

## Appendix A

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

Product Name: Wireless Earphones

Trade Mark: Haylou

Test Model: Haylou MoriPods ANC

FCC ID: 2AMQ6-MORIPODSANC

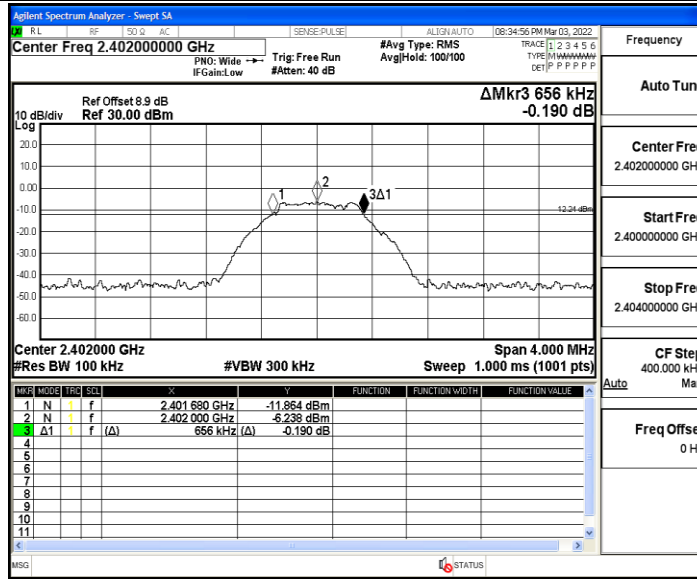
### Environmental Conditions

Temperature:	22.8° C
Relative Humidity:	60%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen
NOTE	N/A

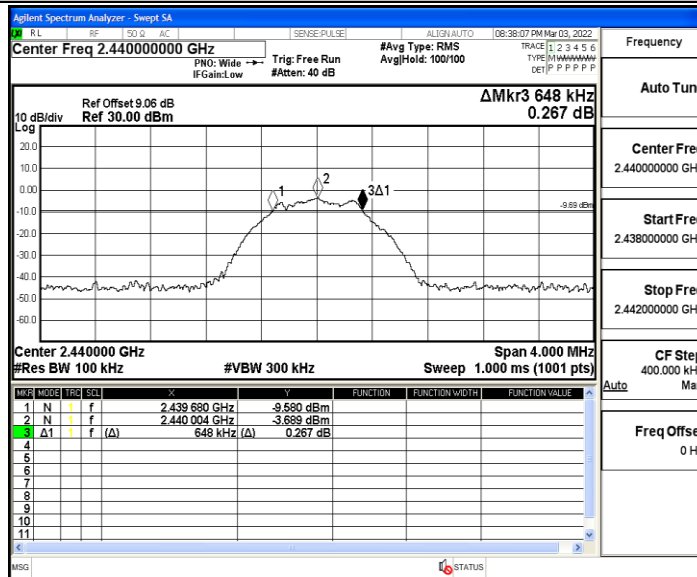
#### A.1. 6dB Bandwidth

TestMode	Antenna	Channel	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.656	2401.680	2402.336	0.5	PASS
		2440	0.648	2439.680	2440.328	0.5	PASS
		2480	0.636	2479.692	2480.328	0.5	PASS
BLE_2M	Ant1	2402	1.108	2401.448	2402.556	0.5	PASS
		2440	1.096	2439.480	2440.576	0.5	PASS
		2480	1.124	2479.452	2480.576	0.5	PASS

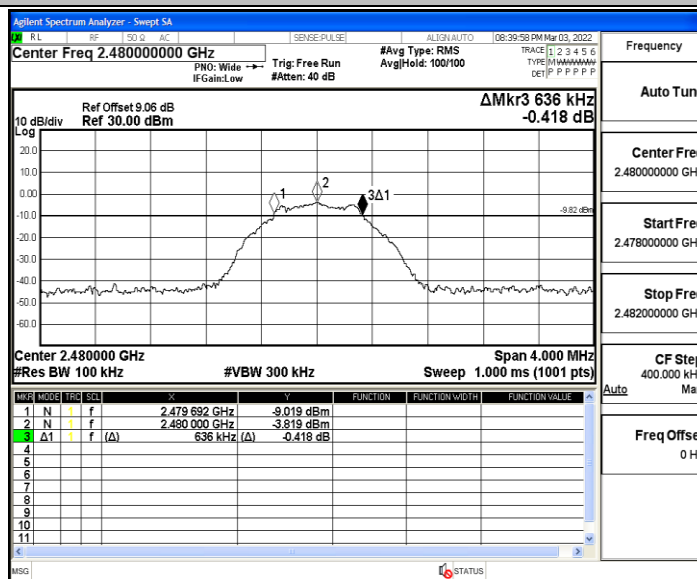
BLE\_1M\_Ant1\_2402



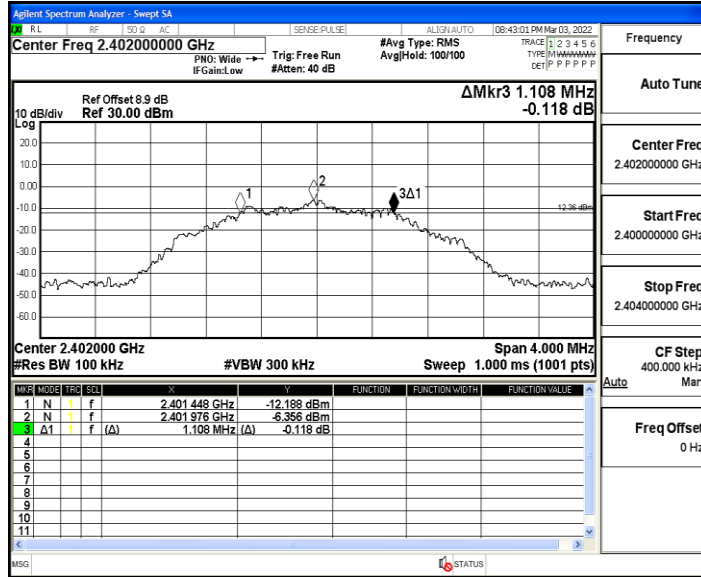
BLE\_1M\_Ant1\_2440



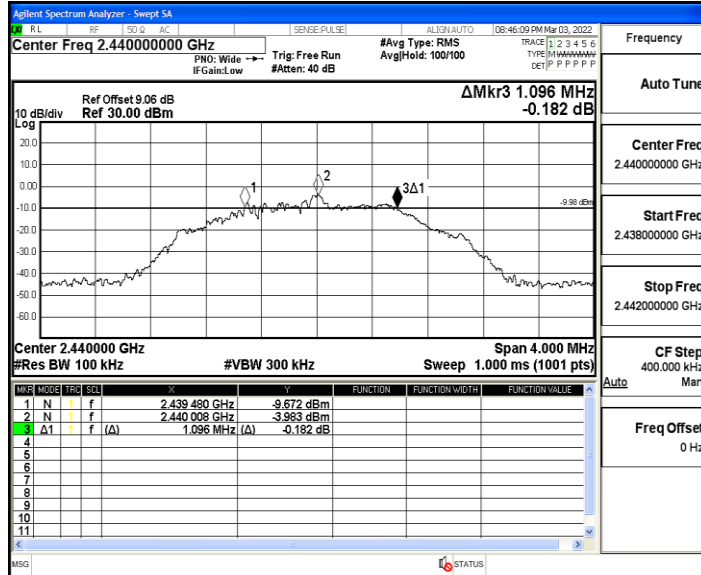
BLE\_1M\_Ant1\_2480



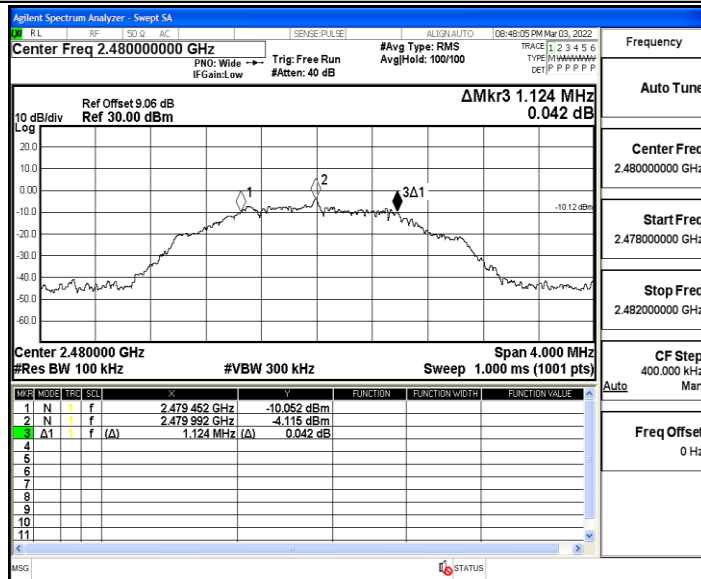
BLE\_2M\_Ant1\_2402



BLE\_2M\_Ant1\_2440

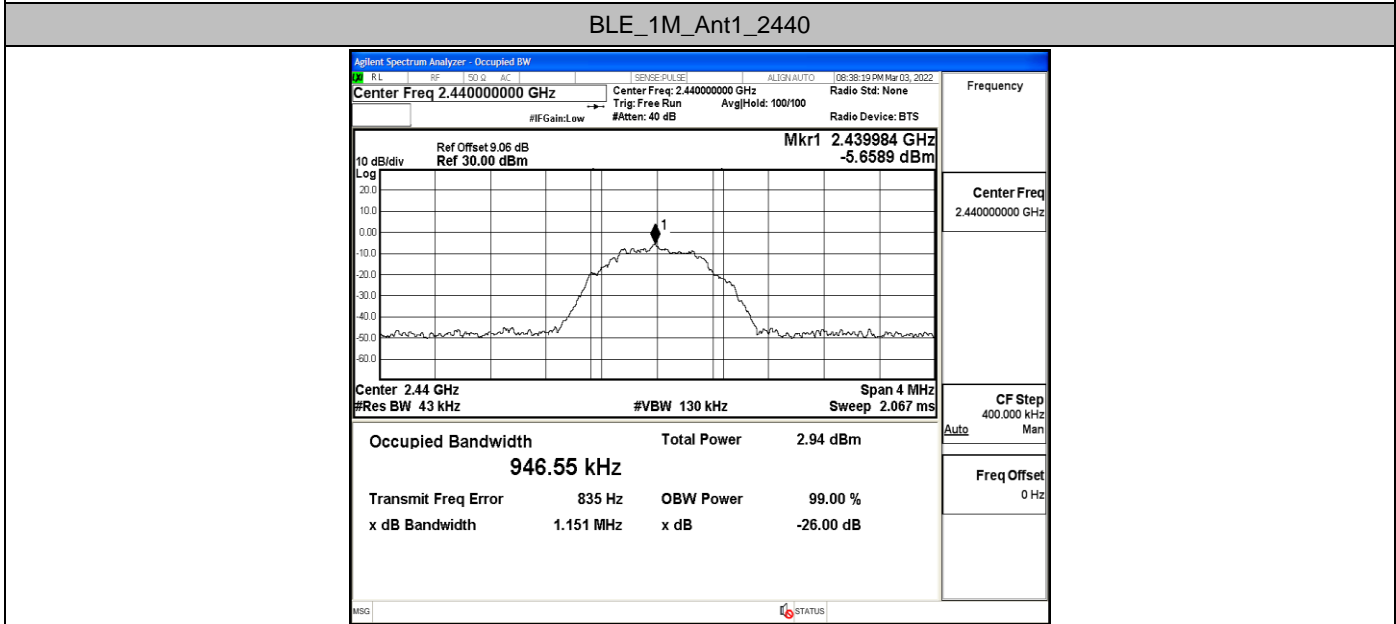
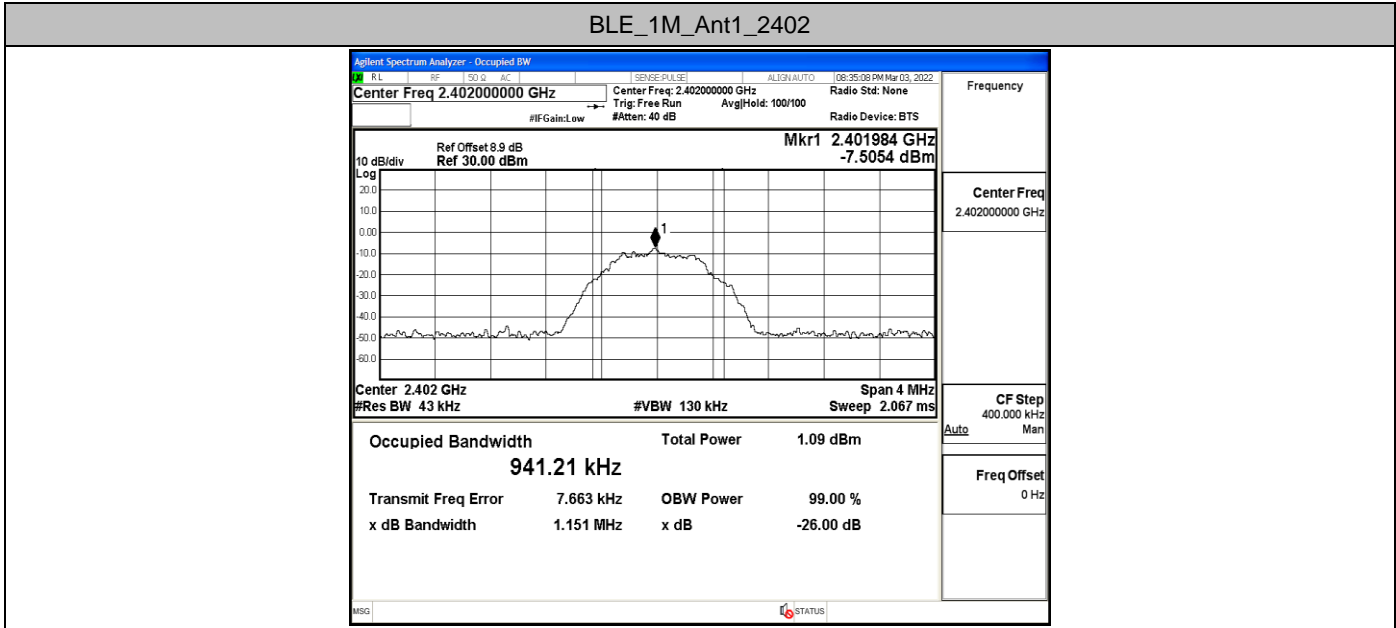


BLE\_2M\_Ant1\_2480

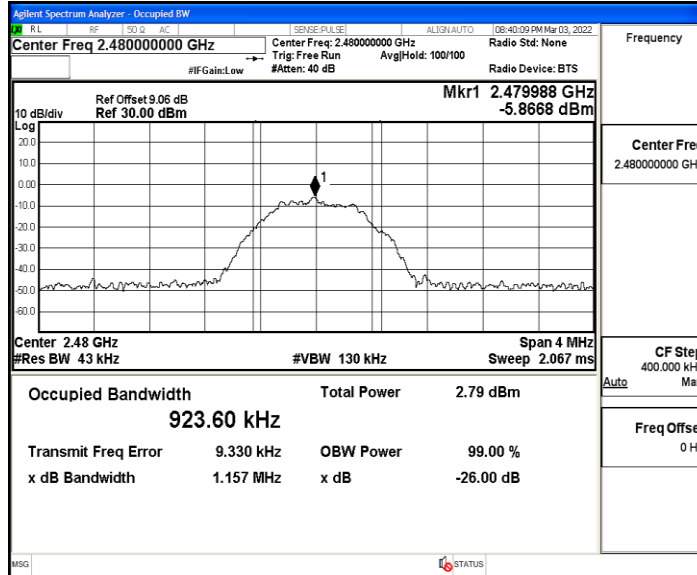


### A.2. Occupied Bandwidth

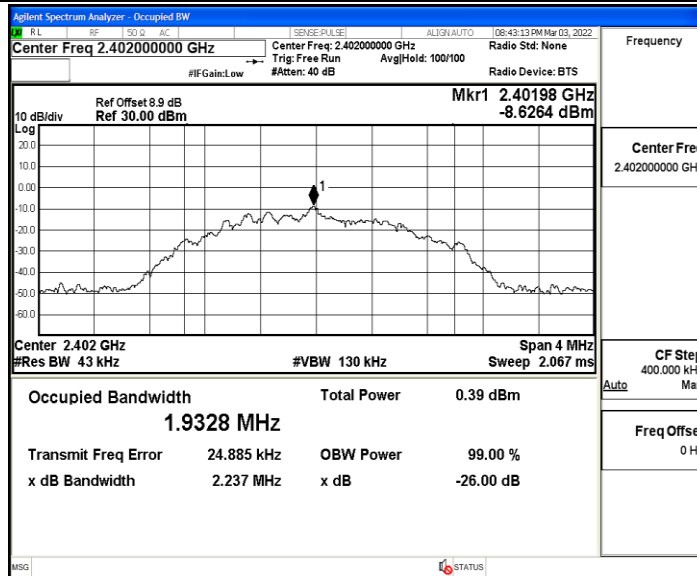
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.94121	2401.537	2402.478	---	---
		2440	0.94655	2439.528	2440.474	---	---
		2480	0.92360	2479.548	2480.471	---	---
BLE_2M	Ant1	2402	1.9328	2401.058	2402.991	---	---
		2440	1.9339	2439.032	2440.966	---	---
		2480	1.9143	2479.059	2480.974	---	---



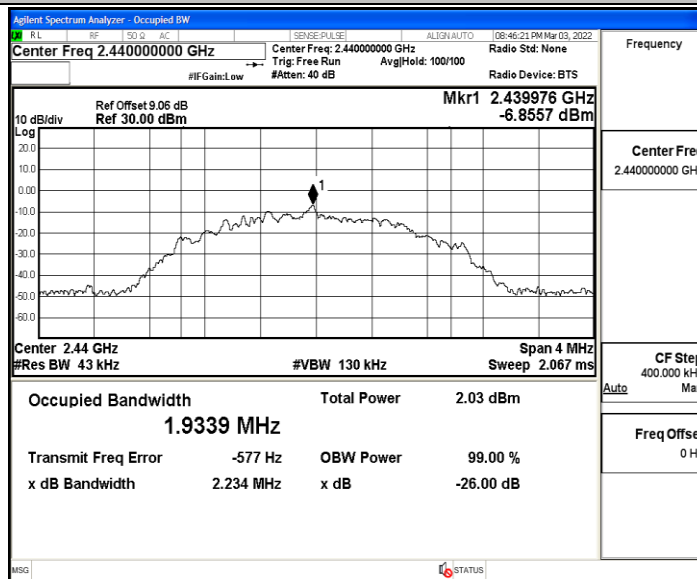
BLE\_1M\_Ant1\_2480



BLE\_2M\_Ant1\_2402



BLE\_2M\_Ant1\_2440



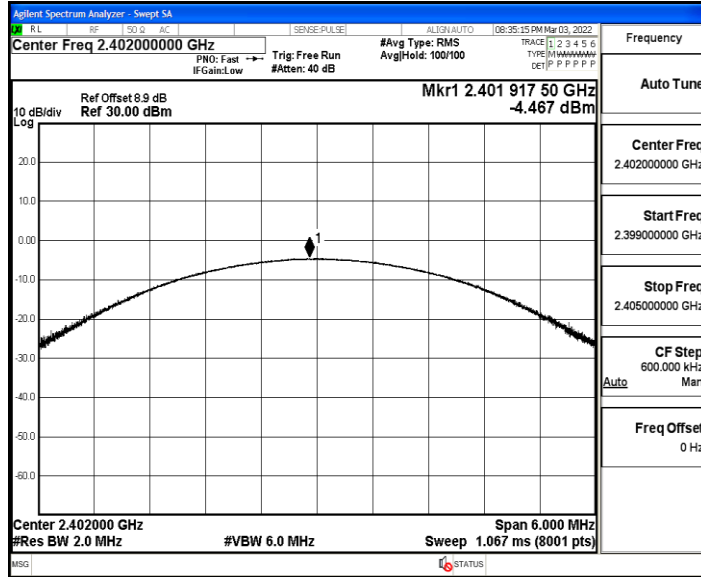
BLE\_2M\_Ant1\_2480



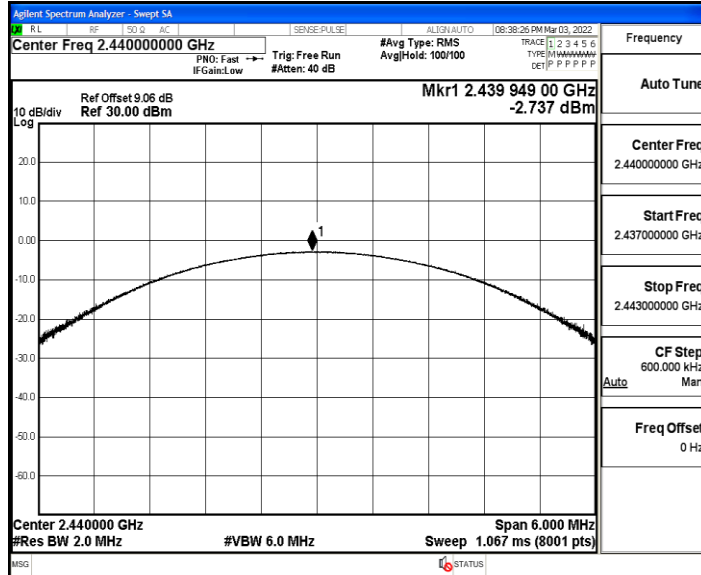
**A.3. Maximum peak conducted output power**

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-4.47	≤30	PASS
		2440	-2.74	≤30	PASS
		2480	-2.9	≤30	PASS
BLE_2M	Ant1	2402	-4.67	≤30	PASS
		2440	-2.89	≤30	PASS
		2480	-2.96	≤30	PASS

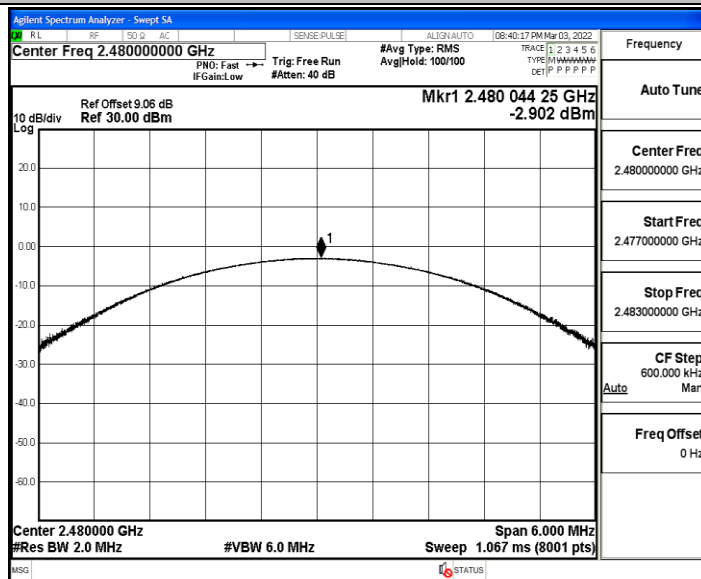
BLE\_1M\_Ant1\_2402



BLE\_1M\_Ant1\_2440

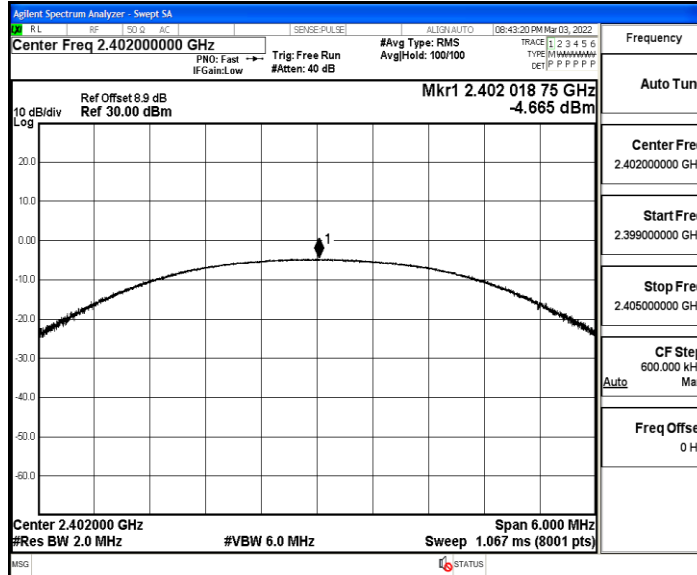


BLE\_1M\_Ant1\_2480

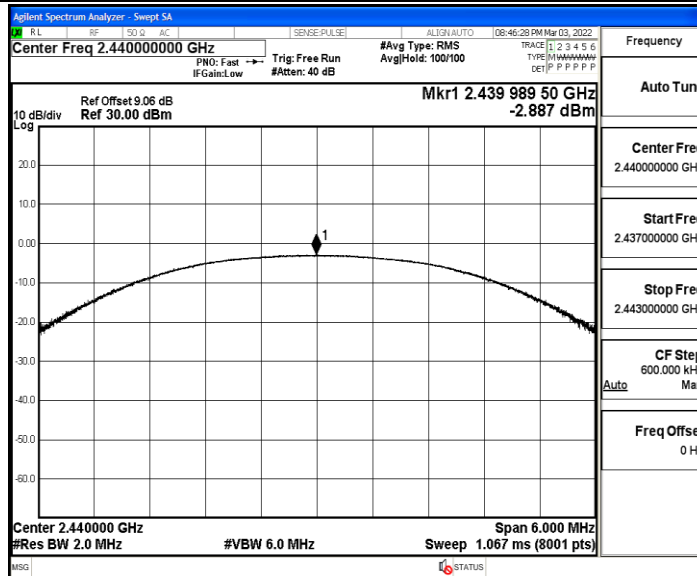




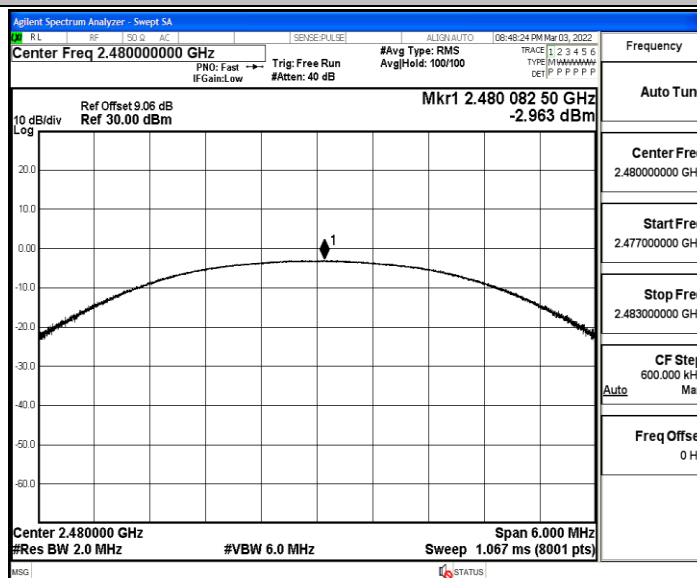
BLE\_2M\_Ant1\_2402



BLE\_2M\_Ant1\_2440



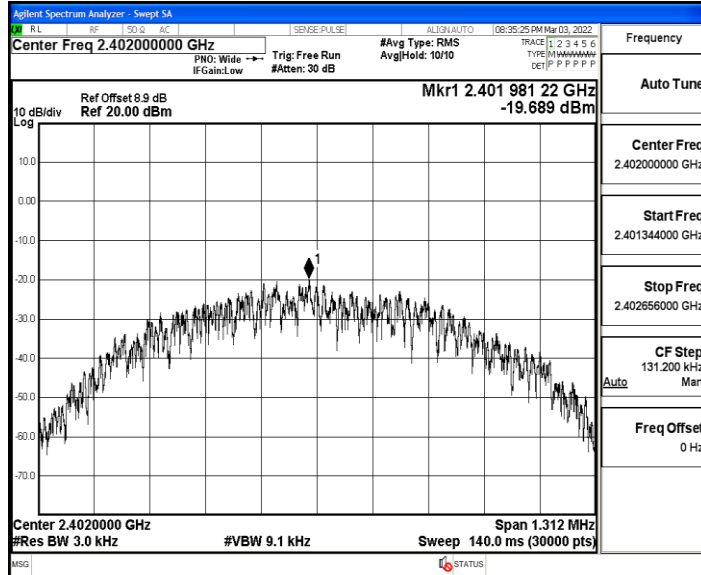
BLE\_2M\_Ant1\_2480



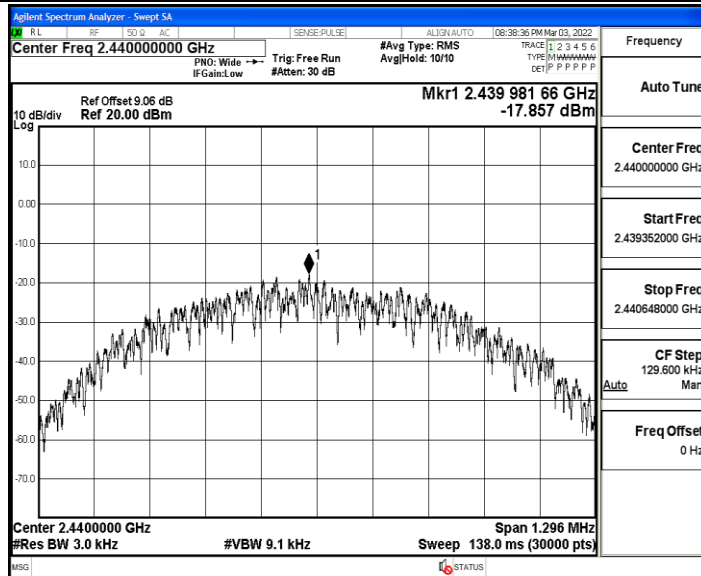
**A.4. Maximum Peak power spectral density**

TestMode	Antenna	Channel	Result[dBm/3-100kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-19.69	≤8.00	PASS
		2440	-17.86	≤8.00	PASS
		2480	-17.9	≤8.00	PASS
BLE_2M	Ant1	2402	-22.07	≤8.00	PASS
		2440	-20.06	≤8.00	PASS
		2480	-20.18	≤8.00	PASS

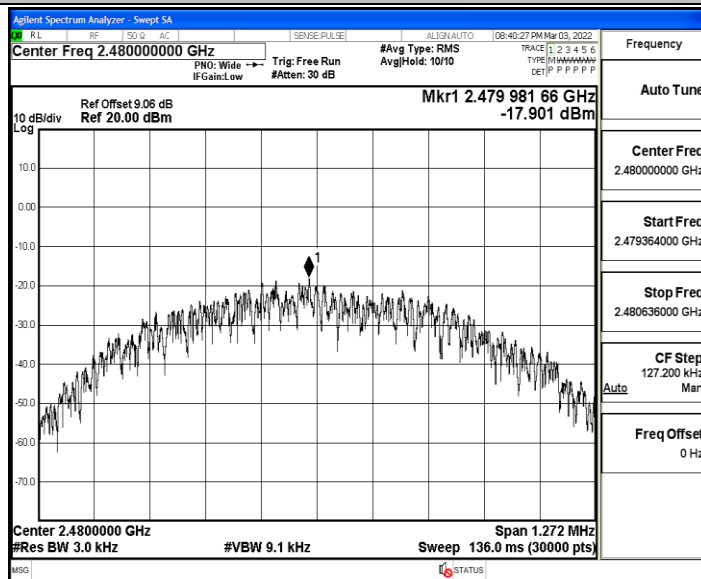
BLE\_1M\_Ant1\_2402



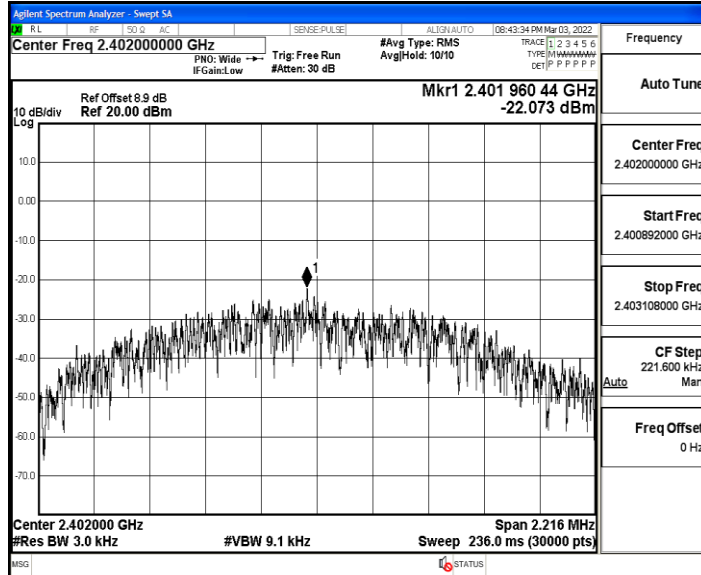
BLE\_1M\_Ant1\_2440



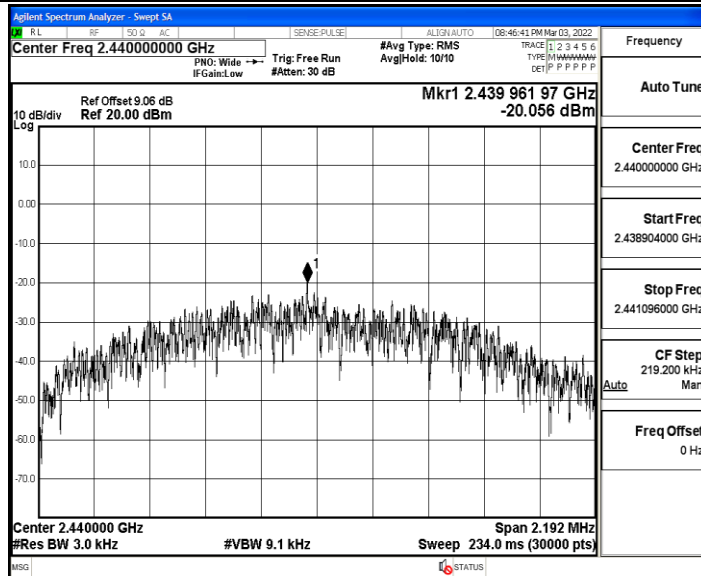
BLE\_1M\_Ant1\_2480



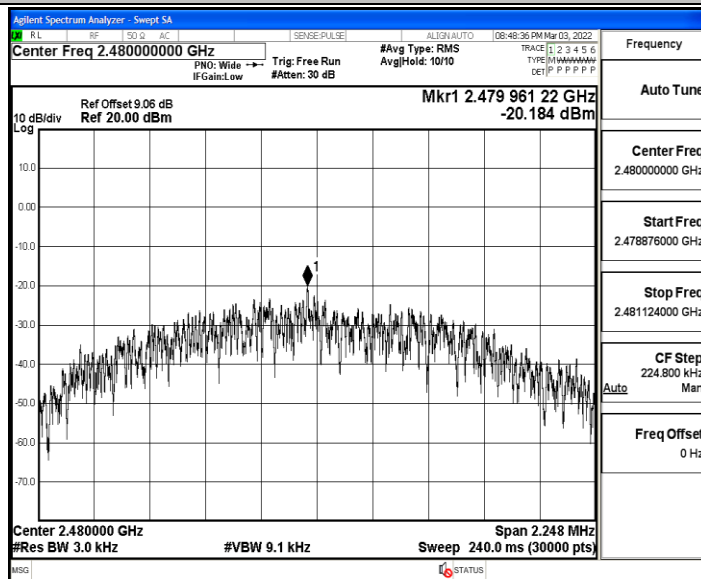
BLE\_2M\_Ant1\_2402



BLE\_2M\_Ant1\_2440



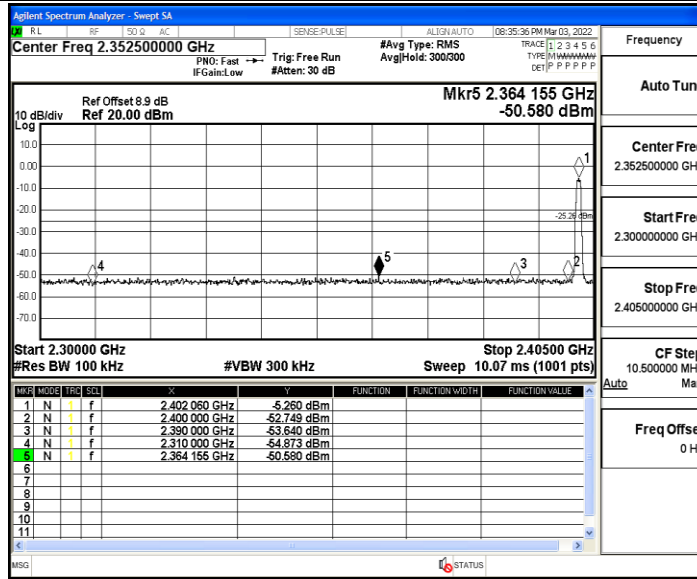
BLE\_2M\_Ant1\_2480



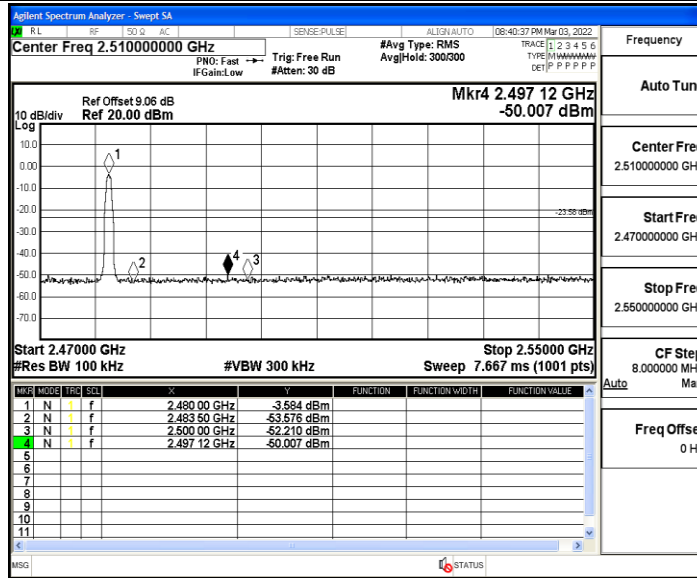
**A.5. Band-edge for RF Conducted Emissions**

TestMode	Antenna	ChName	Channel	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-5.26	-50.58	$\leq -25.26$	PASS
		High	2480	-3.58	-50.01	$\leq -23.58$	PASS
BLE_2M	Ant1	Low	2402	-6.17	-49.87	$\leq -26.17$	PASS
		High	2480	-4.52	-49.54	$\leq -24.52$	PASS

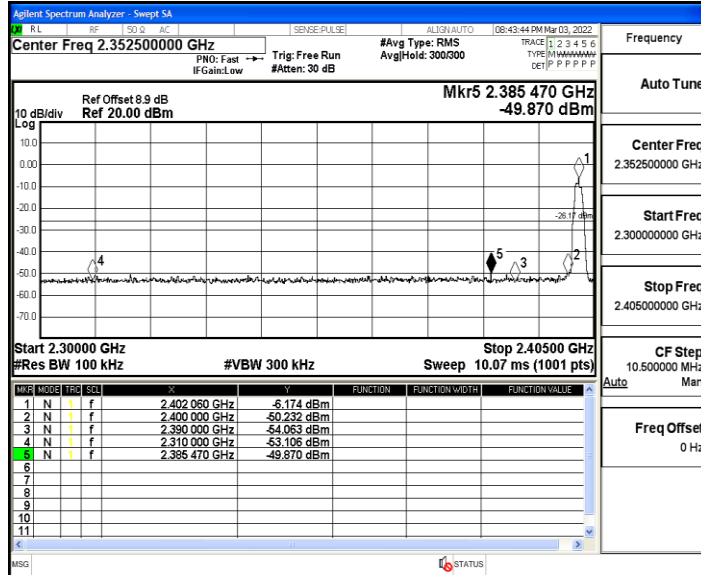
BLE\_1M\_Ant1\_Low\_2402



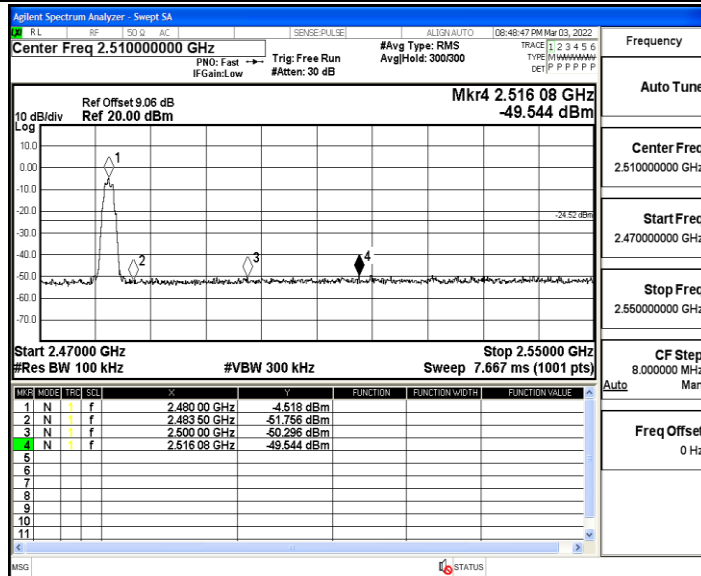
BLE\_1M\_Ant1\_High\_2480



BLE\_2M\_Ant1\_Low\_2402

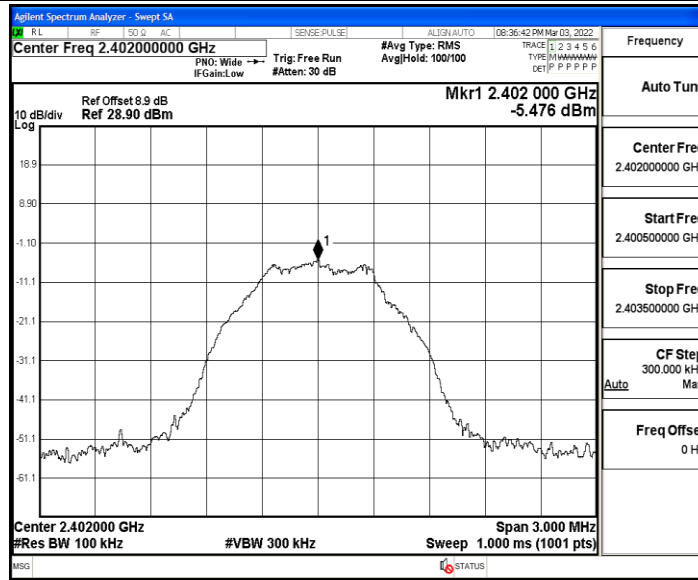


BLE\_2M\_Ant1\_High\_2480

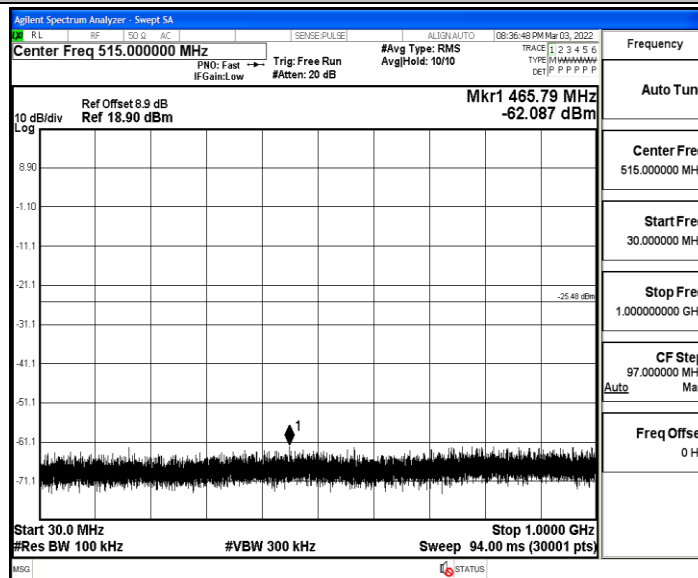


### A.6. RF Conducted Spurious Emissions

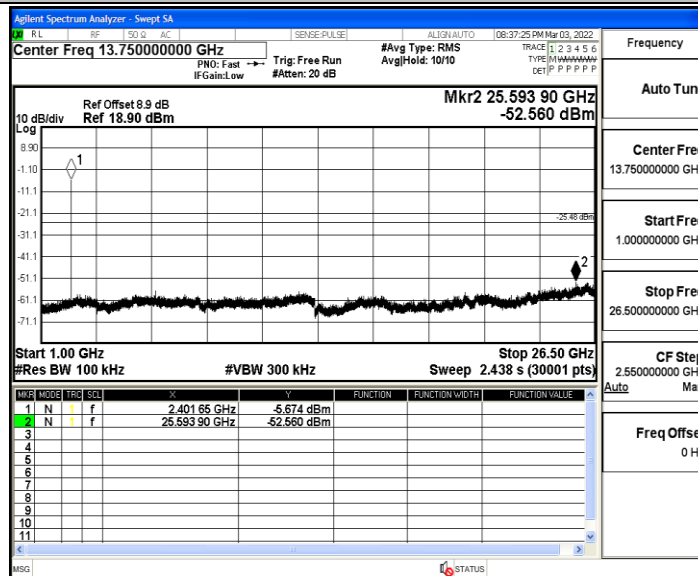
BLE\_1M\_Ant1\_2402\_0~Reference



BLE\_1M\_Ant1\_2402\_30~1000

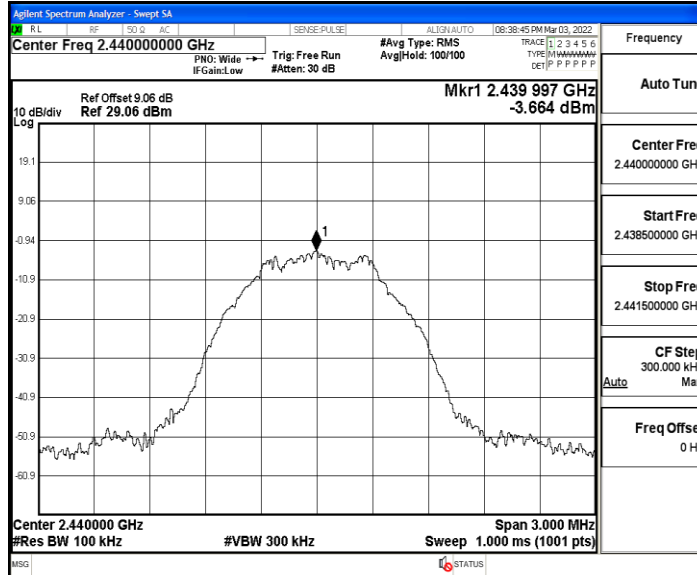


BLE\_1M\_Ant1\_2402\_1000~26500

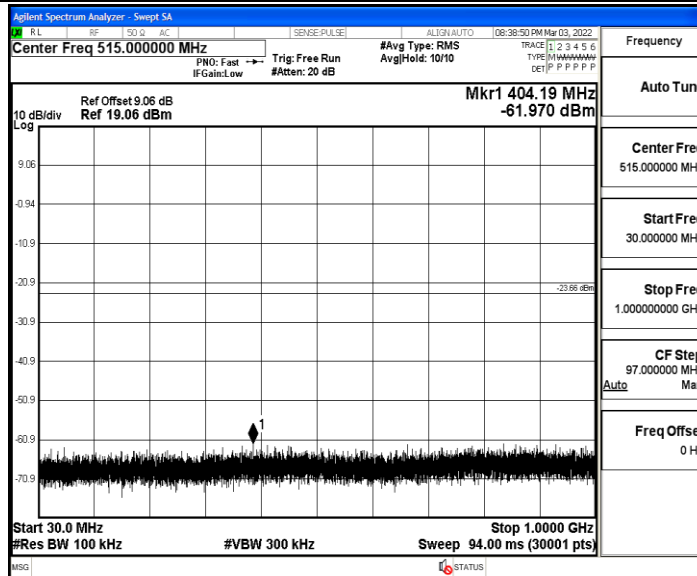




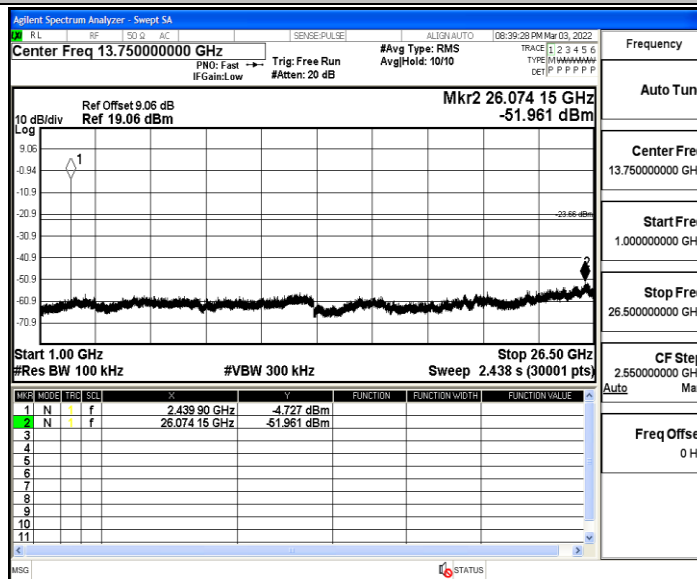
BLE\_1M\_Ant1\_2440\_0~Reference



BLE\_1M\_Ant1\_2440\_30~1000



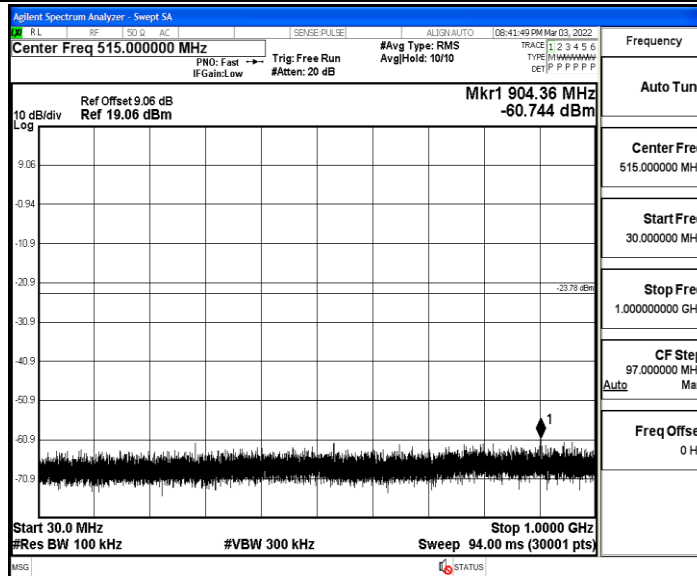
BLE\_1M\_Ant1\_2440\_1000~26500



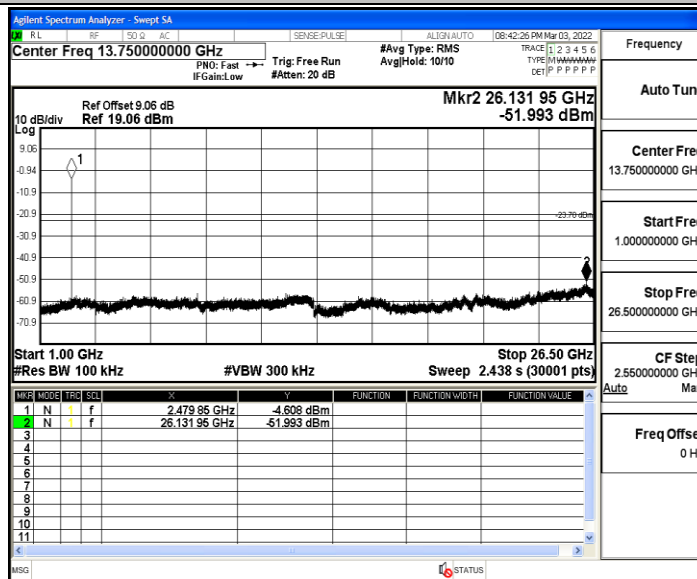
BLE\_1M\_Ant1\_2480\_0~Reference



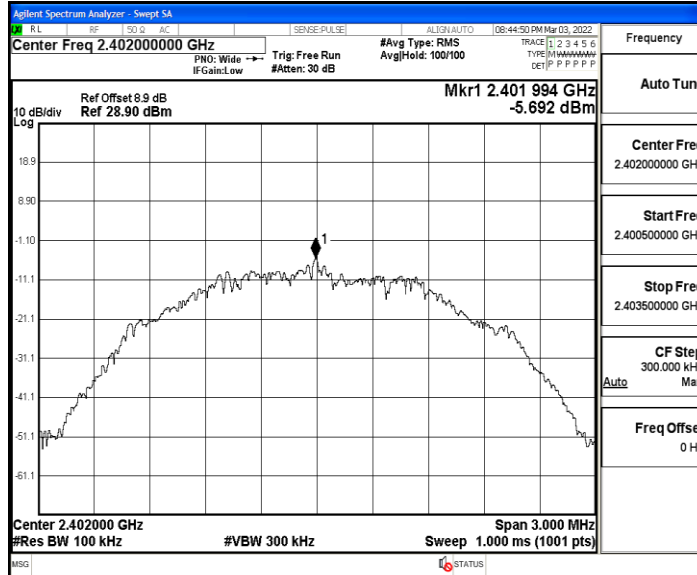
BLE\_1M\_Ant1\_2480\_30~1000



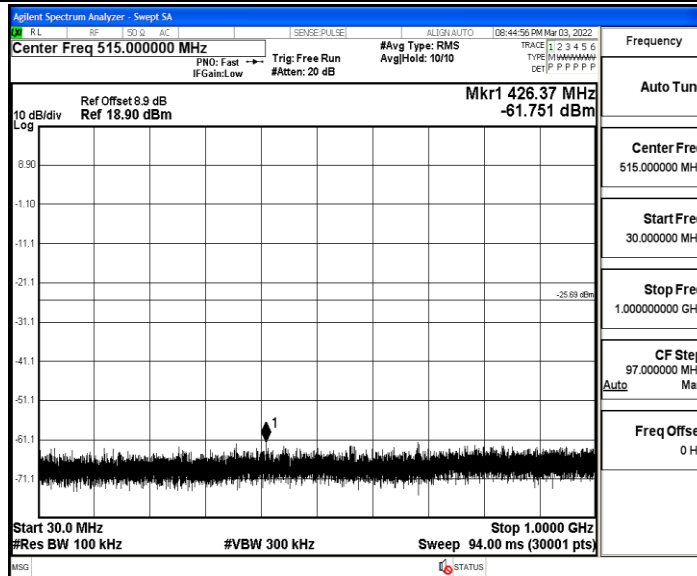
BLE\_1M\_Ant1\_2480\_1000~26500



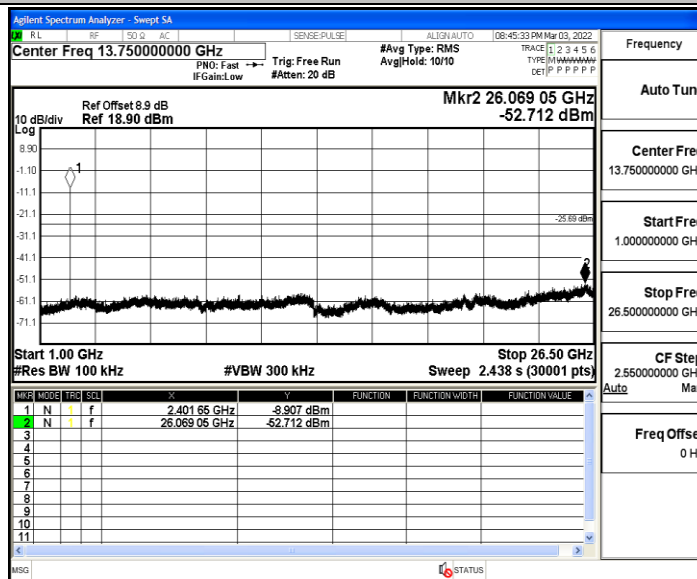
BLE\_2M\_Ant1\_2402\_0~Reference



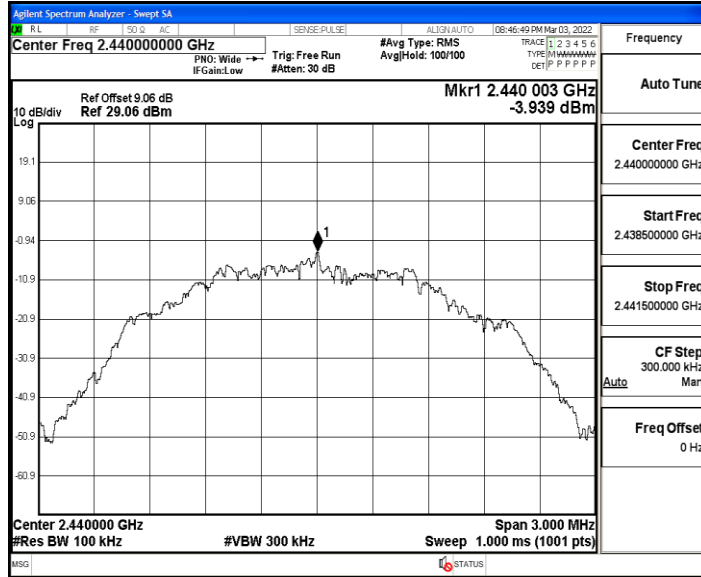
BLE\_2M\_Ant1\_2402\_30~1000



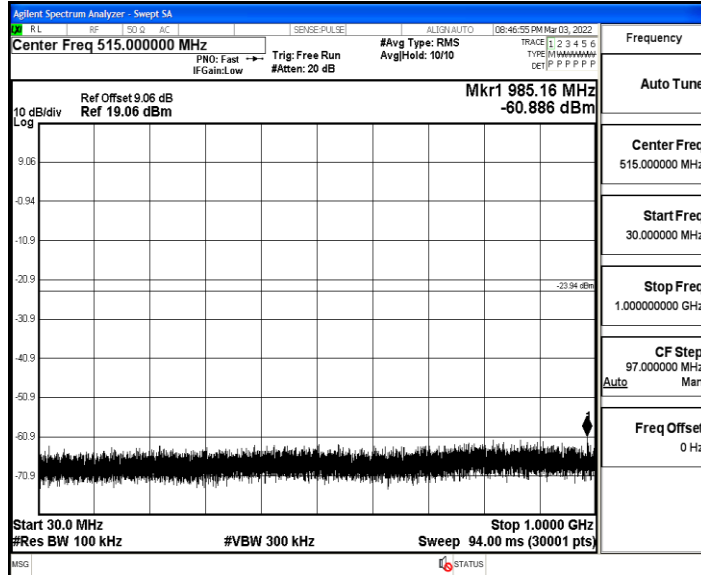
BLE\_2M\_Ant1\_2402\_1000~26500



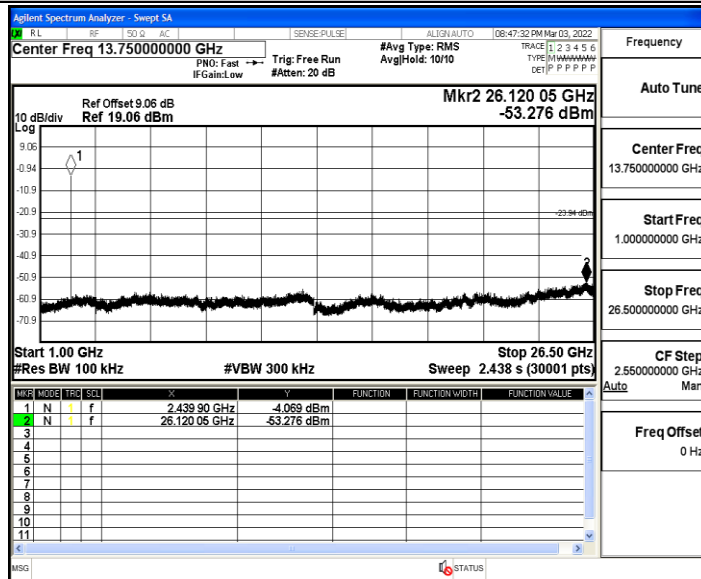
BLE\_2M\_Ant1\_2440\_0~Reference



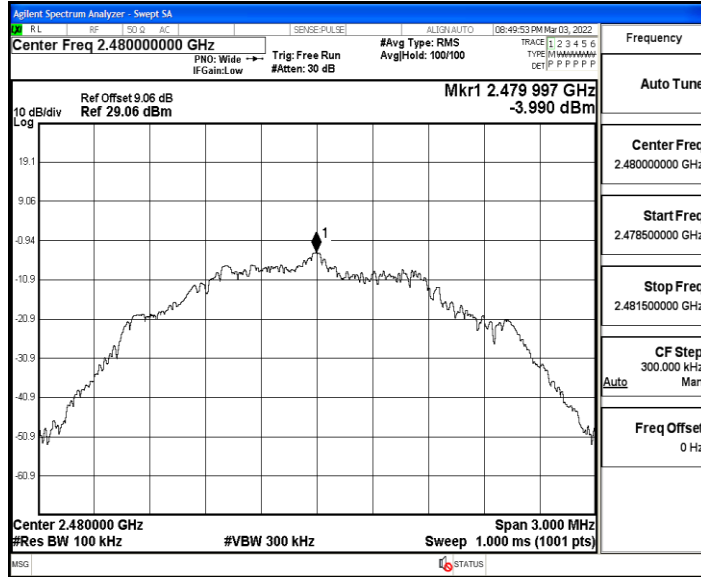
BLE\_2M\_Ant1\_2440\_30~1000



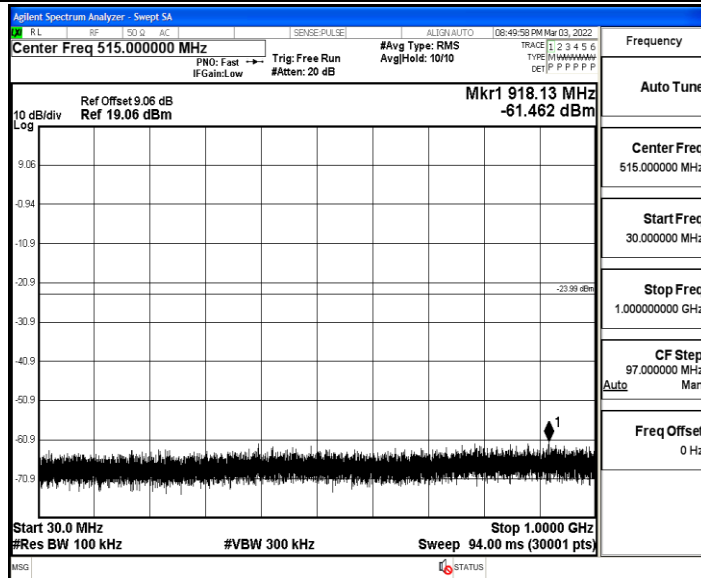
BLE\_2M\_Ant1\_2440\_1000~26500



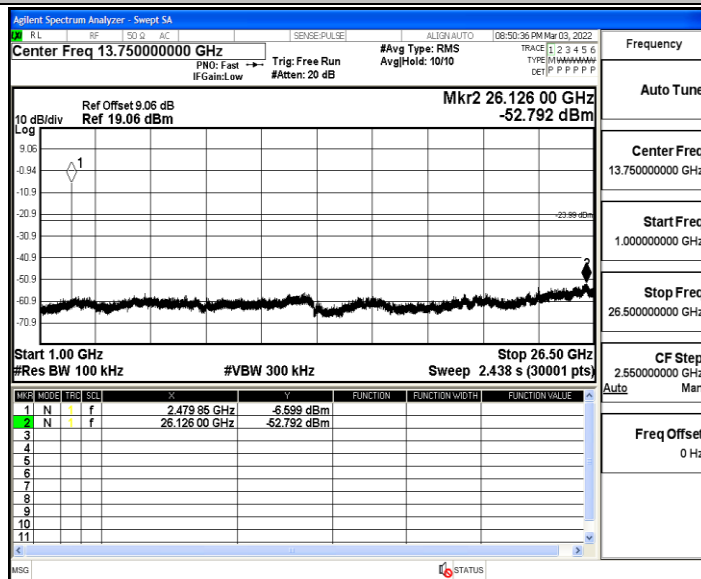
BLE\_2M\_Ant1\_2480\_0~Reference



BLE\_2M\_Ant1\_2480\_30~1000

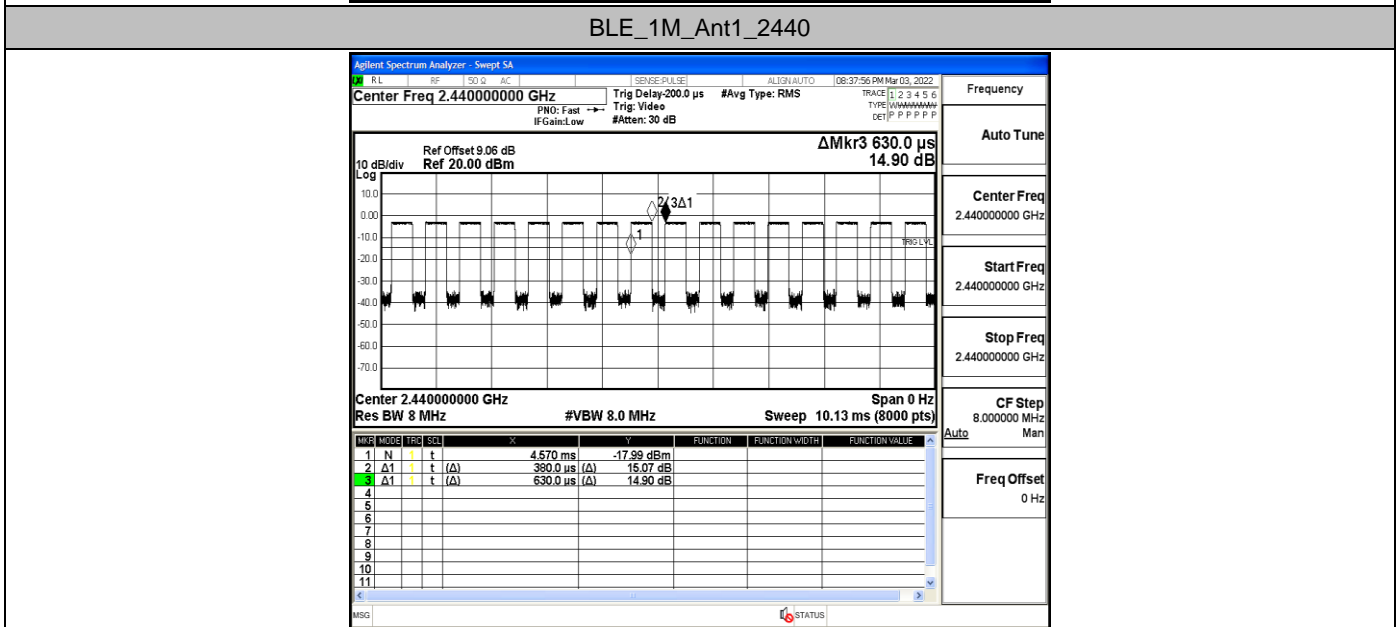
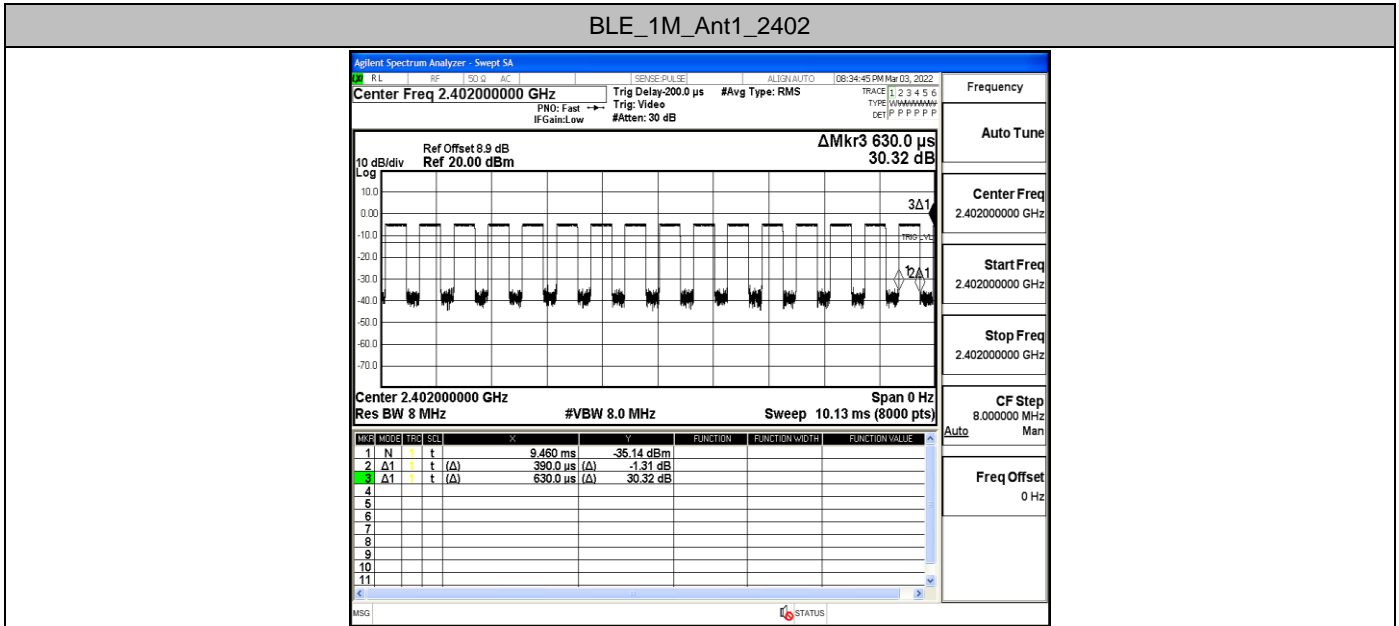


BLE\_2M\_Ant1\_2480\_1000~26500

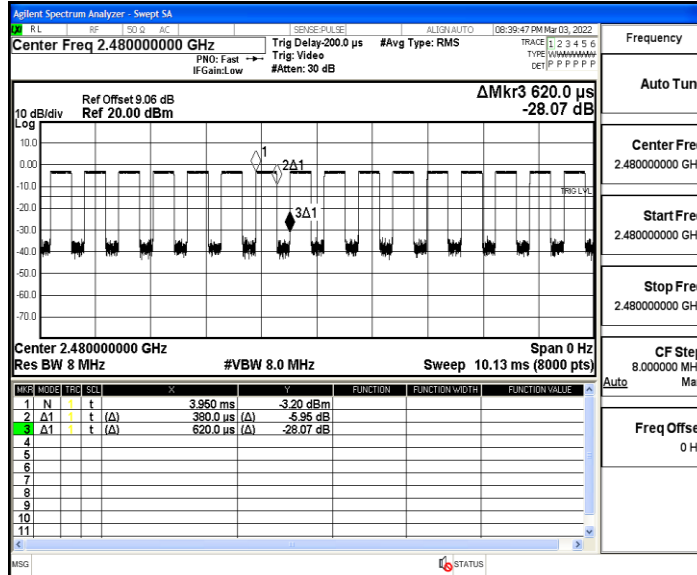


### A.7. Duty Cycle

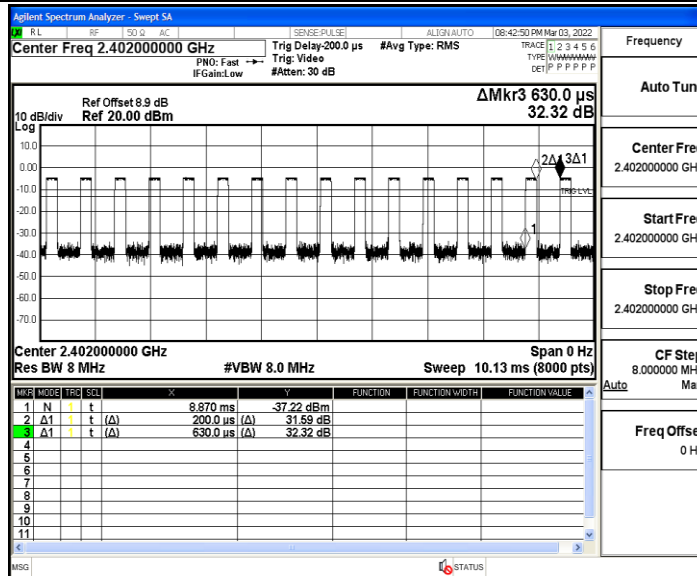
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	1/T
BLE_1M	Ant1	2402	0.39	0.63	61.90	2.56
		2440	0.38	0.63	60.32	2.63
		2480	0.38	0.62	61.29	2.63
BLE_2M	Ant1	2402	0.20	0.63	31.75	5.00
		2440	0.19	0.62	30.65	5.26
		2480	0.20	0.63	31.75	5.00



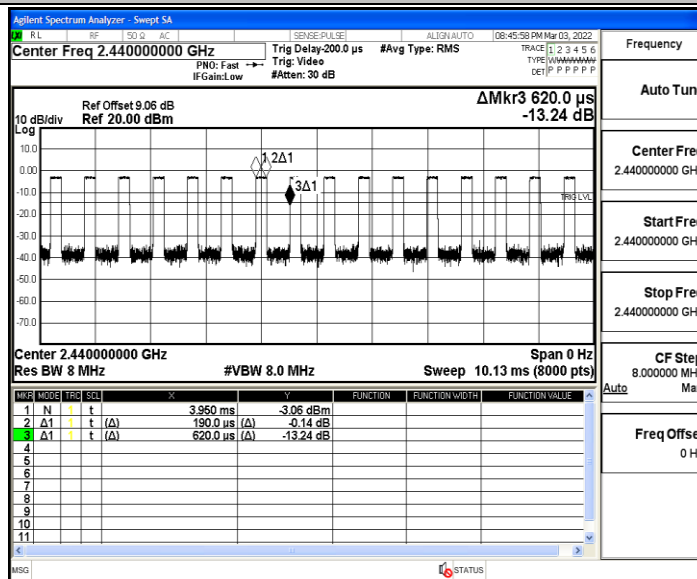
BLE\_1M\_Ant1\_2480



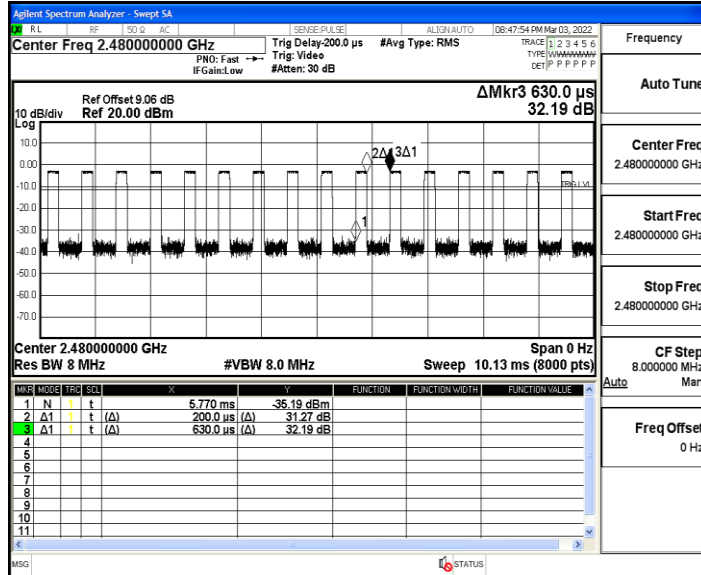
BLE\_2M\_Ant1\_2402



BLE\_2M\_Ant1\_2440



BLE\_2M\_Ant1\_2480



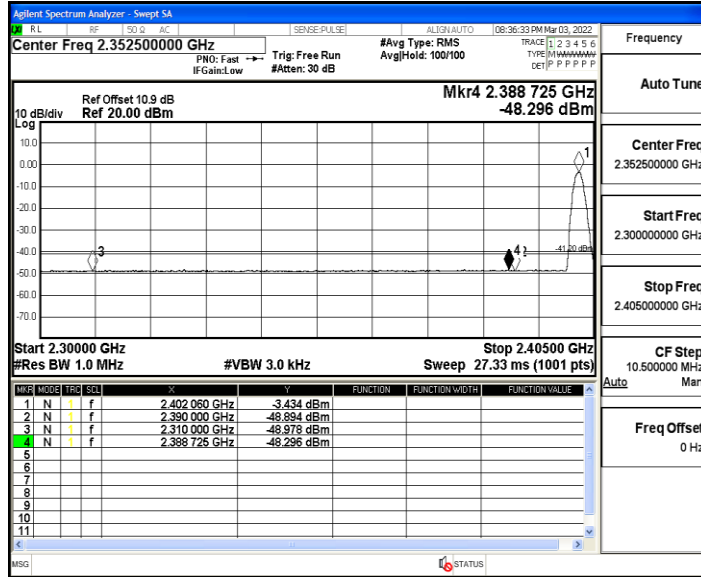


**A.8. Restrict-band band-edge measurements**

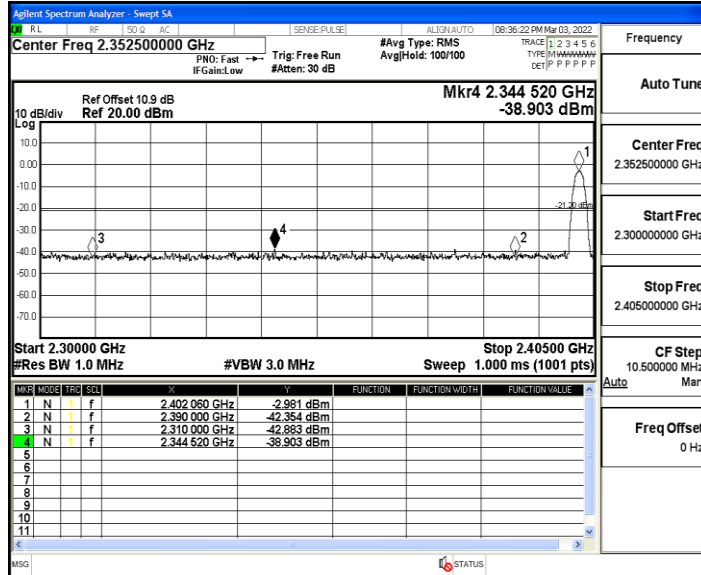
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-48.98	≤-41.20	PASS
				AV	2388.725	-48.3	≤-41.20	PASS
				AV	2390.000	-48.89	≤-41.20	PASS
				Peak	2310.000	-42.88	≤-21.20	PASS
				Peak	2344.520	-38.9	≤-21.20	PASS
				Peak	2390.000	-42.35	≤-21.20	PASS
		High	2480	AV	2483.500	-47.71	≤-41.20	PASS
				AV	2483.520	-47.71	≤-41.20	PASS
				AV	2500.000	-48.08	≤-41.20	PASS
				Peak	2483.500	-42.54	≤-21.20	PASS
				Peak	2494.320	-38.97	≤-21.20	PASS
				Peak	2500.000	-37.91	≤-21.20	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-48.41	≤-41.20	PASS
				AV	2369.405	-47.72	≤-41.20	PASS
				AV	2390.000	-48.1	≤-41.20	PASS
				Peak	2310.000	-42.46	≤-21.20	PASS
				Peak	2378.120	-38.99	≤-21.20	PASS
				Peak	2390.000	-41.19	≤-21.20	PASS
		High	2480	AV	2483.500	-47.42	≤-41.20	PASS
				AV	2489.040	-46.92	≤-41.20	PASS
				AV	2500.000	-47.5	≤-41.20	PASS
				Peak	2483.500	-41.24	≤-21.20	PASS
				Peak	2496.000	-38.42	≤-21.20	PASS
				Peak	2500.000	-41.6	≤-21.20	PASS

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.

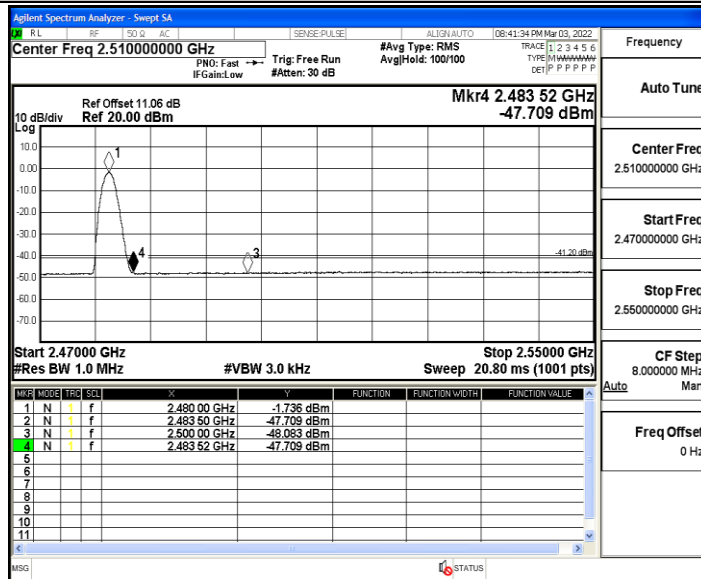
BLE\_1M\_Ant1\_Low\_2402\_AV



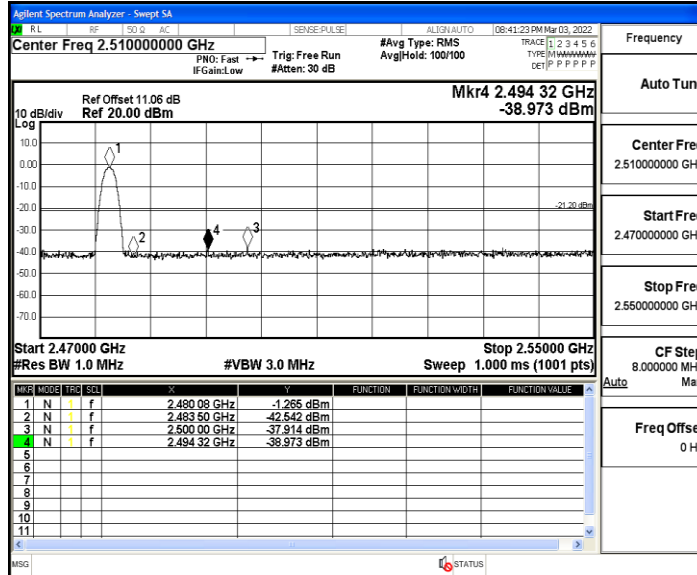
BLE\_1M\_Ant1\_Low\_2402\_Peak



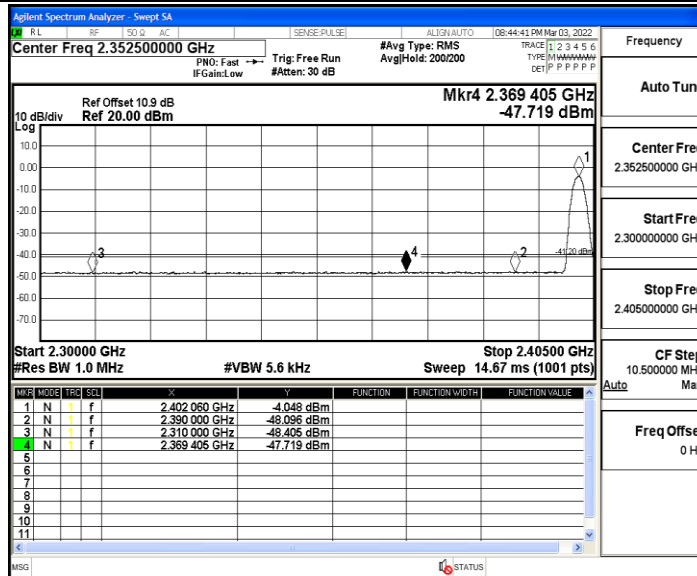
BLE\_1M\_Ant1\_High\_2480\_AV



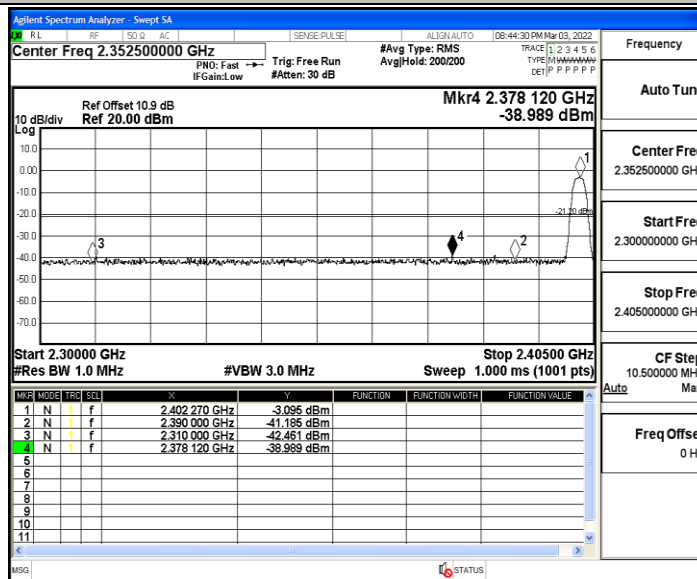
BLE\_1M\_Ant1\_High\_2480\_Peak



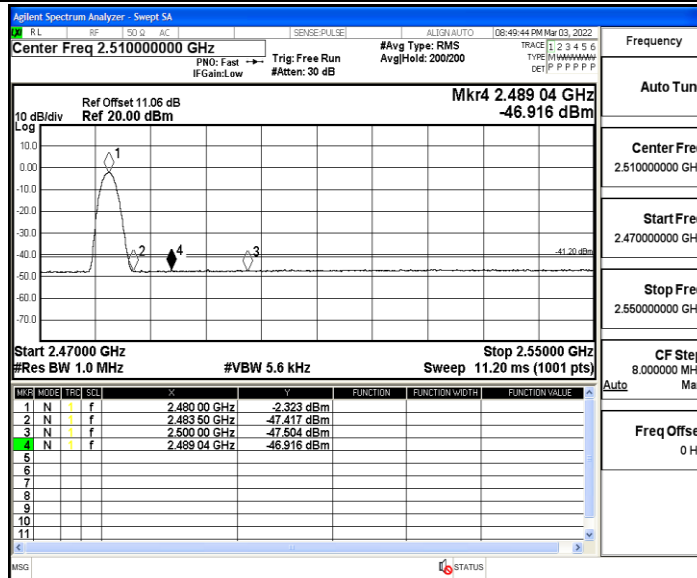
BLE\_2M\_Ant1\_Low\_2402\_AV



BLE\_2M\_Ant1\_Low\_2402\_Peak



BLE\_2M\_Ant1\_High\_2480\_AV



BLE\_2M\_Ant1\_High\_2480\_Peak

