

Test Report

Report No.:	SIT250527160101ER-3
Date of issue:	June 04, 2025
Applicant:	Mid Ocean Brands B.V.
Product:	3 in 1 wireless charger
Model(s):	MO2729

Shenzhen SIT Testing Technology Co., Ltd.

Room 401, Building A2, The 2nd Industrial Zone of Zhu'ao, Gushu, Xixiang, Bao'an District,
Shenzhen, Guangdong, China

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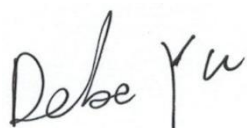
Applicant:	Mid Ocean Brands B.V.
Address:	7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong
Manufacturer:	114628

Equipment Under Test (EUT)

EUT Name : 3 in 1 wireless charger
Model No. : MO2729
Series Model No. : N/A
Brand Name : N/A
Receipt Date : 2025-05-27
Test Date : 2025-05-27 to 2025-06-03
Issue Date : 2025-06-04
Standards : ETSI EN 300 330 V2.1.1 (2017-02)
Conclusions : **PASS**

In the configuration tested, the EUT complied with the standards specified above. The EUT technically complies with the Council Directive 2014/53/EU relating to radio equipment.

Prepared by:



Project Engineer

Reviewed by:



Project Supervisor

Approved by:



Technical Director

Summary of Test Result

Transmitter results summary:

EN 300 330 V2.1.1				
Item	Description of Test	Clause No	Condition	Result
1	Permitted range of operating frequencies	4.3.1		Pass
2	Operating frequency ranges	4.3.2		Pass
3	Modulation bandwidth	4.3.3		Pass
4	Transmitter H-field requirements	4.3.4	Only for equipment under class 1 and class 2, in clause 6.1.2	Pass
5	Transmitter radiated spurious domain emission limits < 30 MHz	4.3.8		Pass
6	Transmitter radiated spurious domain emission limits > 30 MHz	4.3.9	For equipment under class 1, 2 and 4 in clause 6.1.2	Pass
7	Transmitter Frequency stability under low voltage conditions	4.3.10	Only for channelized systems	N/A*

Receiver results summary:

Item	Description of Test	Result
1	Receiver adjacent channel selectivity	N/A*
2	Receiver blocking or desensitization	N/A*
3	Receiver spurious emissions	N/A*
4	Receiver blocking or desensitization	N/A*

N/A*: no applicable.

1 General description

1.1 Feature of equipment under test (EUT)

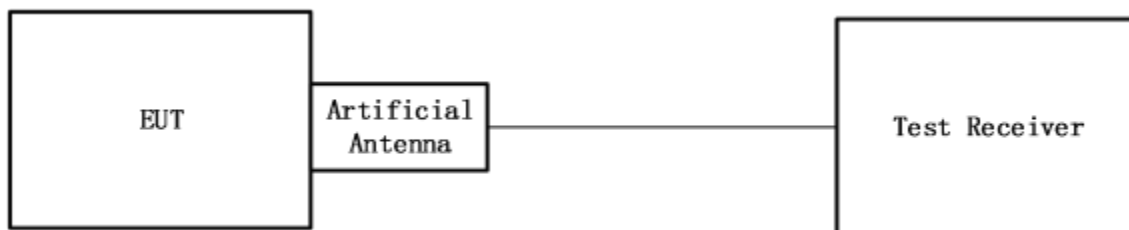
Product name:	Wireless Charger
Model name:	MO2729
Series Model:	N/A
Model difference:	N/A
Electrical rating:	Input DC 5V/3A, DC 9V/2.7A Wireless Output Power: Phone Output: 15W Max(DC 5V/1A, 7.5V/1A, 9V/1.11A, 9V/1.67A) Earbud Output: 5W Max(DC 5V/1A) Apple watch Output 2.5w Max(DC 5V/0.5A)
Accessories:	N/A
Software version:	--
Hardware version:	--
RF specification:	
Operation frequency:	Transmitter (Apple watch): 300-350KHz
Modulation type:	ASK
Antenna type:	Coil Antenna

1.2 EUT operation mode

No.	Test modes
Mode1	Mobile phone
Mode2	Stand-by

1.3 EUT test setup

For Conducted test:



For Radiated test:



See photographs of the test setup in the report for the actual setup and connections between EUT and support equipment.

1.4 Test conditions

During the measurement the environmental conditions were within the listed ranges:

- Temperature: 15°C ~ 35°C
- Humidity: 20%~75% ~
- Atmospheric pressure: 98kPa ~ 101kPa

For extreme test conditions

Test Conditions	Normal	Low	High
Temperature (°C)	25	0	35
Power supply (VDC)	7.5	5	9
Note1: The extremes of the operating temperature ranges are declared by the manufacture.			

1.5 Ancillary equipment list

Equipment	Model	S/N	Manufacturer
Mobile phone	-	-	-
Adapter	-	-	-

1.6 Measurement uncertainty

Measurement Uncertainty for a Level of Confidence of 95 %, $U=2 \times U_c(y)$

RF frequency	1×10^{-7}
RF power, conducted	± 1 dB
Conducted emission of receivers	± 1 dB
Radiated emission of transmitter	± 6 dB
Radiated emission of receiver	± 6 dB
Temperature	± 1 degree
Humidity	± 5 %

2 Testing site

Test laboratory:	Shenzhen SIT Testing Technology Co., Ltd.
Test site location:	Room 401, Building A2, The 2nd Industrial Zone of Zhu'ao, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China
Telephone:	(86)-0755-29173399
Fax:	(86)-0755-29179933

3 List of test equipment

Equipment No.	Equipment Name	Manufacturer	Model	Serial No.	Calibration date	Due date
MTi-E043	EMI Test Receiver	Rohde&schwarz	ESCI7	101166	2024/12/26	2025/12/25
MTi-E044	Broadband antenna	<u>Schwarzbeck</u>	VULB9163	9163-1338	2024/12/30	2025/12/29
MTi-E047	Pre-amplifier	Hewlett-Packard	8447F	3113A06184	2024/12/26	2025/12/25
MTi-E045	Double Ridged Broadband Horn Antenna	schwarabeck	BBHA 9120 D	9120D-2278	2024/12/30	2025/12/29
MTi-E057	Wideband Radio Communication Tester	R&S	CMW500	149155	2024/12/26	2025/12/25
MTi-E058	ESG Series Analog Signal Generator	Agilent	E4421B	GB40051240	2024/12/25	2025/12/24
MTi-E062	PXA Signal Analyzer	Agilent	N9030A	MY51350296	2024/12/25	2025/12/24
MTi-E063	Power Splitter	/	PD-4SF-206D	/	2024/12/04	2025/12/03
MTi-E064	Synthesized Sweeper	Agilent	83752A	3610A01957	2024/12/25	2025/12/24
MTi-E065	DC Power Supply	Agilent	E3632A	MY40027695	2024/12/04	2025/12/03
MTi-E066	MXA Signal Analyzer	Agilent	N9020A	MY50143483	2024/12/26	2025/12/25
MTi-E071	ESG Vector Signal Generator	Agilent	N5182A	MY50143762	2024/12/25	2025/12/24
MTi-E072	Thermometer Clock Humidity Monitor	-	HTC-1	/	2024/12/05	2025/12/04
MTi-E089	ESG Vector Signal Generator	Agilent	N5182A	MY49060455	2024/12/25	2025/12/24
MTi-E046	Active Loop Antenna	Schwarzbeck	FMZB 1519 B	00066	2024/12/30	2025/12/29
MTi-A029	Loop antenna	SOLAR	7334-1	220095-2	2024/12/20	2025/12/19

4 Transmitter parameters

4.1 Permitted range of operating frequencies and Operating frequency ranges

4.1.1 Definition

The permitted range of operating frequencies is the frequency range over which the equipment is authorized to operate.

4.1.2 Limits

The permitted frequency range of the modulation bandwidth shall be stated by the provider. Outside the permitted range of operating frequencies the unintentional emissions shall be reduced to the limits given in clause 4.3 of the present report.

4.1.3 Test Procedures

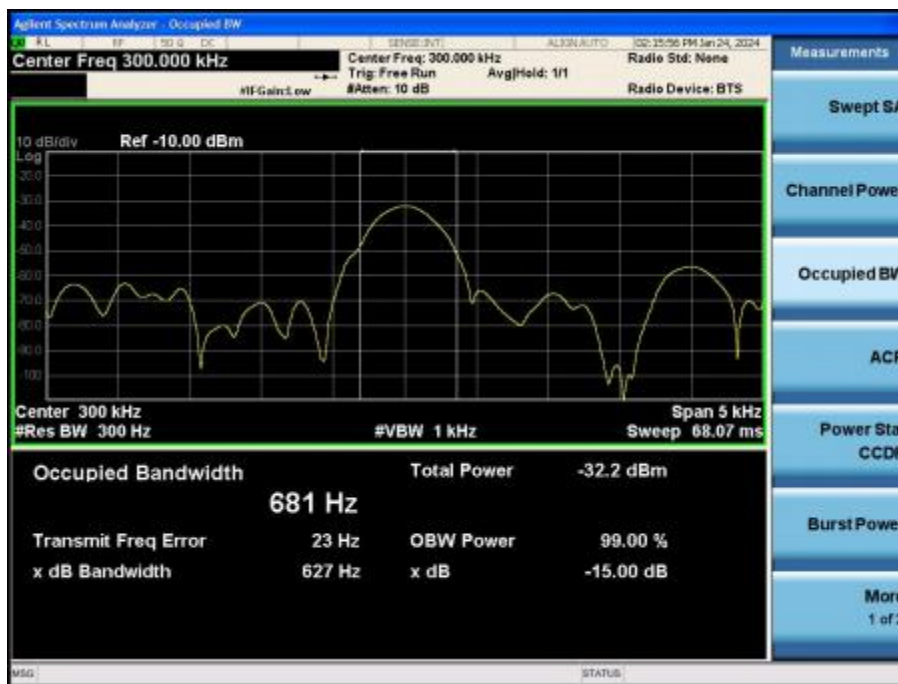
Follow the test procedure as described in EN 300 330-1 V2.1.1 Clause 6.2.2 to measure the permitted range of operating frequencies at normal condition.

4.1.4 Test Result

Transmitter 3 (Watch):

Operating frequency range(s) (OFR)			
FL (kHz)	FH (kHz)	Limit (kHz)	Result
299.66	350.34	Between 148.5 kHz and 5 MHz	Pass

OBW- Lowest channel



OBW-Highest channel



4.2 Permitted range of the modulation bandwidth

4.2.1 Definition

The frequency range of the modulation bandwidth contains all associated side bands above the following level:

For carrier frequencies in the range 135 kHz to 30 MHz:

- 15 dB below the carrier or the appropriate spurious limit as defined in clause 4.3 of the present report.

4.2.2 Limits

The permitted range of the modulation bandwidth shall be within the assigned frequency band see table 1 or $\pm 7.5\%$ of the carrier frequency whichever is the smallest.

4.2.3 Test Procedures

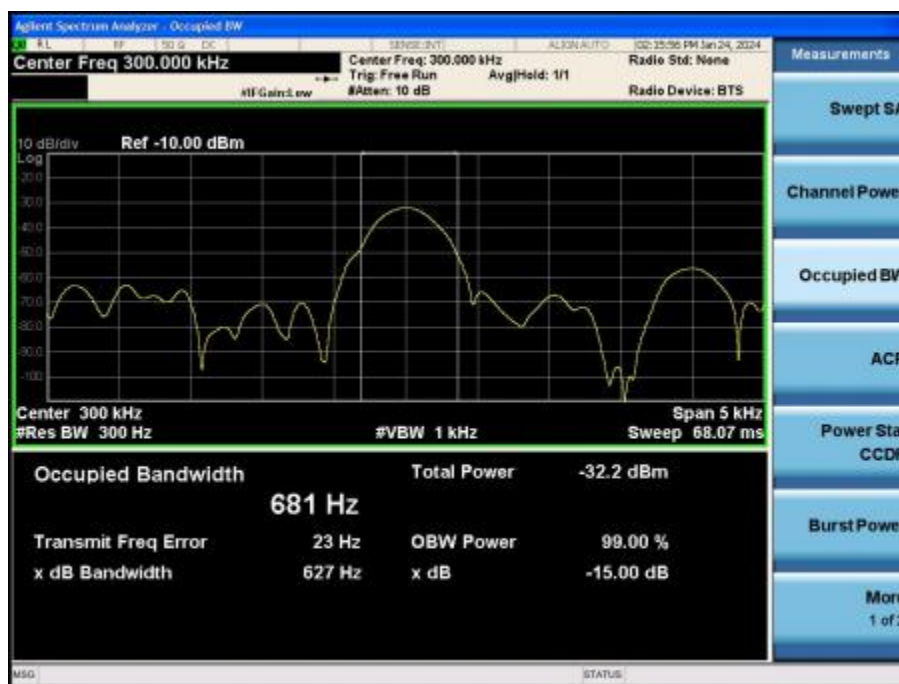
Follow the test procedure as described in EN 300 330-1 V2.1.1 Clause 6.2.3 to measure the permitted range of the modulation bandwidth at normal condition.

4.2.4 Test Result

Transmitter 3 (Watch):

FL (kHz)	FH (kHz)	Limit (kHz)	Result
299.69	350.34	between 277.5KHz and 376.25KHz	Pass

OBW- Lowest channel



OBW-Highest channel



4.3 Transmitter H-field requirements

4.3.1 Definition

H-field (radiated)

In the case of a transmitter with an integral or dedicated antenna, the radiated H-field is defined in the direction of maximum field strength under specified conditions of measurement

4.3.2 Limits

H-field limits

Frequency range (MHz)	H-field strength limit (H_f) dB μ A/m at 10 m or specified in mW e.r.p.
$0,009 \leq f < 0,090$	72 descending 3 dB/oct above 0,03 MHz or according to note 1 (see note 5)
$0,09 \leq f < 0,119$	42
$0,119 \leq f < 0,135$	66 descending 3 dB/oct above 0,119 MHz or according to note 1 (see notes 3 and 5)
$0,135 \leq f < 0,140$	42
$0,140 \leq f < 0,1485$	37,7
$0,1485 \leq f < 30$	-5 (see note 4)
$0,315 \leq f < 0,600$	-5
$3,155 \leq f < 3,400$	13,5
4,234	9 (see note 9)
4,516	7
$7,400 \leq f < 8,800$	9
$10,2 \leq f < 11,00$	9
$12,5 \leq f \leq 20$	-7
$6,765 \leq f \leq 6,795$	42 (see notes 3 and 7)
$26,957 \leq f \leq 27,283$	42 (see note 3)
$13,410 \leq f \leq 13,553$, $13,567 \leq f \leq 13,710$	9 (see note 6)
$13,110 \leq f \leq 13,410$, $13,710 \leq f \leq 14,010$	-3,5 (see note 6)
$12,660 \leq f \leq 13,110$, $14,010 \leq f \leq 14,460$	-10 (see note 6)
$11,810 \leq f \leq 12,660$, $14,460 \leq f \leq 15,310$	-16 (see note 6)
$13,460 \leq f \leq 13,553$, $13,567 \leq f \leq 13,660$	27 (see note 6)
$13,360 \leq f \leq 13,460$, $13,660 \leq f \leq 13,760$	Linear transition from 27 to -3,5 (see note 6)
$13,110 \leq f \leq 13,360$, $13,760 \leq f \leq 14,010$	-3,5 (see note 6)
$12,660 \leq f \leq 13,110$, $14,010 \leq f \leq 14,460$	-5 (see note 6)
$13,553 \leq f \leq 13,567$	42 (see note 3) or 60 (see notes 2 and 3)
27,095	42

Frequency range (MHz)	H-field strength limit (H_f) dB μ A/m at 10 m or specified in mW e.r.p.
26,995, 27,045, 27,095, 27,145, 27,195 (see note 8)	100 mW
NOTE 1: For the frequency ranges 9 kHz to 135 kHz, the following additional restrictions apply to limits above 42 dBμA/m:] - for loop coil antennas with an area $\geq 0,16 \text{ m}^2$ this table and table B.1 with the antenna limitations apply; - for loop coil antennas with an area between $0,05 \text{ m}^2$ and $0,16 \text{ m}^2$ table B.1 applies with a correction factor. The limit is: table value + $10 \times \log (\text{area}/0,16 \text{ m}^2)$; - for loop coil antennas with an area $< 0,05 \text{ m}^2$ the limit is 10 dB below table B.1. NOTE 2: For RFID (incl. NFC) and EAS applications only. NOTE 3: Spectrum mask limit, see annex I. NOTE 4: For further information see annex G. NOTE 5: Limit is 42 dBμA/m for the following spot frequencies: 60 kHz $\pm$ 250 Hz, 66,6 kHz $\pm$ 750 Hz, 75 kHz $\pm$ 250 Hz, 77,5 kHz $\pm$ 250 Hz, and 129,1 kHz $\pm$ 500 Hz. NOTE 6: Only in conjunction with spectrum mask, see annex I. NOTE 7: The frequency range 6,765 MHz - 6,795 MHz is not a harmonised ISM frequency band according article 5.138 of the ITU Radio Regulations [I.13]. NOTE 8: Center frequencies for channelized systems by using $\leq 10 \text{ kHz}$ bandwidth. NOTE 9: The limit is valid in the range 984 kHz - 7 484 kHz for Transmitting only on receipt of a Balise/Eurobalise tele-powering signal from a train.	

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

$$H_{3m} = H_{10m} + C3$$

$$C3 \text{ (conversion factor in dB)} = 32.1\text{dB}$$

4.3.3 Test Procedures

Follow the test procedure as described in EN 300 330-1 V2.1.1 Clause 6.2.4 to measure the H-field at normal condition.

EN 300 330 Annex H.2: Limits for measurements at 3 m distance

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

$$H_{3m} = H_{10m} + C_3$$

H_{10m} is the H-field limit in dBμA/m at 10 m distance

C_3 is a conversion factor in dB determined from figure H.2

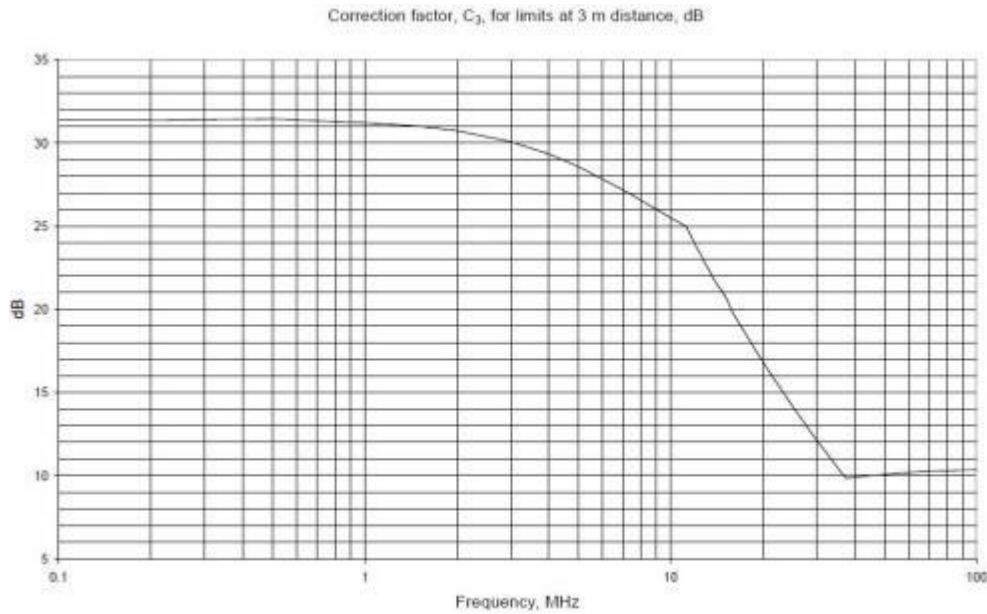


Figure H.2: Conversion factor C_3 versus frequency

4.3.4 Test Result

Transmitter 3 (Watch):

Test mode:	Mode 1		
Power supply:	Power by AC/DC adapter AC 230V/50Hz	Test site:	RE chamber 1

Frequency (kHz)	Measurement Level@3m (dBuA/m)	C3 Factor (dB)	Level@ 10m (dBuA/m)	Limit@ 10m (dBuA/m)	Result	Detector
325.1	20.16	31.21	-11.05	-5	Pass	QP

4.4 Transmitter spurious emissions

4.4.1 Definition

Spurious domain emission limits are limits on emissions at frequencies other than those of the carrier and sidebands associated with normal test modulation. The level of spurious emissions shall be measured at normal condition as either:

- 1) a) their power or current level in an artificial antenna (conducted spurious emission); and
 - b) their effective radiated power or field strength when radiated by the cabinet and structure of the equipment (cabinet radiation); or
- 2) their effective radiated power or field strength when radiated by the cabinet and the integral antenna.

4.4.2 Limits

Blew 30MHz (test distance at 10m):

State	Frequency $9\text{kHz} \leq f < 10\text{MHz}$	Frequency $10\text{MHz} \leq f < 30\text{MHz}$
Operation	27dB μ A/m at 9 kHz descending 3dB/oct	-3.5dB μ A/m
Standby	5.5dB μ A/m at 9 kHz descending 3dB/oct	-25dB μ A/m

Above 30MHz

State	47MHz to 74MHz 87.5MHz to 118MHz 174MHz to 230MHz 470MHz to 862MHz	Other frequencies between 30MHz to 1000MHz
Operation	4nW	250nW
Standby	2nW	2nW

4.4.3 Test Procedures

Follow the test procedure as described in EN 300 330-1 V2.1.1 Clause 7.5 to measure the H-field at normal condition.

Test Result

For 9 kHz – 30 MHz

Test mode:	Mode 1		
Power supply:	Power by AC/DC adapter AC 230V/50Hz	Test site:	RE chamber 1

No.	Frequency	Result@3m	C3	Result @10m	Limit@ 10m	Margin	Detector
	(MHz)	dBuA/m	(dB)	dBuA/m	dBuA/m	dB	
1	0.1598	8.7	31.2	-22.5	14.5	-37.0	QP
2	0.168	5.43	31.2	-25.77	14.3	-40.1	QP
3	0.4812	1.41	31.2	-29.79	9.7	-39.5	QP
4	0.5322	-1.02	31.1	-32.12	9.3	-41.4	QP
5	0.8045	-5.21	31.1	-36.31	7.5	-43.8	QP
6	0.9633	-7.07	31.1	-38.17	6.7	-44.9	QP

Test mode:	Mode 2		
Power supply:	Power by AC/DC adapter AC 230V/50Hz	Test site:	RE chamber 1

No.	Frequency	Result@3m	C3	Result @10m	Limit@ 10m	Margin	Detector
	(MHz)	dBuA/m	(dB)	dBuA/m	dBuA/m	dB	
1	159.8	5.6	31.2	-25.6	-7.0	-18.6	QP
2	323.4	8.54	31.2	-22.66	-10.1	-12.6	QP
3	481.2	1.32	31.2	-29.88	-11.8	-18.1	QP
4	532.2	-3.92	31.1	-35.02	-12.2	-22.8	QP
5	804.5	-5.6	31.1	-36.7	-14.0	-22.7	QP
6	953.1	-5.9	31.1	-37	-14.7	-22.3	QP

Notes:

C3 Factor is a conversion factor in dB determined from figure H.2 of EN 300 330.

Level@10m (dBuA/m) Measurement Level@3m (dBuA/m) - C3 Factor (dB).

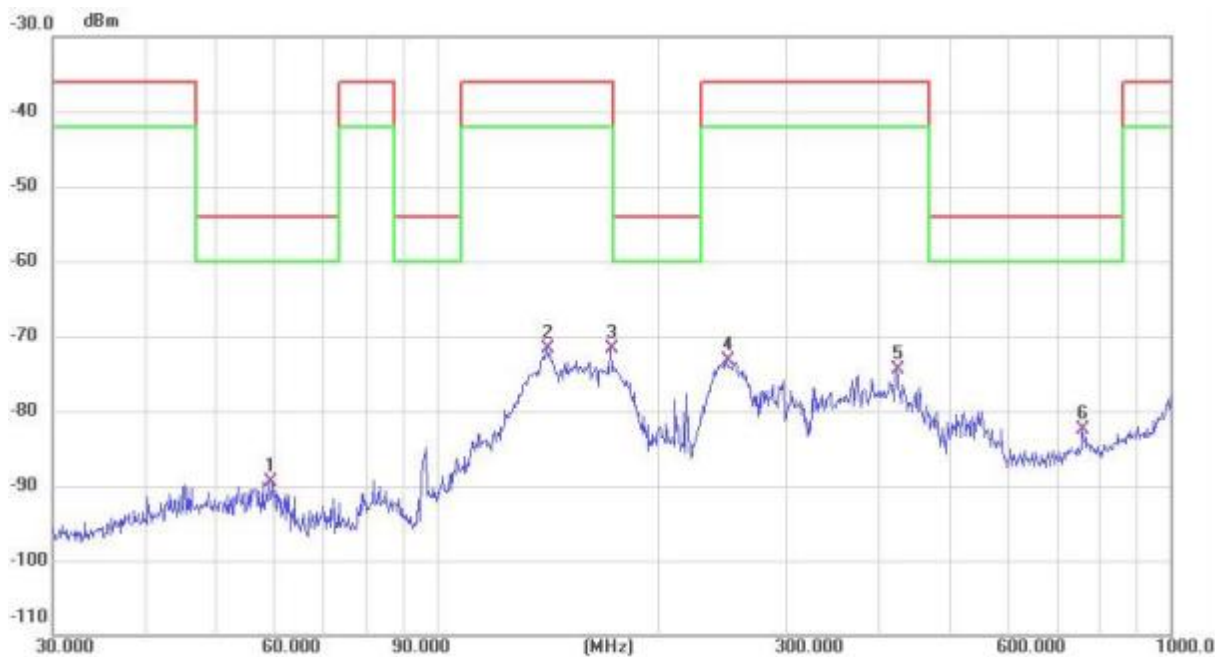
QP means Quasi Peak.

The three orthogonal orientations (x/y/z) of the measurement shielded loop antenna was performed for pre-scan, the maximum radiated transmissions (x axis) were recorded.

Margin (dB) = Result @10m (dBuA/m) - Limit@10m (dBuA/m)

Frequency 30 MHz ~ 1 GHz

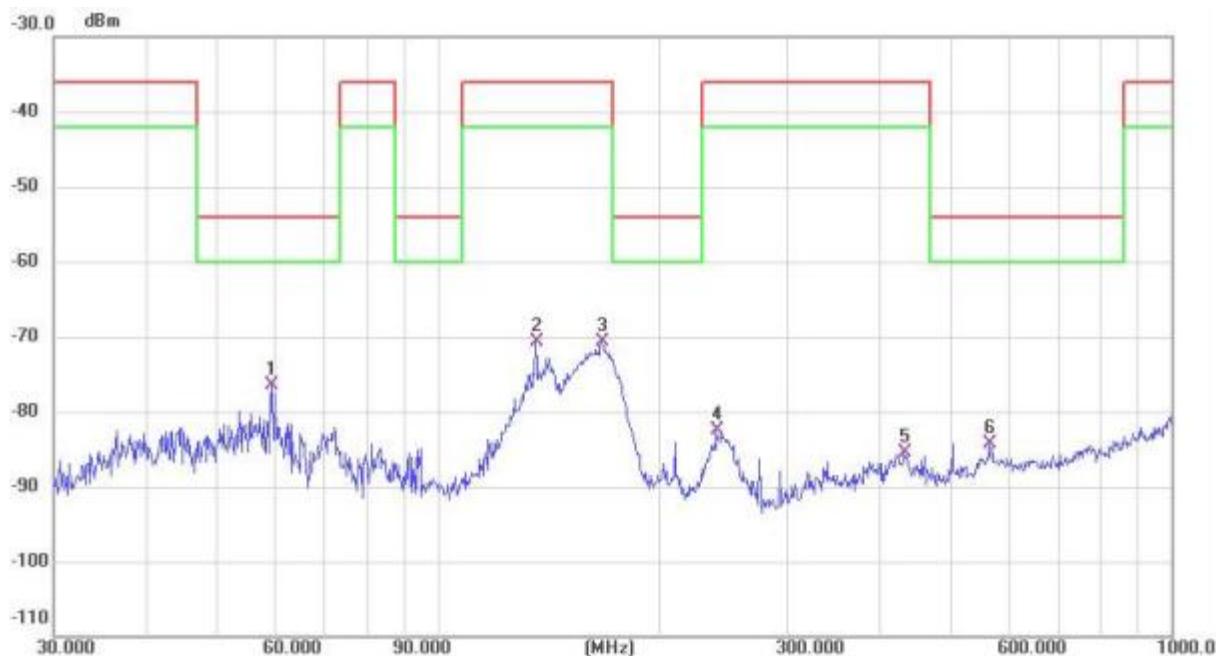
Test mode:	Mode 1	Polarization:	Horizontal
Power supply:	Power by AC/DC adapter AC 230V/50Hz	Test site:	RE chamber 1



No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector
1	59.2325	-75.32	-14.11	-89.43	-54.00	-35.43	QP
2	141.3298	-56.60	-15.07	-71.67	-36.00	-35.67	QP
3	172.5988	-55.09	-16.60	-71.69	-36.00	-35.69	QP
4	248.5519	-60.60	-12.75	-73.35	-36.00	-37.35	QP
5	423.5403	-64.58	-9.87	-74.45	-36.00	-38.45	QP
6 *	758.0408	-78.03	-4.44	-82.47	-54.00	-28.47	QP

Frequency 30 MHz ~ 1 GHz

Test mode:	Mode 1	Polarization:	Vertical
Power supply:	Power by AC/DC adapter AC 230V/50Hz	Test site:	RE chamber 1



No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector
1 *	59.4405	-62.30	-14.15	-76.45	-54.00	-22.45	QP
2	135.9822	-54.20	-16.49	-70.69	-36.00	-34.69	QP
3	167.2368	-54.29	-16.41	-70.70	-36.00	-34.70	QP
4	239.9874	-69.47	-12.98	-82.45	-36.00	-46.45	QP
5	432.5457	-76.14	-9.40	-85.54	-36.00	-49.54	QP
6	564.6389	-77.12	-7.14	-84.26	-54.00	-30.26	QP

Frequency 30 MHz ~ 1 GHz

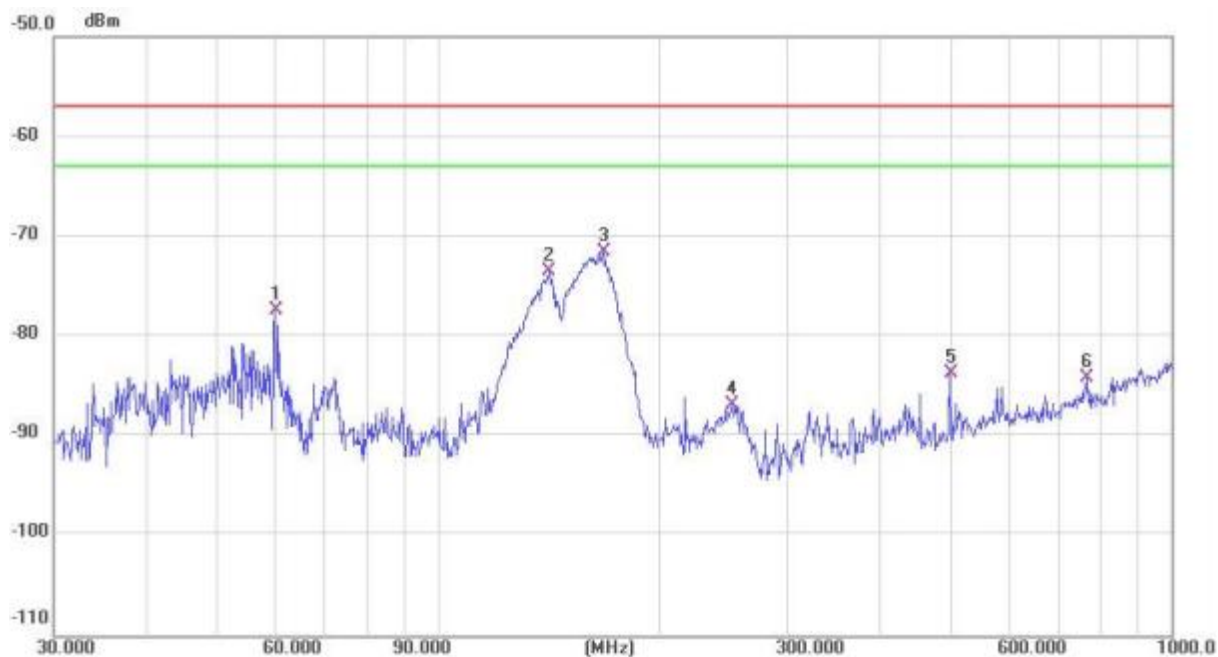
Test mode:	Mode 2	Polarization:	Horizontal
Power supply:	Power by AC/DC adapter AC 230V/50Hz	Test site:	RE chamber 1



No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector
1	53.5052	-73.22	-12.98	-86.20	-57.00	-29.20	QP
2 *	140.8351	-56.26	-15.07	-71.33	-57.00	-14.33	QP
3	159.7844	-57.10	-16.08	-73.18	-57.00	-16.18	QP
4	245.9509	-60.47	-12.79	-73.26	-57.00	-16.26	QP
5	303.5437	-63.33	-11.30	-74.63	-57.00	-17.63	QP
6	413.2706	-64.32	-10.27	-74.59	-57.00	-17.59	QP

Frequency 30 MHz ~ 1 GHz

Test mode:	Mode 2	Polarization:	Vertical
Power supply:	Power by AC/DC adapter AC 230V/50Hz	Test site:	RE chamber 1



No.	Frequency (MHz)	Reading (dBm)	Factor (dB)	Level (dBm)	Limit (dBm)	Margin (dB)	Detector
1	60.0691	-63.16	-14.26	-77.42	-57.00	-20.42	QP
2	141.8262	-58.37	-15.07	-73.44	-57.00	-16.44	QP
3 *	167.8243	-55.14	-16.41	-71.55	-57.00	-14.55	QP
4	252.0627	-74.25	-12.63	-86.88	-57.00	-29.88	QP
5	499.4247	-75.10	-8.53	-83.63	-57.00	-26.63	QP
6	768.7481	-79.74	-4.45	-84.19	-57.00	-27.19	QP

4.5 Transmitter Frequency stability under low voltage conditions

4.5.1 Definition

The frequency stability under low voltage condition is the ability of the equipment to maintain its operating frequency and not produce emissions which exceed any relevant limit when the battery voltage falls below the lower extreme voltage level.

4.5.2 Limits

The equipment shall either:

- a) remain in the Operating Channel without exceeding any applicable limits (e.g. Duty Cycle); or
- b) reduce its effective radiated power below the Spurious Emission limits without exceeding any applicable limits (e.g. Duty Cycle); or
- c) shut down, (e.g. no emission above EMC levels).

4.5.3 Test Procedures

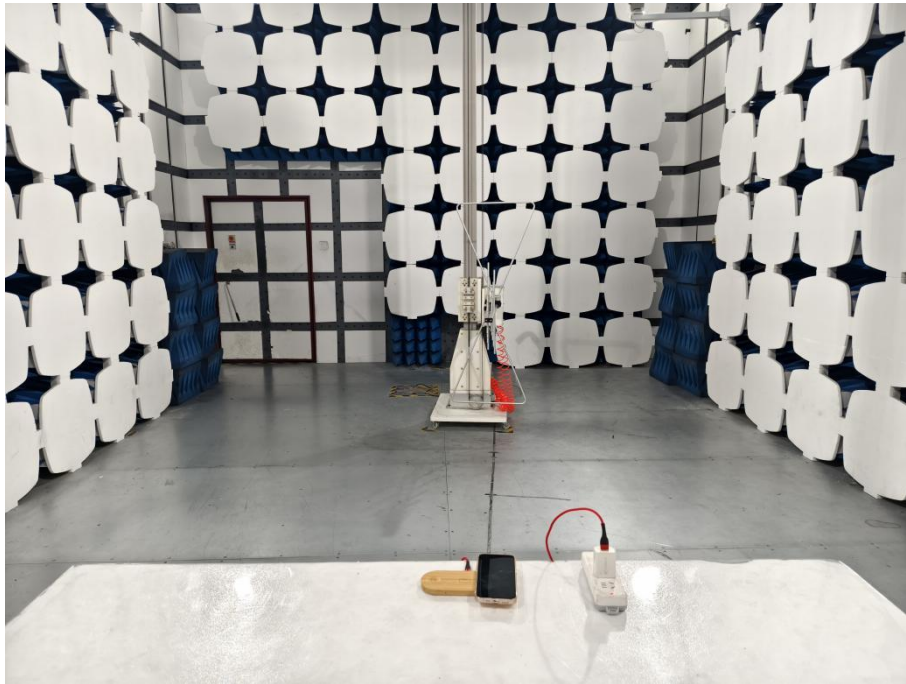
Follow the test procedure as described in EN 300 330-1 V2.1.1 Clause 6.2.10 to measure the product.

4.5.4 Test Result

Not application, This item only applicable for channelized systems where channel limits are defined.

Photographs of the Test Setup

Radiated emissions(Below 30MHz)



Photographs of the EUT

See the report No.: SIT250422160201ER-1

----END OF REPORT----

RADIO TEST REPORT

For

Mid Ocean Brands B.V.

3 in 1 wireless charger

Test Model: MO2729

Prepared for : Mid Ocean Brands B.V.
Address : 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan,
Kowloon, Hong Kong

Prepared by : Shenzhen SIT Testing Technology Co., Ltd.
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Date of receipt of test sample : April 24, 2025
Number of tested samples : 1
Serial number : Prototype
Date of Test : April 24, 2025~April 29, 2025
Date of Report : April 29, 2025



RADIO TEST REPORT
ETSI EN 303 417 V1.1.1 (2017-09)

Wireless power transmission systems, using technologies other than radio frequency beam, in the 19-21kHz, 59-61 kHz, 79-90 kHz, 100-300 kHz, 6765-6795 kHz ranges; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU

Report Reference No. : SIT250422160201ER-2

Date Of Issue : April 29, 2025

Testing Laboratory Name : Shenzhen SIT Testing Technology Co., Ltd.

Address : Room 401, Building A2, The 2nd Industrial Zone of Zhu'ao, Gushu, Xixiang, Bao'an District, Shenzhen, Guangdong, China

Testing Location/ Procedure : Full application of Harmonised standards ☒
Partial application of Harmonised standards ☐
Other standard testing method ☐**Applicant's Name : Mid Ocean Brands B.V.**

Address : 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong

Test Specification

Standard : ETSI EN 303417 V1.1.1 (2017-09)

Test Report Form No. : SITEMC-1.0

TRF Originator : Shenzhen SIT Testing Technology Co., Ltd.

Master TRF : Dated 2017-09

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Test Item Description. : 3 in 1 wireless charger

Trade Mark : N/A

Test Model : MO2729

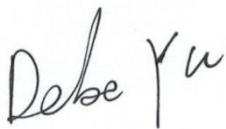
Ratings : Input DC 5V/3A, DC 9V/2.7A

Wireless Output Power:

Phone Output: 15W Max(DC 5V/1A, 7.5V/1A, 9V/1.11A, 9V/1.67A)

Earbud Output: 5W Max(DC 5V/1A)

Apple watch Output 2.5w Max(DC 5V/0.5A)

Result : Positive**Compiled by:**

Project Engineer

Supervised by:

Project Supervisor

Approved by:


Technical Director

Radio -- TEST REPORT

Test Report No. : SIT250422160201ER-2April 29, 2025

Date of issue

Test Model..... : MO2729

EUT..... : 3 in 1 wireless charger

Applicant..... : Mid Ocean Brands B.V.Address..... : 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan,
Kowloon, Hong Kong

Telephone..... : /

Fax..... : /

Manufacturer..... : 114628

Address..... : /

Telephone..... : /

Fax..... : /

Test Result

Positive

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Revision History

Revision	Issue Date	Revisions	Revised By
00	April 28, 2025	Initial Issue	Kevin Sun

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1.1. Product Description for Equipment Under Test (EUT)

EUT : 3 in 1 wireless charger
 Test Model : MO2729
 Additional Model No. : N/A
 Model Declaration : /
 Power Supply : Input DC 5V/3A, DC 9V/2.7A
 Wireless Output Power:
 Phone Output: 15W Max(DC 5V/1A, 7.5V/1A, 9V/1.11A, 9V/1.67A)
 Earbud Output: 5W Max(DC 5V/1A)
 Apple watch Output 2.5w Max(DC 5V/0.5A)
 Hardware version : /
 Operating Frequency : 110~205 KHz, 100KHz for pairing
 100.00KHz for pairing;
 111.00~117.00KHz, Channel Frequency=111+(K-1)KHz,
 K=1, 2, 3.....7;
 120.00~139.00KHz, Channel Frequency=120+(K-1) KHz,
 Channel Frequency : K=1, 2, 3.....20;
 141.00~148.00KHz, Channel Frequency=141+(K-1)KHz,
 K=1, 2, 3.....8;
 150.00~204.00KHz, Channel Frequency=150+(K-1)KHz,
 K=1, 2, 3.....55
 177.50KHz for Low power mode
 Channel Number : 1
 Modulation Type : GSKF
 Antenna Description : Ferrite Antenna, 2 dBi(Max.)
 Product class : I

1.2. Support equipment List

Manufacturer	Description	Model	Serial Number	Certificate
--	--	--	--	--

1.3. External I/O

I/O Port Description	Quantity	Cable
USB Port	1	N/A

1.4. Objective

The following report of is prepared on behalf of the **Shenzhen Jincheng Weiye Technology Co., Ltd.** In accordance with ETSI EN 303 417 V1.1.1 (2017-09): Wireless power transmission systems, using technologies other than radio frequency beam, in the 19 - 21 kHz, 59 - 61 kHz, 79 - 90 kHz, 100 - 300 kHz, 6 765 - 6 795 kHz ranges; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU.

The objective is to determine compliance with ETSI EN 303 417 V1.1.1 (2017-09).

1.5. Test Methodology

All measurements contained in this report were conducted with ETSI EN 303 417 V1.1.1 (2017-09).

1.6. Measurement Uncertainty (95% confidence levels, k=2)

Test Item	Uncertainty
Radio Frequency	0.9 x 10 ⁻⁴
Total RF Power, Conducted	1.0 dB
RF Power Density, Conducted	1.8 dB
Spurious Emissions, Conducted	1.8 dB
All Emissions, Radiated	3.1 dB
Temperature	0.5°C
Humidity	1 %
DC And Low Frequency Voltages	1 %

1.7. Description Of Test Mode

The EUT has been tested under typical operating condition. No software used to control the EUT for staying in transmitting mode for testing.

***Note: The EUT has been tested under normal condition(Temperature: 25°C & Nominal Voltage: DC 5.0V) in this report , and only recorded the worst test data in the report.

2. SYSTEM TEST CONFIGURATION

2.1. Justification

The system was configured for testing in engineering mode.

2.2. EUT Exercise Software

N/A.

2.3. Special Accessories

N/A.

2.4. Block Diagram/Schematics

Please refer to the related document.

2.5. Equipment Modifications

Shenzhen SIT Testing Technology Co., Ltd. has not done any modification on the EUT.

2.6. Configuration of Test Setup

Please refer to the test setup photo.

3. SUMMARY OF TEST RESULTS

Reference Clause No.	Description Of Test Item	Result
§4.3.2	Permitted range of operating frequencies	Compliant
§4.3.3	Operating frequency range(s) (OFR)	Compliant
§4.3.4	H-field requirements	Compliant
§4.3.5	Transmitter spurious emissions	Compliant
§4.3.6	Transmitter out of band (OOB) emissions	Compliant
§4.3.7	WPT system unwanted conducted emissions	N/A
§4.4.2	Receiver blocking	Compliant

Note: N/A means not applicable

4. PERMITTED RANGE OF OPERATING FREQUENCIES

4.1. Definition

The permitted range of operating frequencies denotes the frequency ranges set out in Table 1. It likewise denotes the respective frequency range for accommodation of the fundamental WPT frequency of the EUT within its operating frequency range (OFR).

Table 1: WPT systems within the permitted frequency bands below 30MHz

	WPT frequency range	Frequency Bands	WPT systems
Transmit and Receive	1	19 kHz to 21 kHz	WPT systems
Transmit and Receive	2	59 kHz to 61 kHz	WPT systems
Transmit and Receive	3	79 kHz to 90 kHz	WPT systems
Transmit and Receive	4	100 kHz to 119 kHz	WPT systems
Transmit and Receive		119 kHz to 140 kHz	WPT systems
Transmit and Receive		140 kHz to 148,5 kHz	WPT systems
Transmit and Receive	5	148.5 kHz to 300 kHz	WPT systems
Transmit and Receive		6765kHz to 6795 kHz	WPT systems

4.2. Limit

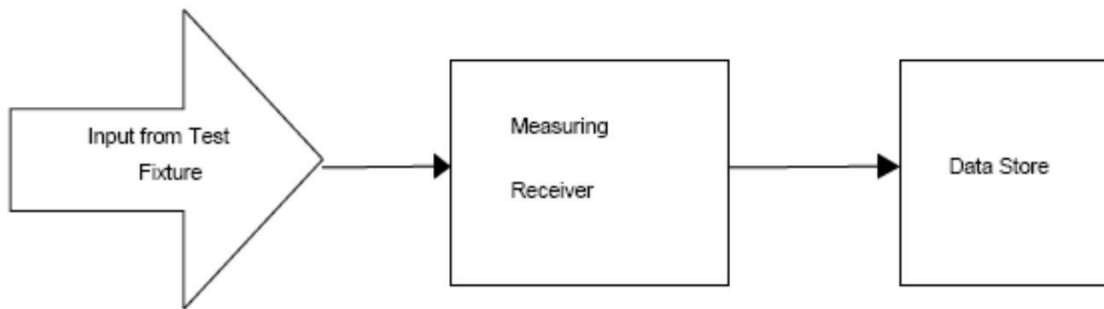
The permitted range of operating frequency range(s) for intentional emissions shall be within 19 - 21 kHz, 59 - 61 kHz, 79 - 90 kHz, 100 - 300 kHz, 6 765 - 6 795 kHz.

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	Transmitter	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) - Performance criteria test (RX test) (clause 4.4) - Wanted performance criteria test (RX test) (clause 4.4)
Mode 3: Communication	WPT system alignment	TX and RX	TX and RX	Worst case alignment	- 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) - Wanted performance criteria test (RX test) (clause 4.4)
Mode 4: energy transmission	WPT system alignment	TX and RX	TX and RX	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.	- Performance criteria test (RX test) (clause 4.4) - Wanted performance criteria test (RX test) (clause 4.4)

4.3. Test Procedure

Please refer to ETSI EN 303 417 V1.1.1 (2017-09) clause 6 for the measurement method.



4.4. Test Result

Pass

Test Result				
Test Temperature (°C)	Test Voltage (Vdc)	Lower Frequency (KHz)	Upper Frequency (KHz)	Limit
25°C	5.0	103.75	112.46	100KHz<f<300KHz
25°C	5.0	115.45	203.12	100KHz<f<300KHz

5. OPERATING FREQUENCY RANGE(S) (OFR)

5.1. Definition

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.

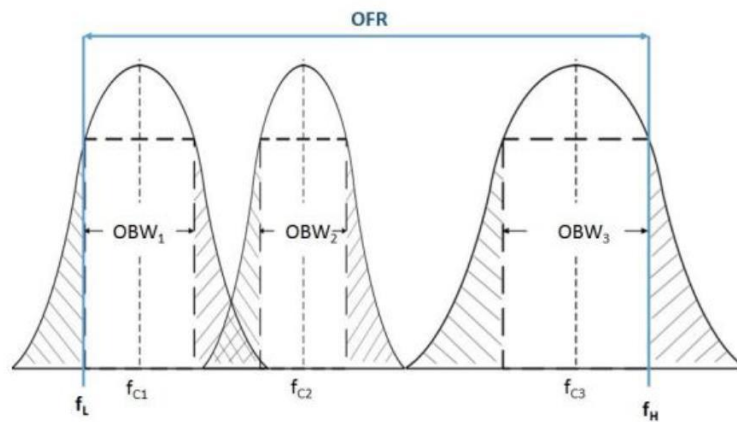


Figure 2: OFR of a multi - frequency WPT system within one frequency range of Table 2 and within one WPT system cycle time

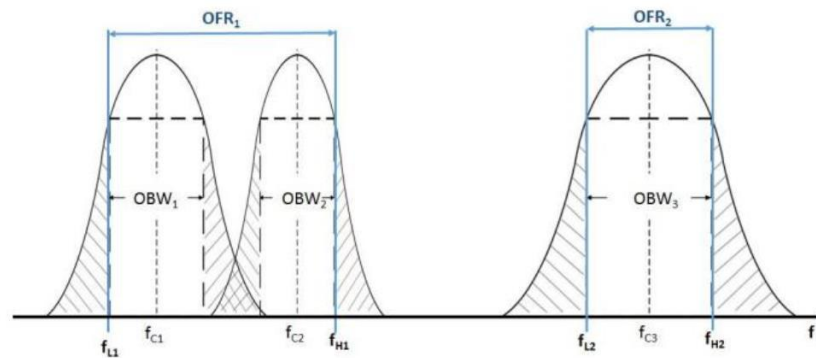


Figure 3: OFR of a multi - frequency WPT system within two frequency ranges of Table 2 and within one WPT system cycle time

5.2. Limit

The operating frequency range for emissions shall be within one of the following limits: 19 - 21 kHz, 59 - 61 kHz, 79 - 90 kHz, 100 - 300 kHz, 6 765 - 6 795 kHz.

5.3. Test Procedure

Please refer to ETSI EN 303 417 V1.1.1 (2017-09) clause 6 for the measurement method.

5.4. Test Result

Pass

Test Result				
Test temperature (°C)	Test voltage (Vdc)	Lower Frequency (kHz)	Upper Frequency (kHz)	Limit
25°C	5.0	103.12	126.09	100Hz<f<300Hz
25°C	5.0	120.56	204.51	100Hz<f<300Hz

6. H-FIELD REQUIREMENTS

6.1. Definition

The radiated H-field is defined in the direction of maximum field strength under specified conditions of measurement.

6.2. 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 ERC/REC 70-03 [i.1].

Table 3 H-field limits at 10 m

Frequency range [MHz]	H-field strength limit [dB μ A/m at 10 m]	Comments
$0,019 \leq f < 0,021$	72	
$0,059 \leq f < 0,061$	69,1 descending 10 dB/dec above 0,059 MHz	See note 1
$0,079 \leq f < 0,090$	67,8 descending 10 dB/dec above 0,079 MHz	See note 2
$0,100 \leq f < 0,119$	42	
$0,119 \leq f < 0,135$	66 descending 10 dB/dec above 0,119 MHz	See note 1
$0,135 \leq f < 0,140$	42	
$0,140 \leq f < 0,1485$	37,7	
$0,1485 \leq f < 0,30$	-5	
$6,765 \leq f < 6,795$	42	

NOTE 1: Limit is 42 dB μ A/m for the following spot frequencies: 60 kHz $\pm$ 250 Hz and 129,1 kHz $\pm$ 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.

6.3. Test Procedure

Please refer to ETSI EN 303 417 V1.1.1 (2017-09) clause 6.1&6.2 for the measurement method.

6.4. Test Result

Pass

Frequency(KHz)	Antenna Polarity	Measure Level At 3m (dBuA/m)	Calculated Factor (dB, -C3)	Result At 10m (dBuA/m)	Limit At 10m (dBuA/m)
110.00 (Pairing)	--	9.35	-31.4	-22.05	42
111.00	--	9.78	-31.4	-21.62	42
114.00	--	8.92	-31.4	-22.48	42
117.00	--	9.42	-31.4	-21.98	42
120.00	--	9.56	-31.4	-21.84	66 descending 3 dB/oct above 0.119MHz
129.05	--	9.28	-31.4	-22.12	42
129.15	--	8.89	-31.4	-22.51	42
135.00	--	9.72	-31.4	-21.68	42
139.00	--	12.13	-31.4	-19.27	42
141.00	--	11.78	-31.4	-19.62	37.7
148.00	--	11.34	-31.4	-20.06	37.7
150.00	--	11.21	-31.4	-20.19	-5
177.50(Low power Mode)	--	9.36	-31.4	-22.04	-5
204.00	--	8.45	-31.4	-22.95	-5

***Note:

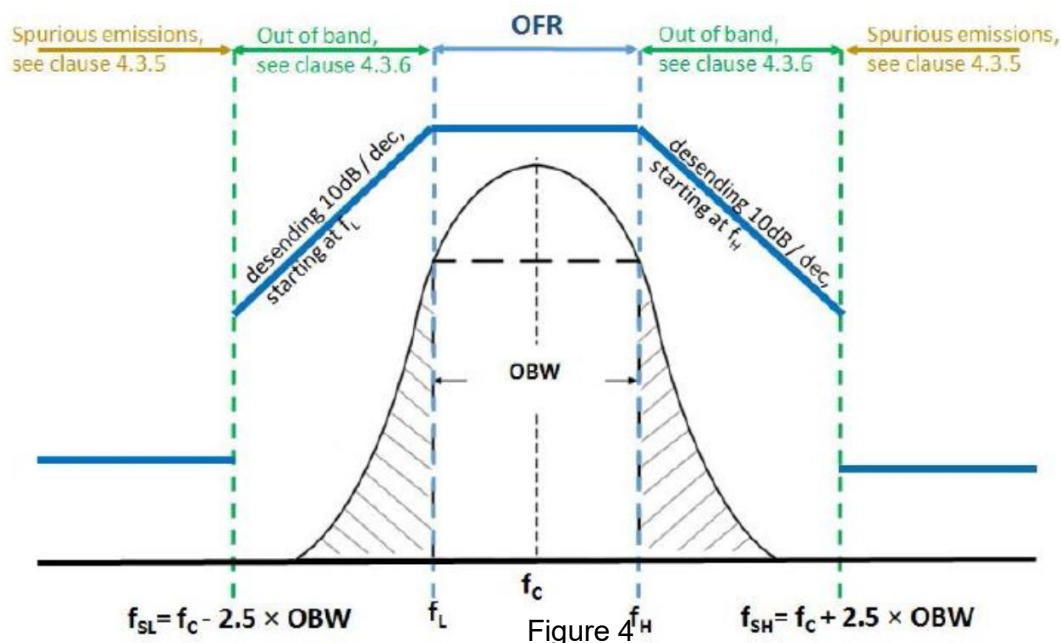
$$H_{10m}=H_{3m}-C_3$$

The correct factor C_3 is equal to or approximately equal to 31.4dB
All test modes have been tested and only record the worst result.

7. TRANSMITTER SPURIOUS EMISSIONS

7.1. Definition

The transmitter spurious emissions for a single frequency system are to be considered in frequency ranges defined in Figure 4 ($f < f_{SL}$ and $f > f_{SH}$).



7.2. Limit

The radiated field strength of spurious emissions below 30 MHz shall not exceed the generated H-field given in Table 4.

Table 4

State (see note)	Frequency $9 \text{ kHz} \leq f < 10 \text{ MHz}$	Frequency $10 \text{ MHz} \leq f < 30 \text{ MHz}$
Operating	27 dB μ A/m at 9 kHz descending 10 dB/dec	-3,5 dB μ A/m
Standby	5,5 dB μ A/m at 9 kHz descending 10 dB/dec	-25 dB μ A/m

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

The power of any radiated spurious emission between 30 MHz and 1 GHz shall not exceed the values given in Table 5.

Table 5

State (see note)	47 MHz to 74 MHz 87,5 MHz to 118 MHz 174 MHz to 230 MHz 470 MHz to 790 MHz	Other frequencies between 30 MHz to 1 000 MHz
Operating	4 nW	250 nW
Standby	2 nW	2 nW

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

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7.3. Test Setup

Please refer to ETSI EN 303 417 V1.1.1 (2017-09) clause 6.

7.4. Test Procedure

Please refer to ETSI EN 303 417 V1.1.1 (2017-09) clause 6.1&6.2 for the measurement method.

7.5. Test Result

Test Result for Operating Mode (9KHz~30MHz)			
Frequency (MHz)	Measure Level (dBuA/m)	Limit (dBuA/m)	Margin (dB)
--	--	27 dBμA/m at 9 kHz descending 3 dB/oct (9KHz – 10MHz)	--
--	--		--
--	--	-3,5 dBμA/m (10MHz – 30MHz)	--
--	--		--
Test Result for Standby Mode (9KHz~30MHz)			
Frequency (MHz)	Measure Level (dBuA/m)	Limit (dBuA/m)	Margin (dB)
--	--	5.5 dBμA/m at 9 kHz descending 3 dB/oct (9KHz – 10MHz)	--
--	--		--
--	--	-25 dBμA/m (10MHz – 30MHz)	--
--	--		--

Remark:

Data of measurement within this frequency range shown “ -- ” in the table above means the reading of emissions are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured. Measured in frequency range from 9k~10th harmonic or 1GHz(which is greater).

The Test Result for Operating Mode,Tx-150KHz(Above 30MHz)					
Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Pol/Phase	Remark
80.24	-51.36	-36	-15.36	Horizontal	Peak
145.57	-52.34	-36	-16.34	Horizontal	Peak
349.39	-49.26	-36	-13.26	Horizontal	Peak
52.34	-66.45	-54	-12.45	Vertical	Peak
125.56	-53.12	-36	-17.12	Vertical	Peak
459.56	-53.16	-36	-17.16	Vertical	Peak

The Test Result for Operating Mode,Tx-150KHz(Above 30MHz)

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Pol/Phase	Remark
81.2	-52.47	-36	-16.47	Horizontal	Peak
143.28	-51.69	-36	-15.69	Horizontal	Peak
354.56	-53.12	-36	-17.12	Horizontal	Peak
50.69	-65.24	-54	-11.24	Vertical	Peak
126.63	-55.21	-36	-19.21	Vertical	Peak
457.91	-58.46	-36	-22.46	Vertical	Peak

The Test Result for Operating Mode,Tx-204KHz(Above 30MHz)

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Pol/Phase	Remark
76.91	-53.01	-36	-17.01	Horizontal	Peak
144.91	-52.14	-36	-16.14	Horizontal	Peak
351.51	-49.68	-36	-13.68	Horizontal	Peak
52.25	-67.84	-54	-13.84	Vertical	Peak
129.08	-52.04	-36	-16.04	Vertical	Peak
455.83	-53.16	-36	-17.16	Vertical	Peak

The Test Result for Operating Mode,Tx-100KHz(Above 30MHz)

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Pol/Phase	Remark
76.5	-53.34	-36	-17.34	Horizontal	Peak
146.22	-48.67	-36	-12.67	Horizontal	Peak
352.69	-53.26	-36	-17.26	Horizontal	Peak
53.67	-64.21	-54	-10.21	Vertical	Peak
128.92	-58.16	-36	-22.16	Vertical	Peak
460.3	-52.42	-36	-16.42	Vertical	Peak

The Test Result for Operating Mode,Tx-177.5KHz(Above 30MHz)

Frequency (MHz)	Measure Level (dBm)	Limit (dBm)	Margin (dB)	Pol/Phase	Remark
52.59	-66.37	-57	-9.37	Horizontal	Peak
101.63	-64.12	-57	-7.12	Horizontal	Peak
223.49	-74.29	-57	-17.29	Horizontal	Peak
54.36	-73.34	-57	-16.34	Vertical	Peak
114.54	-72.54	-57	-15.54	Vertical	Peak
224.3	-74.16	-57	-17.16	Vertical	Peak

Note:We have test all modes and only record the worst result.

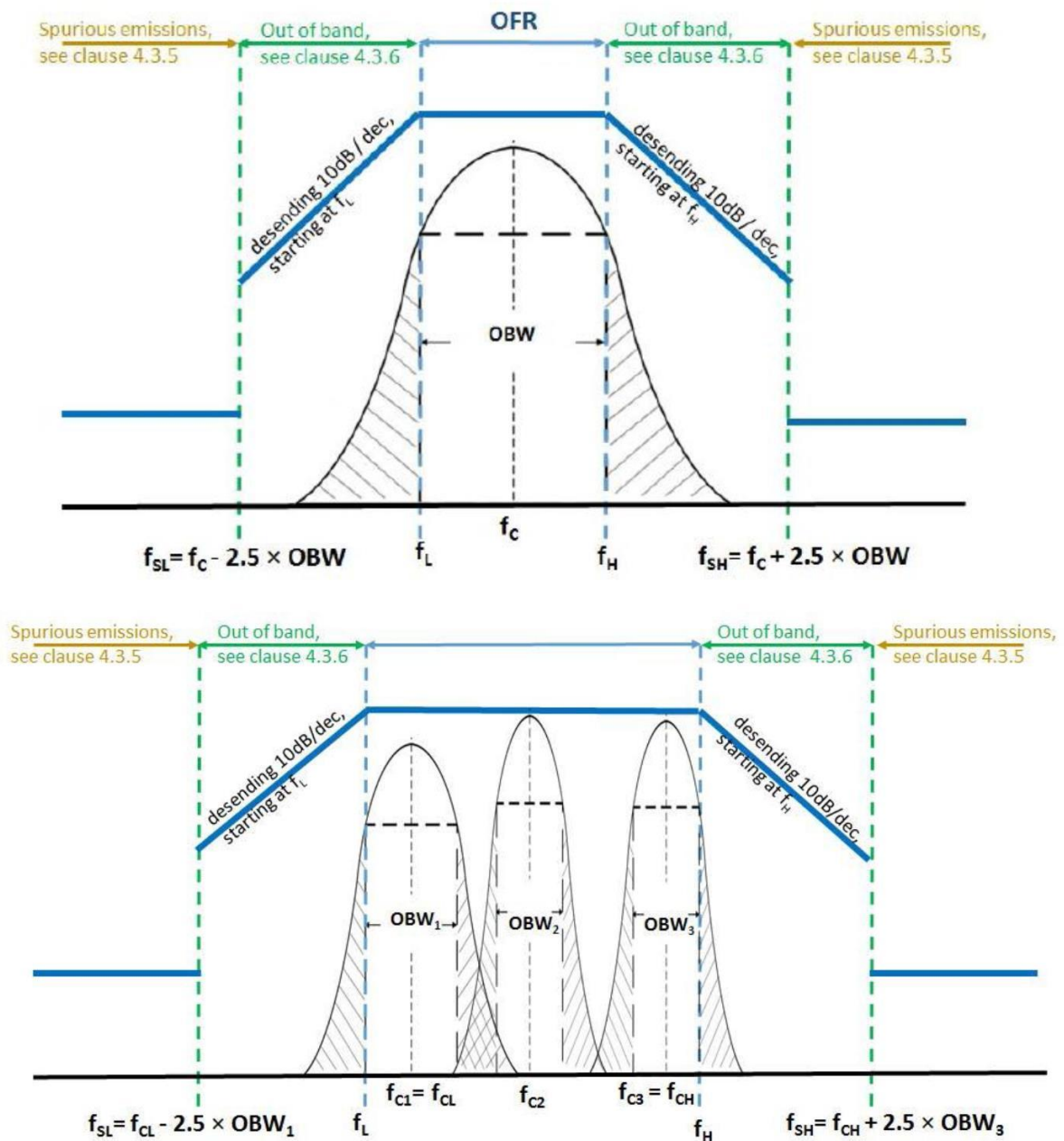
8. TRANSMITTER OUT OF BAND (OOB) EMISSIONS

8.1. Definition

The WPT system out of band emissions are to be considered in frequency ranges defined in Figure 4 and Figure 5 (between f_{SL} and f_L and between f_H and f_{SH}).

8.2. 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.



8.3. Test Procedure

Please refer to ETSI EN 303 417 V1.1.1 (2017-09) clause 6.1&6.2 for the measurement method.

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8.4. Test Result

PASS

Test Mode: MO2729

Frequency (KHz)	Antenna Polarity	Measure Level At 3m	Result At 10m	Limit At 10m
		(dBuA/m)	(dBuA/m)	(dBuA/m)
110.00 (Pairing)	--	7.43	-23.24	32.0
111.00	--	10.42	-20.76	32.0
114.00	--	9.37	-20.97	32.0
117.00	--	10.42	-20.41	32.0
120.00	--	9.55	-21.65	56 descending 3 dB/oct above 0,119 MHz
129.05	--	1.33	-30.06	32.0
129.15	--	1.64	-29.47	32.0
135.00	--	8.41	-22.59	32.0
139.00	--	8.86	-22.57	32.0
141.00	--	7.98	-22.36	27.7
148.00	--	8.42	-21.24	27.7
150.00	--	8.53	-21.79	-15.0
177.50(Low power Mode)	--	2.83	-27.26	-15.0
204.00	--	3.83	-26.32	-15.0

9. WPT SYSTEM UNWANTED CONDUCTED EMISSIONS

9.1. Applicability

This applies to all WPT systems where the cable to the primary coil exceeds a length of 3 m and where the cable is not installed in the ground or any metallic structures.

9.2. Definition

WPT system unwanted conducted emissions are based on the emissions of the unwanted common mode current on the cable between the off board power supply and the primary coil seen as a monopole radiator driven against the power supply.

9.3. Limit

The common mode current (ICM) between 1 MHz and 30 MHz shall not exceed the following limit:

$$\text{ICM} = 47 - 8 \times \log(f) \text{ dB}\mu\text{A}$$

NOTE: f is the frequency in MHz.

9.4. Test Procedure

Please refer to ETSI EN 303 417 V1.1.1 (2017-09) clause 6.2.4 for the measurement method.

9.4. Test Result

NOT Applicable.

Note: The EUT cable to the primary coil is less than a length of 3 m.

10. RECEIVER BLOCKING

10.1. Definition

Blocking is a measure of the capability of the receiver to receive a wanted signal without exceeding a given degradation due to the presence of an unwanted input signal at any frequencies other than those of the receiver spurious responses.

The test shall be performed in the relevant operational modes (see clause 4.2.3).

The wanted performance criteria from clause 4.2.2 shall be used as criterion for the receiver blocking tests.

10.2. Limit

Table 6: Receiver blocking limits

	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)	$f = f_c \pm 10 \times F$ (see note)
Signal level field strength at the EUT	72 dB μ A/m	72 dB μ A/m	82 dB μ A/m

NOTE: $F = \text{OFR}$ see clause 4.3.3.

10.3. Test Setup

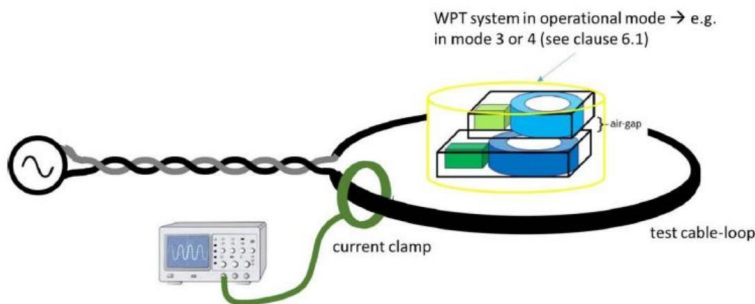


Figure 11: Schematic test set-up for the RX-blocking test

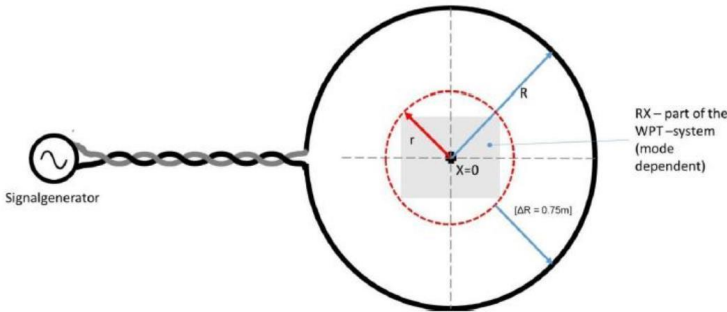


Figure 12: Schematic test set-up for the RX-blocking test

10.4. Test Procedure

- a) 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.
- b) The manufacturer shall declare in which device orientation(s) (worst case) the test shall be performed.
- c) 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)).
- d) The test setup is visualized in the following Figures 11 and 12.
- e) 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).
- f) 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].
- g) 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.
- h) The EUT shall be placed to the centre of the test-loop (e.g. see Figures 11 and 12).
 - i) 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 $\Delta R = 0,75$ m larger than the maximum dimension r of the EUT.
 - j) (See Figure 12): $R \geq r + \Delta R$.
- k) The maximum H-Field can be calculated from the loop current I (into the test-loop) with the following formula:
- l) The required output current to achieve the required magnetic field from Table 12 at the WPT system shall be generated with a signal generator (unmodulated signal) at the test frequencies from Table 6.
- m) For each test frequency the "reaction" of the device shall be recorded and checked against the performance criterion from clause 4.2.2.
- n)

10.5. Test Result

PASS.

11. LIST OF MEASURING EQUIPMENT

Manufacturer	Description	Model	Serial Number	Cal. Date	Due Date
SIDT FRANKONIA	3m Semi Anechoic Chamber	SAC-3M	03CH03-HY	2024/09/18	2025/09/17
EMI Test Receiver	ROHDE& SCHWARZS	ESCI	101142	2024/09/18	2025/09/17
Agilent	Spectrum Analyzer	E4407B	MY41440292	2024/09/16	2025/09/15
Agilent	MXA Signal Analyzer	N9020A	MY50510140	2024/09/27	2025/09/26
SCHWARZBECK	Loop Antenna	FMZB 1519	/	2024/09/16	2025/09/15
SCHWARZBECK	By-log Antenna	VULB9163	9163-470	2024/09/10	2025/09/09
EMCO	Horn Antenna	3115	6741	2024/09/10	2025/09/09
Jye Bao	RF Cable-R03m	RG142	CB021	2024/09/18	2025/09/17
SUCOFLEX	RF Cable-HIGH	SUCOFLEX 106	03CH03-HY	2024/09/18	2025/09/17

12. TEST SETUP PHOTOGRAPHS

Photo of Radiated Emissions Measurement



12. EXTERIOR AND INTERIOR PHOTOGRAPHS OF EUT

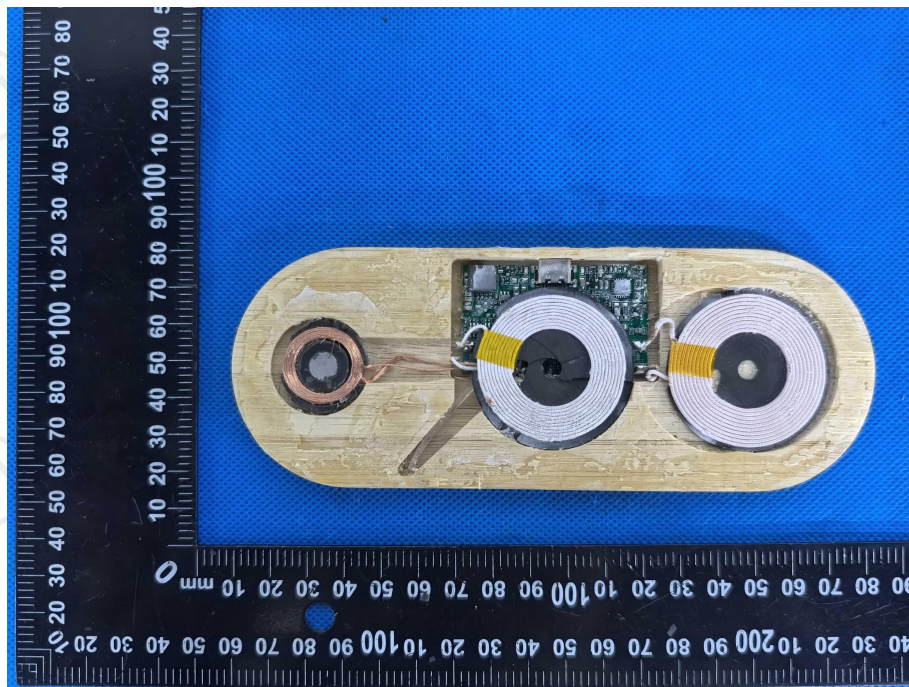
Appearance photograph of EUT



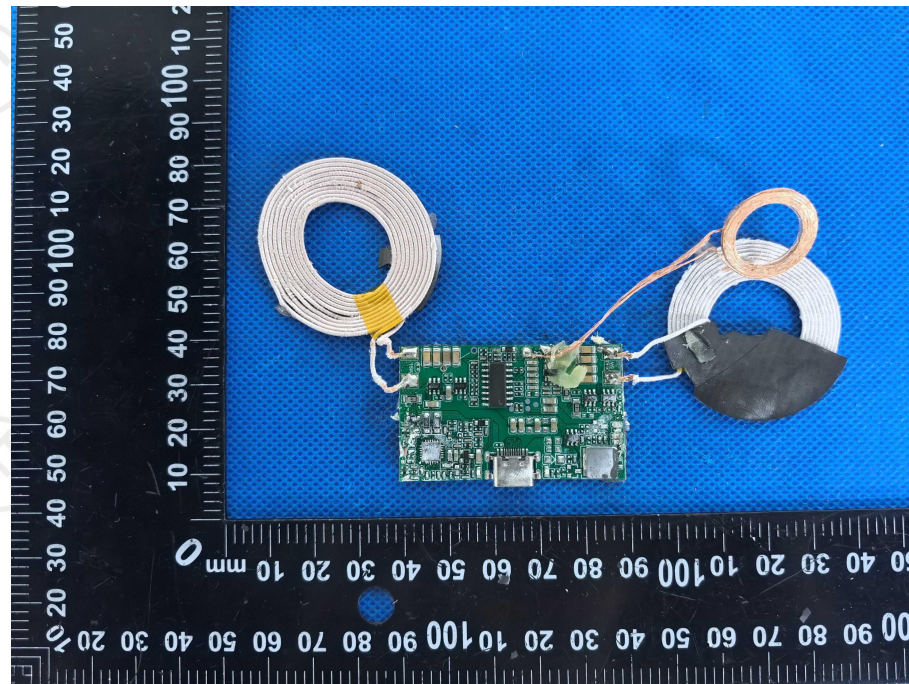
Appearance photograph of EUT



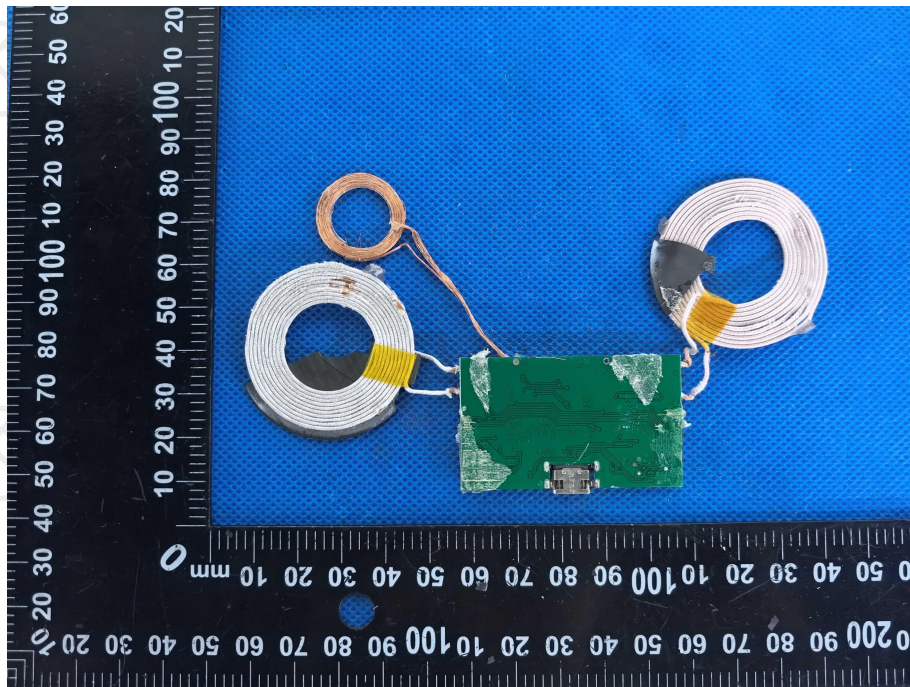
Appearance photograph of EUT



Appearance photograph of EUT



Appearance photograph of EUT



-----THE END OF REPORT-----



Health Test Report

Health Test Report

Prepared for :

Mid Ocean Brands B.V.

7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong

Product: 3 in 1 wireless charger

Trade Name: N/A

Model Name: MO2729

Date of Test: April 24, 2025- April 29, 2025

Date of Report: April 29, 2025

Report Number: SIT250422160201HR

Prepared By :

Shenzhen SIT Testing Technology Co., Ltd

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E-mail: info@sit-cert.com <http://www.sit-cert.com>

Applicant : Mid Ocean Brands B.V.
 Address : 7/F., Kings Tower, 111 King Lam Street, Cheung Sha Wan, Kowloon, Hong Kong
 Manufacturer : 114628
 EUT Description : 3 in 1 wireless charger
 (A) Model No. : MO2729
 (B) Serial Model : N/A
 Input DC 5V/3A, DC 9V/2.7A
 Wireless Output Power:
 (C) Power Supply : Phone Output:15W Max(DC 5V/1A, 7.5V/1A, 9V/1.11A, 9V/1.67A)
 Earbud Output: 5W Max(DC 5V/1A)
 Apple watch Output 2.5w Max(DC 5V/0.5A)

Standards..... EN IEC 62311:2020
 EN 50665:2017

This device described above has been tested by SIT LAB, and the test results show that the equipment under test (EUT) is in compliance with the 2014/53/EU RED Directive Art.3.2 requirements. And it is applicable only to the tested sample identified in the report.

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Test Result..... **Pass**

Date of Test: April 24, 2025 - April 29, 2025

Prepared by: 
 Project Engineer

Reviewed by: 
 Project Supervisor

Approved by: 
 Technical Director



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1. GENERAL INFORMATION

1.2. GENERAL DESCRIPTION OF EUT

Equipment	3 in 1 wireless charger	
Model Name.	MO2729	
Serial Model	N/A	
Model Difference	All types of circuits and RF modules are the same, this report only test mode name: MO2729 .	
Product Description	The EUT is 3 in 1 wireless charger:	
	Bit Rate of Transmitter	N/A
	Antenna Designation:	Ferrite Antenna
	Antenna Gain(Peak)	2 dBi
	Based on the application, features, or specification exhibited in User's Manual, the EUT is considered as an ITE/Computing Device. More details of EUT technical specification, please refer to the User's Manual. Note: This radio test report only applies for wireless, For Other transmitters is tested and reported in another radio test report.	
Channel List	Refer to below	
Power	Input DC 5V/3A, DC 9V/2.7A Wireless Output Power: Phone Output:15W Max(DC 5V/1A, 7.5V/1A, 9V/1.11A, 9V/1.67A) Earbud Output: 5W Max(DC 5V/1A) Apple watch Output 2.5w Max(DC 5V/0.5A)	
Hardware Version	N/A	
Software Version	N/A	

Note:

1. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

IEEE 802.11b/g/n HT20/Nht40: Thirteen channels are provided to the EUT.

Channel	Frequency(MHz)	Channel	Frequency(MHz)
1	2412	8	2447
2	2417	9	2452
3	2422	10	2457
4	2427	11	2462
5	2432	12	2467
6	2437	13	2472
7	2442		

Test Frequency List

Modulation Type	Test Frequency					
	Lowest		Middle		Highest	
	Channel	Frequency (MHz)	Channel	Frequency (MHz)	Channel	Frequency (MHz)
802.11b	1	2412	7	2442	13	2472
802.11g	1	2412	7	2442	13	2472
802.11n(H20)	1	2412	7	2442	13	2472
802.11n(H40)	3	2422	7	2442	11	2462

2. EN 50665 REQUIREMENT

2.1. GENERAL INFORMATION

The essential requirements of Directive 99/5/ec in the article 3.1(a) and the limits must be taken from Council Recommendation 99/519/EC for General Population or from the ICNIRP Guidelines for Occupational Exposure, EN 50665 Assessment of electronic and electrical equipment related to human exposure restrictions for electromagnetic fields (0 Hz – 300 GHz)

2.2. LIMIT

Exposure limits	SAR Limit(W/kg)	
	General population/uncontrolled exposure environment	Occupational/controlled exposure environment
Spatial Average(averaged over the whole body)	0.08	0.4
Spatial peak(averaged over any 1g of tissue)	2.0	10
Spatial peak(hands/wrists/feet/ankles averaged over 10g)	4.0	20.0

3. RESULT

The maximum results of specific absorption rate found during testing for MO2729 are as follows(with expanded uncertainty 6.4%)

Table1

Exposure Configuration	Frequency	Highest Measured SAR 1g(W/Kg)	Highest Measured SAR 10g(W/Kg)
Head (Separation Distance 20cm)	2412 MHz	0.1043	0.1015
	2442 MHz	0.1086	0.1042
	2472 MHz	0.1064	0.1087
Body-worn(Separation Distance 20cm)	2412 MHz	0.1232	0.1243
	2442 MHz	0.1122	0.1351
	2472 MHz	0.1263	0.1318

The maximum sar value is obtained at the case of (table1), and the maximum value is **0.1351** W/Kg(10g) for Head and **0.1042** W/Kg(10g)for body.

Test result : pass

-----The end of the report-----