

Appendix B

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

Product Name: Atmosic BLE module

Trade Mark: N/A

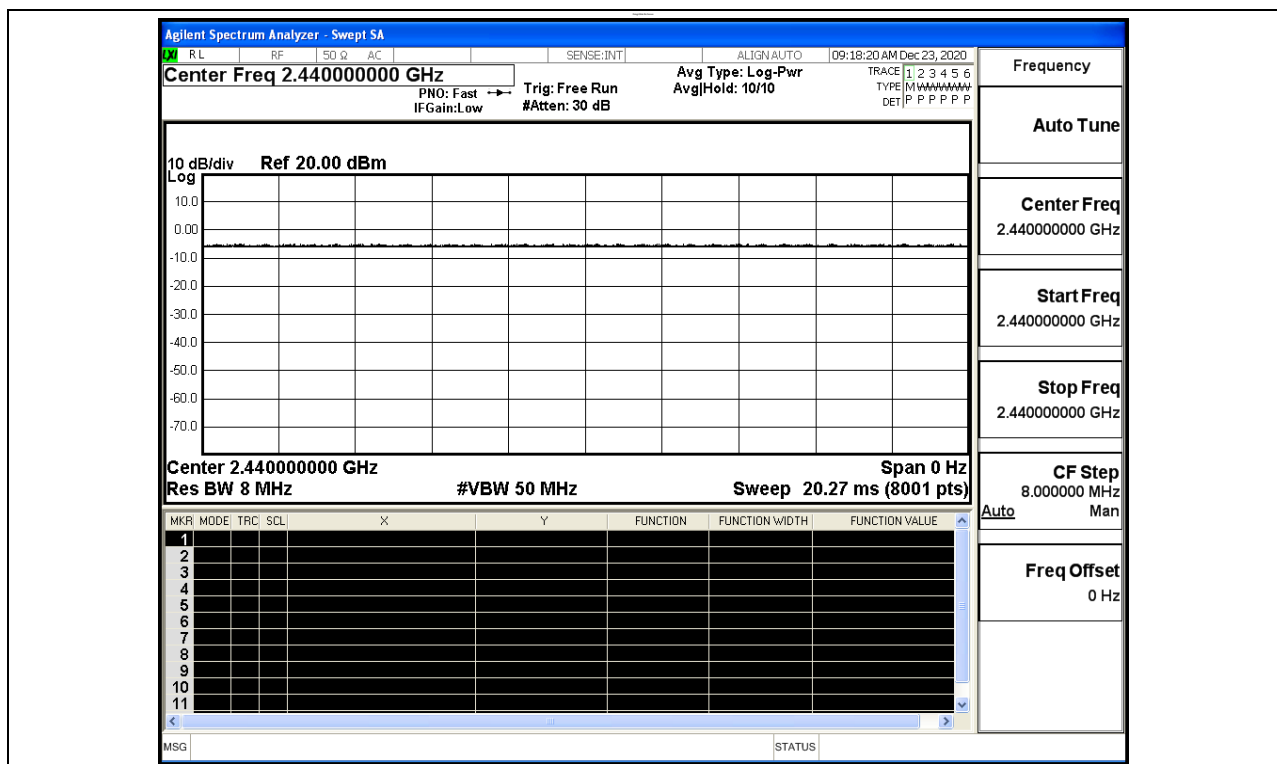
Test Model: GTI-ATM2022-1M

Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	53.6%
ATM Pressure:	101.0 kPa
Test Engineer:	Ken He
Supervised by:	Li Huan

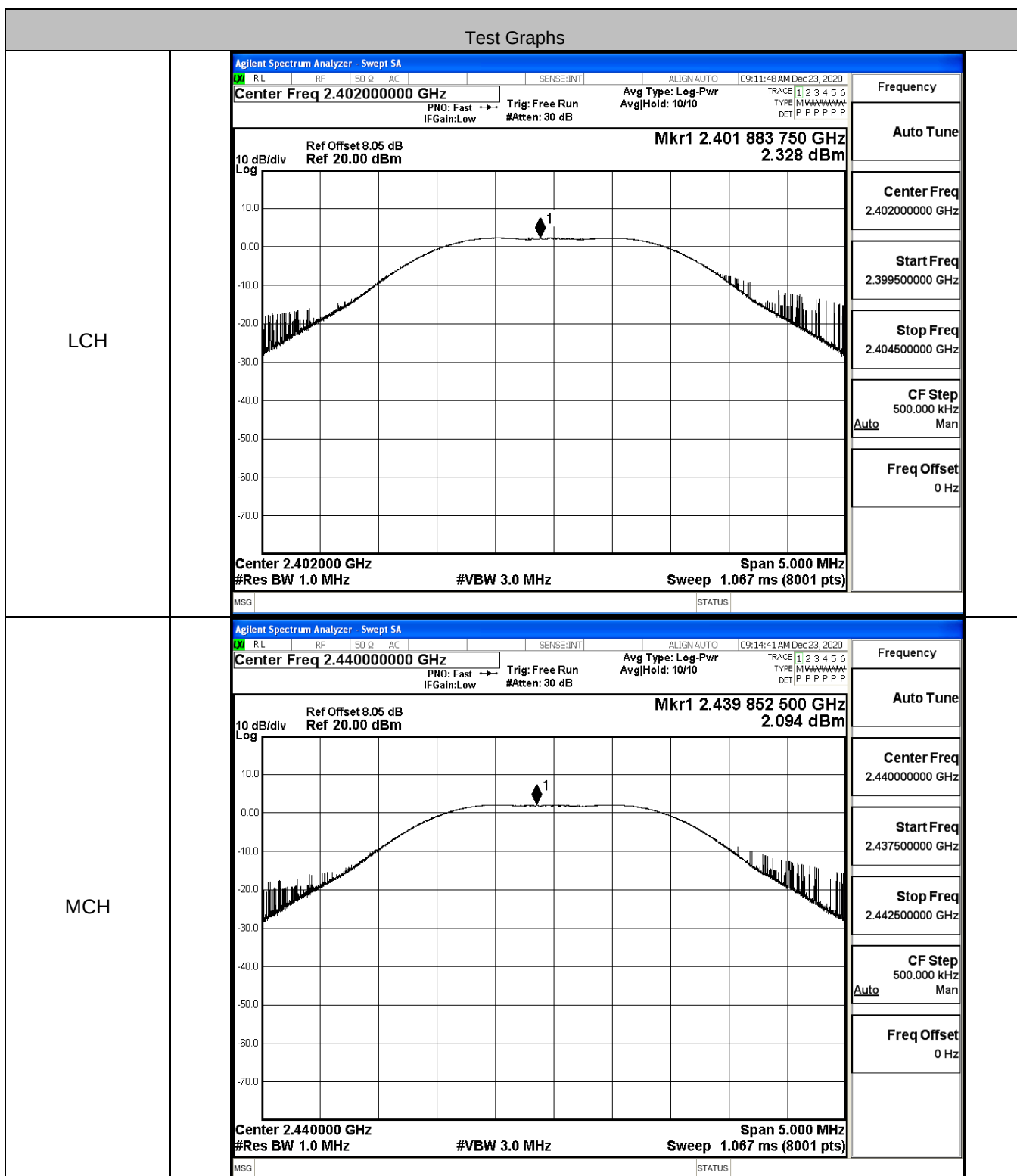
B.1 Duty Cycle

Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BT 2LE	2440	Ant1	100	PASS

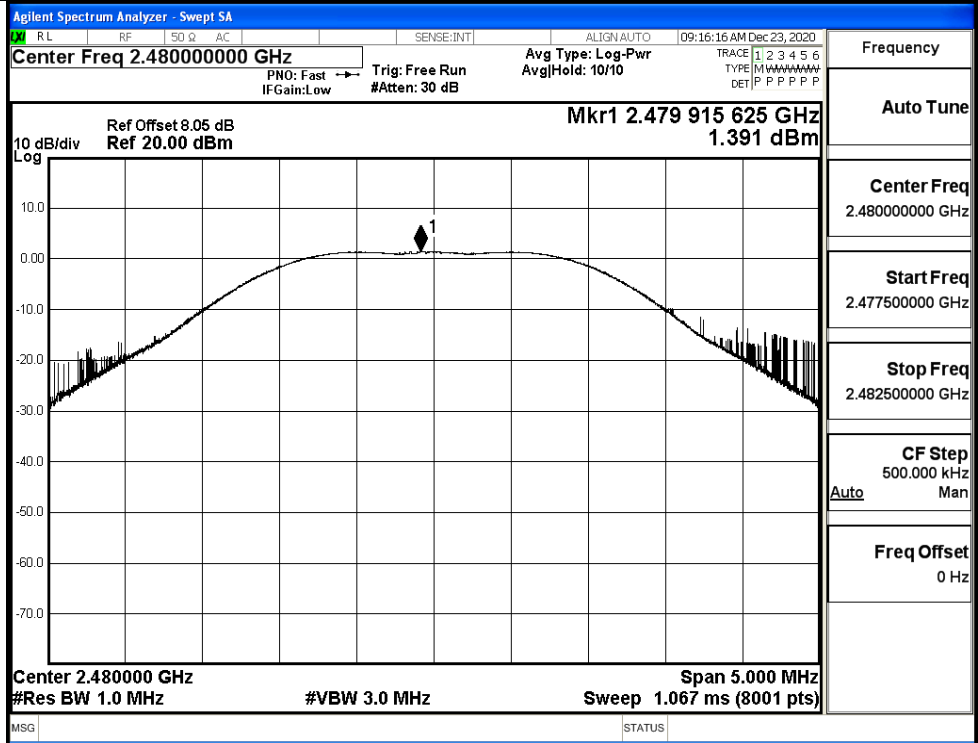


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT 2LE	LCH	2.328	30	PASS
BT 2LE	MCH	2.094	30	PASS
BT 2LE	HCH	1.391	30	PASS

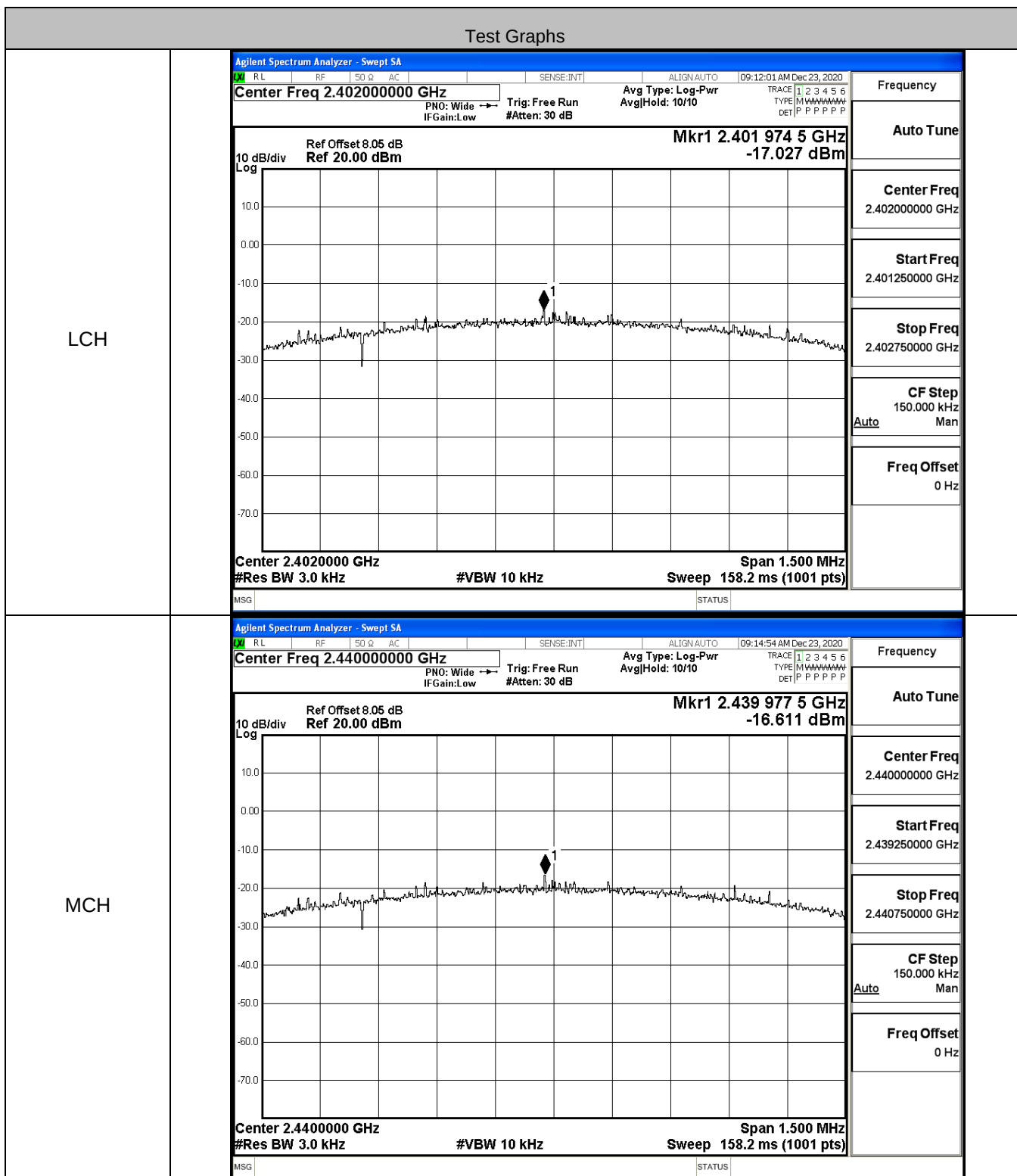


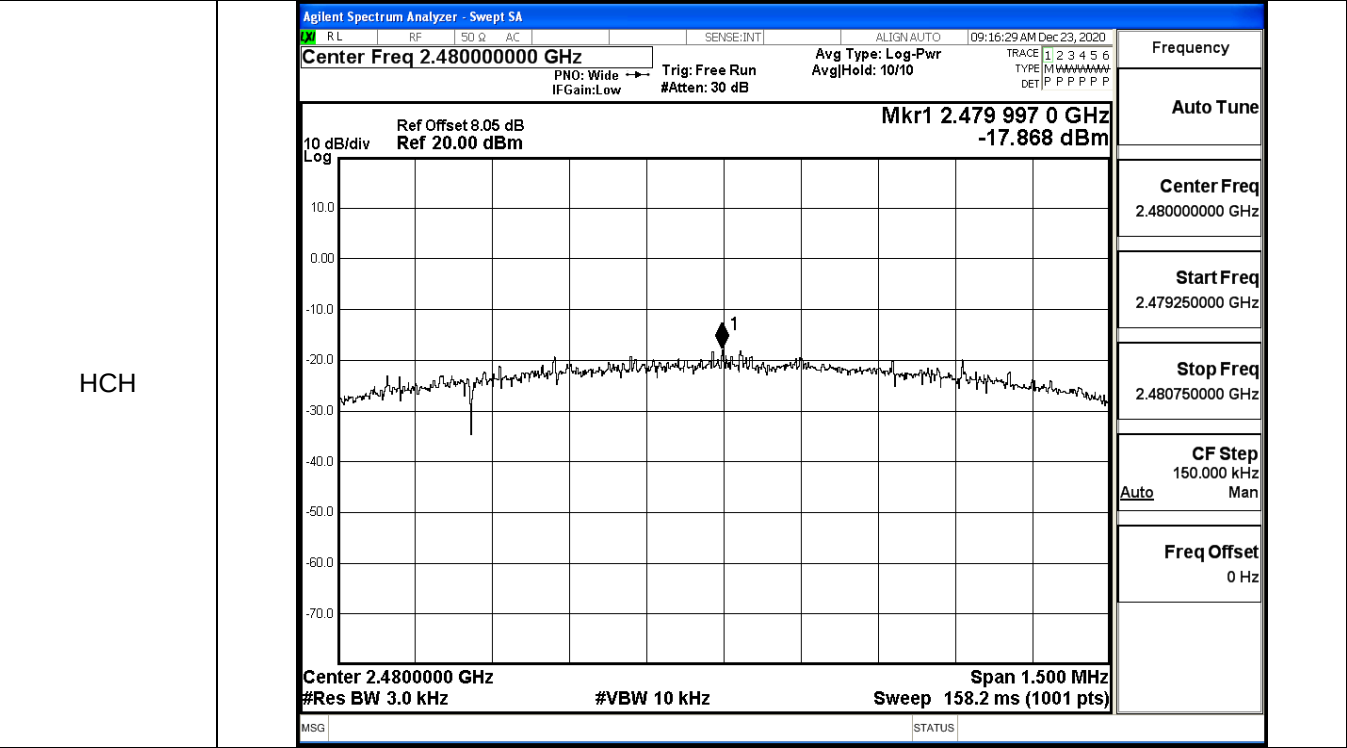
HCH



B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT 2LE	LCH	-17.027	8	PASS
BT 2LE	MCH	-16.611	8	PASS
BT 2LE	HCH	-17.868	8	PASS



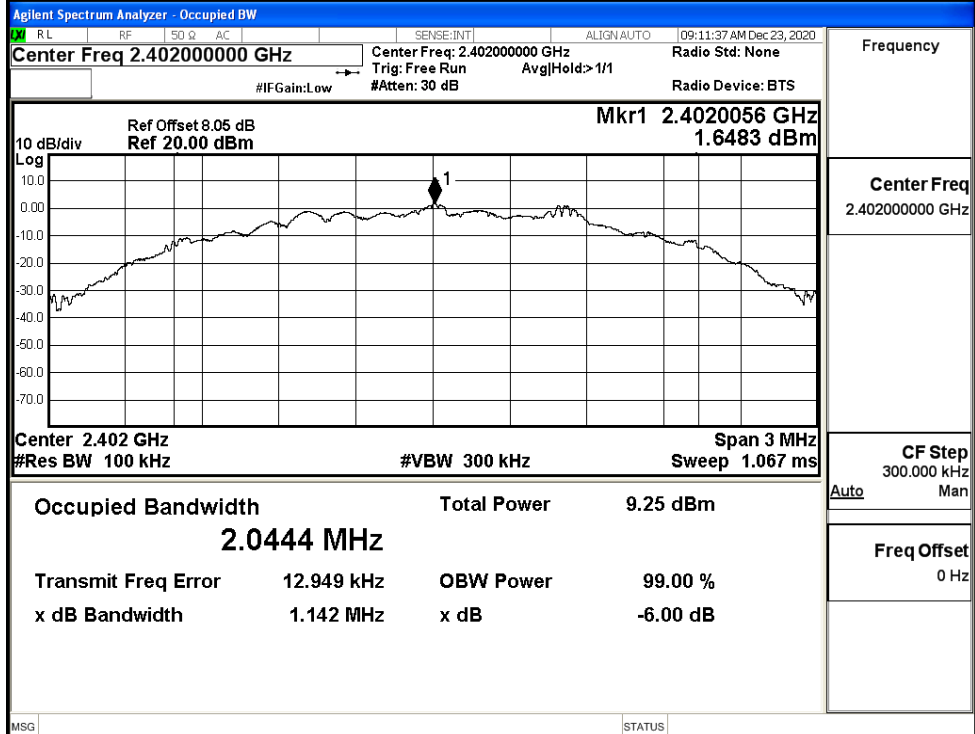


B.4 6dB Bandwidth

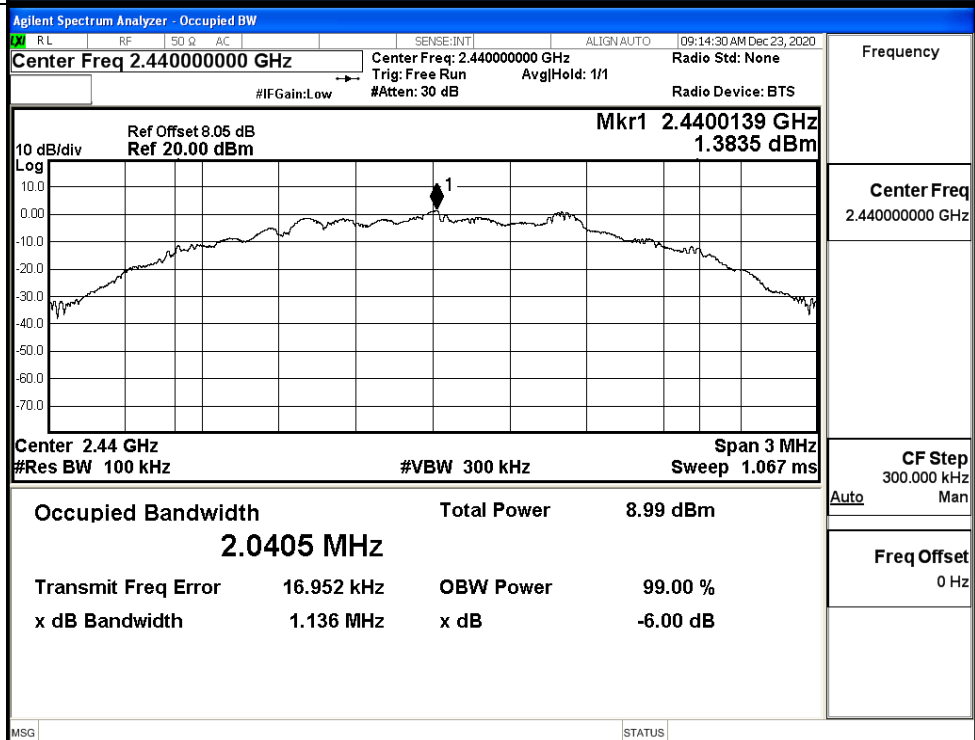
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT 2LE	LCH	1.142	≥ 0.5	PASS
BT 2LE	MCH	1.136	≥ 0.5	PASS
BT 2LE	HCH	1.140	≥ 0.5	PASS

Test Graphs

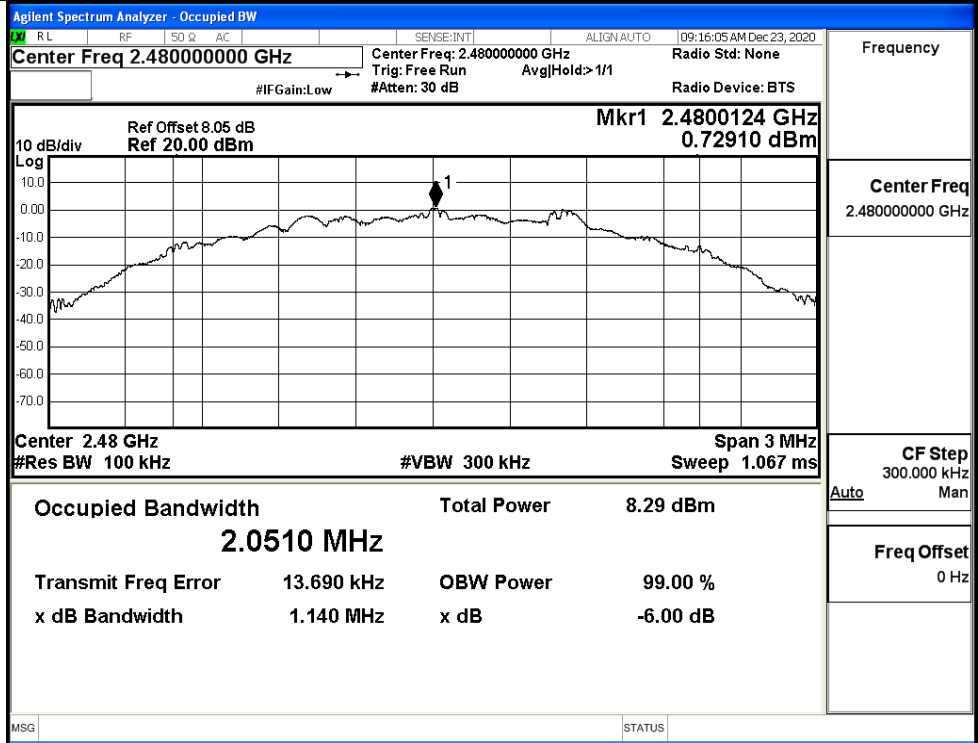
LCH



MCH

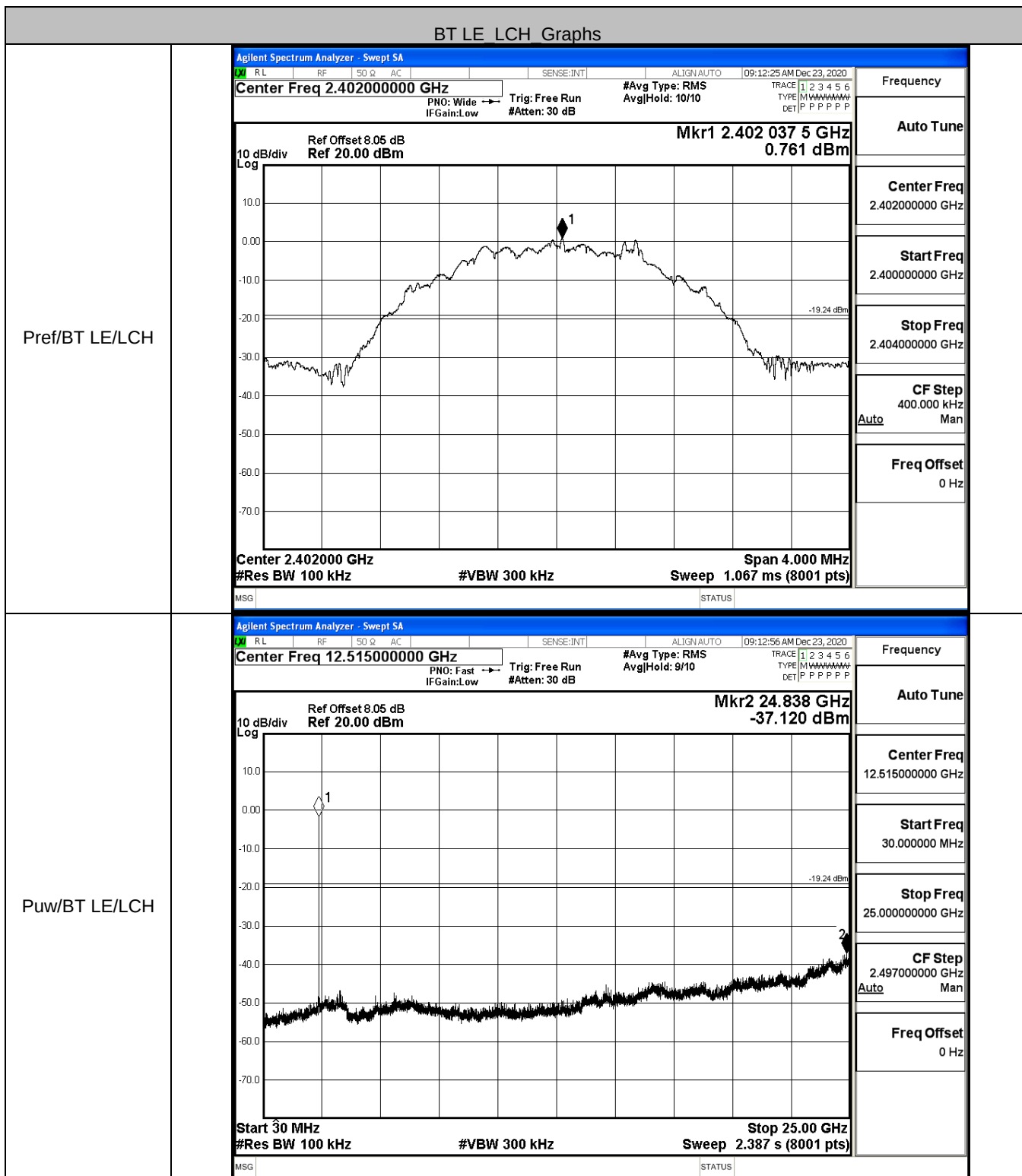


HCH



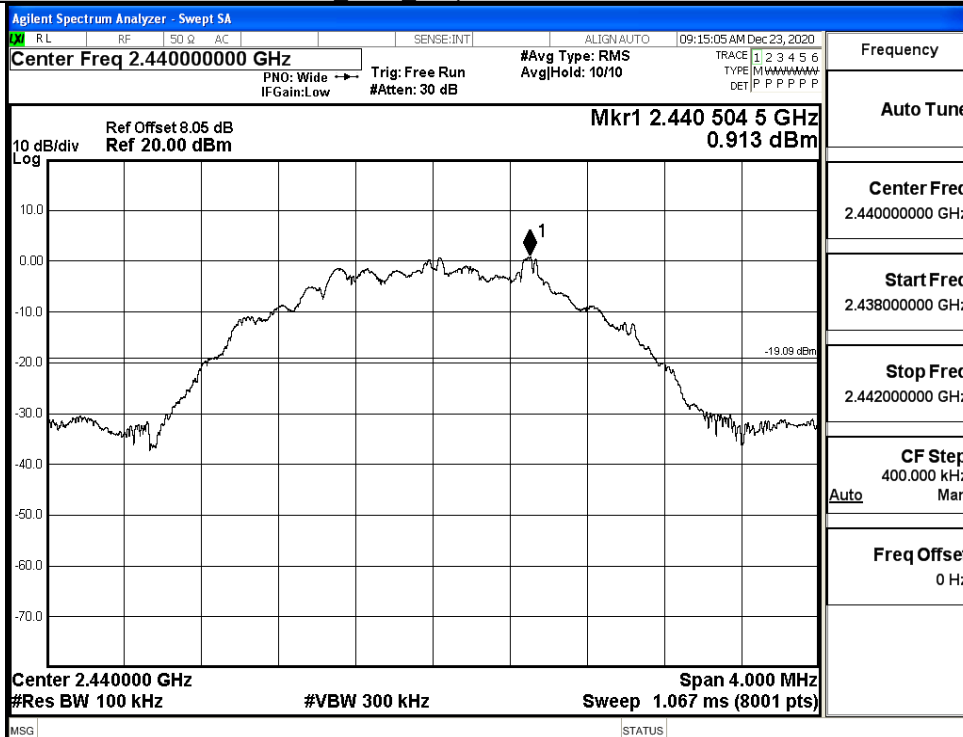
B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT 2LE	LCH	0.761	-37.120	-19.239	PASS
BT 2LE	MCH	0.913	-36.639	-19.087	PASS
BT 2LE	HCH	0.752	-37.205	-19.248	PASS

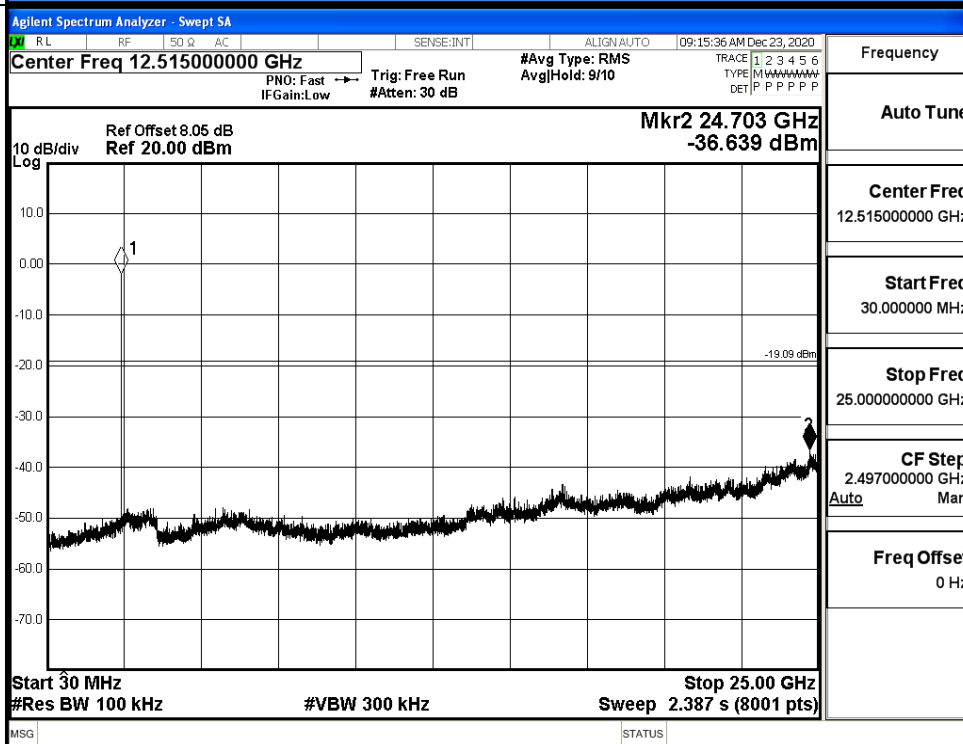


BT LE MCH Graphs

Pref/BT LE/MCH

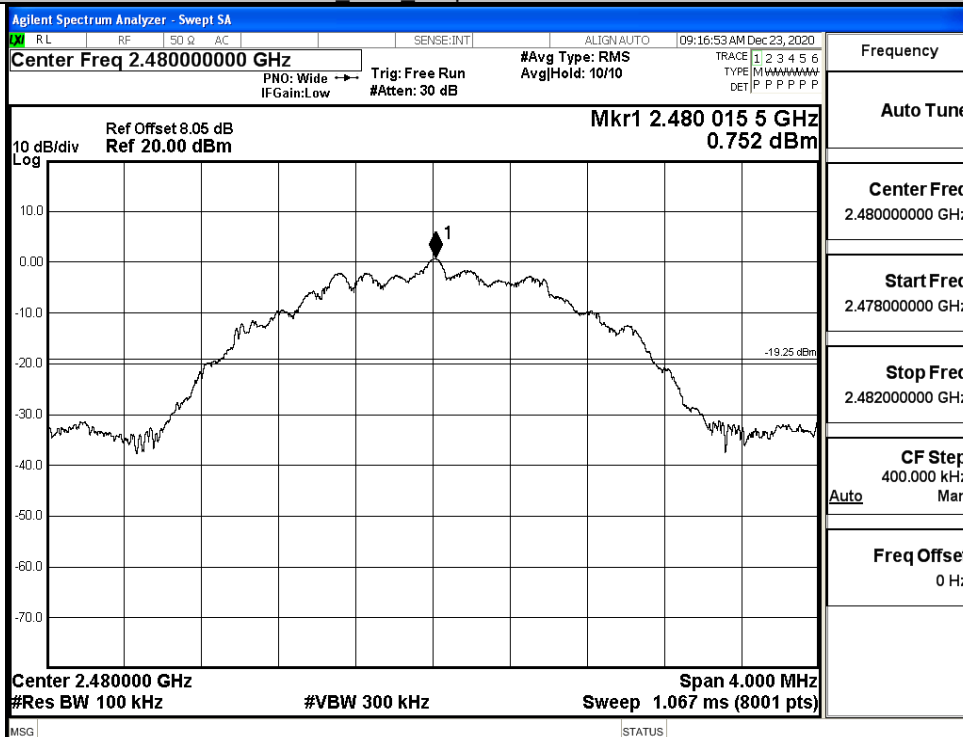


Puw/BT LE/MCH

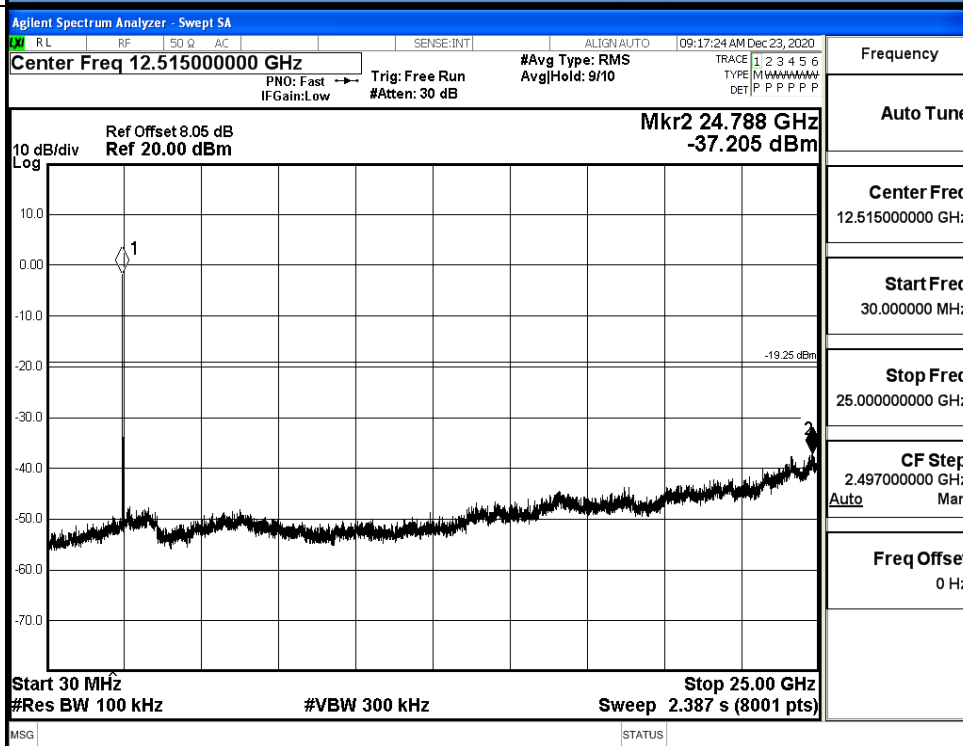


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

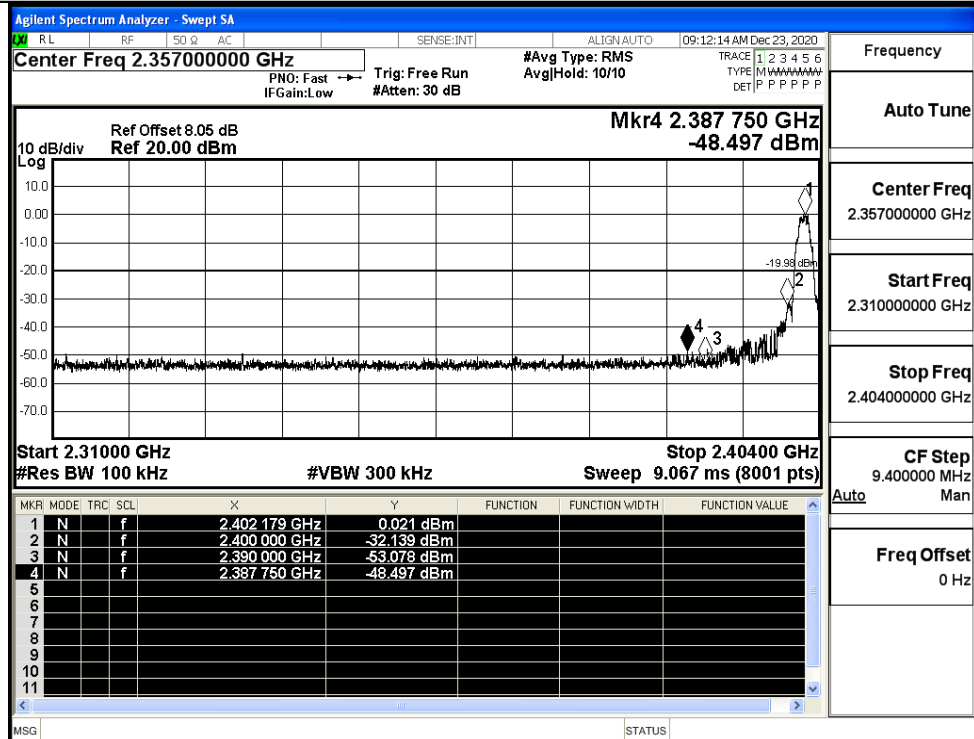


B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT 2LE	LCH	0.021	-48.497	-19.98	PASS
BT 2LE	HCH	0.913	-39.292	-19.09	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

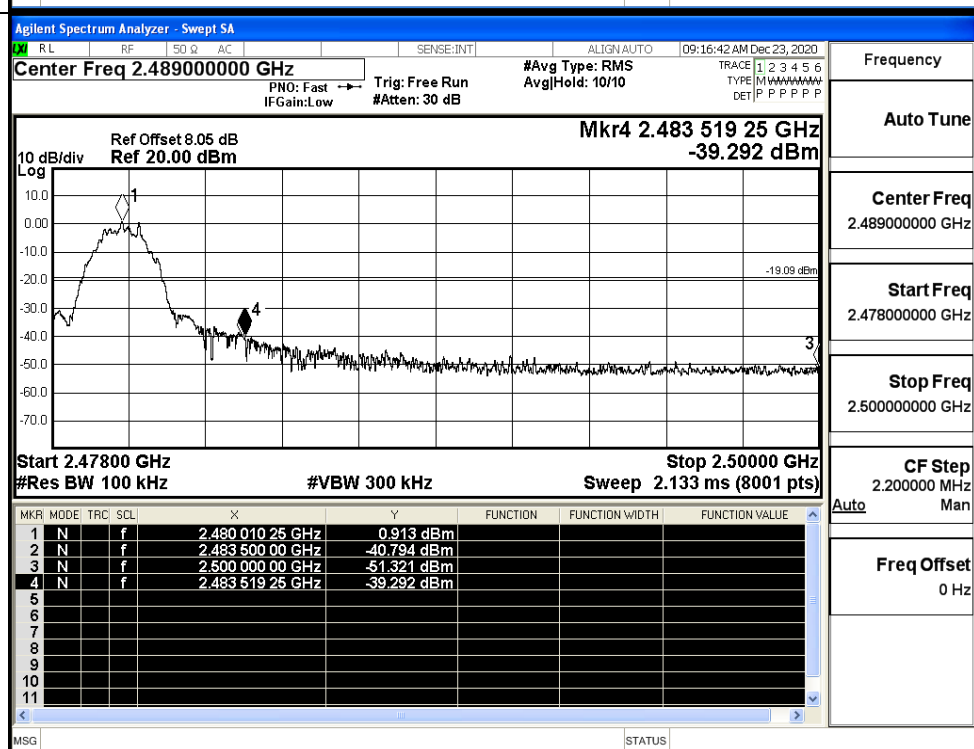
9.400000 MHz

Auto Man

Freq Offset

0 Hz

HCH



Frequency

Auto Tune

Center Freq

2.489000000 GHz

Start Freq

2.478000000 GHz

Stop Freq

2.500000000 GHz

CF Step

2.200000 MHz

Auto Man

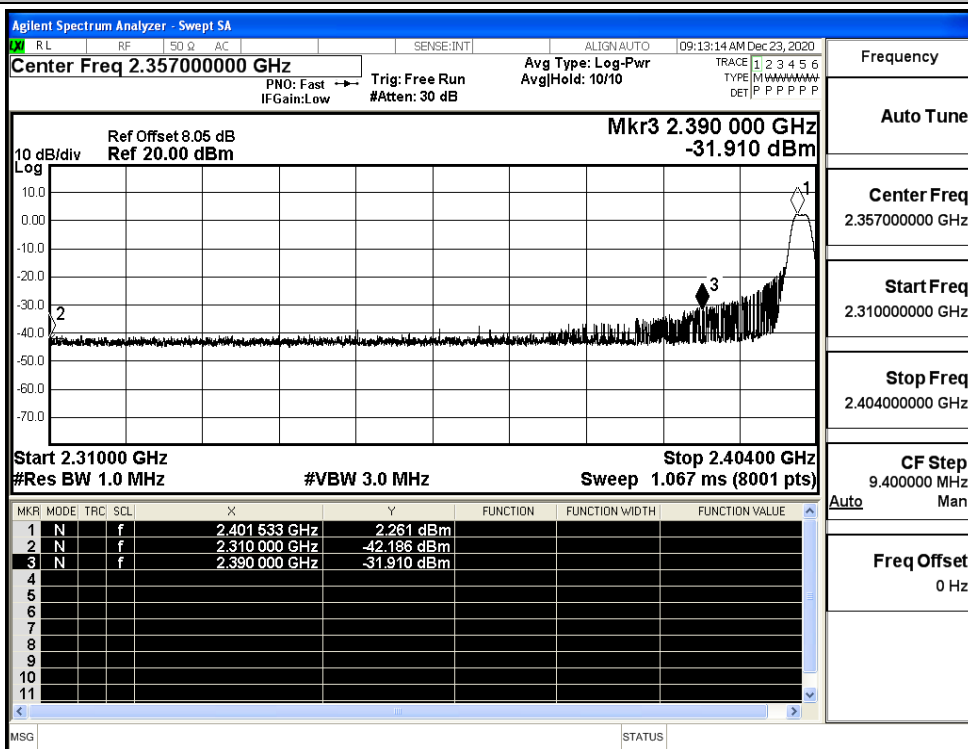
Freq Offset

0 Hz

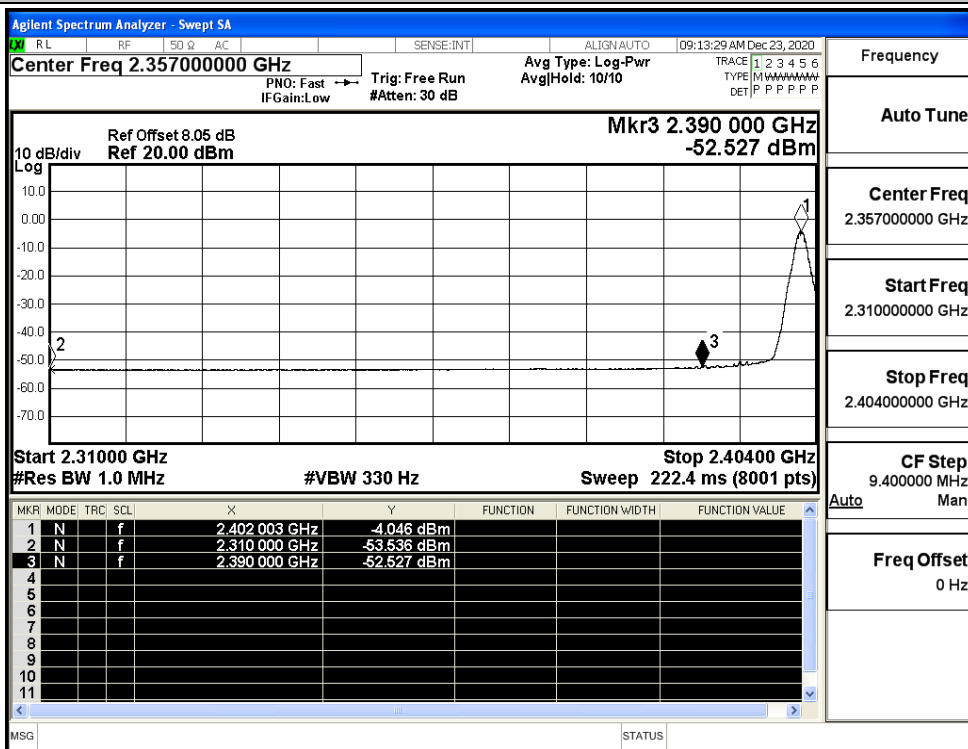
B.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdi
BT 2LE	2402	Ant1	2310.0	-42.19	2.0	0	55.04	PEAK	74	PASS
		Ant1	2310.0	-53.54	2.0	0	43.69	AV	54	PASS
		Ant1	2390.0	-31.91	2.0	0	65.32	PEAK	74	PASS
		Ant1	2390.0	-52.53	2.0	0	44.7	AV	54	PASS
	2480	Ant1	2483.5	-21.56	2.0	0	75.67	PEAK	74	PASS
		Ant1	2483.5	-49.46	2.0	0	47.77	AV	54	PASS
		Ant1	2500.0	-42.68	2.0	0	54.55	PEAK	74	PASS
		Ant1	2500.0	-52.40	2.0	0	44.83	AV	54	PASS

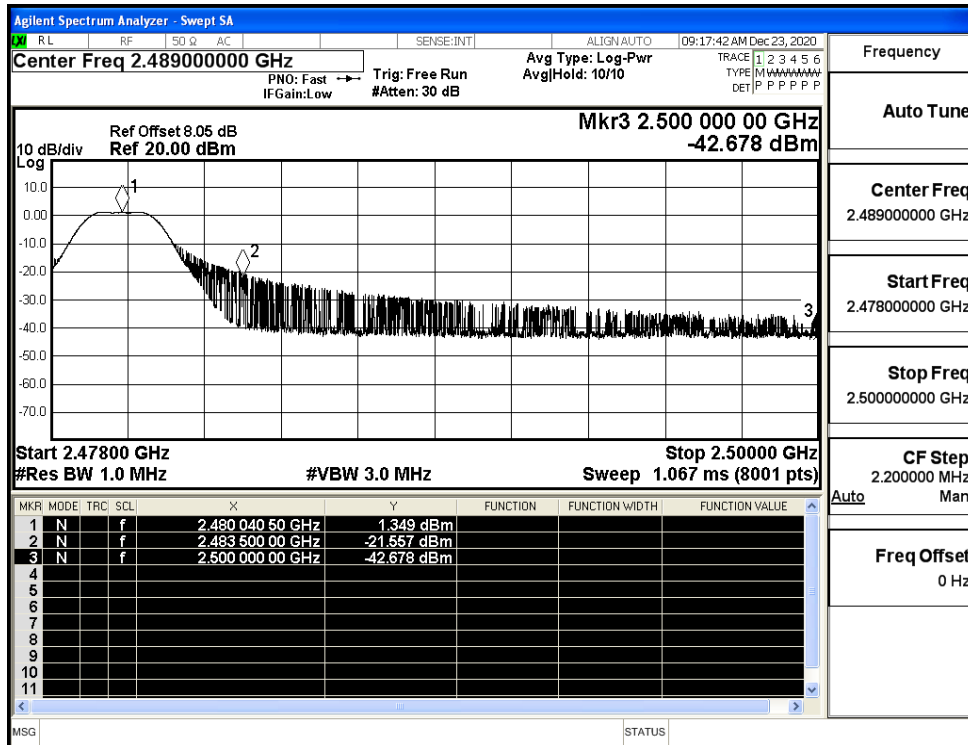
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

