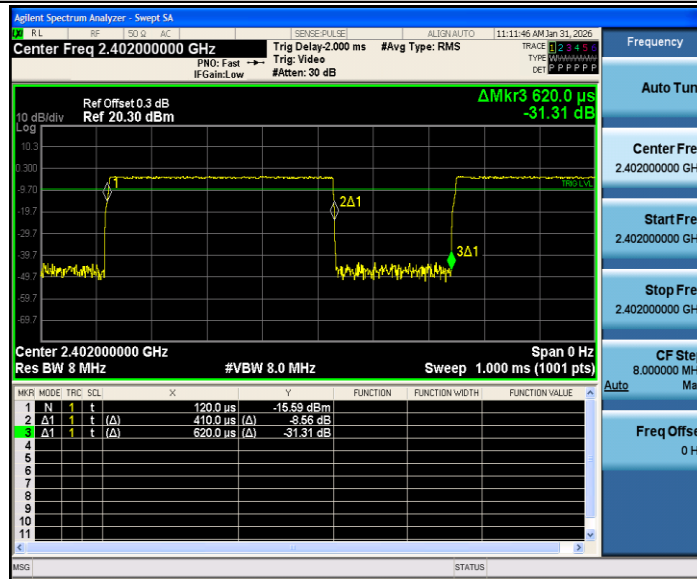
Appendix G: Duty Cycle

Test Result

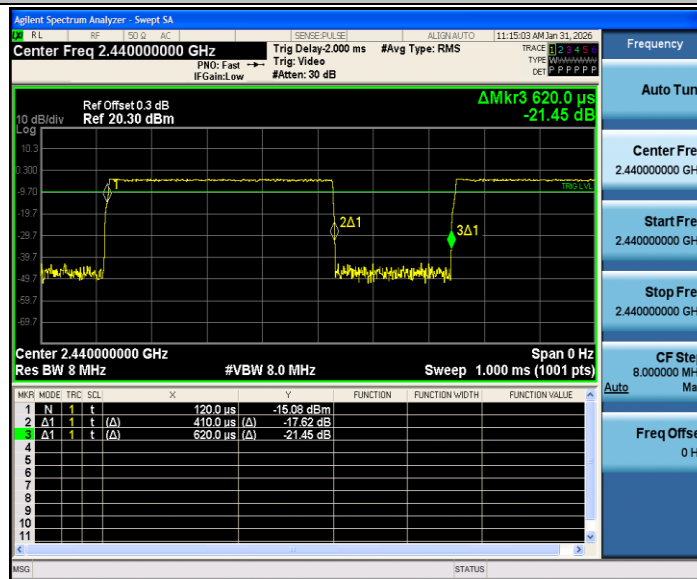
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.41	0.62	0.6613	66.13	1.80	---	---
		2440	0.41	0.62	0.6613	66.13	1.80	---	---
		2480	0.41	0.62	0.6613	66.13	1.80	---	---

Test Graphs

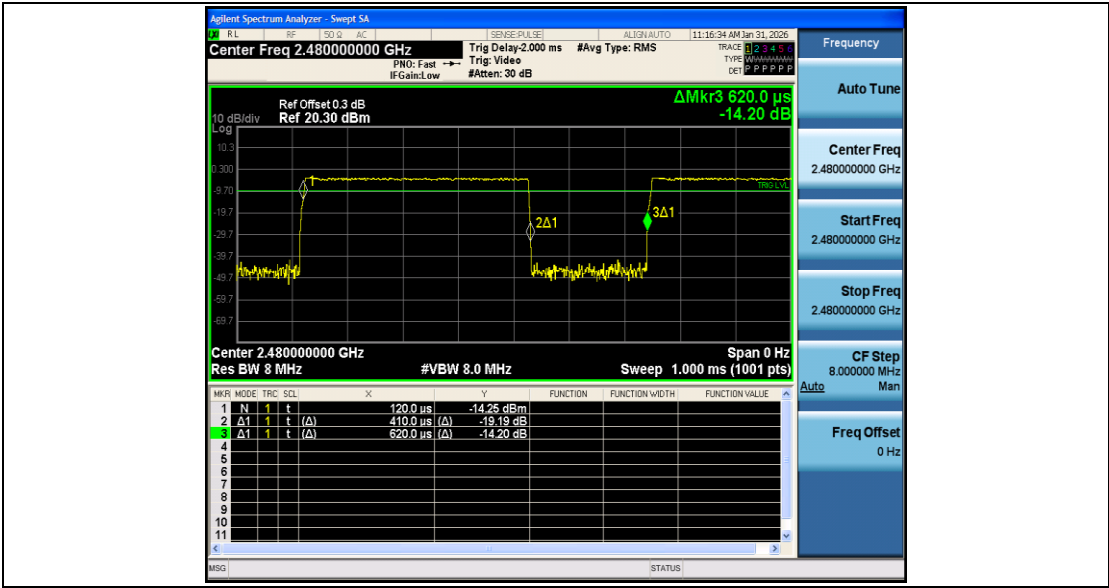
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



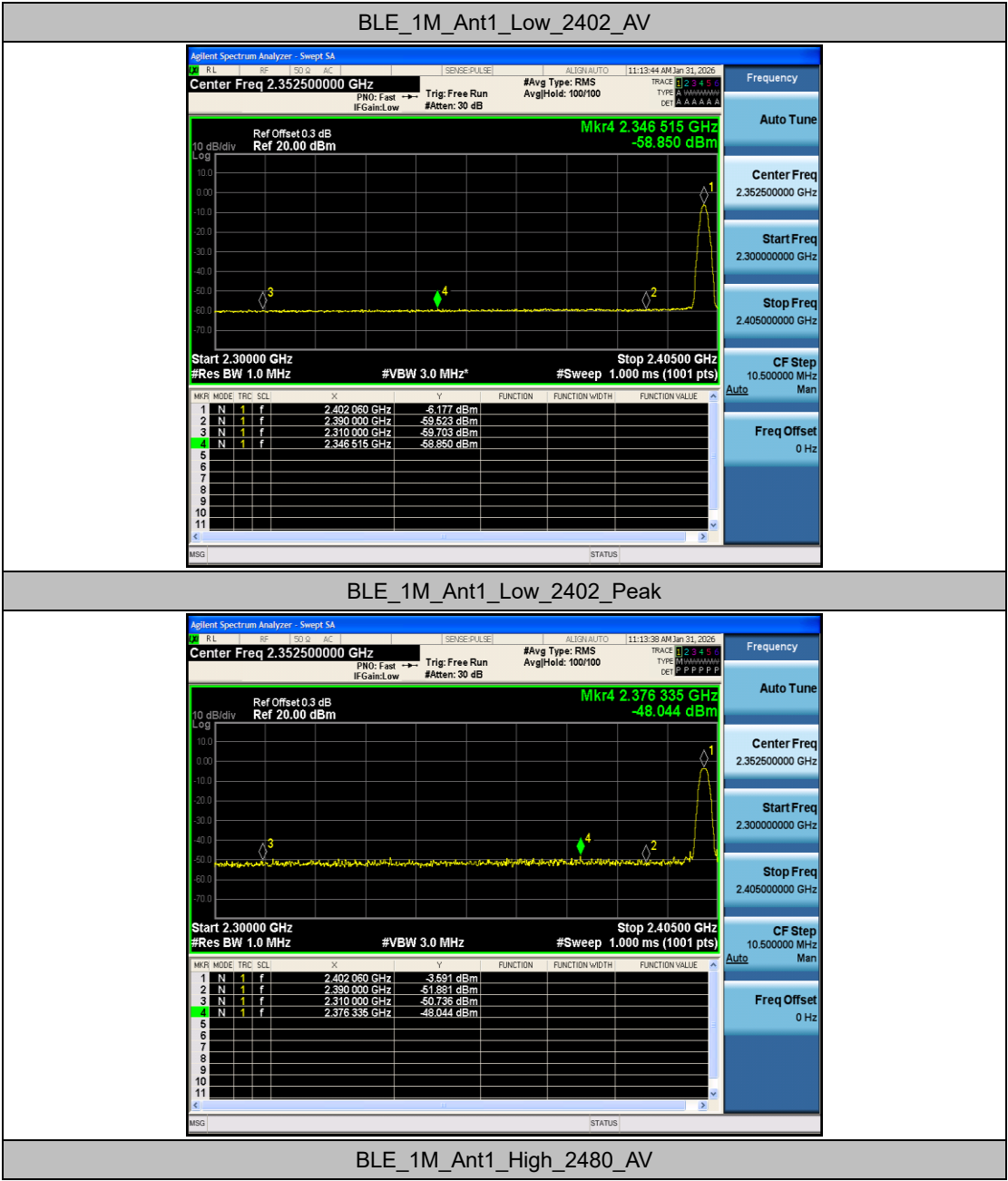
Appendix H: Emissions in Restricted Bands

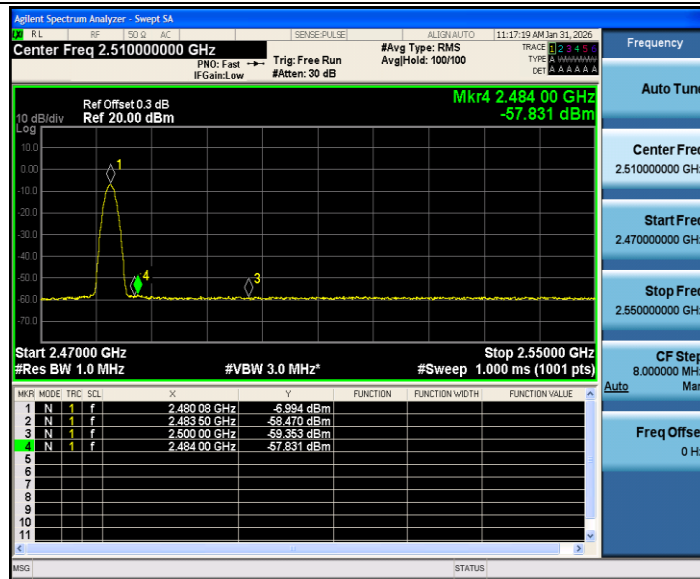
Test Result

TestMode	Antenna	Channel	Freq(MHz)	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	-59.7	2.00	1.80	39.30	≤54	PASS
				AV	2346.515	-58.85	2.00	1.80	40.15	≤54	PASS
				AV	2390.000	-59.52	2.00	1.80	39.48	≤54	PASS
				Peak	2310.000	-50.74	2.00	0.00	46.46	≤74	PASS
				Peak	2376.335	-48.04	2.00	0.00	49.16	≤74	PASS
				Peak	2390.000	-51.88	2.00	0.00	45.32	≤74	PASS
		High	2480	AV	2483.500	-58.47	2.00	1.80	40.53	≤54	PASS
				AV	2484.000	-57.83	2.00	1.80	41.17	≤54	PASS
				AV	2500.000	-59.35	2.00	1.80	39.65	≤54	PASS
				Peak	2483.500	-48.17	2.00	0.00	49.03	≤74	PASS
				Peak	2484.400	-44.89	2.00	0.00	52.31	≤74	PASS
				Peak	2500.000	-50.56	2.00	0.00	46.64	≤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

