

Appendix A

RF Test Data for ZigBee (Conducted Measurement)

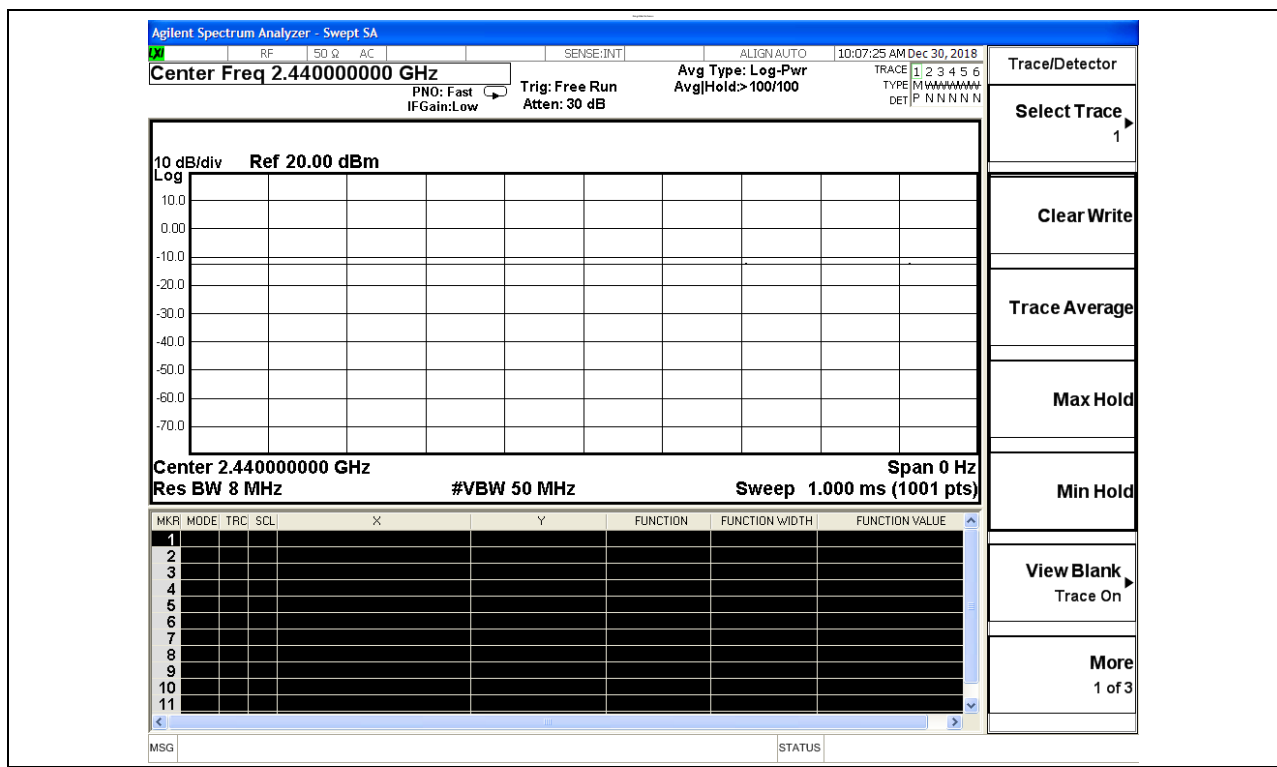
Product Name: Register
Trade Mark: Smart Forced Air
Test Model: Register

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

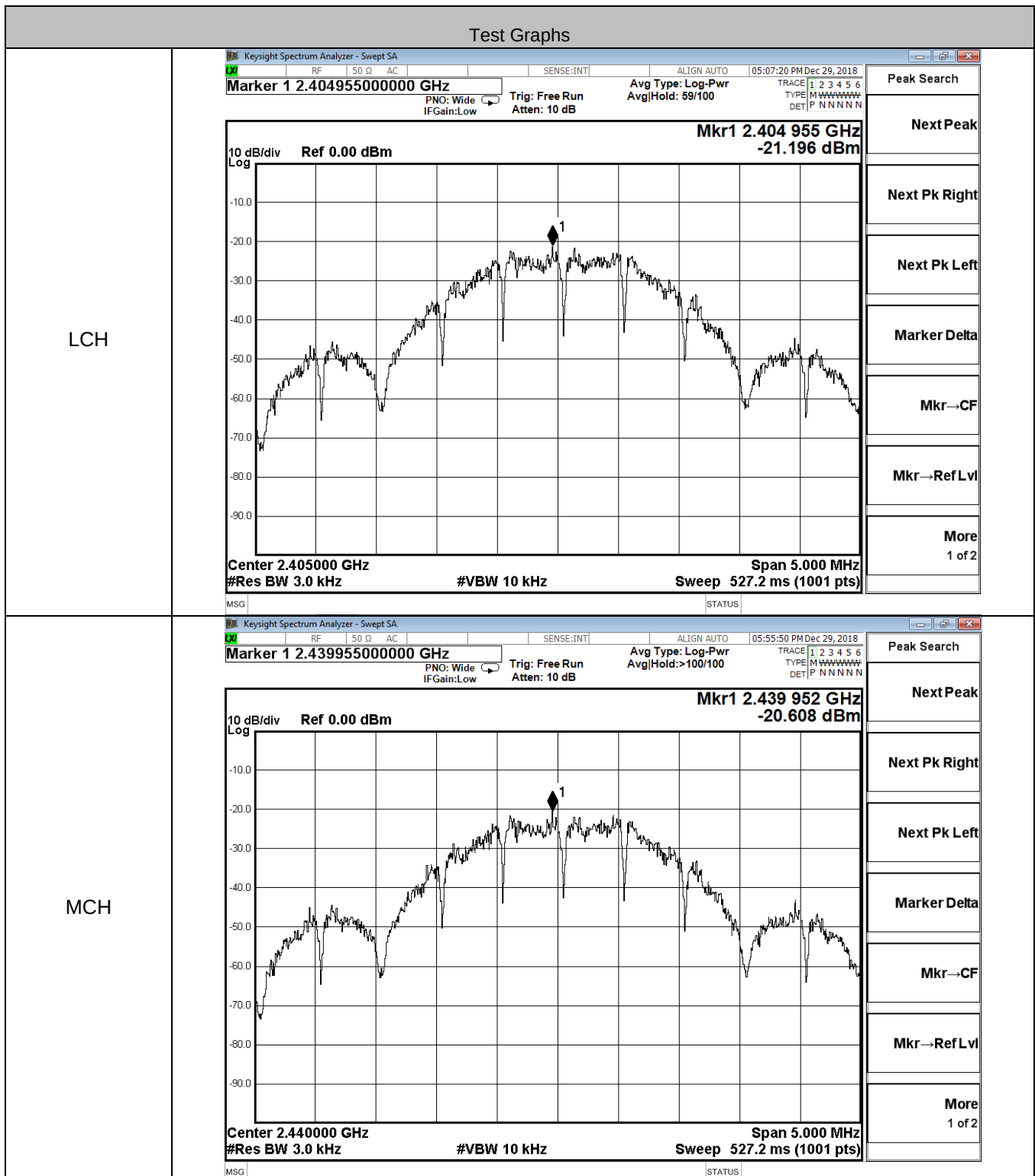


A.2 Maximum Conducted Peak Output Power

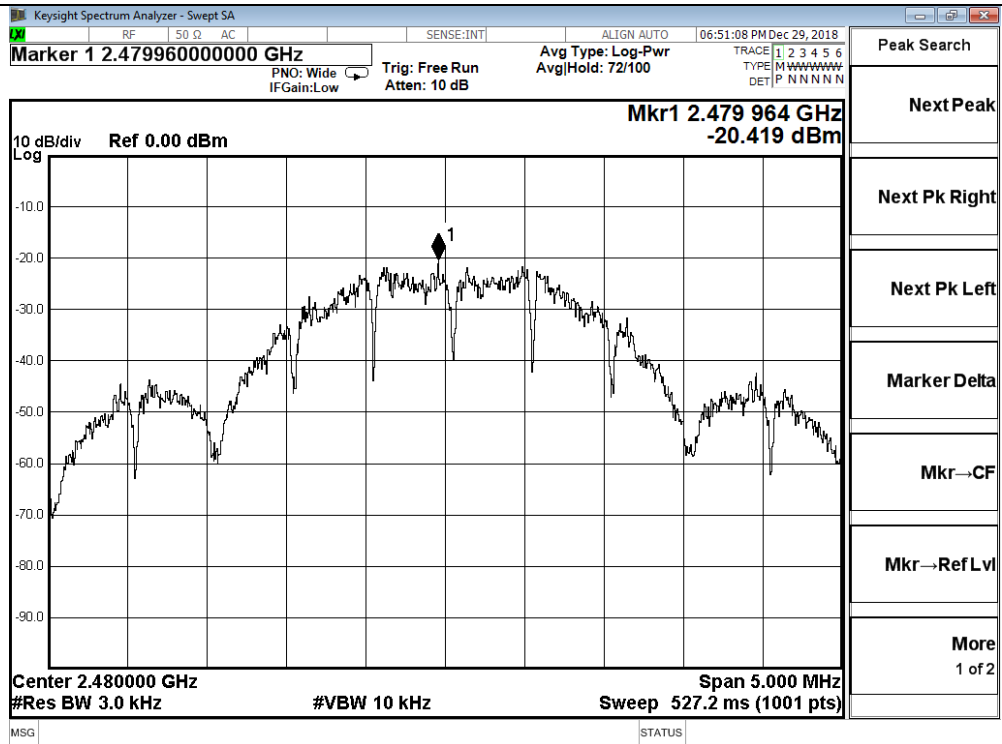
Mode	Channel	Conduct Peak Power[dBm]	Limit [dBm]	Verdict
ZigBee	LCH	-5.253	30	PASS
ZigBee	MCH	-5.038	30	PASS
ZigBee	HCH	-4.804	30	PASS

A.3 Maximum Power Spectral Density

Mode	Channel	PSD [dBm/3KHz]	Limit [dBm/3KHz]	Verdict
ZigBee	LCH	-21.196	8	PASS
ZigBee	MCH	-20.608	8	PASS
ZigBee	HCH	-20.419	8	PASS

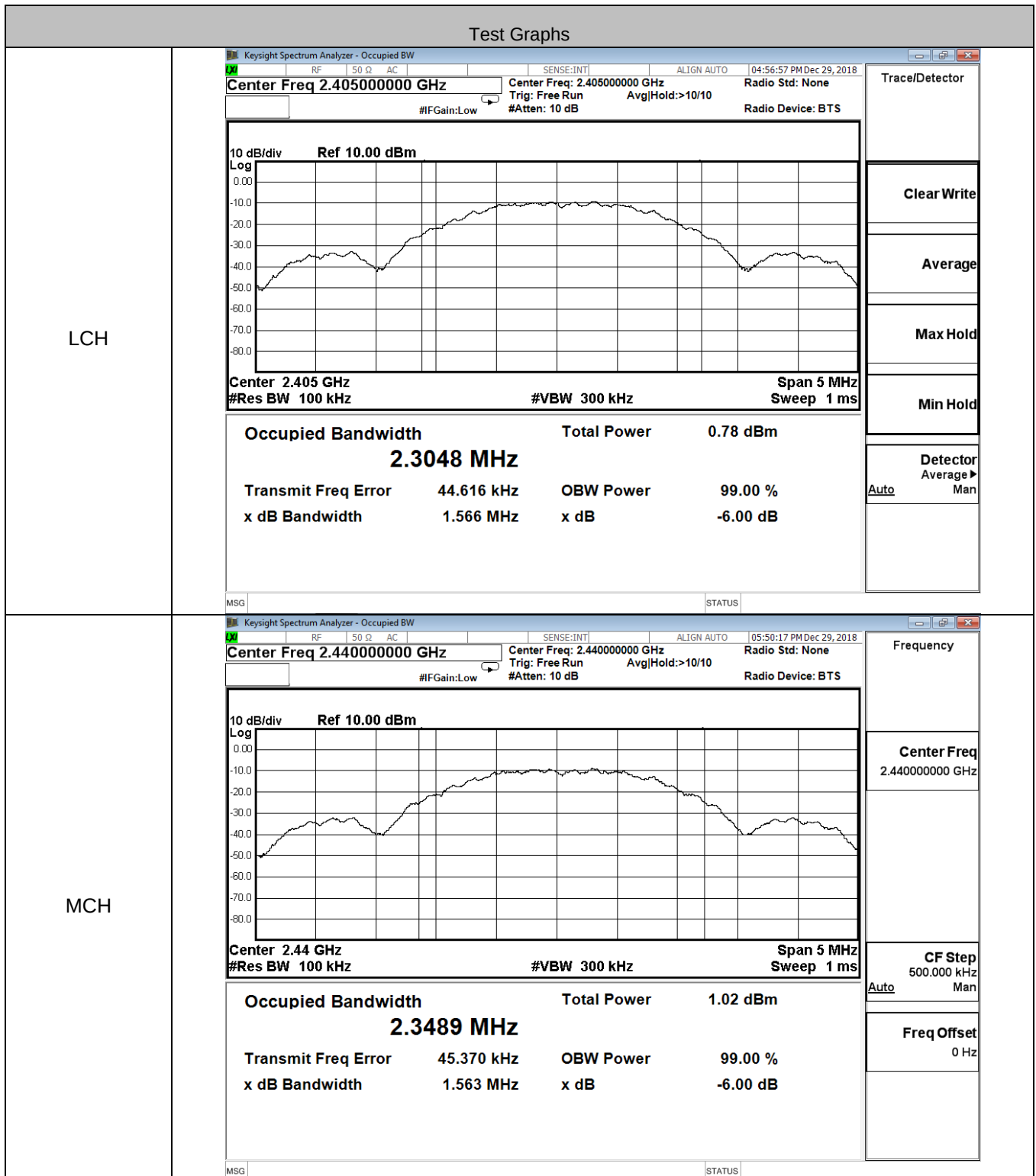


HCH

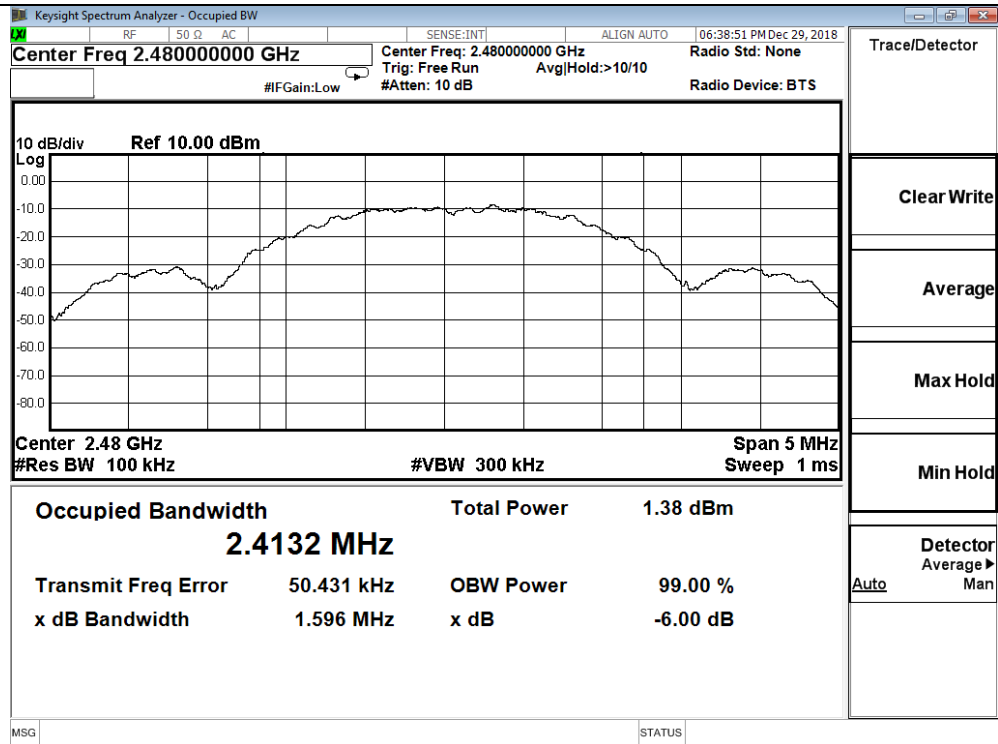


A.4 6dB Bandwidth

Mode	Channel	6dB Bandwidth [MHz]	Limit [MHz]	Verdict
ZigBee	LCH	1.566	≥0.5	PASS
ZigBee	MCH	1.563	≥0.5	PASS
ZigBee	HCH	1.596	≥0.5	PASS



HCH

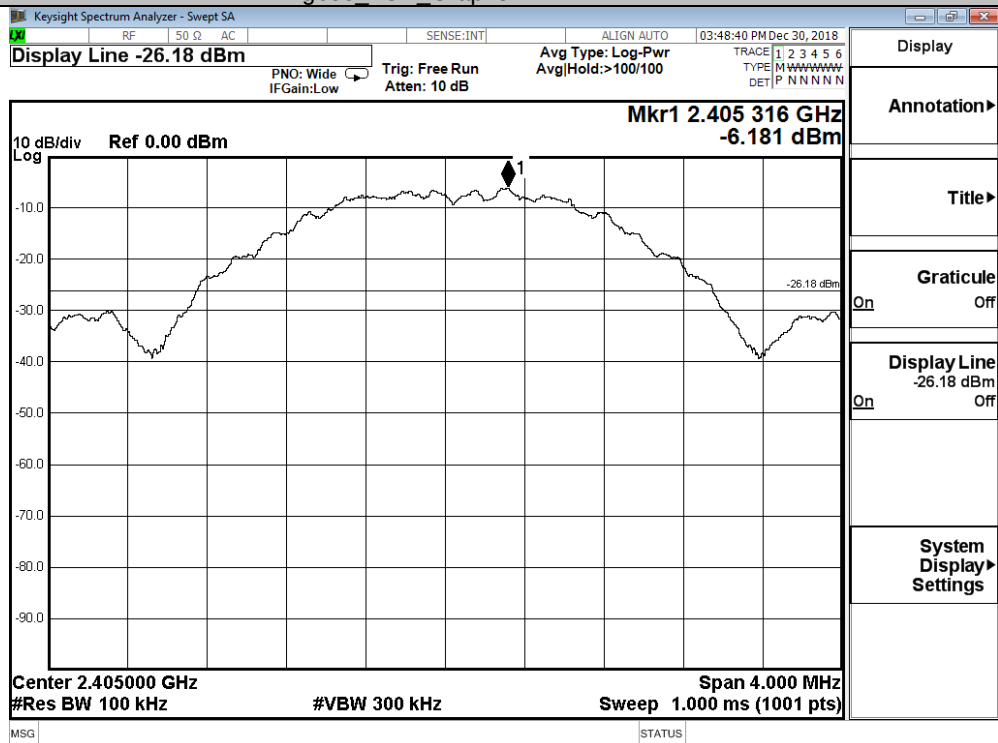


A.5 RF Conducted Spurious Emissions

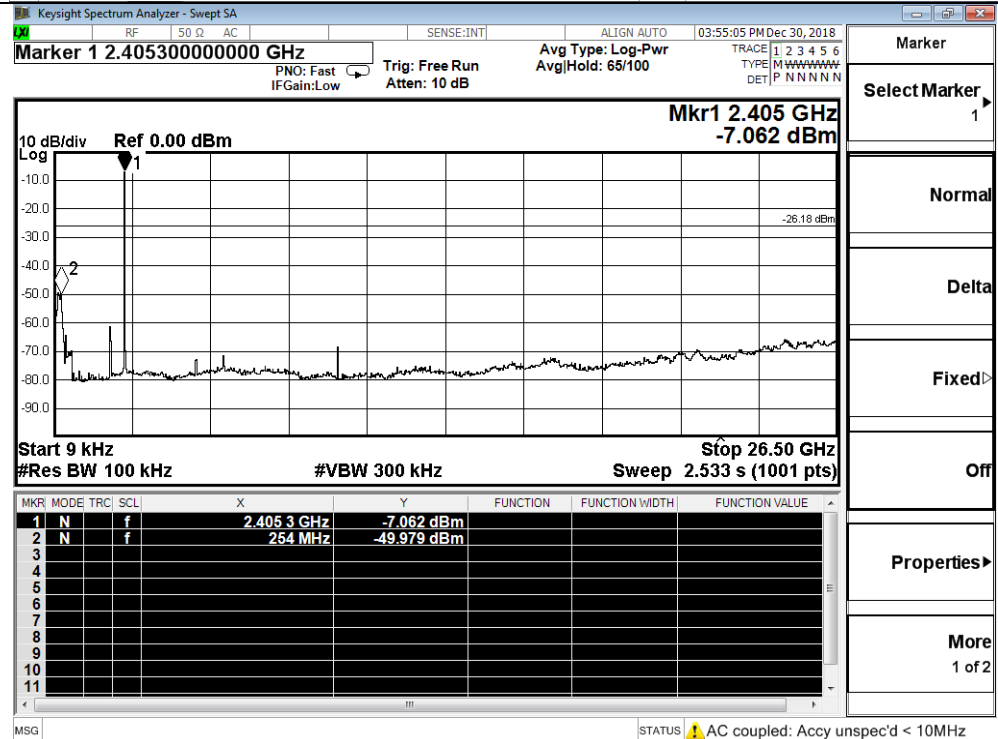
Mode	Channel	Pref [dBm]	Max. Level [dBm]	Limit [dBm]	Verdict
ZigBee	LCH	-6.181	-49.979	-26.181	PASS
ZigBee	MCH	-6.321	-49.491	-26.321	PASS
ZigBee	HCH	-5.794	-47.419	-25.794	PASS

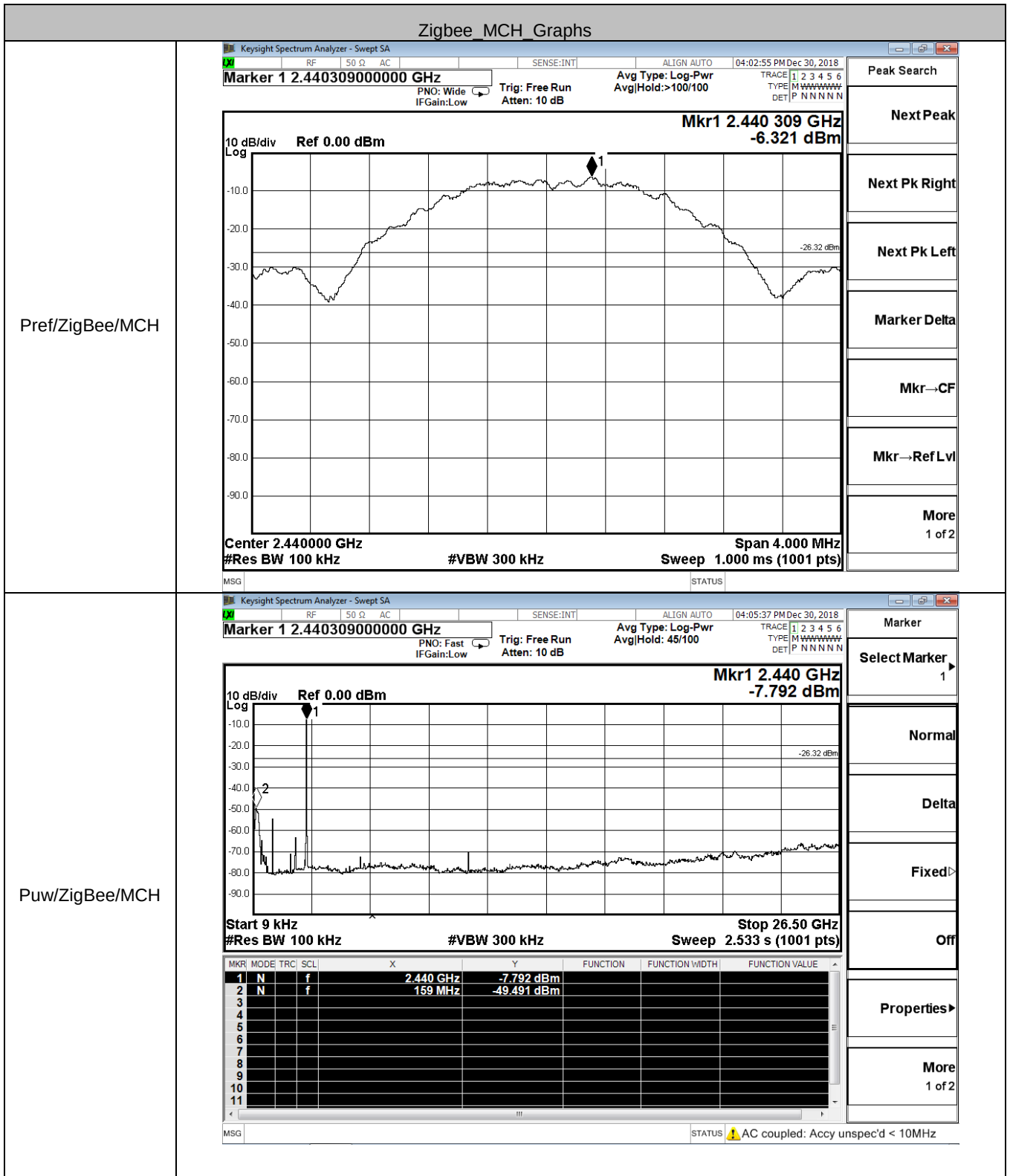
Zigbee_LCH_Graphs

Pref/ZigBee/LCH



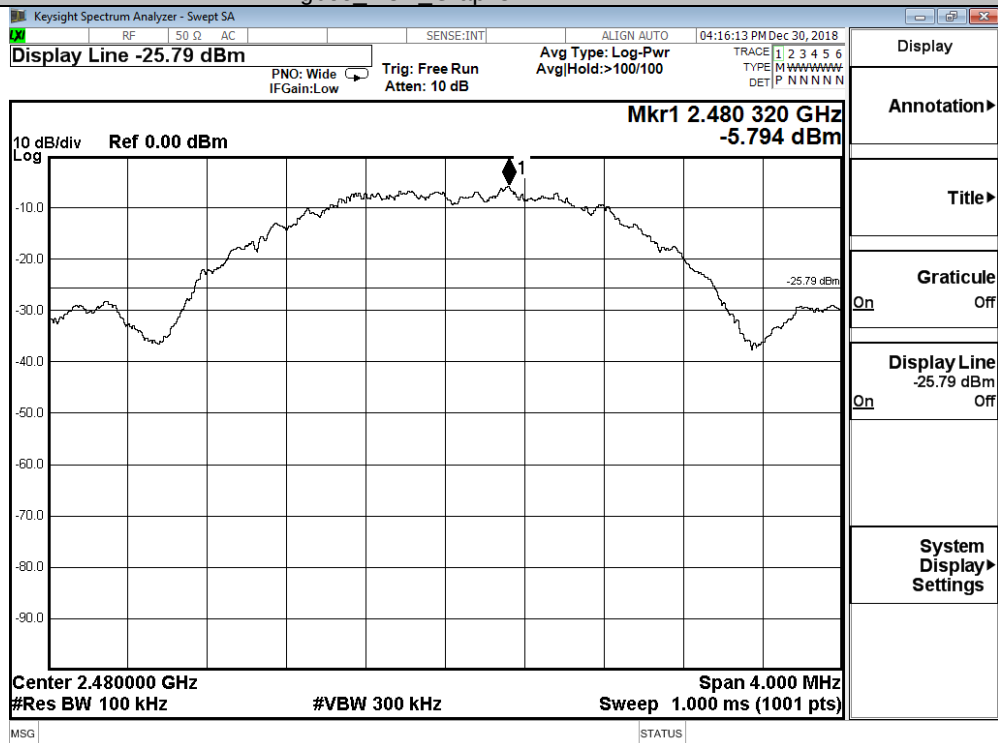
Puw/ZigBee/LCH



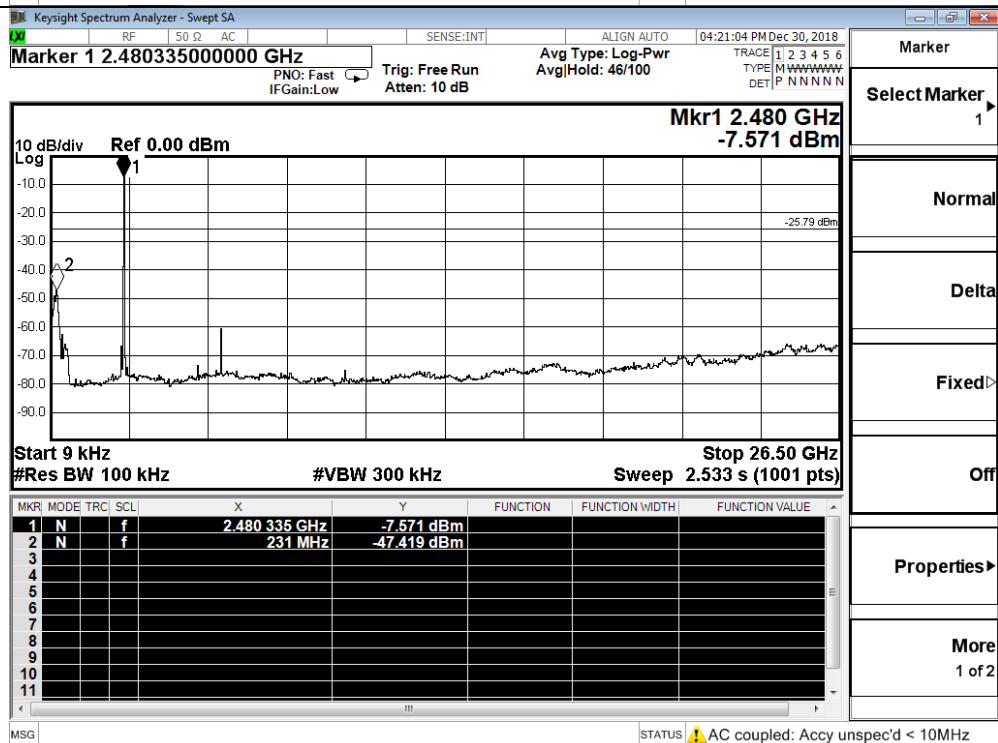


Zigbee_HCH_Graphs

Pref/ZigBee/HCH

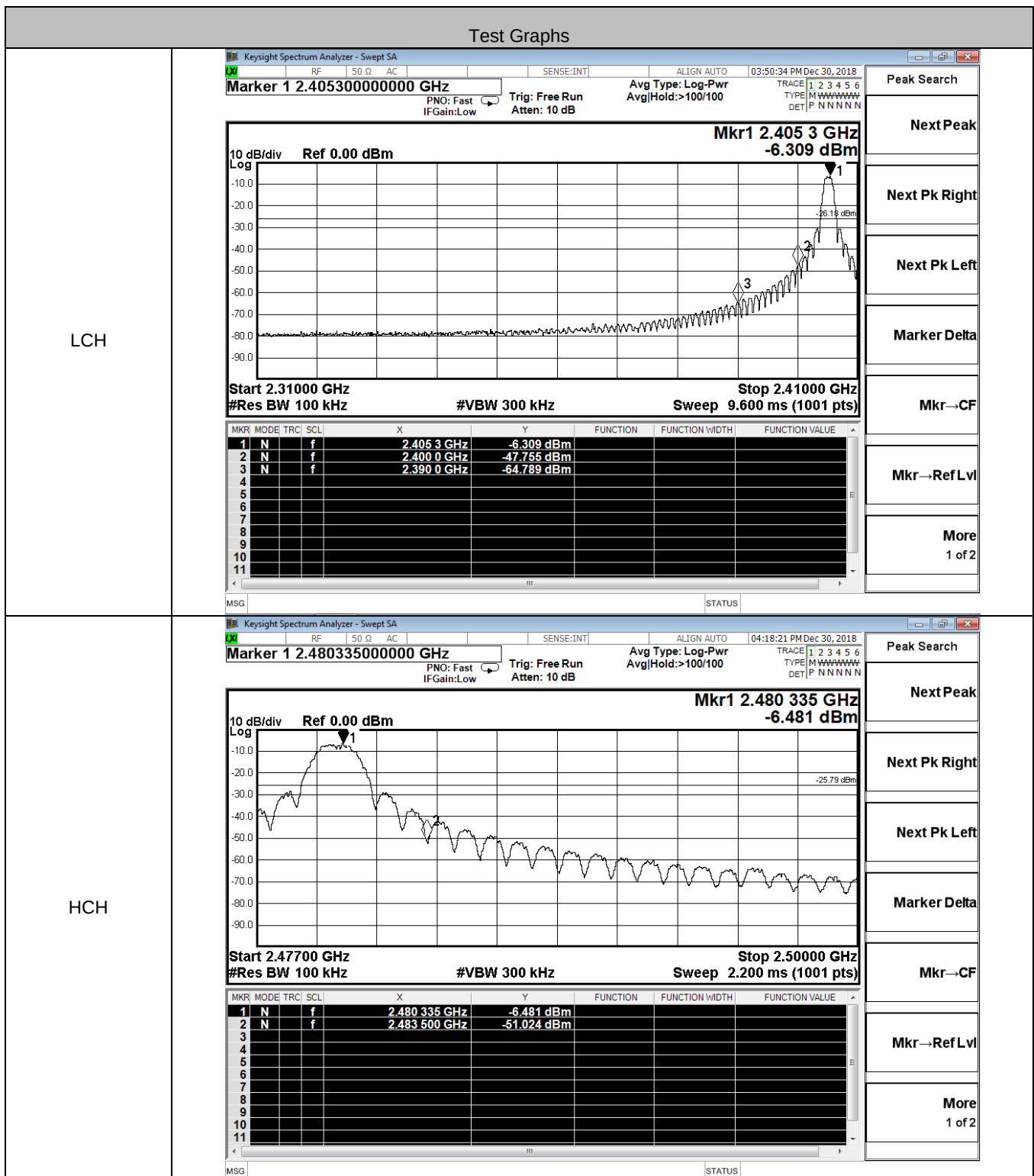


Puw/ZigBee/HCH



A.6 Band-edge for RF Conducted Emissions

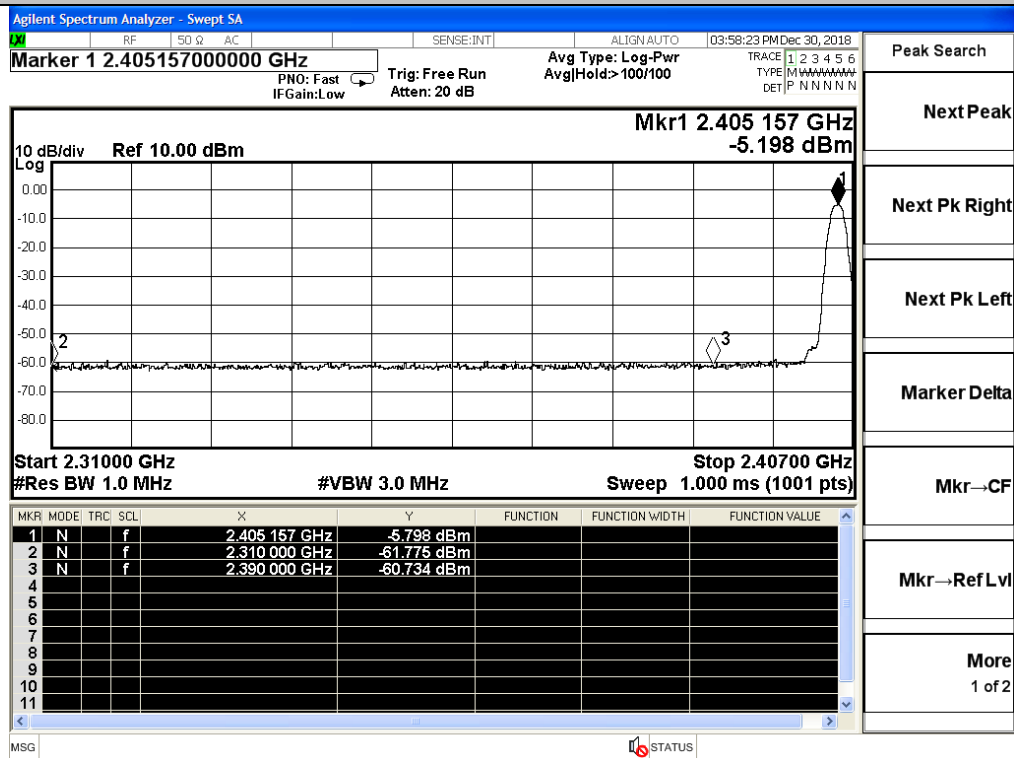
Mode	Channel	Carrier Power[dBm]	Max.Spurious Level [dBm]	Limit [dBm]	Verdict
ZigBee	LCH	-6.309	-47.755	-26.181	PASS
ZigBee	HCH	-6.481	-51.024	-25.794	PASS



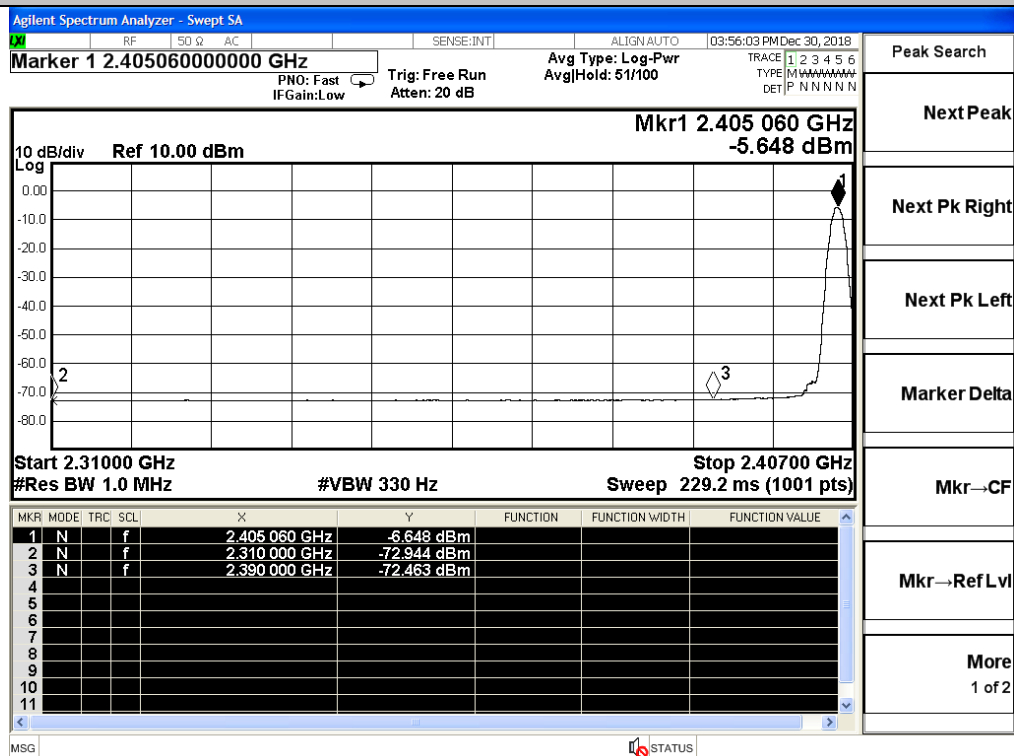
A.7 Restrict-band band-edge measurements

Test Mode	Test Channel	Ant	Freq.	Power [dBm]	Gain	Ground Factor	E [dBuV/m]	Detector	Limit [dBuV/m]	Verdict
ZigBee	2405	Ant1	2310.0	-61.775	2.0	0	33.455	PEAK	74	PASS
		Ant1	2310.0	-72.944	2.0	0	22.286	AV	54	PASS
		Ant1	2390.0	-60.734	2.0	0	34.496	PEAK	74	PASS
		Ant1	2390.0	-72.463	2.0	0	22.767	AV	54	PASS
	2480	Ant1	2483.5	-58.561	2.0	0	36.669	PEAK	74	PASS
		Ant1	2483.5	-70.231	2.0	0	24.999	AV	54	PASS
		Ant1	2500.0	-60.306	2.0	0	34.924	PEAK	74	PASS
		Ant1	2500.0	-72.374	2.0	0	22.856	AV	54	PASS

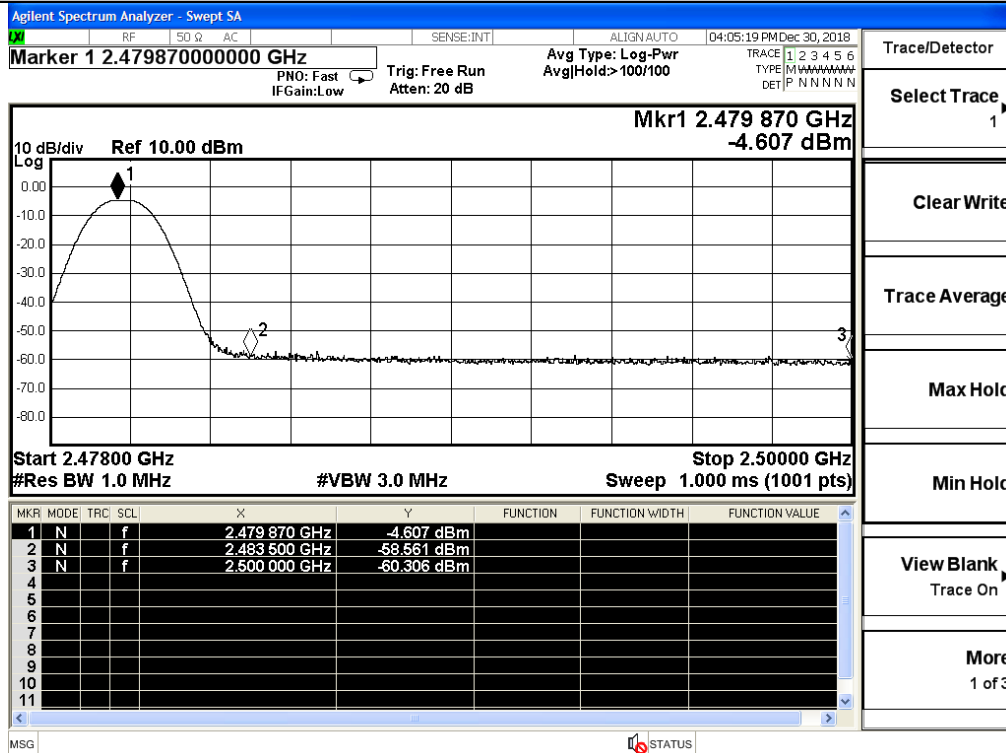
Restrict-band band-edge measurements_Zigbee_2405_Ant1_PEAK



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

