



Agilent Spectrum Analyzer - Sweep SA

AL RF VIDEO DC CENTER FREQ SOURCE OFF AUTOVOLT OL-NB 11 AM Nov 11, 2021

Center Freq 2.441000000 GHz Trig Delay 2.000 ms #Avg Type: RMS Trace 1: 2 3 4 5
 PWD: Fast → IF Gain: low #Atten: 20 dB TYP: VMMMMH DEL: P P P P P

10 dB/div Ref Offset 9.15 dB ΔMkr2 415.0 μs
 Log Ref 19.15 dBm 16.34 dB

Center 2.441000000 GHz Span 0 Hz
 Res BW 1.0 MHz #VBW 3.0 MHz Sweep 10.13 ms (8000 pts)

Frequency Auto Tun Center Freq 2.441000000 GHz Start Freq 2.441000000 GHz Stop Freq 2.441000000 GHz CF Step 1.000000 MHz Auto Ma Freq Offset 0 Hz

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.441000000 GHz

Ref Offset 9.15 dB
Ref 19.15 dBm

Trig Delay 2.000 ms
Trig: Video
IF Gain: low
#Atten: 20 dB

Auto Tune

Frequency

Center Freq 2.441000000 GHz

Start Freq 2.441000000 GHz

Stop Freq 2.441000000 GHz

CF Stop 1.000000 MHz
Auto Ma

Freq Offset 0 Hz

Center Freq 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Sweep 10.13 ms (8000 pts)
Span 0 Hz

Agilent Spectrum Analyzer - Sweep SA

Center Freq 2.441000000 GHz

Ref Offset 9.16 dB
Ref 19.15 dBm

ΔMkr2 2.916 ms
14.79 dB

Trig Delay 2.000 ms #Avg Type: RMS
Trig Video
#Atten: 20 dB

10 dB/div
-50

9.15
-40.85
-10.9
-20.9
-30.9
-40.9
-60.9
-70.9

2Δ1

TR0 LVL

Center Freq 2.441000000 GHz
Res BW 1.0 MHz
#VBW 3.0 MHz
Sweep 10.13 ms (8000 pts)
Span 0 Hz

Frequency

Auto Tun

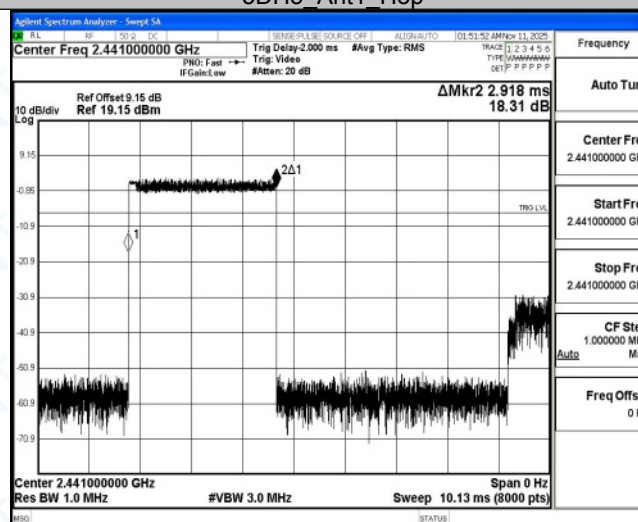
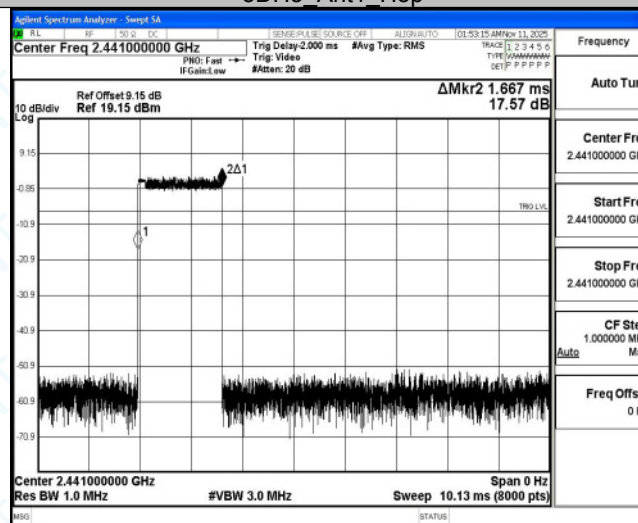
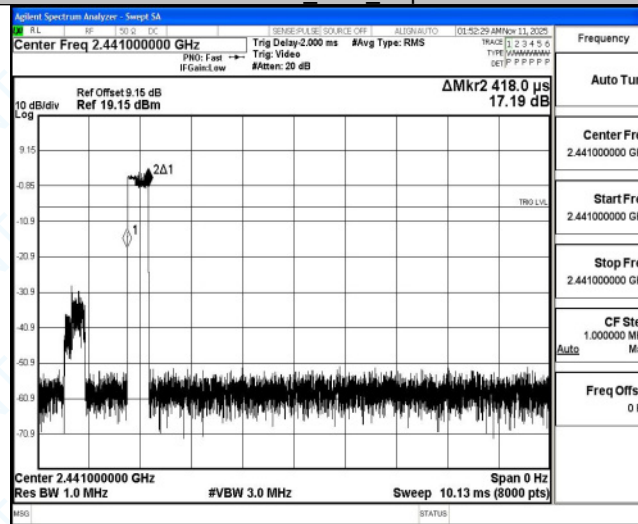
Center Freq 2.441000000 GHz

Start Freq 2.441000000 GHz

Stop Freq 2.441000000 GHz

CF Stop 1.000000 MHz
Auto

Freq Offset 0 Hz





Appendix E: 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
3DH5	Ant1	Hop	79	≥15	PASS

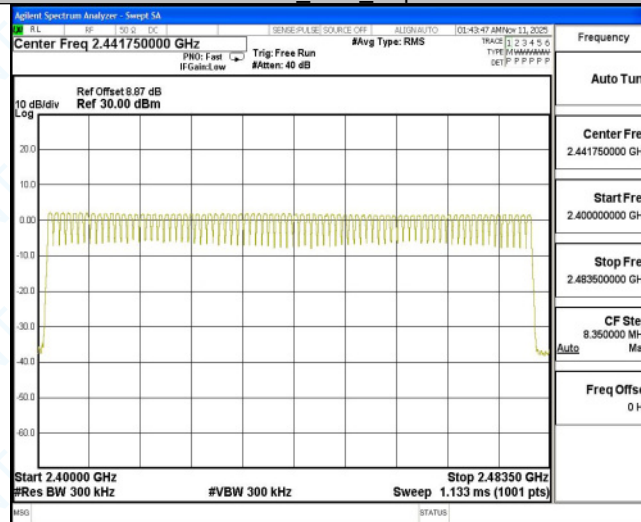
Note :

Both left and right earphone have tested, The Right earphone is the worst, only the worse case was reported.

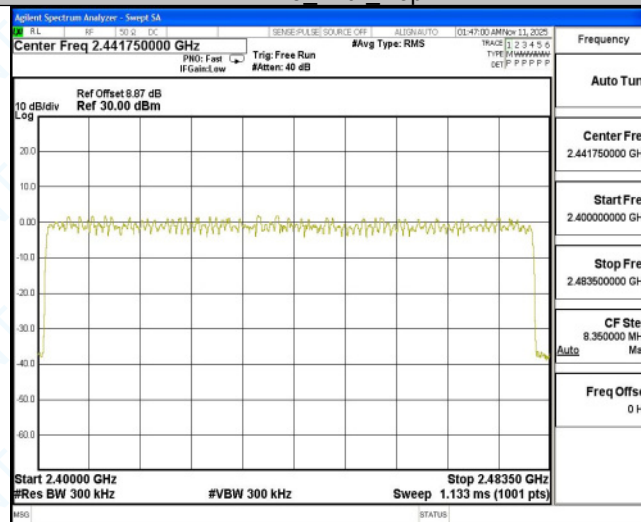


Test Graphs

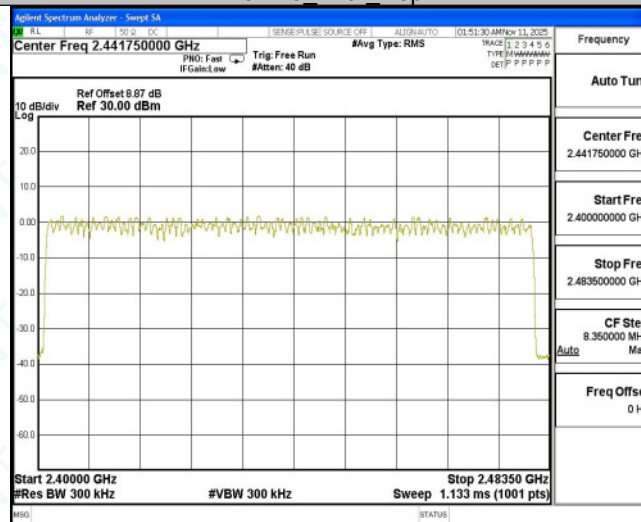
DH5_Ant1_Hop



2DH5_Ant1_Hop



3DH5_Ant1_Hop





Appendix F: Band edge measurements

Test Result

TestMode	Antenna	ChName	Freq(MHz)	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	2.95	-48.01	≤ -17.05	PASS
		High	2480	2.10	-48.47	≤ -17.9	PASS
		Low	Hop_2402	1.20	-50.08	≤ -18.8	PASS
		High	Hop_2480	1.38	-48.76	≤ -18.62	PASS
2DH5	Ant1	Low	2402	2.96	-48.35	≤ -17.05	PASS
		High	2480	2.37	-48.52	≤ -17.63	PASS
		Low	Hop_2402	-1.35	-49.8	≤ -21.35	PASS
		High	Hop_2480	-1.05	-48.83	≤ -21.05	PASS
3DH5	Ant1	Low	2402	1.54	-48.57	≤ -18.46	PASS
		High	2480	1.27	-50.18	≤ -18.73	PASS
		Low	Hop_2402	1.36	-49.49	≤ -18.64	PASS
		High	Hop_2480	1.29	-49.46	≤ -18.71	PASS

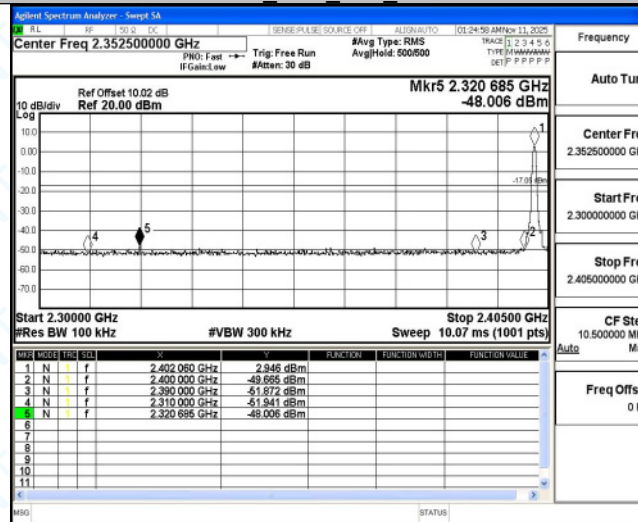
Note :

Both left and right earphone have tested, The Right earphone is the worst, only the worse case was reported.

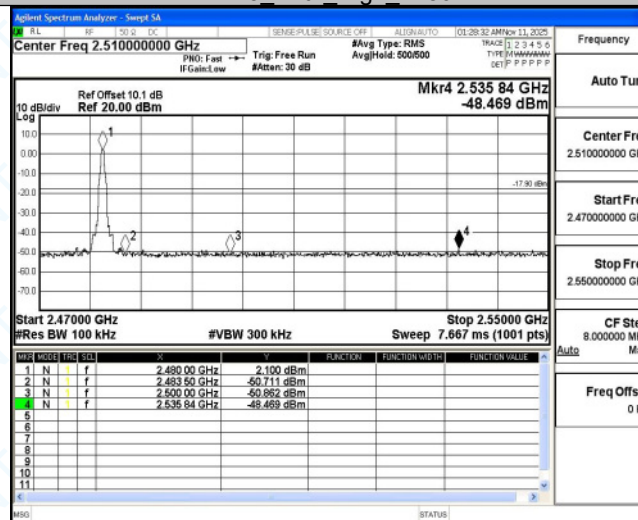


Test Graphs

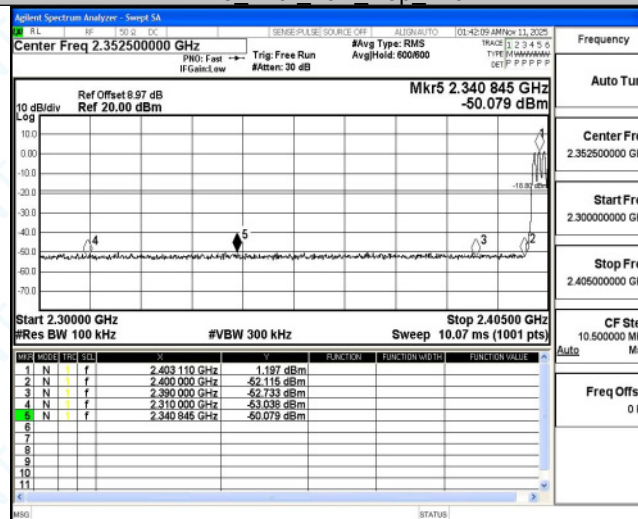
DH5_Ant1_Low_2402



DH5_Ant1_High_2480

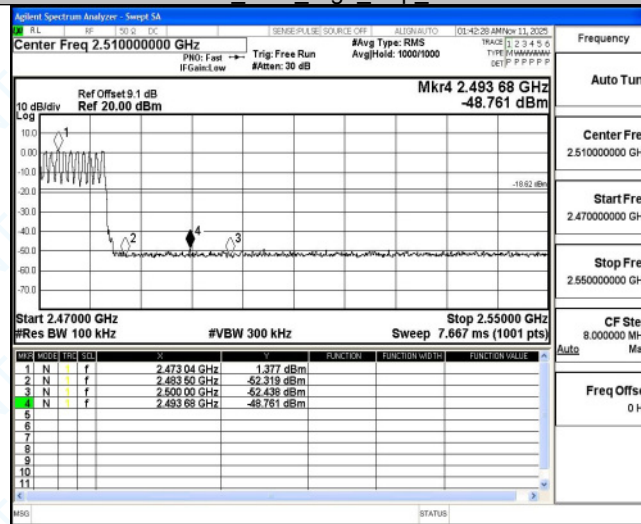


DH5_Ant1_Low_Hop_2402

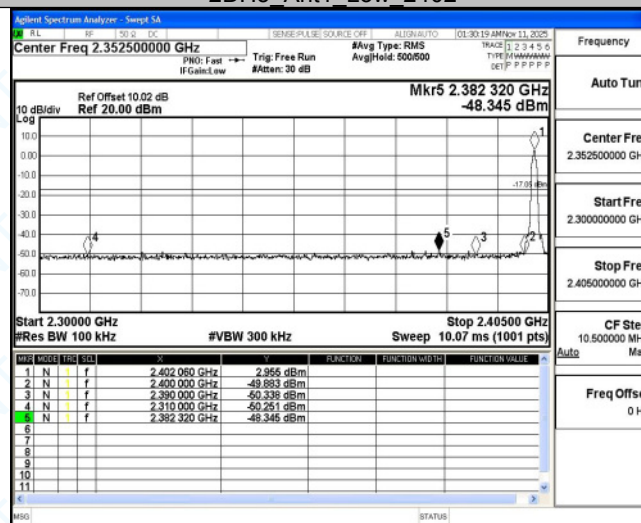




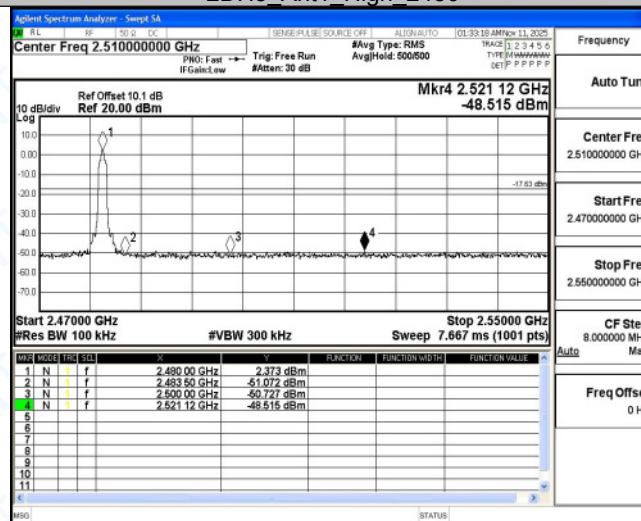
DH5_Ant1_High_Hop_2480



2DH5_Ant1_Low_2402

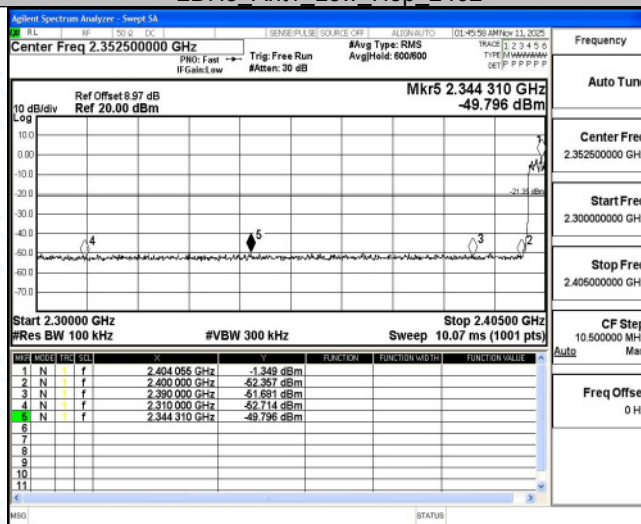


2DH5_Ant1_High_2480

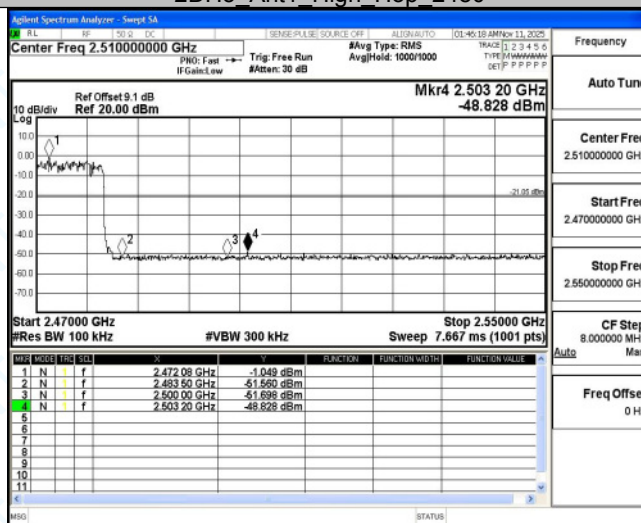




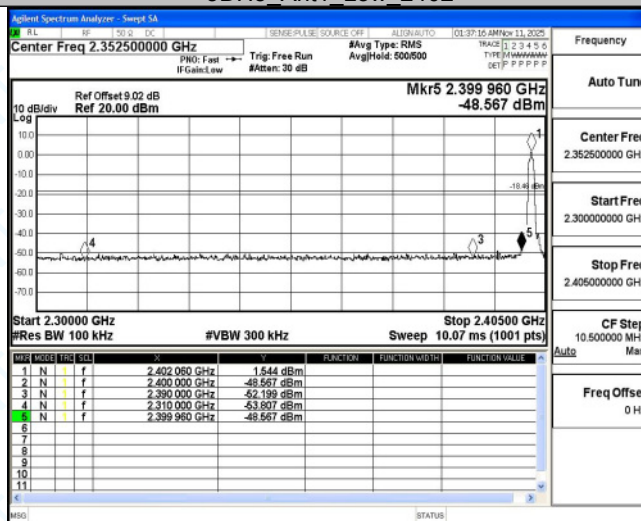
2DH5_Ant1_Low_Hop_2402



2DH5_Ant1_High_Hop_2480

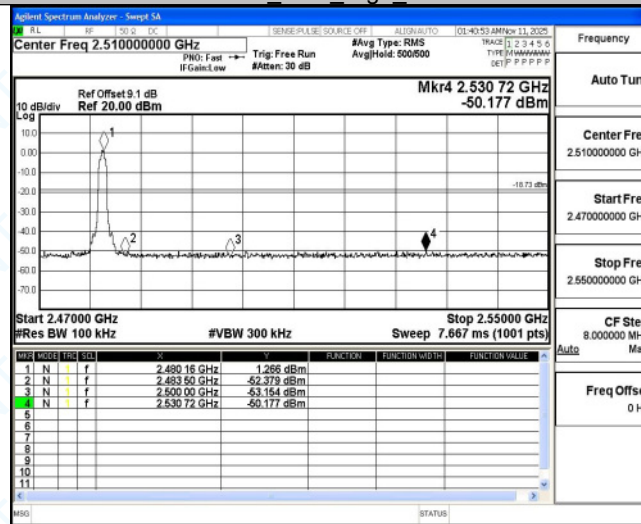


3DH5_Ant1_Low_2402

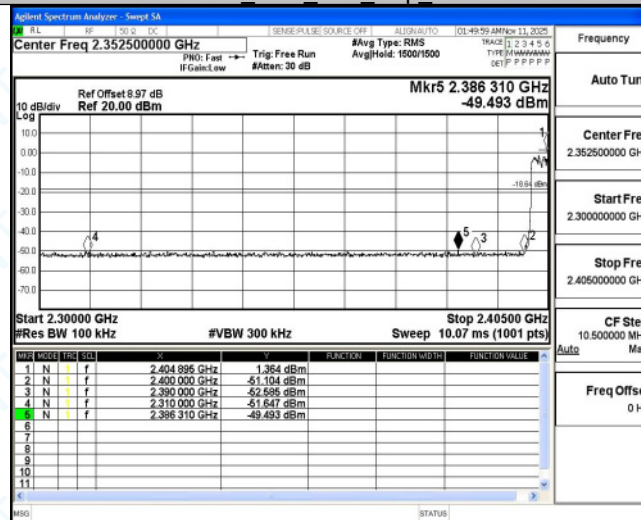




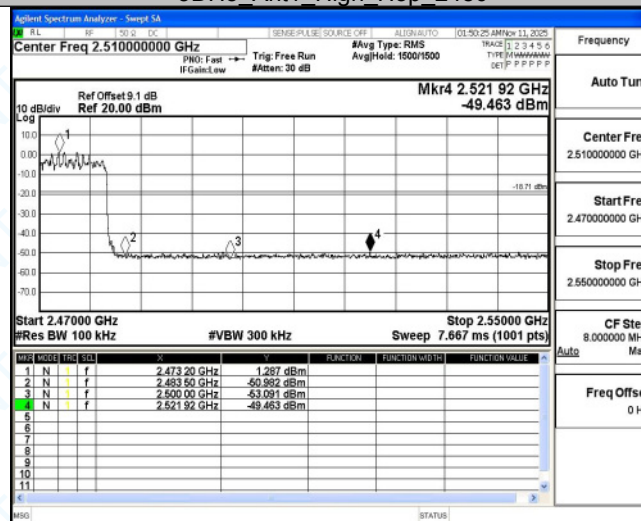
3DH5_Ant1_High_2480



3DH5_Ant1_Low_Hop_2402



3DH5_Ant1_High_Hop_2480





Appendix G: Conducted Spurious Emission

Test Result

TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	Reference	2.73	2.73	---	PASS
			30~1000	2.73	-60.74	≤ -17.27	PASS
			1000~26500	2.73	-42.82	≤ -17.27	PASS
		2441	Reference	2.51	2.51	---	PASS
			30~1000	2.51	-60.32	≤ -17.49	PASS
			1000~26500	2.51	-42.72	≤ -17.49	PASS
		2480	Reference	2.03	2.03	---	PASS
			30~1000	2.03	-60.96	≤ -17.97	PASS
			1000~26500	2.03	-42.55	≤ -17.97	PASS
2DH5	Ant1	2402	Reference	2.17	2.17	---	PASS
			30~1000	2.17	-61.44	≤ -17.83	PASS
			1000~26500	2.17	-46.39	≤ -17.83	PASS
		2441	Reference	2.10	2.10	---	PASS
			30~1000	2.10	-61.3	≤ -17.9	PASS
			1000~26500	2.10	-44.35	≤ -17.9	PASS
		2480	Reference	2.21	2.21	---	PASS
			30~1000	2.21	-61.41	≤ -17.79	PASS
			1000~26500	2.21	-46.53	≤ -17.79	PASS
3DH5	Ant1	2402	Reference	1.61	1.61	---	PASS
			30~1000	1.61	-62.29	≤ -18.39	PASS
			1000~26500	1.61	-45.01	≤ -18.39	PASS
		2441	Reference	0.95	0.95	---	PASS
			30~1000	0.95	-61.88	≤ -19.05	PASS
			1000~26500	0.95	-46.43	≤ -19.05	PASS
		2480	Reference	0.47	0.47	---	PASS
			30~1000	0.47	-62.18	≤ -19.53	PASS
			1000~26500	0.47	-47.67	≤ -19.53	PASS

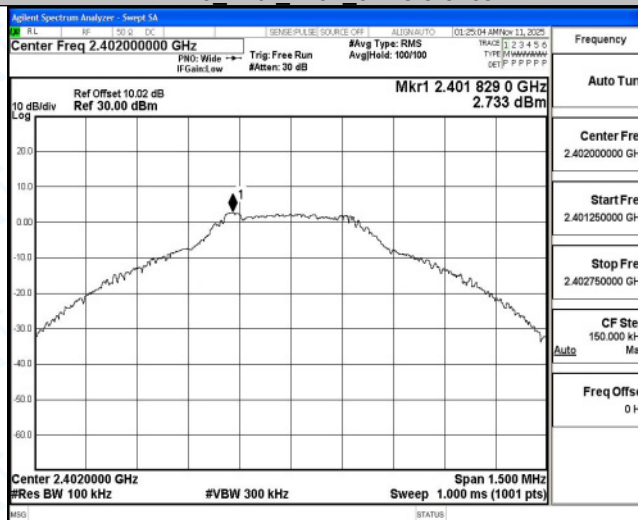
Note :

Both left and right earphone have tested, The Right earphone is the worst, only the worse case was reported.

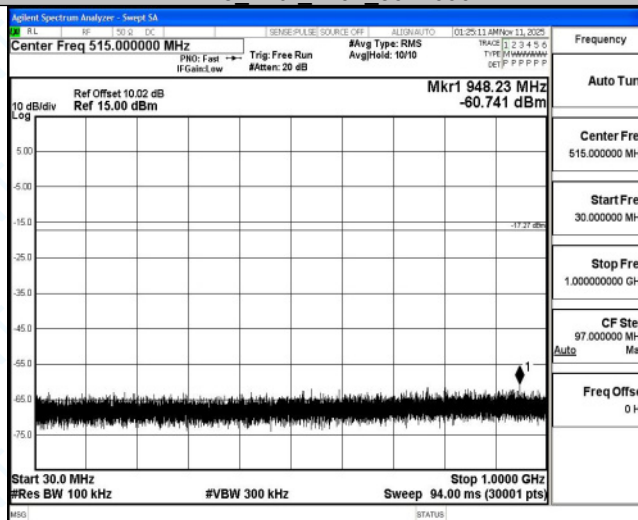


Test Graphs

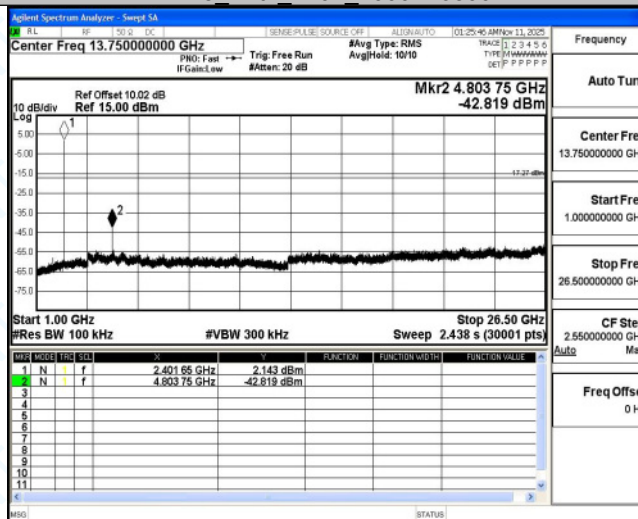
DH5_Ant1_2402_0~Reference



DH5_Ant1_2402_30~1000

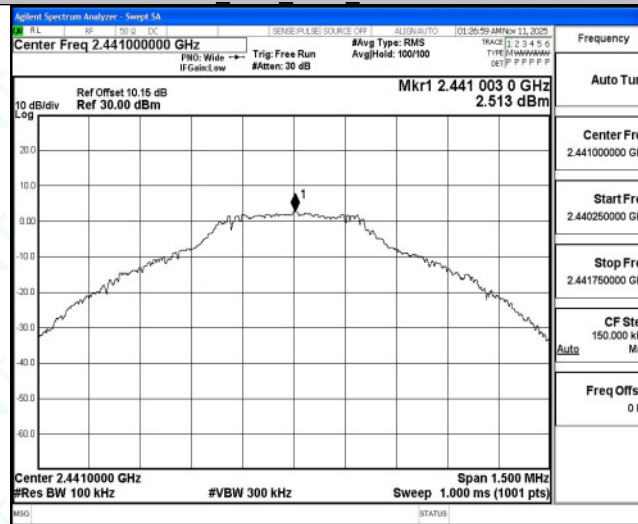


DH5_Ant1_2402_1000~26500

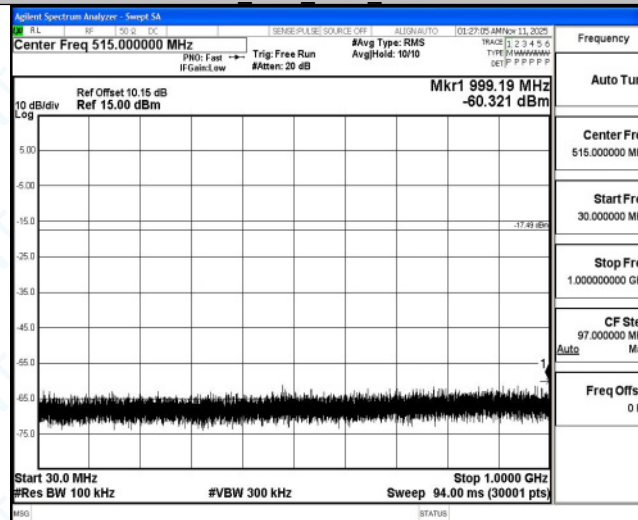




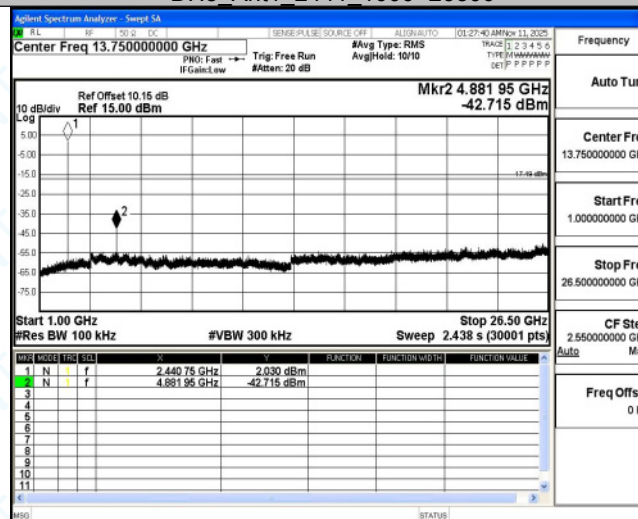
DH5_Ant1_2441_0~Reference



DH5_Ant1_2441_30~1000

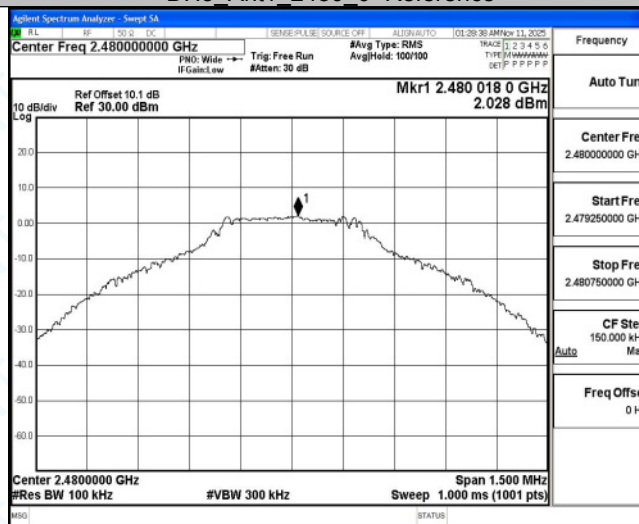


DH5_Ant1_2441_1000~26500

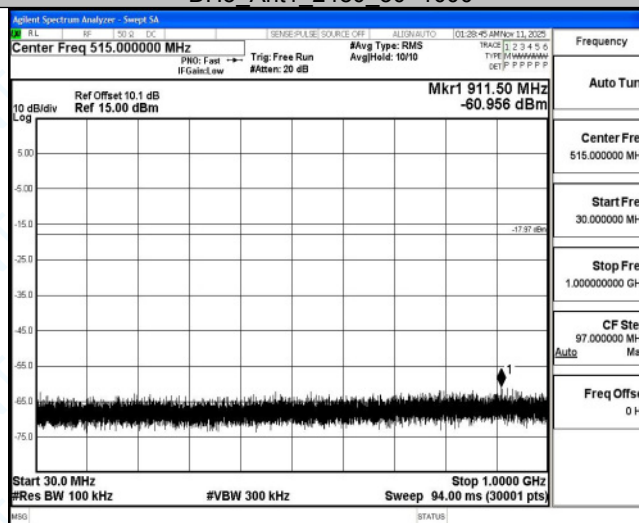




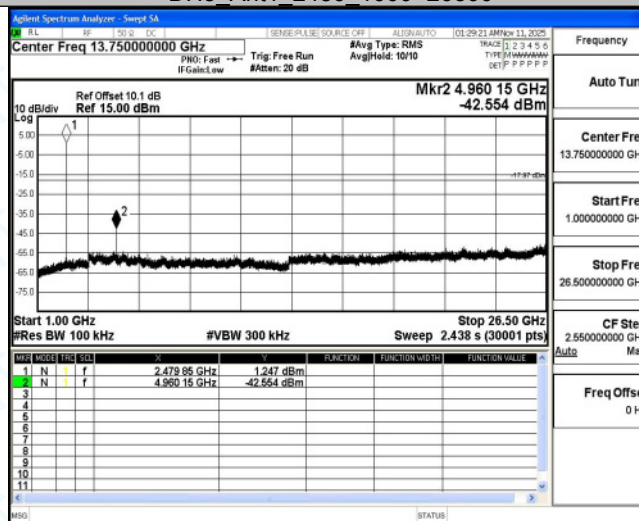
DH5_Ant1_2480_0~Reference



DH5_Ant1_2480_30~1000

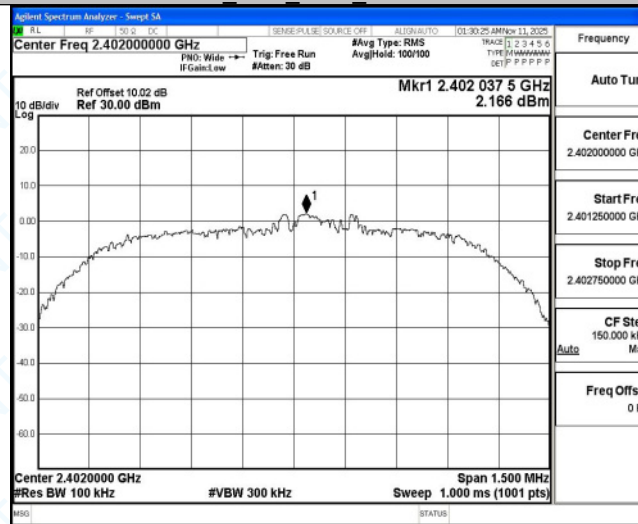


DH5_Ant1_2480_1000~26500

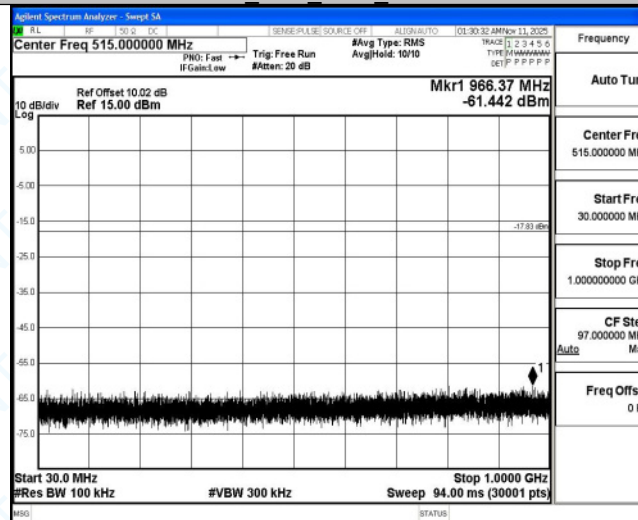




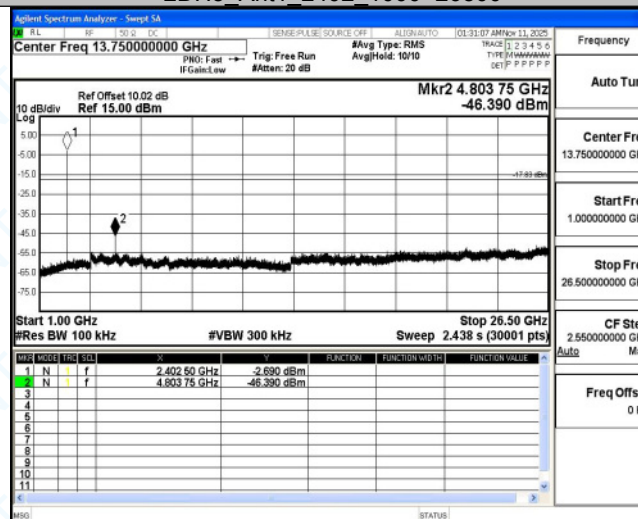
2DH5_Ant1_2402_0~Reference



2DH5_Ant1_2402_30~1000

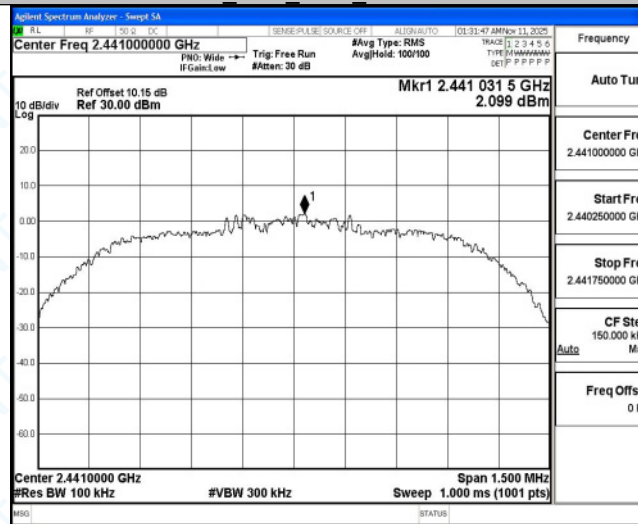


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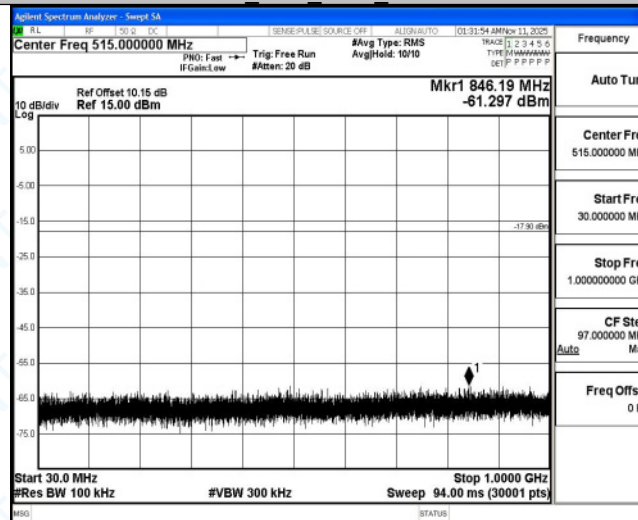




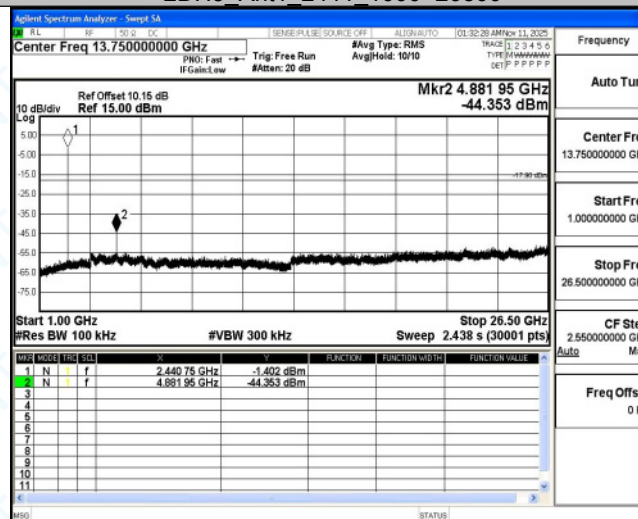
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2DH5_Ant1_2441_30~1000

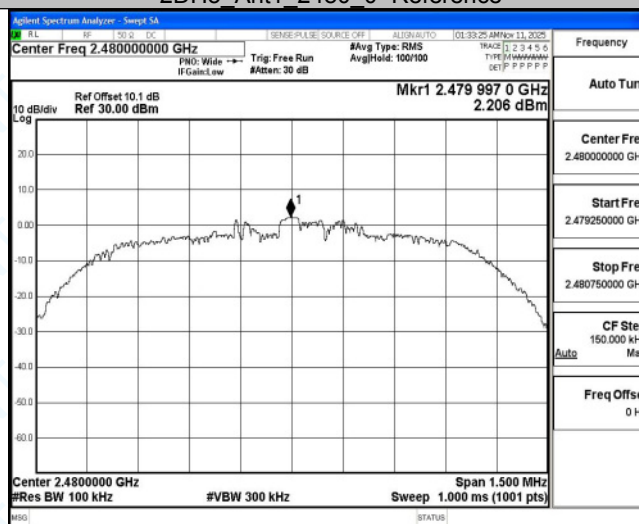


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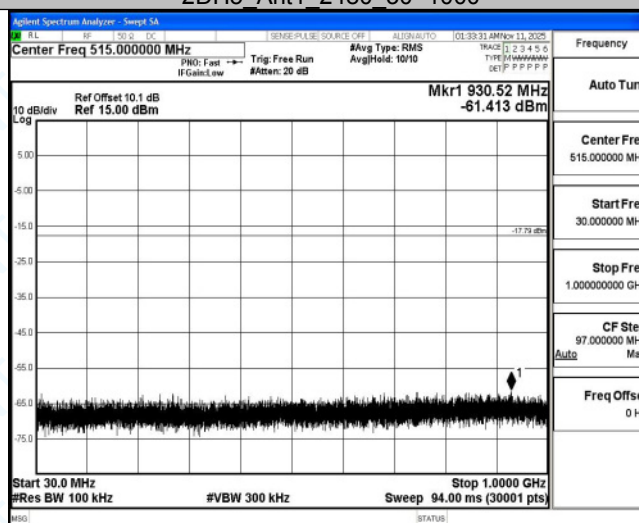




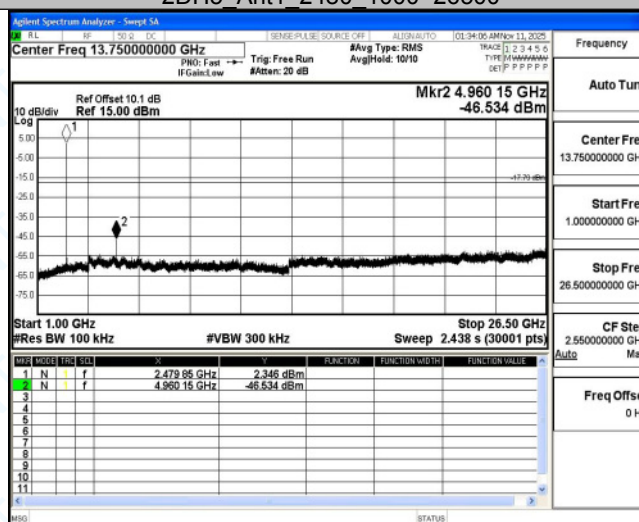
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2DH5_Ant1_2480_30~1000

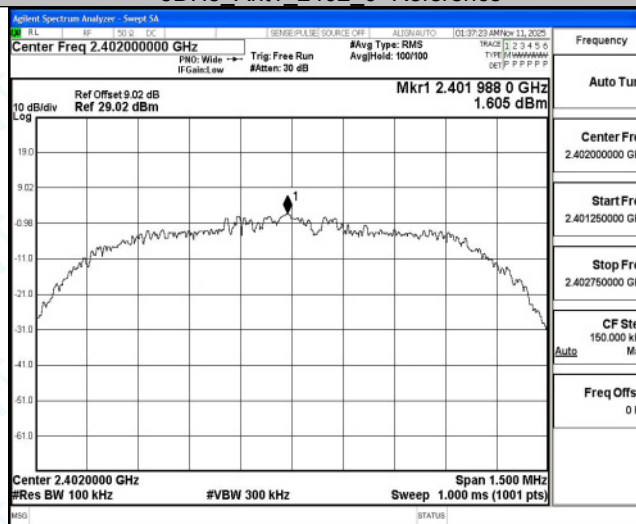


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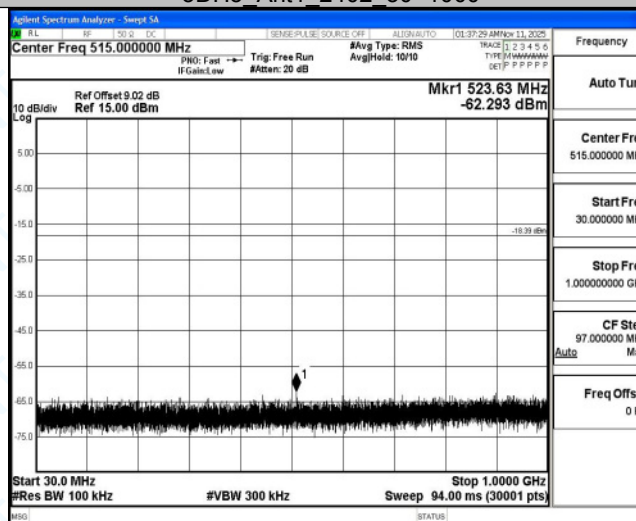




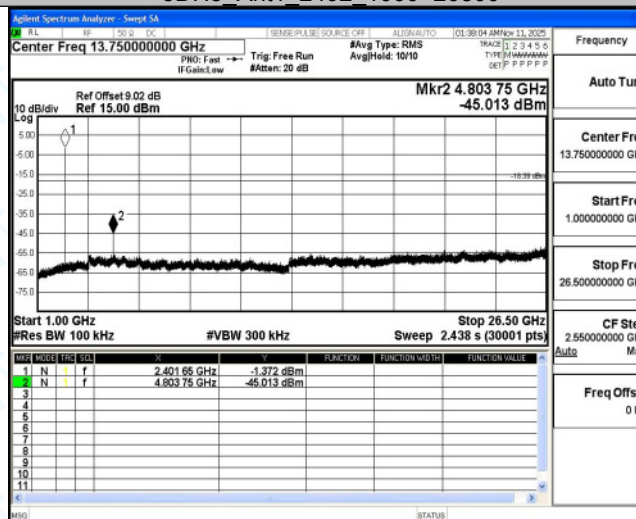
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3DH5_Ant1_2402_30~1000

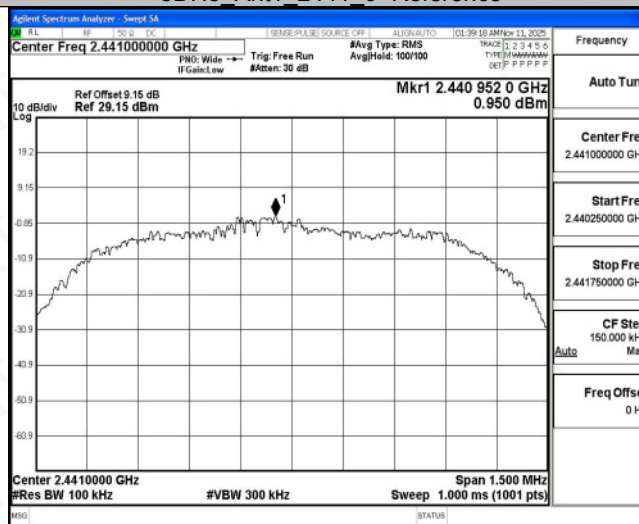


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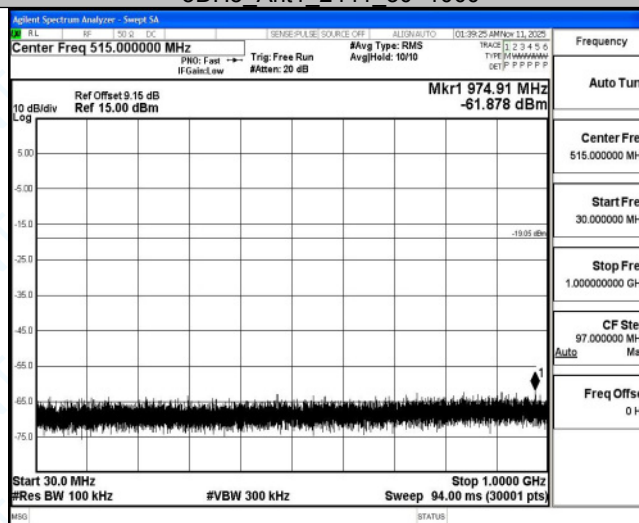




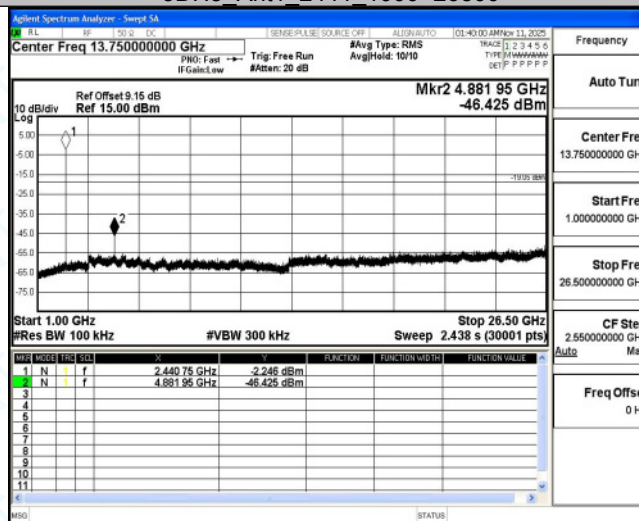
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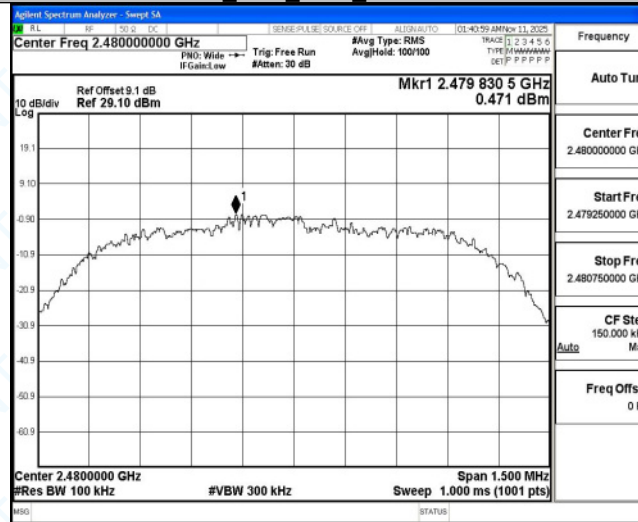


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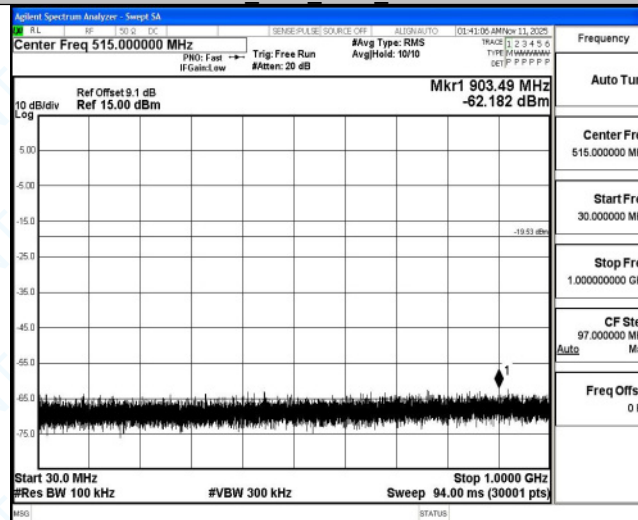




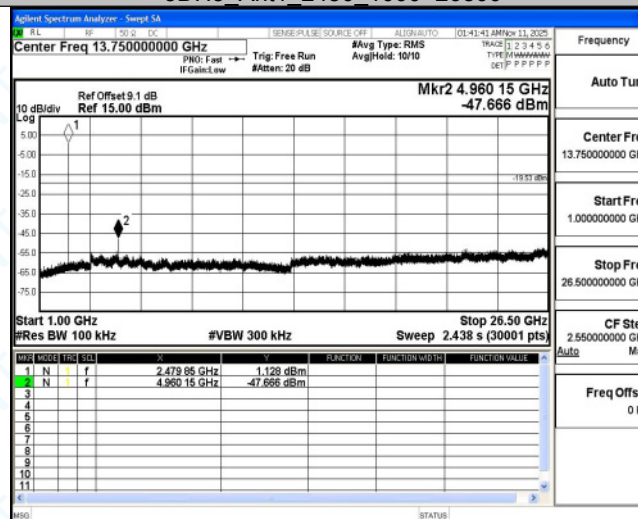
3DH5_Ant1_2480_0~Reference



3DH5_Ant1_2480_30~1000



3DH5_Ant1_2480_1000~26500



The End Report

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