

Appendix B

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

Product Name: Alarm clock

Trade Mark: TOSHIBA

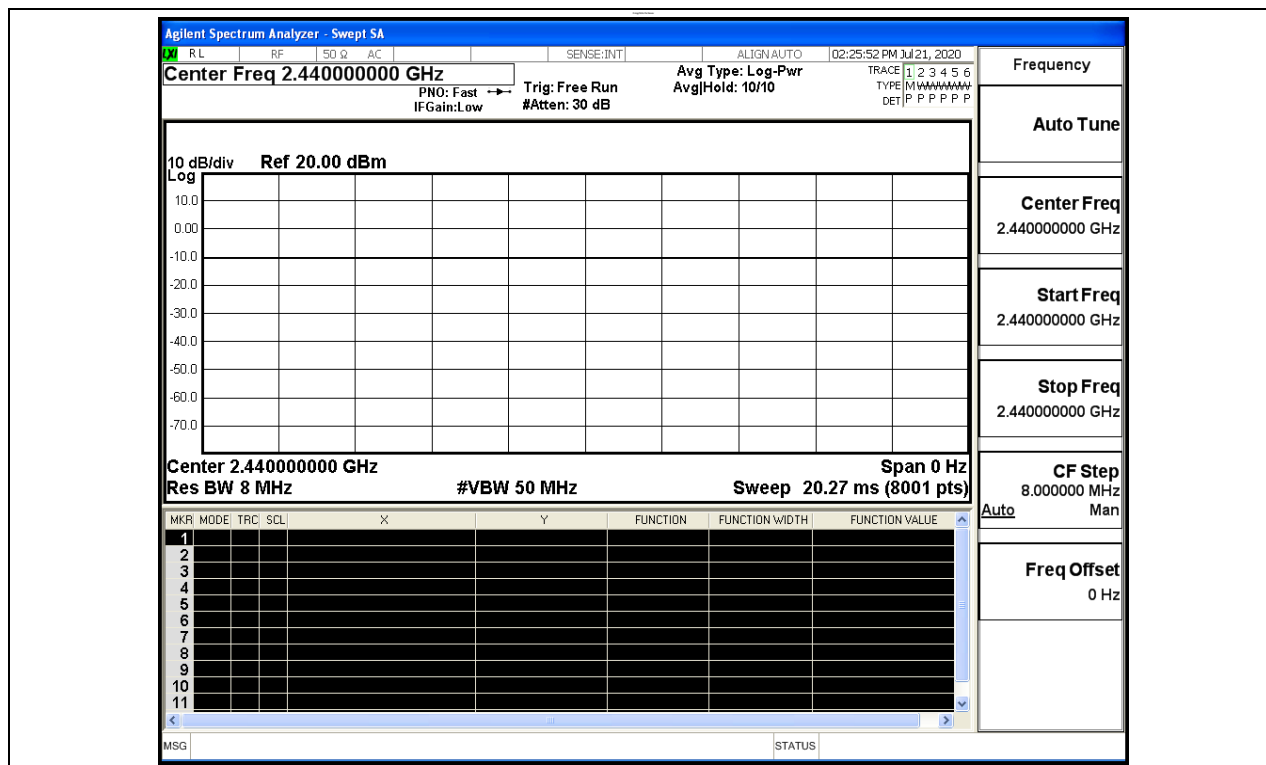
Test Model: WS-QI639

Environmental Conditions

Temperature:	23.3 ° C
Relative Humidity:	54.2%
ATM Pressure:	100.0 kPa
Test Engineer:	Jay Li
Supervised by:	Li Huan

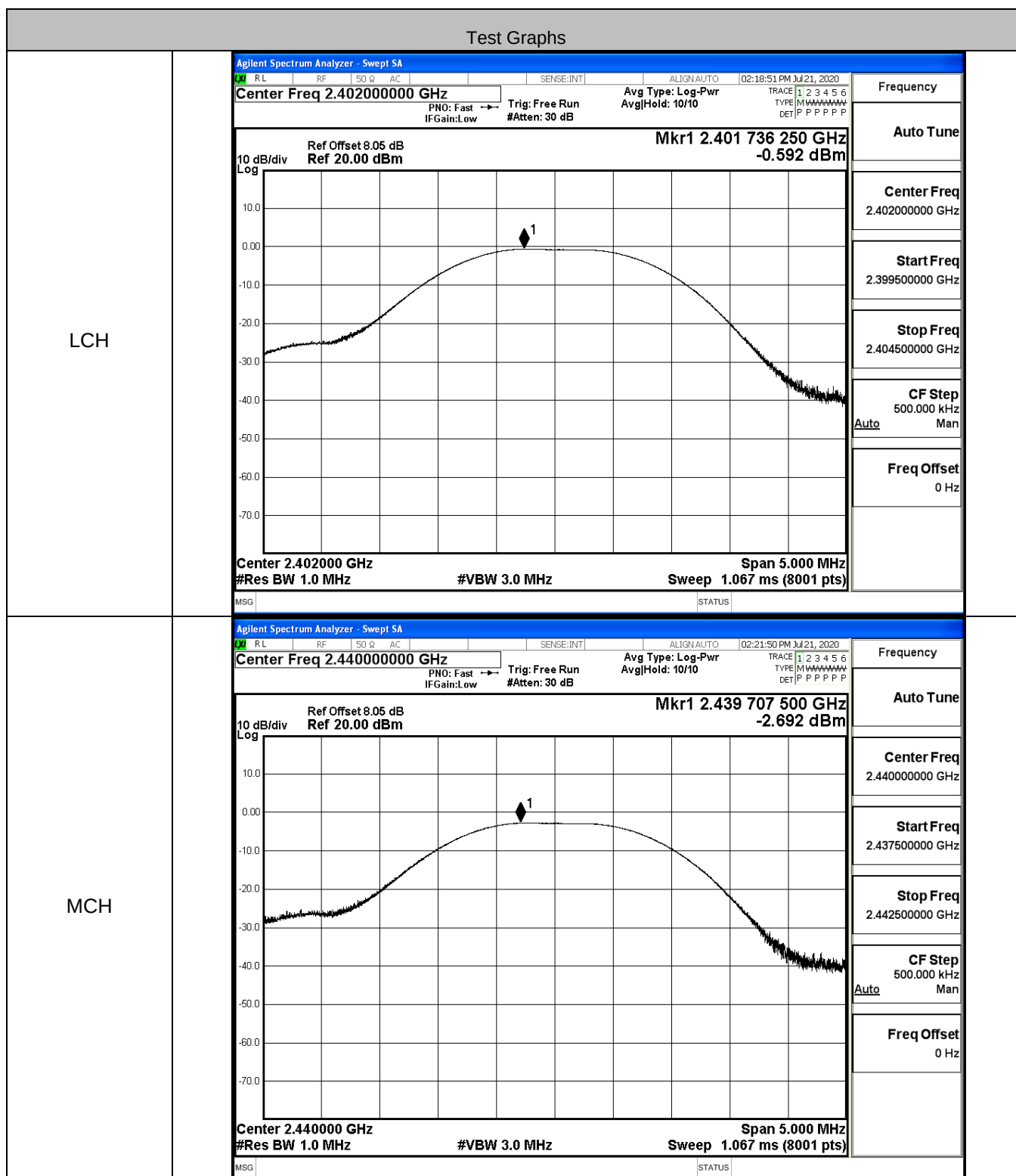
B.1 Duty Cycle

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

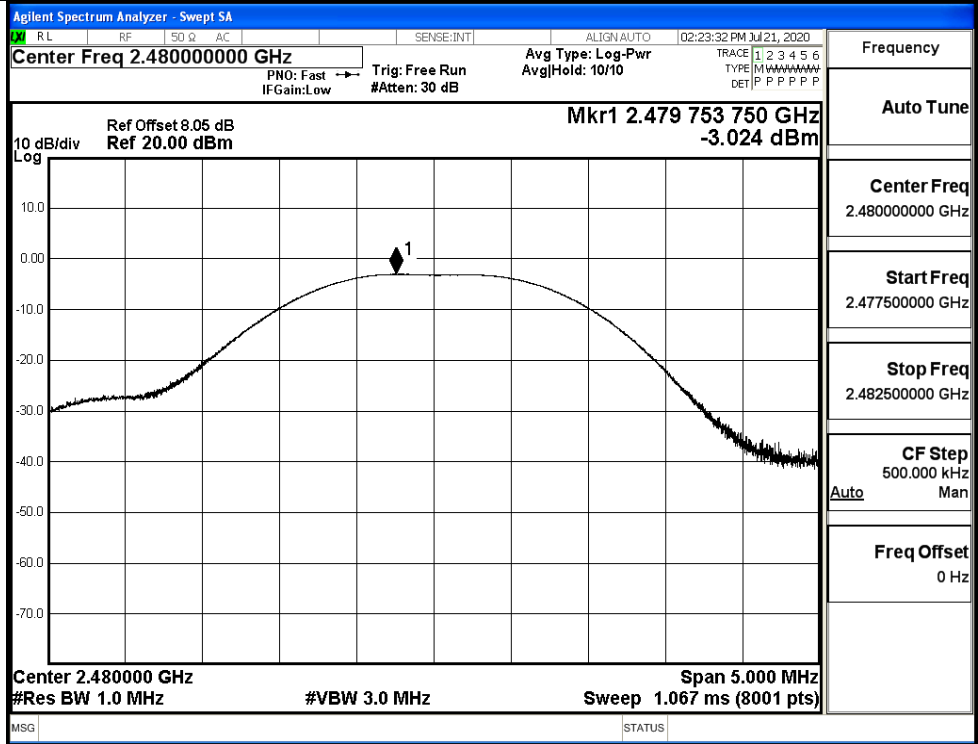


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.592	30	PASS
BT LE	MCH	-2.692	30	PASS
BT LE	HCH	-3.024	30	PASS



HCH

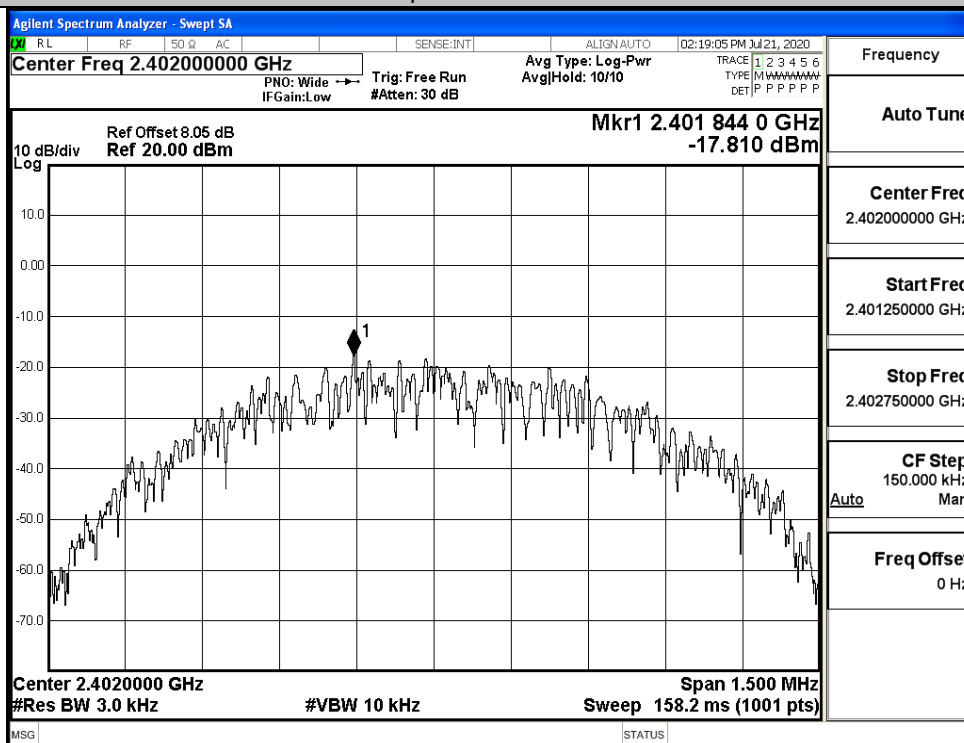


B.3 Maximum Power Spectral Density

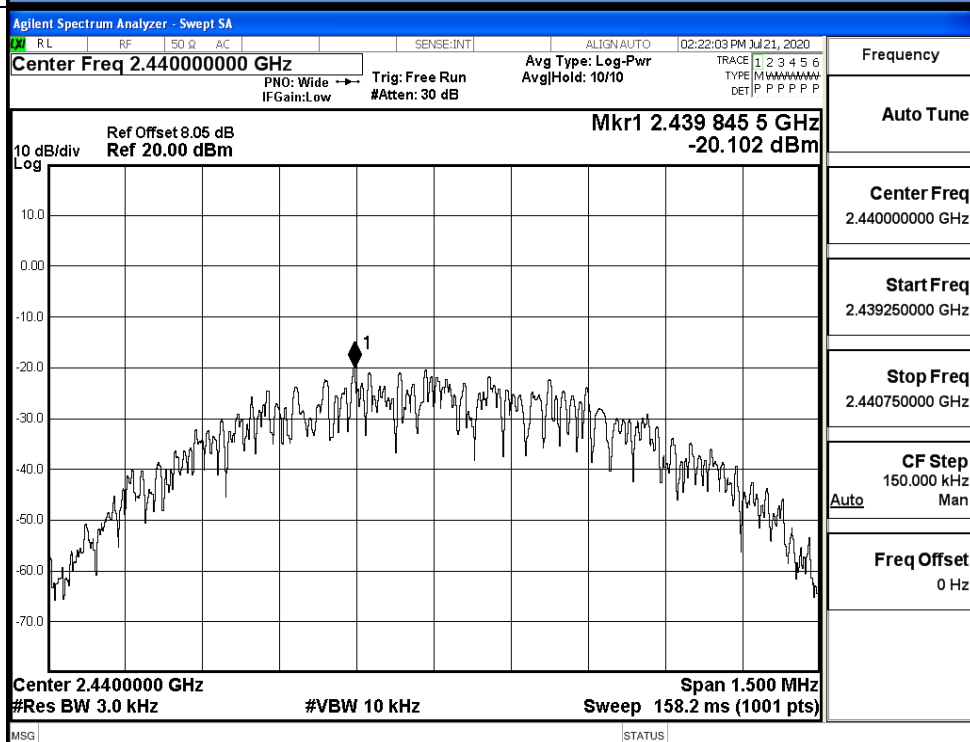
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-17.810	8	PASS
BT LE	MCH	-20.102	8	PASS
BT LE	HCH	-20.250	8	PASS

Test Graphs

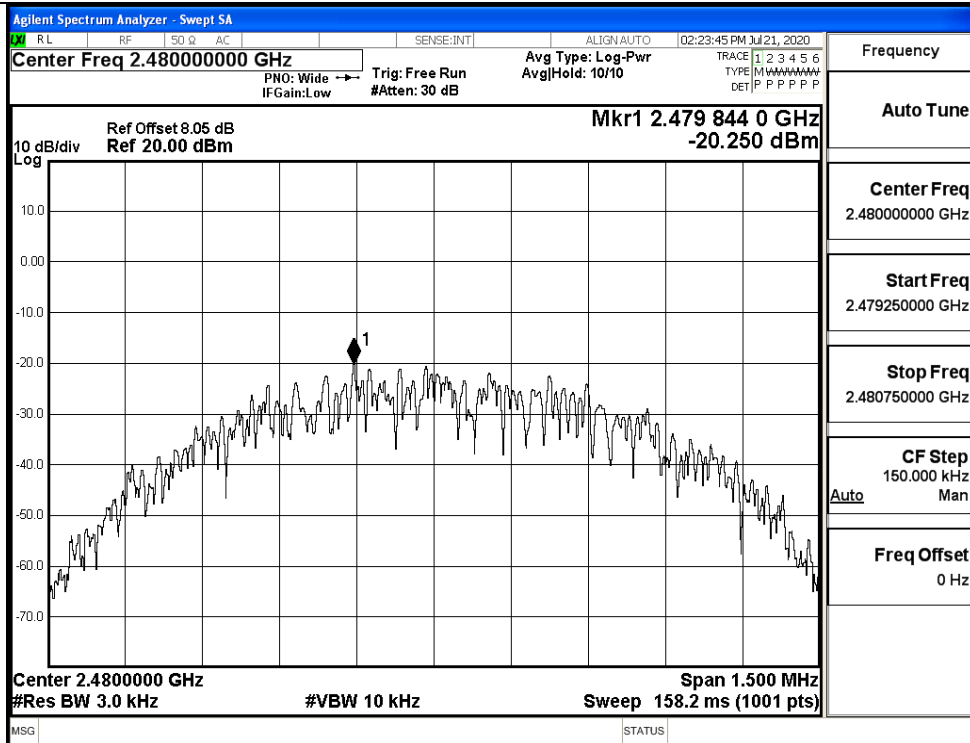
LCH



MCH



HCH

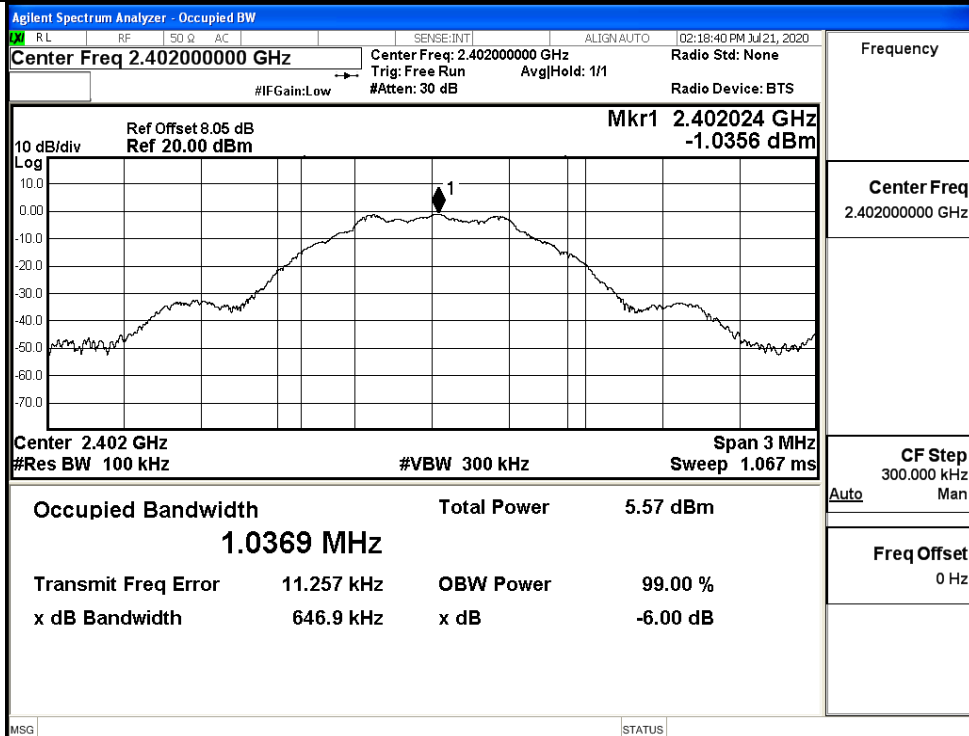


B.4 6dB Bandwidth

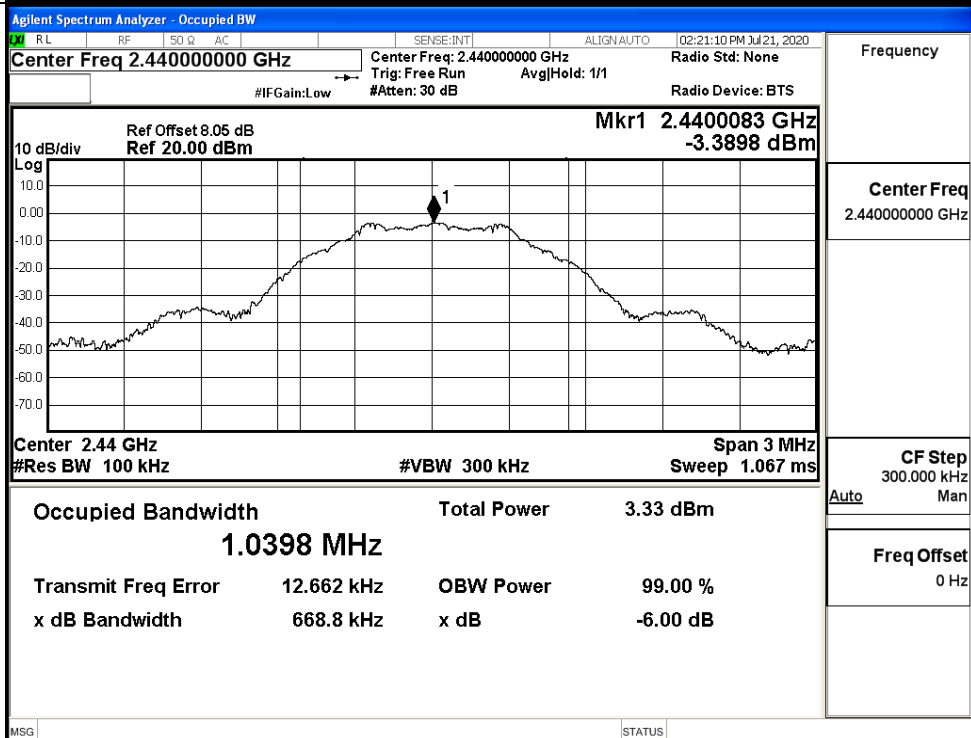
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6469	≥ 0.5	PASS
BT LE	MCH	0.6688	≥ 0.5	PASS
BT LE	HCH	0.6608	≥ 0.5	PASS

Test Graphs

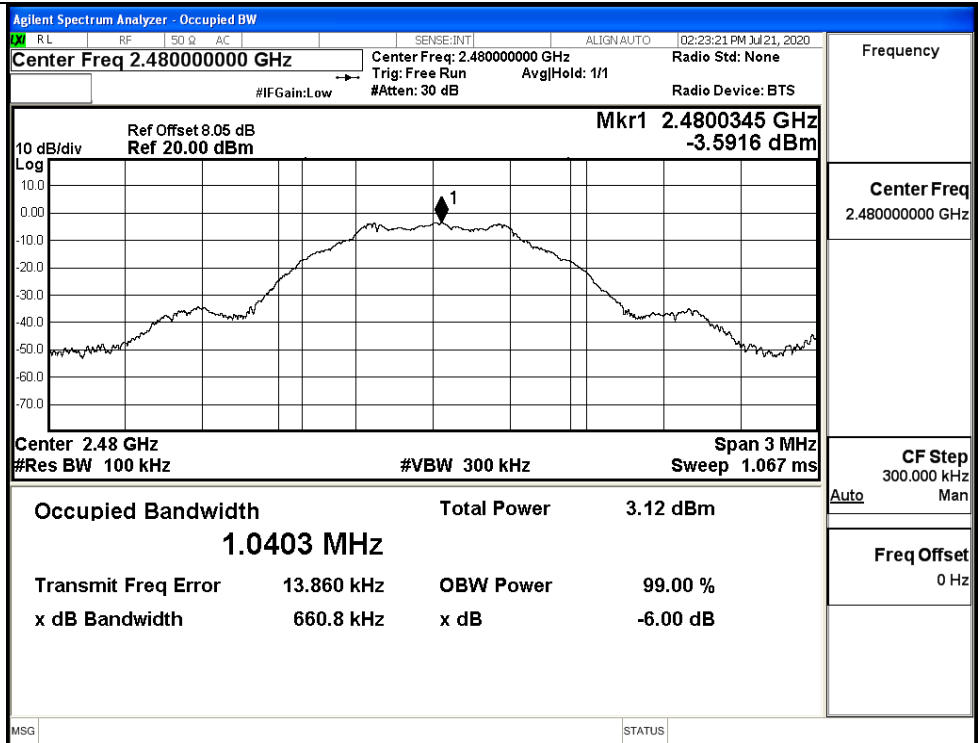
LCH



MCH



HCH

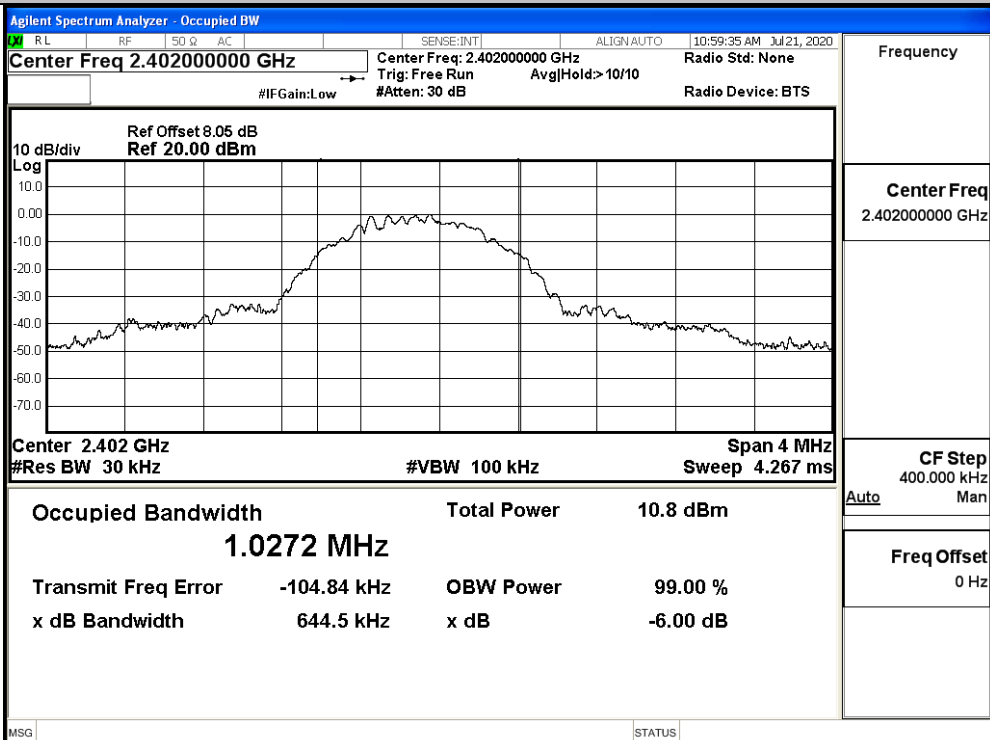


A.5 Occupied Bandwidth

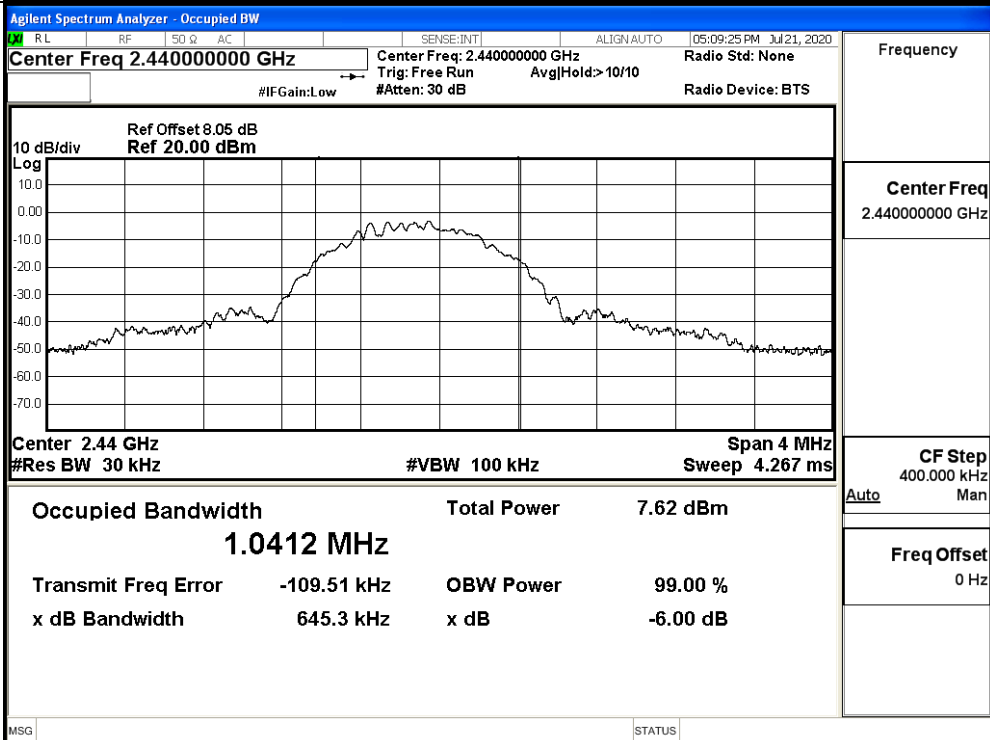
Mode	Channel	Occupied Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	1.0272	≥ 0.5	PASS
BT LE	MCH	1.0412	≥ 0.5	PASS
BT LE	HCH	1.0527	≥ 0.5	PASS

Test Graphs

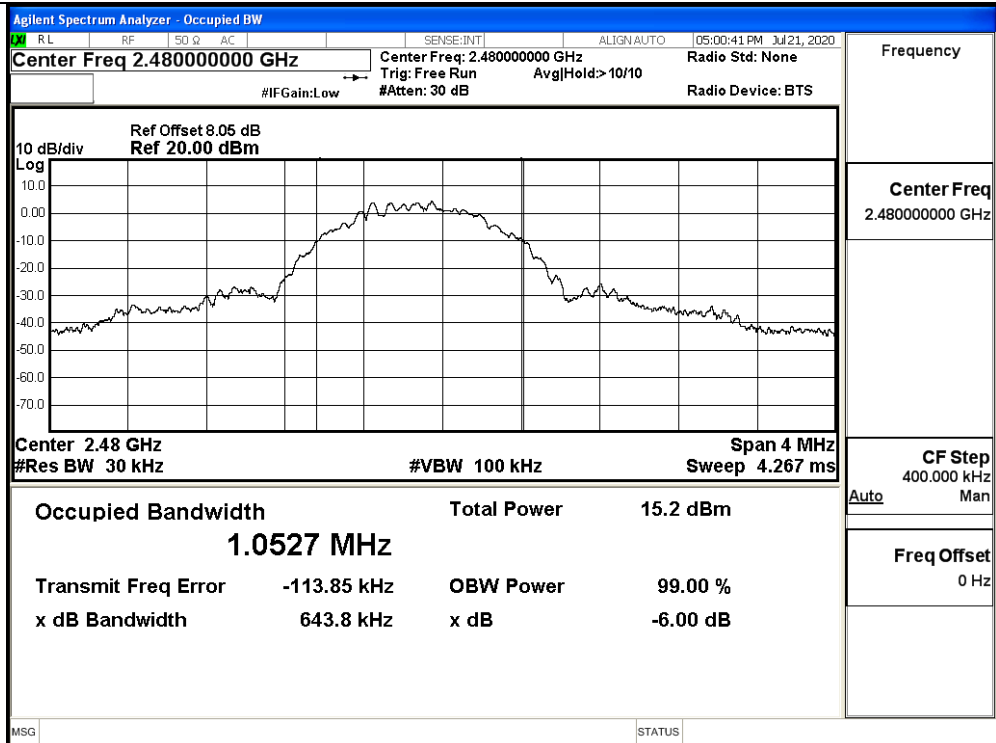
LCH



MCH



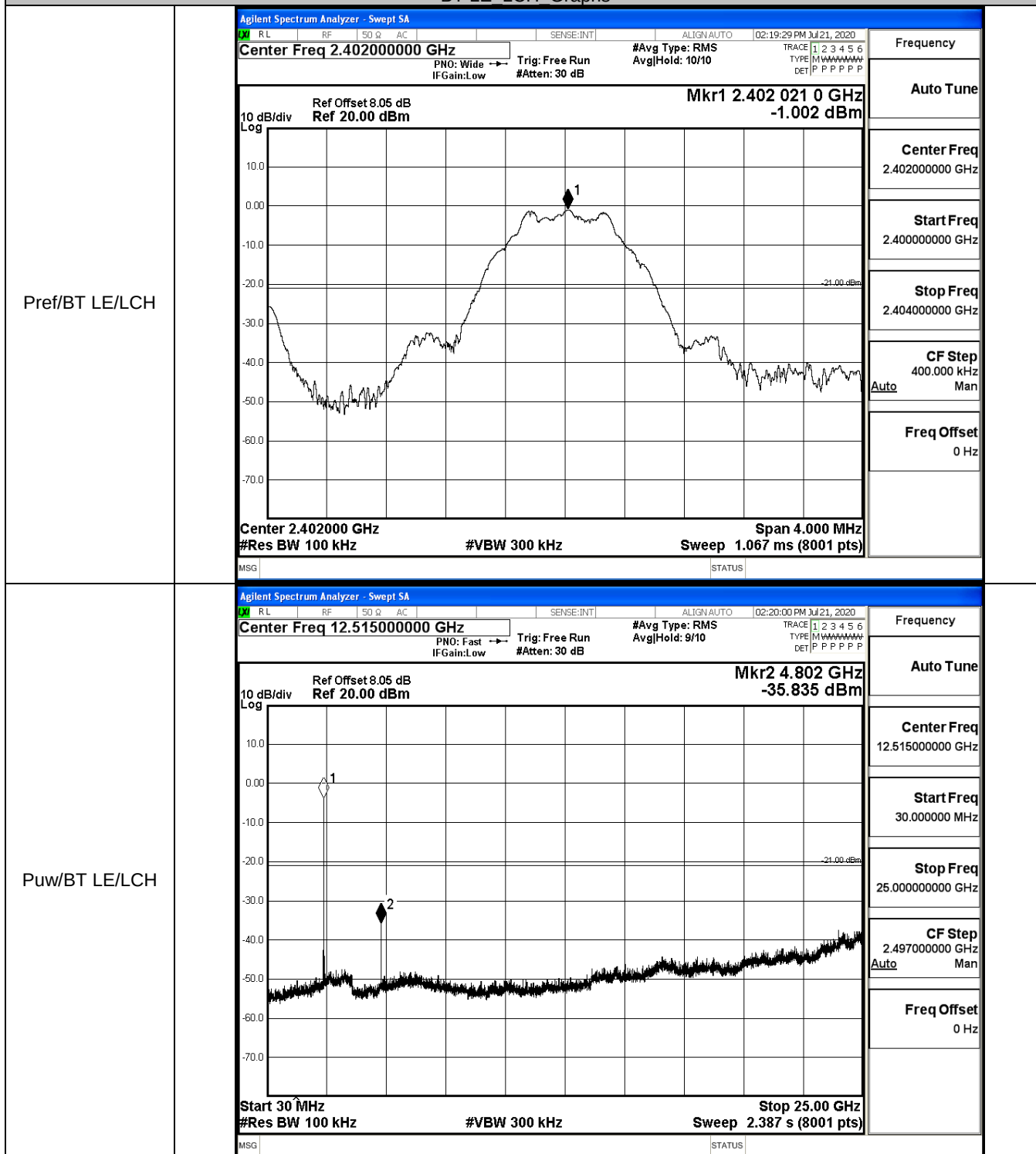
HCH



B.6 RF Conducted Spurious Emissions

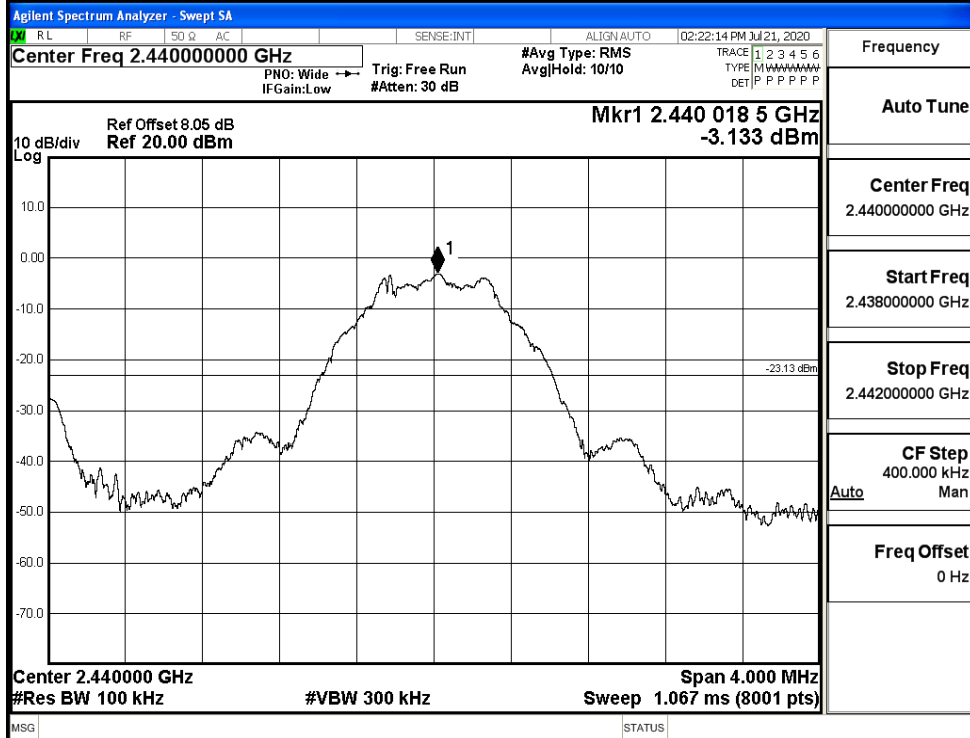
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-1.002	-35.835	-21.002	PASS
BT LE	MCH	-3.133	-37.467	-23.133	PASS
BT LE	HCH	-3.39	-37.723	-23.390	PASS

BT LE LCH Graphs

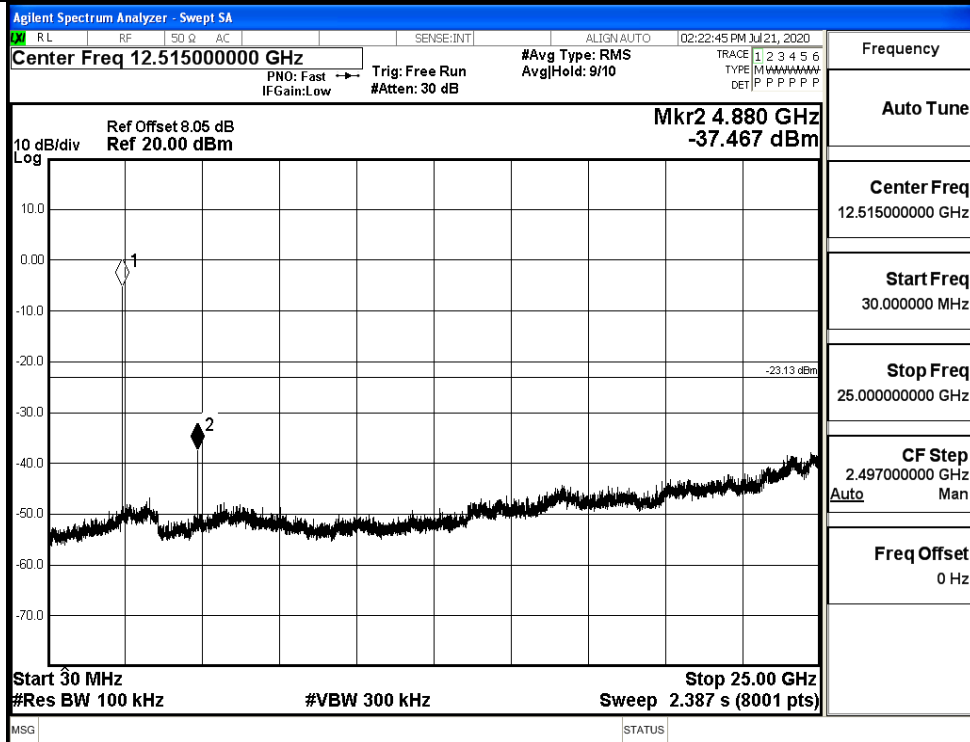


BT LE MCH Graphs

Pref/BT LE/MCH

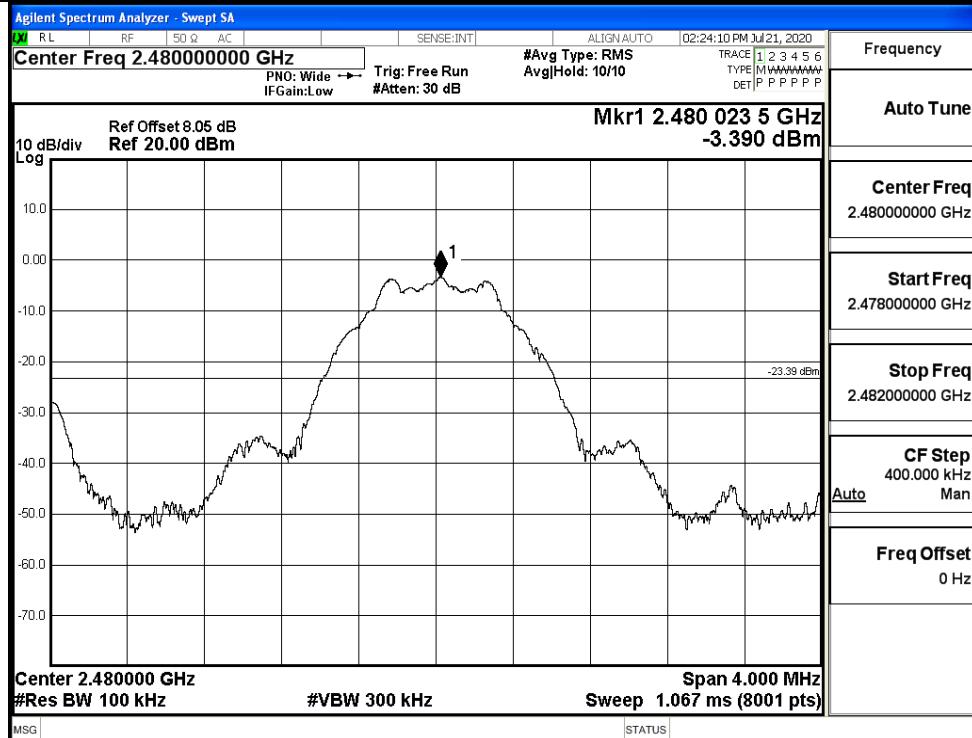


Puw/BT LE/MCH

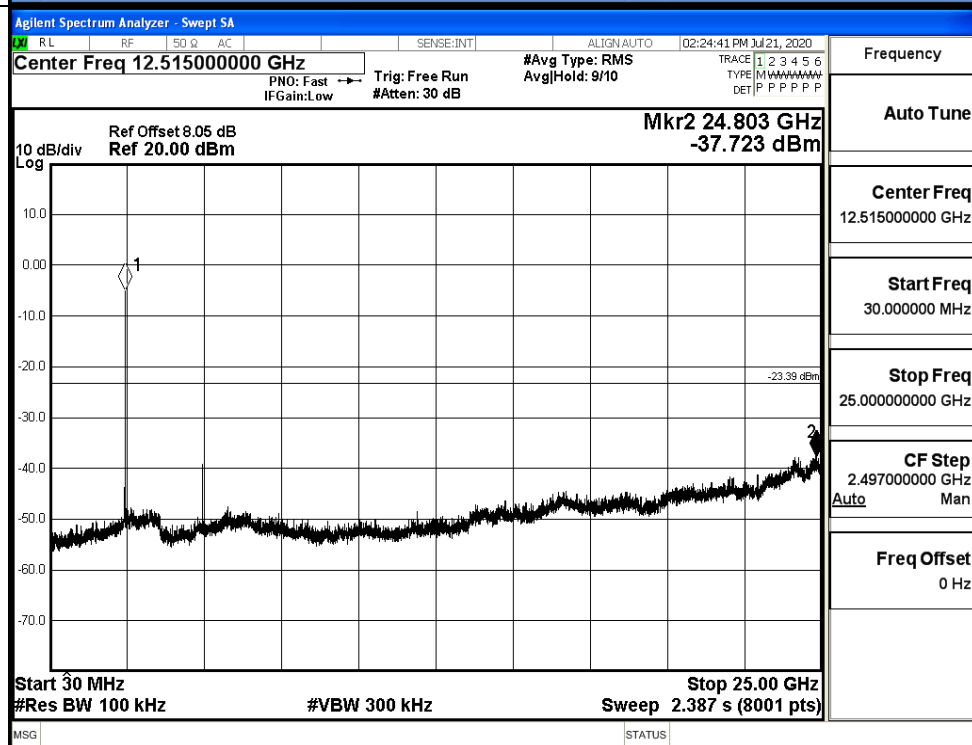


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

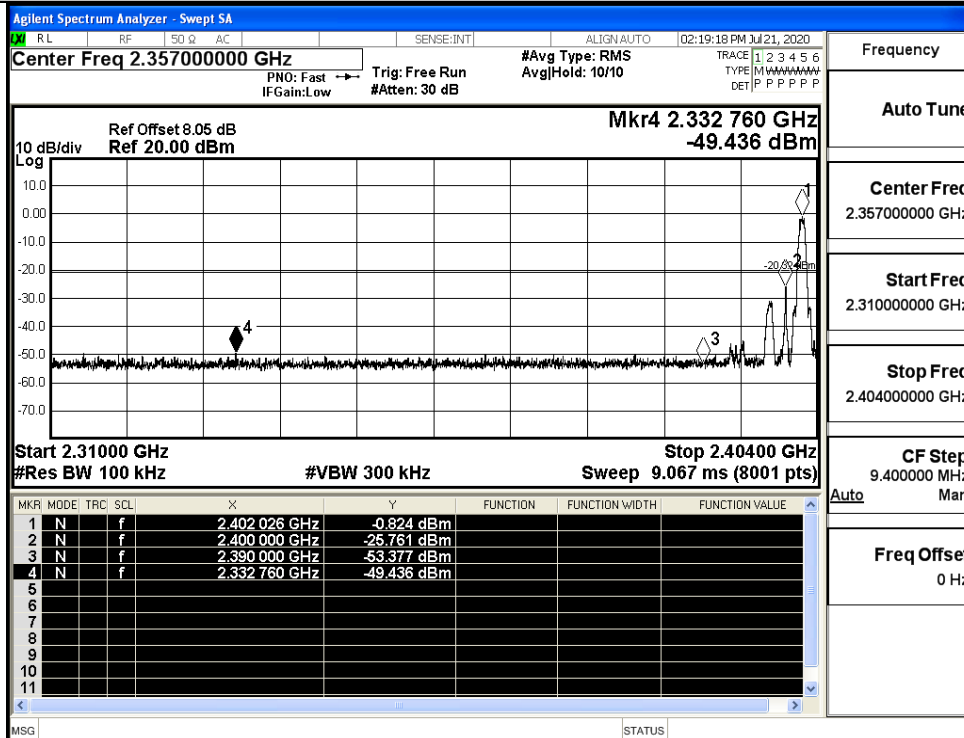


B.7 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.824	-49.436	-20.82	PASS
BT LE	HCH	-3.181	-45.698	-23.18	PASS

Test Graphs

LCH



Frequency

Auto Tune

Center Freq

2.357000000 GHz

Start Freq

2.310000000 GHz

Stop Freq

2.404000000 GHz

CF Step

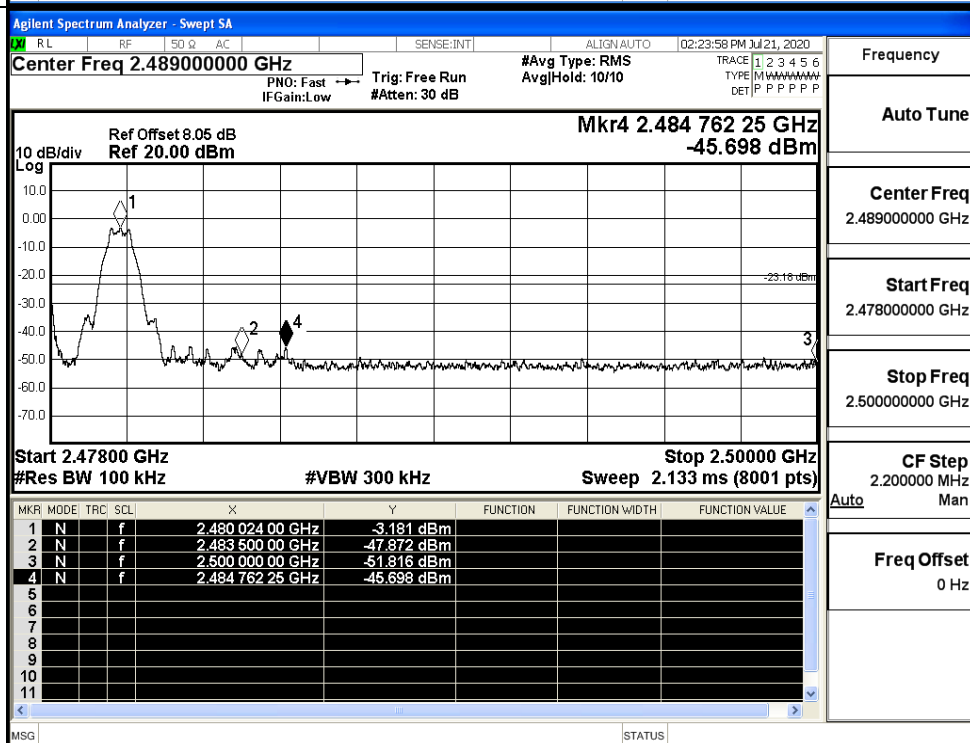
9.400000 MHz

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

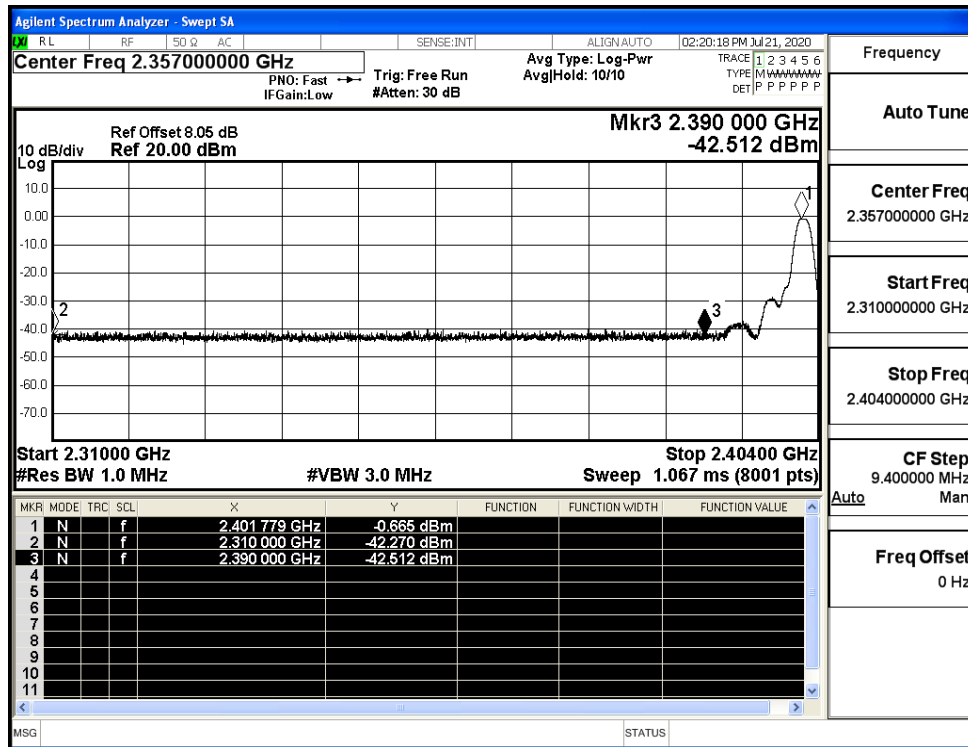
Freq Offset

0 Hz

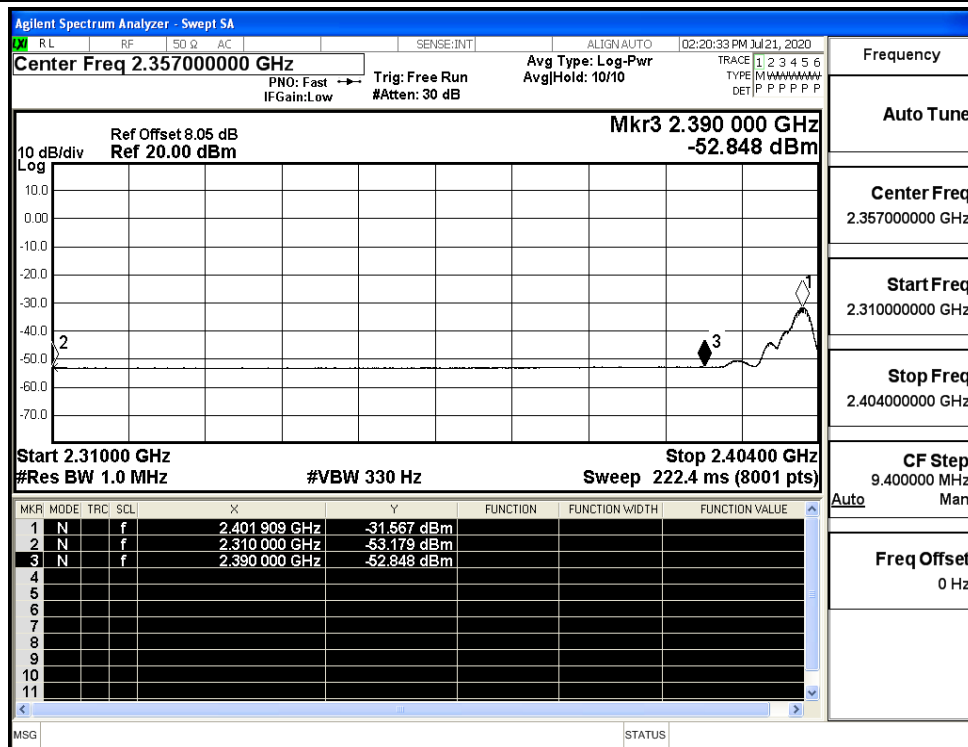
B.8 Restrict-band band-edge measurements

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	-42.27	2.0	0	52.99	PEAK	74	PASS
		Ant1	2310.0	-53.18	2.0	0	42.08	AV	54	PASS
		Ant1	2390.0	-42.51	2.0	0	52.75	PEAK	74	PASS
		Ant1	2390.0	-52.85	2.0	0	42.41	AV	54	PASS
	2480	Ant1	2483.5	-39.55	2.0	0	55.71	PEAK	74	PASS
		Ant1	2483.5	-50.81	2.0	0	44.45	AV	54	PASS
		Ant1	2500.0	-42.91	2.0	0	52.35	PEAK	74	PASS
		Ant1	2500.0	-52.21	2.0	0	43.05	AV	54	PASS

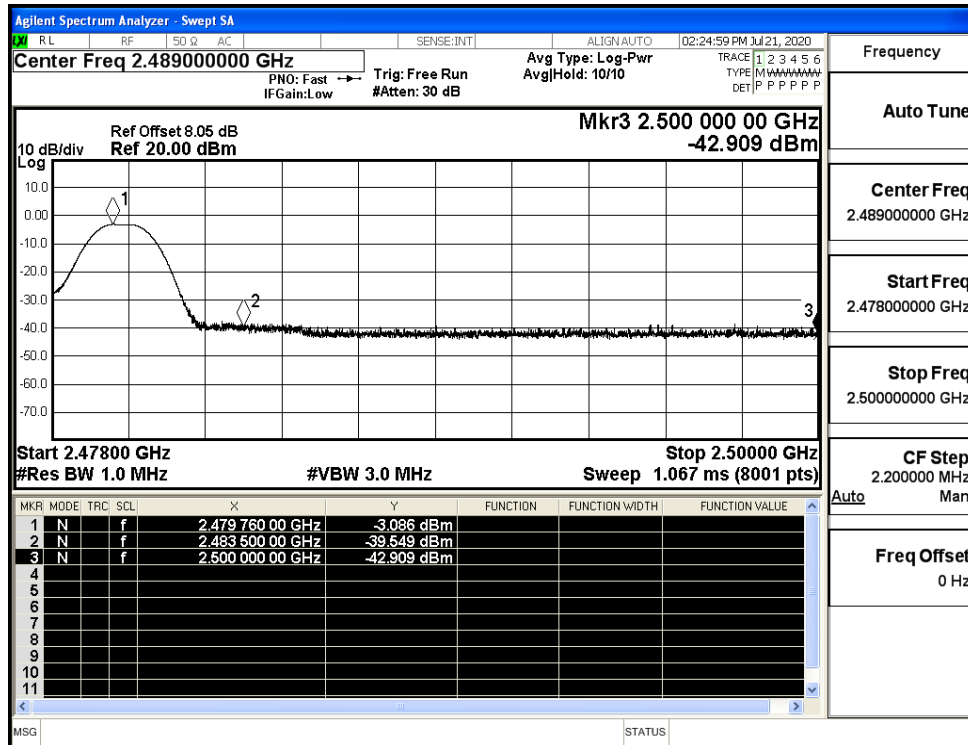
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

