JQA APPLICATION NO.: 441-20249 Issue Date : July 8, 2002

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EMI TEST REPORT

JQA APPLICATION NO. : 441-20249

Model No. : RI-21BTY

Type of Equipment : Immobilizer System

Regulations Applied : CFR 47 FCC Rules and Regulations Part 15

FCC ID : MOZRI-21BTY

Applicant : TOKAI RIKA CO., LTD.

Address : 260, Toyota 3-chome, Oguchi-cho, Niwa-gun,

Aichi-ken 480-0195, Japan

Manufacture : TOKAI RIKA CO., LTD.

Address : 260, Toyota 3-chome, Oguchi-cho, Niwa-gun,

Aichi-ken 480-0195, Japan

Received date of EUT : June 28, 2002

Final Judgment : Passed

TEST RESULTS IN THIS REPORT are obtained in use of equipment that is traceable to National Institute of Advanced Industrial Science and Technology (AIST) of Japan and Communication Research Laboratory (CRL) of Japan.

The test results only responds to the tested sample.

THIS REPORT should not be reproduced, except in full, without the approval of the JQA SAFETY & EMC CENTER EMC ENGINEERING DEPT. TSURU EMC BRANCH.

:CFR 47 FCC Rules Part 15

FCC ID :MOZRI-21BTY
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2	Test	Data	
	2.1	AC Power Line Conducted Emission 0.45 MHz - 30 MHz	N / A
	2.2	Radiated Emission (Electric Field)9 kHz - 30 MHz	21 - 22
	2.3	Radiated Emission (Electric Field)30 MHz - 1000 MHz	23 - 24
	2.4	Radiated Emission (Electric Field) Above 1 GHz	N / A
	2.5	Frequency Stability	N / A
	2.6	Occupied Bandwidth	N / A

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1 DOCUMENTATION

1.1 TEST REGULATION

FCC Rules and Regulations Part 15 Subpart A and C (June 23, 1989) Intentional Radiators

Test procedure :

AC power line conducted emission, radiated emission, frequency stability and occupied bandwidth tests were performed according to the procedures in ANSI C63.4-1992.

1.2 GENERAL INFORMATION

1.2.1 Test facility:

1) Test Facility located at JQA SAFETY & EMC CENTER EMC ENGINEERING DEPT. TSURU EMC BRANCH:

Open Site No.1, No.2, An Anechoic Chamber (3 $\mathfrak m$ and 10 $\mathfrak m$, on common plane) and a Shielded Room

FCC Registration Number: 90728 (Date of Listing: April 2,2002

2) JQA SAFETY & EMC CENTER EMC ENGINEERING DEPT. TSURU EMC BRANCH is recognized under the National Voluntary Laboratory Accreditation Program for satisfactory compliance established in title 15, Part 285 Code of Federal Regulations.

NVLAP Lab Code: 200192-0 (Effective through: June 30, 2003)

1.2.2 Description of the Equipment Under Test (EUT) :

1) Type of Equipment : Immobilizer System

2) Product Type : Production

3) Category : Low Power Communication Device

Transmitter

4) EUT Authorization : Certification 5) FCC ID : MOZRI-21BTY

6) Trade Name :

7) Model No. : RI-21BTY
8) Operating Frequency Range : 134.2 kHz
9) Highest Frequency Used in the EUT : 134.2 kHz

10) Serial No. : -

11) Date of Manufacture : -

12) Power Rating : 12.0 VDC 13) EUT Grounding : None

1.2.3 Definitions for symbols used in this test report :

- <u>x</u> indicates that the listed condition, standard or equipment is applicable for this report.
- indicates that the listed condition, standard or equipment is not applicable for this report.

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1.3 TEST CONDITION

1.3.1	The	measurement	of	the	AC	Power	Line	Conducted	Emission
-------	-----	-------------	----	-----	----	-------	------	-----------	----------

 $\underline{}$ - was performed in the following test site. \underline{x} - was not applicable.

Test location :

Safety Testing Center EMC Engineering Dept. Tsuru EMC Branch 2096 Ohhata, Tanbozawa, Tsuru-shi Yamanashi-ken 402-0045, JAPAN

 -	Shiel	Lded	Room	No.1
 -	Shiel	lded	Room	No.2
 -	Anech	noic	Chamb	oer
 _	Open	Site	e No.	L
 _	Open	Site	e No.2	2

	Type	Model No.	Manufacturer	Serial No.	Last Cal.	Interval
	- Test Receiver	ESI7	Rohde & Schwarz	100059	Oct. 2001	. 1 Year
	- Test Receiver	ESH-3	Rohde & Schwarz	881460/016	May. 2002	2 1 Year
	LISN(for Peripheral)	KNW-407	Kyoritsu Electrical	8-833-5	Aug. 2001	1 Year
	- LISN(for EUT)	KNW-407	Kyoritsu Electrical	8-680-14	Aug. 2001	1 Year
_	LISN	KNW-407	Kyoritsu Electrical	7-757-1	Jun. 2002	l Year
	LISN	KNW-243C	Kyoritsu Electrical	8-692-5	Aug. 2001	1 Year
	- LISN	KNW-243C	Kyoritsu Electrical	8-831-2	Jun. 2002	2 1 Year
	- LISN	KNW-243C	Kyoritsu Electrical	8-831-3	Jun. 2002	l Year
	LISN	KNW-243C	Kyoritsu Electrical	8-831-4	Jun. 2002	l Year
	- RF Cable	3D-2W	Fujikura	No.1	May. 2001	1 Year
_	RF Cable	3D-2W	Fujikura	No.2	May. 2001	1 Year
	- RF Cable	3D-2W	Fujikura	No.3	May. 2001	. 1 Year
	- 50ohm Termination	-	TDC	15406501E1	Feb. 2001	1 Year
	50ohm Termination	_	_	15406502E1	Feb. 2001	1 Year

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1.3.2	The	measurement	οf	the	Radiated	Emission (9	\mathbf{kHz}	_	30	MHz)
-------	-----	-------------	----	-----	----------	------------	---	----------------	---	----	-----	---

 $\underline{\ x\ }$ - was performed in the following test site.

___ - was not applicable.

Test location :

Safety Testing Center EMC Engineering Dept. Tsuru EMC Branch 2096 Ohhata, Tsuru-shi, Yamanashi-ken 402-0045, JAPAN

<u>x</u> - Open Site No. 1 (3, 10 or 30 meters)

_____- Open Site No. 2 (3 or 10 meters)

___ - Anechoic Chamber(3 or 10 meters)

Validation of Site Attenuation :

1) Last Confirmed Date : N/A
2) Interval : N/A

	Type	Model No.	Manufacturer	Serial No.	Last Cal.	Interval
<u>x</u> -	Test Receiver	ESI7	Rohde & Schwarz	100059	Oct. 2001	1 Year
	Test Receiver	ESH-3	Rohde & Schwarz	881460/016	May. 2002	1 Year
<u>x</u> -	Loop Antenna	HFH2-Z2	Rohde & Schwarz	872994/043	May. 2002	1 Year
	Loop Antenna	6502	EMCO	8905-2347	May. 2002	1 Year
<u>x</u> -	RF Cable	5D-2W	Fujikura	155-21-002E0	May. 2002	1 Year

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1.3.3	The measurement	οf	the	Radiated	Emission ((30	MHz	_	1000	MHz)
-------	-----------------	----	-----	----------	------------	-----	-----	---	------	-----	---

 $\underline{\ x\ }$ - was performed in the following test site.

___ - was not applicable.

Test location :

Safety Testing Center EMC Engineering Dept. Tsuru EMC Branch 2096 Ohhata, Tsuru-shi, Yamanashi-ken 402-0045, JAPAN

_____ - Open Site No. 1 (3, 10 or 30 meters)

- Open Site No. 2 (3 or 30 meters)

x - Anechoic Chamber(3 or 10 meters)

Validation of Site Attenuation :

1) Last Confirmed Date : May, 2002

2) Interval :1 year

Туре	Model No	. Manufacturer	Serial No.	Last Cal.	Interval
<u>x</u> - Test Receiv	ver ESI7	Rohde & Schwarz	100059	Oct. 2001	1 Year
Test Receiv	ver ESVS10	Rohde & Schwarz	843744/018	Mar. 2002	1 Year
Test Receiv	ver ESVS10	Rohde & Schwarz	84231/004	Mar. 2002	1 Year
Biconical A	Antenna BBA9106	Schwarzbeck	11905065-2	May. 2002	1 Year
Biconical A	Antenna BBA9106	Schwarzbeck	11905065-3	May. 2002	1 Year
<u>x</u> - Biconical A	Antenna BBA9106	Schwarzbeck	G4397001	May. 2002	1 Year
Log-Periodi	c Antenna UHALP910	7 Schwarzbeck	91071212	May. 2002	1 Year
Log-Periodi	lc Antenna UHALP910	7 Schwarzbeck	9107915	May. 2002	1 Year
<u>x</u> - Log-Periodi	c Antenna UHALP910	7 Schwarzbeck	G43597003	May. 2002	1 Year
Dipole Ante	enna KBA-511 <i>A</i>	. Kyoritsu Electric	cal 0-195-5	May. 2002	1 Year
Dipole Ante	enna KBA-511 <i>A</i>	. Kyoritsu Electric	cal 0-230-6	May. 2002	1 Year
Dipole Ante	enna KBA-611	Kyoritsu Electric	cal 0-196-8	May. 2002	1 Year
Dipole Ante	enna KBA-611	Kyoritsu Electric	cal 0-228-13	May. 2002	1 Year
RF Cable	20D/5D-2	W Fujikura	No.1	May. 2002	1 Year
RF Cable	20D/5D-2	W Fujikura	No.2	May. 2002	1 Year
x - RF Cable	20D/5D-2	W Fujikura	No.3	May. 2002	1 Year

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1.3.4	The	measurement	οf	the	Radiated	Emission (Above	1000	MHz)
-------	-----	-------------	----	-----	----------	------------	-------	------	-----	---

- was performed in the following test site.
- x was not applicable.

Test location:

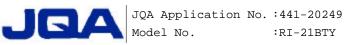
Safety Testing Center EMC Engineering Dept. Tsuru EMC Branch 2096 Ohhata, Tsuru-shi, Yamanashi-ken 402-0045, JAPAN

- _____- Open Site No. 1 (3, 10 or 30 meters)
- _____- Open Site No. 2 (3 or 10 meters)
- _____ Anechoic Chamber(3 or 10 meters)

Validation of Site Attenuation :

1) Last Confirmed Date : N/A
2) Interval : N/A

	Type	Model No.	Manufacturer	Serial No.	Last Cal.	Interval
	Spectrum Analyzer	8563E	Hewlett Packard	3438A00756	Apr. 2002	1 Year
	Spectrum Analyzer	R4131C	Advantest	717201249	May. 2002	1 Year
	Log-Periodic Antenna	94612-1	Rohde & Schwarz	97062301	May. 2002	1 Year
	RF Amplifier	WJ-6611-513	Watkins-Johnson	0288	May. 2002	1 Year
	RF Amplifier	WJ-6682-834	Watkins-Johnson	0052	May. 2002	1 Year
	RF Amplifier	WJ-6870-506	Watkins-Johnson	0018	May. 2002	1 Year
	RF Cable(7m)	SUCOFLEX 104	Suhner	52146/4	May. 2002	1 Year
	RF Cable(3m)	SUCOFLEX 104	Suhner	52053/4	May. 2002	1 Year
	RF Cable(2m)	SUCOFLEX 104	Suhner	39934/4	May. 2002	1 Year
_	RF Cable(1m)	SUCOFLEX 104	Suhner	35687/4	May. 2002	1 Year



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1.3.5 The measurement of the Frequency	Stability
was performed.	
x - was not applicable.	
Used test instruments:	

Туре	Model No.	Manufacturer	Serial No.	Last Cal.	Interval
 - Frequency Counter	53131A	Hewlett Packard	3546A11807	May 2002	1 Year
 - Oven	-	Ohnishi Co. Ltd.	-	Aug. 2001	1 Year
- DC Power Supply	6628A	Hewlett Packard	3224A00284	July 2001	1 Year

1.3.6 The measurement of the Occupied Bandwidth

- was performed.

 \underline{x} - was not applicable.

Type	Model No.	Manufacturer	Serial No.	Last Cal.	Interval
Spectrum Analyzer	8560E	Hewlett Packard	3240A00189	Sep. 2001	1 Year
Spectrum Analyzer	8563E	Hewlett Packard	3221A00201	May. 2002	1 Year
Spectrum Analyzer	8566B	Hewlett Packard	2140A01091	Apr. 2002	1 Year
Spectrum Analyzer	8566B	Hewlett Packard	2747A05855	May. 2002	1 Year
Function Generator	3325A	Hewlett Packard	2512A21776	May. 2002	1 Year
FM Linear Detector	MS61A	Anritsu Corp.	M77486	Sep. 2001	1 Year
Level Meter	ML422C	Anritsu Corp.	M87571	June 2002	1 Year

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1.4 EUT MODIFICATION / Deviation from Standard

1.4.1 EUT MODIFICATION

х	-No	modifica	ations	were	cor	nducte	d b	y JQA	to	ach	ieve	comp	liance	to	Clas	ss B	leve	els.
	- To	achieve	compl	iance	to	Class	В	level	s,	the	follo	owing	change	es v	were	made	by	JQA
	du	ring the	compl	iance	tes	st.												

The modifications will be implement	ted in all production models of this equipment.
Applicant :	Date :
Typed Name :	Position :

1.4.2 Deviation from Standard:

х		No	deviations	s from	the	stand	dard	desc	ribed	d in	clause 1	L.1.			
	_	The	following	deviat	cions	were	empl	Loyed	from	the	standard	described	in	clause	1.1:
		_													<u>-</u>

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1.5 TEST RESULTS

Remarks:

AC Power Line Conducted Emission	Applicable	$\underline{\hspace{1.5cm}}^{\hspace{1.5cm} imes}$ - NOT Applicable
The requirements are	PASSED	NOT PASSED
Remarks :		
Radiated Emission [§15.209(a)(b)]	<u>x</u> - Applicable	NOT Applicable
The requirements are	x - PASSED	NOT PASSED
Remarks:		
Frequency Stability	Applicable	<u>x</u> - NOT Applicable
The requirements are	PASSED	NOT PASSED
Remarks:		
Occupied Bandwidth	Applicable	\underline{x} - NOT Applicable
The requirements are	PASSED	NOT PASSED

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1.6 SUMMARY

General Remarks:

The EUT was tested according to the requirements of FCC Rules and Regulations Part 15 Subpart A and C (June 23, 1989) under the test configuration, as shown in clause 1.7 to 1.10.

The conclusion for the test items of which are required by the applied regulation is indicated under the final judgment.

Final Judgment:

The "as received" sample;

x - fulfill the test requirements of the regulation mentioned on clause 1.1.

- fulfill the test requirements of the regulation mentioned on clause 1.1, but with certain qualifications.

- doesn't fulfill the test regulation mentioned on clause 1.1.

Begin of testing: July 2, 2002

End of testing : July 2, 2002

- JAPAN QUALITY ASSURANCE ORGANIZATION -Approved by:

Signatories: Issued by:

Takaharu Hada Director Tsuru EMC Branch JQA EMC Engineering Dept. Yuichi Fukumoto Manager

Tsuru EMC Branch JQA EMC Engineering Dept.

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1.7 TEST CONFIGURATION / OPERATION OF EUT

1.7.1 Test Configuration

The equipment under test (EUT) consists of :

Symbol	Item	Manufacturer	Model No.	FCC ID	Serial No.
А	Immobilizer System	TOKAI RIKA CO., LTD.	RI-21BTY	MOZRI-21BTY	-

The measurement was carried out with the following support equipment connected:

Symbol	Item	Manufacturer	Model No.	FCC ID	Serial No.	
В	DC Power Supply	KIKUSUI ELECTRONICS	PAB 18-2.5DU	N/A	30079912	

Type of Cable:

Symbol	Description	Identification (Manufacturer etc.)	Shielded YES / NO	Ferrite Core	Connector type Shielded YES / NO	Length (m)
1	DC Power Cable(for EUT)	_	NO	NO	NO	0.9
2	AC Power Cable	-	NO	NO	NO	1.8

1.7.2 Operating condition

Power supply Voltage : 12.0 VDC(from DC Power Supply)

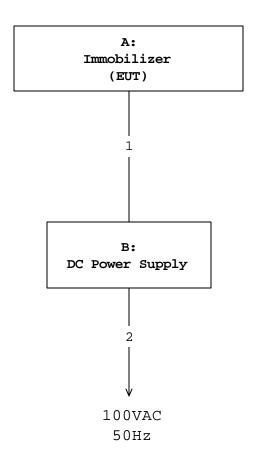
The tests have been carried out under the transmitting condition.

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1.8 EUT ARRANGEMENT (DRAWINGS)



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1.9 PRELIMINARY TEST AND TEST-SETUP (DRAWINGS)

1.9.1 AC Power Line Conducted Emission (450 kHz - 30 MHz) :

According to description of ANSI C63.4-1992 sec.13.1.3.1, the AC power line preliminary conducted emissions measurements were carried out.

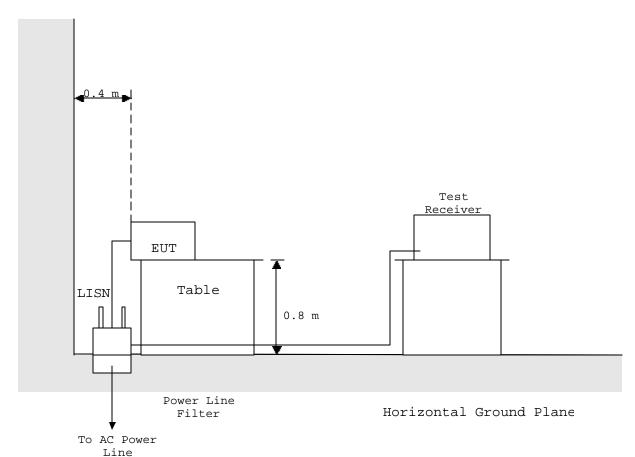
The preliminary conducted measurements were performed using the spectrum analyzer to observe the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for final AC power line conducted emissions measurements.

Shielded Enclosure

- Side View -

Vertical Ground Plane



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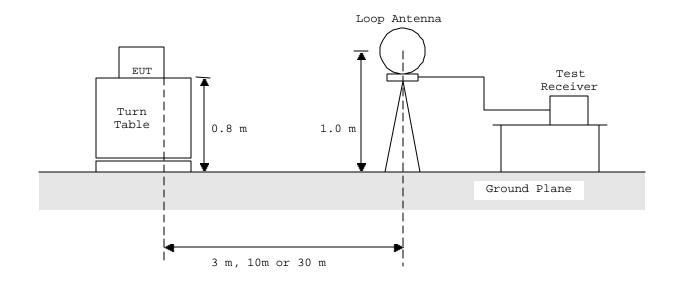
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1.9.2 Radiated Emission (9 kHz - 30 MHz):

According to description of ANSI C63.4-1992 sec.13.1.4.1, the preliminary radiated emissions measurement were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements.

- Side View -



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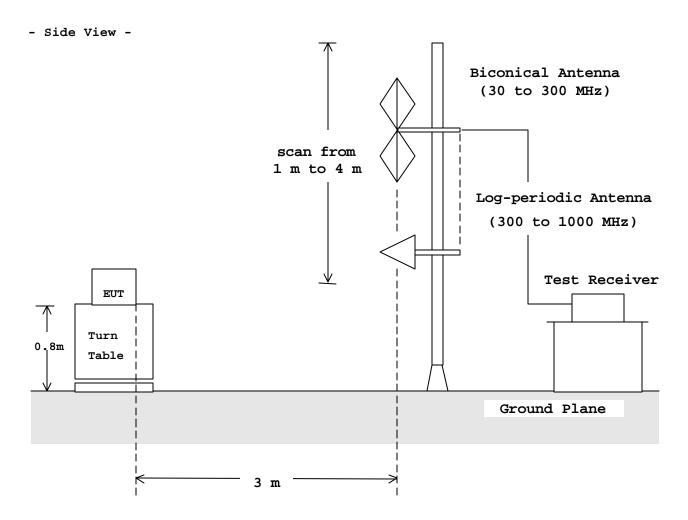
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1.9.3 Radiated Emission (30 MHz - 1000 MHz):

According to description of ANSI C63.4-1992 sec.13.1.4.1, the preliminary radiated emissions measurement were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements.

Anechoic Chamber



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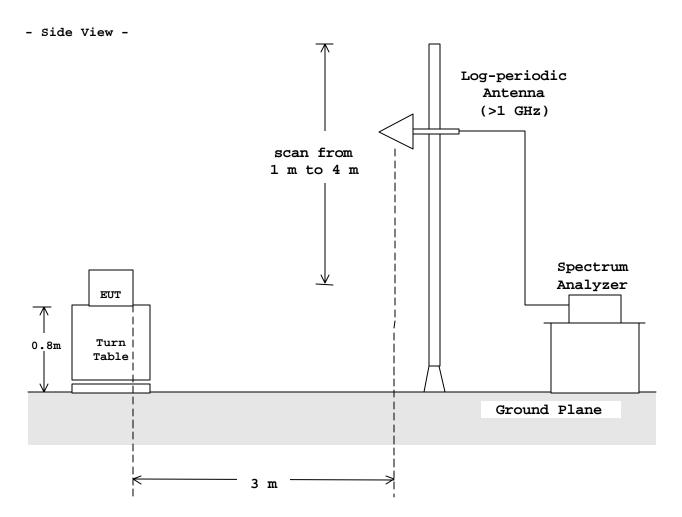
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1.9.4 Radiated Emission (Above 1 GHz):

According to description of ANSI C63.4-1992 sec.13.1.4.1, the preliminary radiated emissions measurements were carried out. The preliminary radiated measurements were performed at the measurement distance that specified for compliance to determine the emission characteristics of the EUT.

The EUT configuration, cable configuration and mode of operation were determined for producing the maximum level of emissions. These configurations were used for the final radiated emissions measurements.

Anechoic Chamber



Standard :CFR 47

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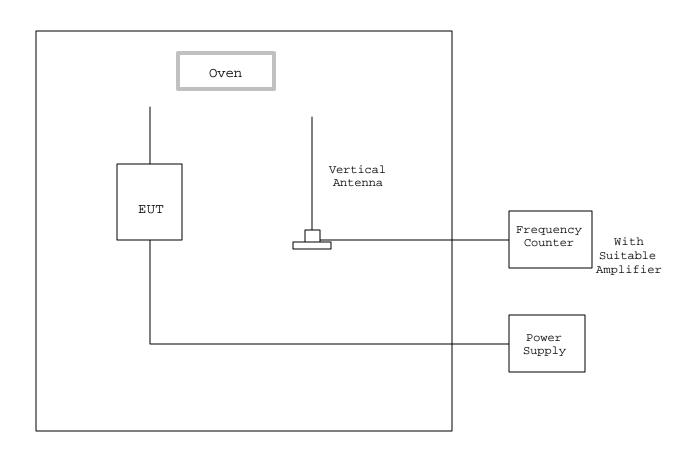
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1.9.5 Frequency Stability:

According to description of ANSI C63.4-1992 sec.13.1.5 and sec.13.1.6, the frequency stability measurements were carried out. By using frequency counter with suitable RF amplifier, the carrier frequency of the transmitter under test was measured with a temperature variation of $-20\,^{\circ}\text{C}$ to $+50\,^{\circ}\text{C}$ at the normal supply voltage, and if required, with a variation in the primary voltage from 85 % to 115 % the rated supply voltage at the temperature of $+20\,^{\circ}\text{C}$.

These measurements were carried out after allow sufficient time (approximately 1 hour) for the temperature of the chamber to stabilize.



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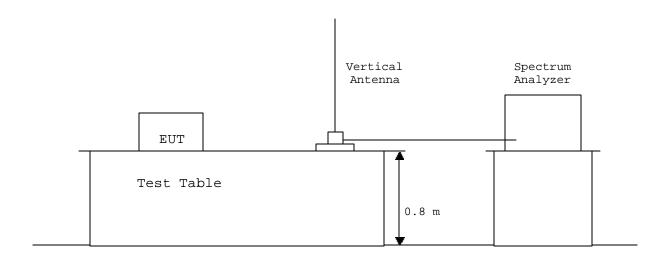
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1.9.6 Occupied Bandwidth:

According to description of ANSI C63.4-1992 sec.13.1.7, the occupied bandwidth measurements were carried out. By using a spectrum analyzer with a vertical antenna for picking up the signal, the measurements of the emission were made under the transmitting modes of the EUT.

The resolution bandwidth of spectrum analyzer was set to the value specified in sec.13.1.7.



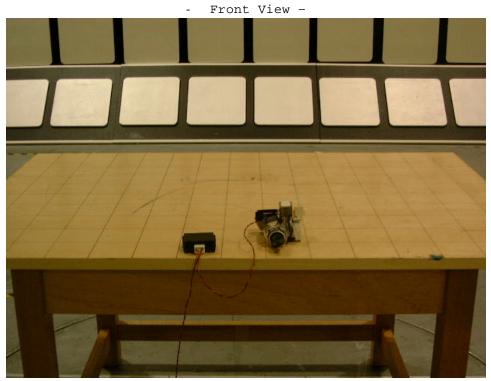
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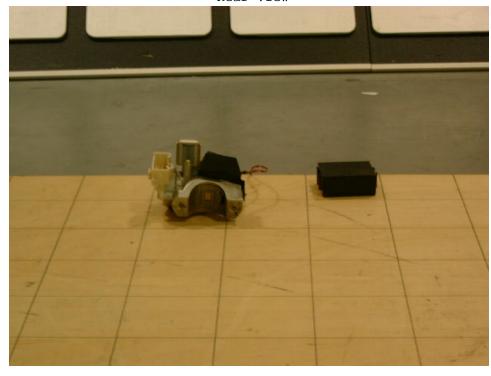
1.10 TEST ARRANGEMENT (PHOTOGRAPHS)

PHOTOGRAPHS OF EUT CONFIGURATION FOR RADIATED EMISSIONS MEASUREMENT

Photograph present configuration with maximum emission



Rear View -



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TEST DATA

2.1 AC Power Line Conducted Emission Measurement(0.45 MHz - 30 MHz)

Note: This test was not applicable.

2.2 Radiated Emissions Measurement(9 kHz - 30 MHz)

Date : ___July 2, 2002

Temp.: <u>20 °C</u> Humi.: <u>58 %</u>

Operating Frequency : 134.2 kHz
Distance of Measurement : 30 meters

Frequency	Meter Reading	Field Strength
(MHz)	$(dB\mu V/m)$	$(dB\mu V/m)$
Fundamental		
0.134	< 30.0	< 30.0
Harmonic Frequ	ency	
0.268	< 33.2	< 33.2
0.403	< 31.4	< 31.4
0.537	< 30.1	< 30.1
0.671	< 29.0	< 29.0
0.805	< 28.1	< 28.1
0.939	< 27.3	< 27.3
1.074	< 27.0	< 27.0
1.208	< 27.0	< 27.0
1.342	< 27.0	< 27.0

Note: The fundamental field strength was found undetectable weak of the field strength meter.

Y. Fukumoto
Tested by:

Yuichi Fukumoto

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The distance of measurements was reduced to 10 meters.

Date : July 2, 2002

Temp.: 20 °C Humi.: 58 %

Operating Frequency : 134.2 kHz
Distance of Measurement : 10 meters

Frequency	Meter Reading	Field Strength
(MHz)	$(dB\mu V/m)$	(dB μ V/m)
Fundamental		
0.134	38.2	38.2(Average)
0.134	39.4	39.4(Peak)
Harmonic Frequen	су	
0.268	< 33.2	< 33.2(Average)
0.268	< 39.4	< 39.4(Peak)
0.403	< 31.4	< 31.4(Average)
0.403	< 36.6	< 36.6(Peak)
0.537	< 30.1	< 30.1
0.671	< 29.0	< 29.0
0.805	< 28.1	< 28.1
0.939	< 27.3	< 27.3
1.074	< 27.0	< 27.0
1.208	< 27.0	< 27.0
1.342	< 27.0	< 27.0

Note: 1. Meter reading value shows field strength, because the value includes antenna factor.

- 2. The symbol of "<" means "or less".
- 3. Measuring Instrument Setting:

Frequency Range : 110 kHz to 490 kHz

Detector Function : Average/Peak, IF Band width : 10 kHz

Frequency Range : 536.8 kHz to 1345 kHz

Detector Function : CISPR Quasi-peak Peak, IF Band width : 9 kHz

For fundamental, the measured field strength was extrapolated todistance 300 meters, using the formula that field strength varies as the inverse distance square(40 dB per decade of distance).

Calculation :

Average: $38.2 \text{ dB}\mu\text{V/m} - 20\log_{10}((300/10)^2) = 38.2 - 59.1 = -20.9 \text{ dB}\mu\text{V/m}$ at 300 meters

Limits for fundamental(§15.209(a)) = $20\log_{10}(2400/134.2)$ = $25.0~\mathrm{dB}\mu\mathrm{V/m}$

Peak: $39.4 \text{ dB}\mu\text{V/m} - 20\log_{10}((300/10)^2) = 39.4 - 59.1 = -19.7 \text{ dB}\mu\text{V/m}$ at 300 meters

Limits for fundamental($\S15.209(a)$) = $20\log_{10}(2400/134.2)+20 = 45.0 \text{ dB}\mu\text{V/m}$

Tested by : _____

Yuichi Fukumoto

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2. Radiated Spurious Emissions [§15.209]

Date : July 2, 2002

Temp. : 20°C Humi.: 58%

Frequency	Antenna Factor		Reading BuV)	Limits		on Level BuV/m)	Marg (dl	gin Commer 3)	ıt
(MHz)	(dB/m)	Horiz	. Ver.	(dBuV/m)	Horiz.	Ver.	Horiz.	Ver.	
30.0	19.1	< -2.0	2.6	40.0	< 17.1	21.7	> 22.9	18.3	
45.6	16.3	< -2.0	9.3	40.0	< 14.3	25.6	> 25.7	14.4	
49.9	12.8	4.5	21.3	40.0	17.3	34.1	22.7	5.9	
56.7	9.2	2.7	16.5	40.0	11.9	25.7	28.1	14.3	
64.0	7.6	3.2	15.3	40.0	10.8	22.9	29.2	17.1	
80.0	9.6	5.4	15.0	40.0	15.0	24.6	25.0	15.4	
96.0	11.2	3.2	9.6	43.5	14.4	20.8	29.1	22.7	
111.9	13.4	9.9	11.8	43.5	23.3	25.2	20.2	18.3	
127.9	15.0	19.9	15.5	43.5	34.9	30.5	8.6	13.0	
159.9	17.1	22.6	9.2	43.5	39.7	26.3	3.8	17.2	
175.9	17.9	8.3	1.7	43.5	26.2	19.6	17.3	23.9	
207.9	18.2	7.7	7.4	43.5	25.9	25.6	17.6	17.9	
239.9	18.6	0.5	-0.2	46.0	19.1	18.4	26.9	27.6	
319.9	19.4	4.9	0.9	46.0	24.3	20.3	21.7	25.7	
351.8	19.6	9.9	3.0	46.0	29.5	22.6	16.5	23.4	
400.0	20.3	< -2.0	< -2.0	46.0	< 18.3	< 18.3	> 27.7	> 27.7	
500.0	22.7	< -2.0	< -2.0	46.0	< 20.7	< 20.7	> 25.3	> 25.3	
600.0	24.9	< -2.0	< -2.0	46.0	< 22.9	< 22.9	> 23.1	> 23.1	
800.0	27.2	< -2.0	< -2.0	46.0	< 25.2	< 25.2	> 20.8	> 20.8	
1000.0	29.9	< -2.0	< -2.0	54.0	< 27.9	< 27.9	> 26.1	> 26.1	

Notes: 1) Test Location : Anechoic Chamber

- 2) Test Distance : 3 m
- 3) The spectrum was checked from 30 MHz to 1000 MHz.
- 4) Antenna factor includes the cable loss for 33 meter.
- 5) The symbol of "<" means "or less".
- 6) The symbol of ">" means "more than".
- 7) A sample calculation was made at 30.0 MHz

Af + Mr = 19.1 + 2.6 = 21.7 dBuV/m

Af : Antenna Factor Mr : Meter Reading

8) Setting of measuring instrument :

Detector Function : CISPR Quasi-Peak

IF Bandwidth : 120 kHz

Tested by :

Yuichi Fukumoto

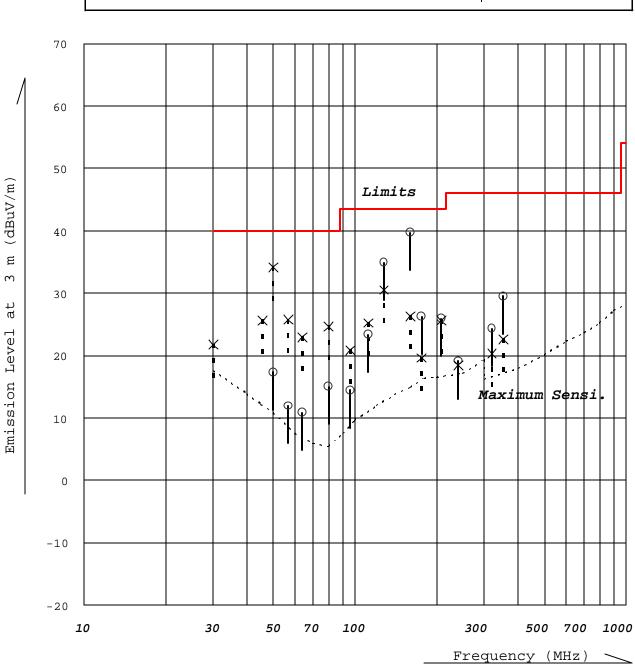
:CFR 47 FCC Rules Part 15

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Radiated Emissions Measurements (30 MHz - 1000 MHz)





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2.4 Radiated Emissions Measurement(Above 1 GHz)

Note: This test was not applicable.

2.5 Frequency Stability Measurement

Note: This test was not applicable.

2.6 Occupied Bandwidth Measurement

Note: This test was not applicable.