MPE TEST REPORT

Test Report No.: 13762998H

Applicant	:	**Panasonic Corporation**
Type of EUT	:	**Wireless Charger**
Model Number of EUT	:	**AF2201**
FCC ID	:	**ACJ932AF2201**
Test standard	:	**FCC rule §1.1310** **Radiofrequency radiation exposure limits.** ***This test report has issued for MPE testing by wireless charger according to KDB 680106 D01 v03r01.**
Test Result	:	**Complied (Refer to SECTION 3)**

1. This test report shall not be reproduced in full or partial, without the written approval of UL Japan, Inc.
2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the limits of the above standard.
4. The test results in this test report are traceable to the national or international standards.
5. This test report must not be used by the customer to claim product certification, approval, or endorsement by the A2LA accreditation body.
6. This test report covers Radio technical requirements. It does not cover administrative issues such as Manual or non-Radio test related Requirements. (if applicable)
7. The all test items in this test report are conducted by UL Japan, Inc. Ise EMC Lab.
8. The opinions and the interpretations to the result of the description in this report are outside scopes where UL Japan has been accredited.
9. The information provided from the customer for this report is identified in Section 1.

Date of test: May 31, 2021

Representative test engineer:
Hiroyuki Furutaka
Engineer

Approved by:
Tsubasa Takayama
Leader

CERTIFICATE 5107.02

☐ The testing in which "Non-accreditation" is displayed is outside the accreditation scopes in UL Japan.
☒ There is no testing item of "Non-accreditation".

REVISION HISTORY

Original Test Report No.: 13762998H

Revision	Test report No.	Date	Page revised	Contents
- (Original)	13762998H	July 1, 2021	-	-

Reference: Abbreviations (Including words undescribed in this report)

A2LA	The American Association for Laboratory Accreditation
AC	Alternating Current
AFH	Adaptive Frequency Hopping
AM	Amplitude Modulation
Amp, AMP	Amplifier
ANSI	American National Standards Institute
Ant, ANT	Antenna
AP	Access Point
ASK	Amplitude Shift Keying
Atten., ATT	Attenuator
AV	Average
BPSK	Binary Phase-Shift Keying
BR	Bluetooth Basic Rate
BT	Bluetooth
BT LE	Bluetooth Low Energy
BW	BandWidth
Cal Int	Calibration Interval
CCK	Complementary Code Keying
Ch., CH	Channel
CISPR	Comite International Special des Perturbations Radioelectriques
CW	Continuous Wave
DBPSK	Differential BPSK
DC	Direct Current
DFS	Dynamic Frequency Selection
DQPSK	Differential QPSK
DSSS	Direct Sequence Spread Spectrum
EDR	Enhanced Data Rate
EIRP, e.i.r.p.	Equivalent Isotropically Radiated Power
EMC	ElectroMagnetic Compatibility
EMI	ElectroMagnetic Interference
EN	European Norm
ERP, e.r.p.	Effective Radiated Power
EU	European Union
EUT	Equipment Under Test
Fac.	Factor
FCC	Federal Communications Commission
FHSS	Frequency Hopping Spread Spectrum
FM	Frequency Modulation
Freq.	Frequency
FSK	Frequency Shift Keying
GFSK	Gaussian Frequency-Shift Keying
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
Hori.	Horizontal
ICES	Interference-Causing Equipment Standard
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers
IF	Intermediate Frequency
ILAC	International Laboratory Accreditation Conference
ISED	Innovation, Science and Economic Development Canada
ISO	International Organization for Standardization
JAB	Japan Accreditation Board
LAN	Local Area Network
LIMS	Laboratory Information Management System
MCS	Modulation and Coding Scheme
MRA	Mutual Recognition Arrangement
NIST	National Institute of Standards and Technology
NS	No signal detect.
NSA	Normalized Site Attenuation
NVLAP	National Voluntary Laboratory Accreditation Program
OBW	Occupied Band Width
OFDM	Orthogonal Frequency Division Multiplexing
OOK	On Off Keying
P/M	Power meter
PCB	Printed Circuit Board
PER	Packet Error Rate
PHY	Physical Layer
PK	Peak
PN	Pseudo random Noise
PRBS	Pseudo-Random Bit Sequence
PSD	Power Spectral Density
QAM	Quadrature Amplitude Modulation
QP	Quasi-Peak
QPSK	Quadri-Phase Shift Keying
RBW	Resolution Band Width
RDS	Radio Data System
RE	Radio Equipment
RF	Radio Frequency
RMS	Root Mean Square
RSS	Radio Standards Specifications
Rx	Receiving
SA, S/A	Spectrum Analyzer
SG	Signal Generator
SVSWR	Site-Voltage Standing Wave Ratio
TR	Test Receiver
Tx	Transmitting
VBW	Video BandWidth
Vert.	Vertical
WLAN	Wireless LAN

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SECTION 1 : Customer information

Company Name	:	Panasonic Corporation
Address	:	4261, Ikonobe-cho, Tsuzuki-ku, Yokohama-shi, Kanagawa-ken, 224-8520, Japan
Telephone Number	:	+81-80-3444-7148
Facsimile Number	:	+81-45-931-0806
Contact Person	:	Takahisa Sakai

The information provided from the customer is as follows;
- Applicant, Type of EUT, Model Number of EUT, FCC ID on the cover and other relevant pages
- Operating/Test Mode(s) (Mode(s)) on all the relevant pages
- SECTION 1: Customer information
- SECTION 2: Equipment under test (EUT)
- SECTION 4: Operation of EUT during testing

* The laboratory is exempted from liability of any test results affected from the above information in SECTION 2 and 4.

SECTION 2 : Equipment under test (EUT)

2.1. Identification of EUT

Type	:	Wireless Charger
Model Number	:	AF2201
Serial Number	:	Refer to SECTION 4.2
Rating	:	DC 10.5 V to 16.0 V (Typ. DC 12.0 V)
Receipt Date	:	April 16, 2021
Country of Mass-production	:	China and Thailand
Condition	:	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification	:	No Modification by the test lab.

2.2. Product Description

Model: AF2201 (referred to as the EUT in this report) is a Wireless Charger.

Feature of EUT	:	Press the supply switch of the wireless charger. Each press the power supply switch it on/off. When turned the hybrid system off, the state of the power supply for wireless charger is memorized. Place the charging side of the portable device (etc. mobile phone) down. When charging, the operation indicator light (orange) comes on. If charging is not occurring, try placing the portable device as close to the center of the charging area as possible. When charging is complete, the operation indicator light (green) comes on.

Radio Specification

Operating Frequency	:	120.3 kHz / 127.0 kHz / 127.5 kHz / 126.515 kHz to 128.549 kHz
Rated Output Power	:	5 W / 10 W
Coil system	:	Single Coil
Charging distance	:	Contact
Clock frequency (maximum)	:	8 MHz

*Test limit was applied to the test limit of 100 kHz - 300 kHz based on FCC rule Section 1.1310, according to KDB 680106 D01 RF Exposure Wireless Charging Apps Clause 3).

SECTION 3 : Test specification, procedures and results

3.1 Test specification

Title : FCC rule §1.1310 Radiofrequency radiation exposure limits.

Purpose of test Compliance with Radiofrequency radiation exposure limits.

3.2 Procedures & results

Item	Test Procedure	Limits	Deviation	Worst Margin	Result
MPE Limit	KDB 680106 D01 RF Exposure Wireless Charging Apps v03r01	Table 1(B)	N/A	Refer to section.5	Complied

*These tests were performed without any deviations from test procedure.

Table 1—Limits for Maximum Permissible Exposure (MPE)

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 Exposures				
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 - 1500			f/300	6
1500 - 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 - 1500			f/1500	30
1500 - 100,000			1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density
Note 1 to Table 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.
Note 2 to Table 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

Test limit was applied to the test limit of 100 kHz - 300 kHz based on FCC rule Section 1.1310, according to KDB 680106 D01 RF Exposure Wireless Charging Apps Section 3 c).

KDB 680106 D01 RF Exposure Wireless Charging Apps requires following contents in order to exclude RF exposure evaluation.

a). Power transfer frequency is less than 1 MHz.
b). Output power from each primary coil is less than or equal to 15 watts.
c). The system may consist of more than one source primary coils, charging one or more clients. If more than one primary coil is present, the coil pairs may be powered on at the same time.
d). Client device is placed directly in contact with the transmitter.
e). Mobile exposure conditions only (portable exposure conditions are not covered by this exclusion).
f). The aggregate H-field strengths anywhere at or beyond 15 cm surrounding the device, and 20 cm away from the surface from all coils that by design can simultaneously transmit, and while those coils are simultaneously energized, are demonstrated to be less than 50% of the applicable MPE limit.

All requests were complied.

Also, Test data used Exposure Level Tester is complied KDB 680106 D01 RF Exposure Wireless Charging Apps Section 3 c).

3.3 Confirmation

UL Japan, Inc. hereby confirms that EUT, in the configuration tested, complies with the specifications KDB 680106 D01 RF Exposure Wireless Charging Apps.
And Model: AF2201(referred to as the EUT in this report) is a Wireless Charger.

3.4 Uncertainty

Although this standard determines only the limit value of uncertainty, there is no applicable rule of uncertainty in this. Therefore, the following results are derived depending on whether or not laboratory uncertainty is applied.

EMF
The following uncertainties have been calculated to provide a confidence level of 95 % using a coverage factor $k = 2$.

1 Hz - 400 kHz (H-Field) ELT400	9.23 %
100 kHz - 3 GHz (E-Field) SEF-01, SEF-05	24.16 %

*The worst value in the test range was applied.

3.5 Test Location

UL Japan, Inc. Ise EMC Lab.
*A2LA Certificate Number: 5107.02 / FCC Test Firm Registration Number: 199967
ISED Lab Company Number: 2973C / CAB identifier: JP0002
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone: +81 596 24 8999, Facsimile: +81 596 24 8124

Test site	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms	Maximum measurement distance
No.1 semi-anechoic chamber	19.2 x 11.2 x 7.7	7.0 x 6.0	No.1 Power source room	10 m
No.2 semi-anechoic chamber	7.5 x 5.8 x 5.2	4.0 x 4.0	-	3 m
No.3 semi-anechoic chamber	12.0 x 8.5 x 5.9	6.8 x 5.75	No.3 Preparation room	3 m
No.3 shielded room	4.0 x 6.0 x 2.7	N/A	-	-
No.4 semi-anechoic chamber	12.0 x 8.5 x 5.9	6.8 x 5.75	No.4 Preparation room	3 m
No.4 shielded room	4.0 x 6.0 x 2.7	N/A	-	-
No.5 semi-anechoic chamber	6.0 x 6.0 x 3.9	6.0 x 6.0	-	-
No.5 measurement room	6.4 x 6.4 x 3.0	6.4 x 6.4	-	-
No.6 shielded room	4.0 x 4.5 x 2.7	4.0 x 4.5	-	-
No.6 measurement room	4.75 x 5.4 x 3.0	4.75 x 4.15	-	-
No.7 shielded room	4.7 x 7.5 x 2.7	4.7 x 7.5	-	-
No.8 measurement room	3.1 x 5.0 x 2.7	3.1 x 5.0	-	-
No.9 measurement room	8.8 x 4.6 x 2.8	2.4 x 2.4	-	-
No.10 shielded room	3.8 x 2.8 x 2.8	3.8 x 2.8	-	-
No.11 measurement room	4.0 x 3.4 x 2.5	N/A	-	-
No.12 measurement room	2.6 x 3.4 x 2.5	N/A	-	-

3.6 Test data, Test instruments, and Test set up

Refer to APPENDIX.

SECTION 4 : Operation of EUT during testing

4.1 Operating modes

The EUT exercise program used during testing was designed to exercise the various system components in a manner similar to typical use. Test configuration was adjusted maximum output power of EUT.

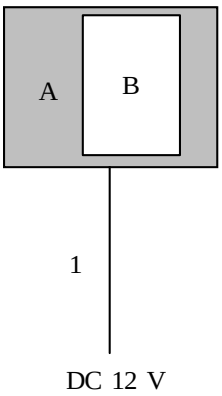
Test sequence is used:

Test mode		Remarks
1)	Normal Operating mode (120.3 kHz / 5 W)	Mode 1
2)	Normal Operating mode (127.5 kHz / 10 W)	Mode 2
3)	Normal Operating mode (127.0 kHz / 5 W)	Mode 3
4)	Normal Operating mode (127.627 kHz / 10 W)	Mode 4
5)	Normal Operating mode (127.756 kHz / 10 W)	Mode 5
6)	Normal Operating mode (128.016 kHz / 10 W)	Mode 6
7)	Normal Operating mode (128.549 kHz / 10 W)	Mode 7
8)	Normal Operating mode (127.373 kHz / 10 W)	Mode 8
9)	Normal Operating mode (127.248 kHz / 10 W)	Mode 9
10)	Normal Operating mode (126.999 kHz / 10 W)	Mode 10
11)	Normal Operating mode (126.515 kHz / 10 W)	Mode 11

Justification: The system was configured in typical fashion (as a customer would normally use it) for testing.

4.2 Configuration and peripherals

[Mode 1 to 3]



* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

Description of EUT and Support equipment

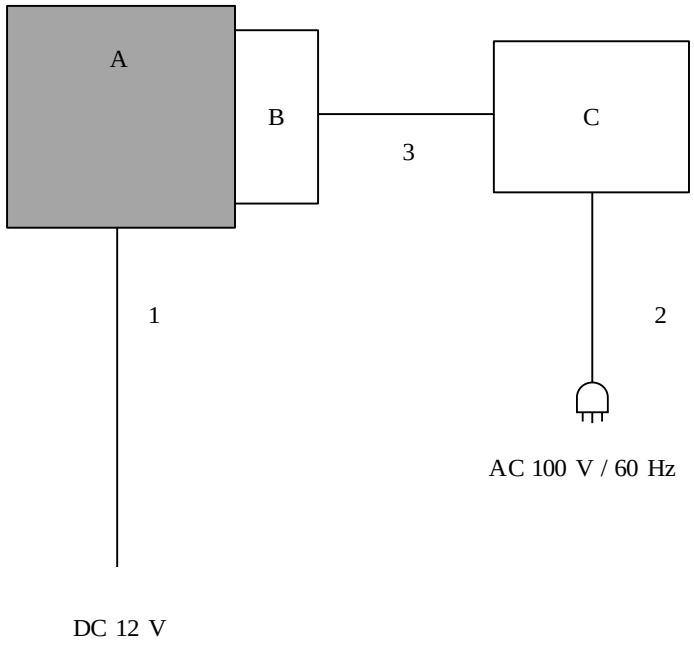
No.	Item	Model number	Serial number	Manufacturer	Remarks
A	Wireless Charger	AF2201	500051	Panasonic Corporation	EUT
B	Test Jig	PAS-JS100	103	Panasonic Corporation	-

*A and B communicates and charges via air interface.

List of cables used

No.	Name	Length (m)	Shield		Remark
			Cable	Connector	
1	DC Cable	2.2	Unshielded	Unshielded	-

[**Mode 4 to 11**]



* Cabling and setup(s) were taken into consideration and test data was taken under worse case conditions.

Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	Remarks
A	Wireless Charger	AF2201	500051	Panasonic Corporation	EUT
B	Reference Receiver	TPR#MP1B	103	Nok9	-
C	Qi Reference Tester	CATSII Qi BST	200134-1807	Nok9	-

*A and B communicates and charges via air interface.

List of cables used

No.	Name	Length (m)	Shield		Remark
			Cable	Connector	
1	DC Cable	2.2	Unshielded	Unshielded	-
2	AC Cable	1.8	Unshielded	Unshielded	-
3	Communication Cable	0.6	Shielded	Shielded	-

SECTION 5 : MPE Limit [KDB 680106 Section 3) (FCC § 1.1310)]

5.1. Operating environment

This test was carried out in No.6 shielded room

Date	:	May 31, 2021
Temperature	:	23 deg.C
Humidity	:	50 % RH
Engineer	:	Hiroyuki Furutaka

5.2. Test configuration

The EUT was placed on a non-metalilic of 0.8m above the reference ground plane.
Worst position is shown in the photos in Appendix 2.

5.3. Test conditions

EUT position : Table top

5.4. Test procedure

The test of the weighted result has been performed using time domain evaluation.
Sensor locations : Around from 10 cm to 40 cm

5.5. Results

Summary of the test results : Complied

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APPENDIX 1: Test data

Magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 1

Operating Frequency	0.1203 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2540	0.2021	pass
15cm	0.1890	0.1504	pass
20cm	0.1670	0.1329	pass
30cm	0.1500	0.1193	pass
40cm	0.1090	0.0867	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2700	0.2148	pass
15cm	0.1780	0.1416	pass
20cm	0.1680	0.1337	pass
30cm	0.1430	0.1138	pass
40cm	0.1230	0.0979	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2980	0.2371	pass
15cm	0.2130	0.1695	pass
20cm	0.1980	0.1575	pass
30cm	0.1870	0.1488	pass
40cm	0.1670	0.1329	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3010	0.2395	pass
15cm	0.2230	0.1774	pass
20cm	0.2030	0.1615	pass
30cm	0.1840	0.1464	pass
40cm	0.1700	0.1352	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2980	0.2371	pass
15cm	0.2130	0.1695	pass
20cm	0.1950	0.1551	pass
30cm	0.1810	0.1440	pass
40cm	0.1650	0.1313	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2340	0.1862	pass
15cm	0.1610	0.1281	pass
20cm	0.1500	0.1193	pass
30cm	0.1410	0.1122	pass
40cm	0.1400	0.1114	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 1

Operating Frequency		**0.1203**	MHz
	Limit	**614.00**	V/m

*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result
3cm	0.85	pass	0.79	pass	1.25	pass	1.63	pass	2.38	pass	0.57	pass
10cm	0.59	pass	0.56	pass	0.63	pass	0.78	pass	0.83	pass	0.50	pass
15cm	0.57	pass	0.50	pass	0.50	pass	0.67	pass	0.65	pass	0.49	pass
20cm	0.52	pass	0.45	pass	0.47	pass	0.60	pass	0.54	pass	0.44	pass
30cm	0.47	pass	0.43	pass	0.39	pass	0.54	pass	0.46	pass	0.42	pass
40cm	0.38	pass	0.40	pass	0.37	pass	0.43	pass	0.34	pass	0.36	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

UL Japan, Inc.
Ise EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8999
Facsimile : +81 596 24 8124

Magnetic field strength

Report No. 13762998H
Test place Ise EMC Lab. No.6 shielded room
Date May 31, 2021
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Hiroyuki Furutaka
Mode Mode 2

Operating Frequency	0.1275 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2230	0.1774	pass
15cm	0.2000	0.1591	pass
20cm	0.1670	0.1329	pass
30cm	0.1560	0.1241	pass
40cm	0.1340	0.1066	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3340	0.2657	pass
15cm	0.2560	0.2037	pass
20cm	0.1980	0.1575	pass
30cm	0.1670	0.1329	pass
40cm	0.1440	0.1146	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3280	0.2609	pass
15cm	0.2740	0.2180	pass
20cm	0.1890	0.1504	pass
30cm	0.1780	0.1416	pass
40cm	0.1560	0.1241	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3240	0.2578	pass
15cm	0.2650	0.2108	pass
20cm	0.1870	0.1488	pass
30cm	0.1720	0.1368	pass
40cm	0.1510	0.1201	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3560	0.2832	pass
15cm	0.2760	0.2196	pass
20cm	0.1890	0.1504	pass
30cm	0.1700	0.1352	pass
40cm	0.1530	0.1217	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2560	0.2037	pass
15cm	0.1650	0.1313	pass
20cm	0.1560	0.1241	pass
30cm	0.1450	0.1154	pass
40cm	0.1400	0.1114	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 2

Operating Frequency		**0.1275**	MHz
	Limit	**614.00**	V/m

*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result
3cm	1.52	pass	1.14	pass	2.07	pass	2.11	pass	3.90	pass	0.70	pass
10cm	1.15	pass	0.89	pass	0.98	pass	0.87	pass	1.27	pass	0.54	pass
15cm	0.70	pass	0.76	pass	0.71	pass	0.69	pass	0.72	pass	0.47	pass
20cm	0.63	pass	0.65	pass	0.68	pass	0.61	pass	0.65	pass	0.40	pass
30cm	0.45	pass	0.51	pass	0.52	pass	0.54	pass	0.55	pass	0.36	pass
40cm	0.33	pass	0.43	pass	0.47	pass	0.40	pass	0.41	pass	0.32	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

Magnetic field strength

Report No. 13762998H
Test place Ise EMC Lab. No.6 shielded room
Date May 31, 2021
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Hiroyuki Furutaka
Mode Mode 3

Operating Frequency	0.127 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2580	0.2053	pass
15cm	0.1870	0.1488	pass
20cm	0.1650	0.1313	pass
30cm	0.1450	0.1154	pass
40cm	0.1110	0.0883	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2760	0.2196	pass
15cm	0.1870	0.1488	pass
20cm	0.1700	0.1352	pass
30cm	0.1500	0.1193	pass
40cm	0.1200	0.0955	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2890	0.2299	pass
15cm	0.2030	0.1615	pass
20cm	0.1850	0.1472	pass
30cm	0.1780	0.1416	pass
40cm	0.1560	0.1241	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2890	0.2299	pass
15cm	0.2030	0.1615	pass
20cm	0.1920	0.1527	pass
30cm	0.1760	0.1400	pass
40cm	0.1610	0.1281	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2970	0.2363	pass
15cm	0.2110	0.1679	pass
20cm	0.1910	0.1519	pass
30cm	0.1780	0.1416	pass
40cm	0.1600	0.1273	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2230	0.1774	pass
15cm	0.1630	0.1297	pass
20cm	0.1510	0.1201	pass
30cm	0.1430	0.1138	pass
40cm	0.1420	0.1130	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
Reading is from measurement tool ELT-400.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 3

Operating Frequency		**0.127**	MHz
	Limit	**614.00**	V/m

*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**
3cm	0.88	pass	0.81	pass	1.27	pass	1.46	pass	2.35	pass	0.55	pass
10cm	0.63	pass	0.65	pass	0.60	pass	0.56	pass	0.80	pass	0.49	pass
15cm	0.59	pass	0.52	pass	0.51	pass	0.50	pass	0.61	pass	0.48	pass
20cm	0.43	pass	0.40	pass	0.45	pass	0.43	pass	0.50	pass	0.43	pass
30cm	0.39	pass	0.39	pass	0.38	pass	0.41	pass	0.41	pass	0.42	pass
40cm	0.35	pass	0.33	pass	0.35	pass	0.34	pass	0.32	pass	0.33	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

UL Japan, Inc.
Ise EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8999
Facsimile : +81 596 24 8124

Magnetic field strength

Report No. 13762998H
Test place Ise EMC Lab. No.6 shielded room
Date May 31, 2021
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Hiroyuki Furutaka
Mode Mode 4

Operating Frequency	0.1203 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3130	0.2490	pass
15cm	0.2060	0.1639	pass
20cm	0.1730	0.1376	pass
30cm	0.1420	0.1130	pass
40cm	0.1240	0.0986	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3840	0.3055	pass
15cm	0.2340	0.1862	pass
20cm	0.1700	0.1352	pass
30cm	0.1400	0.1114	pass
40cm	0.1300	0.1034	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2780	0.2212	pass
15cm	0.2130	0.1695	pass
20cm	0.1890	0.1504	pass
30cm	0.1670	0.1329	pass
40cm	0.1340	0.1066	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.4890	0.3890	pass
15cm	0.2340	0.1862	pass
20cm	0.1820	0.1448	pass
30cm	0.1560	0.1241	pass
40cm	0.1310	0.1042	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.8610	0.6850	pass
15cm	0.2650	0.2108	pass
20cm	0.1780	0.1416	pass
30cm	0.1650	0.1313	pass
40cm	0.1420	0.1130	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.1990	0.1583	pass
15cm	0.1760	0.1400	pass
20cm	0.1570	0.1249	pass
30cm	0.1450	0.1154	pass
40cm	0.1400	0.1114	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
Reading is from measurement tool ELT-400.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 4

Operating Frequency		**0.1203**	MHz
	Limit	**614.00**	V/m

*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result
3cm	0.97	pass	1.02	pass	5.65	pass	7.03	pass	27.41	pass	0.73	pass
10cm	0.64	pass	0.68	pass	2.40	pass	1.43	pass	3.52	pass	0.46	pass
15cm	0.52	pass	0.54	pass	1.15	pass	0.91	pass	1.63	pass	0.42	pass
20cm	0.49	pass	0.50	pass	0.53	pass	0.52	pass	0.85	pass	0.39	pass
30cm	0.41	pass	0.40	pass	0.43	pass	0.44	pass	0.52	pass	0.37	pass
40cm	0.31	pass	0.33	pass	0.35	pass	0.30	pass	0.28	pass	0.36	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

UL Japan, Inc.
Ise EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8999
Facsimile : +81 596 24 8124

Magnetic field strength

Report No. 13762998H
Test place Ise EMC Lab. No.6 shielded room
Date May 31, 2021
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Hiroyuki Furutaka
Mode Mode 5

Operating Frequency	0.127756 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3210	0.2554	pass
15cm	0.2130	0.1695	pass
20cm	0.1780	0.1416	pass
30cm	0.1450	0.1154	pass
40cm	0.1230	0.0979	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3780	0.3007	pass
15cm	0.2360	0.1877	pass
20cm	0.1730	0.1376	pass
30cm	0.1430	0.1138	pass
40cm	0.1340	0.1066	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2790	0.2220	pass
15cm	0.2140	0.1702	pass
20cm	0.1870	0.1488	pass
30cm	0.1650	0.1313	pass
40cm	0.1370	0.1090	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.4870	0.3874	pass
15cm	0.2310	0.1838	pass
20cm	0.1800	0.1432	pass
30cm	0.1650	0.1313	pass
40cm	0.1320	0.1050	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.8590	0.6834	pass
15cm	0.2620	0.2084	pass
20cm	0.1760	0.1400	pass
30cm	0.1630	0.1297	pass
40cm	0.1410	0.1122	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.1980	0.1575	pass
15cm	0.1730	0.1376	pass
20cm	0.1540	0.1225	pass
30cm	0.1430	0.1138	pass
40cm	0.1380	0.1098	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 5

Operating Frequency		**0.127756** MHz	
	Limit	**614.00** V/m	*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result
3cm	0.98	pass	1.01	pass	5.64	pass	7.00	pass	27.44	pass	0.75	pass
10cm	0.65	pass	0.67	pass	2.41	pass	1.41	pass	3.55	pass	0.47	pass
15cm	0.54	pass	0.55	pass	1.12	pass	0.89	pass	1.66	pass	0.44	pass
20cm	0.51	pass	0.53	pass	0.54	pass	0.50	pass	0.87	pass	0.41	pass
30cm	0.43	pass	0.42	pass	0.46	pass	0.45	pass	0.55	pass	0.41	pass
40cm	0.32	pass	0.31	pass	0.34	pass	0.32	pass	0.30	pass	0.31	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

UL Japan, Inc.
Ise EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8999
Facsimile : +81 596 24 8124

Magnetic field strength

Report No. 13762998H
Test place Ise EMC Lab. No.6 shielded room
Date May 31, 2021
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Hiroyuki Furutaka
Mode Mode 6

Operating Frequency	0.128016 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3180	0.2530	pass
15cm	0.2030	0.1615	pass
20cm	0.1700	0.1352	pass
30cm	0.1460	0.1161	pass
40cm	0.1270	0.1010	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3970	0.3158	pass
15cm	0.2430	0.1933	pass
20cm	0.1780	0.1416	pass
30cm	0.1430	0.1138	pass
40cm	0.1340	0.1066	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2870	0.2283	pass
15cm	0.2230	0.1774	pass
20cm	0.1850	0.1472	pass
30cm	0.1690	0.1344	pass
40cm	0.1350	0.1074	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.4860	0.3866	pass
15cm	0.2310	0.1838	pass
20cm	0.1800	0.1432	pass
30cm	0.1540	0.1225	pass
40cm	0.1300	0.1034	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.8580	0.6826	pass
15cm	0.2600	0.2068	pass
20cm	0.1750	0.1392	pass
30cm	0.1620	0.1289	pass
40cm	0.1400	0.1114	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2030	0.1615	pass
15cm	0.1780	0.1416	pass
20cm	0.1580	0.1257	pass
30cm	0.1800	0.1432	pass
40cm	0.1430	0.1138	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 6

Operating Frequency		**0.128016** MHz	
	Limit	**614.00** V/m	*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result
3cm	0.96	pass	0.99	pass	5.67	pass	7.03	pass	27.42	pass	0.74	pass
10cm	0.64	pass	0.66	pass	2.43	pass	1.43	pass	3.52	pass	0.46	pass
15cm	0.52	pass	0.54	pass	1.15	pass	0.93	pass	1.63	pass	0.43	pass
20cm	0.50	pass	0.52	pass	0.56	pass	0.52	pass	0.83	pass	0.40	pass
30cm	0.42	pass	0.40	pass	0.48	pass	0.46	pass	0.54	pass	0.39	pass
40cm	0.30	pass	0.30	pass	0.35	pass	0.34	pass	0.32	pass	0.30	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

Magnetic field strength

Report No. 13762998H
Test place Ise EMC Lab. No.6 shielded room
Date May 31, 2021
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Hiroyuki Furutaka
Mode Mode 7

Operating Frequency	0.128549 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3140	0.2498	pass
15cm	0.2080	0.1655	pass
20cm	0.1740	0.1384	pass
30cm	0.1460	0.1161	pass
40cm	0.1310	0.1042	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3890	0.3095	pass
15cm	0.2390	0.1901	pass
20cm	0.1730	0.1376	pass
30cm	0.1430	0.1138	pass
40cm	0.1360	0.1082	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2870	0.2283	pass
15cm	0.2230	0.1774	pass
20cm	0.1910	0.1519	pass
30cm	0.1690	0.1344	pass
40cm	0.1390	0.1106	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.4920	0.3914	pass
15cm	0.2380	0.1893	pass
20cm	0.1830	0.1456	pass
30cm	0.1590	0.1265	pass
40cm	0.1340	0.1066	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.8760	0.6969	pass
15cm	0.2670	0.2124	pass
20cm	0.1820	0.1448	pass
30cm	0.1730	0.1376	pass
40cm	0.1450	0.1154	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2030	0.1615	pass
15cm	0.1790	0.1424	pass
20cm	0.1600	0.1273	pass
30cm	0.1480	0.1177	pass
40cm	0.1420	0.1130	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 7

Operating Frequency		**0.128549**	MHz
	Limit	**614.00**	V/m

*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result
3cm	1.02	pass	1.03	pass	5.67	pass	7.02	pass	27.55	pass	0.78	pass
10cm	0.67	pass	0.68	pass	2.45	pass	1.43	pass	3.57	pass	0.48	pass
15cm	0.55	pass	0.57	pass	1.14	pass	0.91	pass	1.68	pass	0.46	pass
20cm	0.53	pass	0.54	pass	0.56	pass	0.52	pass	0.89	pass	0.43	pass
30cm	0.45	pass	0.44	pass	0.48	pass	0.46	pass	0.57	pass	0.41	pass
40cm	0.34	pass	0.33	pass	0.36	pass	0.34	pass	0.32	pass	0.34	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

UL Japan, Inc.
Ise EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8999
Facsimile : +81 596 24 8124

Magnetic field strength

Report No. 13762998H
Test place Ise EMC Lab. No.6 shielded room
Date May 31, 2021
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Hiroyuki Furutaka
Mode Mode 8

Operating Frequency	0.127373 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3080	0.2450	pass
15cm	0.1980	0.1575	pass
20cm	0.1690	0.1344	pass
30cm	0.1400	0.1114	pass
40cm	0.1230	0.0979	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3790	0.3015	pass
15cm	0.2310	0.1838	pass
20cm	0.1680	0.1337	pass
30cm	0.1380	0.1098	pass
40cm	0.1310	0.1042	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2820	0.2243	pass
15cm	0.2190	0.1742	pass
20cm	0.1920	0.1527	pass
30cm	0.1720	0.1368	pass
40cm	0.1430	0.1138	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.4910	0.3906	pass
15cm	0.2380	0.1893	pass
20cm	0.1840	0.1464	pass
30cm	0.1580	0.1257	pass
40cm	0.1340	0.1066	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.8570	0.6818	pass
15cm	0.2620	0.2084	pass
20cm	0.1720	0.1368	pass
30cm	0.1600	0.1273	pass
40cm	0.1400	0.1114	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.1930	0.1535	pass
15cm	0.1730	0.1376	pass
20cm	0.1550	0.1233	pass
30cm	0.1430	0.1138	pass
40cm	0.1390	0.1106	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 8

Operating Frequency		**0.127373** MHz	
	Limit	**614.00** V/m	*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result	Reading (V/m)	Result
3cm	0.96	pass	0.99	pass	5.68	pass	7.12	pass	27.59	pass	0.80	pass
10cm	0.62	pass	0.65	pass	2.45	pass	1.56	pass	3.67	pass	0.50	pass
15cm	0.51	pass	0.52	pass	1.15	pass	0.98	pass	1.76	pass	0.48	pass
20cm	0.48	pass	0.51	pass	0.56	pass	0.65	pass	0.98	pass	0.44	pass
30cm	0.40	pass	0.41	pass	0.48	pass	0.55	pass	0.59	pass	0.42	pass
40cm	0.30	pass	0.32	pass	0.37	pass	0.38	pass	0.36	pass	0.34	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

UL Japan, Inc.
Ise EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8999
Facsimile : +81 596 24 8124

Magnetic field strength

Report No. 13762998H
Test place Ise EMC Lab. No.6 shielded room
Date May 31, 2021
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Hiroyuki Furutaka
Mode Mode 9

Operating Frequency	0.127248 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3180	0.2530	pass
15cm	0.2140	0.1702	pass
20cm	0.1760	0.1400	pass
30cm	0.1450	0.1154	pass
40cm	0.1280	0.1018	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3980	0.3166	pass
15cm	0.2450	0.1949	pass
20cm	0.1760	0.1400	pass
30cm	0.1460	0.1161	pass
40cm	0.1380	0.1098	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2870	0.2283	pass
15cm	0.2230	0.1774	pass
20cm	0.1920	0.1527	pass
30cm	0.1690	0.1344	pass
40cm	0.1370	0.1090	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.4930	0.3922	pass
15cm	0.2450	0.1949	pass
20cm	0.1880	0.1496	pass
30cm	0.1620	0.1289	pass
40cm	0.1340	0.1066	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.8730	0.6945	pass
15cm	0.2670	0.2124	pass
20cm	0.1820	0.1448	pass
30cm	0.1690	0.1344	pass
40cm	0.1450	0.1154	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2030	0.1615	pass
15cm	0.1870	0.1488	pass
20cm	0.1670	0.1329	pass
30cm	0.1480	0.1177	pass
40cm	0.1430	0.1138	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 9

Operating Frequency	**0.127248** MHz	
Limit	**614.00** V/m	*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**
3cm	1.02	pass	1.04	pass	5.76	pass	7.12	pass	27.58	pass	0.87	pass
10cm	0.68	pass	0.68	pass	2.56	pass	1.51	pass	3.78	pass	0.54	pass
15cm	0.58	pass	0.58	pass	1.23	pass	0.93	pass	1.78	pass	0.48	pass
20cm	0.55	pass	0.56	pass	1.67	pass	0.63	pass	0.98	pass	0.44	pass
30cm	0.45	pass	0.44	pass	0.56	pass	0.54	pass	0.59	pass	0.43	pass
40cm	0.36	pass	0.32	pass	0.41	pass	0.43	pass	0.37	pass	0.35	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

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Ise EMC Lab.
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8999
Facsimile : +81 596 24 8124

Magnetic field strength

Report No. 13762998H
Test place Ise EMC Lab. No.6 shielded room
Date May 31, 2021
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Hiroyuki Furutaka
Mode Mode 10

Operating Frequency	0.126999 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3340	0.2657	pass
15cm	0.2130	0.1695	pass
20cm	0.1870	0.1488	pass
30cm	0.1490	0.1185	pass
40cm	0.1340	0.1066	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3980	0.3166	pass
15cm	0.2450	0.1949	pass
20cm	0.1870	0.1488	pass
30cm	0.1540	0.1225	pass
40cm	0.1410	0.1122	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2890	0.2299	pass
15cm	0.2240	0.1782	pass
20cm	0.1940	0.1543	pass
30cm	0.1740	0.1384	pass
40cm	0.1450	0.1154	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.4980	0.3962	pass
15cm	0.2450	0.1949	pass
20cm	0.1920	0.1527	pass
30cm	0.1670	0.1329	pass
40cm	0.1450	0.1154	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.8720	0.6937	pass
15cm	0.2760	0.2196	pass
20cm	0.1810	0.1440	pass
30cm	0.1720	0.1368	pass
40cm	0.1480	0.1177	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2030	0.1615	pass
15cm	0.1870	0.1488	pass
20cm	0.1670	0.1329	pass
30cm	0.1570	0.1249	pass
40cm	0.1460	0.1161	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 10

Operating Frequency	**0.126999** MHz	
Limit	**614.00** V/m	*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**
3cm	1.09	pass	1.12	pass	5.78	pass	7.12	pass	27.87	pass	0.79	pass
10cm	0.76	pass	0.78	pass	2.56	pass	1.54	pass	3.67	pass	0.50	pass
15cm	0.58	pass	0.58	pass	1.23	pass	0.93	pass	1.76	pass	0.48	pass
20cm	0.55	pass	0.57	pass	0.58	pass	0.65	pass	0.91	pass	0.44	pass
30cm	0.47	pass	0.44	pass	0.44	pass	0.52	pass	0.59	pass	0.42	pass
40cm	0.35	pass	0.33	pass	0.31	pass	0.41	pass	0.32	pass	0.34	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

Magnetic field strength

Report No. 13762998H
Test place Ise EMC Lab. No.6 shielded room
Date May 31, 2021
Temperature / Humidity 23 deg. C / 50 % RH
Engineer Hiroyuki Furutaka
Mode Mode 11

Operating Frequency	0.126515 MHz
	1.63 A/m *1)

Measurement distnace *2)	Front		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3230	0.2570	pass
15cm	0.2130	0.1695	pass
20cm	0.1760	0.1400	pass
30cm	0.1450	0.1154	pass
40cm	0.1340	0.1066	pass
Measurement distnace *2)	Rear		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.3870	0.3079	pass
15cm	0.2390	0.1901	pass
20cm	0.1730	0.1376	pass
30cm	0.1450	0.1154	pass
40cm	0.1370	0.1090	pass
Measurement distnace *2)	Left		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2810	0.2235	pass
15cm	0.2230	0.1774	pass
20cm	0.1930	0.1535	pass
30cm	0.1730	0.1376	pass
40cm	0.1380	0.1098	pass
Measurement distnace *2)	Right		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.4920	0.3914	pass
15cm	0.2430	0.1933	pass
20cm	0.1880	0.1496	pass
30cm	0.1650	0.1313	pass
40cm	0.1370	0.1090	pass
Measurement distnace *2)	Top		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.8730	0.6945	pass
15cm	0.2750	0.2188	pass
20cm	0.1870	0.1488	pass
30cm	0.1720	0.1368	pass
40cm	0.1470	0.1169	pass
Measurement distnace *2)	Bottom		
	Actual magnetic density(μT)	Magnetic field strength(A/m) *3)	Result
10cm	0.2030	0.1615	pass
15cm	0.1870	0.1488	pass
20cm	0.1630	0.1297	pass
30cm	0.1560	0.1241	pass
40cm	0.1480	0.1177	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.
*3):This value was caluculated by following fomula.
*Magnetic field strength [A/m]= Magnetic densty / 4π*10(-7)

*Test result is less than 50 % of the MPE limit.

Electro-magnetic field strength

Report No.	13762998H
Test place	Ise EMC Lab. No.6 shielded room
Date	May 31, 2021
Temperature / Humidity	23 deg. C / 50 % RH
Engineer	Hiroyuki Furutaka
Mode	Mode 11

Operating Frequency	**0.126515** MHz	
Limit	**614.00** V/m	*1)

*2)	Front		Rear		Right		Left		Top		Bottom	
	Reading (V/m)	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**	**Reading (V/m)**	**Result**
3cm	1.07	pass	1.03	pass	5.67	pass	7.09	pass	27.72	pass	0.81	pass
10cm	0.78	pass	0.73	pass	2.45	pass	1.50	pass	3.61	pass	0.52	pass
15cm	0.60	pass	0.52	pass	1.16	pass	0.90	pass	1.65	pass	0.50	pass
20cm	0.56	pass	0.50	pass	0.51	pass	0.61	pass	0.81	pass	0.45	pass
30cm	0.45	pass	0.47	pass	0.41	pass	0.48	pass	0.50	pass	0.40	pass
40cm	0.36	pass	0.33	pass	0.32	pass	0.38	pass	0.31	pass	0.30	pass

*1): For this limit value, "General Population / Uncontrolled Exposure" of FCC § 1.1310 (e) (B) was used.
*2): This is the distance between the center of the probe and the edges of the EUT.

*Test result is less than 50 % of the MPE limit.

APPENDIX 2: Test instruments

Test equipment

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
EMF	SEF-05	145498	Probe EF0391(E-Field)	NARDA	EF0391	A-1299	09/17/2018	36
EMF	SEF-01	145494	Broadband Field Meter	NARDA	NBM-520	C-0520	09/17/2018	36
EMF	SMM-01	146284	Exposure Level Tester	NARDA	ELT-400	M-0163	09/17/2020	12
EMF	SMS-01	146315	Magnetic Field Probe 100cm^2	NARDA	ELT-400	M-0180	09/17/2020	12
EMF	MOS-34	141572	Thermo-Hygrometer	CUSTOM. Inc	CTH-201	3401	01/15/2021	12
EMF	MJM-04	142178	Measure	PROMART	SEN1635	-	-	-

The expiration date of the calibration is the end of the expired month.
As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.

Test item:

EMF: Electromagnetic field