

Appendix B

RF Test Data for BT V5.0 (Conducted Measurement)

Product Name: Solar Bluetooth Speaker

Trade Mark: KEYANG

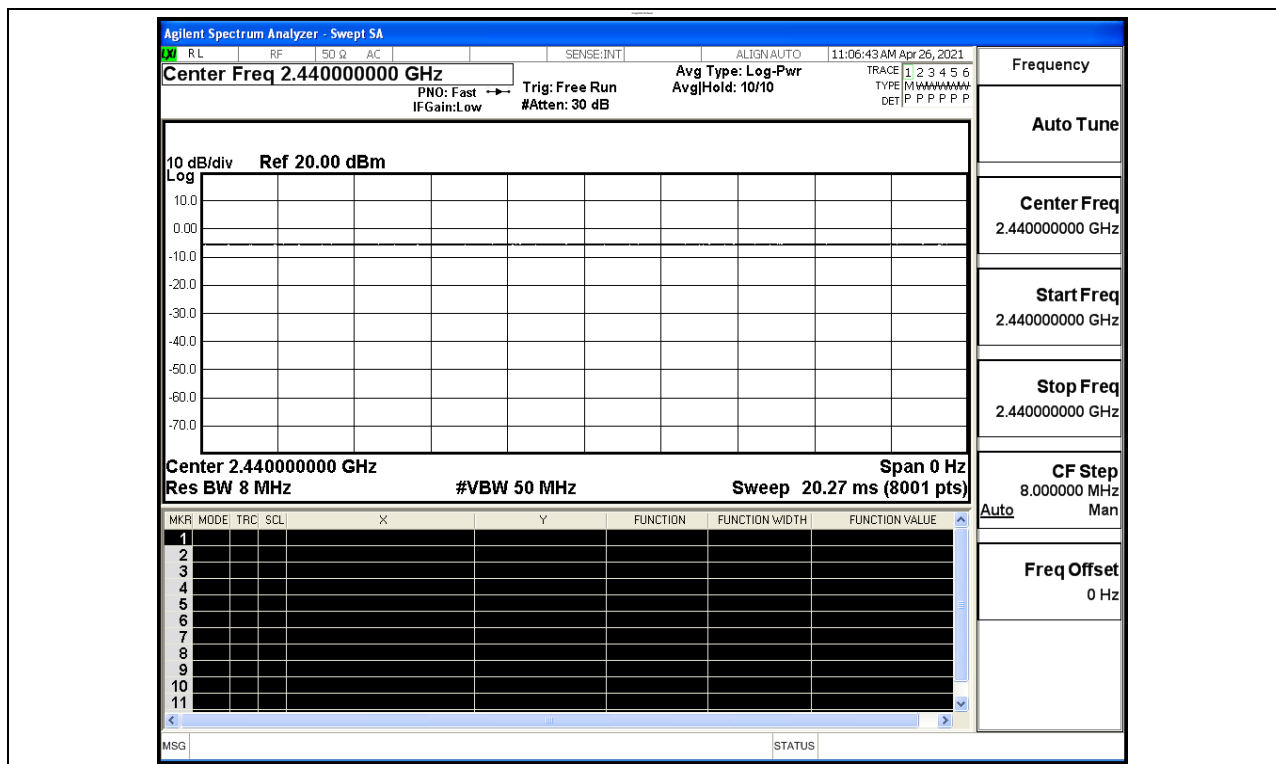
Test Model: KY8052

Environmental Conditions

Temperature:	24.9° C
Relative Humidity:	55.4%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

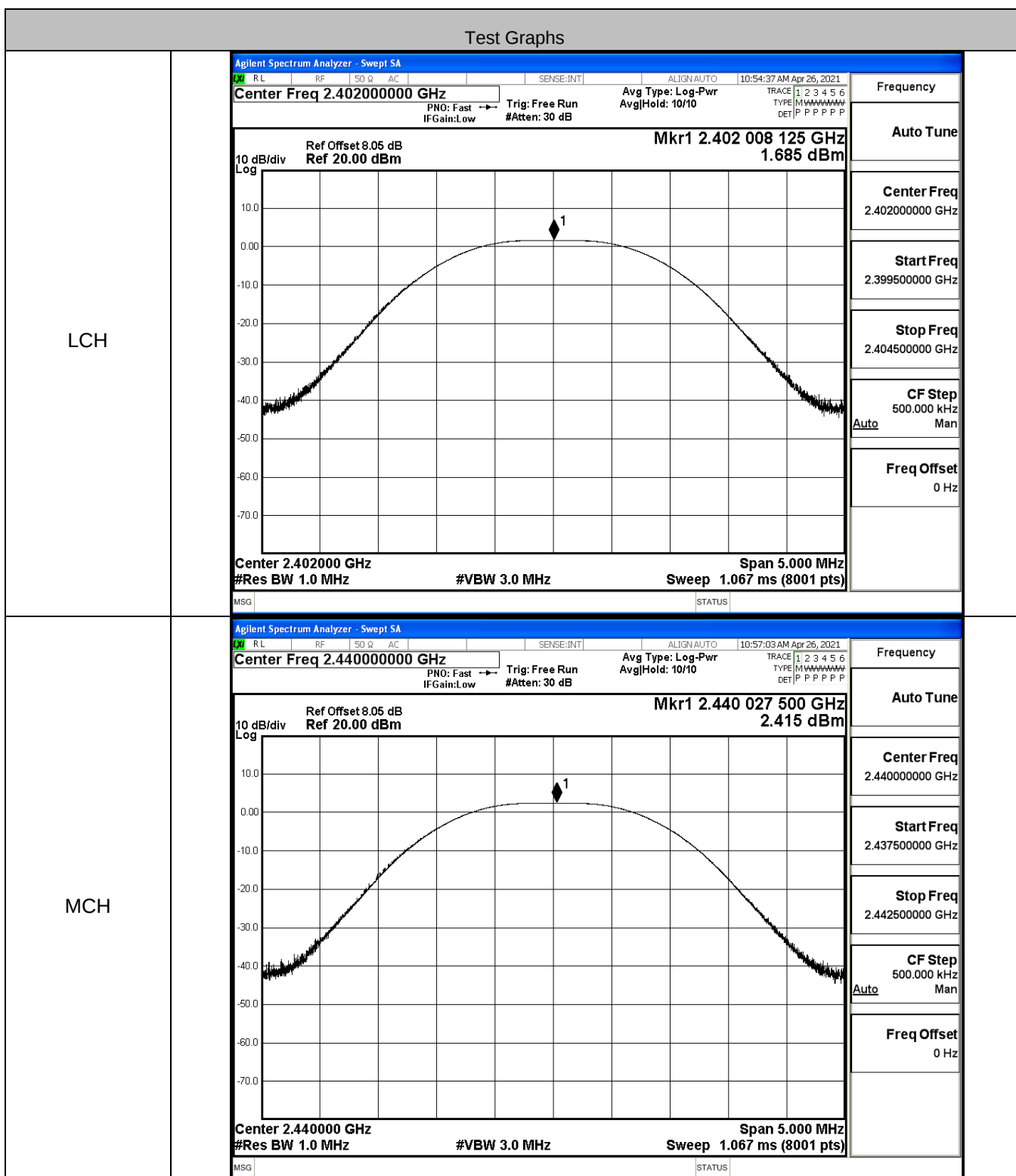
B.1 Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BT LE	2440	Ant1	100	PASS

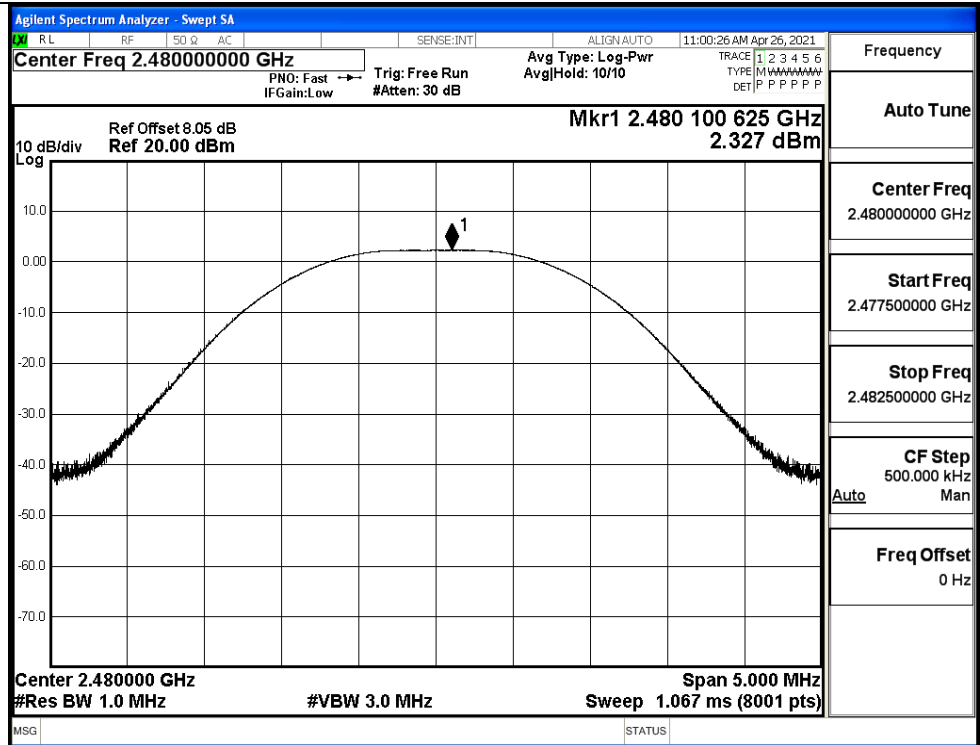


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.685	30	PASS
BT LE	MCH	2.415	30	PASS
BT LE	HCH	2.327	30	PASS



HCH

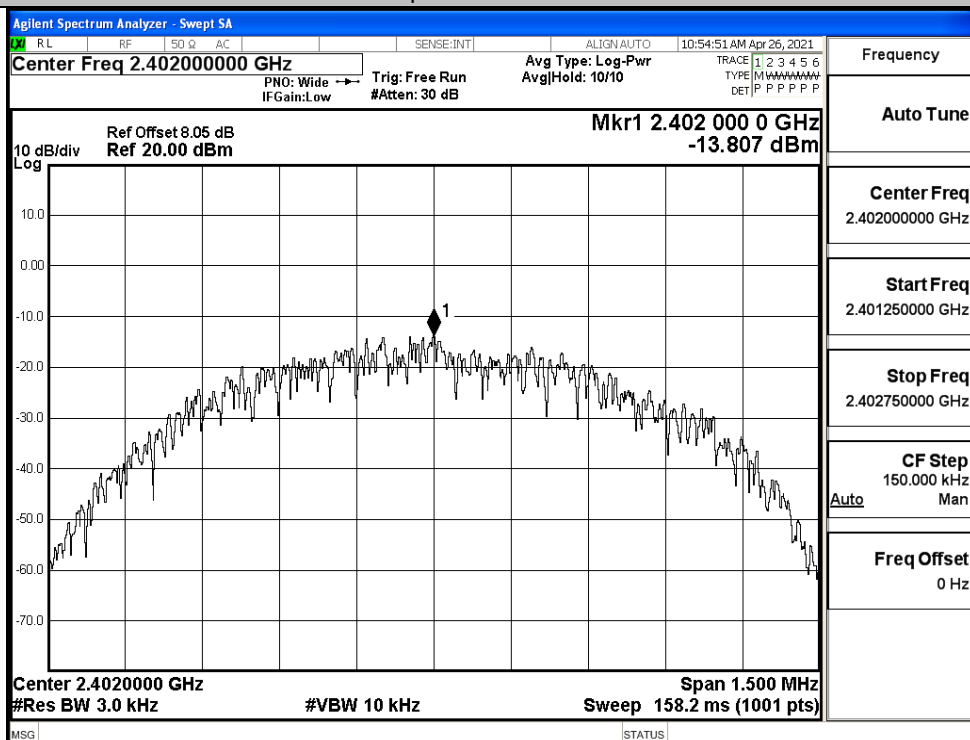


B.3 Maximum Power Spectral Density

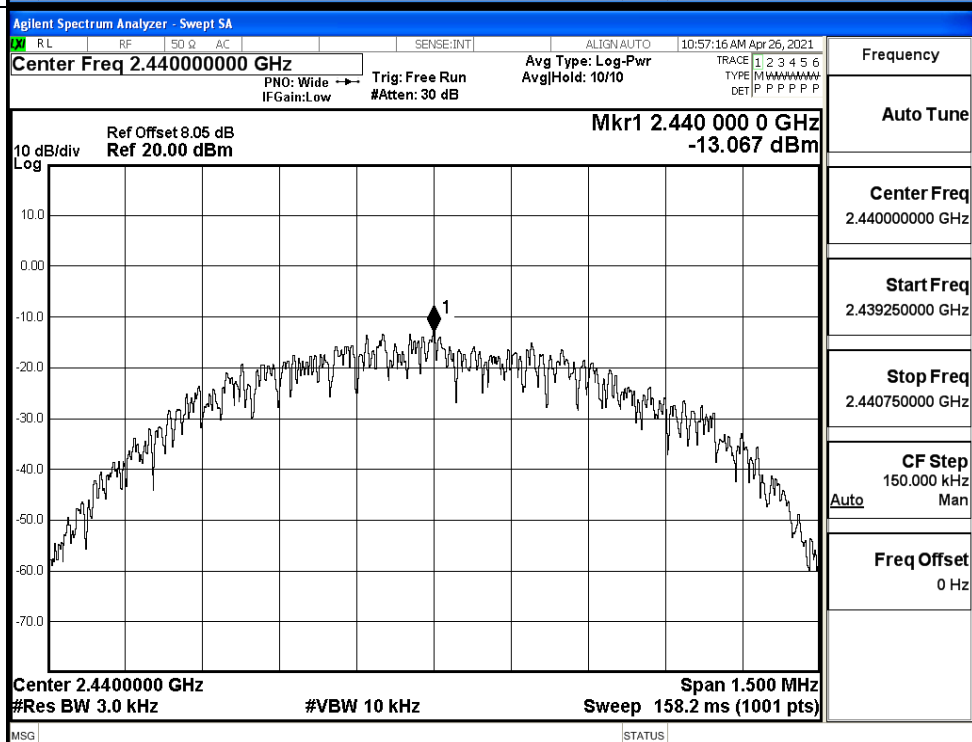
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-13.807	8	PASS
BT LE	MCH	-13.067	8	PASS
BT LE	HCH	-13.323	8	PASS

Test Graphs

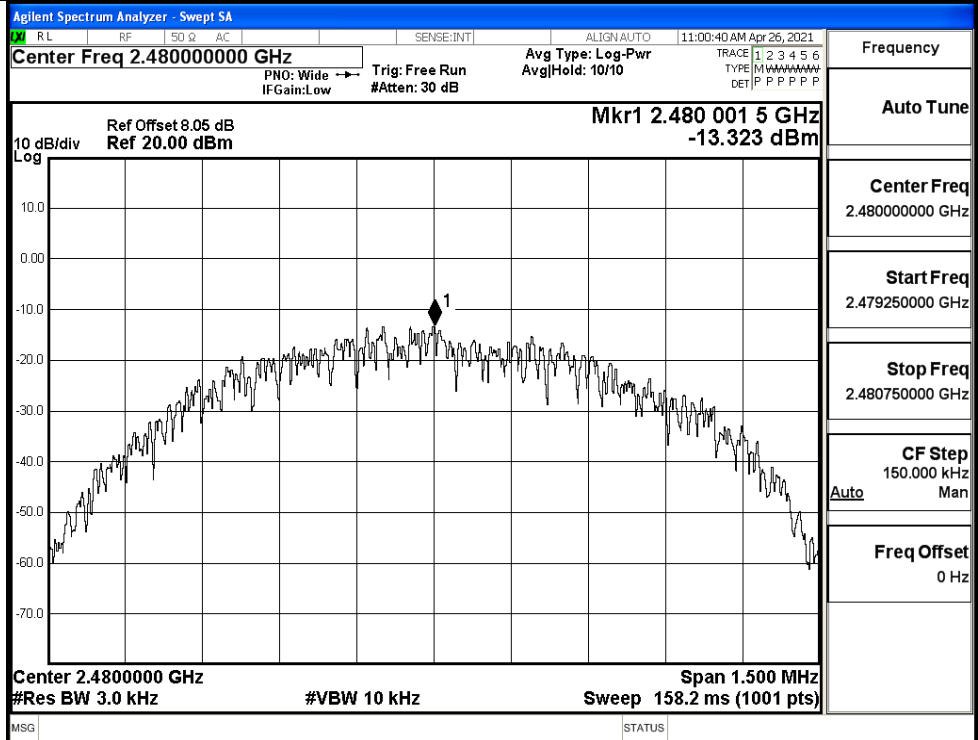
LCH



MCH



HCH

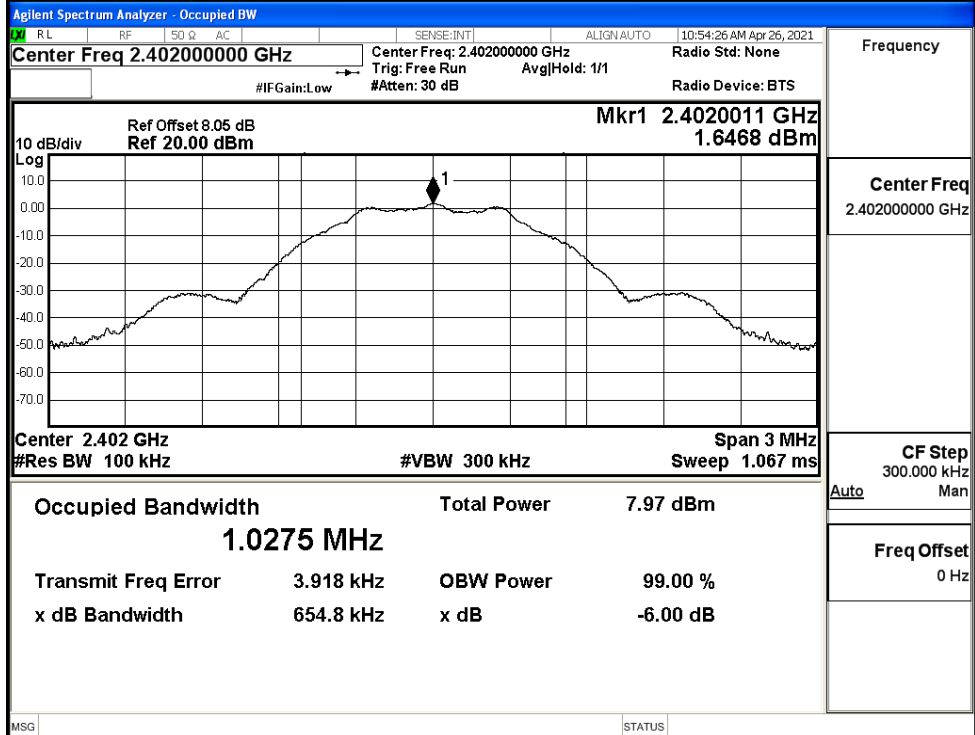


B.4 6dB Bandwidth

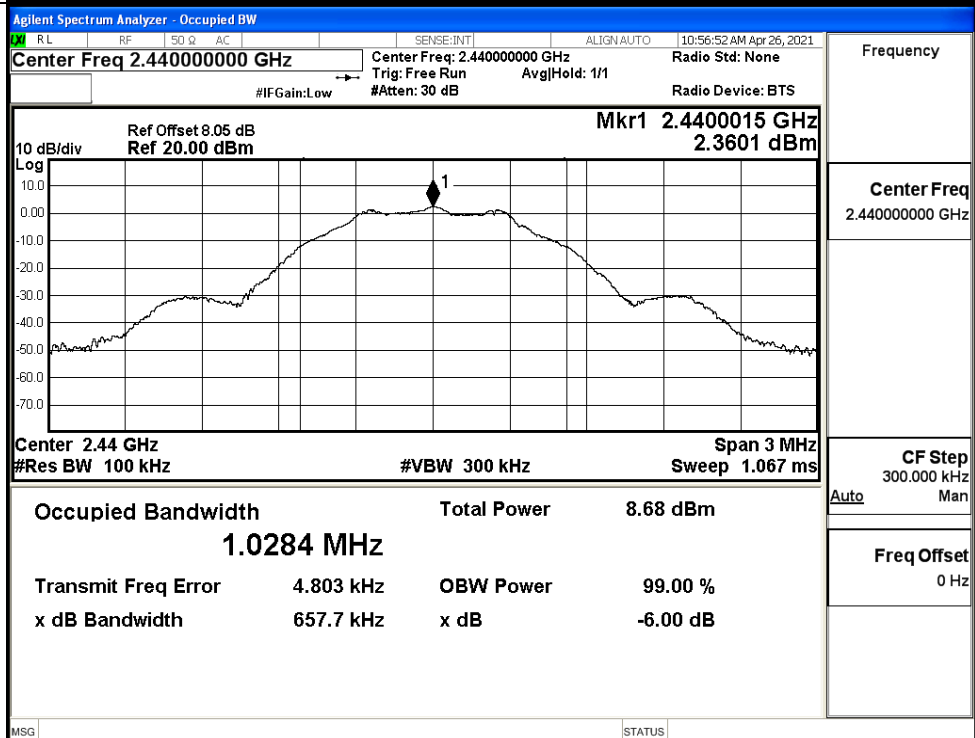
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6548	≥ 0.5	PASS
BT LE	MCH	0.6577	≥ 0.5	PASS
BT LE	HCH	0.6590	≥ 0.5	PASS

Test Graphs

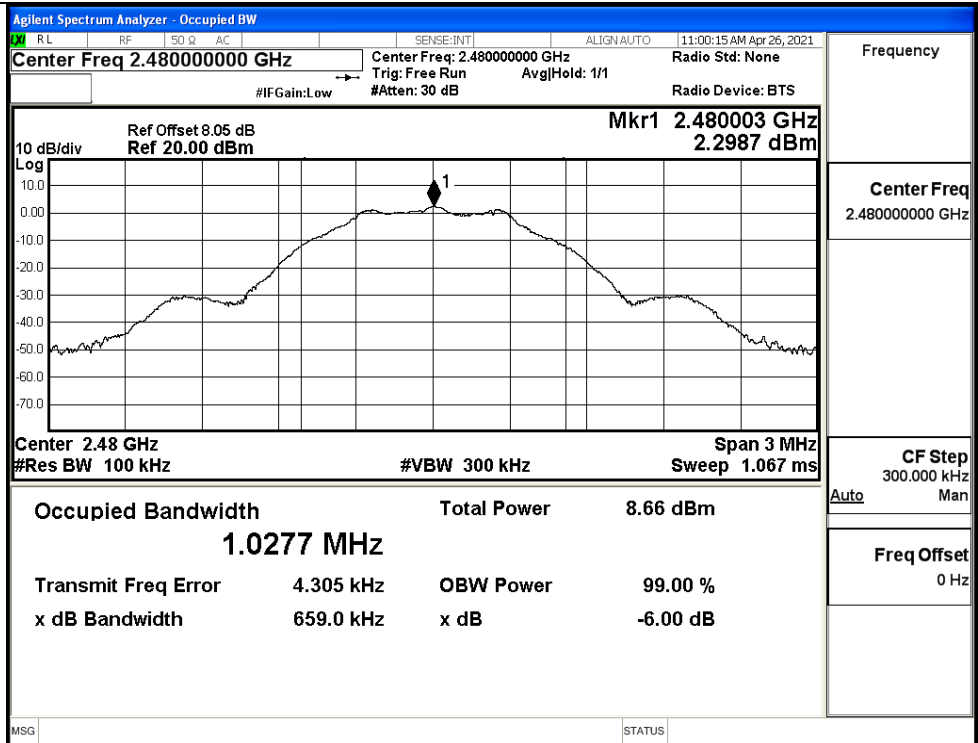
LCH



MCH



HCH

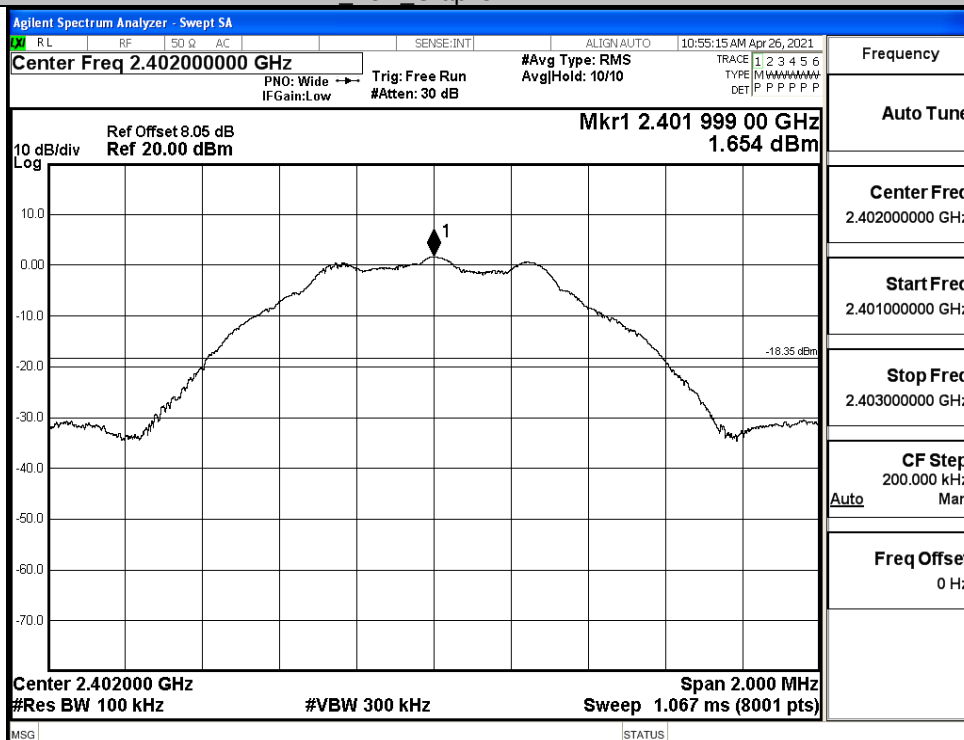


B.5 RF Conducted Spurious Emissions

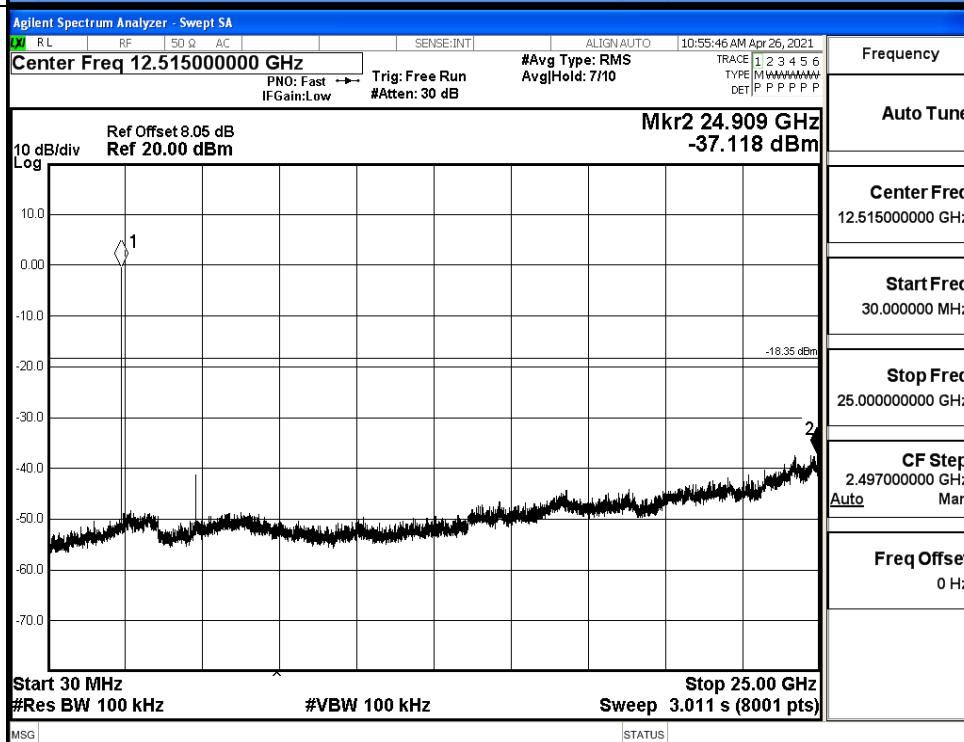
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.654	-37.118	-18.346	PASS
BT LE	MCH	2.368	-37.411	-17.632	PASS
BT LE	HCH	2.229	-37.162	-17.771	PASS

BT LE LCH Graphs

Pref/BT LE/LCH

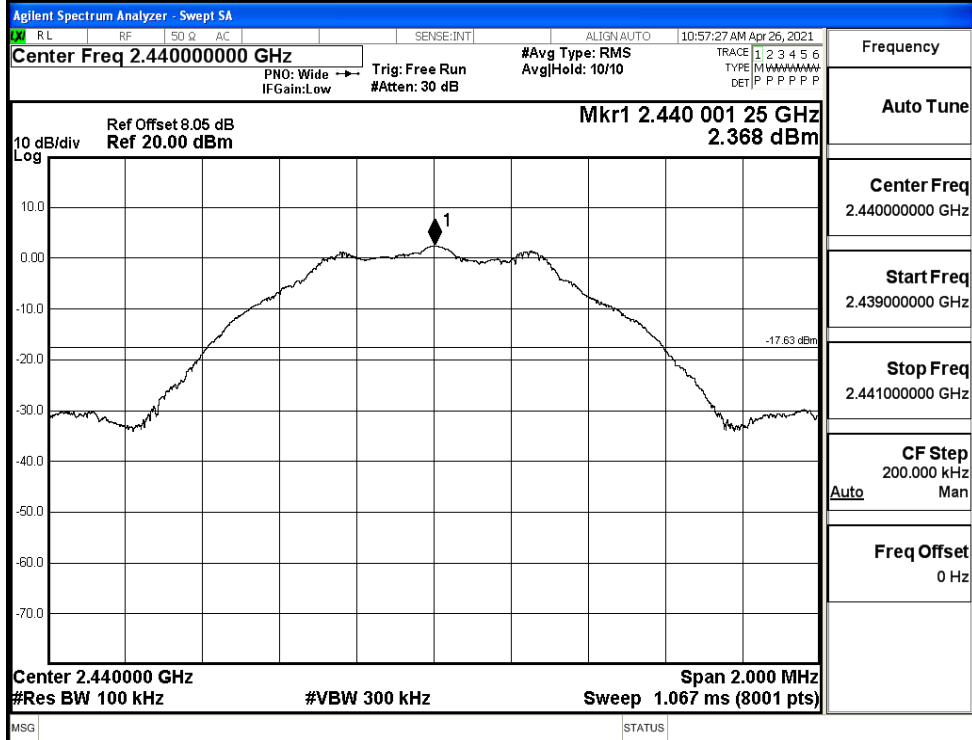


Puw/BT LE/LCH

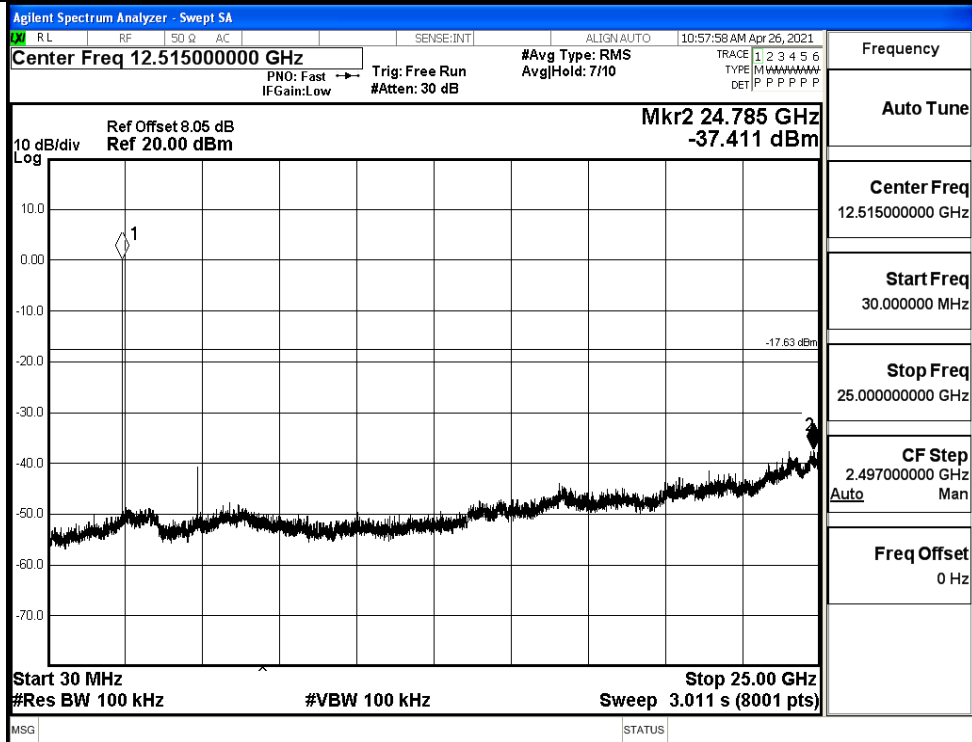


BT LE MCH Graphs

Pref/BT LE/MCH

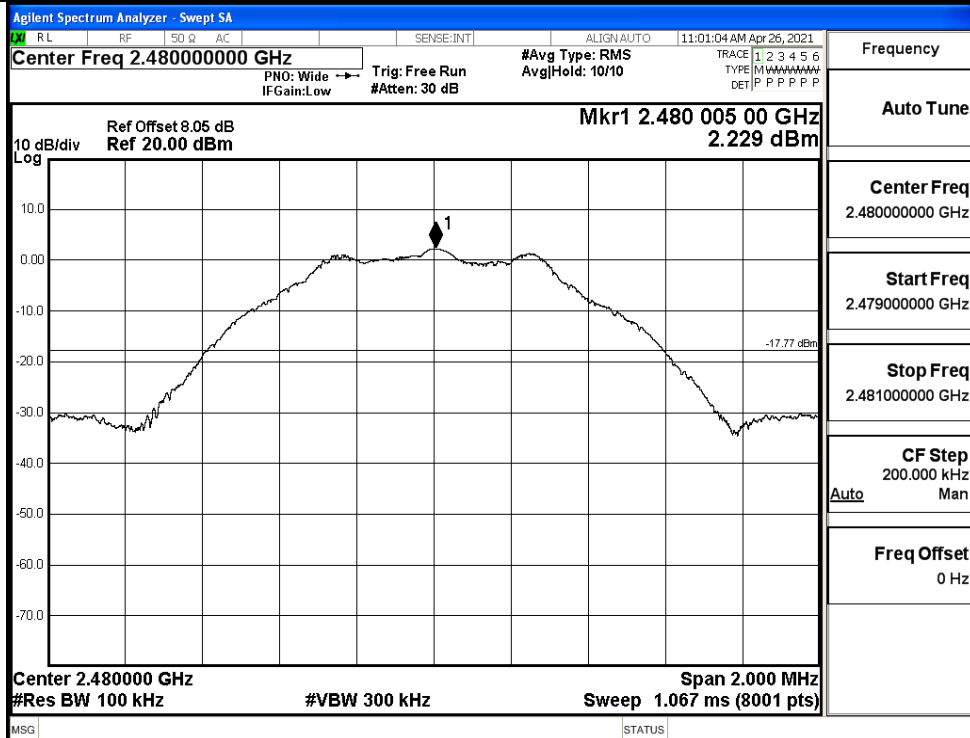


Puw/BT LE/MCH

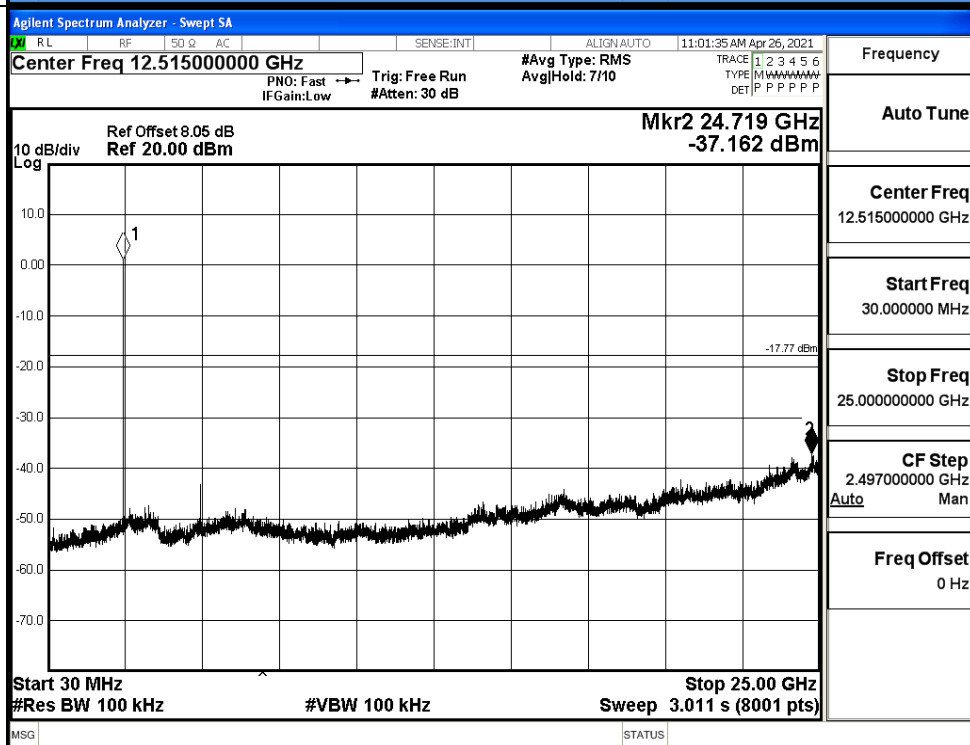


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

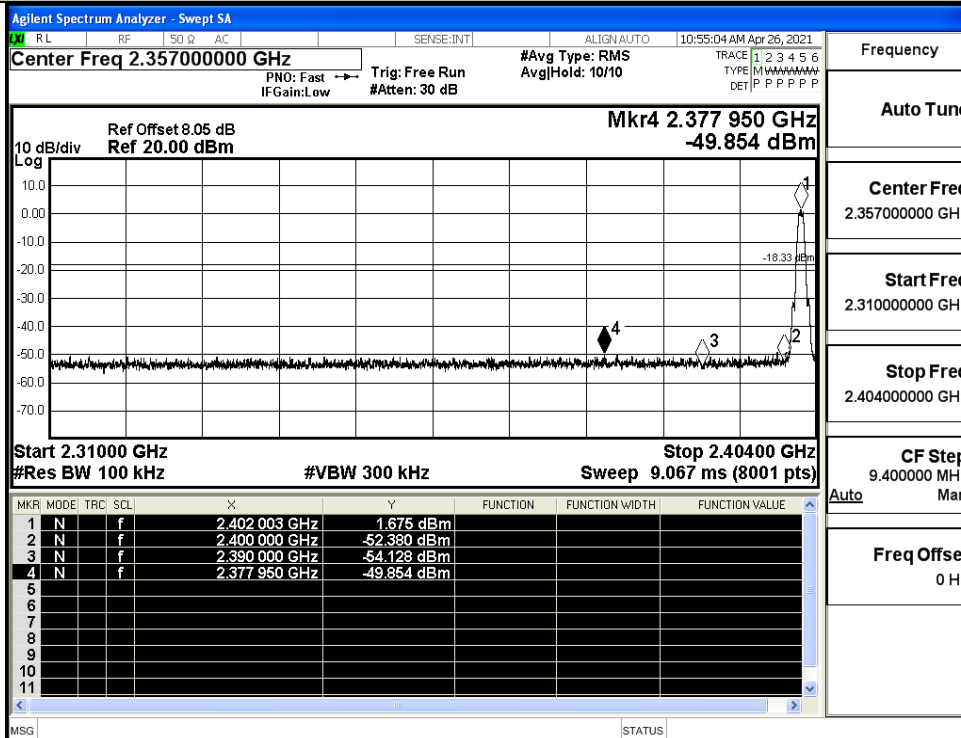


B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.675	-49.854	-18.33	PASS
BT LE	HCH	2.351	-49.137	-17.65	PASS

Test Graphs

LCH

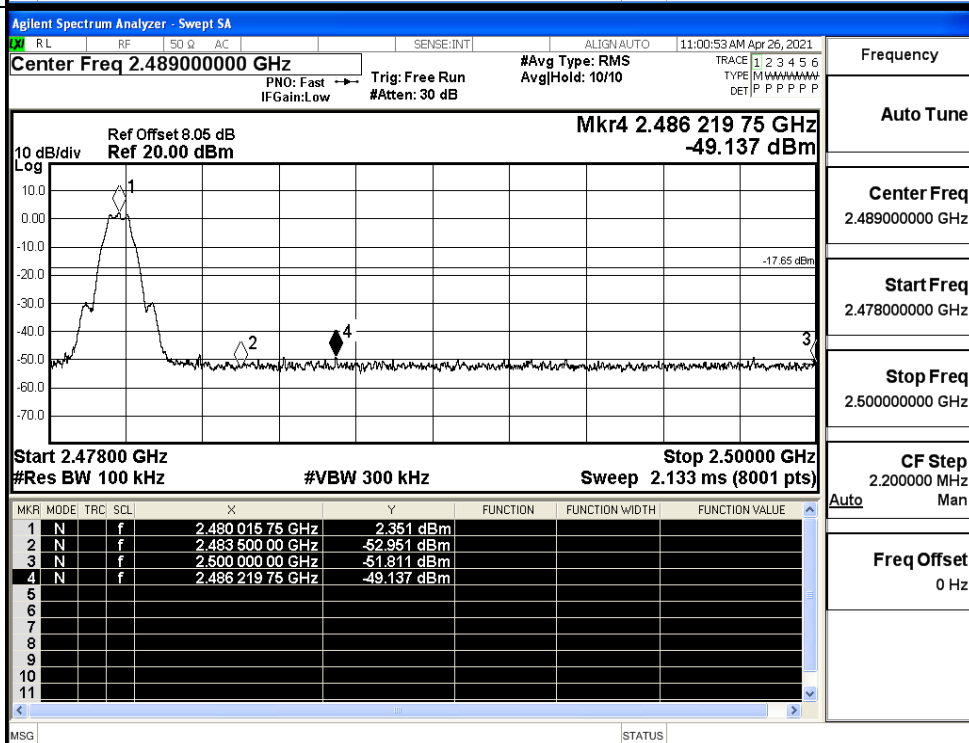


Frequency

Auto Tune

Center Freq
2.357000000 GHzStart Freq
2.310000000 GHzStop Freq
2.404000000 GHzCF Step
9.400000 MHz
Auto ManFreq Offset
0 Hz

HCH



Frequency

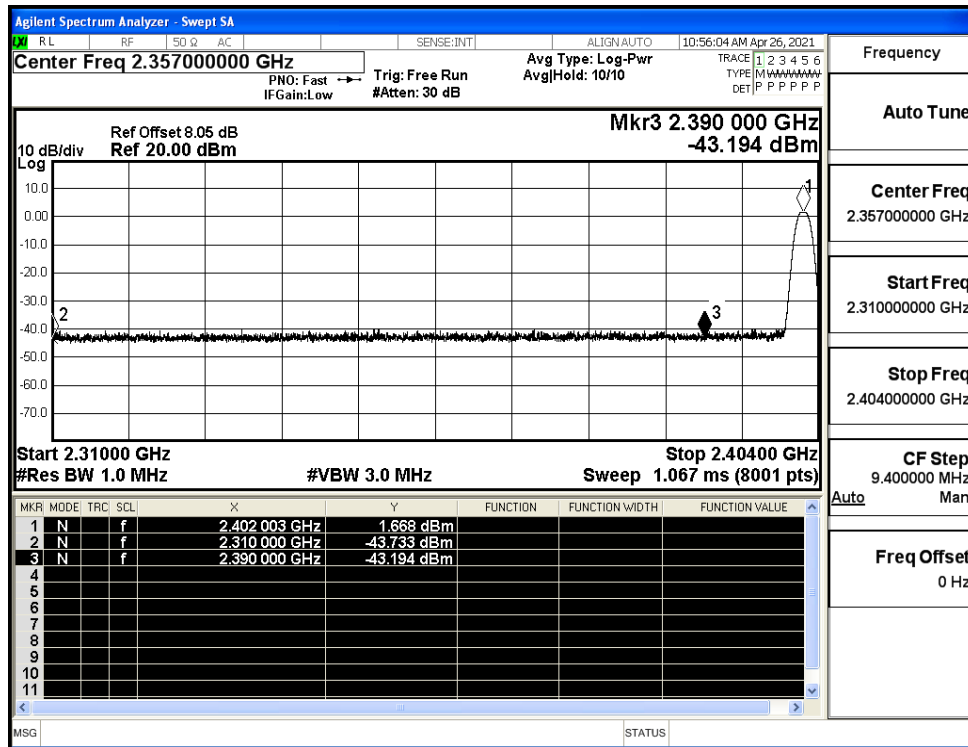
Auto Tune

Center Freq
2.489000000 GHzStart Freq
2.478000000 GHzStop Freq
2.500000000 GHzCF Step
2.200000 MHz
Auto ManFreq Offset
0 Hz

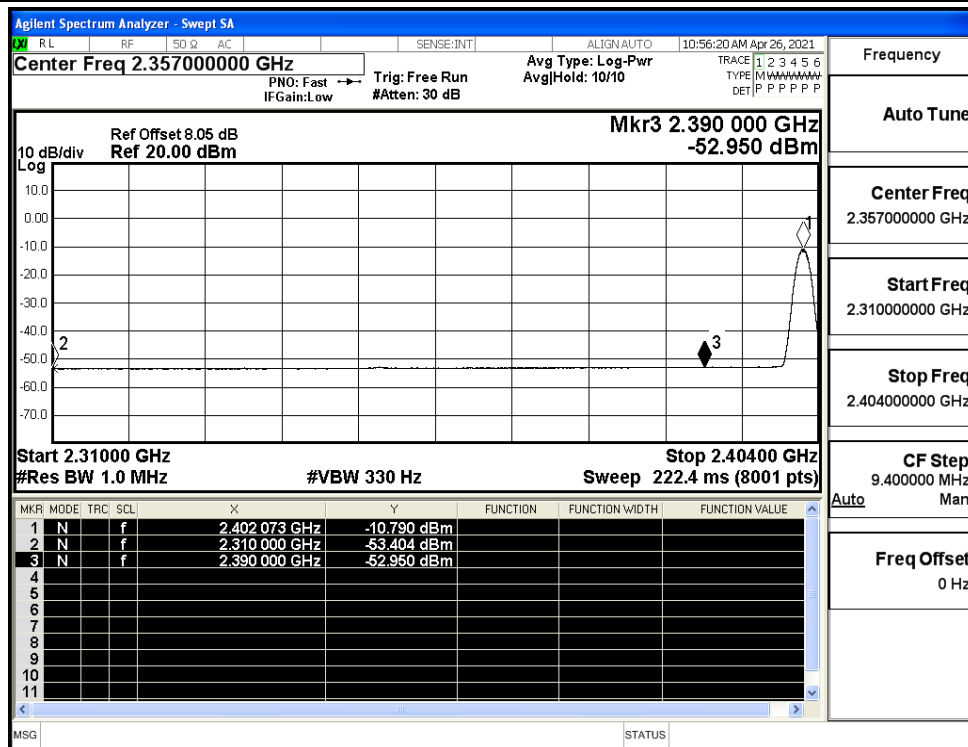
B.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdi
BT LE	2402	Ant1	2310.0	-43.73	2.0	0	51.52	PEAK	74	PASS
		Ant1	2310.0	-53.40	2.0	0	41.85	AV	54	PASS
		Ant1	2390.0	-43.19	2.0	0	52.06	PEAK	74	PASS
		Ant1	2390.0	-52.95	2.0	0	42.31	AV	54	PASS
	2480	Ant1	2483.5	-41.83	2.0	0	53.43	PEAK	74	PASS
		Ant1	2483.5	-52.34	2.0	0	42.91	AV	54	PASS
		Ant1	2500.0	-41.28	2.0	0	53.98	PEAK	74	PASS
		Ant1	2500.0	-52.31	2.0	0	42.94	AV	54	PASS

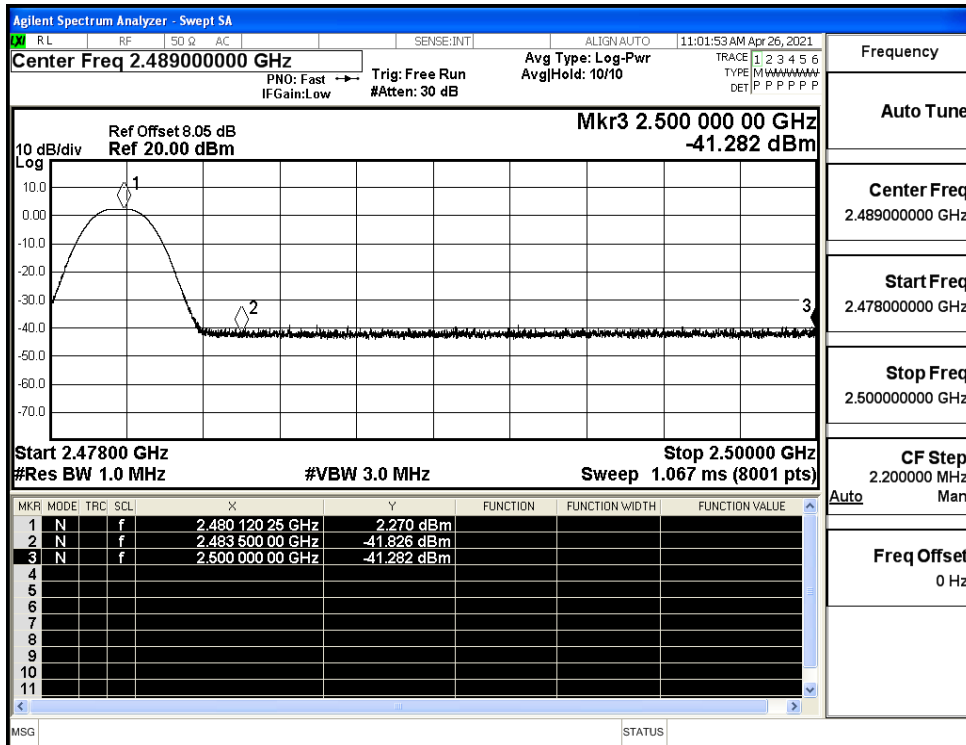
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



Restrict-band band-edge measurements_BT LE_2402_Ant1_AV



Restrict-band band-edge measurements_BT LE_2480_Ant1_PEAK



Restrict-band band-edge measurements_BT LE_2480_Ant1_AV

