

Appendix B

RF Test Data for BT 5.0(BLE) (Conducted Measurement)

Product Name: Bluetooth earphone

Trade Mark: IVANTE

Test Model: S2

Environmental Conditions

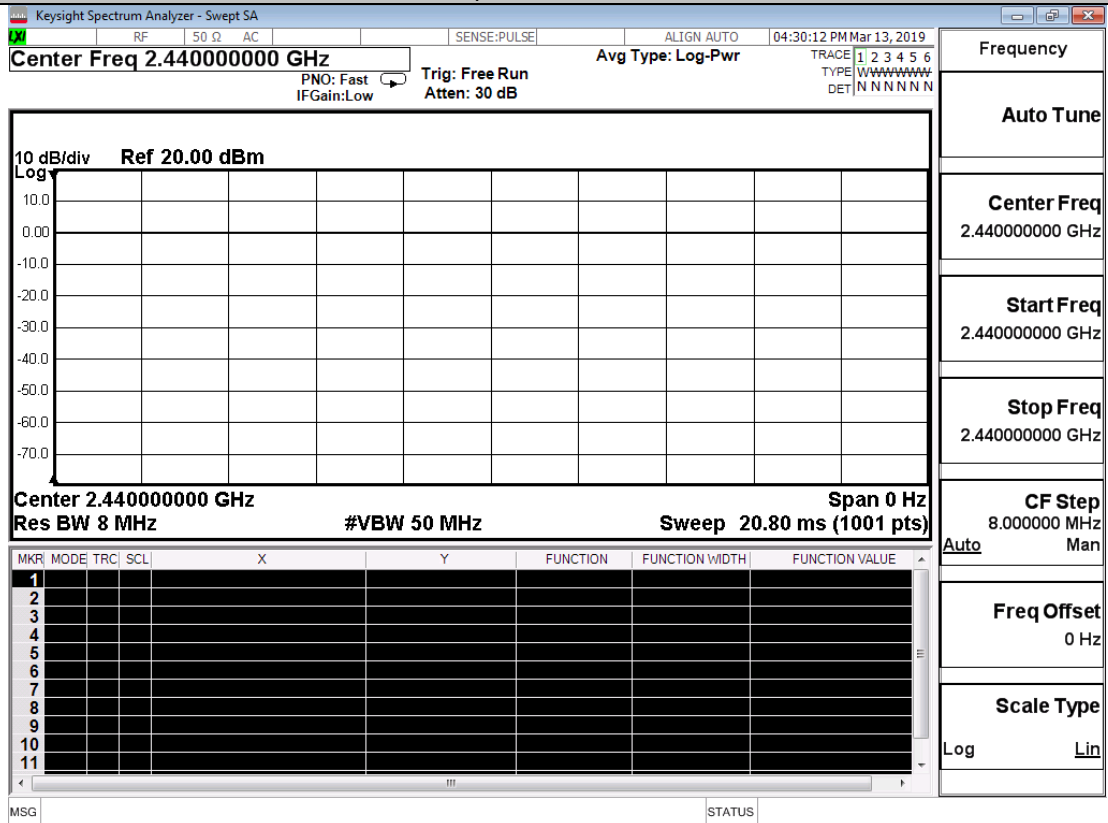
Temperature:	23.4 ° C
Relative Humidity:	65%
ATM Pressure:	100.0 kPa
Test Engineer:	AKING JIN
Supervised by:	JAYDEN ZHUO

B.1 Duty Cycle

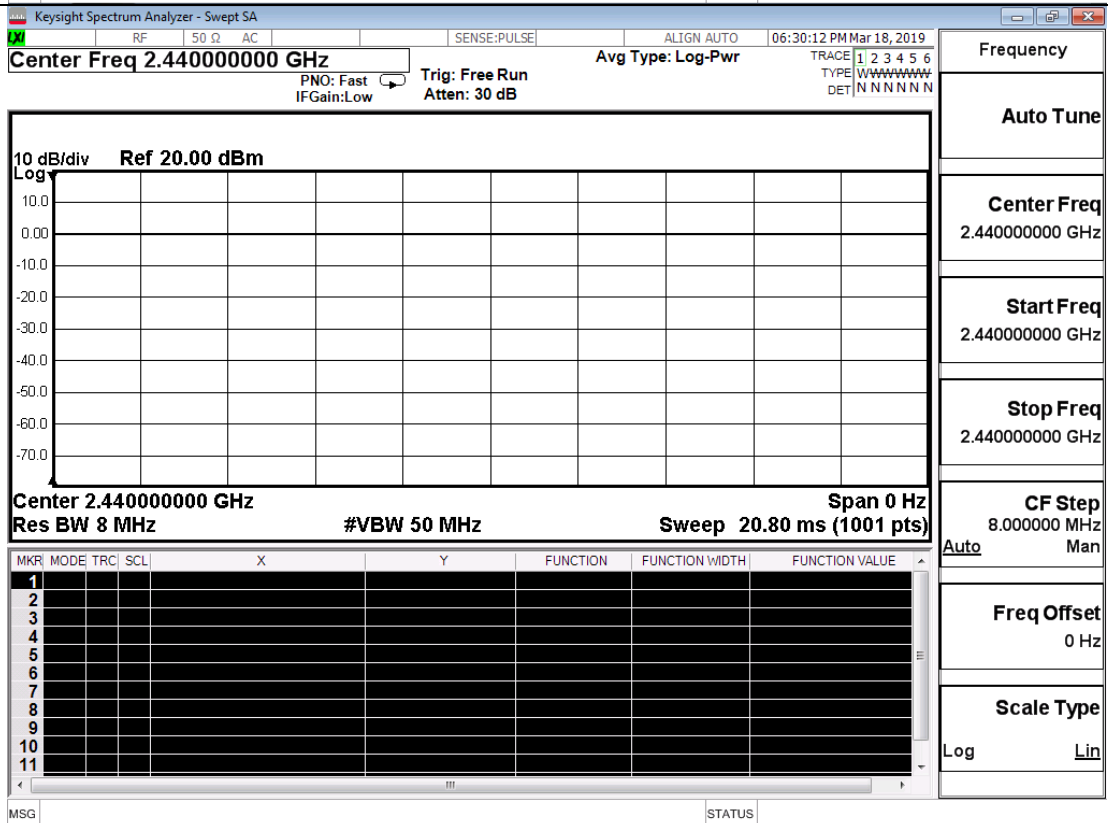
Test Mode	Test Channel	Ant	Duty Cycle[%]	Verdict
LE	2440	Ant1	100	PASS
2LE	2440	Ant1	100	PASS

Test Graphs

LE

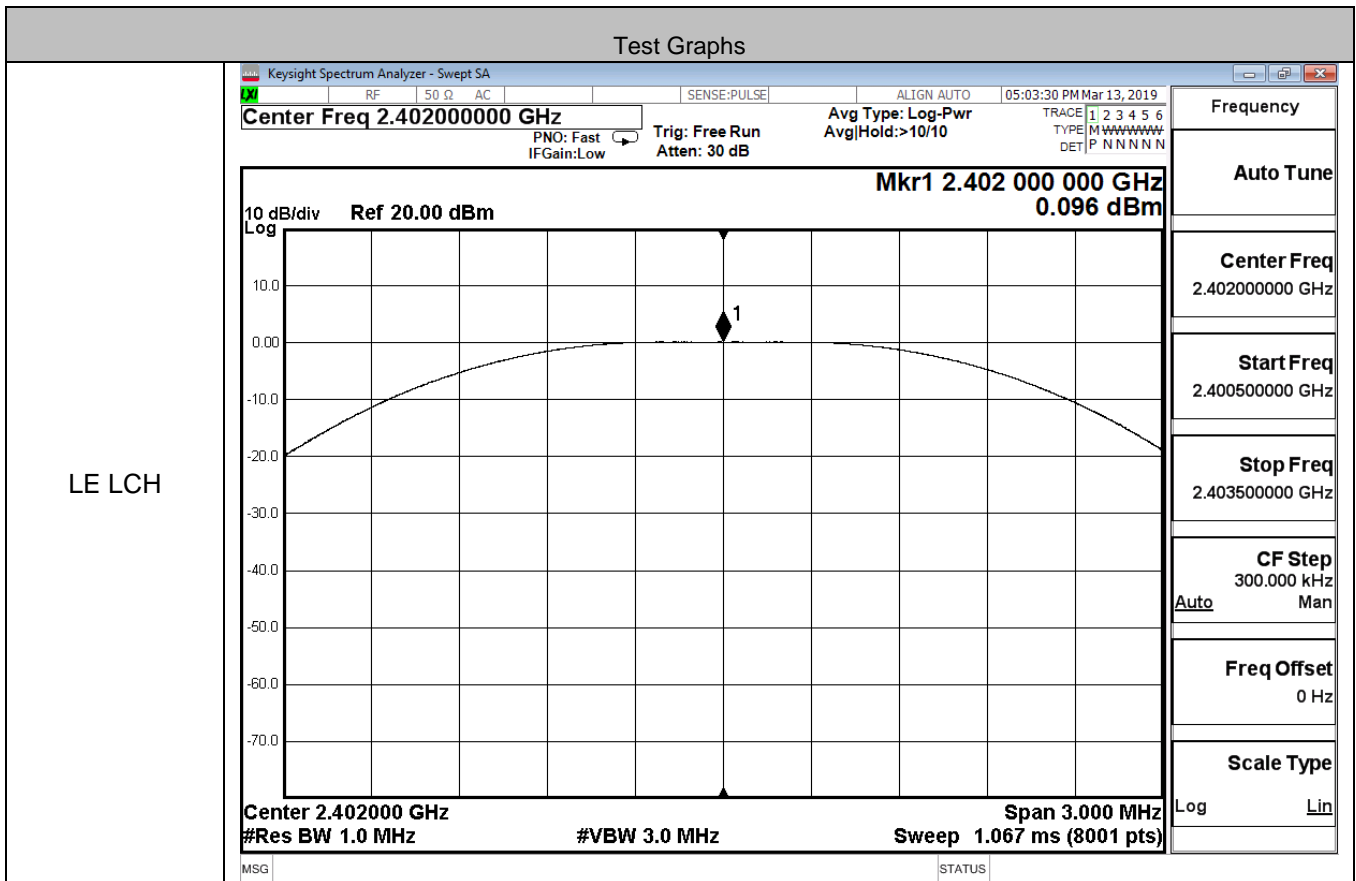


2LE



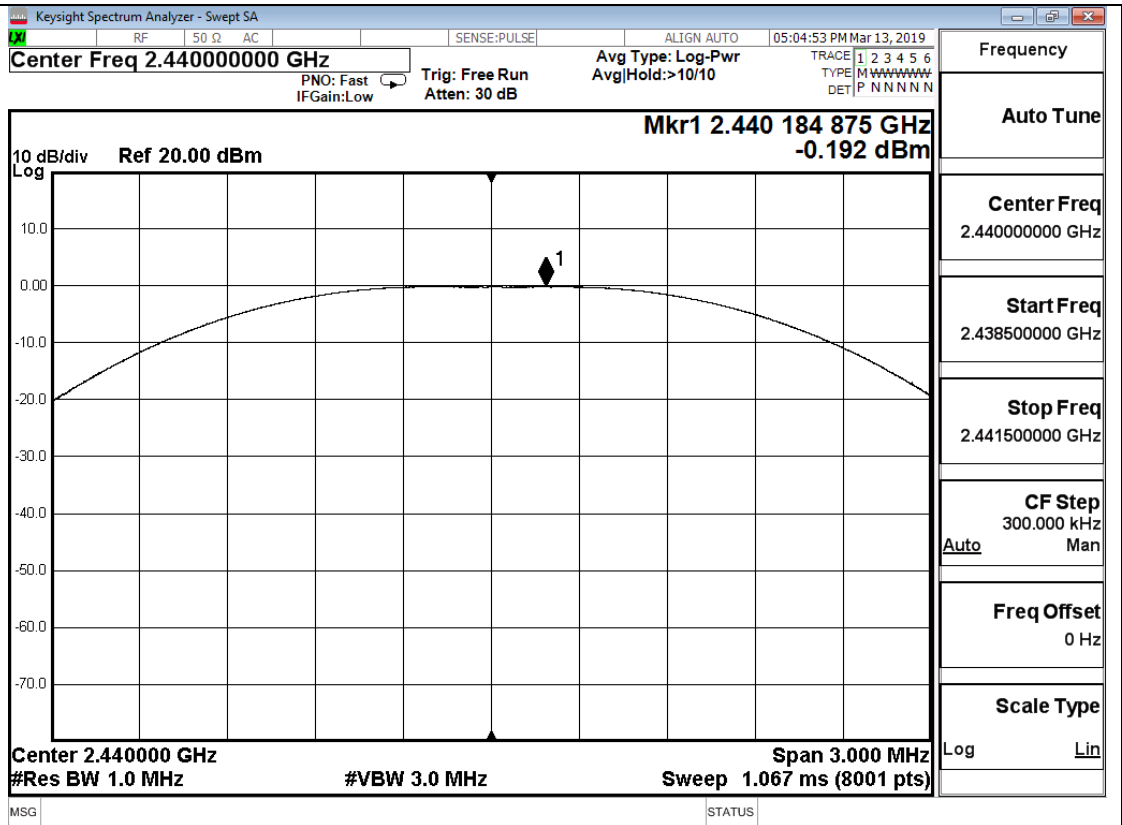
B.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
LE	LCH	0.096	30	PASS
LE	MCH	-0.192	30	PASS
LE	HCH	-1.360	30	PASS
2LE	LCH	-0.491	30	PASS
2LE	MCH	-0.011	30	PASS
2LE	HCH	-0.230	30	PASS

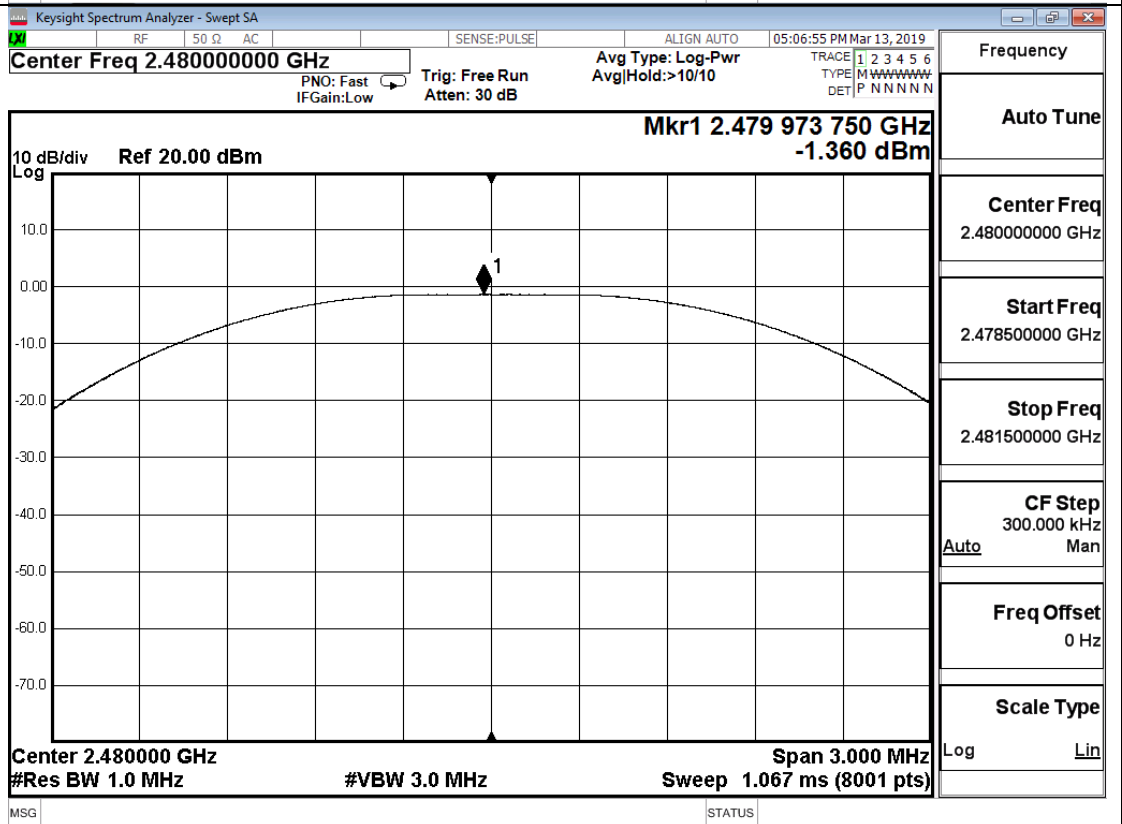


LE LCH

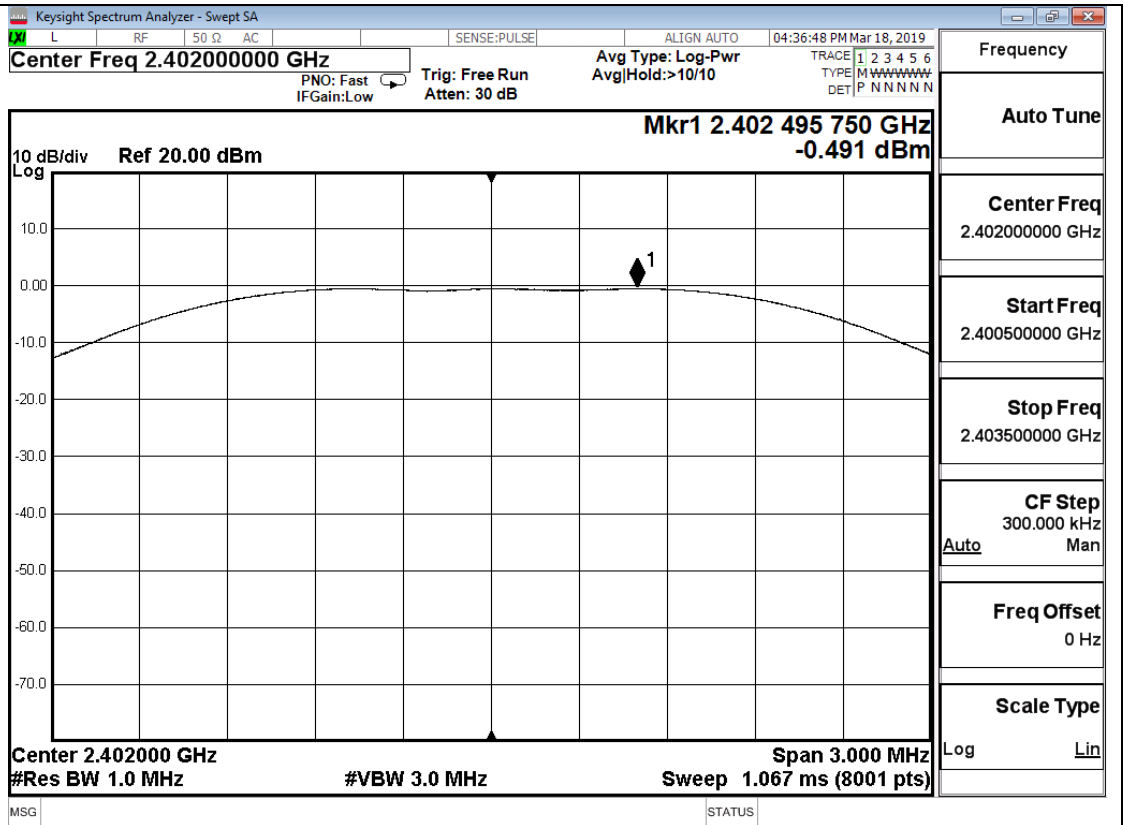
LE MCH



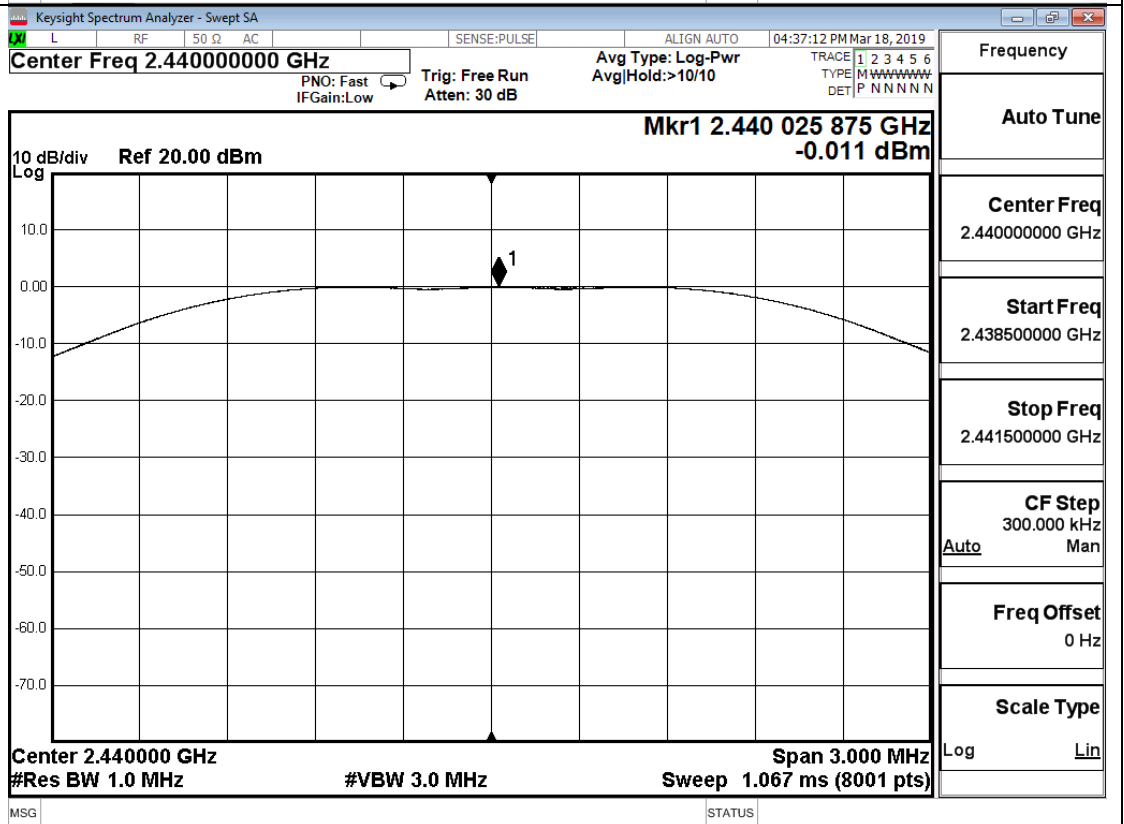
LE HCH

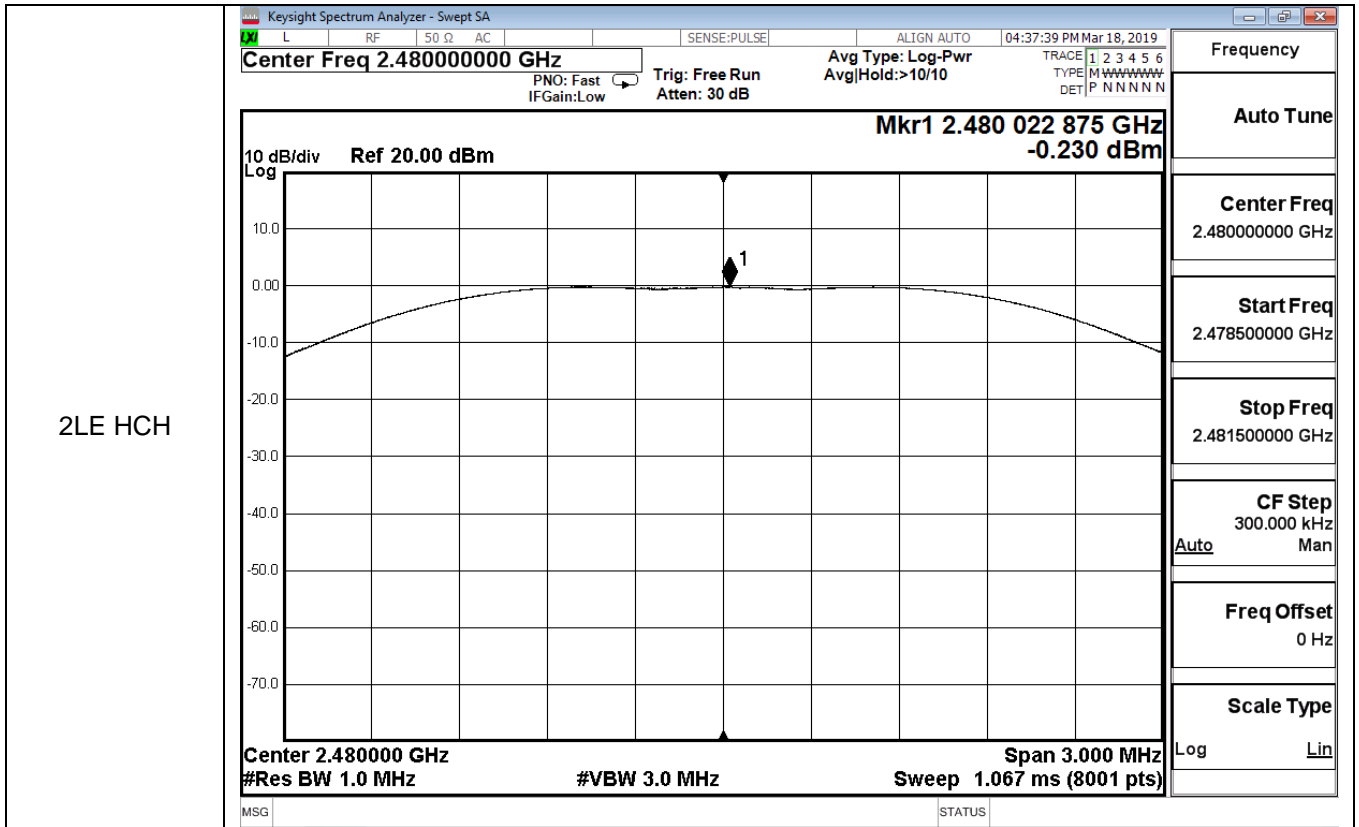


2LE LCH



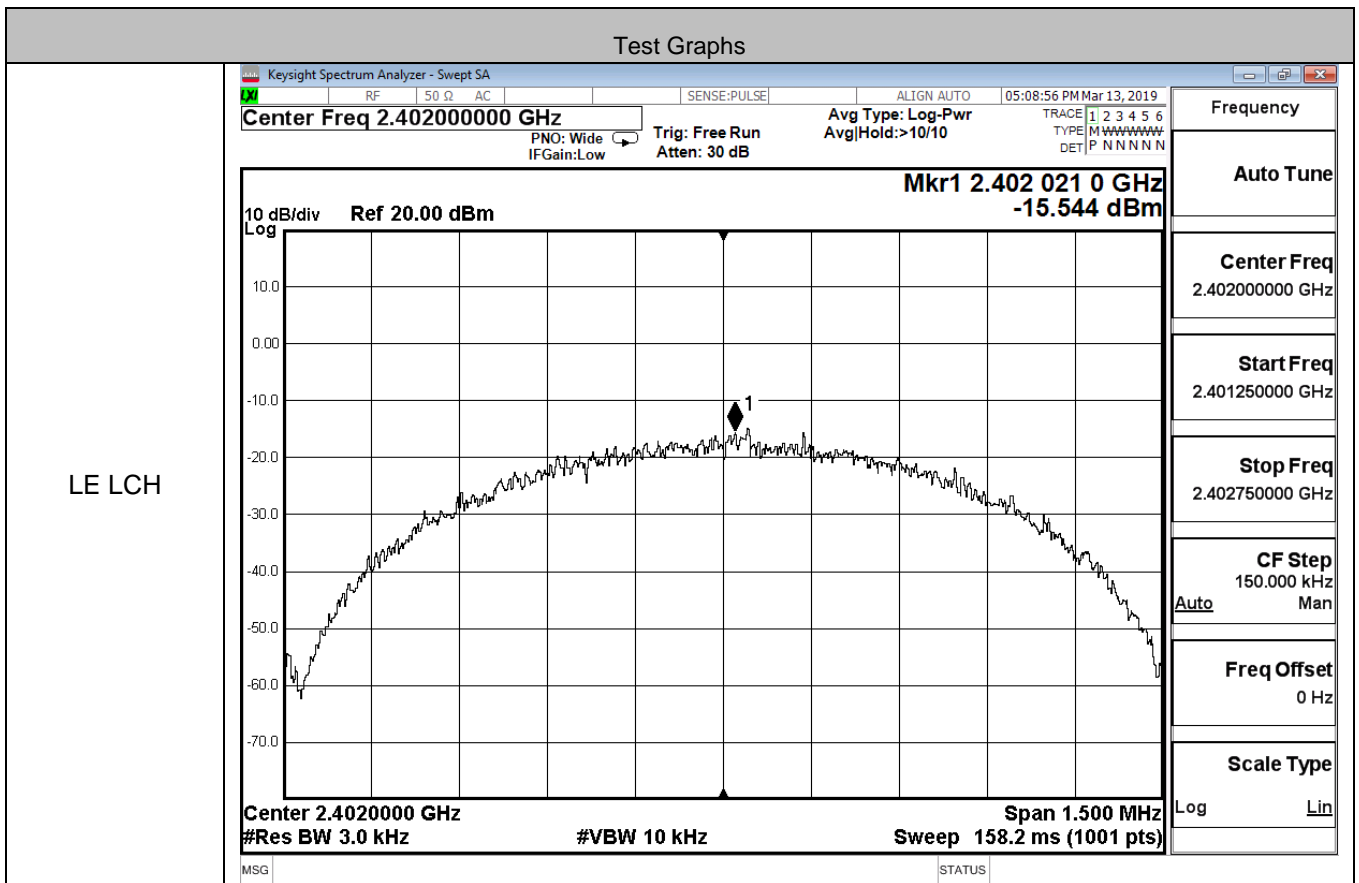
2LE MCH



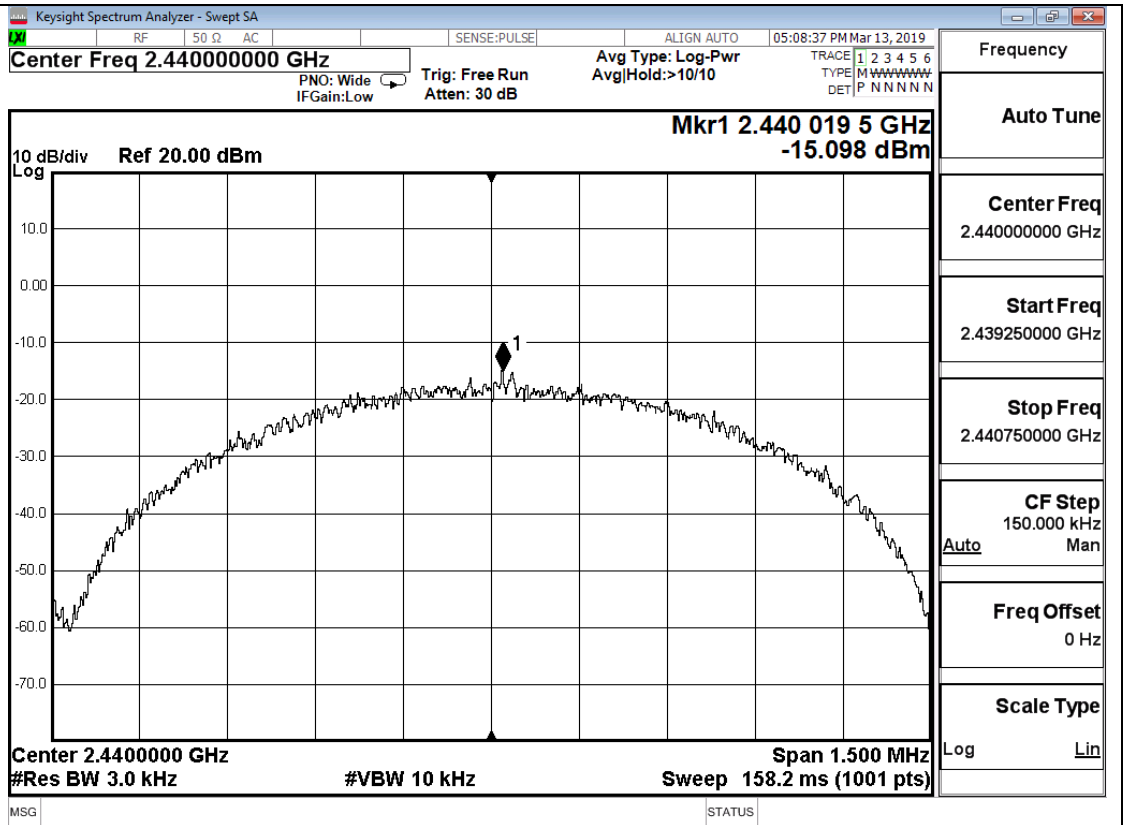


B.3 Maximum Power Spectral Density

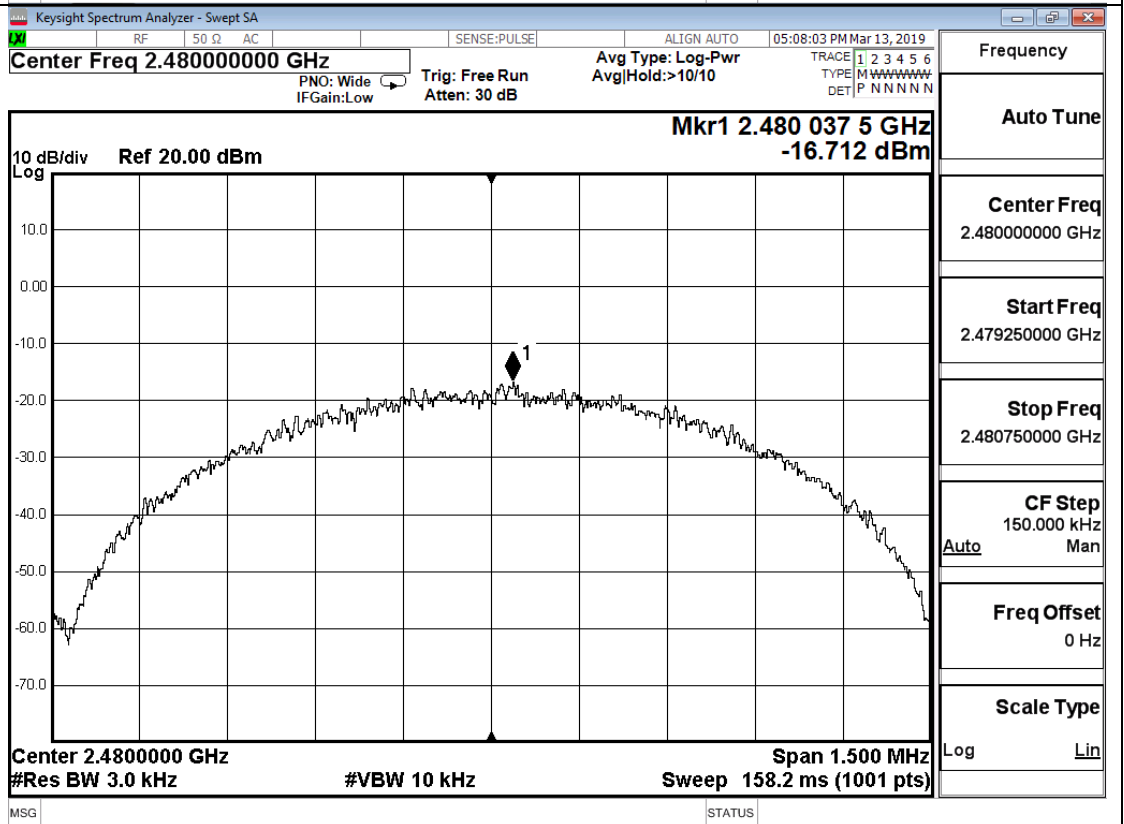
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
LE	LCH	-15.544	8	PASS
LE	MCH	-15.098	8	PASS
LE	HCH	-16.712	8	PASS
2LE	LCH	-18.803	8	PASS
2LE	MCH	-18.217	8	PASS
2LE	HCH	-18.692	8	PASS



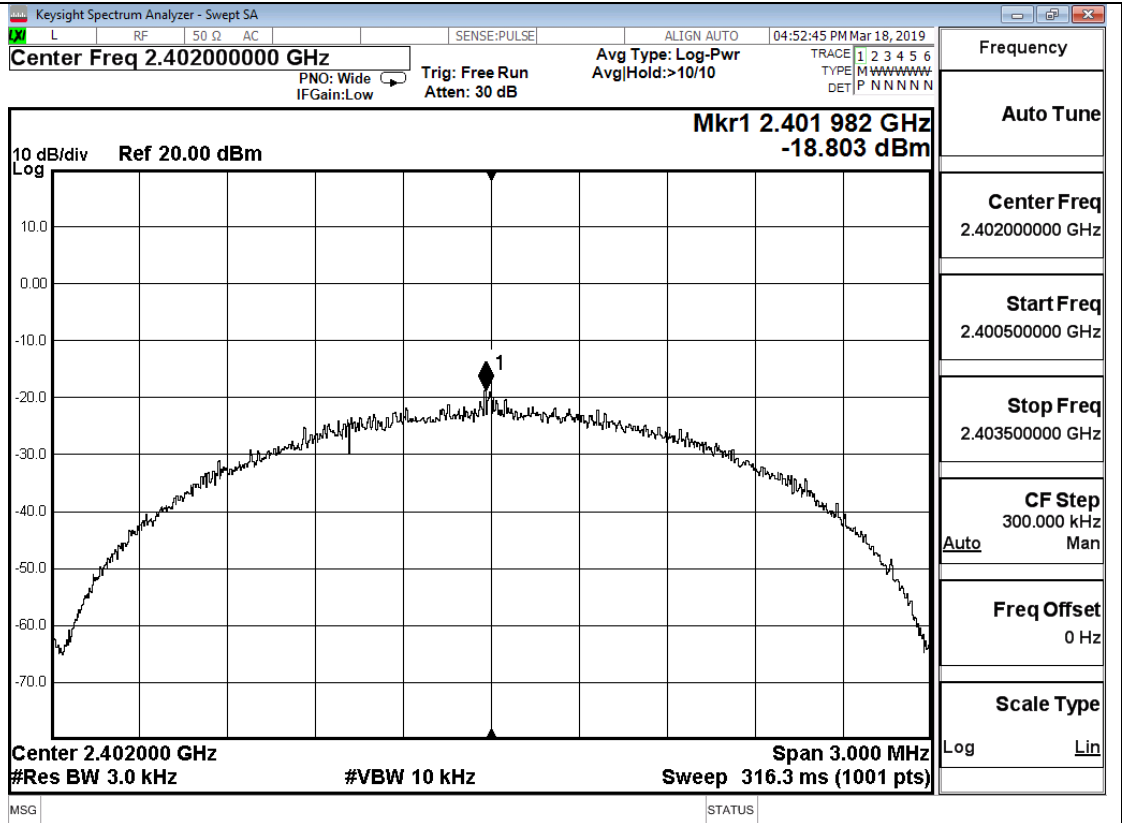
LE MCH



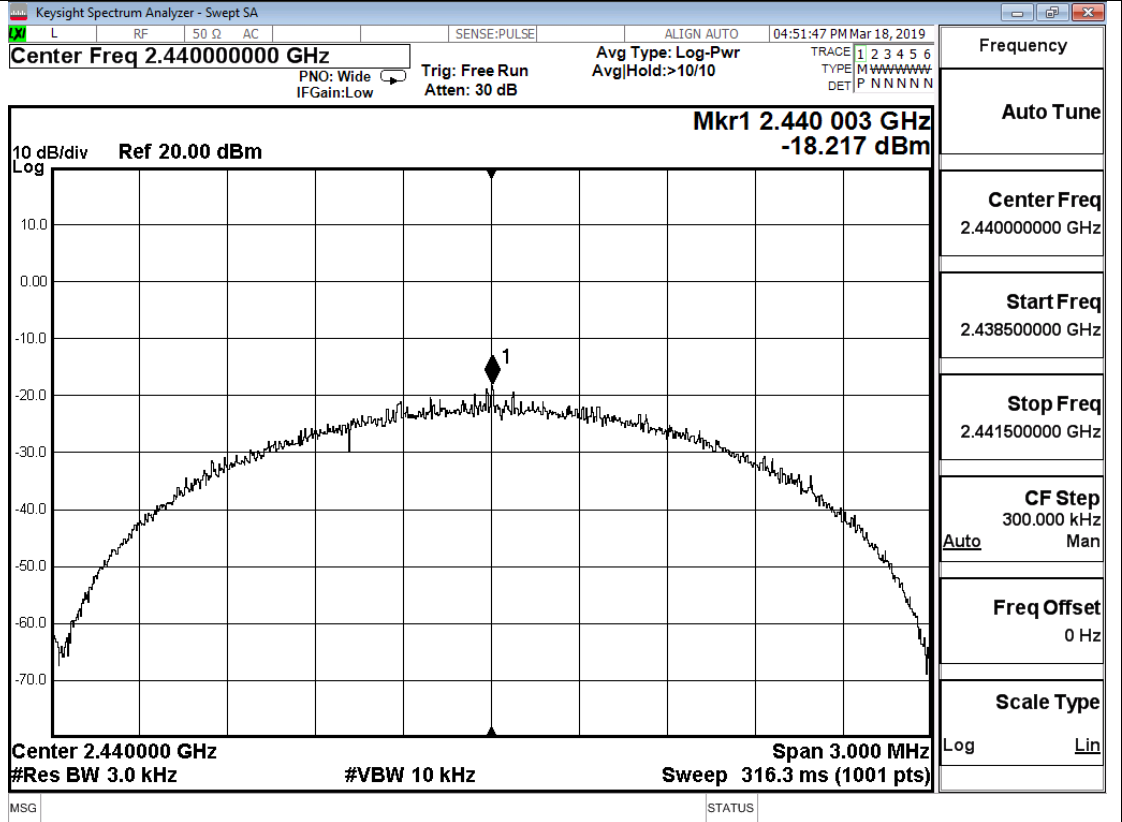
LE HCH

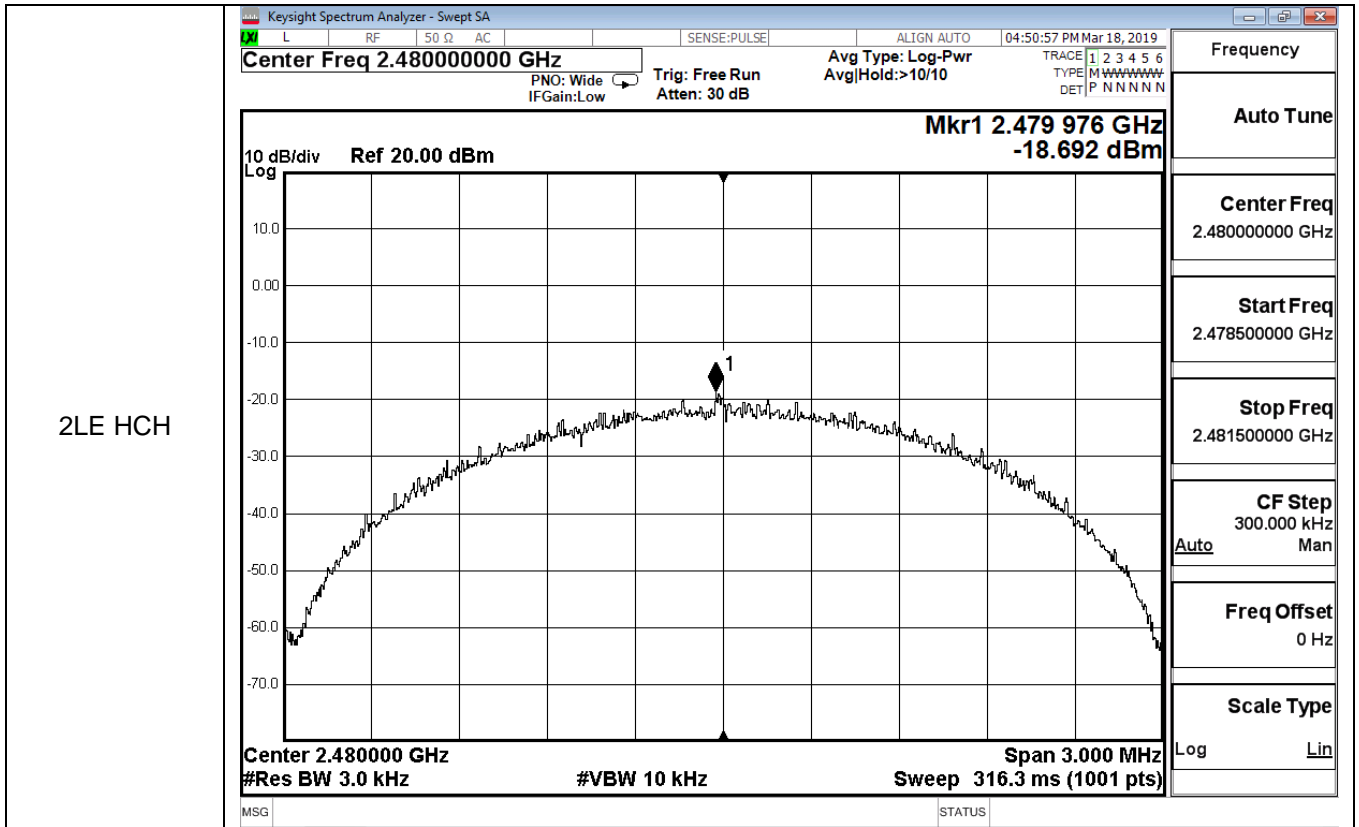


2LE LCH



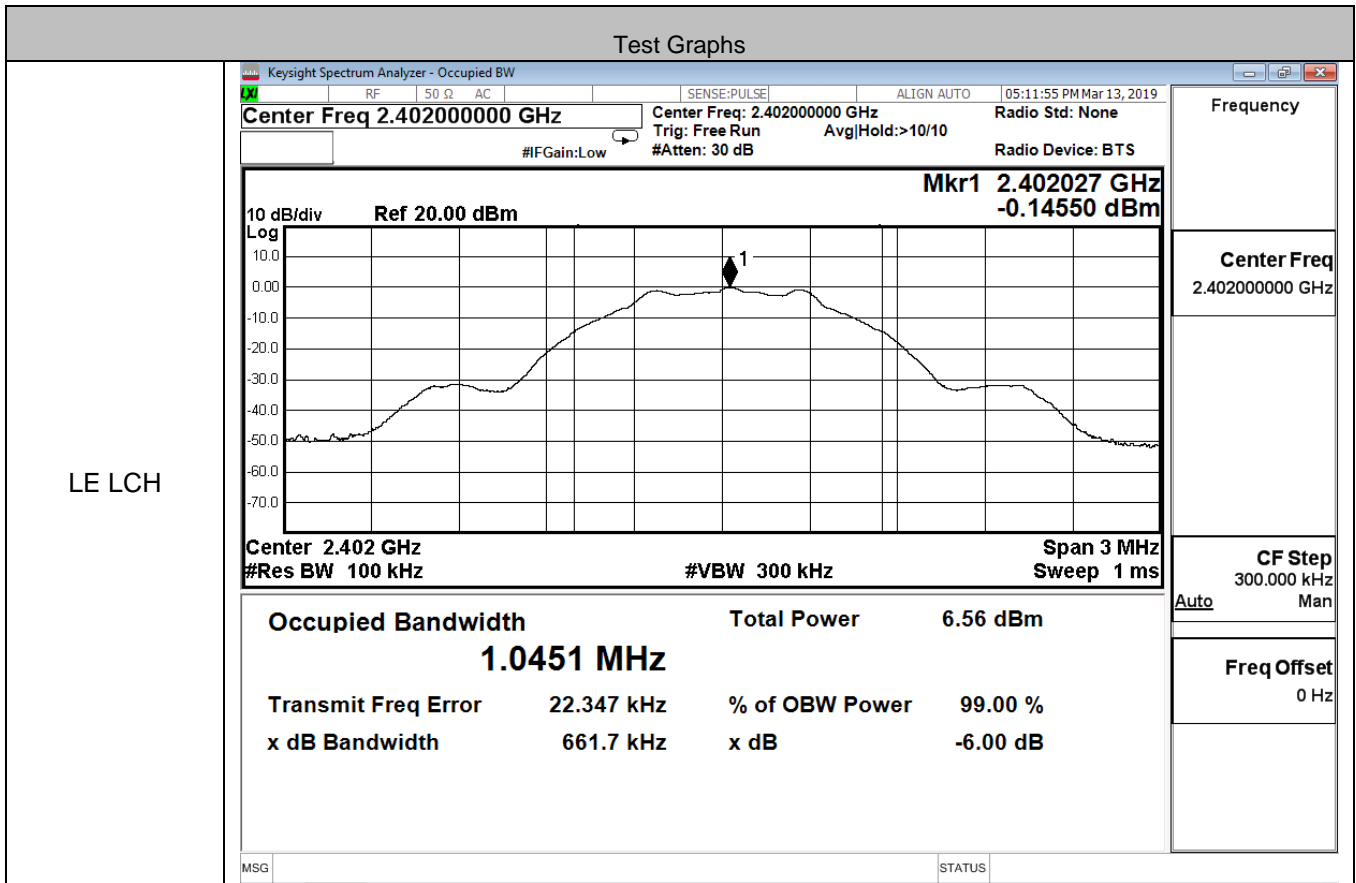
2LE MCH



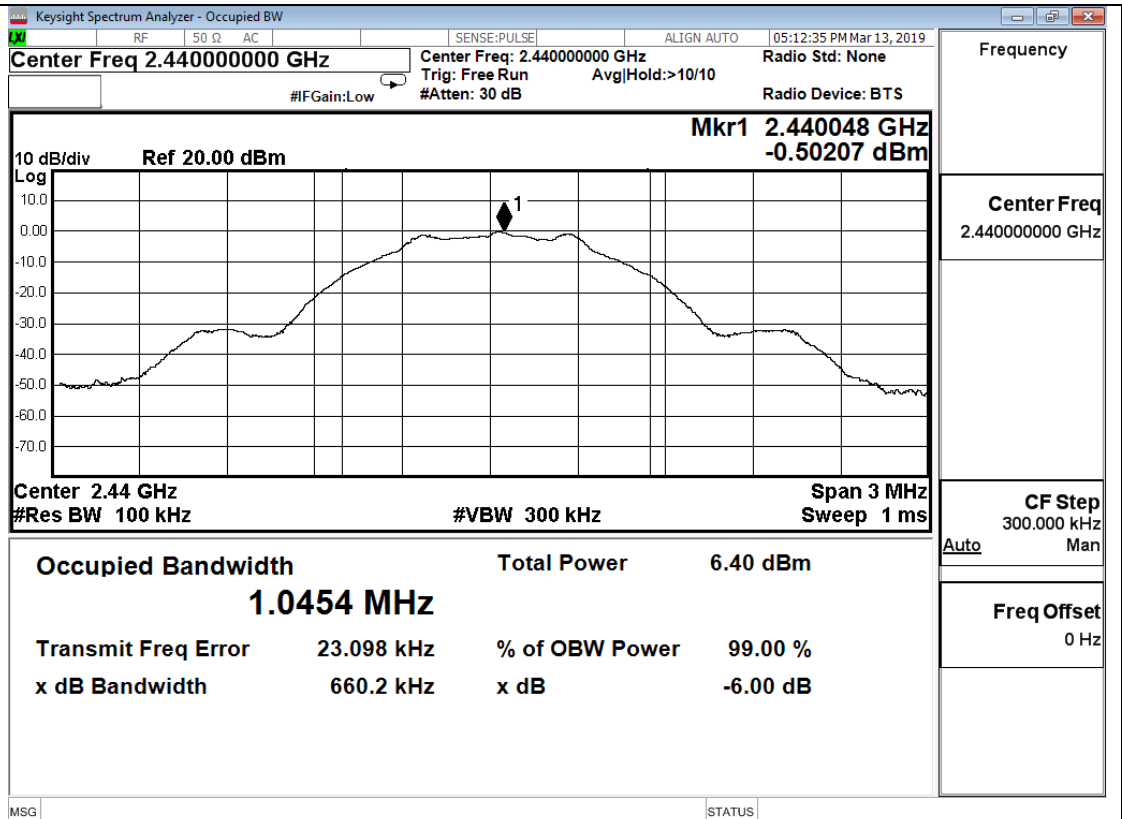


B.4 6dB Bandwidth

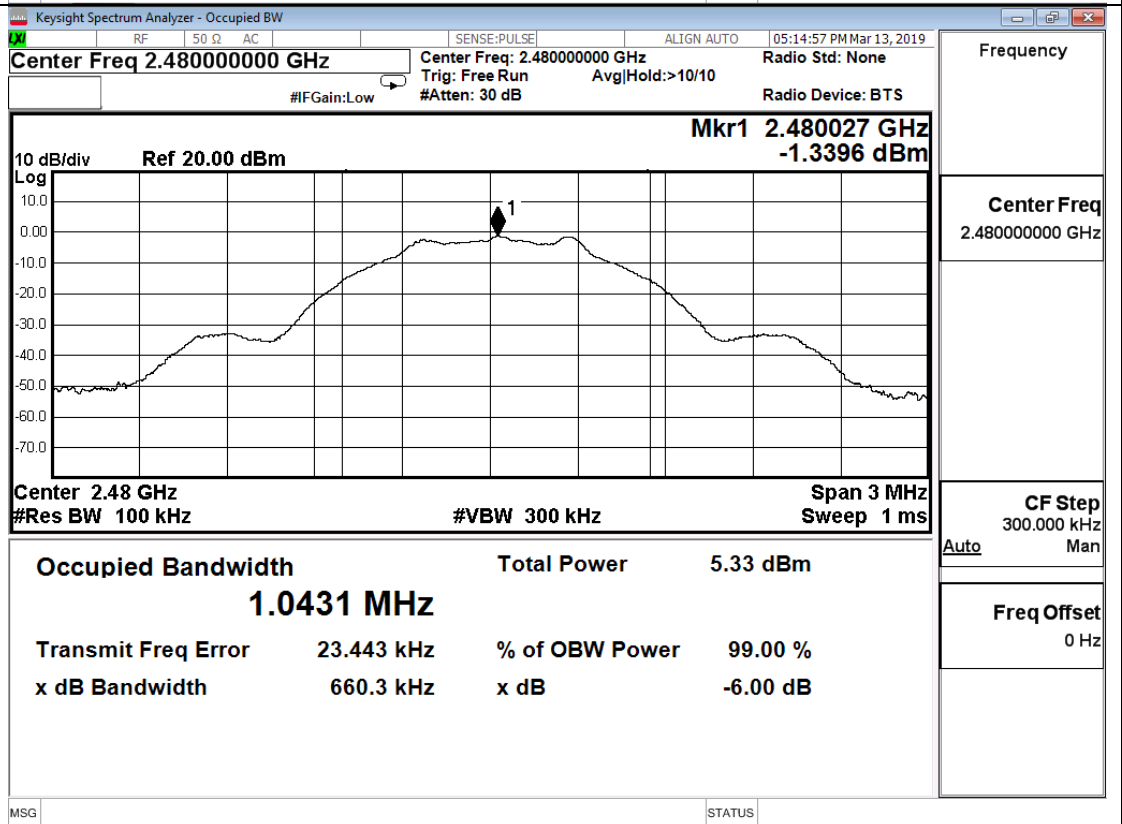
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
LE	LCH	0.6617	≥0.5	PASS
LE	MCH	0.6602	≥0.5	PASS
LE	HCH	0.6603	≥0.5	PASS
2LE	LCH	1.143	≥0.5	PASS
2LE	MCH	1.152	≥0.5	PASS
2LE	HCH	1.154	≥0.5	PASS



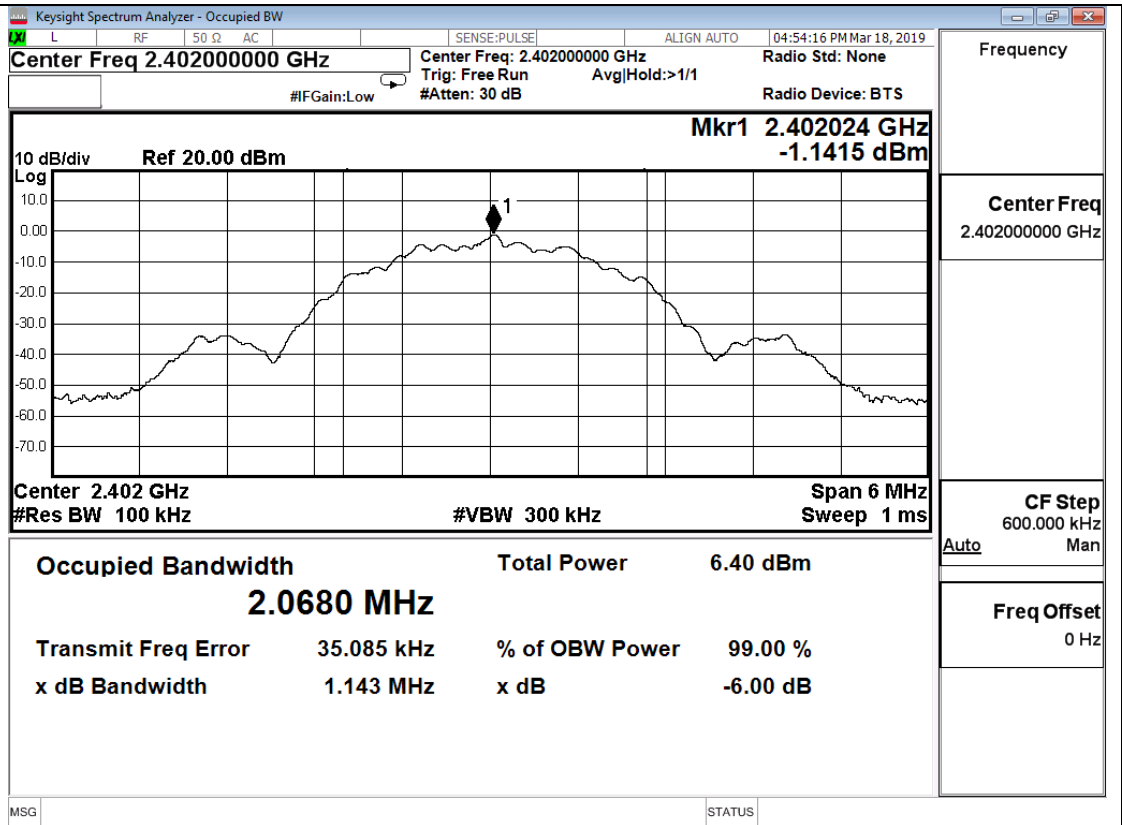
LE MCH



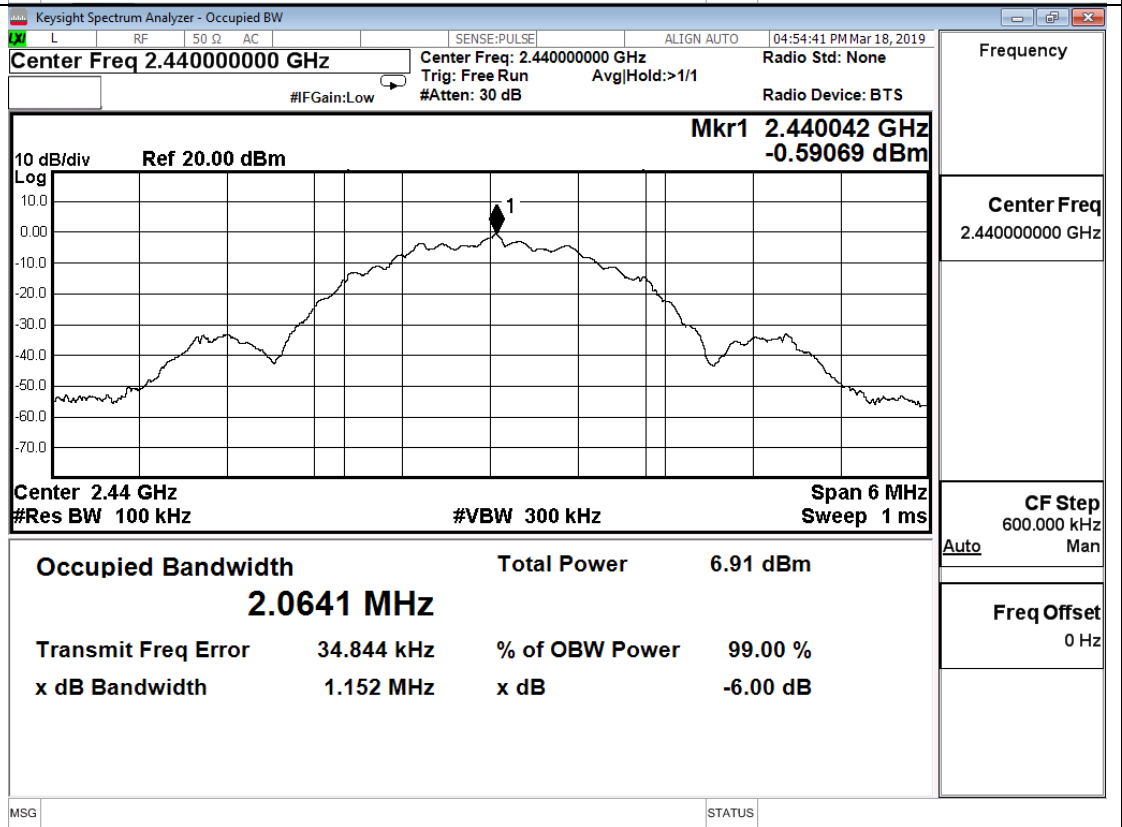
LE HCH

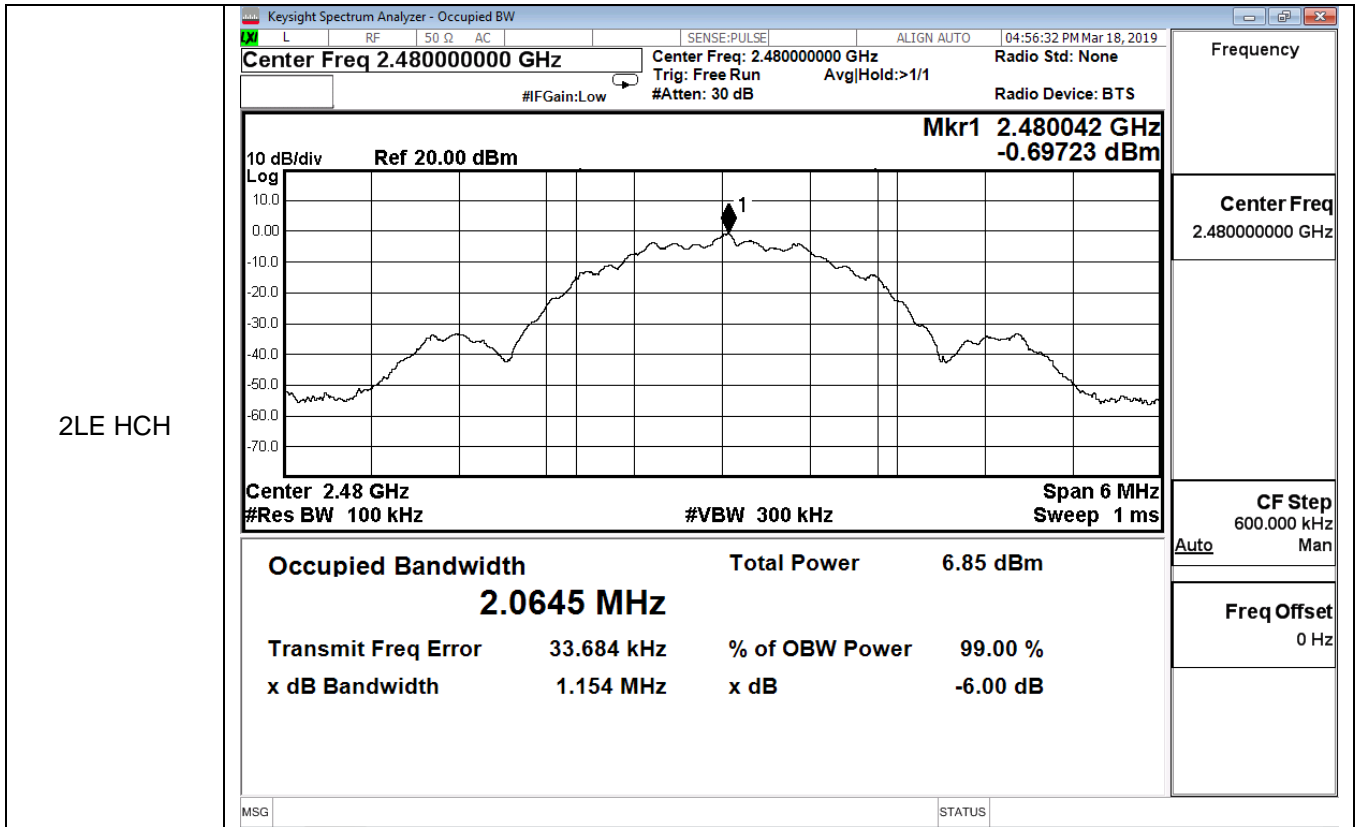


2LE LCH



2LE MCH



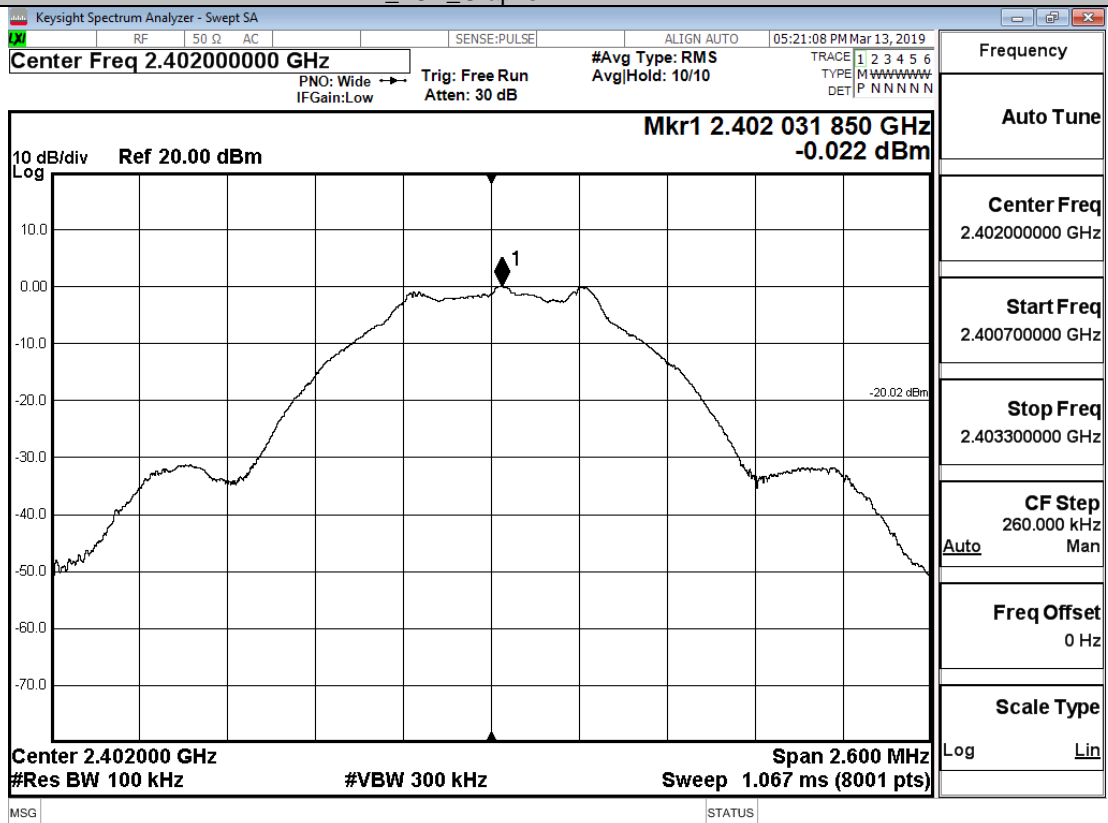


B.5 RF Conducted Spurious Emissions

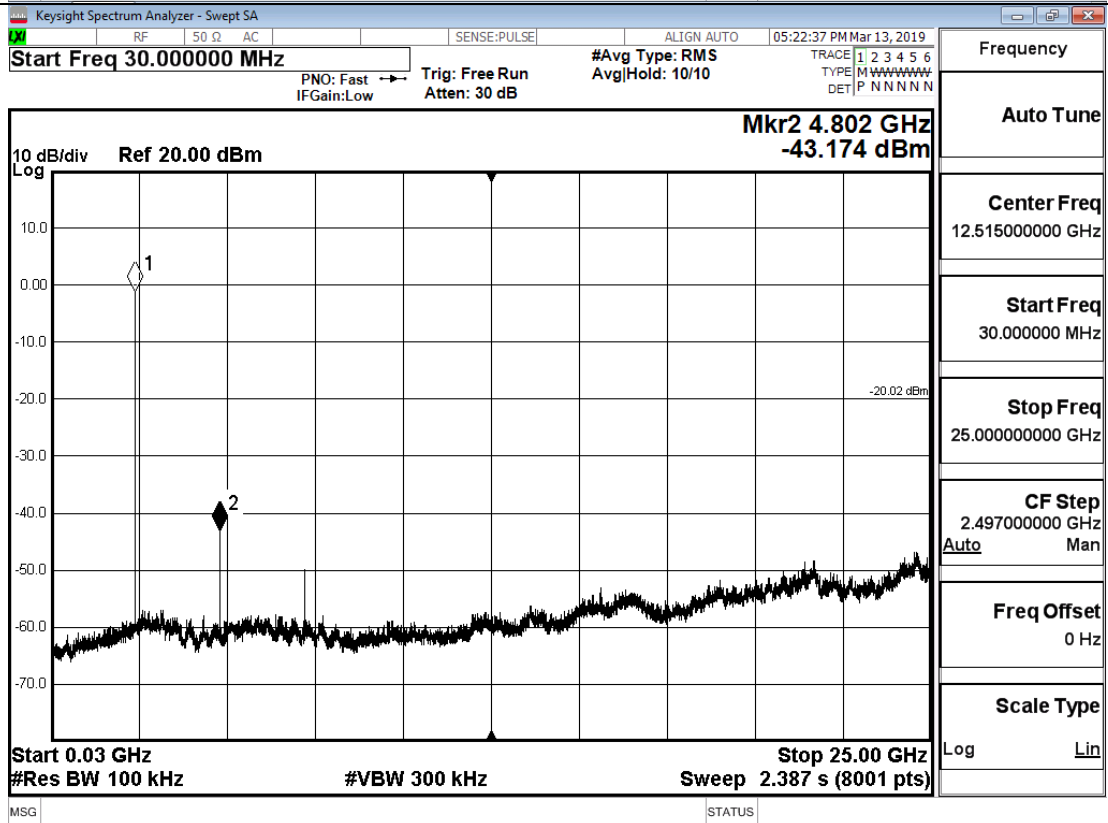
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
LE	LCH	-0.022	-43.174	-20.02	PASS
LE	MCH	-0.254	-40.133	-20.25	PASS
LE	HCH	-1.435	-38.963	-21.44	PASS
2LE	LCH	-1.073	-42.024	-21.07	PASS
2LE	MCH	-0.674	-41.886	-20.67	PASS
2LE	HCH	-0.708	-42.744	-20.71	PASS

LE_LCH_Graphs

Pref/ LE/LCH

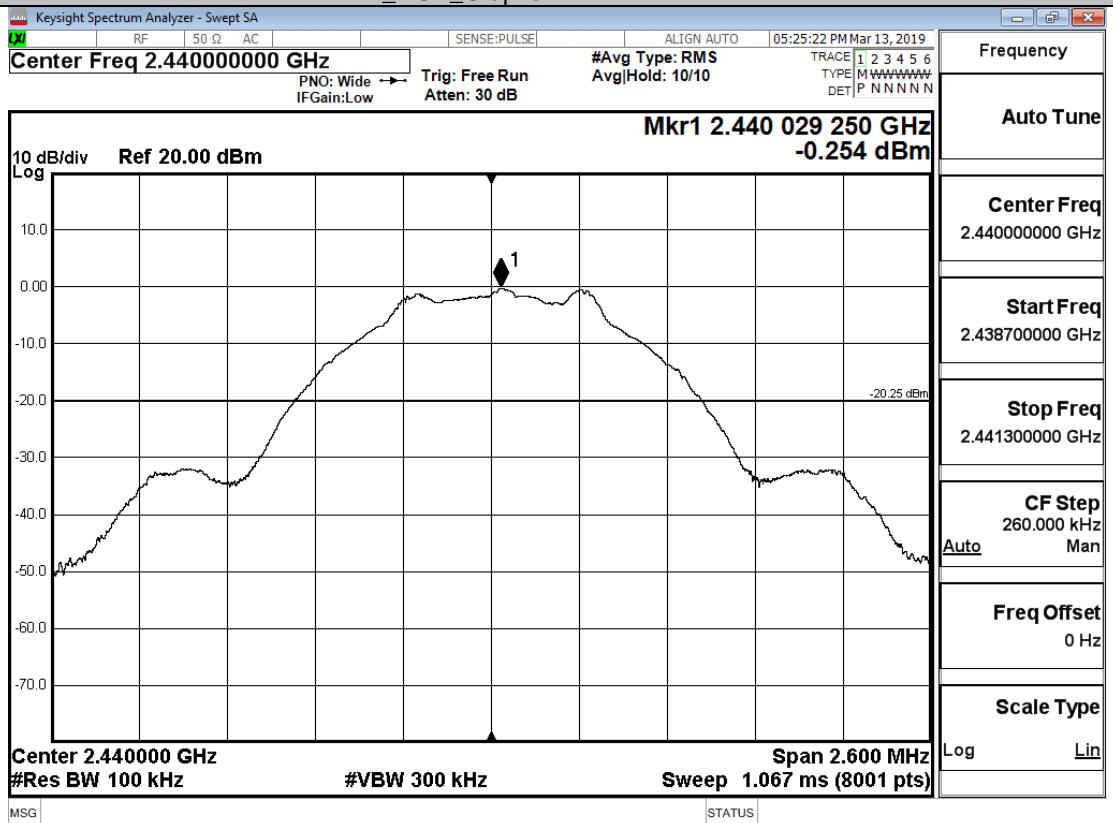


Puw/ LE/LCH

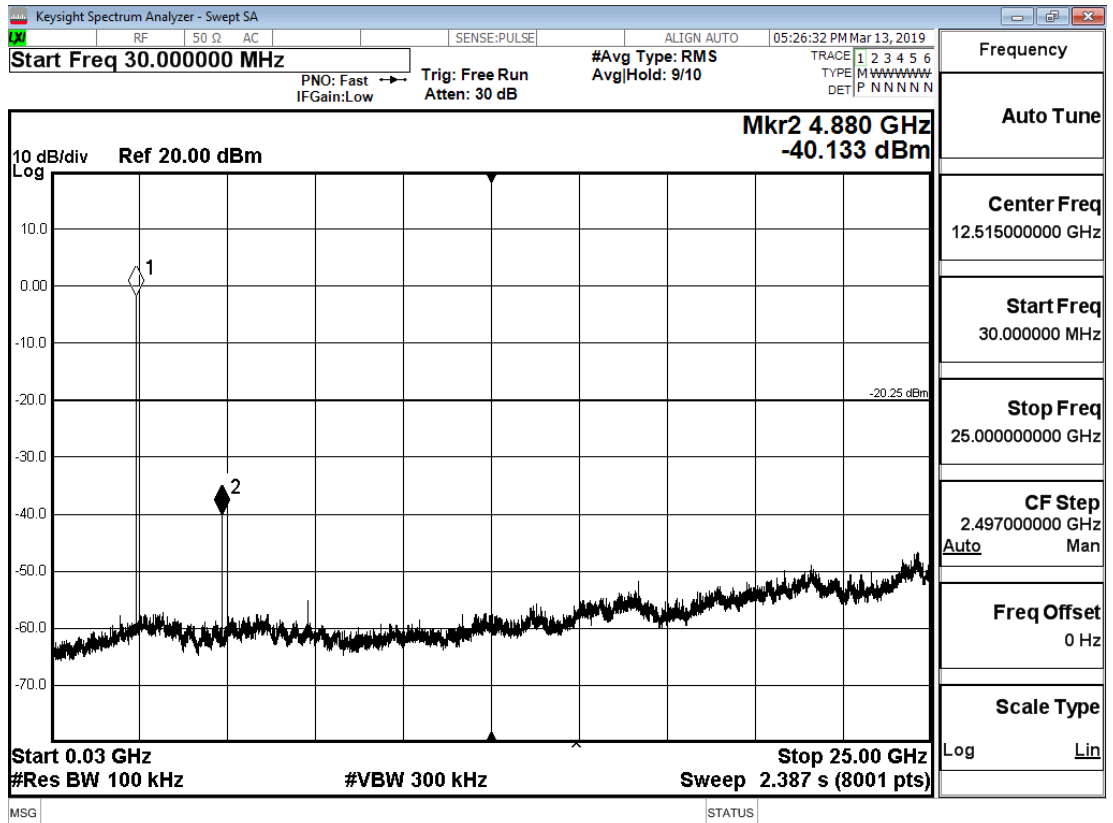


LE_MCH_Graphs

Pref/ LE/MCH

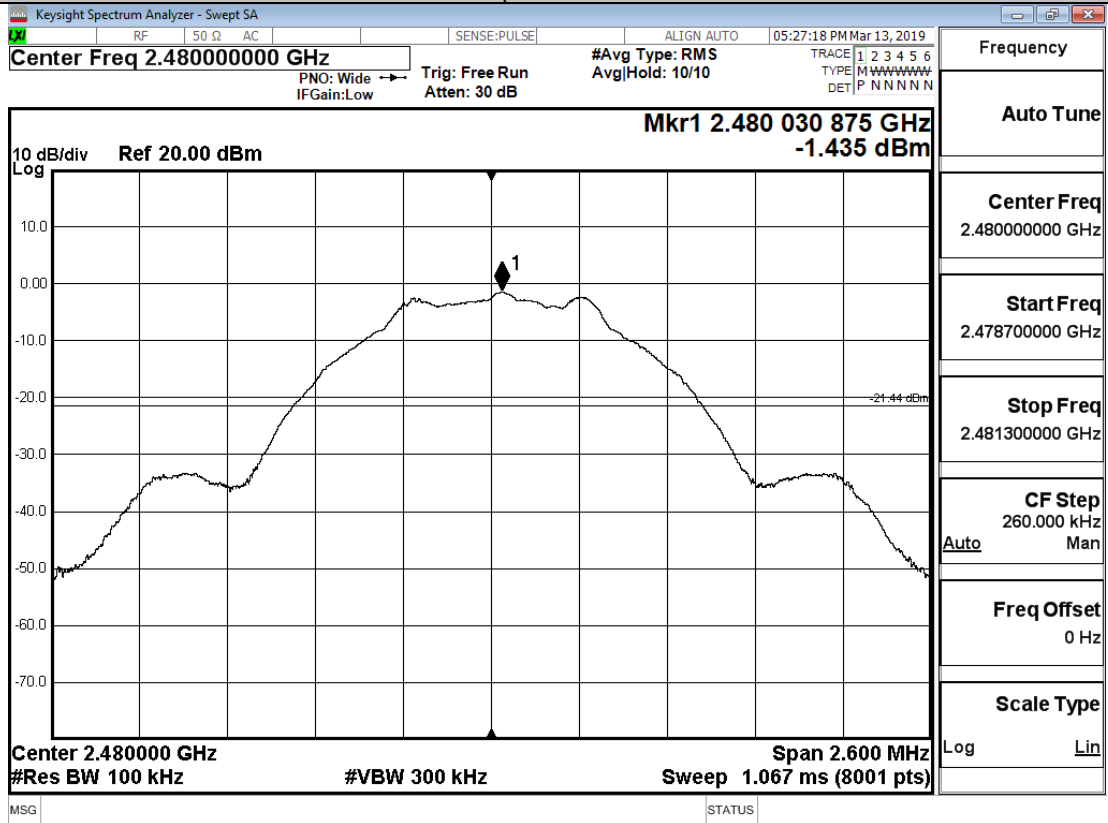


Puw/ LE/MCH

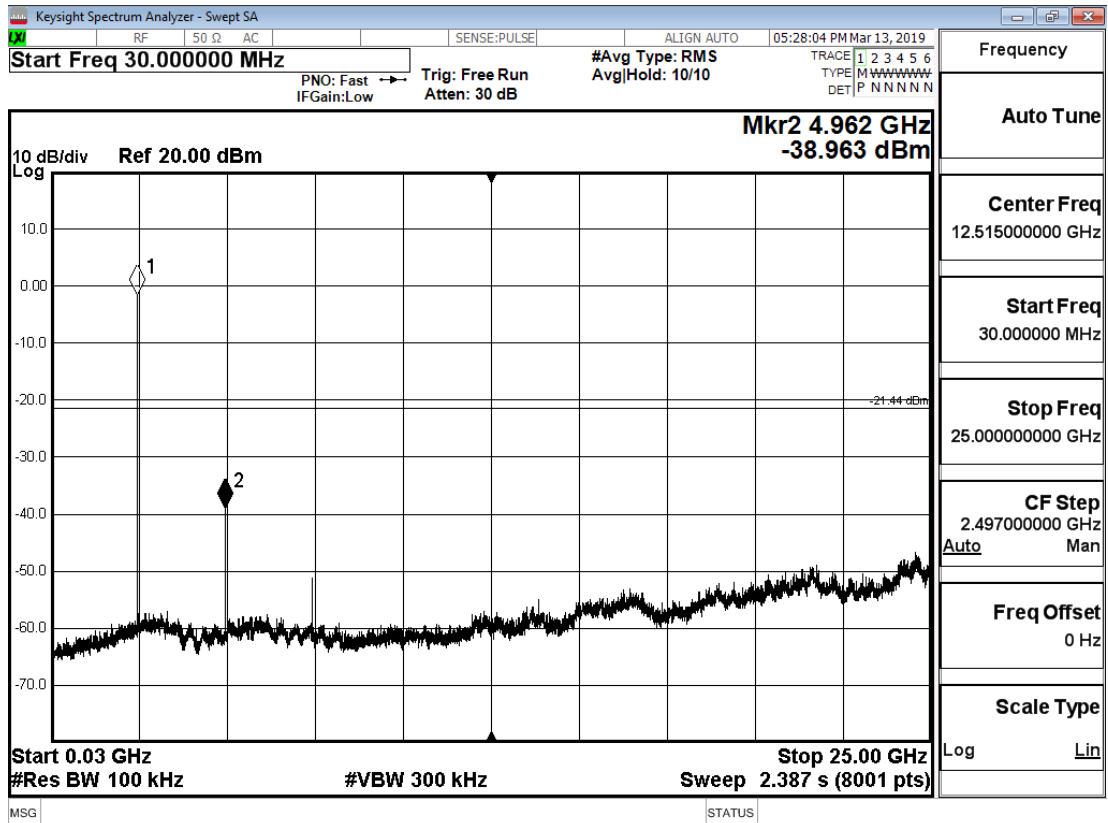


LE_HCH_Graphs

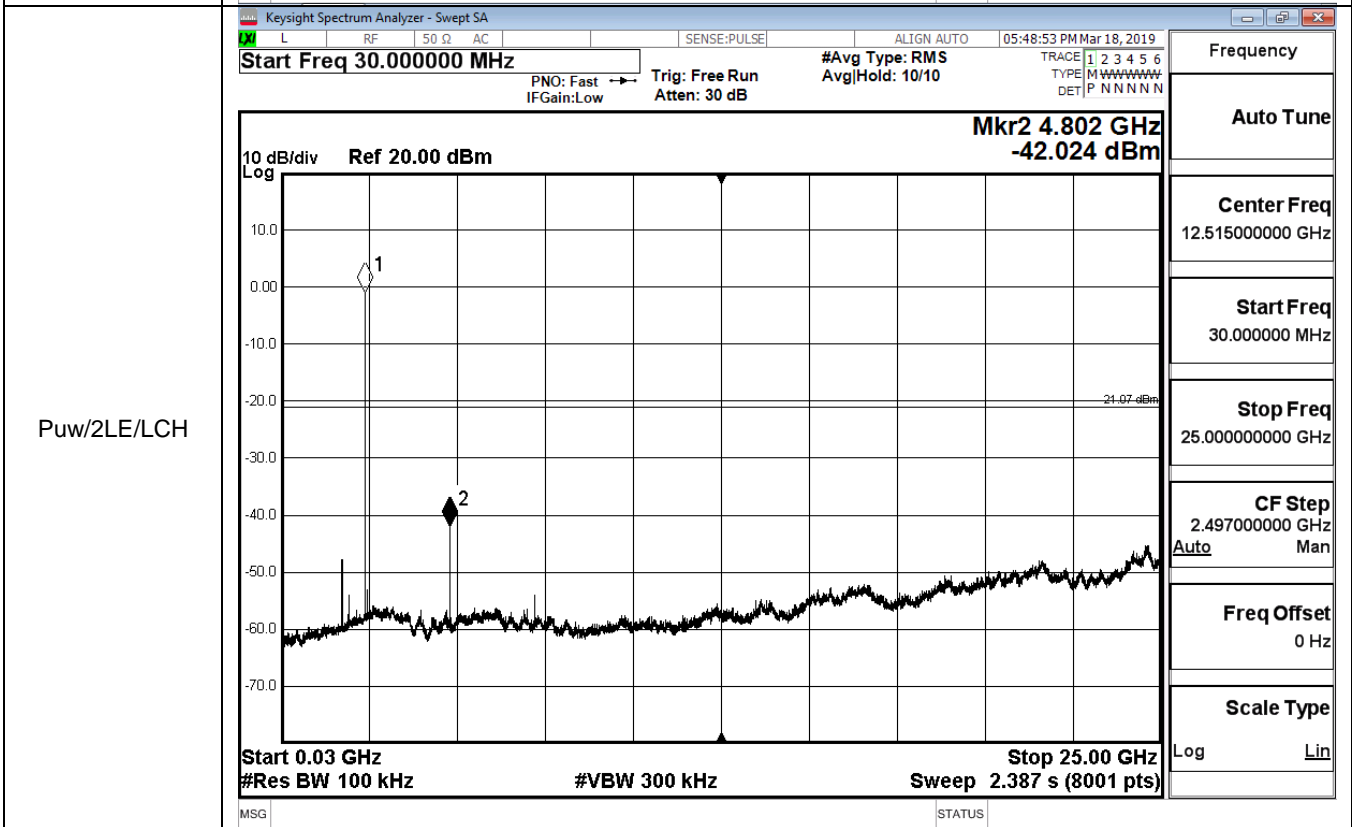
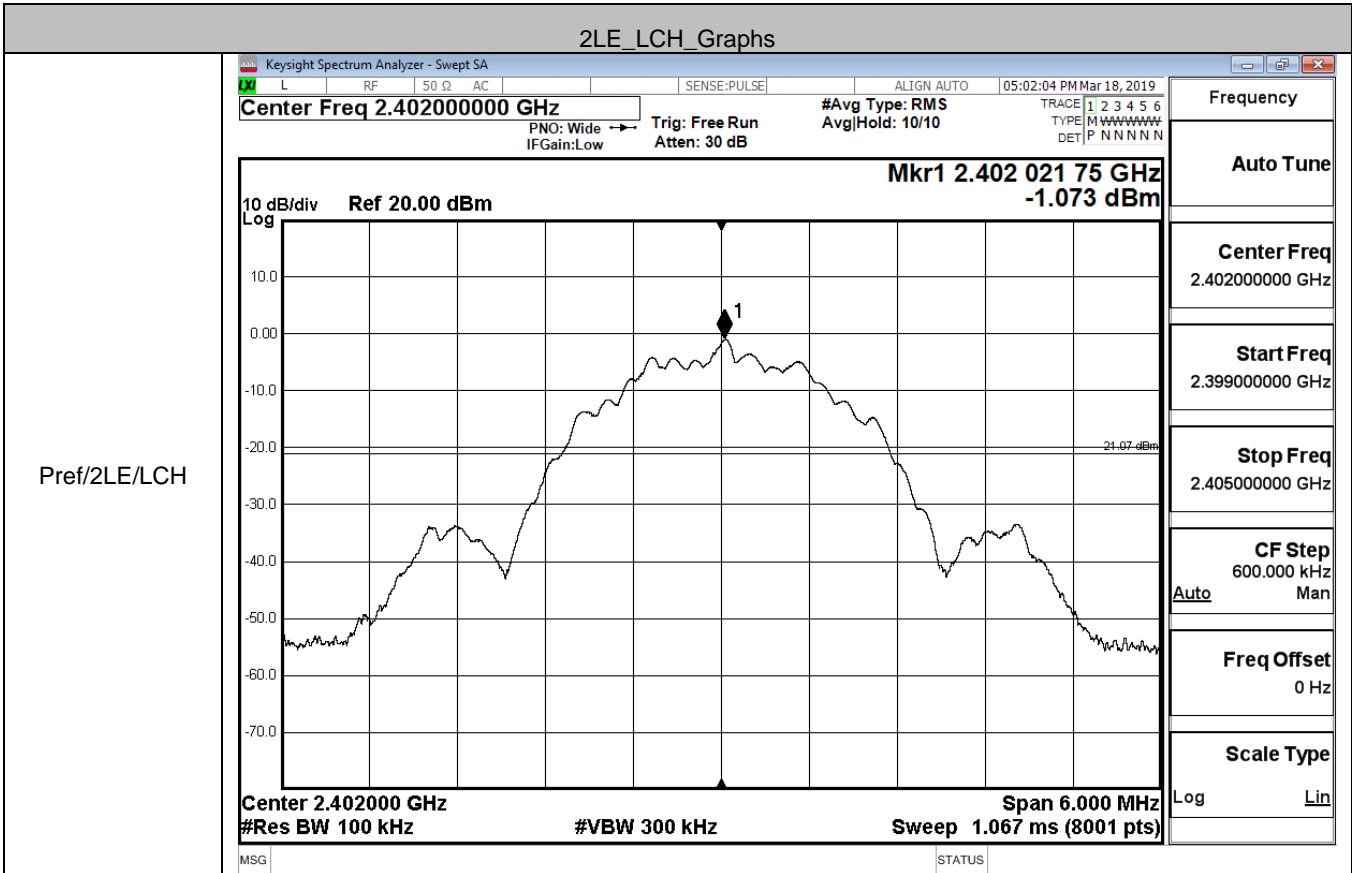
Pref/ LE/HCH



Puw/ LE/HCH

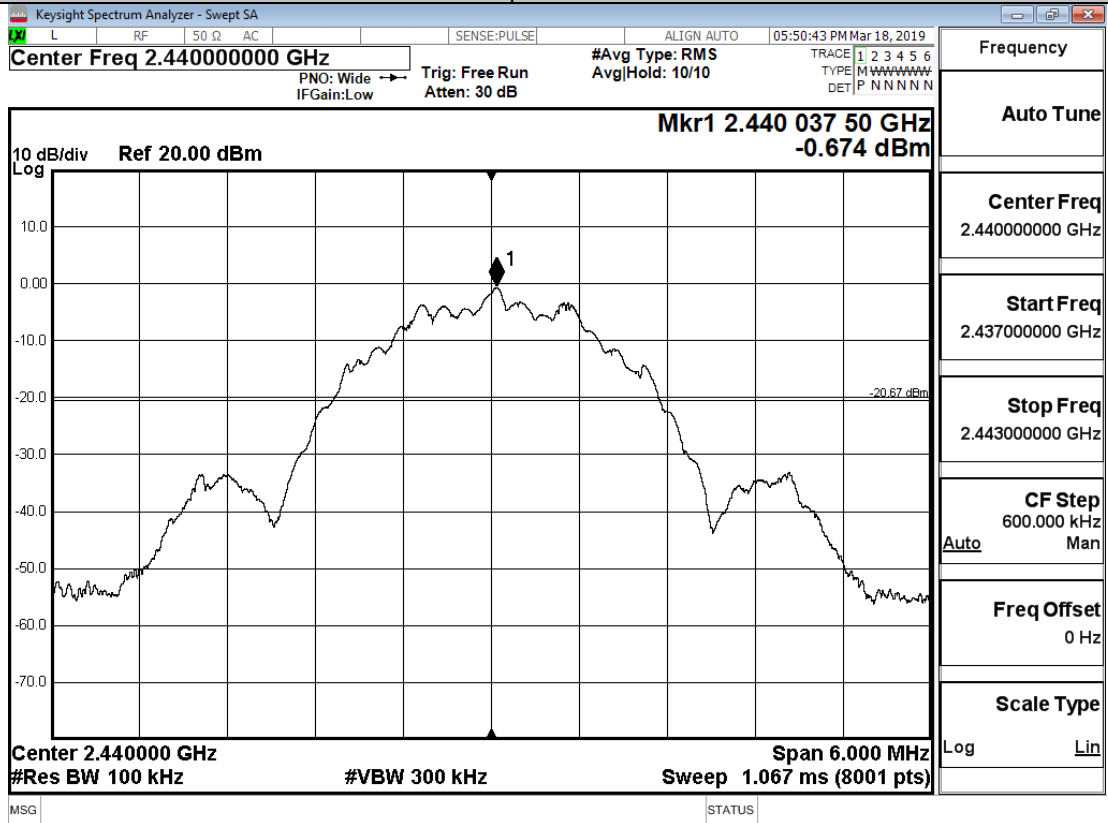


2LE_LCH_Graphs

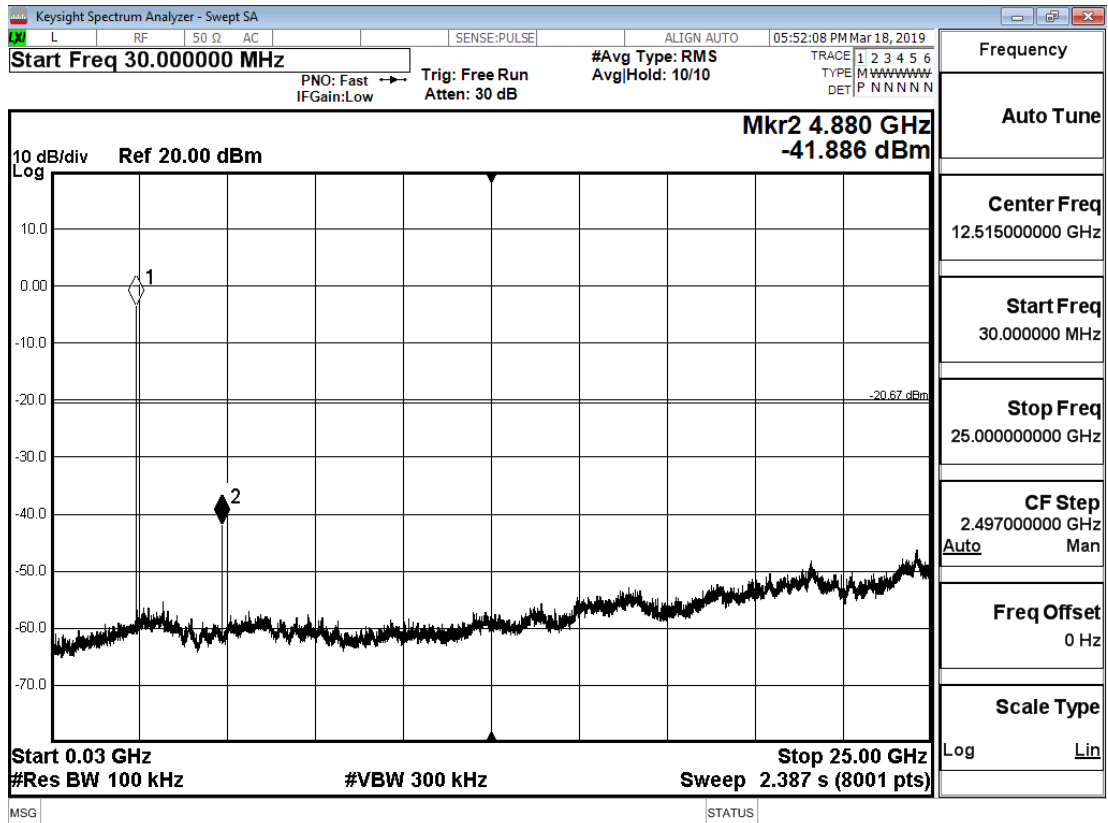


2LE_MCH_Graphs

Pref/2LE/MCH

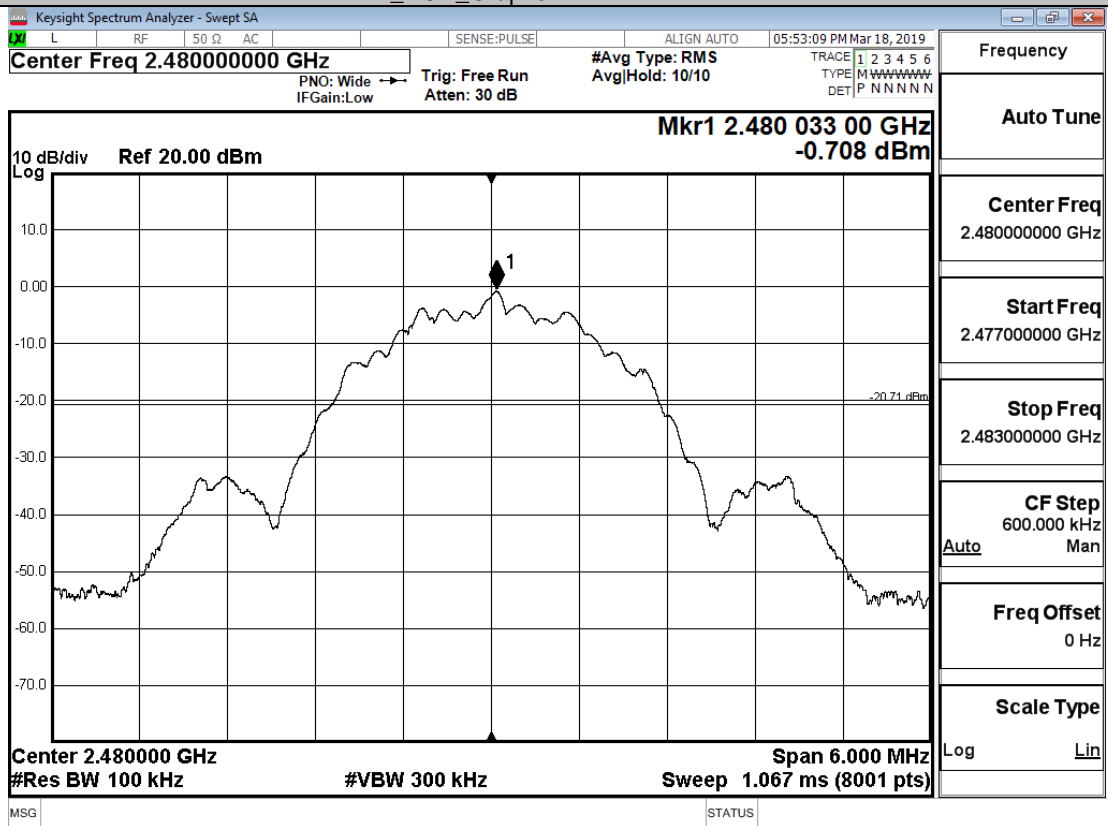


Puw/2LE/MCH

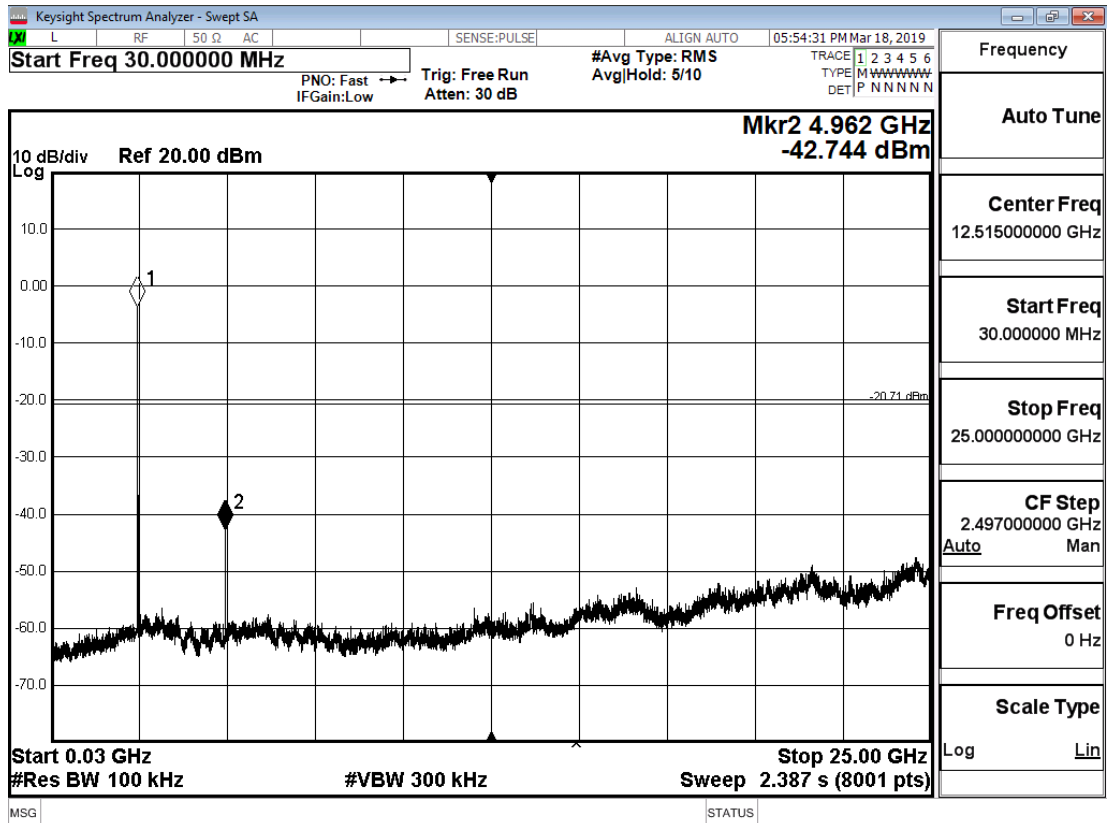


2LE_HCH_Graphs

Pref/2LE/HCH

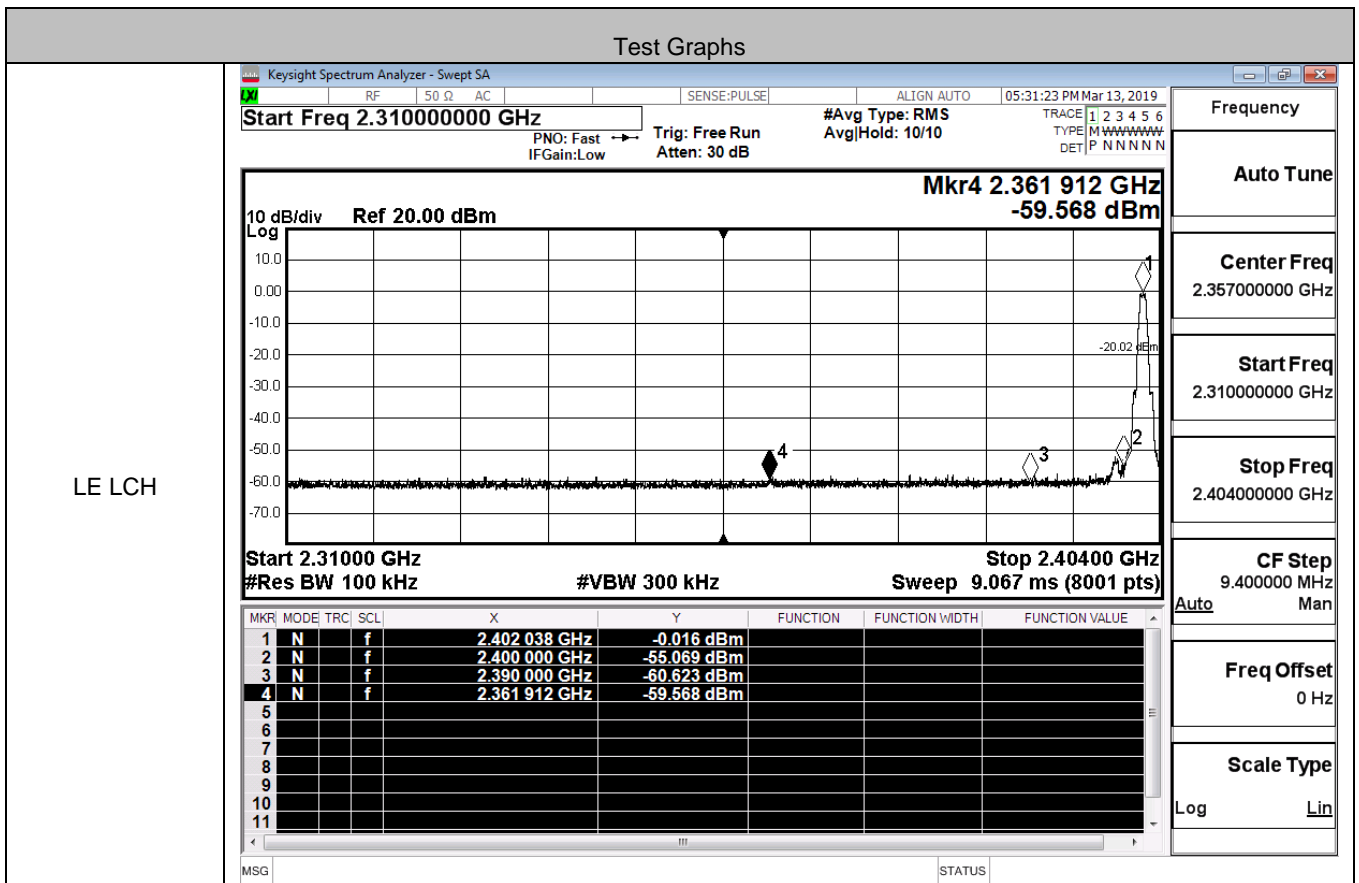


Puw/2LE/HCH

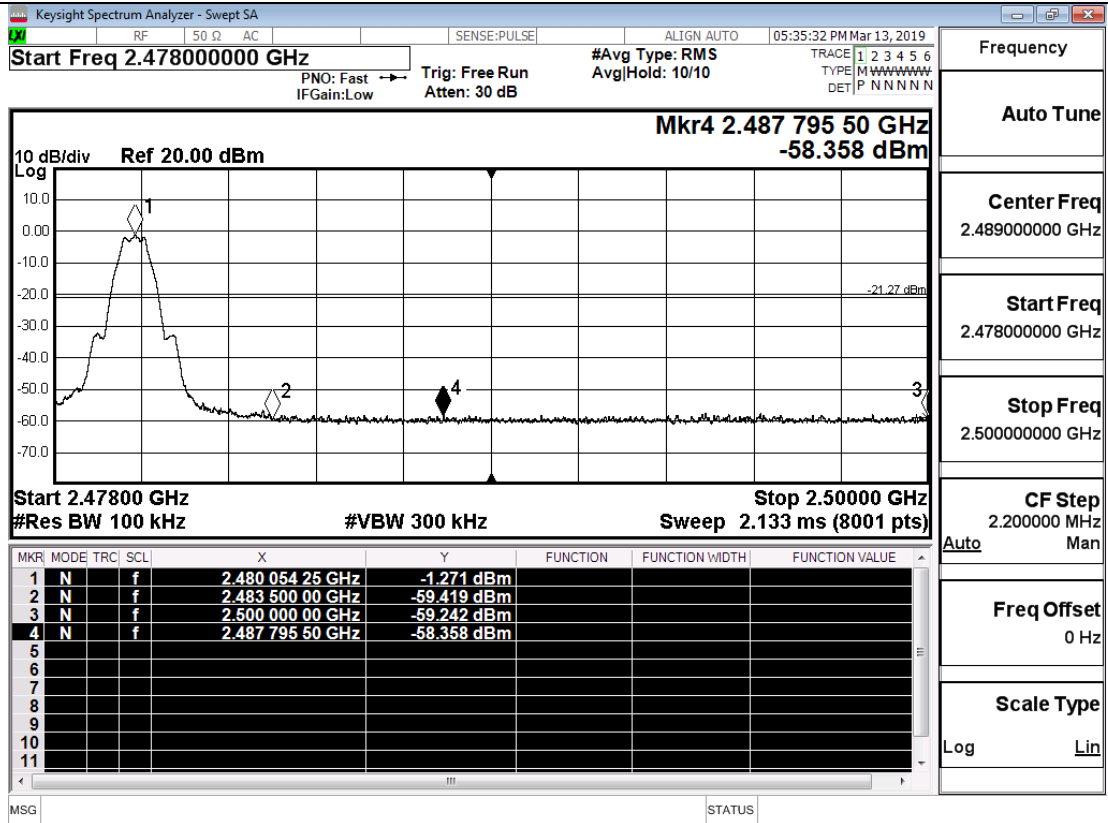


B.6 Band-edge for RF Conducted Emissions

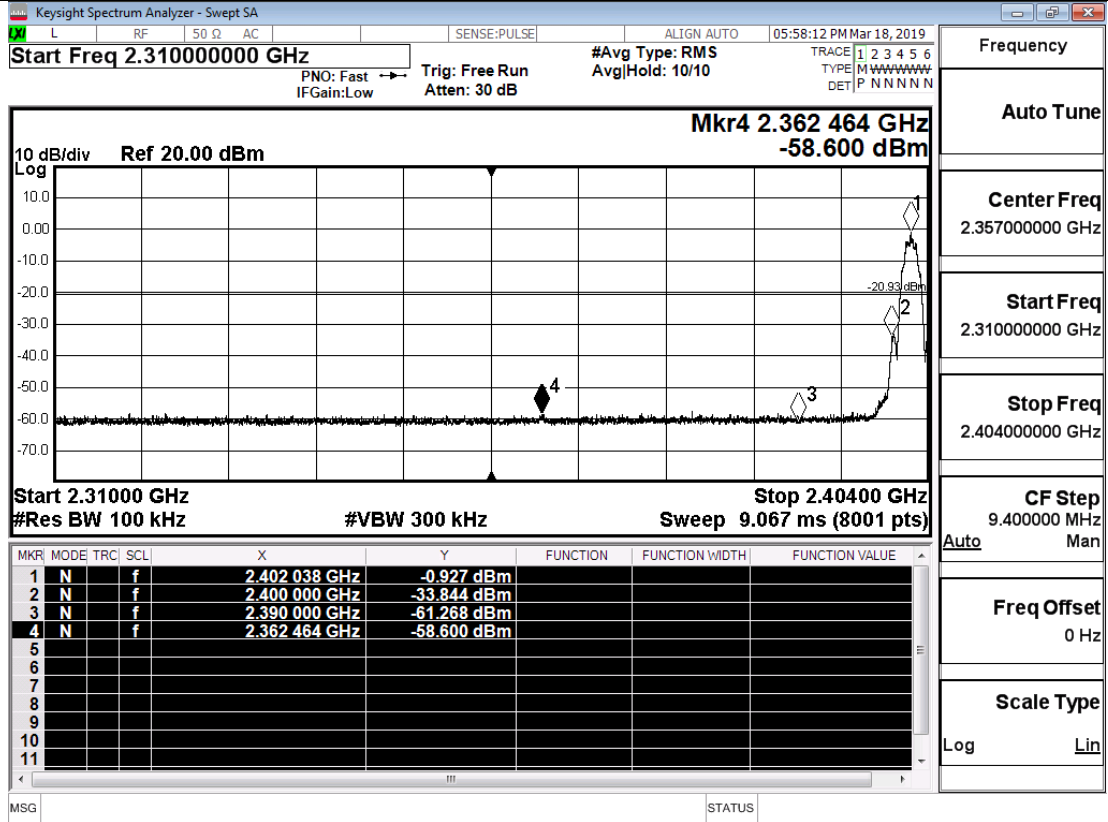
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
LE	LCH	-0.016	-55.069	-20.016	PASS
LE	HCH	-1.271	-58.358	-21.271	PASS
2LE	LCH	-0.927	-33.844	-20.927	PASS
2LE	HCH	-0.499	-57.270	-20.499	PASS



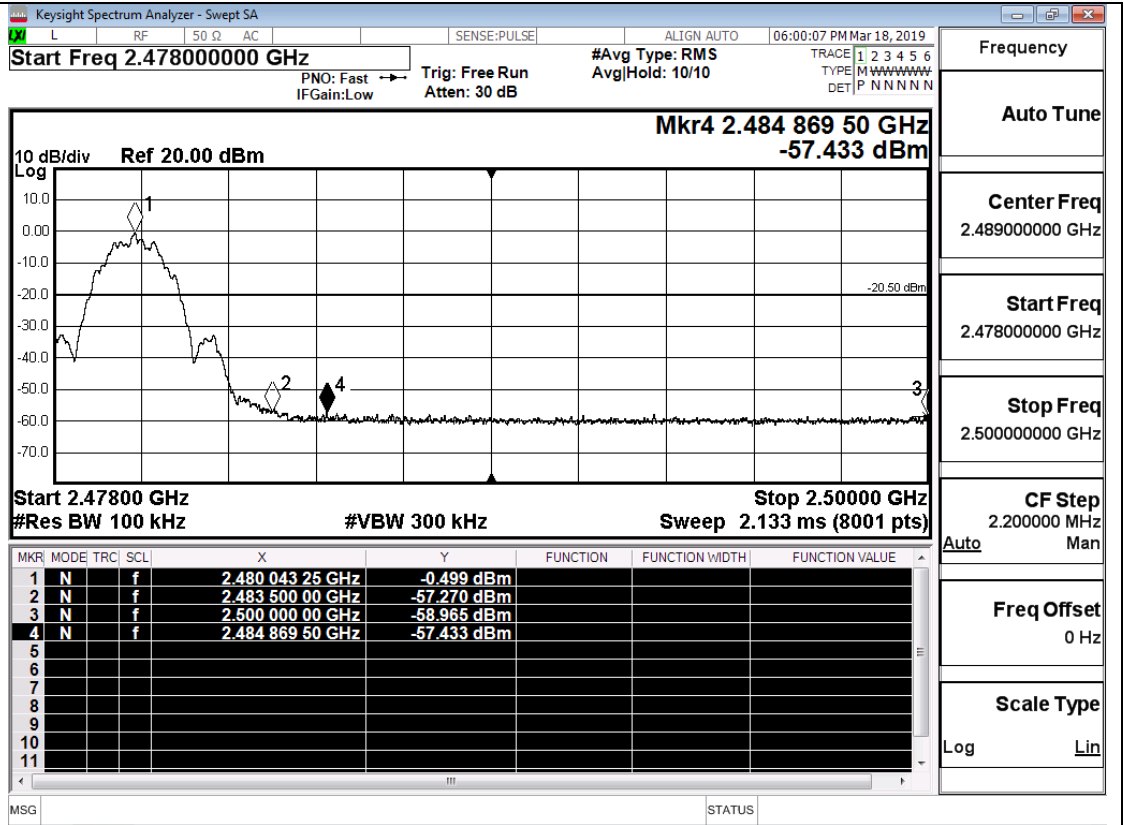
LE HCH



2LE LCH



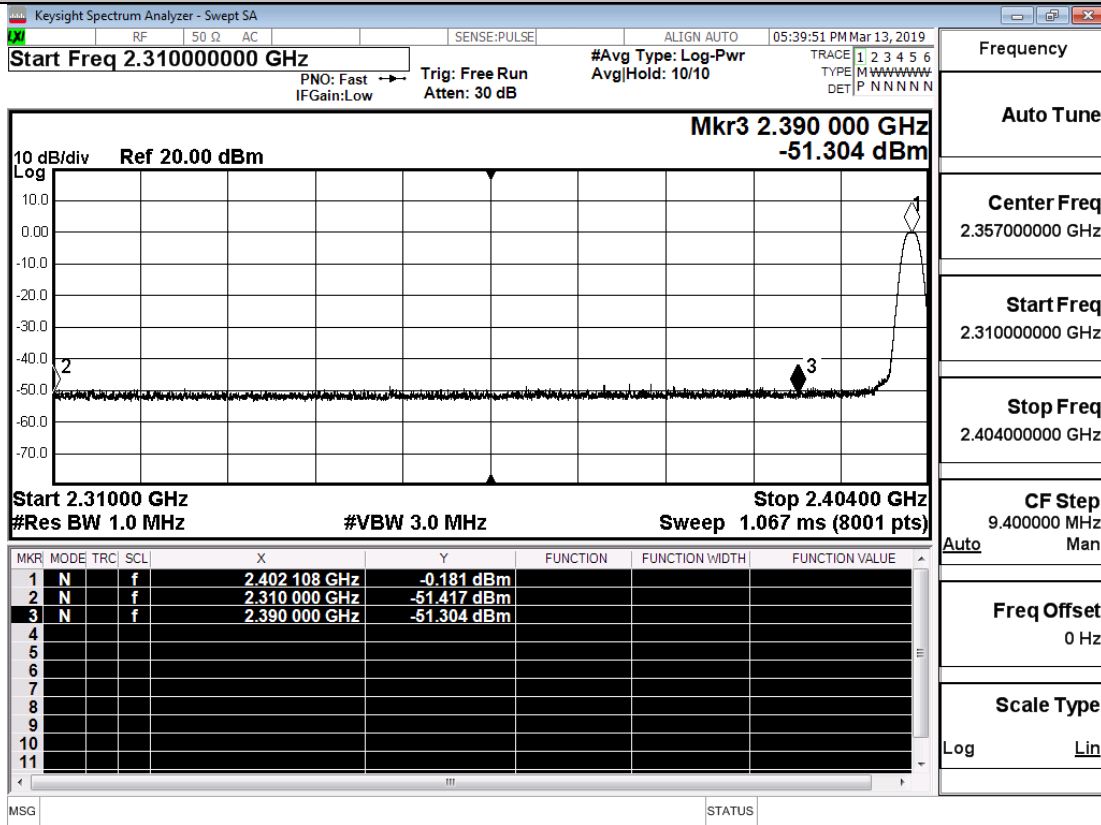
2LE HCH



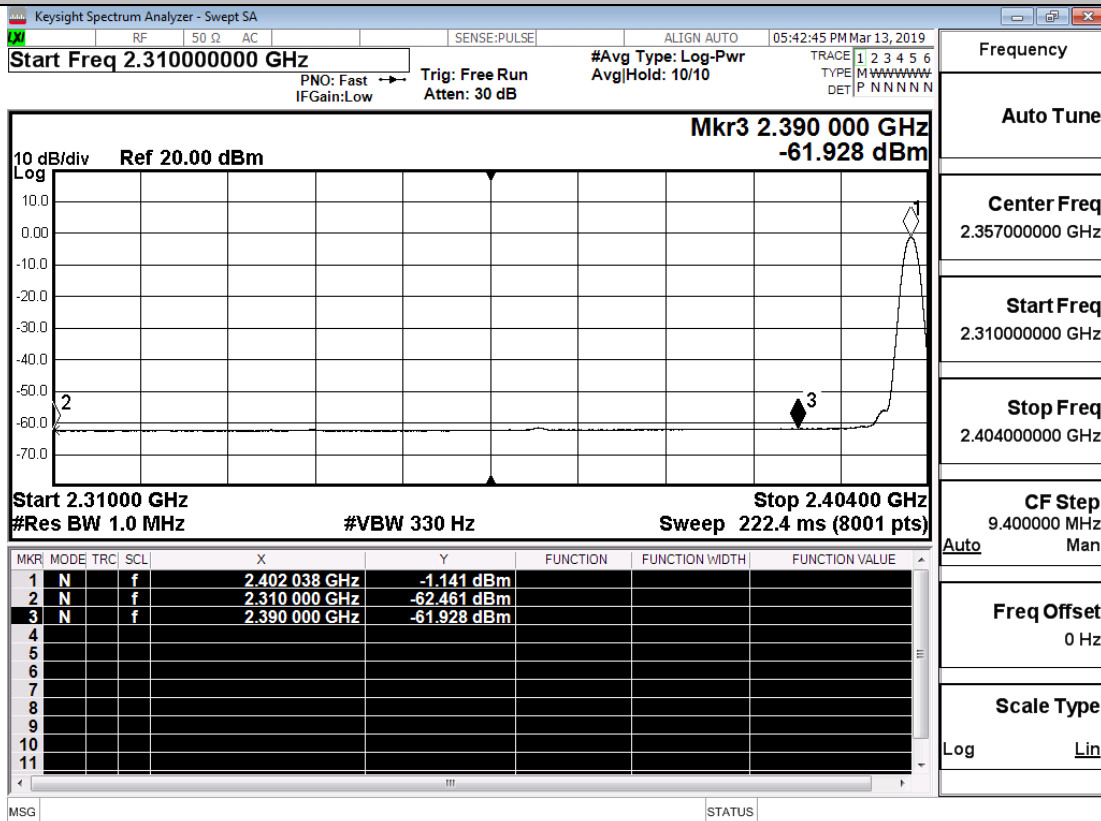
B.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
LE	2402	Ant1	2310.0	-51.417	2.000	0	45.81	PEAK	74	PASS
		Ant1	2310.0	-62.461	2.000	0	34.77	AV	54	PASS
		Ant1	2390.0	-51.304	2.000	0	45.93	PEAK	74	PASS
		Ant1	2390.0	-61.928	2.000	0	35.30	AV	54	PASS
	2480	Ant1	2483.5	-49.925	2.000	0	47.31	PEAK	74	PASS
		Ant1	2483.5	-59.825	2.000	0	37.41	AV	54	PASS
		Ant1	2500.0	-51.355	2.000	0	45.88	PEAK	74	PASS
		Ant1	2500.0	-61.655	2.000	0	35.58	AV	54	PASS
2LE	2402	Ant1	2310.0	-51.358	2.000	0	45.87	PEAK	74	PASS
		Ant1	2310.0	-62.446	2.000	0	34.78	AV	54	PASS
		Ant1	2390.0	-50.350	2.000	0	46.88	PEAK	74	PASS
		Ant1	2390.0	-61.761	2.000	0	35.47	AV	54	PASS
	2480	Ant1	2483.5	-45.617	2.000	0	51.61	PEAK	74	PASS
		Ant1	2483.5	-57.593	2.000	0	39.64	AV	54	PASS
		Ant1	2500.0	-50.857	2.000	0	46.37	PEAK	74	PASS
		Ant1	2500.0	-61.577	2.000	0	35.65	AV	54	PASS

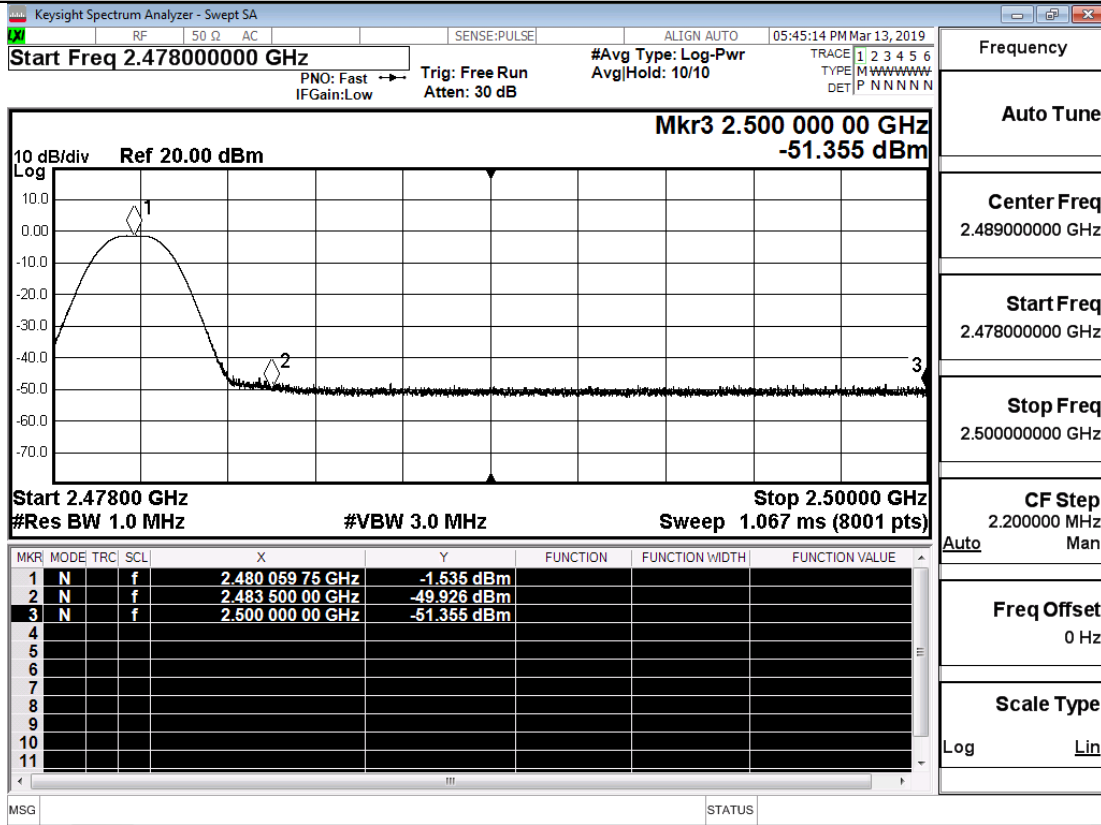
Restrict-band band-edge measurements_LE_2402_Ant1_PEAK



Restrict-band band-edge measurements_LE_2402_Ant1_AV

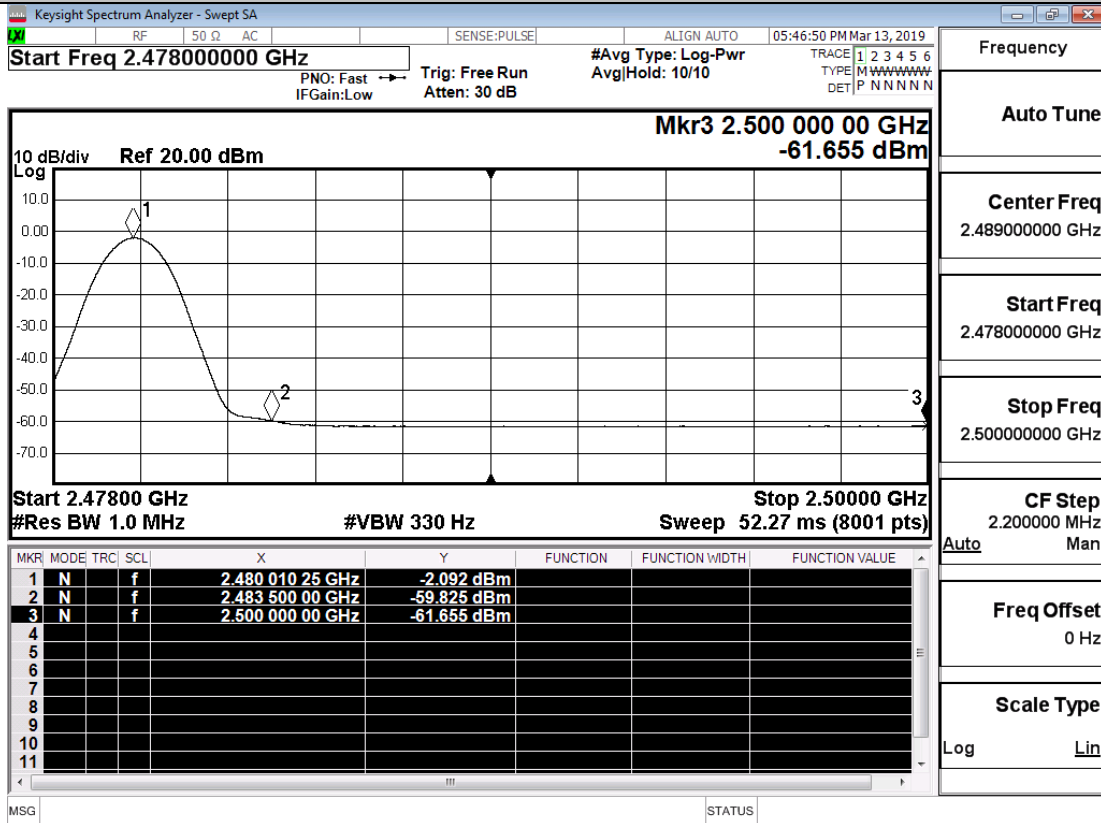


Restrict-band band-edge measurements_LE_2480_Ant1_PEAK



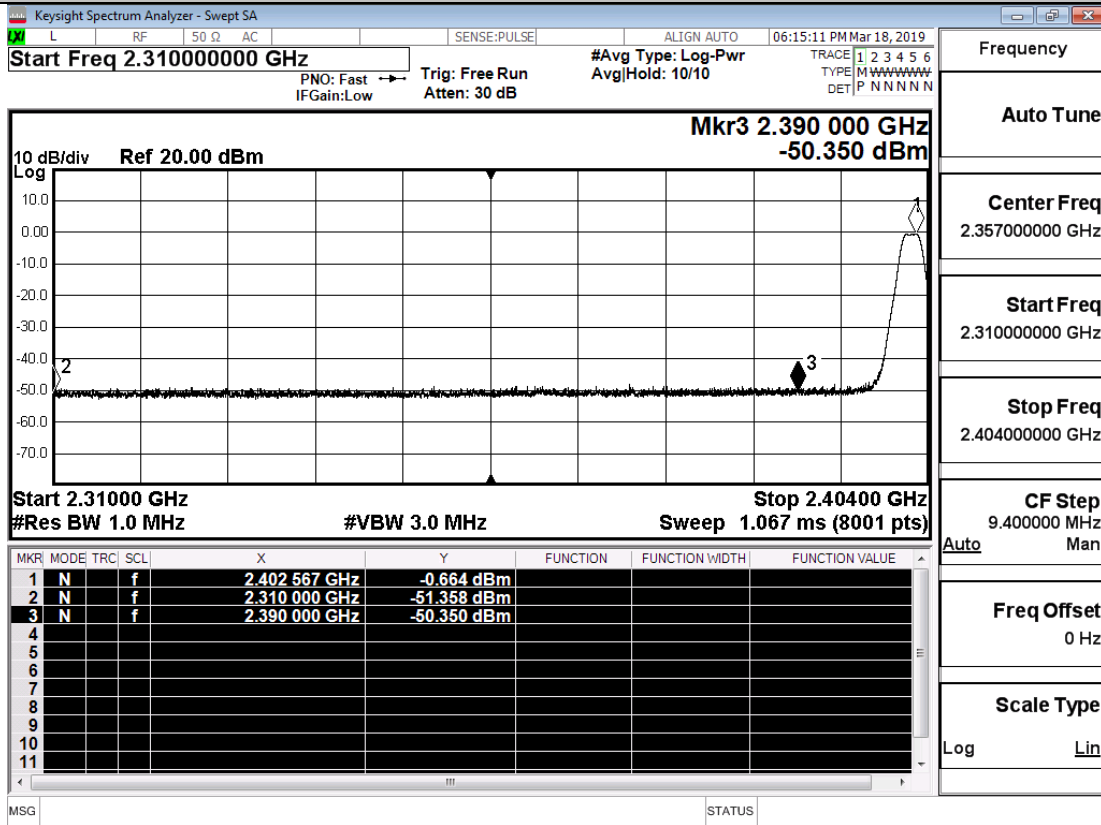
Frequency
Auto Tune
Center Freq 2.489000000 GHz
Start Freq 2.478000000 GHz
Stop Freq 2.500000000 GHz
CF Step 2.200000 MHz Auto Man
Freq Offset 0 Hz
Scale Type Log Lin

Restrict-band band-edge measurements_LE_2480_Ant1_AV

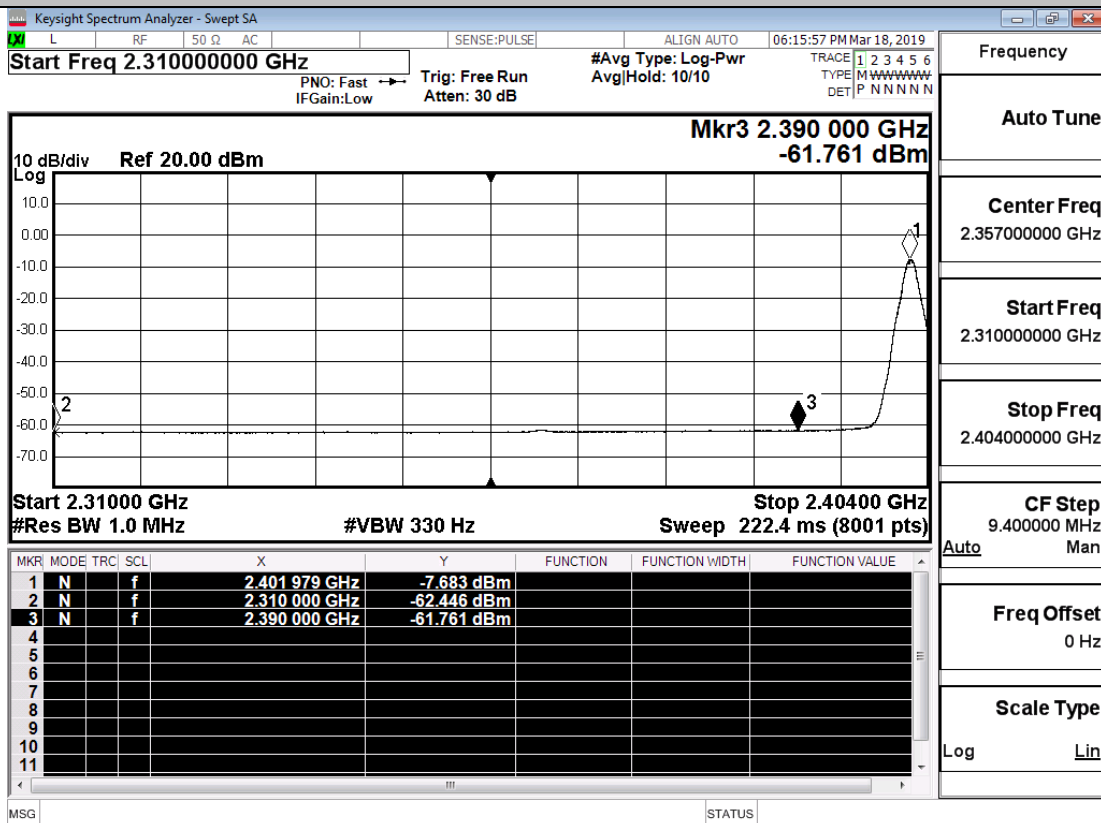


Frequency
Auto Tune
Center Freq 2.489000000 GHz
Start Freq 2.478000000 GHz
Stop Freq 2.500000000 GHz
CF Step 2.200000 MHz Auto Man
Freq Offset 0 Hz
Scale Type Log Lin

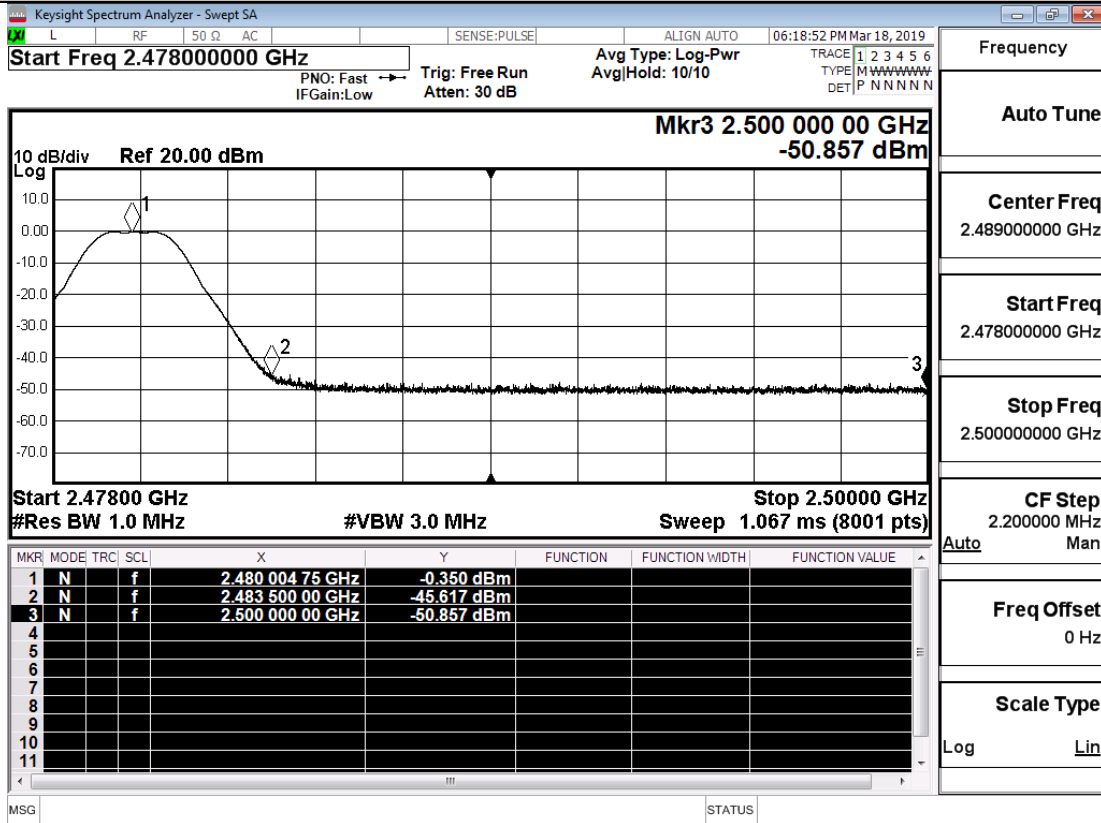
Restrict-band band-edge measurements_2LE_2402_Ant1_PEAK



Restrict-band band-edge measurements_2LE_2402_Ant1_AV



Restrict-band band-edge measurements_2LE_2480_Ant1_PEAK



Restrict-band band-edge measurements_2LE_2480_Ant1_AV

