



FCC TEST REPORT

FCC ID: 2BTRD-IW31

On Behalf of

Shenguang Jiyuan Intelligent Manufacturing (Shenzhen) Technology Co., Ltd.

3-in-1 25W Magsafe Wireless Charger

Model No.: iw31

Prepared for : Shenguang Jiyuan Intelligent Manufacturing (Shenzhen) Technology Co., Ltd.
Address : 302, A Bldg, RunFeng industry Park, 4197 Baoan Road, Gushu, Xixiang, Baoan, Shenzhen, Guangdong, China

Prepared By : Shenzhen PSI Testing Co., Ltd.
Address : 1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

Report Number : psi2601056-C01-R01
Date of Receipt : Dec. 29, 2025
Date of Test : Dec. 29, 2025-Jan. 12, 2026
Date of Report : Jan. 12, 2026
Version Number : V0

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TEST REPORT DECLARATION

Applicant : Shenguang Jiyuan Intelligent Manufacturing (Shenzhen) Technology Co., Ltd.
Address : 302, A Bldg, RunFeng industry Park, 4197 Baoan Road, Gushu, Xixiang, Baoan, Shenzhen, Guangdong, China
Manufacturer : Shenguang Jiyuan Intelligent Manufacturing (Shenzhen) Technology Co., Ltd.
Address : 302, A Bldg, RunFeng industry Park, 4197 Baoan Road, Gushu, Xixiang, Baoan, Shenzhen, Guangdong, China
EUT Description : 3-in-1 25W Magsafe Wireless Charger
(A) Model No. : iw31
(B) Trademark : N/A

Measurement Standard Used:

FCC CFR Title 47 Part 15 Subpart C

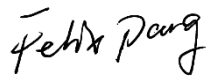
ANSI C63.10-2020

Test Result: PASS

The device described above is tested by Shenzhen PSI Testing Co., Ltd. to determine the maximum emission levels emanating from the device and the severe levels of the device can endure and its performance criterion. The test results are contained in this test report and Shenzhen PSI Testing Co., Ltd. is assumed full responsibility for the accuracy and completeness of test. Also, this report shows that the EUT is technically compliant with the FCC CFR Title 47 Part 15 Subpart C requirements.

This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Shenzhen PSI Testing Co., Ltd.

Tested by (name + signature).....: Felix Pang
Test Engineer



Approved by (name + signature).....: Simple Guan
Project Manager



Date of issue.....: Jan. 12, 2026

Revision History

Revision	Issue Date	Revisions	Revised By
V0	Jan. 12, 2026	Initial released Issue	Felix Pang

1. Test Result Summary

Requirement	CFR 47 Section	Result
Antenna requirement	§15.203	PASS
AC Power Line Conducted Emission	§15.207	PASS
Spurious Emission	§15.209	PASS
Occupied Bandwidth	§15.215 (c)	PASS

Note:

1. *PASS: Test item meets the requirement.*
2. *Fail: Test item does not meet the requirement.*
3. *N/A: Test case does not apply to the test object.*
4. *The test result judgment is decided by the limit of test standard.*
5. Decision rules for the conclusion of this test report: decision by actual test data without considering measurement uncertainty.

2. General Information

2.1. Description of Device (EUT)

EUT Name : 3-in-1 25W Magsafe Wireless Charger
Model No. : iw31
Diff : /
Power supply : Input: 12 V==3 A, 15 V==3 A
Output for Mobile Phones:25W/15W/10W/7.5W/5W
Output for iWatch: 2.5W
Output for Earphones: 5W(Max)

Radio Technology : Wireless power transmission systems

Operation frequency : Phone: 115-205KHz, 360KHz
Earbuds: 115-205KHz
Watch:320-350KHz

Modulation : ASK

Antenna Type : Coil Antenna

Connector cable loss : 0dB

Software version : V1.0

Hardware version : V1.0

Note : Antenna information is provided by applicant.
Testing lab is not responsible for the accuracy of the information.

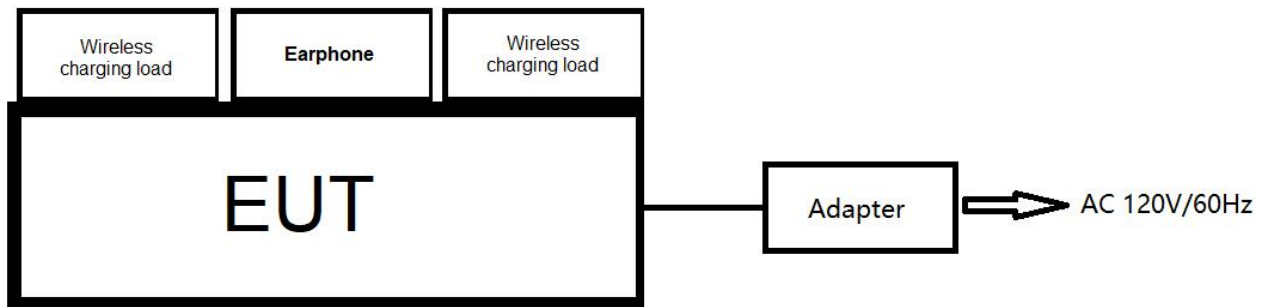
2.2. Accessories of Device (EUT)

Accessories	:	N/A
Manufacturer	:	N/A
Model	:	N/A
specifications	:	N/A

2.3. Tested Supporting System Details

No.	Description	Manufacturer	Model	Serial Number	Certification
1	AC Adapter	Dongguan DaHong Electronics Co., Ltd.	V12060L1H0-CN	/	AE
2	Wireless charging load	/	EESON	/	AE
3	Wireless charging load	/	YBZ	/	AE
4	Earphone	Apple	A2031	/	AE

2.4. Block Diagram of connection between EUT and simulators



2.5. Description of Test Modes

Number	Modes
1	AC Mains + Phone wireless charging (25W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:≤1%)
2	AC Mains + Phone wireless charging (15W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:≤1%)
3	AC Mains + Phone wireless charging (10W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:≤1%)
4	AC Mains + Phone wireless charging (7.5W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:≤1%)
5	AC Mains + Phone wireless charging (5W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:≤1%)
6	AC Mains + Phone wireless charging (25W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:50%)
7	AC Mains + Phone wireless charging (15W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:50%)
8	AC Mains + Phone wireless charging (10W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:50%)
9	AC Mains + Phone wireless charging (7.5W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:50%)
10	AC Mains + Phone wireless charging (5W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:50%)
11	AC Mains + Phone wireless charging (25W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:≥98%)
12	AC Mains + Phone wireless charging (15W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:≥98%)
13	AC Mains + Phone wireless charging (10W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:≥98%)
14	AC Mains + Phone wireless charging (7.5W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:≥98%)
15	AC Mains + Phone wireless charging (5W) + Watch wireless charging (2.5W) + Earphone wireless charging (Battery Status:≥98%)
16	Standby

Note: All test modes has been tested, this report only reflected the worst mode.Mode 1 is worst case.

2.6. Test Conditions

Items	Required
Temperature range:	15-35℃
Humidity range:	25-75%
Pressure range:	86-106kPa

2.7. Test Facility

Shenzhen PSI Testing Co., Ltd.

1-2/F., Building 5, Yudafu Industrial Park, No.10, Xingye West Road, Shajing Subdistrict, Bao'an District, Shenzhen, Guangdong, China

September 13, 2023 File on Federal Communication Commission

Registration Number: 916281

2.8. Measurement Uncertainty

(95% confidence levels, k=2)

Item	Uncertainty
Power Line Conducted Emissions Test	2.13dB
Radiation Emission test in 3m chamber(Below 30MHz)	4.07dB
Radiation Emission test in 3m chamber(30MHz to 1GHz)	4.51dB
Radiation Emission test in 3m chamber(1GHz to 18GHz)	5.07dB
Radiation Emission test in 3m chamber(18GHz to 40GHz)	5.21dB
Radio Frequency	48.24KHz
Conducted RF Power	0.41dB
Power Spectral Density	0.39 dB
Occupied-Bandwidth	968Hz
Duty Cycle	1%
Conducted-Spurious Emission	1.26dB

2.9. Test Equipment List

Item	Equipment	Manufacturer	Model No.	Serial No.	Firmware Version	Last Cal.	Cal. Interval
1.	9*6*6 anechoic chamber	SKET	9*6*6	N/A	/	2025.12.19	3 Year
2.	Test Receiver	Rohde&Schwarz	ESCI 7	101032/003	4.42 SP3	2025.12.18	1 Year
3.	L.I.S.N.#1	Rohde&Schwarz	ENV 216	102282	/	2025.12.18	1 Year
4.	L.I.S.N.#2	EMCO	3810-2	00094944	/	2025.12.18	1 Year
5.	Loop Antenna	Schwarz beck	FMZB 1519B	00128	/	2025.01.02	2 Year
6.	Bilog Antenna	Schwarz beck	VULB 9168	01448	/	2025.01.02	2 Year
7.	Spectrum Analyzer	Rohde&Schwarz	FSV40-N	101648	3.70	2025.12.18	1 Year
8.	Horn Antenna	Schwarz beck	BBHA 9120 D	02706	/	2025.01.02	2 Year
9.	Amplifier	SKET	LNPA_0118 G-50	SK20220329 01	/	2025.12.18	1 Year
10.	Horn Antenna	Schwarz beck	BBHA 9170	00946	/	2024.12.31	2 Year
11.	Amplifier	SKET	LNPA_1840 G-50	SK20190403 02	/	2025.12.18	1 Year
12.	RF Power Probe	Rohde&Schwarz	NRP-Z11	1138.3004.02 -1111533-Fz	/	2025.12.18	1 Year
13.	RF Sensor Unit	Tachoy	TR1029-2	20220428P0 08	/	2025.12.18	1 Year
14.	Spectrum Analyzer	Agilent	N9020A	MY51281067	A.14.03	2025.12.18	1 Year
15.	Temp. & Humid Chamber	Auchno	9606	/	/	2025.12.18	1 Year
16.	Regulated DC Power Supply	Xinouhua	ADC120V10 A	20221125163 8	/	2025.12.18	1 Year
17.	Cable	SKET	Cable-RE-1	#02/#03	/	2025.12.18	1 Year
18.	Cable	SKET	Cable-RE-2	#01	/	2025.12.18	1 Year
19.	Cable	SKET	Cable-RE-3	#04	/	2025.12.18	1 Year
20.	Cable	SKET	Cable-CE-1	A-E-24	/	2025.12.18	1 Year
21.	6dB Attenuator	Schwarzbeck	DGA 9552N 6dB	CK4186	/	2025.12.18	1 Year
22.	Power meter	Agilent	E4419B	GB40202121	/	2025.12.18	1 Year
23.	Comprehensive Test Instrument	Rohde&Schwarz	CMW 500	145266	/	2025.12.18	1 Year
For Test Software Information							
Item	Software Name	Manufacturer	Version				
RE	EZ EMC	Farad	PSI-3A1				
CE	EZ EMC	Farad	PSI-3A1				
RF	RTS	TACHOY	V1.0.0				

3. Test Results and Measurement Data

3.1. Conducted Emission

3.1.1. Test Specification

Test Requirement:	FCC Part15 C Section 15.207														
Test Method:	ANSI C63.10-2020														
Frequency Range:	150 kHz to 30 MHz														
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto														
Limits:	<table><tr><th rowspan="2">Frequency range (MHz)</th><th colspan="2">Limit (dBuV)</th></tr><tr><th>Quasi-peak</th><th>Average</th></tr><tr><td>0.15-0.5</td><td>66 to 56*</td><td>56 to 46*</td></tr><tr><td>0.5-5</td><td>56</td><td>46</td></tr><tr><td>5-30</td><td>60</td><td>50</td></tr></table>	Frequency range (MHz)	Limit (dBuV)		Quasi-peak	Average	0.15-0.5	66 to 56*	56 to 46*	0.5-5	56	46	5-30	60	50
Frequency range (MHz)	Limit (dBuV)														
	Quasi-peak	Average													
0.15-0.5	66 to 56*	56 to 46*													
0.5-5	56	46													
5-30	60	50													
Test Setup:	Reference Plane 40cm 80cm E.U.T Adapter LISN Filter AC power EMI Receiver Test table/Insulation plane Remark: E.U.T: Equipment Under Test LISN: Line Impedance Stabilization Network Test table height=0.8m														
Test Mode:	Transmitting Mode														
Test Procedure:	1. The E.U.T is connected to an adapter through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm/50uH coupling impedance for the measuring equipment. 2. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refer to the block diagram of the test setup and photographs). 3. Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10-2020 on conducted measurement.														
Test Result:	PASS														

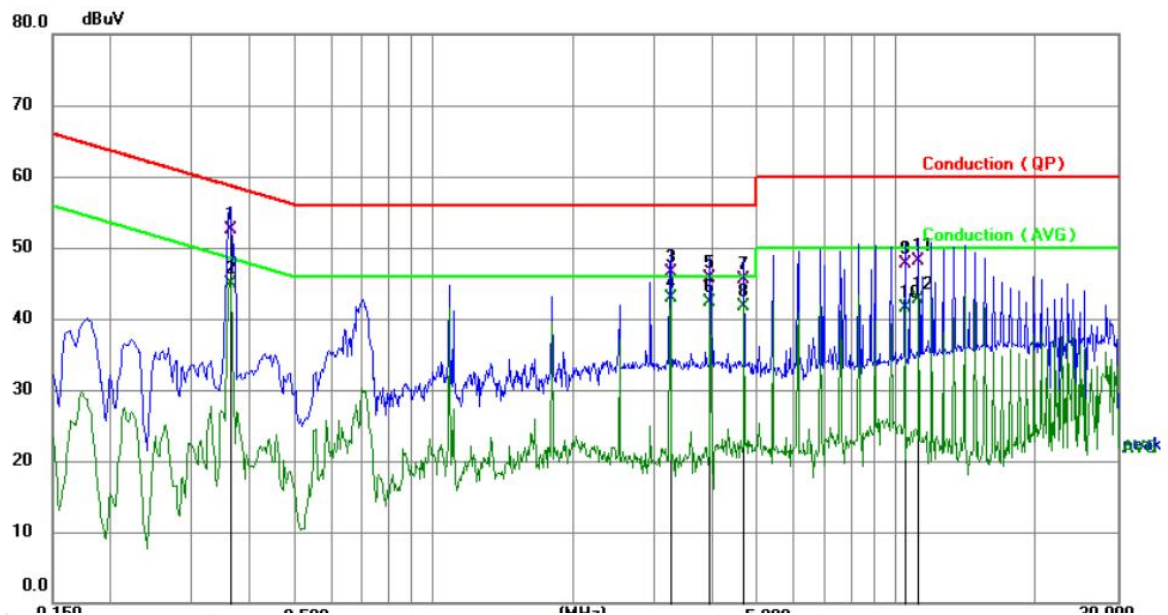
3.1.2. Test data

Please refer to following diagram for individual

Test Mode	: Mode 1
Test Results	: PASS
Note:	1. The test results are listed in next pages. 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector and quasi-peak detector need not be carried out. 3. If the limits for the measurement with the average detector are met when using a receiver with a quasi-peak detector, the test unit shall be deemed to meet both limits and the measurement with the average detector need not be carried out.

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Temperature	26°C	Humidity	54%
Pol	Line		AC 120V/60Hz

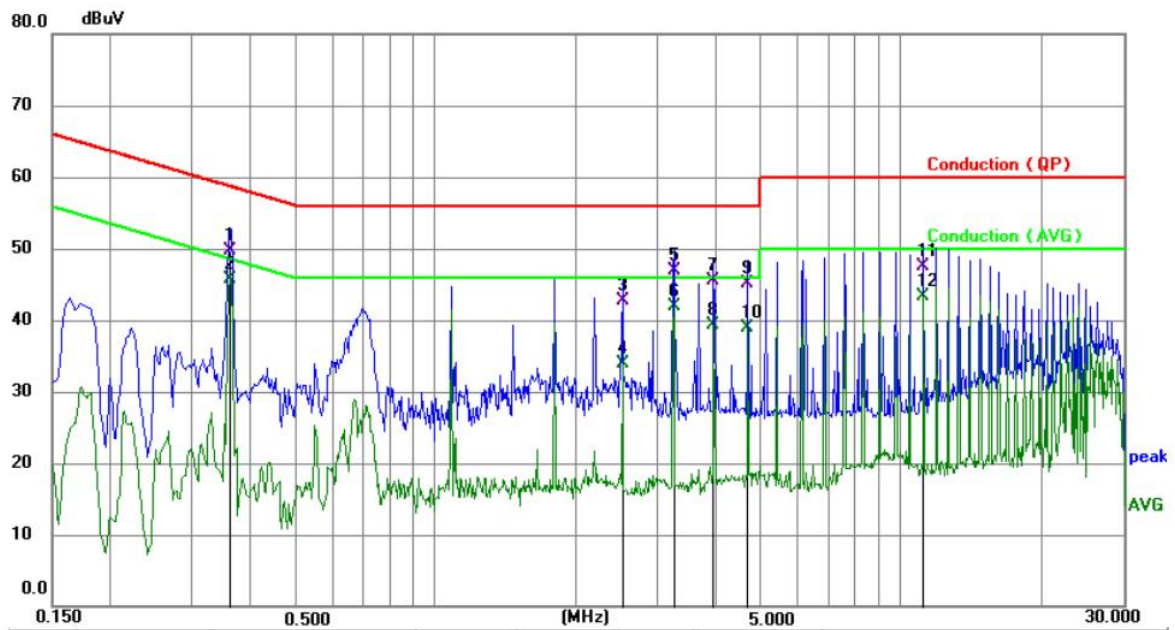


No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.3614	42.59	9.97	52.56	58.70	-6.14	QP	P	
2	0.3614	35.02	9.97	44.99	48.70	-3.71	AVG	P	
3	3.2414	36.40	10.08	46.48	56.00	-9.52	QP	P	
4 *	3.2414	32.79	10.08	42.87	46.00	-3.13	AVG	P	
5	3.9615	35.67	10.09	45.76	56.00	-10.24	QP	P	
6	3.9615	32.18	10.09	42.27	46.00	-3.73	AVG	P	
7	4.6814	35.32	10.11	45.43	56.00	-10.57	QP	P	
8	4.6814	31.67	10.11	41.78	46.00	-4.22	AVG	P	
9	10.4414	37.58	10.08	47.66	60.00	-12.34	QP	P	
10	10.4414	31.37	10.08	41.45	50.00	-8.55	AVG	P	
11	11.1615	37.96	10.08	48.04	60.00	-11.96	QP	P	
12	11.1615	32.72	10.08	42.80	50.00	-7.20	AVG	P	

Level = Reading + Factor Margin = Level - Limit

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Pol	Neutral
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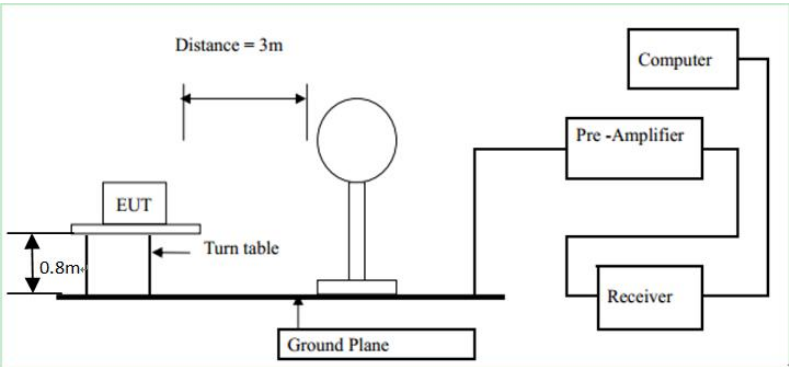


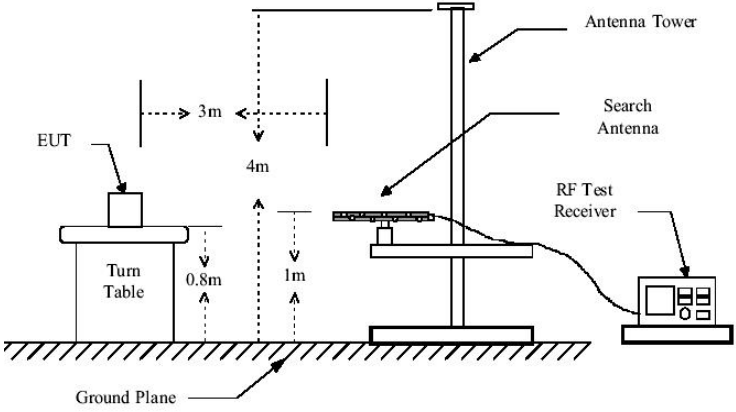
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB)	Level (dBuV)	Limit (dBuV)	Margin (dB)	Detector	P/F	Remark
1	0.3613	39.74	9.97	49.71	58.70	-8.99	QP	P	
2 *	0.3613	35.64	9.97	45.61	48.70	-3.09	AVG	P	
3	2.5215	32.66	10.06	42.72	56.00	-13.28	QP	P	
4	2.5215	23.85	10.06	33.91	46.00	-12.09	AVG	P	
5	3.2414	36.85	10.08	46.93	56.00	-9.07	QP	P	
6	3.2414	31.75	10.08	41.83	46.00	-4.17	AVG	P	
7	3.9615	35.35	10.09	45.44	56.00	-10.56	QP	P	
8	3.9615	29.17	10.09	39.26	46.00	-6.74	AVG	P	
9	4.6814	34.92	10.11	45.03	56.00	-10.97	QP	P	
10	4.6814	28.89	10.11	39.00	46.00	-7.00	AVG	P	
11	11.1615	37.44	10.08	47.52	60.00	-12.48	QP	P	
12	11.1615	33.26	10.08	43.34	50.00	-6.66	AVG	P	

Level = Reading + Factor Margin = Level - Limit

3.2. Radiated Spurious Emission Measurement

3.2.1. Test Specification

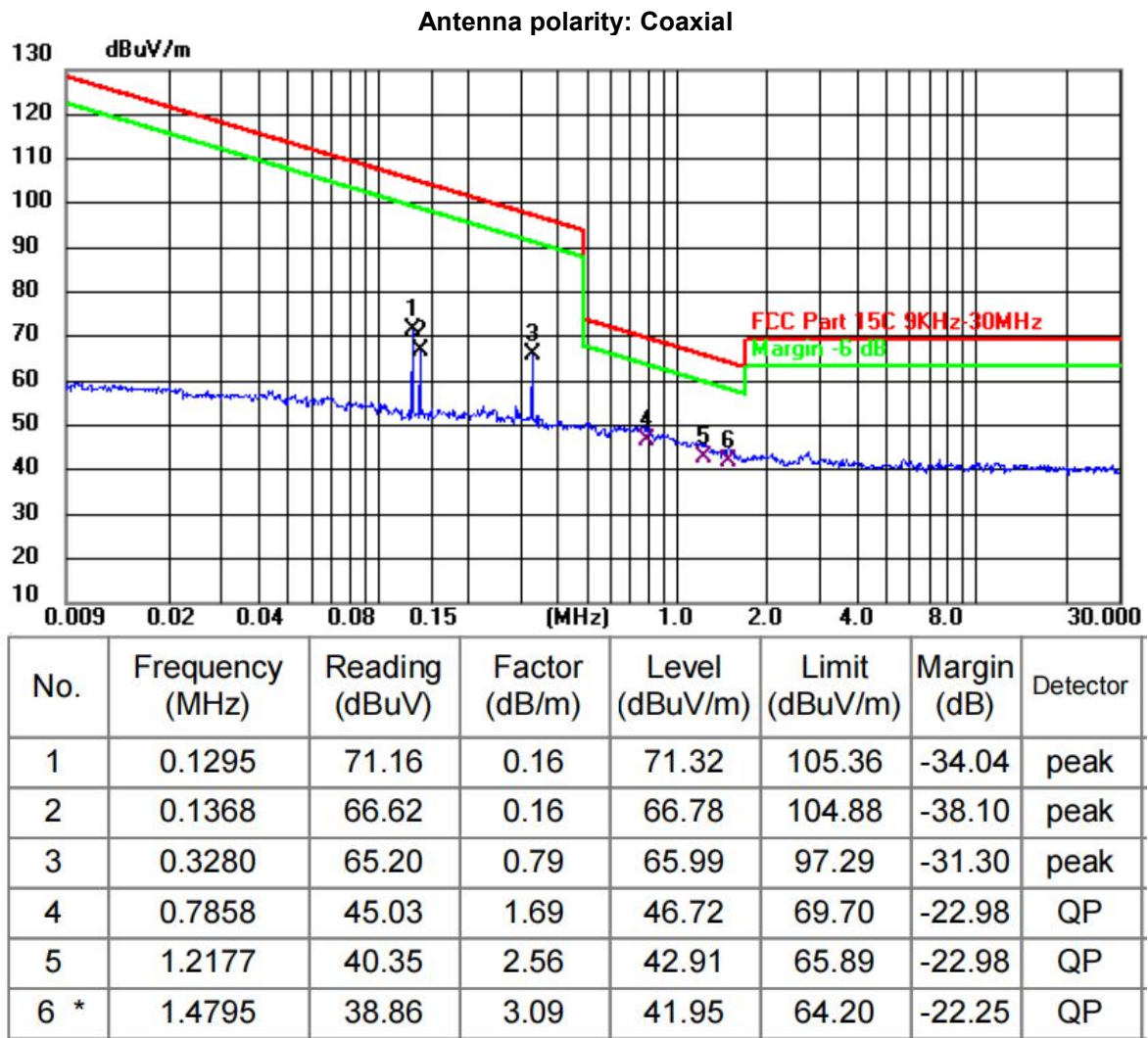
Test Requirement:	FCC Part15 C Section 15.209				
Test Method:	ANSI C63.10-2020				
Frequency Range:	9 kHz to 1 GHz				
Measurement Distance:	3 m				
Antenna Polarization:	Coaxial & Coplanar(9KHz-30MHz) Horizontal & Vertical(30MHz-1GHz)				
Operation mode:	Refer to item 4.1				
Receiver Setup:	Frequency	Detector	RBW	VBW	Remark
	9kHz- 150kHz	Quasi-peak	200Hz	1kHz	Quasi-peak Value
	150kHz-30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value
	30MHz-1GHz	Quasi-peak	100KHz	300KHz	Quasi-peak Value
	Note: The emission limits shown in the above table are based on measurements employing a CISPR quasi-peak detector except for the frequency bands 9-90 KHz, 110-490 KHz and above 1000 MHz. Radiated emission limits in these three bands are based on measurements employing an average detector.				
Limit:	Frequency		Field Strength (microvolts/meter)	Measurement Distance (meters)	
	0.009-0.490		2400/F(KHz)	300	
	0.490-1.705		24000/F(KHz)	30	
	1.705-30		30	30	
	30-88		100	3	
	88-216		150	3	
	216-960		200	3	
	Above 960		500	3	
	Test setup:	For radiated emissions below 30MHz			
					
	30MHz to 1GHz				

	
Test Procedure:	- For the radiated emission test below 1GHz: The EUT was placed on a turntable with 0.8 meter above ground. The EUT was set 3 meters from the interference receiving antenna, which was mounted on the top of a variable height antenna tower. The EUT was arranged to its worst case and then tune the antenna tower (from 1 m to 4 m) and turntable (from 0 degree to 360 degrees) to find the maximum reading. A pre-amp and a high PASS filter are used for the test in order to get better signal level. - Corrected Reading: Antenna Factor + Cable Loss + Read Level - Preamp Factor = Level - For measurement below 1GHz, If the emission level of the EUT measured by the peak detector is 3 dB 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. - Use the following spectrum analyzer settings: - Span shall wide enough to fully capture the emission being measured; - Set RBW=100 kHz for $f < 1$ GHz; VBW $\geq$ RBW; Sweep = auto; Detector function = peak; Trace = max hold; For average measurement: VBW = 10 Hz, when duty cycle is no less than 98 percent. VBW $\geq 1/T$, when duty cycle is less than 98 percent where T is the minimum transmission duration over which the transmitter is on and is transmitting at its maximum power control level for the tested mode of operation.
Test mode:	Refer to section 4.1 for details
Test results:	PASS

3.2.2. Test Data

Please refer to following diagram for individual

Frequency Range	: 9KHz~30MHz
Test Mode	: Mode 1
Test Results	: PASS
Note:	1. The test results are listed in next pages. 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the quasi-peak detector need not be carried out.

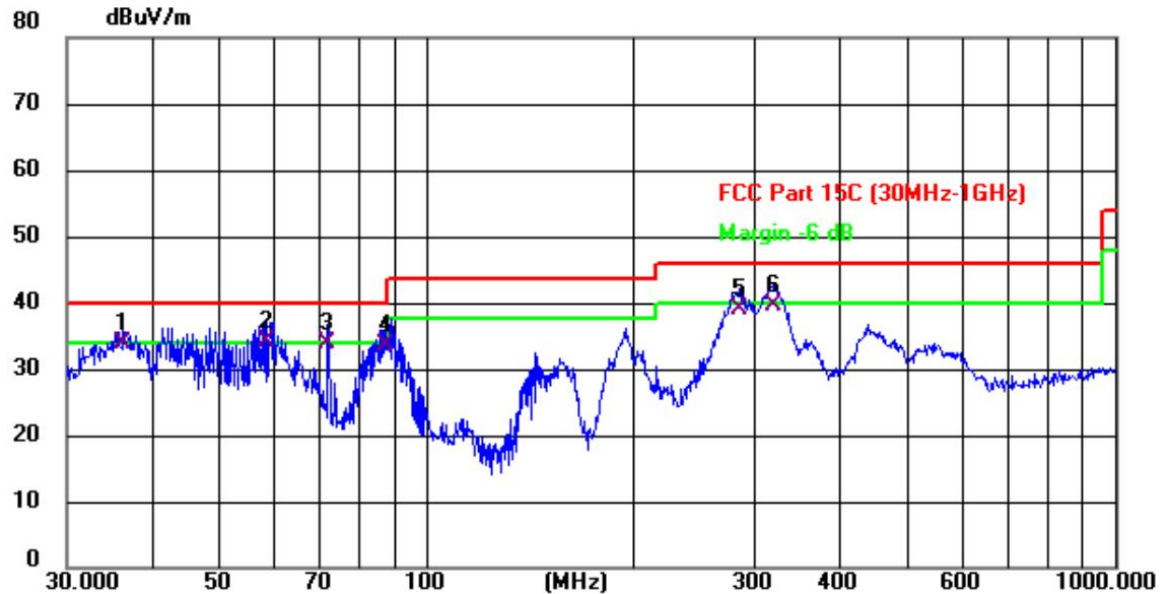


Level = Reading + Factor Margin = Level – Limit

Frequency Range	: 30MHz~1000MHz
Test Mode	: Mode 1
Test Results	: PASS
Note:	1. The test results are listed in next pages. 2. If the limits for the measurement with the average detector are met when using a receiver with a peak detector, the test unit shall be deemed to meet both limits and the measurement with the quasi-peak detector need not be carried out.

30MHz-1GHz

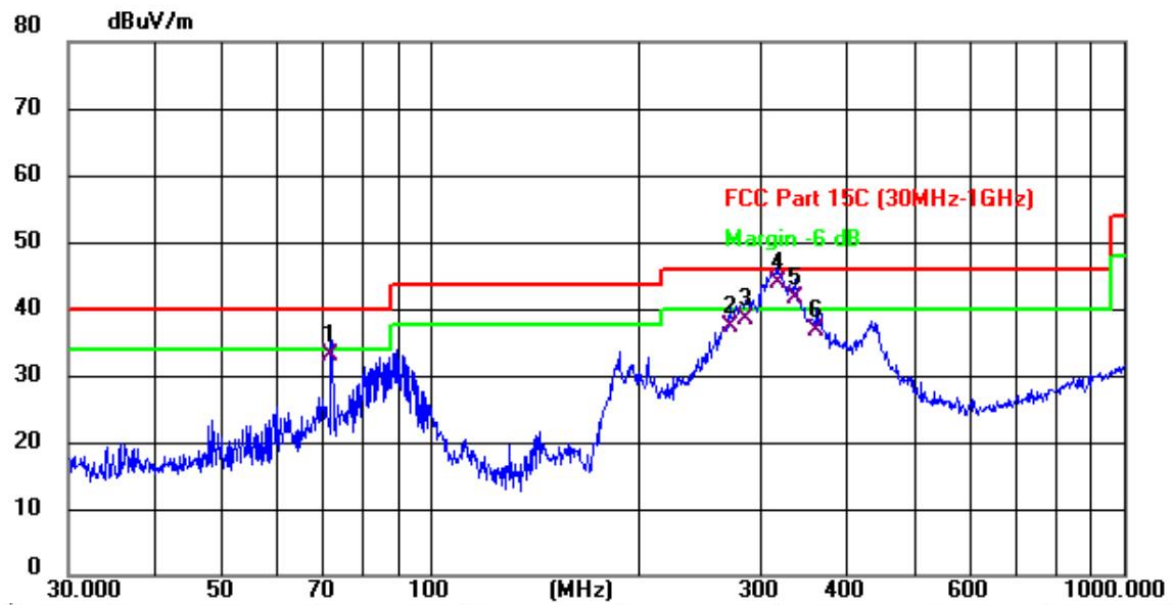
Temperature	24.2°C	Humidity	56.6%
Pol	Vertical	Test Voltage	AC 120V/60Hz



No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	36.2540	43.43	-9.44	33.99	40.00	-6.01	QP
2 *	58.6126	43.49	-9.27	34.22	40.00	-5.78	QP
3	71.8320	46.01	-12.28	33.73	40.00	-6.27	QP
4	87.4175	45.59	-11.97	33.62	40.00	-6.38	QP
5	283.9791	46.52	-7.51	39.01	46.00	-6.99	QP
6	318.8170	46.47	-6.80	39.67	46.00	-6.33	QP

Level = Reading + Factor Margin = Level – Limit

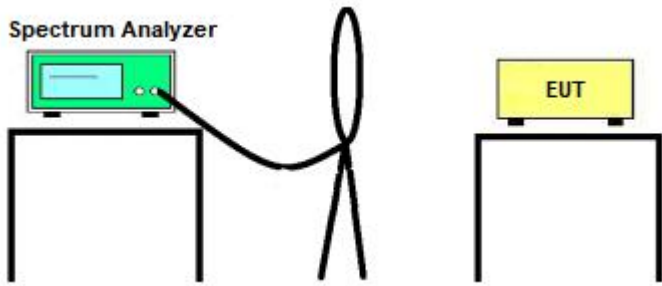
Pol	Horizontal
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No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
1	71.8320	45.35	-12.28	33.07	40.00	-6.93	QP
2	270.3747	45.08	-7.77	37.31	46.00	-8.69	QP
3	284.9766	45.85	-7.49	38.36	46.00	-7.64	QP
4 *	316.5890	50.70	-6.85	43.85	46.00	-2.15	QP
5 !	336.0350	47.92	-6.42	41.50	46.00	-4.50	QP
6	360.4476	42.74	-5.89	36.85	46.00	-9.15	QP

Level = Reading + Factor Margin = Level – Limit

3.3. Test Specification

Test Requirement:	FCC Part15 C Section 15.215(c)
Test Method:	ANSI C63.10-2020
Limit:	N/A
Test Procedure:	1. According to the follow Test-setup, keep the relative position between the artificial antenna and the EUT. 2. Set to the maximum power setting and enable the EUT transmit continuously. 3. Use the following spectrum analyzer settings for 20dB Bandwidth measurement. Span = approximately 2 to 3 times the 20 dB bandwidth, centered on a hopping channel; RBW$\geq$1% of the 20 dB bandwidth; VBW$\geq$RBW; Sweep = auto; Detector function = peak; Trace = max hold. 4. Measure and record the results in the test report.
Test setup:	 The diagram illustrates the test setup. On the left, a 'Spectrum Analyzer' is shown on a stand. A cable connects it to a loop antenna, also on a stand. To the right of the antenna is a yellow box labeled 'EUT' (Equipment Under Test) on a stand. The antenna is positioned between the Spectrum Analyzer and the EUT.
Test Mode:	Refer to section 4.1 for details
Test results:	PASS

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3.3.1. Test data

Temperature:	25.3 °C	Relative Humidity:	55.2%
Pressure:	101kPa		

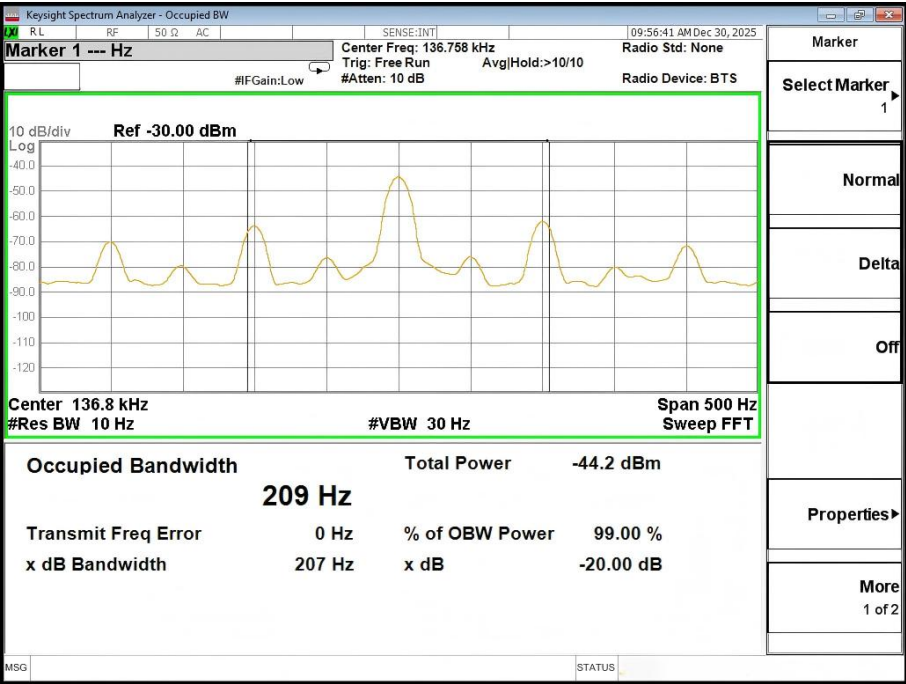
Frequency (KHz)	20dB bandwidth (KHz)	Result
129.5	0.203	Pass
136.8	0.207	Pass
328	0.571	Pass
360	0.204	Pass

Phone coil

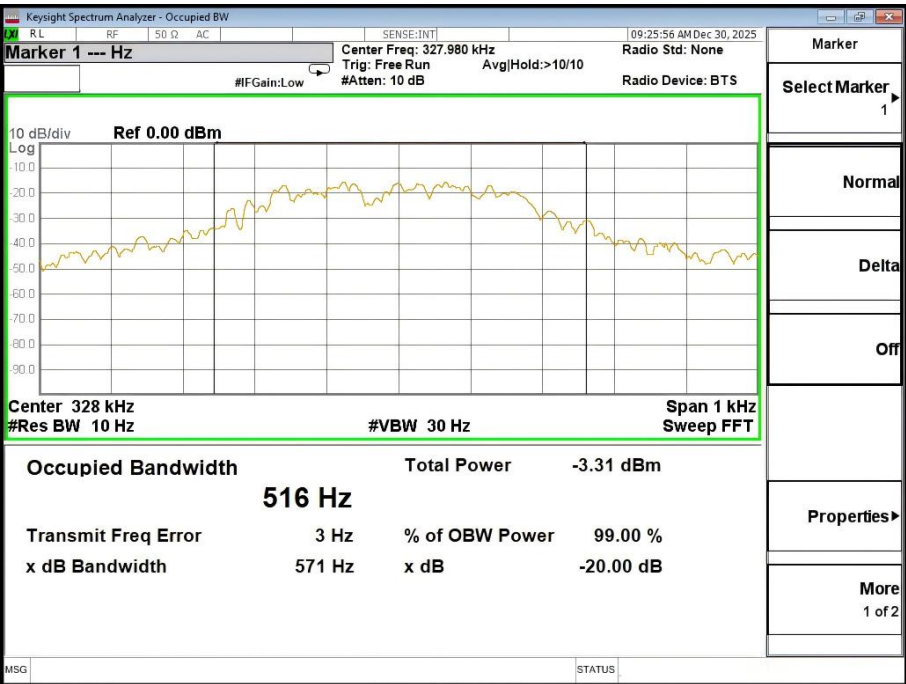


psi2601056-C01-R01

Earbuds coil



Watch coil



25W



4. Photos of test setup

Reference to the **appendix I Test Setup Photo** for details.

5. Photos of EUT

Reference to the **appendix II external photos** and **appendix III internal photos** for details.

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