

RF Test Data for Bluetooth (BDR+EDR) (Conducted Measurements)

General Description of EUT	
Product Name:	WINDOW FACING LCD DISPLAY
Test Model:	WFD55H40
Sample ID:	202207-0204_01-02
Environmental Conditions	
Temperature:	25℃
Relative Humidity:	55%
Test Voltage:	AC 240V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TBR-C-202207-0204-8	

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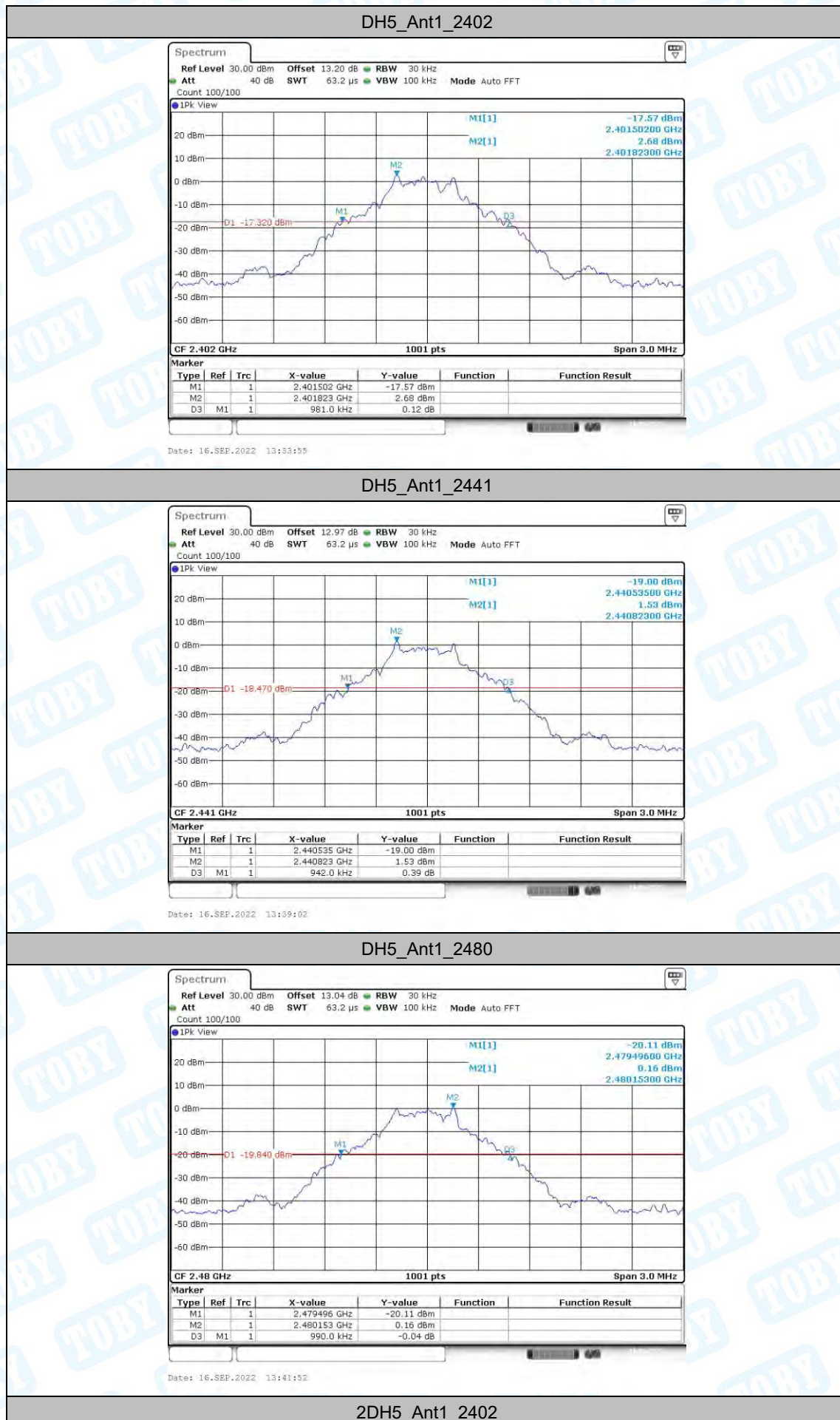
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1. 20dB Emission Bandwidth

1.1. Test Result

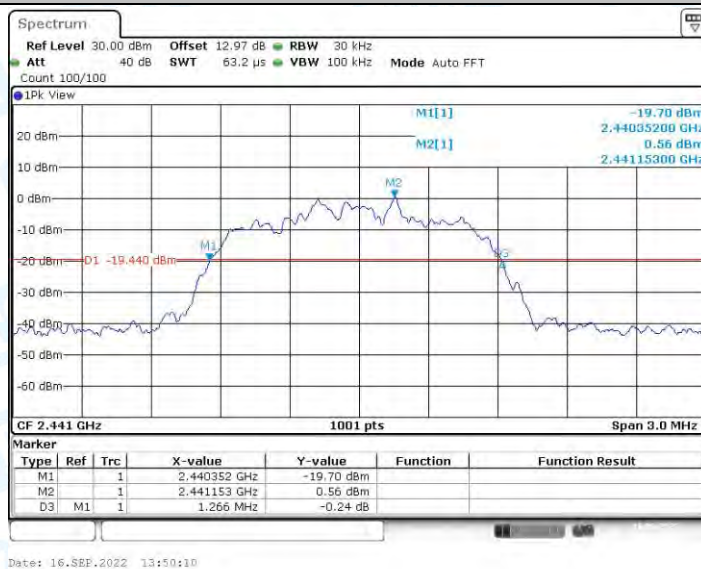
TestMode	Antenna	Channel	20db EBW[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.98	---	---
		2441	0.94	---	---
		2480	0.99	---	---
2DH5	Ant1	2402	1.22	---	---
		2441	1.27	---	---
		2480	1.24	---	---
3DH5	Ant1	2402	1.28	---	---
		2441	1.26	---	---
		2480	1.27	---	---

1.2. Test Graphs

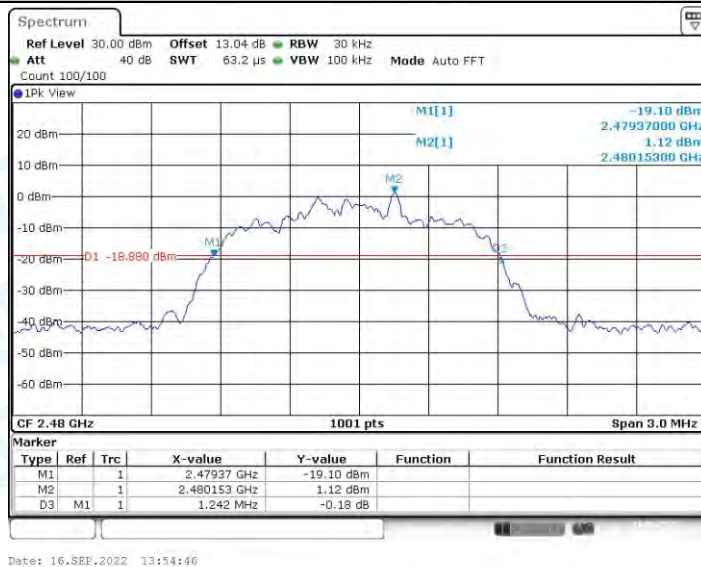




2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480

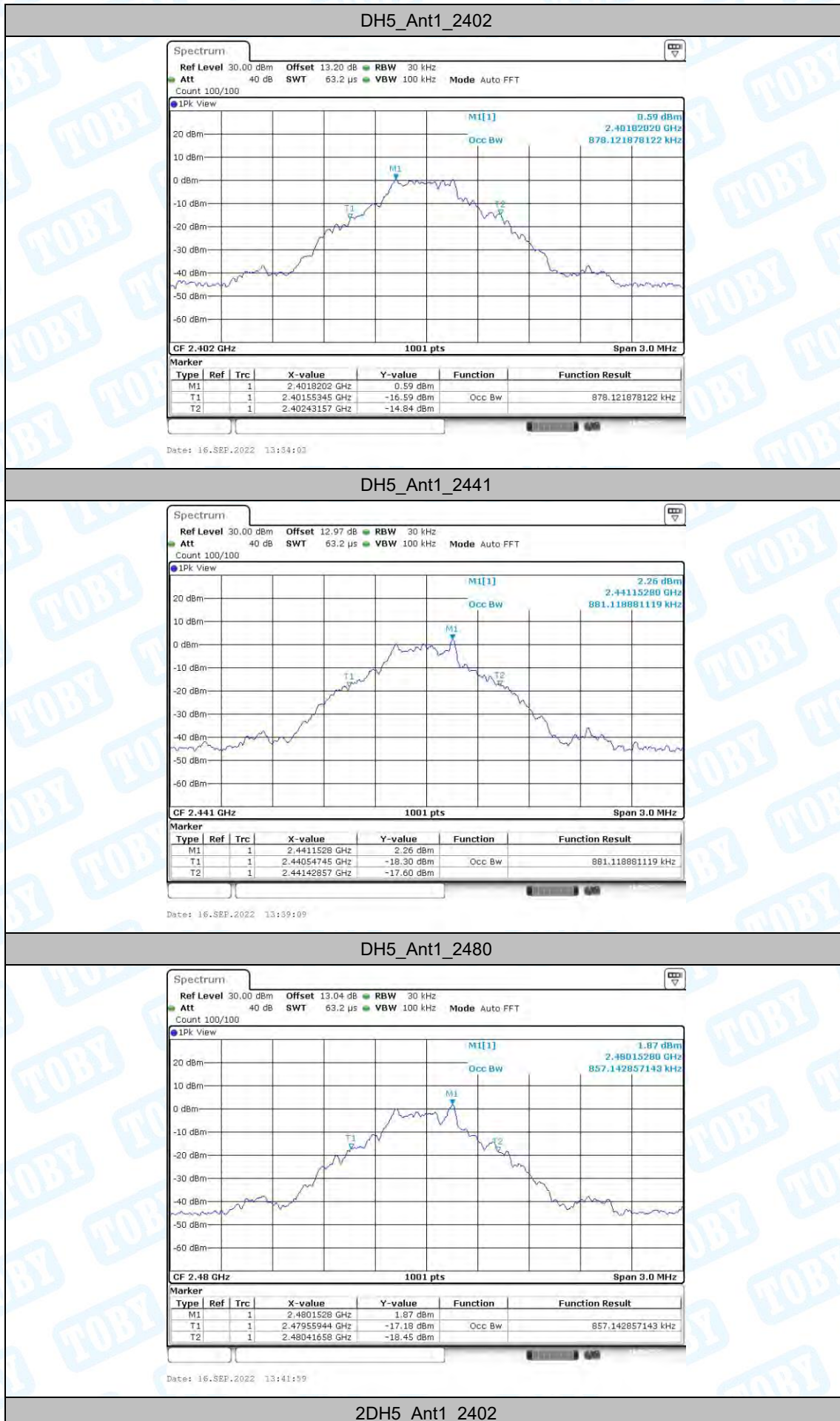


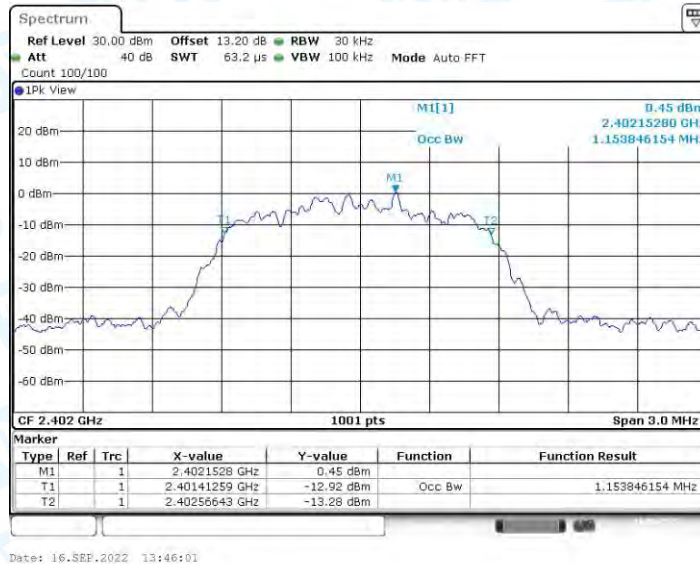
2. Occupied Channel Bandwidth

2.1. Test Result

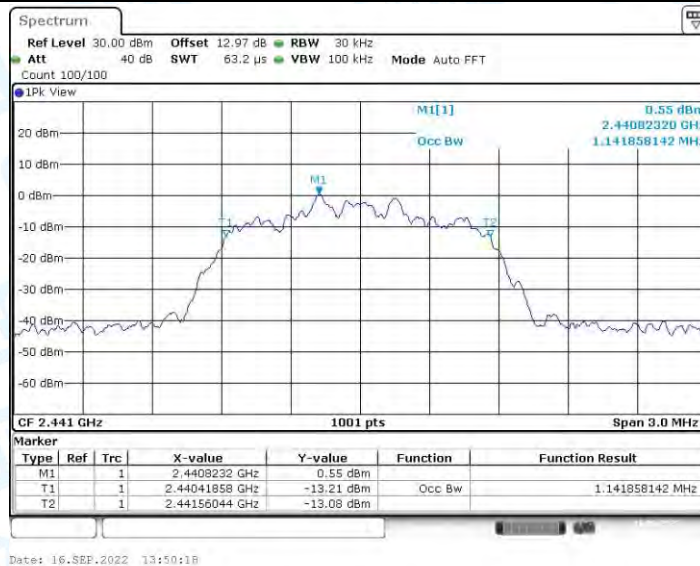
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.878	2401.5534	2402.4316	---	---
		2441	0.881	2440.5475	2441.4286	---	---
		2480	0.857	2479.5594	2480.4166	---	---
2DH5	Ant1	2402	1.154	2401.4126	2402.5664	---	---
		2441	1.142	2440.4186	2441.5604	---	---
		2480	1.148	2479.4126	2480.5604	---	---
3DH5	Ant1	2402	1.148	2401.4066	2402.5544	---	---
		2441	1.154	2440.4036	2441.5574	---	---
		2480	1.172	2479.3856	2480.5574	---	---

2.2. Test Graphs

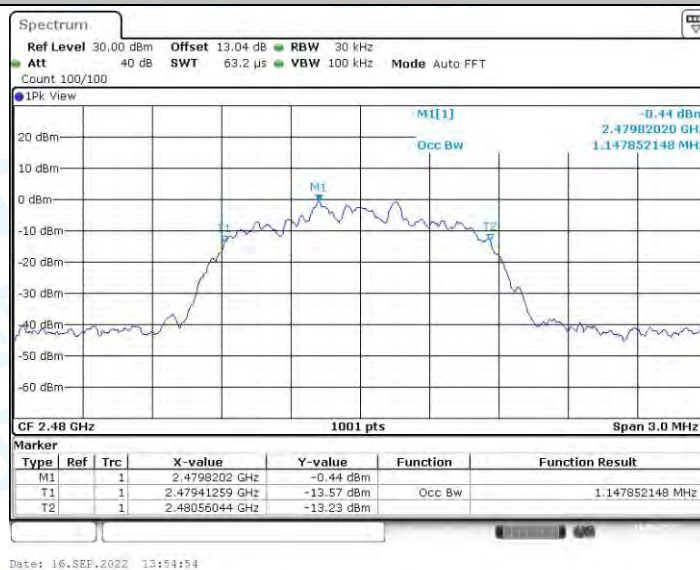




2DH5_Ant1_2441



2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



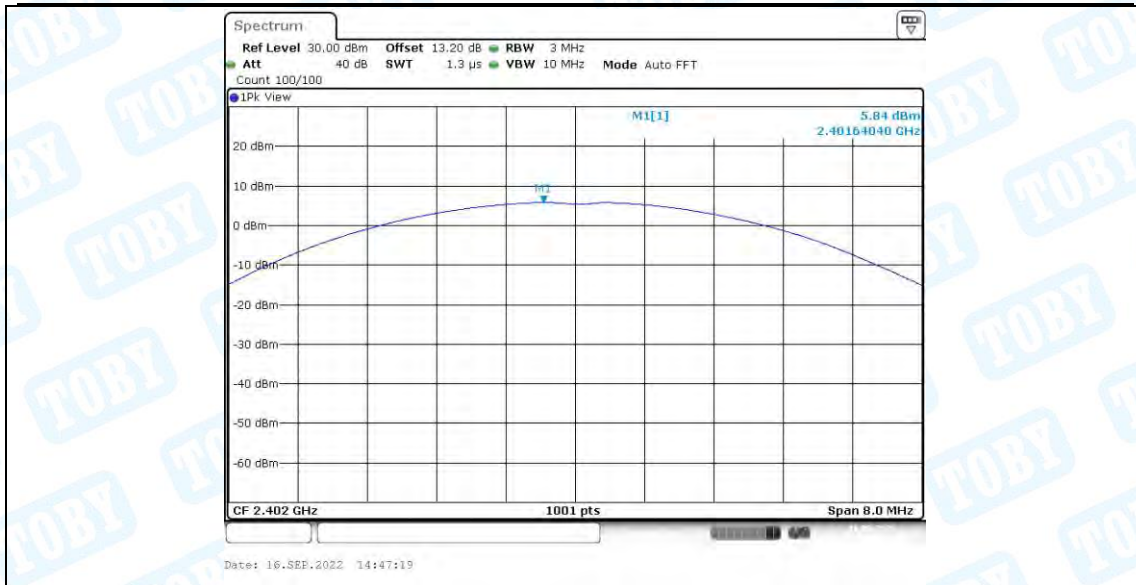
3. Maximum conducted output power

3.1. Test Result

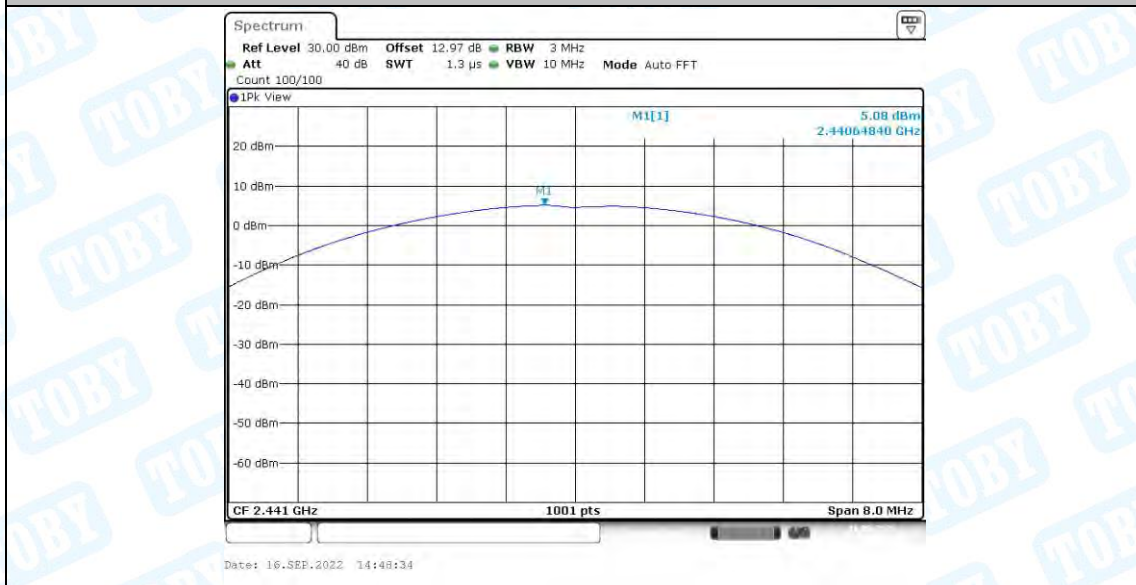
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	4.95	≤20.97	PASS
		2441	3.96	≤20.97	PASS
		2480	3.74	≤20.97	PASS
2DH5	Ant1	2402	5.84	≤20.97	PASS
		2441	5.08	≤20.97	PASS
		2480	4.59	≤20.97	PASS
3DH5	Ant1	2402	6.22	≤20.97	PASS
		2441	5.33	≤20.97	PASS
		2480	5.15	≤20.97	PASS

3.2.Test Graphs

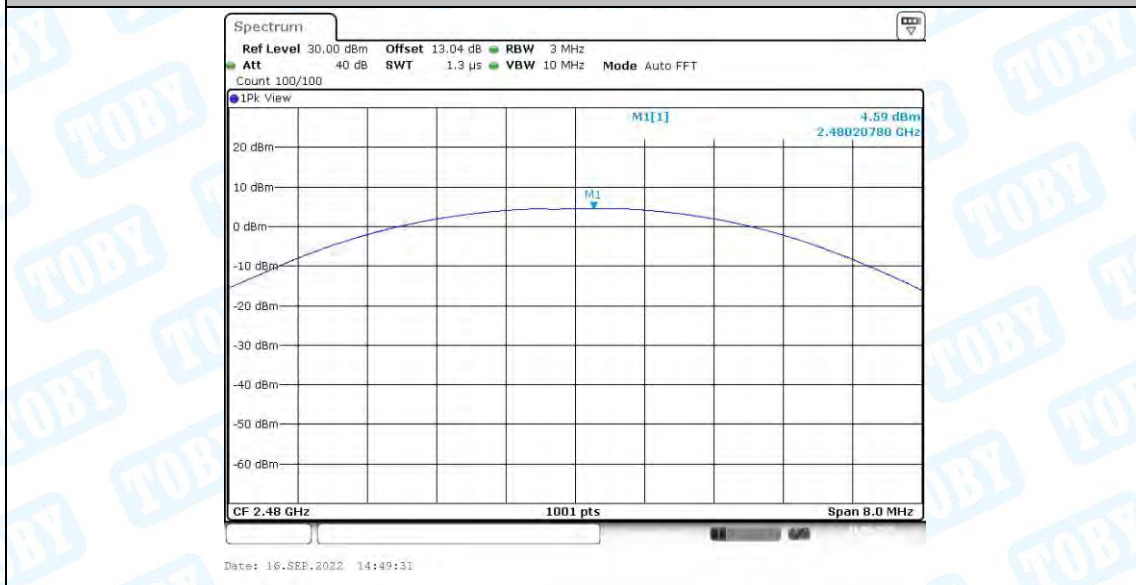




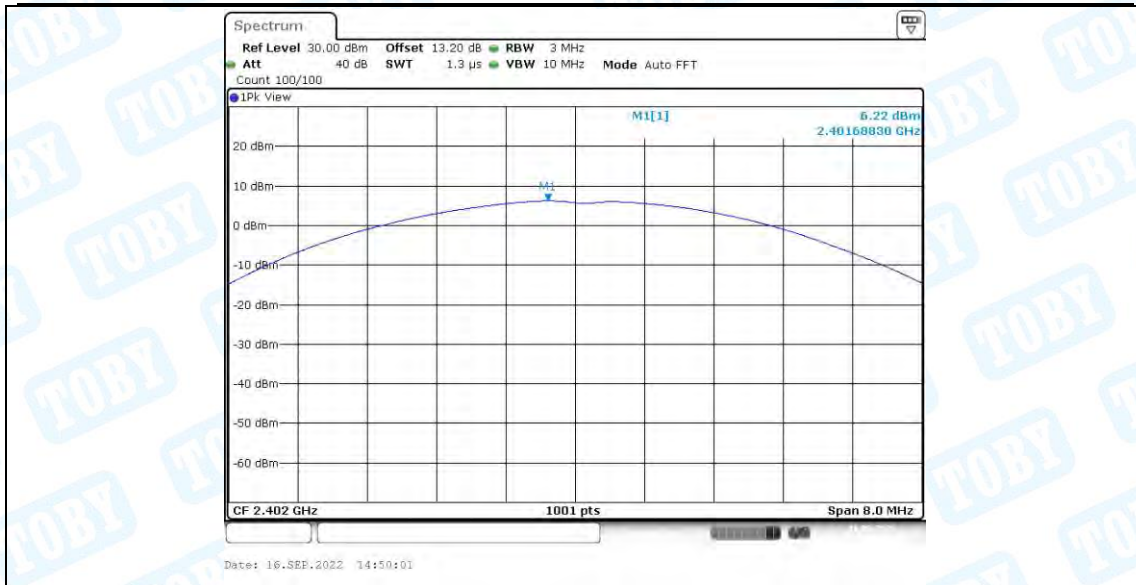
2DH5_Ant1_2441



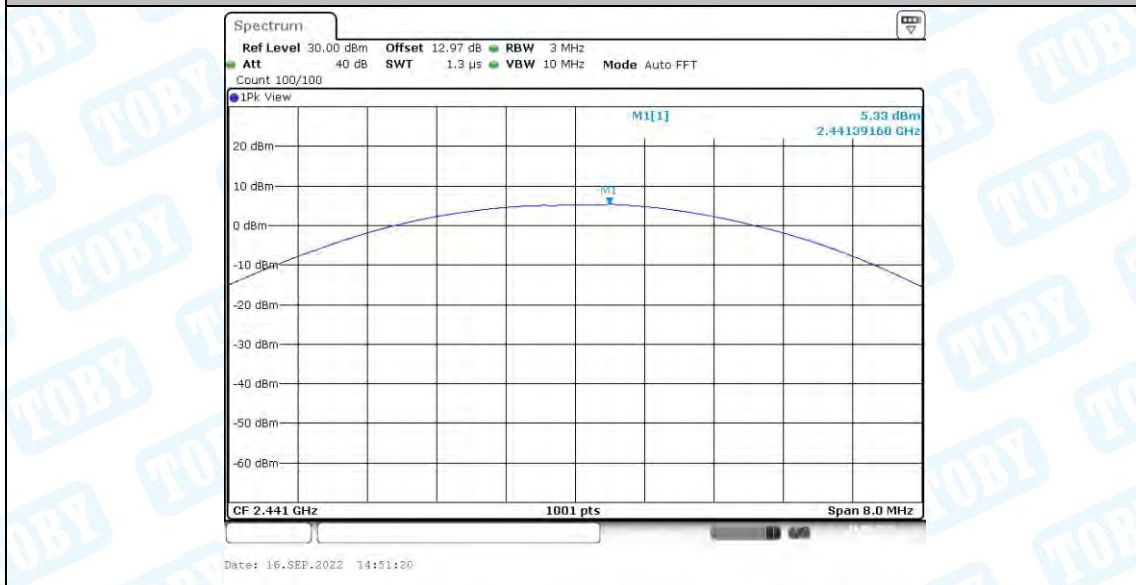
2DH5_Ant1_2480



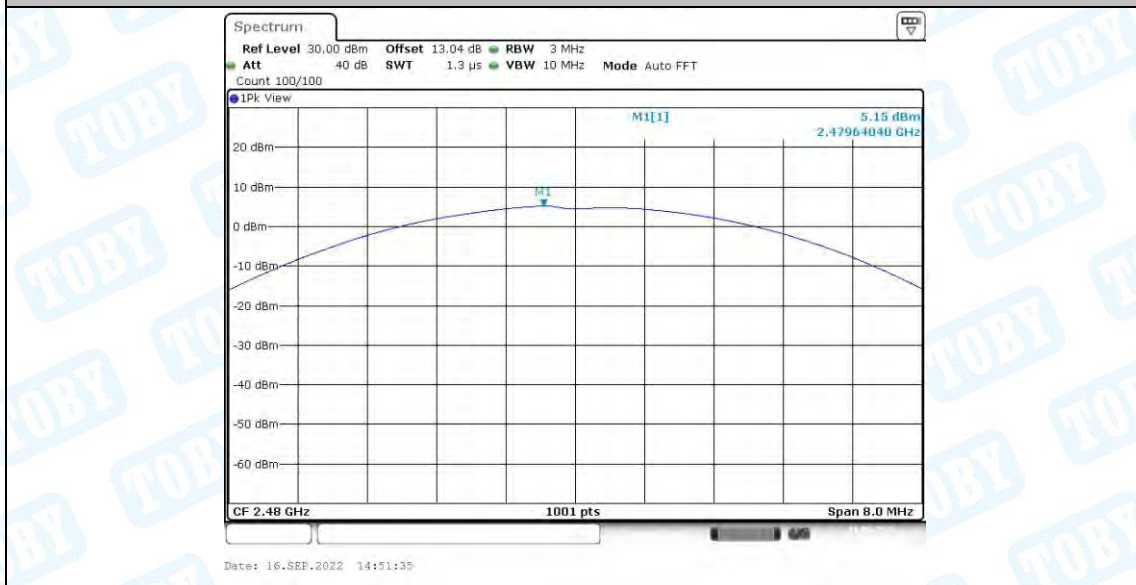
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



4. Carrier frequency separation

4.1. Test Result

TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.675	≥ 0.660	PASS
2DH5	Ant1	Hop	1	≥ 0.847	PASS
3DH5	Ant1	Hop	1.072	≥ 0.853	PASS

4.2.Test Graphs

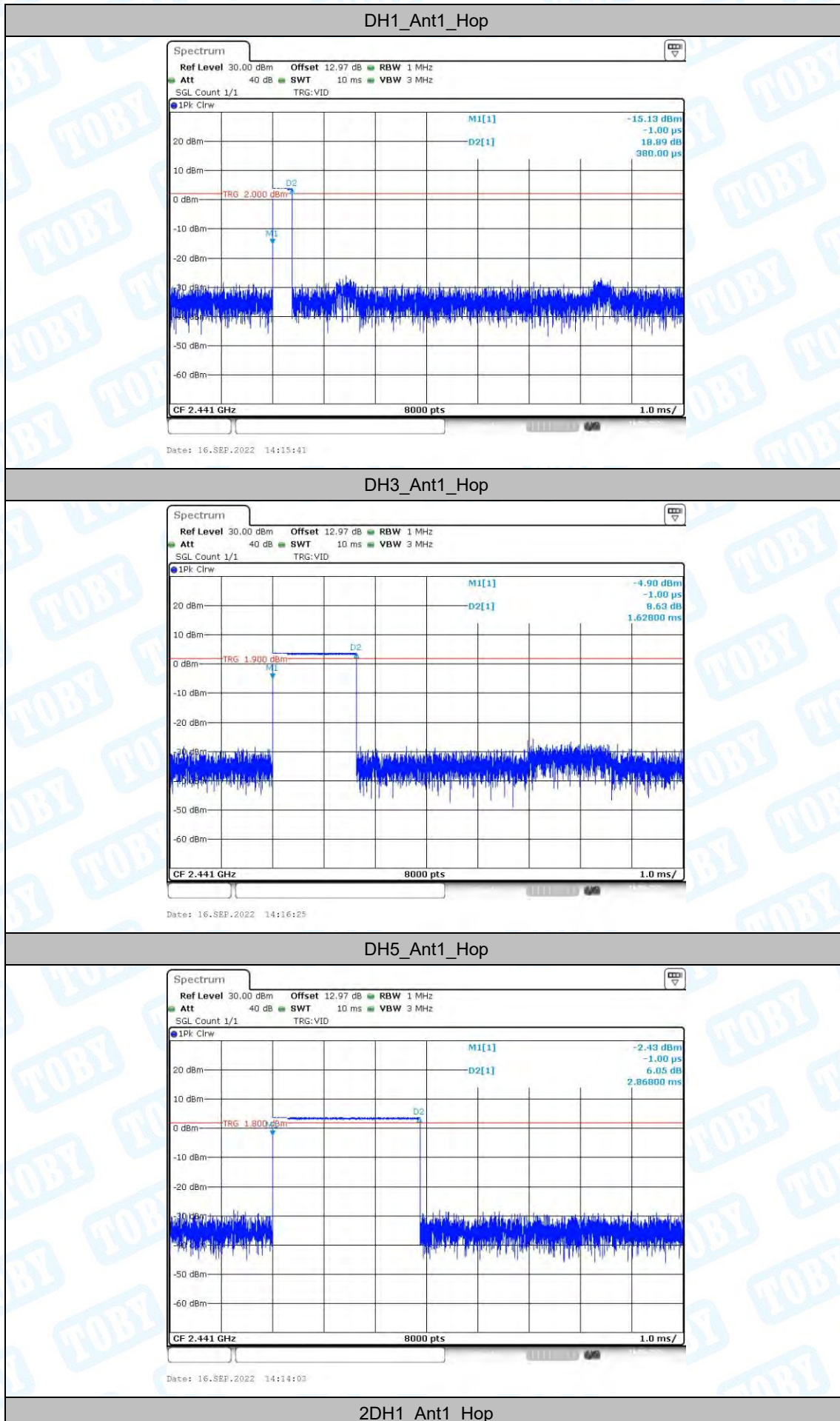


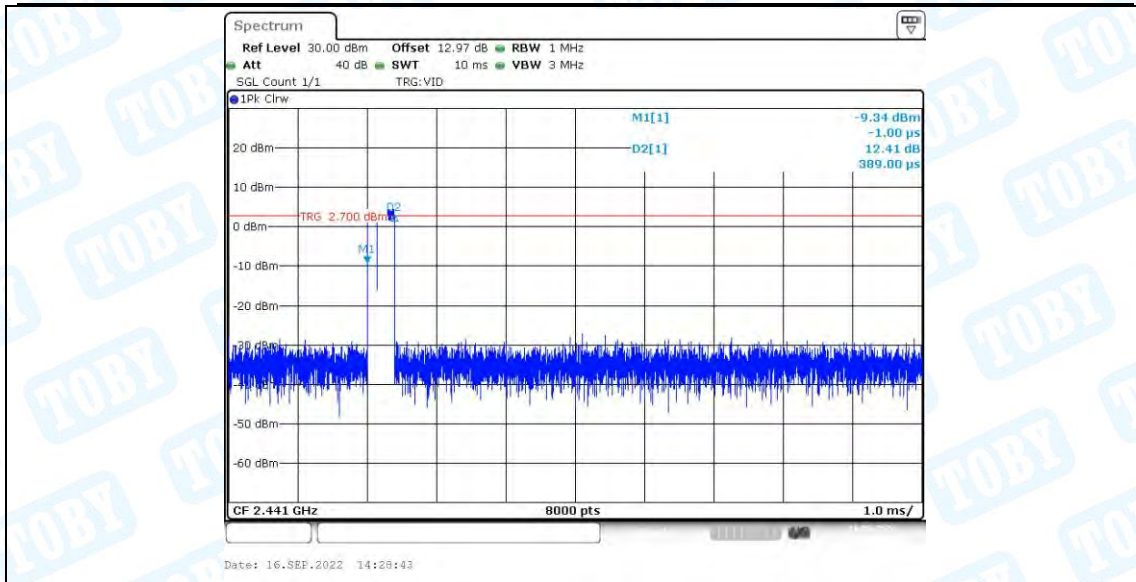
5. Time of occupancy

5.1. Test Result

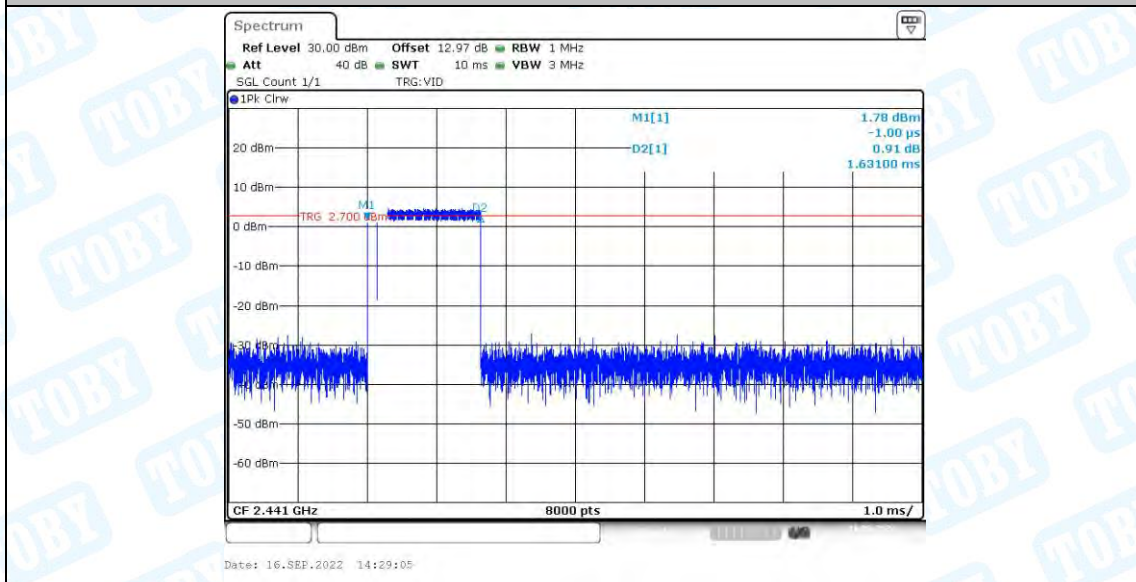
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.380	320	0.122	≤0.4	PASS
DH3	Ant1	Hop	1.628	160	0.26	≤0.4	PASS
DH5	Ant1	Hop	2.868	106.67	0.306	≤0.4	PASS
2DH1	Ant1	Hop	0.389	320	0.124	≤0.4	PASS
2DH3	Ant1	Hop	1.631	160	0.261	≤0.4	PASS
2DH5	Ant1	Hop	2.873	106.67	0.306	≤0.4	PASS
3DH1	Ant1	Hop	0.386	320	0.124	≤0.4	PASS
3DH3	Ant1	Hop	1.630	160	0.261	≤0.4	PASS
3DH5	Ant1	Hop	2.874	106.67	0.307	≤0.4	PASS

5.2.Test Graphs

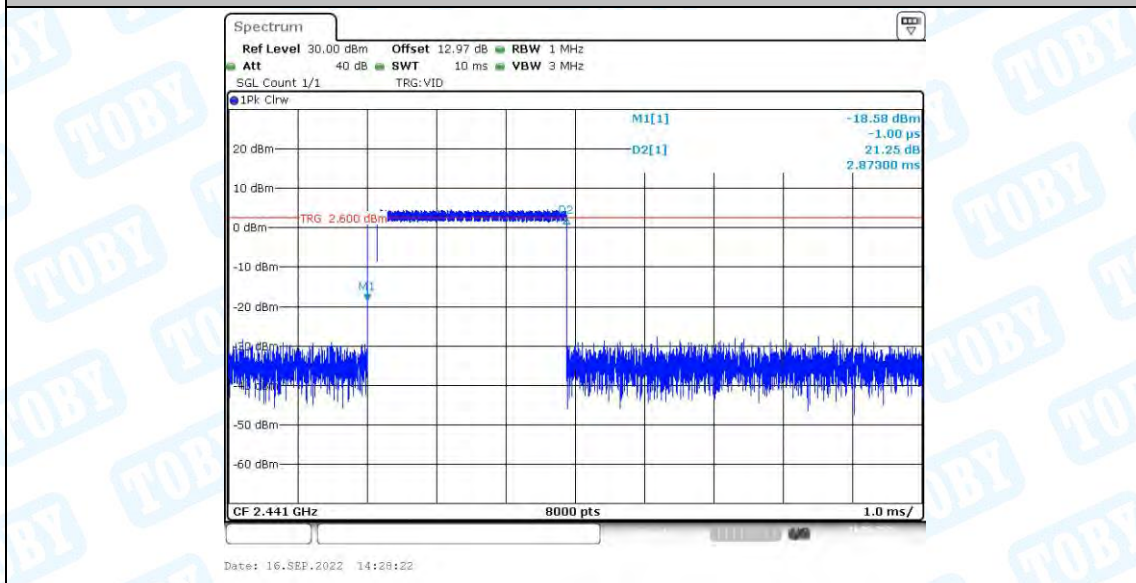




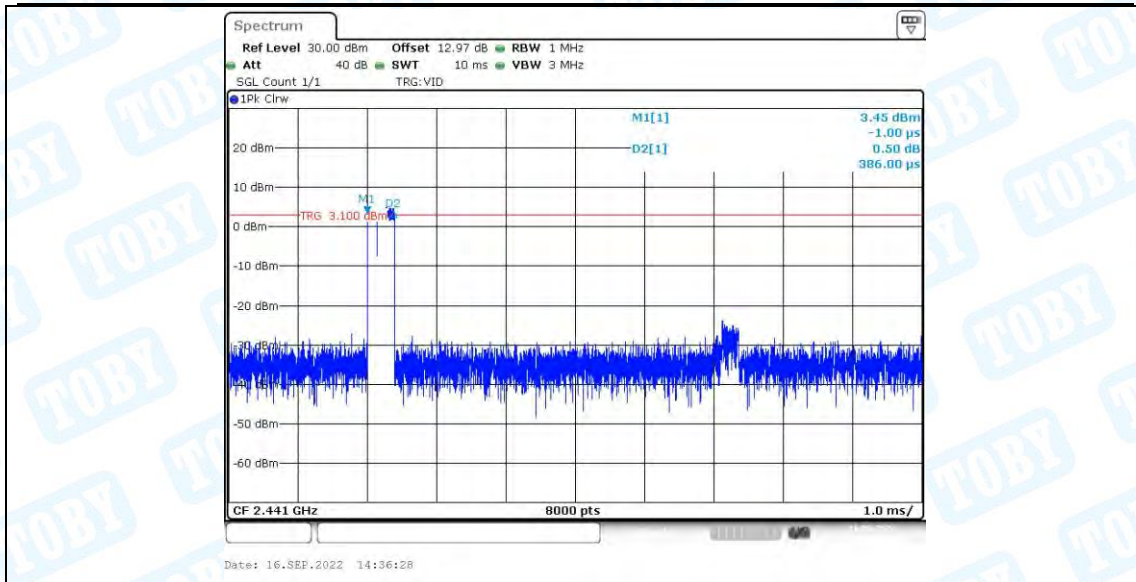
2DH3_Ant1_Hop



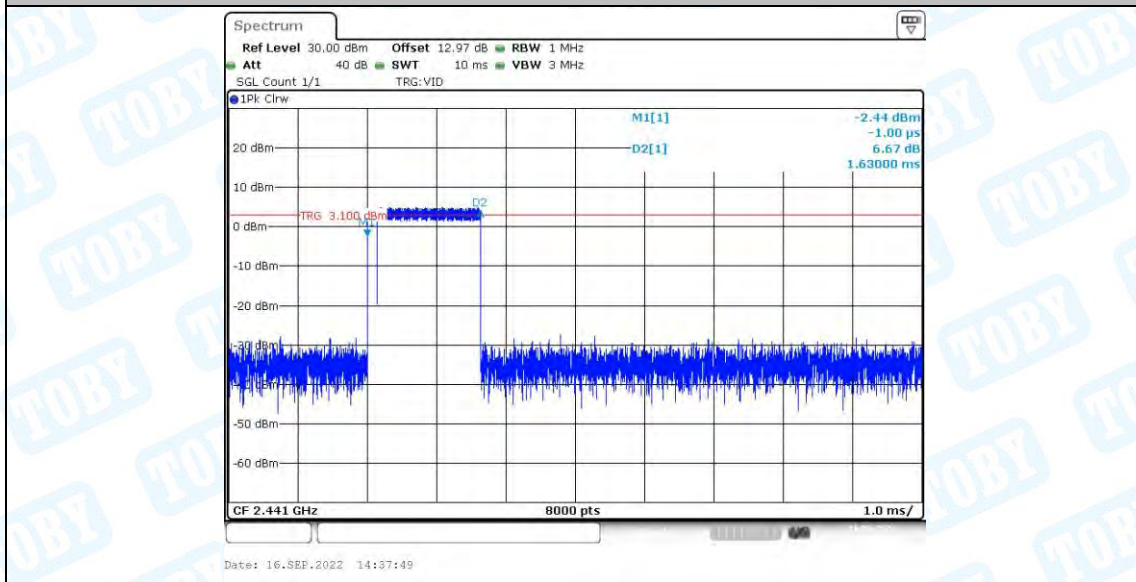
2DH5_Ant1_Hop



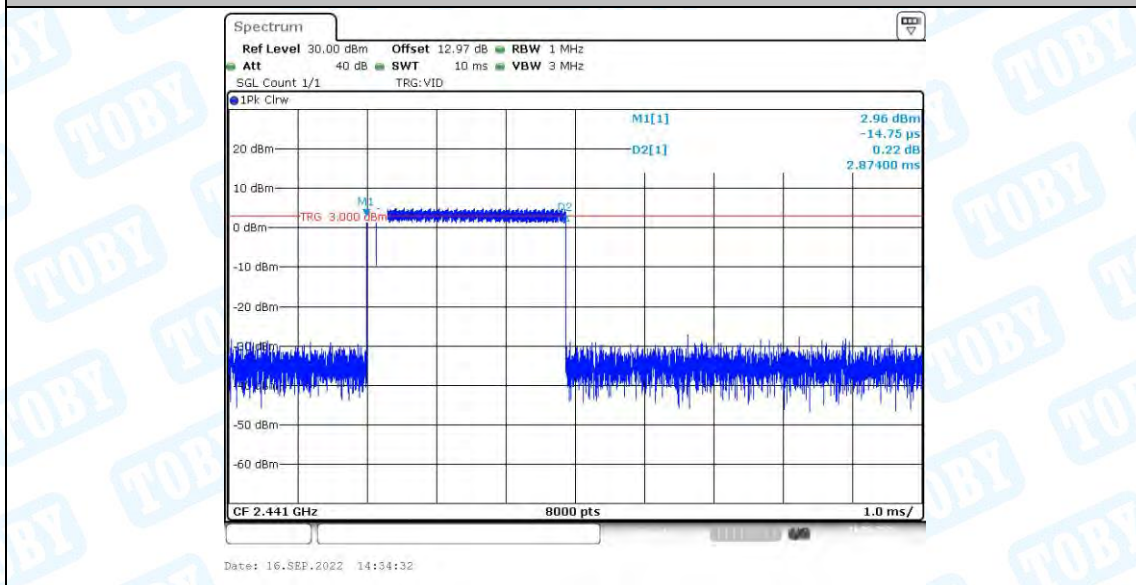
3DH1_Ant1_Hop



3DH3_Ant1_Hop



3DH5_Ant1_Hop



6. Number of hopping channels

6.1. 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

6.2.Test Graphs

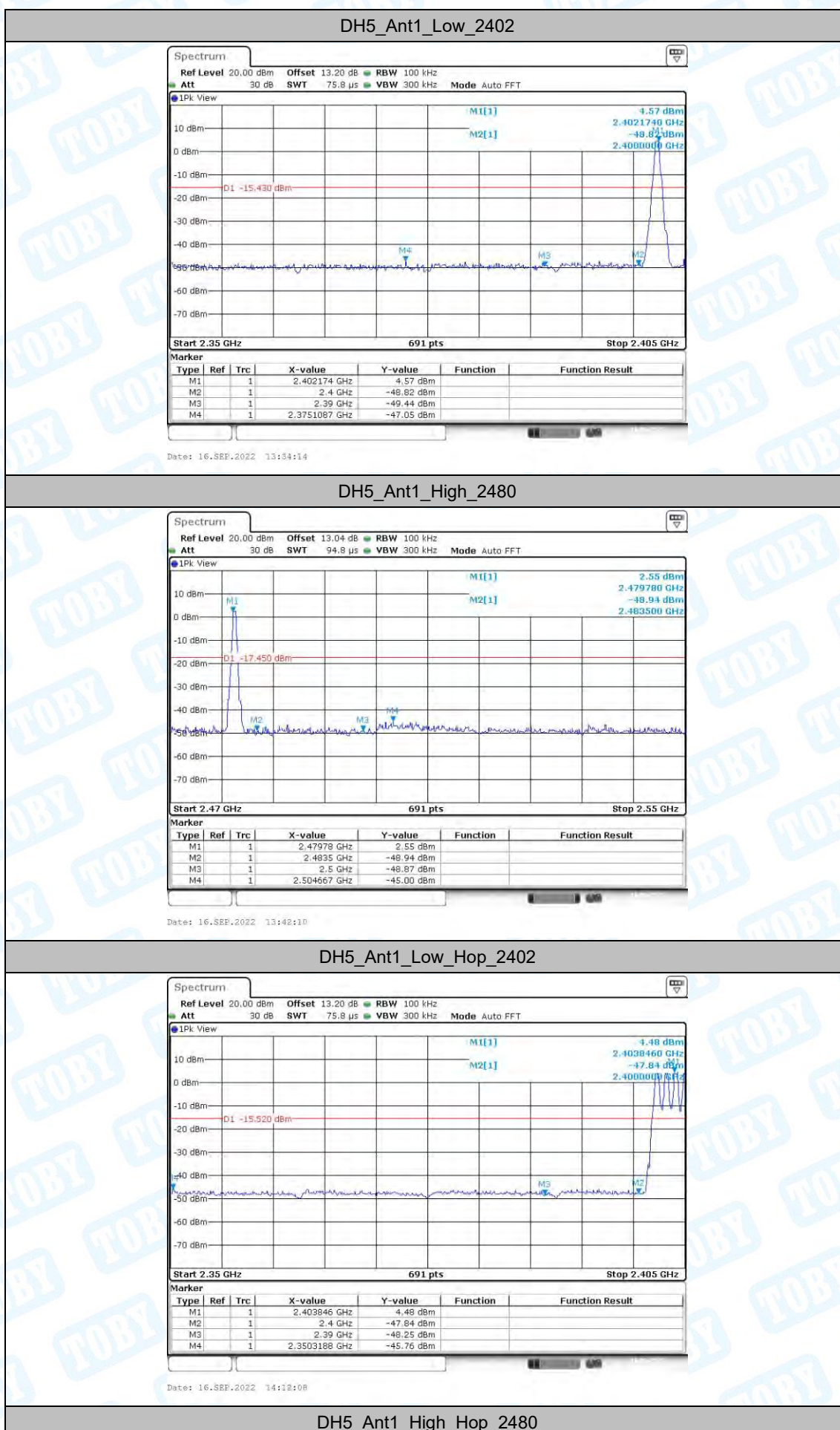


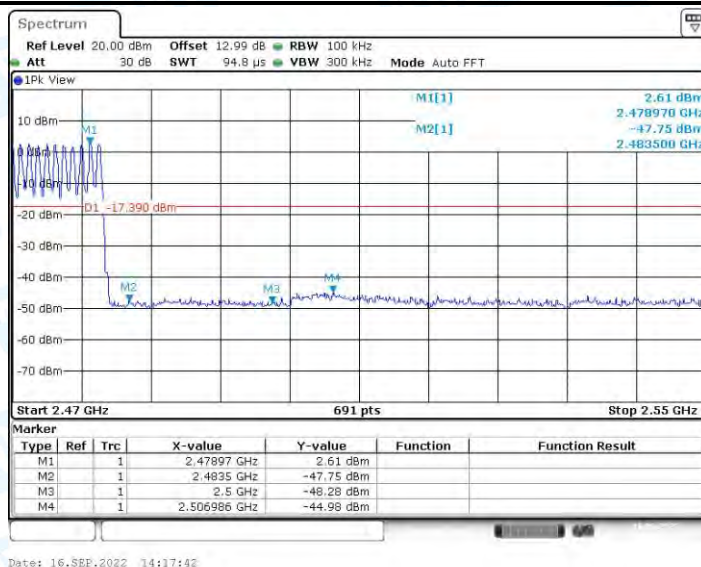
7. Band edge measurements

7.1. Test Result

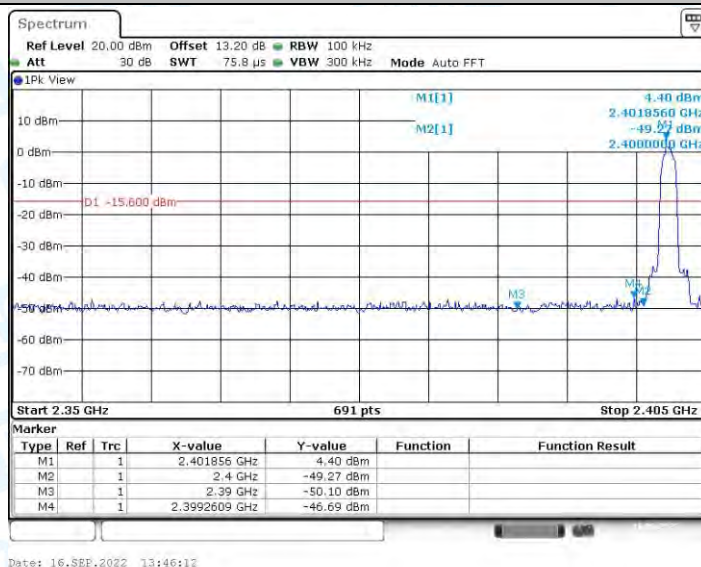
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	4.57	-47.05	≤ -15.43	PASS
		High	2480	2.55	-45	≤ -17.45	PASS
		Low	Hop_2402	4.48	-45.76	≤ -15.52	PASS
		High	Hop_2480	2.61	-44.98	≤ -17.39	PASS
2DH5	Ant1	Low	2402	4.40	-46.69	≤ -15.6	PASS
		High	2480	3.24	-45.59	≤ -16.76	PASS
		Low	Hop_2402	4.68	-47.03	≤ -15.32	PASS
		High	Hop_2480	3.28	-44.79	≤ -16.72	PASS
3DH5	Ant1	Low	2402	4.59	-45.8	≤ -15.41	PASS
		High	2480	3.34	-44.84	≤ -16.66	PASS
		Low	Hop_2402	1.24	-46.84	≤ -18.76	PASS
		High	Hop_2480	0.37	-44.56	≤ -19.63	PASS

7.2. Test Graphs

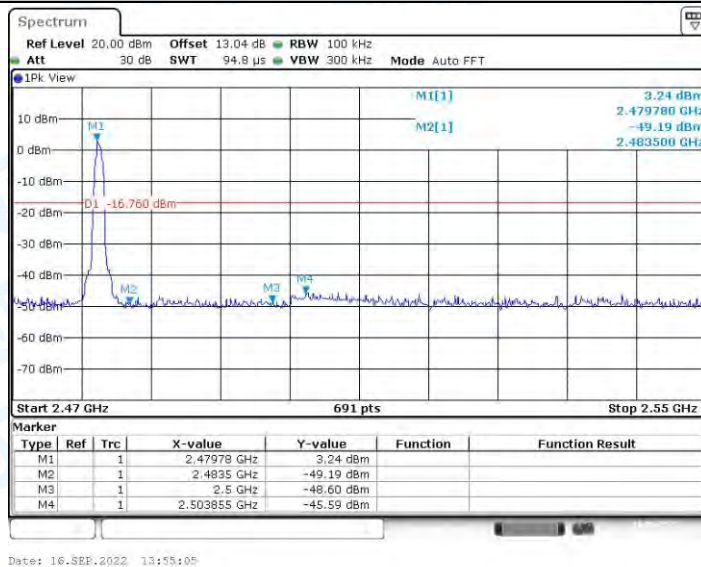




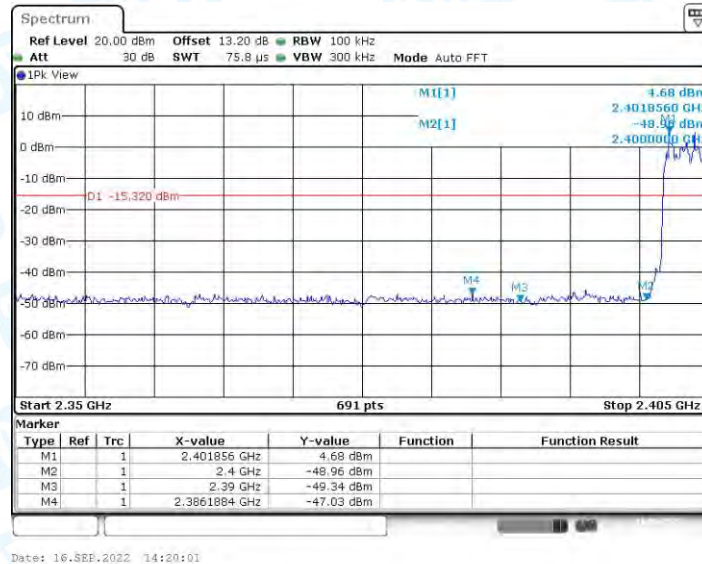
2DH5_Ant1_Low_2402



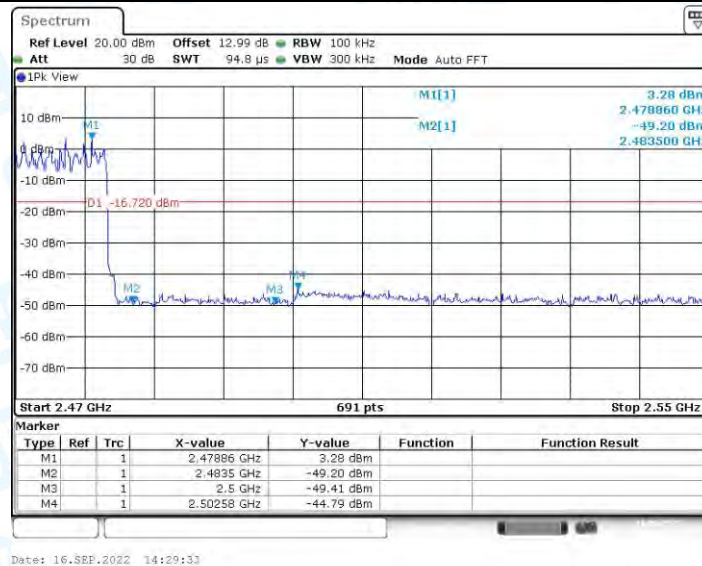
2DH5_Ant1_High_2480



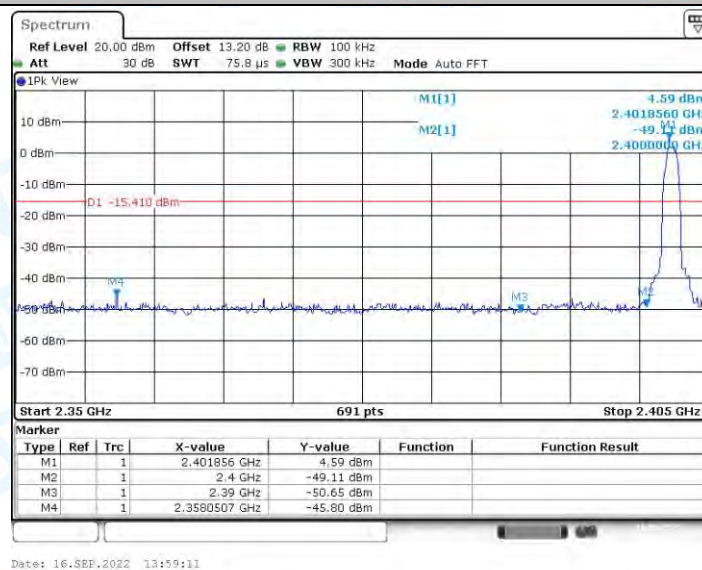
2DH5_Ant1_Low_Hop_2402



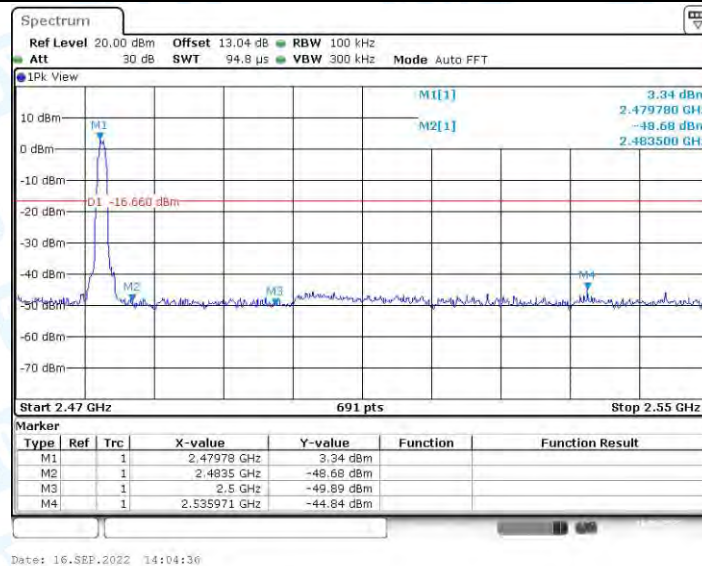
2DH5_Ant1_High_Hop_2480



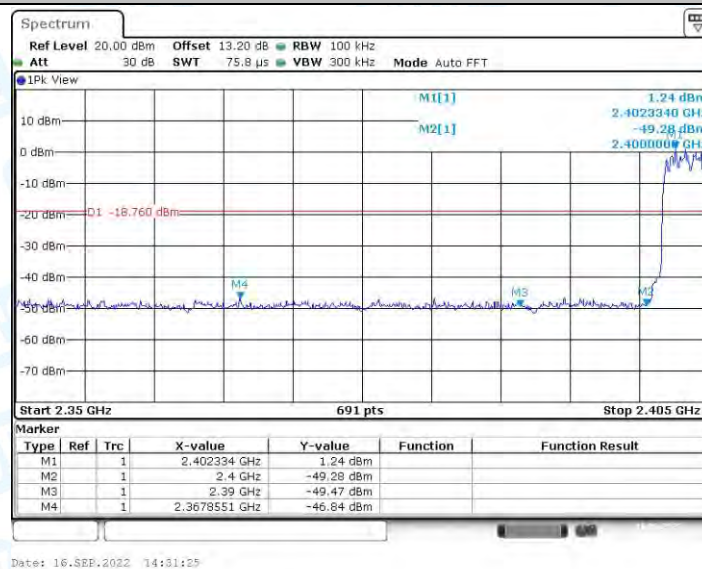
3DH5_Ant1_Low_2402



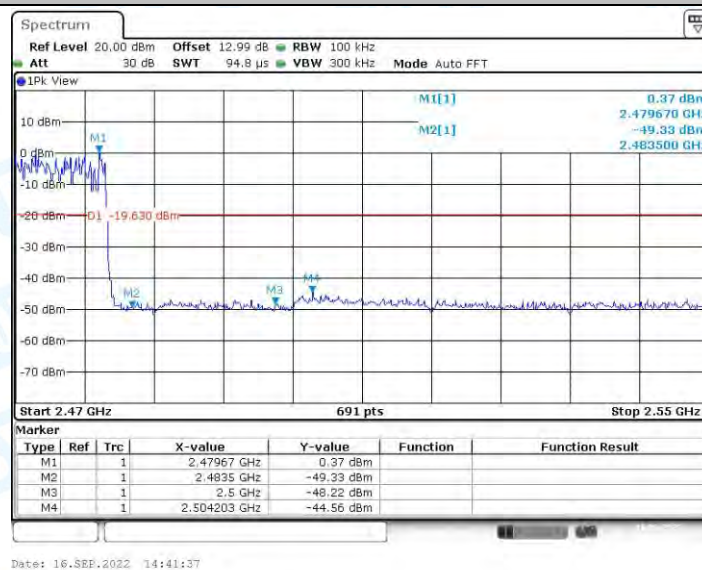
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

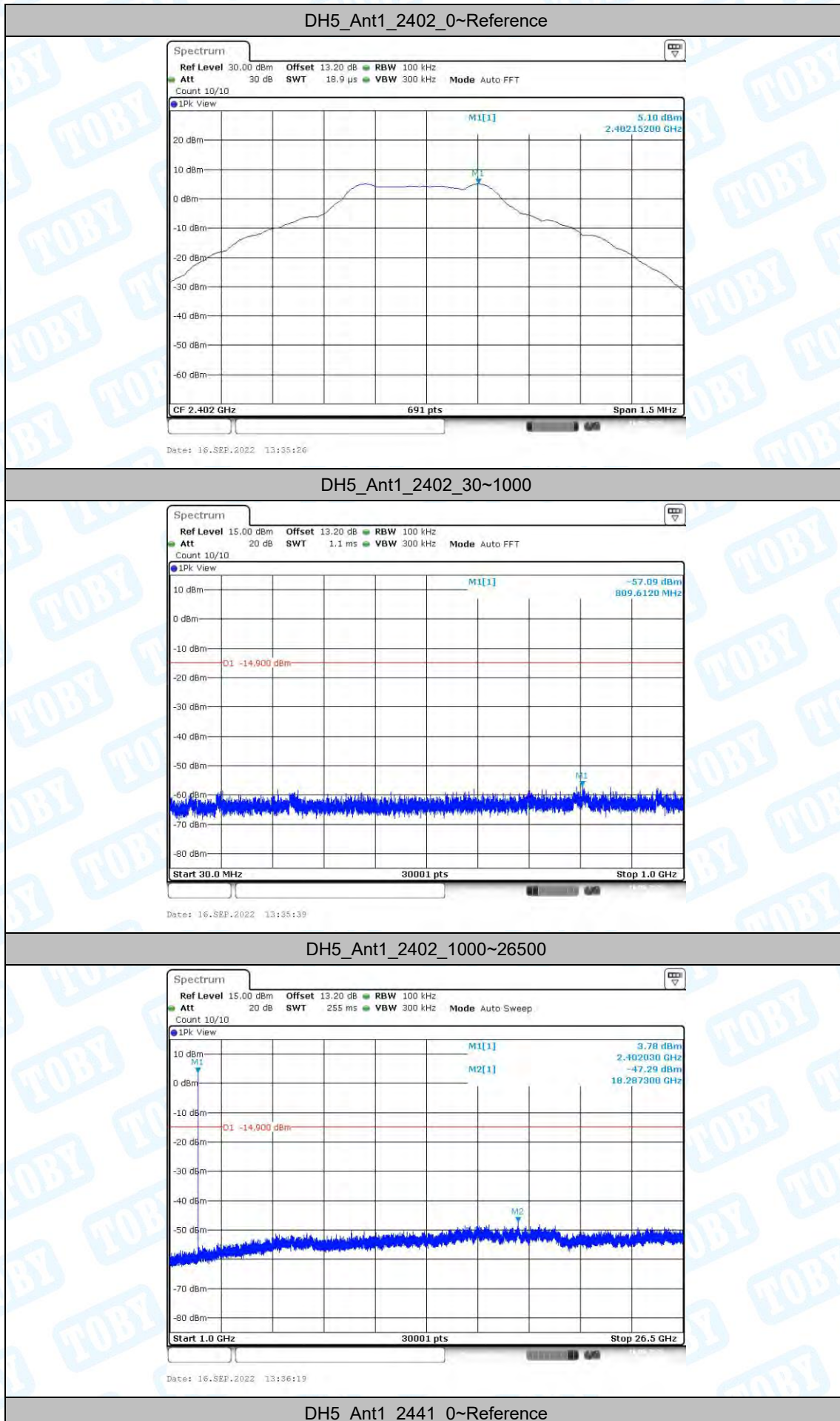


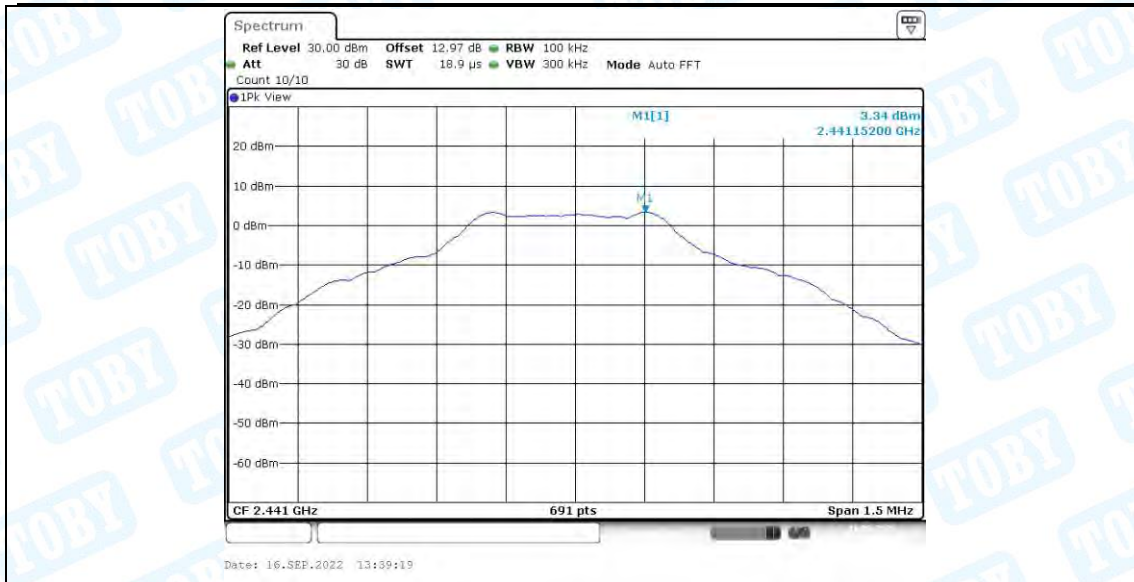
8. Conducted Spurious Emission

8.1. Test Result

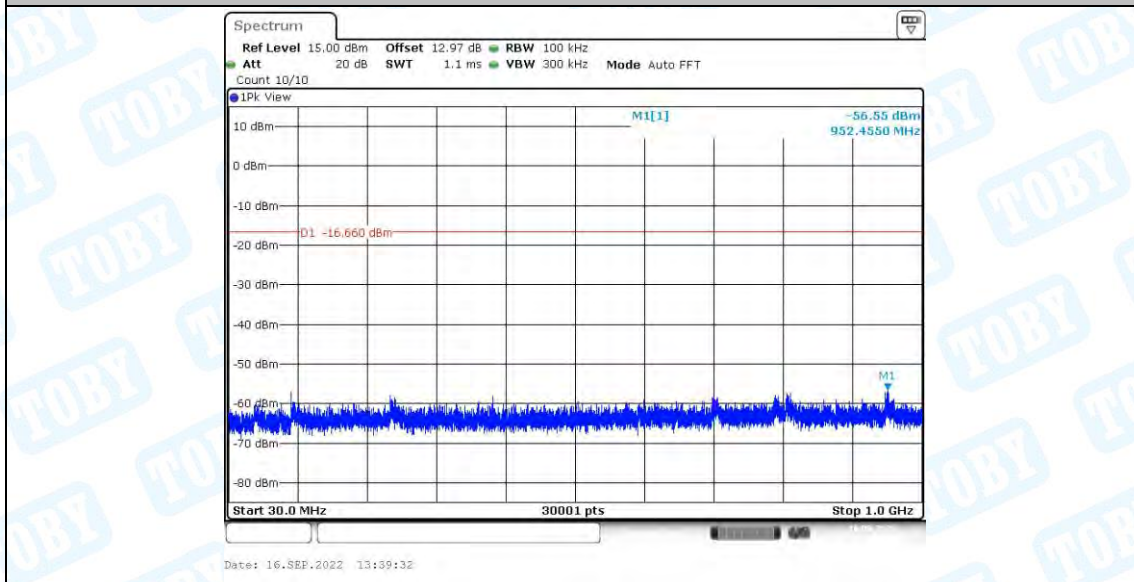
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	5.10	5.10	---	PASS
			30~1000	5.10	-57.09	≤-14.9	PASS
			1000~26500	5.10	-47.29	≤-14.9	PASS
		2441	Reference	3.34	3.34	---	PASS
			30~1000	3.34	-56.55	≤-16.66	PASS
			1000~26500	3.34	-47.17	≤-16.66	PASS
		2480	Reference	2.92	2.92	---	PASS
			30~1000	2.92	-56.32	≤-17.08	PASS
			1000~26500	2.92	-47.6	≤-17.08	PASS
2DH5	Ant1	2402	Reference	4.35	4.35	---	PASS
			30~1000	4.35	-57.03	≤-15.65	PASS
			1000~26500	4.35	-48.31	≤-15.65	PASS
		2441	Reference	3.40	3.40	---	PASS
			30~1000	3.40	-57.52	≤-16.6	PASS
			1000~26500	3.40	-47.6	≤-16.6	PASS
		2480	Reference	3.16	3.16	---	PASS
			30~1000	3.16	-57.05	≤-16.84	PASS
			1000~26500	3.16	-47.9	≤-16.84	PASS
3DH5	Ant1	2402	Reference	4.51	4.51	---	PASS
			30~1000	4.51	-56.07	≤-15.49	PASS
			1000~26500	4.51	-47.67	≤-15.49	PASS
		2441	Reference	3.62	3.62	---	PASS
			30~1000	3.62	-57.41	≤-16.38	PASS
			1000~26500	3.62	-47.39	≤-16.38	PASS
		2480	Reference	3.26	3.26	---	PASS
			30~1000	3.26	-57.51	≤-16.74	PASS
			1000~26500	3.26	-47.76	≤-16.74	PASS

8.2. Test Graphs

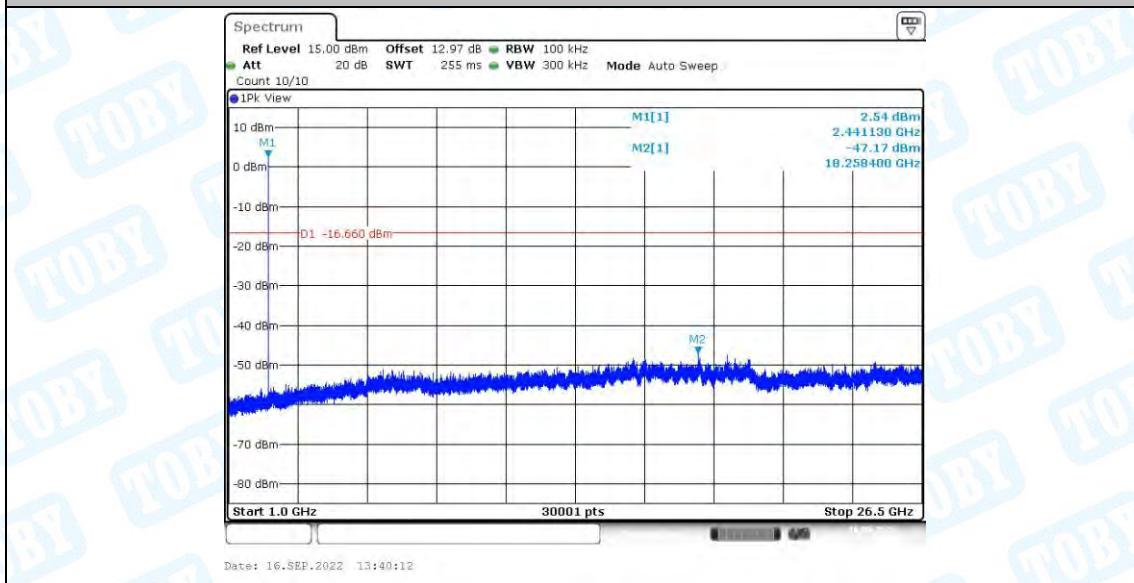




DH5_Ant1_2441_30~1000



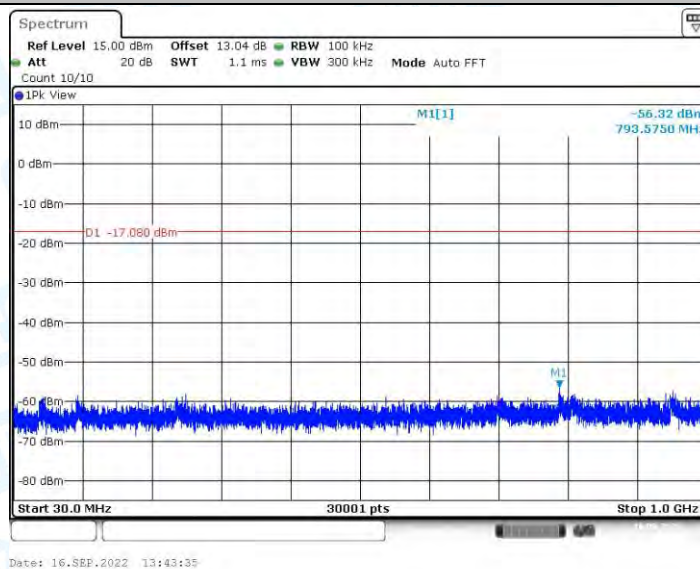
DH5_Ant1_2441_1000~26500



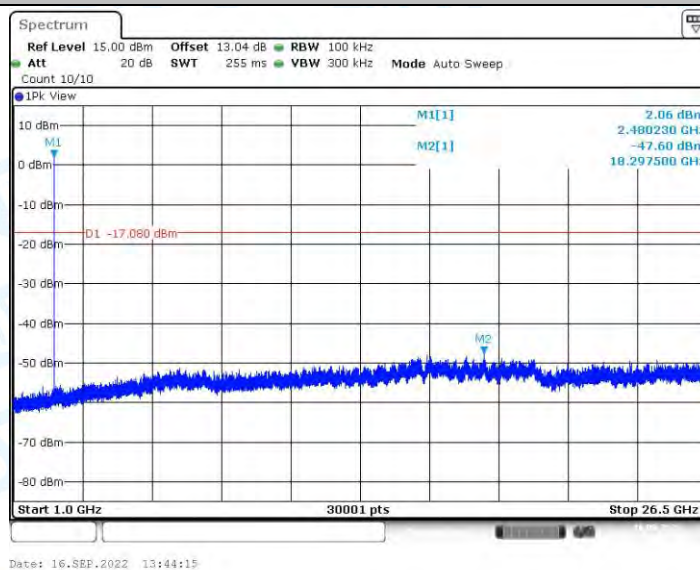
DH5_Ant1_2480_0~Reference



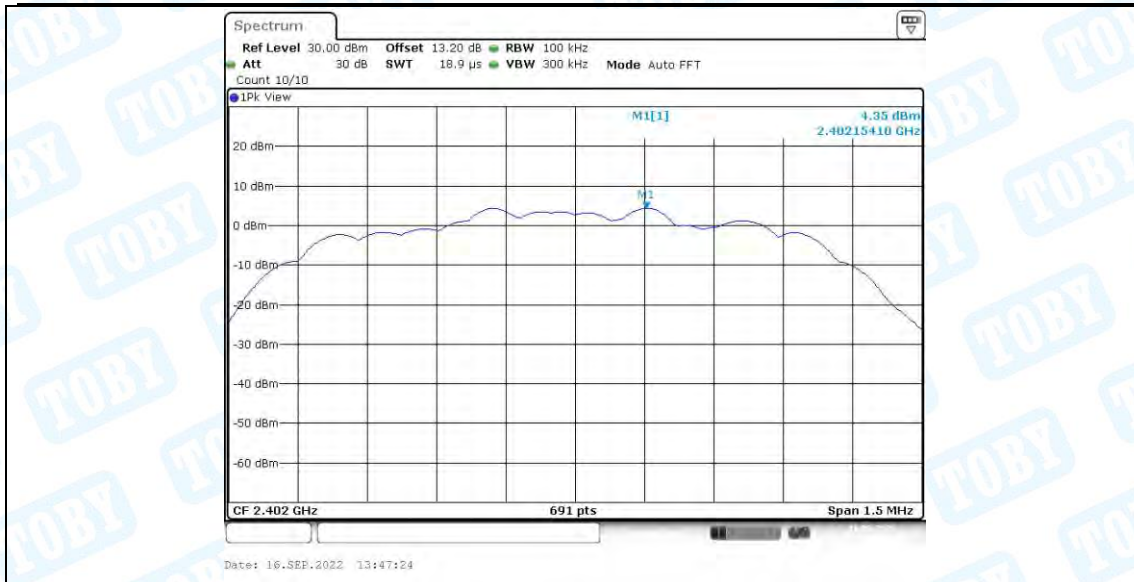
DH5_Ant1_2480_30~1000



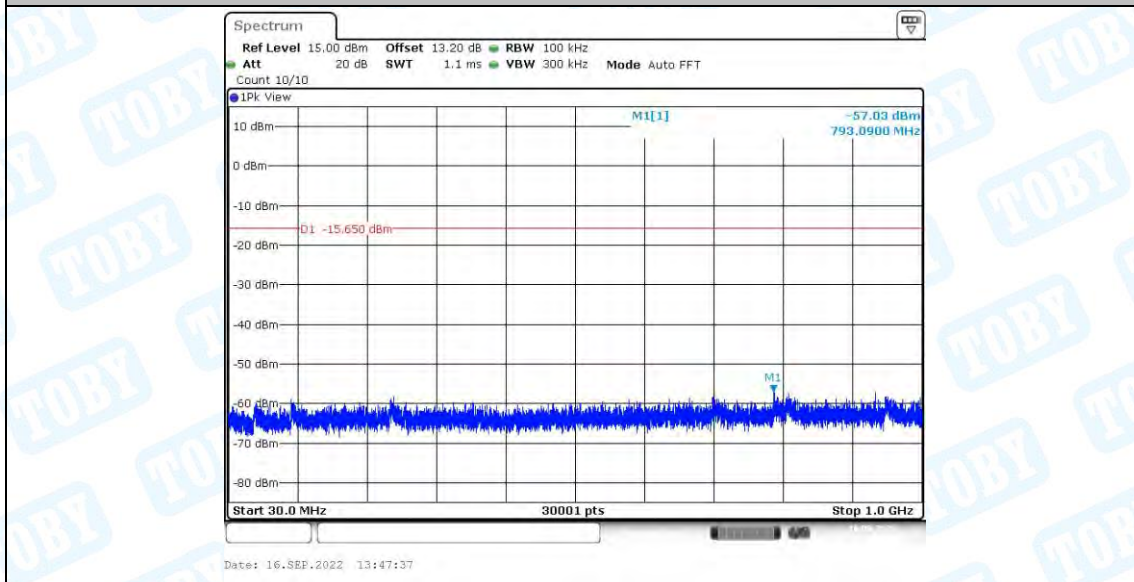
DH5_Ant1_2480_1000~26500



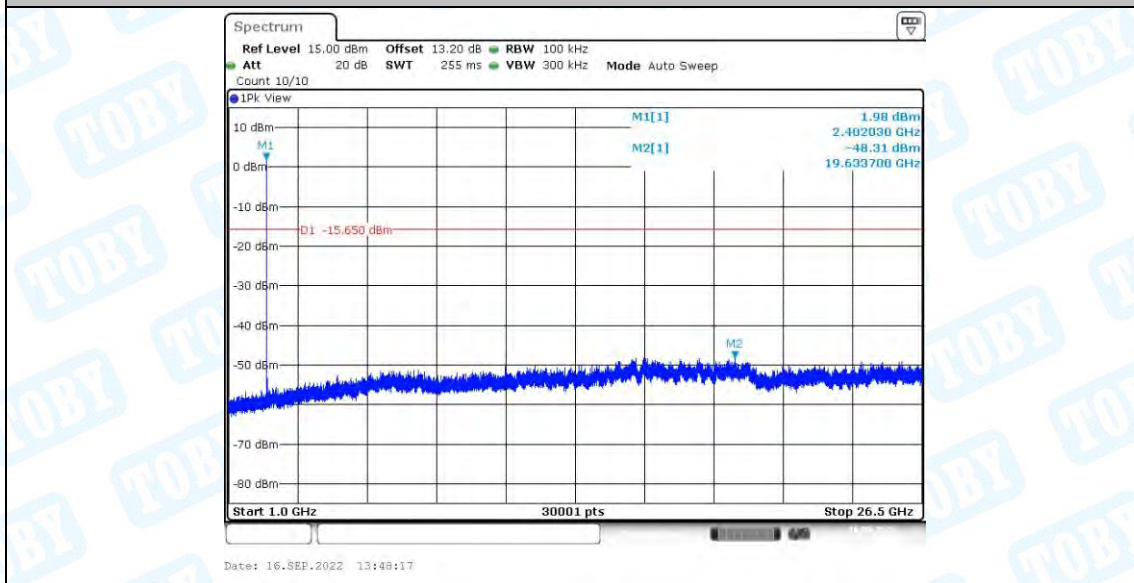
2DH5_Ant1_2402_0~Reference



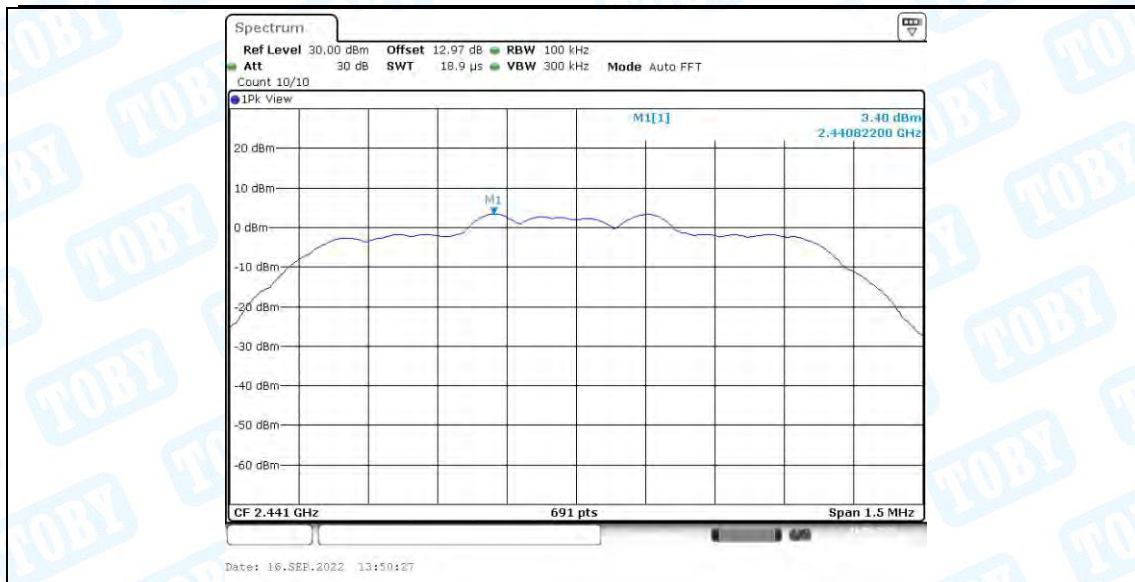
2DH5_Ant1_2402_30~1000



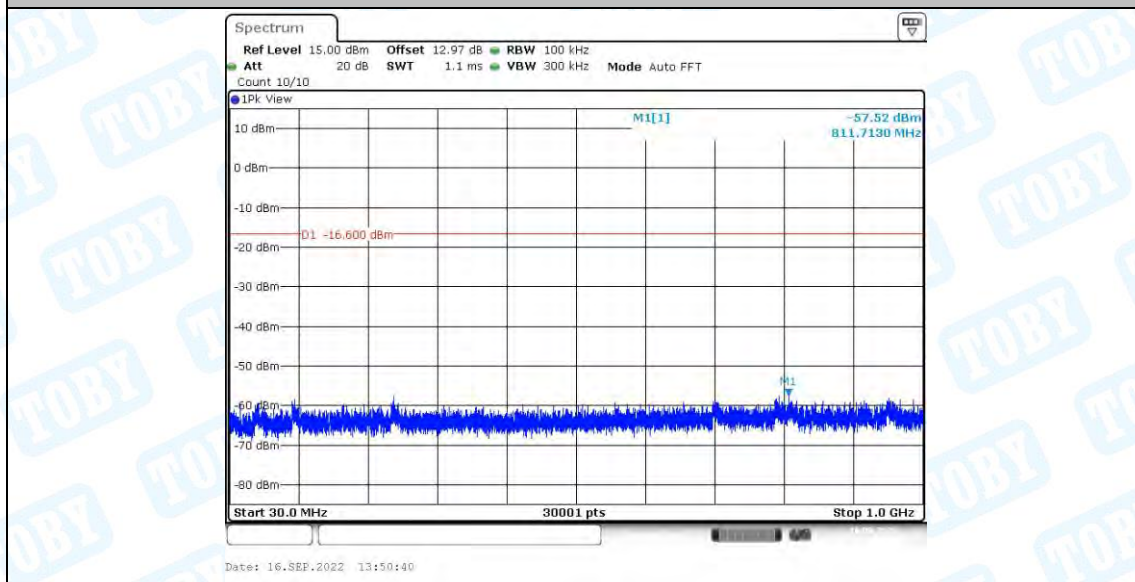
2DH5_Ant1_2402_1000~26500



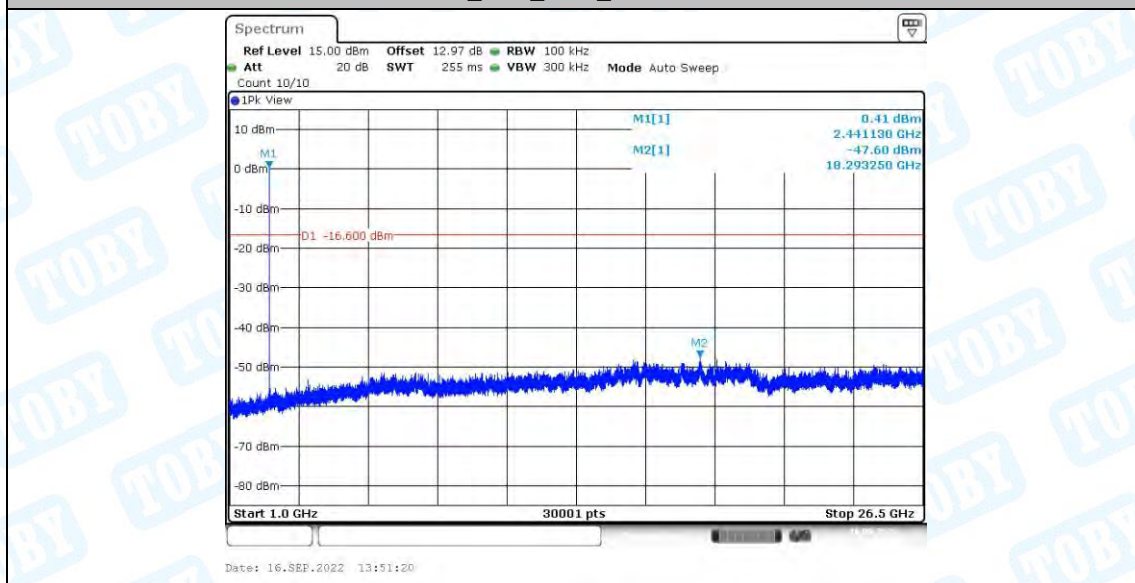
2DH5_Ant1_2441_0~Reference



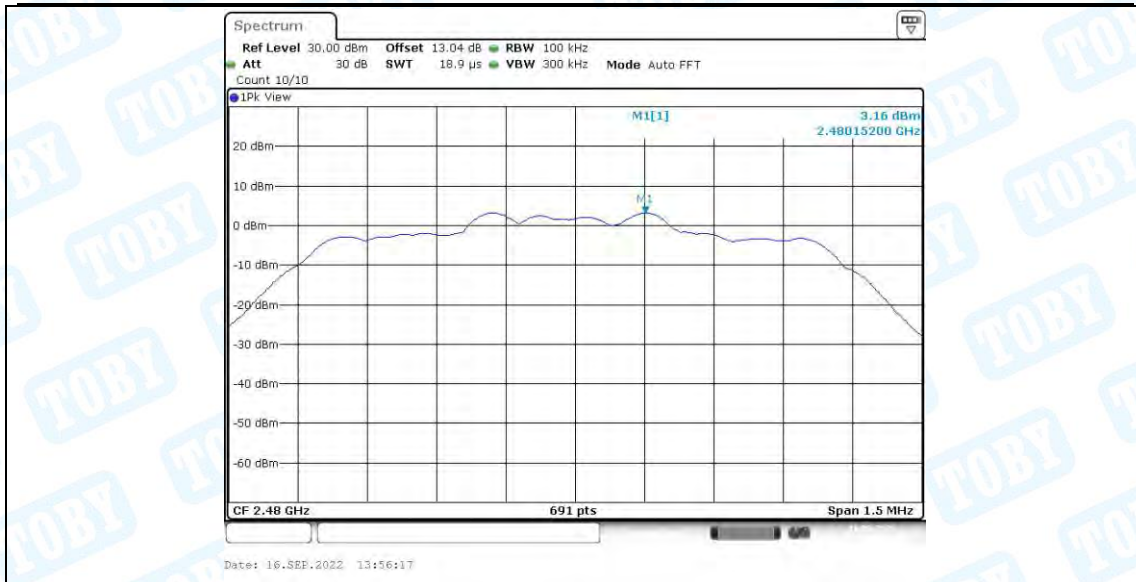
2DH5_Ant1_2441_30~1000



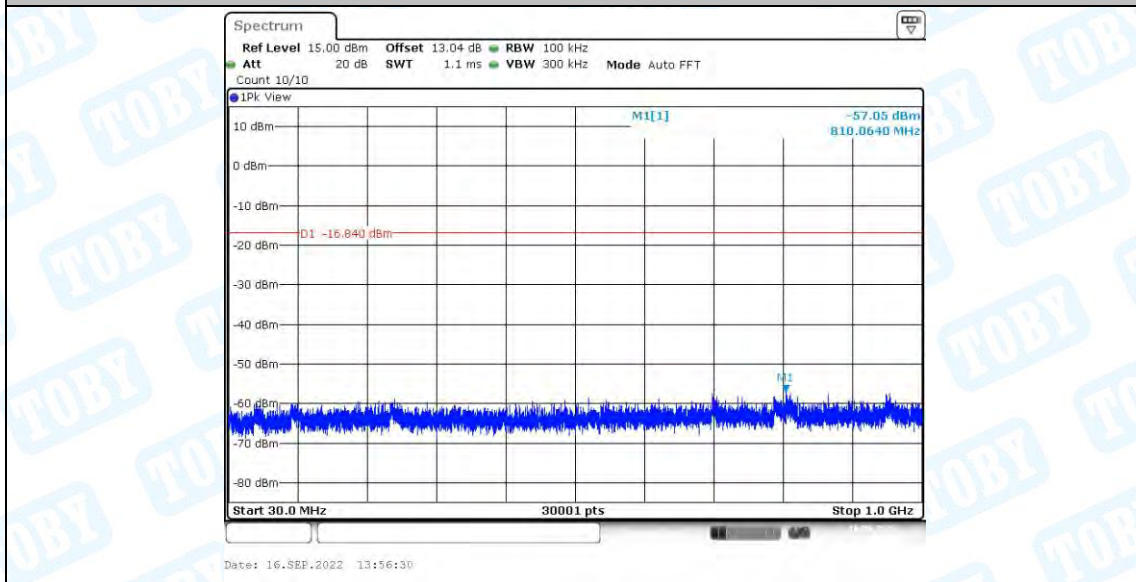
2DH5_Ant1_2441_1000~26500



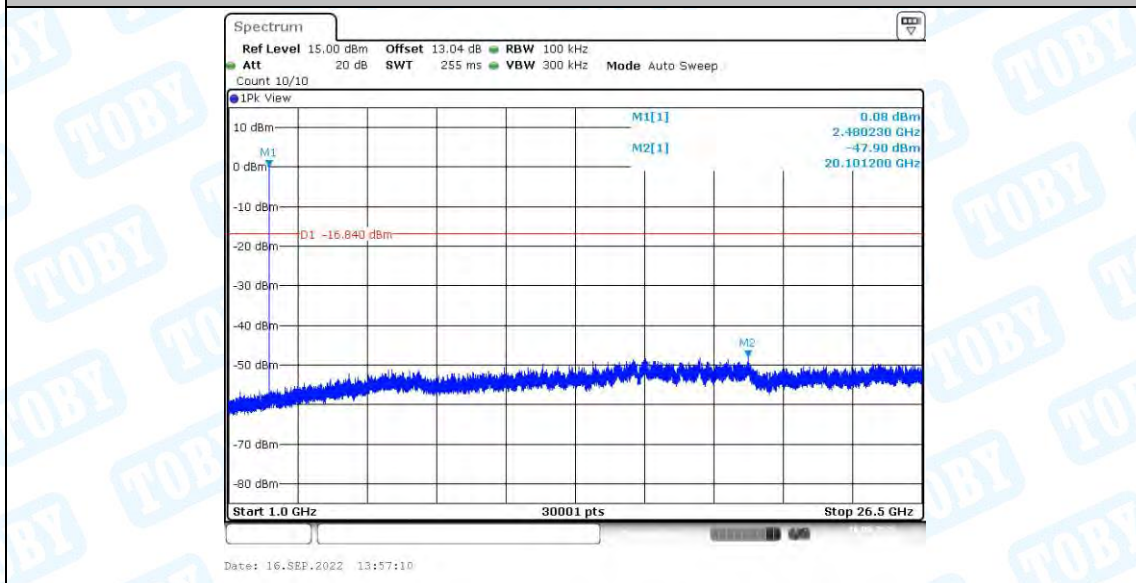
2DH5_Ant1_2480_0~Reference



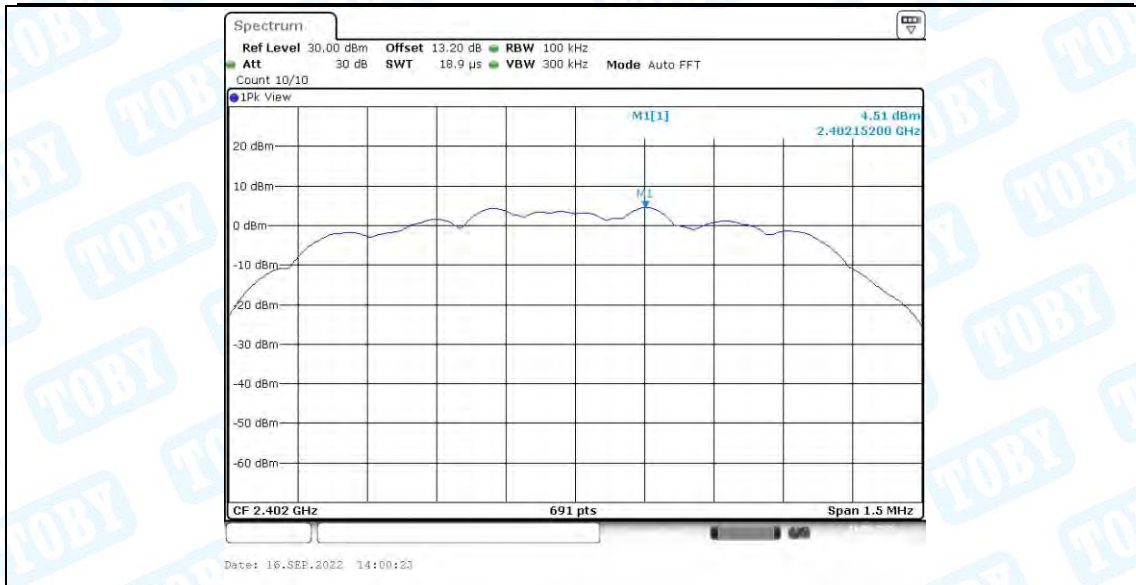
2DH5_Ant1_2480_30~1000



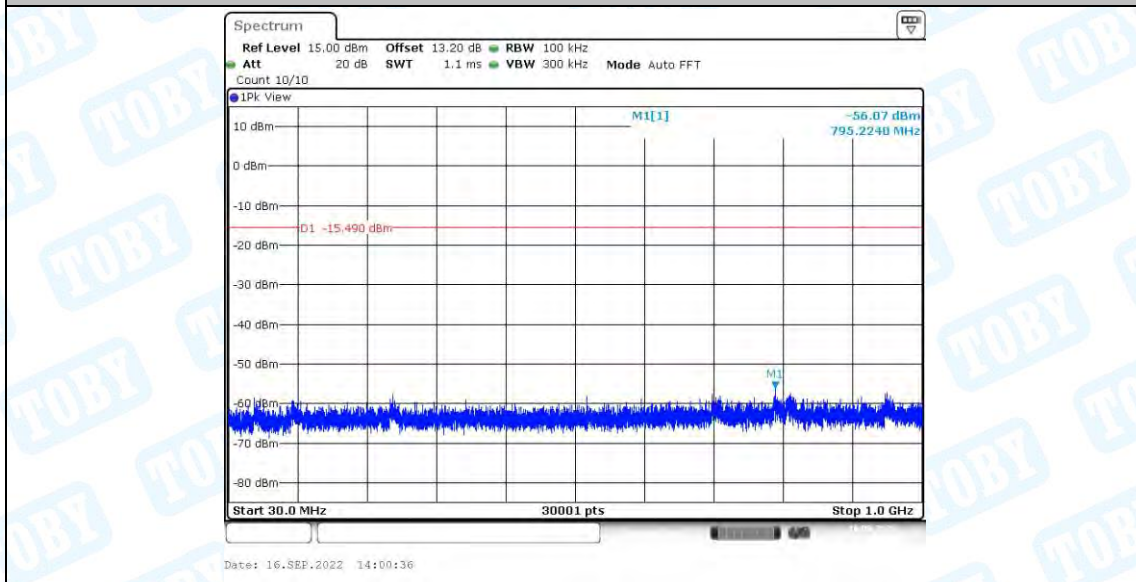
2DH5_Ant1_2480_1000~26500



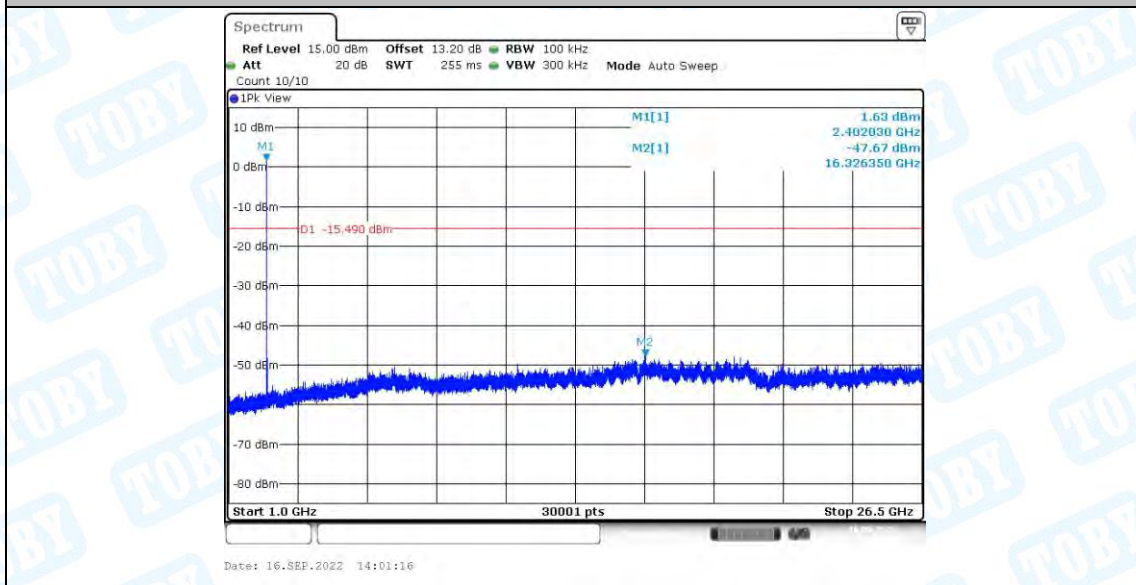
3DH5_Ant1_2402_0~Reference



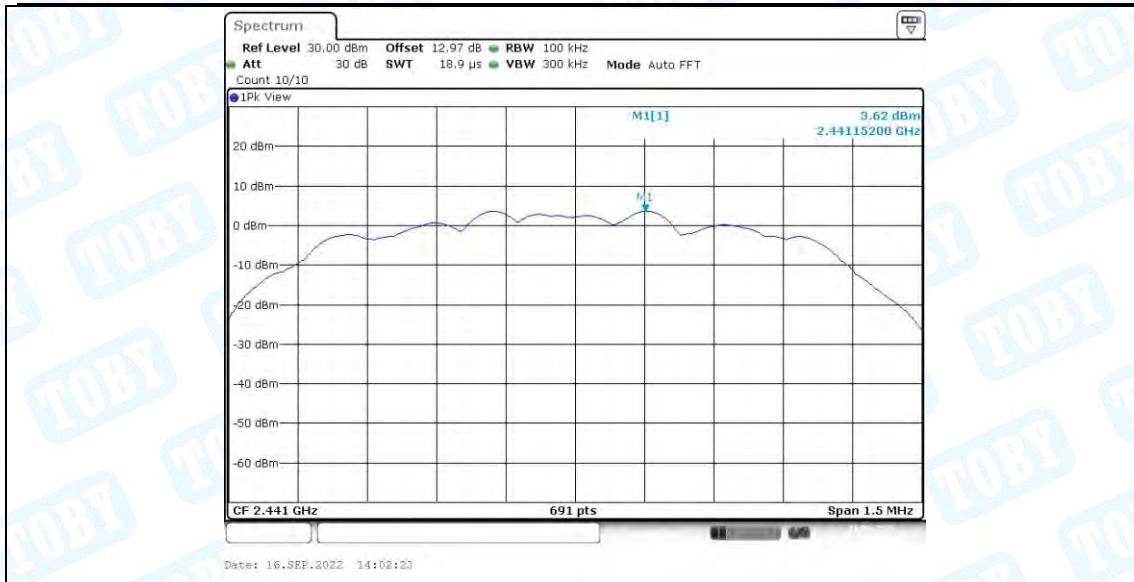
3DH5_Ant1_2402_30~1000



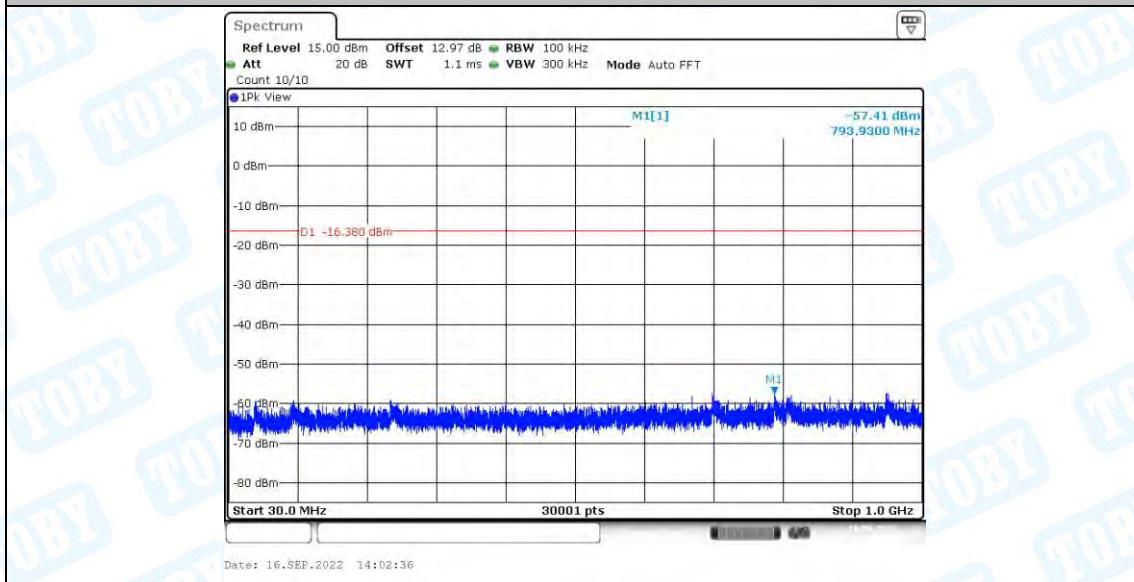
3DH5_Ant1_2402_1000~26500



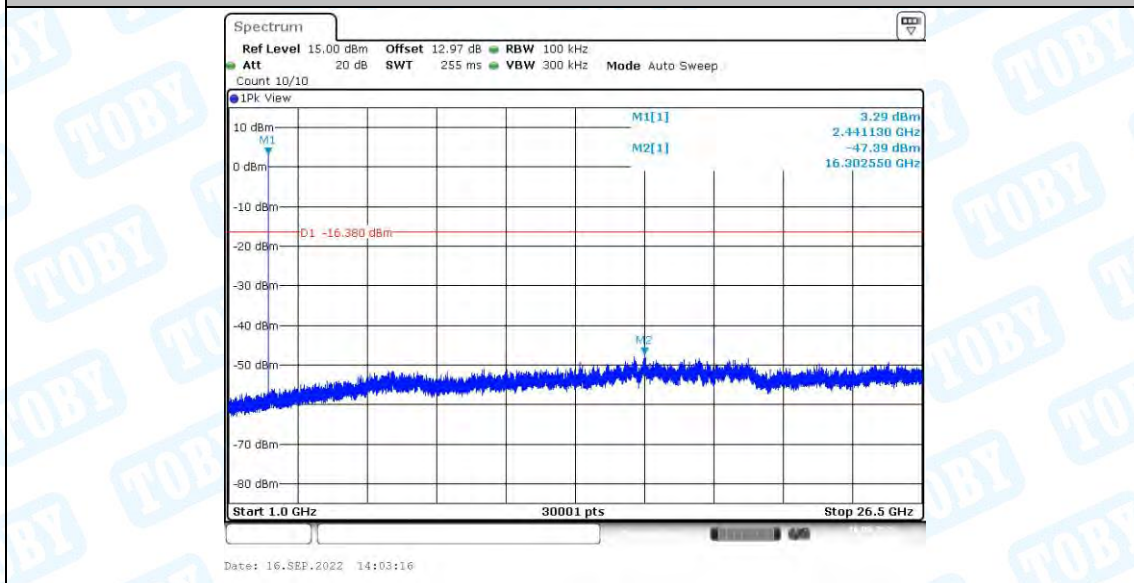
3DH5_Ant1_2441_0~Reference



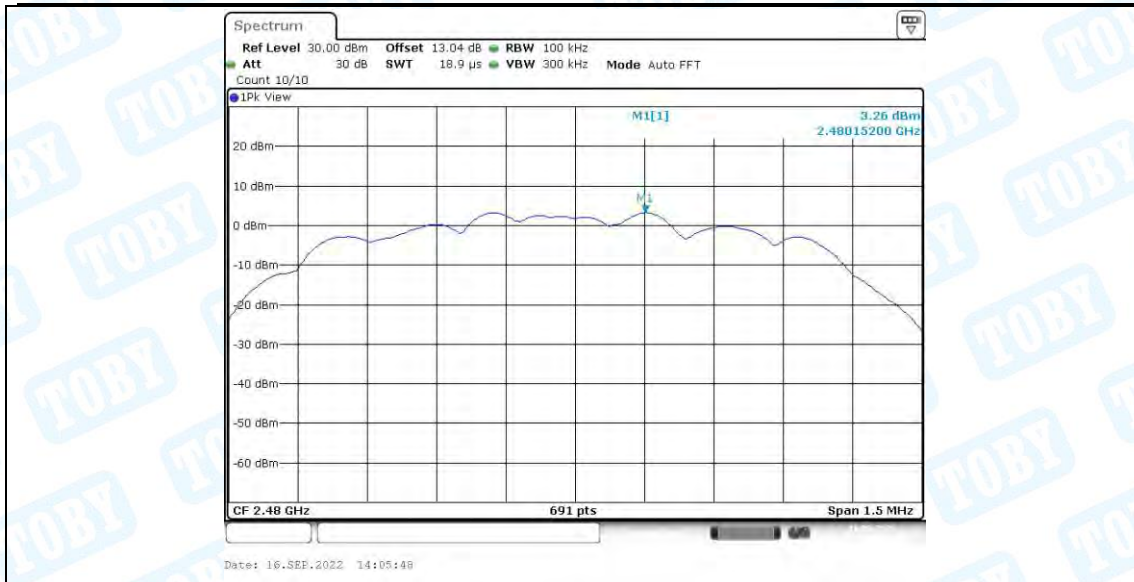
3DH5_Ant1_2441_30~1000



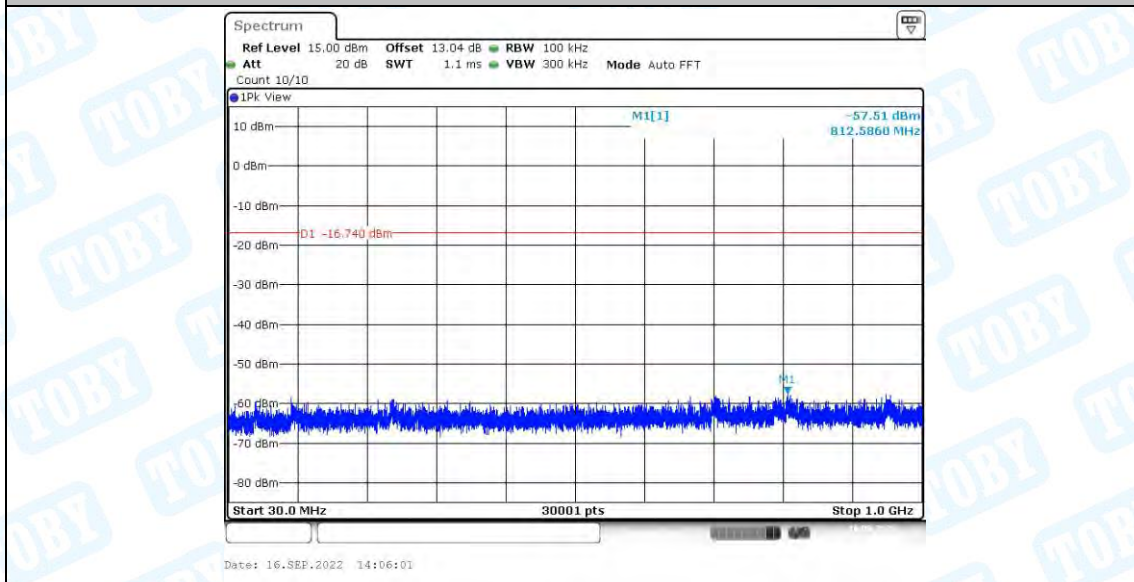
3DH5_Ant1_2441_1000~26500



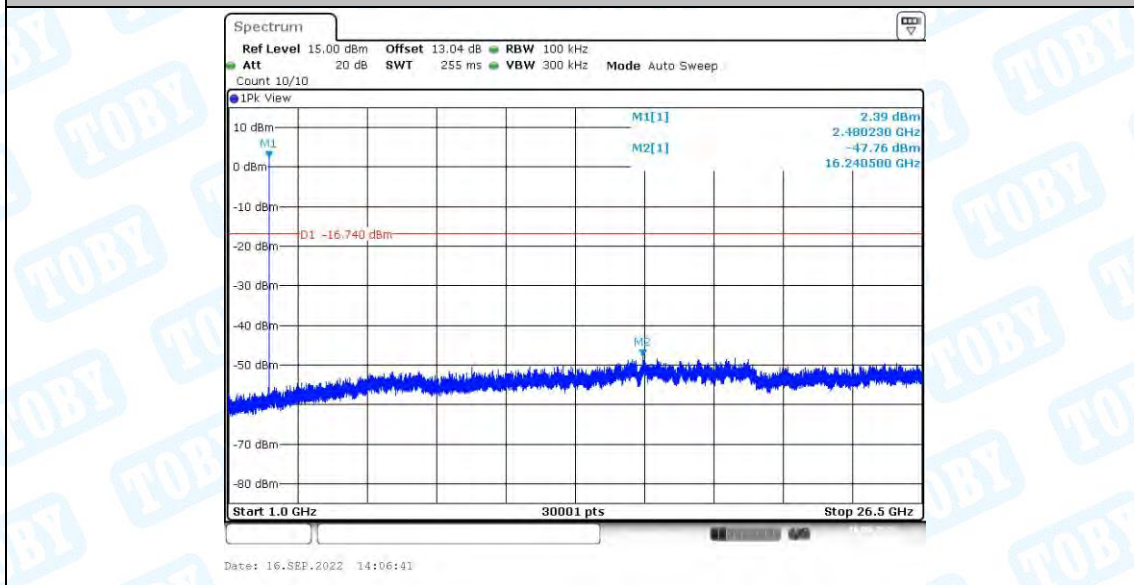
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500



9. Emissions in Restricted Bands

9. Test Result

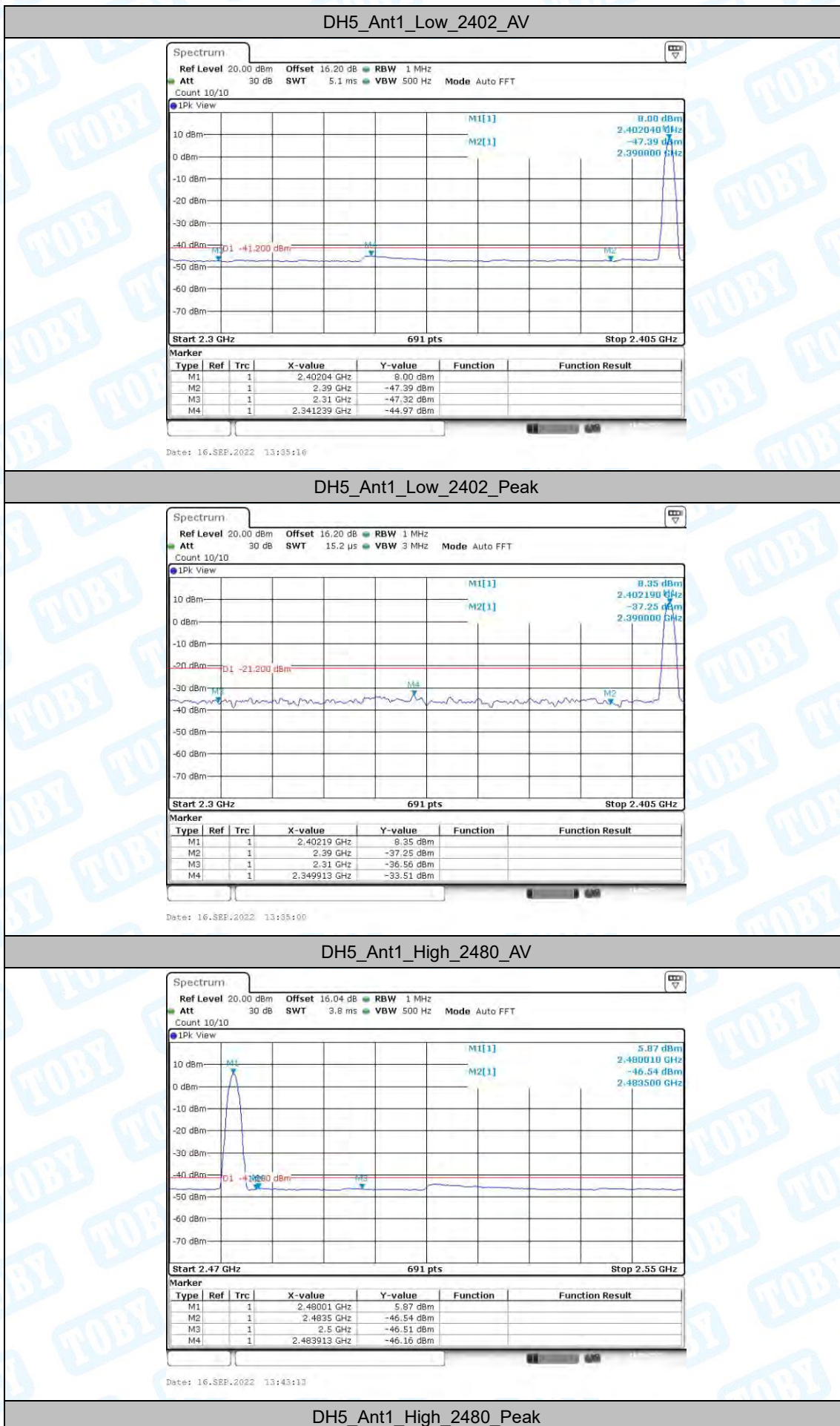
TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-47.32	≤-41.20	PASS
				AV	2341.239	-44.97	≤-41.20	PASS
				AV	2390.000	-47.39	≤-41.20	PASS
				Peak	2310.000	-36.56	≤-21.20	PASS
				Peak	2349.913	-33.51	≤-21.20	PASS
				Peak	2390.000	-37.25	≤-21.20	PASS
		High	2480	AV	2483.500	-46.54	≤-41.20	PASS
				AV	2483.913	-46.16	≤-41.20	PASS
				AV	2500.000	-46.51	≤-41.20	PASS
				Peak	2483.500	-37.89	≤-21.20	PASS
				Peak	2497.246	-34.04	≤-21.20	PASS
				Peak	2500.000	-36.5	≤-21.20	PASS
		Low	Hop_240 2	Peak	2310.000	-36.68	≤-21.20	PASS
				Peak	2347.783	-33.56	≤-21.20	PASS
				Peak	2390.000	-37.18	≤-21.20	PASS
		High	Hop_248 0	Peak	2483.500	-37.07	≤-21.20	PASS
				Peak	2484.377	-33.68	≤-21.20	PASS
				Peak	2500.000	-35.79	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-47.41	≤-41.20	PASS
				AV	2341.543	-45.09	≤-41.20	PASS
				AV	2390.000	-47.22	≤-41.20	PASS
				Peak	2310.000	-36.61	≤-21.20	PASS
				Peak	2340.174	-32.61	≤-21.20	PASS
				Peak	2390.000	-36.82	≤-21.20	PASS
		High	2480	AV	2483.500	-46.6	≤-41.20	PASS
				AV	2483.913	-46.2	≤-41.20	PASS
				AV	2500.000	-46.45	≤-41.20	PASS
				Peak	2483.500	-38.22	≤-21.20	PASS
				Peak	2493.768	-34.5	≤-21.20	PASS
				Peak	2500.000	-35.87	≤-21.20	PASS
		Low	Hop_240 2	Peak	2310.000	-36.53	≤-21.20	PASS
				Peak	2341.848	-33.51	≤-21.20	PASS
				Peak	2390.000	-36.78	≤-21.20	PASS
		High	Hop_248 0	Peak	2483.500	-36.86	≤-21.20	PASS
				Peak	2498.058	-34	≤-21.20	PASS
				Peak	2500.000	-35.44	≤-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-47.44	≤-41.20	PASS
				AV	2340.630	-44.83	≤-41.20	PASS
				AV	2390.000	-47.35	≤-41.20	PASS
				Peak	2310.000	-35.99	≤-21.20	PASS
				Peak	2339.870	-33.22	≤-21.20	PASS

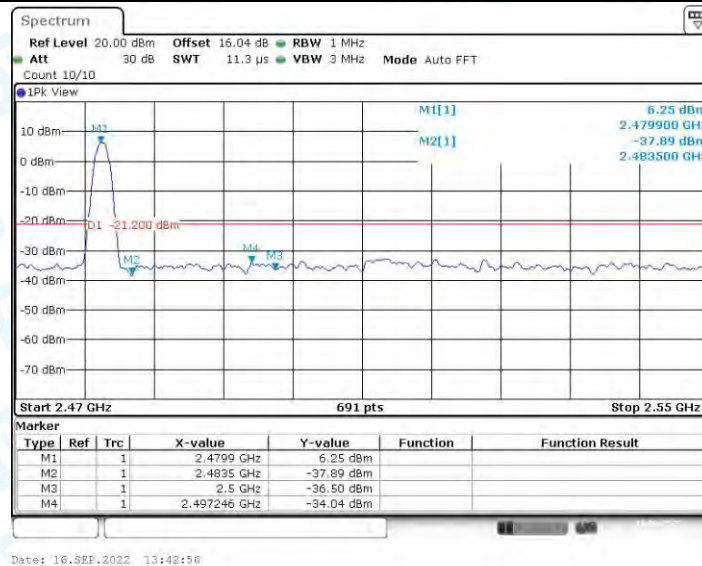
				Peak	2390.000	-35.34	≤-21.20	PASS
		High	2480	AV	2483.500	-46.56	≤-41.20	PASS
				AV	2484.029	-46.06	≤-41.20	PASS
				AV	2500.000	-46.52	≤-41.20	PASS
				Peak	2483.500	-37.78	≤-21.20	PASS
				Peak	2497.362	-34.67	≤-21.20	PASS
				Peak	2500.000	-36.38	≤-21.20	PASS
		Low	Hop_240 2	Peak	2310.000	-37.48	≤-21.20	PASS
				Peak	2340.935	-32.69	≤-21.20	PASS
				Peak	2390.000	-36.77	≤-21.20	PASS
		High	Hop_248 0	Peak	2483.500	-38.07	≤-21.20	PASS
				Peak	2499.333	-34.3	≤-21.20	PASS
				Peak	2500.000	-35.88	≤-21.20	PASS

Note:

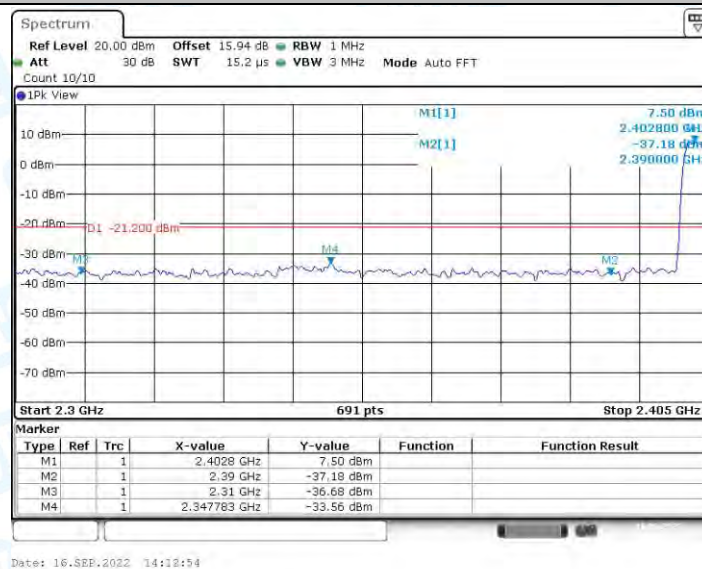
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

10.2. Test Graphs

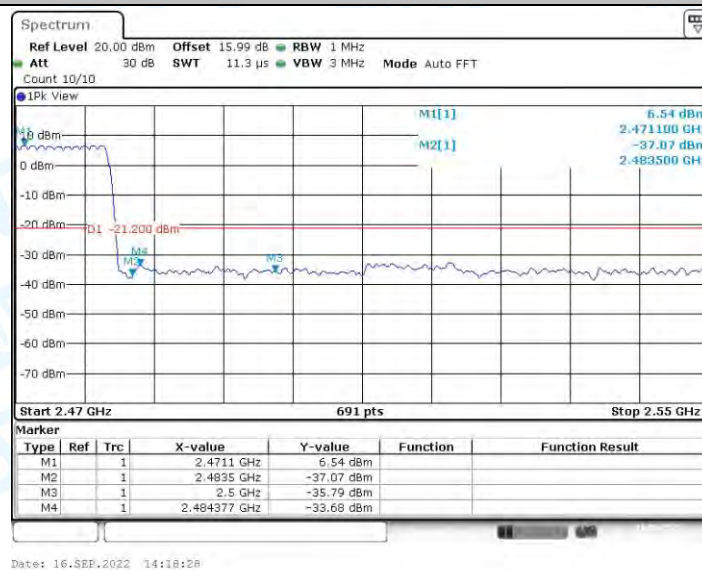




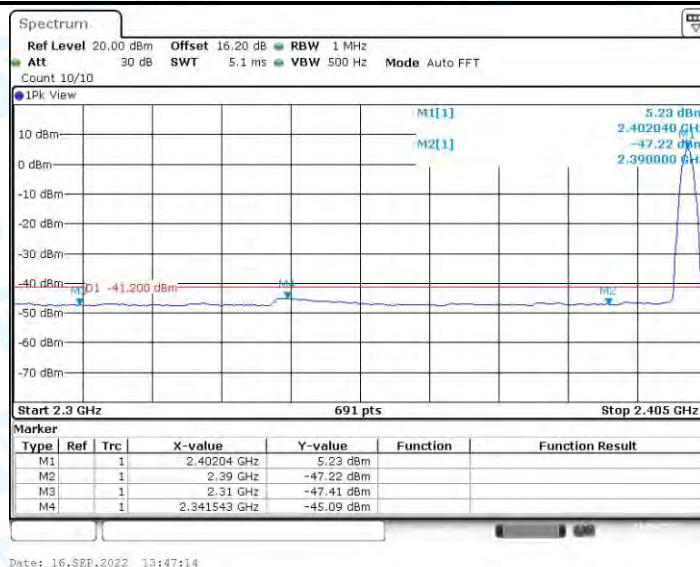
DH5_Ant1_Low_Hop_2402_Peak



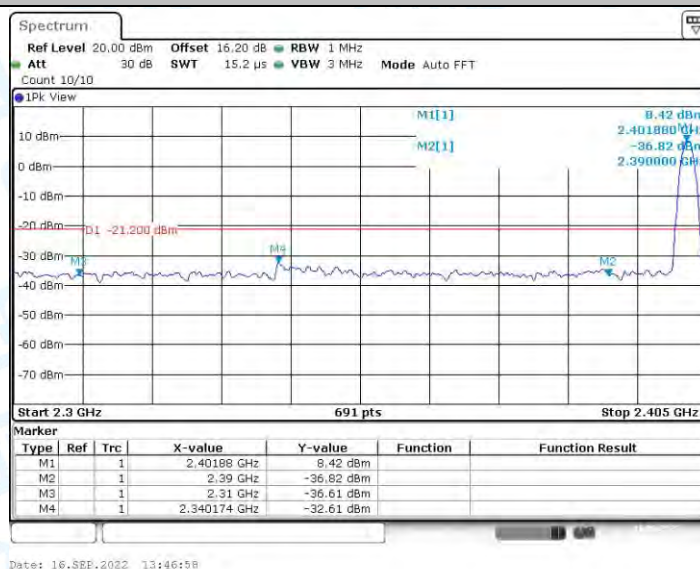
DH5_Ant1_High_Hop_2480_Peak



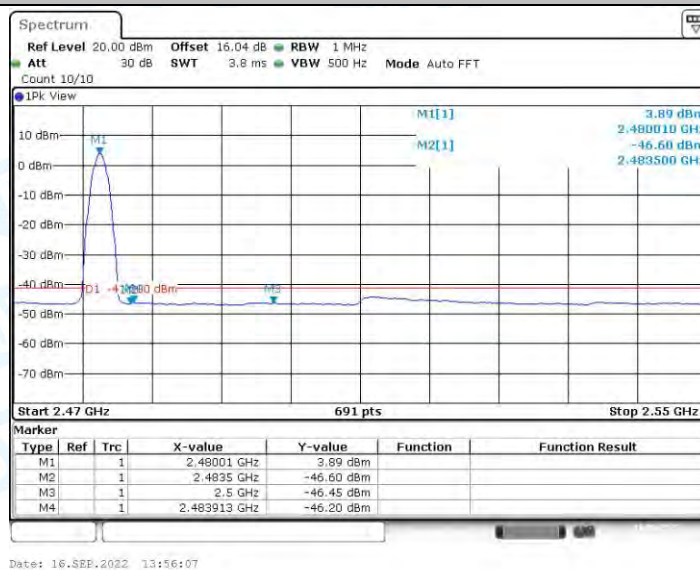
2DH5_Ant1_Low_2402_AV



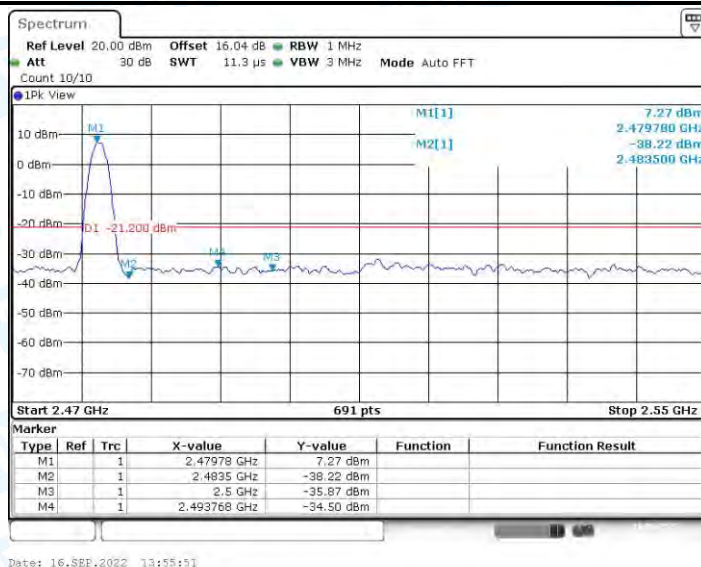
2DH5_Ant1_Low_2402_Peak



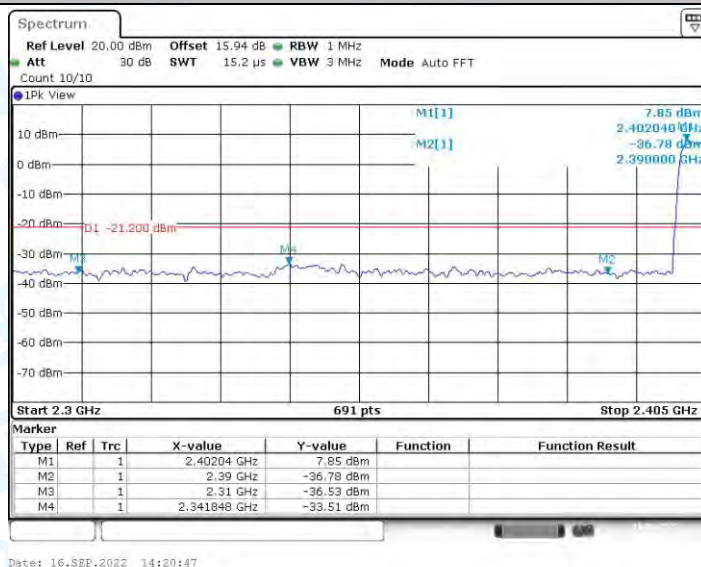
2DH5_Ant1_High_2480_AV



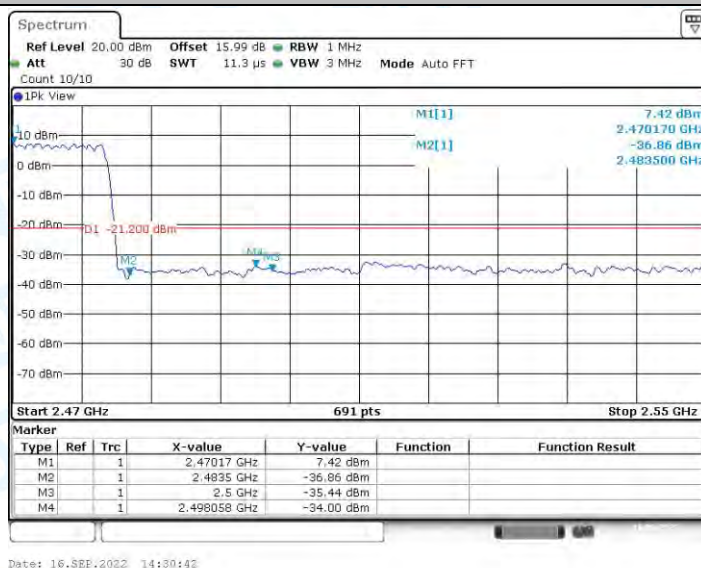
2DH5_Ant1_High_2480_Peak



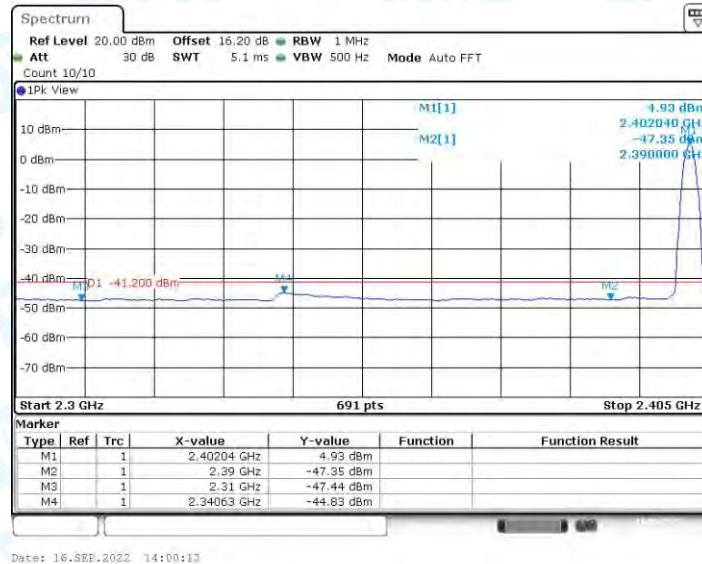
2DH5_Ant1_Low_Hop_2402_Peak



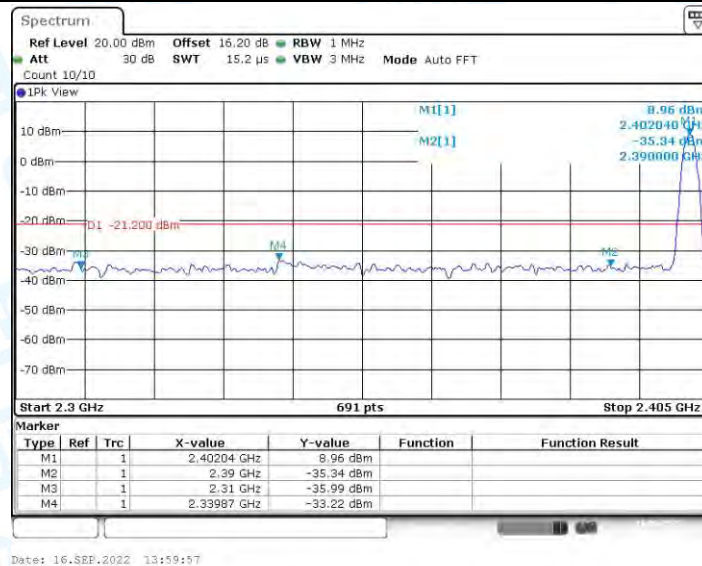
2DH5_Ant1_High_Hop_2480_Peak



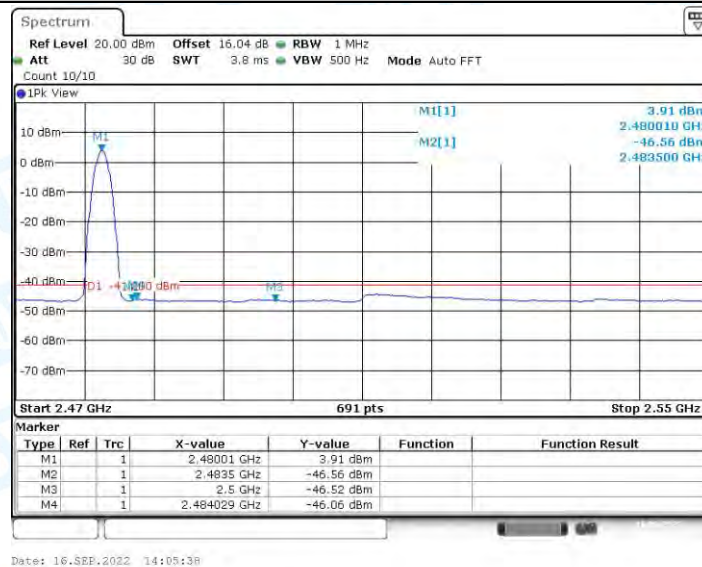
3DH5_Ant1_Low_2402_AV



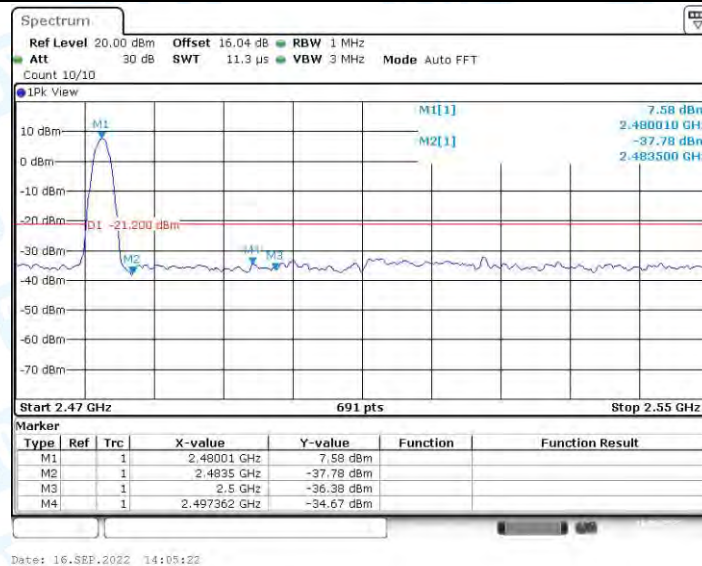
3DH5_Ant1_Low_2402_Peak



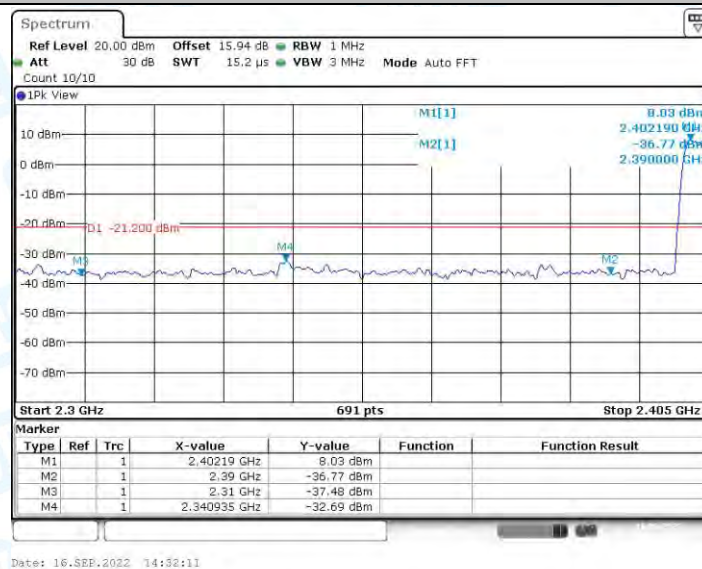
3DH5_Ant1_High_2480_AV



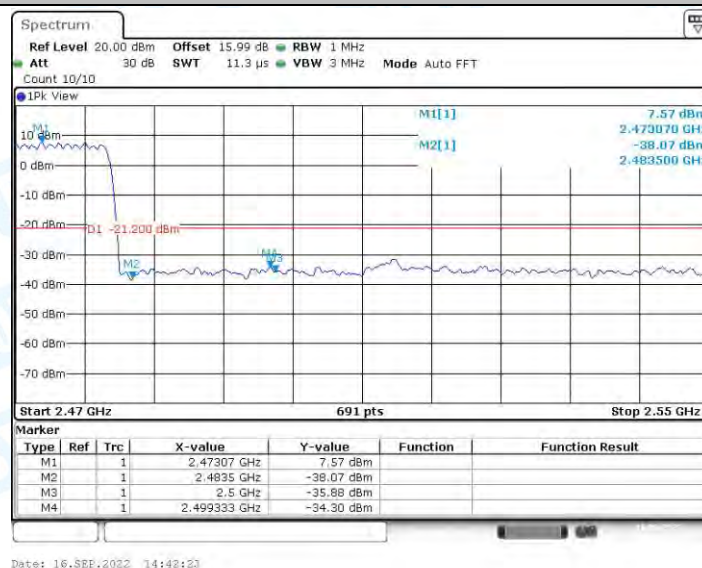
3DH5_Ant1_High_2480_Peak



3DH5_Ant1_Low_Hop_2402_Peak



3DH5_Ant1_High_Hop_2480_Peak



-----End of the report-----