

Appendix A

RF Test Data for ZigBee (Conducted Measurement)

Product Name: Repeater

Trade Mark: Smart Forced Air

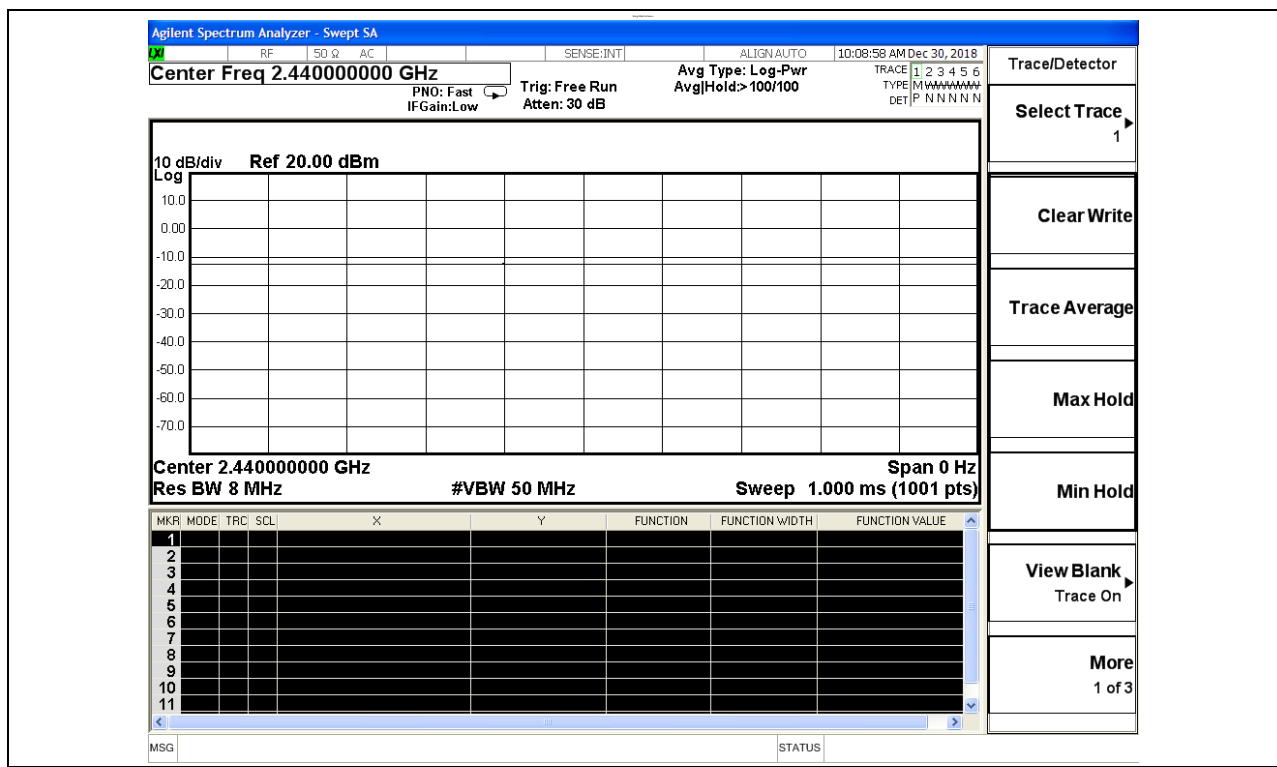
Test Model: Repeater

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

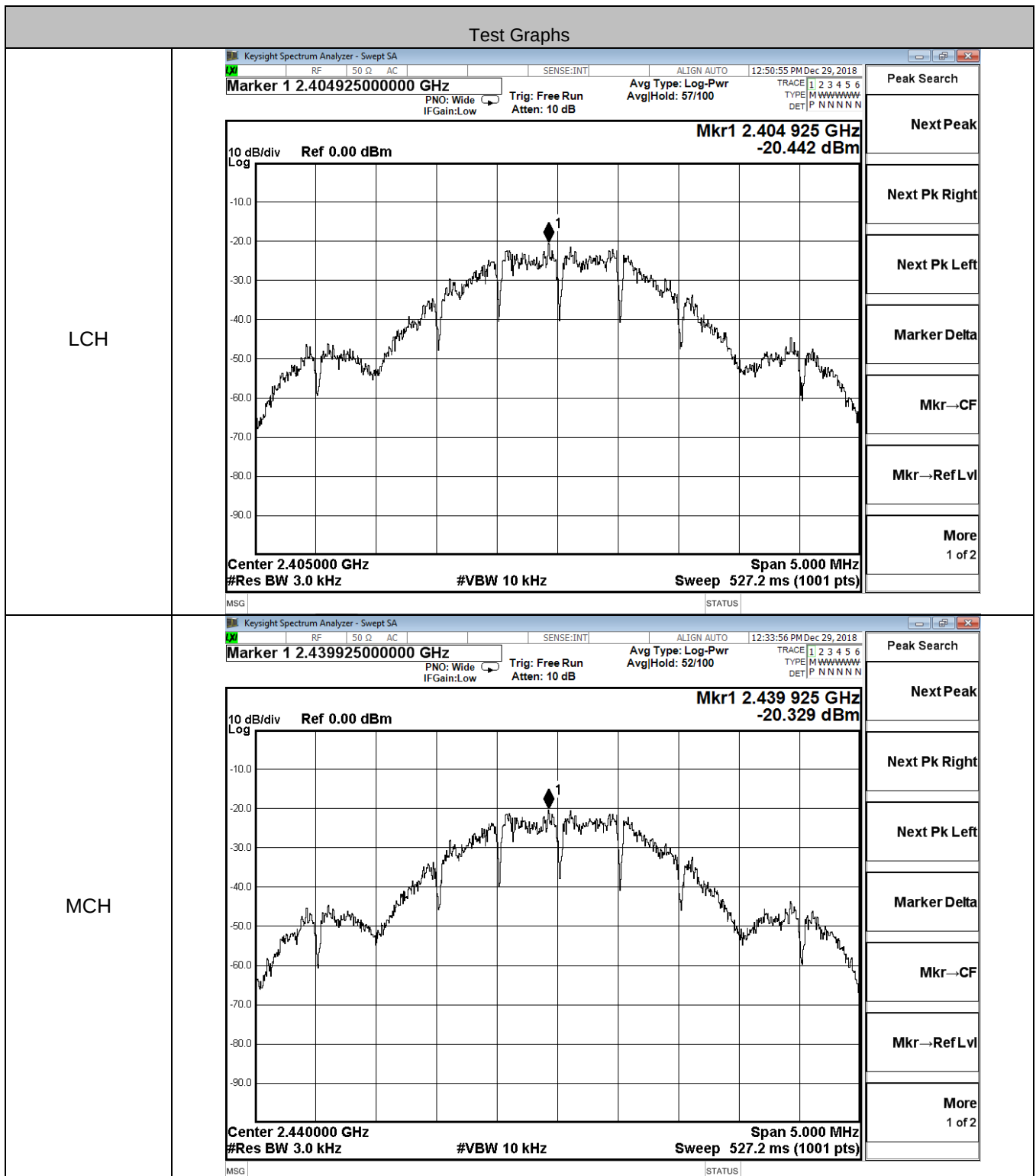


A.2 Maximum Conducted Peak Output Power

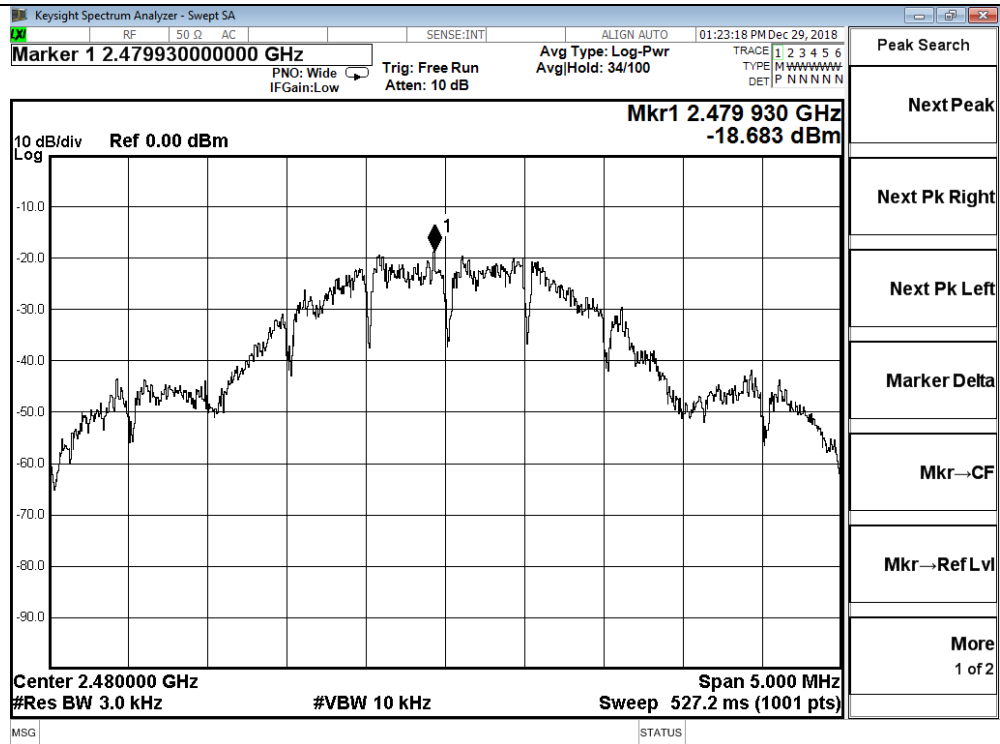
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
ZigBee	LCH	-5.437	30	PASS
ZigBee	MCH	-4.881	30	PASS
ZigBee	HCH	-3.427	30	PASS

A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
ZigBee	LCH	-20.442	8	PASS
ZigBee	MCH	-20.329	8	PASS
ZigBee	HCH	-18.683	8	PASS

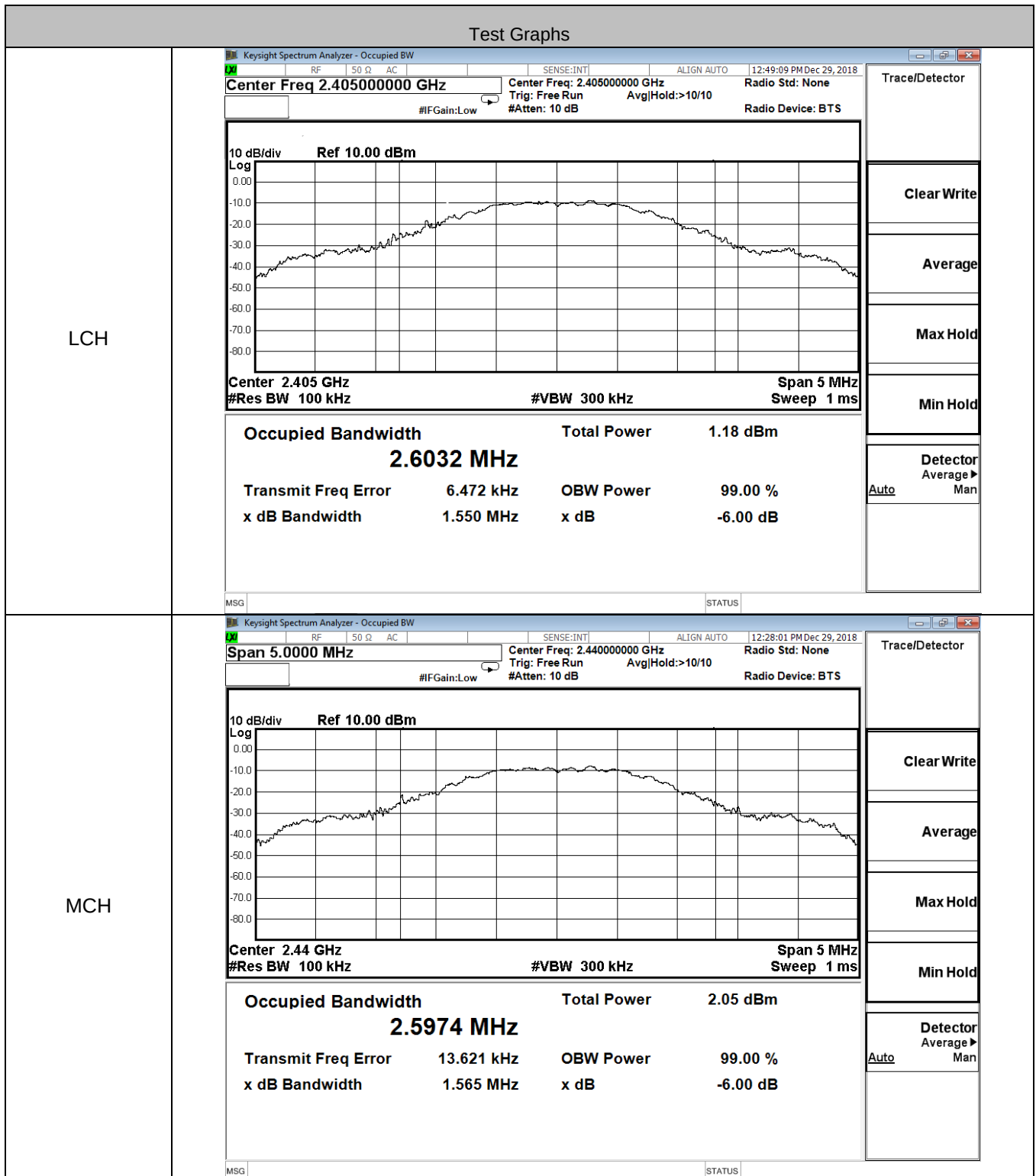


HCH

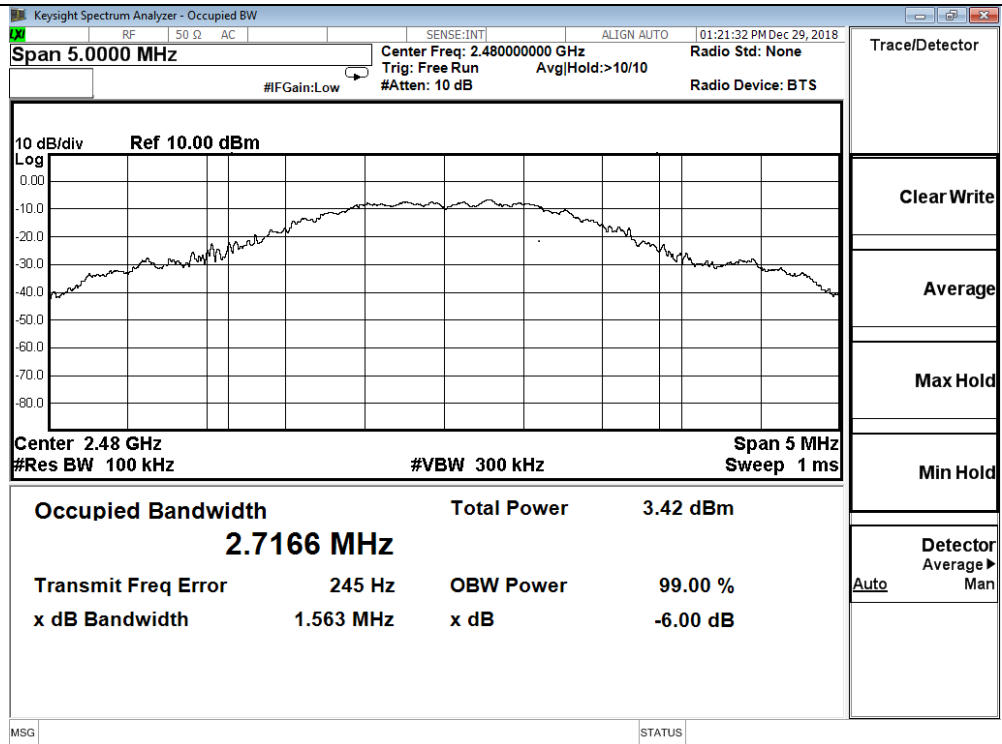


B.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
ZigBee	LCH	1.550	≥0.5	PASS
ZigBee	MCH	1.565	≥0.5	PASS
ZigBee	HCH	1.563	≥0.5	PASS

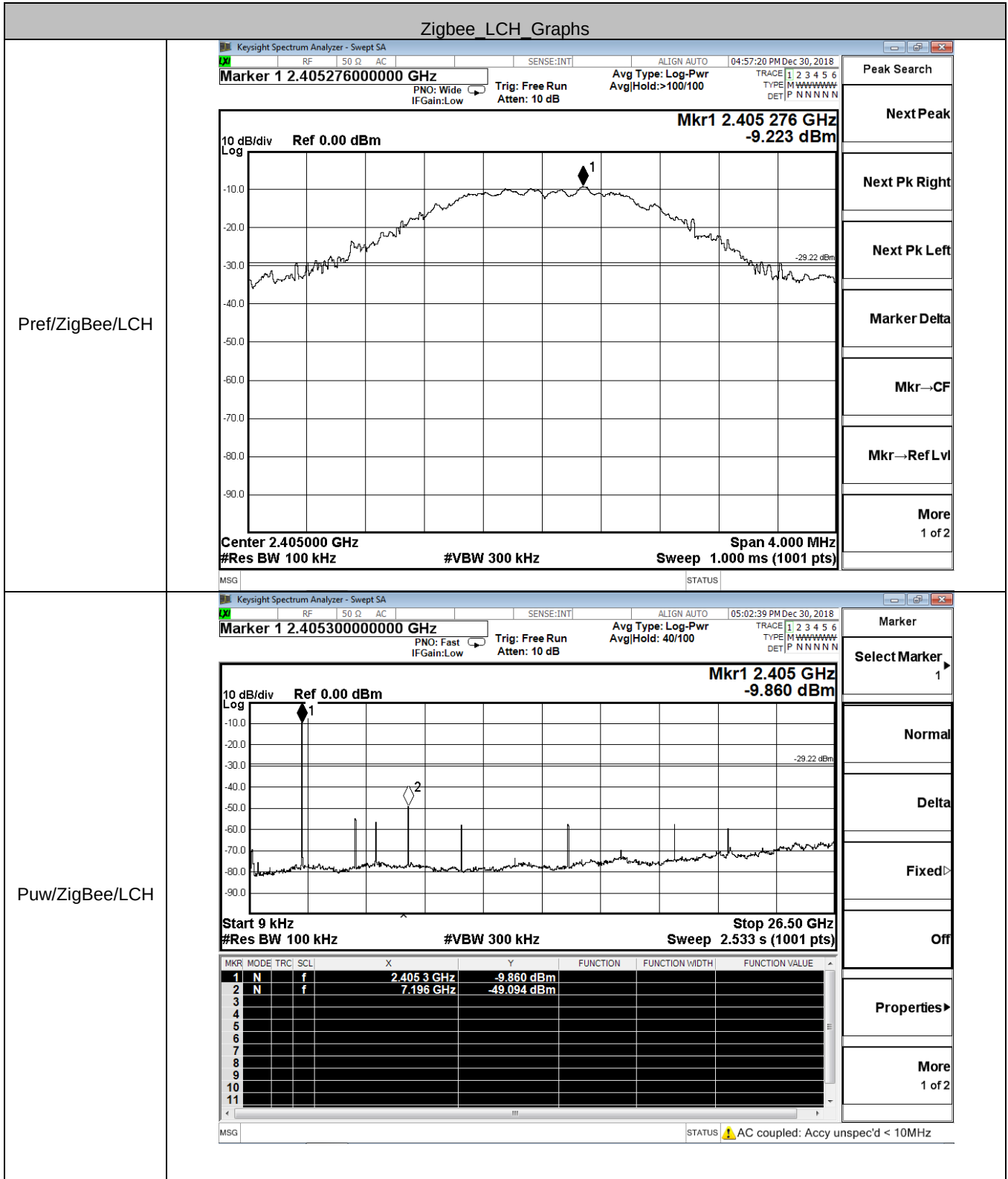


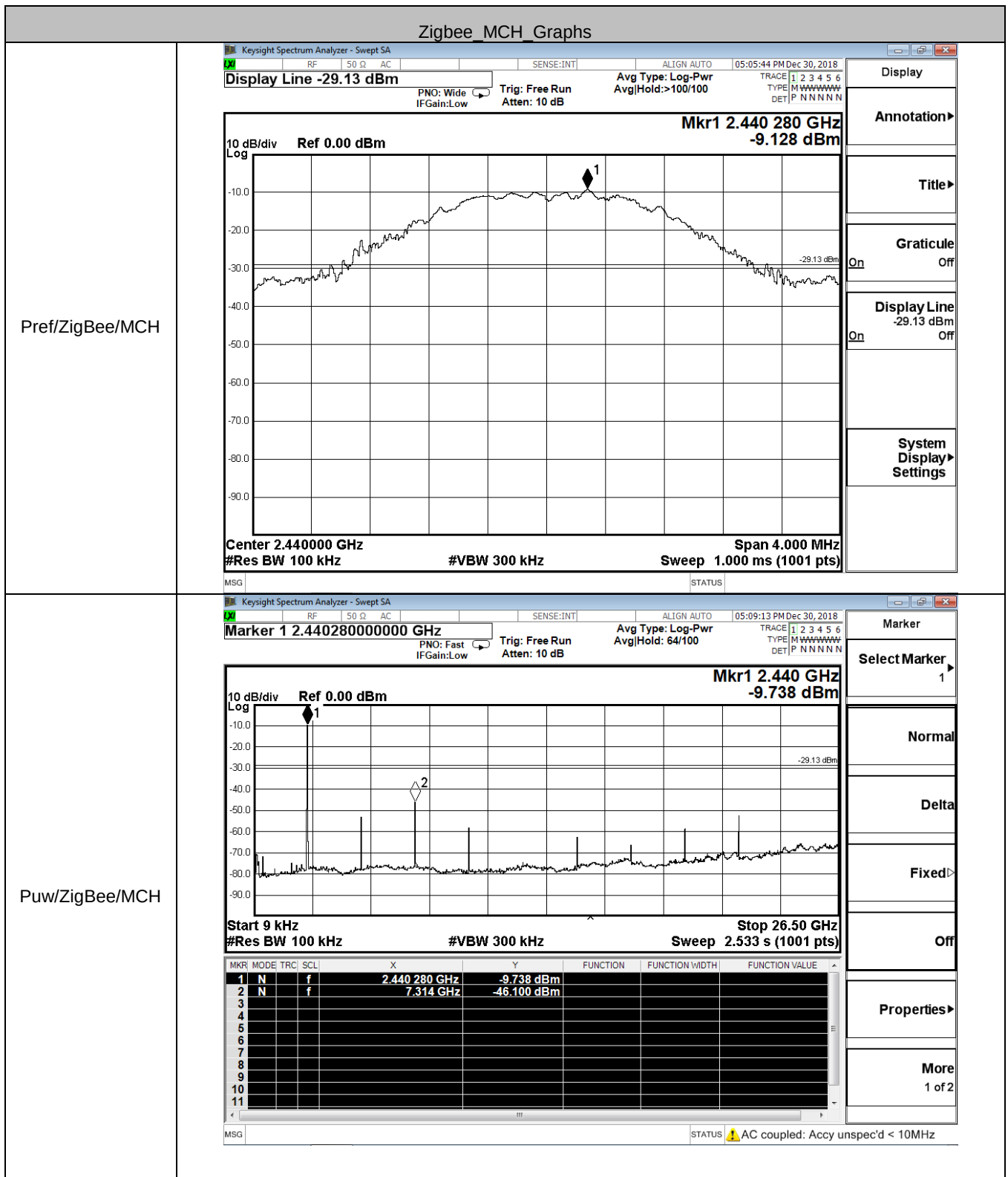
HCH



A.5 RF Conducted Spurious Emissions

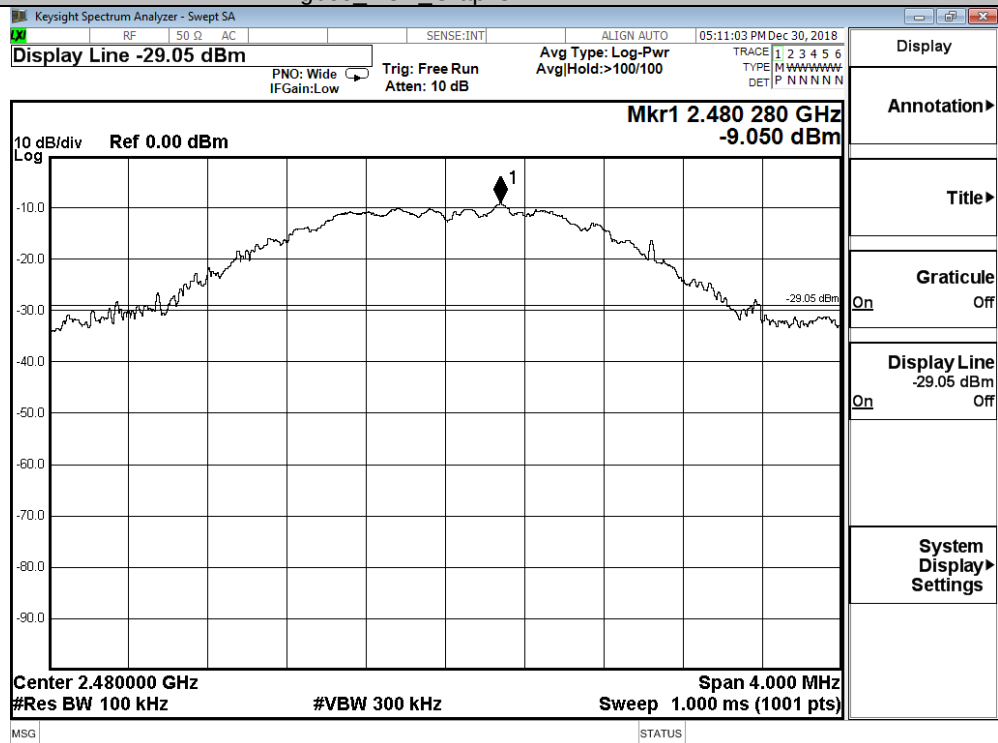
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
ZigBee	LCH	-9.223	-49.094	-29.223	PASS
ZigBee	MCH	-9.128	-46.100	-29.128	PASS
ZigBee	HCH	-9.050	-47.942	-29.050	PASS



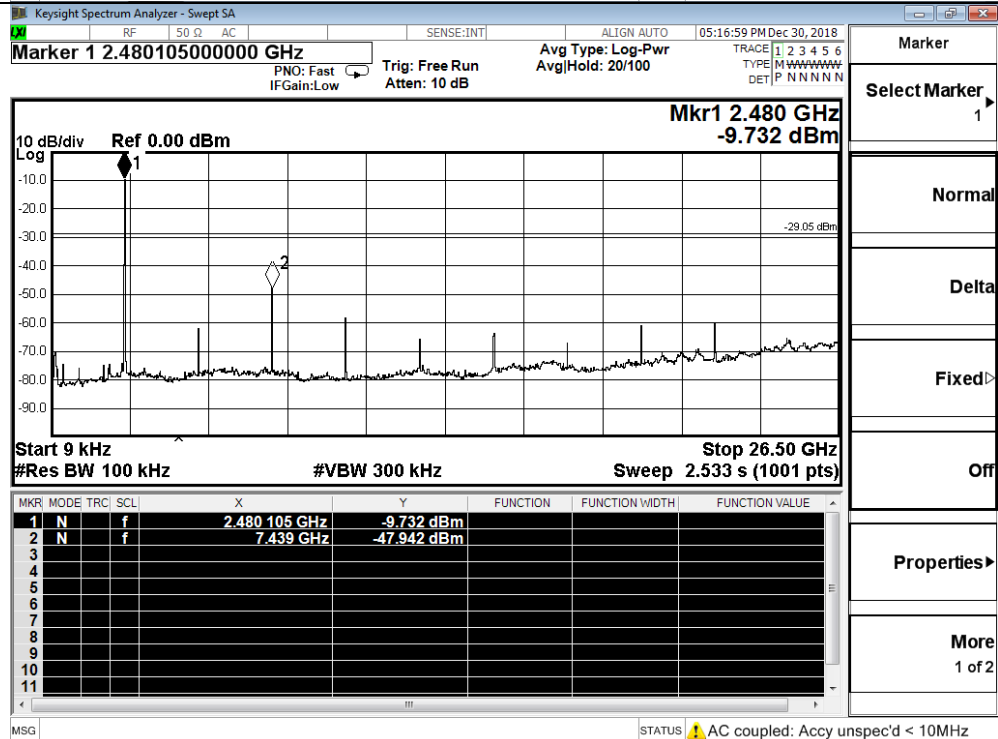


Zigbee_HCH_Graphs

Pref/ZigBee/HCH

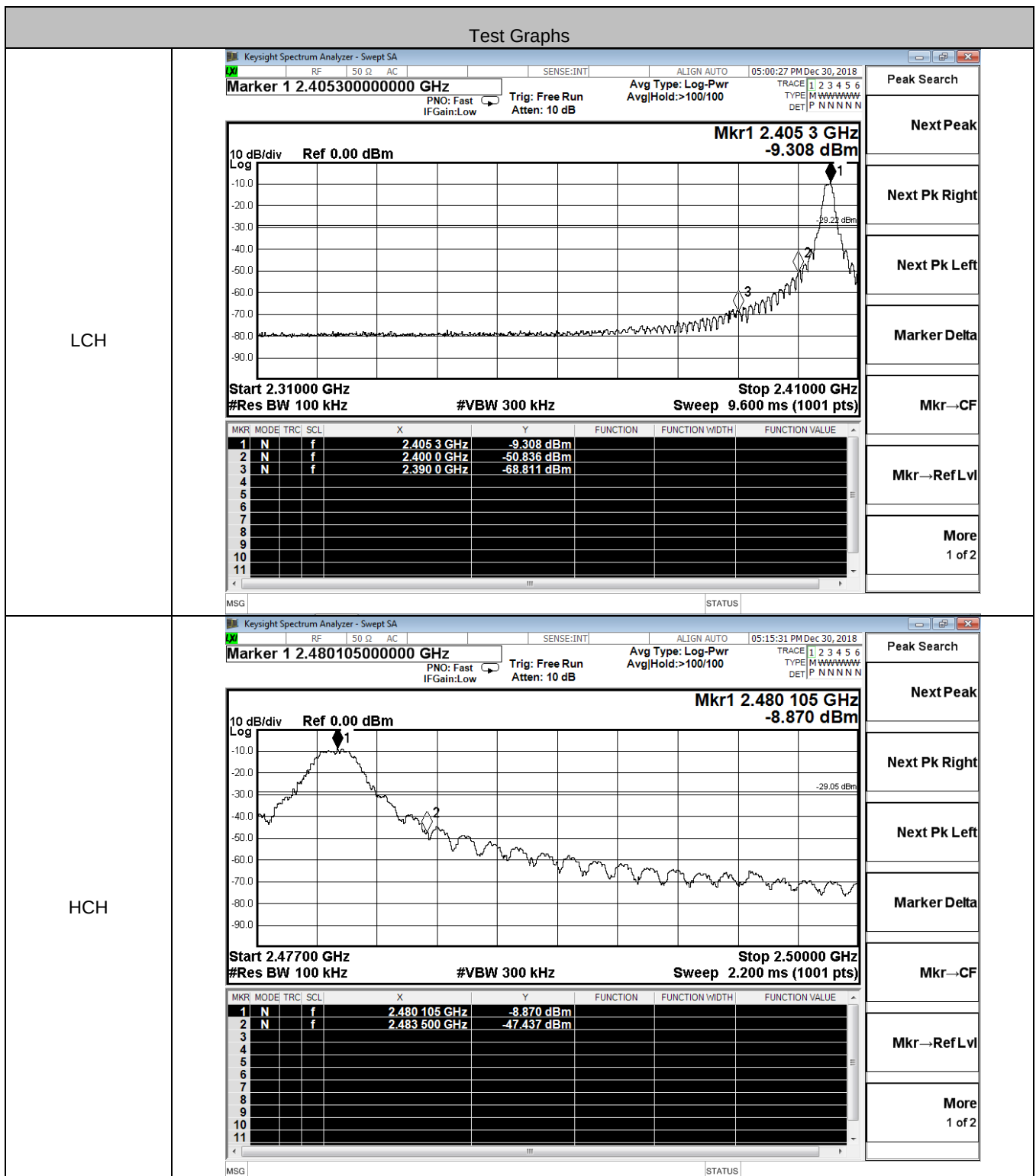


Puw/ZigBee/HCH



A.6 Band-edge for RF Conducted Emissions

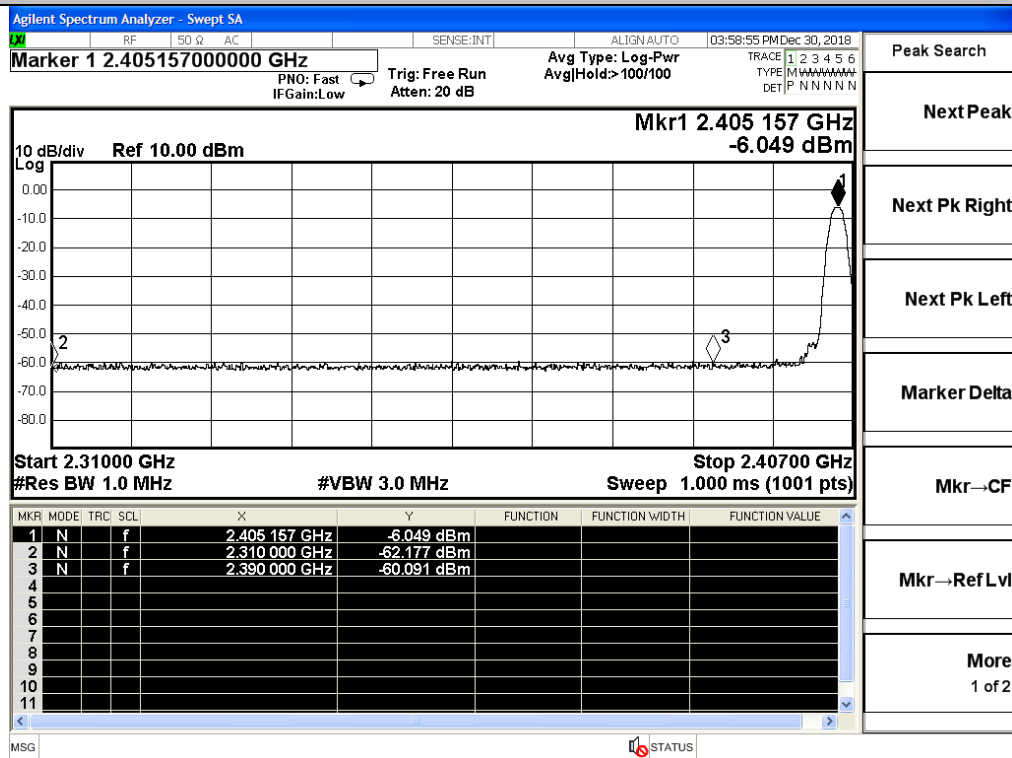
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
ZigBee	LCH	-9.308	-50.836	-29.223	PASS
ZigBee	HCH	-8.870	-47.437	-29.050	PASS



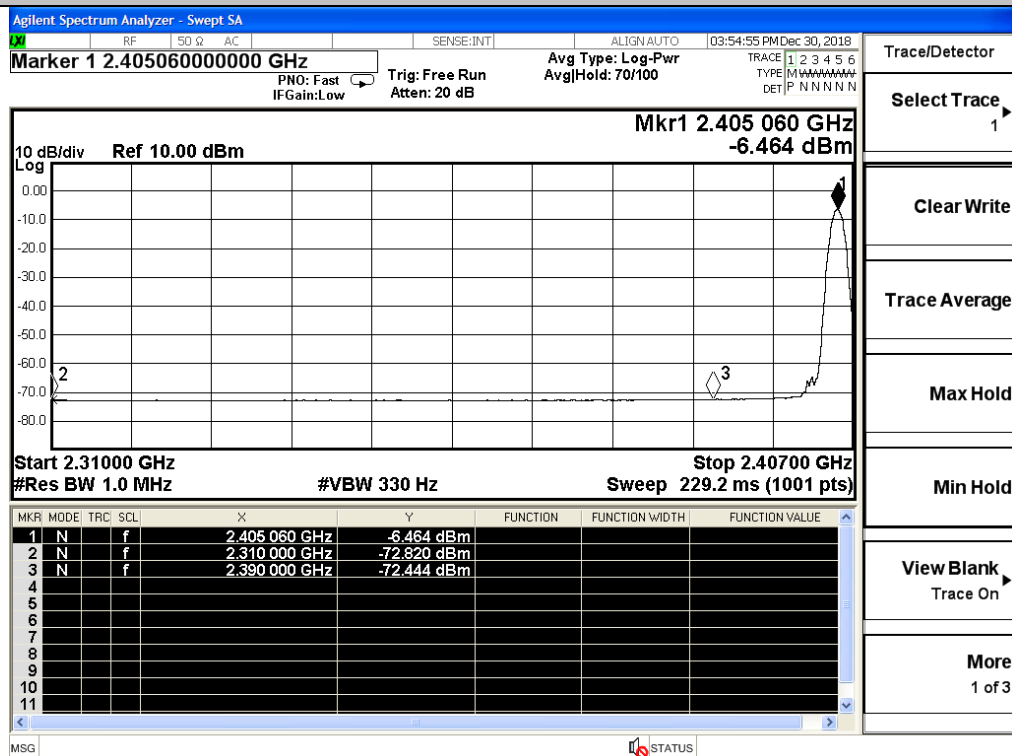
A.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
ZigBee	2405	Ant1	2310.0	-62.177	2.0	0	33.053	PEAK	74	PASS
		Ant1	2310.0	-72.820	2.0	0	22.410	AV	54	PASS
		Ant1	2390.0	-60.091	2.0	0	35.139	PEAK	74	PASS
		Ant1	2390.0	-72.444	2.0	0	22.786	AV	54	PASS
	2480	Ant1	2483.5	-59.677	2.0	0	35.553	PEAK	74	PASS
		Ant1	2483.5	-70.679	2.0	0	24.551	AV	54	PASS
		Ant1	2500.0	-61.290	2.0	0	33.940	PEAK	74	PASS
		Ant1	2500.0	-72.371	2.0	0	22.859	AV	54	PASS

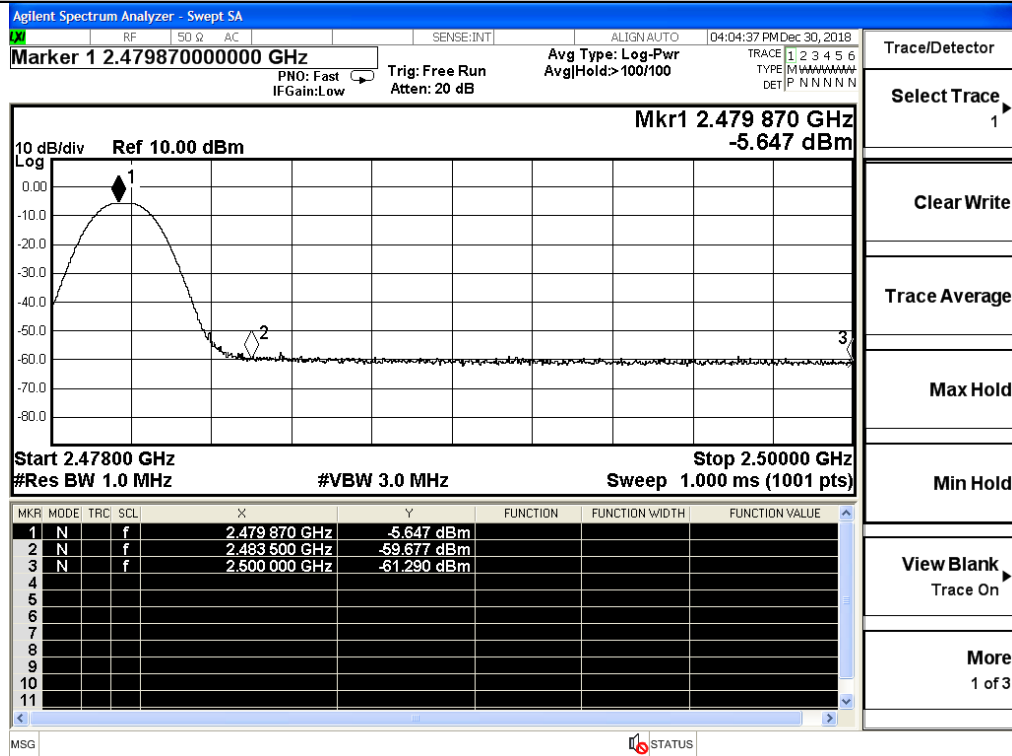
Restrict-band band-edge measurements_Zigbee_2405_Ant1_PEAK



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

