

Appendix A

RF Test Data for BT LE V5.1(DTS) (Conducted Measurement)

Product Name: Wi-Fi & Bluetooth Module

Trade Mark: Dialog

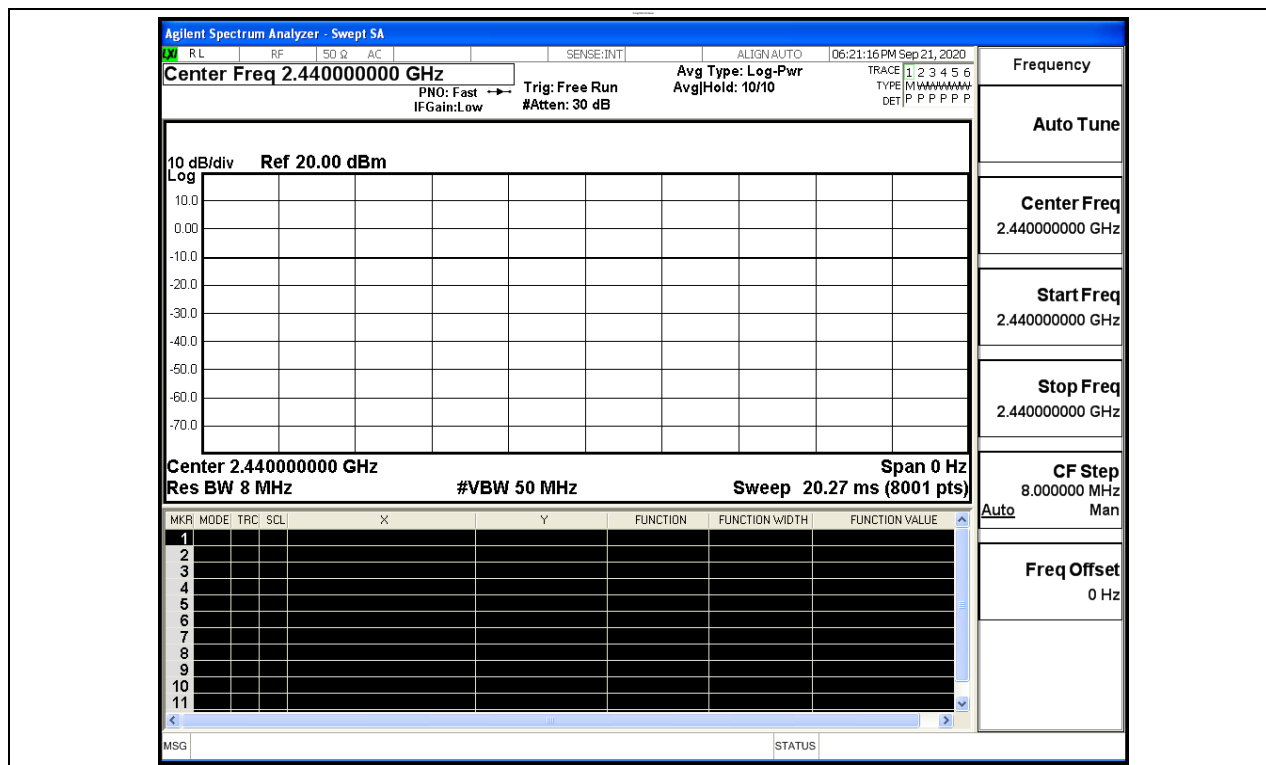
Test Model: DA16600MOD-AAE4WA32

Environmental Conditions

Temperature:	22.8 ° C
Relative Humidity:	53.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Carl Fu
Supervised by:	Li Huan

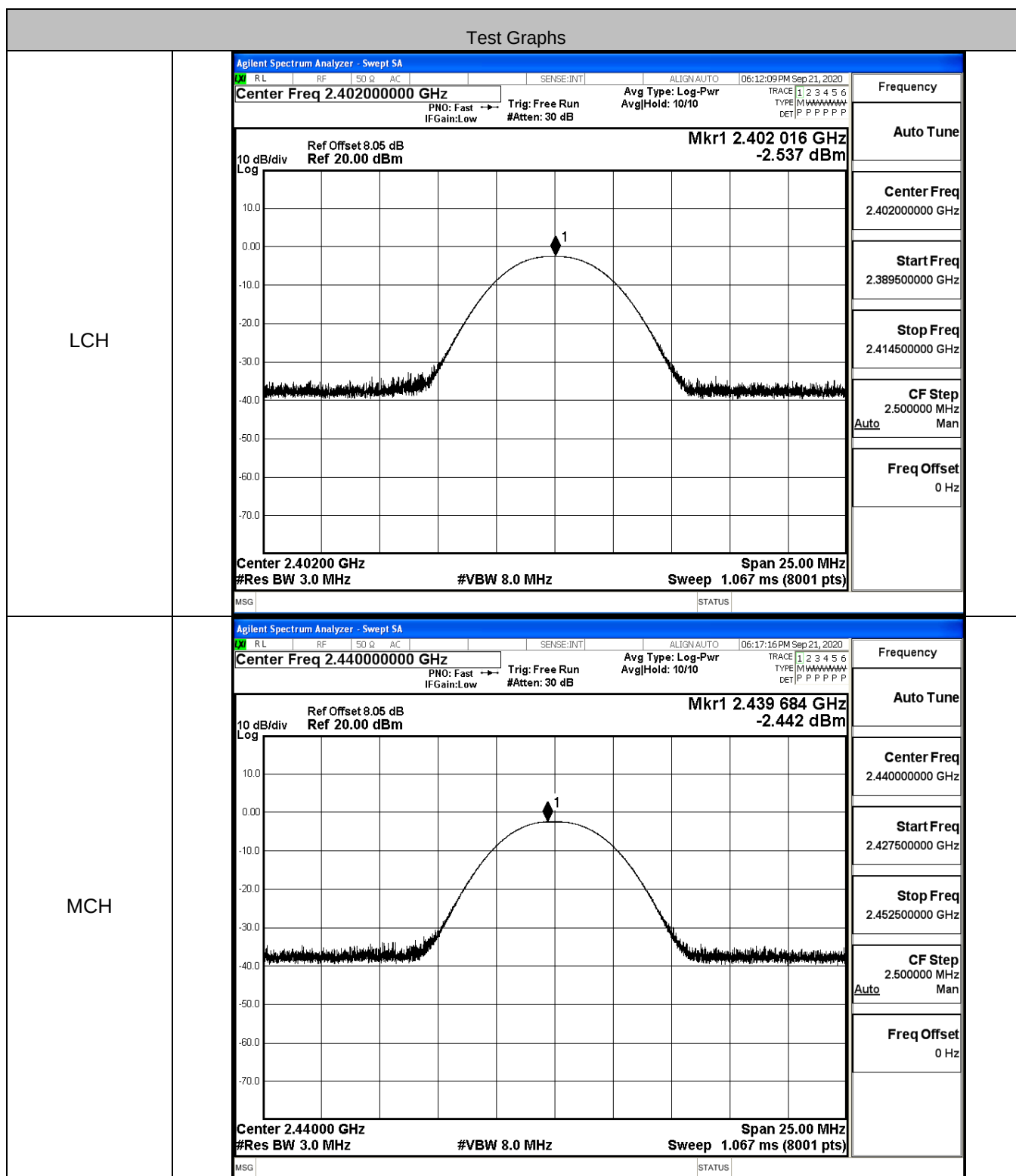
A.1 Duty Cycle

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

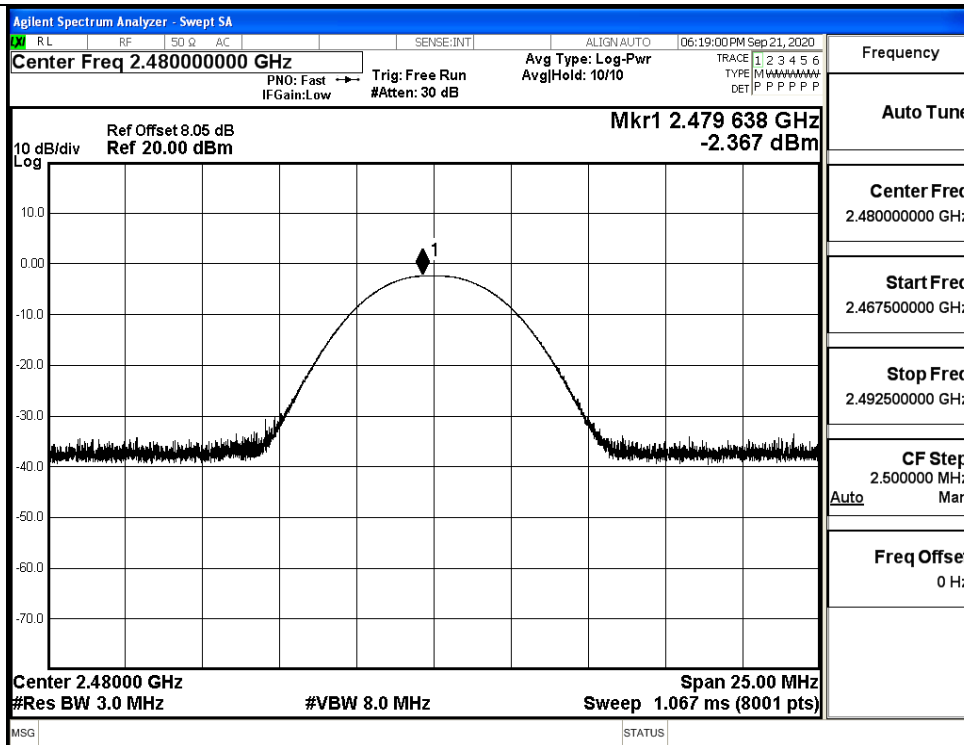


A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.537	30	PASS
BT LE	MCH	-2.442	30	PASS
BT LE	HCH	-2.367	30	PASS



HCH

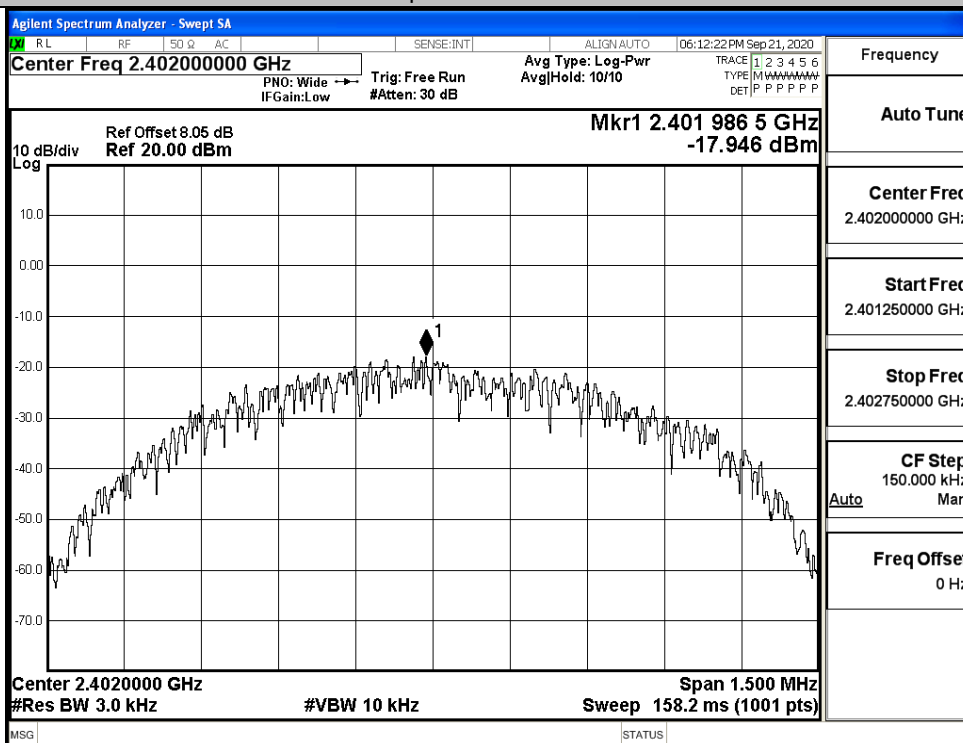


A.3 Maximum Power Spectral Density

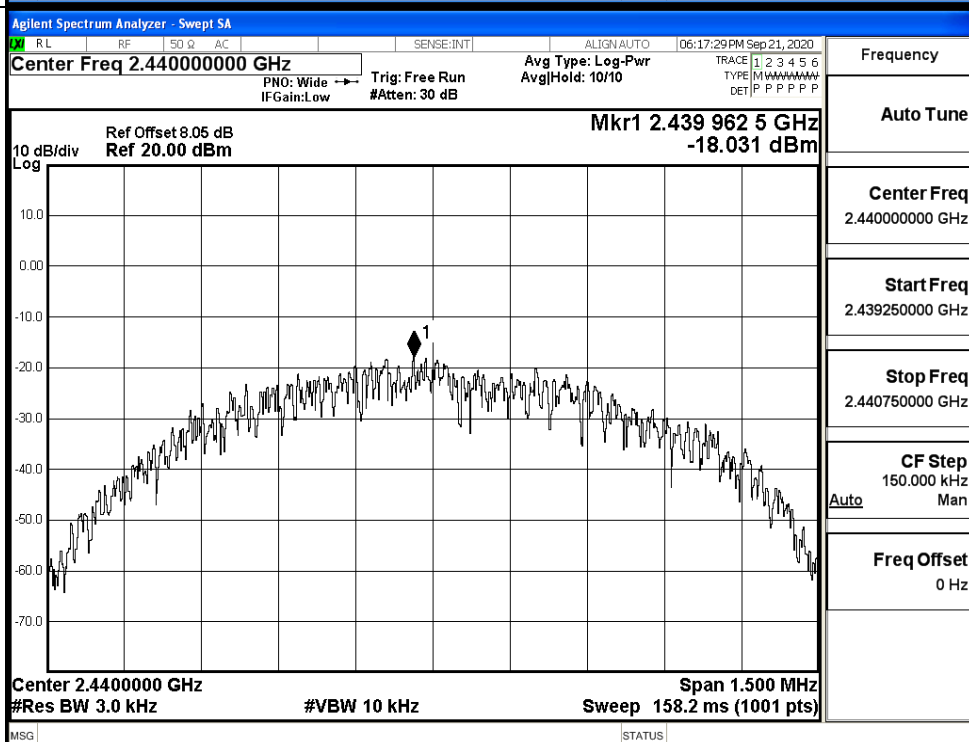
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-17.946	8	PASS
BT LE	MCH	-18.031	8	PASS
BT LE	HCH	-18.268	8	PASS

Test Graphs

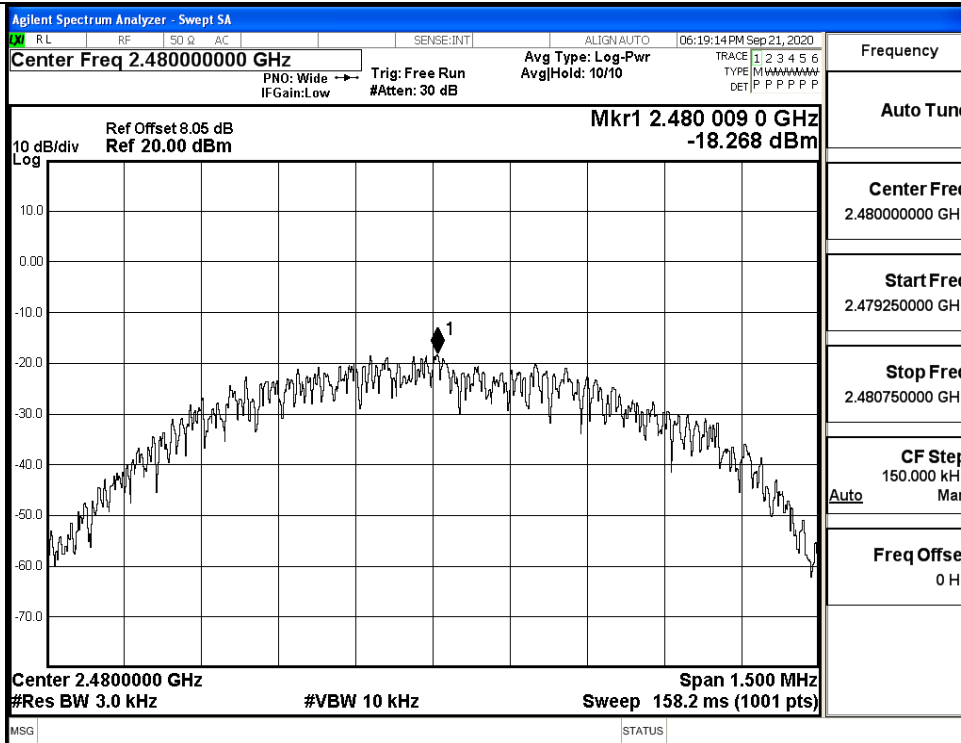
LCH



MCH



HCH

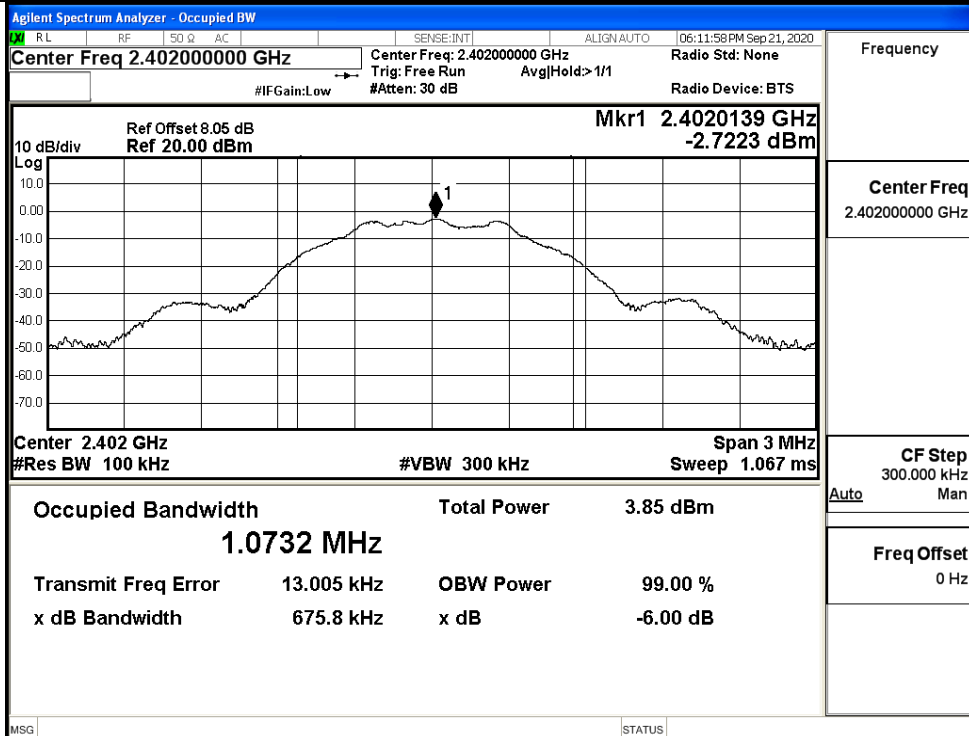


A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6758	≥ 0.5	PASS
BT LE	MCH	0.6656	≥ 0.5	PASS
BT LE	HCH	0.6903	≥ 0.5	PASS

Test Graphs

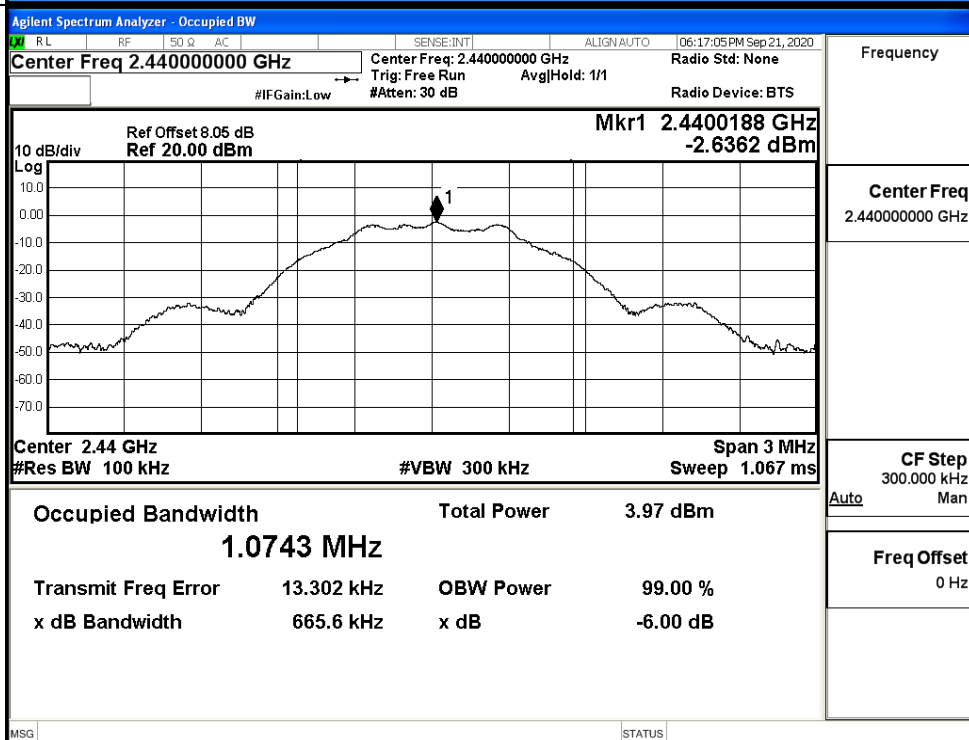
LCH



Frequency

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

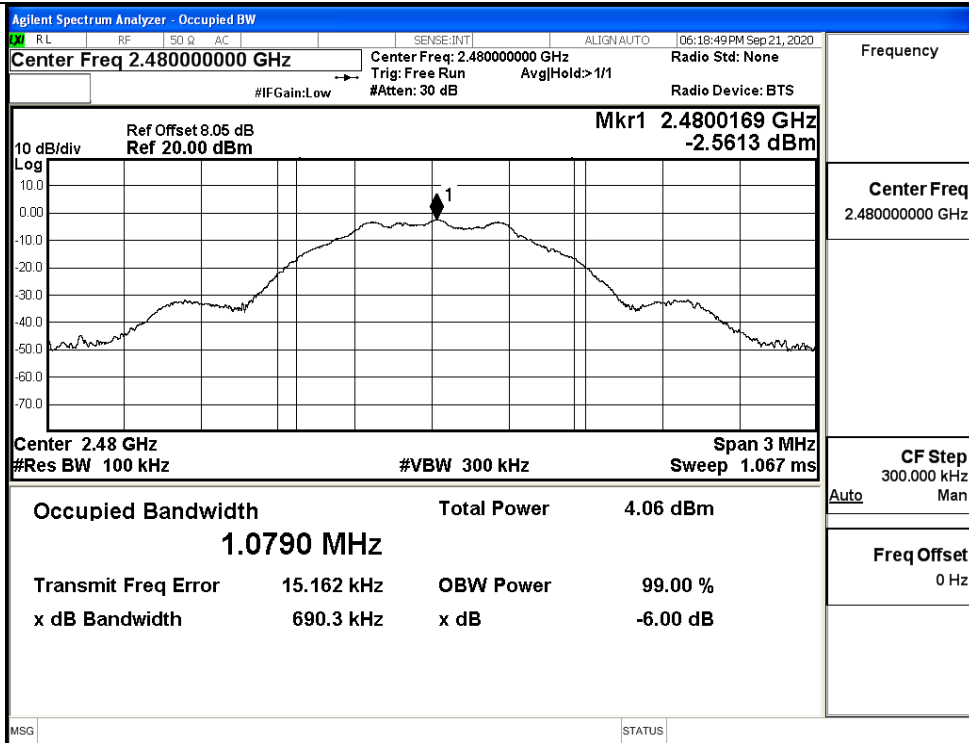
MCH



Frequency

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

HCH

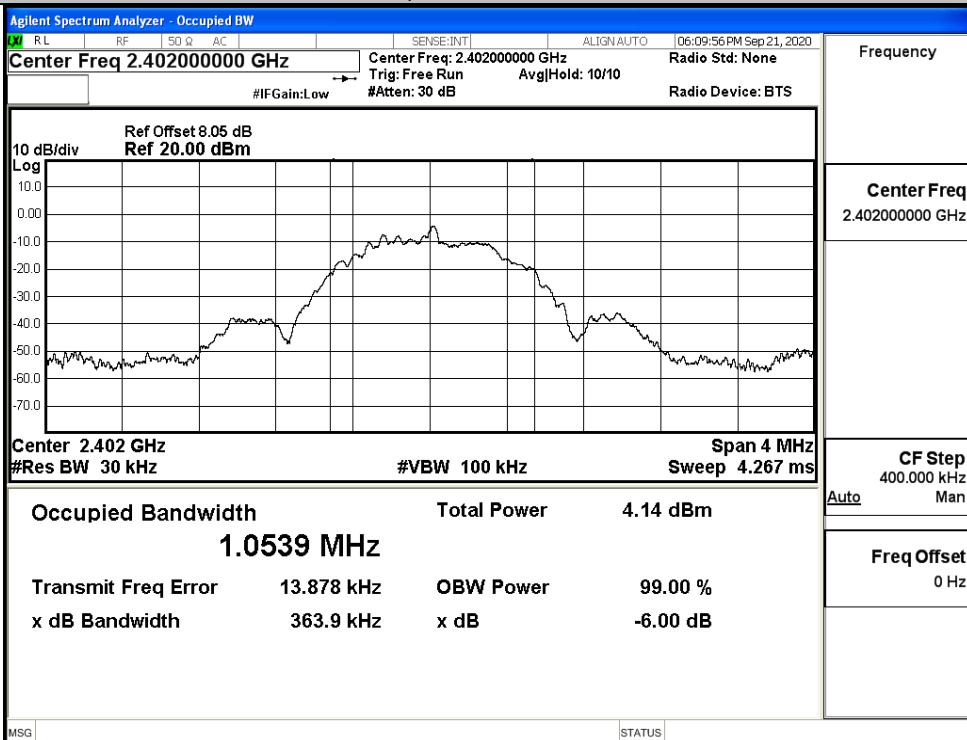


A.5 Occupied Bandwidth

Mode	Channel	Occupied Bandwidth [MHz]	Verdict
BT LE	LCH	1.0539	PASS
BT LE	MCH	1.0537	PASS
BT LE	HCH	1.0588	PASS

Test Graphs

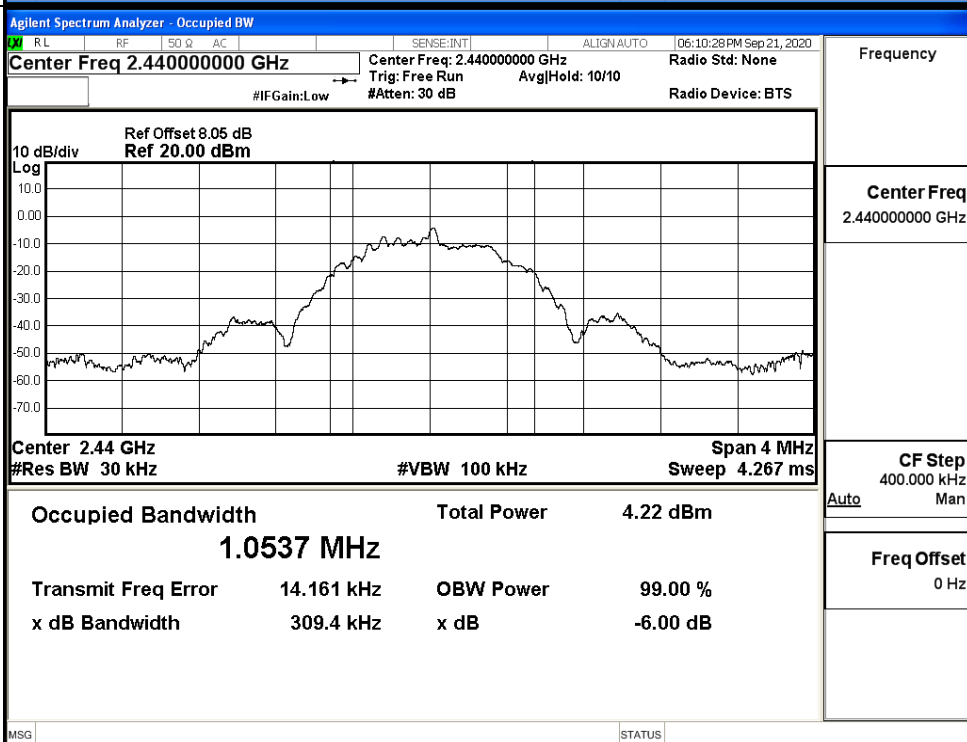
LCH



Frequency

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

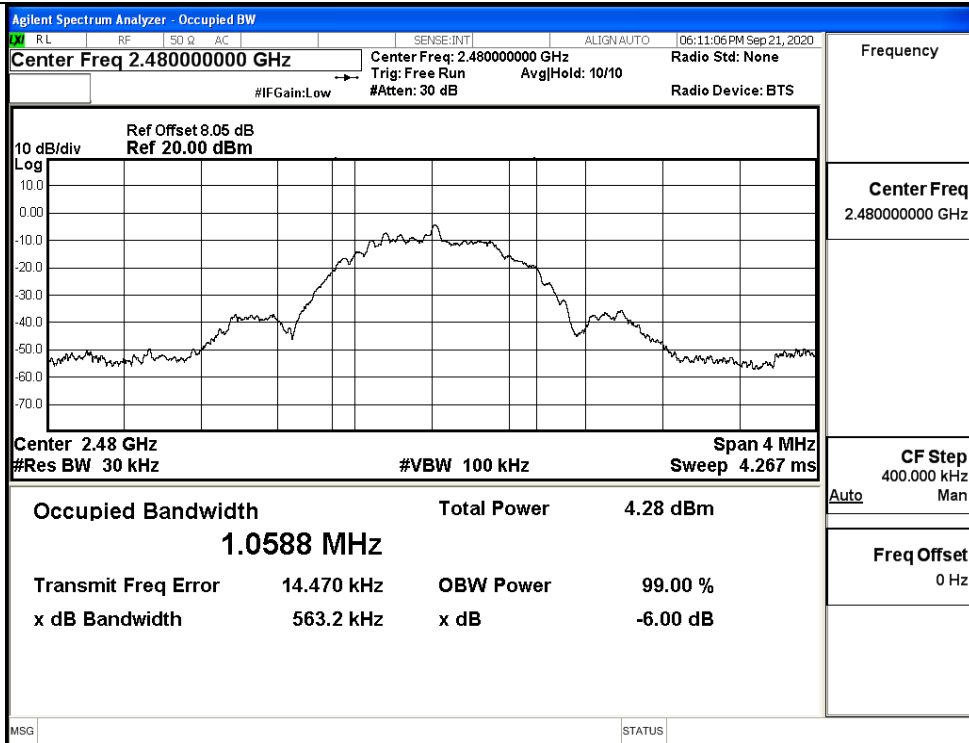
MCH



Frequency

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

HCH

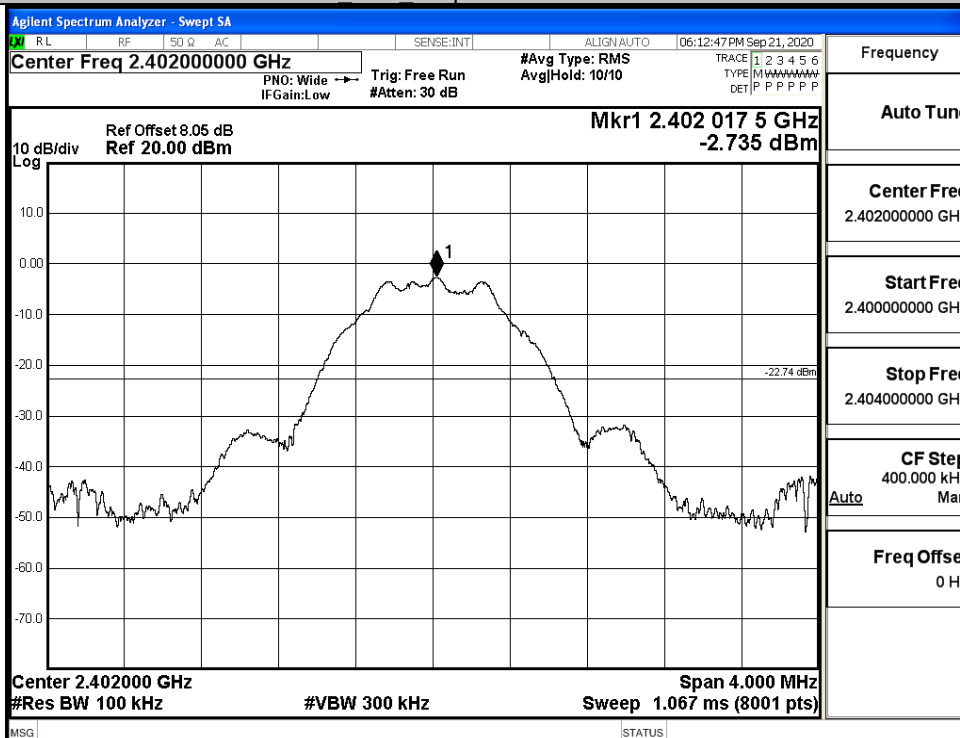


A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.735	-37.348	-22.735	PASS
BT LE	MCH	-2.663	-36.897	-22.663	PASS
BT LE	HCH	-2.593	-37.117	-22.593	PASS

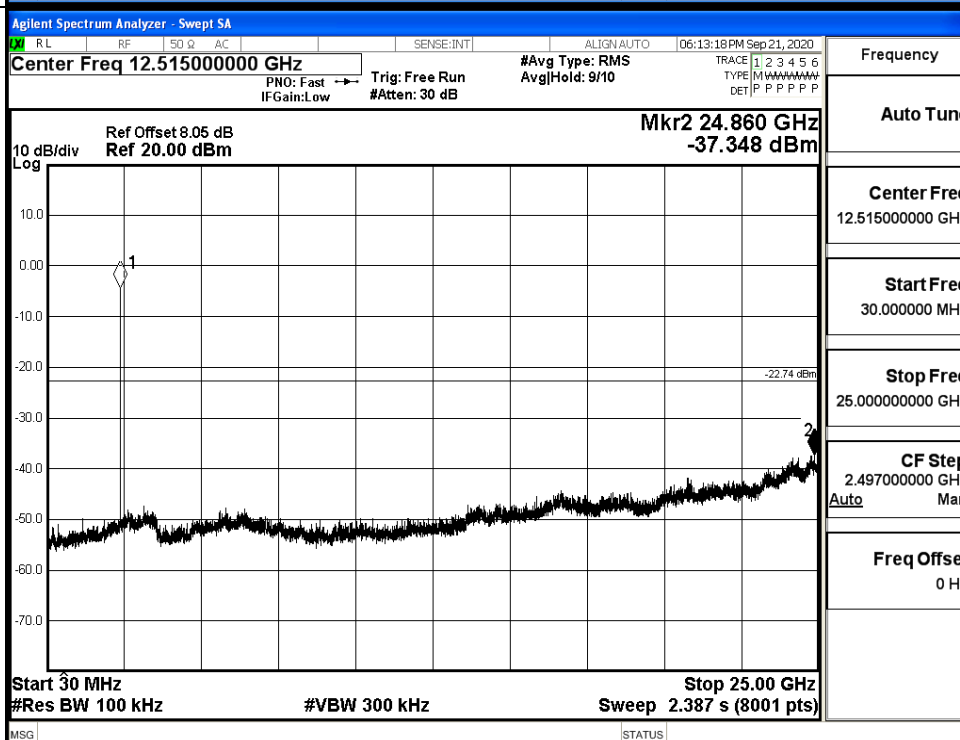
BT LE LCH Graphs

Pref/BT LE/LCH



Frequency
Auto Tune
Center Freq 2.402000000 GHz
Start Freq 2.400000000 GHz
Stop Freq 2.404000000 GHz
CF Step 400.000 kHz Auto Man
Freq Offset 0 Hz

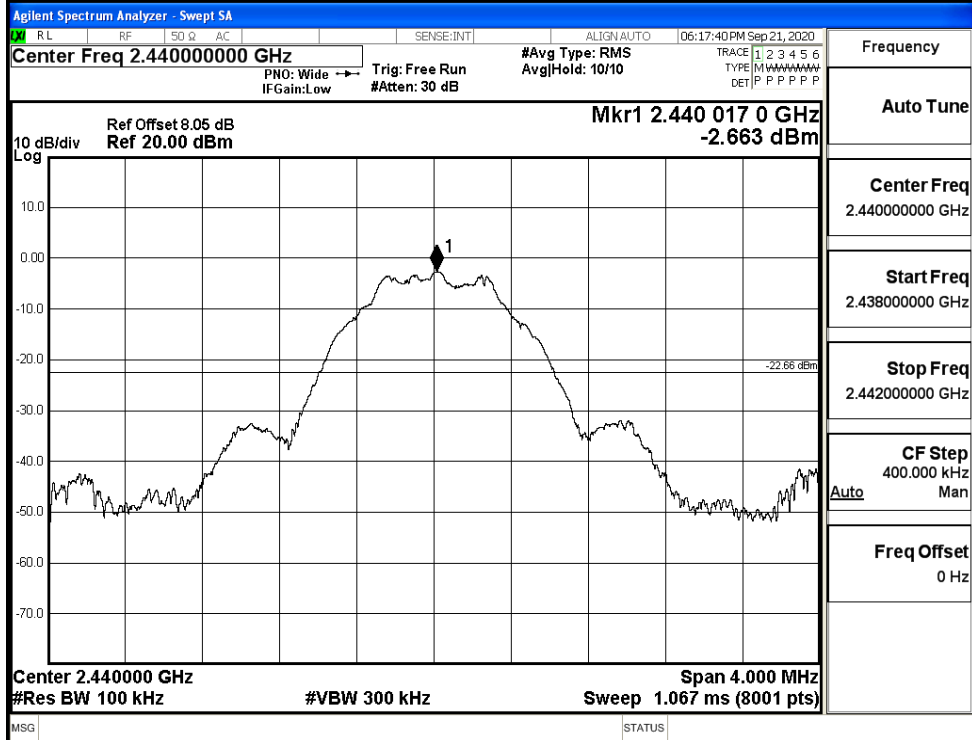
Puw/BT LE/LCH



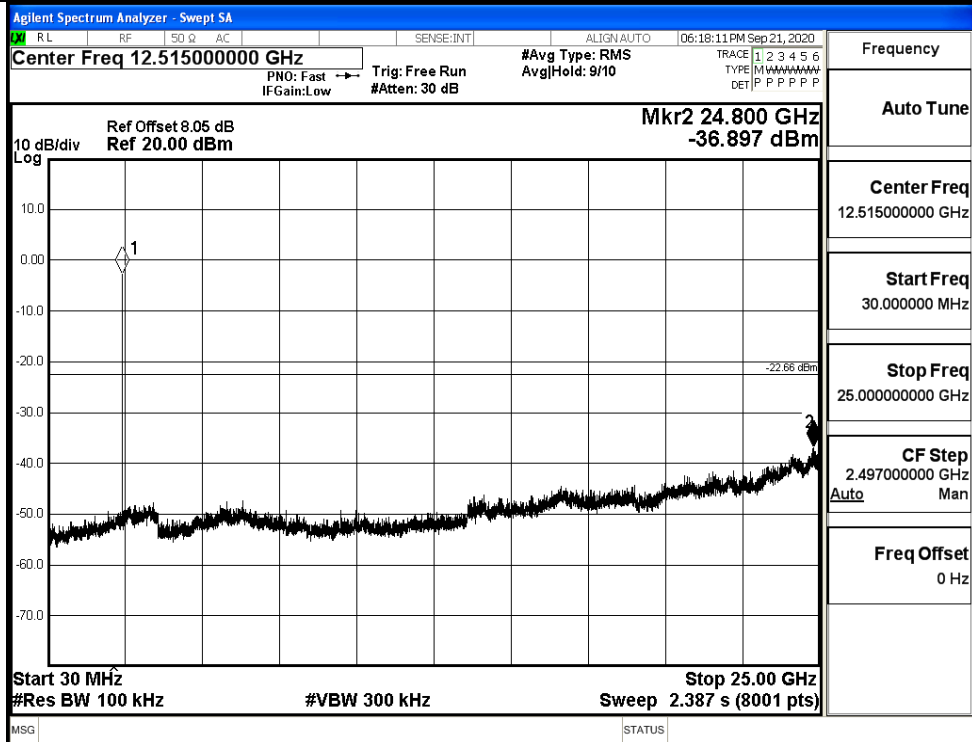
Frequency
Auto Tune
Center Freq 12.515000000 GHz
Start Freq 30.000000 MHz
Stop Freq 25.000000000 GHz
CF Step 2.497000000 GHz Auto Man
Freq Offset 0 Hz

BT LE MCH Graphs

Pref/BT LE/MCH

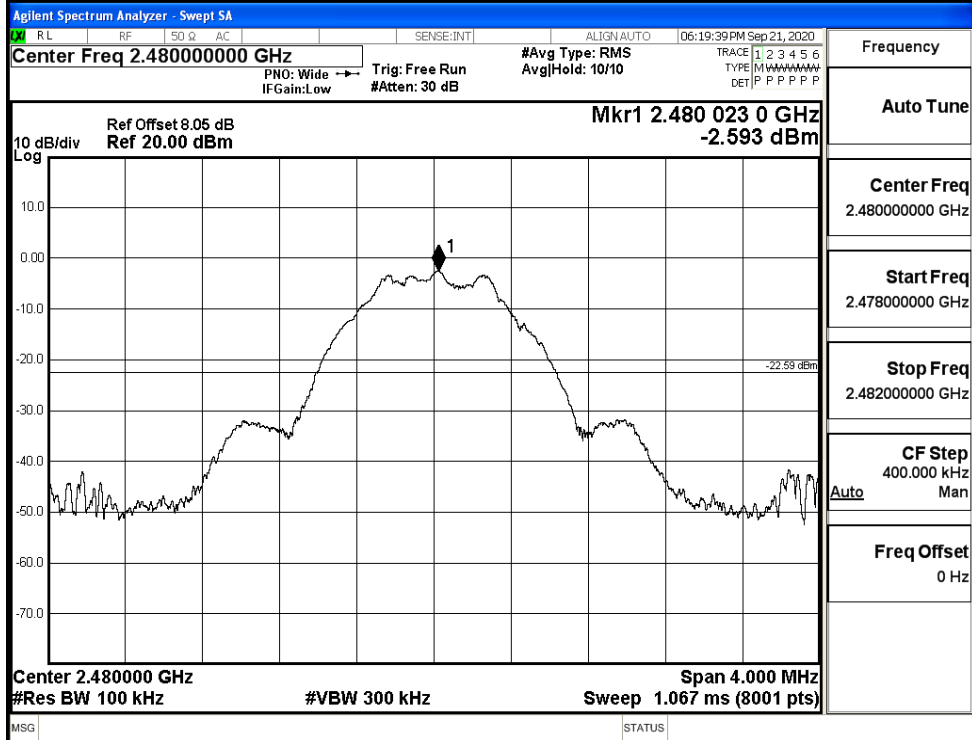


Puw/BT LE/MCH

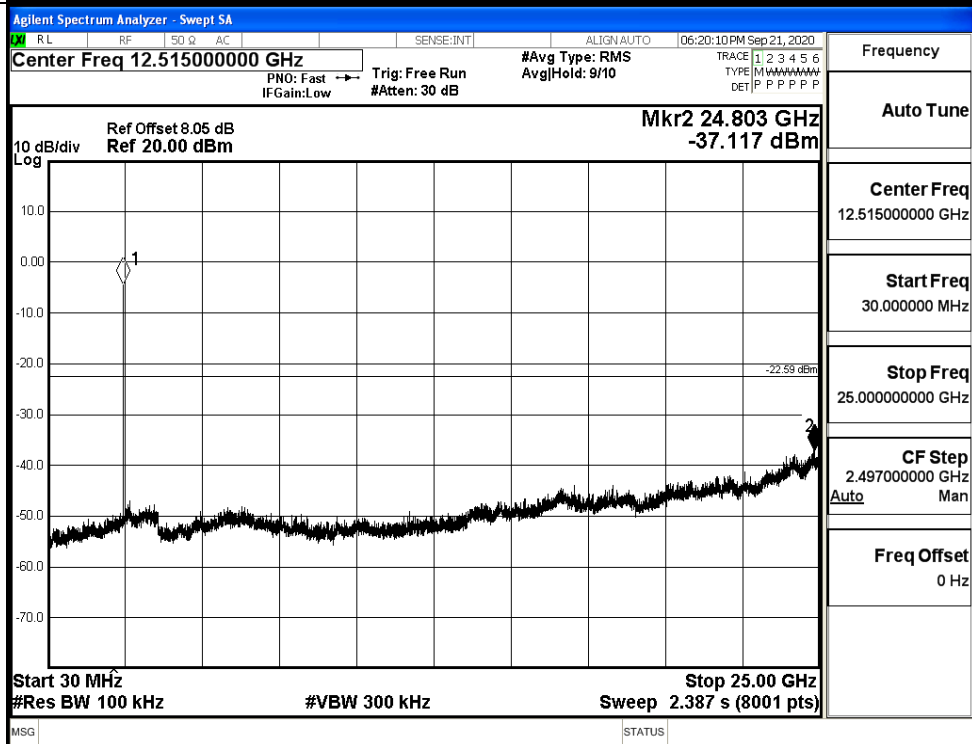


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

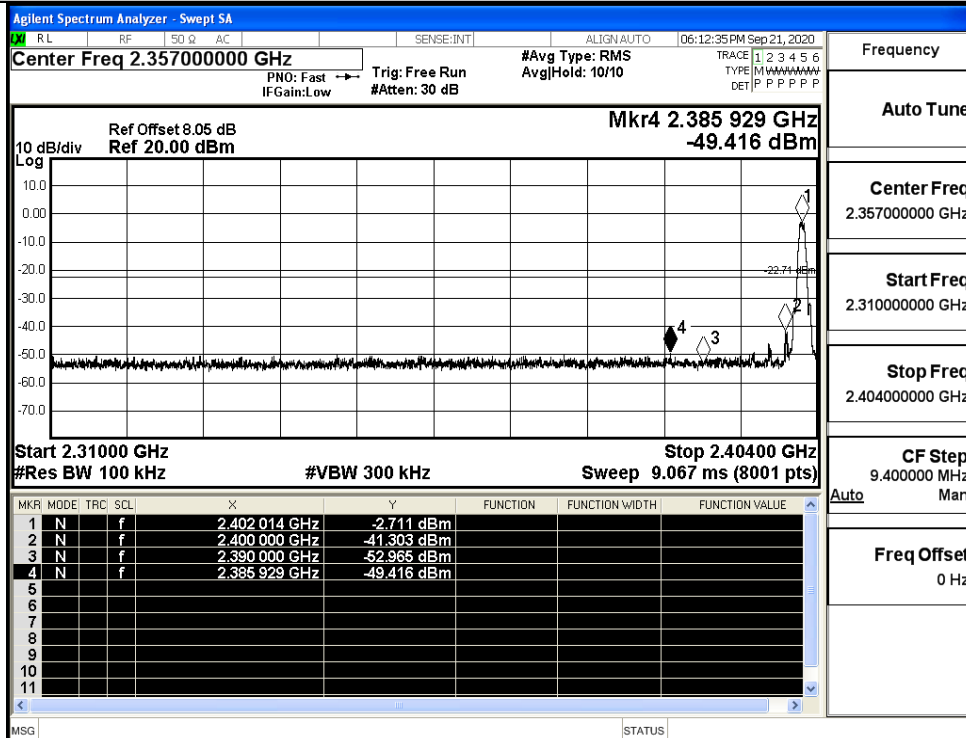


A.7 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.711	-49.416	-22.71	PASS
BT LE	HCH	-2.473	-45.826	-22.47	PASS

Test Graphs

LCH

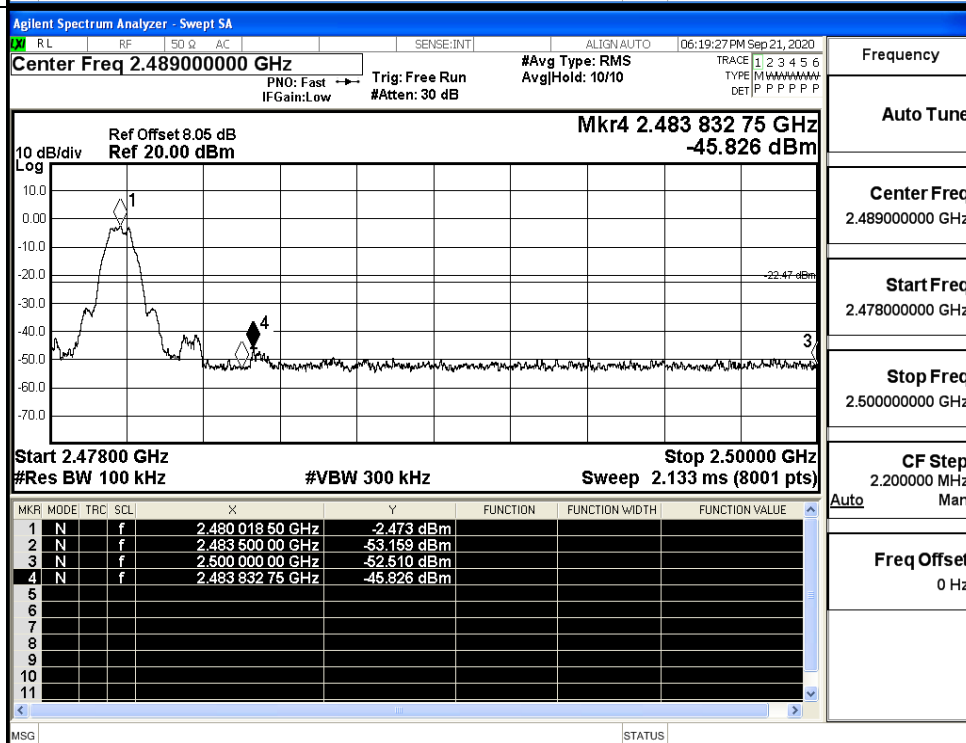


Frequency

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

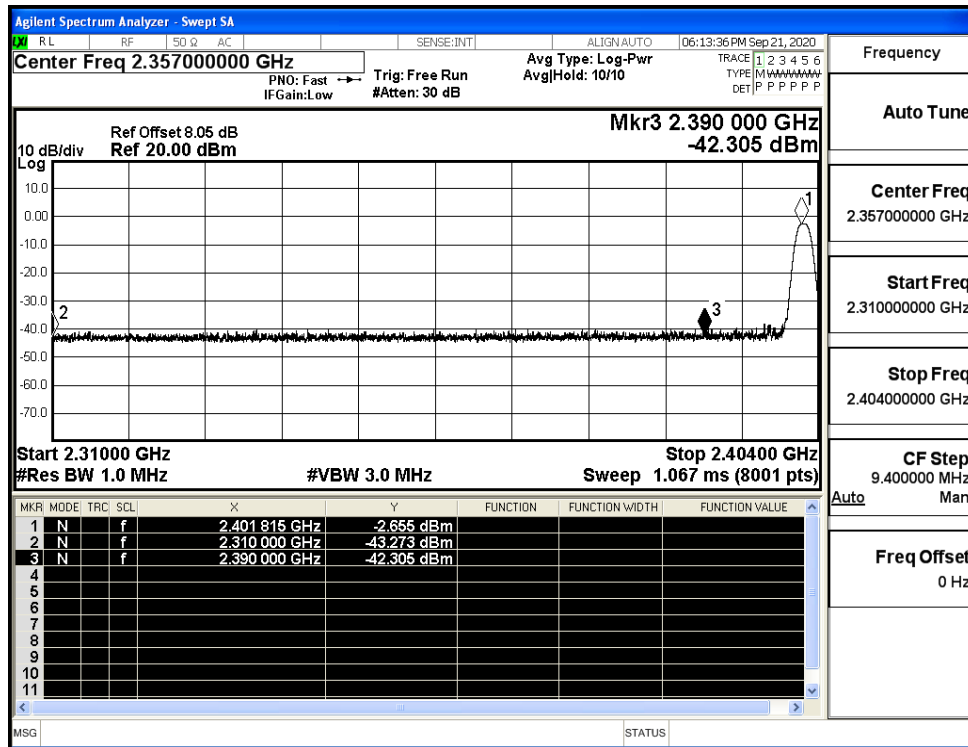
Auto Tune

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

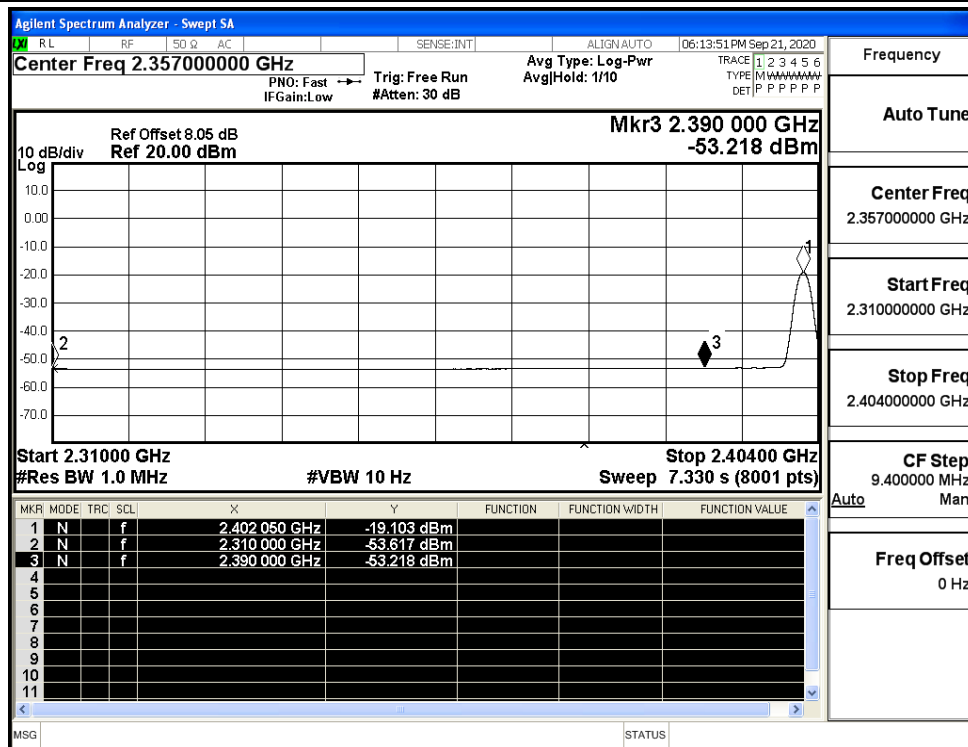
A.8 Restrict-band band-edge measurements

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	-43.27	2.0	0	53.96	PEAK	74	PASS
		Ant1	2310.0	-53.62	2.0	0	43.61	AV	54	PASS
		Ant1	2390.0	-42.31	2.0	0	54.92	PEAK	74	PASS
		Ant1	2390.0	-53.22	2.0	0	44.01	AV	54	PASS
	2480	Ant1	2483.5	-43.65	2.0	0	53.58	PEAK	74	PASS
		Ant1	2483.5	-52.66	2.0	0	44.57	AV	54	PASS
		Ant1	2500.0	-41.66	2.0	0	55.57	PEAK	74	PASS
		Ant1	2500.0	-52.61	2.0	0	44.62	AV	54	PASS

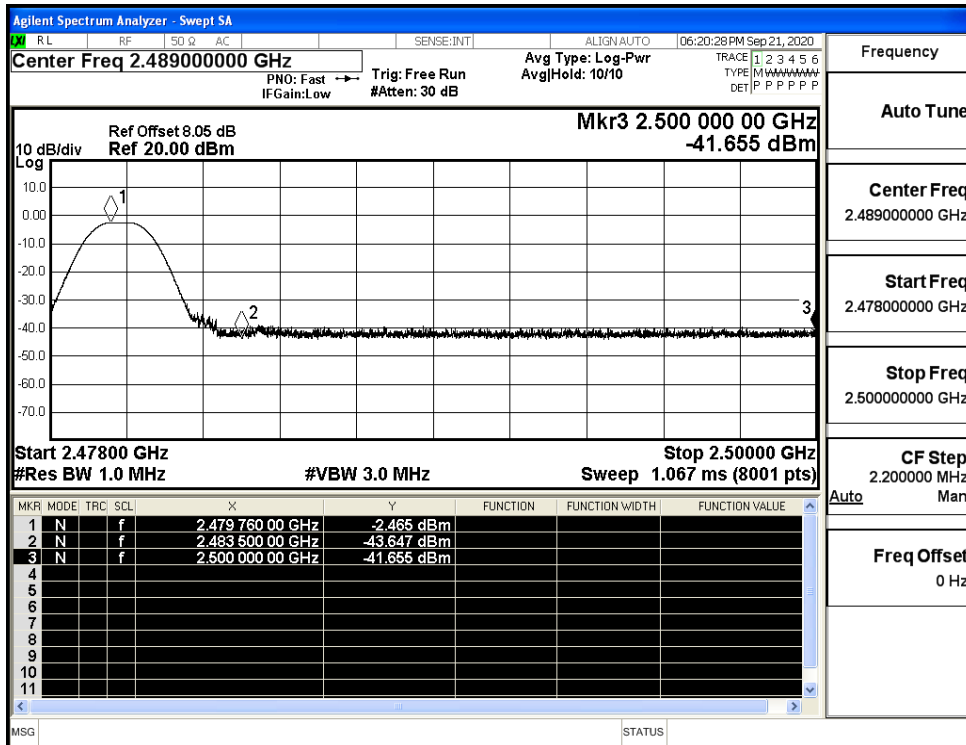
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

