

Appendix: Bluetooth Classic of module 1

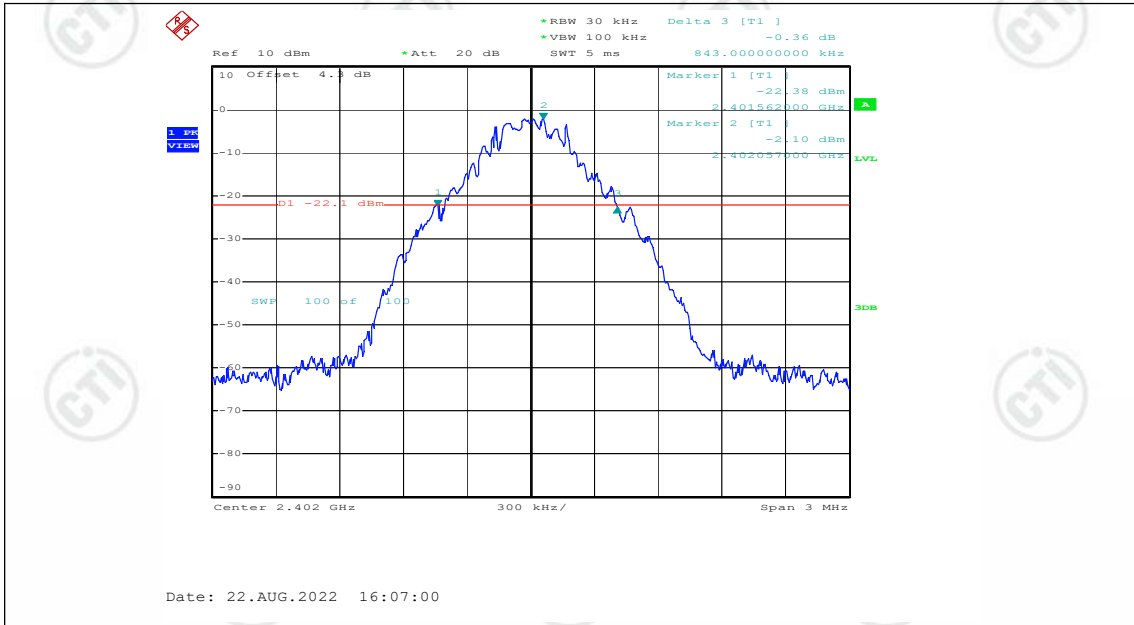
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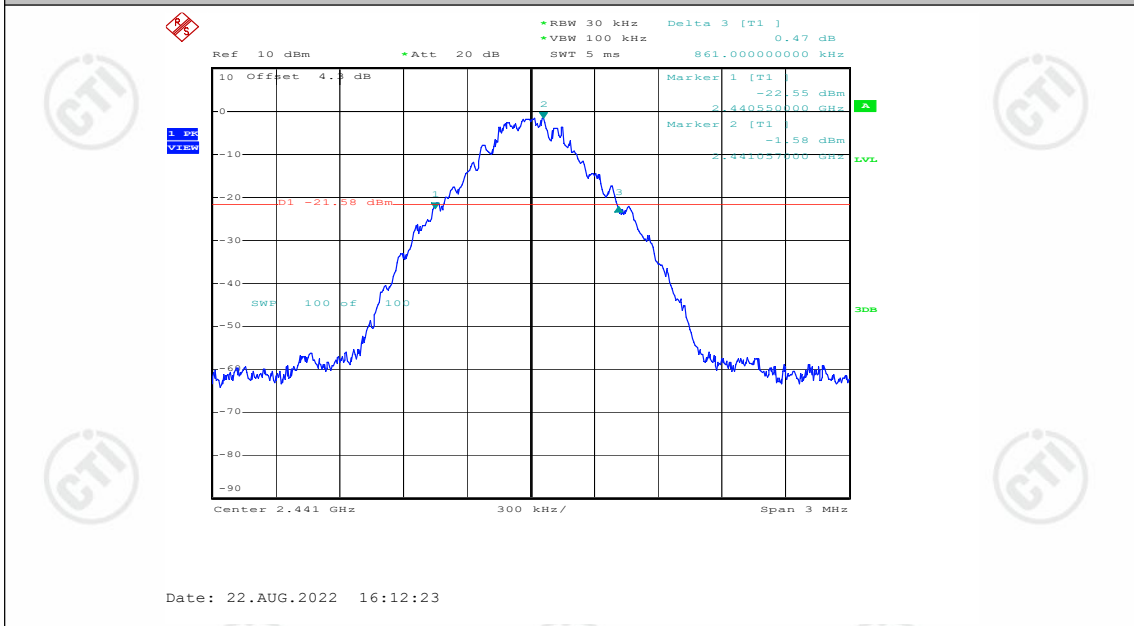
Appendix A: 20dB Emission Bandwidth**Test Result**

Test Mode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.84	2401.56	2402.41	---	---
		2441	0.86	2440.55	2441.41	---	---
		2480	0.85	2479.56	2480.41	---	---
2DH5	Ant1	2402	1.28	2401.36	2402.65	---	---
		2441	1.24	2440.37	2441.61	---	---
		2480	1.26	2479.37	2480.63	---	---
3DH5	Ant1	2402	1.28	2401.36	2402.63	---	---
		2441	1.28	2440.36	2441.64	---	---
		2480	1.27	2479.36	2480.63	---	---

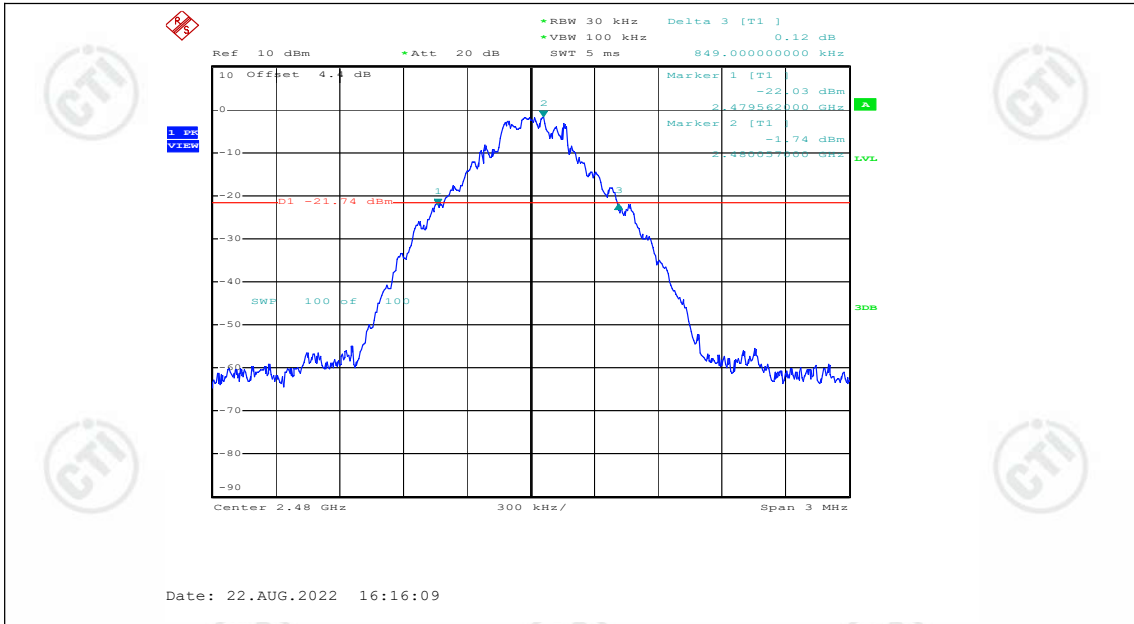
Test Graphs



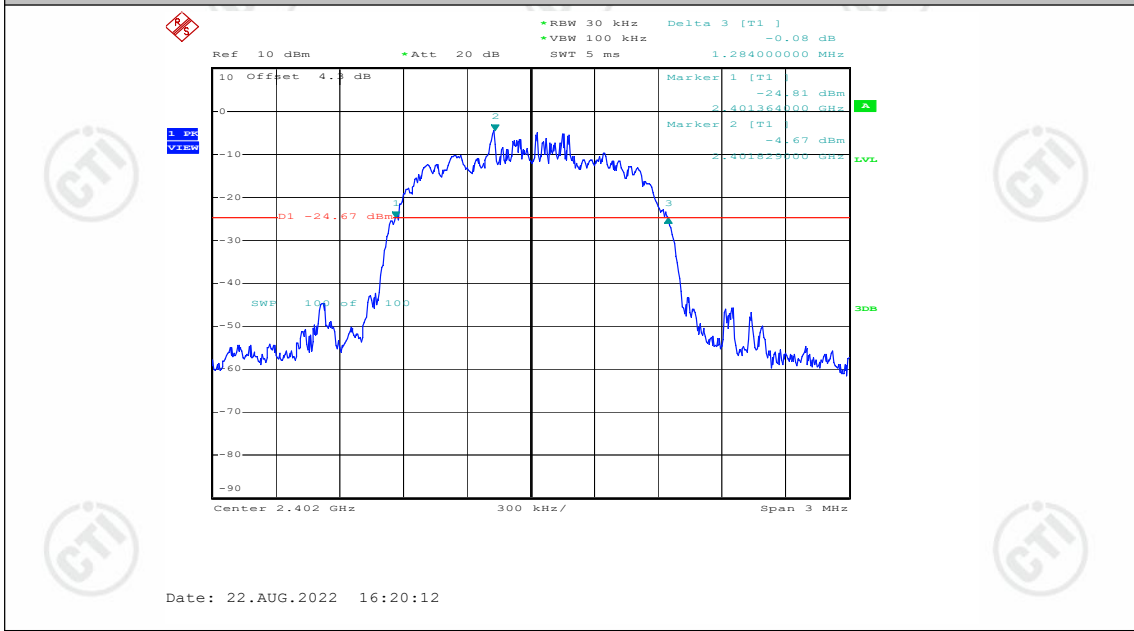
DH5_Ant1_2402



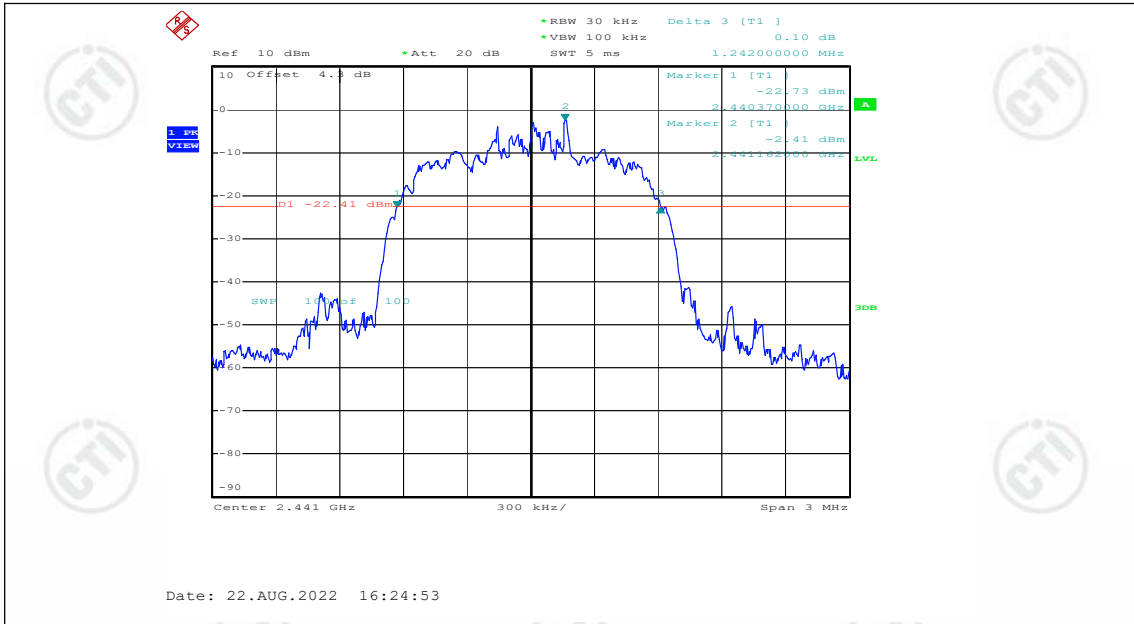
DH5_Ant1_2441



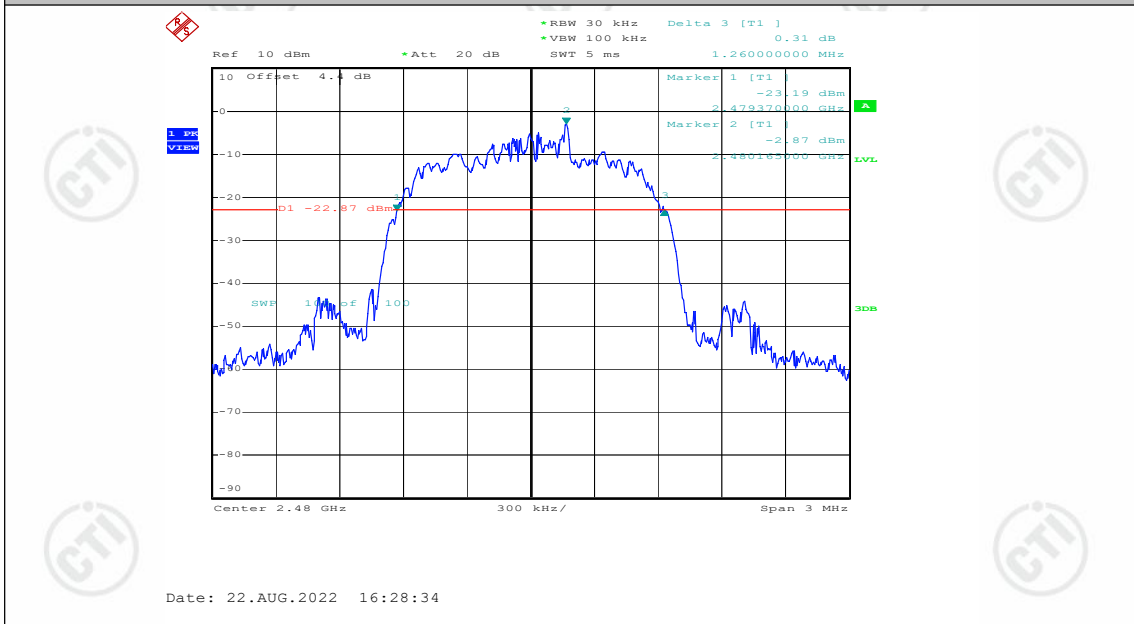
DH5_Ant1_2480



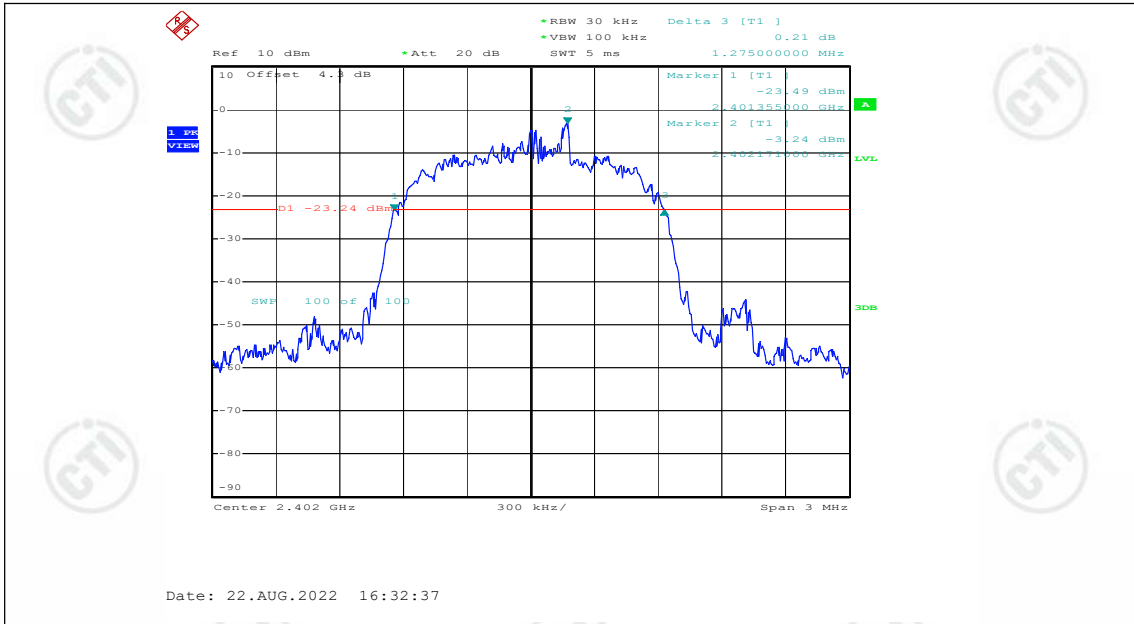
2DH5_Ant1_2402



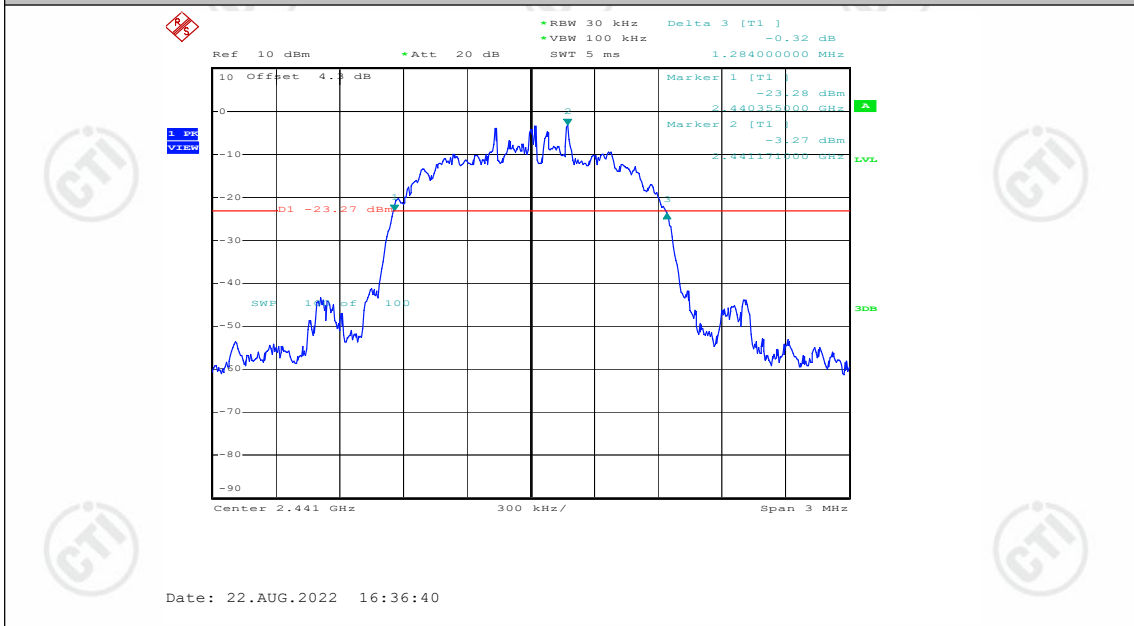
2DH5_Ant1_2441



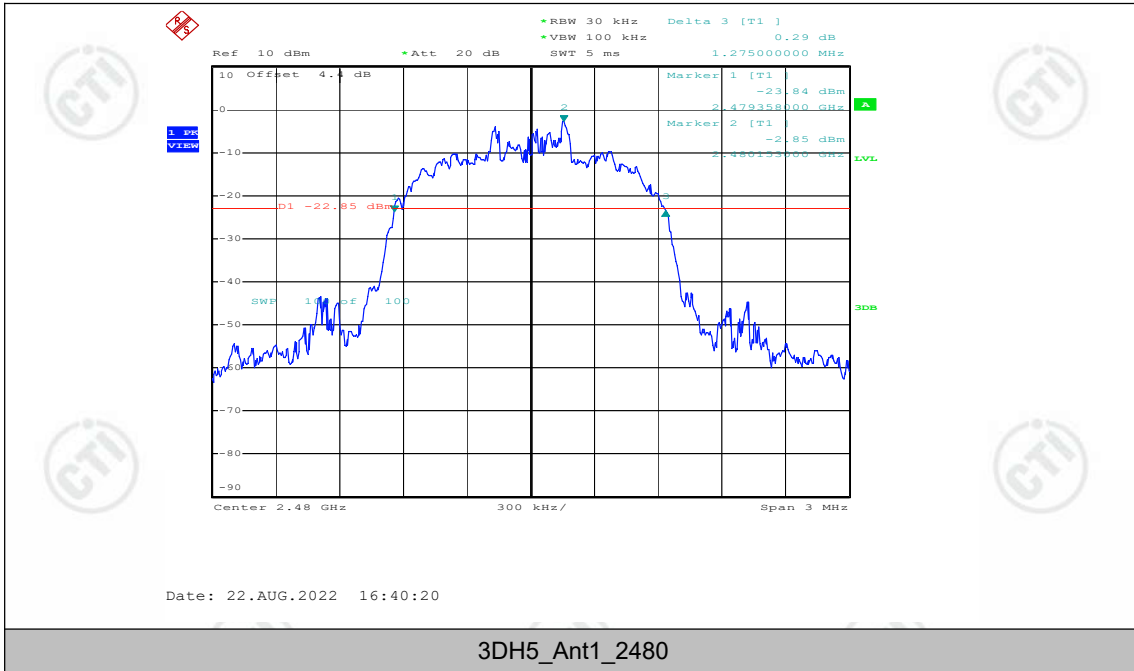
2DH5_Ant1_2480



3DH5_Ant1_2402



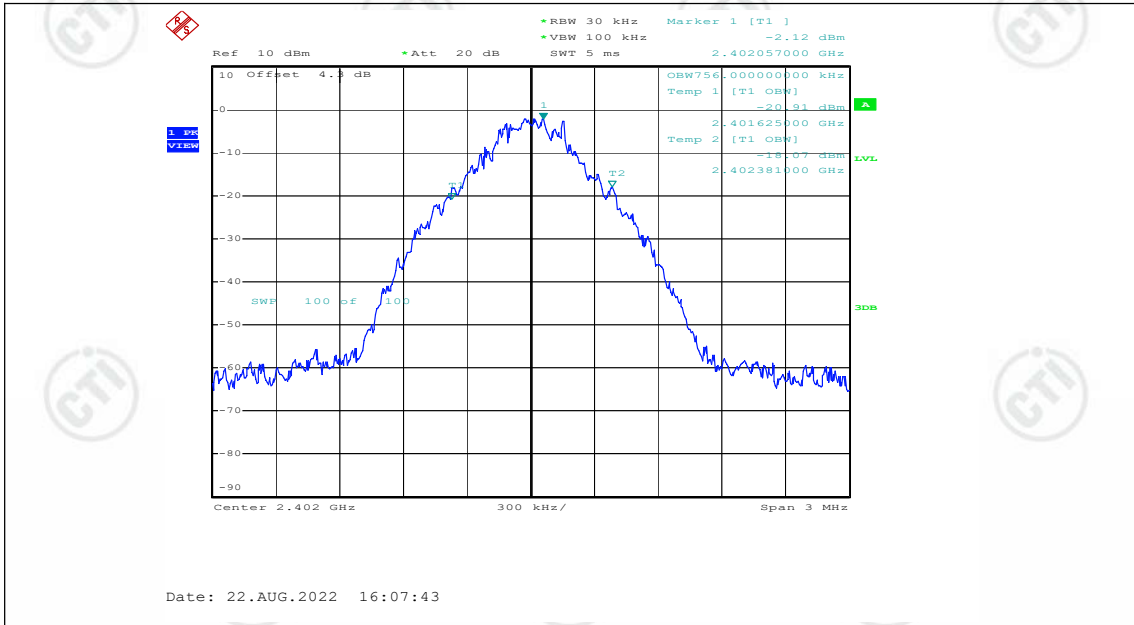
3DH5_Ant1_2441



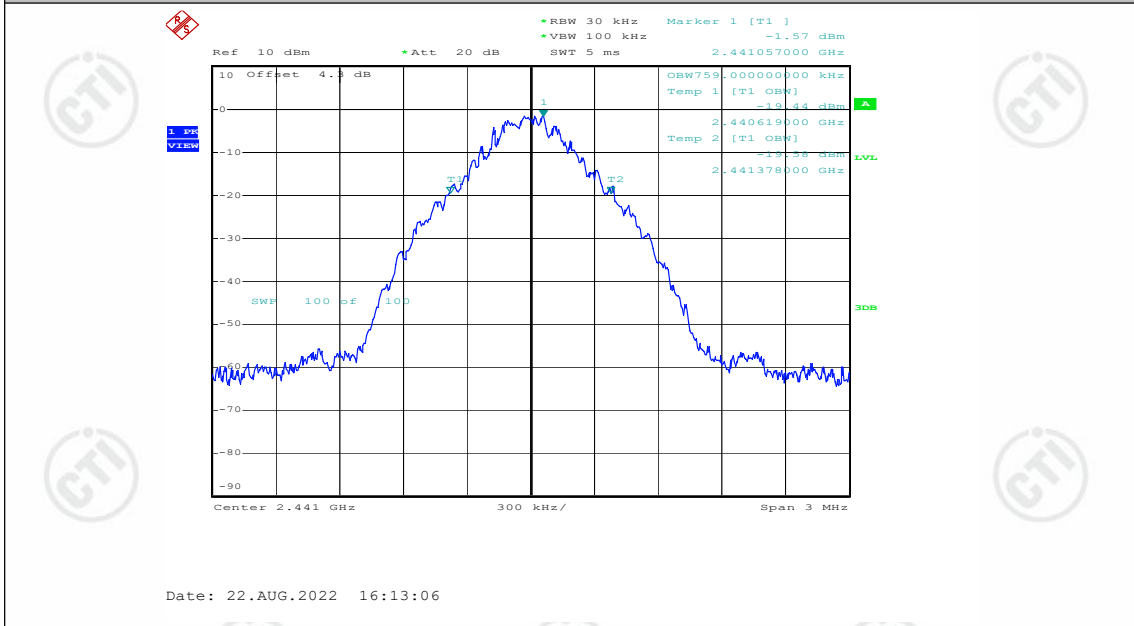
Appendix B: Occupied Channel Bandwidth**Test Result**

Test Mode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.756	0.000	0.000	---	---
		2441	0.759	0.000	0.000	---	---
		2480	0.762	0.000	0.000	---	---
2DH5	Ant1	2402	1.182	0.000	0.000	---	---
		2441	1.167	0.000	0.000	---	---
		2480	1.161	0.000	0.000	---	---
3DH5	Ant1	2402	1.17	0.000	0.000	---	---
		2441	1.167	0.000	0.000	---	---
		2480	1.173	0.000	0.000	---	---

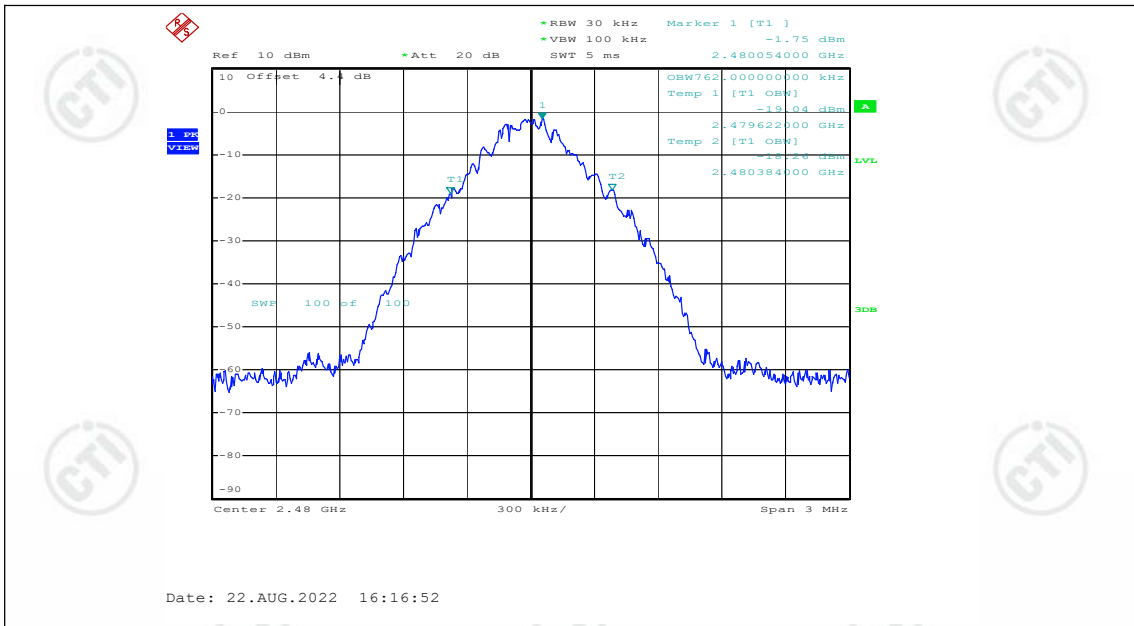
Test Graphs



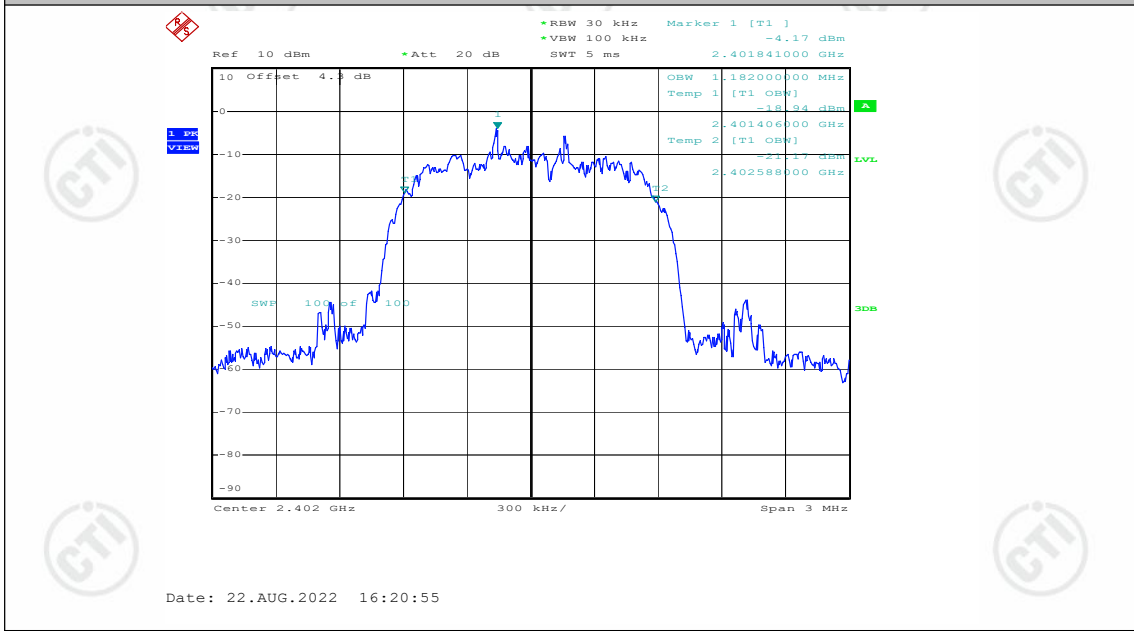
DH5_Ant1_2402



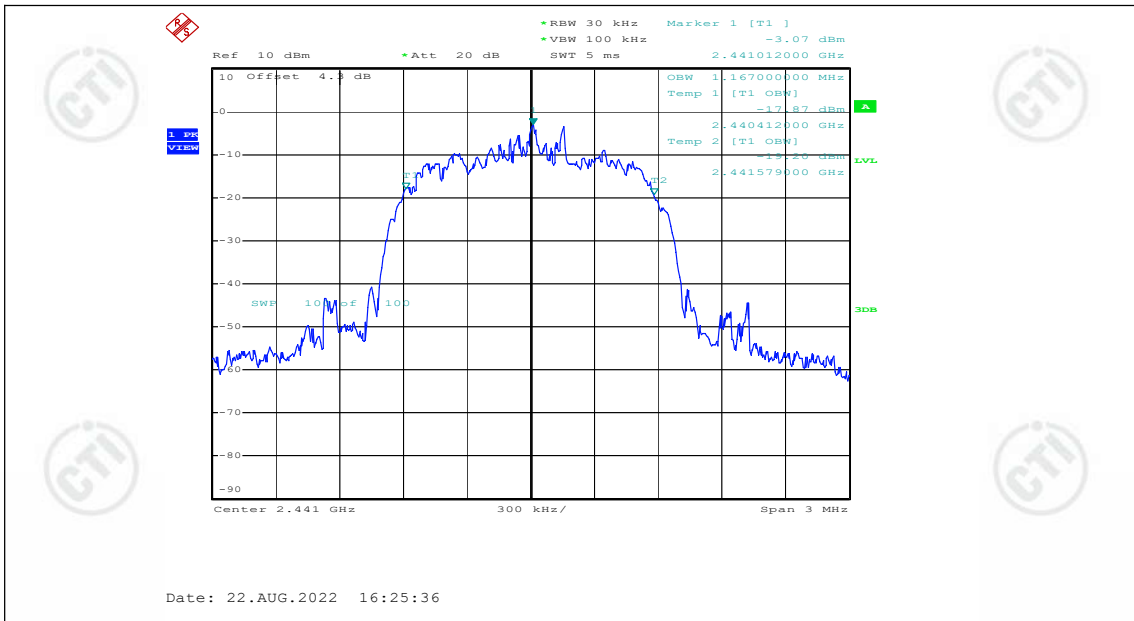
DH5_Ant1_2441



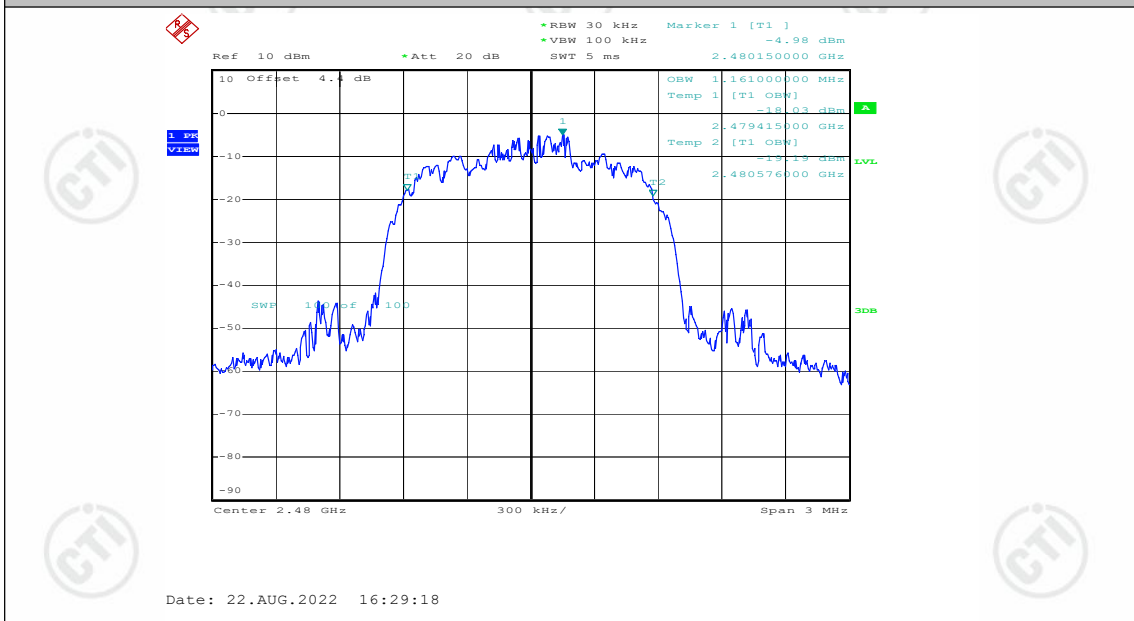
DH5_Ant1_2480



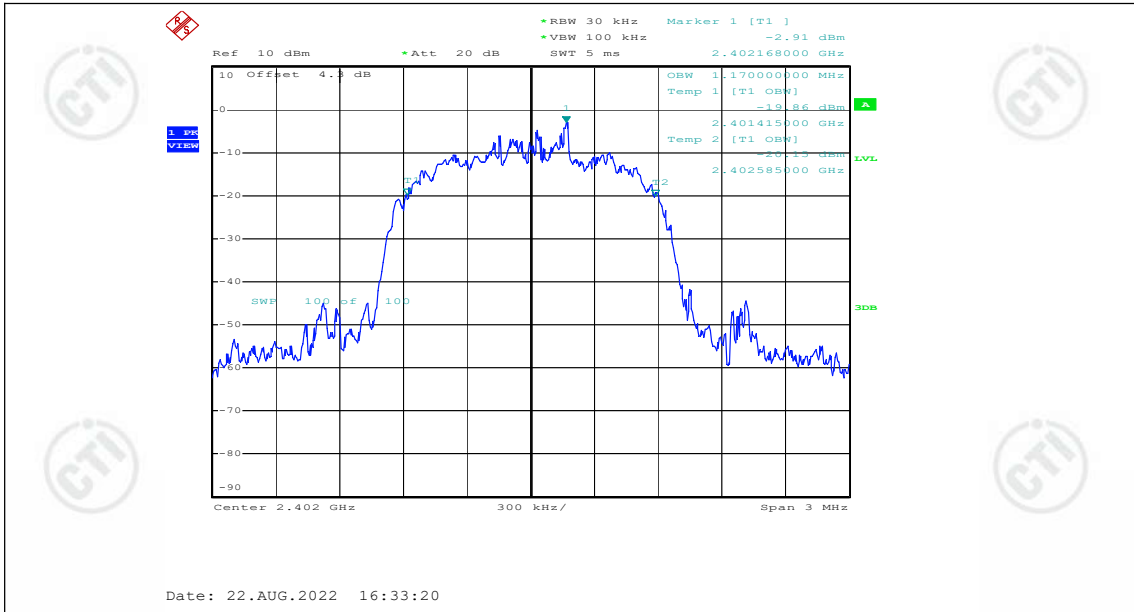
2DH5_Ant1_2402



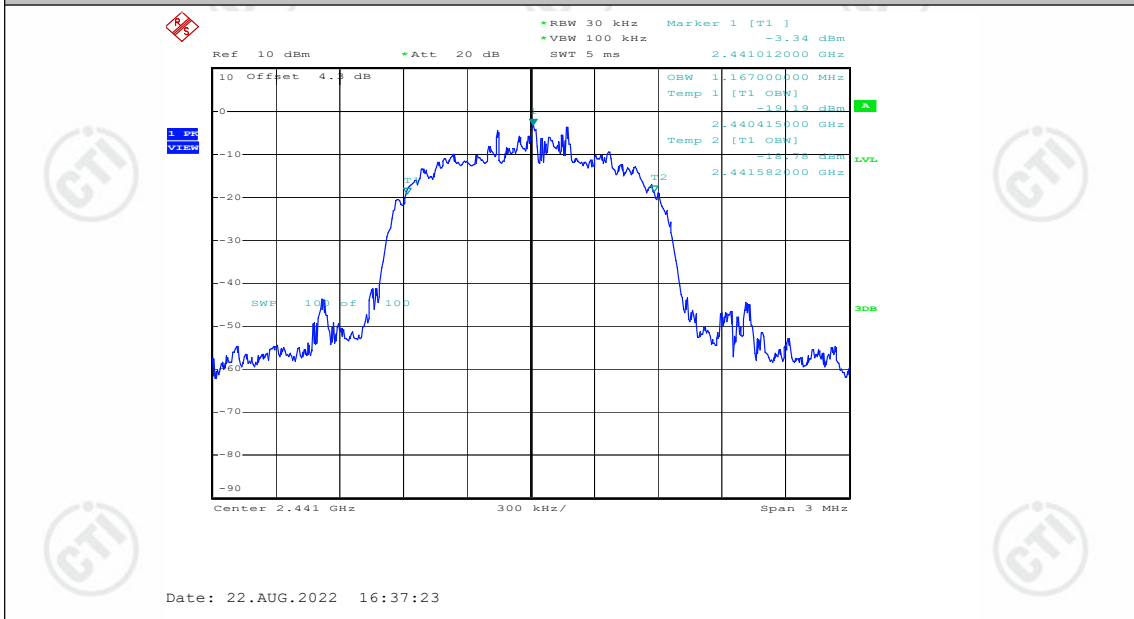
2DH5_Ant1_2441



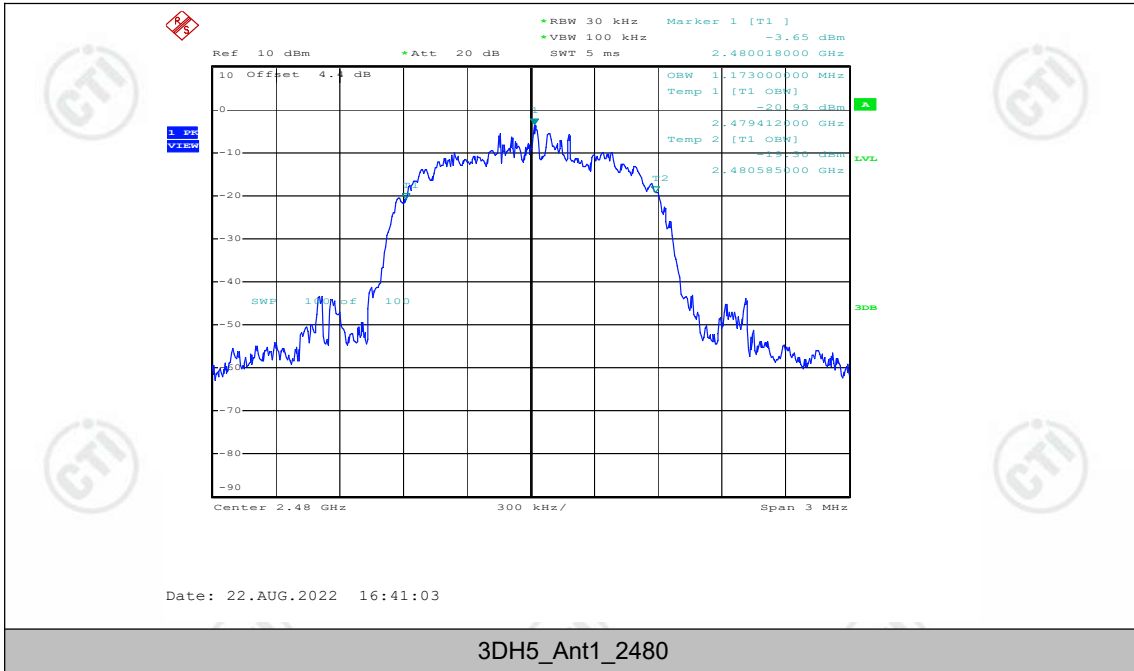
2DH5_Ant1_2480



3DH5_Ant1_2402



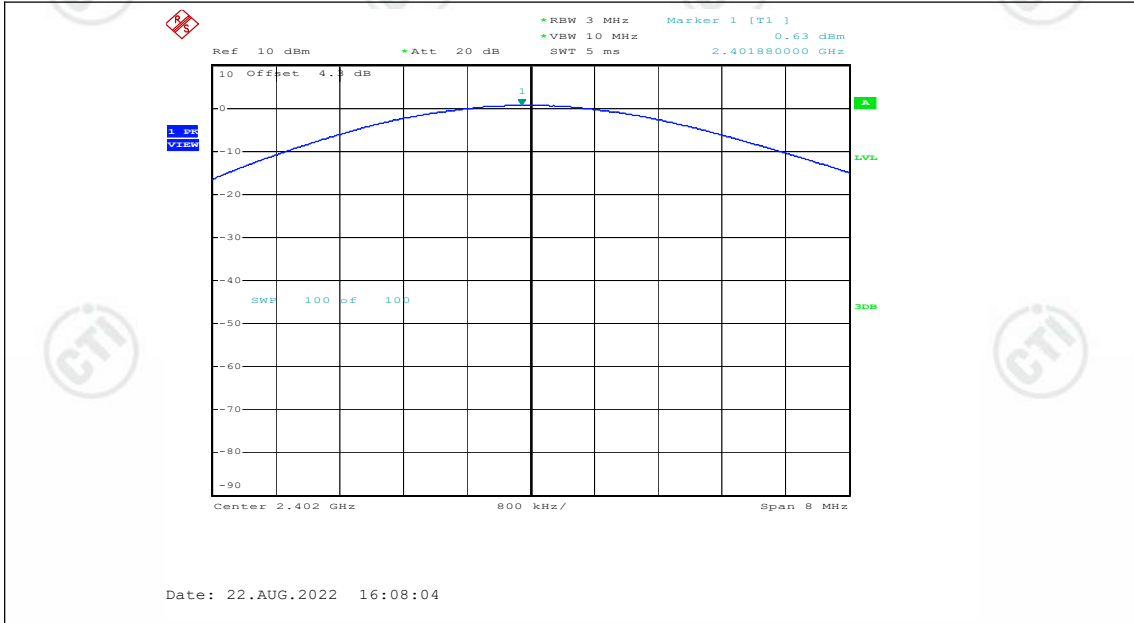
3DH5_Ant1_2441



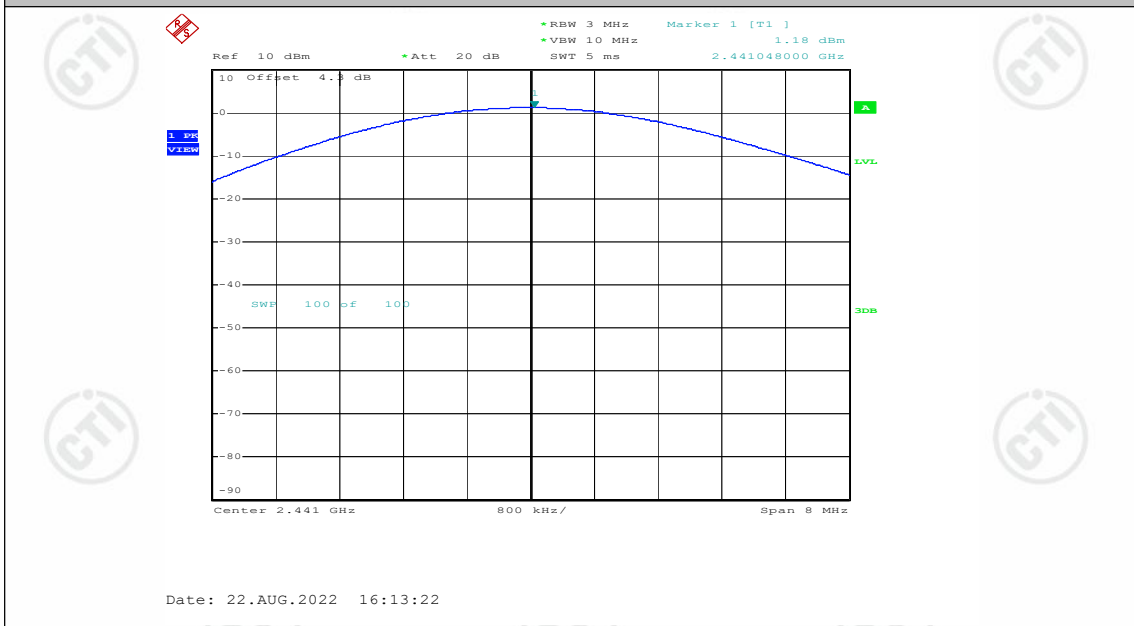
Appendix C: Maximum conducted output power**Test Result**

Test Mode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	0.63	≤20.97	PASS
		2441	1.18	≤20.97	PASS
		2480	1	≤20.97	PASS
2DH5	Ant1	2402	0.11	≤20.97	PASS
		2441	0.6	≤20.97	PASS
		2480	0.45	≤20.97	PASS
3DH5	Ant1	2402	0.11	≤20.97	PASS
		2441	0.6	≤20.97	PASS
		2480	0.48	≤20.97	PASS

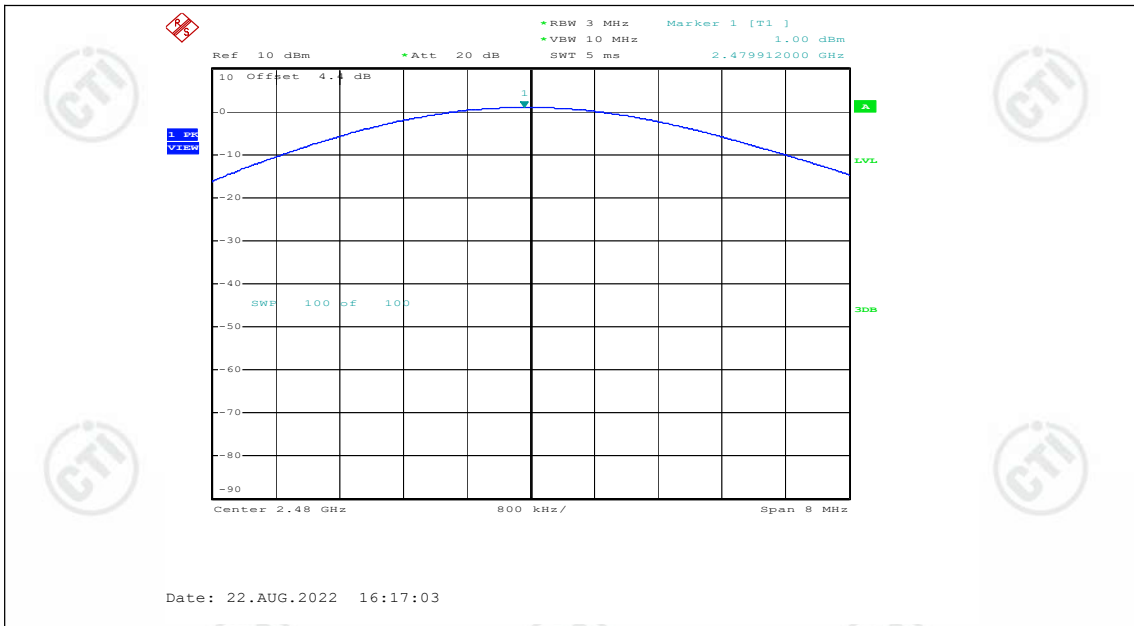
Test Graphs



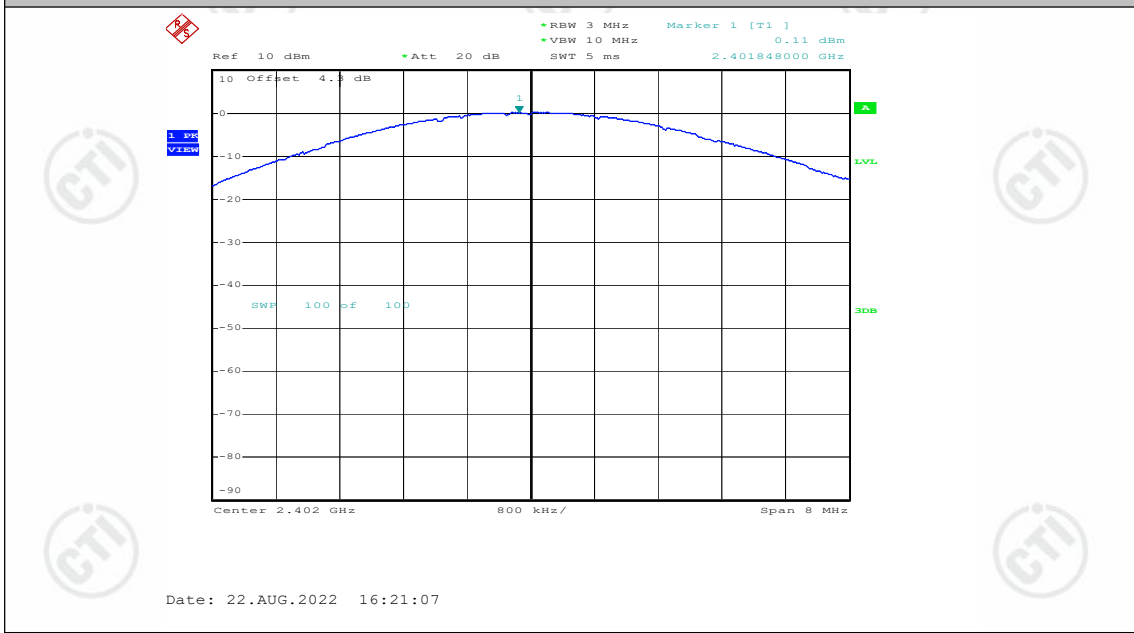
DH5_Ant1_2402



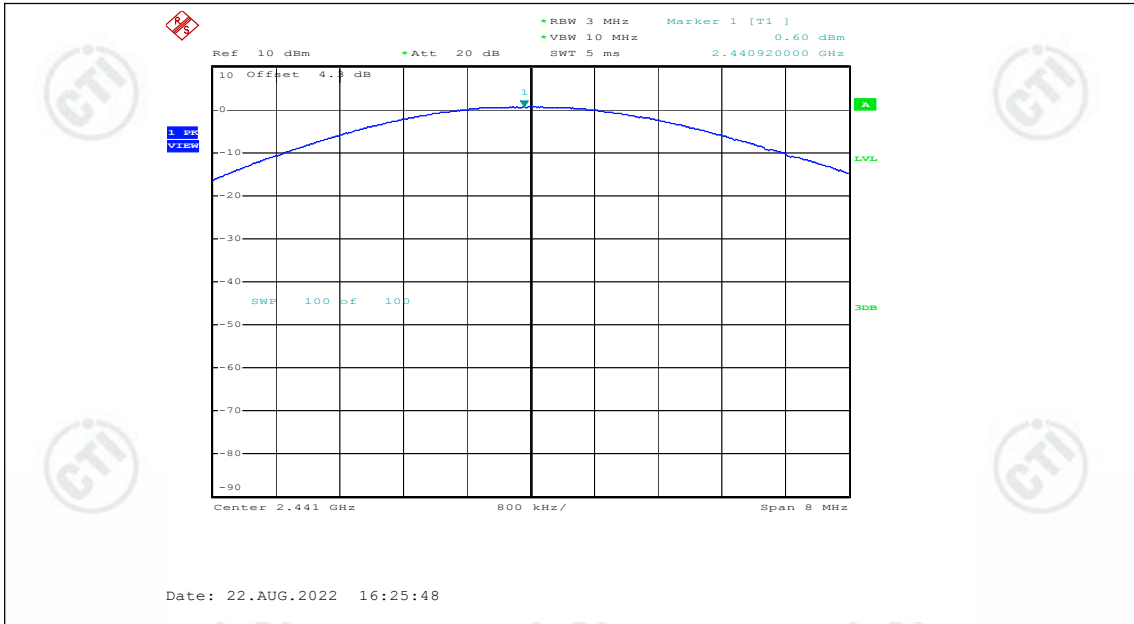
DH5_Ant1_2441



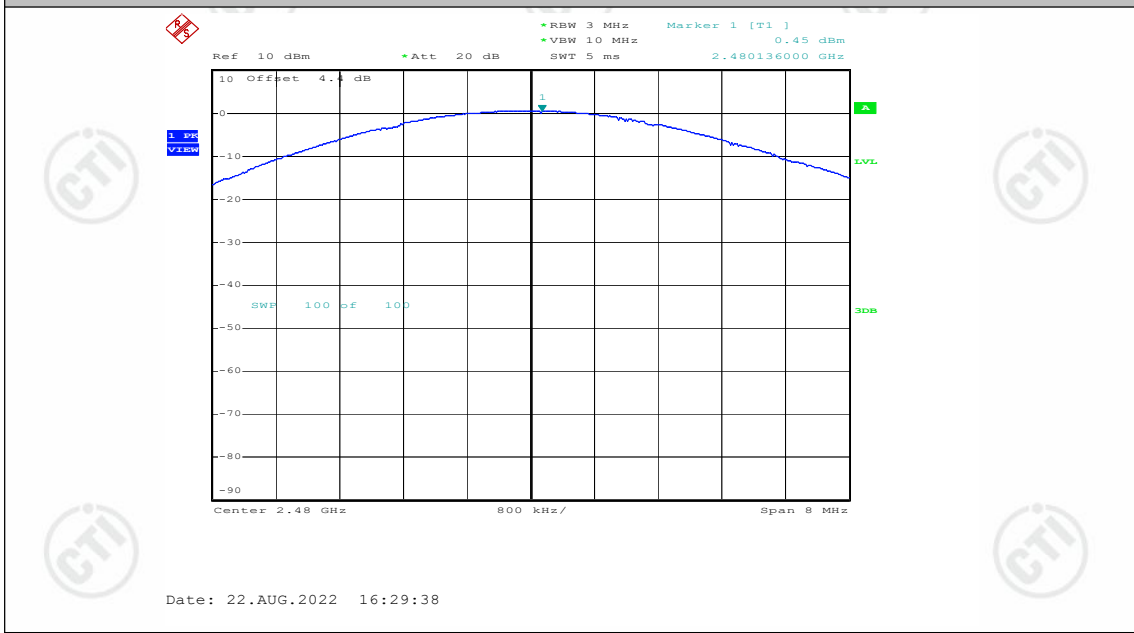
DH5_Ant1_2480



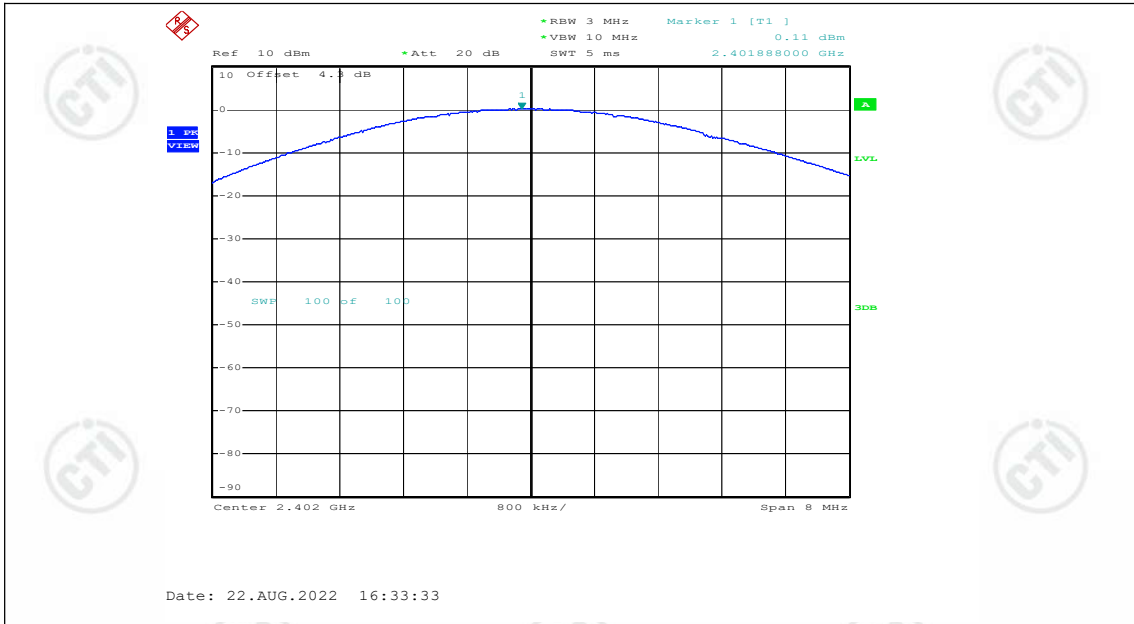
2DH5_Ant1_2402



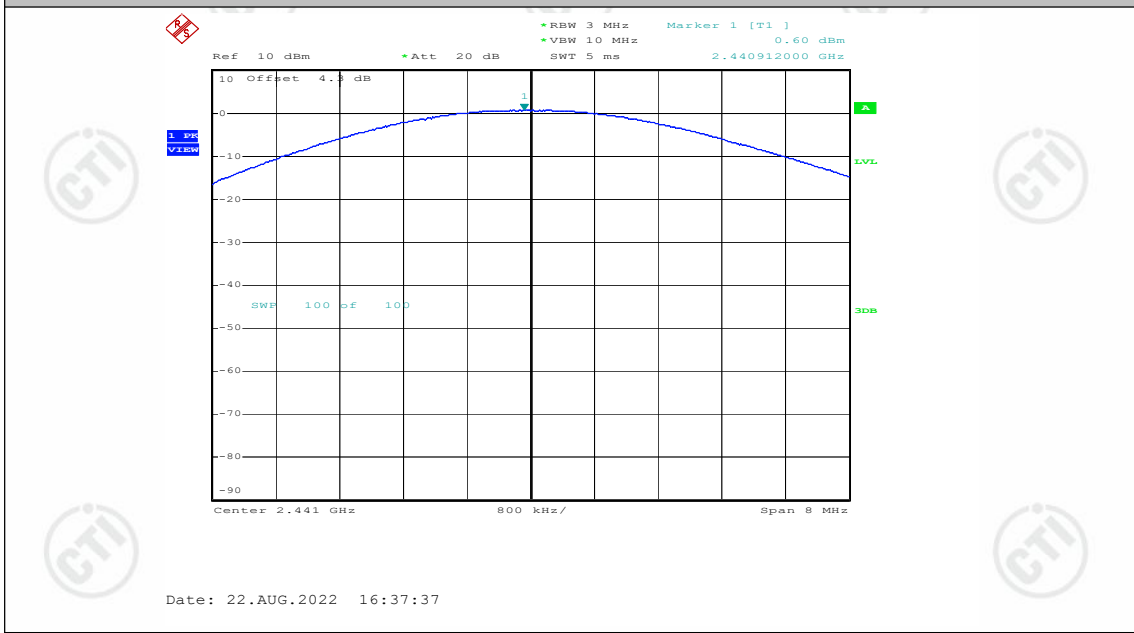
2DH5_Ant1_2441



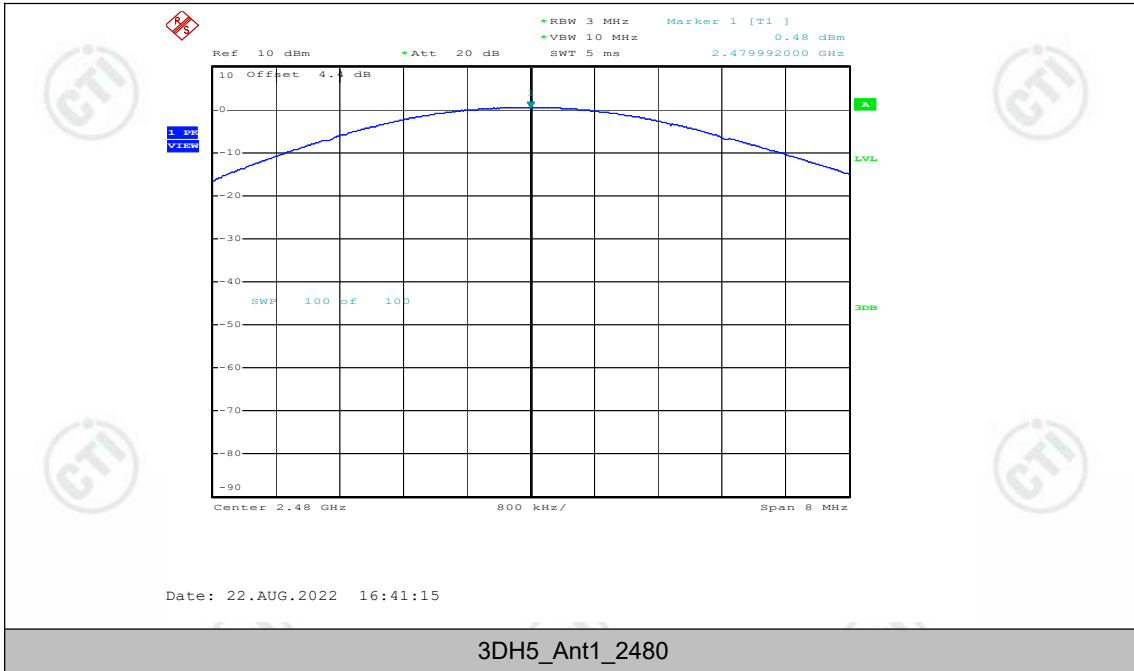
2DH5_Ant1_2480



3DH5_Ant1_2402



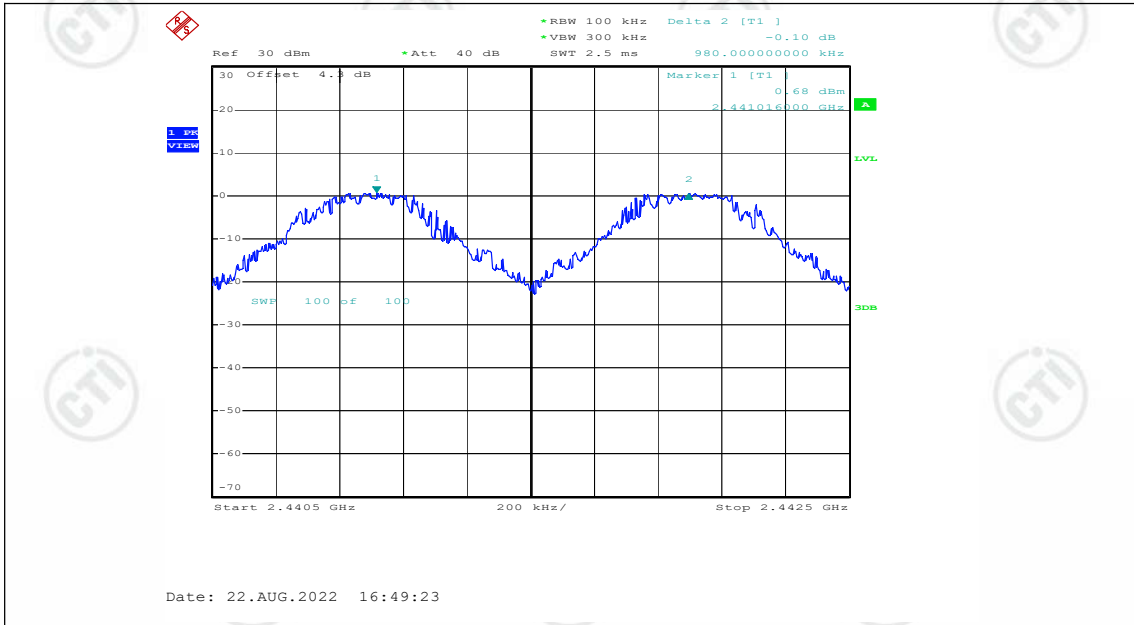
3DH5_Ant1_2441



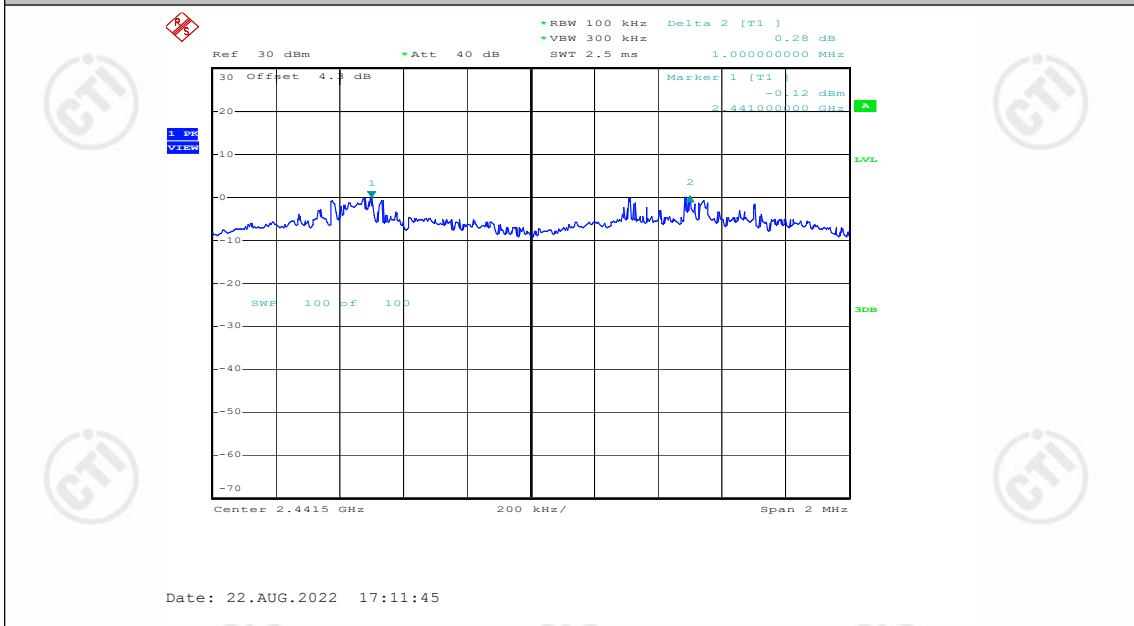
Appendix D: Carrier frequency separation**Test Result**

Test Mode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.98	≥0.860	PASS
2DH5	Ant1	Hop	1	≥0.853	PASS
3DH5	Ant1	Hop	0.956	≥0.853	PASS

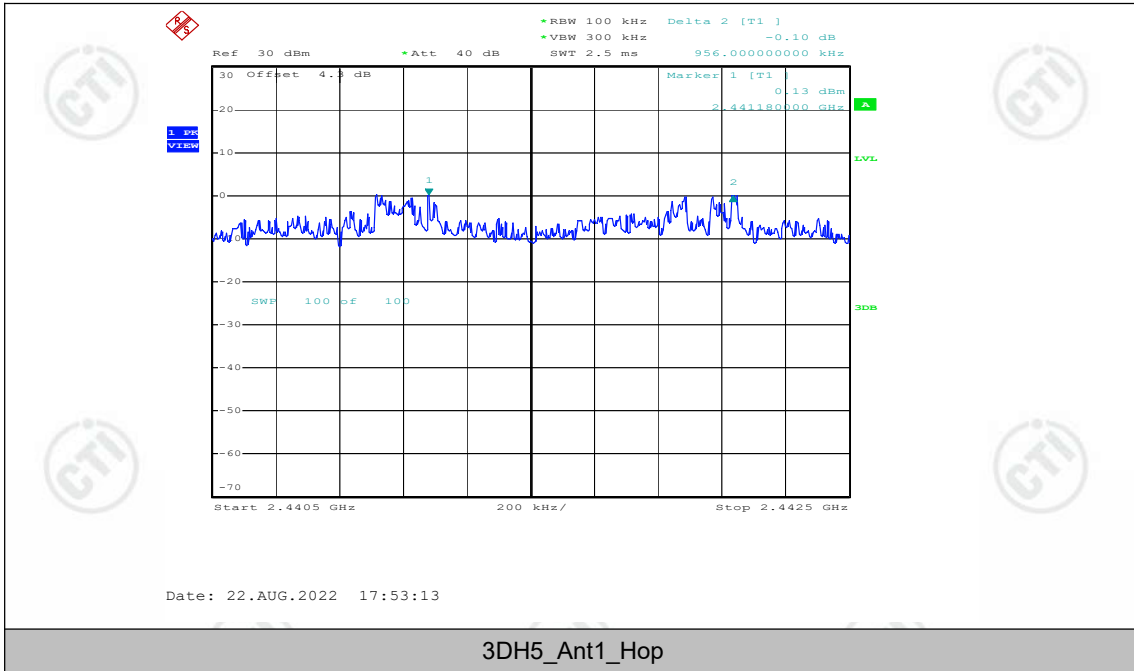
Test Graphs



DH5_Ant1_Hop



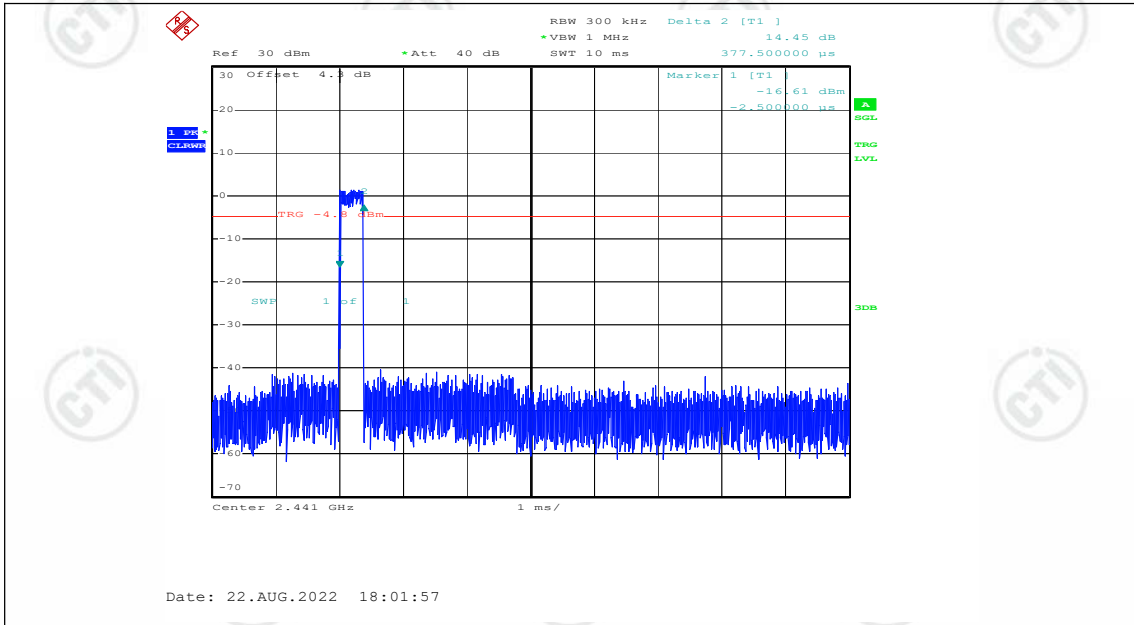
2DH5_Ant1_Hop



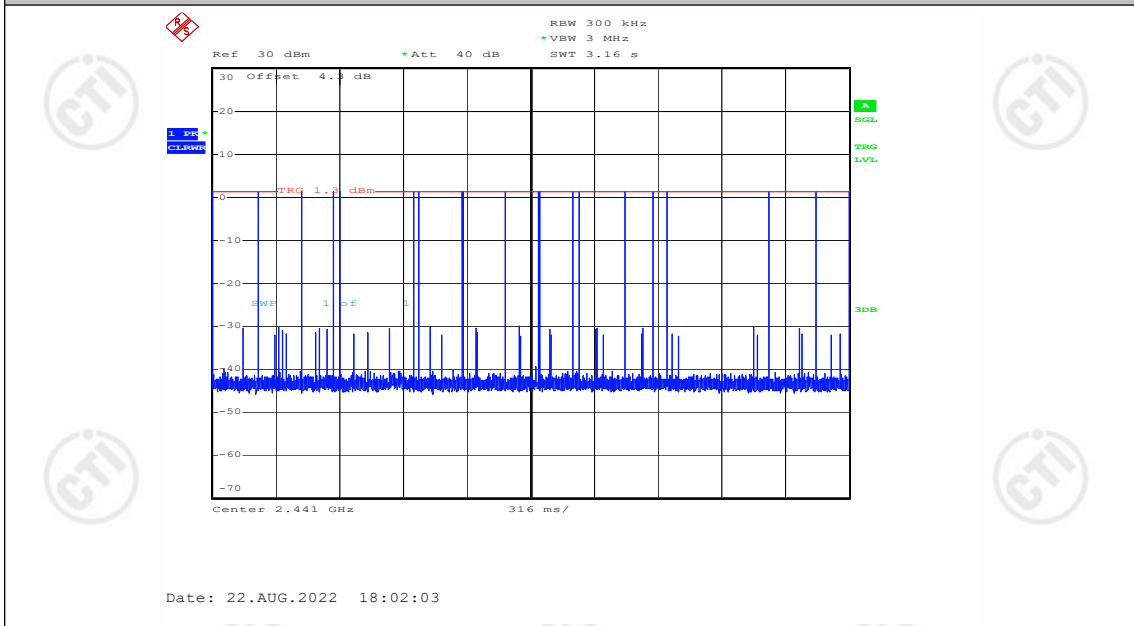
Appendix E: Time of occupancy**Test Result**

Test Mode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.38	180	0.068	≤0.4	PASS
DH3	Ant1	Hop	1.63	170	0.278	≤0.4	PASS
DH5	Ant1	Hop	2.88	80	0.231	≤0.4	PASS
2DH1	Ant1	Hop	0.39	160	0.062	≤0.4	PASS
2DH3	Ant1	Hop	1.64	170	0.278	≤0.4	PASS
2DH5	Ant1	Hop	2.89	110	0.317	≤0.4	PASS
3DH1	Ant1	Hop	0.39	160	0.062	≤0.4	PASS
3DH3	Ant1	Hop	1.64	140	0.229	≤0.4	PASS
3DH5	Ant1	Hop	2.89	90	0.26	≤0.4	PASS

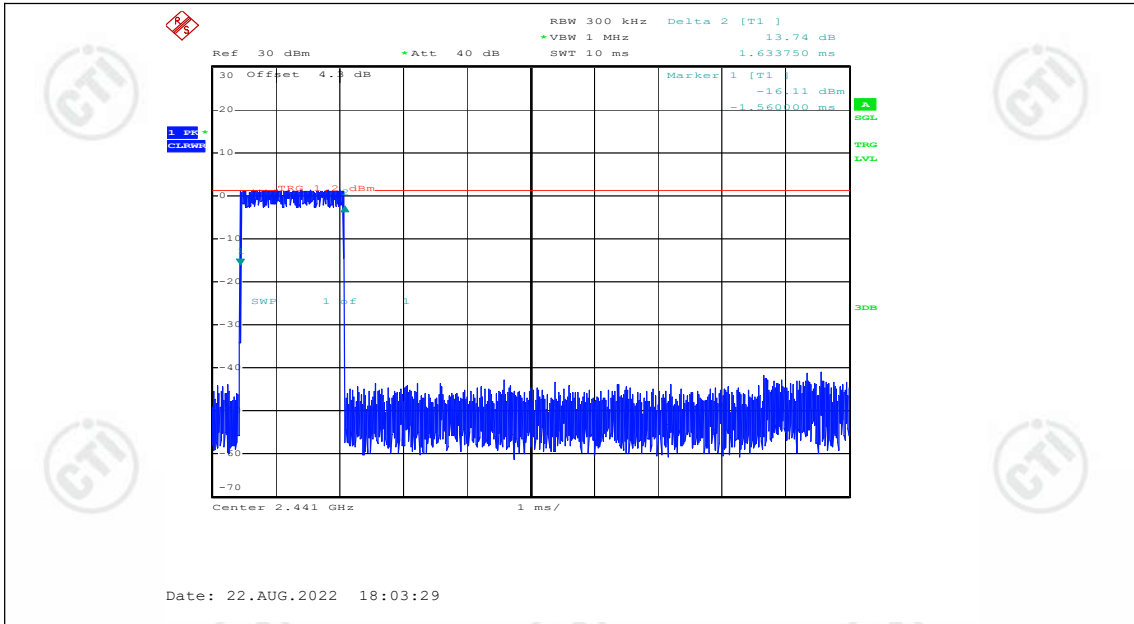
Test Graphs



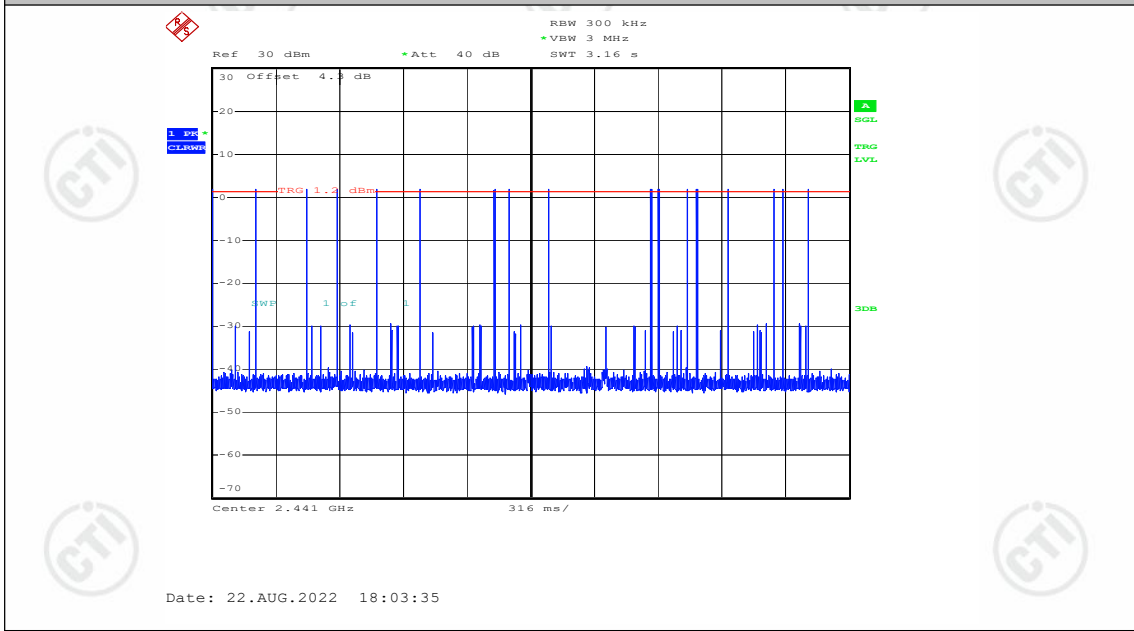
DH1_Ant1_Hop



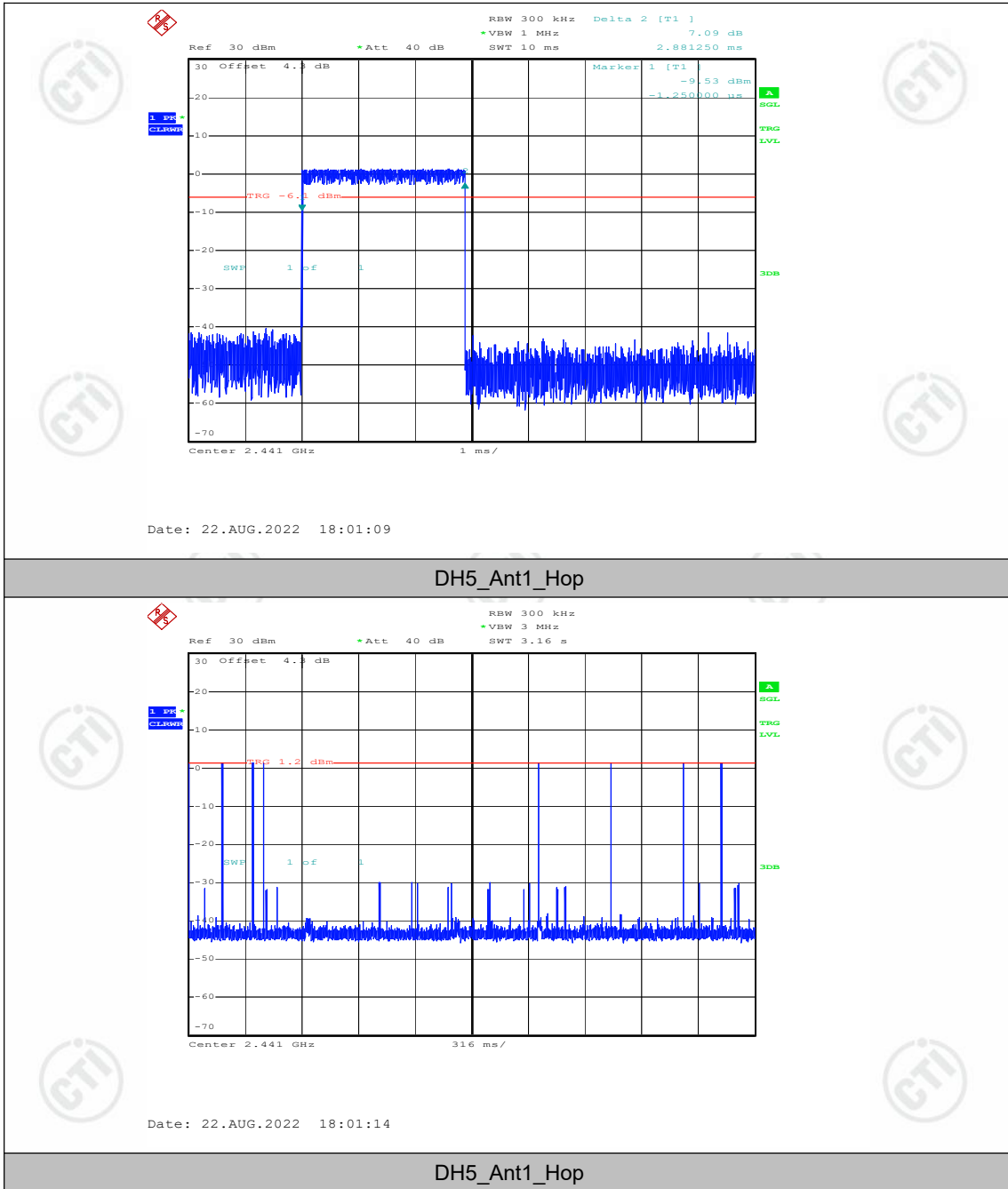
DH1_Ant1_Hop

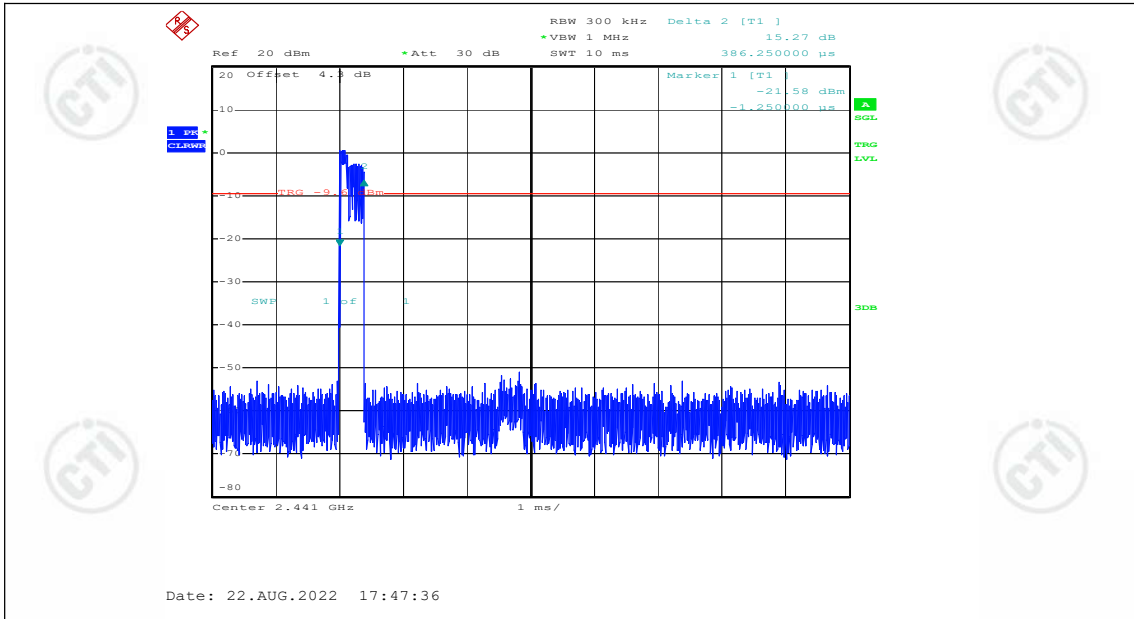


DH3_Ant1_Hop

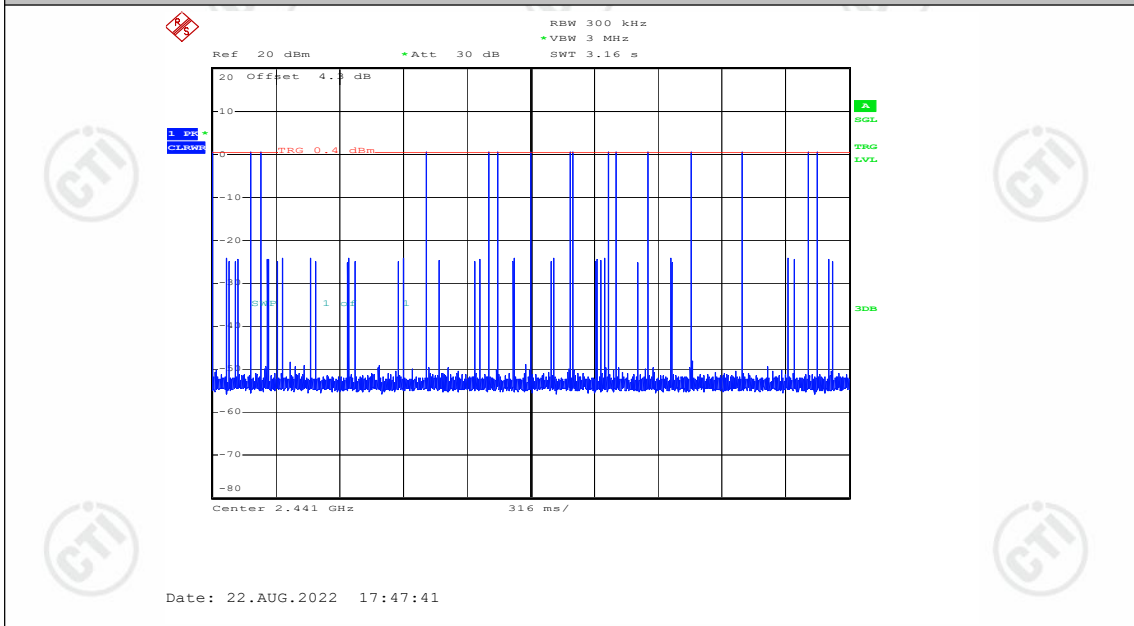


DH3_Ant1_Hop

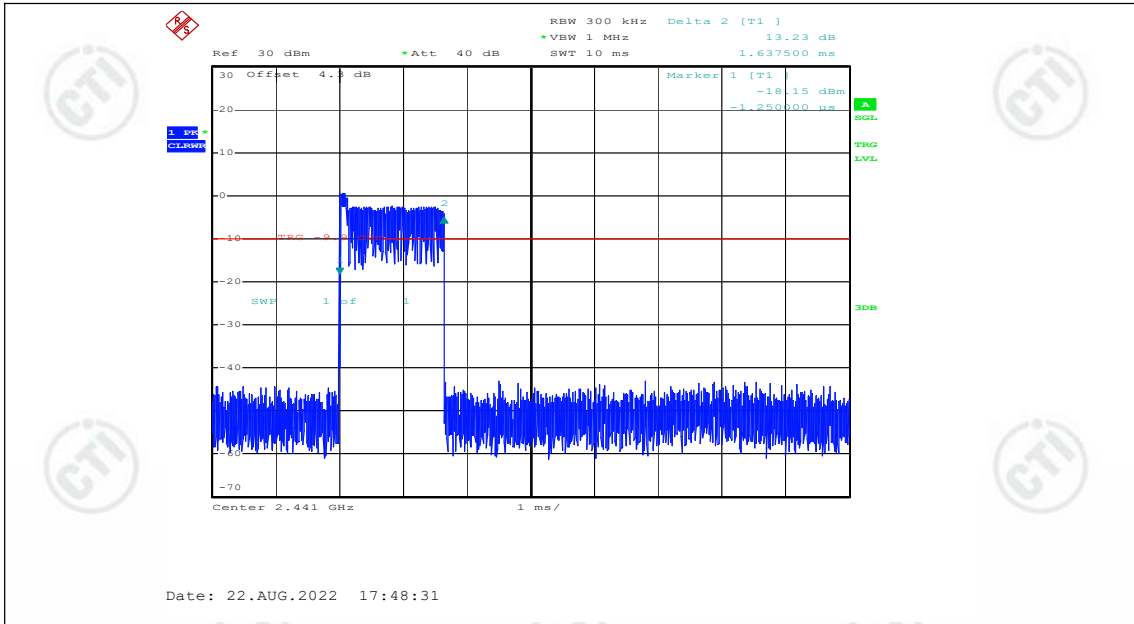




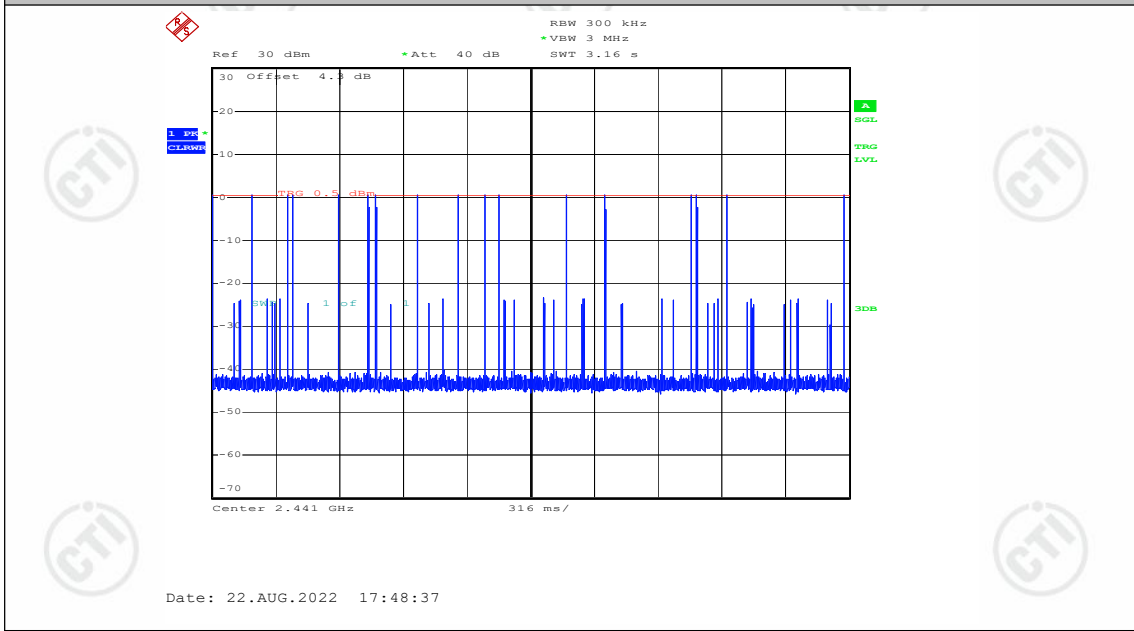
2DH1_Ant1_Hop



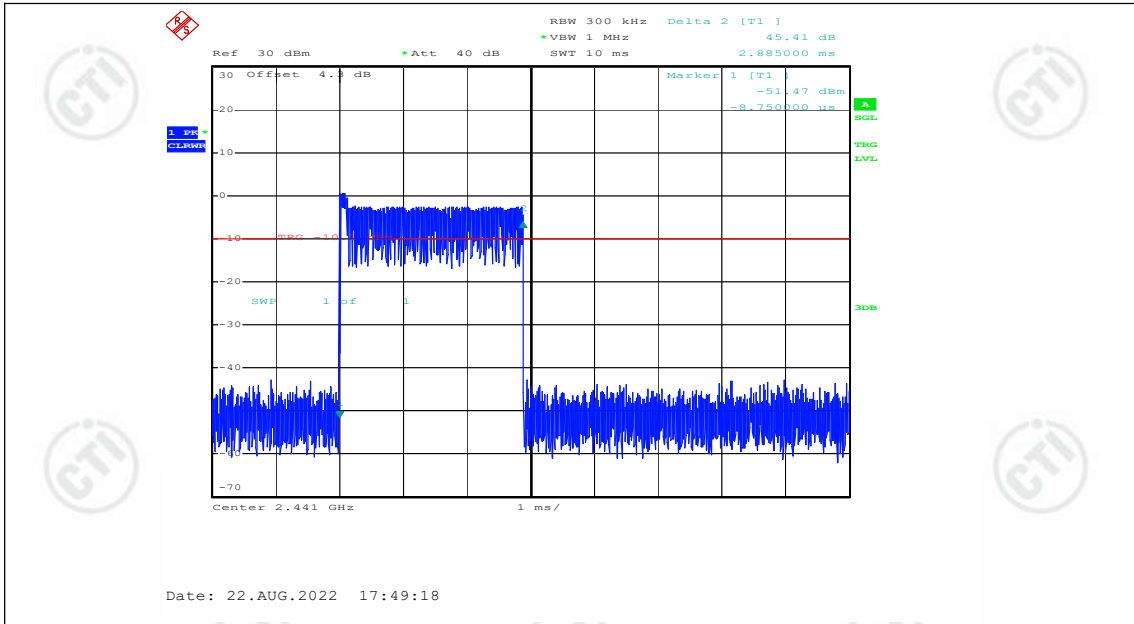
2DH1_Ant1_Hop



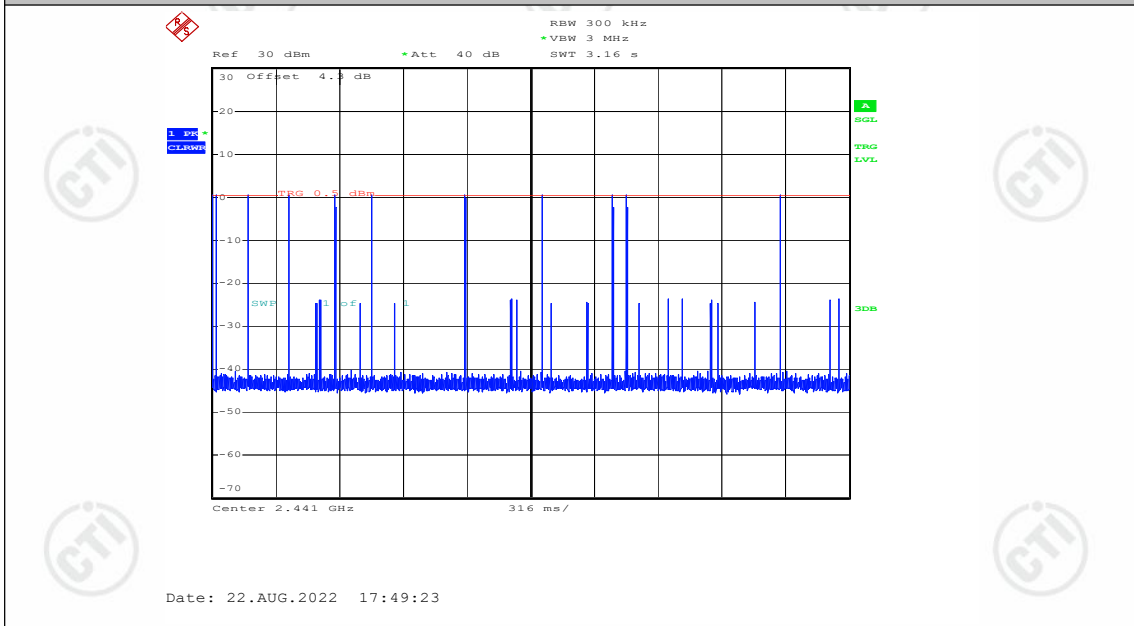
2DH3_Ant1_Hop



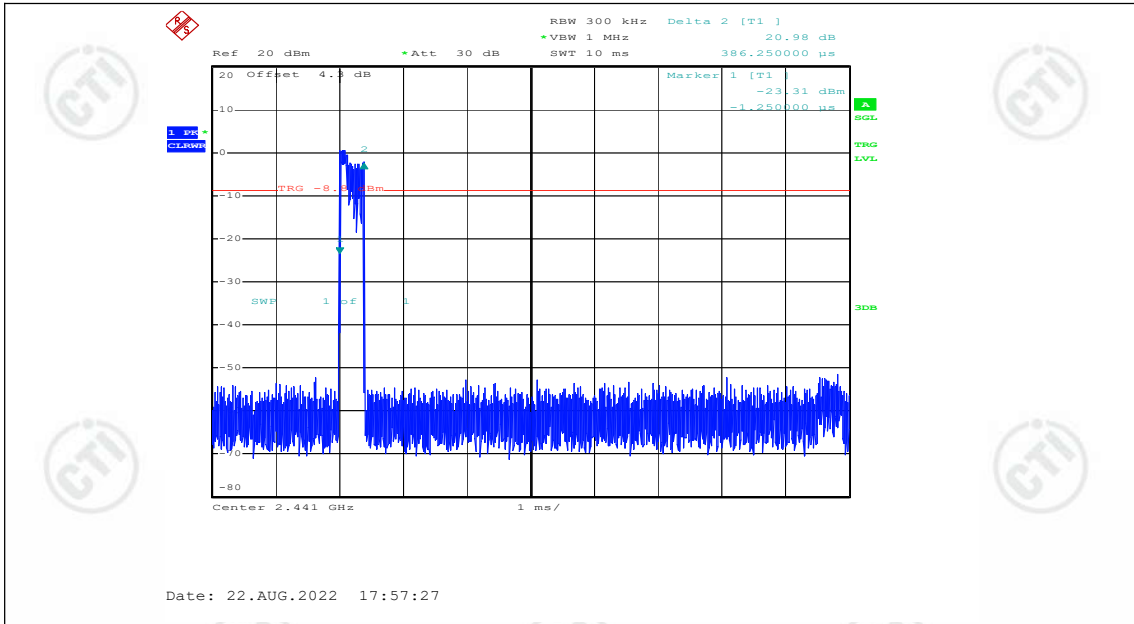
2DH3_Ant1_Hop



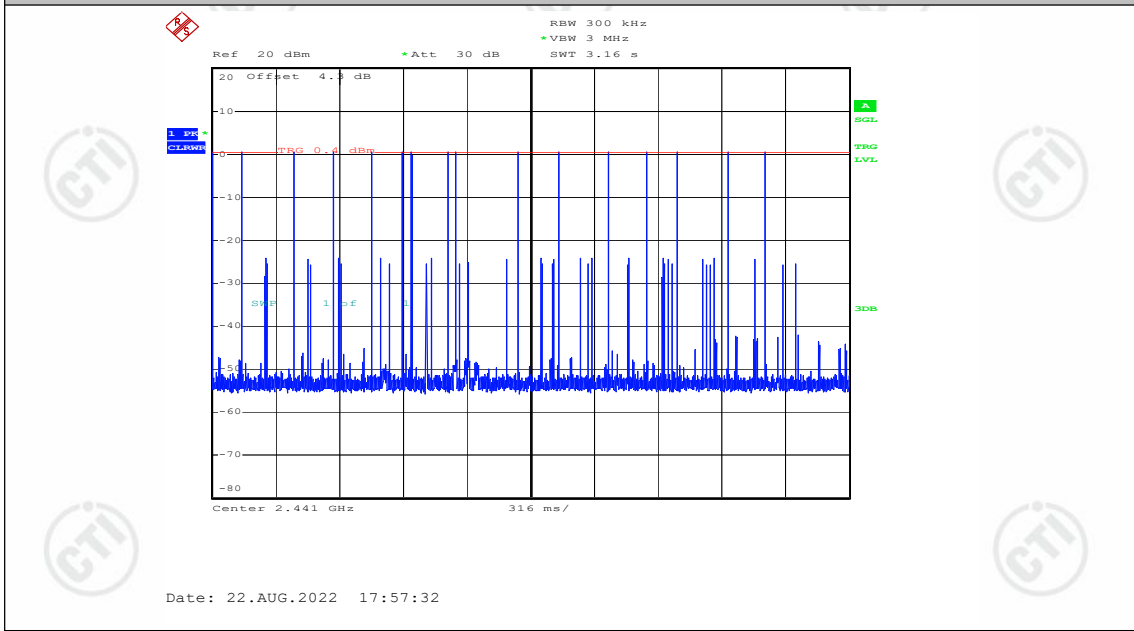
2DH5_Ant1_Hop



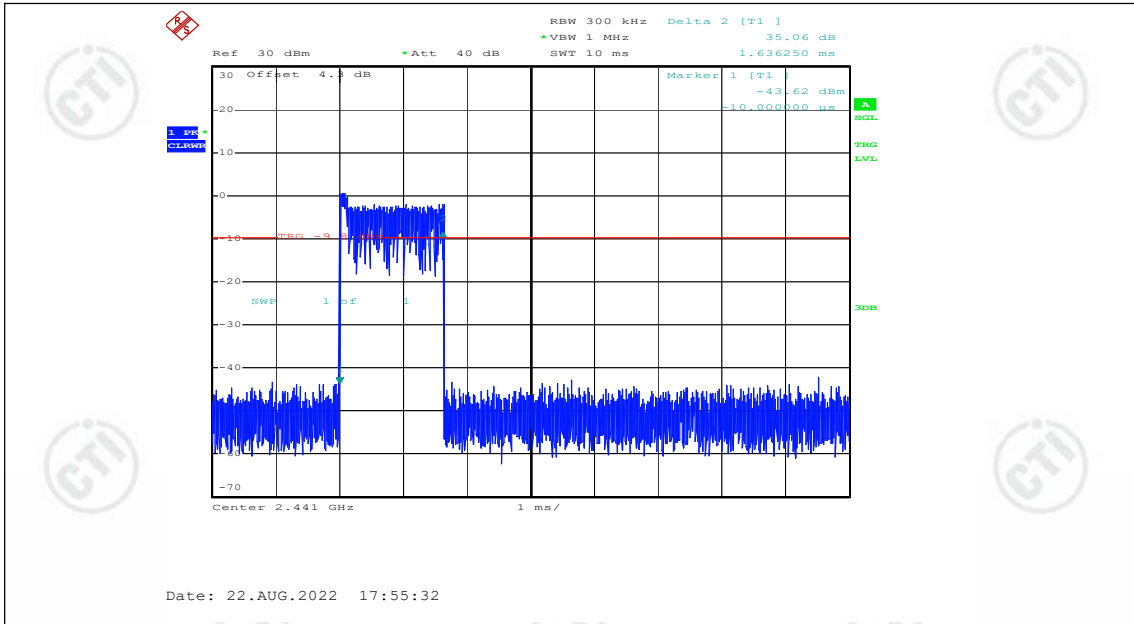
2DH5_Ant1_Hop



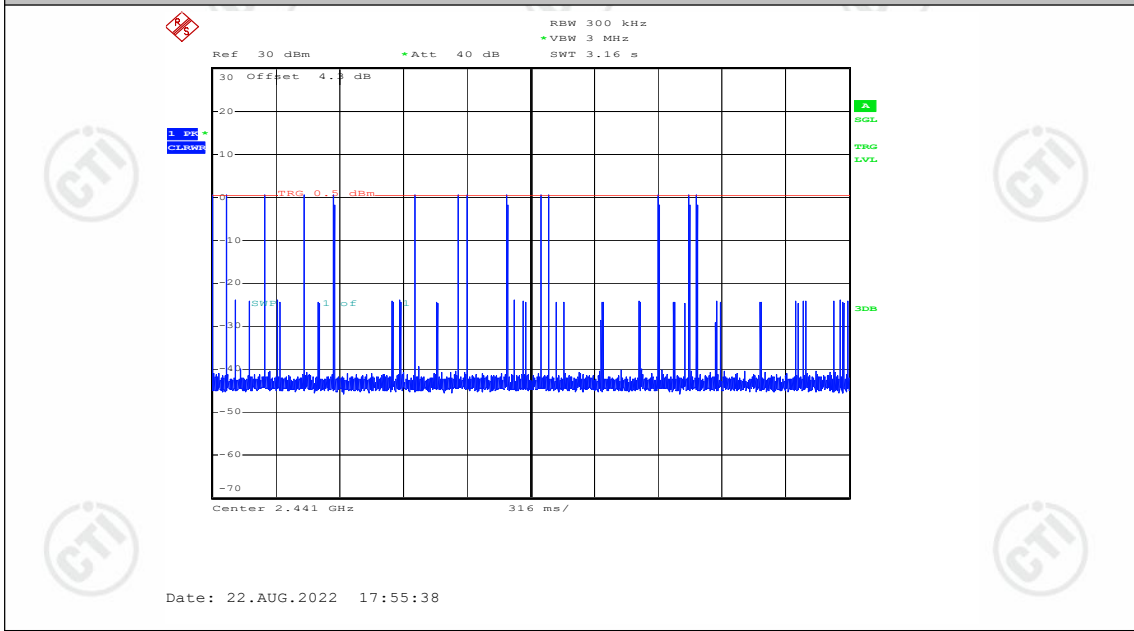
3DH1_Ant1_Hop



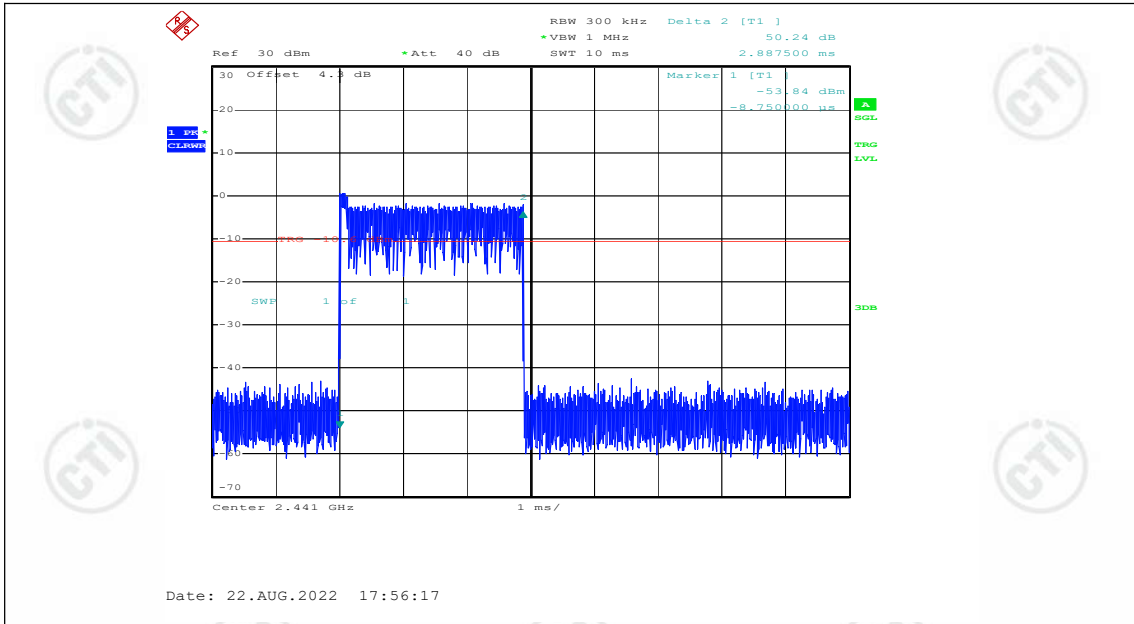
3DH1_Ant1_Hop



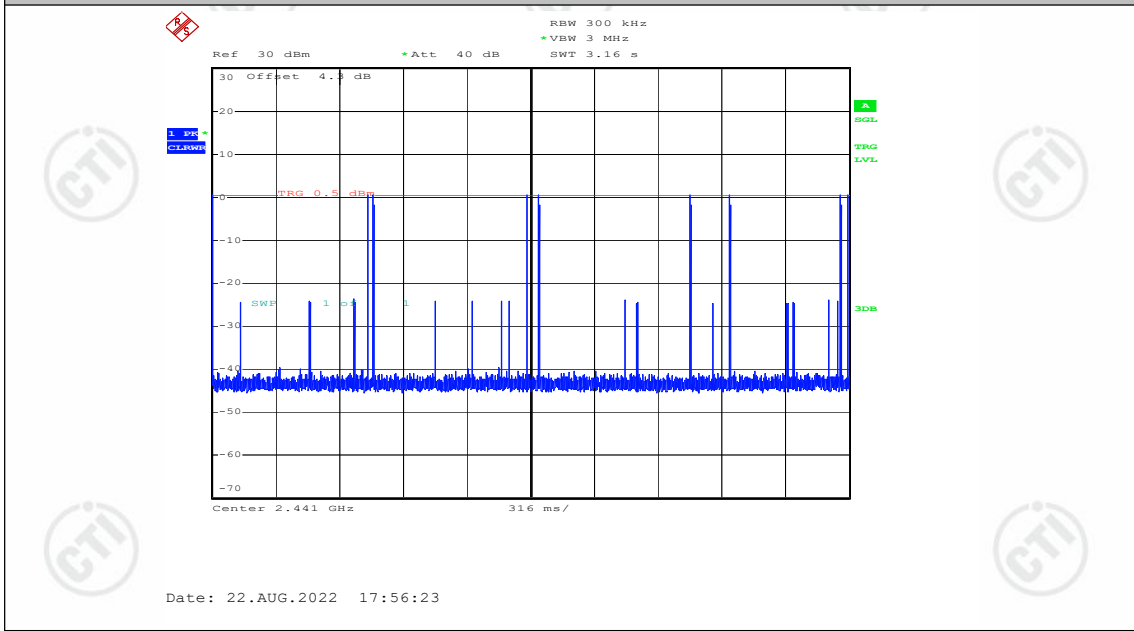
3DH3_Ant1_Hop



3DH3_Ant1_Hop



3DH5_Ant1_Hop

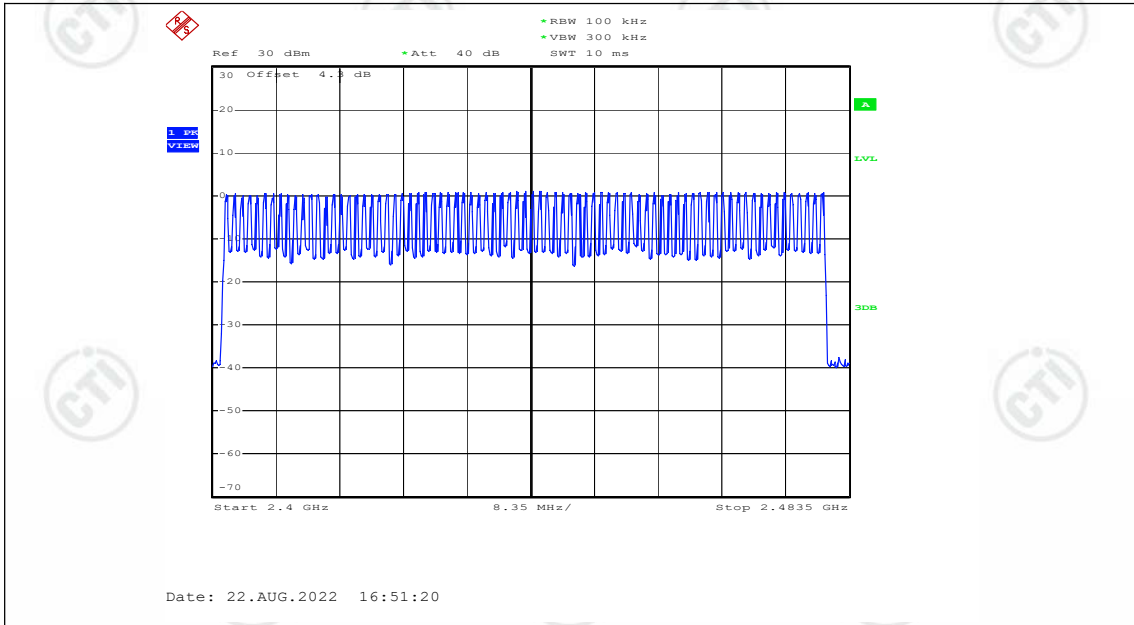


3DH5_Ant1_Hop

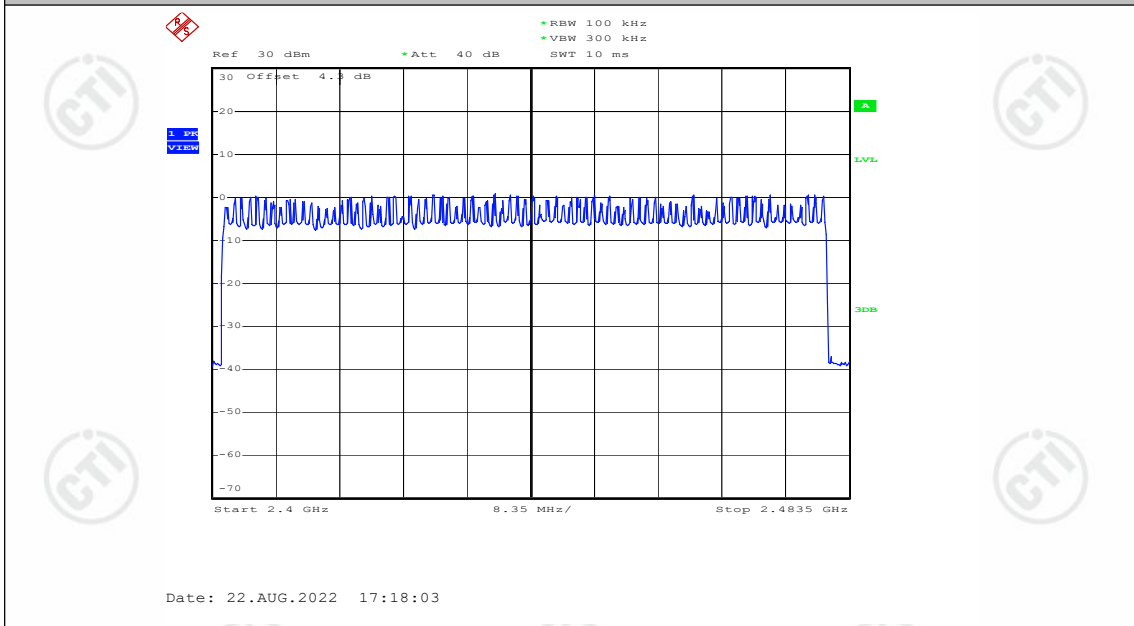
Appendix F: Number of hopping channels**Test Result**

Test Mode	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

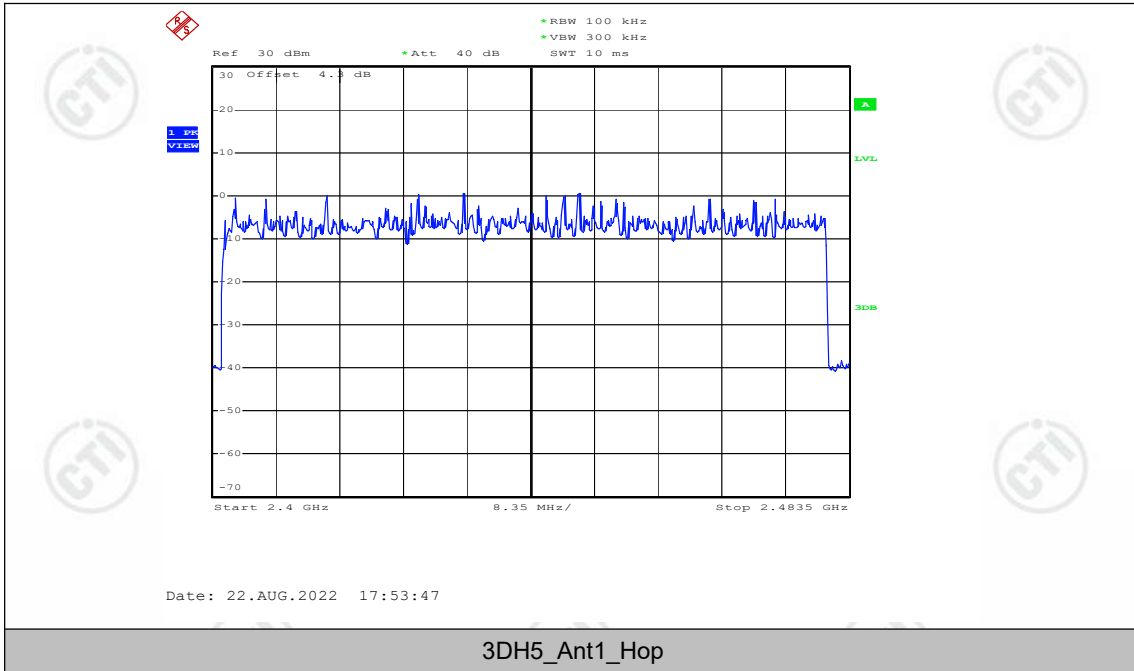
Test Graphs



DH5_Ant1_Hop



2DH5_Ant1_Hop

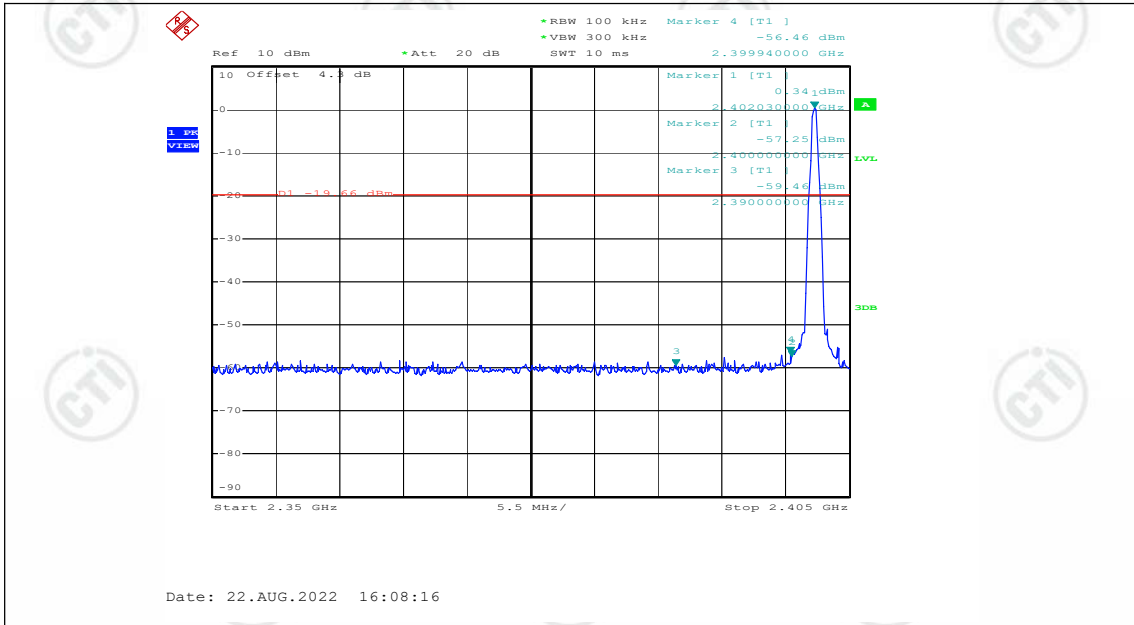


Appendix G:Band edge measurements

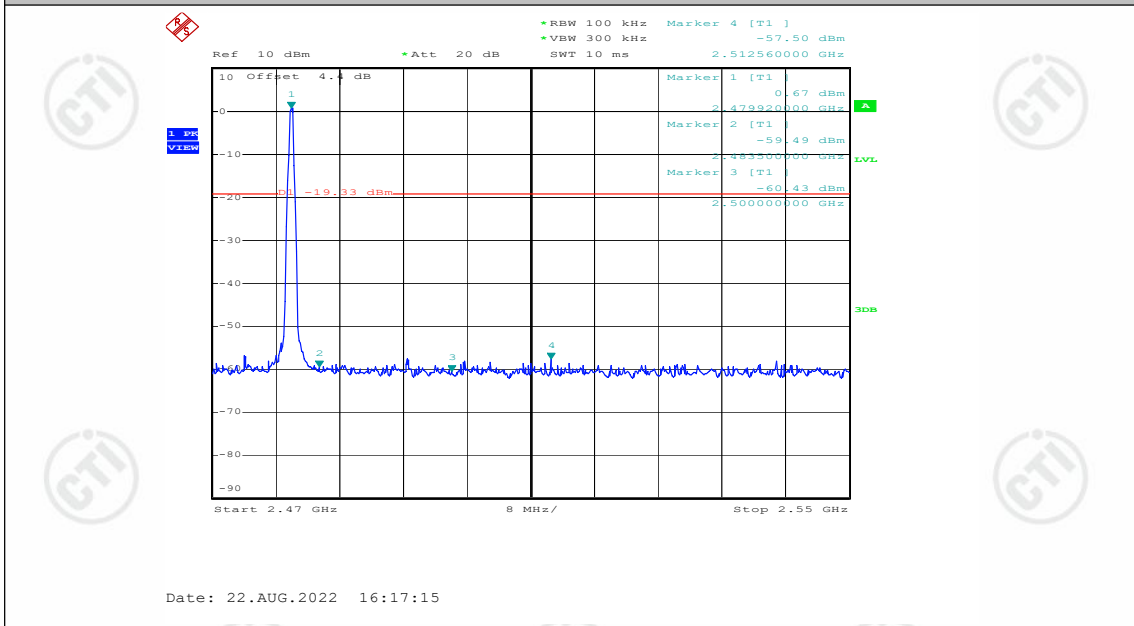
Test Result

Test Mode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.34	-56.46	≤-19.66	PASS
		High	2480	0.67	-57.5	≤-19.33	PASS
		Low	Hop_2402	0.14	-46.9	≤-19.86	PASS
		High	Hop_2480	0.86	-47.61	≤-19.14	PASS
2DH5	Ant1	Low	2402	-0.07	-56.83	≤-20.07	PASS
		High	2480	0.25	-58.28	≤-19.75	PASS
		Low	Hop_2402	-0.41	-46.87	≤-20.41	PASS
		High	Hop_2480	0.19	-47.16	≤-19.81	PASS
3DH5	Ant1	Low	2402	-0.26	-57.36	≤-20.26	PASS
		High	2480	0.00	-57.41	≤-20	PASS
		Low	Hop_2402	-2.33	-47.16	≤-22.33	PASS
		High	Hop_2480	0.40	-46.65	≤-19.6	PASS

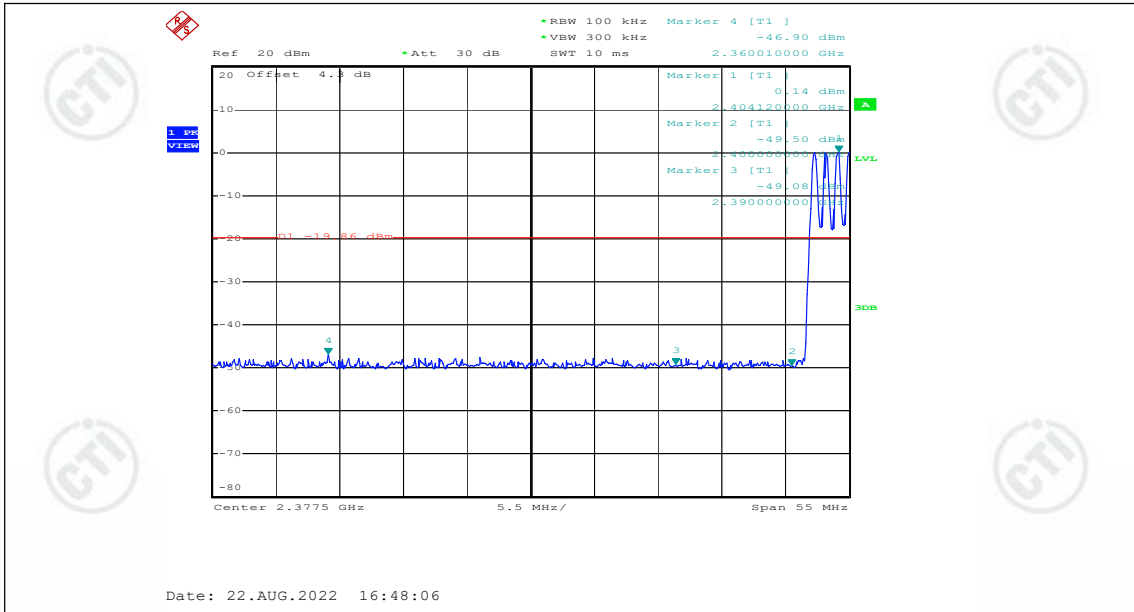
Test Graphs



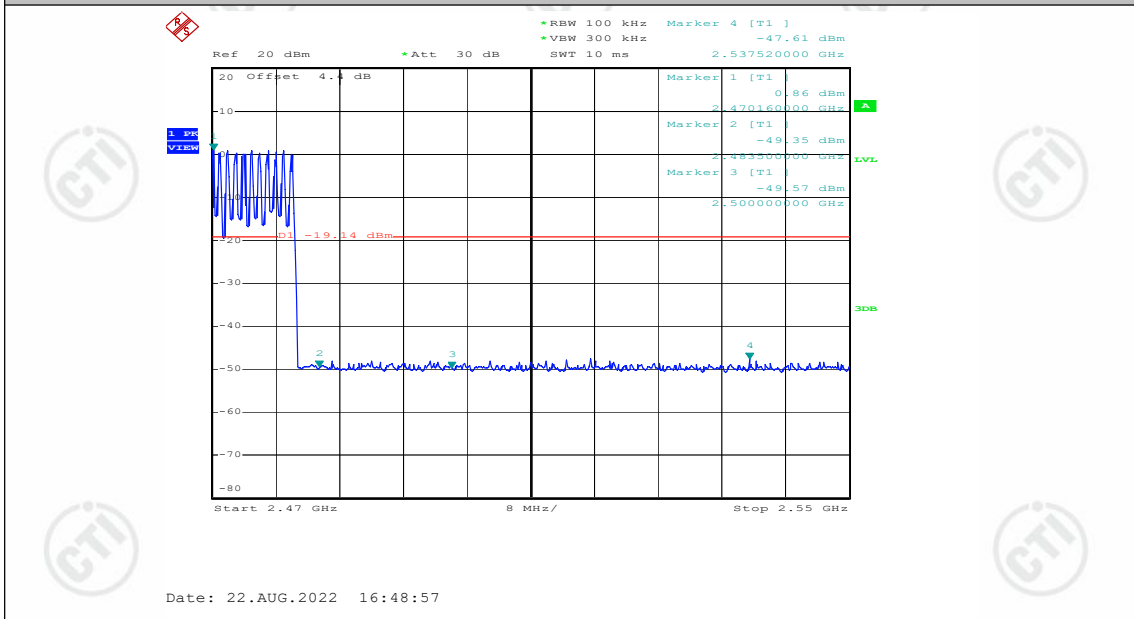
DH5_Ant1_Low_2402



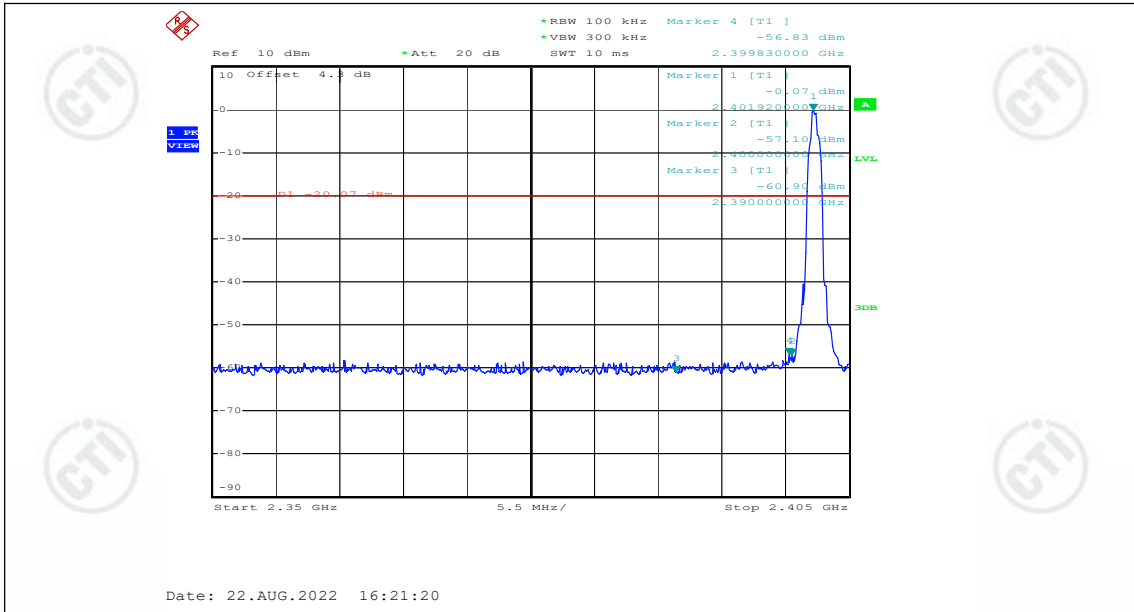
DH5_Ant1_High_2480



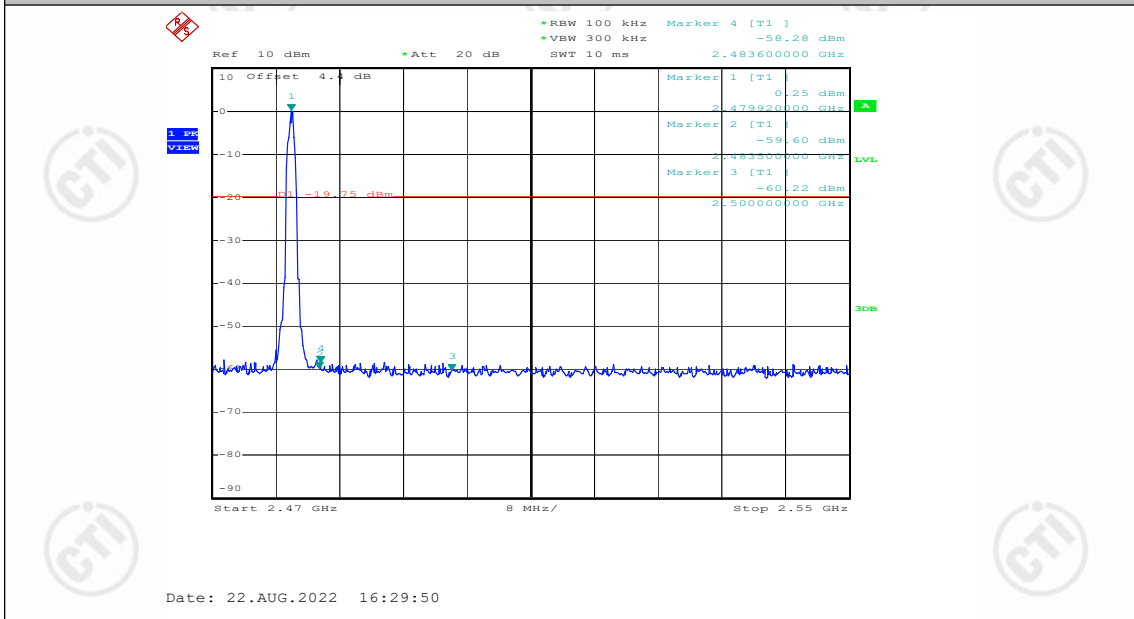
DH5_Ant1_Low_Hop_2402



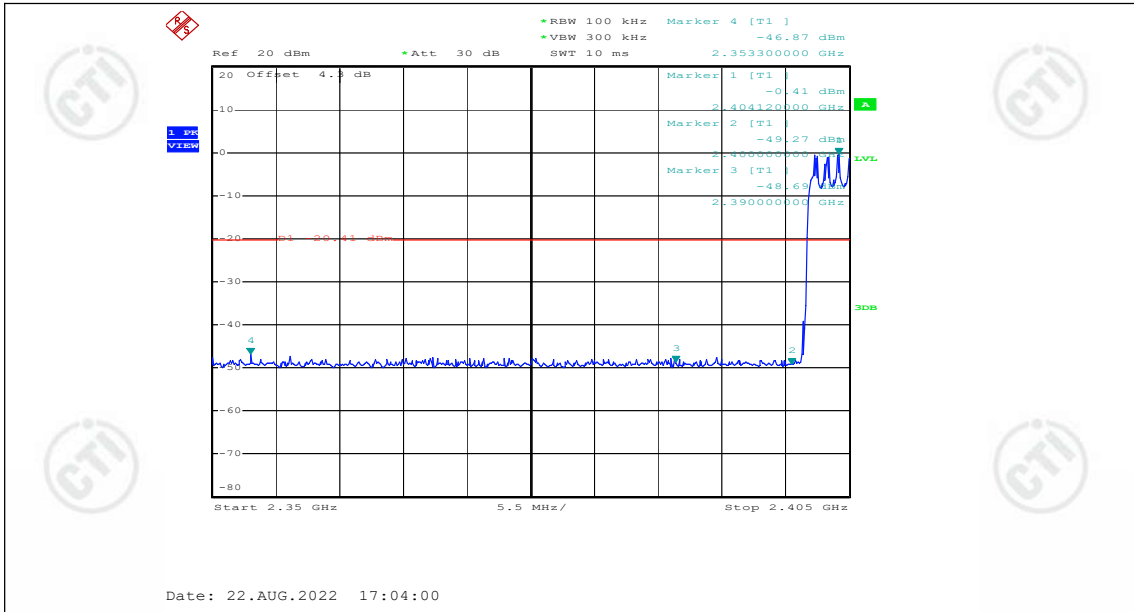
DH5_Ant1_High_Hop_2480



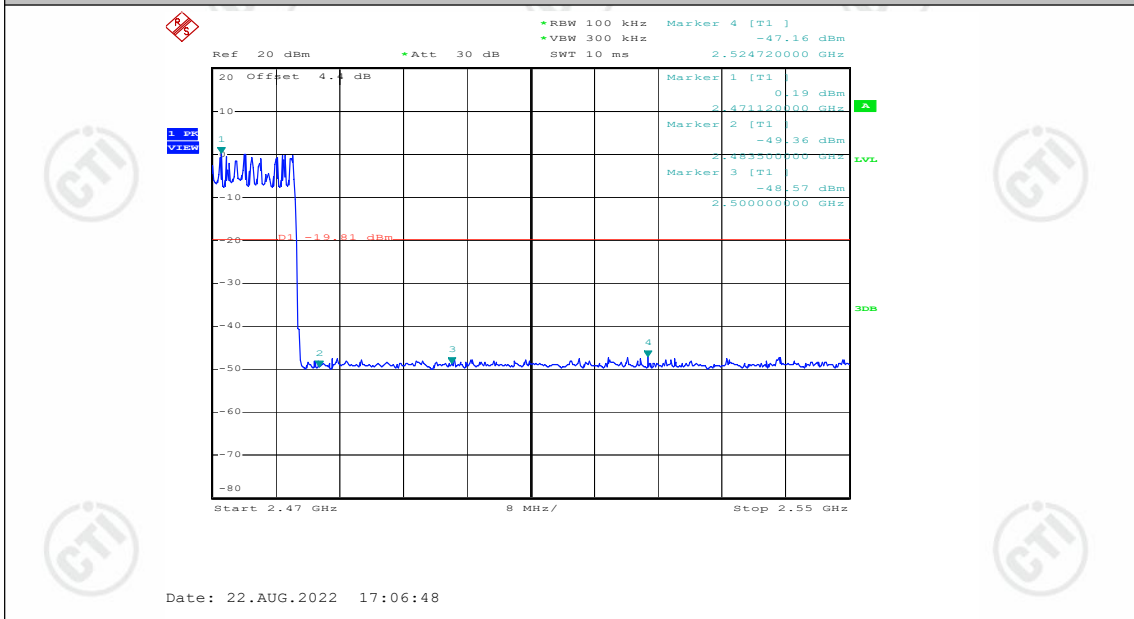
2DH5_Ant1_Low_2402



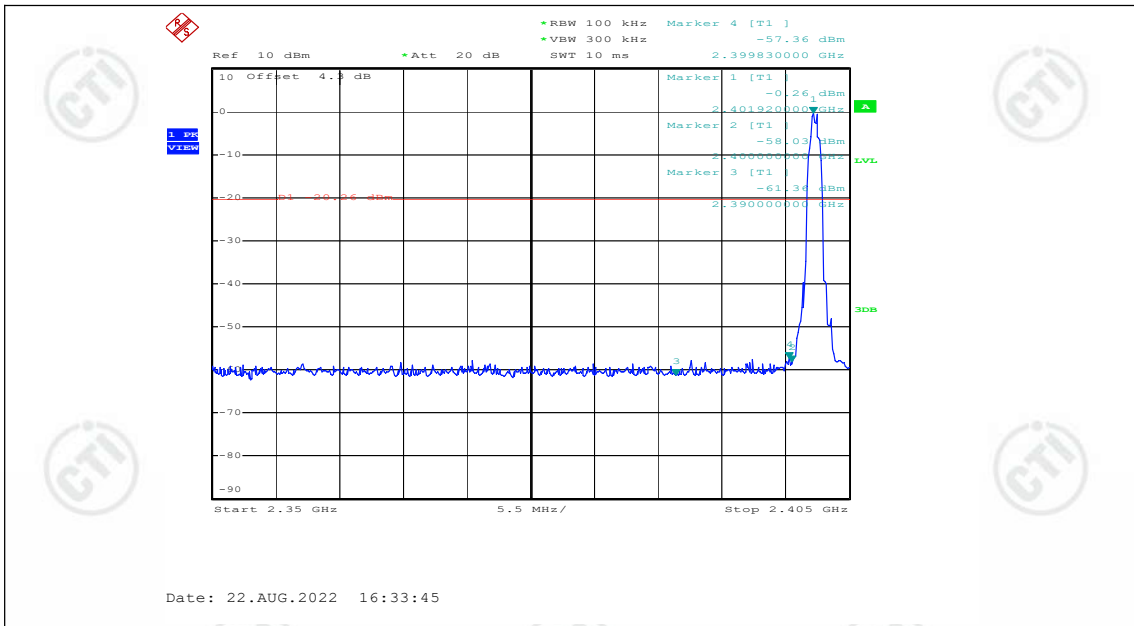
2DH5_Ant1_High_2480



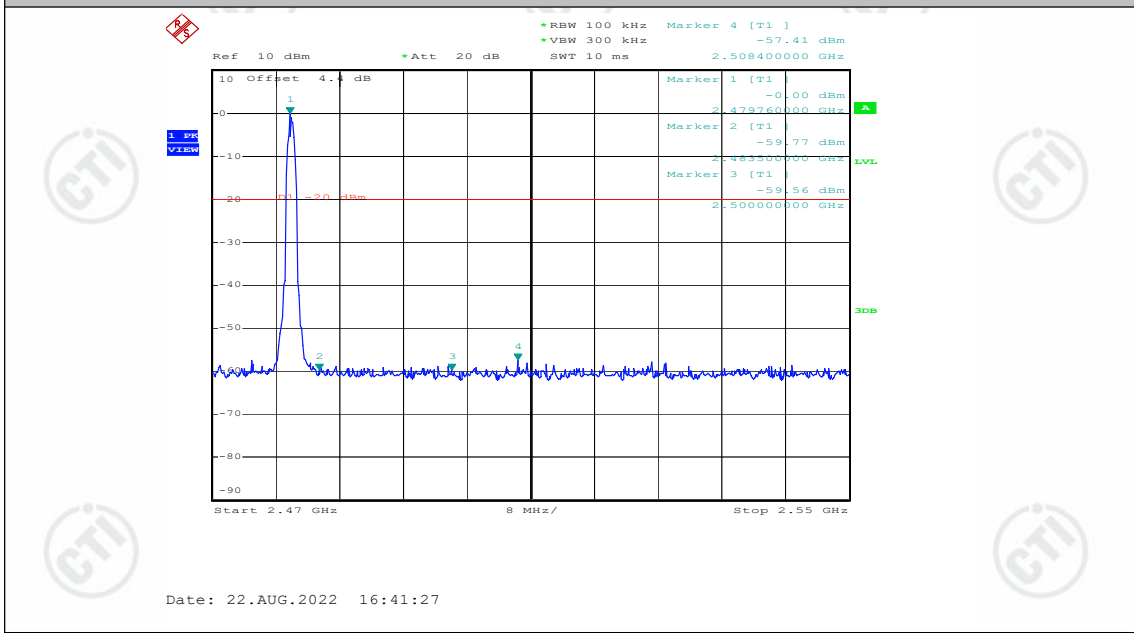
2DH5_Ant1_Low_Hop_2402



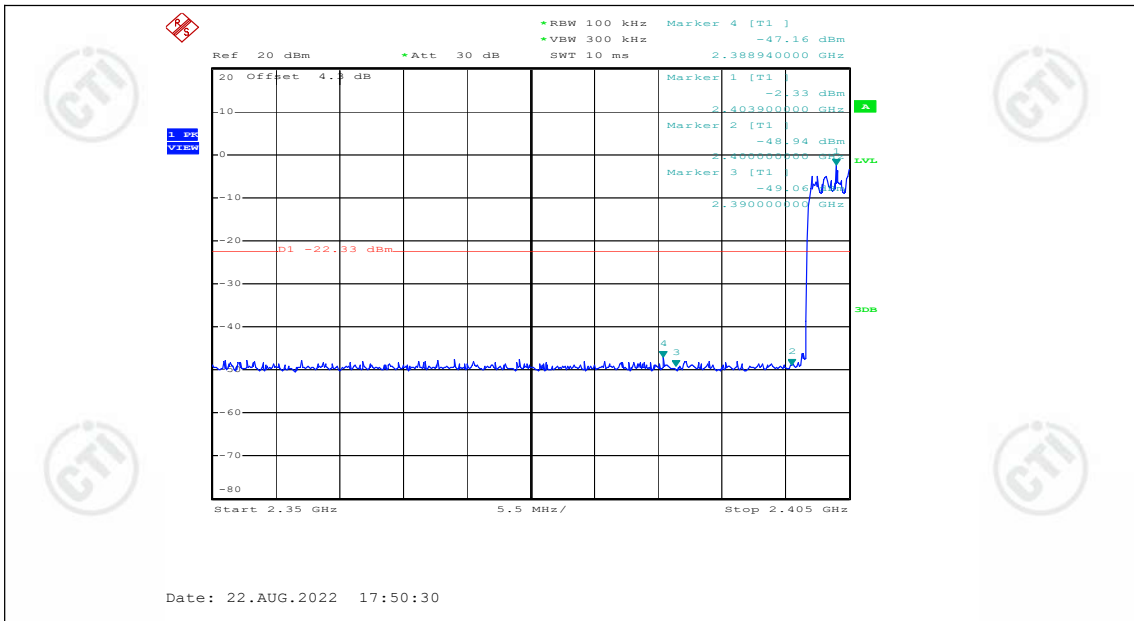
2DH5_Ant1_High_Hop_2480



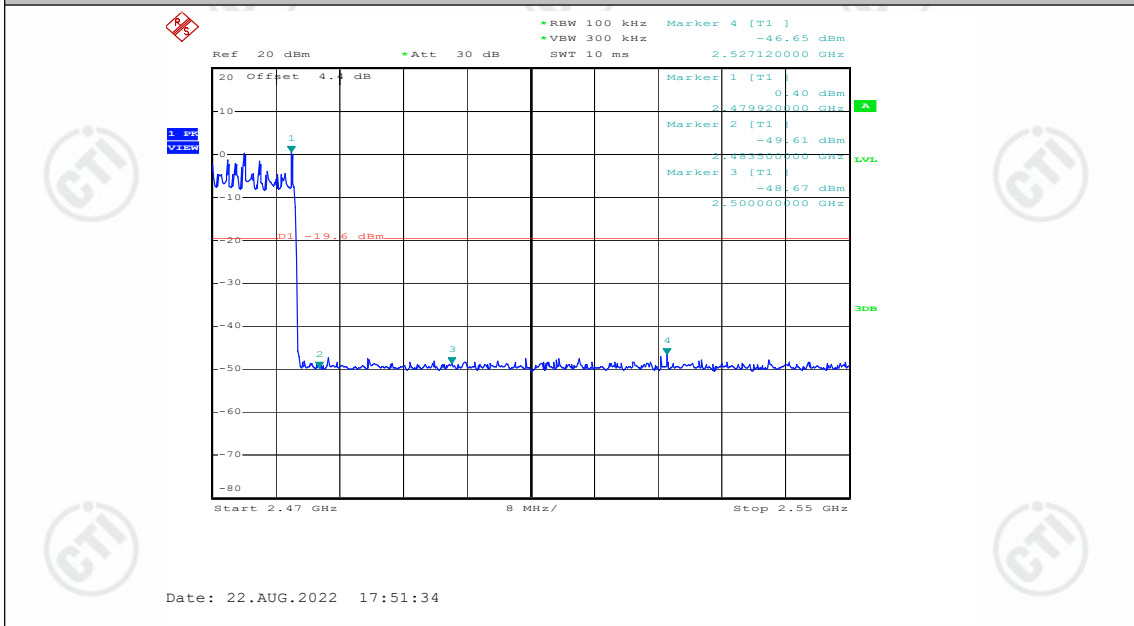
3DH5_Ant1_Low_2402



3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



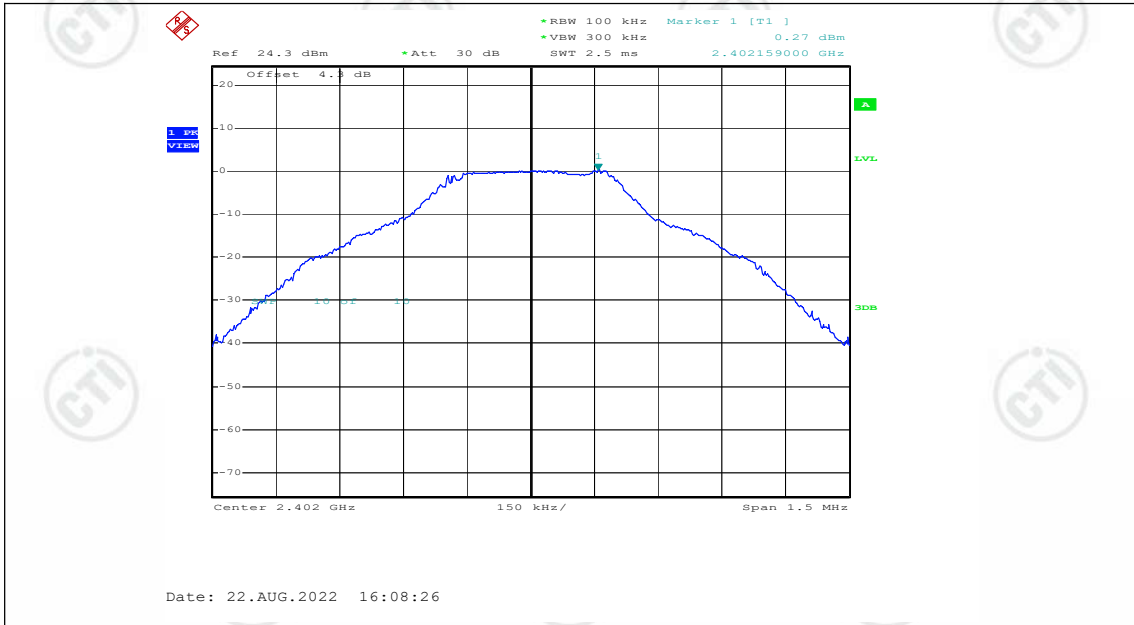
3DH5_Ant1_High_Hop_2480

Appendix H:Conducted Spurious Emission

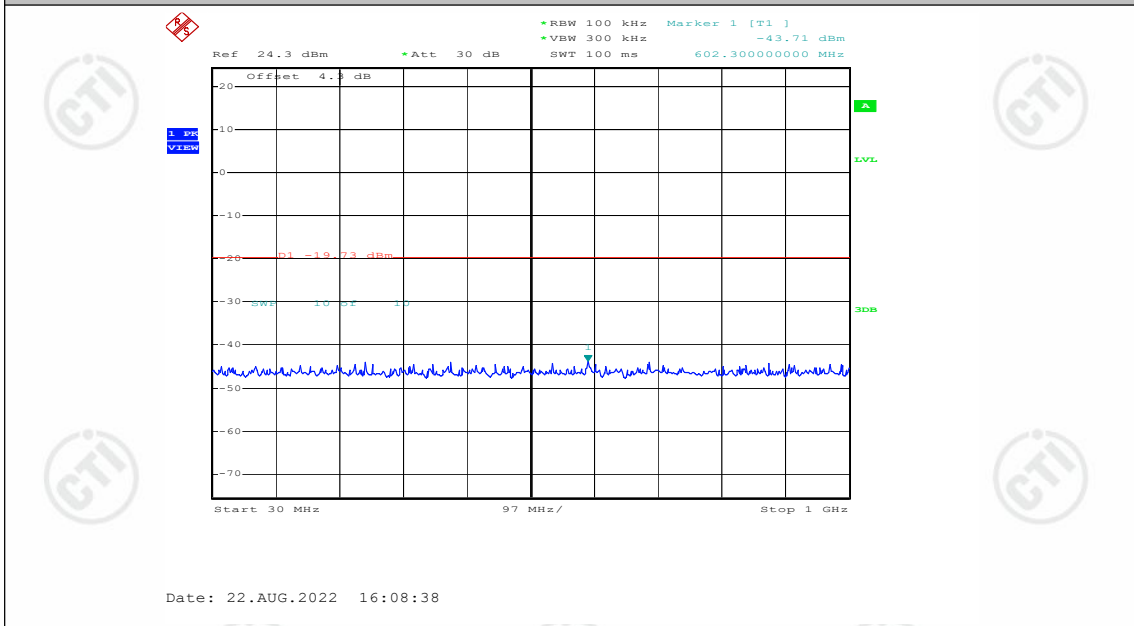
Test Result

Test Mode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	0.27	0.27	---	PASS
			30~1000	0.27	-43.71	≤-19.73	PASS
			1000~26500	0.27	-46.37	≤-19.73	PASS
		2441	Reference	0.79	0.79	---	PASS
			30~1000	0.79	-43.94	≤-19.21	PASS
			1000~26500	0.79	-46.45	≤-19.21	PASS
		2480	Reference	0.60	0.60	---	PASS
			30~1000	0.60	-44.05	≤-19.4	PASS
			1000~26500	0.60	-46.2	≤-19.4	PASS
2DH5	Ant1	2402	Reference	-0.21	-0.21	---	PASS
			30~1000	-0.21	-44.52	≤-20.21	PASS
			1000~26500	-0.21	-45.66	≤-20.21	PASS
		2441	Reference	0.42	0.42	---	PASS
			30~1000	0.42	-43.35	≤-19.58	PASS
			1000~26500	0.42	-46.59	≤-19.58	PASS
		2480	Reference	0.23	0.23	---	PASS
			30~1000	0.23	-43.59	≤-19.77	PASS
			1000~26500	0.23	-46.45	≤-19.77	PASS
3DH5	Ant1	2402	Reference	-0.26	-0.26	---	PASS
			30~1000	-0.26	-44.25	≤-20.26	PASS
			1000~26500	-0.26	-46.27	≤-20.26	PASS
		2441	Reference	0.49	0.49	---	PASS
			30~1000	0.49	-43.71	≤-19.51	PASS
			1000~26500	0.49	-46.48	≤-19.51	PASS
		2480	Reference	0.34	0.34	---	PASS
			30~1000	0.34	-43.49	≤-19.66	PASS
			1000~26500	0.34	-45.83	≤-19.66	PASS

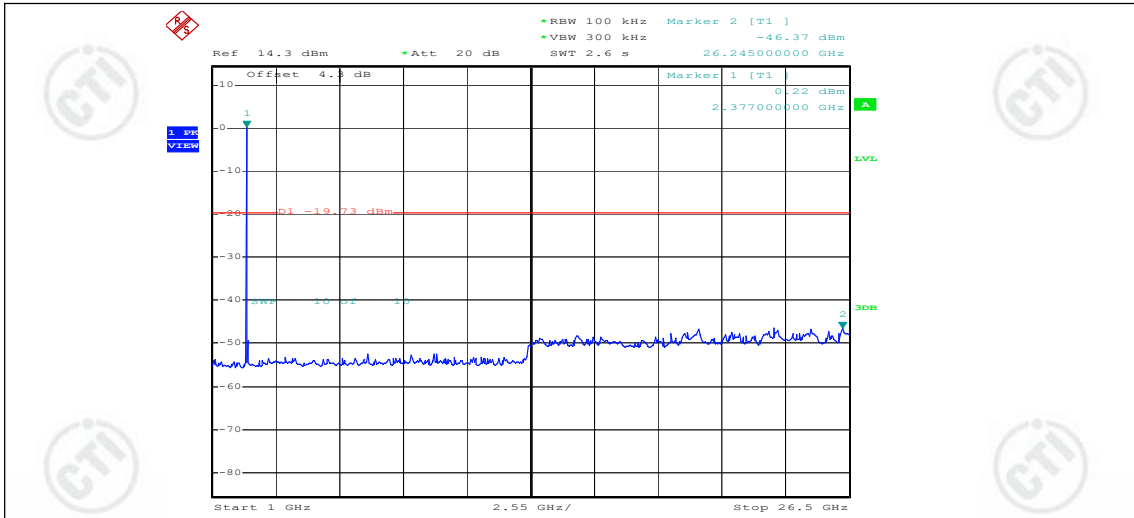
Test Graphs



DH5_Ant1_2402_0~Reference

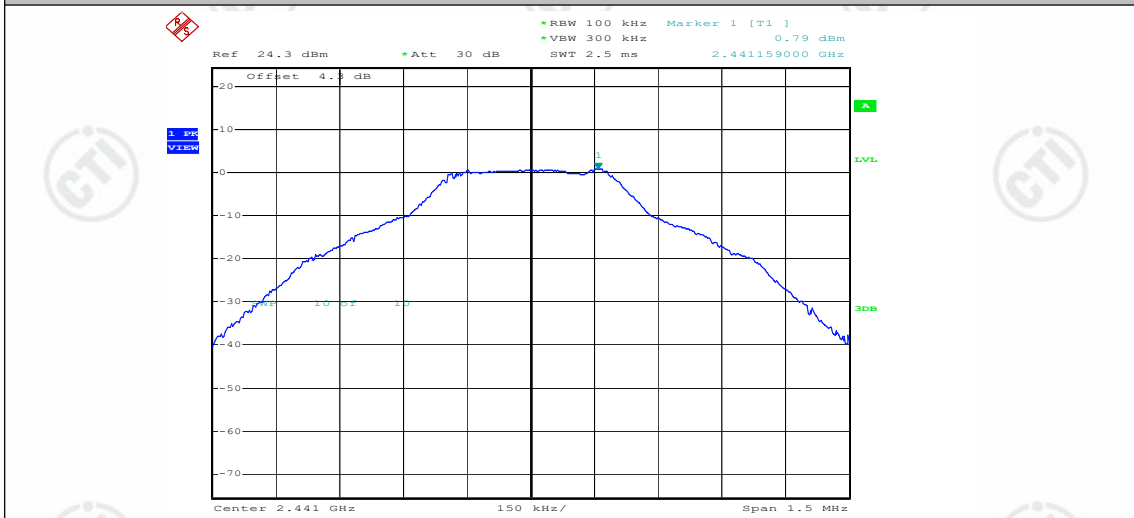


DH5_Ant1_2402_30~1000



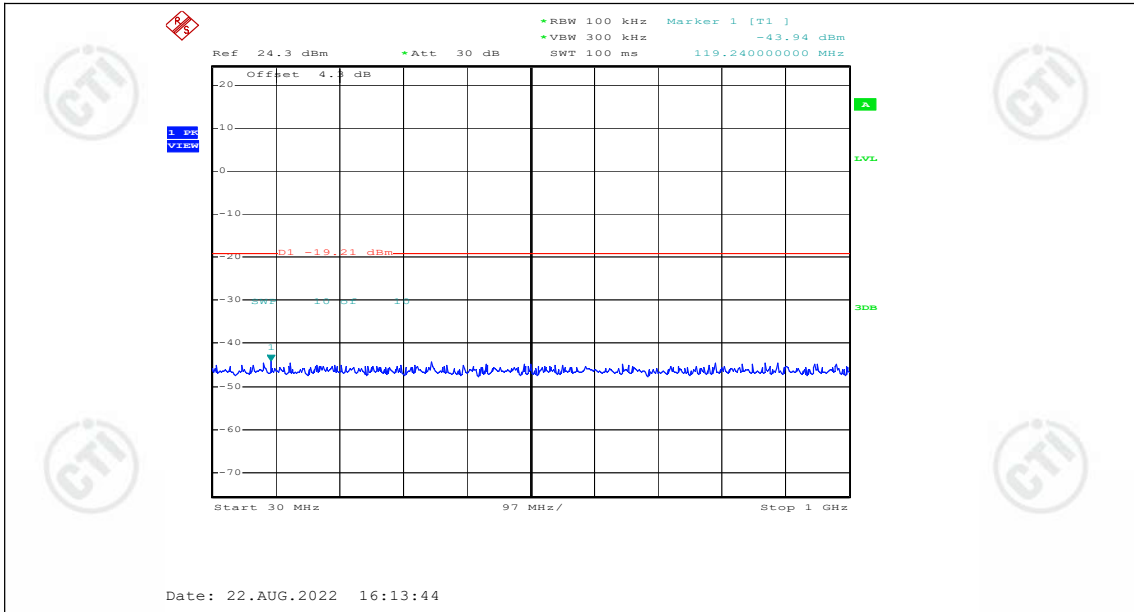
Date: 22.AUG.2022 16:10:23

DH5_Ant1_2402_1000~26500

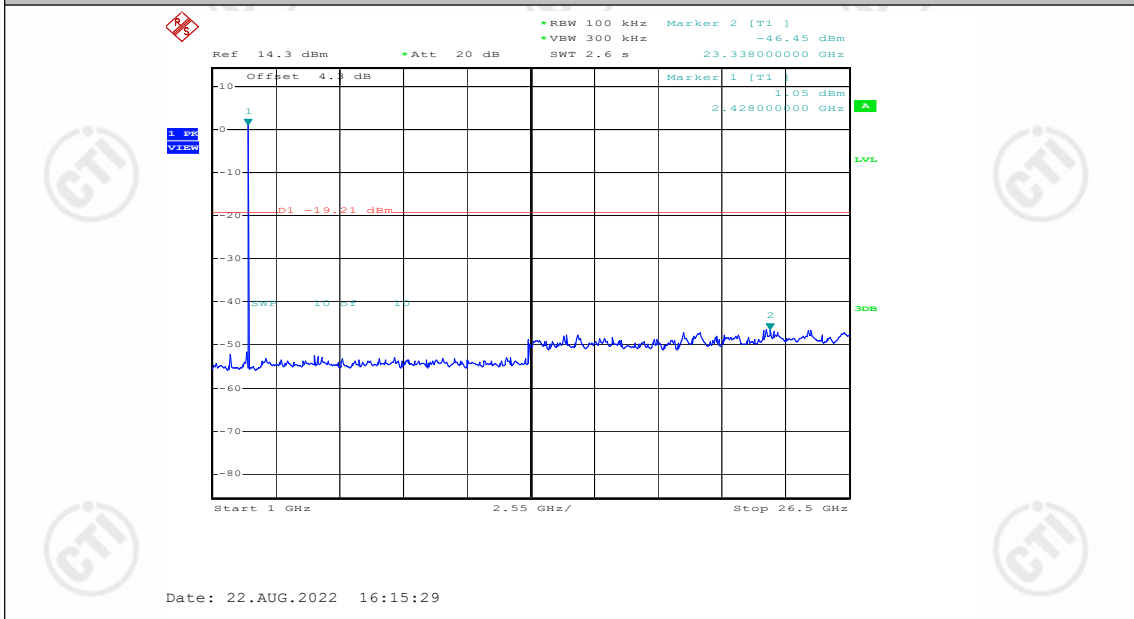


Date: 22.AUG.2022 16:13:31

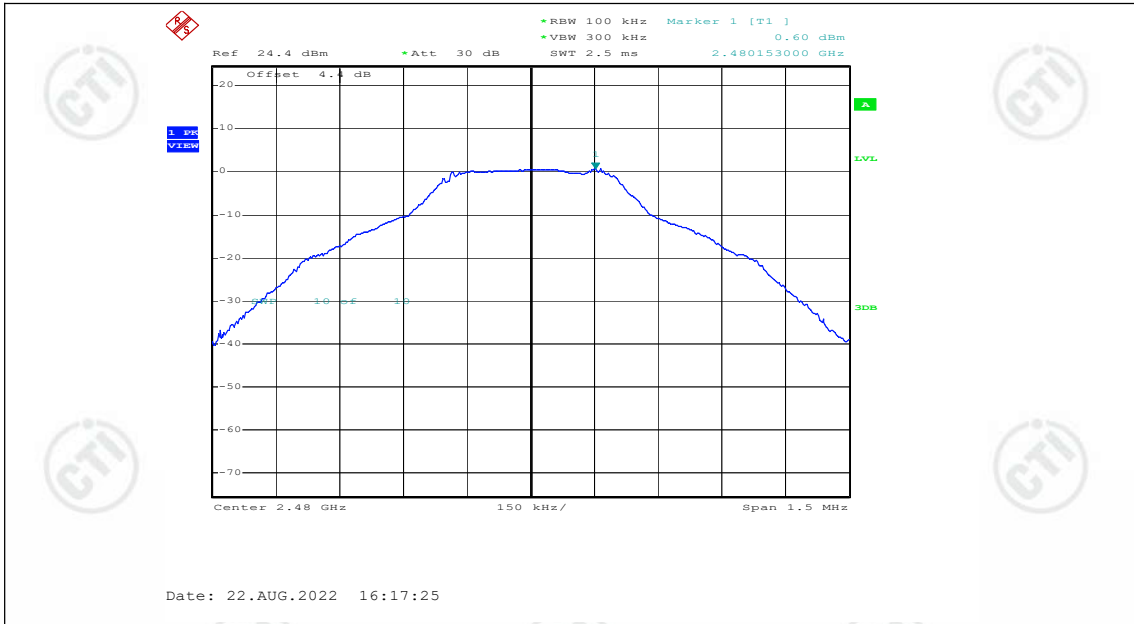
DH5_Ant1_2441_0~Reference



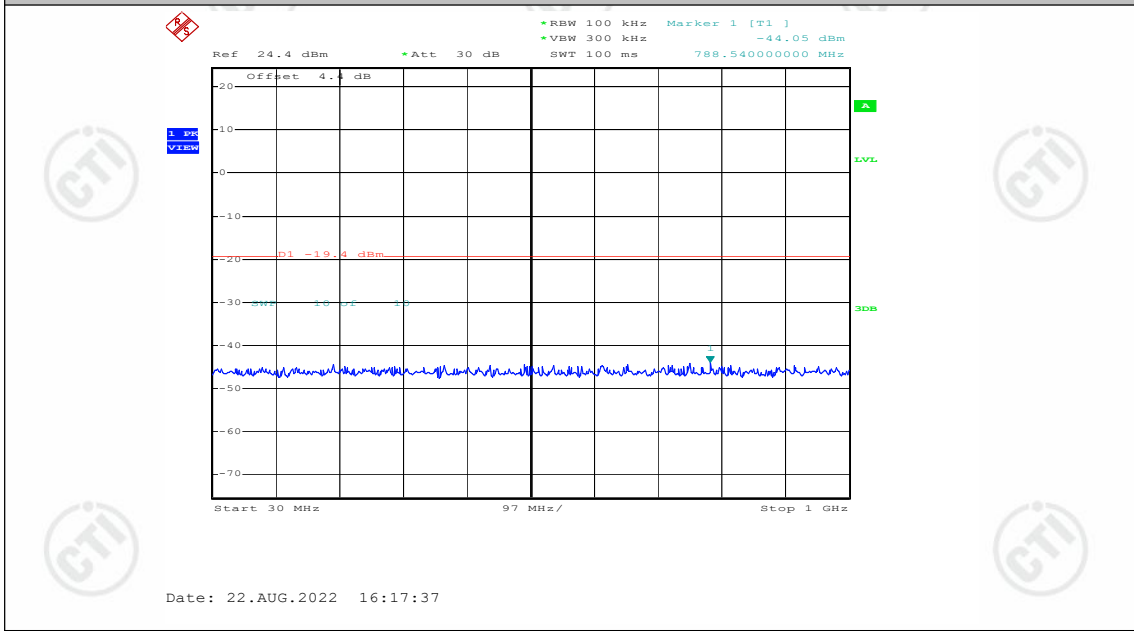
DH5_Ant1_2441_30~1000



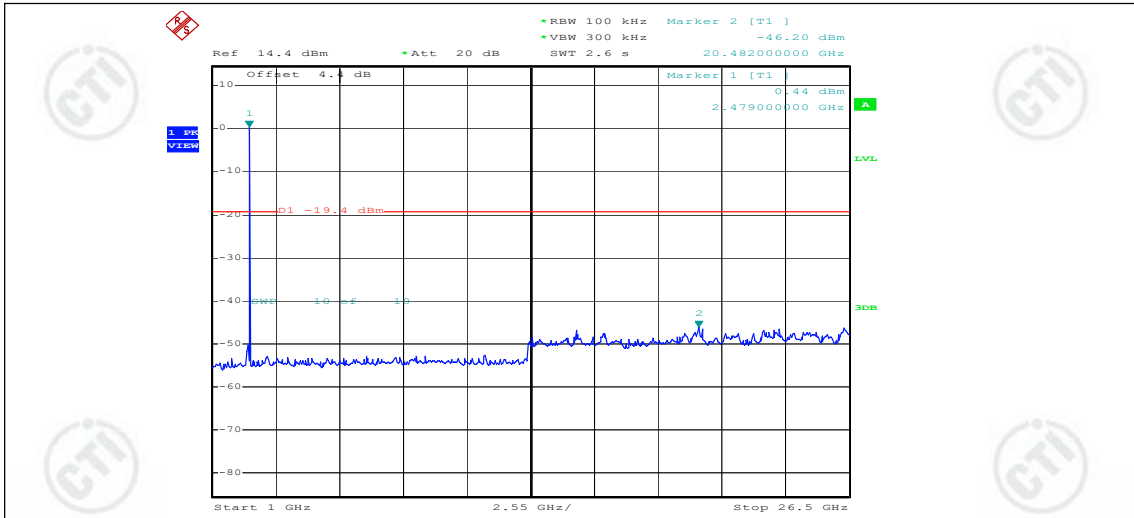
DH5_Ant1_2441_1000~26500



DH5_Ant1_2480_0-Reference

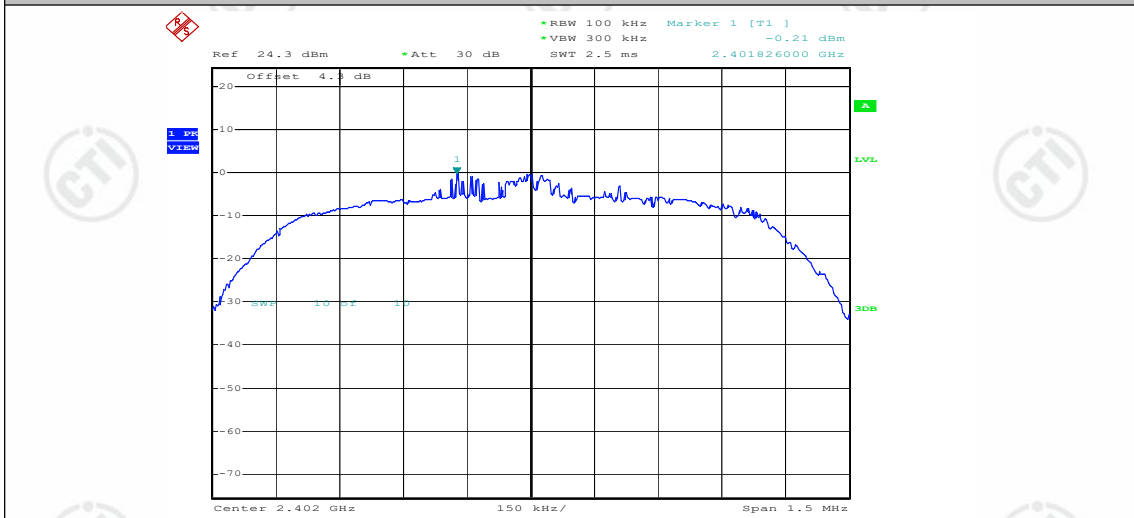


DH5_Ant1_2480_30~1000



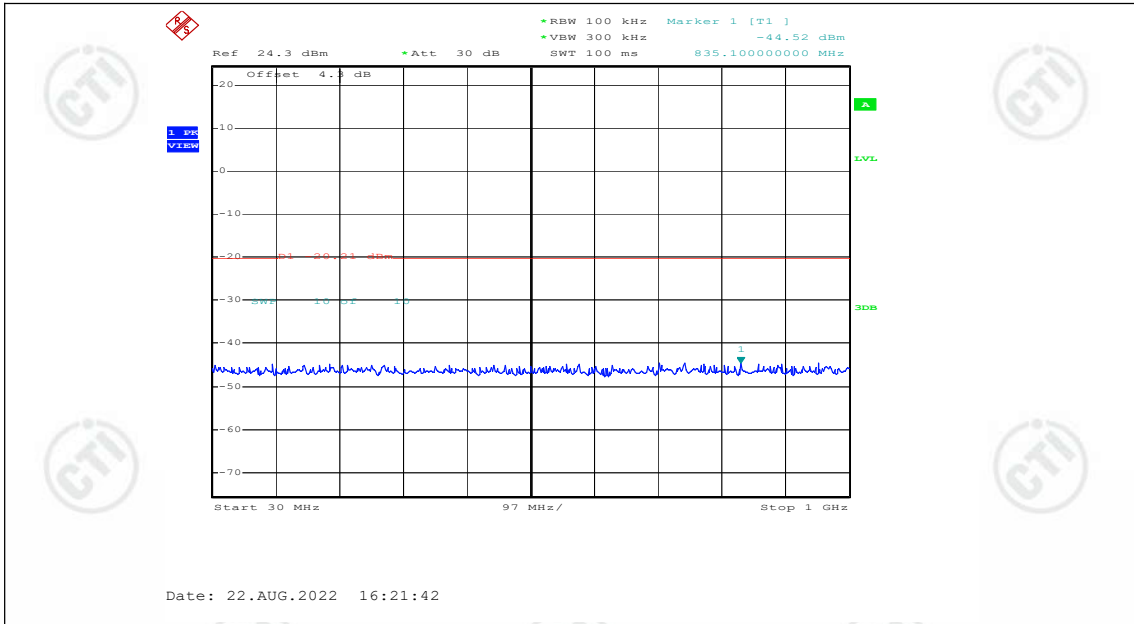
Date: 22.AUG.2022 16:19:22

DH5_Ant1_2480_1000~26500

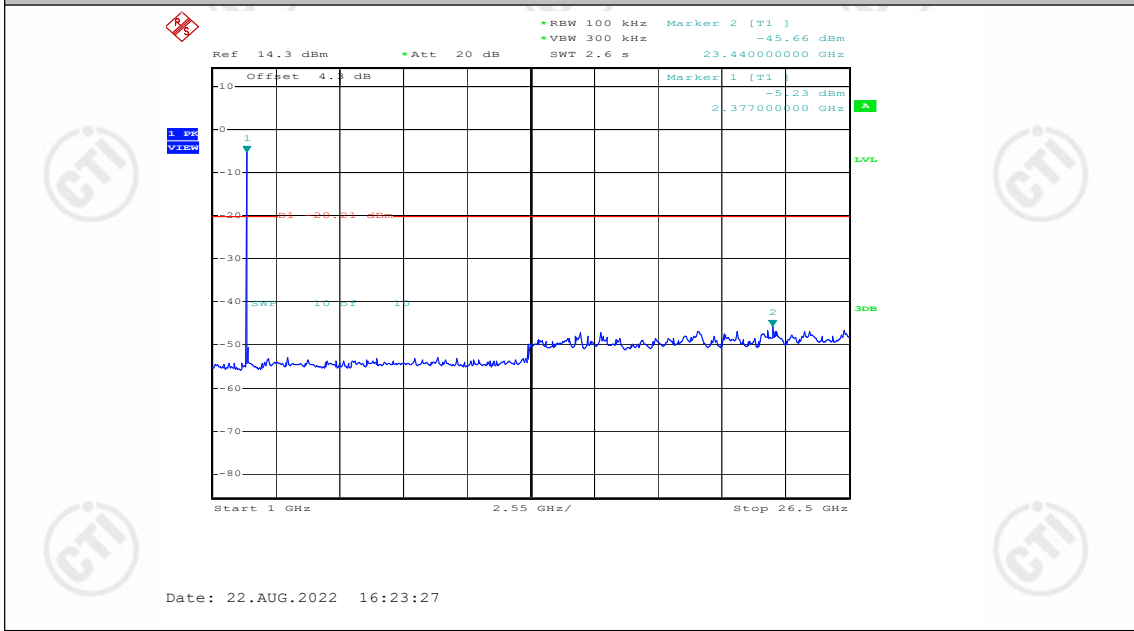


Date: 22.AUG.2022 16:21:30

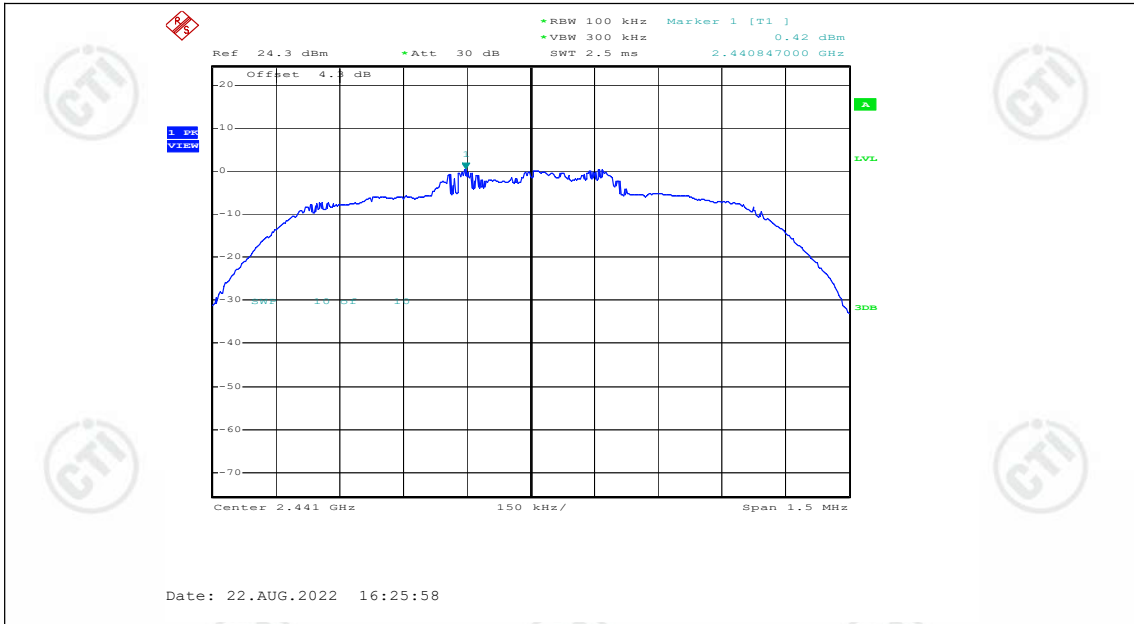
2DH5_Ant1_2402_0~Reference



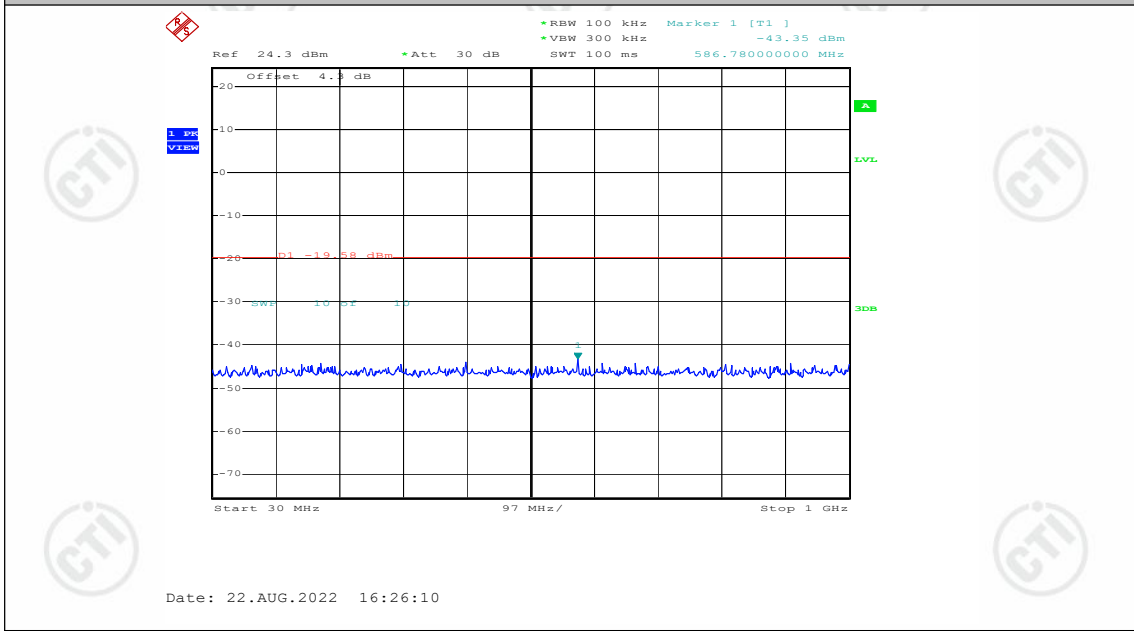
2DH5_Ant1_2402_30~1000



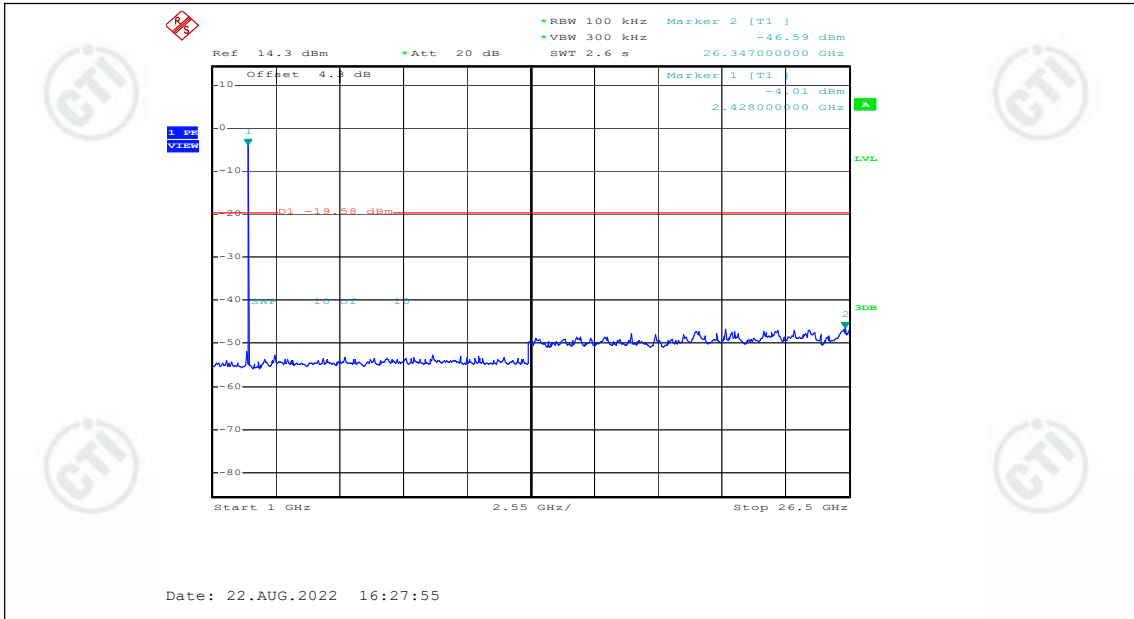
2DH5_Ant1_2402_1000~26500



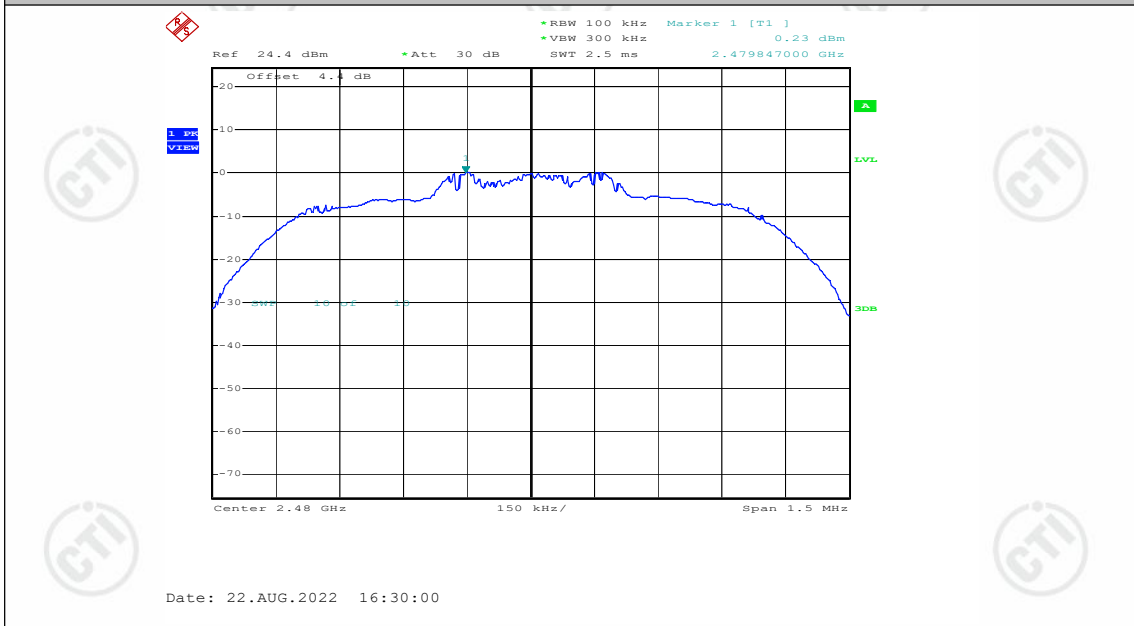
2DH5_Ant1_2441_0~Reference



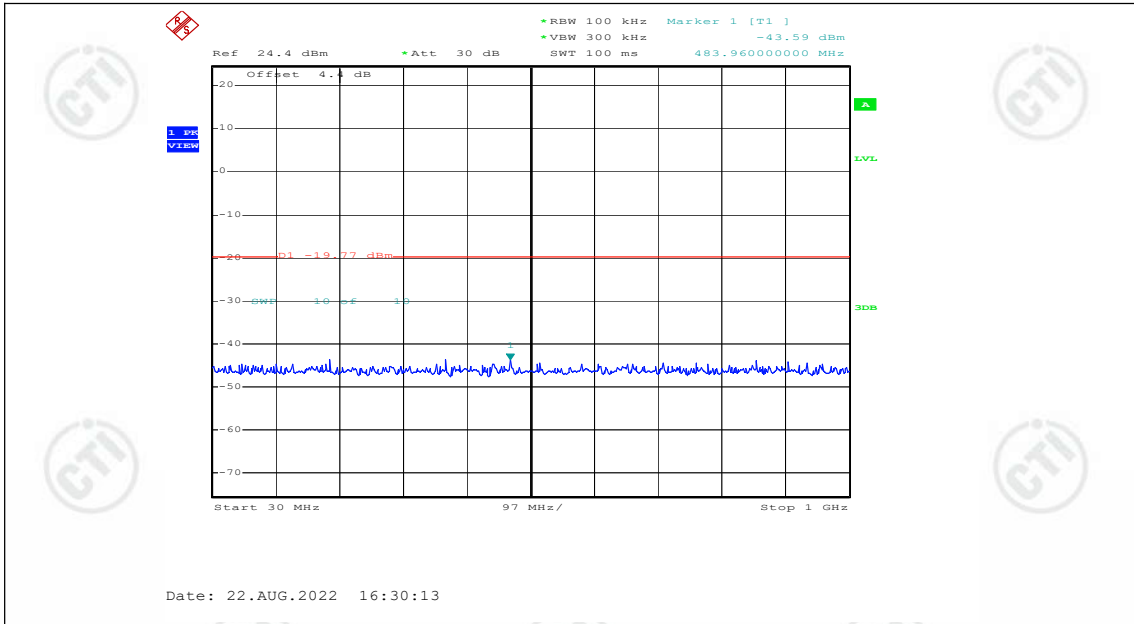
2DH5_Ant1_2441_30~1000



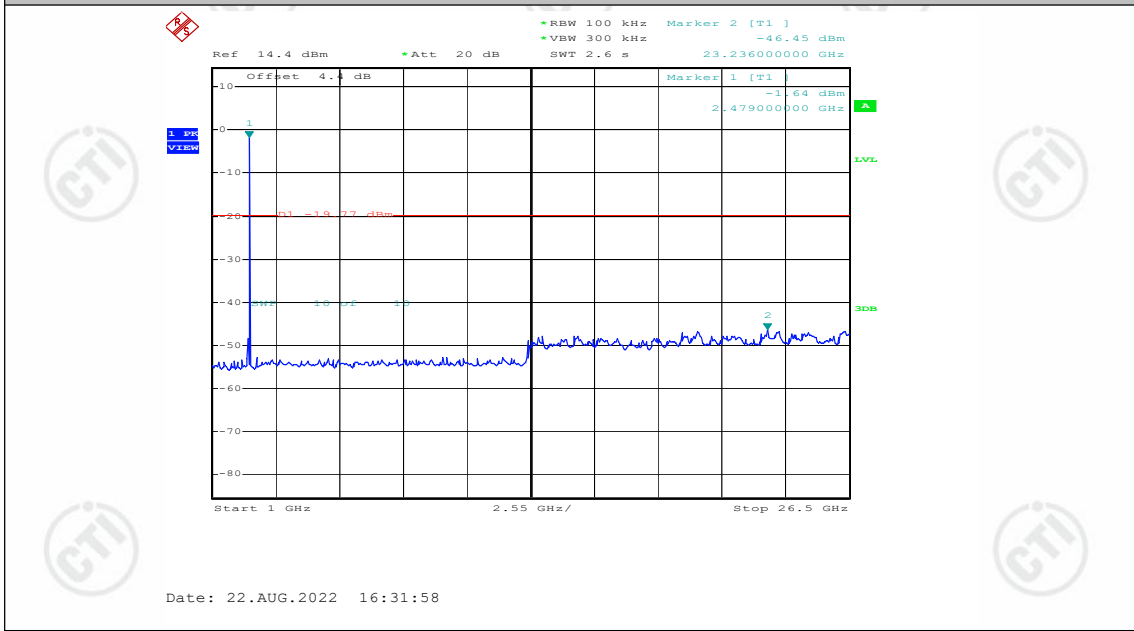
2DH5_Ant1_2441_1000~26500



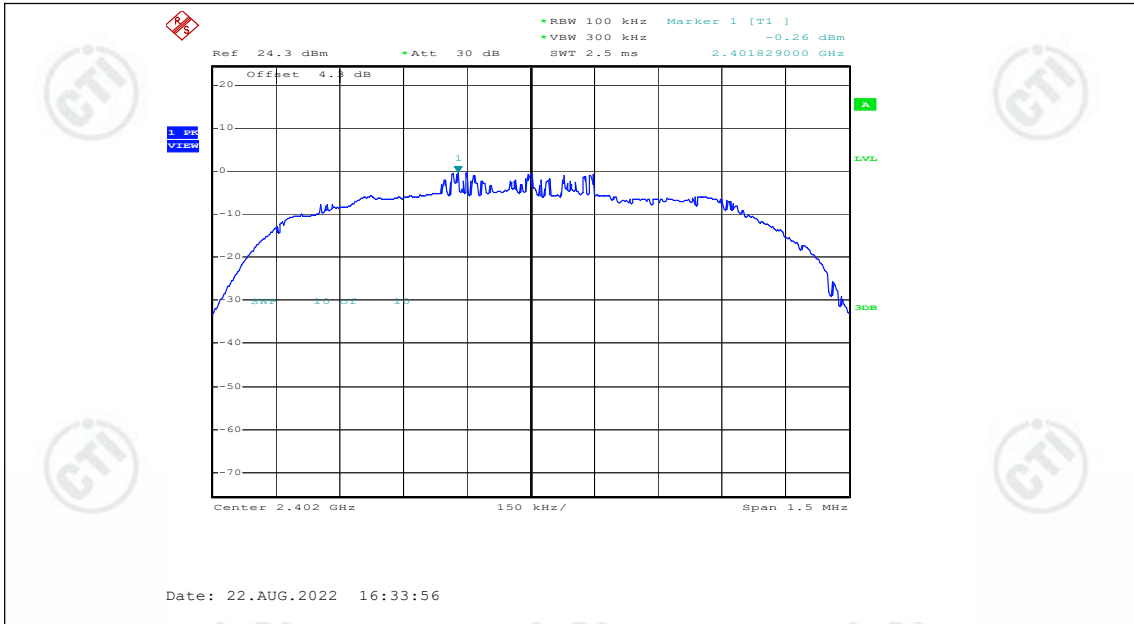
2DH5_Ant1_2480_0~Reference



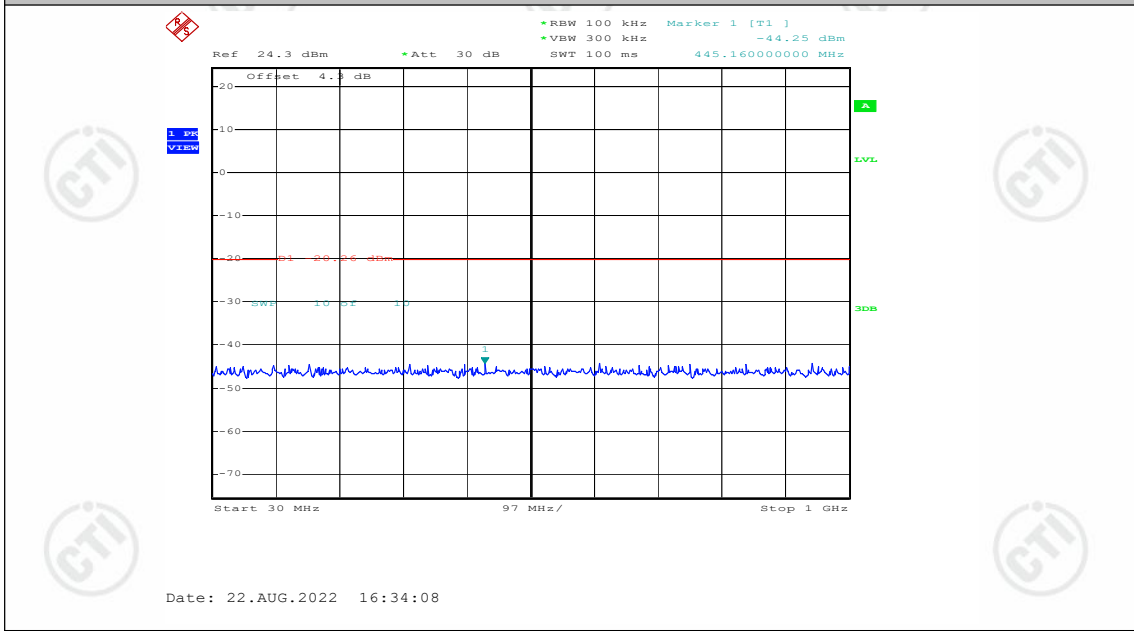
2DH5_Ant1_2480_30~1000



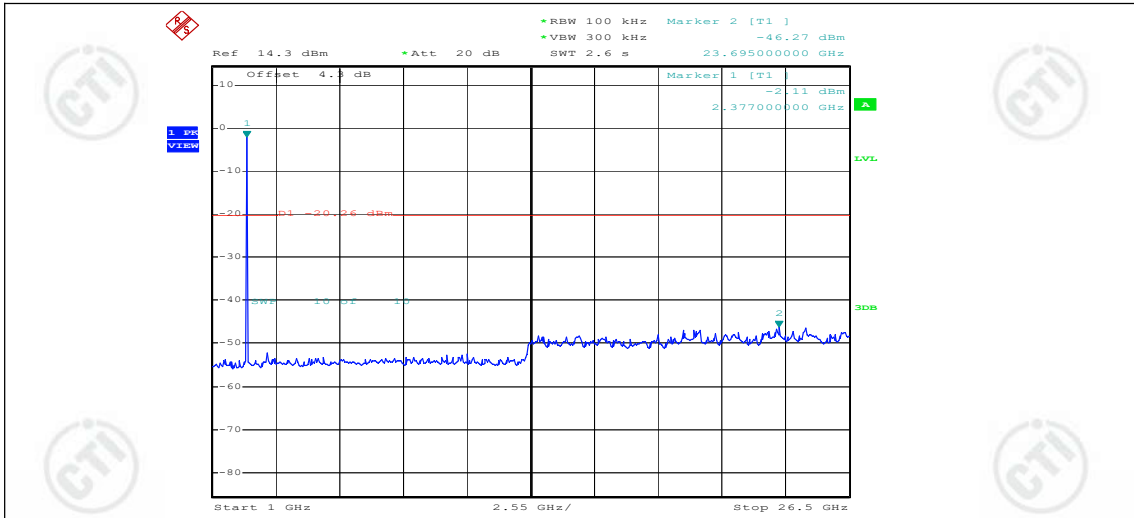
2DH5_Ant1_2480_1000~26500



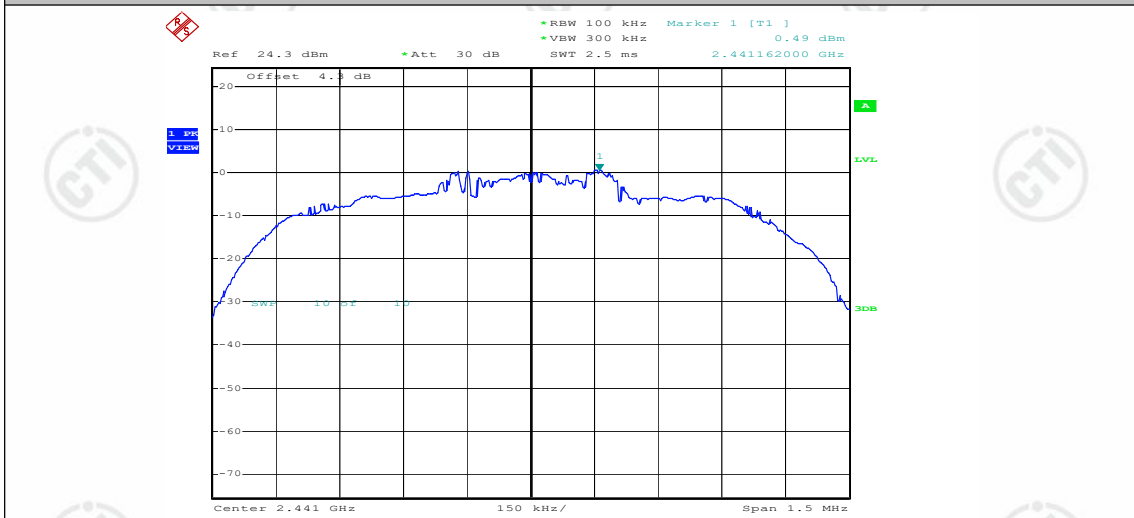
3DH5_Ant1_2402_0~Reference



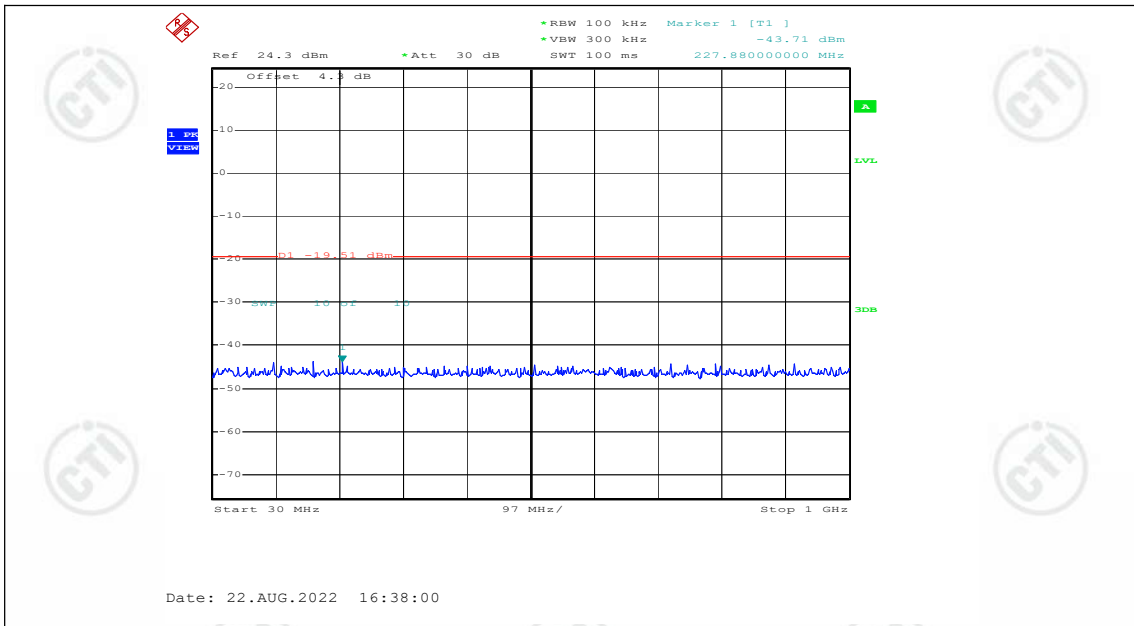
3DH5_Ant1_2402_30~1000



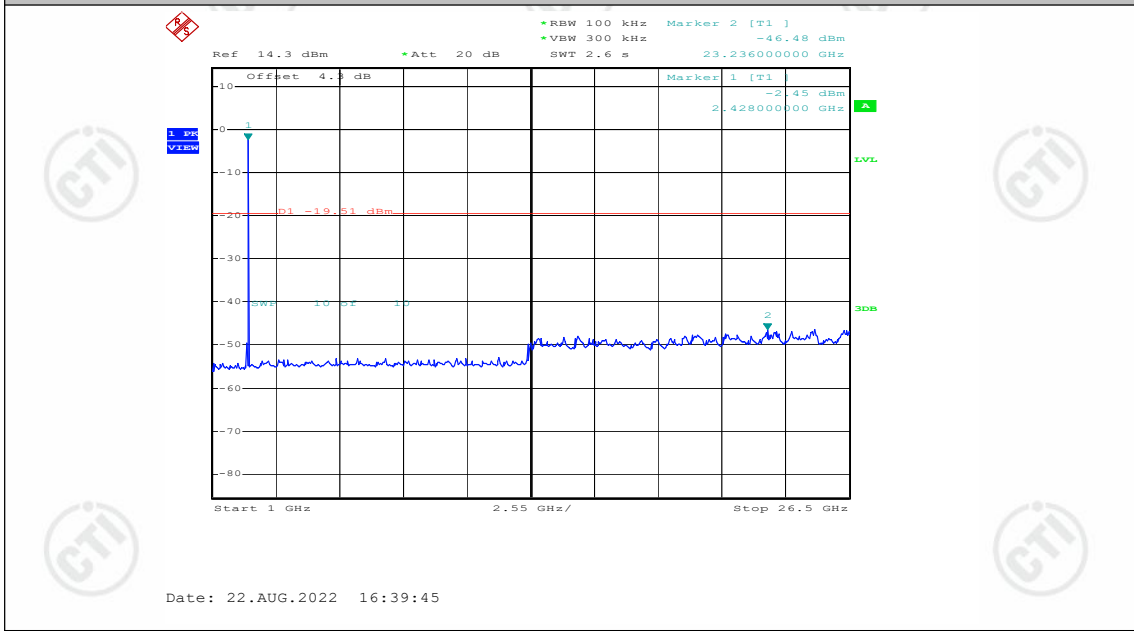
3DH5_Ant1_2402_1000~26500



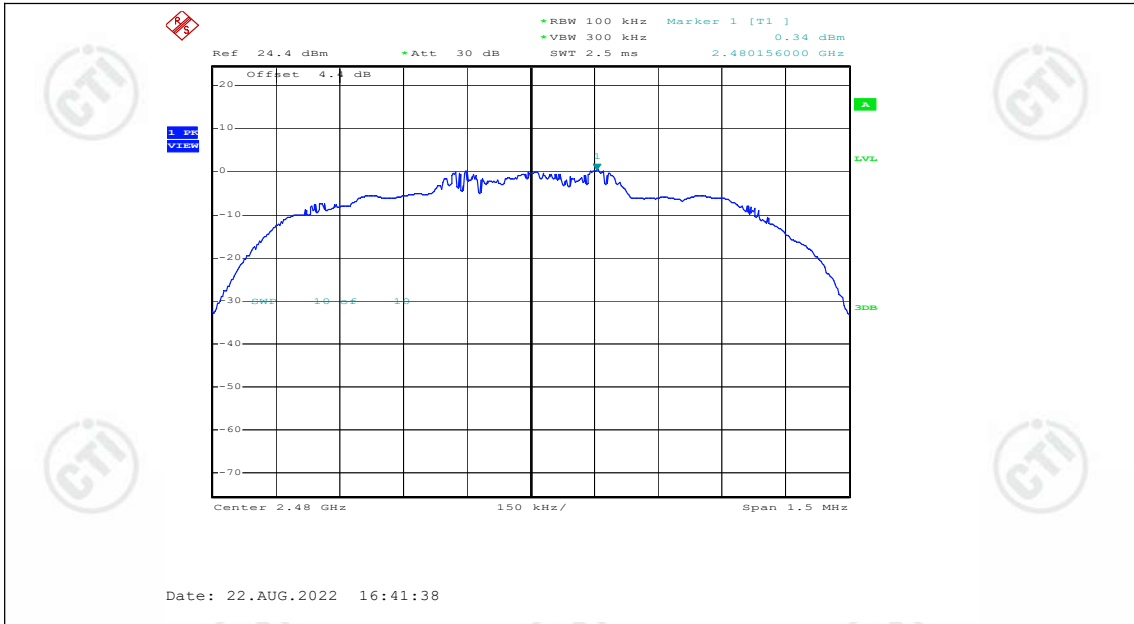
3DH5_Ant1_2441_0~Reference



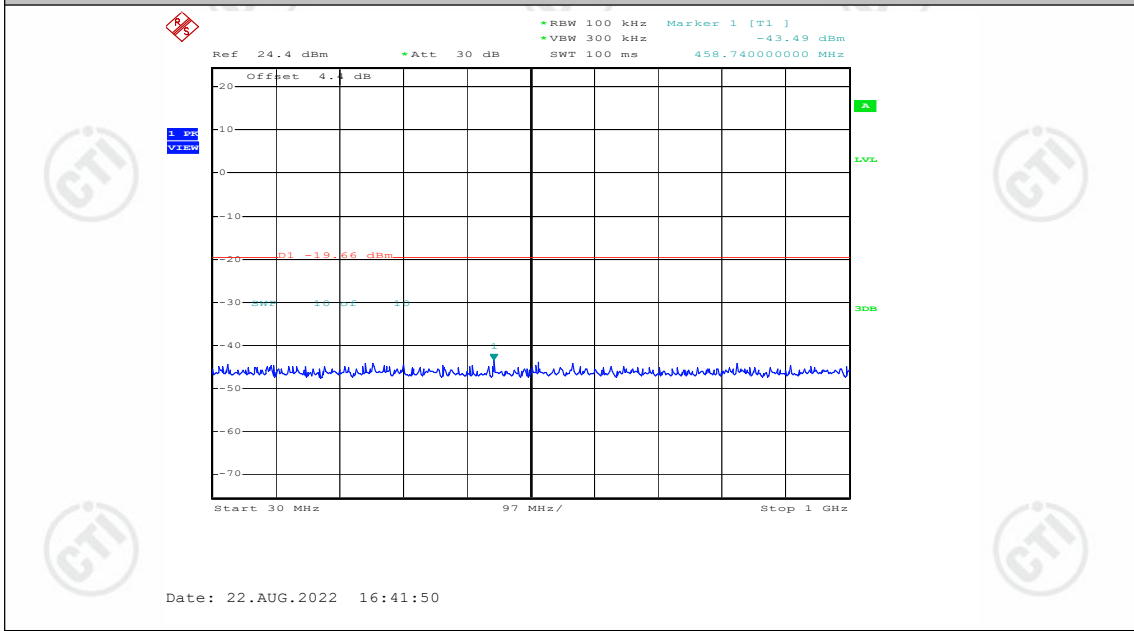
3DH5_Ant1_2441_30~1000



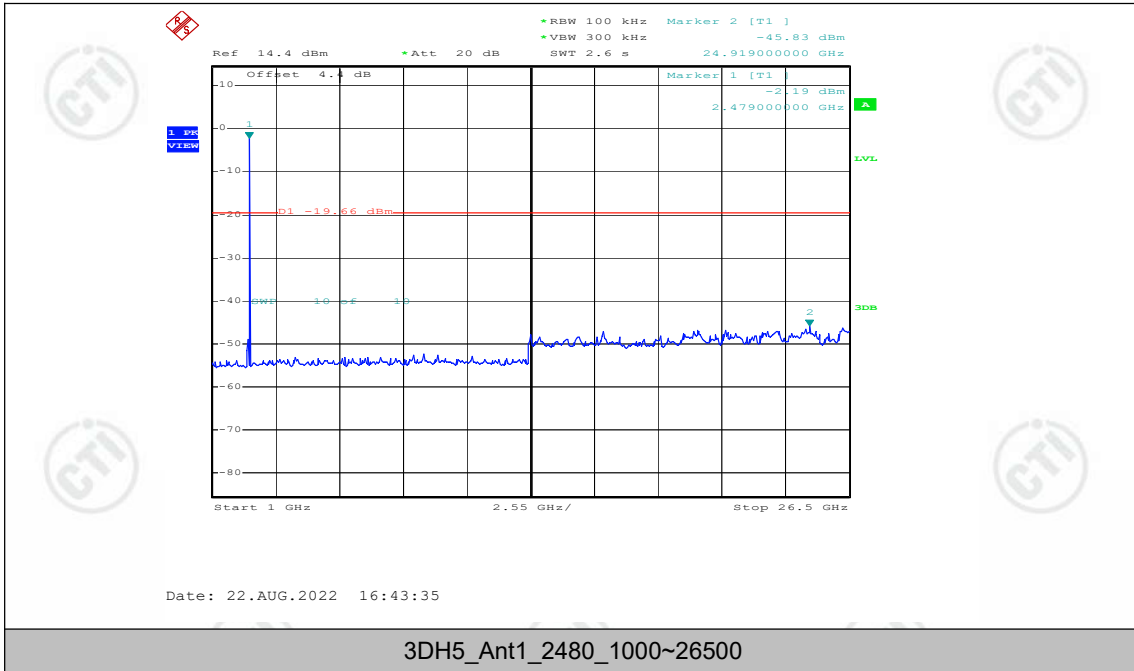
3DH5_Ant1_2441_1000~26500



3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000

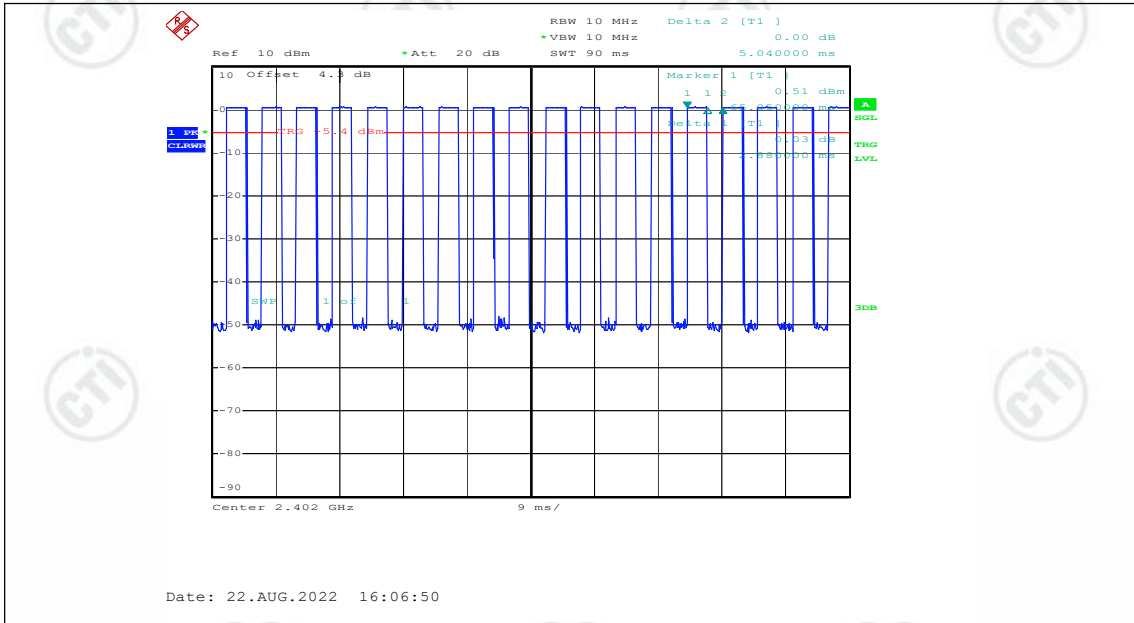


3DH5_Ant1_2480_1000~26500

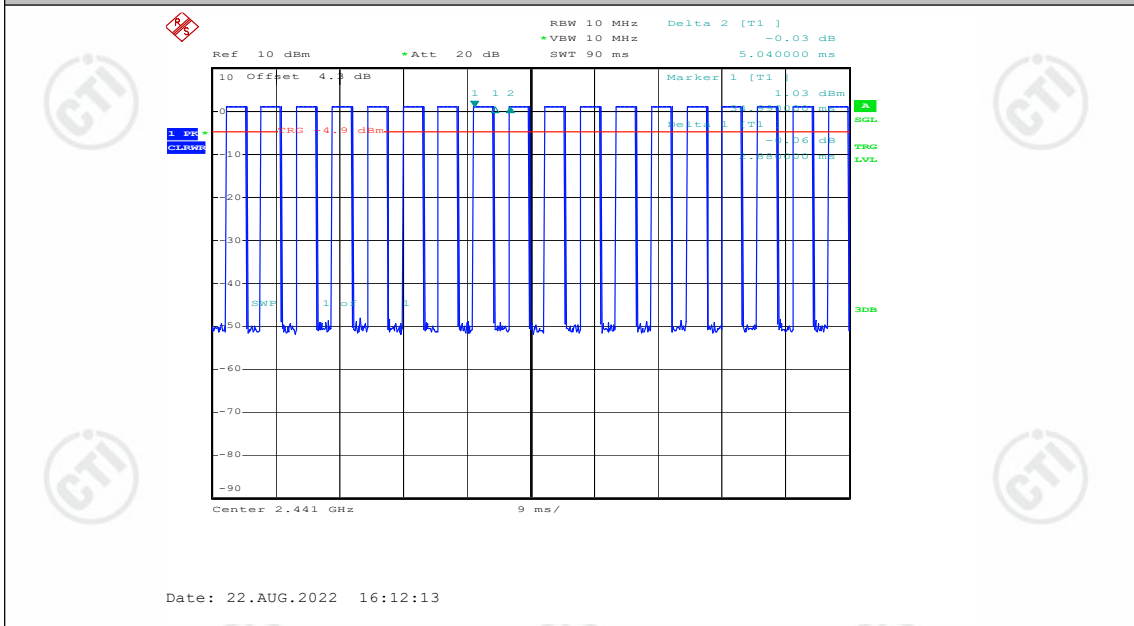
Appendix I: DutyCycle**Test Result**

Test Mode	Antenna	Channel	Transmission Duration [ms]	Transmission Period [ms]	Duty Cycle [%]	Limit	Verdict
DH5	Ant1	2402	2.88	5.04	57.14	---	---
		2441	2.88	5.04	57.14	---	---
		2480	2.88	5.04	57.14	---	---
2DH5	Ant1	2402	2.88	5.04	57.14	---	---
		2441	2.88	5.04	57.14	---	---
		2480	2.88	5.04	57.14	---	---
3DH5	Ant1	2402	2.88	5.04	57.14	---	---
		2441	2.88	5.04	57.14	---	---
		2480	2.88	5.04	57.14	---	---

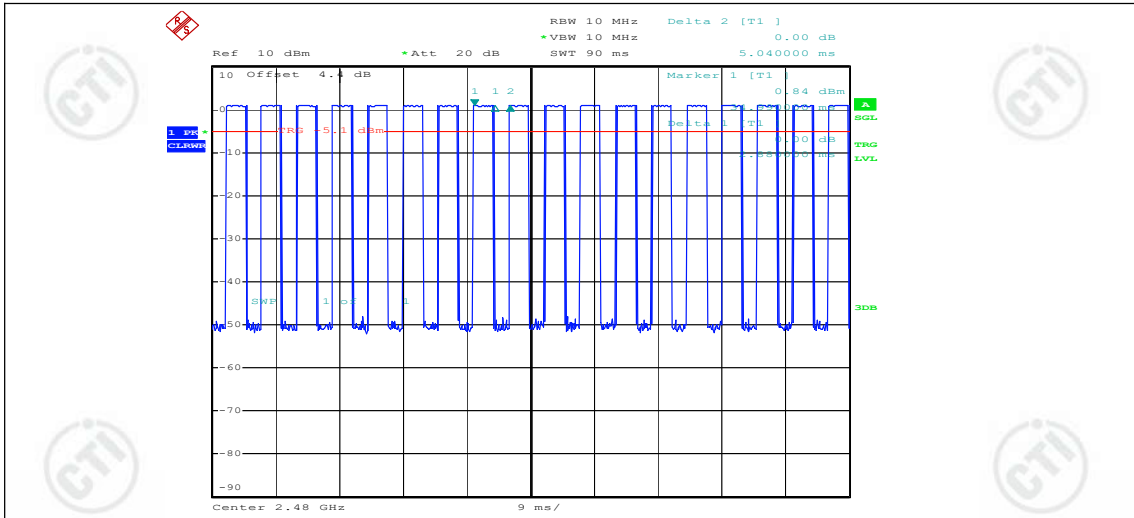
Test Graphs



DH5_Ant1_2402

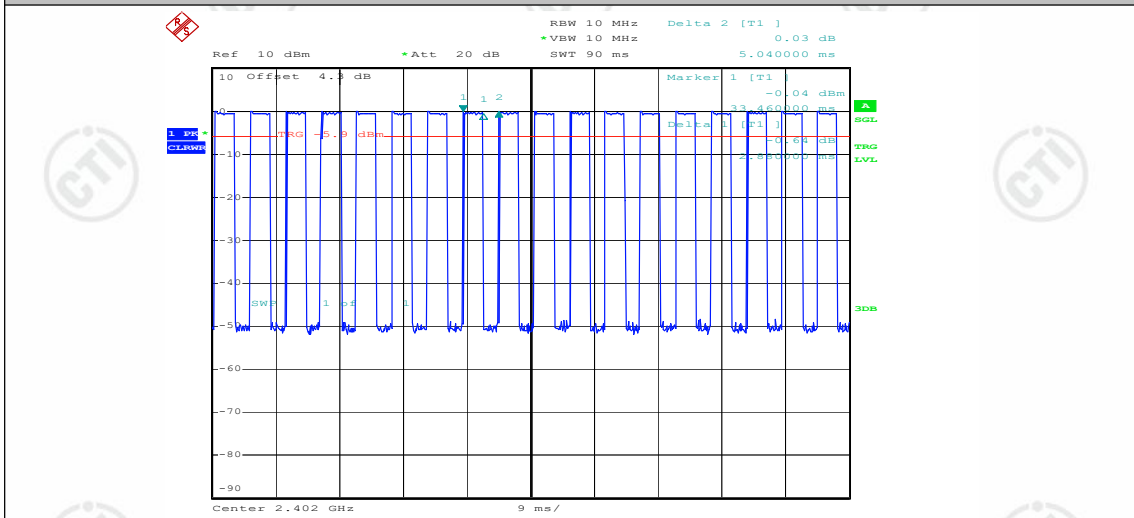


DH5_Ant1_2441



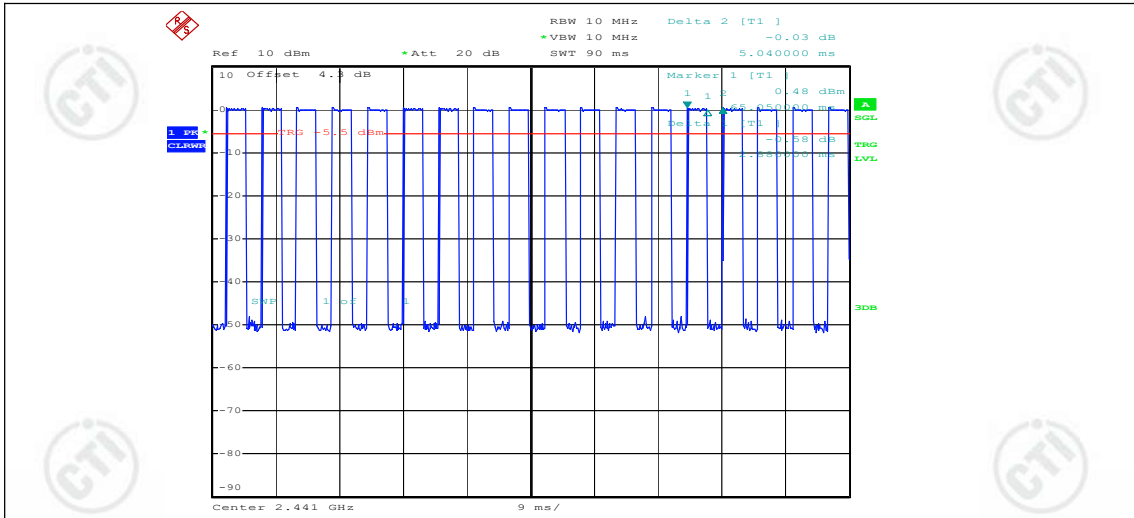
Date: 22.AUG.2022 16:15:58

DH5_Ant1_2480



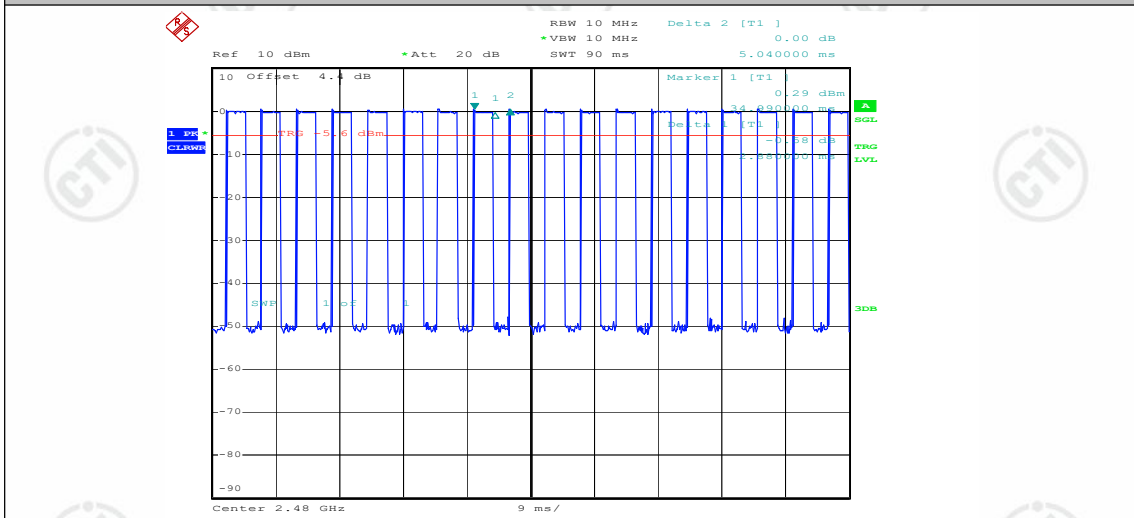
Date: 22.AUG.2022 16:20:02

2DH5_Ant1_2402



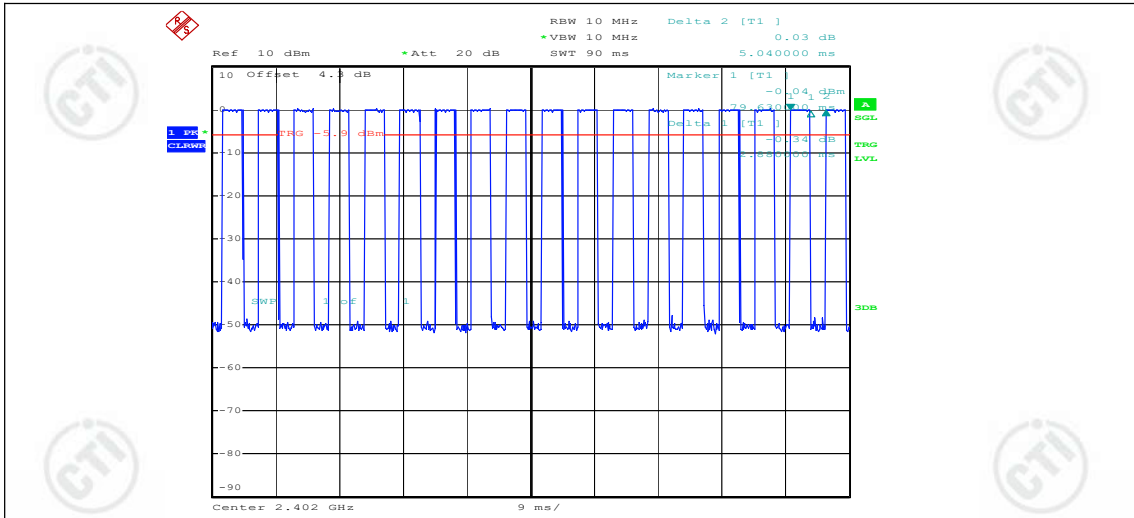
Date: 22.AUG.2022 16:24:42

2DH5_Ant1_2441



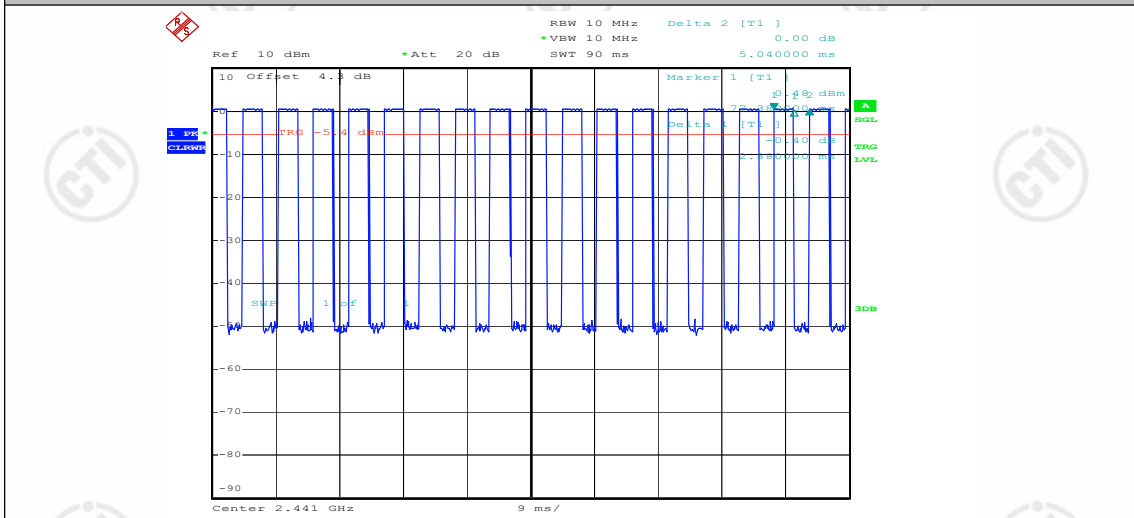
Date: 22.AUG.2022 16:28:24

2DH5_Ant1_2480



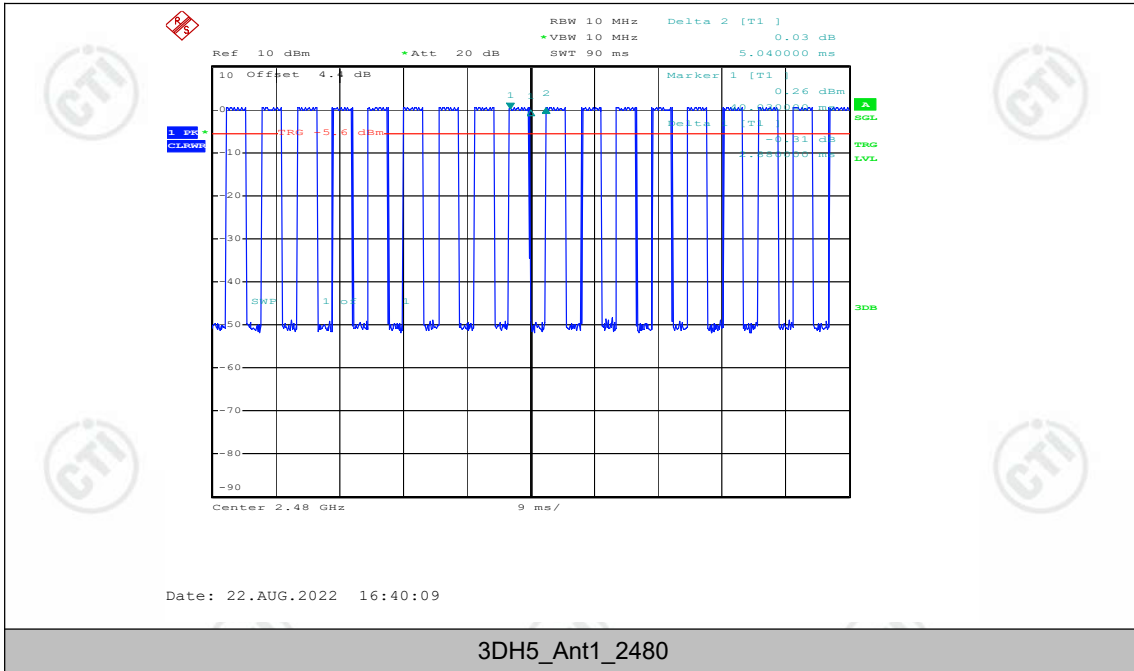
Date: 22.AUG.2022 16:32:27

3DH5_Ant1_2402



Date: 22.AUG.2022 16:36:29

3DH5_Ant1_2441



*** End of Report ***