



Prüfbericht-Nr.: <i>Test report no.:</i>	CN22TAVM 001	Auftrags-Nr.: <i>Order no.:</i>	168379679	Seite 1 von 30 <i>Page 1 of 30</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2021-04-25	
Auftraggeber: <i>Client:</i>	iDeal of Sweden AB Gamla Rådstugugatan 33, Norrköping, Ostergötland 60224, Sweden			
Prüfgegenstand: <i>Test item:</i>	Wireless Charger			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	IDWCTE22-407, IDWCTE22-408, IDWCTE22-409, IDWCTE22-411 (Trademark: IDEAL OF SWEDEN)			
Auftrags-Inhalt: <i>Order content:</i>	Type test			
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 CFR47 FCC Part 15: Subpart B Section 15.107 CFR47 FCC Part 15: Subpart B Section 15.109			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2022-06-30	Refer to photos document		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003291482-001, 002			
Prüfzeitraum: <i>Testing period:</i>	2022-07-08 – 2022-07-13			
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>		genehmigt von: <i>authorized by:</i>		
Datum: <i>Date:</i> 2022-07-25	<small>Signed by: Alex Lan</small>	Ausstellungsdatum: <i>Issue date:</i> 2022-07-26	<small>Signed by: Winnie Hou</small>	
Stellung / Position	Assistant Project Manager	Stellung / Position	Department Manager	
Sonstiges / Other:	FCC ID: 2AZEK-IDWC Factory: SHENZHEN JINXINWANG ELECTRONICS CO.,LTD Address: Room 201, Building B, No. 7 Fangkeng Road, Pinghu, Longgang District, Shenzhen, P.R. China Supplier: HK GUO GUO INT'L DEVELOPMENT CO., LIMITED Address: RM 3,UNIT P, 1/F., KAISER ESTATE, PHASE 3, NOS. 9-11 HOK YUEN STREET, HUNG HOM, KOWLOON, HK			
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>	Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged:</i>			
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet <i>Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor</i> P(ass) = passed a.m. test specifications(s) F(ail) = failed a.m. test specifications(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

V05

Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 99% BANDWIDTH

RESULT: Pass

5.1.3 20dB BANDWIDTH

RESULT: Pass

5.1.4 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.5 CONDUCTED EMISSION ON AC MAINS

RESULT: Pass

5.1.6 RADIATED EMISSION

RESULT: Pass

6.1.1 ELECTROMAGNETIC FIELDS

RESULT: Pass

Contents

1	GENERAL REMARKS	4
1.1	COMPLEMENTARY MATERIALS.....	4
2	TEST SITES.....	4
2.1	TEST FACILITIES	4
2.2	LIST OF TEST AND MEASUREMENT INSTRUMENTS	5
2.3	TRACEABILITY	7
2.4	CALIBRATION.....	7
2.5	MEASUREMENT UNCERTAINTY.....	7
2.6	LOCATION OF ORIGINAL DATA.....	7
2.7	STATUS OF FACILITY USED FOR TESTING	7
3	GENERAL PRODUCT INFORMATION	8
3.1	PRODUCT FUNCTION AND INTENDED USE	8
3.2	RATINGS AND SYSTEM DETAILS.....	8
3.3	INDEPENDENT OPERATION MODES.....	9
3.4	NOISE GENERATING AND NOISE SUPPRESSING PARTS	9
3.5	SUBMITTED DOCUMENTS.....	9
4	TEST SET-UP AND OPERATION MODES.....	10
4.1	PRINCIPLE OF CONFIGURATION SELECTION	10
4.2	TEST OPERATION AND TEST SOFTWARE	10
4.3	SPECIAL ACCESSORIES AND AUXILIARY EQUIPMENT	10
4.4	COUNTERMEASURES TO ACHIEVE EMC COMPLIANCE	10
4.5	TEST SETUP DIAGRAM	11
5	TEST RESULTS	13
5.1	TRANSMITTER REQUIREMENT & TEST SUITES FOR WPT	13
5.1.1	<i>Antenna Requirement.....</i>	<i>13</i>
5.1.2	<i>20dB Bandwidth</i>	<i>15</i>
5.1.3	<i>Radiated Spurious Emission</i>	<i>16</i>
5.1.4	<i>Conducted Emission on AC Mains.....</i>	<i>22</i>
5.1.5	<i>Radiated Emission.....</i>	<i>25</i>
6	SAFETY HUMAN EXPOSURE.....	28
6.1	RADIO FREQUENCY EXPOSURE COMPLIANCE.....	28
6.1.1	<i>Electromagnetic Fields</i>	<i>28</i>
7	PHOTOGRAPHS OF THE TEST SET-UP	30
8	LIST OF TABLES.....	30
9	LIST OF PHOTOGRAPHS.....	30

1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:
Appendix A: Test setup photos.

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

No. 362 Huanguan Road Middle, Longhua District, Shenzhen 518110, People's Republic of China

FCC Registration No.: 694916

IC Registration No.: 25069

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing				
Description	Manufacturer	Model	Serial No.	Cal. Until
Signal Analyzer	Rohde & Schwarz	FSV 40	101441	09.08.2022
OSP	Rohde & Schwarz	OSP 150	101017	02.12.2022
Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A
Test Software	Rohde & Schwarz	WMS32 (V10.40.10)	N/A	N/A
Shielding Room 8#	Albatross	SR8	APC17151-SR8	22.06.2024
Unwanted Emission Testing				
Description	Manufacturer	Model	Serial No.	Cal. Until
EMI Test Receiver	R&S	ESR 7	102021	10.08.2022
Signal Analyzer	R&S	FSV 40	101439	09.08.2022
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	09.08.2022
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	09.08.2022
Amplifier	R&S	SCU-18F	180070	09.08.2022
Amplifier	R&S	SCU40A	100475	09.08.2022
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	08.08.2022
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	08.08.2022
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	08.08.2022
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	13.09.2022
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	22.06.2024

Prüfbericht - Nr.: CN22TAVM 001

Seite 6 von 30
 Page 6 of 30

Test report no.

Conducted Emission				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
EMI Test Receiver	R&S	ESR3	102680	2023-02-27
Artificial Mains Network	R&S	ENV216	101445	2023-02-27
Artificial Mains Network	R&S	ENV432	101546	2023-02-27
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A
Radiated Emission				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
3m SAC	ETS-Lindgren	SAC3	CT001632-Q1362	2024-04-26
EMI Test Receiver	R&S	ESR7	102111	2022-12-01
Trilog-Broadband antenna	SCHWARZBECK	VULB9168	0945	2022-12-12
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A

RF Exposure				
H-Field Probe 100 cm2 SENSOR	narda	D-0010	BN 2300/90.10	2023-05-20
MAGNETIC FIELD HiTESTER ELT-400	narda	D-0009	BN 2304/03	2023-05-20

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

Test	Parameters	Expanded uncertainty (U _{lab})	Expanded uncertainty (U _{cispr})
Conducted Emission	Level accuracy (9kHz to 150kHz)	± 3.70 dB	± 3.8 dB
	(150kHz to 30MHz)	± 3.30 dB	± 3.4 dB
Radiated Emission (3m SAC)	Level accuracy (30MHz to 1000MHz)	± 4.52 dB	± 6.3 dB
	Level accuracy (above 1000MHz)	± 4.37 dB	N/A

2.6 Location of Original Data

The original copies of all test data taken during actual testing were in this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No. 362 Huanguan Road Middle, Longhua District, Shenzhen 518110, People's Republic of China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The devices are Wireless Charger, which supports wireless charging function.
All models are identical except for the model name and the color of enclosure.
For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment	Wireless Charger
Type Designation	IDWCTE22-407, IDWCTE22-408, IDWCTE22-409, IDWCTE22-411
FCC ID	2AZEK-IDWC
Trade Mark	IDEAL OF SWEDEN
Input Voltage	DC 5V, 2.1A or DC 9V, 1.67A via external AC/DC Adapter
Test Voltage	AC 120V, 60Hz
Technical Specification of WPT	
Operating Frequency	111-205KHz
Extreme Temperature Range	-20°C - +45°C
Modulation	FSK
Antenna Type	Induction coil
Antenna Gain	0 dBi
Wireless output	10W maximum

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Wireless charging
- B. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Block Diagram
- Schematics
- User Manual

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5&6. All testing were performed according to the procedures in ANSI C63.10: 2013 & ANSI C63.4: 2014

According to clause 3.1, all test were applied on model IDWCTE22-407.

4.3 Special Accessories and Auxiliary Equipment

Table 3: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	Rating or S/N
Electronic Load	YBZ	N/A	N/A
AC/DC Adapter	HUAWEI	HW-100400C01	Input: AC 100-240V, 50/60Hz, 1.2A Output: DC 5V, 2A or DC 9V, 2A or DC 10, 4A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 30MHz)

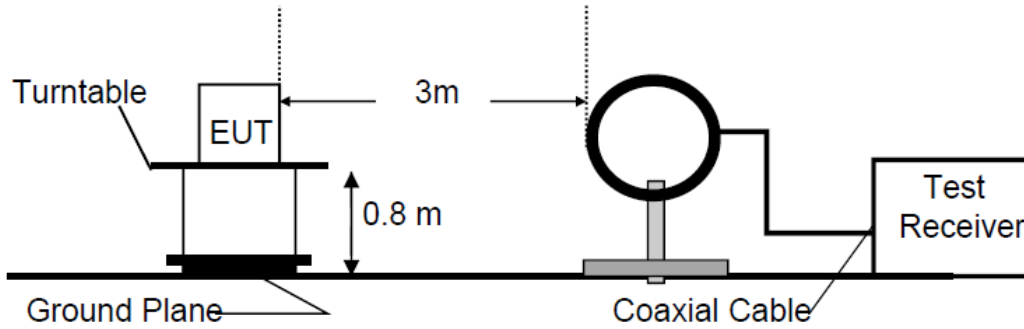


Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

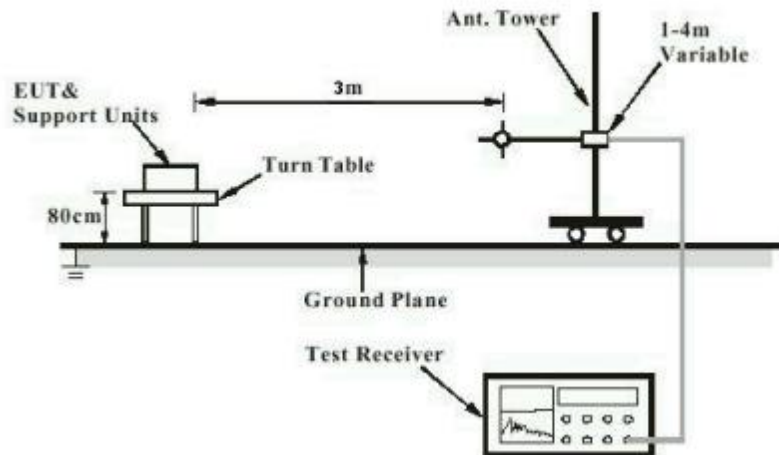
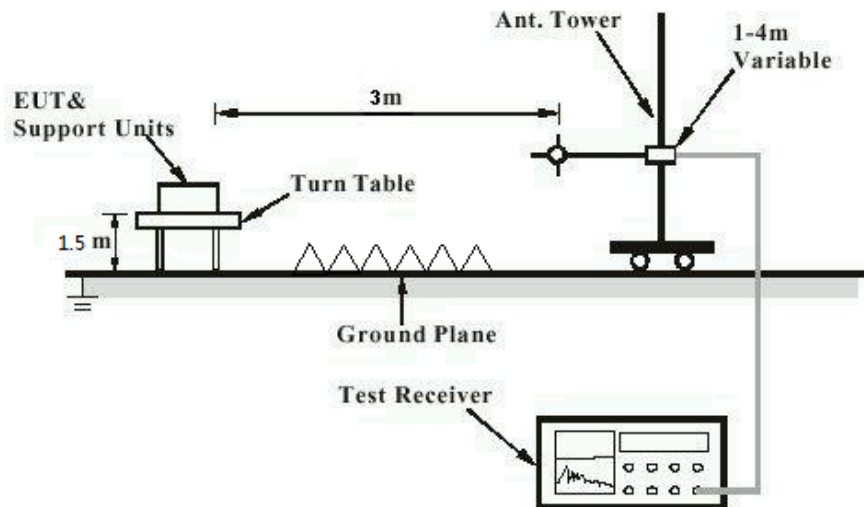


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)



A

Diagram of Measurement Configuration for Conducted Transmitter Measurement

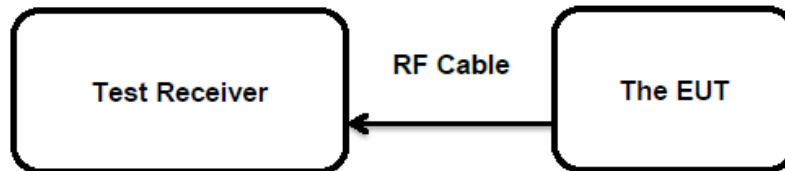
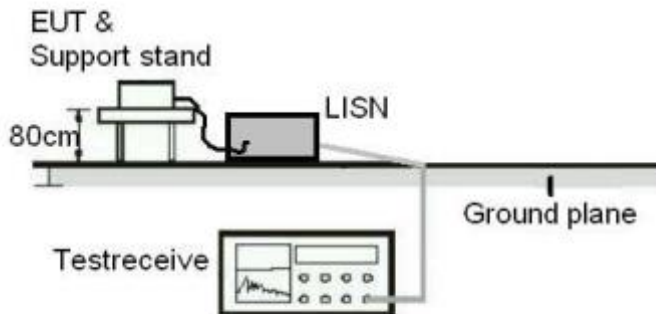


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites for WPT

5.1.1 Antenna Requirement

RESULT:

Pass

Test Specification

Test standard : Part 15.203
Limit : the use of antennas with directional gains that do not exceed 6 dBi

According to the manufacturer declared, the EUT has one internal antenna, the directional gain of antenna is 0 dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

Prüfbericht - Nr.: CN22TAVM 001
 Test report no.

Seite 14 von 30
 Page 14 of 30

5.1.2 99% Bandwidth

RESULT:

Pass

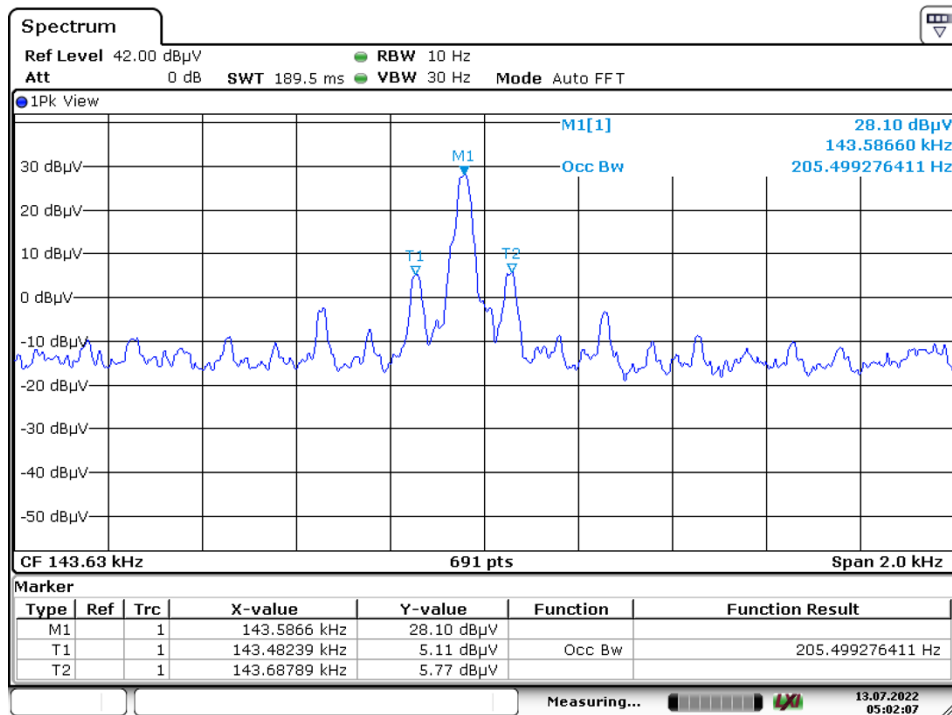
Test Specification

Basic standard : ANSI C63.10: 2013
 Kind of test site : Shielded Room

Test Setup

Date of testing : 2022-07-13
 Input voltage : AC 120V, 60Hz
 Operation mode : A
 Ambient temperature : 22 °C
 Relative humidity : 52 %
 Atmospheric pressure : 101 kPa

For details refer to following test result.



Date: 13.JUL.2022 05:02:07

Prüfbericht - Nr.: CN22TAVM 001
 Test report no.

Seite 15 von 30
 Page 15 of 30

5.1.3 20dB Bandwidth

RESULT:

Pass

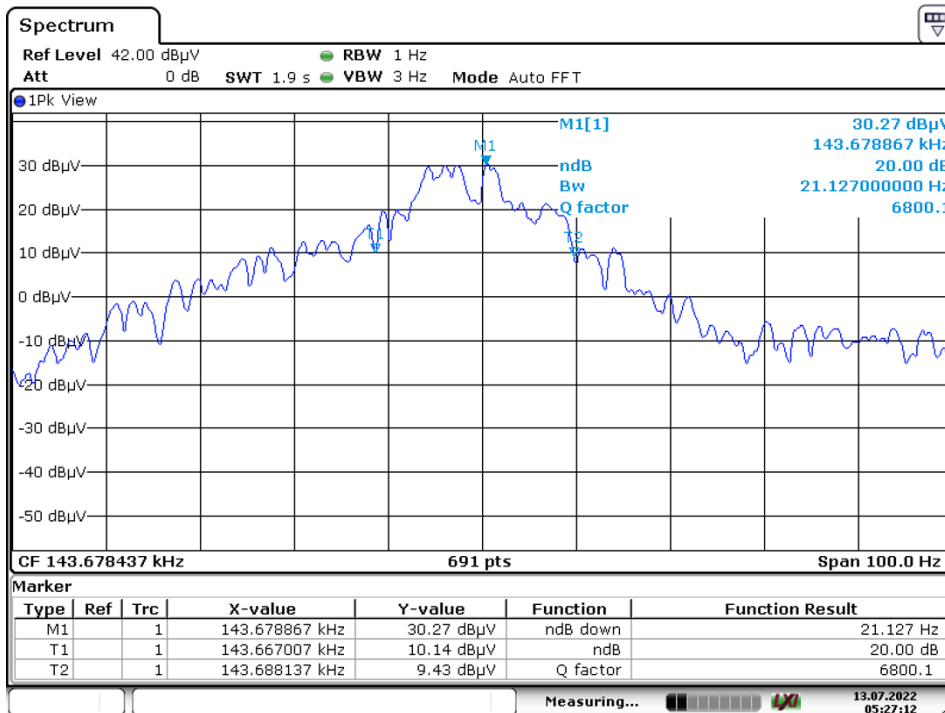
Test Specification

Test standard : FCC Part 15.215(c)
 Basic standard : ANSI C63.10: 2013
 Kind of test site : Shielded Room

Test Setup

Date of testing : 2022-07-13
 Input voltage : AC 120V, 60Hz
 Operation mode : A
 Ambient temperature : 22 °C
 Relative humidity : 52 %
 Atmospheric pressure : 101 kPa

For details refer to following test result.



Date: 13.JUL.2022 05:27:12

Prüfbericht - Nr.: CN22TAVM 001
Test report no.

Seite 16 von 30
Page 16 of 30

5.1.4 Radiated Spurious Emission

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.201
Basic standard : ANSI C63.10: 2013
Limits : Refer to 15.209(a)
Kind of test site : 3m Semi-anechoic Chamber

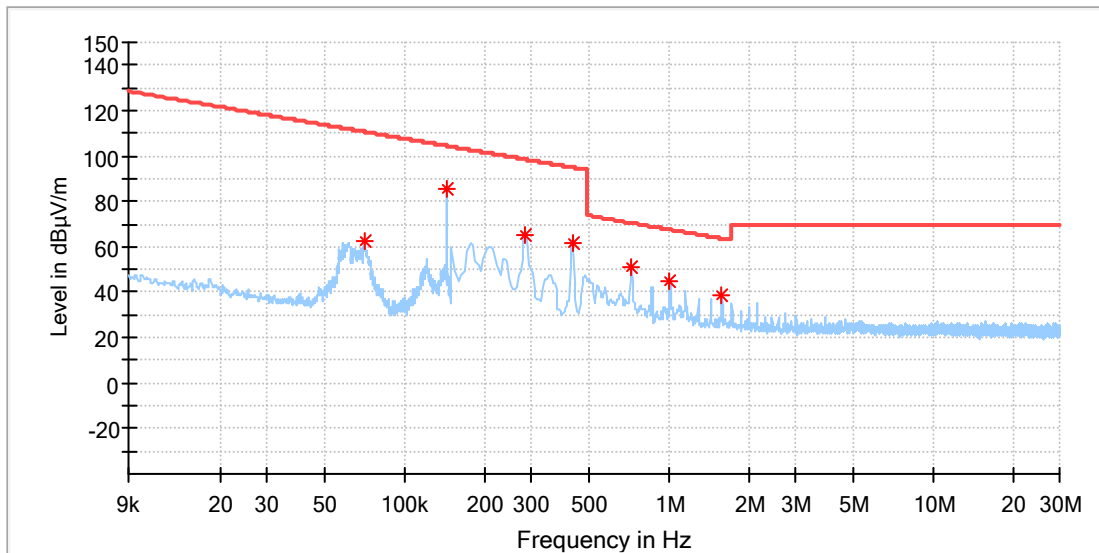
Test Setup

Date of testing : 2022-07-13
Input voltage : AC 120V, 60Hz
Operation mode : A
Ambient temperature : 22 °C
Relative humidity : 52 %
Atmospheric pressure : 101 kPa

For details refer to following test result.

EUT Information

EUT Name: Wireless Charger
 Model: IDWCTE22-407
 Test Mode: Wireless Charging
 Order No/Sample No: 168379679/A003291482-002
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 22 Humi:52%
 Test Standard: FCC Part 15C
 Tested By: Kei Zhang
 Reviewed By: Terry Yin

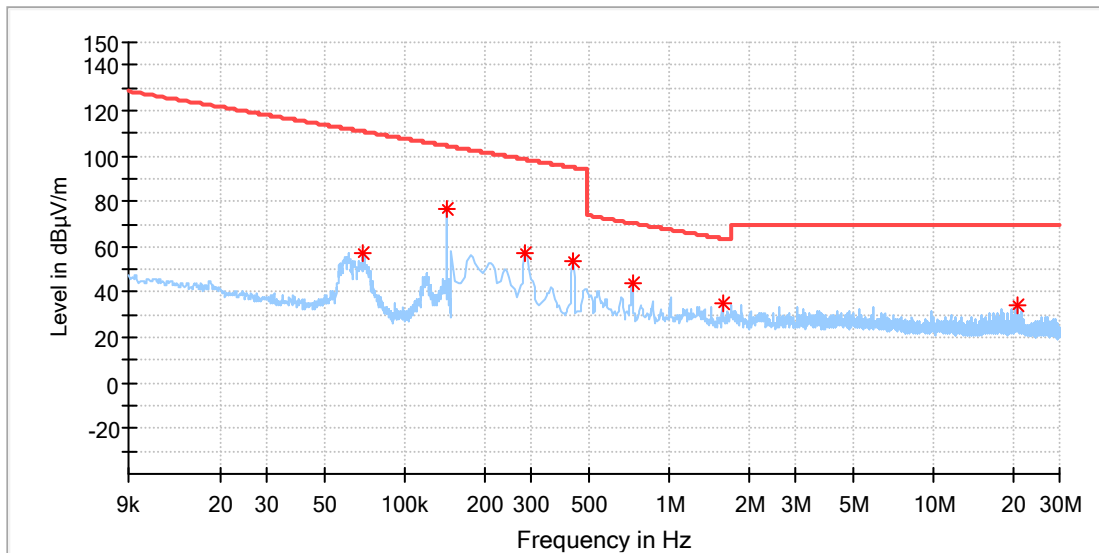


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.070536	62.73	110.63	47.89	100.0	X	273.0	20.1
0.144159	85.17	104.42	19.25	100.0	X	306.0	20.1
0.286081	65.36	98.47	33.12	100.0	X	287.0	20.1
0.430941	61.74	94.92	33.18	100.0	X	305.0	20.1
0.716272	51.39	70.51	19.13	100.0	X	315.0	20.1
1.005993	45.20	67.57	22.37	100.0	X	295.0	20.1
1.581044	39.06	63.65	24.59	100.0	X	295.0	20.1

EUT Information

EUT Name: Wireless Charger
 Model: IDWCTE22-407
 Test Mode: Wireless Charging
 Order No/Sample No: 168379679/A003291482-002
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 22 Humi:52%
 Test Standard: FCC Part 15C
 Tested By: Kei Zhang
 Reviewed By: Terry Yin

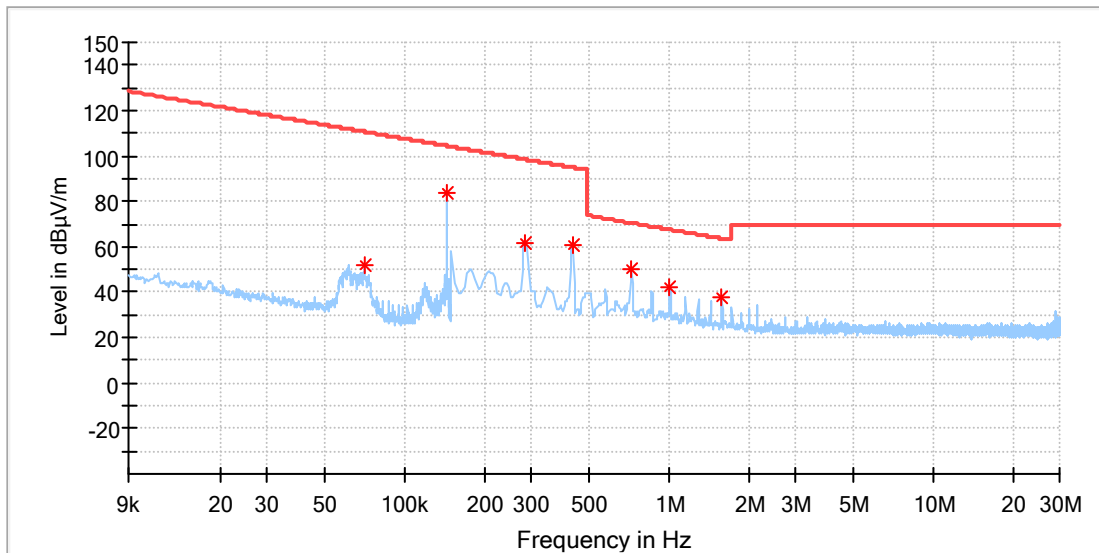


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.069630	56.90	110.74	53.84	100.0	Y	316.0	20.1
0.144964	76.97	104.37	27.40	100.0	Y	36.0	20.1
0.286081	56.88	98.47	41.59	100.0	Y	203.0	20.1
0.430941	53.87	94.92	41.05	100.0	Y	26.0	20.1
0.725052	44.05	70.41	26.36	100.0	Y	22.0	20.1
1.589824	35.10	63.61	28.50	100.0	Y	16.0	20.2
20.878191	33.83	69.50	35.67	100.0	Y	289.0	20.6

EUT Information

EUT Name:	Wireless Charger
Model:	IDWCTE22-407
Test Mode:	Wireless Charging
Order No/Sample No:	168379679/A003291482-002
Test Voltage::	AC 120V/60Hz
Remark:	Temp 22 Humi:52%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

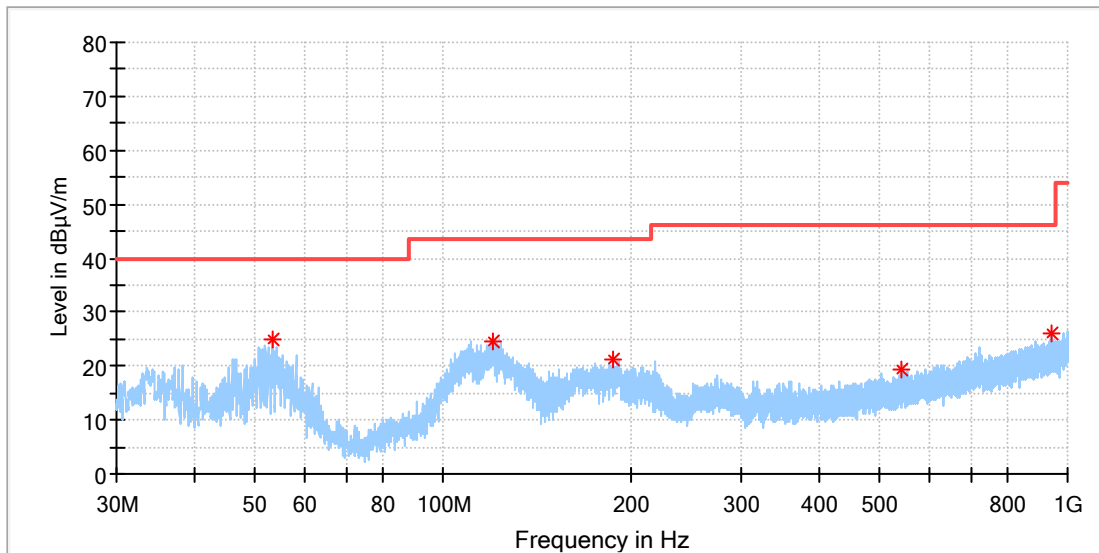


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.070436	51.69	110.64	58.95	100.0	Z	293.0	20.1
0.144159	83.67	104.42	20.75	100.0	Z	304.0	20.1
0.286081	61.89	98.47	36.58	100.0	Z	317.0	20.1
0.430941	60.52	94.92	34.39	100.0	Z	292.0	20.1
0.720662	50.25	70.46	20.21	100.0	Z	302.0	20.1
1.005993	42.31	67.57	25.26	100.0	Z	307.0	20.1
1.581044	37.50	63.65	26.16	100.0	Z	254.0	20.1

EUT Information

EUT Name: Wireless Charger
 Model: IDWCTE22-407
 Test Mode: Wireless Charging
 Order No/Sample No: 168379679/A003291482-002
 Test Voltage:: AC 120V/60Hz
 Remark: Temp 22 Humi:52%
 Test Standard: FCC Part 15C
 Tested By: Kei Zhang
 Reviewed By: Terry Yin

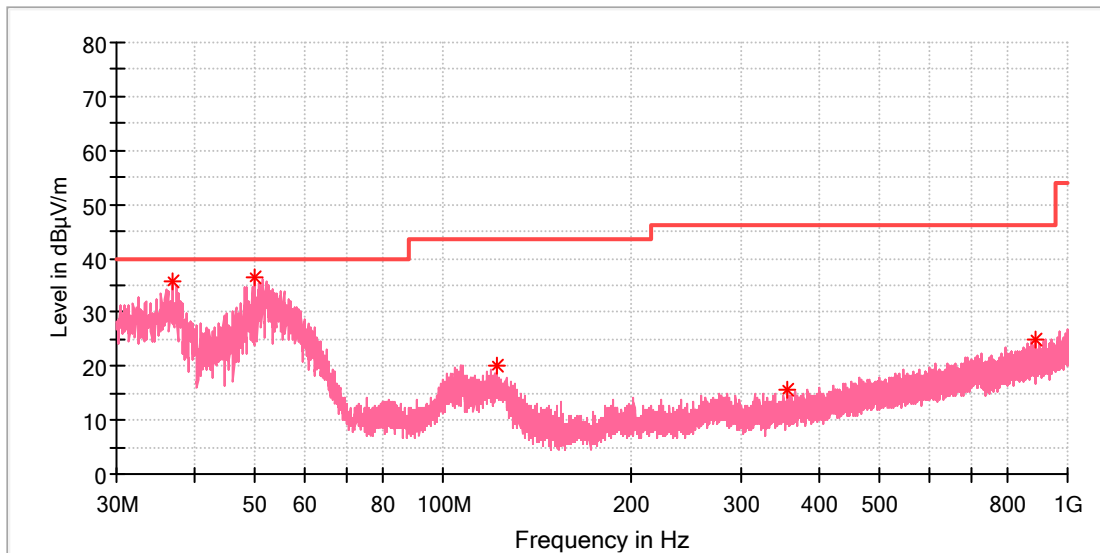


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
53.429231	25.03	40.00	14.97	100.0	H	233.0	-18.7
119.948846	24.72	43.50	18.78	100.0	H	225.0	-21.1
187.028077	21.10	43.50	22.40	100.0	H	14.0	-20.1
540.593077	19.49	46.00	26.51	100.0	H	273.0	-11.4
939.412308	26.11	46.00	19.89	100.0	H	160.0	-5.0

EUT Information

EUT Name:	Wireless Charger
Model:	IDWCTE22-407
Test Mode:	Wireless Charging
Order No/Sample No:	168379679/A003291482-002
Test Voltage::	AC 120V/60Hz
Remark:	Temp 22 Humi:52%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
36.827308	35.83	40.00	4.17	100.0	V	44.0	-21.5
49.996923	36.54	40.00	3.46	100.0	V	327.0	-18.6
122.224615	19.92	43.50	23.58	100.0	V	60.0	-21.3
354.912692	15.72	46.00	30.28	100.0	V	235.0	-15.1
886.659231	25.08	46.00	20.92	100.0	V	285.0	-5.5

Prüfbericht - Nr.: CN22TAVM 001
Test report no.

Seite 22 von 30
Page 22 of 30

5.1.5 Conducted Emission on AC Mains

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.207(a), FCC Part 15.107(a)
Basic standard : ANSI C63.4: 2014, ANSI C63.10: 2013
Frequency range : 0.15 – 30MHz
Limits : FCC Part 15.207(a), FCC Part 15.107(a)
Kind of test site : Shielded Room

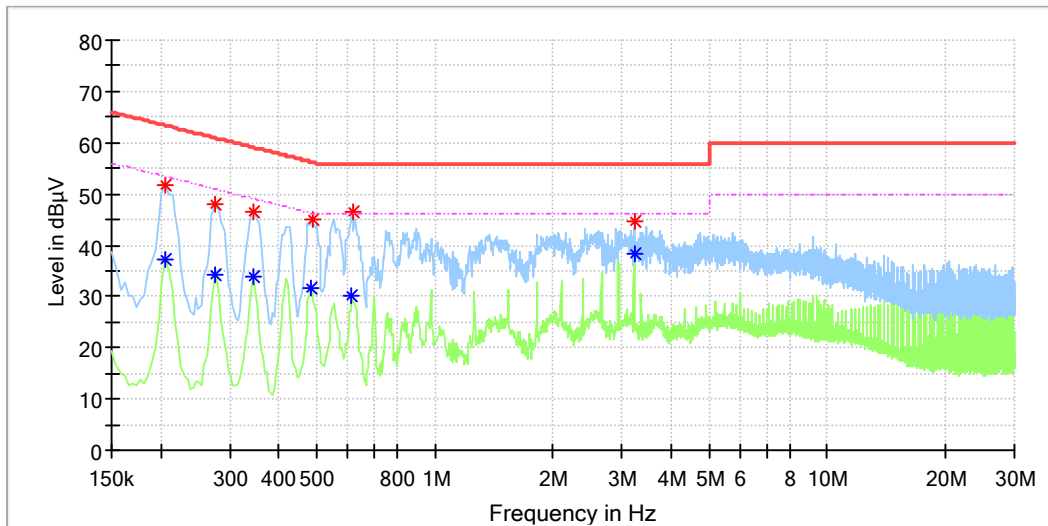
Test Setup

Date of testing : 2022-07-13
Input voltage : AC 120V, 60Hz
Operation mode : A
Earthing : Not connected
Ambient temperature : 24.1 °C
Relative humidity : 52.8 %
Atmospheric pressure : 101 kPa

For details refer to following test result.

EUT Information

EUT Name: Wireless Charger
 Order No: 168379679_P00741020
 Model: IDWCTE22-407
 Test mode: Wireless Charging
 Test Voltage: AC 120V, 60Hz
 Test By:/Review By: Charlie Zha/Gary Chen
 Test Standard: FCC part 15B
 Tem./Hum./Pressure: 24.1°C/52.8%/101kPa
 Remark: SR2

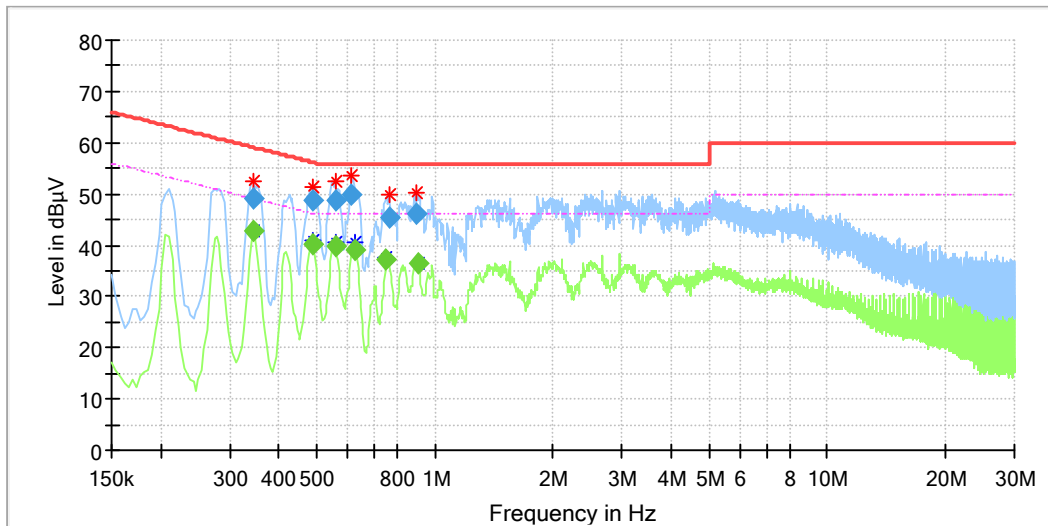


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
0.206000	51.68	---	63.37	11.69	L1	9.9
0.206000	---	37.12	53.37	16.24	L1	9.9
0.274000	48.05	---	61.00	12.94	L1	9.9
0.274000	---	34.19	51.00	16.81	L1	9.9
0.346000	---	34.02	49.06	15.04	L1	9.9
0.346000	46.42	---	59.06	12.64	L1	9.9
0.482000	---	31.65	46.31	14.65	L1	10.0
0.486000	44.94	---	56.24	11.30	L1	10.0
0.614000	---	30.28	46.00	15.72	L1	10.0
0.618000	46.42	---	56.00	9.58	L1	10.0
3.218000	---	38.22	46.00	7.78	L1	10.2
3.218000	44.61	---	56.00	11.39	L1	10.2

EUT Information

EUT Name: Wireless Charger
 Order No: 168379679_P00741020
 Model: IDWCTE22-407
 Test mode: Wireless Charging
 Test Voltage: AC 120V, 60Hz
 Test By:/Review By: Charlie Zha/Gary Chen
 Test Standard: FCC part 15B
 Tem./Hum./Pressure: 24.1°C/52.8%/101kPa
 Remark: SR2



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.345500	---	42.74	49.07	6.33	3000.0	9.000	N	9.8
0.345500	49.25	---	59.07	9.82	3000.0	9.000	N	9.8
0.486500	48.86	---	56.23	7.37	3000.0	9.000	N	9.8
0.490500	---	40.31	46.16	5.85	3000.0	9.000	N	9.8
0.557500	48.59	---	56.00	7.41	3000.0	9.000	N	9.8
0.561500	---	39.64	46.00	6.36	3000.0	9.000	N	9.8
0.613500	49.96	---	56.00	6.04	3000.0	9.000	N	9.8
0.626500	---	39.25	46.00	6.75	3000.0	9.000	N	9.8
0.753500	---	37.28	46.00	8.72	3000.0	9.000	N	9.8
0.769500	45.37	---	56.00	10.63	3000.0	9.000	N	9.8
0.897500	46.30	---	56.00	9.70	3000.0	9.000	N	9.8
0.905500	---	36.28	46.00	9.72	3000.0	9.000	N	9.8

Prüfbericht - Nr.: CN22TAVM 001
Test report no.

Seite 25 von 30
Page 25 of 30

5.1.6 Radiated Emission

RESULT:

Pass

Test Specification

Test standard : FCC Part 15.109(a)
Basic standard : ANSI C63.4: 2014
Frequency range : 30 - 1000MHz *
Classification : Class B
Limit : FCC Part 15.109(a)
Kind of test site : 3m Semi-anechoic Chamber

Test Setup

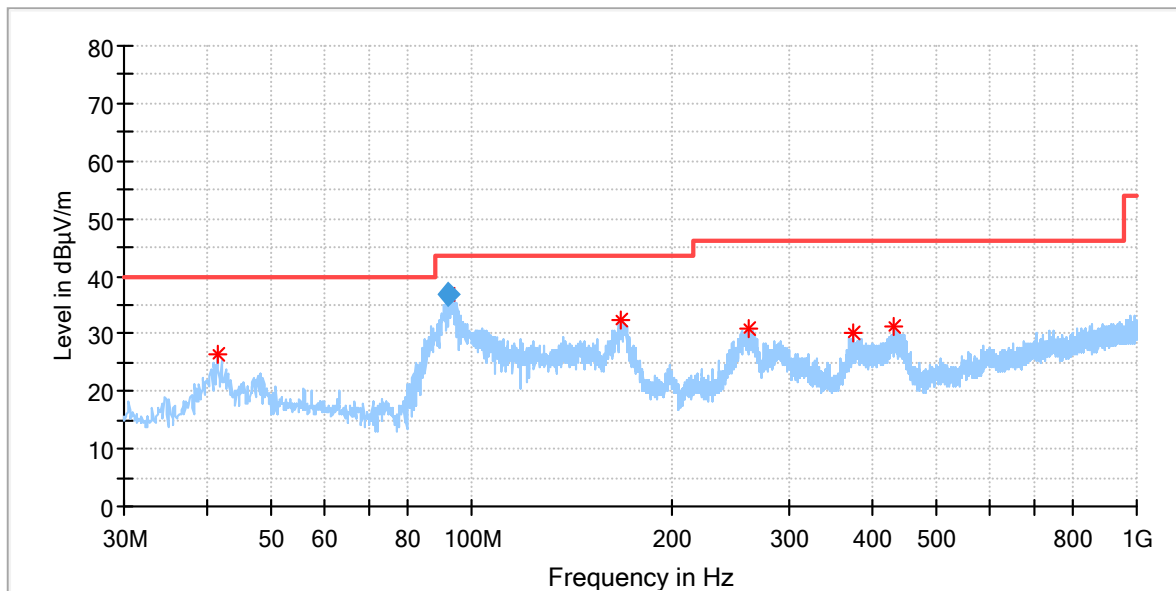
Date of testing : 2022-07-08
Input voltage : AC 120V, 60Hz
Operation mode : A
Earthing : Not Connected
Ambient temperature : 24.0 °C
Relative humidity : 53 %
Atmospheric pressure : 101 kPa

For details refer to following test result.

Remark:*- The highest frequency of internal sources of EUT is less than 108MHz, the measurement shall only be made up to 1GHz.

EUT Information

EUT Name: Wireless Charger
 Order No: 168379679_P00741020
 Model: IDWCTE22-407
 Test mode: Wireless Charging
 Test Voltage: AC 120V, 60Hz
 Test By./Review By: Charlie Zha/Gary Chen
 Test Standard: FCC part 15B
 Tem./Hum./Pressure: 24.0°C/53%/101kPa
 Remark: 3m chamber



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
41.446000	26.38	40.00	13.62	100.0	H	225.0	19.9
167.352000	32.42	43.50	11.08	200.0	H	290.0	21.4
261.442000	30.84	46.00	15.16	100.0	H	246.0	20.0
373.671000	30.30	46.00	15.70	100.0	H	94.0	22.8
430.416000	31.19	46.00	14.81	100.0	H	290.0	23.8

Final Result

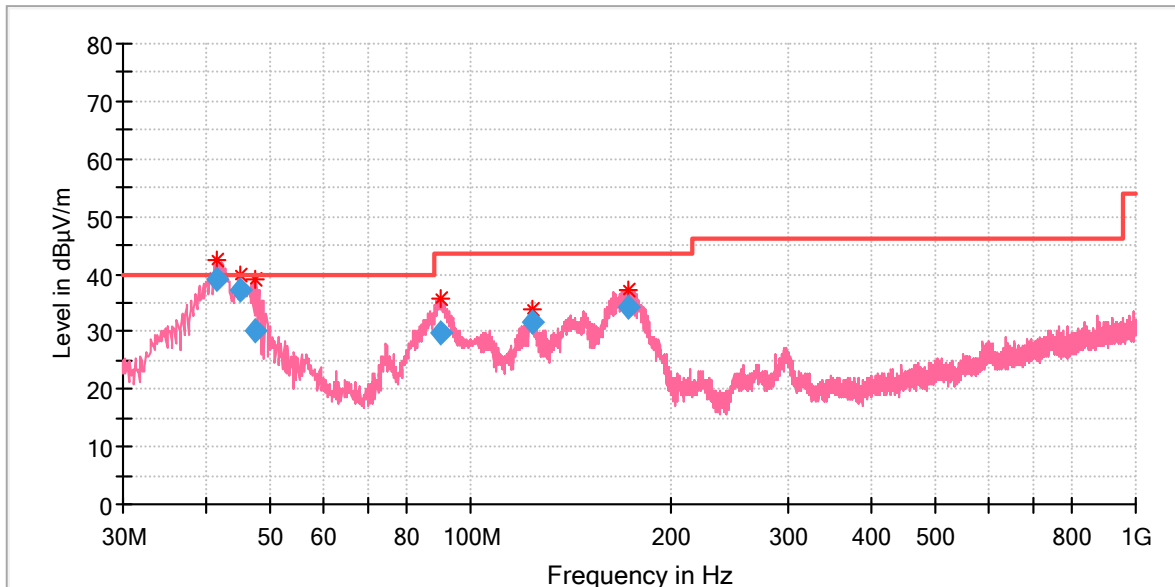
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
92.003000	36.74	43.50	6.76	1000.0	120.000	200.0	H	156.0	15.7

Prüfbericht - Nr.: CN22TAVM 001
 Test report no.

Seite 27 von 30
 Page 27 of 30

EUT Information

EUT Name: Wireless Charger
 Order No: 168379679_P00741020
 Model: IDWCTE22-407
 Test mode: Wireless Charging
 Test Voltage: AC 120V, 60Hz
 Test By:/Review By: Charlie Zha/Gary Chen
 Test Standard: FCC part 15B
 Tem./Hum./Pressure: 24.0°C/53%/101kPa
 Remark: 3m chamber



Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
41.660000	39.10	40.00	0.90	1000.0	120.000	100.0	V	233.0	20.0
44.861000	37.18	40.00	2.82	1000.0	120.000	100.0	V	264.0	20.7
47.400000	29.97	40.00	10.03	1000.0	120.000	100.0	V	202.0	21.3
90.120000	29.81	43.50	13.69	1000.0	120.000	100.0	V	88.0	15.3
123.374000	31.69	43.50	11.81	1000.0	120.000	100.0	V	81.0	19.1
172.610000	34.21	43.50	9.29	1000.0	120.000	100.0	V	79.0	21.1

6 Safety Human Exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:

Pass

Test Specification

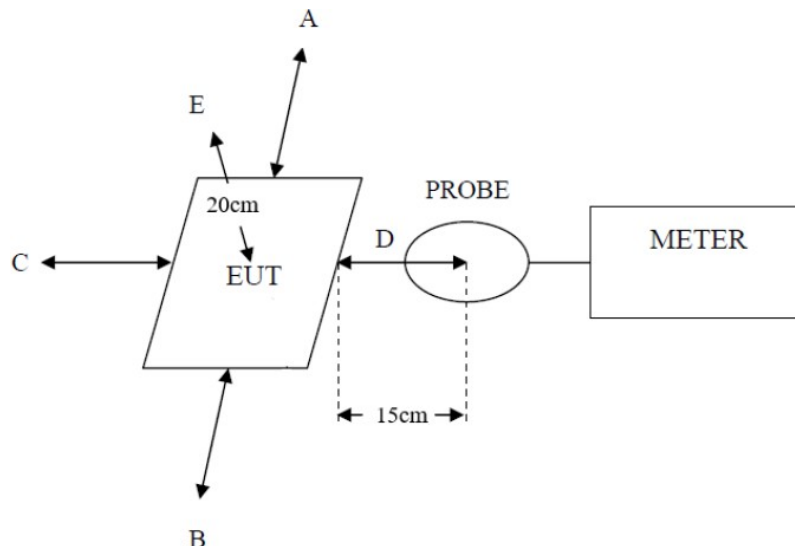
Test standard : CFR47 FCC Part 2: Subpart J Section 1.1310
FCC CFR 47 Part 1(1.1310) KDB 680106 D01 v03

According to the table 1 of FCC Part 2.1310, the reference limit as below:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

f = frequency in MHz * = Plane-wave equivalent power density

Test Setup:



Prüfbericht - Nr.: CN22TAVM 001
Test report no.

Seite 29 von 30
Page 29 of 30

Test Result:

Table: H-Field Strength at 15 cm from the edges surrounding the EUT and 20cm from the top surface of the EUT

EUT Test Mode	Measured H-Field Strength Values (A/m)					50% Limit (A/m)	Limit (A/m)	Result
	Test Position A	Test Position B	Test Position C	Test Position D	Test Position E			
Device working at the maximum power	0.1952	0.2296	0.1912	0.1936	0.2064	0.815	1.63	Pass

7 Photographs of the Test Set-Up

Refer to test setup photos document.

8 List of Tables

Table 1: List of Test and Measurement Equipment.....	5
Table 2: Technical Specification of EUT.....	8
Table 3: List of Accessories and Auxiliary Equipment.....	10

9 List of Photographs

Refer to appendix A.