

Prüfbericht-Nr.: <i>Test report no.:</i>	CN21X0J6 001	Auftrags-Nr.: <i>Order no.:</i>	168309842	Seite 1 von 29 <i>Page 1 of 29</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2021-03-11	
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>	IDFQlrxyy-zzz (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>	2021-03-16	Refer to photos document		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003016294-001 to 003			
Prüfzeitraum: <i>Testing period:</i>	2021-03-17 – 2021-03-26			
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> 2021-05-28	Signed by: Alex Lan	Ausstellungsdatum: <i>Issue date:</i> 2021-05-28	Signed by: Sam Lin	
Stellung / Position	Senior Project Engineer	Stellung / Position	Department Manager	
Sonstiges / Other:	FCC ID: 2AZEK-IDFQI			
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 Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor 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>				

Prüfbericht - Nr.: CN21X0J6 001
Test report no.

Seite 2 von 29
Page 2 of 29

Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 20dB BANDWIDTH

RESULT: Pass

5.1.3 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.4 CONDUCTED EMISSION ON AC MAINS

RESULT: Pass

5.1.5 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
<i>5.1.1</i>	<i>Antenna Requirement</i>	<i>13</i>
<i>5.1.2</i>	<i>20dB Bandwidth</i>	<i>14</i>
<i>5.1.3</i>	<i>Radiated Spurious Emission</i>	<i>15</i>
<i>5.1.4</i>	<i>Conducted Emission on AC Mains.....</i>	<i>21</i>
<i>5.1.5</i>	<i>Radiated Emission</i>	<i>24</i>
6	SAFETY HUMAN EXPOSURE	26
6.1	RADIO FREQUENCY EXPOSURE COMPLIANCE	26
<i>6.1.1</i>	<i>Electromagnetic Fields.....</i>	<i>26</i>
7	PHOTOGRAPHS OF THE TEST SET-UP.....	28
8	LIST OF TABLES.....	29
9	LIST OF PHOTOGRAPHS	29

Prüfbericht - Nr.: **CN21X0J6 001**
Test report no.

Seite 4 von 29
Page 4 of 29

1 General Remarks

1.1 Complementary Materials

None

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	2021-08-20
OSP	Rohde & Schwarz	OSP 150	101017	2021-12-20
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	2021-07-23
Unwanted Emission Testing				
Description	Manufacturer	Model	Serial No.	Cal. Until
EMI Test Receiver	Rohde & Schwarz	ESR 7	102021	2021-08-19
Signal Analyzer	Rohde & Schwarz	FSV 40	101439	2021-08-21
System Controller Interface	Rohde & Schwarz	SCI-100	S10010038	N/A
Filterbank	Rohde & Schwarz	Wlan	100759	2021-08-21
OSP	Rohde & Schwarz	OSP 120	102040	N/A
Pre-amplifier	Rohde & Schwarz	SCU08F1	08320031	2021-08-20
Amplifier	Rohde & Schwarz	SCU-18F	180070	2021-08-20
Amplifier	Rohde & Schwarz	SCU40A	100475	2021-08-21
Trilog Broadband Antenna (30 MHz - 1 GHz)	Schwarzbeck	VULB9162	193	2021-09-02
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	2021-09-02
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2021-09-02
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2021-09-01
Wideband Ridged Horn Antenna (12-18 GHz)	Steatite	QMS-00208	18313	2021-09-02
Test software	Rohde & Schwarz	V10.40.10-EMC32	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2021-06-07

Prüfbericht - Nr.: CN21X0J6 001

Seite 6 von 29

Test report no.

Page 6 of 29

Conducted Emission				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
EMI Test Receiver	R&S	ESR3	102428	2021-09-03
Artificial Mains Network	R&S	ENV216	102333	2021-08-19
Artificial Mains Network	R&S	ENV432	101411	2021-08-19
Impedance Stabilisation Network	R&S	ENY81	100323	2021-08-19
Impedance Stabilisation Network	R&S	ENY81-CA6	101810	2021-08-20
Current Probe	R&S	EZ-17	101247	2021-08-19
Voltage Probe	R&S	ESH2-Z3	100557	2021-08-19
Attenuator	R&S	ESH2Z31	100300	2021-08-19
EMC32 test software	R&S	EMC32(Ver.10.50.01)	N/A	N/A
Radiated Emission				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
10m modified SAC	ETS	SAC10	CT001632-Q1399	2021-08-31
EMI Test Receiver	R&S	ESR7	102022	2021-08-19
EMI Test Receiver	R&S	ESR7	102023	2021-08-19
Bilog Antenna	TESEQ	CBL6112D	51321	2021-08-29
Bilog Antenna	TESEQ	CBL6112D	51322	2021-08-29
Preamplifier	SCHWARZBECK	BBV9745	115	2021-09-10
Preamplifier	EMCI	EMC9135-P	980629	2022-01-05
Preamplifier	FIT	SCU-18F	180076	2021-08-19
Horn Antenna	R&S	HF907	102707	2021-09-01
Switching Controller Interface	R&S	OSP 120	102038	N/A
EMC32 test software	R&S	EMC32(Ver.10.50.01)	N/A	N/A

RF Exposure				
H-Field Probe 100 cm2 SENSOR	narda	D-0010	BN 2300/90.10	2021-05-20
MAGNETIC FIELD HiTESTER ELT-400	narda	D-0009	BN 2304/03	2021-05-20

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) (150kHz to 30MHz)	± 3.70 dB ± 3.30 dB	± 3.8 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
Radiated Emission (10m SAC)	Level accuracy (30MHz to 1000MHz)	± 4.66 dB	± 6.3 dB
	Level accuracy (above 1000MHz)	± 4.35 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 the color of enclosure different, for example:

Model	Enclosure	Photo
IDFQISS21-256	Golden Night Marble	
IDFQISS21-257	Rose Pearl Marble	
IDFQISS21-258	Mint Swirl Marble	

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	IDFQIrxyy-zzz (r stands for A to Z or blank, x stands for A to Z or blank, yy stands for 00 to 99 or blank, zzz stands for 0 to 999, all models are identical except for the pattern or color).
FCC ID	2AZEK-IDFQI
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	110-205KHz
Extreme Temperature Range	-20°C - +35°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 IDFQISS21-256.

4.3 Special Accessories and Auxiliary Equipment

Table 3: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N
Electrical Load	YBZ	N/A	N/A
AC/DC Adapter	Xiaomi	/	/

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)

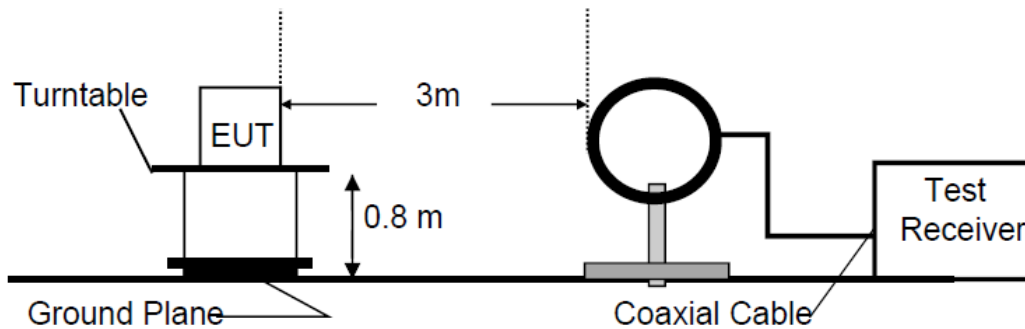


Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

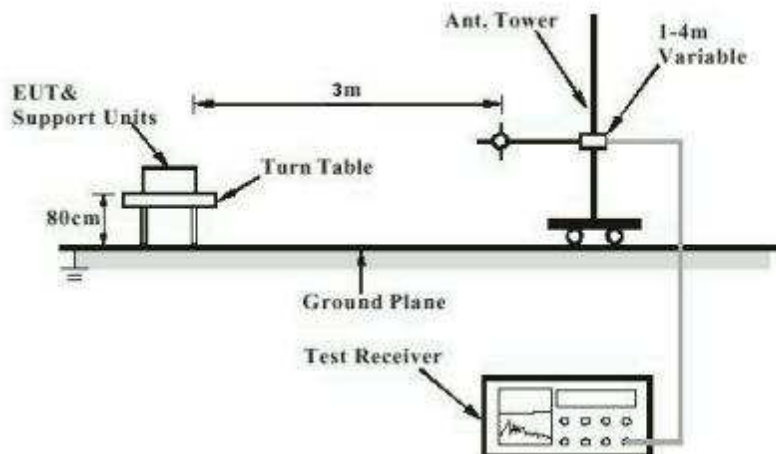
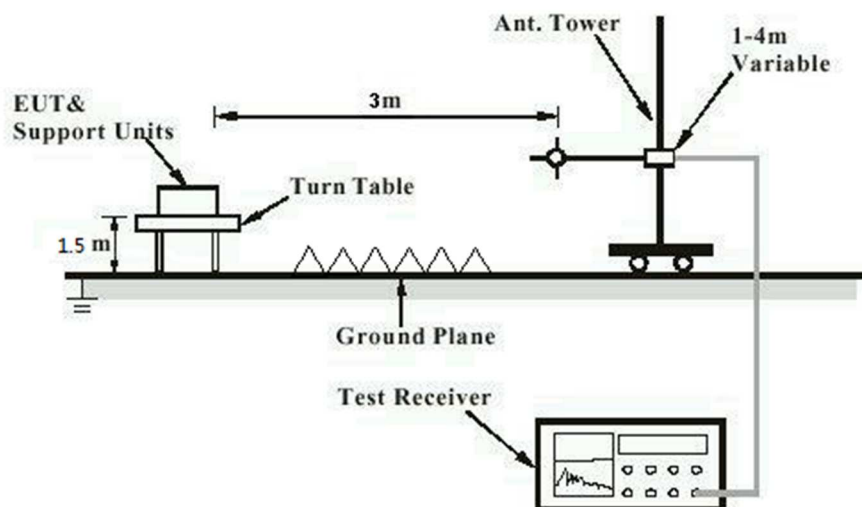


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)



A

Diagram of Measurement Configuration for Conducted Transmitter Measurement

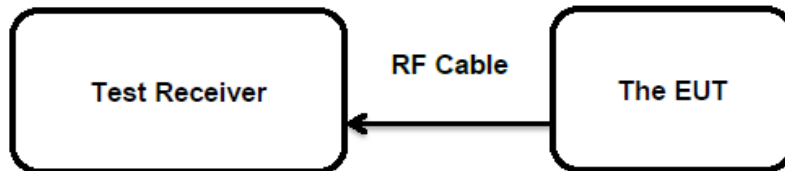
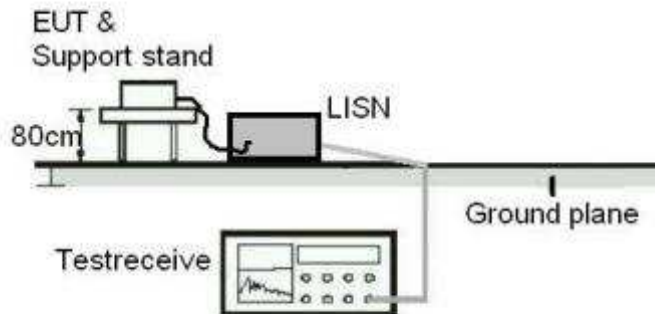


Diagram of Measurement Equipment Configuration for Mains Conduction Measurement



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.: CN21X0J6 001
Test report no.

Seite 14 von 29
Page 14 of 29

5.1.2 20dB Bandwidth

RESULT:

Pass

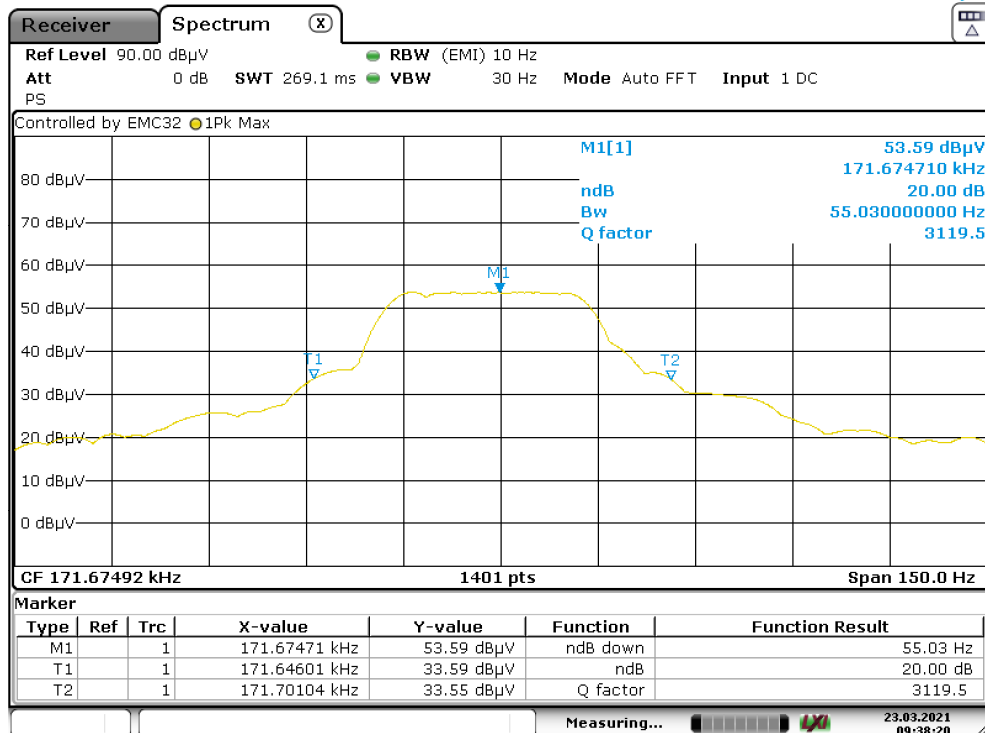
Test Specification

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

Test Setup

Date of testing : 23.03.2021
Input voltage : AC 120V, 60Hz
Operation mode : A
Ambient temperature : 25 °C
Relative humidity : 56 %
Atmospheric pressure : 101 kPa

For details refer to following test result.



Date: 23.MAR.2021 09:38:20

Prüfbericht - Nr.: CN21X0J6 001
Test report no.

Seite 15 von 29
Page 15 of 29

5.1.3 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

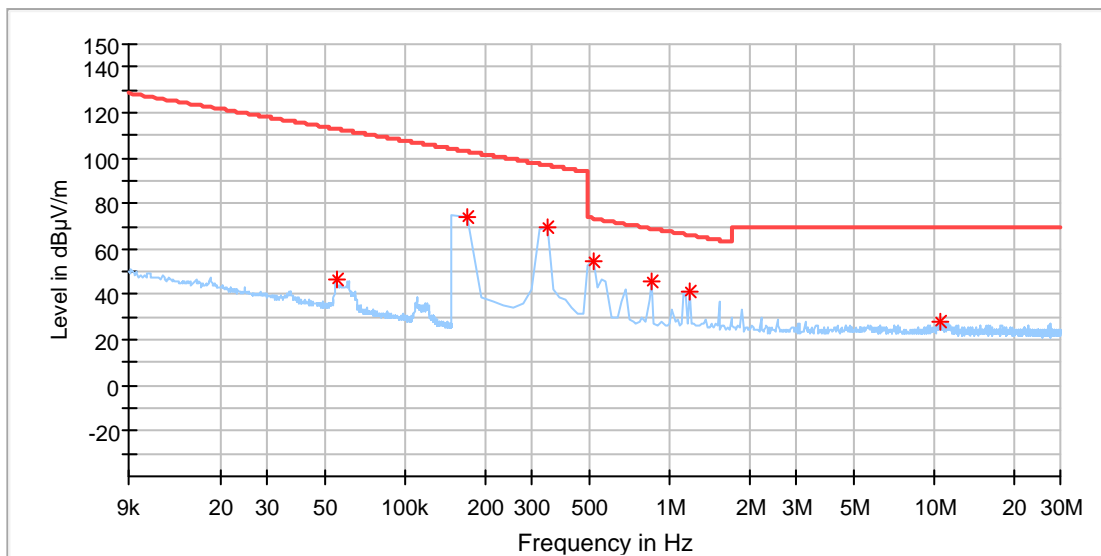
Test Setup

Date of testing : 23.03.2021
Input voltage : AC 120V, 60Hz
Operation mode : A
Ambient temperature : 23 °C
Relative humidity : 48 %
Atmospheric pressure : 101 kPa

For details refer to following test result.

EUT Information

EUT Name: Wireless Charger
 Model: IDFQISS21-256
 Test Mode: TX
 Test Voltage:: 120V/60Hz
 Remark: Temp 23 Humi:48%
 Test Standard: FCC Part 15C
 Tested By: Alano Qu
 Reviewed By: Terry Yin



Critical Freqs

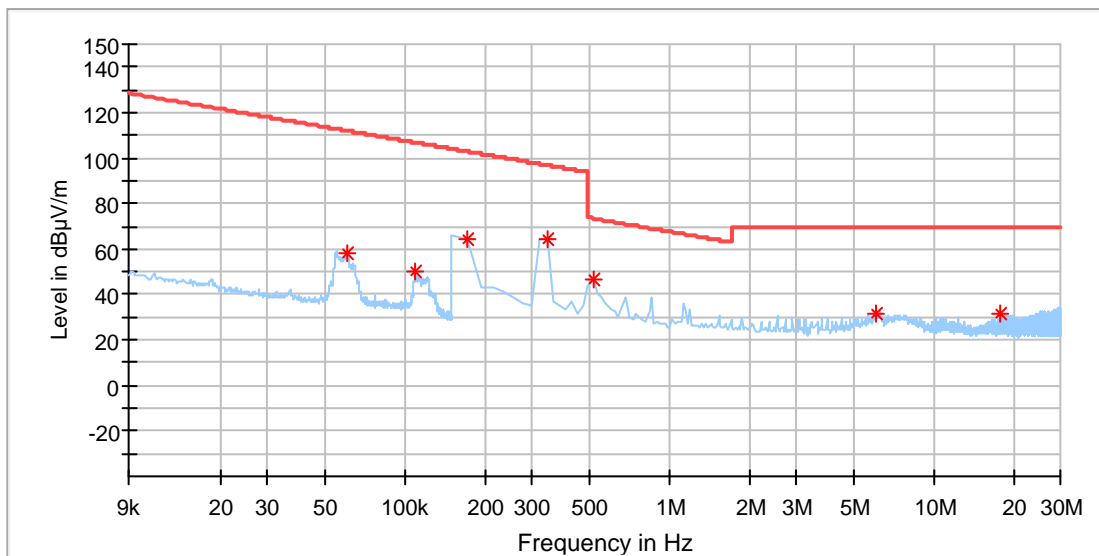
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.055026	46.40	112.78	66.38	100.0	X	279.0	20.1
0.171322	73.69	102.92	29.23	100.0	X	351.0	20.1
0.341893	69.97	96.92	26.95	100.0	X	0.0	20.1
0.512464	54.89	73.41	18.52	100.0	X	0.0	20.1
0.853607	46.09	68.99	22.91	100.0	X	0.0	20.1
1.194750	41.03	66.08	25.05	100.0	X	351.0	20.1
10.533536	27.93	69.50	41.57	100.0	X	54.0	20.4

Prüfbericht - Nr.: CN21X0J6 001
Test report no.

Seite 17 von 29
Page 17 of 29

EUT Information

EUT Name: Wireless Charger
 Model: IDFQISS21-256
 Test Mode: TX
 Test Voltage:: 120V/60Hz
 Remark: Temp 23 Humi:48%
 Test Standard: FCC Part 15C
 Tested By: Alano Qu
 Reviewed By: Terry Yin

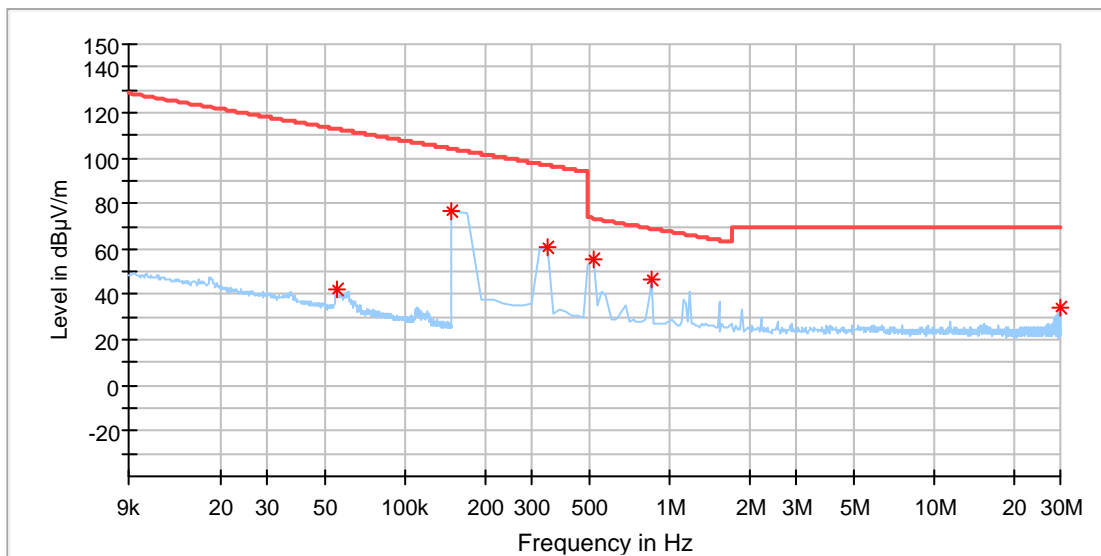


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.060364	58.12	111.98	53.86	100.0	Y	354.0	20.1
0.109211	49.80	106.83	57.03	100.0	Y	306.0	20.1
0.171322	64.58	102.92	38.34	100.0	Y	76.0	20.1
0.341893	64.71	96.92	32.21	100.0	Y	274.0	20.1
0.512464	46.63	73.41	26.78	100.0	Y	76.0	20.1
6.077357	31.74	69.50	37.76	100.0	Y	201.0	20.3
17.676214	31.79	69.50	37.71	100.0	Y	298.0	20.5

EUT Information

EUT Name: Wireless Charger
 Model: IDFQISS21-256
 Test Mode: TX
 Test Voltage:: 120V/60Hz
 Remark: Temp 23 Humi:48%
 Test Standard: FCC Part 15C
 Tested By: Alano Qu
 Reviewed By: Terry Yin

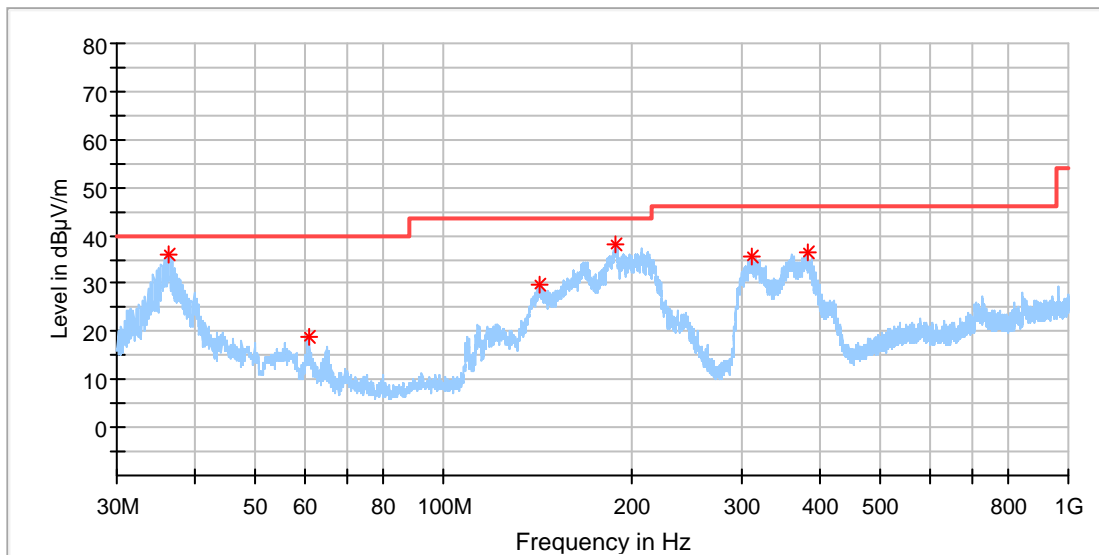


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.055228	42.60	112.75	70.15	100.0	Z	355.0	20.1
0.150000	76.67	104.08	27.41	100.0	Z	0.0	20.1
0.341893	60.33	96.92	36.59	100.0	Z	198.0	20.1
0.512464	55.54	73.41	17.87	100.0	Z	0.0	20.1
0.853607	46.92	68.99	22.07	100.0	Z	324.0	20.1
29.893393	33.81	69.50	35.69	100.0	Z	0.0	20.7

EUT Information

EUT Name: Wireless Charger
 Model: IDFQISS21-256
 Test Mode: TX
 Test Voltage:: 120V/60Hz
 Remark: Temp 23 Humi:55%
 Test Standard: FCC PART 15C
 Tested By: Alano Qu
 Reviewed By: Terry Yin



Critical Freqs

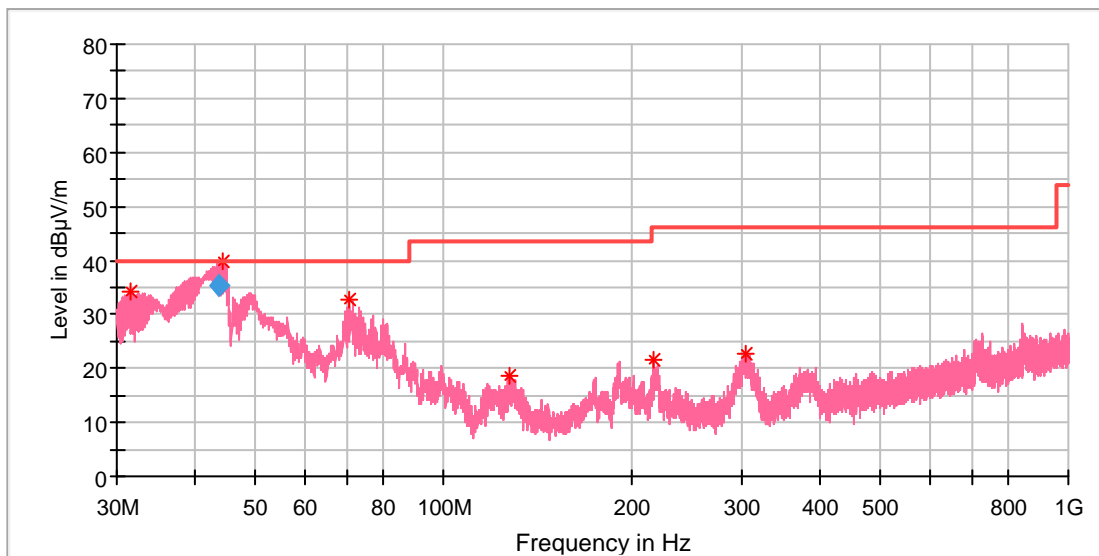
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
36.402000	35.90	40.00	4.10	100.0	H	140.0	-21.7
60.749000	18.76	40.00	21.24	100.0	H	186.0	-19.5
142.326000	29.73	43.50	13.77	100.0	H	309.0	-22.6
187.916000	38.00	43.50	5.50	100.0	H	89.0	-20.1
311.445500	35.80	46.00	10.20	100.0	H	18.0	-16.3
382.740500	36.41	46.00	9.59	100.0	H	246.0	-14.5

Prüfbericht - Nr.: **CN21X0J6 001**
Test report no.

Seite 20 von 29
Page 20 of 29

EUT Information

EUT Name: Wireless Charger
 Model: IDFQISS21-256
 Test Mode: TX
 Test Voltage:: 120V/60Hz
 Remark: Temp 23 Humi:48%
 Test Standard: FCC Part 15C
 Tested By: Alano Qu
 Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.529615	34.12	40.00	5.88	100.0	V	266.0	-22.8
44.438077	39.98	40.00	0.02	100.0	V	266.0	-18.9
70.851923	32.79	40.00	7.21	100.0	V	218.0	-22.1
127.671539	18.52	43.50	24.98	100.0	V	6.0	-21.6
216.799615	21.42	46.00	24.58	100.0	V	207.0	-18.7
303.950385	22.70	46.00	23.30	100.0	V	147.0	-16.2

Final Result

Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
43.858431	35.17	40.00	4.83	100.0	V	311.0	-19.1

Prüfbericht - Nr.: CN21X0J6 001
Test report no.

Seite 21 von 29
Page 21 of 29

5.1.4 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 : 25.03.2021
Input voltage : AC 120V/60Hz
Operation mode : B
Earthing : Not connected
Ambient temperature : 22 °C
Relative humidity : 55 %
Atmospheric pressure : 101 kPa

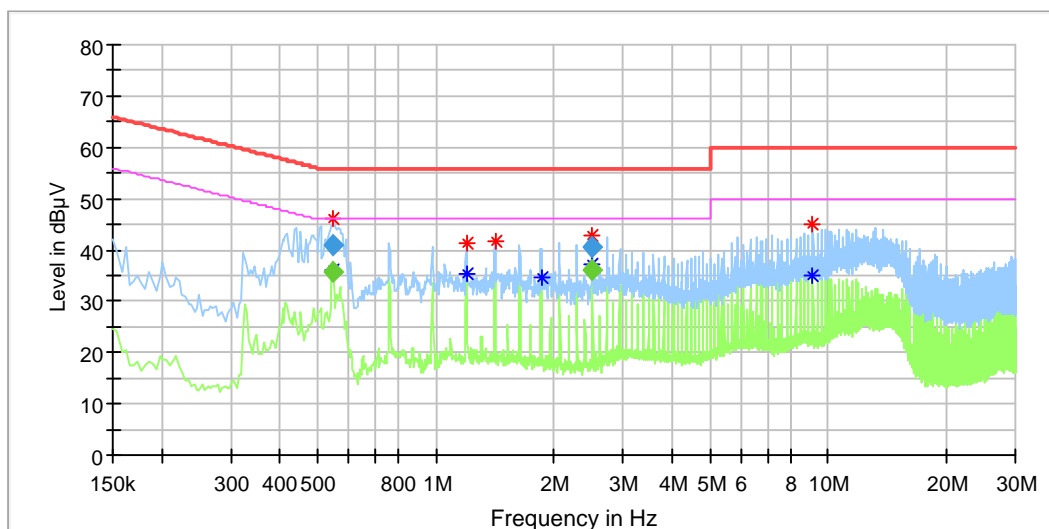
For the measurement records, refer to the appendix C.

Prüfbericht - Nr.: **CN21X0J6 001**
Test report no.

Seite 22 von 29
Page 22 of 29

EUT Information

EUT Name: Wireless Charger
Model: IDFQISS21-256
Test Model: Full Load
Test Voltage: AC 120v/60hz
Test By: Charlie Zha
Review By: Gary Chen
Remark: SR2



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Bandwidth (kHz)	Line
0.545500	45.97	---	56.00	10.03	---	L1
0.545500	---	36.12	46.00	9.88	---	L1
1.198000	41.46	---	56.00	14.54	---	L1
1.198000	---	35.18	46.00	10.82	---	L1
1.418000	41.86	---	56.00	14.14	---	L1
1.854000	---	34.62	46.00	11.38	---	L1
2.505500	42.92	---	56.00	13.08	---	L1
2.505500	---	37.17	46.00	8.83	---	L1
9.154000	---	34.81	50.00	15.19	---	L1
9.154000	45.02	---	60.00	14.98	---	L1

Final_Result

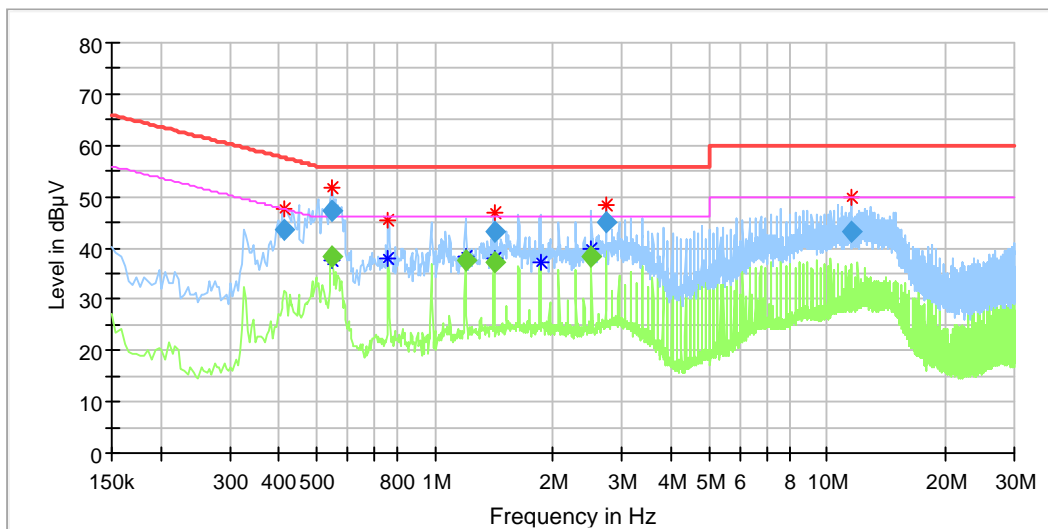
Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.545500	---	35.88	46.00	10.12	1000.0	9.000	L1
0.545500	41.04	---	56.00	14.96	1000.0	9.000	L1
2.505500	---	35.99	46.00	10.01	1000.0	9.000	L1
2.505500	40.52	---	56.00	15.48	1000.0	9.000	L1

Prüfbericht - Nr.: CN21X0J6 001
 Test report no.

Seite 23 von 29
 Page 23 of 29

EUT Information

EUT Name: Wireless Charger
 Model: IDFQISS21-256
 Test Model: Full Load
 Test Voltage: AC 120v/60hz
 Test By: Charlie Zha
 Review By: Gary Chen
 Remark: SR2



Final Result

Frequency (MHz)	QuasiPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line
0.413500	43.63	---	57.58	13.95	1000.0	9.000	N
0.545500	---	38.23	46.00	7.77	1000.0	9.000	N
0.545500	47.21	---	56.00	8.79	1000.0	9.000	N
1.197500	---	37.52	46.00	8.48	1000.0	9.000	N
1.417500	43.25	---	56.00	12.75	1000.0	9.000	N
1.417500	---	37.20	46.00	8.80	1000.0	9.000	N
2.505500	---	38.50	46.00	7.50	1000.0	9.000	N
2.725500	45.14	---	56.00	10.86	1000.0	9.000	N
11.553500	43.06	---	60.00	16.94	1000.0	9.000	N

Prüfbericht - Nr.: CN21X0J6 001
Test report no.

Seite 24 von 29
Page 24 of 29

5.1.5 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 : 10m Semi-anechoic Chamber & 3m Full-anechoic Chamber

Test Setup

Date of testing : 17.12.2020
Input voltage : AC 120V, 60Hz
Operation mode : B
Earthing : Not Connected
Ambient temperature : 24.5 °C
Relative humidity : 59 %
Atmospheric pressure : 101 kPa

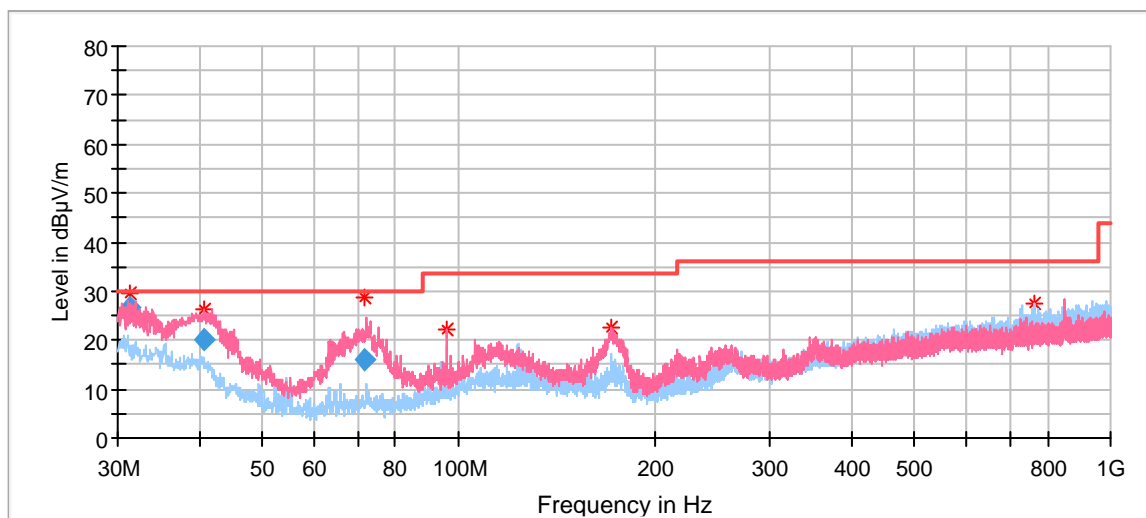
Remark:*- The highest frequency of internal sources of EUT is less than 108MHz, the measurement shall only be made up to 1GHz.

Prüfbericht - Nr.: **CN21X0J6 001**
Test report no.

Seite 25 von 29
Page 25 of 29

EUT Information

EUT Name: Wireless Charger
Model: IDFQISS21-258
Test Mode: Full Load
Test Voltage: AC 120v/60hz
Test By: Charlie zha
Review By: Gary Chen
Remark: 10m Chamber



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.366111	29.36	30.00	0.64	104.0	V	253.0	-5.9
40.815556	26.31	30.00	3.69	100.0	V	176.0	-11.7
71.688889	28.67	30.00	1.33	246.0	V	77.0	-17.4
95.744444	22.28	33.50	11.22	100.0	V	0.0	-13.6
170.865556	22.67	33.50	10.83	100.0	V	162.0	-14.2
764.074444	27.38	36.00	8.62	200.0	H	309.0	-6.4

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)
31.366111	26.63	30.00	3.37	1000.0	120.000	104.0	V	253.0	-5.6
40.815556	20.22	30.00	9.78	1000.0	120.000	100.0	V	176.0	-11.1
71.688889	16.20	30.00	13.80	1000.0	120.000	246.0	V	77.0	-17.4

6 Safety Human Exposure

6.1 Radio Frequency Exposure Compliance

6.1.1 Electromagnetic Fields

RESULT:

Pass

Test Specification

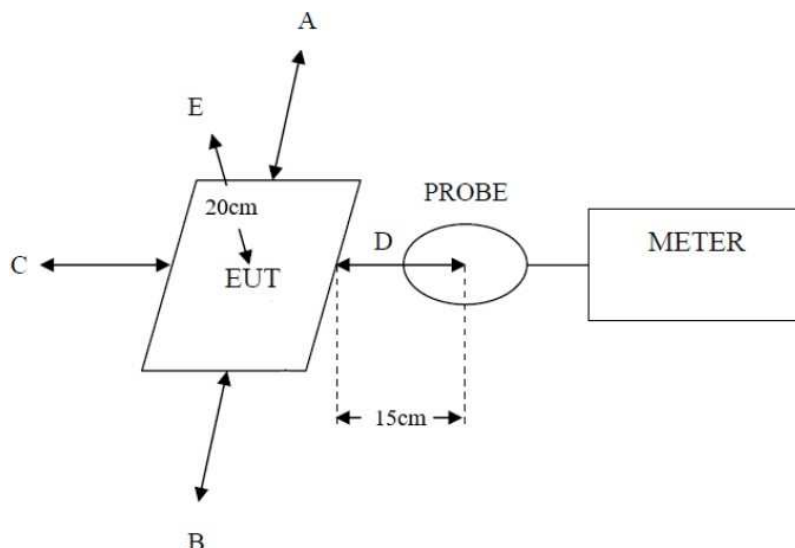
Test standard : CFR47 FCC Part 2: Subpart J Section 1.1310
FCC CFR 47 Part 1(1.1310) KDB 680106 D01 v03

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.: CN21X0J6 001
Test report no.

Seite 27 von 29
Page 27 of 29

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	0.2464	0.2384	0.2232	0.2248	0.2600	0.815	1.63	Pass

Prüfbericht - Nr.: CN21X0J6 001
Test report no.

Seite 28 von 29
Page 28 of 29

7 Photographs of the Test Set-Up

Refer to 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 photos document