

(EMI)

TEST REPORT

REPORT NUMBER : TR 02-0011

APPLICANT : KYUSHU MATSUSHITA ELECTRIC CO., LTD.
TELECOM DIVISION

MODEL NUMBER : KX-TDA0142

REGULATION : FCC Rules and Regulations Part 15
Subpart C - Intentional Radiators

ISSUE DATE : February 5, 2002

Kyushu Matsushita Electric Test Lab
EMC Center

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KME

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KME TEST LAB EMC CENTER

SECTION 1. EMI TEST REPORT ON EUT

APPLICANT INFORMATION

Company	:	Kyushu Matsushita Electric Co., Ltd. Telecom Division
Address	:	1-62, 4-chome, Minoshima Hakata-ku, Fukuoka 812-8531, Japan
Phone Number	:	092-477-1101 (+81-92-477-1101)
Facsimile Number	:	092-477-1450 (+81-92-477-1450)

DESCRIPTION of TEST ITEM

Kind of Equipments	:	Cell Station Unit
Condition of Equipment	:	Pre-Production
Type	:	Wall mounted Type
Brand	:	Panasonic
Model Number	:	KX-TDA0142
Serial Number	:	No.1
Power Supply	:	via Main Unit PBX

TEST PERFORMED

Location	:	Kyushu Matsushita Electric Test Lab EMC Center Shielded Room (FCC File No. 1300F2)
Address	:	441-13, Nagahasu Tateishi-cho, Tosu, Saga 841-8585, Japan
Receipt Date	:	January 28, 2002
Test Date	:	January 28, 2002
Regulation	:	FCC Rules and Regulations Part 15 Subpart C Class B
Test Procedure	:	ANSI C63.4-1992

SECTION 2. TEST CERTIFICATION

1.Measurement Results

The results obtained from the measurement of the above mentioned device are shown in the attached sheets. The results in this report apply only to the sample(s) tested.

2.Summary of Results

Test sample complies with FCC Rules and Regulations

Part 15 Subpart C - Intentional Radiators(Class B).

Worst Margin(Conducted Emission) -- 9.2517MHz 3.9dB (at page 4)

3.These test results are traceable to the National and International Standards.

4.Measurements Uncertainty, at time of test, and at least 95% Confidence, was estimated to be as follows:

Conducted Emission Measurements:

2.40dB[0.09M- 1MHz], 2.63dB[1M-30MHz]

Issue Date : February 5, 2002

Certifying
Manager : M.Horie



February 5, 2002

SECTION 3. TEST RESULTS EMISSION

3.1 Conducted Emission

Model Name : Cell Station Unit
 Model No. : KX-TDA0142
 Serial No. : No.1
 Operator : H.Miyoshi
 Points : 12
 Detector : QP
 RBW : 10kHz

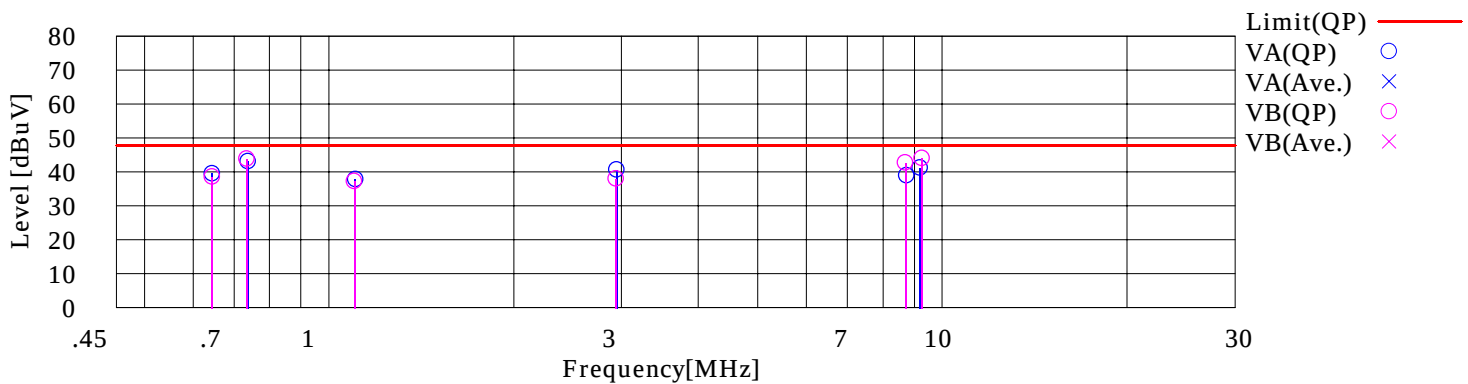
Test condition of instruments

Date : 2002/01/28 14:53
 Temperature : 23deg
 Humidity : 35%
 EUT Warm-up Time : 30minutes
 :
 Test Mode : Talk mode
 Comment : via Main Unit PBX
 : 1008hPa

Level=Emission Level=Meter Reading+Factor (Cable, LISN)

The measurement was conducted the worst emissions condition.

LIMIT : FCC Part15 Class B (QP)

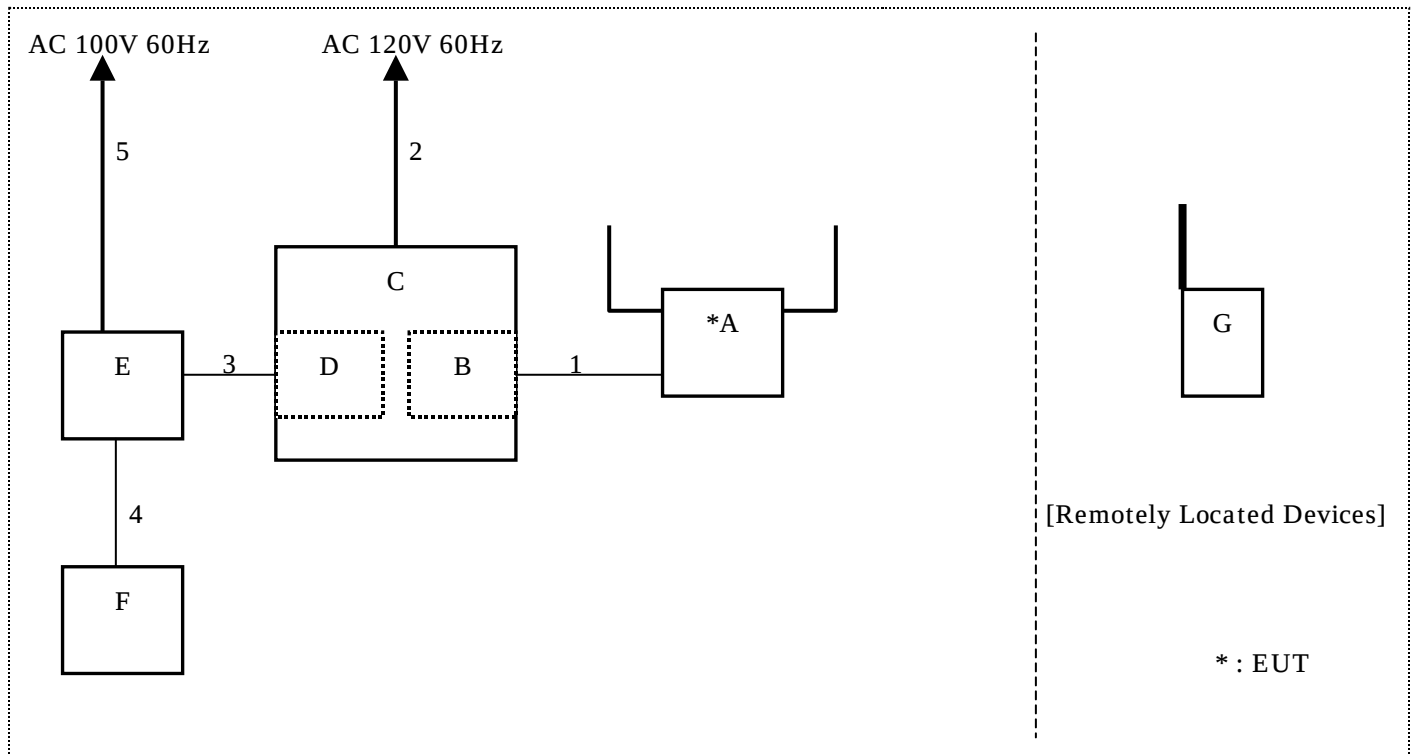


Frequency [MHz]	Meter Reading (QP) [dBuV]	Meter Reading (Ave.) [dBuV]	Factor [dB]	Level (QP) [dBuV]	Level (Ave.) [dBuV]	Line	Limit (QP) [dBuV]	Limit (Ave.) [dBuV]	Margin (QP) [dB]	Margin (Ave.) [dB]
0.6452	39.3	----	0.2	39.5	----	VA	47.9	0.0	8.4	----
0.7381	43.0	----	0.2	43.2	----	VA	47.9	0.0	4.7	----
1.1043	37.6	----	0.3	37.9	----	VA	47.9	0.0	10.0	----
2.9428	40.3	----	0.3	40.6	----	VA	47.9	0.0	7.3	----
8.7318	38.4	----	0.5	38.9	----	VA	47.9	0.0	9.0	----
9.1857	40.6	----	0.5	41.1	----	VA	47.9	0.0	6.8	----
0.6439	38.3	----	0.2	38.5	----	VB	47.9	0.0	9.4	----
0.7342	43.6	----	0.2	43.8	----	VB	47.9	0.0	4.1	----
1.1004	37.0	----	0.3	37.3	----	VB	47.9	0.0	10.6	----
2.9340	37.6	----	0.3	37.9	----	VB	47.9	0.0	10.0	----
8.7061	42.2	----	0.5	42.7	----	VB	47.9	0.0	5.2	----
9.2517	43.5	----	0.5	44.0	----	VB	47.9	0.0	3.9	----

SECTION 4. DESCRIPTION OF TEST EQUIPMENT

4.1 Construction of Equipment

The Construction of EUT during the test as follows.



Symbols or number assigned to equipment or cables on this diagram is used on tables in section 4.2 to 4.3.

4.2 EUT and Support Equipment Used

The EUT was supported by the following equipments during the test.

Indication in the following left side column corresponds to section 4.1

	Item	Model No. [Manufacturer]	Serial No.	FCC I/D
A	Cell Station Unit [EUT]	KX-TDA0142 [KME]	No.1	Under Application
B	Cell Station Interface Card	KX-TDA0144 [KME]	E.S.(No.1)	None
C	PBX	KX-TDA200 [KME]	E.S.(No.1)	None
D	Loopstart CO Trunk Card	KX-TDA0180 [KME]	E.S.(No.1)	None
E	Loop Simulator	UT-T1000 [Unitec]	EMF-134	None
F	Single Line Telephone	---	---	None
G	System Wireless Telephone	KX-TD7690 [KME]	No.1	Under Application

4.3 Cable(s) Used

The following cable(s) was used for the test.

Indication number in the following left side column corresponds to Section 4.1

No	Name	Length	Shield	Connector	Ferrite Core
1	Tel Cable	2.2 m	Unshielded	Plastic Hood	None
2	AC Cable for PBX	1.5 m	Unshielded	Plastic Hood	None
3	Tel Cable (Amphenol)	2.0 m	Shielded	Plastic Hood	None
4	Tel Cable	1.8 m	Unshielded	Plastic Hood	None
5	AC Cable for Loop Simulator	1.5 m	Unshielded	Plastic Hood	None

4.4 Operating Condition

Talk mode

The EUT was operated under the talk mode.

The talk was set between the System Wireless Telephone and CO trunk.

4.5 Any deviations from, additions to or exclusions from the test method

No deviation

SECTION 5. PHOTOGRAPHS OF MAXIMUM EMISSION SET-UP

5.1 Conducted Emission

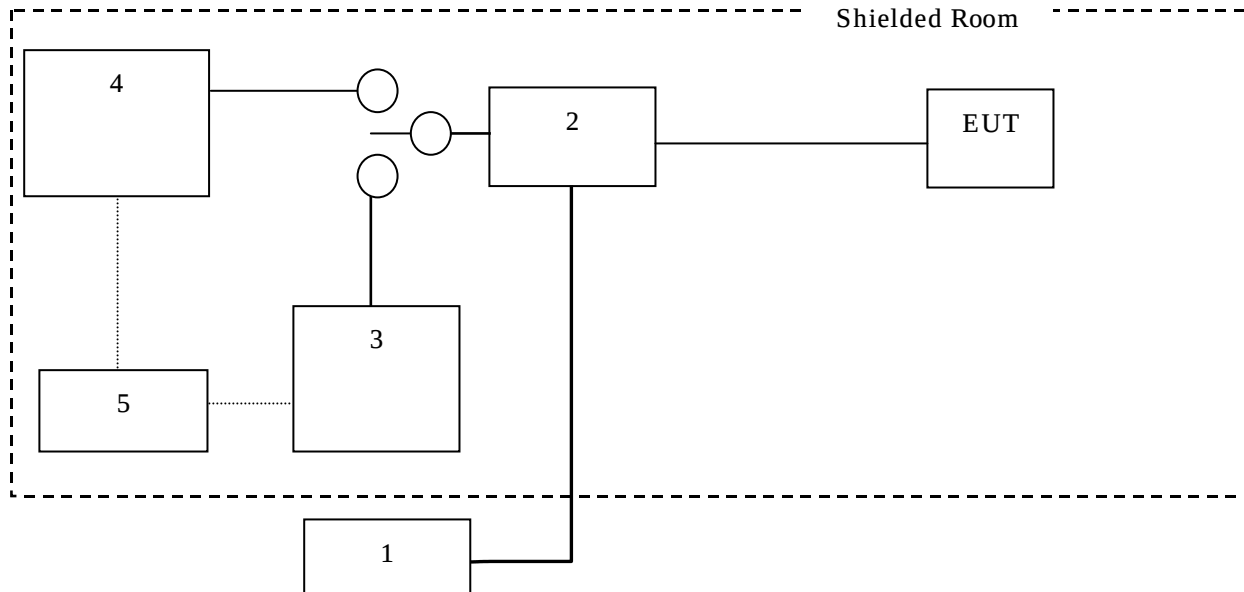
Test setup in accordance with ANSI C63.4 - 1992



February 5, 2002

SECTION 6. TEST ARRANGEMENT AND LIST OF TEST INSTRUMENTS

6.1 Conducted Emission



No	Apparatus	Model No. (Manufacture)	Specification	Calibration		Serial No.
				Date	Interval	
1	Power Supply	* FUK-23749-3 (NF)	50/60Hz 4kVA 264V	---	---	---
2	LISN	* KNW-407 (Kyoritsu)	250V15A	Sep-01	1 year	8-1345-3
3	Spectrum Analyzer	R3261C (Advantest)	9kHz-2.6GHz	Aug-01	3 years	61720502
4	EMI Receiver	* ESHS10 (R&S)	9kHz-30MHz	Nov-01	1 year	844077/017
5	PC	OptiPlex GX110 (DELL)	---	---	---	---
-	Shielded Room	* --- (RIKEN)	0.15M-30MHz	---	---	---
-	R.F.Fuse	* MP612 (ANRITSU)	---	Sep-01	1 year	---
-	LISN	KNW-407 (Kyoritsu)	250V15A	Aug-01	3 years	8-1345-4
-	50ohm Terminator	---	---	Sep-01	1 year	---
-	Cables	* EMF-164,165,167	0.15M-30MHz	Sep-01	1 year	---
-	SW Box	* PSU (R&S)	---	Sep-01	1 year	---

* Used for final test

SECTION 7. TEST PROCEDURE(s)

7.1 Conducted Emission

7.1.1 Measurement system

Equipment Set-up (Refer to section 4 and 5)

Wall mounted Equipment

EUT is placed on EUT table of size, 1.0m(d) by 1.5m(w), raised 0.8m above the metal ground plane and 0.4 m from vertical metal plane.

Interconnecting Cables

Excess part of the interconnecting cables longer than 1 meter are bundled in the center.

Cables that hang closer than 40 cm to the ground plane is folded back and forth forming bundle 30 to 40 cm long, hanging approx, in the middle between ground plane and table.

The measurement was conducted the worst emissions condition.

AC Power Cord

AC power cord for EUT is connected to one LISN which is placed on the ground plane. The LISN is placed in 80 cm from the nearest part of EUT chassis.

The excess power cable is bounded in the center, or shortened to appropriate length.

AC cables except from the EUT are connected second LISN.

LISN

The chassis of the LISN is placed on the metal ground plane. The lead to be tested is selectable by switch, and the terminals which are not connected to the EUT are terminated in 50 ohm resistor termination.

Test Equipments (refer to section 6. 6.1)

7.1.2 Test Procedure

7.1.2.1 Preliminary Measurement

EUT is tested on all operating conditions.

The spectrum analyzer is set max-hold mode and swept till no variation. Then spectrum chart are plotted out to detect the worst conditions in configuration and/or operating mode. All leads except for safety grounded are tested.

7.1.2.2 Final Measurement

The EUT is operated in the condition where maximum emission is detected by the preliminary test.

EMI Test Receiver is used for final measurement. The equipment and cables are arranged or manipulated within the range of the test standard in the above condition.