Appendix Test Data for BT(BDR/EDR) (Conducted Measurement)

Product Name: Bluetooth Speaker

Trade Mark: N/A

Test Model: T20

FCC ID: 2BG8B-T20

Environmental Conditions

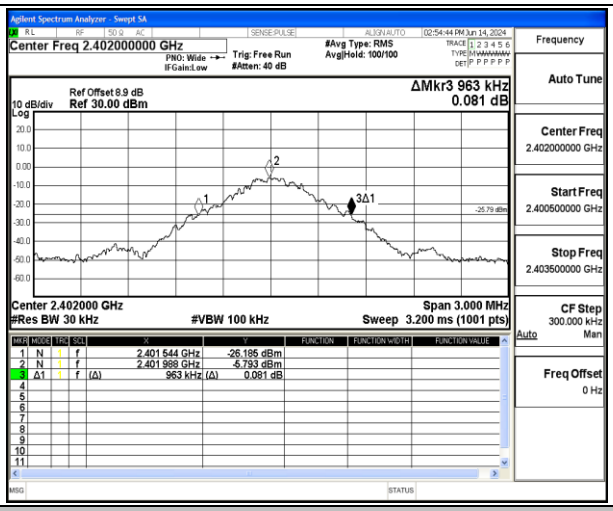
Temperature:	23.8℃
Relative Humidity:	58%
ATM Pressure:	100.0 kPa
Test Engineer:	Allen Lai
Supervised by:	Hugo Chen
NOTE	N/A

Appendix A: 20dB Emission Bandwidth

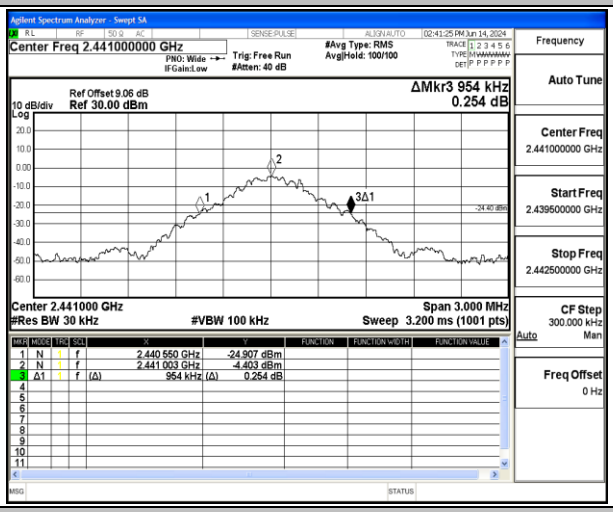
Test Result

TestMode	Antenna	Frequency[MHz]	20db EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.963	2401.544	2402.507	---	---
DH5	Ant1	2441	0.954	2440.550	2441.504	---	---
DH5	Ant1	2480	0.954	2479.553	2480.507	---	---
2DH5	Ant1	2402	1.269	2401.397	2402.666	---	---
2DH5	Ant1	2441	1.287	2440.376	2441.663	---	---
2DH5	Ant1	2480	1.287	2479.382	2480.669	---	---

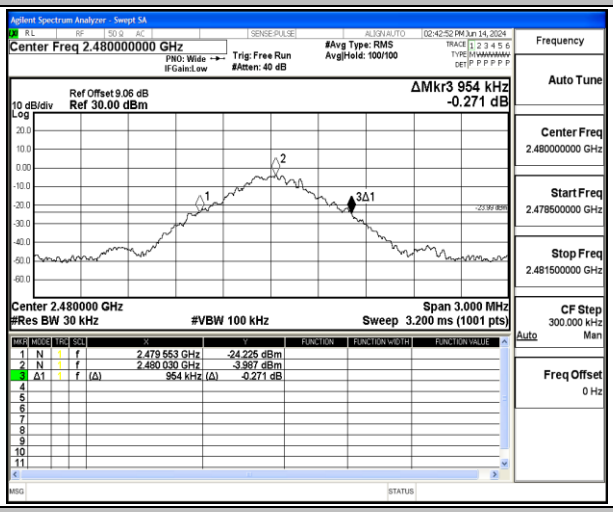
Test Graphs



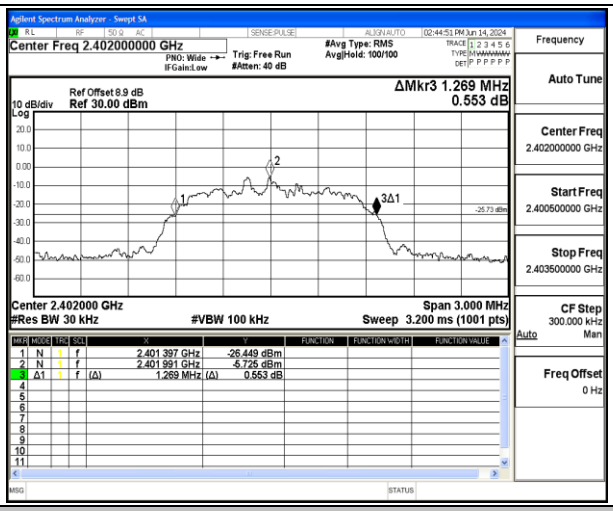
DH5-Ant1-2402



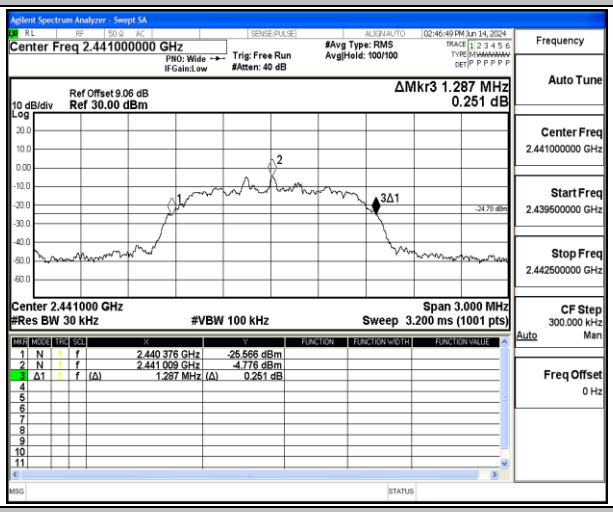
DH5-Ant1-2441



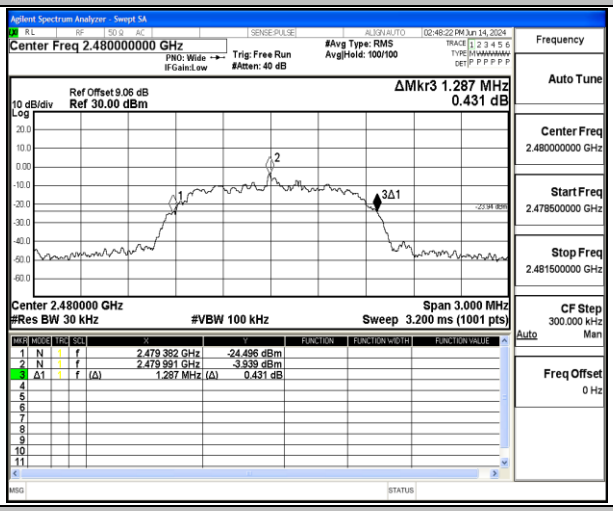
DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441



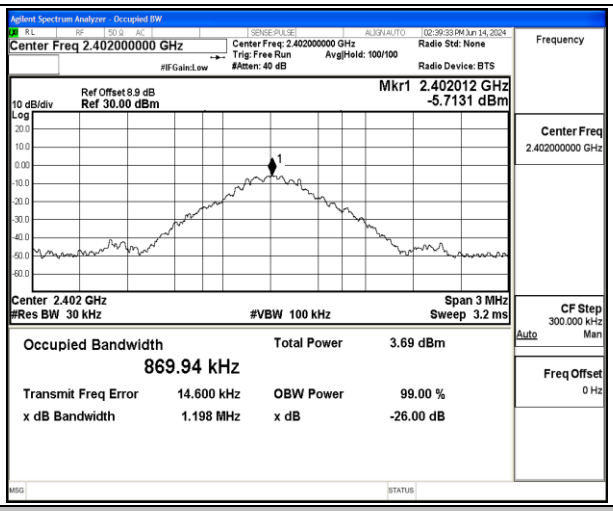
2DH5-Ant1-2480

Appendix B: Occupied Channel Bandwidth

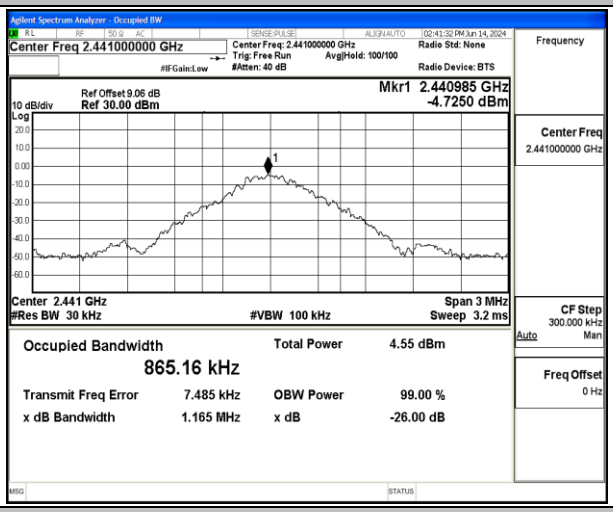
Test Result

TestMode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86994	2401.5796	2402.4496	---	---
DH5	Ant1	2441	0.86516	2440.5749	2441.4401	---	---
DH5	Ant1	2480	0.86759	2479.5762	2480.4438	---	---
2DH5	Ant1	2402	1.2139	2401.4063	2402.6202	---	---
2DH5	Ant1	2441	1.1865	2440.4199	2441.6064	---	---
2DH5	Ant1	2480	1.1906	2479.4190	2480.6096	---	---

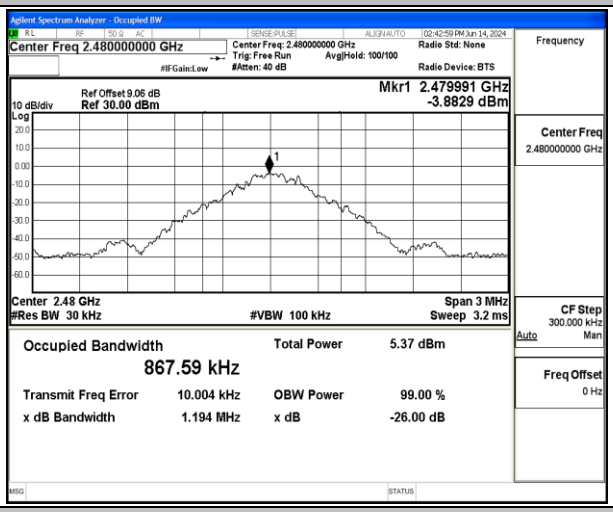
Test Graphs



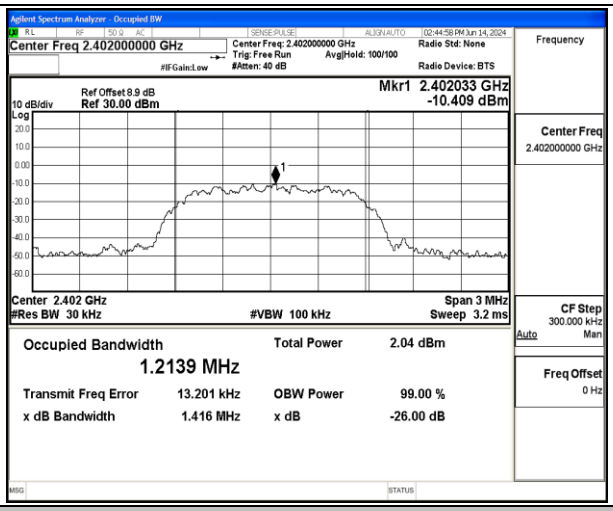
DH5-Ant1-2402



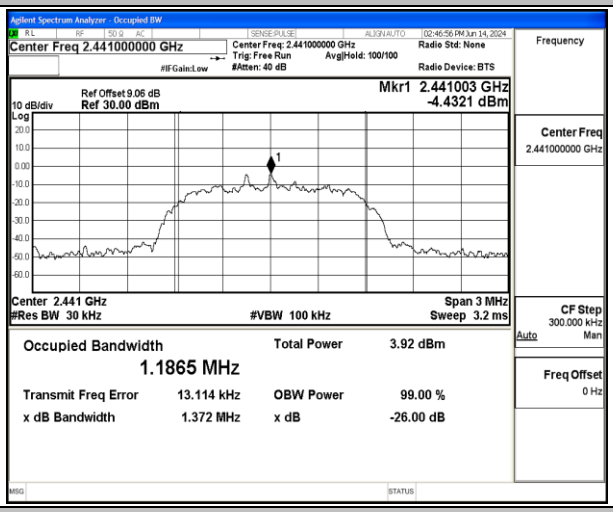
DH5-Ant1-2441



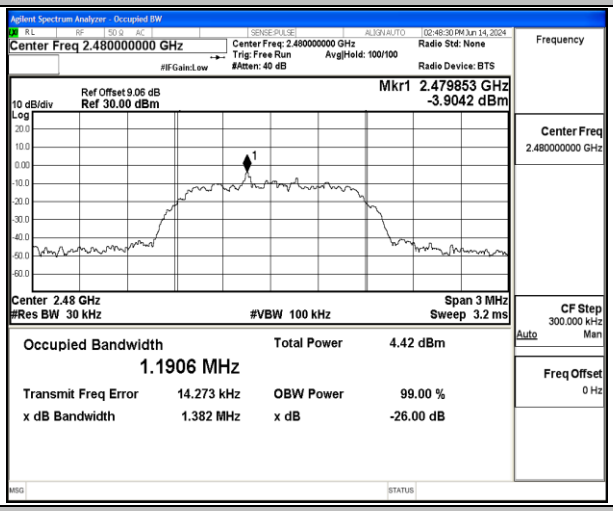
DH5-Ant1-2480



2DH5-Ant1-2402



2DH5-Ant1-2441



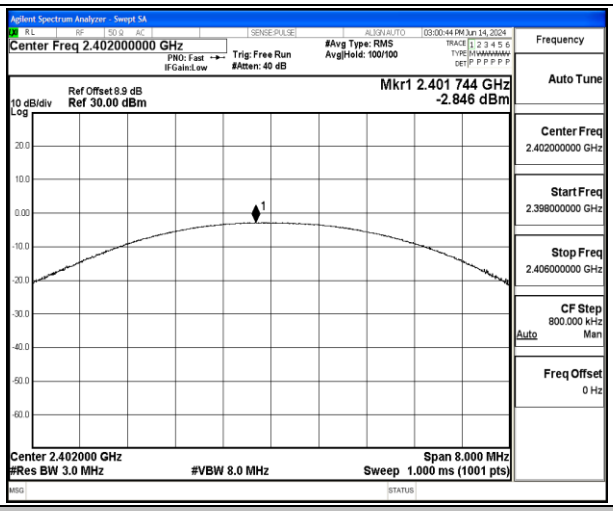
2DH5-Ant1-2480

Appendix C: Maximum peak conducted output power

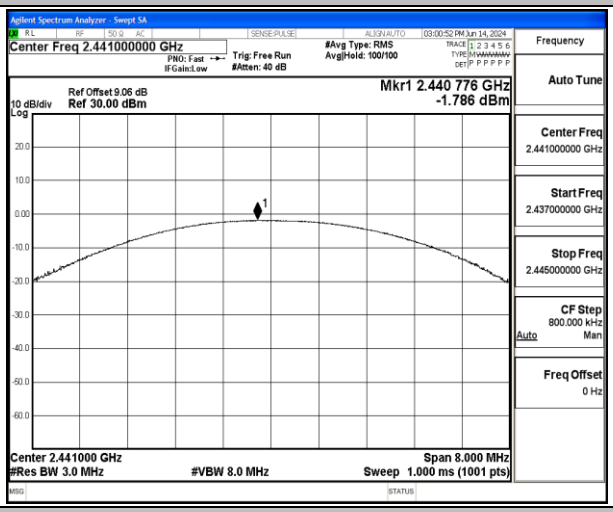
Test Result

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	-2.85	≤30	PASS
DH5	Ant1	2441	-1.79	≤30	PASS
DH5	Ant1	2480	-1.02	≤30	PASS
2DH5	Ant1	2402	-2.04	≤20.97	PASS
2DH5	Ant1	2441	-0.98	≤20.97	PASS
2DH5	Ant1	2480	-0.37	≤20.97	PASS

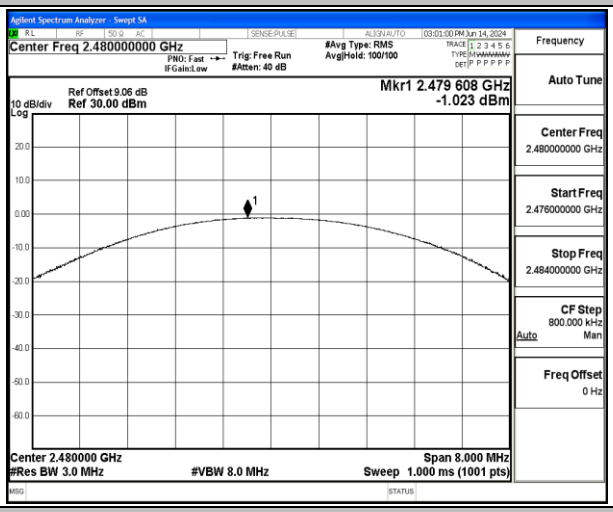
Test Graphs



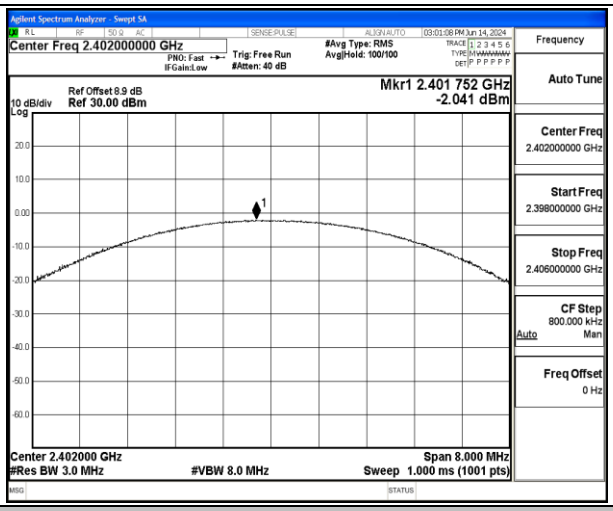
DH5-Ant1-2402-PASS



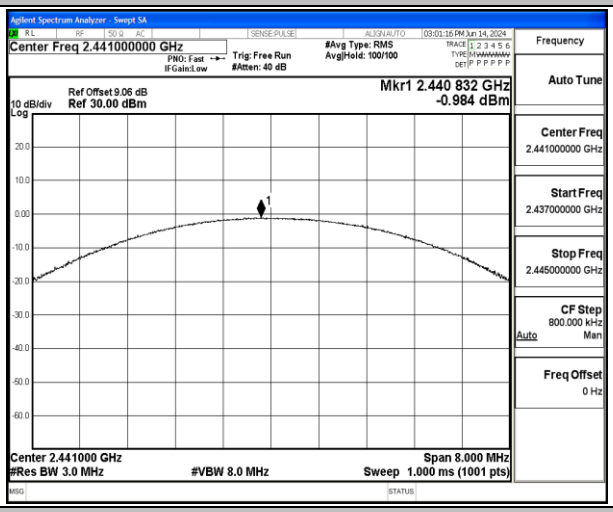
DH5-Ant1-2441-PASS



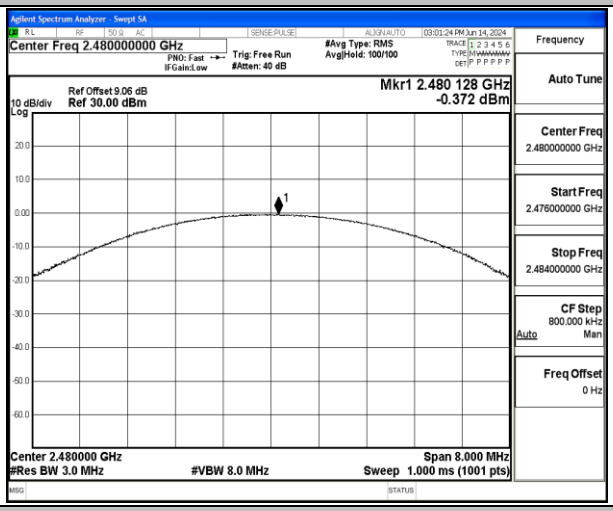
DH5-Ant1-2480-PASS



2DH5-Ant1-2402-PASS



2DH5-Ant1-2441-PASS



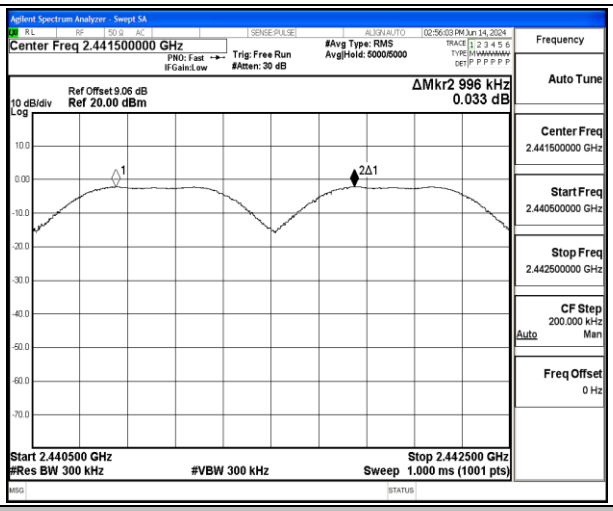
2DH5-Ant1-2480-PASS

Appendix D: Carrier frequency separation

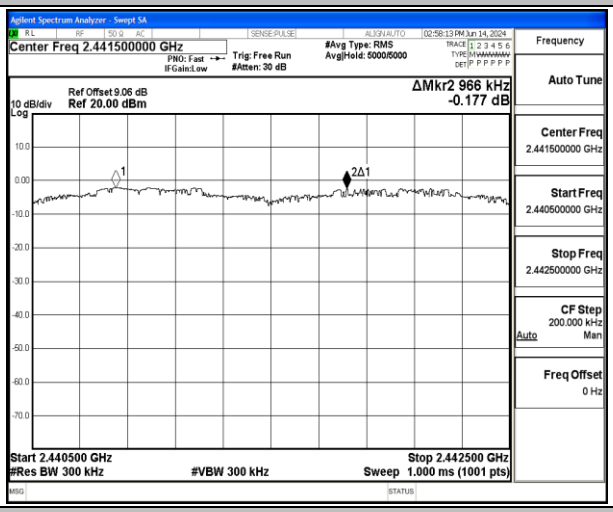
Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.996	≥0.963	PASS
2DH5	Ant1	Hop	0.966	≥0.858	PASS

Test Graphs



DH5-Ant1-Hop-PASS



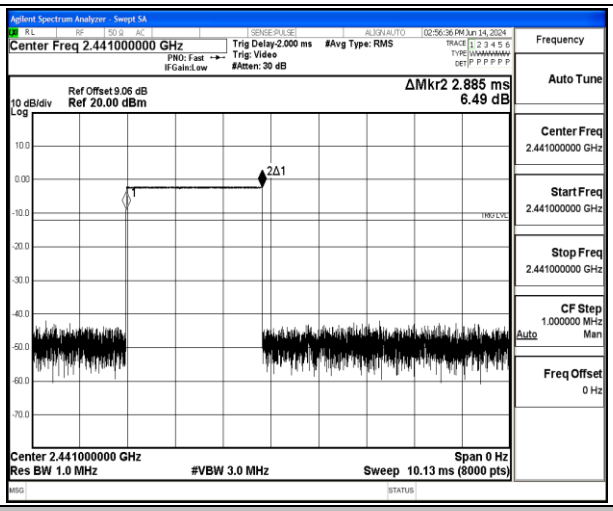
2DH5-Ant1-Hop-PASS

Appendix E: Time of occupancy

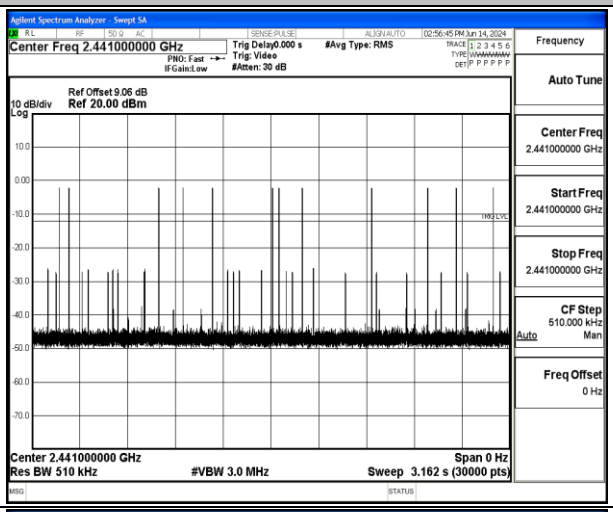
Test Result

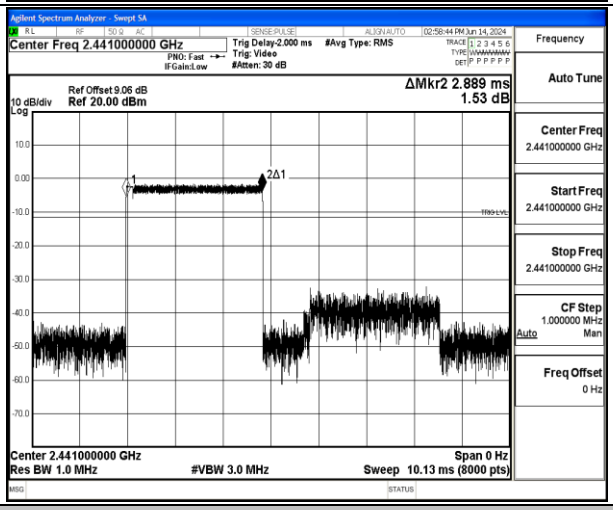
TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH5	Ant1	Hop	2.885	130	0.375	≤0.4	PASS
2DH5	Ant1	Hop	2.889	40	0.116	≤0.4	PASS

Test Graphs

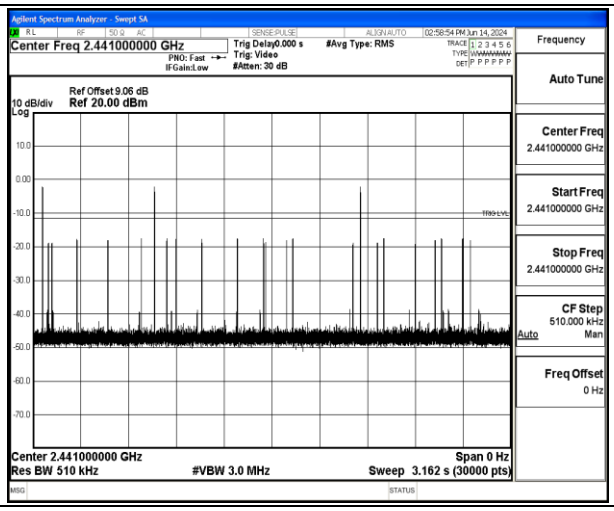


DH5-Ant1-Hop-PASS





2DH5-Ant1-Hop-PASS

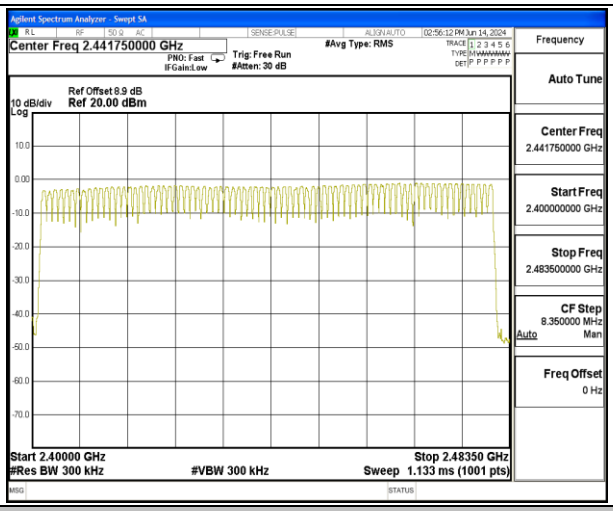

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay0.000 s
Trig: Video
#Atten: 30 dB
#Avg Type: RMS
02:58:54 PM Jun 14, 2024
Frequency
Auto Tune
Ref Offset 9.06 dB
10 dB/div
Ref 20.00 dBm
Log
Center Freq
2.441000000 GHz
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
CF Step
510.000 kHz
Auto
Man
Freq Offset
0 Hz
Center 2.441000000 GHz
Span 0 Hz
Res BW 510 kHz
#VBW 3.0 MHz
Sweep 3.162 s (30000 pts)

Appendix F: Number of hopping channels

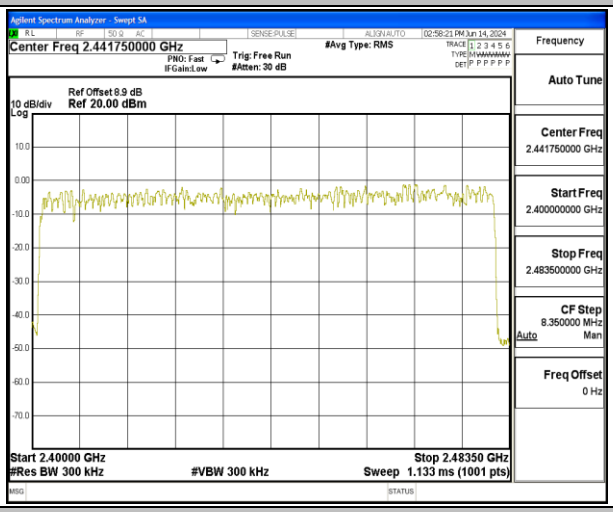
Test Result

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

Test Graphs



DH5-Ant1-Hop-PASS



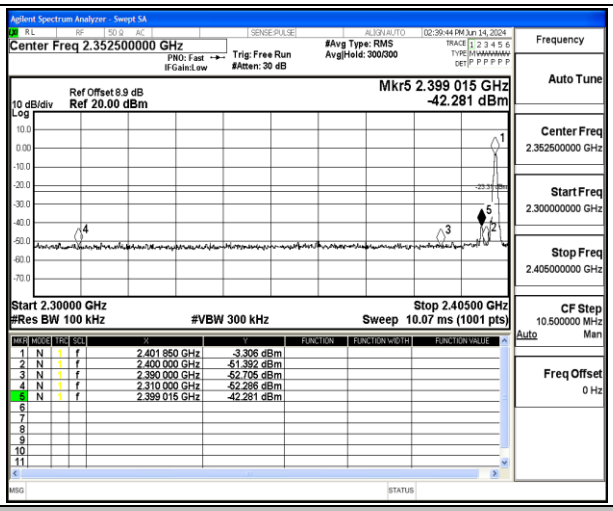
2DH5-Ant1-Hop-PASS

Appendix G: Band edge measurements

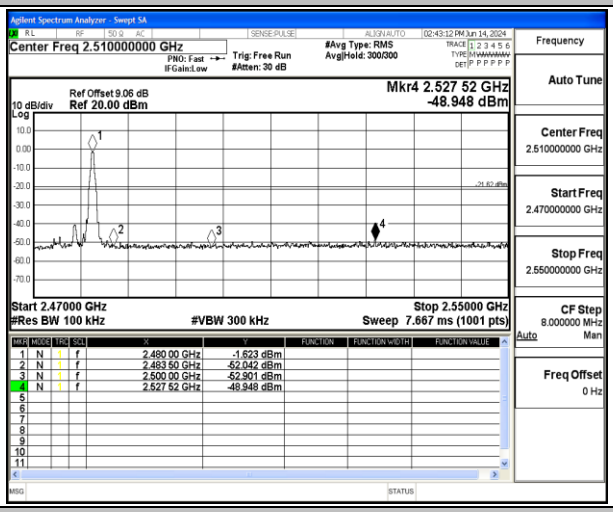
Test Result

TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-3.31	-42.28	≤-23.31	PASS
DH5	Ant1	High	2480	-1.62	-48.95	≤-21.62	PASS
DH5	Ant1	Low	Hop_2402	-4.04	-43.24	≤-24.04	PASS
DH5	Ant1	High	Hop_2480	-1.92	-48.93	≤-21.92	PASS
2DH5	Ant1	Low	2402	-3.40	-42.28	≤-23.4	PASS
2DH5	Ant1	High	2480	-1.56	-49.18	≤-21.56	PASS
2DH5	Ant1	Low	Hop_2402	-7.34	-44.99	≤-27.34	PASS
2DH5	Ant1	High	Hop_2480	-1.97	-49.39	≤-21.97	PASS

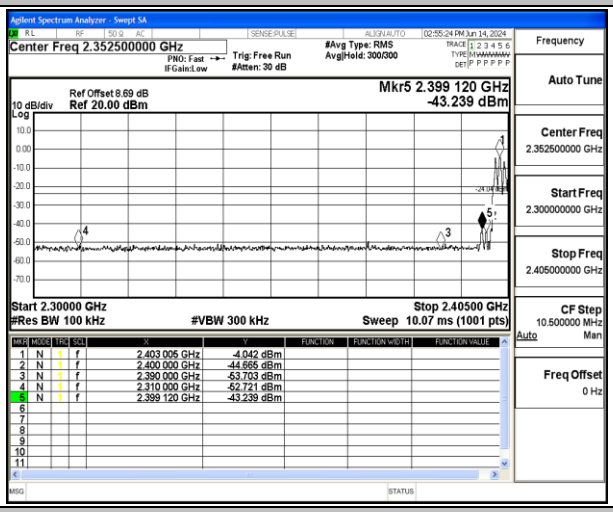
Test Graphs



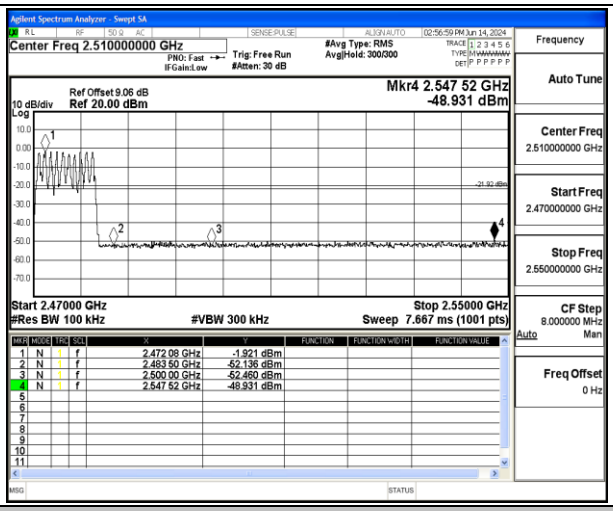
DH5-Ant1-2402-PASS



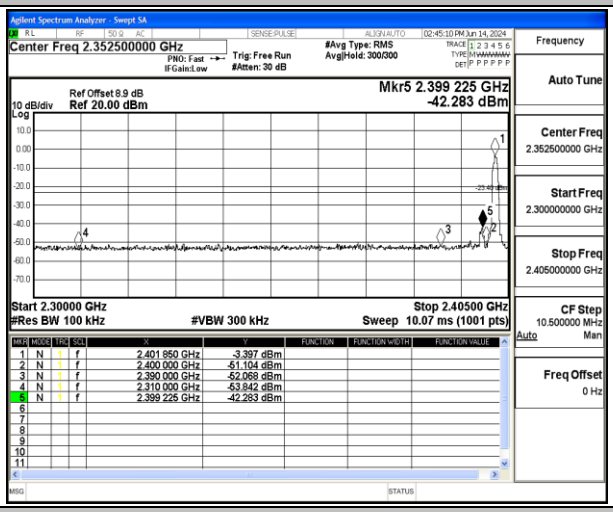
DH5-Ant1-2480-PASS



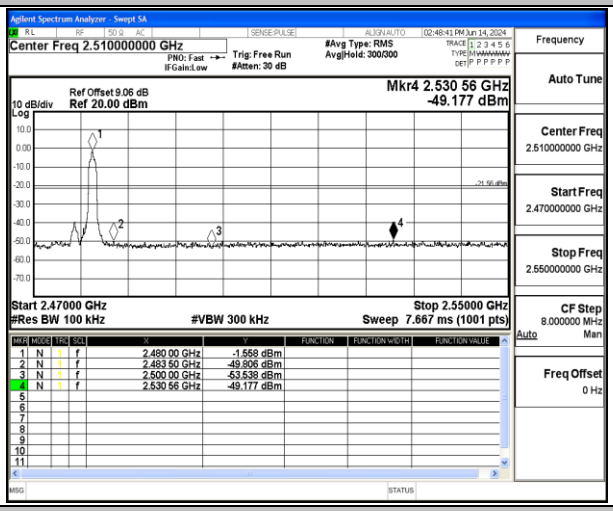
DH5-Ant1-Hop_2402-PASS



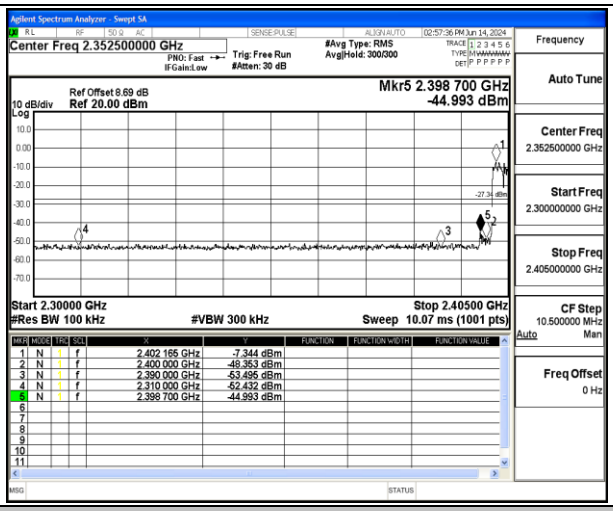
DH5-Ant1-Hop_2480-PASS



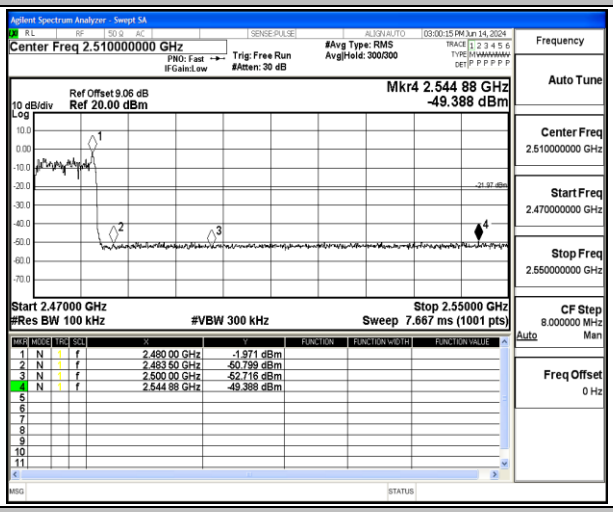
2DH5-Ant1-2402-PASS



2DH5-Ant1-2480-PASS



2DH5-Ant1-Hop_2402-PASS



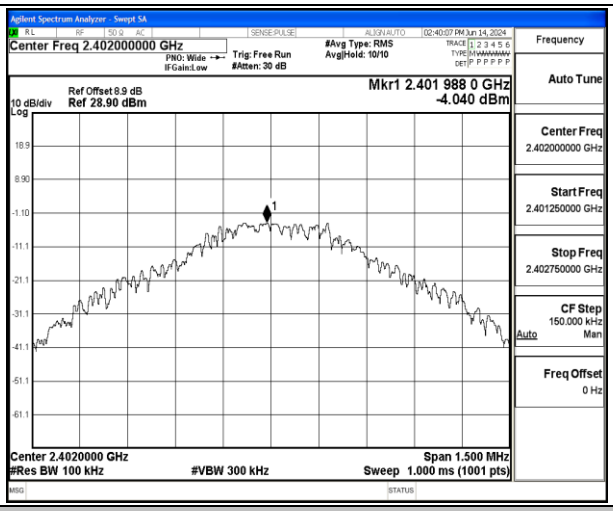
2DH5-Ant1-Hop_2480-PASS

Appendix H: Conducted Spurious Emission

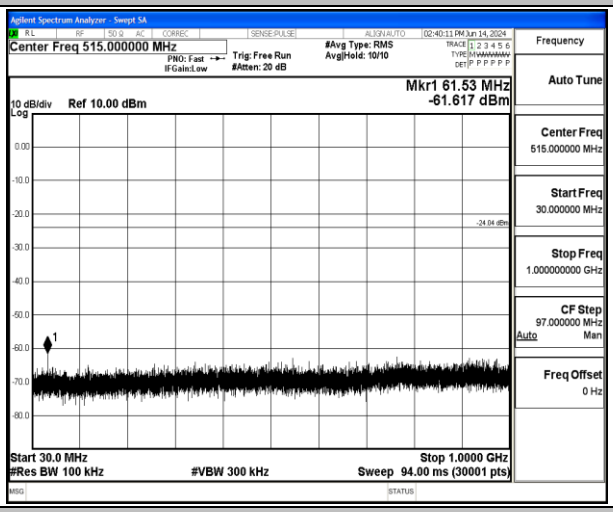
Test Result

TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	-4.04	-4.04	---	PASS
DH5	Ant1	2402	30~1000	-4.04	-61.62	≤-24.04	PASS
DH5	Ant1	2402	1000~26500	-4.04	-47.37	≤-24.04	PASS
DH5	Ant1	2441	0~Reference	-3.08	-3.08	---	PASS
DH5	Ant1	2441	30~1000	-3.08	-61.85	≤-23.08	PASS
DH5	Ant1	2441	1000~26500	-3.08	-47.17	≤-23.08	PASS
DH5	Ant1	2480	0~Reference	-2.45	-2.45	---	PASS
DH5	Ant1	2480	30~1000	-2.45	-62.4	≤-22.45	PASS
DH5	Ant1	2480	1000~26500	-2.45	-49.96	≤-22.45	PASS
2DH5	Ant1	2402	0~Reference	-4.58	-4.58	---	PASS
2DH5	Ant1	2402	30~1000	-4.58	-60.58	≤-24.58	PASS
2DH5	Ant1	2402	1000~26500	-4.58	-48.82	≤-24.58	PASS
2DH5	Ant1	2441	0~Reference	-3.27	-3.27	---	PASS
2DH5	Ant1	2441	30~1000	-3.27	-60.13	≤-23.27	PASS
2DH5	Ant1	2441	1000~26500	-3.27	-47.27	≤-23.27	PASS
2DH5	Ant1	2480	0~Reference	-1.94	-1.94	---	PASS
2DH5	Ant1	2480	30~1000	-1.94	-61.8	≤-21.94	PASS
2DH5	Ant1	2480	1000~26500	-1.94	-49.66	≤-21.94	PASS

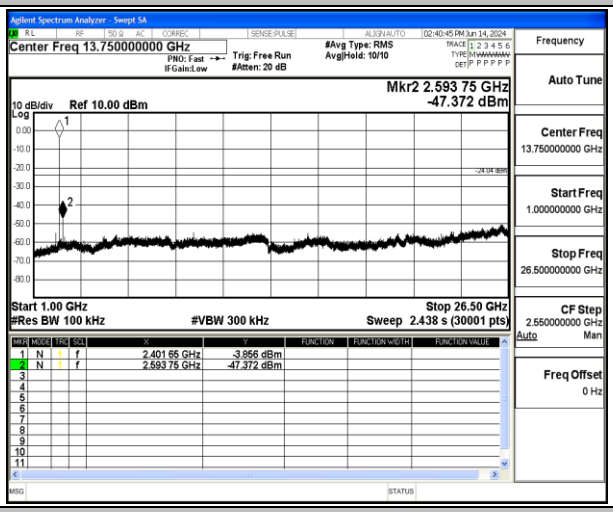
Test Graphs



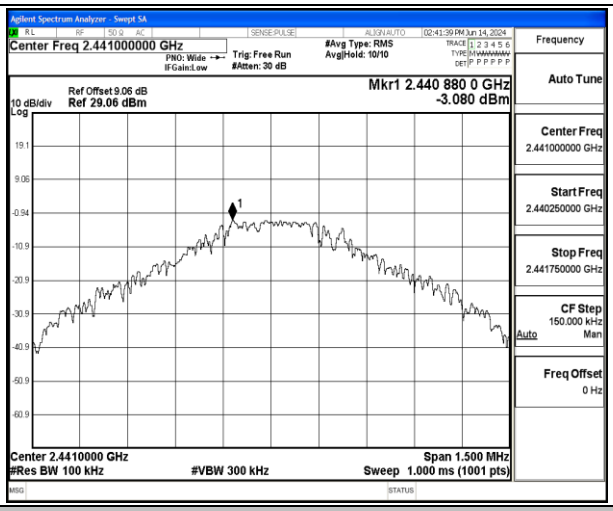
DH5-Ant1-2402-0~Reference-PASS



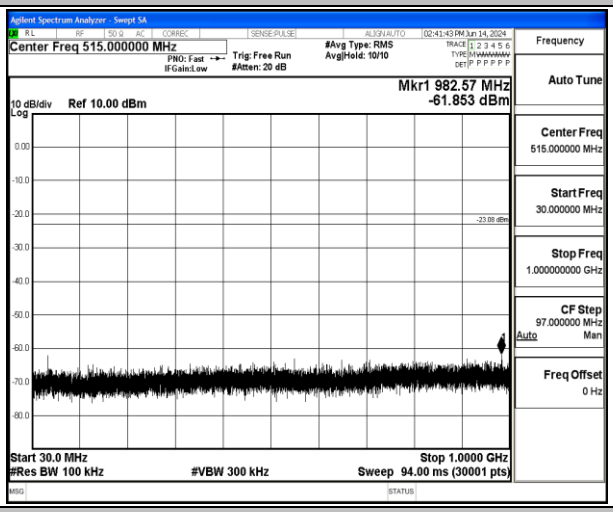
DH5-Ant1-2402-30~1000-PASS



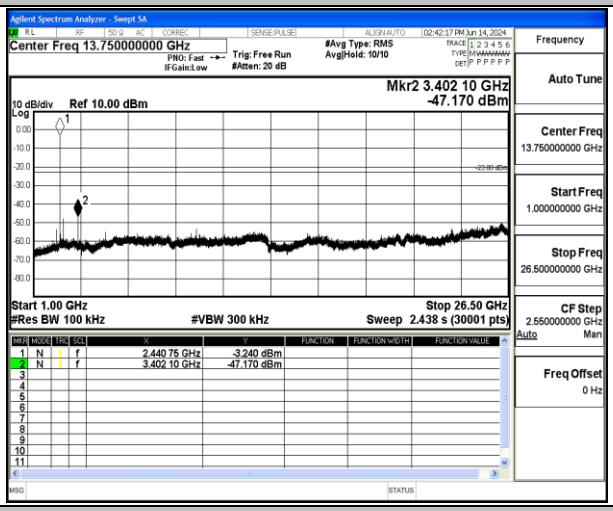
DH5-Ant1-2402-1000~26500-PASS



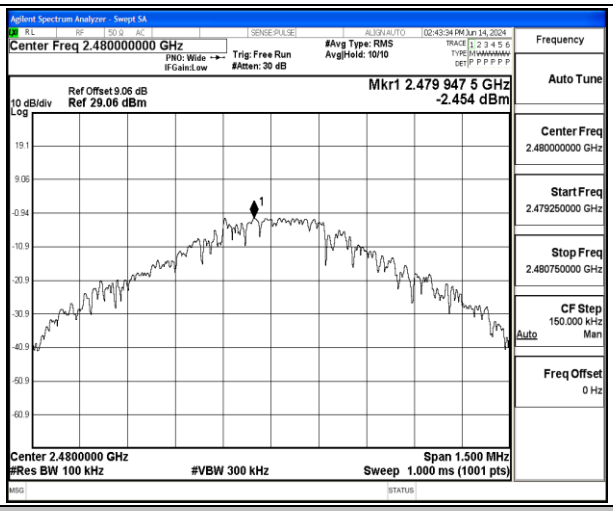
DH5-Ant1-2441-0~Reference-PASS



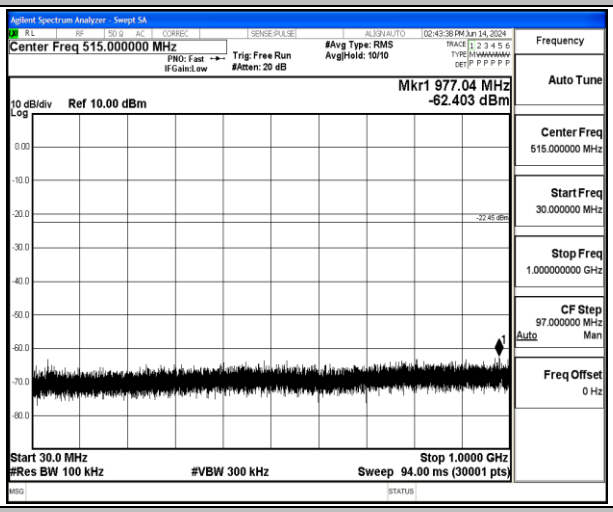
DH5-Ant1-2441-30~1000-PASS



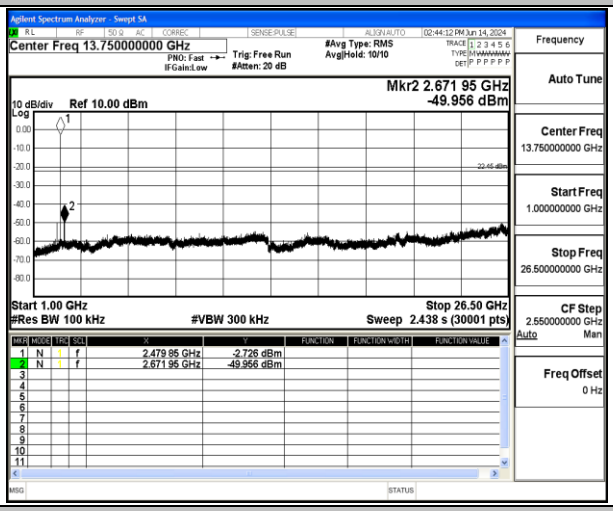
DH5-Ant1-2441-1000~26500-PASS



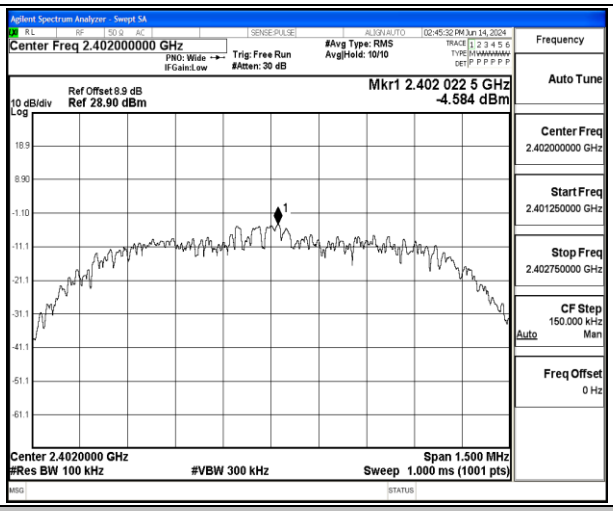
DH5-Ant1-2480-0~Reference-PASS



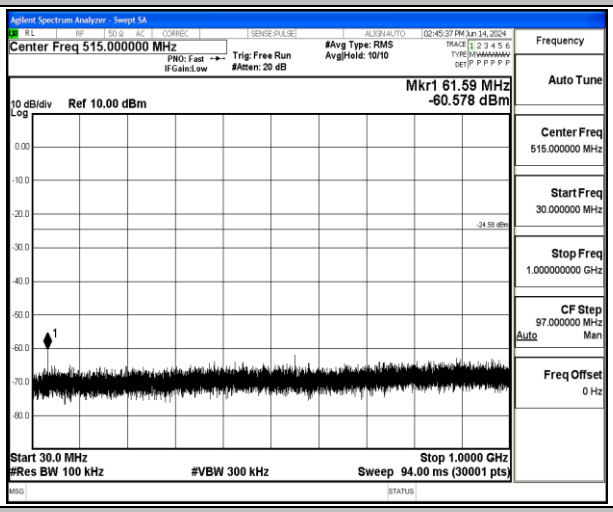
DH5-Ant1-2480-30~1000-PASS



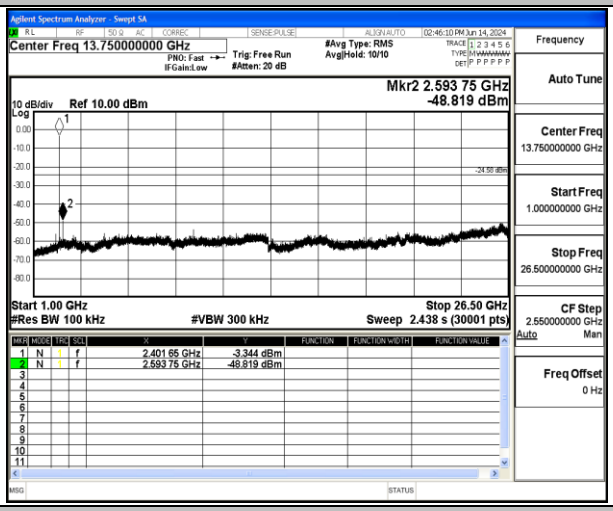
DH5-Ant1-2480-1000~26500-PASS



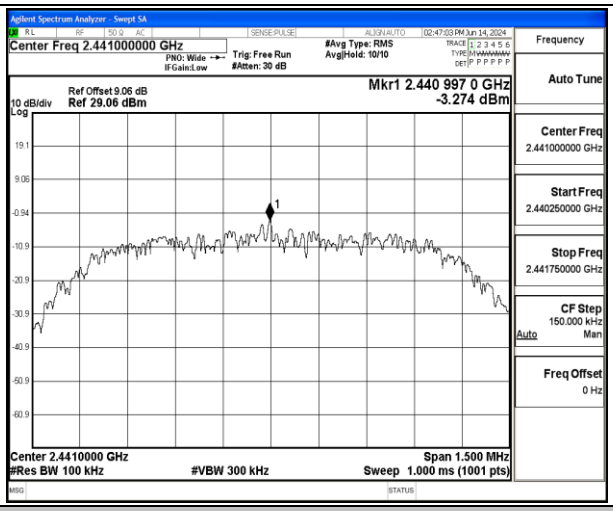
2DH5-Ant1-2402-0~Reference-PASS



2DH5-Ant1-2402-30~1000-PASS



2DH5-Ant1-2402-1000~26500-PASS



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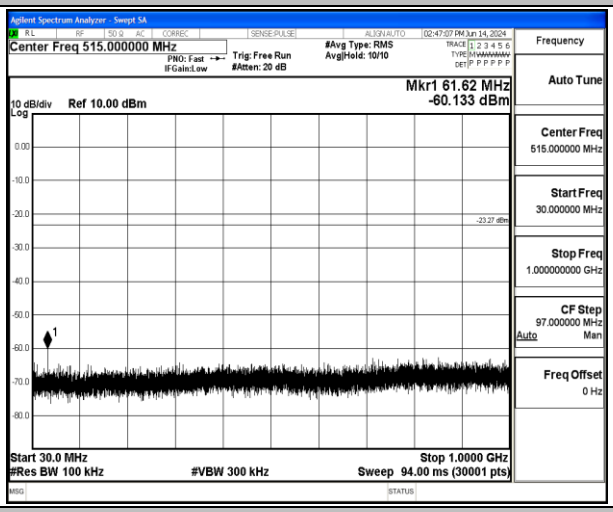
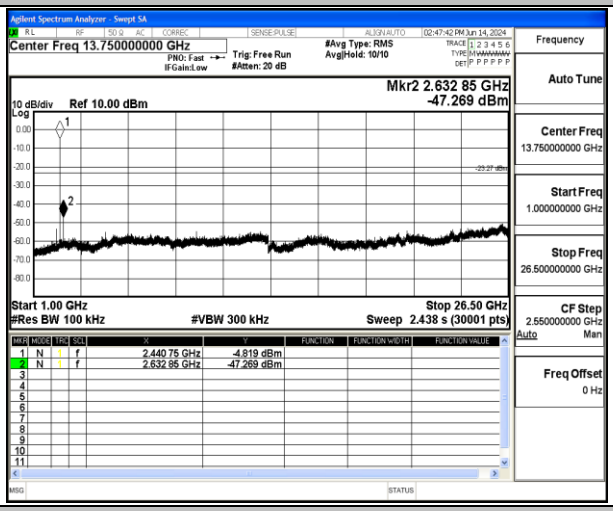
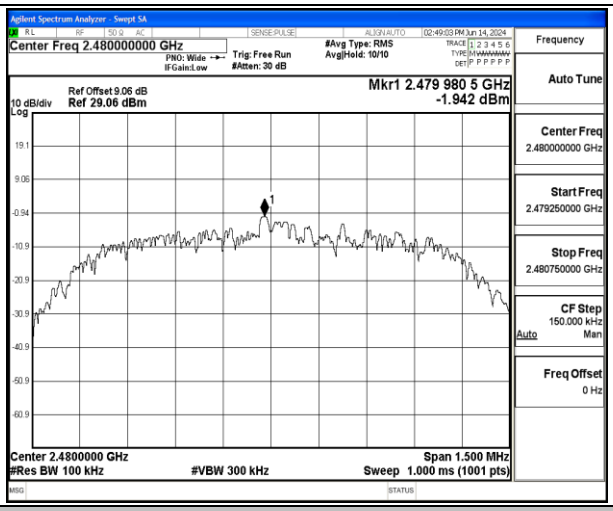


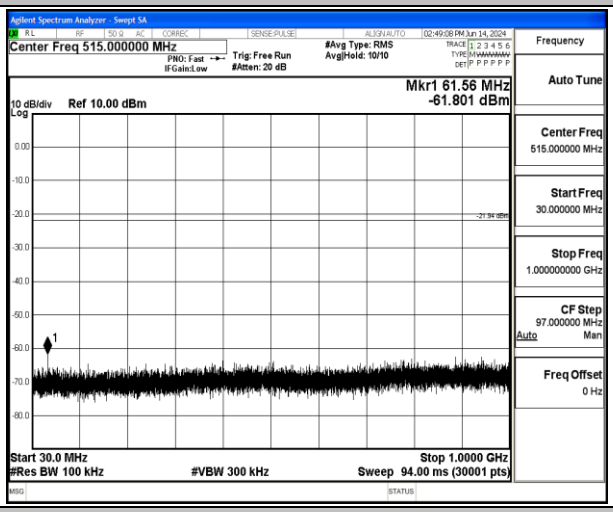
2DH5-Ant1-2441-30~1000-PASS



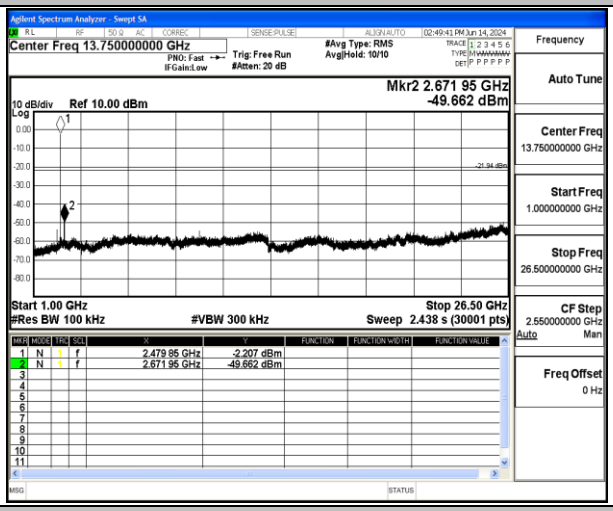
2DH5-Ant1-2441-1000~26500-PASS



2DH5-Ant1-2480-0~Reference-PASS



2DH5-Ant1-2480-30~1000-PASS



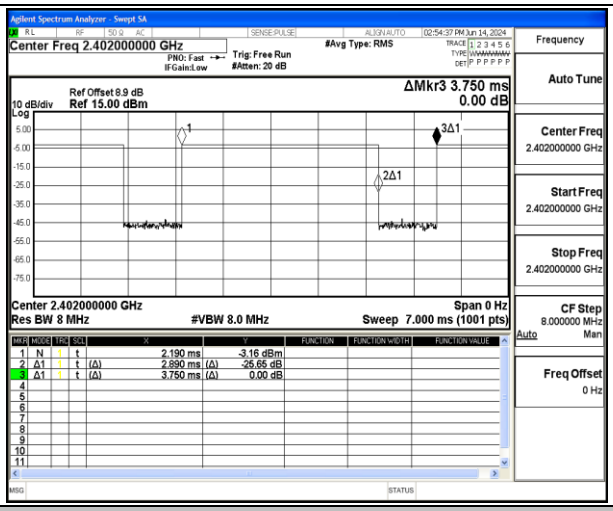
2DH5-Ant1-2480-1000~26500-PASS

Appendix I: Duty Cycle

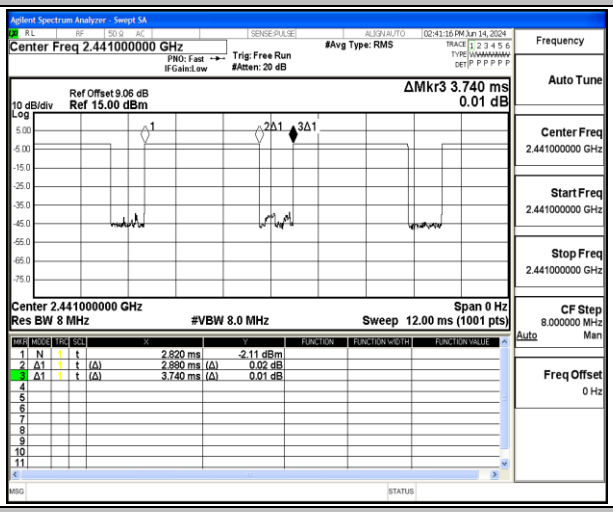
Test Result

TestMode	Antenna	Frequency[MHz]	ON Time [ms]	Period [ms]	Duty Cycle [%]	Duty Cycle Factor[dB]
DH5	Ant1	2402	2.89	3.75	77.07	1.13
DH5	Ant1	2441	2.88	3.74	77.01	1.13
DH5	Ant1	2480	2.88	3.74	77.01	1.13
2DH5	Ant1	2402	2.89	3.75	77.07	1.13
2DH5	Ant1	2441	2.89	3.76	76.86	1.14
2DH5	Ant1	2480	2.89	3.75	77.07	1.13

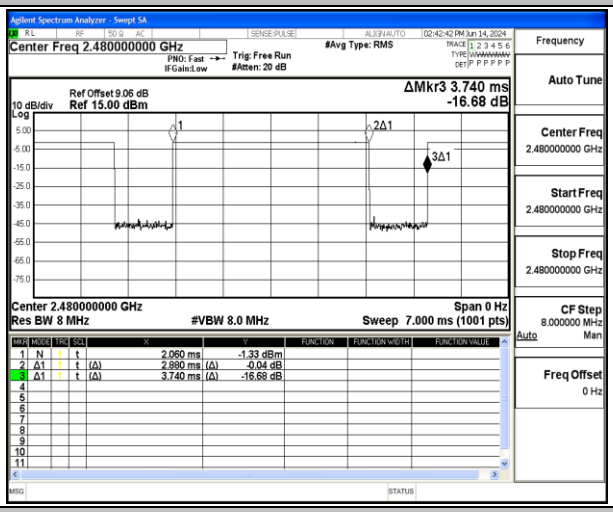
Test Graphs



NTNV-DH5-Ant1-2402



NTNV-DH5-Ant1-2441



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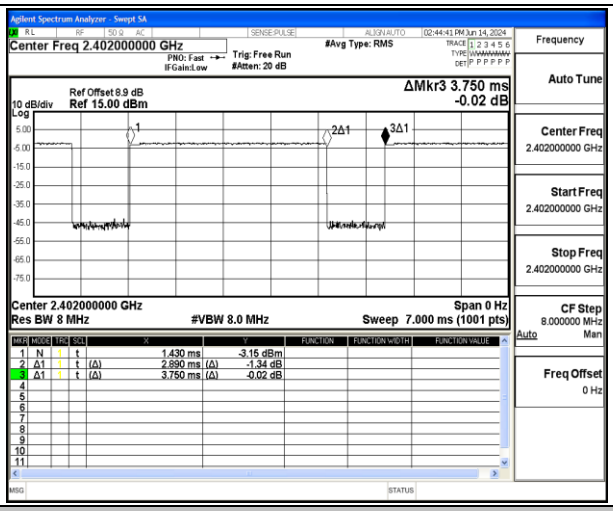
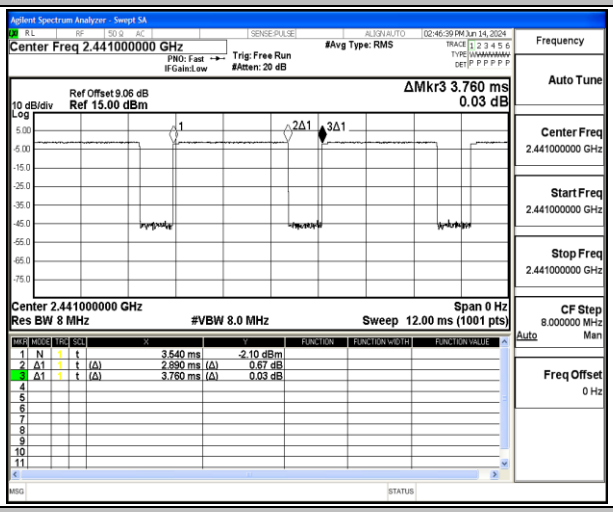
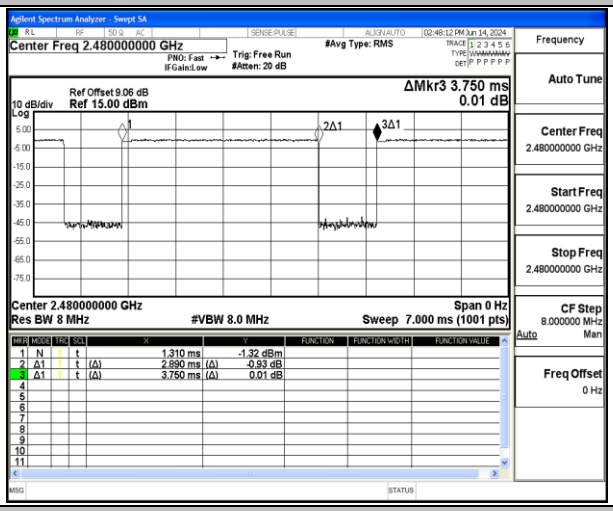


NTNV-2DH5-Ant1-2402



NTNV-2DH5-Ant1-2441



NTNV-2DH5-Ant1-2480