

Appendix B

RF Test Data for BT V4.2 (BLE) (Conducted Measurement)

Product Name: Wireless Stereo Bluetooth headphones

Trade Mark: N/A

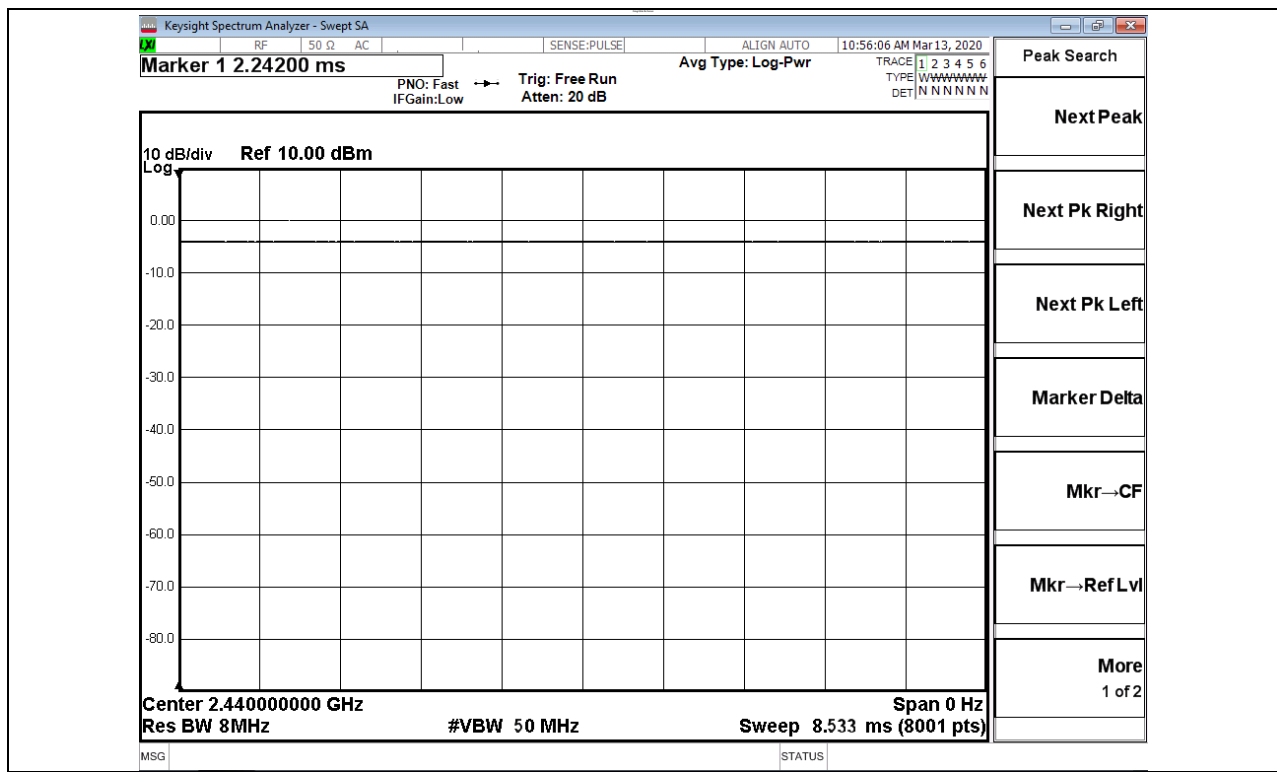
Test Model: FS-BT210

Environmental Conditions

Temperature:	23.9° C
Relative Humidity:	54%
ATM Pressure:	100.0 kPa
Test Engineer:	Tom Liu
Supervised by:	Jayden.Zhuo

B.1 Duty Cycle

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

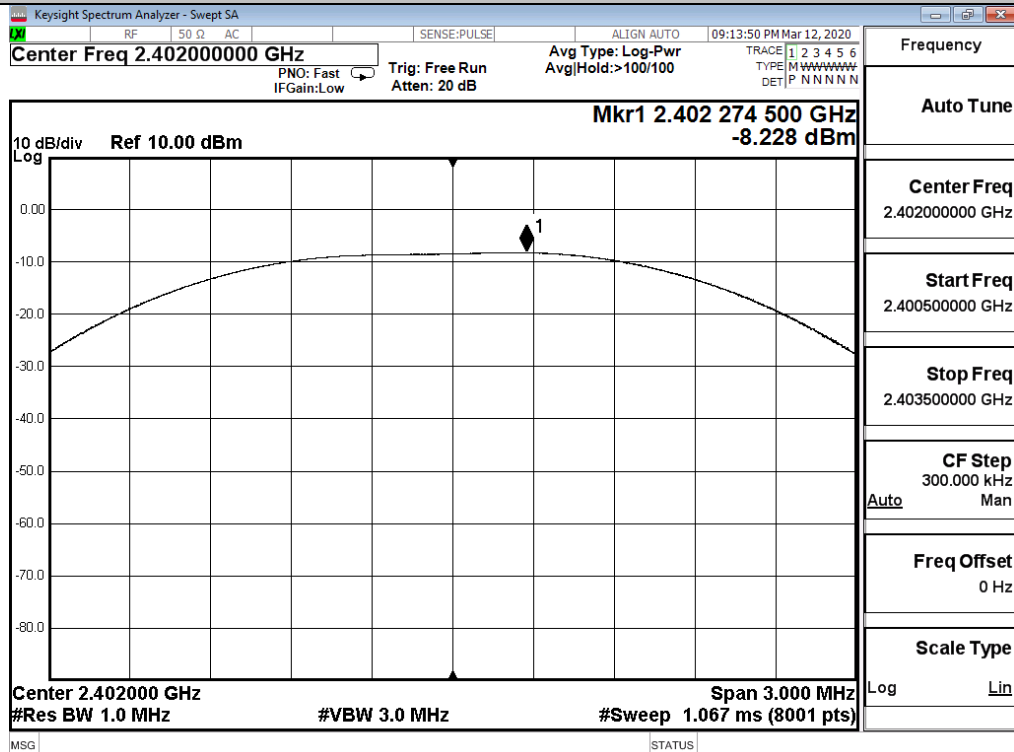


B.2 Maximum Conducted Peak Output Power

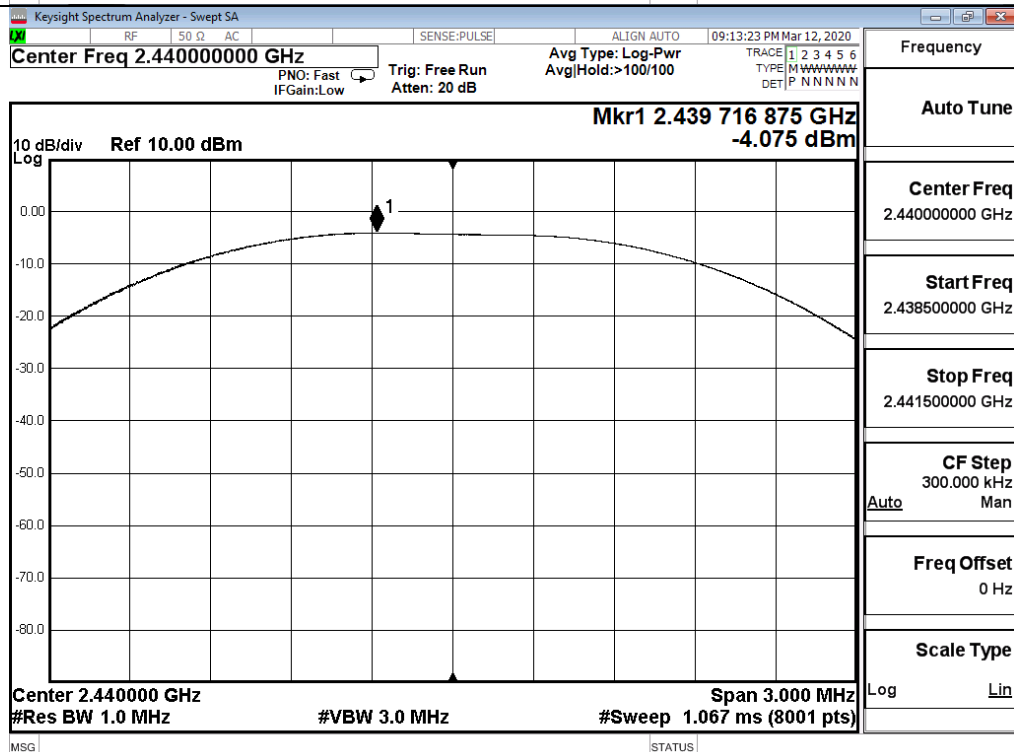
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-8.228	30	PASS
BT LE	MCH	-4.075	30	PASS
BT LE	HCH	-2.402	30	PASS

Test Graphs

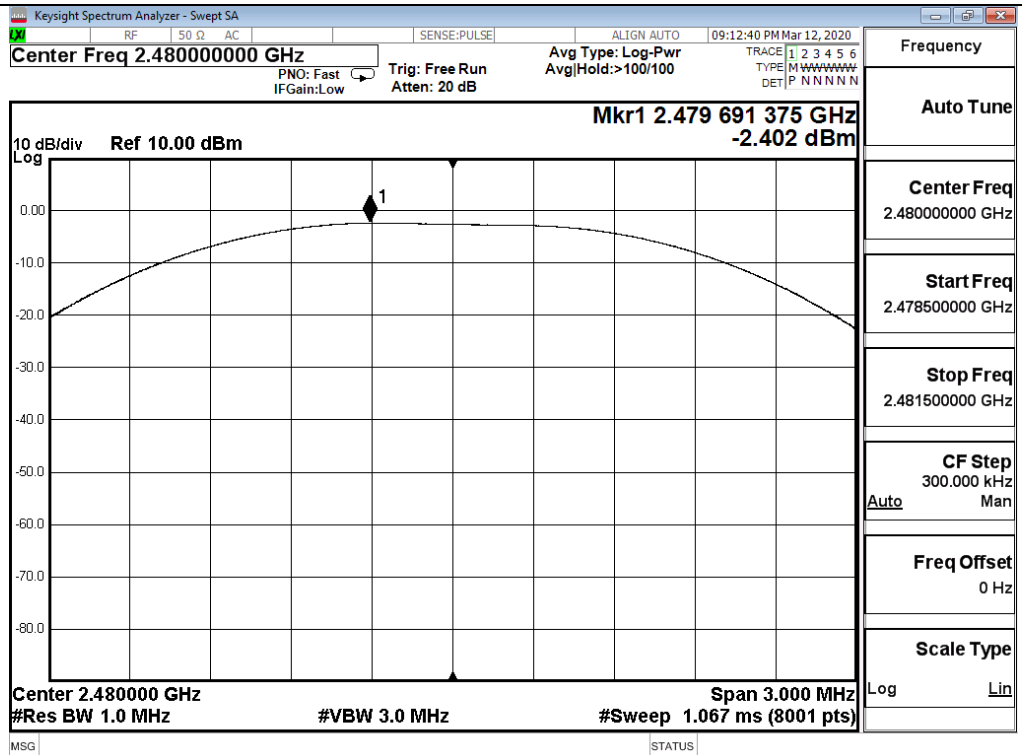
LCH



MCH

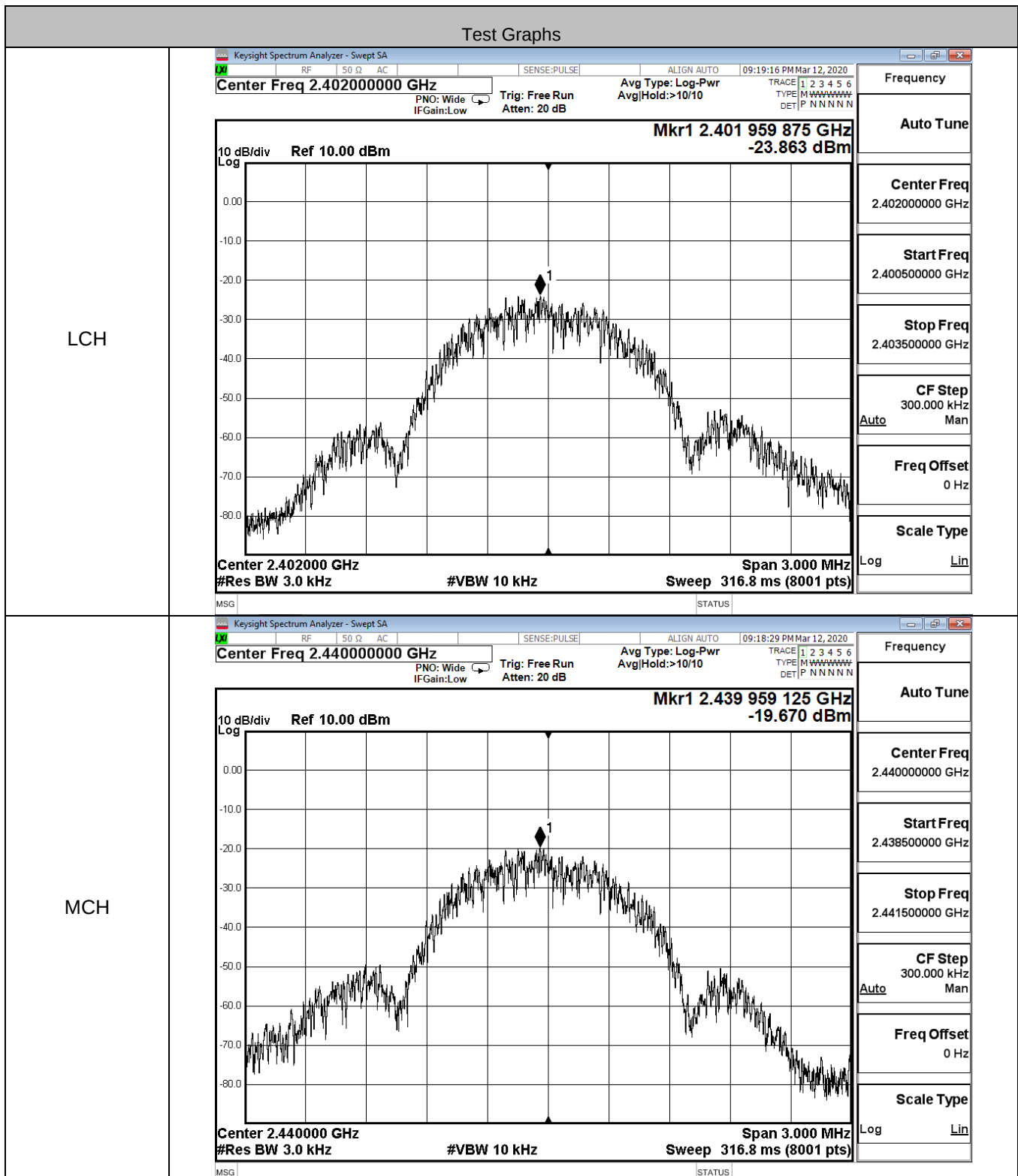


HCH



B.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-23.863	8	PASS
BT LE	MCH	-19.670	8	PASS
BT LE	HCH	-18.098	8	PASS



Keysight Spectrum Analyzer - Swept SA

RF 50 Ω AC SENSE:PULSE ALIGN AUTO 09:17:59 PM Mar 12, 2020

Center Freq 2.48000000 GHz Avg Type: Log-Pwr Avg|Hold:>10/10

PNO: Wide IFGain:Low Trig: Free Run Atten: 20 dB

TRACE 1 2 3 4 5 6
TYPE M W W W W W W W
DET P N N N N N N

Frequency

Auto Tune

Center Freq 2.48000000 GHz

Start Freq 2.478500000 GHz

Stop Freq 2.481500000 GHz

CF Step 300.000 kHz
Auto Man

Freq Offset 0 Hz

Scale Type Log Lin

10 dB/div Ref 10.00 dBm

Log

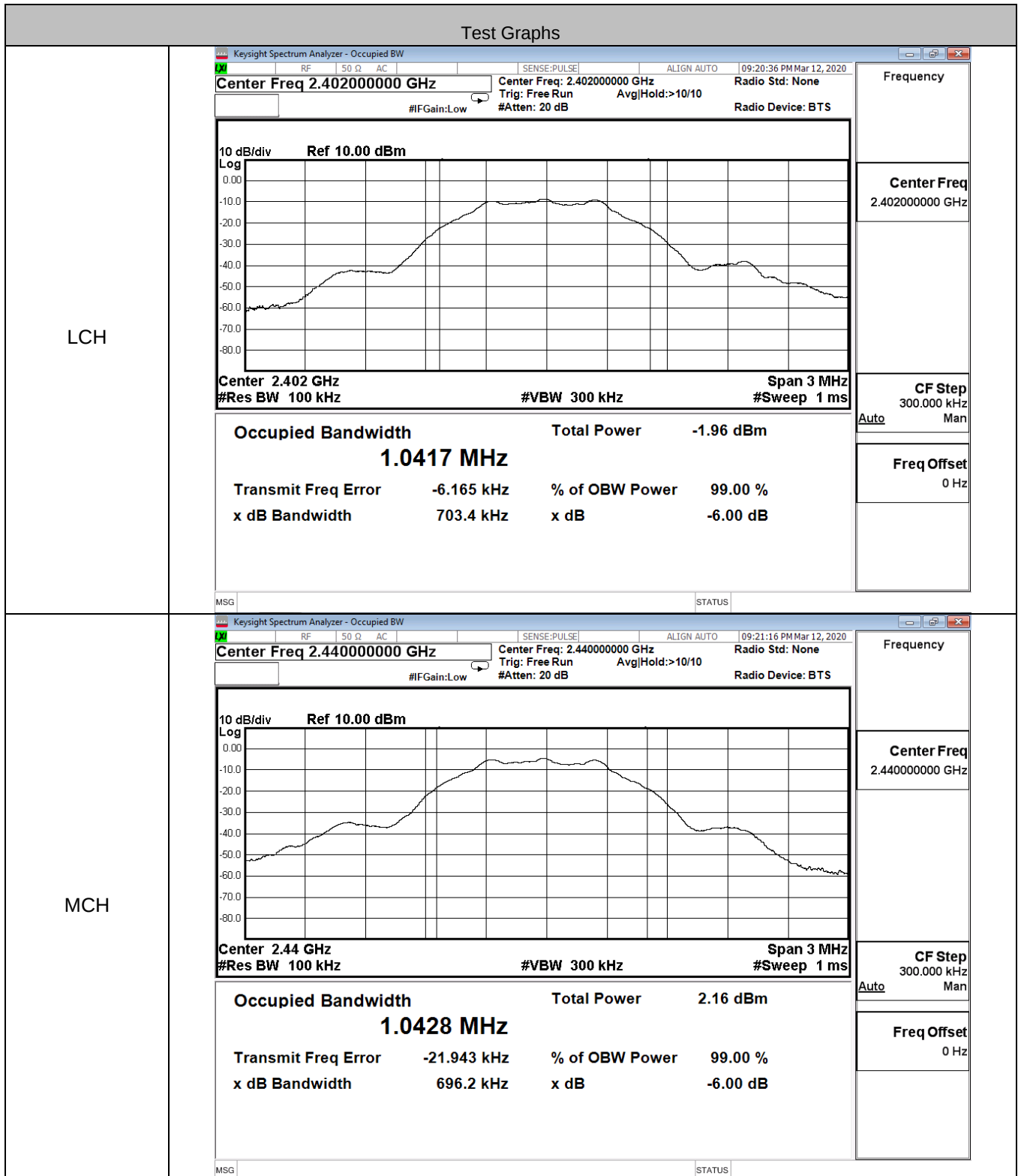
Mkr1 2.479 959 875 GHz -18.098 dBm

Center 2.480000 GHz Span 3.000 MHz
#Res BW 3.0 kHz #VBW 10 kHz Sweep 316.8 ms (8001 pts)

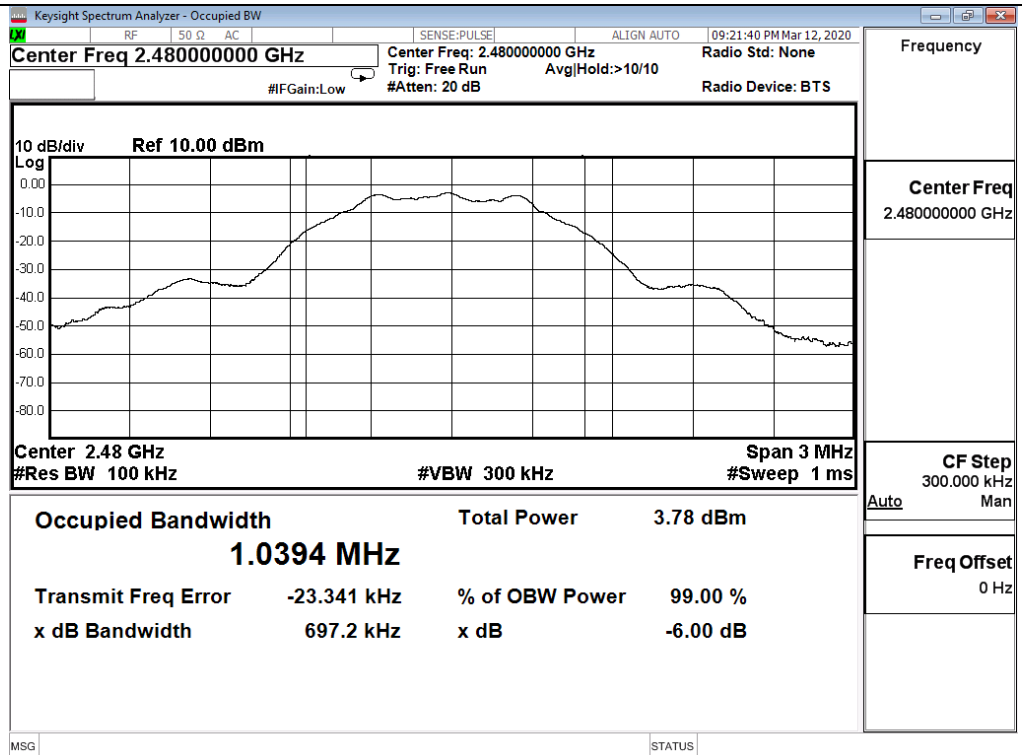
MSG STATUS

B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.7034	≥ 0.5	PASS
BT LE	MCH	0.6962	≥ 0.5	PASS
BT LE	HCH	0.6972	≥ 0.5	PASS

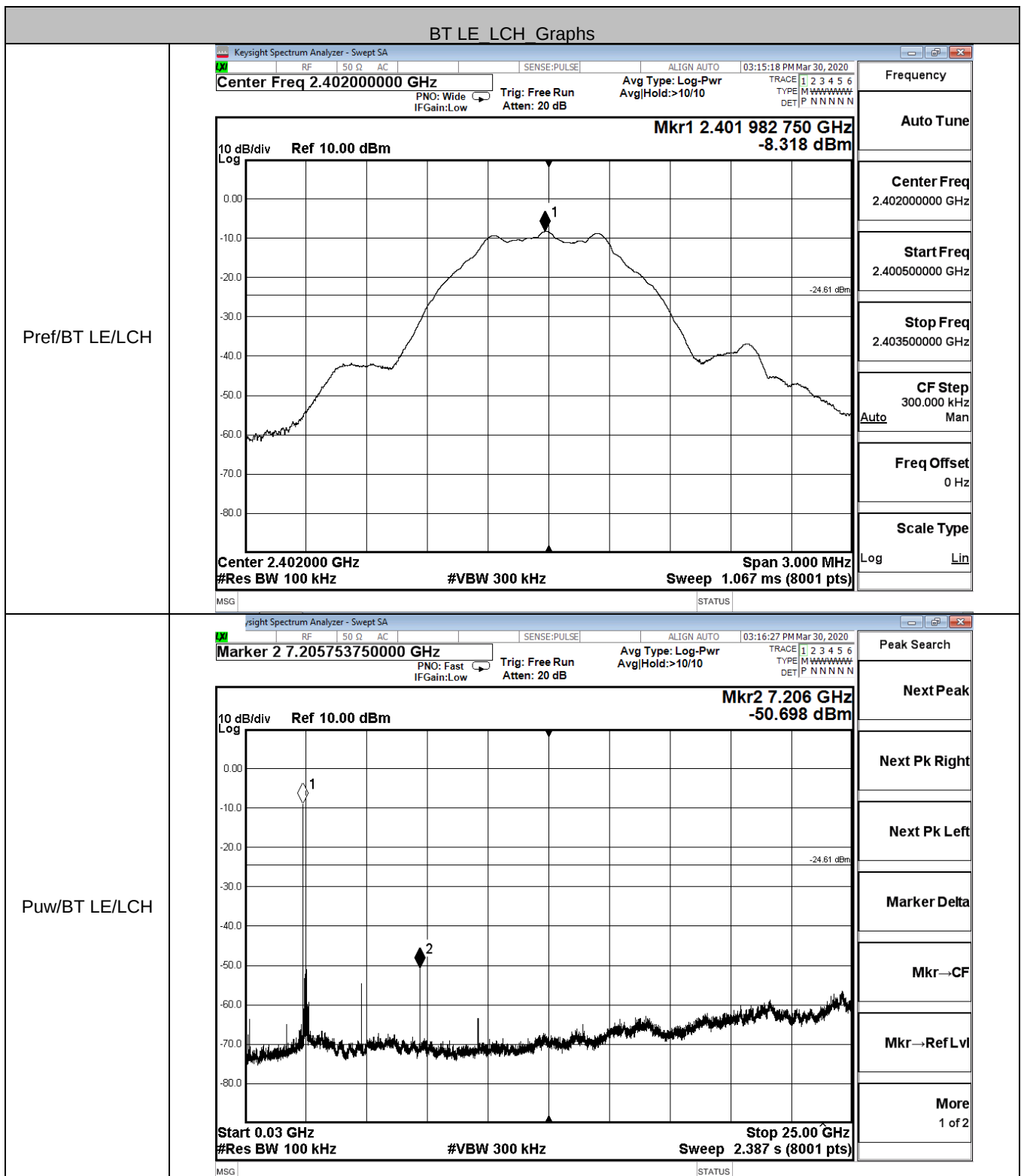


HCH



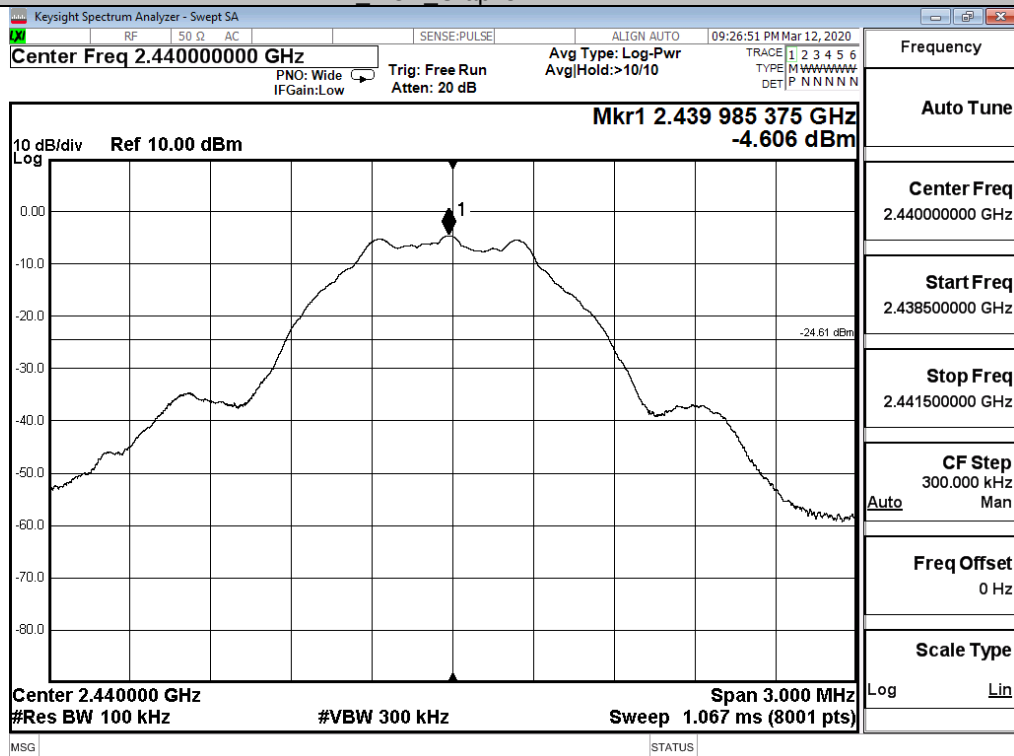
B.5 RF Conducted Spurious Emissions

Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-8.318	-50.698	-28.32	PASS
BT LE	MCH	-4.606	-49.335	-24.61	PASS
BT LE	HCH	-2.912	-44.749	-22.91	PASS

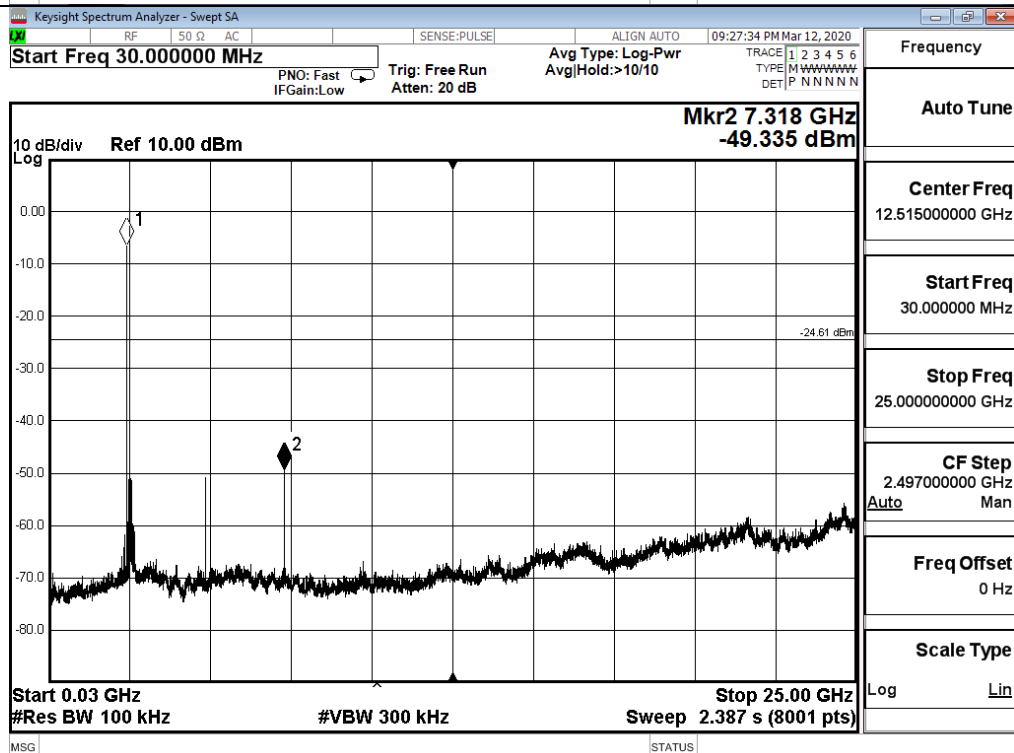


BT LE MCH Graphs

Pref/BT LE/MCH

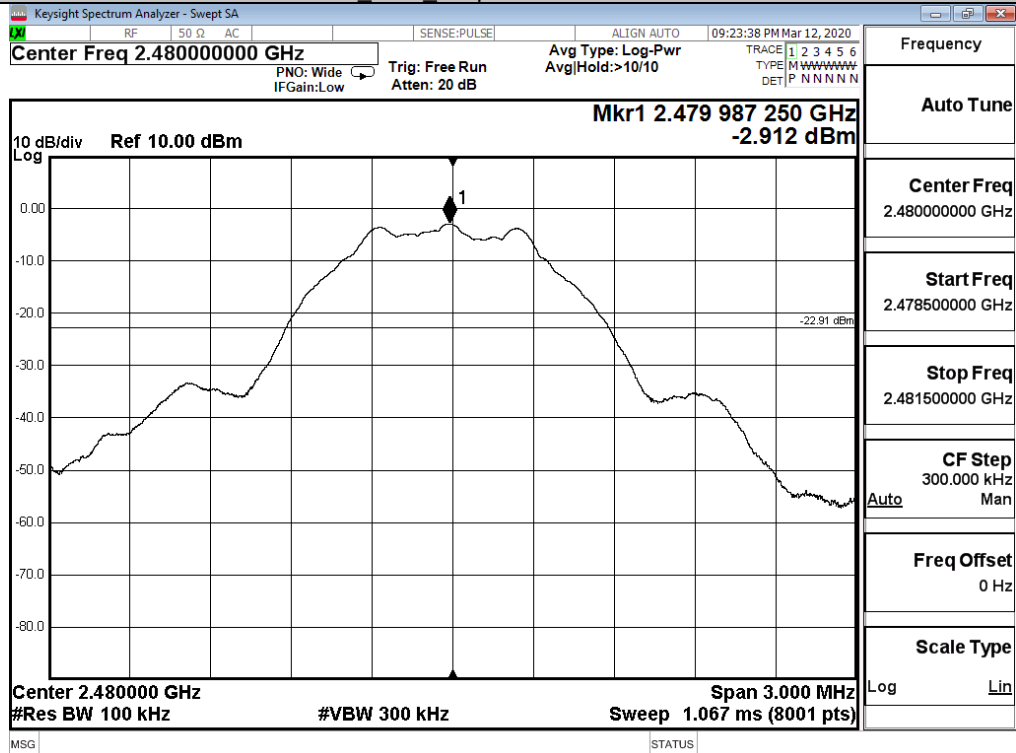


Puw/BT LE/MCH

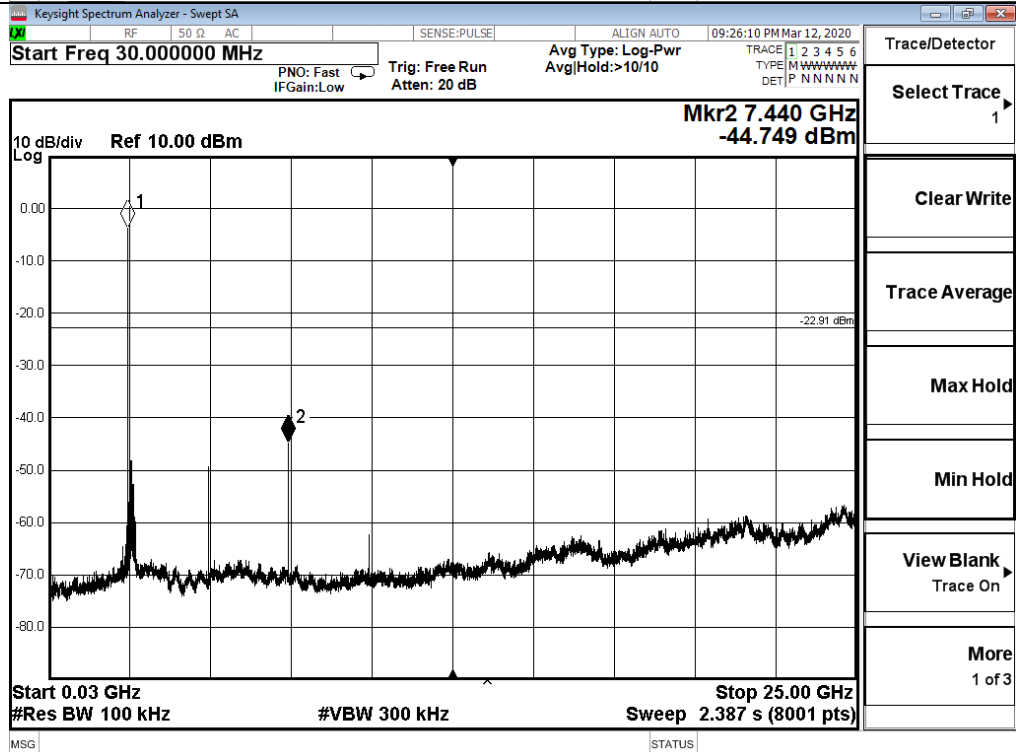


BT LE HCH Graphs

Pref/BT LE/HCH

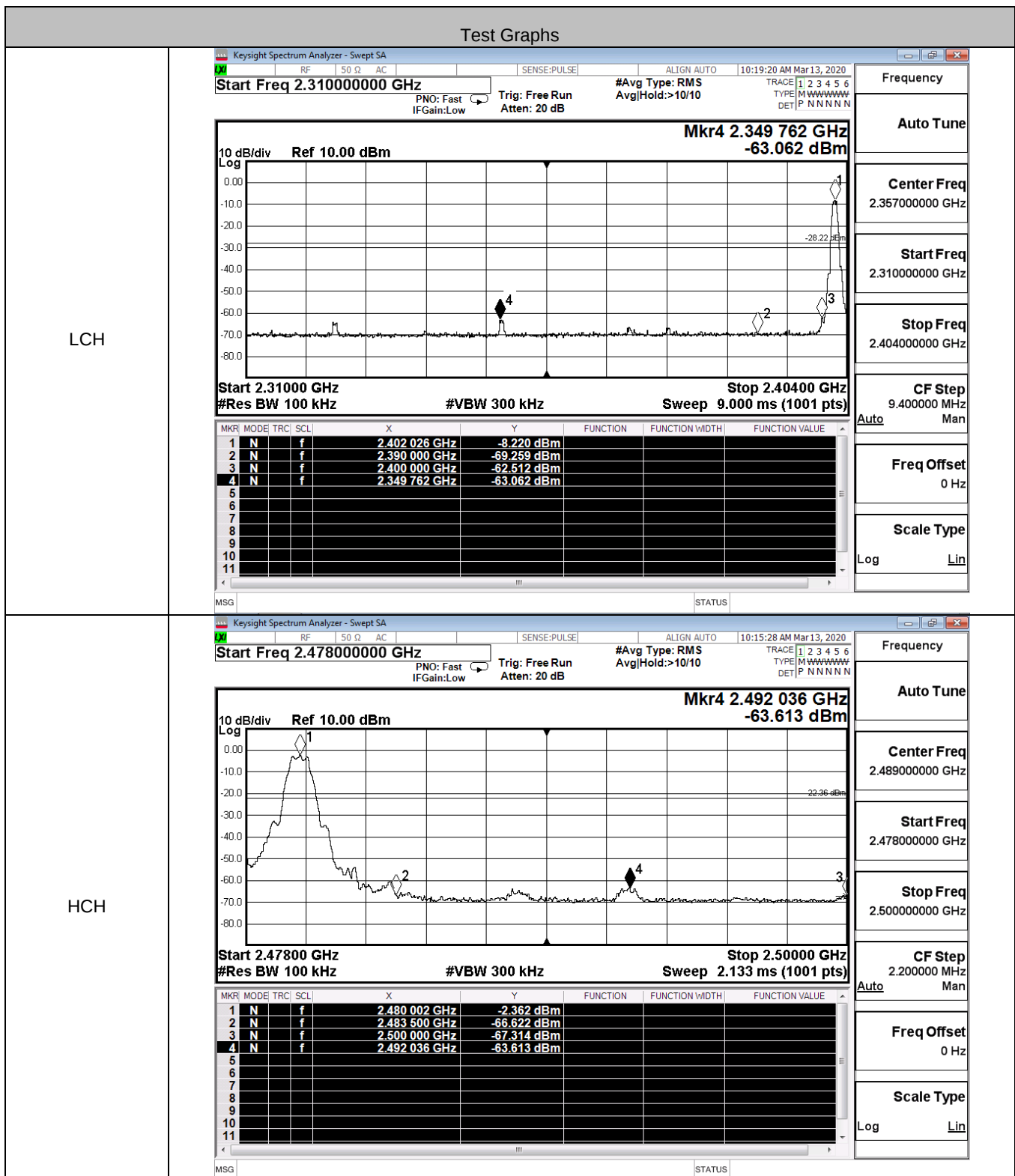


Puw/BT LE/HCH



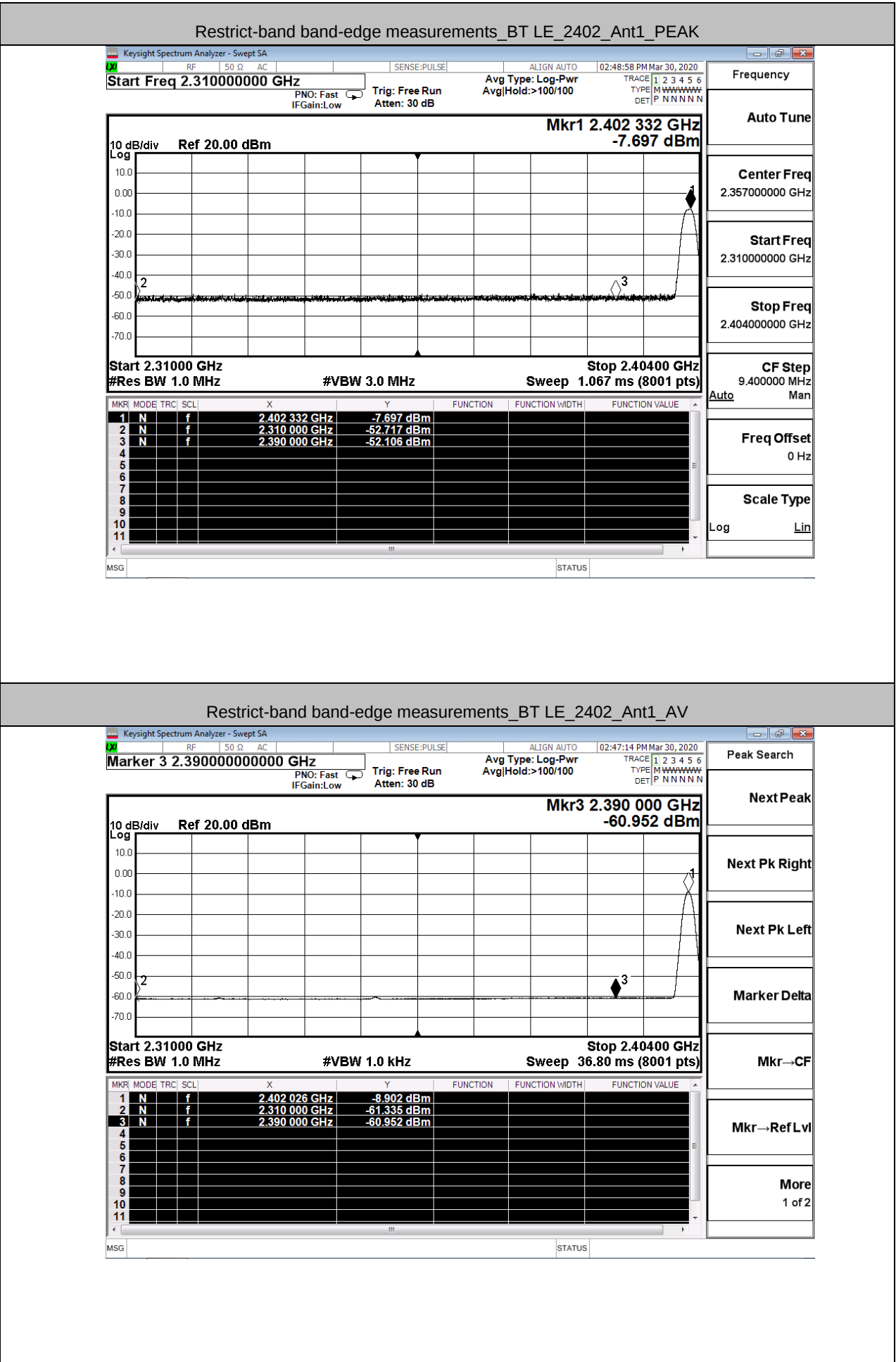
B.6 Band-edge for RF Conducted Emissions

Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-8.220	-63.062	-28.22	PASS
BT LE	HCH	-2.362	-63.613	-22.36	PASS

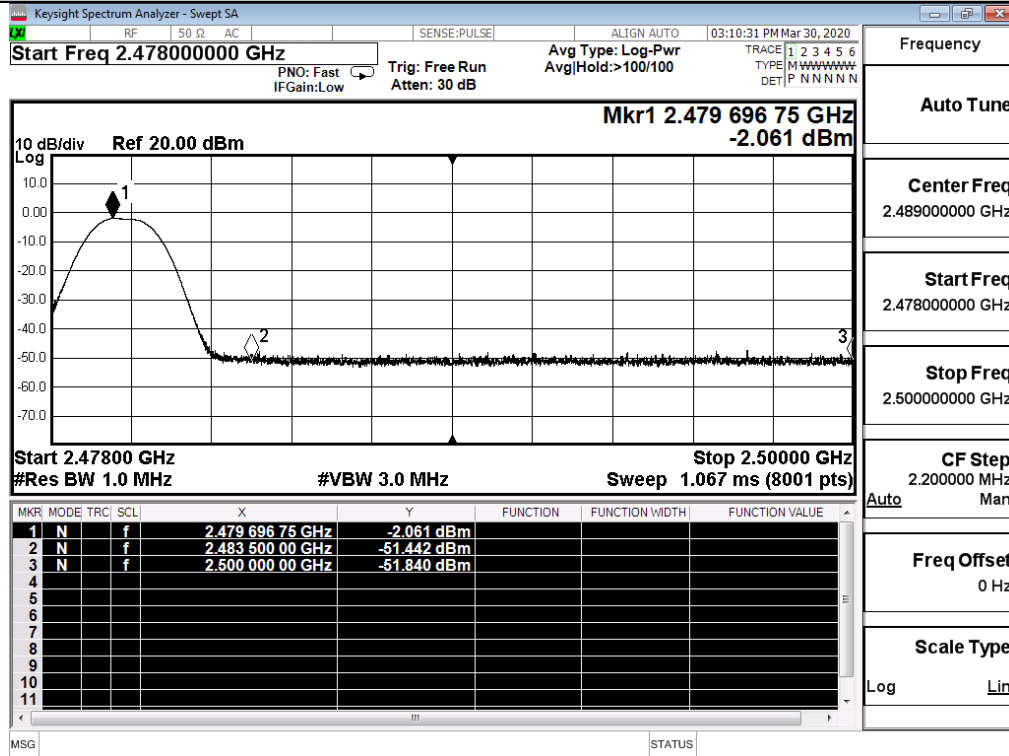


B.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdi
BT LE	2402	Ant1	2310.0	-52.717	2	0	44.54	PEAK	74	PASS
		Ant1	2310.0	-61.335	2	0	35.93	AV	54	PASS
		Ant1	2390.0	-52.106	2	0	45.15	PEAK	74	PASS
		Ant1	2390.0	-60.952	2	0	36.31	AV	54	PASS
	2480	Ant1	2483.5	-51.442	2	0	45.82	PEAK	74	PASS
		Ant1	2483.5	-60.092	2	0	37.17	AV	54	PASS
		Ant1	2500.0	-51.840	2	0	45.42	PEAK	74	PASS
		Ant1	2500.0	-60.814	2	0	36.45	AV	54	PASS



Restrict-band band-edge measurements_BT LE_2480_Ant1_PEAK



Restrict-band band-edge measurements_BT LE_2480_Ant1_AV

