

EUROFINS ELECTRICAL TESTING SERVICE (SHENZHEN) CO., LTD.

RADIO TEST - REPORT

FCC Compliance Test Report for

Product name: Anker Prime Wireless Charging Station (3-in-1, MagGo, AirCool, Foldable)

Model name: A25N1

FCC ID: 2AOKB-A25N1

Test Report Number: EFGX25090522-IE-01-E01

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1 General Information

1.1 Notes

The results of this test report relate exclusively to the item tested as specified in chapter "Description of test item" and are not transferable to any other test items.

Eurofins Electrical Testing Service (Shenzhen) Co., Ltd. is not responsible for any generalisations and conclusions drawn from this report. Any modification of the test item can lead to invalidity of test results and this test report may therefore be not applicable to the modified test item.

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Operator:

2025-10-22

Bruce Zheng / Project Engineer



Date

Eurofins-Lab.

Name / Title

Signature

Technical responsibility for area of testing:

2025-10-22

Albert Xu / Lab Manager



Date

Eurofins

Name / Title

Signature

1.2 Testing laboratory

Eurofins Electrical Testing Service (Shenzhen) Co., Ltd.

Room 20 of 2/F., 1/F., Building 2, Spring Block & Room 102, Building 8, Autumn Block, Meishenghuigu Innovation Park, No.83, Dabao Road, Bao'an District, Shenzhen, Guangdong, China

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The Laboratory has passed the Accreditation by the American Association for Laboratory Accreditation (A2LA). The Accreditation number is 5376.01

The Laboratory has been listed by industry Canada to perform electromagnetic emission measurements, The CAB identifier is CN0088

1.3 Details of applicant

Name	:	Anker Innovations Limited
Address	:	Unit 56, 8th Floor, Tower 2, Admiralty Centre, 18 Harcourt Road, Hong Kong
Telephone	:	./.
Fax	:	./.

1.4 Details of manufacturer

Name	:	Anker Innovations Limited
Address	:	Unit 56, 8th Floor, Tower 2, Admiralty Centre, 18 Harcourt Road, Hong Kong
Telephone	:	./.
Fax	:	./.

1.5 Application details

Date of receipt of application : 2025-09-26
 Date of receipt of test item : 2025-09-26
 Date of test : 2025-09-26 to 2025-10-22
 Date of issue : 2025-10-22

1.6 Test item

Product type : Anker Prime Wireless Charging Station (3-in-1, MagGo, AirCool, Foldable)
 Model name : A25N1
 Sample ID : 250927-19-001
 Brand : ANKER
 Serial number : N/A
 Ratings : Input: 9.0V, 3A; 12V, 3A; 15V, 3A
 Output: Phone:25W; Apple watch: 5W; TWS: 5W
 Test voltage : 120V
 Additional information : ./

RadioTechnical data

Operating Frequency : Phone:115-148kHz & 360kHz
 TWS:115-148kHz
 Apple watch:326.5kHz & 1.778MHz
 Modulation : ASK

The above sample(s) and sample information was/were submitted and identified on behalf of the applicant.
 Eurofins assures objectivity and impartiality of the test, and fulfills the obligation of confidentiality for applicant's commercial information and technical documents.

1.7 Test standards

Test Standards	
FCC Part 15 Subpart C	PART 15 - RADIO FREQUENCY DEVICES Subpart C - Intentional Radiators

Test Method

- 1: ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz.
- 2: ANSI C63.10-2020, American National Standard for Testing Unlicensed Wireless Devices.

2 Technical test

2.1 Summary of test results

No deviations from the technical specification(s) were ascertained in the course of the tests performed.



or

The deviations as specified were ascertained in the course of the tests performed.



2.2 Test environment

Ac line conducted

Enviroment Parameter	Temperature	Relative Humidity
101.2 kPa	24.2℃	57.3%

Radiated

Enviroment Parameter	Temperature	Relative Humidity
101.2 kPa	24.3℃	52.7%

2.3 Measurement uncertainty

The uncertainty is calculated using the methods suggested in the "Guide to the Expression of Uncertainty in Measurement" (GUM) published by ISO.

System Measurement Uncertainty	
Test Items	Extended Uncertainty
Uncertainty in conducted measurements	1.96dB
Uncertainty for Radiated Emission 9KHz-30MHz	4.56dB
Uncertainty for Radiated Emission 30MHz-3000MHz	Horizontal: 4.46dB; Vertical: 4.54dB;

2.4 Test mode

No.	Operating Mode
Mode 1	Wireless Output (Phone:5W)
Mode 2	Wireless Output (Phone:7.5W)
Mode 3	Wireless Output (Phone:25W)
Mode 4	Wireless Output (Apple watch:3W)
Mode 5	Wireless Output (Apple watch:5W)
Mode 6	Wireless Output (TWS:5W)
Mode 7	Wireless Output (Phone:5W + TWS:5W)
Mode 8	Wireless Output (Phone:7.5W + TWS:5W)
Mode 9	Wireless Output (Phone:25W + TWS:5W)
Mode 10	Wireless Output (Phone:5W + Apple watch:3W)
Mode 11	Wireless Output (Phone:7.5W + Apple watch:3W)
Mode 12	Wireless Output (Phone:25W + Apple watch:3W)
Mode 13	Wireless Output (Phone:5W + Apple watch:5W)
Mode 14	Wireless Output (Phone:7.5W + Apple watch:5W)
Mode 15	Wireless Output (Phone:25W + Apple watch:5W)
Mode 16	Wireless Output (Apple watch:3W + TWS:5W)
Mode 17	Wireless Output (Apple watch:5W + TWS:5W)
Mode 18	Wireless Output (Phone:5W + Apple watch:3W + TWS:5W)
Mode 19	Wireless Output (Phone:7.5W + Apple watch:3W + TWS:5W)
Mode 20	Wireless Output (Phone:25W + Apple watch:3W + TWS:5W)
Mode 21	Wireless Output (Phone:5W + Apple watch:5W + TWS:5W)
Mode 22	Wireless Output (Phone:7.5W + Apple watch:5W + TWS:5W)
Mode 23	Wireless Output (Phone:25W + Apple watch:5W + TWS:5W)
Mode 24	Standby

Note:

Phone 5W: 115-148kHz

Phone 7.5W: 115-148kHz

Phone 25W: 360kHz

TWS 5W: 115-148kHz

Apple watch 3W: 326.5kHz

Apple watch 5W: 1.778MHz

2.5 Test equipment utilized

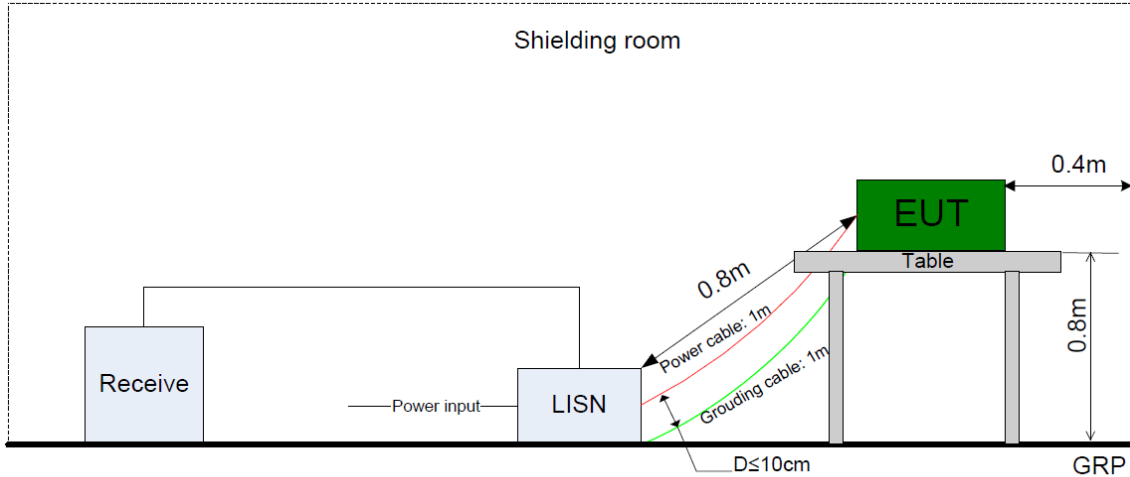
EQUIPMENT ID	EQUIPMENT NAME	MODEL NO.	CAL. DUE DATE
23-2-10-63	Temperature & Humidity Meter	COS-03	2026-03-25
23-2-10-65	Barometer	Baro	2026-03-25
23-2-13-12	Signal Analyzer	N9010B-544	2026-03-25
23-2-10-43	Switch and Control Unit	ERIT-E-JS0806-2	2026-03-25
23-2-10-44	DC power supply	E3642A	2026-03-25
23-2-10-45	Temperature test chamber	SG-80-CC-2	2026-03-25
23-2-10-50	Temperature & Humidity Meter	COS-03	2026-03-25
23-2-10-66	Barometer	Baro	2026-03-25
23-2-13-01	EMI Test Receiver	ESR7	2026-03-25
23-2-13-02	Signal Analyzer	N9020B-544	2026-03-25
23-2-12-01	Active Loop Antenna	FMZB 1519B	2026-05-29
23-2-12-02	TRILOG Broadband Antenna	VULB9168	2026-05-29

2.6 Auxiliary Equipment Used during Test:

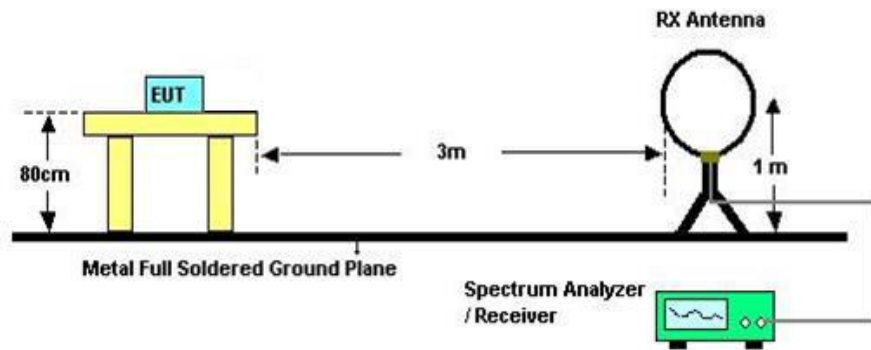
DESCRIPTION	MANUFACTURER	MODEL NO.	S/N
Wireless charging load	YBZ	YBZ1.1	---
Wireless charging load	YBZ	YBZ3.0	---
Wireless charging load	YBZ	YBZ1.2	---
iWatch	Apple	iWatch S7	---

2.7 Test setup

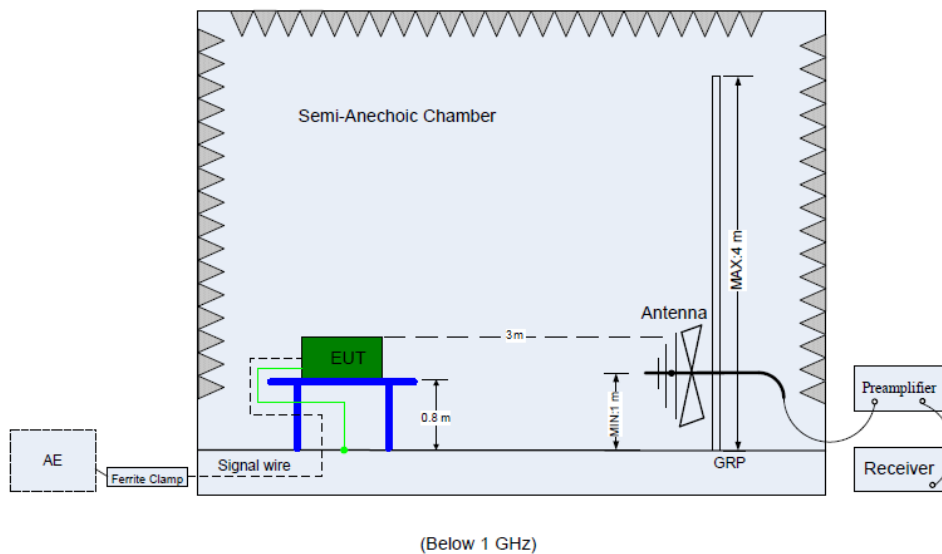
AC line conducted



Radiated tests below 30MHz



Radiated tests below 1GHz



2.8 Test results

☒ 1st test

☐ test after modification

☐ production test

Technical Requirements				
FCC Part 15 Subpart C				
Test Condition		Test Result	Verdict	Test Site
§15.207	Conducted emission AC power port	See Page 11	Pass	Site 1
§15.209	Radiated Emission	See page 17	Pass	Site 1
§15.215 (c)	20dB Occupied bandwidth	See page 26	Pass	Site 1
§15.203	Antenna requirement	See note 1	Pass	--

Note 1: No antenna connector is used.

3 Technical Requirement

3.1 Conducted emission AC power port

Test Method:

The test method was referred to the subclause 6.2 of ANSI C63.10-2020.

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both Neutral and Live lines.

Limit:

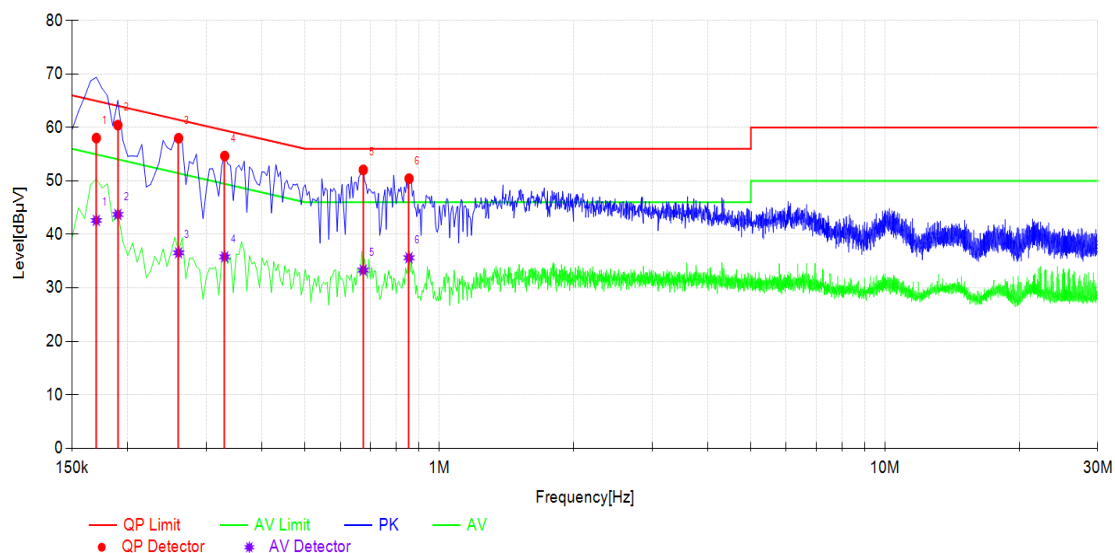
FCC §15.207 (a)

Frequency	QP Limit	AV Limit
MHz	dBμV	dBμV
0.150-0.500	66-56*	56-46*
0.500-5	56	46
5-30	60	50

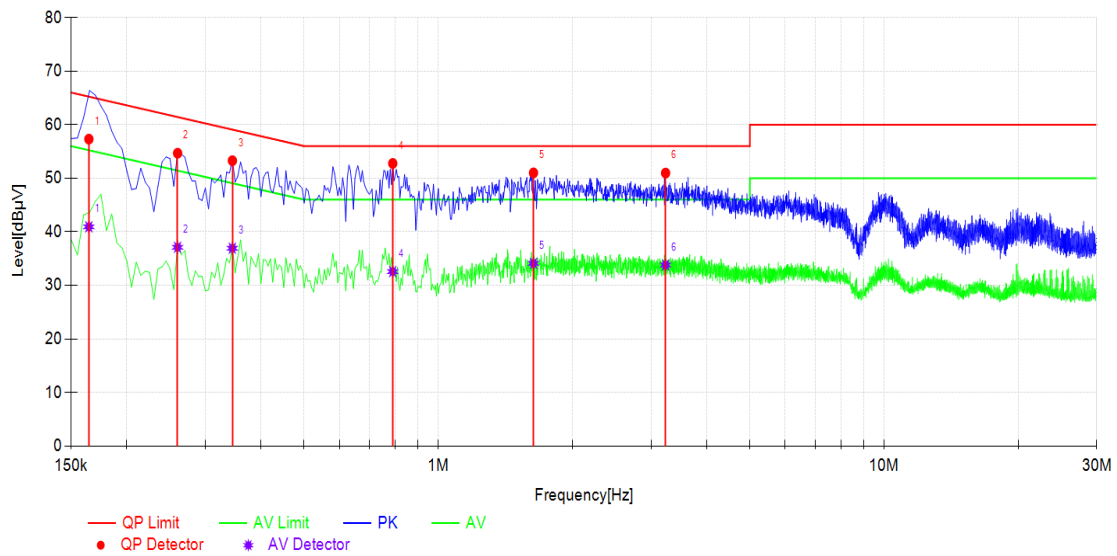
Decreasing linear.

Test Result:

All of the listed pre-test mode were tested, only the data of the worst mode(Mode23) is recorded in the report



Final Data List										
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Type	Verdict
1	0.1700	12.29	58.02	64.96	6.94	42.62	54.96	12.34	L1	PASS
2	0.19	12.33	60.44	64.04	3.60	43.73	54.04	10.31	L1	PASS
3	0.26	12.33	57.99	61.43	3.44	36.56	51.43	14.87	L1	PASS
4	0.33	12.31	54.66	59.45	4.79	35.81	49.45	13.64	L1	PASS
5	0.675	12.26	52.07	56.00	3.93	33.32	46.00	12.68	L1	PASS
6	0.855	12.31	50.44	56.00	5.56	35.63	46.00	10.37	L1	PASS



Final Data List										
NO.	Freq. [MHz]	Factor [dB]	QP Value [dBμV]	QP Limit [dBμV]	QP Margin [dB]	AV Value [dBμV]	AV Limit [dBμV]	AV Margin [dB]	Type	Verdict
1	0.1644	12.35	57.32	65.24	7.92	40.94	55.24	14.30	N	PASS
2	0.26	12.33	54.68	61.43	6.75	37.12	51.43	14.31	N	PASS
3	0.345	12.30	53.29	59.08	5.79	36.94	49.08	12.14	N	PASS
4	0.79	12.26	52.78	56.00	3.22	32.58	46.00	13.42	N	PASS
5	1.635	12.34	51.01	56.00	4.99	34.12	46.00	11.88	N	PASS
6	3.235	12.39	50.98	56.00	5.02	33.81	46.00	12.19	N	PASS

3.2 Radiated emissions

Test Method:

Radiated Spurious Emissions Below 30MHz: ANSI C63.10-2020 Section 6.4

Radiated Spurious Emissions 30-1000MHz: ANSI C63.10-2020 Section 6.3 and 6.5

[For 9 kHz ~ 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 30MHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

[For above 30 MHz]

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. For measurement below 1GHz, the initial step in collecting conducted emission data is a spectrum analyzer peak detector mode pre-scanning the measurement frequency range. Significant peaks are then marked and then Quasi Peak detector mode re-measured. If the emission level of the EUT measured by the peak detector is lower than the applicable limit, the peak emission level will be reported. Otherwise, the emission measurement will be repeated using the quasi-peak detector and reported.

Note:

- a. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
- b. All modes of operation were investigated and the worst-case emissions are reported.

Limit:

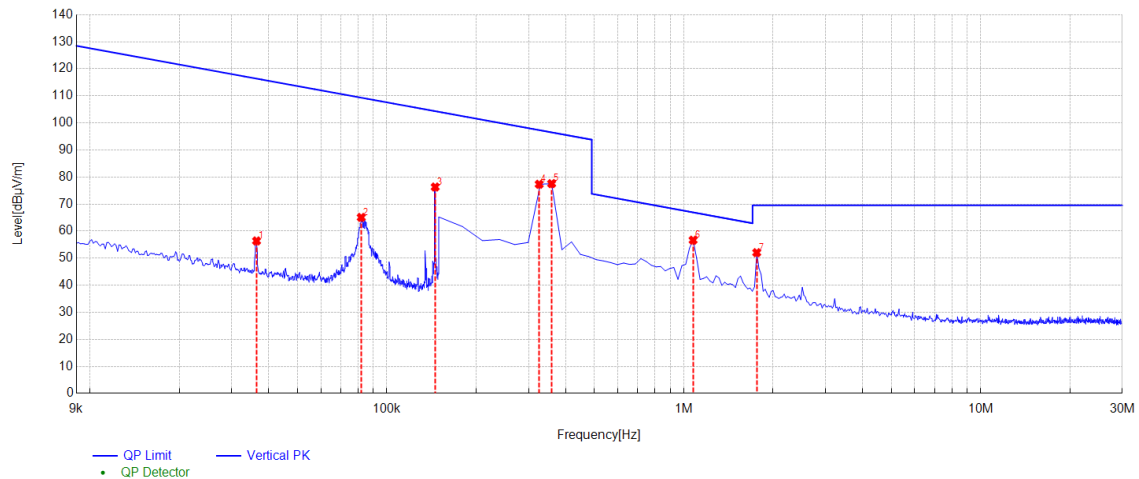
FCC §15.209

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 m	-
1.705 - 30	30 @ 30m	-
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

Test Result:

After pre-scan, the worst emission data was recorded.

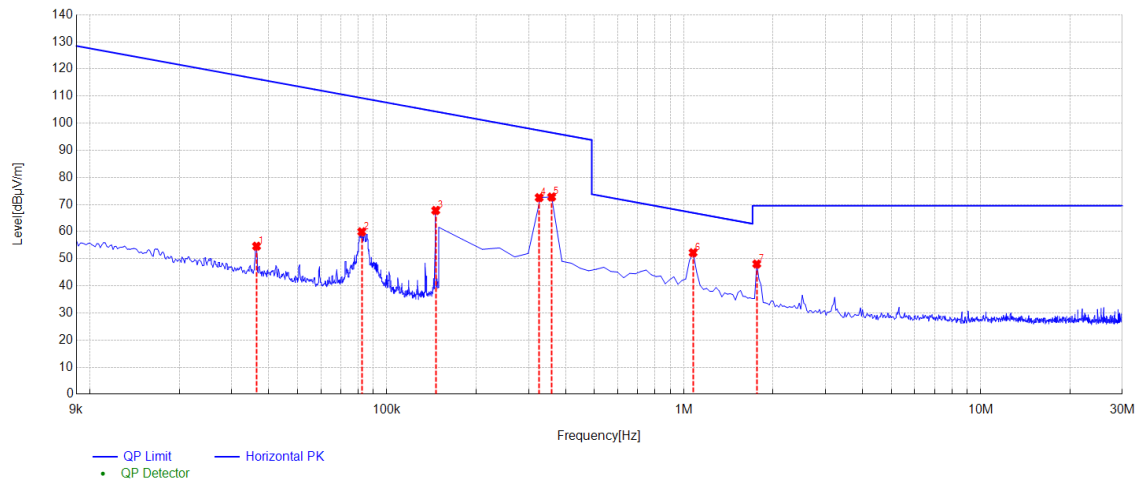
Mode 20



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	56.38	-11.03	116.38	60.00	100	78	X	PASS
2	0.0820	65.07	-10.67	109.32	44.25	100	325	X	PASS
3*	0.1455	76.31	-10.61	104.34	28.03	100	207	X	PASS
4*	0.3260	77.34	-10.56	97.26	19.92	100	178	X	PASS
5*	0.3600	77.56	-10.51	96.50	18.94	100	178	X	PASS
6	1.0754	56.66	-9.88	66.93	10.27	100	171	X	PASS
7*	1.7780	52.05	-10.14	69.50	17.45	100	84	X	PASS

Remarks:

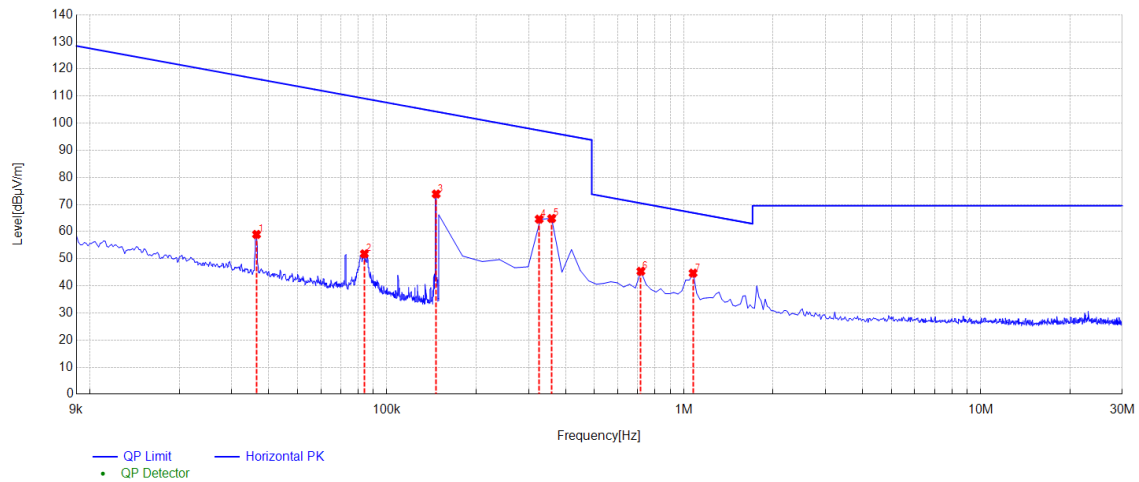
1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	54.63	-11.03	116.38	61.75	100	350	Y	PASS
2	0.0823	59.94	-10.67	109.29	49.35	100	267	Y	PASS
3*	0.1461	67.80	-10.61	104.31	36.51	100	130	Y	PASS
4*	0.3260	72.55	-10.56	97.26	24.71	100	95	Y	PASS
5*	0.3600	72.78	-10.51	96.50	23.72	100	95	Y	PASS
6	1.0754	52.23	-9.88	66.93	14.70	100	102	Y	PASS
7*	1.7780	48.06	-10.14	69.50	21.44	100	19	Y	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamplifier Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

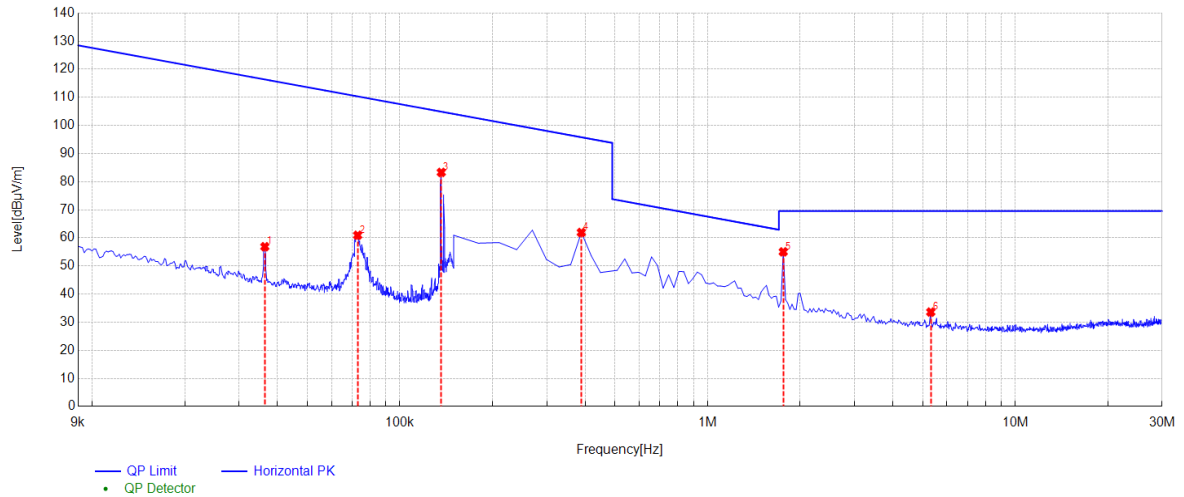


NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	58.97	-11.03	116.38	57.41	100	198	Z	PASS
2	0.0840	51.82	-10.66	109.11	57.29	100	313	Z	PASS
3*	0.1466	73.88	-10.61	104.27	30.39	100	192	Z	PASS
4*	0.3260	64.60	-10.56	97.26	32.66	100	168	Z	PASS
5*	0.3600	64.83	-10.51	96.50	31.67	100	168	Z	PASS
6	0.7171	45.35	-10.16	70.47	25.12	100	215	Z	PASS
7	1.0754	44.69	-9.88	66.93	22.24	100	154	Z	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamplifier Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

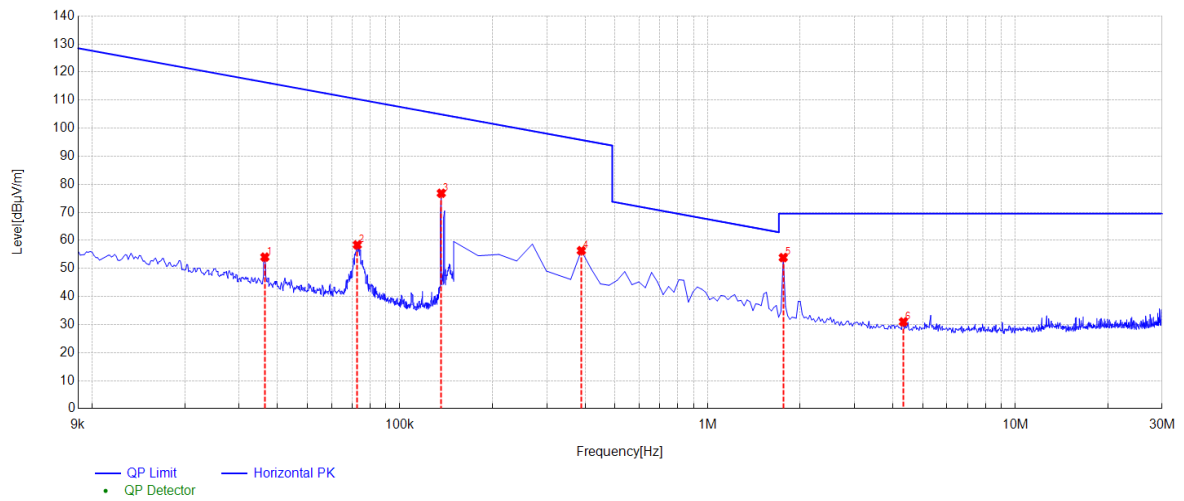
Mode 21



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	56.87	-11.03	116.38	59.51	100	130	X	PASS
2	0.0729	60.93	-10.70	110.34	49.41	100	153	X	PASS
3*	0.1363	83.30	-10.62	104.91	21.61	100	212	X	PASS
4	0.3888	61.92	-10.46	95.81	33.89	100	210	X	PASS
5*	1.778	55.03	-10.14	69.50	14.47	100	298	X	PASS
6	5.3140	33.60	-9.54	69.50	35.90	100	300	X	PASS

Remarks:

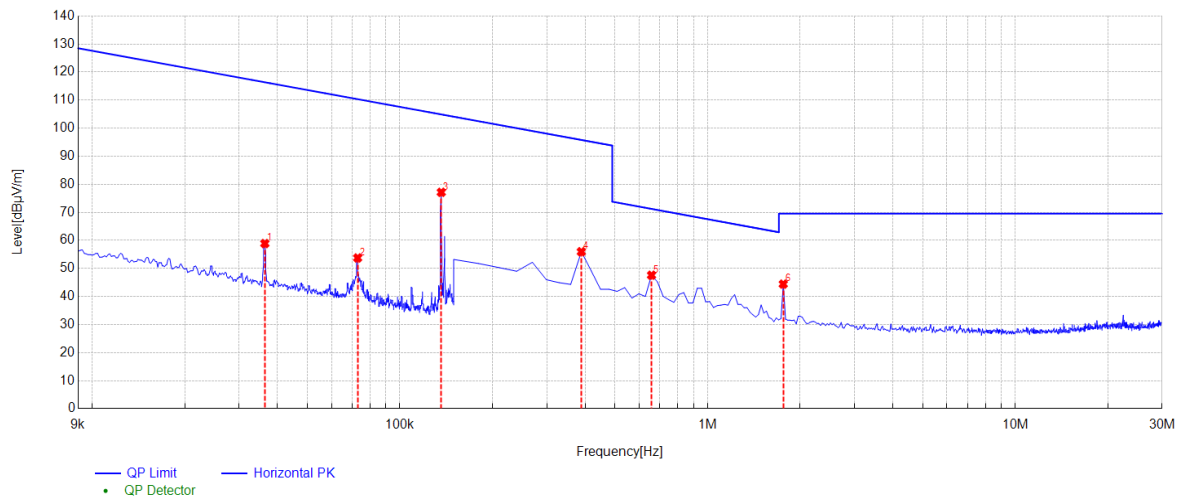
1. Result value (dBμV/m) = Reading value (dBμV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBμV/m) - Limit value (dBμV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBμV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	54.05	-11.03	116.38	62.33	100	114	Y	PASS
2	0.0727	58.41	-10.70	110.36	51.95	100	249	Y	PASS
3*	0.1363	76.81	-10.62	104.91	28.10	100	308	Y	PASS
4	0.3888	56.34	-10.46	95.81	39.47	100	300	Y	PASS
5*	1.778	53.86	-10.14	69.50	15.64	100	40	Y	PASS
6	4.3290	30.96	-9.88	69.50	38.54	100	201	Y	PASS

Remarks:

1. Result value (dBμV/m) = Reading value (dBμV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBμV/m) - Limit value (dBμV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBμV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

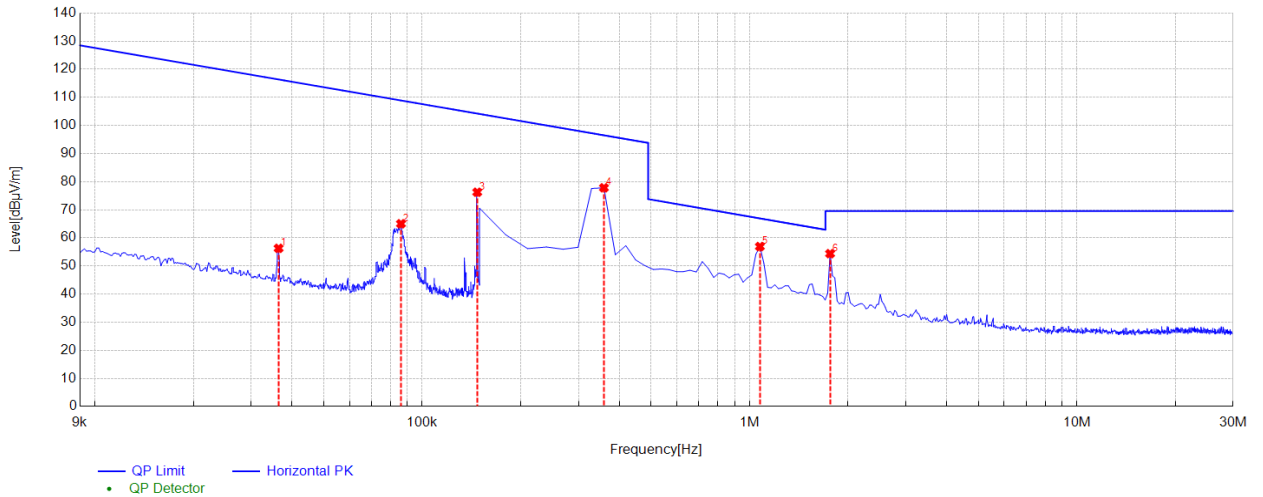


NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	58.89	-11.03	116.38	57.49	100	323	Z	PASS
2	0.0729	53.75	-10.70	110.34	56.59	100	136	Z	PASS
3*	0.1363	77.15	-10.62	104.91	27.76	100	208	Z	PASS
4	0.3888	55.96	-10.46	95.81	39.85	100	190	Z	PASS
5	0.6574	47.59	-10.23	71.23	23.64	100	251	Z	PASS
6*	1.778	44.43	-10.14	69.50	25.07	100	102	Z	PASS

Remarks:

1. Result value (dBμV/m) = Reading value (dBμV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBμV/m) - Limit value (dBμV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBμV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

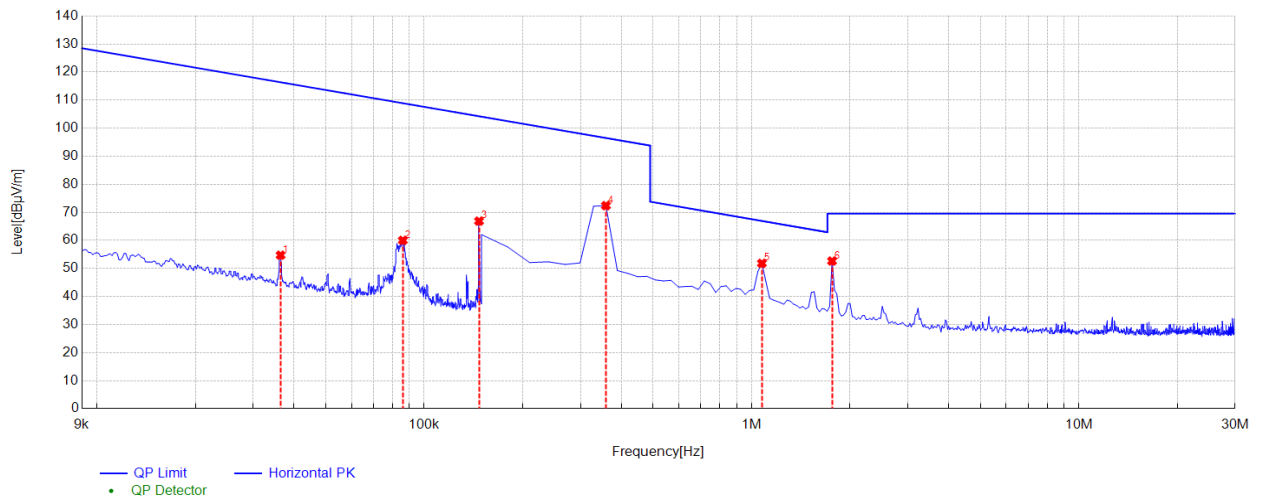
Mode 23



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	56.29	-11.03	116.38	60.09	100	249	X	PASS
2	0.0861	65.03	-10.66	108.89	43.86	100	165	X	PASS
3*	0.1472	76.25	-10.61	104.24	27.99	100	214	X	PASS
4*	0.3600	77.82	-10.51	96.50	18.68	100	175	X	PASS
5	1.0754	56.92	-9.88	66.93	10.01	100	164	X	PASS
6*	1.7780	54.39	-10.14	69.50	15.11	100	115	X	PASS

Remarks:

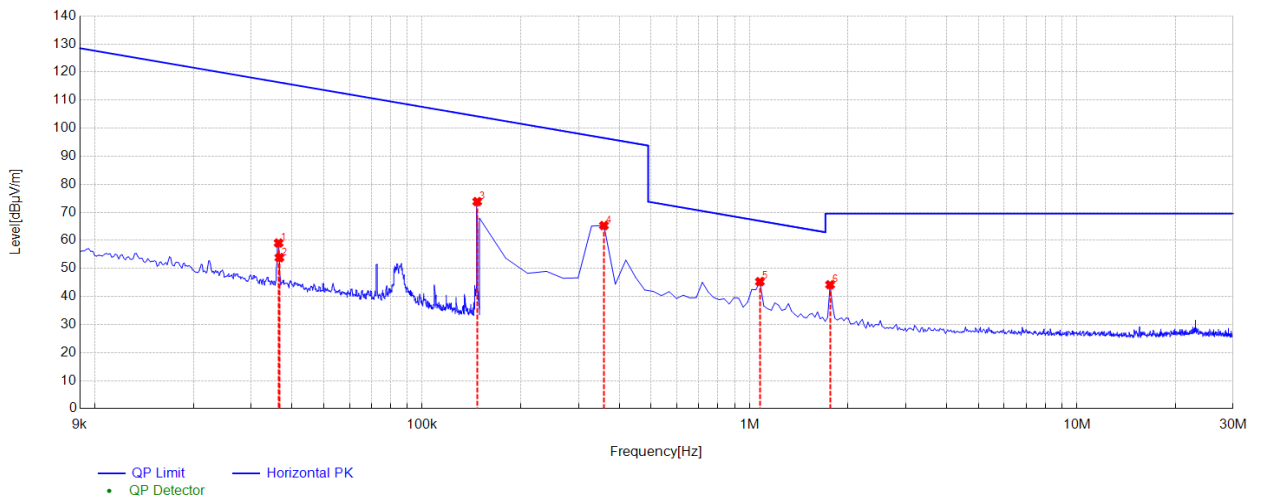
1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	54.73	-11.03	116.38	61.65	100	272	Y	PASS
2	0.0860	60.01	-10.66	108.91	48.90	100	243	Y	PASS
3*	0.1470	66.87	-10.61	104.25	37.38	100	133	Y	PASS
4*	0.3600	72.40	-10.51	96.50	24.10	100	104	Y	PASS
5	1.0754	51.83	-9.88	66.93	15.10	100	98	Y	PASS
6*	1.7780	52.64	-10.14	69.50	16.86	100	17	Y	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. "*" : Fundamental Frequency.

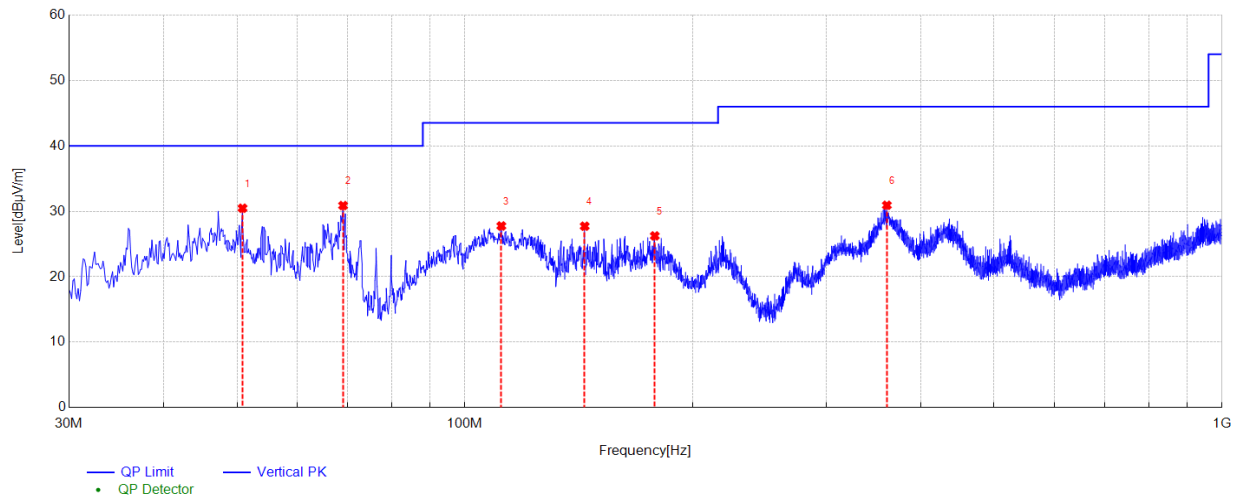


NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	0.0364	59.07	-11.03	116.38	57.31	100	166	Z	PASS
2	0.0366	53.84	-11.03	116.31	62.47	100	50	Z	PASS
3*	0.1472	73.83	-10.61	104.24	30.41	100	195	Z	PASS
4*	0.3600	65.30	-10.51	96.50	31.20	100	173	Z	PASS
5	1.0754	45.29	-9.88	66.93	21.64	100	166	Z	PASS
6*	1.7780	44.18	-10.14	69.50	25.32	100	100	Z	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).
4. The other emission levels were very low against the limit.
5. “*” : Fundamental Frequency.

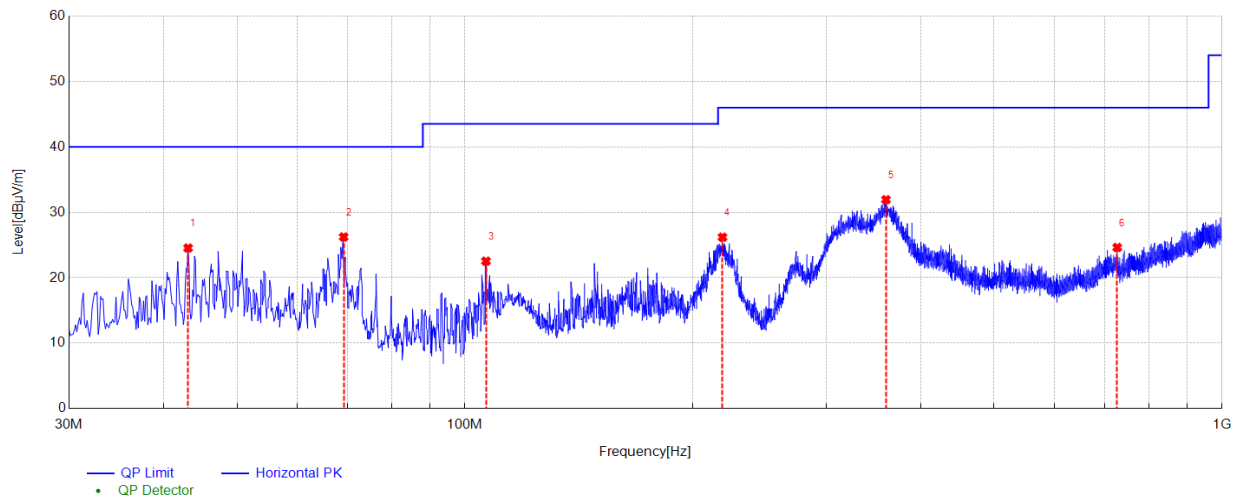
30-1000MHz
Mode 23



NO.	Freq. [MHz]	Level [dBuV/m]	Factor [dB/m]	Limit [dBuV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	50.8550	30.48	-16.45	40.00	9.52	100	254	Vertical	PASS
2	69.0425	30.89	-18.34	40.00	9.11	100	296	Vertical	PASS
3	111.722	27.77	-18.74	43.50	15.73	100	87	Vertical	PASS
4	143.975	27.73	-16.46	43.50	15.77	100	52	Vertical	PASS
5	178.167	26.25	-17.64	43.50	17.25	100	28	Vertical	PASS
6	360.891	30.93	-14.81	46.00	15.07	100	220	Vertical	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamplifier Factor (dB).



NO.	Freq. [MHz]	Level [dBμV/m]	Factor [dB/m]	Limit [dBμV/m]	Margin [dB]	Height [cm]	Angle [°]	Polarity	Verdict
1	43.0950	24.55	-16.13	40.00	15.45	100	10	Horizontal	PASS
2	69.1637	26.24	-18.39	40.00	13.76	100	10	Horizontal	PASS
3	106.630	22.54	-19.24	43.50	20.96	100	10	Horizontal	PASS
4	218.907	26.20	-19.50	46.00	19.80	100	278	Horizontal	PASS
5	359.921	31.93	-14.81	46.00	14.07	100	314	Horizontal	PASS
6	727.187	24.63	-6.64	46.00	21.37	100	221	Horizontal	PASS

Remarks:

1. Result value (dBuV/m) = Reading value (dBuV/m) + Correction Factor (dB/m).
2. Margin(dB) = Result value (dBuV/m) - Limit value (dBuV/m).
3. Correction Factor (dB/m) = Antenna Factor (dBuV/m) + Cable Loss (dB) - Preamp Factor (dB).

3.3 20dB Occupied bandwidth

Test Method:

The test method was referred to the subclause 6.9.2 of ANSI C63.10-2020.

The occupied bandwidth is measured as the width of the spectral envelope of the modulated signal, at an amplitude level reduced from a reference value by a specified ratio (or in decibels, a specified number of dB down from the reference value). Typical ratios, expressed in dB, are -6 dB, -20 dB, and -26 dB, corresponding to 6 dB BW, 20 dB BW, and 26 dB BW, respectively. In this subclause, the ratio is designated by “-xx dB.” The reference value is either the level of the unmodulated carrier or the highest level of the spectral envelope of the modulated signal, as stated by the applicable requirement. Some requirements might specify a specific maximum or minimum value for the “-xx dB” bandwidth; other requirements might specify that the “-xx dB” bandwidth be entirely contained within the authorized or designated frequency band.

- a) The spectrum analyzer center frequency is set to the nominal EUT channel center frequency. The span range for the EMI receiver or spectrum analyzer shall be between two times and five times the OBW.
- b) The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW and video bandwidth (VBW) shall be approximately three times RBW, unless otherwise specified by the applicable requirement.
- c) Set the reference level of the instrument as required, keeping the signal from exceeding the maximum input mixer level for linear operation. In general, the peak of the spectral envelope shall be more than $[10 \log (\text{OBW}/\text{RBW})]$ below the reference level. Specific guidance is given in 4.1.5.2.
- d) Steps a) through c) might require iteration to adjust within the specified tolerances.
- e) The dynamic range of the instrument at the selected RBW shall be more than 10 dB below the target “-xx dB down” requirement; that is, if the requirement calls for measuring the -20 dB OBW, the instrument noise floor at the selected RBW shall be at least 30 dB below the reference value.
- f) Set detection mode to peak and trace mode to max hold.
- g) Determine the reference value: Set the EUT to transmit an unmodulated carrier or modulated signal, as applicable. Allow the trace to stabilize. Set the spectrum analyzer marker to the highest level of the displayed trace (this is the reference value).
- h) Determine the “-xx dB down amplitude” using $[(\text{reference value}) - \text{xx}]$. Alternatively, this calculation may be made by using the marker-delta function of the instrument.
- i) If the reference value is determined by an unmodulated carrier, then turn the EUT modulation ON, and either clear the existing trace or start a new trace on the spectrum analyzer and allow the new trace to stabilize. Otherwise, the trace from step g) shall be used for step j).
- j) Place two markers, one at the lowest frequency and the other at the highest frequency of the envelope of the spectral display, such that each marker is at or slightly below the “-xx dB down amplitude” determined in step h). If a marker is below this “-xx dB down amplitude” value, then it shall be as close as possible to this value. The occupied bandwidth is the frequency difference between the two markers. Alternatively, set a marker at the lowest frequency of the envelope of the spectral display, such that the marker is at or slightly below the “-xx dB down amplitude” determined in step h). Reset the marker-delta function and move the marker to the other side of the emission until the delta marker amplitude is at the same level as the reference marker amplitude. The marker-delta frequency reading at this point is the specified emission bandwidth.
- k) The occupied bandwidth shall be reported by providing plot(s) of the measuring instrument display; the plot axes and the scale units per division shall be clearly labeled. Tabular data may be reported in addition to the plot(s).

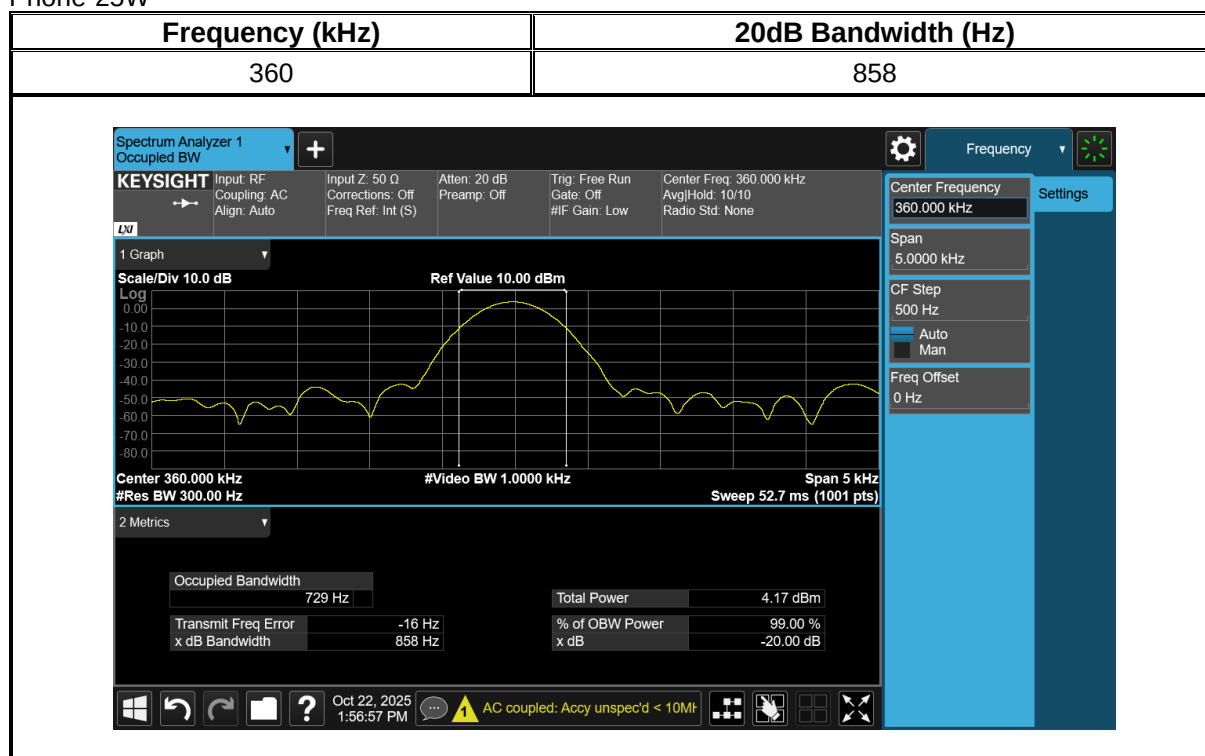
Limit:

The field strength of any emissions appearing between the band edges and out of band shall be attenuated at least 20 dB below the level of the unmodulated carrier or to the general limits in Section 15.209.

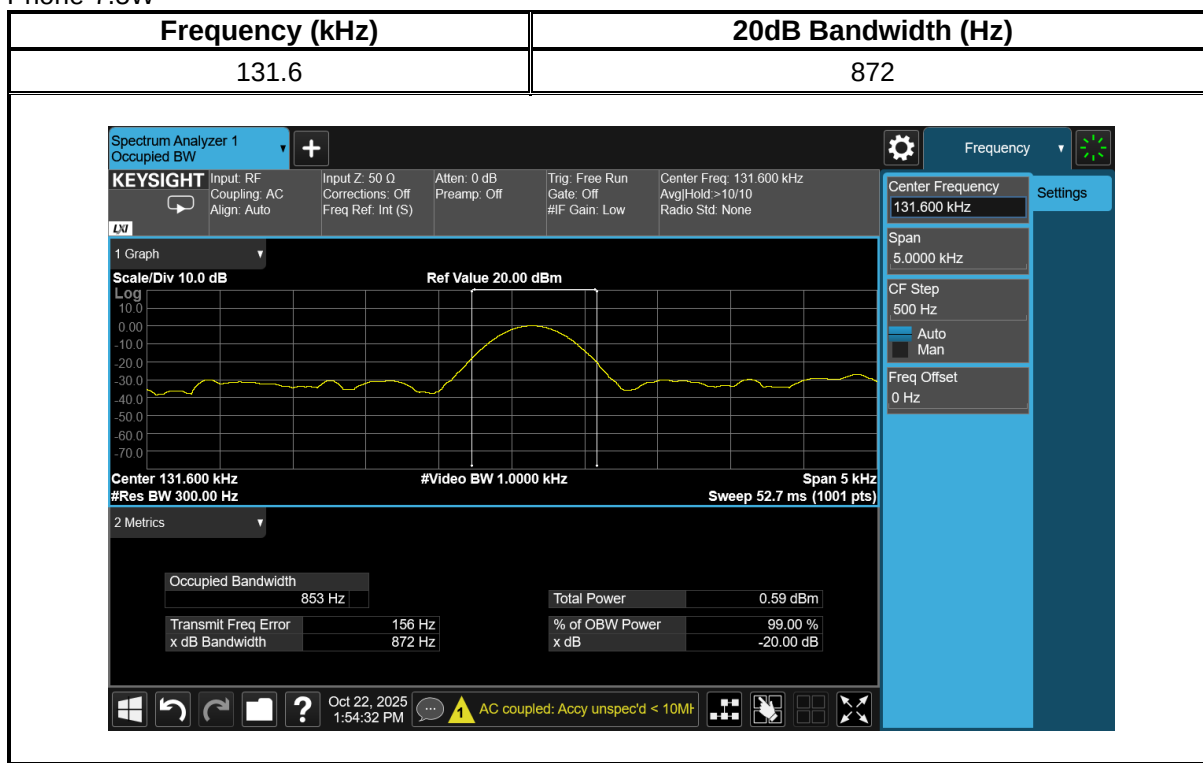
Test Result:

Because the measured signal is CW-like, adjusting the RBW per C63.10 would not be practical since measurement bandwidth will always follow the RBW. The RBW is set to 300 Hz to perform the occupied bandwidth test.

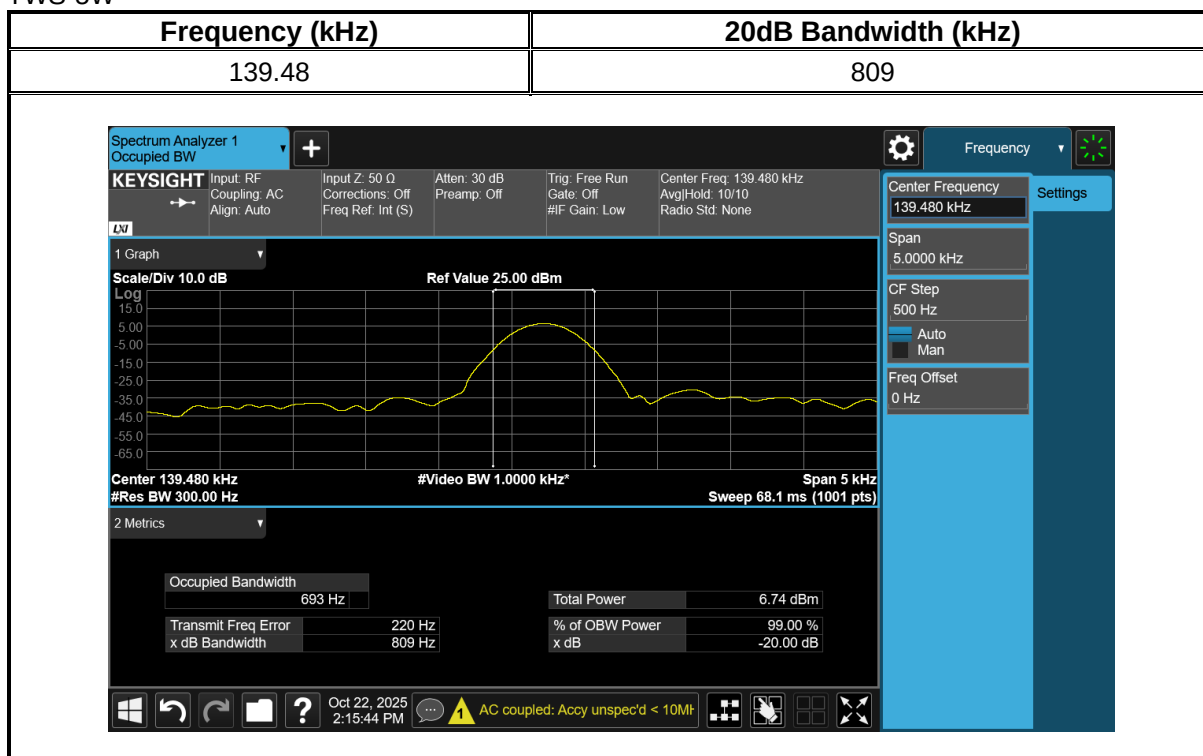
Phone-25W



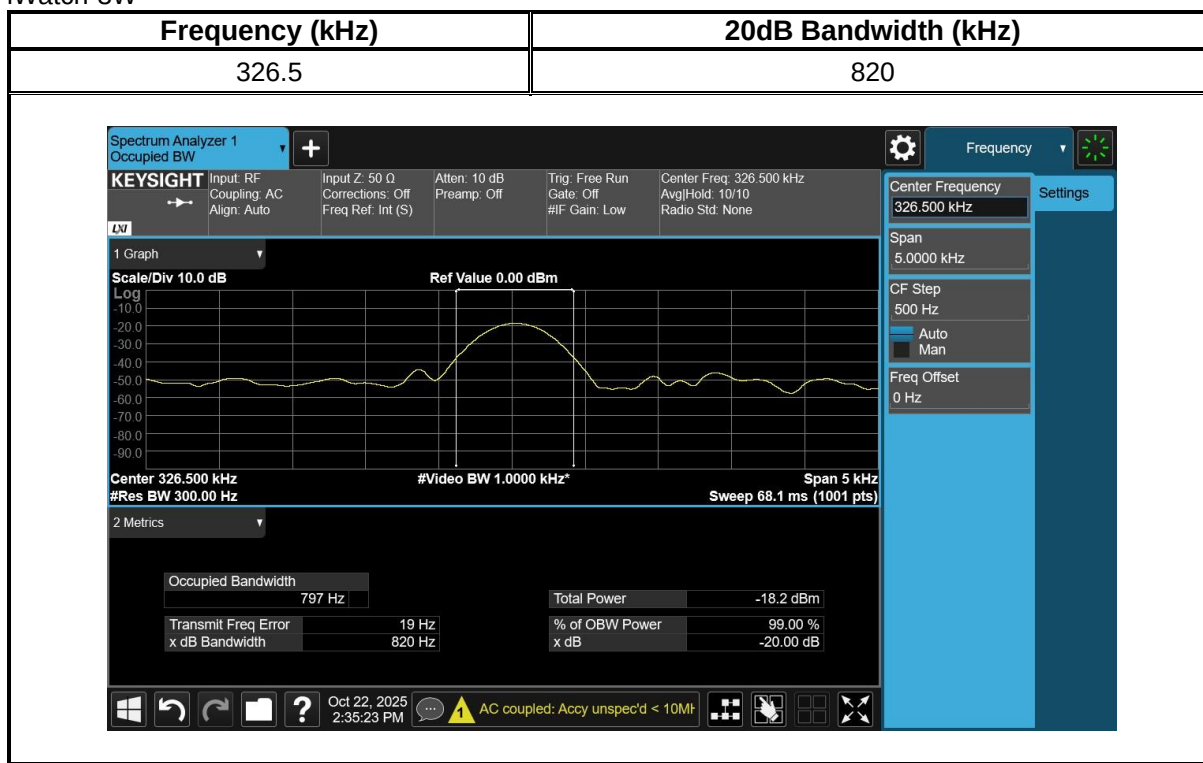
Phone-7.5W



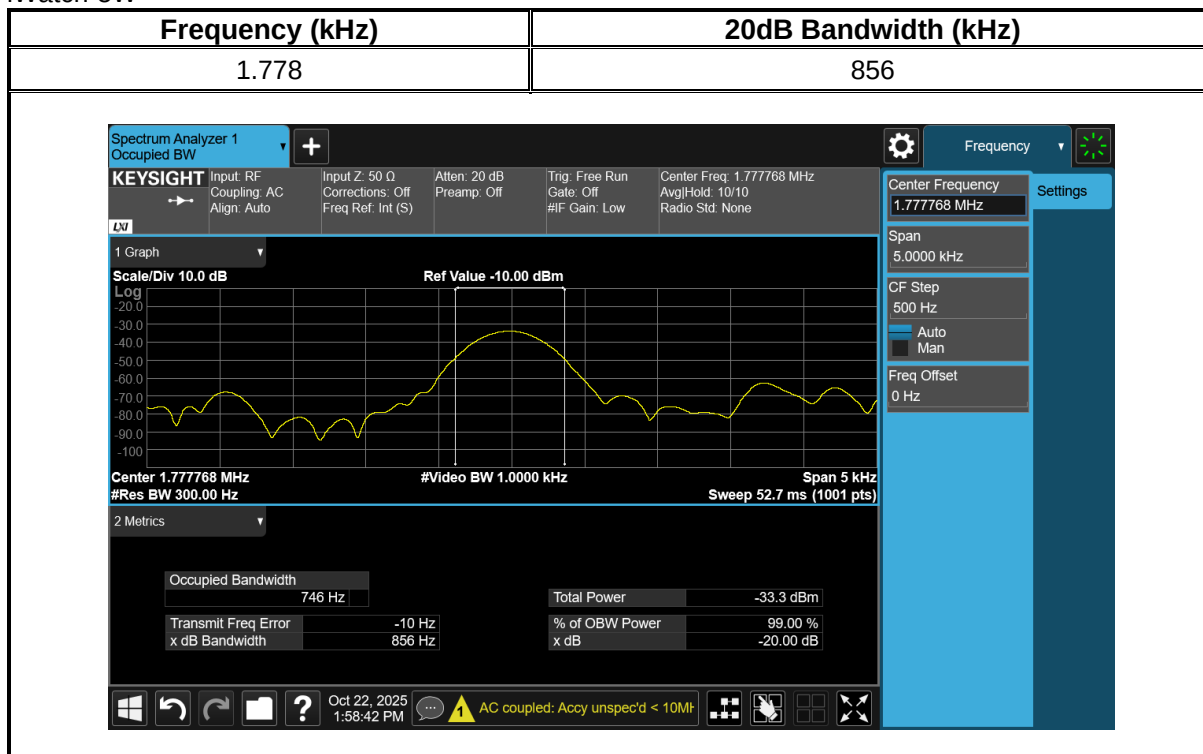
TWS-5W



iWatch-3W



iWatch-5W



-End of report-