

Appendix A

RF Test Data for BT V4.2(BDR/EDR) (Conducted Measurement)

Product Name: BT Mesh Floodlight

Trade Mark: N/A

Test Model: ZJ-MHFA1-RGBWW

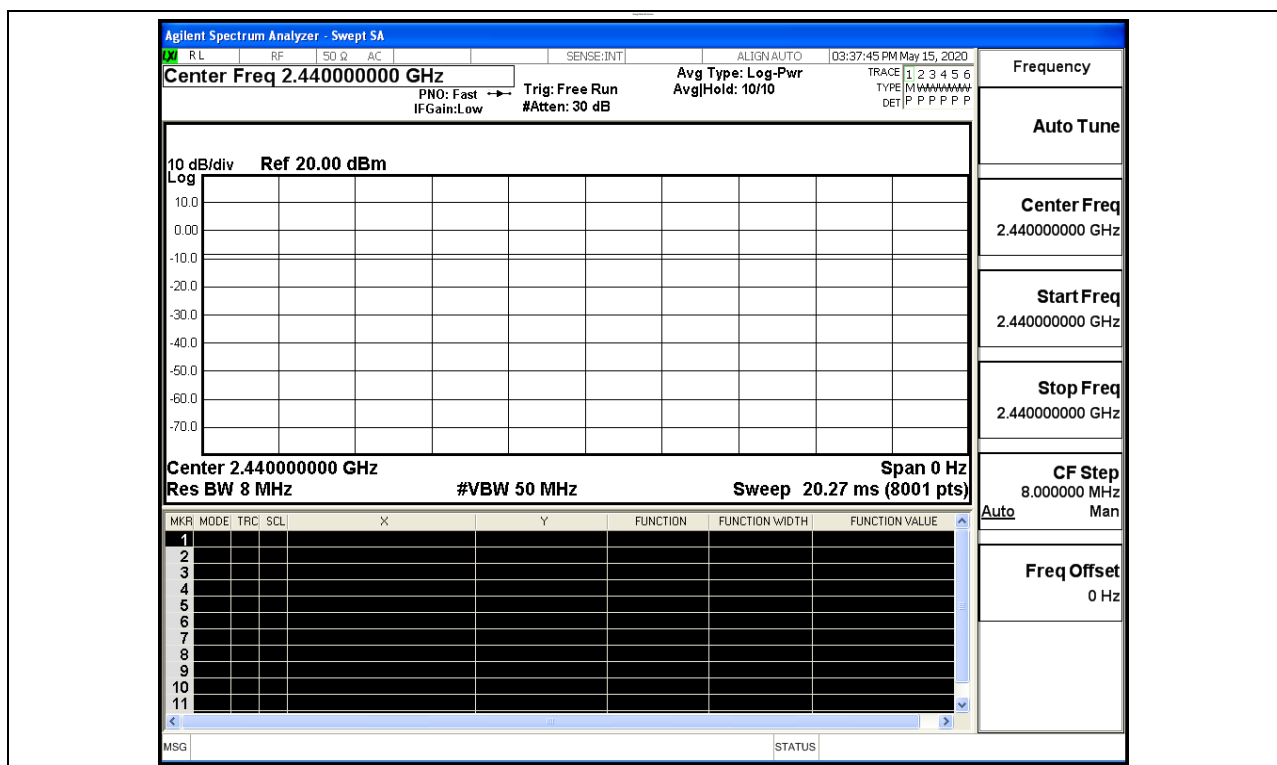
Environmental Conditions

Temperature:	24.5° C
Relative Humidity:	52.3%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Li Huan

A.1 Duty Cycle

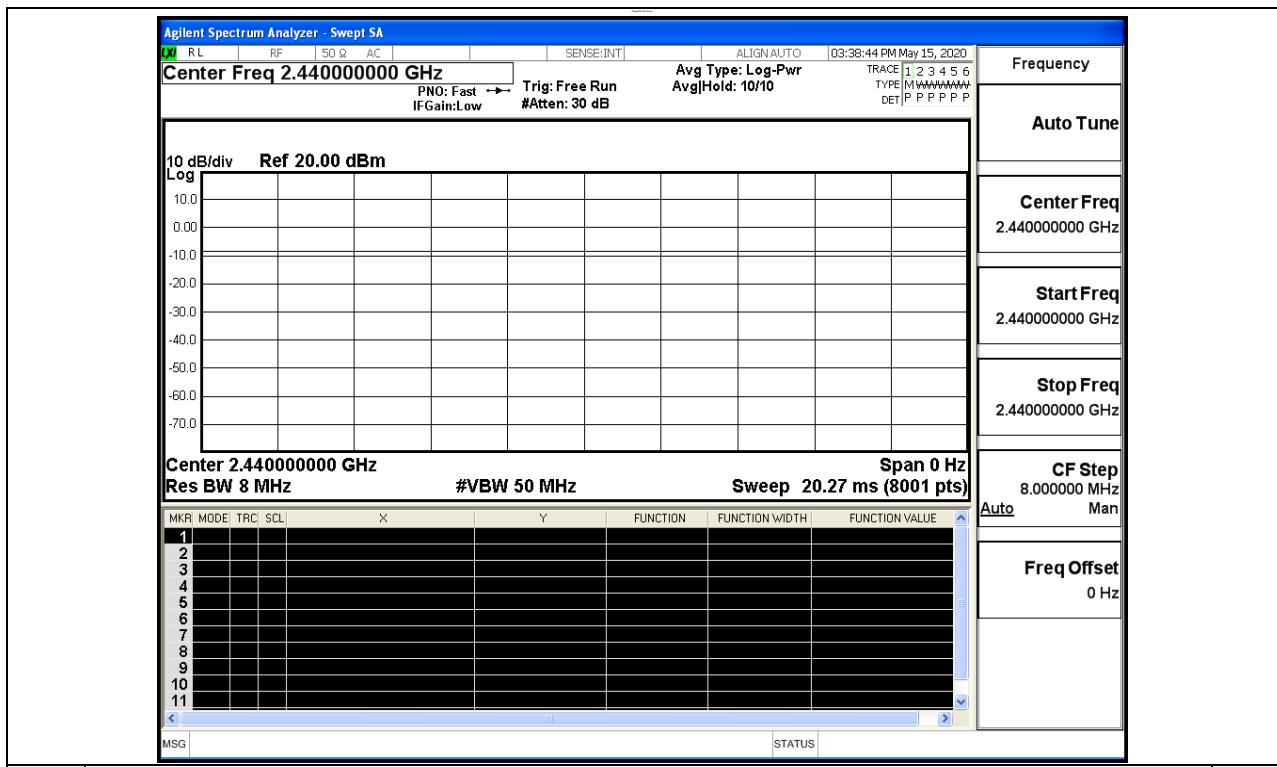
BT LE

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



BT 2LE

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



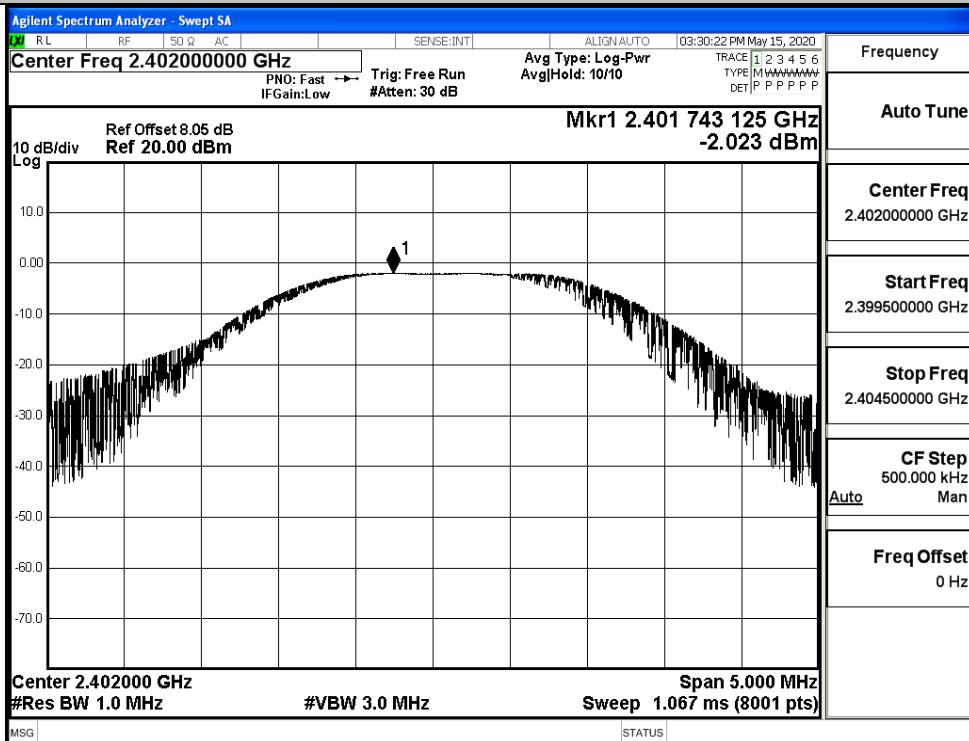
A.2 Maximum Conducted Peak Output Power

BT LE

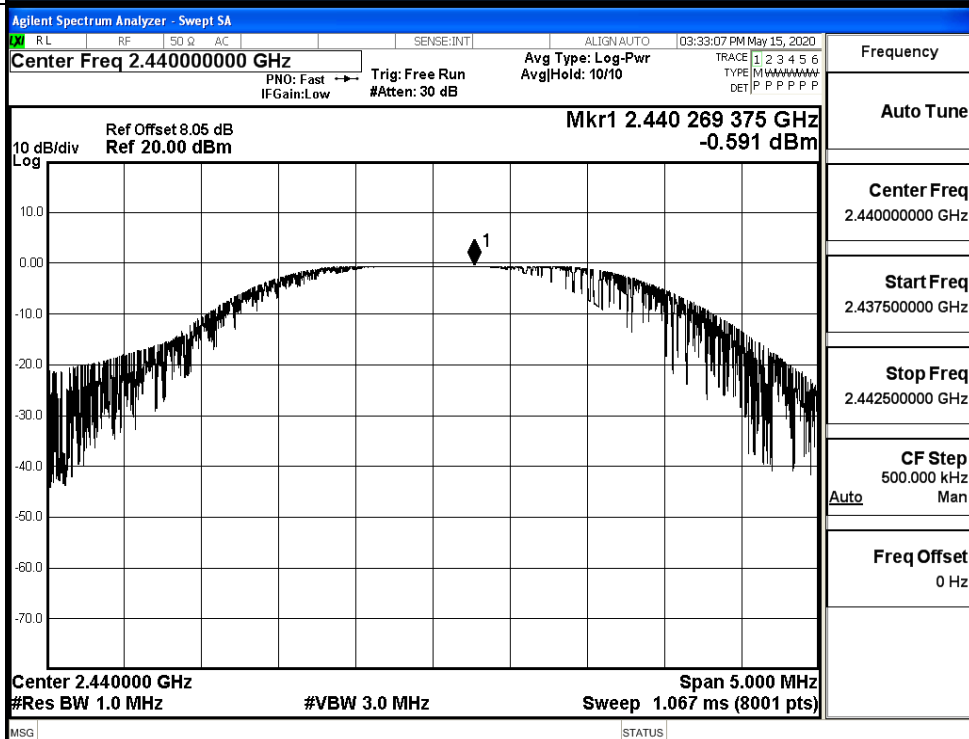
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.023	30	PASS
BT LE	MCH	-0.591	30	PASS
BT LE	HCH	0.339	30	PASS

Test Graphs

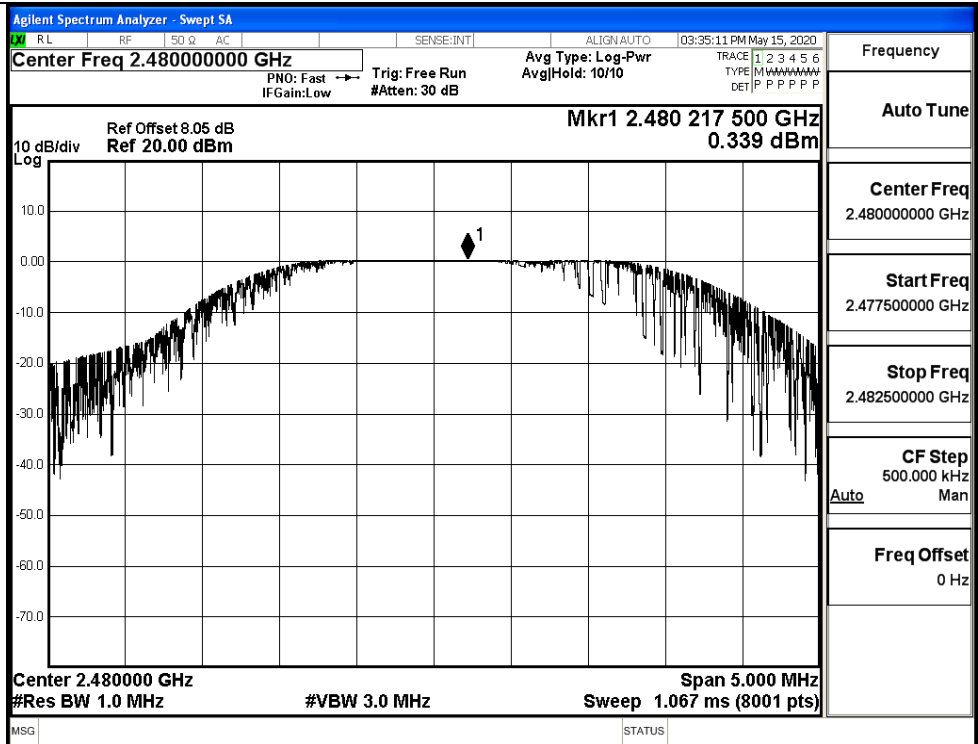
LCH



MCH



HCH

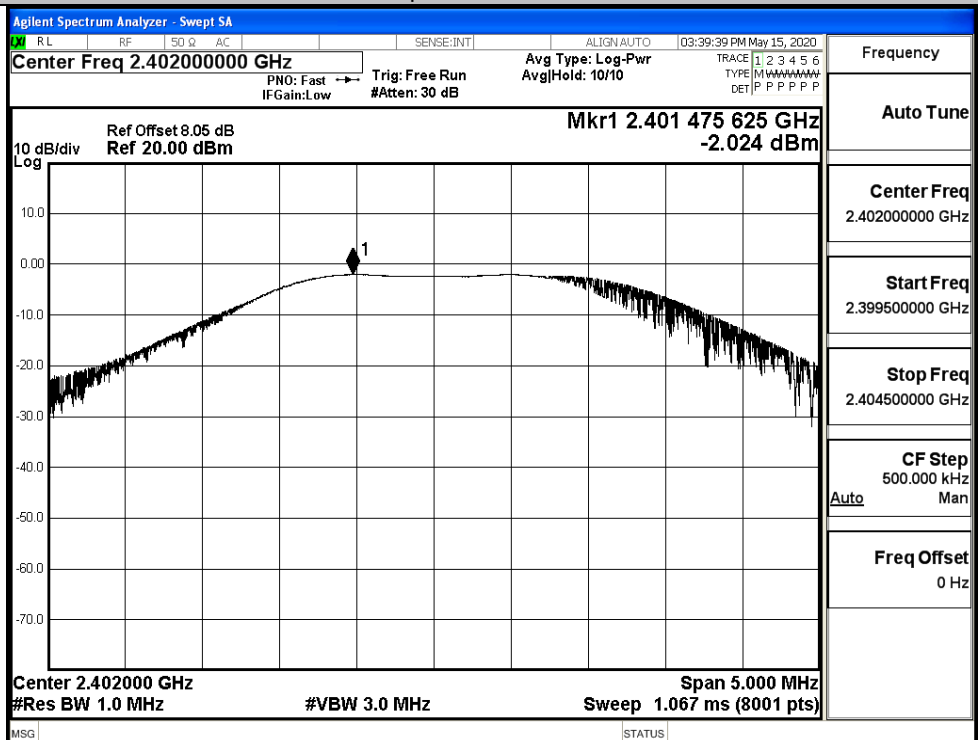


BT 2LE

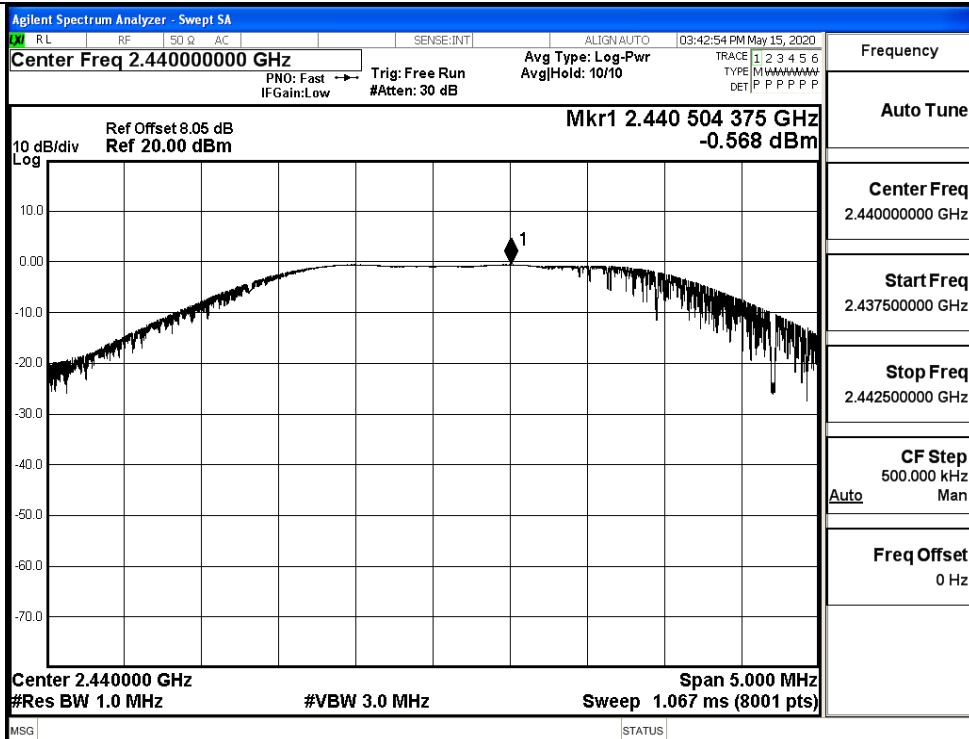
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.024	30	PASS
BT LE	MCH	-0.568	30	PASS
BT LE	HCH	0.376	30	PASS

Test Graphs

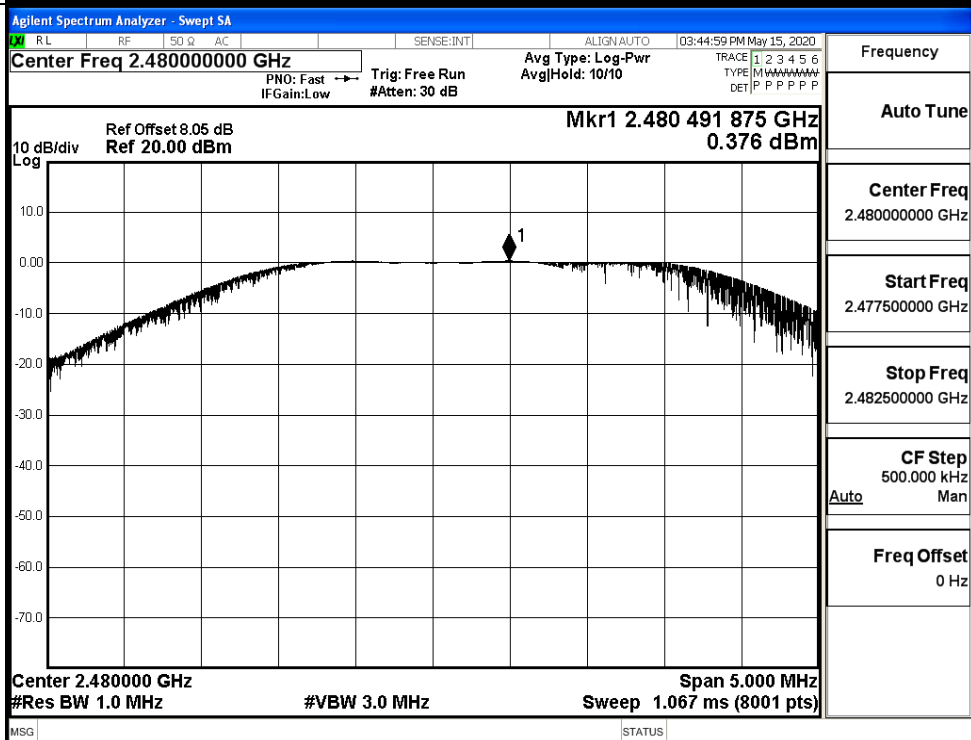
LCH



MCH



HCH



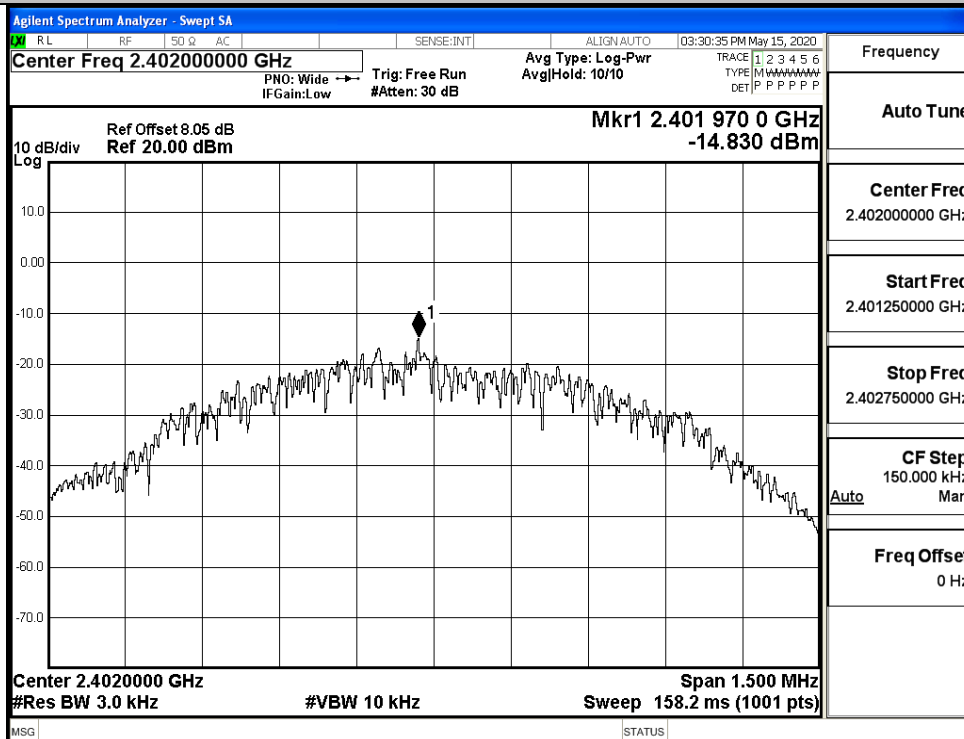
A.3 Maximum Power Spectral Density

BT LE

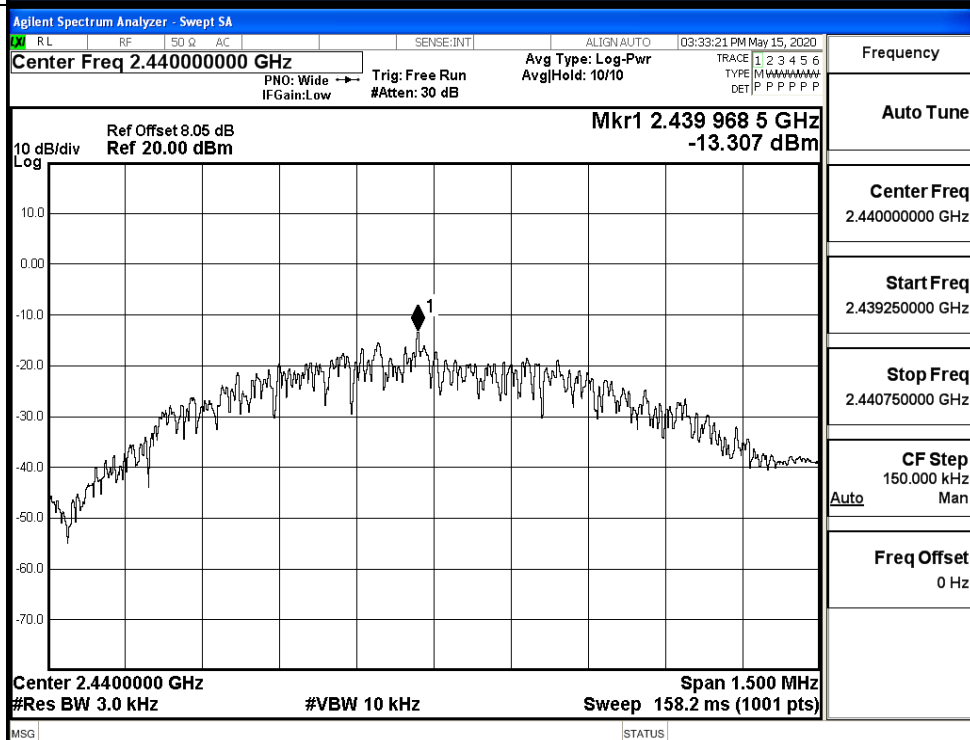
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-14.830	8	PASS
BT LE	MCH	-13.307	8	PASS
BT LE	HCH	-12.201	8	PASS

Test Graphs

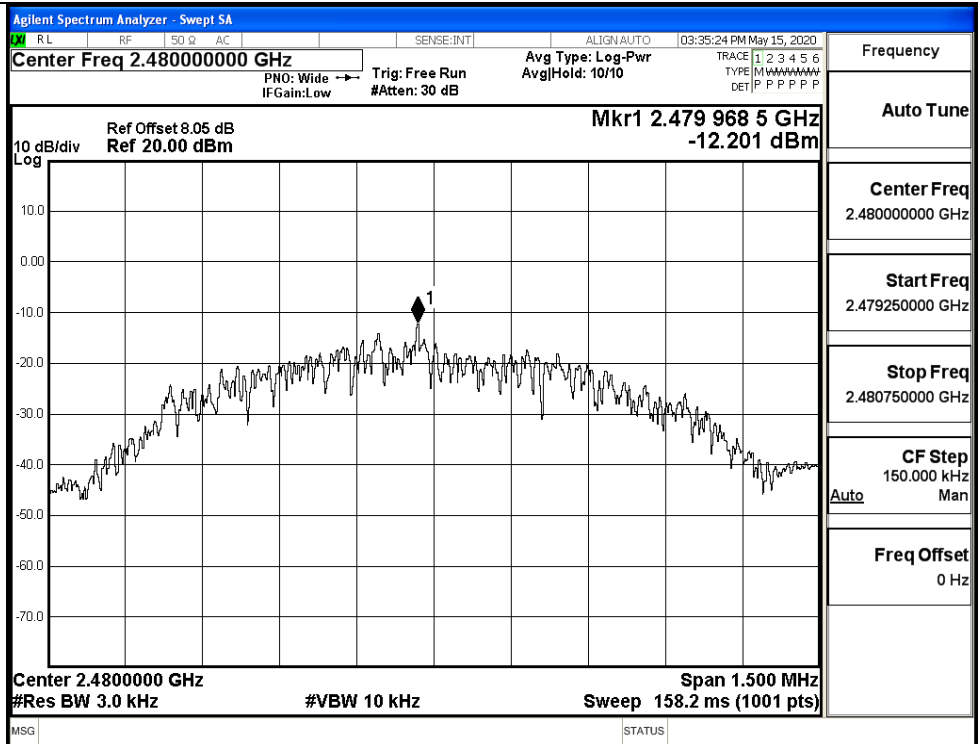
LCH



MCH



HCH

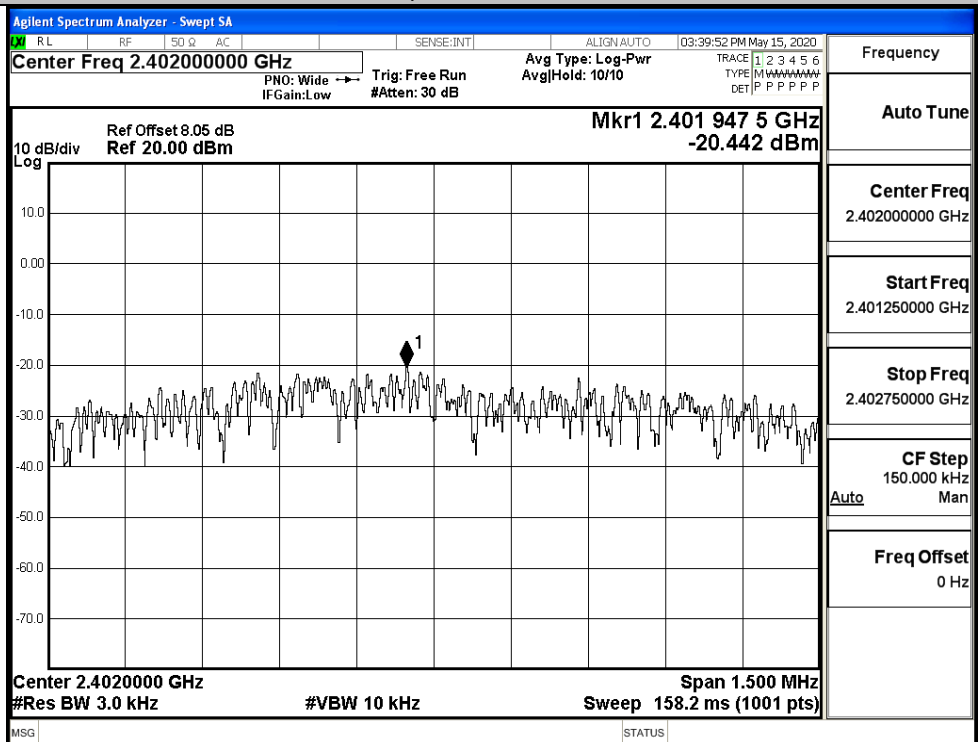


BT 2LE

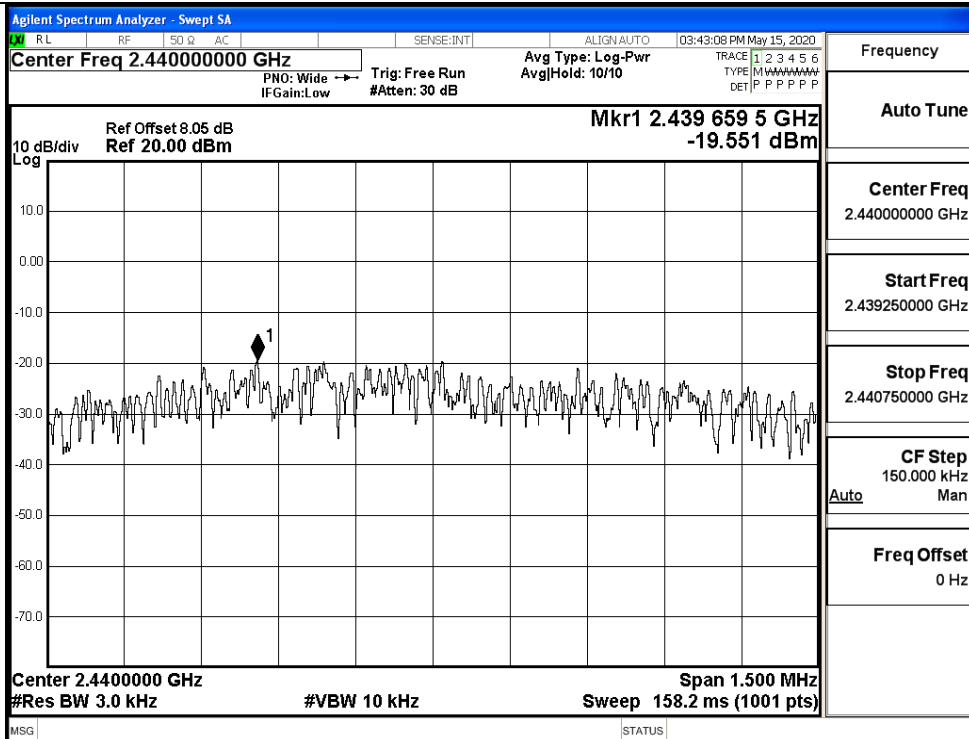
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-20.442	8	PASS
BT LE	MCH	-19.551	8	PASS
BT LE	HCH	-18.420	8	PASS

Test Graphs

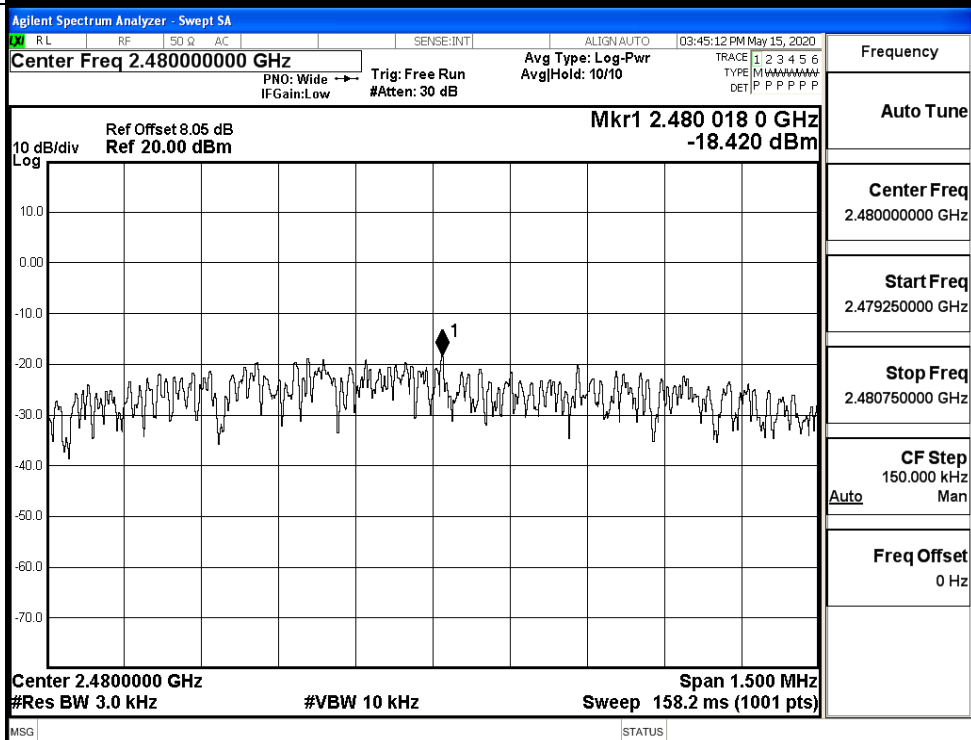
LCH



MCH



HCH



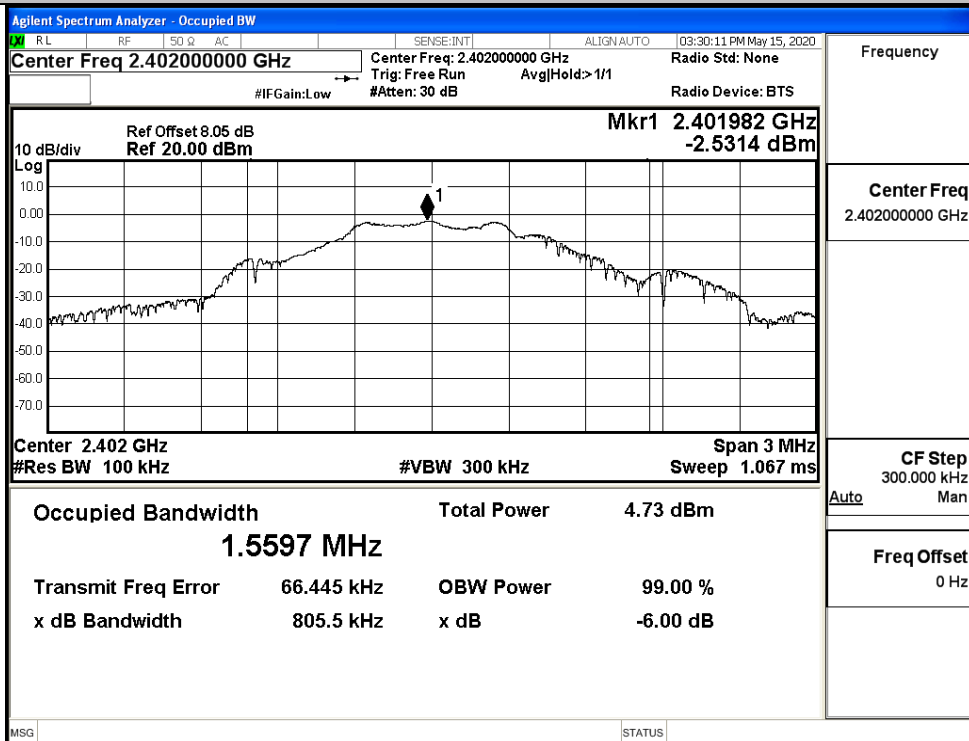
A.4 6dB Bandwidth

BT LE

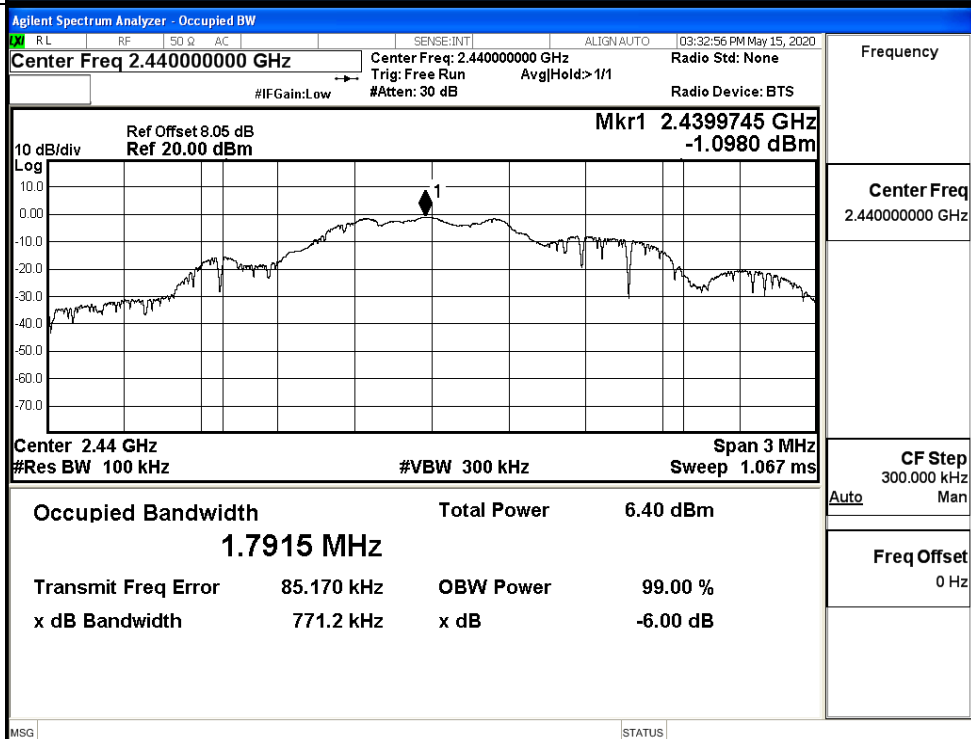
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.8055	≥ 0.5	PASS
BT LE	MCH	0.7712	≥ 0.5	PASS
BT LE	HCH	0.8773	≥ 0.5	PASS

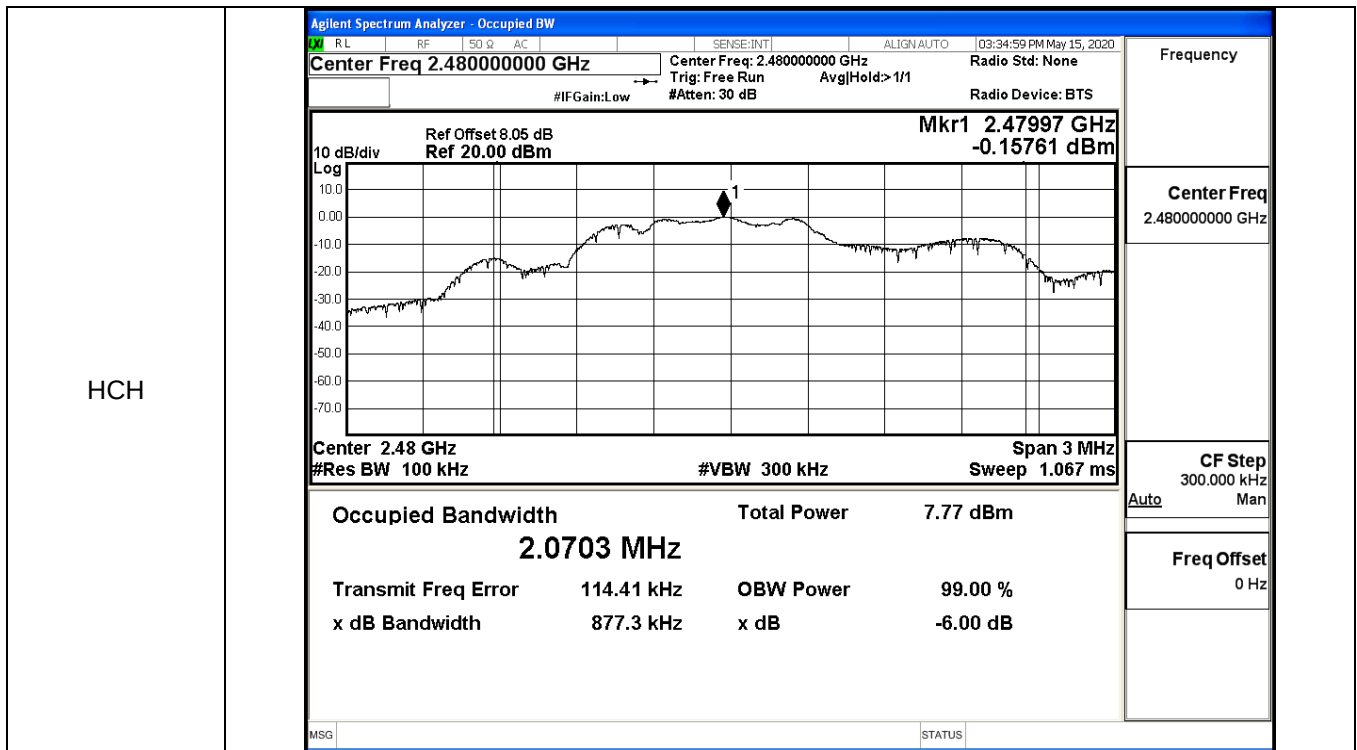
Test Graphs

LCH



MCH

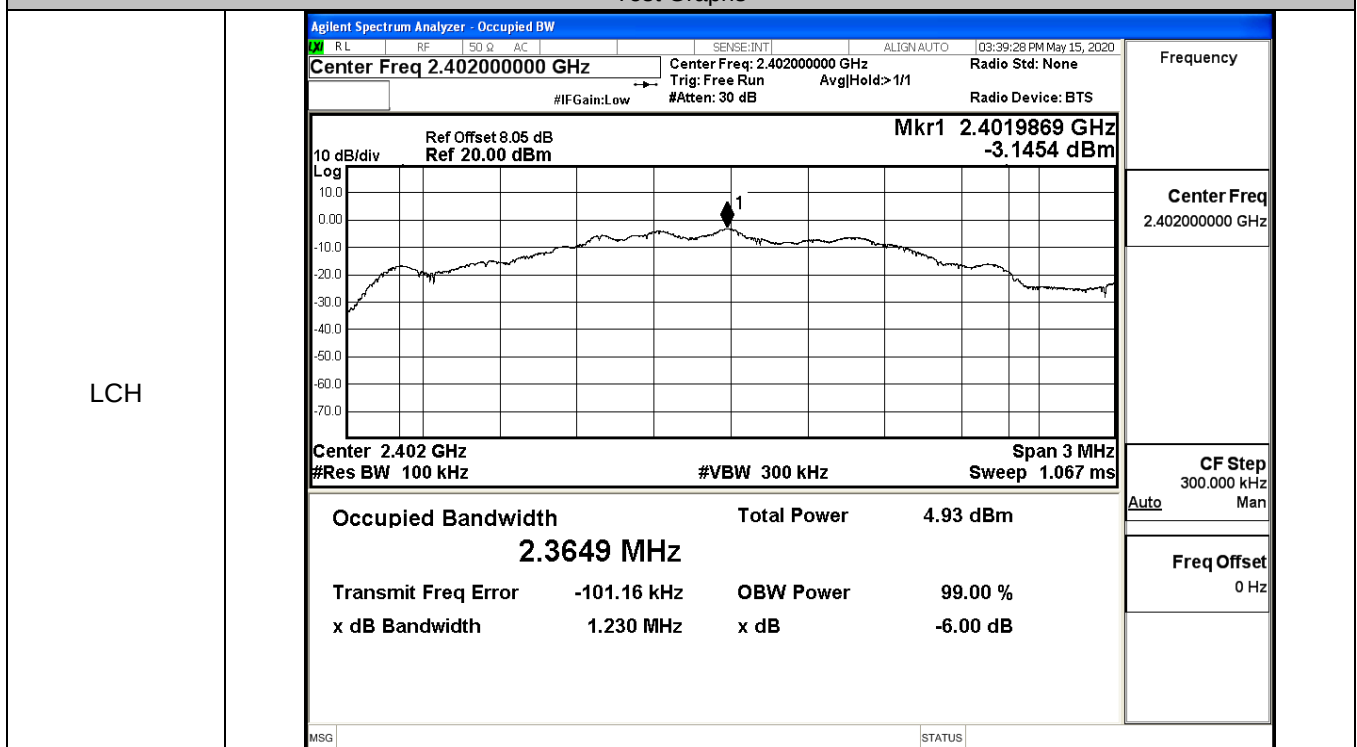




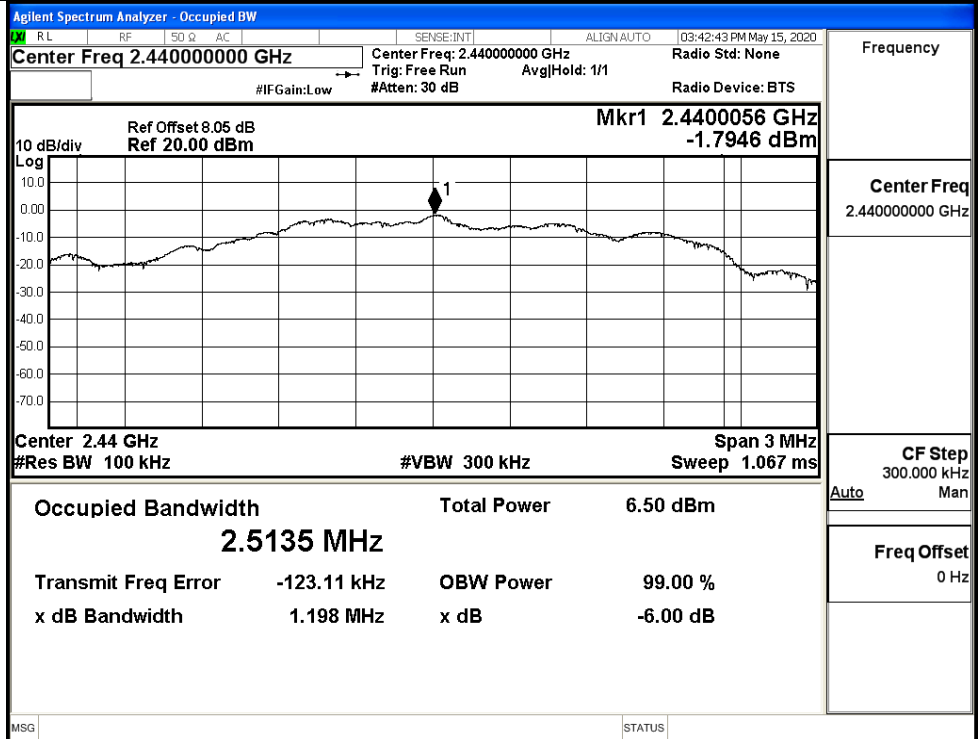
BT 2LE

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	1.230	≥ 0.5	PASS
BT LE	MCH	1.198	≥ 0.5	PASS
BT LE	HCH	1.256	≥ 0.5	PASS

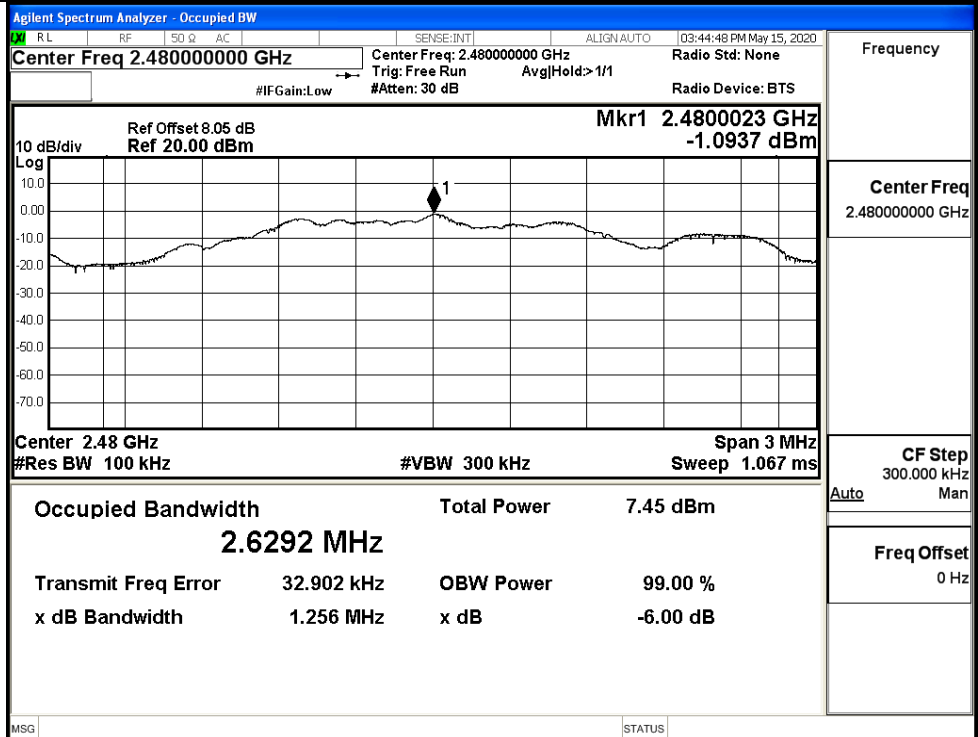
Test Graphs



MCH



HCH



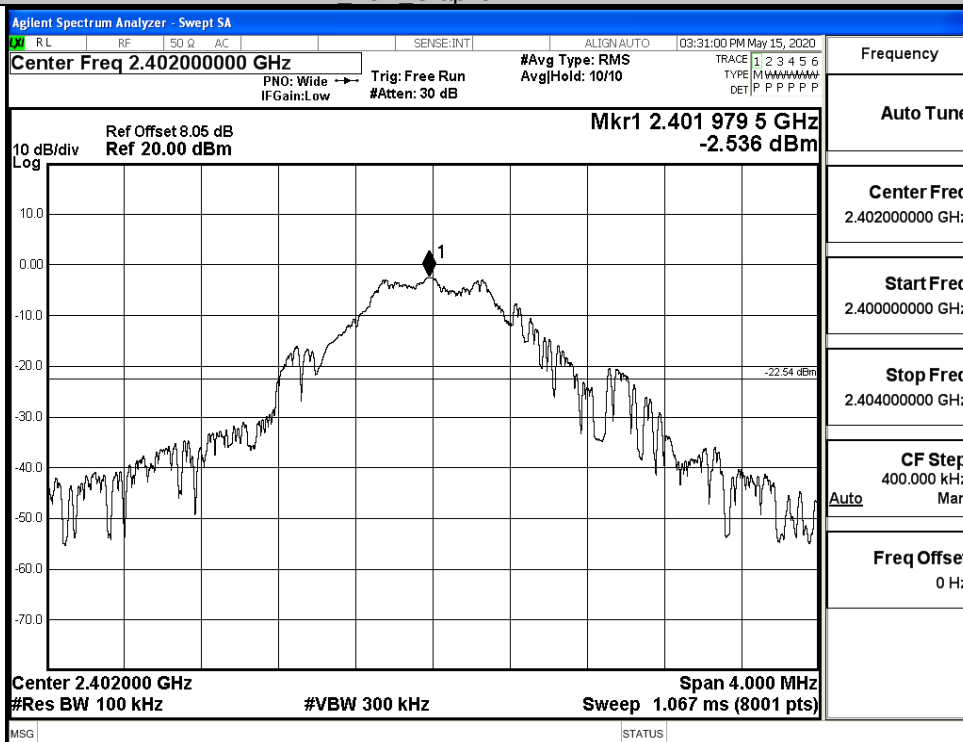
A.5 RF Conducted Spurious Emissions

BT LE

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.536	-37.242	-22.536	PASS
BT LE	MCH	-1.095	-36.943	-21.095	PASS
BT LE	HCH	-0.129	-37.235	-20.129	PASS

BT LE LCH Graphs

Pref/BT LE/LCH

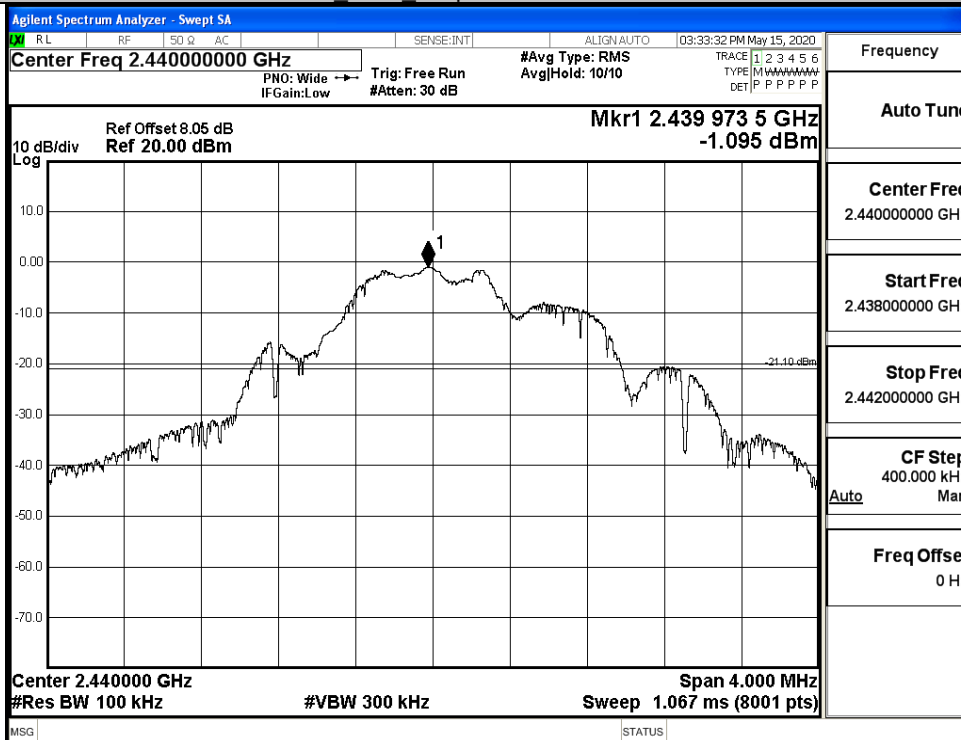


Puw/BT LE/LCH

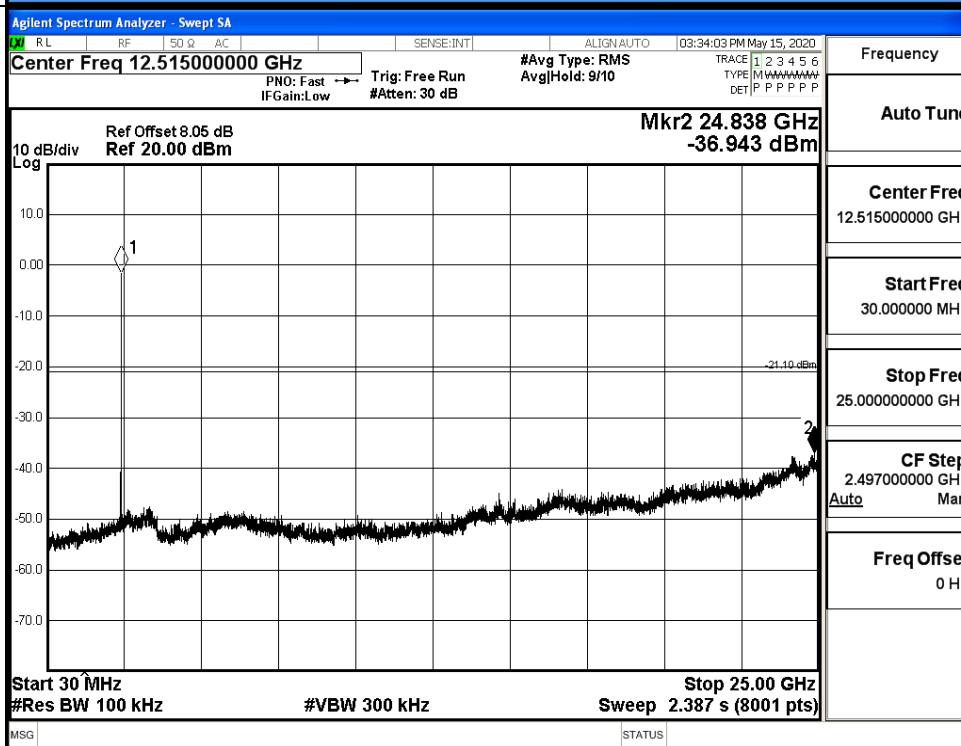


BT LE MCH Graphs

Pref/BT LE/MCH

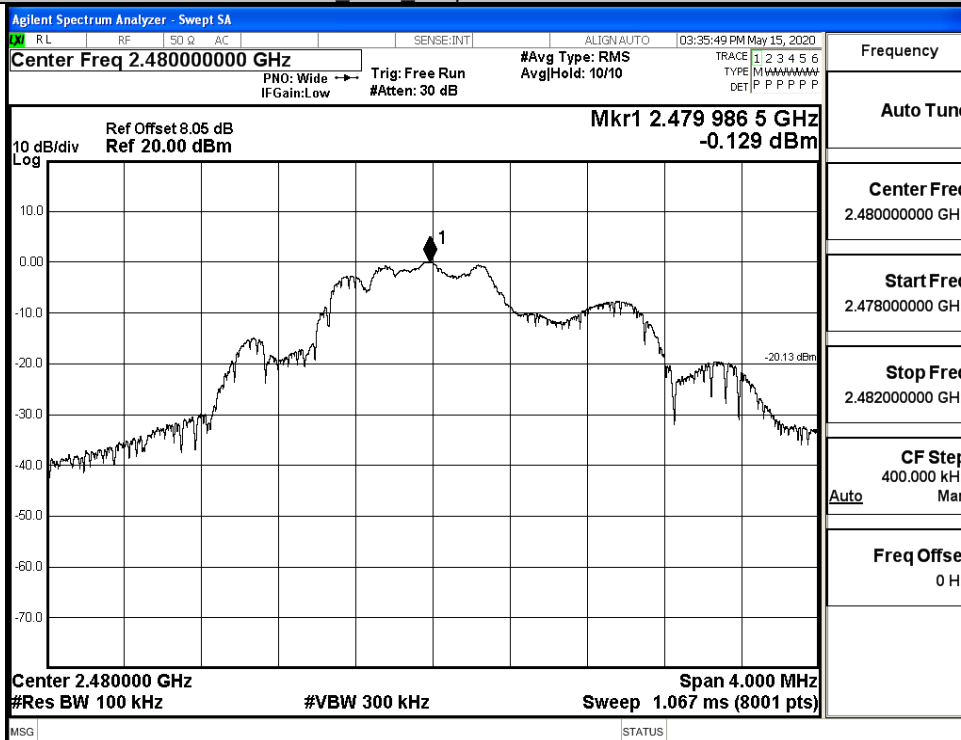


Puw/BT LE/MCH



BT LE HCH Graphs

Pref/BT LE/HCH



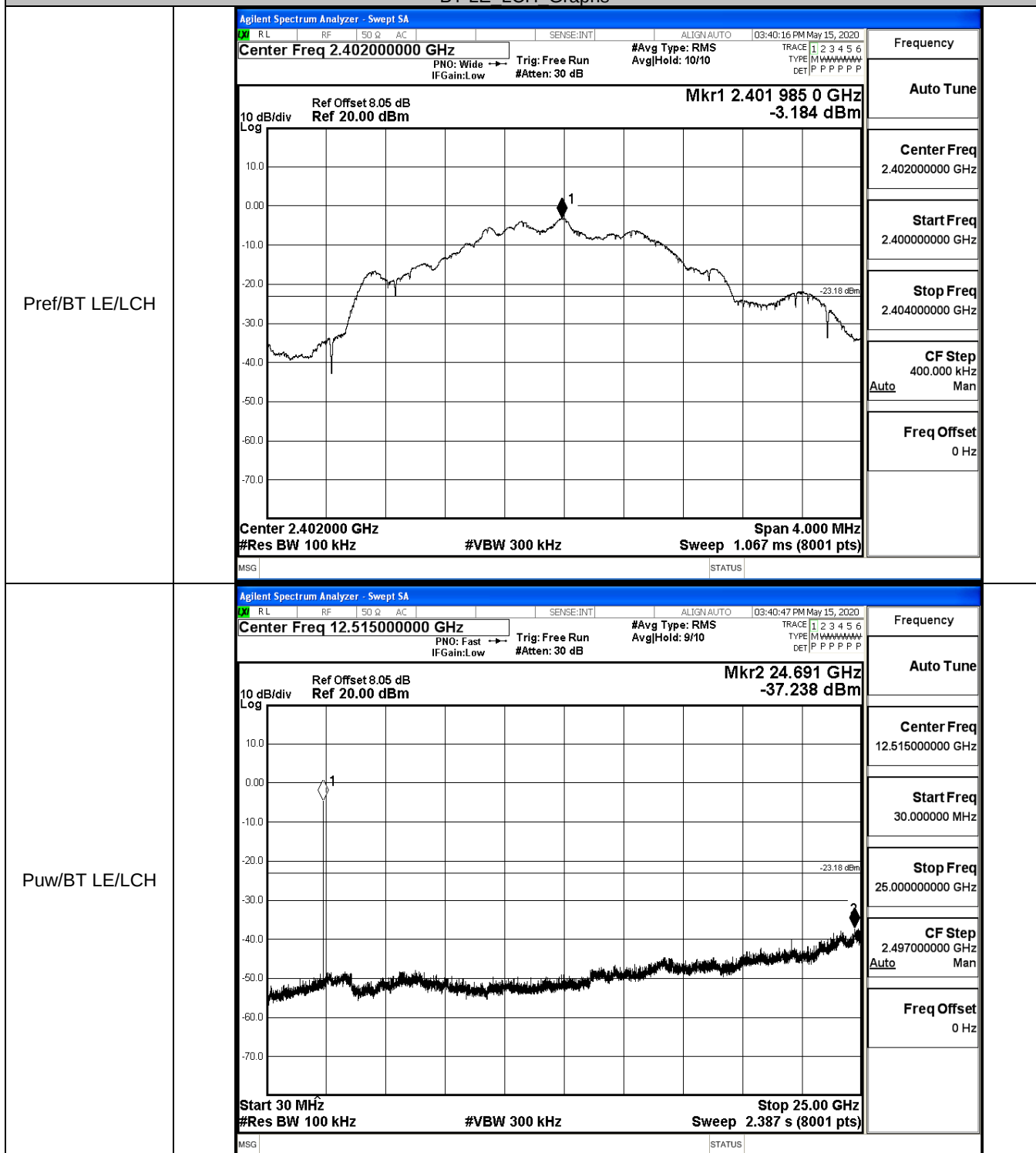
Puw/BT LE/HCH



BT 2LE

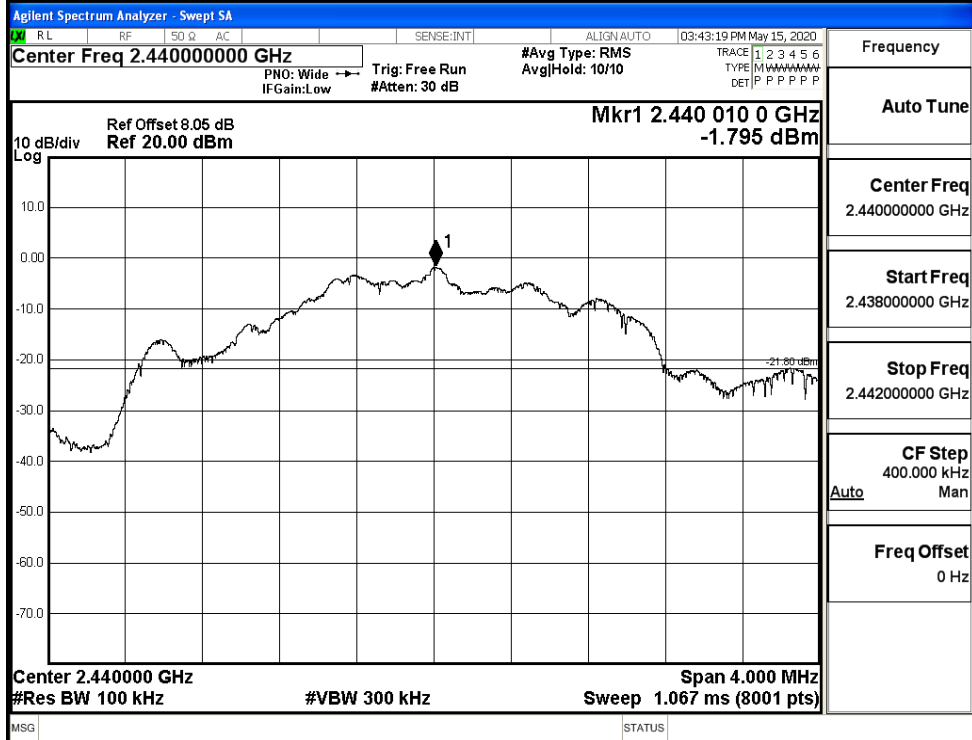
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-3.184	-37.238	-23.184	PASS
BT LE	MCH	-1.795	-37.190	-21.795	PASS
BT LE	HCH	-1.037	-37.147	-21.037	PASS

BT LE LCH Graphs

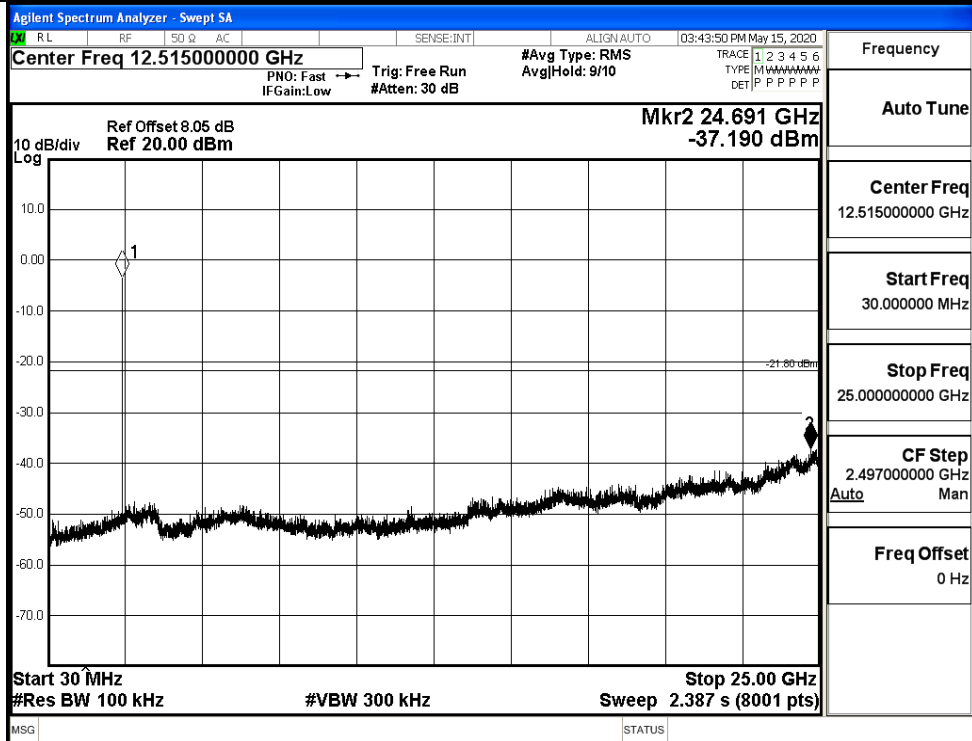


BT LE MCH Graphs

Pref/BT LE/MCH

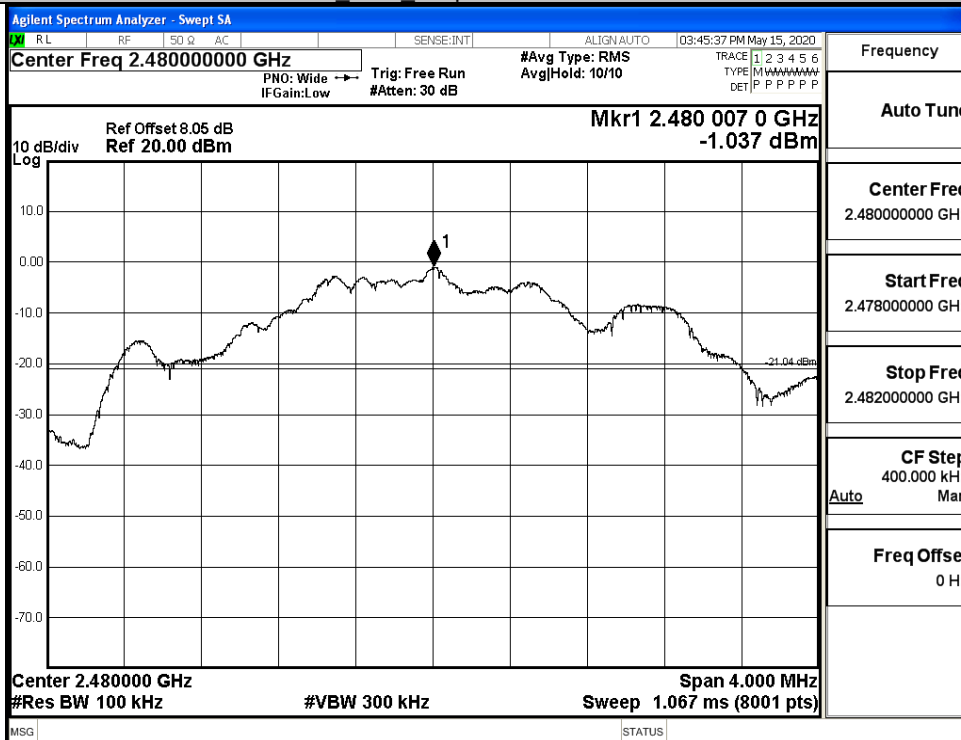


Puw/BT LE/MCH

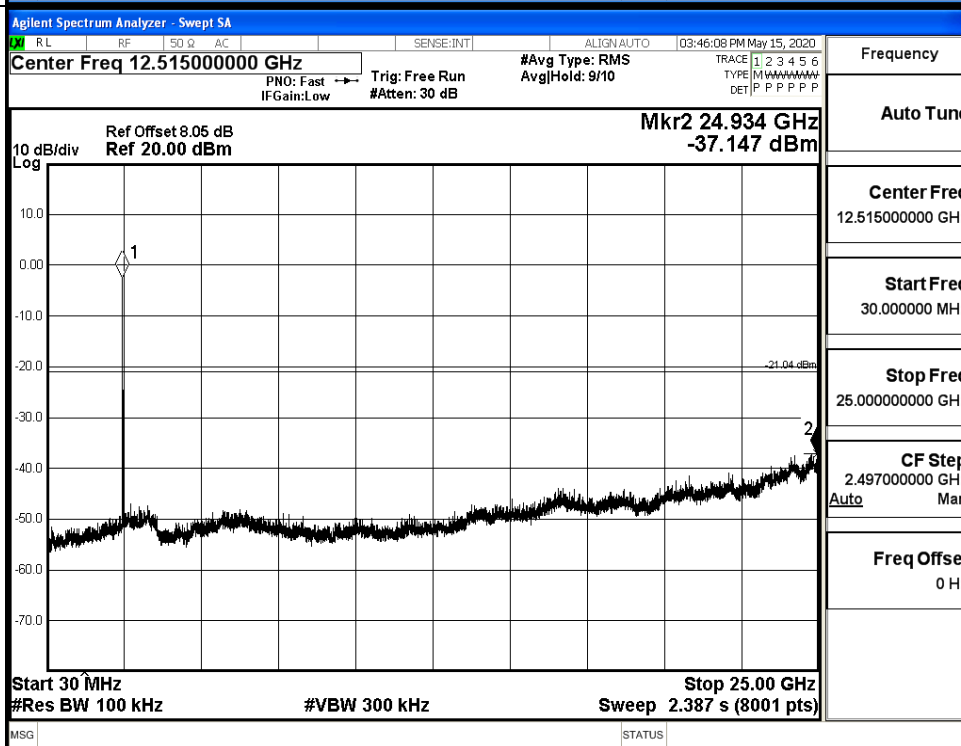


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH



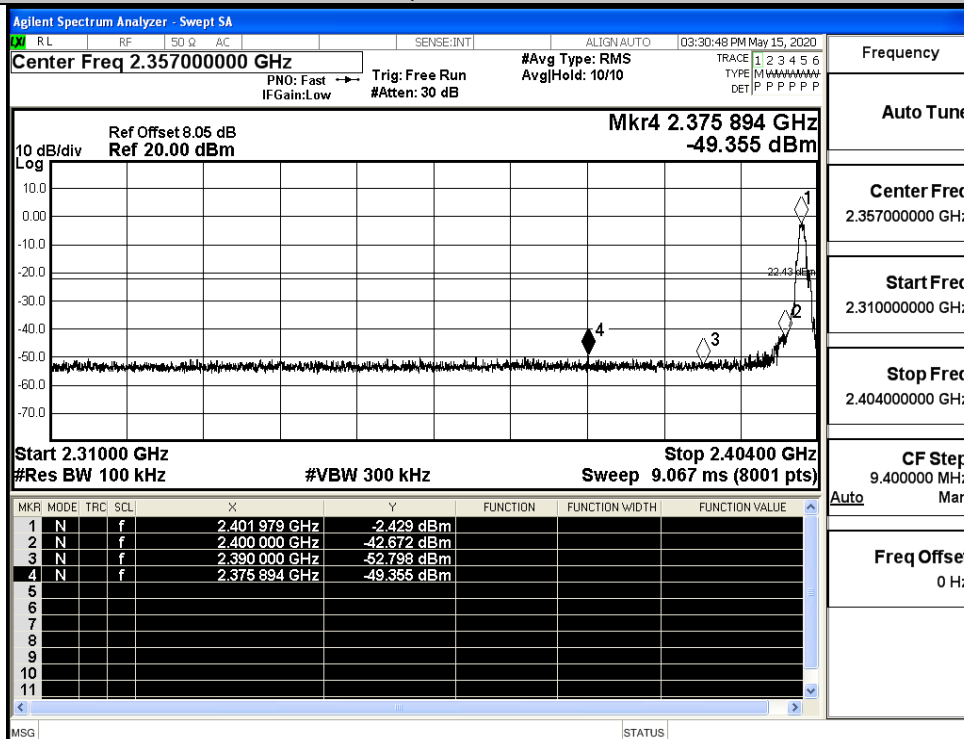
A.6 Band-edge for RF Conducted Emissions

BT LE

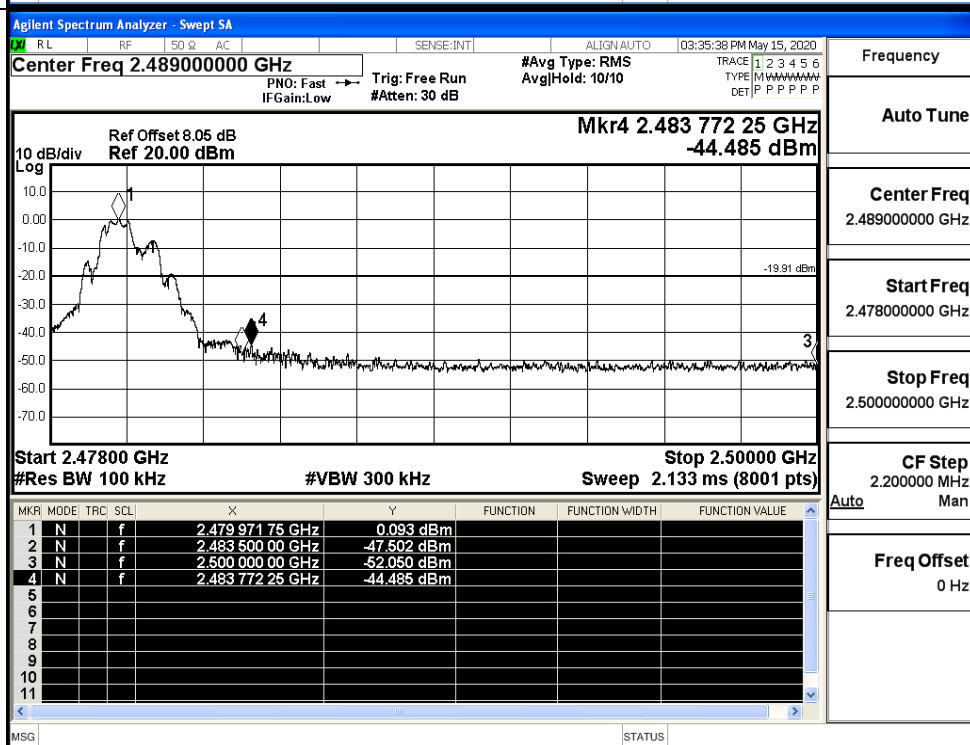
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.429	-49.355	-22.43	PASS
BT LE	HCH	0.093	-44.485	-19.91	PASS

Test Graphs

LCH



HCH

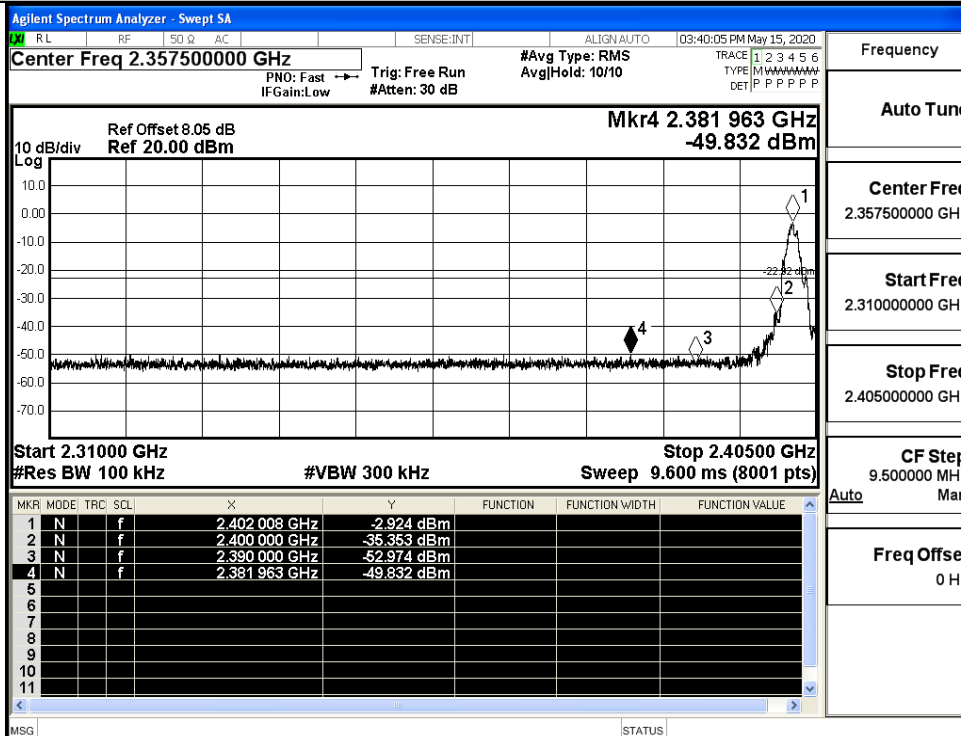


BT 2LE

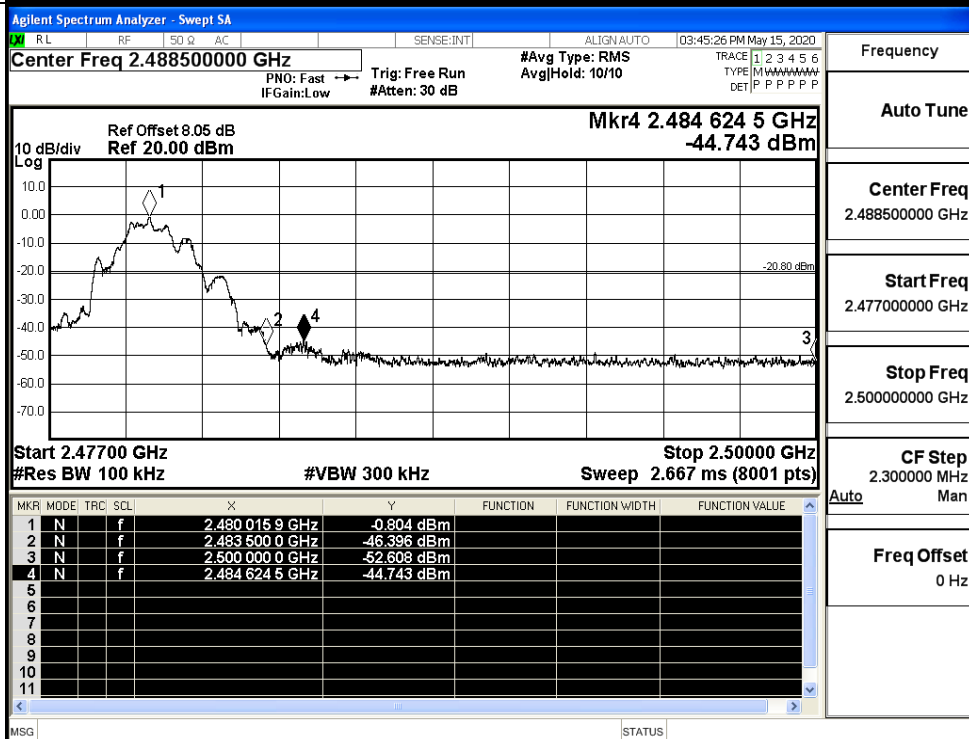
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.924	-49.832	-22.92	PASS
BT LE	HCH	-0.804	-44.743	-20.8	PASS

Test Graphs

LCH



HCH

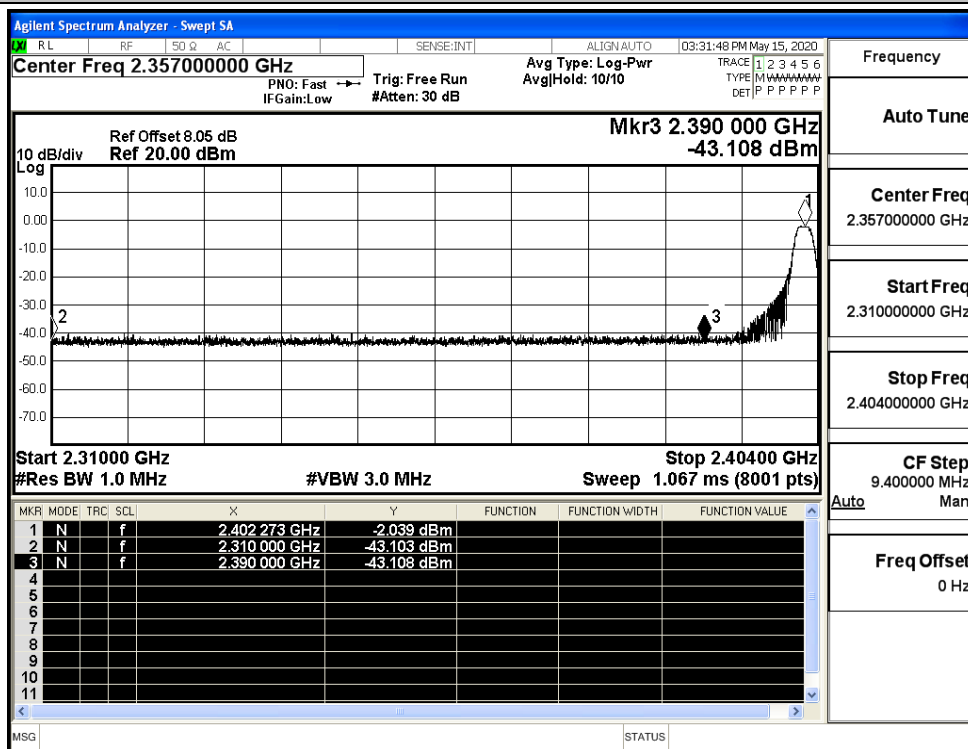


A.7 Restrict-band band-edge measurements

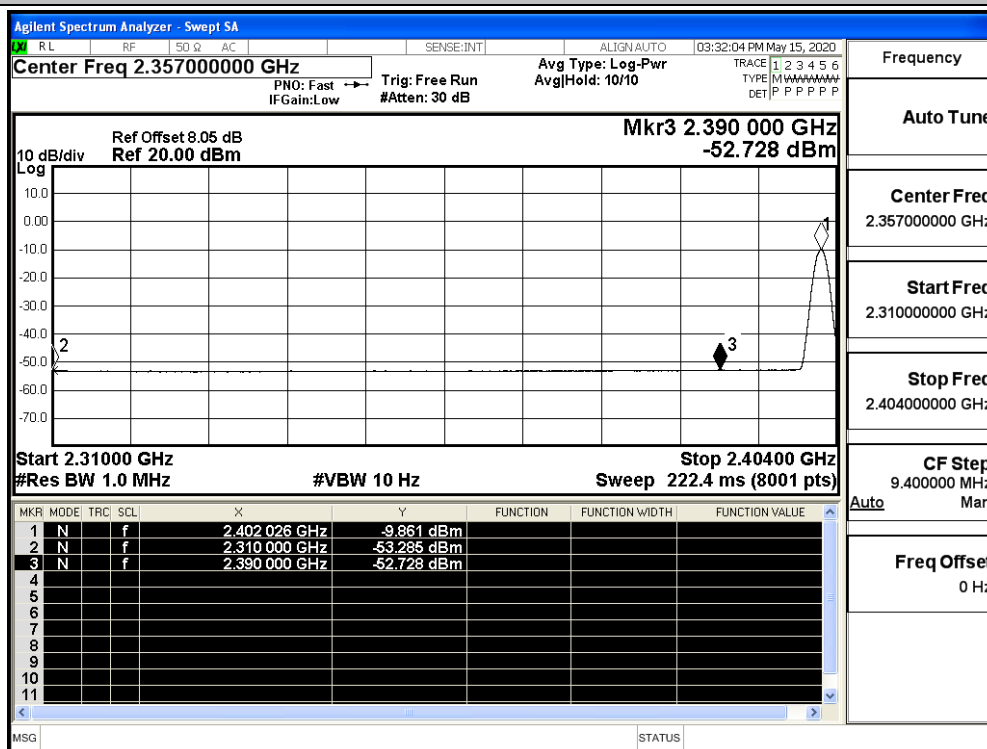
BT LE

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	-43.10	2.0	0	54.16	PEAK	74	PASS
		Ant1	2310.0	-53.29	2.0	0	43.97	AV	54	PASS
		Ant1	2390.0	-43.11	2.0	0	54.15	PEAK	74	PASS
		Ant1	2390.0	-52.73	2.0	0	44.53	AV	54	PASS
	2480	Ant1	2483.5	-34.47	2.0	0	62.79	PEAK	74	PASS
		Ant1	2483.5	-52.42	2.0	0	44.84	AV	54	PASS
		Ant1	2500.0	-42.46	2.0	0	54.8	PEAK	74	PASS
		Ant1	2500.0	-52.24	2.0	0	45.02	AV	54	PASS

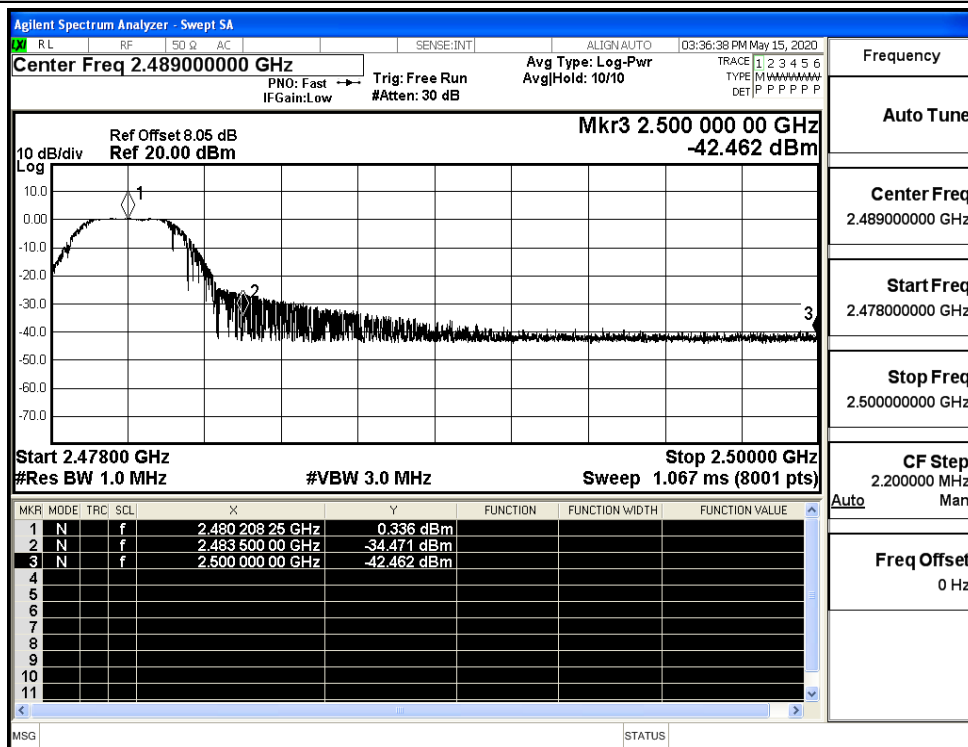
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



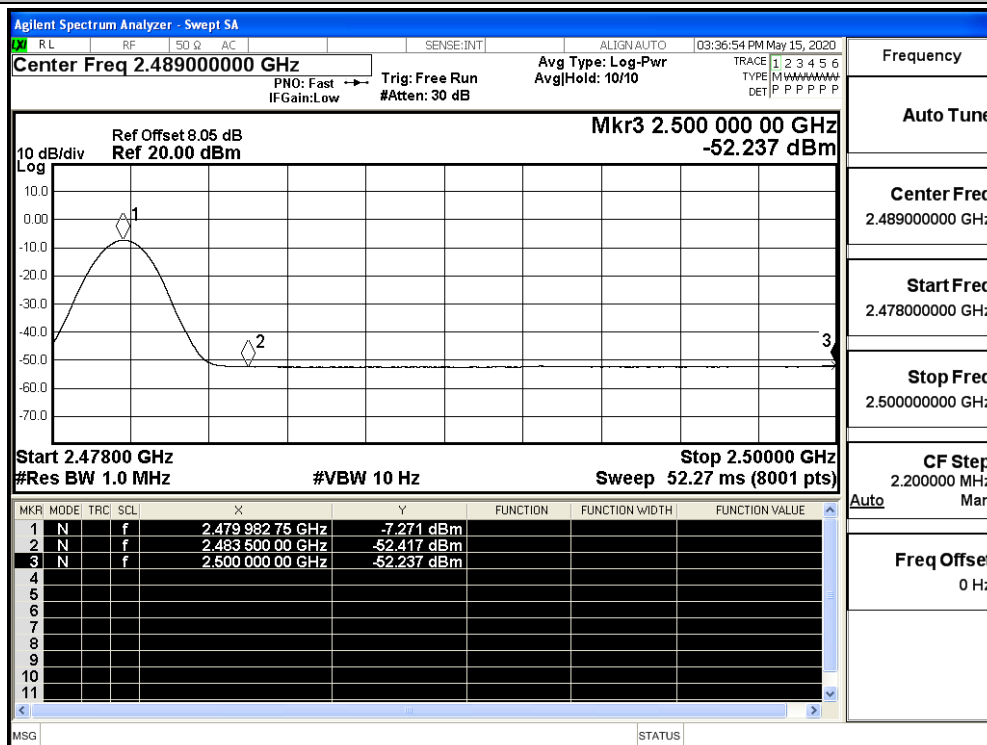
Restrict-band band-edge measurements_BT LE_2402_Ant1_AV



Restrict-band band-edge measurements_BT LE_2480_Ant1_PEAK



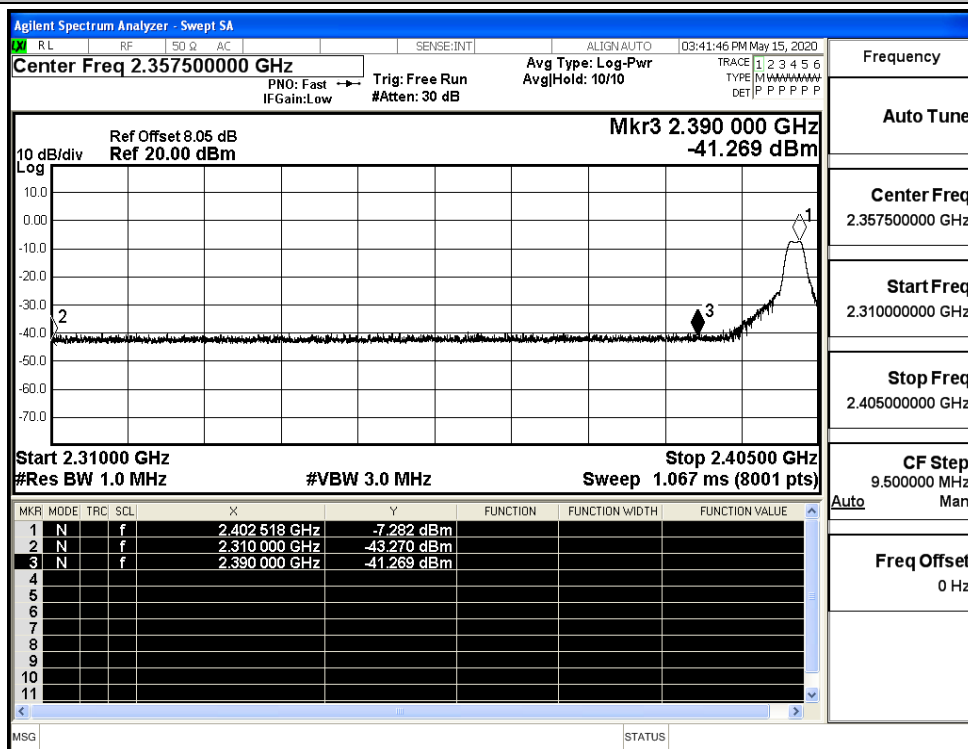
Restrict-band band-edge measurements_BT LE_2480_Ant1_AV



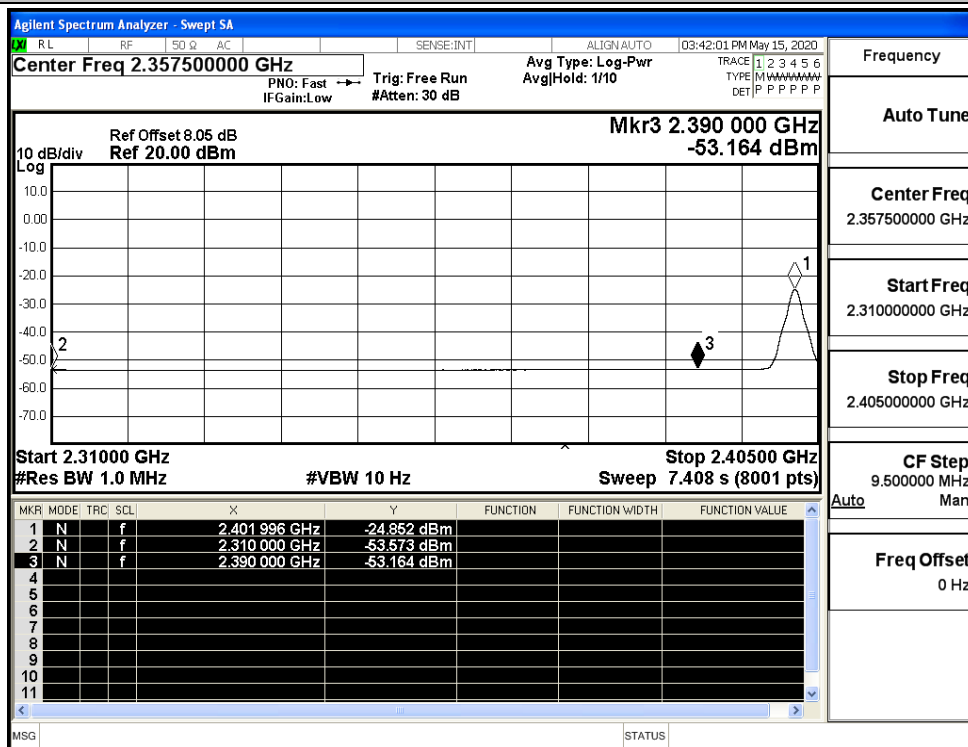
BT 2LE

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	53.99	PEAK	74	PASS
		Ant1	2310.0	-53.57	2.0	0	43.69	AV	54	PASS
		Ant1	2390.0	-41.27	2.0	0	55.99	PEAK	74	PASS
		Ant1	2390.0	-53.16	2.0	0	44.1	AV	54	PASS
	2480	Ant1	2483.5	-32.12	2.0	0	65.14	PEAK	74	PASS
		Ant1	2483.5	-52.09	2.0	0	45.17	AV	54	PASS
		Ant1	2500.0	-40.20	2.0	0	57.06	PEAK	74	PASS
		Ant1	2500.0	-52.37	2.0	0	44.89	AV	54	PASS

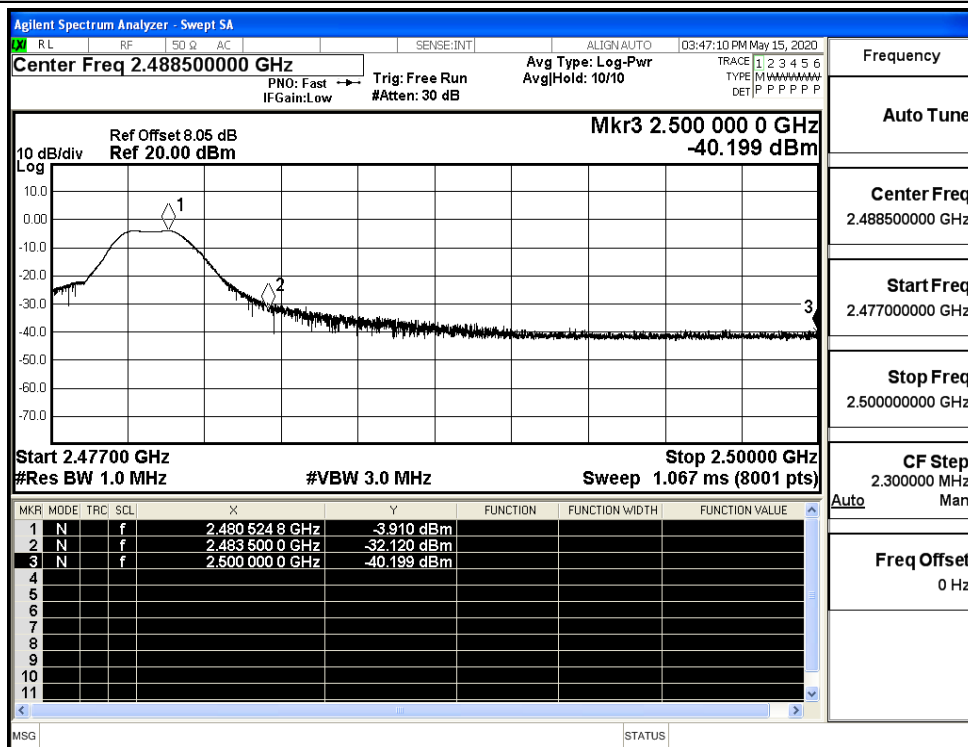
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

