

Appendix B

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

Product Name: Showerhead Speaker

Trade Mark: atomi

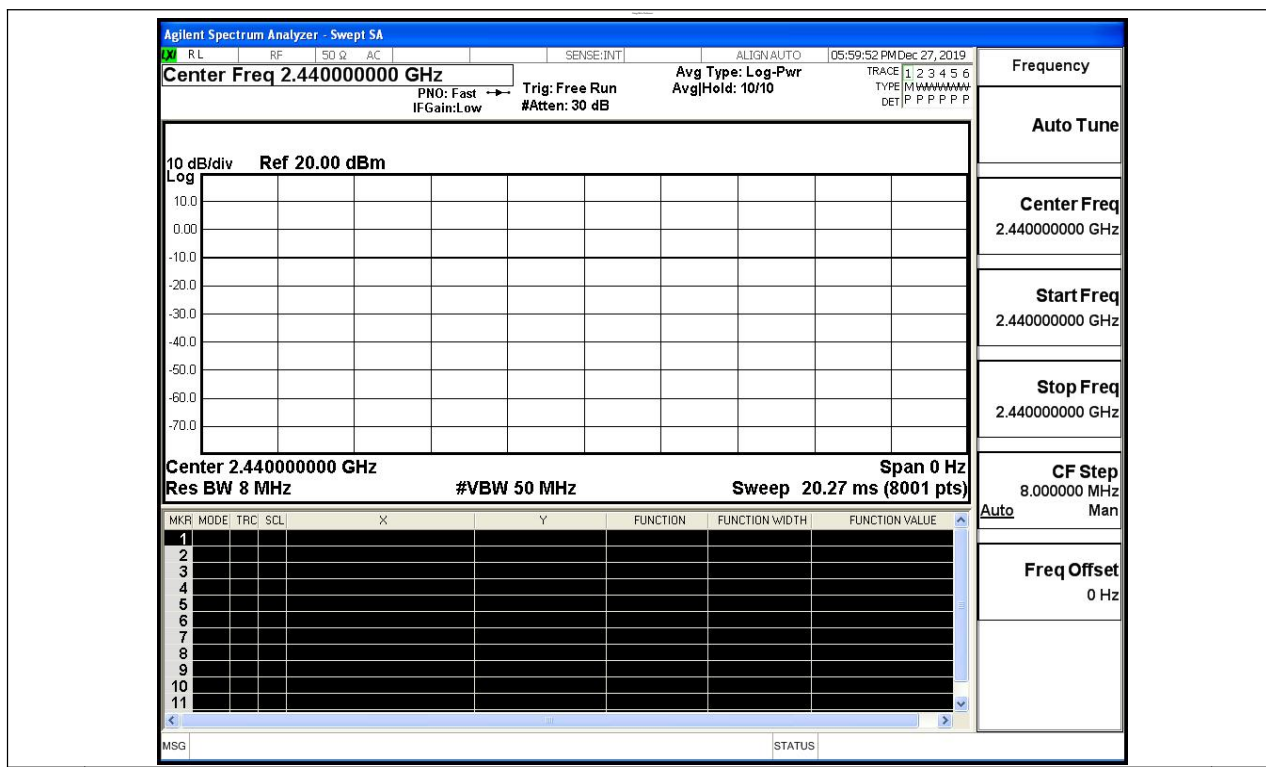
Test Model: AT1393

Environmental Conditions

Environmental Conditions	
Temperature:	24.3 ° C
Relative Humidity:	53.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Qu Xin
Supervised by:	Wang Chuang

B.1 Duty Cycle

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

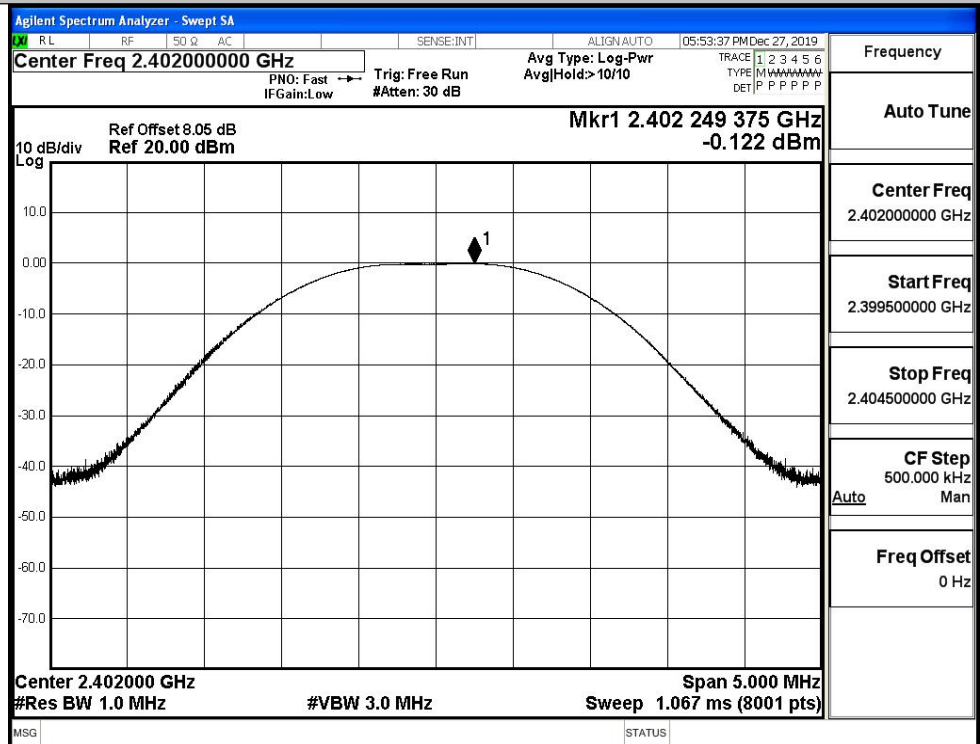


B.2 Maximum Conducted Peak Output Power

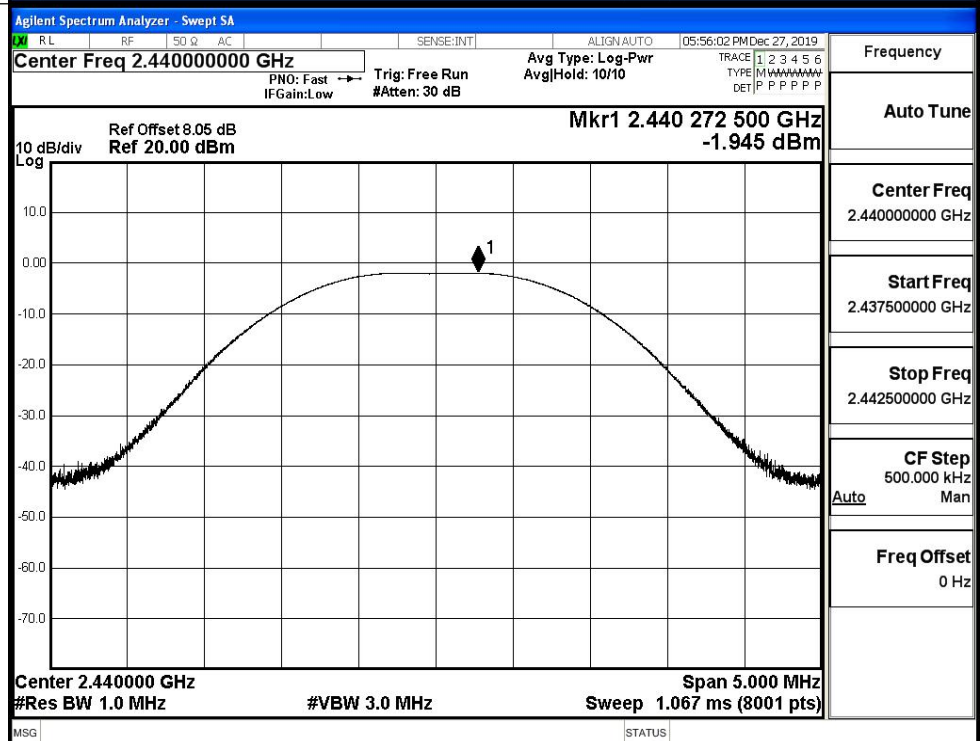
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.122	30	PASS
BT LE	MCH	-1.945	30	PASS
BT LE	HCH	-0.721	30	PASS

Test Graphs

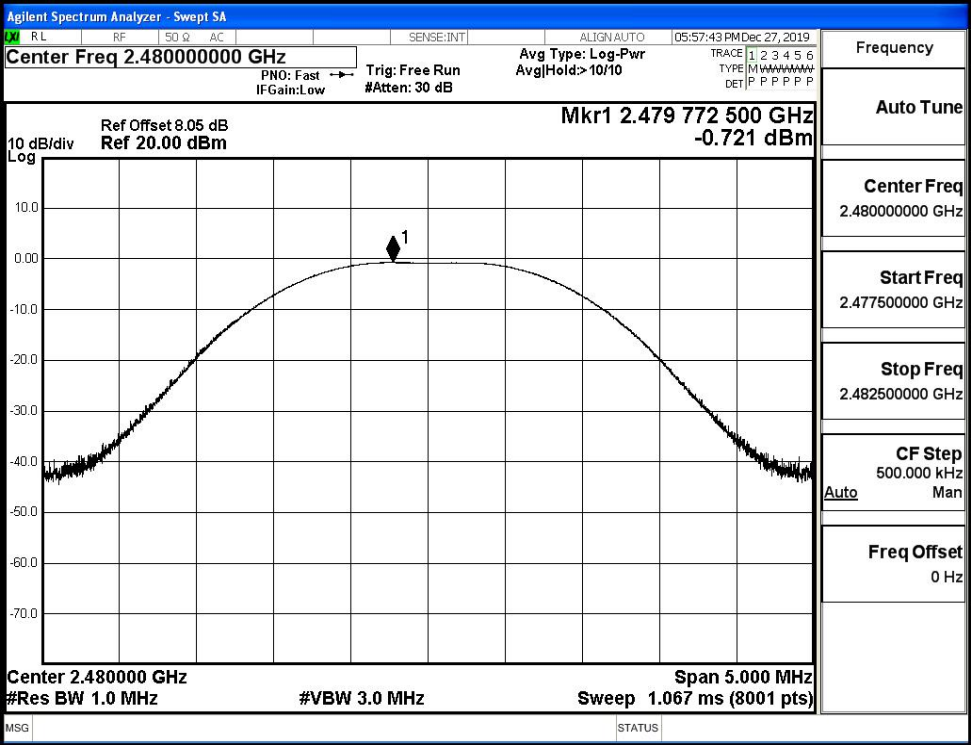
LCH



MCH



HCH

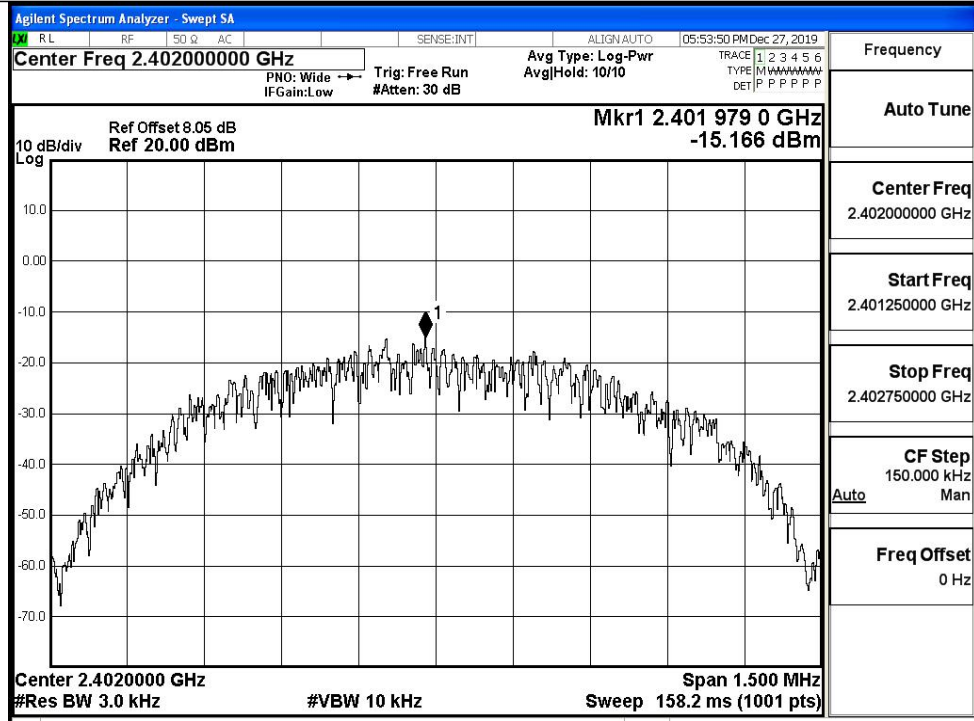


B.3 Maximum Power Spectral Density

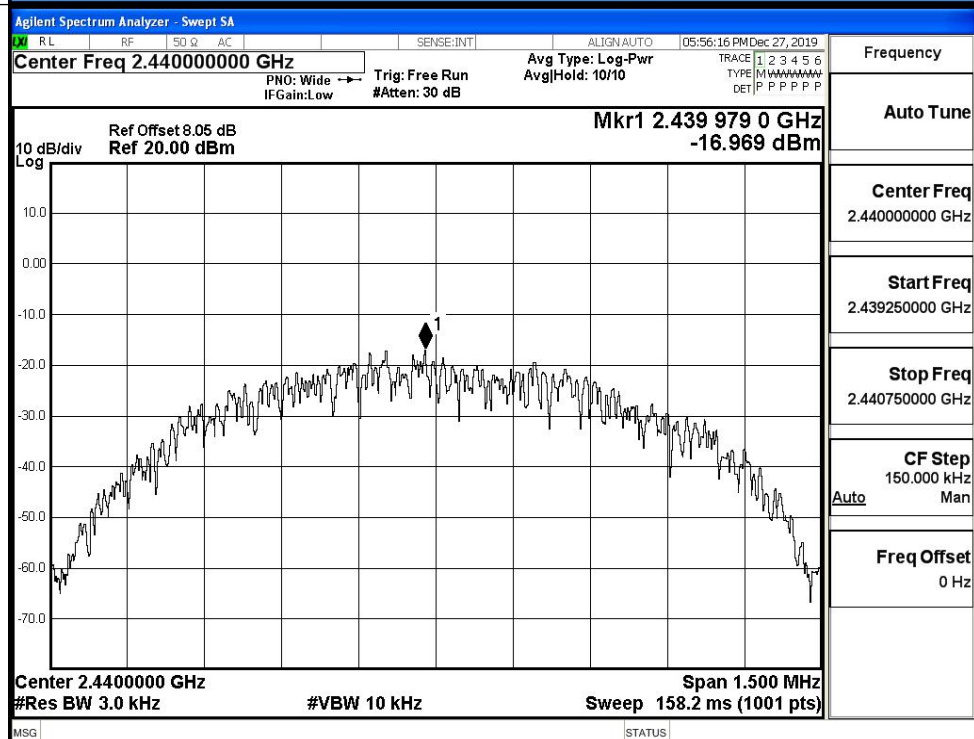
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
BT LE	LCH	-15.166	8	PASS
BT LE	MCH	-16.969	8	PASS
BT LE	HCH	-15.817	8	PASS

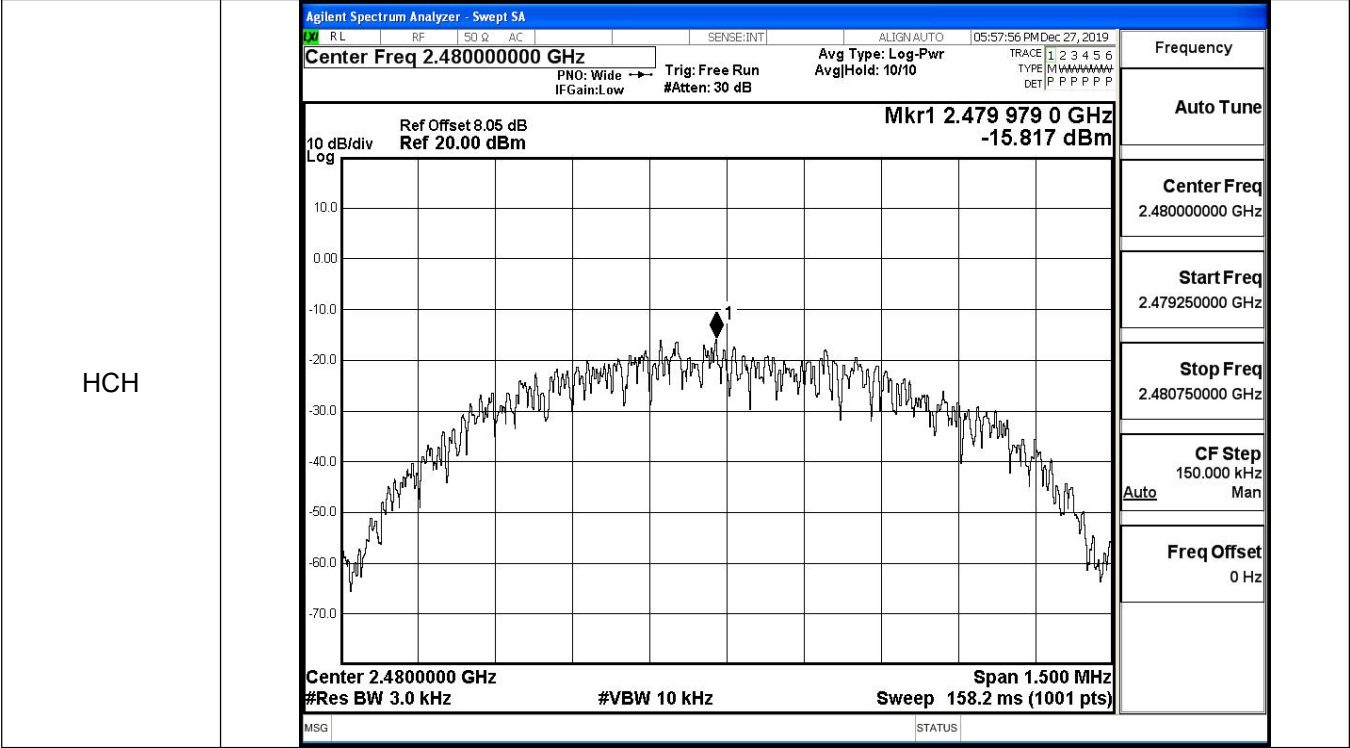
Test Graphs

LCH



MCH



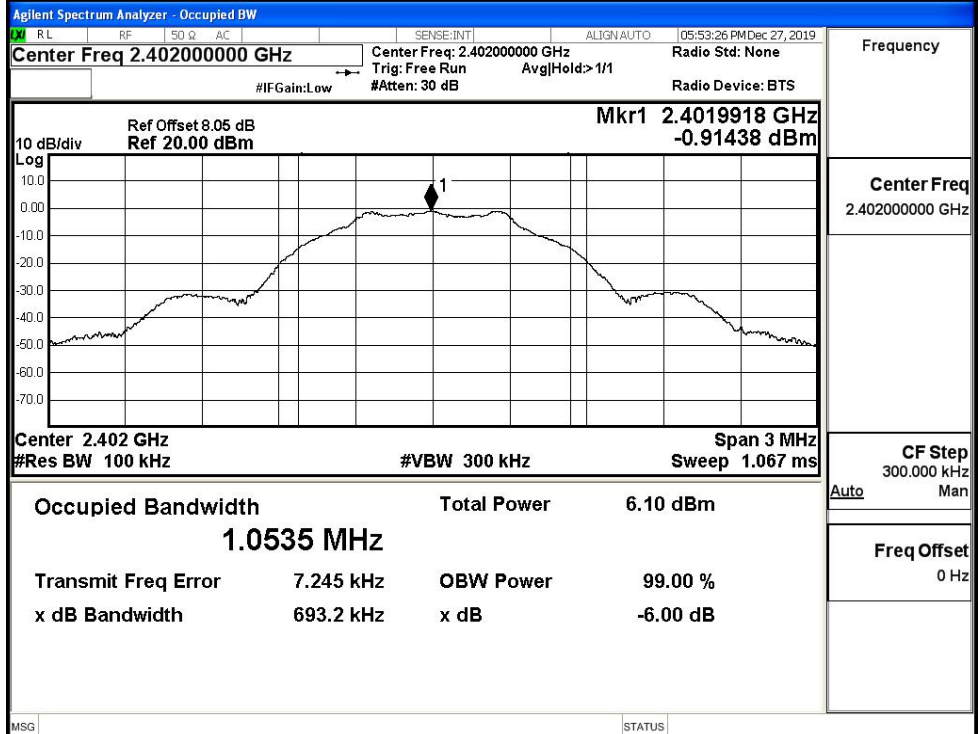


B.4 6dB Bandwidth

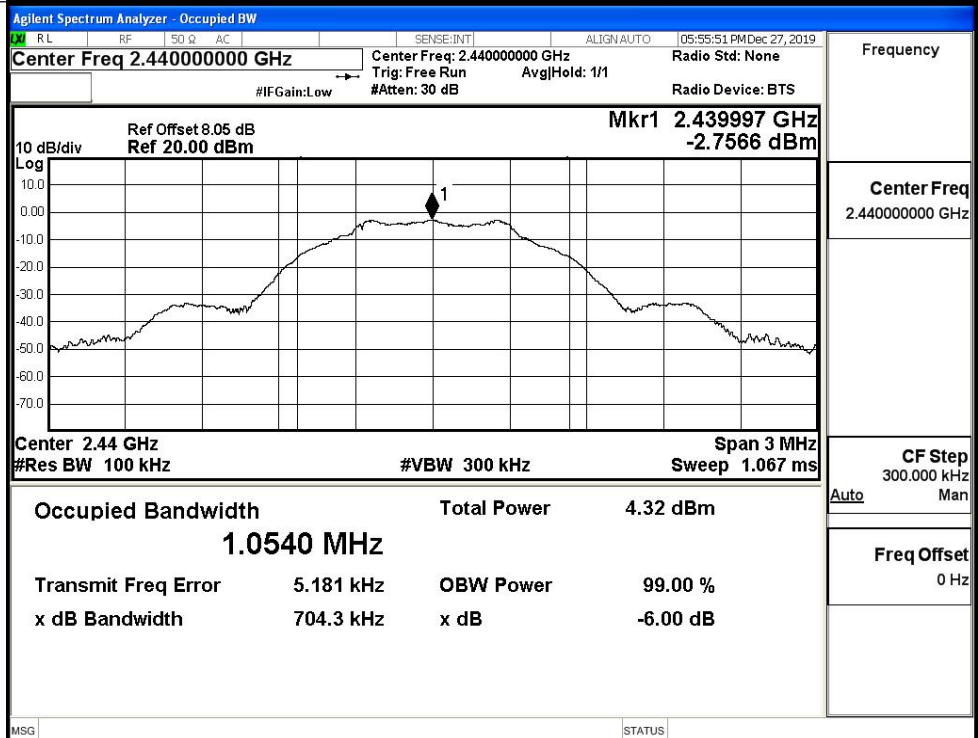
Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
BT LE	LCH	0.6932	≥ 0.5	PASS
BT LE	MCH	0.7043	≥ 0.5	PASS
BT LE	HCH	0.7014	≥ 0.5	PASS

Test Graphs

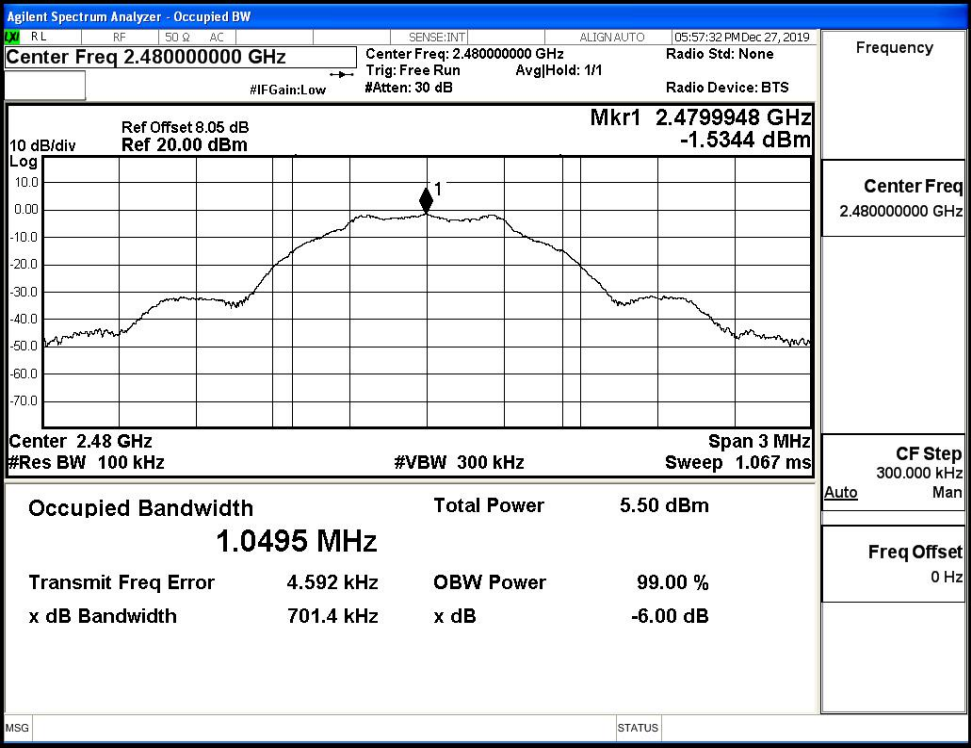
LCH



MCH



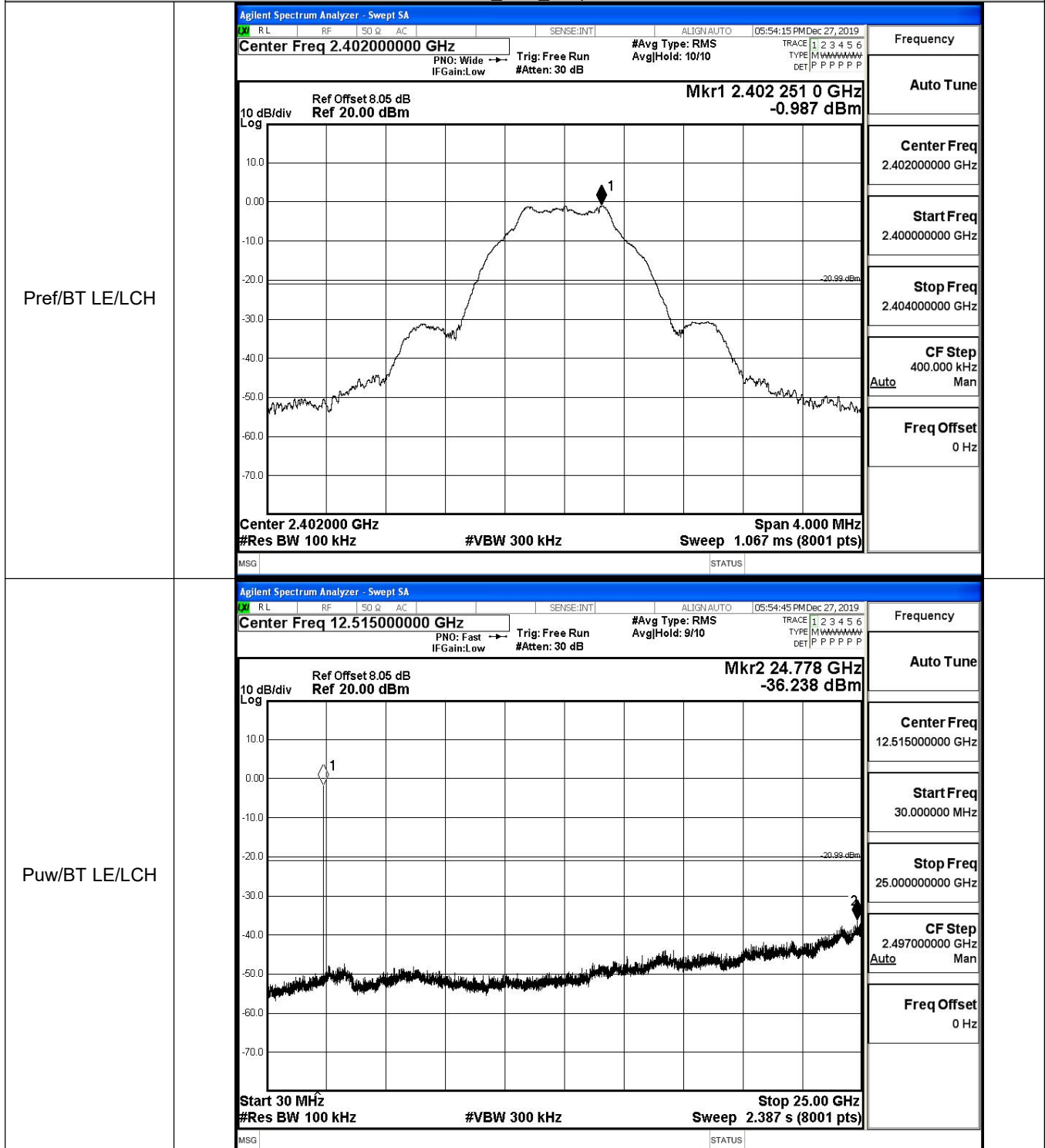
HCH



B.5 RF Conducted Spurious Emissions

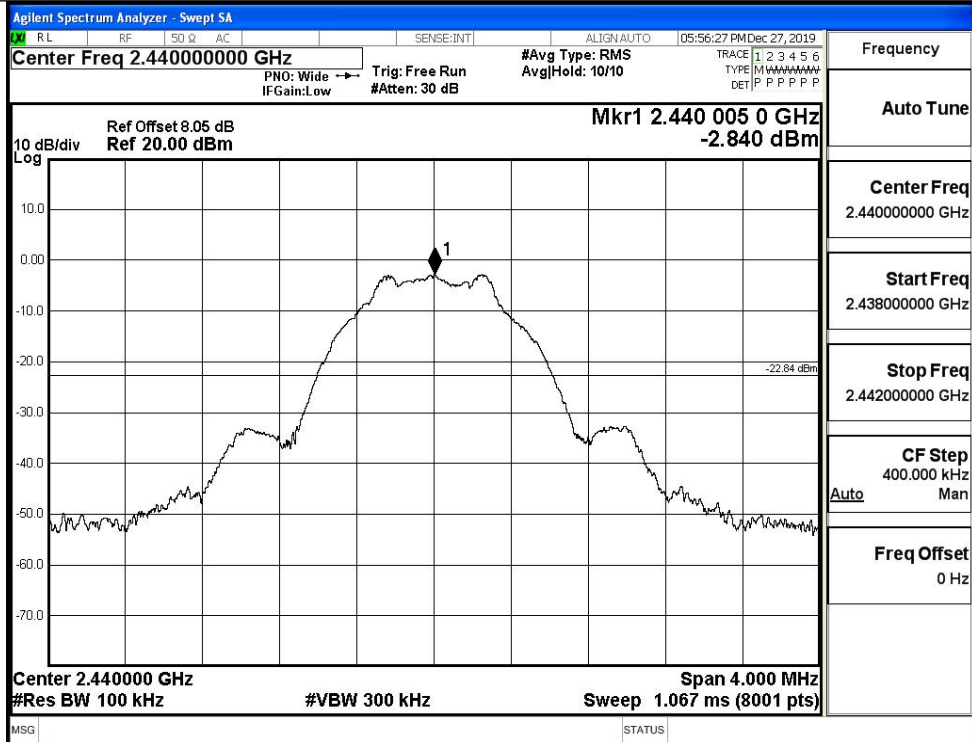
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.987	-36.238	-20.987	PASS
BT LE	MCH	-2.84	-37.277	-22.840	PASS
BT LE	HCH	-1.529	-37.152	-21.529	PASS

BT LE_LCH_Graphs

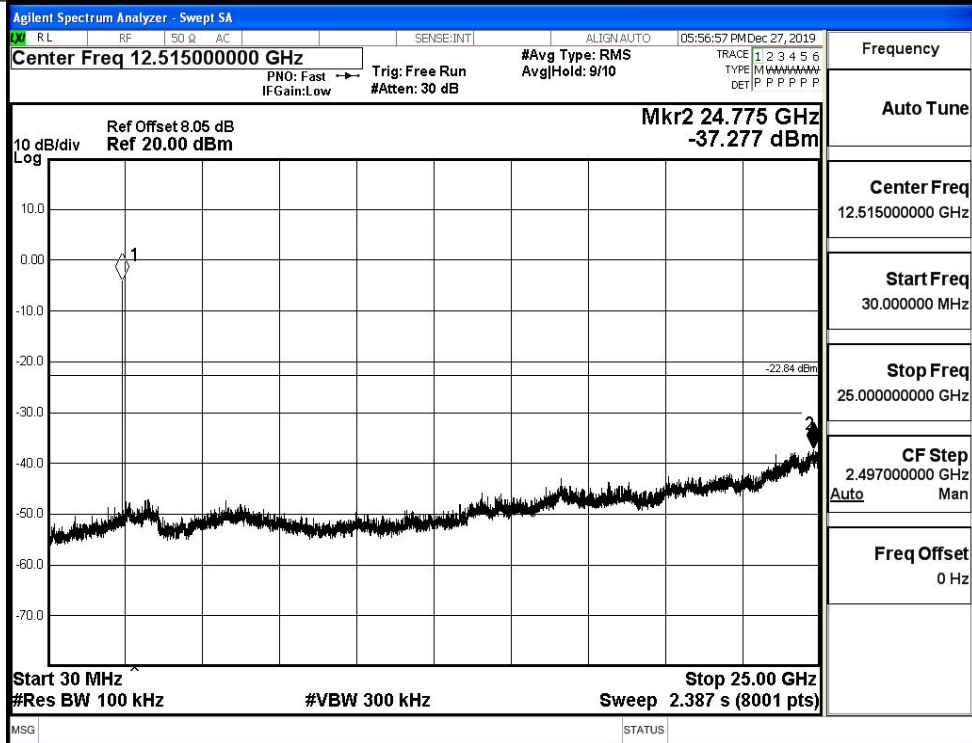


BT LE MCH Graphs

Pref/BT LE/MCH

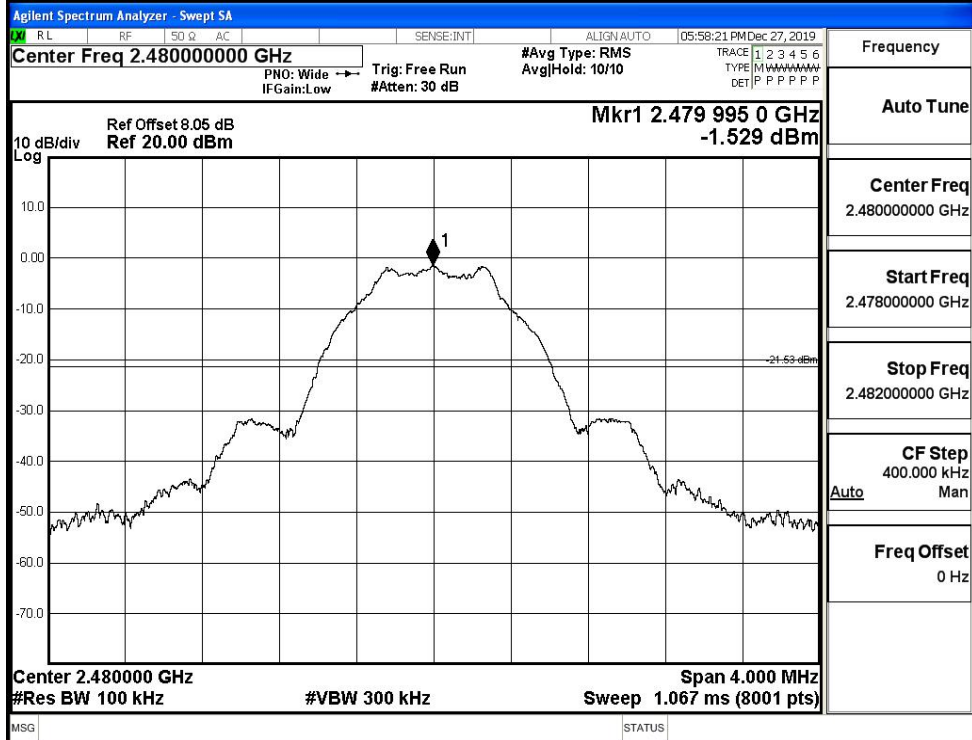


Puw/BT LE/MCH

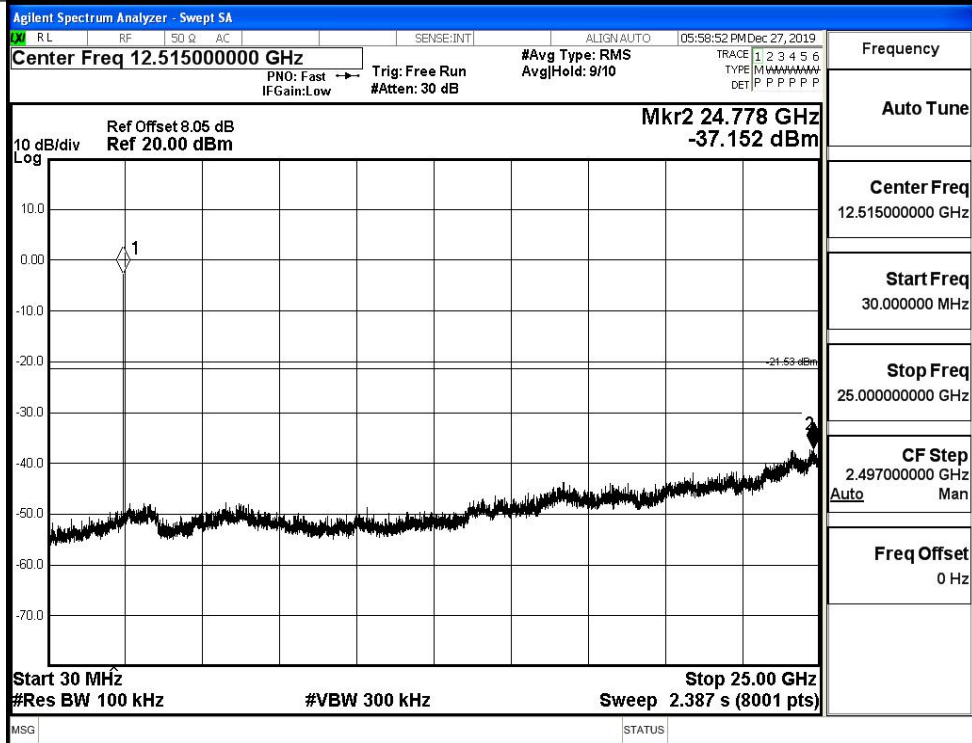


BT LE HCH Graphs

Pref/BT LE/HCH



Puw/BT LE/HCH

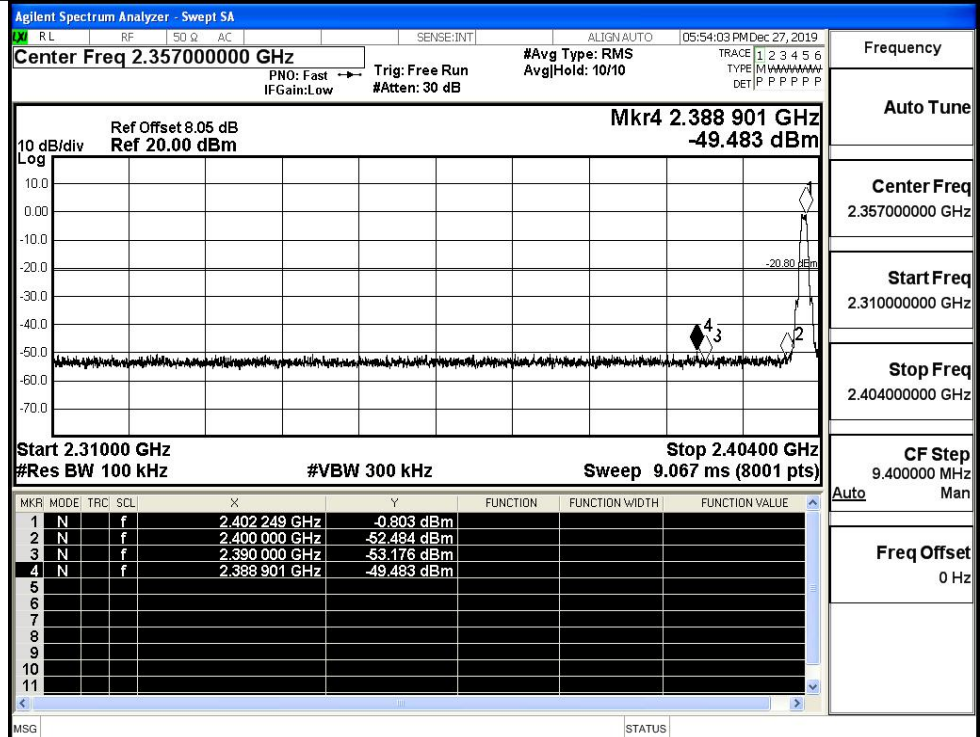


B.6 Band-edge for RF Conducted Emissions

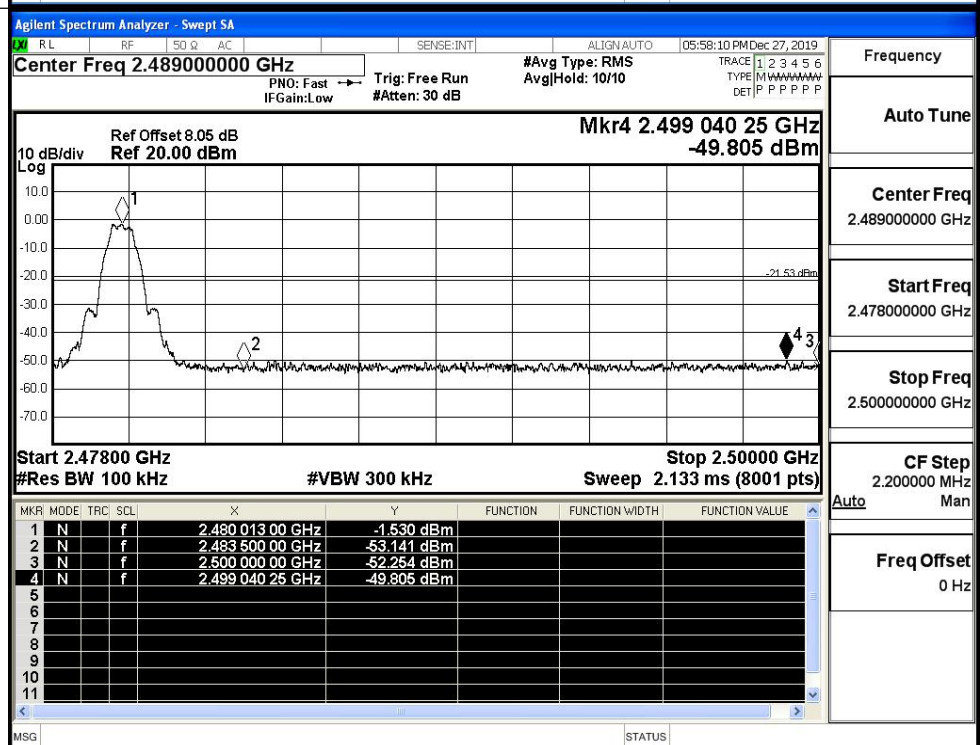
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
BT LE	LCH	-0.803	-49.483	-20.8	PASS
BT LE	HCH	-1.530	-49.805	-21.53	PASS

Test Graphs

LCH



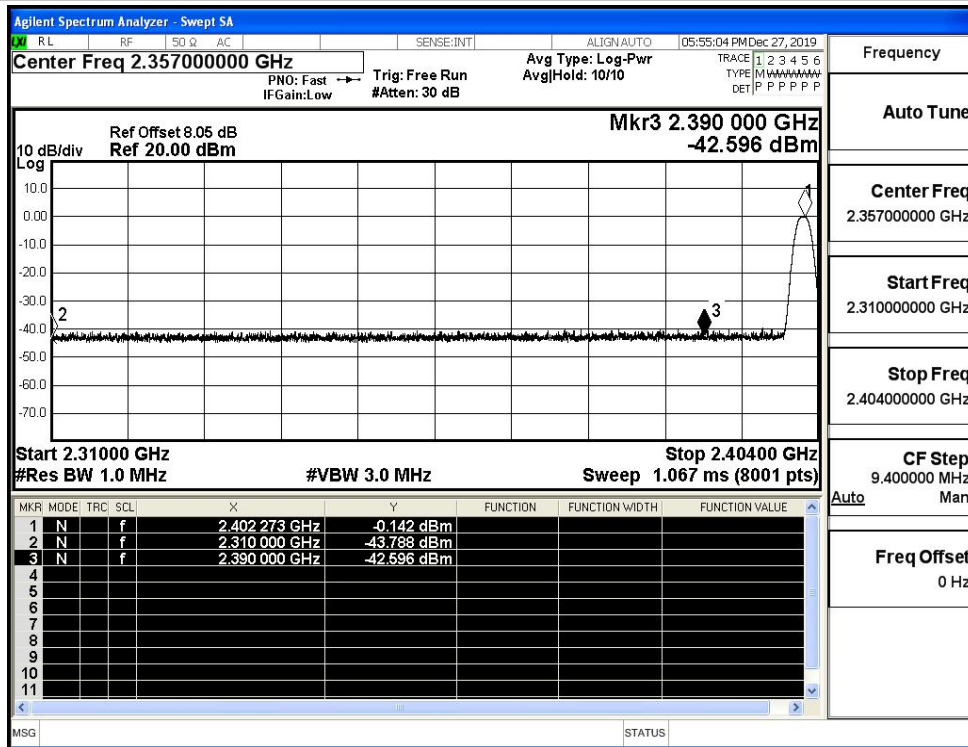
HCH



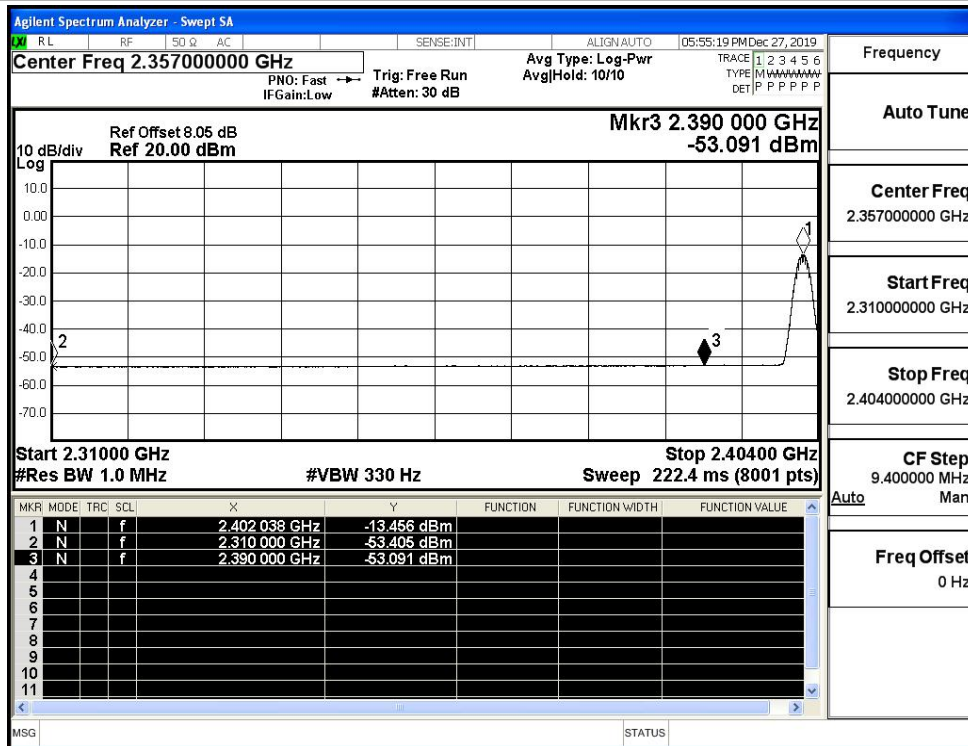
B.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdi
BT LE	2402	Ant1	2310.0	-43.79	2.0	0	53.47	PEAK	74	PASS
		Ant1	2310.0	-53.41	2.0	0	43.85	AV	54	PASS
		Ant1	2390.0	-42.60	2.0	0	54.66	PEAK	74	PASS
		Ant1	2390.0	-53.09	2.0	0	44.17	AV	54	PASS
	2480	Ant1	2483.5	-41.66	2.0	0	55.60	PEAK	74	PASS
		Ant1	2483.5	-52.61	2.0	0	44.65	AV	54	PASS
		Ant1	2500.0	-42.88	2.0	0	54.38	PEAK	74	PASS
		Ant1	2500.0	-52.36	2.0	0	44.89	AV	54	PASS

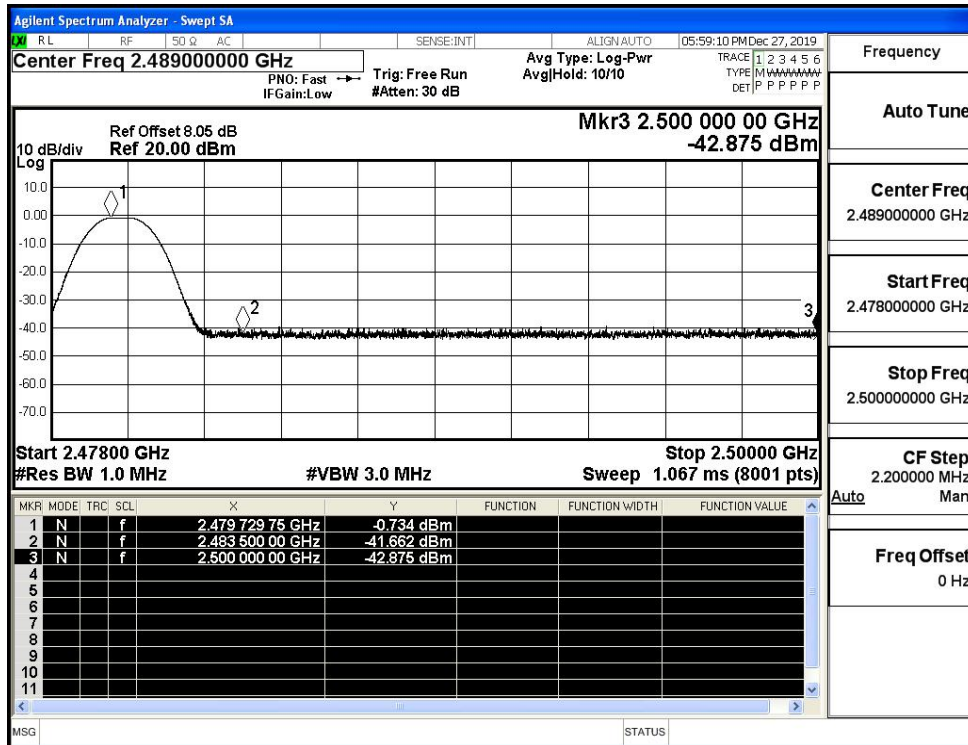
Restrict-band band-edge measurements_BT LE_2402_Ant1_PEAK



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

