

Appendix A

RF Test Data for BT 4.2(BLE) (Conducted Measurement)

Product Name: TS Smart Mortise with PIN

Trade Mark: N/A

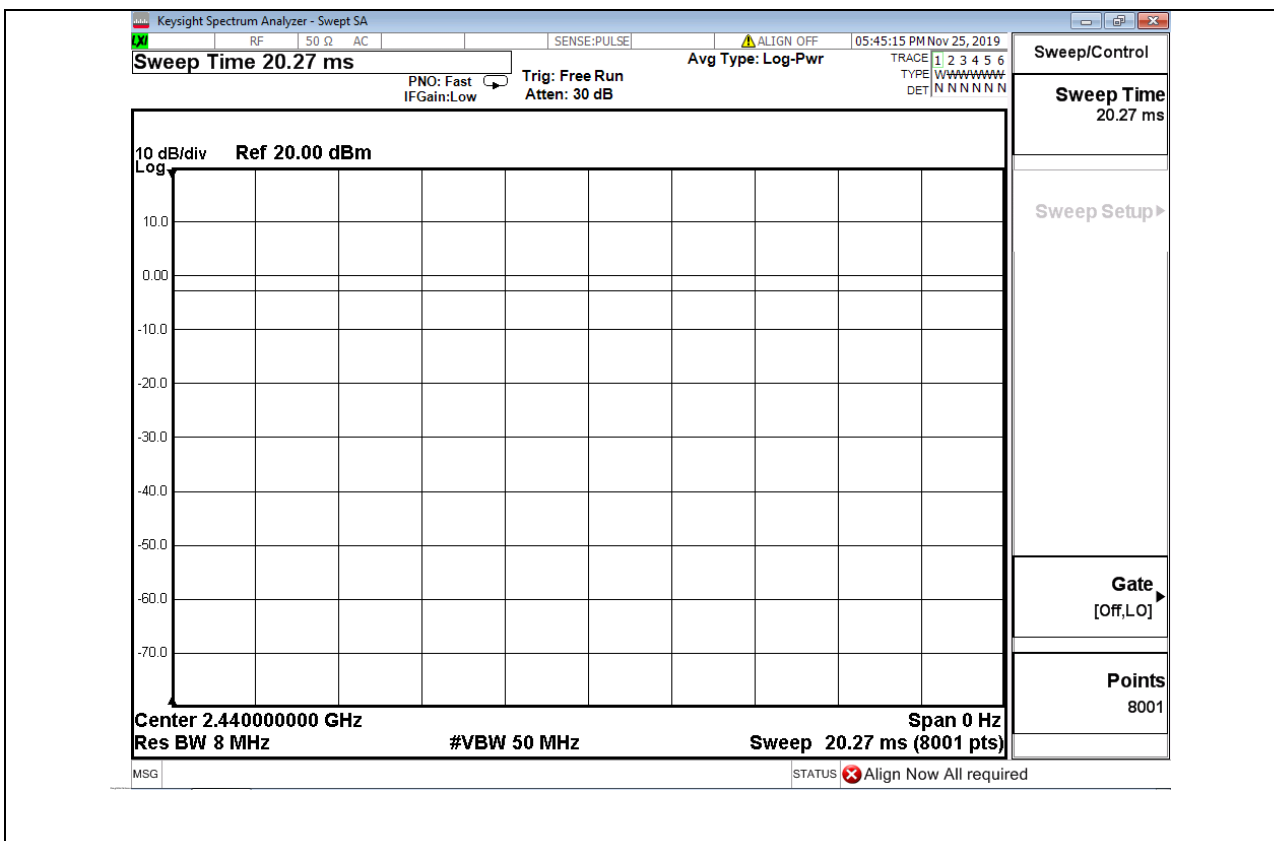
Test Model: e-Secure 5000-BLE

Environmental Conditions

Temperature:	24.2 ° C
Relative Humidity:	53.4%
ATM Pressure:	100.0 kPa
Test Engineer:	CHUANG WANG
Supervised by:	Jayden.Zhuo

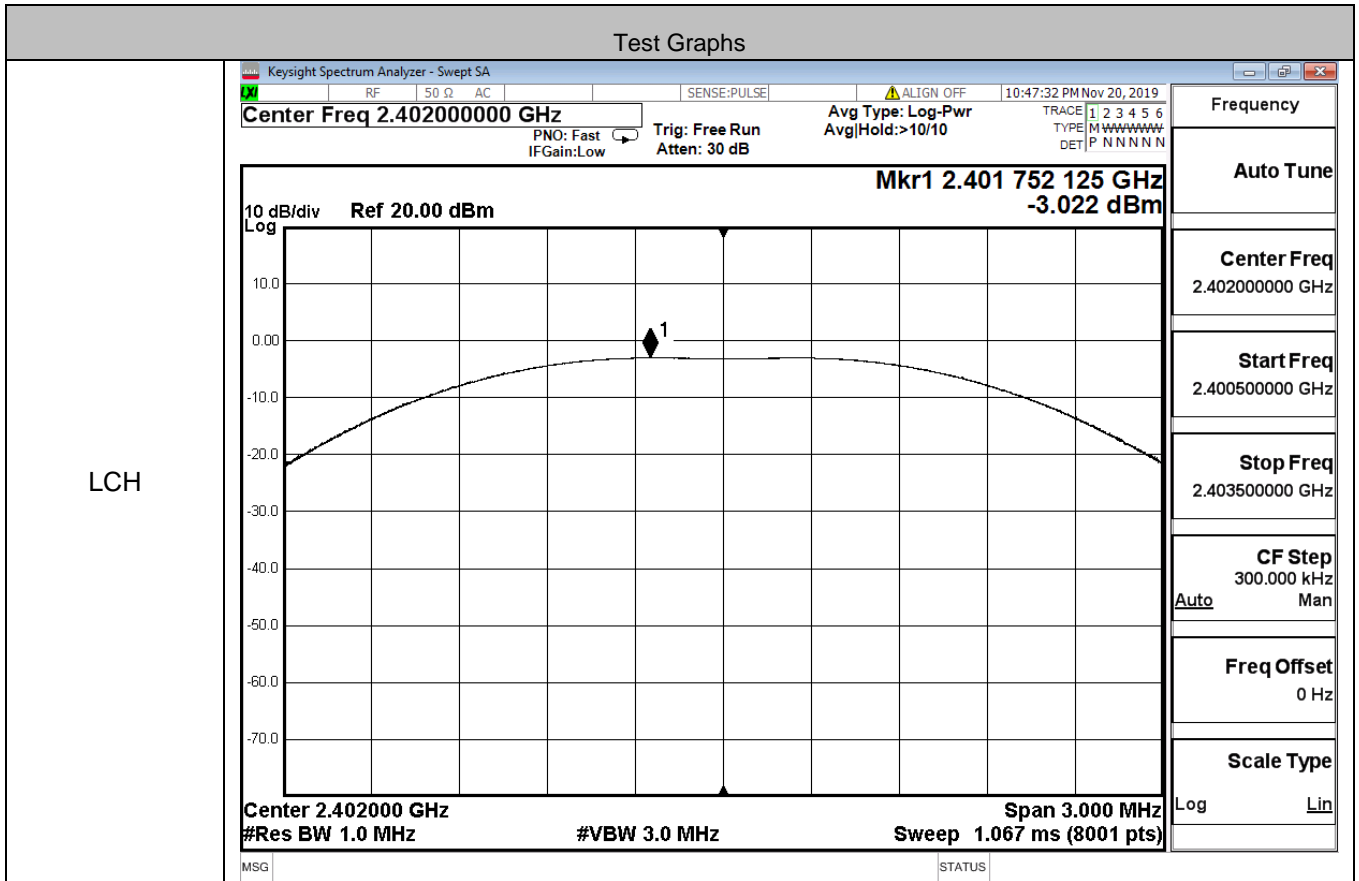
A.1 Duty Cycle

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

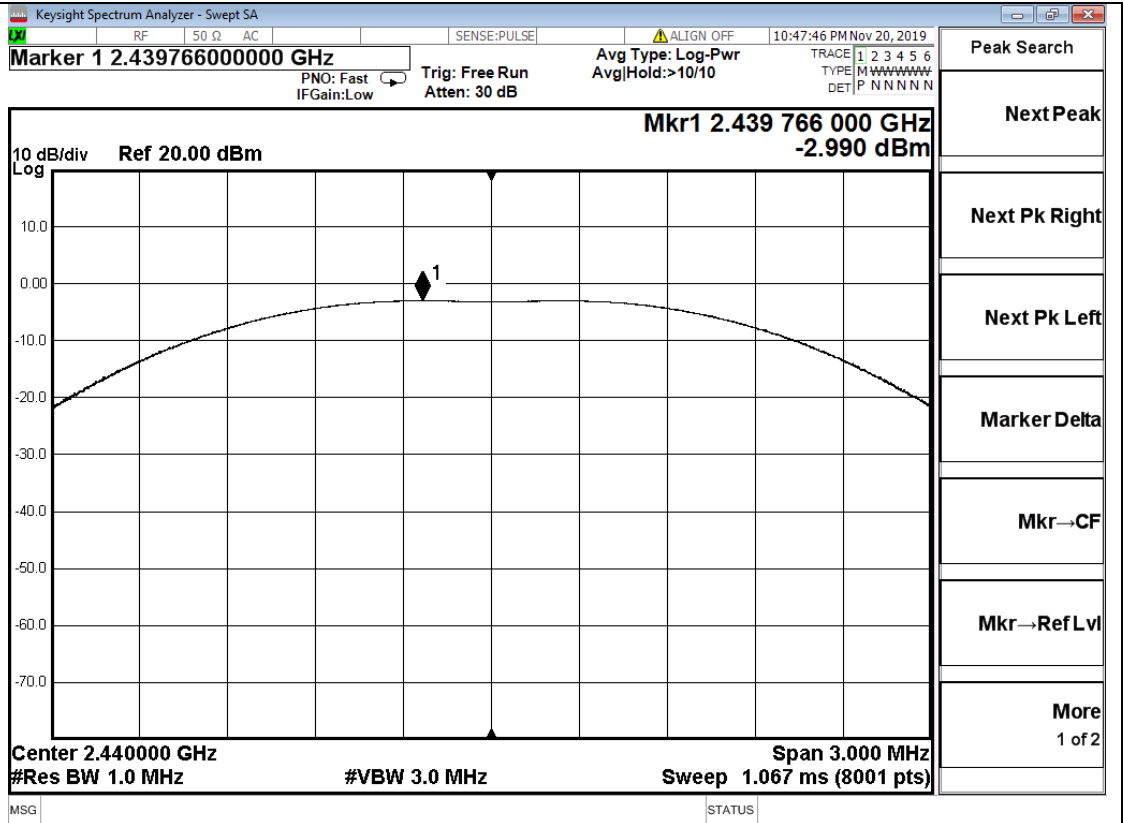


A.2 Maximum Conducted Peak Output Power

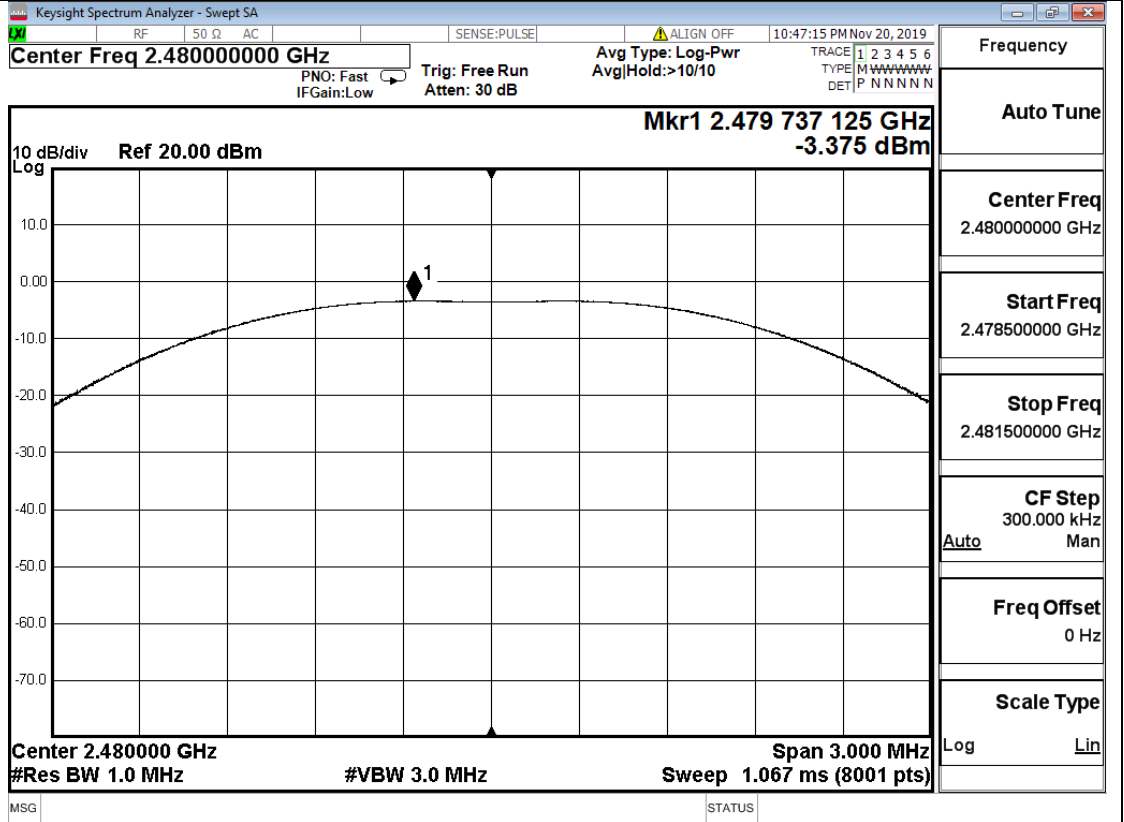
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-3.022	30	PASS
BT LE	MCH	-2.990	30	PASS
BT LE	HCH	-3.375	30	PASS



MCH

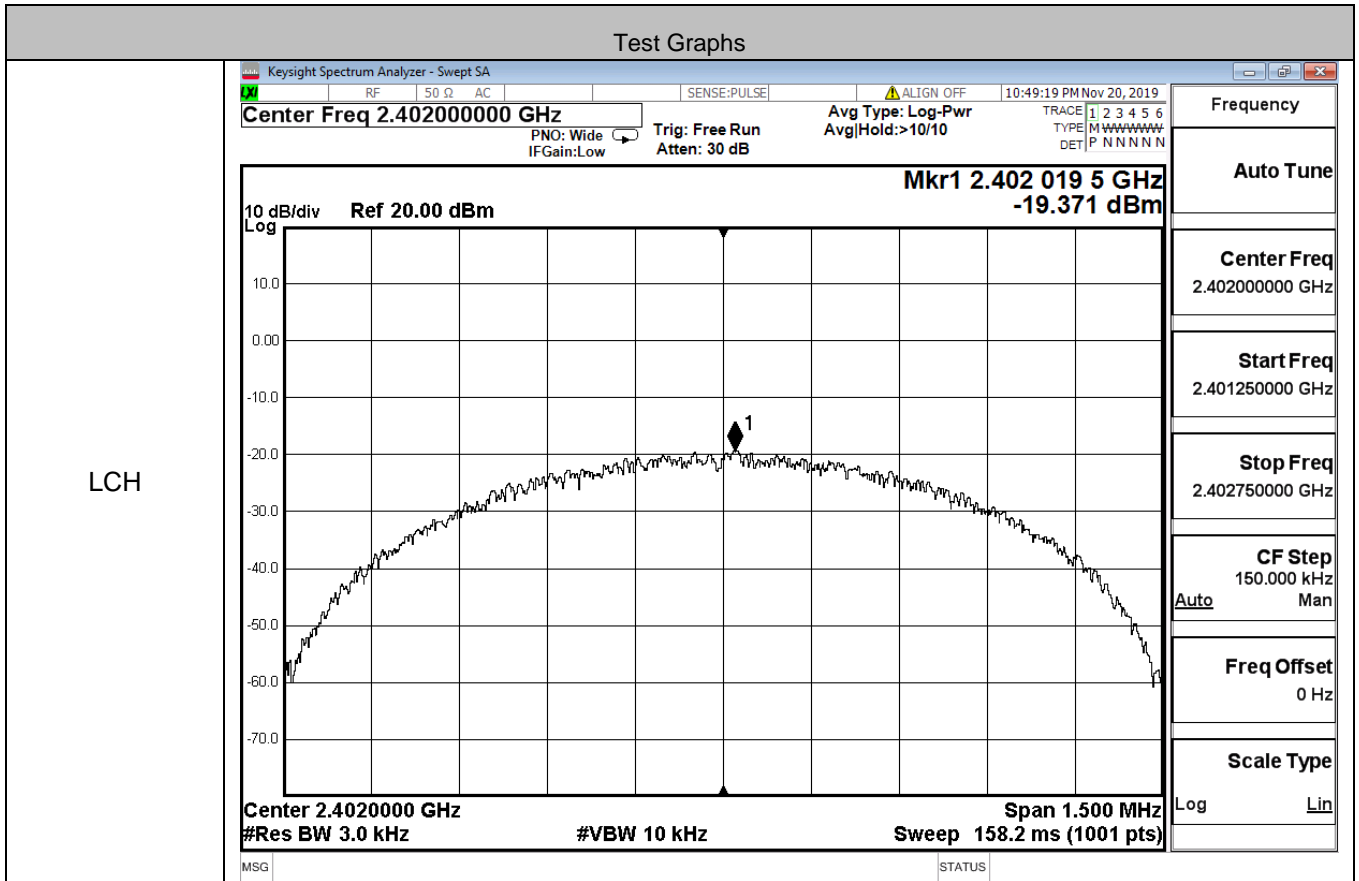


HCH

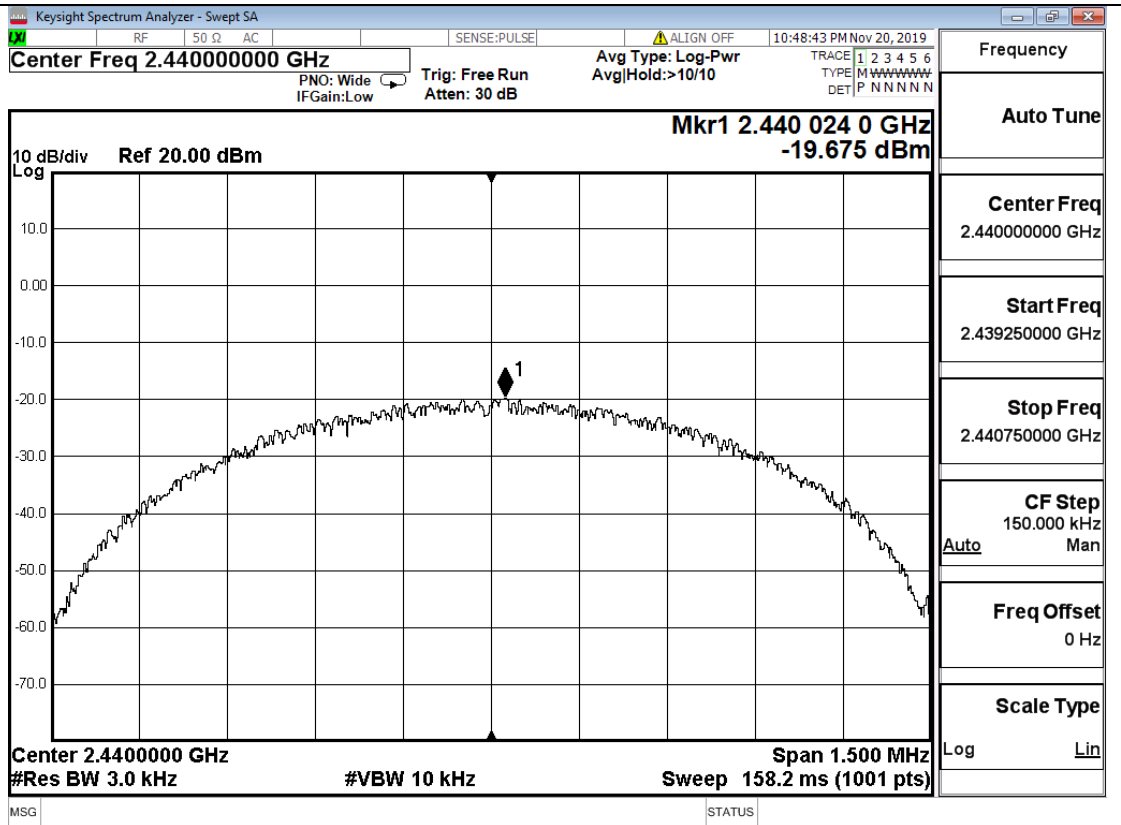


A.3 Maximum Power Spectral Density

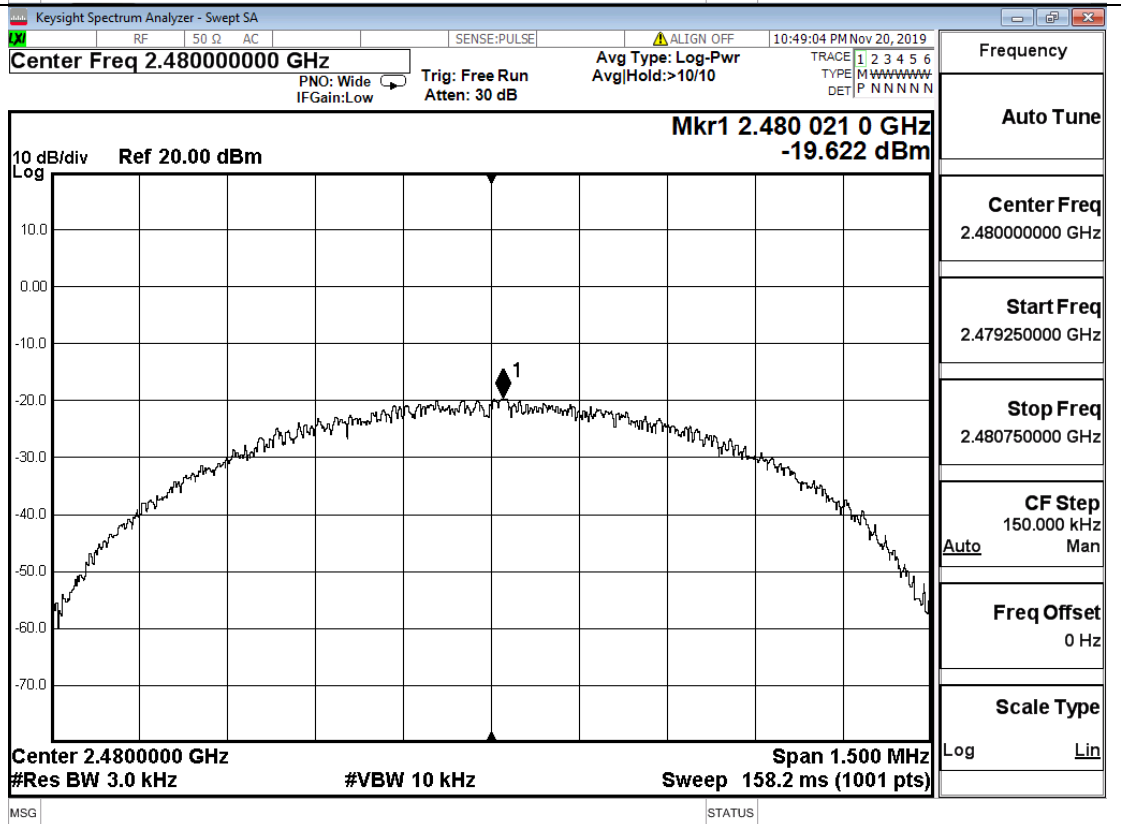
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-19.371	8	PASS
BT LE	MCH	-19.675	8	PASS
BT LE	HCH	-19.622	8	PASS



MCH

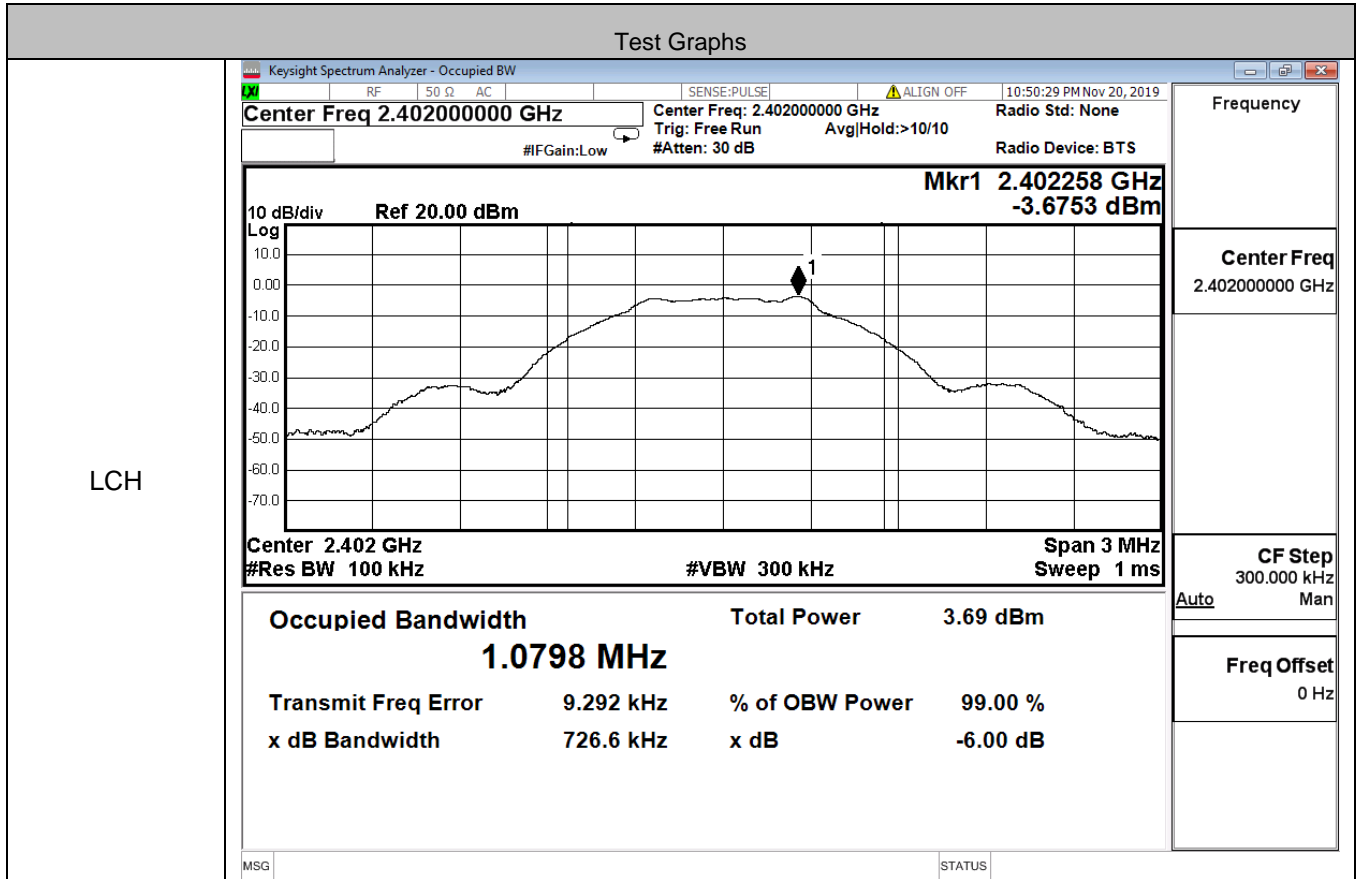


HCH

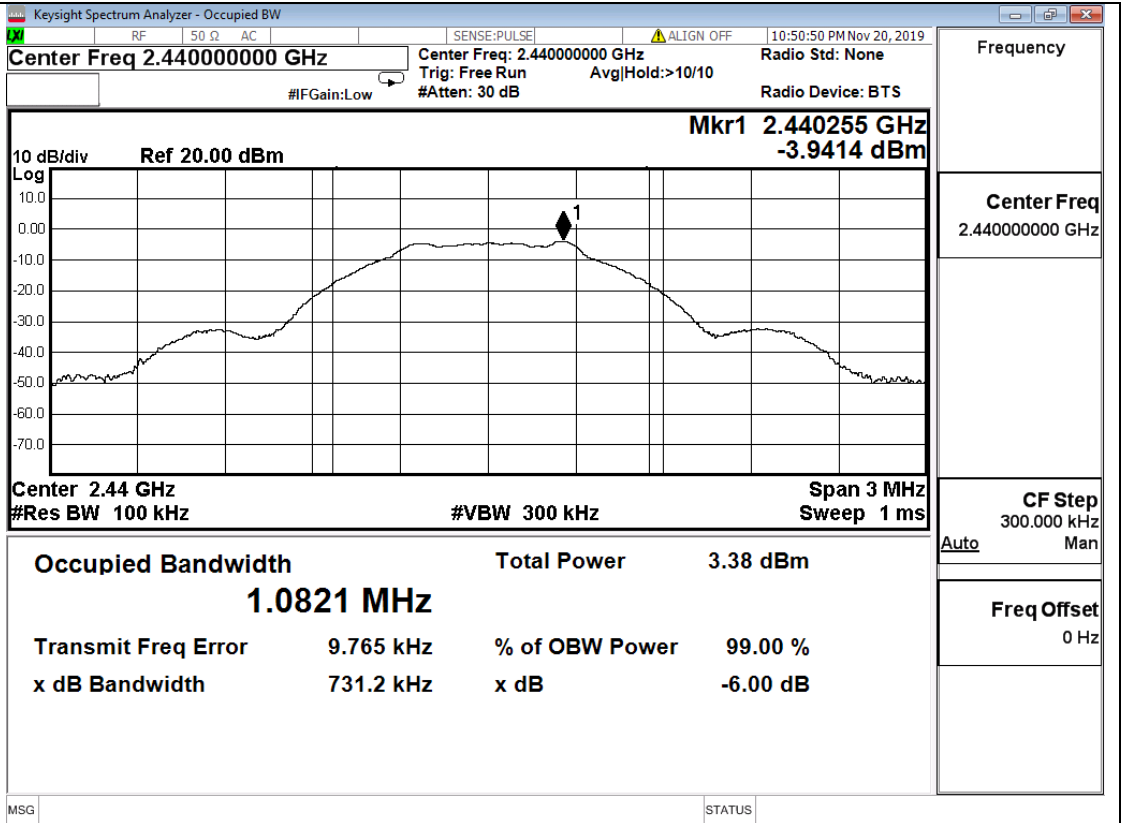


A.4 6dB Bandwidth

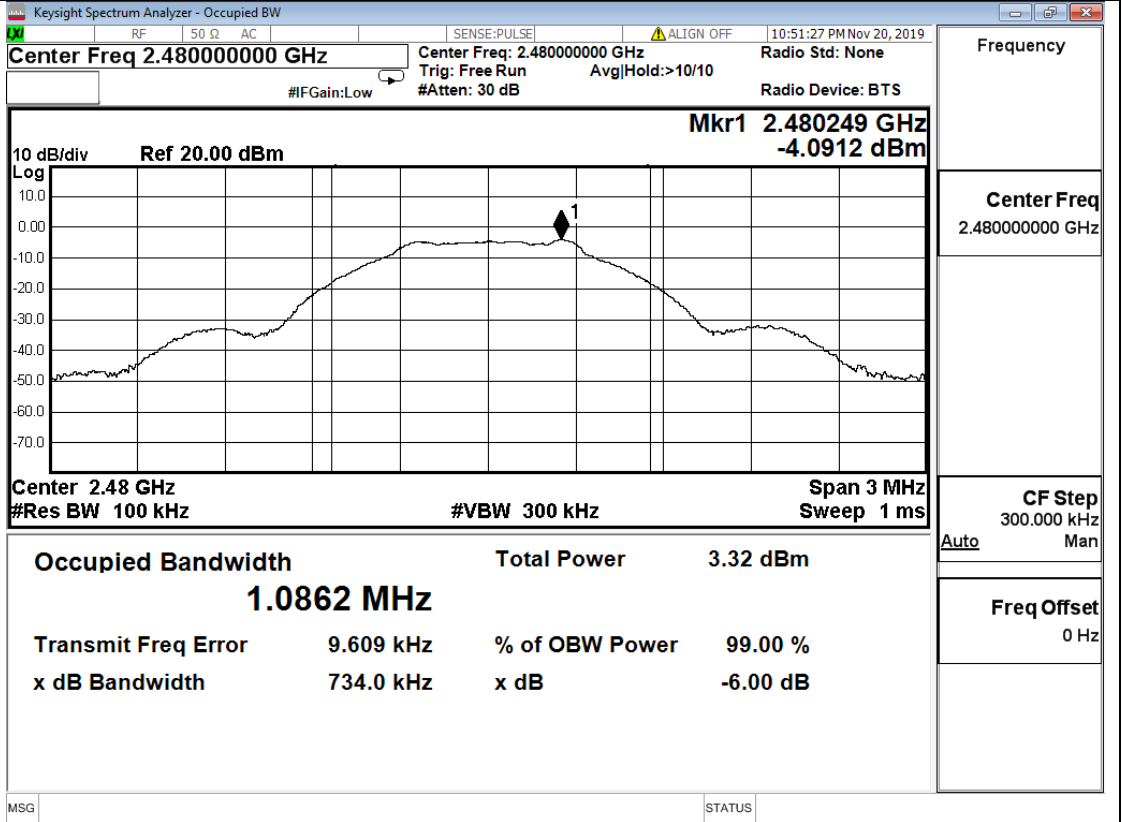
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7266	≥0.5	PASS
BT LE	MCH	0.7312	≥0.5	PASS
BT LE	HCH	0.7340	≥0.5	PASS



MCH



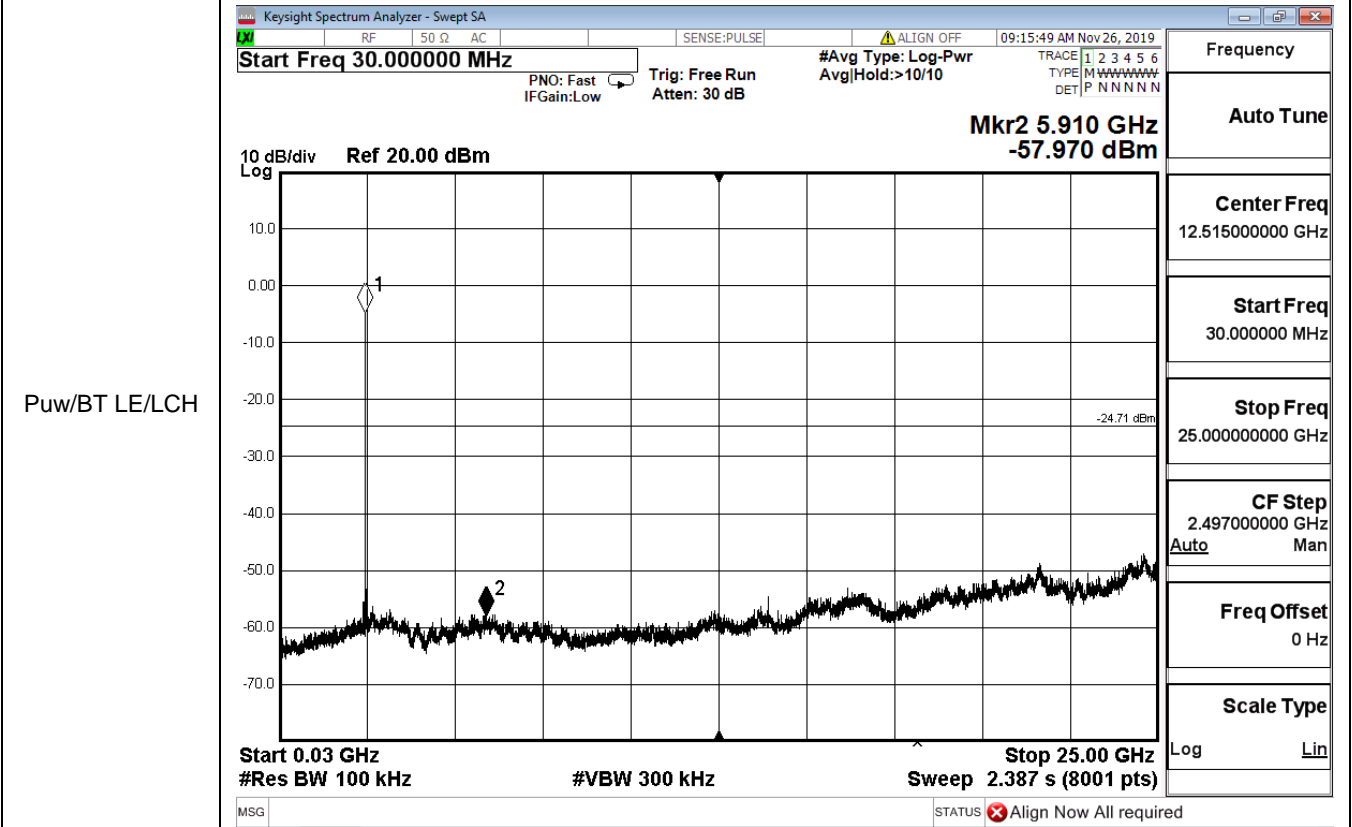
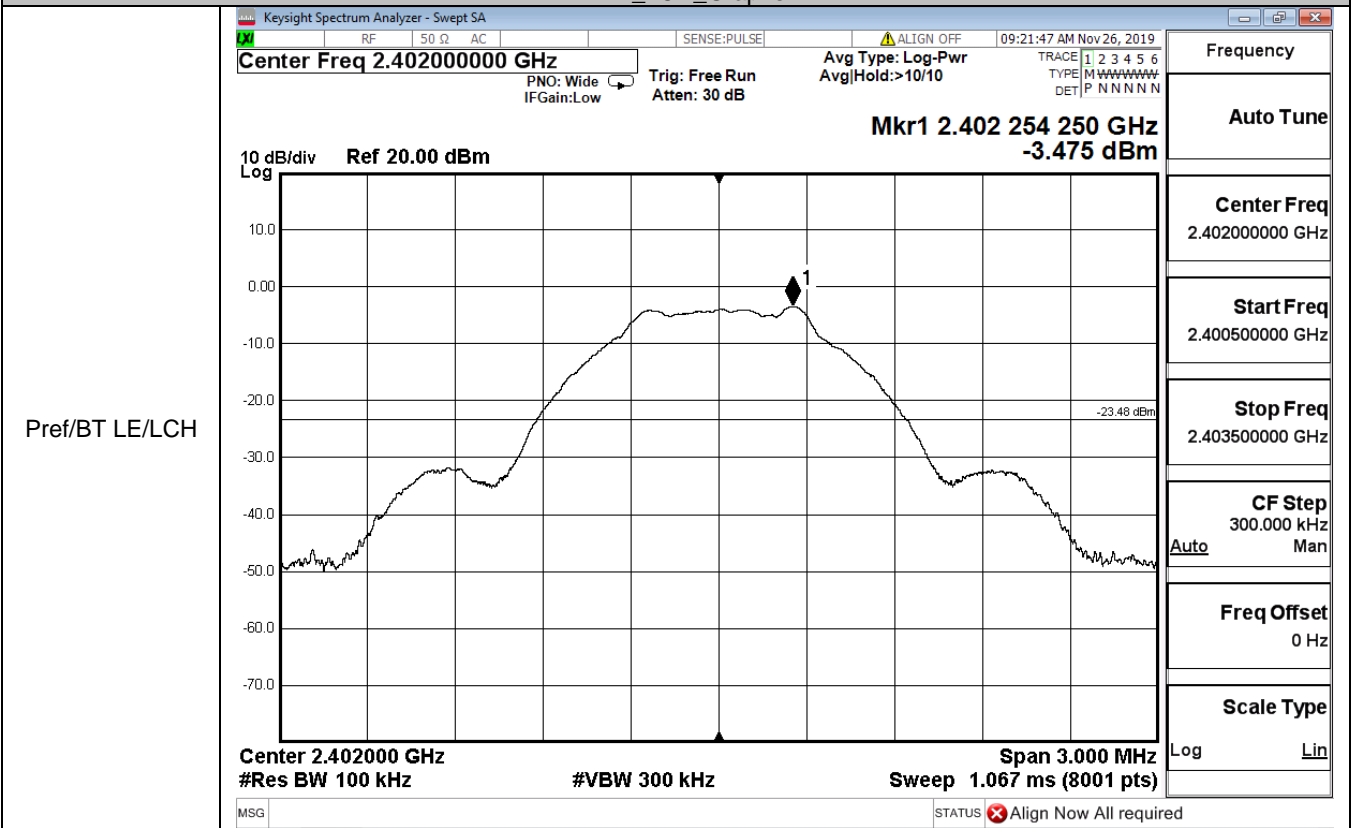
HCH



A.5 RF Conducted Spurious Emissions

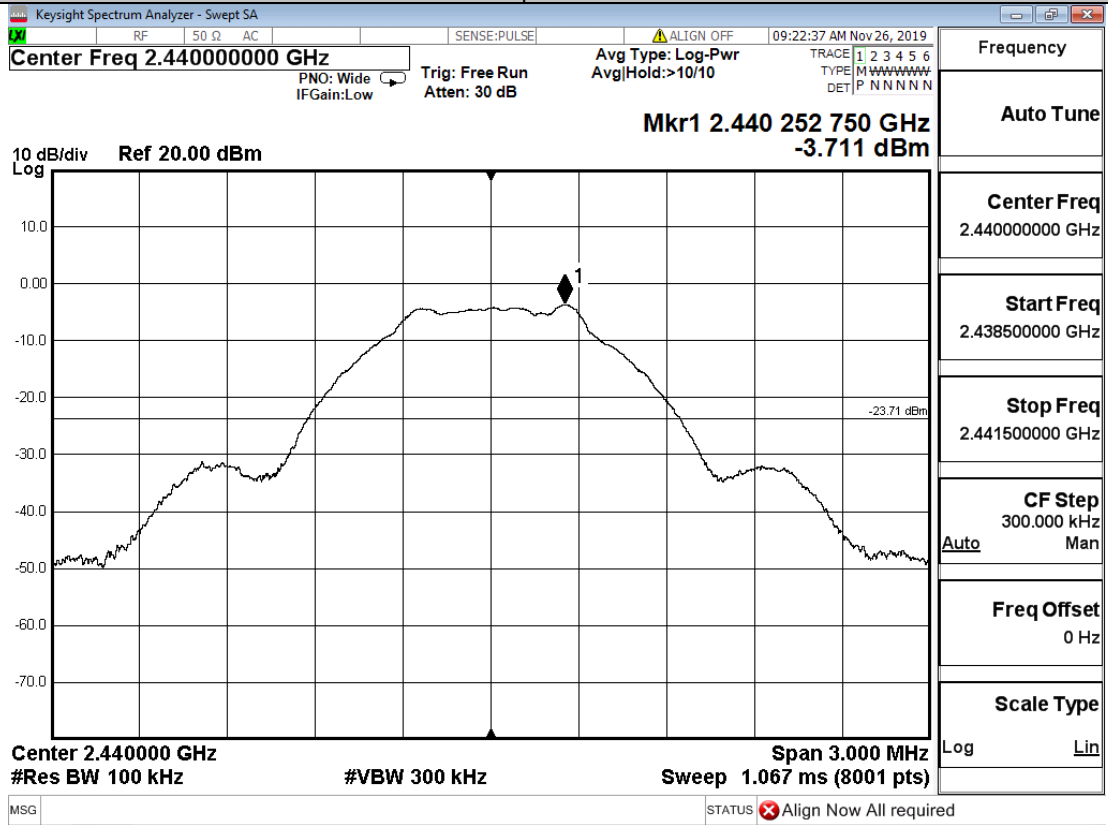
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-3.475	-57.970	-23.48	PASS
BT LE	MCH	-3.711	-56.714	-23.71	PASS
BT LE	HCH	-4.038	-56.714	-24.04	PASS

BT LE_LCH_Graphs

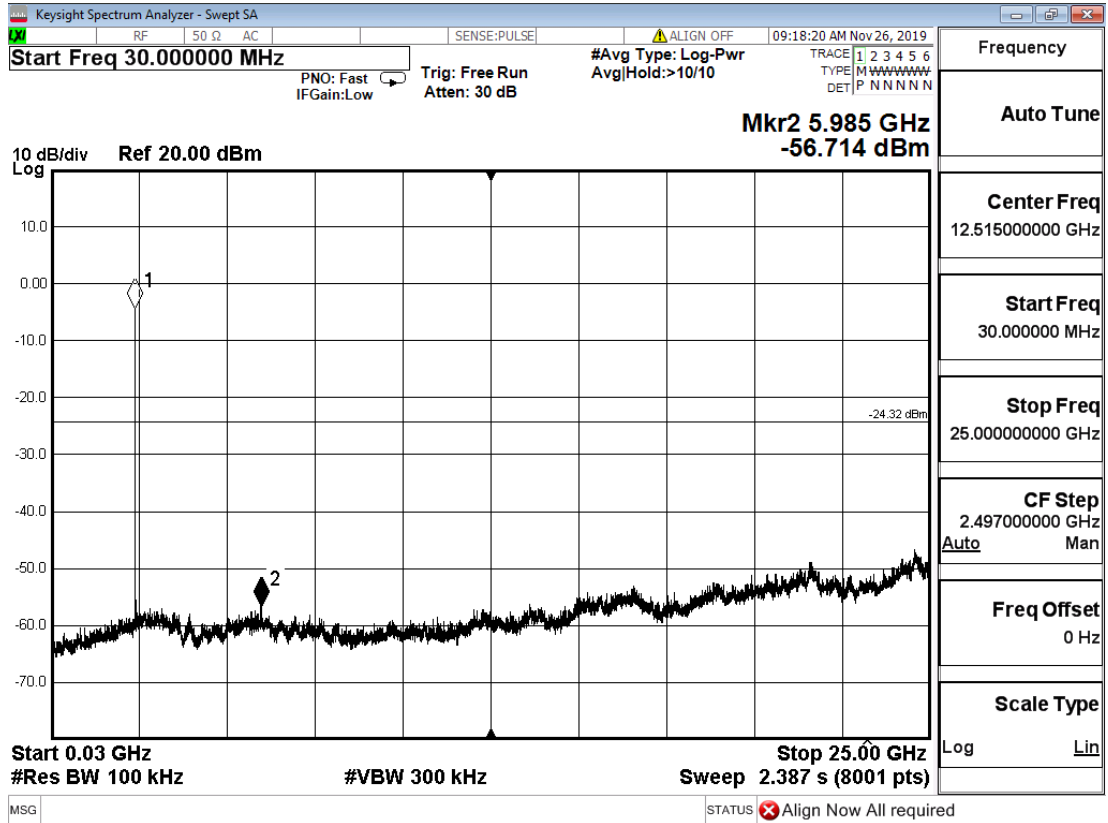


BT LE_MCH_Graphs

Pref/BT LE/MCH

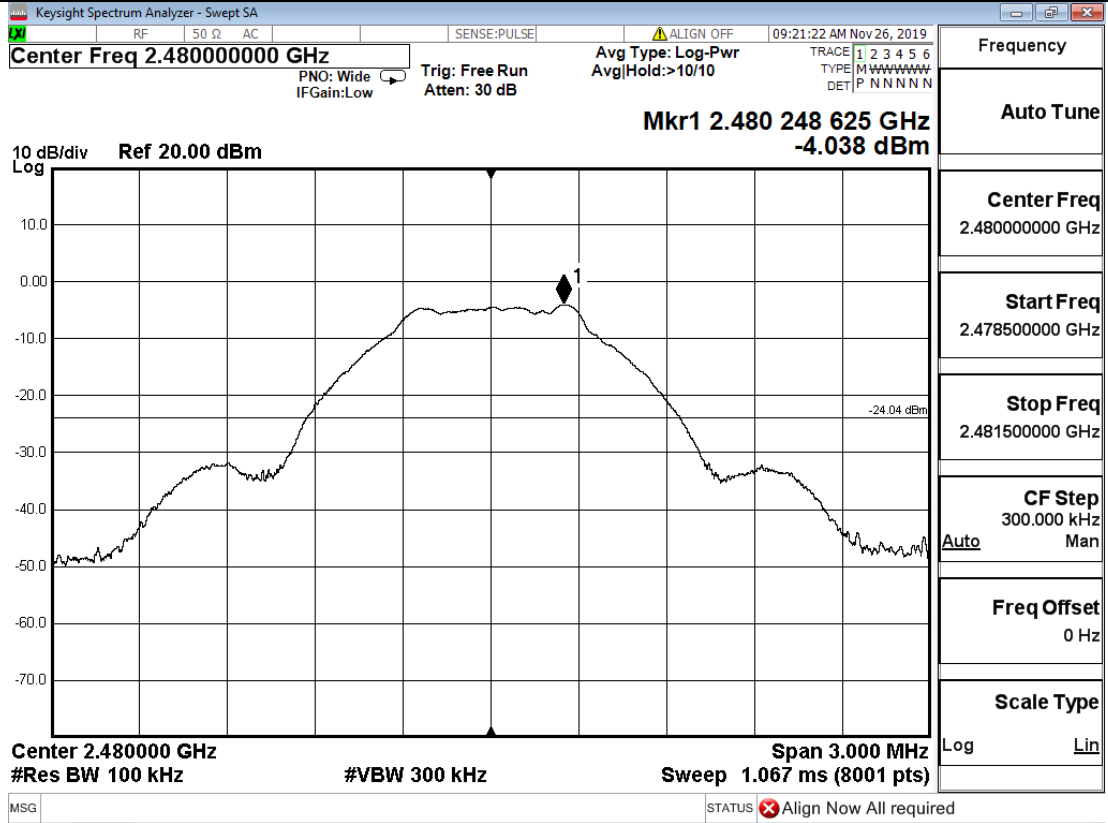


Puw/BT LE/MCH

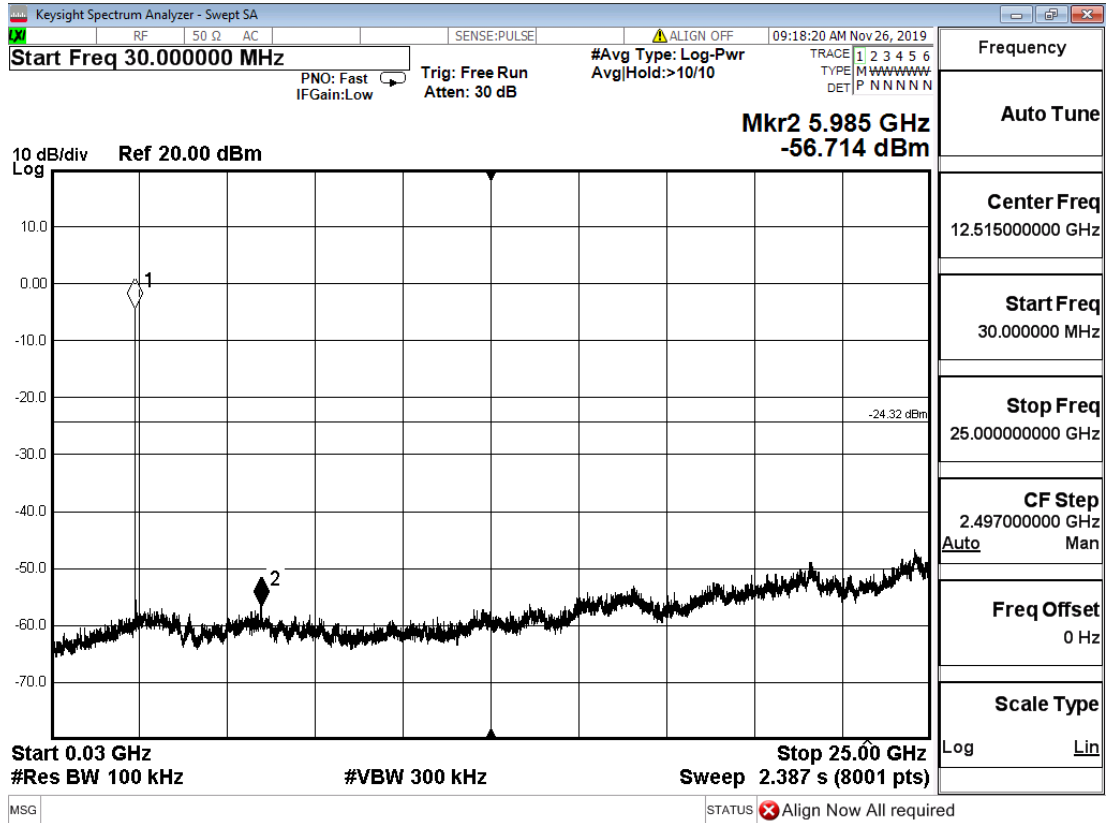


BT LE_HCH_Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

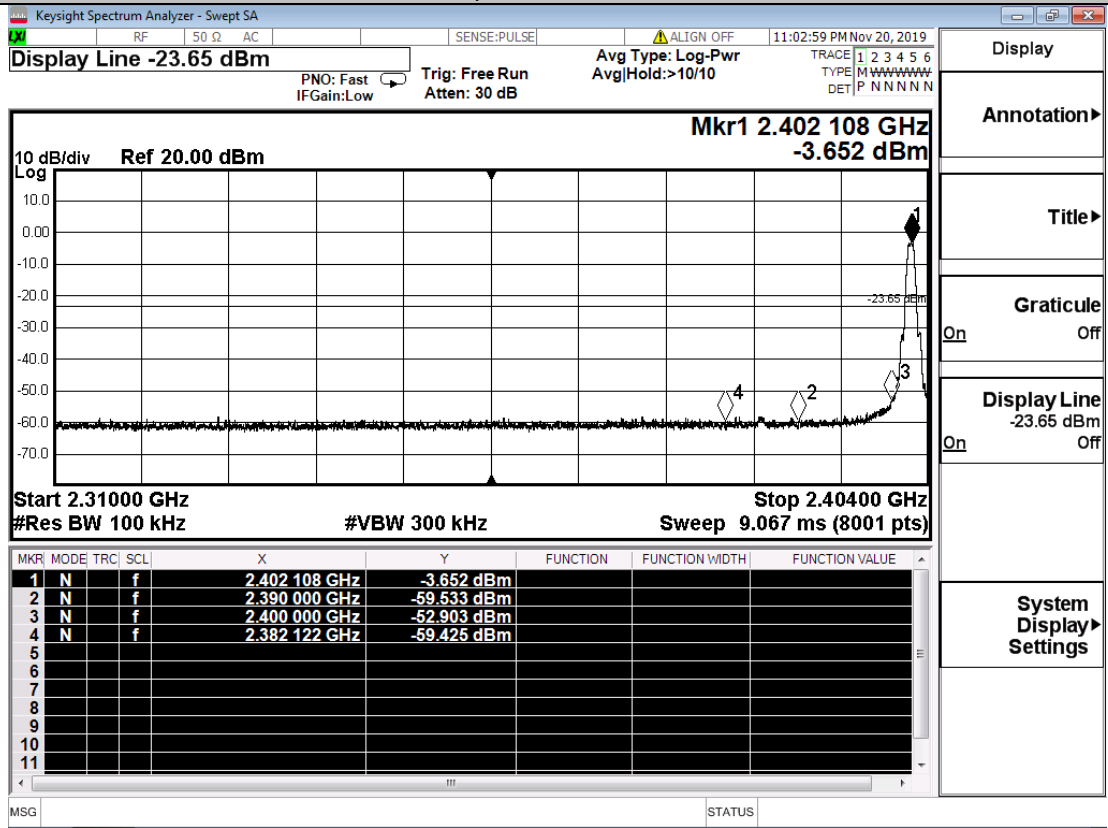


A.6 Band-edge for RF Conducted Emissions

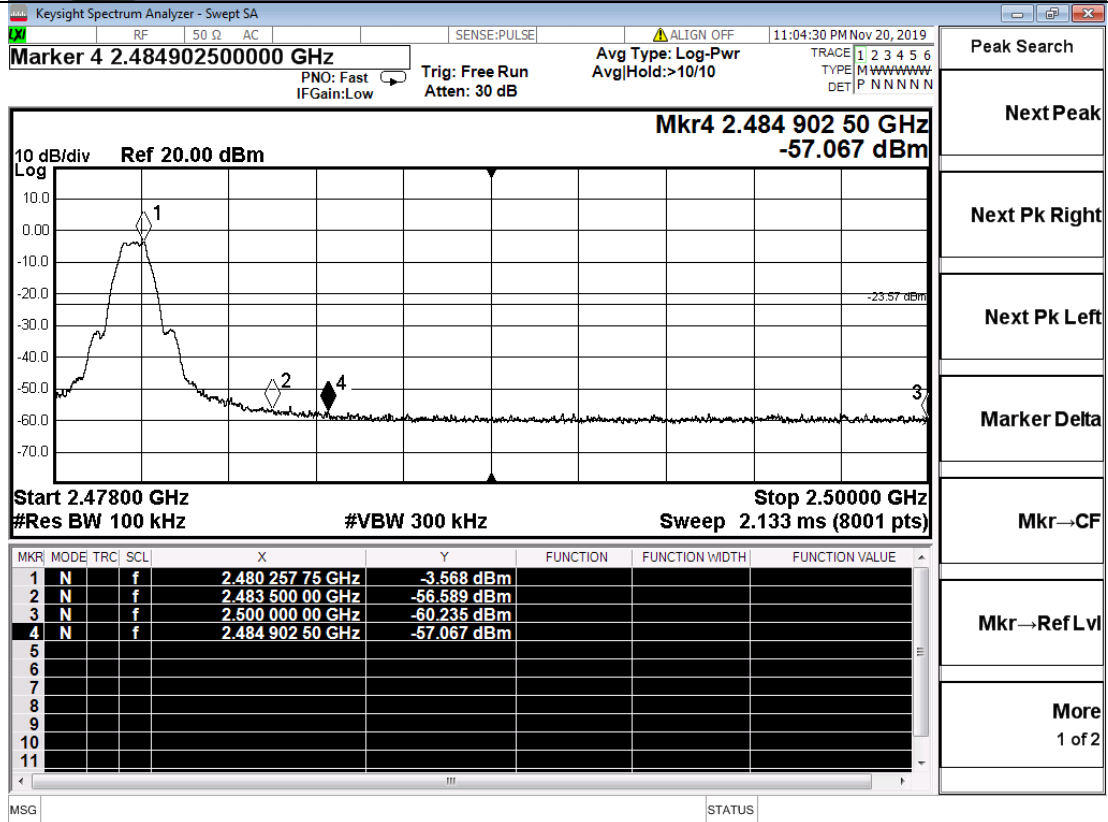
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-2.652	-52.903	-22.65	PASS
BT LE	HCH	-3.568	-56.589	-23.57	PASS

Test Graphs

LCH



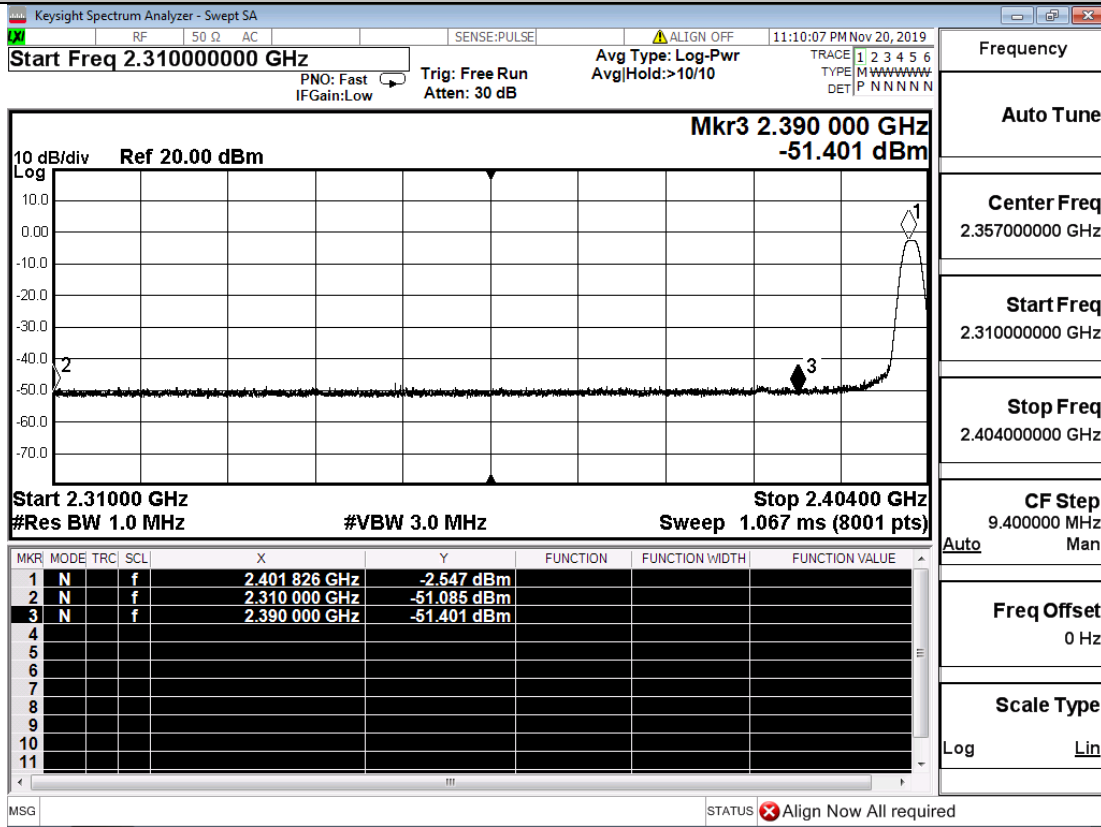
HCH



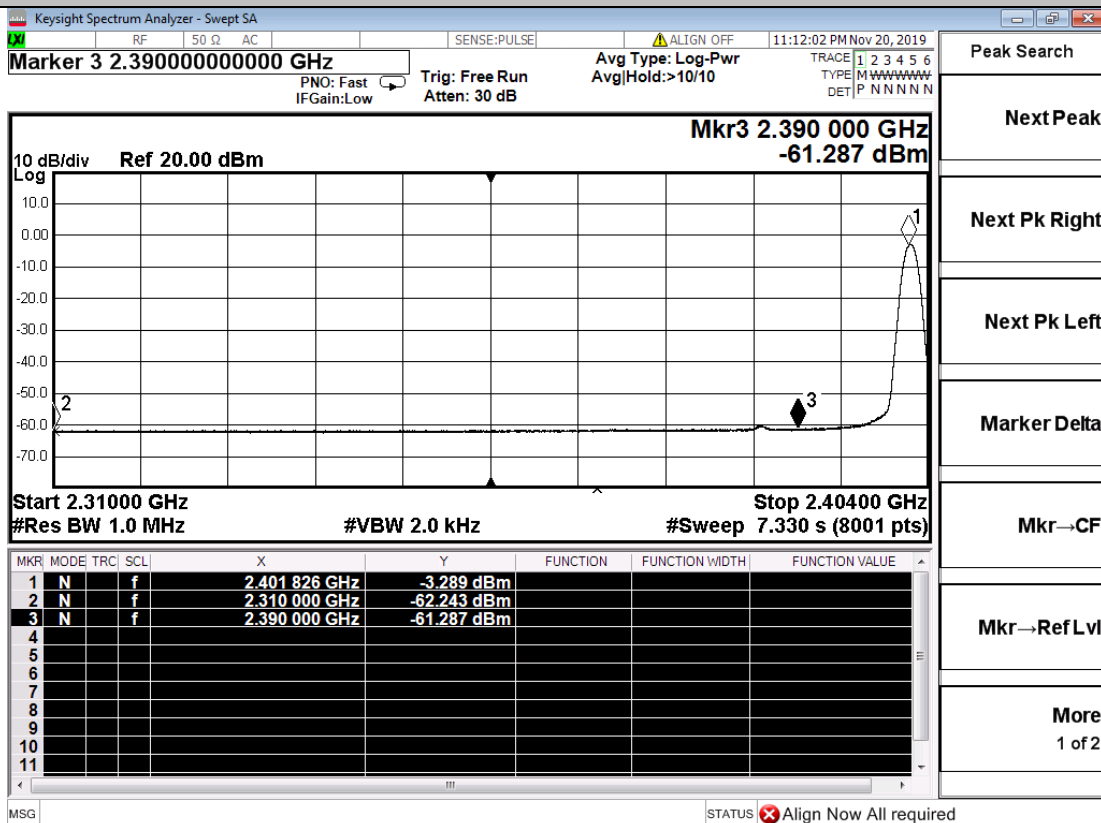
A.7 Restrict-band band-edge measurements

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	-51.085	2.23	0	46.38	PEAK	74	PASS
		Ant1	2310.0	-62.243	2.23	0	35.22	AV	54	PASS
		Ant1	2390.0	-51.401	2.23	0	46.06	PEAK	74	PASS
		Ant1	2390.0	-61.287	2.23	0	36.17	AV	54	PASS
	2480	Ant1	2483.5	-47.462	2.23	0	50.00	PEAK	74	PASS
		Ant1	2483.5	-58.334	2.23	0	39.13	AV	54	PASS
		Ant1	2500.0	-51.726	2.23	0	45.73	PEAK	74	PASS
		Ant1	2500.0	-61.303	2.23	0	36.16	AV	54	PASS

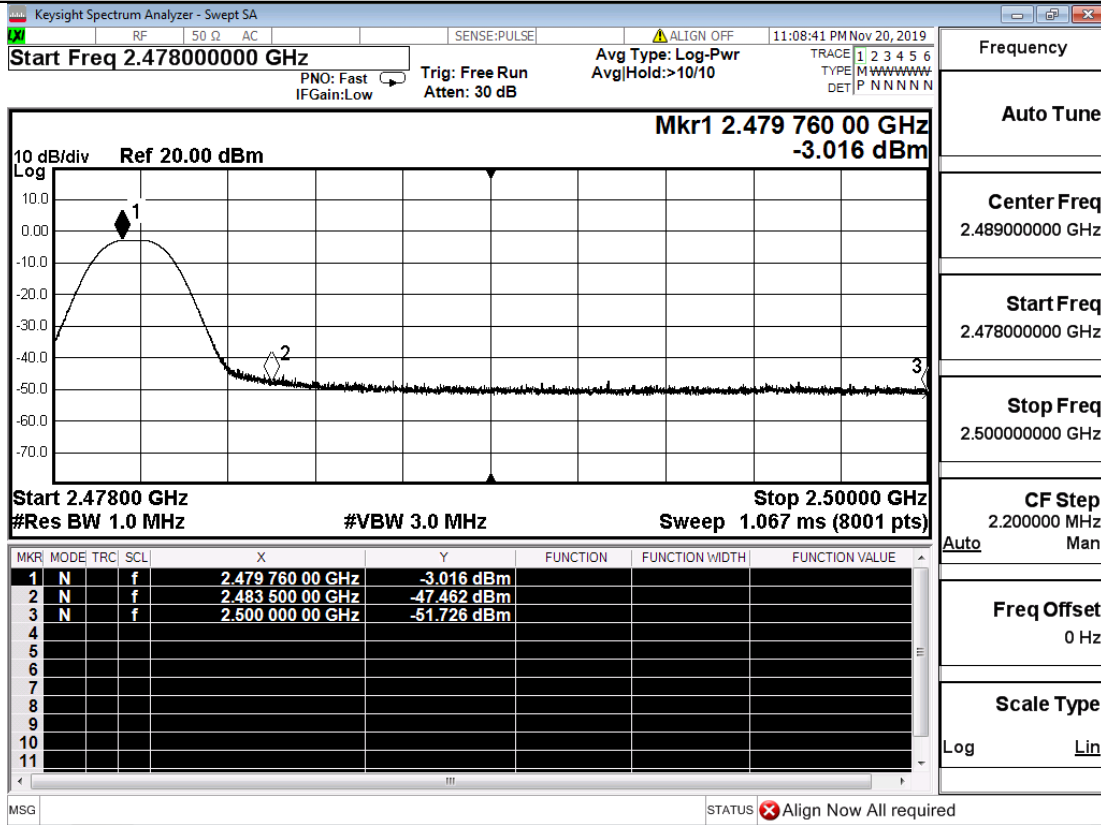
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

