

Appendix A

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

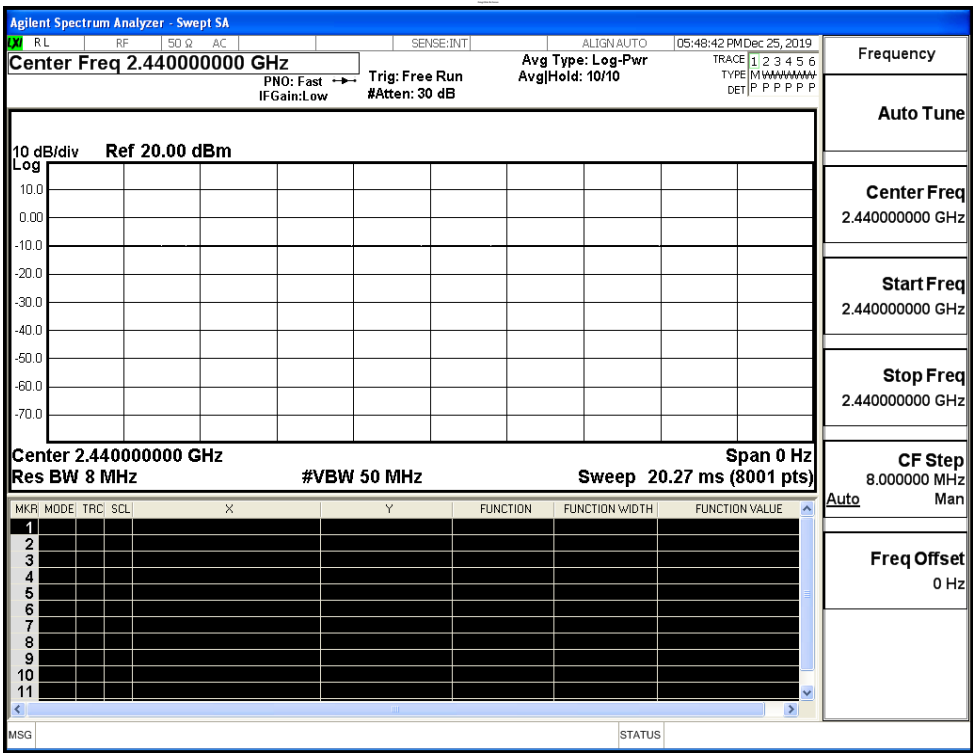
Product Name: LevelMatePRO Plus
Trade Mark: Command Electronics
Test Model: LevelMatePRO Plus

Environmental Conditions

Temperature:	24.5 ° C
Relative Humidity:	52.9%
ATM Pressure:	100.0 kPa
Test Engineer:	Diamond Lu
Supervised by:	Wang Chuang

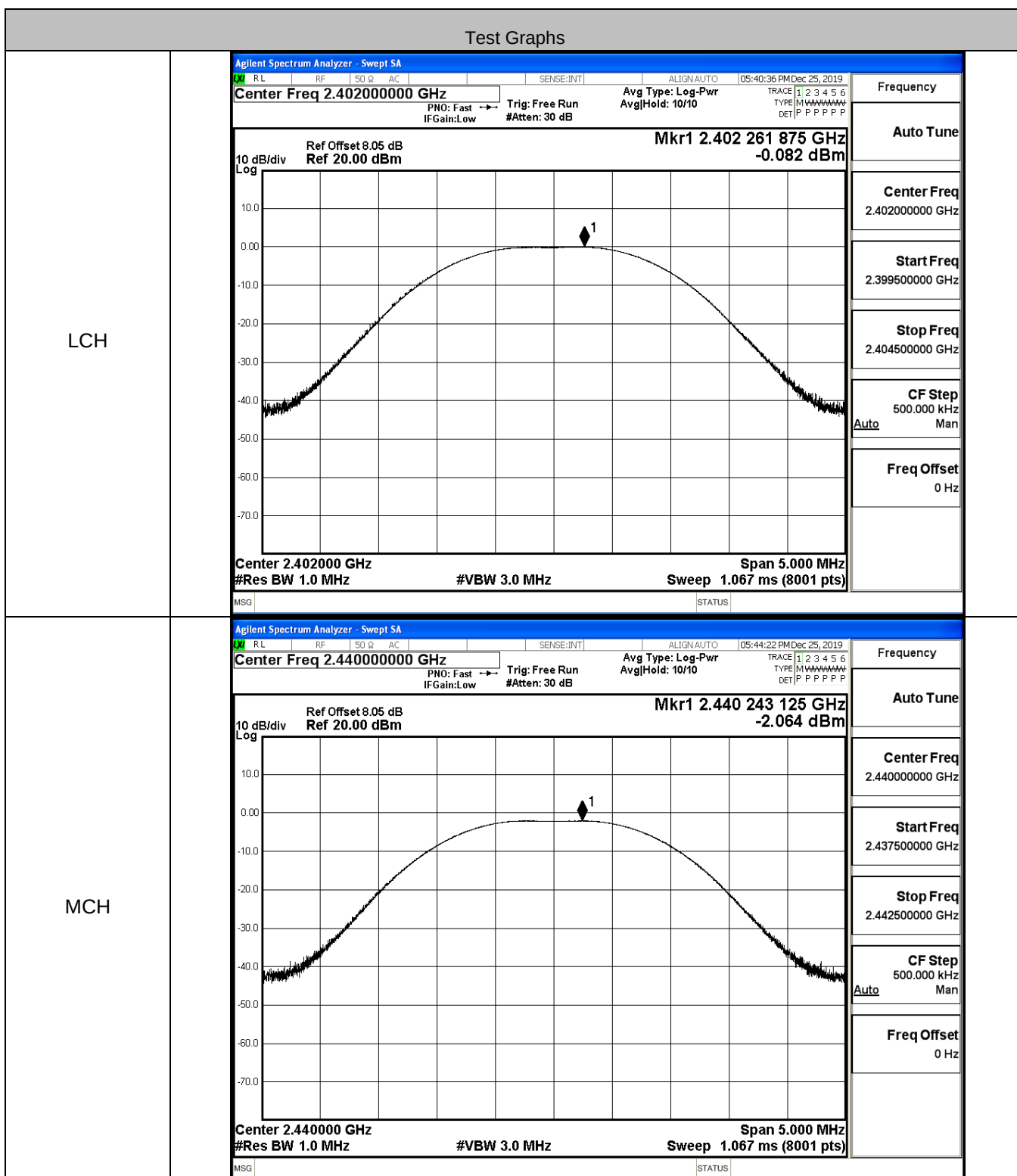
A.1 Duty Cycle

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

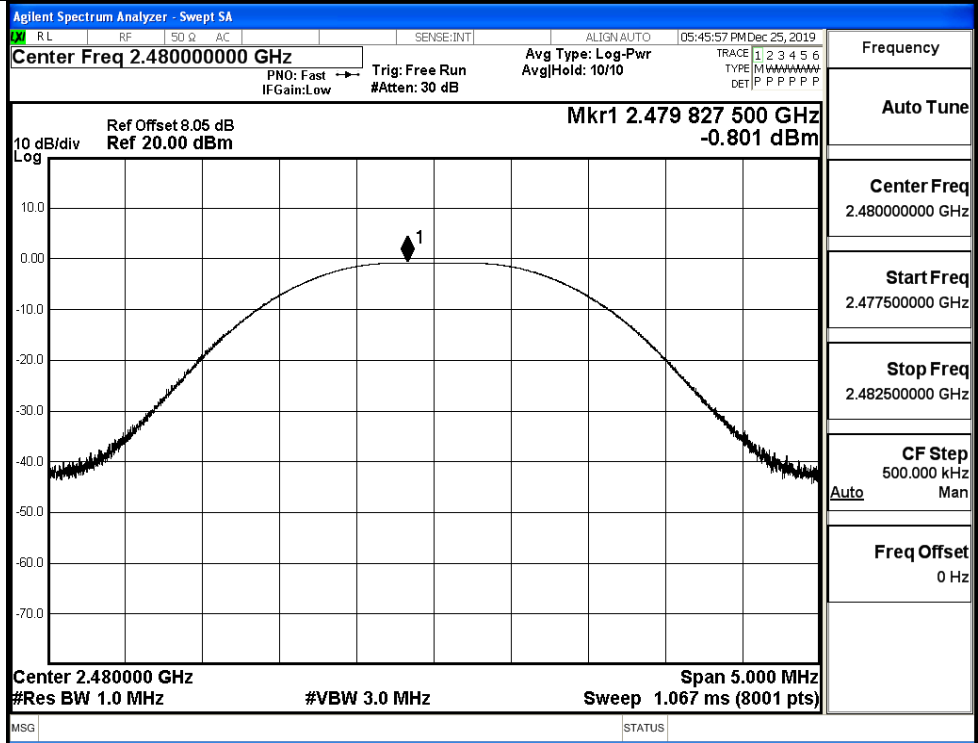


A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.082	30	PASS
BT LE	MCH	-2.064	30	PASS
BT LE	HCH	-0.801	30	PASS

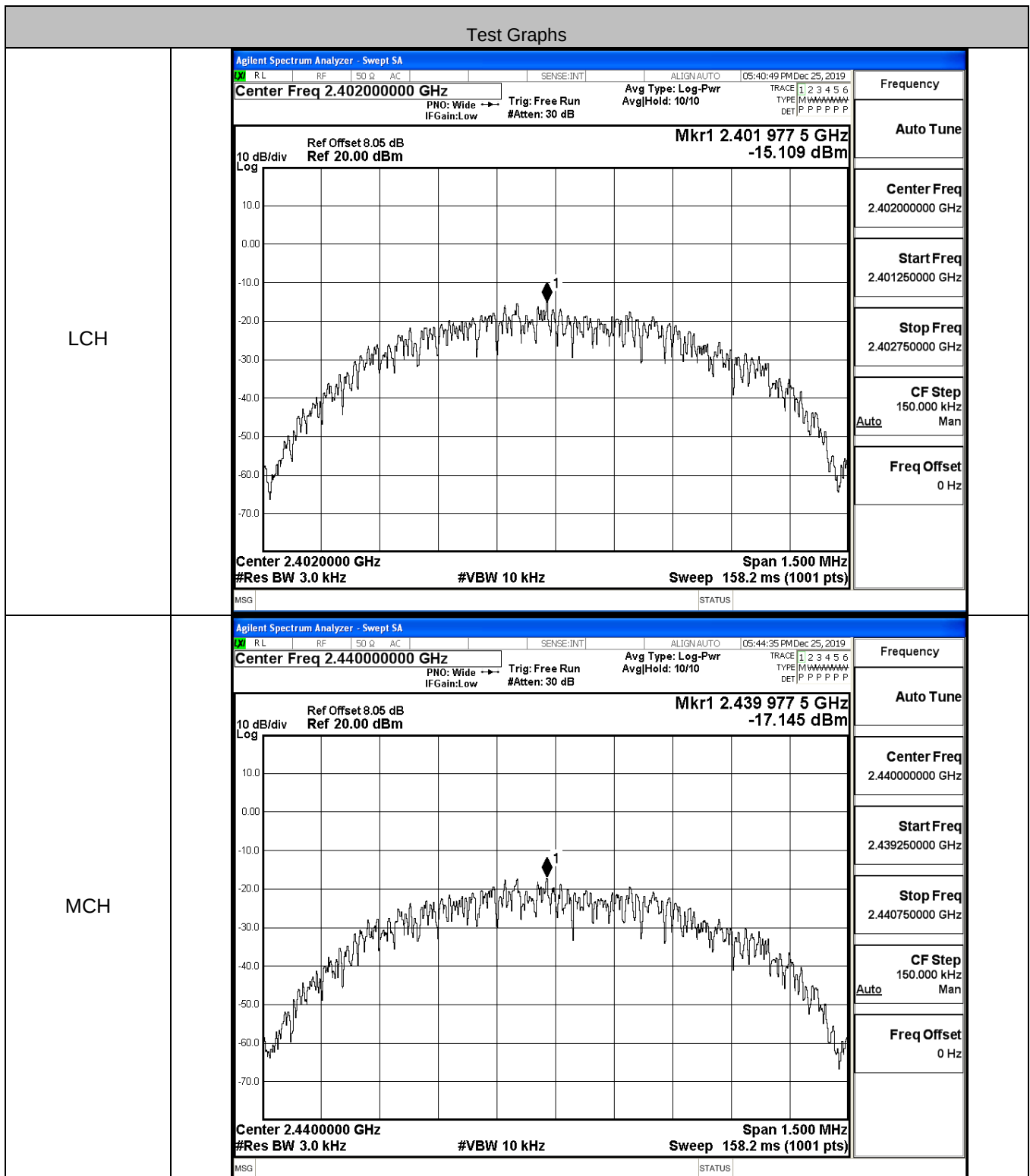


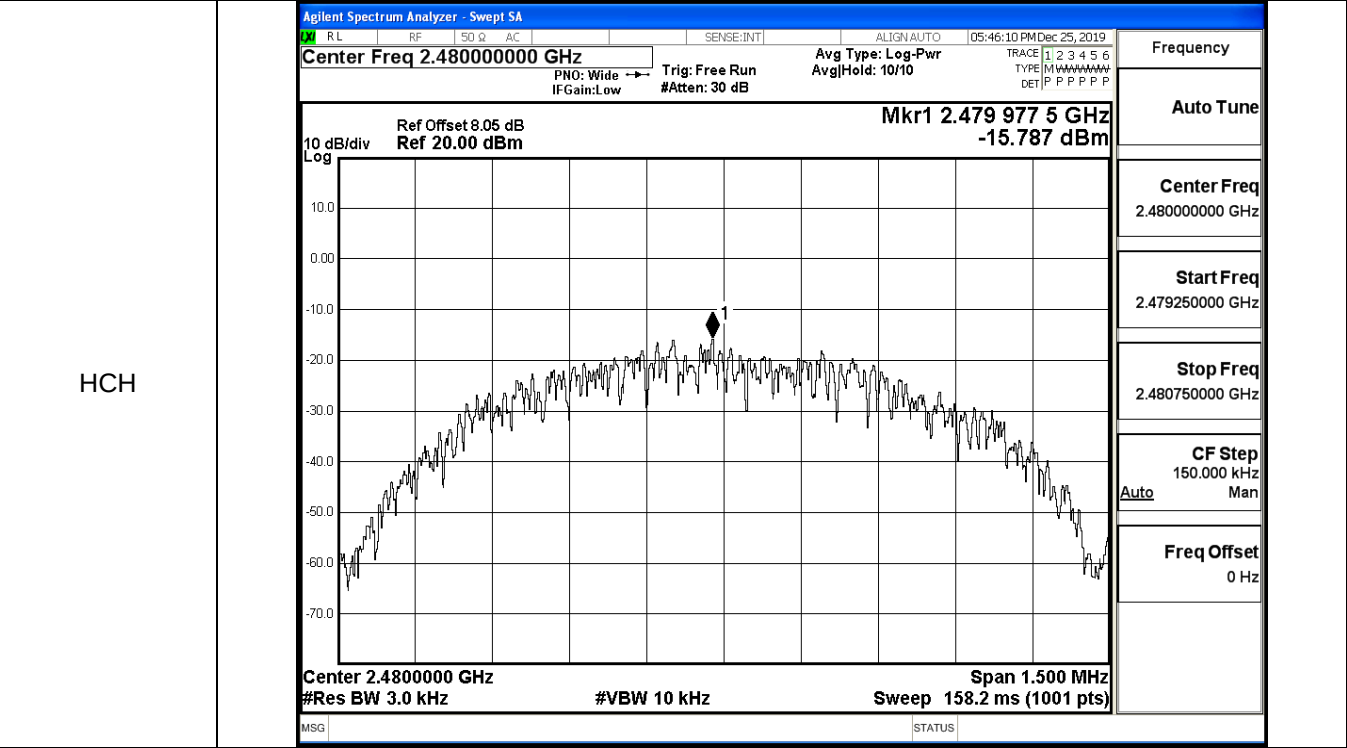
HCH



A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-15.109	8	PASS
BT LE	MCH	-17.145	8	PASS
BT LE	HCH	-15.787	8	PASS



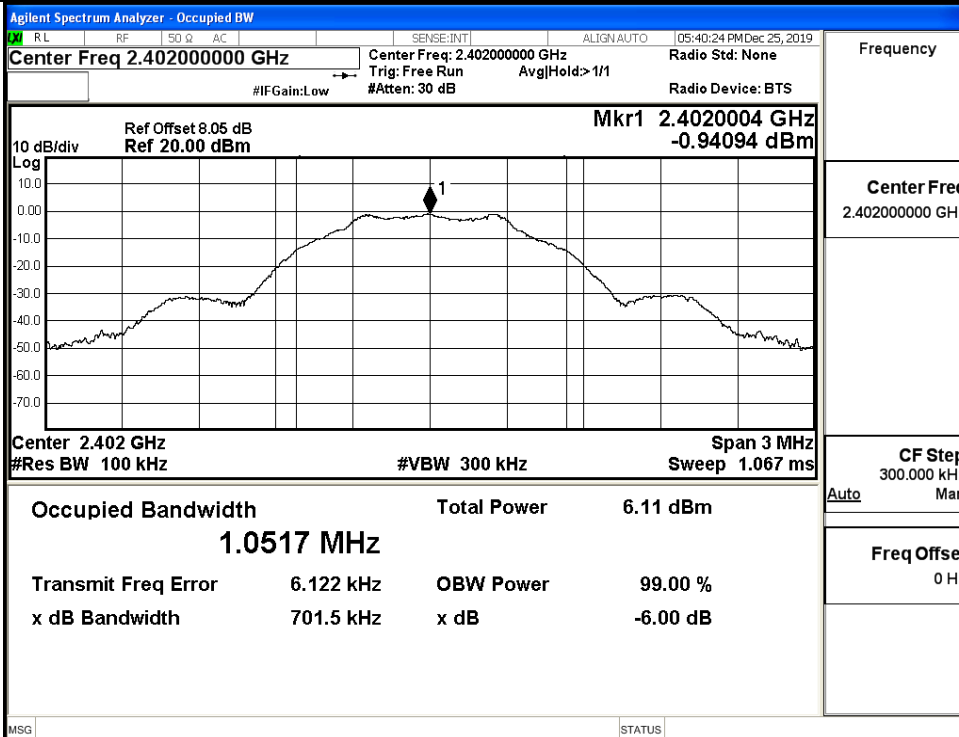


A.4 6dB Bandwidth

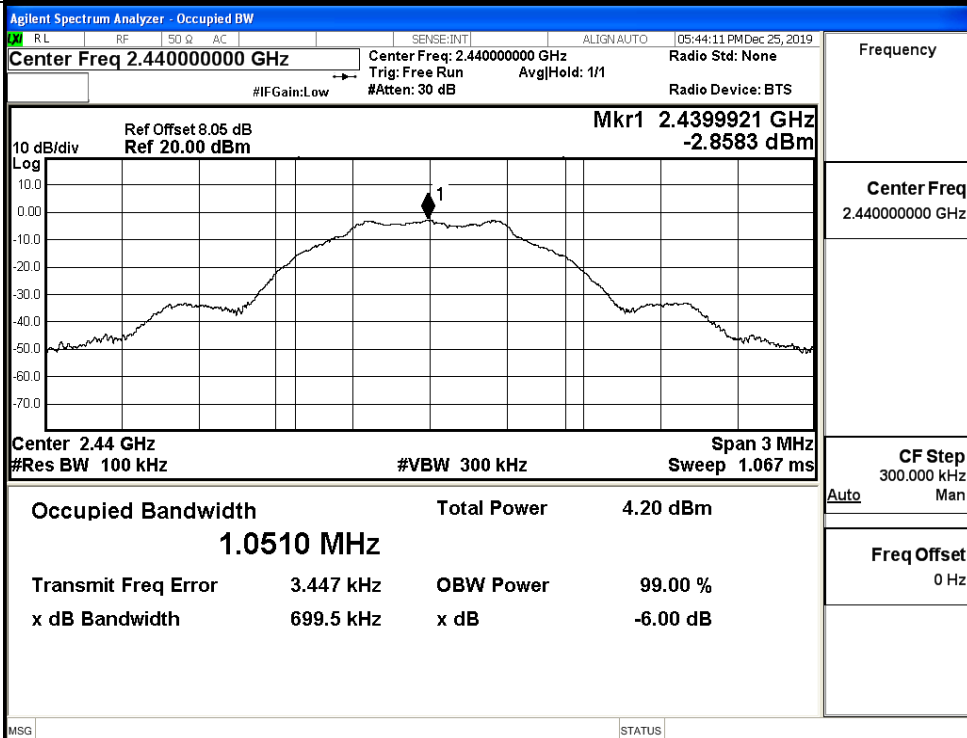
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7015	≥ 0.5	PASS
BT LE	MCH	0.6995	≥ 0.5	PASS
BT LE	HCH	0.6995	≥ 0.5	PASS

Test Graphs

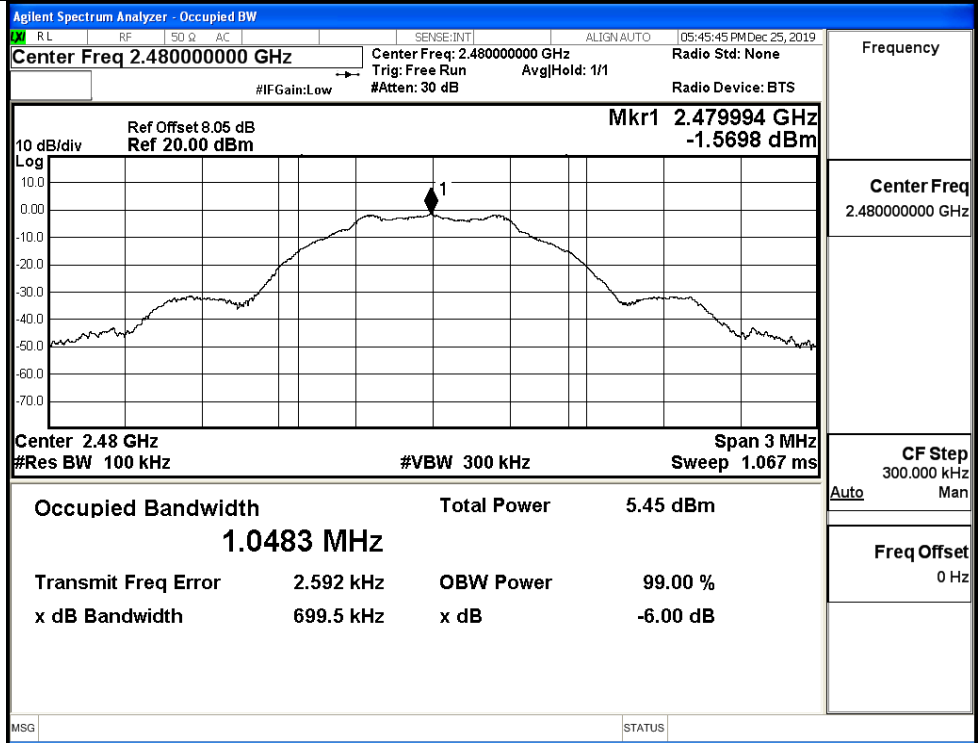
LCH



MCH



HCH

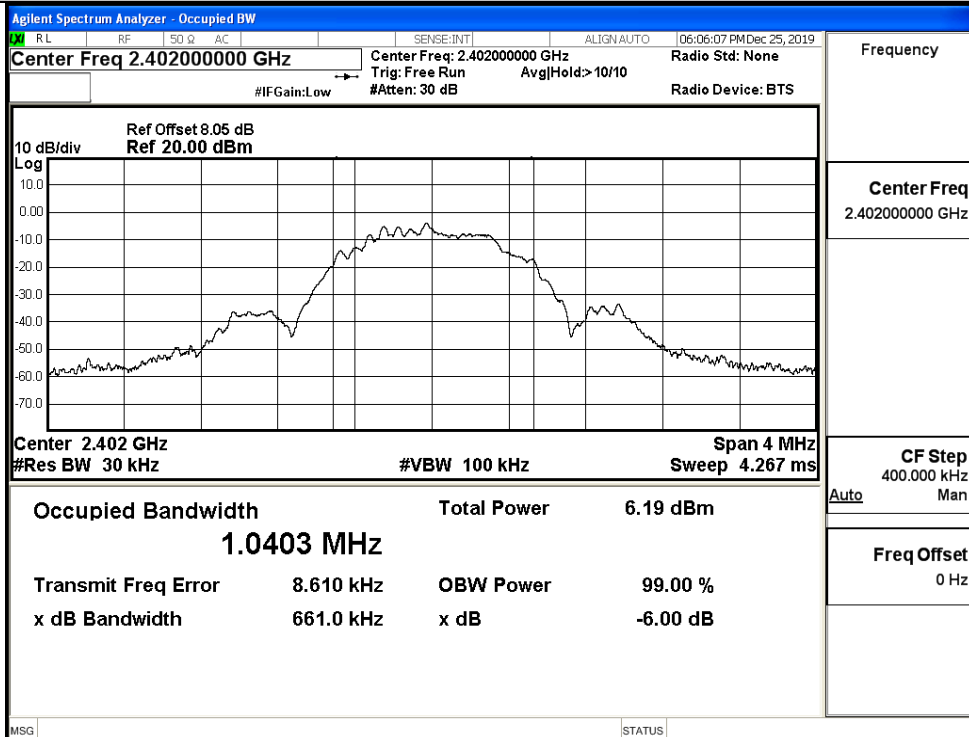


A.5 Occupied Bandwidth

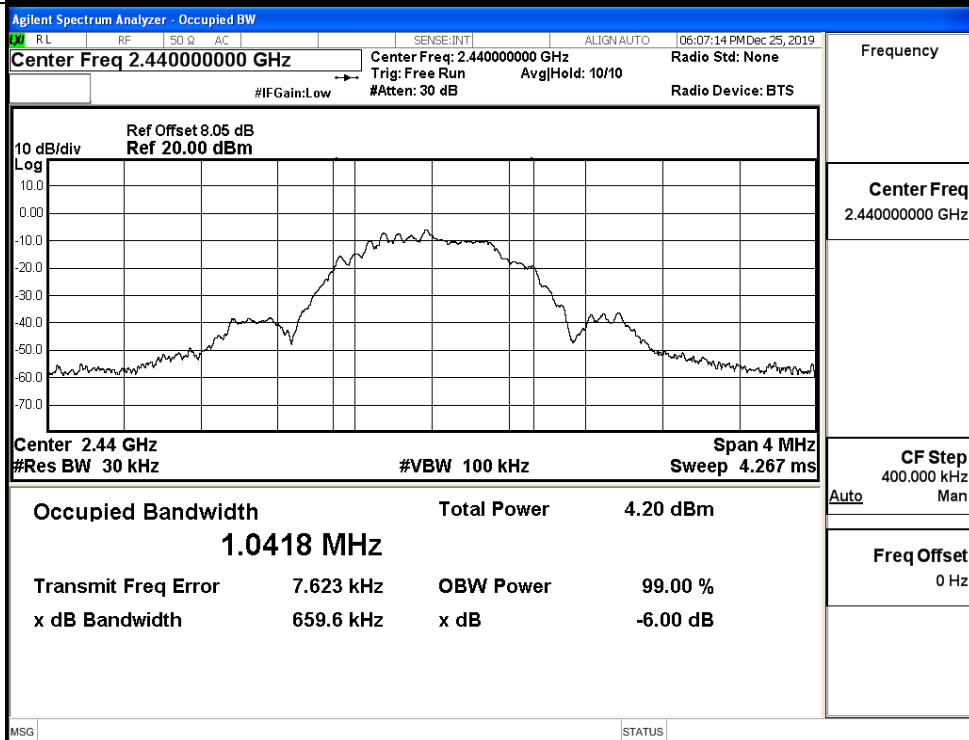
Mode	Channel	Occupied Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	1.0403	≥ 0.5	PASS
BT LE	MCH	1.0418	≥ 0.5	PASS
BT LE	HCH	1.0383	≥ 0.5	PASS

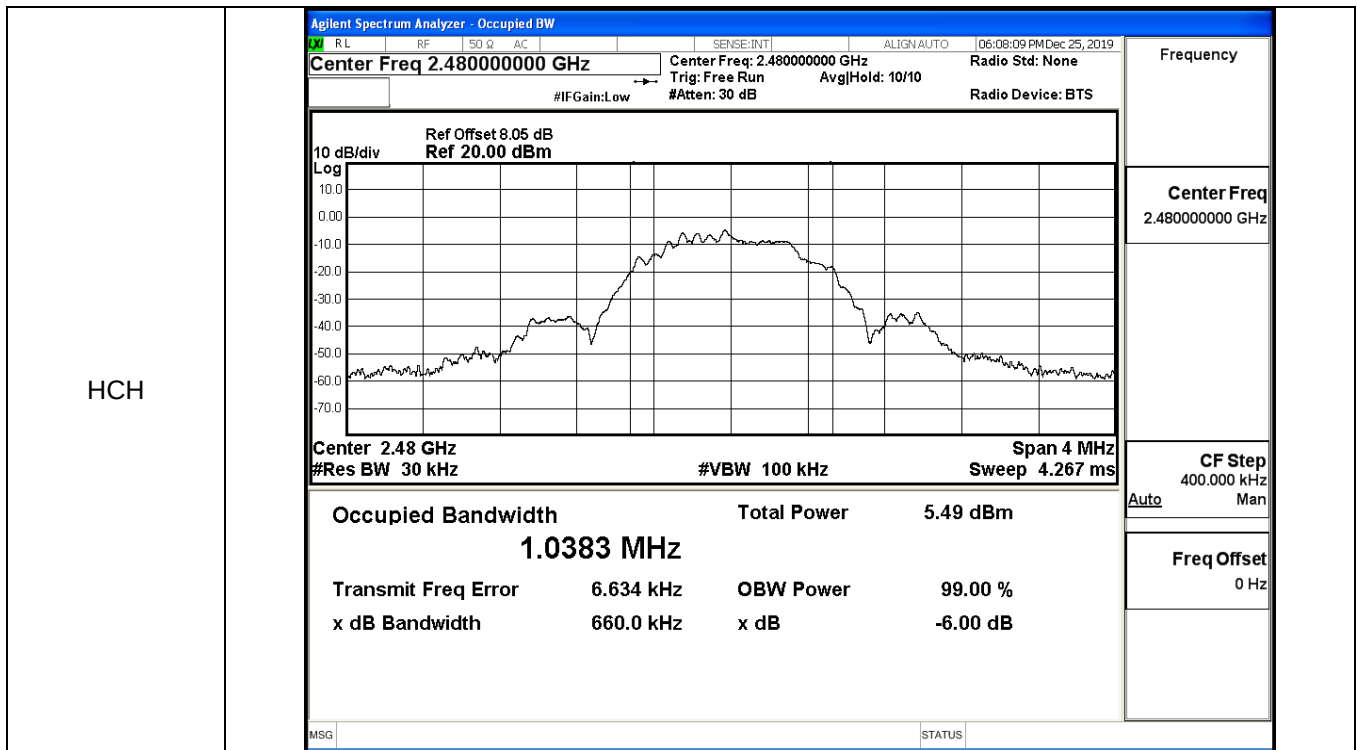
Test Graphs

LCH



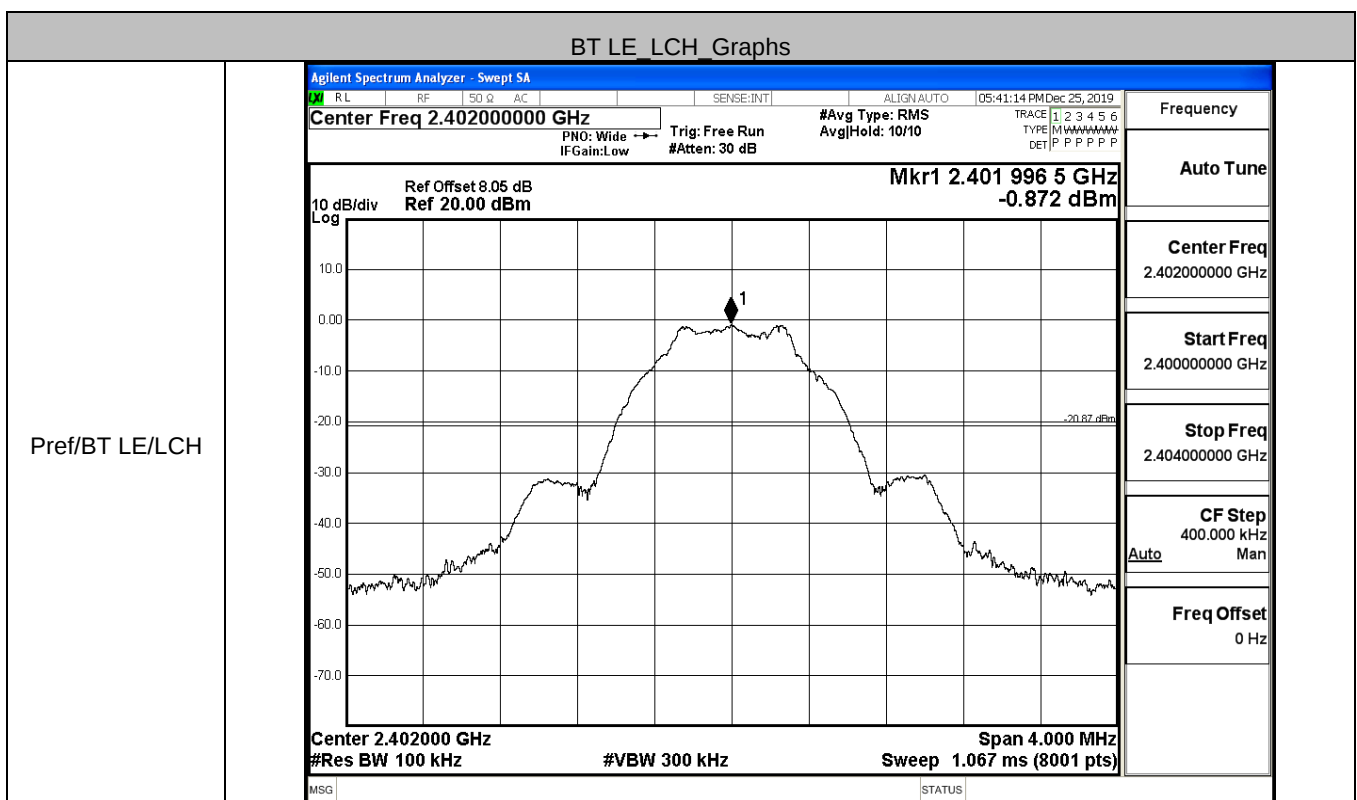
MCH



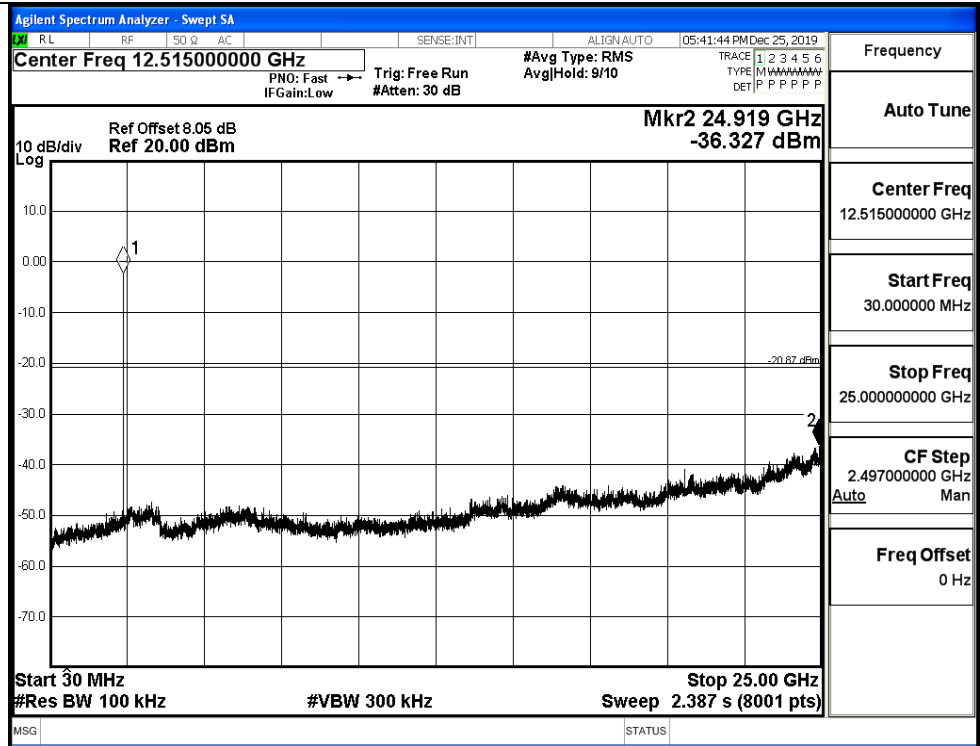


A.6 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.872	-36.327	-20.872	PASS
BT LE	MCH	-2.85	-36.231	-22.850	PASS
BT LE	HCH	-1.592	-37.227	-21.592	PASS

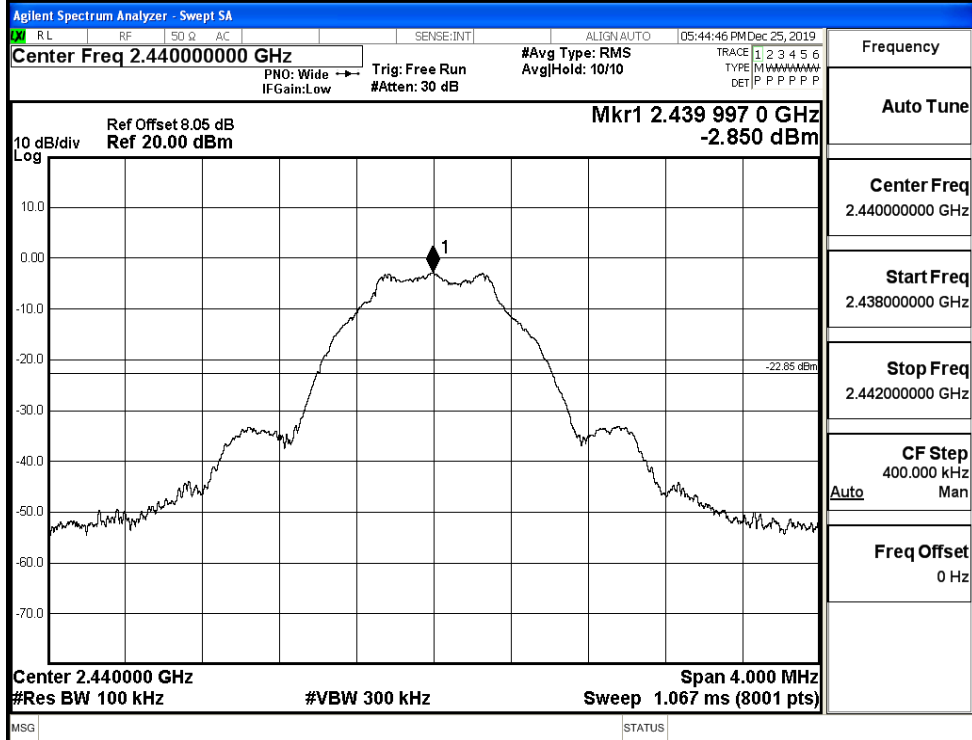


Puw/BT LE/LCH

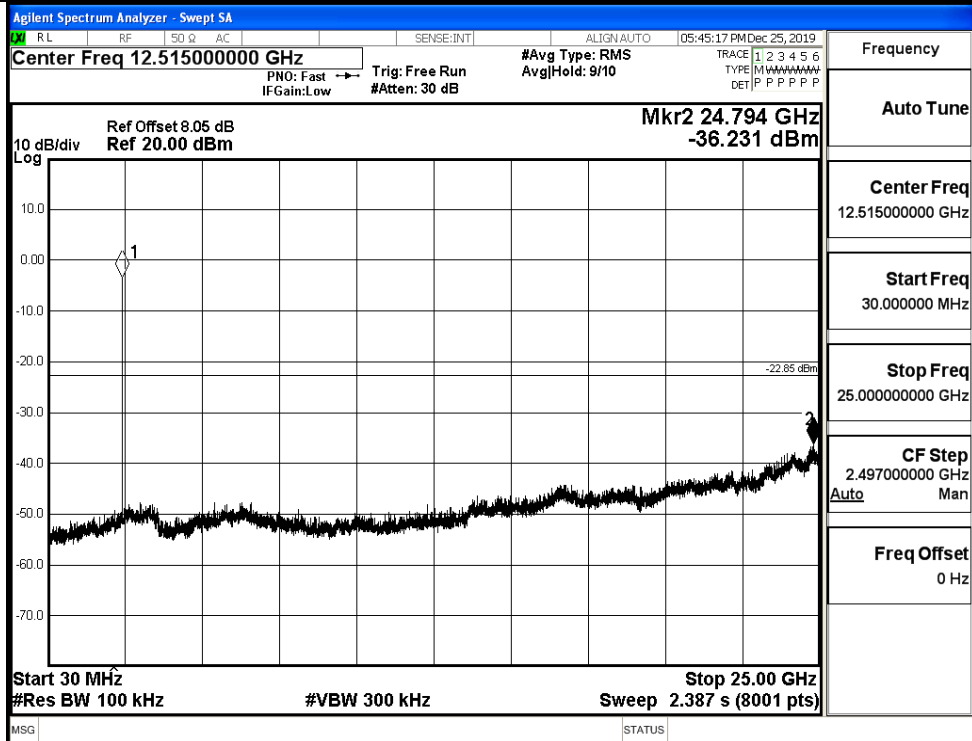


BT LE MCH Graphs

Pref/BT LE/MCH

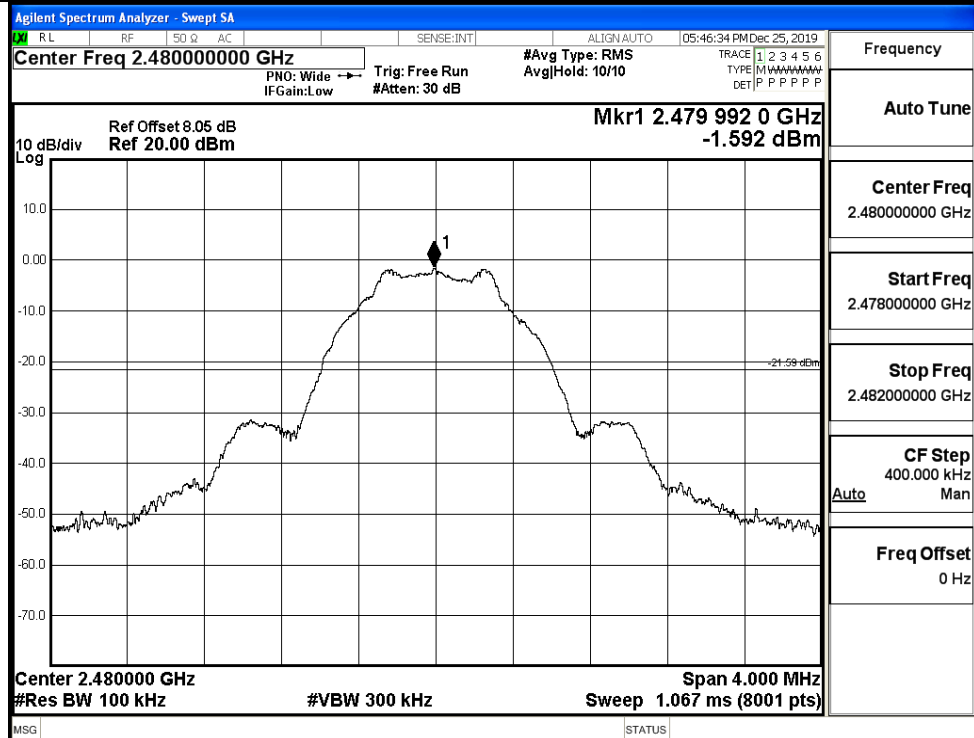


Puw/BT LE/MCH

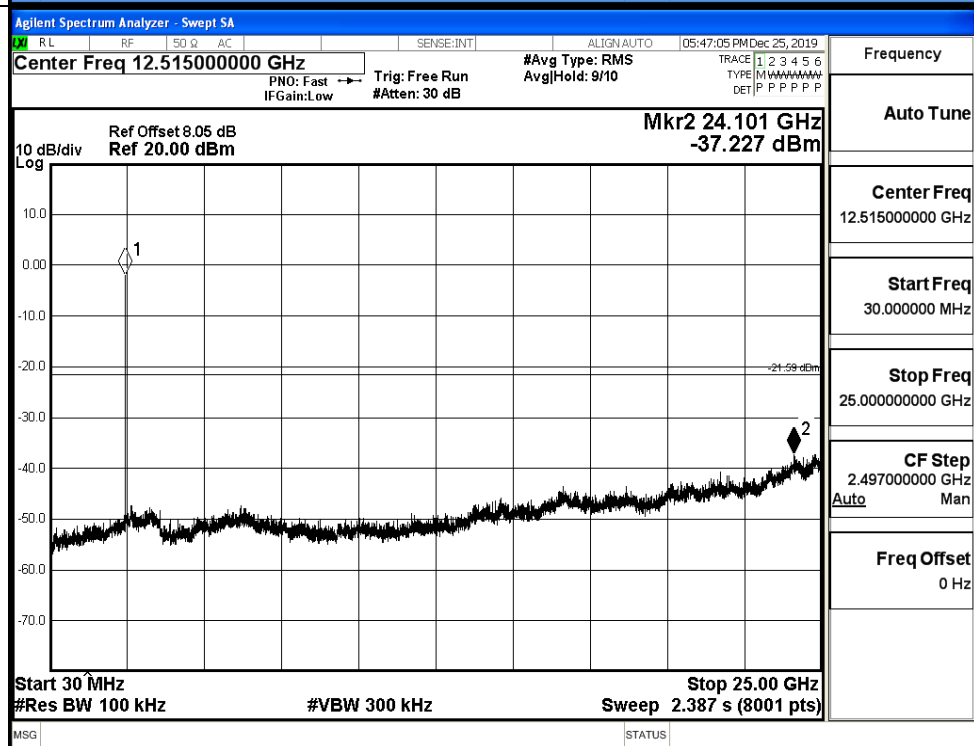


BT LE HCH Graphs

Pref/BT LE/HCH

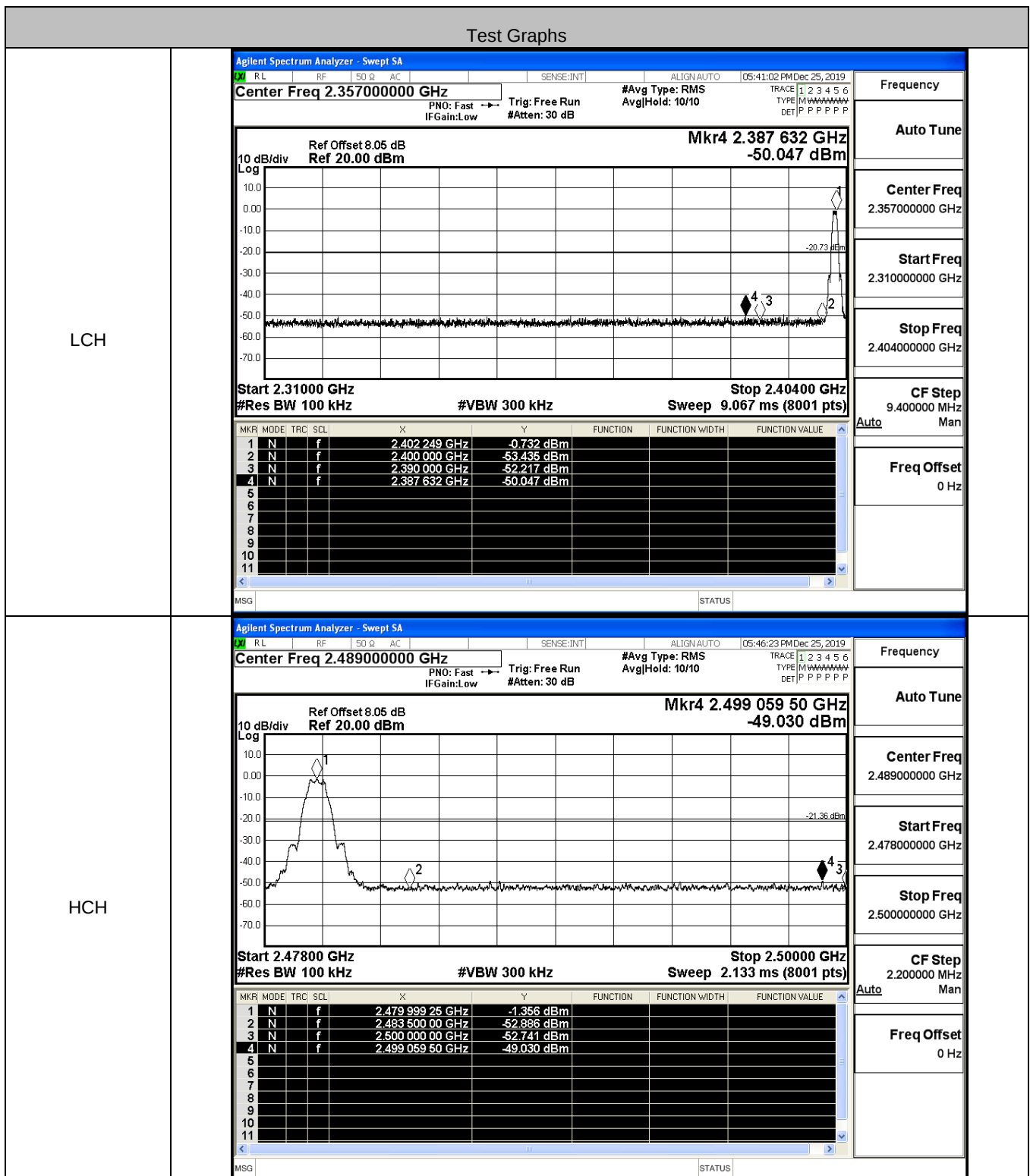


Puw/BT LE/HCH



A.7 Band-edge for RF Conducted Emissions

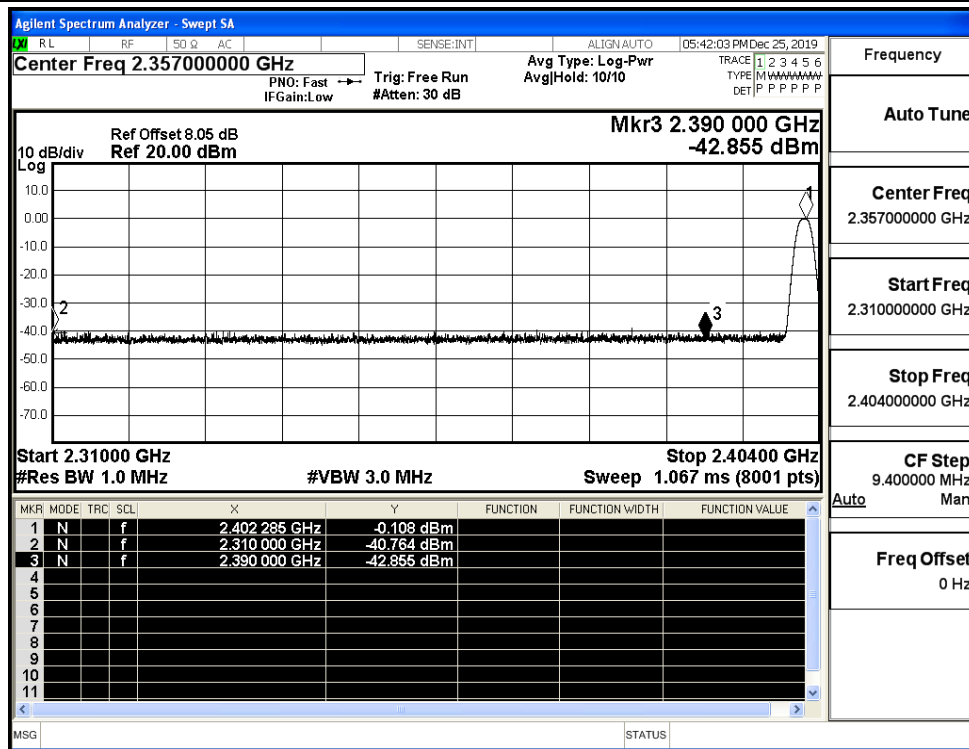
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.732	-50.047	-20.73	PASS
BT LE	HCH	-1.356	-49.030	-21.36	PASS



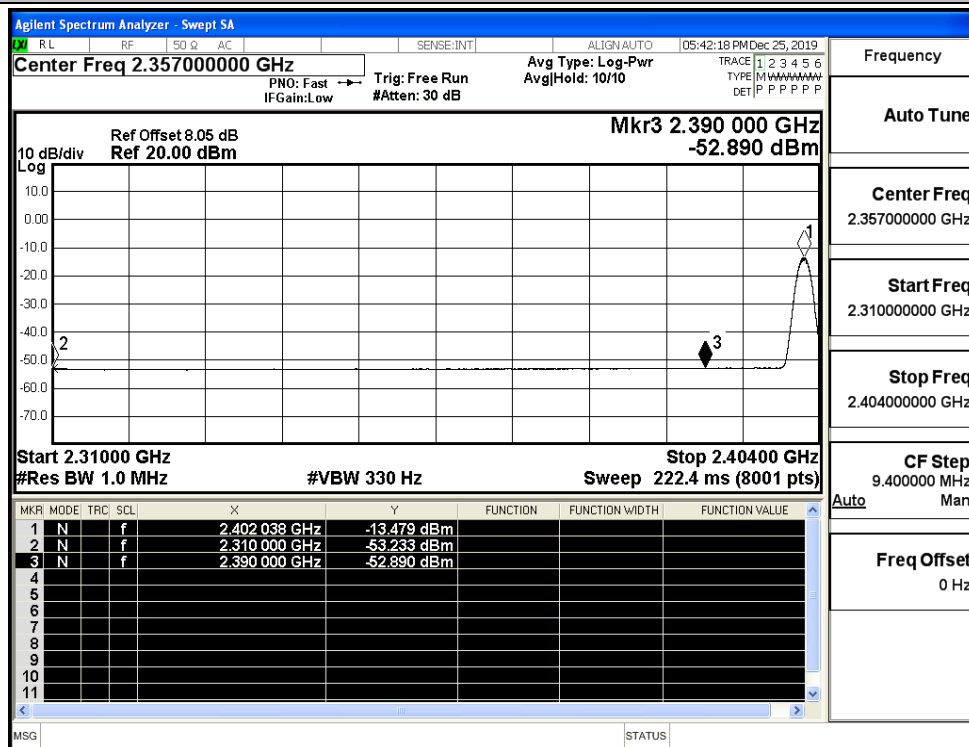
A.8 Restrict-band band-edge measurements

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	-40.76	2.0	0	56.49	PEAK	74	PASS
		Ant1	2310.0	-53.23	2.0	0	44.02	AV	54	PASS
		Ant1	2390.0	-42.86	2.0	0	54.40	PEAK	74	PASS
		Ant1	2390.0	-52.89	2.0	0	44.37	AV	54	PASS
	2480	Ant1	2483.5	-42.19	2.0	0	55.07	PEAK	74	PASS
		Ant1	2483.5	-52.47	2.0	0	44.78	AV	54	PASS
		Ant1	2500.0	-42.44	2.0	0	54.82	PEAK	74	PASS
		Ant1	2500.0	-52.34	2.0	0	44.92	AV	54	PASS

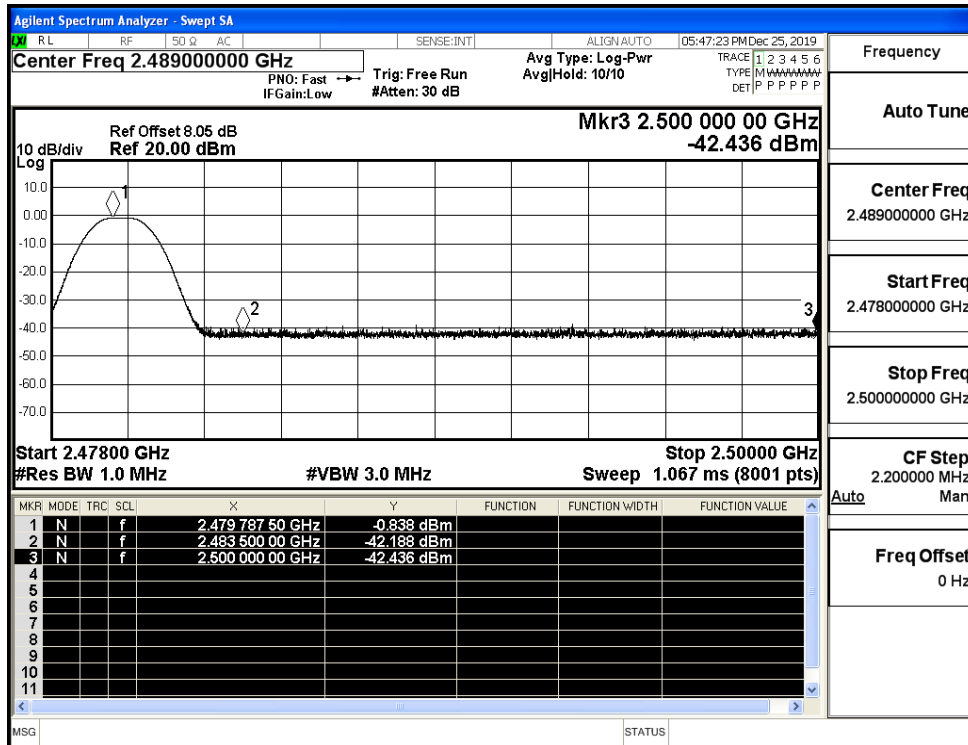
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

