

Test Report

Report No. : MTi250107021-0201E1
Date of issue : 2025-05-23
Applicant : Heltec Automation Technology Co., Ltd
Product : MeshPocket
Model(s) : HT-298A, HT-298B, HT-298C, HT-298D, HT-298G,
HT-298P, HT-298S, HT-298T, HT-298Z

Shenzhen Microtest Co., Ltd.

TEST REPORT

Report No.: MTi250107021-0201E1

Table of contents

1	General Description	4
1.1	Description of the EUT	4
1.2	Description of test modes	4
1.3	Environmental Conditions	5
1.4	Description of support units	5
1.5	Measurement uncertainty	5
2	Summary of Test Result	6
3	Test Facilities and accreditations	7
3.1	Test laboratory	7
4	List of test equipment	8
5	Test result	9
5.1	Description of WPT operational modes	9
5.2	Permitted range of operating frequencies	10
5.3	Operation frequency range(s) (OFR)	11
5.4	H-field requirements	14
5.5	Transmitter spurious emissions (Below 30MHz)	17
5.6	Transmitter spurious emissions (30MHz-1GHz)	20
5.7	Transmitter out of band (OOB) emissions	26
5.8	Receiver blocking	27
	Photographs of the test setup	28
	Photographs of the EUT	29

TEST REPORT

Report No.: MTi250107021-0201E1

Test Result Certification		
Applicant	Heltec Automation Technology Co., Ltd	
Applicant Address	1f, No.54,56,58, Zirui North Street,Gaoxin District, Chengdu	
Manufacturer	Heltec Automation Technology Co., Ltd	
Manufacturer Address	1f, No.54, 56, 58, Zirui North Street, Gaoxin District, Chengdu	
Product description		
Product name	MeshPocket	
Trademark		
Model name	HT-298A	
Series Model	HT-298B, HT-298C, HT-298D, HT-298G, HT-298P, HT-298S, HT-298T, HT-298Z	
Standards	ETSI EN 303 417 V1.1.1(2017-09)	
Date of Test		
Date of test	2025-04-23 to 2025-05-19	
Test result	Pass	
Prepared by:	James Qin	
Reviewed by:	David Lee	
Approved by:	Lewis Lian	

TEST REPORT

Report No.: MTi250107021-0201E1

1 General Description

1.1 Description of the EUT

Product name:	MeshPocket
Model name:	HT-298A
Series Model:	HT-298B, HT-298C, HT-298D, HT-298G, HT-298P, HT-298S, HT-298T, HT-298Z
Model difference:	All the models are the same circuit and module, except the model name.
Electrical rating:	Type-C Input: DC 5V/3A, 9V/2.22A Type-C Output: DC 5V/3A, 9V/2.22A Battery: DC 3.87V 5000mAh 19.35Wh Wireless Output: 5W/7.5W/10W/15W
Accessories:	Cable: 1. USB-A Magnetic charging cable(60cm)*1 2. Type-C to Type-C cable(25cm) *1
Hardware version:	V1.0.0
Software version:	V1.0.0
Test sample(s) number:	MTi250107021-02-R001
RF specification	
Operating frequency range:	110-148kHz
Modulation type:	ASK

1.2 Description of test modes

All the test modes were carried out with the EUT in normal operation, the final test mode of the EUT was the worst test mode for emission test, which was shown in this report and defined as:

No.	Emission test modes
Mode1	Charging+Wireless Output(5W)
Mode2	Charging+Wireless Output(7.5W)
Mode3	Wireless Output(5W)
Mode4	Wireless Output(7.5W)
Mode5	Wireless Output(10W)
Mode6	standby

TEST REPORT

Report No.: MTi250107021-0201E1

1.3 Environmental Conditions

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

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

For extreme test conditions

Test Conditions	Normal	Low	High
Temperature (°C)	25	-10	45
Power supply (VDC)	9	8.1	9.9

Note1: The extremes of the operating temperature ranges are declared by the manufacture.

1.4 Description of support units

Support equipment list			
Description	Model	Serial No.	Manufacturer
wireless charging load	YBZ1.1	/	YBZ
USB-C AC adapter(65W)	EP-TA865	/	SAMSUNG
Support cable list			
Description	Length (m)	From	To
/	/	/	/

1.5 Measurement uncertainty

Parameter	Measurement uncertainty
RF frequency	$\pm 1.12 \times 10^{-8}$
RF power, conducted	± 1 dB
RF power, radiated	± 4.7 dB
Temperature	± 1 °C
Humidity	± 5 %

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

TEST REPORT

Report No.: MTi250107021-0201E1

2 Summary of Test Result

No.	Description of Test	Reference clause No.	Result
1	Permitted range of operating frequencies	4.3.2	Pass
2	Operating frequency ranges	4.3.3	Pass
3	H-field requirements	4.3.4	Pass
4	Transmitter spurious emissions (Below 30MHz)	4.3.5	Pass
5	Transmitter spurious emissions (30MHz-1GHz)	4.3.5	Pass
6	Transmitter out of band (OOB) emissions	4.3.6	Pass
7	WPT system unwanted conducted emissions	4.3.7	N/A
8	Receiver blocking	4.4.2	Pass

TEST REPORT

Report No.: MTi250107021-0201E1

3 Test Facilities and accreditations

3.1 Test laboratory

Test laboratory:	Shenzhen Microtest Co., Ltd.
Test site location:	101, No.7, Zone 2, Xinxing Industrial Park, Fuhai Avenue, Xinhe Community, Fuhai Street, Bao'an District, Shenzhen, Guangdong, China
Telephone:	(86-755)88850135
Fax:	(86-755)88850136
CNAS Registration No.:	CNAS L5868
FCC Registration No.:	448573

TEST REPORT

Report No.: MTi250107021-0201E1

4 List of test equipment

No.	Equipment	Manufacturer	Model	Serial No.	Cal. date	Cal. Due
Operating frequency range(s) (OFR)						
Receiver blocking						
1	Wideband Radio Communication Tester	Rohde&schwarz	CMW500	149155	2025-03-18	2026-03-17
2	ESG Series Analog Ssignal Generator	Agilent	E4421B	GB40051240	2025-03-14	2026-03-13
3	PXA Signal Analyzer	Agilent	N9030A	MY51350296	2025-03-14	2026-03-13
4	Synthesized Sweeper	Agilent	83752A	3610A01957	2025-03-14	2026-03-13
5	MXA Signal Analyzer	Agilent	N9020A	MY50143483	2025-03-14	2026-03-13
6	RF Control Unit	Tonscend	JS0806-1	19D8060152	2025-03-18	2026-03-17
7	Band Reject Filter Group	Tonscend	JS0806-F	19D8060160	2025-03-14	2026-03-13
8	ESG Vector Signal Generator	Agilent	N5182A	MY50143762	2025-03-14	2026-03-13
9	DC Power Supply	Agilent	E3632A	MY40027695	2025-03-18	2026-03-17
Transmitter out of band(OOB) emissions						
H-field requirements						
Transmitter spurious emissions(Below 30MHz)						
1	EMI Test Receiver	Rohde&schwarz	ESCi7	101166	2025-03-14	2026-03-13
2	Active Loop Antenna	Schwarzbeck	FMZB 1519 B	00066	2024-03-23	2026-03-22
3	Amplifier	Hewlett-Packard	8447F	3113A06184	2025-03-18	2026-03-17
Transmitter spurious emissions(30MHz-1GHz)						
1	EMI Test Receiver	Rohde&schwarz	ESCi7	101166	2025-03-14	2026-03-13
2	TRILOG Broadband Antenna	schwarabeck	VULB 9163	9163-1338	2023-06-11	2025-06-10
3	Active Loop Antenna	Schwarzbeck	FMZB 1519 B	00066	2024-03-23	2026-03-22
4	Amplifier	Hewlett-Packard	8447F	3113A06184	2025-03-18	2026-03-17

TEST REPORT

Report No.: MTi250107021-0201E1

5 Test result

5.1 Description of WPT operational modes

Refer to EN 303 417 clause 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	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 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	•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 1: 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.	

TEST REPORT

Report No.: MTi250107021-0201E1

5.2 Permitted range of operating frequencies

5.2.1 Description

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).

EN 303 417 Table 1: WPT systems within the permitted frequency bands below 30 MHz

/	WPT frequency range	Frequency Bands	Applications
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		148.5 kHz to 300 kHz	WPT systems
Transmit and Receive	5	6 765 kHz to 6 795 kHz	WPT systems

5.2.2 Limits

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.

5.2.3 Test result

The manufacturer declared that the EUT is designed to operate in the frequency ranges:

110 kHz - 148 kHz.

The justification/test was performed for operating frequency ranges (OFR) in the item 5.3 of this document.

TEST REPORT

Report No.: MTi250107021-0201E1

5.3 Operation frequency range(s) (OFR)

5.3.1 Description

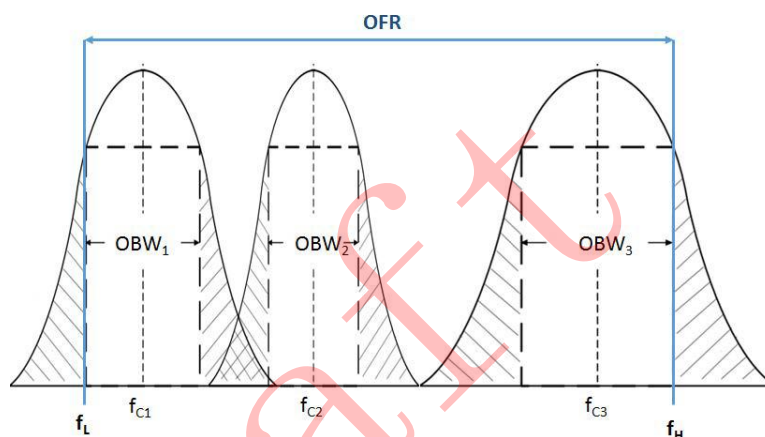
The operating frequency range is the frequency range over which the WPT system is intentionally transmitting.

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.

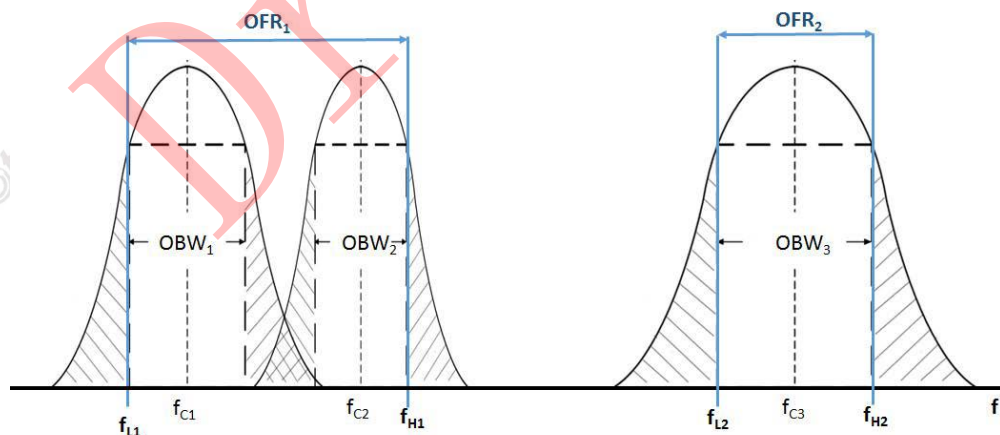
The WPT system could have more than one operating frequency range.

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:



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



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

5.3.2 Limits

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.

5.3.3 Test method

The conformance test suite for operating frequency ranges shall be as defined in clause 6.2.1 of EN 303 417.

TEST REPORT

Report No.: MTi250107021-0201E1

5.3.4 Test result

Operating frequency range(s) (OFR)			
F _L (kHz)	F _H (kHz)	Limit (kHz)	Result
109.66	148.34	100 - 300	Pass

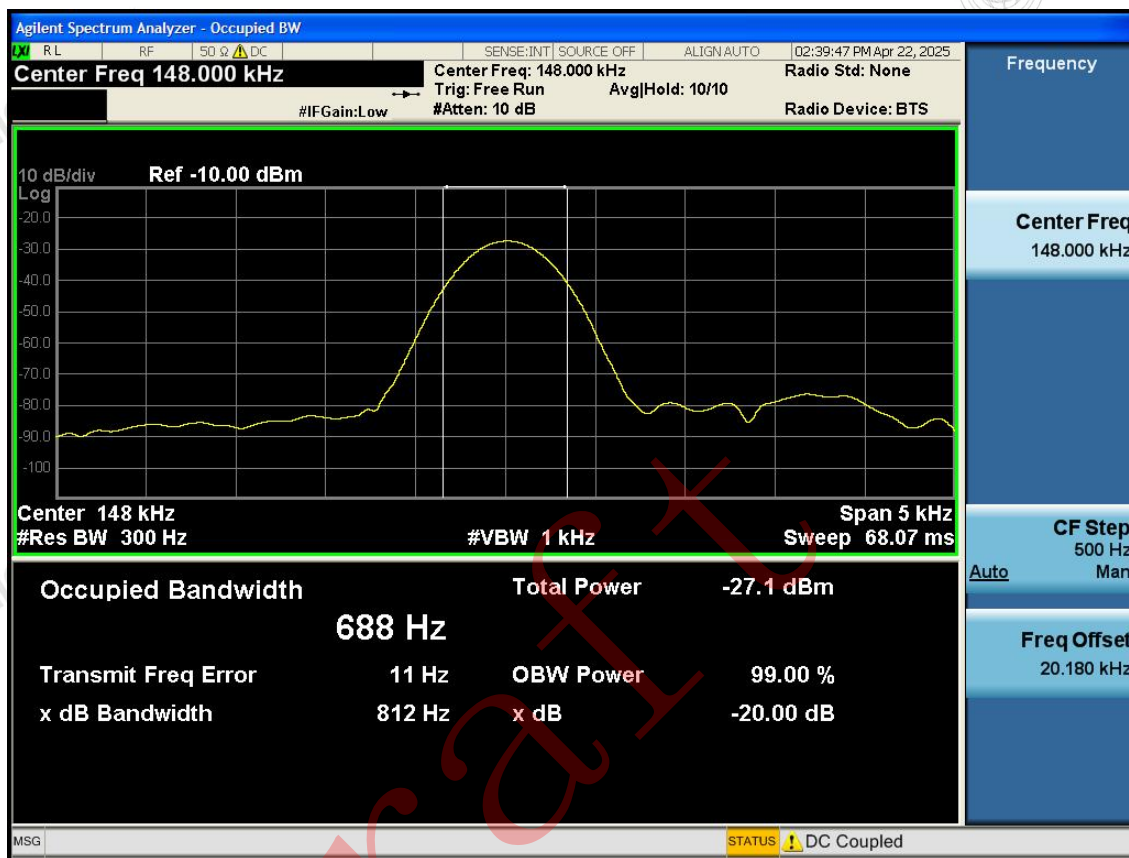
OBW – Lowest channel



TEST REPORT

Report No.: MTi250107021-0201E1

OBW – highest channel



Note: All test modes have been tested and only record the worst result.

TEST REPORT

Report No.: MTi250107021-0201E1

5.4 H-field requirements

5.4.1 Description

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

5.4.2 Limits

Frequency range [MHz]	H-field strength limit [dBμA/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	Note 1
$0.079 \leq f < 0.090$	67.8 descending 10 dB/dec above 0.079 MHz	Note 2
$0.100 \leq f < 0.119$	42	
$0.119 \leq f < 0.135$	66 descending 10 dB/dec above 0.119 MHz	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 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 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.

5.4.3 Test method

The conformance test suite for H-field requirements shall be as defined in clause 6.2.1 of EN 303 417.

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:

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

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

C3 is a conversion factor in dB determined from figure H.2

TEST REPORT

Report No.: MTi250107021-0201E1

Correction factor, C_3 , for limits at 3 m distance, dB

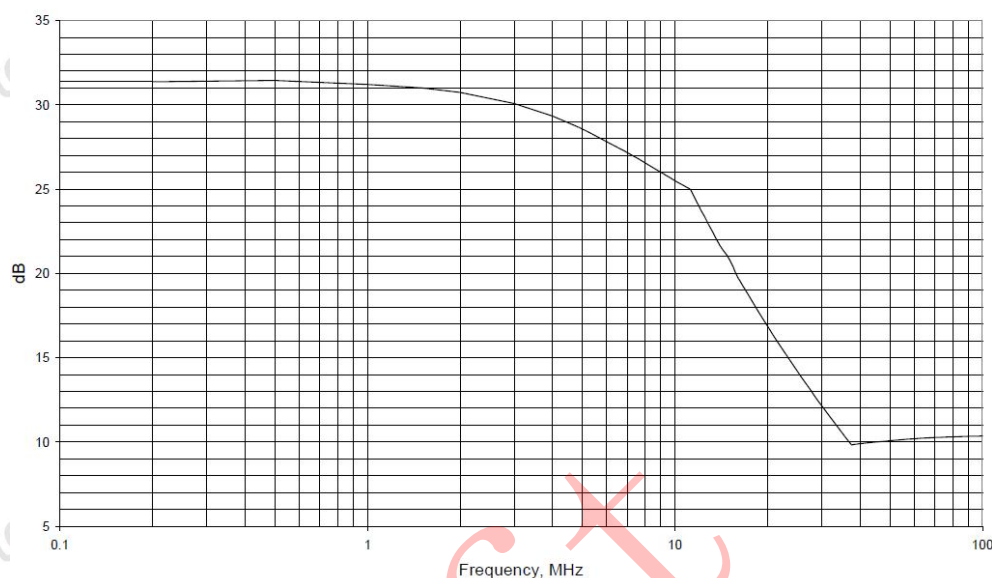


Figure H.2: Conversion factor C_3 versus frequency

TEST REPORT

Report No.: MTi250107021-0201E1

5.4.4 Test Result

Test mode:	Mode 5		
Power supply:	Powered by battery	Test site:	RE chamber 2

Frequency (kHz)	Measurement Level@3m (dBuA/m)	C ₃ Factor (dB)	Level@10m (dBuA/m)	Limit@10m (dBuA/m)	Result	Detector
127.8	8.7	31.2	-22.5	65.7	Pass	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.

All test modes have been tested and only record the worst result.

TEST REPORT

Report No.: MTi250107021-0201E1

5.5 Transmitter spurious emissions (Below 30MHz)

5.5.1 Description

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

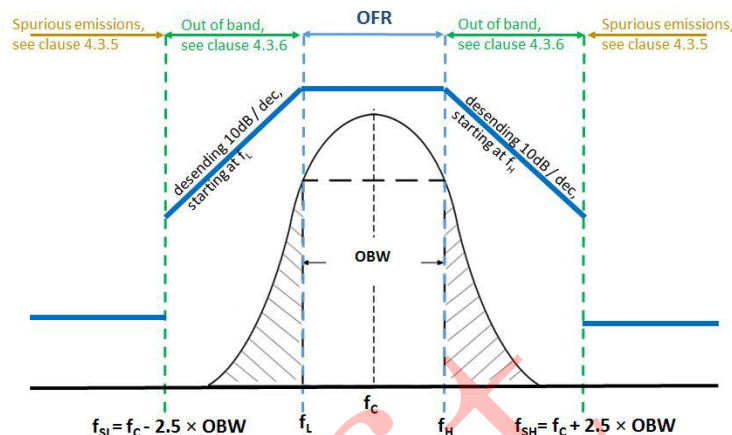


Figure 4: Out of band and spurious domain of a single frequency WPT system

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 $f > f_{SH}$).

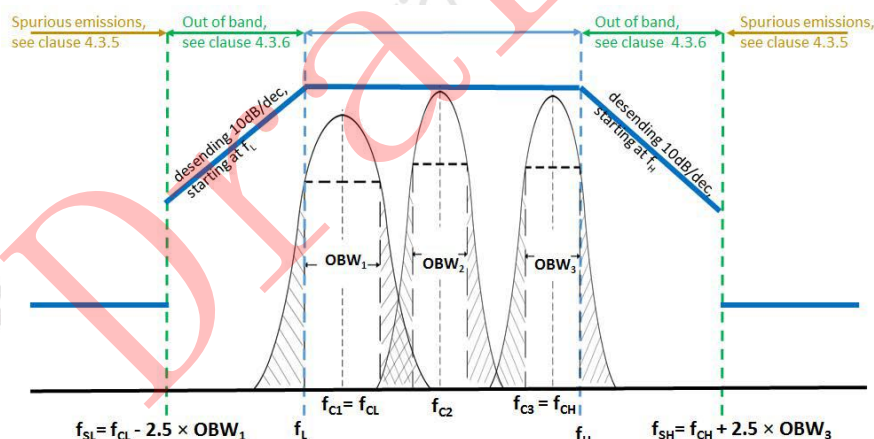


Figure 5: Out of band and spurious domain of a multi-frequency system (during one WPT system cycle time)

TEST REPORT

Report No.: MTi250107021-0201E1

5.5.2 Limits

The radiated field strength of spurious emissions below 30 MHz shall not exceed the generated H-field given in 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 of EN 303 417; "standby" means mode 1 according to Table 2 EN 303 417.

5.5.3 Test method

The conformance test suite for unwanted emissions shall be as defined in clause 6.2.1 of EN 303 417.

5.5.4 Test result

Note: All test modes have been tested and only record the worst result.

TEST REPORT

Report No.: MTi250107021-0201E1

Test mode:	Mode 5		
Power supply:	Powered by battery	Test site:	RE chamber 2

No.	Frequency	Result@3m	C ₃	Result @10m	Limit@10m	Margin	Detector
	(MHz)	dBuA/m	(dB)	dBuA/m	dBuA/m	dB	
1	0.2548	-3.86	31.2	-35.06	12.5	-47.5	QP
2	0.3811	-7.23	31.2	-38.43	10.7	-49.2	QP
3	0.4127	-8.4	31.2	-39.6	10.4	-50.0	QP
4	0.6011	-16.31	31.1	-47.41	8.8	-56.2	QP
5	0.8897	-18.92	31.1	-50.02	7.0	-57.1	QP
6	1.2756	-19.95	31	-50.95	5.5	-56.4	QP

Test mode:	Mode 6		
Power supply:	Powered by battery	Test site:	RE chamber 2

No.	Frequency	Result@3m	C ₃	Result @10m	Limit@10m	Margin	Detector
	(MHz)	dBuA/m	(dB)	dBuA/m	dBuA/m	dB	
1	0.2548	-6.19	31.2	-37.39	-9.0	-28.4	QP
2	0.3832	-8.22	31.2	-39.42	-10.8	-28.6	QP
3	0.4127	-11.13	31.2	-42.33	-11.1	-31.2	QP
4	0.5916	-18.12	31.1	-49.22	-12.7	-36.5	QP
5	0.8757	-20.23	31.1	-51.33	-14.4	-36.9	QP
6	1.1595	-22.12	31	-53.12	-15.6	-37.5	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)

TEST REPORT

Report No.: MTi250107021-0201E1

5.6 Transmitter spurious emissions (30MHz-1GHz)

5.6.1 Description

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

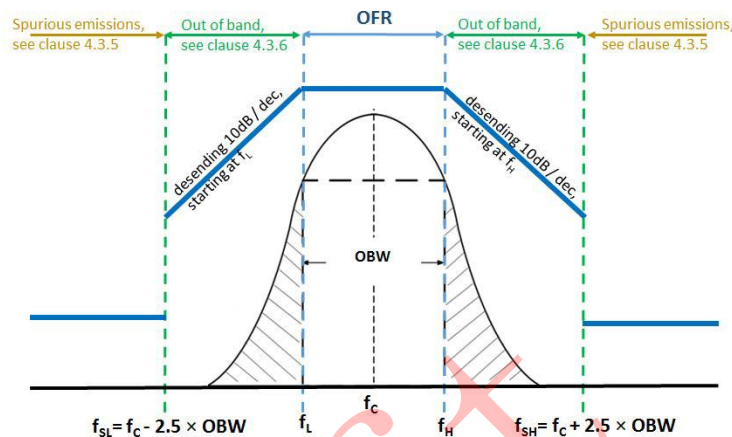


Figure 4: Out of band and spurious domain of a single frequency WPT system

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 $f > f_{SH}$).

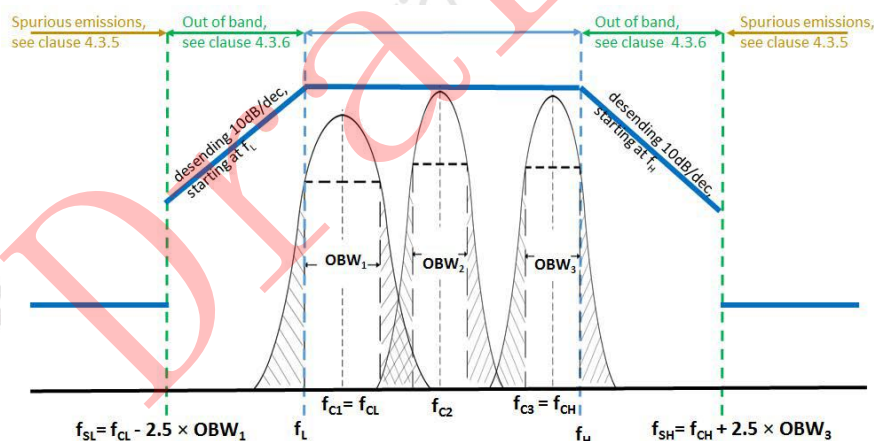


Figure 5: Out of band and spurious domain of a multi-frequency system (during one WPT system cycle time)

TEST REPORT

Report No.: MTi250107021-0201E1

5.6.2 Limits

The power of any radiated spurious emission between 30 MHz and 1 GHz shall not exceed the values given in Table 5 of EN 303 417:

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 of EN 303 417; "standby" means mode 1 according to Table 2 EN 303 417.

5.6.3 Test method

The conformance test suite for unwanted emissions shall be as defined in clause 6.2.1 of EN 303 417.

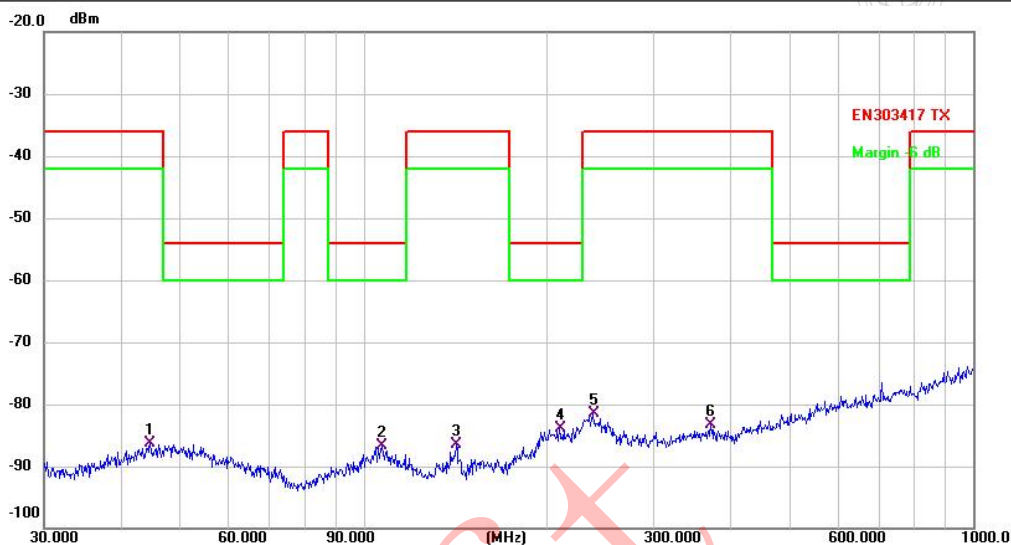
5.6.4 Test result

Note: All test modes have been tested and only record the worst result.

TEST REPORT

Report No.: MTi250107021-0201E1

Mode5 / Polarization: Horizontal

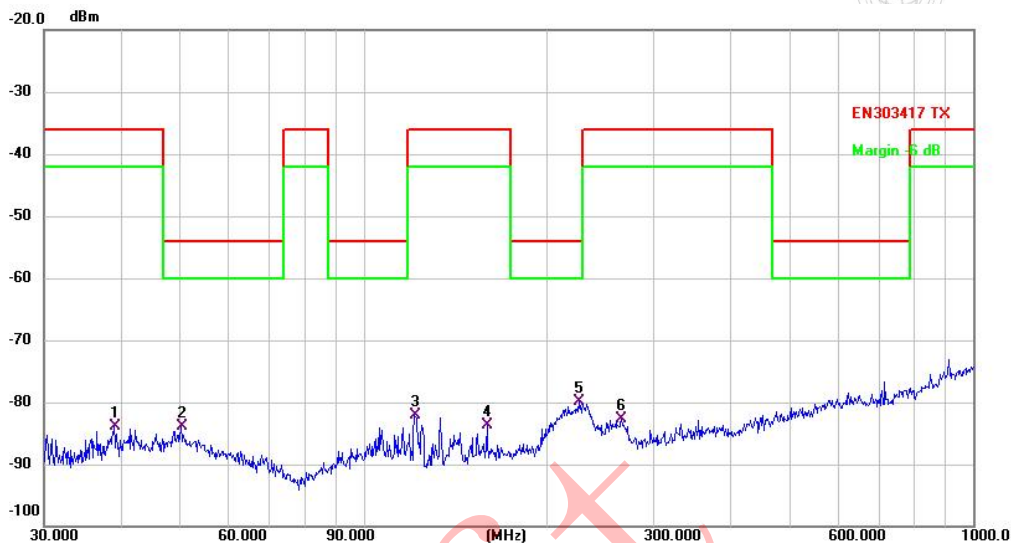


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1		44.7433	-79.55	-6.76	-86.31	-36.00	-50.31	QP	
2		107.1337	-79.68	-6.93	-86.61	-54.00	-32.61	QP	
3		141.8262	-77.74	-8.78	-86.52	-36.00	-50.52	QP	
4	*	210.0482	-76.21	-7.63	-83.84	-54.00	-29.84	QP	
5		238.3102	-74.96	-6.58	-81.54	-36.00	-45.54	QP	
6		372.0045	-79.81	-3.41	-83.22	-36.00	-47.22	QP	

TEST REPORT

Report No.: MTi250107021-0201E1

Mode5 / Polarization: Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1		39.0245	-75.68	-8.21	-83.89	-36.00	-47.89	QP	
2		50.2324	-77.29	-6.62	-83.91	-54.00	-29.91	QP	
3		121.1231	-72.12	-9.88	-82.00	-36.00	-46.00	QP	
4		159.2251	-74.13	-9.65	-83.78	-36.00	-47.78	QP	
5	*	226.0994	-72.00	-7.95	-79.95	-54.00	-25.95	QP	
6		265.6757	-77.07	-5.67	-82.74	-36.00	-46.74	QP	

TEST REPORT

Report No.: MTi250107021-0201E1

Mode6 / Polarization: Horizontal

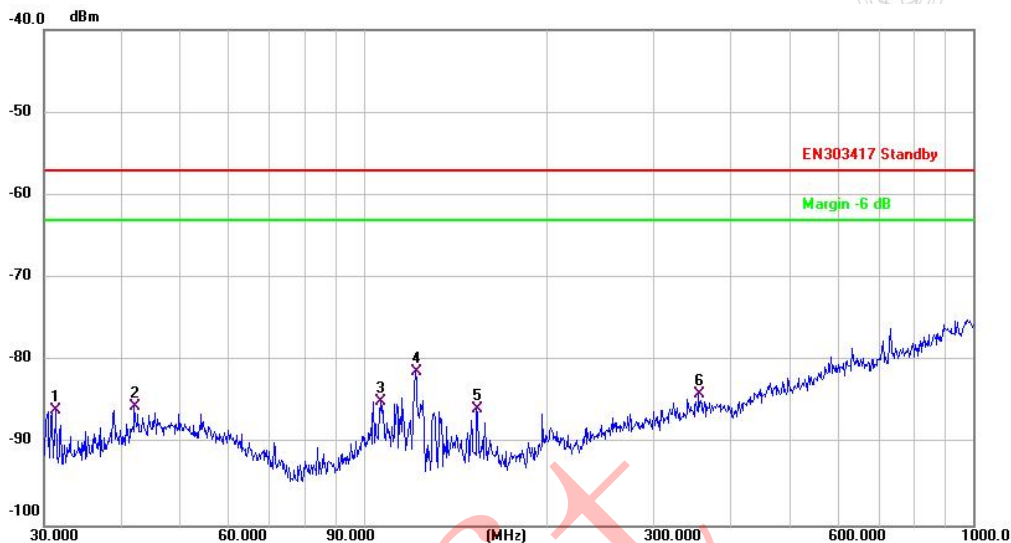


No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1		47.9940	-79.63	-6.84	-86.47	-57.00	-29.47	QP	
2		103.8055	-80.32	-7.62	-87.94	-57.00	-30.94	QP	
3		140.3421	-80.47	-8.78	-89.25	-57.00	-32.25	QP	
4		199.2855	-79.34	-6.58	-85.92	-57.00	-28.92	QP	
5		325.5958	-80.77	-4.31	-85.08	-57.00	-28.08	QP	
6	*	530.1014	-80.19	-1.39	-81.58	-57.00	-24.58	QP	

TEST REPORT

Report No.: MTi250107021-0201E1

Mode6 / Polarization: Vertical



No.	Mk.	Freq. MHz	Reading Level dBm	Correct Factor dB	Measure- ment dBm	Limit dBm	Over dB	Detector	Comment
1		31.3992	-76.19	-9.85	-86.04	-57.00	-29.04	QP	
2		42.1542	-78.30	-7.17	-85.47	-57.00	-28.47	QP	
3		106.7587	-78.03	-6.94	-84.97	-57.00	-27.97	QP	
4	*	121.5486	-71.25	-10.00	-81.25	-57.00	-24.25	QP	
5		153.2004	-76.16	-9.71	-85.87	-57.00	-28.87	QP	
6		355.4273	-80.61	-3.42	-84.03	-57.00	-27.03	QP	

TEST REPORT

Report No.: MTi250107021-0201E1

5.7 Transmitter out of band (OOB) emissions

5.7.1 Description

The transmitter spurious emissions for a single frequency system are to be considered in frequency ranges defined in Figures 4 and Figures 5 ($f < f_{SL}$ and $f > f_{SH}$).

5.7.2 Limits

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.

5.7.3 Test method

The conformance test suite for Transmitter out of band emissions is provided in clause 6.2.1 of EN 303 417.

5.7.4 Test result

Test mode:	Mode 5		
Power supply:	Powered by battery	Test site:	RE chamber 2

Frequency (kHz)	Measurement Level@3m (dBuA/m)	C ₃ Factor (dB)	Level@10m (dBuA/m)	Limit@10m (dBuA/m)	Result	Detector
109.66	-22.8	31.2	-54.0	42.00	Pass	QP
148.34	-22.4	31.2	-53.6	37.70	Pass	QP
108.28	-31.6	31.2	-62.8	42.00	Pass	QP
149.72	-31.1	31.2	-62.3	-5.00	Pass	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

TEST REPORT

Report No.: MTi250107021-0201E1

5.8 Receiver blocking

5.8.1 Description

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

5.8.2 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 = OFR see clause 4.3.3.			

5.8.3 Test method

The conformance test suite for performance criterion test shall be as defined in clause 6.3.2 and within the test-setup(s) as defined in clause 6.1 of EN 303 417.

5.8.4 Test result

For $F_c = 110$ kHz

Test Frequency (kHz)	Blocking Signal (dB μ A/m)	Performance Criterion	Result
103.1	82	Without degradation of Performance	Pass
109.3	72	Without degradation of Performance	Pass
110.0	72	Without degradation of Performance	Pass
110.7	72	Without degradation of Performance	Pass
116.9	82	Without degradation of Performance	Pass

For $F_c = 148$ kHz

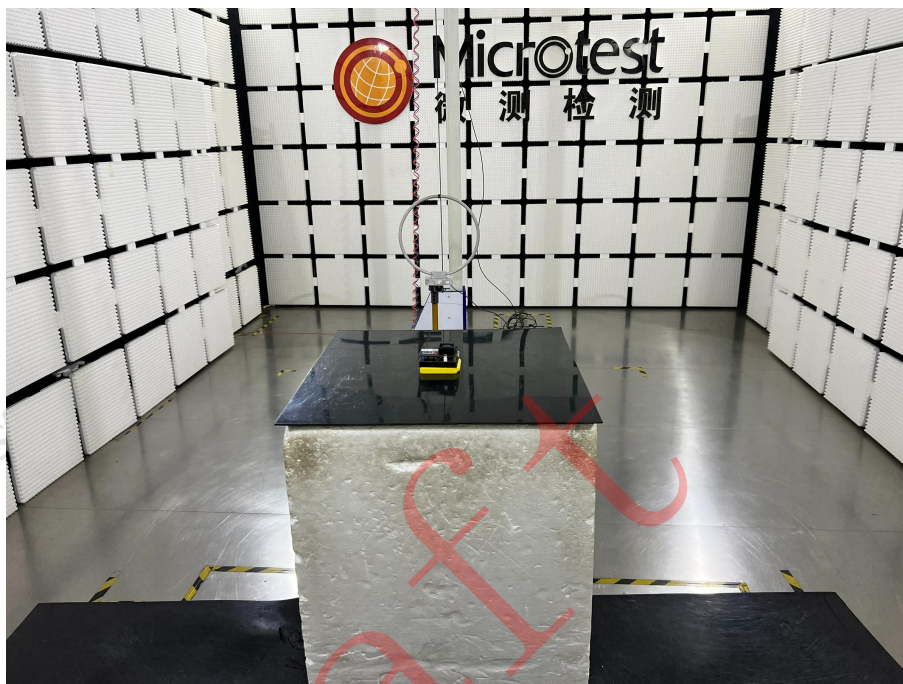
Test Frequency (kHz)	Blocking Signal (dB μ A/m)	Performance Criterion	Result
141.1	82	Without degradation of Performance	Pass
147.3	72	Without degradation of Performance	Pass
148.0	72	Without degradation of Performance	Pass
148.7	72	Without degradation of Performance	Pass
154.9	82	Without degradation of Performance	Pass

TEST REPORT

Report No.: MTi250107021-0201E1

Photographs of the test setup

Transmitter spurious emissions(Below 30MHz)



Transmitter spurious emissions(30MHz-1GHz)



TEST REPORT

Report No.: MTi250107021-0201E1

Photographs of the EUT

Refer to Appendix - EUT Photos

Draft

TEST REPORT

Report No.: MTi250107021-0201E1

Statement

1. This report is invalid without the seal and signature of the laboratory.
2. The test results of this report are only responsible for the samples submitted. Client shall be responsible for representativeness of the sample and authenticity of the material.
3. The report shall not be partially reproduced without the written consent of the Laboratory.
4. This report is invalid if transferred, altered or tampered with in any form without authorization.
5. The observations or tests with special mark fall outside the scope of accreditation, and are only used for purpose of commission, research, training, internal quality control etc.
6. Any objection to this report shall be submitted to the laboratory within 15 days from the date of receipt of the report.

***** END OF REPORT *****