

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

Product Name:PCIE Wireless Card

Trade Mark:N/A

Test Model:PCE-3100

FCC ID: 2AYYXPCE-3100

Environmental Conditions

Temperature:	25.5°C
Relative Humidity:	55.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

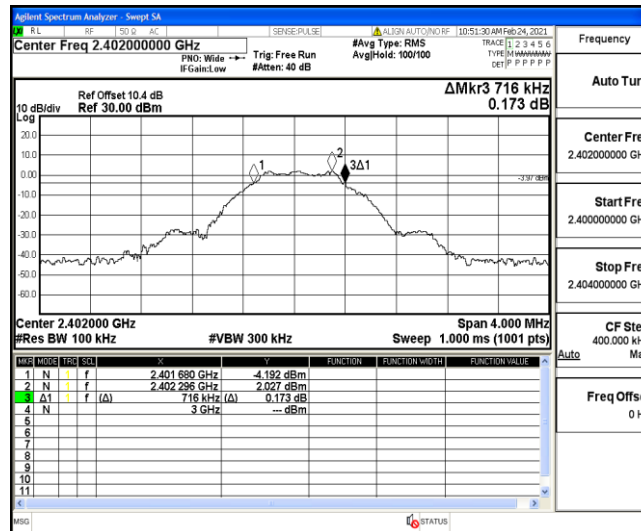
Appendix A: DTS Bandwidth

Test Result

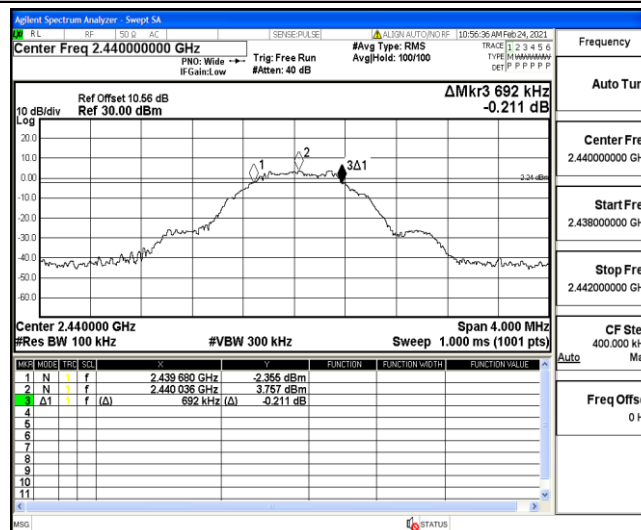
TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_BT 1M	Ant1	2402	0.716	2401.680	2402.396	0.5	PASS
		2440	0.692	2439.680	2440.372	0.5	PASS
		2480	0.688	2479.688	2480.376	0.5	PASS

Test Graphs

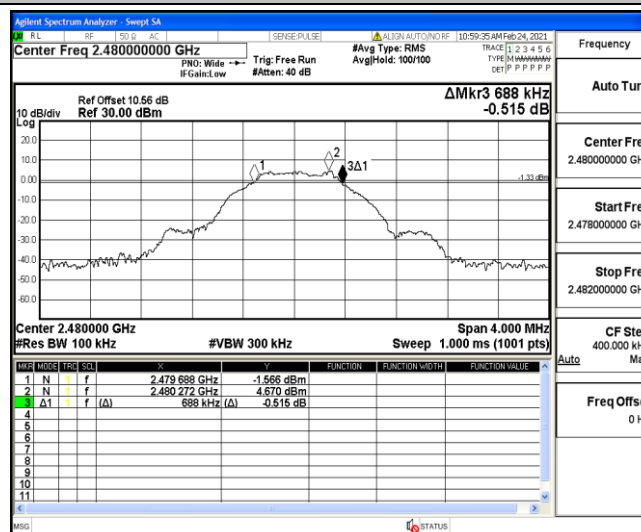
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



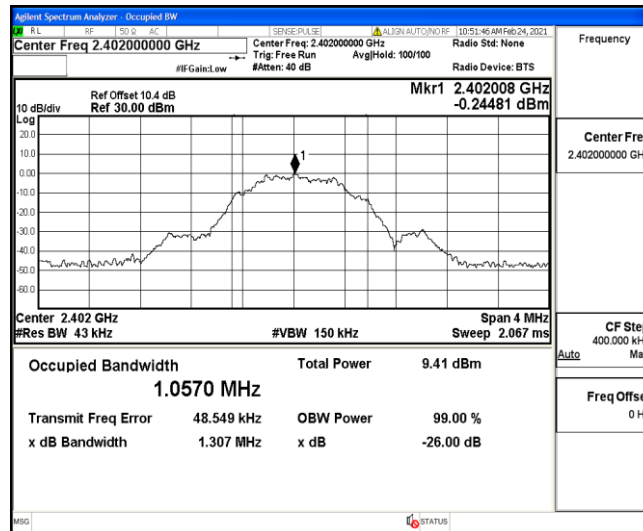
Appendix B: Occupied Channel Bandwidth

Test Result

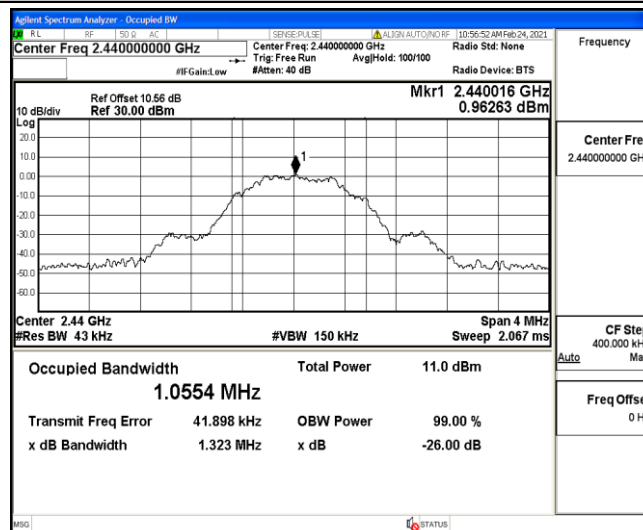
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_BT 1M	Ant1	2402	1.0570	2401.520	2402.577	---	PASS
		2440	1.0554	2439.514	2440.570	---	PASS
		2480	1.0573	2479.508	2480.565	---	PASS

Test Graphs

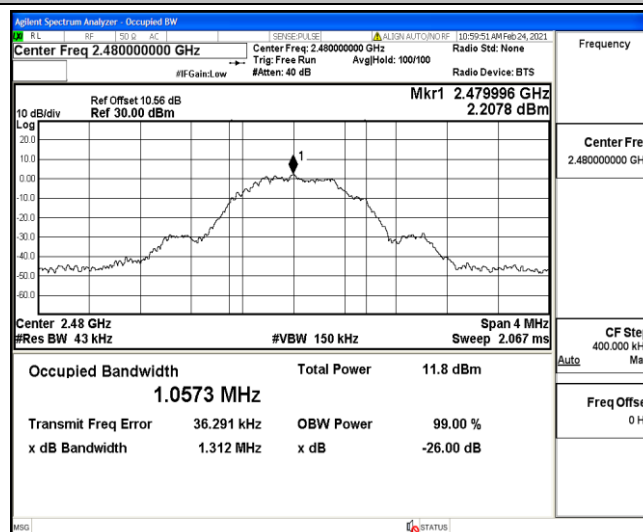
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



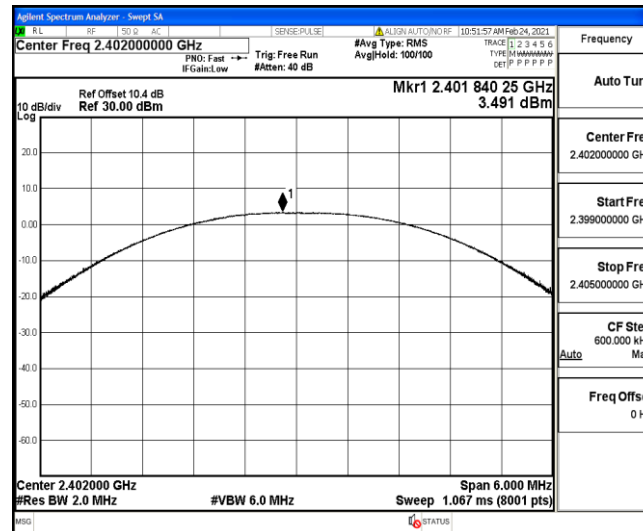
Appendix C: Maximum conducted output power

Test Result

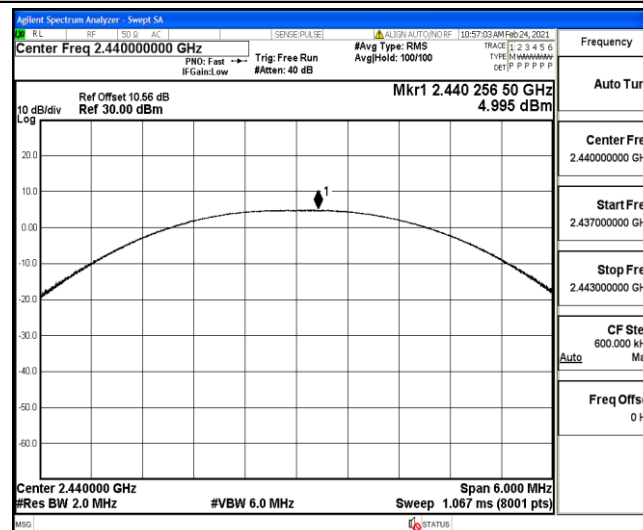
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_BT 1M	Ant1	2402	3.49	<=30	PASS
		2440	5	<=30	PASS
		2480	5.91	<=30	PASS

Test Graphs

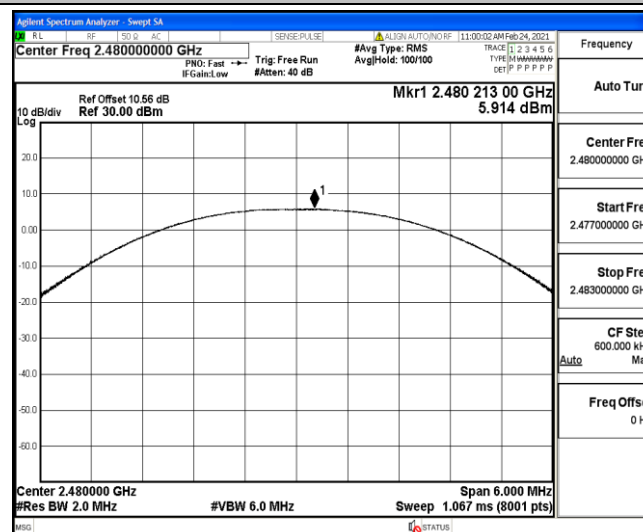
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



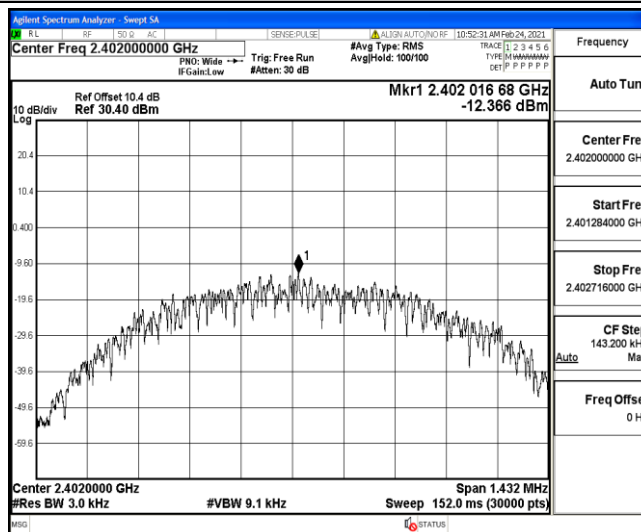
Appendix D: Maximum power spectral density

Test Result

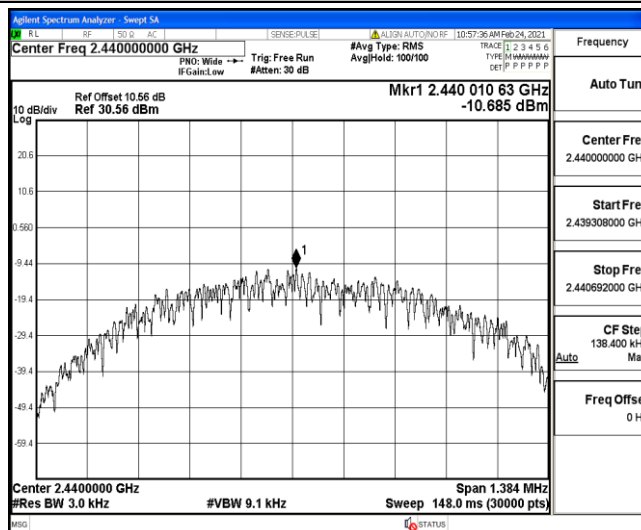
TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_BT 1M	Ant1	2402	-12.37	<=8	PASS
		2440	-10.69	<=8	PASS
		2480	-9.79	<=8	PASS

Test Graphs

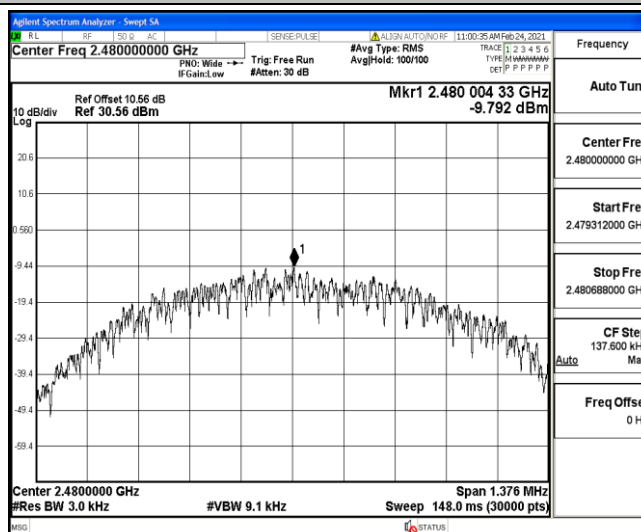
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



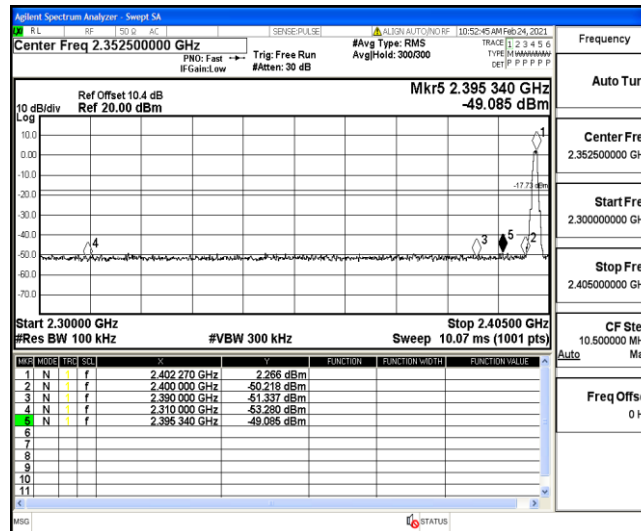
Appendix E: Band edge measurements

Test Result

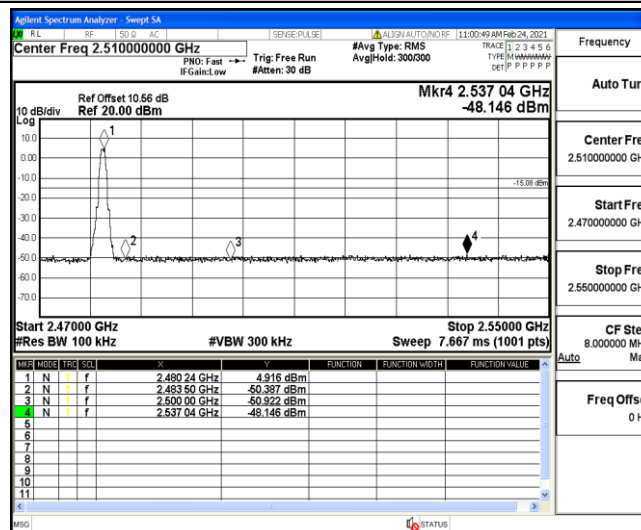
TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_BT 1M	Ant1	Low	2402	2.27	-49.09	<=-15.25	PASS
		High	2480	4.92	-48.15	<=-13.95	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



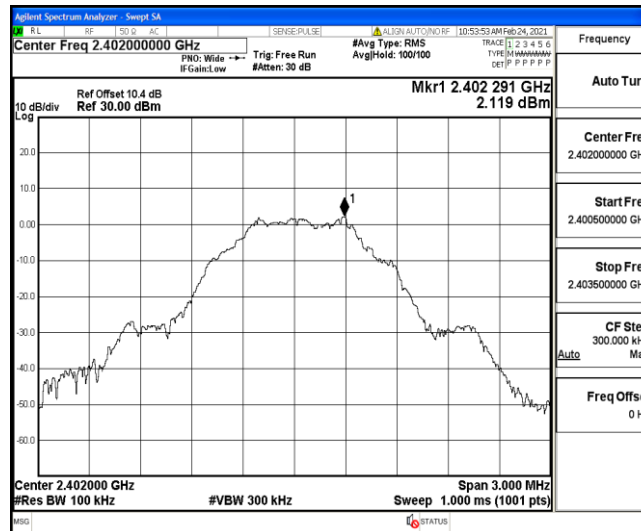
Appendix F: Conducted Spurious Emission

Test Result

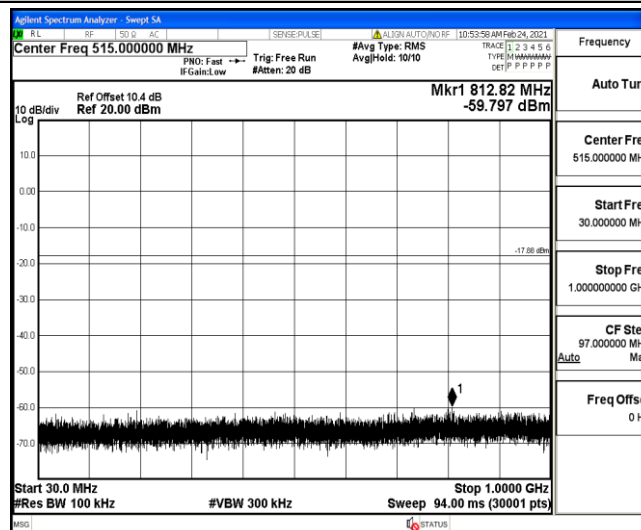
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	2.12	2.12	---	PASS
			30~1000	2.12	-59.8	<=-17.88	PASS
			1000~26500	2.12	-46.09	<=-17.88	PASS
		2440	Reference	3.76	3.76	---	PASS
			30~1000	3.76	-59.49	<=-16.24	PASS
			1000~26500	3.76	-45.99	<=-16.24	PASS
		2480	Reference	4.67	4.67	---	PASS
			30~1000	4.67	-60.27	<=-15.33	PASS
			1000~26500	4.67	-46.05	<=-15.33	PASS

Test Graphs

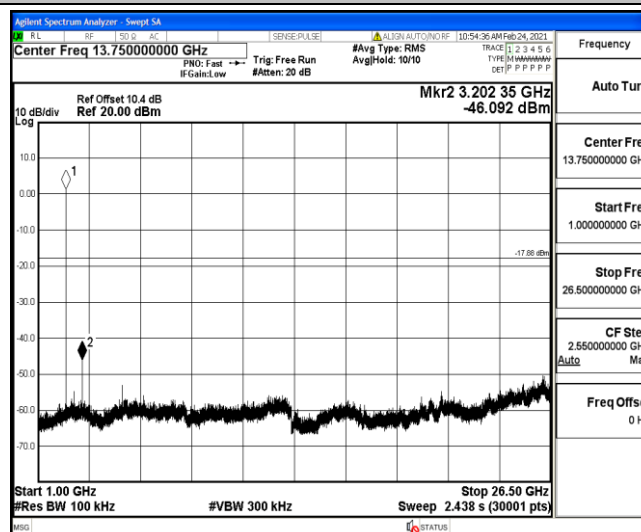
BLE_1M_Ant1_2402_0~Reference



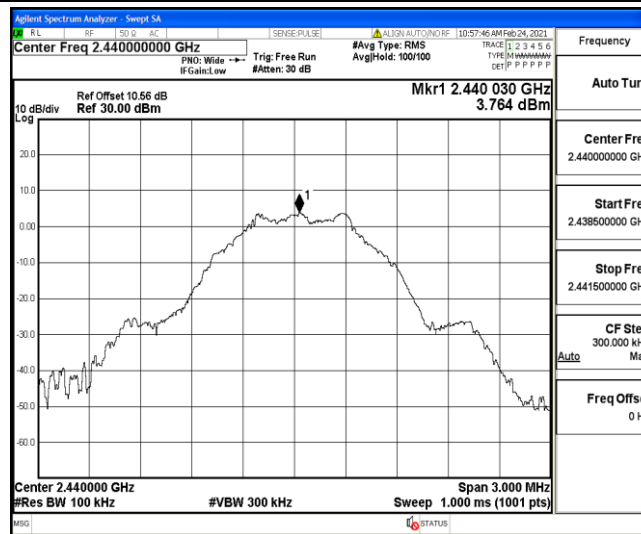
BLE_1M_Ant1_2402_30~1000



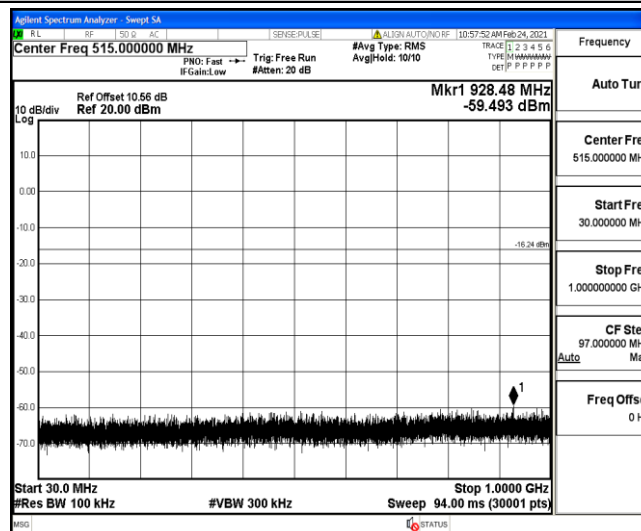
BLE_1M_Ant1_2402_1000~26500



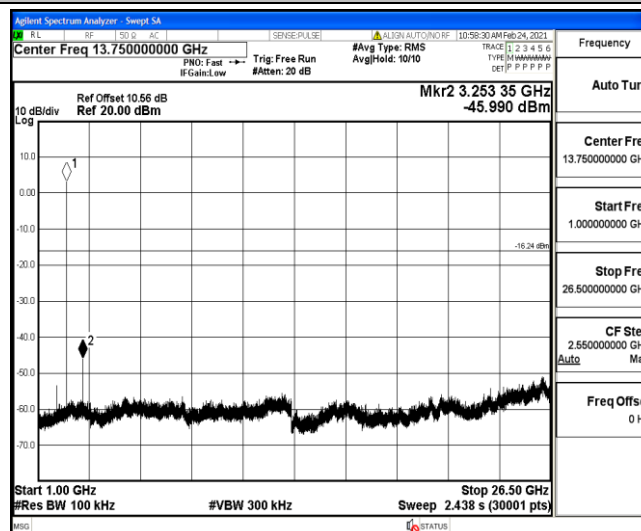
BLE_1M_Ant1_2440_0~Reference



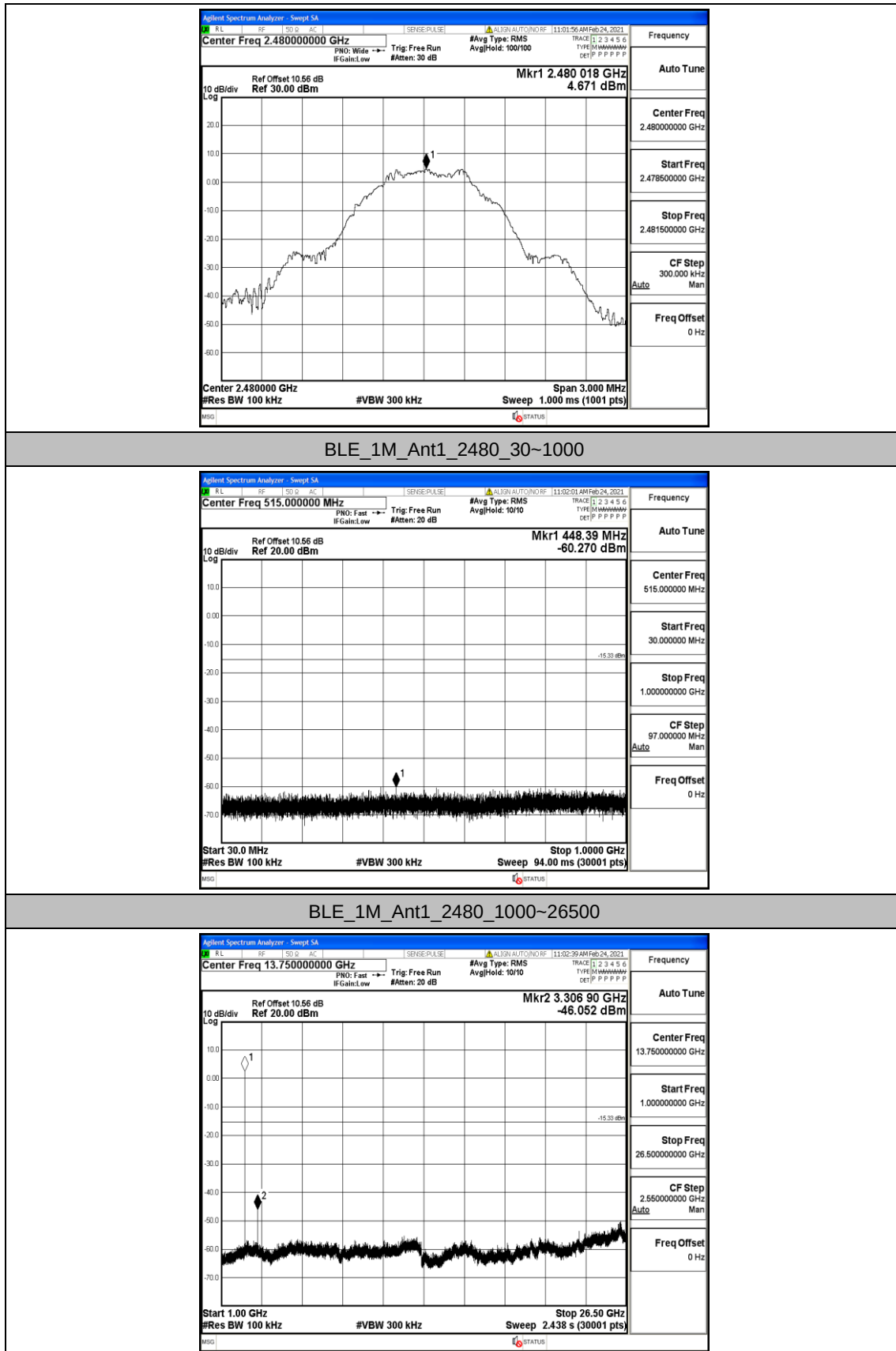
BLE_1M_Ant1_2440_30~1000



BLE_1M_Ant1_2440_1000~26500



BLE_1M_Ant1_2480_0~Reference



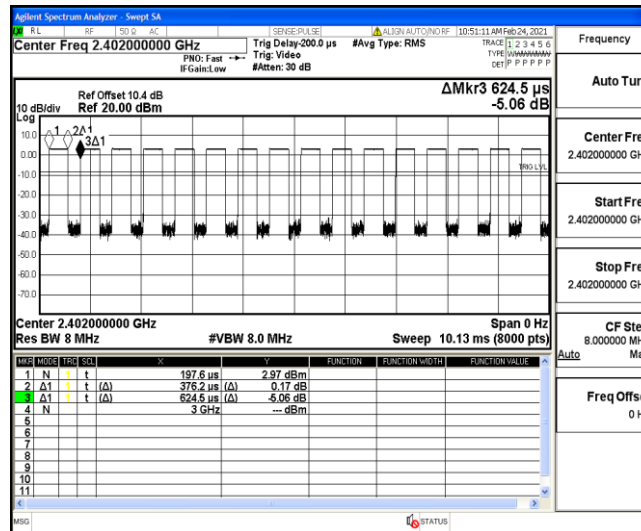
Appendix G: Duty Cycle

Test Result

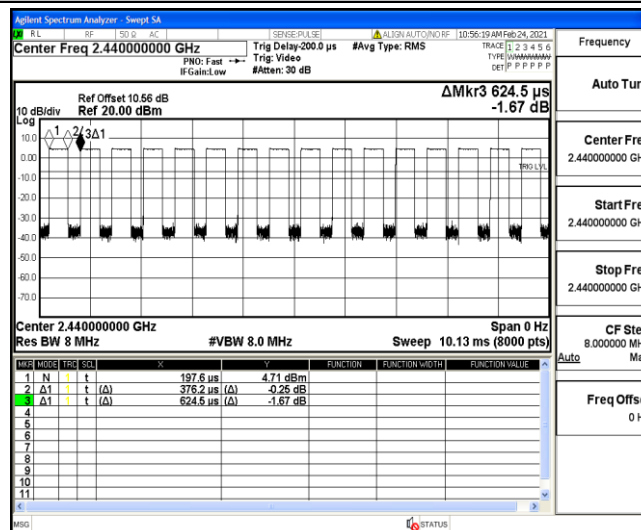
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/B[KHz]
BLE_BT 1M	Ant1	2402	0.38	0.62	61.29	2.63
		2440	0.38	0.62	61.29	2.63
		2480	0.38	0.63	60.32	2.63

Test Graphs

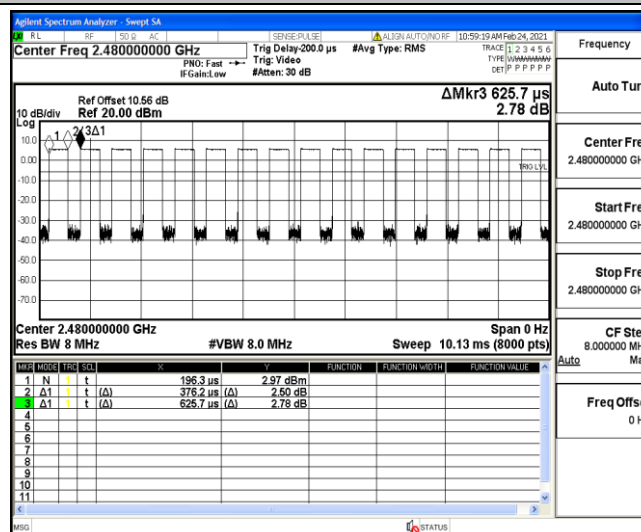
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix H: Emissions in Restricted Bands

Test Result

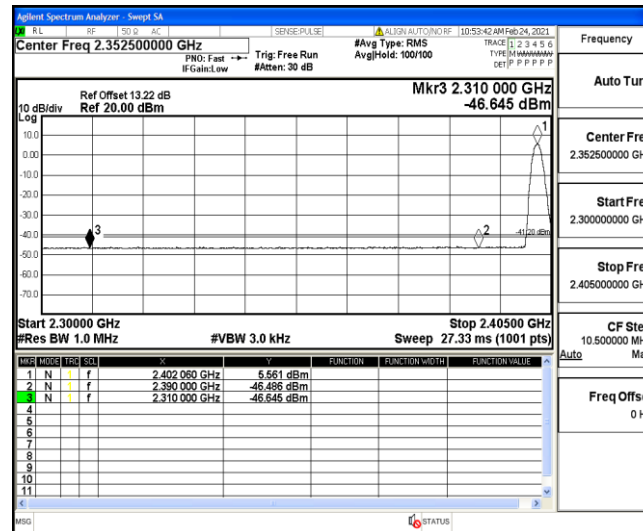
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_BT 1M	Ant1	Low	2402	AV	2310.000	-46.65	<=-41.20	PASS
				AV	2390.000	-46.49	<=-41.20	PASS
				Peak	2310.000	-39.34	<=-21.20	PASS
				Peak	2390.000	-38.95	<=-21.20	PASS
		High	2480	AV	2483.500	-44.27	<=-41.20	PASS
				AV	2500.000	-45.54	<=-41.20	PASS
				Peak	2483.500	-39.51	<=-21.20	PASS
				Peak	2500.000	-38.19	<=-21.20	PASS

Note:

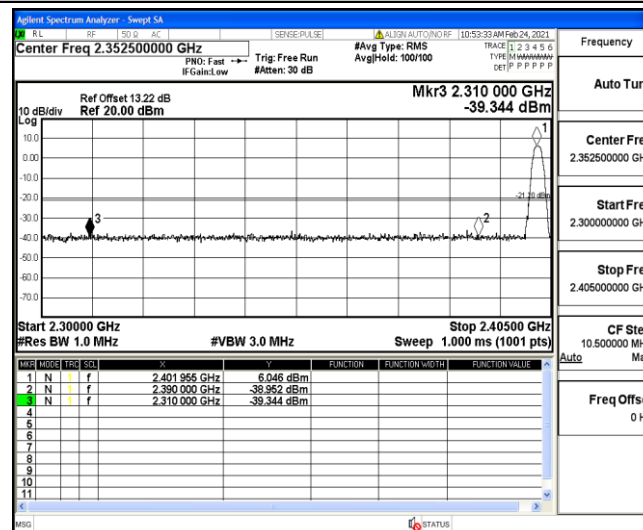
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

BLE_1M_Ant1_Low_2402_AV



BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV

