



Appendix A

RF Test Data for BT (Conducted Measurement)

Product Name: Bluetooth sky light

Test Model: S006

Environmental Conditions

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





A.1 20dB Emission Bandwidth

Test Result

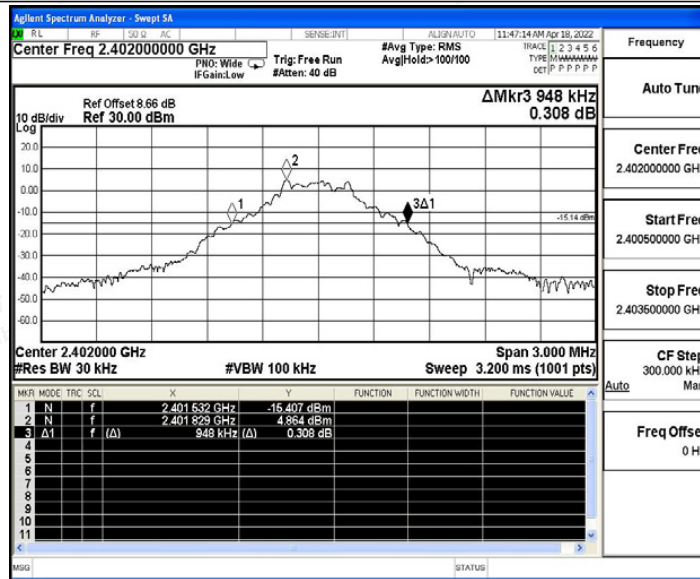
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.948	2401.532	2402.480	---	---
		2441	0.957	2440.526	2441.483	---	---
		2480	0.954	2479.523	2480.477	---	---
2DH5	Ant1	2402	1.323	2401.328	2402.651	---	---
		2441	1.290	2440.352	2441.642	---	---
		2480	1.293	2479.352	2480.645	---	---
3DH5	Ant1	2402	1.305	2401.337	2402.642	---	---
		2441	1.302	2440.337	2441.639	---	---
		2480	1.302	2479.337	2480.639	---	---



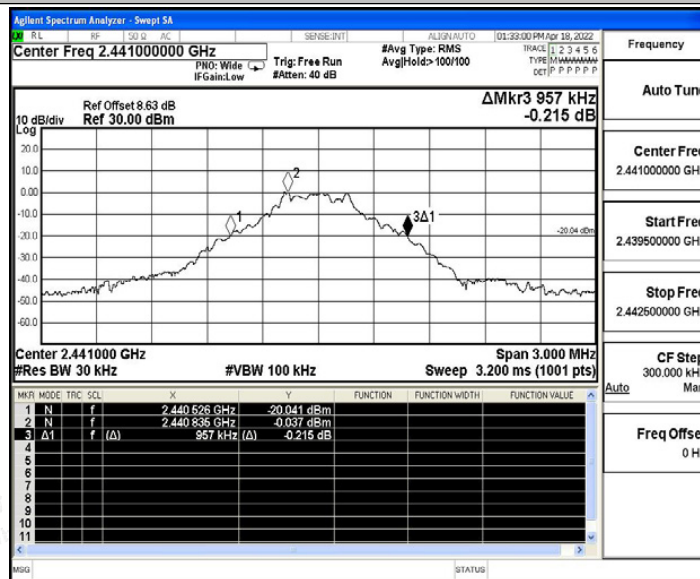


Test Graphs

DH5_Ant1_2402

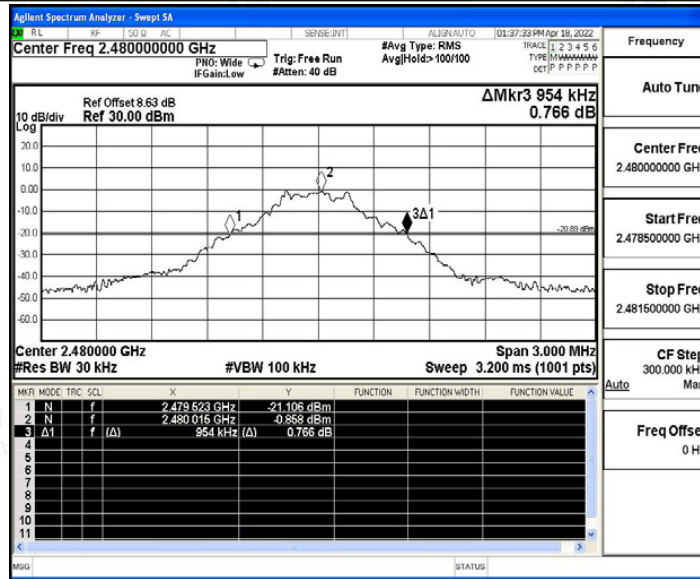


DH5_Ant1_2441

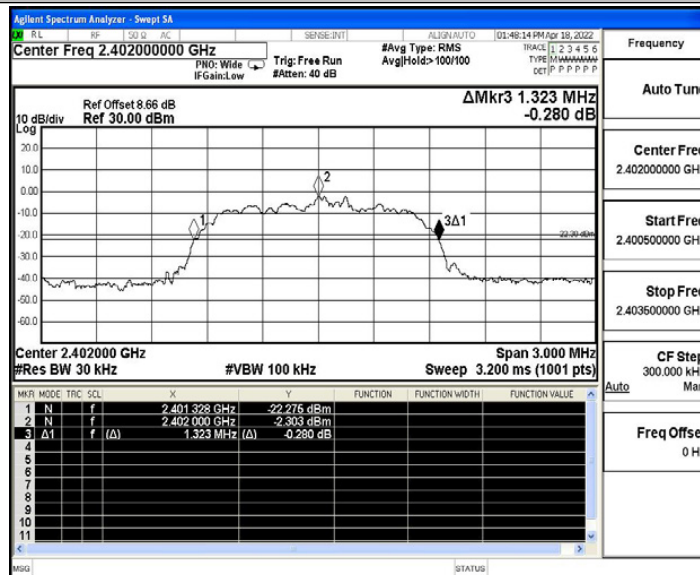


DH5_Ant1_2480



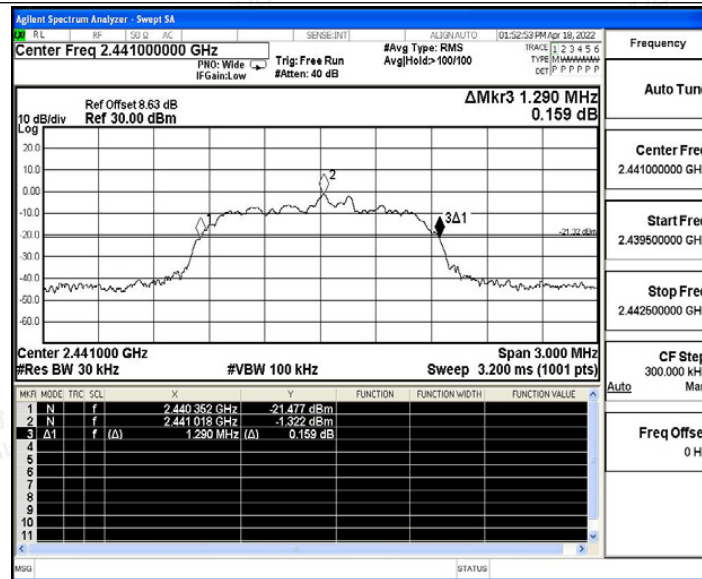


2DH5_Ant1_2402

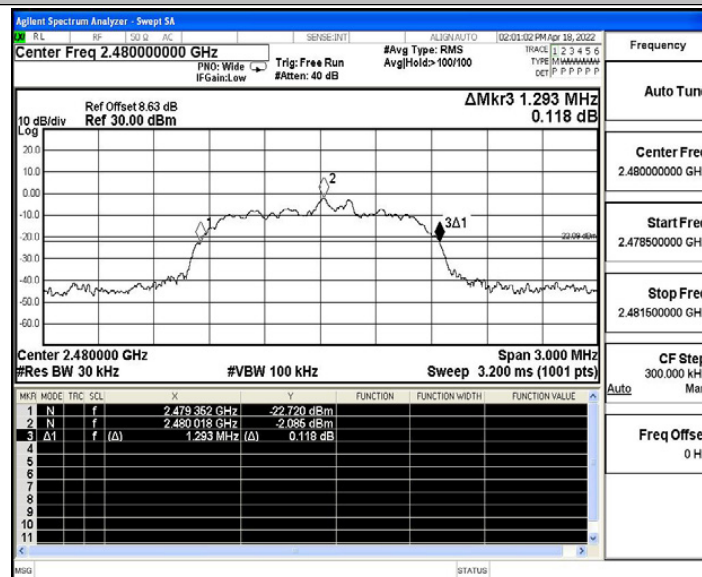


2DH5_Ant1_2441



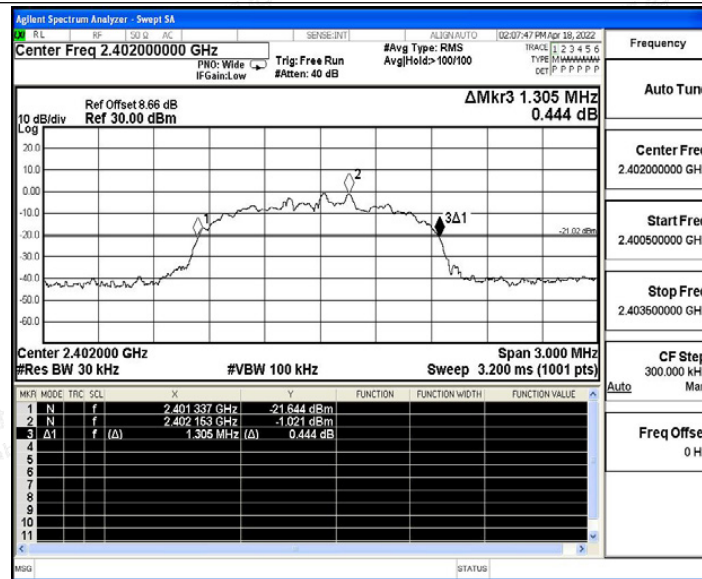


2DH5_Ant1_2480

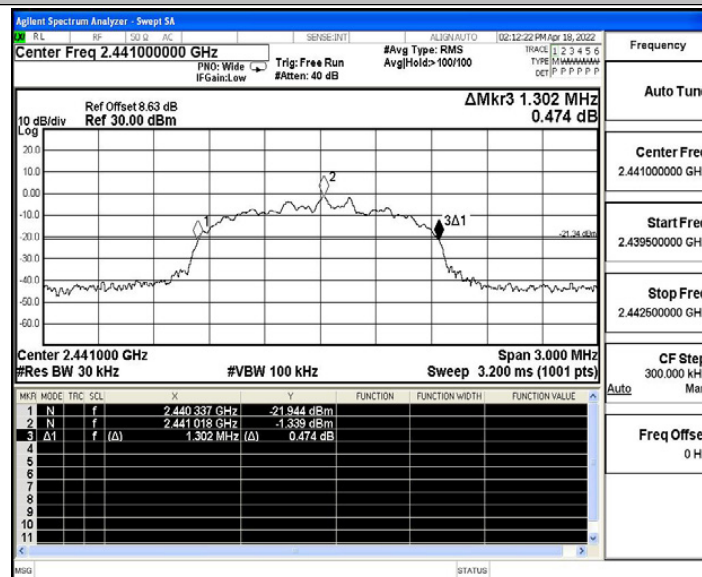


3DH5_Ant1_2402



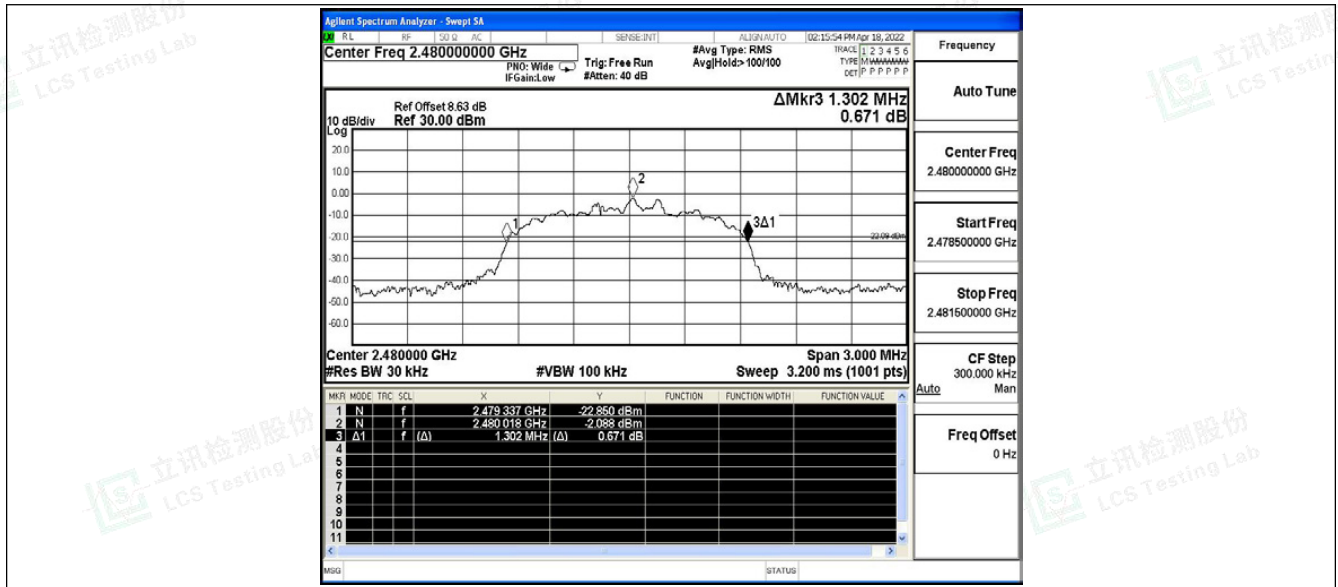


3DH5_Ant1_2441



3DH5_Ant1_2480







A.2 Maximum peak conducted output power

Test Result

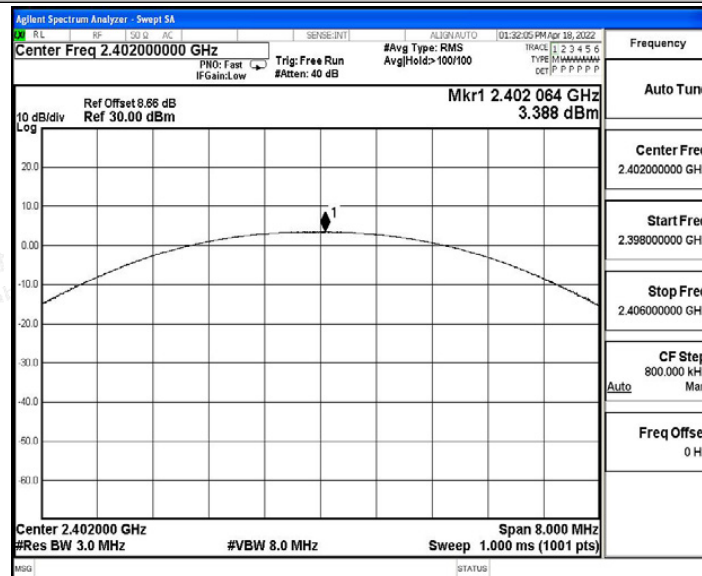
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	3.39	≤20.97	PASS
		2441	2.35	≤20.97	PASS
		2480	1.61	≤20.97	PASS
2DH5	Ant1	2402	3.44	≤20.97	PASS
		2441	2.92	≤20.97	PASS
		2480	2.14	≤20.97	PASS
3DH5	Ant1	2402	3.67	≤20.97	PASS
		2441	3.24	≤20.97	PASS
		2480	2.52	≤20.97	PASS



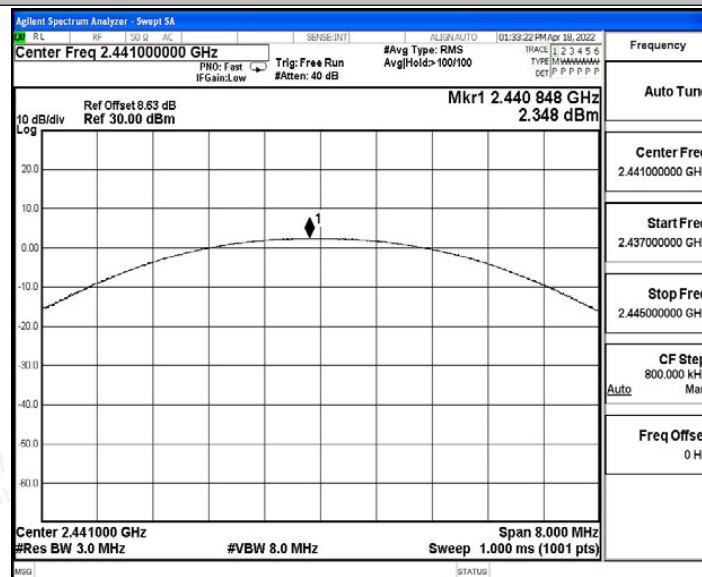


Test Graphs

DH5_Ant1_2402

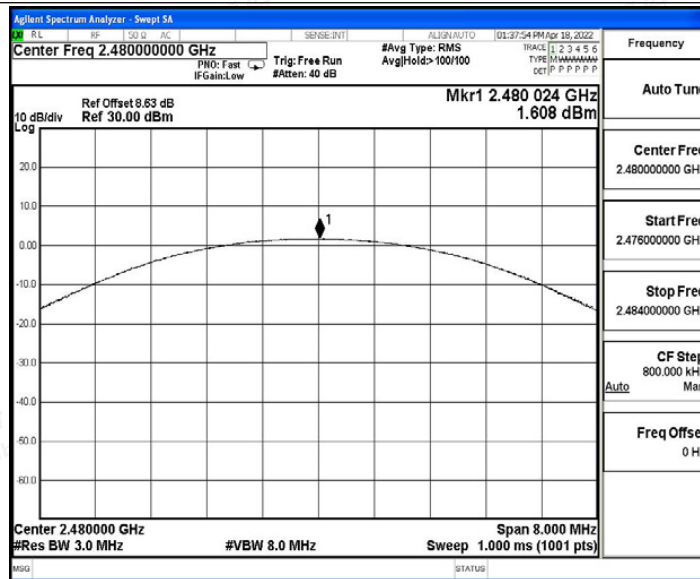


DH5_Ant1_2441

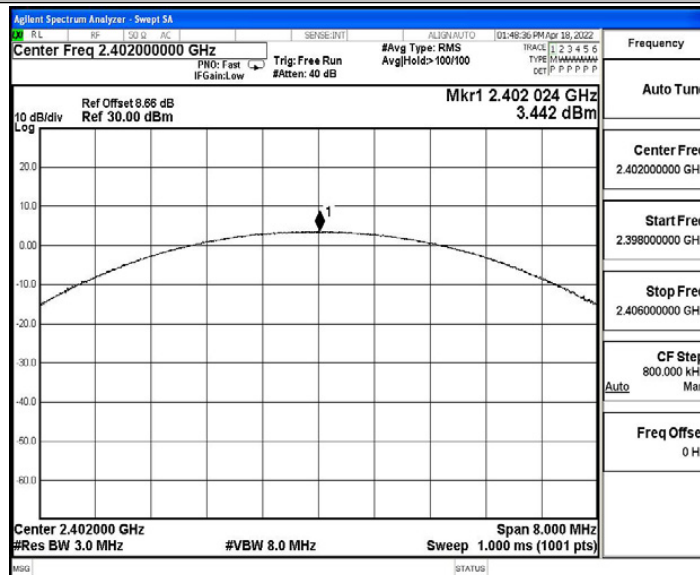


DH5_Ant1_2480



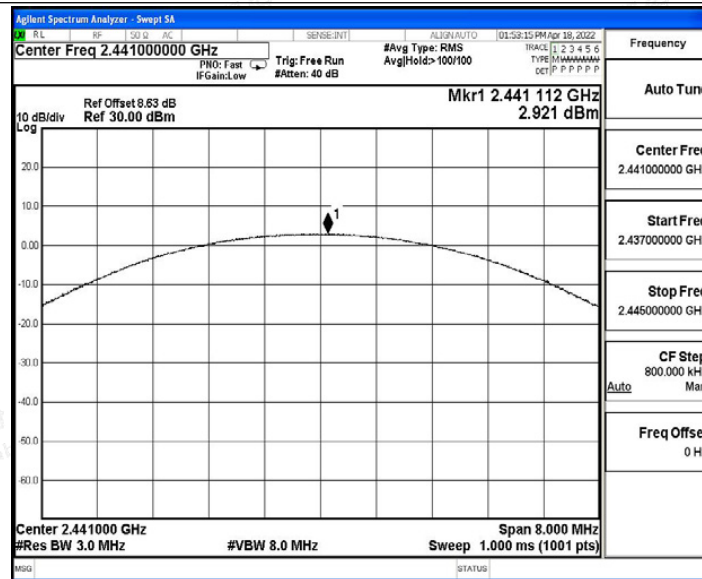


2DH5_Ant1_2402

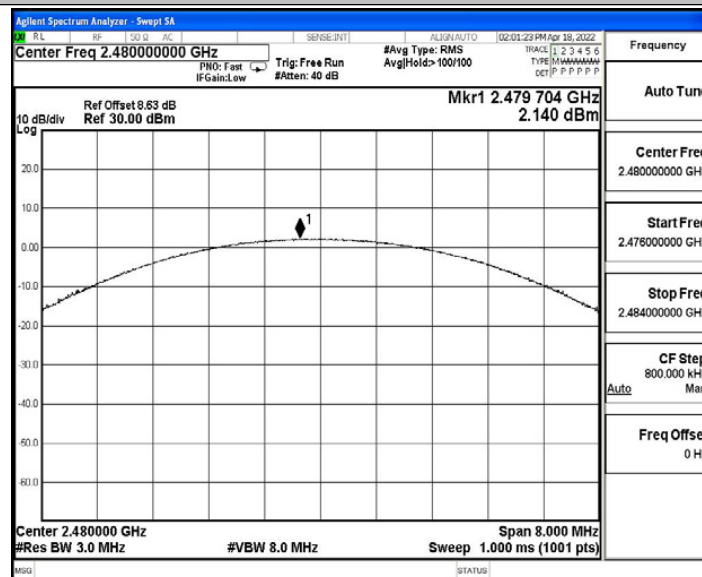


2DH5_Ant1_2441



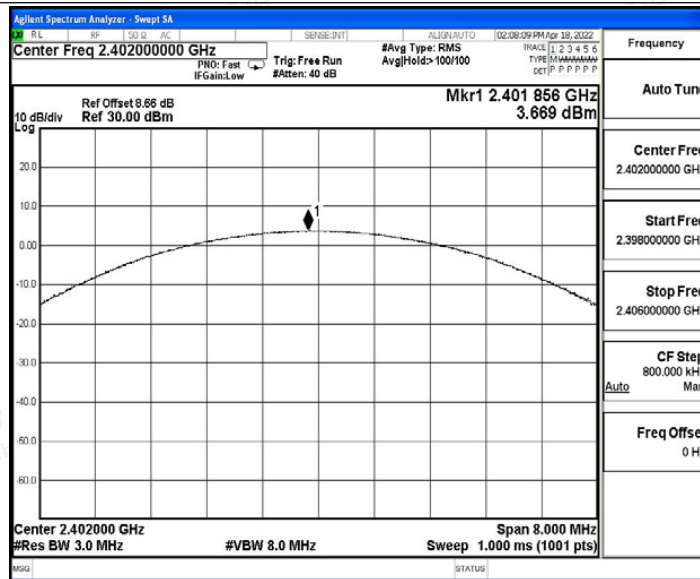


2DH5_Ant1_2480

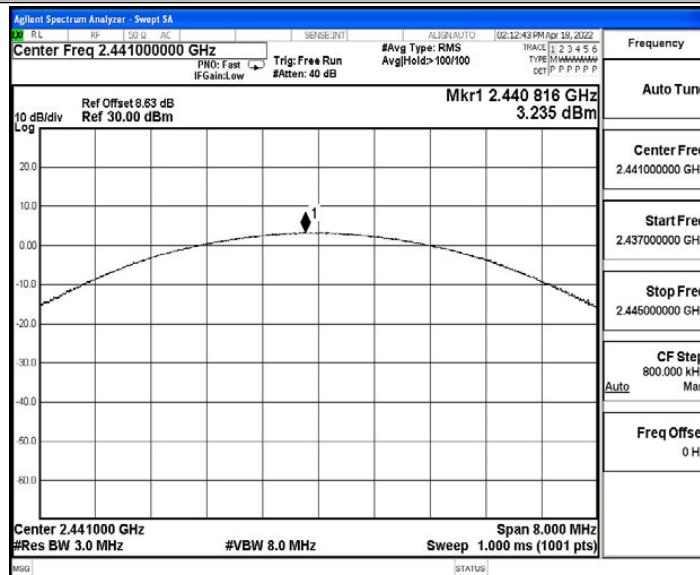


3DH5_Ant1_2402



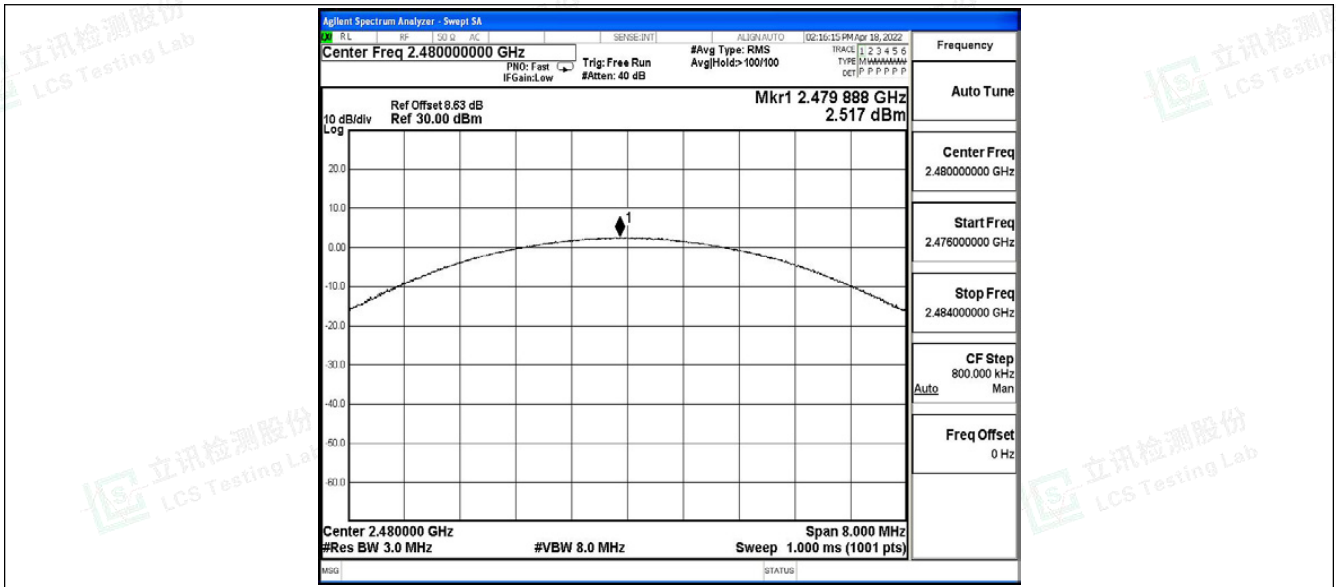


3DH5_Ant1_2441



3DH5_Ant1_2480







A.3 Carrier frequency separation

Test Result

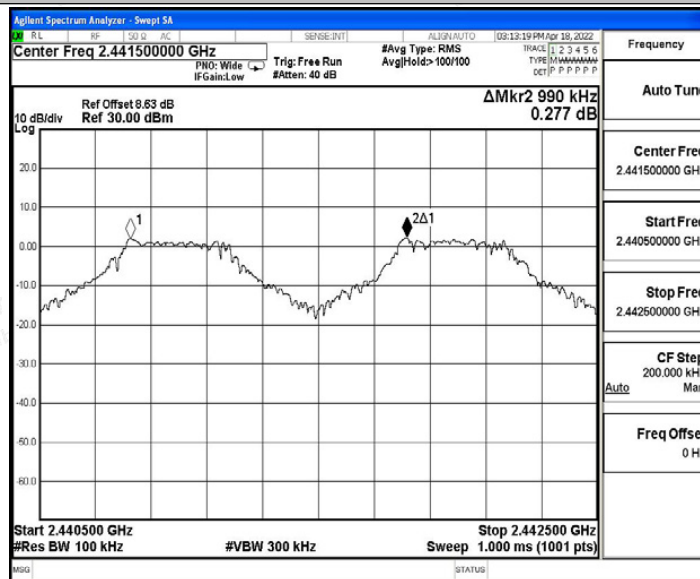
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.99	≥ 0.957	PASS
2DH5	Ant1	Hop	0.992	≥ 0.882	PASS
3DH5	Ant1	Hop	1.084	≥ 0.870	PASS



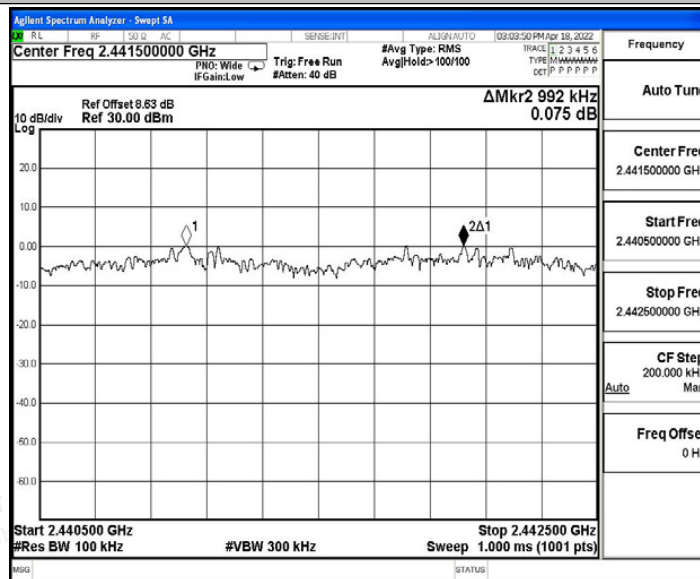


Test Graphs

DH5_Ant1_Hop

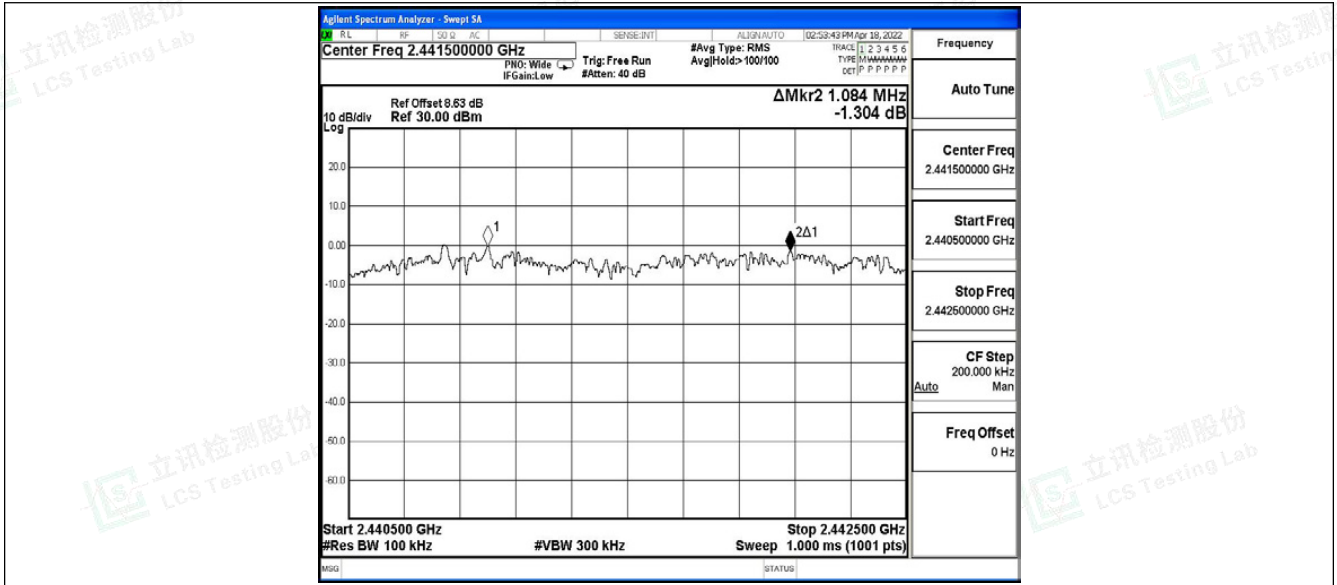


2DH5_Ant1_Hop



3DH5_Ant1_Hop







A.4 Time of occupancy

Test Result

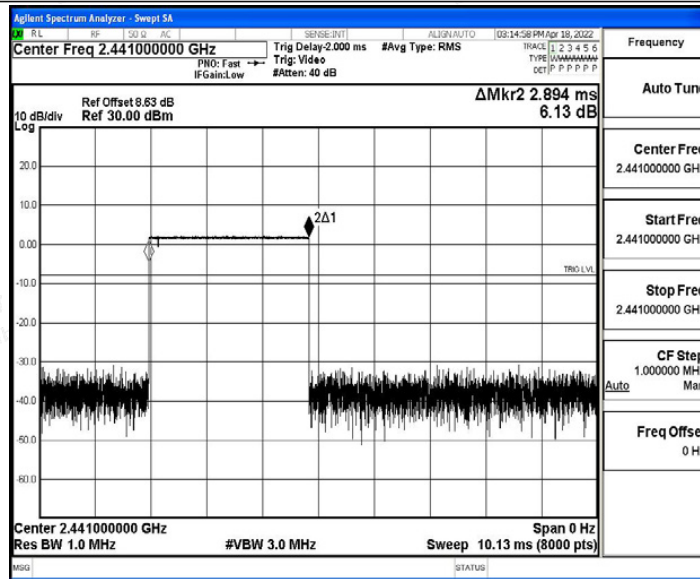
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.89	106.67	0.309	≤0.4	PASS
2DH5	Ant1	Hop	2.88	106.67	0.308	≤0.4	PASS
3DH5	Ant1	Hop	2.88	106.67	0.307	≤0.4	PASS



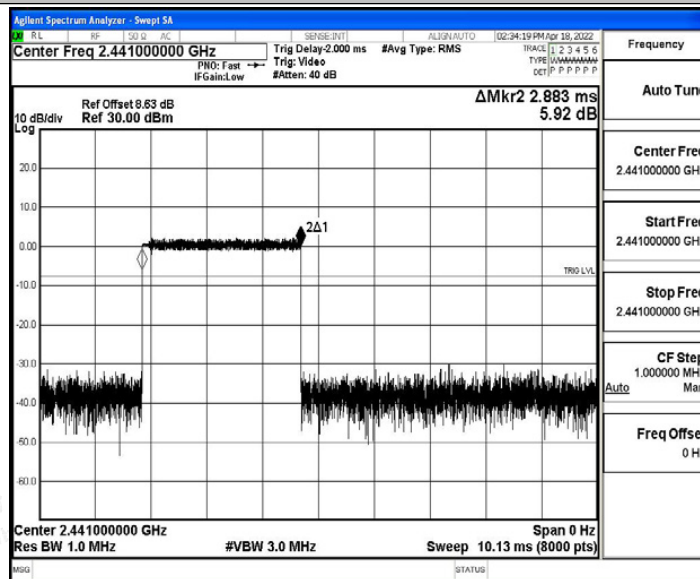


Test Graphs

DH5_Ant1_Hop

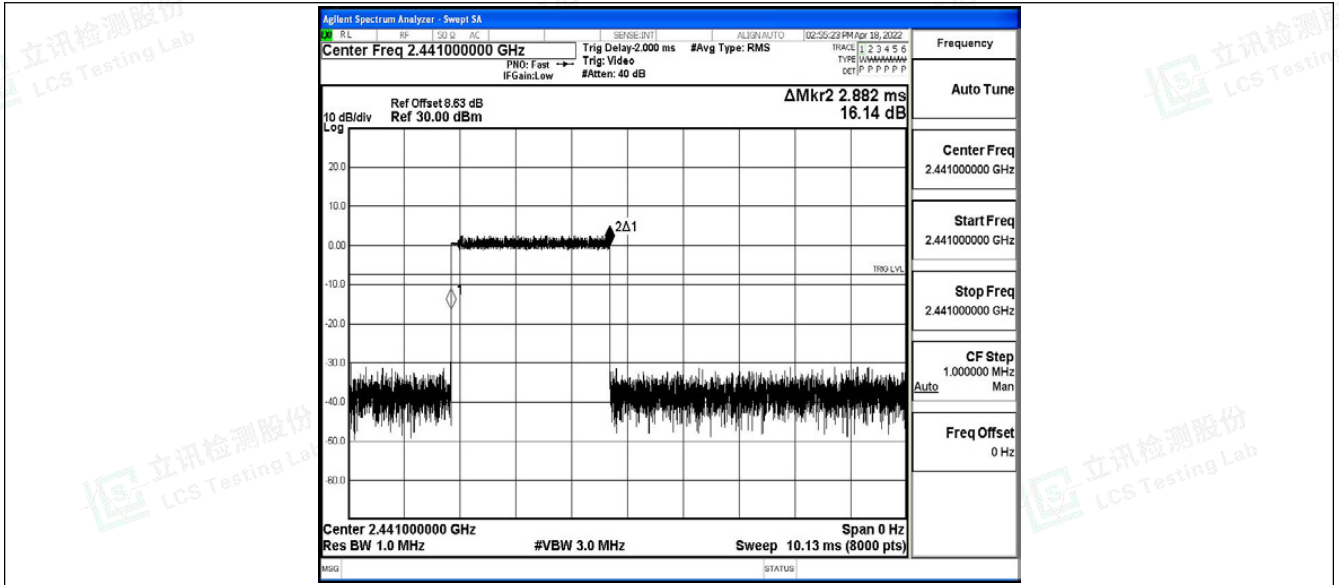


2DH5_Ant1_Hop



3DH5_Ant1_Hop







A.5 Number of hopping channels

Test Result

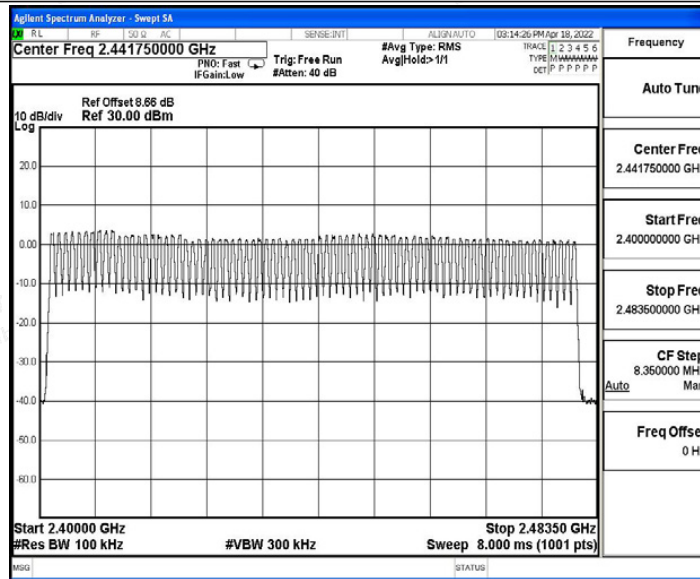
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥ 15	PASS
2DH5	Ant1	Hop	79	≥ 15	PASS
3DH5	Ant1	Hop	79	≥ 15	PASS



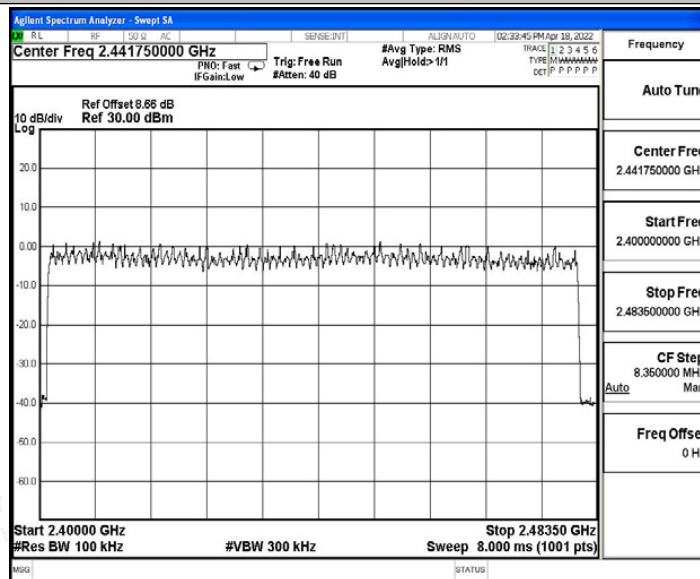


Test Graphs

DH5_Ant1_Hop

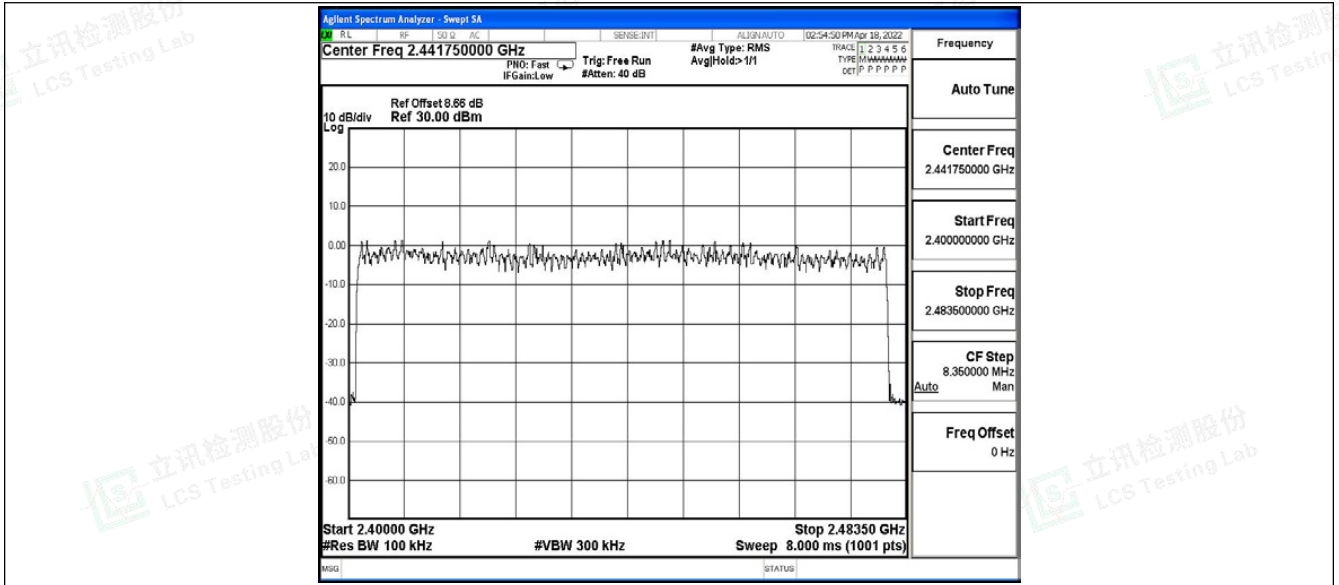


2DH5_Ant1_Hop



3DH5_Ant1_Hop







A.6 Band edge measurements

Test Result

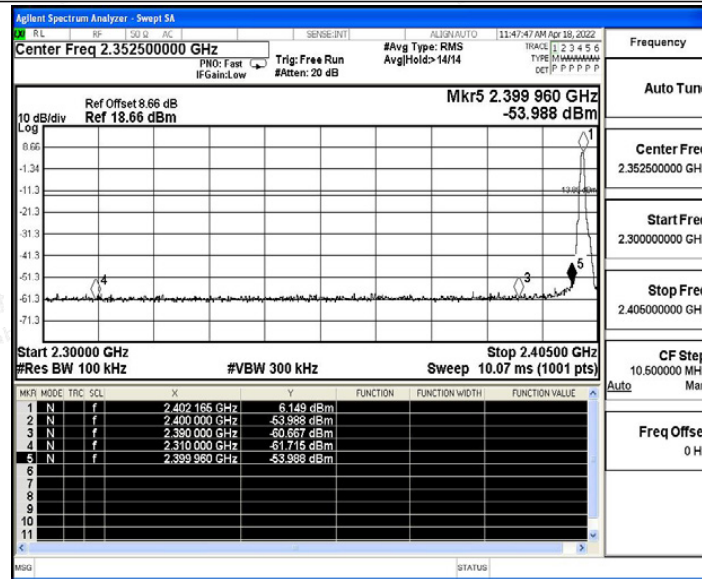
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	6.15	-53.99	≤ -13.85	PASS
		High	2480	1.03	-57.97	≤ -18.97	PASS
		Low	Hop_2402	2.43	-58.73	≤ -17.57	PASS
		High	Hop_2480	1.11	-57.74	≤ -18.9	PASS
2DH5	Ant1	Low	2402	0.75	-53.66	≤ -19.25	PASS
		High	2480	-0.33	-57.05	≤ -20.33	PASS
		Low	Hop_2402	-0.40	-59.12	≤ -20.4	PASS
		High	Hop_2480	-2.61	-57.91	≤ -22.61	PASS
3DH5	Ant1	Low	2402	-0.91	-53.26	≤ -20.91	PASS
		High	2480	-0.48	-57.54	≤ -20.48	PASS
		Low	Hop_2402	0.56	-58.93	≤ -19.44	PASS
		High	Hop_2480	-0.65	-56.59	≤ -20.65	PASS



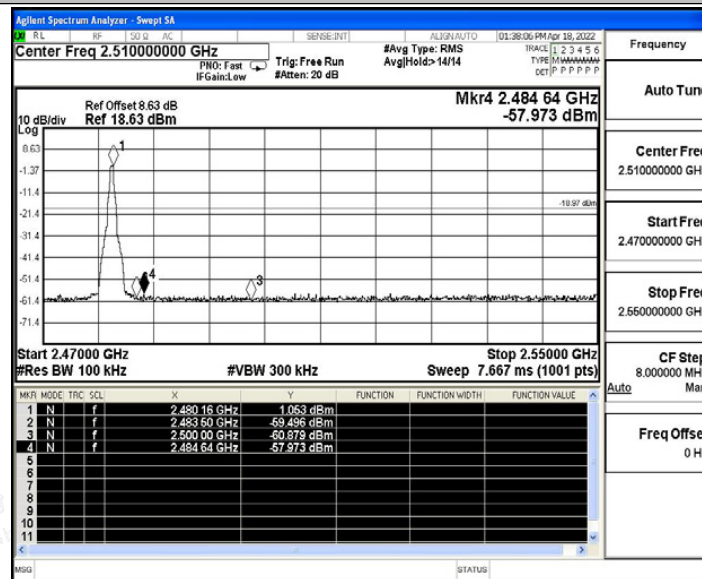


Test Graphs

DH5_Ant1_Low_2402

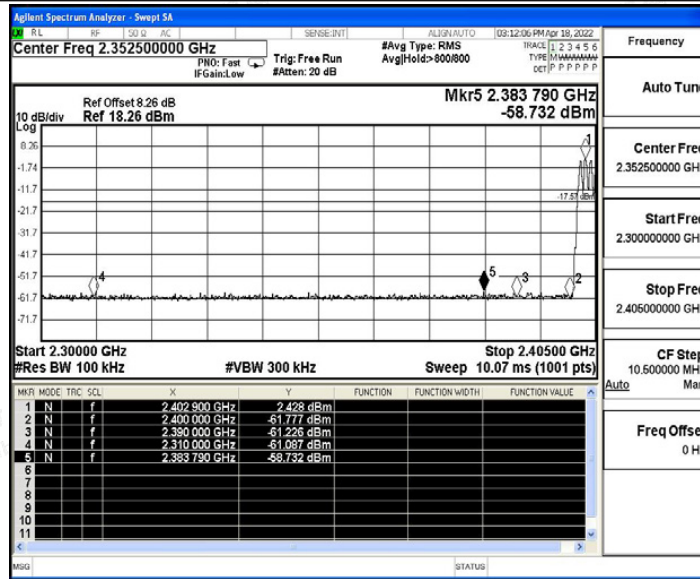


DH5_Ant1_High_2480

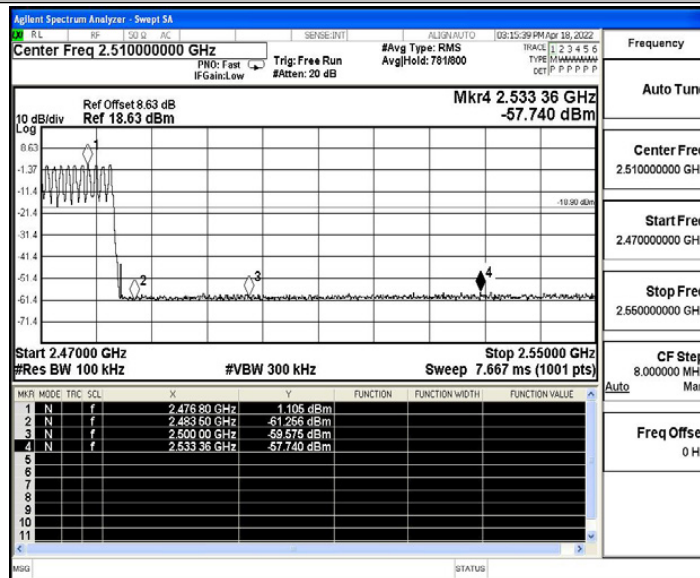


DH5_Ant1_Low_Hop_2402



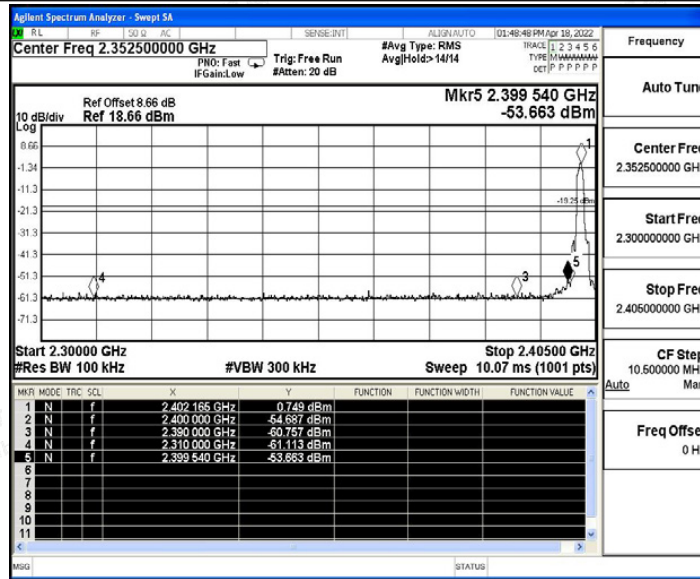


DH5_Ant1_High_Hop_2480

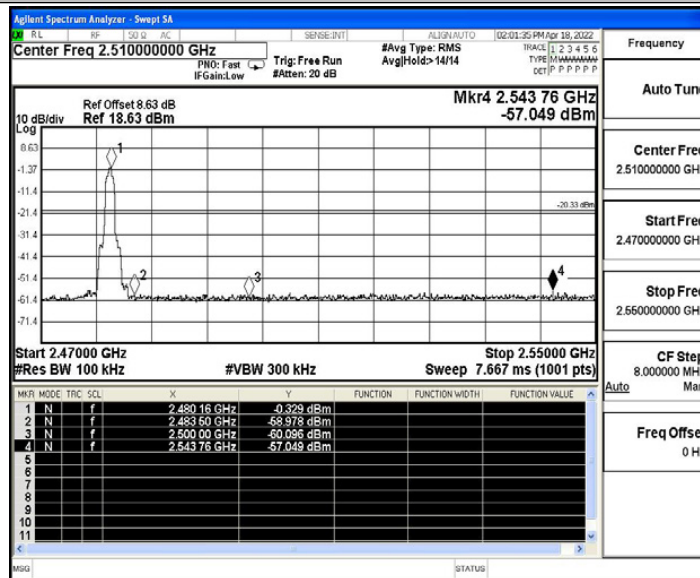


2DH5_Ant1_Low_2402



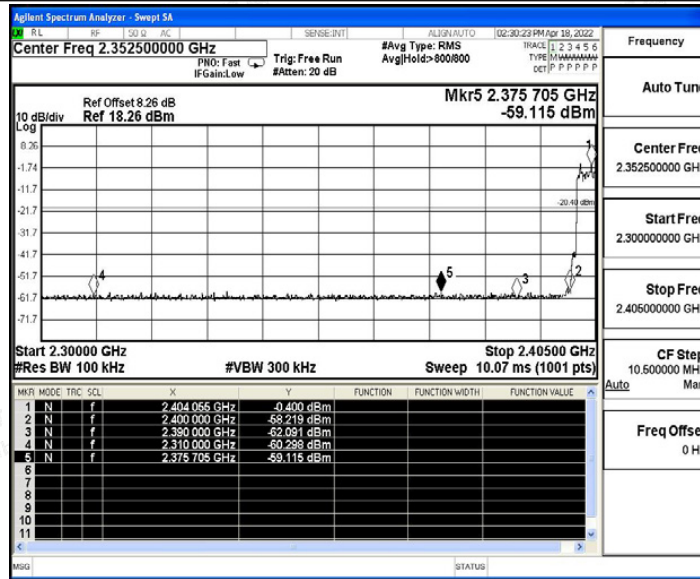


2DH5_Ant1_High_2480

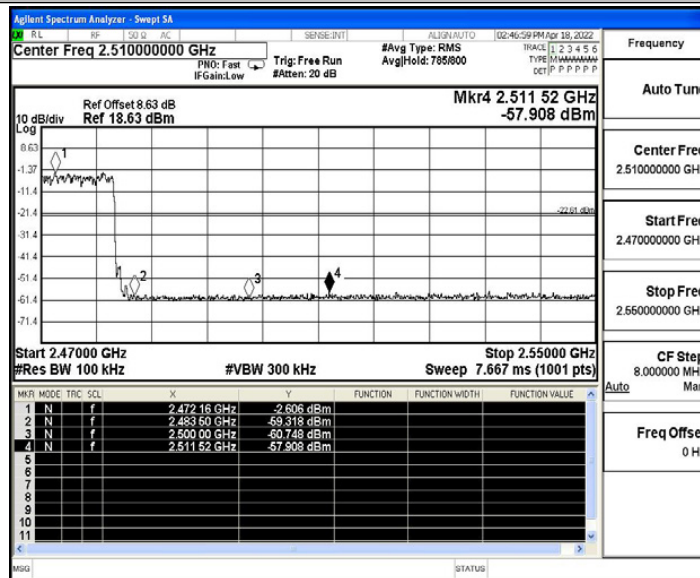


2DH5_Ant1_Low_Hop_2402



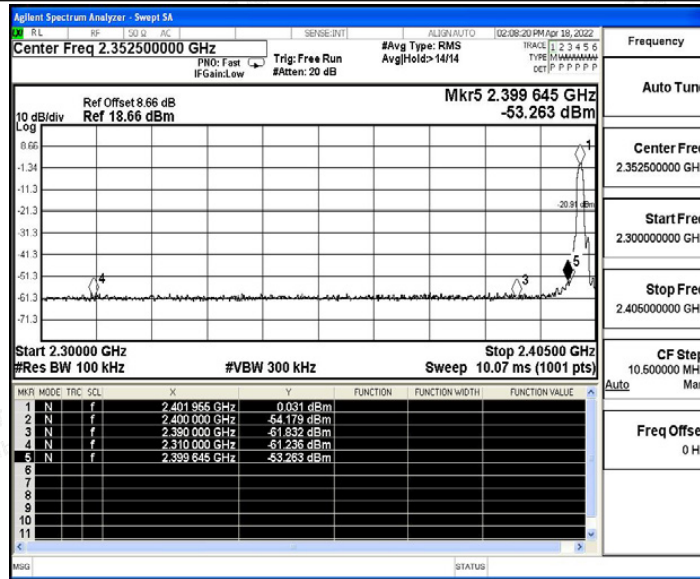


2DH5_Ant1_High_Hop_2480

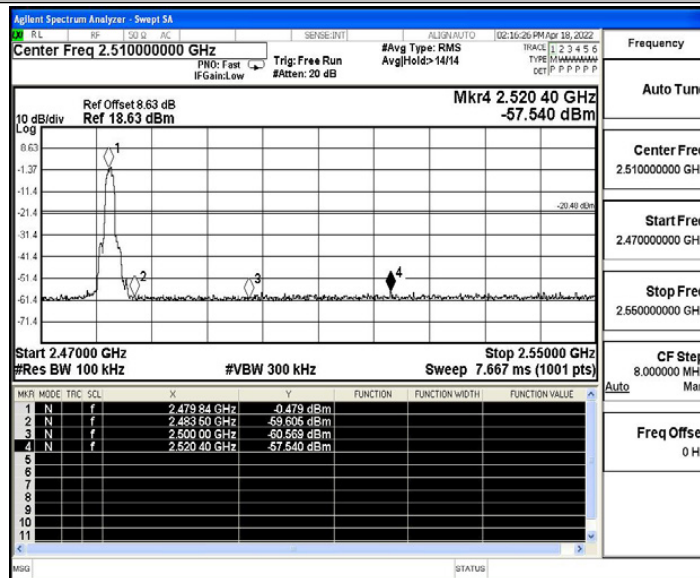


3DH5_Ant1_Low_2402



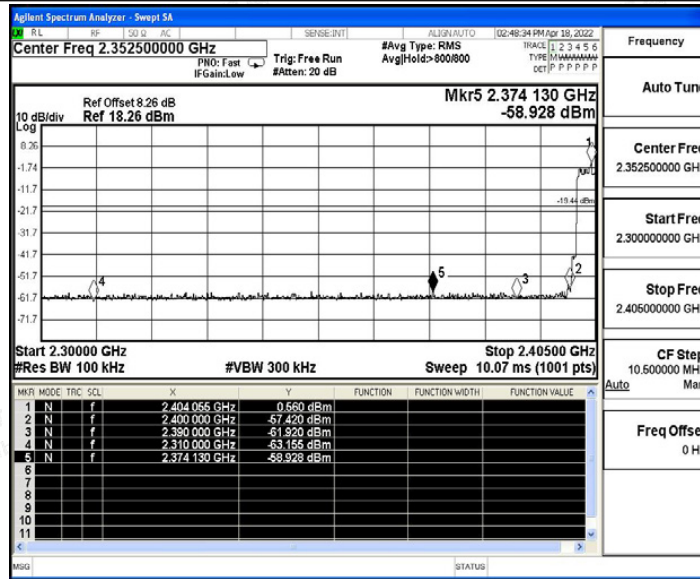


3DH5_Ant1_High_2480

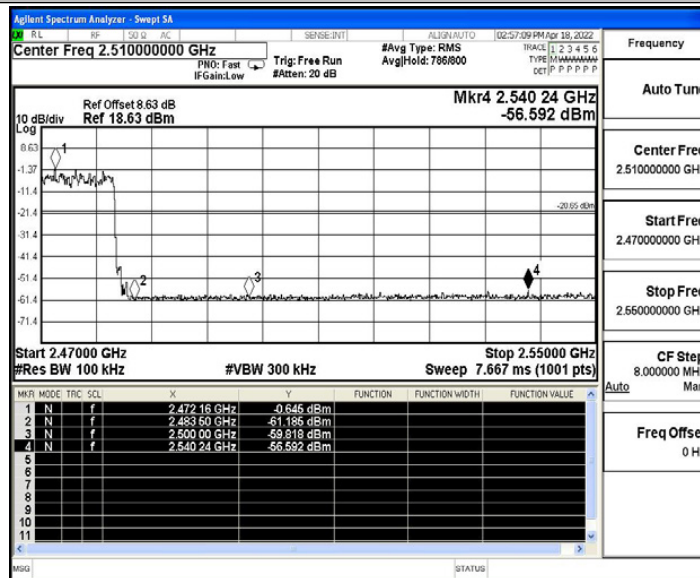


3DH5_Ant1_Low_Hop_2402





3DH5_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	6.11	6.11	---	PASS
			30~1000	6.11	-27.45	≤ -13.89	PASS
			1000~26500	6.11	-45.02	≤ -13.89	PASS
		2441	Reference	1.81	1.81	---	PASS
			30~1000	1.81	-60.1	≤ -18.19	PASS
			1000~26500	1.81	-46.13	≤ -18.19	PASS
		2480	Reference	1.14	1.14	---	PASS
			30~1000	1.14	-60.22	≤ -18.86	PASS
			1000~26500	1.14	-46.15	≤ -18.86	PASS
2DH5	Ant1	2402	Reference	0.80	0.80	---	PASS
			30~1000	0.80	-60.4	≤ -19.2	PASS
			1000~26500	0.80	-44.35	≤ -19.2	PASS
		2441	Reference	0.30	0.30	---	PASS
			30~1000	0.30	-60.61	≤ -19.7	PASS
			1000~26500	0.30	-46.24	≤ -19.7	PASS
		2480	Reference	-0.74	-0.74	---	PASS
			30~1000	-0.74	-46.2	≤ -20.74	PASS
			1000~26500	-0.74	-45.85	≤ -20.74	PASS
3DH5	Ant1	2402	Reference	1.07	1.07	---	PASS
			30~1000	1.07	-60.8	≤ -18.93	PASS
			1000~26500	1.07	-45.61	≤ -18.93	PASS
		2441	Reference	0.50	0.50	---	PASS
			30~1000	0.50	-60.62	≤ -19.5	PASS
			1000~26500	0.50	-46.48	≤ -19.5	PASS
		2480	Reference	-0.19	-0.19	---	PASS
			30~1000	-0.19	-61.13	≤ -20.19	PASS
			1000~26500	-0.19	-45.64	≤ -20.19	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

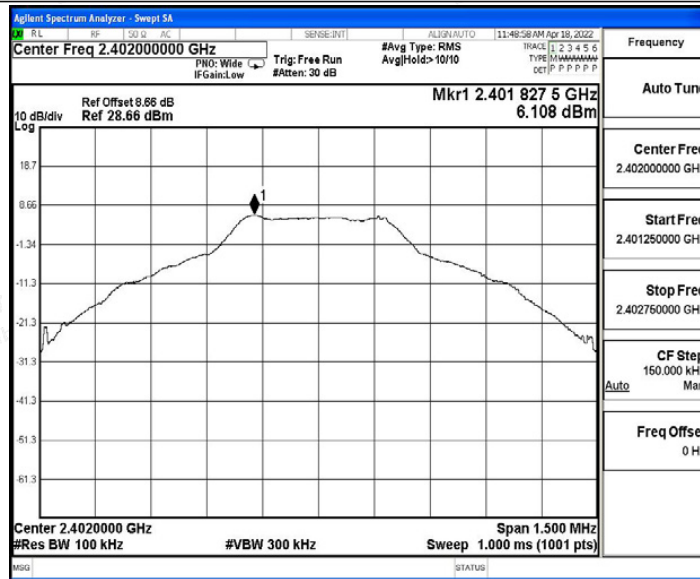
Tel: +(86) 0755-82591330 | E-mail: webmaster@lcs-cert.com | Web: www.lcs-cert.com

Scan code to check authenticity

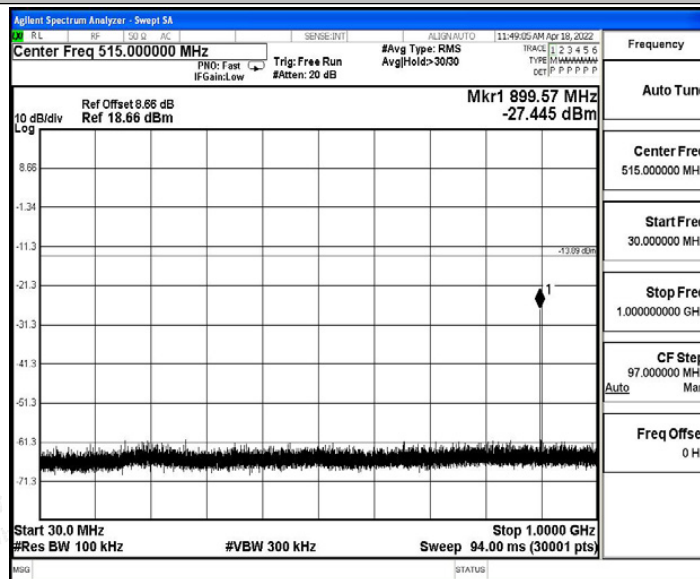


Test Graphs

DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000



DH5_Ant1_2402_1000~26500

