

Appendix A

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

Product Name: Nreal Controller

Trade Mark:  nreal

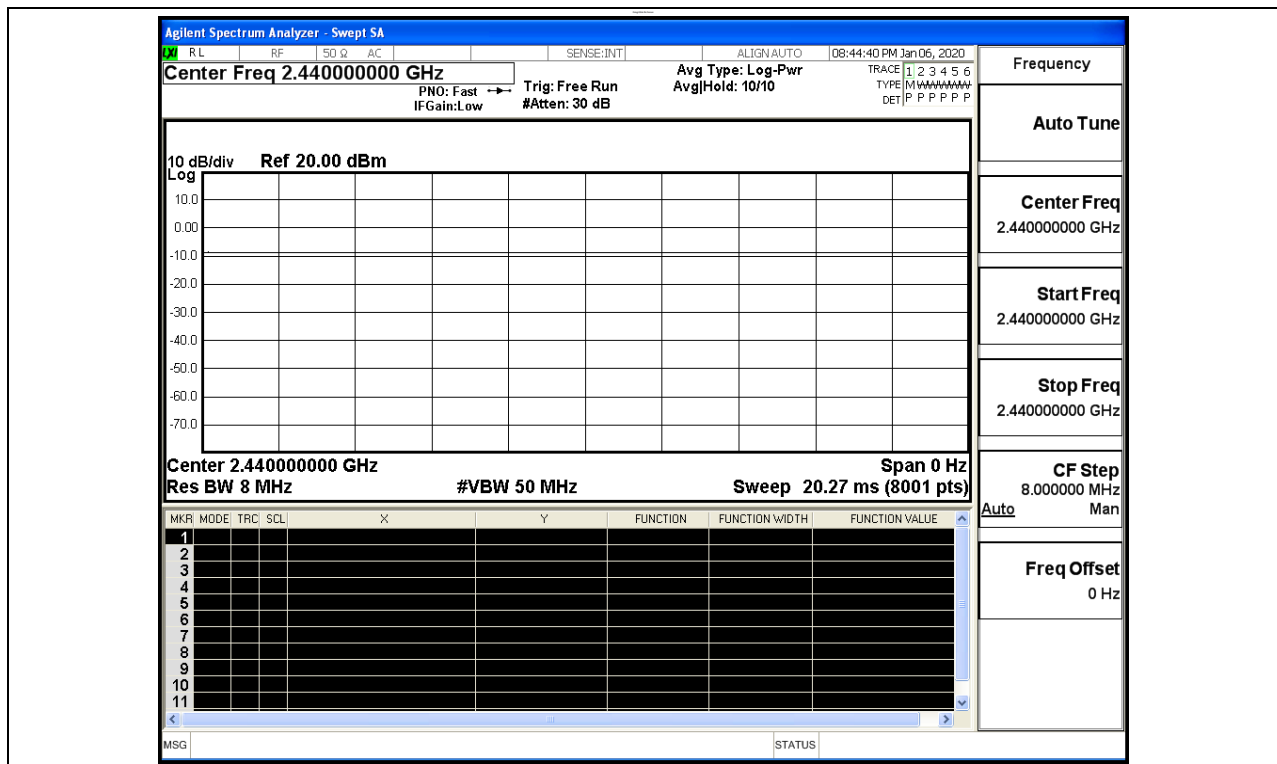
Test Model: NR-9100CGL

Environmental Conditions

Temperature:	23.2° C
Relative Humidity:	53.5%
ATM Pressure:	100.0 kPa
Test Engineer:	Alisa Huang
Supervised by:	Tom.Liu

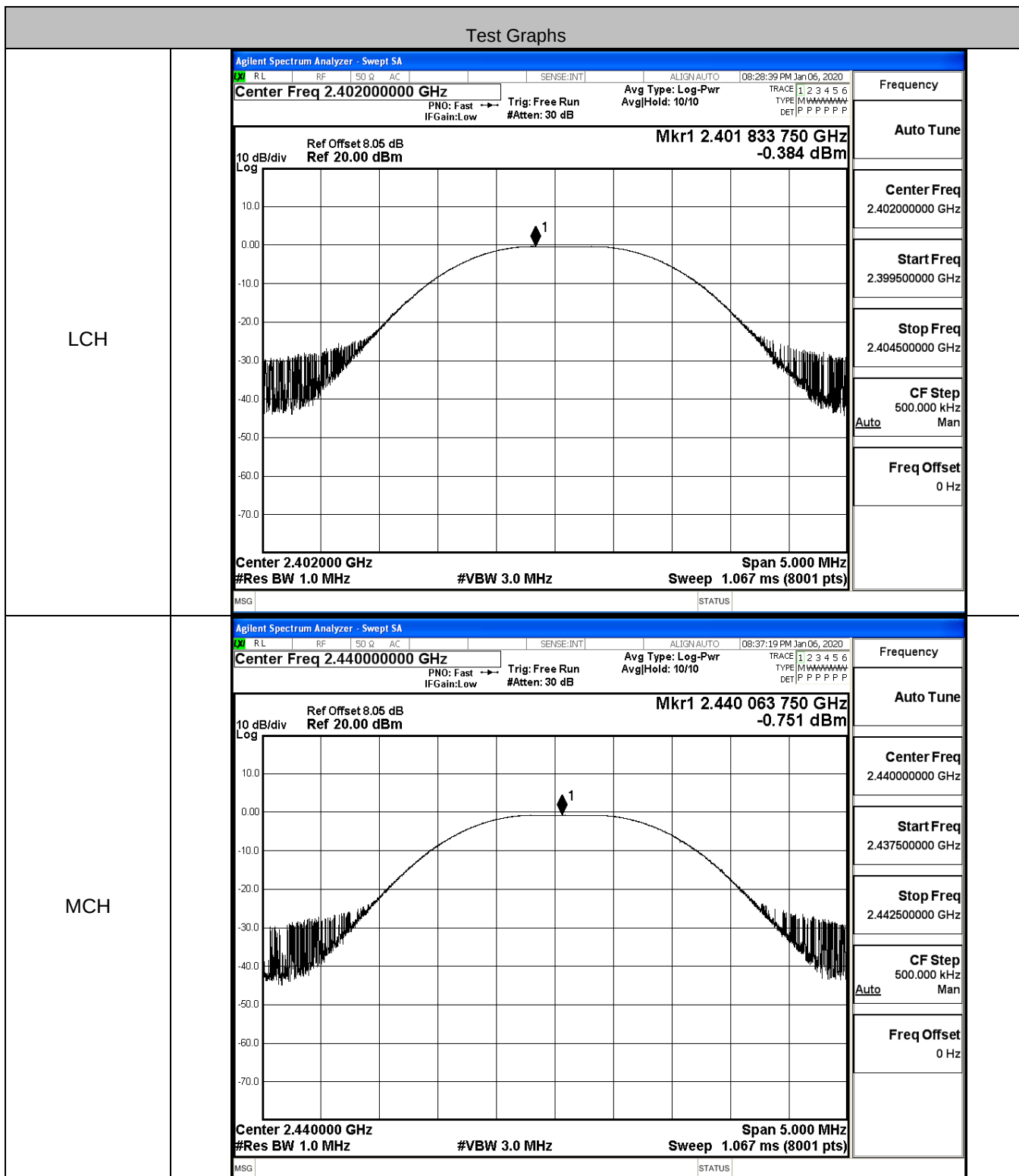
A.1 Duty Cycle

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

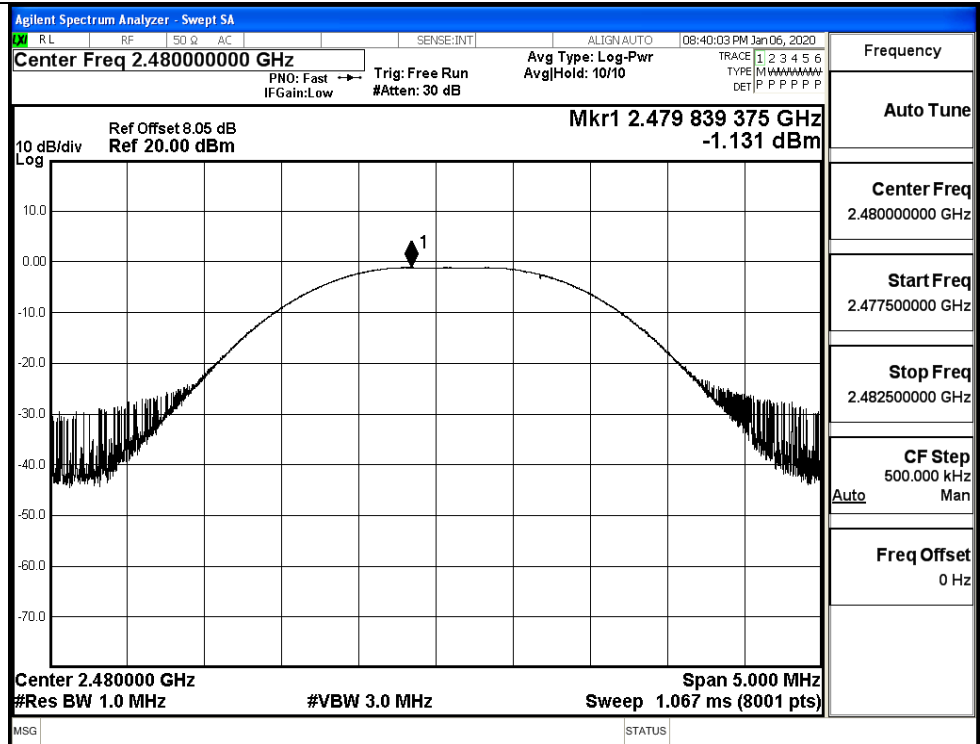


A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.384	30	PASS
BT LE	MCH	-0.751	30	PASS
BT LE	HCH	-1.131	30	PASS



HCH

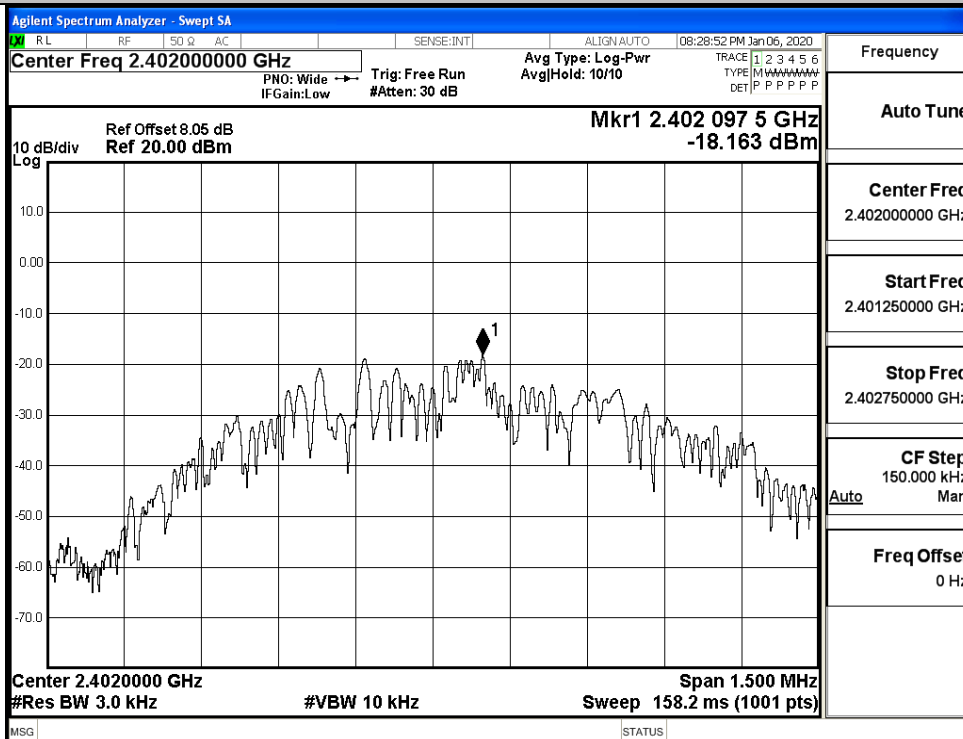


A.3 Maximum Power Spectral Density

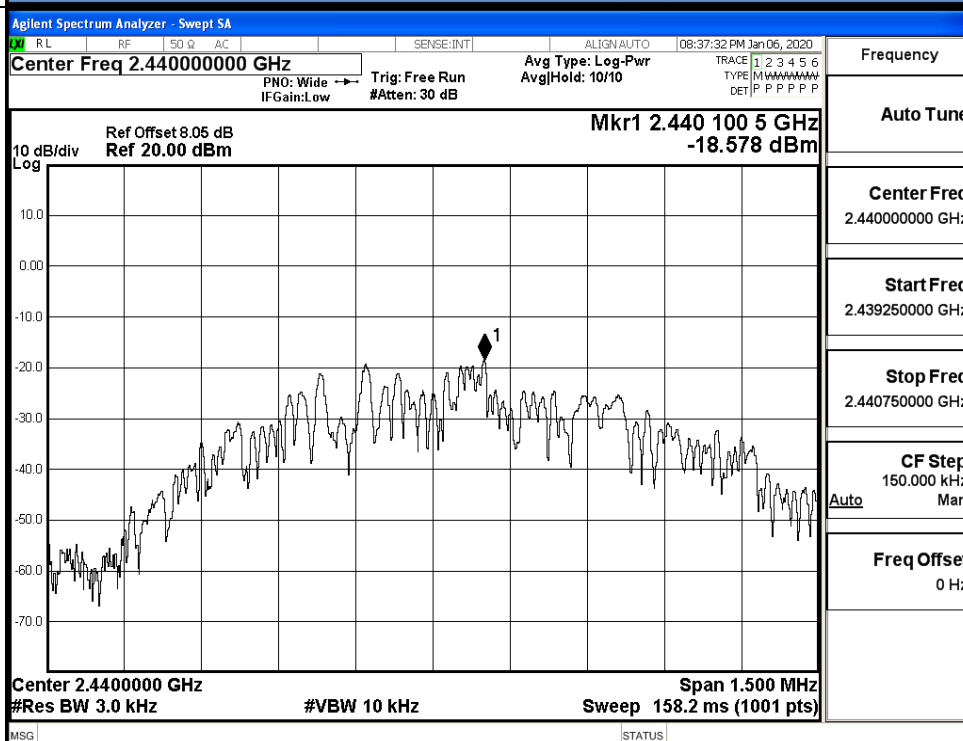
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-18.163	8	PASS
BT LE	MCH	-18.578	8	PASS
BT LE	HCH	-18.886	8	PASS

Test Graphs

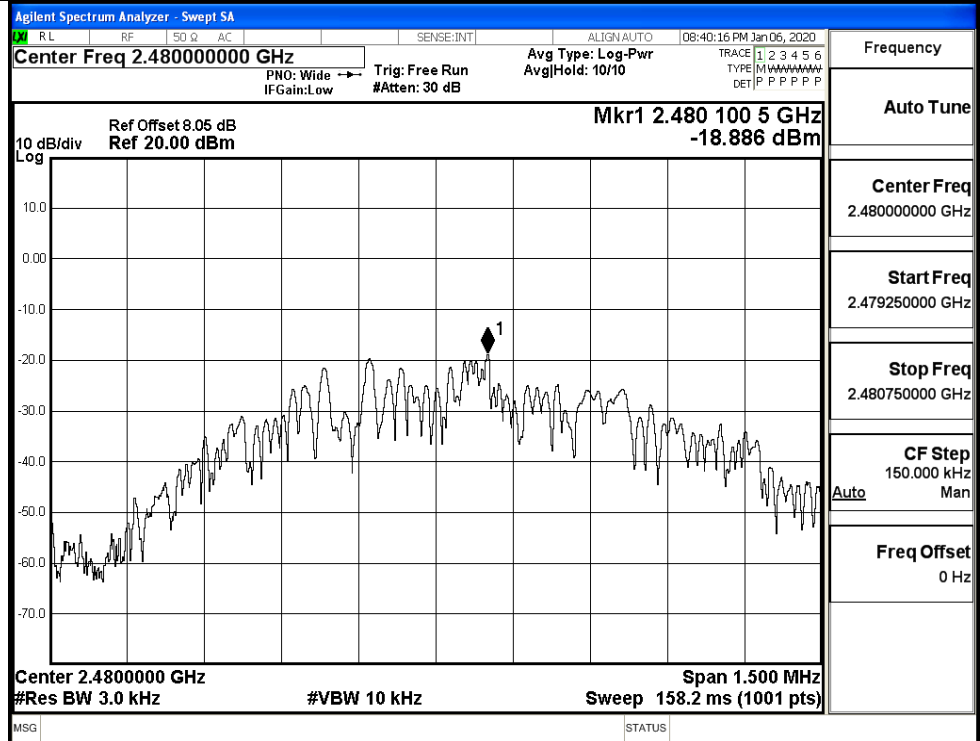
LCH



MCH



HCH

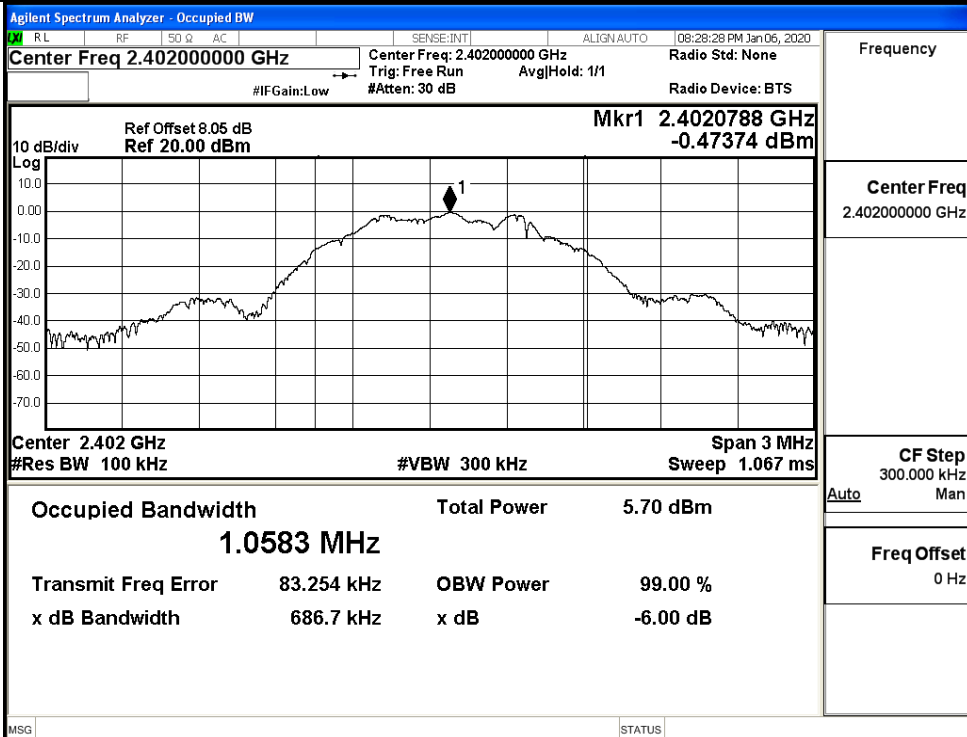


A.4 6dB Bandwidth

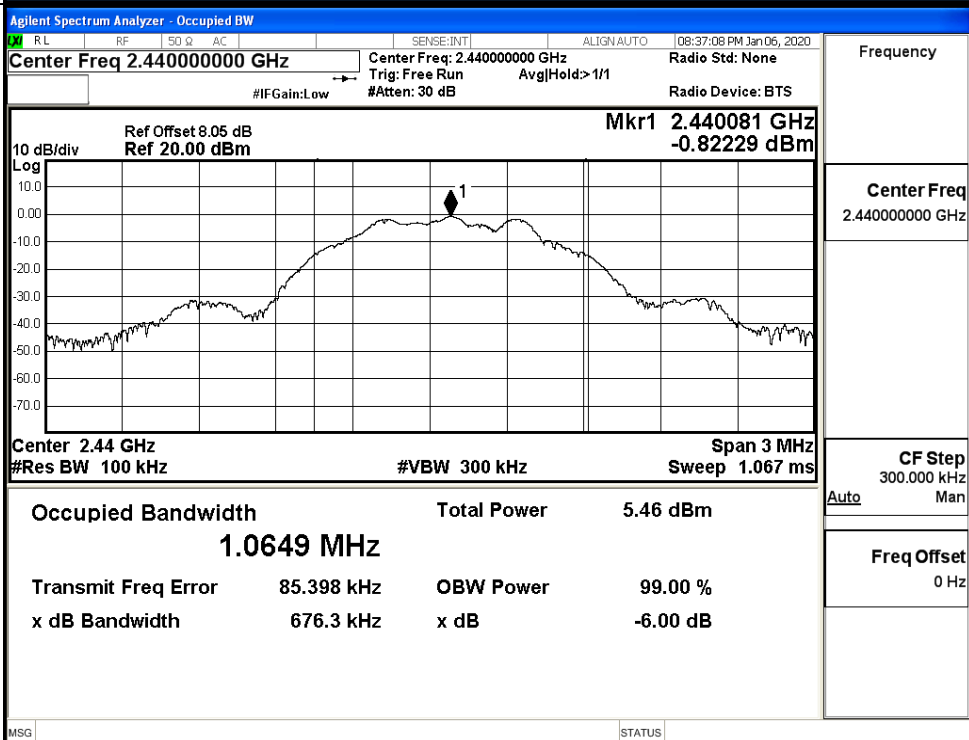
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6867	≥ 0.5	PASS
BT LE	MCH	0.6763	≥ 0.5	PASS
BT LE	HCH	0.6831	≥ 0.5	PASS

Test Graphs

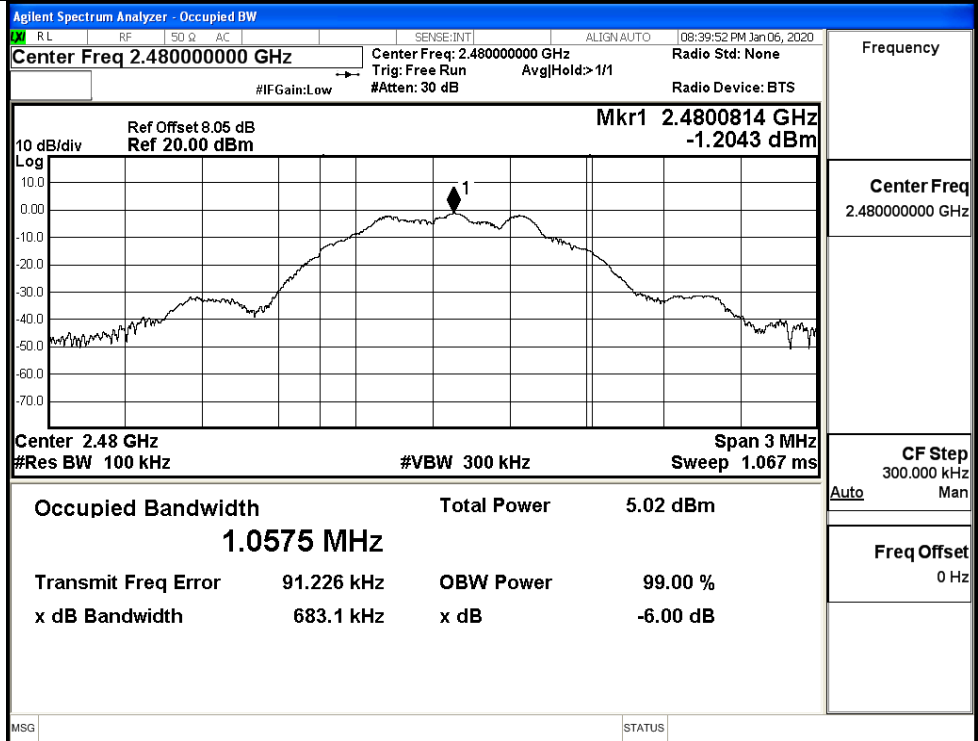
LCH



MCH



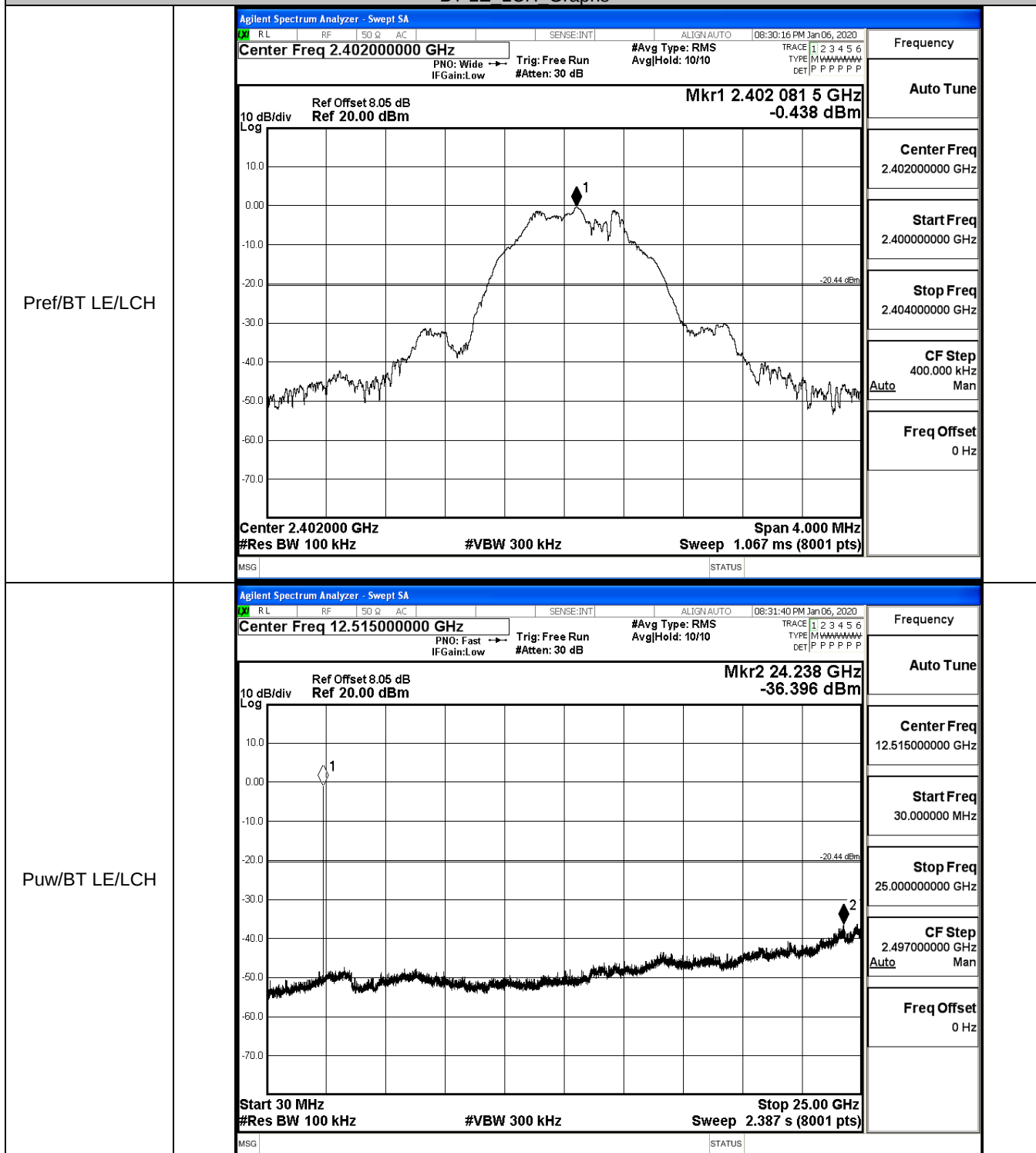
HCH



A.5 RF Conducted Spurious Emissions

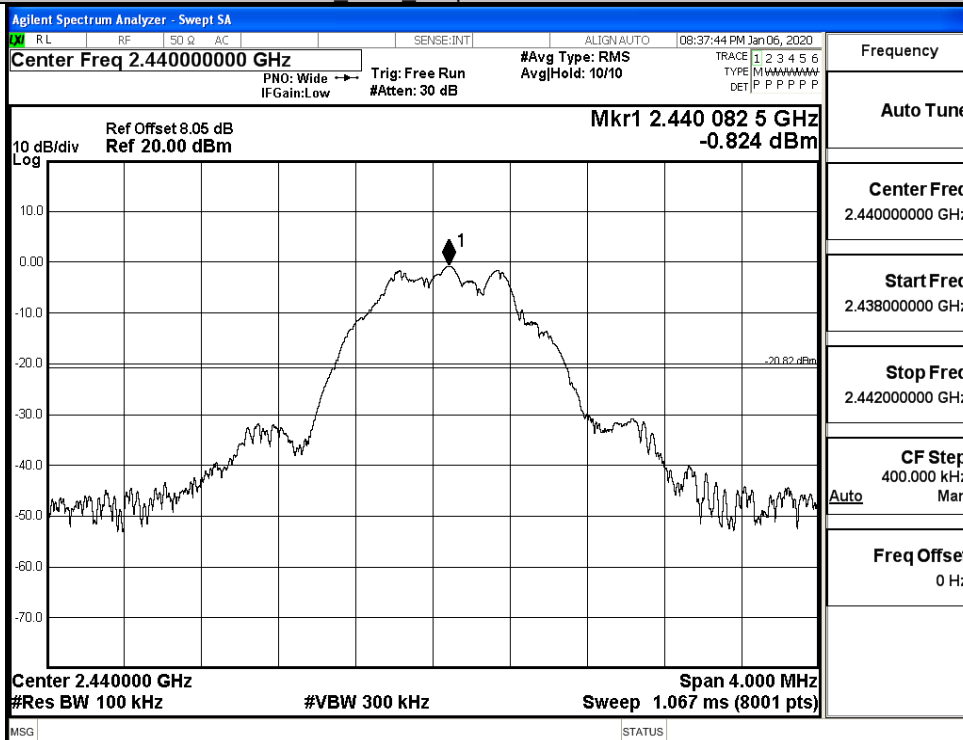
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.438	-36.396	-20.438	PASS
BT LE	MCH	-0.824	-36.821	-20.824	PASS
BT LE	HCH	-1.215	-37.070	-21.215	PASS

BT LE LCH Graphs

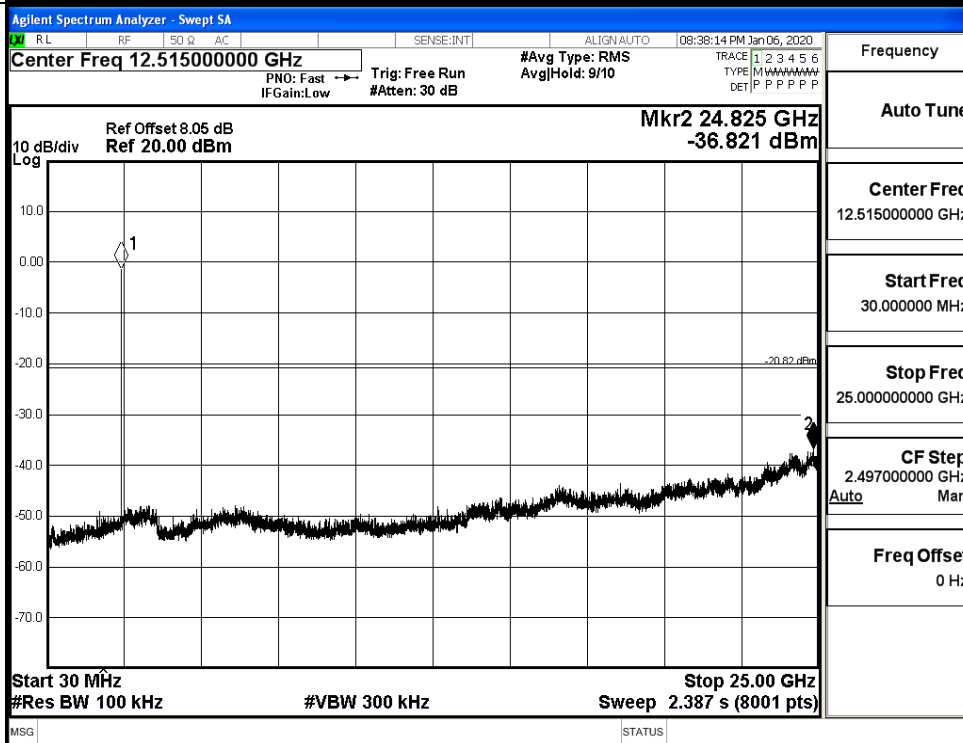


BT LE MCH Graphs

Pref/BT LE/MCH

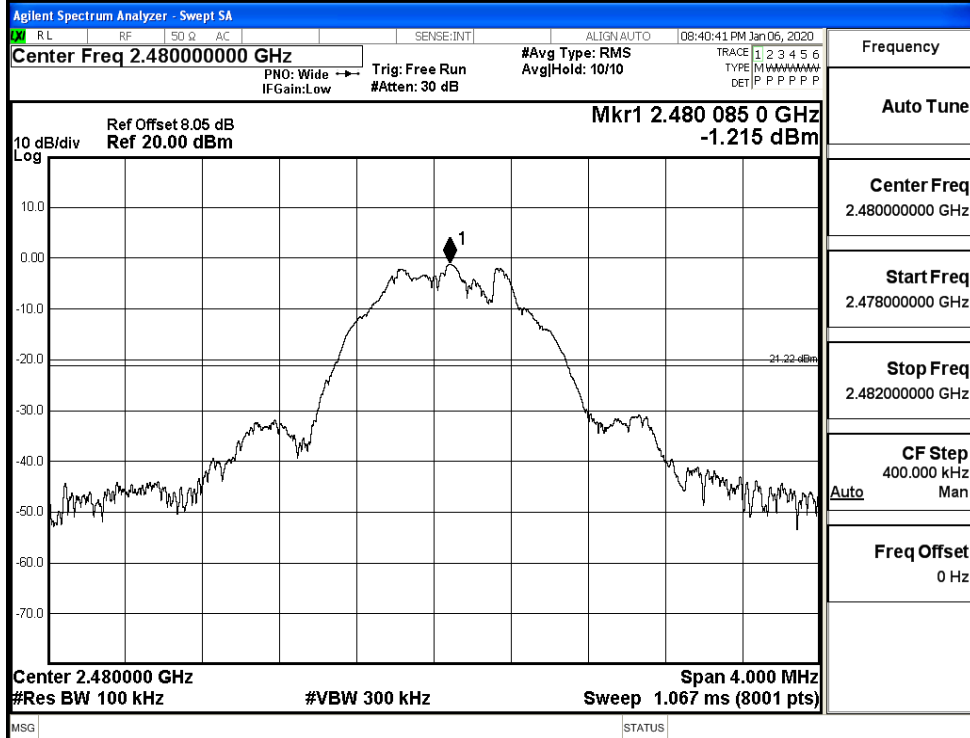


Puw/BT LE/MCH

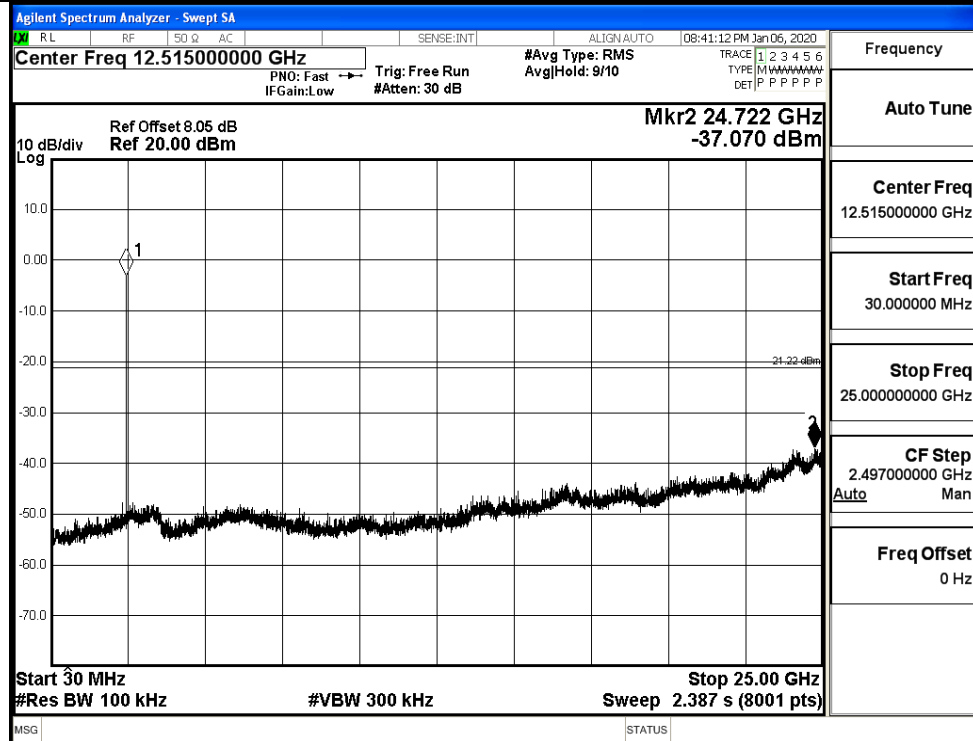


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

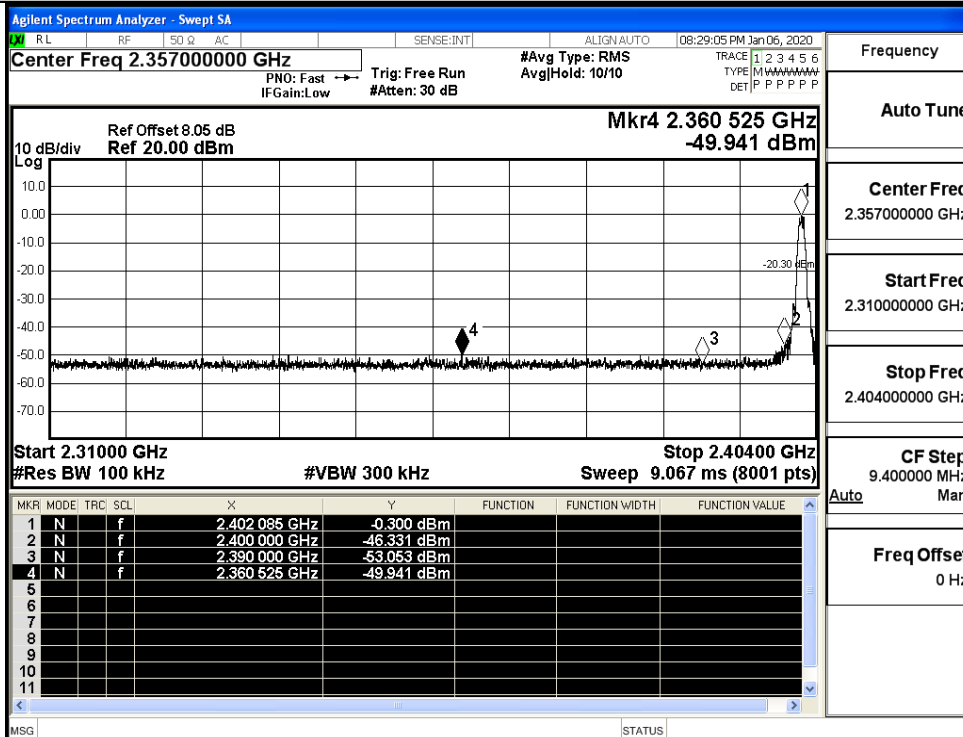


A.6 Band-edge for RF Conducted Emissions

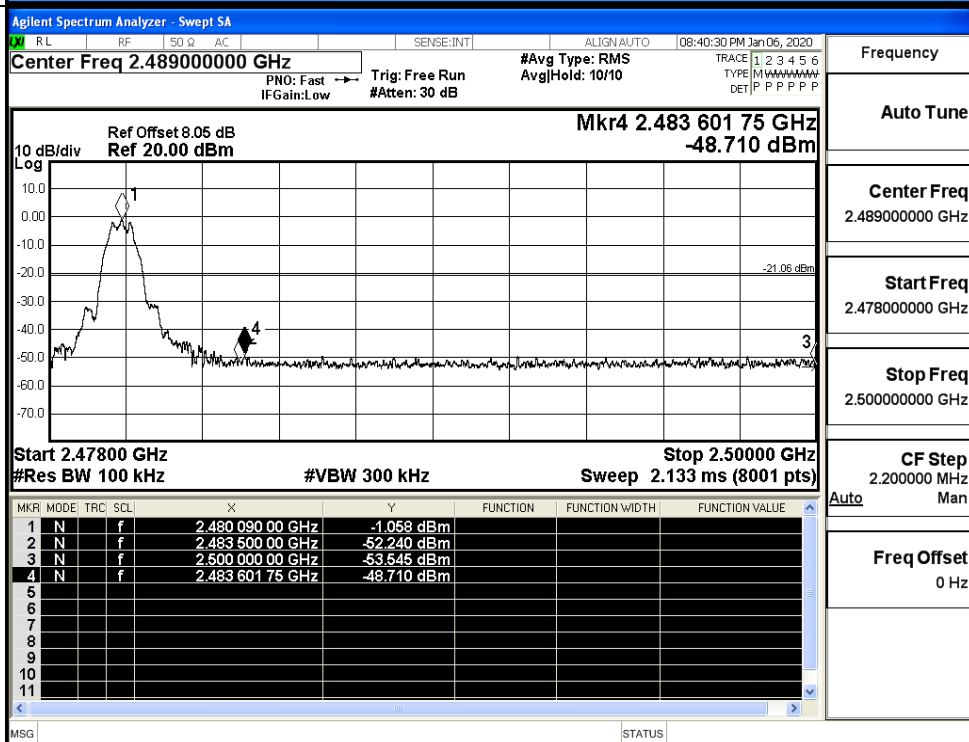
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.300	-49.941	-20.3	PASS
BT LE	HCH	-1.058	-48.710	-21.06	PASS

Test Graphs

LCH



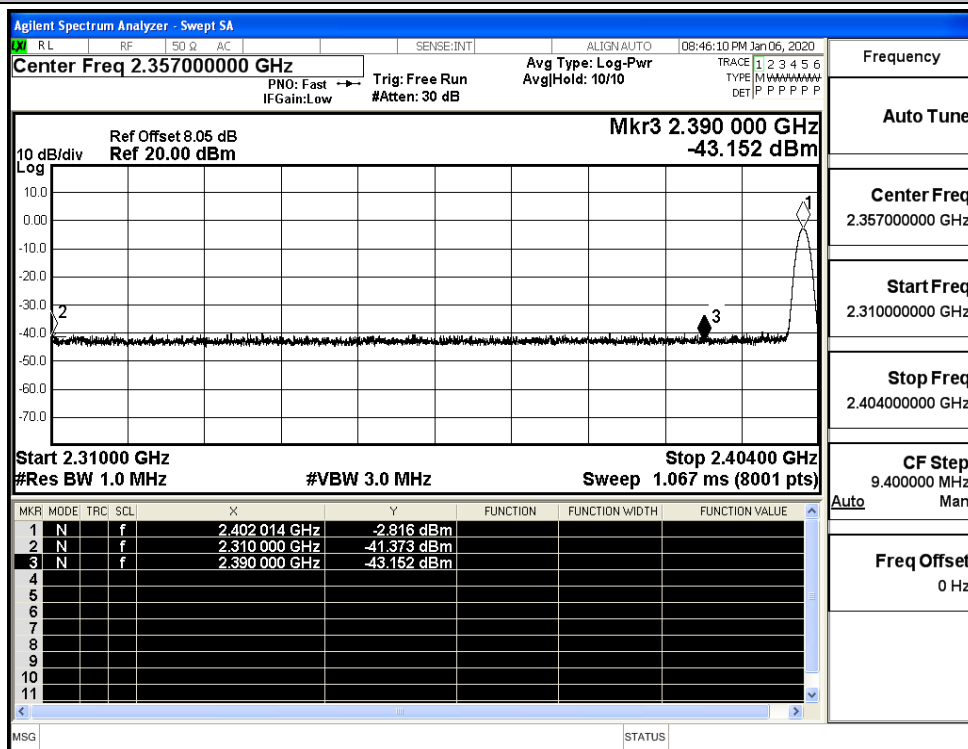
HCH



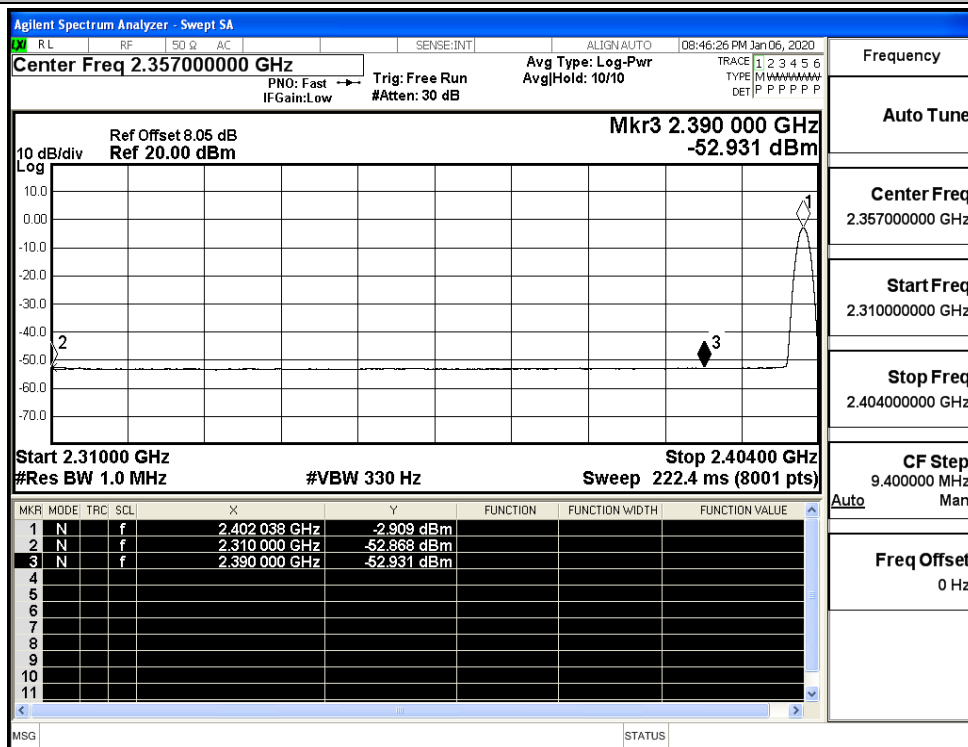
A.7 Restrict-band band-edge measurements

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	-41.37	2.0	0	54.38	PEAK	74	PASS
		Ant1	2310.0	-52.87	2.0	0	42.89	AV	54	PASS
		Ant1	2390.0	-43.15	2.0	0	52.61	PEAK	74	PASS
		Ant1	2390.0	-52.93	2.0	0	42.83	AV	54	PASS
	2480	Ant1	2483.5	-42.63	2.0	0	53.13	PEAK	74	PASS
		Ant1	2483.5	-52.39	2.0	0	43.37	AV	54	PASS
		Ant1	2500.0	-41.50	2.0	0	54.26	PEAK	74	PASS
		Ant1	2500.0	-52.35	2.0	0	43.41	AV	54	PASS

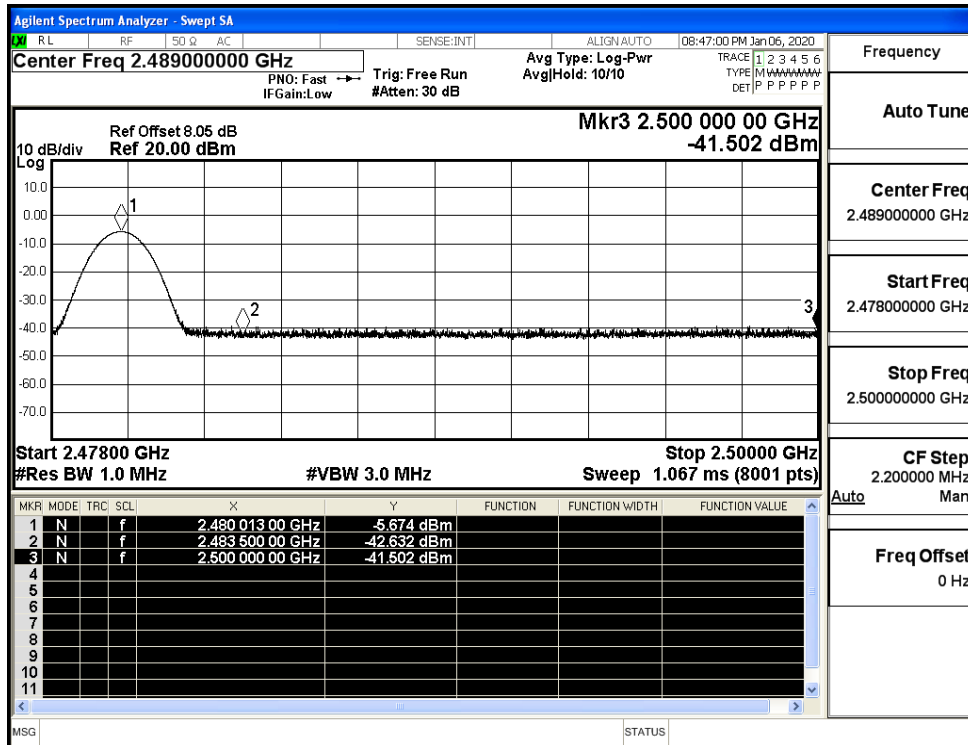
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

