FCC Appendix RF Test Data

FCC ID	**:**	**2A7D2-BY065**
Company:	**:**	**ZHONGSHAN CITY BOBIE BABY PRODUCT CO.,LTD**
EUT	**:**	**Multi-functional Swing**
Model Number	**:**	**BY065**
Report No.	**:**	**CTA25052800501**
Reviewed By	**:**	**Eric Wang**

Appendix A: 20dB Emission Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.945	2401.553	2402.498	---	---
		2441	0.957	2440.547	2441.504	---	---
		2480	0.942	2479.553	2480.495	---	---
2DH5	Ant1	2402	1.281	2401.379	2402.660	---	---
		2441	1.311	2440.358	2441.669	---	---
		2480	1.272	2479.388	2480.660	---	---

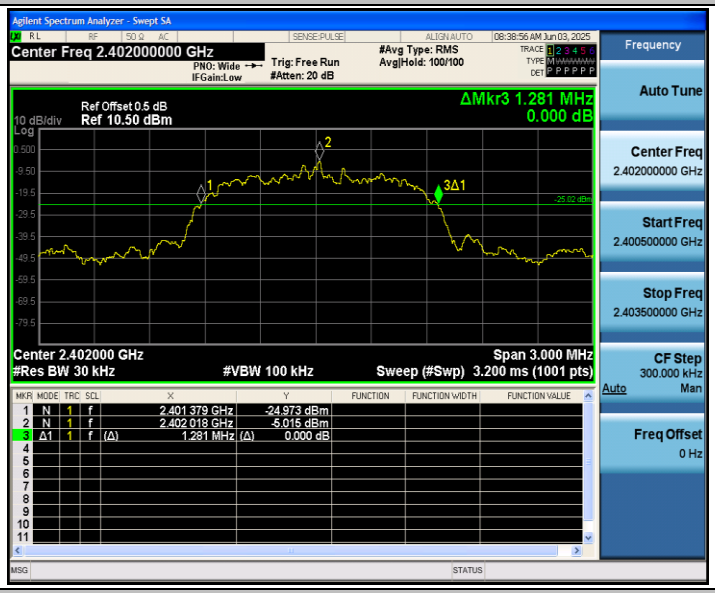
Test Graphs

DH5_Ant1_2402

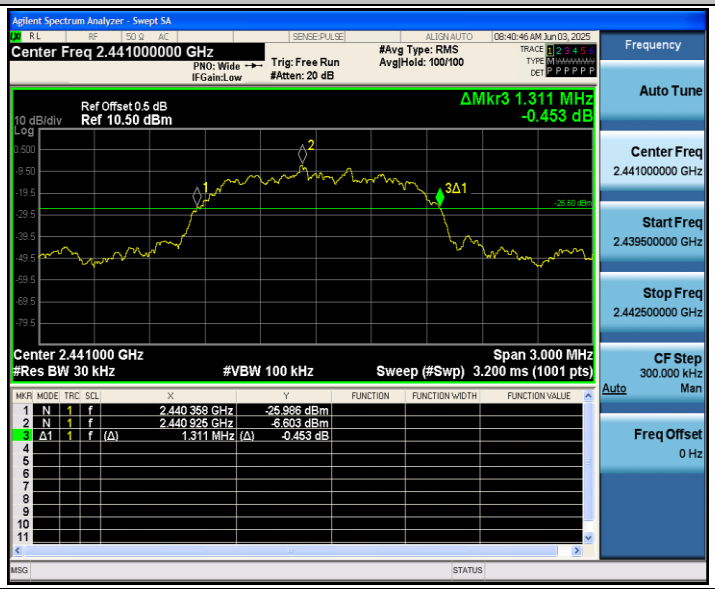
DH5_Ant1_2441

DH5_Ant1_2480

2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480

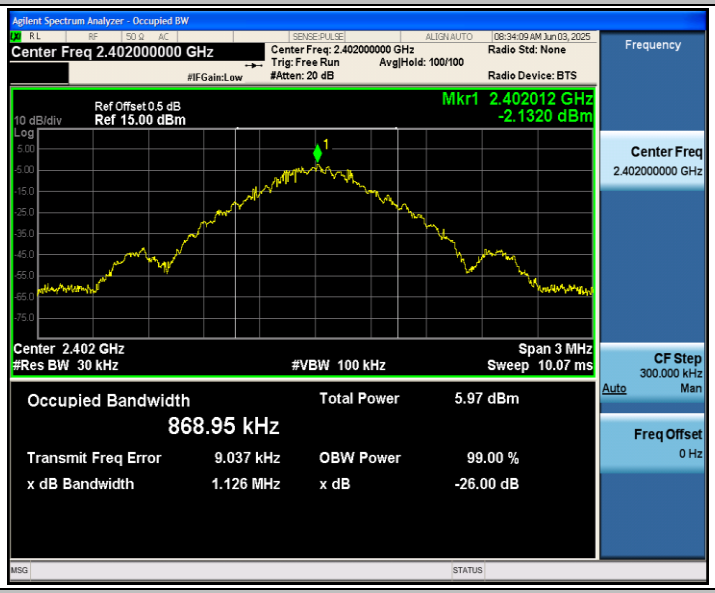

Appendix B: Occupied Channel Bandwidth

Test Result

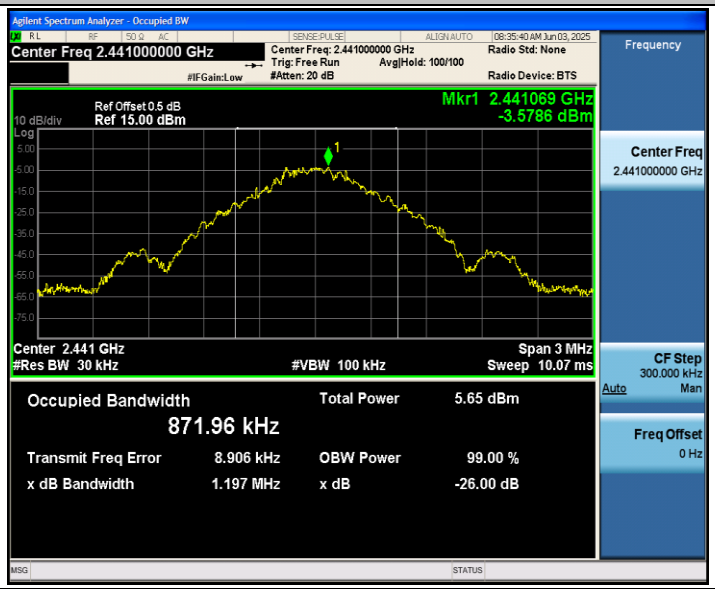
TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.86895	2401.5746	2402.4435	---	---
		2441	0.87196	2440.5729	2441.4449	---	---
		2480	0.86684	2479.5746	2480.4415	---	---
2DH5	Ant1	2402	1.1819	2401.4184	2402.6003	---	---
		2441	1.1852	2440.4171	2441.6023	---	---
		2480	1.1878	2479.4170	2480.6048	---	---

Test Graphs

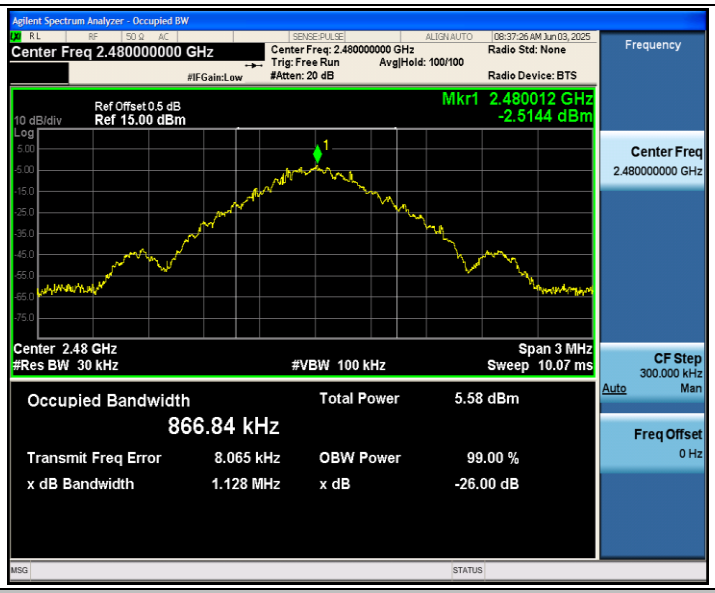
DH5_Ant1_2402



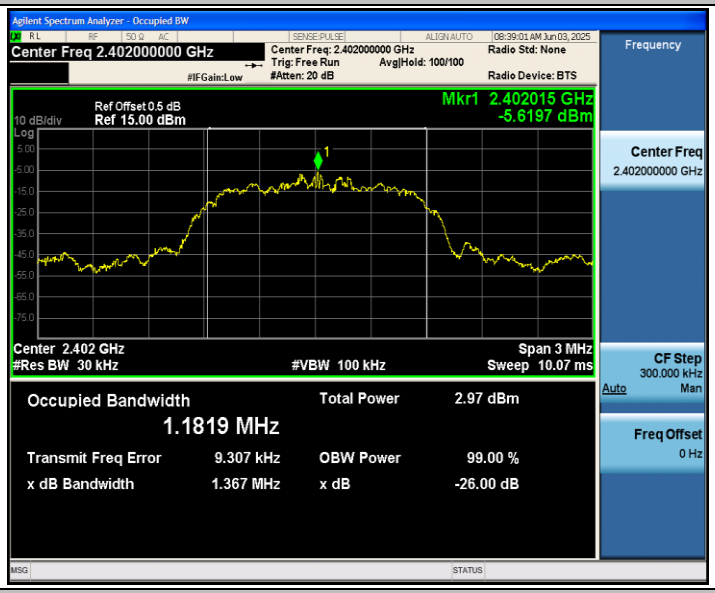
DH5_Ant1_2441



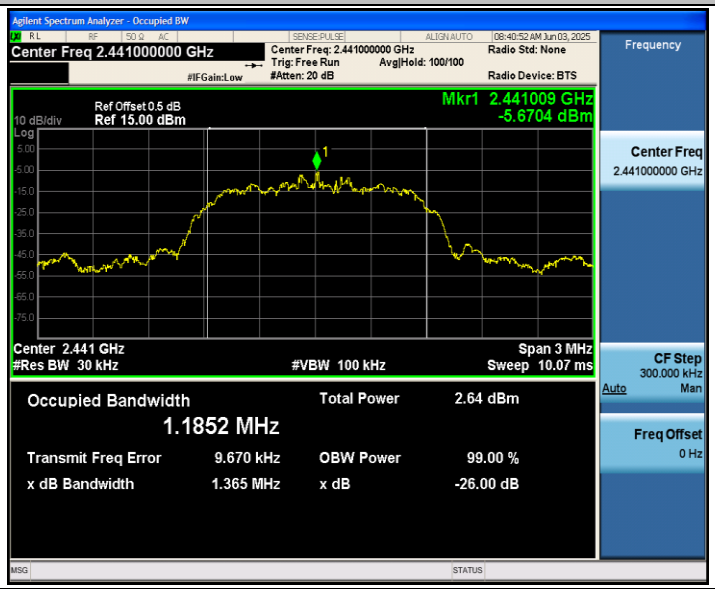
DH5_Ant1_2480

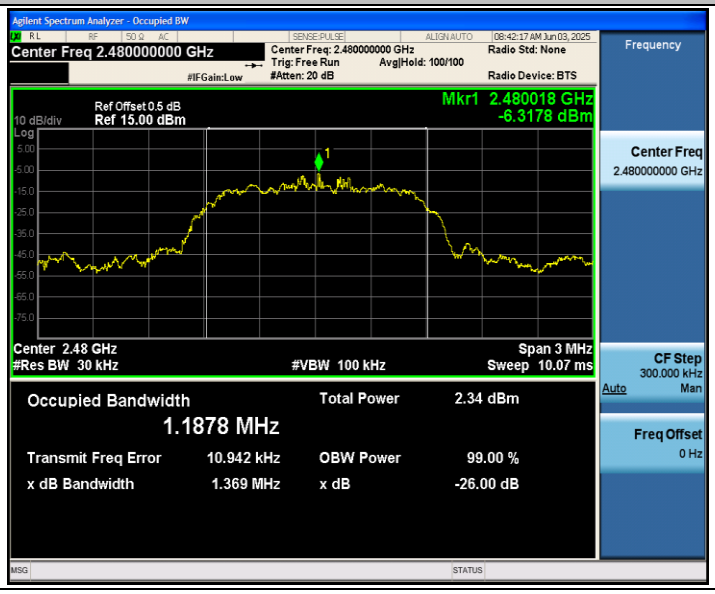


2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480


Appendix C: Maximum conducted output power

Test Result Peak

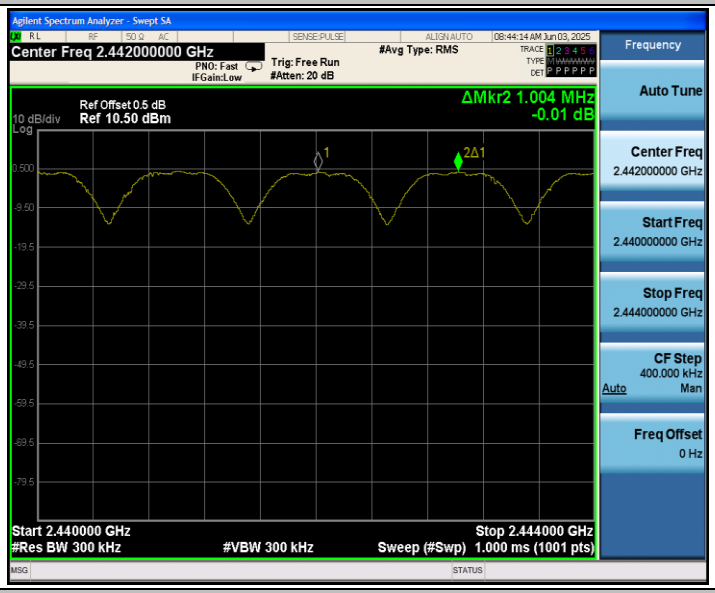
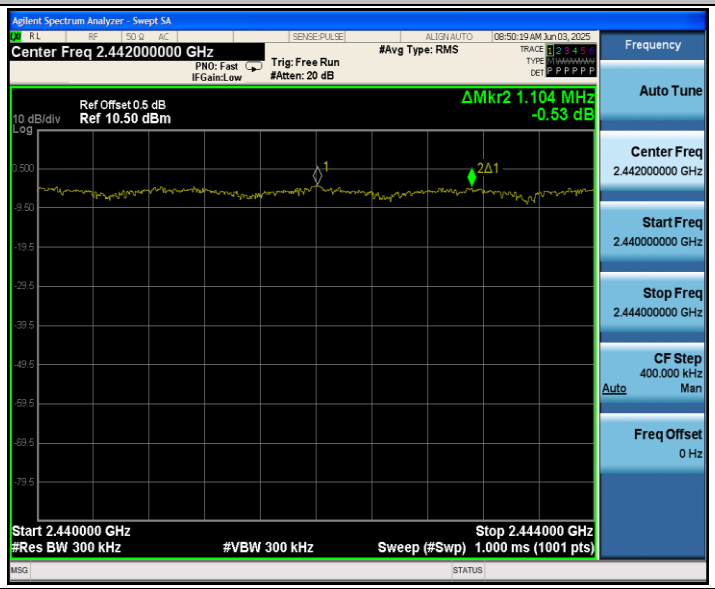
Test Mode	Antenna	Freq(MHz)	Conducted Peak Powert[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	0.02	≤20.97	PASS
		2441	-0.26	≤20.97	PASS
		2480	-0.35	≤20.97	PASS
2DH5	Ant1	2402	-0.76	≤20.97	PASS
		2441	-1.01	≤20.97	PASS
		2480	-1.13	≤20.97	PASS

Appendix D: Carrier frequency separation

Test Result

TestMode	Antenna	Freq(MHz)	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	1.004	≥0.957	PASS
2DH5	Ant1	Hop	1.104	≥0.874	PASS

Test Graphs

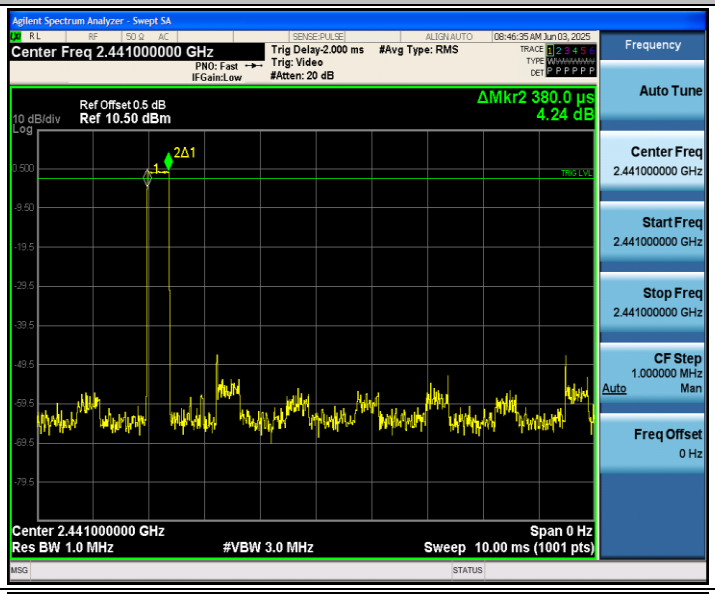
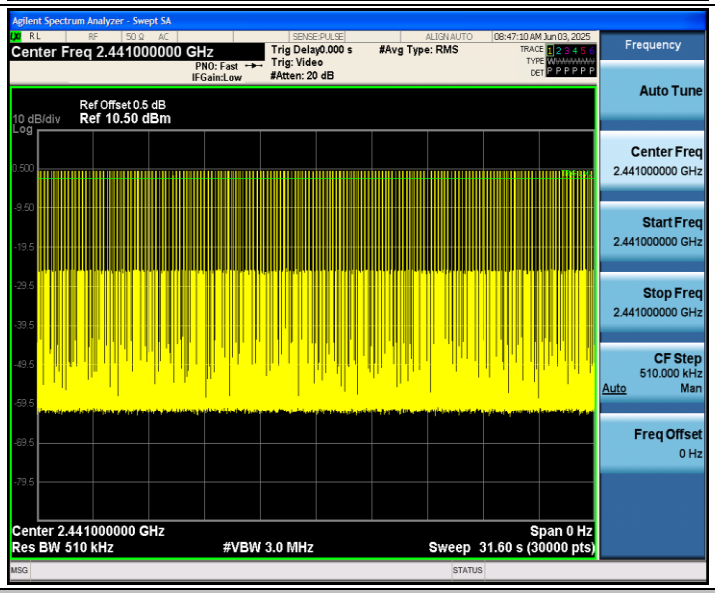
DH5_Ant1_Hop

2DH5_Ant1_Hop


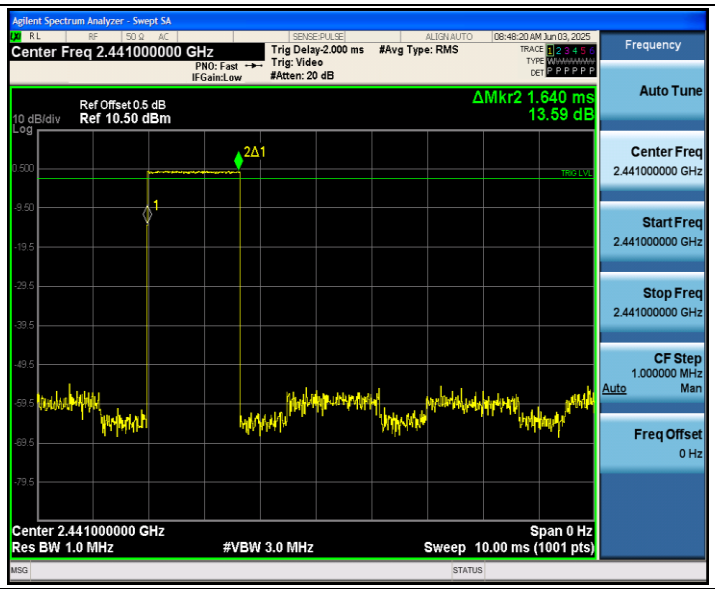
Appendix E: Time of occupancy

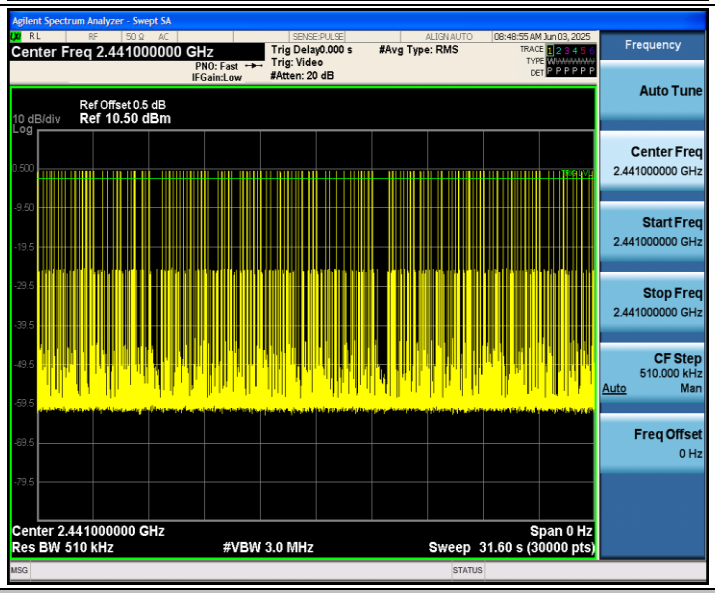
Test Result

TestMode	Antenna	Freq(MHz)	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.380	320	0.122	≤0.4	PASS
DH3	Ant1	Hop	1.640	166	0.272	≤0.4	PASS
DH5	Ant1	Hop	2.890	99	0.286	≤0.4	PASS
2DH1	Ant1	Hop	0.400	320	0.128	≤0.4	PASS
2DH3	Ant1	Hop	1.650	166	0.274	≤0.4	PASS
2DH5	Ant1	Hop	2.900	105	0.305	≤0.4	PASS

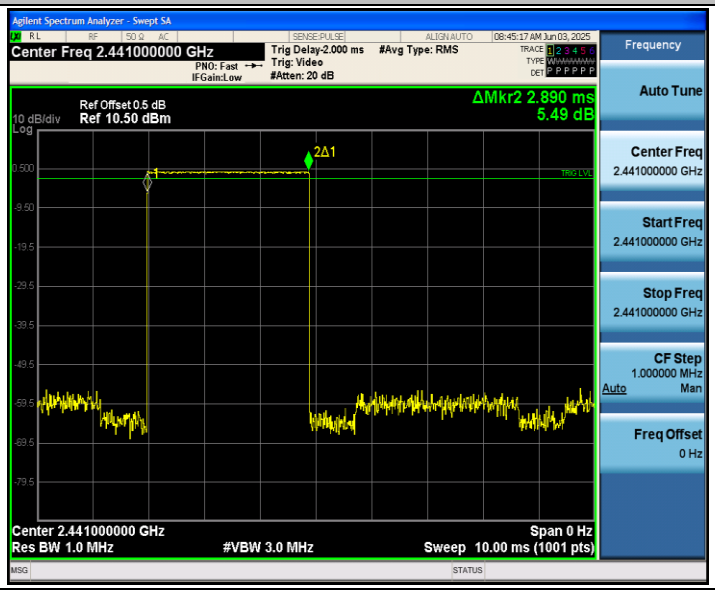
Test Graphs

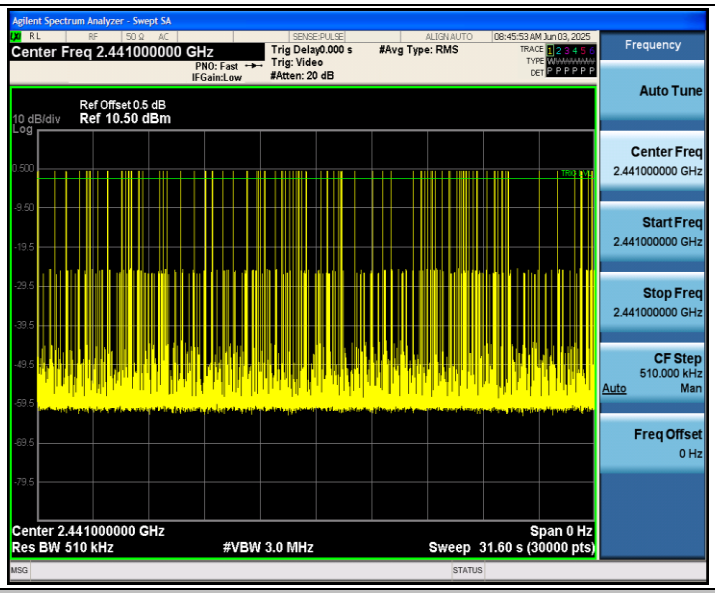
DH1_Ant1_Hop


DH3_Ant1_Hop


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay-2.000 ms
Trig: Video
#Avg Type: RMS
#Atten: 20 dB
08:48:20 AM Jun 03, 2025
Ref Offset 0.5 dB
10 dB/div
Ref 10.50 dBm
ΔMkr2 1.640 ms
13.59 dB
2Δ1
1
Center 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 10.00 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.441000000 GHz
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

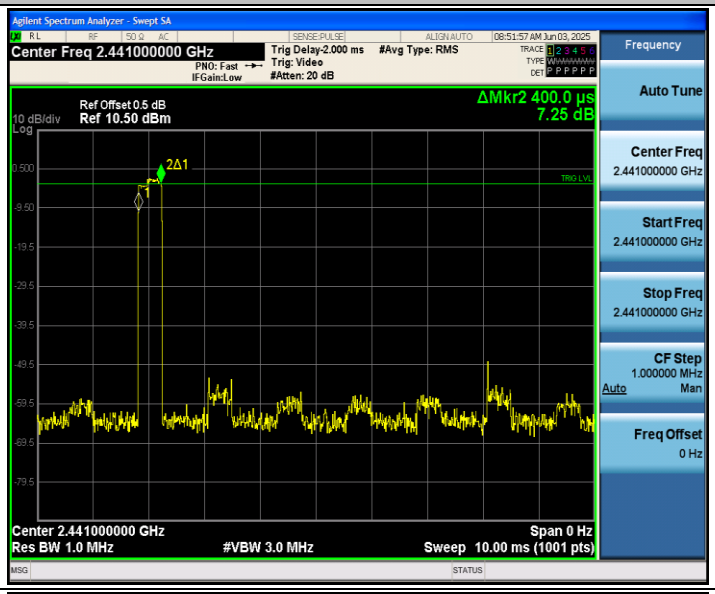

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay0.000 s
Trig: Video
#Avg Type: RMS
#Atten: 20 dB
08:48:55 AM Jun 03, 2025
Ref Offset 0.5 dB
10 dB/div
Ref 10.50 dBm
Center 2.441000000 GHz
Res BW 510 kHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 31.60 s (30000 pts)
Frequency
Auto Tune
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

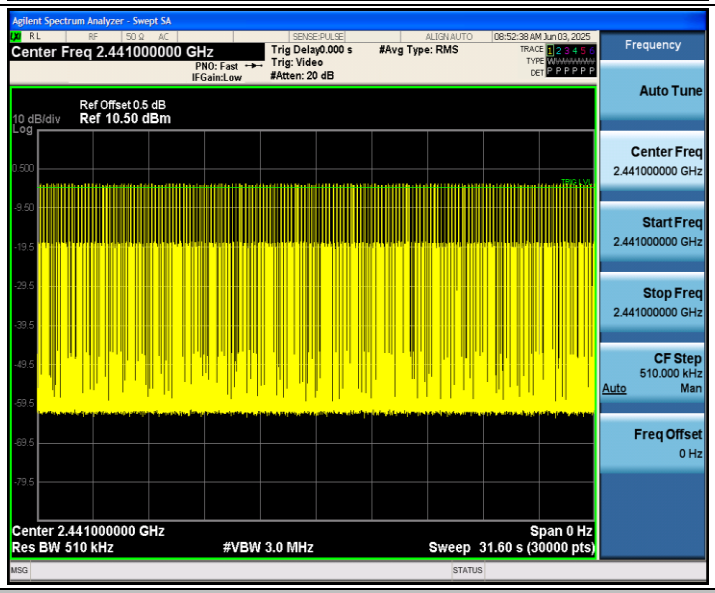
DH5_Ant1_Hop


Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay-2.000 ms
Trig: Video
#Avg Type: RMS
#Atten: 20 dB
08:45:17 AM Jun 03, 2025
Ref Offset 0.5 dB
10 dB/div
Ref 10.50 dBm
ΔMkr2 2.890 ms
5.49 dB
2Δ1
1
Center 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 10.00 ms (1001 pts)
Frequency
Auto Tune
Center Freq
2.441000000 GHz
Start Freq
2.441000000 GHz
Stop Freq
2.441000000 GHz
CF Step
1.000000 MHz
Auto
Man
Freq Offset
0 Hz

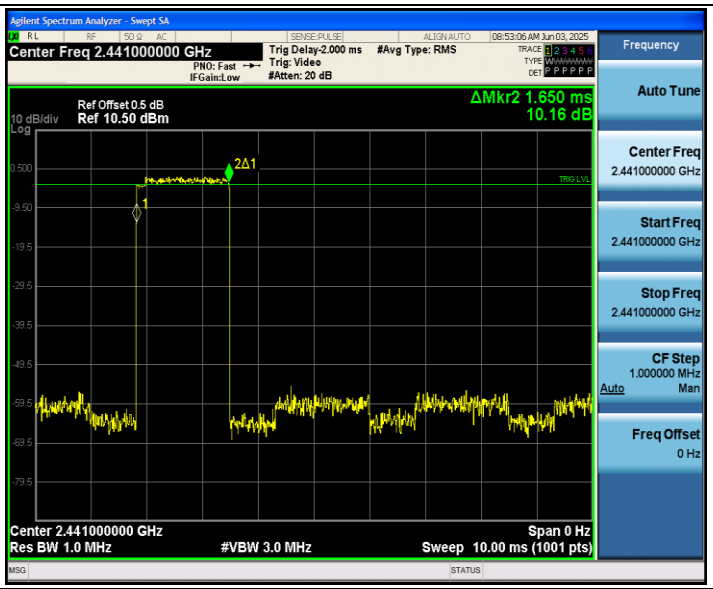


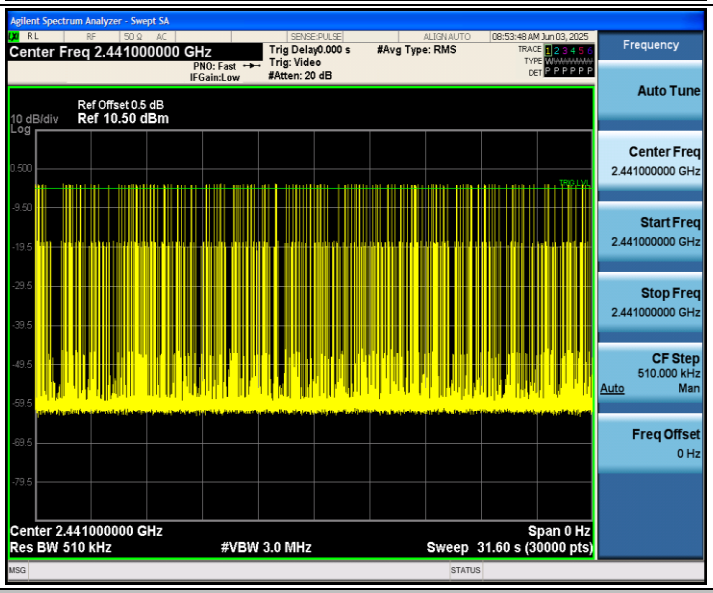
2DH1_Ant1_Hop



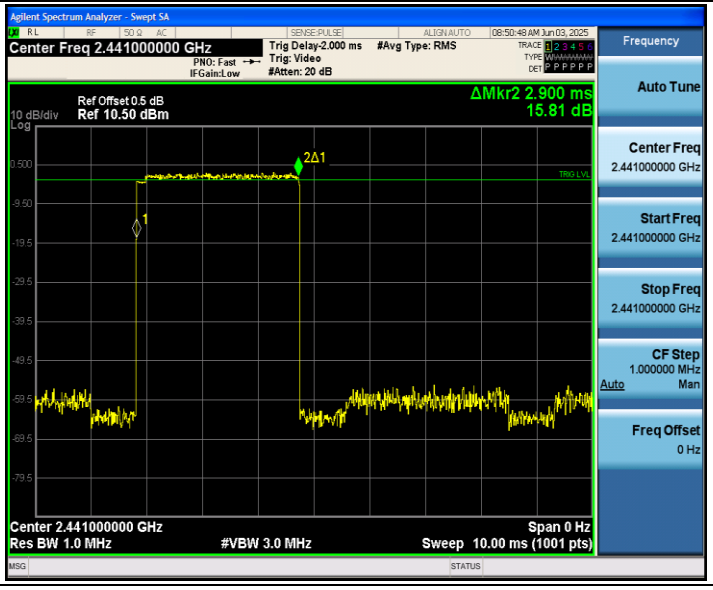


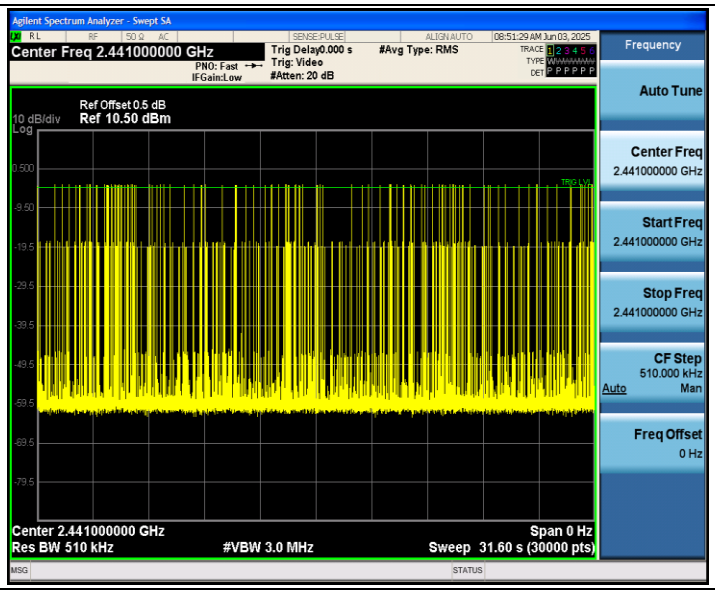
2DH3_Ant1_Hop





2DH5_Ant1_Hop



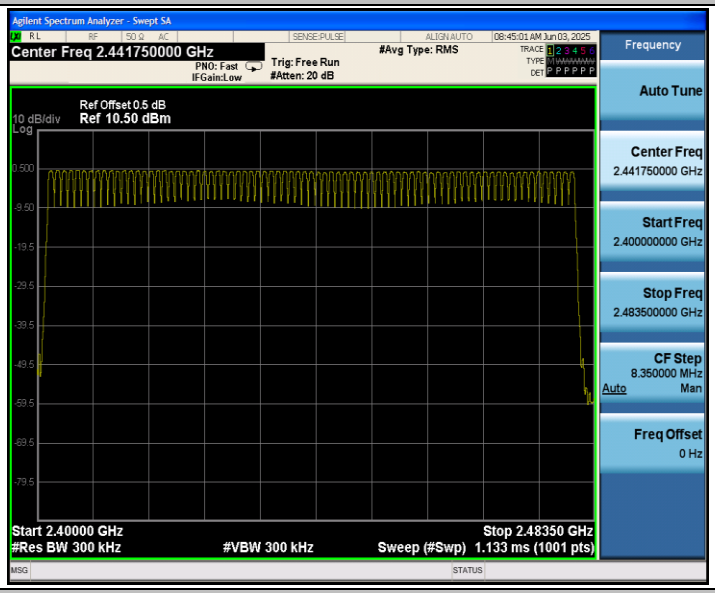
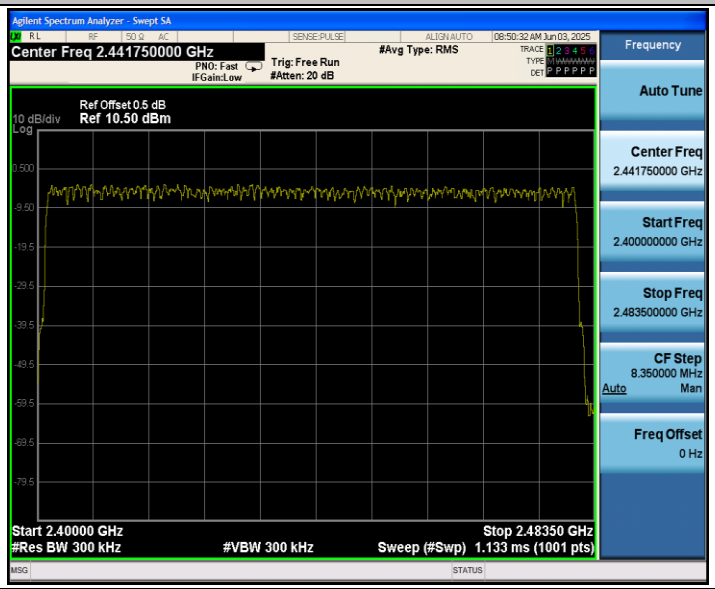

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.441000000 GHz
PNO: Fast
IFGain:Low
Trig Delay 0.000 s
Trig: Video
#Avg Type: RMS
#Atten: 20 dB
08:51:29 AM Jun 03, 2025
Ref Offset 0.5 dB
10 dB/div
Log
Ref 10.50 dBm
0.500
-9.50
-19.5
-29.5
-39.5
-49.5
-59.5
-69.5
-79.5
Center 2.441000000 GHz
Res BW 510 kHz
#VBW 3.0 MHz
Span 0 Hz
Sweep 31.60 s (30000 pts)
Frequency
Auto Tune
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
MSG
STATUS

Appendix F: Number of hopping channels

Test Result

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

Test Graphs

DH5_Ant1_Hop

2DH5_Ant1_Hop


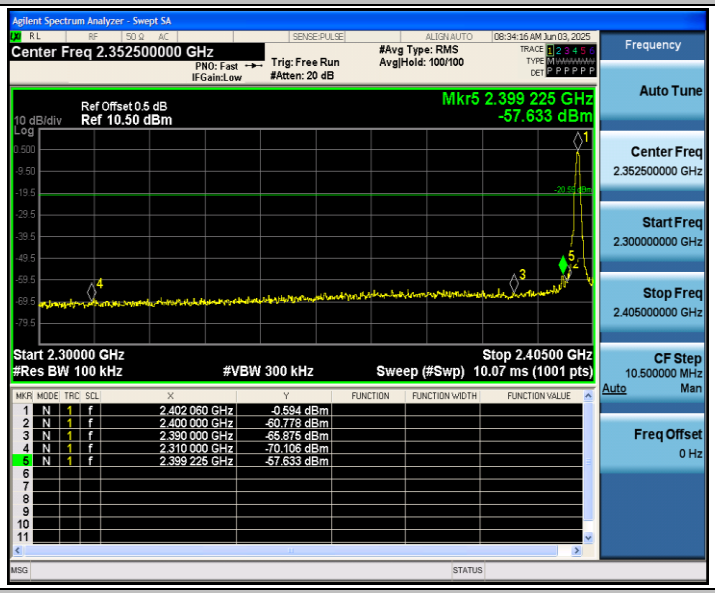
Appendix G: Band edge measurements

Test Result

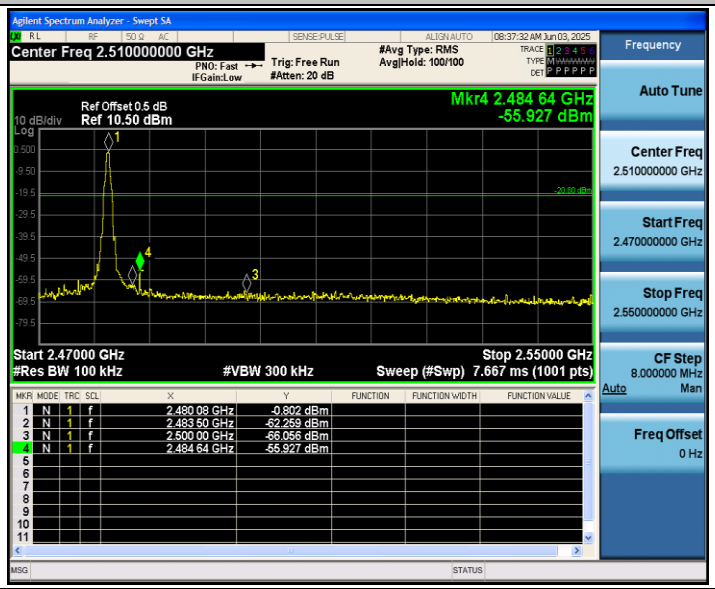
TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	-0.59	-57.63	≤-20.59	PASS
		High	2480	-0.80	-55.93	≤-20.8	PASS
		Low	Hop_2402	-0.72	-62.39	≤-20.72	PASS
		High	Hop_2480	-0.36	-62.65	≤-20.36	PASS
2DH5	Ant1	Low	2402	-4.65	-55.94	≤-24.65	PASS
		High	2480	-3.88	-61.74	≤-23.88	PASS
		Low	Hop_2402	-6.35	-63.44	≤-26.35	PASS
		High	Hop_2480	-3.97	-64.12	≤-23.97	PASS

Test Graphs

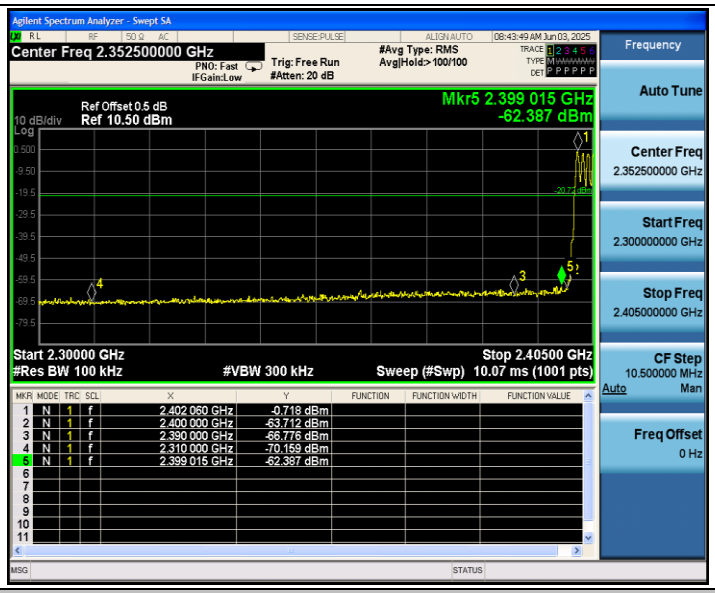
DH5_Ant1_Low_2402



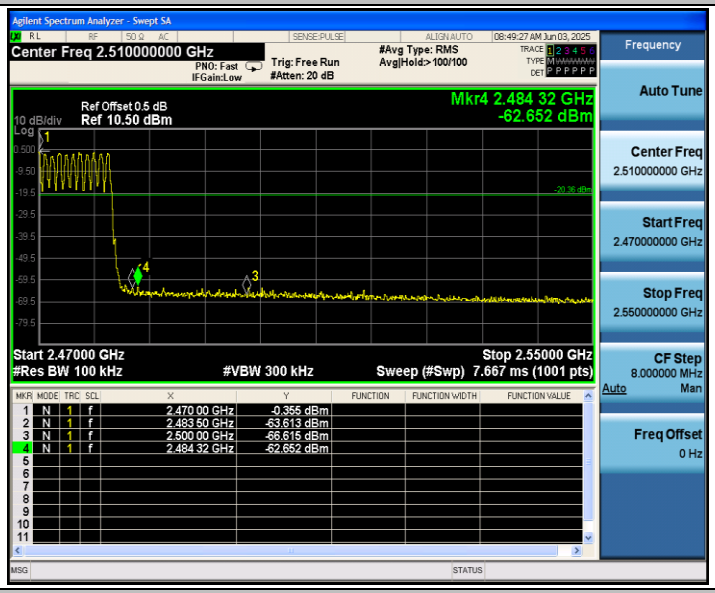
DH5_Ant1_High_2480



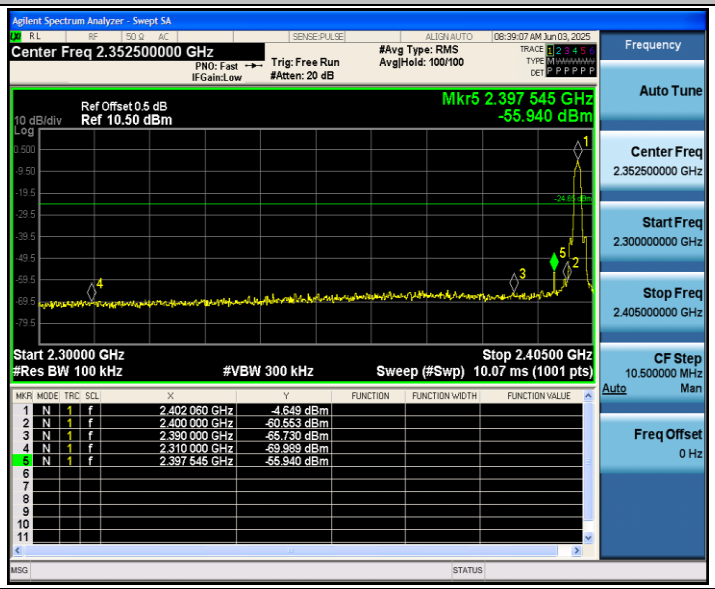
DH5_Ant1_Low_Hop_2402

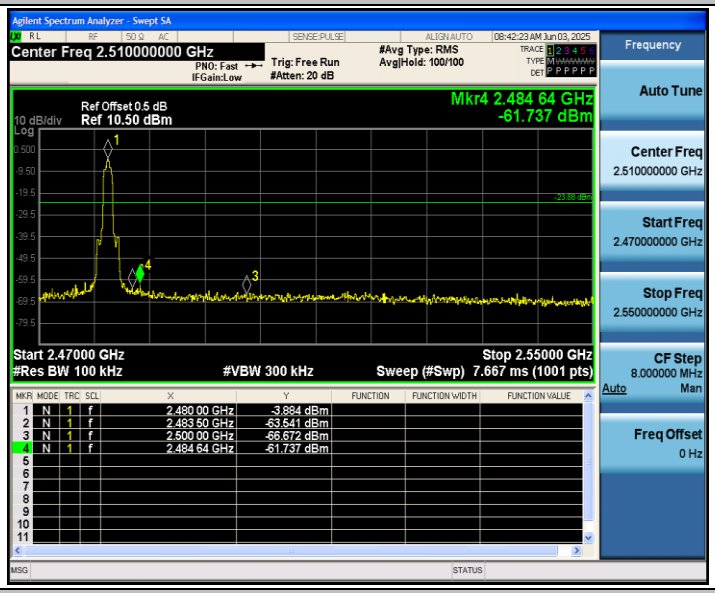
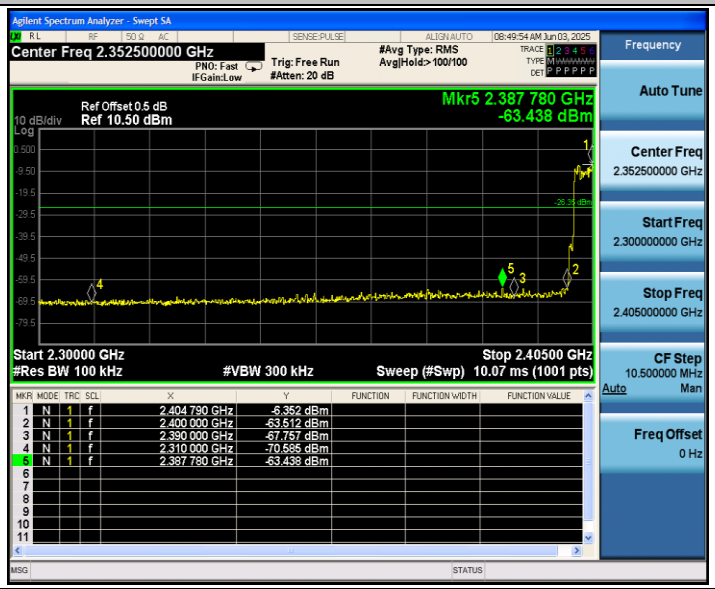


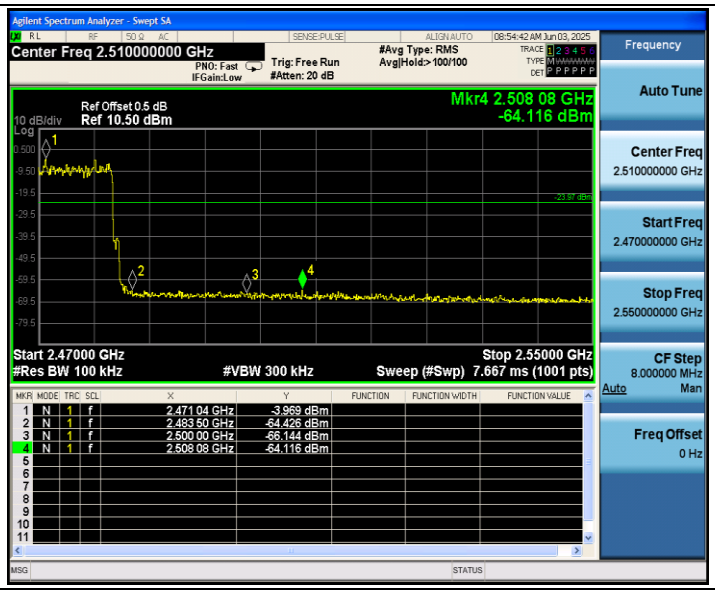
DH5_Ant1_High_Hop_2480



2DH5_Ant1_Low_2402



2DH5_Ant1_High_2480

2DH5_Ant1_Low_Hop_2402

2DH5_Ant1_High_Hop_2480

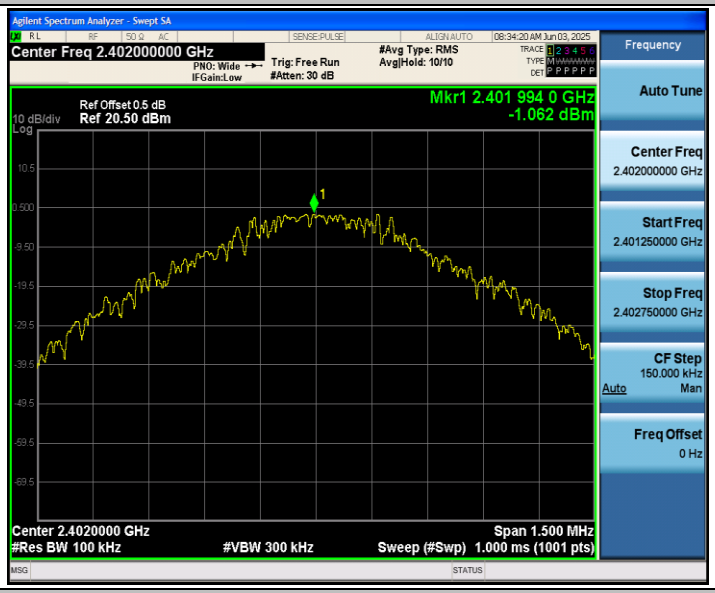
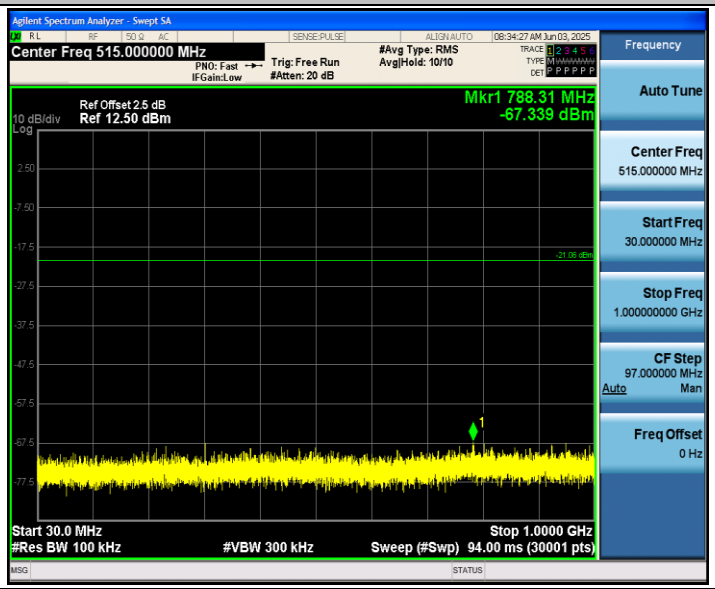

Agilent Spectrum Analyzer - Swept SA
Center Freq 2.510000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
#Avg Type: RMS
Avg|Hold:>100/100
08:54:42 AM Jun 03, 2025
Frequency
Auto Tune
Ref Offset 0.5 dB
10 dB/div
Ref 10.50 dBm
Mkr4 2.508 08 GHz
-64.116 dBm
Center Freq
2.510000000 GHz
Start Freq
2.470000000 GHz
Stop Freq
2.550000000 GHz
CF Step
8.000000 MHz
Auto
Man
Freq Offset
0 Hz
Start 2.47000 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 2.55000 GHz
Sweep (#Swp) 7.667 ms (1001 pts)
1 N 1 f 2.471 04 GHz -3.969 dBm
2 N 1 f 2.483 50 GHz -64.426 dBm
3 N 1 f 2.500 00 GHz -66.144 dBm
4 N 1 f 2.508 08 GHz -64.116 dBm
MSG
STATUS

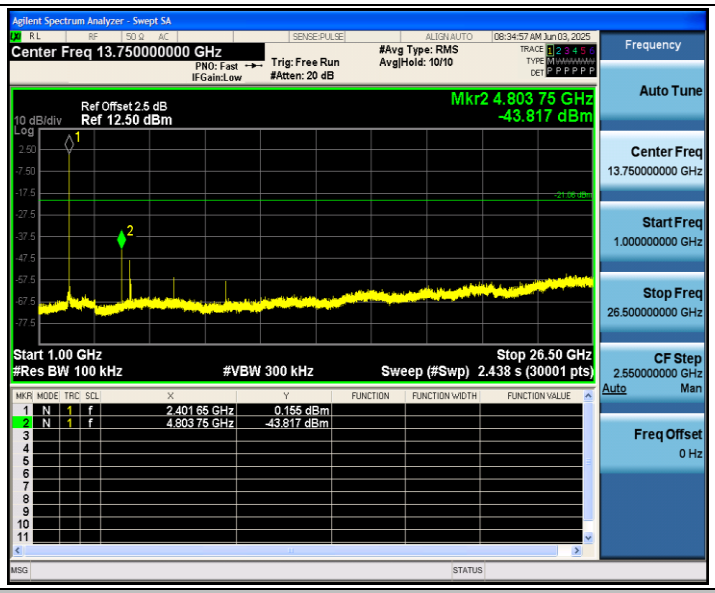
Appendix H: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	-1.06	-1.06	---	PASS
			30~1000	-1.06	-67.34	≤-21.06	PASS
			1000~26500	-1.06	-43.82	≤-21.06	PASS
		2441	Reference	-1.40	-1.40	---	PASS
			30~1000	-1.40	-66.97	≤-21.4	PASS
			1000~26500	-1.40	-32.4	≤-21.4	PASS
		2480	Reference	-1.24	-1.24	---	PASS
			30~1000	-1.24	-67.82	≤-21.24	PASS
			1000~26500	-1.24	-43.63	≤-21.24	PASS
2DH5	Ant1	2402	Reference	-4.91	-4.91	---	PASS
			30~1000	-4.91	-67.79	≤-24.91	PASS
			1000~26500	-4.91	-49.47	≤-24.91	PASS
		2441	Reference	-4.02	-4.02	---	PASS
			30~1000	-4.02	-68.31	≤-24.02	PASS
			1000~26500	-4.02	-50.11	≤-24.02	PASS
		2480	Reference	-6.91	-6.91	---	PASS
			30~1000	-6.91	-67.57	≤-26.91	PASS
			1000~26500	-6.91	-48.22	≤-26.91	PASS

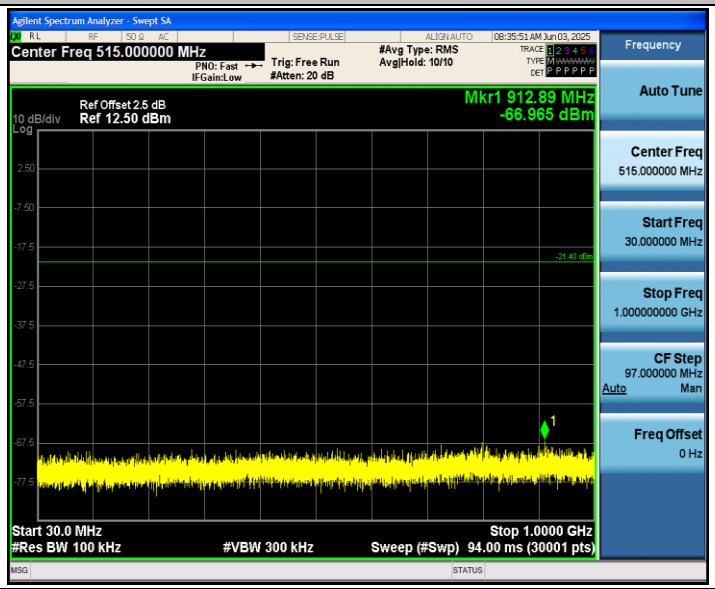
Test Graphs

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



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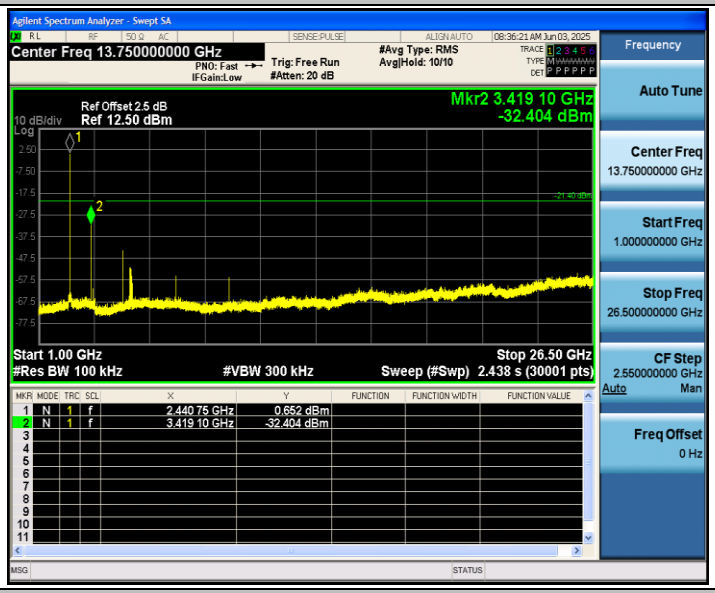
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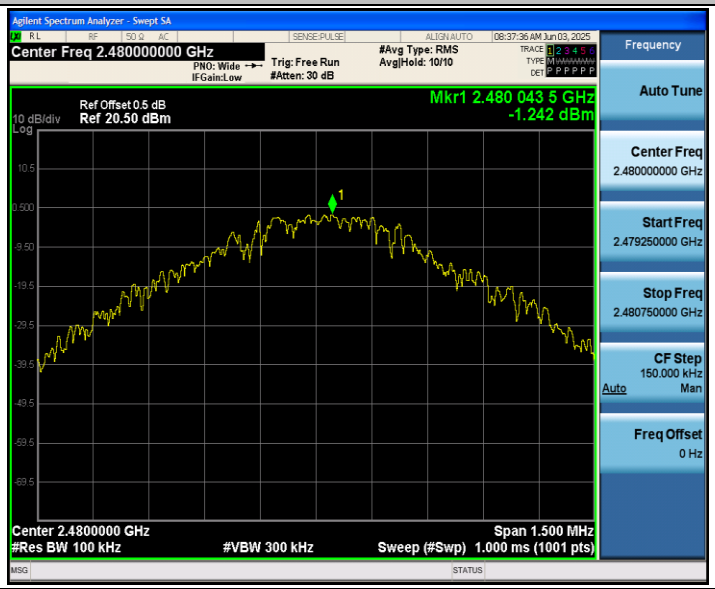
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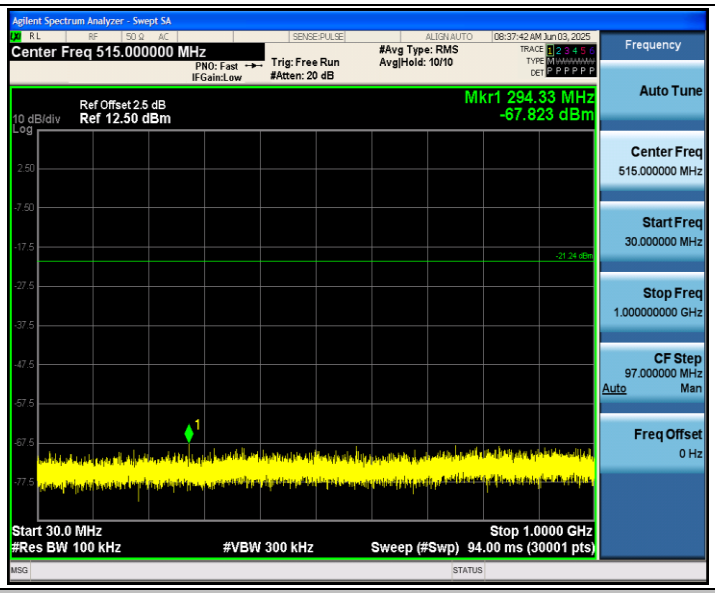

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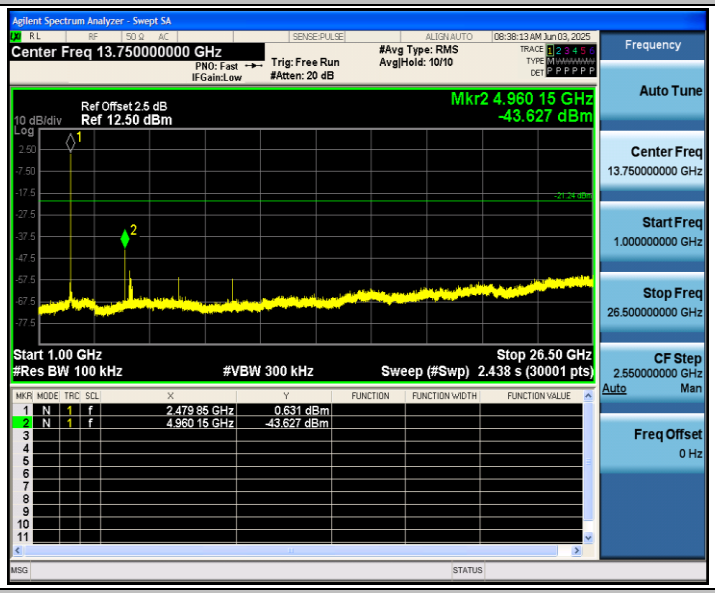

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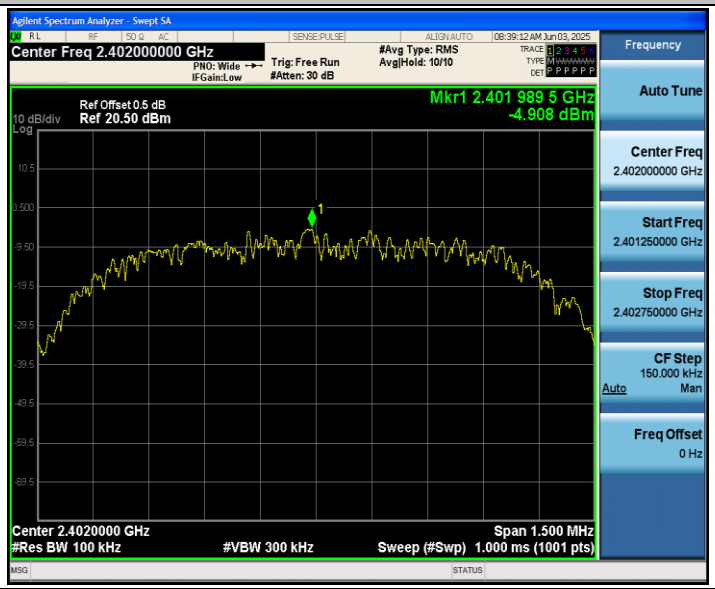

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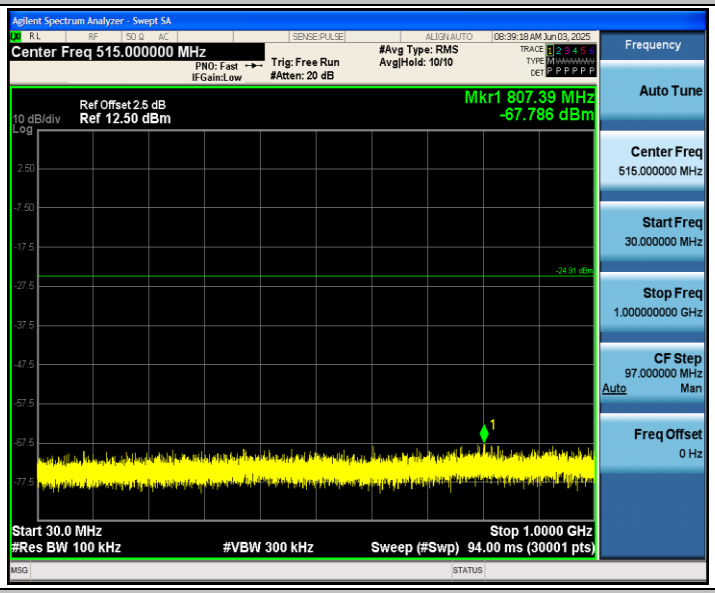
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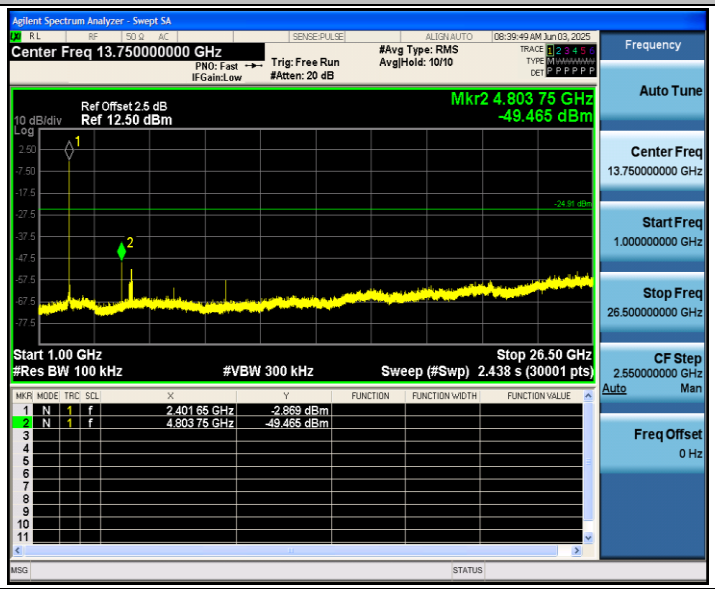
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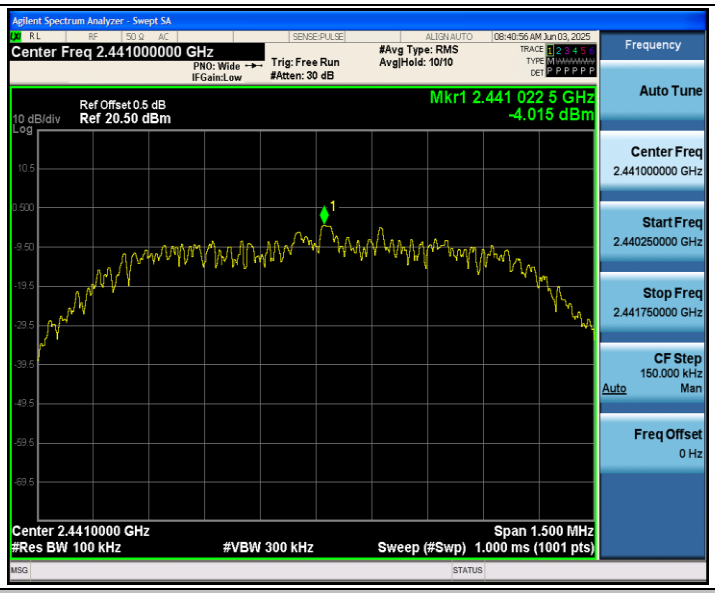

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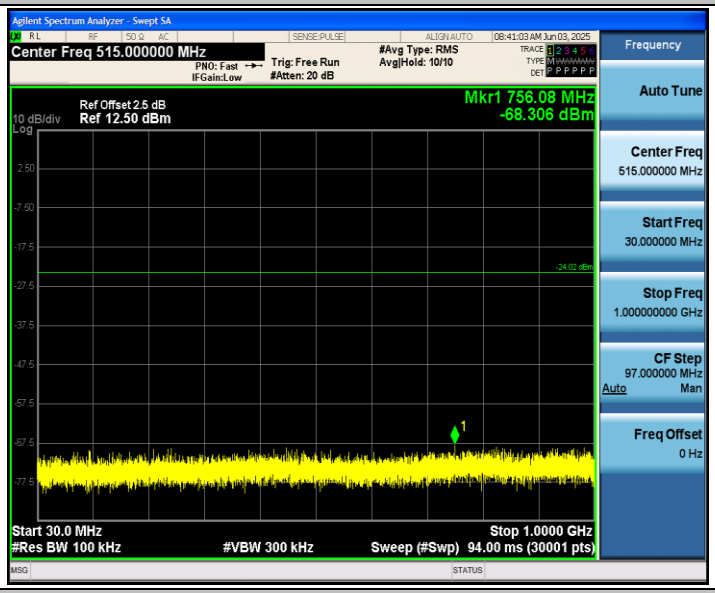

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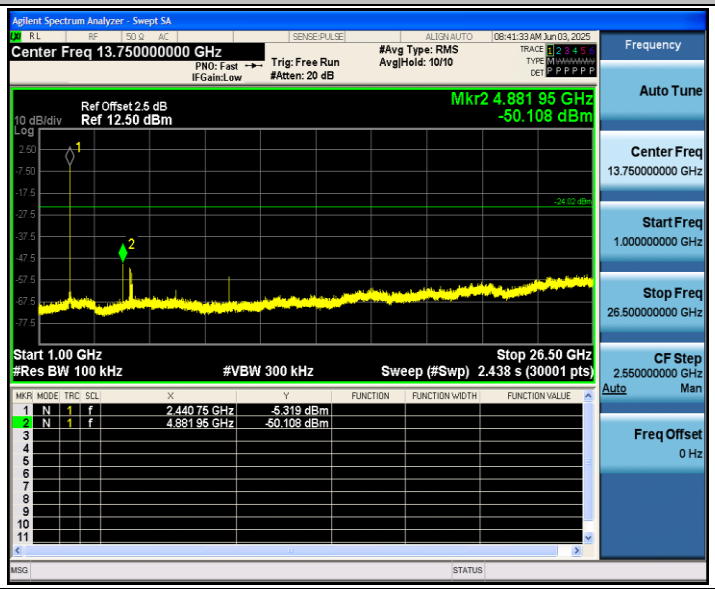

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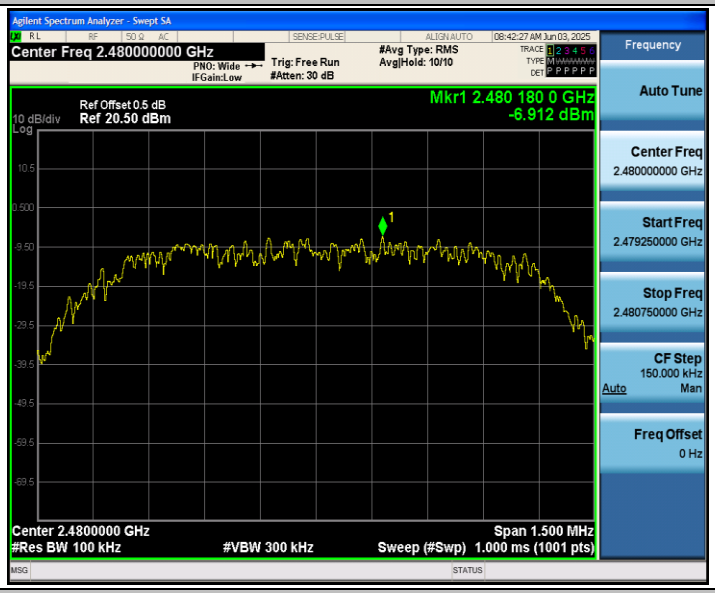
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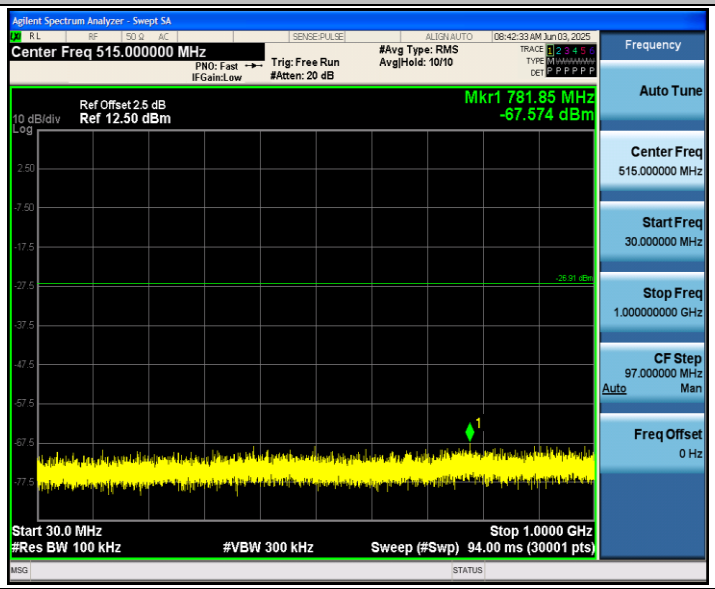
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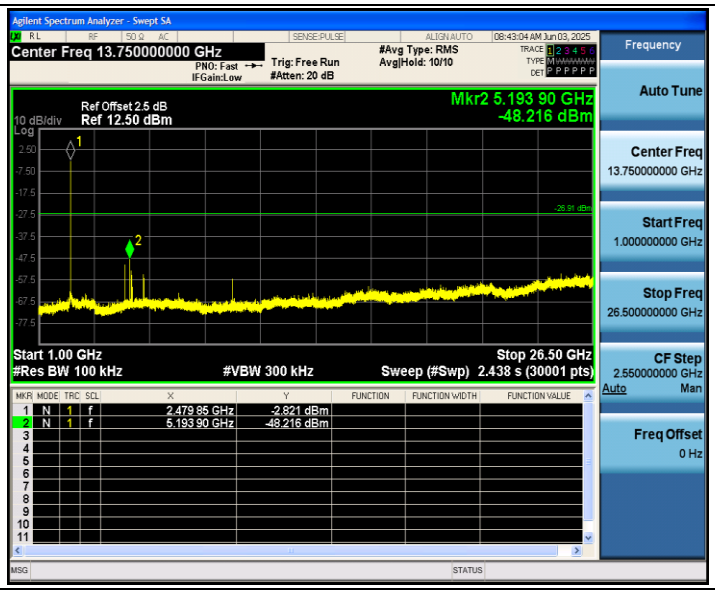
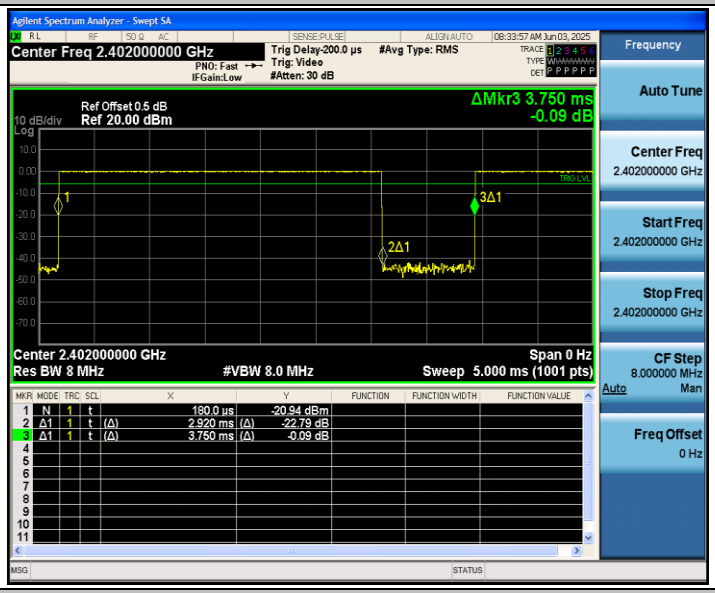
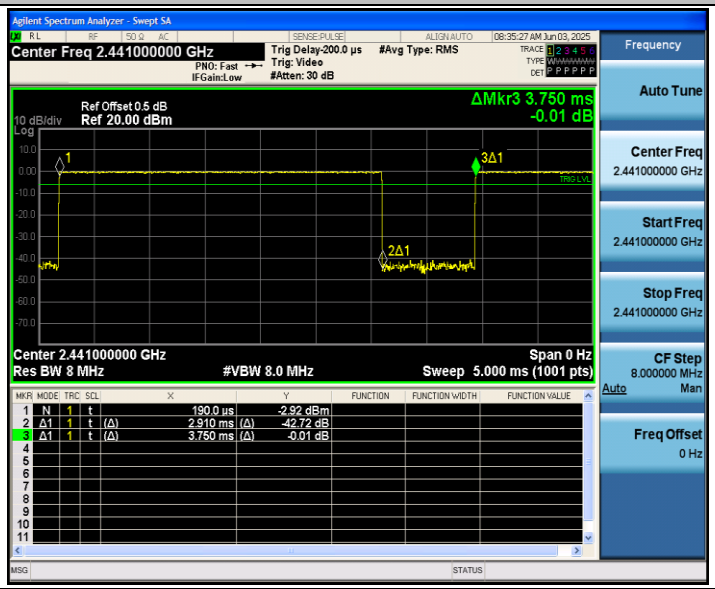

Agilent Spectrum Analyzer - Swept SA
Center Freq 13.750000000 GHz
PNO: Fast
IFGain:Low
Trig: Free Run
#Atten: 20 dB
#Avg Type: RMS
Avg|Hold: 10/10
08:43:04 AM Jun 03, 2025
Frequency
Ref Offset 2.5 dB
10 dB/div
Log
Ref 12.50 dBm
Mkr2 5.193 90 GHz
-48.216 dBm
-26.91 dBm
Start 1.00 GHz
#Res BW 100 kHz
#VBW 300 kHz
Stop 26.50 GHz
Sweep (#Swp) 2.438 s (30001 pts)
MKR MODE TRC SCL X Y FUNCTION FUNCTION WIDTH FUNCTION VALUE
1 N 1 f 2.479 85 GHz -2.821 dBm
2 N 1 f 5.193 90 GHz -48.216 dBm
Auto Tune
Center Freq
13.750000000 GHz
Start Freq
1.000000000 GHz
Stop Freq
26.500000000 GHz
CF Step
2.550000000 GHz
Auto
Man
Freq Offset
0 Hz
MSG
STATUS

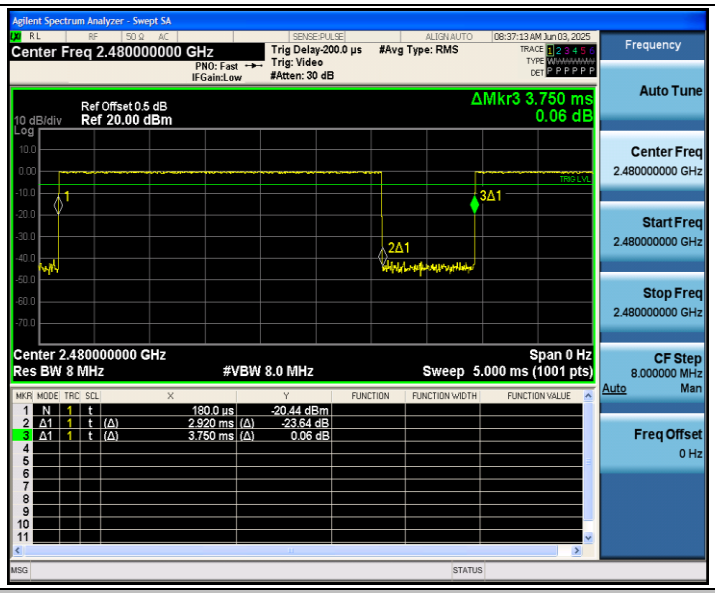
Appendix I: Duty Cycle

Test Result

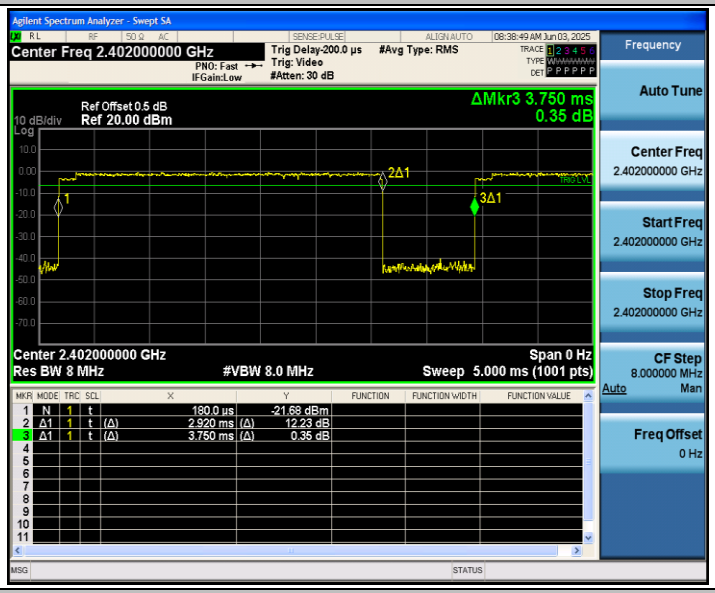
TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	DC [%]	xFactor	Limit	Verdict
DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.91	3.75	77.60	1.10	---	---
		2480	2.92	3.75	77.87	1.09	---	---
2DH5	Ant1	2402	2.92	3.75	77.87	1.09	---	---
		2441	2.92	3.75	77.87	1.09	---	---
		2480	2.92	3.75	77.87	1.09	---	---

Test Graphs

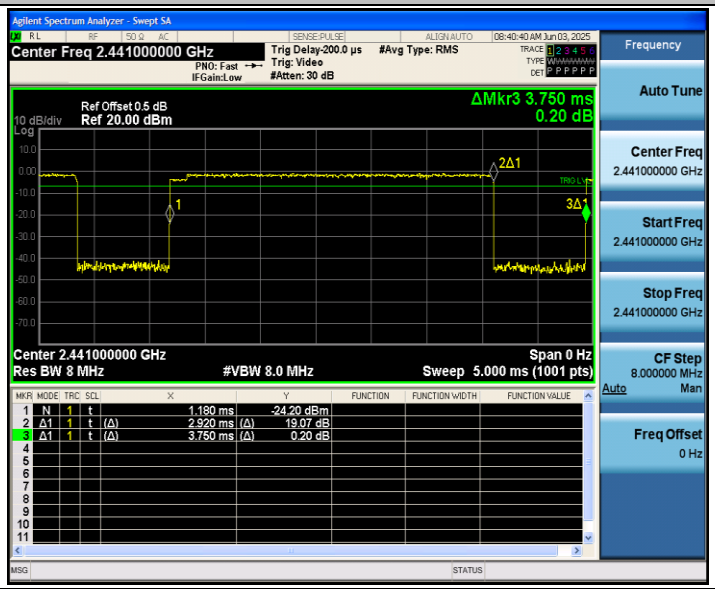
DH5_Ant1_2402

DH5_Ant1_2441

DH5_Ant1_2480



2DH5_Ant1_2402



2DH5_Ant1_2441



2DH5_Ant1_2480