



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Soundbar

Test Model: S28R

Environmental Conditions

Temperature:	23.8 ° C
Relative Humidity:	52.1%
ATM Pressure:	100.0 kPa
Test Engineer:	Joker Hu
Supervised by:	Li Huan





A.1 20dB Emission Bandwidth

Test Result

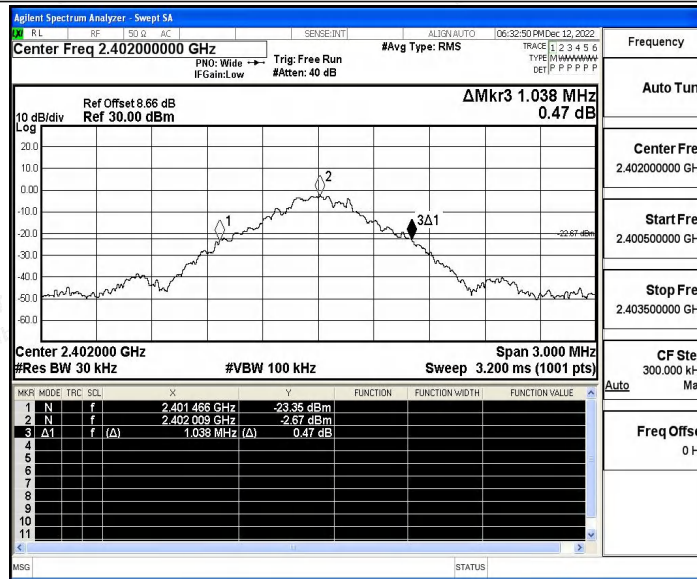
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Verdict
DH5	Ant1	2402	1.038	2401.466	2402.504	---
		2441	0.981	2440.511	2441.492	---
		2480	1.032	2479.457	2480.489	---
2DH5	Ant1	2402	1.338	2401.394	2402.732	---
		2441	1.296	2440.430	2441.726	---
		2480	1.305	2479.427	2480.732	---



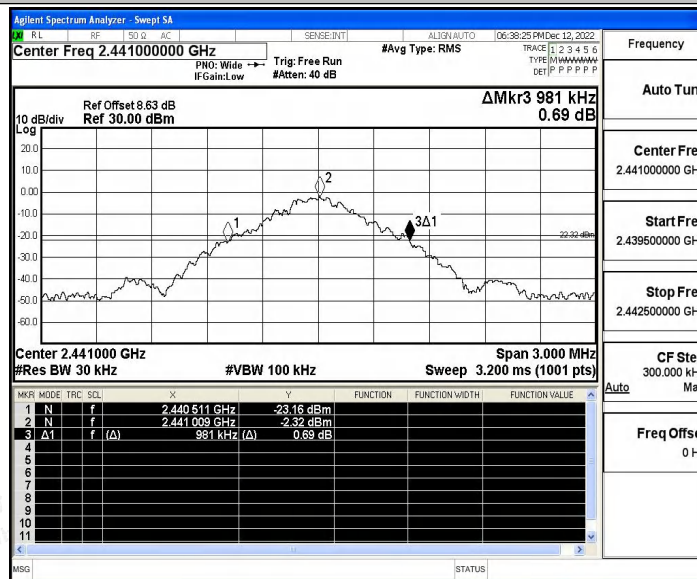


Test Graphs

DH5_Ant1_2402

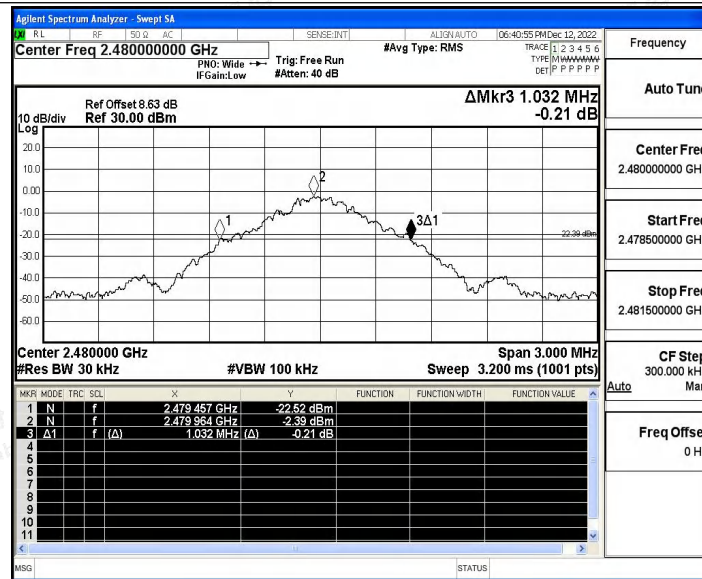


DH5_Ant1_2441

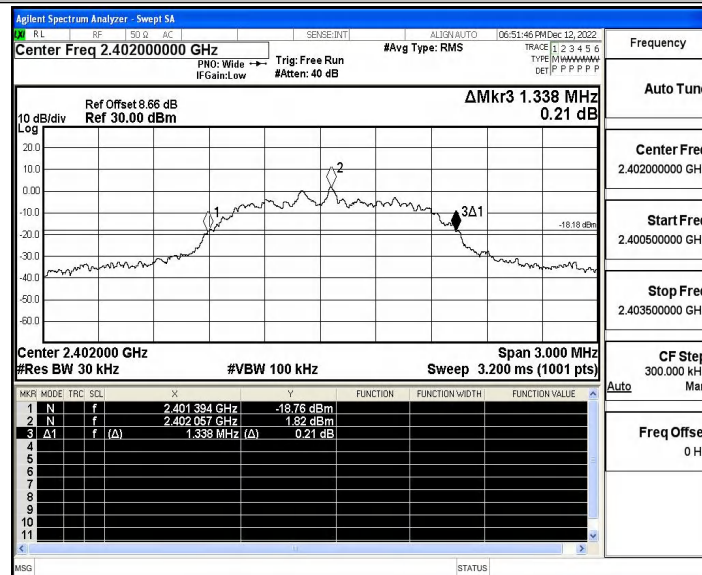


DH5_Ant1_2480





2DH5_Ant1_2402



2DH5_Ant1_2441

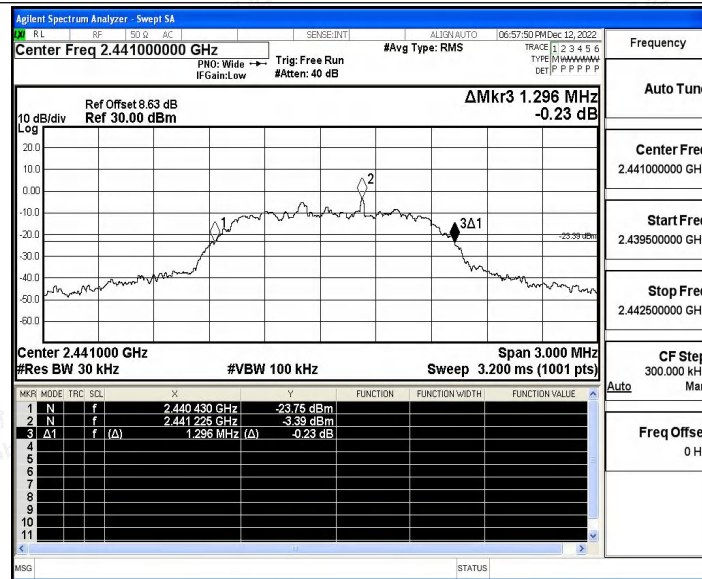


Shenzhen LCS Compliance Testing Laboratory Ltd.

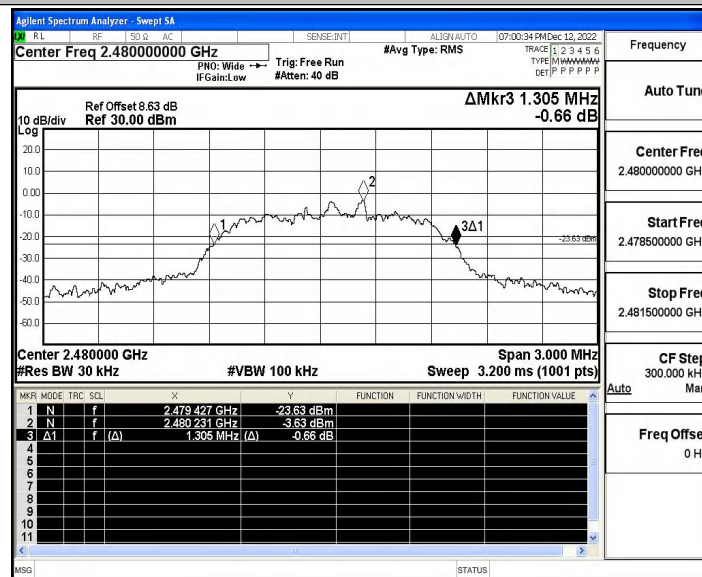
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

Scan code to check authenticity



2DH5_Ant1_2480





A.2 Maximum conducted output power

Test Result

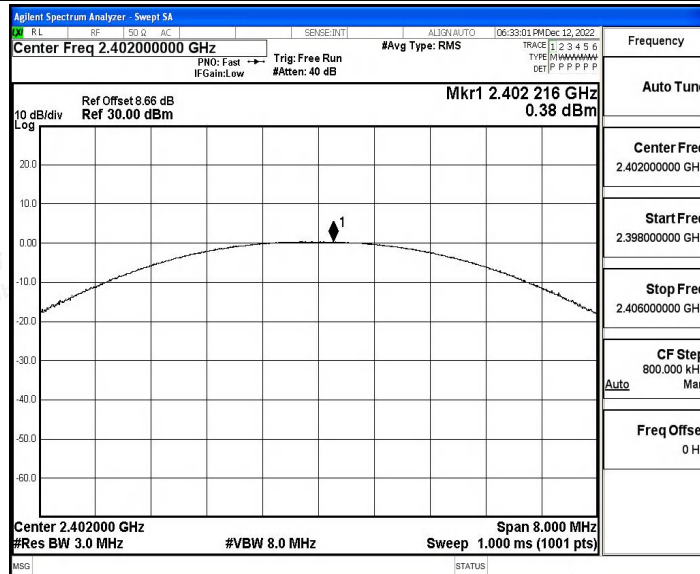
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	0.38	≤20.97	PASS
		2441	0.74	≤20.97	PASS
		2480	0.7	≤20.97	PASS
2DH5	Ant1	2402	0.32	≤20.97	PASS
		2441	0.28	≤20.97	PASS
		2480	0.11	≤20.97	PASS



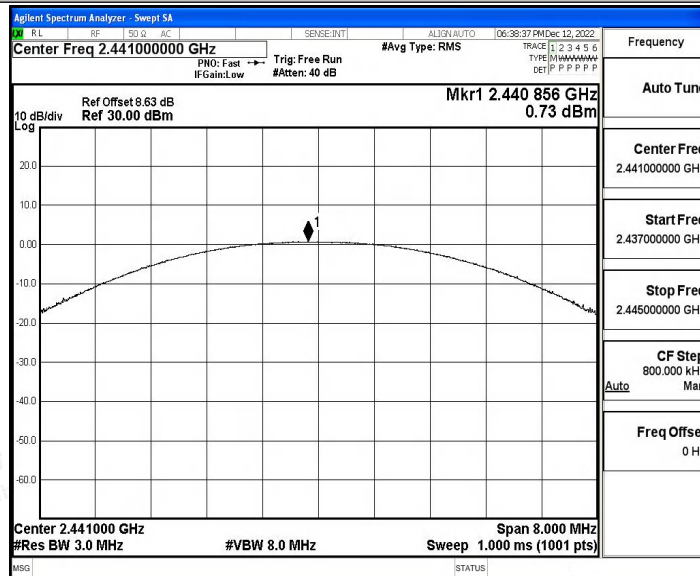


Test Graphs

DH5_Ant1_2402

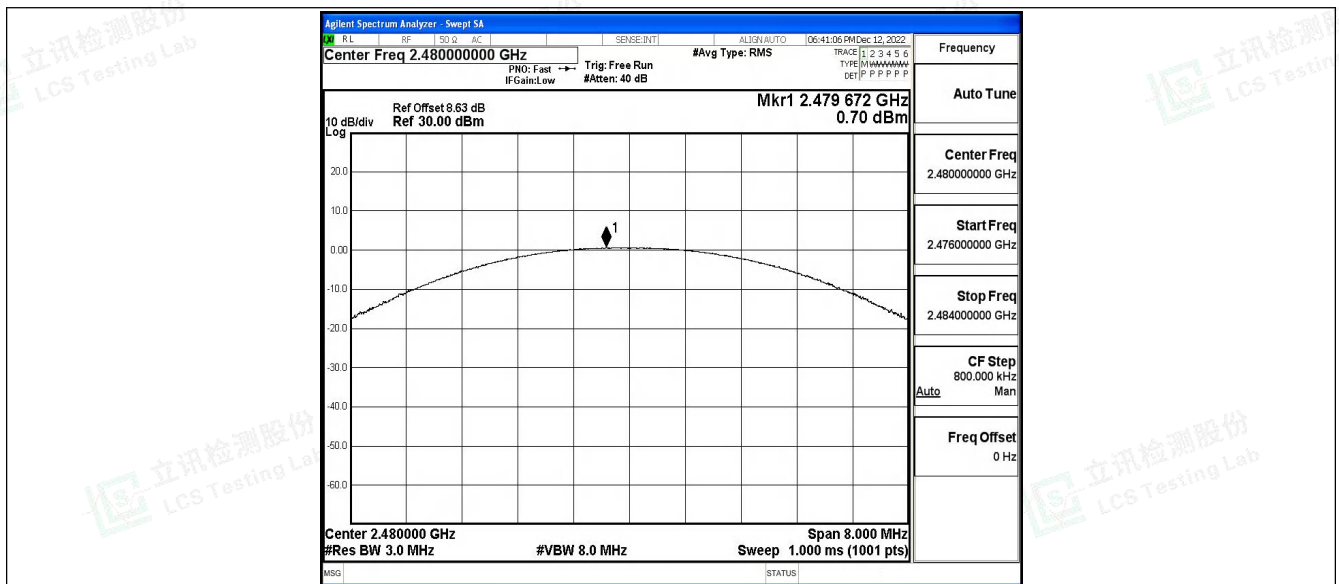


DH5_Ant1_2441

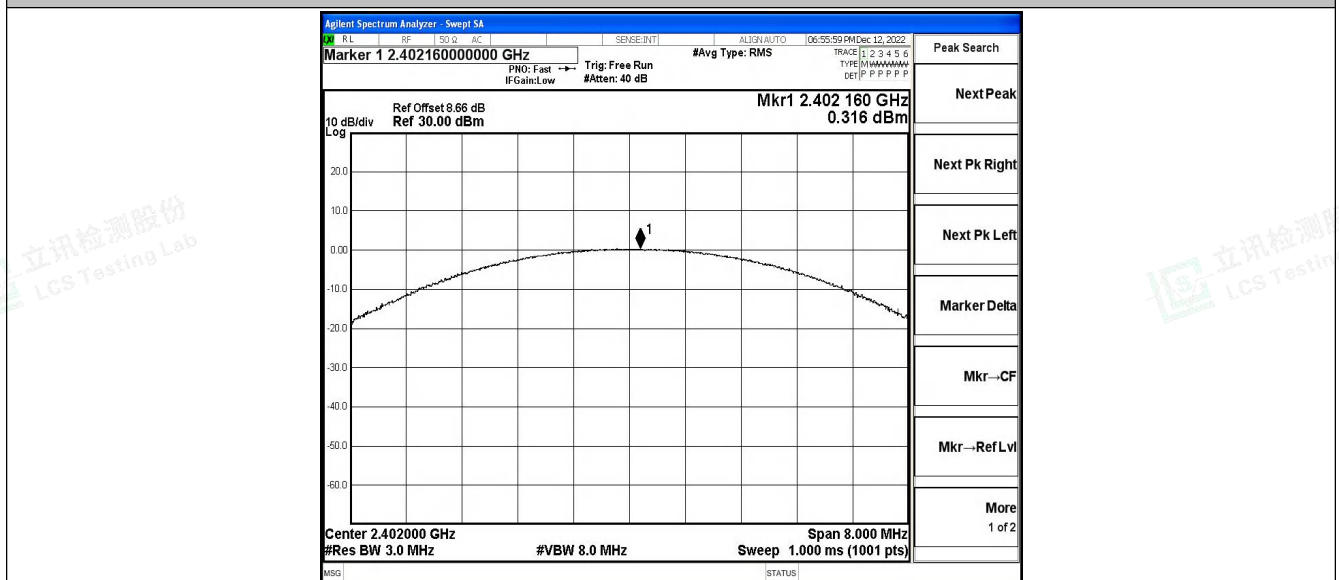


DH5_Ant1_2480



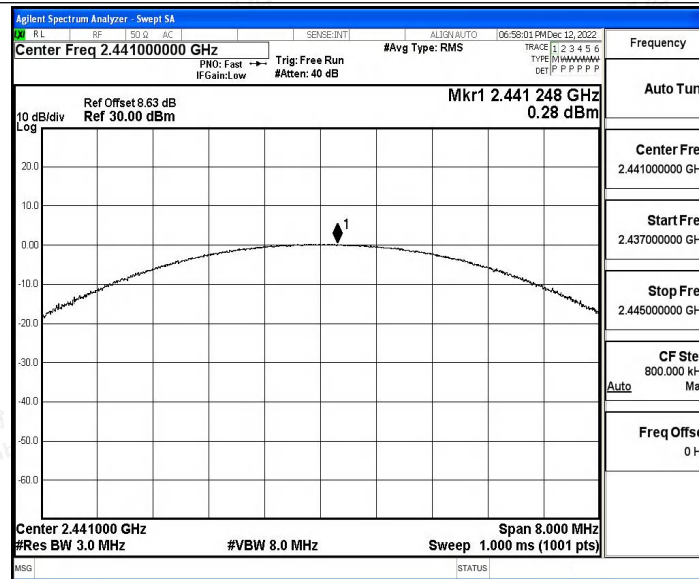


2DH5_Ant1_2402

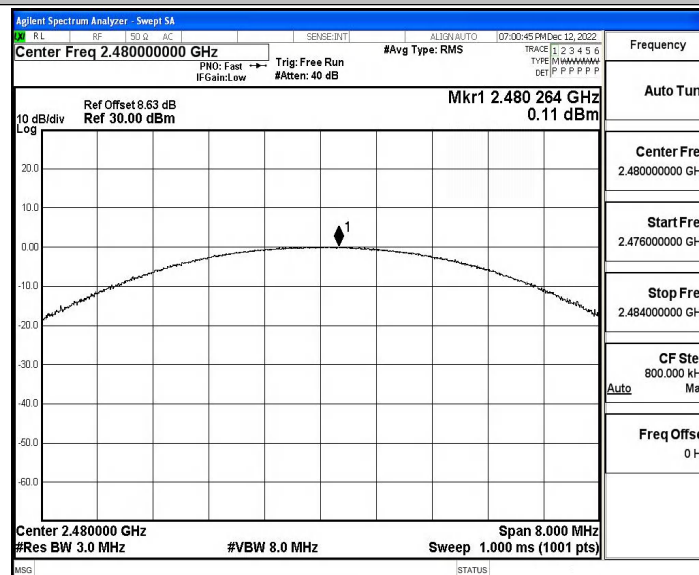


2DH5_Ant1_2441





2DH5_Ant1_2480





A.3 Carrier frequency separation

Test Result

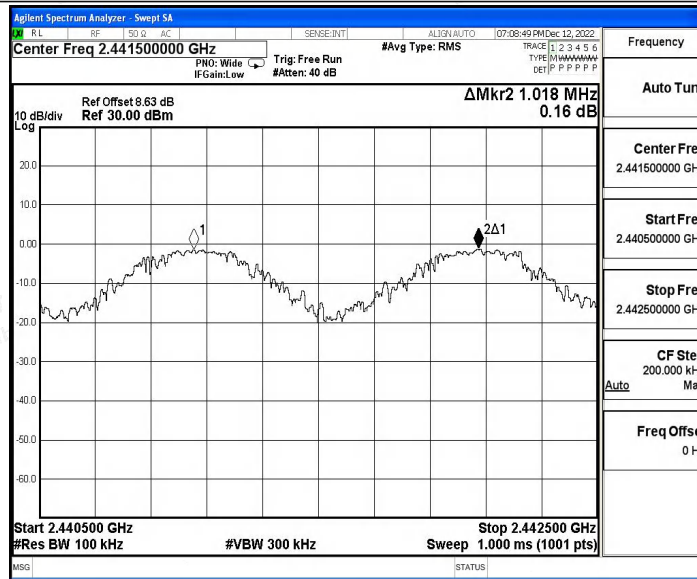
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.018	≥0.692	PASS
2DH5	Ant1	Hop	1.296	≥0.892	PASS



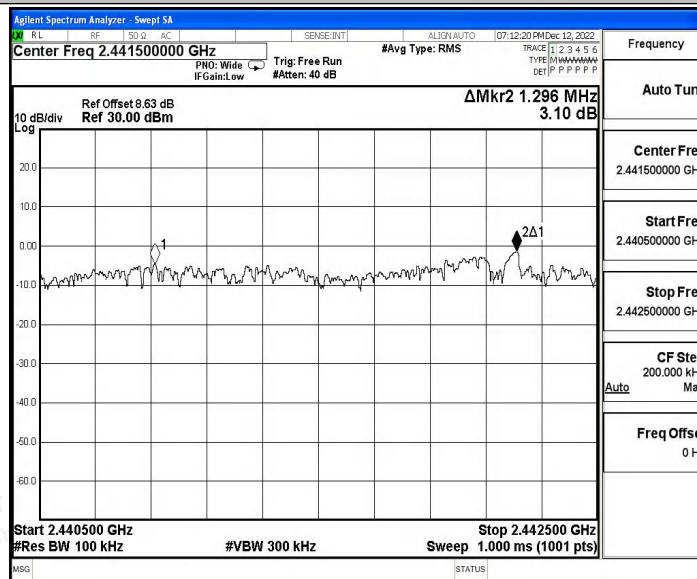


Test Graphs

DH5_Ant1_Hop



2DH5_Ant1_Hop





A.4 Time of occupancy

Test Result

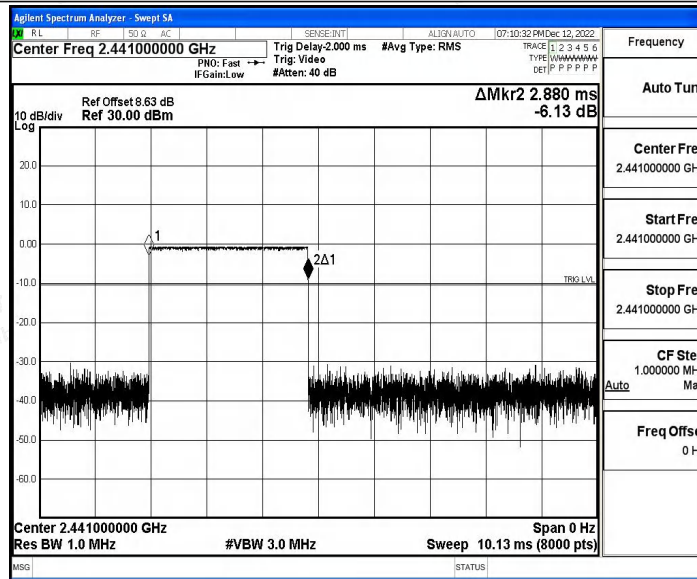
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS
2DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS



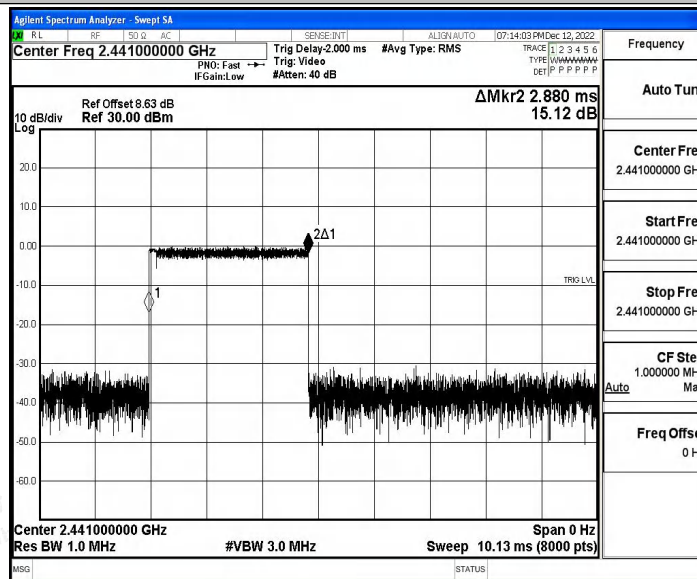


Test Graphs

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



Shenzhen LCS Compliance Testing Laboratory Ltd.
Add: 101, 201 Bldg A & 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



A.6 Band edge measurements

Test Result

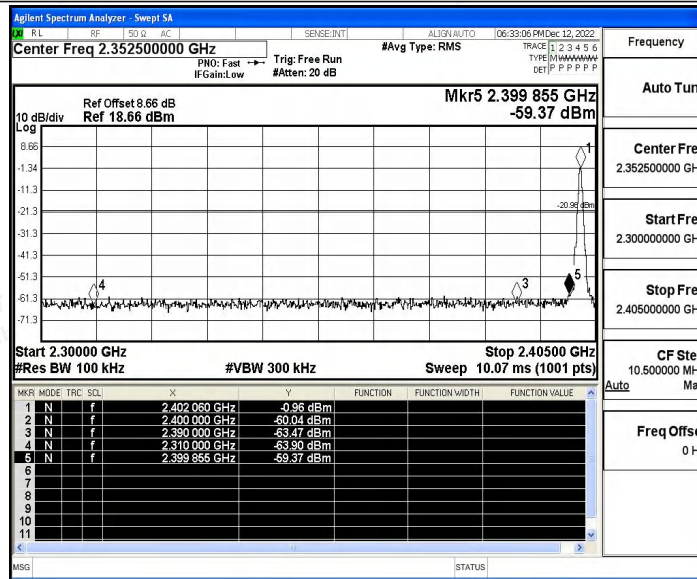
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.96	-59.37	≤ -20.96	PASS
		High	2480	-0.37	-59.03	≤ -20.37	PASS
		Low	Hop_2402	-1.50	-52.77	≤ -21.5	PASS
		High	Hop_2480	-1.21	-51.73	≤ -21.21	PASS
2DH5	Ant1	Low	2402	0.87	-48.54	≤ -19.13	PASS
		High	2480	-4.04	-55.37	≤ -24.04	PASS
		Low	Hop_2402	-1.44	-54.99	≤ -21.44	PASS
		High	Hop_2480	-1.08	-54.72	≤ -21.08	PASS



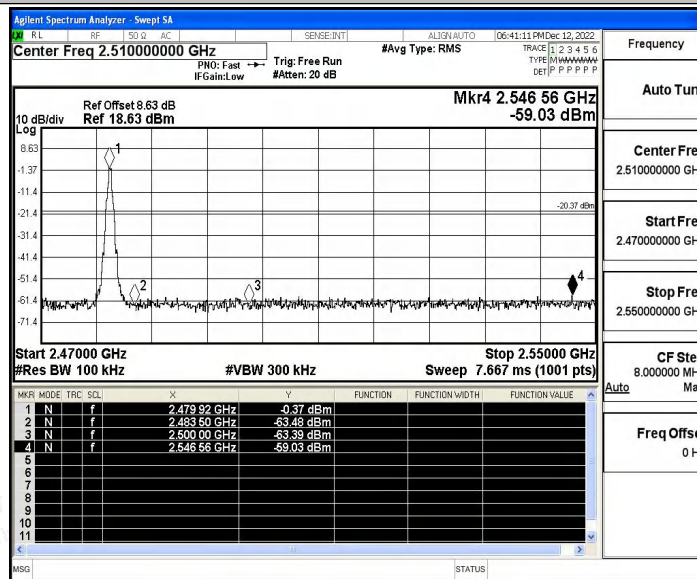


Test Graphs

DH5_Ant1_Low_2402

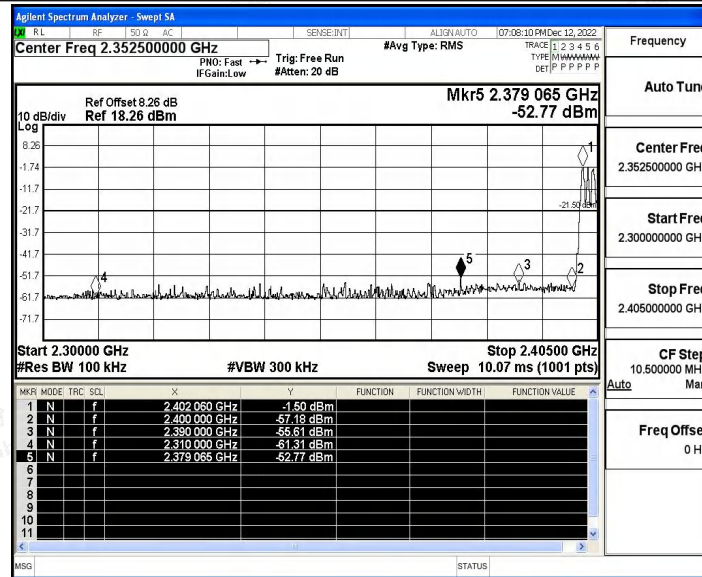


DH5_Ant1_High_2480

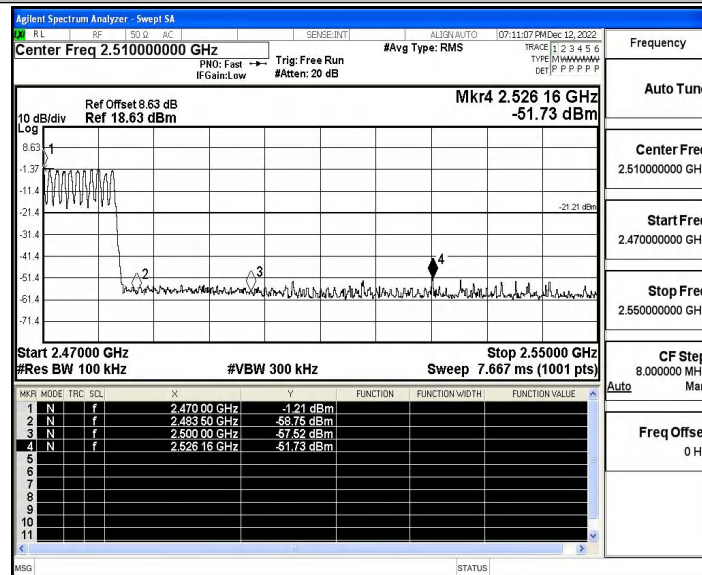


DH5_Ant1_Low_Hop_2402





DH5_Ant1_High_Hop_2480



2DH5_Ant1_Low_2402

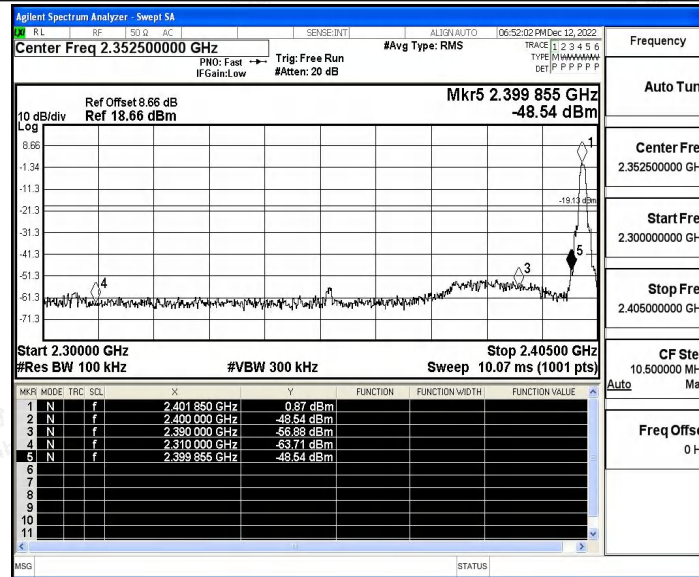


Shenzhen LCS Compliance Testing Laboratory Ltd.

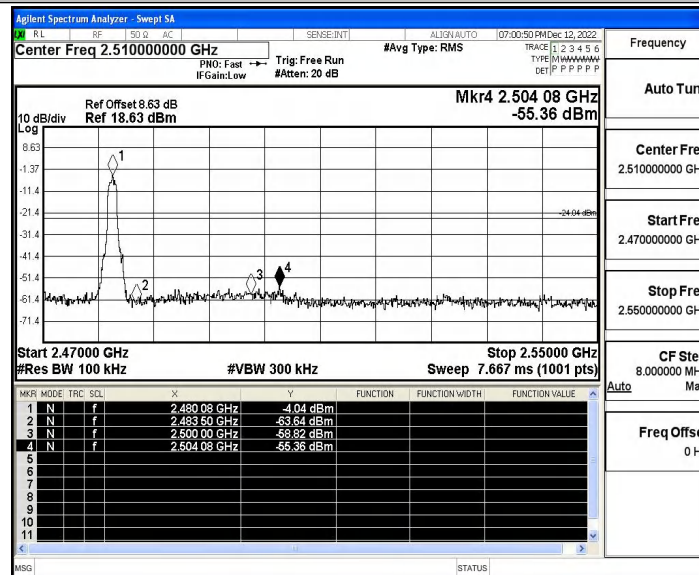
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

Scan code to check authenticity



2DH5_Ant1_High_2480



2DH5_Ant1_Low_Hop_2402

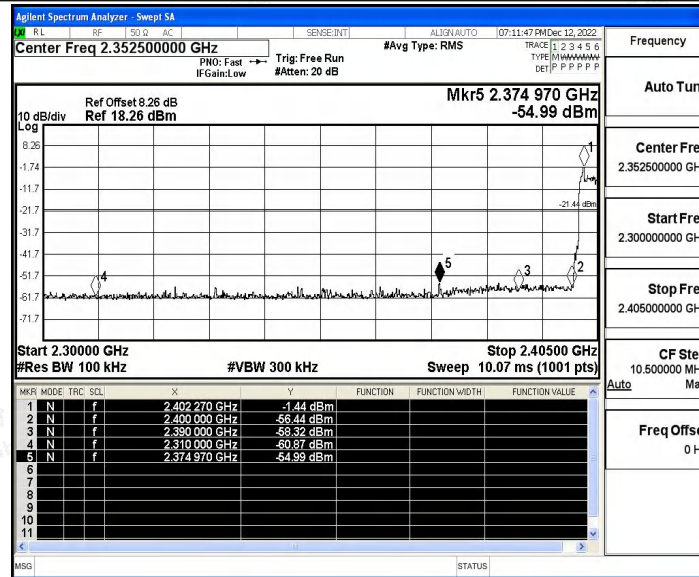


Shenzhen LCS Compliance Testing Laboratory Ltd.

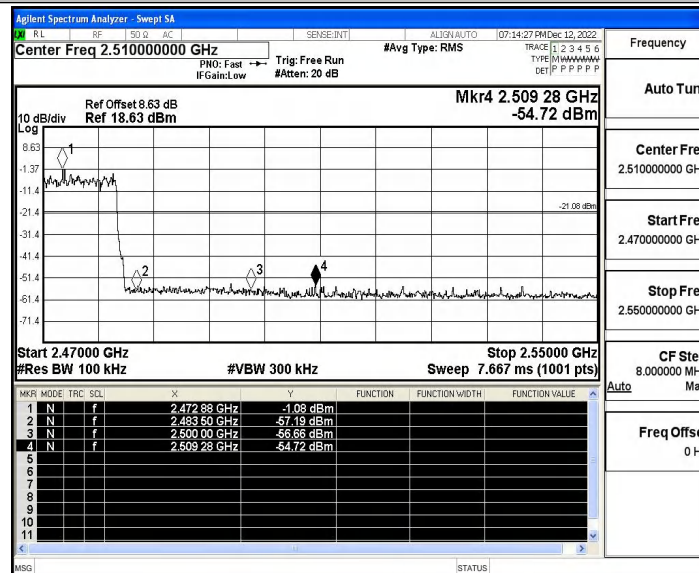
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

Scan code to check authenticity



2DH5_Ant1_High_Hop_2480





A.7 Conducted Spurious Emission

Test Result

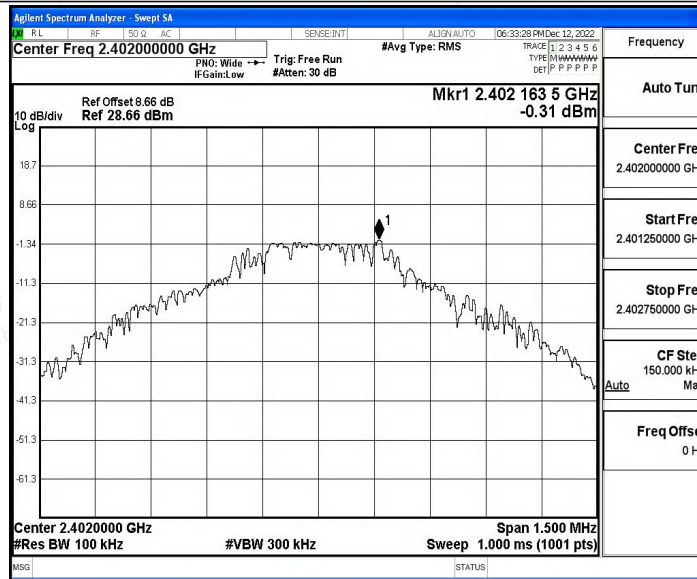
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.31	-0.31	---	PASS
			30~1000	-0.31	-60.31	≤-20.31	PASS
			1000~26500	-0.31	-45.57	≤-20.31	PASS
		2441	Reference	-0.26	-0.26	---	PASS
			30~1000	-0.26	-60.29	≤-20.26	PASS
			1000~26500	-0.26	-45.8	≤-20.26	PASS
		2480	Reference	-0.62	-0.62	---	PASS
			30~1000	-0.62	-61	≤-20.62	PASS
			1000~26500	-0.62	-46.03	≤-20.62	PASS
2DH5	Ant1	2402	Reference	0.62	0.62	---	PASS
			30~1000	0.62	-47.25	≤-19.38	PASS
			1000~26500	0.62	-38.84	≤-19.38	PASS
		2441	Reference	-1.11	-1.11	---	PASS
			30~1000	-1.11	-35.15	≤-21.11	PASS
			1000~26500	-1.11	-42.53	≤-21.11	PASS
		2480	Reference	-5.18	-5.18	---	PASS
			30~1000	-5.18	-35.07	≤-25.18	PASS
			1000~26500	-5.18	-44.07	≤-25.18	PASS



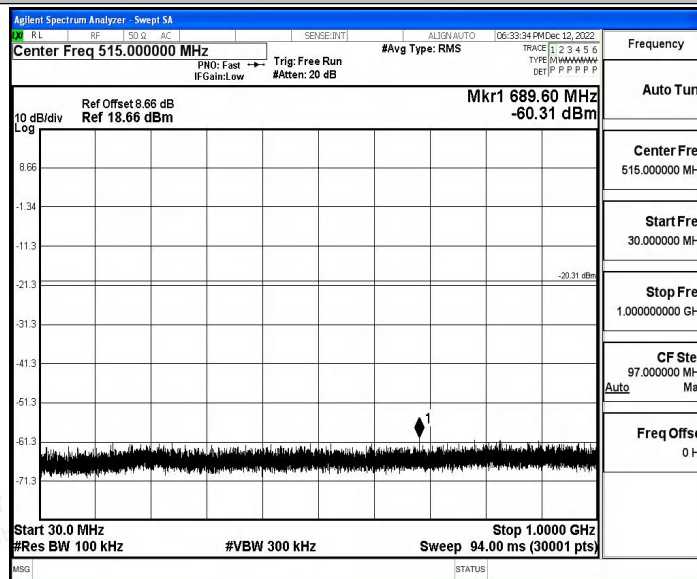


Test Graphs

DH5_Ant1_2402_0~Reference

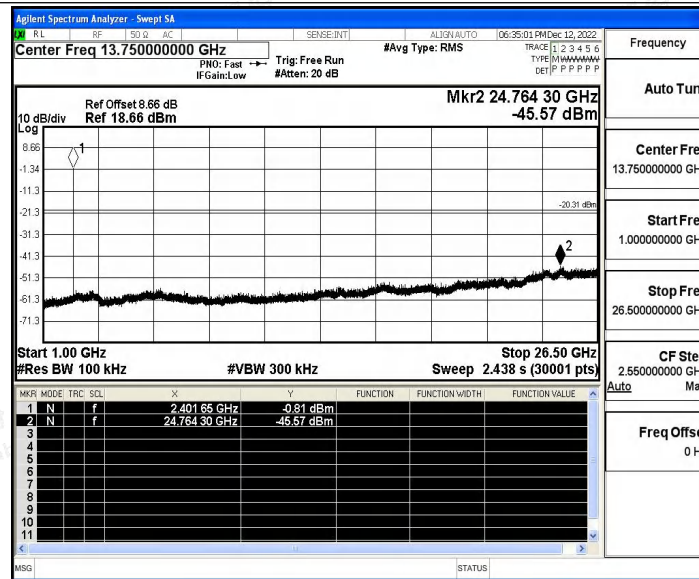


DH5_Ant1_2402_30~1000

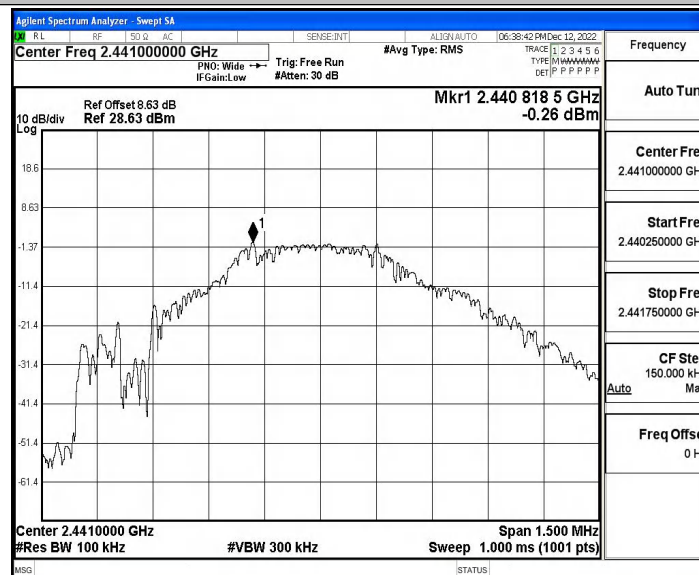


DH5_Ant1_2402_1000~26500



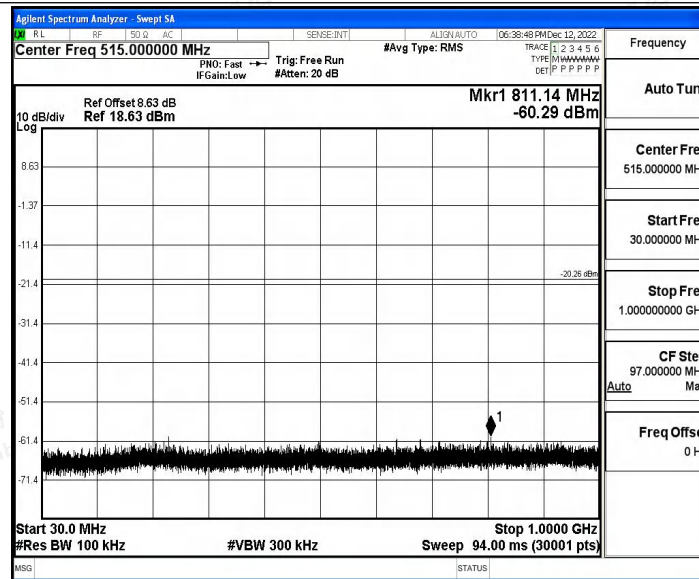


DH5_Ant1_2441_0~Reference

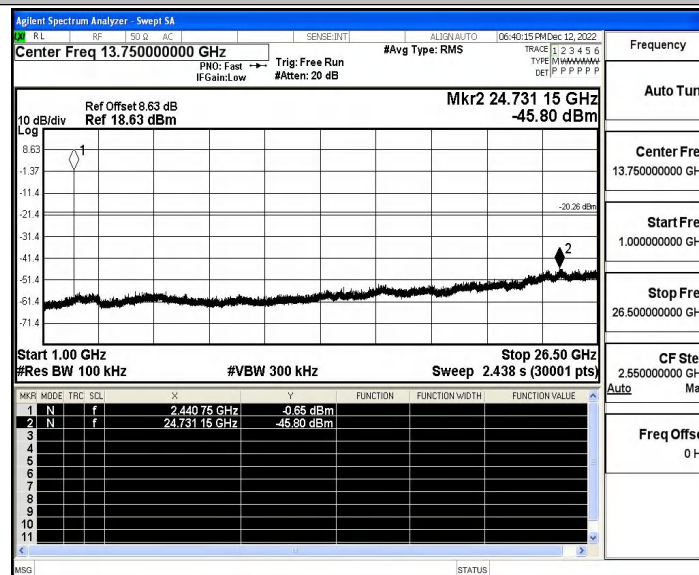


DH5_Ant1_2441_30~1000



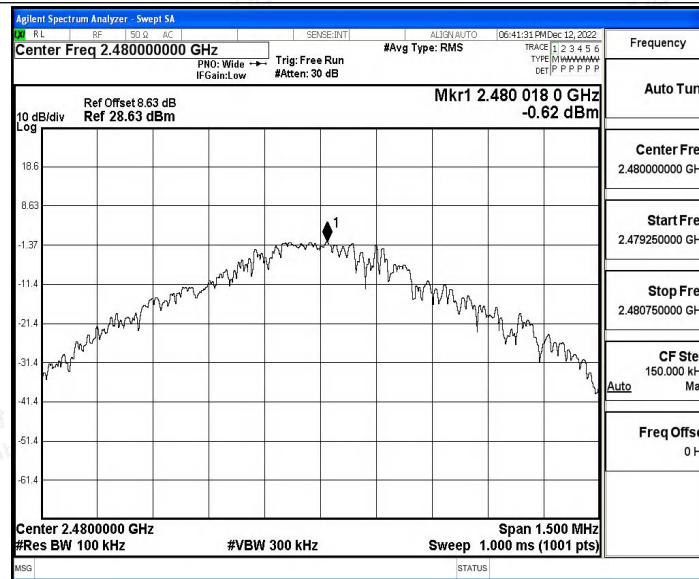


DH5_Ant1_2441_1000~26500

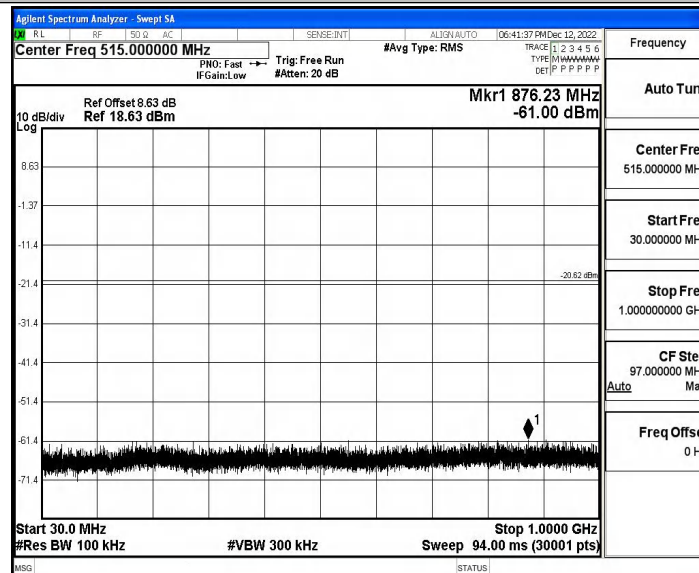


DH5_Ant1_2480_0~Reference



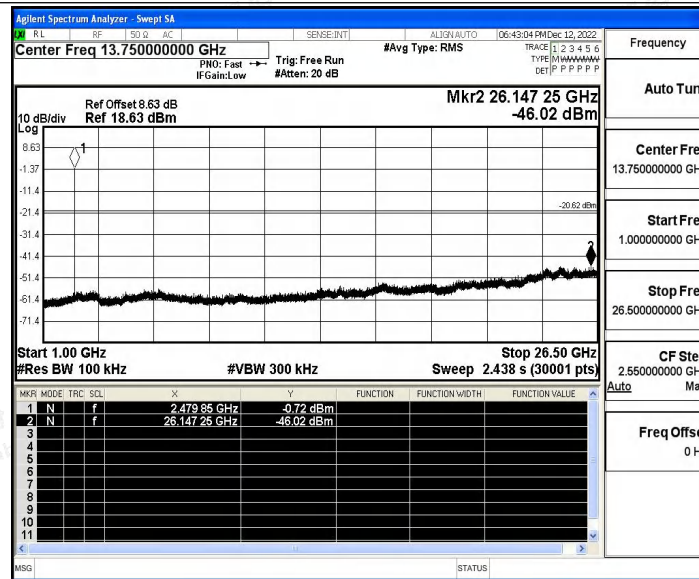


DH5_Ant1_2480_30~1000

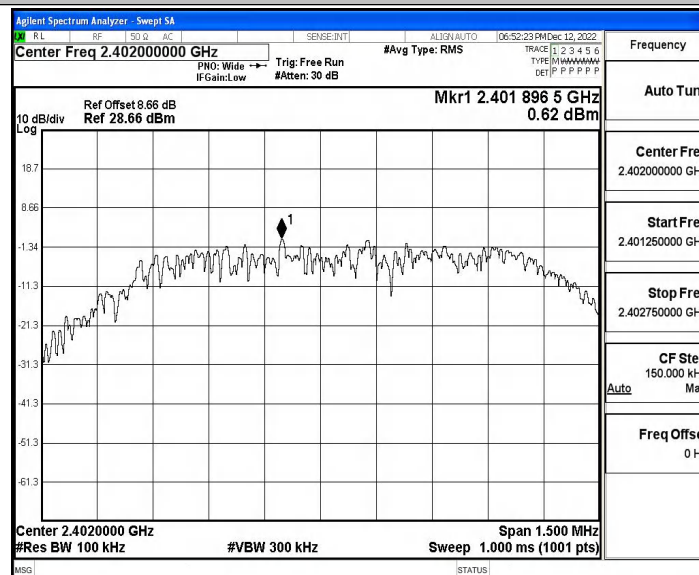


DH5_Ant1_2480_1000~26500



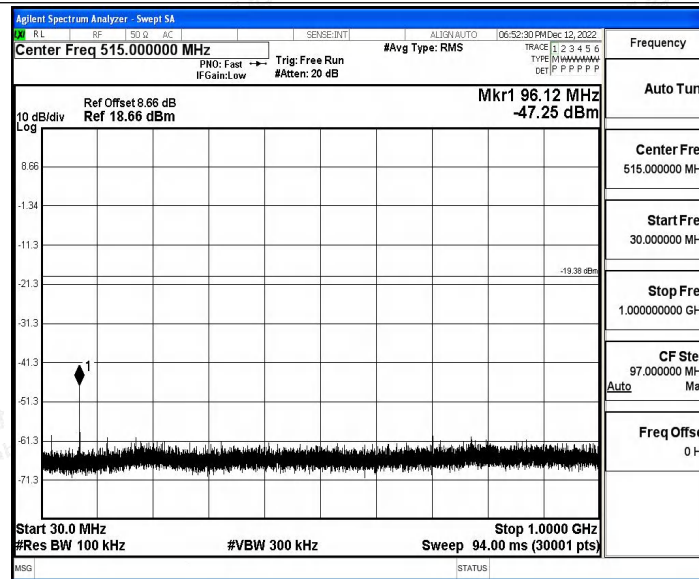


2DH5_Ant1_2402_0~Reference

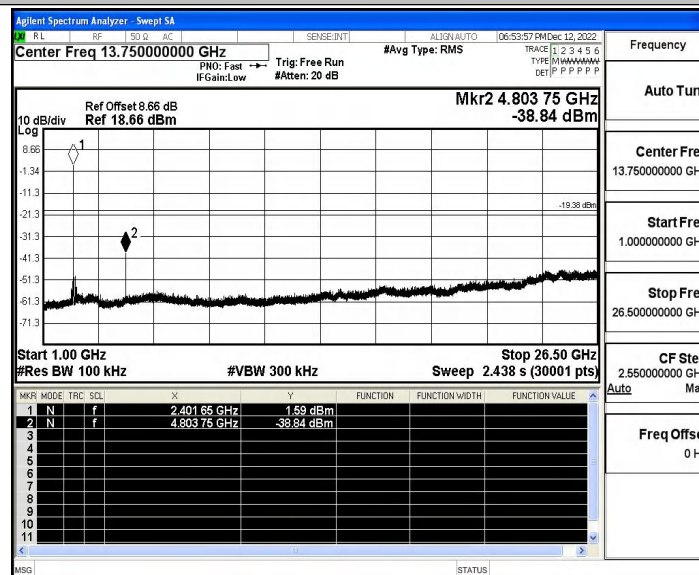


2DH5_Ant1_2402_30~1000



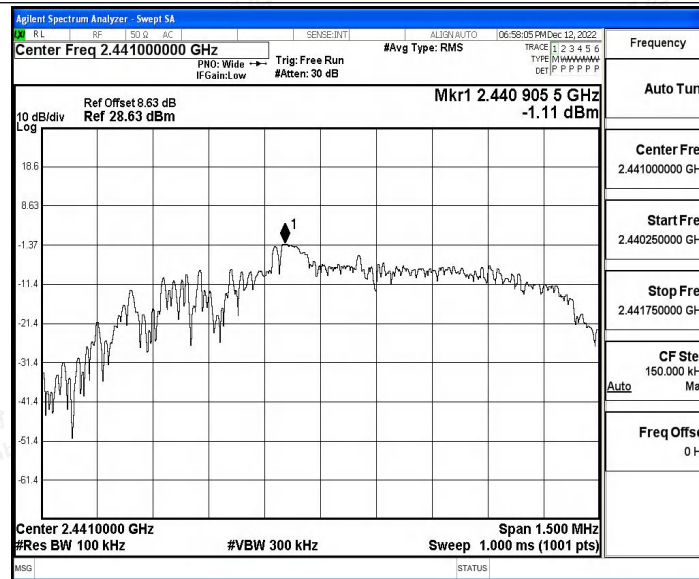


2DH5_Ant1_2402_1000~26500

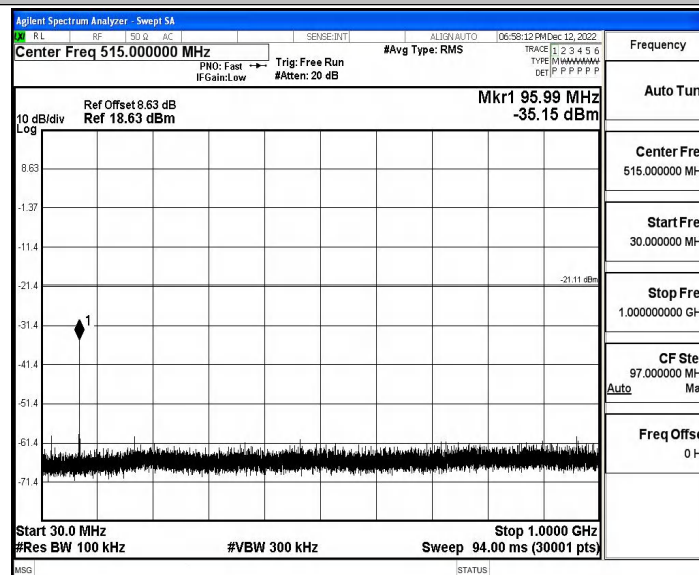


2DH5_Ant1_2441_0~Reference



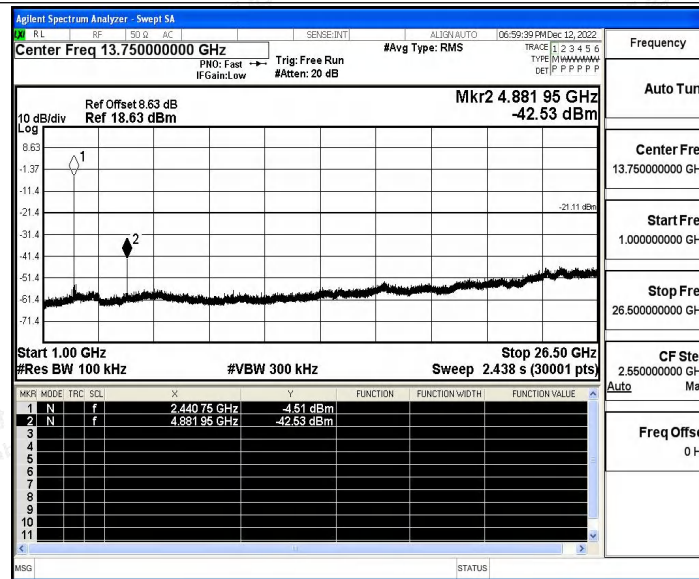


2DH5_Ant1_2441_30~1000

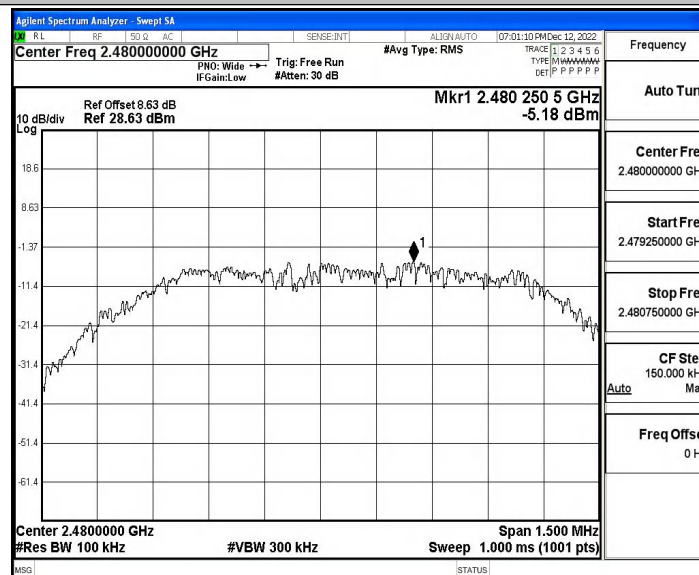


2DH5_Ant1_2441_1000~26500



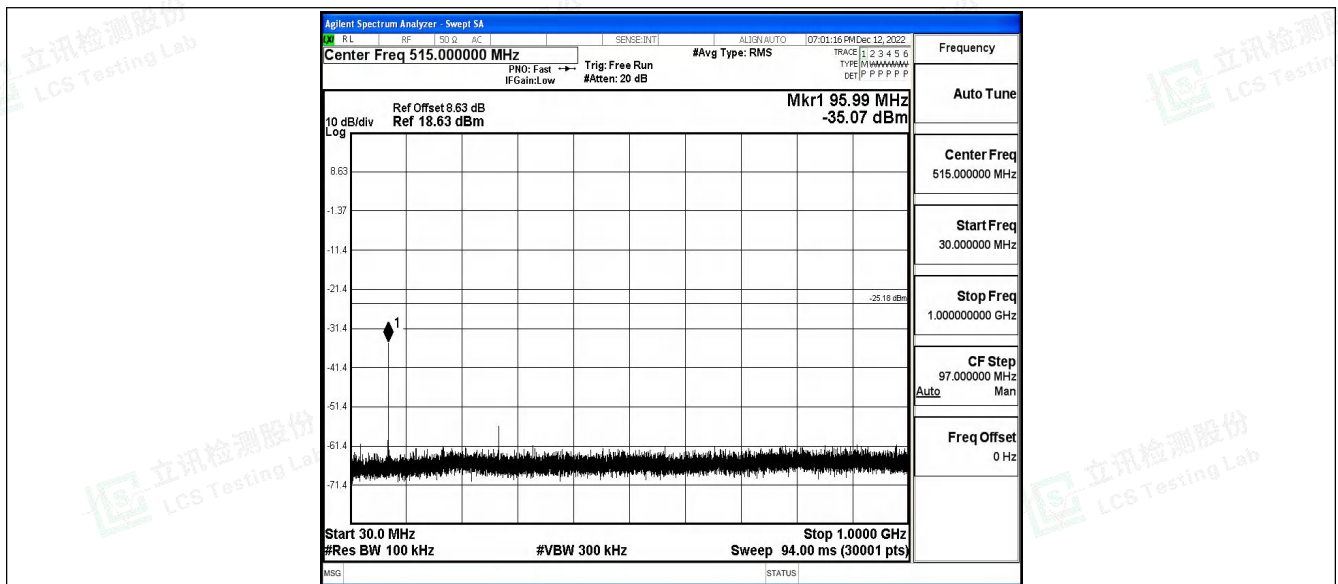


2DH5_Ant1_2480_0~Reference

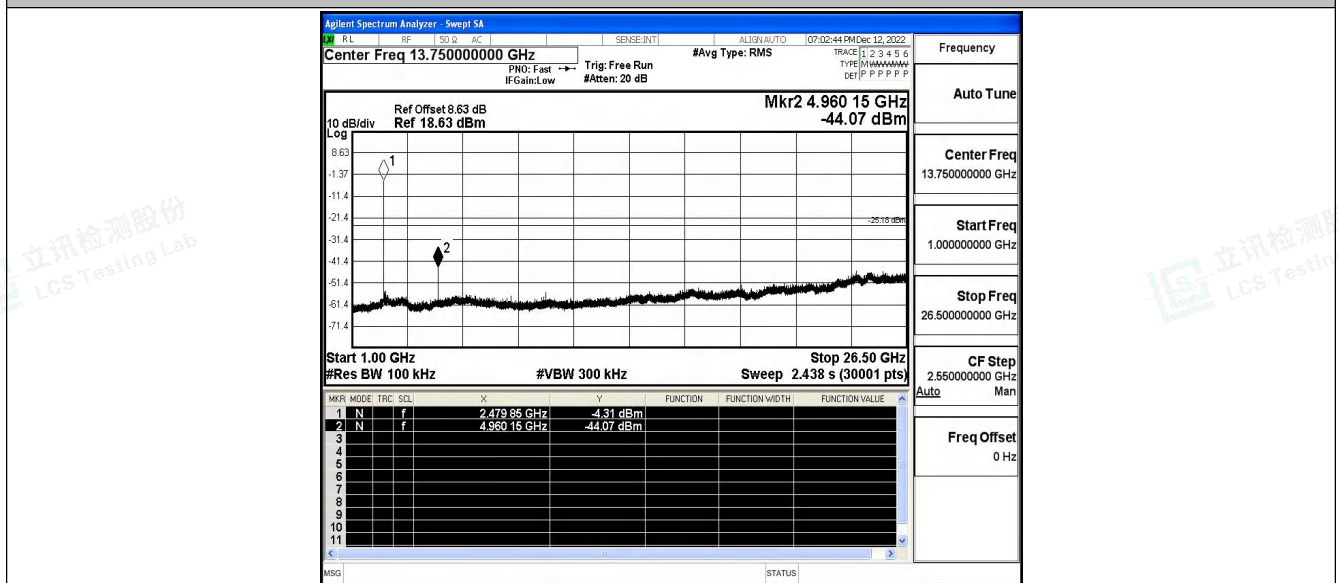


2DH5_Ant1_2480_30~1000





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	-58.2	≤-41.20	37.00	≤54	PASS
				AV	2388.725	-57.52	≤-41.20	37.68	≤54	PASS
				AV	2390.000	-57.66	≤-41.20	37.54	≤54	PASS
				Peak	2310.000	-50.82	≤-21.20	44.38	≤74	PASS
				Peak	2379.905	-48.22	≤-21.20	46.98	≤74	PASS
				Peak	2390.000	-49.3	≤-21.20	45.90	≤74	PASS
		High	2480	AV	2483.500	-55.49	≤-41.20	39.71	≤54	PASS
				AV	2483.520	-55.49	≤-41.20	39.71	≤54	PASS
				AV	2500.000	-57.2	≤-41.20	38.00	≤54	PASS
				Peak	2483.500	-51.6	≤-21.20	43.60	≤74	PASS
				Peak	2483.840	-47.45	≤-21.20	47.75	≤74	PASS
				Peak	2500.000	-52.26	≤-21.20	42.94	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-50.07	≤-21.20	45.13	≤74	PASS
				Peak	2368.145	-41.07	≤-21.20	54.13	≤74	PASS
				Peak	2390.000	-45.04	≤-21.20	50.16	≤74	PASS
		High	Hop_2480	Peak	2483.500	-45.04	≤-21.20	50.16	≤74	PASS
				Peak	2485.200	-43.35	≤-21.20	51.85	≤74	PASS
				Peak	2500.000	-46.51	≤-21.20	48.69	≤74	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-57.95	≤-41.20	37.25	≤54	PASS
				AV	2378.225	-48.71	≤-41.20	46.49	≤54	PASS
				AV	2390.000	-50.21	≤-41.20	44.99	≤54	PASS
				Peak	2310.000	-51.6	≤-21.20	43.60	≤74	PASS
				Peak	2385.785	-40.64	≤-21.20	54.56	≤74	PASS
				Peak	2390.000	-45.94	≤-21.20	49.26	≤74	PASS
		High	2480	AV	2483.500	-53.56	≤-41.20	41.64	≤54	PASS
				AV	2499.680	-52.6	≤-41.20	42.60	≤54	PASS
				AV	2500.000	-52.64	≤-41.20	42.56	≤54	PASS
				Peak	2483.500	-50.09	≤-21.20	45.11	≤74	PASS
				Peak	2498.480	-43.21	≤-21.20	51.99	≤74	PASS
				Peak	2500.000	-47.08	≤-21.20	48.12	≤74	PASS
		Low	Hop_2402	Peak	2310.000	-50.16	≤-21.20	45.04	≤74	PASS
				Peak	2379.695	-42.48	≤-21.20	52.72	≤74	PASS
				Peak	2390.000	-46.95	≤-21.20	48.25	≤74	PASS
		High	Hop_2480	Peak	2483.500	-45.74	≤-21.20	49.46	≤74	PASS
				Peak	2499.360	-41.46	≤-21.20	53.74	≤74	PASS



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: 101, 201 Bldg A & 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



				Peak	2500.000	-44.89	≤-21.20	50.31	≤74	PASS
--	--	--	--	------	----------	--------	---------	-------	-----	------

Note:

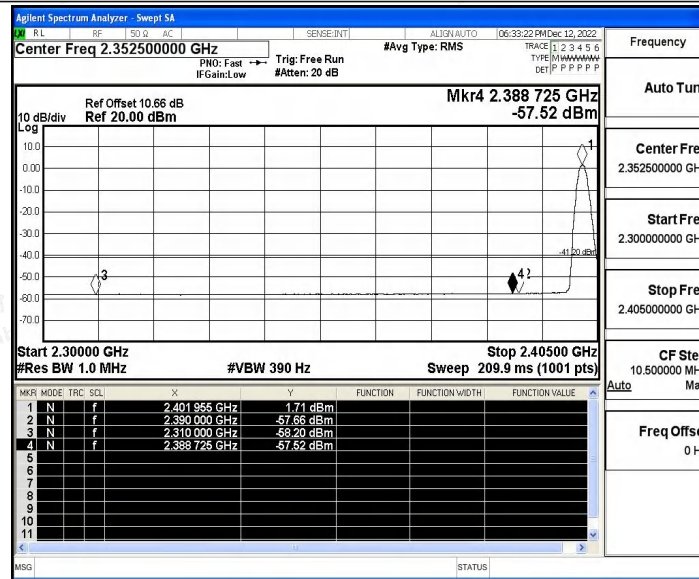
- 1. The Antenna Gain is compensated in the graph.
- 2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.



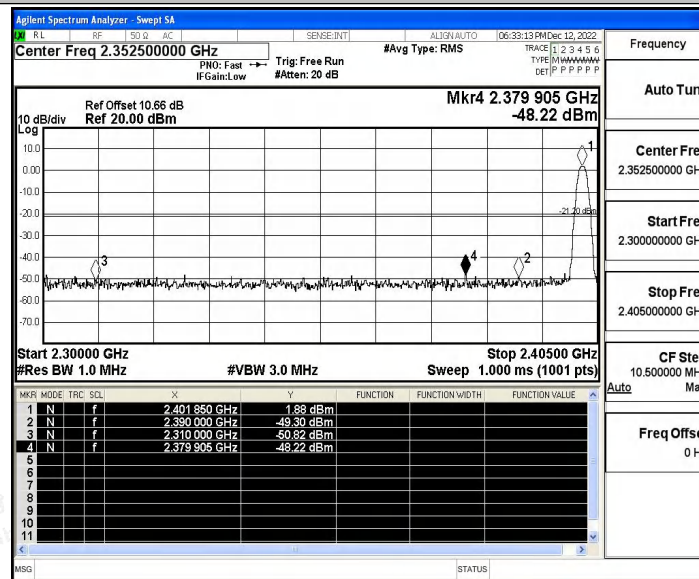


Test Graphs

DH5_Ant1_Low_2402_AV



DH5_Ant1_Low_2402_Peak



DH5_Ant1_High_2480_AV

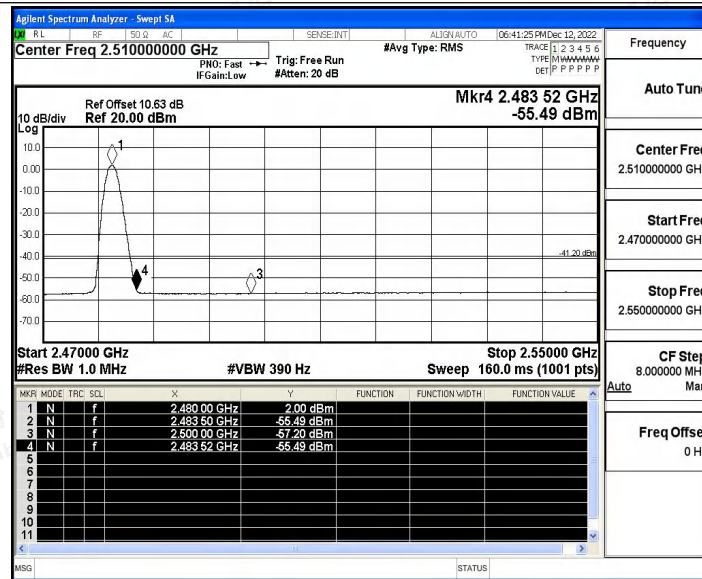


Shenzhen LCS Compliance Testing Laboratory Ltd.

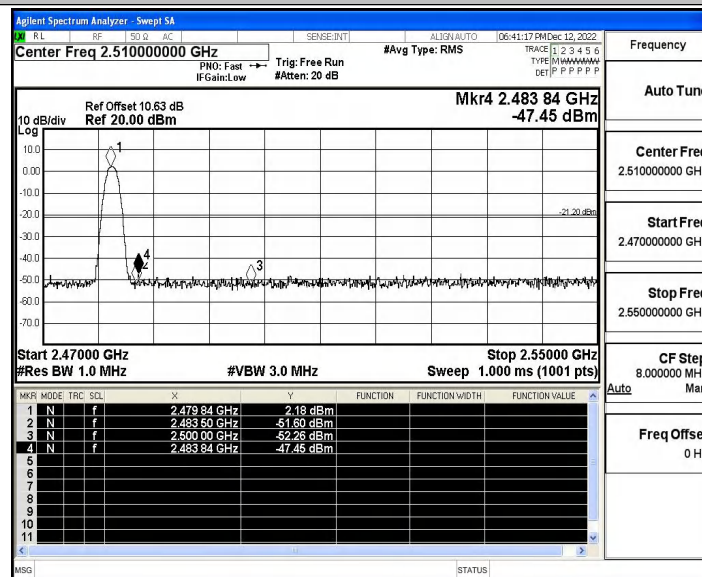
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

Scan code to check authenticity



DH5_Ant1_High_2480_Peak



DH5_Ant1_Low_Hop_2402_Peak

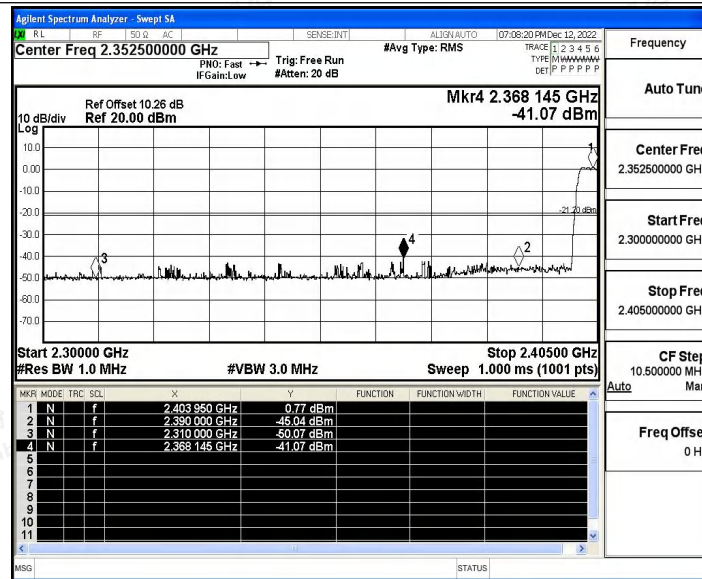


Shenzhen LCS Compliance Testing Laboratory Ltd.

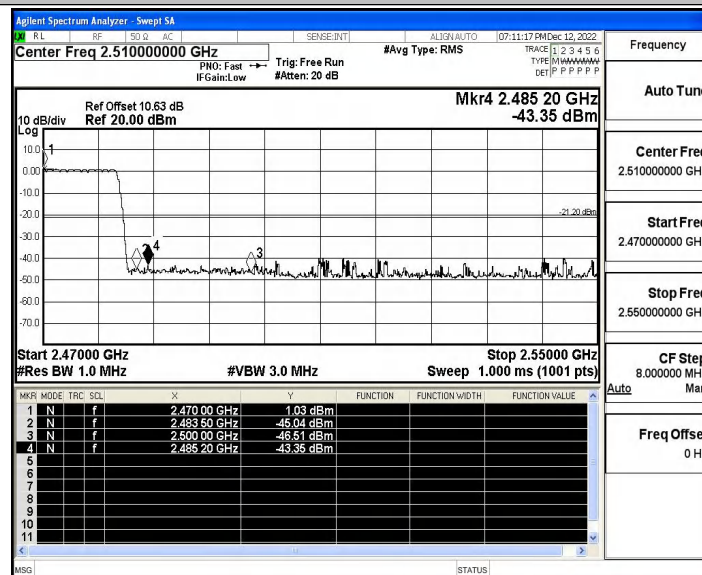
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

Scan code to check authenticity



DH5_Ant1_High_Hop_2480_Peak



2DH5_Ant1_Low_2402_AV

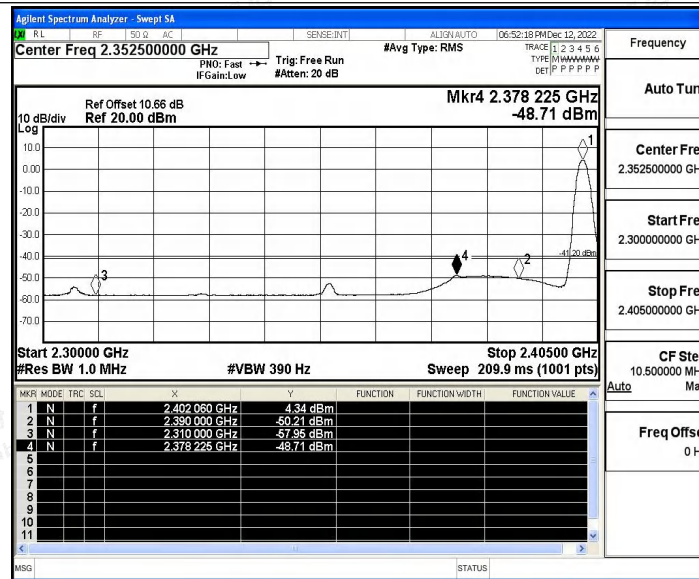


Shenzhen LCS Compliance Testing Laboratory Ltd.

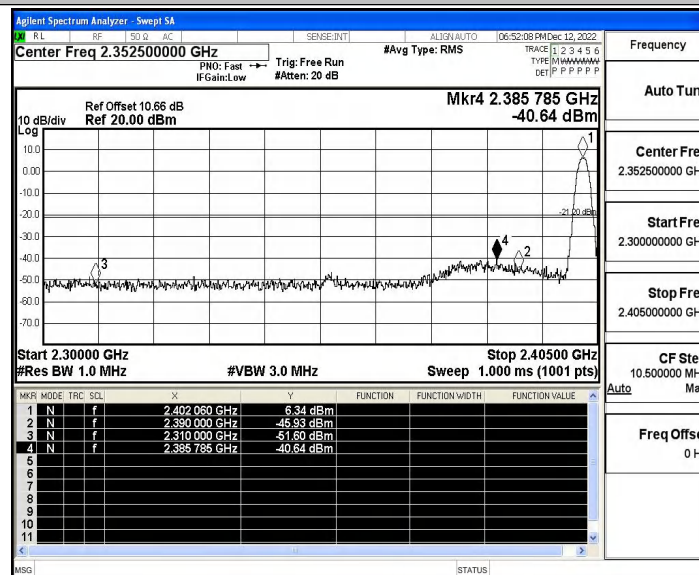
Add: 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China

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

Scan code to check authenticity

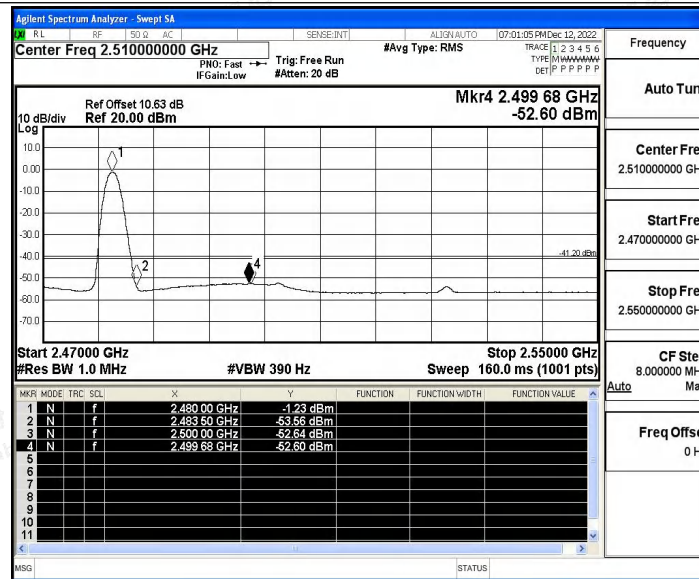


2DH5_Ant1_Low_2402_Peak

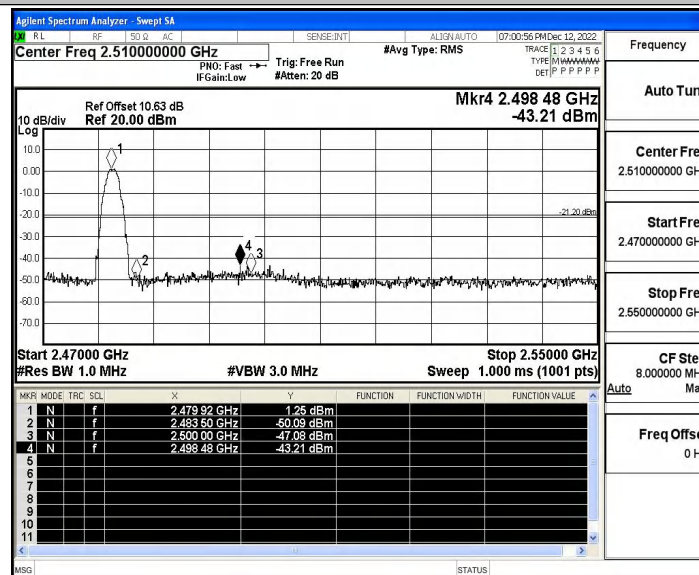


2DH5_Ant1_High_2480_AV



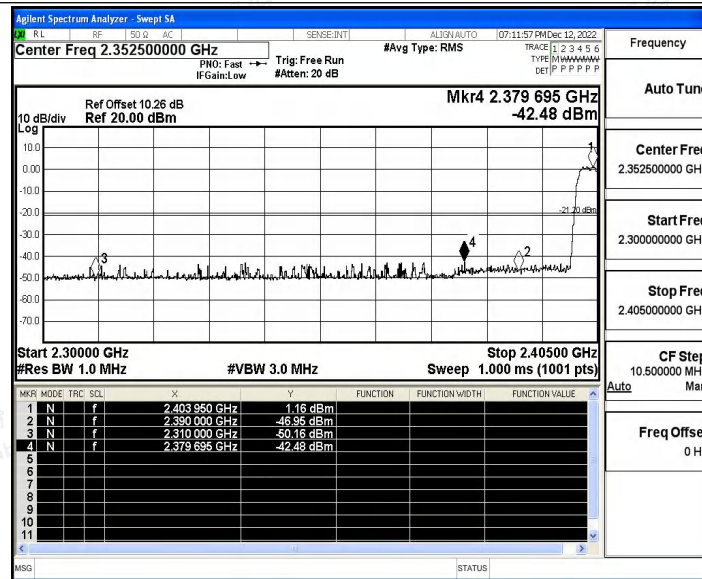


2DH5_Ant1_High_2480_Peak

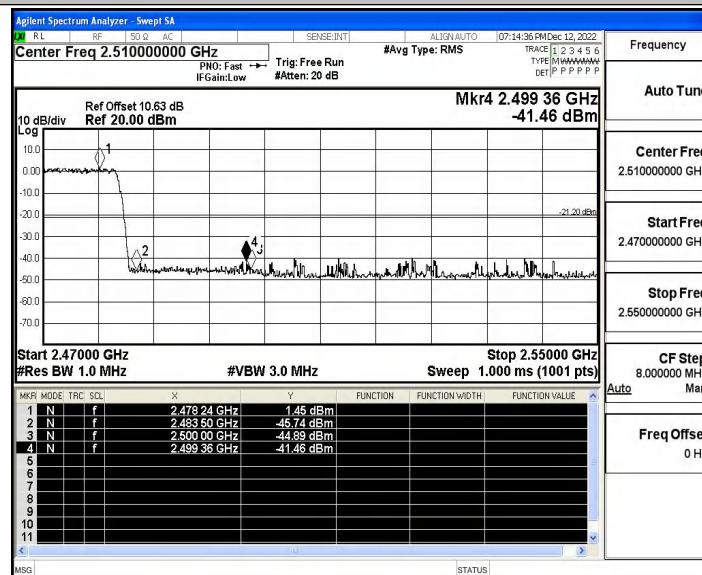


2DH5_Ant1_Low_Hop_2402_Peak





2DH5_Ant1_High_Hop_2480_Peak



Shenzhen LCS Compliance Testing Laboratory Ltd.

Add: 101, 201 Bldg A & 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