

Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)**Product Name: Sport Bluetooth Earbuds****Trade Mark: N/A****Test Model: X3 Pro****FCC ID: 2A889-X3PRO****Environmental Conditions**

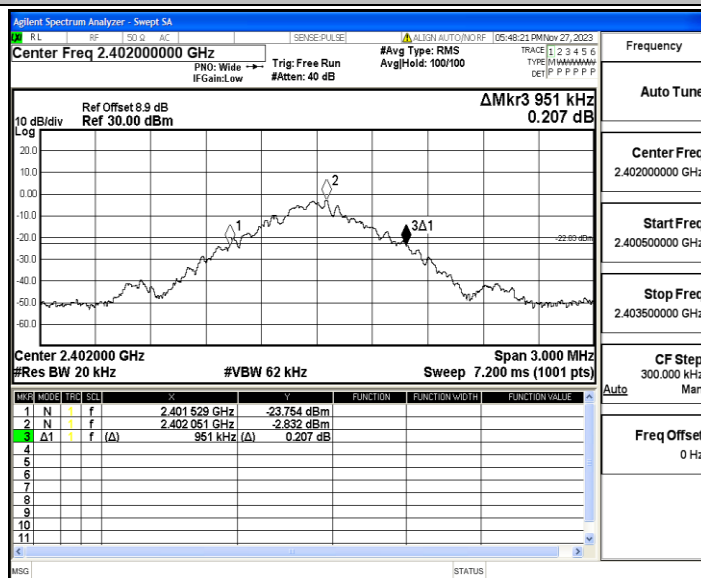
Temperature:	25.5°C
Relative Humidity:	55%
ATM Pressure:	100.0 kPa
Test Engineer:	Anna Hu
Supervised by:	Hugo Chen
NOTE	N/A

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

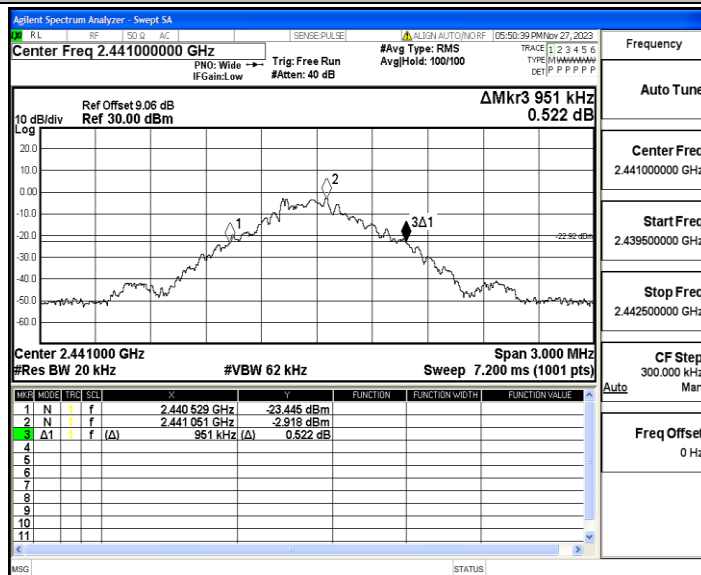
TestMode	Antenna	Channel	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.951	2401.529	2402.480	---	---
		2441	0.951	2440.529	2441.480	---	---
		2480	0.954	2479.529	2480.483	---	---
2DH5	Ant1	2402	1.203	2401.391	2402.594	---	---
		2441	1.323	2440.331	2441.654	---	---
		2480	1.317	2479.337	2480.654	---	---
3DH5	Ant1	2402	1.233	2401.367	2402.600	---	---
		2441	1.239	2440.361	2441.600	---	---
		2480	1.182	2479.409	2480.591	---	---

Test Graphs

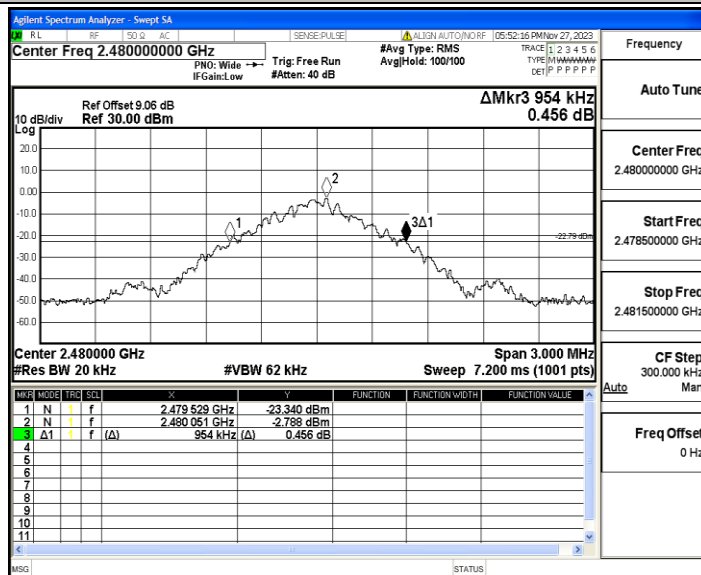
DH5_Ant1_2402



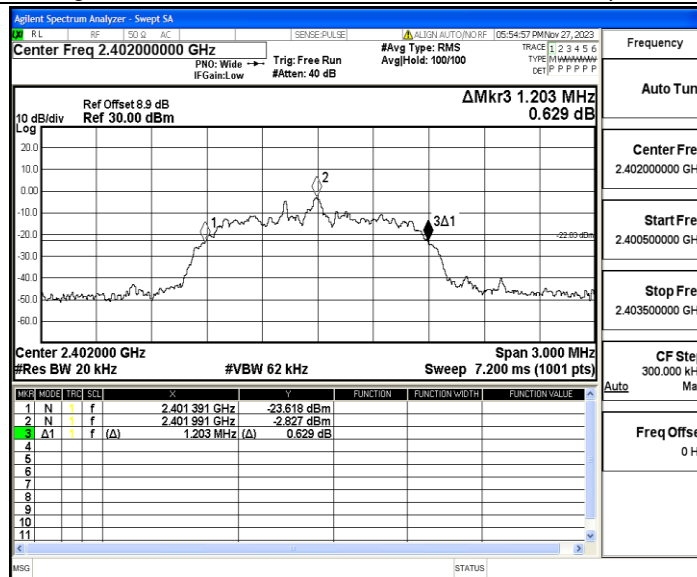
DH5_Ant1_2441



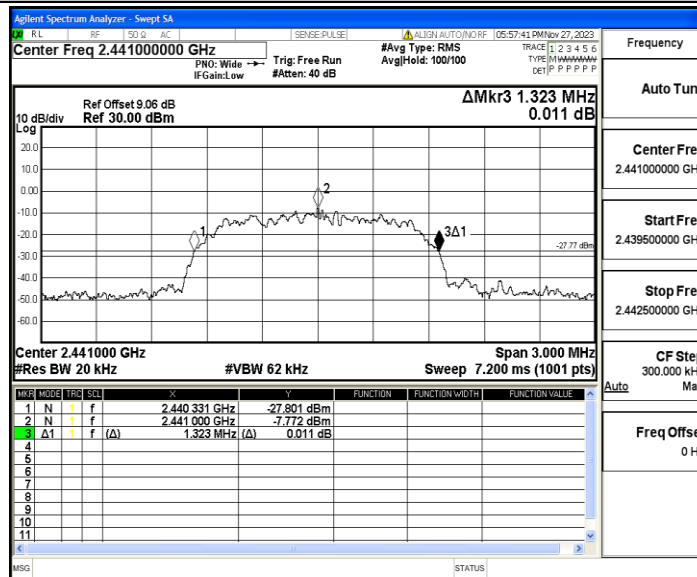
DH5_Ant1_2480



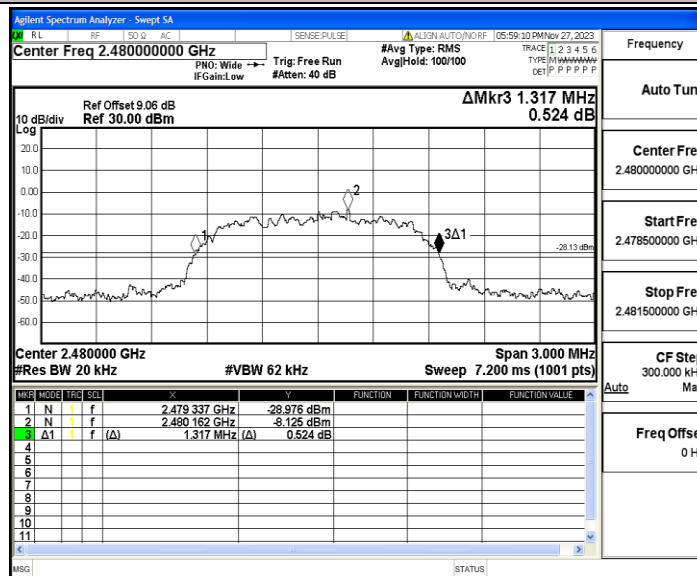
2DH5_Ant1_2402



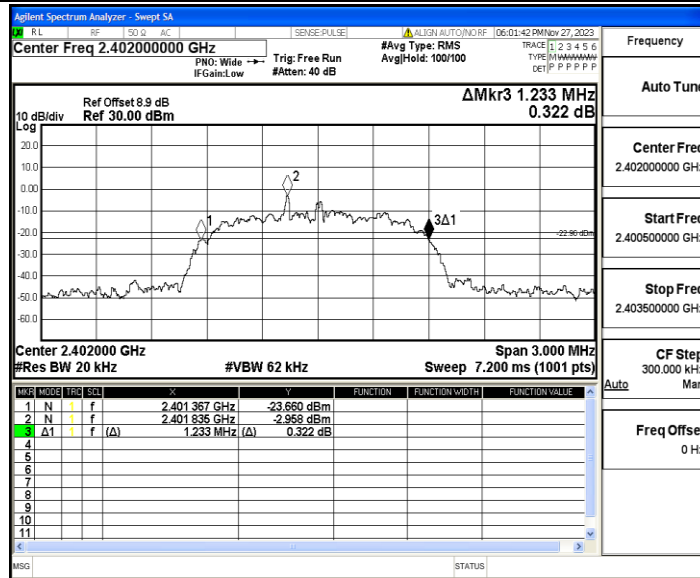
2DH5_Ant1_2441



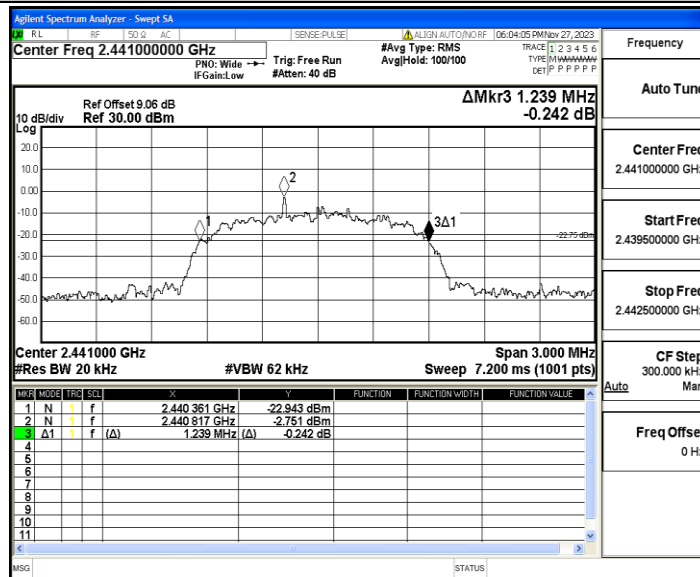
2DH5_Ant1_2480



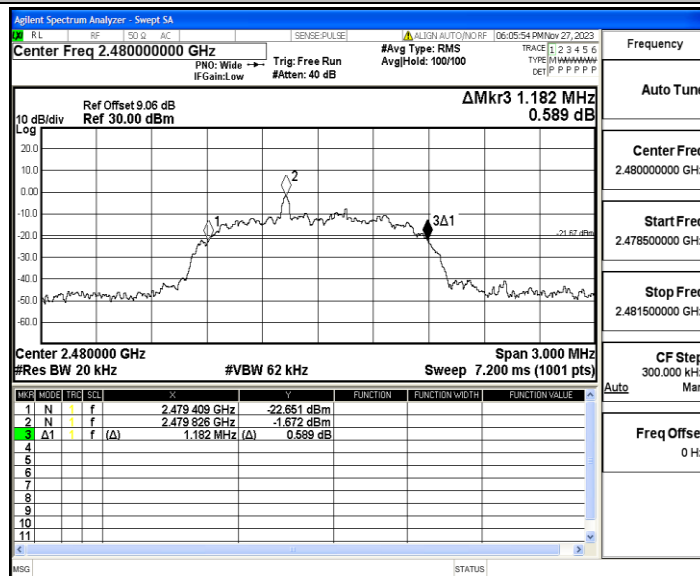
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



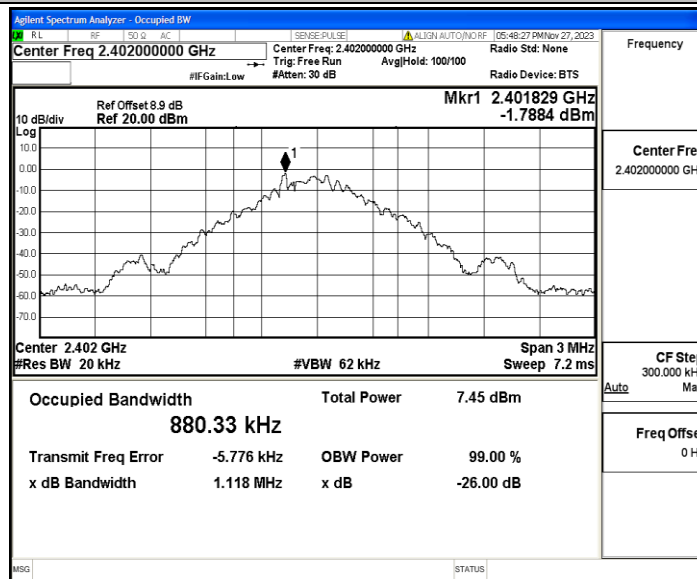
Appendix B: Occupied Channel Bandwidth

Test Result

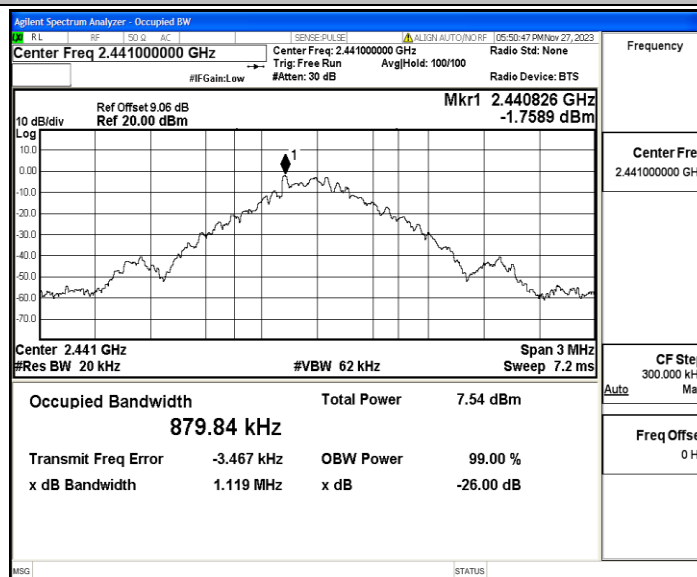
TestMode	Antenna	Channel	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.88033	2401.5541	2402.4344	---	---
		2441	0.87984	2440.5566	2441.4365	---	---
		2480	0.89178	2479.5474	2480.4392	---	---
2DH5	Ant1	2402	1.1628	2401.4084	2402.5712	---	---
		2441	1.1611	2440.4086	2441.5697	---	---
		2480	1.1574	2479.4093	2480.5667	---	---
3DH5	Ant1	2402	1.1646	2401.4085	2402.5731	---	---
		2441	1.1444	2440.4200	2441.5644	---	---
		2480	1.1599	2479.4110	2480.5709	---	---

Test Graphs

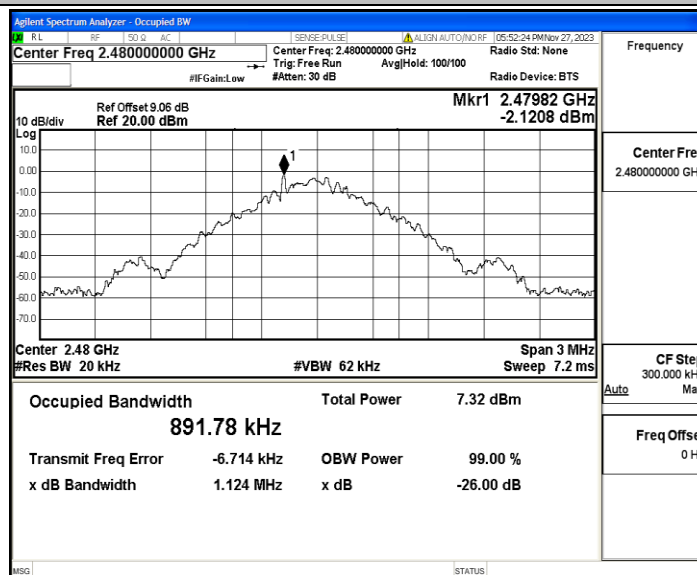
DH5_Ant1_2402



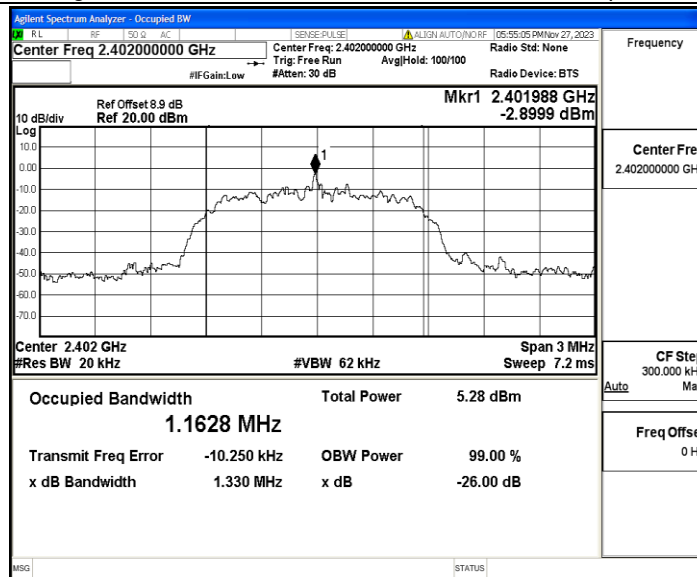
DH5_Ant1_2441



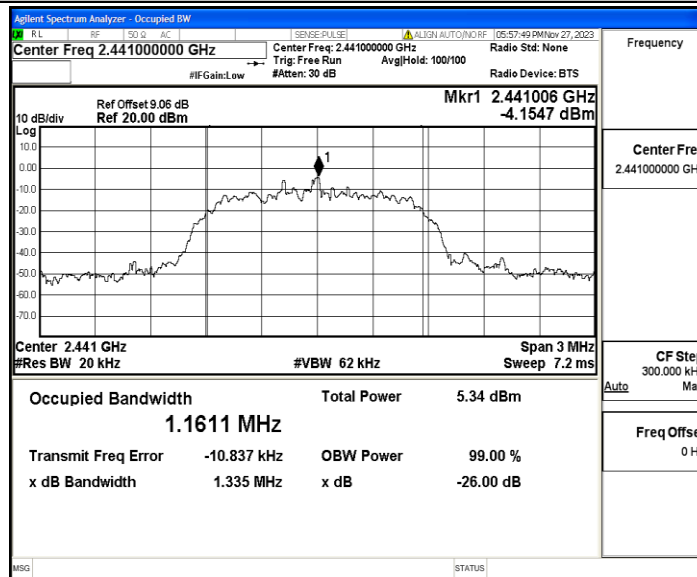
DH5_Ant1_2480



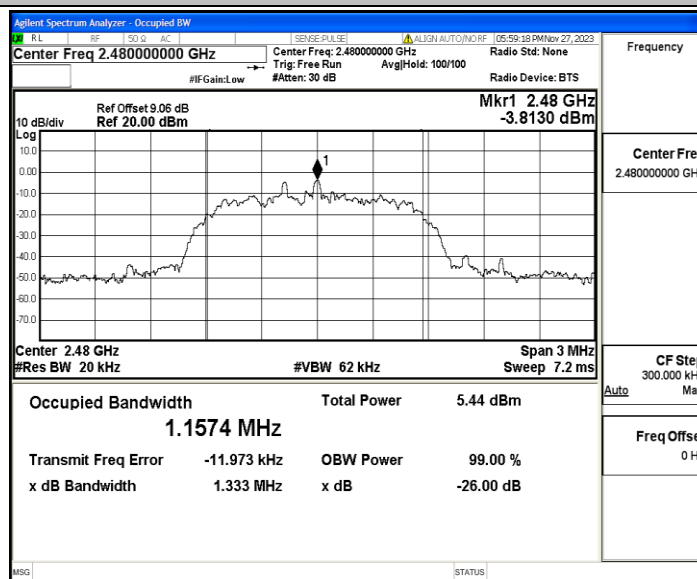
2DH5_Ant1_2402



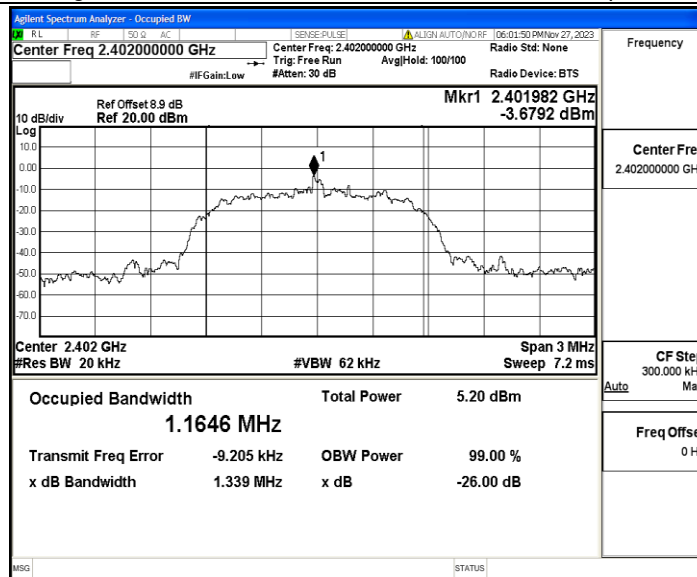
2DH5_Ant1_2441



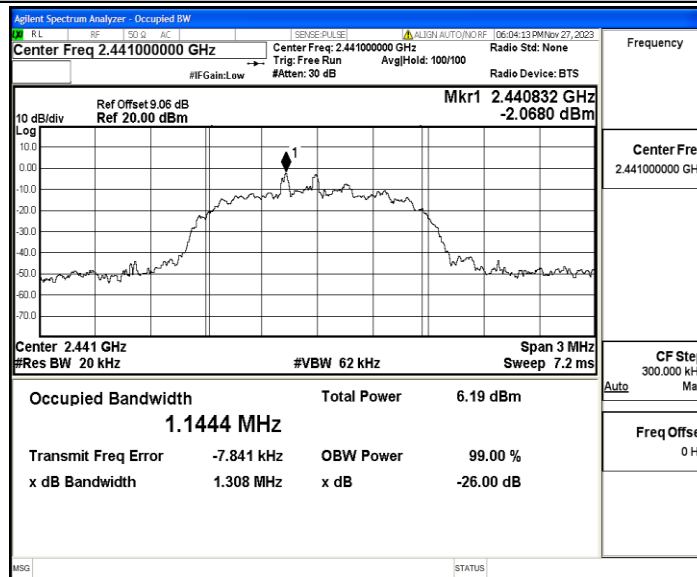
2DH5_Ant1_2480



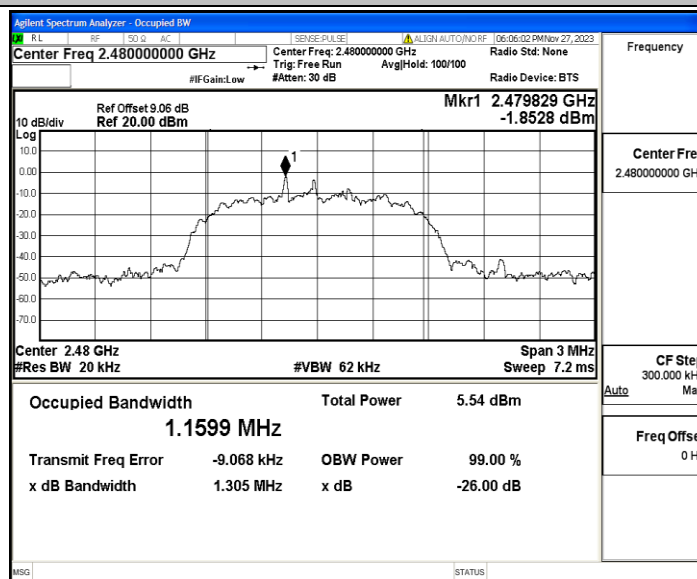
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



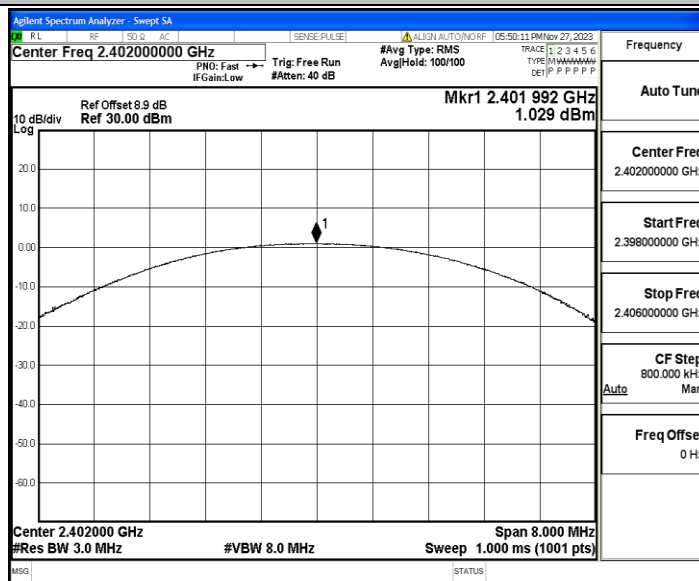
Appendix C: Maximum Peak conducted output power

Test Result

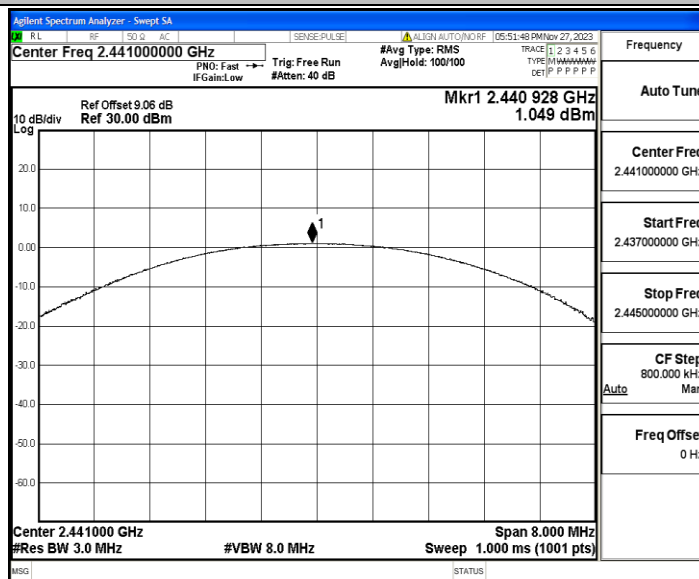
TestMode	Antenna	Channel	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	1.03	≤30	PASS
		2441	1.05	≤30	PASS
		2480	1.08	≤30	PASS
2DH5	Ant1	2402	0.97	≤20.97	PASS
		2441	0.99	≤20.97	PASS
		2480	1.01	≤20.97	PASS
3DH5	Ant1	2402	1.22	≤20.97	PASS
		2441	1.31	≤20.97	PASS
		2480	1.36	≤20.97	PASS

Test Graphs

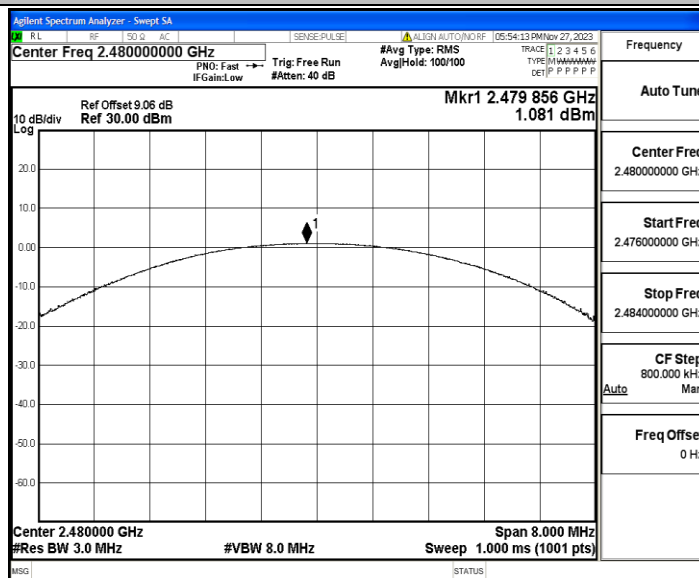
DH5_Ant1_2402



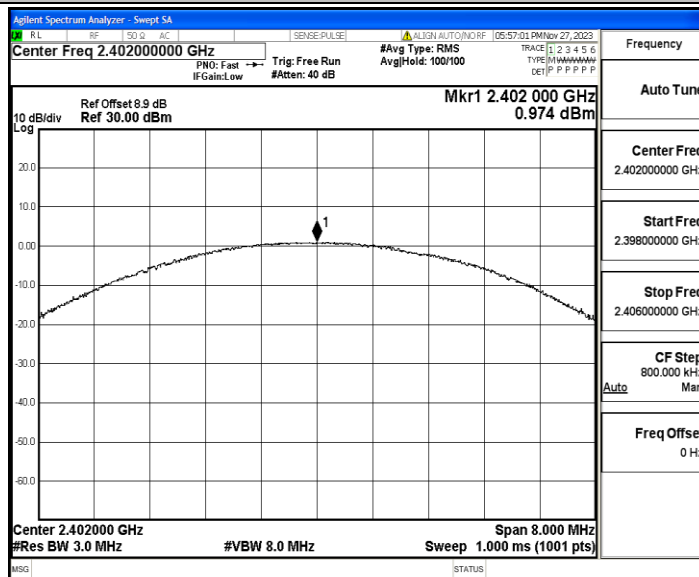
DH5_Ant1_2441



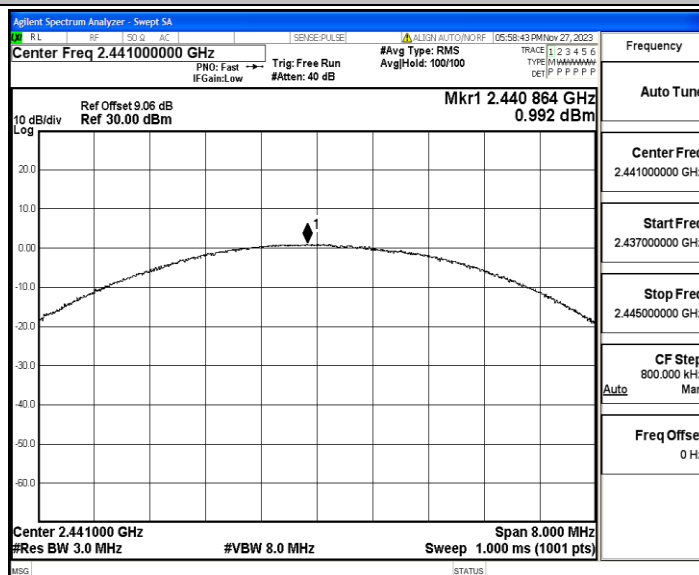
DH5_Ant1_2480



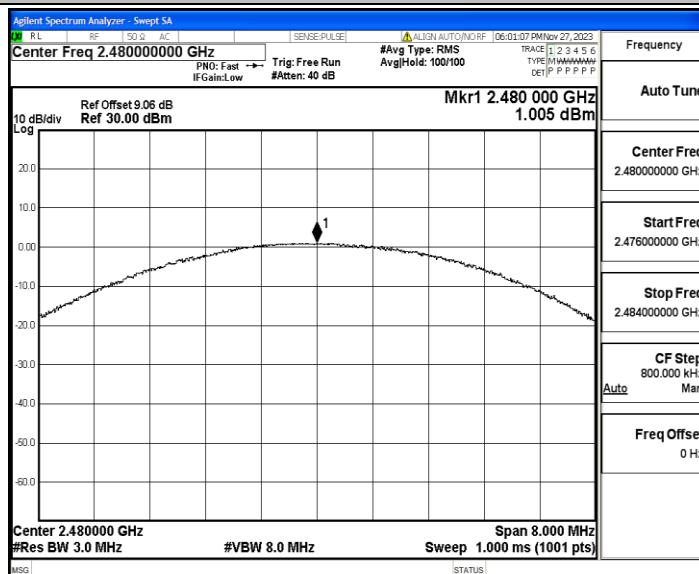
2DH5_Ant1_2402



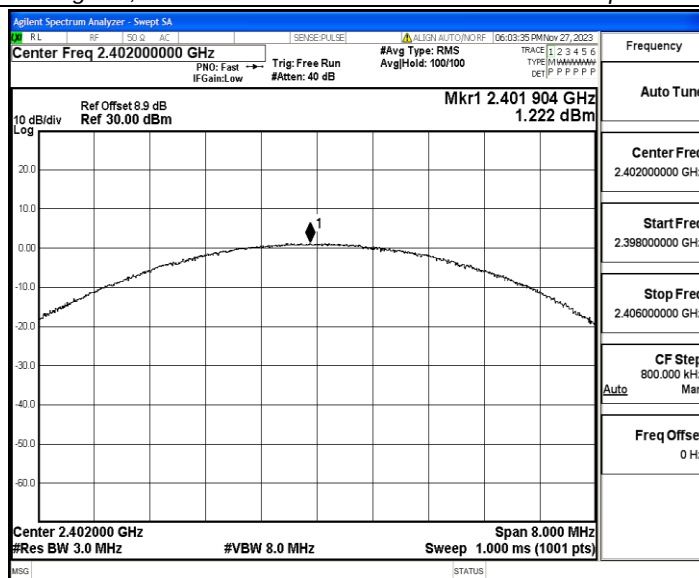
2DH5_Ant1_2441



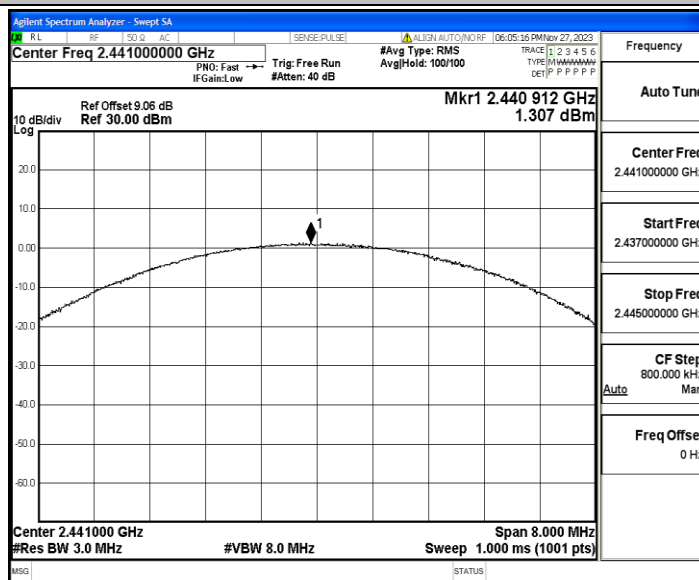
2DH5_Ant1_2480



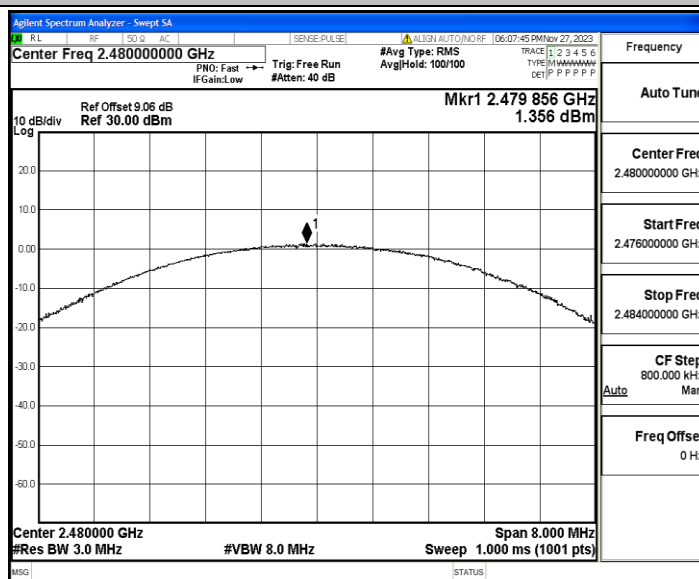
3DH5_Ant1_2402



3DH5_Ant1_2441



3DH5_Ant1_2480



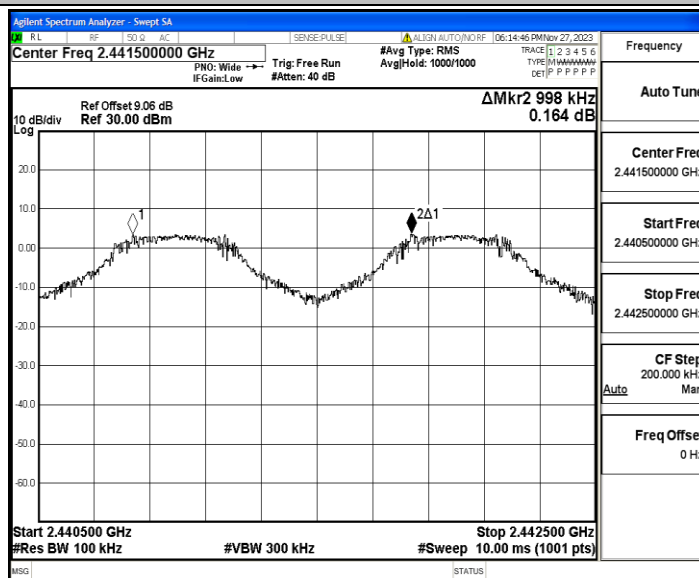
Appendix D: Carrier frequency separation

Test Result

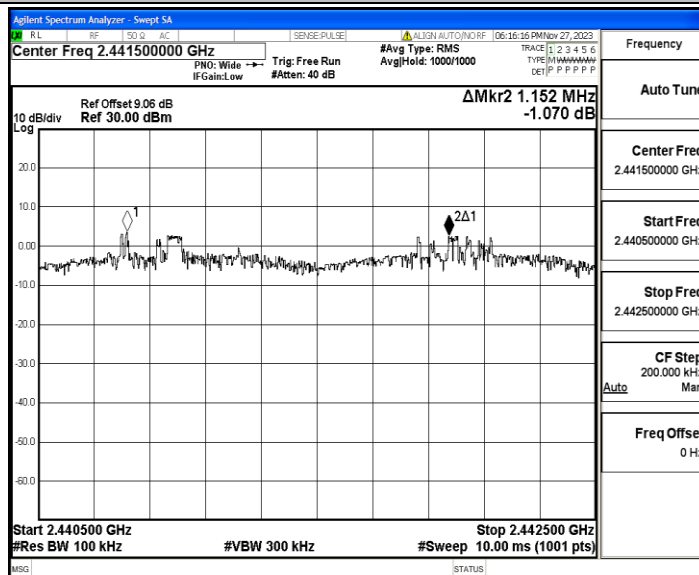
TestMode	Antenna	Channel	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.998	≥ 0.954	PASS
2DH5	Ant1	Hop	1.152	≥ 0.882	PASS
3DH5	Ant1	Hop	0.968	≥ 0.826	PASS

Test Graphs

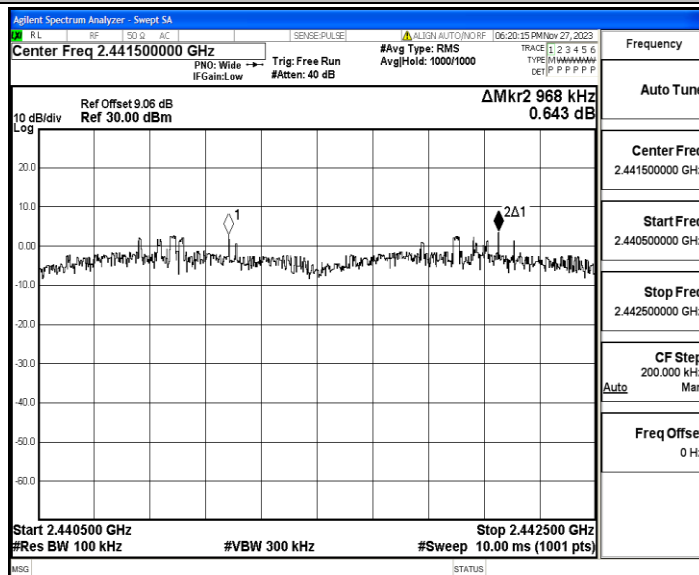
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop

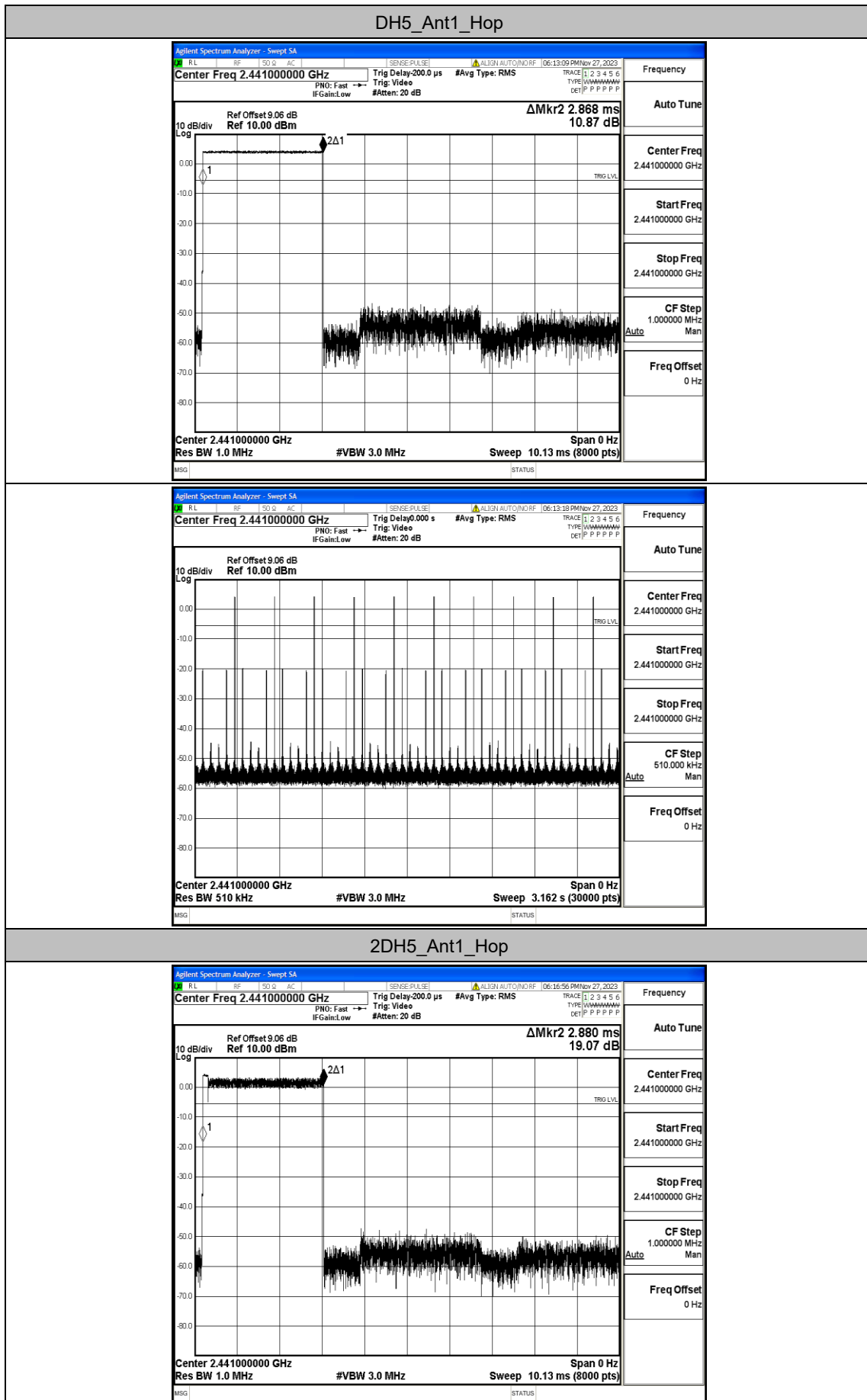


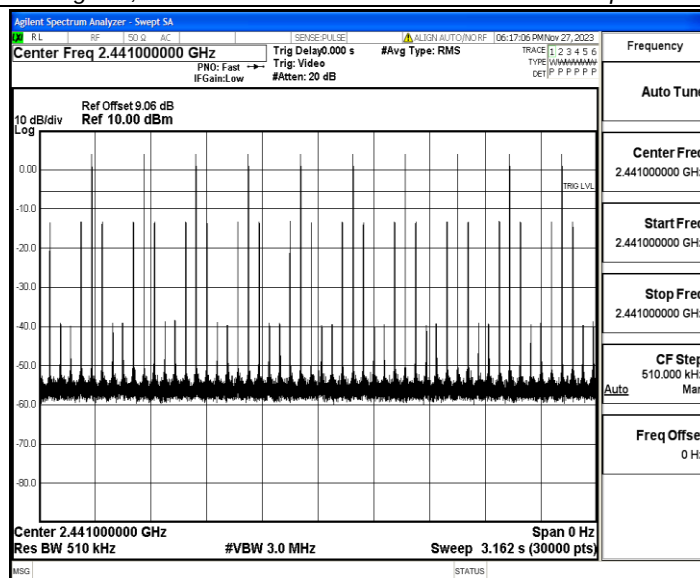
Appendix E: Time of occupancy

Test Result

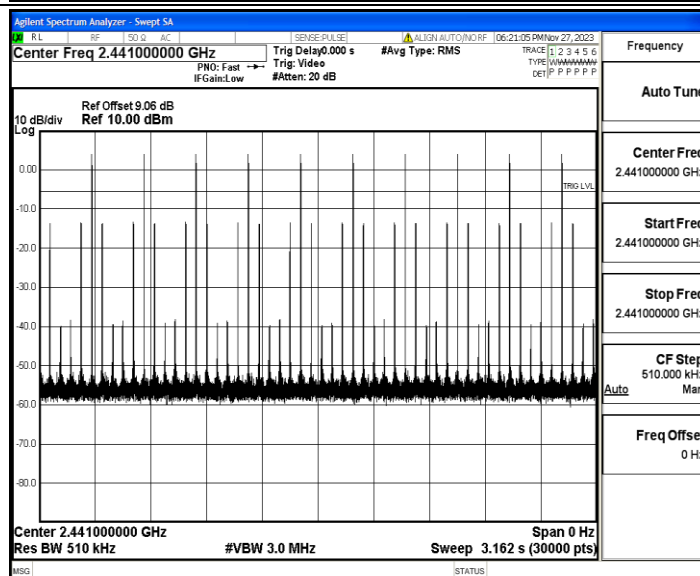
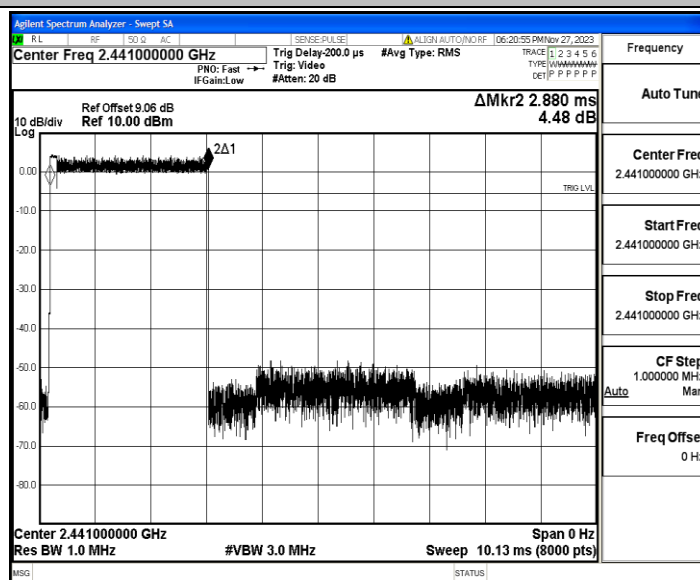
TestMode	Antenna	Channel	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.868	110	0.315	≤0.4	PASS
2DH5	Ant1	Hop	2.880	110	0.317	≤0.4	PASS
3DH5	Ant1	Hop	2.880	110	0.317	≤0.4	PASS

Test Graphs





3DH5_Ant1_Hop

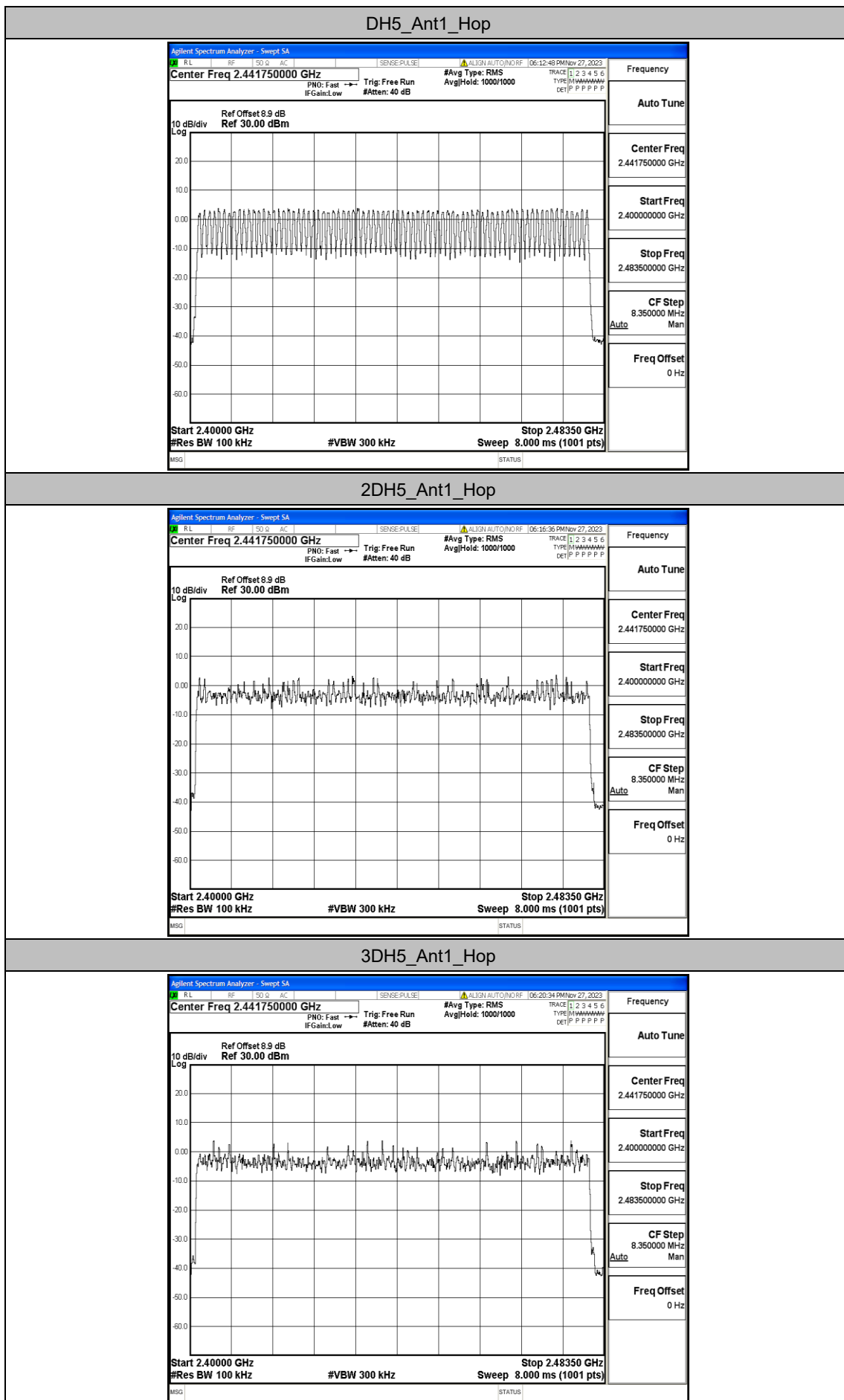


Appendix F: Number of hopping channels

Test Result

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

Test Graphs



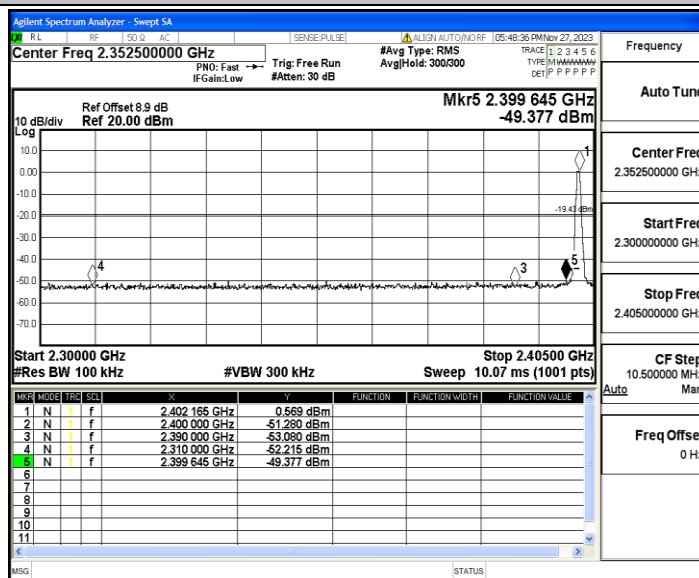
Appendix G: Band edge measurements

Test Result

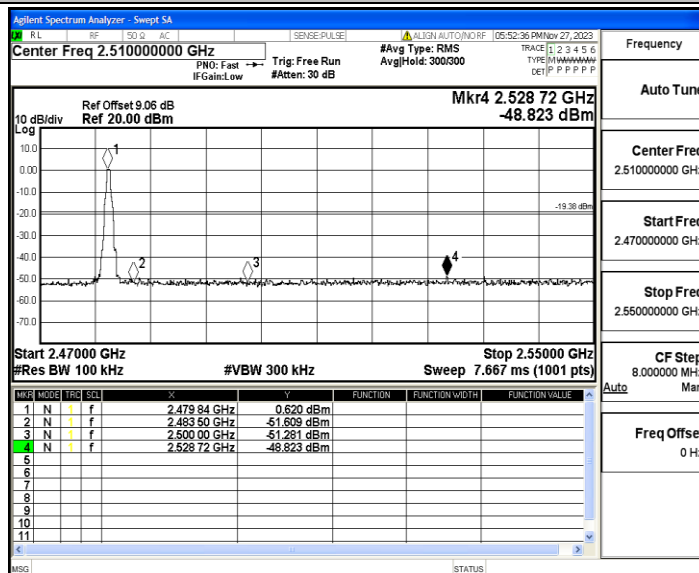
TestMode	Antenna	ChName	Channel	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	0.57	-49.38	≤ -19.43	PASS
		High	2480	0.62	-48.82	≤ -19.38	PASS
		Low	Hop_2402	3.03	-50.24	≤ -16.98	PASS
		High	Hop_2480	3.59	-48.72	≤ -16.42	PASS
2DH5	Ant1	Low	2402	0.50	-50.04	≤ -19.5	PASS
		High	2480	-0.13	-48.84	≤ -20.13	PASS
		Low	Hop_2402	2.53	-49.82	≤ -17.48	PASS
		High	Hop_2480	1.49	-49.27	≤ -18.52	PASS
3DH5	Ant1	Low	2402	0.52	-50.06	≤ -19.48	PASS
		High	2480	0.65	-48.26	≤ -19.36	PASS
		Low	Hop_2402	-2.44	-50.76	≤ -22.44	PASS
		High	Hop_2480	3.28	-48.36	≤ -16.72	PASS

Test Graphs

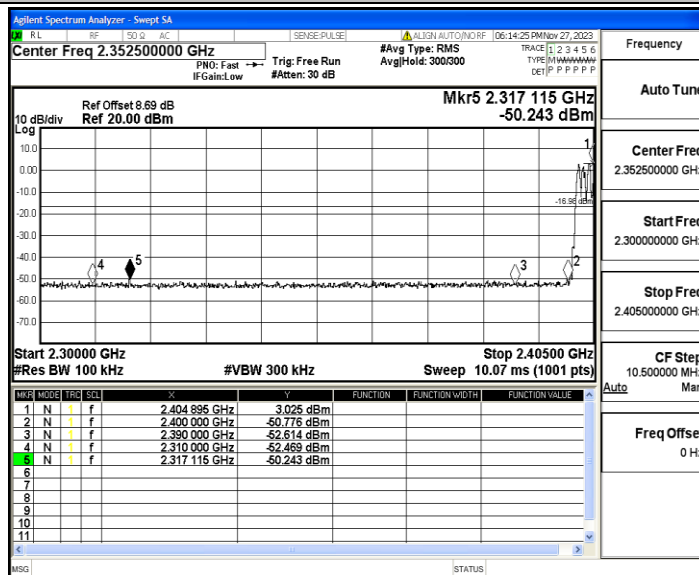
DH5_Ant1_Low_2402



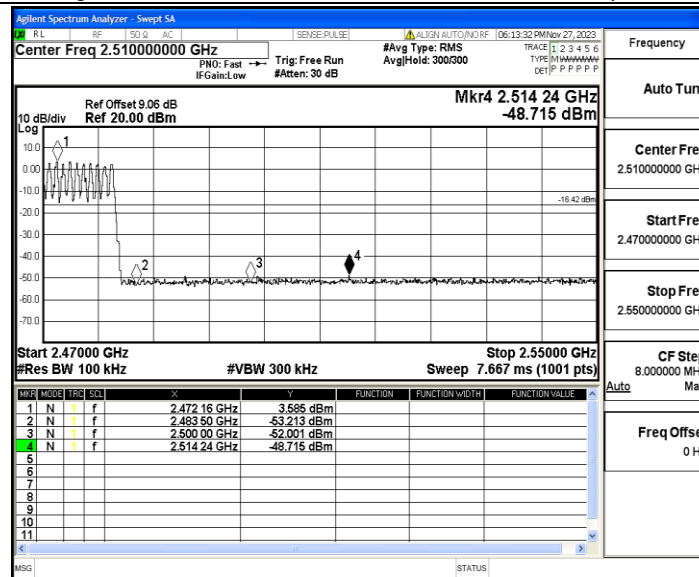
DH5_Ant1_High_2480



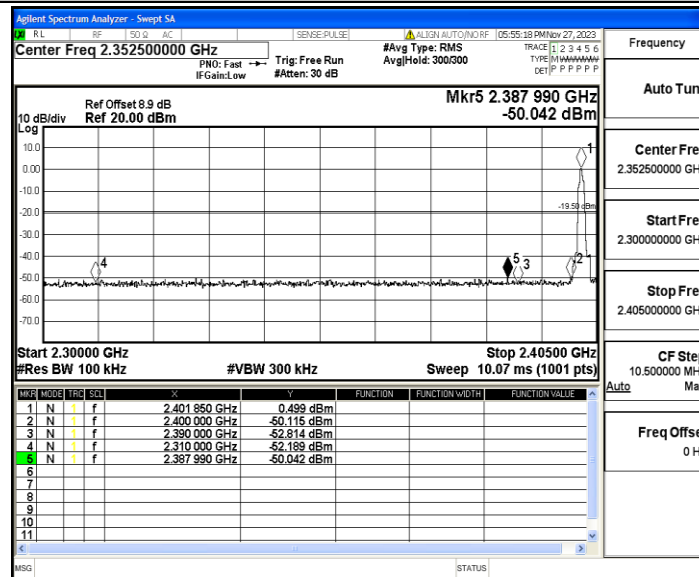
DH5_Ant1_Low_Hop_2402



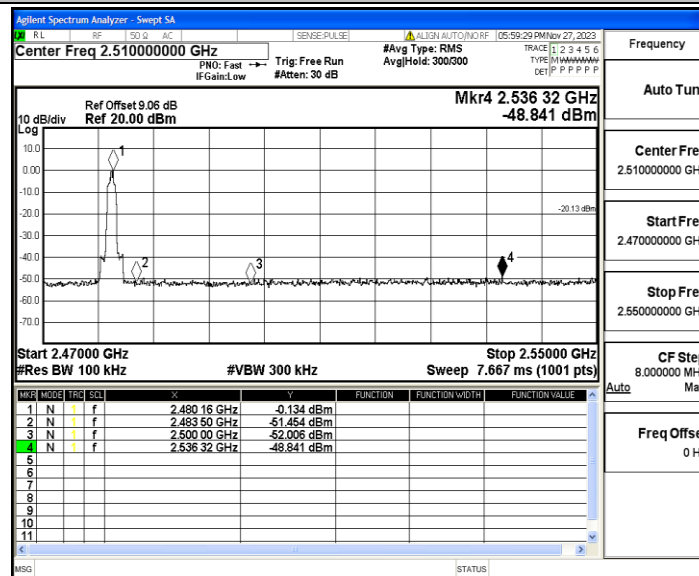
DH5_Ant1_High_Hop_2480



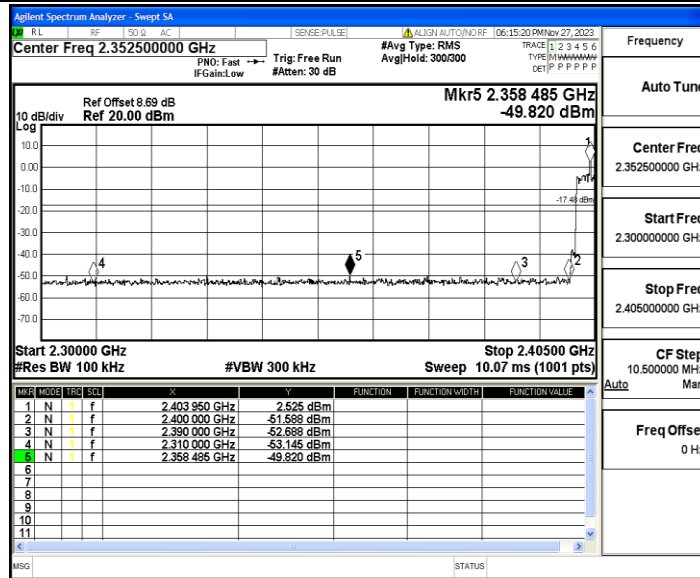
2DH5_Ant1_Low_2402



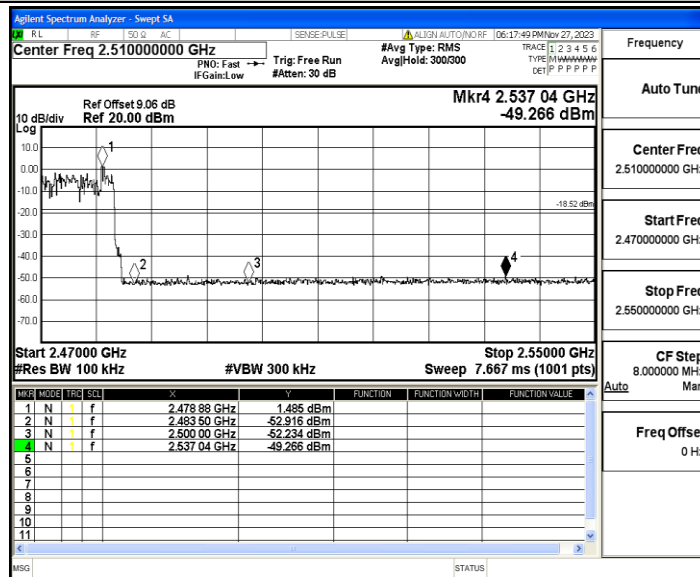
2DH5_Ant1_High_2480



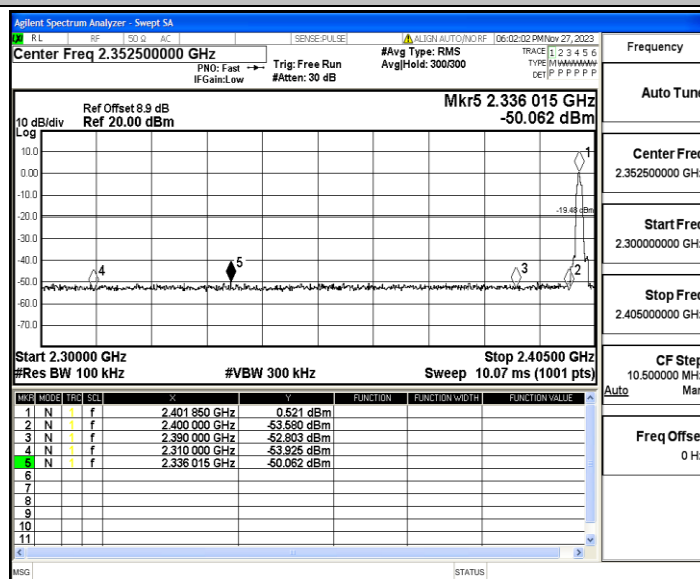
2DH5_Ant1_Low_Hop_2402



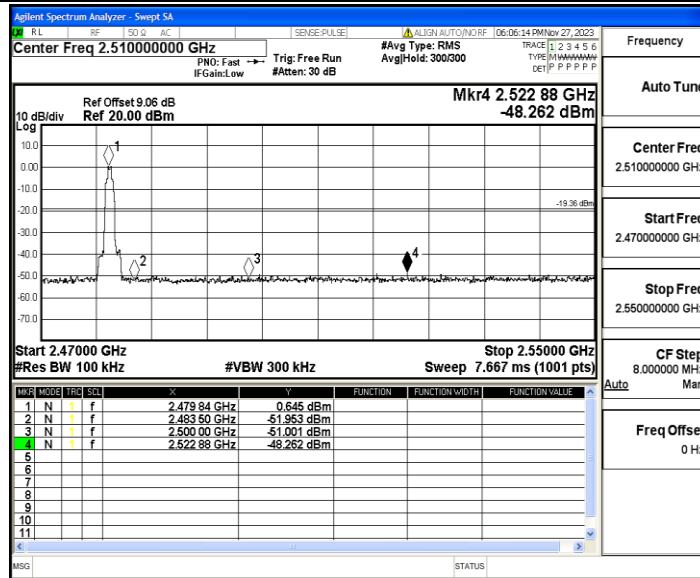
2DH5_Ant1_High_Hop_2480



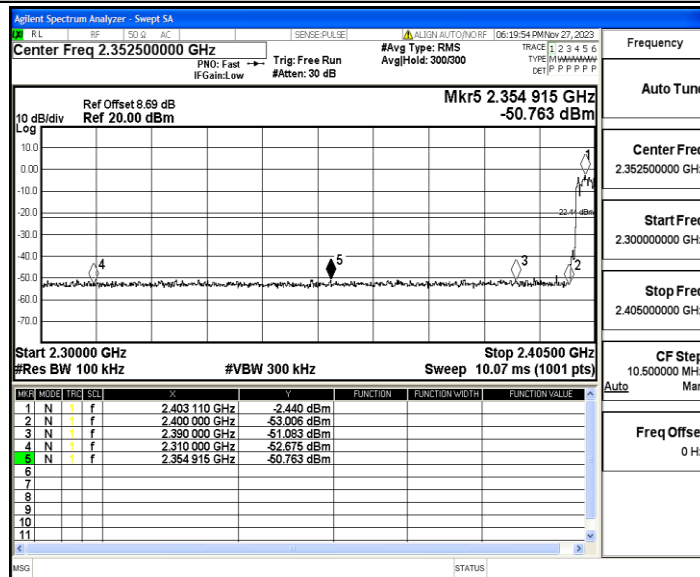
3DH5_Ant1_Low_2402



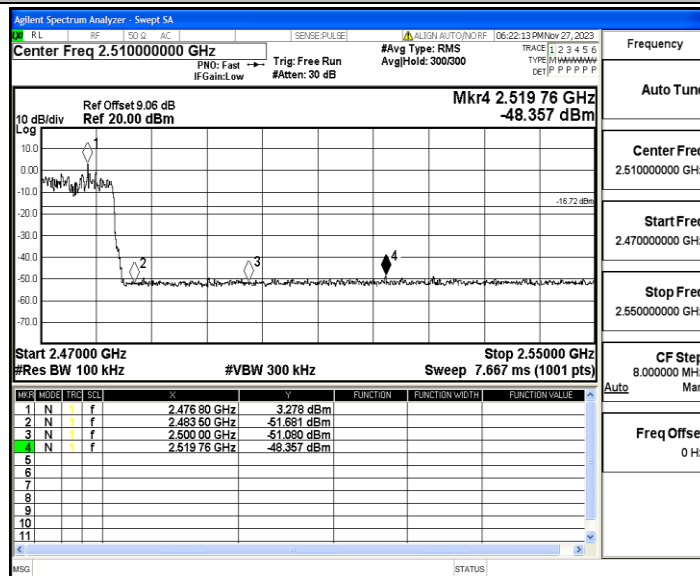
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480



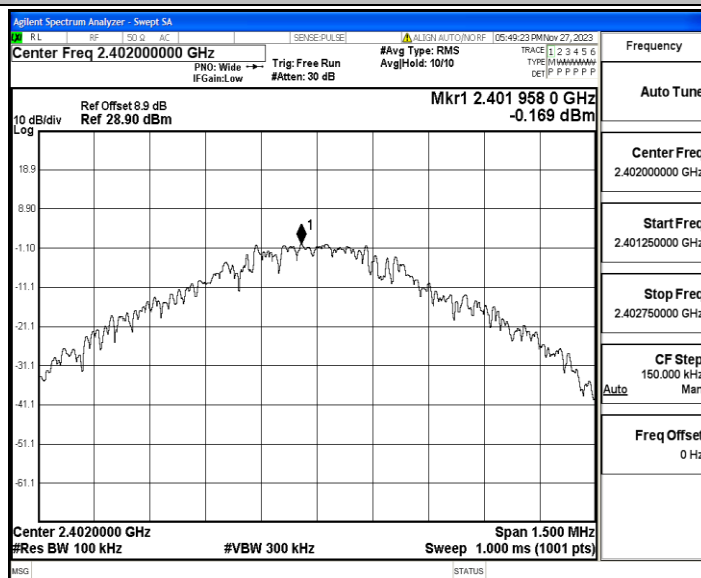
Appendix H: Conducted Spurious Emission

Test Result

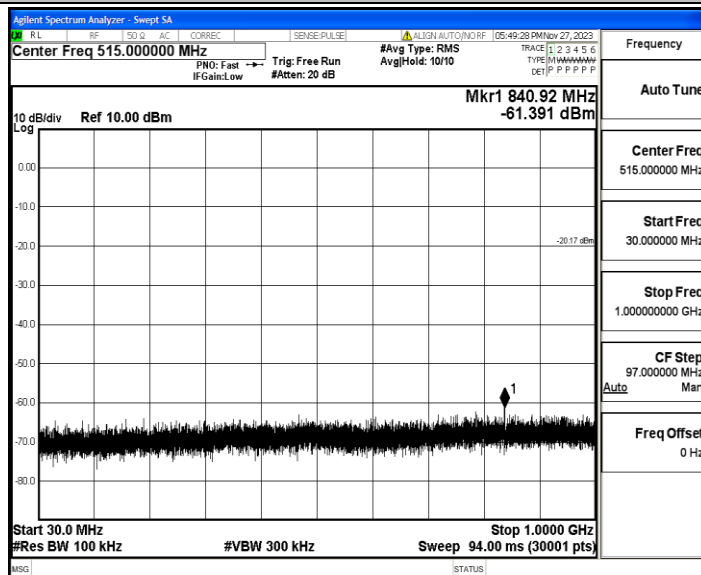
TestMode	Antenna	Channel	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-0.17	-0.17	---	PASS
			30~1000	-0.17	-61.39	≤-20.17	PASS
			1000~26500	-0.17	-38.59	≤-20.17	PASS
		2441	Reference	-0.09	-0.09	---	PASS
			30~1000	-0.09	-60.82	≤-20.09	PASS
			1000~26500	-0.09	-37.26	≤-20.09	PASS
		2480	Reference	-0.17	-0.17	---	PASS
			30~1000	-0.17	-61.04	≤-20.17	PASS
			1000~26500	-0.17	-38.21	≤-20.17	PASS
2DH5	Ant1	2402	Reference	0.11	0.11	---	PASS
			30~1000	0.11	-61.9	≤-19.89	PASS
			1000~26500	0.11	-44.31	≤-19.89	PASS
		2441	Reference	-1.01	-1.01	---	PASS
			30~1000	-1.01	-62.04	≤-21.01	PASS
			1000~26500	-1.01	-41.76	≤-21.01	PASS
		2480	Reference	-0.81	-0.81	---	PASS
			30~1000	-0.81	-61.43	≤-20.81	PASS
			1000~26500	-0.81	-44.12	≤-20.81	PASS
3DH5	Ant1	2402	Reference	0.39	0.39	---	PASS
			30~1000	0.39	-61.97	≤-19.61	PASS
			1000~26500	0.39	-44.46	≤-19.61	PASS
		2441	Reference	-4.07	-4.07	---	PASS
			30~1000	-4.07	-62.01	≤-24.07	PASS
			1000~26500	-4.07	-36.02	≤-24.07	PASS
		2480	Reference	-1.21	-1.21	---	PASS
			30~1000	-1.21	-62.46	≤-21.21	PASS
			1000~26500	-1.21	-42.99	≤-21.21	PASS

Test Graphs

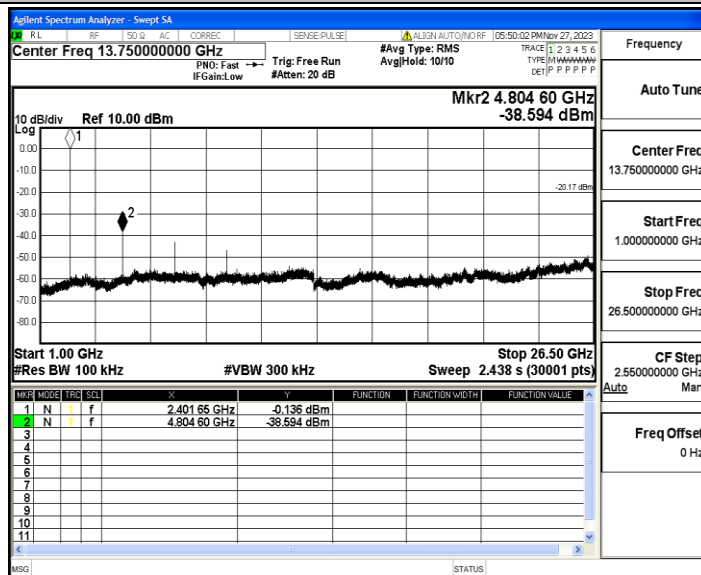
DH5_Ant1_2402_0~Reference



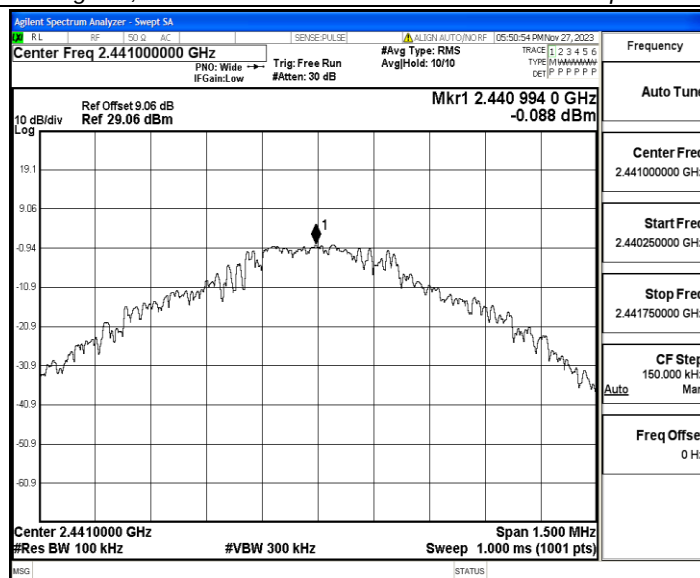
DH5_Ant1_2402_30~1000



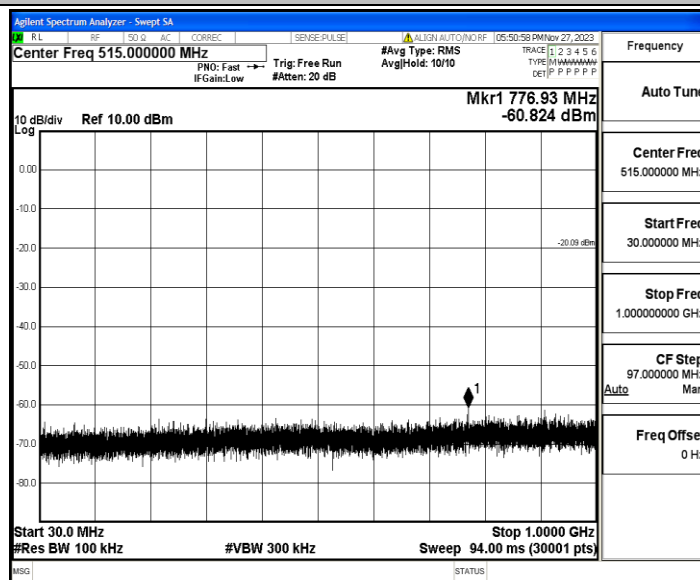
DH5_Ant1_2402_1000~26500



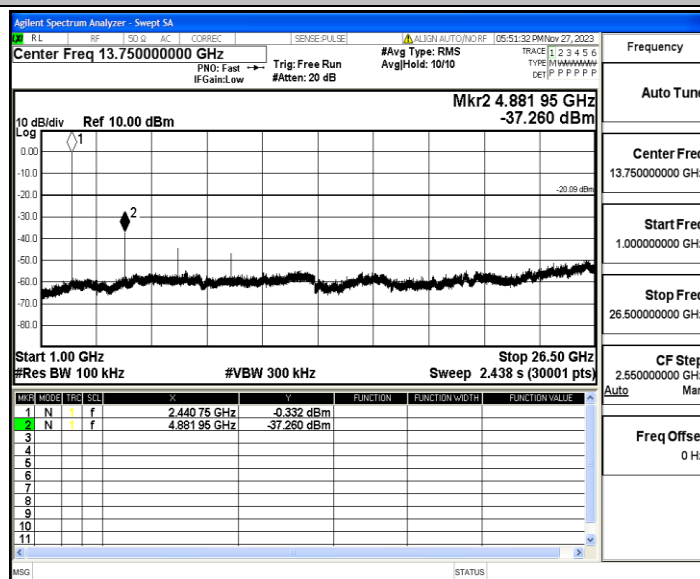
DH5_Ant1_2441_0~Reference



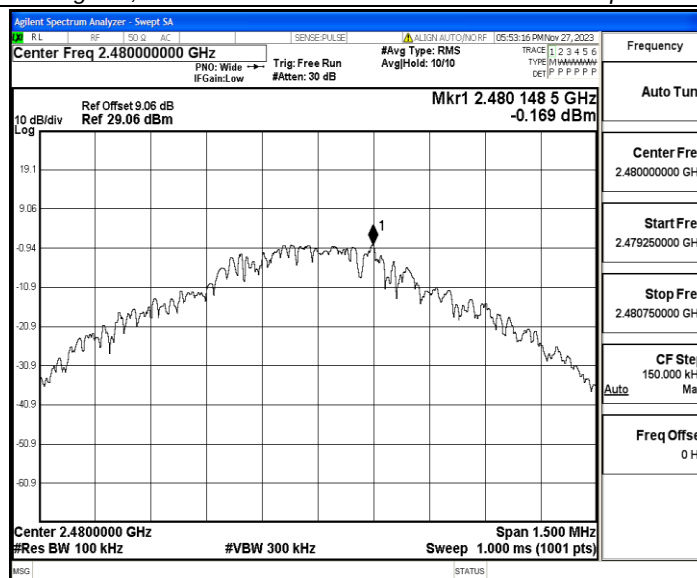
DH5_Ant1_2441_30~1000



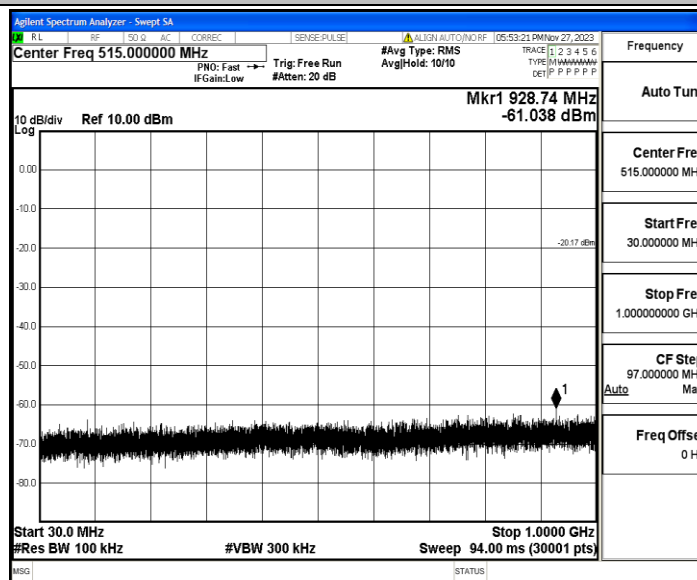
DH5_Ant1_2441_1000~26500



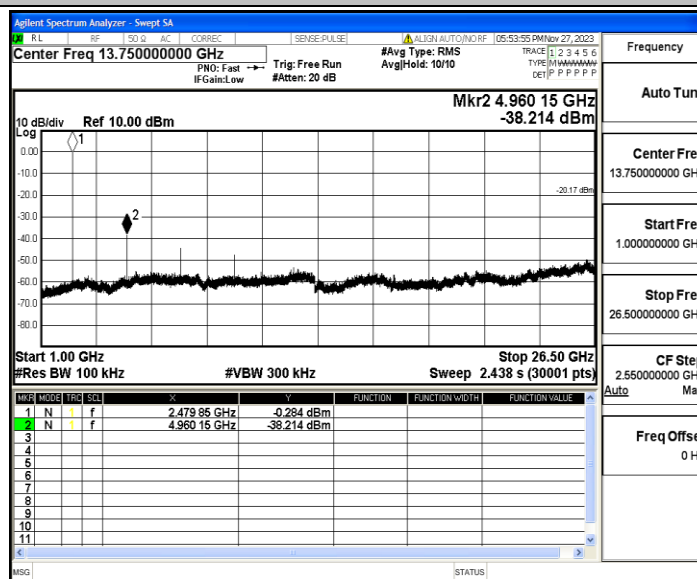
DH5_Ant1_2480_0~Reference



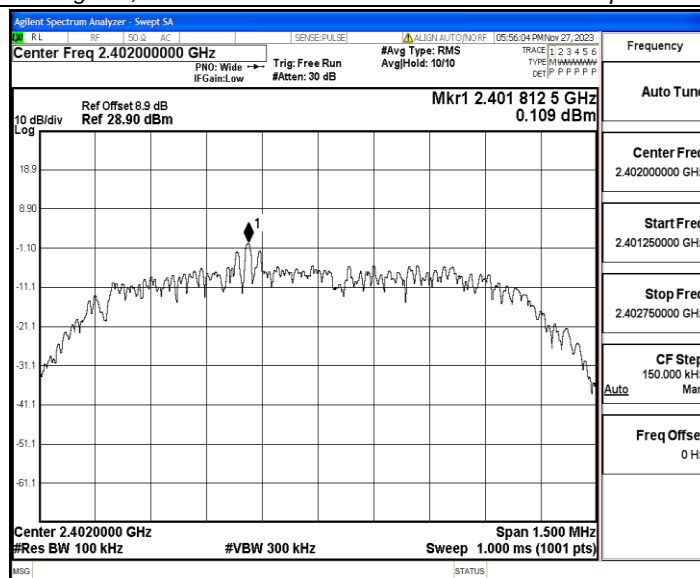
DH5_Ant1_2480_30~1000



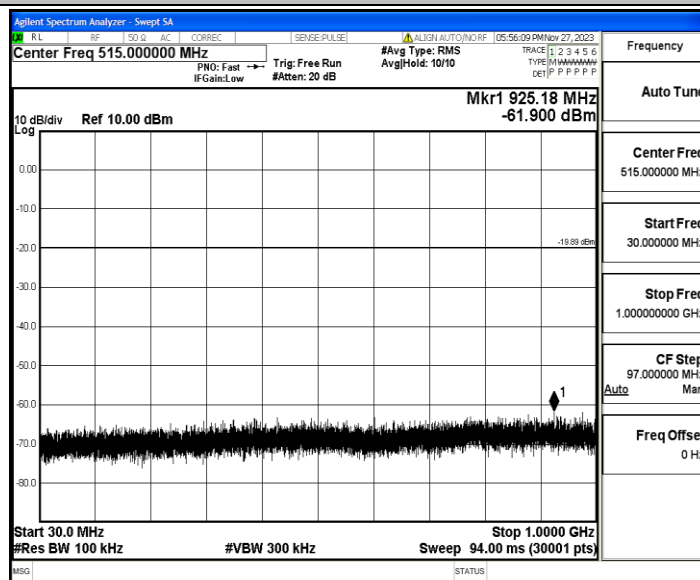
DH5_Ant1_2480_1000~26500



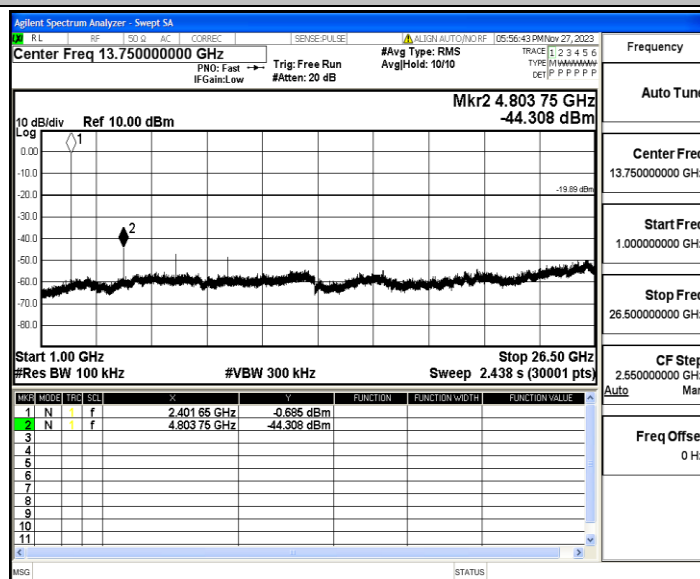
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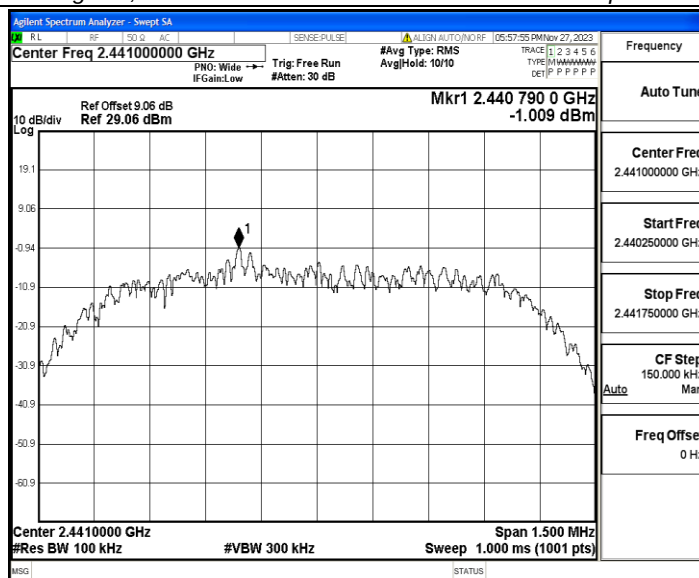
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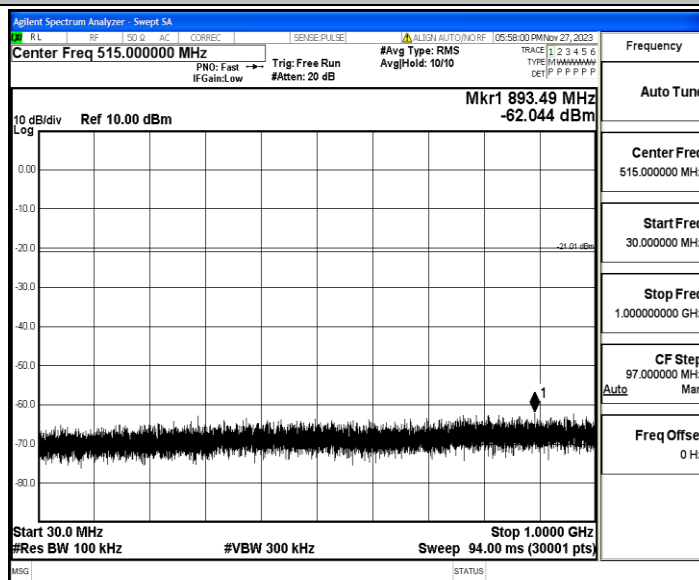
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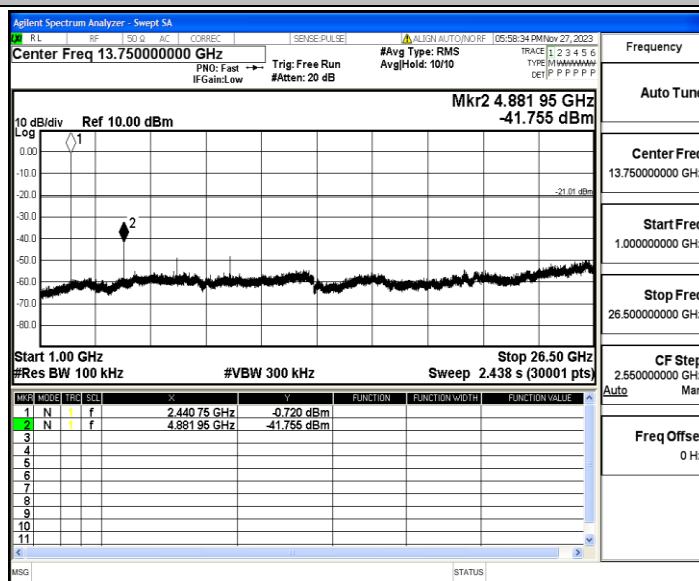
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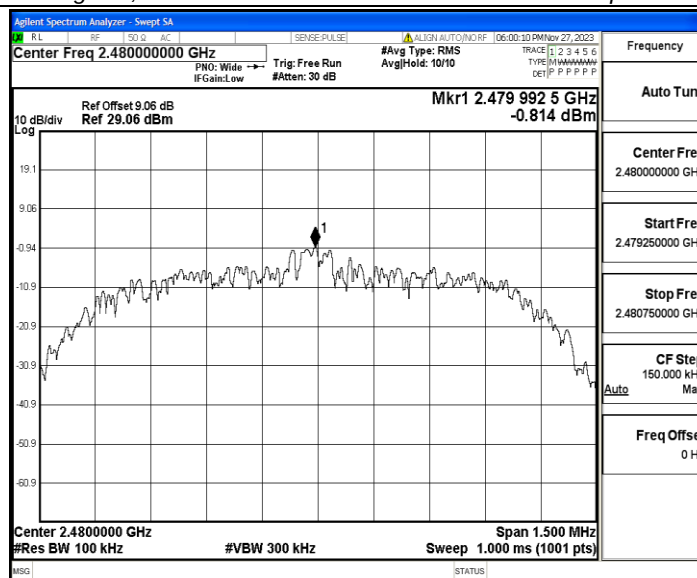
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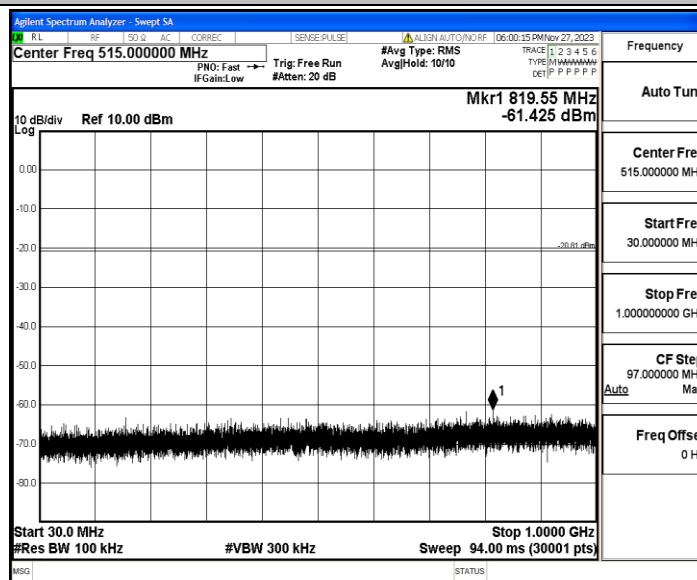
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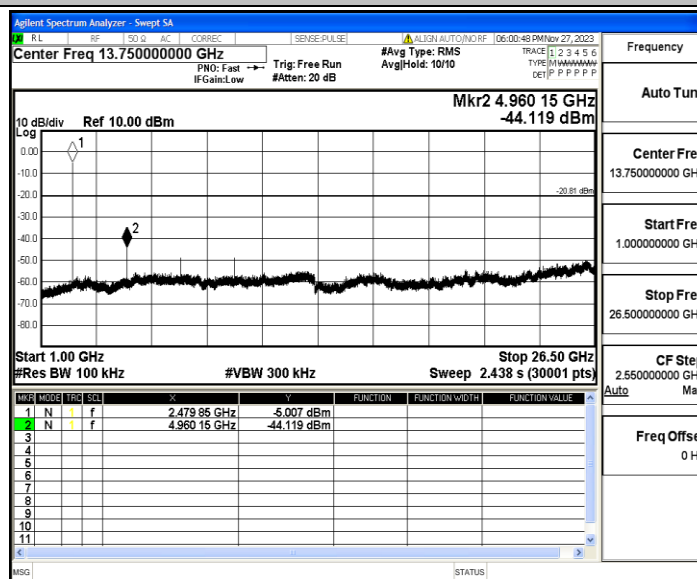
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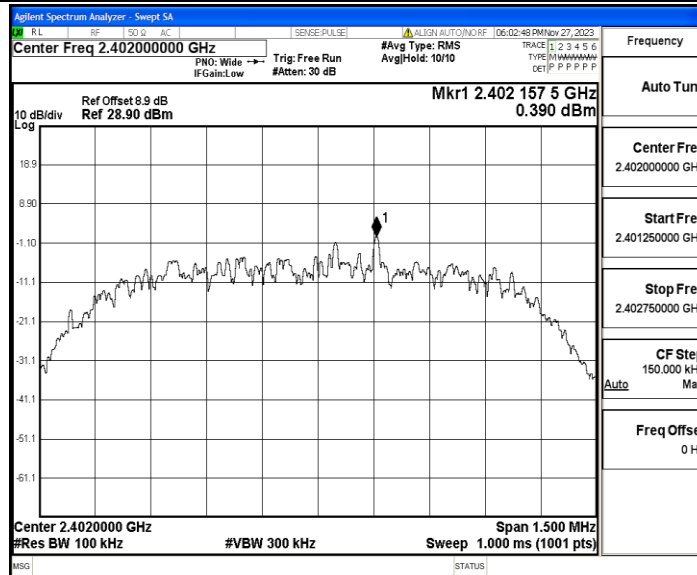
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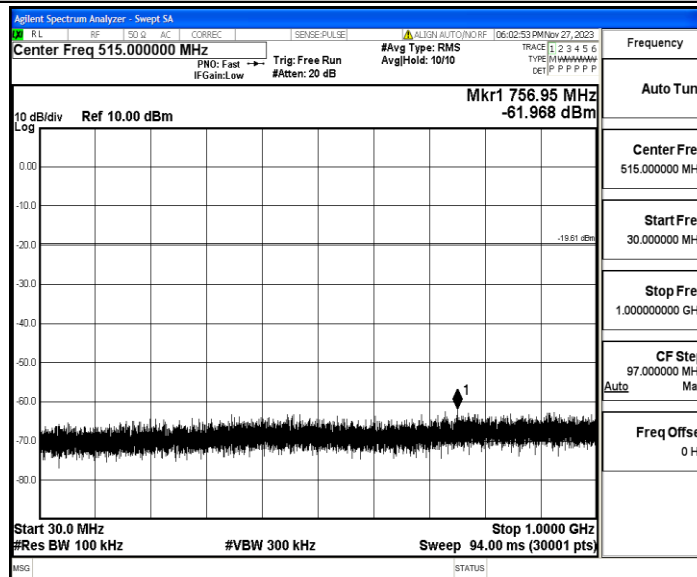
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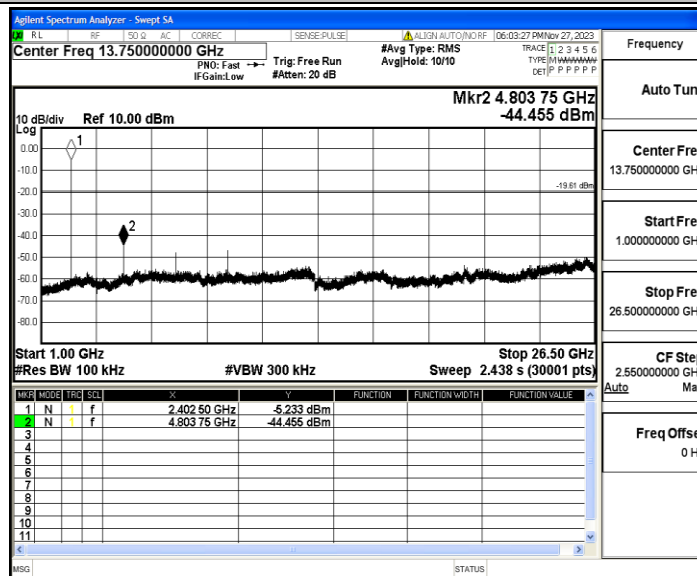
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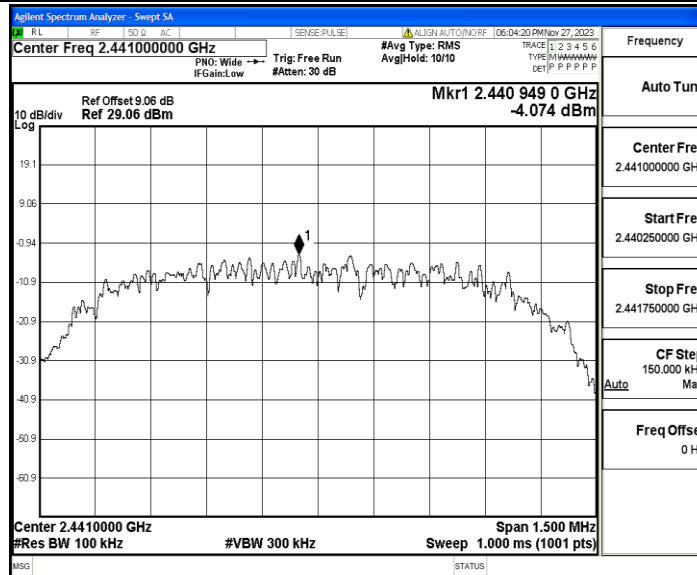
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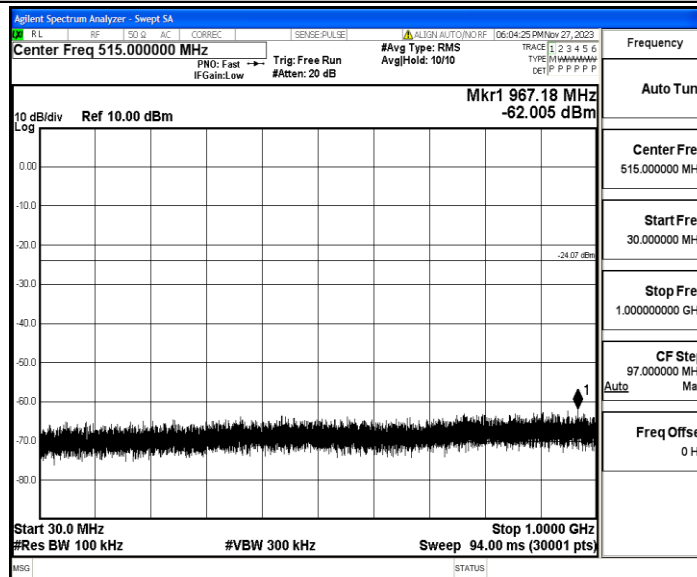
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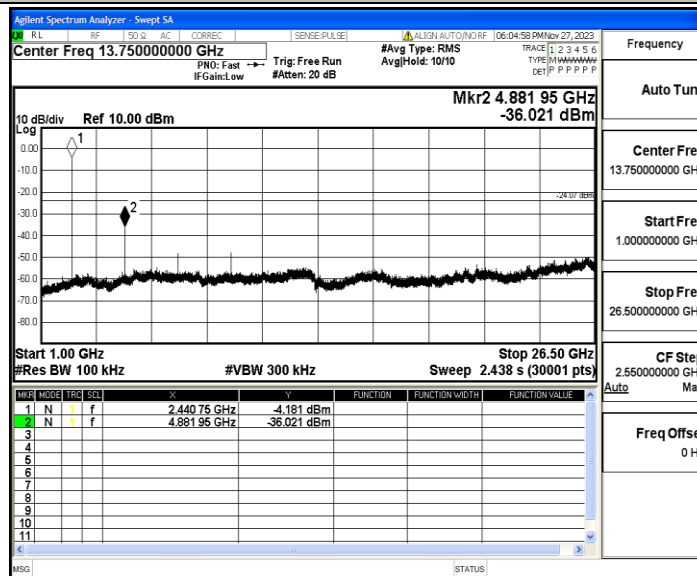
3DH5_Ant1_2441_0~Reference



3DH5_Ant1_2441_30~1000



3DH5_Ant1_2441_1000~26500



3DH5_Ant1_2480_0~Reference