EMI TEST REPORT

Test Report No. : 13185291Y-A-R1

Applicant:	**DENSO CORPORATION**
Type of EUT:	**Cockpit Control Unit**
Model Number of EUT:	**DNNS109**
FCC ID:	**HYQDNNS091**
Test regulation:	**FCC Part 15 Subpart B:2019 Class B** **ICES-003 Issue 6: 2016 + Amendment 1: 2017 Class B** **(SMSE-005-19)**
Test result:	**Complied (Refer to Section 3.2)**

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 regulation.
4. The test results in this test report are traceable to the national or international standards.
5. This test report covers EMC technical requirements. It does not cover administrative issues such as Manual or non-EMC test related Requirements. (if applicable)
6. The all test items in this test report are conducted by UL Japan, Inc. Yokowa EMC Lab.
7. This test report must not be used by the customer to claim product certification, approval, or endorsement by any agency of the Federal Government.
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.
10. This report is a revised version of 13185291Y-A. 13185291Y-A is replaced with this report.

Date of test: January 7 to 9, 2020

Representative test engineer:

Hiromichi Nakai
Engineer
Consumer Technology Division

Approved by:

Daigo Hamaguchi
Leader
Consumer Technology Division

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

RTL02610

UL Japan, Inc.
Yokowa EMC Lab.
108 Yokowa-cho, Ise-shi, Mie-ken, 516-1106 JAPAN
Telephone: +81 596 24 8750
Facsimile: +81 596 39 0232

REVISION HISTORY

Original Test Report No.: 13185291Y-A

Revision	Test report No.	Date	Page revised	Contents
- (Original)	13185291Y-A	February 19, 2020	-	-
1	13185291Y-A-R1	February 25, 2020	P.12	Addition of procedure for test antenna

UL Japan, Inc.
Yokowa EMC Lab.
108 Yokowa-cho, Ise-shi, Mie-ken, 516-1106 JAPAN
Telephone: +81 596 24 8750
Facsimile: +81 596 39 0232

Reference: Abbreviations (Including words undescribed in this report)

AAN	Asymmetric Artificial Network
AC	Alternating Current
AM	Amplitude Modulation
AMN	Artificial Mains Network
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
C.F	Correction Factor
Cal Int	Calibration Interval
CAV	CISPR AV
CCK	Complementary Code Keying
CDN	Coupling Decoupling Network
Ch., CH	Channel
CISPR	Comite International Special des Perturbations Radioelectriques
Corr.	Correction
CPE	Customer premise equipment
CW	Continuous Wave
DBPSK	Differential BPSK
DC	Direct Current
DET	Detector
Dmax	maximum absolute voltage change during an observation period
DQPSK	Differential QPSK
DSSS	Direct Sequence Spread Spectrum
EDR	Enhanced Data Rate
e.i.r.p., EIRP	Equivalent Isotropically Radiated Power
EM clamp	Electromagnetic clamp
EMC	ElectroMagnetic Compatibility
EMI	ElectroMagnetic Interference
EMS	ElectroMagnetic Susceptibility
EN	European Norm
e.r.p., ERP	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
Fund	Fundamental
FWD	Forward
GFSK	Gaussian Frequency-Shift Keying
GNSS	Global Navigation Satellite System
GPS	Global Positioning System
Hori.	Horizontal
ICES	Interference-Causing Equipment Standard
I/O	Input/Output
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
ISN	Impedance Stabilization Network
ISO	International Organization for Standardization
JAB	Japan Accreditation Board
LAN	Local Area Network
LCL	Longitudinal Conversion Loss
LIMS	Laboratory Information Management System
LISN	Line Impedance Stabilization Network
MRA	Mutual Recognition Arrangement
N/A	Not Applicable
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
PK	Peak
P_{LT}	long-term flicker severity
POHC(A)	Partial Odd Harmonic Current
Pol., Pola.	Polarization
PR-ASK	Phase Reversal ASK
P_{ST}	short-term flicker severity
QAM	Quadrature Amplitude Modulation
QP	Quasi-Peak
QPSK	Quadri-Phase Shift Keying
r.m.s., RMS	Root Mean Square
RBW	Resolution Band Width
RE	Radio Equipment
REV	Reverse
RF	Radio Frequency
RFID	Radio Frequency Identifier
RSS	Radio Standards Specifications
Rx	Receiving
SINAD	Ratio of (Signal + Noise + Distortion) to (Noise + Distortion)
S/N	Signal to Noise ratio
SA, S/A	Spectrum Analyzer
SG	Signal Generator
SVSWR	Site-Voltage Standing Wave Ratio
THC(A)	Total Harmonic Current
THD(%)	Total Harmonic Distortion
TR	Test Receiver
Tx	Transmitting
VBW	Video BandWidth
Vert.	Vertical
WLAN	Wireless LAN
xDSL	Generic term for all types of DSL technology (DSL: Digital Subscriber Line)

UL Japan, Inc.
Yokowa EMC Lab.
108 Yokowa-cho, Ise-shi, Mie-ken, 516-1106 JAPAN
Telephone: +81 596 24 8750
Facsimile: +81 596 39 0232

CONTENTS

PAGE

Section 1: Customer information

Company Name	:	DENSO CORPORATION
Address	:	1-1 Showa-cho, Kariya-shi, Aichi ken, 448-8661 Japan
Telephone Number	:	+81-566-20-3304
Facsimile Number	:	+81-566-25-4920
Contact Person	:	Naoto Makino

The information provided from the customer is as follows;
- Applicant, Type of Equipment, Model No., 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 E.U.T. 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 of EUT	:	Cockpit Control Unit
Model Number of EUT	:	DNNS109
Serial No.	:	Refer to Clause 4.2
Rating	:	DC 13.2 V
Country of Mass-production	:	Japan
Condition of EUT	:	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Receipt Date of Sample (Information from test lab.)	:	December 26, 2019
Modification of EUT	:	No modification by the test lab.

2. 2 Product description

Model: DNNS109 (referred to as the EUT in this report) is a Cockpit Control Unit.
The clock frequencies used in the EUT: 2000 MHz

Section 3: Test specification, procedures and results

3. 1 Test Specification

Test Specification	:	FCC Part 15 Subpart B FCC Part 15 final revised on July 19, 2019 and effective August 19, 2019 except 15.258
Title	:	FCC 47CFR Part15 Radio Frequency Device Subpart B Unintentional Radiators
Test Specification	:	ICES-003 Issue 6: 2016 + Amendment 1: 2017 (SMSE-005-19)
Title	:	Spectrum Management and Telecommunications Interference-Causing Equipment Standard Information Technology Equipment (Including Digital Apparatus) – Limits and Methods of Measurement

3. 2 Procedures & results

Item	Test Procedure	Limits	Deviation	Worst margin	Result	Remarks
Conducted emission	ANSI C63.4: 2014 7. AC powerline conducted emission measurements IEEE 187:2003	Class B	N/A	N/A	N/A	*1)
Radiated emission	ANSI C63.4: 2014 8. Radiated emission measurements IEEE 187:2003	30 MHz - 88 MHz: 100 μV/m 88 MHz - 216 MHz: 150 μV/m 216 MHz-960 MHz: 200 μV/m above 960 MHz: 500 μV/m	N/A	1.83 dB (3488.800 MHz, Vertical, AV, 1. FM Reception (Main))	Complied# a)	*2)
Antenna Terminal	ANSI C63.4: 2014 12. Measurement of unintentional radiators other than ITE IEEE 187:2003	2 nW (at 75 ohm)	N/A	11.5 dB (2880.000 MHz, 1. FM Reception (Sub))	Complied b)	*3)

*1) The test is not applicable since the EUT does not have AC ports.
*2) The test mode which applies test procedure of IEEE 187:2003 is outside of JAB accreditation scopes.
*3) This test item is outside of JAB accreditation scopes.
Note: UL Japan's EMI Work Procedures No. 13-EM-W0420

a) Refer to Appendix 2 (data of Radiated emission)
b) Refer to Appendix 2 (data of Antenna terminal)

Symbols:
Complied The data of this test item has enough margin, more than the measurement uncertainty.
Complied# The data of this test item meets the limits unless the measurement uncertainty is taken into consideration.

3. 3 Addition to standard

No addition, exclusion nor deviation has been made from the standard.

3. 4 Confirmation

UL Japan, Inc. hereby confirms that E.U.T., in the configuration tested, complies with the specifications FCC Part 15 Subpart B:2019 Class B and ICES-003 Issue 6: 2016 + Amendment 1: 2017 Class B (SMSE-005-19).

3. 5 Uncertainty

There is no applicable rule of uncertainty in this applied standard. Therefore, the results are derived depending on whether or not laboratory uncertainty is applied.
The following uncertainties have been calculated to provide a confidence level of 95 % using a coverage factor $k = 2$.

EMI

		Open area test site			Shielded room				Ucispr (±)
		No.1	No.2	No.3	No.1	No.2	No.3	No.7	
		(±)	(±)	(±)	(±)	(±)	(±)	(±)	
Conducted disturbance									
LISN (AMN)	9 kHz - 150 kHz	3.8 dB							3.8 dB
	150 kHz - 30 MHz	3.4 dB							3.4 dB
ISN (LCL= 55 dB - 40 dB)	150 kHz - 30 MHz	4.2 dB							5.0 dB
ISN (LCL= 65 dB - 50 dB)	150 kHz - 30 MHz	4.6 dB							5.0 dB
ISN (LCL= 75 dB - 60 dB)	150 kHz - 30 MHz	5.0 dB							5.0 dB
ISN (Screened)	150 kHz - 30 MHz	3.4 dB							5.0 dB
ISN (75 ohm)	150 kHz - 30 MHz	3.4 dB							5.0 dB
Current probe	150 kHz - 30 MHz	2.9 dB							2.9 dB
Capacitive Voltage Probe	150 kHz - 30 MHz	3.9 dB							3.9 dB
Voltage probe	150 kHz - 30 MHz	2.9 dB							2.9 dB
Radiated disturbance									
3 m	9 kHz - 30 MHz	3.6 dB	3.5 dB	3.5 dB	-	-	-	-	Not Defined
	30 MHz - 200 MHz (Horizontal)	4.5 dB	4.7 dB	4.7 dB	-	-	-	-	6.3 dB
	30 MHz - 200 MHz (Vertical)	4.6 dB	4.9 dB	4.9 dB	-	-	-	-	6.3 dB
	200 MHz - 1000 MHz (Horizontal)	5.0 dB	5.1 dB	5.1 dB	-	-	-	-	6.3 dB
	200 MHz - 1000 MHz (Vertical)	6.1 dB	6.2 dB	6.2 dB	-	-	-	-	6.3 dB
	1 GHz - 6 GHz	4.8 dB			-	-	-	-	5.2 dB
	6 GHz - 18 GHz	5.1 dB			-	-	-	-	5.5 dB
10 m	9 kHz - 30 MHz	3.3 dB	3.4 dB	3.4 dB	-	-	-	-	Not Defined
	30 MHz - 200 MHz (Horizontal)	4.5 dB	4.7 dB	4.7 dB	-	-	-	-	6.3 dB
	30 MHz - 200 MHz (Vertical)	4.5 dB	4.7 dB	4.7 dB	-	-	-	-	6.3 dB
	200 MHz - 1000 MHz (Horizontal)	4.7 dB	4.9 dB	4.9 dB	-	-	-	-	6.3 dB
	200 MHz - 1000 MHz (Vertical)	4.8 dB	4.9 dB	4.9 dB	-	-	-	-	6.3 dB
	1 GHz - 18 GHz	5.0 dB			-	-	-	-	Not Defined
Antenna terminal voltage									
30 MHz - 1000 MHz		3.7 dB							Not Defined
1 GHz - 2.15 GHz		3.8 dB							Not Defined
Disturbance power									
30 MHz - 300 MHz		3.7 dB							4.5 dB

3. 6 Test Location

UL Japan, Inc. Yokowa EMC Lab.
108 Yokowa-cho, Ise-shi, Mie-ken, 516-1106 JAPAN
Telephone : +81 596 24 8750
Facsimile : +81 596 39 0232
FCC Test Firm Registration Number: 788329

	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 open area test site	-	40 x 20	-
No.2 open area test site	-	20 x 18	-
No.3 open area test site	-	20 x 18	-
No.1 shielded room	5.5 x 6.4 x 2.7	5.5 x 6.4	-
No.2 shielded room	4.5 x 3.6 x 2.7	4.5 x 3.6	-
No.3 shielded room	3.6 x 7.2 x 2.4	3.6 x 7.2	-
No.4 shielded room	5.5 x 5.0 x 2.4	4.35 x 3.35	-
No.5 shielded room	5.5 x 4.3 x 2.5	5.54 x 3.0	-
No.6 shielded room	5.2 x 3.2 x 2.9	5.2 x 3.2	-
No.7 shielded room	9.3 x 3.4 x 2.7	9.3 x 3.4	-
No.1 EMS lab. (Full-anechoic chamber)	5.0 x 8.0 x 3.5	-	-
No.2 EMS lab. (Full-anechoic chamber)	4.0 x 7.0 x 3.5	-	-

3. 7 Test setup, Data of EMI & Test instruments

Refer to Appendix 1 to 3.

Section 4: Operation of EUT during testing

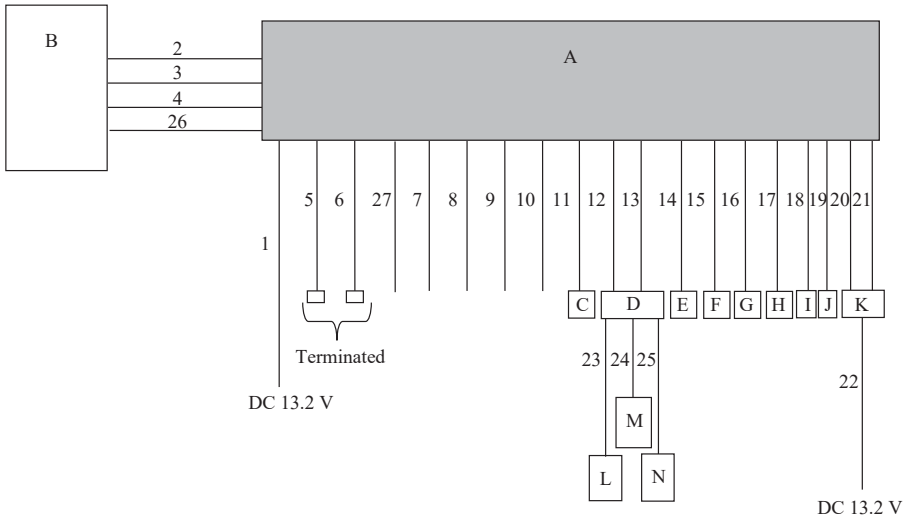
4.1 Operating modes

The EUT exercise program used during testing was designed to exercise the various system components in a manner similar to typical use.
Test sequence is used: 1. FM Reception (Main), FM Reception (Sub)

Software: Version 02.00.11

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

4.2 Configuration and peripherals



*Cabling and setup 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	Cockpit Control Unit	DNNS109	468700-3611	DENSO CORPORATION	EUT
B	Center Information Display	-	462200-8510	DENSO CORPORATION	-
C	GPS Antenna	03590033	86277AL150	YOKOWO	-
D	AUX-Box	86257	FL000	HOSIDEN	-
E	4Ω Speaker	K50	No.13	VISATON	-
F	4Ω Speaker	K50	No.14	VISATON	-
G	4Ω Speaker	K50	No.15	VISATON	-
H	4Ω Speaker	K50	No.16	VISATON	-
I	CAN Terminated	DE-C8-J9	-	-	-
J	CAN Terminated	DE-C8-J9	-	-	-
K	Meter	TN257550-673	85002AN02A	DENSO CORPORATION	-
L	USB Memory	USM4GU G	USM15504B	SONY	-
M	Smart phone	GALAXY NEXUS SC-04D	R2EBB51195E	SAMSUNG	-
N	USB Memory	USM4GU L	14625B-1	SONY	-

List of cables used

No.	Name	Length (m)	Shield		Remarks
			Cable	Connector	
1	DC Cable	1.6	Unshielded	Unshielded	-
2	Bluetooth Antenna Cable	1.0	Shielded	Shielded	-
3	DC + signal Cable	1.0	Unshielded	Unshielded	-
4	LVDS Cable	1.0	Shielded	Shielded	-
5	Antenna Cable	2.0	Shielded	Shielded	-
6	Antenna Cable	2.0	Shielded	Shielded	-
7	USB Cable	1.6	Shielded	Shielded	-
8	USB Cable	1.6	Shielded	Shielded	-
9	Camera Cable	0.9	Shielded	Shielded	-
10	Signal Cable	1.0	Unshielded	Unshielded	-
11	GPS Cable	0.7	Shielded	Shielded	-
12	USB Cable	1.7	Shielded	Shielded	-
13	Signal Cable	0.9	Unshielded	Unshielded	-
14	Speaker Cable	1.0	Unshielded	Unshielded	-
15	Speaker Cable	1.0	Unshielded	Unshielded	-
16	Speaker Cable	1.0	Unshielded	Unshielded	-
17	Speaker Cable	1.0	Unshielded	Unshielded	-
18	Signal Cable	1.0	Unshielded	Unshielded	-
19	Signal Cable	1.0	Unshielded	Unshielded	-
20	Signal Cable	1.2	Unshielded	Unshielded	-
21	Meter Cable	1.7	Shielded	Shielded	-
22	DC Cable	1.6	Unshielded	Unshielded	-
23	USB Cable	2.0	Shielded	Shielded	
24	AUX Cable	1.5	Shielded	Shielded	-
25	USB Cable	2.5	Shielded	Shielded	-
26	WLAN Antenna Cable	1.0	Shielded	Shielded	-
27	WLAN Antenna Cable	0.2	Shielded	Shielded	-

Section 5: Radiated emission

5. 1 Operating environment

This test was carried out in open area test site.
Temperature : See data
Humidity : See data

5. 2 Test configuration

EUT was placed on a table which was consisted by polystyrene foam, polypropylene foam and polycarbonate of nominal size, 1 m by 1.5 m, raised 0.8 m above the conducting ground plane.
The rear of EUT and its peripherals was aligned and flushed with rear of tabletop.
I/O cables that were connected to the peripherals were bundled in center. They were folded back and forth forming a bundle and were hanged 40 cm height to the ground plane. The measurements were performed for vertical or horizontal antenna polarization or both as necessary. The measurement antenna was varied in height above the conducting ground plane to obtain the maximum signal strength.
Photographs of the set up are shown in Appendix 1.

5. 3 Test conditions

Frequency range : 30 MHz - 25000 MHz
Test distance : 3 m
EUT position : Table top

5. 4 Test procedure

The Radiated Electric Field Strength intensity has been measured on an open test site with a ground plane at a distance of 3 m*. (30 MHz – 1000 MHz)
* Measuring distance
The boundary of the EUT is defined by an imaginary circular periphery.
Pre check measurements were performed in shielded room with a search coil / horn antenna at 30 MHz - 25000 MHz to distinguish disturbances of EUT from the ambient noise.
Measurements were performed with quasi-peak detector, average detector and peak detector.
The measuring antenna height was varied between 1 m and 4 m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.
Test antenna was aimed at the EUT for receiving the maximum signal and always kept within the illumination area of the 3 dB beamwidth of the antenna.

The measurements were performed for vertical or horizontal antenna polarization or both as necessary.
The radiated emission measurements were made with the following detector function of the test receiver and spectrum analyzer.

Frequency	:	30 MHz-1000 MHz	1000 MHz-25000 MHz *1)	
Instrument used	:	Test Receiver	Test Receiver	
Detector Type	:	QP	AV	PK
IF Band width	:	120 kHz	RBW 1 MHz	RBW 1 MHz

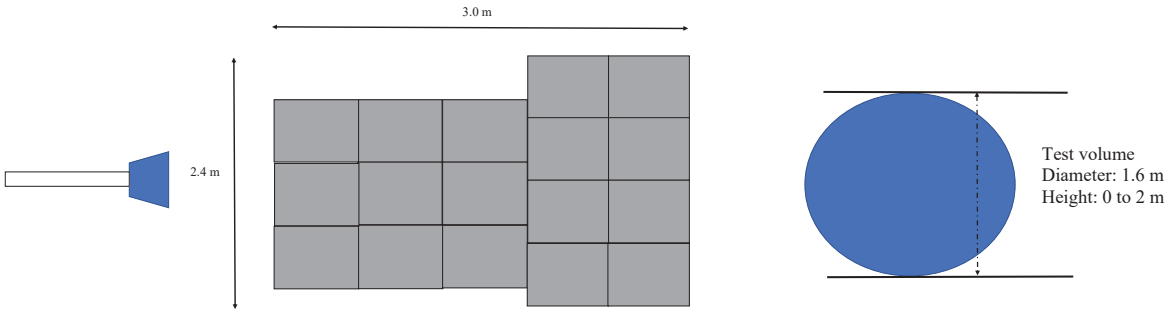
*1) The measurement data was adjusted to a 3 m distance using the following Distance Factor.
Distance factor: 20 log (Actual distance/3 m)
Distance factor and actual distance are shown in Appendix 2.

5. 5 Results

Summary of the test results: Pass

Figure. Absorber arrangement

3Site



Distance from the edge of the antenna to the center of the turntable: 3.8 m

Section 6 : Antenna terminal voltage

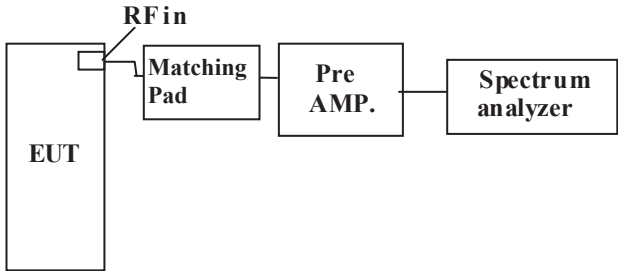
6. 1 Operation environment

The test was carried out in measurement room.
Temperature : See data
Humidity : See data

6. 2 Test configuration

The EUT was placed on a non-metallic platform 0.8 m.
Photographs of the set up are shown in Appendix 1.

Figure 1. Antenna terminal voltage
30 MHz-25000 MHz



6. 3 Test conditions

Frequency range : 30 MHz - 25000 MHz
EUT position : Table top

6. 4 Test procedure

Connect EUT and spectrum analyzer through pre-amplifier. Set EUT to CH investigation mode then measure the voltage of local leakage from antenna terminal. Spectrum analyzer should be hold in maximum mode during the measurement.
Detector Type: Peak (30 MHz - 25000 MHz)
At frequency between 2000 MHz and 25000 MHz, 75/50 ohm conversion loss of impedance is used in speculation.

6. 5 Results

Summary of the test results : Pass

DATA OF RADIATED DISTURBANCE TEST

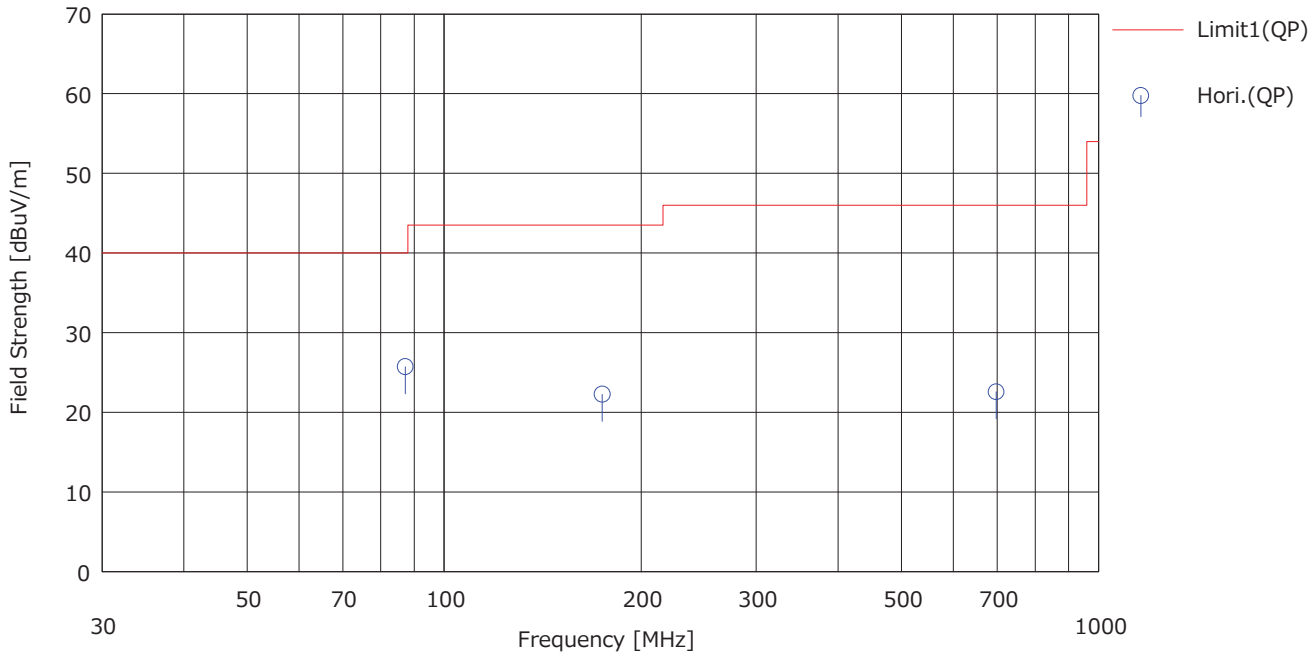
UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (87.0 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi



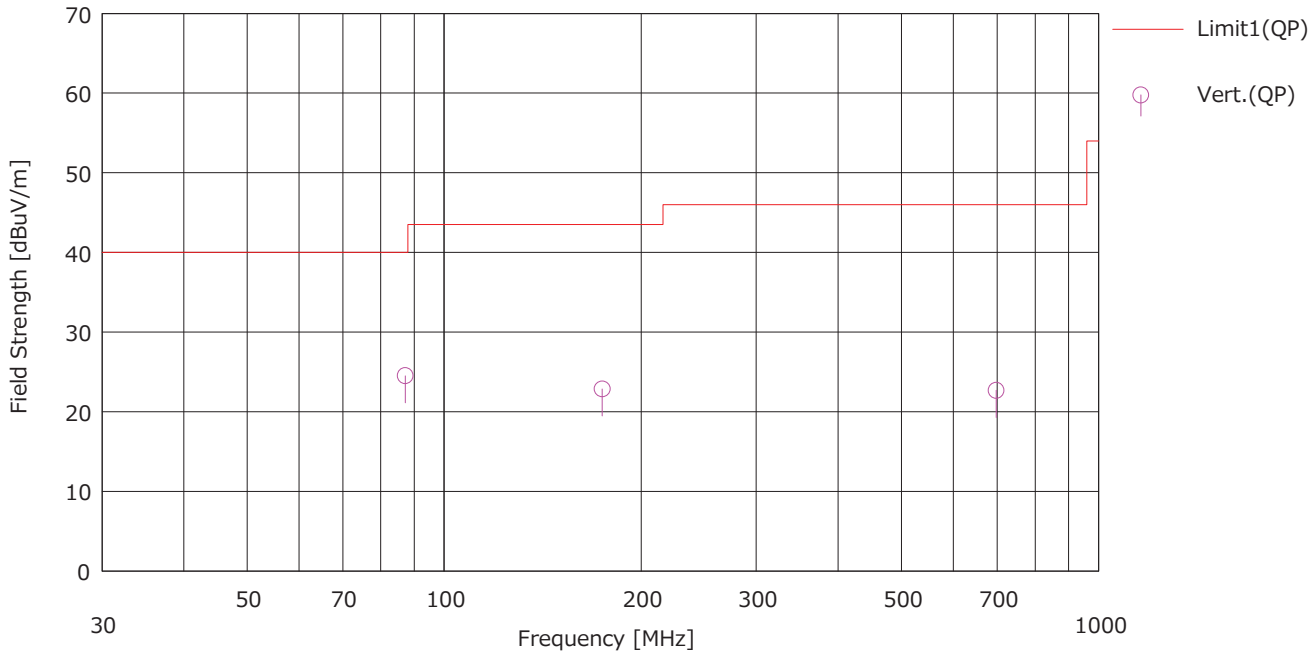


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (87.0 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi

<< QP DATA >>

No.	Freq.	Reading 〈QP〉	Ant.Fac	Loss	Gain	S.Fac	Result 〈QP〉	Limit 〈QP〉	Margin 〈QP〉	Pola.	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]		
1	87.220	38.00	9.48	7.85	29.79	0.18	25.72	40.00	14.28	Hori.	BA	
2	87.220	36.80	9.48	7.85	29.79	0.18	24.52	40.00	15.48	Vert.	BA	
3	174.440	29.40	13.47	8.80	29.64	0.24	22.27	43.50	21.23	Hori.	BA	
4	174.440	30.00	13.47	8.80	29.64	0.24	22.87	43.50	20.63	Vert.	BA	
5	261.660	---	12.15	6.75	29.70	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
6	261.660	---	12.15	6.75	29.70	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
7	348.880	---	15.00	7.55	29.82	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
8	348.880	---	15.00	7.55	29.82	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
9	436.100	---	16.17	8.19	29.95	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
10	436.100	---	16.17	8.19	29.95	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
11	523.320	---	17.61	8.62	30.03	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
12	523.320	---	17.61	8.62	30.03	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
13	610.540	---	19.56	9.06	29.98	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
14	610.540	---	19.56	9.06	29.98	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
15	697.760	23.10	19.85	9.54	29.92	0.00	22.57	46.00	23.43	Hori.	LA	
16	697.760	23.20	19.85	9.54	29.92	0.00	22.67	46.00	23.33	Vert.	LA	
17	784.980	---	20.77	10.04	29.74	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
18	784.980	---	20.77	10.04	29.74	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
19	872.200	---	21.81	10.53	29.33	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
20	872.200	---	21.81	10.53	29.33	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
21	959.420	---	22.13	11.04	28.91	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
22	959.420	---	22.13	11.04	28.91	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

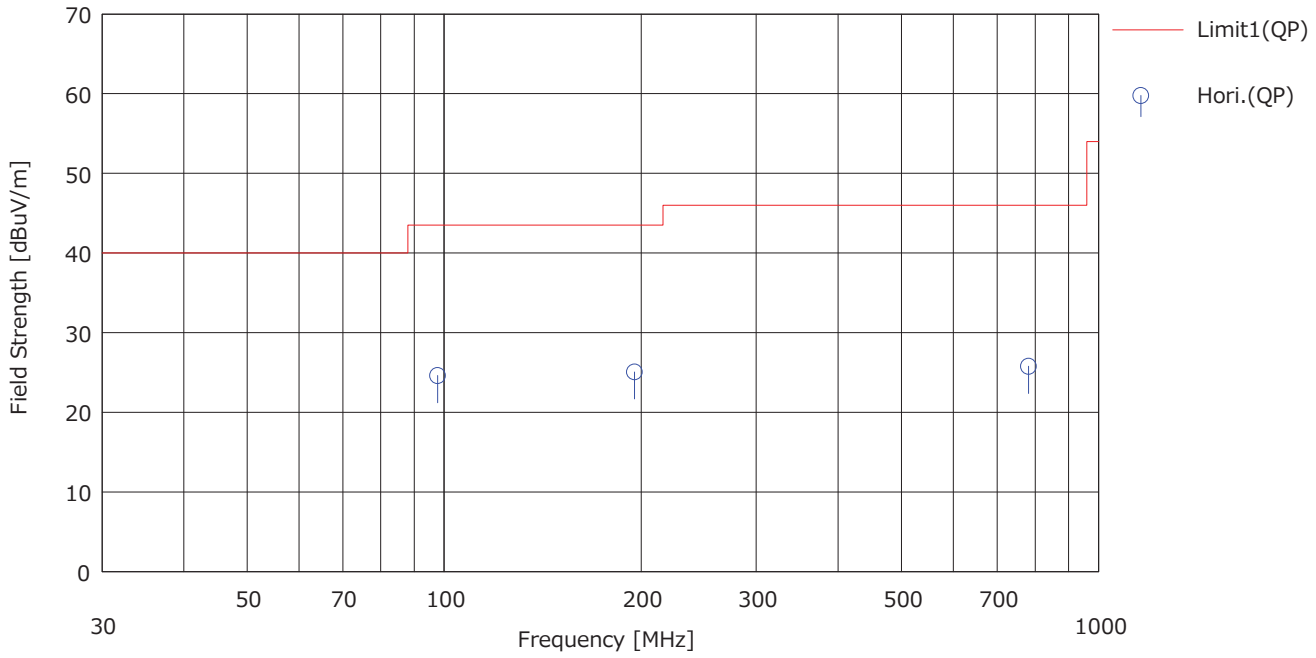
UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (97.5 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi



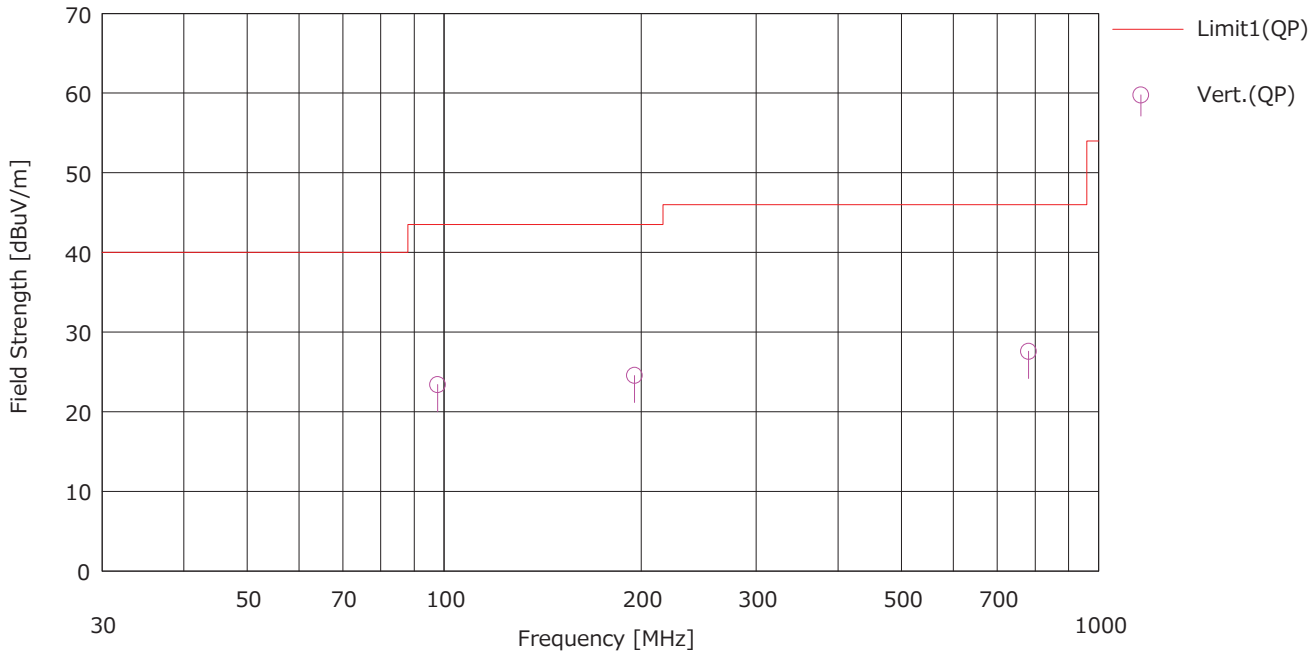


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (97.5 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi

<< QP DATA >>

No.	Freq.	Reading 〈QP〉	Ant.Fac	Loss	Gain	S.Fac	Result 〈QP〉	Limit 〈QP〉	Margin 〈QP〉	Pola.	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]		
1	97.720	36.10	10.06	7.99	29.71	0.17	24.61	43.50	18.89	Hori.	BA	
2	97.720	34.90	10.06	7.99	29.71	0.17	23.41	43.50	20.09	Vert.	BA	
3	195.440	31.10	14.60	9.01	29.62	-0.03	25.06	43.50	18.44	Hori.	BA	
4	195.440	30.60	14.60	9.01	29.62	-0.03	24.56	43.50	18.94	Vert.	BA	
5	293.160	---	13.38	7.05	29.74	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
6	293.160	---	13.38	7.05	29.74	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
7	390.880	---	15.38	7.93	29.89	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
8	390.880	---	15.38	7.93	29.89	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
9	488.600	---	17.39	8.44	30.03	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
10	488.600	---	17.39	8.44	30.03	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
11	586.320	---	18.94	8.93	29.99	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
12	586.320	---	18.94	8.93	29.99	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
13	684.040	---	19.69	9.47	29.93	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
14	684.040	---	19.69	9.47	29.93	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
15	781.760	24.80	20.71	10.02	29.75	0.00	25.78	46.00	20.22	Hori.	LA	
16	781.760	26.60	20.71	10.02	29.75	0.00	27.58	46.00	18.42	Vert.	LA	
17	879.480	---	21.89	10.57	29.30	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
18	879.480	---	21.89	10.57	29.30	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
19	977.200	---	22.50	11.14	28.83	0.00	---	54.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
20	977.200	---	22.50	11.14	28.83	0.00	---	54.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

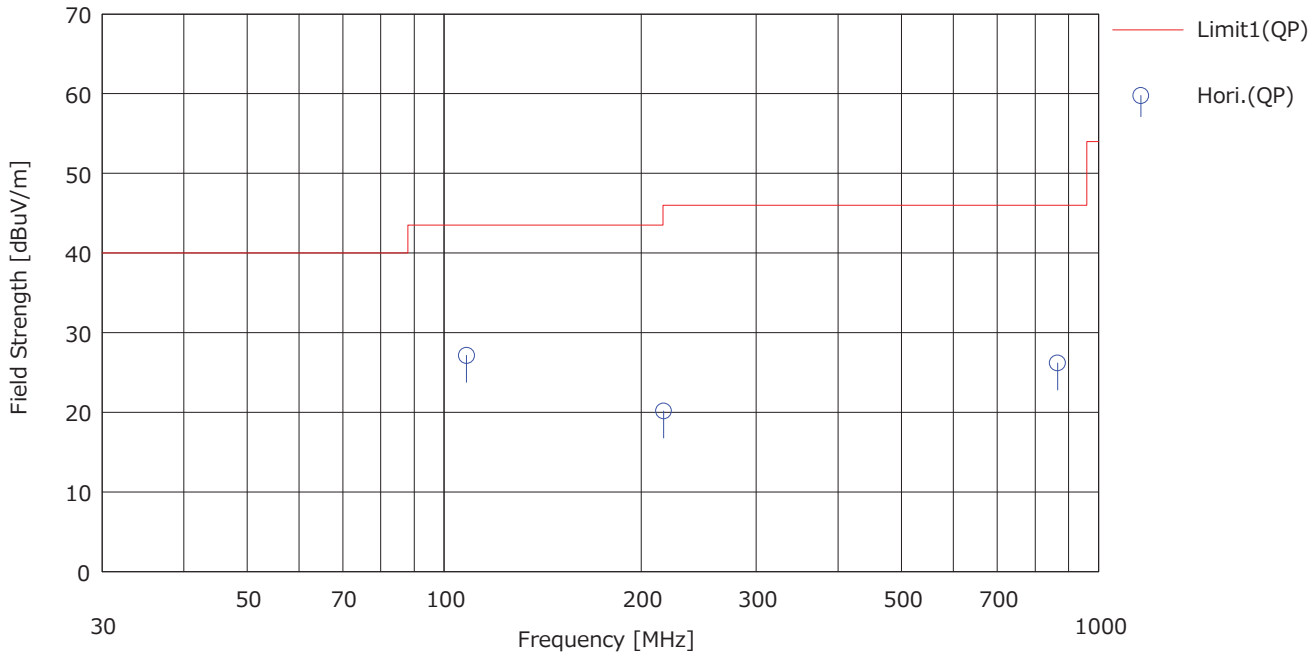
UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (108 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi



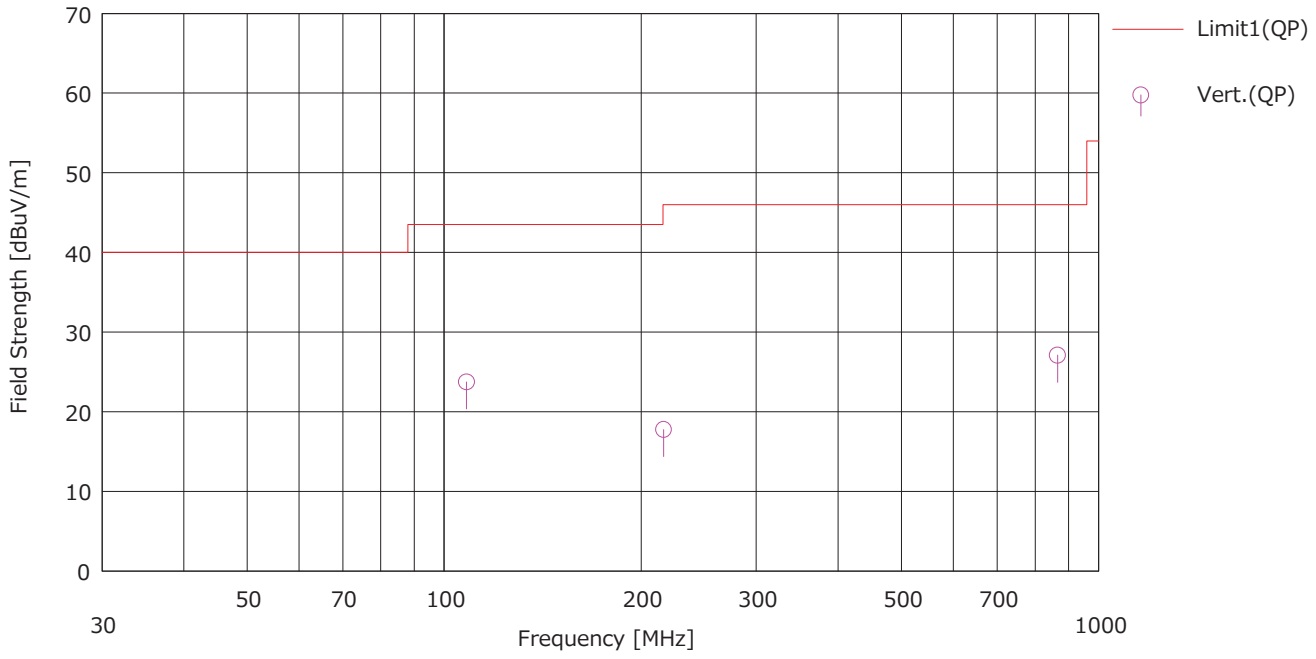


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (108 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi

<< QP DATA >>

No.	Freq.	Reading 〈QP〉	Ant.Fac	Loss	Gain	S.Fac	Result 〈QP〉	Limit 〈QP〉	Margin 〈QP〉	Pola.	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]		
1	108.220	37.80	10.86	8.10	29.68	0.06	27.14	43.50	16.36	Hori.	BA	
2	108.220	34.40	10.86	8.10	29.68	0.06	23.74	43.50	19.76	Vert.	BA	
3	216.440	32.50	11.00	6.31	29.64	0.00	20.17	46.00	25.83	Hori.	LA	
4	216.440	30.10	11.00	6.31	29.64	0.00	17.77	46.00	28.23	Vert.	LA	
5	324.660	---	14.40	7.34	29.79	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
6	324.660	---	14.40	7.34	29.79	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
7	432.880	---	16.11	8.17	29.95	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
8	432.880	---	16.11	8.17	29.95	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
9	541.100	---	17.64	8.71	30.02	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
10	541.100	---	17.64	8.71	30.02	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
11	649.320	---	19.22	9.27	29.95	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
12	649.320	---	19.22	9.27	29.95	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
13	757.540	---	20.21	9.88	29.80	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
14	757.540	---	20.21	9.88	29.80	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
15	865.760	23.20	21.87	10.49	29.37	0.00	26.19	46.00	19.81	Hori.	LA	
16	865.760	24.10	21.87	10.49	29.37	0.00	27.09	46.00	18.91	Vert.	LA	
17	973.980	---	22.37	11.12	28.84	0.00	---	54.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
18	973.980	---	22.37	11.12	28.84	0.00	---	54.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

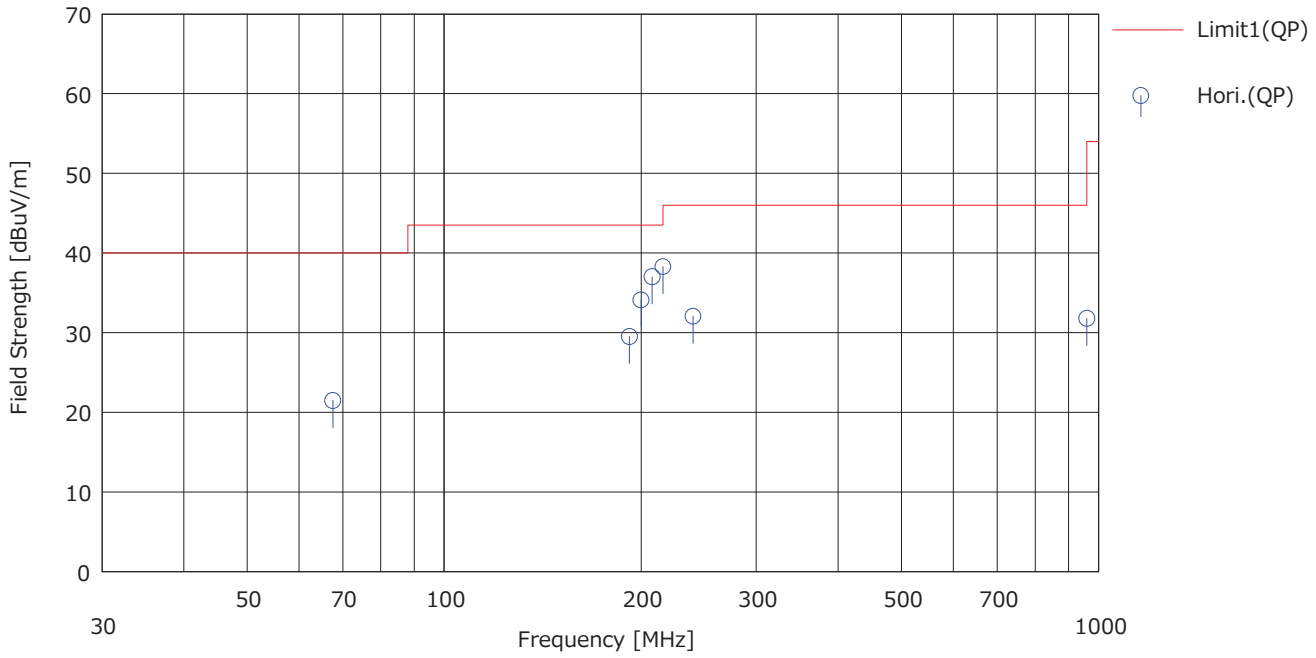
UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : -

Limit : FCC Part 15B CLASS B (3m)

Engineer : Hiromichi Nakai



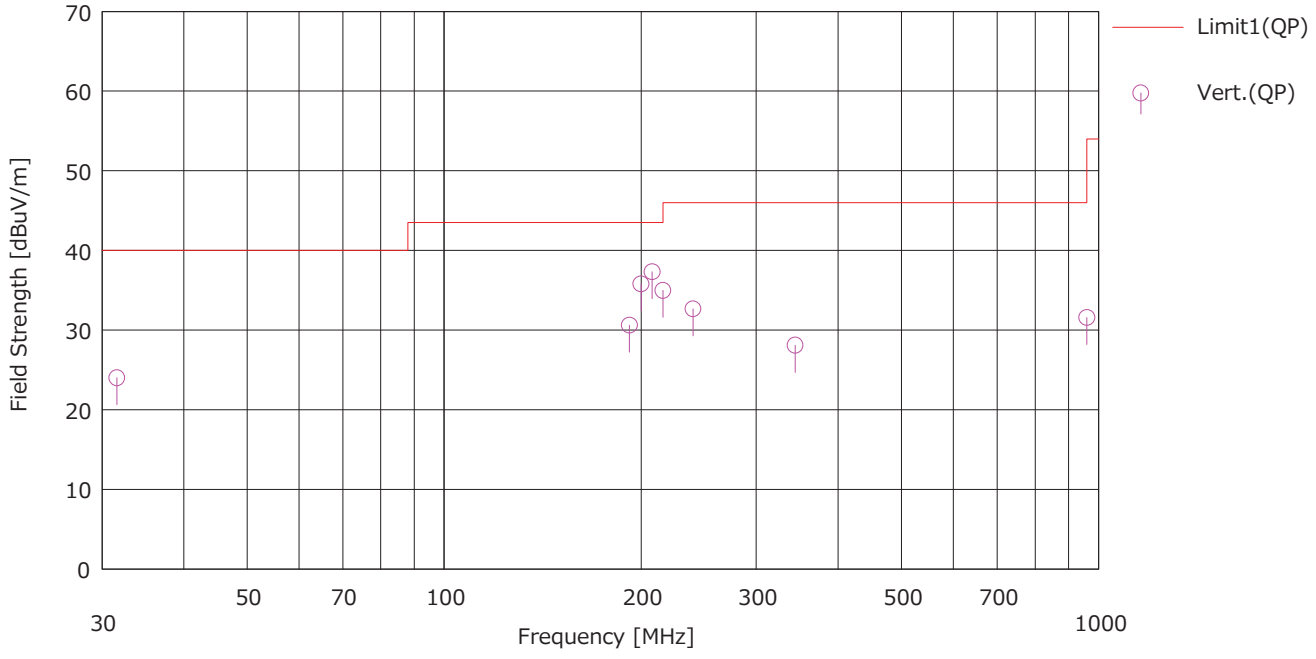


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : -

Limit : FCC Part 15B CLASS B (3m)

Engineer : Hiromichi Nakai

<< QP DATA >>

No.	Freq.	Reading <QP>	Ant.Fac	Loss	Gain	S.Fac	Result <QP>	Limit <QP>	Margin <QP>	Pola.	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]		
1	31.620	33.70	13.28	7.05	29.88	-0.14	24.01	40.00	15.99	Vert.	BA	
2	67.604	34.30	9.62	7.59	29.86	-0.18	21.47	40.00	18.53	Hori.	BA	
3	191.992	35.60	14.54	8.98	29.63	0.02	29.51	43.50	13.99	Hori.	BA	
4	191.998	36.70	14.54	8.98	29.63	0.02	30.61	43.50	12.89	Vert.	BA	
5	200.001	47.80	11.47	6.15	29.62	0.00	35.80	43.50	7.70	Vert.	LA	
6	200.002	46.10	11.47	6.15	29.62	0.00	34.10	43.50	9.40	Hori.	LA	
7	208.001	49.40	11.02	6.23	29.63	0.00	37.02	43.50	6.48	Hori.	LA	
8	208.002	49.70	11.02	6.23	29.63	0.00	37.32	43.50	6.18	Vert.	LA	
9	215.995	47.30	11.01	6.31	29.64	0.00	34.98	43.50	8.52	Vert.	LA	
10	216.001	50.60	11.01	6.31	29.64	0.00	38.28	46.00	7.72	Hori.	LA	
11	240.003	43.60	11.59	6.54	29.67	0.00	32.06	46.00	13.94	Hori.	LA	
12	240.004	44.20	11.59	6.54	29.67	0.00	32.66	46.00	13.34	Vert.	LA	
13	344.000	35.40	15.01	7.51	29.82	0.00	28.10	46.00	17.90	Vert.	LA	
14	959.993	27.50	22.15	11.04	28.91	0.00	31.78	46.00	14.22	Hori.	LA	
15	959.995	27.30	22.15	11.04	28.91	0.00	31.58	46.00	14.42	Vert.	LA	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

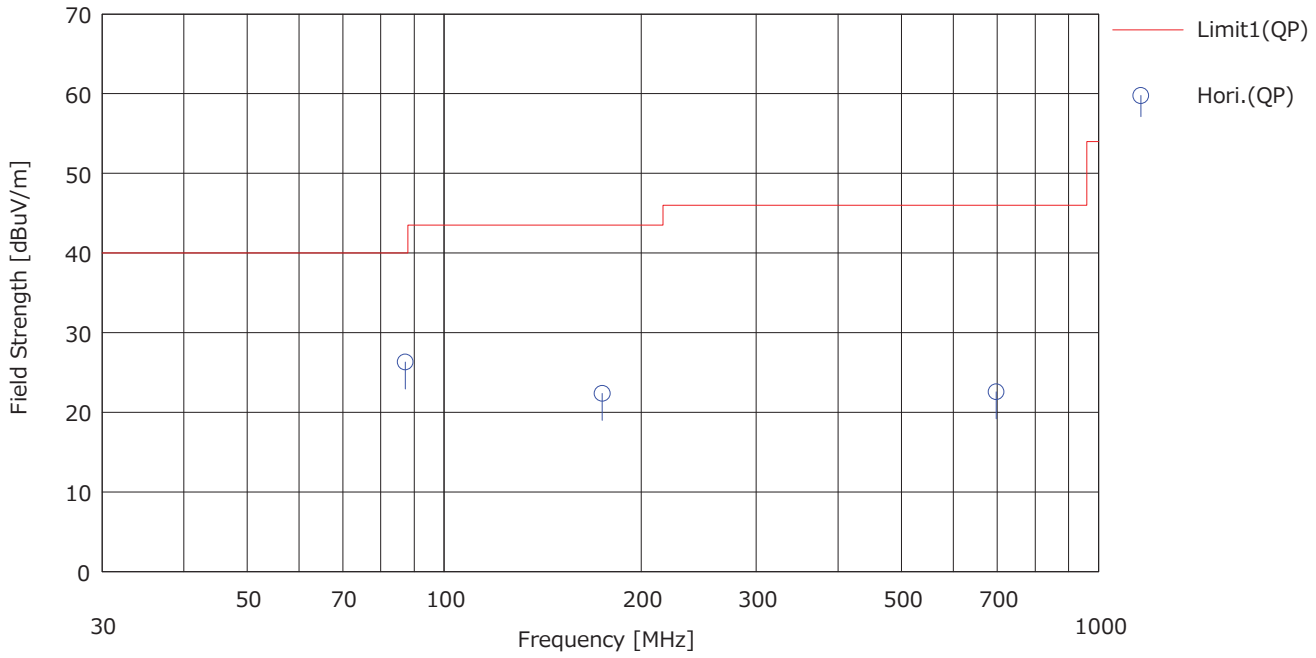
UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (SUb)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (87.0 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi



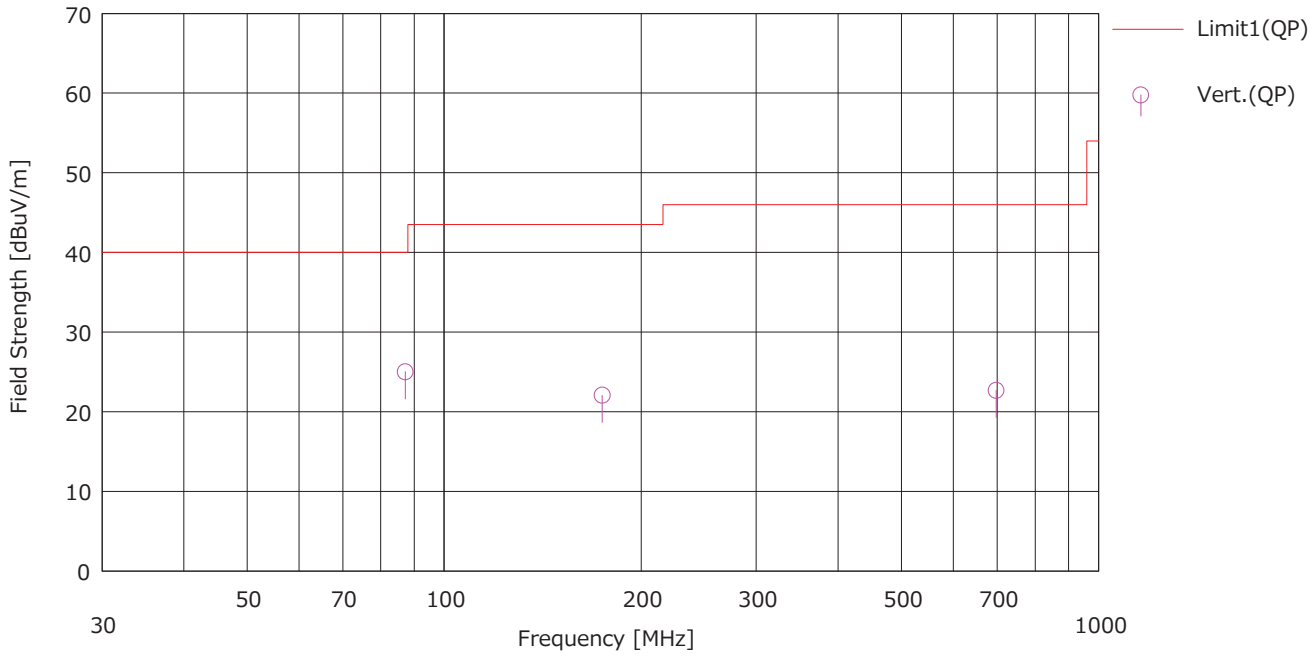


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (SUb)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (87.0 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi

<< QP DATA >>

No.	Freq.	Reading 〈QP〉	Ant.Fac	Loss	Gain	S.Fac	Result 〈QP〉	Limit 〈QP〉	Margin 〈QP〉	Pola.	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]		
1	87.220	38.60	9.48	7.85	29.79	0.18	26.32	40.00	13.68	Hori.	BA	
2	87.220	37.30	9.48	7.85	29.79	0.18	25.02	40.00	14.98	Vert.	BA	
3	174.440	29.50	13.47	8.80	29.64	0.24	22.37	43.50	21.13	Hori.	BA	
4	174.440	29.20	13.47	8.80	29.64	0.24	22.07	43.50	21.43	Vert.	BA	
5	261.660	---	12.15	6.75	29.70	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
6	261.660	---	12.15	6.75	29.70	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
7	348.880	---	15.00	7.55	29.82	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
8	348.880	---	15.00	7.55	29.82	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
9	436.100	---	16.17	8.19	29.95	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
10	436.100	---	16.17	8.19	29.95	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
11	523.320	---	17.61	8.62	30.03	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
12	523.320	---	17.61	8.62	30.03	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
13	610.540	---	19.56	9.06	29.98	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
14	610.540	---	19.56	9.06	29.98	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
15	697.760	23.10	19.85	9.54	29.92	0.00	22.57	46.00	23.43	Hori.	LA	
16	697.760	23.20	19.85	9.54	29.92	0.00	22.67	46.00	23.33	Vert.	LA	
17	784.980	---	20.77	10.04	29.74	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
18	784.980	---	20.77	10.04	29.74	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
19	872.200	---	21.81	10.53	29.33	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
20	872.200	---	21.81	10.53	29.33	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
21	959.420	---	22.13	11.04	28.91	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
22	959.420	---	22.13	11.04	28.91	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

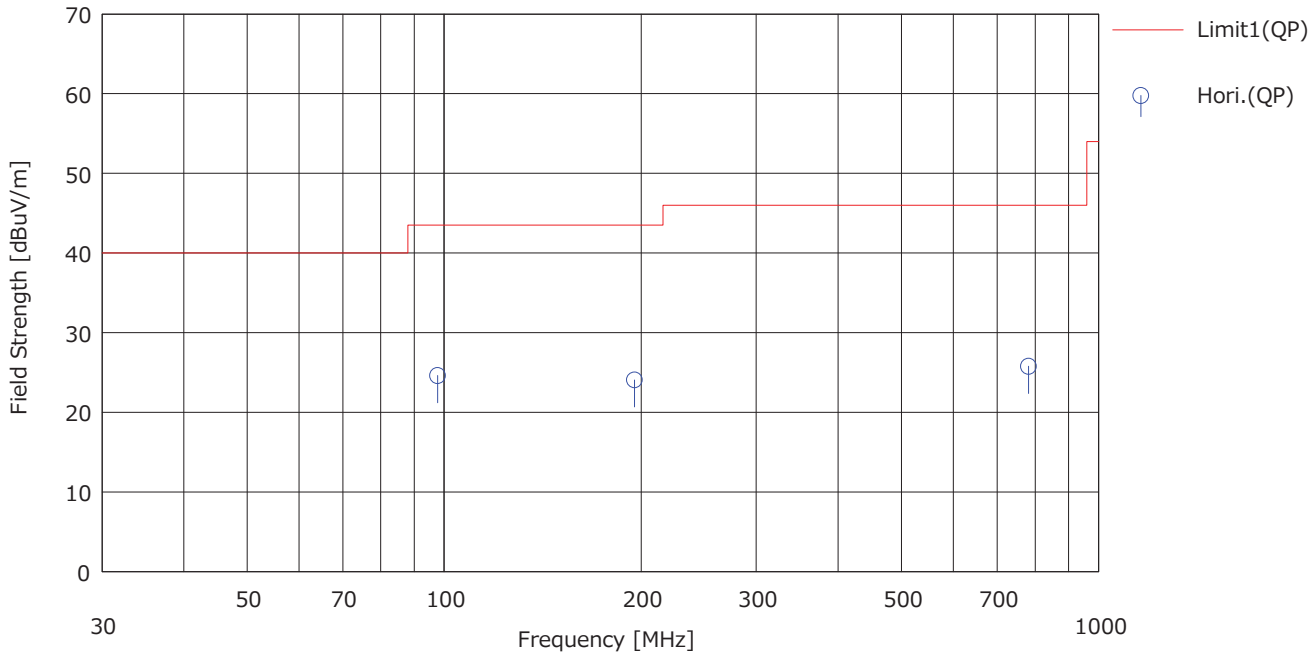
UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (97.5 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi



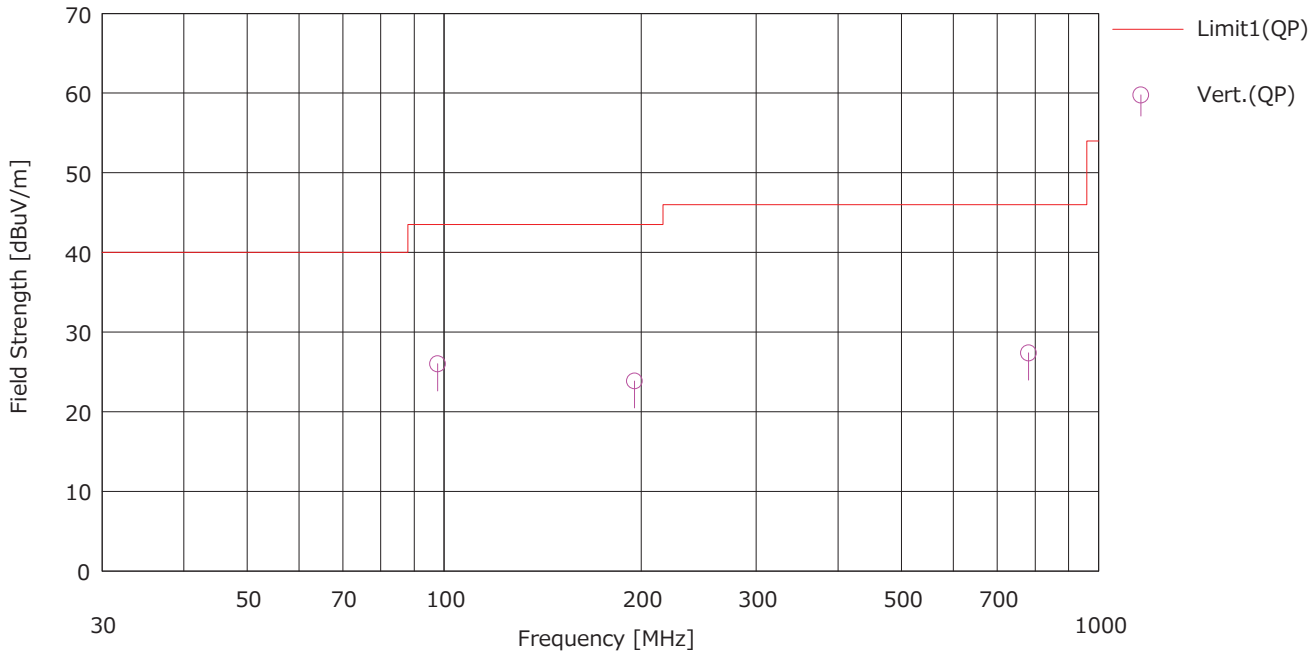


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (97.5 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi

<< QP DATA >>

No.	Freq.	Reading (QP)	Ant.Fac	Loss	Gain	S.Fac	Result (QP)	Limit (QP)	Margin (QP)	Pola.	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]		
1	97.720	36.10	10.06	7.99	29.71	0.17	24.61	43.50	18.89	Hori.	BA	
2	97.720	37.50	10.06	7.99	29.71	0.17	26.01	43.50	17.49	Vert.	BA	
3	195.440	30.10	14.60	9.01	29.62	-0.03	24.06	43.50	19.44	Hori.	BA	
4	195.440	29.90	14.60	9.01	29.62	-0.03	23.86	43.50	19.64	Vert.	BA	
5	293.160	---	13.38	7.05	29.74	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
6	293.160	---	13.38	7.05	29.74	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
7	390.880	---	15.38	7.93	29.89	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
8	390.880	---	15.38	7.93	29.89	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
9	488.600	---	17.39	8.44	30.03	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
10	488.600	---	17.39	8.44	30.03	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
11	586.320	---	18.94	8.93	29.99	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
12	586.320	---	18.94	8.93	29.99	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
13	684.040	---	19.69	9.47	29.93	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
14	684.040	---	19.69	9.47	29.93	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
15	781.760	24.80	20.71	10.02	29.75	0.00	25.78	46.00	20.22	Hori.	LA	
16	781.760	26.40	20.71	10.02	29.75	0.00	27.38	46.00	18.62	Vert.	LA	
17	879.480	---	21.89	10.57	29.30	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
18	879.480	---	21.89	10.57	29.30	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
19	977.200	---	22.50	11.14	28.83	0.00	---	54.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
20	977.200	---	22.50	11.14	28.83	0.00	---	54.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

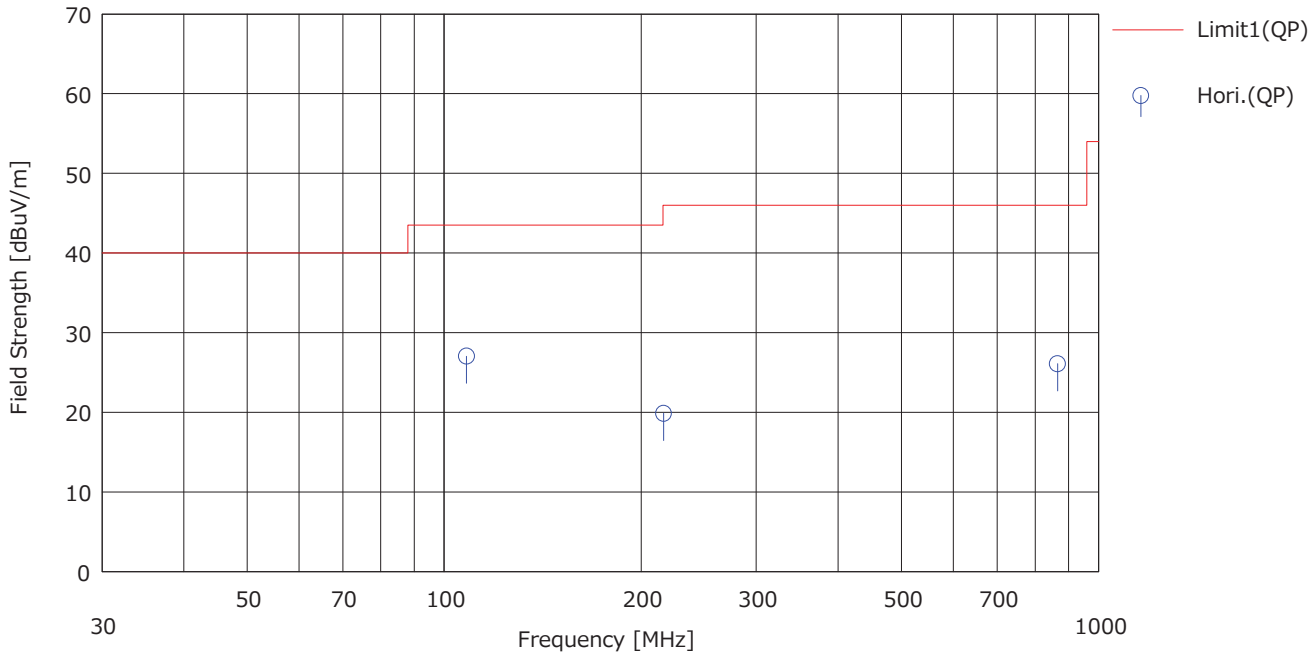
UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (108 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi



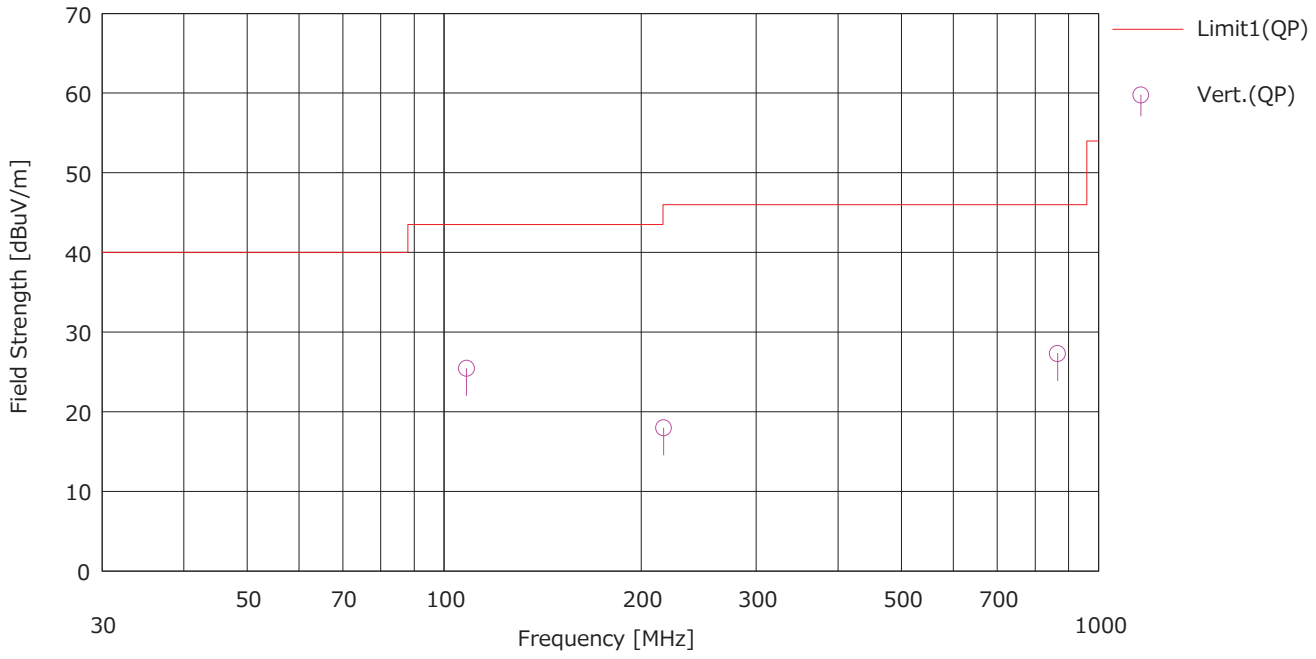


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : Local (108 MHz Receiving)

Limit : FCC Part 15B CLASS B (3m)

Engineer : Seigo Kakehi

<< QP DATA >>

No.	Freq.	Reading (QP)	Ant.Fac	Loss	Gain	S.Fac	Result (QP)	Limit (QP)	Margin (QP)	Pola.	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]		
1	108.220	37.70	10.86	8.10	29.68	0.06	27.04	43.50	16.46	Hori.	BA	
2	108.220	36.10	10.86	8.10	29.68	0.06	25.44	43.50	18.06	Vert.	BA	
3	216.440	32.20	11.00	6.31	29.64	0.00	19.87	46.00	26.13	Hori.	LA	
4	216.440	30.30	11.00	6.31	29.64	0.00	17.97	46.00	28.03	Vert.	LA	
5	324.660	---	14.40	7.34	29.79	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
6	324.660	---	14.40	7.34	29.79	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
7	432.880	---	16.11	8.17	29.95	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
8	432.880	---	16.11	8.17	29.95	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
9	541.100	---	17.64	8.71	30.02	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
10	541.100	---	17.64	8.71	30.02	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
11	649.320	---	19.22	9.27	29.95	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
12	649.320	---	19.22	9.27	29.95	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
13	757.540	---	20.21	9.88	29.80	0.00	---	46.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
14	757.540	---	20.21	9.88	29.80	0.00	---	46.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.
15	865.760	23.10	21.87	10.49	29.37	0.00	26.09	46.00	19.91	Hori.	LA	
16	865.760	24.30	21.87	10.49	29.37	0.00	27.29	46.00	18.71	Vert.	LA	
17	973.980	---	22.37	11.12	28.84	0.00	---	54.00	---	Hori.	LA	It has been confirmed that the margin exceeds 20 dB.
18	973.980	---	22.37	11.12	28.84	0.00	---	54.00	---	Vert.	LA	It has been confirmed that the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

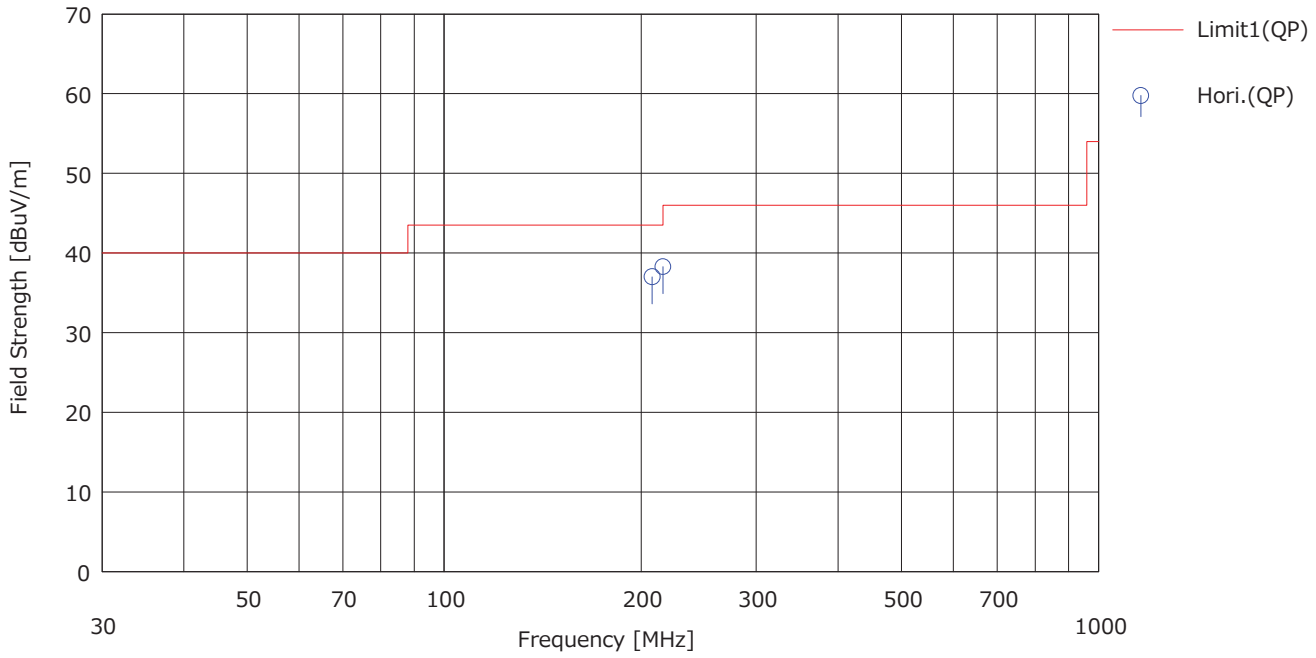
UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (SUb)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : -

Limit : FCC Part 15B CLASS B (3m)

Engineer : Hiromichi Nakai



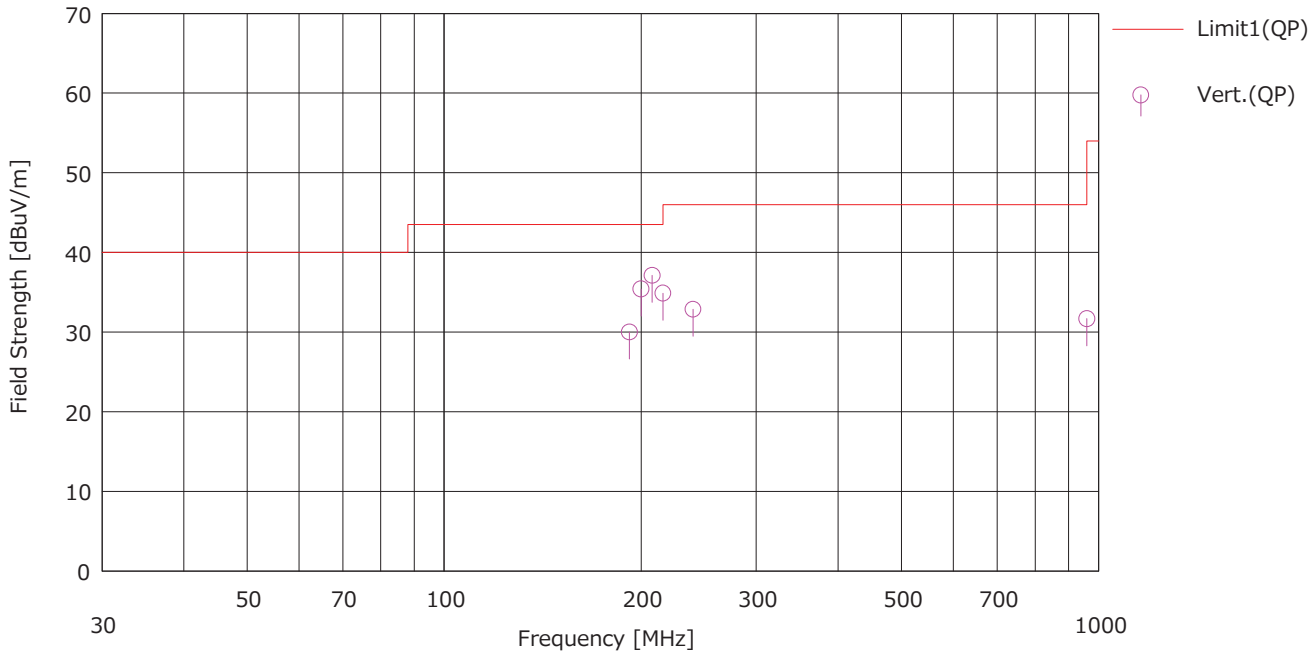


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 2 Open area test site
Date : 01/08/2020

Mode : 1.FM Reception (SUb)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 20 deg. C / 40 % RH

Remarks : -

Limit : FCC Part 15B CLASS B (3m)

Engineer : Hiromichi Nakai

<< QP DATA >>

No.	Freq.	Reading (QP)	Ant.Fac	Loss	Gain	S.Fac	Result (QP)	Limit (QP)	Margin (QP)	Pola.	Ant. Type	Comment
	[MHz]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]	[H/V]		
1	191.998	36.10	14.54	8.98	29.63	0.02	30.01	43.50	13.49	Vert.	BA	
2	200.002	47.40	11.47	6.15	29.62	0.00	35.40	43.50	8.10	Vert.	LA	
3	207.999	49.40	11.02	6.23	29.63	0.00	37.02	43.50	6.48	Hori.	LA	
4	208.000	49.50	11.02	6.23	29.63	0.00	37.12	43.50	6.38	Vert.	LA	
5	216.000	47.20	11.01	6.31	29.64	0.00	34.88	43.50	8.62	Vert.	LA	
6	216.002	50.60	11.01	6.31	29.64	0.00	38.28	46.00	7.72	Hori.	LA	
7	240.001	44.40	11.59	6.54	29.67	0.00	32.86	46.00	13.14	Vert.	LA	
8	959.996	27.40	22.15	11.04	28.91	0.00	31.68	46.00	14.32	Vert.	LA	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING+ANT.Fac.+LOSS(CABLE+ATTEN(Below 1GHz only)) - GAIN(AMP)+S.Fac(ANSI C63.5_ΔAF)

DATA OF RADIATED DISTURBANCE TEST

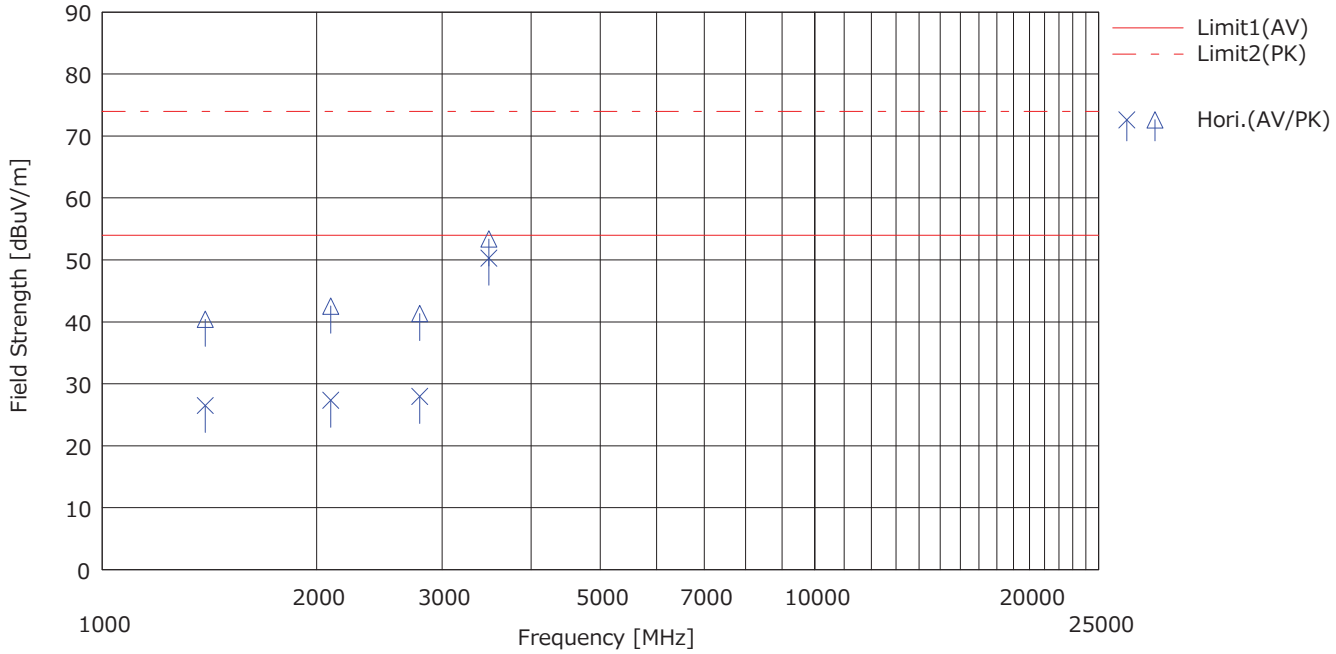
UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (87.0 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi



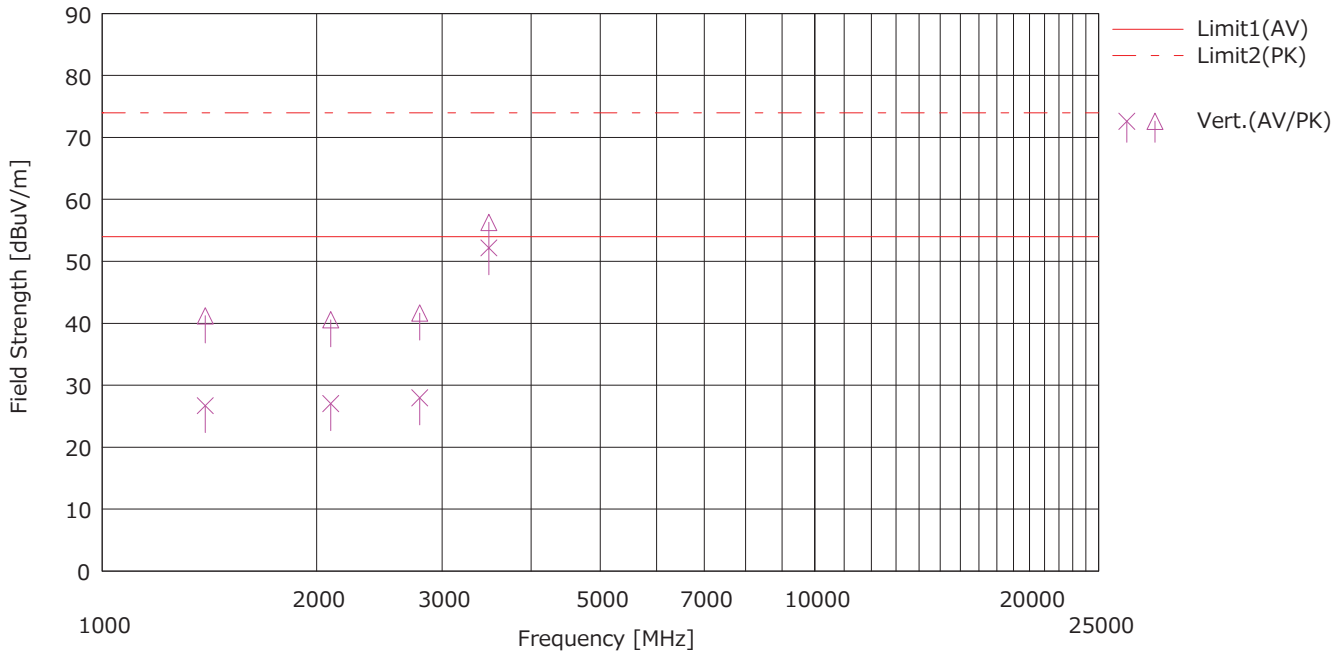


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (87.0 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

<< AV/PK DATA >>

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
1	1046.640	---	---	24.82	1.98	40.36	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
2	1046.640	---	---	24.82	1.98	40.36	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
3	1133.860	---	---	25.00	2.05	40.22	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
4	1133.860	---	---	25.00	2.05	40.22	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
5	1221.080	---	---	25.40	2.12	40.08	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
6	1221.080	---	---	25.40	2.12	40.08	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
7	1308.300	---	---	25.73	2.19	39.94	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
8	1308.300	---	---	25.73	2.19	39.94	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
9	1395.520	36.90	50.80	25.77	3.35	39.80	0.28	26.50	40.40	54.00	74.00	27.50	33.60	Hori.	HA	
10	1395.520	37.10	51.60	25.77	3.35	39.80	0.28	26.70	41.20	54.00	74.00	27.30	32.80	Vert.	HA	
11	1482.740	---	---	25.51	2.34	39.66	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
12	1482.740	---	---	25.51	2.34	39.66	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
13	1569.960	---	---	25.28	2.41	39.52	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
14	1569.960	---	---	25.28	2.41	39.52	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
15	1657.180	---	---	25.02	2.48	39.38	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
16	1657.180	---	---	25.02	2.48	39.38	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
17	1744.400	---	---	25.08	2.55	39.24	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
18	1744.400	---	---	25.08	2.55	39.24	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
19	1831.620	---	---	25.40	2.62	39.10	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
20	1831.620	---	---	25.40	2.62	39.10	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
21	1918.840	---	---	25.73	2.69	38.96	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
22	1918.840	---	---	25.73	2.69	38.96	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
23	2006.060	---	---	26.25	2.76	38.83	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
24	2006.060	---	---	26.25	2.76	38.83	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
25	2093.280	34.80	50.00	26.98	4.17	38.88	0.28	27.35	42.55	54.00	74.00	26.65	31.45	Hori.	HA	
26	2093.280	34.50	48.00	26.98	4.17	38.88	0.28	27.05	40.55	54.00	74.00	26.95	33.45	Vert.	HA	
27	2180.500	---	---	28.16	2.87	38.92	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
28	2180.500	---	---	28.16	2.87	38.92	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
29	2267.720	---	---	28.15	2.93	38.96	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
30	2267.720	---	---	28.15	2.93	38.96	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
31	2354.940	---	---	27.74	2.98	39.01	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
32	2354.940	---	---	27.74	2.98	39.01	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
33	2442.160	---	---	27.50	3.03	39.05	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
34	2442.160	---	---	27.50	3.03	39.05	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
35	2529.380	---	---	27.50	3.08	39.09	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
36	2529.380	---	---	27.50	3.08	39.09	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
37	2616.600	---	---	27.80	3.14	39.14	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
38	2616.600	---	---	27.80	3.14	39.14	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
39	2703.820	---	---	28.11	3.19	39.18	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
40	2703.820	---	---	28.11	3.19	39.18	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
41	2791.040	33.80	47.20	28.29	4.81	39.23	0.28	27.95	41.35	54.00	74.00	26.05	32.65	Hori.	HA	
42	2791.040	33.80	47.50	28.29	4.81	39.23	0.28	27.95	41.65	54.00	74.00	26.05	32.35	Vert.	HA	
43	2878.260	---	---	28.51	3.30	39.27	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
44	2878.260	---	---	28.51	3.30	39.27	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
45	2965.480	---	---	28.41	3.34	39.31	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
46	2965.480	---	---	28.41	3.34	39.31	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
47	3052.700	---	---	28.63	3.40	39.30	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
48	3052.700	---	---	28.63	3.40	39.30	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (87.0 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
49	3139.920	---	---	28.75	3.45	39.25	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
50	3139.920	---	---	28.75	3.45	39.25	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
51	3227.140	---	---	28.52	3.51	39.21	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
52	3227.140	---	---	28.52	3.51	39.21	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
53	3314.360	---	---	28.18	3.55	39.16	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
54	3314.360	---	---	28.18	3.55	39.16	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
55	3401.580	---	---	28.18	3.60	39.11	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
56	3401.580	---	---	28.18	3.60	39.11	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
57	3488.800	54.90	58.00	28.77	5.39	39.07	0.28	50.27	53.37	54.00	74.00	3.73	20.63	Hori.	HA	
58	3488.800	56.80	60.90	28.77	5.39	39.07	0.28	52.17	56.27	54.00	74.00	1.83	17.73	Vert.	HA	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

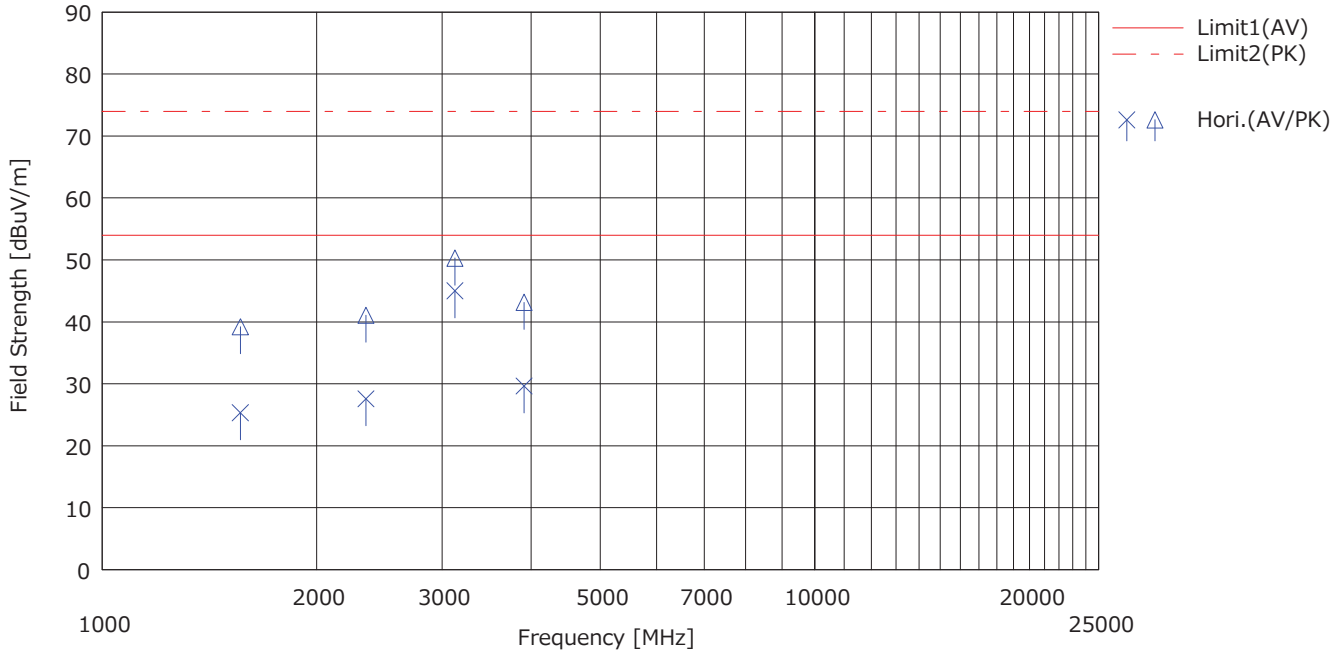
UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (97.5 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi



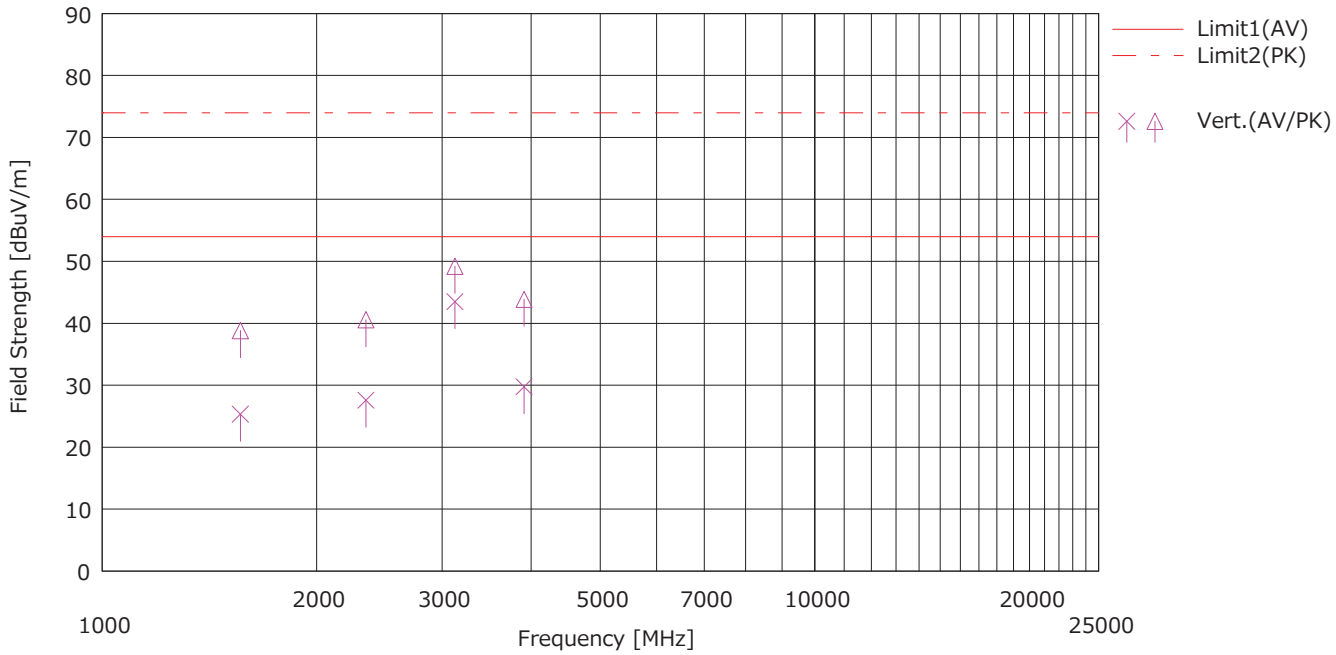


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (97.5 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

<< AV/PK DATA >>

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
1	1074.920	---	---	24.95	2.00	40.32	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
2	1074.920	---	---	24.95	2.00	40.32	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
3	1172.640	---	---	25.15	2.08	40.16	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
4	1172.640	---	---	25.15	2.08	40.16	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
5	1270.360	---	---	25.57	2.16	40.00	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
6	1270.360	---	---	25.57	2.16	40.00	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
7	1368.080	---	---	25.77	2.24	39.85	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
8	1368.080	---	---	25.77	2.24	39.85	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
9	1465.800	---	---	25.63	2.32	39.69	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
10	1465.800	---	---	25.63	2.32	39.69	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
11	1563.520	35.70	49.60	25.31	3.56	39.53	0.28	25.32	39.22	54.00	74.00	28.68	34.78	Hori.	HA	
12	1563.520	35.70	49.20	25.31	3.56	39.53	0.28	25.32	38.82	54.00	74.00	28.68	35.18	Vert.	HA	
13	1661.240	---	---	25.02	2.48	39.38	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
14	1661.240	---	---	25.02	2.48	39.38	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
15	1758.960	---	---	25.12	2.56	39.22	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
16	1758.960	---	---	25.12	2.56	39.22	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
17	1856.680	---	---	25.49	2.65	39.06	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
18	1856.680	---	---	25.49	2.65	39.06	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
19	1954.400	---	---	25.93	2.72	38.90	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
20	1954.400	---	---	25.93	2.72	38.90	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
21	2052.120	---	---	26.52	2.79	38.86	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
22	2052.120	---	---	26.52	2.79	38.86	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
23	2149.840	---	---	27.89	2.86	38.90	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
24	2149.840	---	---	27.89	2.86	38.90	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
25	2247.560	---	---	28.24	2.91	38.95	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
26	2247.560	---	---	28.24	2.91	38.95	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
27	2345.280	34.10	47.60	27.78	4.41	39.00	0.28	27.57	41.07	54.00	74.00	26.43	32.93	Hori.	HA	
28	2345.280	34.10	47.10	27.78	4.41	39.00	0.28	27.57	40.57	54.00	74.00	26.43	33.43	Vert.	HA	
29	2443.000	---	---	27.50	3.03	39.05	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
30	2443.000	---	---	27.50	3.03	39.05	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
31	2540.720	---	---	27.53	3.10	39.10	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
32	2540.720	---	---	27.53	3.10	39.10	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
33	2638.440	---	---	27.86	3.15	39.15	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
34	2638.440	---	---	27.86	3.15	39.15	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
35	2736.160	---	---	28.11	3.21	39.20	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
36	2736.160	---	---	28.11	3.21	39.20	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
37	2833.880	---	---	28.46	3.27	39.25	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
38	2833.880	---	---	28.46	3.27	39.25	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
39	2931.600	---	---	28.42	3.33	39.30	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
40	2931.600	---	---	28.42	3.33	39.30	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
41	3029.320	---	---	28.57	3.38	39.31	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
42	3029.320	---	---	28.57	3.38	39.31	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
43	3127.040	50.10	55.40	28.77	5.10	39.26	0.28	44.99	50.29	54.00	74.00	9.01	23.71	Hori.	HA	
44	3127.040	48.60	54.30	28.77	5.10	39.26	0.28	43.49	49.19	54.00	74.00	10.51	24.81	Vert.	HA	
45	3224.760	---	---	28.53	3.50	39.21	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
46	3224.760	---	---	28.53	3.50	39.21	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
47	3322.480	---	---	28.14	3.56	39.16	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
48	3322.480	---	---	28.14	3.56	39.16	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (97.5 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
49	3420.200	---	---	28.32	3.62	39.10	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
50	3420.200	---	---	28.32	3.62	39.10	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
51	3517.920	---	---	28.89	3.67	39.05	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
52	3517.920	---	---	28.89	3.67	39.05	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
53	3615.640	---	---	29.15	3.73	39.00	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
54	3615.640	---	---	29.15	3.73	39.00	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
55	3713.360	---	---	29.31	3.78	38.94	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
56	3713.360	---	---	29.31	3.78	38.94	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
57	3811.080	---	---	29.55	3.84	38.89	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
58	3811.080	---	---	29.55	3.84	38.89	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
59	3908.800	32.80	46.30	29.68	5.72	38.84	0.28	29.64	43.14	54.00	74.00	24.36	30.86	Hori.	HA	
60	3908.800	32.90	47.00	29.68	5.72	38.84	0.28	29.74	43.84	54.00	74.00	24.26	30.16	Vert.	HA	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

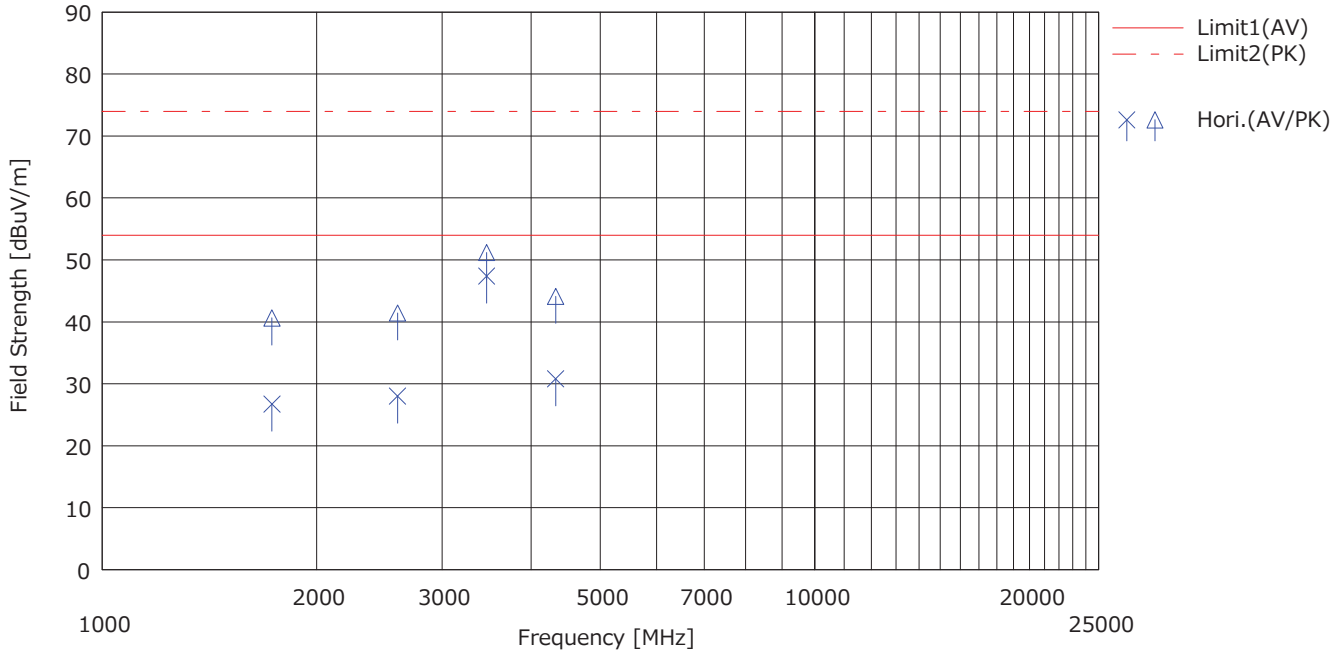
UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (108 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi



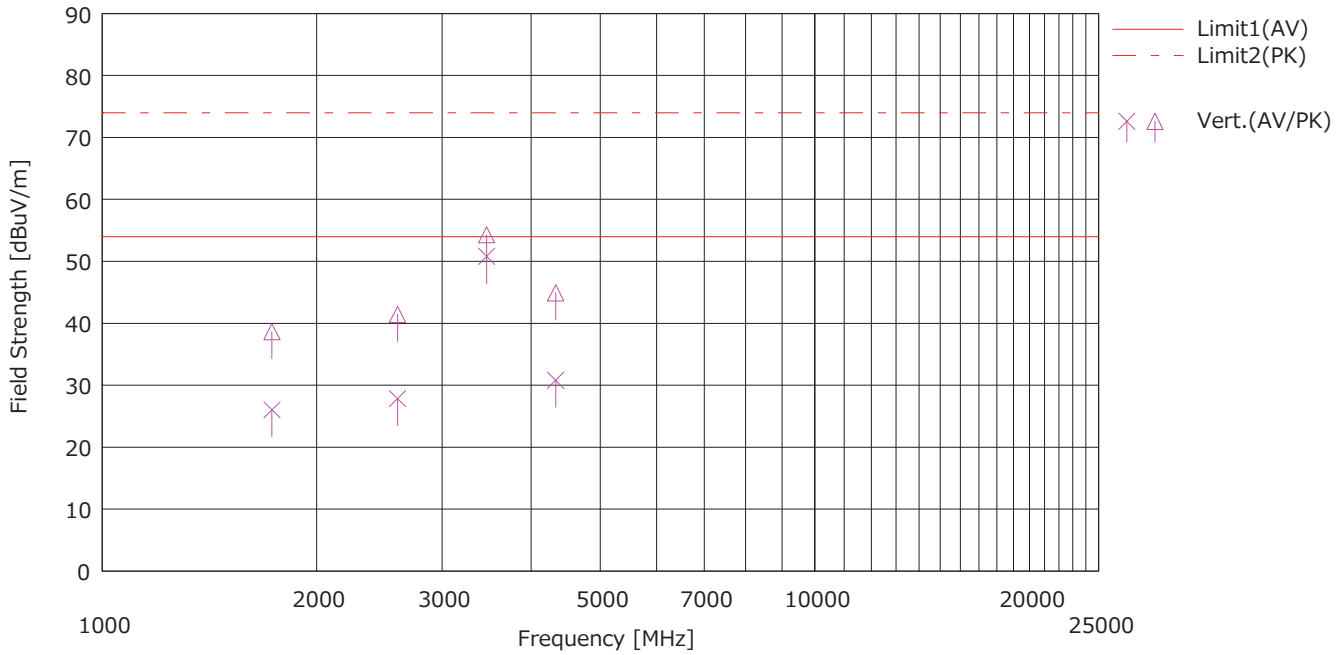


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (108 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

<< AV/PK DATA >>

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
1	1082.200	---	---	24.98	2.01	40.31	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
2	1082.200	---	---	24.98	2.01	40.31	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
3	1190.420	---	---	25.29	2.10	40.13	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
4	1190.420	---	---	25.29	2.10	40.13	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
5	1298.640	---	---	25.71	2.18	39.96	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
6	1298.640	---	---	25.71	2.18	39.96	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
7	1406.860	---	---	25.77	2.28	39.78	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
8	1406.860	---	---	25.77	2.28	39.78	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
9	1515.080	---	---	25.38	2.36	39.61	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
10	1515.080	---	---	25.38	2.36	39.61	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
11	1623.300	---	---	25.09	2.45	39.44	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
12	1623.300	---	---	25.09	2.45	39.44	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
13	1731.520	36.90	50.80	25.05	3.75	39.26	0.28	26.72	40.62	54.00	74.00	27.28	33.38	Hori.	HA	
14	1731.520	36.20	48.80	25.05	3.75	39.26	0.28	26.02	38.62	54.00	74.00	27.98	35.38	Vert.	HA	
15	1839.740	---	---	25.43	2.63	39.09	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
16	1839.740	---	---	25.43	2.63	39.09	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
17	1947.960	---	---	25.89	2.72	38.91	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
18	1947.960	---	---	25.89	2.72	38.91	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
19	2056.180	---	---	26.57	2.79	38.86	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
20	2056.180	---	---	26.57	2.79	38.86	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
21	2164.400	---	---	28.02	2.86	38.91	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
22	2164.400	---	---	28.02	2.86	38.91	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
23	2272.620	---	---	28.13	2.93	38.97	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
24	2272.620	---	---	28.13	2.93	38.97	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
25	2380.840	---	---	27.63	3.00	39.02	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
26	2380.840	---	---	27.63	3.00	39.02	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
27	2489.060	---	---	27.44	3.07	39.07	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
28	2489.060	---	---	27.44	3.07	39.07	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
29	2597.280	34.50	47.90	27.74	4.64	39.13	0.28	28.03	41.43	54.00	74.00	25.97	32.57	Hori.	HA	
30	2597.280	34.30	47.90	27.74	4.64	39.13	0.28	27.83	41.43	54.00	74.00	26.17	32.57	Vert.	HA	
31	2705.500	---	---	28.11	3.19	39.18	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
32	2705.500	---	---	28.11	3.19	39.18	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
33	2813.720	---	---	28.38	3.26	39.24	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
34	2813.720	---	---	28.38	3.26	39.24	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
35	2921.940	---	---	28.44	3.33	39.29	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
36	2921.940	---	---	28.44	3.33	39.29	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
37	3030.160	---	---	28.58	3.38	39.31	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
38	3030.160	---	---	28.58	3.38	39.31	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
39	3138.380	---	---	28.75	3.45	39.26	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
40	3138.380	---	---	28.75	3.45	39.26	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
41	3246.600	---	---	28.43	3.51	39.20	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
42	3246.600	---	---	28.43	3.51	39.20	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
43	3354.820	---	---	28.03	3.58	39.14	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
44	3354.820	---	---	28.03	3.58	39.14	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
45	3463.040	52.20	56.00	28.62	5.37	39.08	0.28	47.39	51.19	54.00	74.00	6.61	22.81	Hori.	HA	
46	3463.040	55.60	59.10	28.62	5.37	39.08	0.28	50.79	54.29	54.00	74.00	3.21	19.71	Vert.	HA	
47	3571.260	---	---	29.05	3.70	39.02	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
48	3571.260	---	---	29.05	3.70	39.02	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (108 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
49	3679.480	---	---	29.27	3.77	38.96	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
50	3679.480	---	---	29.27	3.77	38.96	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
51	3787.700	---	---	29.49	3.83	38.90	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
52	3787.700	---	---	29.49	3.83	38.90	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
53	3895.920	---	---	29.69	3.89	38.85	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
54	3895.920	---	---	29.69	3.89	38.85	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
55	4004.140	---	---	29.75	3.95	38.79	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
56	4004.140	---	---	29.75	3.95	38.79	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
57	4112.360	---	---	29.81	4.01	38.82	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
58	4112.360	---	---	29.81	4.01	38.82	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
59	4220.580	---	---	30.13	4.05	38.85	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
60	4220.580	---	---	30.13	4.05	38.85	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
61	4328.800	33.00	46.30	30.37	6.03	38.87	0.28	30.81	44.11	54.00	74.00	23.19	29.89	Hori.	HA	
62	4328.800	33.00	47.10	30.37	6.03	38.87	0.28	30.81	44.91	54.00	74.00	23.19	29.09	Vert.	HA	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

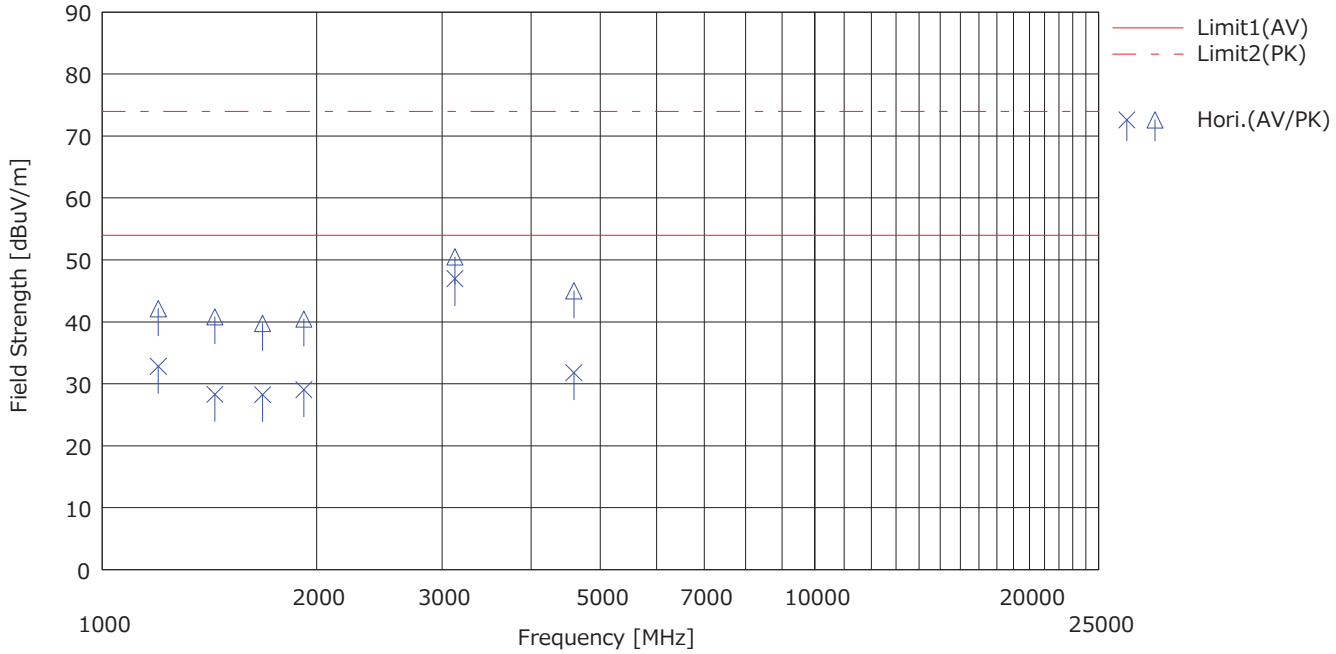
UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : -

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Jun Ito



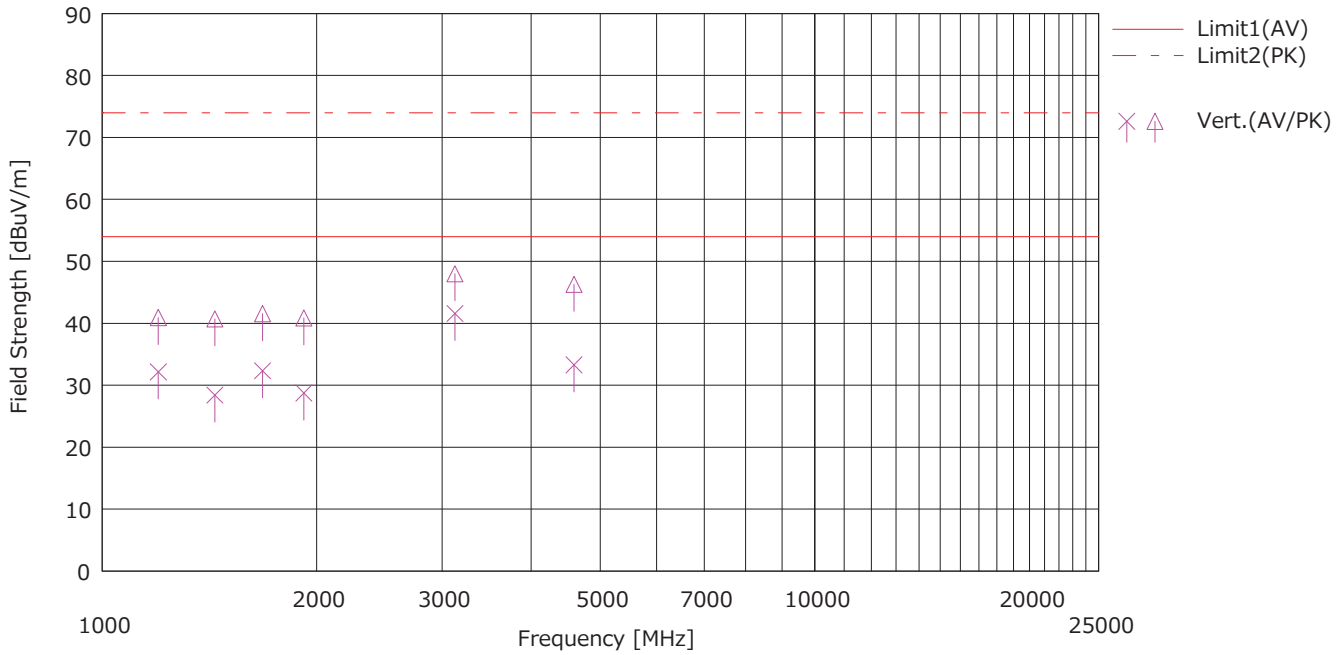


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Main)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : -

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Jun Ito

<< AV/PK DATA >>

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
1	1200.006	44.20	53.50	25.36	3.11	40.12	0.28	32.83	42.13	54.00	74.00	21.17	31.87	Hori.	HA	
2	1200.007	43.50	52.30	25.36	3.11	40.12	0.28	32.13	40.93	54.00	74.00	21.87	33.07	Vert.	HA	
3	1440.057	38.60	51.10	25.75	3.40	39.73	0.28	28.30	40.80	54.00	74.00	25.70	33.20	Hori.	HA	
4	1440.062	38.70	51.00	25.75	3.40	39.73	0.28	28.40	40.70	54.00	74.00	25.60	33.30	Vert.	HA	
5	1680.084	38.60	50.10	25.00	3.70	39.35	0.28	28.23	39.73	54.00	74.00	25.77	34.27	Hori.	HA	
6	1680.099	42.70	51.90	25.00	3.70	39.35	0.28	32.33	41.53	54.00	74.00	21.67	32.47	Vert.	HA	
7	1920.050	38.00	49.40	25.74	3.99	38.96	0.28	29.05	40.45	54.00	74.00	24.95	33.55	Hori.	HA	
8	1920.064	37.70	49.80	25.74	3.99	38.96	0.28	28.75	40.85	54.00	74.00	25.25	33.15	Vert.	HA	
9	3127.065	52.10	55.60	28.77	5.10	39.26	0.28	46.99	50.49	54.00	74.00	7.01	23.51	Hori.	HA	
10	3127.072	46.70	53.10	28.77	5.10	39.26	0.28	41.59	47.99	54.00	74.00	12.41	26.01	Vert.	HA	
11	4592.497	33.40	46.60	30.82	6.23	38.94	0.28	31.79	44.99	54.00	74.00	22.21	29.01	Hori.	HA	
12	4593.157	34.90	47.90	30.82	6.23	38.94	0.28	33.29	46.29	54.00	74.00	20.71	27.71	Vert.	HA	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

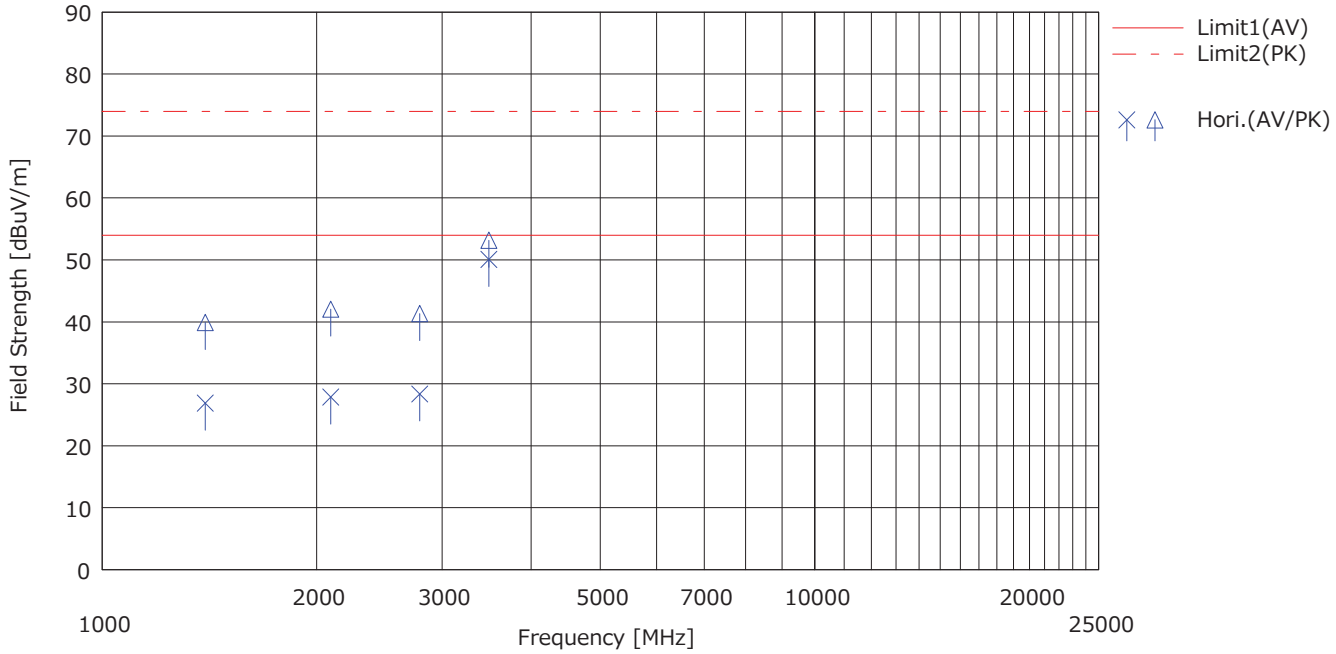
UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (87.0 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi



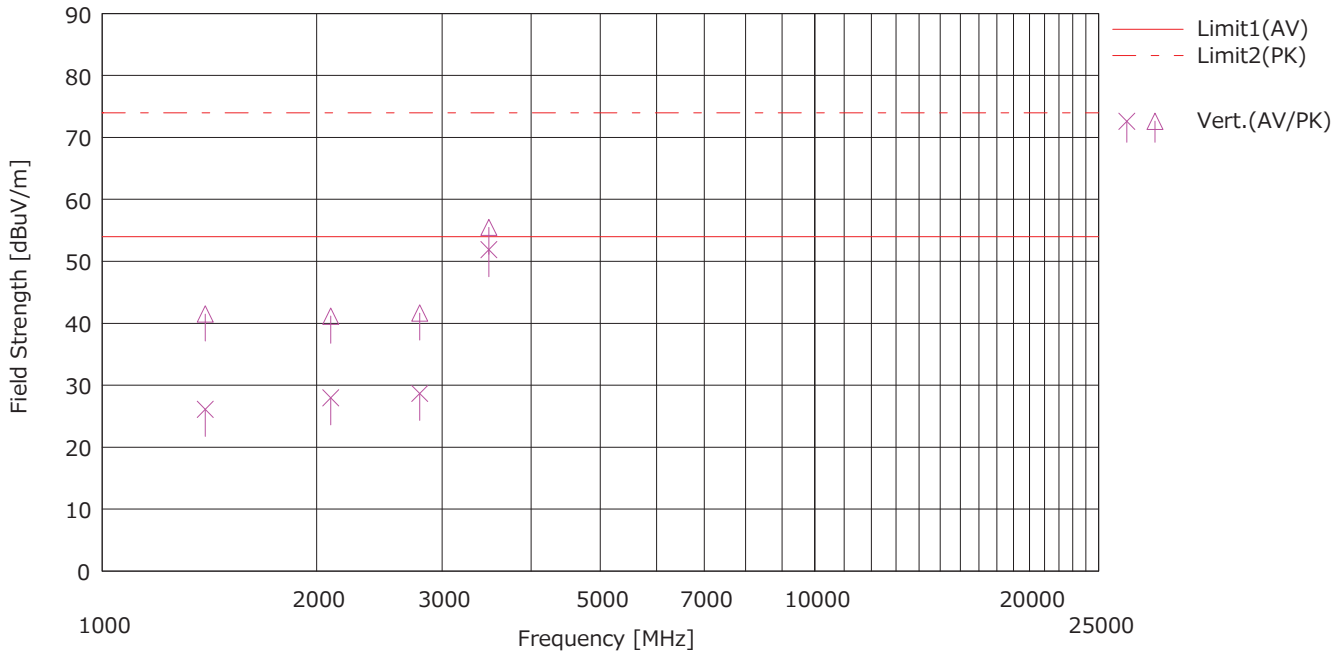


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (87.0 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

<< AV/PK DATA >>

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
1	1046.640	---	---	24.82	1.98	40.36	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
2	1046.640	---	---	24.82	1.98	40.36	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
3	1133.860	---	---	25.00	2.05	40.22	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
4	1133.860	---	---	25.00	2.05	40.22	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
5	1221.080	---	---	25.40	2.12	40.08	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
6	1221.080	---	---	25.40	2.12	40.08	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
7	1308.300	---	---	25.73	2.19	39.94	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
8	1308.300	---	---	25.73	2.19	39.94	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
9	1395.520	37.30	50.30	25.77	3.35	39.80	0.28	26.90	39.90	54.00	74.00	27.10	34.10	Hori.	HA	
10	1395.520	36.50	51.90	25.77	3.35	39.80	0.28	26.10	41.50	54.00	74.00	27.90	32.50	Vert.	HA	
11	1482.740	---	---	25.51	2.34	39.66	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
12	1482.740	---	---	25.51	2.34	39.66	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
13	1569.960	---	---	25.28	2.41	39.52	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
14	1569.960	---	---	25.28	2.41	39.52	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
15	1657.180	---	---	25.02	2.48	39.38	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
16	1657.180	---	---	25.02	2.48	39.38	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
17	1744.400	---	---	25.08	2.55	39.24	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
18	1744.400	---	---	25.08	2.55	39.24	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
19	1831.620	---	---	25.40	2.62	39.10	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
20	1831.620	---	---	25.40	2.62	39.10	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
21	1918.840	---	---	25.73	2.69	38.96	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
22	1918.840	---	---	25.73	2.69	38.96	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
23	2006.060	---	---	26.25	2.76	38.83	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
24	2006.060	---	---	26.25	2.76	38.83	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
25	2093.280	35.30	49.50	26.98	4.17	38.88	0.28	27.85	42.05	54.00	74.00	26.15	31.95	Hori.	HA	
26	2093.280	35.40	48.60	26.98	4.17	38.88	0.28	27.95	41.15	54.00	74.00	26.05	32.85	Vert.	HA	
27	2180.500	---	---	28.16	2.87	38.92	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
28	2180.500	---	---	28.16	2.87	38.92	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
29	2267.720	---	---	28.15	2.93	38.96	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
30	2267.720	---	---	28.15	2.93	38.96	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
31	2354.940	---	---	27.74	2.98	39.01	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
32	2354.940	---	---	27.74	2.98	39.01	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
33	2442.160	---	---	27.50	3.03	39.05	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
34	2442.160	---	---	27.50	3.03	39.05	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
35	2529.380	---	---	27.50	3.08	39.09	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
36	2529.380	---	---	27.50	3.08	39.09	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
37	2616.600	---	---	27.80	3.14	39.14	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
38	2616.600	---	---	27.80	3.14	39.14	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
39	2703.820	---	---	28.11	3.19	39.18	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
40	2703.820	---	---	28.11	3.19	39.18	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
41	2791.040	34.20	47.20	28.29	4.81	39.23	0.28	28.35	41.35	54.00	74.00	25.65	32.65	Hori.	HA	
42	2791.040	34.50	47.50	28.29	4.81	39.23	0.28	28.65	41.65	54.00	74.00	25.35	32.35	Vert.	HA	
43	2878.260	---	---	28.51	3.30	39.27	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
44	2878.260	---	---	28.51	3.30	39.27	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
45	2965.480	---	---	28.41	3.34	39.31	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
46	2965.480	---	---	28.41	3.34	39.31	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
47	3052.700	---	---	28.63	3.40	39.30	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
48	3052.700	---	---	28.63	3.40	39.30	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (87.0 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
49	3139.920	---	---	28.75	3.45	39.25	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
50	3139.920	---	---	28.75	3.45	39.25	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
51	3227.140	---	---	28.52	3.51	39.21	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
52	3227.140	---	---	28.52	3.51	39.21	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
53	3314.360	---	---	28.18	3.55	39.16	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
54	3314.360	---	---	28.18	3.55	39.16	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
55	3401.580	---	---	28.18	3.60	39.11	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
56	3401.580	---	---	28.18	3.60	39.11	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
57	3488.800	54.70	57.80	28.77	5.39	39.07	0.28	50.07	53.17	54.00	74.00	3.93	20.83	Hori.	HA	
58	3488.800	56.50	60.10	28.77	5.39	39.07	0.28	51.87	55.47	54.00	74.00	2.13	18.53	Vert.	HA	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

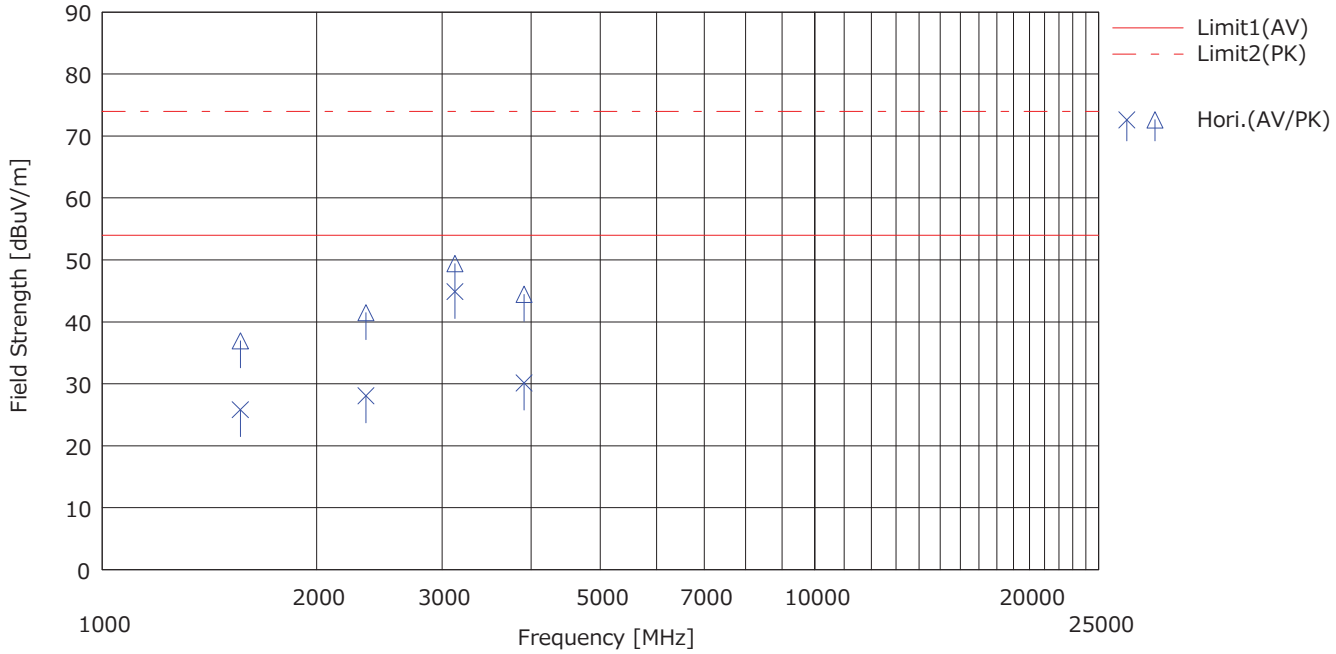
UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (97.5 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi



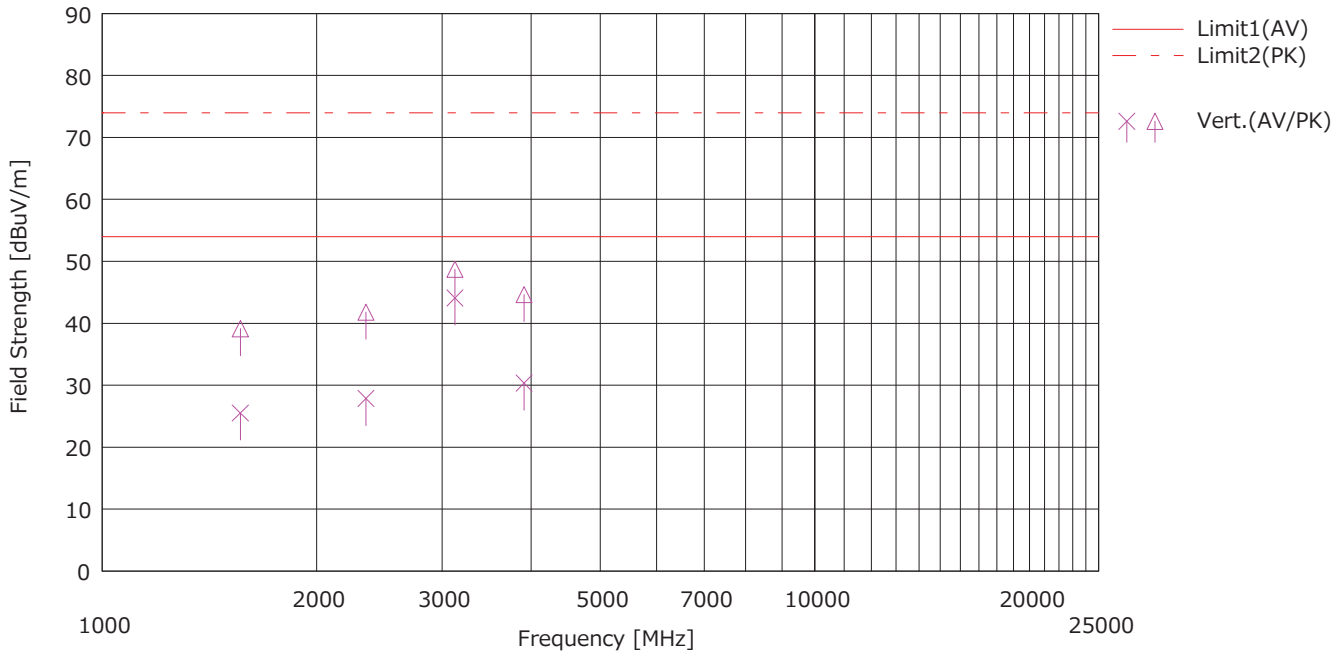


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (97.5 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

<< AV/PK DATA >>

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
1	1074.920	---	---	24.95	2.00	40.32	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
2	1074.920	---	---	24.95	2.00	40.32	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
3	1172.640	---	---	25.15	2.08	40.16	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
4	1172.640	---	---	25.15	2.08	40.16	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
5	1270.360	---	---	25.57	2.16	40.00	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
6	1270.360	---	---	25.57	2.16	40.00	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
7	1368.080	---	---	25.77	2.24	39.85	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
8	1368.080	---	---	25.77	2.24	39.85	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
9	1465.800	---	---	25.63	2.32	39.69	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
10	1465.800	---	---	25.63	2.32	39.69	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
11	1563.520	36.20	47.30	25.31	3.56	39.53	0.28	25.82	36.92	54.00	74.00	28.18	37.08	Hori.	HA	
12	1563.520	35.90	49.50	25.31	3.56	39.53	0.28	25.52	39.12	54.00	74.00	28.48	34.88	Vert.	HA	
13	1661.240	---	---	25.02	2.48	39.38	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
14	1661.240	---	---	25.02	2.48	39.38	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
15	1758.960	---	---	25.12	2.56	39.22	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
16	1758.960	---	---	25.12	2.56	39.22	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
17	1856.680	---	---	25.49	2.65	39.06	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
18	1856.680	---	---	25.49	2.65	39.06	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
19	1954.400	---	---	25.93	2.72	38.90	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
20	1954.400	---	---	25.93	2.72	38.90	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
21	2052.120	---	---	26.52	2.79	38.86	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
22	2052.120	---	---	26.52	2.79	38.86	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
23	2149.840	---	---	27.89	2.86	38.90	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
24	2149.840	---	---	27.89	2.86	38.90	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
25	2247.560	---	---	28.24	2.91	38.95	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
26	2247.560	---	---	28.24	2.91	38.95	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
27	2345.280	34.60	48.00	27.78	4.41	39.00	0.28	28.07	41.47	54.00	74.00	25.93	32.53	Hori.	HA	
28	2345.280	34.40	48.30	27.78	4.41	39.00	0.28	27.87	41.77	54.00	74.00	26.13	32.23	Vert.	HA	
29	2443.000	---	---	27.50	3.03	39.05	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
30	2443.000	---	---	27.50	3.03	39.05	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
31	2540.720	---	---	27.53	3.10	39.10	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
32	2540.720	---	---	27.53	3.10	39.10	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
33	2638.440	---	---	27.86	3.15	39.15	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
34	2638.440	---	---	27.86	3.15	39.15	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
35	2736.160	---	---	28.11	3.21	39.20	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
36	2736.160	---	---	28.11	3.21	39.20	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
37	2833.880	---	---	28.46	3.27	39.25	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
38	2833.880	---	---	28.46	3.27	39.25	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
39	2931.600	---	---	28.42	3.33	39.30	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
40	2931.600	---	---	28.42	3.33	39.30	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
41	3029.320	---	---	28.57	3.38	39.31	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
42	3029.320	---	---	28.57	3.38	39.31	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
43	3127.040	50.00	54.50	28.77	5.10	39.26	0.28	44.89	49.39	54.00	74.00	9.11	24.61	Hori.	HA	
44	3127.040	49.20	53.80	28.77	5.10	39.26	0.28	44.09	48.69	54.00	74.00	9.91	25.31	Vert.	HA	
45	3224.760	---	---	28.53	3.50	39.21	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
46	3224.760	---	---	28.53	3.50	39.21	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
47	3322.480	---	---	28.14	3.56	39.16	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
48	3322.480	---	---	28.14	3.56	39.16	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (97.5 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
49	3420.200	---	---	28.32	3.62	39.10	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
50	3420.200	---	---	28.32	3.62	39.10	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
51	3517.920	---	---	28.89	3.67	39.05	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
52	3517.920	---	---	28.89	3.67	39.05	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
53	3615.640	---	---	29.15	3.73	39.00	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
54	3615.640	---	---	29.15	3.73	39.00	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
55	3713.360	---	---	29.31	3.78	38.94	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
56	3713.360	---	---	29.31	3.78	38.94	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
57	3811.080	---	---	29.55	3.84	38.89	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
58	3811.080	---	---	29.55	3.84	38.89	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
59	3908.800	33.30	47.60	29.68	5.72	38.84	0.28	30.14	44.44	54.00	74.00	23.86	29.56	Hori.	HA	
60	3908.800	33.50	47.80	29.68	5.72	38.84	0.28	30.34	44.64	54.00	74.00	23.66	29.36	Vert.	HA	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

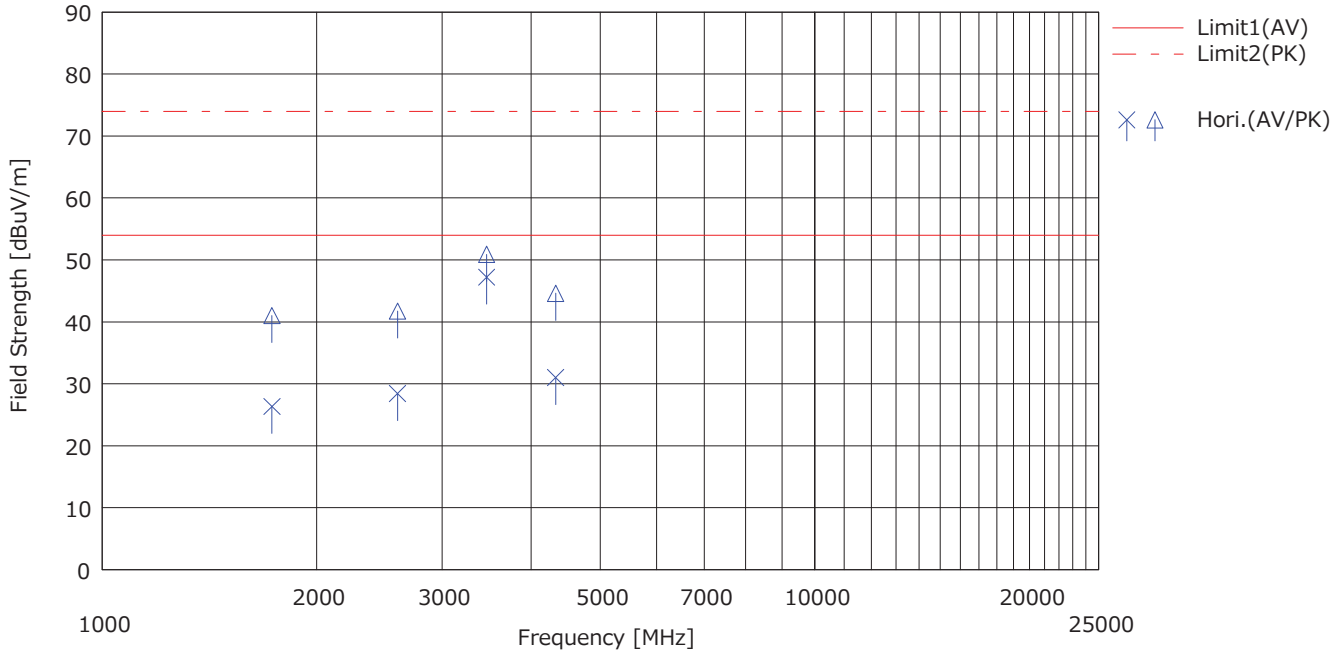
UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (108 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi



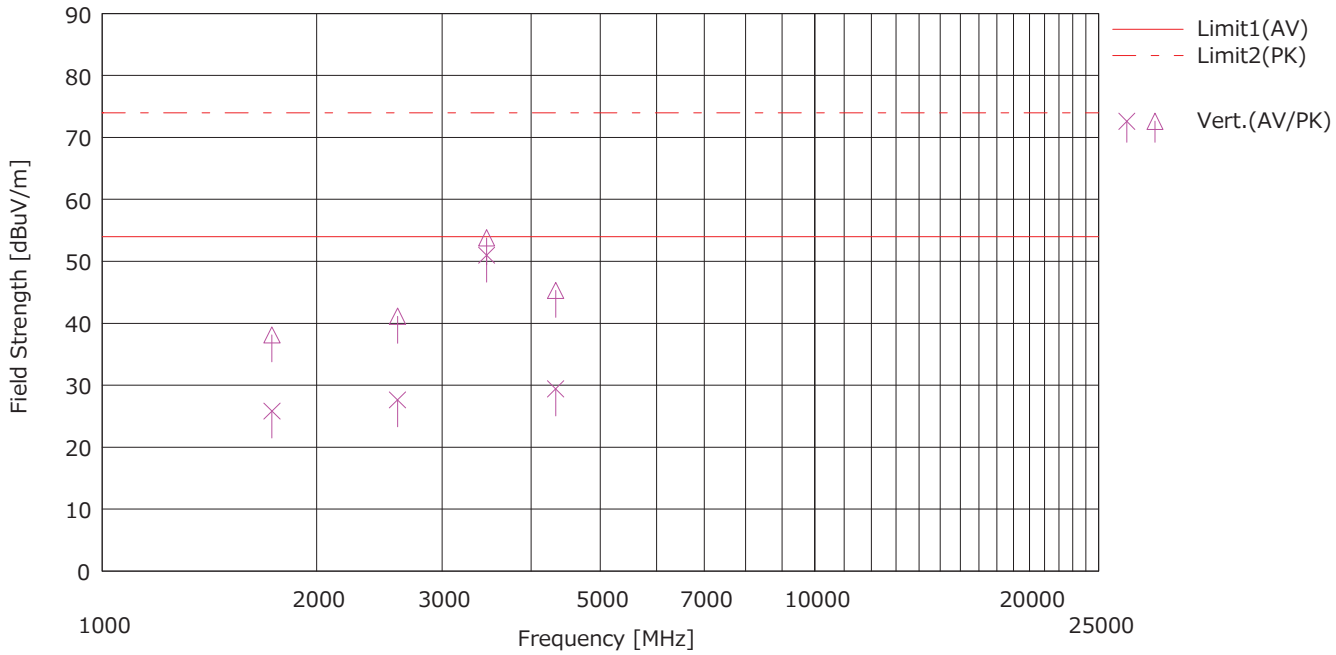


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (108 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

<< AV/PK DATA >>

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
1	1082.200	---	---	24.98	2.01	40.31	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
2	1082.200	---	---	24.98	2.01	40.31	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
3	1190.420	---	---	25.29	2.10	40.13	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
4	1190.420	---	---	25.29	2.10	40.13	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
5	1298.640	---	---	25.71	2.18	39.96	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
6	1298.640	---	---	25.71	2.18	39.96	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
7	1406.860	---	---	25.77	2.28	39.78	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
8	1406.860	---	---	25.77	2.28	39.78	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
9	1515.080	---	---	25.38	2.36	39.61	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
10	1515.080	---	---	25.38	2.36	39.61	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
11	1623.300	---	---	25.09	2.45	39.44	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
12	1623.300	---	---	25.09	2.45	39.44	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
13	1731.520	36.50	51.20	25.05	3.75	39.26	0.28	26.32	41.02	54.00	74.00	27.68	32.98	Hori.	HA	
14	1731.520	36.00	48.30	25.05	3.75	39.26	0.28	25.82	38.12	54.00	74.00	28.18	35.88	Vert.	HA	
15	1839.740	---	---	25.43	2.63	39.09	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
16	1839.740	---	---	25.43	2.63	39.09	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
17	1947.960	---	---	25.89	2.72	38.91	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
18	1947.960	---	---	25.89	2.72	38.91	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
19	2056.180	---	---	26.57	2.79	38.86	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
20	2056.180	---	---	26.57	2.79	38.86	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
21	2164.400	---	---	28.02	2.86	38.91	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
22	2164.400	---	---	28.02	2.86	38.91	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
23	2272.620	---	---	28.13	2.93	38.97	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
24	2272.620	---	---	28.13	2.93	38.97	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
25	2380.840	---	---	27.63	3.00	39.02	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
26	2380.840	---	---	27.63	3.00	39.02	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
27	2489.060	---	---	27.44	3.07	39.07	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
28	2489.060	---	---	27.44	3.07	39.07	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
29	2597.280	34.90	48.20	27.74	4.64	39.13	0.28	28.43	41.73	54.00	74.00	25.57	32.27	Hori.	HA	
30	2597.280	34.10	47.60	27.74	4.64	39.13	0.28	27.63	41.13	54.00	74.00	26.37	32.87	Vert.	HA	
31	2705.500	---	---	28.11	3.19	39.18	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
32	2705.500	---	---	28.11	3.19	39.18	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
33	2813.720	---	---	28.38	3.26	39.24	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
34	2813.720	---	---	28.38	3.26	39.24	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
35	2921.940	---	---	28.44	3.33	39.29	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
36	2921.940	---	---	28.44	3.33	39.29	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
37	3030.160	---	---	28.58	3.38	39.31	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
38	3030.160	---	---	28.58	3.38	39.31	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
39	3138.380	---	---	28.75	3.45	39.26	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
40	3138.380	---	---	28.75	3.45	39.26	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
41	3246.600	---	---	28.43	3.51	39.20	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
42	3246.600	---	---	28.43	3.51	39.20	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
43	3354.820	---	---	28.03	3.58	39.14	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
44	3354.820	---	---	28.03	3.58	39.14	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
45	3463.040	52.00	55.70	28.62	5.37	39.08	0.28	47.19	50.89	54.00	74.00	6.81	23.11	Hori.	HA	
46	3463.040	55.80	58.60	28.62	5.37	39.08	0.28	50.99	53.79	54.00	74.00	3.01	20.21	Vert.	HA	
47	3571.260	---	---	29.05	3.70	39.02	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
48	3571.260	---	---	29.05	3.70	39.02	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (Sub)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : Local (108 MHz Receiving)

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Seigo Kakehi

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
49	3679.480	---	---	29.27	3.77	38.96	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
50	3679.480	---	---	29.27	3.77	38.96	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
51	3787.700	---	---	29.49	3.83	38.90	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
52	3787.700	---	---	29.49	3.83	38.90	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
53	3895.920	---	---	29.69	3.89	38.85	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
54	3895.920	---	---	29.69	3.89	38.85	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
55	4004.140	---	---	29.75	3.95	38.79	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
56	4004.140	---	---	29.75	3.95	38.79	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
57	4112.360	---	---	29.81	4.01	38.82	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
58	4112.360	---	---	29.81	4.01	38.82	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
59	4220.580	---	---	30.13	4.05	38.85	0.28	---	---	54.00	74.00	---	---	Hori.	HA	the margin exceeds 20 dB.
60	4220.580	---	---	30.13	4.05	38.85	0.28	---	---	54.00	74.00	---	---	Vert.	HA	the margin exceeds 20 dB.
61	4328.800	33.20	46.80	30.37	6.03	38.87	0.28	31.01	44.61	54.00	74.00	22.99	29.39	Hori.	HA	
62	4328.800	31.60	47.50	30.37	6.03	38.87	0.28	29.41	45.31	54.00	74.00	24.59	28.69	Vert.	HA	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

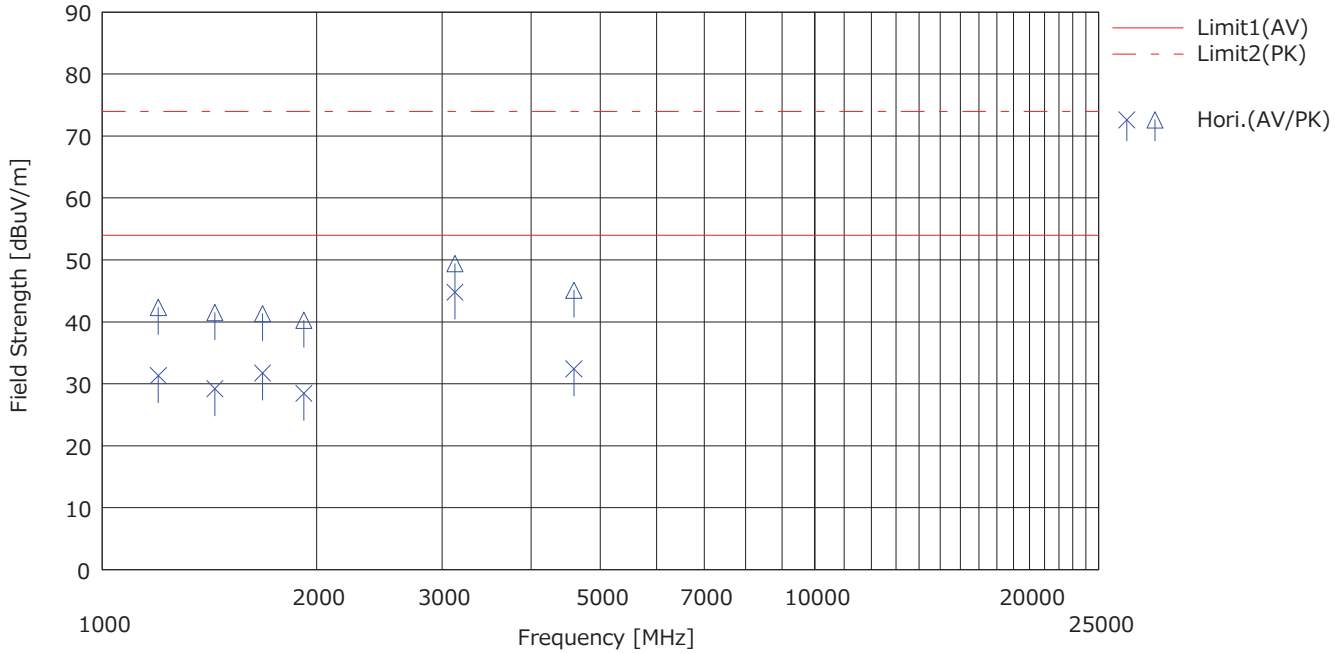
UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : 1.FM Reception (SUb)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : -

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Jun Ito



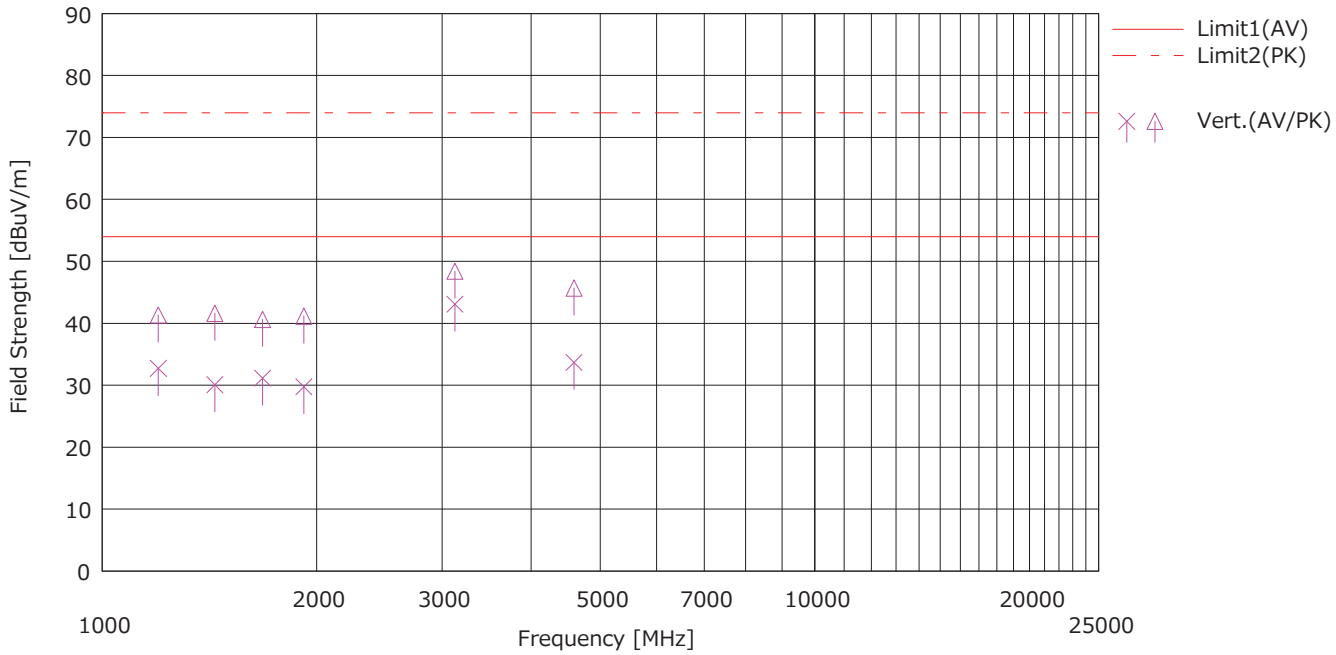


CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

DATA OF RADIATED DISTURBANCE TEST

UL Japan, Inc. Yokowa EMC Lab. No. 3 Open area test site
Date : 01/09/2020

Mode : .FM Reception (SUb)
Order No. : 13185291
Power : DC 13.2 V
Temp. / Humi. : 24 deg. C / 31 % RH

Remarks : -

Limit : FCC Part 15B CLASS B (GHz, 3m)

Engineer : Jun Ito

<< AV/PK DATA >>

No.	Freq.	Reading		Ant.Fac	Loss	Gain	S.Fac	Result		Limit		Margin		Pola.	Ant. Type	Comment
		〈AV〉	〈PK〉					〈AV〉	〈PK〉	〈AV〉	〈PK〉	〈AV〉	〈PK〉			
	[MHz]	[dBuV]	[dBuV]	[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dBuV/m]	[dB]	[dB]	[H/V]		
1	1200.002	44.10	52.70	25.36	3.11	40.12	0.28	32.73	41.33	54.00	74.00	21.27	32.67	Vert.	HA	
2	1200.008	42.70	53.70	25.36	3.11	40.12	0.28	31.33	42.33	54.00	74.00	22.67	31.67	Hori.	HA	
3	1440.049	39.50	51.80	25.75	3.40	39.73	0.28	29.20	41.50	54.00	74.00	24.80	32.50	Hori.	HA	
4	1440.076	40.40	51.90	25.75	3.40	39.73	0.28	30.10	41.60	54.00	74.00	23.90	32.40	Vert.	HA	
5	1680.060	42.10	51.70	25.00	3.70	39.35	0.28	31.73	41.33	54.00	74.00	22.27	32.67	Hori.	HA	
6	1680.079	41.50	51.00	25.00	3.70	39.35	0.28	31.13	40.63	54.00	74.00	22.87	33.37	Vert.	HA	
7	1920.014	37.40	49.20	25.74	3.99	38.96	0.28	28.45	40.25	54.00	74.00	25.55	33.75	Hori.	HA	
8	1920.075	38.70	50.10	25.74	3.99	38.96	0.28	29.75	41.15	54.00	74.00	24.25	32.85	Vert.	HA	
9	3127.066	48.20	53.50	28.77	5.10	39.26	0.28	43.09	48.39	54.00	74.00	10.91	25.61	Vert.	HA	
10	3127.068	49.90	54.50	28.77	5.10	39.26	0.28	44.79	49.39	54.00	74.00	9.21	24.61	Hori.	HA	
11	4592.640	34.00	46.70	30.82	6.23	38.94	0.28	32.39	45.09	54.00	74.00	21.61	28.91	Hori.	HA	
12	4593.015	35.30	47.30	30.82	6.23	38.94	0.28	33.69	45.69	54.00	74.00	20.31	28.31	Vert.	HA	

CHART:WITH FACTOR ANT TYPE: -30MHz:LOOP, 30-199.99MHz:BICONICAL, 200MHz-1000MHz:LOGPERIODIC, 1000MHz-:HORN
CALCULATION:RESULT = READING + ANT.Fac. + LOSS(CABLE)+S.Fac.(DISTANCE Fac.) - GAIN(AMP). Actual distance: 3.10 m.

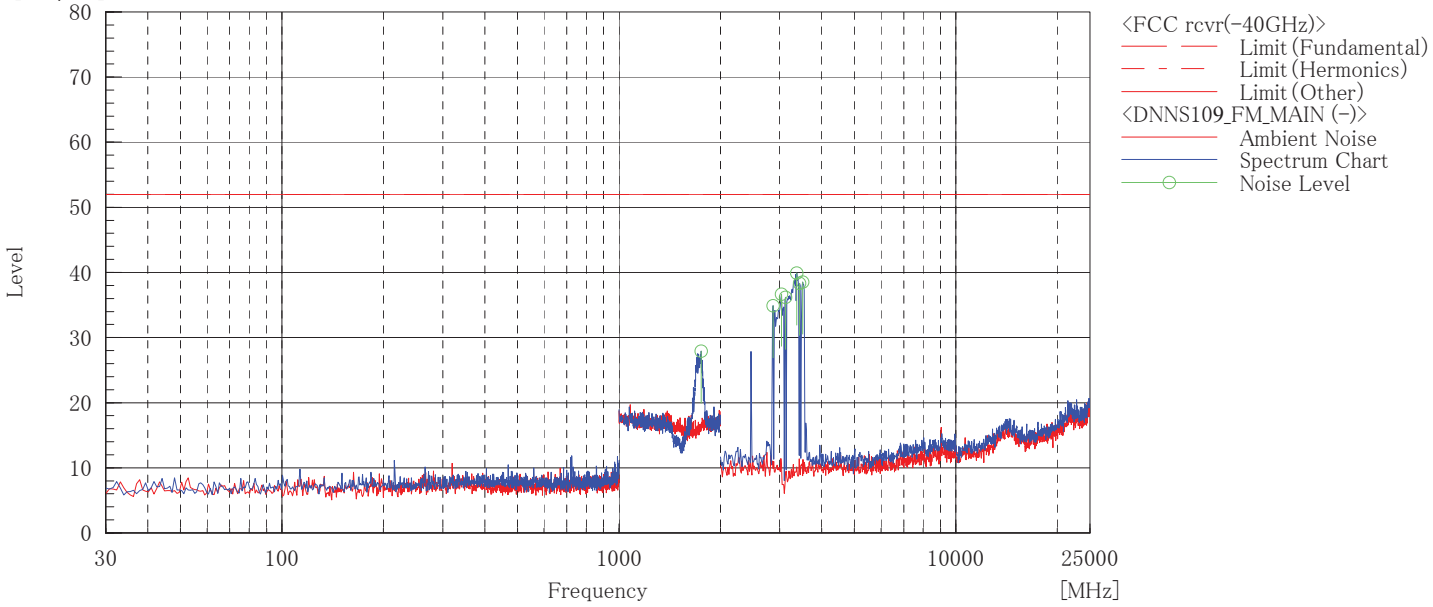
UL Japan, Inc.
Yokowa No.6 S/R

<<ANTENNA TERMINAL VOLTAGE TEST>>

01/07/2020

Limit : FCC Part15(ANSI C63.4/92)
Mode : 1.FM Reception (Main)
Temp./Hum. : 20 deg.C / 40 % RH
Engineer : Hiromichi Nakai
Test Room : No.6 Shielded Room

EUT Power : DC 13.2 V



Spectrum Selection (Peak Value)

Ch.	No.	Frequency [MHz]	Harm	Reading [dB(μV)]	c.f [dB]	Result [dB(μV)]	Limit [dB(μV)]	Margin [dB]
-	1	1753.333		55.1	-27.2	27.9	52.0	24.1
	2	2866.667		67.8	-32.9	34.9	52.0	17.1
	3	3040.000		69.5	-32.8	36.7	52.0	15.4
	4	3120.000		68.9	-32.7	36.2	52.0	15.8
	5	3373.333		72.4	-32.5	39.9	52.0	12.1
	6	3440.000		70.8	-32.4	38.4	52.0	13.7
	7	3506.667		70.8	-32.3	38.5	52.0	13.5

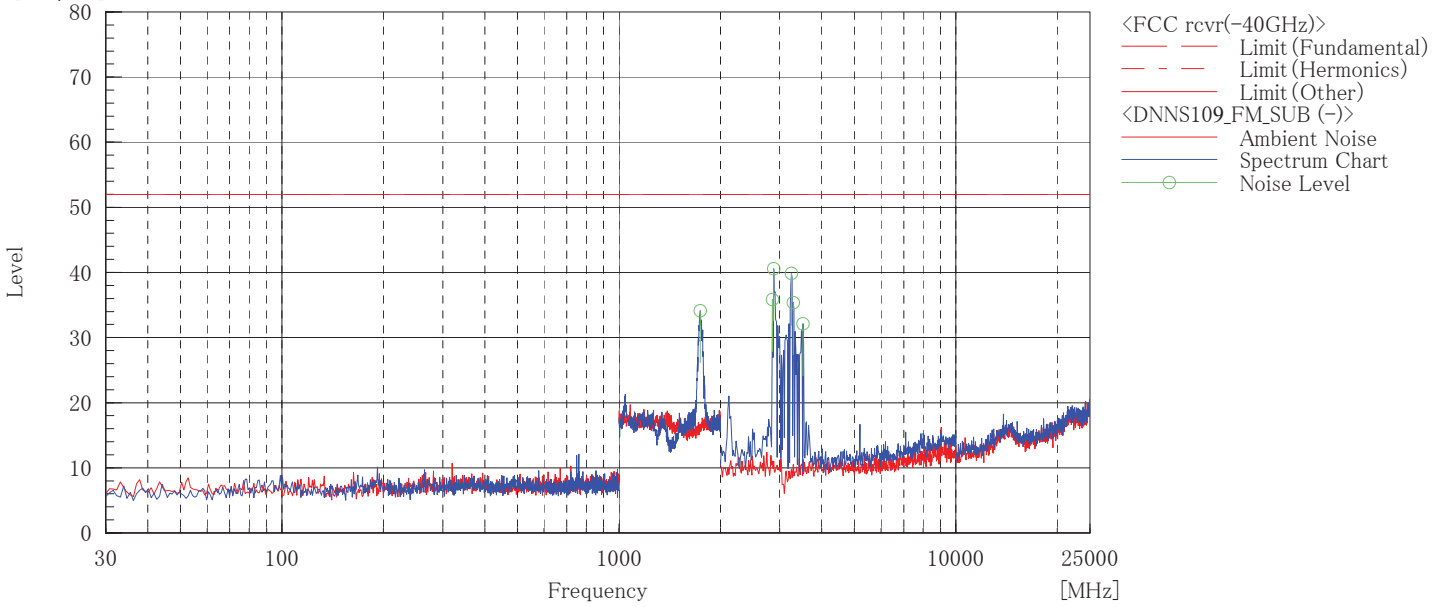
UL Japan, Inc.
Yokowa No.6 S/R

<<ANTENNA TERMINAL VOLTAGE TEST>>

01/07/2020

Limit : FCC Part15(ANSI C63.4/92)
Mode : 1.FM Reception (Sub)
Temp./Hum. : 20 deg.C / 40 % RH
Engineer : Hiromichi Nakai
Test Room : No.6 Shielded Room

EUT Power : DC 13.2 V



Spectrum Selection (Peak Value)

Ch.	No.	Frequency [MHz]	Harm	Reading [dB(μV)]	c.f [dB]	Result [dB(μV)]	Limit [dB(μV)]	Margin [dB]
-	1	1743.333		61.3	-27.2	34.1	52.0	17.9
	2	2853.333		68.7	-32.9	35.8	52.0	16.2
	3	2880.000		73.5	-32.9	40.6	52.0	11.5
	4	3253.333		72.5	-32.6	39.9	52.0	12.1
	5	3293.333		67.9	-32.5	35.4	52.0	16.6
	6	3520.000		64.4	-32.3	32.1	52.0	19.9

APPENDIX 3

Test Instruments

***Hyphens for Last Calibration Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.**

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

RE : Radiated disturbance
AT : Antenna terminal conducted disturbance

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	MCC-218	141394	Microwave Cable	Junkosha	MWX221	1607S141(1 m) / 1608S264(5 m)	2019/09/11	12
RE	TR-13	151197	EMI Test Receiver	Rohde & Schwarz	ESW26	101287	2019/08/29	12
RE	DM-03	146649	Tester	SANWA	PC500	7019229	2019/06/21	12
RE	YJM-15	147543	Measure	-	-	-	-	-
RE	SC-03	147518	Search Coil	UL Japan	-	-	-	-
RE	OS-07	146989	Digital Humidity Indicator	SATO	PC-5000TRH-II	05A06	2019/01/11	12
RE	HA-05	146710	Broad-Band Horn Antenna	Schwarzbeck	BBHA 9120 D	257	2019/04/19	12
RE	YOATS-03(SVSWR)	147000	Open area test site	JSE	3m,10m	3	2019/03/12	12
RE	CC-C14	178057	Microwave Cable	Huber+Suhner	SUCOFLEX 126EA	800630 / 126EA	2019/03/01	12
RE	CC-C15	178392	Microwave Cable	Junkosha INC.	JUNFLON MWX315	1511-023	2019/03/18	12
RE	YAJ-01	147319	Antenna Tilt Jig	Intelligent System Engineering Co., Ltd	Antenna Tilt Jig	T-0004	-	-
RE	MHA-01	141510	Horn Antenna 18-26.5GHz	EMCO	3160-09	1266	2019/05/17	12
RE	AF-06	146601	Pre Amplifier	AGILENT	HP8449B	3008A01672	2019/11/11	12
RE	TR-12	146893	EMI Test Receiver	Rohde & Schwarz	ESU 26	100413	2019/07/26	12
RE	COTS-YW-EMI-TSJ	146923	EMI measurement program	TSJ	TEPTO-DV	-	-	-

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	DM-02	146648	Tester	SANWA	PC500	7019227	2019/06/21	12
RE	YJM-12	147540	Measure	Rubber KOMBE	GW-3H99W	-	-	-
RE	SC-02	147517	Search Coil	UL Japan	-	-	-	-
RE	OS-10	146984	Digital Humidity Indicator	SATO	PC-5000TRH	B-10	2019/04/09	12
RE	AF-03	146611	Pre Amplifier	ANRITSU	MH648A	M97457	2019/07/10	12
RE	AT-02	146625	Attenuator	ANRITSU	MP721A	6200239014	2019/07/11	12
RE	AT-40	146572	Attenuator	ANRITSU	MP721B	6201150481	2019/10/18	12
RE	CC-2ORC	146806	Yokowa No.2 open coaxial(0.01-1000MHz)	UL Japan	CC-21,CC-22,CC-23,CC-24,CC-25,CC-27,SW-21,SW	YO0201	2019/10/18	12
RE	YOATS-02(NSA)	146944	Open area test site	JSE	3m、10m	2	2019/09/16	12
RE	BA-14	159920	Biconical Antenna	Schwarzbeck	VHBB 9124 + BBA 9106	9124-1022	2019/03/06	12
RE	LA-15	146964	Logperiodic Antenna	Schwarzbeck	VUSLP9111B	185	2019/03/21	12
AT	BM-1A01	146833	Barometer	Sunoh	SBR121	2347	2018/09/19	36
AT	OS-33	146736	Thermo-Hygrometer	CUSTOM	CTH-201	510Q06R	2019/03/08	12
AT	DM-06	146650	Tester	SANWA	PC500	7019239	2019/06/21	12
AT	YJM-17	147545	Measure	-	-	-	-	-

Test Item	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
AT	AV17-12	148701	Broadcast Tester	Rohde & Schwarz	SFE	2112.4300K02-121168-Li	2019/08/05	12
AT	APMAT07	146634	Matching Pad	TME	ZT-130	500101	2019/10/11	12
AT	IP-08	146715	Power Combiner	Mini-Circuit	ZFRSC-2050	-	2019/10/11	12
AT	ATS-02	160511	75Ω Cable	ULJapan	-	-	2019/11/07	12
AT	SP-03	146763	50Ω Coaxil Cable(Antenna Terminal)	UL Japan	50-N-N-SP	YSP03	2019/03/07	12
AT	SP-04	146764	50Ω Coaxil Cable(Antenna Terminal)	UL Japan	50-N-N-SP	YSP04	2019/03/07	12
AT	SP-05	146765	50Ω Coaxil Cable(Antenna Terminal)	UL Japan	50-N-N-SP	YSP05	2019/03/07	12
AT	KAF-03	151789	Pre Amplifier	HEWLETT PACKARD	8447D	2944A09947	2019/03/07	12
AT	AF-04	146600	Pre Amplifier	HEWLETT PACKARD	8449B	3008A01207	2019/07/18	12
AT	COTS-YW-AT	146723	Software for Antenna Terminal Voltage	Toyo Corporation	-	-	-	-
AT	TR-09	146776	Test Receiver	Rohde & Schwarz	ESCI	100769	2019/09/27	12

End of Report