

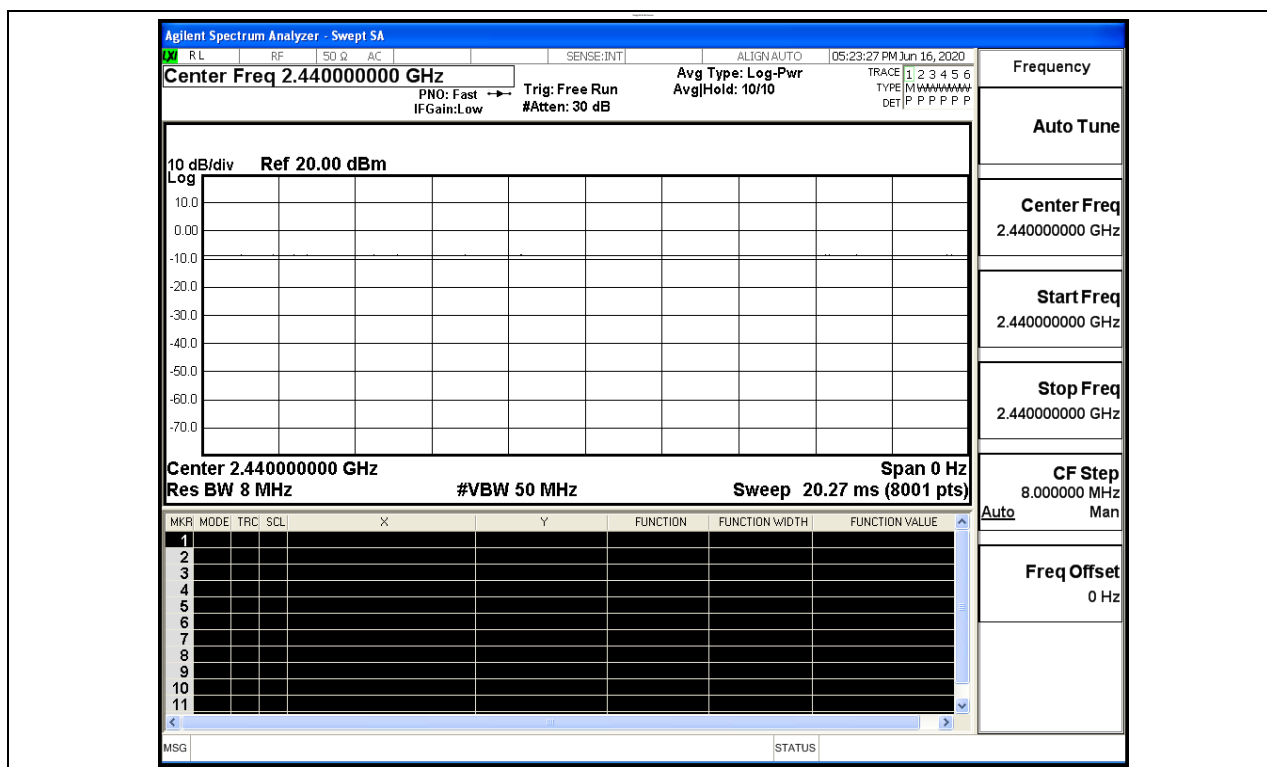
Appendix A
RF Test Data for BT V4.2(BLE) (Conducted Measurement)
Product Name: BABI Smart Cushion
Trade Mark: BABI
Test Model: BSC1001

Environmental Conditions

Temperature:	22.5 ° C
Relative Humidity:	52.8%
ATM Pressure:	100.0 kPa
Test Engineer:	Scout Wu
Supervised by:	Li Huan

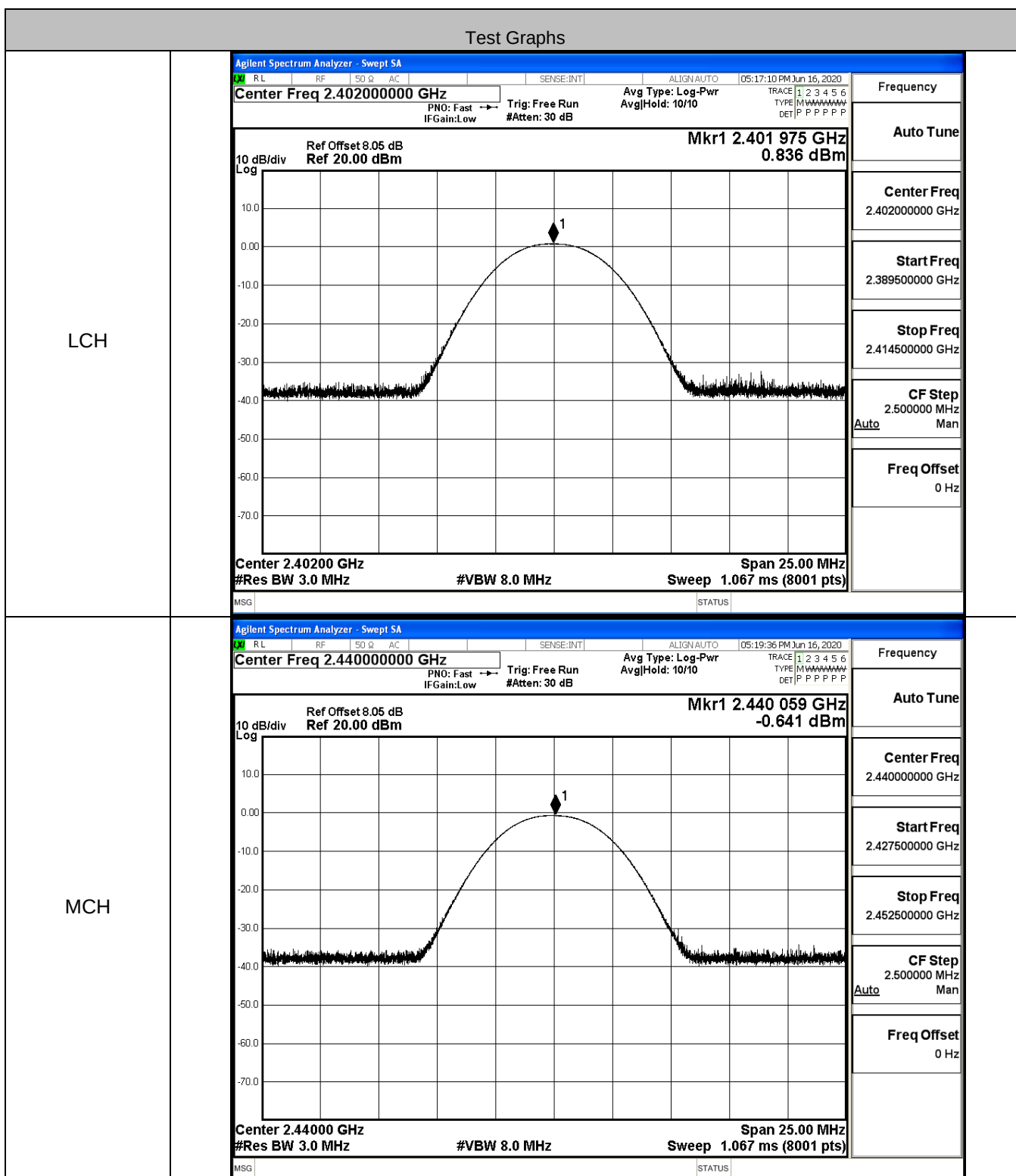
A.1 Duty Cycle

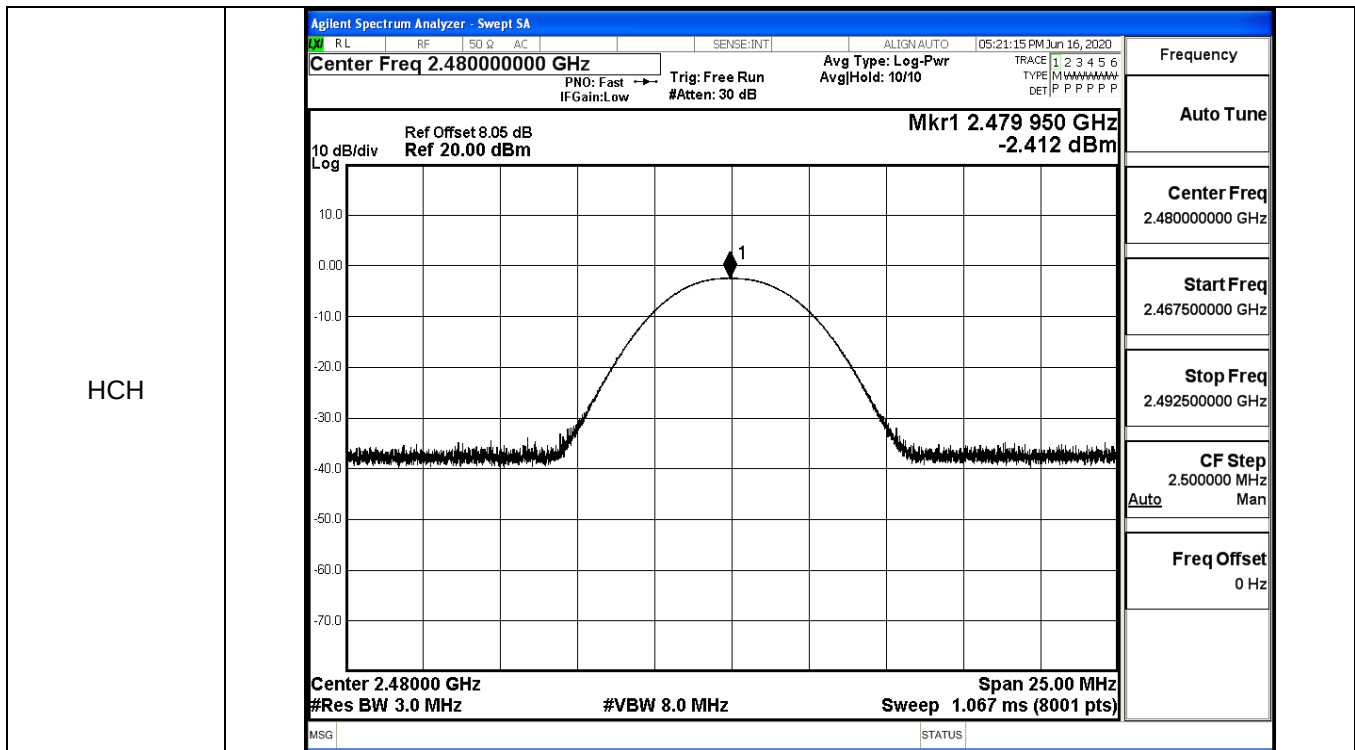
Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
BT LE	2440	Ant1	100	PASS



A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.836	30	PASS
BT LE	MCH	-0.641	30	PASS
BT LE	HCH	-2.412	30	PASS



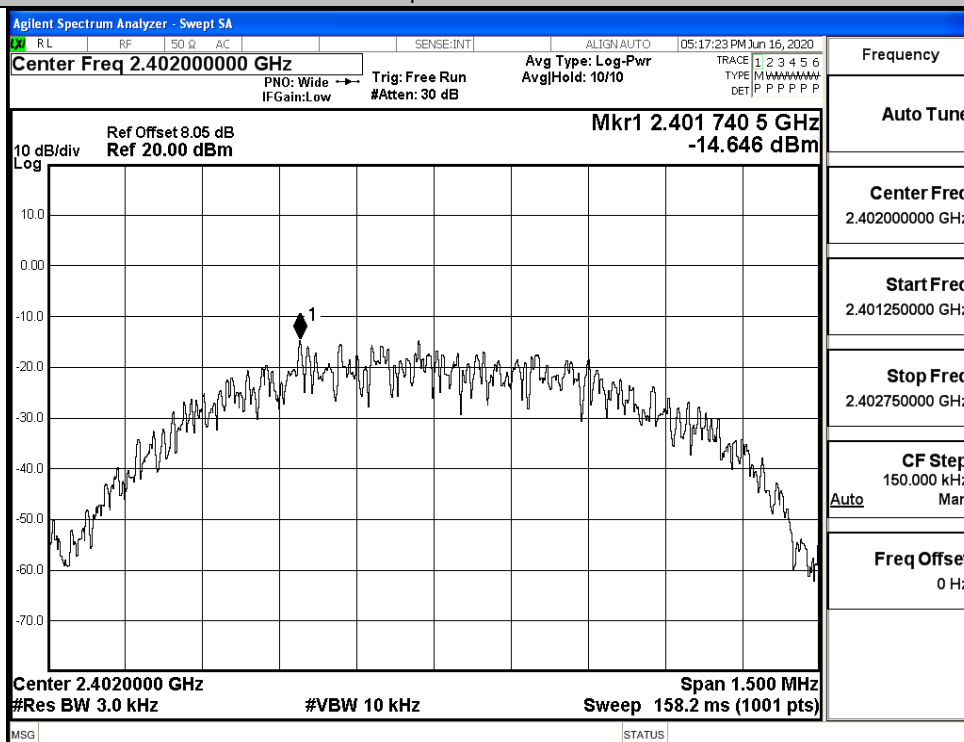


A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-14.646	8	PASS
BT LE	MCH	-16.002	8	PASS
BT LE	HCH	-17.856	8	PASS

Test Graphs

LCH

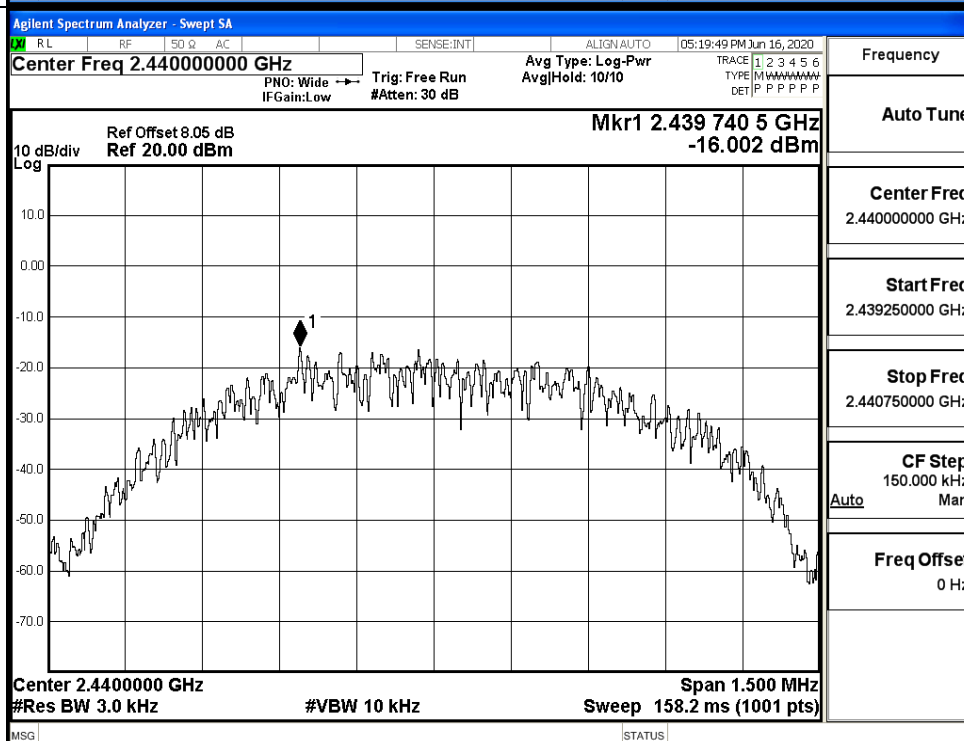


Frequency

Auto Tune

Center Freq
2.402000000 GHzStart Freq
2.401250000 GHzStop Freq
2.402750000 GHzCF Step
150.000 kHz
Auto ManFreq Offset
0 Hz

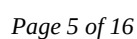
MCH



Frequency

Auto Tune

Center Freq
2.440000000 GHzStart Freq
2.439250000 GHzStop Freq
2.440750000 GHzCF Step
150.000 kHz
Auto ManFreq Offset
0 Hz

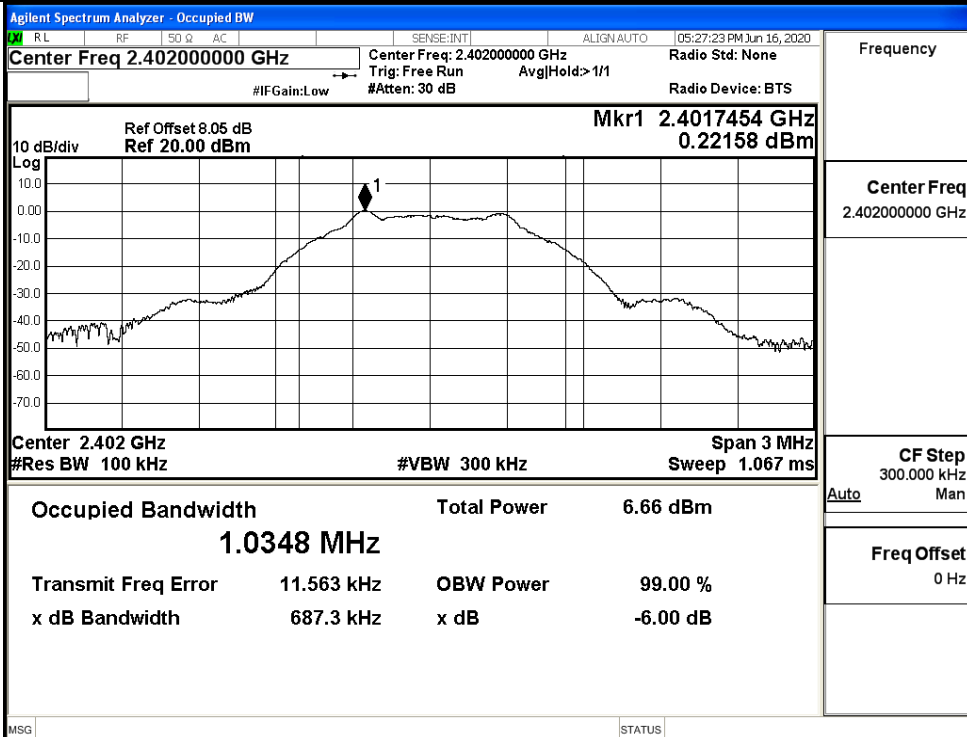


A.4 6dB Bandwidth

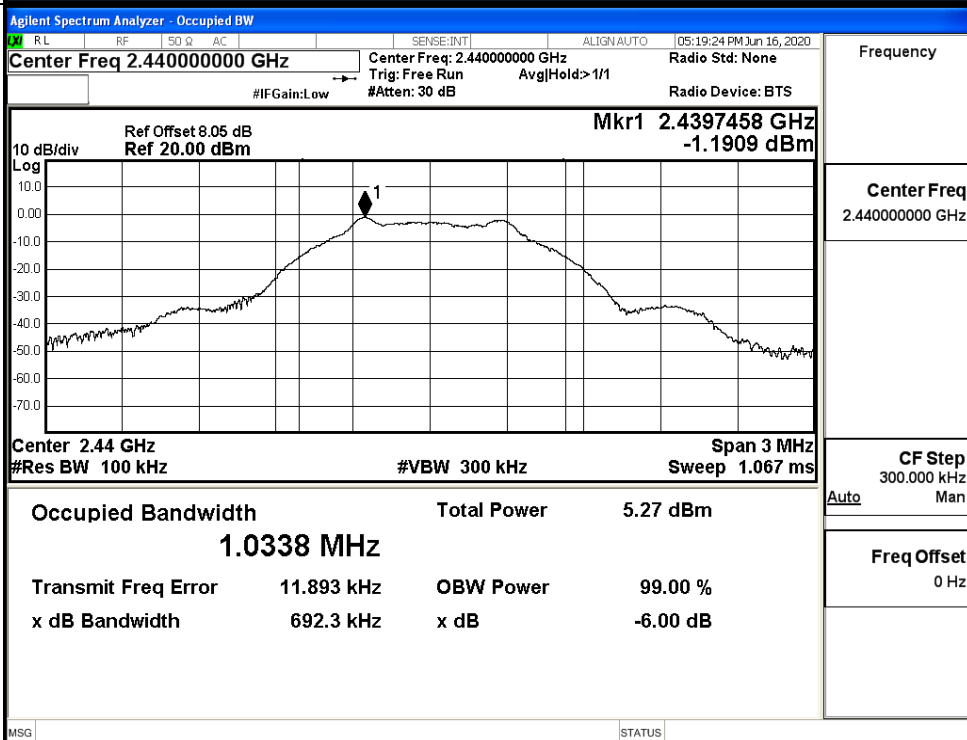
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6873	≥ 0.5	PASS
BT LE	MCH	0.6923	≥ 0.5	PASS
BT LE	HCH	0.6903	≥ 0.5	PASS

Test Graphs

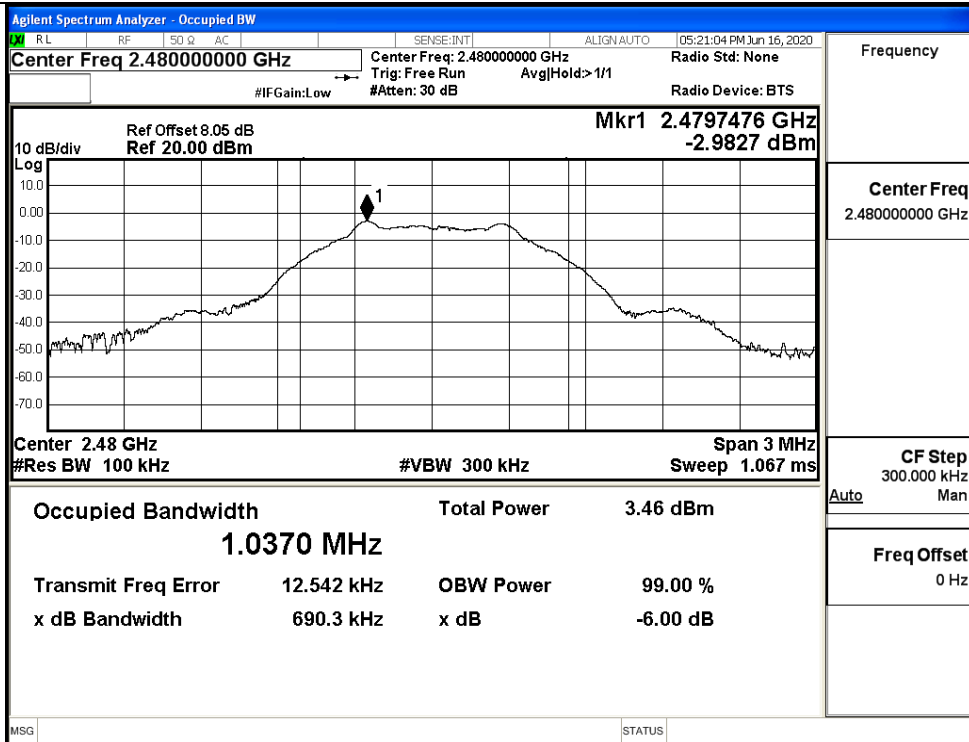
LCH



MCH



HCH

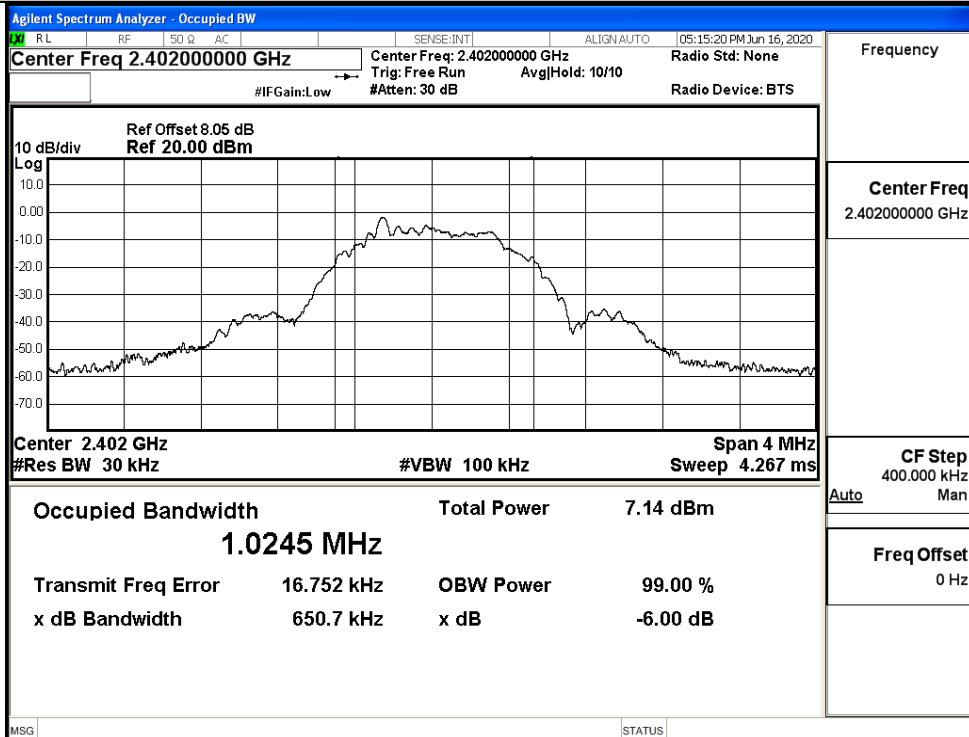


A.5 Occupied Bandwidth

Mode	Channel	Occupied Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	1.0245	≥ 0.5	PASS
BT LE	MCH	1.0236	≥ 0.5	PASS
BT LE	HCH	1.0247	≥ 0.5	PASS

Test Graphs

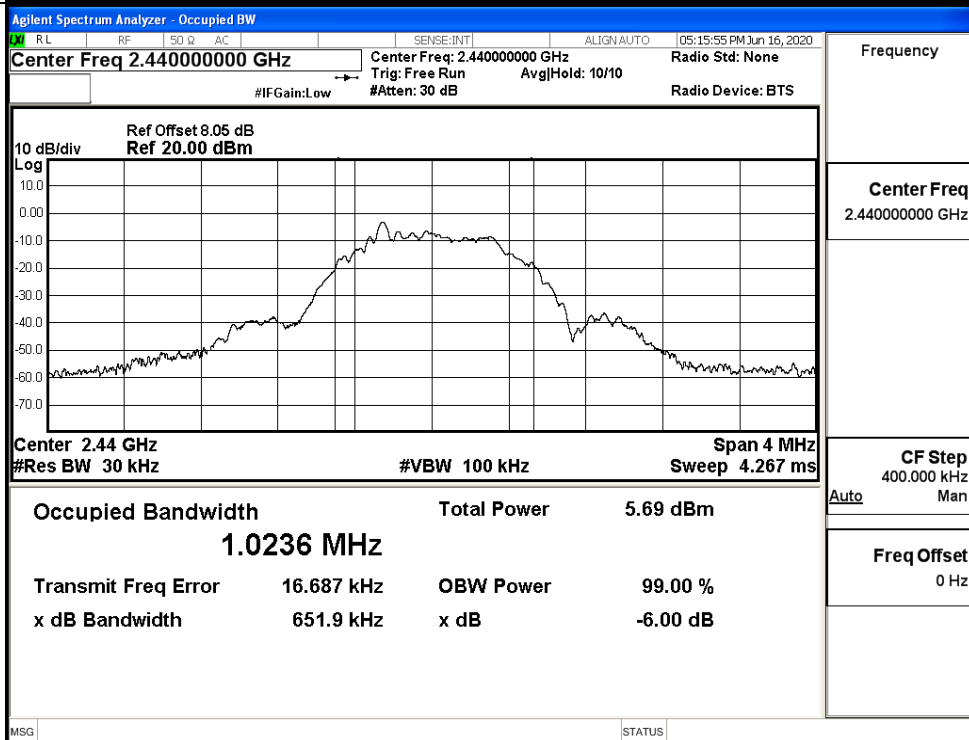
LCH



Frequency

Center Freq
2.402000000 GHzCF Step
400.000 kHz
Auto ManFreq Offset
0 Hz

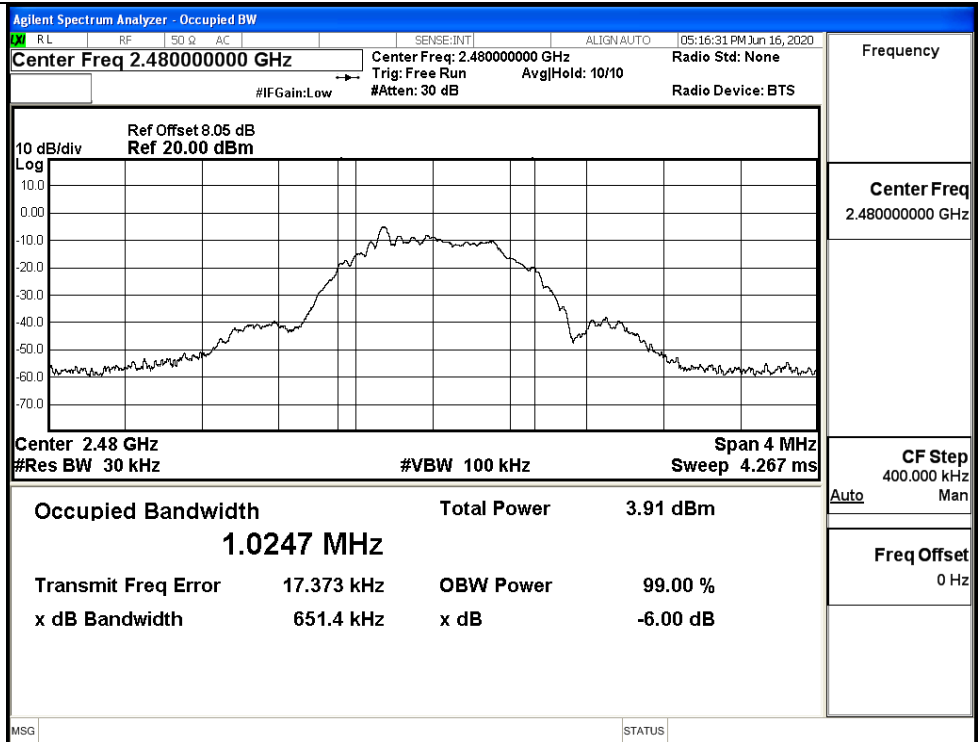
MCH



Frequency

Center Freq
2.440000000 GHzCF Step
400.000 kHz
Auto ManFreq Offset
0 Hz

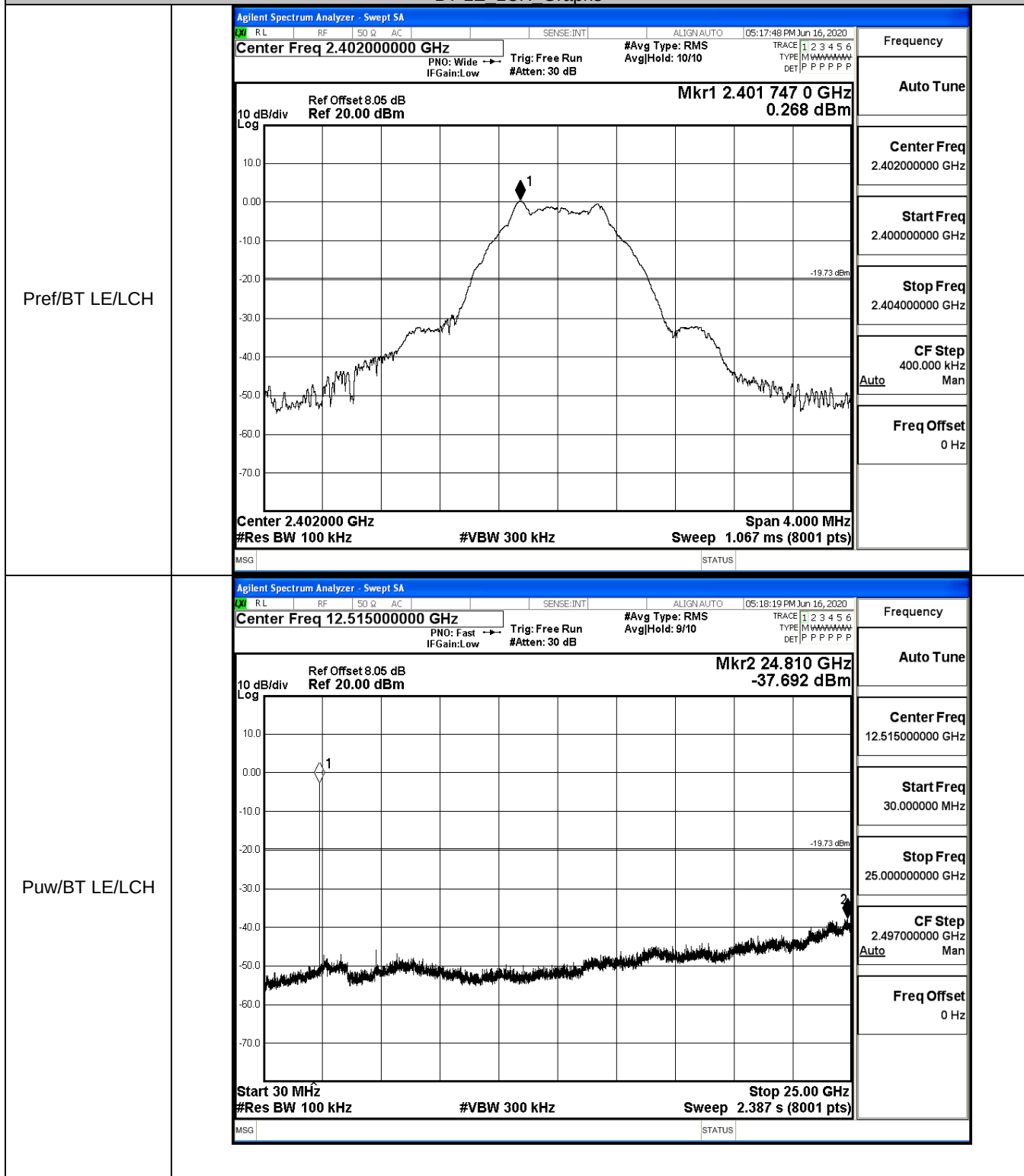
HCH



A.6 RF Conducted Spurious Emissions

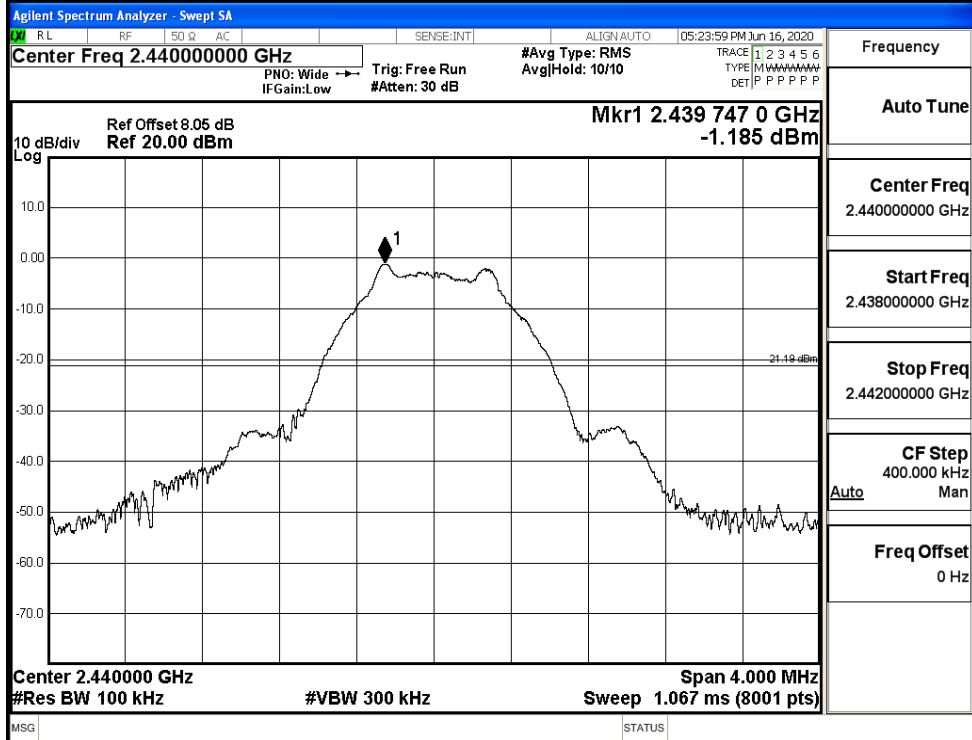
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.268	-37.692	-19.732	PASS
BT LE	MCH	-1.185	-36.885	-21.185	PASS
BT LE	HCH	-2.961	-37.502	-22.961	PASS

BT LE LCH Graphs



BT LE MCH Graphs

Pref/BT LE/MCH

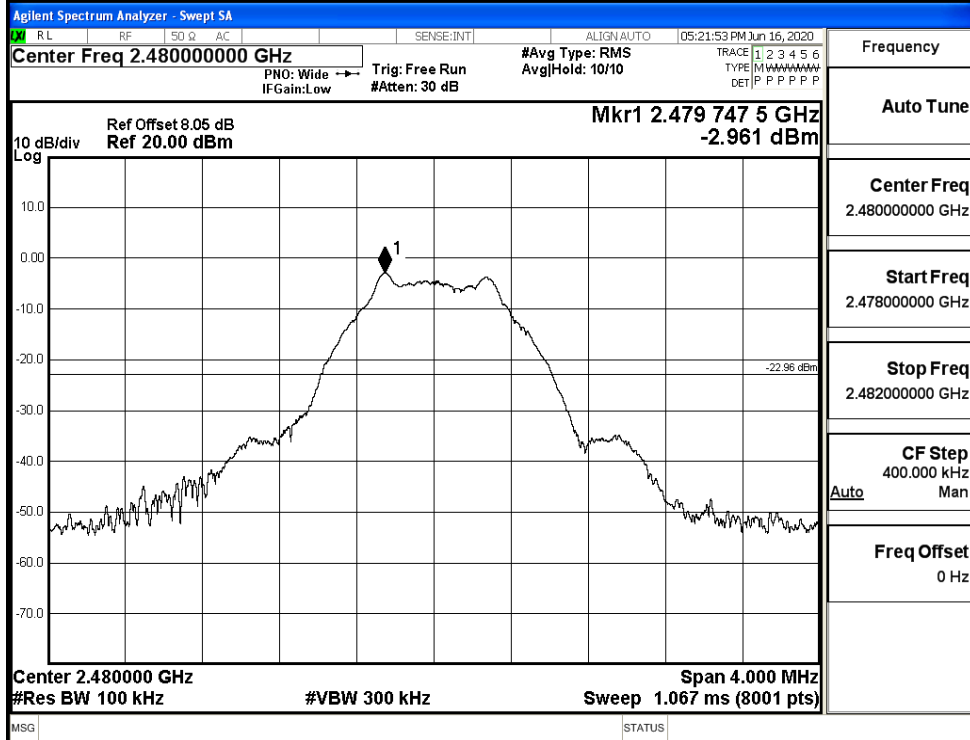


Puw/BT LE/MCH

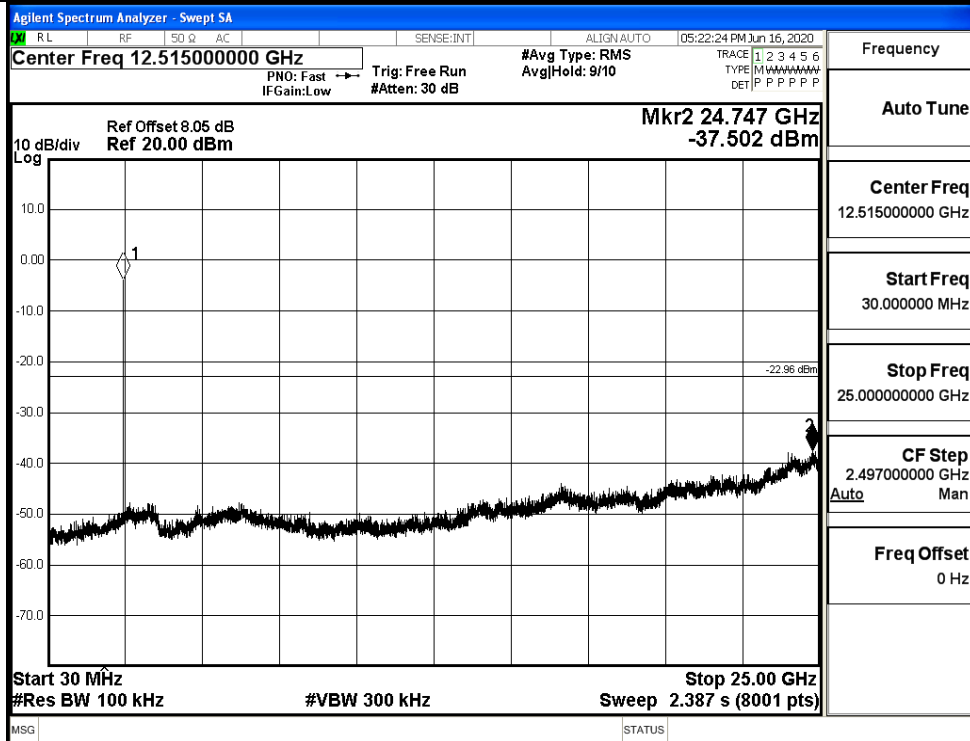


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

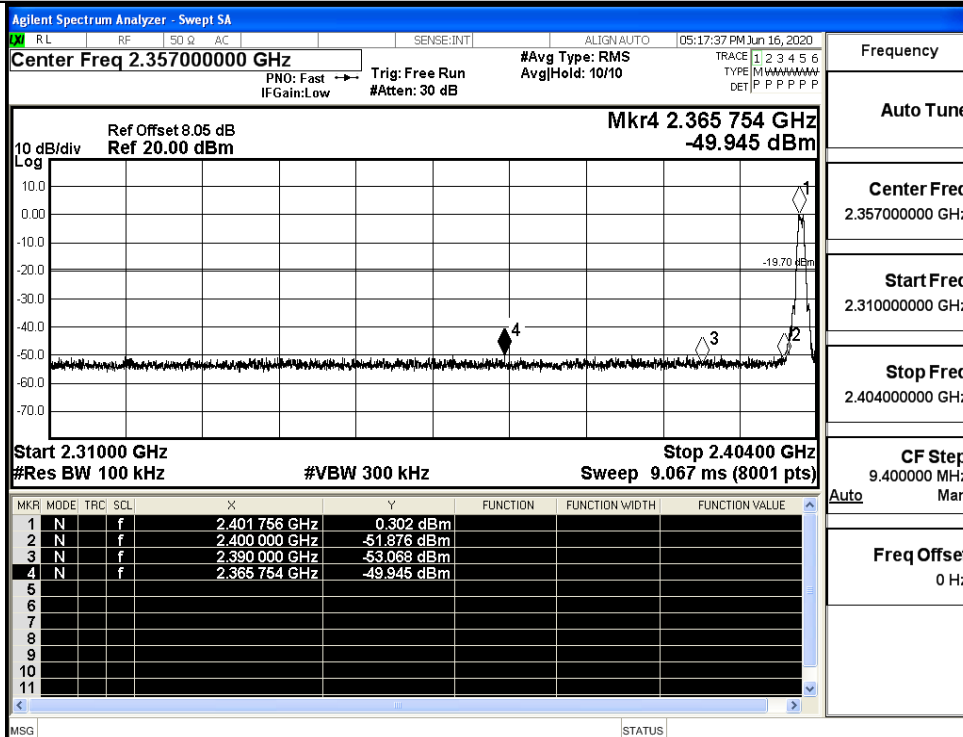


A.7 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	0.302	-49.945	-19.7	PASS
BT LE	HCH	-2.957	-48.790	-22.96	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

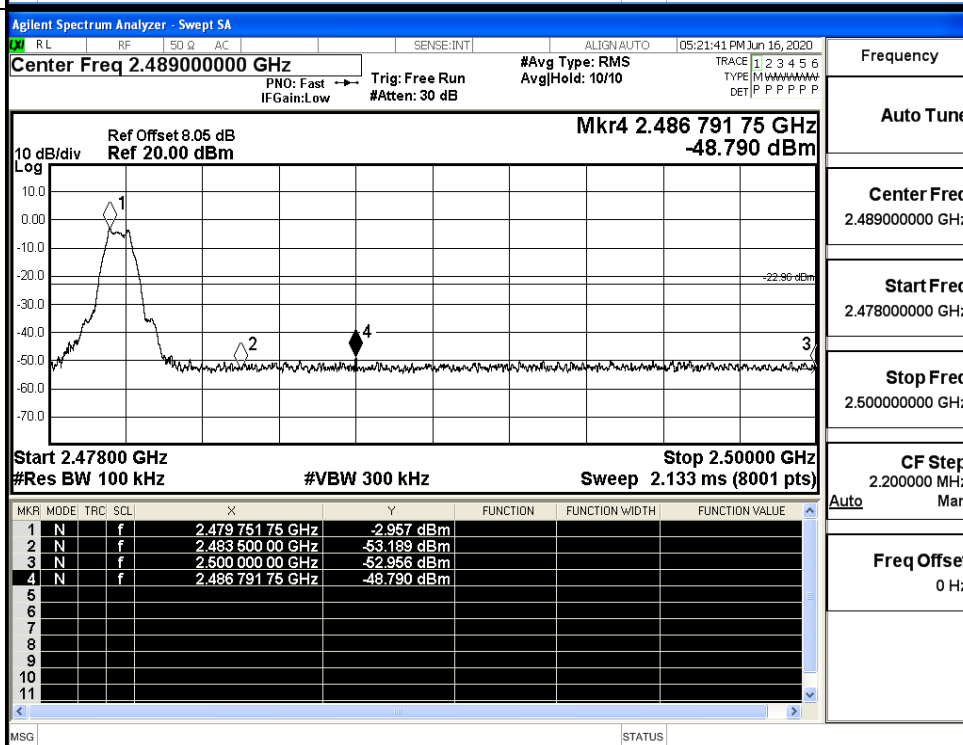
9.400000 MHz

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

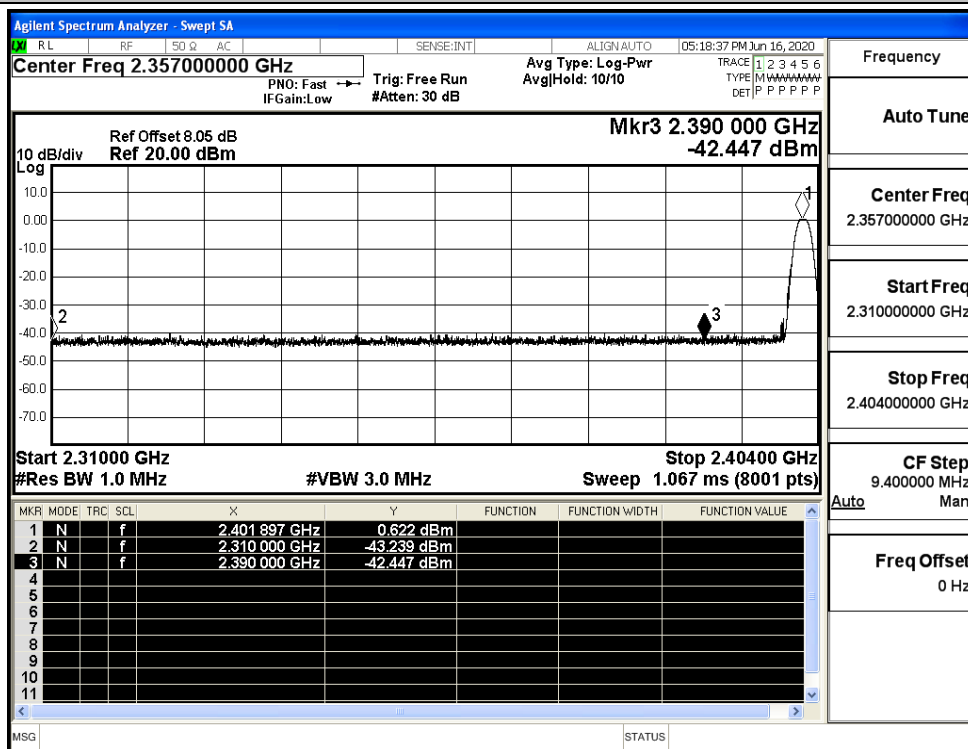
Freq Offset

0 Hz

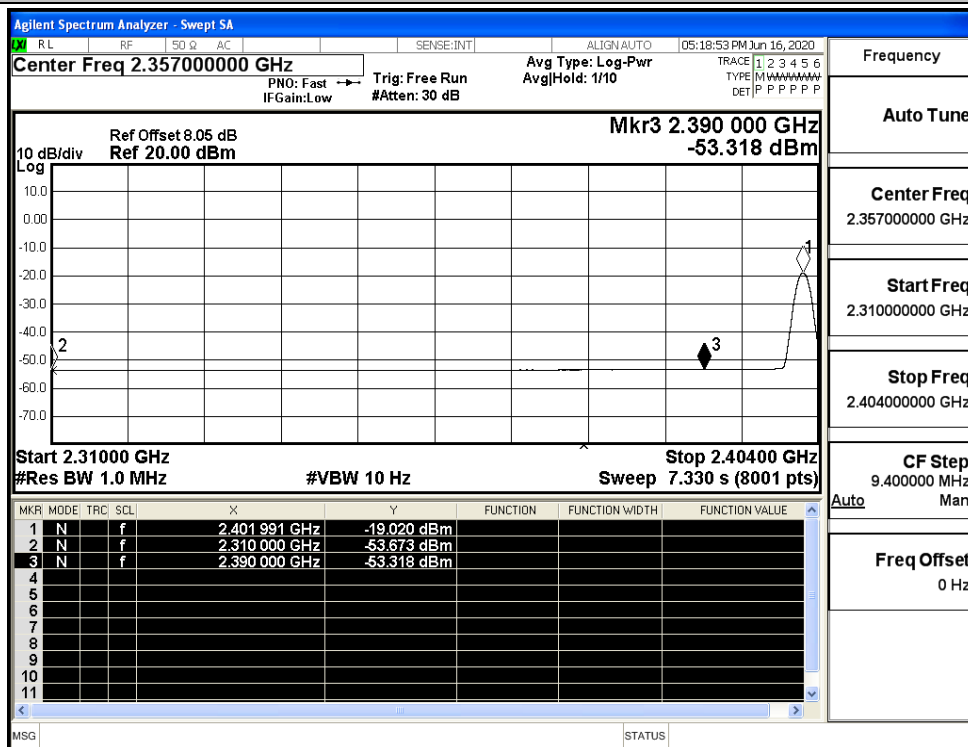
A.8 Restrict-band band-edge measurements

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	-43.24	2.0	0	52.02	PEAK	74	PASS
		Ant1	2310.0	-53.67	2.0	0	41.58	AV	54	PASS
		Ant1	2390.0	-42.45	2.0	0	52.81	PEAK	74	PASS
		Ant1	2390.0	-53.32	2.0	0	41.94	AV	54	PASS
	2480	Ant1	2483.5	-42.57	2.0	0	52.68	PEAK	74	PASS
		Ant1	2483.5	-52.87	2.0	0	42.39	AV	54	PASS
		Ant1	2500.0	-42.78	2.0	0	52.48	PEAK	74	PASS
		Ant1	2500.0	-52.70	2.0	0	42.56	AV	54	PASS

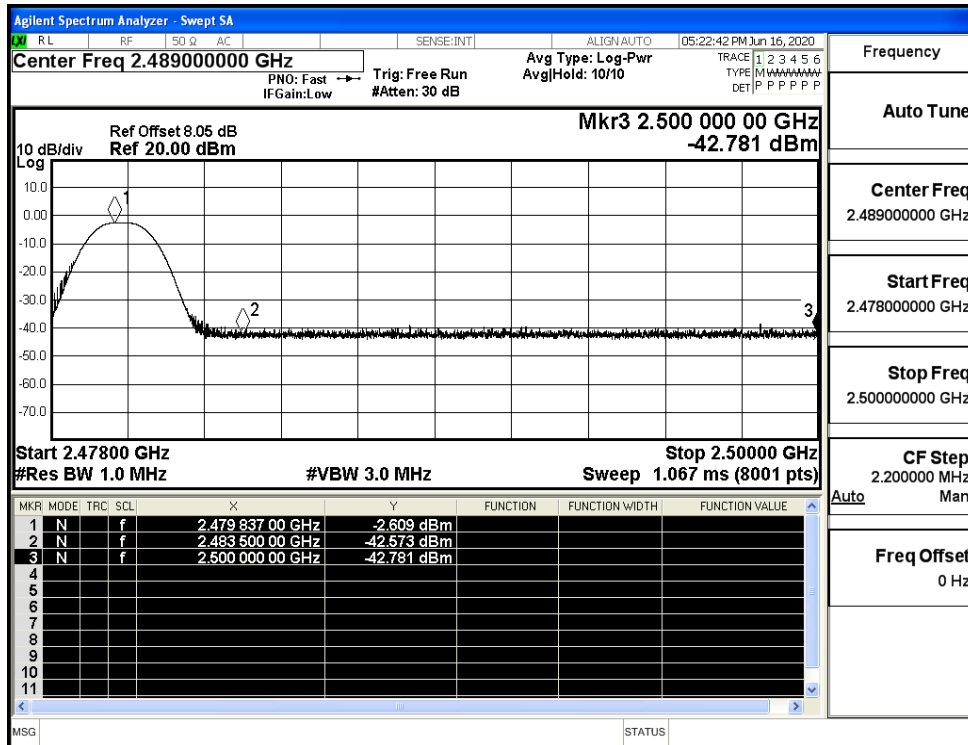
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

