

RF Test Data for Bluetooth (BR+EDR) (Conducted Measurements)

General Description of EUT	
EUT Name:	X56
Model:	X56
Sample ID:	HC-C-202601-0177-01-01-2#
Test Standard:	FCC Part 15.247
Environmental Conditions	
Ambient Temperature:	25℃
Ambient Humidity:	45%RH
Test Power Supply:	DC 3.7V
Test Engineer:	Gold. zhang
Note: For a more detailed features description, please refer to the report TBR-C-202601-0177-26	

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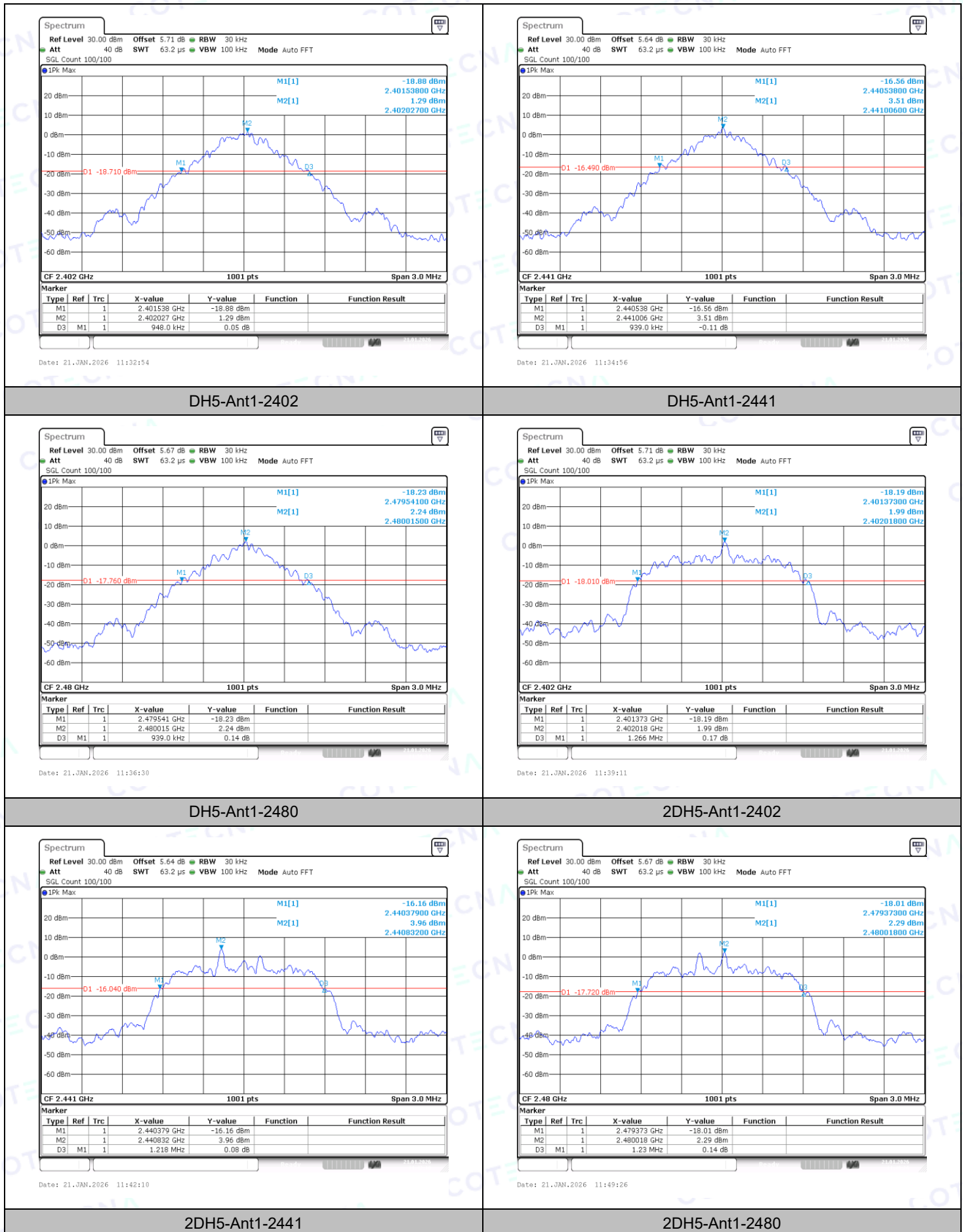
1: 20dB Emission Bandwidth

1.1 Test Result

Test Mode	Antenna	Frequency[MHz]	20dB EBW[MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.95	2401.54	2402.49	---	---
DH5	Ant1	2441	0.94	2440.54	2441.48	---	---
DH5	Ant1	2480	0.94	2479.54	2480.48	---	---
2DH5	Ant1	2402	1.27	2401.37	2402.64	---	---
2DH5	Ant1	2441	1.22	2440.38	2441.60	---	---
2DH5	Ant1	2480	1.23	2479.37	2480.60	---	---
3DH5	Ant1	2402	1.29	2401.36	2402.65	---	---
3DH5	Ant1	2441	1.28	2440.36	2441.64	---	---
3DH5	Ant1	2480	1.26	2479.37	2480.63	---	---

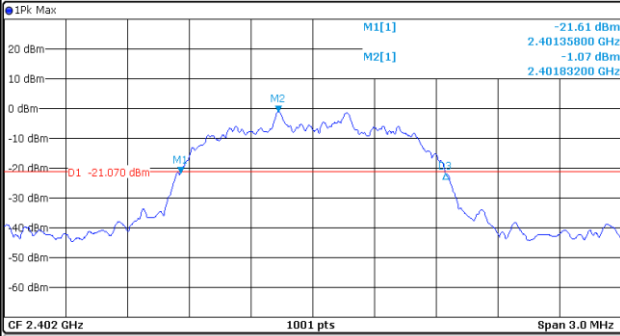
Both headphones were tested, and only the worst mode was recorded.(Left Earphone)

1.2 Test Graphs



Spectrum

Ref Level 30.00 dBm Offset 5.71 dB RBW 30 kHz
Att 40 dB SWT 63.2 μ s VBW 100 kHz Mode Auto FFT
SGL Count 100/100



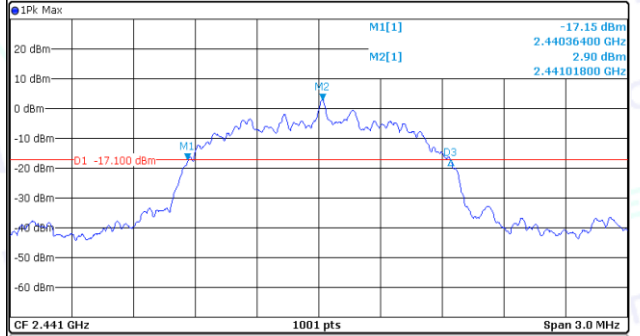
Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1		2.401358 GHz	-21.61 dBm		
M2		1		2.401832 GHz	-1.07 dBm		
D3	M1	1		1.287 MHz	-0.00 dB		

Date: 21.JAN.2026 11:52:00

3DH5-Ant1-2402

Spectrum

Ref Level 30.00 dBm Offset 5.64 dB RBW 30 kHz
Att 40 dB SWT 63.2 μ s VBW 100 kHz Mode Auto FFT
SGL Count 100/100



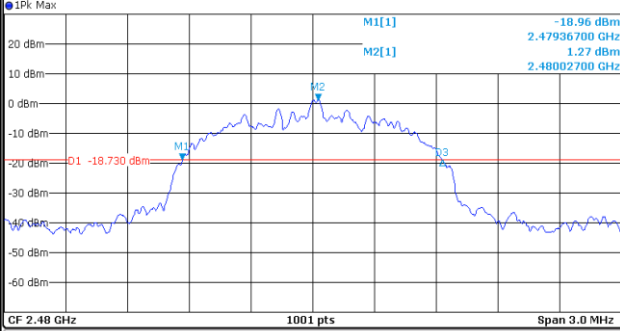
Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1		2.440364 GHz	-17.15 dBm		
M2		1		2.441018 GHz	2.90 dBm		
D3	M1	1		1.278 MHz	-0.12 dB		

Date: 21.JAN.2026 11:54:18

3DH5-Ant1-2441

Spectrum

Ref Level 30.00 dBm Offset 5.67 dB RBW 30 kHz
Att 40 dB SWT 63.2 μ s VBW 100 kHz Mode Auto FFT
SGL Count 100/100



Marker	Type	Ref	Trc	X-value	Y-value	Function	Function Result
M1		1		2.479367 GHz	-18.96 dBm		
M2		1		2.480027 GHz	1.27 dBm		
D3	M1	1		1.263 MHz	0.14 dB		

Date: 21.JAN.2026 11:55:54

3DH5-Ant1-2480

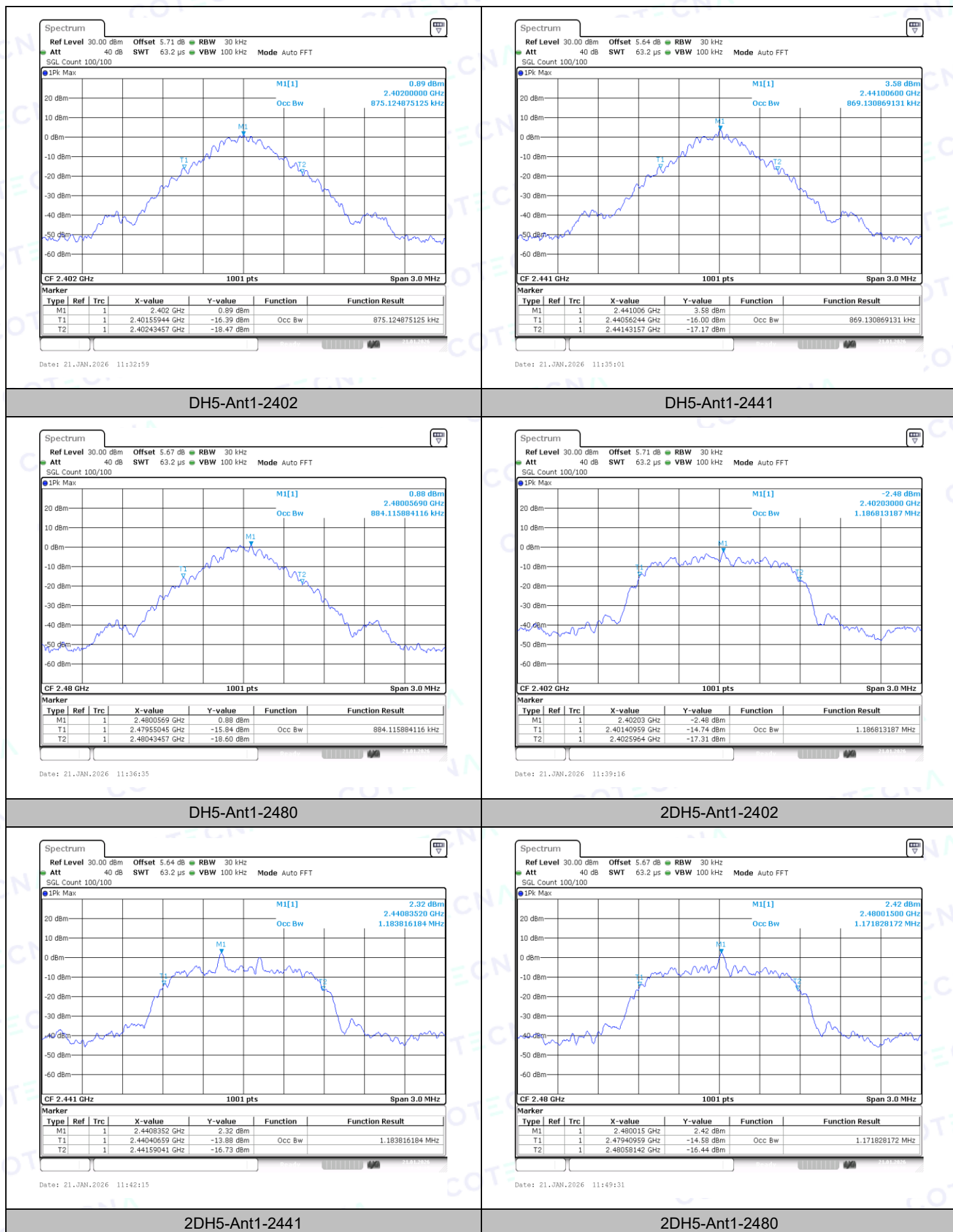
2: Occupied Channel Bandwidth

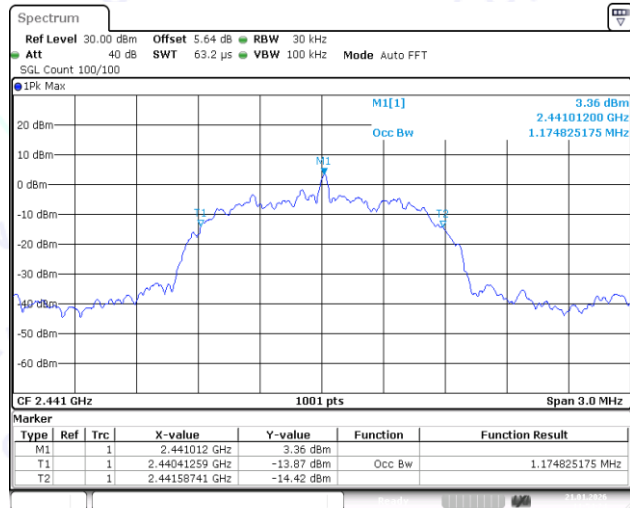
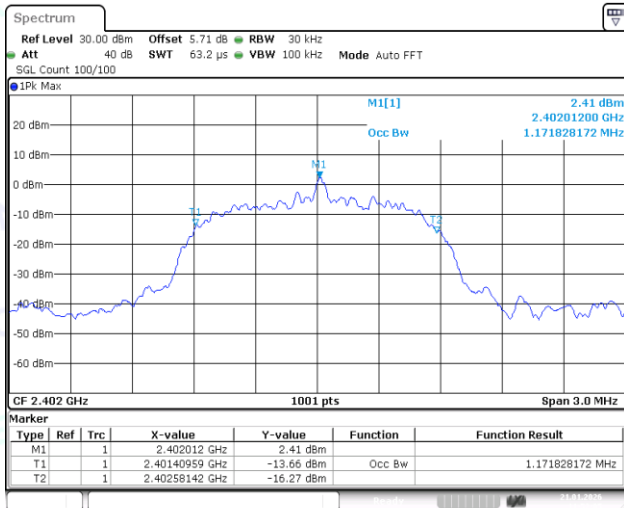
2.1 Test Result

Test Mode	Antenna	Frequency[MHz]	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
DH5	Ant1	2402	0.87512	2401.5594	2402.4346	---	---
DH5	Ant1	2441	0.86913	2440.5624	2441.4316	---	---
DH5	Ant1	2480	0.88412	2479.5504	2480.4346	---	---
2DH5	Ant1	2402	1.1868	2401.4096	2402.5964	---	---
2DH5	Ant1	2441	1.1838	2440.4066	2441.5904	---	---
2DH5	Ant1	2480	1.1718	2479.4096	2480.5814	---	---
3DH5	Ant1	2402	1.1718	2401.4096	2402.5814	---	---
3DH5	Ant1	2441	1.1748	2440.4126	2441.5874	---	---
3DH5	Ant1	2480	1.1718	2479.4156	2480.5874	---	---

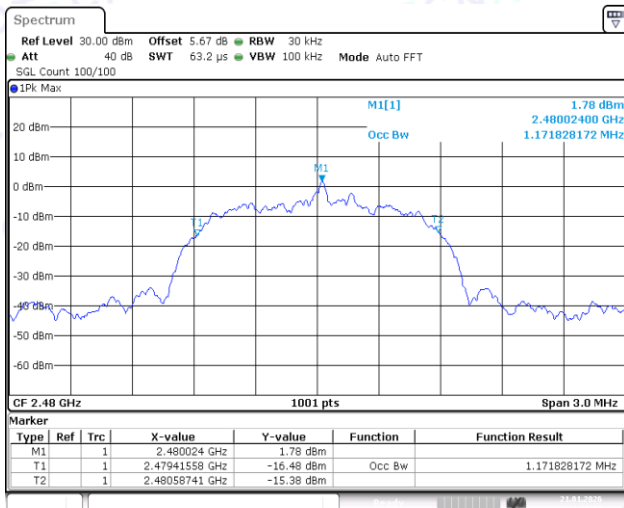
Both headphones were tested, and only the worst mode was recorded.(Left Earphone)

2.2 Test Graphs





3DH5-Ant1-2402



3DH5-Ant1-2441

3DH5-Ant1-2480

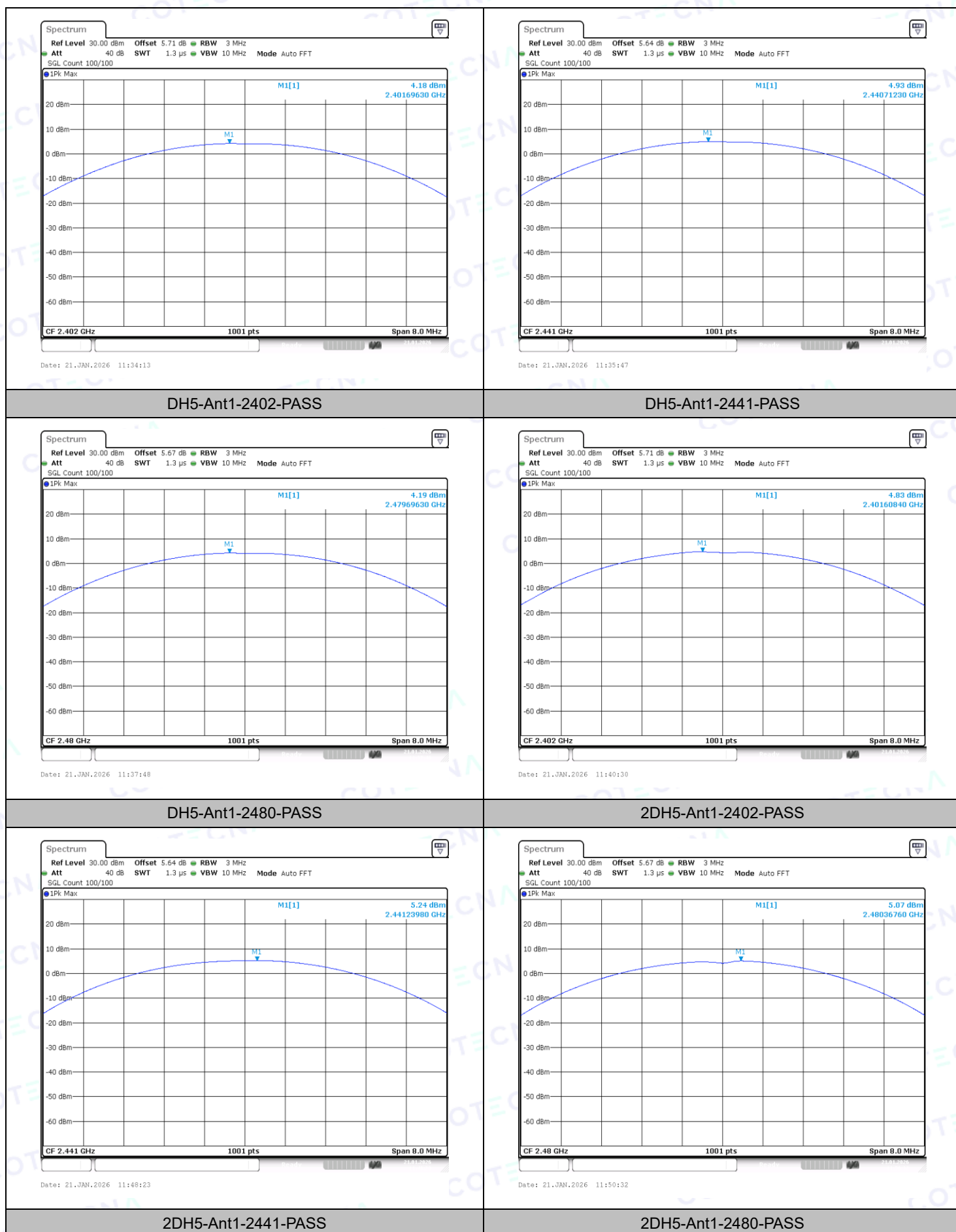
3: Maximum conducted output power

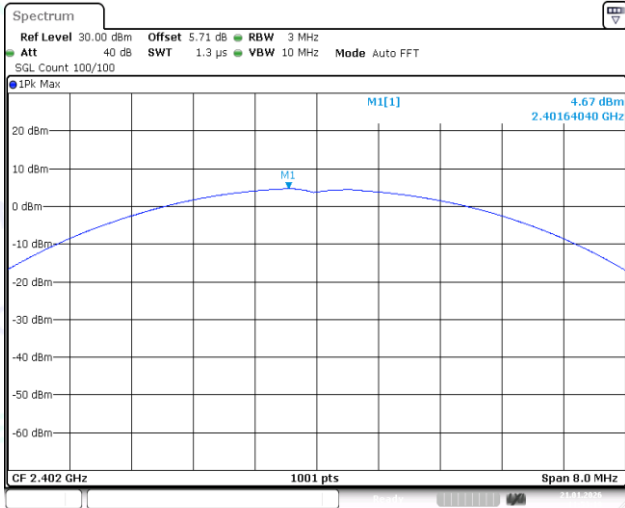
3.1 Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	4.18	≤21	PASS
DH5	Ant1	2441	4.93	≤21	PASS
DH5	Ant1	2480	4.19	≤21	PASS
2DH5	Ant1	2402	4.83	≤21	PASS
2DH5	Ant1	2441	5.24	≤21	PASS
2DH5	Ant1	2480	5.07	≤21	PASS
3DH5	Ant1	2402	4.67	≤21	PASS
3DH5	Ant1	2441	5.13	≤21	PASS
3DH5	Ant1	2480	5.01	≤21	PASS

Only showed the worst mode test data. (Left Earphone)

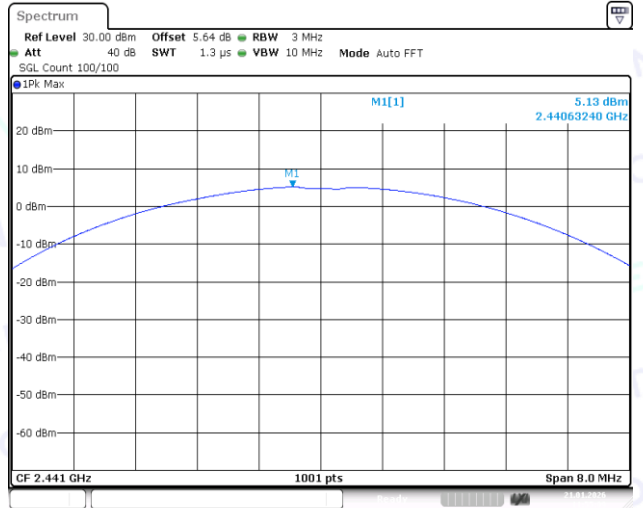
3.2 Test Graphs





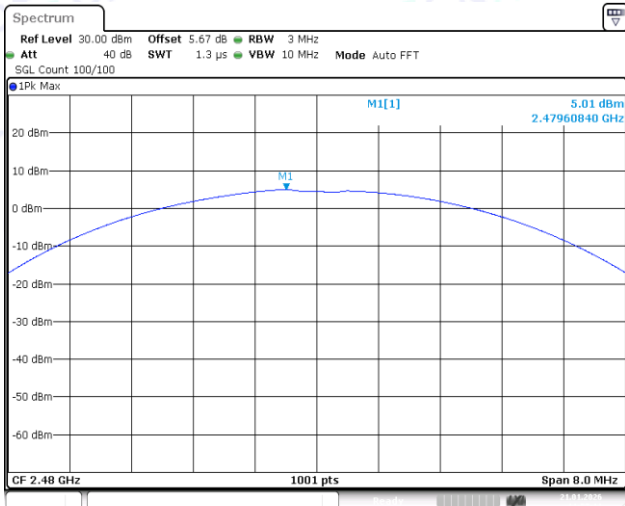
Date: 21.JAN.2026 11:53:19

3DH5-Ant1-2402-PASS



Date: 21.JAN.2026 11:55:09

3DH5-Ant1-2441-PASS



Date: 21.JAN.2026 11:57:12

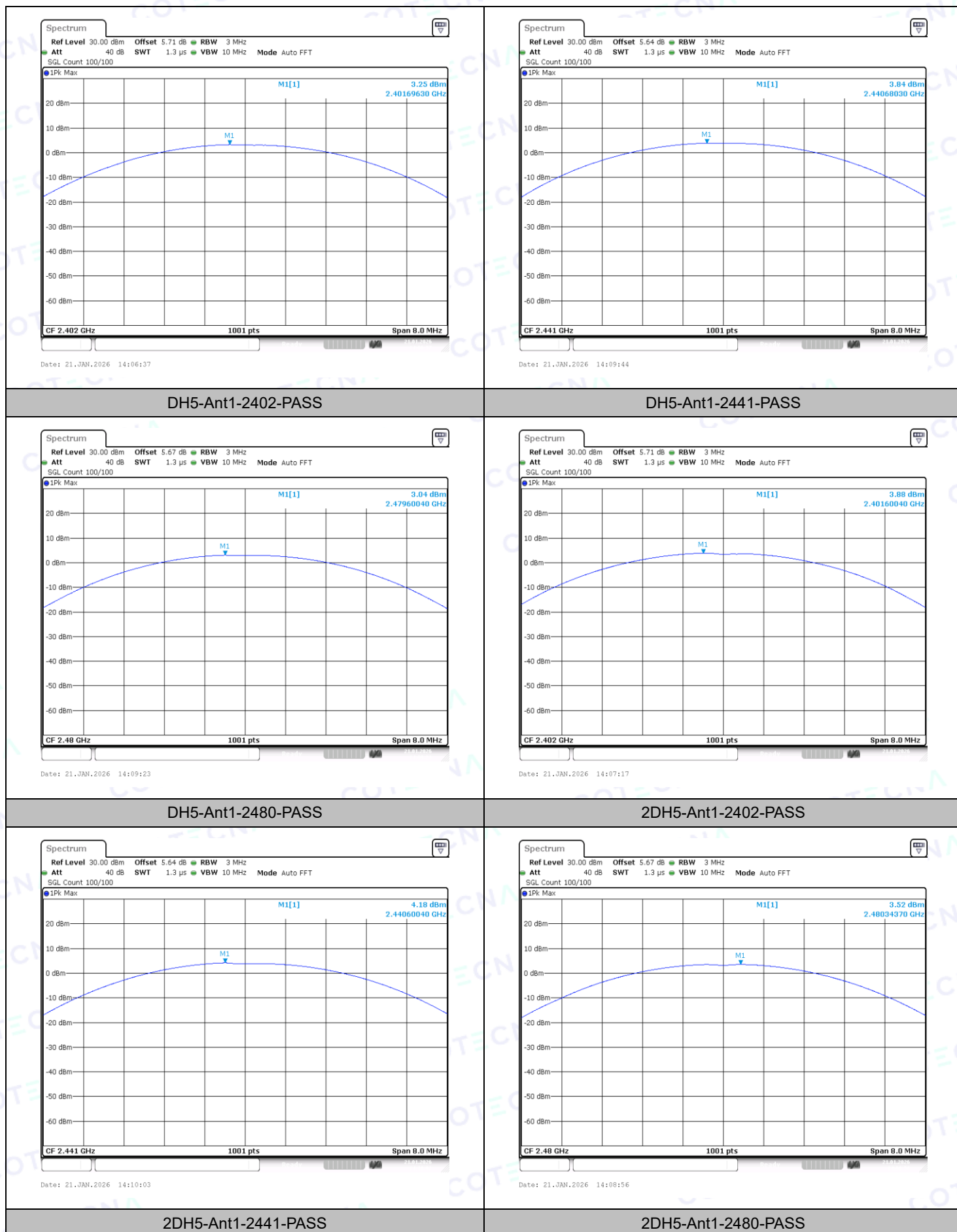
3DH5-Ant1-2480-PASS

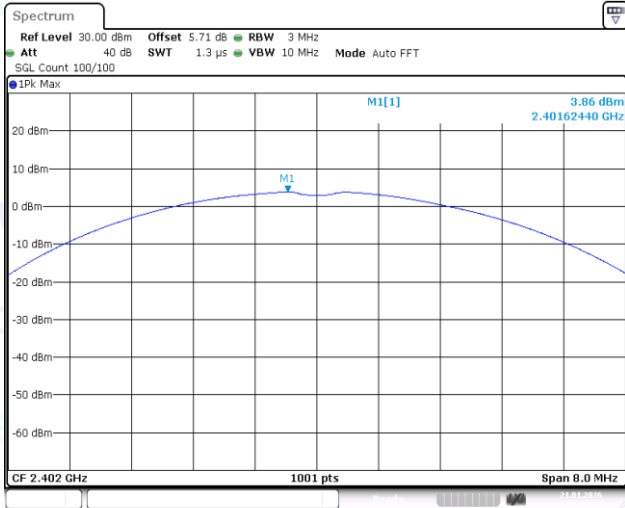
3.3 Test Result Peak

Test Mode	Antenna	Frequency[MHz]	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
DH5	Ant1	2402	3.25	≤21	PASS
DH5	Ant1	2441	3.84	≤21	PASS
DH5	Ant1	2480	3.04	≤21	PASS
2DH5	Ant1	2402	3.88	≤21	PASS
2DH5	Ant1	2441	4.18	≤21	PASS
2DH5	Ant1	2480	3.52	≤21	PASS
3DH5	Ant1	2402	3.86	≤21	PASS
3DH5	Ant1	2441	4.98	≤21	PASS
3DH5	Ant1	2480	4.36	≤21	PASS

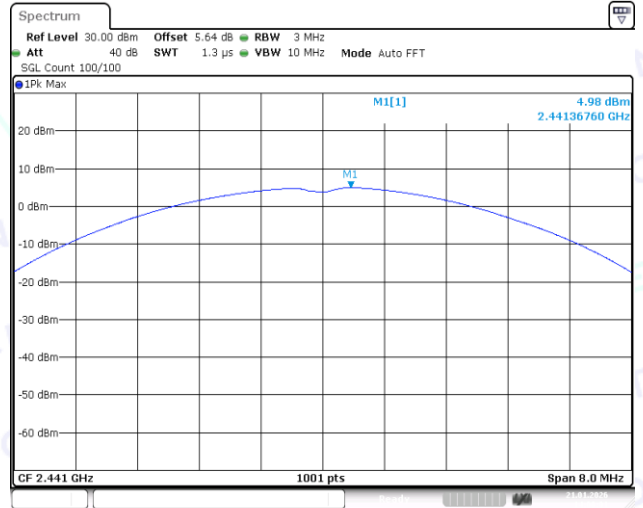
Only showed the worst mode test data. (Right Earphone)

3.4 Test Graphs

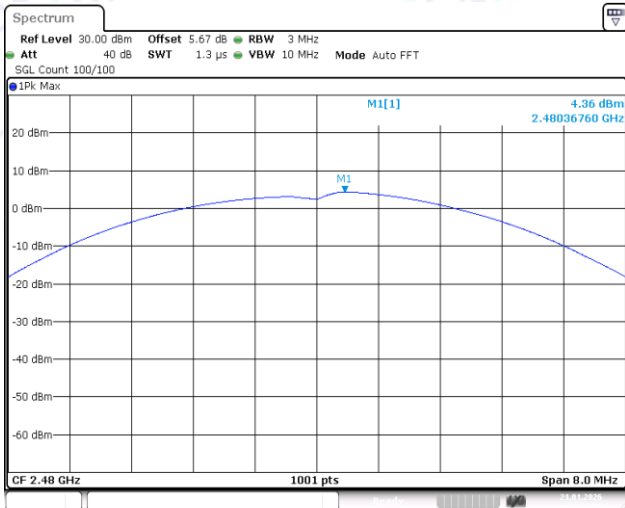




3DH5-Ant1-2402-PASS



3DH5-Ant1-2441-PASS



3DH5-Ant1-2480-PASS

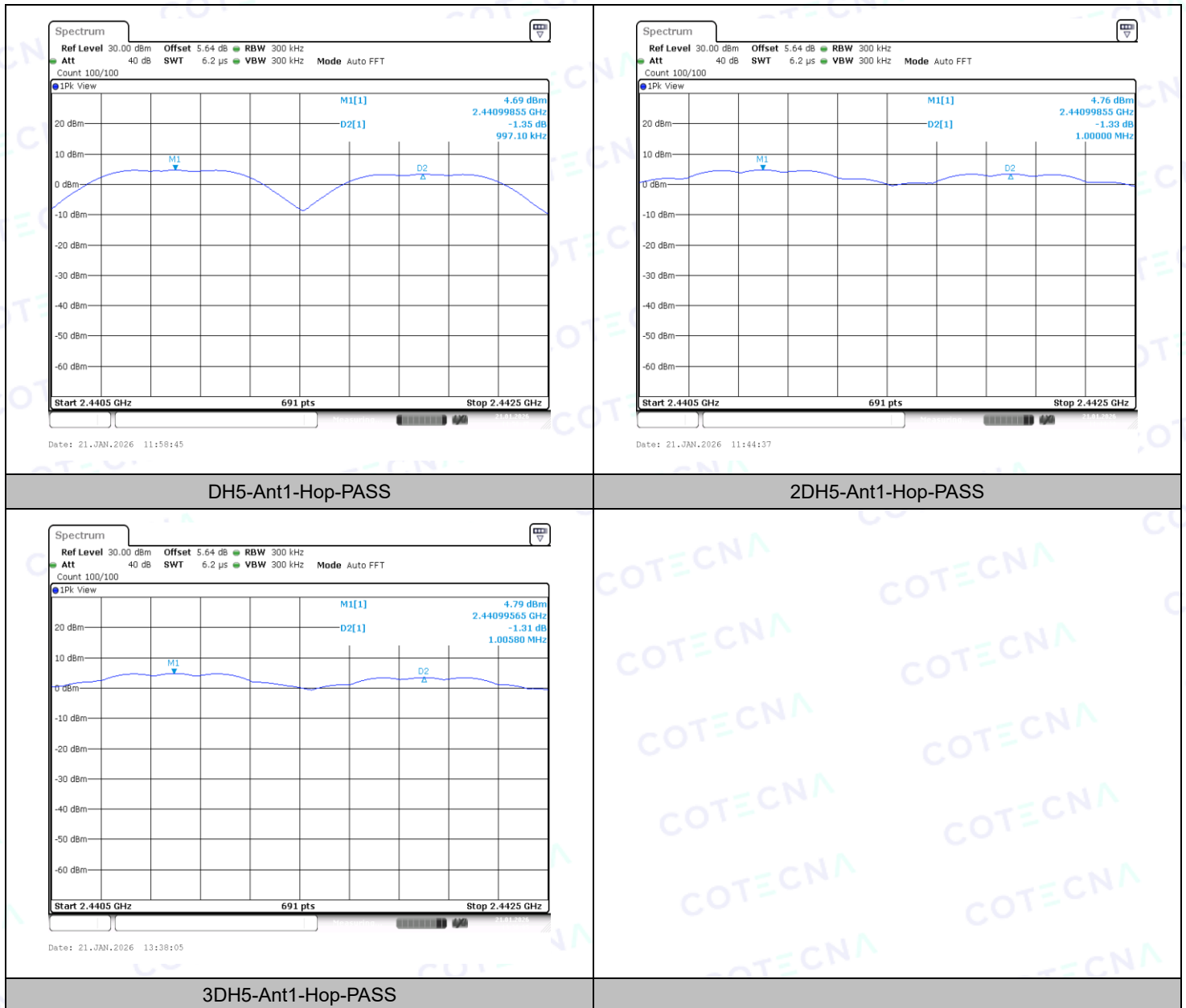
4: Carrier frequency separation

4.1 Test Result

TestMode	Antenna	Frequency[MHz]	Result[MHz]	Limit[MHz]	Verdict
DH5	Ant1	Hop	0.997	≥0.633	PASS
2DH5	Ant1	Hop	1	≥0.847	PASS
3DH5	Ant1	Hop	1.006	≥0.860	PASS

Both headphones were tested, and only the worst mode was recorded.(Left Earphone)

4.2 Test Graphs



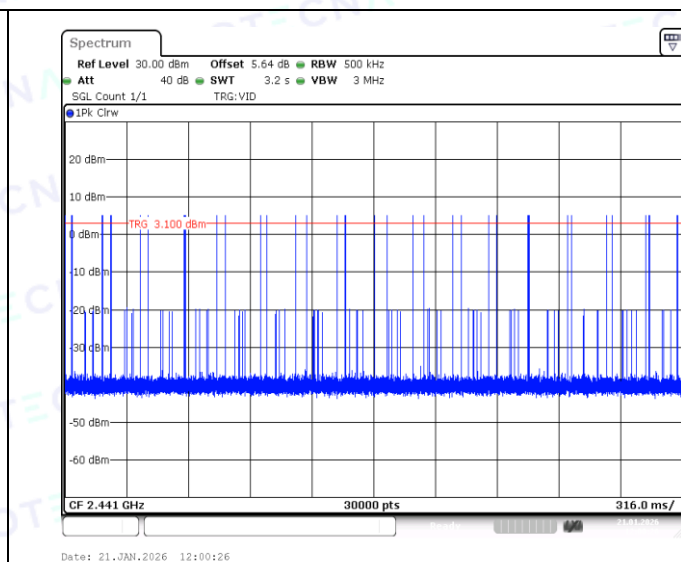
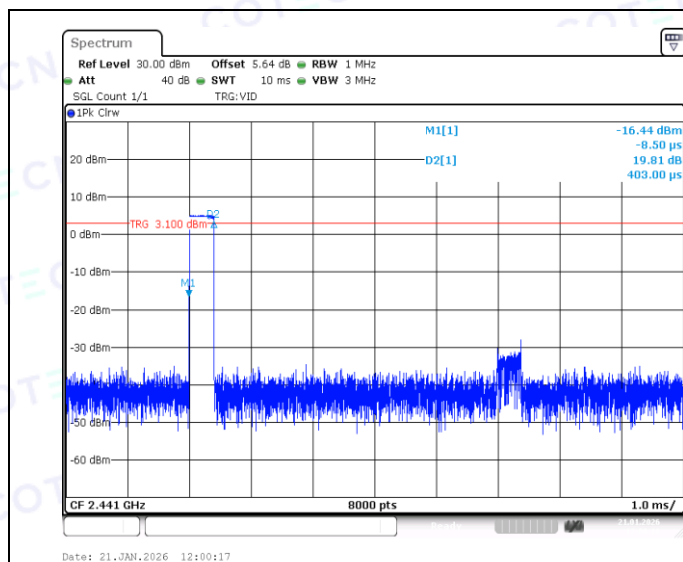
5: Time of occupancy

5.1 Test Result

TestMode	Antenna	Frequency[MHz]	BurstWidth [ms]	TotalHops [Num]	Result[s]	Limit[s]	Verdict
DH1	Ant1	Hop	0.403	330	0.133	≤0.4	PASS
DH3	Ant1	Hop	1.650	190	0.314	≤0.4	PASS
DH5	Ant1	Hop	2.892	70	0.202	≤0.4	PASS
2DH1	Ant1	Hop	0.413	330	0.136	≤0.4	PASS
2DH3	Ant1	Hop	1.656	180	0.298	≤0.4	PASS
2DH5	Ant1	Hop	2.897	120	0.348	≤0.4	PASS
3DH1	Ant1	Hop	0.414	320	0.132	≤0.4	PASS
3DH3	Ant1	Hop	1.656	200	0.331	≤0.4	PASS
3DH5	Ant1	Hop	2.900	130	0.377	≤0.4	PASS

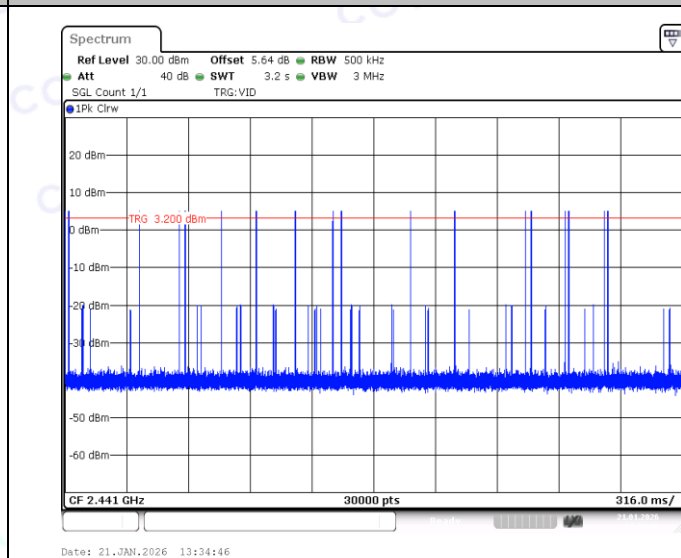
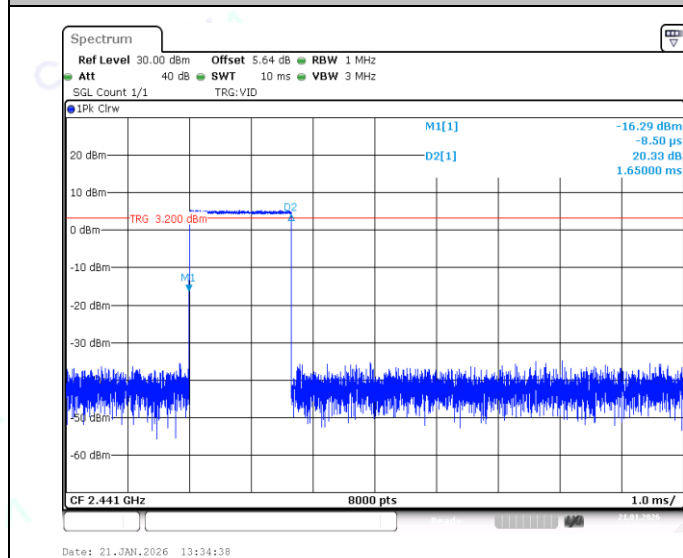
Both headphones were tested, and only the worst mode was recorded.(Left Earphone)

5.2 Test Graphs



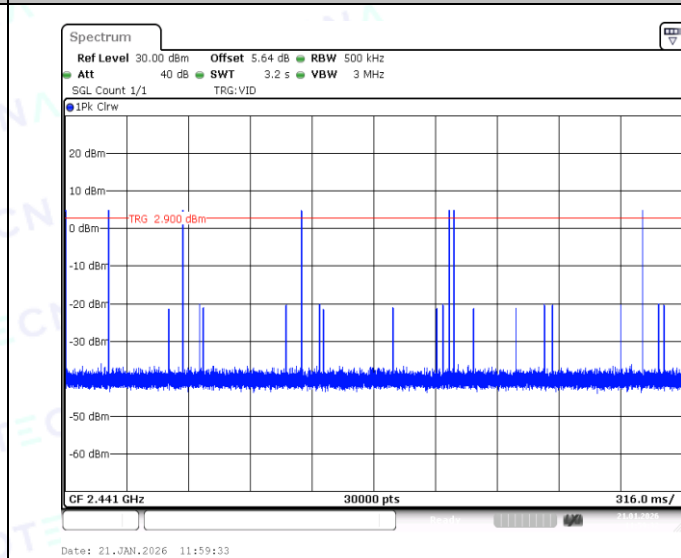
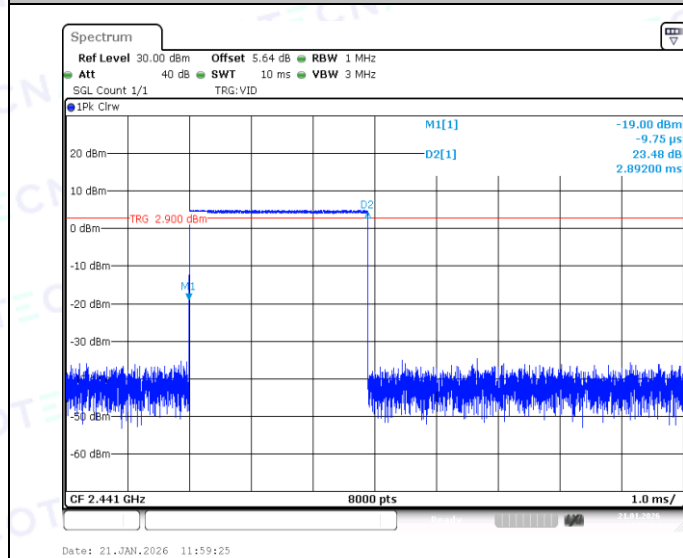
DH1-Ant1-Hop-PASS

DH1-Ant1-Hop-PASS



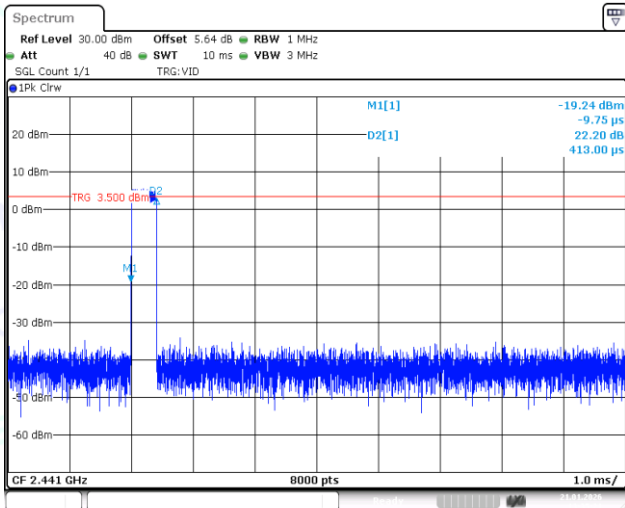
DH3-Ant1-Hop-PASS

DH3-Ant1-Hop-PASS



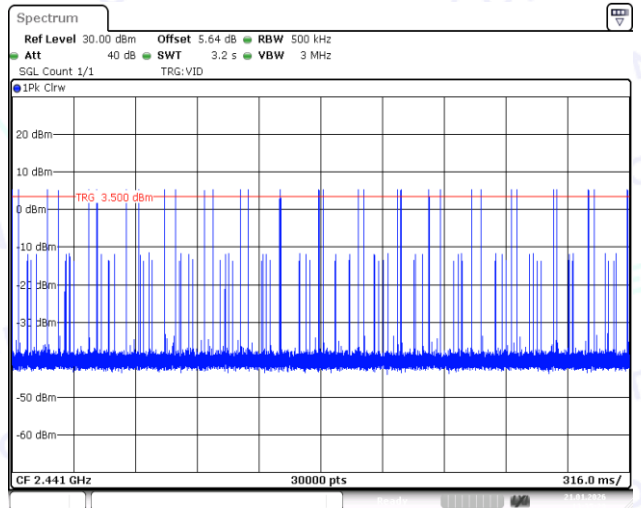
DH5-Ant1-Hop-PASS

DH5-Ant1-Hop-PASS



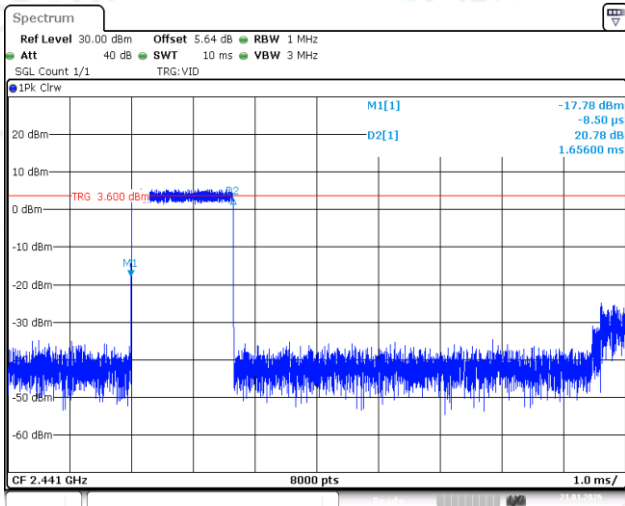
Date: 21.JAN.2026 13:35:21

2DH1-Ant1-Hop-PASS



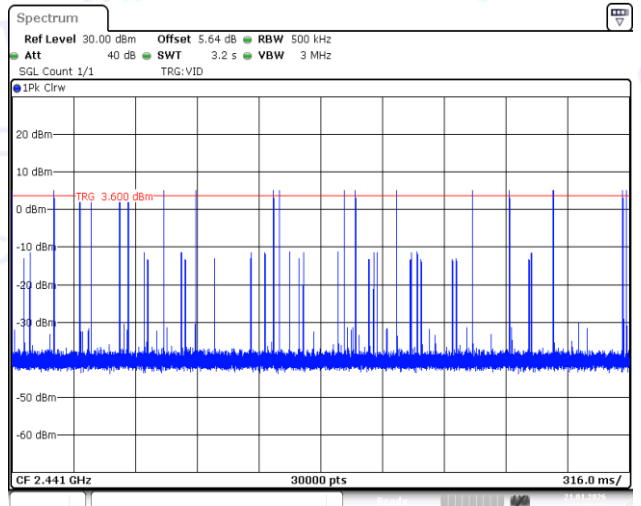
Date: 21.JAN.2026 13:35:29

2DH1-Ant1-Hop-PASS



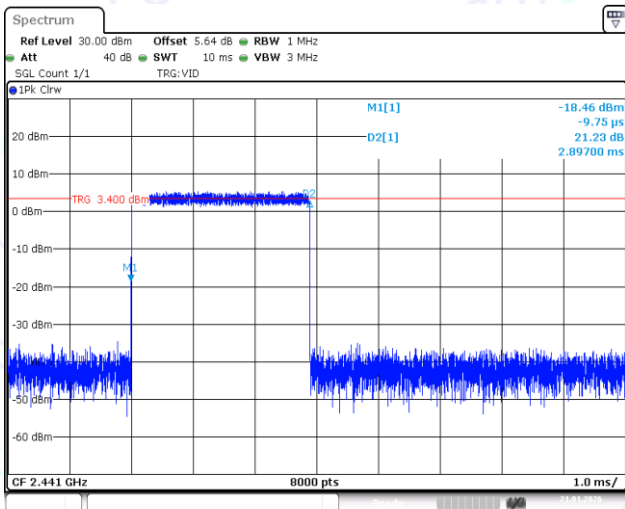
Date: 21.JAN.2026 13:35:59

2DH3-Ant1-Hop-PASS



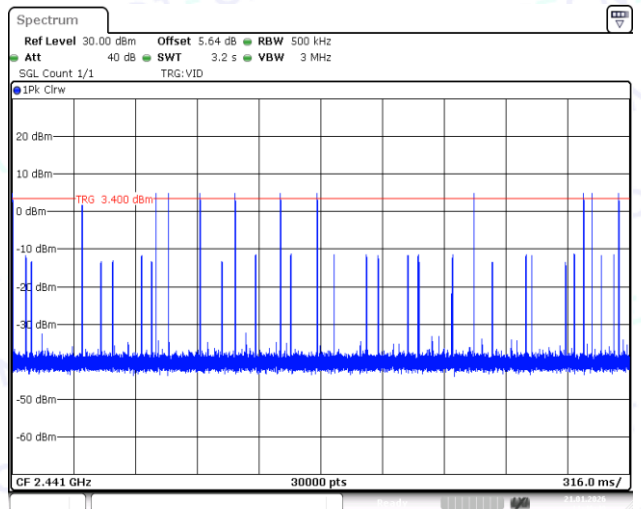
Date: 21.JAN.2026 13:36:08

2DH3-Ant1-Hop-PASS



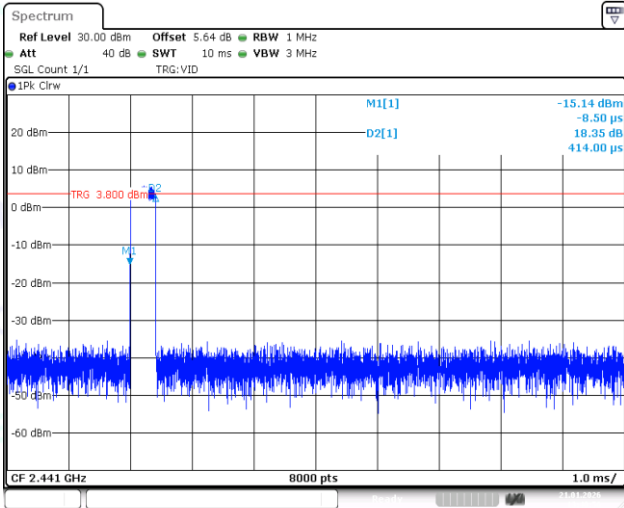
Date: 21.JAN.2026 11:46:41

2DH5-Ant1-Hop-PASS



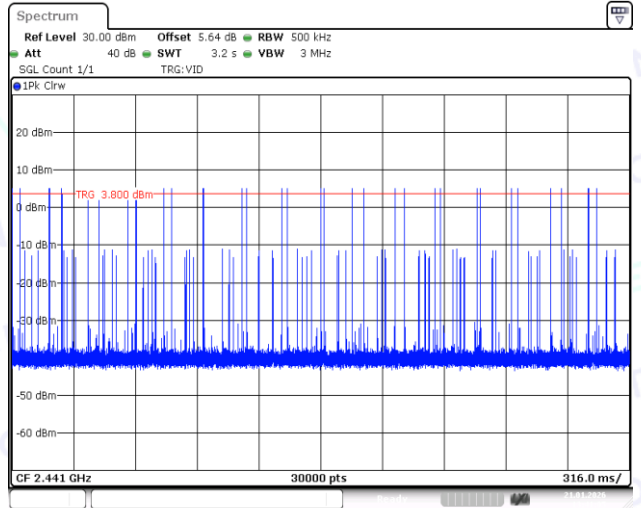
Date: 21.JAN.2026 11:46:49

2DH5-Ant1-Hop-PASS



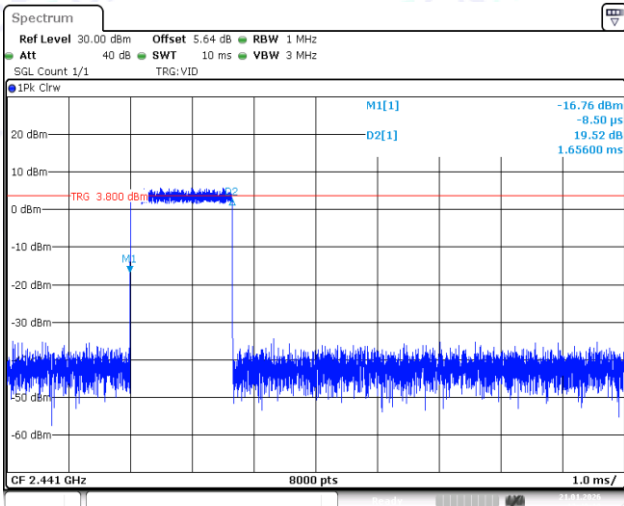
Date: 21.JAN.2026 13:40:56

3DH1-Ant1-Hop-PASS

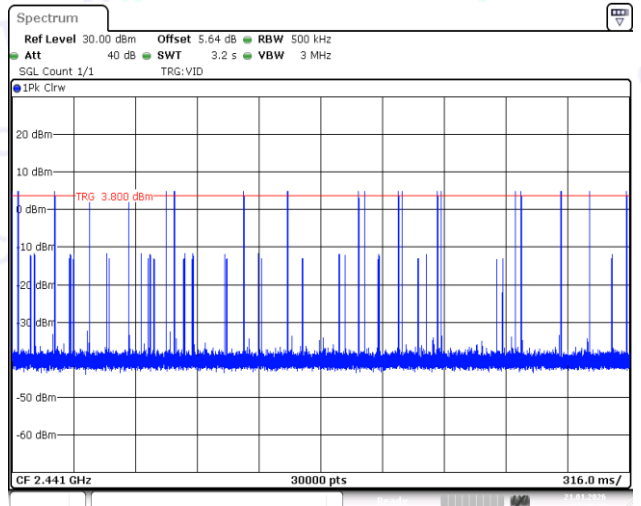


Date: 21.JAN.2026 13:41:05

3DH1-Ant1-Hop-PASS



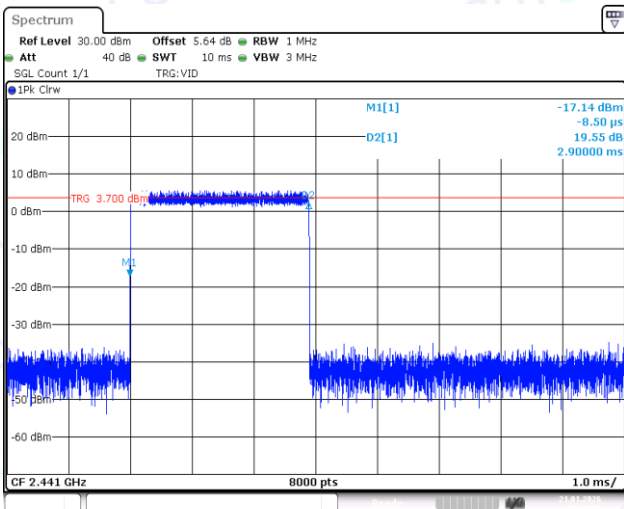
Date: 21.JAN.2026 13:40:19



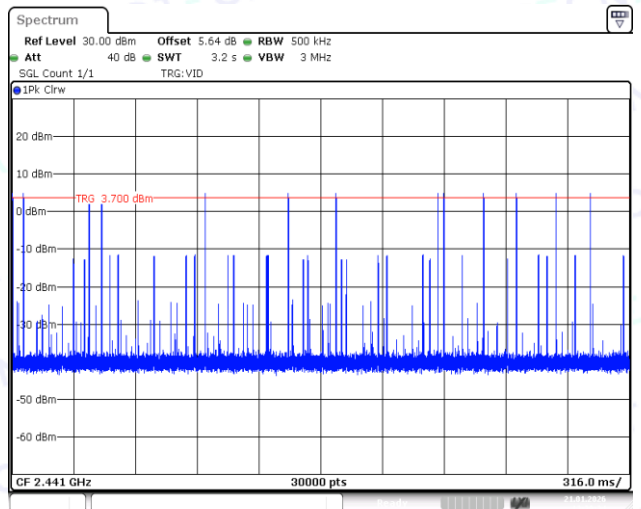
Date: 21.JAN.2026 13:40:27

3DH3-Ant1-Hop-PASS

3DH3-Ant1-Hop-PASS



Date: 21.JAN.2026 13:39:26



Date: 21.JAN.2026 13:39:34

3DH5-Ant1-Hop-PASS

3DH5-Ant1-Hop-PASS

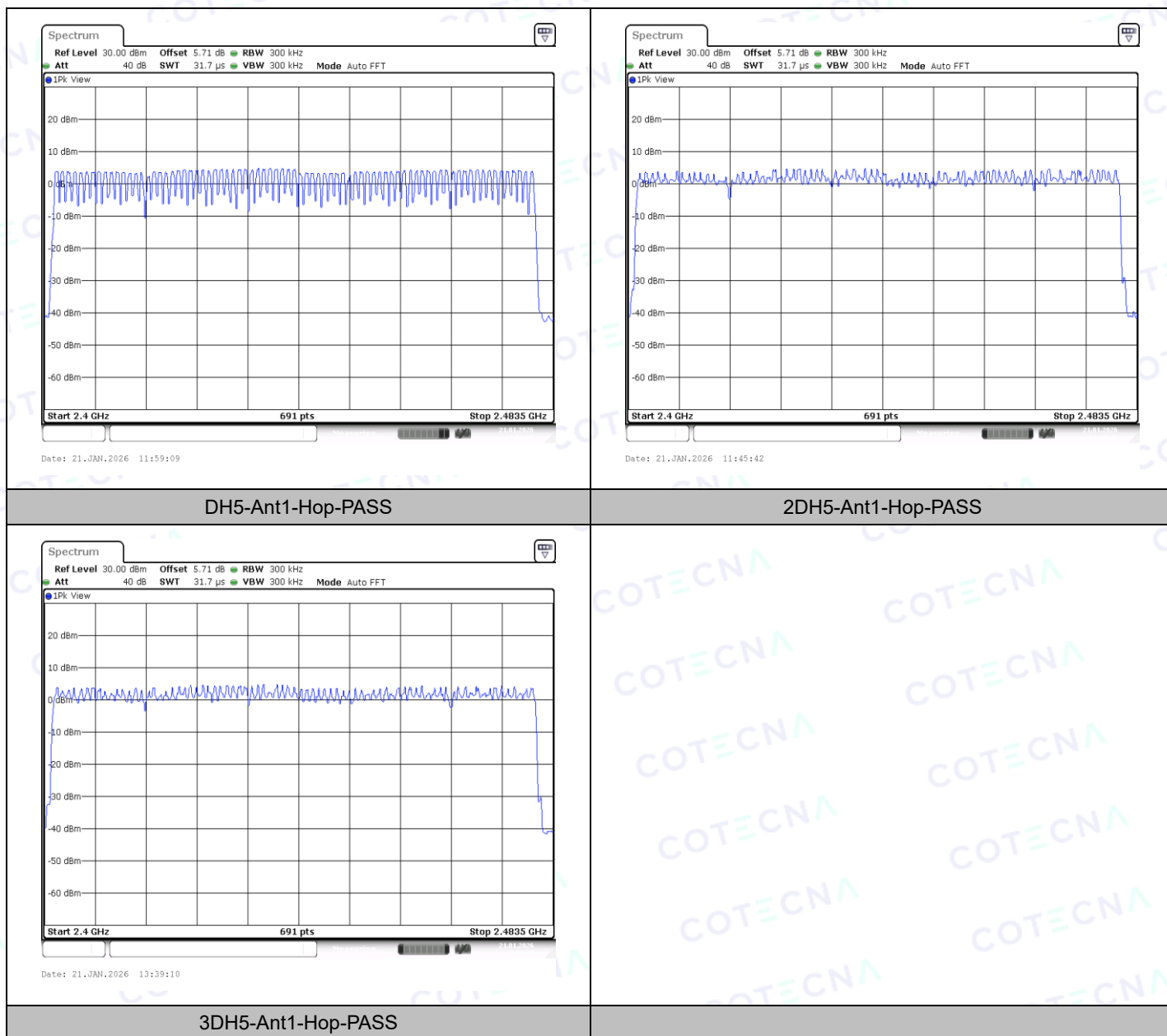
6: Number of hopping channels

6.1 Test Result

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

Both headphones were tested, and only the worst mode was recorded.(Left Earphone)

6.2 Test Graphs



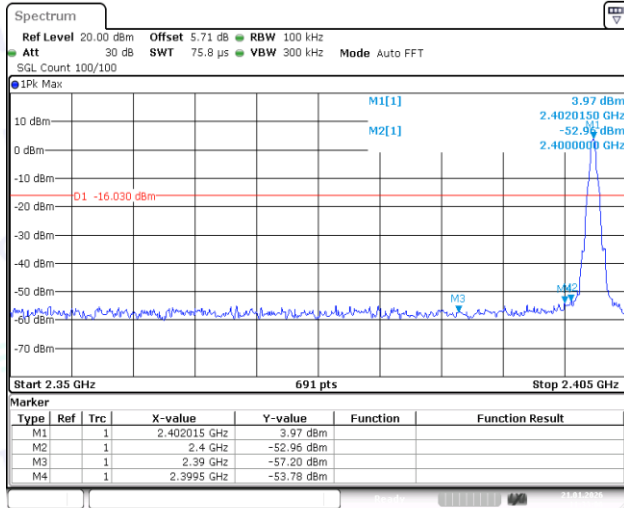
7: Band edge measurements

7.1 Test Result

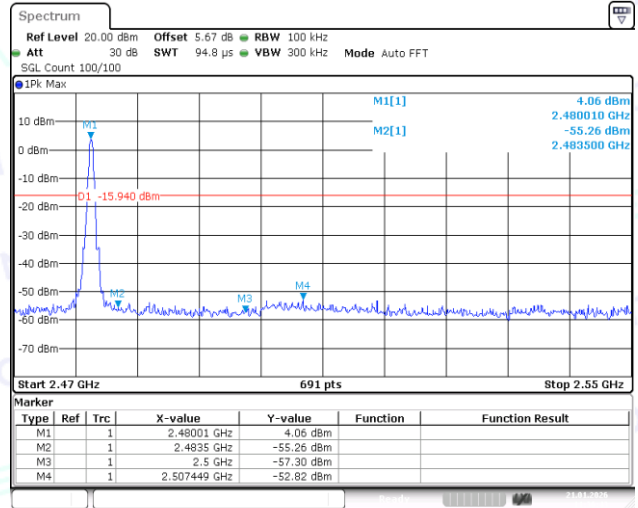
TestMode	Antenna	ChName	Frequency[MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	Low	2402	3.97	-53.78	≤-16.03	PASS
DH5	Ant1	High	2480	4.06	-52.82	≤-15.94	PASS
DH5	Ant1	Low	Hop_2402	-4.00	-54.43	≤-24	PASS
DH5	Ant1	High	Hop_2480	3.24	-46.36	≤-16.76	PASS
2DH5	Ant1	Low	2402	3.90	-50.44	≤-16.1	PASS
2DH5	Ant1	High	2480	3.10	-52.4	≤-16.9	PASS
2DH5	Ant1	Low	Hop_2402	-7.64	-53.65	≤-27.64	PASS
2DH5	Ant1	High	Hop_2480	-3.85	-52.51	≤-23.85	PASS
3DH5	Ant1	Low	2402	3.98	-51.28	≤-16.02	PASS
3DH5	Ant1	High	2480	3.86	-51.06	≤-16.14	PASS
3DH5	Ant1	Low	Hop_2402	-7.67	-54.14	≤-27.67	PASS
3DH5	Ant1	High	Hop_2480	-4.31	-52.29	≤-24.31	PASS

Both headphones were tested, and only the worst mode was recorded.(Left Earphone)

7.2 Test Graphs



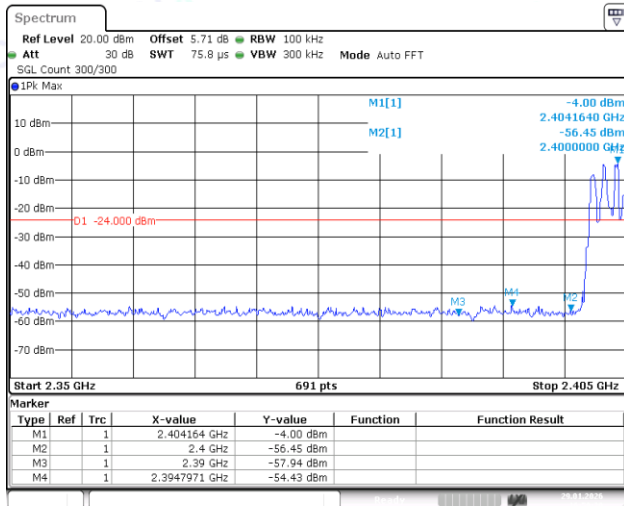
Date: 21.JAN.2026 11:33:06



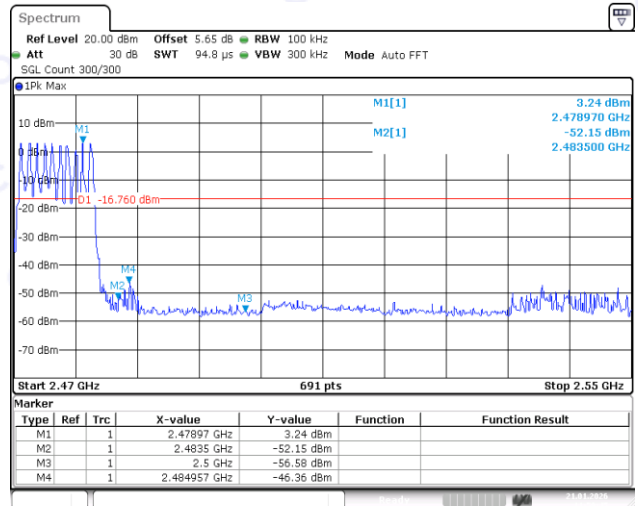
Date: 21.JAN.2026 11:36:43

DH5-Ant1-2402-PASS

DH5-Ant1-2480-PASS



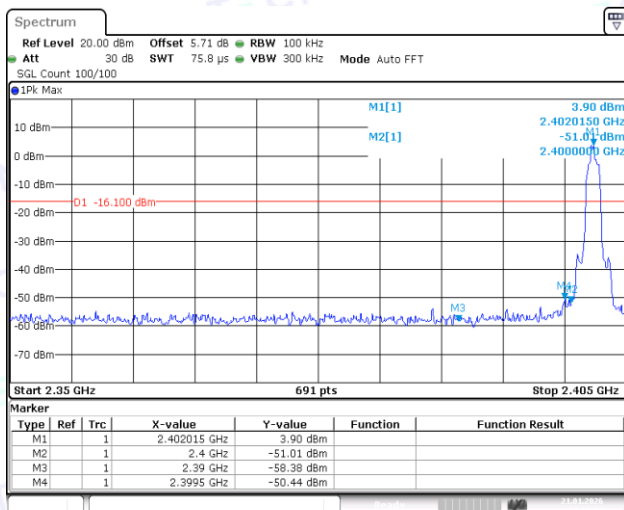
Date: 29.JAN.2026 16:59:20



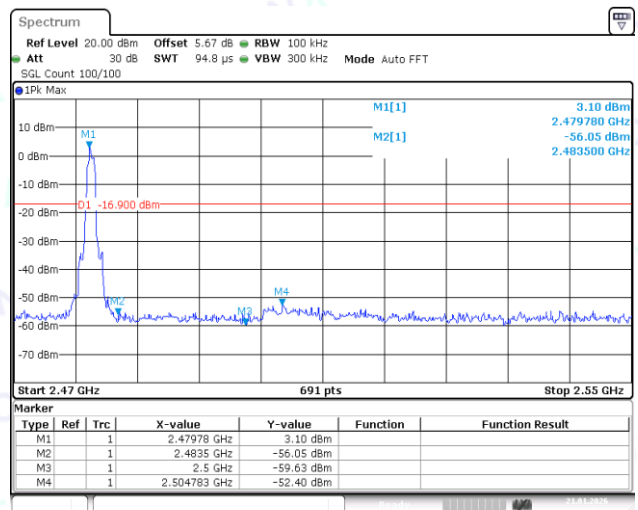
Date: 21.JAN.2026 11:59:46

DH5-Ant1-Hop_2402-PASS

DH5-Ant1-Hop_2480-PASS



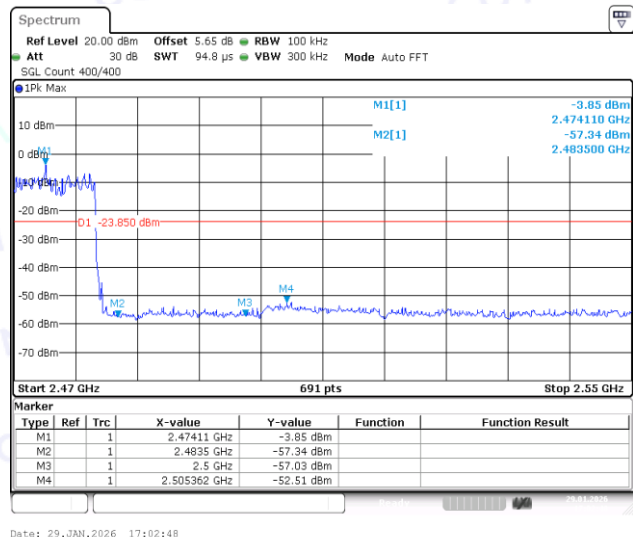
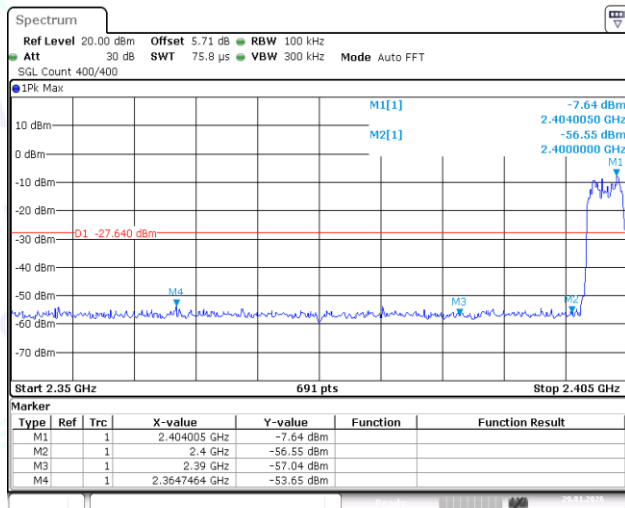
Date: 21.JAN.2026 11:39:23



Date: 21.JAN.2026 11:49:38

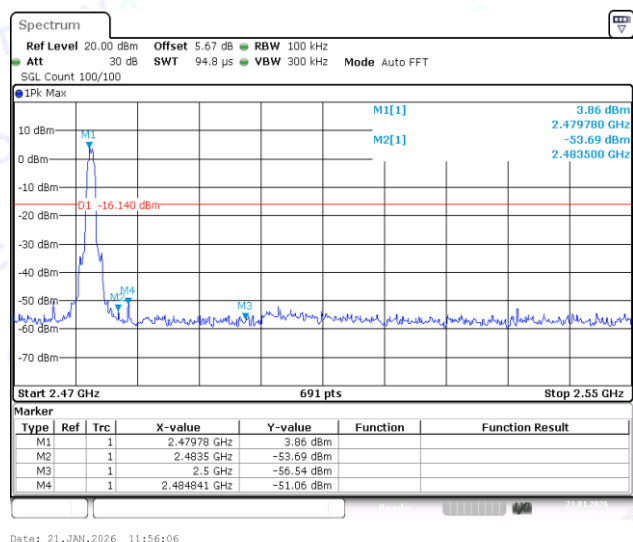
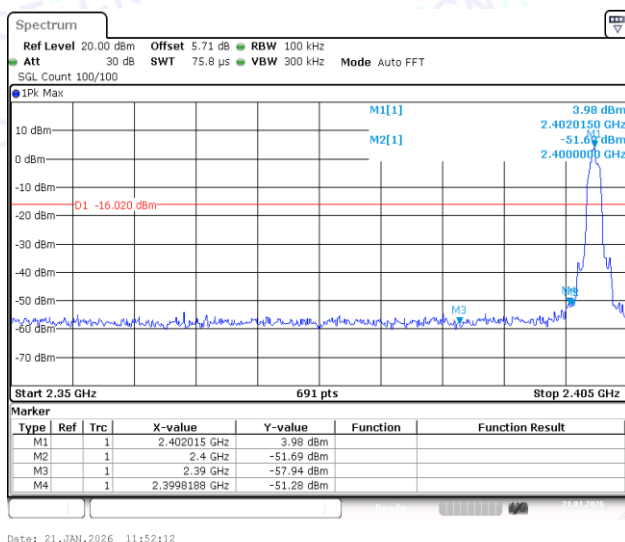
2DH5-Ant1-2402-PASS

2DH5-Ant1-2480-PASS



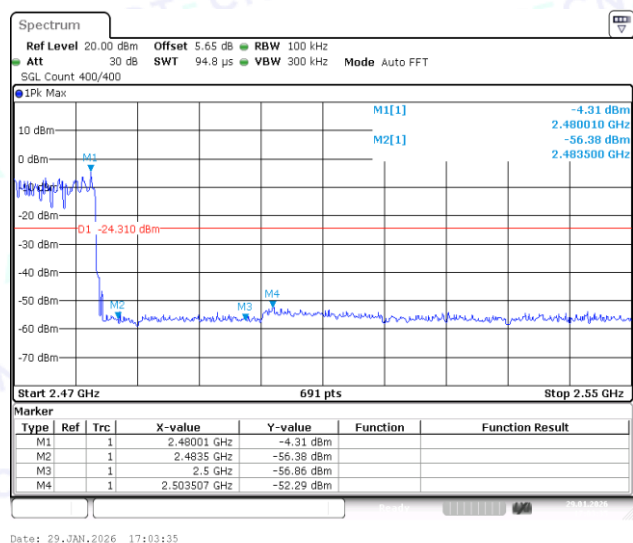
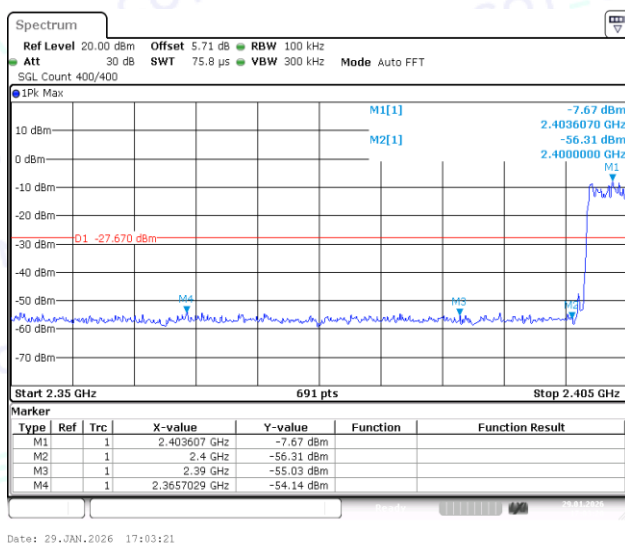
2DH5-Ant1-Hop_2402-PASS

2DH5-Ant1-Hop_2480-PASS



3DH5-Ant1-2402-PASS

3DH5-Ant1-2480-PASS



3DH5-Ant1-Hop_2402-PASS

3DH5-Ant1-Hop_2480-PASS

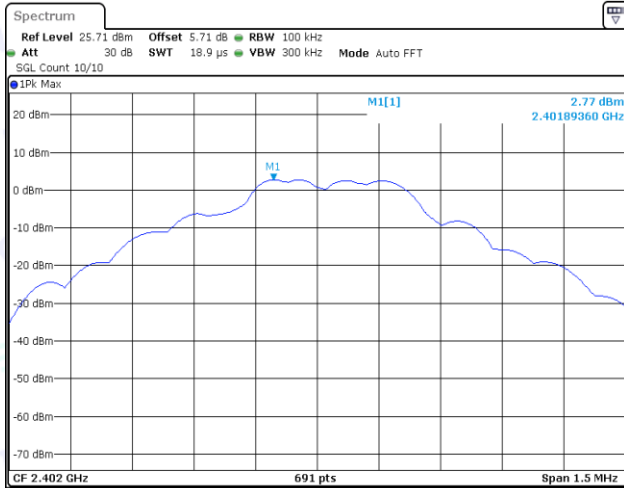
8: Conducted Spurious Emission

8.1 Test Result

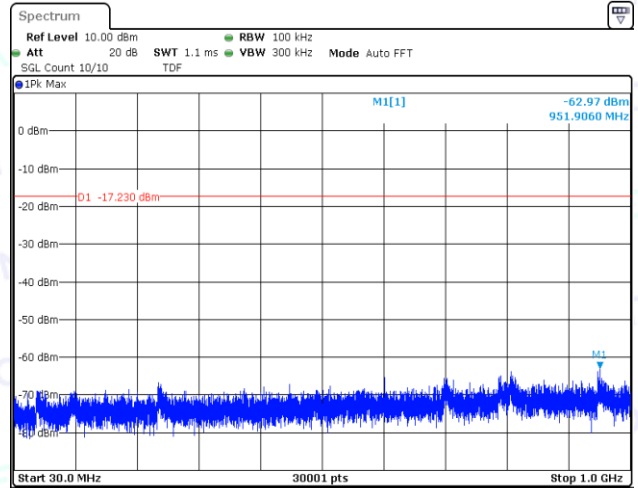
TestMode	Antenna	Frequency[MHz]	FreqRange [MHz]	RefLevel [dBm]	Result [dBm]	Limit [dBm]	Verdict
DH5	Ant1	2402	0~Reference	2.77	2.77	---	PASS
DH5	Ant1	2402	30~1000	2.77	-62.97	≤-17.23	PASS
DH5	Ant1	2402	1000~26500	2.77	-37.79	≤-17.23	PASS
DH5	Ant1	2441	0~Reference	2.87	2.87	---	PASS
DH5	Ant1	2441	30~1000	2.87	-63.59	≤-17.13	PASS
DH5	Ant1	2441	1000~26500	2.87	-37.88	≤-17.13	PASS
DH5	Ant1	2480	0~Reference	3.08	3.08	---	PASS
DH5	Ant1	2480	30~1000	3.08	-64.22	≤-16.92	PASS
DH5	Ant1	2480	1000~26500	3.08	-37.67	≤-16.92	PASS
2DH5	Ant1	2402	0~Reference	-1.79	-1.79	---	PASS
2DH5	Ant1	2402	30~1000	-1.79	-63.51	≤-21.79	PASS
2DH5	Ant1	2402	1000~26500	-1.79	-37.32	≤-21.79	PASS
2DH5	Ant1	2441	0~Reference	-0.72	-0.72	---	PASS
2DH5	Ant1	2441	30~1000	-0.72	-63.56	≤-20.72	PASS
2DH5	Ant1	2441	1000~26500	-0.72	-37.68	≤-20.72	PASS
2DH5	Ant1	2480	0~Reference	-1.04	-1.04	---	PASS
2DH5	Ant1	2480	30~1000	-1.04	-64.46	≤-21.04	PASS
2DH5	Ant1	2480	1000~26500	-1.04	-37.98	≤-21.04	PASS
3DH5	Ant1	2402	0~Reference	2.10	2.10	---	PASS
3DH5	Ant1	2402	30~1000	2.10	-63.7	≤-17.9	PASS
3DH5	Ant1	2402	1000~26500	2.10	-38.04	≤-17.9	PASS
3DH5	Ant1	2441	0~Reference	3.56	3.56	---	PASS
3DH5	Ant1	2441	30~1000	3.56	-64.55	≤-16.44	PASS
3DH5	Ant1	2441	1000~26500	3.56	-37.63	≤-16.44	PASS
3DH5	Ant1	2480	0~Reference	0.51	0.51	---	PASS
3DH5	Ant1	2480	30~1000	0.51	-63.03	≤-19.49	PASS
3DH5	Ant1	2480	1000~26500	0.51	-37.45	≤-19.49	PASS

Both headphones were tested, and only the worst mode was recorded.(Left Earphone)

8.2 Test Graphs



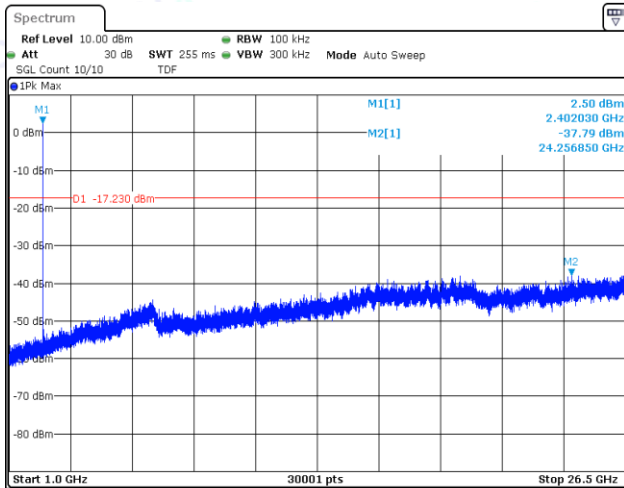
Date: 21.JAN.2026 11:33:31



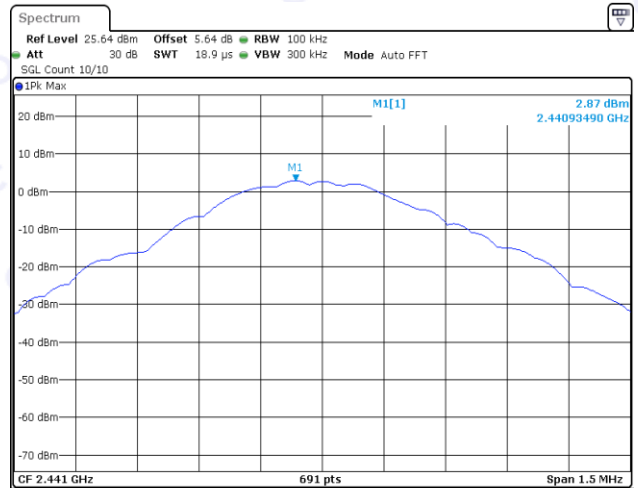
Date: 21.JAN.2026 11:33:39

DH5-Ant1-2402-0~Reference-PASS

DH5-Ant1-2402-30~1000-PASS



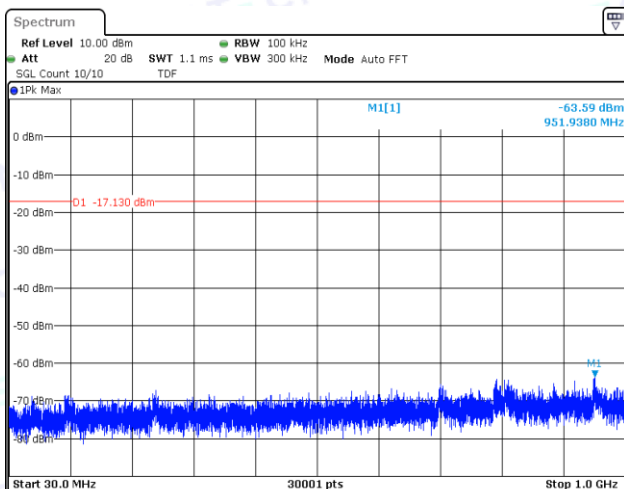
Date: 21.JAN.2026 11:33:56



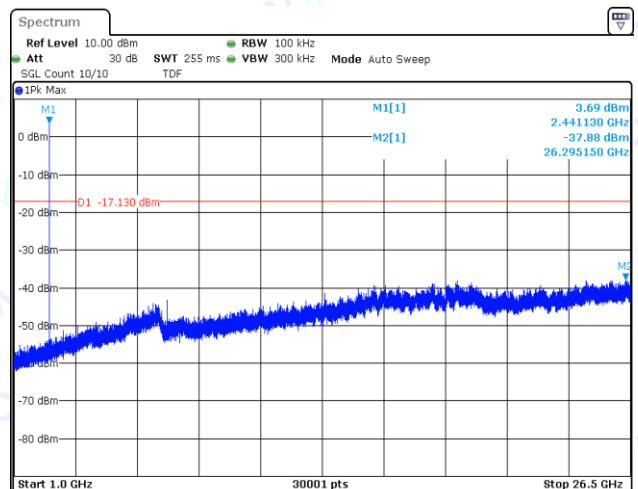
Date: 21.JAN.2026 11:35:06

DH5-Ant1-2402-1000~26500-PASS

DH5-Ant1-2441-0~Reference-PASS



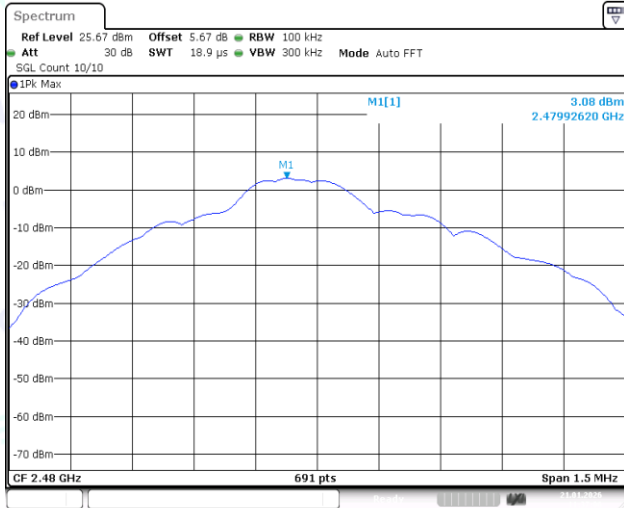
Date: 21.JAN.2026 11:35:13



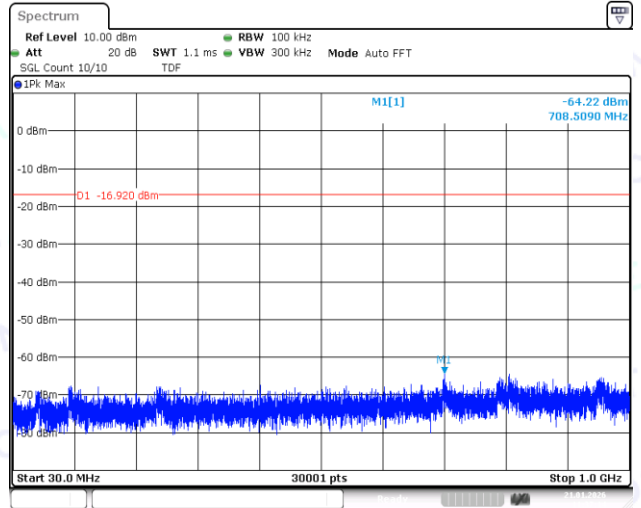
Date: 21.JAN.2026 11:35:31

DH5-Ant1-2441-30~1000-PASS

DH5-Ant1-2441-1000~26500-PASS



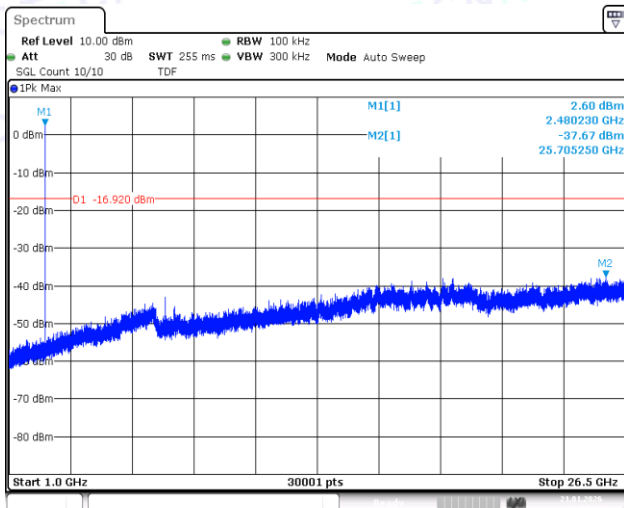
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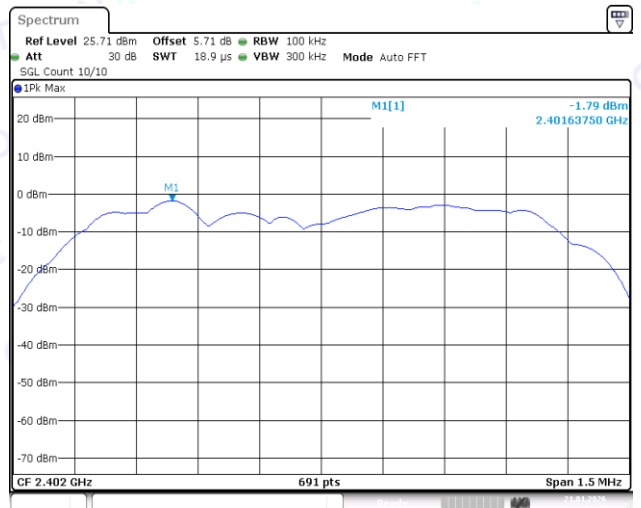
Date: 21.JAN.2026 11:37:14

DH5-Ant1-2480-0~Reference-PASS

DH5-Ant1-2480-30~1000-PASS



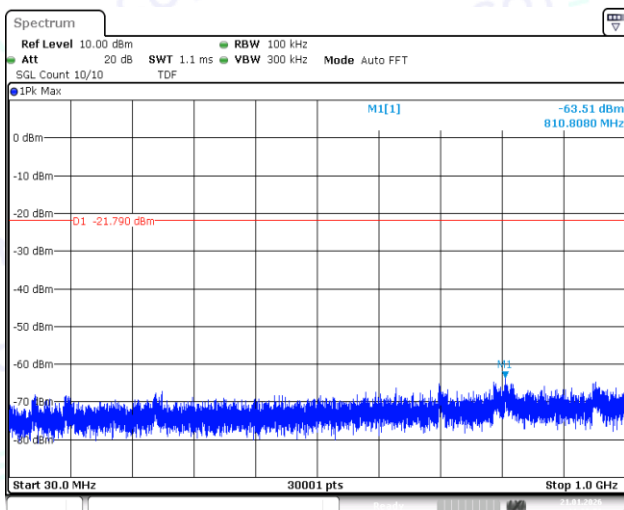
Date: 21.JAN.2026 11:37:31



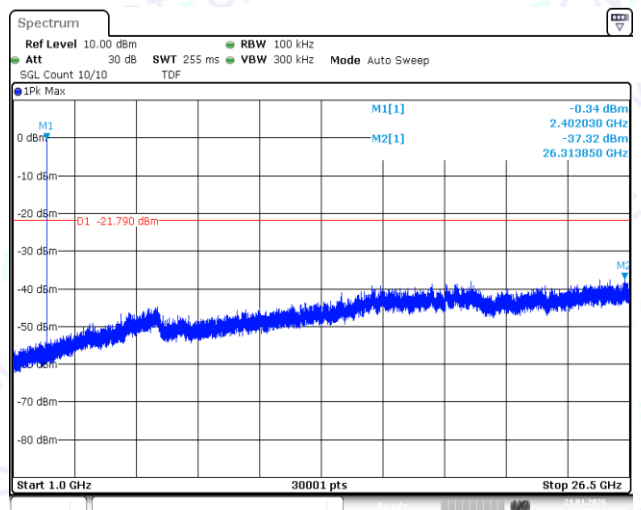
Date: 21.JAN.2026 11:39:48

DH5-Ant1-2480-1000~26500-PASS

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



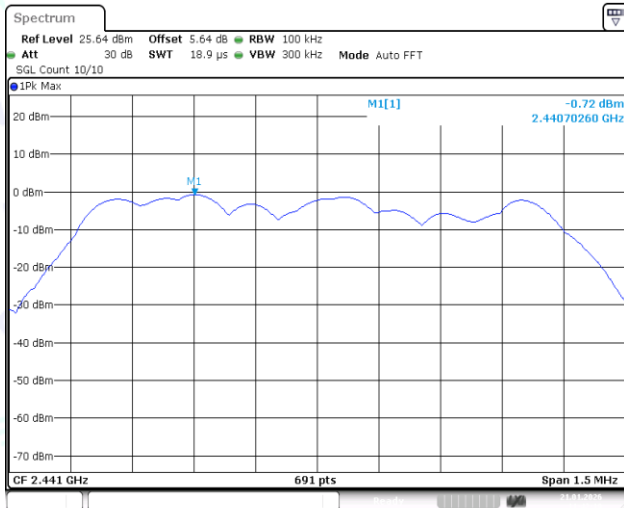
Date: 21.JAN.2026 11:39:56



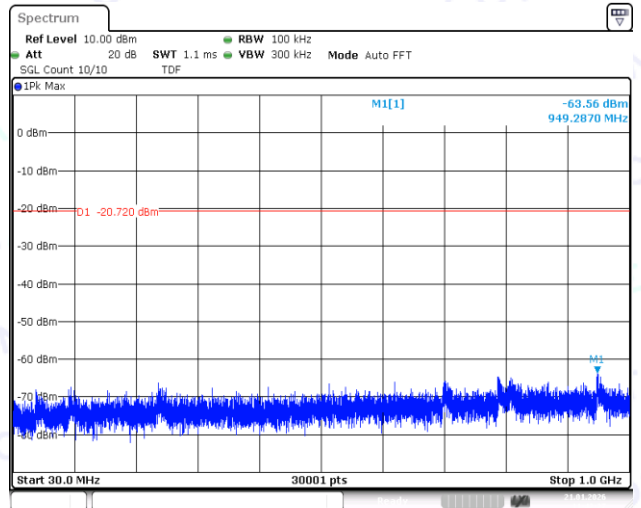
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2DH5-Ant1-2402-30~1000-PASS

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



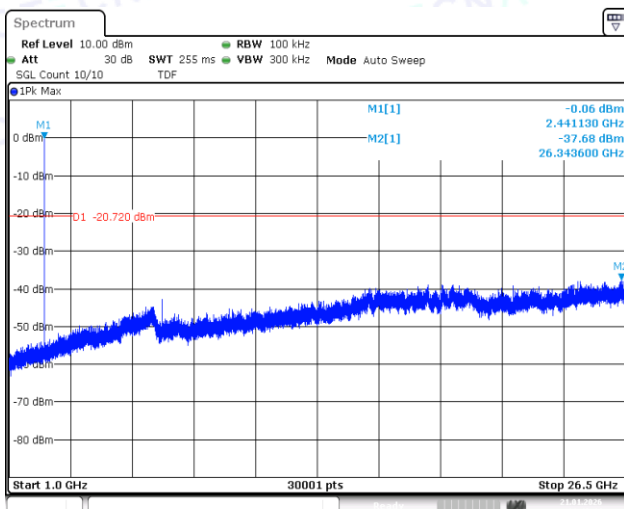
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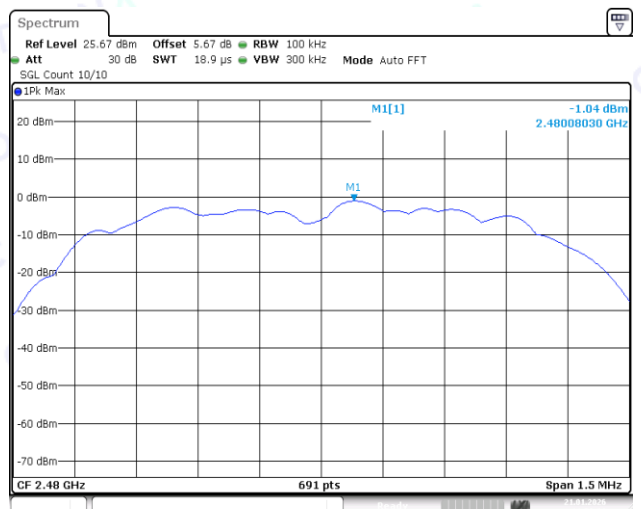
Date: 21.JAN.2026 11:42:27

2DH5-Ant1-2441-0~Reference-PASS

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



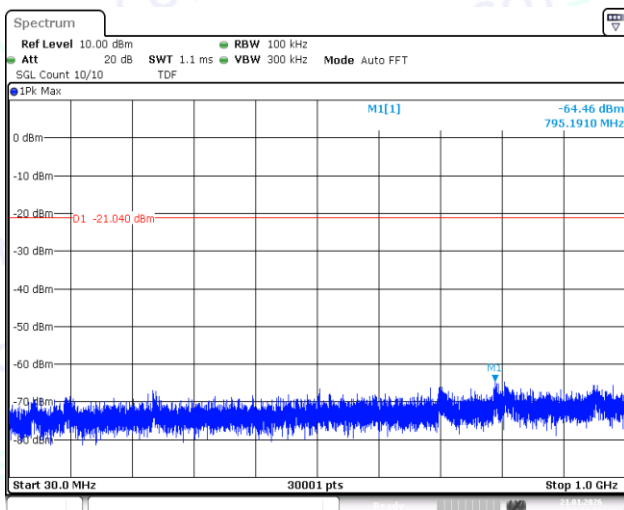
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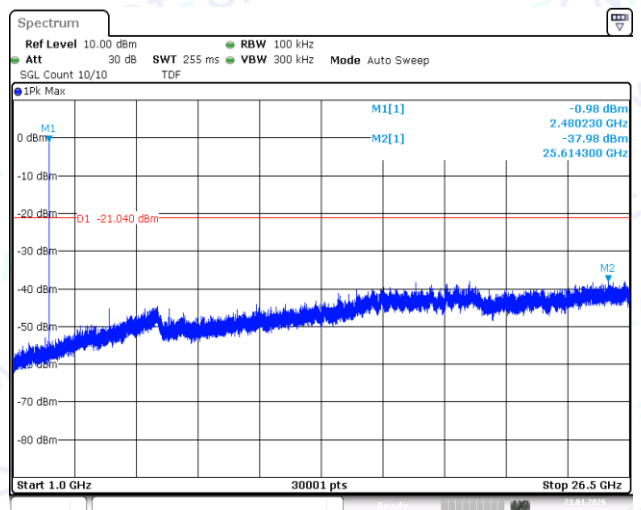
Date: 21.JAN.2026 11:50:01

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

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



Date: 21.JAN.2026 11:50:09



Date: 21.JAN.2026 11:50:27

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

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