

Appendix A

RF Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Bluetooth mechanical keyboard

Trade Mark: Keychron

Test Model: Keychron K14

FCC ID: 2ASF4-K14

Environmental Conditions

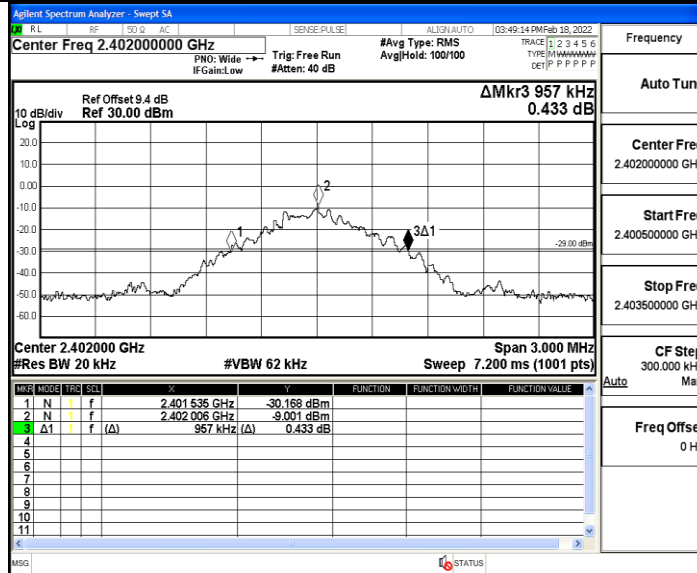
Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Nancy Li
Supervised by:	Hugo Chen

A.1 20 dB Bandwidth

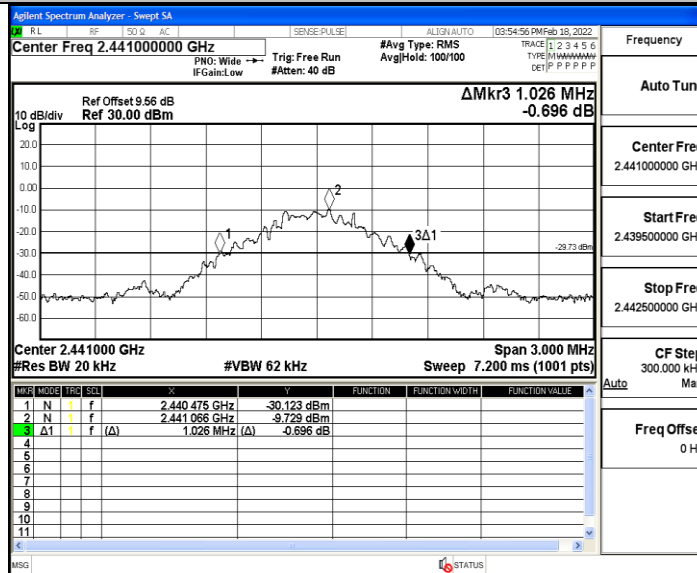
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.957	2401.535	2402.492	---	---
		2441	1.026	2440.475	2441.501	---	---
		2480	1.041	2479.478	2480.519	---	---

Test Graph

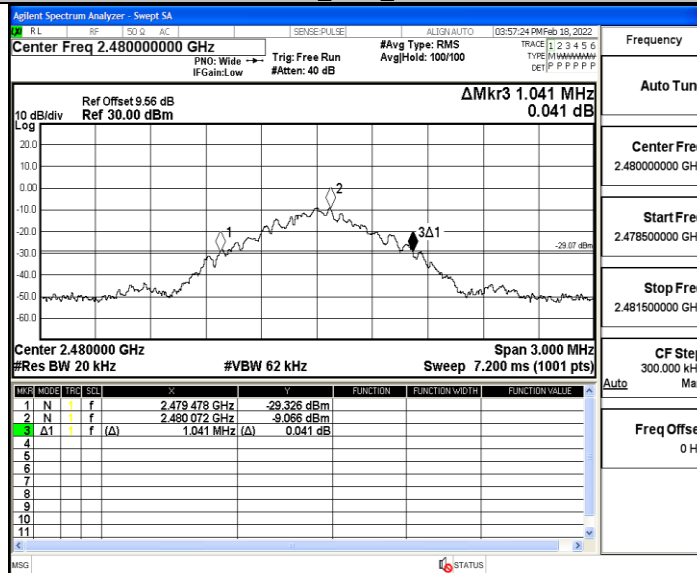
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480

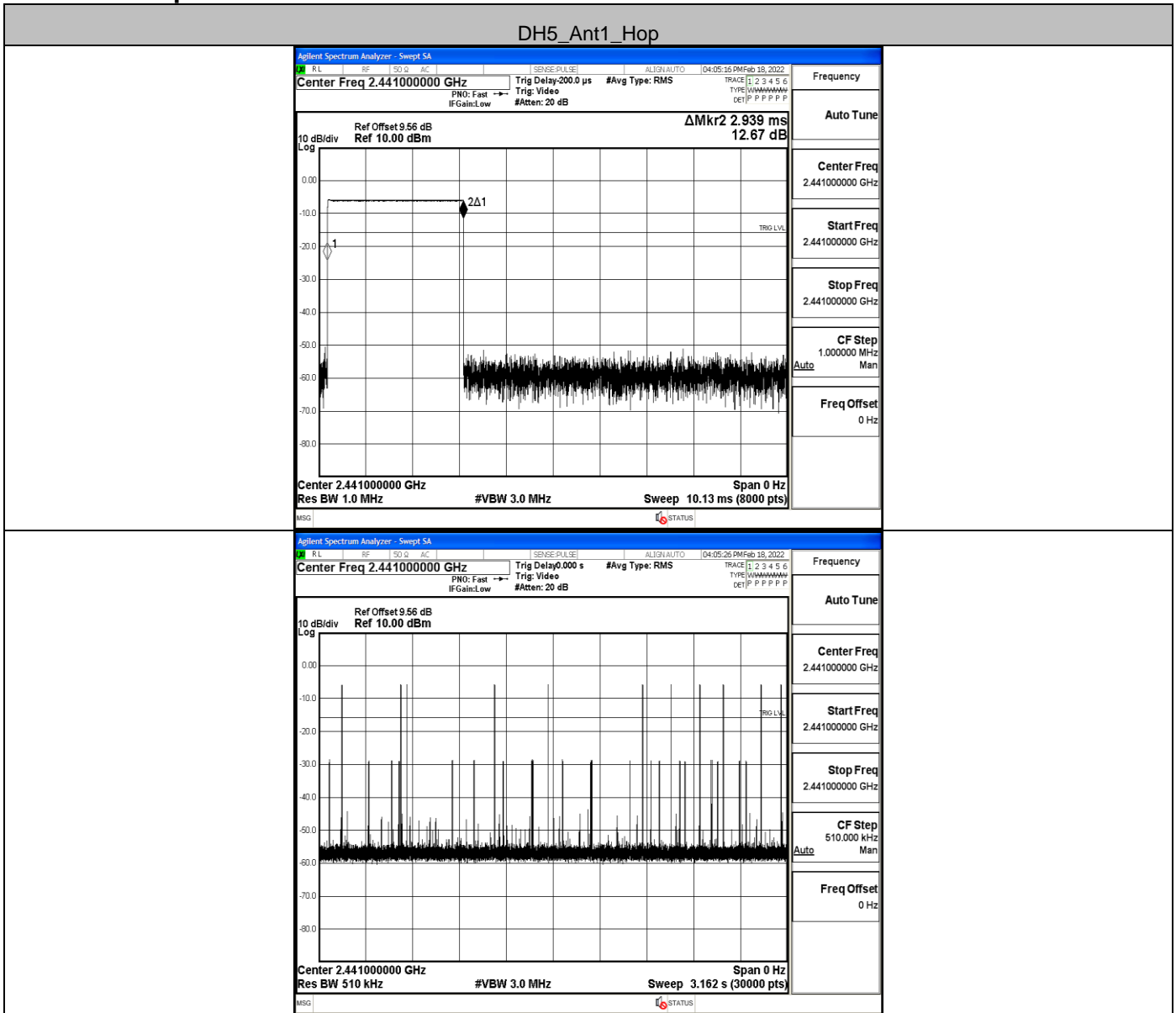


A.2 Dwell Time

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.94	120	0.353	≤0.4	PASS

Test Graph

DH5_Ant1_Hop

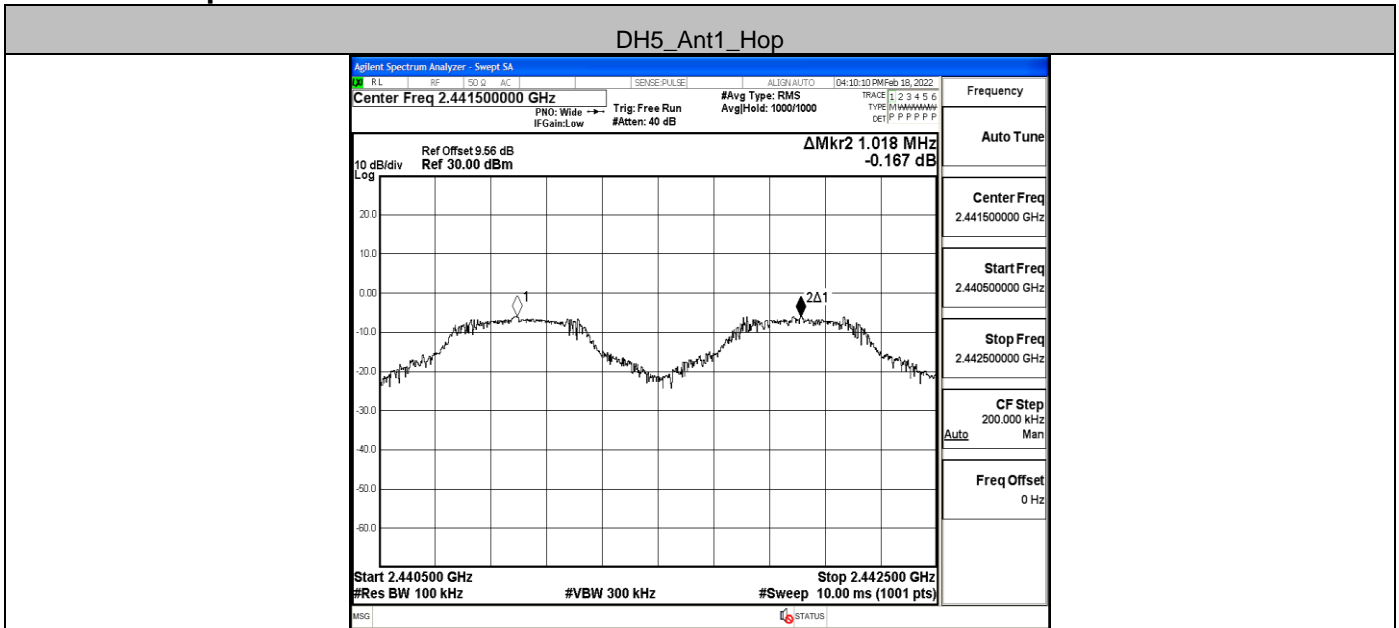


A.3 Carrier Frequency Separation

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.018	≥ 0.694	PASS

Test Graph

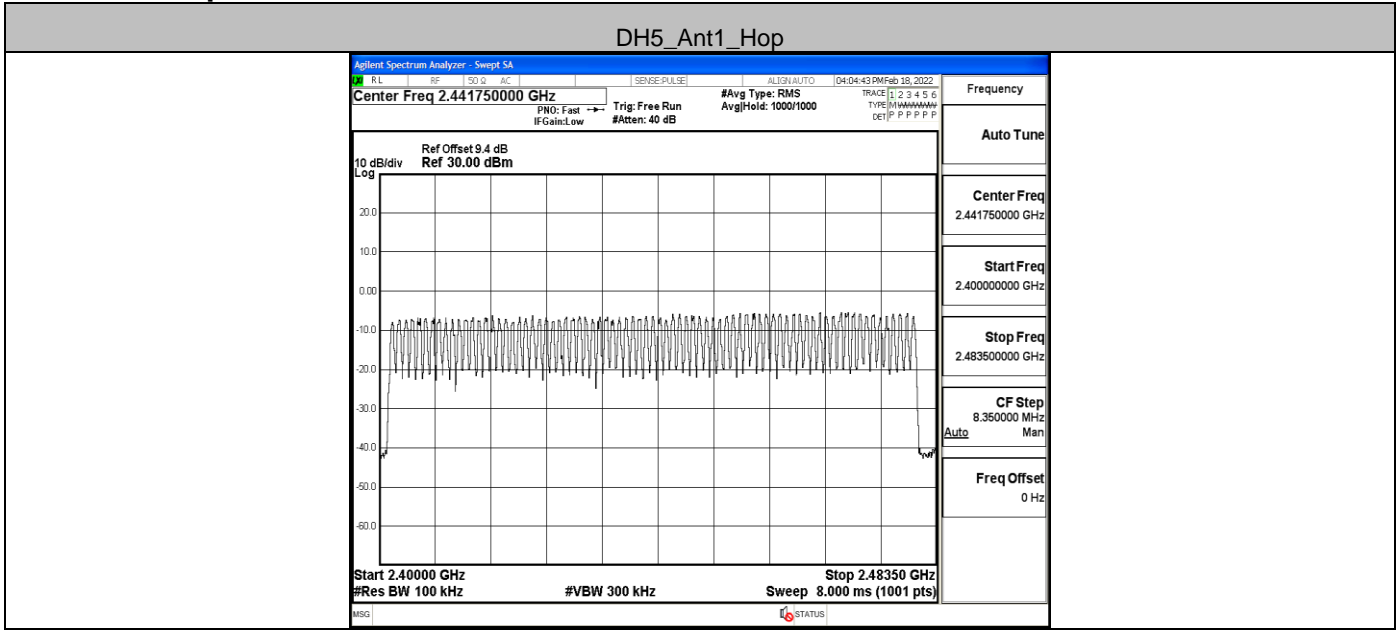
DH5_Ant1_Hop



A.4 Hopping Channel Number

TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	>=15	PASS

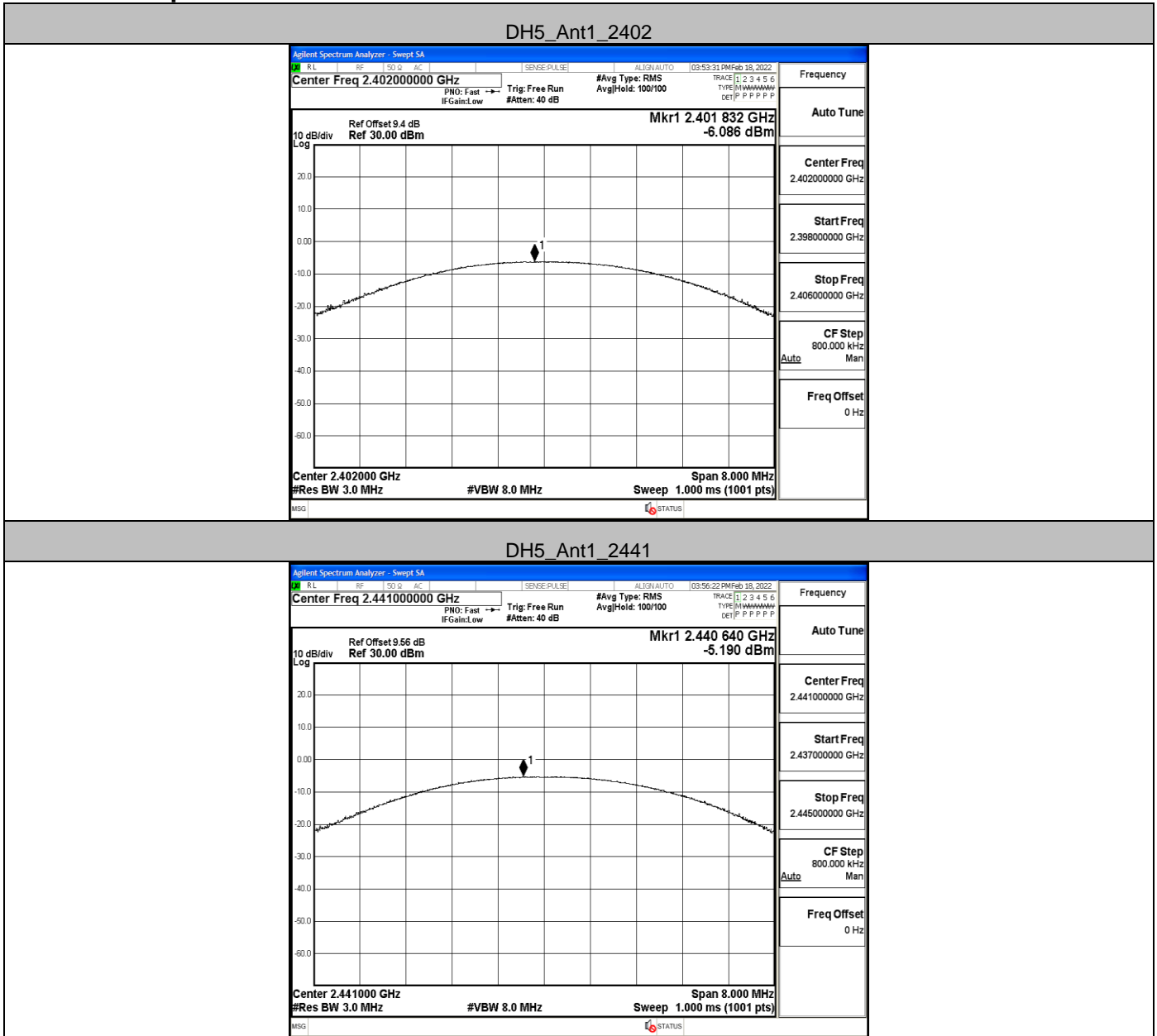
Test Graph



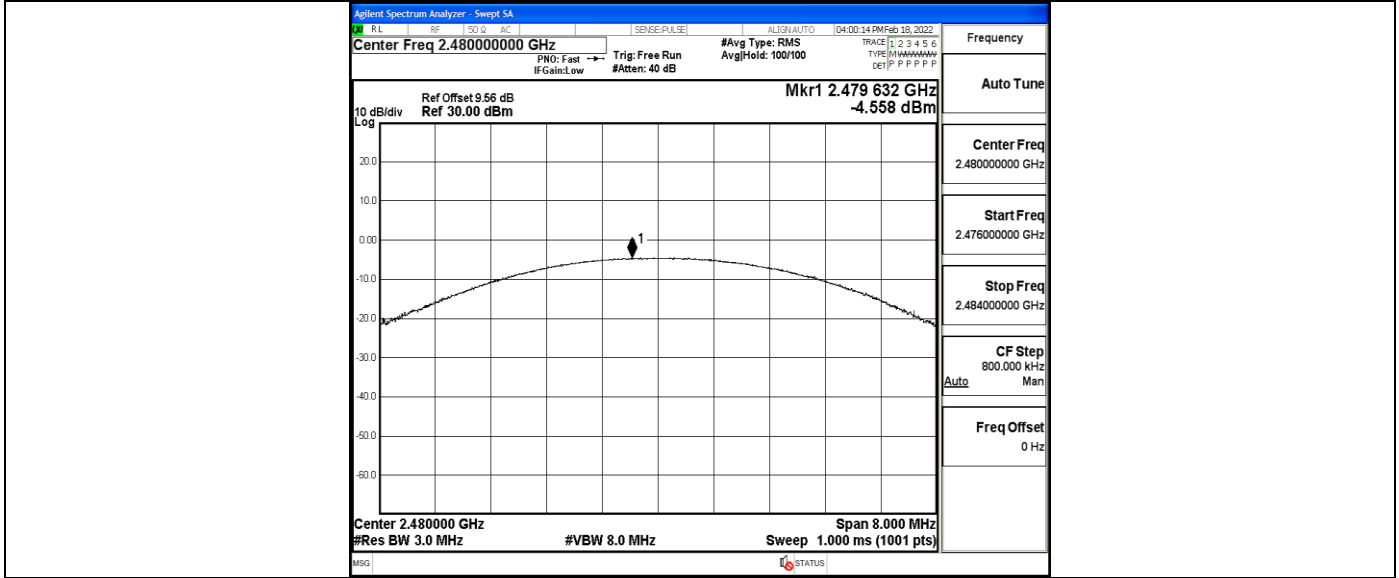
A.5 Conducted Peak Output Power

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-6.09	≤20.97	PASS
		2441	-5.19	≤20.97	PASS
		2480	-4.56	≤20.97	PASS

Test Graph



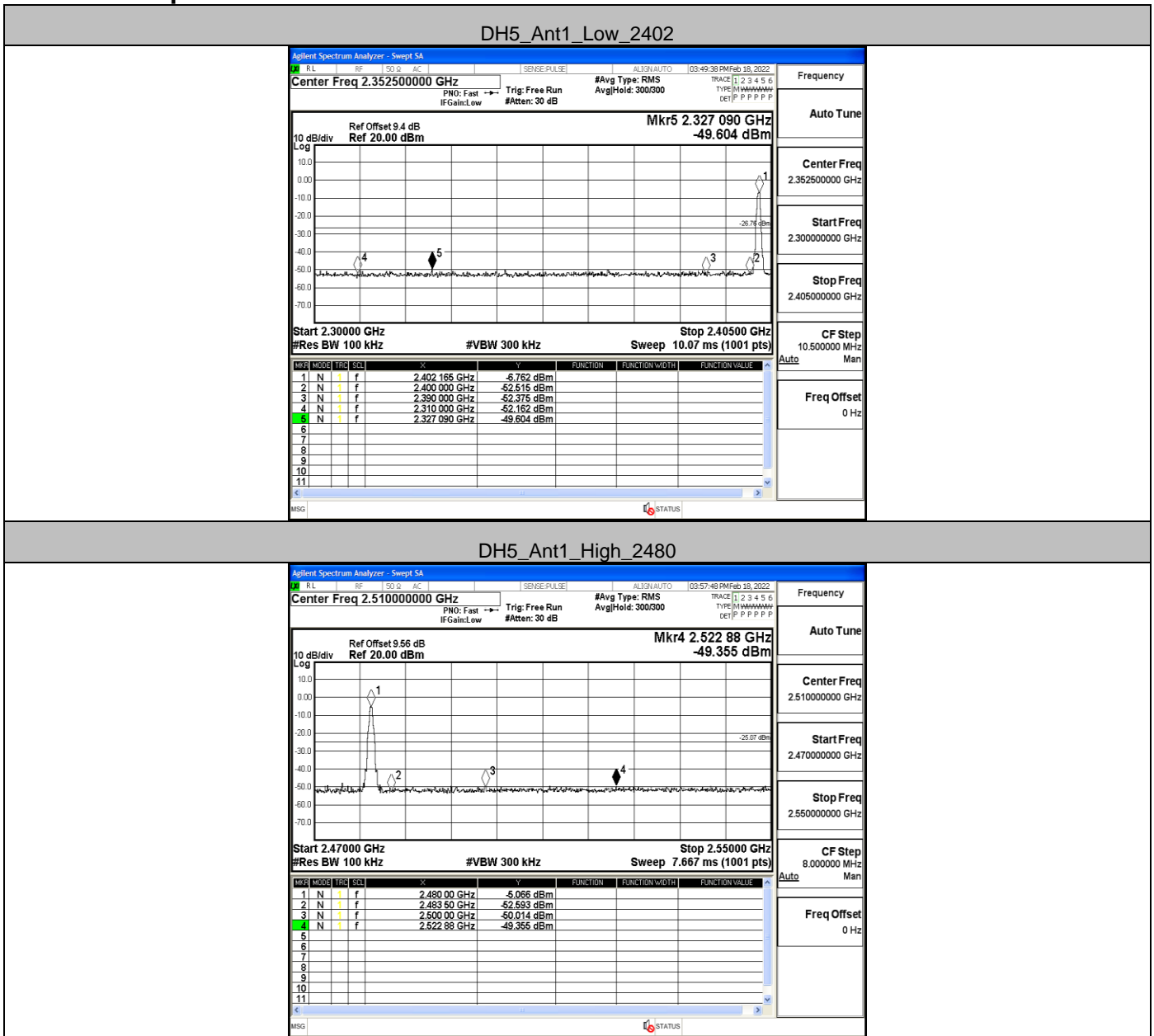
DH5_Ant1_2480



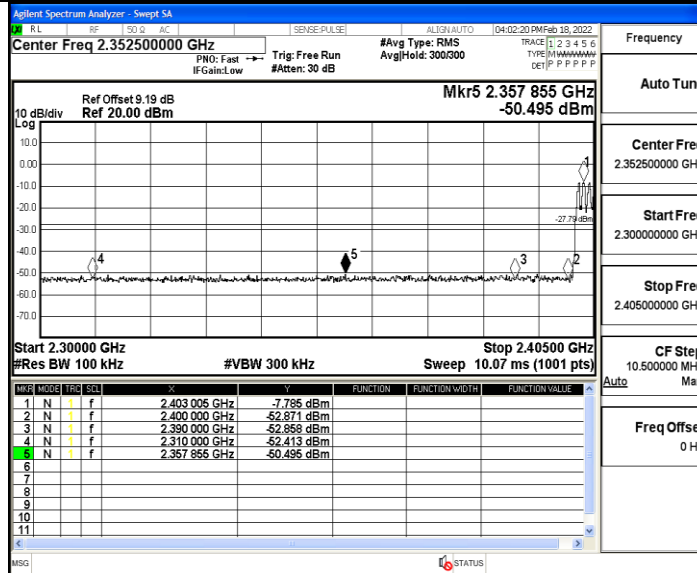
A.6 Band-edge for RF Conducted Emissions

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-6.76	-49.6	≤-26.76	PASS
		High	2480	-5.07	-49.36	≤-25.07	PASS
		Low	Hop_2402	-7.79	-50.5	≤-27.79	PASS
		High	Hop_2480	-5.70	-48.85	≤-25.7	PASS

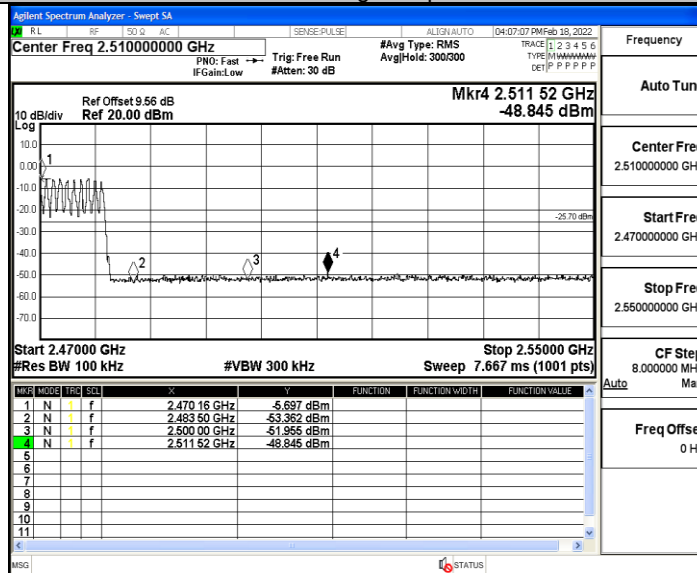
Test Graph



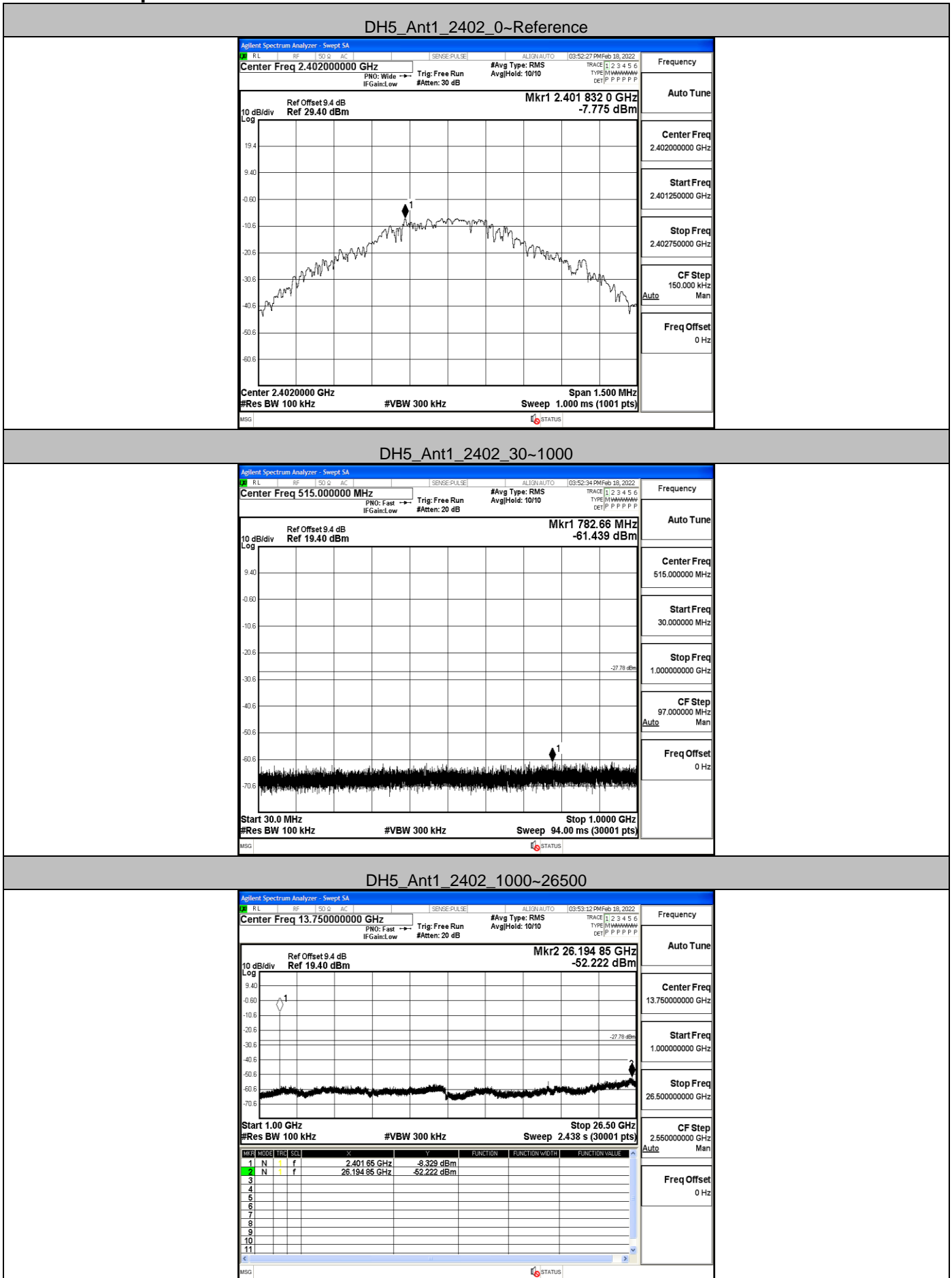
DH5_Ant1_Low_Hop_2402



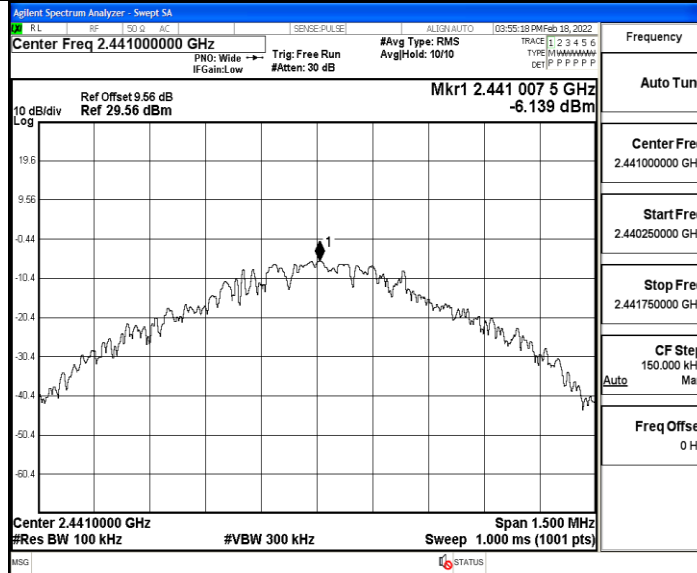
DH5_Ant1_High_Hop_2480



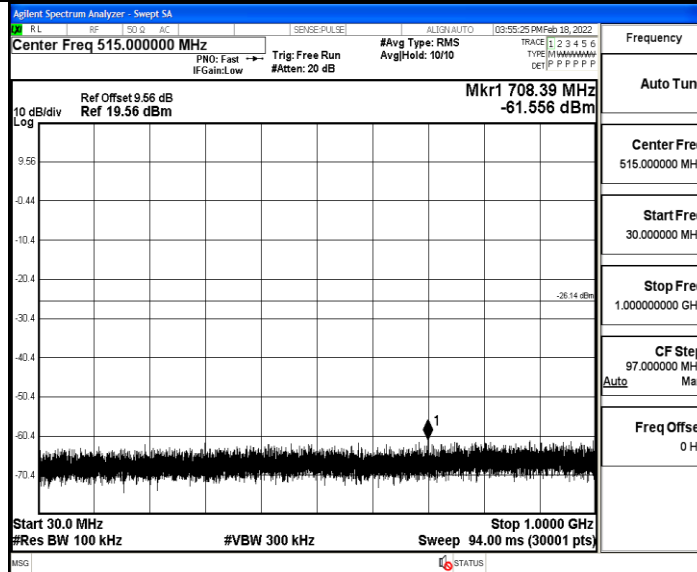
A.7 RF Conducted Spurious Emissions Test Graph



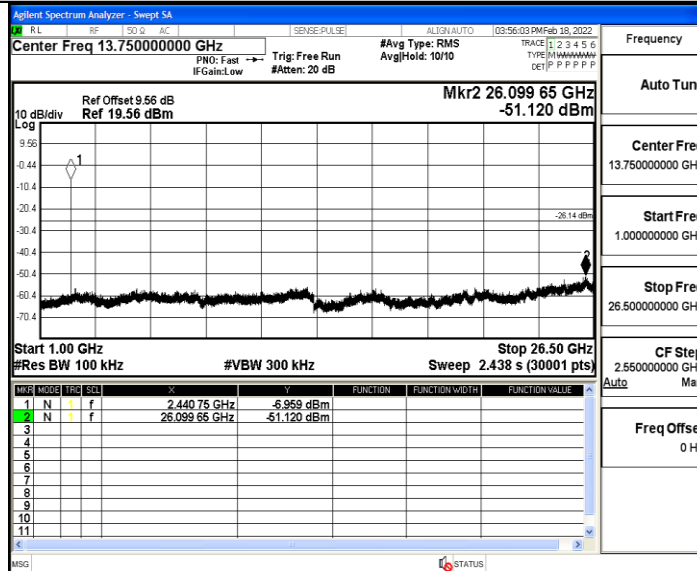
DH5_Ant1_2441_0~Reference



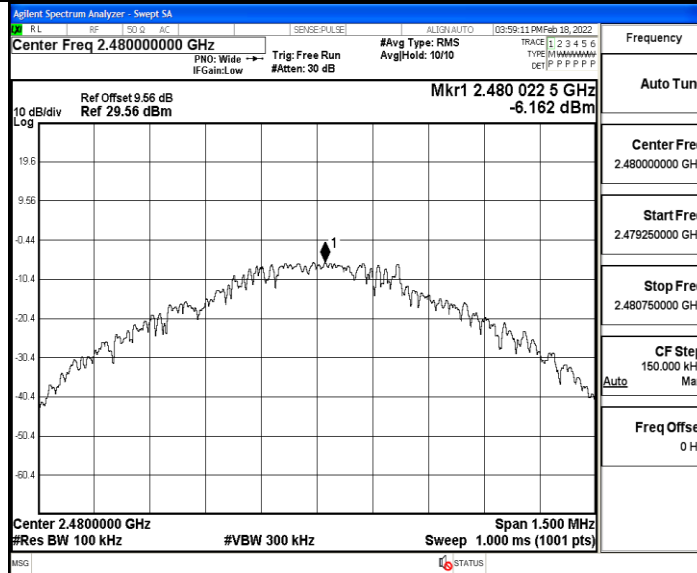
DH5_Ant1_2441_30~1000



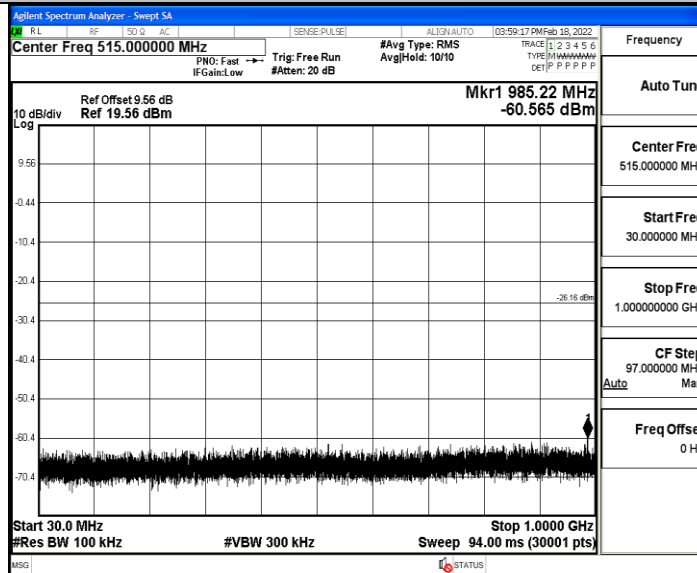
DH5_Ant1_2441_1000~26500



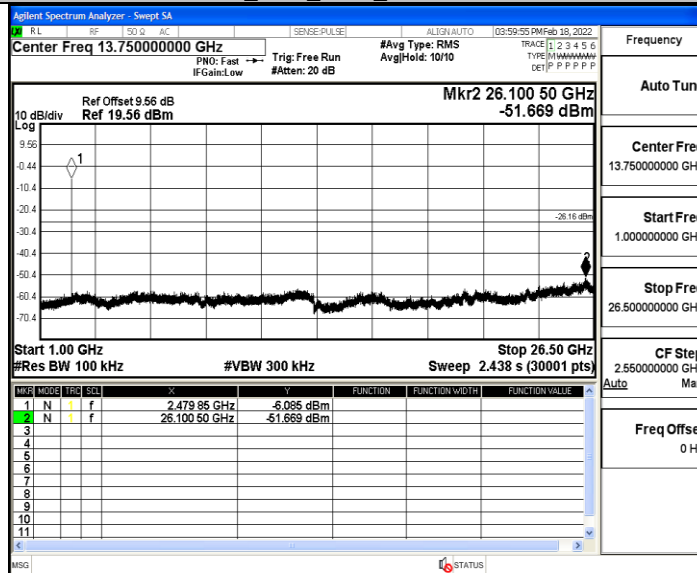
DH5_Ant1_2480_0-Reference



DH5_Ant1_2480_30-1000



DH5_Ant1_2480_1000-26500



A.8 Restrict-band band-edge measurements

TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-49.5	≤-41.20	PASS
				AV	2389.565	-49.2	≤-41.20	PASS
				AV	2390.000	-49.23	≤-41.20	PASS
				Peak	2310.000	-43.71	≤-21.20	PASS
				Peak	2353.025	-40.3	≤-21.20	PASS
				Peak	2390.000	-44.02	≤-21.20	PASS
		High	2480	AV	2483.500	-48.29	≤-41.20	PASS
				AV	2499.440	-48.01	≤-41.20	PASS
				AV	2500.000	-48.19	≤-41.20	PASS
				Peak	2483.500	-42.44	≤-21.20	PASS
				Peak	2498.880	-38.46	≤-21.20	PASS
				Peak	2500.000	-40.66	≤-21.20	PASS

Note :

1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graph



DH5_Ant1_High_2480_Peak

