

Appendix B

RF Test Data for BT LE V4.1 (Conducted Measurement)

Product Name: IPTV Set-Top Box

Trade Mark: N/A

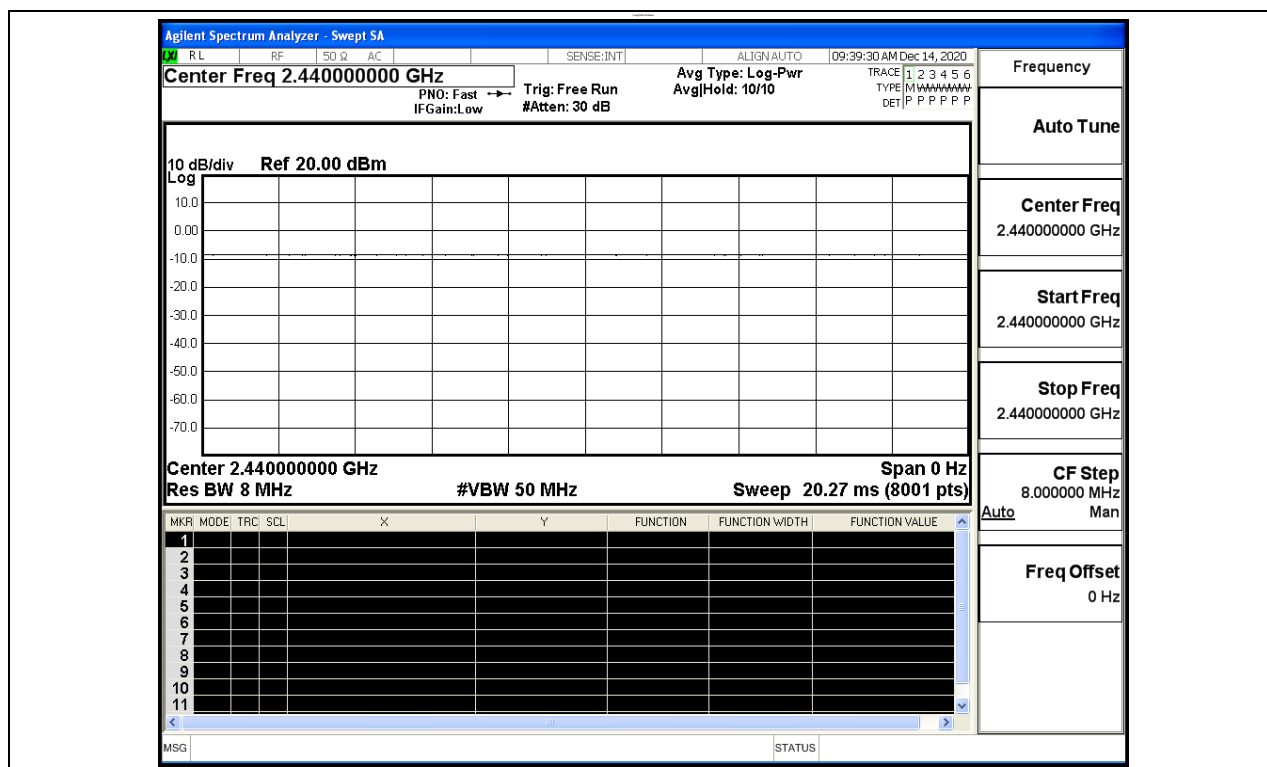
Test Model: SML-5041W

Environmental Conditions

Temperature:	22.3° C
Relative Humidity:	53.6%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

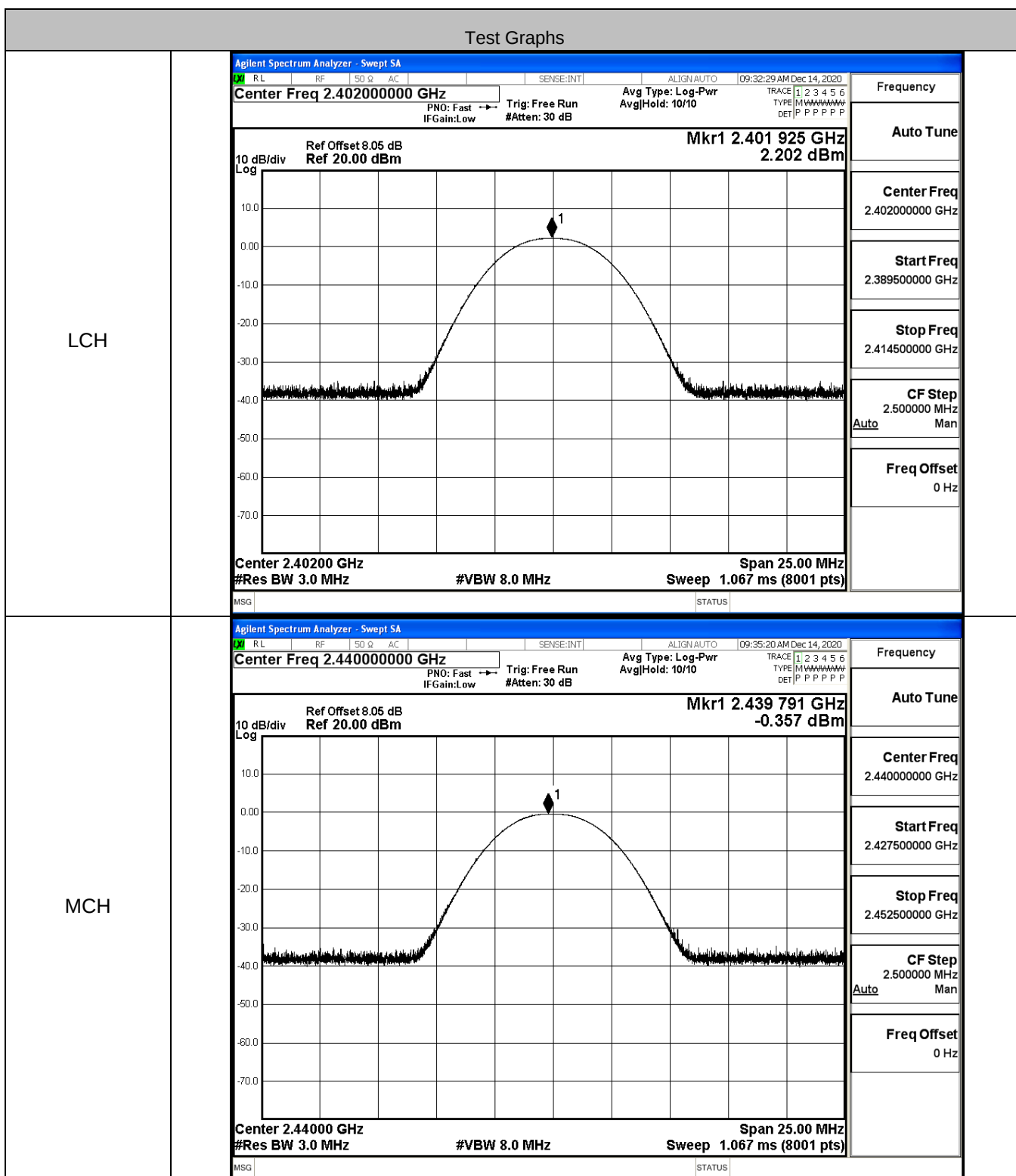
B.1 Duty Cycle

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

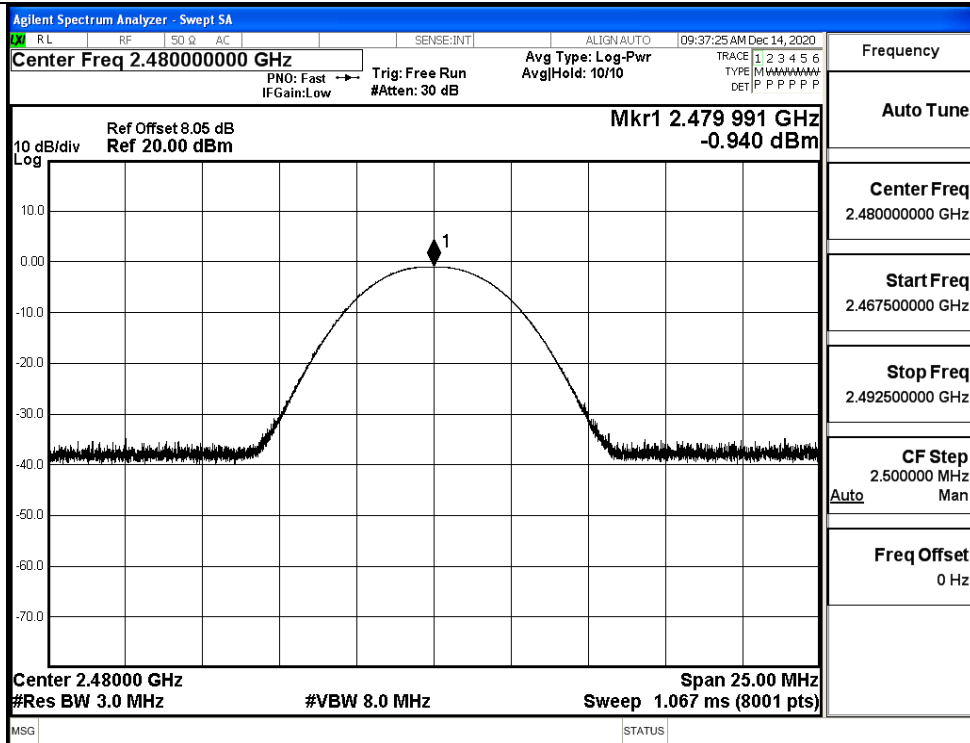


B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	2.202	30	PASS
BT LE	MCH	-0.357	30	PASS
BT LE	HCH	-0.94	30	PASS



HCH

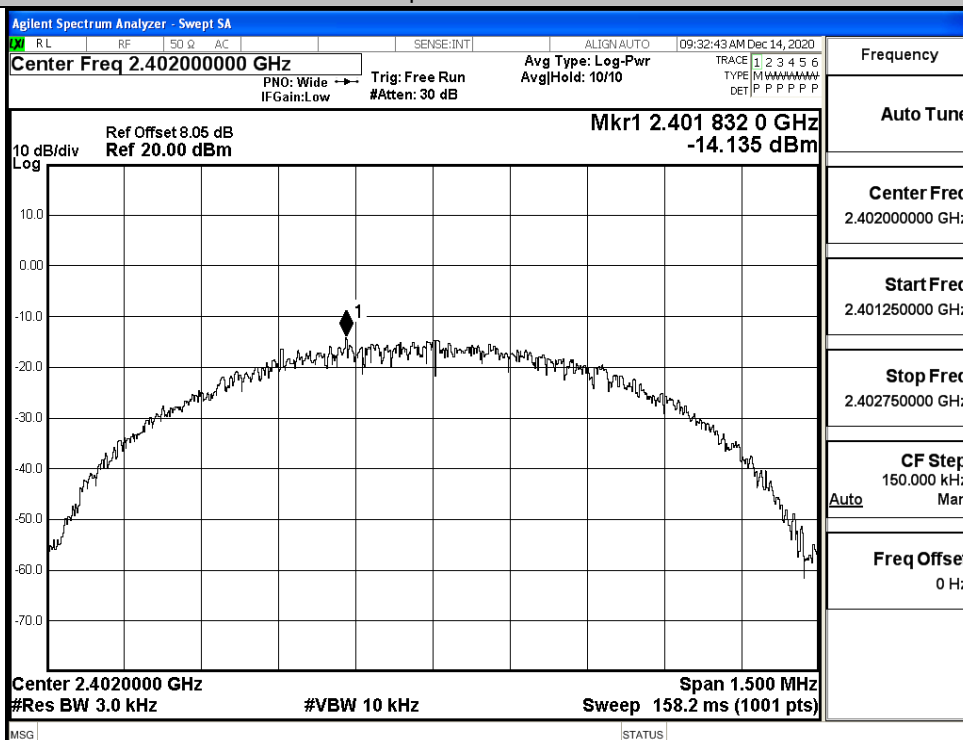


B.3 Maximum Power Spectral Density

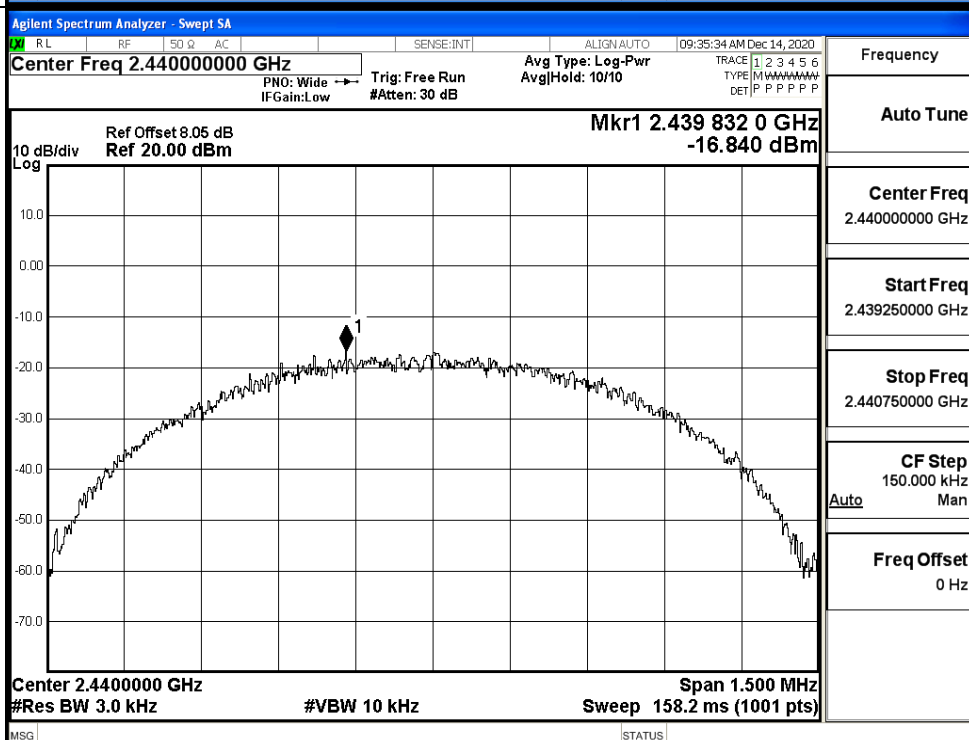
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-14.135	8	PASS
BT LE	MCH	-16.840	8	PASS
BT LE	HCH	-17.365	8	PASS

Test Graphs

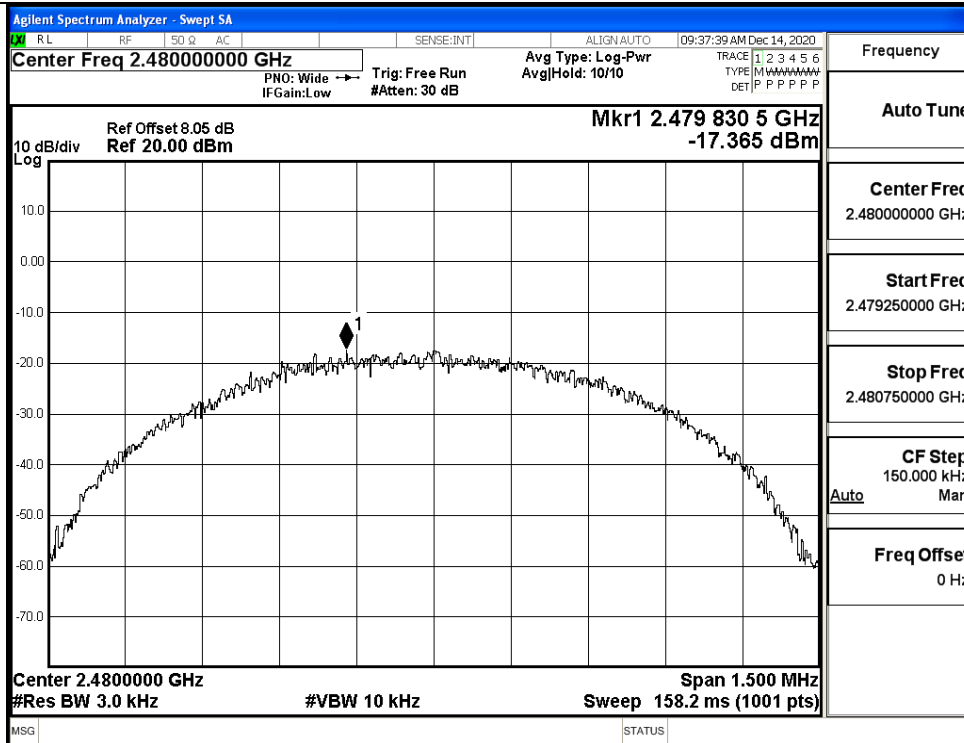
LCH



MCH



HCH

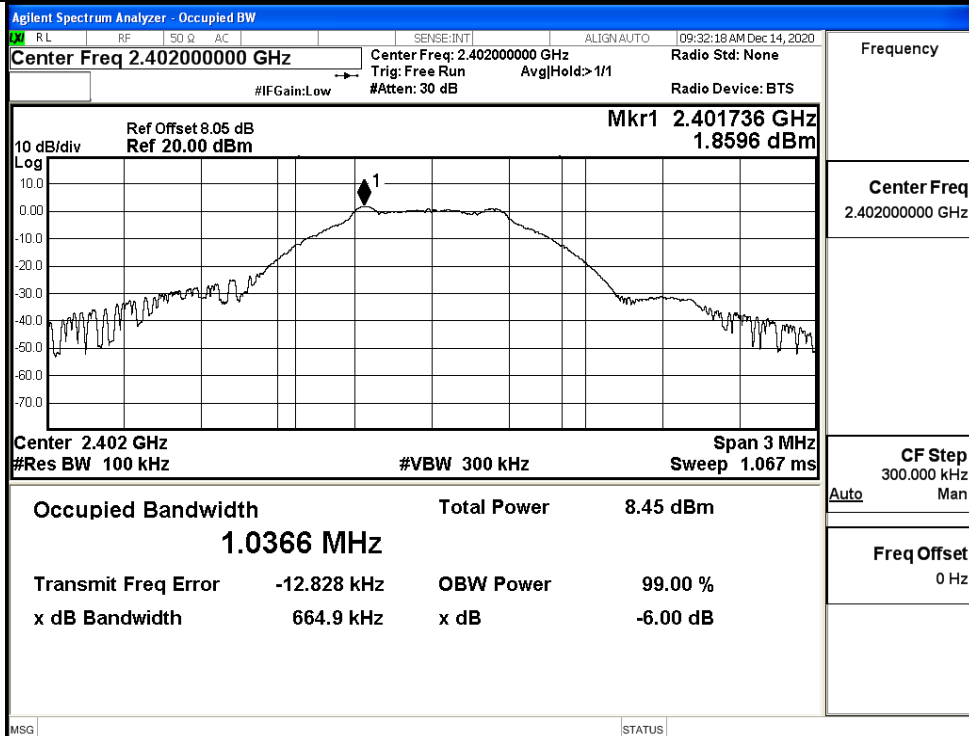


B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6649	≥ 0.5	PASS
BT LE	MCH	0.6657	≥ 0.5	PASS
BT LE	HCH	0.6624	≥ 0.5	PASS

Test Graphs

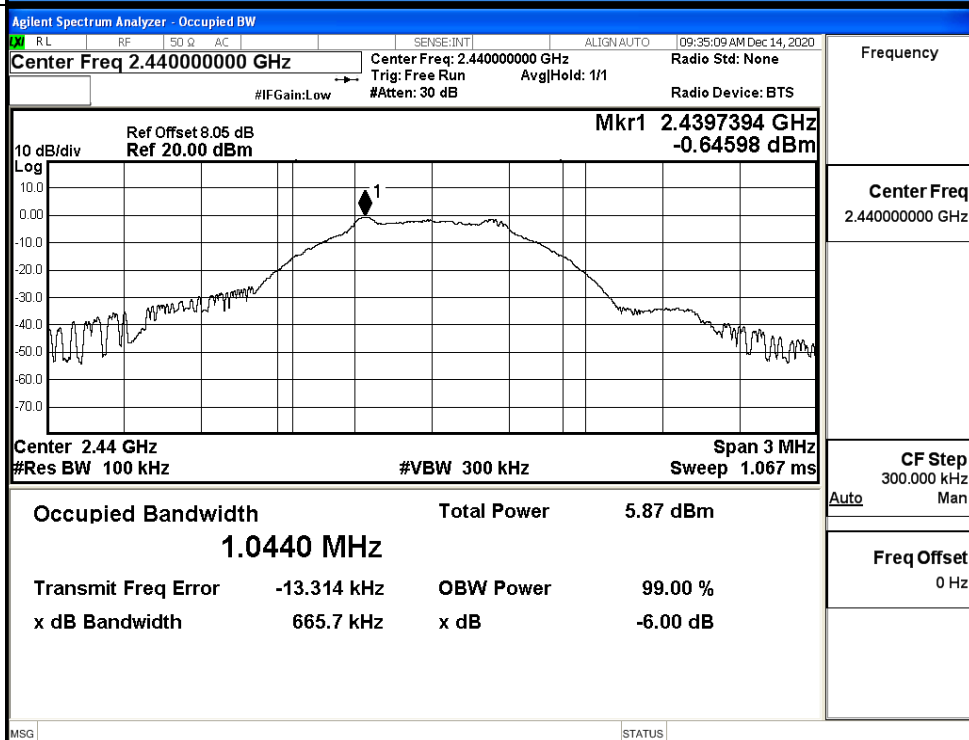
LCH



Frequency

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

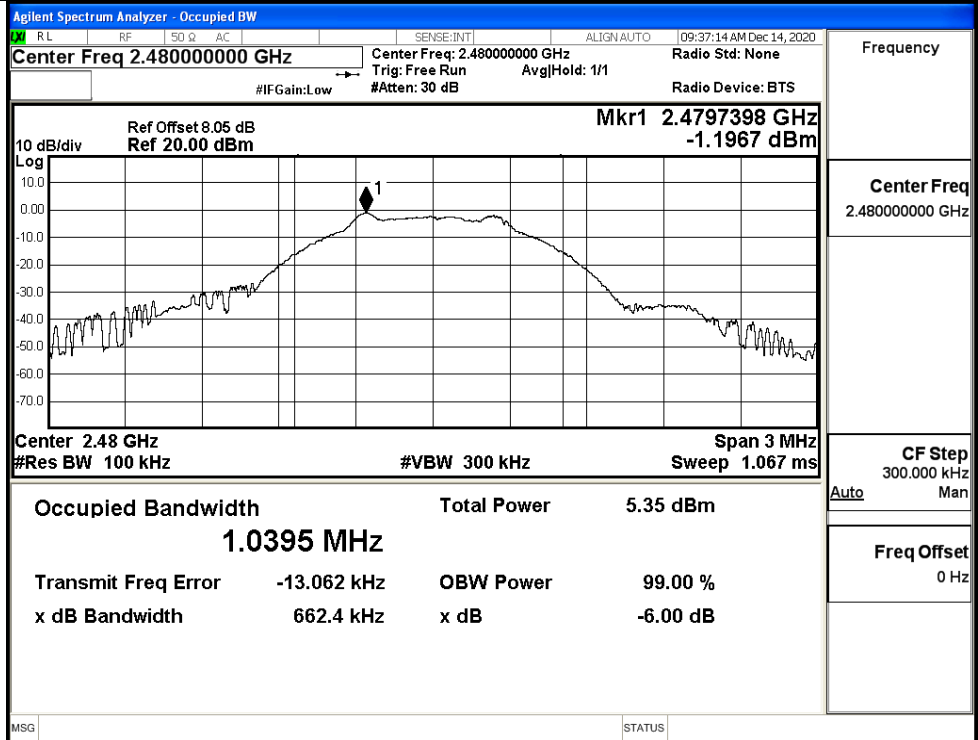
MCH



Frequency

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

HCH

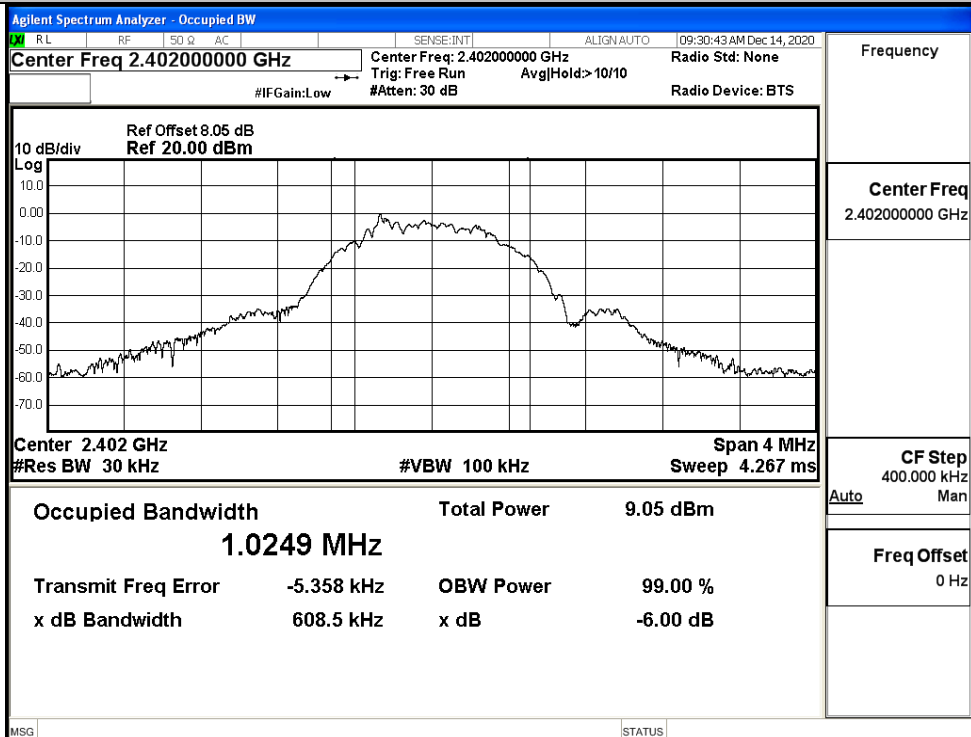


B.5 Occupied Bandwidth

Mode	Channel	Occupied Bandwidth [MHz]	Verdict
BT LE	LCH	1.0249	PASS
BT LE	MCH	1.0228	PASS
BT LE	HCH	1.0259	PASS

Test Graphs

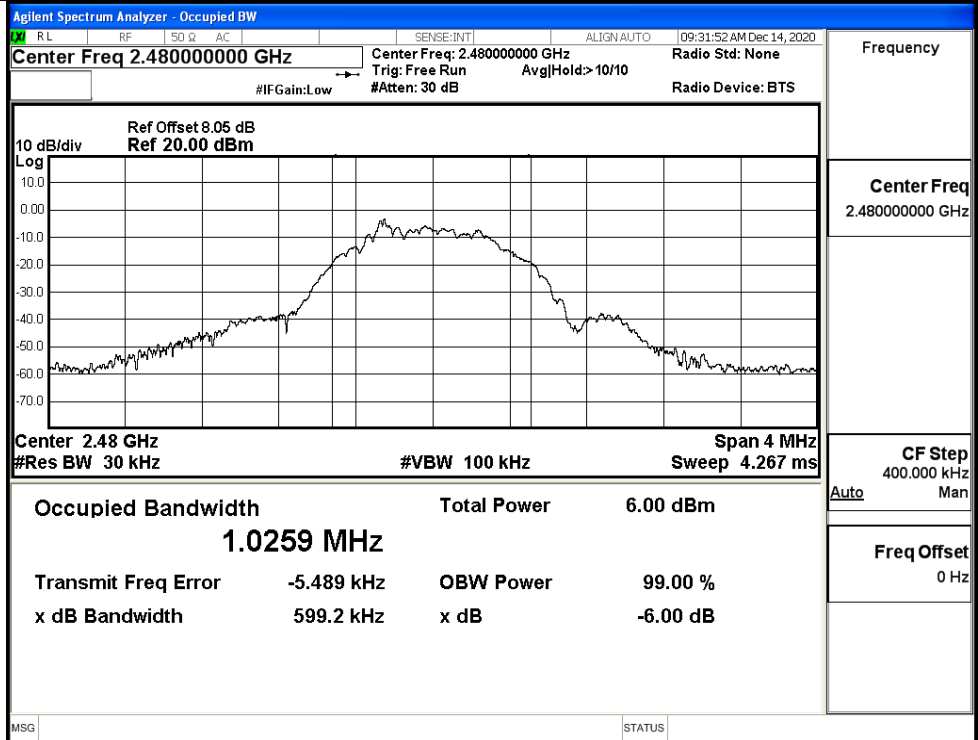
LCH



MCH



HCH

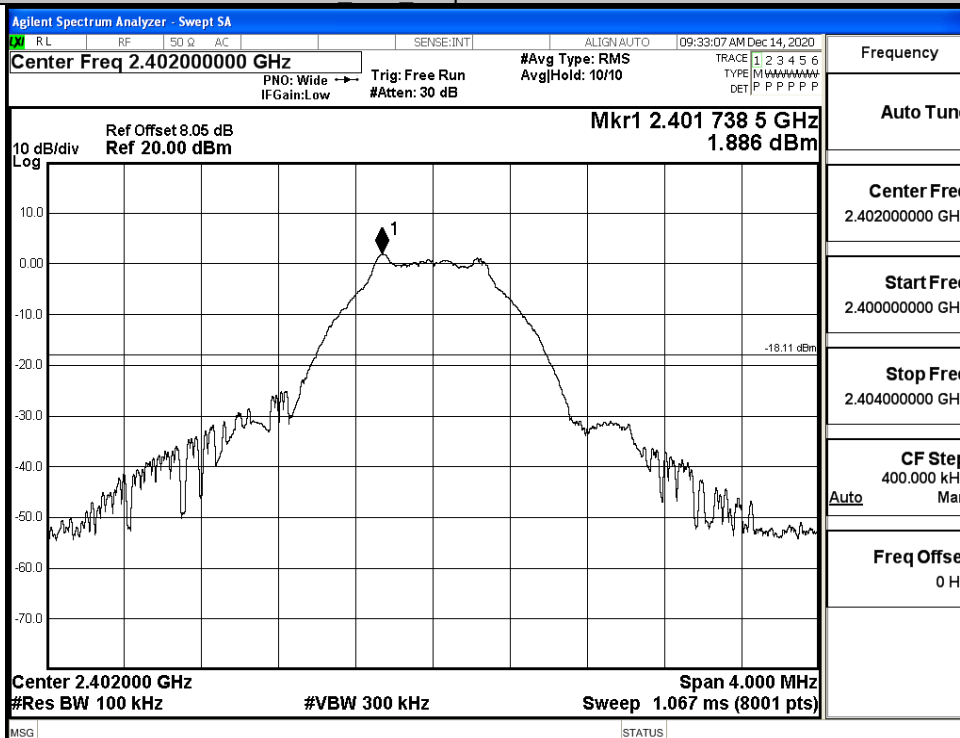


B.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.886	-38.223	-18.114	PASS
BT LE	MCH	-0.676	-37.935	-20.676	PASS
BT LE	HCH	-1.207	-38.041	-21.207	PASS

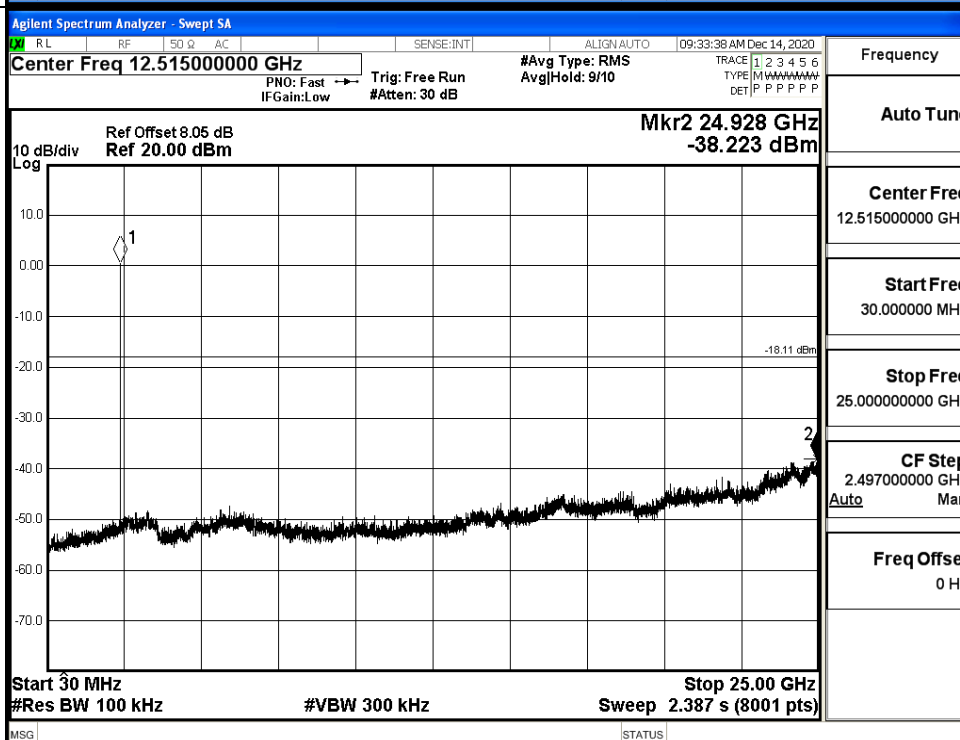
BT LE LCH Graphs

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

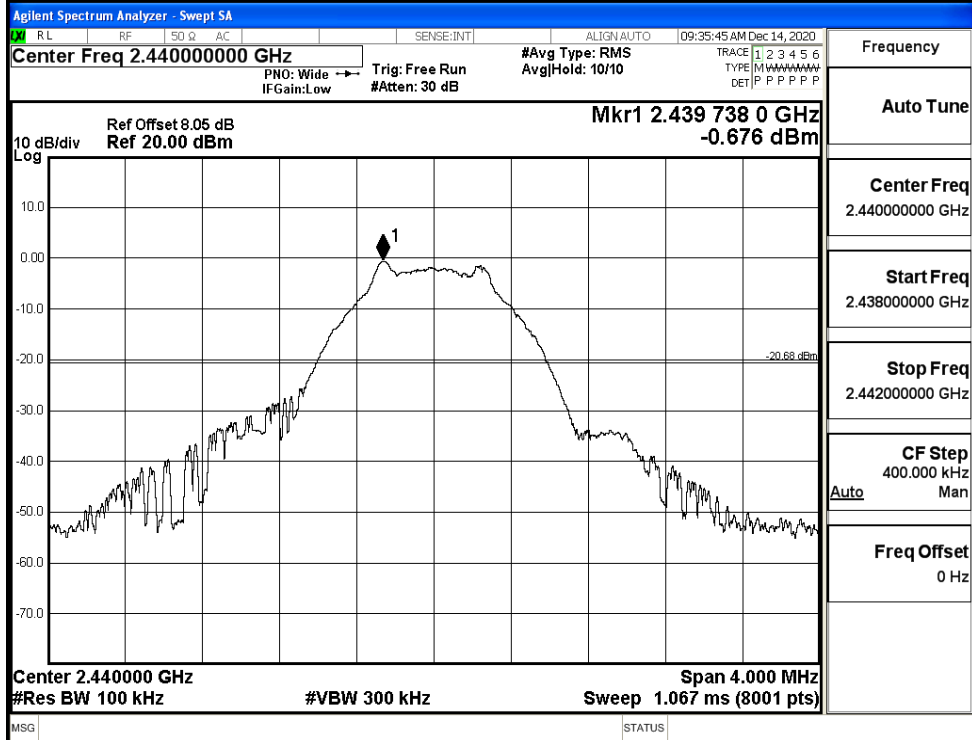
Puw/BT LE/LCH



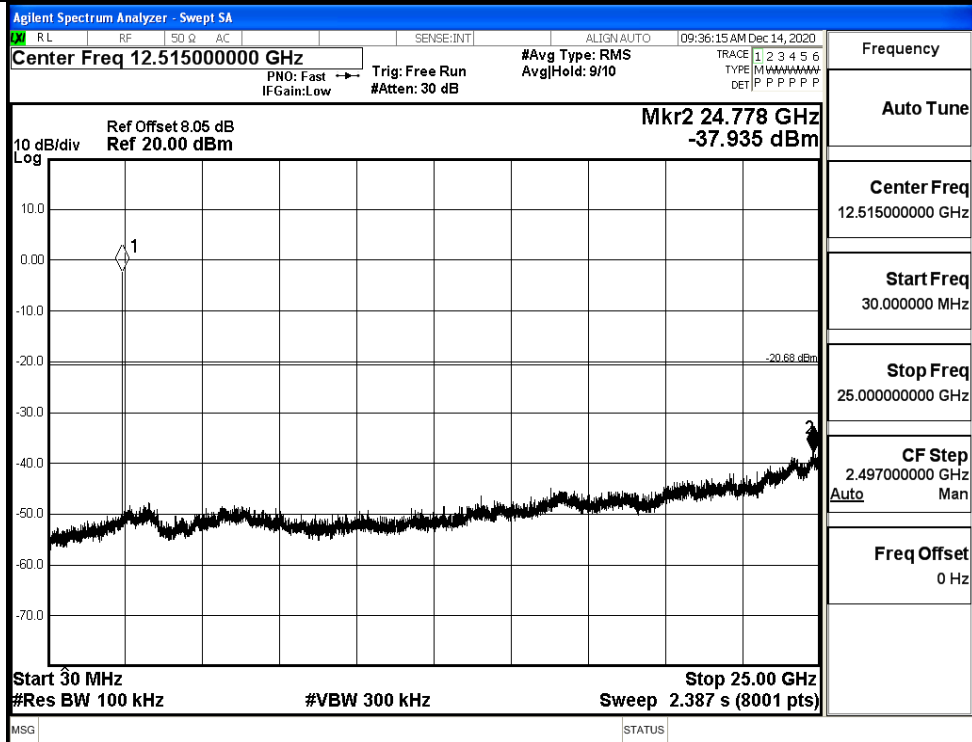
Frequency
Auto Tune
Center Freq 12.515000000 GHz
Start Freq 30.000000 MHz
Stop Freq 25.000000000 GHz
CF Step 2.497000000 GHz Auto Man
Freq Offset 0 Hz

BT LE MCH Graphs

Pref/BT LE/MCH

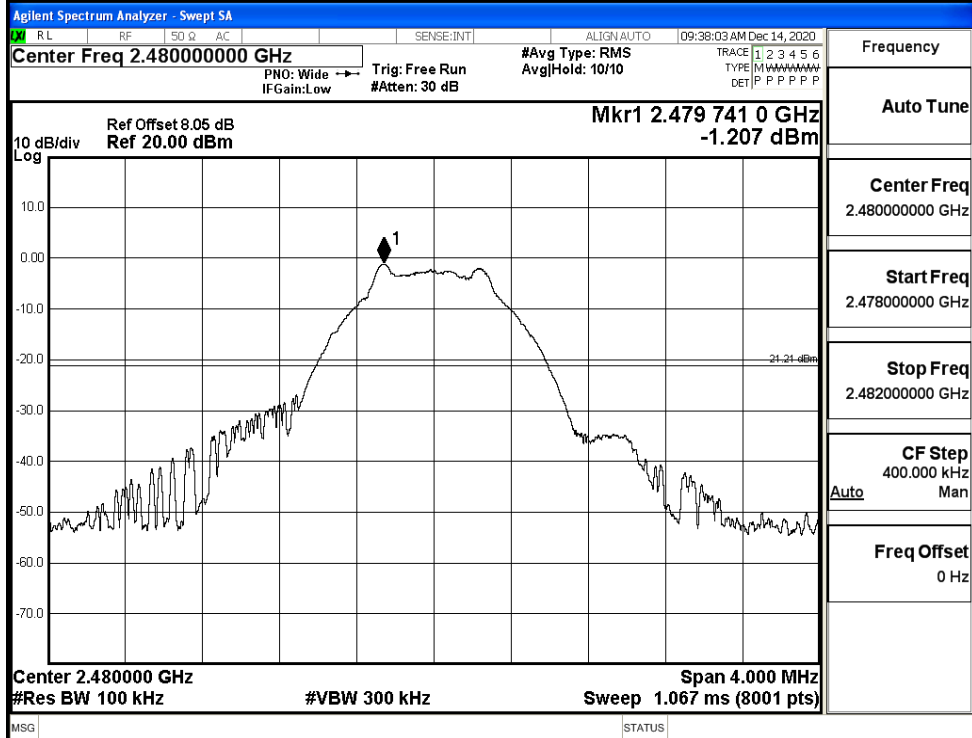


Puw/BT LE/MCH

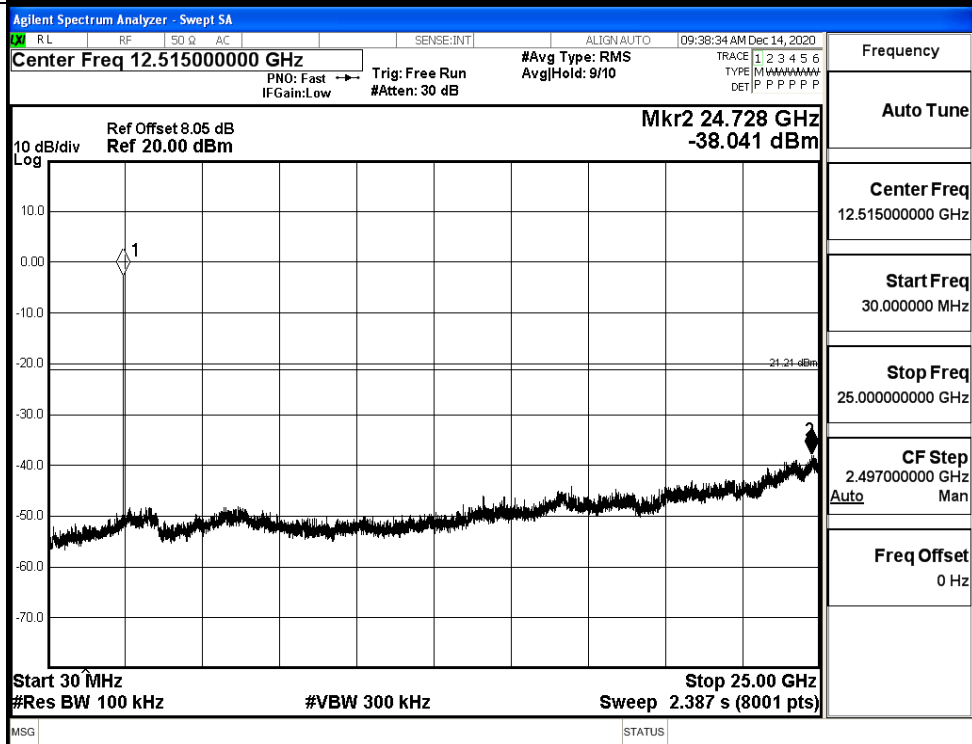


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

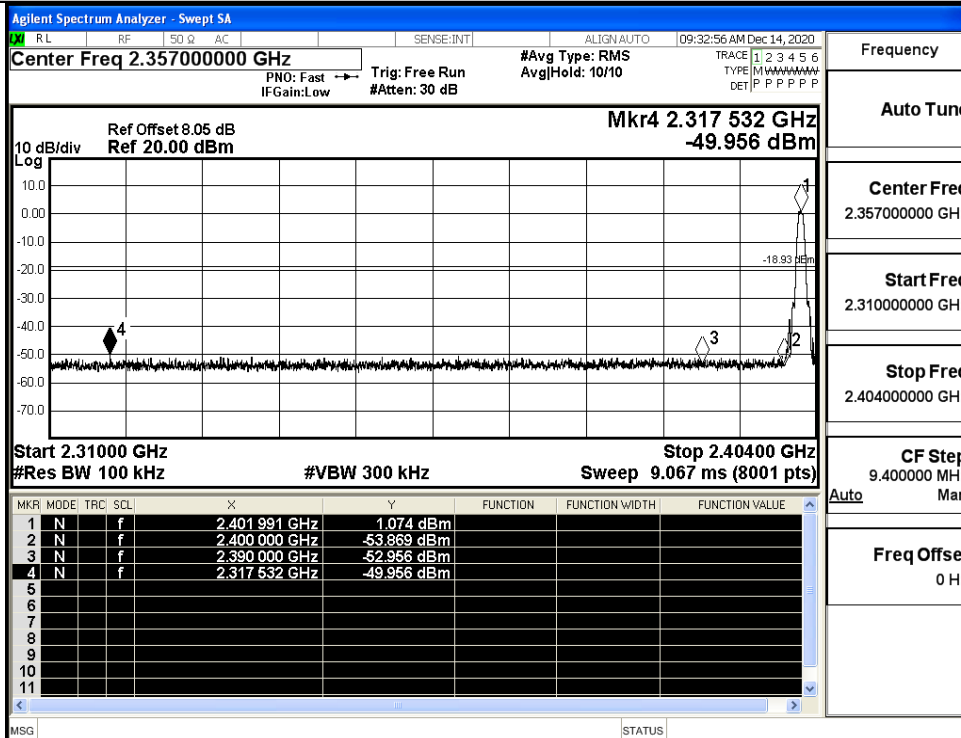


B.7 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	1.074	-49.956	-18.93	PASS
BT LE	HCH	-1.182	-50.014	-21.18	PASS

Test Graphs

LCH

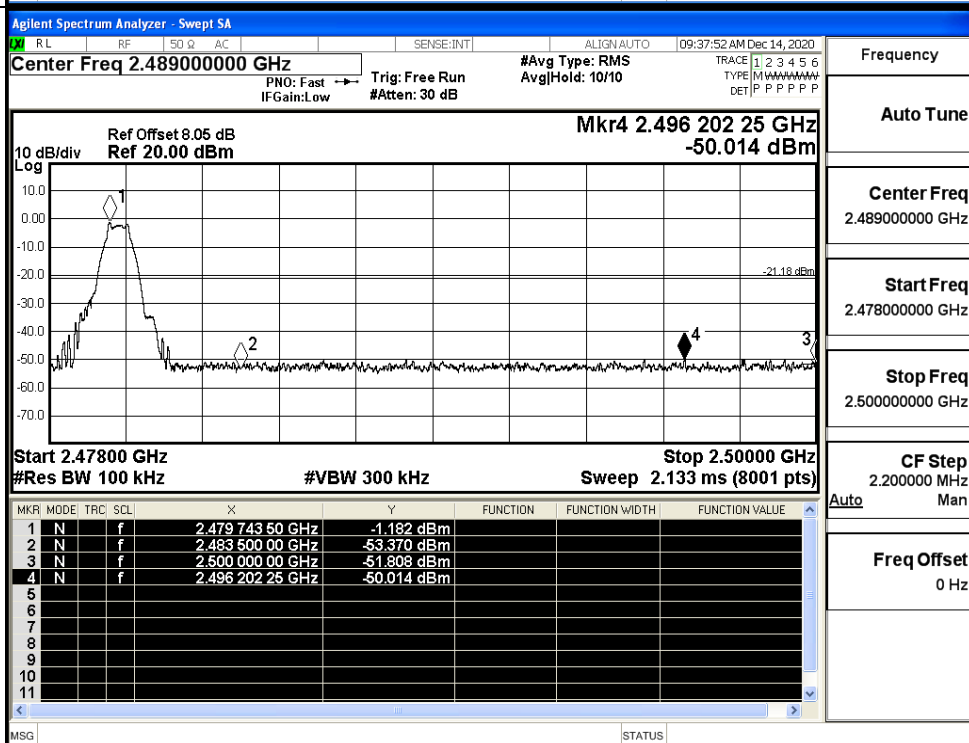


Frequency

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

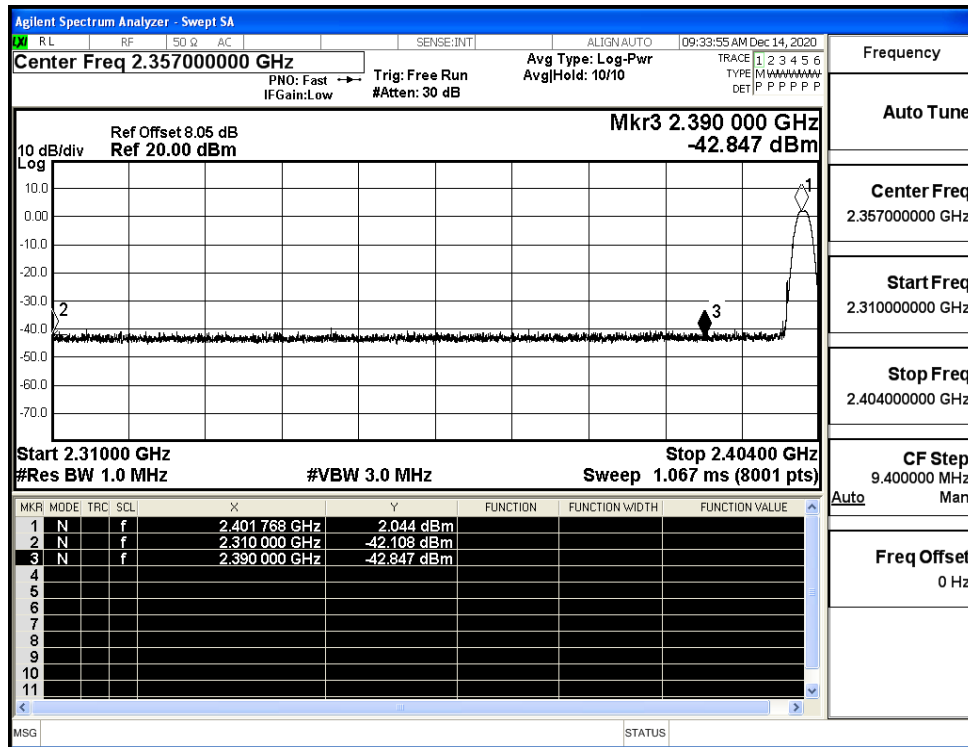
Auto Tune

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

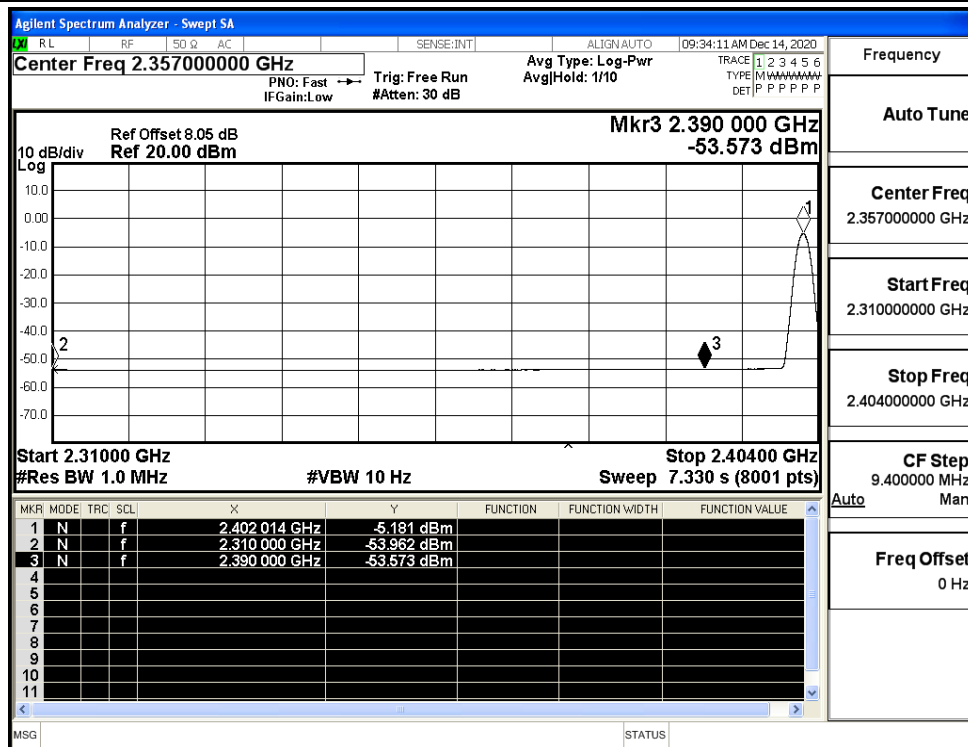
B.8 Restrict-band band-edge measurements

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	-42.11	3.0	0	54.15	PEAK	74	PASS
		Ant1	2310.0	-53.96	3.0	0	42.30	AV	54	PASS
		Ant1	2390.0	-42.85	3.0	0	53.41	PEAK	74	PASS
		Ant1	2390.0	-53.57	3.0	0	42.68	AV	54	PASS
	2480	Ant1	2483.5	-42.07	3.0	0	54.19	PEAK	74	PASS
		Ant1	2483.5	-53.12	3.0	0	43.14	AV	54	PASS
		Ant1	2500.0	-42.45	3.0	0	53.81	PEAK	74	PASS
		Ant1	2500.0	-52.95	3.0	0	43.31	AV	54	PASS

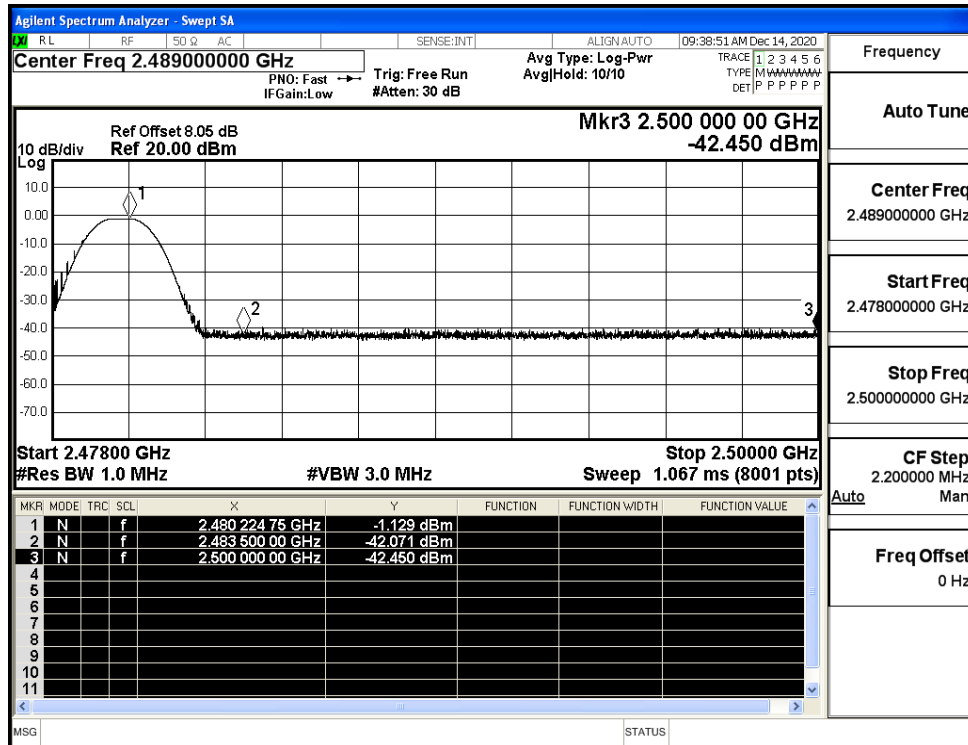
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

