

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

General Description of EUT	
Product Name:	Wireless Headphone
Test Model:	UG-05
Sample ID:	20211129-02-02
Environmental Conditions	
Temperature:	23.8℃
Relative Humidity:	48%
Test Voltage:	DC 3.7V
Test Engineer:	Huang jian ping
Note: For a more detailed features description, please refer to the report TB-FCC185599	

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1. 20dB Emission Bandwidth

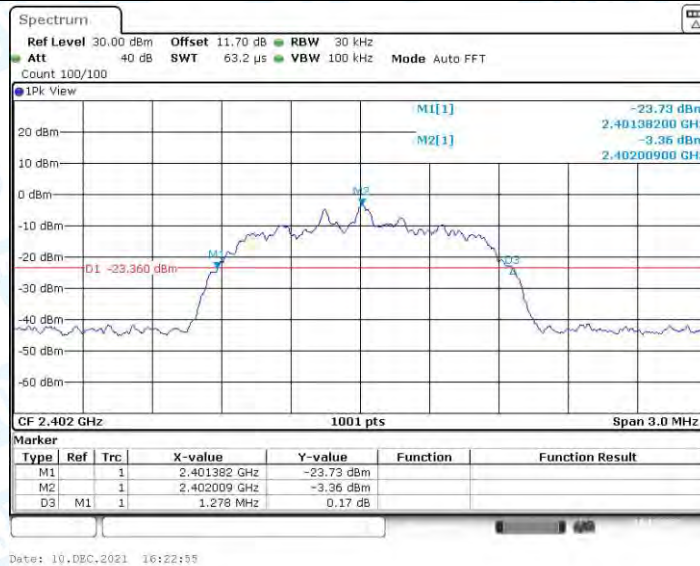
1.1. Test Result

TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.94	2401.55	2402.49	---	PASS
		2441	0.94	2440.55	2441.49	---	PASS
		2480	0.94	2479.55	2480.49	---	PASS
2DH5	Ant1	2402	1.28	2401.38	2402.66	---	PASS
		2441	1.28	2440.38	2441.66	---	PASS
		2480	1.28	2479.38	2480.66	---	PASS
3DH5	Ant1	2402	1.25	2401.38	2402.63	---	PASS
		2441	1.25	2440.38	2441.63	---	PASS
		2480	1.25	2479.38	2480.63	---	PASS

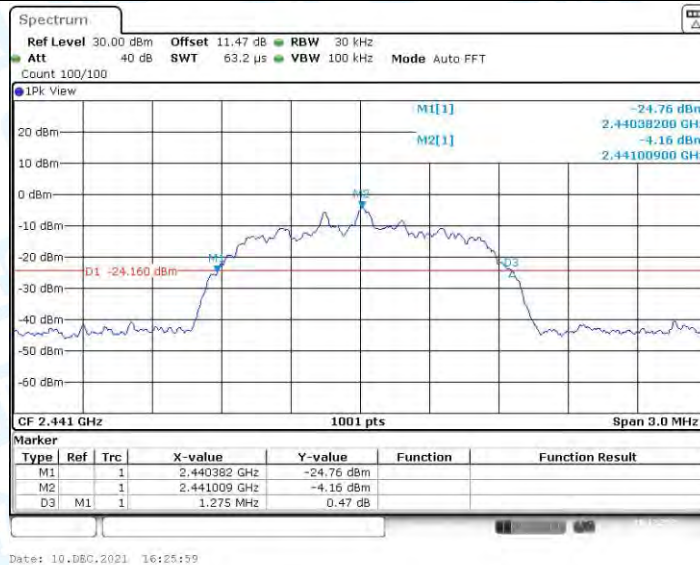
1.2. Test Graphs



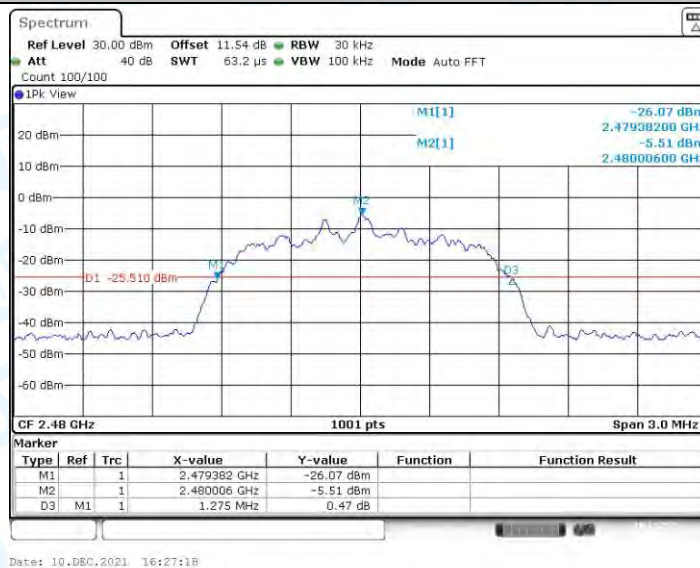
2DH5_Ant1_2402



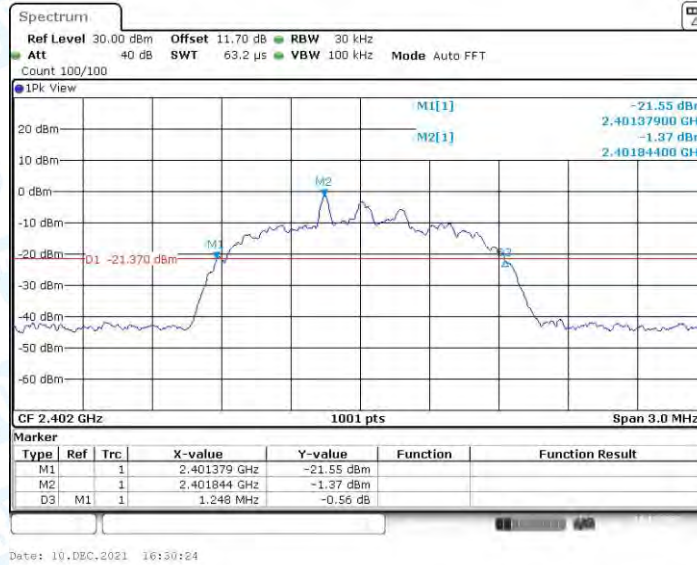
2DH5_Ant1_2441



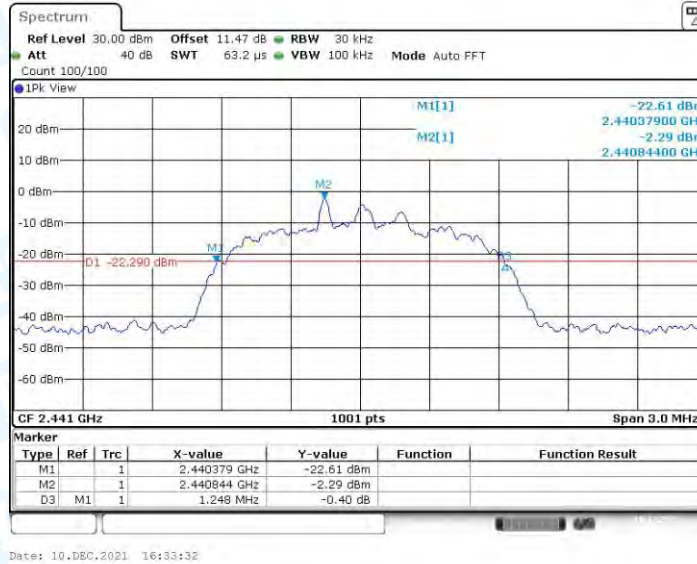
2DH5_Ant1_2480



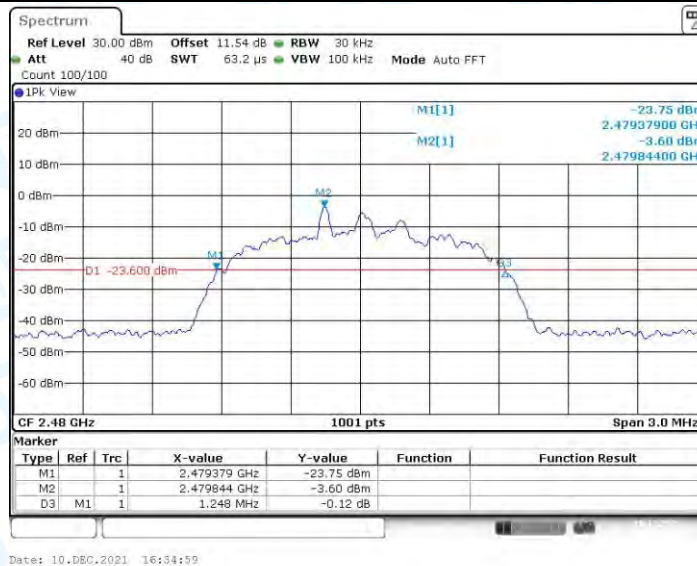
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



2. Occupied Channel Bandwidth

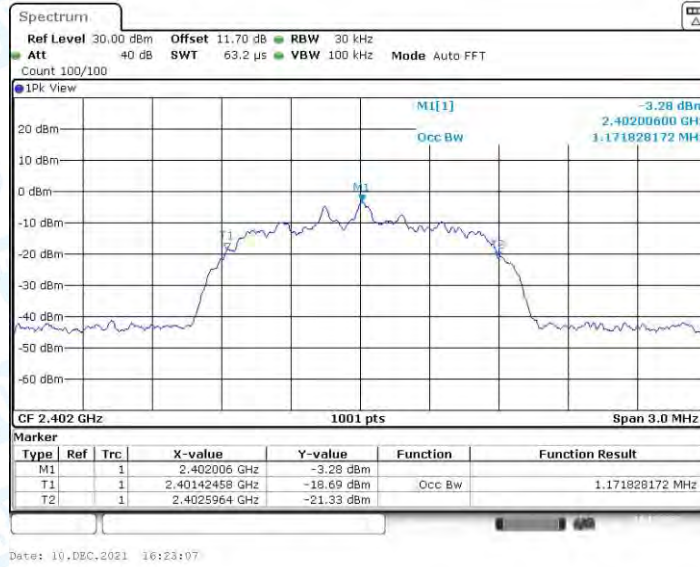
2.1. Test Result

TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.872	2401.574	2402.447	---	PASS
		2441	0.878	2440.571	2441.450	---	PASS
		2480	0.881	2479.571	2480.453	---	PASS
2DH5	Ant1	2402	1.172	2401.425	2402.596	---	PASS
		2441	1.175	2440.425	2441.599	---	PASS
		2480	1.178	2479.422	2480.599	---	PASS
3DH5	Ant1	2402	1.16	2401.434	2402.593	---	PASS
		2441	1.16	2440.434	2441.593	---	PASS
		2480	1.16	2479.434	2480.593	---	PASS

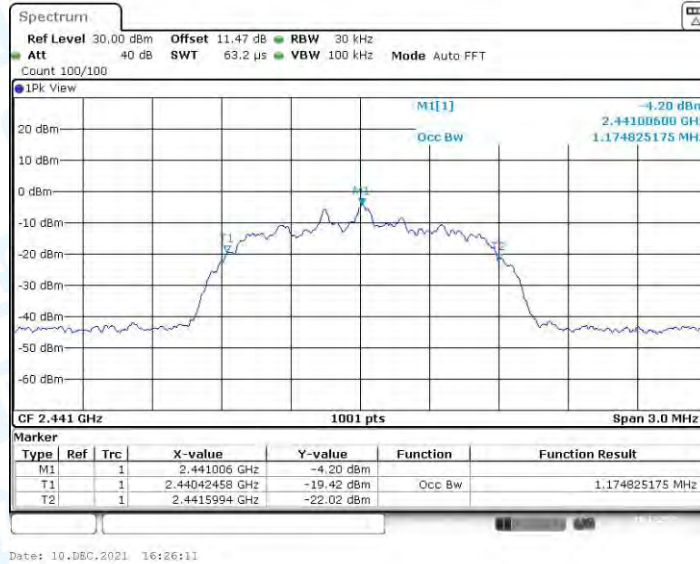
2.2. Test Graphs



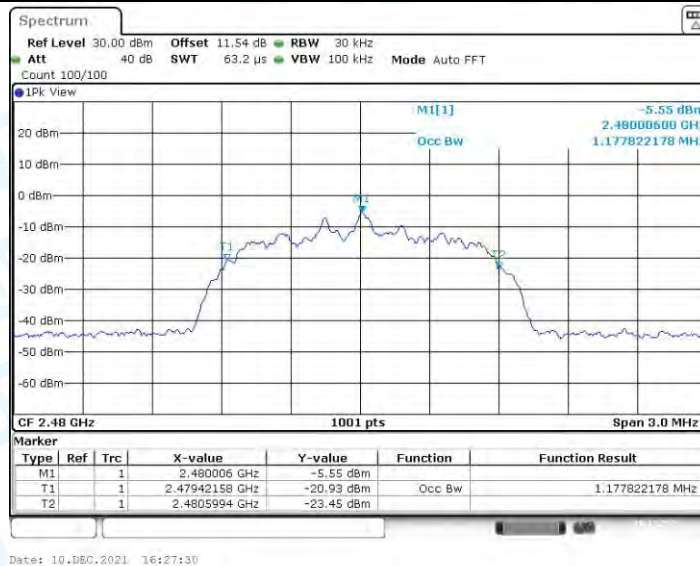
2DH5_Ant1_2402



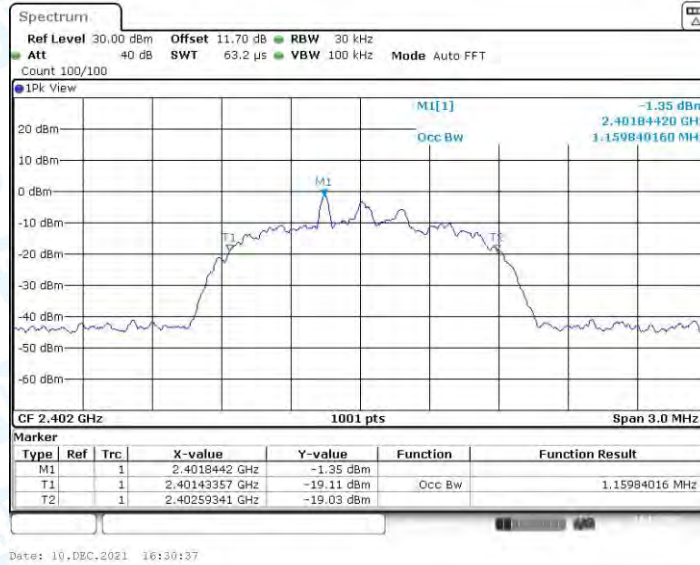
2DH5_Ant1_2441



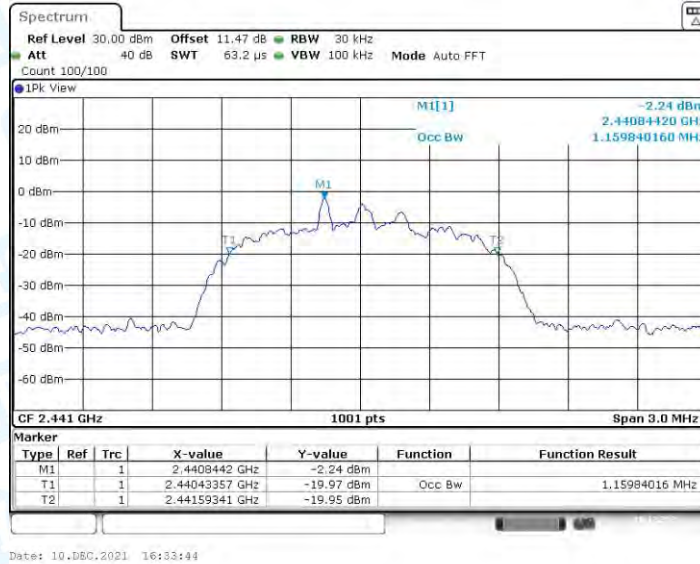
2DH5_Ant1_2480



3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



3. Maximum conducted output power

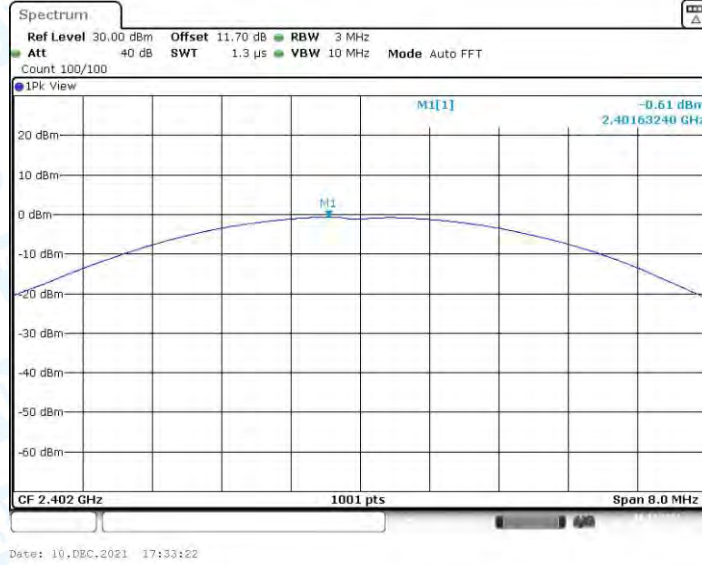
3.1. Test Result

TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-0.43	≤21	PASS
		2441	-1	≤21	PASS
		2480	-2.25	≤21	PASS
2DH5	Ant1	2402	-0.61	≤21	PASS
		2441	-1.48	≤21	PASS
		2480	-2.47	≤21	PASS
3DH5	Ant1	2402	-0.6	≤21	PASS
		2441	-1.13	≤21	PASS
		2480	-2.56	≤21	PASS

3.2.Test Graphs



2DH5_Ant1_2402



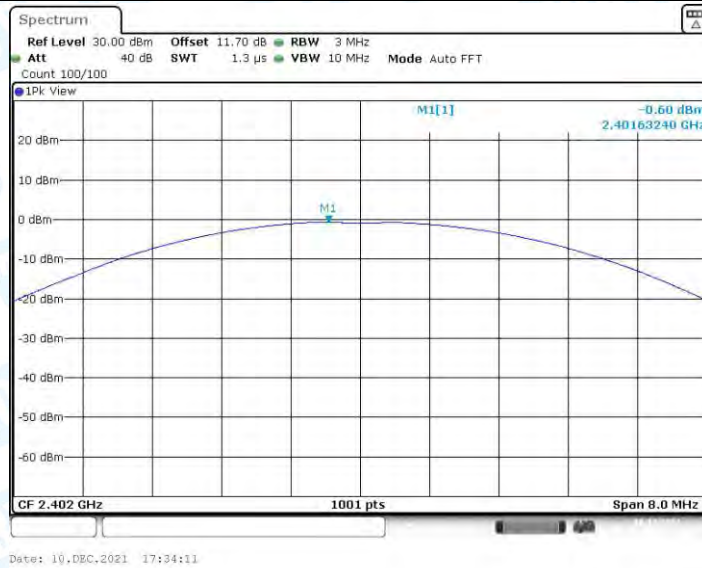
2DH5_Ant1_2441



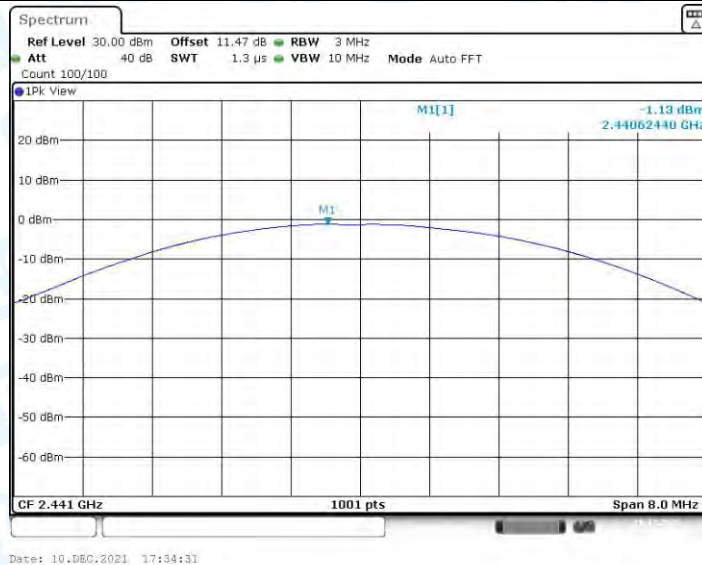
2DH5_Ant1_2480



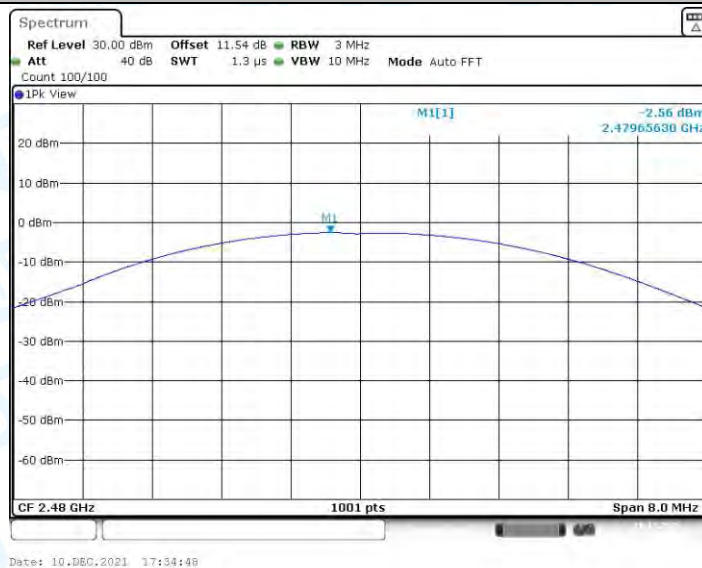
3DH5_Ant1_2402



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	1.003	≥ 0.940	PASS
2DH5	Ant1	Hop	1.009	≥ 0.853	PASS
3DH5	Ant1	Hop	1.023	≥ 0.833	PASS

4.2.Test Graphs

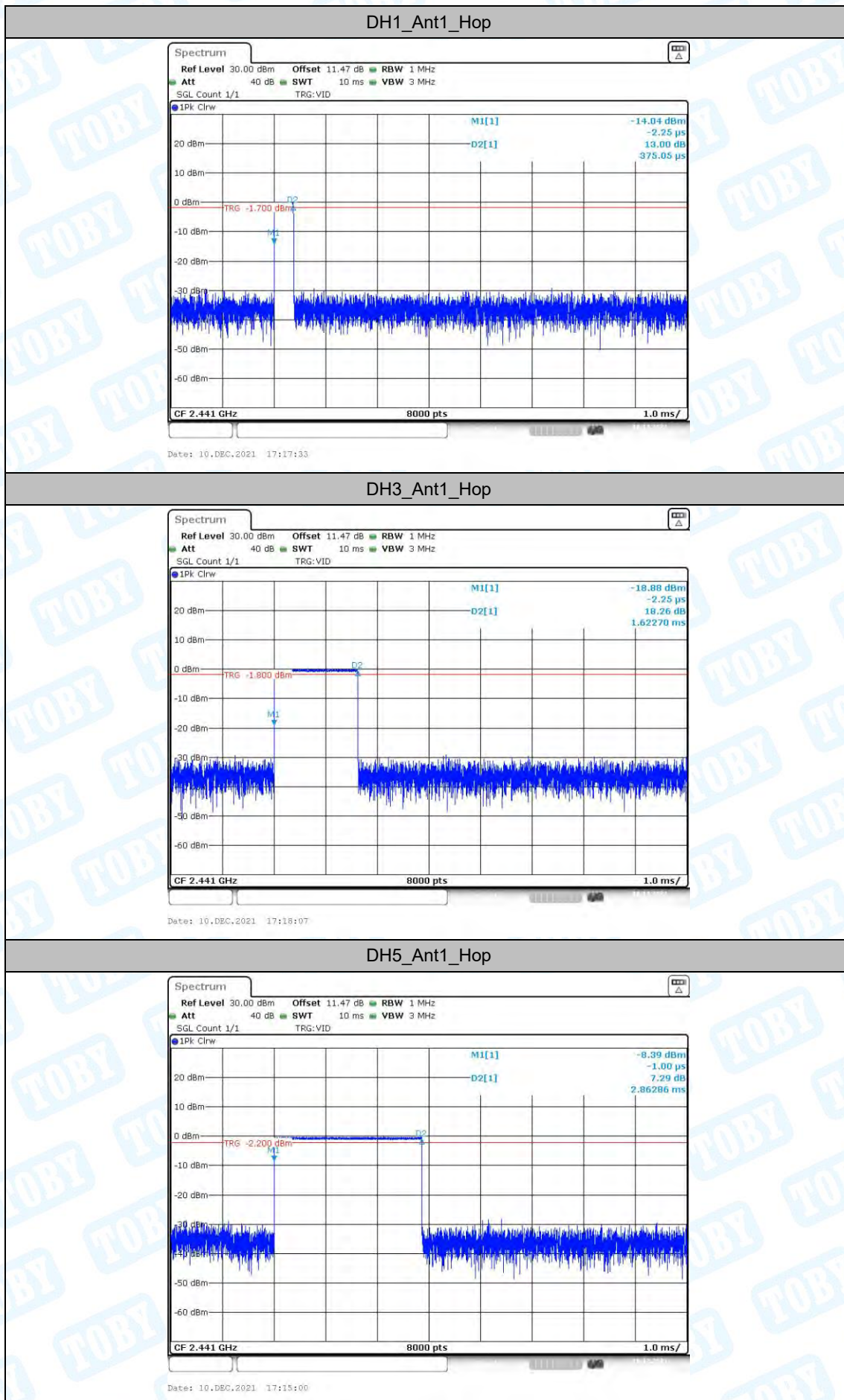


5. Time of occupancy

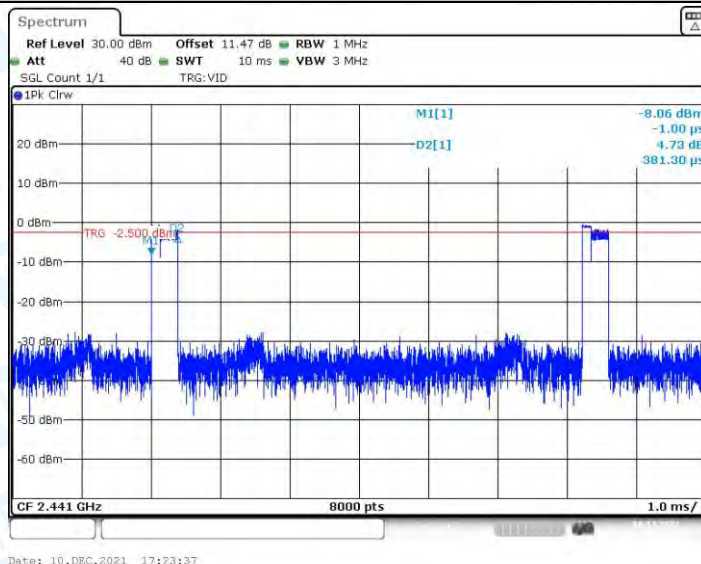
5.1. Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.38	320	0.12	≤0.4	PASS
DH3	Ant1	Hop	1.62	160	0.26	≤0.4	PASS
DH5	Ant1	Hop	2.86	106.67	0.305	≤0.4	PASS
2DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
2DH3	Ant1	Hop	1.63	160	0.26	≤0.4	PASS
2DH5	Ant1	Hop	2.87	106.67	0.306	≤0.4	PASS
3DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
3DH3	Ant1	Hop	1.62	160	0.26	≤0.4	PASS
3DH5	Ant1	Hop	2.87	106.67	0.306	≤0.4	PASS

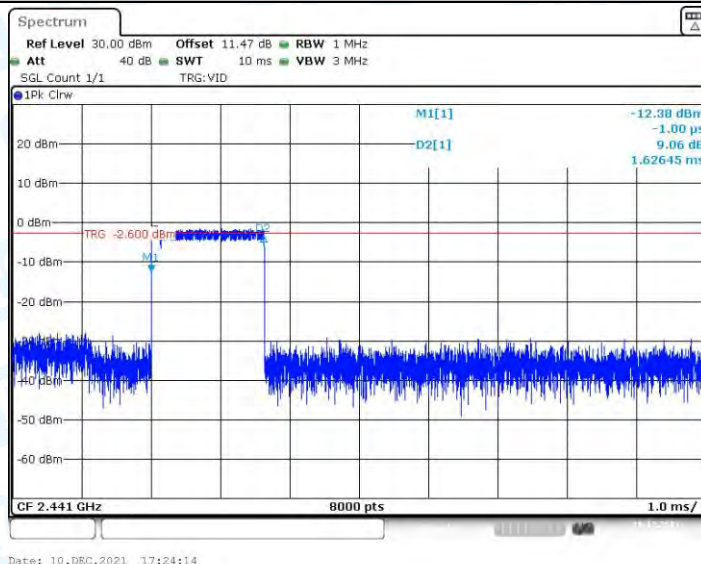
5.2. Test Graphs



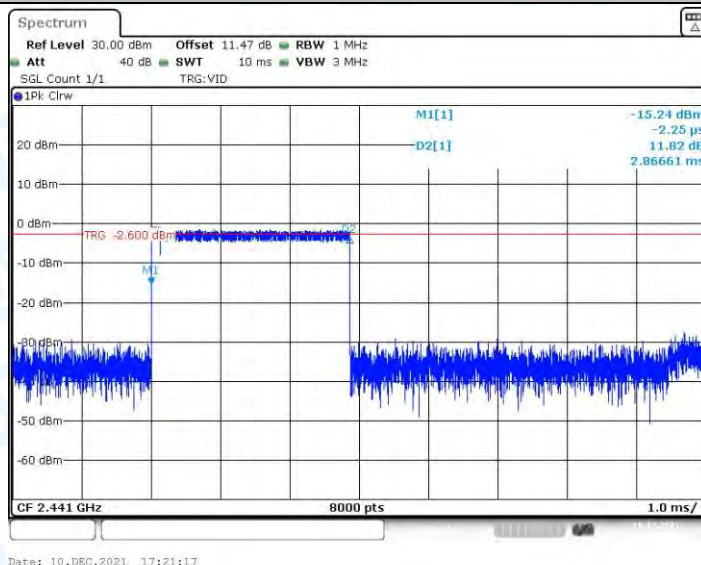
2DH1_Ant1_Hop



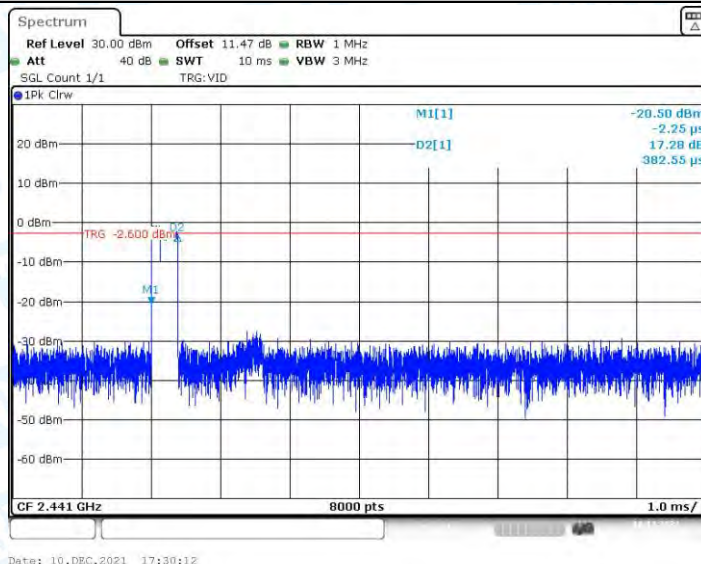
2DH3_Ant1_Hop



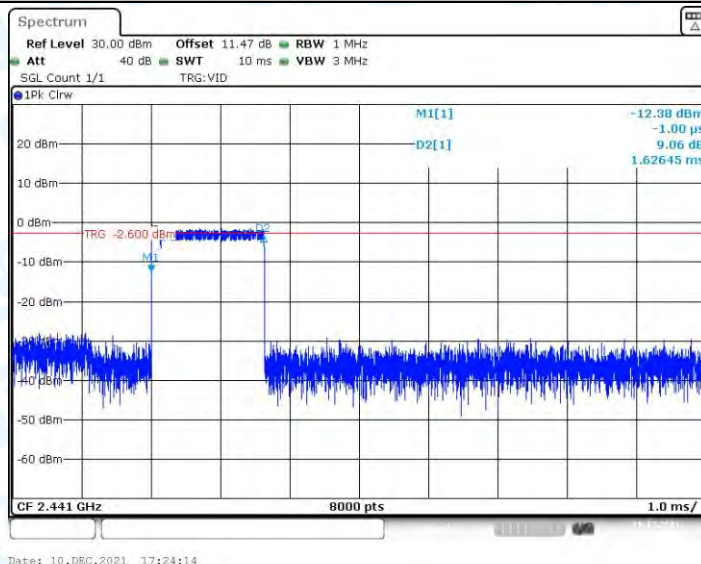
2DH5_Ant1_Hop



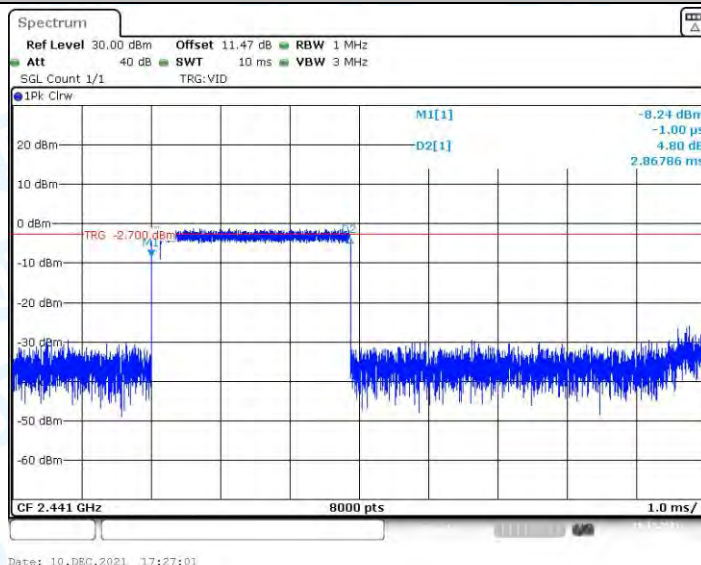
3DH1_Ant1_Hop



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

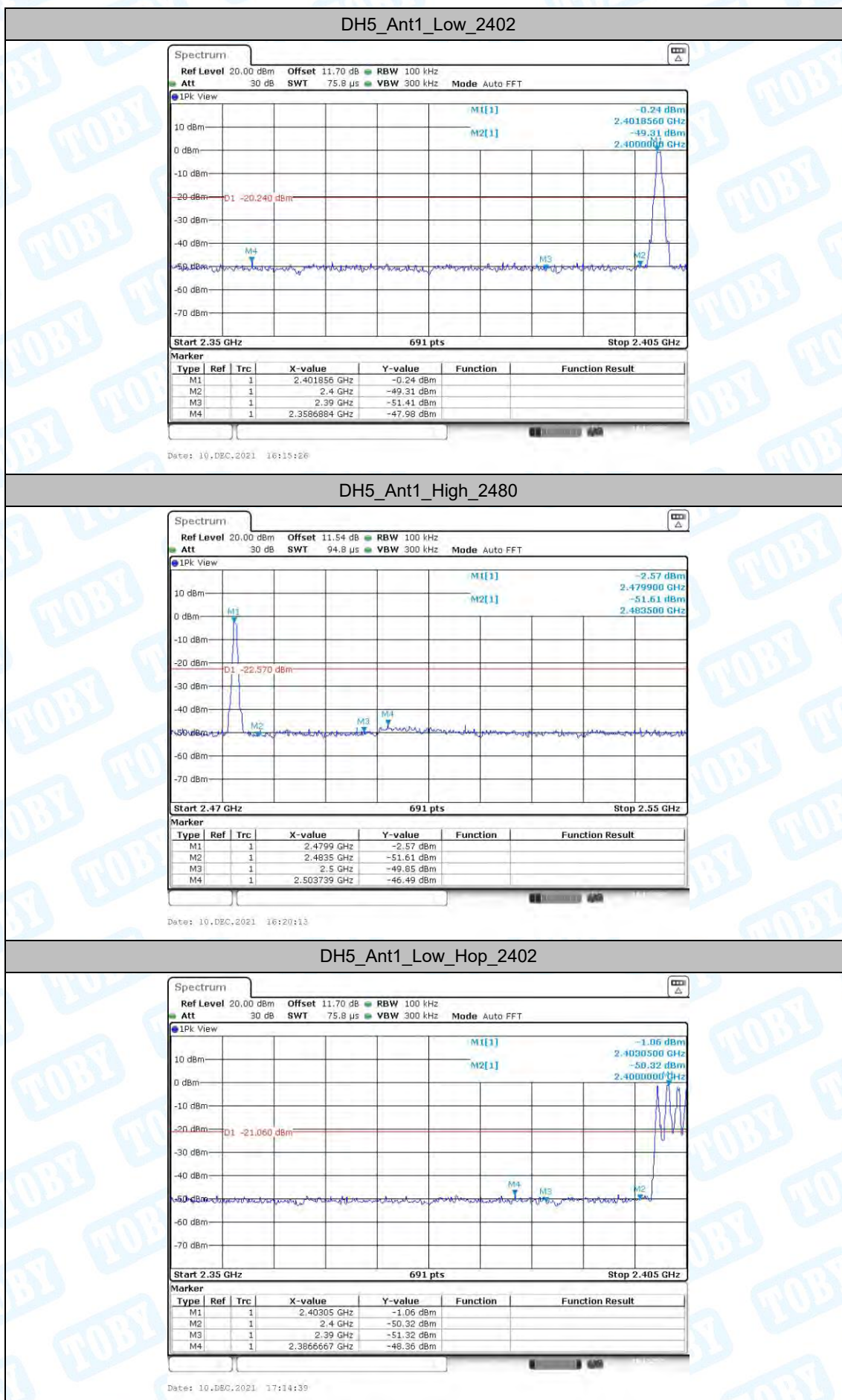


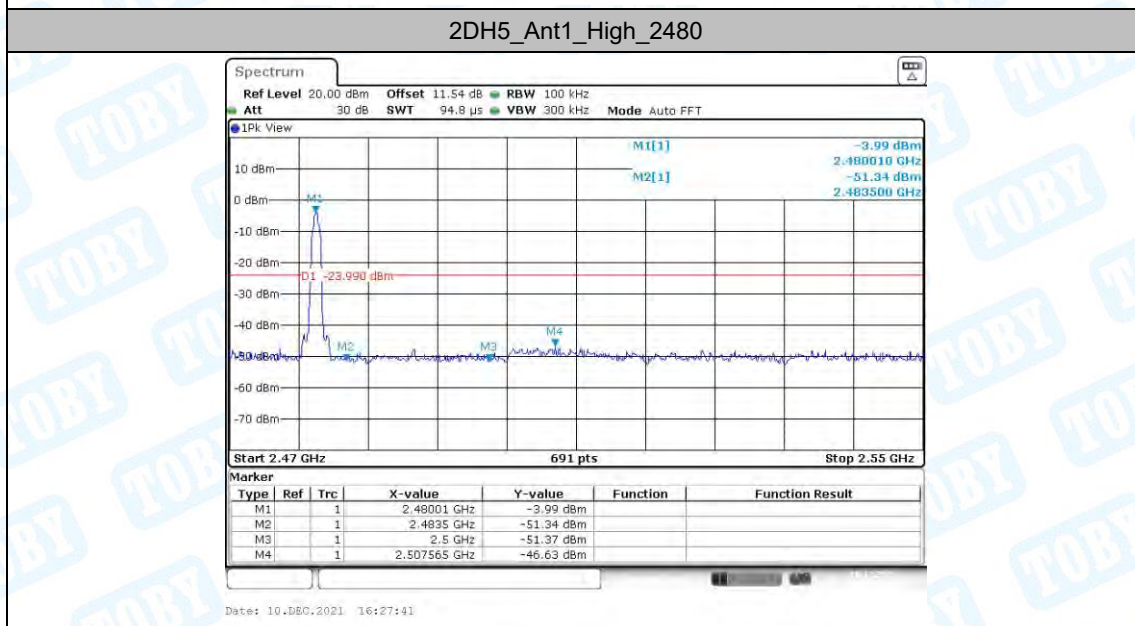
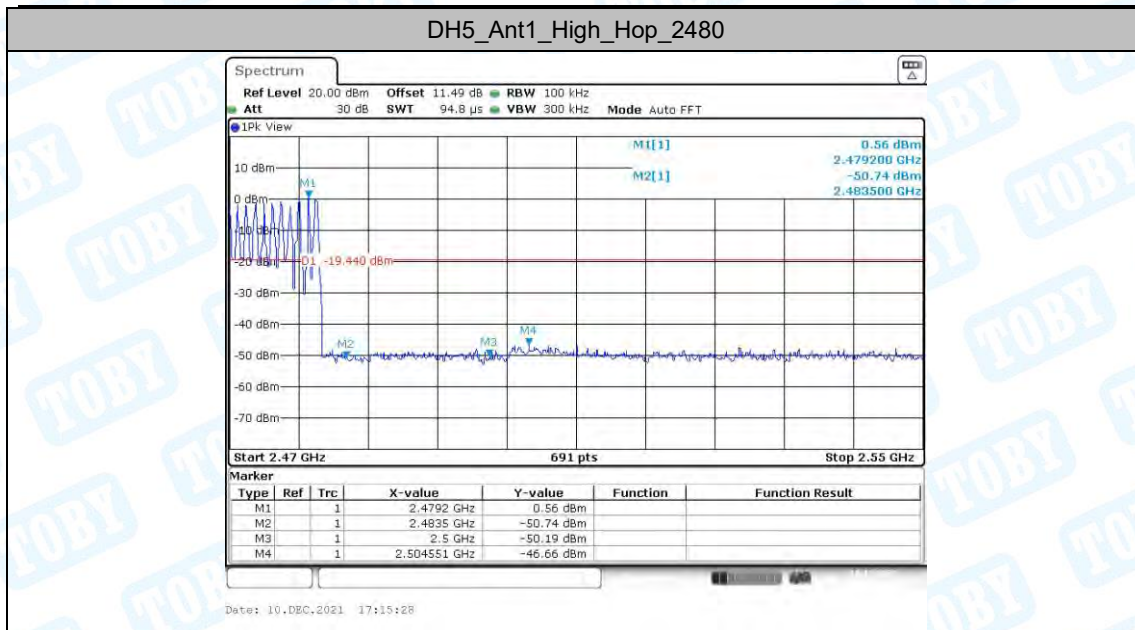
7. Band edge measurements

7.1. Test Result

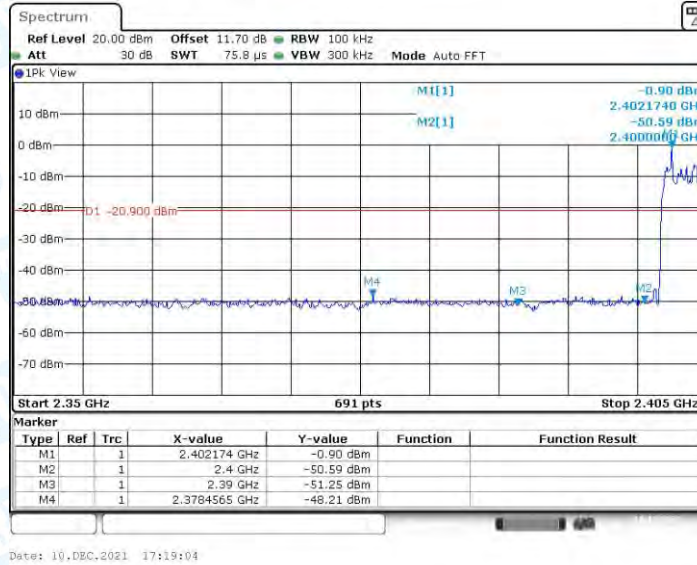
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.24	-47.98	≤ -20.24	PASS
		High	2480	-2.57	-46.49	≤ -22.57	PASS
		Low	Hop_2402	-1.06	-48.36	≤ -21.06	PASS
		High	Hop_2480	0.56	-46.66	≤ -19.44	PASS
2DH5	Ant1	Low	2402	-0.40	-48.26	≤ -20.4	PASS
		High	2480	-3.99	-46.63	≤ -23.99	PASS
		Low	Hop_2402	-0.90	-48.21	≤ -20.9	PASS
		High	Hop_2480	-4.22	-46.17	≤ -24.22	PASS
3DH5	Ant1	Low	2402	-0.19	-48.14	≤ -20.19	PASS
		High	2480	-4.13	-46.81	≤ -24.13	PASS
		Low	Hop_2402	-7.80	-47.9	≤ -27.8	PASS
		High	Hop_2480	-4.36	-46.54	≤ -24.36	PASS

7.2. Test Graphs

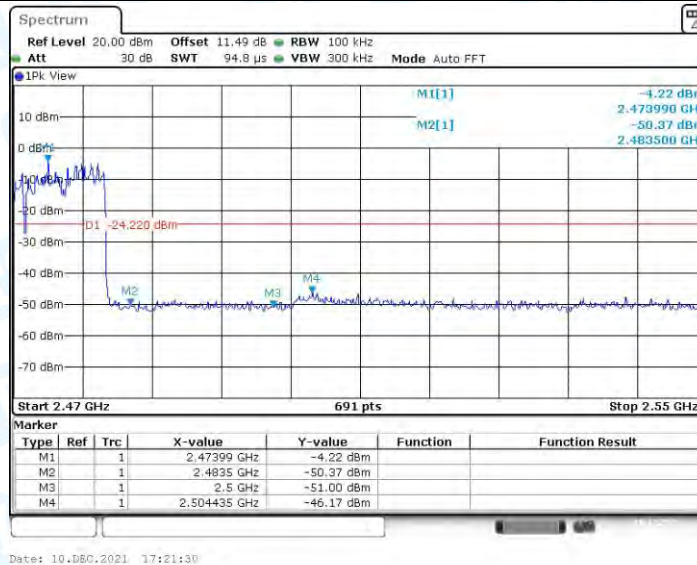




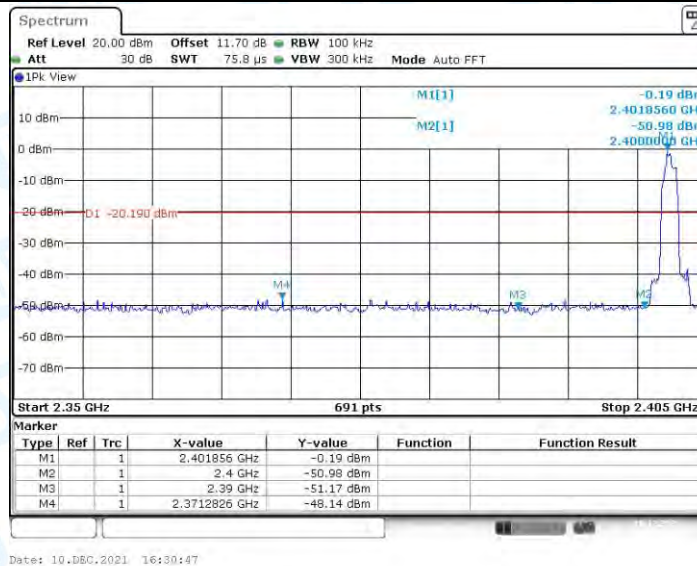
2DH5_Ant1_Low_Hop_2402



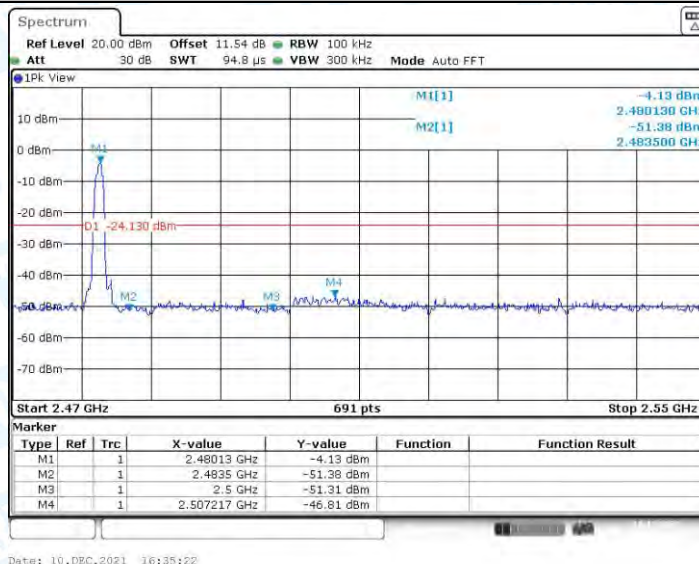
2DH5_Ant1_High_Hop_2480



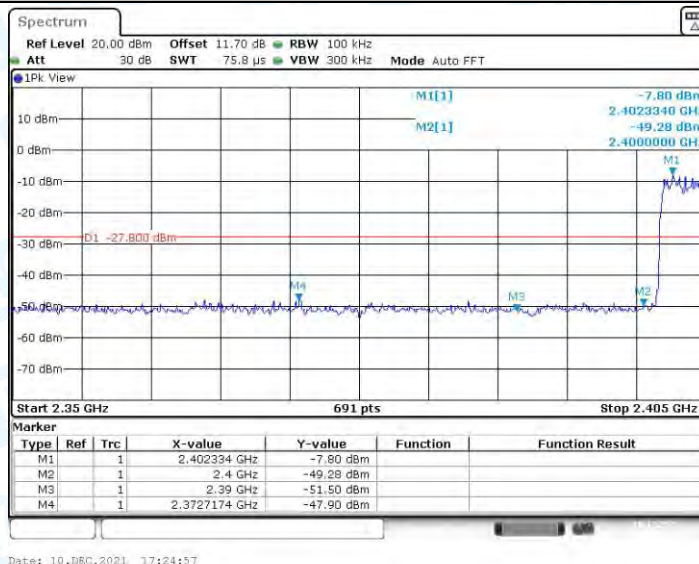
3DH5_Ant1_Low_2402



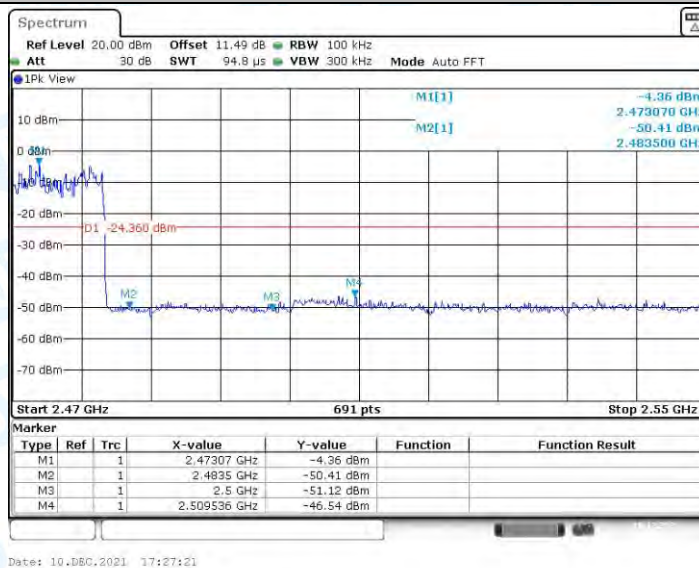
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480

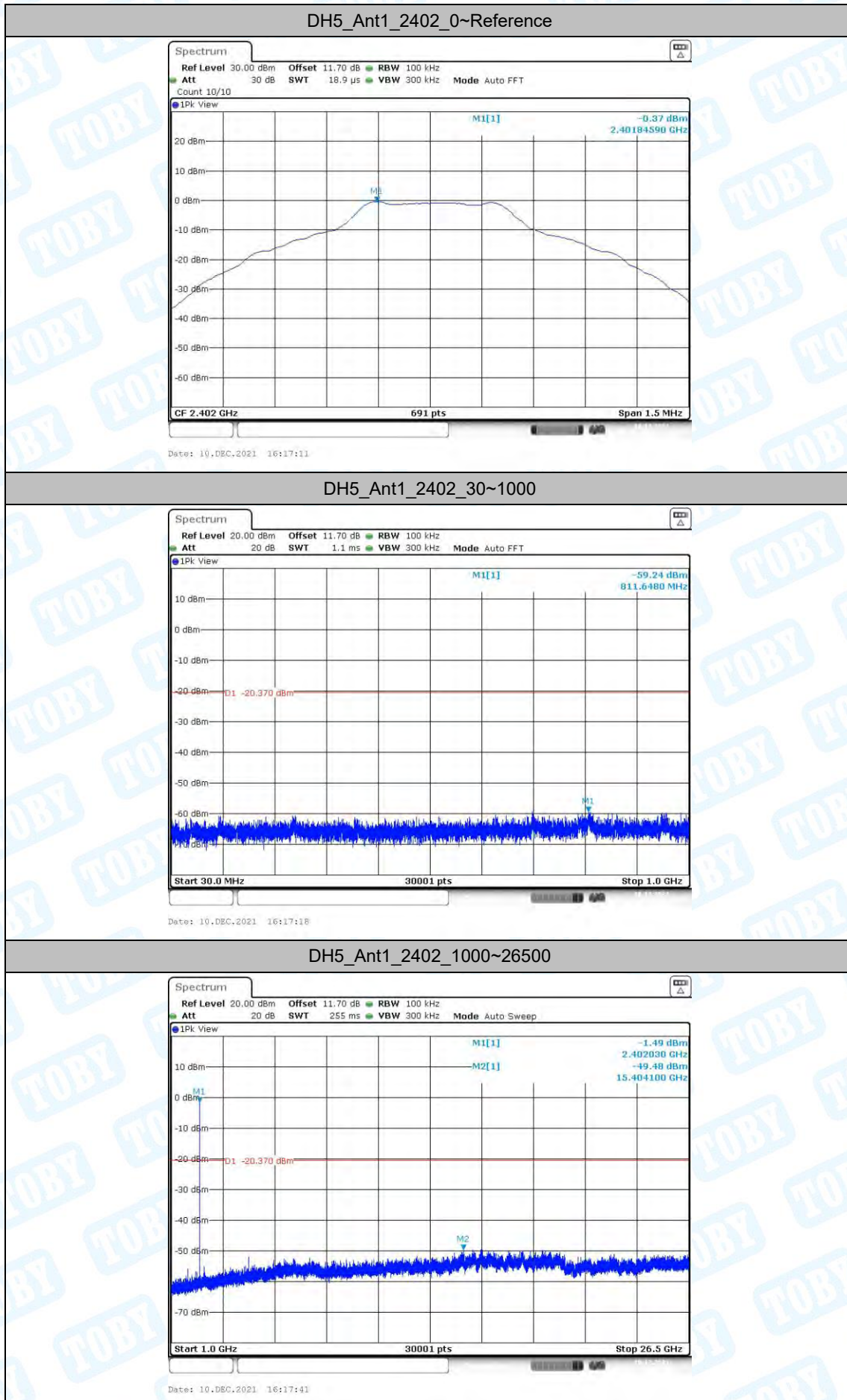


8. Conducted Spurious Emission

8.1. Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.37	-0.37	---	PASS
			30~1000	-0.37	-59.24	≤-20.37	PASS
			1000~26500	-0.37	-49.48	≤-20.37	PASS
		2441	Reference	-1.31	-1.31	---	PASS
			30~1000	-1.31	-59.44	≤-21.31	PASS
			1000~26500	-1.31	-49.29	≤-21.31	PASS
		2480	Reference	-2.66	-2.66	---	PASS
			30~1000	-2.66	-58.95	≤-22.66	PASS
			1000~26500	-2.66	-49.08	≤-22.66	PASS
2DH5	Ant1	2402	Reference	-0.56	-0.56	---	PASS
			30~1000	-0.56	-58.29	≤-20.56	PASS
			1000~26500	-0.56	-49.24	≤-20.56	PASS
		2441	Reference	-1.69	-1.69	---	PASS
			30~1000	-1.69	-57.7	≤-21.69	PASS
			1000~26500	-1.69	-49.65	≤-21.69	PASS
		2480	Reference	-3.28	-3.28	---	PASS
			30~1000	-3.28	-57.65	≤-23.28	PASS
			1000~26500	-3.28	-49.9	≤-23.28	PASS
3DH5	Ant1	2402	Reference	-0.36	-0.36	---	PASS
			30~1000	-0.36	-58.53	≤-20.36	PASS
			1000~26500	-0.36	-49.33	≤-20.36	PASS
		2441	Reference	-1.30	-1.30	---	PASS
			30~1000	-1.30	-59.13	≤-21.3	PASS
			1000~26500	-1.30	-48.6	≤-21.3	PASS
		2480	Reference	0.73	0.73	---	PASS
			30~1000	0.73	-58.86	≤-19.27	PASS
			1000~26500	0.73	-49.67	≤-19.27	PASS

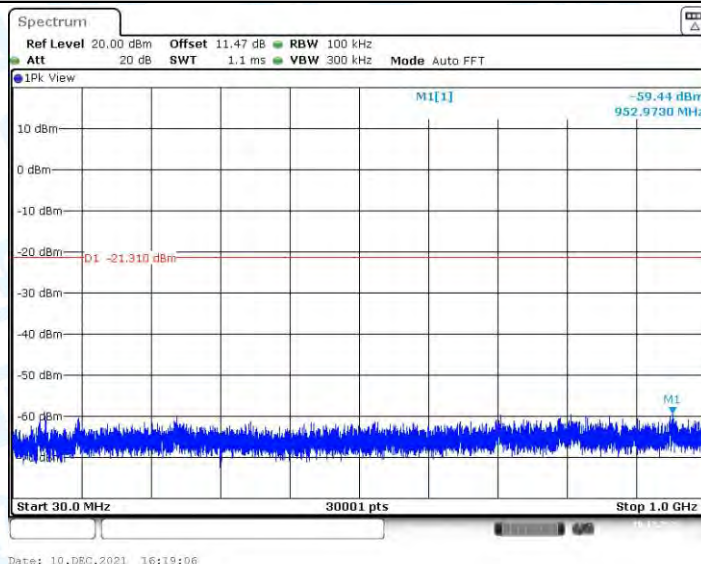
8.2.Test Graphs



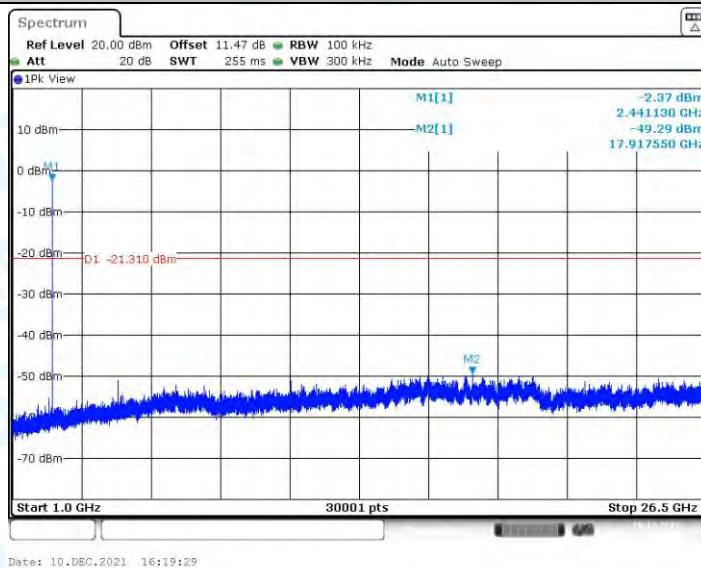
DH5_Ant1_2441_0~Reference



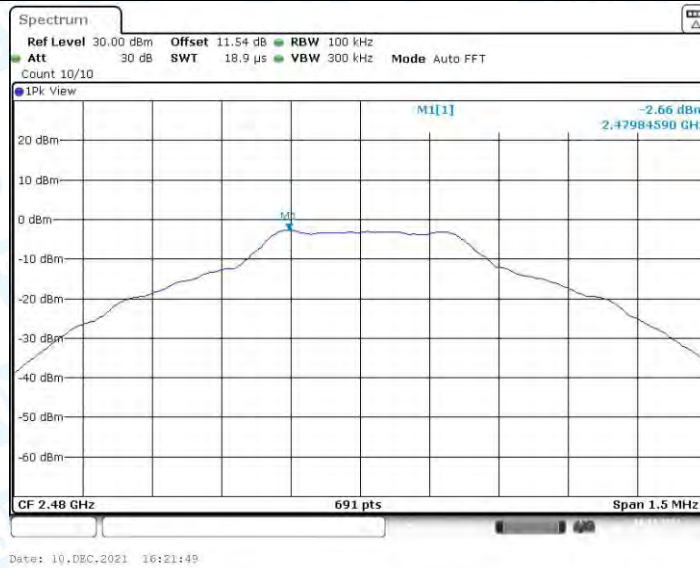
DH5_Ant1_2441_30~1000



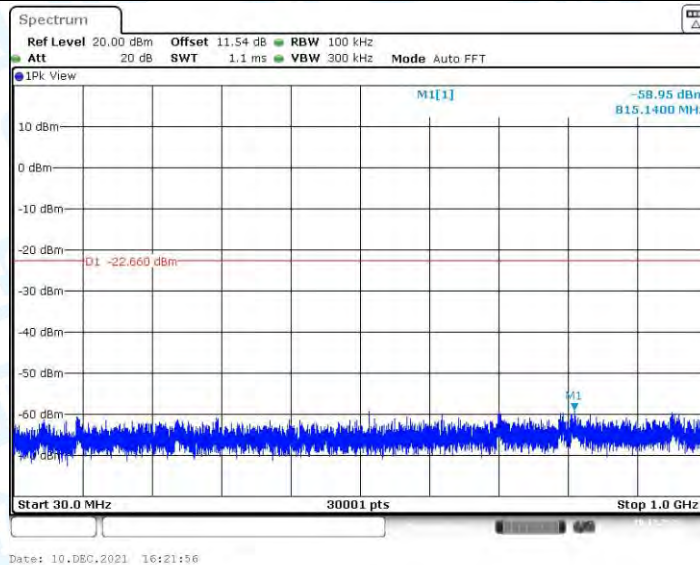
DH5_Ant1_2441_1000~26500



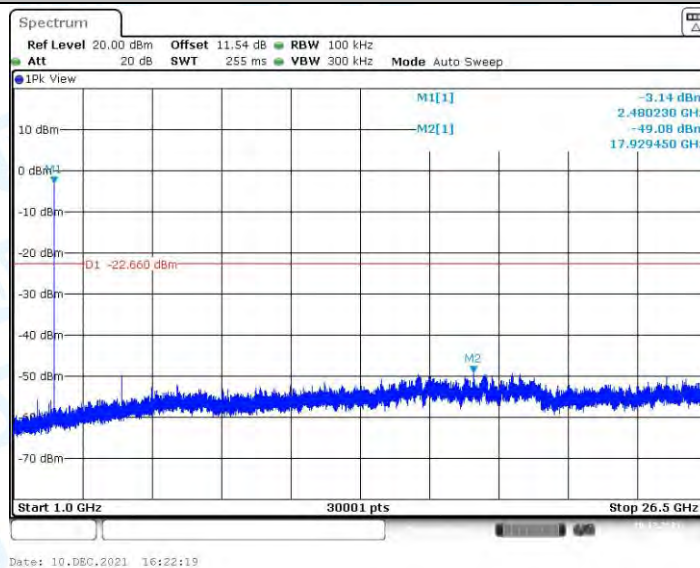
DH5_Ant1_2480_0~Reference



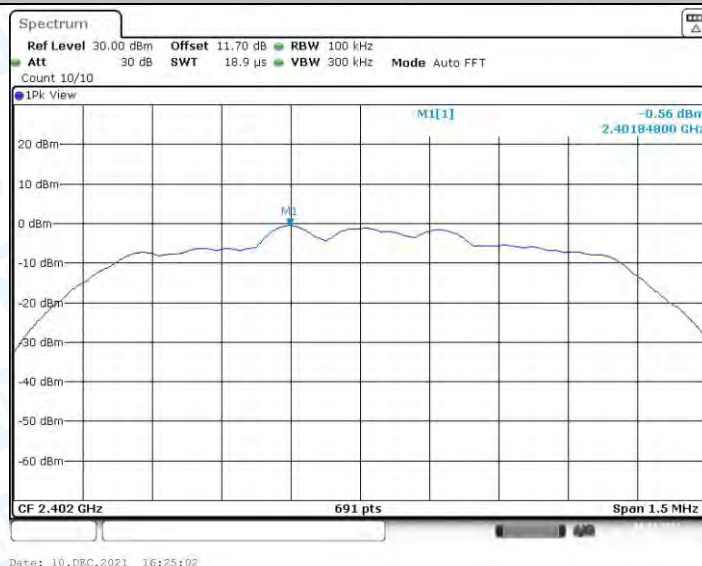
DH5_Ant1_2480_30~1000



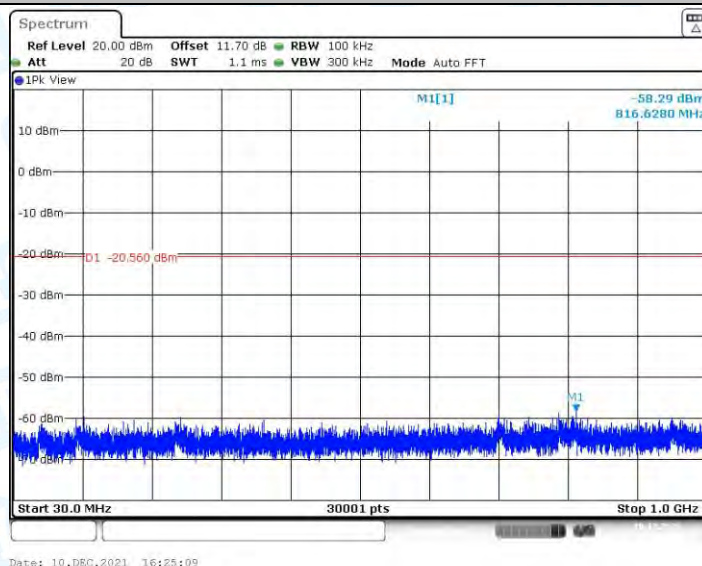
DH5_Ant1_2480_1000~26500



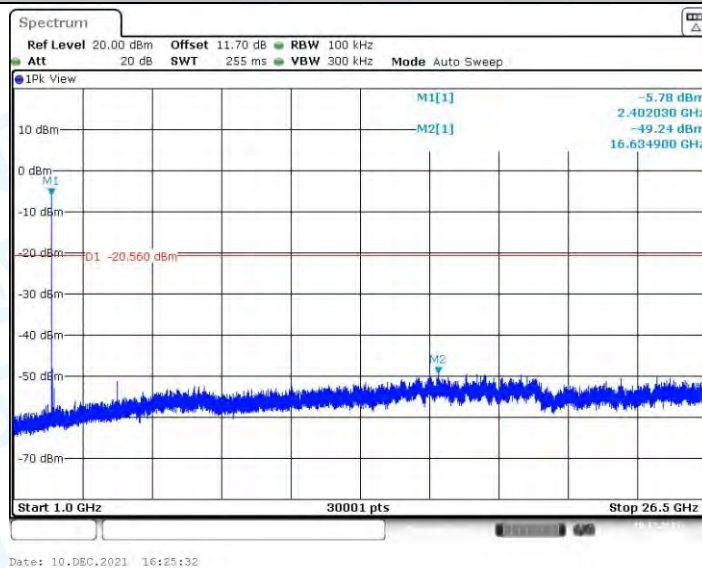
2DH5_Ant1_2402_0~Reference



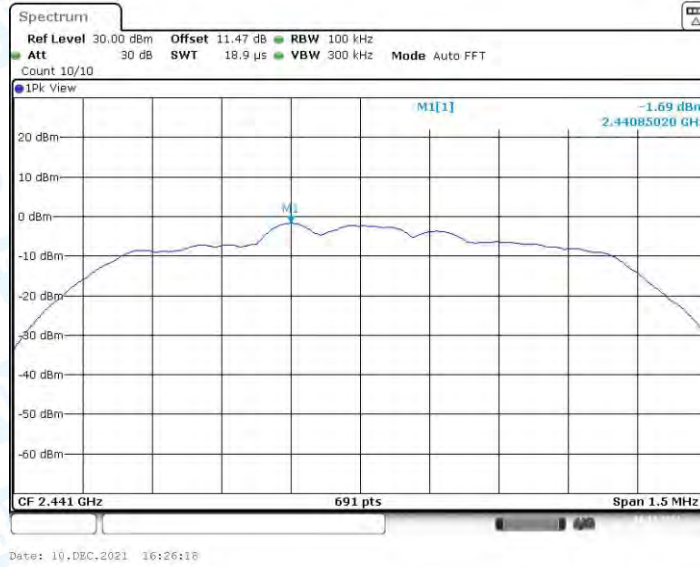
2DH5_Ant1_2402_30~1000



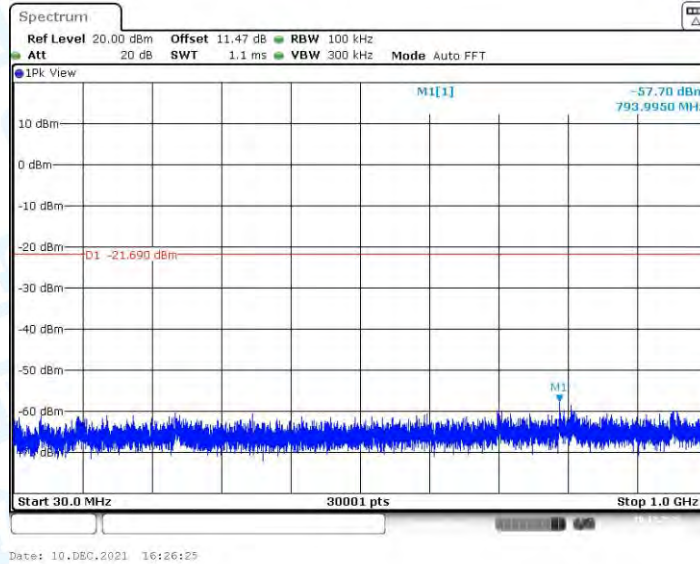
2DH5_Ant1_2402_1000~26500



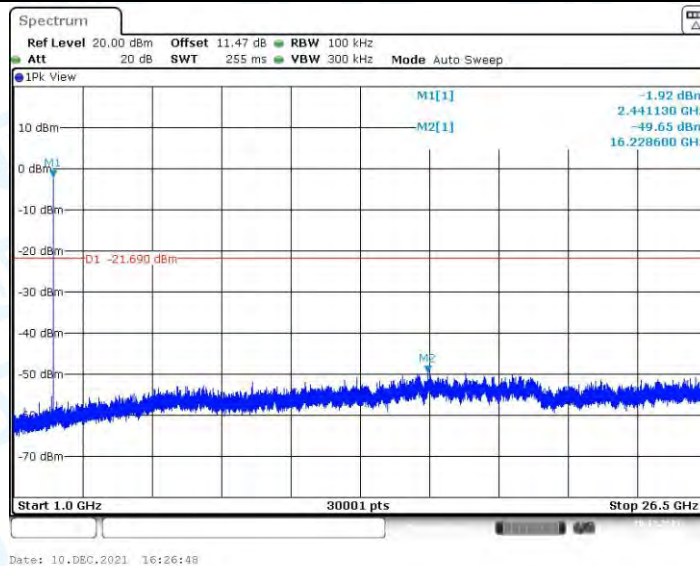
2DH5_Ant1_2441_0~Reference



2DH5_Ant1_2441_30~1000



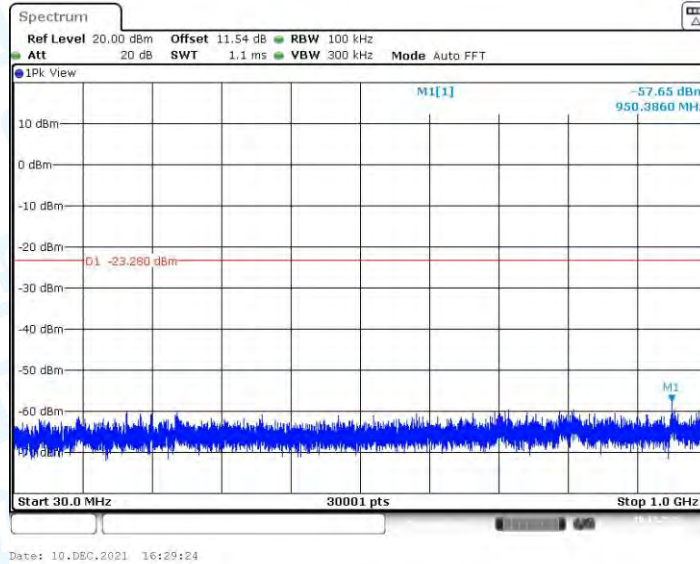
2DH5_Ant1_2441_1000~26500



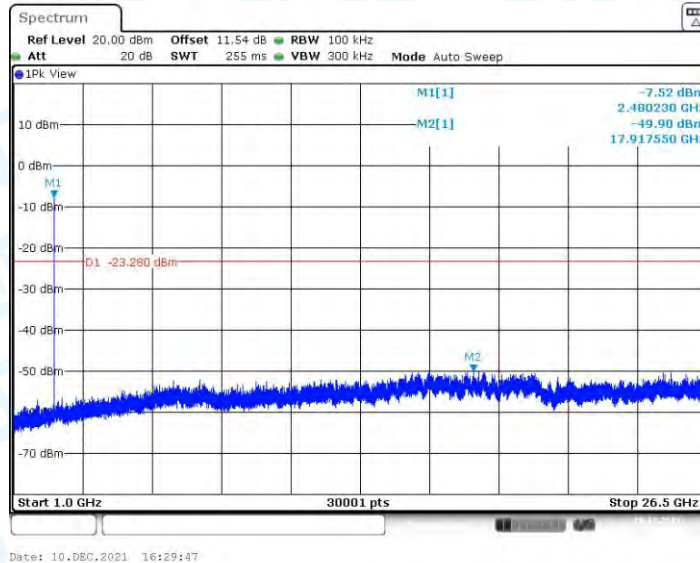
2DH5_Ant1_2480_0~Reference



2DH5_Ant1_2480_30~1000



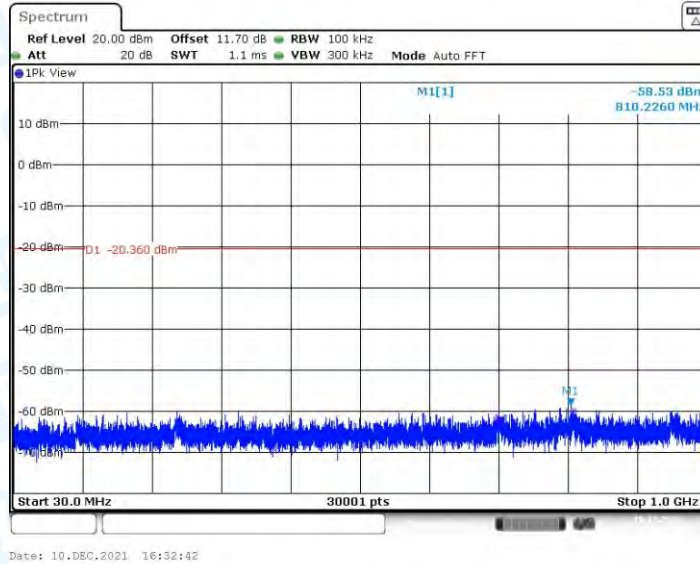
2DH5_Ant1_2480_1000~26500



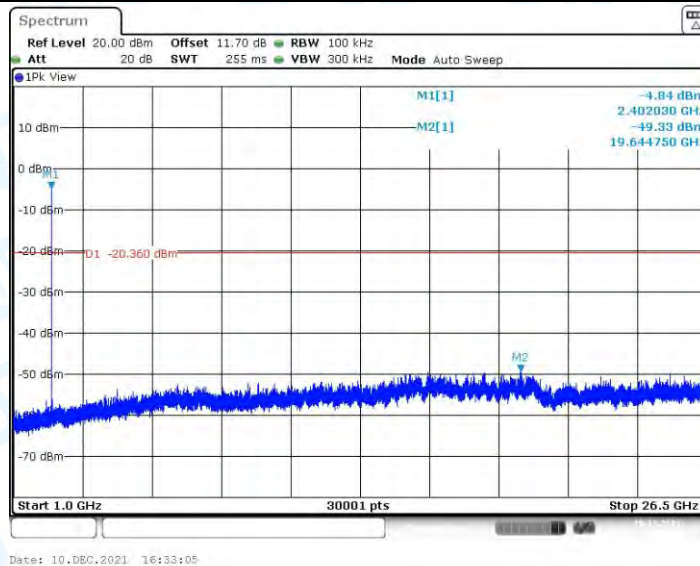
3DH5_Ant1_2402_0~Reference



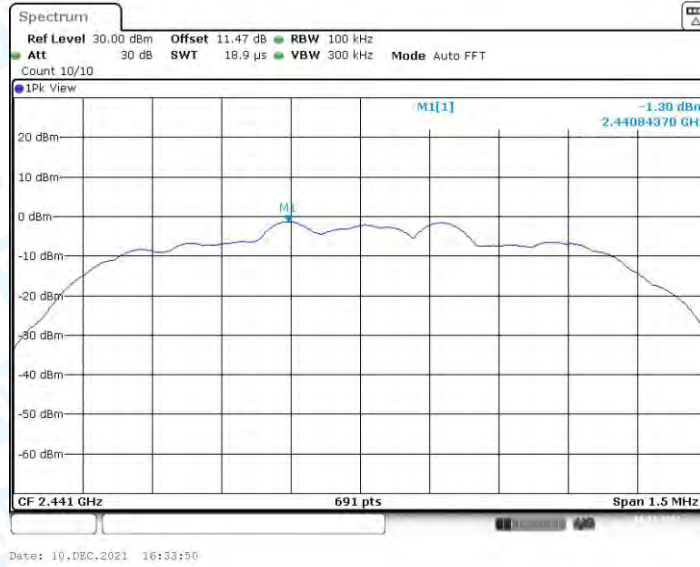
3DH5_Ant1_2402_30~1000



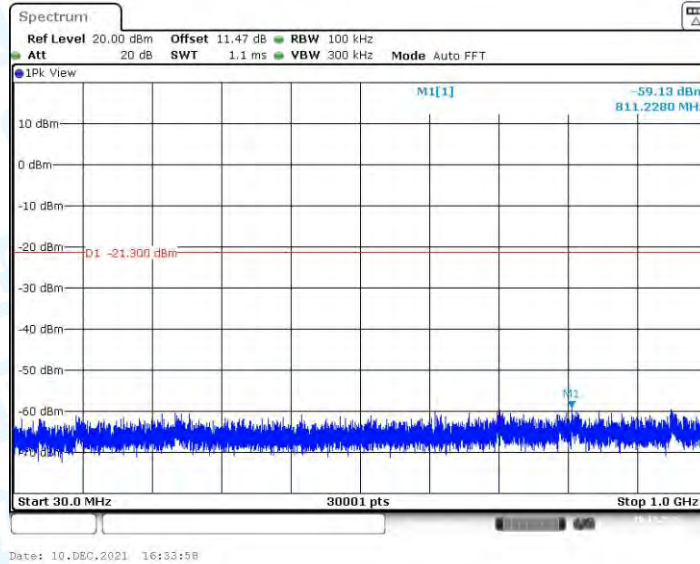
3DH5_Ant1_2402_1000~26500



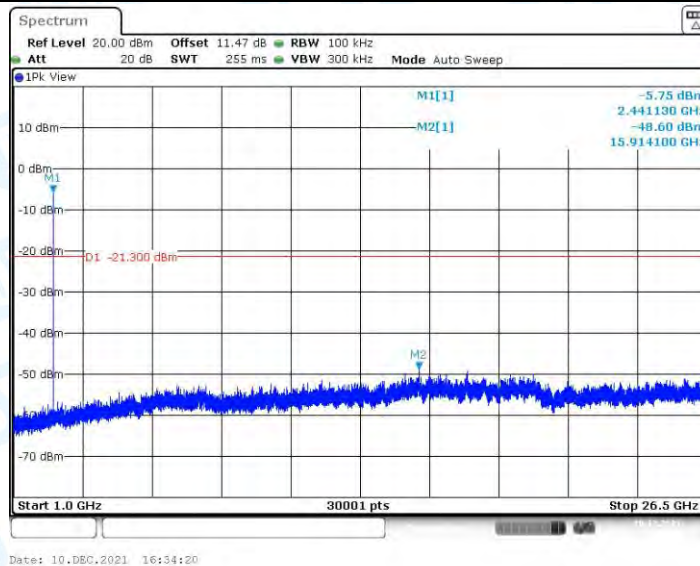
3DH5_Ant1_2441_0~Reference



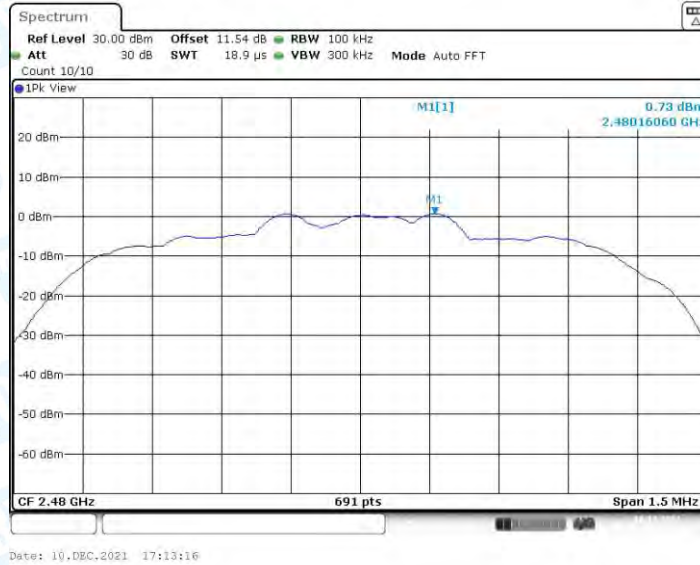
3DH5_Ant1_2441_30~1000



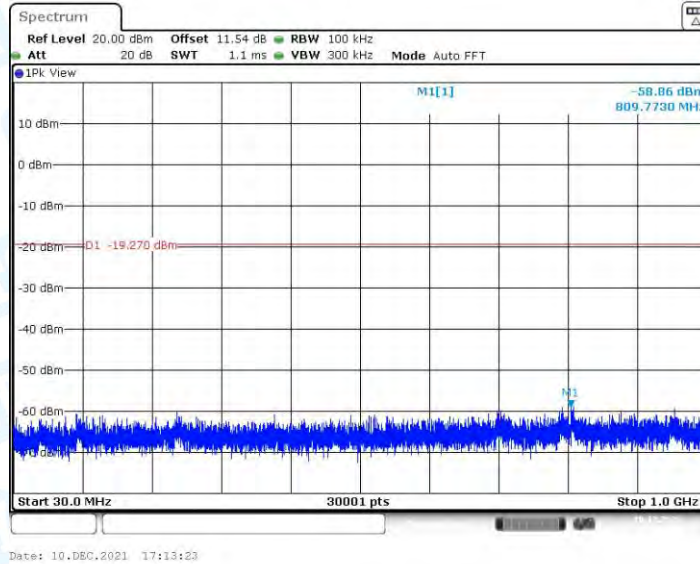
3DH5_Ant1_2441_1000~26500



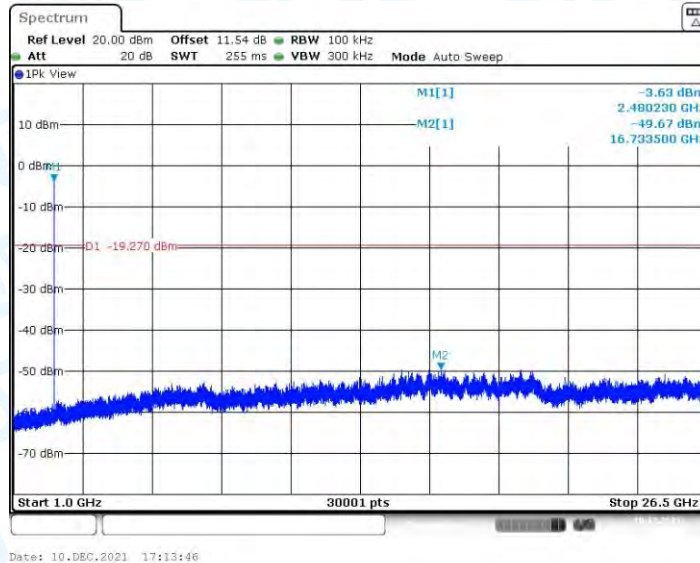
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500



9. Emissions in Restricted Bands

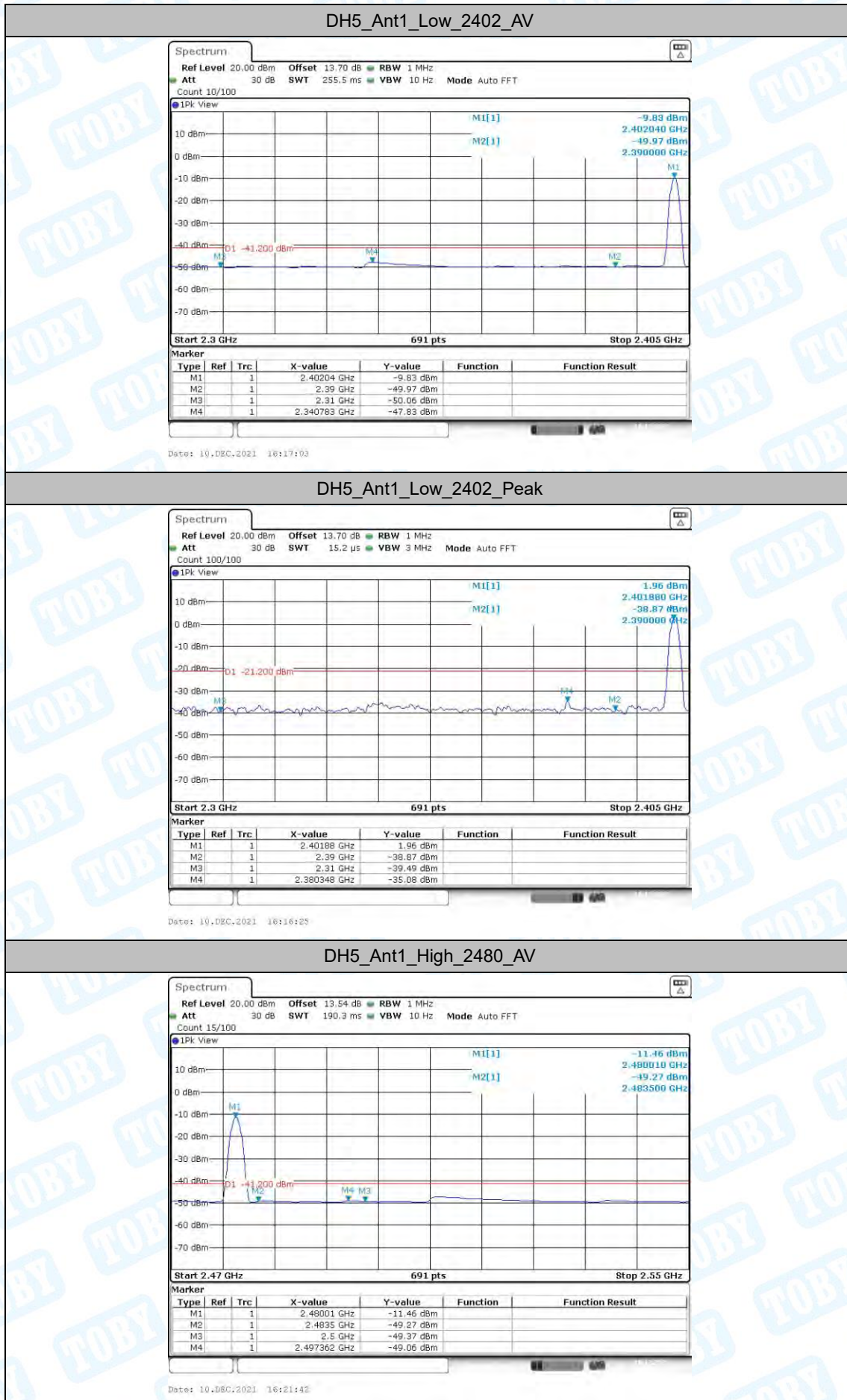
9.1. Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-50.06	≤-41.20	PASS
				AV	2340.783	-47.83	≤-41.20	PASS
				AV	2390.000	-49.97	≤-41.20	PASS
				Peak	2310.000	-39.49	≤-21.20	PASS
				Peak	2380.348	-35.08	≤-21.20	PASS
				Peak	2390.000	-38.87	≤-21.20	PASS
		High	2480	AV	2483.500	-49.27	≤-41.20	PASS
				AV	2497.362	-49.06	≤-41.20	PASS
				AV	2500.000	-49.37	≤-41.20	PASS
				Peak	2483.500	-39.8	≤-21.20	PASS
				Peak	2484.029	-36.76	≤-21.20	PASS
				Peak	2500.000	-38.37	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-50.08	≤-41.20	PASS
				AV	2341.087	-47.87	≤-41.20	PASS
				AV	2390.000	-49.98	≤-41.20	PASS
				Peak	2310.000	-38.27	≤-21.20	PASS
				Peak	2340.630	-35.5	≤-21.20	PASS
				Peak	2390.000	-38.82	≤-21.20	PASS
		High	2480	AV	2483.500	-49.28	≤-41.20	PASS
				AV	2497.246	-49.02	≤-41.20	PASS
				AV	2500.000	-49.34	≤-41.20	PASS
				Peak	2483.500	-39.32	≤-21.20	PASS
				Peak	2486.928	-36.63	≤-21.20	PASS
				Peak	2500.000	-37.8	≤-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-50.1	≤-41.20	PASS
				AV	2340.935	-47.81	≤-41.20	PASS
				AV	2390.000	-49.98	≤-41.20	PASS
				Peak	2310.000	-39.95	≤-21.20	PASS
				Peak	2340.174	-35.79	≤-21.20	PASS
				Peak	2390.000	-36.75	≤-21.20	PASS
		High	2480	AV	2483.500	-49.27	≤-41.20	PASS
				AV	2497.246	-49.06	≤-41.20	PASS
				AV	2500.000	-49.35	≤-41.20	PASS
				Peak	2483.500	-38.78	≤-21.20	PASS
				Peak	2485.304	-36.37	≤-21.20	PASS
				Peak	2500.000	-37.34	≤-21.20	PASS

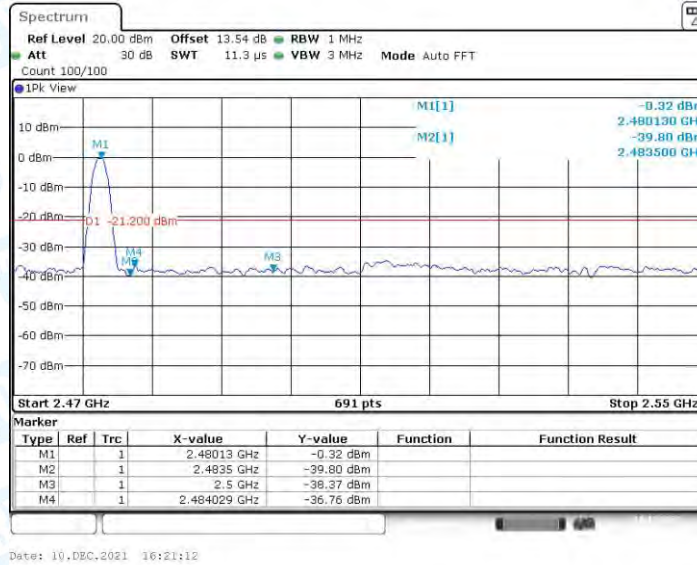
Note:

- 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.

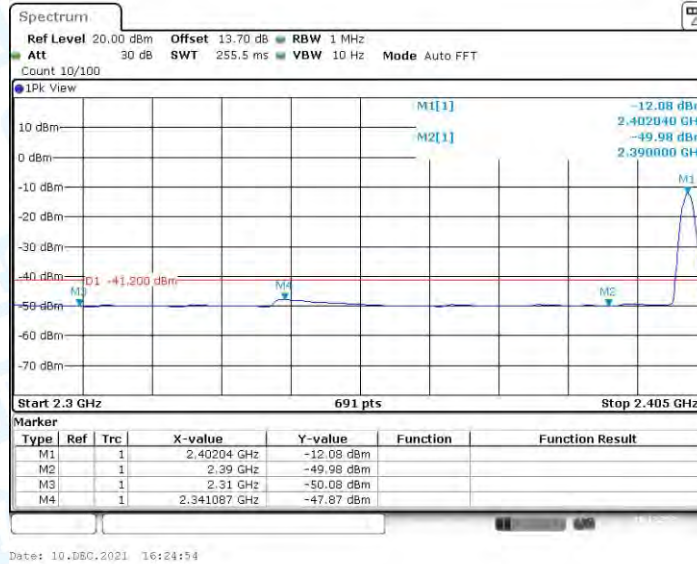
9.2. Test Graphs



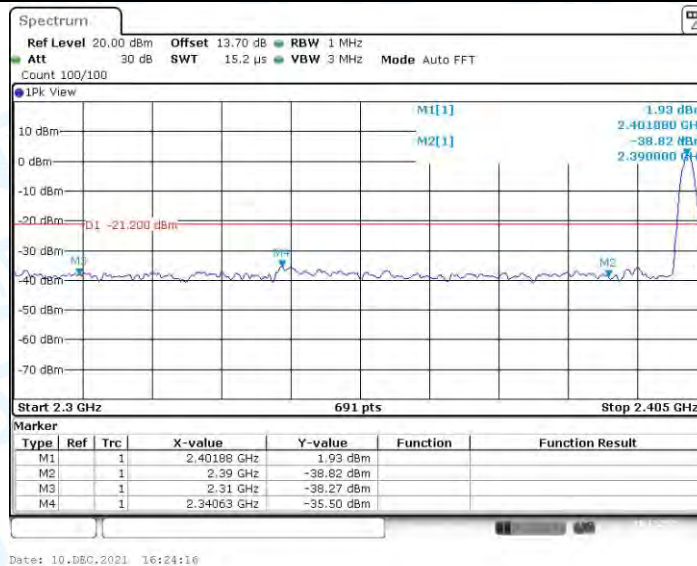
DH5_Ant1_High_2480_Peak



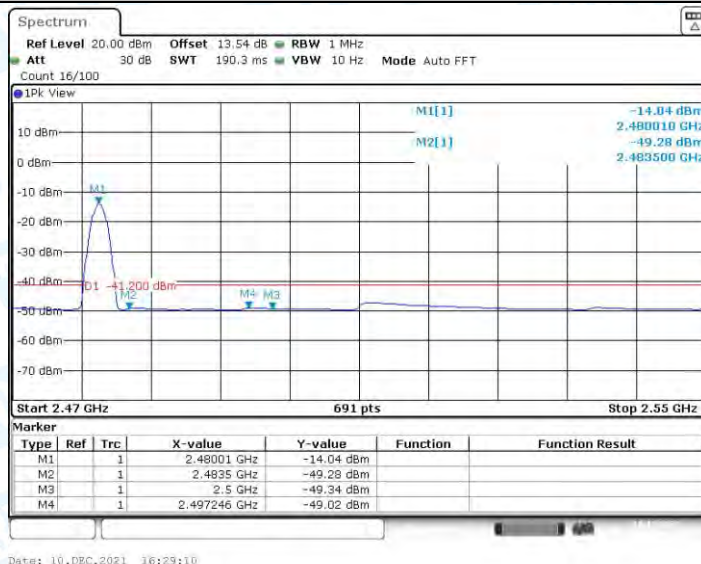
2DH5_Ant1_Low_2402_AV



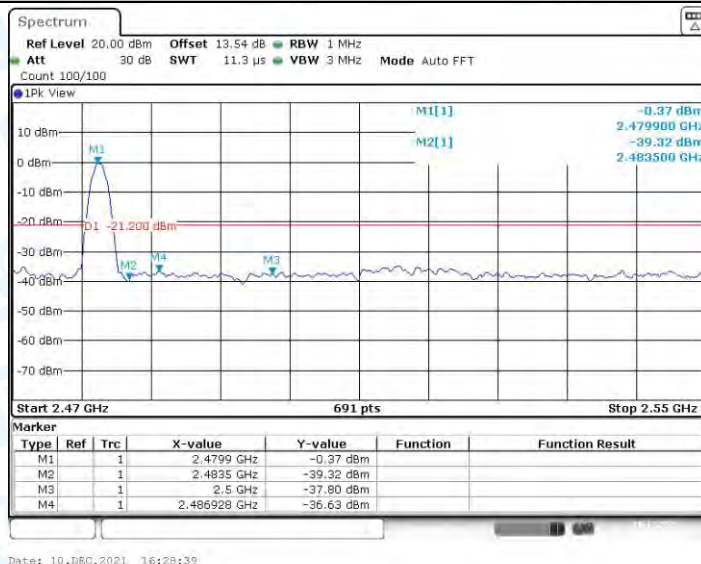
2DH5_Ant1_Low_2402_Peak



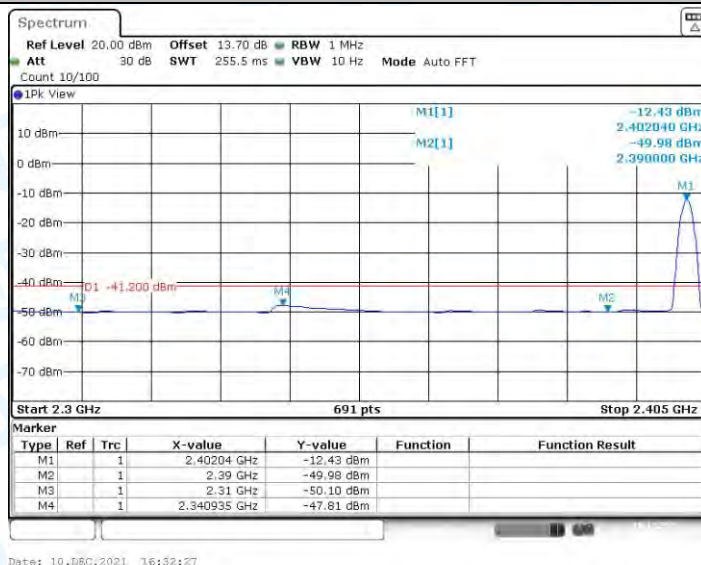
2DH5_Ant1_High_2480_AV



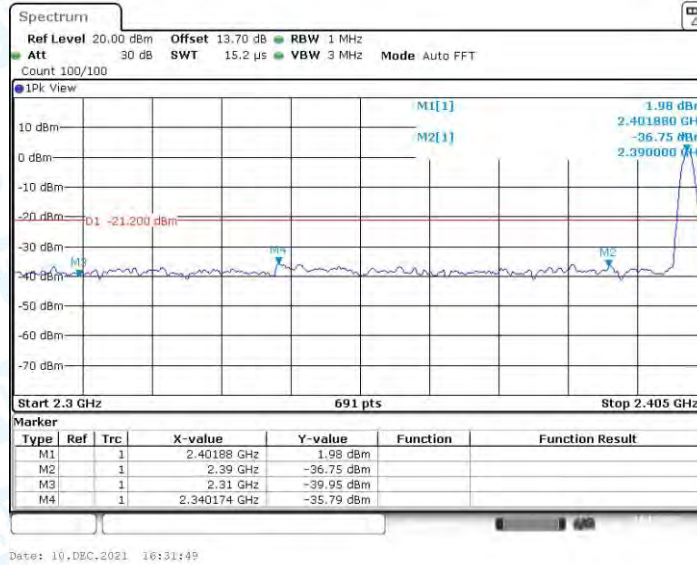
2DH5_Ant1_High_2480_Peak



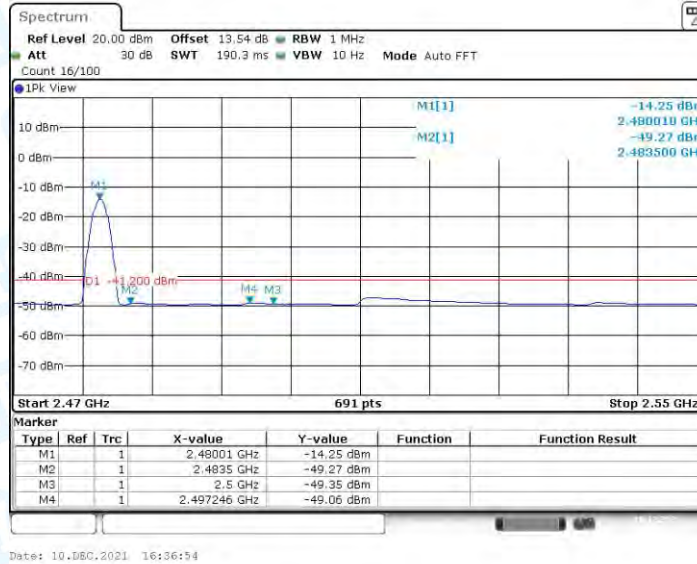
3DH5_Ant1_Low_2402_AV



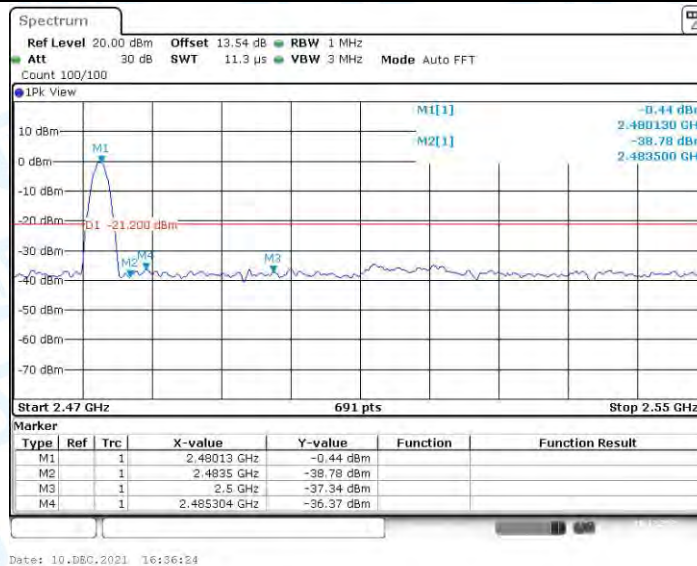
3DH5_Ant1_Low_2402_Peak



3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak



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