

## Appendix A

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

Product Name: Bluetooth mechanical Keyboard

Trade Mark: Keychron

Test Model: Keychron K1 SE

FCC ID: 2ASF4-K1SE

### Environmental Conditions

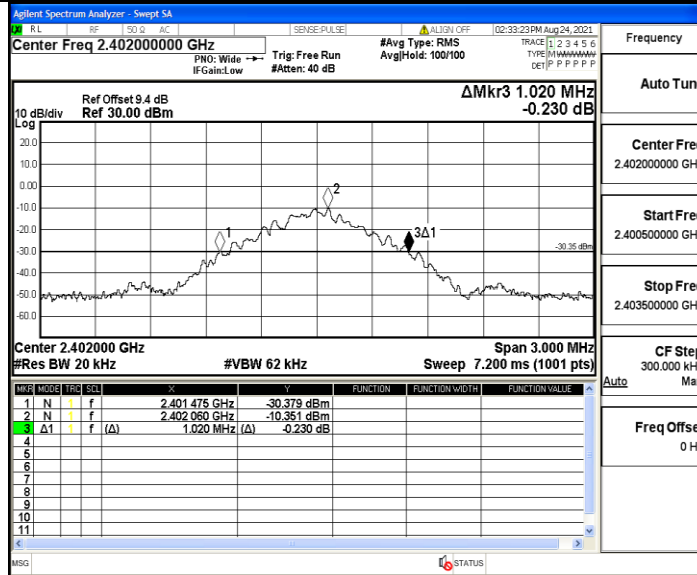
Temperature:	22.8° C
Relative Humidity:	56%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen

#### A.1 20 dB Bandwidth

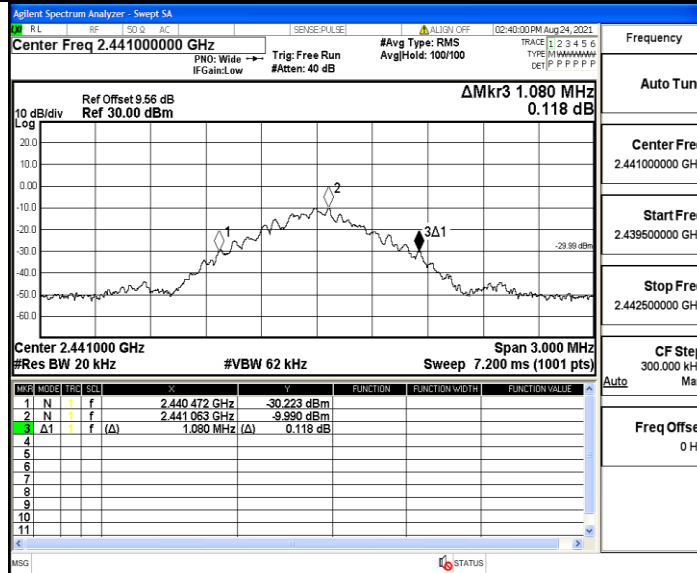
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.020	2401.475	2402.495	---	PASS
		2441	1.080	2440.472	2441.552	---	PASS
		2480	1.023	2479.478	2480.501	---	PASS

Test Graph

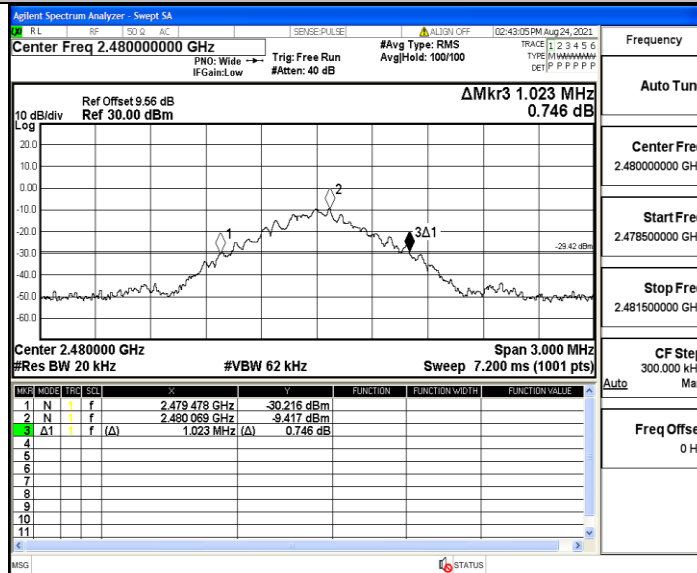
DH5\_Ant1\_2402



DH5\_Ant1\_2441



DH5\_Ant1\_2480

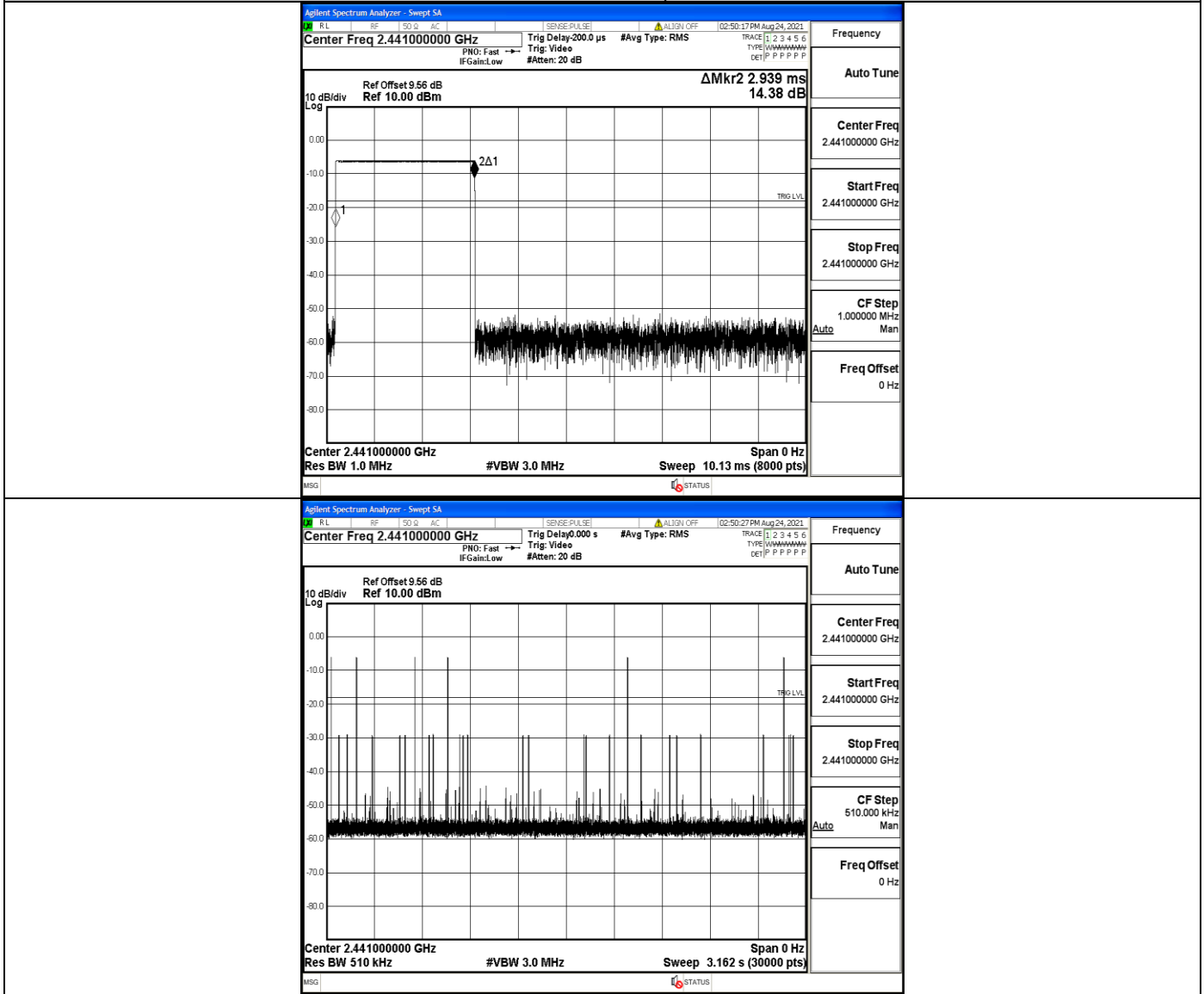


**A.2 Dwell Time**

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.94	70	0.206	≤0.4	PASS

### Test Graph

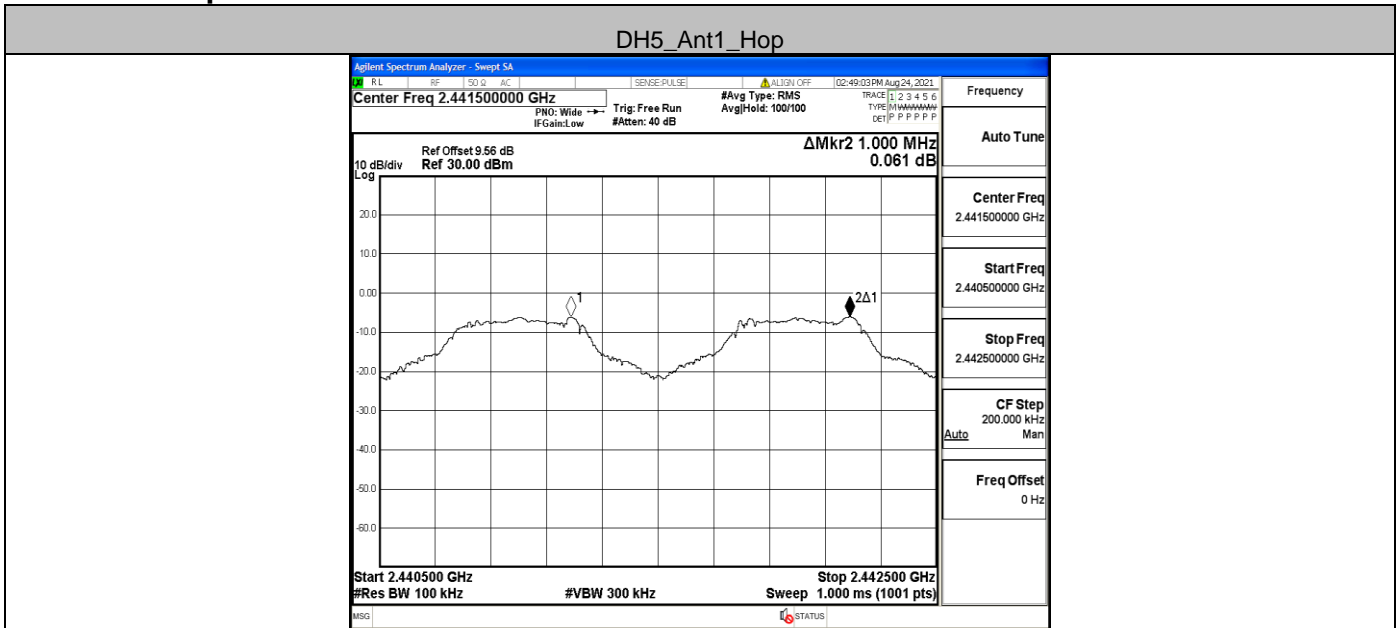
#### DH5\_Ant1\_Hop



### A.3 Carrier Frequency Separation

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1	$\geq 0.720$	PASS

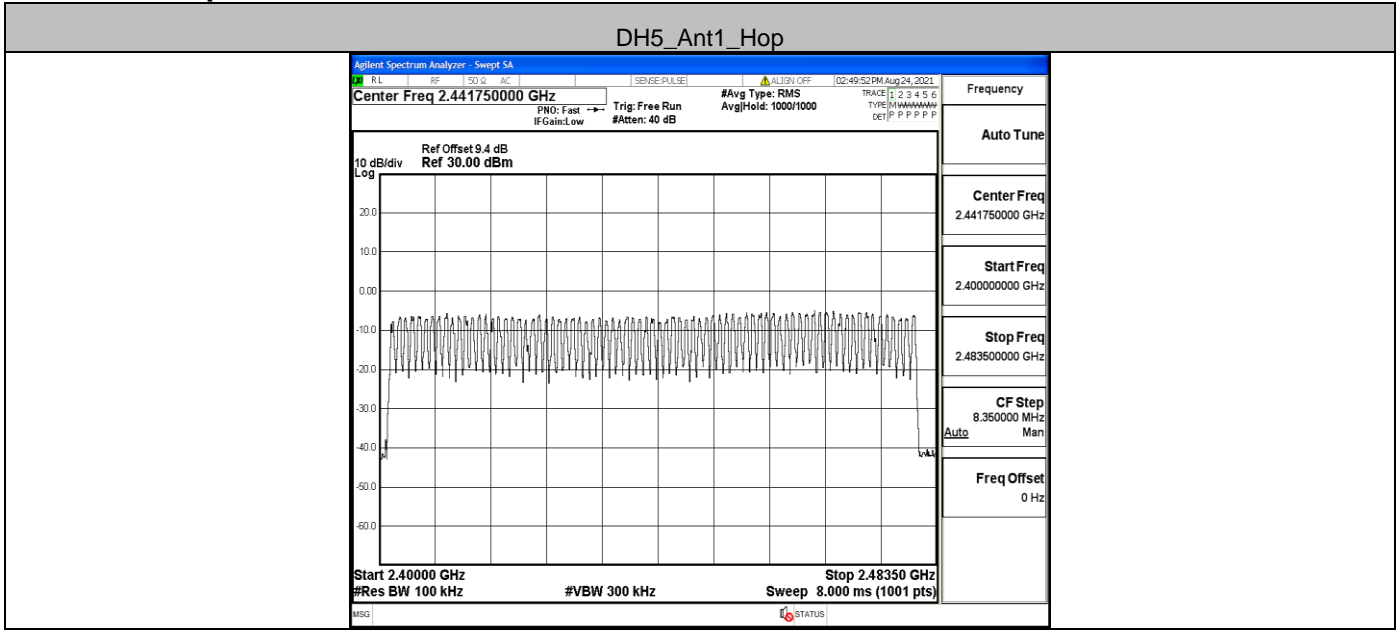
### Test Graph



### A.4 Hopping Channel Number

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

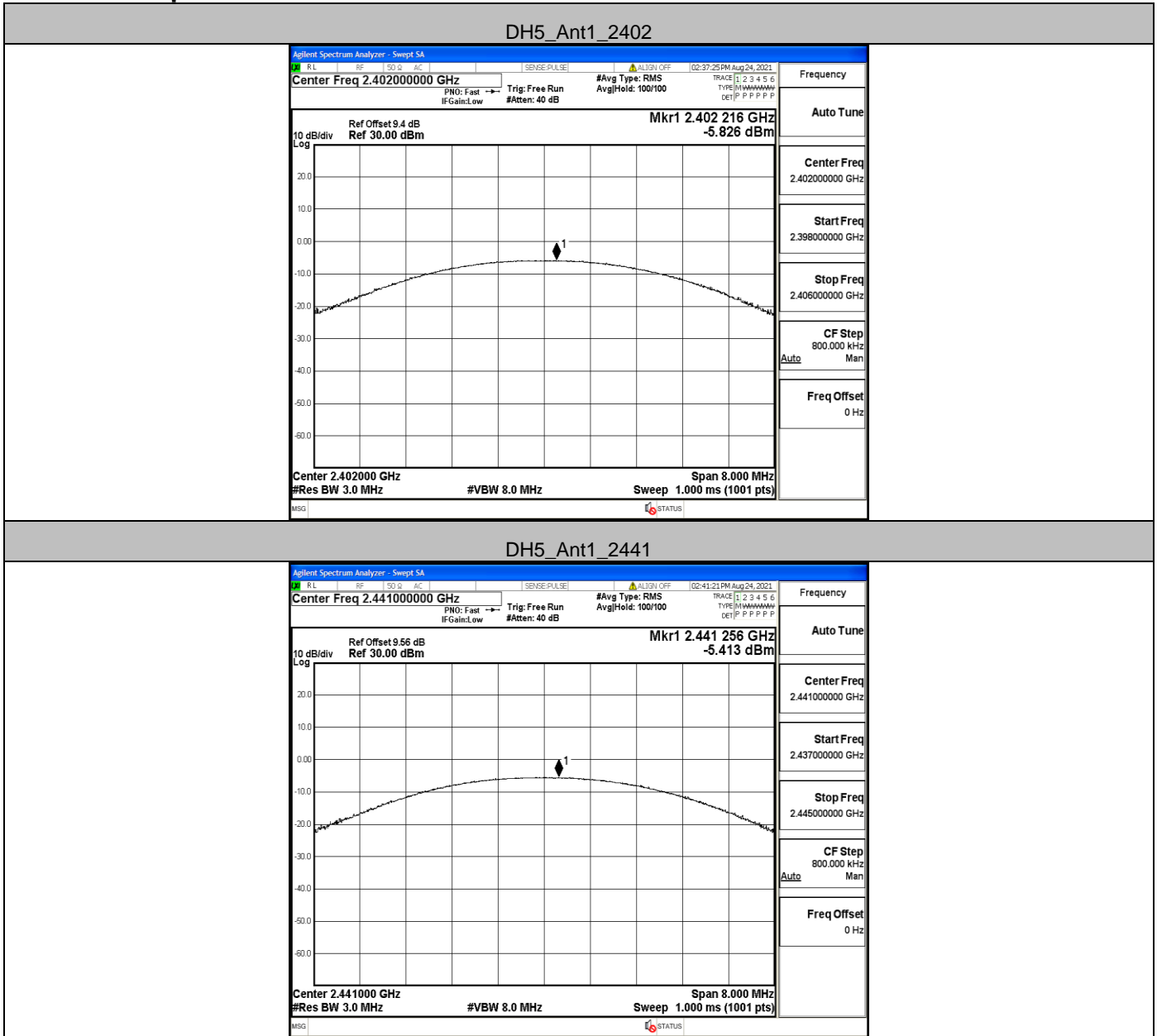
### Test Graph



### A.5 Conducted Peak Output Power

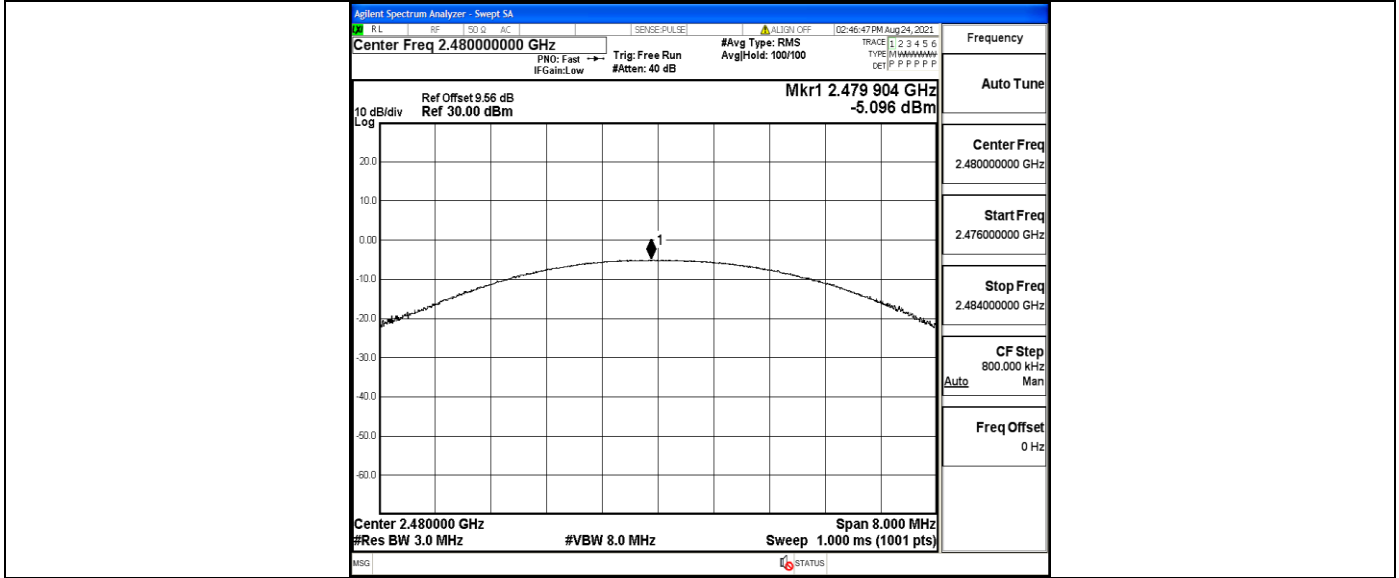
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-5.83	≤30.00	PASS
		2441	-5.41	≤30.00	PASS
		2480	-5.1	≤30.00	PASS

### Test Graph





DH5\_Ant1\_2480

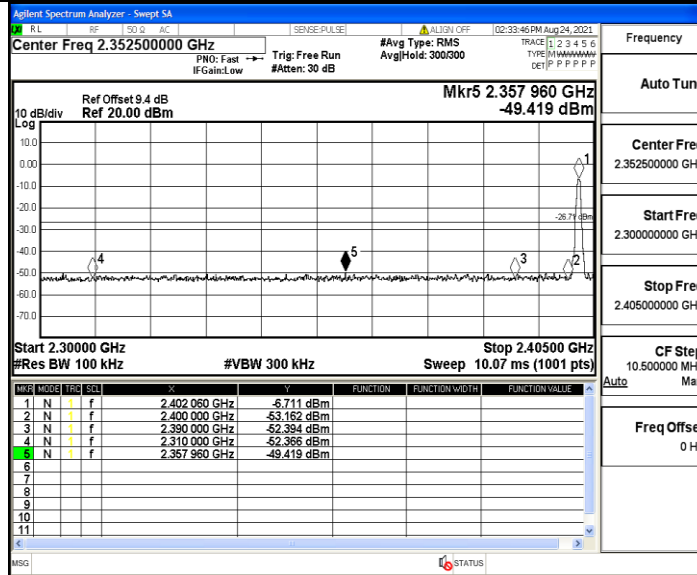


**A.6 Band-edge for RF Conducted Emissions**

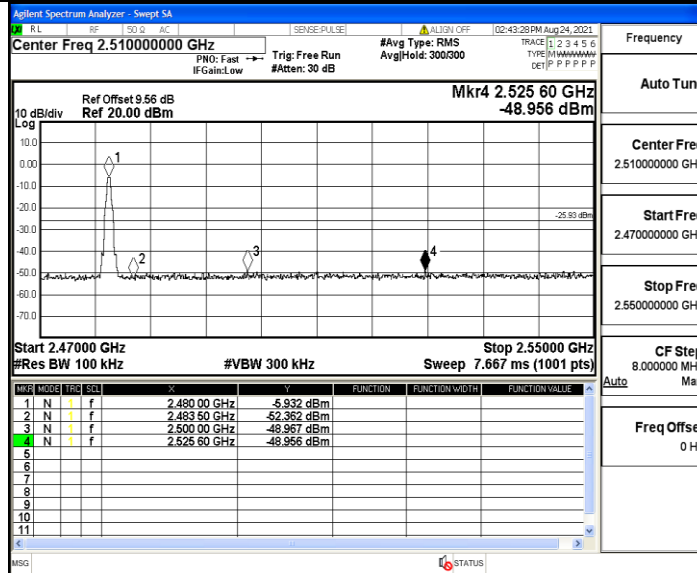
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-6.71	-49.42	$\leq -26.71$	PASS
		High	2480	-5.93	-48.96	$\leq -25.93$	PASS
		Low	Hop_2402	-7.50	-49.57	$\leq -27.5$	PASS
		High	Hop_2480	-5.63	-49.34	$\leq -25.63$	PASS

Test Graph

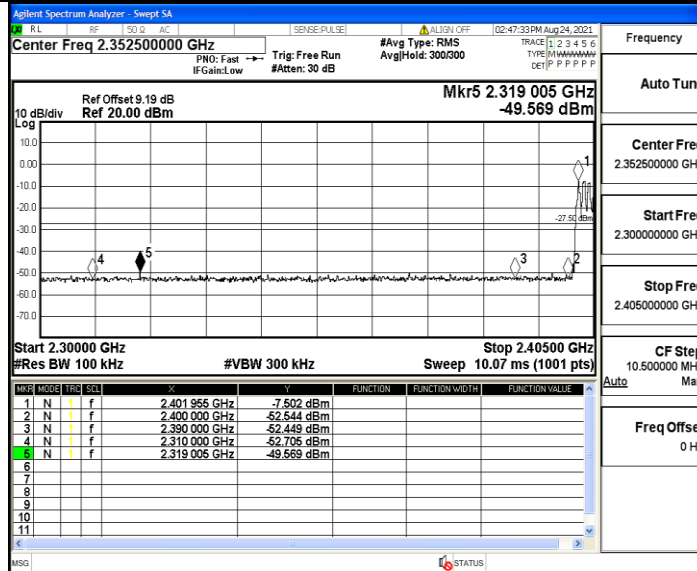
DH5\_Ant1\_Low\_2402



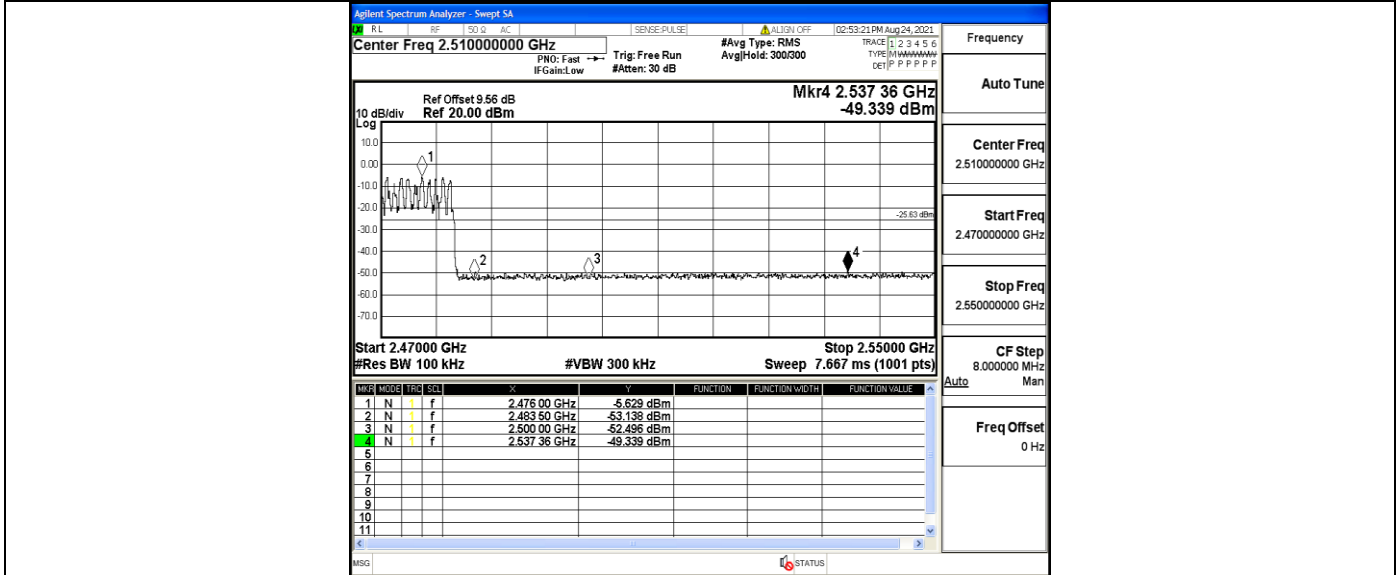
DH5\_Ant1\_High\_2480



DH5\_Ant1\_Low\_Hop\_2402

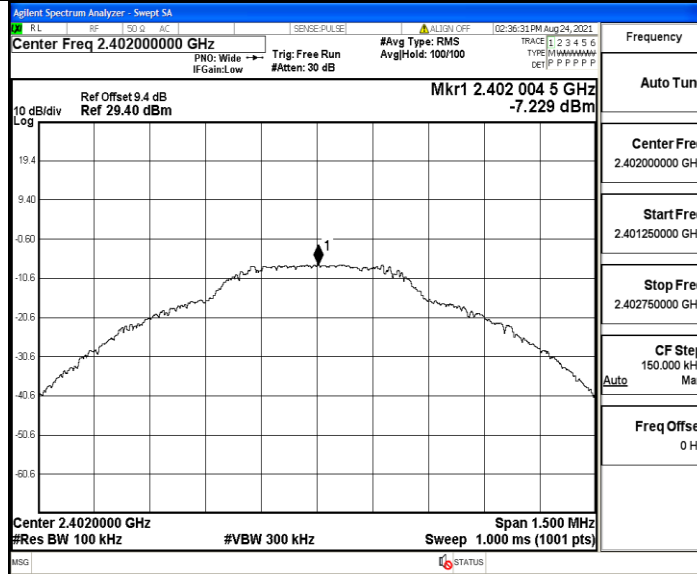


DH5\_Ant1\_High\_Hop\_2480

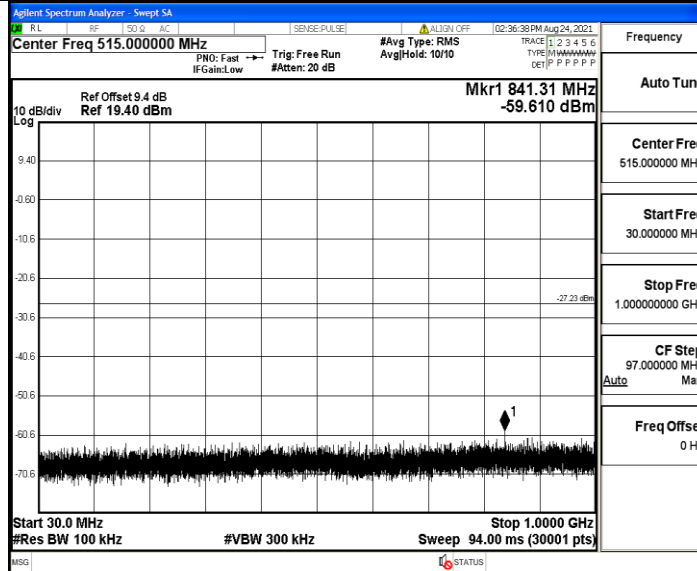


### A.7 RF Conducted Spurious Emissions Test Graph

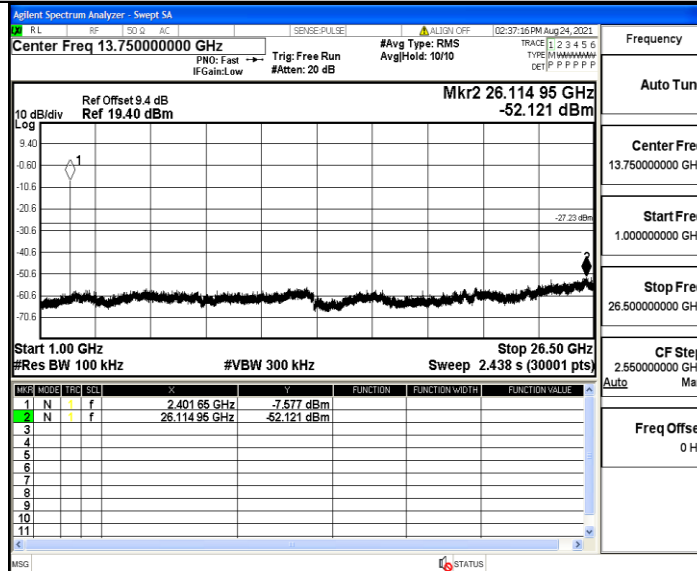
DH5\_Ant1\_2402\_0~Reference



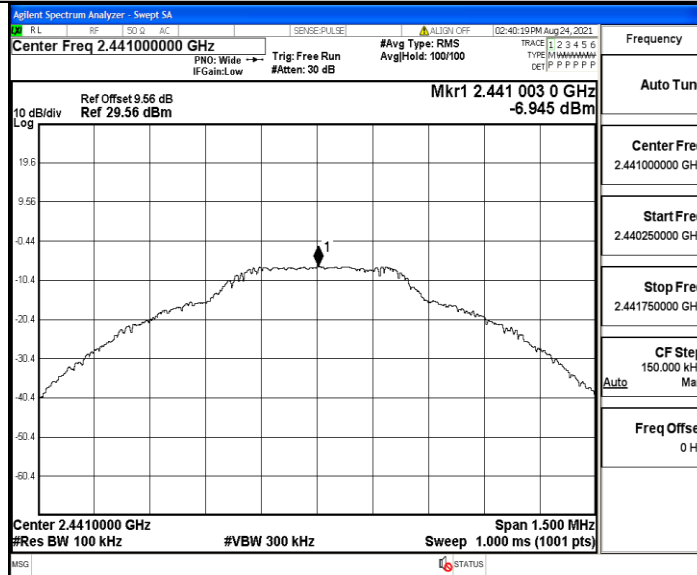
DH5\_Ant1\_2402\_30~1000



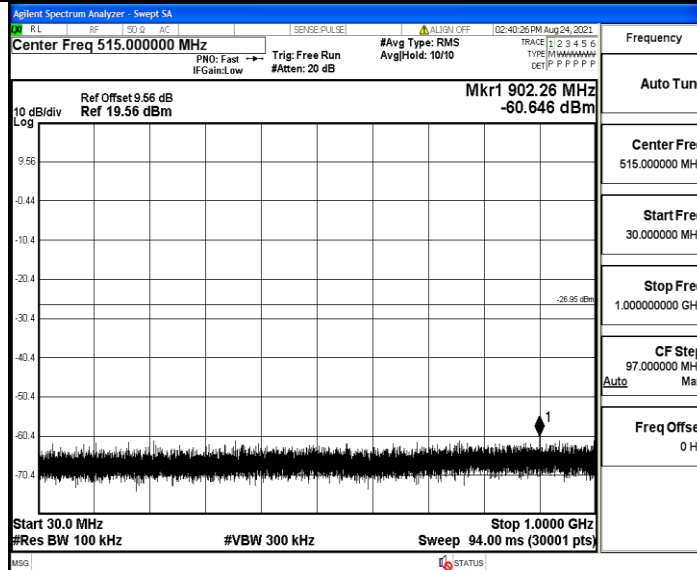
DH5\_Ant1\_2402\_1000~26500



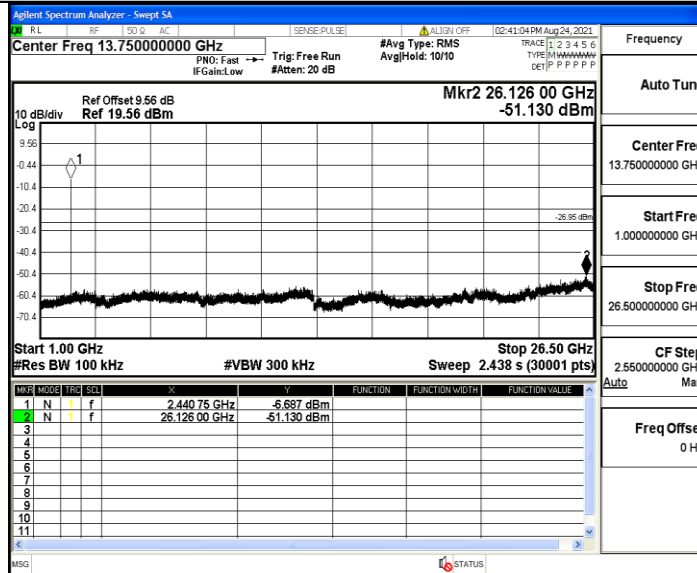
DH5\_Ant1\_2441\_0~Reference



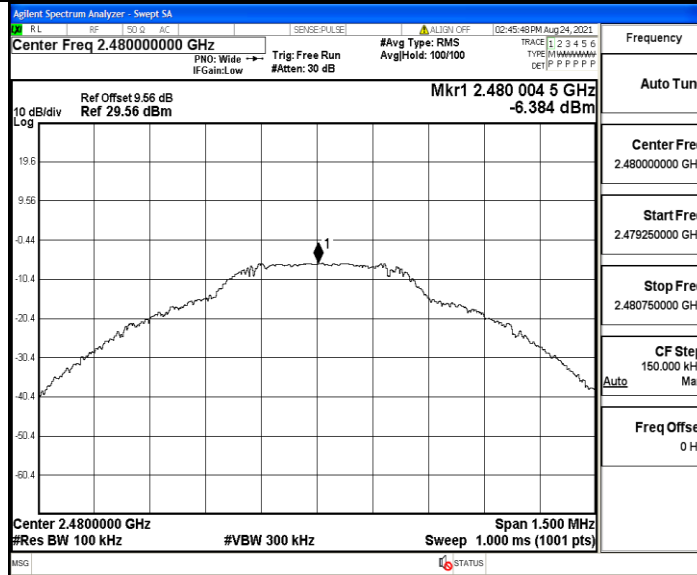
DH5\_Ant1\_2441\_30~1000



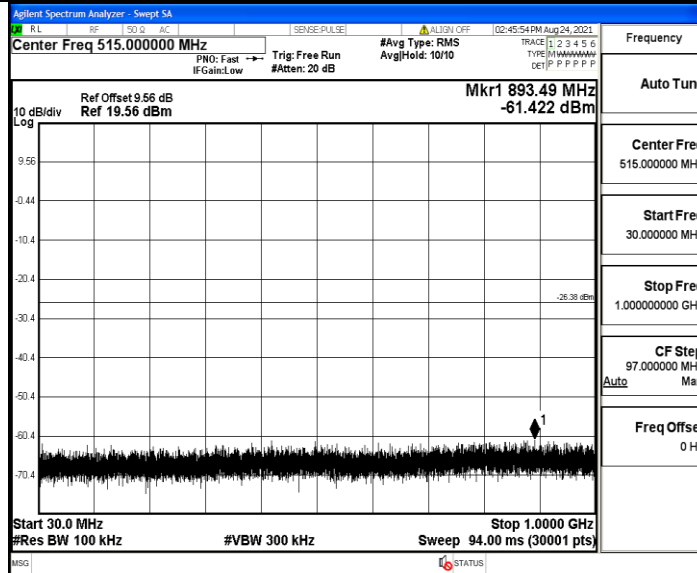
DH5\_Ant1\_2441\_1000~26500



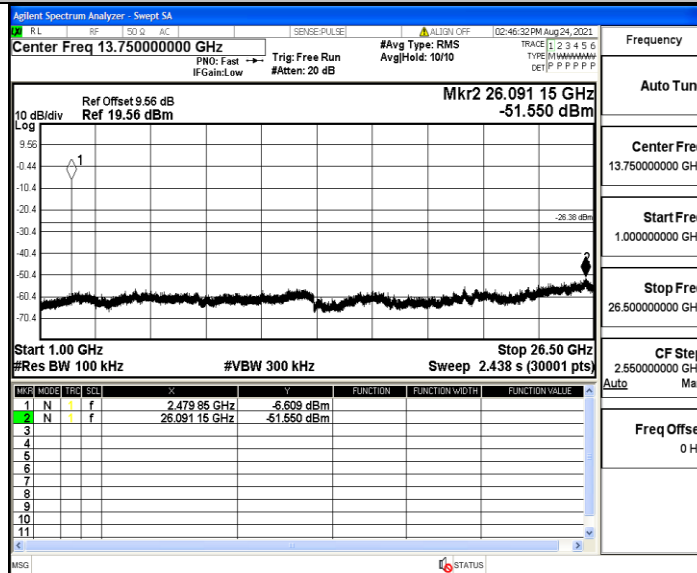
DH5\_Ant1\_2480\_0-Reference



DH5\_Ant1\_2480\_30-1000



DH5\_Ant1\_2480\_1000-26500



**A.8 Restrict-band band-edge measurements**

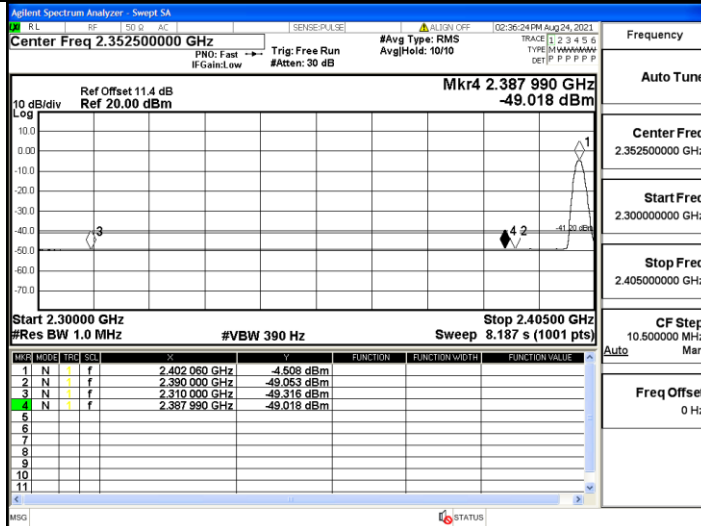
TestMode	Antenna	ChName	Channel	Detector	Freq(MHz)	Result(dBm)	Limit(dBm)	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-49.32	≤-41.20	PASS
				AV	2387.990	-49.02	≤-41.20	PASS
				AV	2390.000	-49.05	≤-41.20	PASS
				Peak	2310.000	-45.16	≤-21.20	PASS
				Peak	2361.425	-40.12	≤-21.20	PASS
				Peak	2390.000	-44.77	≤-21.20	PASS
		High	2480	AV	2483.500	-48.45	≤-41.20	PASS
				AV	2499.520	-48.31	≤-41.20	PASS
				AV	2500.000	-48.34	≤-41.20	PASS
				Peak	2483.500	-43.9	≤-21.20	PASS
				Peak	2488.480	-38.67	≤-21.20	PASS
				Peak	2500.000	-43.2	≤-21.20	PASS

## Note:

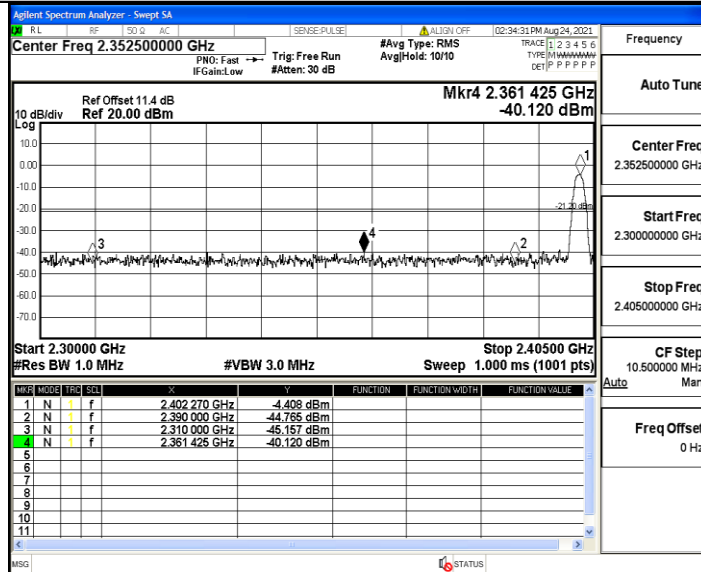
1. The Antenna Gain is compensated in the graph with 2dBi and Antenna Gain which is Higher.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



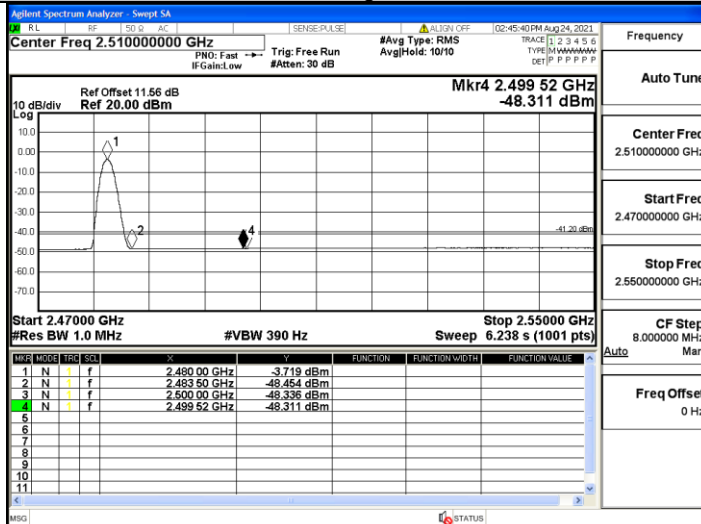
DH5\_Ant1\_Low\_2402\_AV



DH5\_Ant1\_Low\_2402\_Peak



DH5\_Ant1\_High\_2480\_AV



DH5\_Ant1\_High\_2480\_Peak

