

Appendix A

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

Product Name: PONS Motorized Pan Head

Trade Mark: N/A

Test Model: PS-E1

FCC ID: 2AVSW-PSE1

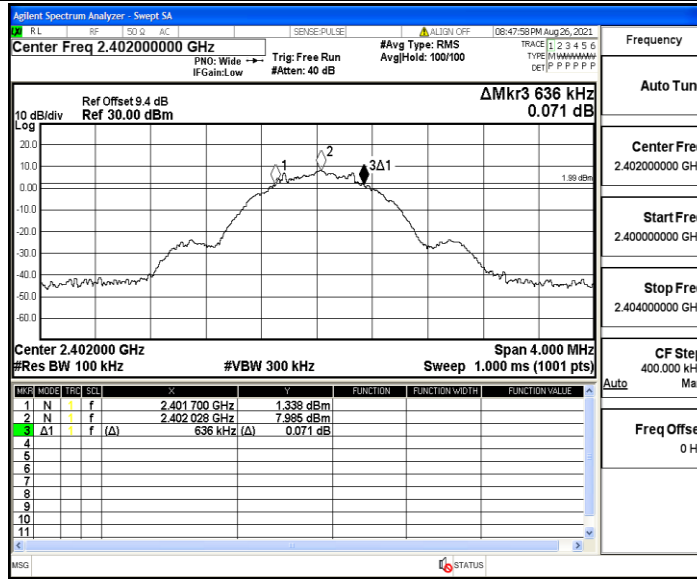
Environmental Conditions

Temperature:	23.2°C
Relative Humidity:	57%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

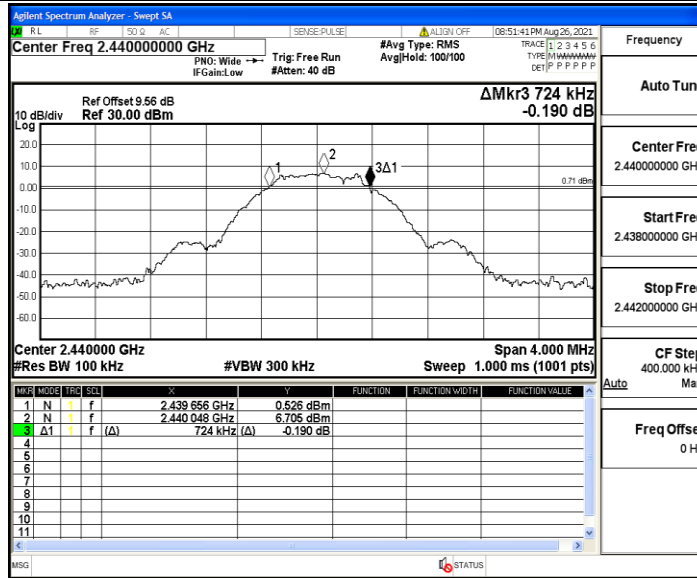
A.1. 6dB Bandwidth

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.636	2401.700	2402.336	0.5	PASS
		2440	0.724	2439.656	2440.380	0.5	PASS
		2480	0.664	2479.688	2480.352	0.5	PASS

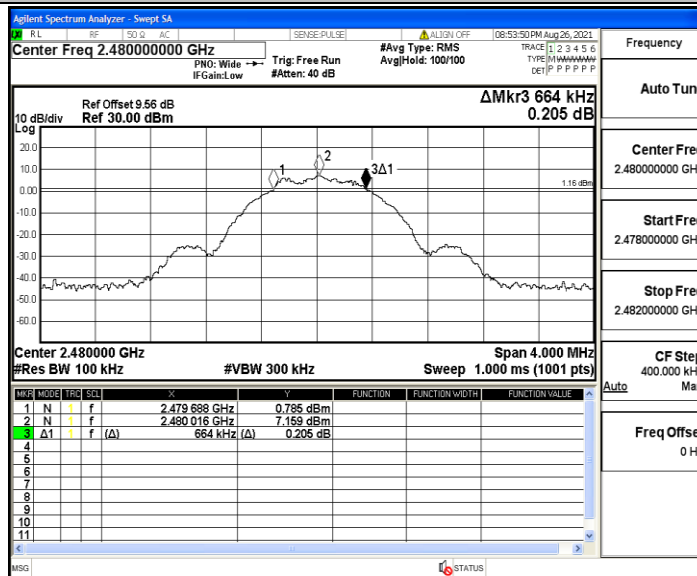
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



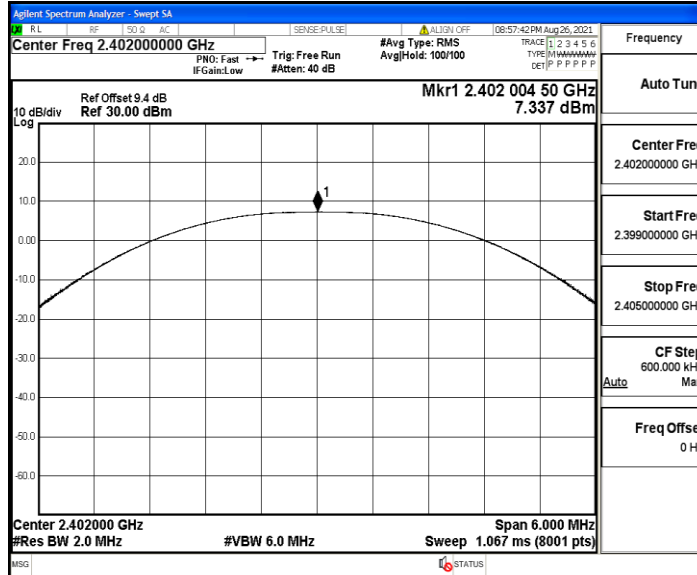
A.2. Occupied Bandwidth

Test Mode	Test Channel	Ant	OBW[MHz]	Limit[MHz]	Verdict
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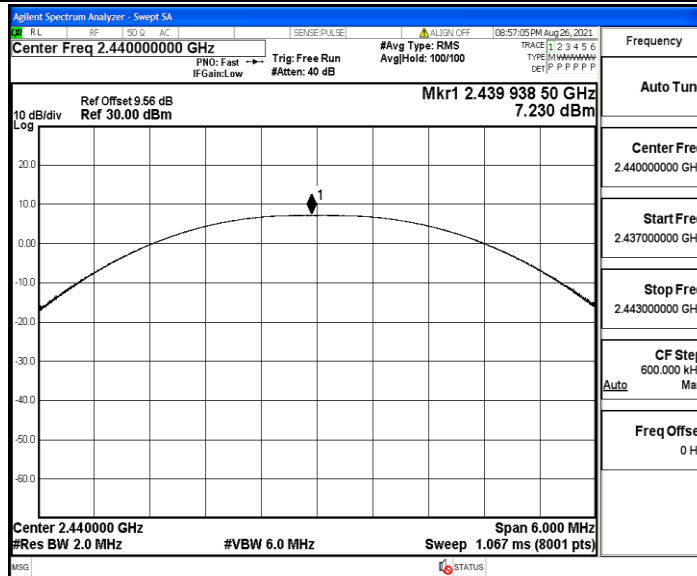
A.3. Maximum peak conducted output power

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	7.34	≤30	PASS
		2440	7.23	≤30	PASS
		2480	6.52	≤30	PASS

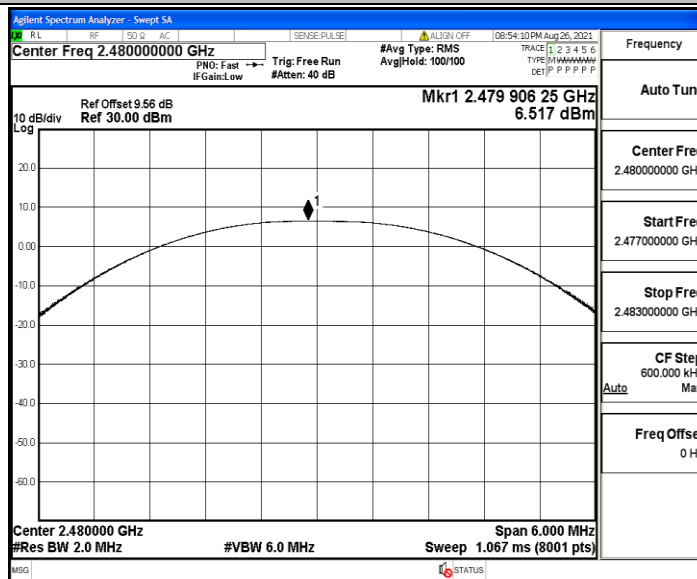
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



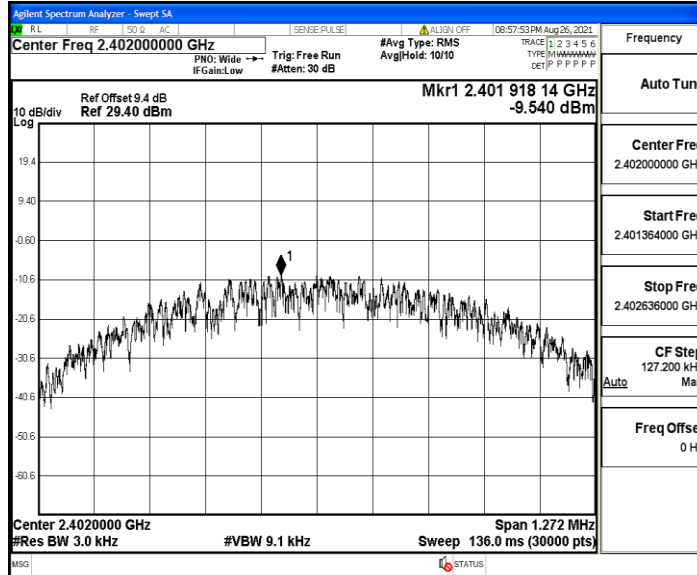
BLE_1M_Ant1_2480



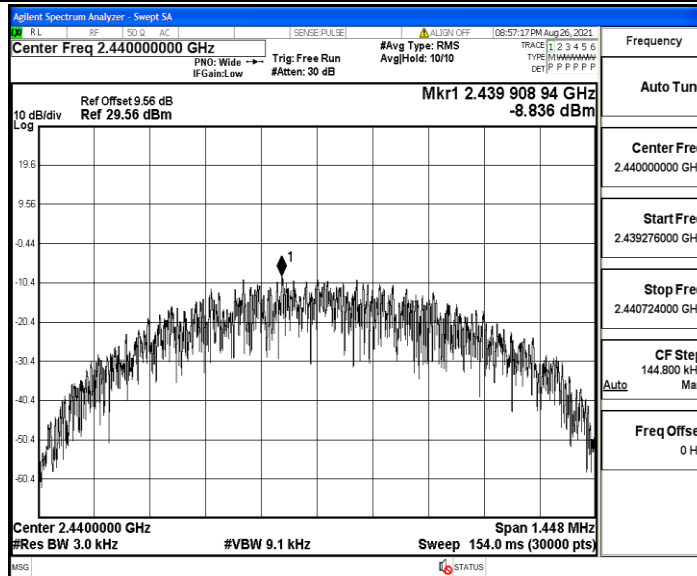
A.4. Maximum Peak power spectral density

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-9.54	≤8	PASS
		2440	-8.84	≤8	PASS
		2480	-9.37	≤8	PASS

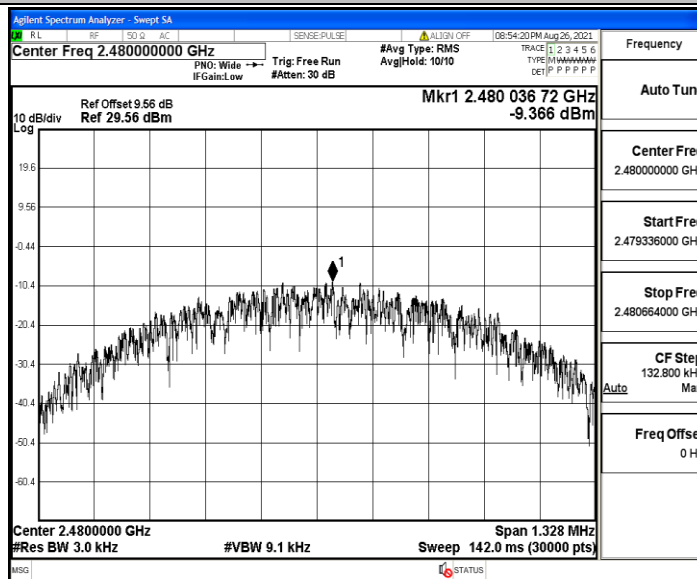
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



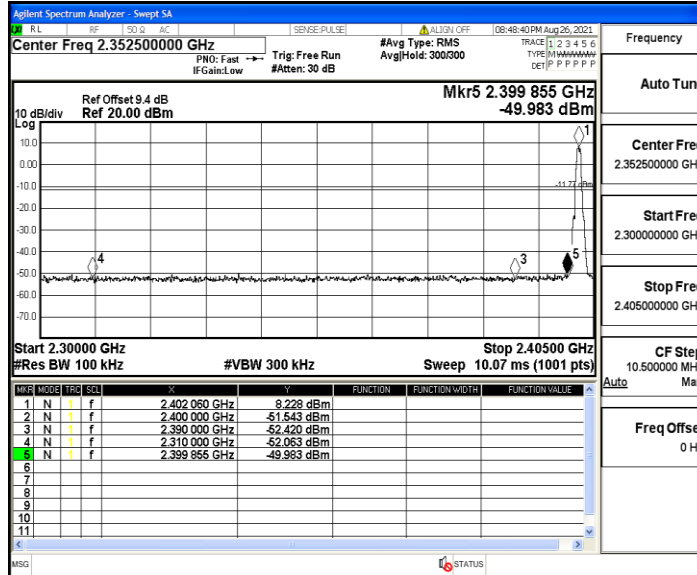
BLE_1M_Ant1_2480



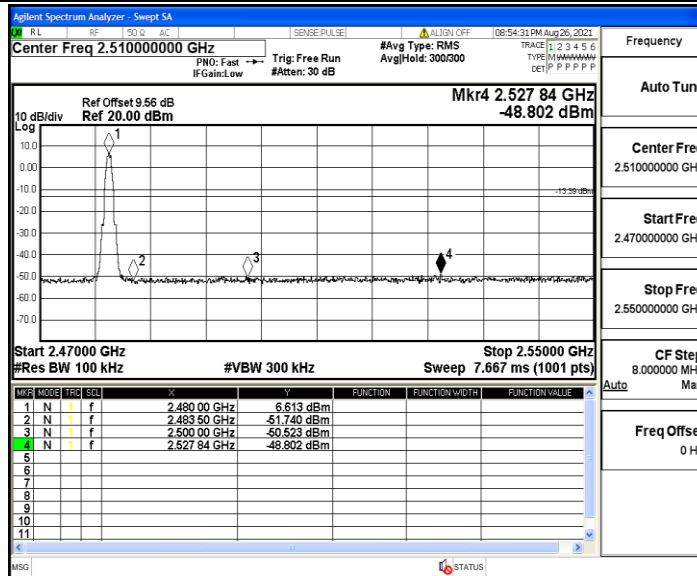
A.5. Band-edge for RF Conducted Emissions

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	8.23	-49.98	≤-11.77	PASS
		High	2480	6.61	-48.8	≤-13.39	PASS

BLE_1M_Ant1_Low_2402



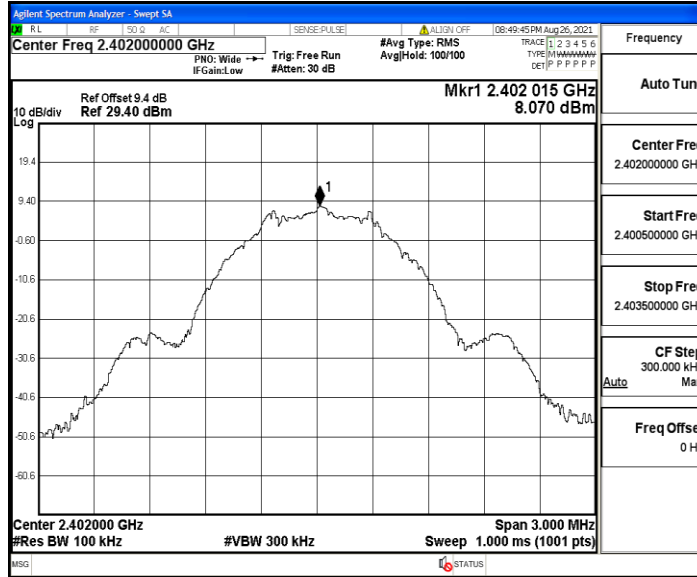
BLE_1M_Ant1_High_2480



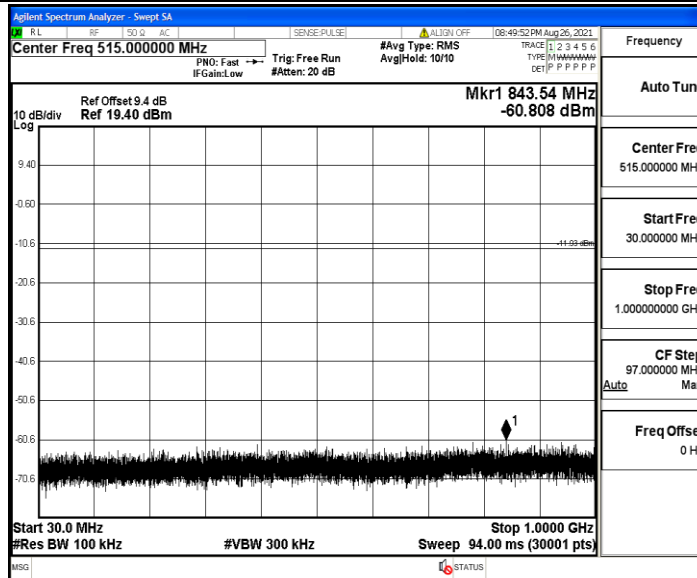
A.6. RF Conducted Spurious Emissions

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	8.07	8.07	---	PASS
			30~1000	8.07	-60.81	≤-11.93	PASS
			1000~26500	8.07	-44.21	≤-11.93	PASS
		2440	Reference	7.51	7.51	---	PASS
			30~1000	7.51	-61.01	≤-12.49	PASS
			1000~26500	7.51	-43.52	≤-12.49	PASS
		2480	Reference	5.58	5.58	---	PASS
			30~1000	5.58	-61.07	≤-14.42	PASS
			1000~26500	5.58	-45.74	≤-14.42	PASS

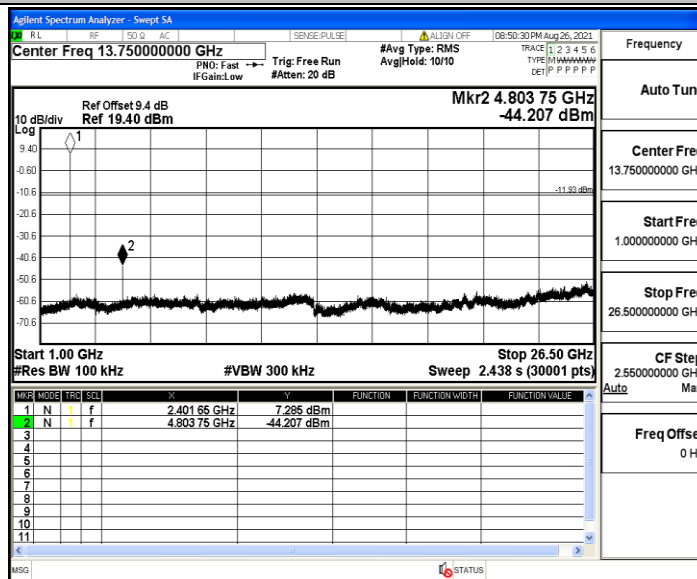
BLE_1M_Ant1_2402_0~Reference



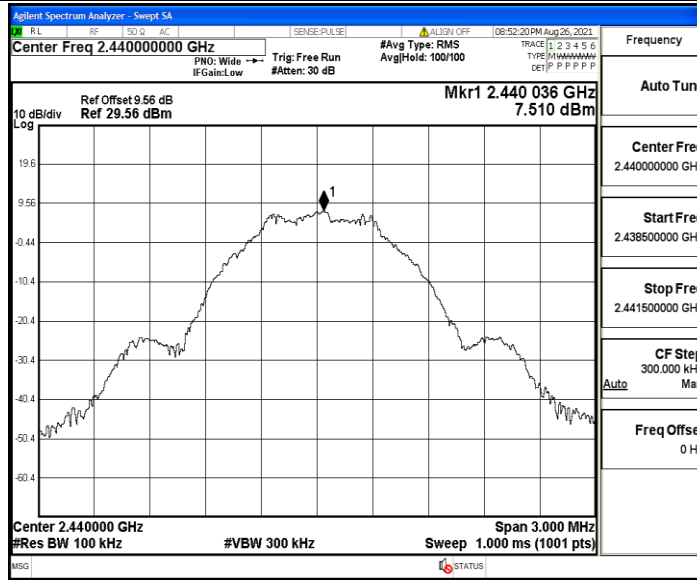
BLE_1M_Ant1_2402_30~1000



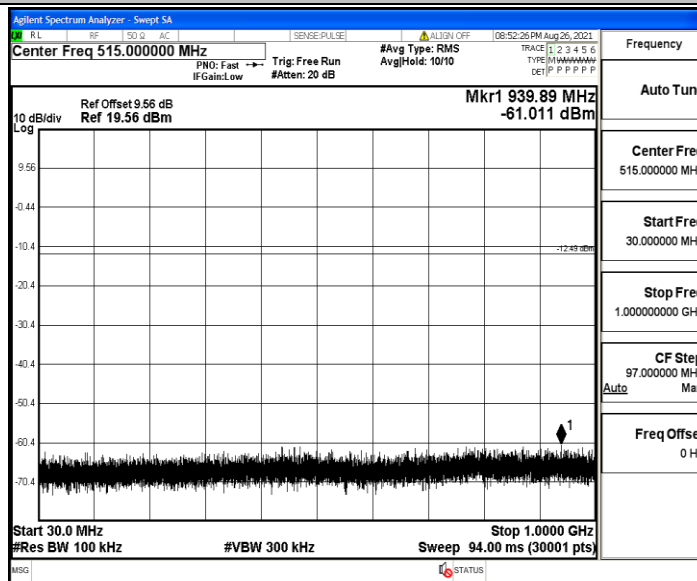
BLE_1M_Ant1_2402_1000~26500



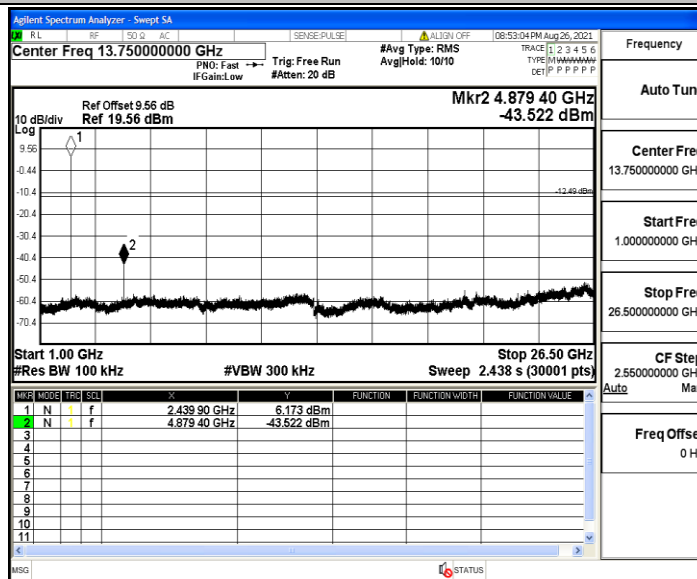
BLE_1M_Ant1_2440_0~Reference



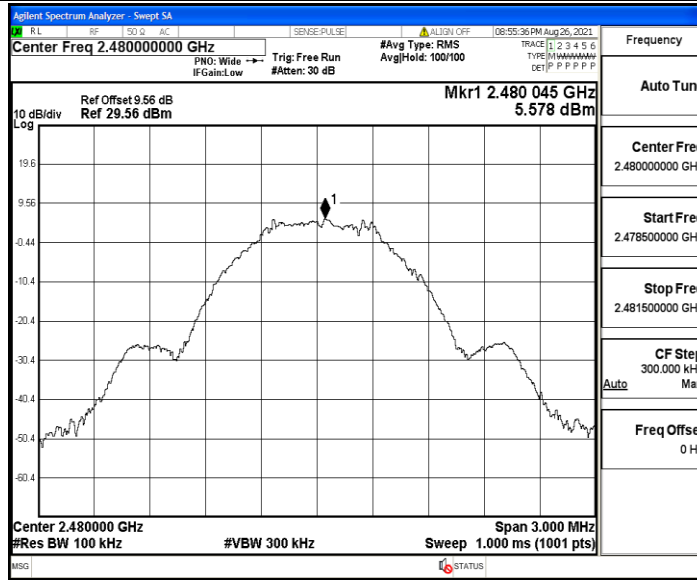
BLE_1M_Ant1_2440_30~1000



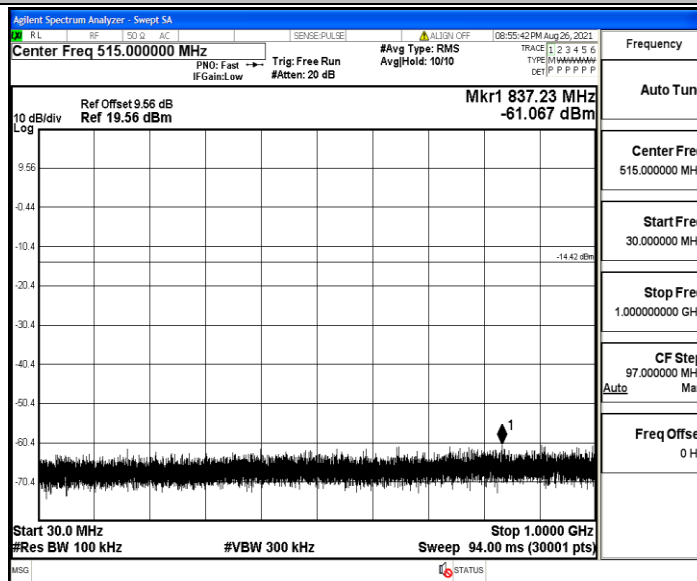
BLE_1M_Ant1_2440_1000~26500



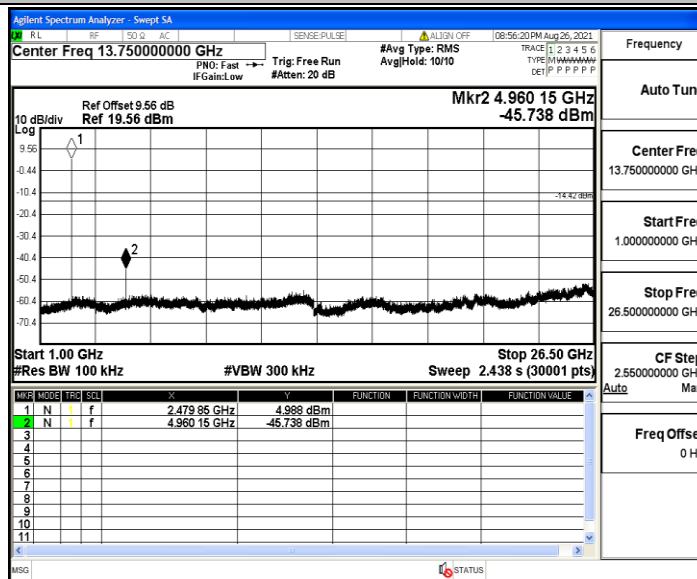
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500



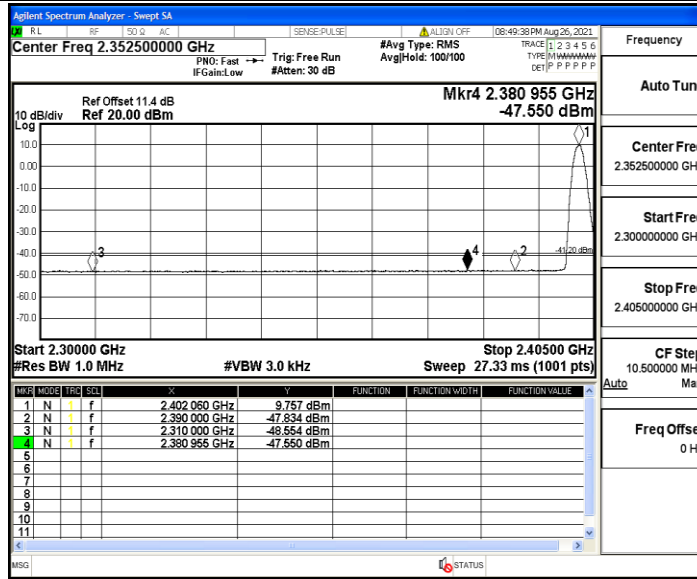
A.7. Restrict-band band-edge measurements

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.55	≤-41.20	PASS
				AV	2380.955	-47.55	≤-41.20	PASS
				AV	2390.000	-47.83	≤-41.20	PASS
				Peak	2310.000	-40.35	≤-21.20	PASS
				Peak	2367.410	-38.66	≤-21.20	PASS
				Peak	2390.000	-41.32	≤-21.20	PASS
		High	2480	AV	2483.500	-45.22	≤-41.20	PASS
				AV	2483.520	-45.22	≤-41.20	PASS
				AV	2500.000	-47.23	≤-41.20	PASS
				Peak	2483.500	-40.04	≤-21.20	PASS
				Peak	2484.720	-38.91	≤-21.20	PASS
				Peak	2500.000	-40.18	≤-21.20	PASS

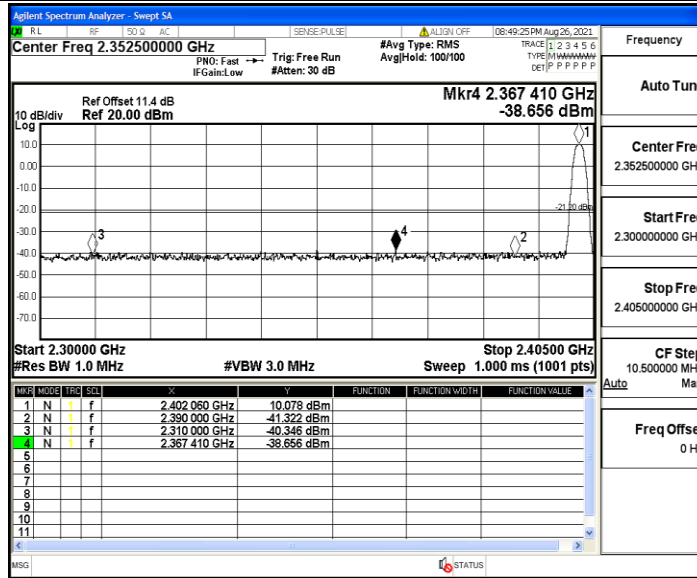
Note:

1. The Antenna Gain is compensated in the graph.
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.

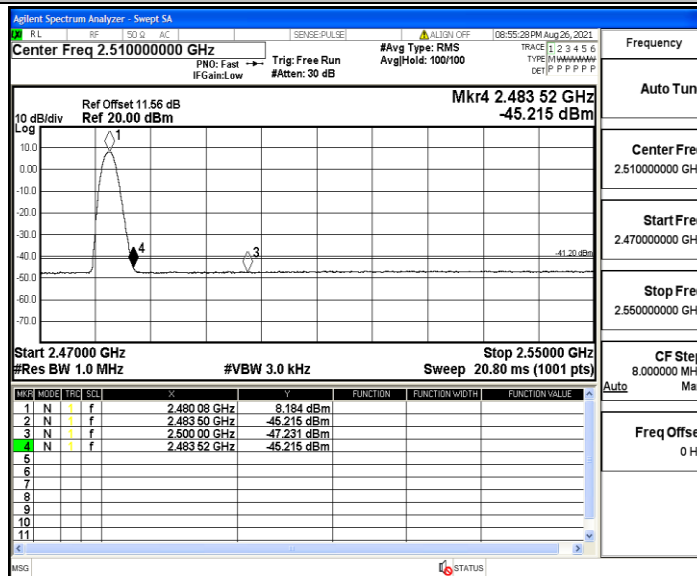
BLE_1M_Ant1_Low_2402_AV



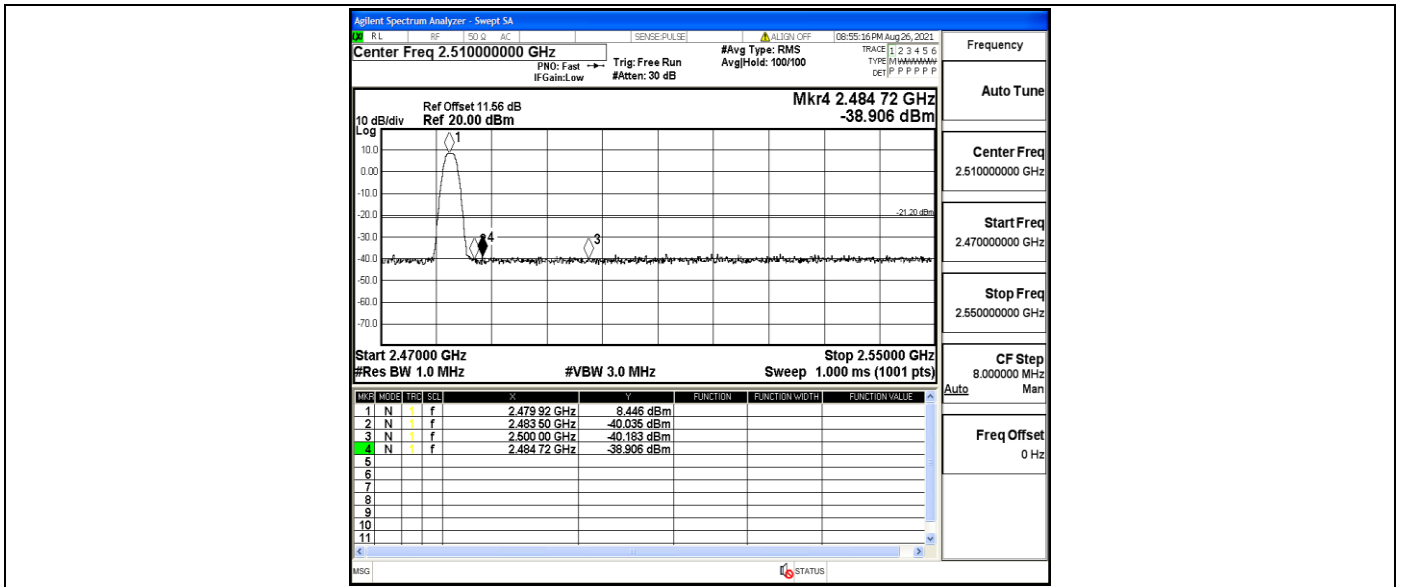
BLE_1M_Ant1_Low_2402_Peak



BLE_1M_Ant1_High_2480_AV



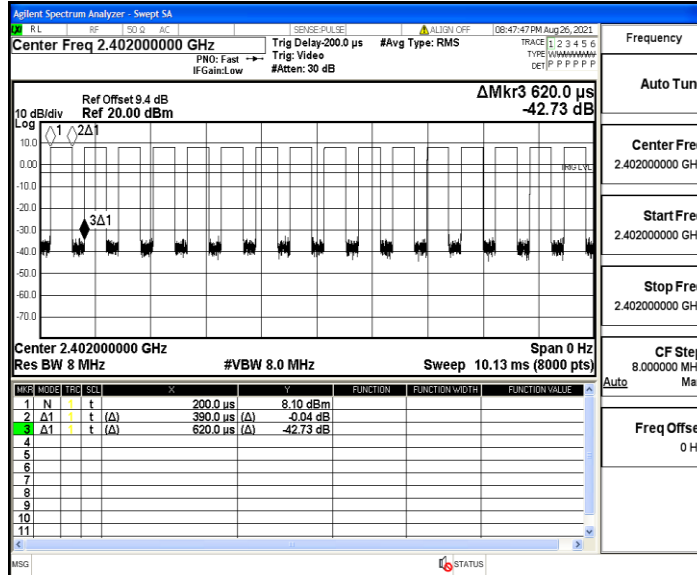
BLE_1M_Ant1_High_2480_Peak



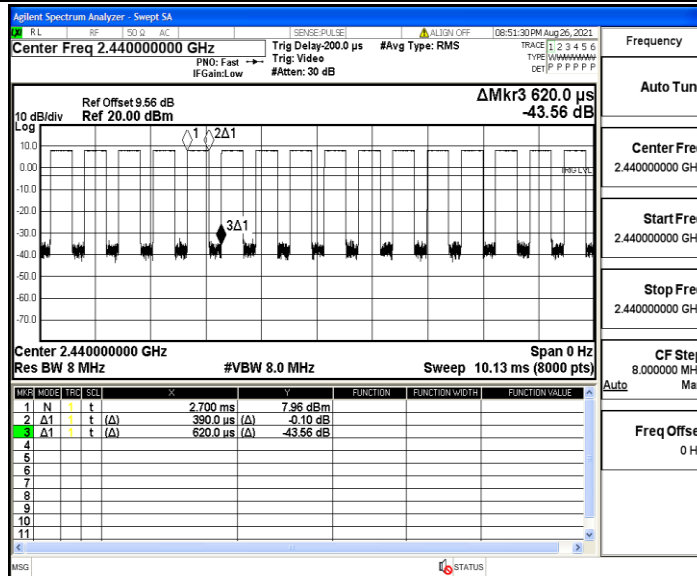
A.8. Duty Cycle

TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]
BLE_1M	Ant1	2402	0.39	0.62	62.90
		2440	0.39	0.62	62.90
		2480	0.40	0.63	63.49

BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480

