

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

Product Name: 4K OTT BOX

Trade Mark: N/A

Test Model: SX5BEL SEI600HM4 BOXQ

FCC ID: 2AOVU-SX5BEX

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

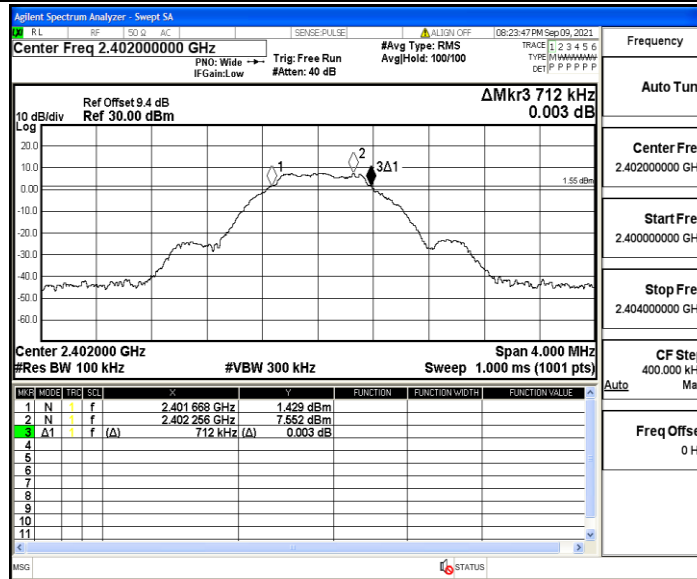
Appendix A: DTS Bandwidth

Test Result

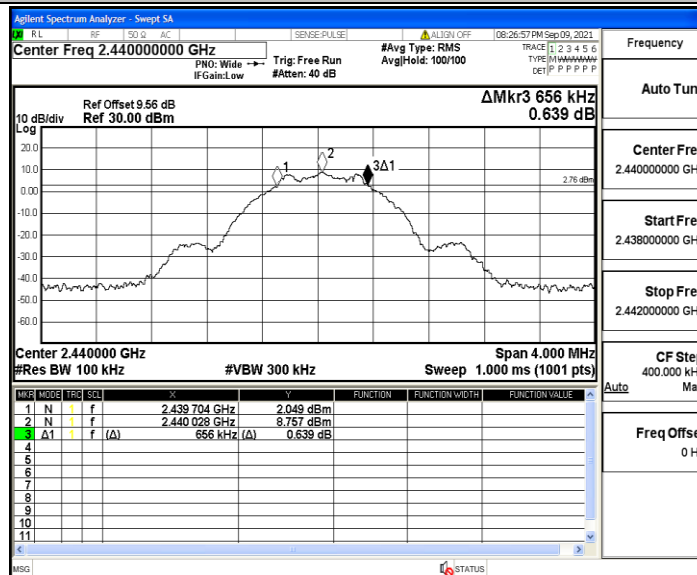
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant3	2402	0.712	2401.668	2402.380	0.5	PASS
		2440	0.656	2439.704	2440.360	0.5	PASS
		2480	0.672	2479.696	2480.368	0.5	PASS

Test Graphs

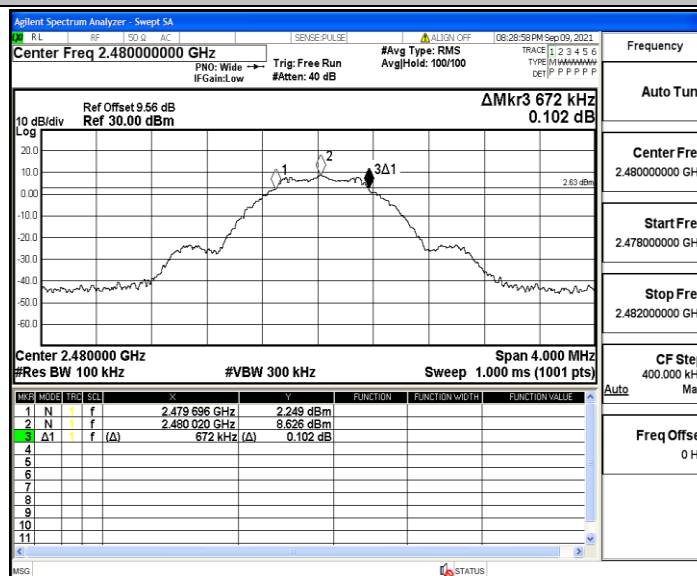
BLE_1M_Ant3_2402



BLE_1M_Ant3_2440



BLE_1M_Ant3_2480



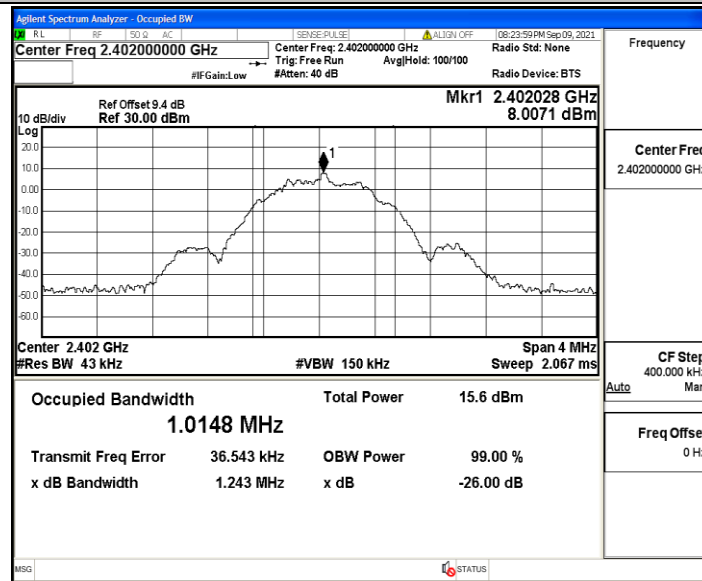
Appendix B: Occupied Channel Bandwidth

Test Result

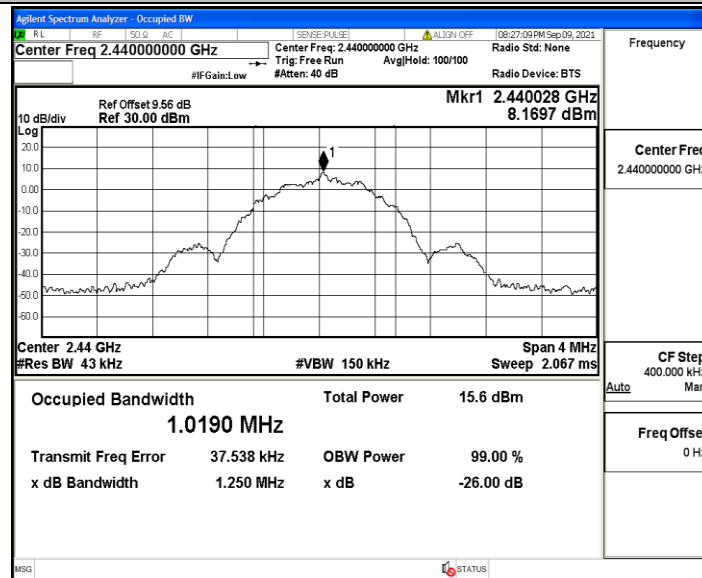
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant3	2402	1.0148	2401.529	2402.544	---	PASS
		2440	1.0190	2439.528	2440.547	---	PASS
		2480	1.0277	2479.525	2480.552	---	PASS

Test Graphs

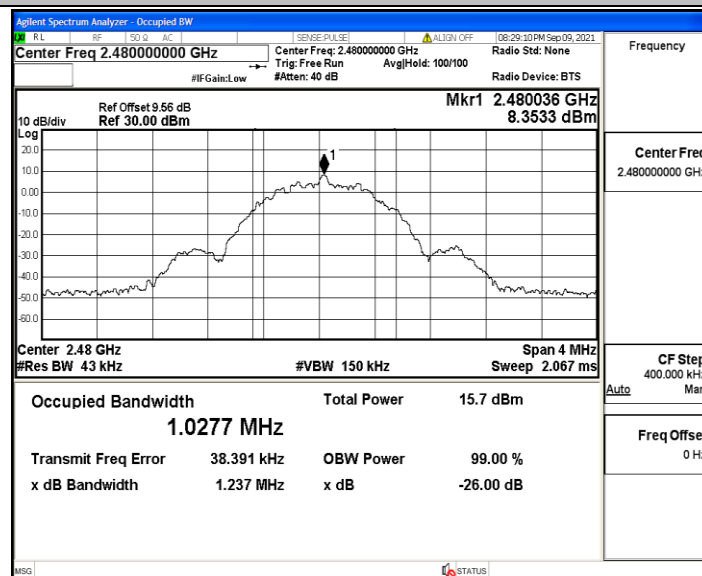
BLE_1M_Ant3_2402



BLE_1M_Ant3_2440



BLE_1M_Ant3_2480

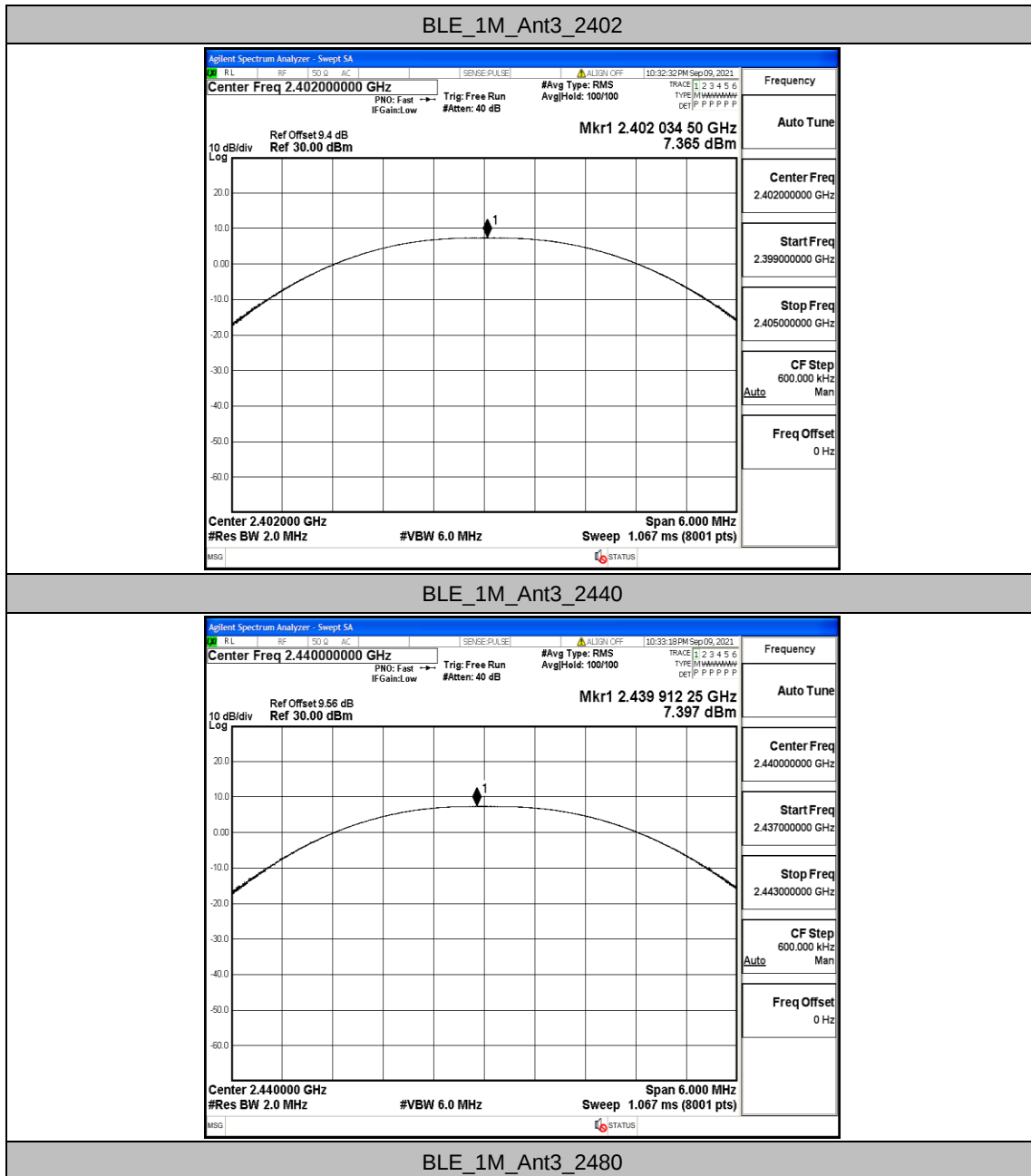


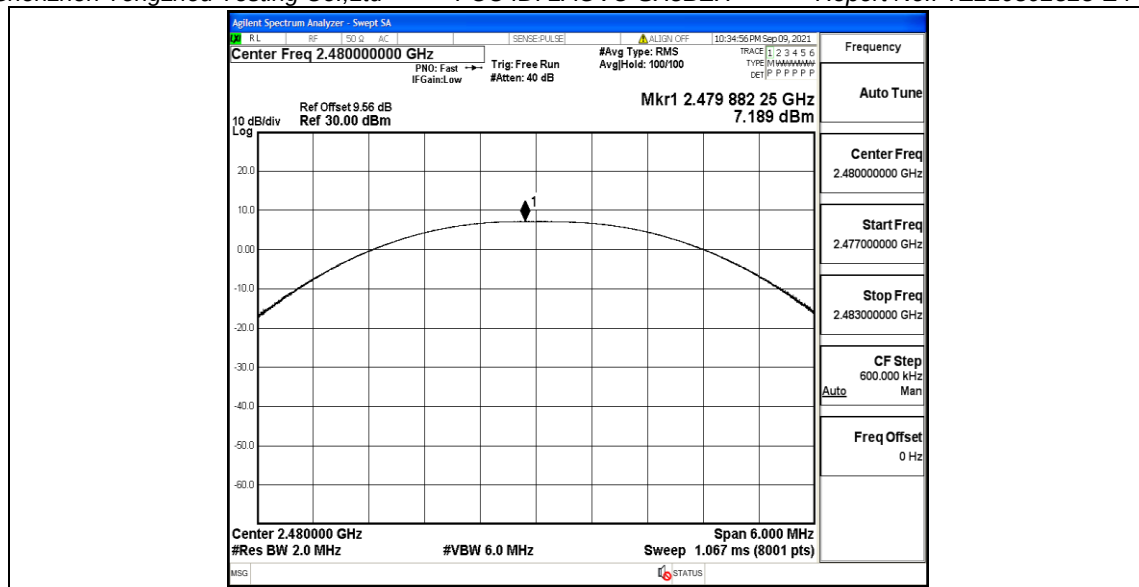
Appendix C: Maximum conducted output power

Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant3	2402	7.37	≤30	PASS
		2440	7.4	≤30	PASS
		2480	7.19	≤30	PASS

Test Graphs



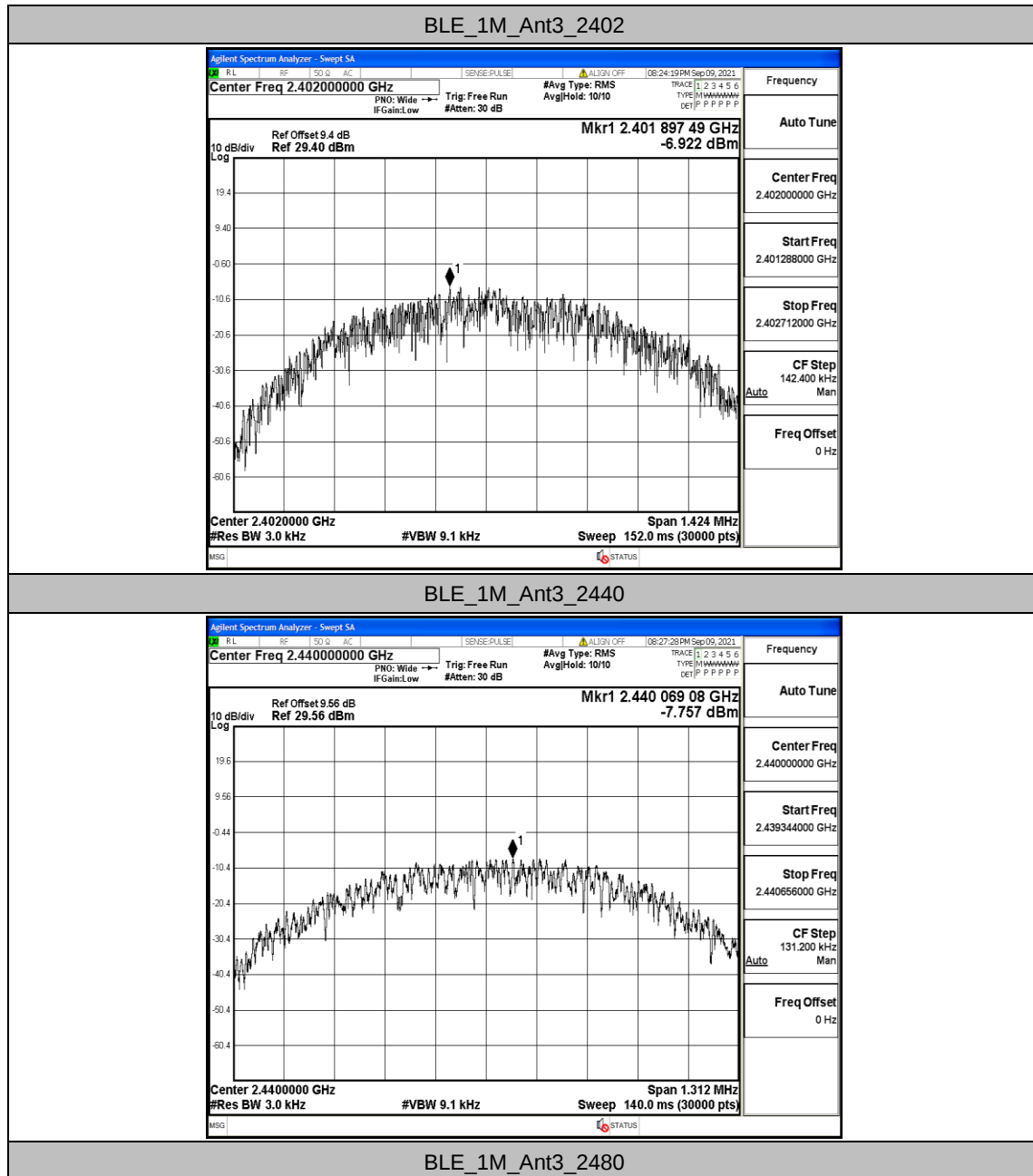


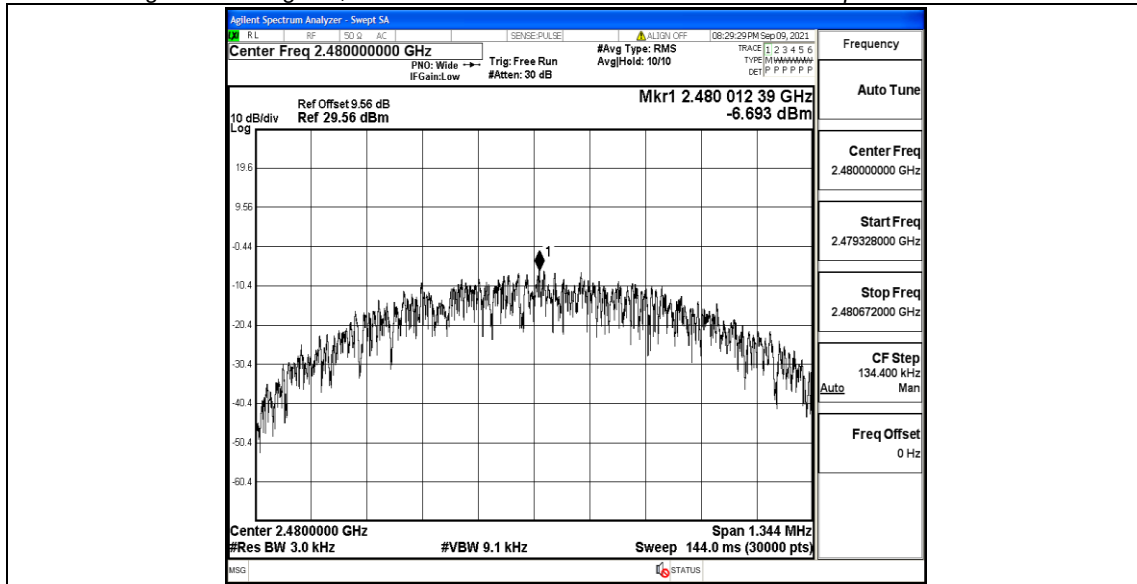
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant3	2402	-6.92	≤8	PASS
		2440	-7.76	≤8	PASS
		2480	-6.69	≤8	PASS

Test Graphs





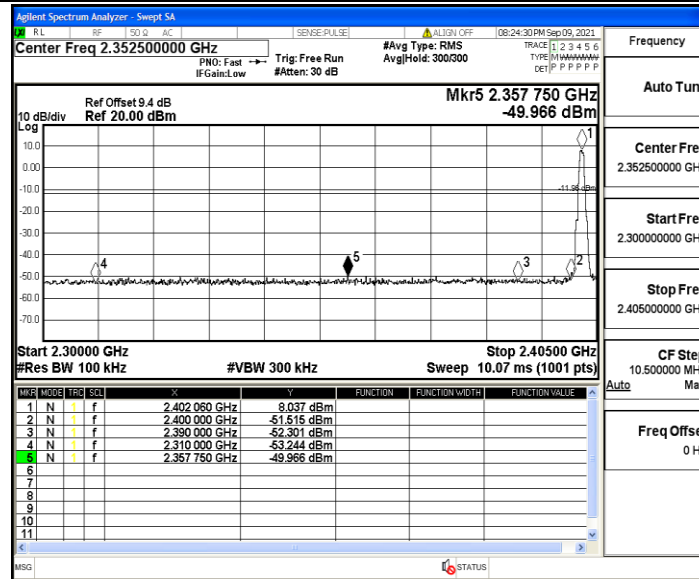
Appendix E: Band edge measurements

Test Result

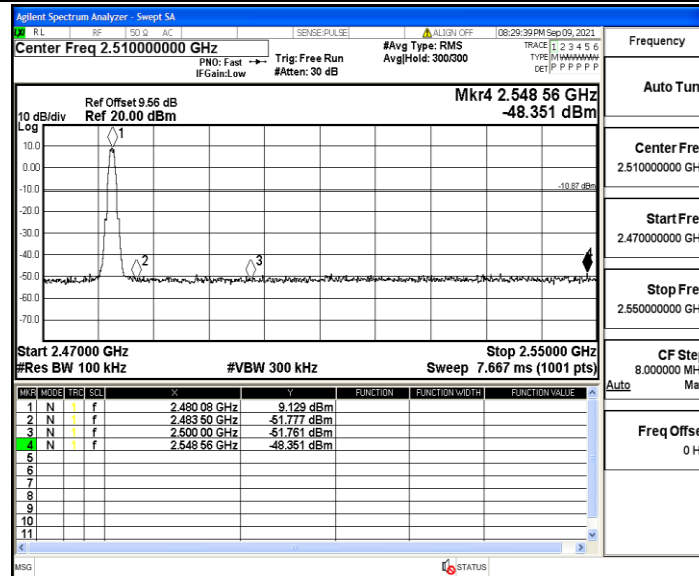
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant3	Low	2402	8.04	-49.97	≤-11.96	PASS
		High	2480	9.13	-48.35	≤-10.87	PASS

Test Graphs

BLE_1M_Ant3_Low_2402



BLE_1M_Ant3_High_2480



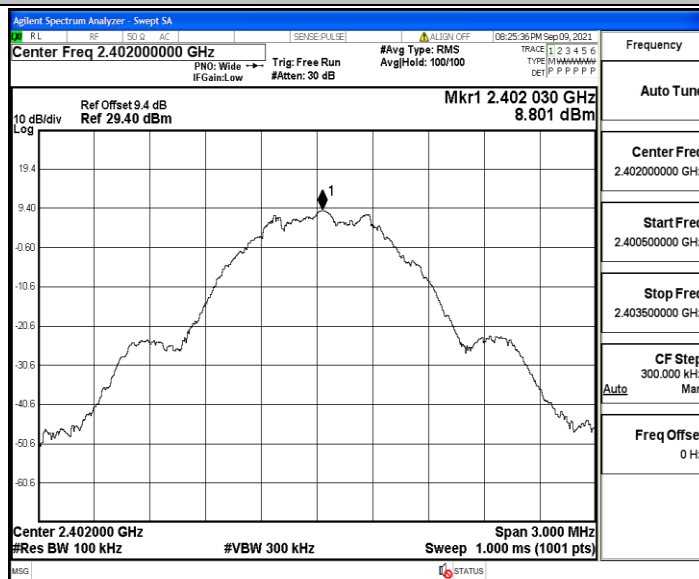
Appendix F: Conducted Spurious Emission

Test Result

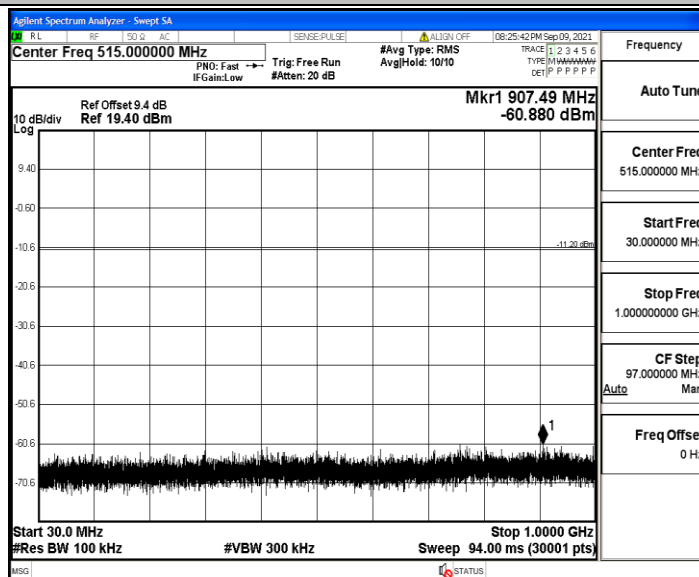
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant3	2402	Reference	8.80	8.80	---	PASS
			30~1000	8.80	-60.88	≤ -11.2	PASS
			1000~26500	8.80	-43.65	≤ -11.2	PASS
		2440	Reference	8.76	8.76	---	PASS
			30~1000	8.76	-60.91	≤ -11.24	PASS
			1000~26500	8.76	-39.23	≤ -11.24	PASS
		2480	Reference	9.01	9.01	---	PASS
			30~1000	9.01	-60.76	≤ -10.99	PASS
			1000~26500	9.01	-38.68	≤ -10.99	PASS

Test Graphs

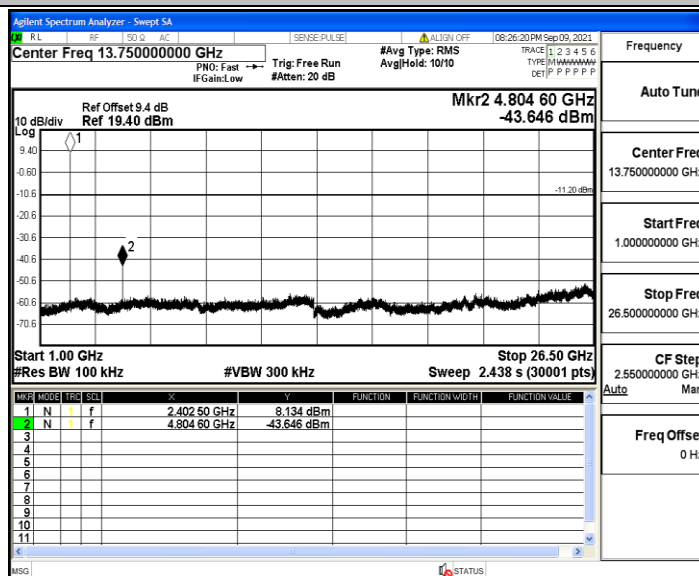
BLE_1M_Ant3_2402_0~Reference



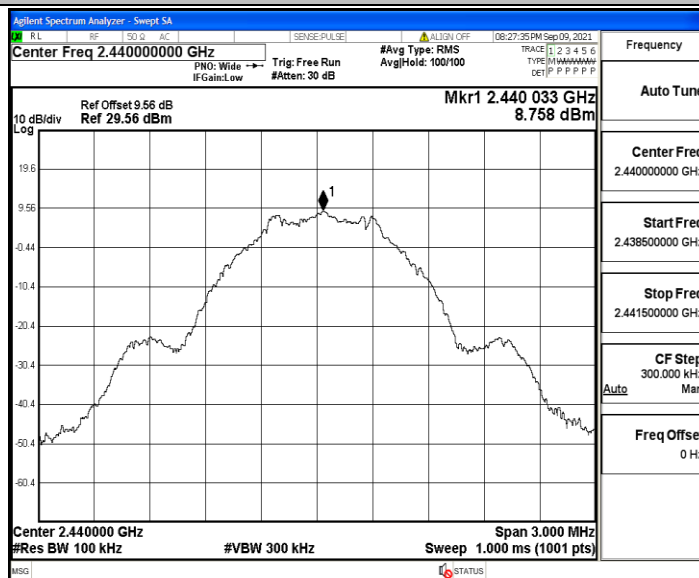
BLE_1M_Ant3_2402_30~1000



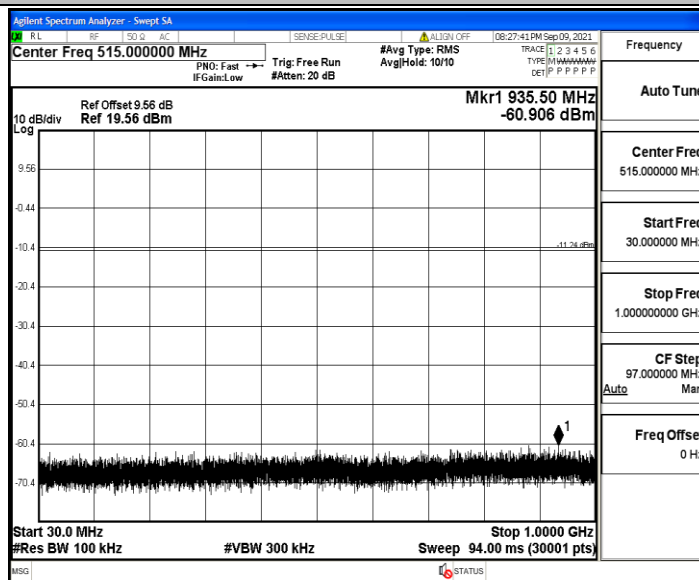
BLE_1M_Ant3_2402_1000~26500



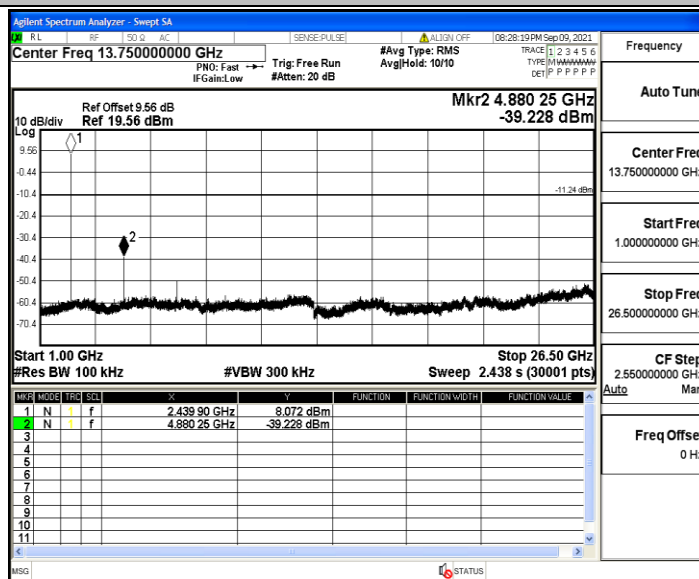
BLE_1M_Ant3_2440_0~Reference



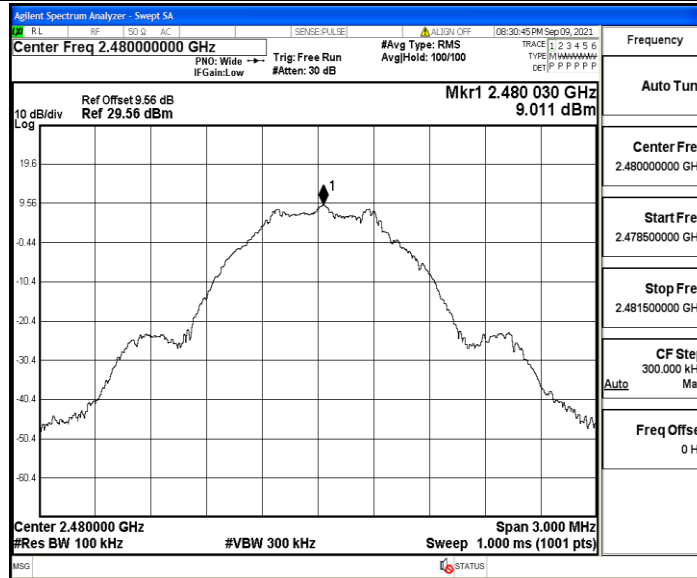
BLE_1M_Ant3_2440_30~1000



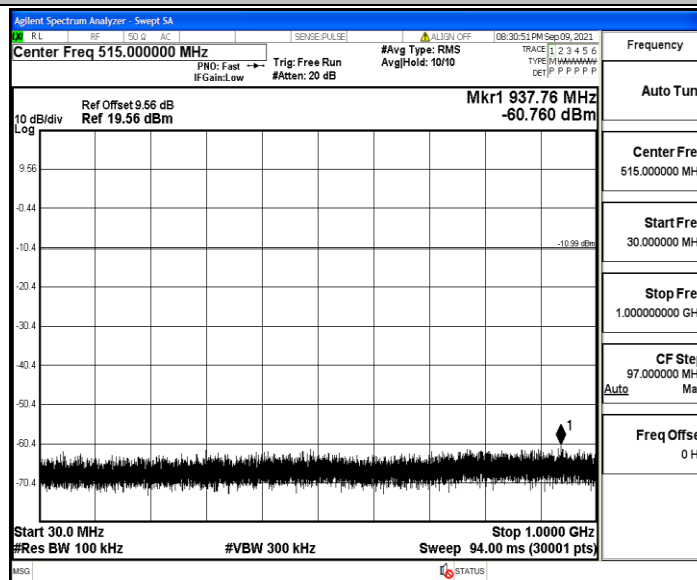
BLE_1M_Ant3_2440_1000~26500



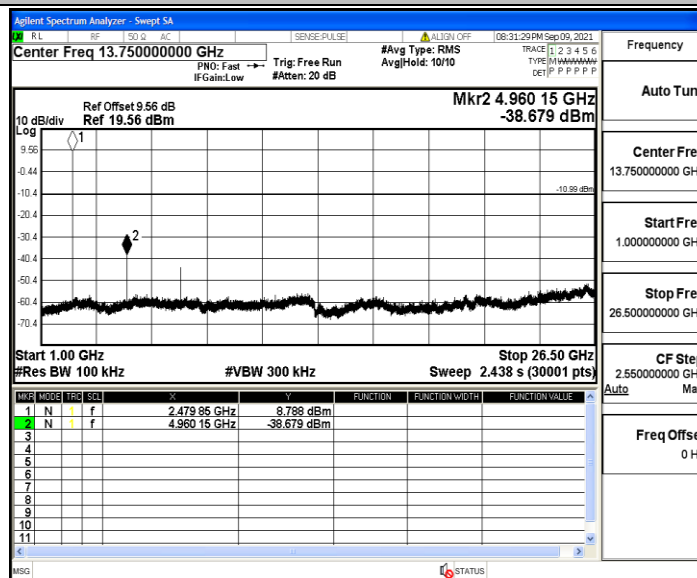
BLE_1M_Ant3_2480_0~Reference



BLE_1M_Ant3_2480_30~1000



BLE_1M_Ant3_2480_1000~26500



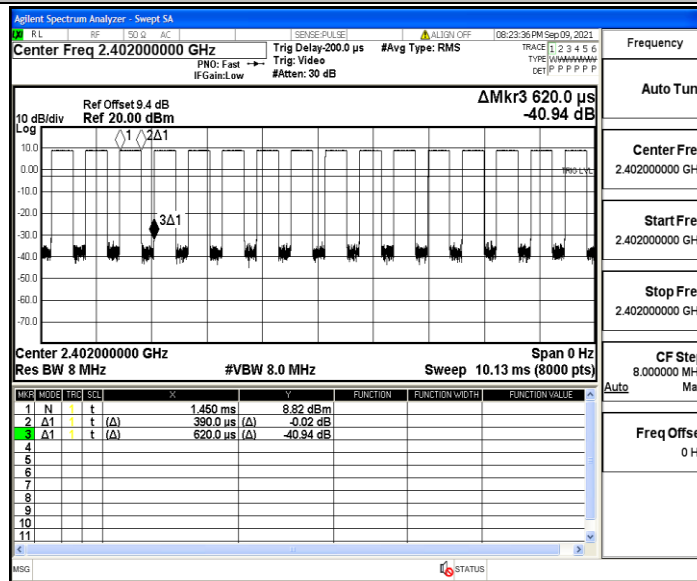
Appendix G: Duty Cycle

Test Result

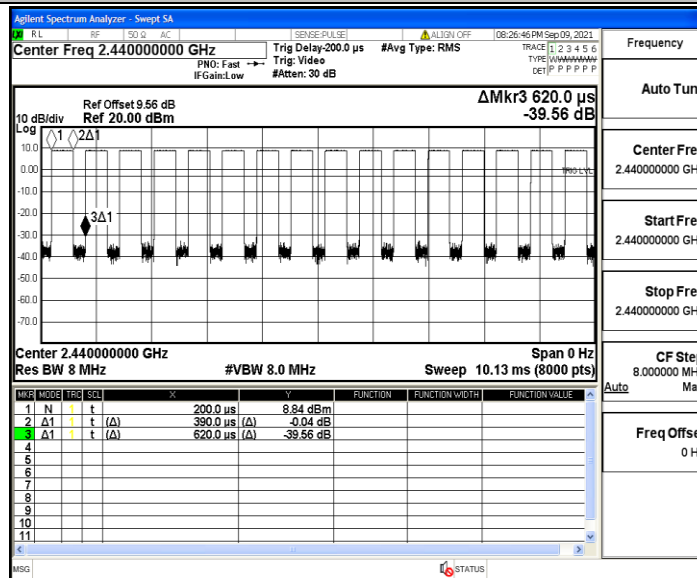
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
BLE_1M	Ant3	2402	0.39	0.62	62.90
		2440	0.39	0.62	62.90
		2480	0.39	0.62	62.90

Test Graphs

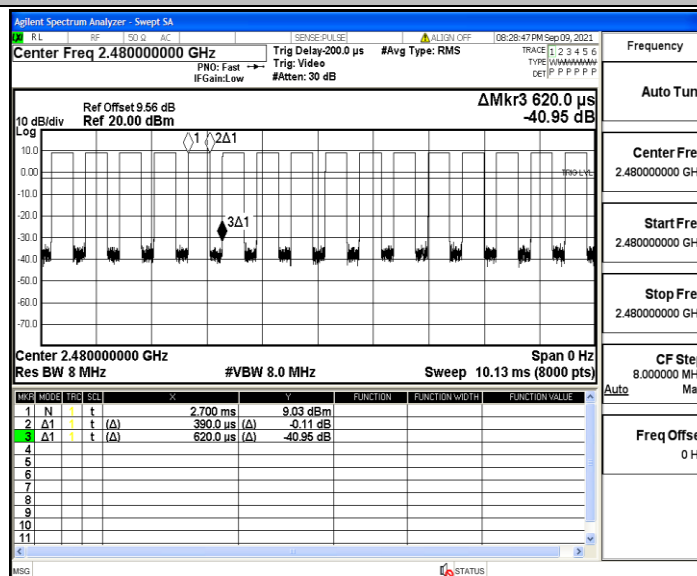
BLE_1M_Ant3_2402



BLE_1M_Ant3_2440



BLE_1M_Ant3_2480



Appendix H: Emissions in Restricted Bands

Test Result

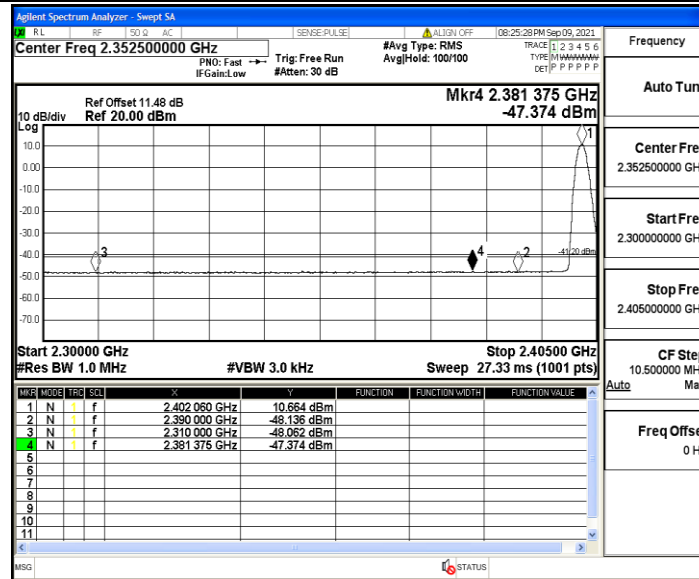
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant3	Low	2402	AV	2310.000	-48.06	≤-41.20	PASS
				AV	2381.375	-47.37	≤-41.20	PASS
				AV	2390.000	-48.14	≤-41.20	PASS
				Peak	2310.000	-42.77	≤-21.20	PASS
				Peak	2354.180	-38.34	≤-21.20	PASS
				Peak	2390.000	-42.67	≤-21.20	PASS
		High	2480	AV	2483.500	-43.69	≤-41.20	PASS
				AV	2483.520	-43.69	≤-41.20	PASS
				AV	2500.000	-47.33	≤-41.20	PASS
				Peak	2483.500	-40.77	≤-21.20	PASS
				Peak	2484.240	-37.67	≤-21.20	PASS
				Peak	2500.000	-40.86	≤-21.20	PASS

Note:

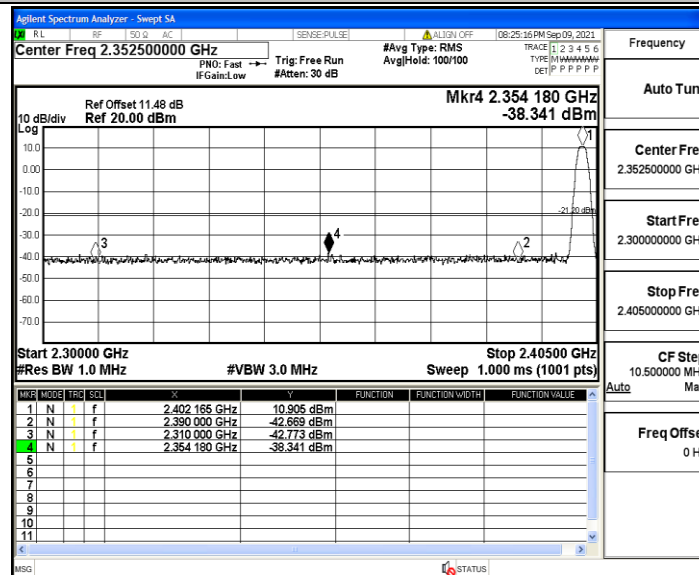
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

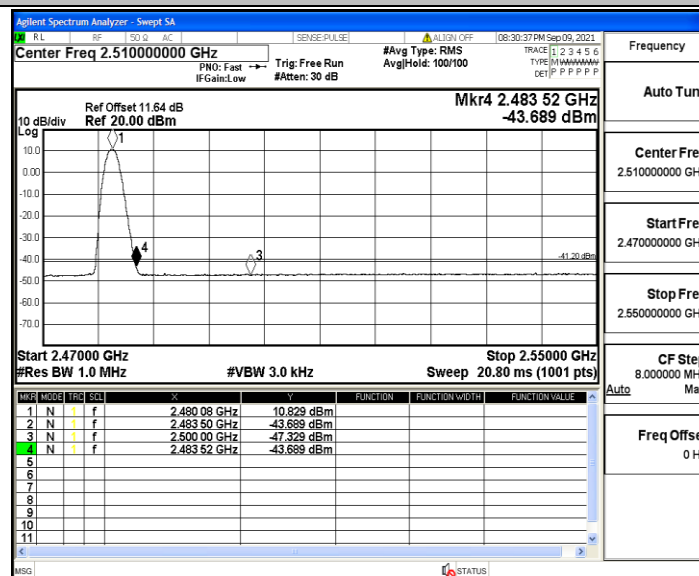
BLE_1M_Ant3_Low_2402_AV



BLE_1M_Ant3_Low_2402_Peak



BLE_1M_Ant3_High_2480_AV



BLE_1M_Ant3_High_2480_Peak

