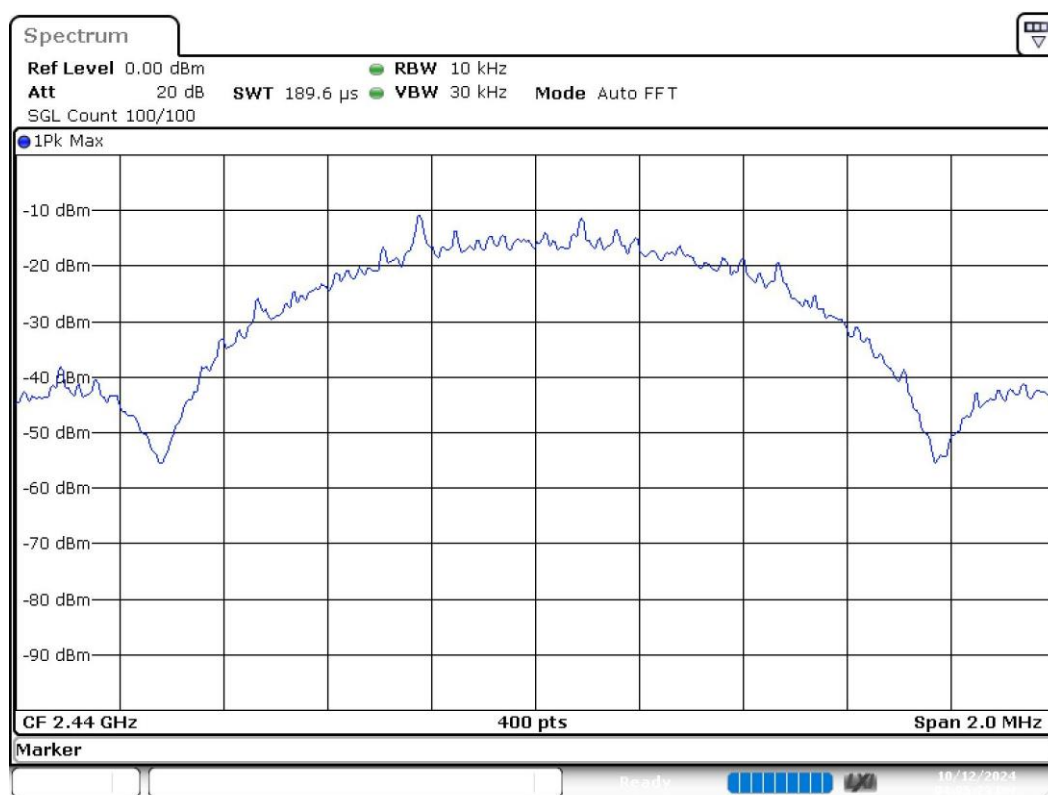
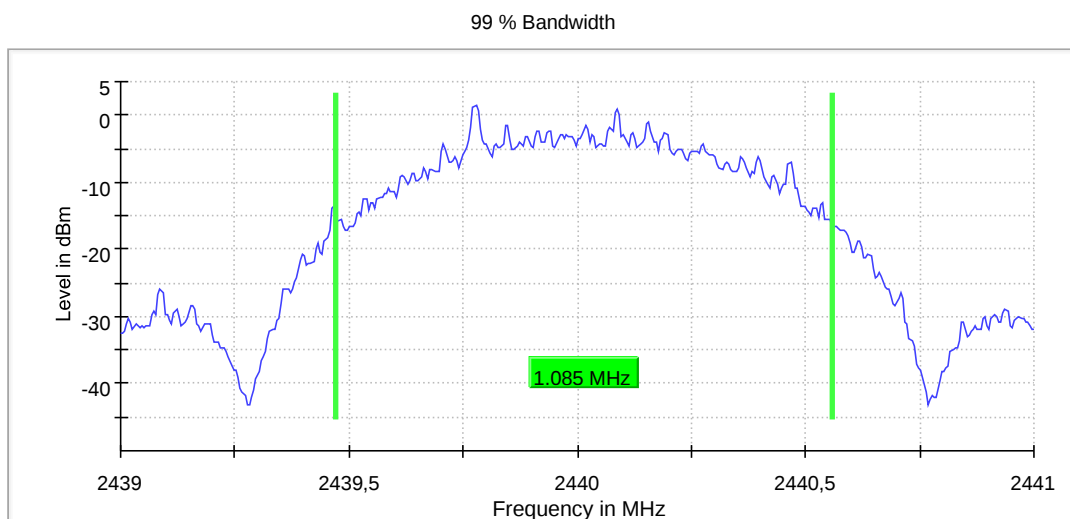
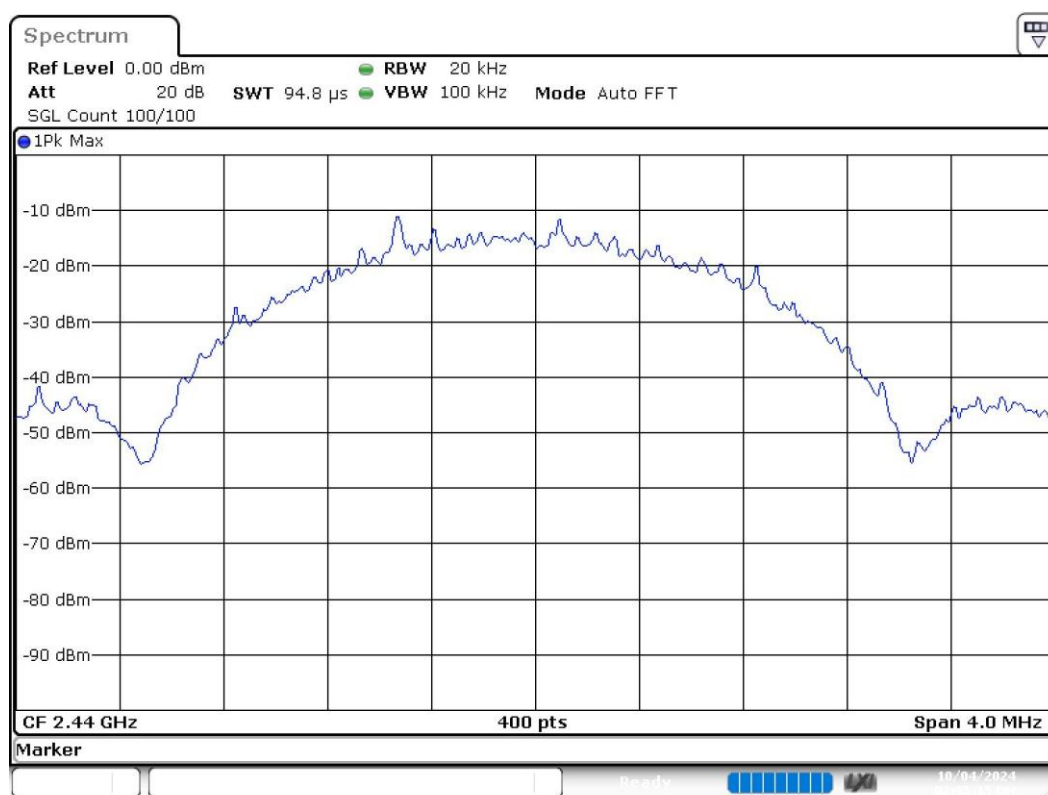
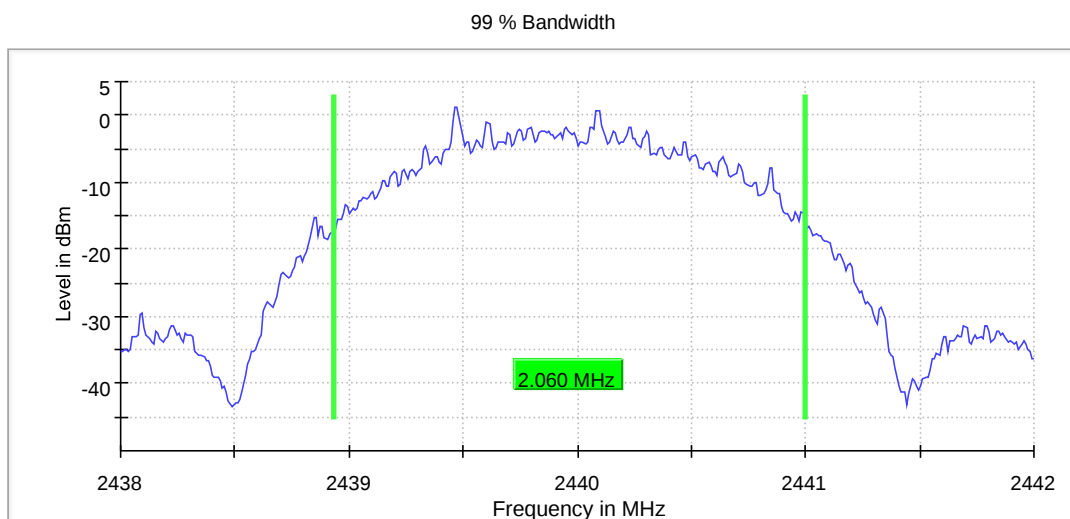




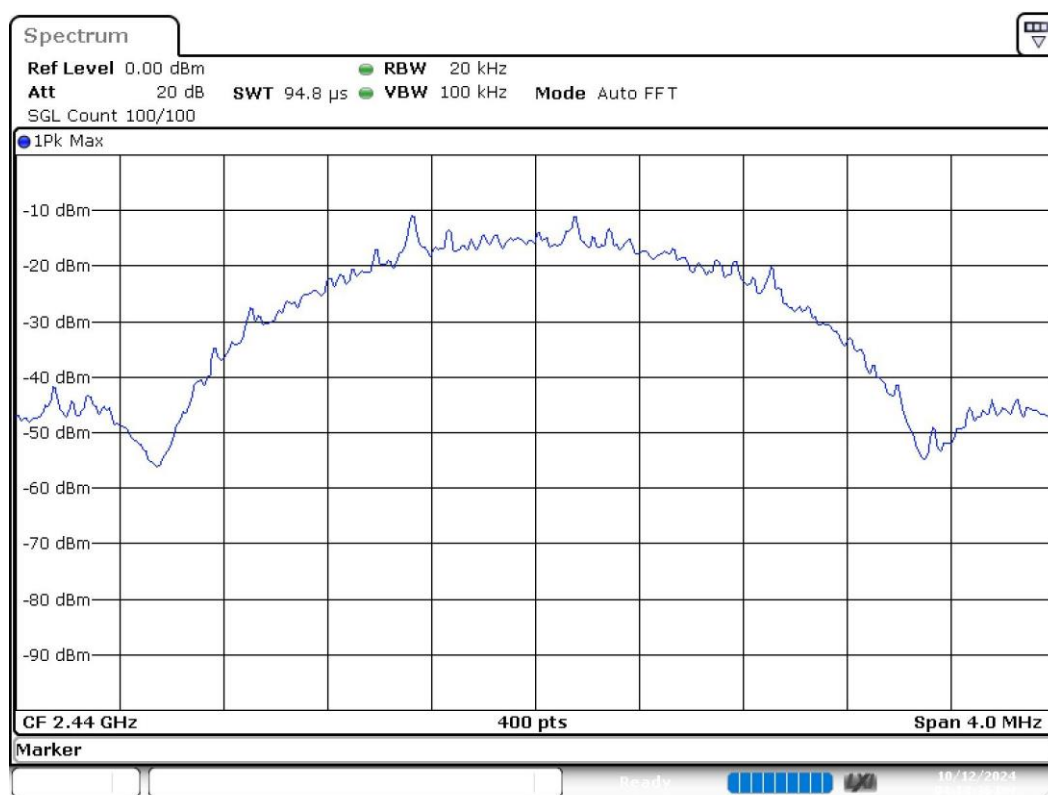
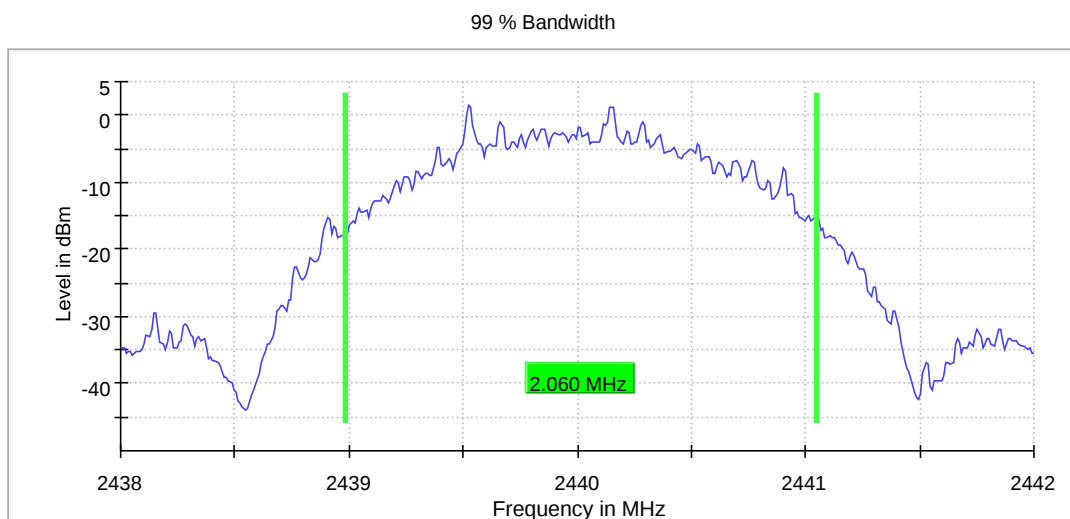
Date: 12.OCT.2024 16:05:24

Screenshot: 99 % bandwidth Measurement, middle channel, 1M bandwidth operation. (AH20)



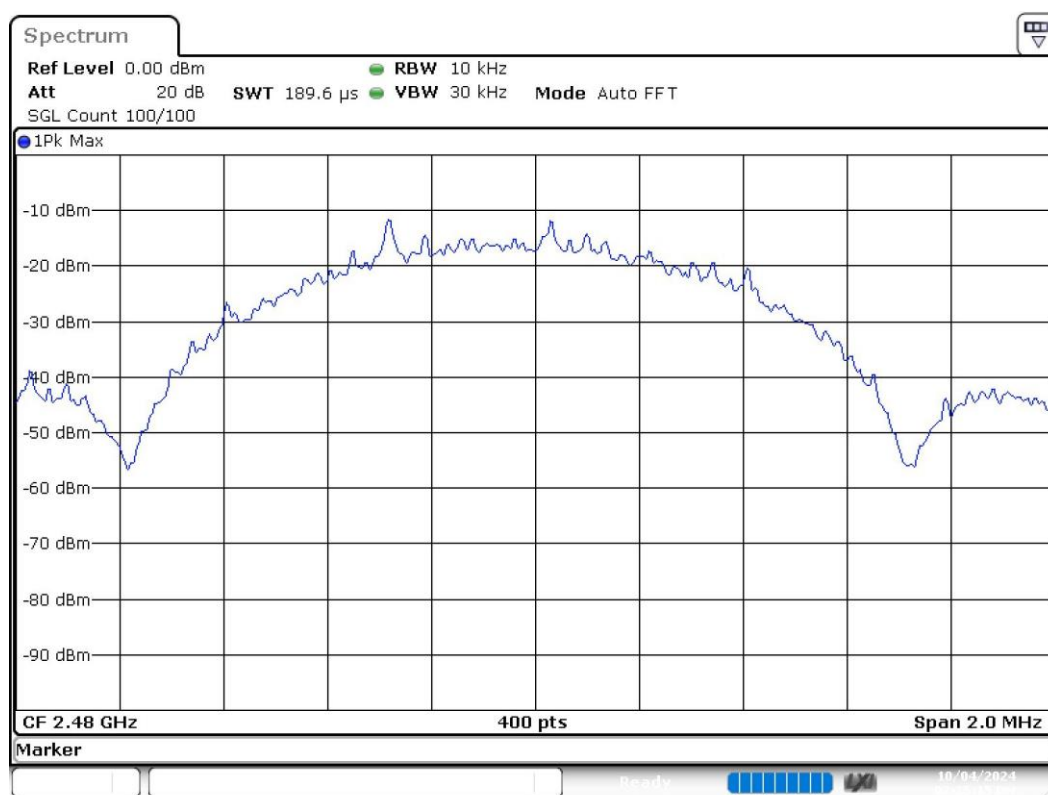
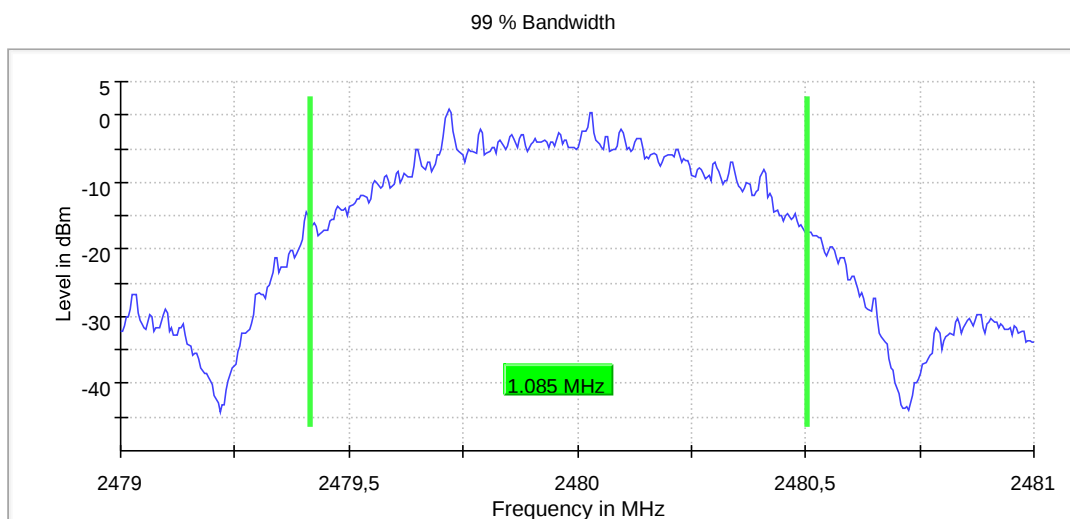
Date: 4.OCT.2024 14:35:15

Screenshot: 99 % bandwidth Measurement, middle channel, 2M bandwidth operation. (AH40)



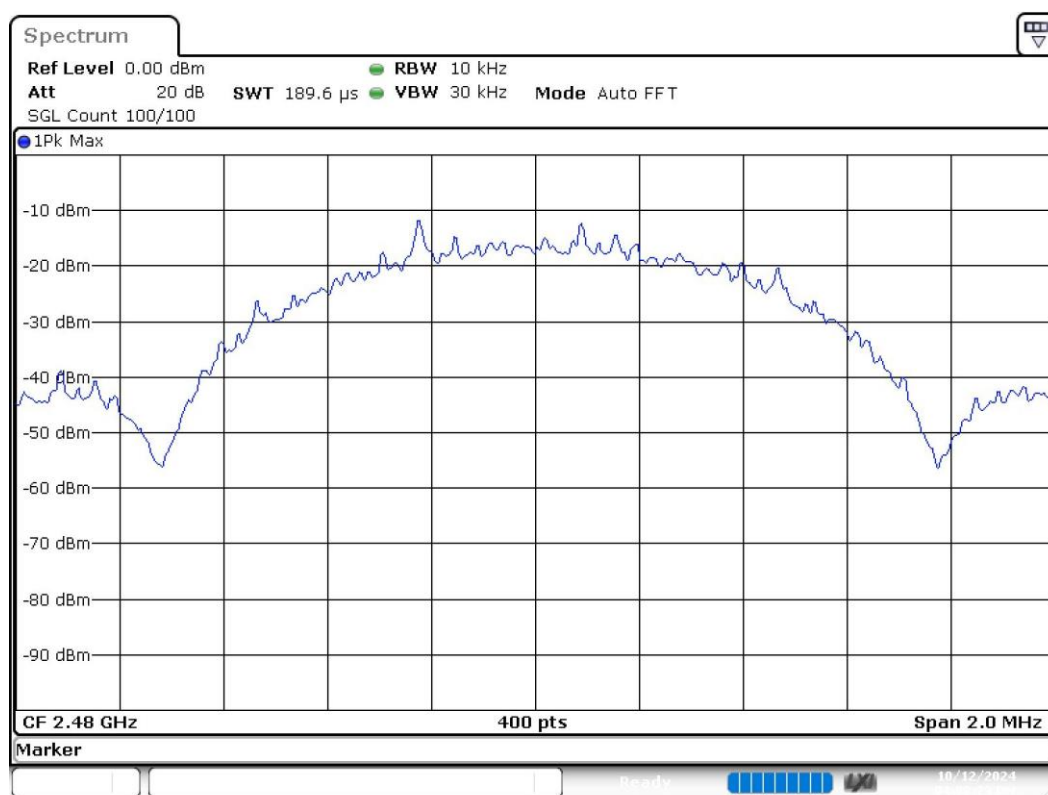
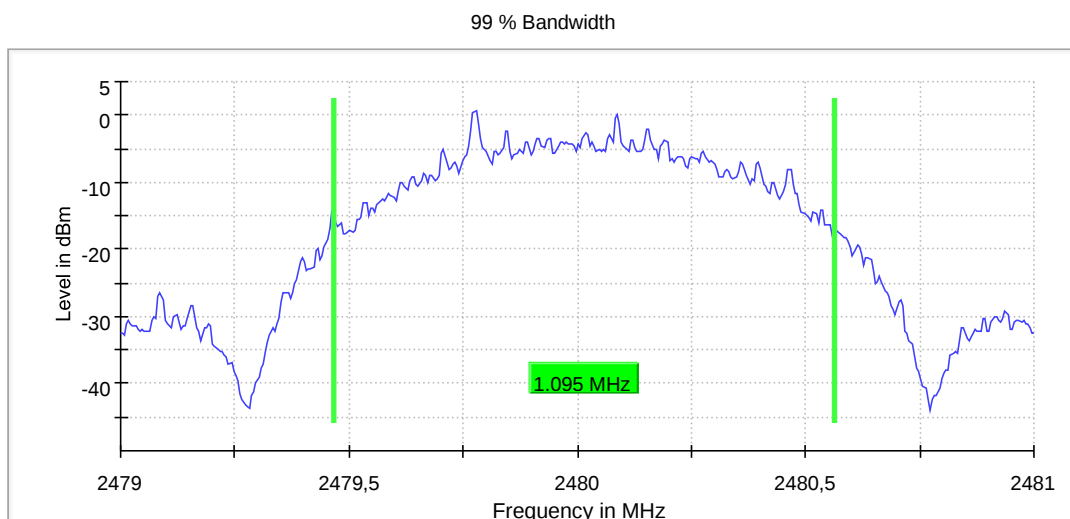
Date: 12.OCT.2024 16:14:36

Screenshot: 99 % bandwidth Measurement, middle channel, 2M bandwidth operation. (AH20)



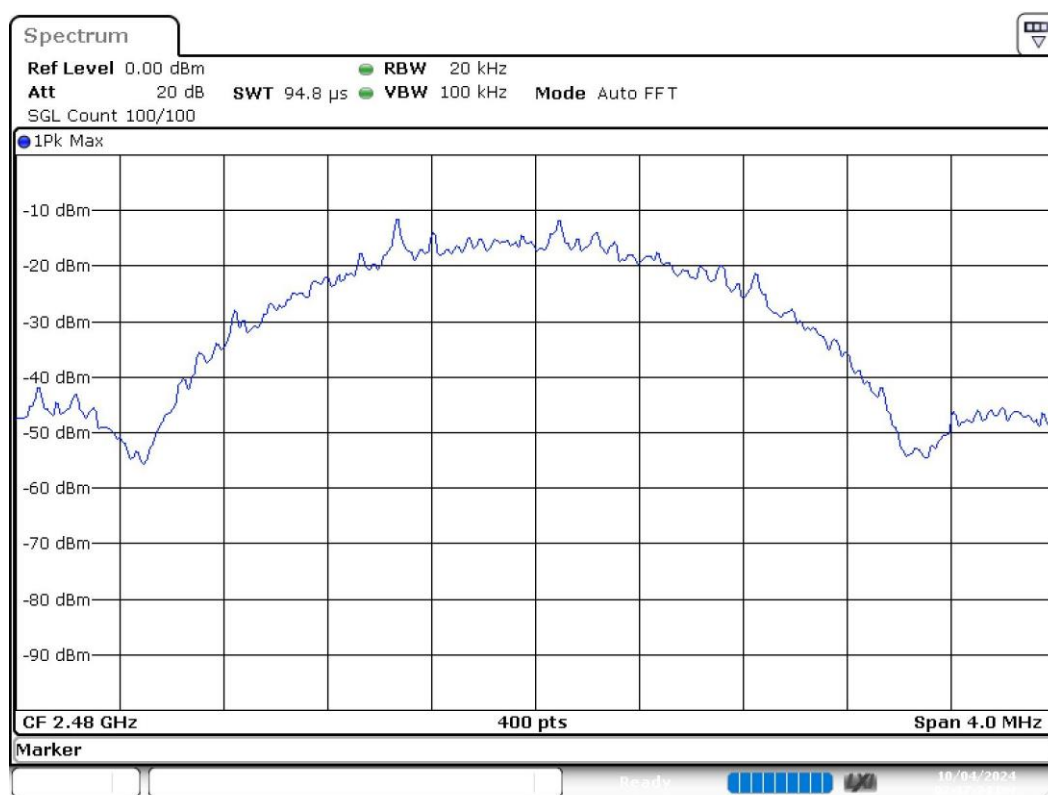
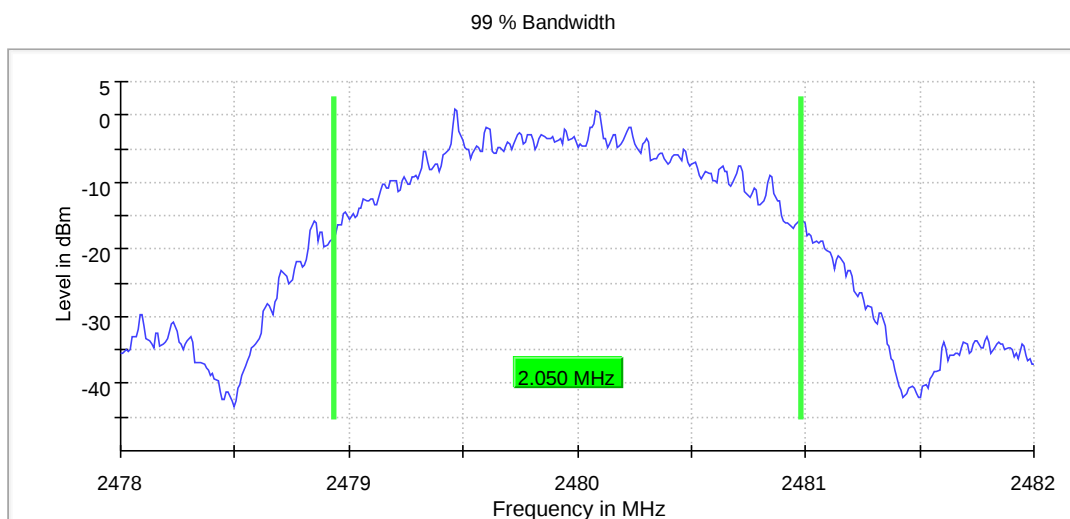
Date: 4.OCT.2024 14:25:15

Screenshot: 99 % bandwidth Measurement, high channel, 1M bandwidth operation. (AH40)



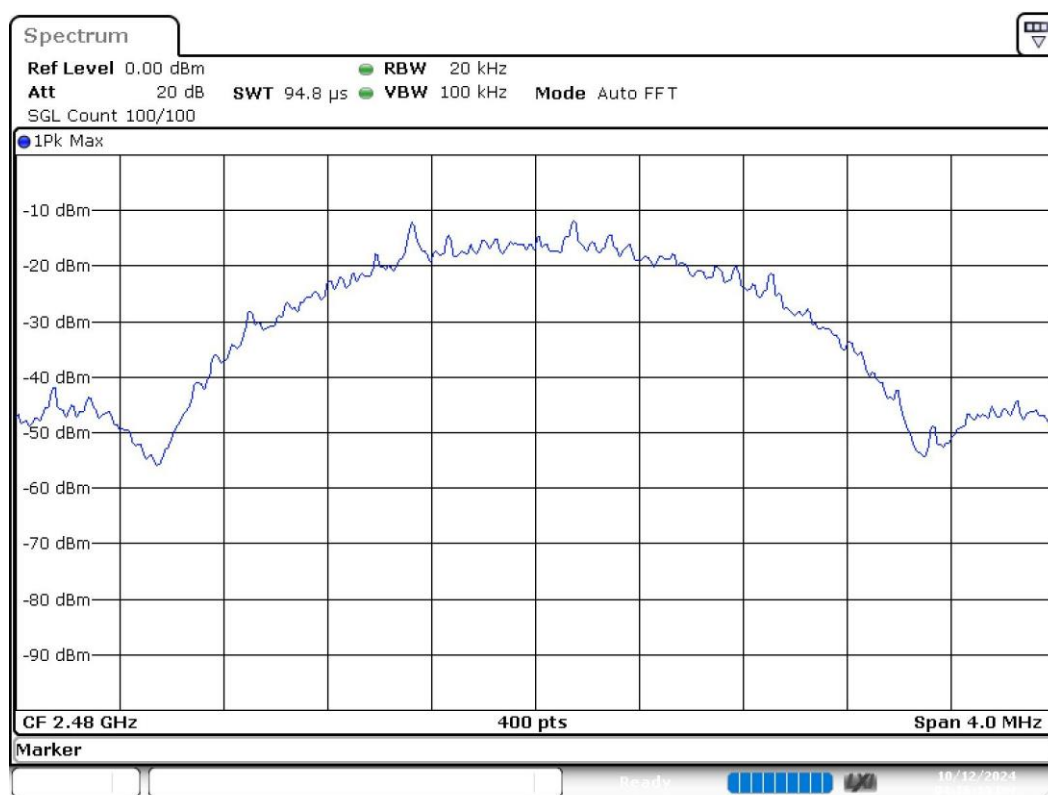
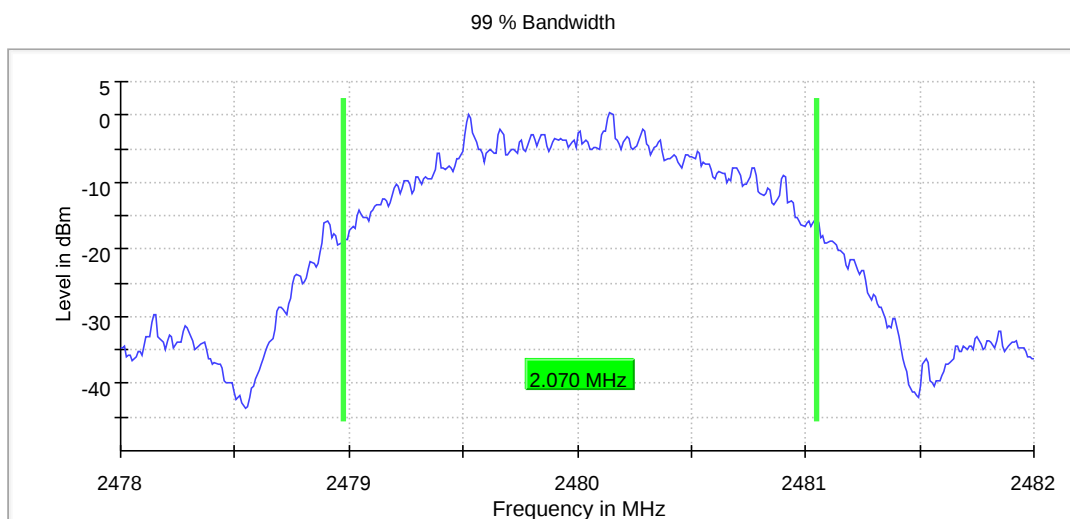
Date: 12.OCT.2024 16:08:23

Screenshot: 99 % bandwidth Measurement, high channel, 1M bandwidth operation. (AH20)



Date: 4.OCT.2024 14:37:24

Screenshot: 99 % bandwidth Measurement, high channel, 1M bandwidth operation. (AH40)



Date: 12.OCT.2024 16:16:20

Screenshot: 99 % bandwidth Measurement, high channel, 1M bandwidth operation. (AH20)

Test result, model AH40

Mode of Operation	Channel [MHz]	99 % BW [MHz]
1MHz BW, Lower	2402	1.090
2MHz BW, Lower	2402	2.080
1MHz BW, Mid	2440	1.100
2MHz BW, Mid	2440	2.060
1MHz BW, Upper	2480	1.085
2MHz BW, Upper	2480	2.050

Test result, model AH20

Mode of Operation	Channel [MHz]	99 % BW [MHz]
1MHz BW, Lower	2402	1.090
2MHz BW, Lower	2402	2.080
1MHz BW, Mid	2440	1.085
2MHz BW, Mid	2440	2.060
1MHz BW, Upper	2480	1.095
2MHz BW, Upper	2480	2.070

12 PEAK POWER SPECTRAL DENSITY

Date of test:	4 October 2024	Test location:	TS8997
EUT Serial:	00.12.4B.00.2E.1A.11.29 00.12.4B.00.2E.18.82.9C	Ambient temp:	20°C
Tested by:	Nahome Micheal Sandipan Basu Björn Utermöhl	Relative humidity:	34%
Test result:	Pass	Margin:	> 6.164dBm

12.1 Test set-up and test procedure.

The test method is in accordance with ANSI C63.10-2020 section 11.10.2.

The EUT was connected to spectrum analyser via rf-cable and attenuator.

12.2 Test conditions

Detector: Peak,
 RBW: 3 kHz
 VBW: >3 x RBW
 Span: 1.5 x 6 dB bandwidth

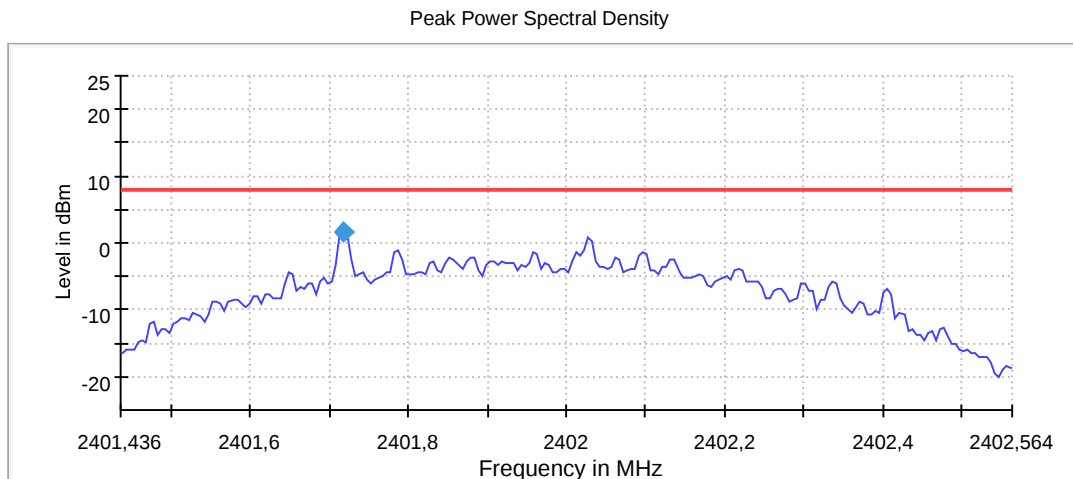
The EUT was set up according to section 2.4, in order to emit the highest emission.

12.3 Requirements

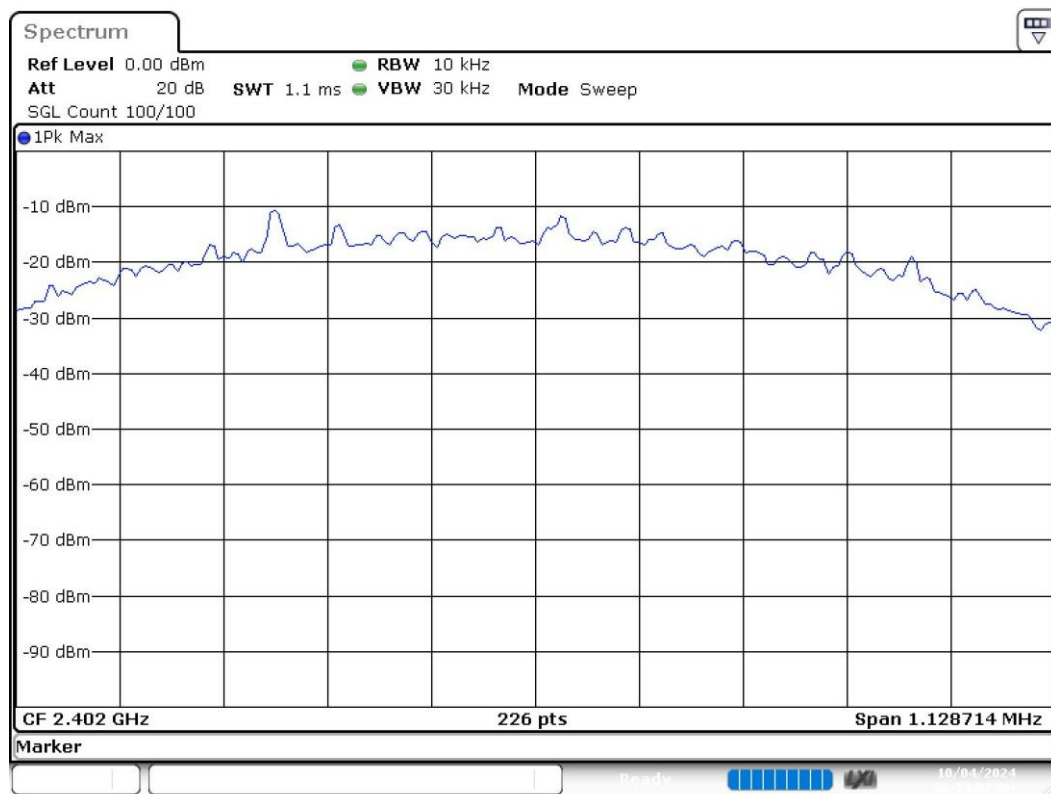
Reference: CFR 47§15.247(3), RSS-247 5.2(2)

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

12.4 Test results

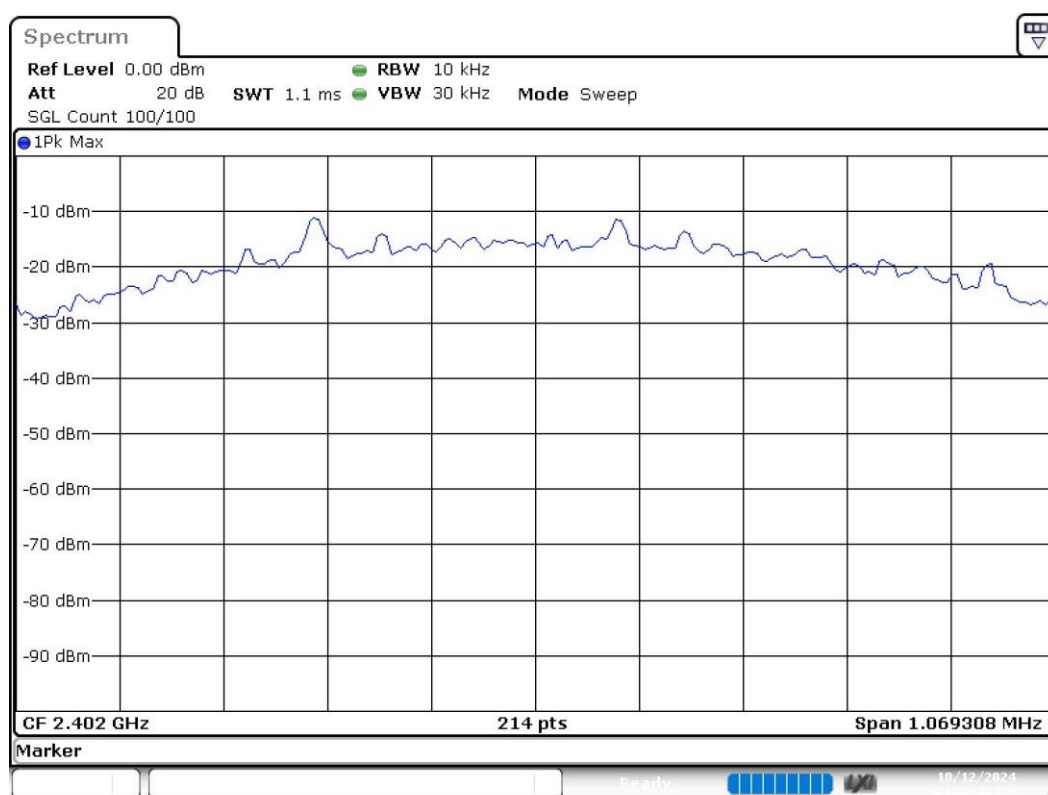
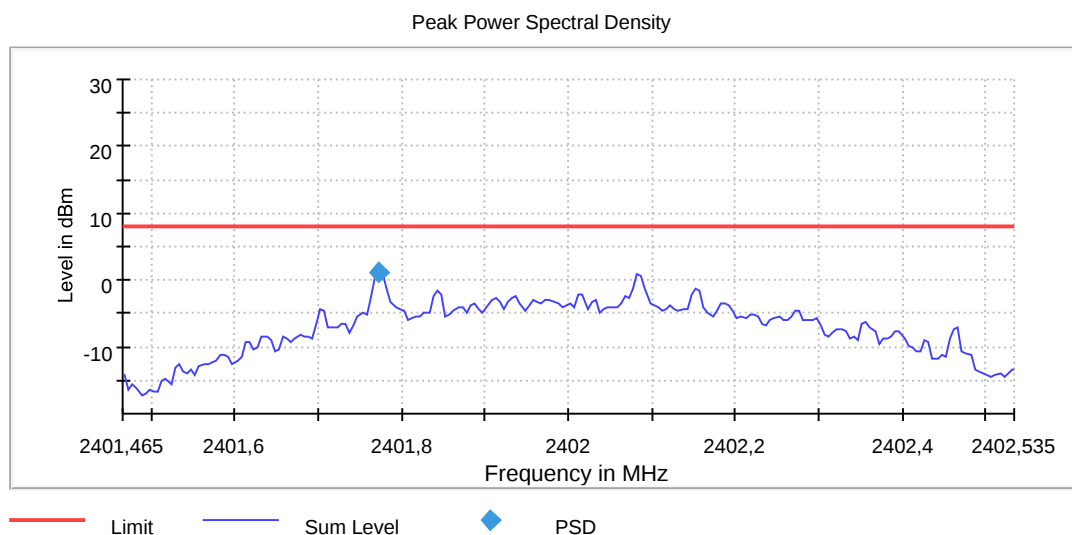


— Limit — Sum Level ◆ PSD



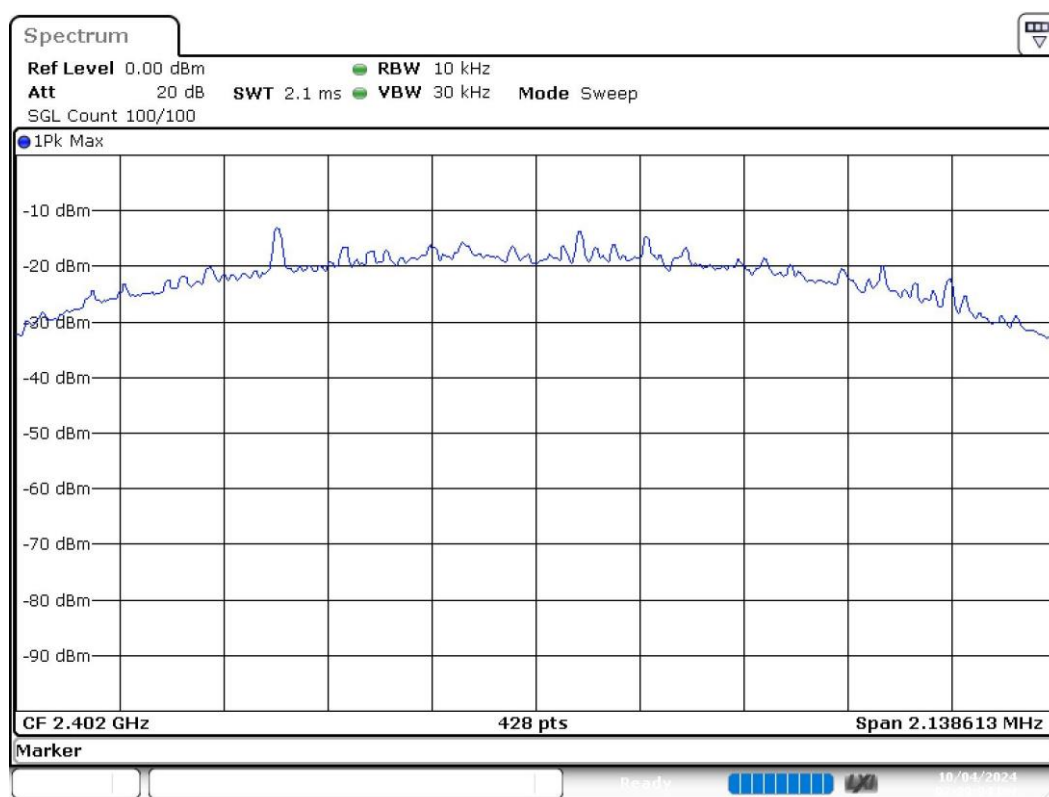
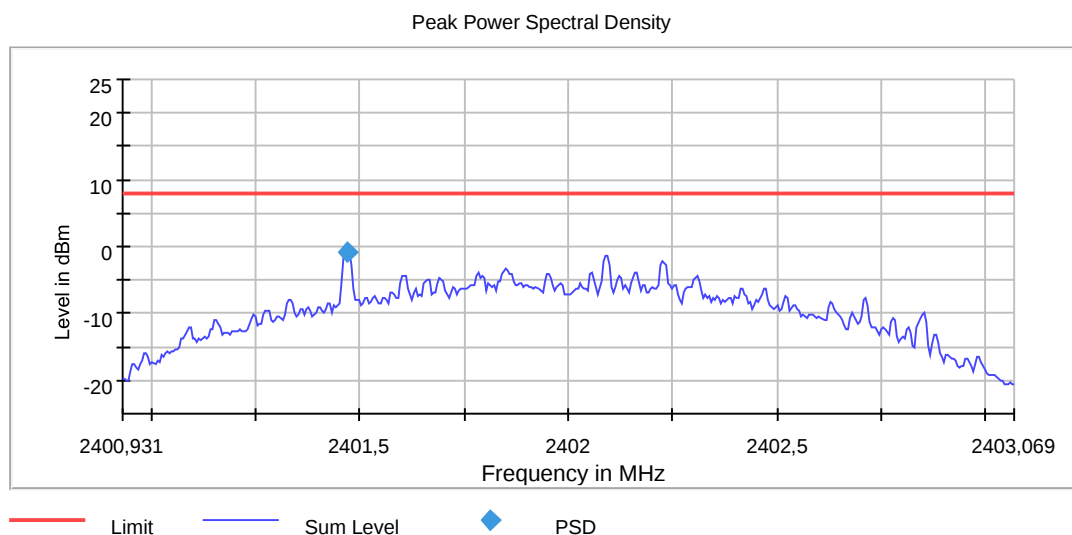
Date: 4.OCT.2024 14:14:03

Screenshot: Peak power spectral density, low channel, 1M bandwidth operation. (AH40)



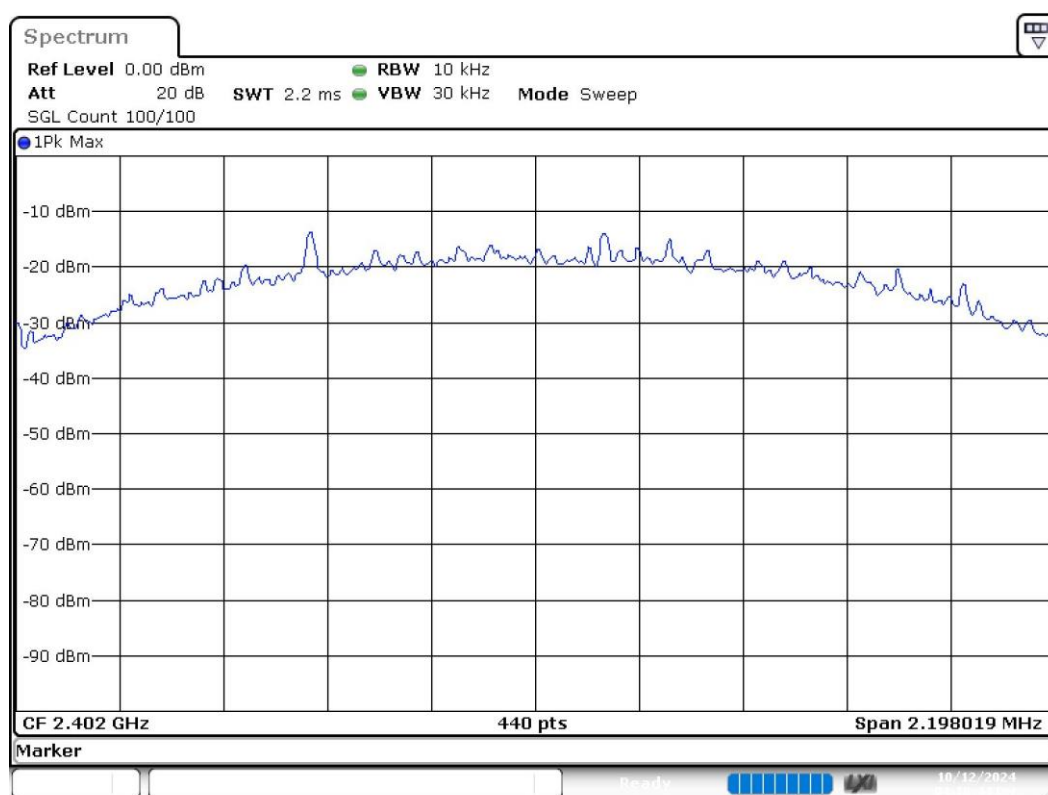
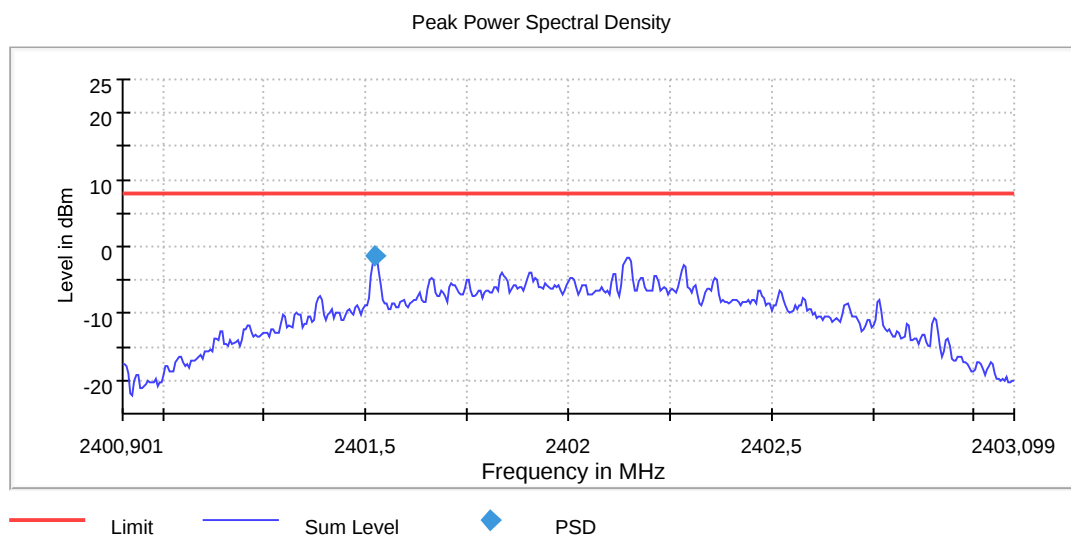
Date: 12.OCT.2024 16:00:40

Screenshot: Peak power spectral density, low channel, 1M bandwidth operation. (AH20)



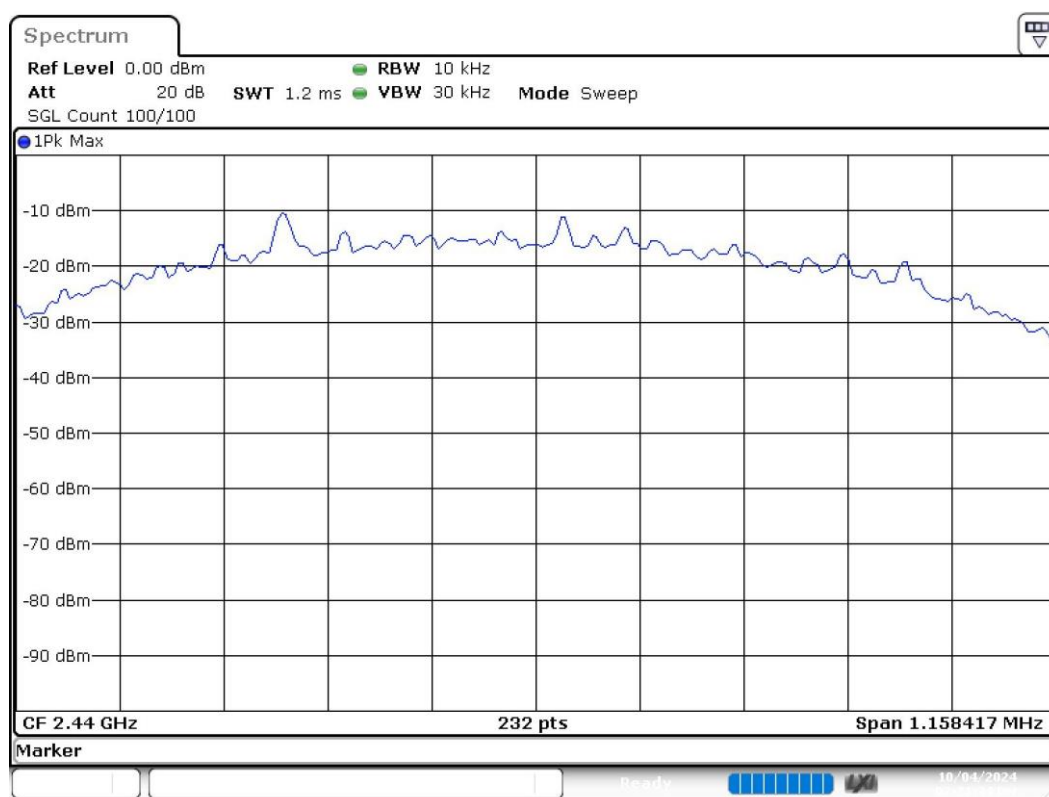
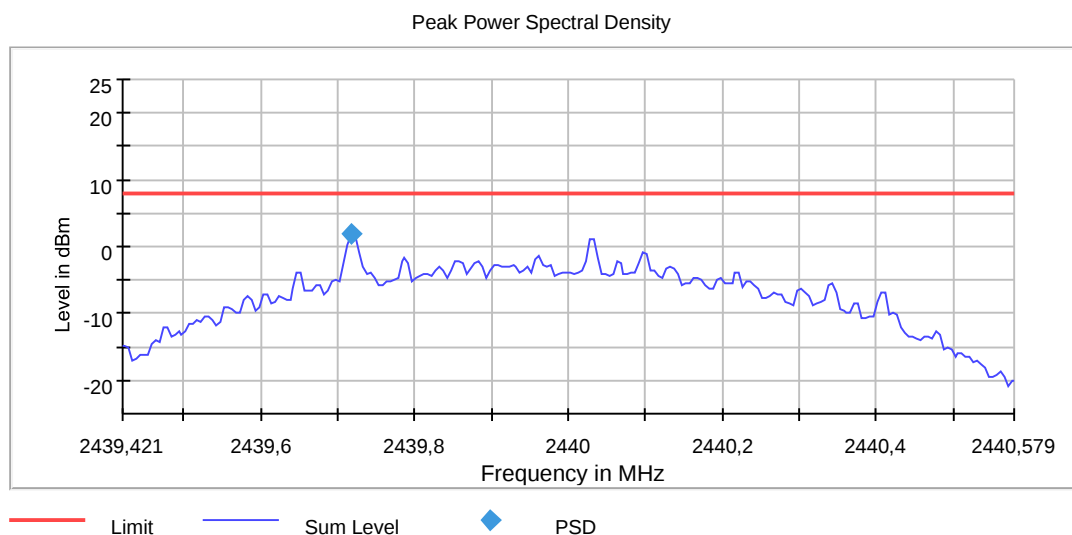
Date: 4.OCT.2024 14:29:05

Screenshot: Peak power spectral density, low channel 2M bandwidth operation. (AH40)



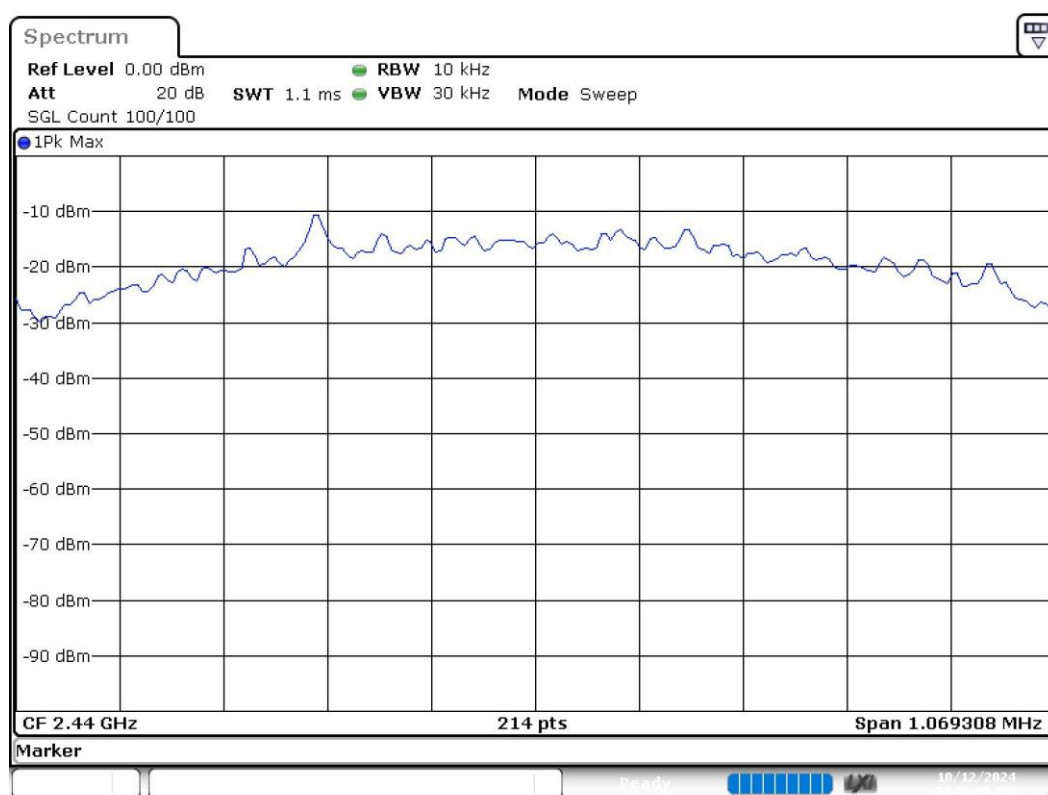
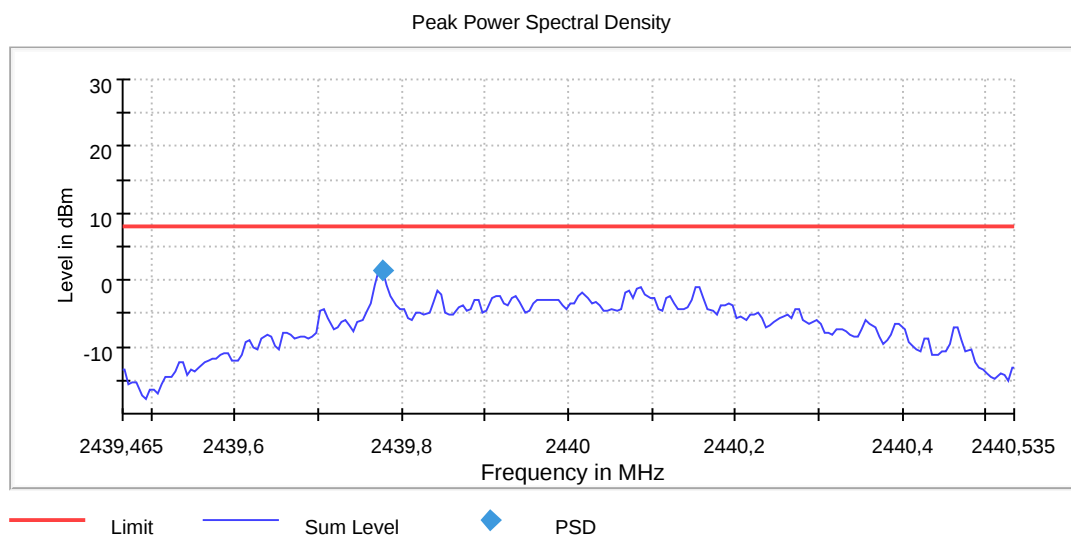
Date: 12.OCT.2024 16:10:44

Screenshot: Peak power spectral density, low channel 2M bandwidth operation. (AH20)



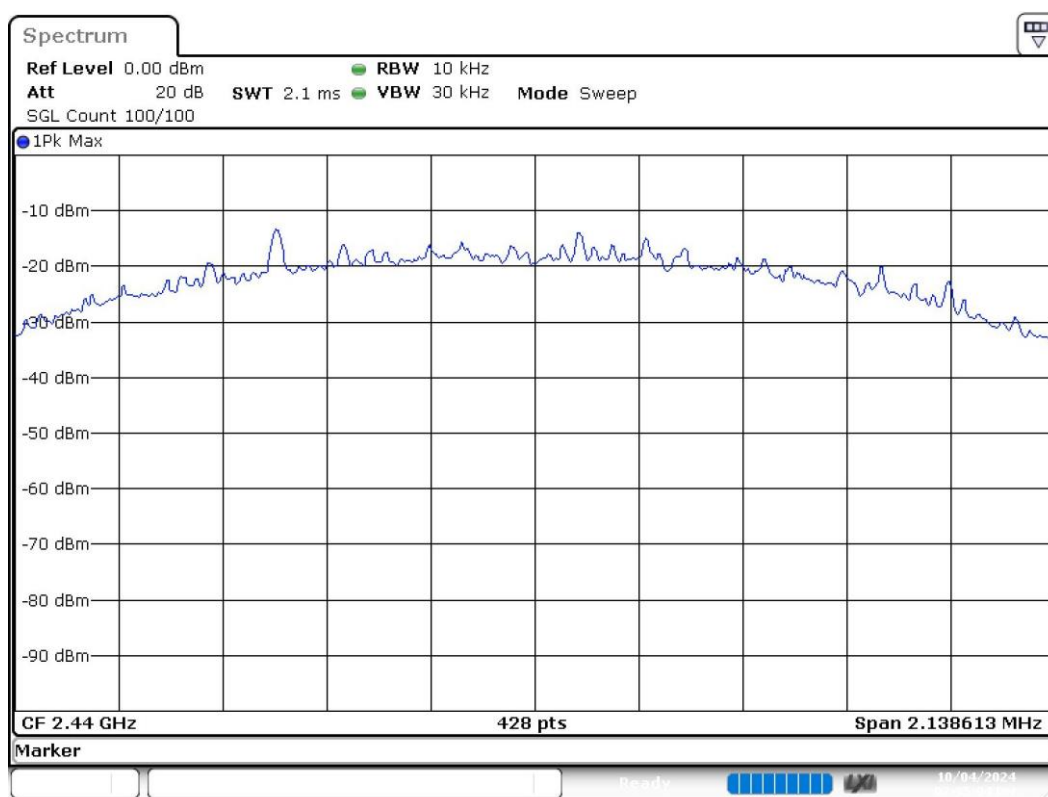
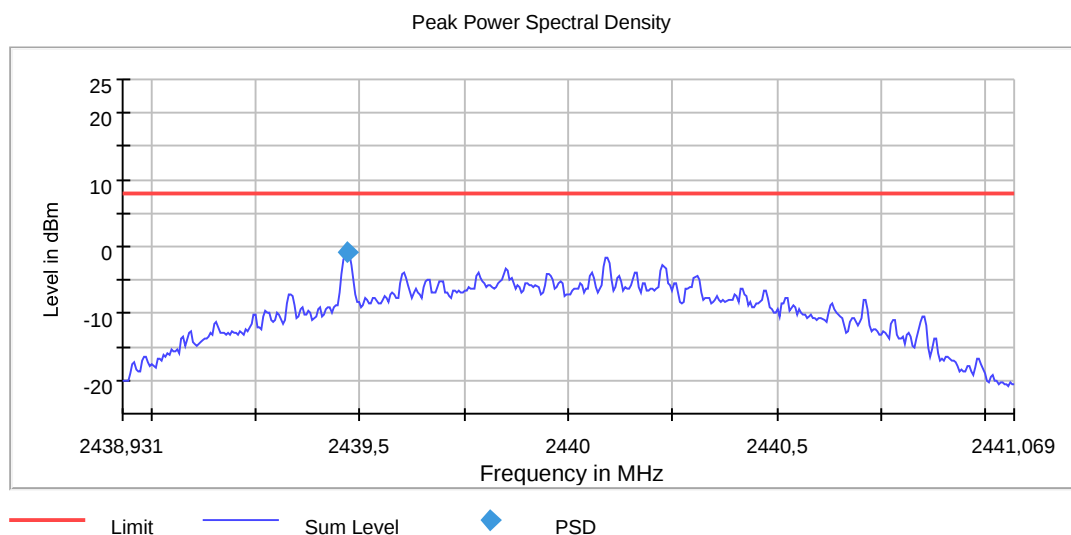
Date: 4.OCT.2024 14:21:35

Screenshot: Peak power spectral density, middle channel, 1M bandwidth operation. (AH40)



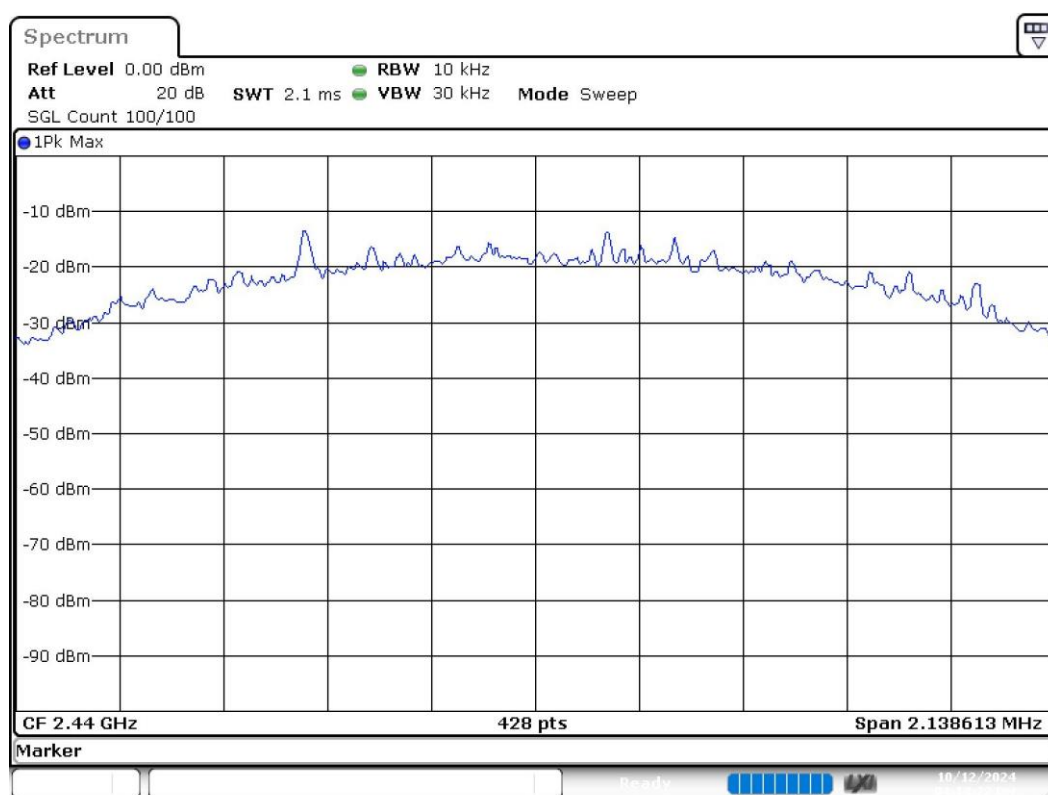
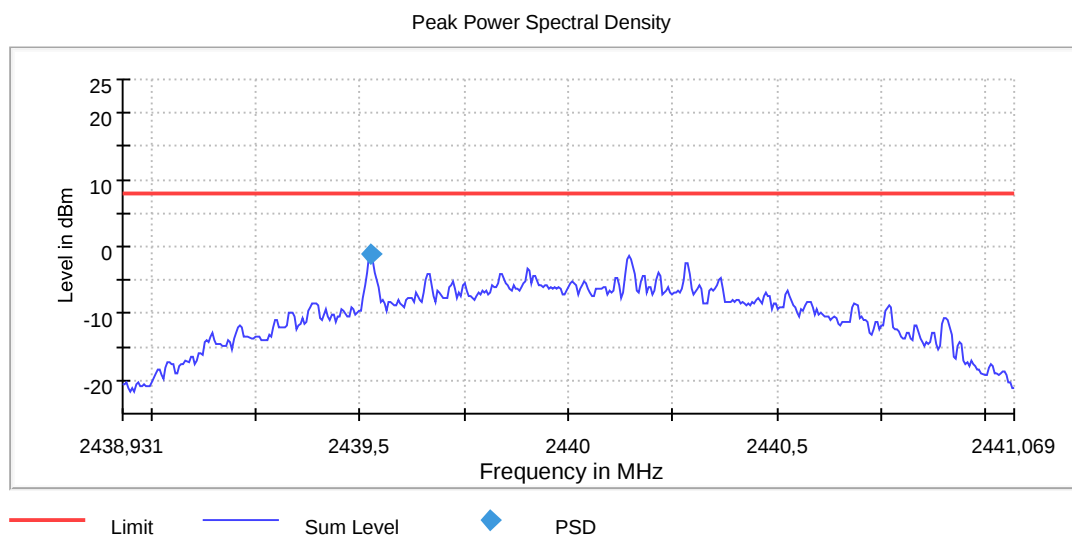
Date: 12.OCT.2024 16:05:07

Screenshot: Peak power spectral density, middle channel, 1M bandwidth operation. (AH20)



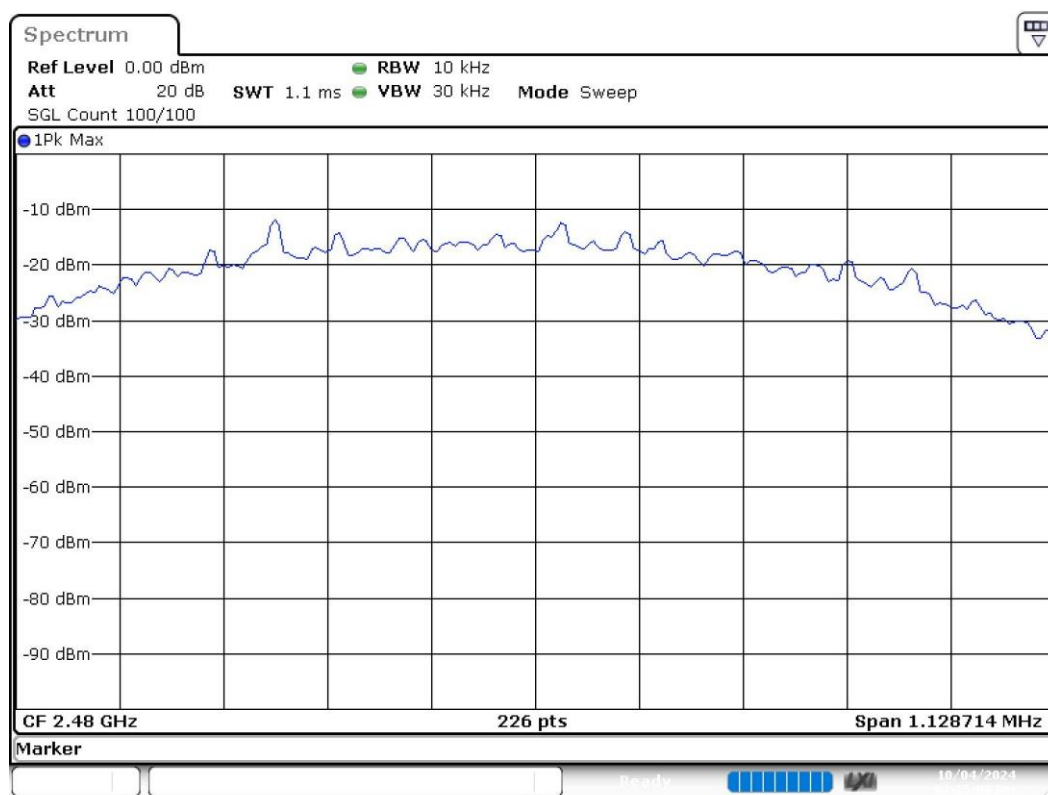
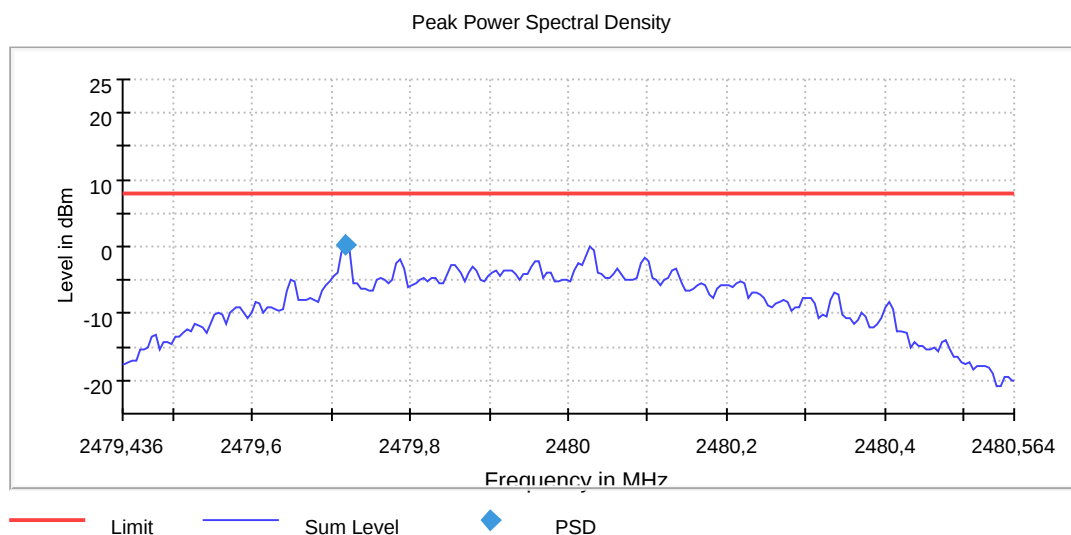
Date: 4.OCT.2024 14:35:04

Screenshot: Peak power spectral density, middle channel, 2M bandwidth operation. (AH40)



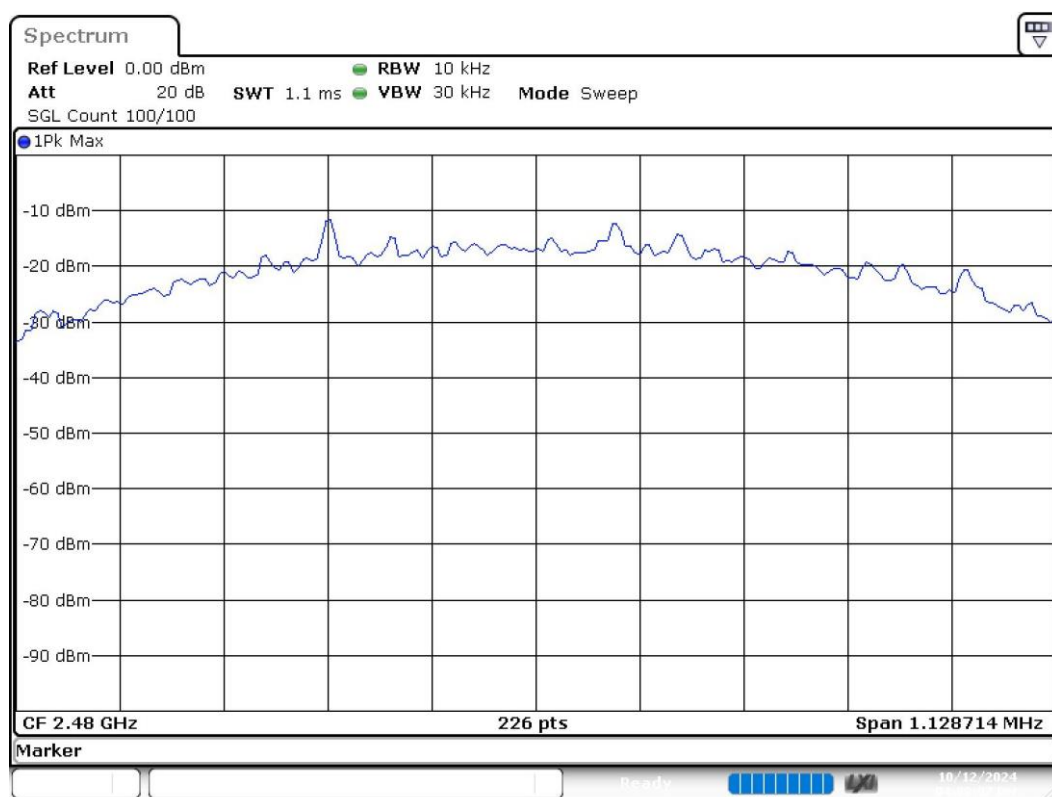
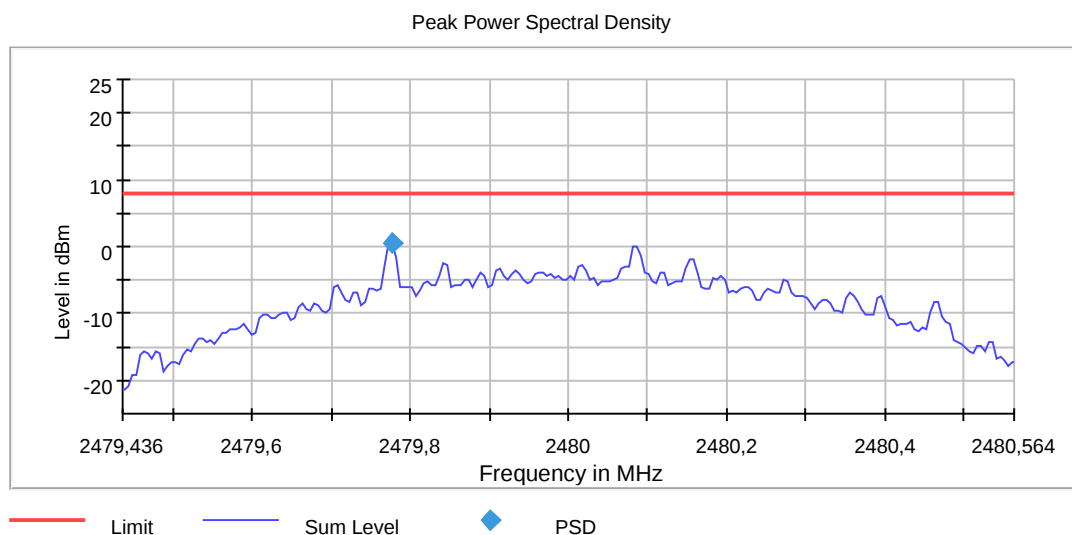
Date: 12.OCT.2024 16:14:23

Screenshot: Peak power spectral density, middle channel, 2M bandwidth operation. (AH20)



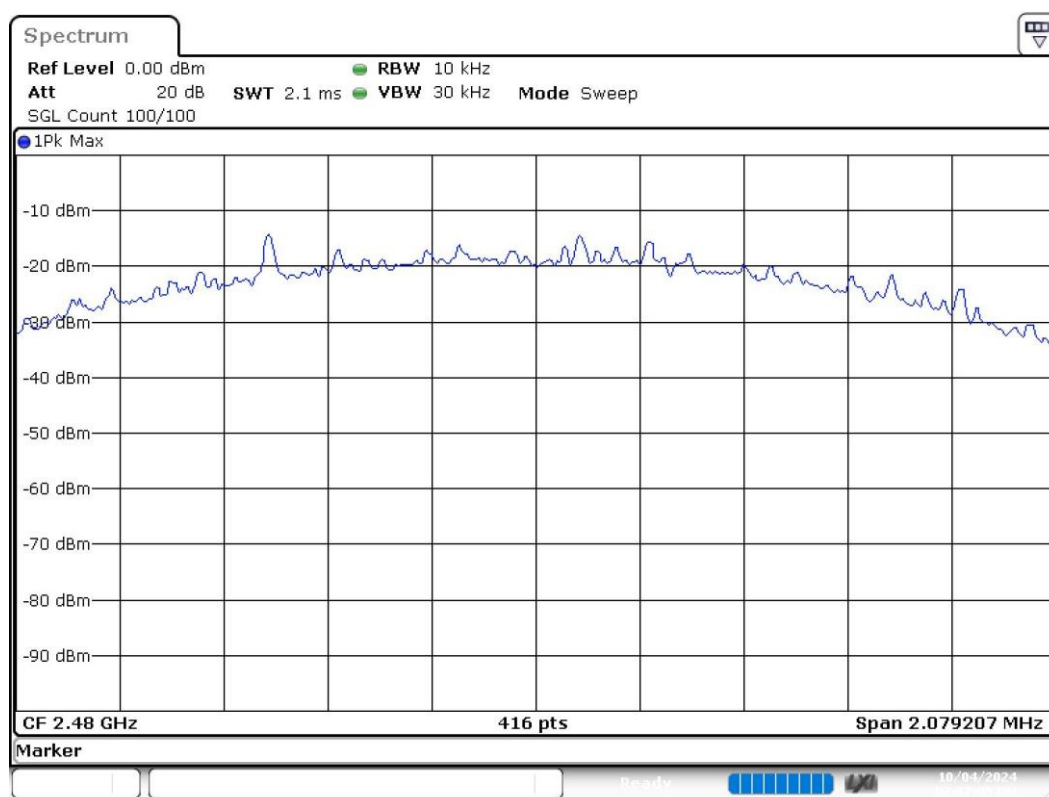
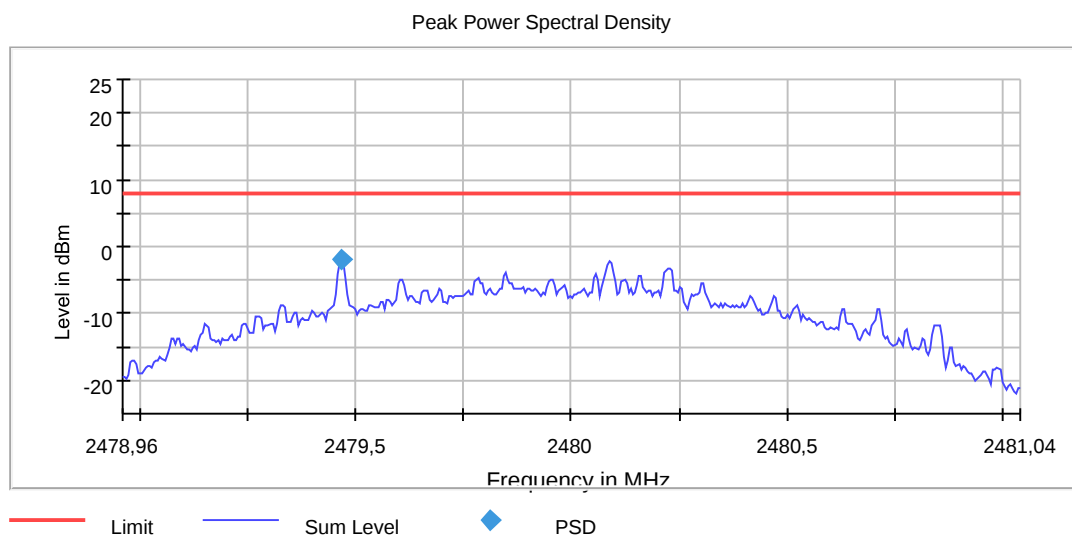
Date: 4.OCT.2024 14:25:00

Screenshot: Peak power spectral density, high channel, 1M bandwidth operation. (AH40)



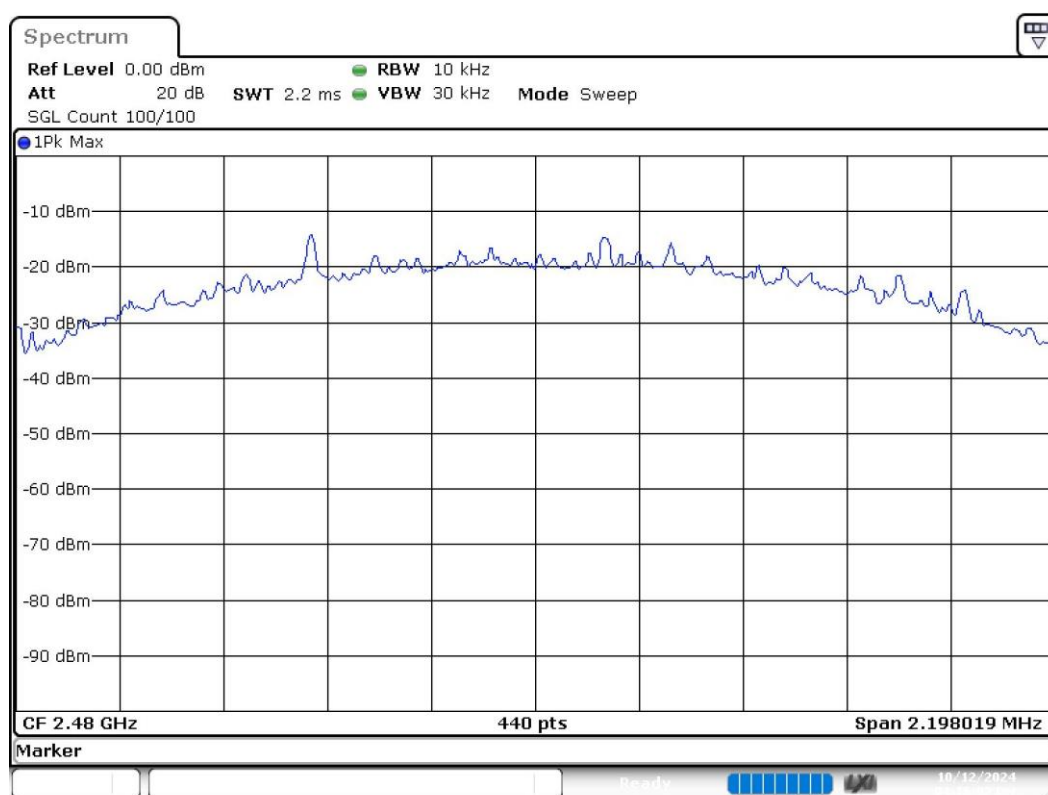
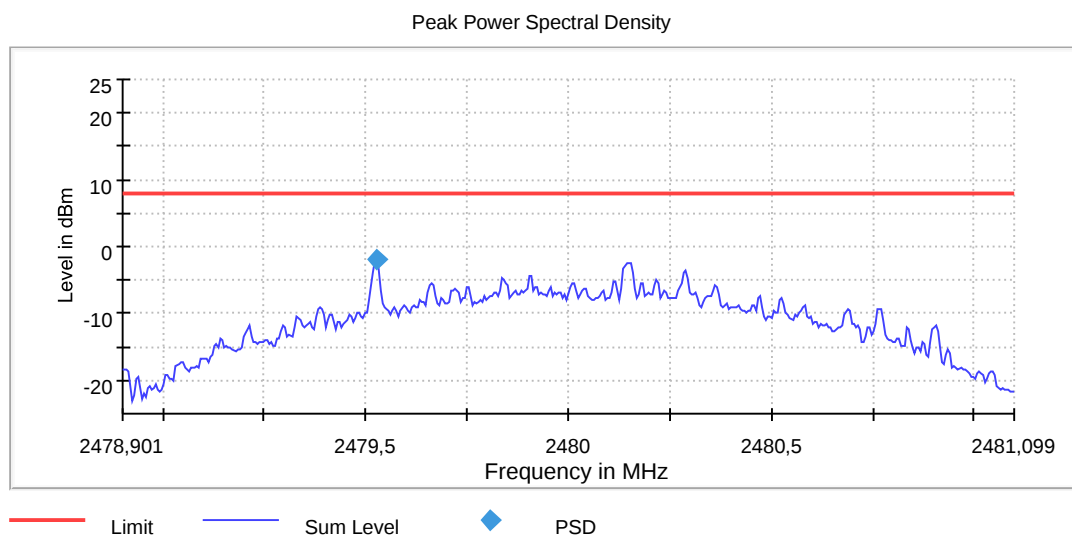
Date: 12.OCT.2024 16:08:08

Screenshot: Peak power spectral density, high channel, 1M bandwidth operation. (AH20)



Date: 4.OCT.2024 14:37:05

Screenshot: Peak power spectral density, high channel, 2M bandwidth operation. (AH40)



Date: 12.OCT.2024 16:16:02

Screenshot: Peak power spectral density, high channel, 2M bandwidth operation. (AH20)

Test result, model AH40

Mode of Operation	Channel [MHz]	PSD [dBm/3kHz]
1MHz BW, Lower	2402	1.722
2MHz BW, Lower	2402	-0.858
1MHz BW, Mid	2440	1.836
2MHz BW, Mid	2440	-0.937
1MHz BW, Upper	2480	0.343
2MHz BW, Upper	2480	-1.933

Test result, model AH20

Mode of Operation	Channel [MHz]	PSD [dBm/3kHz]
1MHz BW, Lower	2402	1.111
2MHz BW, Lower	2402	-1.390
1MHz BW, Mid	2440	1.521
2MHz BW, Mid	2440	-1.215
1MHz BW, Upper	2480	0.601
2MHz BW, Upper	2480	-2.029

13 TEST EQUIPMENT

Conducted emission test site BUR 4

Equipment type	Manufacturer	Model	Inv. No.	Last Cal. date	Cal. interval
Measurement software	Rohde & Schwarz	EMC32 - Version 10.60.20	--	--	--
Receiver	Rohde & Schwarz	ESCI	31686	Jul – 2024	1 year
AMN / LISN	Rohde & Schwarz	ESH3-Z5	30232	Jul – 2024	1 year
Pulse limiter	Rohde & Schwarz	ESH3-Z2	32523	Jul – 2024	1 year
Measurement cable	Bedeia	RG223	39024	Feb – 2024	1 year
Measurement cable	Suhner	G 03232 D-01	39075	Jan – 2024	1 year

3m SAC

Equipment type	Manufacturer	Model	Inv. No.	Last Cal. date	Cal. interval
Measurement software	Rohde & Schwarz	EMC32 - Version 11.50.00	--	--	--
Receiver	Rohde & Schwarz	ESW 44	33950	Jul - 2024	1 year
Antenna ULTRALOG	Rohde & Schwarz	HL562	32310	Jul - 2024	2 years
Measurement cable	Rosenberger	UFB311A	39053	Aug - 2024	1 year
Measurement cable	Suhner	Sucoflex 104	39033	Oct - 2023	1 year
Measurement cable	Huber + Suhner	Sucoflex 104 PE	39086	Dec - 2023	1 year
Termo/hygro	Vaisala	HM41	31326	Dec - 2023	1 year

10m SAC

Equipment type	Manufacturer	Model	Inv. No.	Last Cal. date	Cal. interval
Measurement software	Rohde & Schwarz	EMC32 - Version 11.60.00	--	--	--
Receiver	Rohde & Schwarz	ESW 44	33890	Jul - 2024	1 year
BILOG Antenna	Rohde & Schwarz	TESEQ	34200	Jul - 2023	2 years
Measurement cable	Huber + Suhner	Sucoflex 106	39122	Aug - 2024	1 year
Measurement cable	Rosenberger	UFB293C	39163	Jun – 2024	1 year
Measurement cable	Rosenberger	UFB293C	39148	Jun – 2024	1 year
Measurement cable	Rosenberger	Ut-141A-AL-TP	39235	Nov – 2022	2 year
Preamplifier	SEMKO	AM1331	S7992	Oct – 2024	1 year
Termo/hygro	Vaisala	HM41	31215	Jul – 2024	1 year
Pulse limiter	Rohde & Schwarz	ESH3-Z2	32457	Jul – 2024	1 year

3m FAR

Equipment type	Manufacturer	Model	Inv. No.	Last Cal. date	Cal. interval
Measurement software	Rohde & Schwarz	EMC32 - 11.60.00	--	--	--
Signal analyzer	Rohde & Schwarz	ESU 40	13178	Jul – 2024	1 year
Measurement cable	Huber + Suhner	Sucoflex 102	39135	Jul – 2024	1 year
Measurement cable	Huber + Suhner	Sucoflex 102	39136	Jul – 2024	1 year
Measurement cable	Huber + Suhner	Sucoflex 102	39138	Jul – 2024	1 year
Horn antenna	EMCO	3115	4936	Oct - 2024	1 year
Pre amplifier	Sangus	00101400-23-10P -6-S ; AFS44-12002400-32-10P -44	12335	Jul – 2024	1 year
Horn antenna	EMCO	3160-08	30099	Sep - 2024	2 years
Horn antenna	EMCO	3160-09	34187	Oct - 2020	5 years
2,4 GHz band reject filter:	K&L MICROWAVE INC	WRCGV10-2381-2401-2479-2499-40SS	34448	Dec - 2023	1 year
4 GHz high pass filter	K&L MICROWAVE INC	4410-X4500/18000 -0/0	5133	May - 2024	1 year
10 dB Attenuator:	Huber+Suhner	5910_N-50-010	33208	Dec - 2023	1 year
20 dB Attenuator:	Huber+Suhner	5920_N-50-010/199_NE	32697	April - 2024	1 year
Anechoic Chamber	COMTEST	Fully anechoic room	32600	Oct - 2023	2 years

TS8997

Equipment type	Manufacturer	Model	Inv. No.	Last Cal. date	Cal. interval
Measurement software	Rohde & Schwarz	EMC32 - 11.70.00	--	--	--
Signal analyzer	Rohde & Schwarz	FSV 30	32594	Jul – 2024	1 year
Open switch and control platform	Rohde & Schwarz	OSP-B157W8	33942	Jul – 2024	1 year
Measurement cable	Huber + Suhner	LU7-S074-500	39170	April - 2024	1 year
Measurement cable	Huber + Suhner	LU7-S083-3000	39185	April - 2024	1 year
Measurement cable	Huber + Suhner	Sucoflex 104 PE	39091	Dec - 2023	1 year
Signal generator:	Rohde & Schwarz	SMBV100A	32593	Jul – 2024	1 year
Temperature chamber:	Vötsch	VC4018	12282	N/A	N/A
Communication tester	Rohde & Schwarz	CMW500	34164	N/A	N/A
Combiner 4-port	ANZAC	DS-4-4	3551	Nov - 2023	3 years

14 MEASUREMENT UNCERTAINTY

Continuous conducted disturbances with AMN in the frequency range 9 kHz to 30 MHz ± 3.7 dB

Measurement uncertainty for radiated disturbance

Uncertainty for the frequency range 30 to 1000 MHz at 3 m	± 5.1 dB
Uncertainty for the frequency range 30 to 1000 MHz at 10 m	± 5.0 dB
Uncertainty for the frequency range 1.0 to 18 GHz at 3 m	± 4.7 dB
Uncertainty for the frequency range 18 to 26 GHz at 3 m	± 4.8 dB
Uncertainty for the frequency range 26 to 40 GHz at 3 m	± 5.7 dB

Measurement uncertainty is calculated in accordance with CISPR 16-4-2:2011.

The measurement uncertainty is given with a confidence of 95 %.

15 TEST SET UP AND EUT PHOTOS

EUT photos are in separate document 2500906STO-104.

Test set up photos are in separate document 2500906TO-105.