

Appendix B

RF Test Data for BT LE (Conducted Measurement)

Product Name: W6C Tablet

Test Model: W6C

Environmental Conditions

Temperature:	24.1°C
Relative Humidity:	53.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Zhang hai
Supervised by:	Fengliu Tang

B.1 DTS Bandwidth

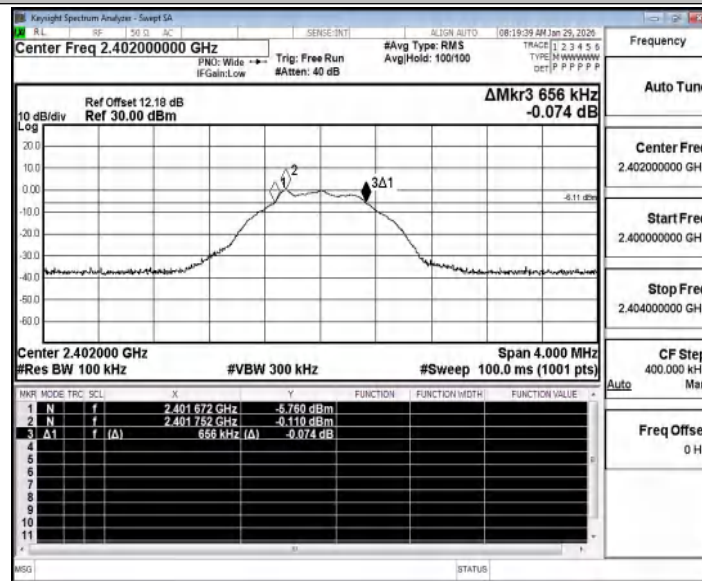
Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.656	2401.672	2402.328	0.5	PASS
		2440	0.660	2439.668	2440.328	0.5	PASS
		2480	0.660	2479.668	2480.328	0.5	PASS
BLE_2M	Ant1	2402	1.128	2401.420	2402.548	0.5	PASS
		2440	1.124	2439.420	2440.544	0.5	PASS
		2480	1.124	2479.420	2480.544	0.5	PASS

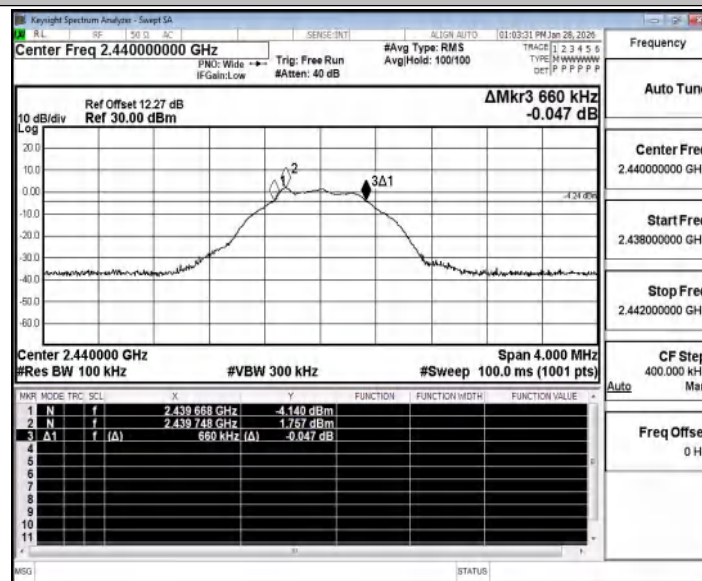
Note :offset=System attenuation +cabal loss

Test Graphs

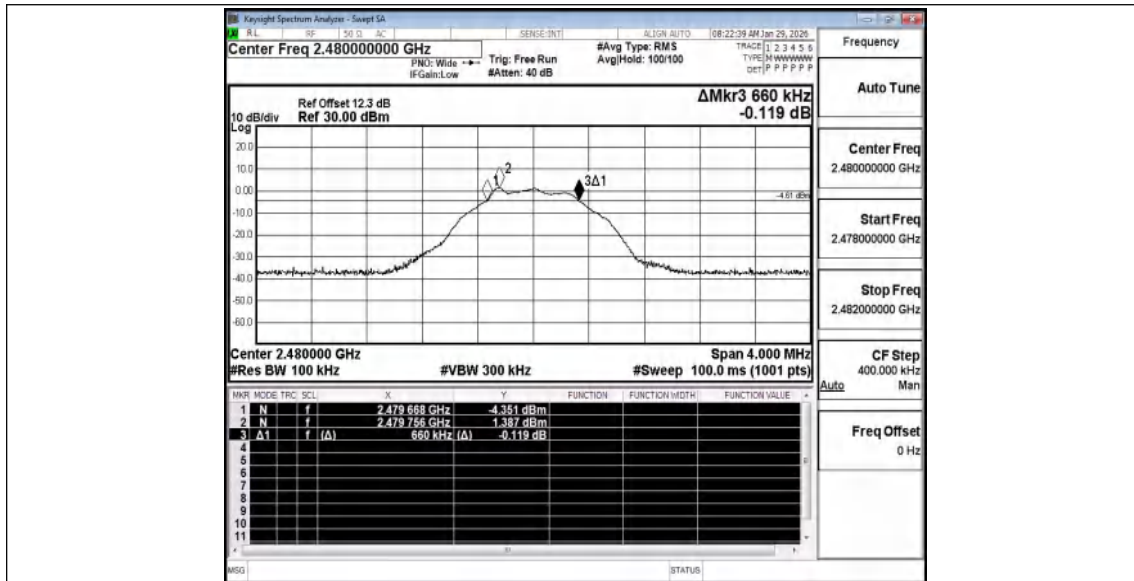
BLE_1M_Ant1_2402



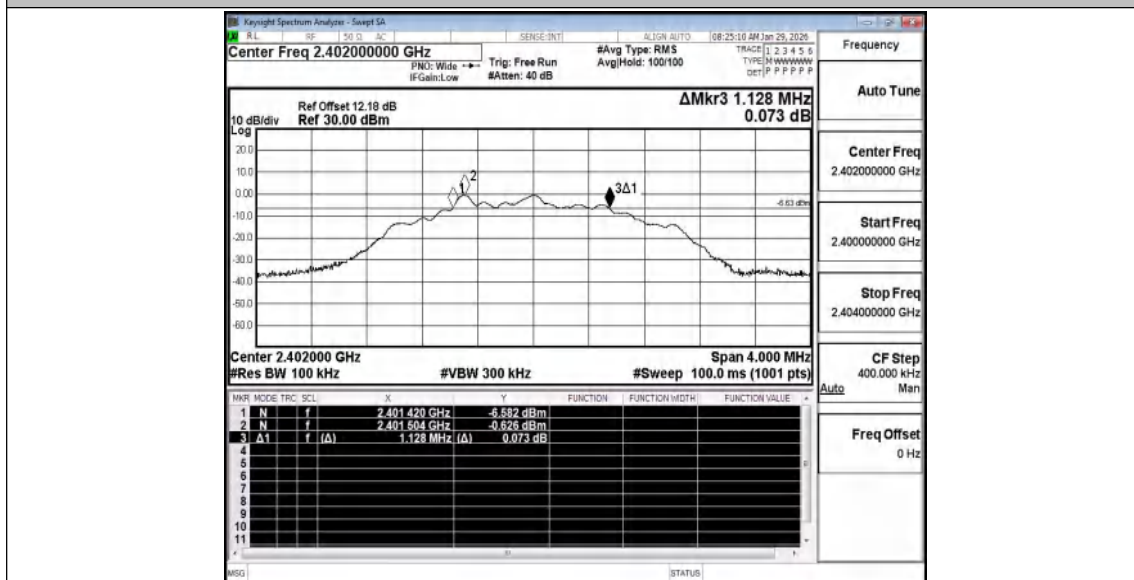
BLE_1M_Ant1_2440



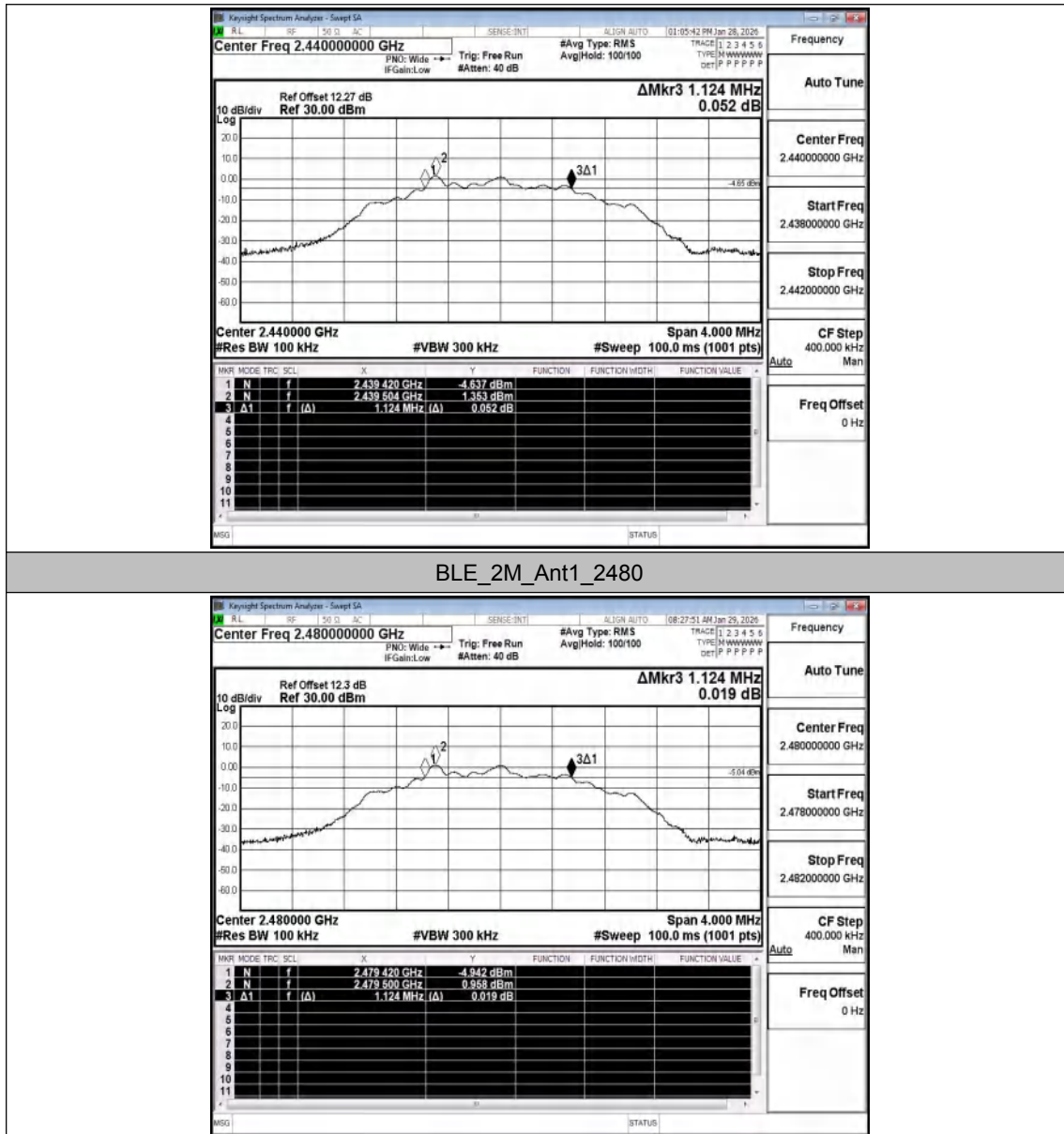
BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



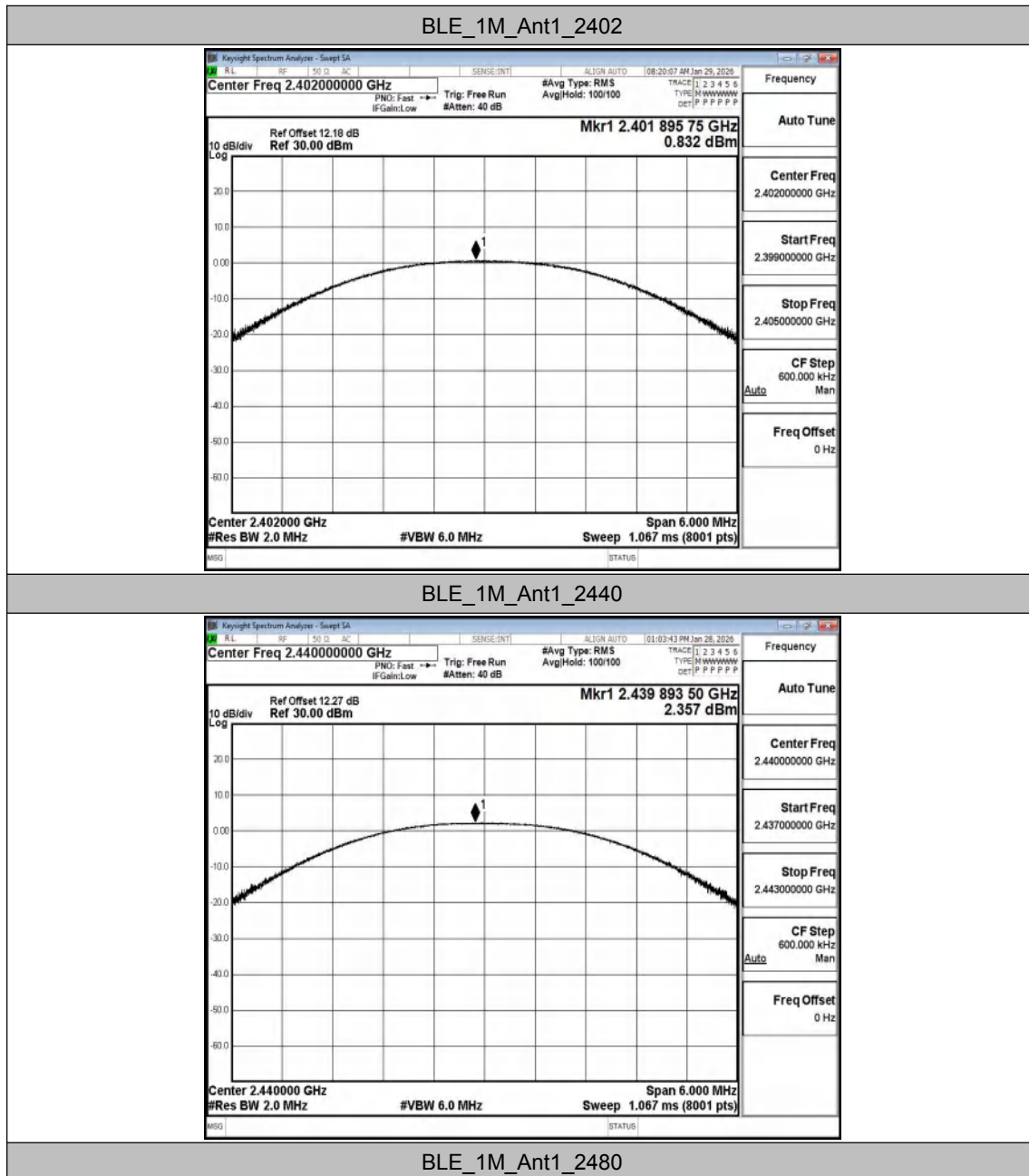
B.2 Maximum Peak Conducted Output Power

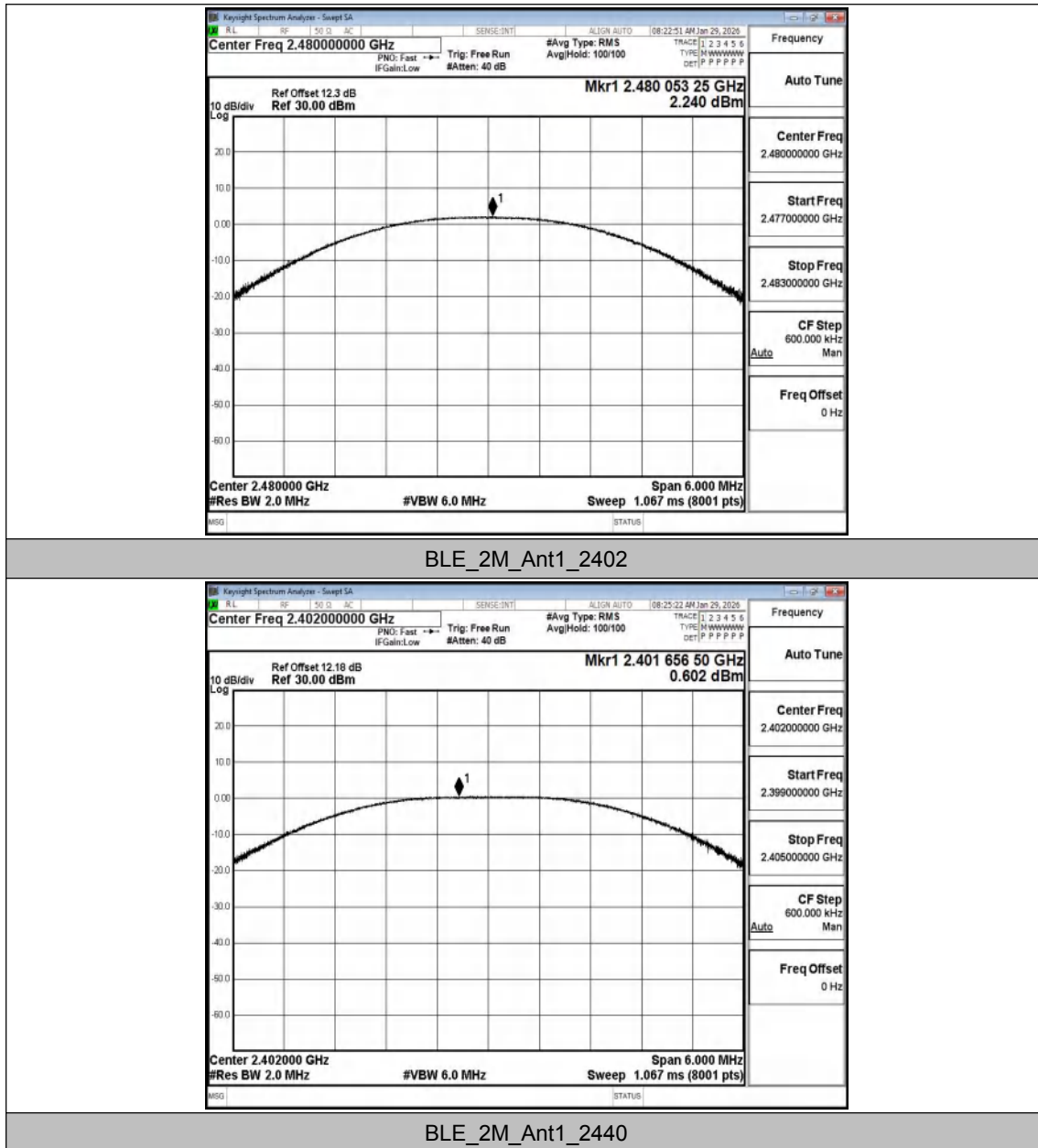
Test Result Peak

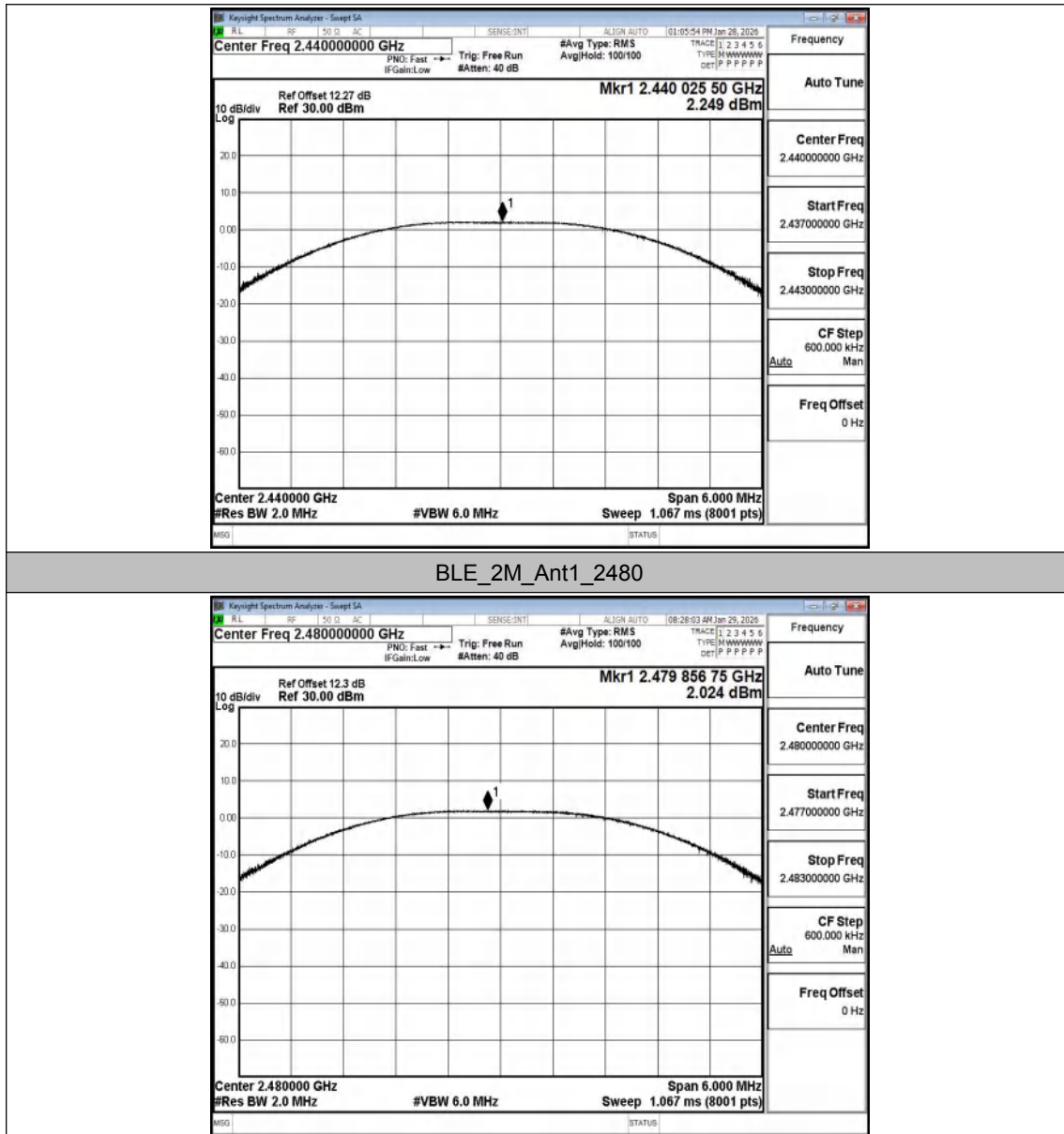
TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	0.83	≤30	PASS
		2440	2.36	≤30	PASS
		2480	2.24	≤30	PASS
BLE_2M	Ant1	2402	0.60	≤30	PASS
		2440	2.25	≤30	PASS
		2480	2.02	≤30	PASS

Note :offset=System attenuation +cabel loss

Test Graphs Peak







B.3 Maximum power spectral density

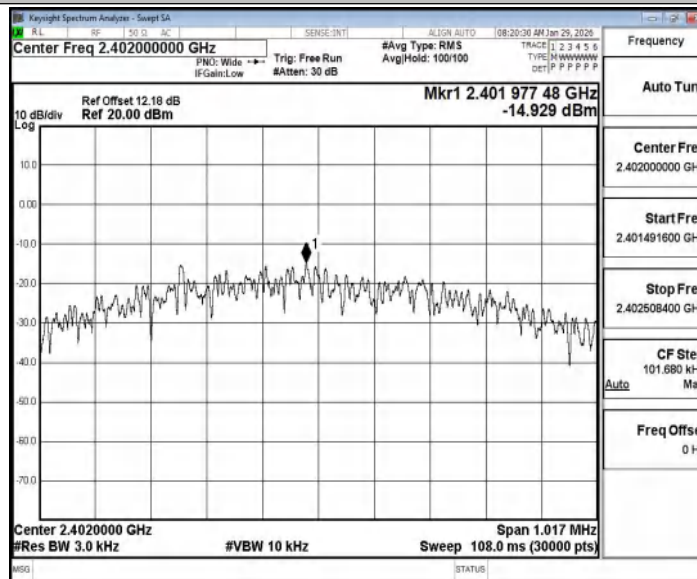
Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-14.93	≤8.00	PASS
		2440	-13.16	≤8.00	PASS
		2480	-13.43	≤8.00	PASS
BLE_2M	Ant1	2402	-17.54	≤8.00	PASS
		2440	-15.56	≤8.00	PASS
		2480	-15.84	≤8.00	PASS

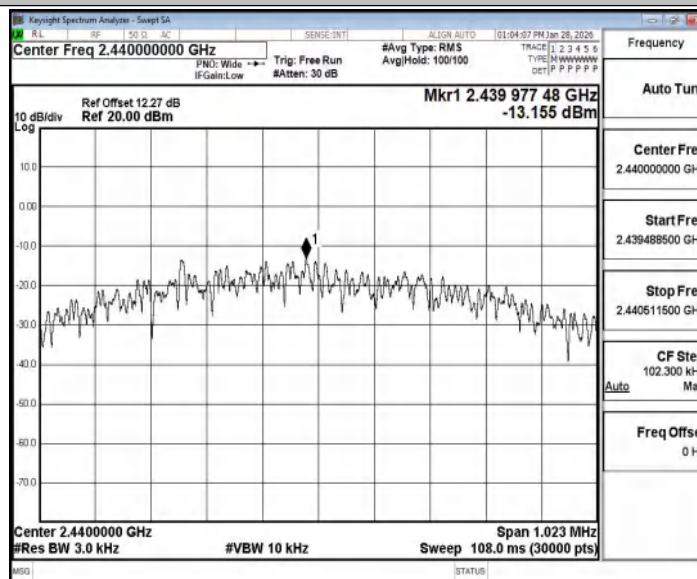
Note :offset=System attenuation +cabal loss

Test Graphs

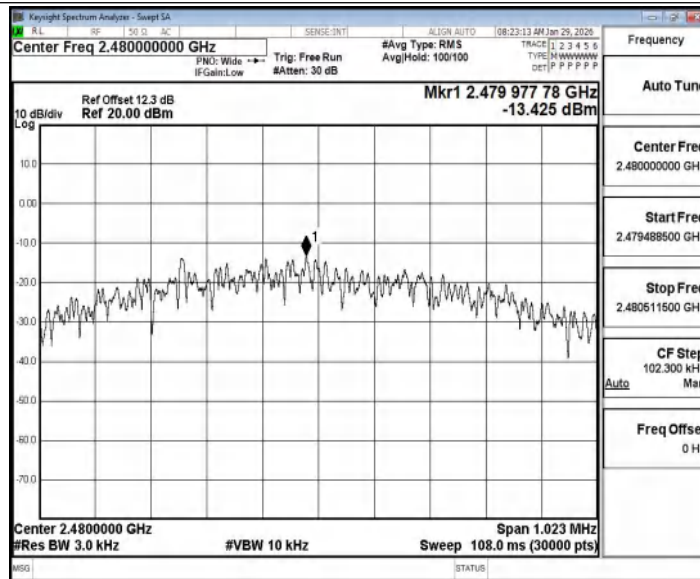
BLE_1M_Ant1_2402



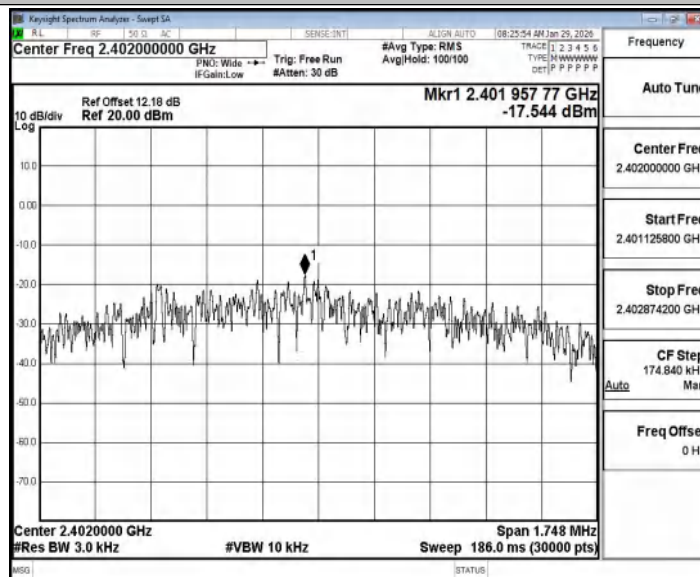
BLE_1M_Ant1_2440



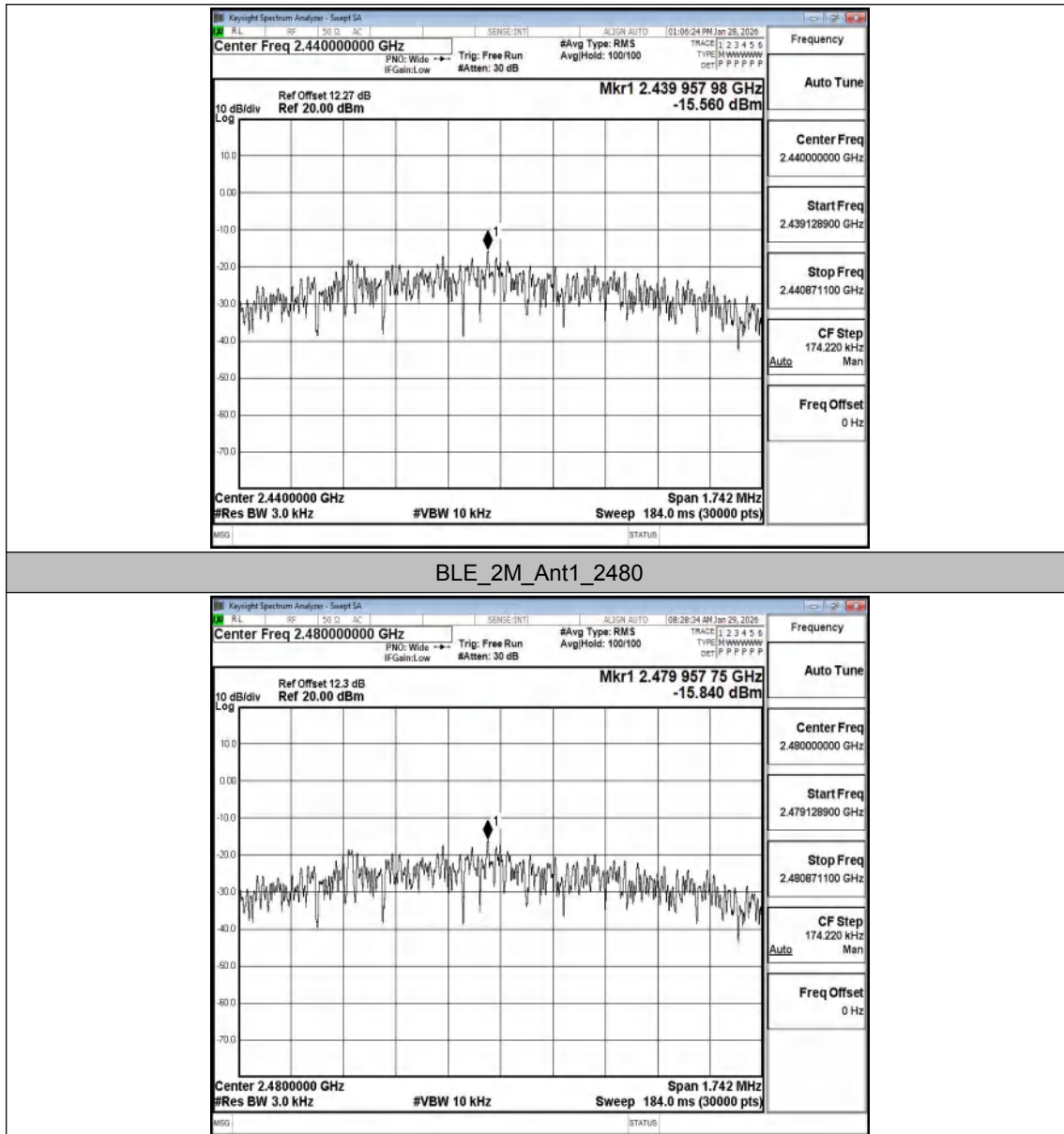
BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



B.4 Band edge measurements

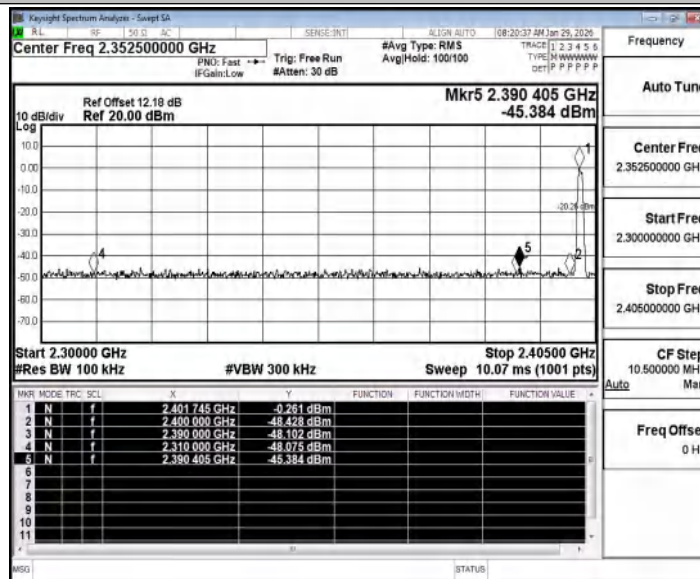
Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-0.26	-45.38	≤-20.26	PASS
		High	2480	1.29	-45.34	≤-18.71	PASS
BLE_2M	Ant1	Low	2402	-0.58	-44.58	≤-20.58	PASS
		High	2480	1.00	-44.36	≤-19	PASS

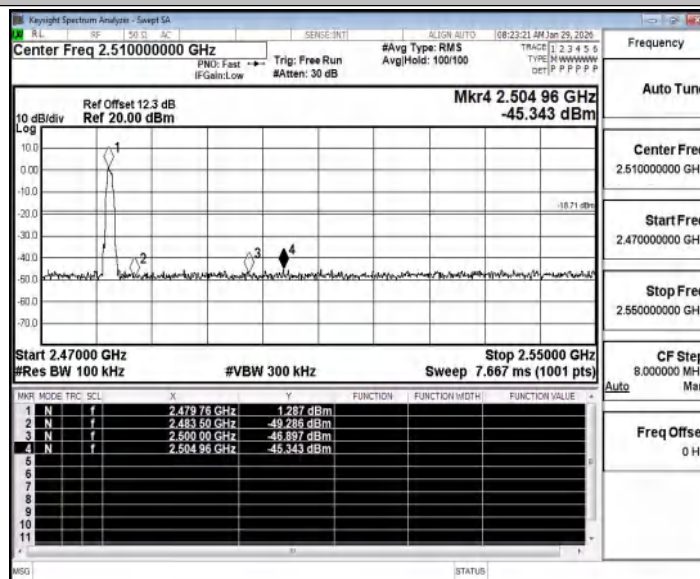
Note :offset=System attenuation +cabal loss

Test Graphs

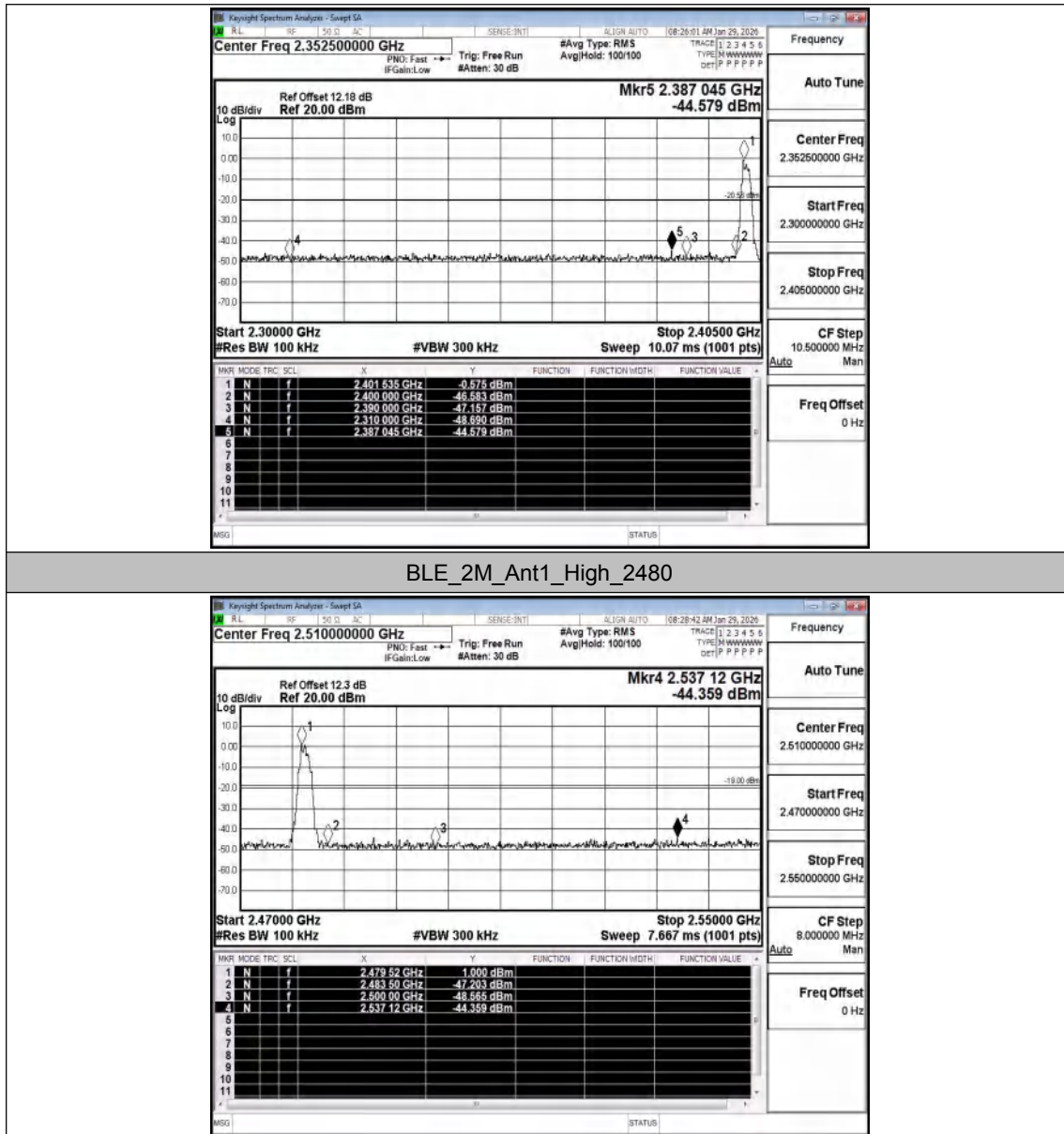
BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



BLE_2M_Ant1_Low_2402



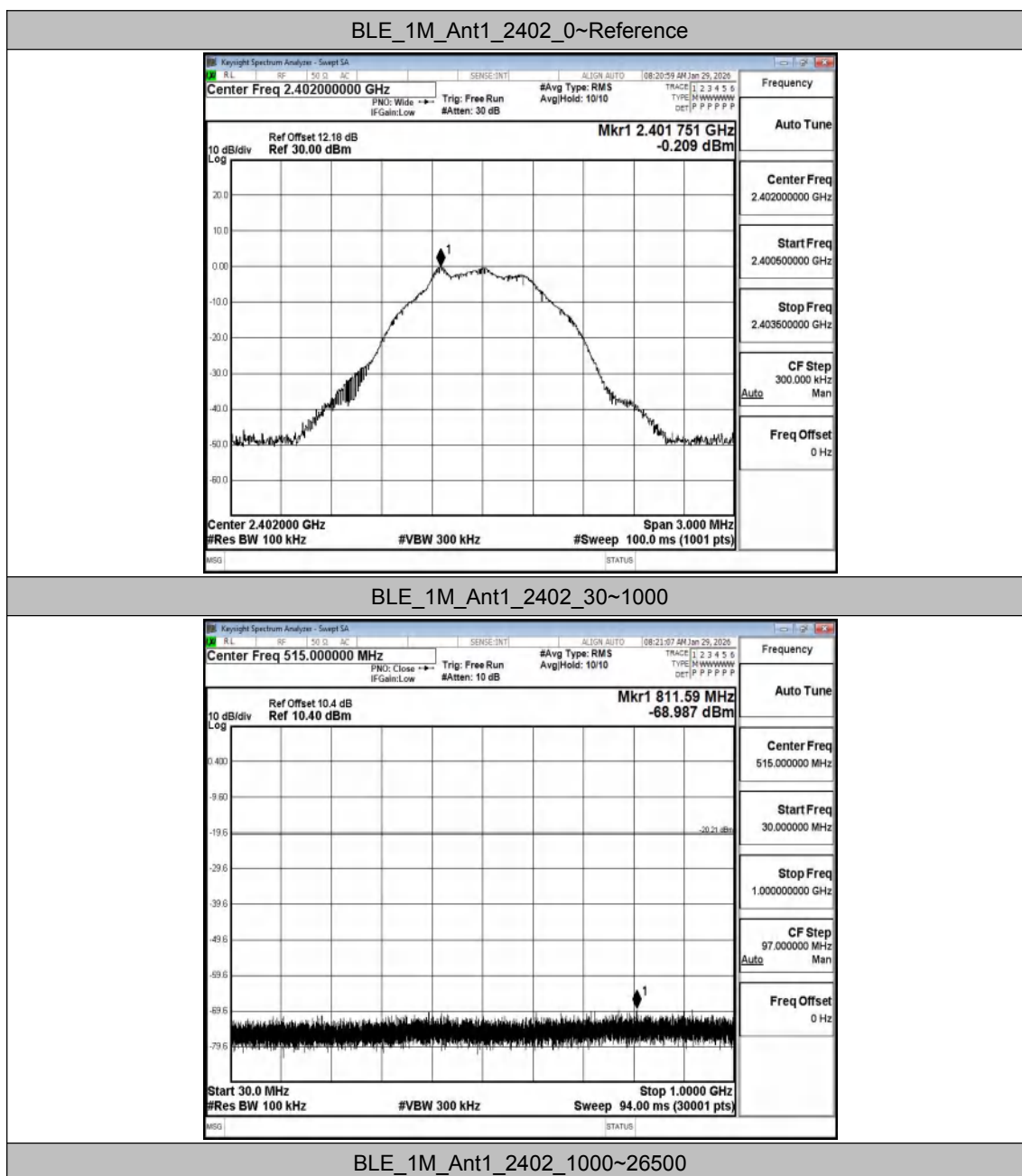
B.5 Conducted Spurious Emission

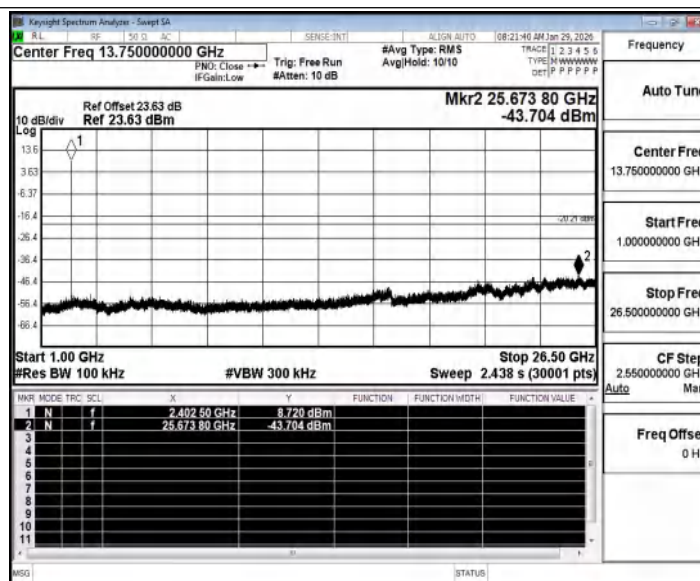
Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-0.21	-0.21	---	PASS
			30~1000	-0.21	-68.99	≤-20.21	PASS
			1000~26500	-0.21	-43.7	≤-20.21	PASS
		2440	Reference	1.64	1.64	---	PASS
			30~1000	1.64	-68.87	≤-18.36	PASS
			1000~26500	1.64	-42.87	≤-18.36	PASS
		2480	Reference	1.35	1.35	---	PASS
			30~1000	1.35	-68.27	≤-18.65	PASS
			1000~26500	1.35	-42.88	≤-18.65	PASS
BLE_2M	Ant1	2402	Reference	-0.70	-0.70	---	PASS
			30~1000	-0.70	-68.04	≤-20.7	PASS
			1000~26500	-0.70	-42.61	≤-20.7	PASS
		2440	Reference	1.27	1.27	---	PASS
			30~1000	1.27	-68.92	≤-18.73	PASS
			1000~26500	1.27	-43.08	≤-18.73	PASS
		2480	Reference	0.90	0.90	---	PASS
			30~1000	0.90	-69.08	≤-19.1	PASS
			1000~26500	0.90	-43.17	≤-19.1	PASS

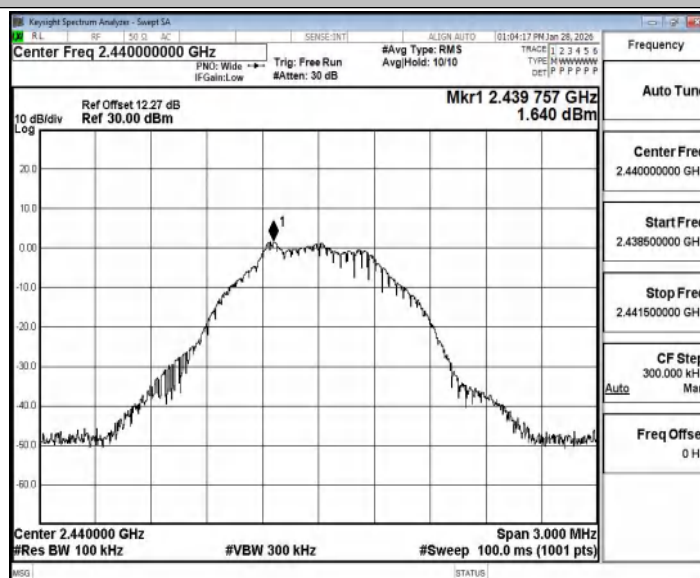
Note : Regarding the spurious emissions from 30MHz to 26.5GHz, the cable lose have been set in the CORREC' of the Spectrum Analyzer during the test.

Test Graphs

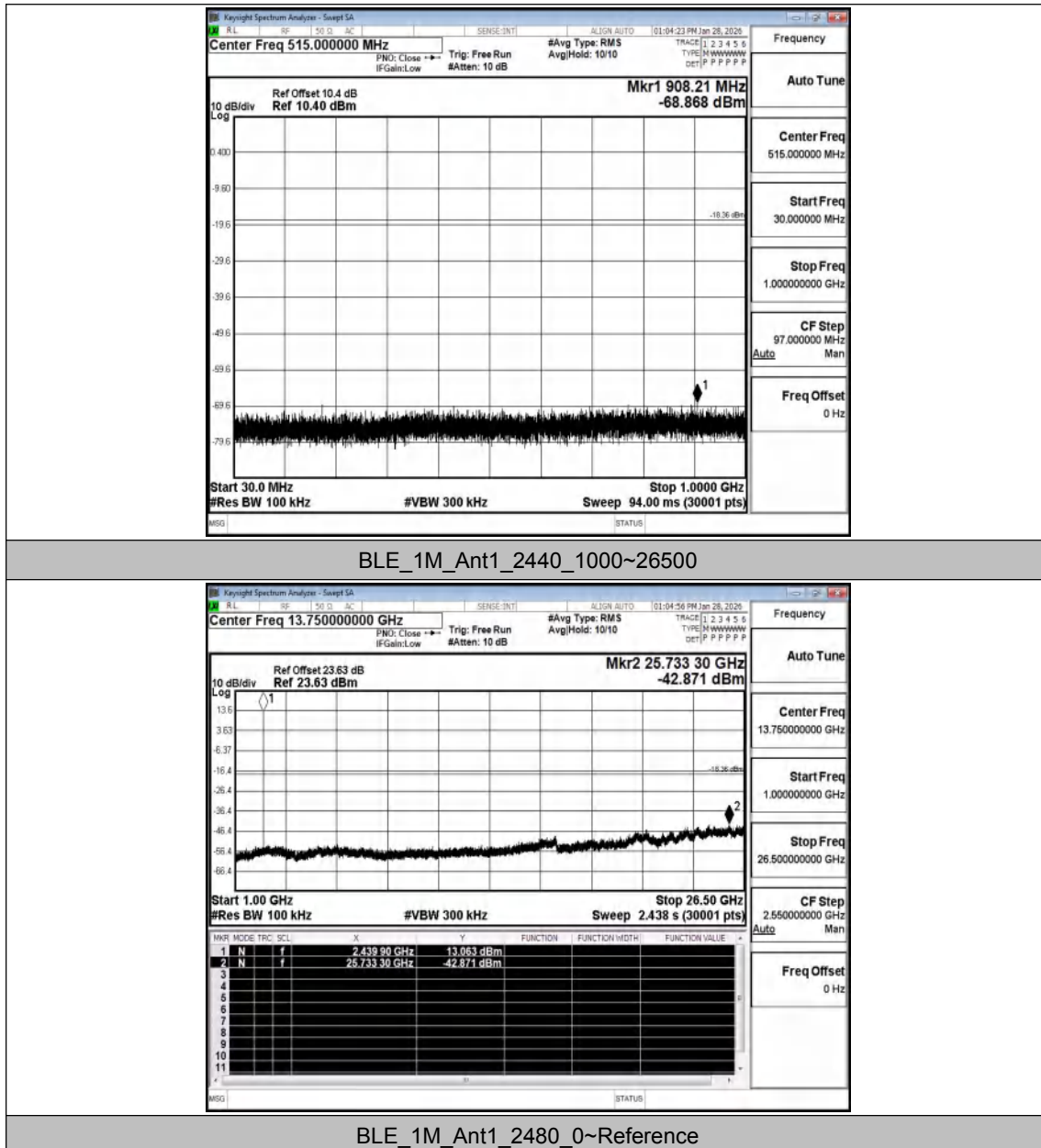


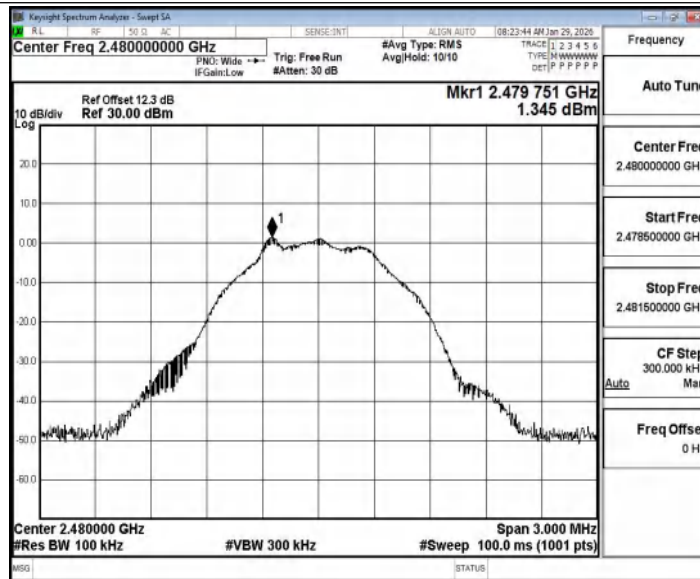


BLE_1M_Ant1_2440_0~Reference

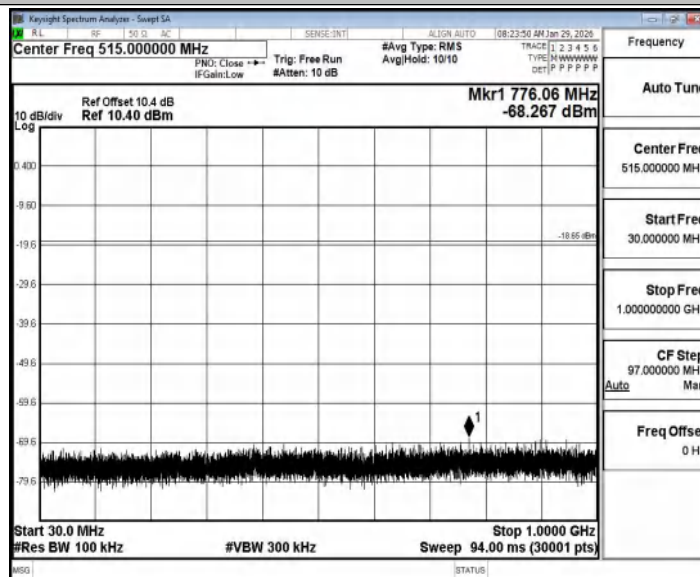


BLE_1M_Ant1_2440_30~1000

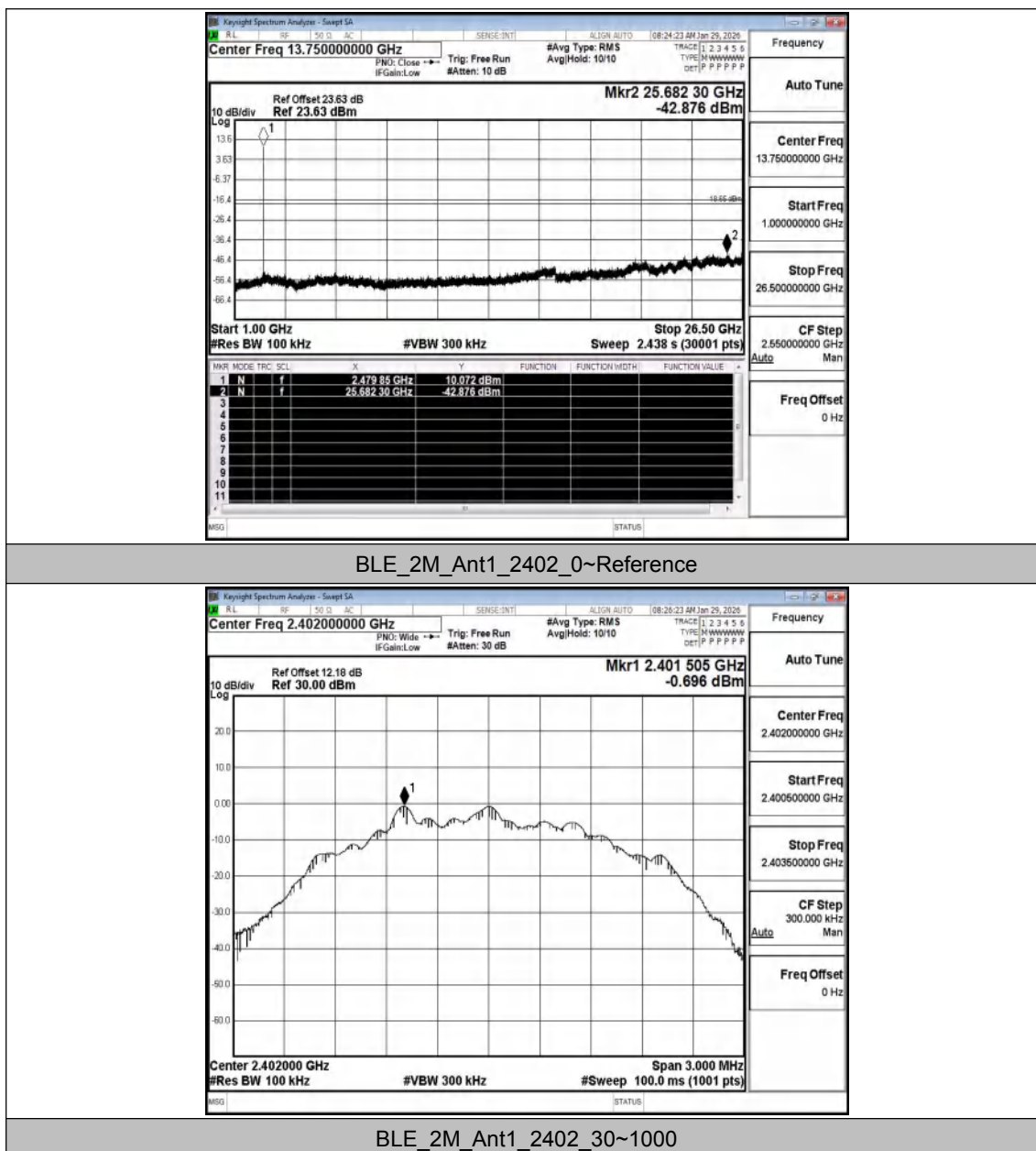


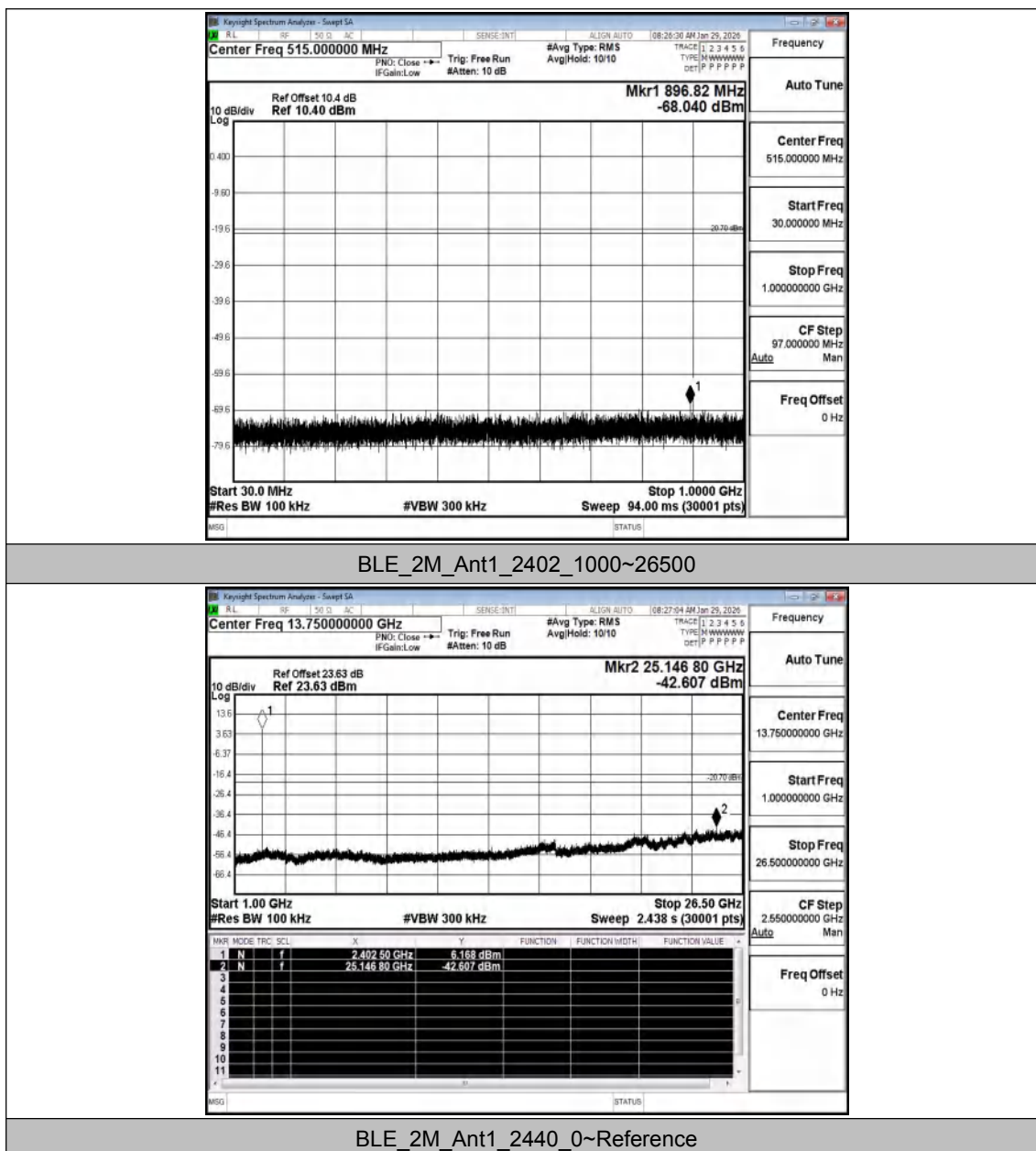


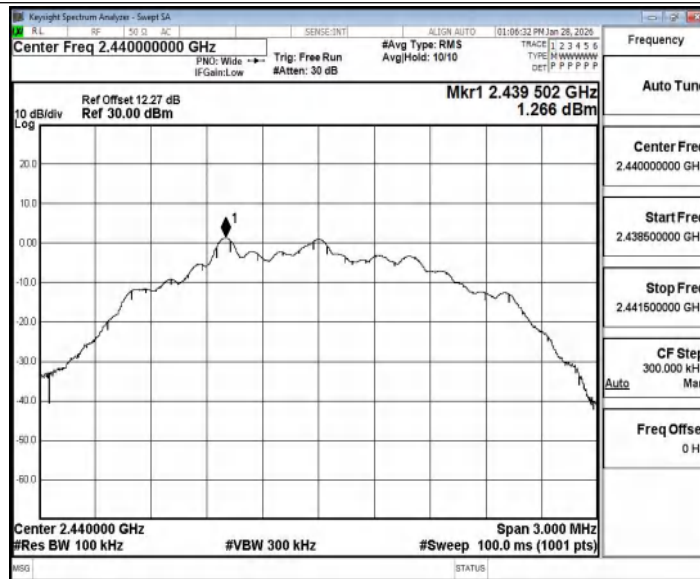
BLE_1M_Ant1_2480_30~1000



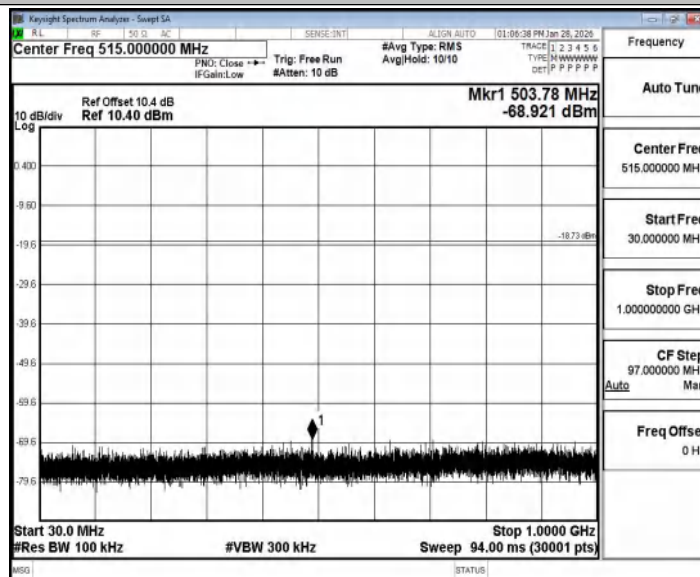
BLE_1M_Ant1_2480_1000~26500



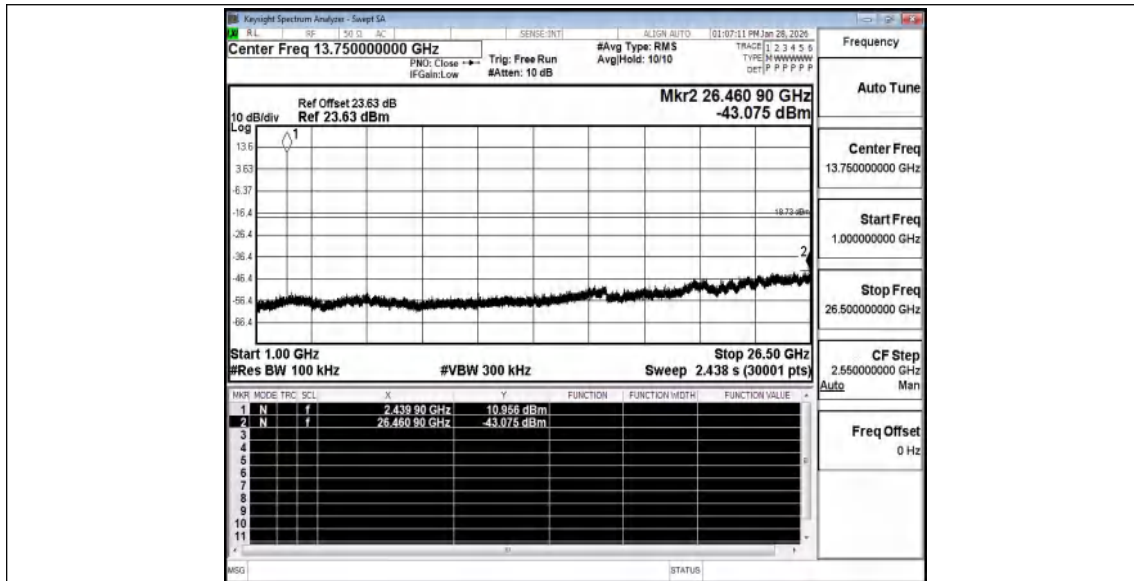




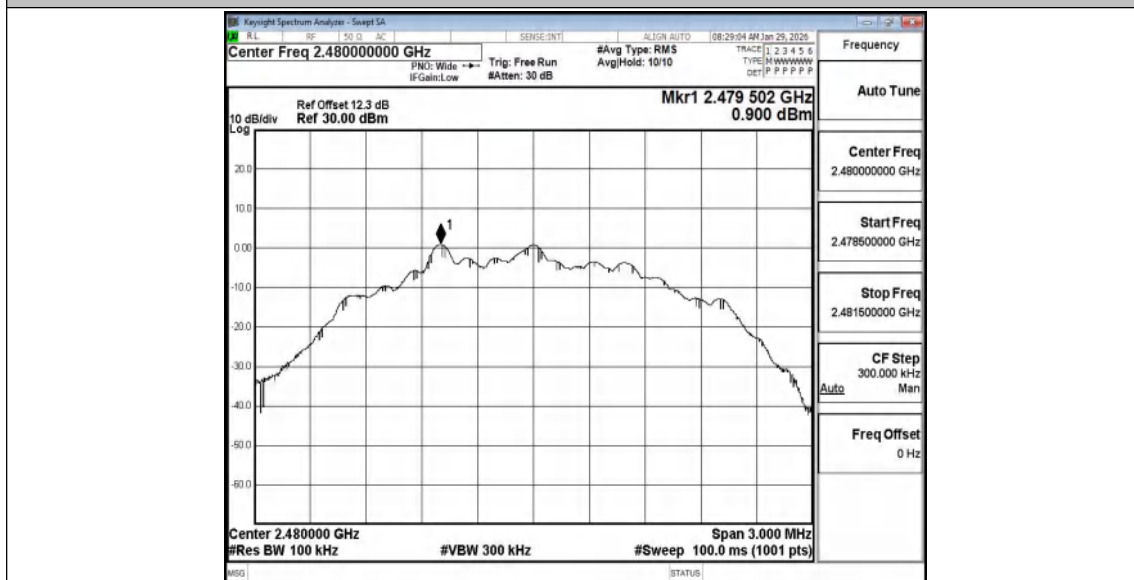
BLE_2M_Ant1_2440_30~1000



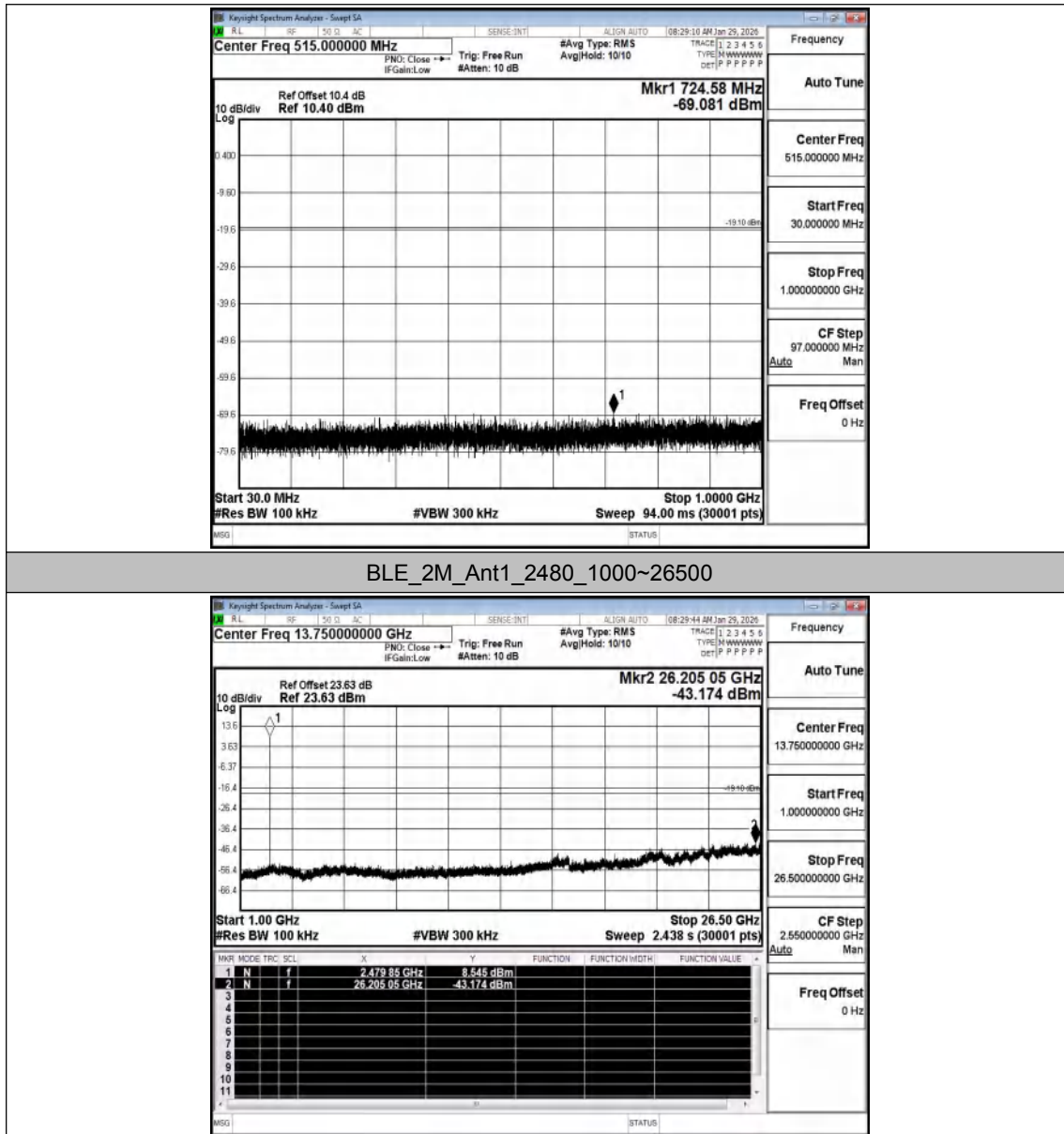
BLE_2M_Ant1_2440_1000~26500



BLE_2M_Ant1_2480_0~Reference



BLE_2M_Ant1_2480_30~1000



B.6 Duty Cycle

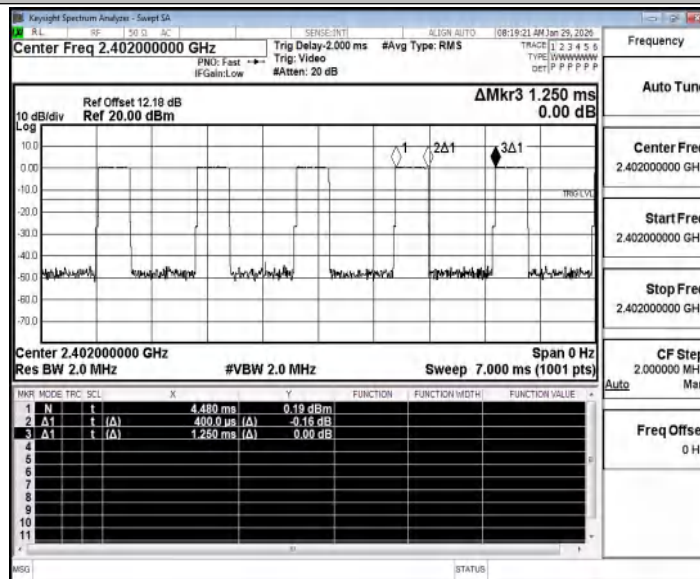
Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.40	1.25	0.3200	32.00	4.95	---	---
		2440	0.40	1.25	0.3200	32.00	4.95	---	---
		2480	0.40	1.25	0.3200	32.00	4.95	---	---
BLE_2M	Ant1	2402	0.20	0.63	0.3175	31.75	4.98	---	---
		2440	0.20	0.63	0.3175	31.75	4.98	---	---
		2480	0.20	0.63	0.3175	31.75	4.98	---	---

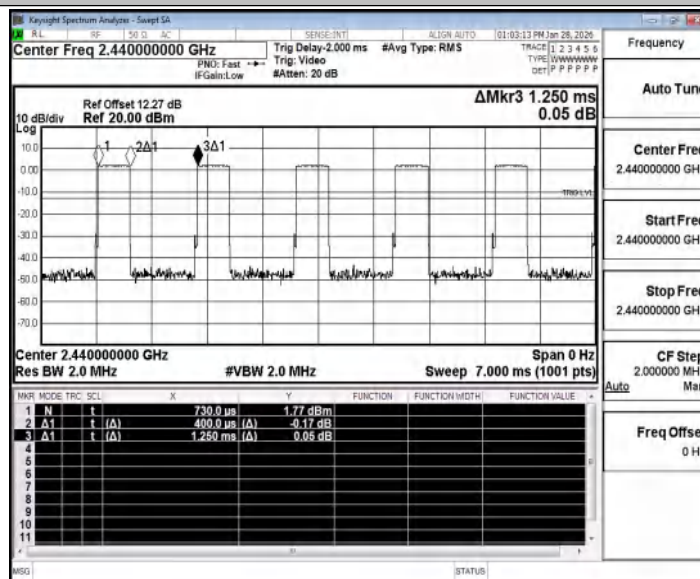
Note :offset=System attenuation +cabel loss

Test Graphs

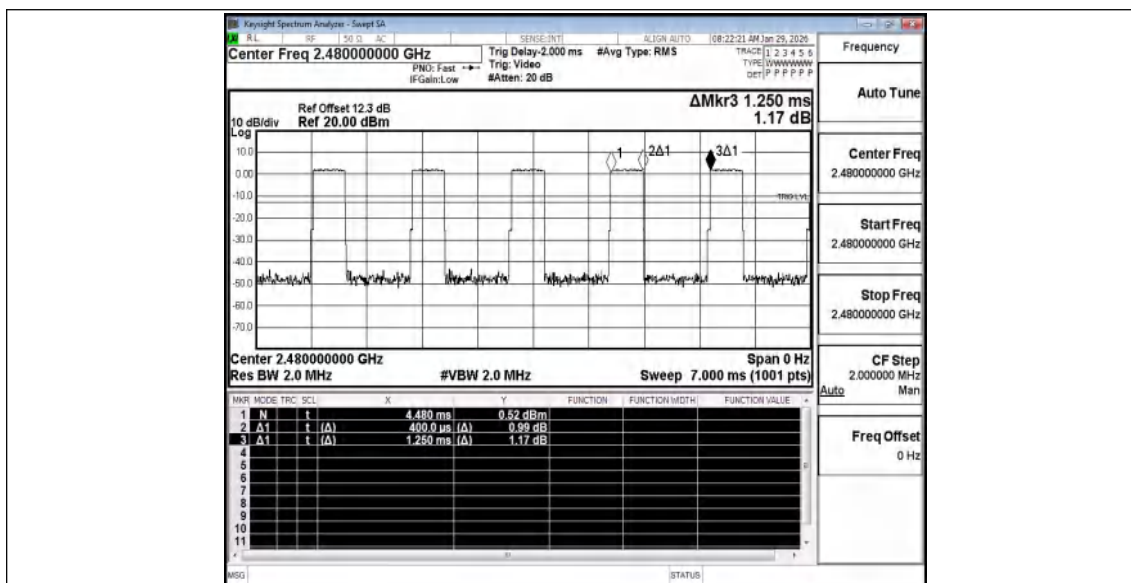
BLE_1M_Ant1_2402



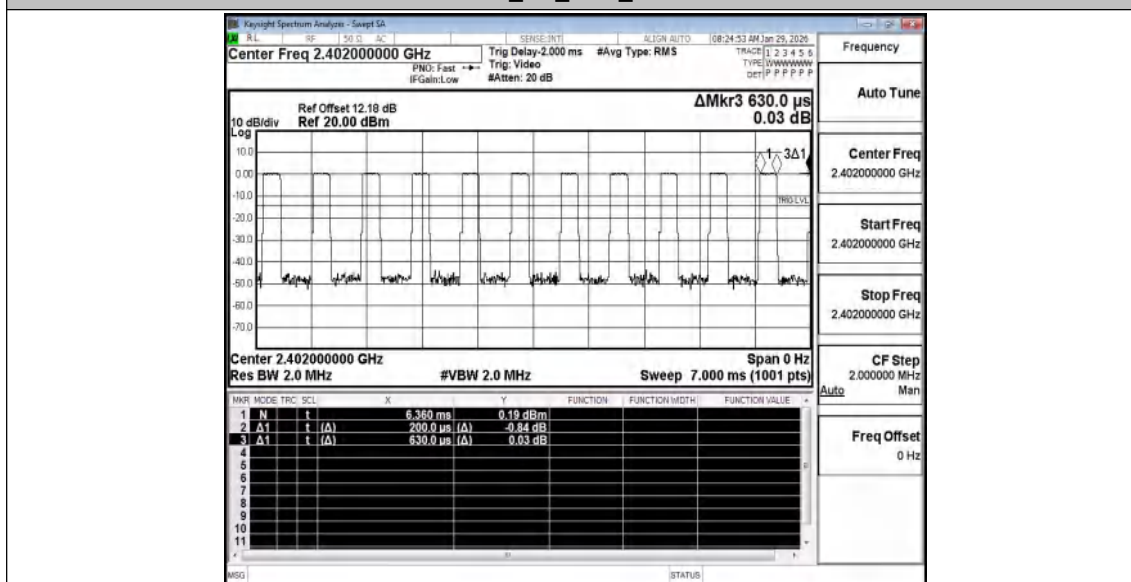
BLE_1M_Ant1_2440



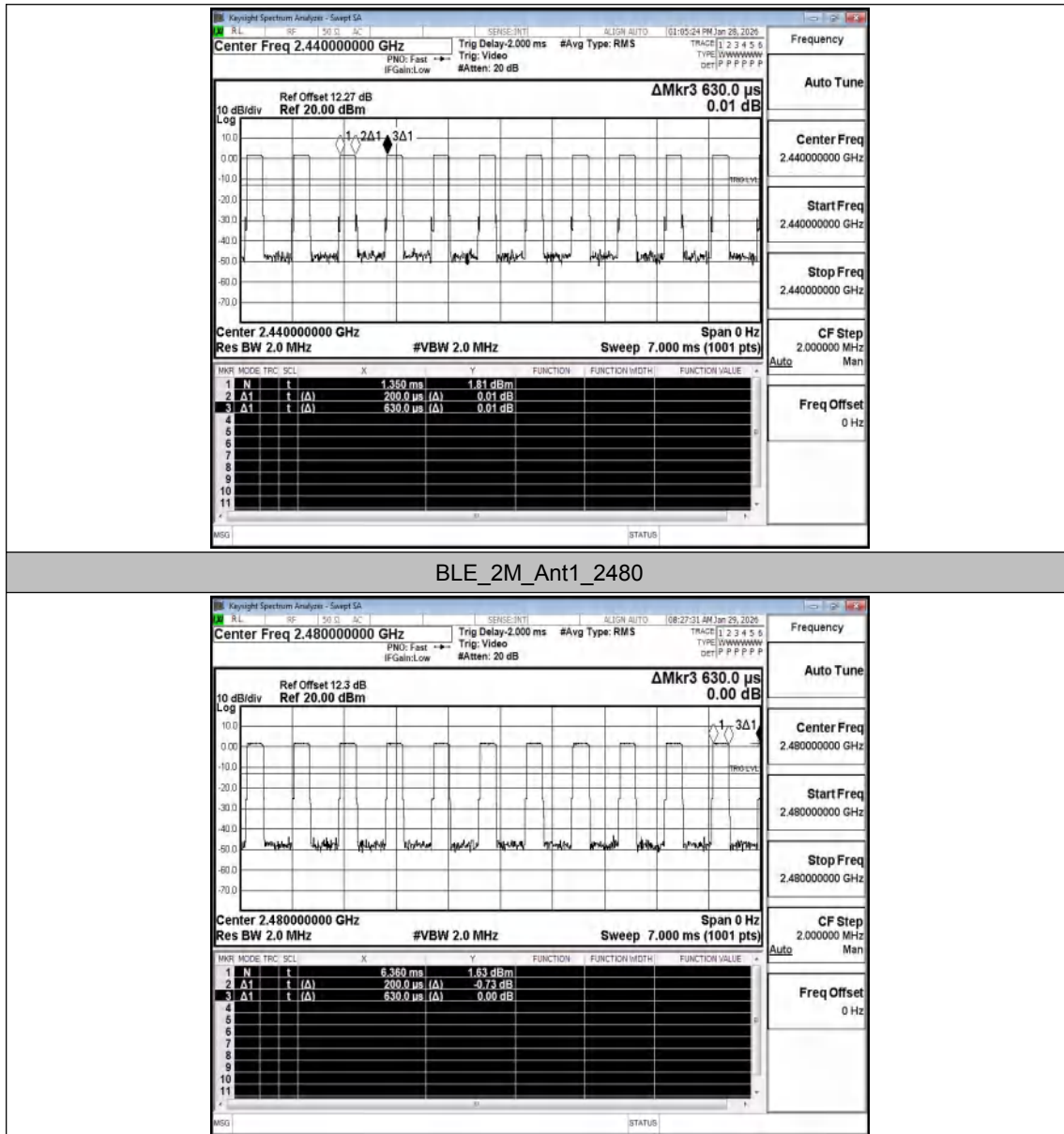
BLE_1M_Ant1_2480



BLE_2M_Ant1_2402



BLE_2M_Ant1_2440



B.7 Emissions in Restricted Bands

Test Result

TestMode	Antenna	ChName	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Limit [dBm]	Gain [dBi]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-56.95	≤-48.15	2.00	4.95	45.20	≤54	PASS
				AV	2389.250	-56.45	≤-48.15	2.00	4.95	45.70	≤54	PASS
				AV	2390.000	-57.35	≤-48.15	2.00	4.95	44.80	≤54	PASS
				Peak	2310.000	-48.94	≤-23.20	2.00	0.00	48.26	≤74	PASS
				Peak	2389.985	-45.89	≤-23.20	2.00	0.00	51.31	≤74	PASS
				Peak	2390.000	-45.89	≤-23.20	2.00	0.00	51.31	≤74	PASS
		High	2480	AV	2483.500	-56.33	≤-48.15	2.00	4.95	45.82	≤54	PASS
				AV	2483.600	-55.91	≤-48.15	2.00	4.95	46.24	≤54	PASS
				AV	2500.000	-56.57	≤-48.15	2.00	4.95	45.58	≤54	PASS
				Peak	2483.500	-48.01	≤-23.20	2.00	0.00	49.19	≤74	PASS
				Peak	2484.880	-41.58	≤-23.20	2.00	0.00	55.62	≤74	PASS
				Peak	2500.000	-48.02	≤-23.20	2.00	0.00	49.18	≤74	PASS
BLE_2M	Ant1	Low	2402	AV	2310.000	-57.12	≤-48.18	2.00	4.98	45.06	≤54	PASS
				AV	2387.885	-56.38	≤-48.18	2.00	4.98	45.80	≤54	PASS
				AV	2390.000	-56.95	≤-48.18	2.00	4.98	45.23	≤54	PASS
				Peak	2310.000	-48.88	≤-23.20	2.00	0.00	48.32	≤74	PASS
				Peak	2347.985	-46.02	≤-23.20	2.00	0.00	51.18	≤74	PASS
				Peak	2390.000	-49.59	≤-23.20	2.00	0.00	47.61	≤74	PASS
		High	2480	AV	2483.500	-56.63	≤-48.18	2.00	4.98	45.55	≤54	PASS
				AV	2484.800	-56.08	≤-48.18	2.00	4.98	46.10	≤54	PASS
				AV	2500.000	-56.6	≤-48.18	2.00	4.98	45.58	≤54	PASS
				Peak	2483.500	-46.93	≤-23.20	2.00	0.00	50.27	≤74	PASS
				Peak	2487.600	-45.85	≤-23.20	2.00	0.00	51.35	≤74	PASS
				Peak	2500.000	-48.63	≤-23.20	2.00	0.00	48.57	≤74	PASS

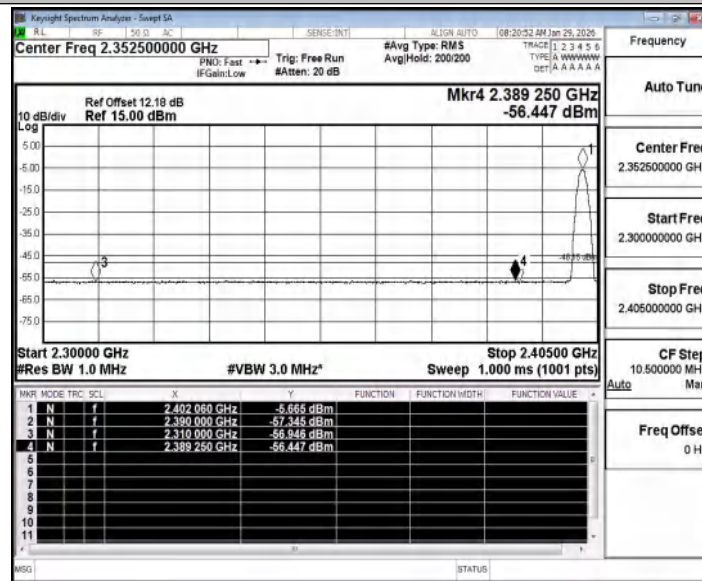
Note :offset=System attenuation +cabal loss

Note:

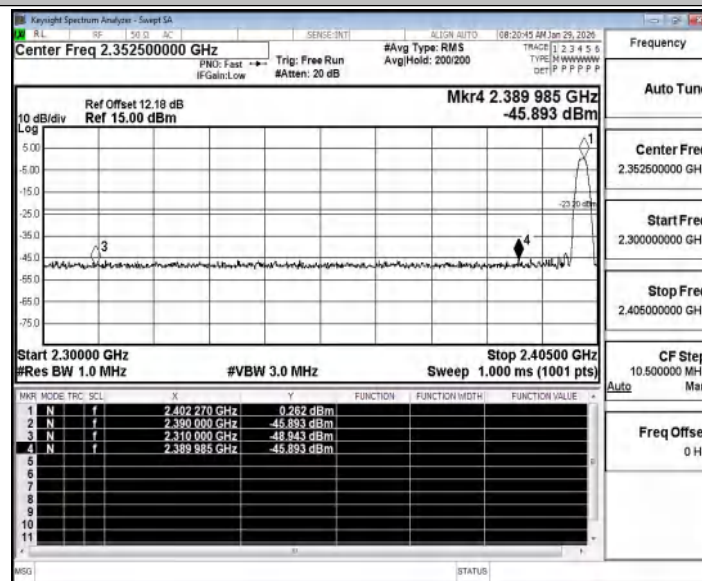
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs

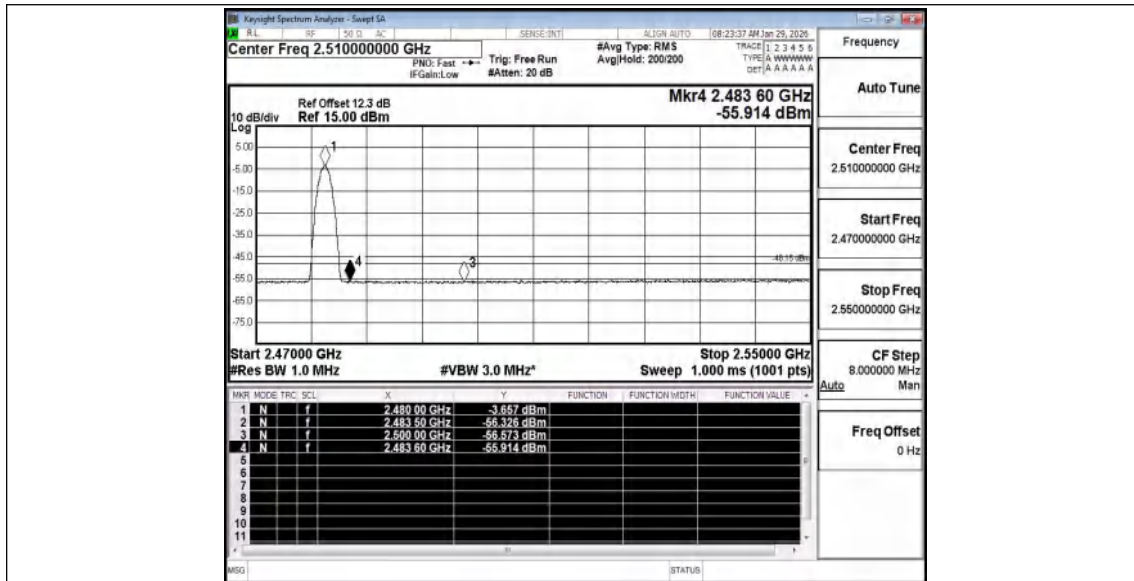
BLE_1M_Ant1_Low_2402_AV



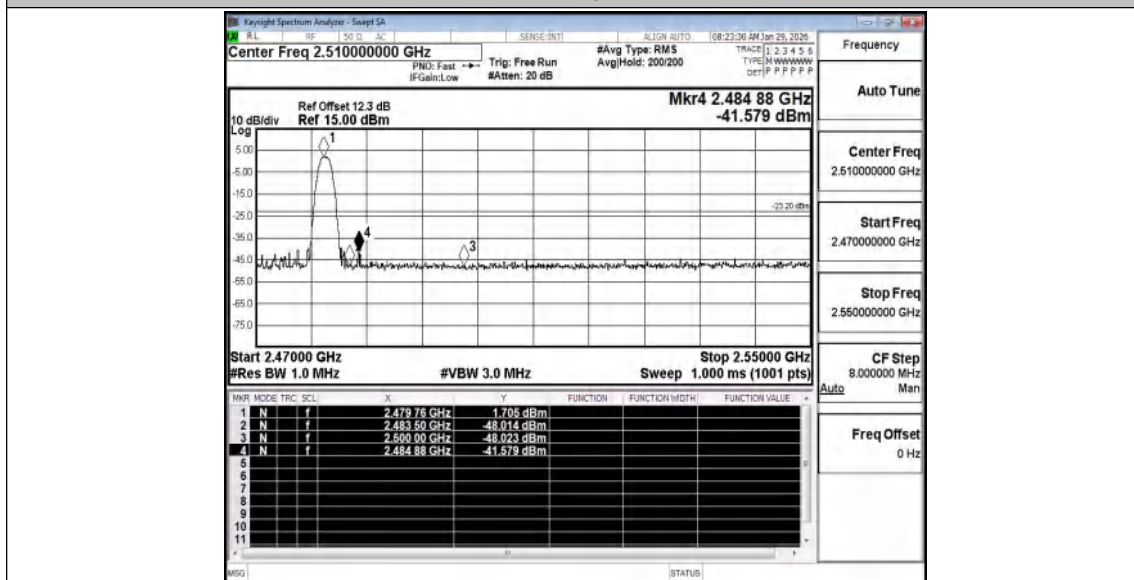
BLE_1M_Ant1_Low_2402_Peak



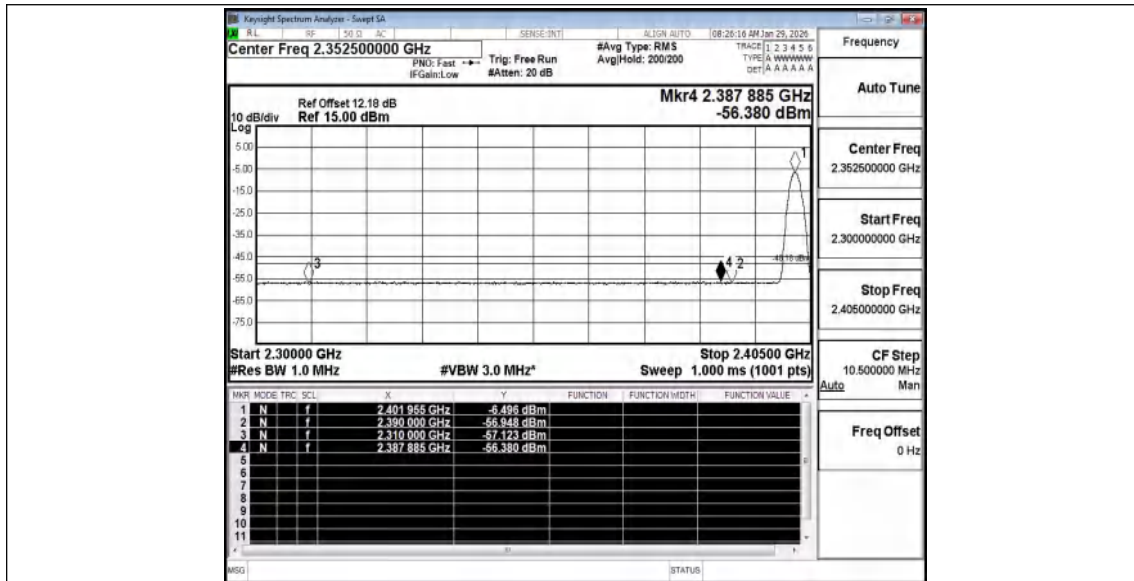
BLE_1M_Ant1_High_2480_AV



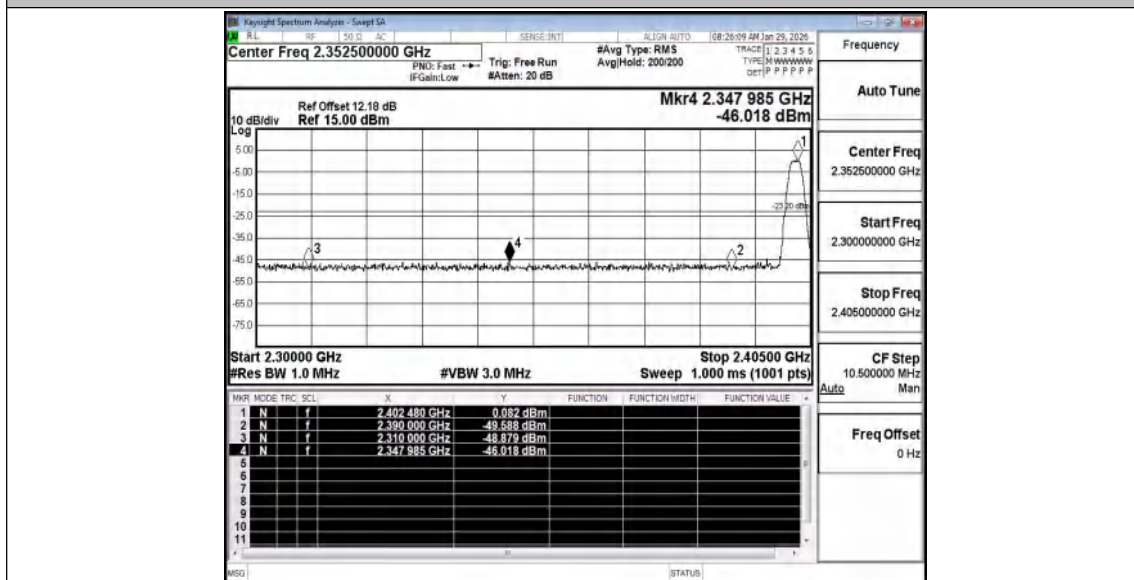
BLE_1M_Ant1_High_2480_Peak



BLE_2M_Ant1_Low_2402_AV



BLE_2M_Ant1_Low_2402_Peak



BLE_2M_Ant1_High_2480_AV

