





## Appendix A

### RF Test Data for BT (Conducted Measurement)

Product Name: STAGE & STUDIO DJ SPEAKER & MIXER BUNDLE KIT

Test Model: PPHP28AMX

#### Environmental Conditions

Temperature:	23.5 ° C
Relative Humidity:	52.2%
ATM Pressure:	100.0 kPa
Test Engineer:	 Kay Hu
Supervised by:	 Li Huan





## A.1 20dB Emission Bandwidth

### Test Result

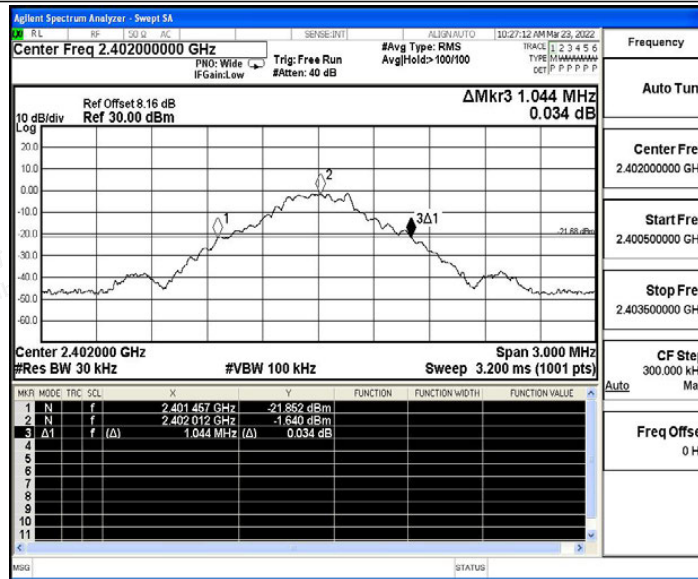
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	1.044	2401.457	2402.501	---	---
		2441	1.038	2440.460	2441.498	---	---
		2480	1.038	2479.463	2480.501	---	---
2DH5	Ant1	2402	1.320	2401.337	2402.657	---	---
		2441	1.320	2440.337	2441.657	---	---
		2480	1.290	2479.361	2480.651	---	---



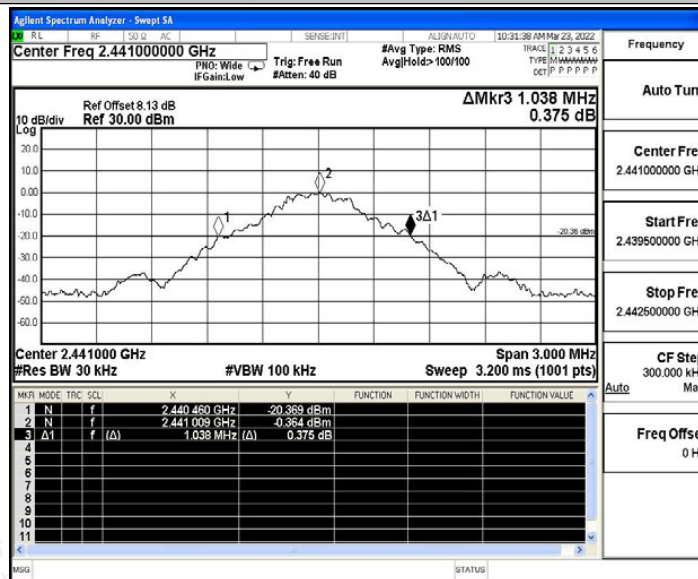


### Test Graphs

#### DH5\_Ant1\_2402

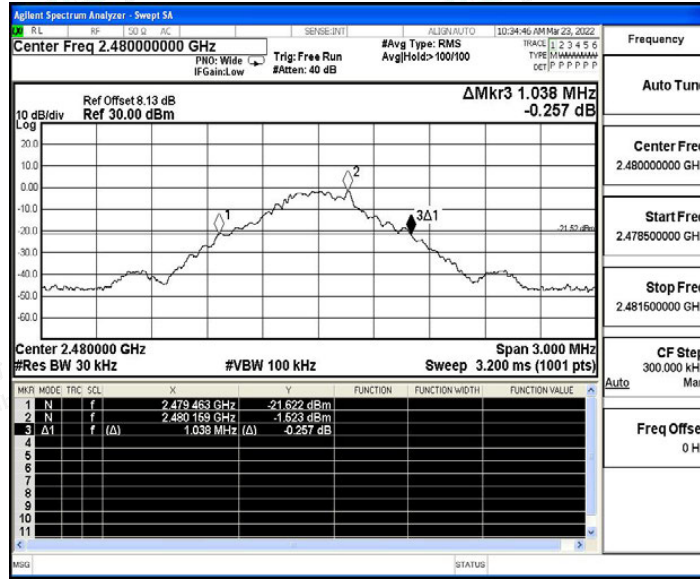


#### DH5\_Ant1\_2441

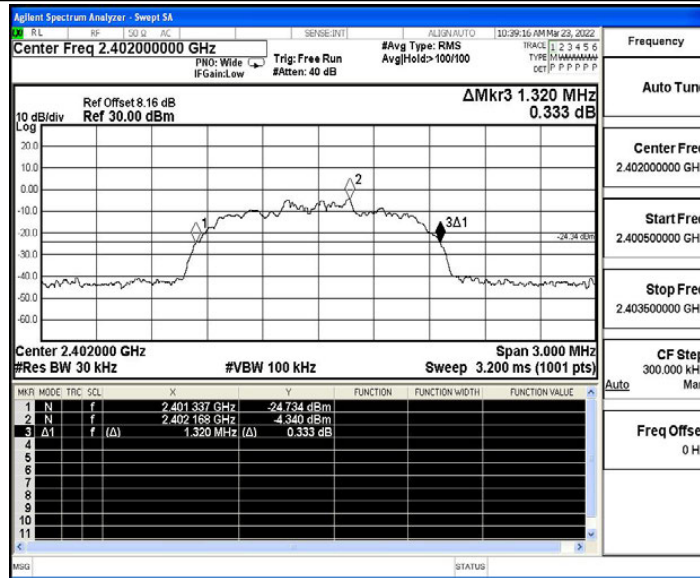


#### DH5\_Ant1\_2480



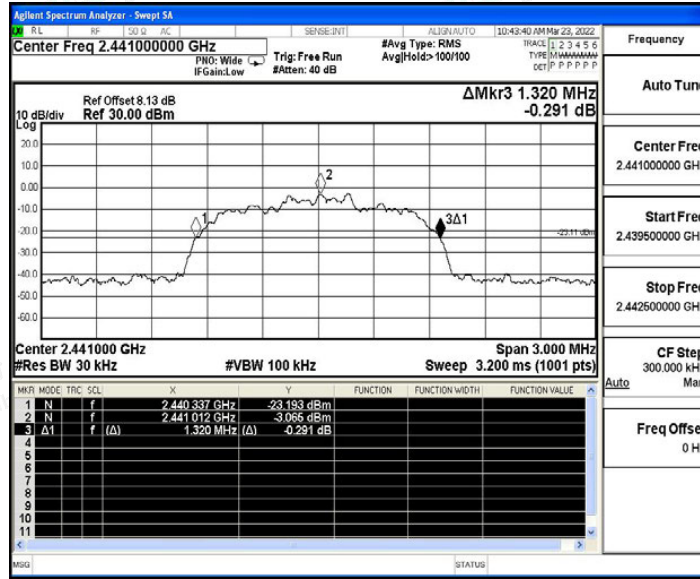


2DH5\_Ant1\_2402

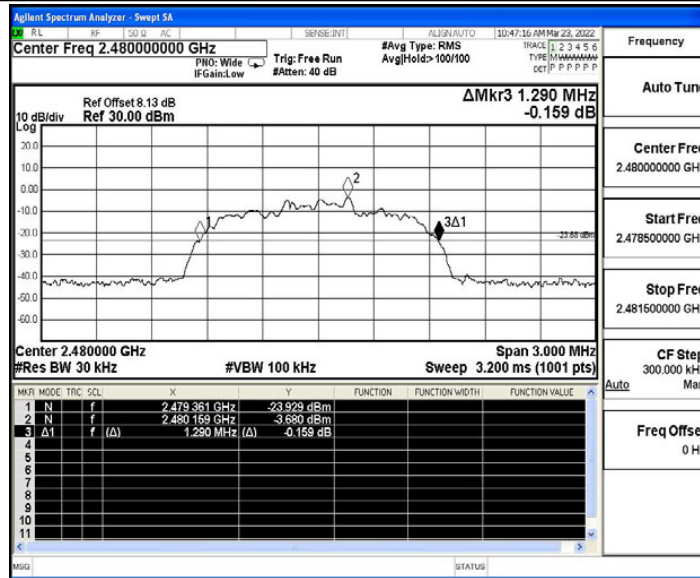


2DH5\_Ant1\_2441





2DH5\_Ant1\_2480





## A.2 Maximum peak conducted output power

### Test Result

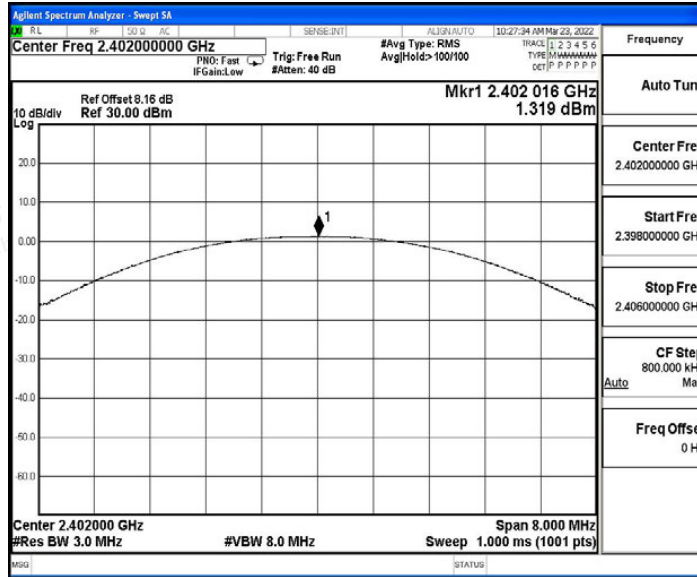
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	1.32	≤20.97	PASS
		2441	2.53	≤20.97	PASS
		2480	1.06	≤20.97	PASS
2DH5	Ant1	2402	0.46	≤20.97	PASS
		2441	1.7	≤20.97	PASS
		2480	0.36	≤20.97	PASS



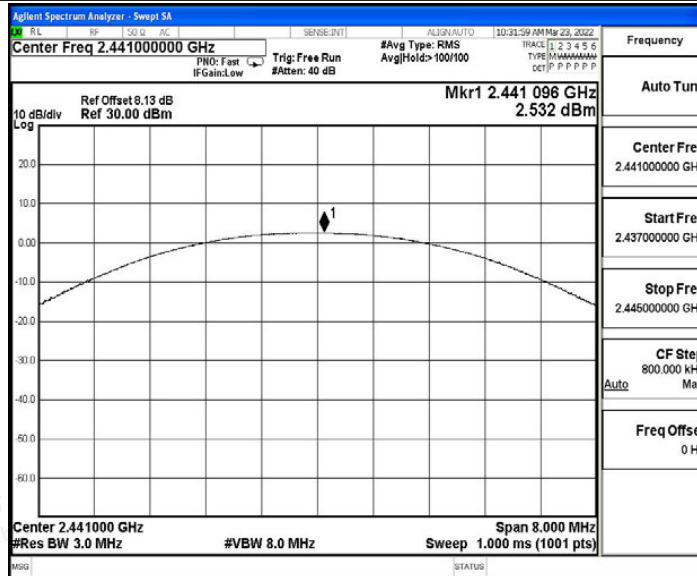


### Test Graphs

DH5\_Ant1\_2402

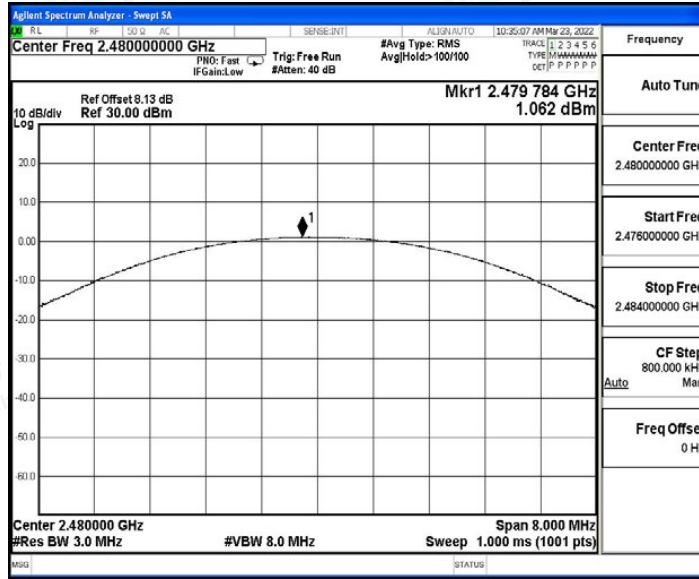


DH5\_Ant1\_2441

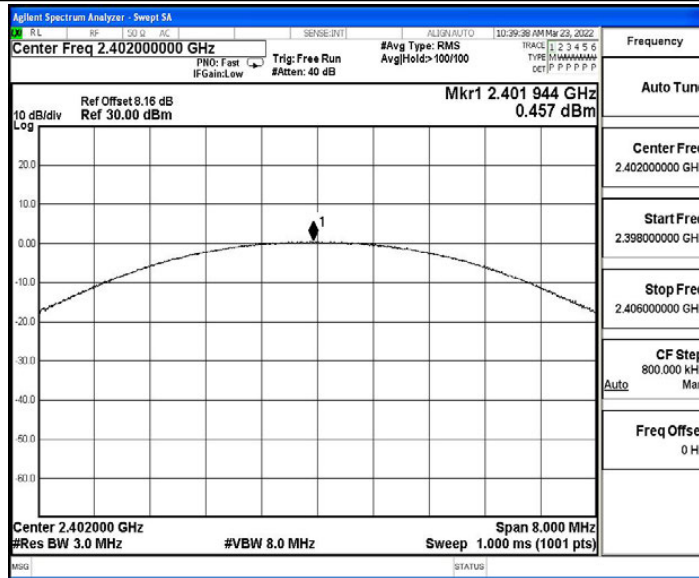


DH5\_Ant1\_2480





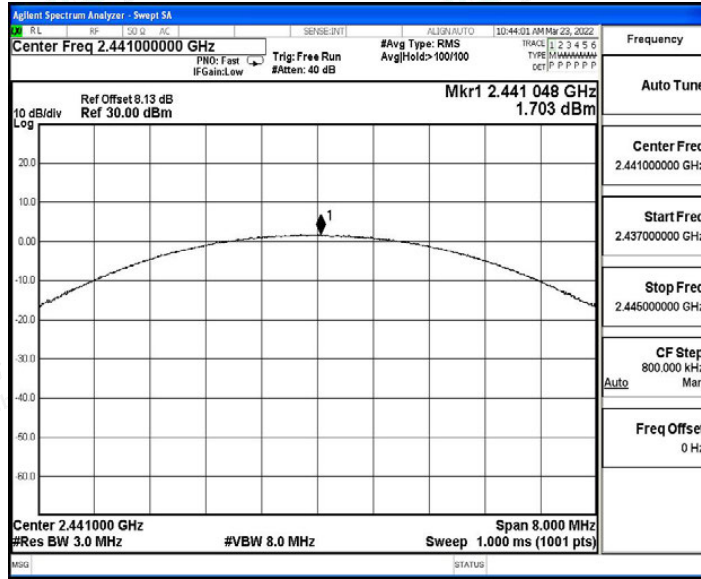
2DH5\_Ant1\_2402



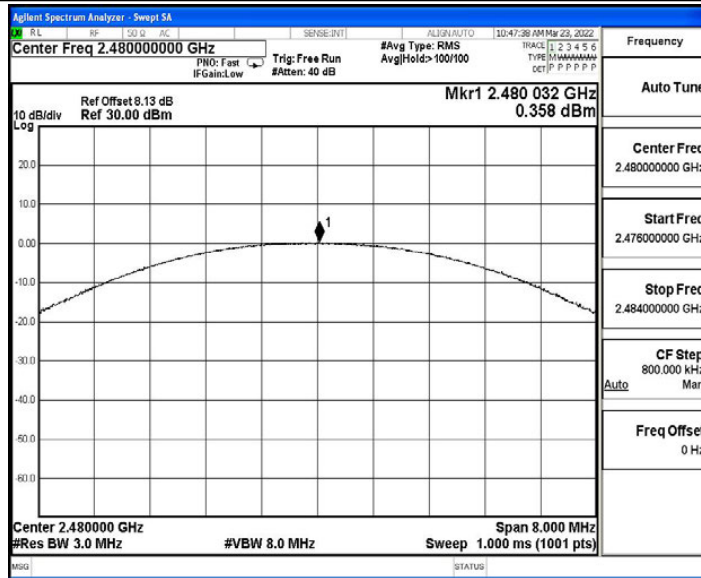
2DH5\_Ant1\_2441







2DH5\_Ant1\_2480





### A.3 Carrier frequency separation

#### Test Result

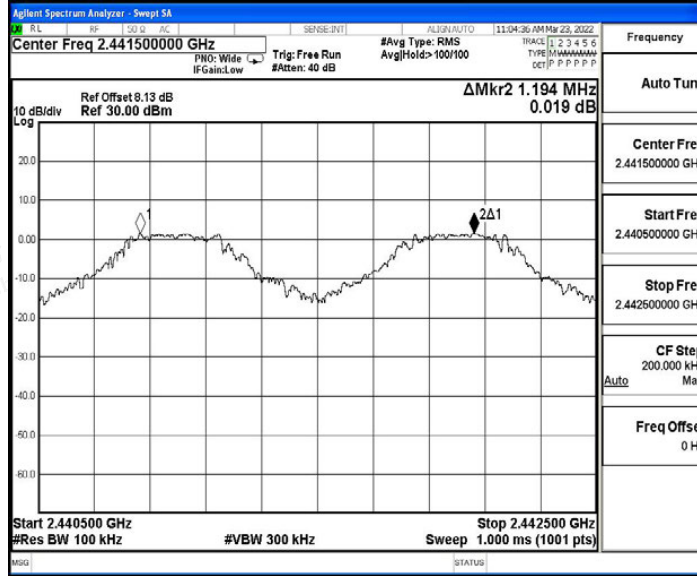
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.194	≥0.696	PASS
2DH5	Ant1	Hop	1.144	≥0.880	PASS



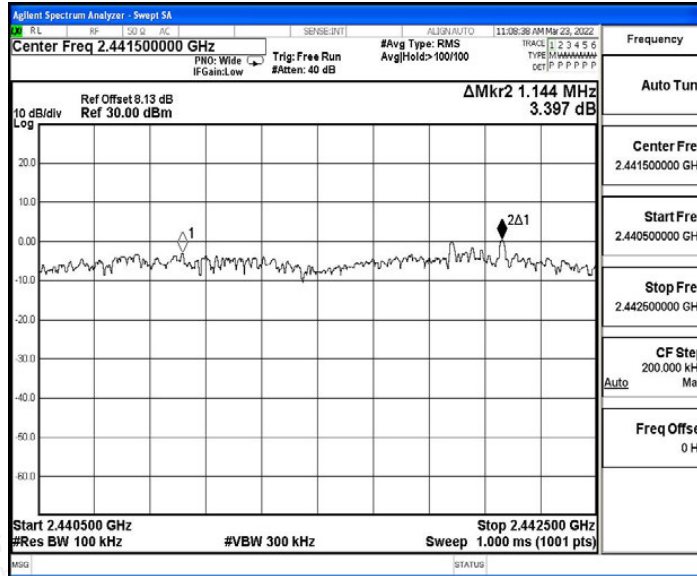


### Test Graphs

#### DH5\_Ant1\_Hop



#### 2DH5\_Ant1\_Hop





## A.4 Time of occupancy

### Test Result

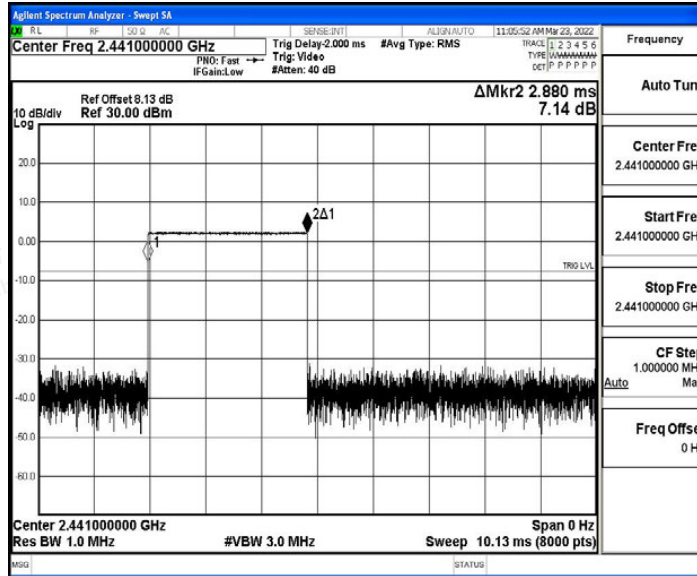
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS
2DH5	Ant1	Hop	2.88	106.67	0.308	≤0.4	PASS



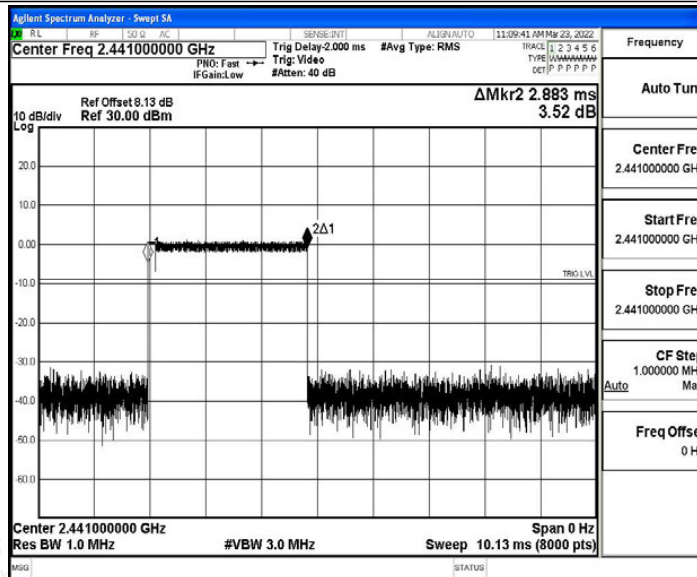


### Test Graphs

#### DH5\_Ant1\_Hop



#### 2DH5\_Ant1\_Hop





## A.5 Number of hopping channels

### Test Result

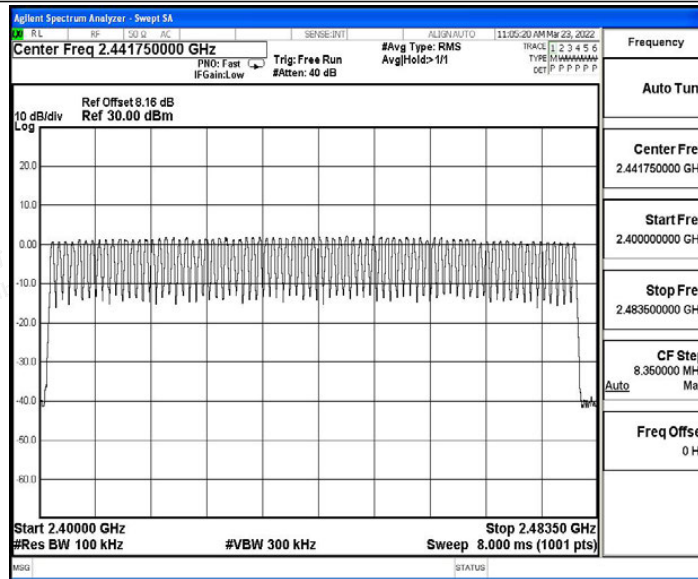
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS



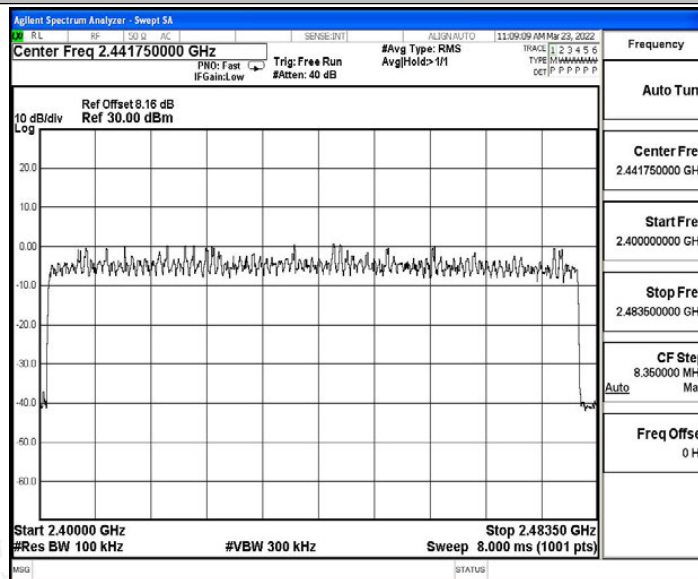


### Test Graphs

DH5\_Ant1\_Hop



2DH5\_Ant1\_Hop





### A.6 Band edge measurements

#### Test Result

TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.84	-55.74	≤-19.16	PASS
		High	2480	0.44	-57.15	≤-19.56	PASS
		Low	Hop_2402	0.58	-59.75	≤-19.42	PASS
		High	Hop_2480	0.62	-58.41	≤-19.38	PASS
2DH5	Ant1	Low	2402	-0.73	-56.08	≤-20.73	PASS
		High	2480	-0.77	-58.36	≤-20.77	PASS
		Low	Hop_2402	-4.49	-59.49	≤-24.49	PASS
		High	Hop_2480	-0.66	-57.97	≤-20.66	PASS

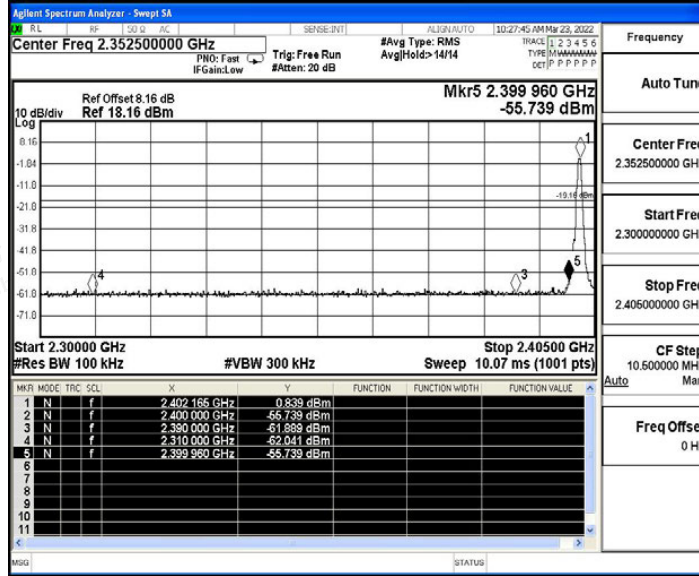




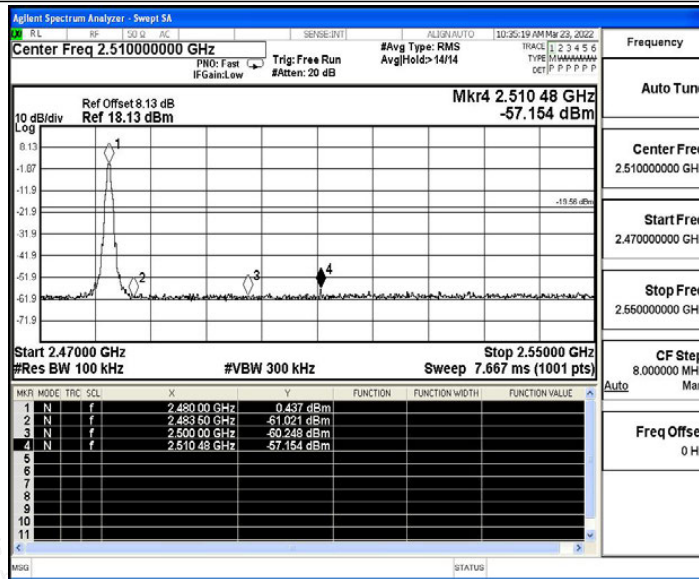


### Test Graphs

DH5\_Ant1\_Low\_2402

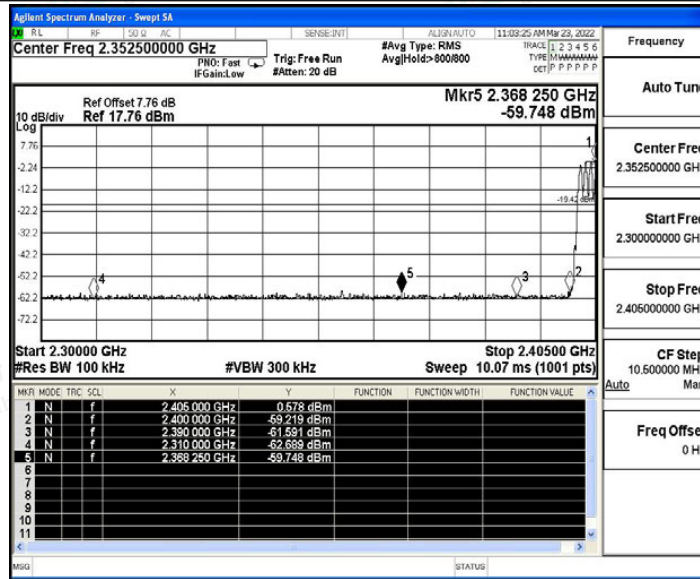


DH5\_Ant1\_High\_2480

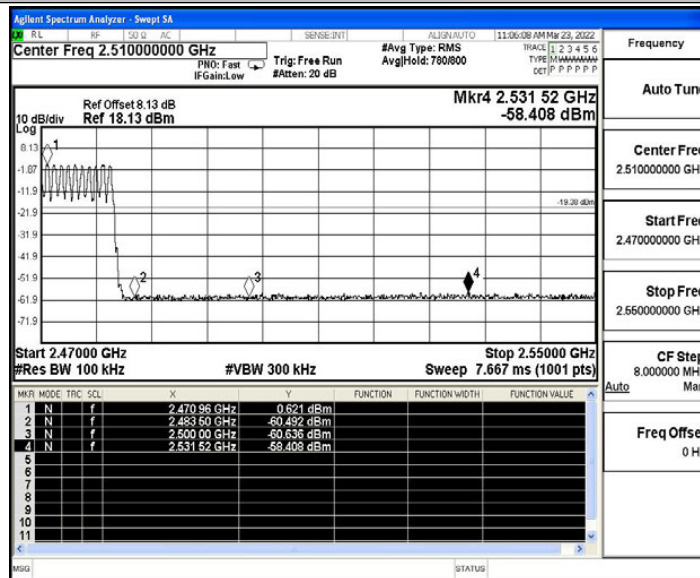


DH5\_Ant1\_Low\_Hop\_2402



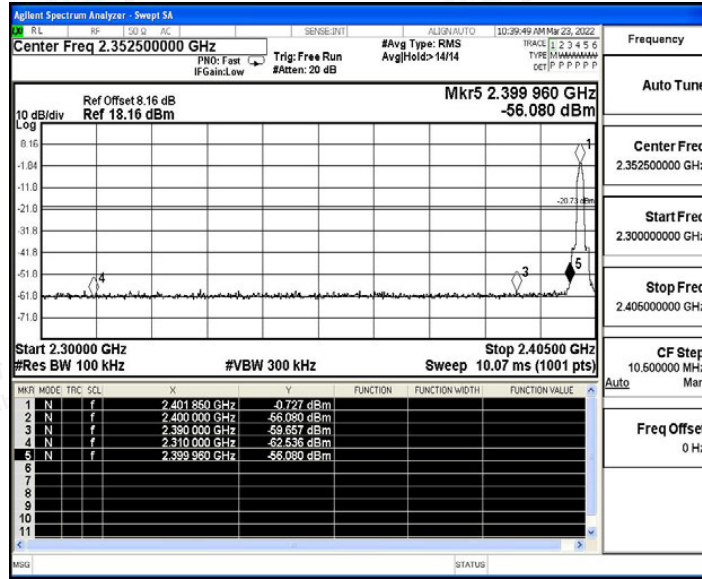


DH5\_Ant1\_High\_Hop\_2480

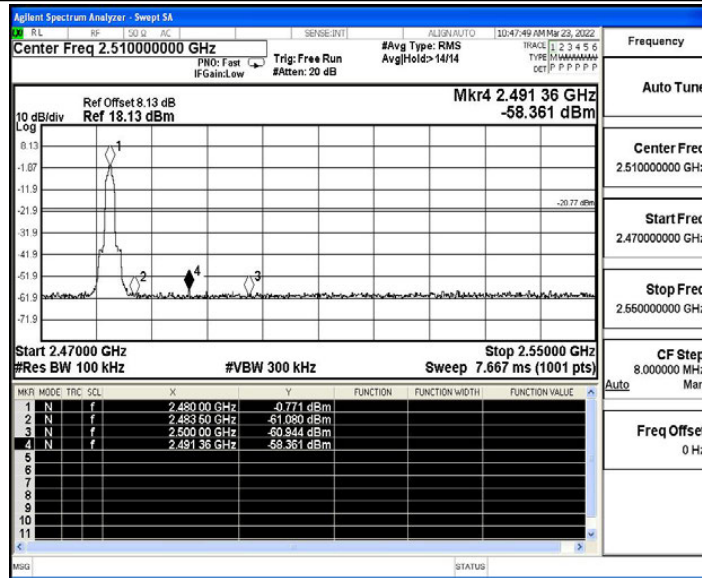


2DH5\_Ant1\_Low\_2402



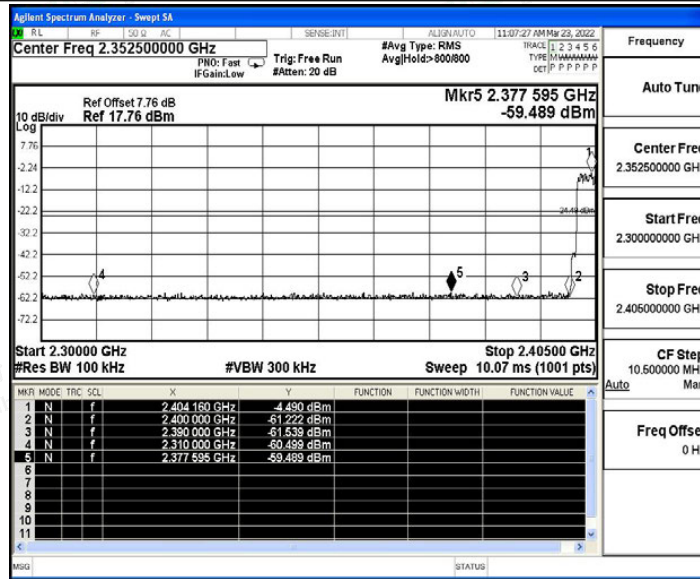


2DH5\_Ant1\_High\_2480

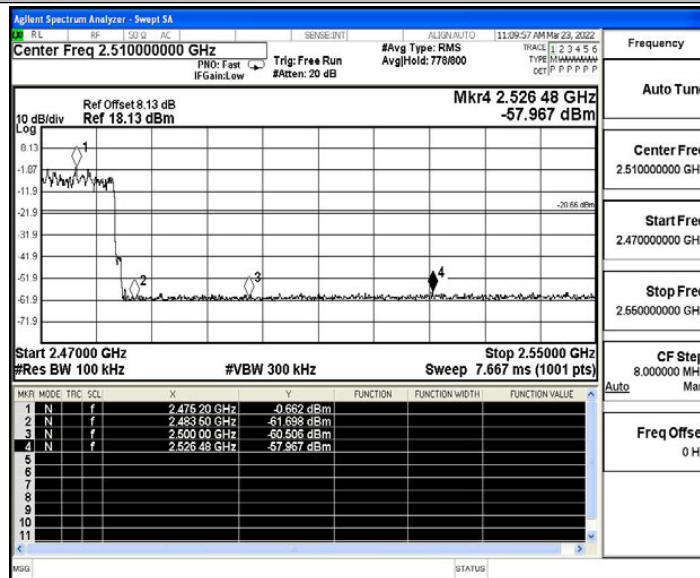


2DH5\_Ant1\_Low\_Hop\_2402





2DH5\_Ant1\_High\_Hop\_2480





## A.7 Conducted Spurious Emission

### Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.57	0.57	---	PASS
			30~1000	0.57	-61.03	≤-19.43	PASS
			1000~26500	0.57	-46.87	≤-19.43	PASS
		2441	Reference	1.71	1.71	---	PASS
			30~1000	1.71	-60.76	≤-18.29	PASS
			1000~26500	1.71	-47.16	≤-18.29	PASS
		2480	Reference	0.57	0.57	---	PASS
			30~1000	0.57	-60.36	≤-19.43	PASS
			1000~26500	0.57	-46.39	≤-19.43	PASS
2DH5	Ant1	2402	Reference	-0.83	-0.83	---	PASS
			30~1000	-0.83	-60.78	≤-20.83	PASS
			1000~26500	-0.83	-46.29	≤-20.83	PASS
		2441	Reference	0.20	0.20	---	PASS
			30~1000	0.20	-60.92	≤-19.8	PASS
			1000~26500	0.20	-46.52	≤-19.8	PASS
		2480	Reference	-1.04	-1.04	---	PASS
			30~1000	-1.04	-60.73	≤-21.04	PASS
			1000~26500	-1.04	-46.69	≤-21.04	PASS



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: 101, 201 Bldg A &amp; 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

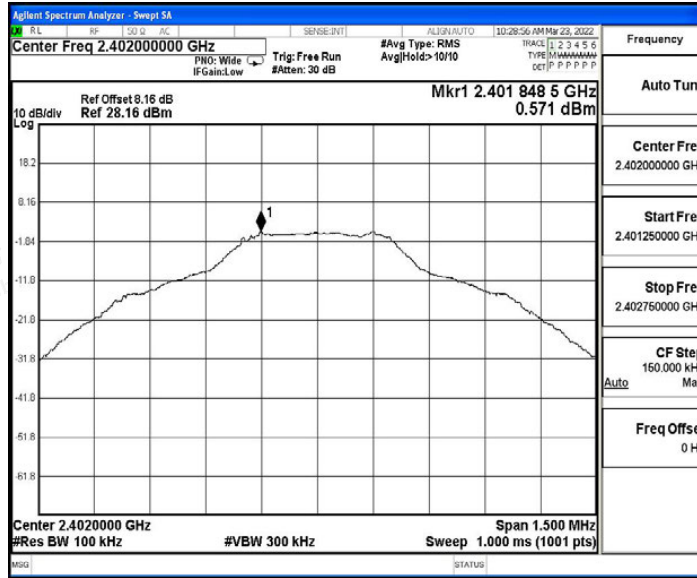
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

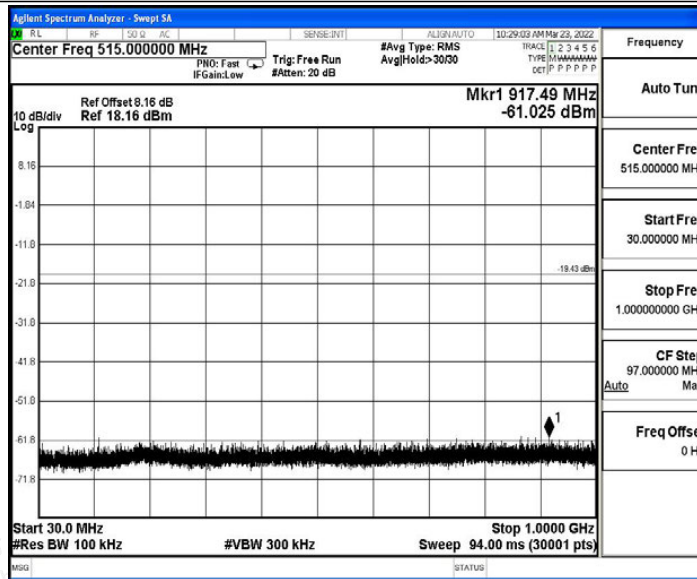


### Test Graphs

DH5\_Ant1\_2402\_0~Reference

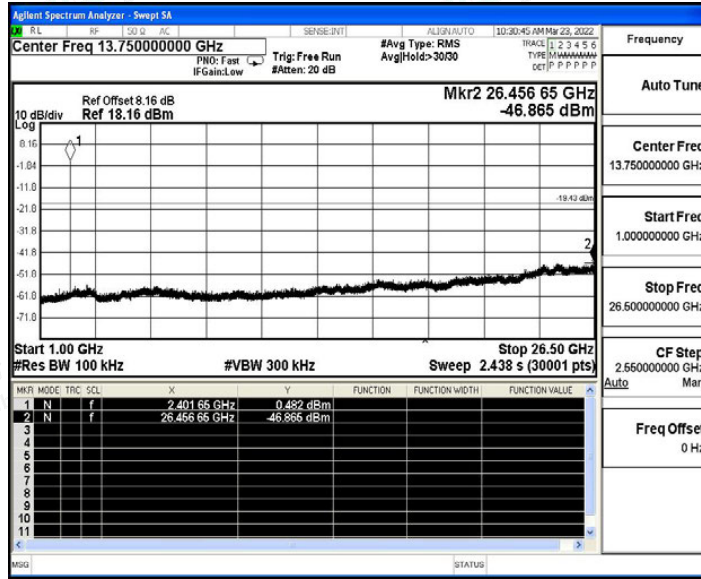


DH5\_Ant1\_2402\_30~1000

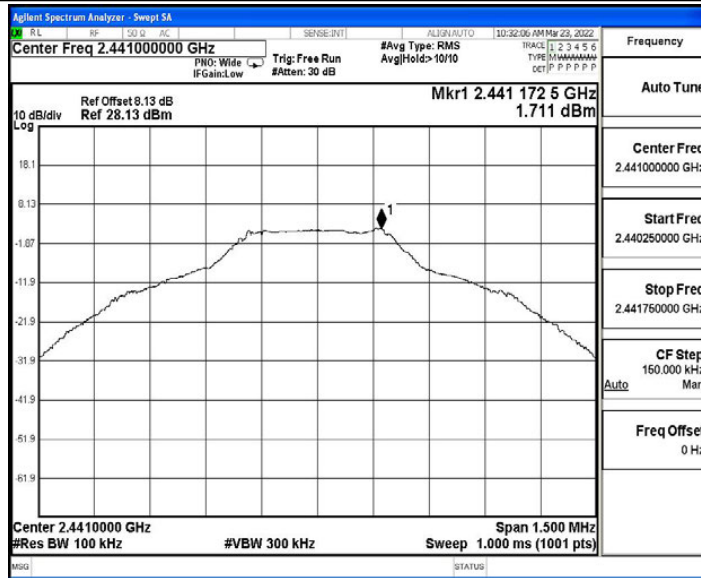


DH5\_Ant1\_2402\_1000~26500



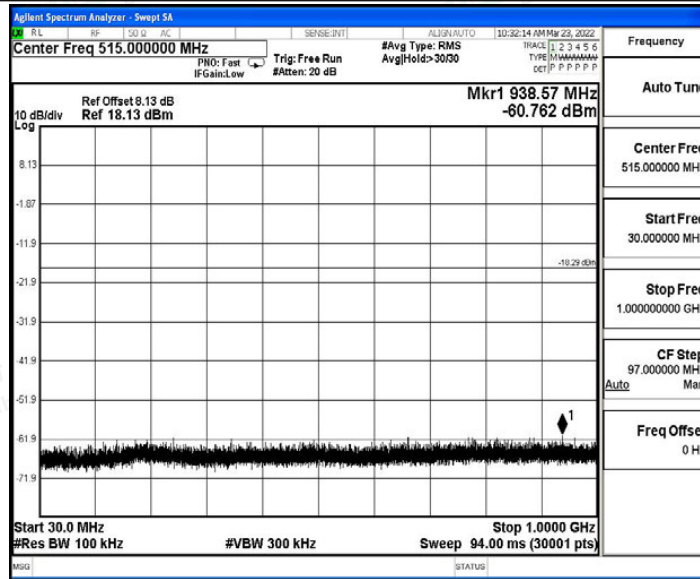


DH5\_Ant1\_2441\_0~Reference

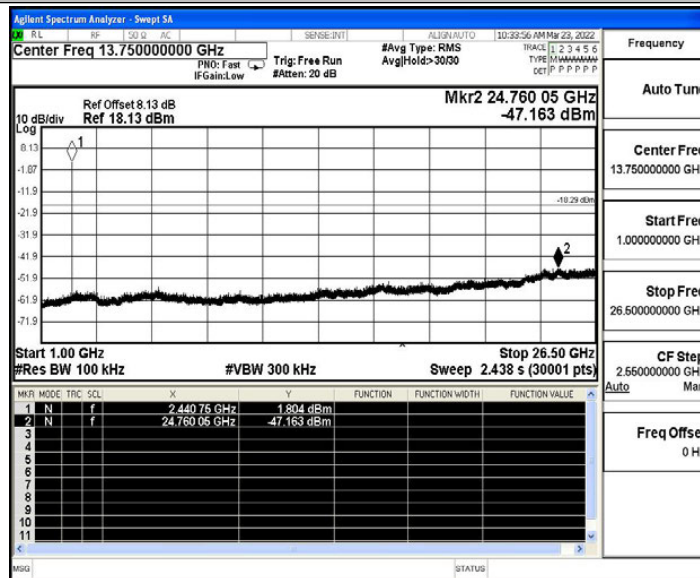


DH5\_Ant1\_2441\_30~1000





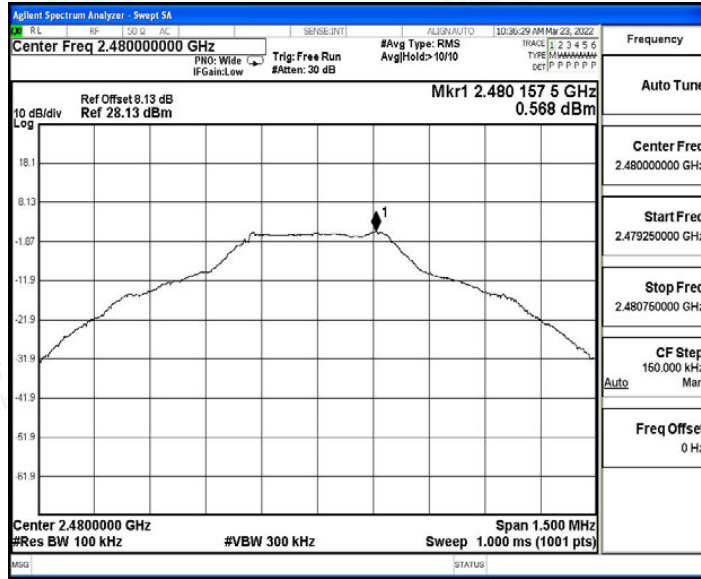
DH5\_Ant1\_2441\_1000~26500



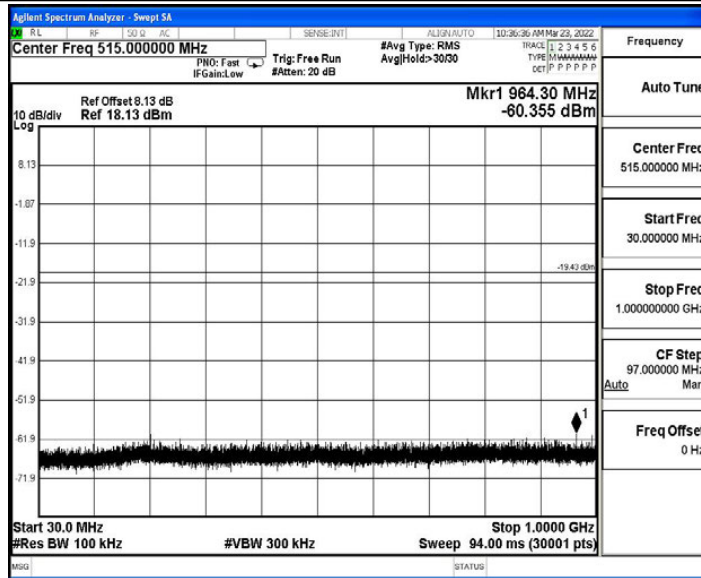
DH5\_Ant1\_2480\_0~Reference





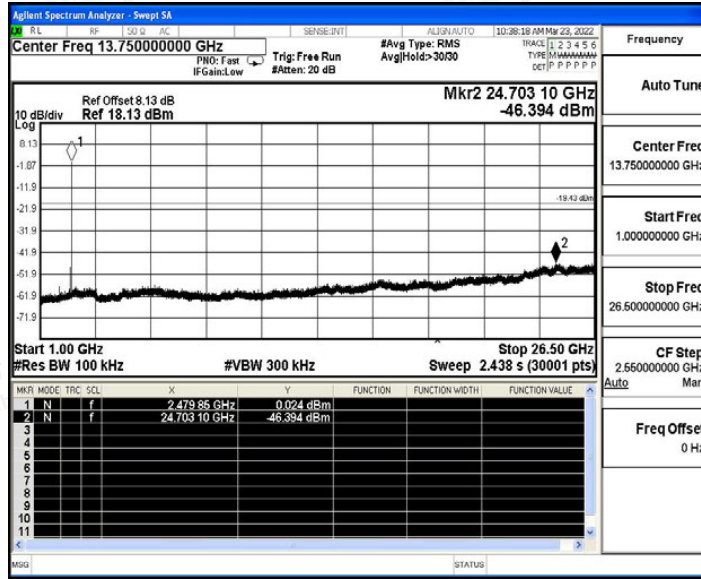


DH5\_Ant1\_2480\_30~1000

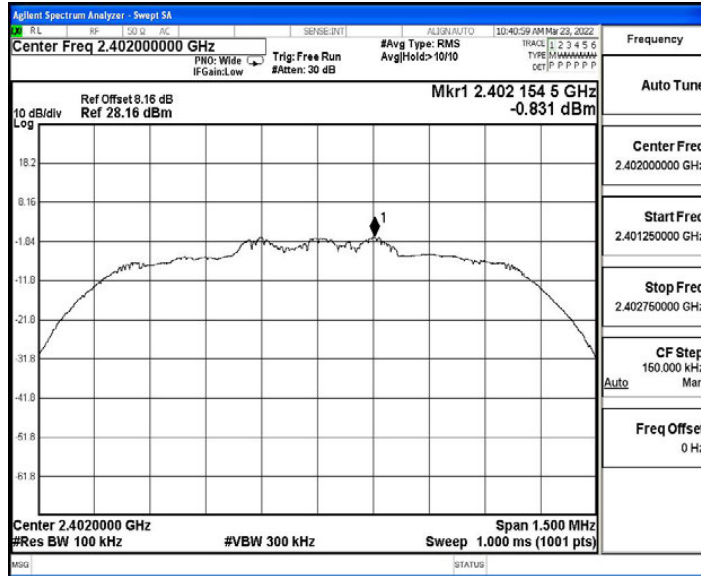


DH5\_Ant1\_2480\_1000~26500



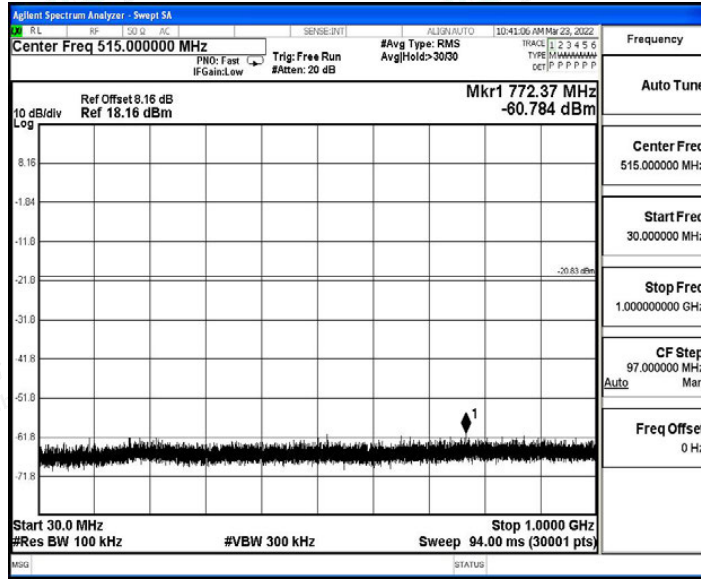


2DH5\_Ant1\_2402\_0~Reference

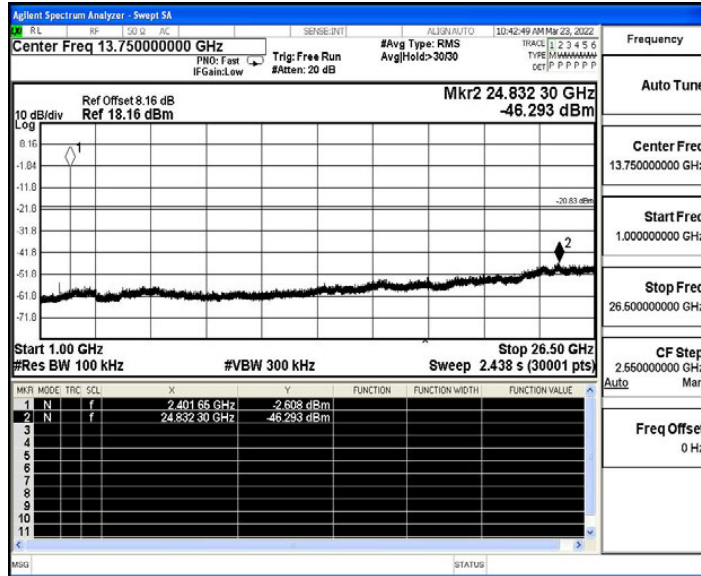


2DH5\_Ant1\_2402\_30~1000



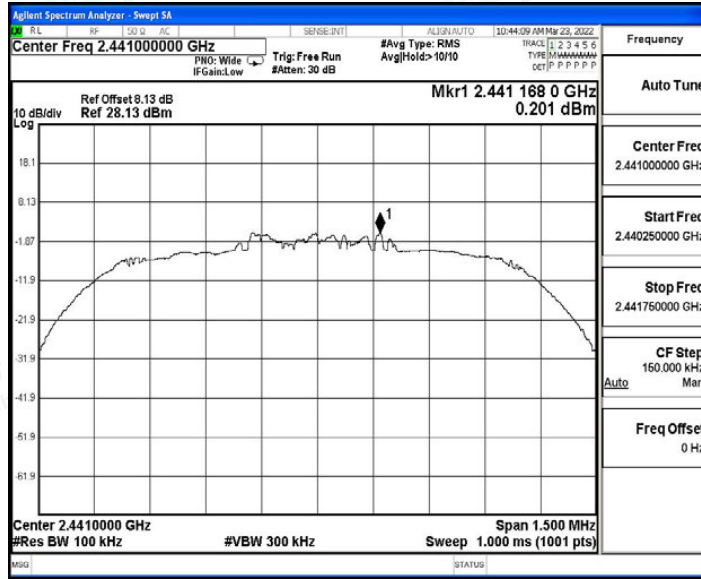


2DH5\_Ant1\_2402\_1000~26500

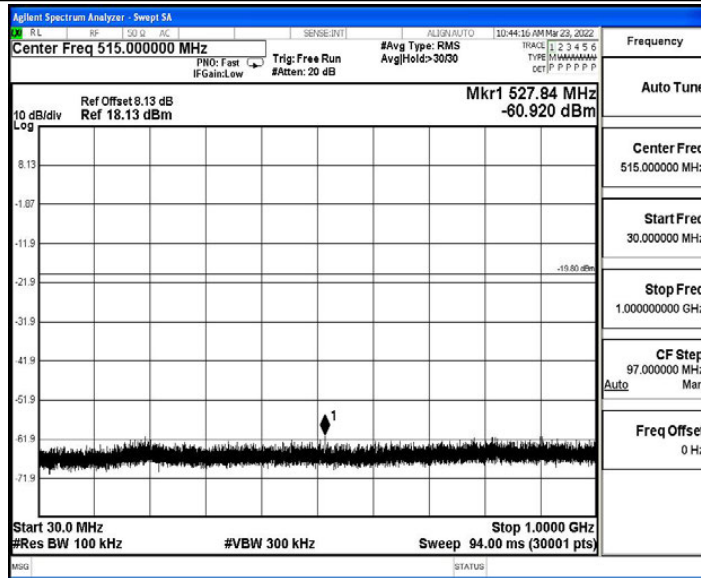


2DH5\_Ant1\_2441\_0~Reference



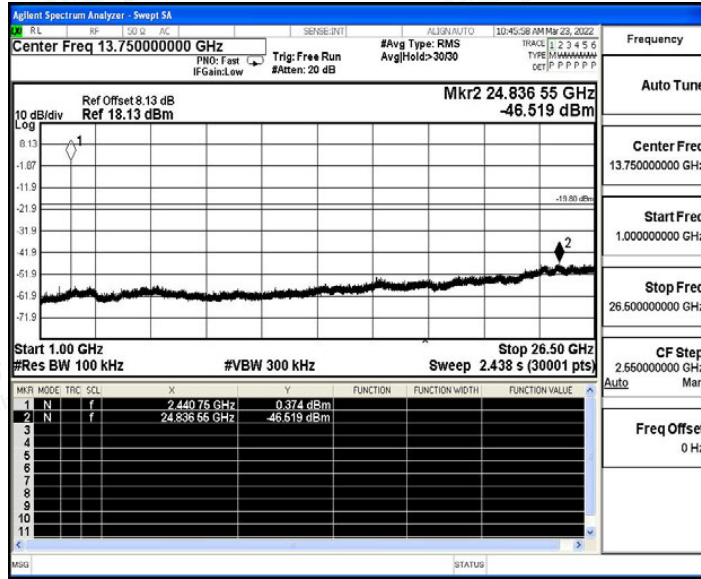


2DH5\_Ant1\_2441\_30~1000

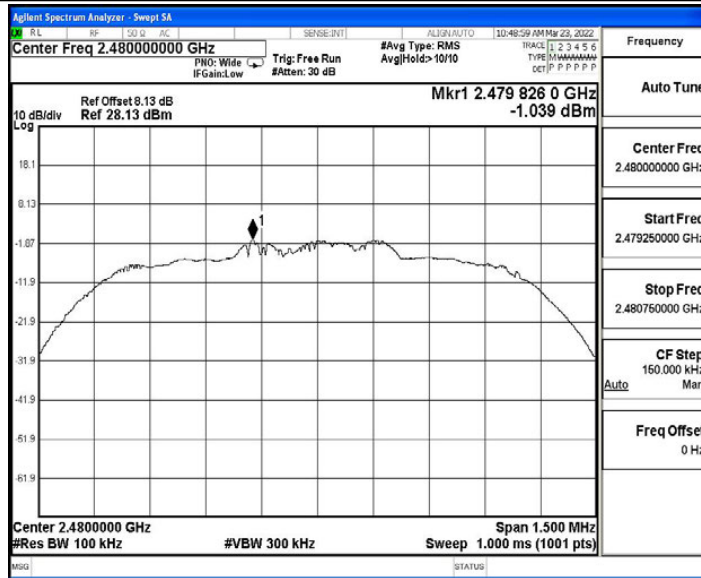


2DH5\_Ant1\_2441\_1000~26500



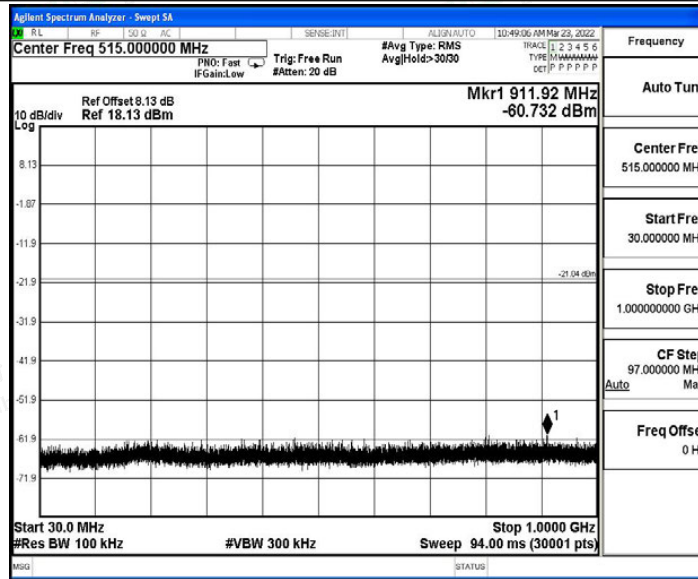


2DH5\_Ant1\_2480\_0~Reference

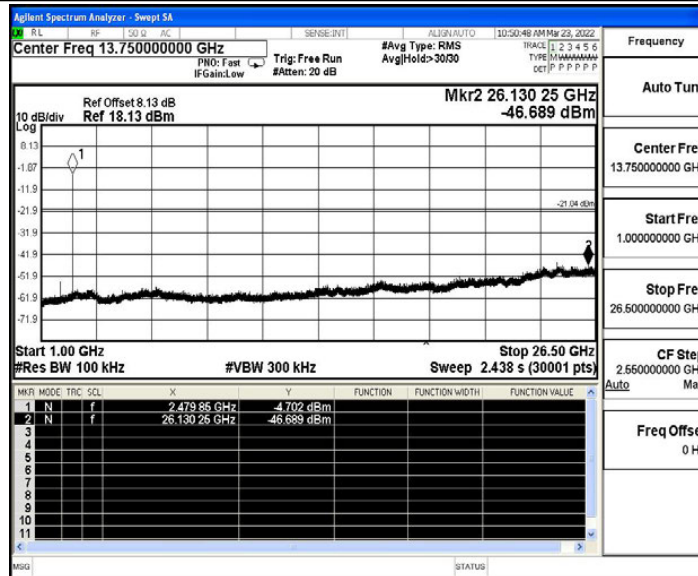


2DH5\_Ant1\_2480\_30~1000





2DH5\_Ant1\_2480\_1000~26500





## A.8 Emissions in Restricted Bands

### Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-58.68	≤-41.20	36.52	≤54	PASS
				AV	2389.565	-58.03	≤-41.20	37.17	≤54	PASS
				AV	2390.000	-58.14	≤-41.20	37.06	≤54	PASS
				Peak	2310.000	-49.85	≤-21.20	45.35	≤74	PASS
				Peak	2370.140	-46.92	≤-21.20	48.28	≤74	PASS
				Peak	2390.000	-48.2	≤-21.20	47.00	≤74	PASS
		High	2480	AV	2483.500	-55	≤-41.20	40.20	≤54	PASS
				AV	2483.520	-55	≤-41.20	40.20	≤54	PASS
				AV	2500.000	-57.71	≤-41.20	37.49	≤54	PASS
				Peak	2483.500	-47.95	≤-21.20	47.25	≤74	PASS
				Peak	2485.840	-46.29	≤-21.20	48.91	≤74	PASS
				Peak	2500.000	-48.21	≤-21.20	46.99	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-58.62	≤-41.20	36.58	≤54	PASS
				AV	2383.055	-58.07	≤-41.20	37.13	≤54	PASS
				AV	2390.000	-58.1	≤-41.20	37.10	≤54	PASS
				Peak	2310.000	-47.93	≤-21.20	47.27	≤74	PASS
				Peak	2368.460	-46.9	≤-21.20	48.30	≤74	PASS
				Peak	2390.000	-48.6	≤-21.20	46.60	≤74	PASS
		High	2480	AV	2483.500	-54.99	≤-41.20	40.21	≤54	PASS
				AV	2483.520	-54.99	≤-41.20	40.21	≤54	PASS
				AV	2500.000	-57.65	≤-41.20	37.55	≤54	PASS
				Peak	2483.500	-47.14	≤-21.20	48.06	≤74	PASS
				Peak	2494.720	-46.02	≤-21.20	49.18	≤74	PASS
				Peak	2500.000	-48.4	≤-21.20	46.80	≤74	PASS

#### Note:

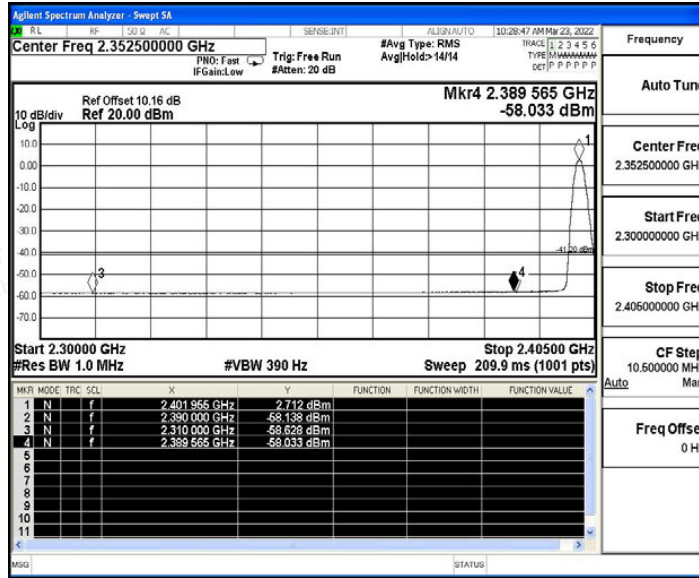
- The Antenna Gain is compensated in the graph.
- The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



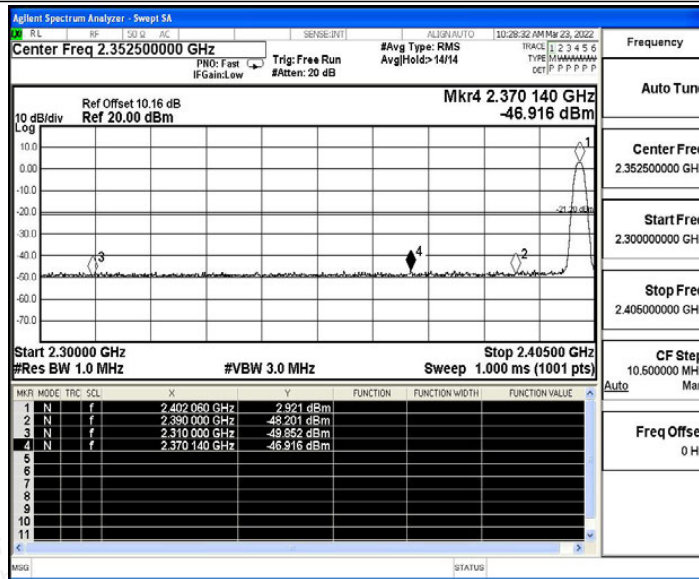


### Test Graphs

#### DH5\_Ant1\_Low\_2402\_AV



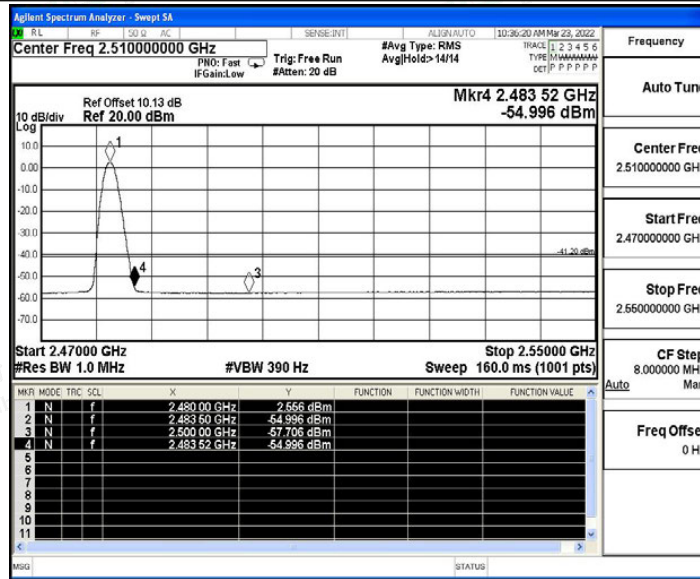
#### DH5\_Ant1\_Low\_2402\_Peak



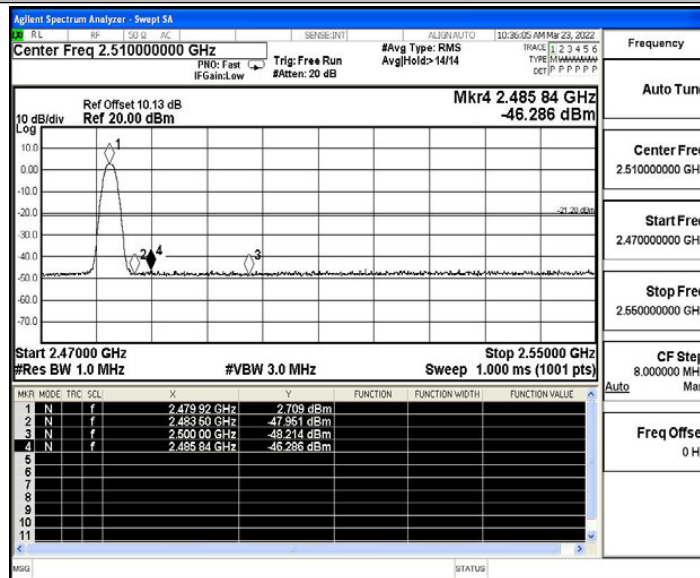
#### DH5\_Ant1\_High\_2480\_AV





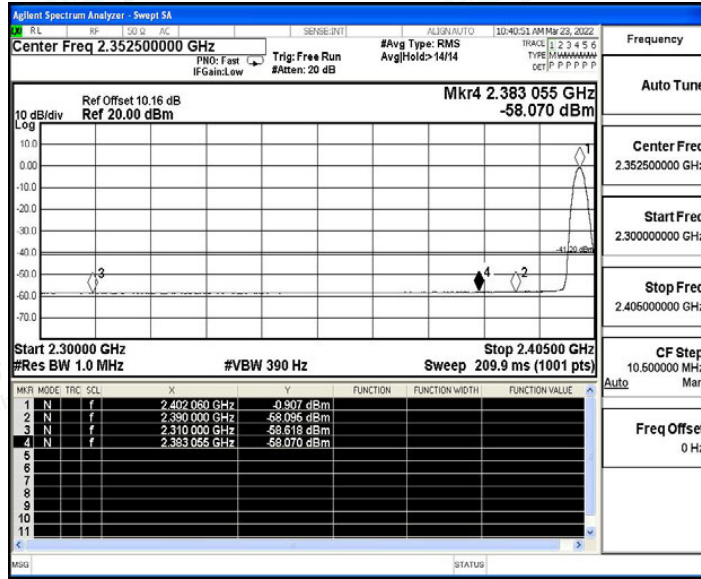


DH5\_Ant1\_High\_2480\_Peak

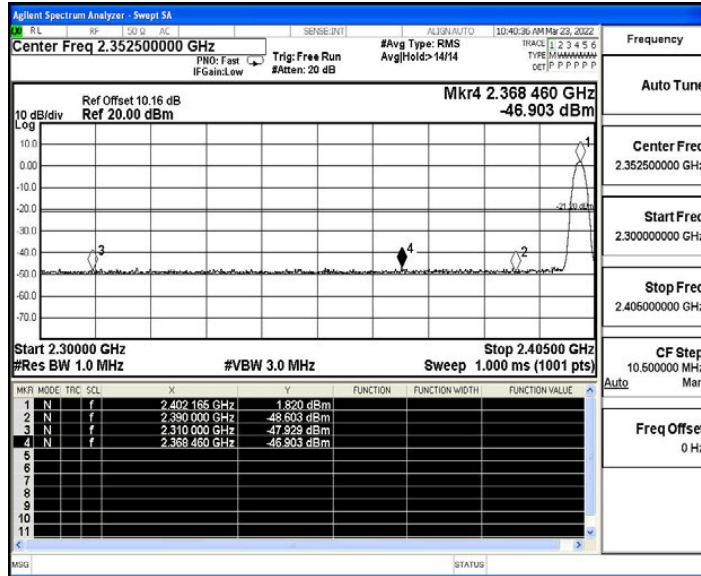


2DH5\_Ant1\_Low\_2402\_AV



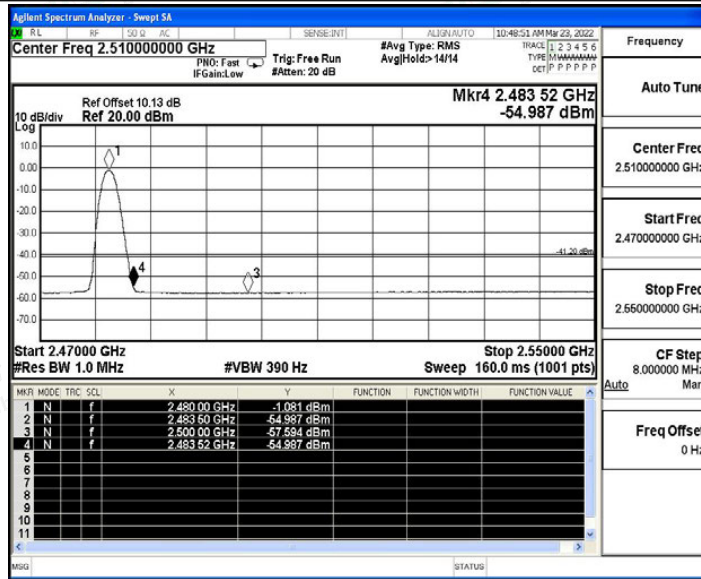


2DH5\_Ant1\_Low\_2402\_Peak



2DH5\_Ant1\_High\_2480\_AV





2DH5\_Ant1\_High\_2480\_Peak

