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

General Description of EUT	
Product Name:	**StiX**
Test Model:	**5700**
Sample ID:	**20211022-08_1-01**
Environmental Conditions	
Temperature:	**25℃**
Relative Humidity:	**45%**
Test Voltage:	**AC 120V**
Test Engineer:	**HUANGJIANPING**
Note: For a more detailed features description, please refer to the report TB-FCC184366	

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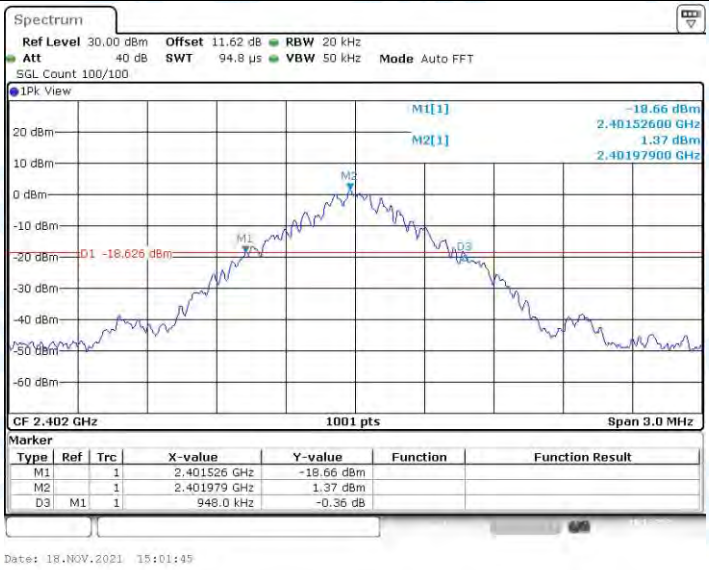
1. 20dB Emission Bandwidth

1.1.Test Result

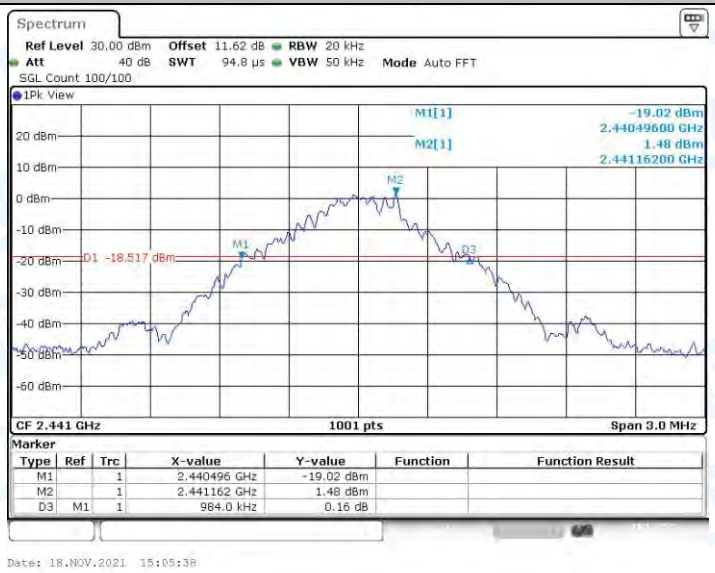
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.948	2401.526	2402.474	---	PASS
		2441	0.984	2440.496	2441.480	---	PASS
		2480	0.942	2479.496	2480.438	---	PASS
2DH5	Ant1	2402	1.344	2401.334	2402.678	---	PASS
		2441	1.344	2440.334	2441.678	---	PASS
		2480	1.335	2479.337	2480.672	---	PASS
3DH5	Ant1	2402	1.344	2401.325	2402.669	---	PASS
		2441	1.314	2440.334	2441.648	---	PASS
		2480	1.347	2479.328	2480.675	---	PASS

1.2.Test Graphs

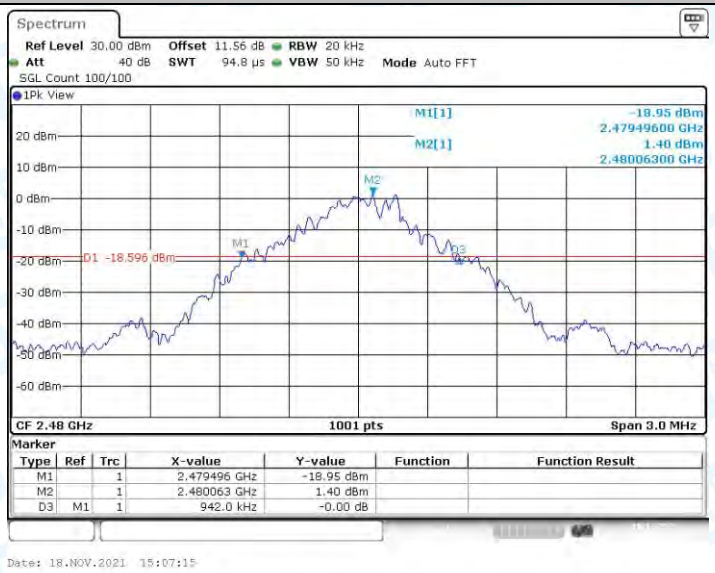
DH5_Ant1_2402



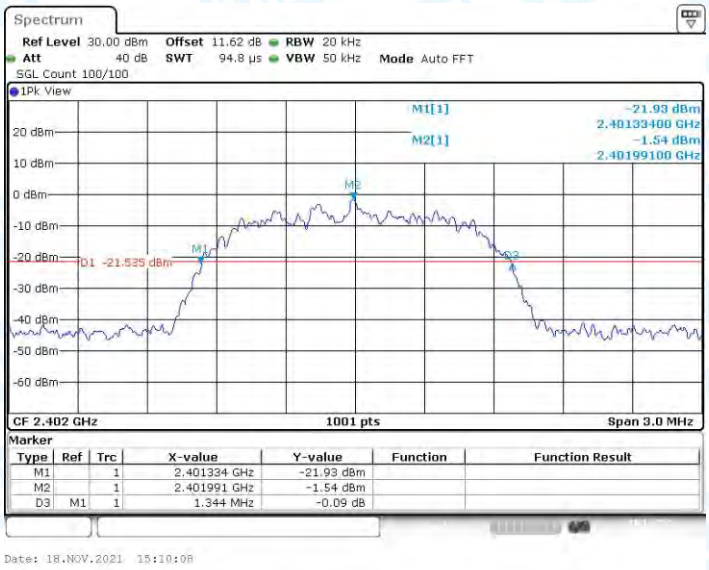
DH5_Ant1_2441



DH5_Ant1_2480



2DH5_Ant1_2402



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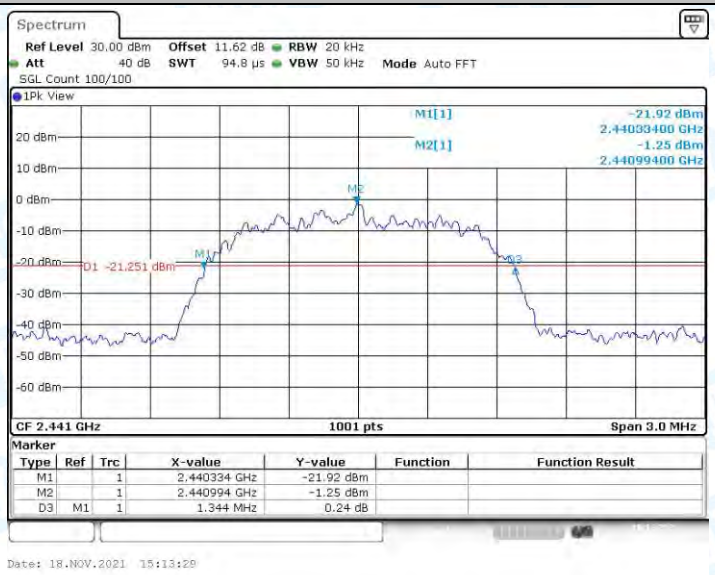

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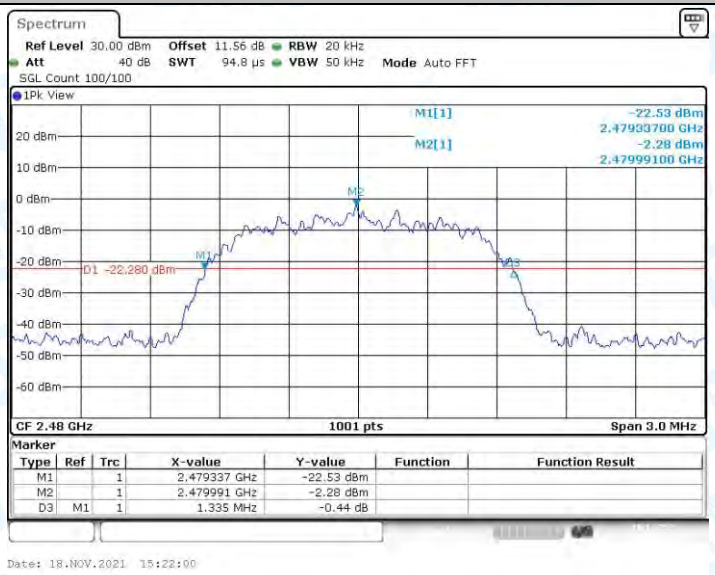
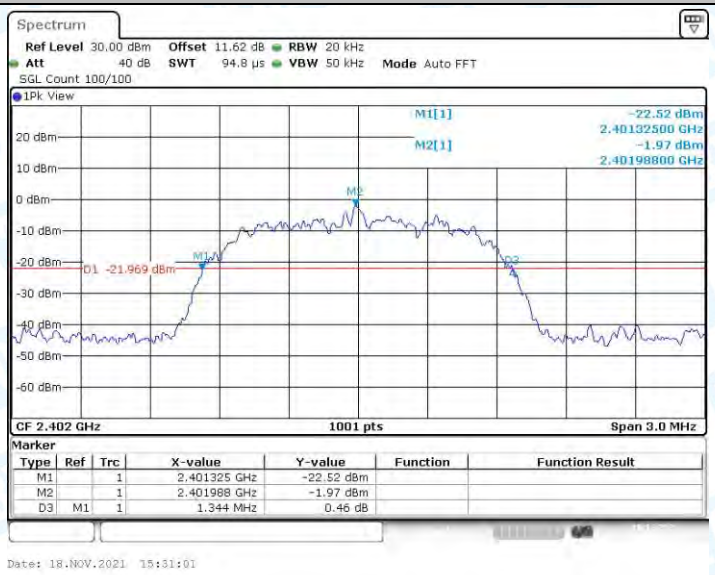


3DH5_Ant1_2402



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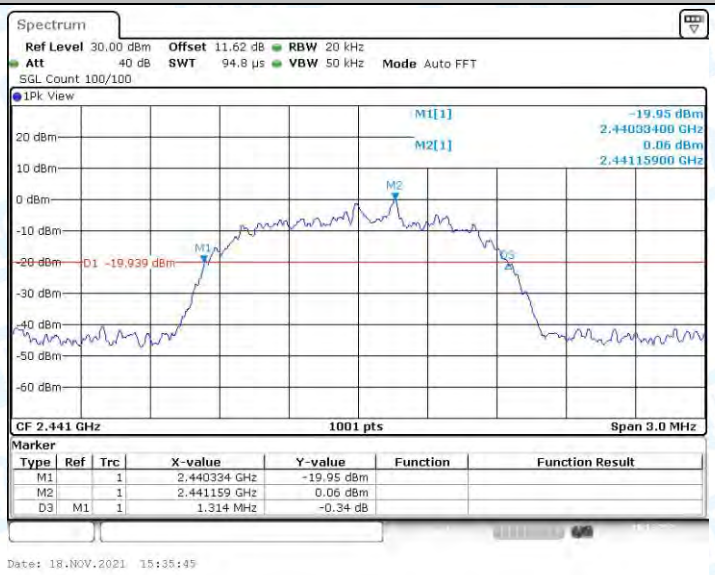

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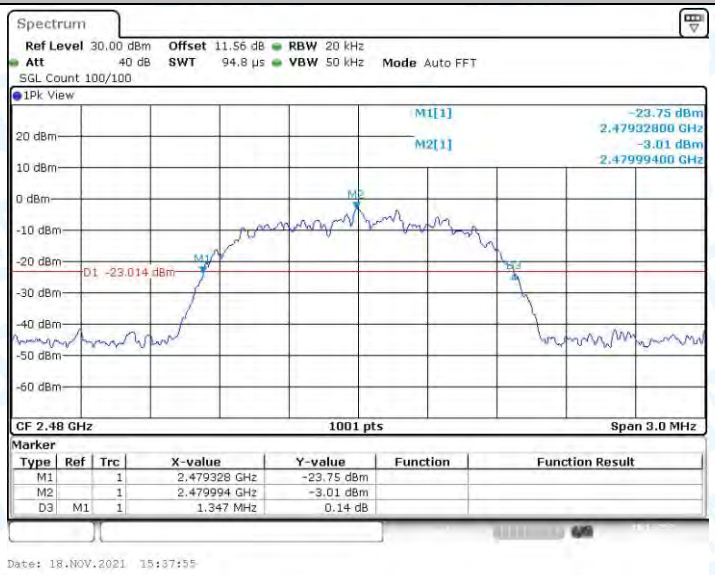


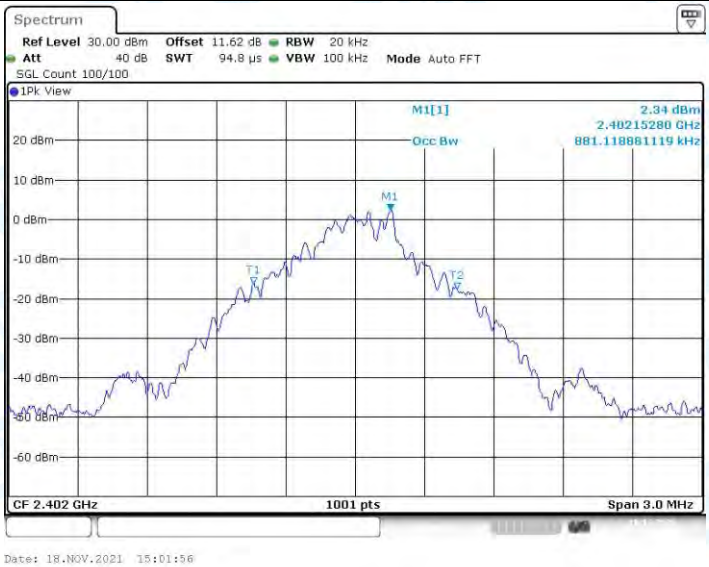
2. Occupied Channel Bandwidth

2.1.Test Result

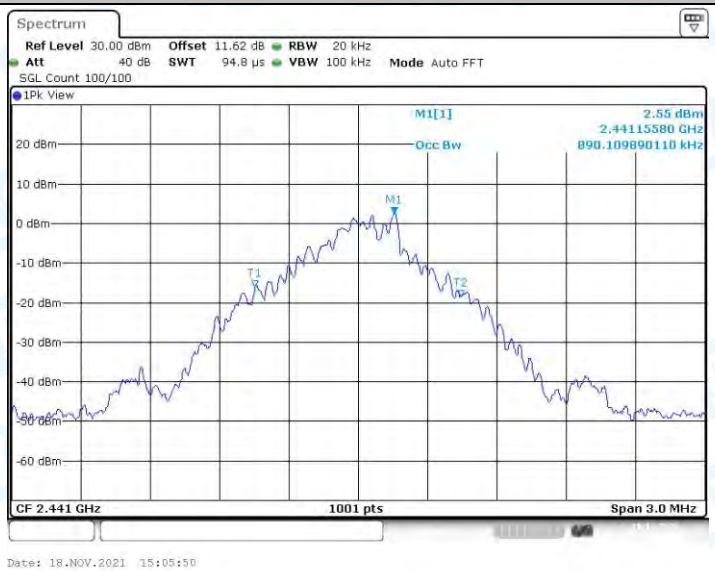
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.881	2401.559	2402.441	---	PASS
		2441	0.89	2440.553	2441.444	---	PASS
		2480	0.893	2479.556	2480.450	---	PASS
2DH5	Ant1	2402	1.202	2401.398	2402.599	---	PASS
		2441	1.223	2440.389	2441.611	---	PASS
		2480	1.214	2479.398	2480.611	---	PASS
3DH5	Ant1	2402	1.211	2401.389	2402.599	---	PASS
		2441	1.22	2440.386	2441.605	---	PASS
		2480	1.208	2479.398	2480.605	---	PASS

2.2.Test Graphs

DH5_Ant1_2402



DH5_Ant1_2441



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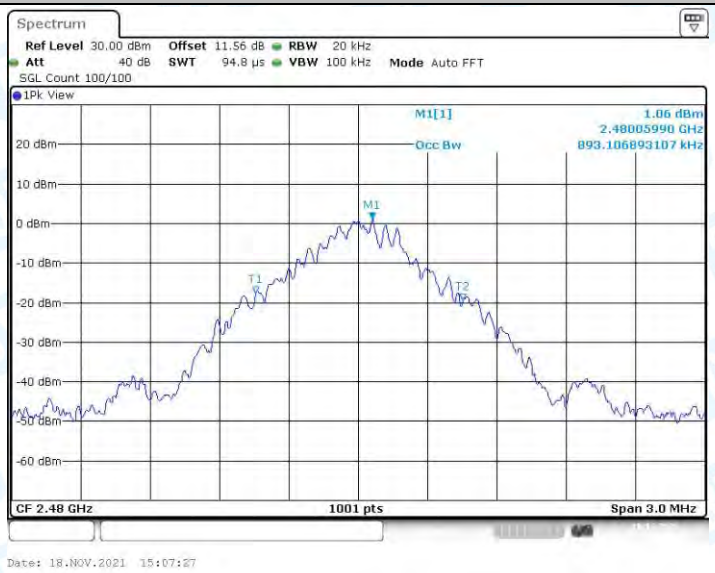
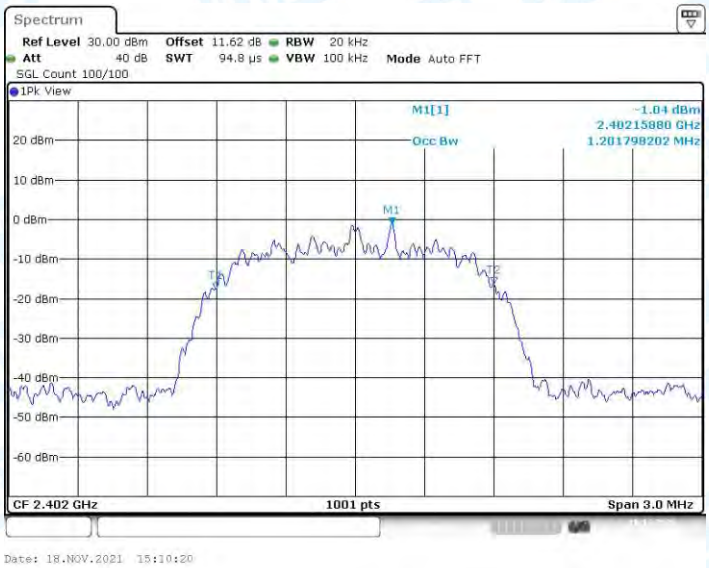
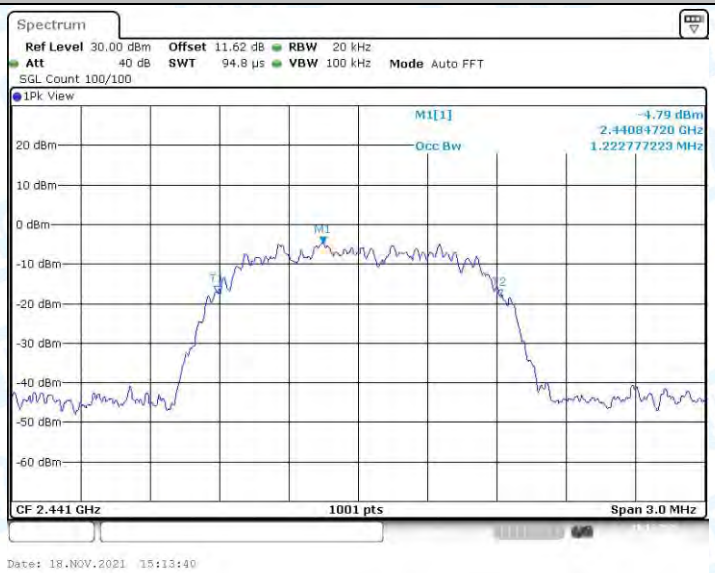


2DH5_Ant1_2402



2DH5_Ant1_2441



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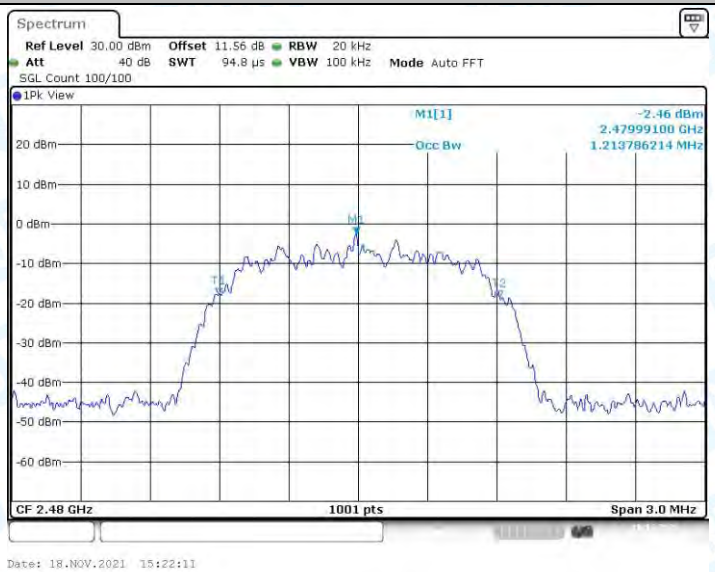
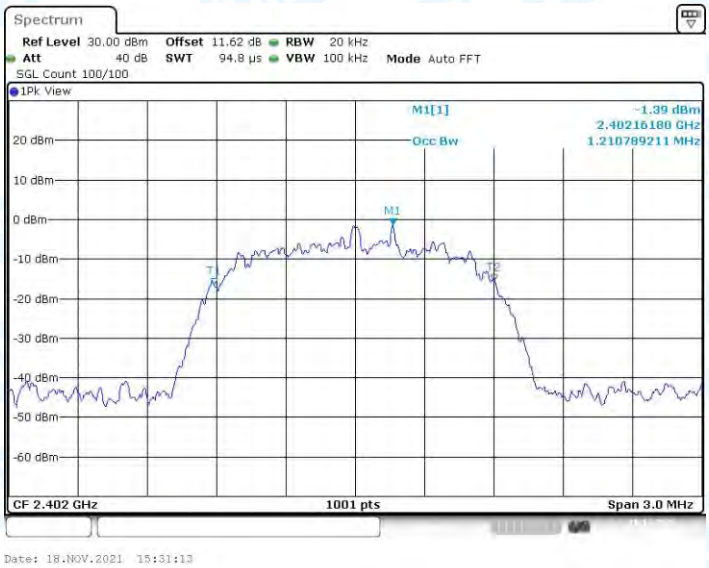
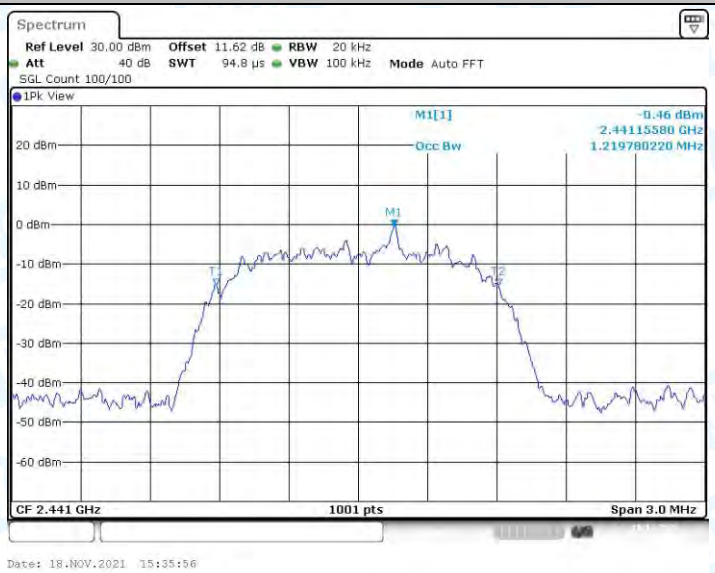


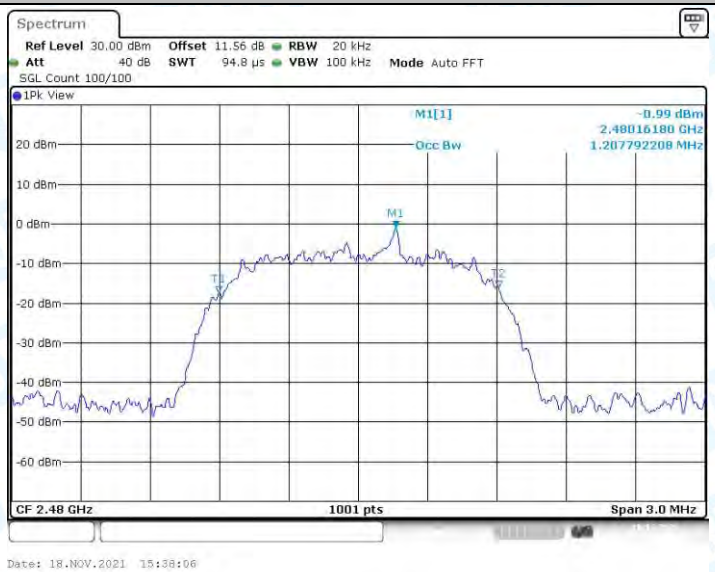
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



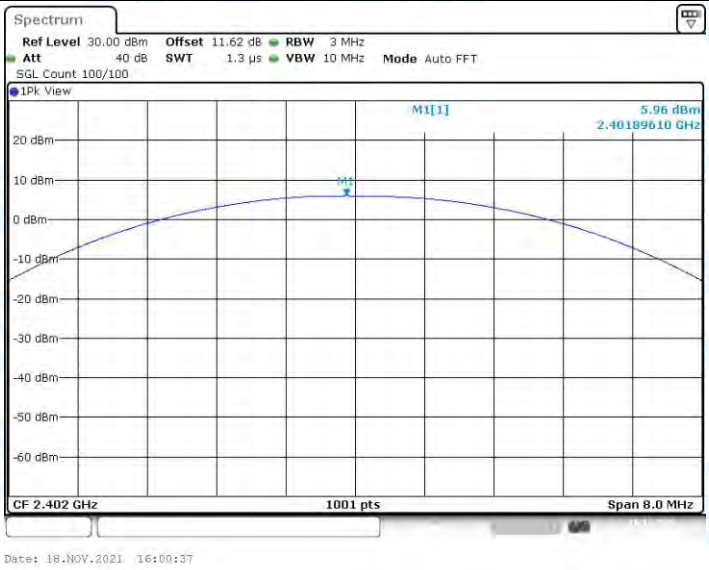
3. Maximum conducted output power

3.1.Test Result

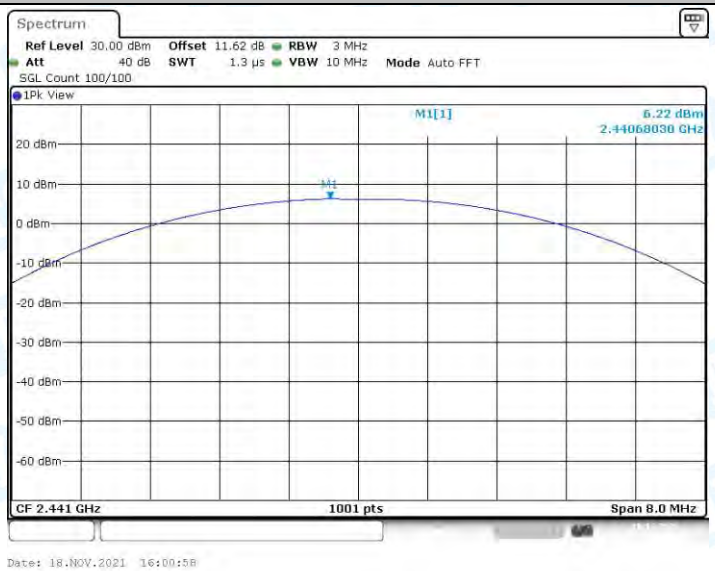
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	5.96	≤20.97	PASS
		2441	6.22	≤20.97	PASS
		2480	5.38	≤20.97	PASS
2DH5	Ant1	2402	5.75	≤20.97	PASS
		2441	5.71	≤20.97	PASS
		2480	4.94	≤20.97	PASS
3DH5	Ant1	2402	5.55	≤20.97	PASS
		2441	6.09	≤20.97	PASS
		2480	4.84	≤20.97	PASS

3.2.Test Graphs

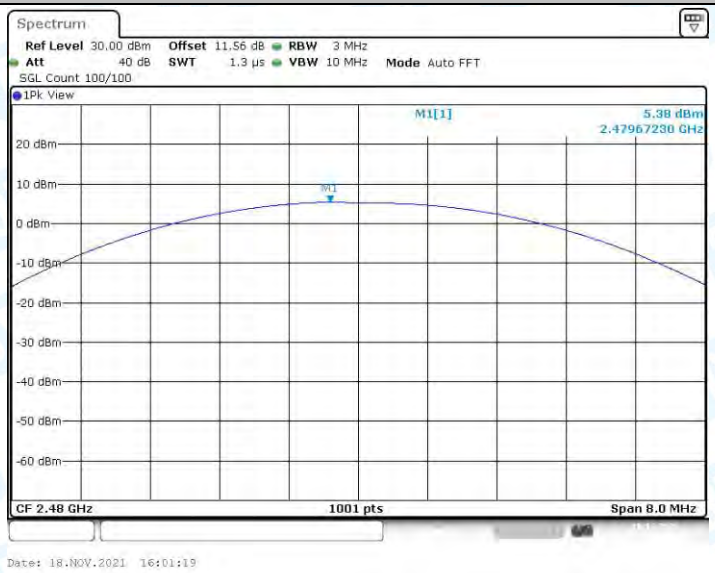
DH5_Ant1_2402



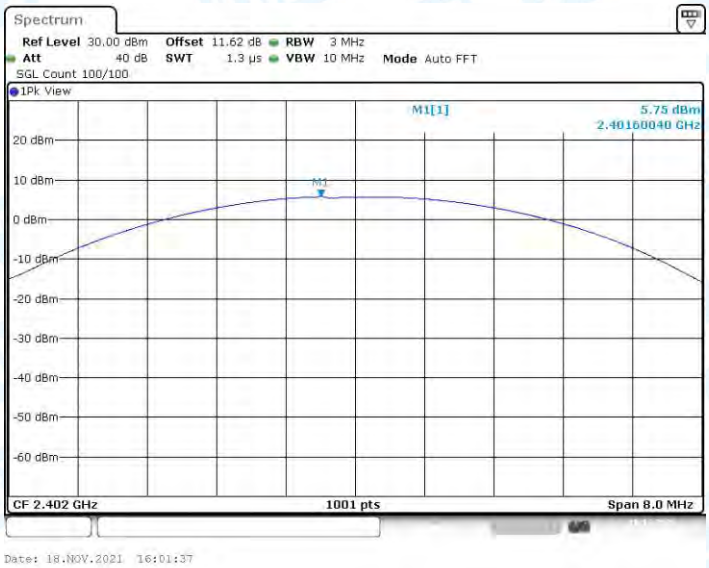
DH5_Ant1_2441



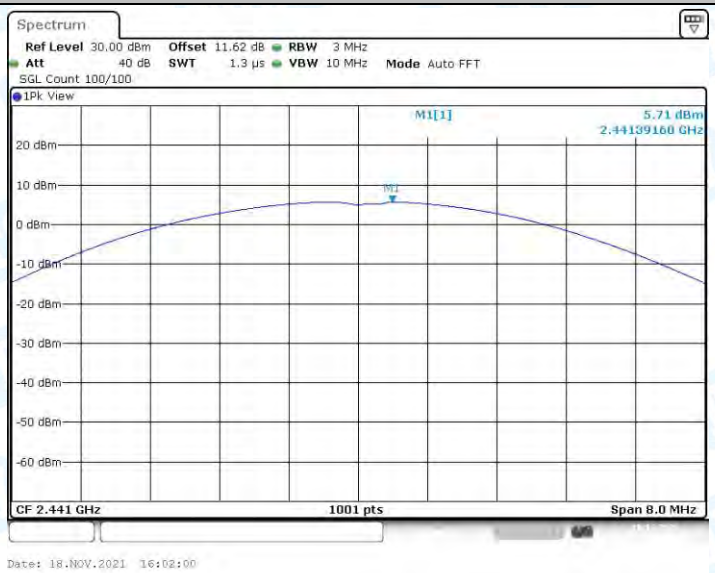
DH5_Ant1_2480



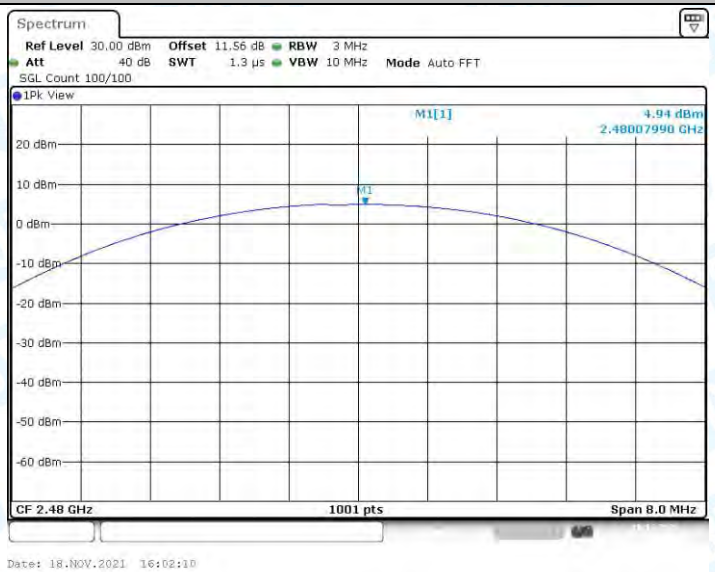
2DH5_Ant1_2402



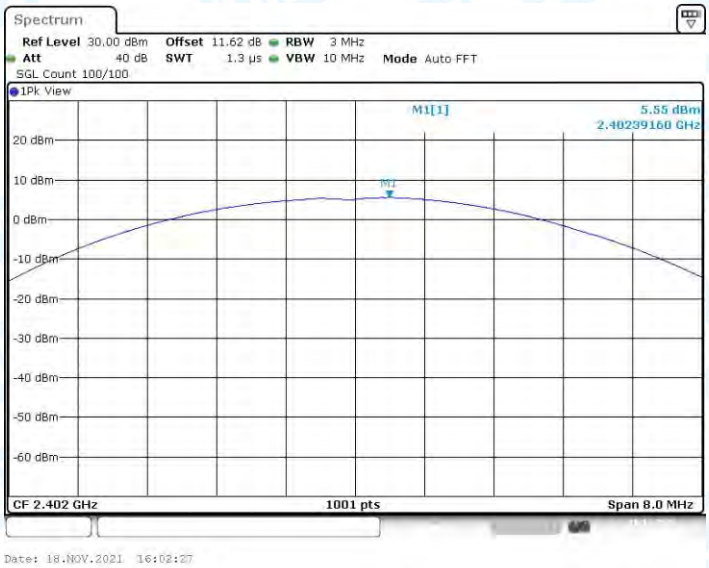
2DH5_Ant1_2441



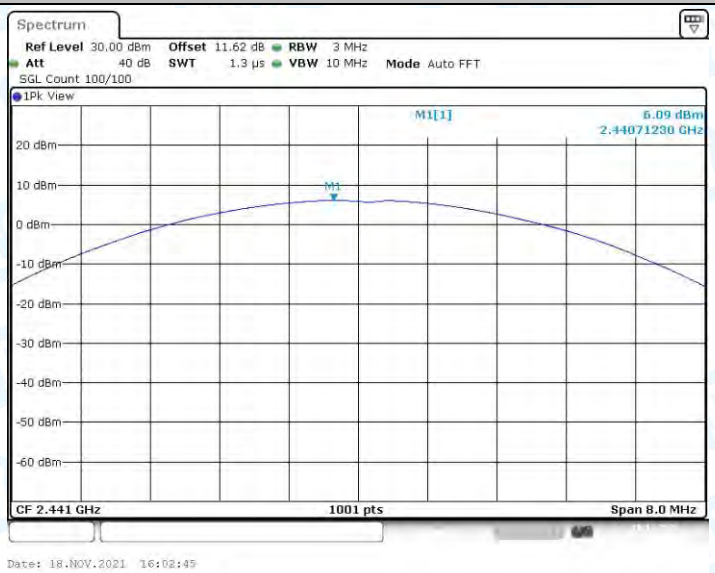
2DH5_Ant1_2480



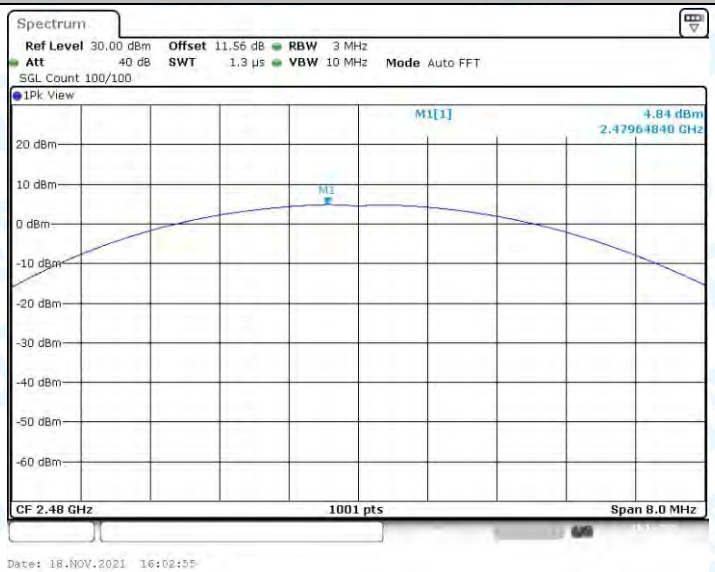
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



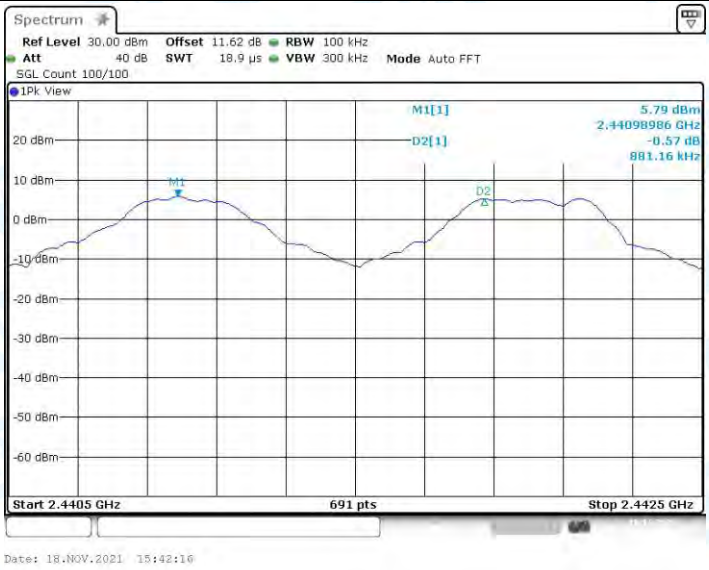
4. Carrier frequency separation

4.1.Test Result

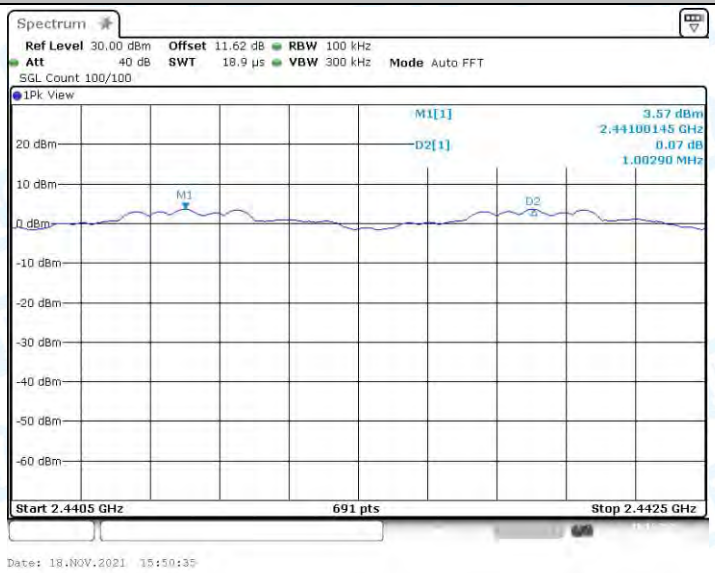
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.881	≥0.656	PASS
2DH5	Ant1	Hop	1.003	≥0.896	PASS
3DH5	Ant1	Hop	1.177	≥0.898	PASS

4.2.Test Graphs

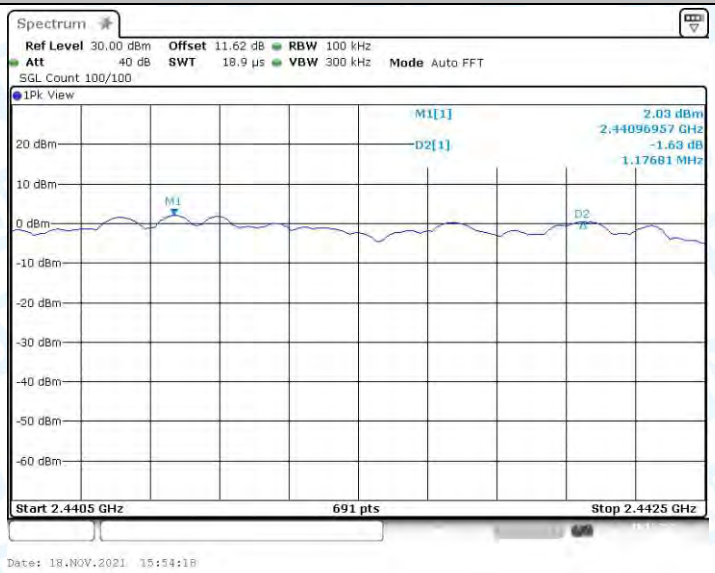
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



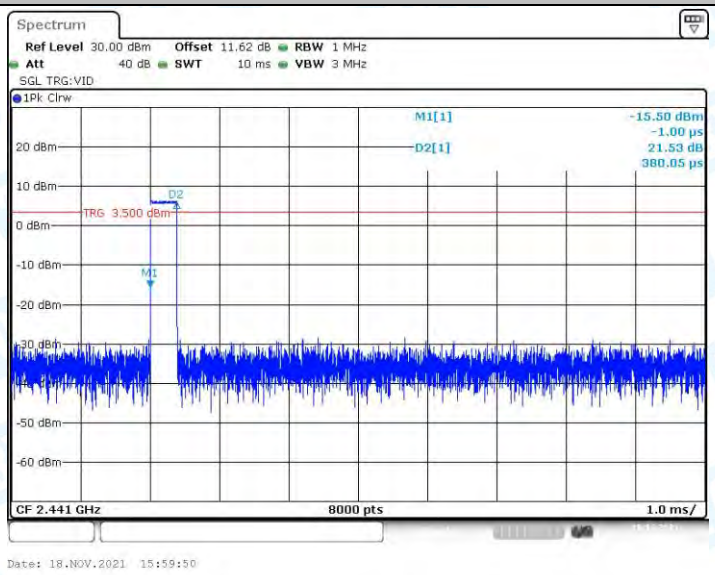
5. Time of occupancy

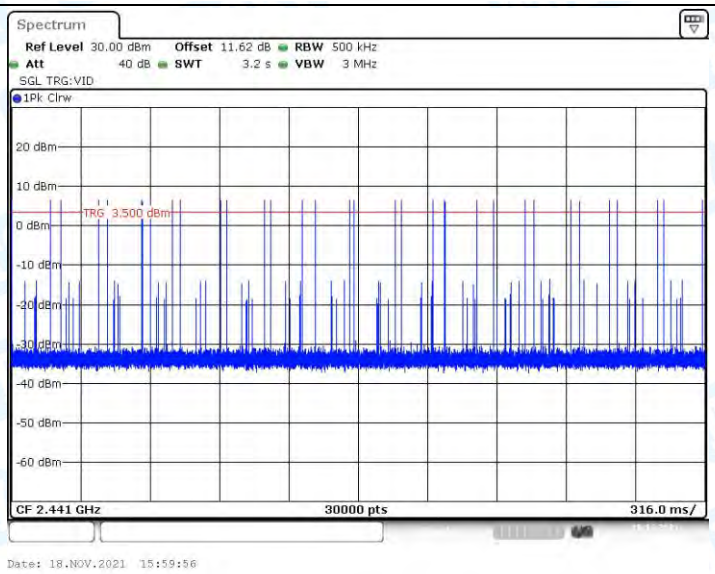
5.1.Test Result

TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.38	320	0.122	≤0.4	PASS
DH3	Ant1	Hop	1.63	180	0.293	≤0.4	PASS
DH5	Ant1	Hop	2.87	130	0.373	≤0.4	PASS
2DH1	Ant1	Hop	0.39	330	0.127	≤0.4	PASS
2DH3	Ant1	Hop	1.63	140	0.228	≤0.4	PASS
2DH5	Ant1	Hop	2.87	110	0.316	≤0.4	PASS
3DH1	Ant1	Hop	0.39	320	0.123	≤0.4	PASS
3DH3	Ant1	Hop	1.63	180	0.293	≤0.4	PASS
3DH5	Ant1	Hop	2.87	130	0.373	≤0.4	PASS

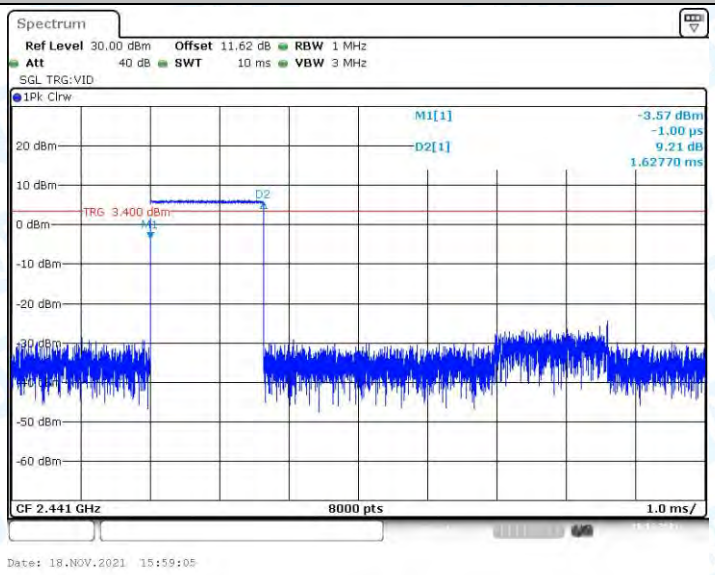
5.2.Test Graphs

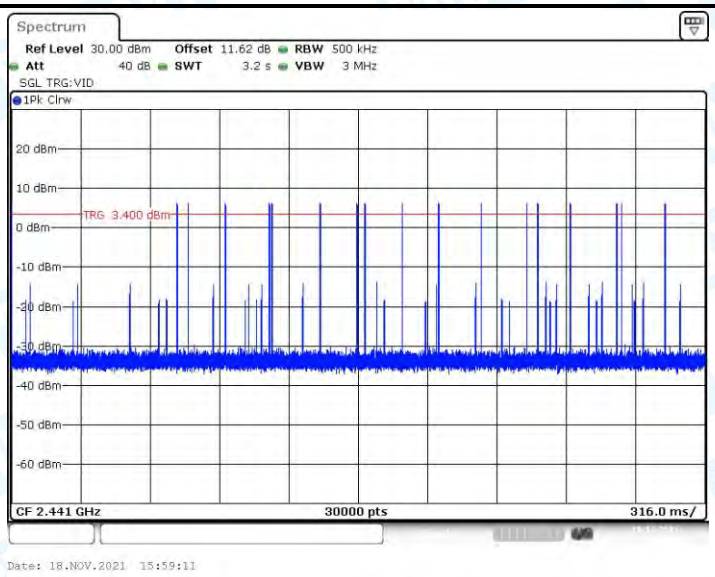
DH1_Ant1_Hop



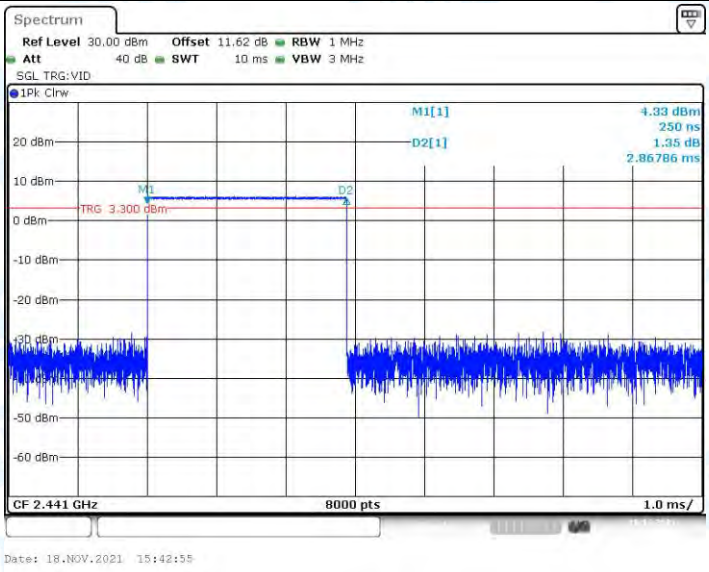


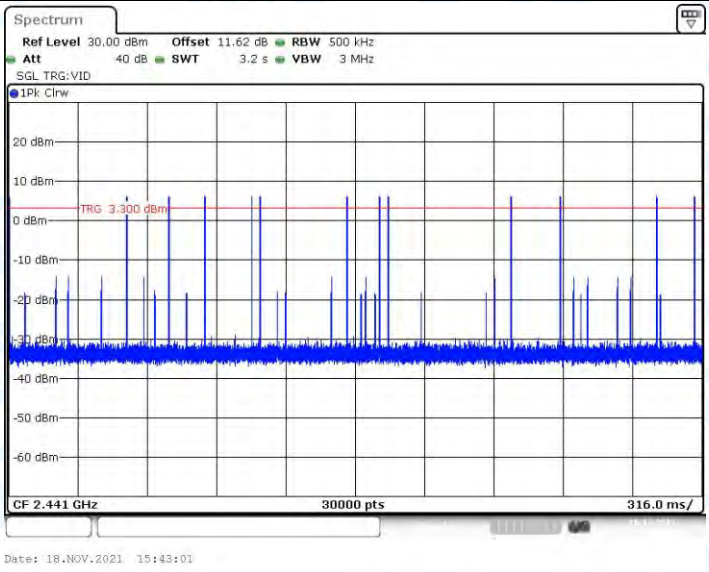
DH3_Ant1_Hop



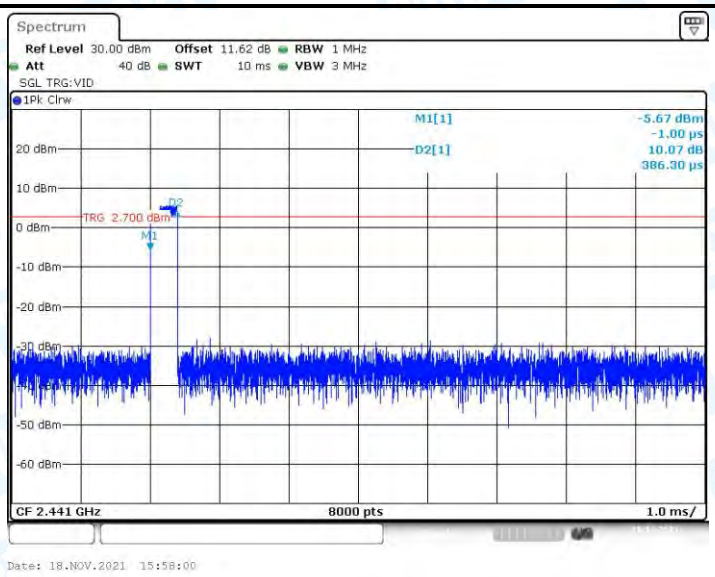


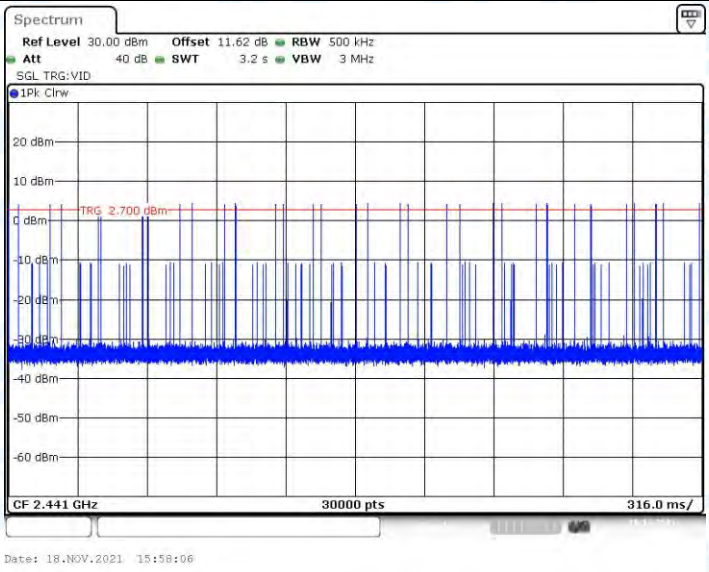
DH5_Ant1_Hop



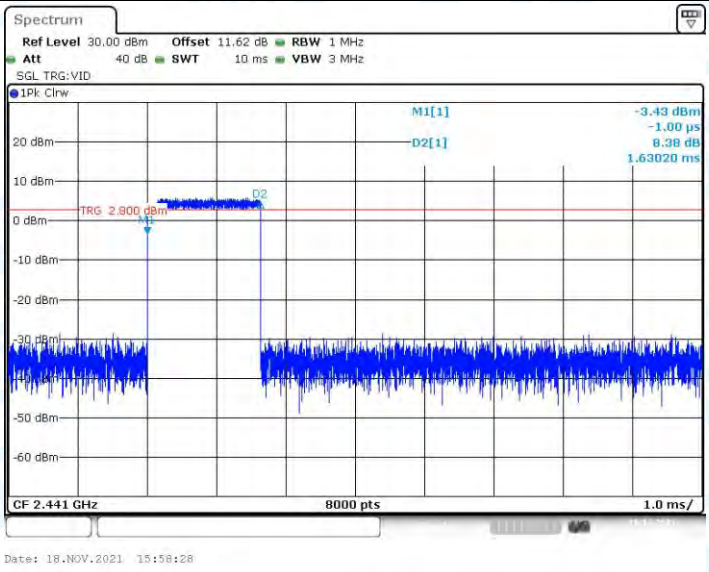


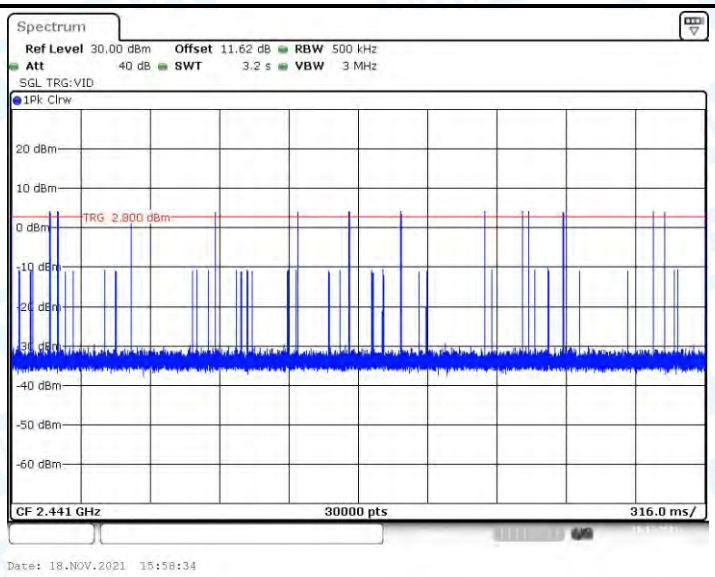
2DH1_Ant1_Hop





2DH3_Ant1_Hop





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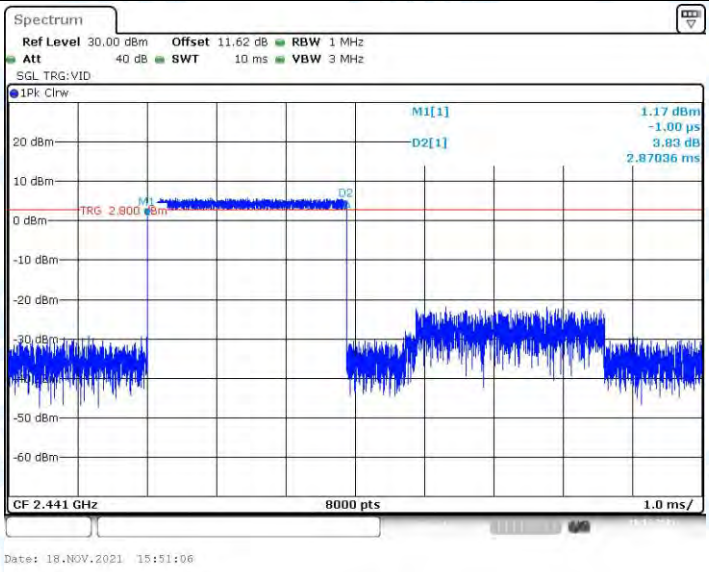
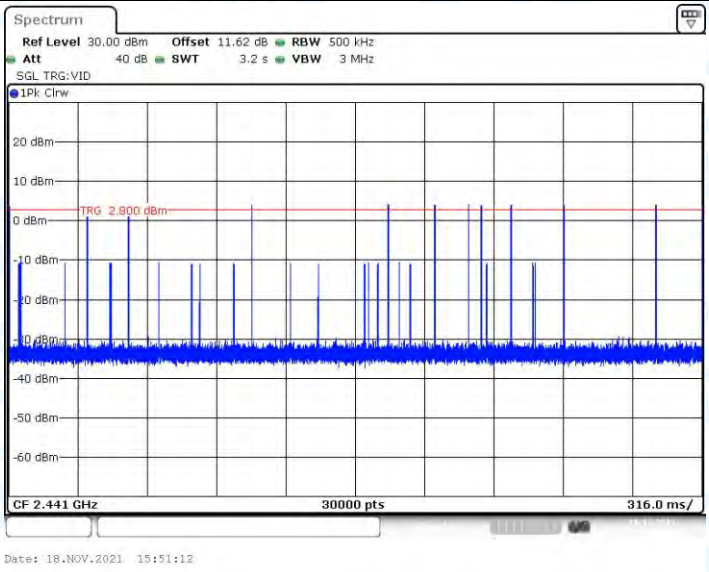
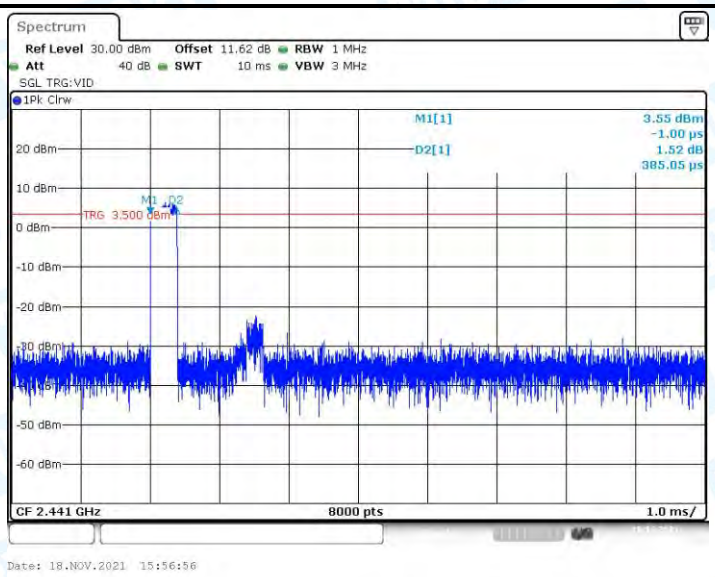
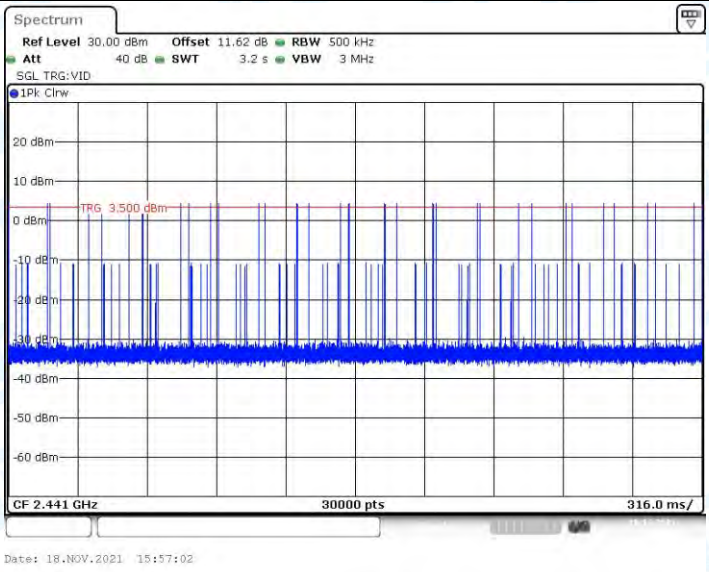


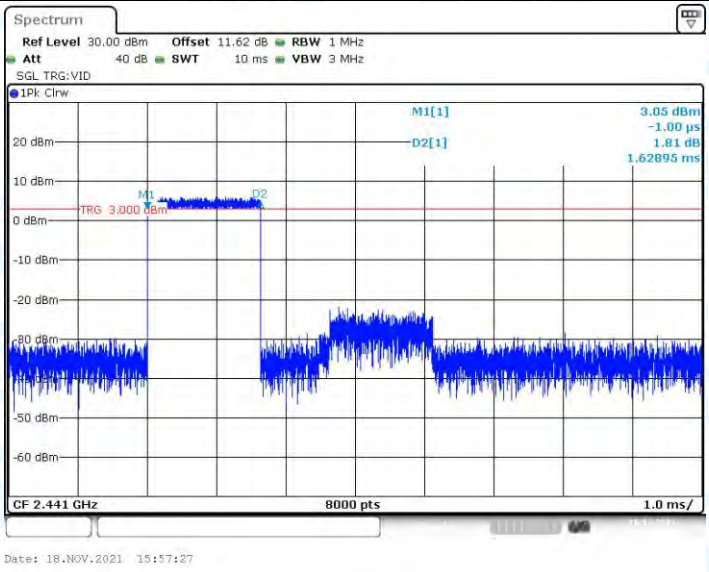


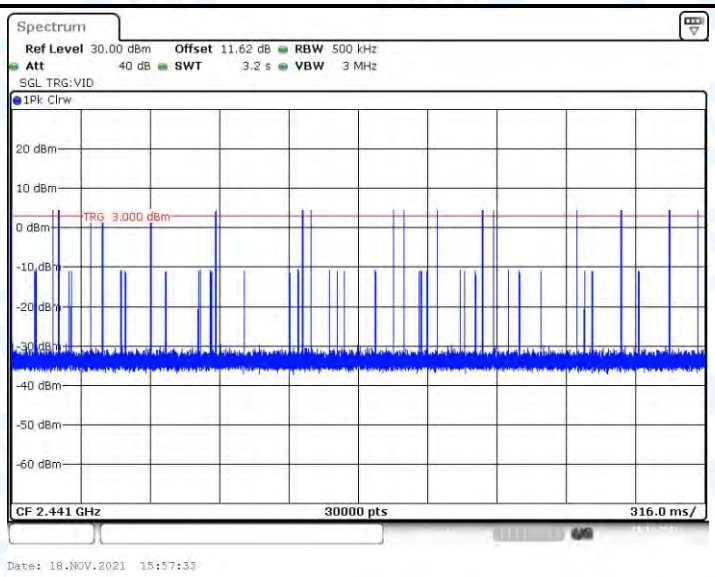
3DH1_Ant1_Hop



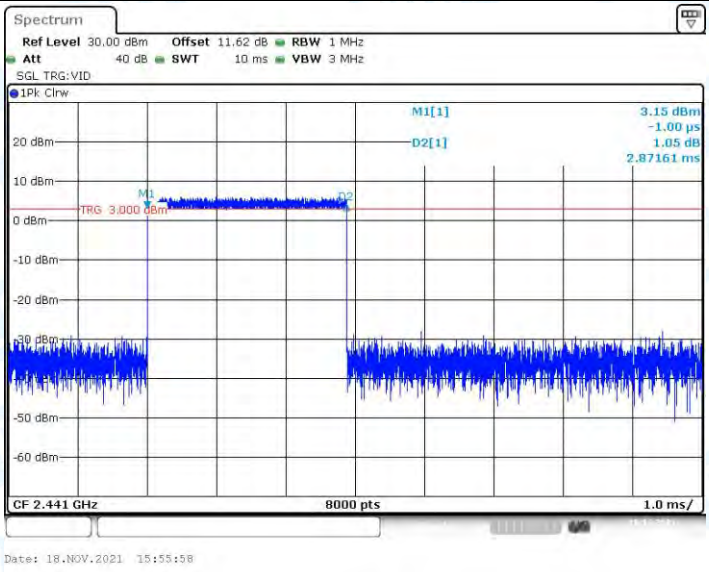


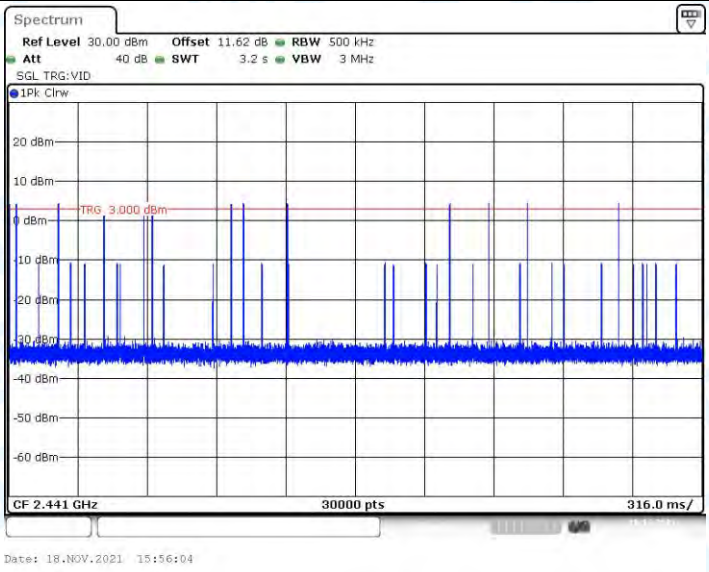
3DH3_Ant1_Hop





3DH5_Ant1_Hop





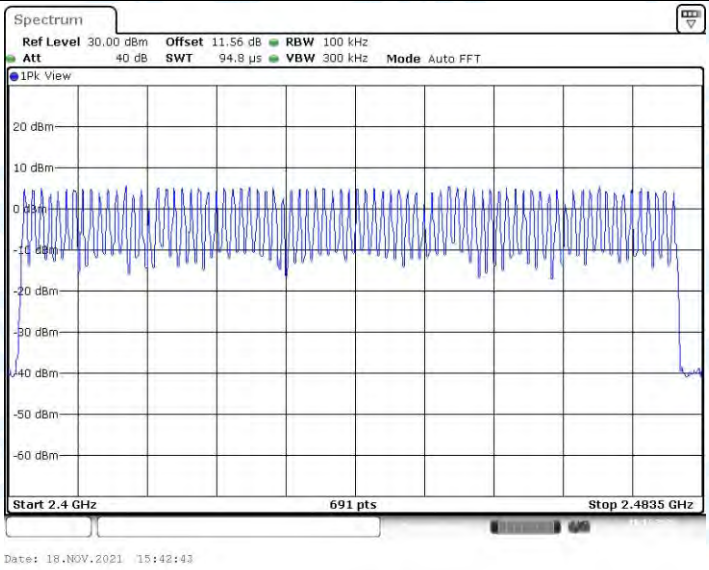
6. Number of hopping channels

6.1.Test Result

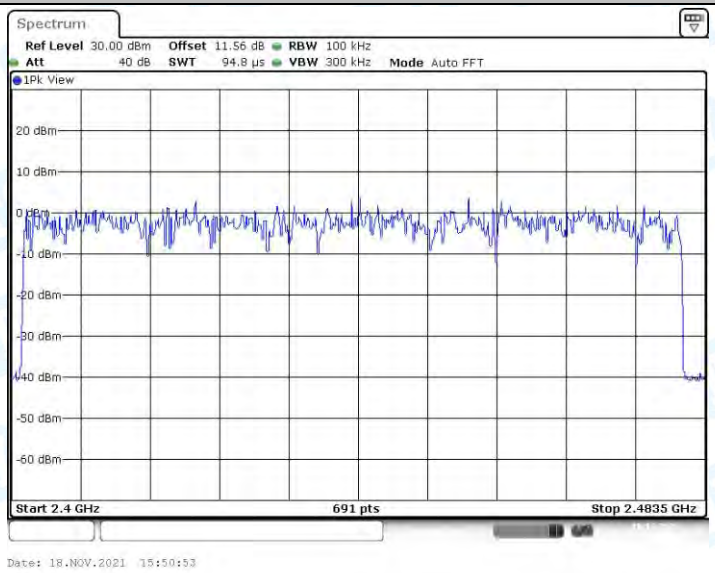
TestMode	Antenna	Channel	Result[Num]	Limit[Num]	Verdict
DH5	Ant1	Hop	79	≥15	PASS
2DH5	Ant1	Hop	79	≥15	PASS
3DH5	Ant1	Hop	79	≥15	PASS

6.2.Test Graphs

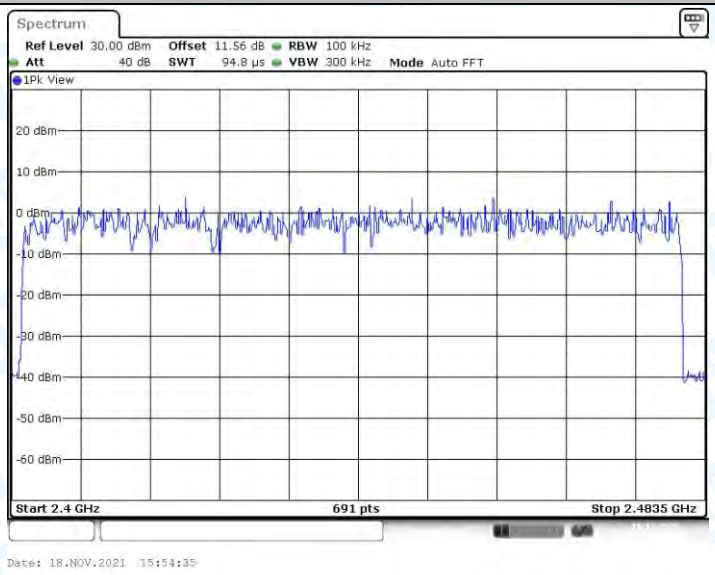
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop



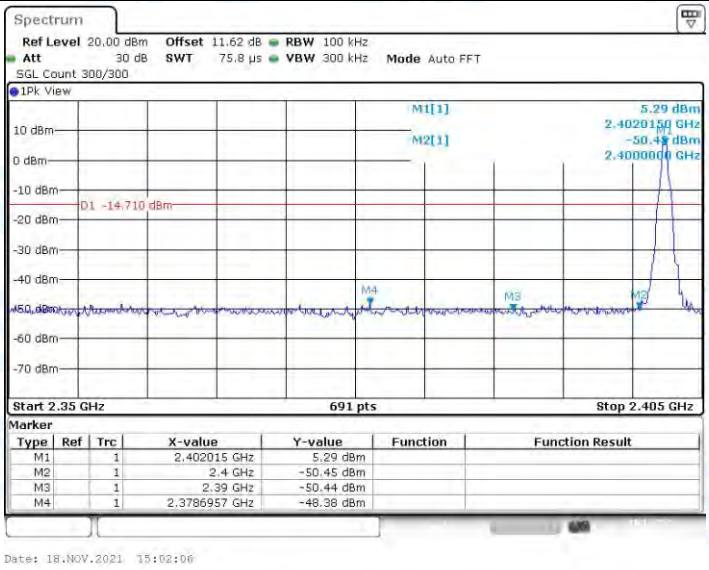
7.Band edge measurements

7.1.Test Result

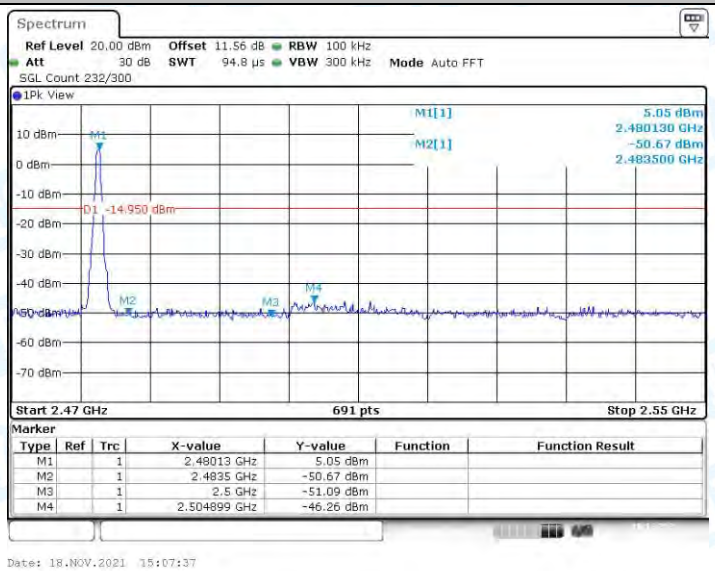
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	5.29	-48.38	≤-14.71	PASS
		High	2480	5.05	-46.26	≤-14.95	PASS
		Low	Hop_2402	5.70	-47.92	≤-14.3	PASS
		High	Hop_2480	4.58	-46.77	≤-15.42	PASS
2DH5	Ant1	Low	2402	3.54	-47.44	≤-16.46	PASS
		High	2480	1.96	-46.61	≤-18.04	PASS
		Low	Hop_2402	1.63	-47.59	≤-18.37	PASS
		High	Hop_2480	4.70	-46.25	≤-15.3	PASS
3DH5	Ant1	Low	2402	2.96	-47.49	≤-17.04	PASS
		High	2480	2.43	-46.05	≤-17.57	PASS
		Low	Hop_2402	1.41	-47.81	≤-18.59	PASS
		High	Hop_2480	4.41	-46.75	≤-15.59	PASS

7.2.Test Graphs

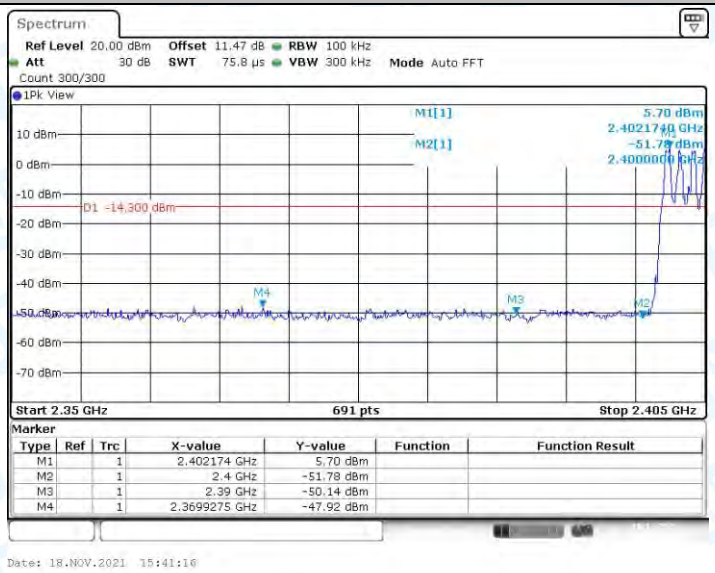
DH5_Ant1_Low_2402



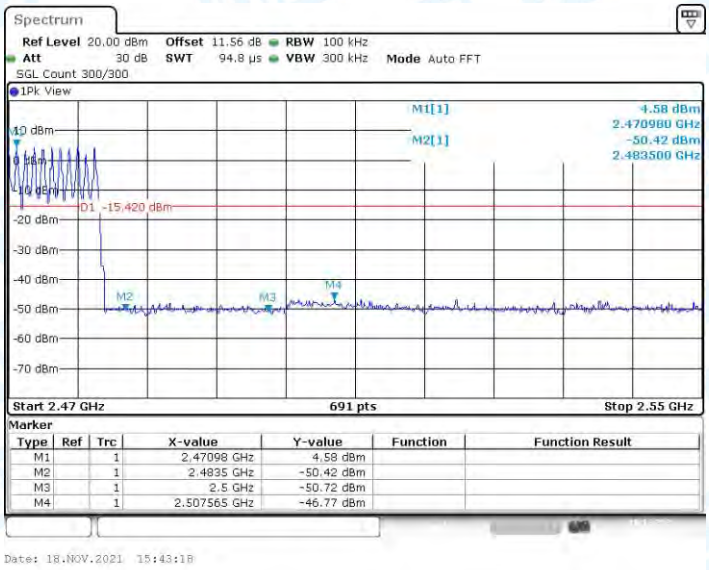
DH5_Ant1_High_2480



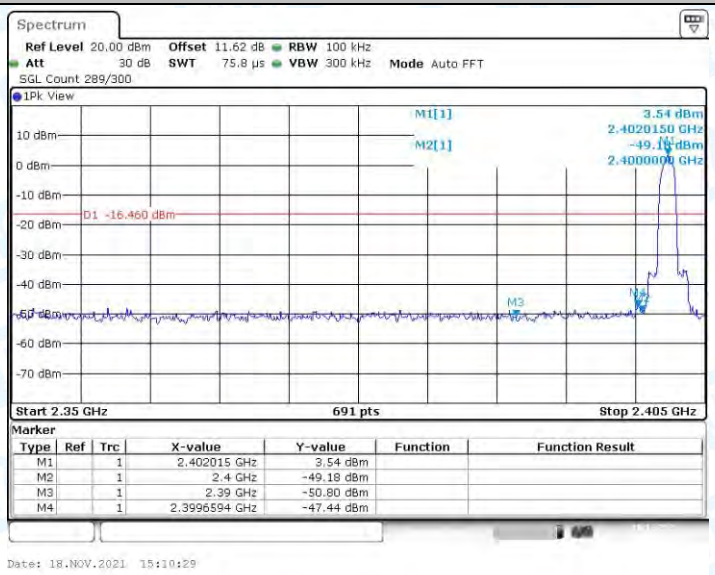
DH5_Ant1_Low_Hop_2402



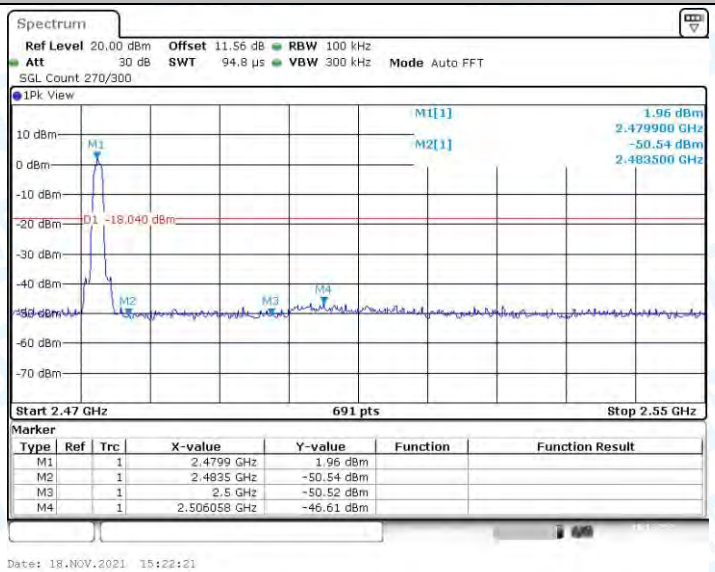
DH5_Ant1_High_Hop_2480



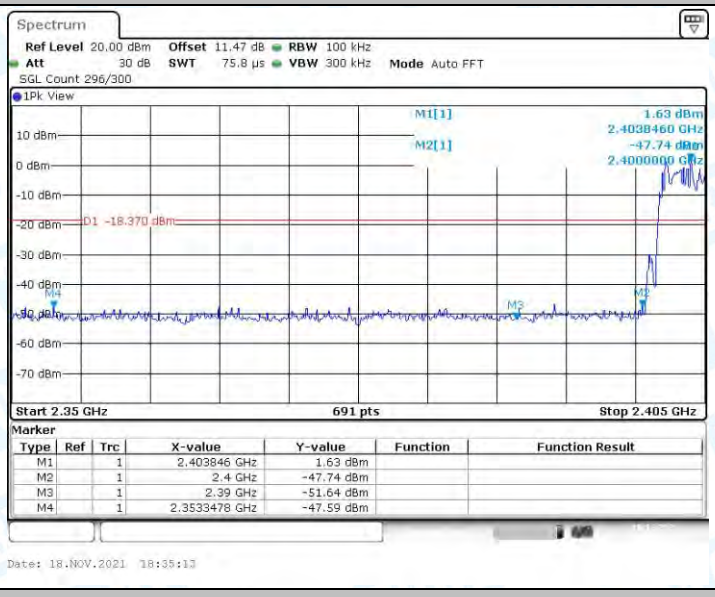
2DH5_Ant1_Low_2402



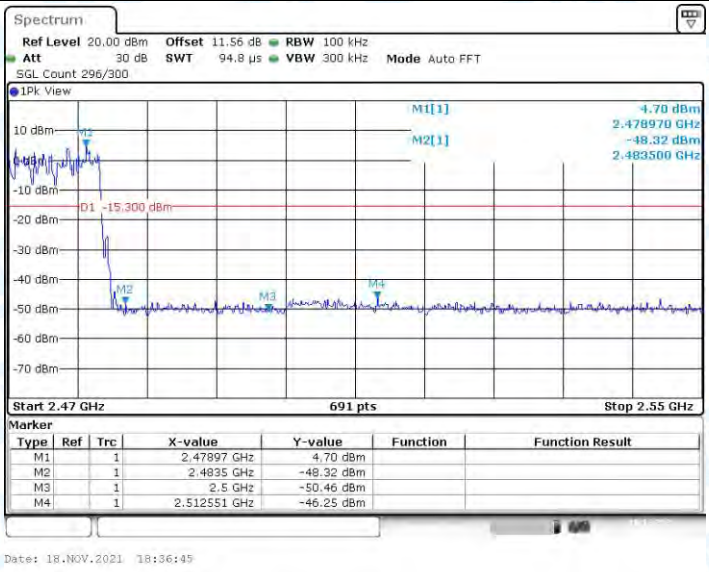
2DH5_Ant1_High_2480



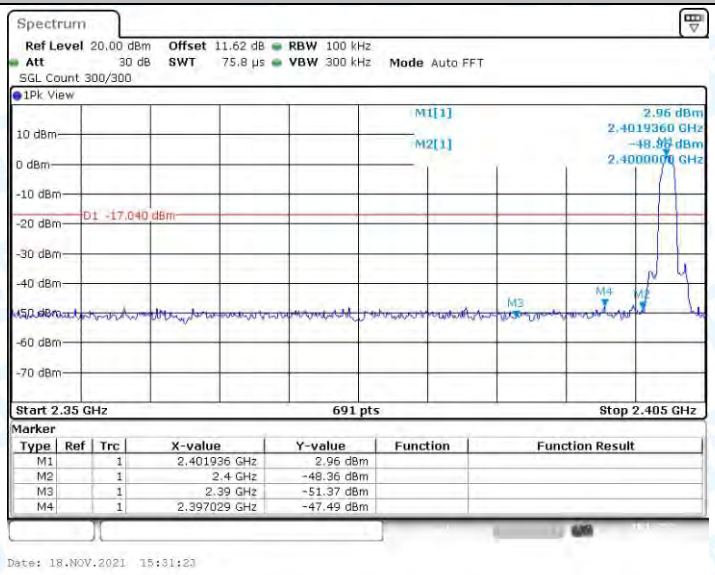
2DH5_Ant1_Low_Hop_2402



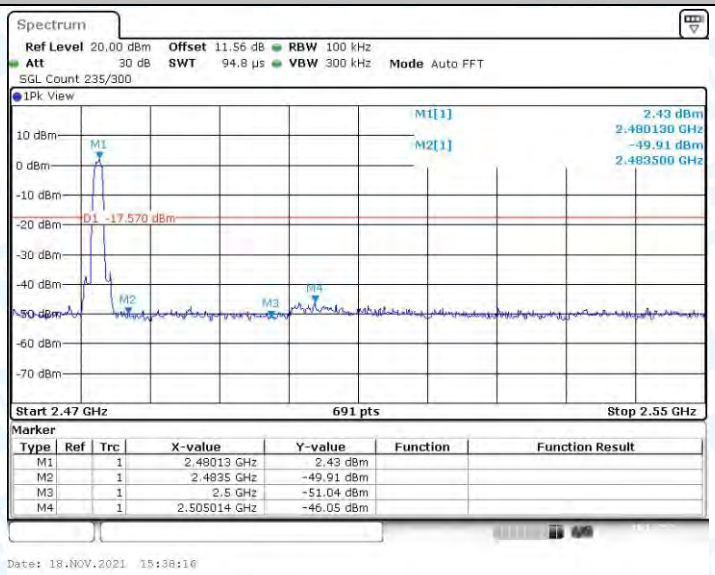
2DH5_Ant1_High_Hop_2480



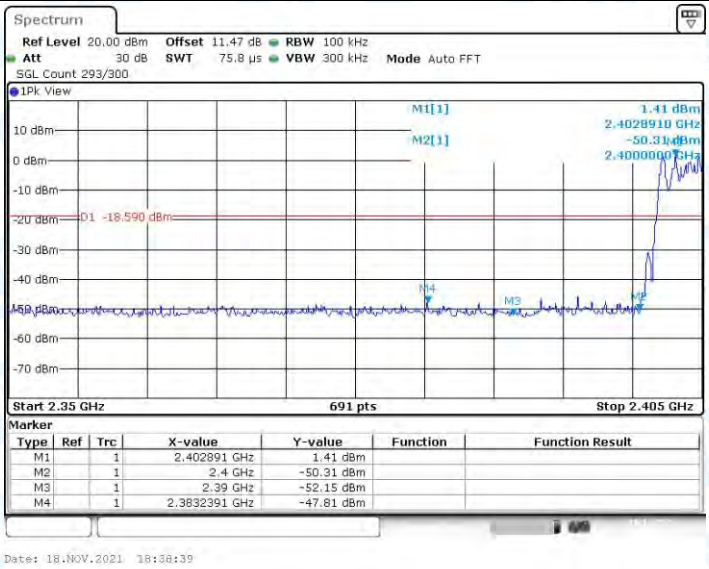
3DH5_Ant1_Low_2402



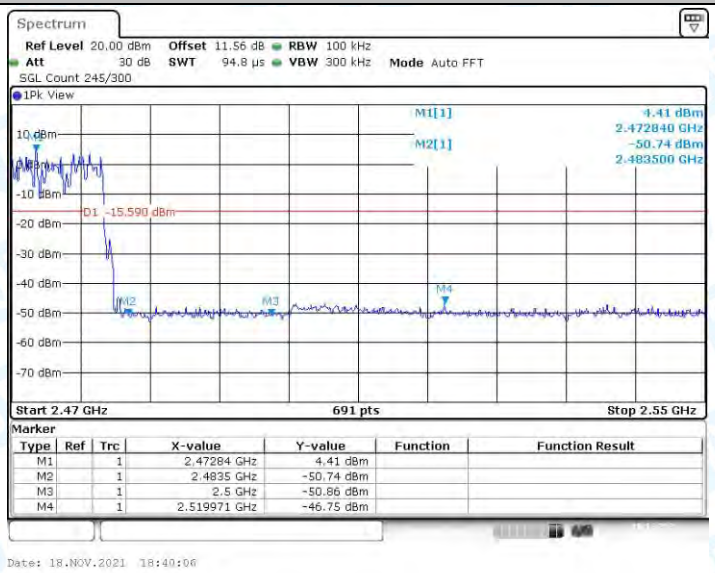
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



8. Conducted Spurious Emission

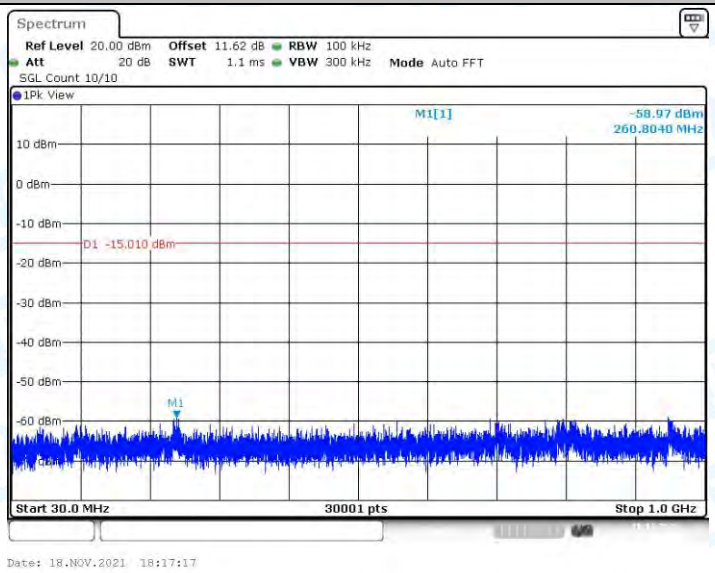
8.1.Test Result

TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	4.99	4.99	---	PASS
			30~1000	4.99	-58.97	≤-15.01	PASS
			1000~26500	4.99	-49.3	≤-15.01	PASS
		2441	Reference	4.97	4.97	---	PASS
			30~1000	4.97	-58.13	≤-15.03	PASS
			1000~26500	4.97	-49.31	≤-15.03	PASS
		2480	Reference	4.21	4.21	---	PASS
			30~1000	4.21	-59.32	≤-15.79	PASS
			1000~26500	4.21	-48.97	≤-15.79	PASS
2DH5	Ant1	2402	Reference	2.58	2.58	---	PASS
			30~1000	2.58	-57.61	≤-17.42	PASS
			1000~26500	2.58	-49.63	≤-17.42	PASS
		2441	Reference	2.71	2.71	---	PASS
			30~1000	2.71	-59.4	≤-17.29	PASS
			1000~26500	2.71	-49.32	≤-17.29	PASS
		2480	Reference	1.84	1.84	---	PASS
			30~1000	1.84	-58.22	≤-18.16	PASS
			1000~26500	1.84	-49.37	≤-18.16	PASS
3DH5	Ant1	2402	Reference	2.57	2.57	---	PASS
			30~1000	2.57	-58.48	≤-17.43	PASS
			1000~26500	2.57	-49.18	≤-17.43	PASS
		2441	Reference	2.68	2.68	---	PASS
			30~1000	2.68	-57.41	≤-17.32	PASS
			1000~26500	2.68	-49.28	≤-17.32	PASS
		2480	Reference	1.82	1.82	---	PASS
			30~1000	1.82	-58.99	≤-18.18	PASS
			1000~26500	1.82	-49.8	≤-18.18	PASS

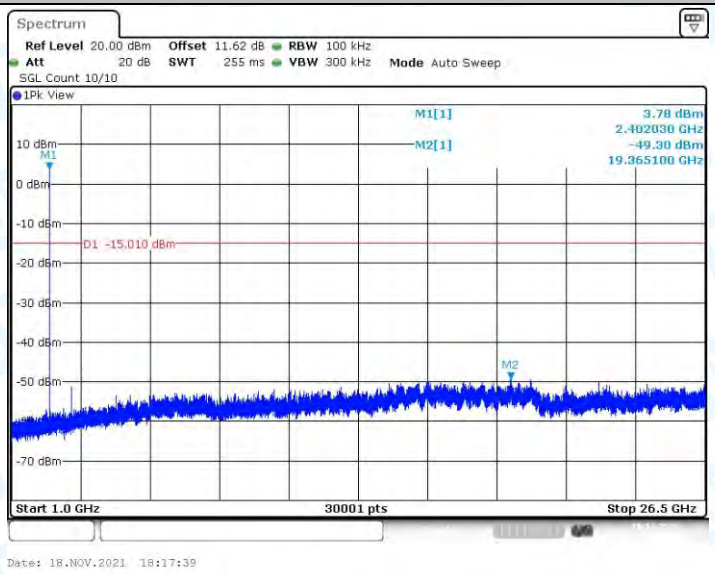
8.2.Test Graphs

DH5_Ant1_2402_0~Reference

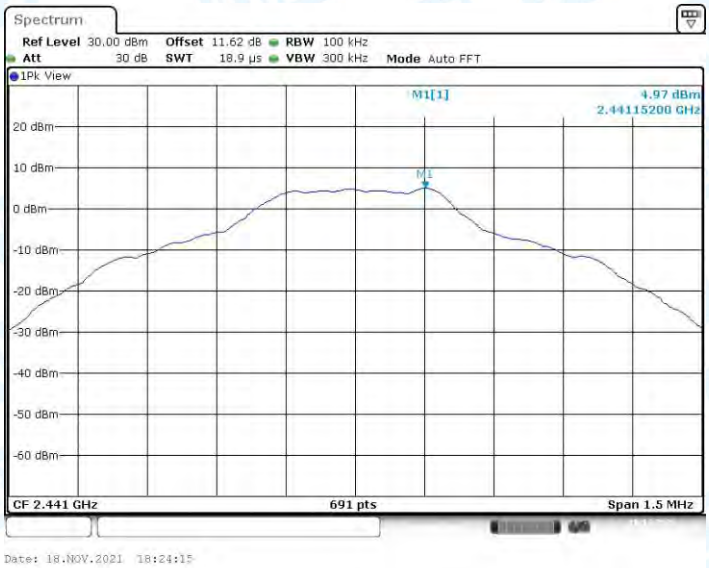
DH5_Ant1_2402_30~1000



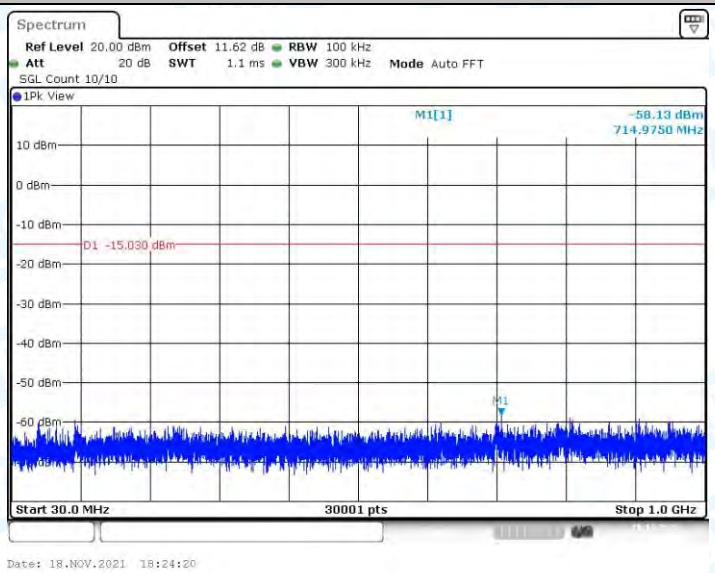
DH5_Ant1_2402_1000~26500



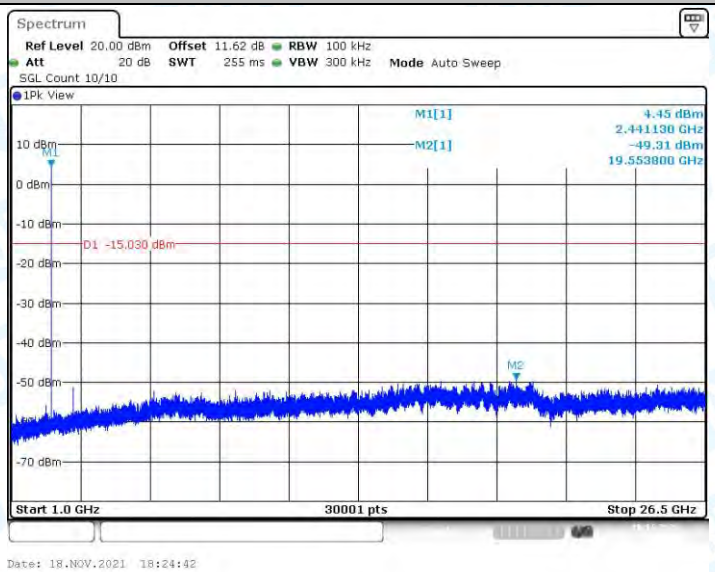
DH5_Ant1_2441_0~Reference



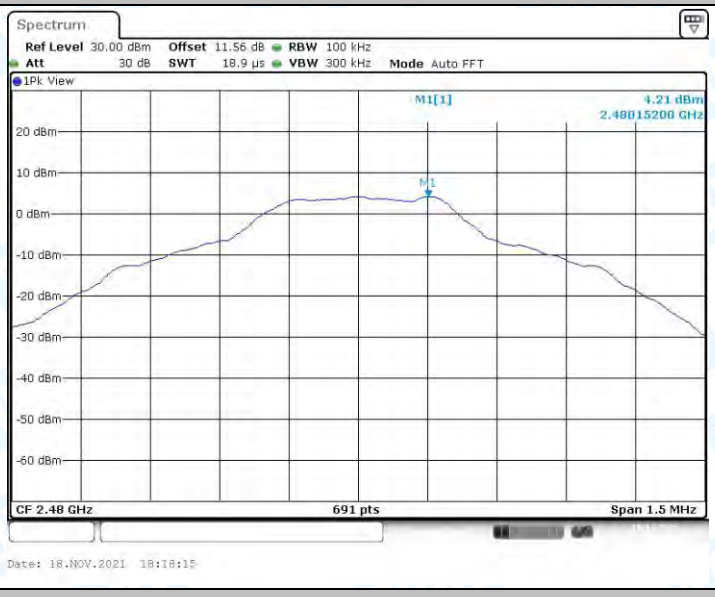
DH5_Ant1_2441_30~1000



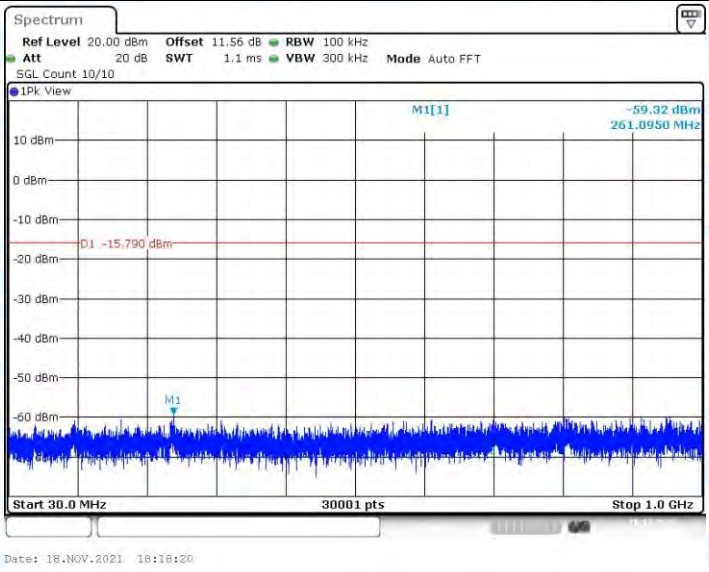
DH5_Ant1_2441_1000~26500



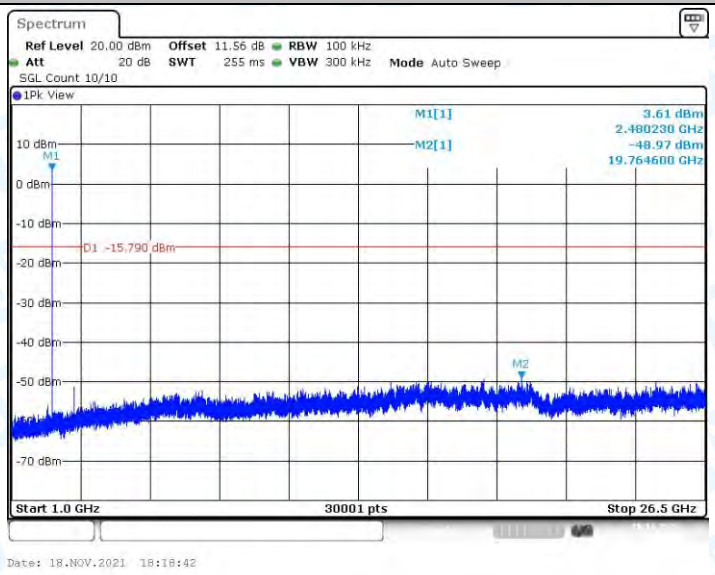
DH5_Ant1_2480_0~Reference



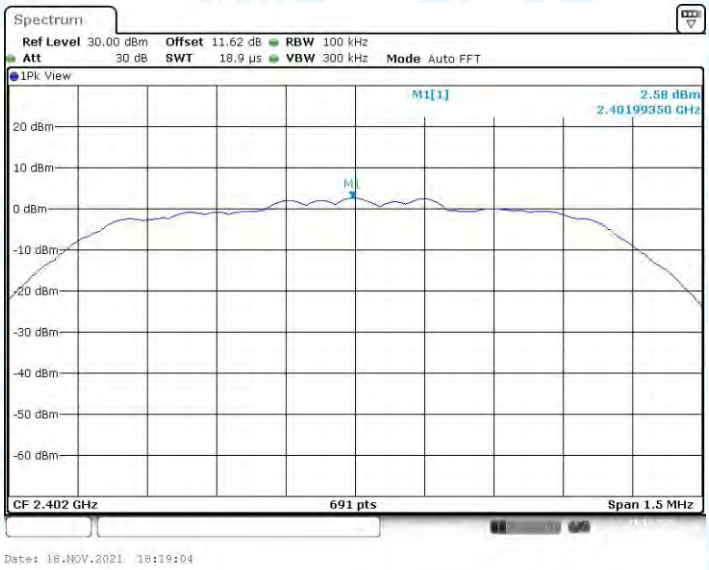
DH5_Ant1_2480_30~1000



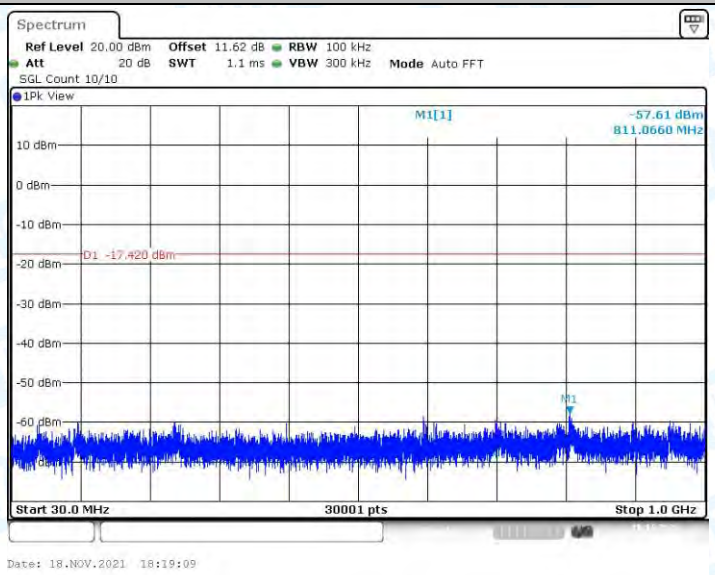
DH5_Ant1_2480_1000~26500



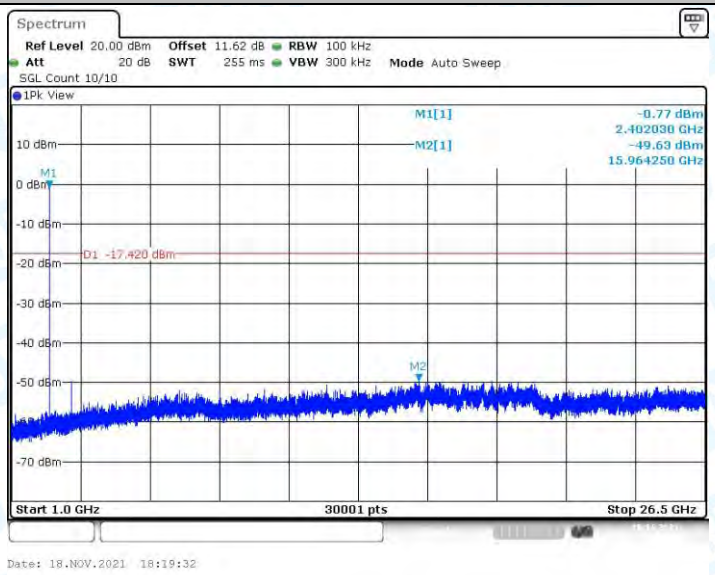
2DH5_Ant1_2402_0~Reference



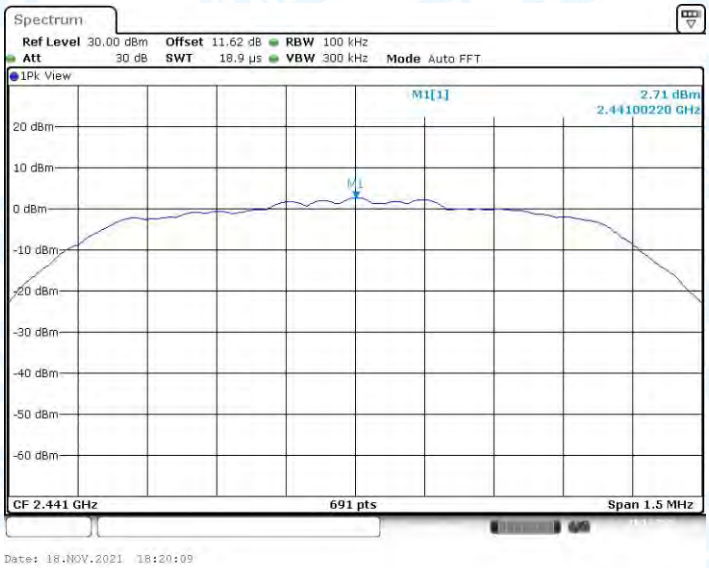
2DH5_Ant1_2402_30~1000



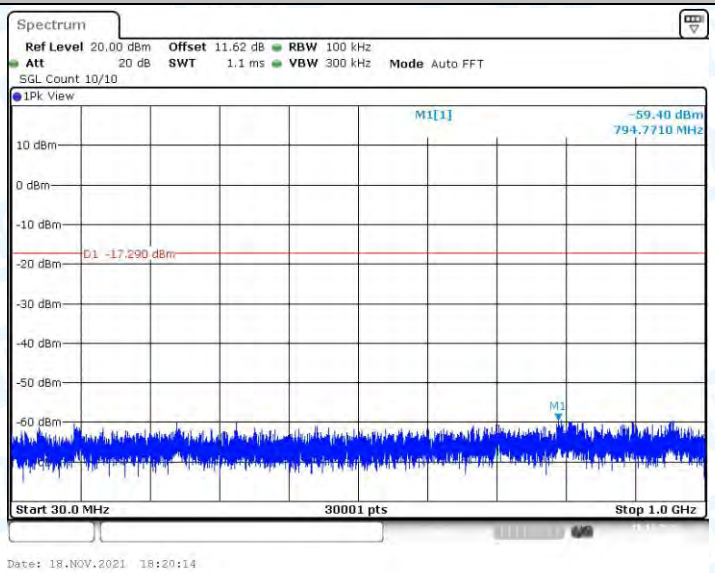
2DH5_Ant1_2402_1000~26500



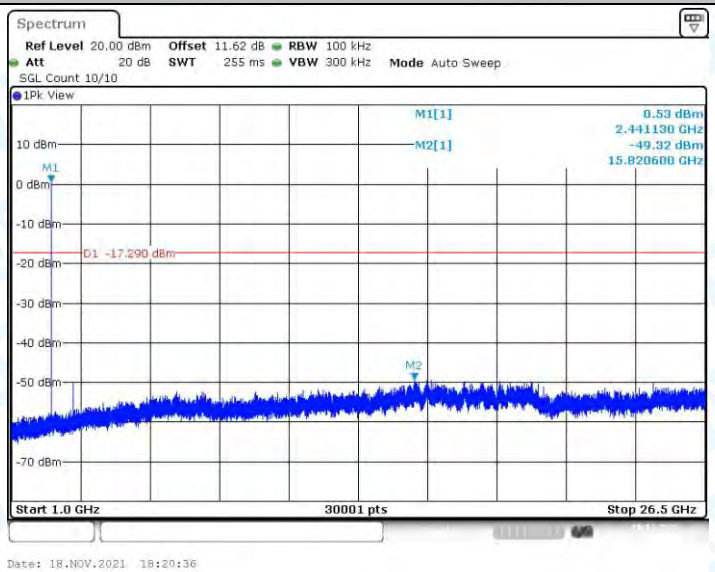
2DH5_Ant1_2441_0~Reference



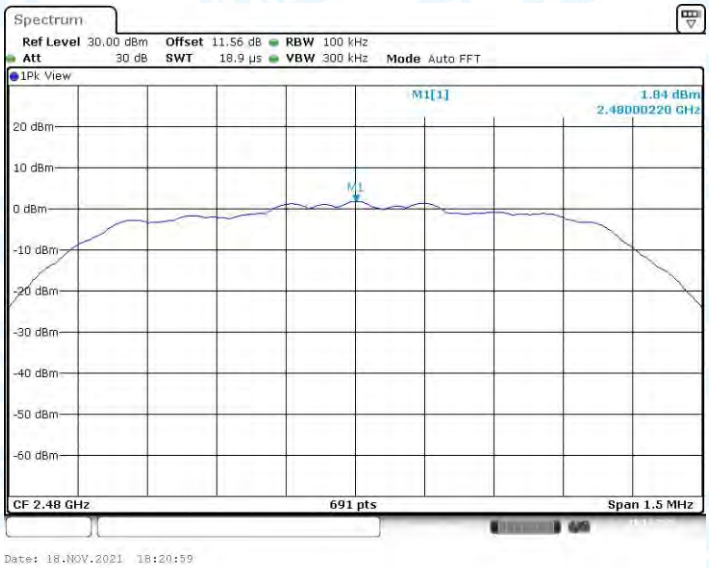
2DH5_Ant1_2441_30~1000



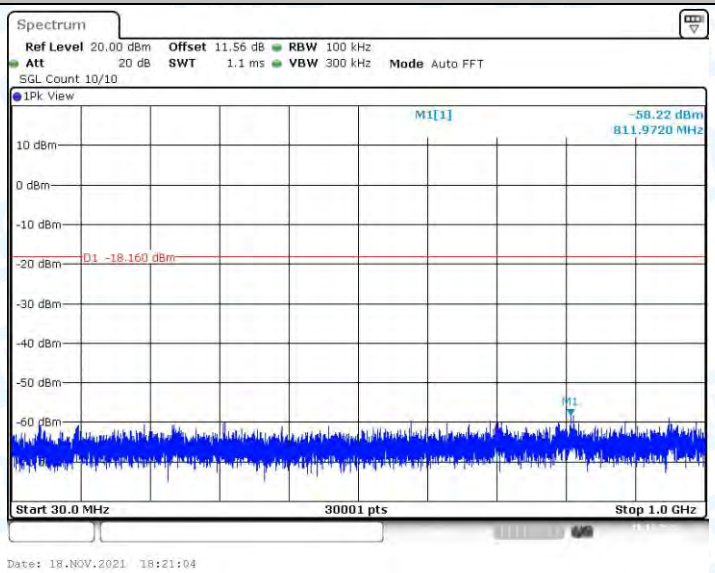
2DH5_Ant1_2441_1000~26500



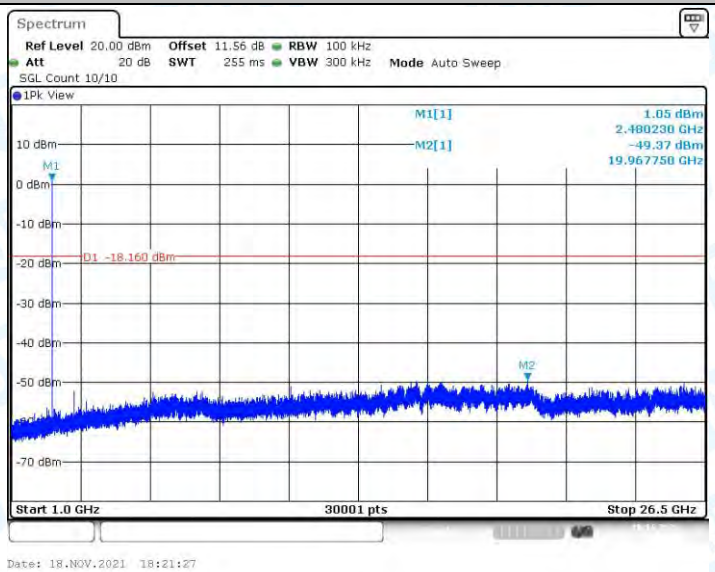
2DH5_Ant1_2480_0~Reference



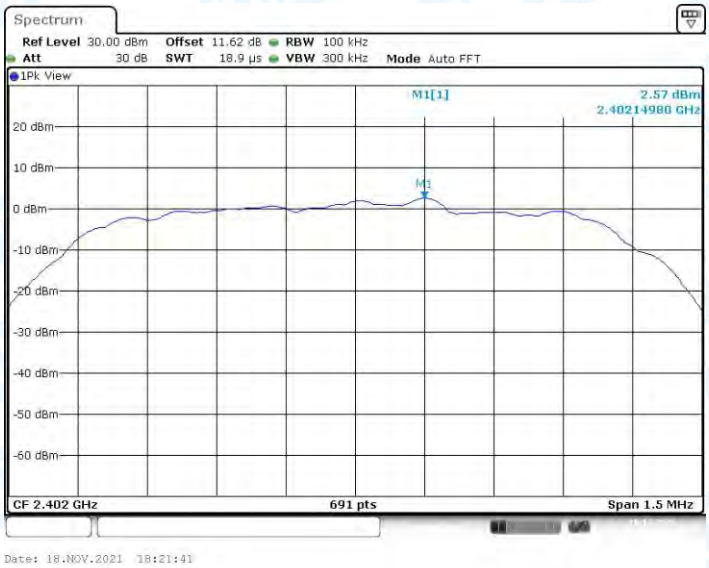
2DH5_Ant1_2480_30~1000



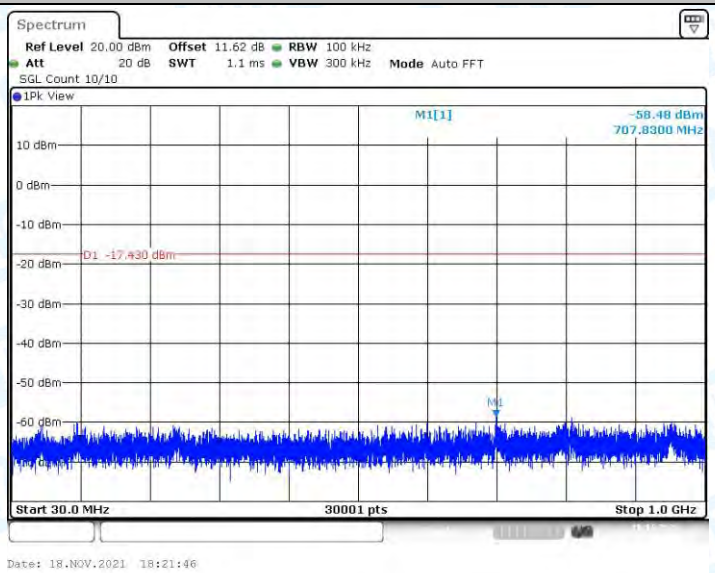
2DH5_Ant1_2480_1000~26500



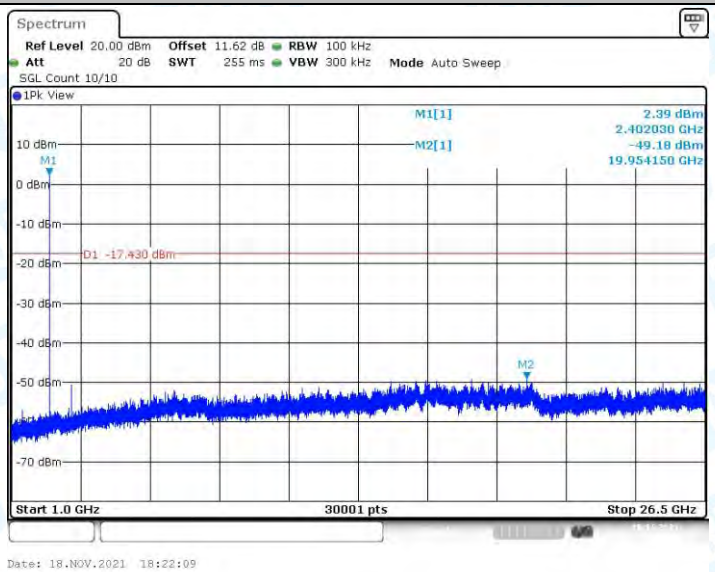
3DH5_Ant1_2402_0~Reference



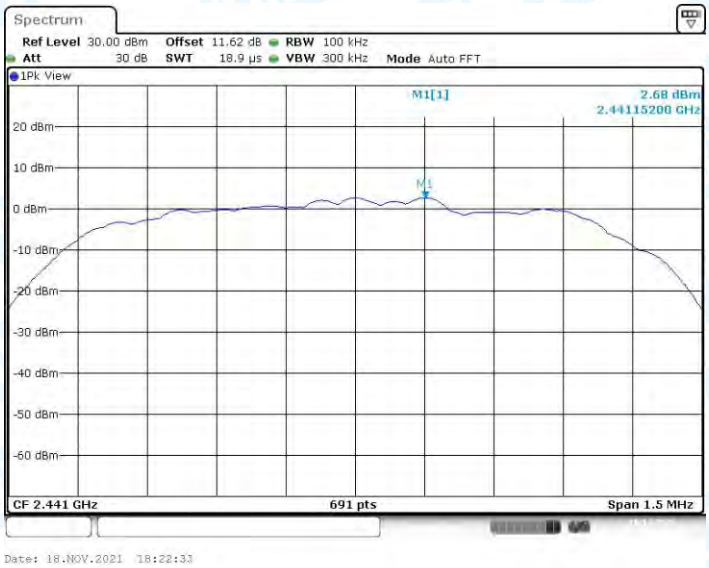
3DH5_Ant1_2402_30~1000



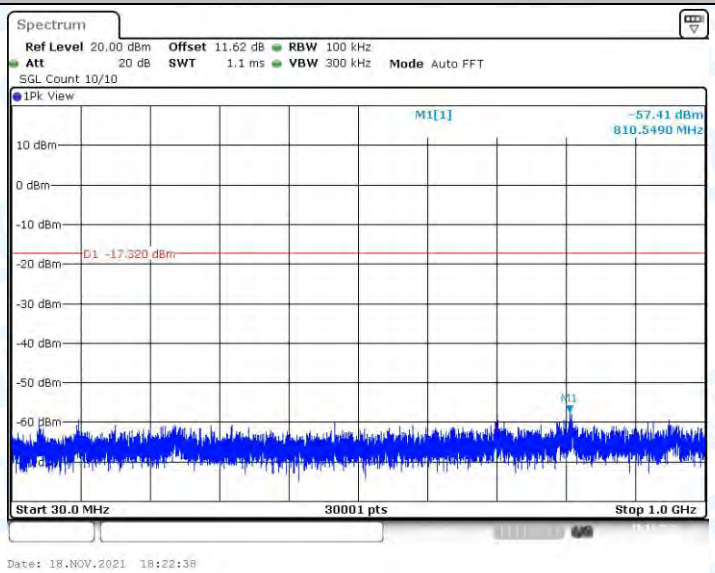
3DH5_Ant1_2402_1000~26500



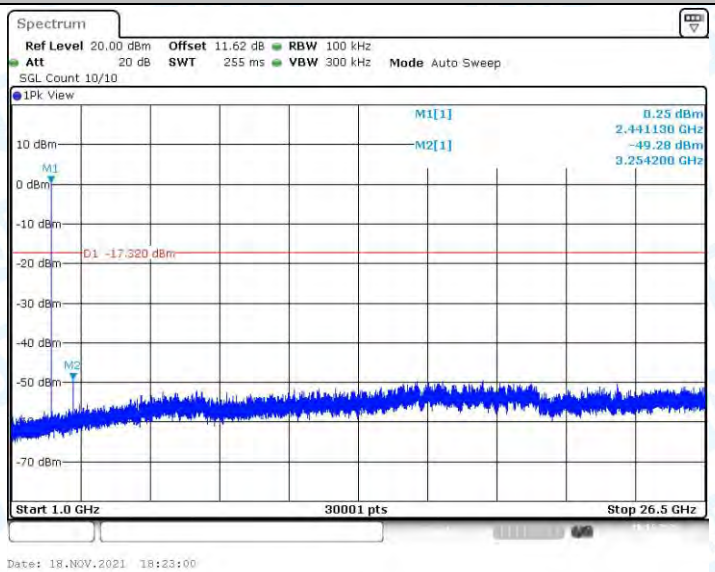
3DH5_Ant1_2441_0~Reference



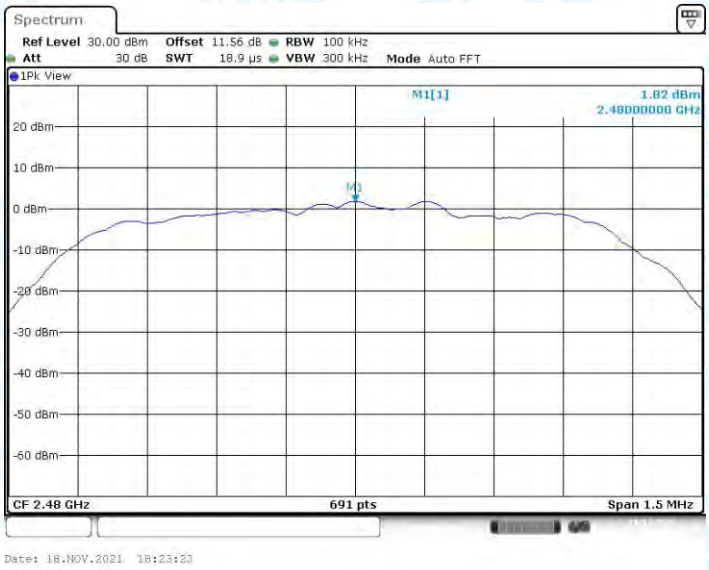
3DH5_Ant1_2441_30~1000



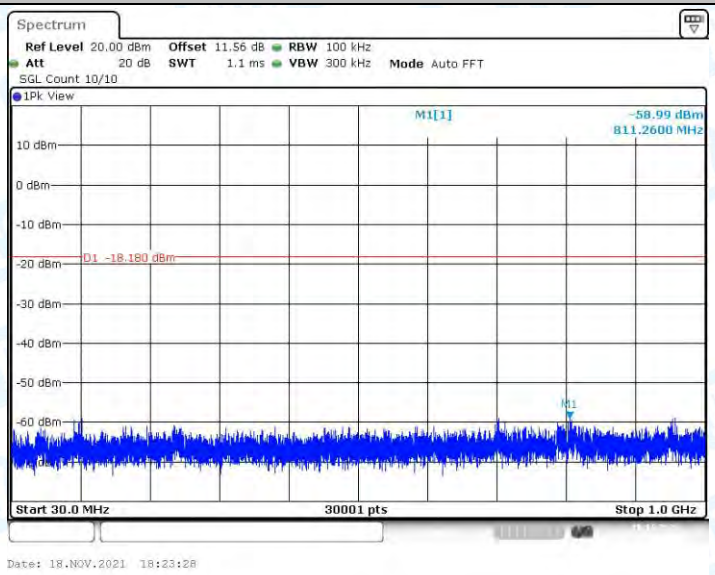
3DH5_Ant1_2441_1000~26500



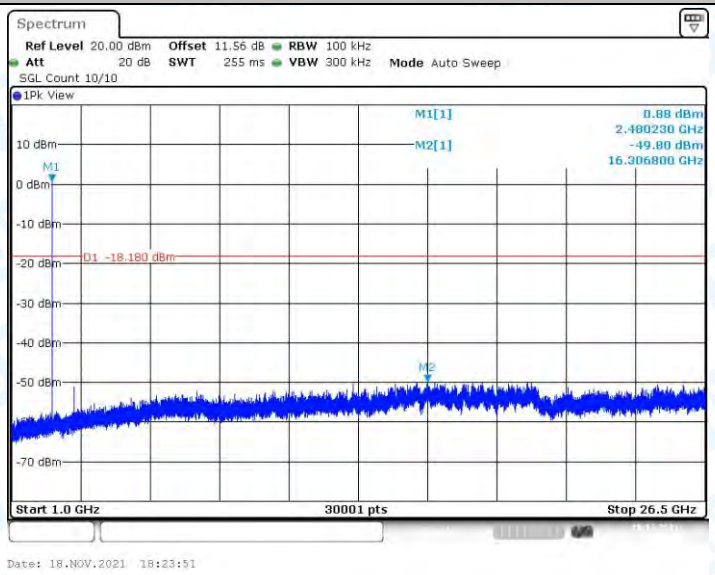
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500



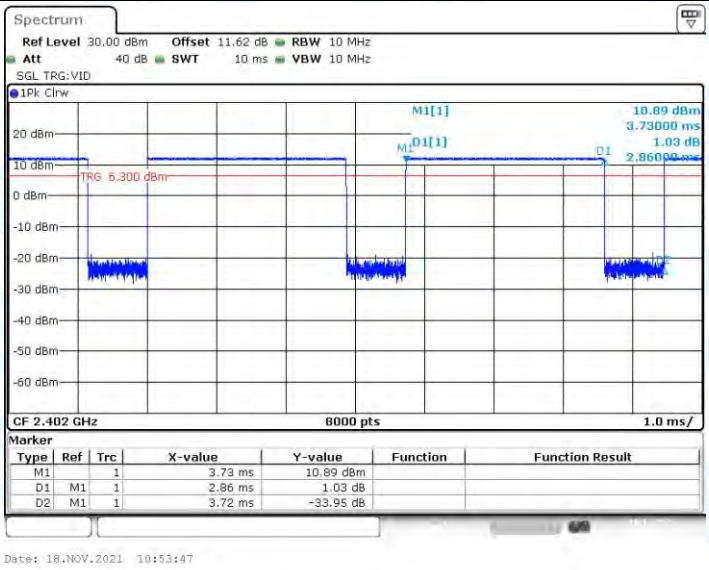
9. Duty Cycle

9.1.Test Result

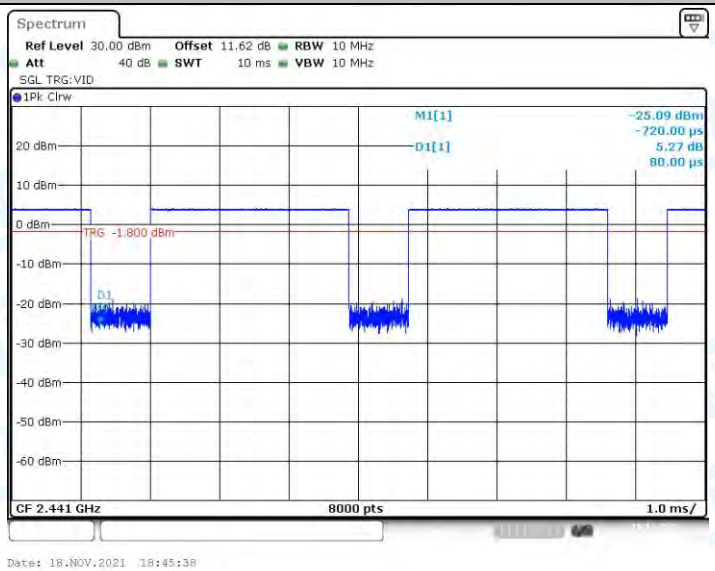
TestMode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
DH5	Ant1	2402	2.86	3.72	76.88	---	PASS
		2441	0.00	0.08	100	---	PASS
		2480	2.86	3.72	76.88	---	PASS

9.2.Test Graphs

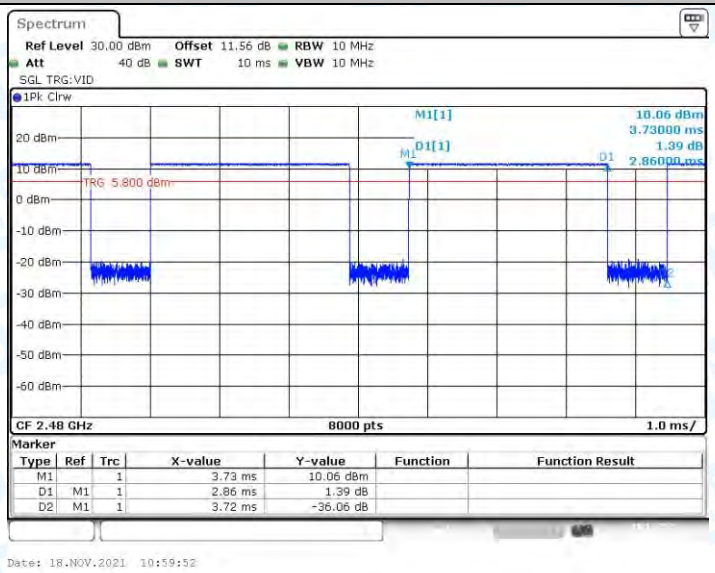
DH5_Ant1_2402



DH5_Ant1_2441



DH5_Ant1_2480



10. Emissions in Restricted Bands

10.1.Test Result

TestMode	Antenna	ChName	Channel	Detector	Freq. [MHz]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	AV	2310.000	-49.53	≤-41.20	PASS
				AV	2340.783	-47.07	≤-41.20	PASS
				AV	2390.000	-49.38	≤-41.20	PASS
				Peak	2310.000	-41.11	≤-21.20	PASS
				Peak	2312.174	-36.9	≤-21.20	PASS
				Peak	2390.000	-41.06	≤-21.20	PASS
		High	2480	AV	2483.500	-48.53	≤-41.20	PASS
				AV	2483.913	-48.13	≤-41.20	PASS
				AV	2500.000	-48.58	≤-41.20	PASS
				Peak	2483.500	-39.37	≤-21.20	PASS
				Peak	2484.145	-37.78	≤-21.20	PASS
				Peak	2500.000	-38.77	≤-21.20	PASS
		Low	Hop_2402	Peak	2310.000	-40.65	≤-21.20	PASS
				Peak	2346.870	-36.36	≤-21.20	PASS
				Peak	2390.000	-39.15	≤-21.20	PASS
		High	Hop_2480	Peak	2483.500	-42.37	≤-21.20	PASS
				Peak	2484.725	-37.44	≤-21.20	PASS
				Peak	2500.000	-41.47	≤-21.20	PASS
2DH5	Ant1	Low	2402	AV	2310.000	-49.88	≤-41.20	PASS
				AV	2340.630	-47.56	≤-41.20	PASS
				AV	2390.000	-49.83	≤-41.20	PASS
				Peak	2310.000	-39.25	≤-21.20	PASS
				Peak	2341.239	-37.04	≤-21.20	PASS
				Peak	2390.000	-40.23	≤-21.20	PASS
		High	2480	AV	2483.500	-48.88	≤-41.20	PASS
				AV	2483.913	-48.74	≤-41.20	PASS
				AV	2500.000	-48.99	≤-41.20	PASS
				Peak	2483.500	-41.57	≤-21.20	PASS
				Peak	2499.217	-35.41	≤-21.20	PASS
				Peak	2500.000	-39.4	≤-21.20	PASS
		Low	Hop_2402	Peak	2310.000	-37.77	≤-21.20	PASS
				Peak	2340.630	-36.04	≤-21.20	PASS
				Peak	2390.000	-37.67	≤-21.20	PASS
		High	Hop_2480	Peak	2483.500	-38.98	≤-21.20	PASS
				Peak	2499.101	-35.54	≤-21.20	PASS
				Peak	2500.000	-38.27	≤-21.20	PASS
3DH5	Ant1	Low	2402	AV	2310.000	-49.88	≤-41.20	PASS
				AV	2341.087	-47.54	≤-41.20	PASS
				AV	2390.000	-49.83	≤-41.20	PASS
				Peak	2310.000	-40.55	≤-21.20	PASS

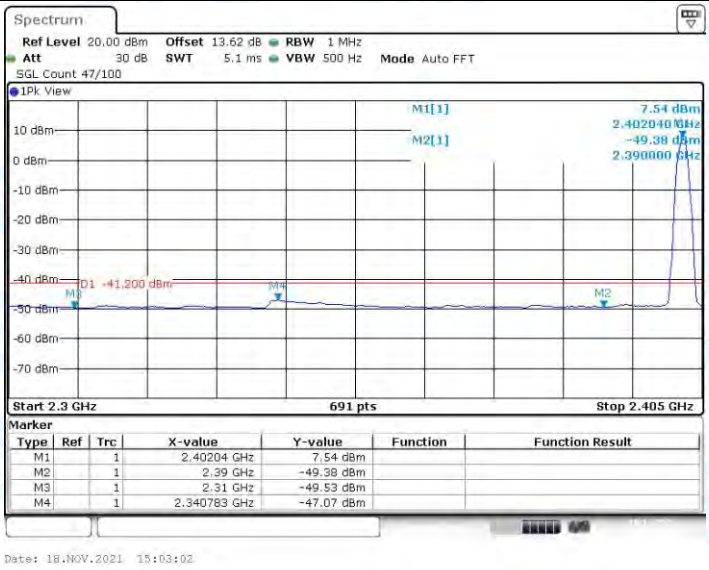
				Peak	2342.761	-36.04	≤-21.20	PASS
				Peak	2390.000	-39.27	≤-21.20	PASS
		High	2480	AV	2483.500	-48.87	≤-41.20	PASS
				AV	2483.913	-48.69	≤-41.20	PASS
				AV	2500.000	-48.97	≤-41.20	PASS
				Peak	2483.500	-40.45	≤-21.20	PASS
				Peak	2490.522	-37.65	≤-21.20	PASS
				Peak	2500.000	-40.94	≤-21.20	PASS
		Low	Hop_2402	Peak	2310.000	-37.05	≤-21.20	PASS
				Peak	2346.413	-35.49	≤-21.20	PASS
				Peak	2390.000	-39.2	≤-21.20	PASS
		High	Hop_2480	Peak	2483.500	-37.79	≤-21.20	PASS
				Peak	2498.058	-35.53	≤-21.20	PASS
				Peak	2500.000	-36.1	≤-21.20	PASS

Note：

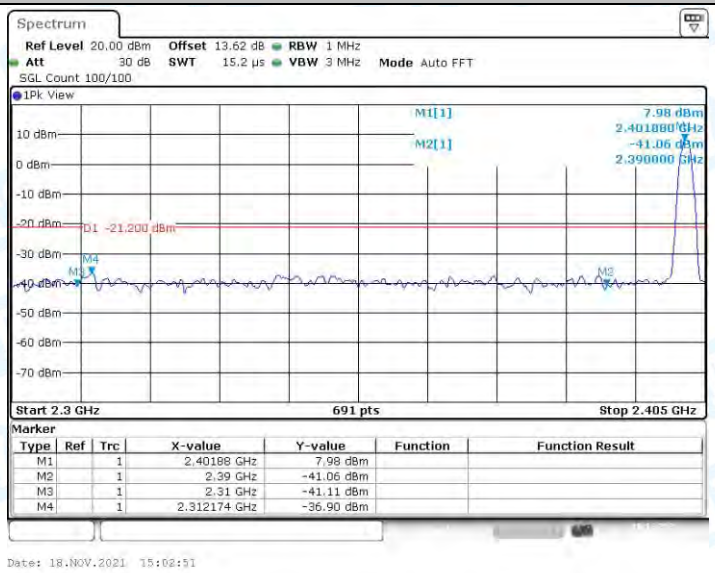
1. The Antenna Gain is compensated in the graph.
2. The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

10.2.Test Graphs

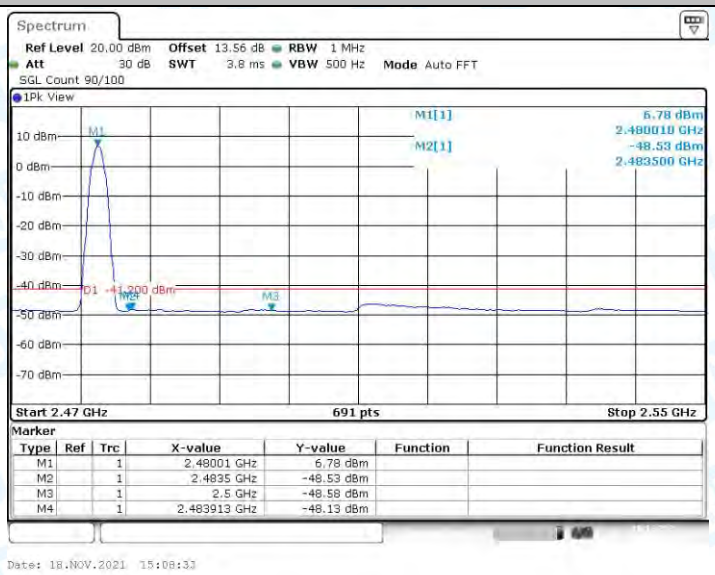
DH5_Ant1_Low_2402_AV



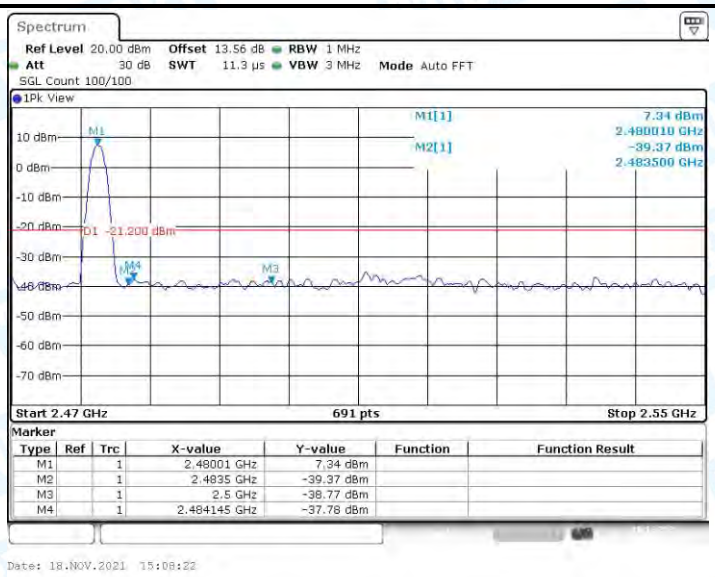
DH5_Ant1_Low_2402_Peak



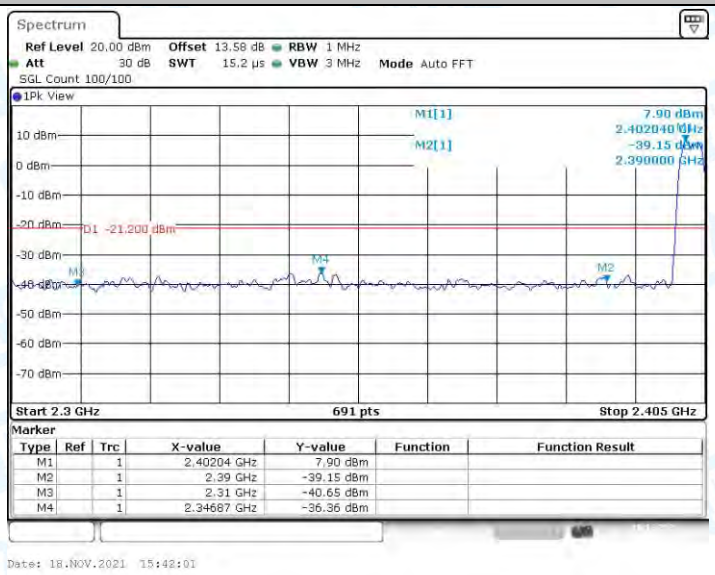
DH5_Ant1_High_2480_AV



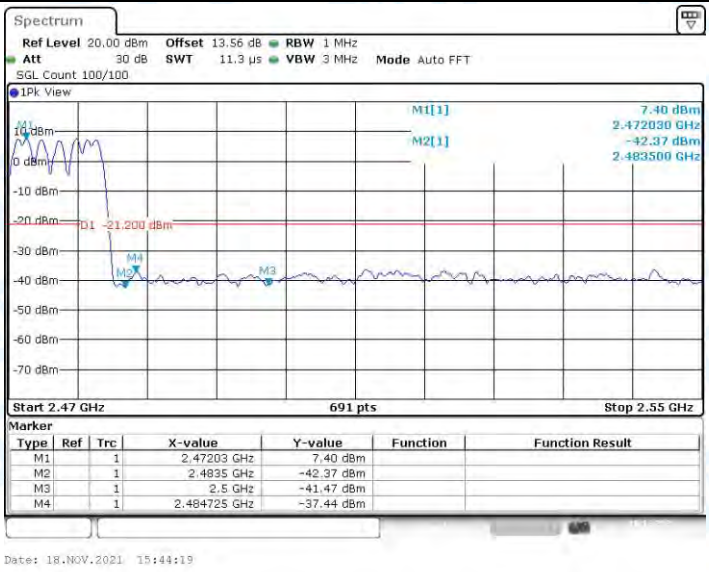
DH5_Ant1_High_2480_Peak



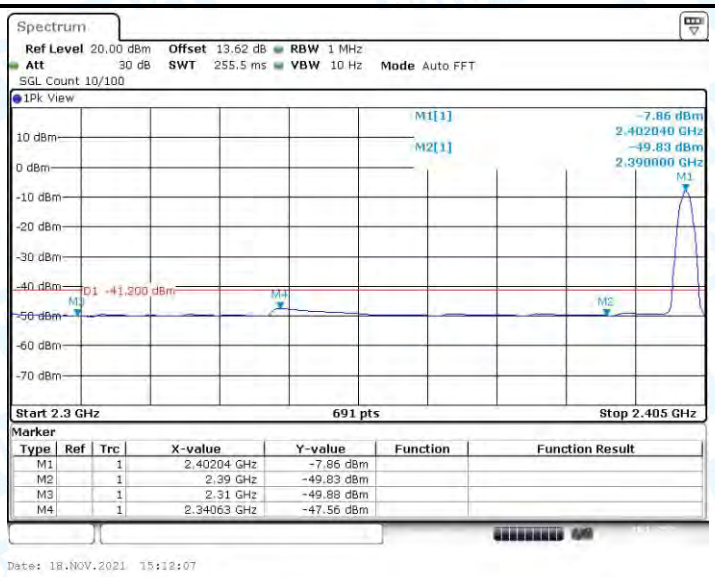
DH5_Ant1_Low_Hop_2402_Peak



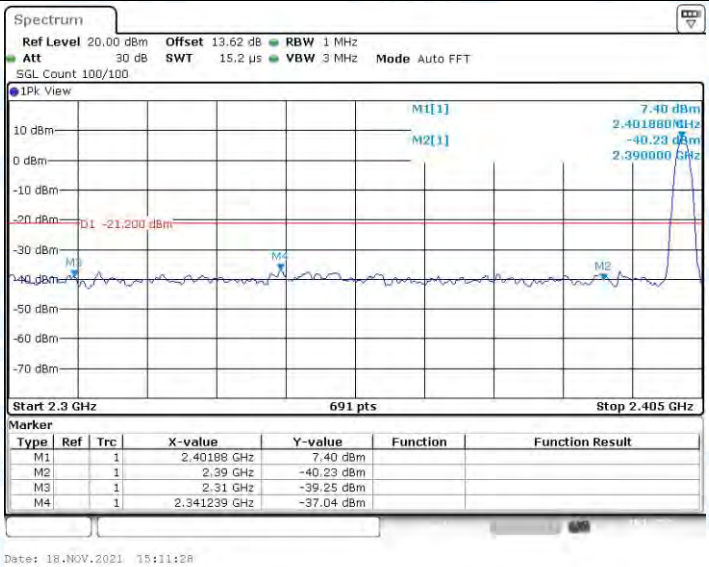
DH5_Ant1_High_Hop_2480_Peak



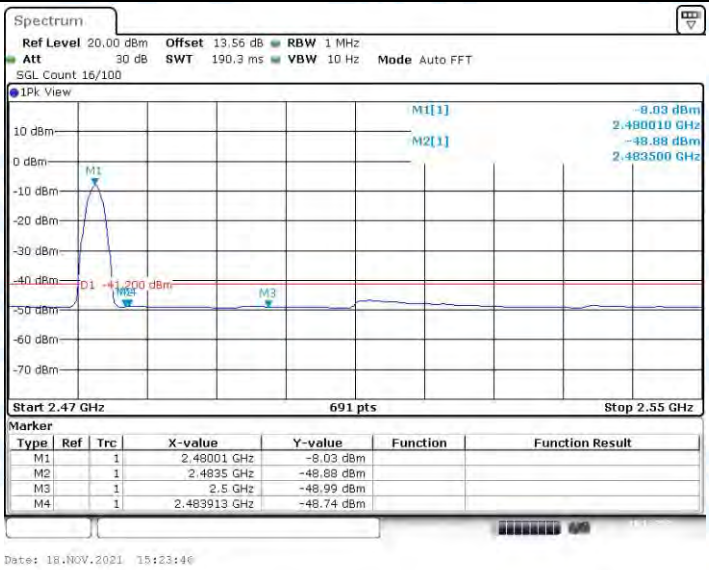
2DH5_Ant1_Low_2402_AV



2DH5_Ant1_Low_2402_Peak



2DH5_Ant1_High_2480_AV



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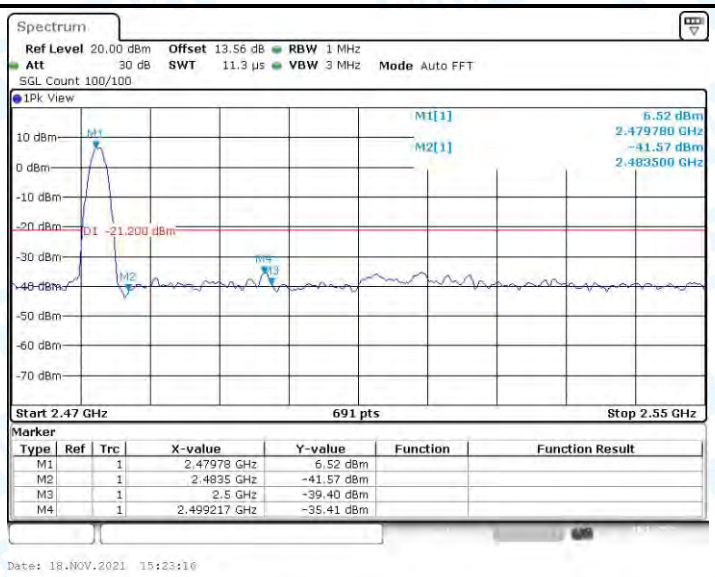
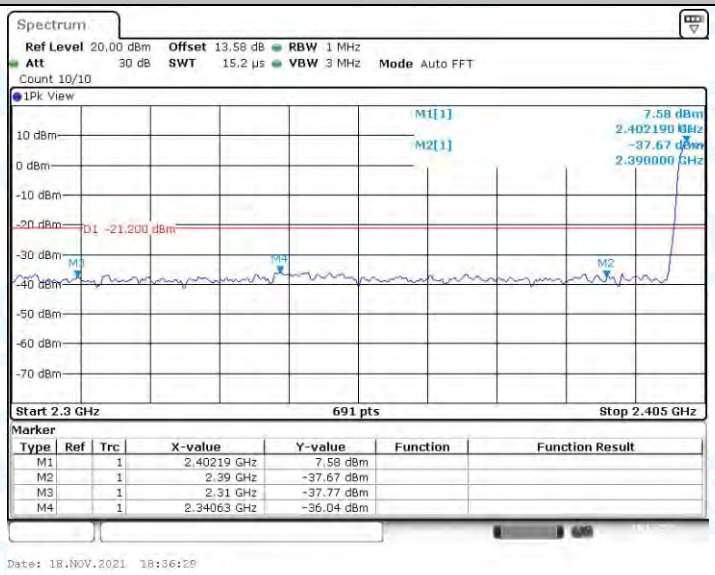
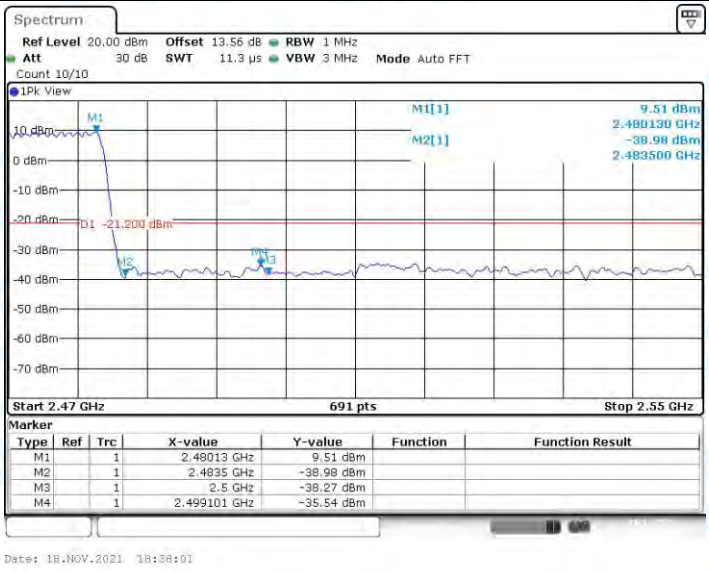


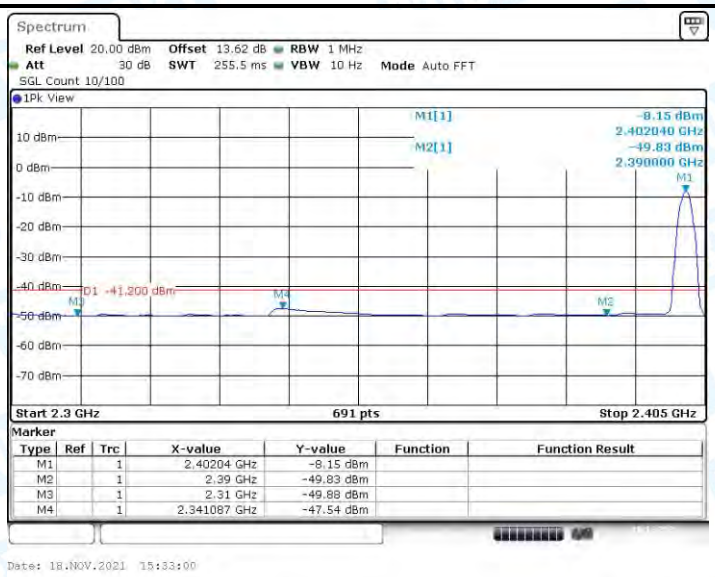
2DH5_Ant1_Low_Hop_2402_Peak



2DH5_Ant1_High_Hop_2480_Peak



3DH5_Ant1_Low_2402_AV



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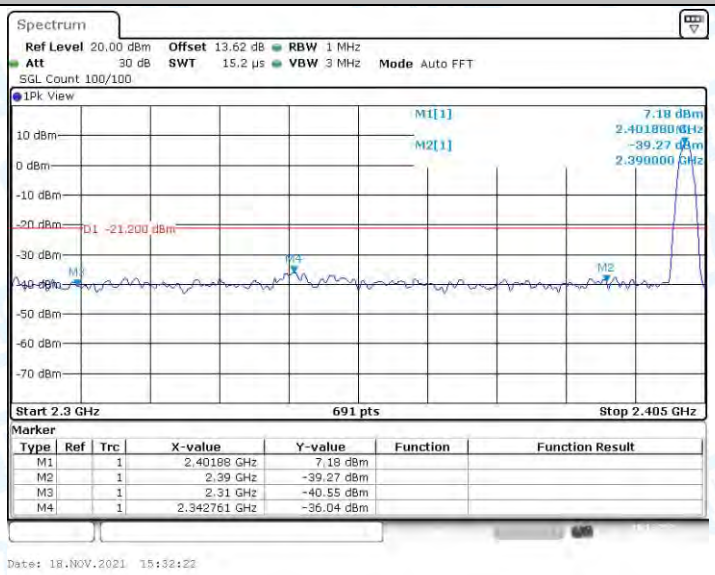
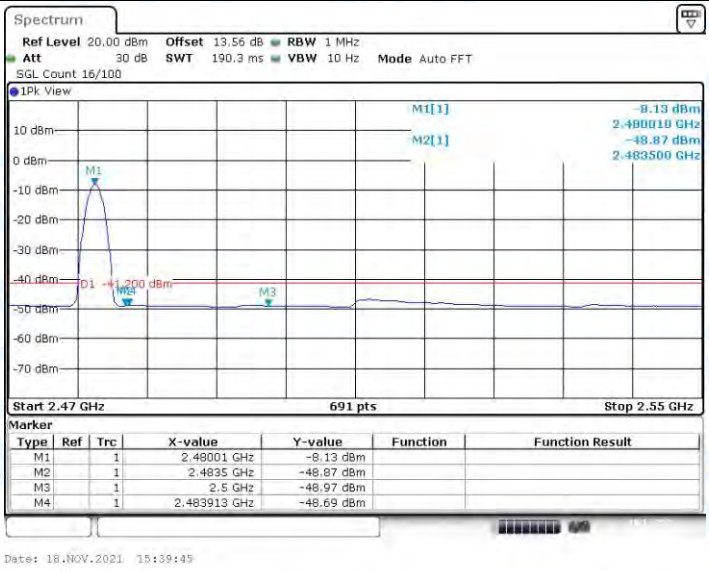
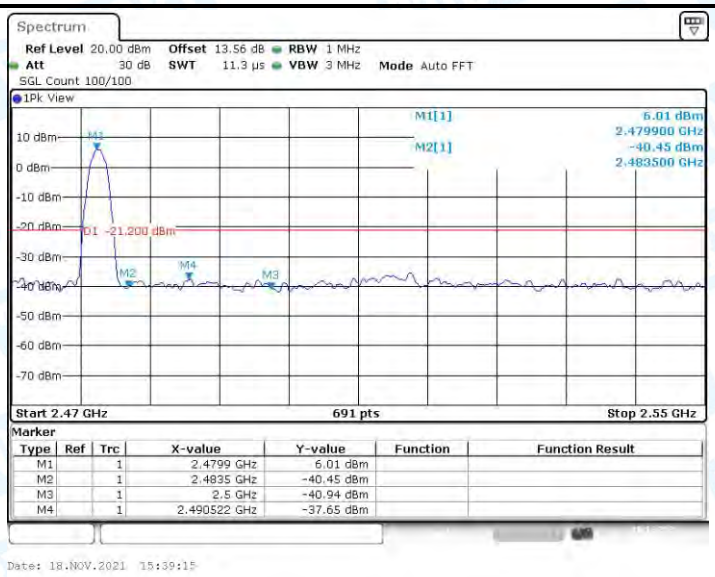


3DH5_Ant1_High_2480_AV



3DH5_Ant1_High_2480_Peak



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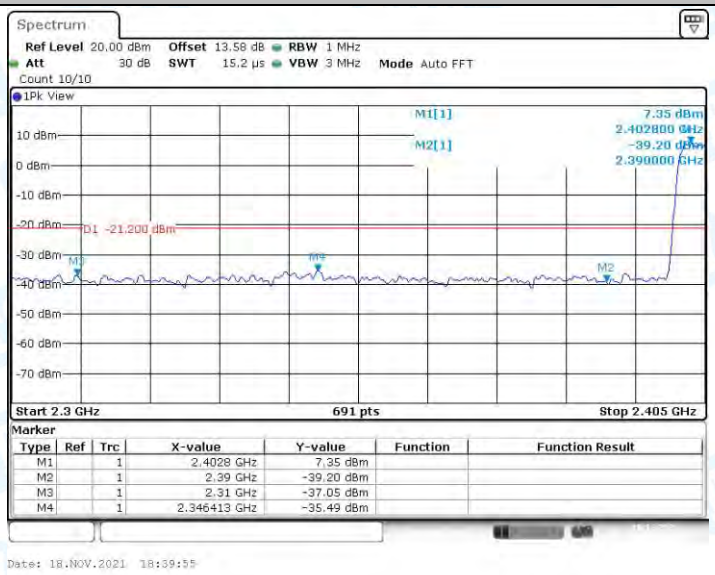

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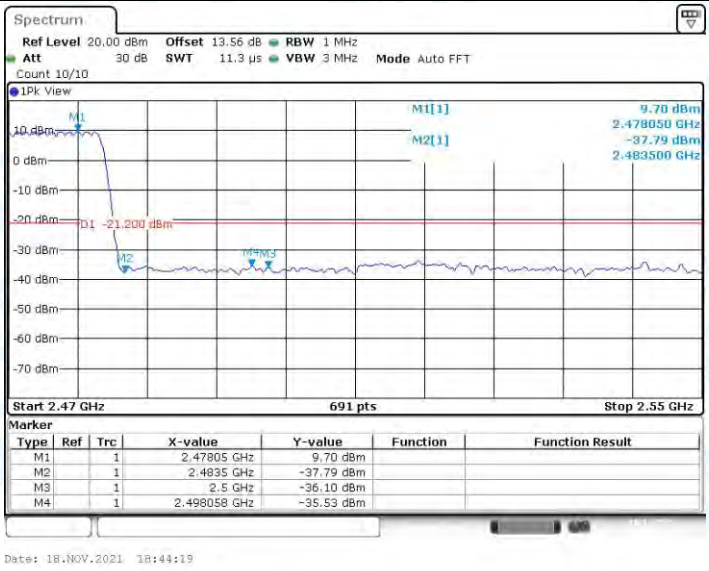

-----End of the report-----