

RF Test Data for BT(BLE) (Conducted Measurement)

Product Name: 4K Set Top Box

Trade Mark: N/A

Test Model: Box R 4K-SX6BHES

FCC ID: 2AOVU-SN6BHXY

Environmental Conditions

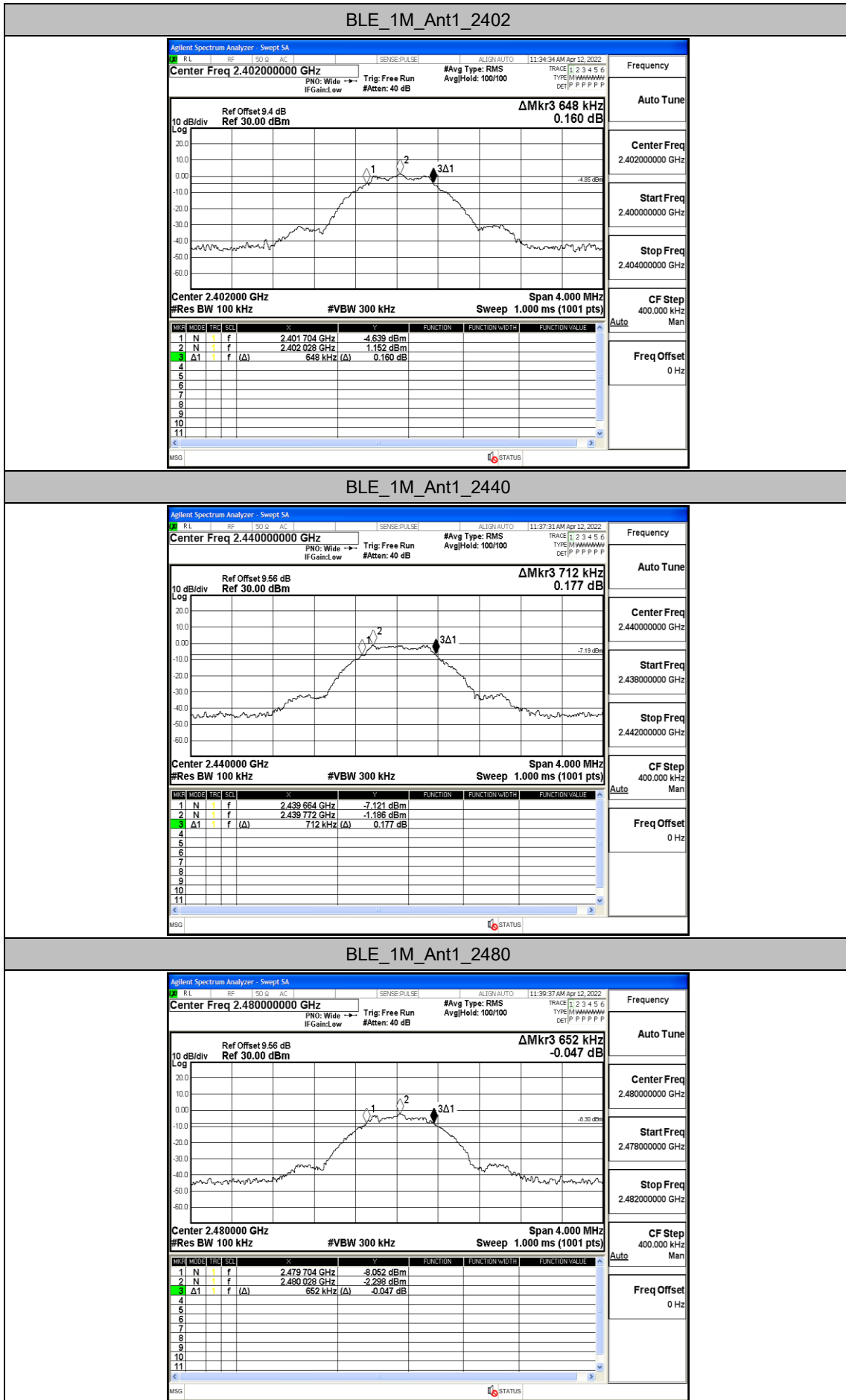
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.648	2401.704	2402.352	0.5	PASS
		2440	0.712	2439.664	2440.376	0.5	PASS
		2480	0.652	2479.704	2480.356	0.5	PASS

Test Graphs

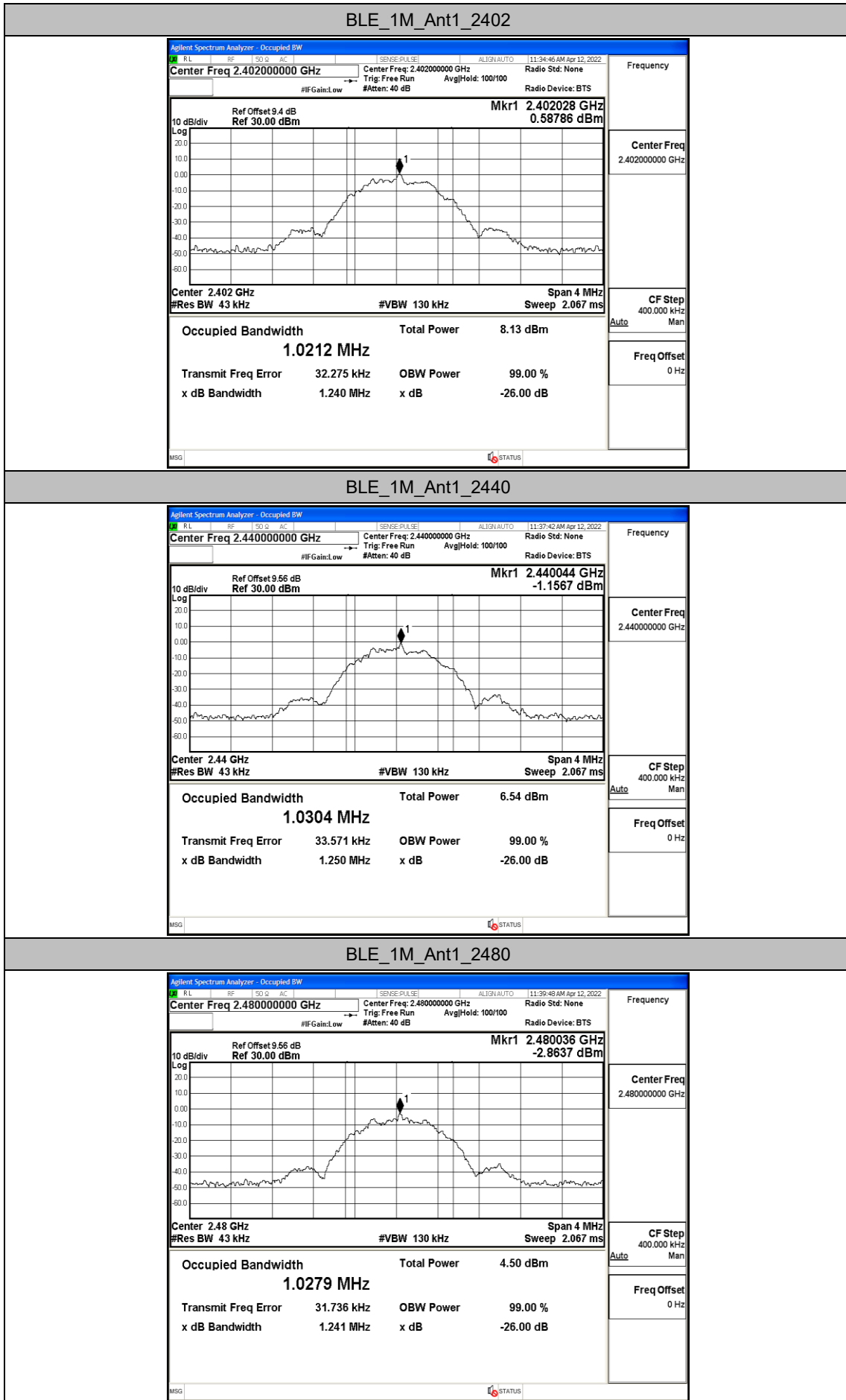


Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0212	2401.522	2402.543	---	---
		2440	1.0304	2439.518	2440.549	---	---
		2480	1.0279	2479.518	2480.546	---	---

Test Graphs

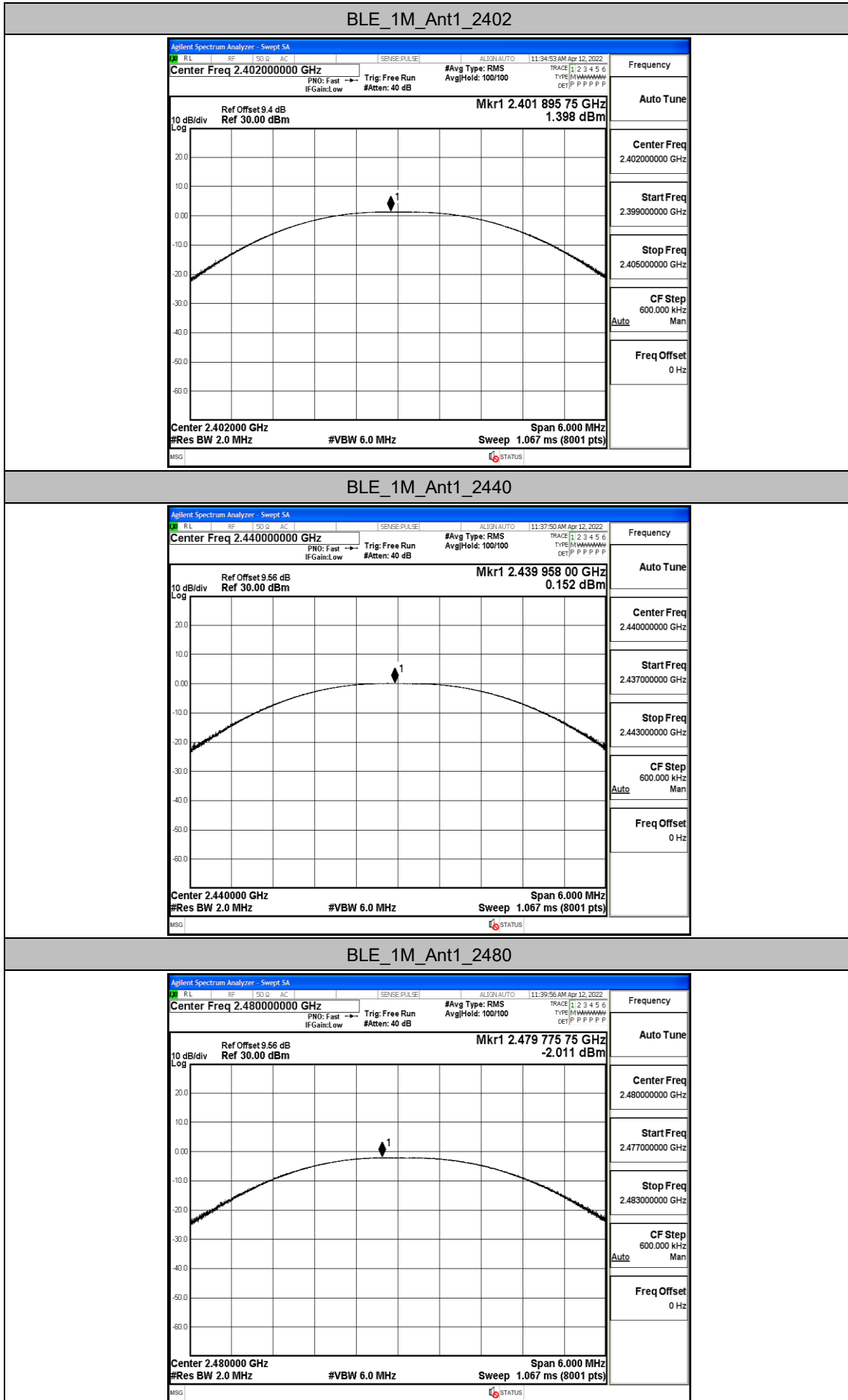


Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	1.4	≤30	PASS
		2440	0.15	≤30	PASS
		2480	-2.01	≤30	PASS

Test Graphs

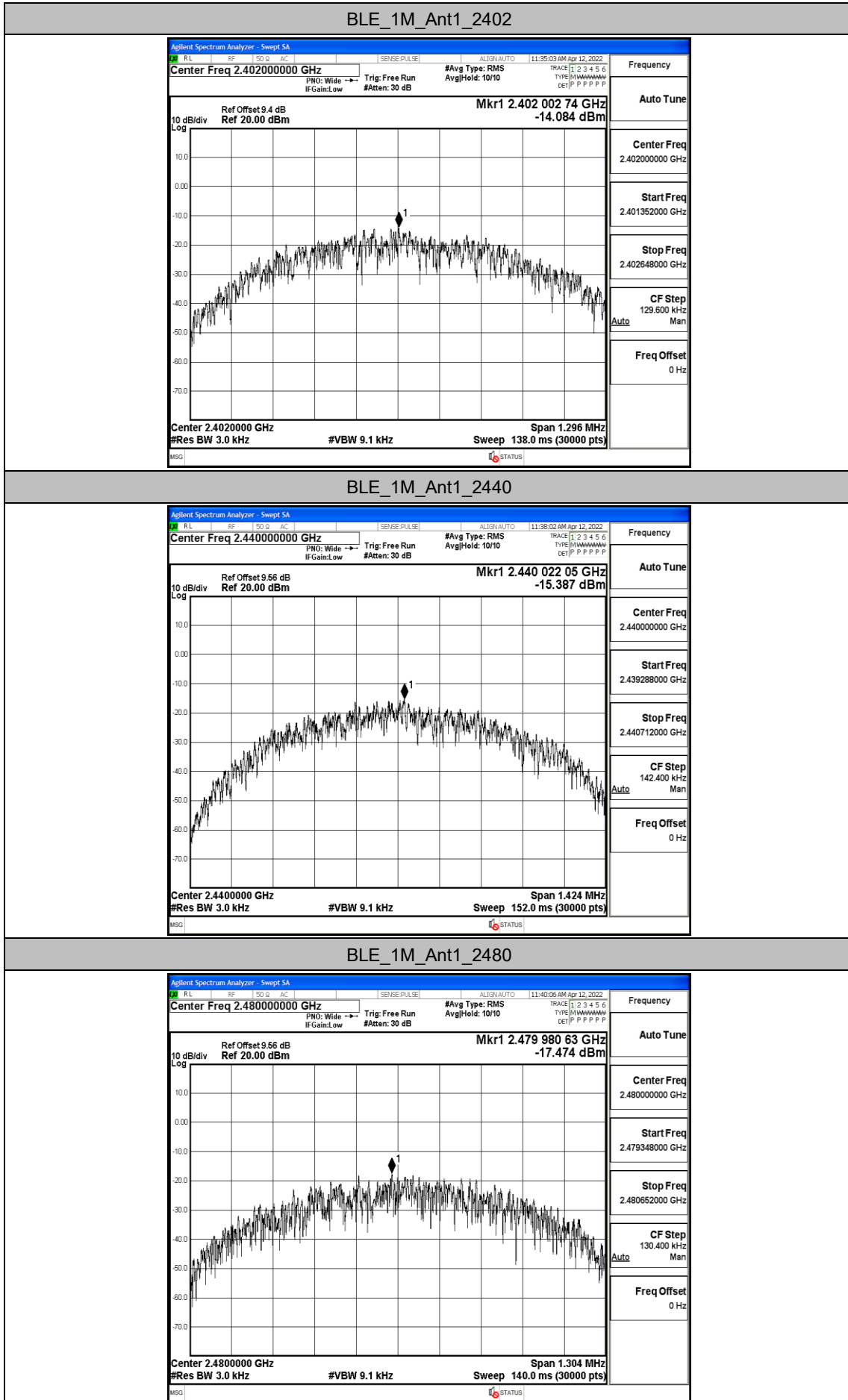


Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.08	≤8.00	PASS
		2440	-15.39	≤8.00	PASS
		2480	-17.47	≤8.00	PASS

Test Graphs



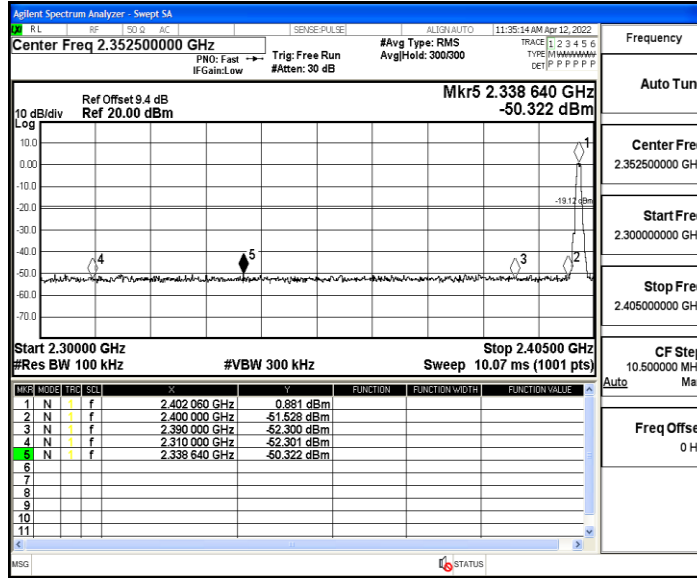
Appendix E: Band edge measurements

Test Result

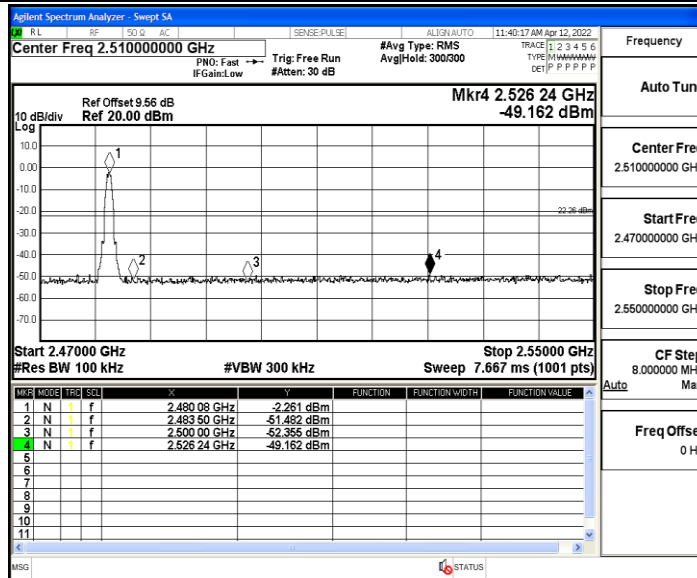
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	0.88	-50.32	≤-19.12	PASS
		High	2480	-2.26	-49.16	≤-22.26	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480

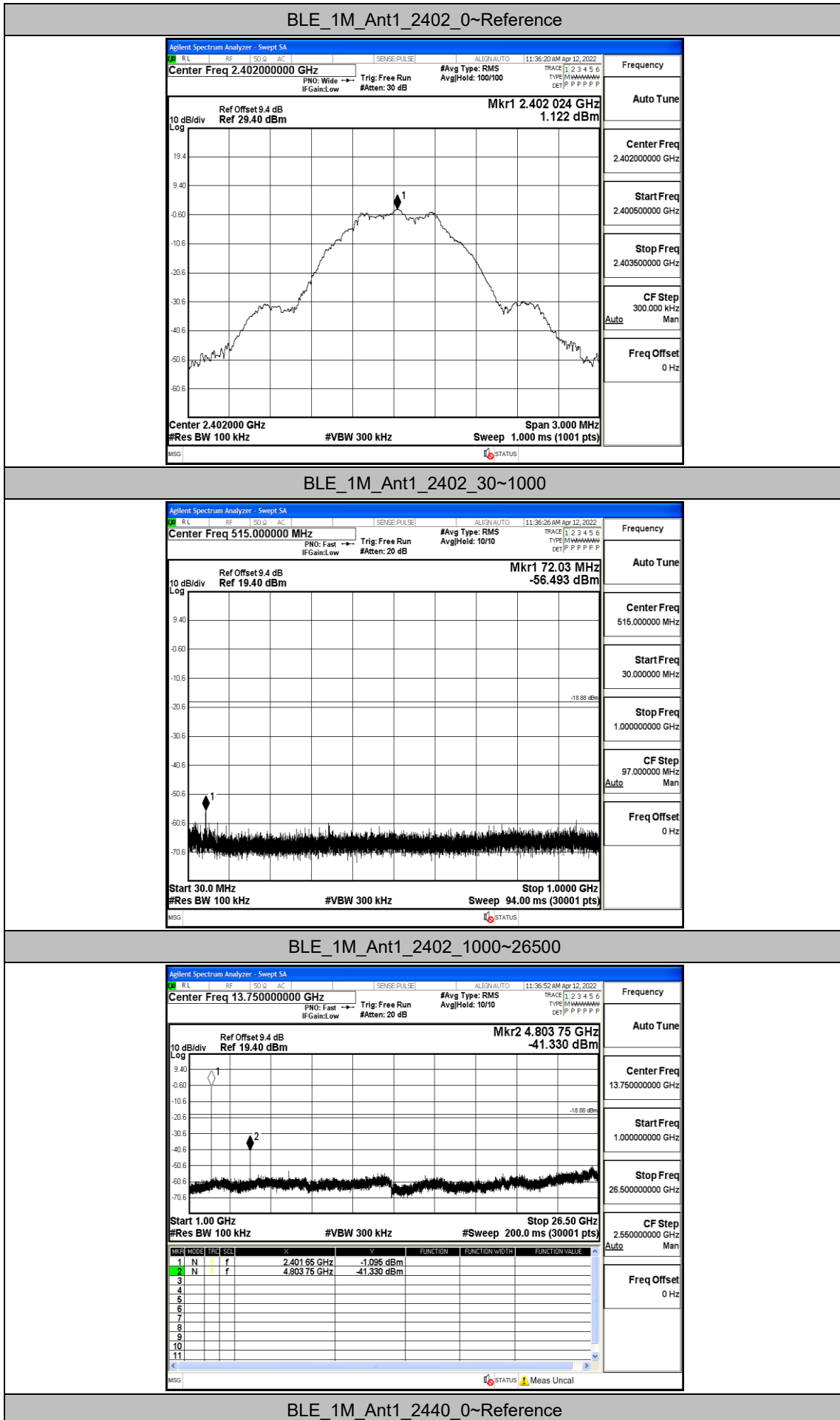


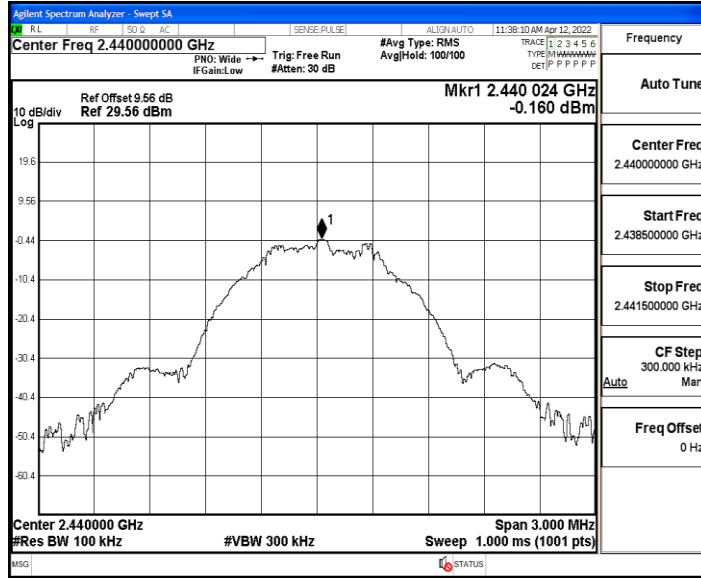
Appendix F: Conducted Spurious Emission

Test Result

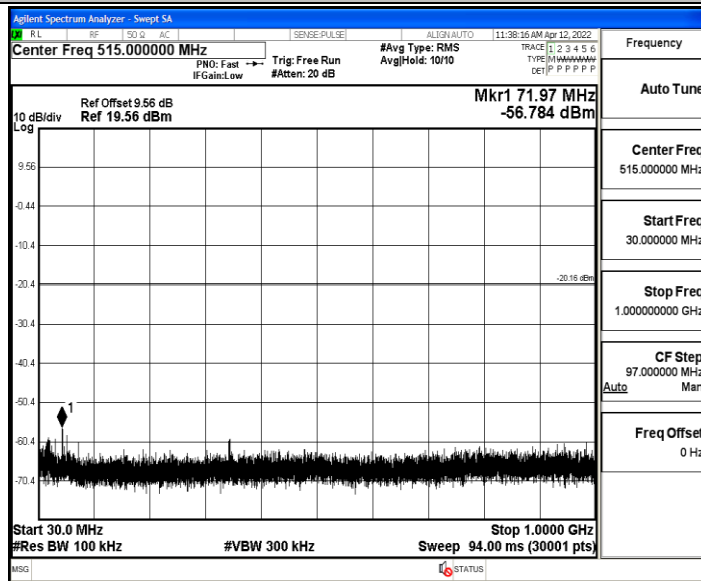
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	1.12	1.12	---	PASS
			30~1000	1.12	-56.49	≤-18.88	PASS
			1000~26500	1.12	-41.33	≤-18.88	PASS
		2440	Reference	-0.16	-0.16	---	PASS
			30~1000	-0.16	-56.78	≤-20.16	PASS
			1000~26500	-0.16	-42.99	≤-20.16	PASS
		2480	Reference	-2.36	-2.36	---	PASS
			30~1000	-2.36	-58.15	≤-22.36	PASS
			1000~26500	-2.36	-38.39	≤-22.36	PASS

Test Graphs

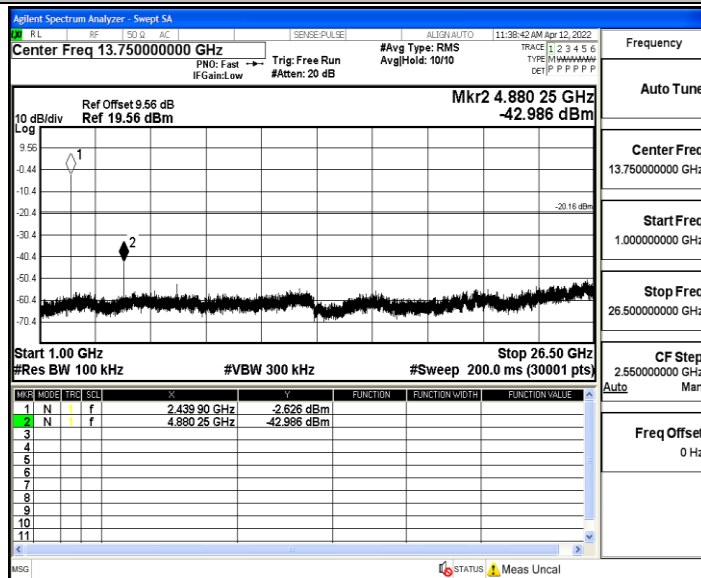




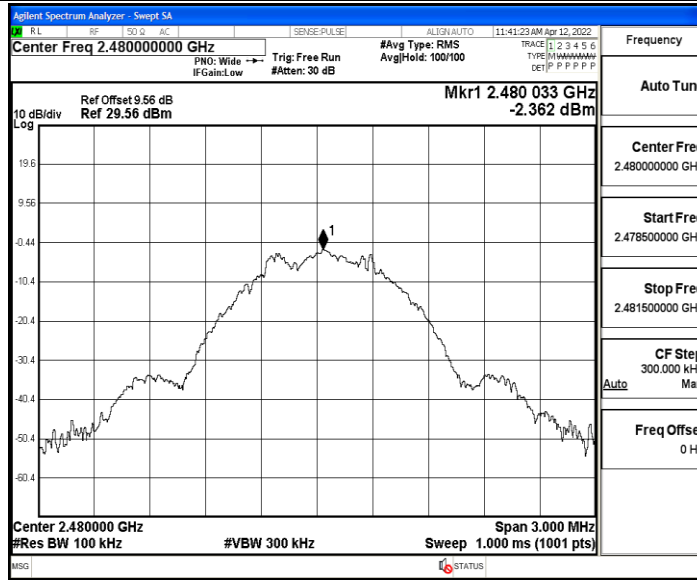
BLE_1M_Ant1_2440_30~1000



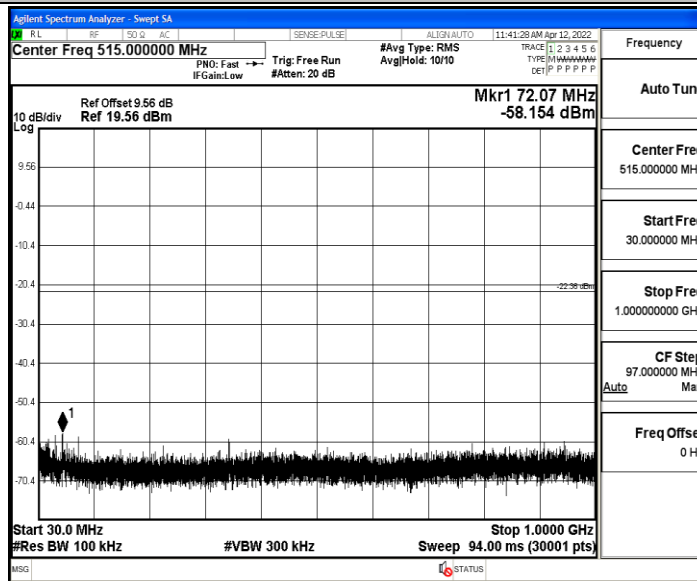
BLE_1M_Ant1_2440_1000~26500



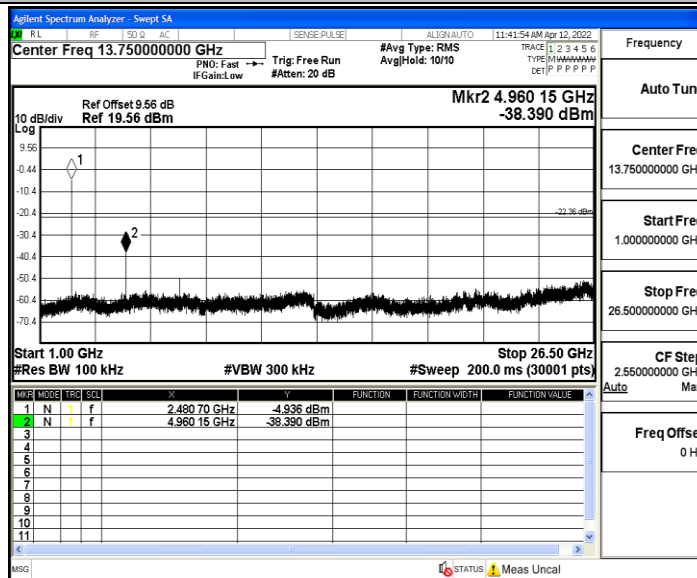
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

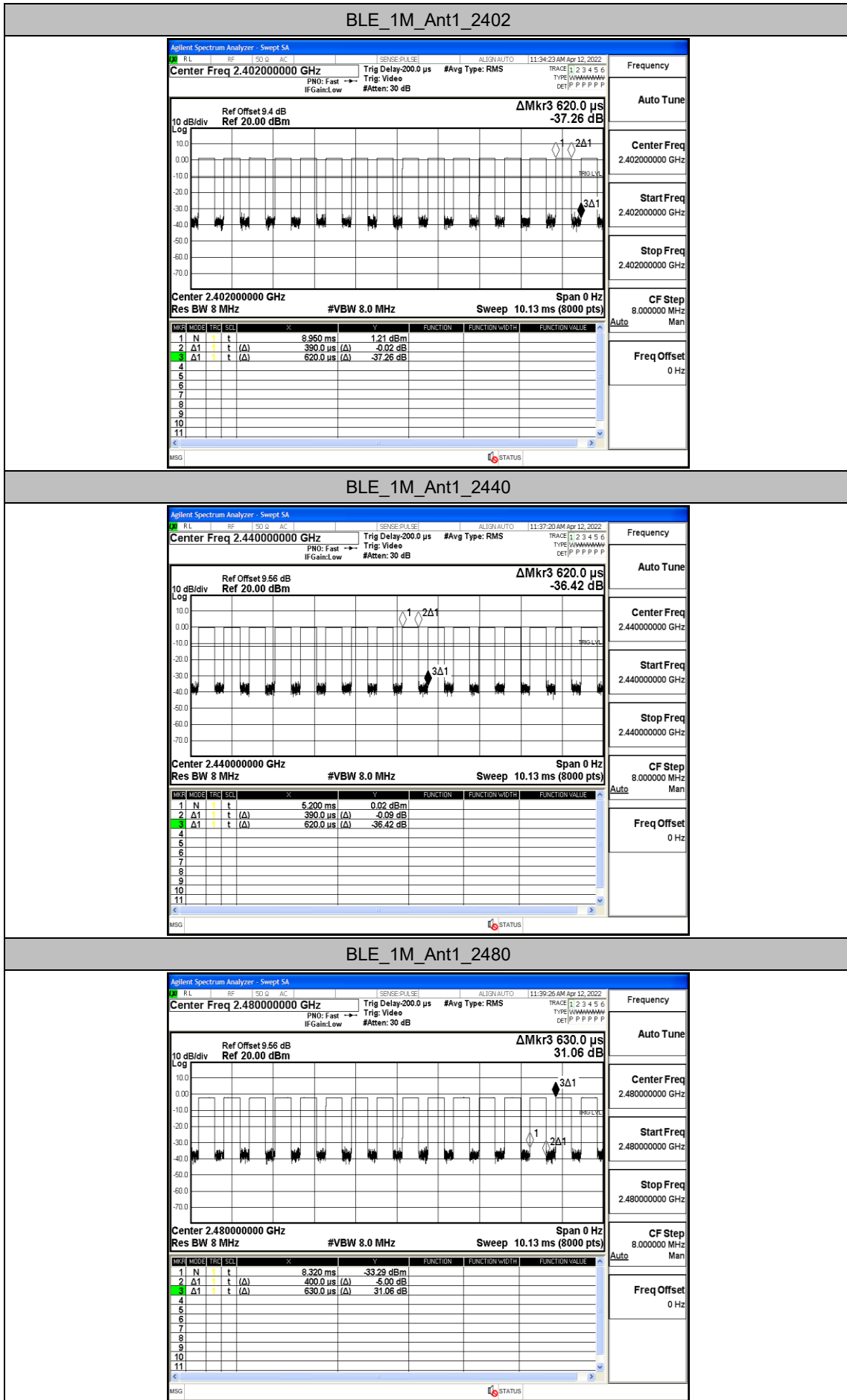


Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T [kHz]
BLE_1M	Ant1	2402	0.39	0.62	62.90	2.56
		2440	0.39	0.62	62.90	2.56
		2480	0.40	0.63	63.49	2.50

Test Graphs



Appendix H: Emissions in Restricted Bands

Test Result

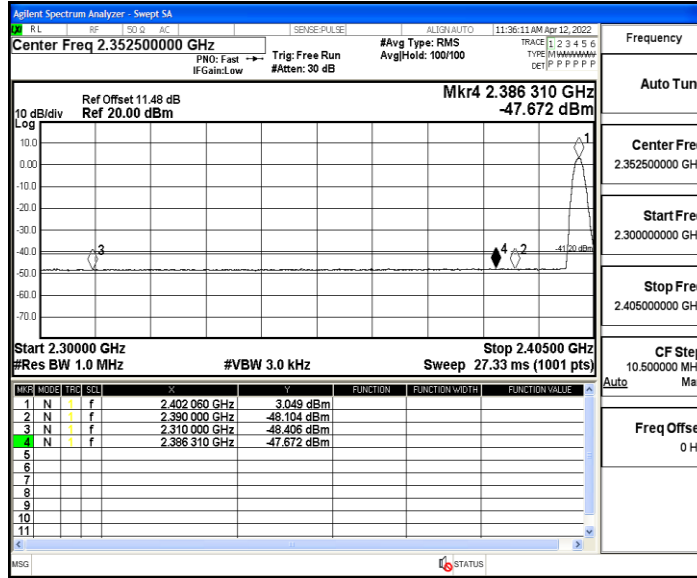
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.41	≤-41.20	PASS
				AV	2386.310	-47.67	≤-41.20	PASS
				AV	2390.000	-48.1	≤-41.20	PASS
				Peak	2310.000	-42.1	≤-21.20	PASS
				Peak	2347.145	-38.09	≤-21.20	PASS
				Peak	2390.000	-41.42	≤-21.20	PASS
		High	2480	AV	2483.500	-47.38	≤-41.20	PASS
				AV	2491.200	-47.13	≤-41.20	PASS
				AV	2500.000	-47.25	≤-41.20	PASS
				Peak	2483.500	-41.02	≤-21.20	PASS
				Peak	2497.680	-39.12	≤-21.20	PASS
				Peak	2500.000	-42.4	≤-21.20	PASS

Note:

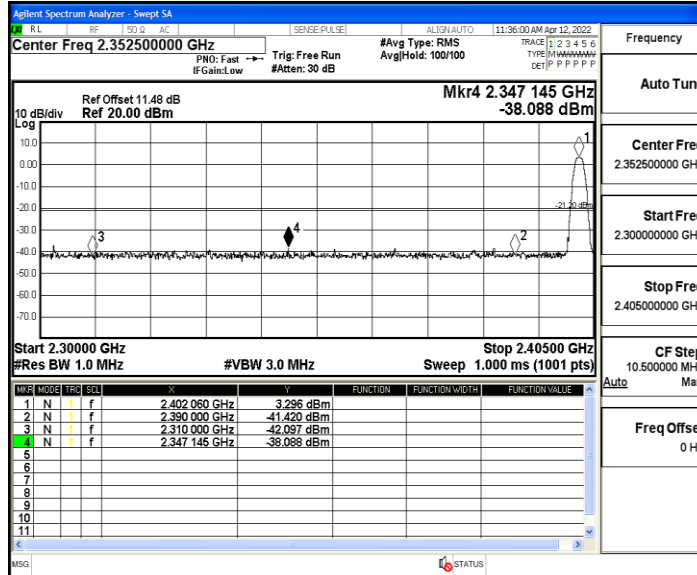
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

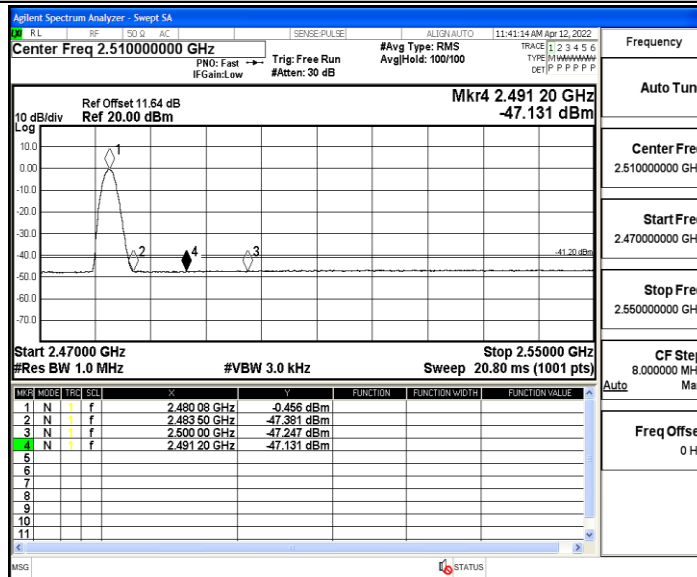
BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



BLE_1M_Ant1_High_2480_Peak

