

Appendix A

RF Test Data for Zigbee (Conducted Measurement)

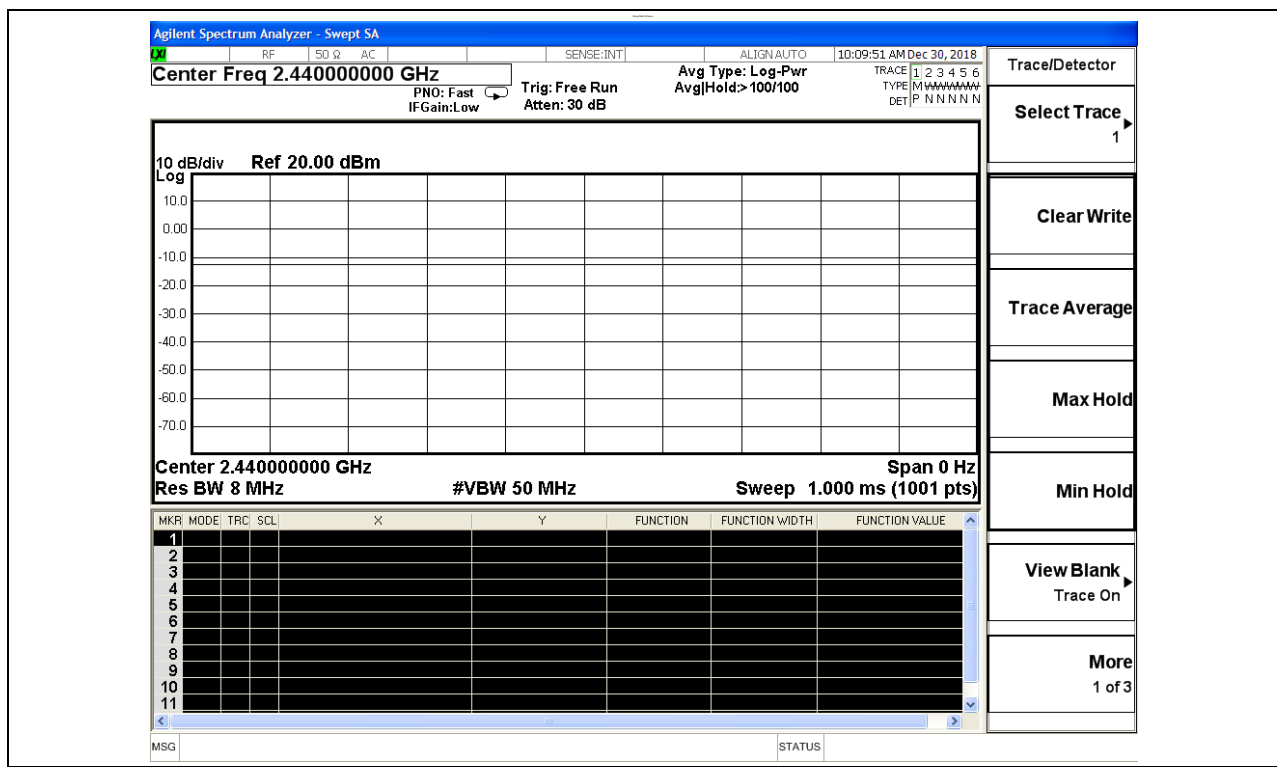
Product Name: Thermostat
Trade Mark: Smart Forced Air
Test Model: Thermostat

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	54.2%
ATM Pressure:	100.0 kPa
Test Engineer:	David Luo
Supervised by:	Jayden.Zhuo

A.1 Duty Cycle

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

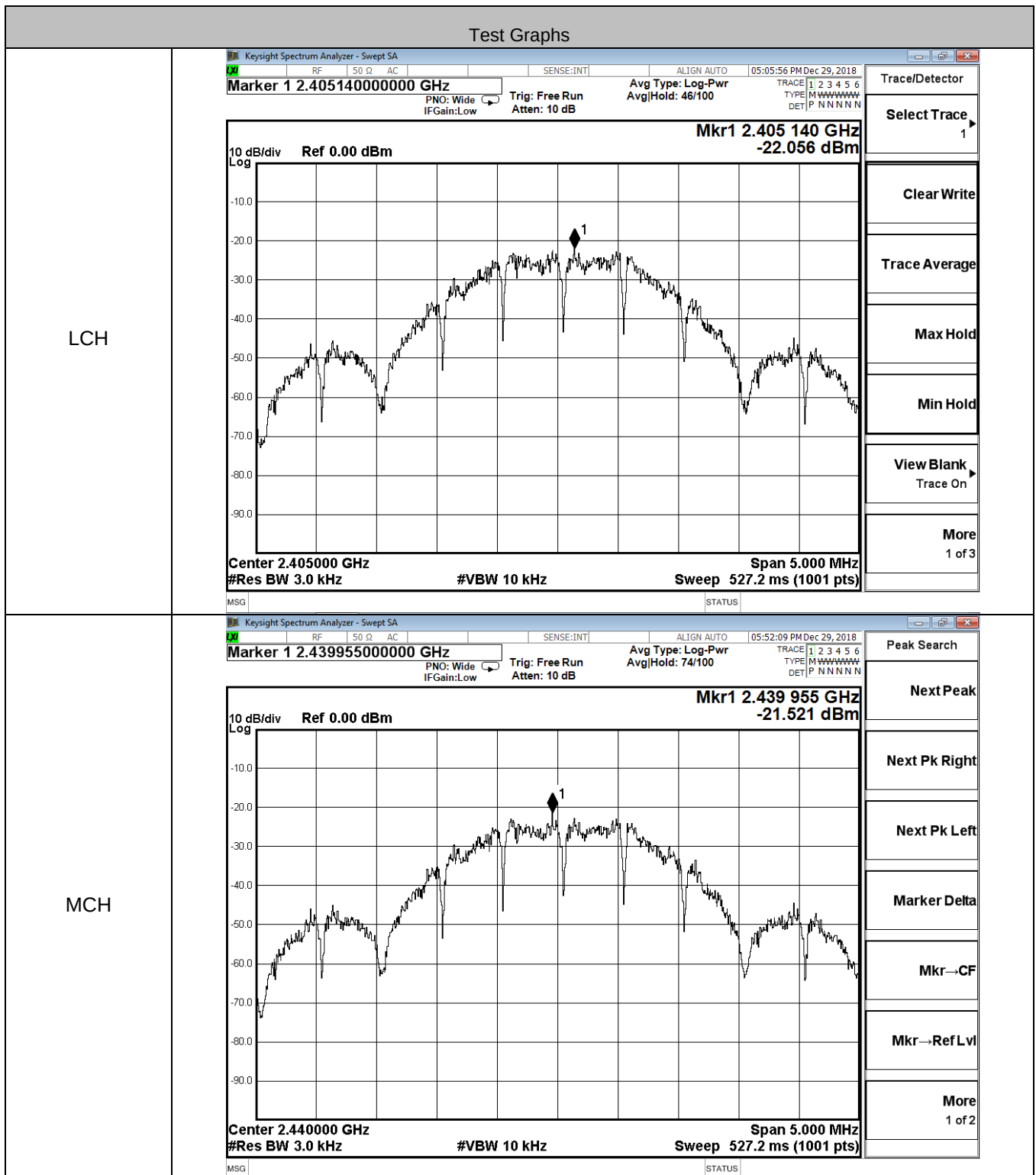


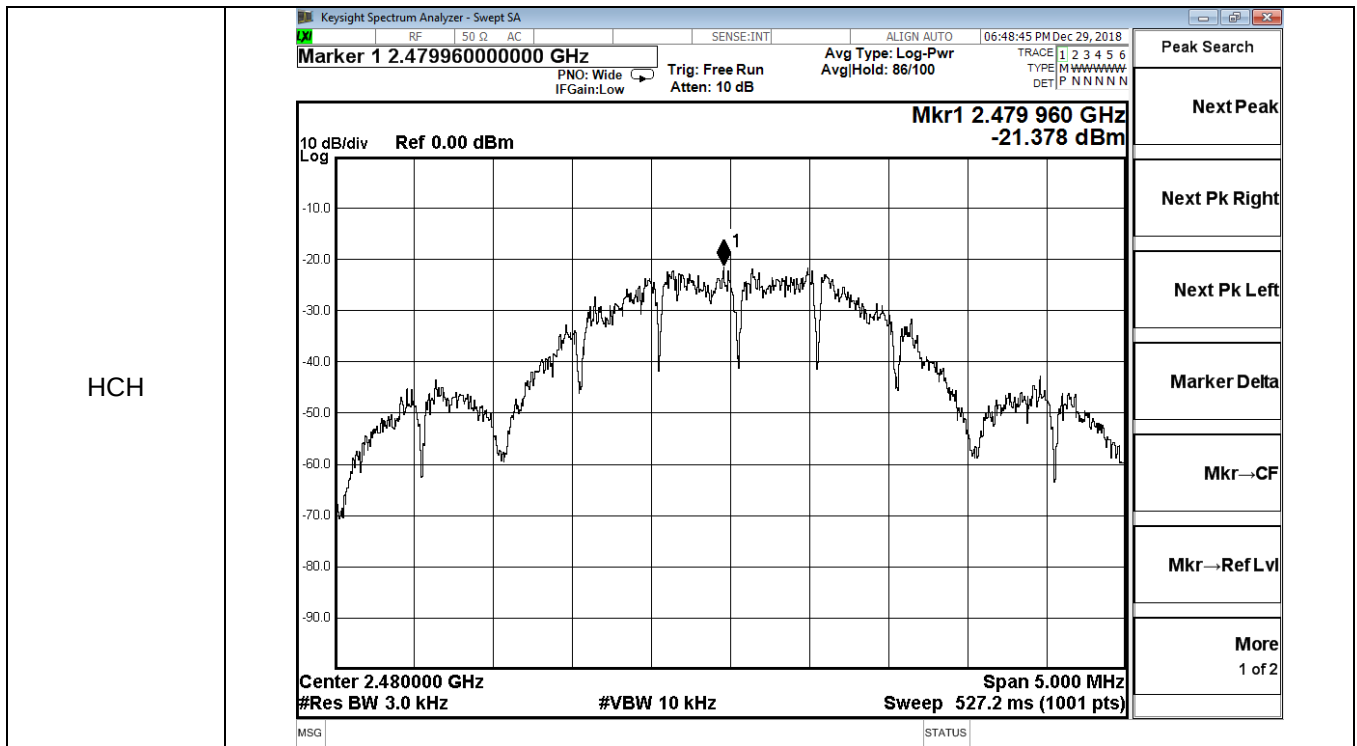
A.2 Maximum Conducted Peak Output Power

Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
ZigBee	LCH	-5.492	30	PASS
ZigBee	MCH	-5.153	30	PASS
ZigBee	HCH	-5.038	30	PASS

A.3 Maximum Power Spectral Density

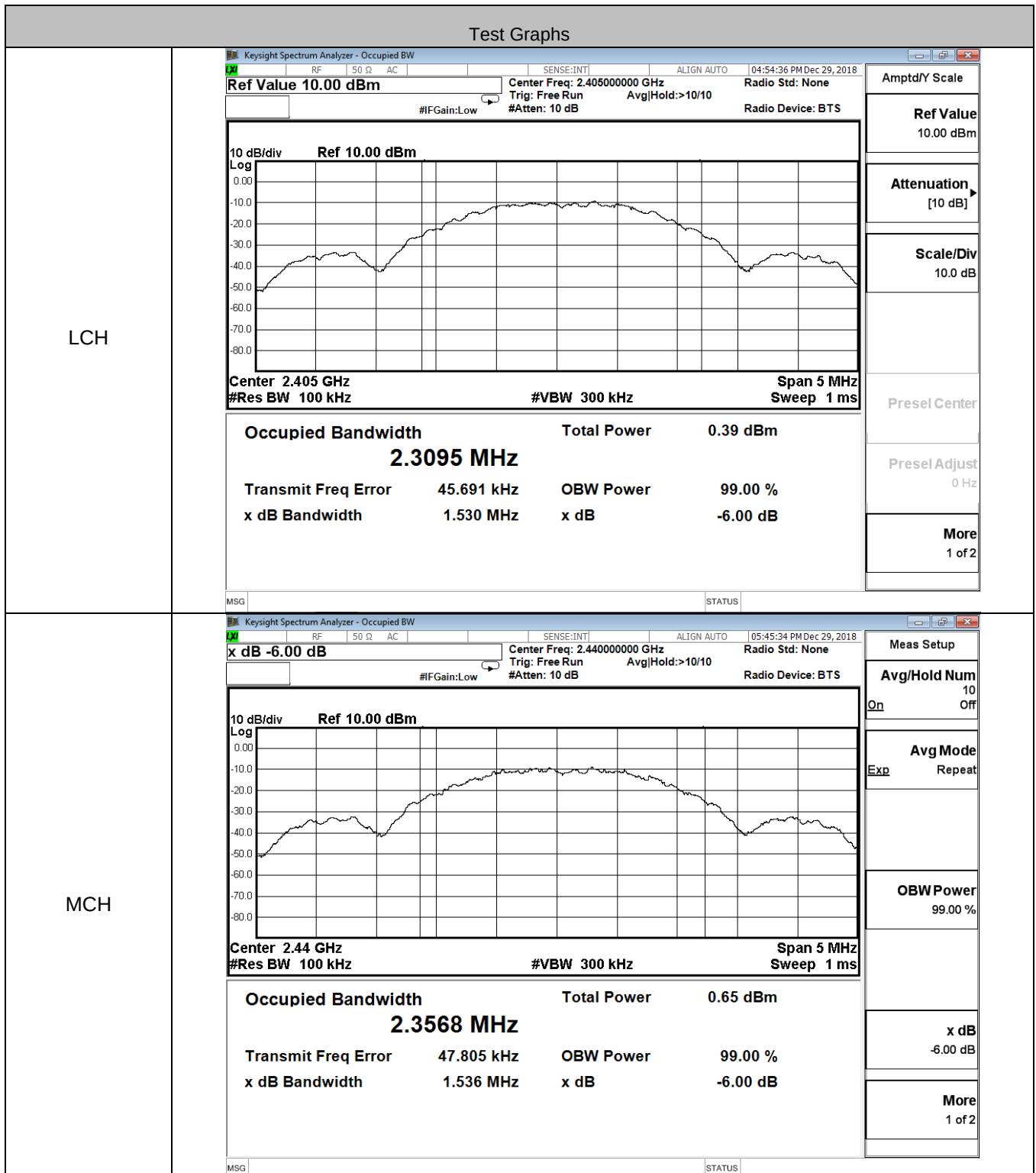
Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
ZigBee	LCH	-22.056	8	PASS
ZigBee	MCH	-21.521	8	PASS
ZigBee	HCH	-21.378	8	PASS



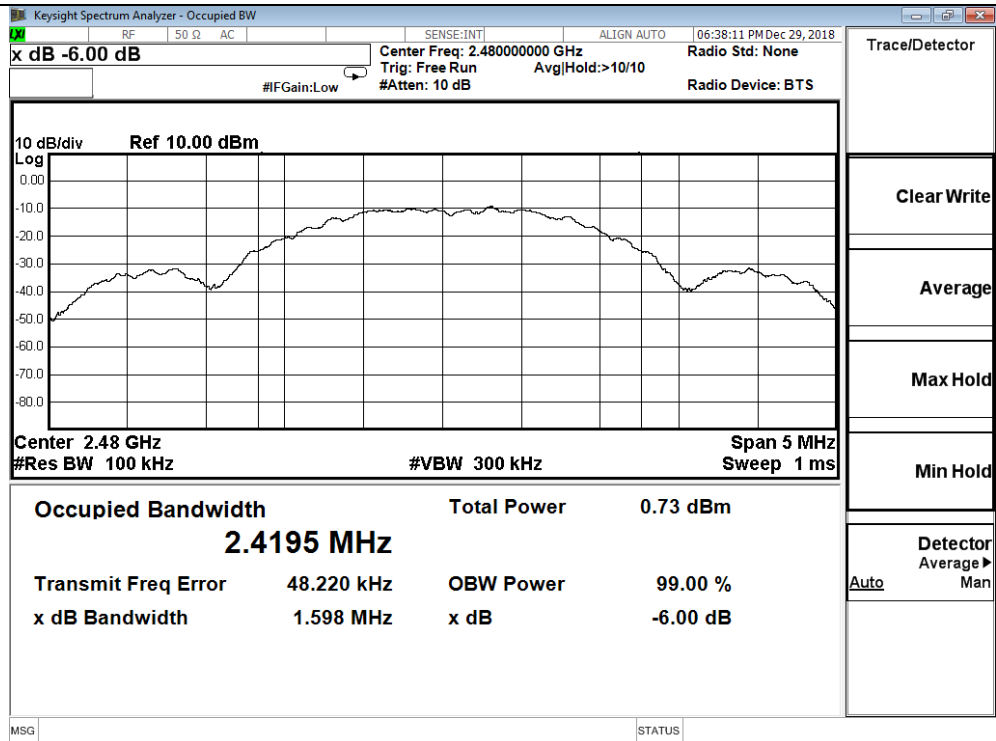


A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
ZigBee	LCH	1.530	≥0.5	PASS
ZigBee	MCH	1.536	≥0.5	PASS
ZigBee	HCH	1.598	≥0.5	PASS



HCH

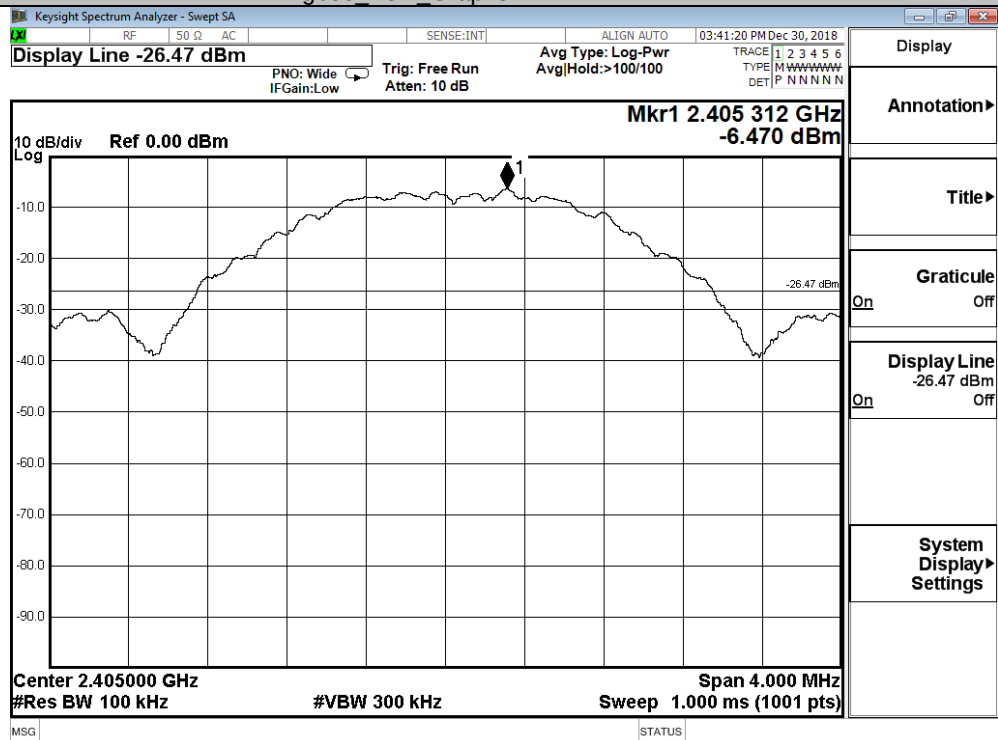


A.5 RF Conducted Spurious Emissions

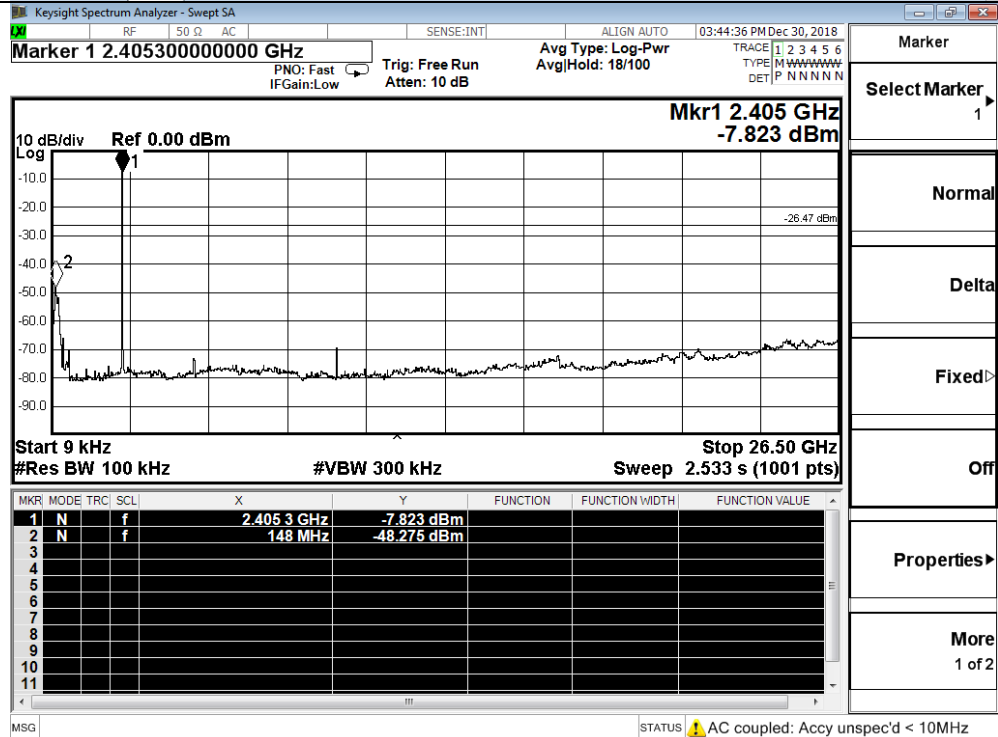
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
ZigBee	LCH	-6.470	-49.841	-26.470	PASS
ZigBee	MCH	-6.577	-49.289	-26.577	PASS
ZigBee	HCH	-6.763	-51.434	-26.763	PASS

Zigbee_LCH_Graphs

Pref/Zigbee/LCH

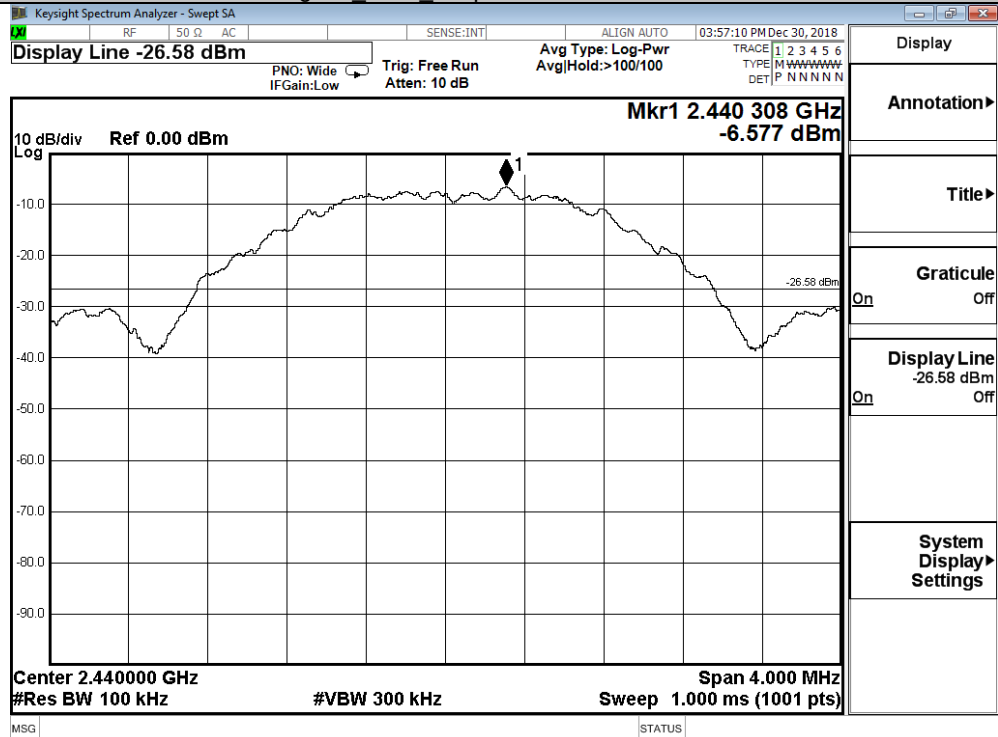


Puw/Zigbee/LCH

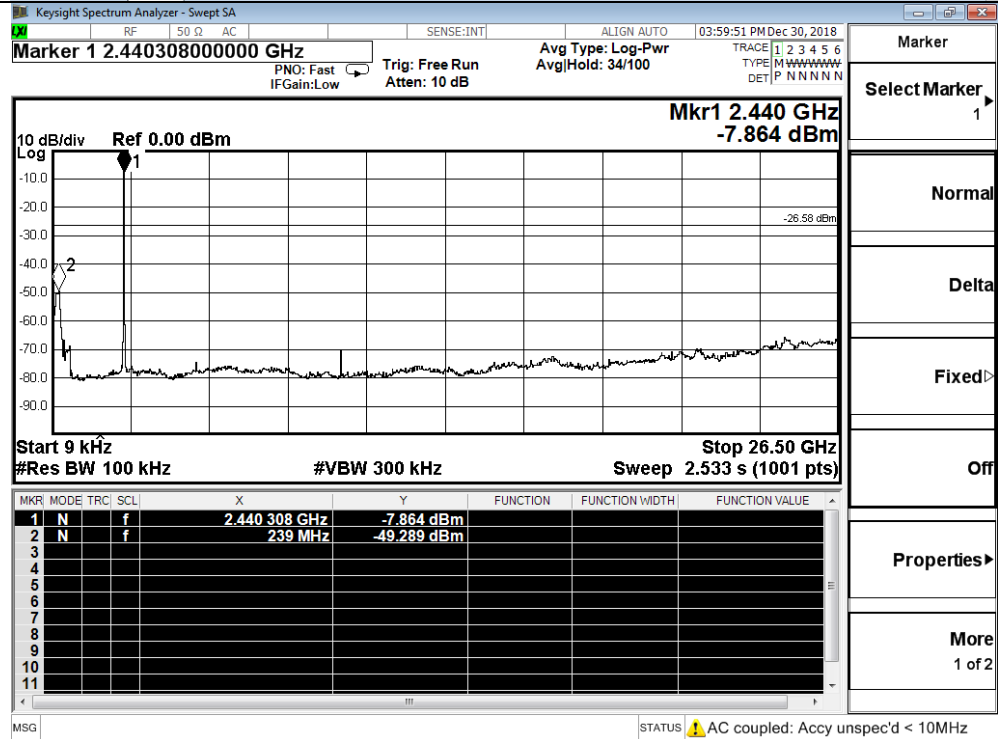


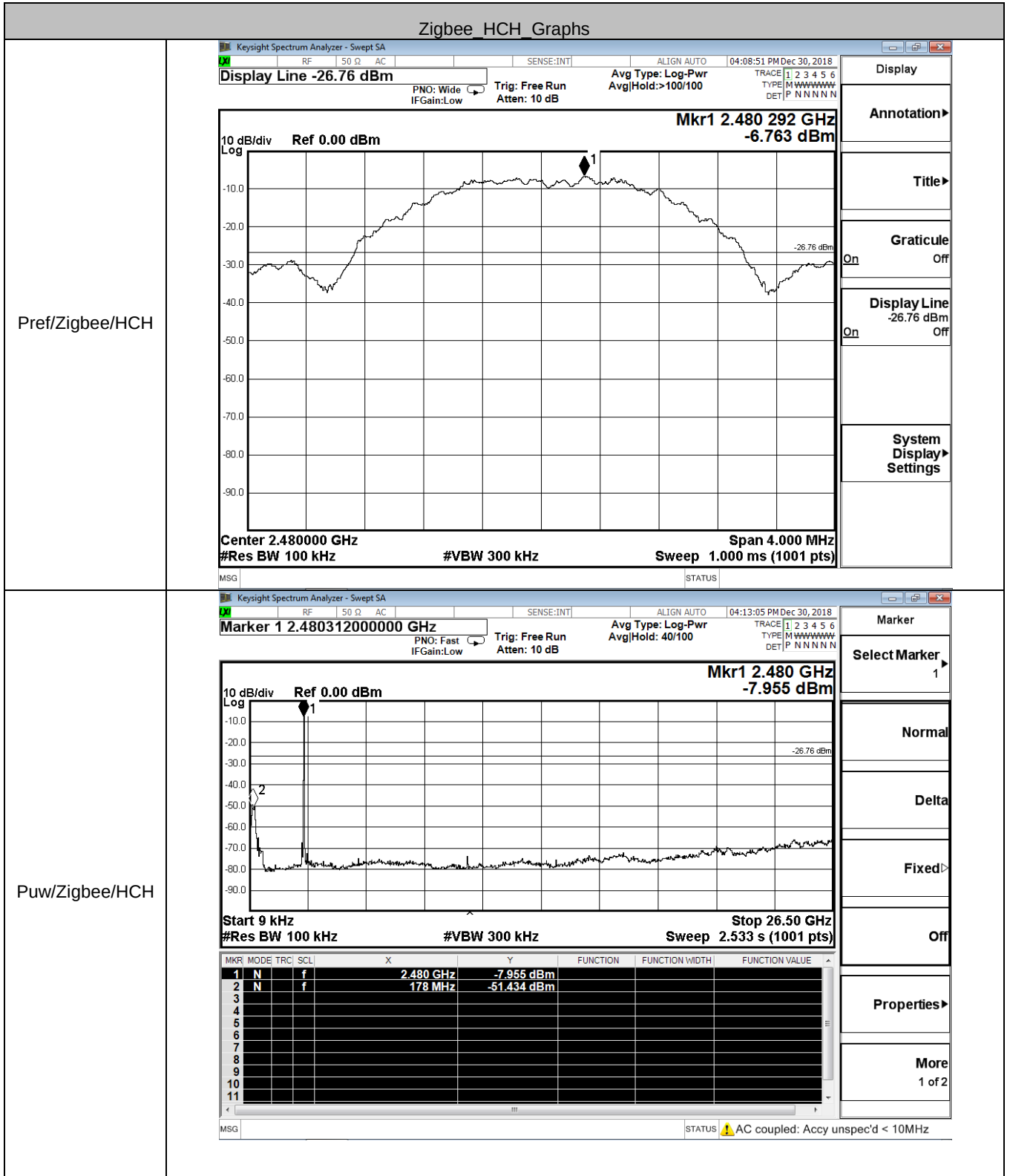
Zigbee MCH Graphs

Pref/Zigbee/MCH



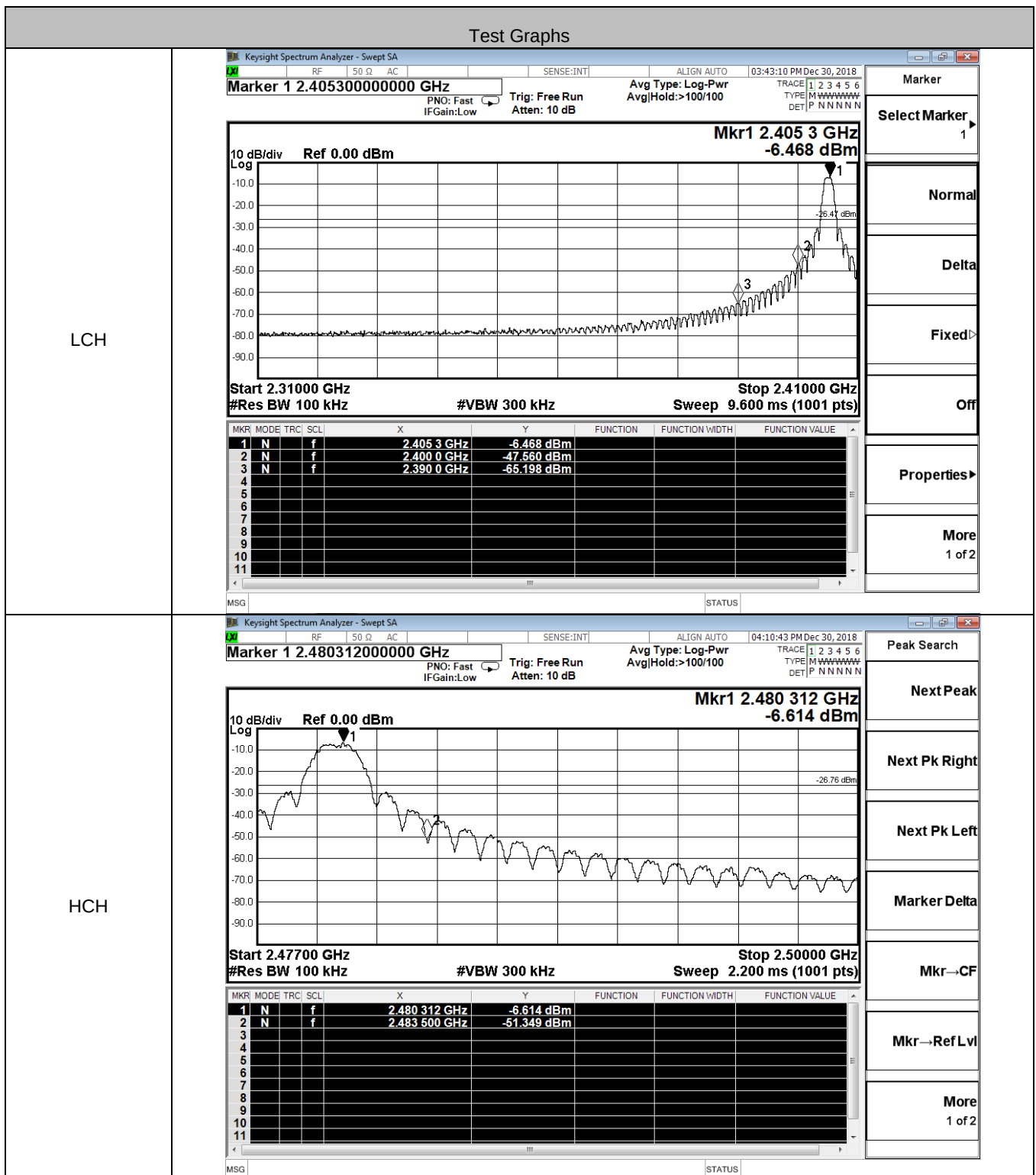
Puw/Zigbee/MCH





A.6 Band-edge for RF Conducted Emissions

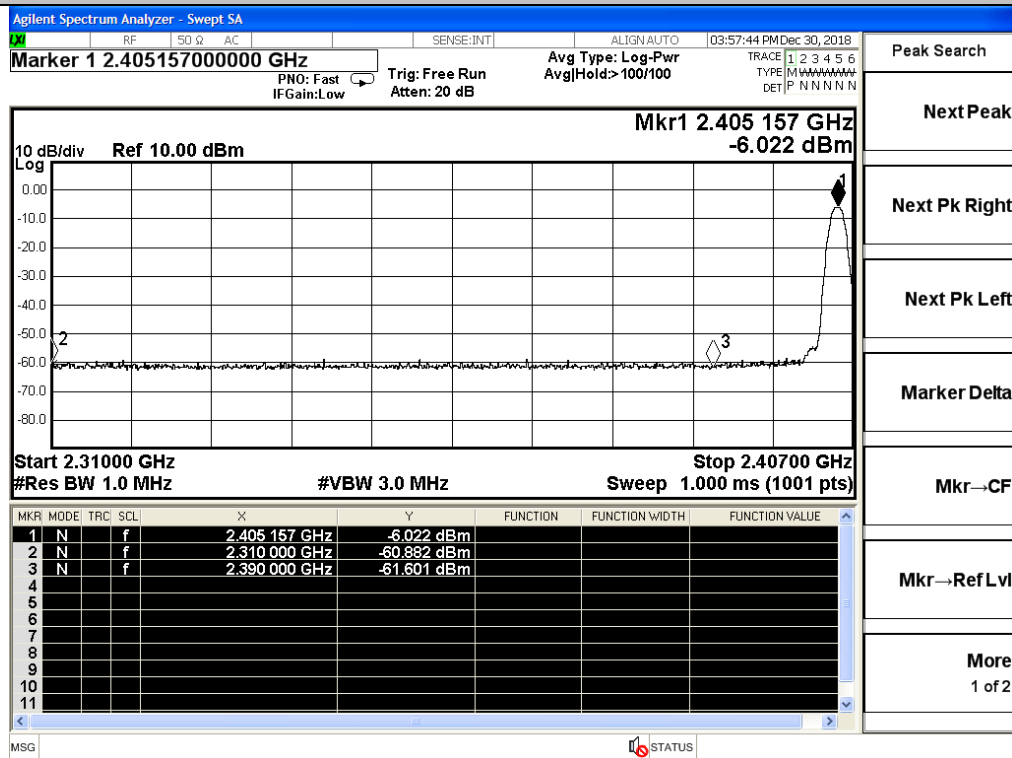
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
ZigBee	LCH	-6.468	-47.560	-26.470	PASS
ZigBee	HCH	-6.614	-51.349	-26.763	PASS



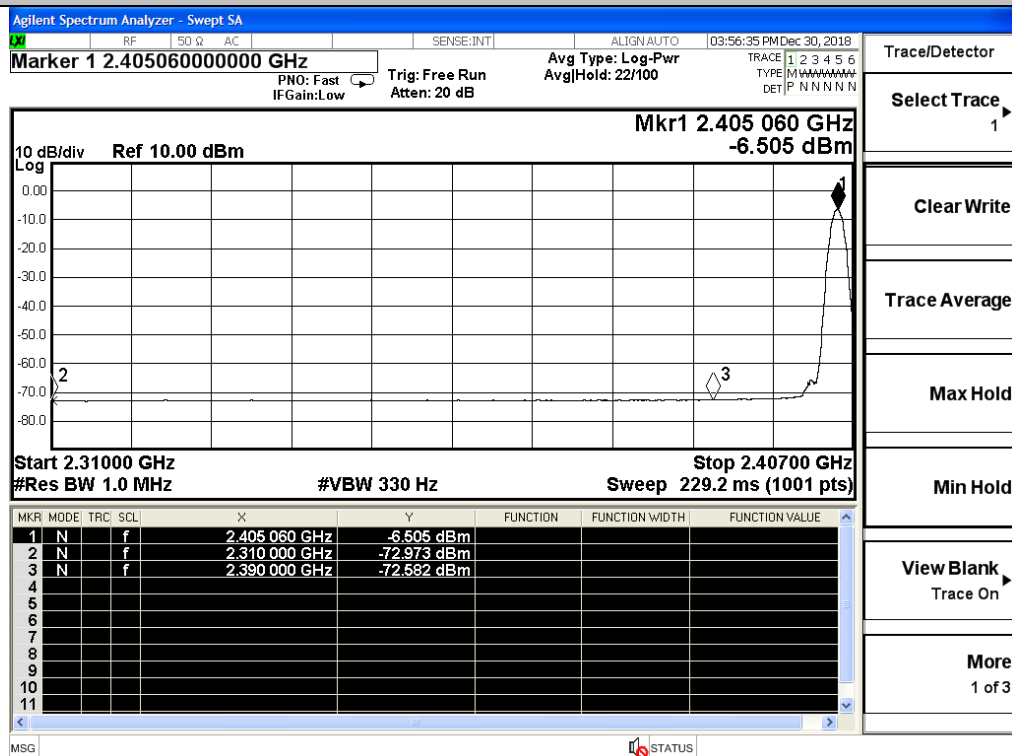
A.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdi
ZigBee	2405	Ant1	2310.0	-60.882	2.0	0	34.348	PEAK	74	PASS
		Ant1	2310.0	-72.973	2.0	0	22.257	AV	54	PASS
		Ant1	2390.0	-61.601	2.0	0	33.629	PEAK	74	PASS
		Ant1	2390.0	-72.582	2.0	0	22.648	AV	54	PASS
	2480	Ant1	2483.5	-59.969	2.0	0	35.261	PEAK	74	PASS
		Ant1	2483.5	-70.740	2.0	0	24.490	AV	54	PASS
		Ant1	2500.0	-60.689	2.0	0	34.541	PEAK	74	PASS
		Ant1	2500.0	-72.493	2.0	0	22.737	AV	54	PASS

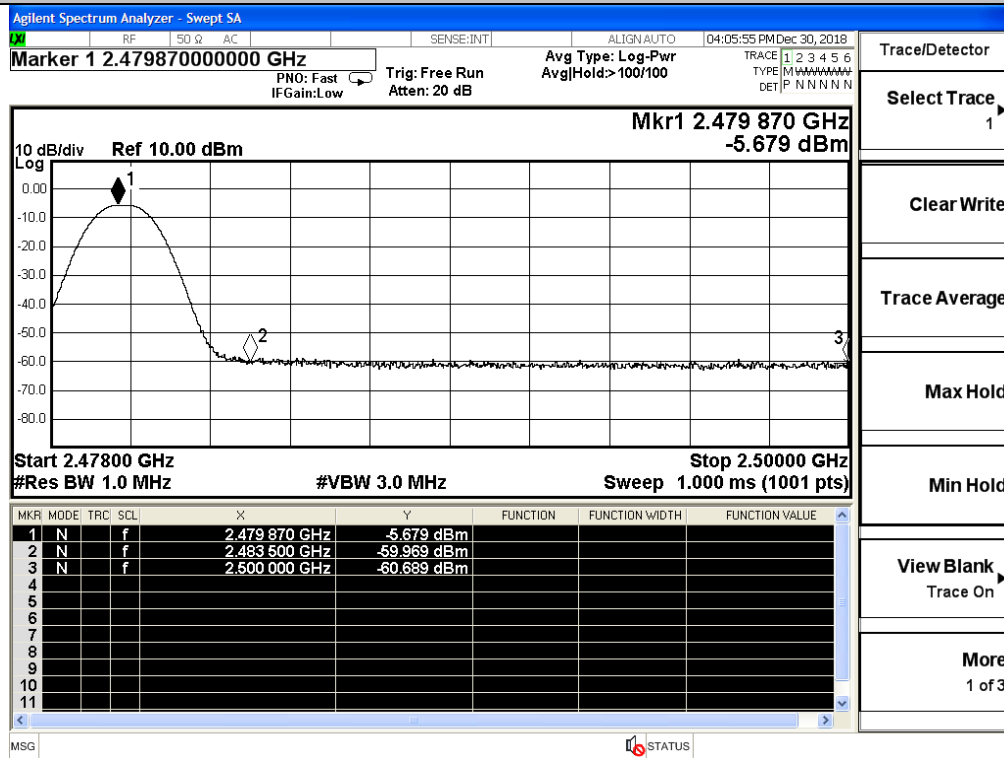
Restrict-band band-edge measurements_Zigbee_2405_Ant1_PEAK



Restrict-band band-edge measurements_Zigbee_2405_Ant1_AV



Restrict-band band-edge measurements_Zigbee_2480_Ant1_PEAK



Restrict-band band-edge measurements_Zigbee_2480_Ant1_AV

