EMI TEST REPORT

Test Report No.: FCN21004

Applicant: Hitachi, Ltd. Service & Platform Business Unit
Address: 2-1, Omika-cho 5-chome, Hitachi-shi
Ibaraki-ken, 319-1293 Japan

Equipment under test: CE50-10N
H-7726-12

Test date: July 6, 2021
Regulations applied: FCC Part 15.107 (2020.10) Class A
FCC Part 15.109 (2020.10) Class A
Test method used: ANSI C63.4-2014 including C63.4a-2017

Test result: Pass

Modification during test: No

Test site: e-OHTAMA, LTD. NAKAI EMC Center
Address: 456 Sakai, Nakai-machi, Ashigarakami-gun, Kanagawa, 259-0157 Japan
TEL: +81-90-5814-7277 FAX: +81-465-81-5938

Verified by: Katsuo Terai
K. Terai Manager

Approved date: Jul. 13, 2021

Approved by: R. Hoshi
R. Hoshi Manager

Notes
- This test report is related only to the equipment described in the cover page.
- This report must not be reproduced in part without written permission by e-OHTAMA, LTD.
- The test results are obtained with test facilities which are traceable to national standards and/or international standards.

ilac-MRA VLAC Lab Accreditation VLAC-007

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1. Equipment under test (EUT)

1.1 Equipment rating

Model/Type	Equipment name	Manufacturer	Power supply rating
H-7726-12	CE50-10N *1	Hitachi, Ltd.	AC100 – 240 V 50/60 Hz, 1 Φ

*1: Equipment name

Equipment name	OpenVINO software install
CE50-10A	Yes
CE50-10N	No

1.2 Condition

Condition	Preproduction sample

1.3 Receipt date

Receipt date	July 2, 2021

1.4 Sampling

Sampling of the equipment	The equipment was selected by the applicant therefore the test site has not sampling.

2. Test conditions

The information in this clause is based on the application from the applicant.

2.1 Mode of operation

Mode of operation	LAN Communication: Packet transmission EXT: Loop back BurnIn Test ・2D Graphics: 2D graphics continuous display ・3D Graphics: 3D graphics continuous display ・CPU Maths: Logical instructions ・Disk Media (USB-HDD): Random read/write ・Disk SSD: Random read/write ・Plugin: Continuous display of color bar (A standard color bar image with small moving elements specified in CISPR 32 was selected by the applicant.)
Program name / Version	BurnIn Test v4.1 (1000) Linux 64bit / 4.1

2.2 Measurement arrangements of EUT

Intended operational arrangement	Can be floor-standing or tabletop or rack mounted
Measurement arrangement	Table-top (Radiated emission measurement is performed vertically and horizontally setting on the table.)

2.3 Deviation from the test method

Contents of deviation	No

2.4 Submitted document

Submitted document	No

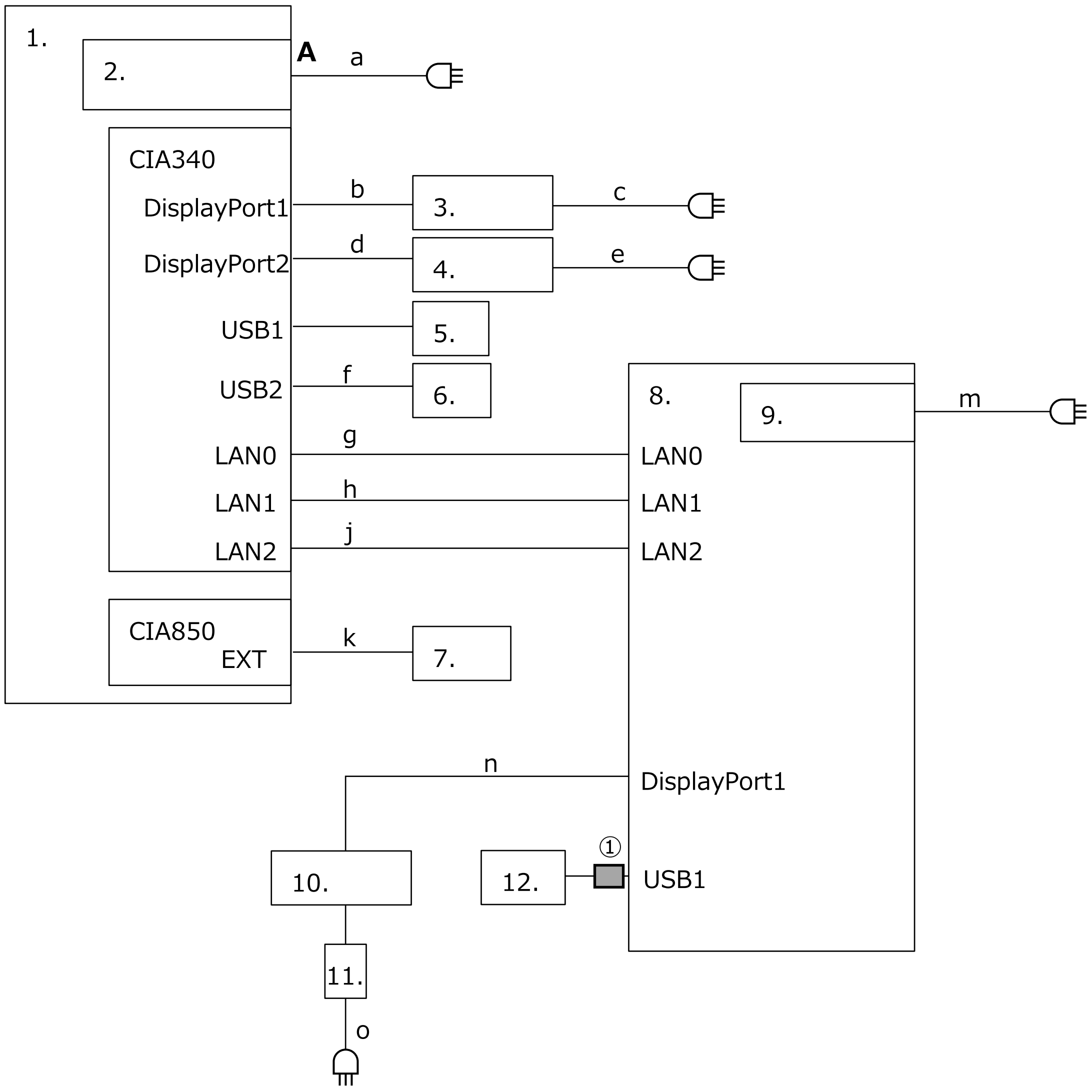
3. Summary of test results

Conducted emission					
Test contents	The port with the EUT	Operator	Test site	Result	Remarks
Mains power port	Yes	S. Nagashima	No. 3 Site	Pass	
Radiated emission					
Test contents	The port with the EUT	Operator	Test site	Result	Remarks
Radiated emission (Up to 1 GHz)	Yes	S. Nagashima	No. 3 Site	Pass	Two types of settings
Radiated emission (Above 1 GHz)	Yes	S. Nagashima	No. 3 Site	Pass	Two types of settings

4. Test configuration

The test of this report was executed that takes into consideration risks in the maximum configurations by the applicant.
The all equipment and cables described in the test configuration were provided by the applicant.

4.1 System diagram



: Ferrite core (Refer to clause 4.4 No. ①)

A: Test point

Number in figure corresponds to No. in clause 4.2, 4.3 and 4.4.

4.2 Equipment list of test configuration

No.	EUT	Model/Type	Equipment name	Ser. No.	FCC ID	Manufacturer	Input voltage V	Hz	Φ	Remarks
1	○	H-7726-12	CE50-10N	S9903Y1-03 R2	—	Hitachi, Ltd.	—	—	—	
2	○	LFA75F-12-J1	PS	0202759PR	DoC	COSEL CO., LTD.	AC120	60	1	Built-in power supply
3		24UD58	LCD Monitor	102NTB8KH5669	DoC	LG Electronics.	AC120	60	1	
4		272P7V	LCD Monitor	UHBA1909014220	DoC	Philips	AC120	60	1	
5		KU-2971	Keyboard	8I00100948B	DoC	Chicony Electronics Co., Ltd	DC5	—	—	
6		HD-PUSU3	HDD	40372170600082	DoC	Buffalo Inc.	DC5	—	—	
7		-	Terminator	-	—	Hitachi, Ltd.	—	—	—	
8		H-7726-12	CE50-10N	S9903Y2-09 R2	—	Hitachi, Ltd.	—	—	—	
9		LFA75F-12-J1	PS	02555002PR	DoC	COSEL CO., LTD.	AC100	50	1	Built-in power supply
10		241E1	LCD Monitor	UHB2101000133	DoC	Philips	DC19	—	—	
11		ADPC1925	AC ADAPTER	5135782A0572	DoC	TPV Electronics Co., Ltd.	AC100	50	1	
12		MSU0939	Mouse	8C15000784B	DoC	Chicony Electronics Co., Ltd	DC5	—	—	

4.3 Cable list

No.	Connected from (port name) — to (port name)	Cable name	Length (m)	Qty.	Connector	Shielded	Remarks
a	2 — AC120 V	AC cable	2.0	1	Plastic	No	3pin
b	1(DisplayPort1) — 3	Display cable	1.8	1	Plastic	Yes	
c	3 — AC120 V	AC cable	2.0	1	Plastic	No	3pin
d	1(DisplayPort2) — 4	Display cable	2.0	1	Plastic	Yes	
e	4 — AC120 V	AC cable	2.0	1	Plastic	No	3pin
f	1(USB2) — 6	USB cable	3.0	1	Plastic	Yes	USB3.0
g	1(LAN0) — 8(LAN0)	LAN cable	5.0	1	Plastic	No	Cat.5e
h	1(LAN1) — 8(LAN1)	LAN cable	5.0	1	Plastic	No	Cat.5e
j	1(LAN2) — 8(LAN2)	LAN cable	5.0	1	Plastic	No	Cat.5e
k	1(EXT) — 7(Terminator)	EXT cable	10.0	1	Metal	Yes	
m	9 — AC100 V	AC cable	2.0	1	Plastic	No	3pin
n	8(DisplayPort1) — 10	Display cable	1.5	1	Plastic	Yes	DVI-DP Connector
o	11 — AC100 V	AC cable	1.5	1	Plastic	No	3pin

4.4 Noise suppression components

No.	Suppression Place	Model	Type	Manufacturer	Remarks
①	Mouse cable	E04SR150718	Ferrite core	SEIWA ELECTRIC MFG. CO., Ltd.	2turn

5. EMI test (conducted emission, radiated emission)

5.1 Test specifications

Regulations applied	FCC Part 15.107 (2020.10) Class A
	FCC Part 15.109 (2020.10) Class A
Test method used	ANSI C63.4-2014 including C63.4a-2017

Test date		Jul. 6, 2021
Environment	Temperature	25 °C
	Relative humidity	62 %RH
	Atmospheric pressure	994 hPa

EUT's highest internal frequency (*F*x):		1.6 GHz (Application by the applicant)
Highest fundamental frequency generated or used within the EUT or highest frequency at which it operates		Highest measured frequency
	*F*x ≤ 108 MHz	1 GHz
	108 MHz < *F*x ≤ 500 MHz	2 GHz
	500 MHz < *F*x ≤ 1000 MHz	5 GHz
○	*F*x > 1 GHz or *F*x is unknown.	5 × *F*x up to a maximum of 40 GHz Highest measured frequency: 8 GHz

	Conducted emission (Mains power port)	Radiated emission at frequencies up to 1 GHz	Radiated emission at frequencies above 1 GHz
Measurement facility	SAC	SAC	FSOATS (SAC with RF absorber on the RGP)
Measurement frequency range	150 kHz – 30 MHz (LISN)	30 MHz – 300 MHz (Biconical antenna) 300 MHz – 1 GHz (LPDA antenna)	1 GHz – 8 GHz (Horn antenna)
Actual measured distance	—	10 m	3.7 m (The result is converted into the level in the distance of 3 m.)
Antenna height scan range	—	1 m – 4 m	1 m – 4 m
EMI receiver detection mode	Average mode: CISPR-Ave 9 kHz (B_6) Quasi peak mode: QP 9 kHz (B_6)	Quasi peak mode: QP 120 kHz (B_6)	Average mode: CISPR-Ave 1 MHz (B_{imp}) Peak mode: Peak 1 MHz (B_{imp})

5.2 Test procedure

1	**Measurement of wide range frequencies using spectrum analyzer** • Spectrum analyzer settings were optimized considering final measurement. • Confirming the measurement instruments were not saturation by overload. • Determine the cable arrangement giving the maximum emission level by the arrangement of the EUT, the arrangement of the local AE and the placement of cables within the range of typical to attempt varied.
2	**Selection of the frequencies** • The frequencies showing high noise levels were chosen from the data on spectrum analyzer.
3	**Measurement by EMI receiver for selected frequencies** • EMI receiver settings (IF bandwidth and detection mode) were in accordance with standards. • Confirming the measurement instruments were not saturation by overload. • The measured AV level is CISPR-Average of CISPR 16-1-1:2010. • Radiated emission was measured at maximum radiation point obtained by operating the turn table and the antenna mast.
4	**Adjusting the angle of the antenna (above 1 GHz)** • In the measurement above 1 GHz, if the antenna height exceeds the EUT height was measured by adjusting the angle of the antenna to the direction of the EUT.

5.3 Calculation of measurement results

Measurement results are calculated by EMI measurement software as shown below sub-clause. The values of the factor and the cable loss at frequencies not selected at calibration are calculated by natural spline interpolation of the third degree.

5.3.1 Conducted emission

Mains power port
Measurement result = Measurement (receiver reading) + Correction factor (c.f.) Correction factor (c.f.) = Factor of LISN + Cable loss

5.3.2 Radiated emission

Up to 1 GHz
Measurement result = Measurement (receiver reading) + Correction factor (c.f.) Correction factor (c.f.) = Antenna factor + Cable loss − Preamp gain
Above 1 GHz
Measurement result = Measurement (receiver reading) + Correction factor (c.f.) Correction factor (c.f.) = Antenna factor + Cable loss − Preamp gain + Factor of distance [20 log (Actual measurement distance / 3.0 m)]

5.4 Uncertainty of EMI measurement (MIU)

The actual test results may contain measurement uncertainty and do not mean to assure complete repeatability and reproducibility. Our lab uses the CISPR International Standard CISPR 16-4-2 to calculate the measurement uncertainty as shown below. Our lab measurement uncertainty (MIU) coverage factor *k*=2, approximately 95 % confidence level:

Measurement contents	Measurement specification			Uncertainty
Conducted emission	9 kHz – 30 MHz (LISN)	Mains power port	—	3.34 dB
Radiated emission	30 MHz – 300 MHz (Biconical antenna)	10 m	Horizontal	3.78 dB
			Vertical	3.75 dB
	300 MHz – 1000 MHz (LPDA antenna)	10 m	Horizontal	3.84 dB
			Vertical	3.84 dB
	1 GHz – 6 GHz (Horn antenna)	3 m (With floor absorber)	Horizontal	5.18 dB
			Vertical	
	6 GHz – 18 GHz (Horn antenna)		Horizontal	4.99 dB
			Vertical	
	18 GHz – 26.5 GHz (Horn antenna)		Horizontal	5.36 dB
			Vertical	
	26.5 GHz – 40 GHz (Horn antenna)		Horizontal	5.49 dB
			Vertical	

5.5 Test results

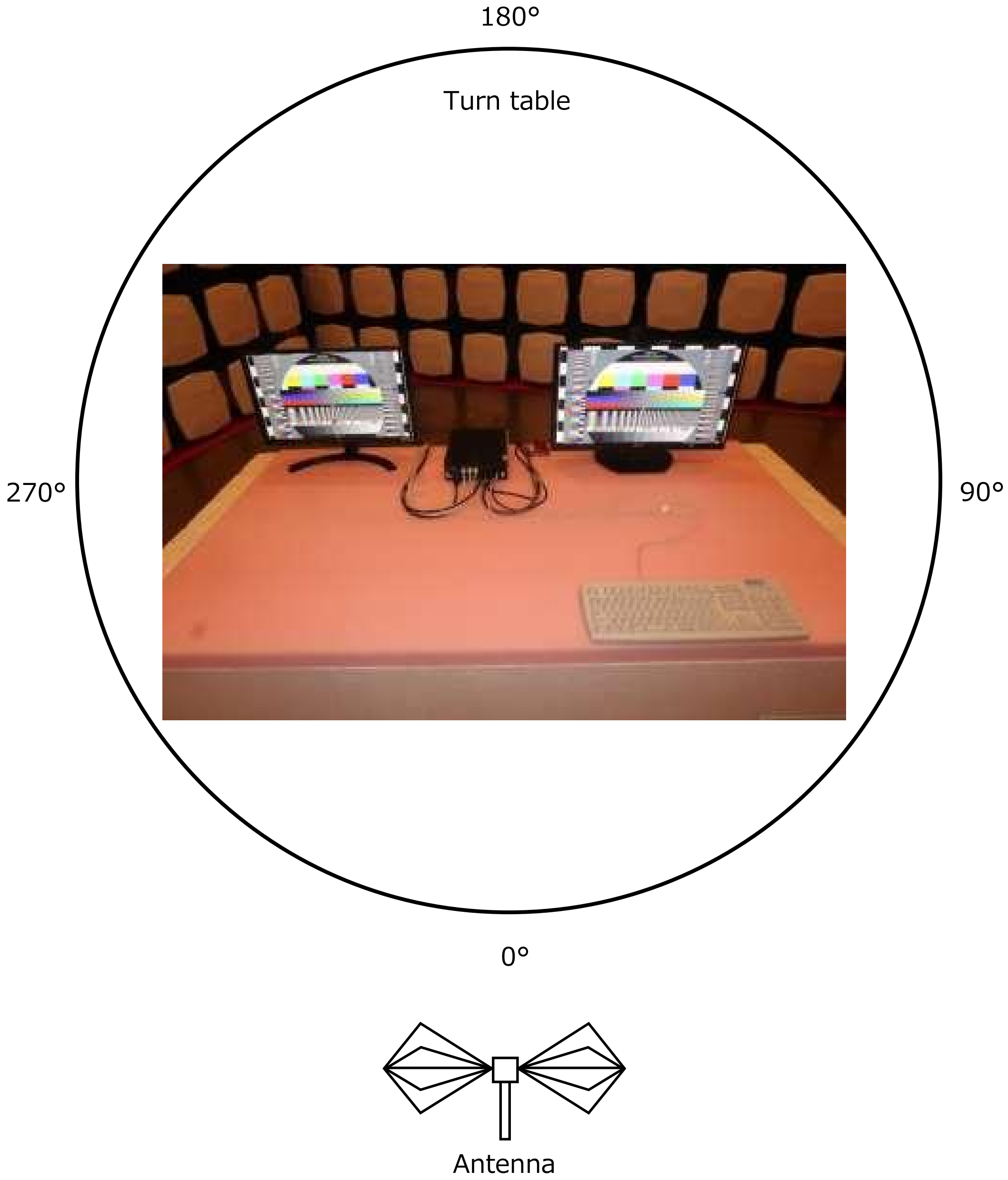
Conducted emission						
Test item	Test point	Minimum margin				Result
Mains power port	**A**	L1 Phase	22.628 MHz	26.1 dB	(AV)	Pass
Radiated emission						
Test item		Minimum margin				Result
Radiated emission (Up to 1 GHz)	Horizontal setting	Vertical polarization	30.491 MHz	8.6 dB	(QP)	Pass
	Vertical setting	Vertical polarization	30.531 MHz	10.5 dB	(QP)	Pass
Radiated emission (Above 1 GHz)	Horizontal setting	Horizontal polarization	5400.053 MHz	14.3 dB	(AV)	Pass
	Vertical setting	Horizontal polarization	4999.651 MHz	16.0 dB	(AV)	Pass

Refer to appendix 1 for details of the test result.

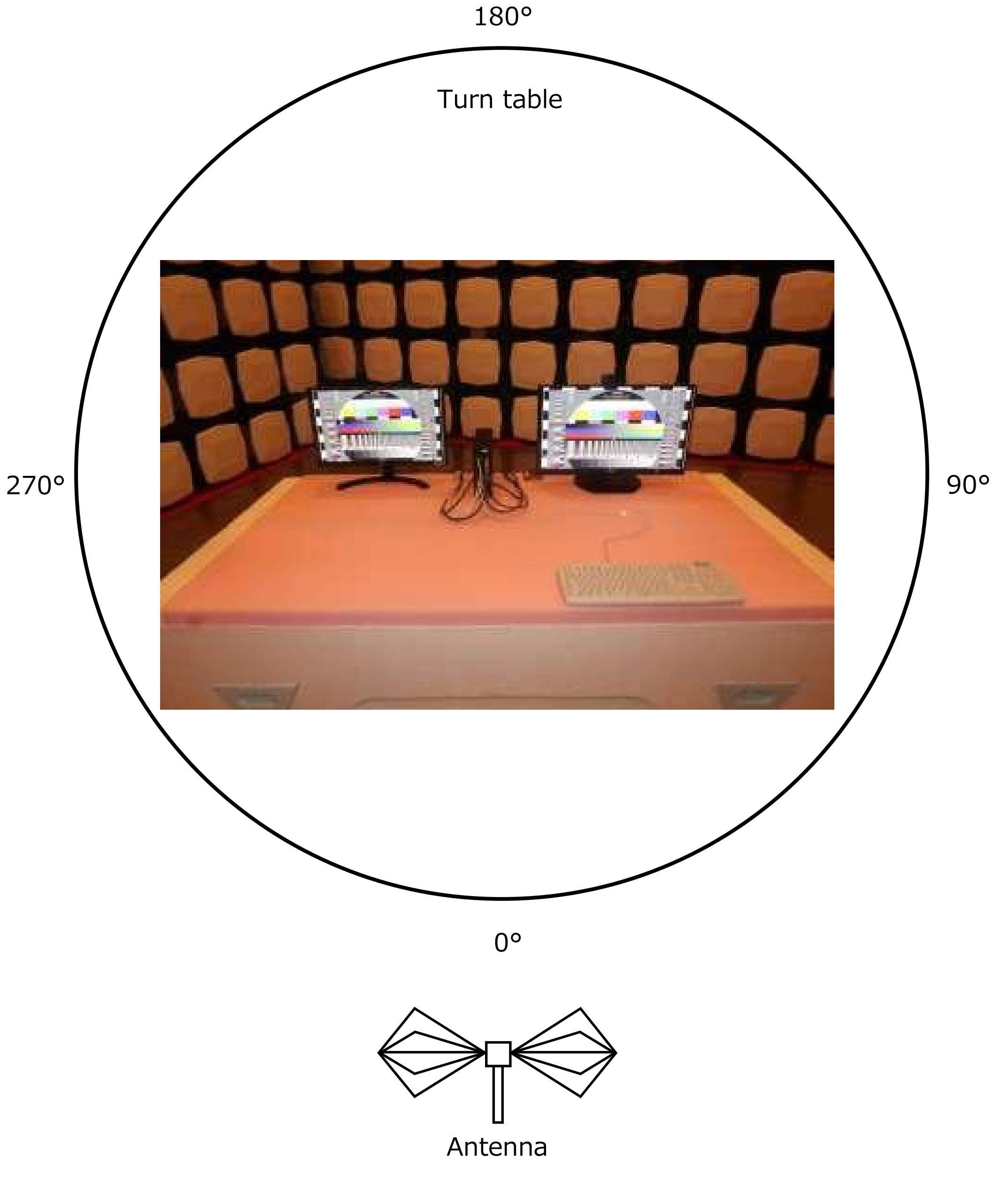
Note 1: The phase of mains power port is temporarily defined for measurement.

5.6 Angle of EUT for radiated emission

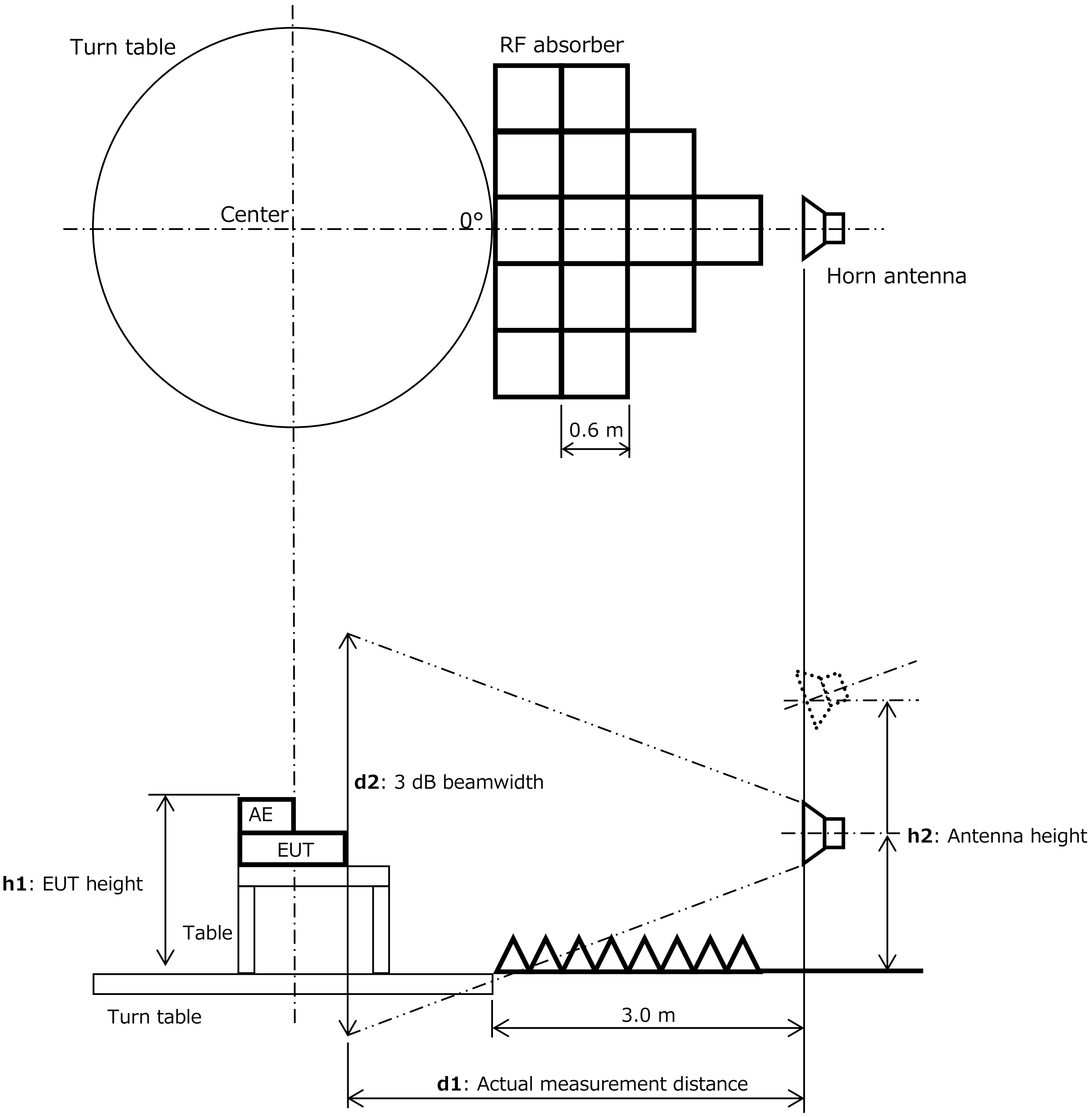
Horizontal setting



Vertical setting



5.7 Test layout of radiated emission (Above 1 GHz)



h1	EUT height (including the local AE)	1.22 m
h2	Antenna height (scan range)	1.0 m – 4.0 m
d1	Actual measurement distance	3.7 m
d2	3 dB beamwidth at 1 GHz – 8 GHz d2 = 2 x d1 x tan (20° / 2)	1.3 m

6. List of measuring instruments

EMI test (conducted emission)

Instrument name	Type	Ser. No. (ID)	Manufacturer	Due date of calibration
Spectrum analyzer / receiver	ESCI	100418	Rohde & Schwarz	2022.02
AMN (LISN) (Measurement port)	ESH3-Z5	831887/015 (R&SR)	Rohde & Schwarz	2021.12
AMN (LISN) (Un-measurement port)	ESH3-Z5	831887/016 (R&SB)	Rohde & Schwarz	2021.12
Attenuator	6810.01.A	(7018)	SUHNER	2021.08
Coax cable	3D-2W	(2073)	Kansai Tsushin Densen	2021.08
	5D-2W	(2041)	Kansai Tsushin Densen	2021.08
	TCF500DD4000	16G06010	TOKUDEN PROSELL	2021.08

EMI test (radiated emission / 30 MHz – 1 GHz)

Instrument name	Type	Ser. No. (ID)	Manufacturer	Due date of calibration
Spectrum analyzer / receiver	ESCI	100418	Rohde & Schwarz	2022.02
Biconical antenna	BBA9106	B-002	Schwarzbeck	2021.10
Log-periodic antenna	UHALP9108-A	0764	Schwarzbeck	2022.01
Preamplifier	8447F	2805A03043	Agilent Technology	2021.08
Coax cable (10 m)	SUCOFLEX106	2371/6	SUHNER	2021.08
	LHPX-10D	(2096)	Hitachi	2021.08
	SUCOFLEX106	8910/6	SUHNER	2021.08
	TCF500DD4000	16G06011	TOKUDEN PROSELL	2021.08
	TCF500DD2000	16G06014	TOKUDEN PROSELL	2021.08
Test site (Semi anechoic chamber)	FACT-10-QZ3.0 Standard Plus	ETS B Pink (No.3)	ETS LINDGREN	2022.05

EMI test (radiated emission / 1 GHz – 18 GHz)

Instrument name	Type	Ser. No. (ID)	Manufacturer	Due date of calibration
Spectrum analyzer / receiver	ESW44	101693	Rohde & Schwarz	2022.02
Horn antenna	3117	00092375 (H-ETS)	ETS LINDGREN	2021.08
Preamplifier	8449B	3008A01297	Agilent Technology	2022.06
RF cable	TCF358FG5500	13X24001	TOKUDEN PROSELL	2022.06
	TCF358FG300	12G25001		2022.06

Appendix 1 Test results

Conducted emission data (Mains power port)

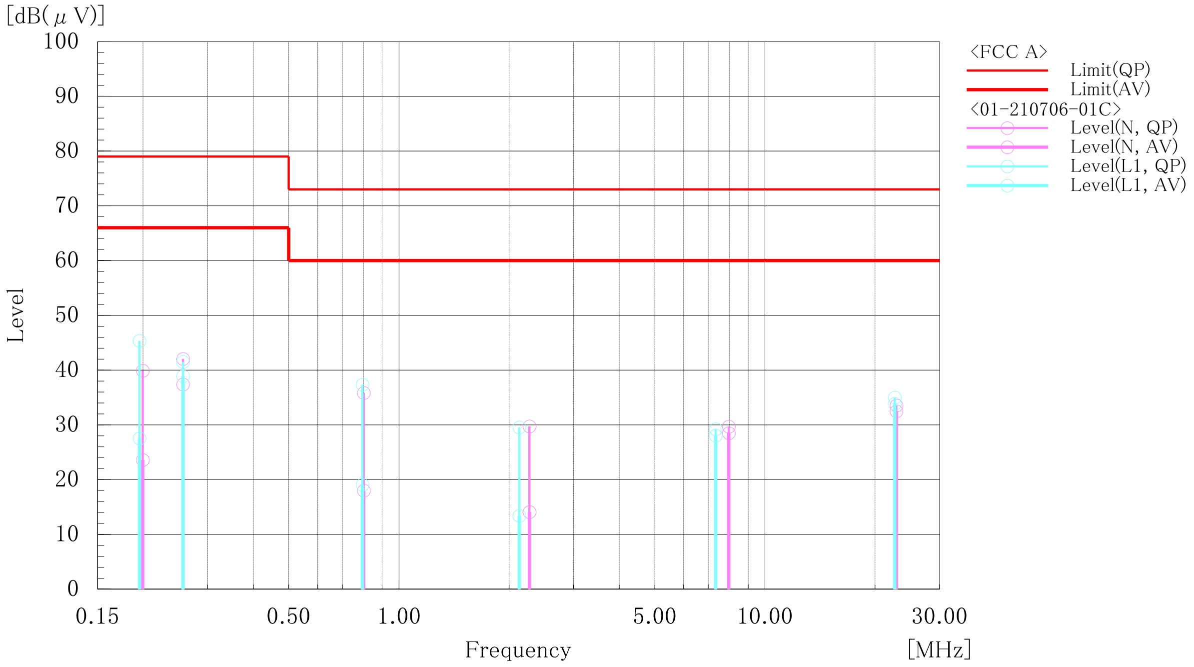
Test point **A**

e-OHTAMA, LTD.
NAKAI EMC Center

<<Conducted Emission>>

6 July,2021 15:53
01-210706-01C.ep9cedata

Order No.	: EM21033	Standard	: FCC Class A
Company	: Hitachi, Ltd.	LISN	: R&SR
Model	: H-7726-12	Input Power	: AC120 V / 60 Hz
Serial	: S9903Y1-03 R2	Temp/Humi	: 25 ℃ / 62 %RH
Condition	: AC Port	Operator	: S.Nagashima



Final Result

--- N (QP) ---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB]	Result [dB(μV)]	Limit [dB(μV)]	Margin [dB]
1	0.199	29.5	10.4	39.9	79.0	39.1
2	0.257	31.6	10.4	42.0	79.0	37.0
3	0.801	25.4	10.5	35.9	73.0	37.1
4	2.274	19.1	10.6	29.7	73.0	43.3
5	7.972	18.7	11.0	29.7	73.0	43.3
6	22.885	21.7	11.8	33.5	73.0	39.5

--- N (AV) ---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB]	Result [dB(μV)]	Limit [dB(μV)]	Margin [dB]
1	0.199	13.2	10.4	23.6	66.0	42.4
2	0.257	27.0	10.4	37.4	66.0	28.6
3	0.801	7.5	10.5	18.0	60.0	42.0
4	2.274	3.5	10.6	14.1	60.0	45.9
5	7.972	17.5	11.0	28.5	60.0	31.5
6	22.885	20.7	11.8	32.5	60.0	27.5

--- L1 (QP) ---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB]	Result [dB(μV)]	Limit [dB(μV)]	Margin [dB]
1	0.195	34.9	10.4	45.3	79.0	33.7
2	0.257	31.1	10.4	41.5	79.0	37.5
3	0.795	26.9	10.5	37.4	73.0	35.6
4	2.133	18.9	10.6	29.5	73.0	43.5
5	7.328	18.3	11.0	29.3	73.0	43.7
6	22.628	23.2	11.8	35.0	73.0	38.0

--- L1 (AV) ---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB]	Result [dB(μV)]	Limit [dB(μV)]	Margin [dB]
1	0.195	17.1	10.4	27.5	66.0	38.5
2	0.257	28.5	10.4	38.9	66.0	27.1
3	0.795	8.5	10.5	19.0	60.0	41.0
4	2.133	2.8	10.6	13.4	60.0	46.6
5	7.328	17.0	11.0	28.0	60.0	32.0
6	22.628	22.1	11.8	33.9	60.0	26.1

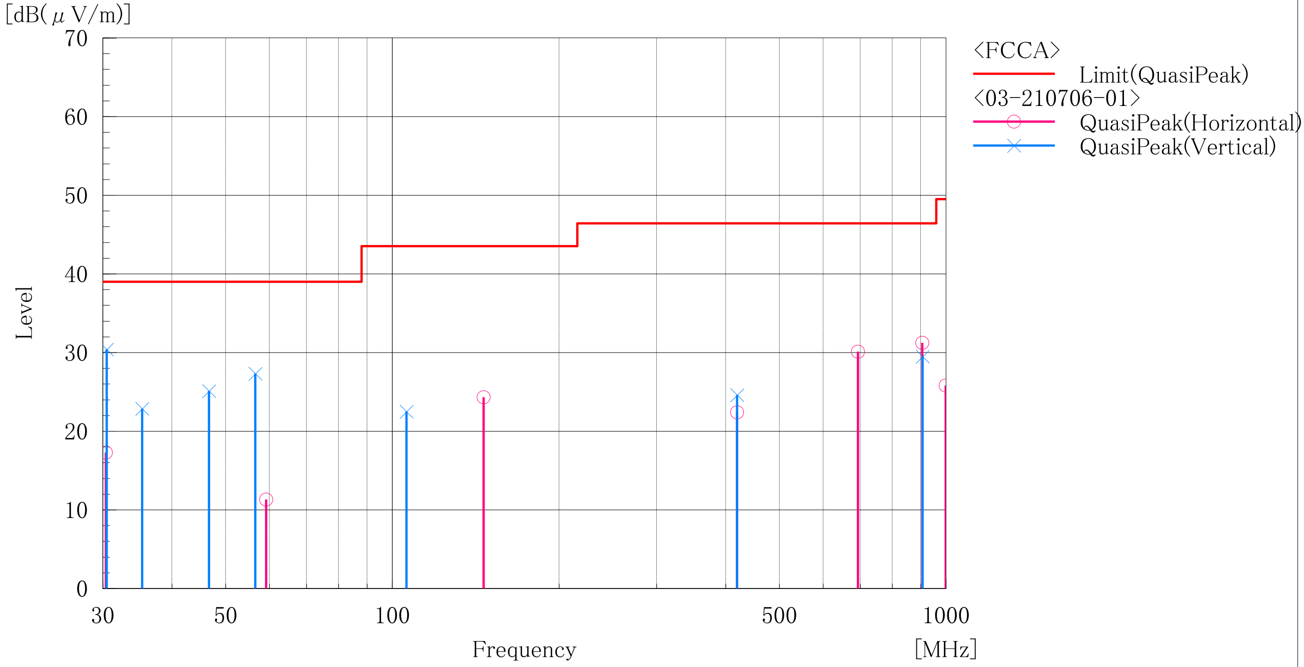
Radiated emission data (Up to 1 GHz) / Horizontal setting

e-OHTAMA,LTD.
NAKAI EMC Center

<<Radiated Emission>>

6 July,2021 10:43
03-210706-01.dat

Order No.	: EM21033	Standard	: FCC Part.15 Class A 10m
Company	: Hitachi, Ltd.	Remarks	: Test No.01
Model	: H-7726-12	Input Power	: AC120 V / 60Hz
Serial No.	: S9903Y1-03 R2	Temp/Humi	: 25 ℃ / 62 %RH
Condition	: Horizontal Setting	Operator	: S.Nagashima



Final Result

--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	30.397	25.3	-8.0	17.3	39.0	21.7	400.0	21.0
2	59.179	29.3	-18.0	11.3	39.0	27.7	343.3	32.8
3	146.251	35.3	-11.0	24.3	43.5	19.2	400.0	228.8
4	419.389	30.2	-7.8	22.4	46.4	24.0	181.1	33.9
5	693.612	33.0	-2.9	30.1	46.4	16.3	100.0	215.0
6	905.846	28.7	2.5	31.2	46.4	15.2	100.0	122.1
7	998.817	23.2	2.6	25.8	49.5	23.7	100.0	352.4

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	30.491	38.5	-8.1	30.4	39.0	8.6	100.0	272.4
2	35.341	33.6	-10.7	22.9	39.0	16.1	202.2	191.8
3	46.657	39.3	-14.2	25.1	39.0	13.9	313.3	0.0
4	56.582	44.5	-17.2	27.3	39.0	11.7	100.0	334.9
5	106.040	36.7	-14.2	22.5	43.5	21.0	100.0	255.7
6	419.391	32.4	-7.8	24.6	46.4	21.8	400.0	14.5
7	907.394	27.0	2.5	29.5	46.4	16.9	100.0	159.3

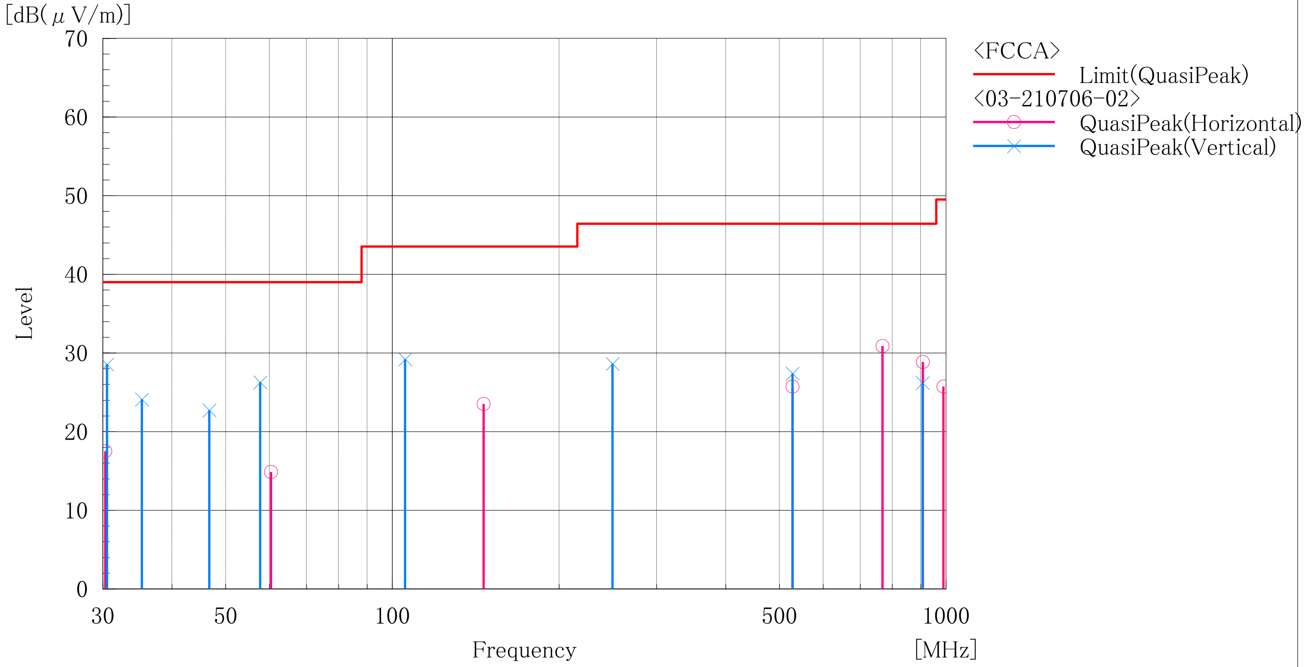
Radiated emission data (Up to 1 GHz) / Vertical setting

e-OHTAMA,LTD.
NAKAI EMC Center

<<Radiated Emission>>

6 July,2021 11:46
03-210706-02.dat

Order No.	: EM21033	Standard	: FCC Part.15 Class A 10m
Company	: Hitachi, Ltd.	Remarks	: Test No.02
Model	: H-7726-12	Input Power	: AC120 V / 60Hz
Serial No.	: S9903Y1-03 R2	Temp/Humi	: 25 ℃ / 62 %RH
Condition	: Vertical Setting	Operator	: S.Nagashima



Final Result

--- Horizontal Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	30.315	25.5	-8.0	17.5	39.0	21.5	400.0	100.2
2	60.440	33.2	-18.3	14.9	39.0	24.1	338.6	2.5
3	146.238	34.5	-11.0	23.5	43.5	20.0	400.0	182.1
4	527.986	32.2	-6.5	25.7	46.4	20.7	262.5	214.4
5	767.997	32.3	-1.4	30.9	46.4	15.5	100.0	131.4
6	908.050	26.3	2.5	28.8	46.4	17.6	263.0	135.1
7	989.450	23.1	2.6	25.7	49.5	23.8	100.0	222.7

--- Vertical Polarization (QP)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	30.531	36.6	-8.1	28.5	39.0	10.5	100.0	269.3
2	35.314	34.8	-10.7	24.1	39.0	14.9	100.0	190.1
3	46.720	36.9	-14.2	22.7	39.0	16.3	353.5	10.6
4	57.738	43.9	-17.6	26.3	39.0	12.7	100.0	356.5
5	105.410	43.5	-14.3	29.2	43.5	14.3	118.5	30.2
6	250.000	35.7	-7.1	28.6	46.4	17.8	100.0	190.1
7	528.009	33.9	-6.5	27.4	46.4	19.0	250.7	39.6
8	907.009	23.7	2.5	26.2	46.4	20.2	362.2	307.4

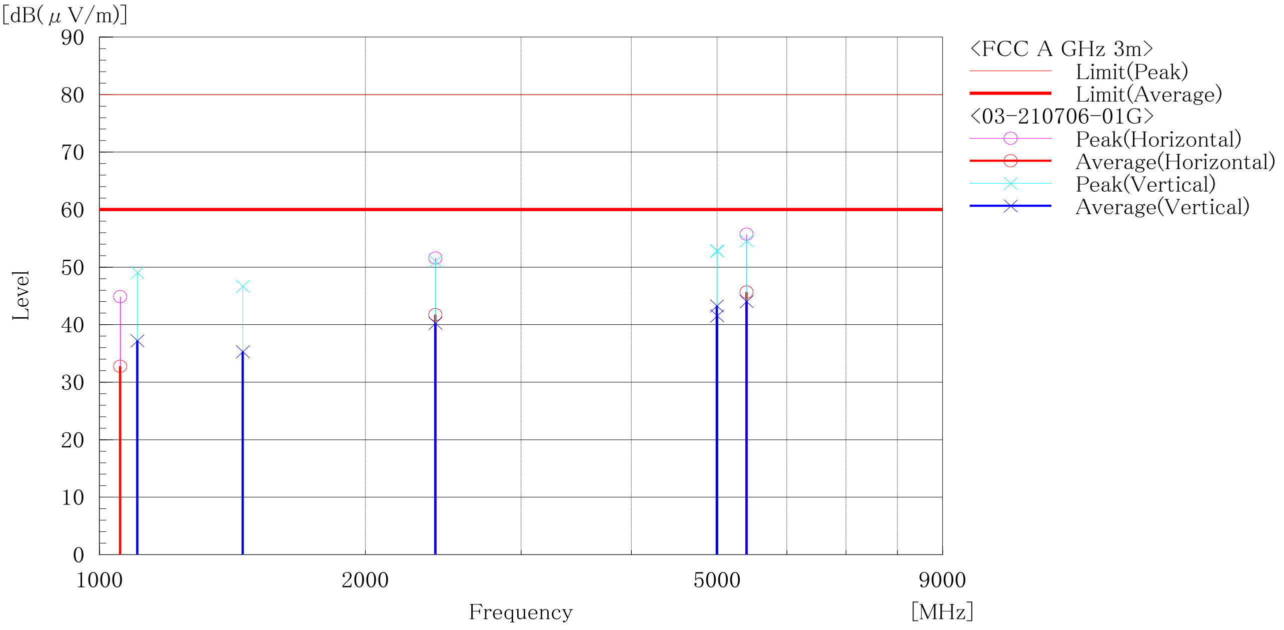
Radiated emission data (Above 1 GHz) / Horizontal setting

e-OHTAMA,LTD.
NAKAI EMC Center

<<Radiated Emission>>

6 July,2021 13:29
03-210706-01G.dat

Order No.	: EM21033	Standard	: FCC Class A GHz 3m
Company	: Hitachi, Ltd.	Remarks	: Test No.01G
Model	: H-7726-12	Input Power	: AC120 V / 60 Hz
Serial No.	: S9903Y1-03 R2	Temp/Humi	: 25 ℃ / 62 %RH
Condition	: Horizontal Setting	Operator	: S.Nagashima



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1055.978	48.6	-3.7	44.9	80.0	35.1	151.0	183.9
2	2400.020	48.0	3.6	51.6	80.0	28.4	202.4	173.7
3	5400.053	48.6	7.1	55.7	80.0	24.3	210.0	202.5

--- Horizontal Polarization (CAV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1055.978	36.4	-3.7	32.7	60.0	27.3	151.0	183.9
2	2400.020	38.1	3.6	41.7	60.0	18.3	202.4	173.7
3	5400.053	38.6	7.1	45.7	60.0	14.3	210.0	202.5

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1103.980	52.6	-3.5	49.1	80.0	30.9	188.2	186.8
2	1453.544	49.1	-2.4	46.7	80.0	33.3	100.0	298.4
3	2400.010	47.4	3.6	51.0	80.0	29.0	100.0	122.2
4	4999.635	46.1	6.8	52.9	80.0	27.1	180.6	36.2
5	4999.824	46.0	6.8	52.8	80.0	27.2	162.5	106.1
6	5400.023	47.5	7.1	54.6	80.0	25.4	100.0	186.4

--- Vertical Polarization (CAV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1103.980	40.7	-3.5	37.2	60.0	22.8	188.2	186.8
2	1453.544	37.7	-2.4	35.3	60.0	24.7	100.0	298.4
3	2400.010	36.6	3.6	40.2	60.0	19.8	100.0	122.2
4	4999.635	36.5	6.8	43.3	60.0	16.7	180.6	36.2
5	4999.824	34.8	6.8	41.6	60.0	18.4	162.5	106.1
6	5400.023	36.9	7.1	44.0	60.0	16.0	100.0	186.4

Note: The measurement level (Result) of radiated emission is converted into the level in the distance of 3 m.

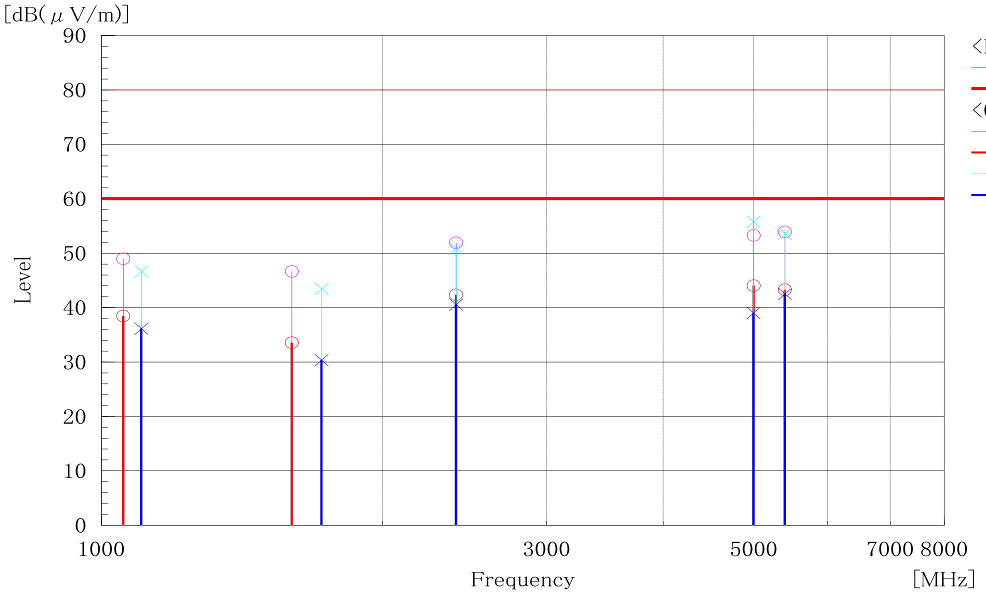
Radiated emission data (Above 1 GHz) / Vertical setting

e-OHTAMA,LTD.
NAKAI EMC Center

<<Radiated Emission>>

6 July,2021 14:08
03-210706-02G.dat

Order No.	: EM21033	Standard	: FCC Class A GHz 3m
Company	: Hitachi, Ltd.	Remarks	: Test No.02G
Model	: H-7726-12	Input Power	: AC120 V / 60 Hz
Serial No.	: S9903Y1-03 R2	Temp/Humi	: 25 ℃ / 62 %RH
Condition	: Vertical Setting	Operator	: S.Nagashima



Final Result

--- Horizontal Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1056.000	52.7	-3.7	49.0	80.0	31.0	312.7	97.6
2	1600.000	48.5	-1.9	46.6	80.0	33.4	135.0	109.6
3	2400.029	48.3	3.6	51.9	80.0	28.1	170.0	174.1
4	4999.651	46.4	6.8	53.2	80.0	26.8	274.4	219.6
5	5400.030	46.8	7.1	53.9	80.0	26.1	175.4	194.7

--- Horizontal Polarization (CAV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1056.000	42.1	-3.7	38.4	60.0	21.6	312.7	97.6
2	1600.000	35.4	-1.9	33.5	60.0	26.5	135.0	109.6
3	2400.029	38.8	3.6	42.4	60.0	17.6	170.0	174.1
4	4999.651	37.2	6.8	44.0	60.0	16.0	274.4	219.6
5	5400.030	36.2	7.1	43.3	60.0	16.7	175.4	194.7

--- Vertical Polarization (PK)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1103.985	50.2	-3.5	46.7	80.0	33.3	296.5	58.0
2	1722.245	44.5	-1.0	43.5	80.0	36.5	282.9	227.7
3	2400.005	47.3	3.6	50.9	80.0	29.1	100.0	146.3
4	4996.256	49.0	6.8	55.8	80.0	24.2	131.5	198.6
5	5400.010	46.5	7.1	53.6	80.0	26.4	100.0	199.7

--- Vertical Polarization (CAV)---

No.	Frequency [MHz]	Reading [dB(μV)]	c.f [dB(1/m)]	Result [dB(μV/m)]	Limit [dB(μV/m)]	Margin [dB]	Height [cm]	Angle [°]
1	1103.985	39.7	-3.5	36.2	60.0	23.8	296.5	58.0
2	1722.245	31.4	-1.0	30.4	60.0	29.6	282.9	227.7
3	2400.005	37.0	3.6	40.6	60.0	19.4	100.0	146.3
4	4996.256	32.2	6.8	39.0	60.0	21.0	131.5	198.6
5	5400.010	35.4	7.1	42.5	60.0	17.5	100.0	199.7

Note: The measurement level (Result) of radiated emission is converted into the level in the distance of 3 m.

Appendix 2 Photographs

Conducted emission (Mains power port)

Test point **A** (1 of 2)

Test point **A** (2 of 2)

(Photographs show the EUT arrangement for maximum emission level)

Radiated emission (Up to 1 GHz) / Horizontal setting

(Photographs show the EUT arrangement for maximum emission level)

Radiated emission (Up to 1 GHz) / Vertical setting

(Photographs show the EUT arrangement for maximum emission level)

Radiated emission (Above 1 GHz) / Horizontal setting

(Photographs show the EUT arrangement for maximum emission level)

Radiated emission (Above 1 GHz) / Vertical setting

(Photographs show the EUT arrangement for maximum emission level)

Equipment under test

width: 210 mm

Depth : 285 mm

Equipment under test

height : 69 mm
(Excluding protrusions)

Name plate

Associated equipment (AE)