Radio Test Report

Report No.: AGC05443260894ER02

PRODUCT DESIGNATION	:	Magnetic power bank
BRAND NAME	:	N/A
MODEL NAME	:	MO2442
APPLICANT	:	MID OCEAN BRANDS B.V.
DATE OF ISSUE	:	Sep. 24, 2026
STANDARD(S)	:	ETSI EN 303 417 V1.1.1 (2017-09)
REPORT VERSION	:	V1.0

Attestation of ***G***lobal ***C***ompliance (Shenzhen) Co., Ltd

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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Sep. 24, 2026	Valid	Initial Release

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1. General Information

Applicant	MID OCEAN BRANDS B.V.
Address	Unit 711 716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Manufacturer	MID OCEAN BRANDS B.V.
Address	Unit 711 716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Factory	MID OCEAN BRANDS B.V.
Address	Unit 711 716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Product Designation	Magnetic power bank
Brand Name	N/A
Test Model	MO2442
Series Model(s)	N/A
Difference Description	N/A
Date of receipt of test item	Sep. 01, 2026
Date of Test	Sep. 01, 2026 to Sep. 20, 2026
Deviation from Standard	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Test Report Form No	AGCER-EU-WPT-V1

Note: The test results of this report relate only to the tested sample identified in this report.

Prepared By	Jack Gui (Project Engineer)	Sep. 24, 2026
Reviewed By	Bibo Zhang (Reviewer)	Sep. 24, 2026
Approved By	Angela Li (Authorized Officer)	Sep. 24, 2026

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2. Product Information

2.1 Product Technical Description

Equipment Type	WPT System
Permitted Range of Operating Frequency	☐ WPT Band 1: 19~21kHz
	☐ WPT Band 2: 59~61kHz
	☐ WPT Band 3: 79~90kHz
	☒ WPT Band 4: 100~119kHz,119~140kHz,140~148.5kHz
	☒ WPT Band 4: 148.5~300kHz
	☐ WPT Band 5: 6765kHz~6795kHz
Operation Frequency	110kHz-205kHz
Hardware Version	V1.0
Software Version	V1.0
Modulation Type	ASK
Corrected Amplitude H-field@10m	-14.9dBμA/m@10m(Max.)
Antenna Designation	Coil Antenna
Input Rating	DC 5V 3A, DC 9V 2.22A
Output Rating	DC 5V/3A, 9V/2.22A, 12V/1.66A Wireless output: 15W(max)

Note: For more details, refer to the user's manual of the EUT.

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2.2 Objective

Perform Radio Spectrum tests for CE Marking according to the provisions of article 3.2 of the Radio Equipment Directive (2014/53/EU) for the WPT function of the EUT.

2.3 Test Items and The Results

The tests were performed according to following standards:

ETSI EN 303 417 V1.1.1 (2017-09)	Wireless power transmission systems, using technologies other than radio frequency beam in the 19-21kHz,59-61kHz,79-90kHz,100-300 kHz, 6765-6795kHz ranges; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU

Test items and the results are as bellow:

No.	Test Item	Standard Require	Condition	Result
Harmonised Standard ETSI EN 303 417				
1	Permitted range of Operating Frequencies	sub-clause 4.3.2	/	Pass
2	Operating Frequency Ranges	sub-clause 4.3.3	/	Pass
3	H-field Requirements	sub-clause 4.3.4	/	Pass
4	Transmitter Spurious Emissions	sub-clause 4.3.5	/	Pass
5	Transmitter Out of Band (OOB) Emissions	sub-clause 4.3.6	/	Pass
6	WPT System Unwanted Conducted Emissions	sub-clause 4.3.7	Only for equipment which has a cable between the off board power supply and the primary coil which is longer than 3 m	N/A
7	Receiver Blocking	sub-clause 4.4.2	Only for Mode1, Mode2 and Mode3 (see Table 2)	Pass

Note: N/A means not applicable. This equipment does not meet the above test item evaluation conditions, so it is not applicable.

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2.3 Overview of Operational Modes within a WPT System

EN 303 417 Clauses 4.2.3 Table 2: Overview of operational modes within a WPT system					
Operational Mode	Set-up	Function of base station	Function of mobile device	Test Scenario	Conformance Requirements
Mode 1: base station in stand-by, idle mode	Single device	TX	Not applicable	Single radiation test (TX) with the base station/charging pad. The test set-up as described in clause 6.1.2 shall be used.	● Operating frequency range (clause 4.3.3) ● H-Field emission (clause 4.3.4) ● TX spurious (clauses 4.3.5, 4.3.6 and 4.3.7) ● Performance criteria test (RX test) (clause 4.4)
Mode 2: Communication before charging, adjustment charging mode / position	In combination	TX and RX	TX and RX	Specific test setup, declared by the manufacturer. Manufacturer shall declare the maximal distance between base station and mobile device the WPT system is able to communicate (distance D). The test setup- up shall be performed with the largest communication distance. The test set-up as described in clause 6.1.3 shall be used.	● Operating frequency range (clause 4.3.3) ● H-Field emission (clause 4.3.4) ● TX spurious (clauses 4.3.5, 4.3.6 and 4.3.7) ● Wanted performance criteria test (RX test) (clause 4.4)
Mode 3: Communication	WPT system alignment	TX and RX	TX and RX	● Worst case alignment ● Both tests can be performed within one set-up, worst-case alignment. ● The test set-up as described in clause 6.1.4 shall be used.	● Operating frequency range (clause 4.3.3) ● H-Field emission (clause 4.3.4) ● TX spurious (clauses 4.3.5, 4.3.6 and 4.3.7) ● Wanted Performance criteria test (RX test) (clause 4.4)
Mode 4: energy transmission	WPT system alignment	TX and RX	TX and RX		

2.4 Description of Test Modes

No.	Test Mode Description	Test Channel		
		Lowest	Middle	Highest
1	base station in stand-by, idle mode	/		
2	Communication before charging, adjustment charging mode / position	/	/	/
3	Communication	128.4kHz		
4	Energy transmission	112.2kHz	167.6kHz	204.8kHz

Note:
1) During the initial establishment of the charging mode (mode 2), no or very low emission occur (below the sensitivity level of the test set-up), so the mode 2 can be assumed as irrelevant for the test.
2) Mode 1 is only for base station function equipment and is not taken into consideration
3) Mode 3 and mode 4 have been performed within one set-up, worst-case alignment.
4) The Communication frequency 128.4 kHz corresponds to the maximum field strength.

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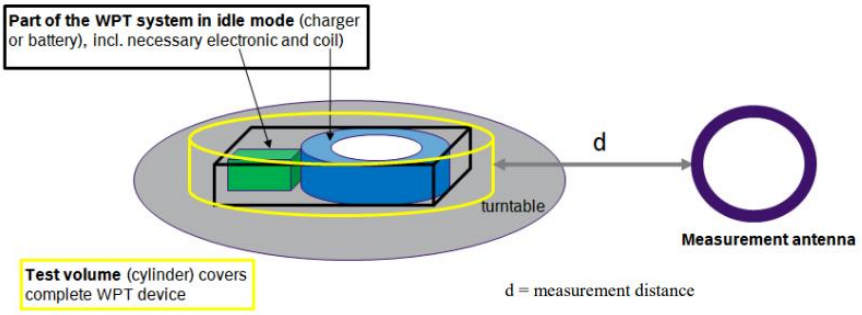
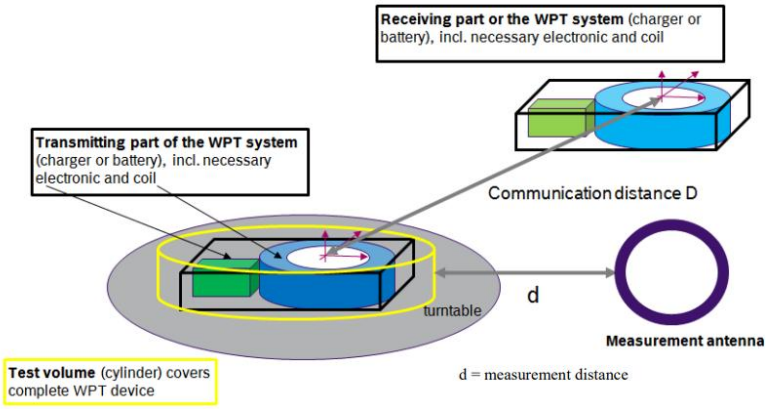
3. Setup of Equipment Under Test

3.1 Setup Configuration of EUT

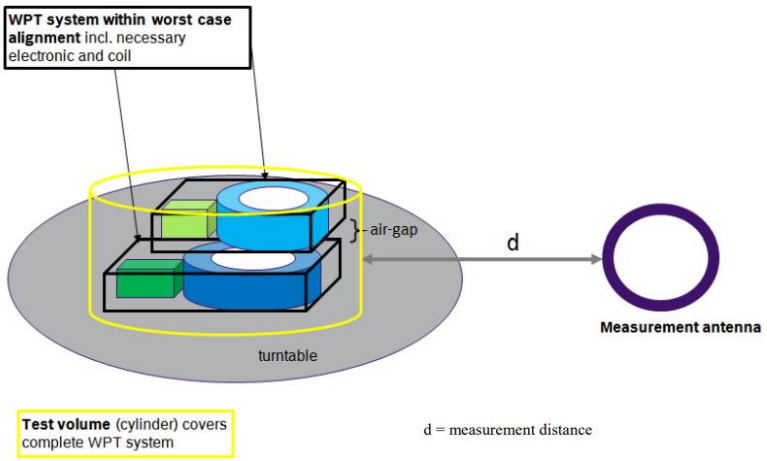
◆ **Mode 1: Idle Mode**



◆ **Mode 2: Charging Adjustment**



◆ **Mode 3 and Mode 4: Power Transmission Arrangement**



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3.2 Support Equipment

The EUT has been associated with peripherals and configuration operated in a manner tended to maximize its emission characteristics in a typical application.
The following peripheral devices and interface cables were connected during the measurement:

Whether support unit is used?				
Yes				
Item	Equipment	Manufacturer	Model No.	Specification
1	Wireless Charging Load	YBZ	Q2	Support 5W,10W,15W, 25W
2	Adapter	Apple	A2452	Input(AC): 100-240V 50/60Hz 2.5A Output(DC): 5V3A/9V3A/11V6.1A/20V5A/20V6A

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4. Test Environment

4.1 Address of The Test Laboratory

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

4.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to follow CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories.)

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to follow ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

IC-Registration No.: 24842(CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.

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4.3 Environmental Conditions

Normal Condition	VN=nominal Voltage	DC 3.85V
	TN=normal Temperature	25 °C
Extreme Condition	VL=lower Voltage	DC 3.47V
	TL=lower Temperature	0 °C
	VH=higher Voltage	DC 4.24V
	TH=higher Temperature	45 °C
Note: The maximum temperature of 45 is not a standard requirement and is measured according to the maximum service temperature stated by the manufacturer.		

4.4 Measurement Uncertainty

Test Items	Measurement Uncertainty
Frequency error	± 1 x 10^{-7}
Transmitter power conducted	± 0.75dB
Maximum Frequency Deviation: Within 300Hz and 6KHz of Audio Frequency Within 6KHz and 25KHz of Audio Frequency	± 5% ± 3dB
Adjacent channel power	± 3dB
Conducted Emission of Transmitter, Valid Up to 12.75GHz	± 4dB
Conducted Emissions of Receivers	± 3dB
Radiated Emission of Transmitter, Valid Up to 12.75GHz	± 6dB

Note:This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=1.96.

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4.5 List of Equipment Used

● Radiated Spurious Emission							
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
☒	AGC-EM-E046	EMI Test Receiver	R&S	ESCI	100096	2026-01-13	2027-01-12
☒	AGC-EM-E061	Spectrum Analyzer	Agilent	N9010A	MY53470504	2026-05-20	2027-05-19
☒	AGC-EM-E005	Wideband Antenna	SCHWARZBECK	VULB9168	VULB9168-494	2025-01-15	2027-01-14
☒	AGC-EM-E086	Active loop antenna(9K-30MHz)	ZHINAN	ZN30900C	18051	2026-01-14	2028-01-13
☒	AGC-EM-E017	Power Amplifier	AR	75A250	18464	2026-07-14	2027-07-13

● Test Software					
Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Version Information
☒	AGC-EM-S011	RSE Test System	Tonscend	TS+-Ver2.1(JS36-RSE)	4.0.0.0

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5. ETSI EN 303 417 Requirements for Transmitter and Receiver

5.1 Operating Frequency Ranges and Permitted Range of Operating Frequencies

Test Limit

The permitted range of operating frequency range(s) for intentional emissions shall be within 19 - 21 kHz, 59 - 61 kHz, 79 - 90 kHz, 100 - 300 kHz, 6 765 - 6 795 kHz,

Test Description

- The operating frequency range is the frequency range over which the WPT system is intentionally transmitting (all operational modes, see clause 4.2.3, Table 2).
- The operating frequency range(s) of the WPT system are determined by the lowest (f_L) and highest frequency (f_H) as occupied by the power envelope.
- The WPT system could have more than one operating frequency range. For a single frequency systems the OFR is equal to the occupied bandwidth (OBW) of the WPT system.
- For multi-frequency systems the OFR is described in Figures 2 and 3.

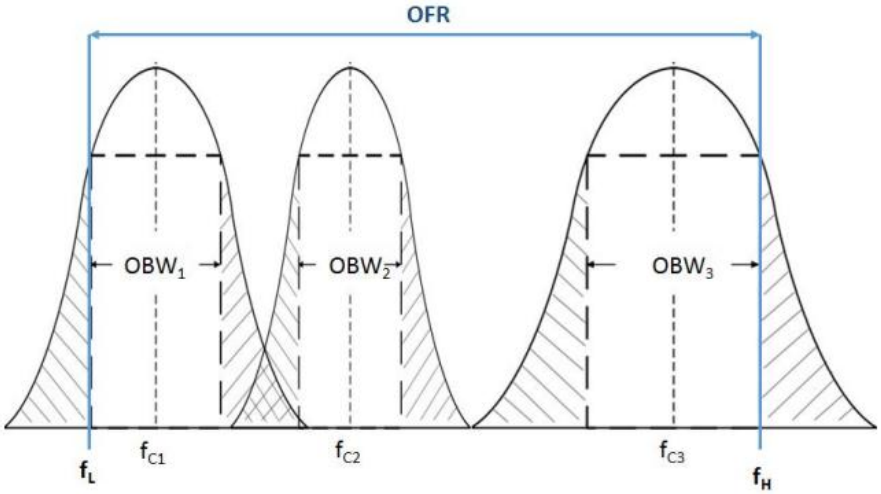

Figure 2: OFR of a multi - frequency WPT system within one frequency range of Table 2 and within one WPT system cycle time

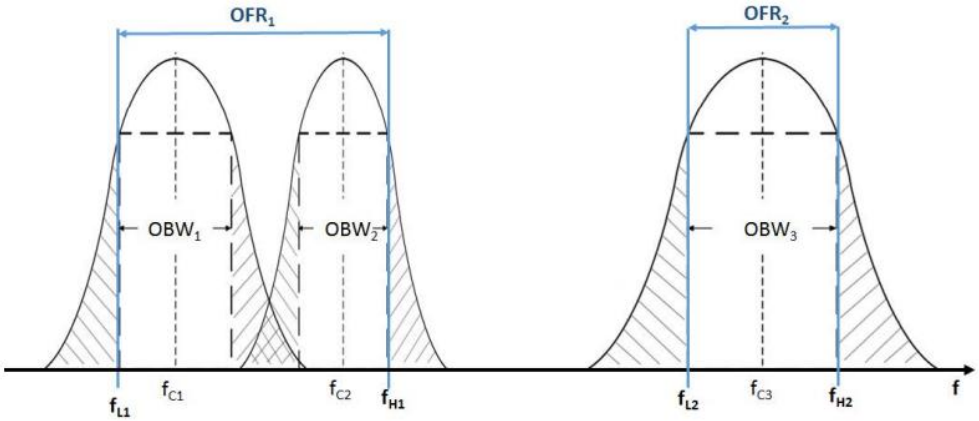

Figure 3: OFR of a multi - frequency WPT system within two frequency ranges of Table 2 and within one WPT system cycle time

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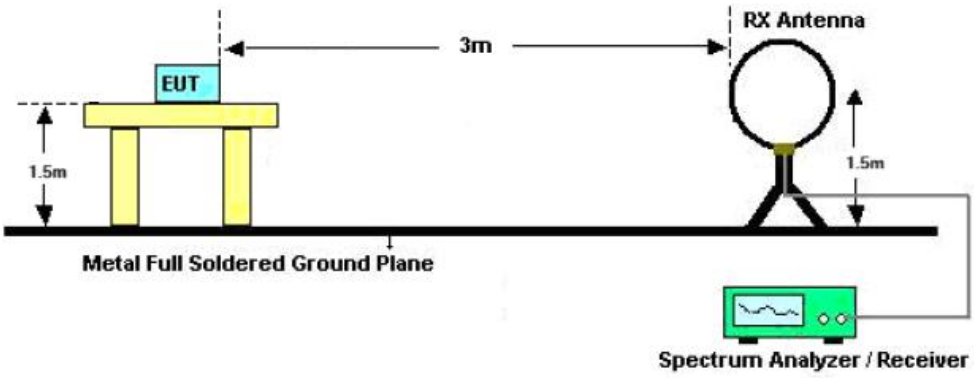
Test Setup



Test Procedure

1. The EUT was placed on a turn table which is 1.5m above ground plane.
2. The EUT was modulated by normal signal,
3. Set SPA Center Frequency = fundamental frequency, RBW=VBW=200Hz, Span=5kHz, Detector=RMS. The 99 % OBW function shall be used to determine the operating frequency range, f_H is the frequency of the upper marker resulting from the OFR, f_L is the frequency of the lower marker resulting from the OFR.
4. Both normal test condition and extreme test condition applied

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Test Result

☒ Test Mode: Mode 3

Frequency (kHz)	Test Conditions		99% Bandwidth (kHz)	F_L at 99% BW (kHz)	F_H at 99% BW (kHz)	Limit Band (kHz)	Result
	Temperature (°C)	Voltage (V)					
128.4	0	8.1	0.695	128.050	128.745	100~300	Pass
		9.9	0.698	128.050	128.748		Pass
	25	9.0	0.702	128.049	128.751		Pass
	45	8.1	0.692	128.053	128.745		Pass
		9.9	0.693	128.054	128.748		Pass

☒ Test Mode: Mode 4

Frequency Range (kHz)	Test Conditions		Lower Frequency (kHz)	Upper Frequency (kHz)	Limit Band (kHz)
	Temperature (°C)	Voltage (V)			
111.6-203.2	0	8.1	111.253	203.548	100~300
		9.9	111.257	203.547	
	25	9.0	111.252	203.551	
	45	8.1	111.258	203.548	
		9.9	111.258	203.548	
OFR	92.299kHz				
Result	Pass				

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5.2 Transmitter H-Field Requirements

Test Limit

- The H-field limits are provided in Table 3.
- They have been specified for control of any radiated emissions within the OFR originating from the WPT system (power transmission and accompanying data communication).
- The H-field limits in Table 3 are EU wide harmonised according to EC Decision 2013/752/EU [i.2]. Further information is available in CEPT/ERC/REC 70-03 [i.1].

Table 3: H-field limits

Frequency range [MHz]	H-field strength limit [dBµA/m at 10 m]	Comments
0,019 ≤ f < 0,021	72	
0,059 ≤ f < 0,061	69,1 descending 10 dB/dec above 0,059 MHz	See note 1
0,079 ≤ f < 0,090	67,8 descending 10 dB/dec above 0,079 MHz	See note 2
0,100 ≤ f < 0,119	42	
0,119 ≤ f < 0,135	66 descending 10 dB/dec above 0,119 MHz	See note 1
0,135 ≤ f < 0,140	42	
0,140 ≤ f < 0,1485	37,7	
0,1485 ≤ f < 0,30	-5	
6,765 ≤ f < 6,795	42	
NOTE 1: Limit is 42 dBµA/m for the following spot frequencies: 60 kHz ± 250 Hz and 129,1 kHz ± 500 Hz. NOTE 2: At the time of preparation of the present document the feasibility of increased limits for high power wireless power transmission systems to charge vehicles [i.4] was prepared. New specific requirements for such systems (e.g. higher H-field emission limits in the 79 - 90 kHz band) will be reflected within a future revision of the present document.		

- The H-field limit in dBµA/m at 3 m, H_{3m}, is determined by the following equation:

$$H_{3m} = H_{10m} + C_3 \quad (F.2)$$

Where: H_{10m} is the H-field limit in dBµA/m at 10 m distance according to the present document; and C_3 is a conversion factor in dB determined from figure F.2.

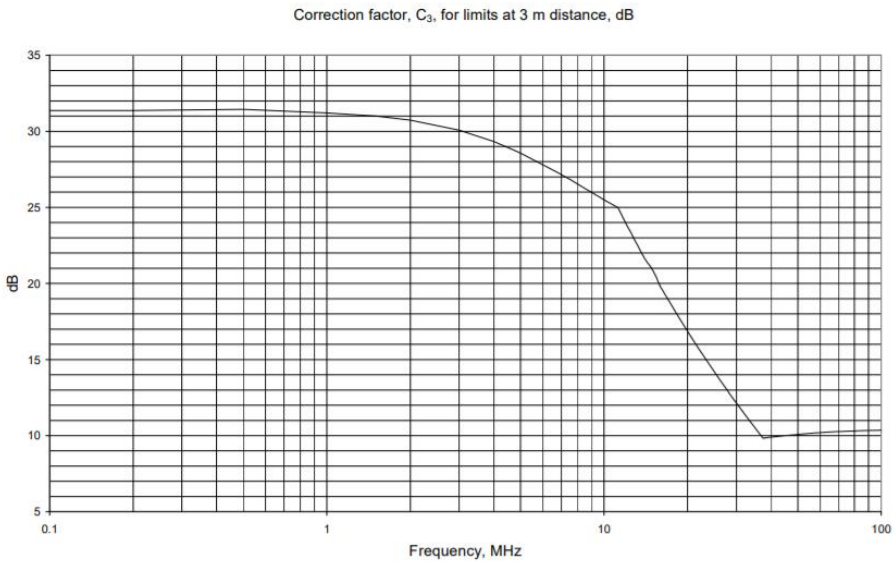

Figure H.2: Conversion factor C_3 versus frequency

- E(dBµV/m) = dBµA/m+51.5;
- ERP (dBm)=E(dBµV/m) +20lg(D)-104.8, D is the measurement distance;
- ERP=10lgP(mW)

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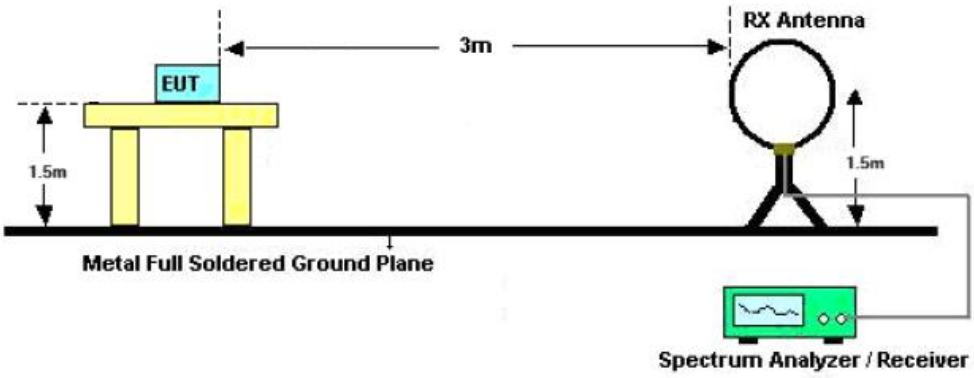
Test Setup



Test Procedure

1. The EUT was placed on the top of an insulating table 1.5 meters above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The H-field is measured with a shielded loop antenna connected to a measurement receiver.
4. The measuring bandwidth and detector type of the measurement receiver shall be in accordance with EN 300 330 V2.1.1 clause 5.12.
5. The EUT operate with modulation under normal and extreme conditions.

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Test Result

Test conditions	Test Temp.	Test Volt.	Note
TN/VN	25°C	9.0V	Worst case
TL/ VL	0°C	8.1V	--
TH/VL	45°C	8.1V	--
TL/VH	0°C	9.9V	--
TH/VH	45°C	9.9V	--

☒ Test Mode: Mode 3

Frequency (kHz)	Reading (dBμA/m)	Factor (dB)	Field Strength (dBμV/m@3m)	Field Strength (dBμA/m@3m)	Calculated (dBμA/m@10m)	Limit at 10m (dBμA/m@10m)	Result
128.4	35.62	32.18	67.8	16.3	-14.9	65.48	Pass

☒ Test Mode: Mode 4

Frequency (kHz)	Reading (dBμA/m)	Factor (dB)	E-Field Strength (dBμV/m@3m)	H-Field Strength (dBμA/m@3m)	Calculated (dBμA/m@10m)	Limit at 10m (dBμA/m@10m)	Result
111.6	30.52	27.15	57.67	6.17	-25.03	42.00	Pass
168.2	31.67	27.15	58.82	7.32	-23.88	-5.00	Pass
203.2	31.79	27.15	58.94	7.44	-23.76	-5.00	Pass

Remark:
1. Field Strength at 3m(dBμA/m) = Reading Level + Corrected Factor
2. Calculated at 10m(dBμA/m) = Field Strength at 3m(dBμA/m)-31.2dB
3. For the calculated method, please refer to Annex F at EN 300330.

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5.3 Transmitter Out of Band (OOB) Emissions

Test Limit

The OOB limits are visualized in Figures 4 and 5; they are descending from the intentional limits from Table 3 at f_H/f_L with 10 dB/decade.

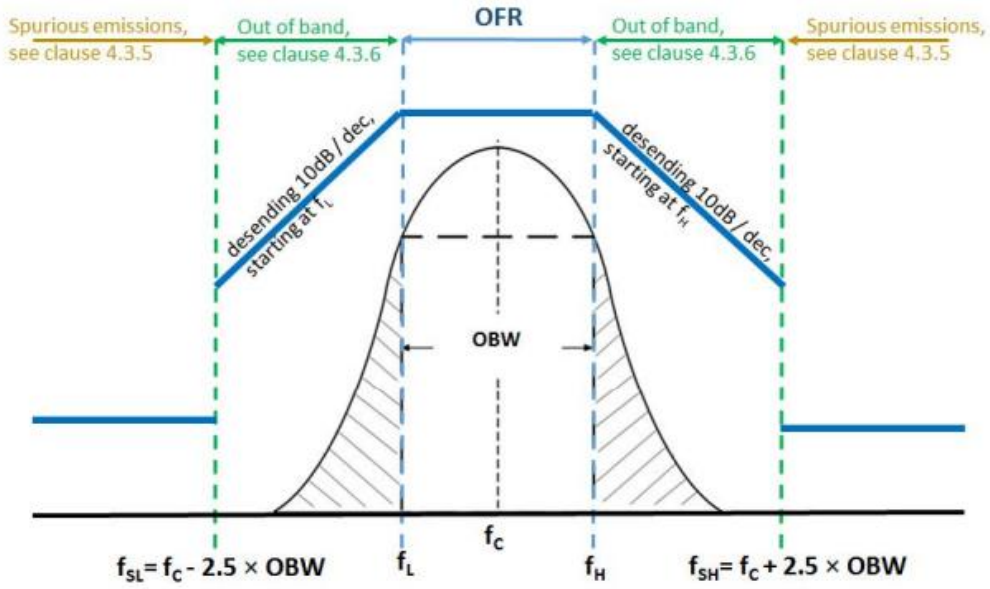

Figure 4: Out of band and spurious domain of a single frequency WPT system

The transmitter spurious emissions for a multi frequency system (within one WPT frequency range from Table 2) are to be considered in frequency ranges defined in Figure 5 ($f < f_{SL}$ and $f > f_{SH}$)

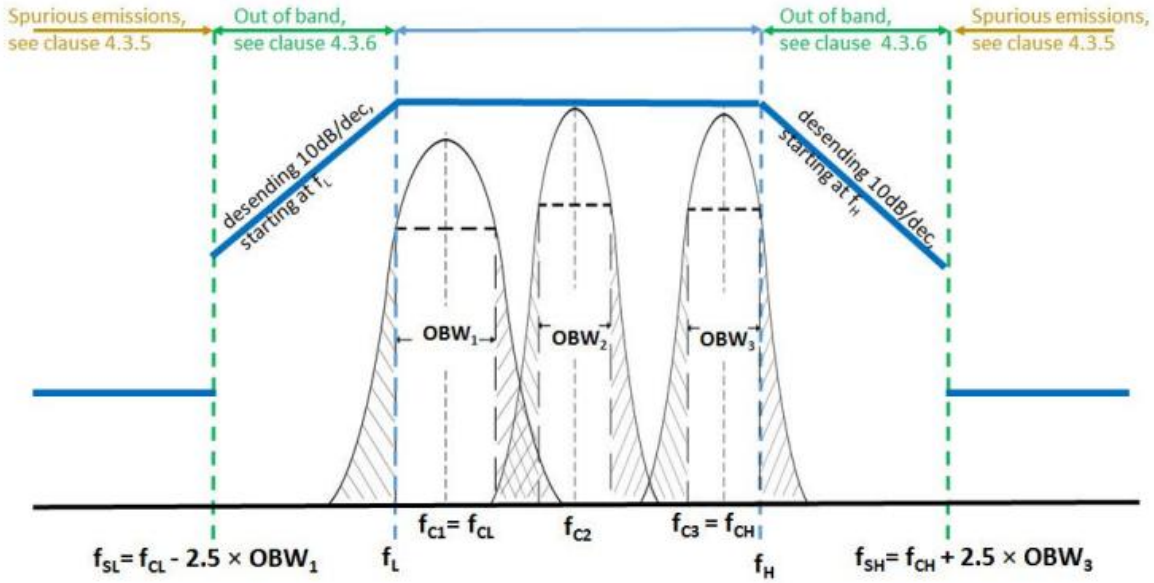

Figure 5: Out of band and spurious domain of a multi - frequency system (during one WPT system cycle time)

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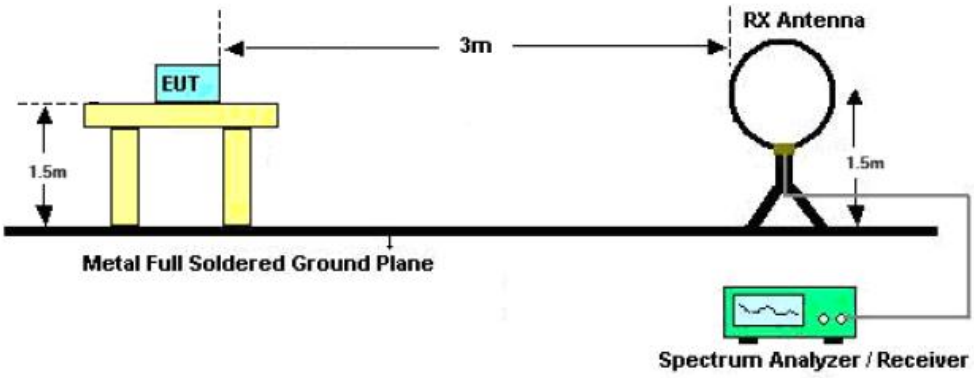
Test Setup



Test Procedure

1. The EUT was placed on a turn table which is 1.5m above ground plane.
2. The EUT was modulated by normal signal,
3. Set SPA Center Frequency = fundamental frequency, RBW=VBW=200Hz, Span=5KHz, Detector=RMS. The 99 % OBW function shall be used to determine the operating frequency range, f_H is the frequency of the upper marker resulting from the OFR, f_L is the frequency of the lower marker resulting from the OFR.
4. Both normal test condition and extreme test condition applied

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Test Result

☒ Test Mode: Mode 3

Test Frequency (kHz)	Frequency Range (kHz)		Maximum level @10m (dBμA/m)	Limit @ 10m (dBμA/m)	Result
128.4	f_{SL}-f_L	126.645 - 128.049	Less than -24.06	See figure 4	Pass
	f_L	128.049	-24.06	65.48	Pass
	f_H	128.751	-24.58	65.48	Pass
	f_H-f_{SH}	128.751 - 130.155	Less than -24.58	See figure 4	Pass

☒ Test Mode: Mode 4

Test Frequency (kHz)	Frequency Range (kHz)		Maximum level @10m (dBμA/m)	Limit @ 10m (dBμA/m)	Result
111.6-203.2	f_{SL}-f_L	109.86 - 111.252	Less than -34.19	See figure 4	Pass
	f_L	111.252	-34.19	42.00	Pass
	f_H	203.551	-33.44	-5.00	Pass
	f_H-f_{SH}	203.551 - 204.953	Less than -33.44	See figure 4	Pass

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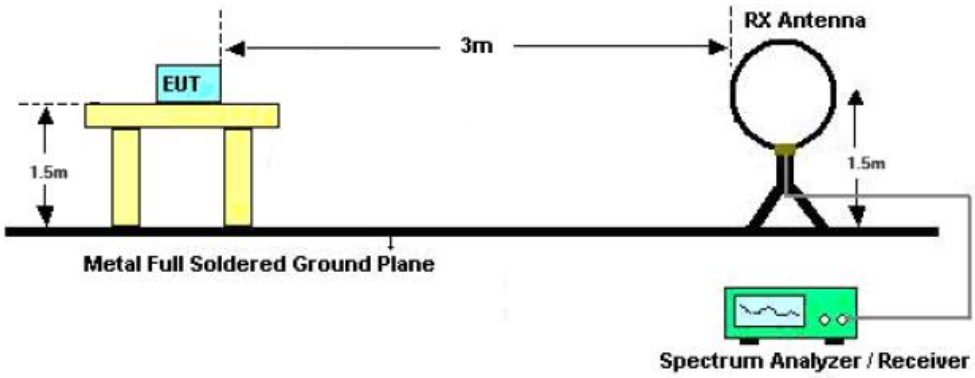
5.4 Transmitter Spurious Emissions (Frequency Below 30MHz)

Test Limit

Operating Mode		
Frequency Range	Distance	Maximum Field Strength Limit
9 kHz ≤ f < 10 MHz	10m	27dBμA/m at 9 kHz descending 3 dB/oct
10 MHz ≤ f < 30 MHz	10m	-3.5 dBμA/m
Stand-by Mode		
9 kHz ≤ f < 10 MHz	10m	5.5dBμA/m at 9 kHz descending 3 dB/oct
10 MHz ≤ f < 30 MHz	10m	-25 dBμA/m

Note: "Operating" means mode 2, 3 and 4 according to Table 2; "standby" means mode 1 according to Table 2.

Test Setup



Test Procedure

◆ For test method of frequency range (9 kHz-30MHz)

1. The EUT was placed on the top of an insulating table 1.5 meters above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
2. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
3. The H-field is measured with a shielded loop antenna connected to a measurement receiver.
4. The measuring bandwidth and detector type of the measurement receiver shall be in accordance with EN 300 330 V2.1.1 clause 5.12

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Test Result

☒ Test Mode: Mode 3 (Operating Mode: Face)

Transmitter Spurious Emissions for 9kHz to 30MHz							
Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	E-Field Strength@3m (dBμV/m)	E-Field Strength@10m (dBμV/m)	Calculated@10m (dBμA/m)	Limit@10m (dBμA/m)	Margin (dB)
0.055	25.49	35.88	61.37	9.87	-21.33	19.11	40.44
0.244	22.68	33.13	55.81	4.31	-26.89	12.66	39.55
0.568	19.57	33.13	52.70	1.20	-30.00	9.00	38.99
0.837	19.57	25.45	45.02	-6.48	-37.68	7.32	45.00
0.667	17.46	22.66	40.12	-11.38	-42.58	8.30	50.88
0.902	16.29	18.56	34.85	-16.65	-47.85	6.99	54.84

☒ Test Mode: Mode 3 (Operating Mode: Side)

Transmitter Spurious Emissions for 9kHz to 30MHz							
Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	E-Field Strength@3m (dBμV/m)	E-Field Strength@10m (dBμV/m)	Calculated@10m (dBμA/m)	Limit@10m (dBμA/m)	Margin (dB)
0.062	25.62	35.88	61.50	10.00	-21.20	18.61	39.81
0.225	22.60	33.13	55.73	4.23	-26.97	13.03	40.00
0.577	19.84	33.13	52.97	1.47	-29.73	8.93	38.67
0.845	19.70	25.45	45.15	-6.35	-37.55	7.27	44.82
0.780	17.76	22.66	40.42	-11.08	-42.28	7.62	49.91
0.915	16.03	18.56	34.59	-16.91	-48.11	6.93	55.04

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☒ Test Mode: Mode 4 (Operating Mode: Face), Lowest Channel Worst Case

Transmitter Spurious Emissions for 9kHz to 30MHz							
Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	E-Field Strength@3m (dBμV/m)	E-Field Strength@10m (dBμV/m)	Calculated@10m (dBμA/m)	Limit@10m (dBμA/m)	Margin (dB)
0.032	20.54	35.88	56.42	45.96	-5.54	21.44	0.032
0.216	17.82	33.13	50.95	40.49	-11.01	13.19	0.216
0.412	14.76	33.13	47.89	37.43	-14.07	10.40	0.412
1.501	14.65	25.45	40.10	29.64	-21.86	4.78	1.501
2.377	12.60	22.66	35.26	24.80	-26.70	2.78	2.377
4.970	11.13	18.56	29.69	19.23	-32.27	-0.42	4.970

☒ Test Mode: Mode 4 (Operating Mode: Side), Lowest Channel Worst Case

Transmitter Spurious Emissions for 9kHz to 30MHz							
Frequency (MHz)	Reading (dBμV)	Factor (dB/m)	E-Field Strength@3m (dBμV/m)	E-Field Strength@10m (dBμV/m)	Calculated@10m (dBμA/m)	Limit@10m (dBμA/m)	Margin (dB)
0.057	20.70	35.88	56.58	46.12	-5.38	19.00	0.057
0.235	17.58	33.13	50.71	40.25	-11.25	12.84	0.235
0.420	14.70	33.13	47.83	37.37	-14.13	10.32	0.420
1.289	14.76	25.45	40.21	29.75	-21.75	5.44	1.289
2.894	12.50	22.66	35.16	24.70	-26.80	1.93	2.894
3.475	11.02	18.56	29.58	19.12	-32.38	1.13	3.475

Notes:

1. Negative sign (-) in the margin column signify levels below the limit.
2. Other emissions found were at least 20 dB below the limit.
3. E-Field Strength@3m(dBμV/m) = Reading Level + Factor
4. E-Field Strength@10m(dBμV/m) = E-Field Strength@3m(dBμV/m)+10.46dB
5. H-Field Strength(dBμA/m)= E-Field Strength(dBμV/m)-51.5dB

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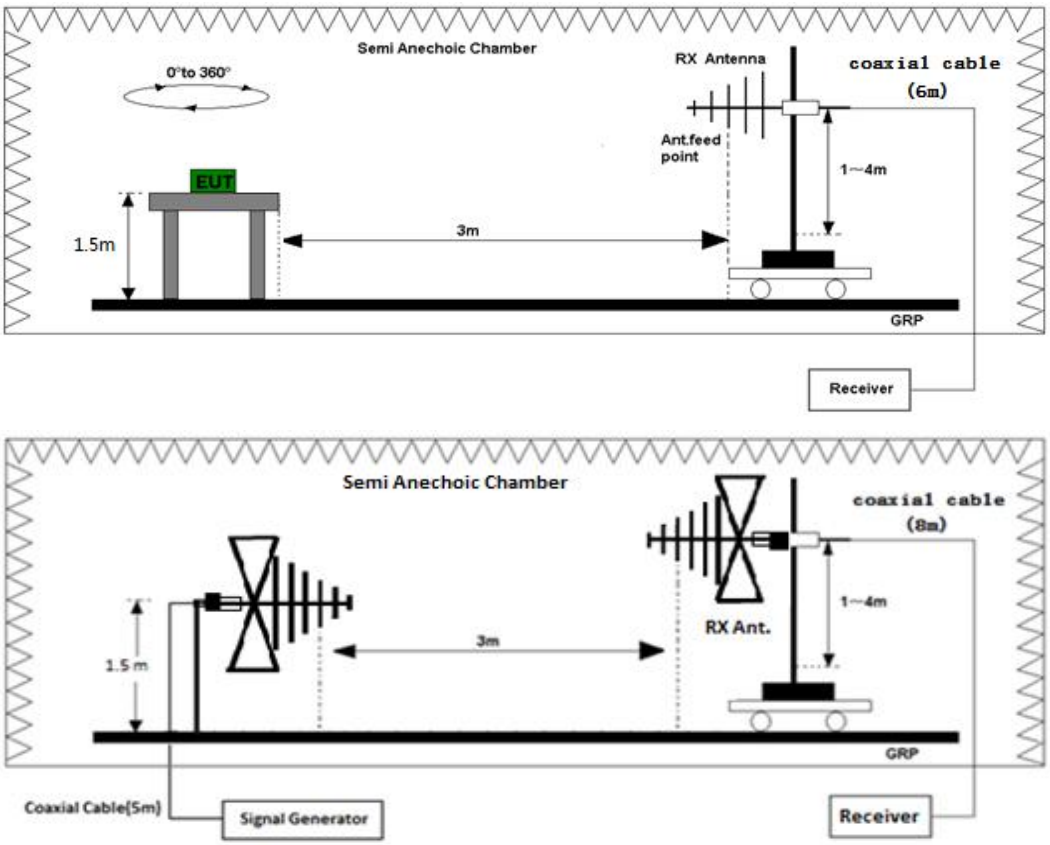
5.5 Transmitter Spurious Emissions (Frequency Above 30MHz)

Spurious emissions are emissions at frequencies other than those of the carrier and sidebands associated with normal modulation.

Test Limit

Frequency Range	Operating Mode Limit	Standby Mode Limit
47 MHz to 74 MHz	4 nW	2 nW
87.5 MHz to 118 MHz	4 nW	2 nW
174 MHz to 230 MHz	4 nW	2 nW
470 MHz to 790 MHz	4 nW	2 nW
Other frequency between 30 MHz to 1000 MHz	250 nW	2 nW

Test Setup



Radiated Emission Test Set-Up Frequency 30 MHz ~ 1 GHz

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Test Procedure

◆ For test method of frequency range (30 MHz-1000MHz)

1. EUT was placed on a 1.5m height wooden table. The search antenna is placed at 3m distances from the EUT and search antenna height is from 1-4m. With the transmitter operating at continuously mode, the turntable was slowly rotated to locate the direction of maximum emission. Once maximum direction is determined, the search antenna was raised and lowered in both vertical and horizontal polarizations.
2. The EUT was removed from the turntable and replaced with a linearly polarized antenna connected to a calibrated RF signal generator. The RF generator was set to a measured emission frequency and the search antenna was raised and lowered to produce a maximum received reading. The generator output was increased to match the radiated emission reading measured previously, and the result expressed in dB EIRP or ERP, correcting for substitution antenna gain at each frequency.
3. Factor=Antenna Factor + Cable loss, Margin=Limit- Measurement Level.
4. The “Factor” value can be calculated automatically by software of measurement system.
5. All test modes had been pre-tested. The worst case and recorded in the report.

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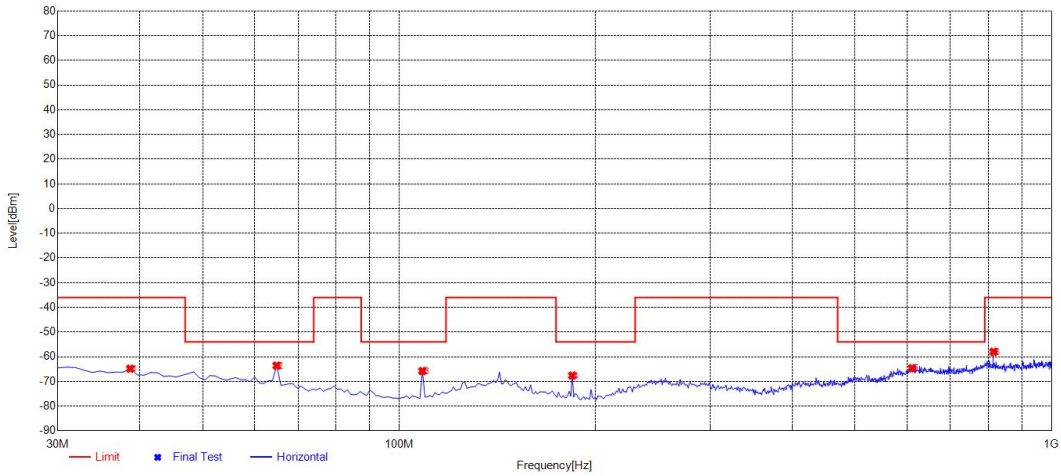
Test Result

Test mode:	Operating (Mode 3)	Test Frequency:	128.4kHz

Horizontal



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	38.73	-93.09	-64.82	-36.00	28.82	28.27	210	Horizontal
2	64.92	-87.00	-63.58	-54.00	9.58	23.42	350	Horizontal
3	108.57	-83.30	-65.78	-54.00	11.78	17.52	20	Horizontal
4	184.23	-86.95	-67.61	-54.00	13.61	19.34	210	Horizontal
5	611.03	-92.72	-64.59	-54.00	10.59	28.13	190	Horizontal
6	814.73	-87.89	-58.00	-36.00	22.00	29.89	360	Horizontal

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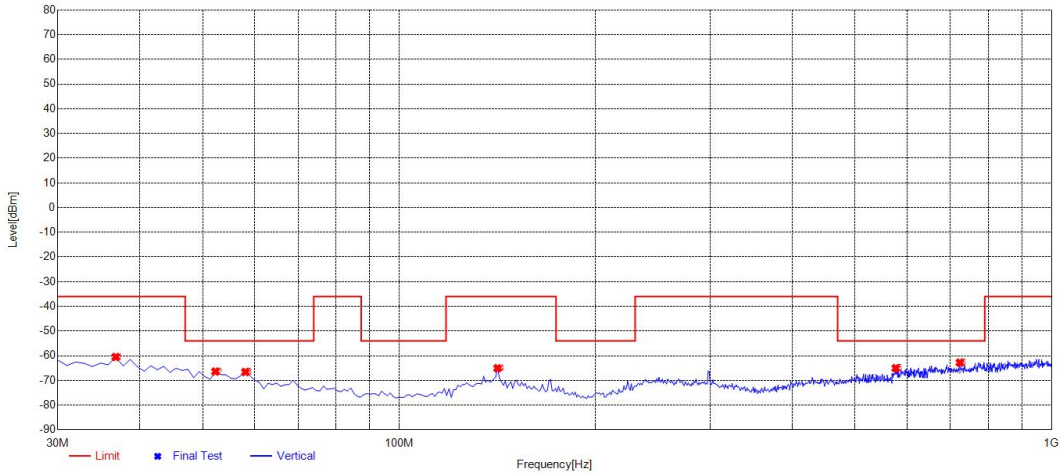
Test mode:	Operating (Mode 3)	Test Frequency:	128.4kHz

Vertical



NO.	Freq. [MHz]	Reading [dBm]	Level [dBm]	Limit [dBm]	Margin [dB]	Factor [dB]	Angle [°]	Polarity
1	36.79	-88.78	-60.50	-36.00	24.50	28.28	300	Vertical
2	52.31	-92.10	-66.39	-54.00	12.39	25.71	180	Vertical
3	58.13	-91.25	-66.57	-54.00	12.57	24.68	270	Vertical
4	141.55	-89.18	-65.04	-36.00	29.04	24.14	270	Vertical
5	577.08	-92.37	-65.03	-54.00	11.03	27.34	230	Vertical
6	723.55	-90.74	-62.76	-54.00	8.76	27.98	190	Vertical

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5.6 Receiver Blocking

Test Limit

The EUT shall achieve the wanted performance criterion, in the presence of the blocking signal.

	In-band signal	OOB signal	Remote-band signal
Frequency	Centre frequency (f_c) of the WPT system (see clause 4.3.3)	$f = f_c \pm F$ (see note)	$f = f_c \pm 10*F$ (see note)
Signal level field strength at the EUT	72dBμA/m	72dBμA/m	82dBμA/m
Note: F = OFR see clause 4.3.3.			

Test Setup

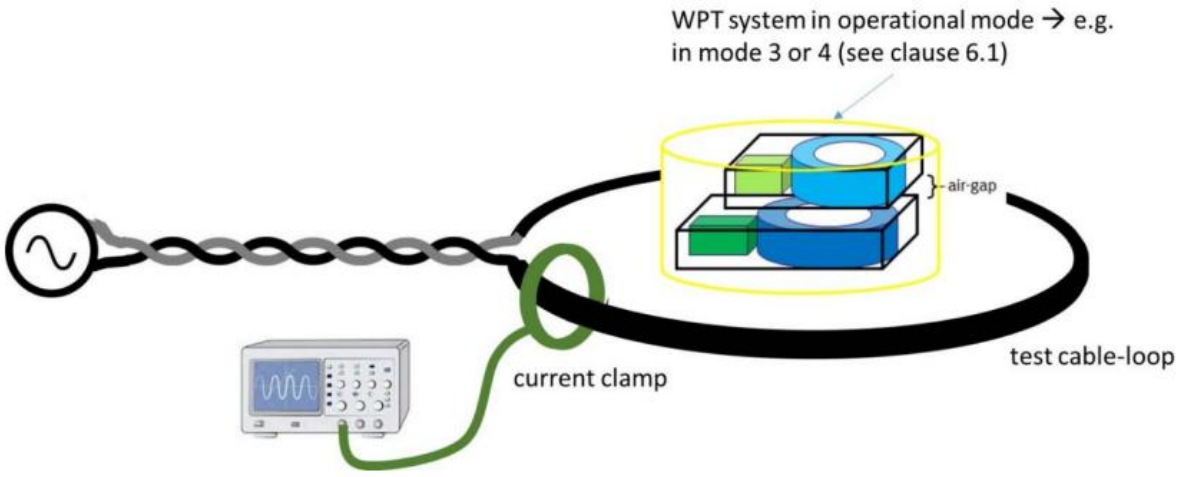

Figure 11: Schematic test set-up for the RX-blocking test

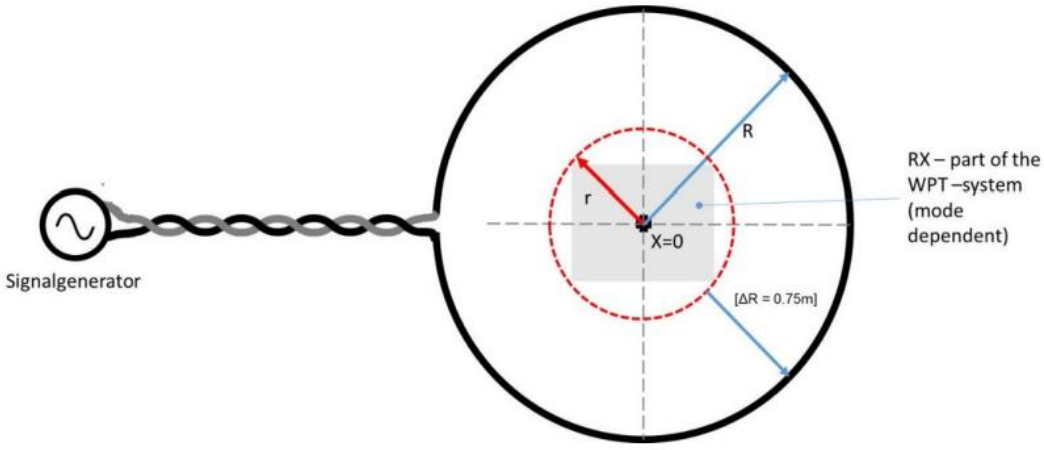

Figure 12: Schematic test set-up for the RX-blocking test

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Test Procedure

The fulfilment of the WPT system performance criterion in all possible operational modes (see clause 4.2.3) shall be tested in presence of the inference signals according to Table 6.

- The manufacturer shall declare in which device orientation(s) (worst case) the test shall be performed.
- The WPT system shall initially operate without interference according to its specified sensitivity (detecting an specific object in the maximum depth as declared by the manufacturer (see clause 4.2.2 on wanted performance criteria)).
- The test setup is visualized in the following Figures 11 and 12.
- The tool shall be operated as intended (e.g. some tools might require to be moved across the object, some tool can be used stationary).
- The test shall be carried out inside a test chamber according to clauses C.1.1 and C.1.2 in ETSI EN 300 330 [1].
- A test loop with a radius r shall be used to create the magnetic field; the test loop shall lie on a non-metallic ground and the minimum distance to metallic objects (e.g. ground plane) shall be 0,75 m.
- The EUT shall be placed to the centre of the test-loop (e.g. see Figures 11 and 12).
- The test loop shall be sufficiently large so that the test loop itself does not influence the WPT system; The radius R of the test-loop shall be in minimum ΔR = 0,75 m larger than the maximum dimension r of the EUT.
- (See Figure 12): R >= r + ΔR.
- The maximum H-Field can be calculated from the loop current I (into the test-loop) with the following formula:

$$H = \frac{I}{2R}$$

Test Result

☒ Test Mode: Mode 3

Interference Type	Test Frequency (kHz)	Signal level @ EUT	Performance	Result
In-band signal	128.4	72dBuA/m	No function loss	Pass
OOB signal	127.698	72dBuA/m	No function loss	Pass
	129.102	72dBuA/m	No function loss	Pass
Remote-band signal	121.38	82dBuA/m	No function loss	Pass
	135.42	82dBuA/m	No function loss	Pass

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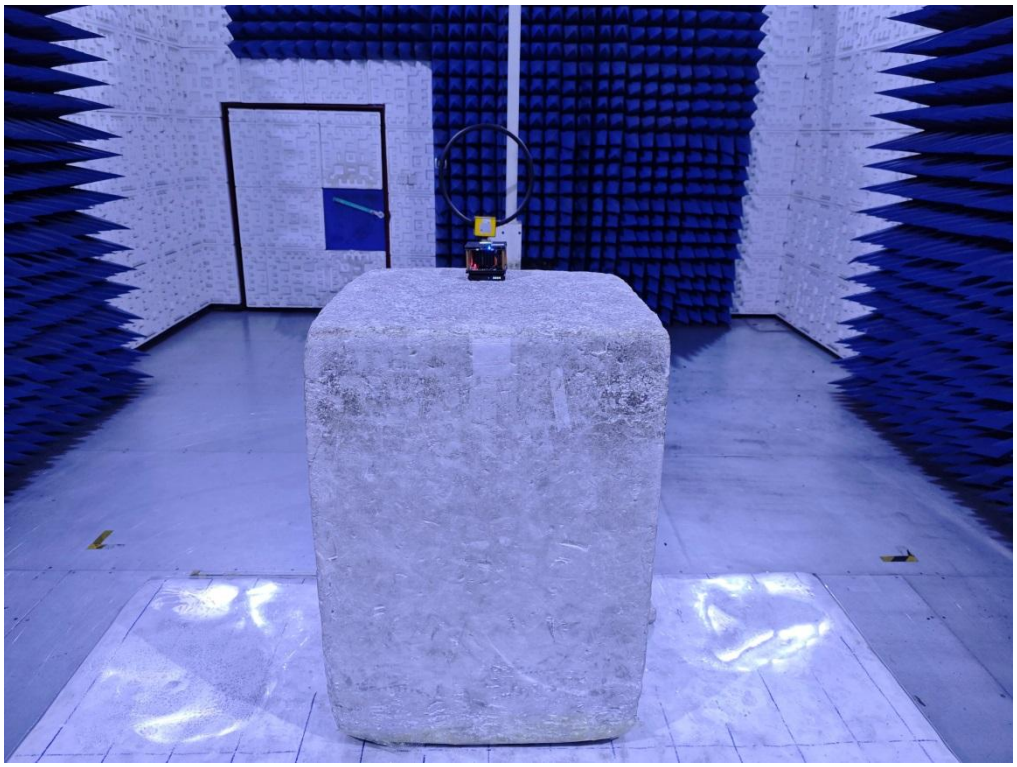
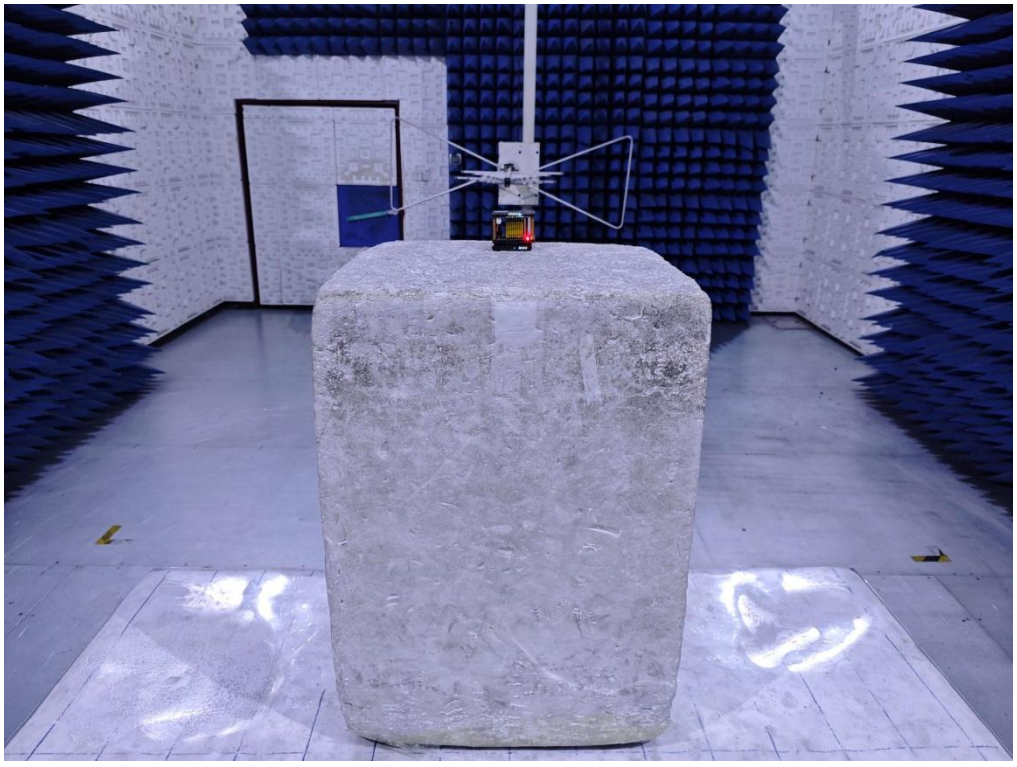
Appendix I: Photographs of Test Setup

Radiated Spurious Emissions Below 30MHz Test Setup



Radiated Spurious Emissions Below 1GHz Test Setup



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Appendix II: Photographs of Test EUT

Refer to the Report No.: AGC05443260894AP01

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Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the “Company”) solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the “Clients”).
2. Any report issued by Company as a result of this application for testing services (the “Report”) shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
3.The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

----End of Report----

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Health Test Report

Report No.: AGC05443260894EH01

PRODUCT DESIGNATION	:	Magnetic power bank
BRAND NAME	:	N/A
MODEL NAME	:	MO2442
APPLICANT	:	MID OCEAN BRANDS B.V.
DATE OF ISSUE	:	Sep. 24, 2026
STANDARD(S)	:	EN IEC 62311:2020 EN 50665:2017
REPORT VERSION	:	V1.0

Attestation of ***G***lobal ***C***ompliance (Shenzhen) Co., Ltd

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Report Revise Record

Report Version	Revise Time	Issued Date	Valid Version	Notes
V1.0	/	Sep. 24, 2026	Valid	Initial Release

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1. General Information

Applicant	MID OCEAN BRANDS B.V.
Address	Unit 711 716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Manufacturer	MID OCEAN BRANDS B.V.
Address	Unit 711 716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Factory	MID OCEAN BRANDS B.V.
Address	Unit 711 716, 7/F., Tower A, 83 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong.
Product Designation	Magnetic power bank
Brand Name	N/A
Test Model	MO2442
Series Model(s)	N/A
Difference Description	N/A
Date of receipt of test item	Sep. 01, 2026
Date of Test	Sep. 01, 2026 to Sep. 20, 2026
Deviation from Standard	No any deviation from the test method
Condition of Test Sample	Normal
Test Result	Pass
Test Report Form No	AGCER-EU-Health/5-V1

Note: The test results of this report relate only to the tested sample identified in this report.

Prepared By	Jack Gui (Project Engineer)	Sep. 24, 2026
Reviewed By	Bibo Zhang (Reviewer)	Sep. 24, 2026
Approved By	Angela Li (Authorized Officer)	Sep. 24, 2026

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2. Product Information

2.1 Product Technical Description

Product Designation	Magnetic power bank
Test Model	MO2442
Hardware Version	V1.0
Software Version	V1.0
Input Rating	DC 5V 3A, DC 9V 2.22A
Output Rating	DC 5V/3A, 9V/2.22A, 12V/1.66A Wireless output: 15W(max)
WPT Technical Parameters	
Operation Frequency Range	110-205 kHz
Modulation Type	ASK
Antenna Designation	Coil Antenna

Note:

1. The above information was declared by the manufacturer.
2. The equipment submitted are representative production models.
3. For more details, please refer to the User's manual of the EUT.

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3. Test Environment

3.1 Address of The Test Laboratory

Laboratory: Attestation of Global Compliance (Shenzhen) Co., Ltd.

Address: 1-2/F, Building 19, Junfeng Industrial Park, Chongqing Road, Heping Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China

3.2 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

CNAS-Lab Code: L5488

Attestation of Global Compliance (Shenzhen) Co., Ltd. has been assessed and proved to follow CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories.)

A2LA-Lab Cert. No.: 5054.02

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to follow ISO/IEC 17025: 2017 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing.

FCC-Registration No.: 975832

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintained in our files with Registration 975832.

IC-Registration No.: 24842(CAB identifier: CN0063)

Attestation of Global Compliance (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the Certification and Engineering Bureau of Industry Canada. The acceptance letter from the IC is maintained in our files with Registration 24842.

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4. EN 62311 Requirements for Near Field Measurements

4.1 Evaluation Methodology

- This International Standard applies to electronic and electrical equipment for which no dedicated product- or product family standard regarding human exposure to electromagnetic fields applies.
- This generic standard applies to electronic and electrical apparatus for which no dedicated product- or product family standard regarding human exposure to electromagnetic fields applies.
- The frequency range covered is 0 Hz to 300 GHz.
- The object of this generic standard is to provide assessment methods and criteria to evaluate such equipment against basic restrictions or reference levels on exposure of the general public related to electric, magnetic, electromagnetic fields and induced and contact current.

Note: This standard is intended to cover both intentional and non-intentional radiators. If the equipment complies with the requirements in another relevant standard, e.g. EN 62479 covering low power equipment, then the requirements of this standard (IEC 62311) are considered to be met and the application of this standard to that equipment is not necessary.

4.2 Measurement limits

According to EN IEC 62311:2020, Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0Hz–300GHz).

Annex F Measurement of E and H field

A commonly used probe size is 100 cm^2, also the contribution of the three axes X, Y and Z can be evaluated separately.

Frequency Range	E-field Strength (V/m)	H-Field Strength (A/m)	B-Field (uT)	Equivalent plane Wave Power Density (W/m^2)
0-1 Hz	--	$3.2*10^4$	$4*10^4$	--
1-8 Hz	10000	$3.2*10^4/f^2$	$4*10^4/f^2$	--
8-25 Hz	10000	4000/f	5000/f	--
0.025-0.8 kHz	250/f	4/f	5/f	--
0.8-3 kHz	250/f	5	6.25	--
3-150 kHz	87	5	6.25	--
0.15-1 MHz	87	0.73/f	0.92/f	--
1-10 MHz	$87/f^{1/2}$	0.73/f	0.92/f	--
10-400 MHz	28	0.073	0.092	2
400-2000 MHz	$1.375\ f^{1/2}$	$0.0037\ f^{1/2}$	$0.0046\ f^{1/2}$	f/200
2-300 GHz	61	0.16	0.20	10

*Note:

1. f as indicated in the frequency range column.
2. Provided that basic restrictions are met and adverse indirect effects can be excluded, field strength values can be exceeded.
3. For frequencies between 100 kHz and 10 GHz, S, E2 , H2 and B2 are to be averaged over any 6-min period.
4. For peak values at frequencies up to 100 kHz see Table 4, note 3.
5. For peak values at frequencies exceeding 100 kHz see Figs.1 and 2. Between 100 KHz and 10MHz, peak

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values for the field strengths are obtained by interpolation from the 1.5-fold peak at 100 kHz to the 32-fold peak at 10 MHz. For frequencies exceeding 10 MHz it is suggested that the peak equivalent plane wave power density, as averaged over the pulse width, does not exceed 1,000 times the S restrictions, or that the field strength does not exceed 32 times the field strength exposure levels given in the table.

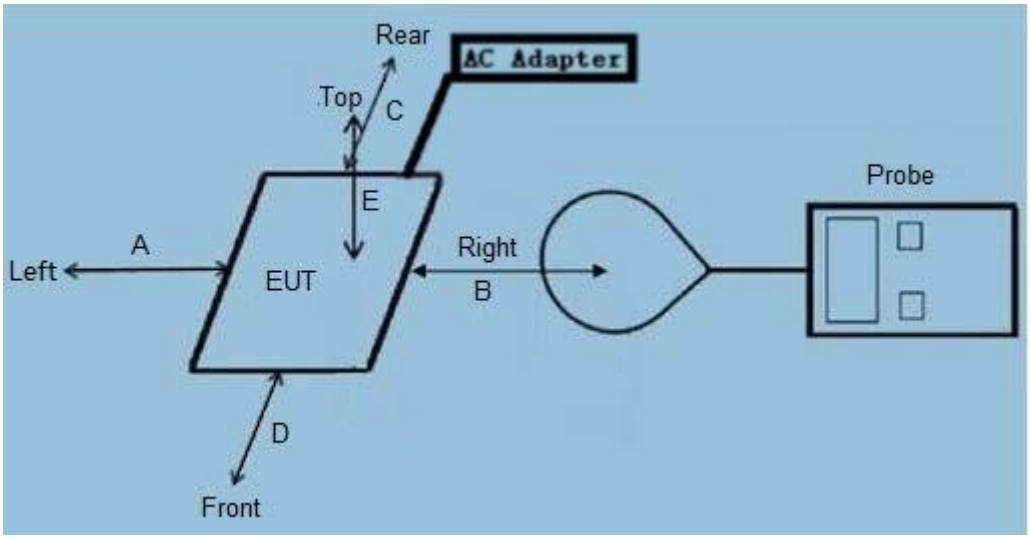
6. For frequencies exceeding 10 GHz, S, E2 , H2 and B2 are to be averaged over any 68/ f1.05 –min period (f in GHz).
7. No E-field value is provided for frequencies < 1 Hz, which are effectively static electric fields, Electric shock from low impedance sources is prevented by established electrical safety procedures for such equipment

4.3 Measurement Method and Arrangement

- **Measurement of E and H field**

A commonly used probe size is 100 cm^2, also the contribution of the three axes X, Y and Z can be evaluated separately

Mobile:



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4.4 Test Equipment List

Used	Equipment No.	Test Equipment	Manufacturer	Model No.	Serial No.	Last Cal. Date (YY-MM-DD)	Next Cal. Date (YY-MM-DD)
☒	AGC-RF-011	Broadband Field Meter	WAVECONTROL	SMP2	J-0004	2025-02-19	2027-02-18
☒	AGC-RF-012	Probe FHP	WAVECONTROL	WP400	J-0015	2025-02-19	2027-02-18

4.5 Measurement Uncertainty

The reported uncertainty of measurement y ±U, where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%.

Item	Measurement Uncertainty
E-Field Strength (0.003-0.4MHz)	±1.5dB
E-Field Strength (0.4-10MHz)	±1.3dB
H-Field Strength (0.003-0.4MHz)	±1.3dB
H-Field Strength (0.4-10MHz)	±1.2dB

4.6 Description of Test Modes

No.	Test Mode Description	Exposure Conditions
1	Full Load Mode 15W	Portable
2	Half Load Mode 7.5W	Portable
3	Null Load Mode 0W	Portable
4	Wireless Output Load + Powered by AC/DC adapter	Mobile
Note: All modes have been tested and only the worst mode test data recorded in the test report.		

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4.7 Test Result

Mode Description	Test Frequency (kHz)	Maximum Radiated H-Field at 0cm (A/m)		Limit (A/m)	Result
Mode 1	110-205	Position A	0.514	5	Pass
		Position B	0.602		
		Position C	0.201		
		Position D	0.235		
		Position E	0.117		
		Position F	0.106		

Mode Description	Test Frequency (kHz)	Maximum Radiated H-Field at 20cm (A/m)		Limit (A/m)	Result
Mode 1	110-205	Position A	0.042	5	Pass
		Position B	0.039		
		Position C	0.040		
		Position D	0.045		
		Position E	0.047		

Since Radiated H-Field at worse case is 0.091A/m which cannot exceed the exempt condition, 5A/m. It is deemed to full fit the requirement of RF exposure basic restriction specified in EC Council Recommendation (1999/519/EC).

4.8 Evaluation Conclusion

Remark: EUT meets the basic requirements in the standard.

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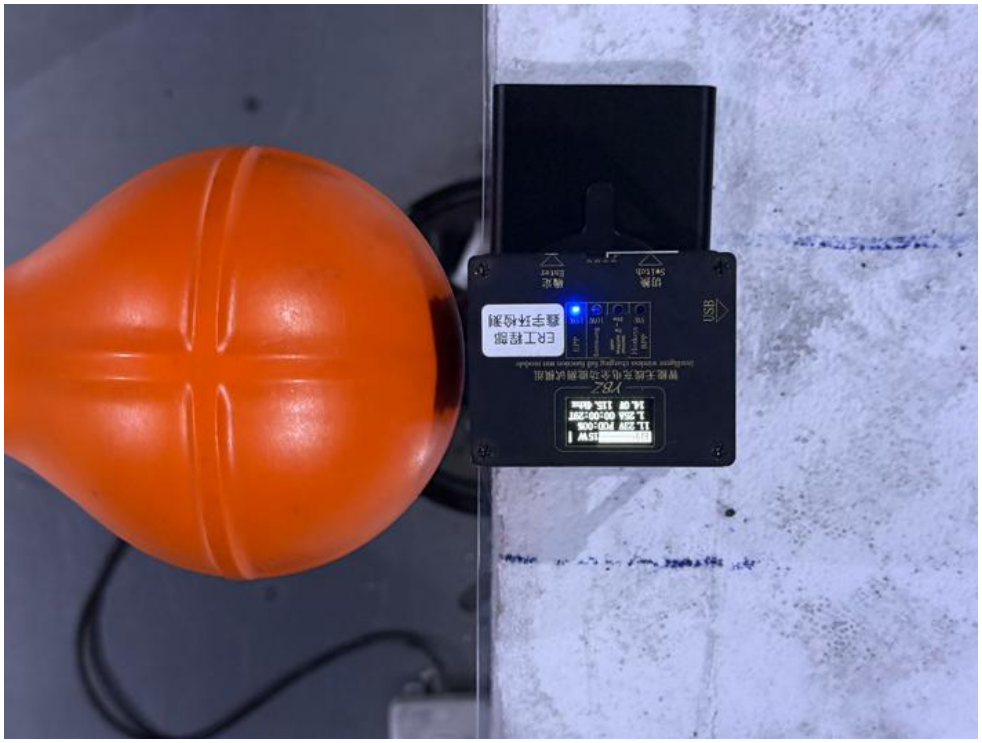
Appendix I: Photographs of Test Setup

Portable

Measure Position A

Measure Position B



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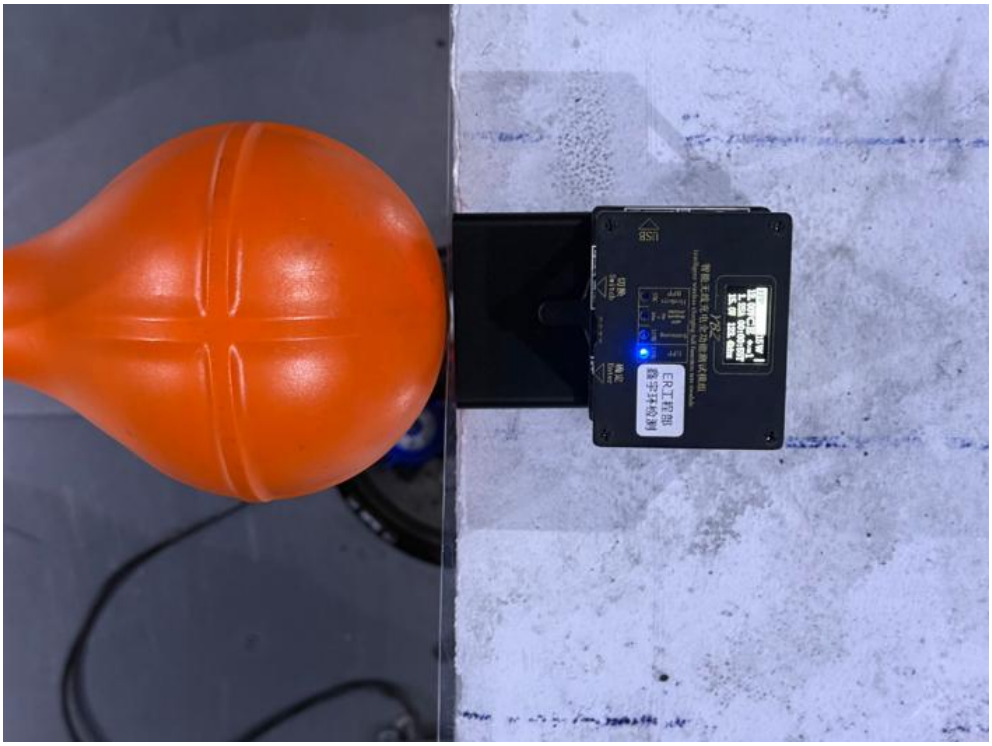
Measure Position C

Measure Position D



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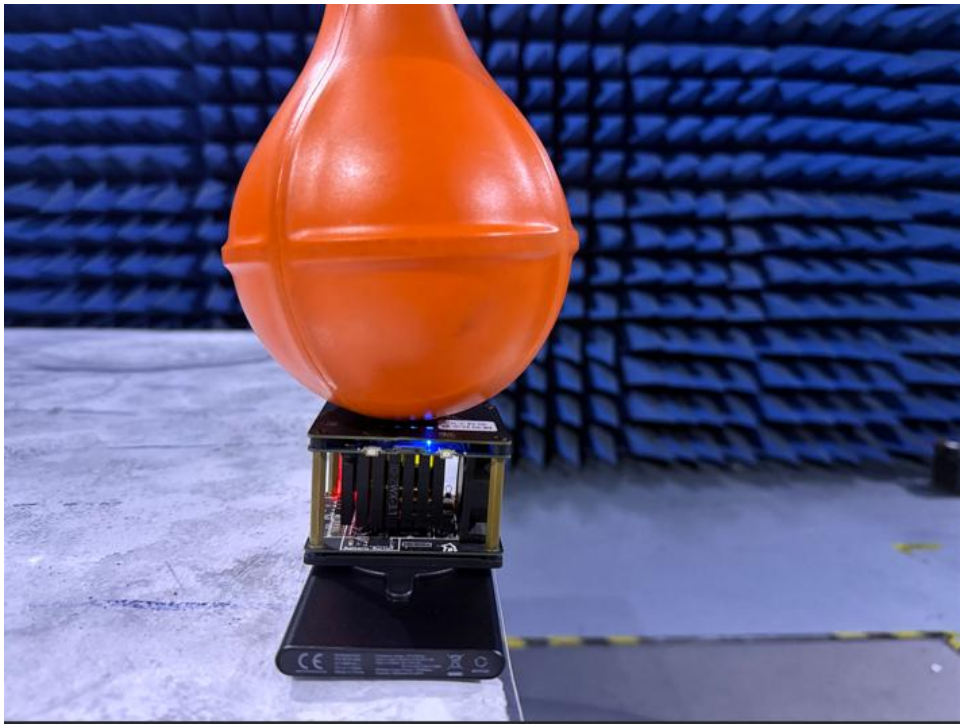
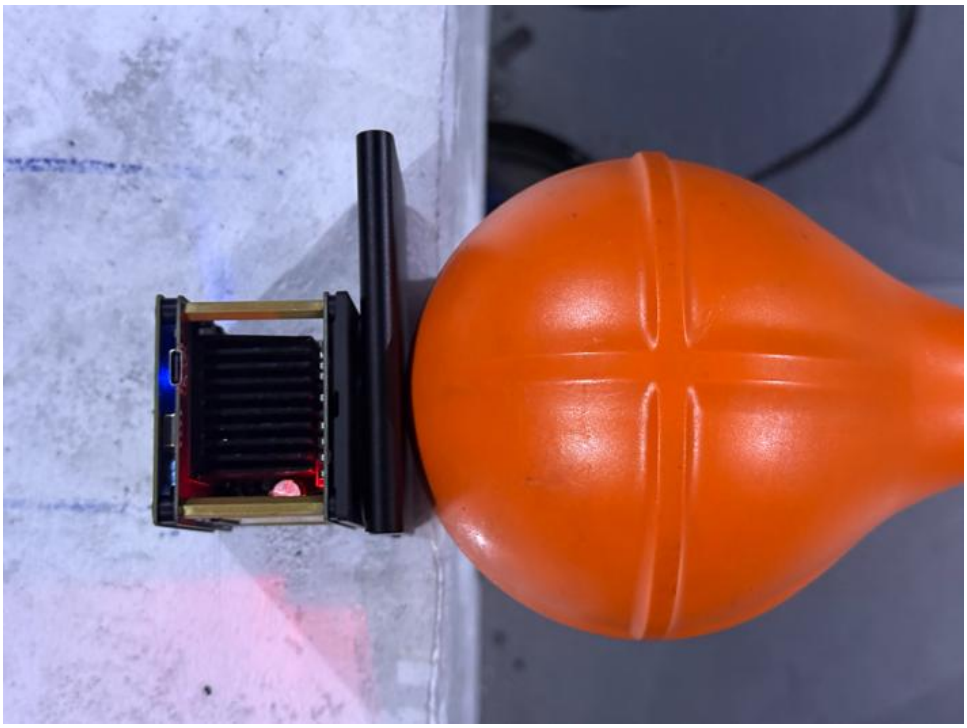
Measure Position E



Measure Position F



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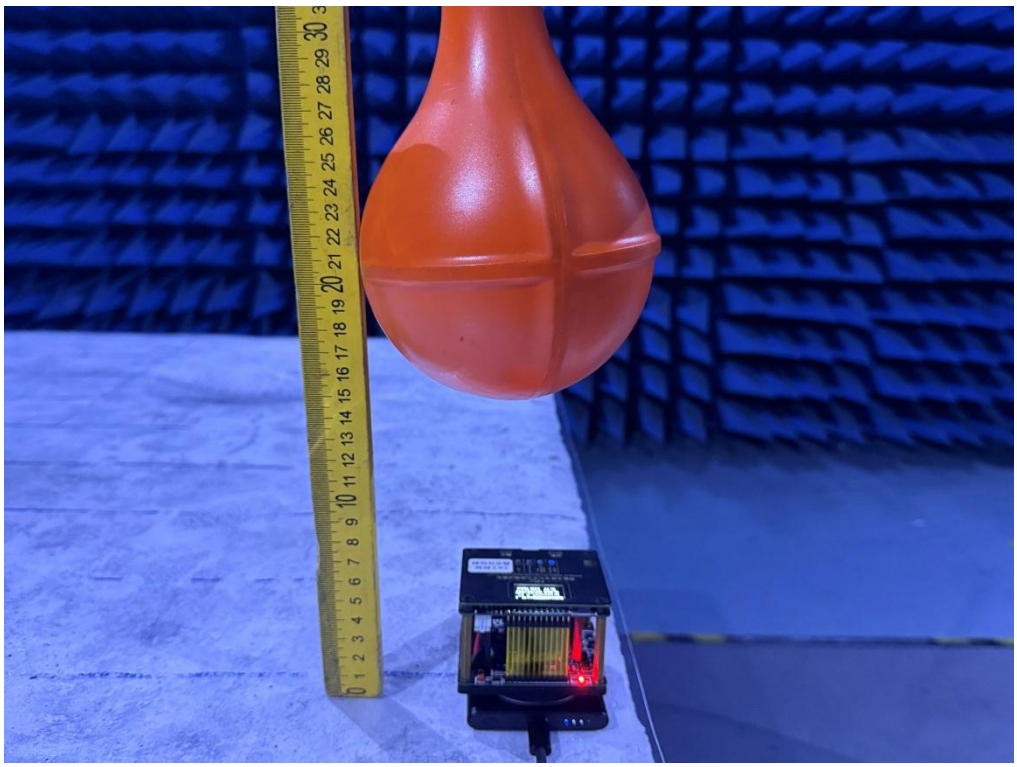
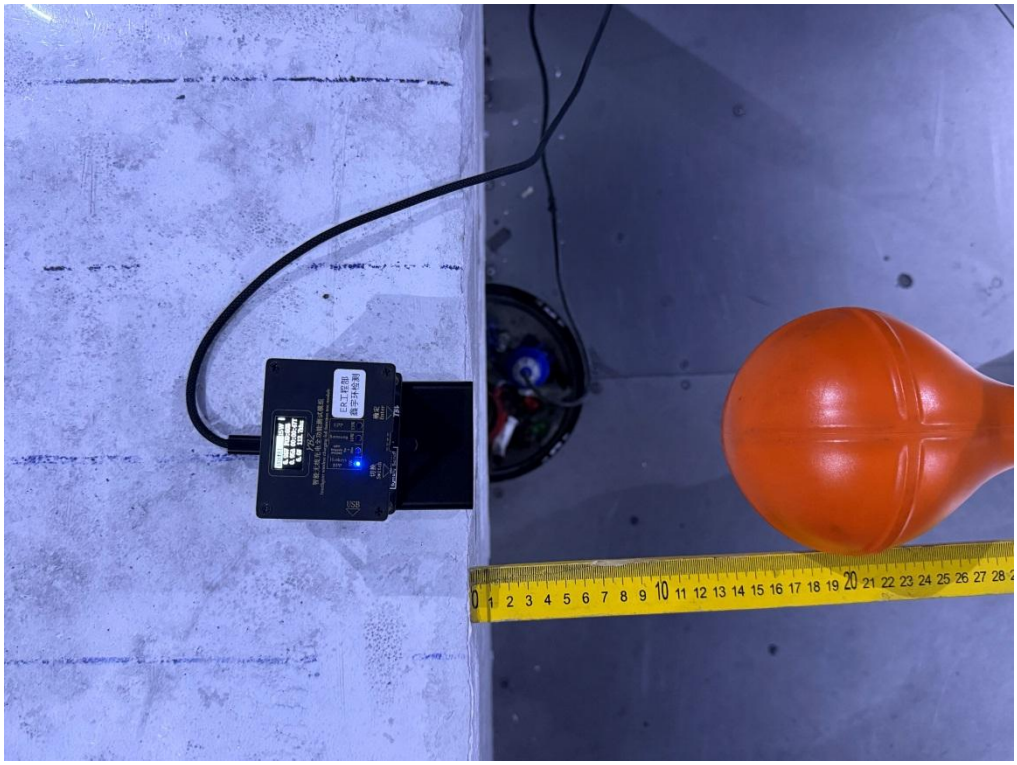
Mobile

Measure Position E



Measure Position A



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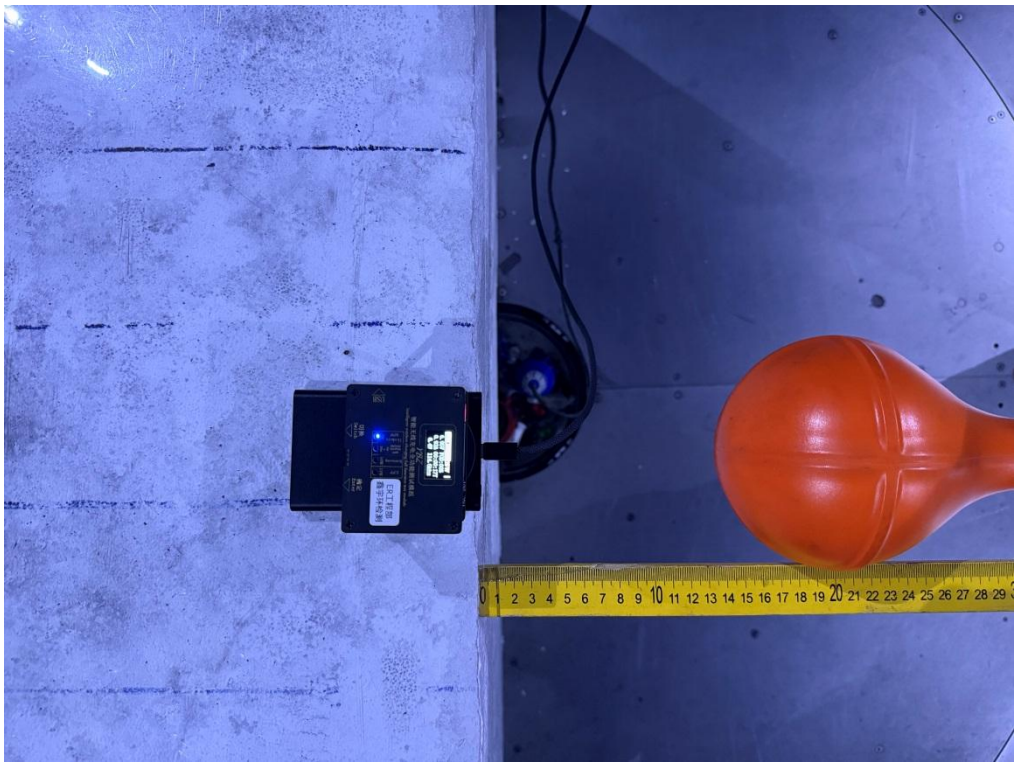
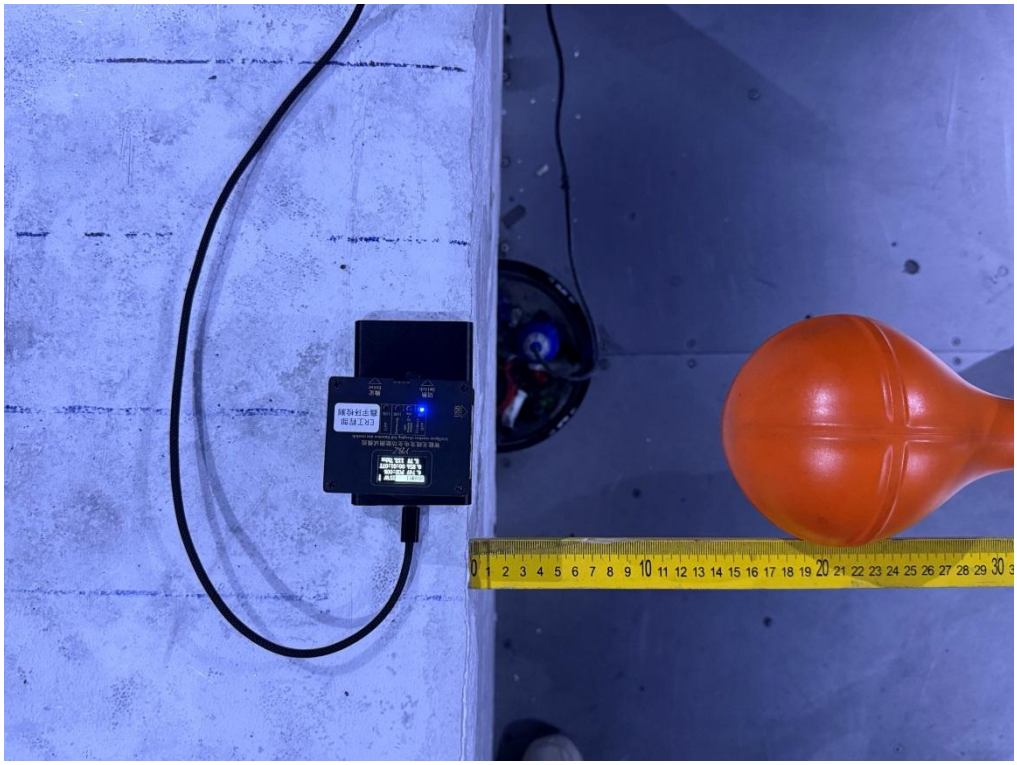
Measure Position B



Measure Position C



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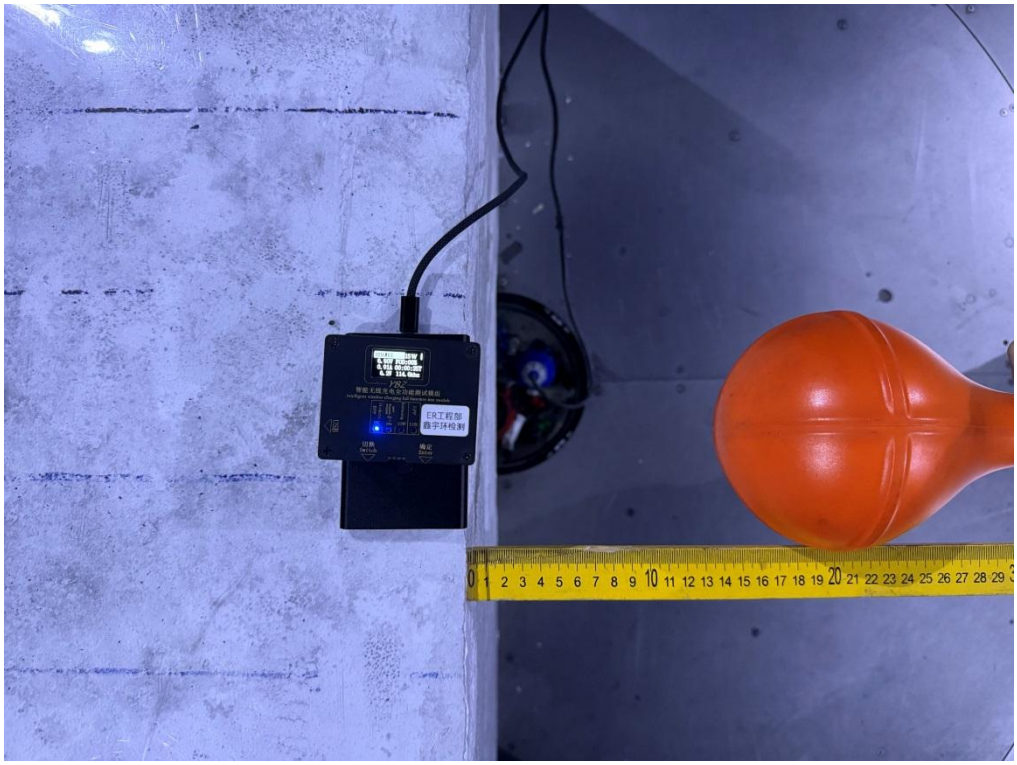
Measure Position D



Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the "Dedicated Testing/Inspection Stamp" is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.

Conditions of Issuance of Test Reports

1. All samples and goods are accepted by the Attestation of Global Compliance (Shenzhen) Co., Ltd (the “Company”) solely for testing and reporting in accordance with the following terms and conditions. The company provides its services on the basis that such terms and conditions constitute express agreement between the company and any person, firm or company requesting its services (the “Clients”).
2. Any report issued by Company as a result of this application for testing services (the “Report”) shall be issued in confidence to the Clients and the Report will be strictly treated as such by the Company. It may not be reproduced either in its entirety or in part and it may not be used for advertising or other unauthorized purposes without the written consent of the Company. The Clients to whom the Report is issued may, however, show or send it, or a certified copy thereof prepared by the Company to its customer, supplier or other persons directly concerned. The Company will not, without the consent of the Clients, enter into any discussion or correspondence with any third party concerning the contents of the Report, unless required by the relevant governmental authorities, laws or court orders.
3.The Company shall not be called or be liable to be called to give evidence or testimony on the Report in a court of law without its prior written consent, unless required by the relevant governmental authorities, laws or court orders.
4. In the event of the improper use of the report as determined by the Company, the Company reserves the right to withdraw it, and to adopt any other additional remedies which may be appropriate.
5. Samples submitted for testing are accepted on the understanding that the Report issued cannot form the basis of, or be the instrument for, any legal action against the Company.
6. The Company will not be liable for or accept responsibility for any loss or damage however arising from the use of information contained in any of its Reports or in any communication whatsoever about its said tests or investigations.
7. Clients wishing to use the Report in court proceedings or arbitration shall inform the Company to that effect prior to submitting the sample for testing.
8. The Company is not responsible for recalling the electronic version of the original report when any revision is made to them. The Client assumes the responsibility to providing the revised version to any interested party who uses them.
9. Subject to the variable length of retention time for test data and report stored hereinto as otherwise specifically required by individual accreditation authorities, the Company will only keep the supporting test data and information of the test report for a period of six years. The data and information will be disposed of after the aforementioned retention period has elapsed. Under no circumstances shall we provide any data and information which has been disposed of after retention period. Under no circumstances shall we be liable for damage of any kind, including (but not limited to) compensatory damages, lost profits, lost data, or any form of special, incidental, indirect, consequential or punitive damages of any kind, whether based on breach of contract of warranty, tort (including negligence), product liability or otherwise, even if we are informed in advance of the possibility of such damages.

-----End of Report-----

Any report having not been signed by authorized approver, or having been altered without authorization, or having not been stamped by the “Dedicated Testing/Inspection Stamp” is deemed to be invalid. Copying or excerpting portion of, or altering the content of the report is not permitted without the written authorization of AGC. The test results presented in the report apply only to the tested sample. Any objections to report issued by AGC should be submitted to AGC within 15days after the issuance of the test report. Further enquiry of validity or verification of the test report should be addressed to AGC by agc01@agccert.com.