



RADIO TEST REPORT

Test Report No. : 26FE0042-HO

Applicant : FUJITSU TEN LIMITED
Type of Equipment : Motion Sensor
Model No. : FTL358
Test standard : FCC Part 15 Subpart C
Section 15.209, Section 15.245: 2005
FCC ID : BAB271000-358
Test Result : Complied

1. This test report shall not be reproduced in full or partial, without the written approval of UL Apex Co., Ltd.
2. The results in this report apply only to the sample tested.
3. This equipment is in compliance with above regulation. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this report are traceable to the national or international standards.

Date of test:

February 3 to 12, 2006

Tested by:

Hiroka Umeyama
EMC Services

Kenichi Adachi
EMC Services

Approved by :

Naoki Sakamoto
Group Leader of
EMC Services

UL Apex Co., Ltd.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

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MF060b(01.06.05)

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SECTION 1: Client information

Company Name : FUJITSU TEN LIMITED
Address : 2-28, Goshō-dori 1-chome, Hyogo-ku, Kobe-shi, Hyogo,
652-8510 Japan
Telephone Number : +81-78-682-2159
Facsimile Number : +81-78-671-7160
Contact Person : Naoto Nishimura

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment : Motion Sensor
Model No. : FTL358
Serial No. : 12
Country of Manufacture : Japan
Receipt Date of Sample : February 3, 2006
Condition of EUT : Production prototype
(Not for Sale: This sample is equivalent to mass-produced items.)

2.2 Product Description

Model: FTL358 (referred to as the EUT in this report) is the Motion Sensor.

Equipment type : Transceiver
Frequency of operation : 24.15GHz
Type of modulation : No modulation/Pulse modulation
Duty cycle : N0N :Continuous duty / P0N:62.5μs ON/437.5μs OFF
Other clock frequency : Micro-processor:10MHz
Antenna type : Patch Antenna (on the PC board)
Antenna gain : 8 dBi
Method of frequency generation : Dielectric Resonator
Operating voltage (inner) : RF: 3.3V
Operating temperature : -40 degree C. to +105 degree C.

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part 15 Subpart C 2005
Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.245 Operation within the bands 902 – 928MHz, 2435 – 2465MHz,
5785 – 5815MHz, 10500 – 10550MHz, and 24075 – 24175MHz.

FCC 15.31 (e)

This EUT provides stable voltage (Inner DC3.3V) constantly to RF Module regardless of input voltage. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

It is impossible for end users to replace the antenna, because the antenna is mounted inside of the EUT. Therefore, the equipment complies with the antenna requirement of Section 15.203.

3.2 Procedures and results

No.	Item	Test Procedure	Specification	Deviation	Worst margin *0)	Results
1	Electric Field Strength of Fundamental Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.245(b)	N/A	27.4dB (AV) 46.3dB (PK) Horizontal	Complied
2	Electric Field Strength of Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.205 Section 15.209 Section 15.245(b)	N/A	5.9dB 16504.000MHz, AV Horizontal, Vertical	Complied
3	-20dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.215(c)	N/A	-	Complied

*Note: UL Apex's EMI Work Procedure QPM05 and QPM15.

*0) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99% Occupied Band Width	RSS-Gen 4.4.1	RSS-Gen 4.4.1	Radiated	N/A	N/A	N/A

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3.4 Uncertainty

Radiated Emission Test

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is ± 4.5 dB.
The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ± 5.2 dB.
The measurement uncertainty (with a 95% confidence level) for this test using Horn Antenna is ± 6.6 dB.
The data listed in this report meets the limits unless the uncertainty is taken into consideration.

3.5 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN
Telephone : +81 596 24 8116
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	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	313583	IC4247A	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	846015	IC4247A-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 shielded room	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.4 measurement room	-	-	3.1 x 5.0 x 2.7m	N/A	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1 and No.2 semi-anechoic and No.3 shielded room.

3.6 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

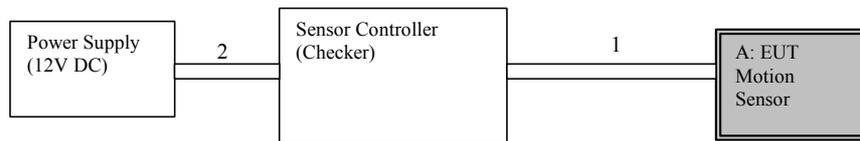
The mode : Arming mode

*30 minutes after the power of the EUT turned on, it transmits the detection signal when the object moves nearby.

RF oscillation mode has normal oscillation mode and intermittent oscillation mode. The normal oscillation mode is changed to the intermittent oscillation mode when the EUT does not detect any object movement for more than 30 seconds.

*The EUT has no receiving or standby mode.

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	Motion Sensor	FTL358	12	FUJITSU TEN LIMITED	EUT
B	Sensor Controller (Checker)	-	-	FUJITSU	-
C	Power Supply	40B19L	A030402	YUASA	-

List of cables used

No.	Name	Length (m)	Shield
1	DC Power & Signal Cable	2.0	N
2	DC Cable	0.5	N

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SECTION 5: Radiated emission (Fundamental and Spurious Emission)

5.1 Operating environment

Test place : No.2 semi anechoic chamber.
Temperature : See data
Humidity : See data

5.2 Test configuration

EUT was placed on a platform of table size (0.5m x 1.0m x 0.8m) on the conducting ground plane.
The EUT was set on the center of the tabletop.
Test was made with the antenna positioned in both the horizontal and vertical planes of polarization. The measurement antenna varied in height above the conducting ground plane to obtain the maximum signal strength.
A drawing of the set up is shown in the photos of APPENDIX 1.

5.3 Test conditions

Frequency range: 30MHz-10000MHz, 10000MHz-26500MHz, 26500MHz-72000MHz, 72000MHz-100000MHz
Test distance : 3m , 1m , 0.5m , 0.1m
EUT position : Tabletop
EUT operation mode : Transmitting

5.4 Test procedure

The measuring antenna height varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.
The measurements were performed for both vertical and horizontal antenna polarization with the Test Receiver or the Spectrum Analyzer.

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver	Spectrum Analyzer
IF Bandwidth	QP: BW 120kHz	PK: RBW:1MHz/VBW: 1MHz AV: RBW:1MHz/VBW:10Hz

- The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

5.5 Results

Summary of the test results: Pass

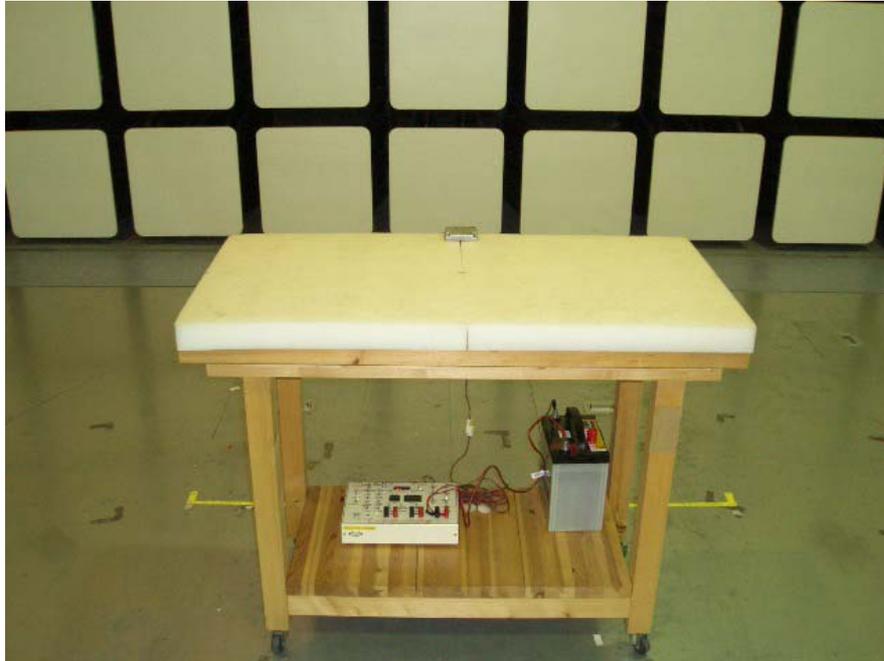
Date: February 3 to 12, 2006

Tested by: Hiroka Umeyama and Kenichi Adachi

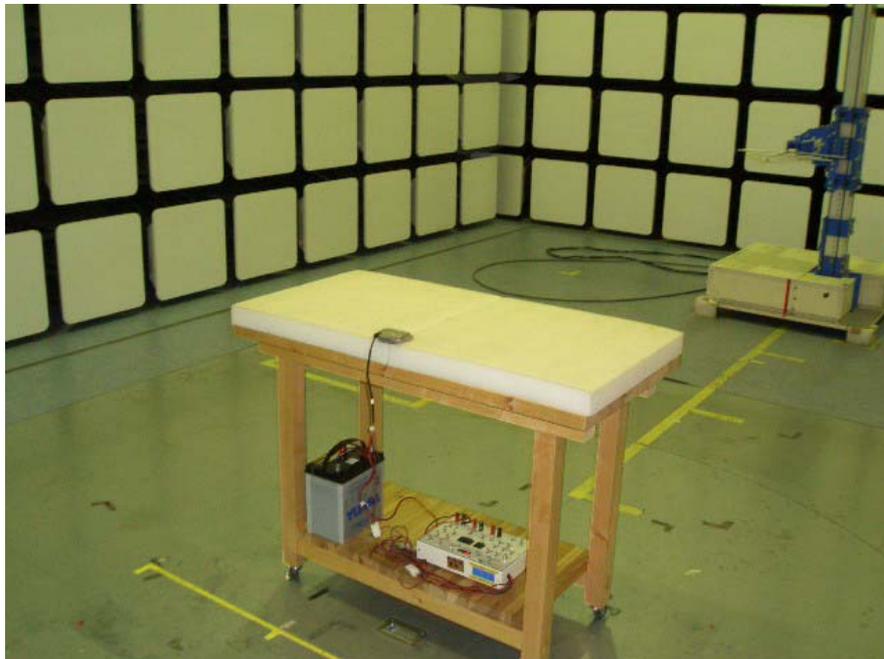
APPENDIX 1: Photographs of test setup

Radiated emission

Front



Rear



Worst Case Position
(Below 1GHz: X-axis / Above 1GHz: Horizontal : Y-axis / Vertical: Z-axis)

X-axis



Y-axis



Z-axis



APPENDIX 2:Test Instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE	2005/04/11 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2005/10/10 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2005/10/14 * 12
MPA-09	Pre Amplifier	Agilent	8447D	RE	2005/09/07 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2005/12/16 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2005/02/24 * 12
MCC-25	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2005/08/30 * 12
MCC-47	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2005/08/30 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2006/01/09 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2006/01/09 * 12
MPA-10	Pre Amplifier	Agilent	8449B	RE	2005/09/07 * 12
MOS-02	Digital Humidity Indicator	N.T	NT-1800	RE	2004/11/25 * 24
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE	2006/02/02 * 12
MRENT-23	Spectrum Analyzer	Advantest	R3273	RE	2006/01/10 * 12
MHA-03	Horn Antenna	EMCO	3160-10	RE	2006/01/09 * 12
MCC-27	Microwave Cable 1G-50GHz	Suhner	SUCOFLEX101	RE	2005/08/30 * 12
MCC-28	Microwave Cable 1G-50GHz	Suhner	SUCOFLEX101	RE	2005/08/30 * 12
MPA-03	Microwave System Power Amplifier	Agilent	83050A	RE	2005/05/11 * 12
MSA-03	Spectrum Analyzer	Agilent	E4448A	RE	2005/09/16 * 12
MHA-07	Horn Antenna	Custom	HO22R	RE	2004/12/01 * 36
MHA-10	Horn Antenna	WiseWave	ARH1523-02	RE	2004/09/04 * 36
MMX-01	Preselected Millimeter Mixer	Agilent	11974V-E01	RE	2005/08/24 * 12
MHA-11	Horn Antenna	WiseWave	ARH1023-02	RE	2004/09/04 * 36

All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Test Item:

RE: Radiated Emission

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APPENDIX 3: Data of EMI test

Radiated Emission
(Spurious Emission)

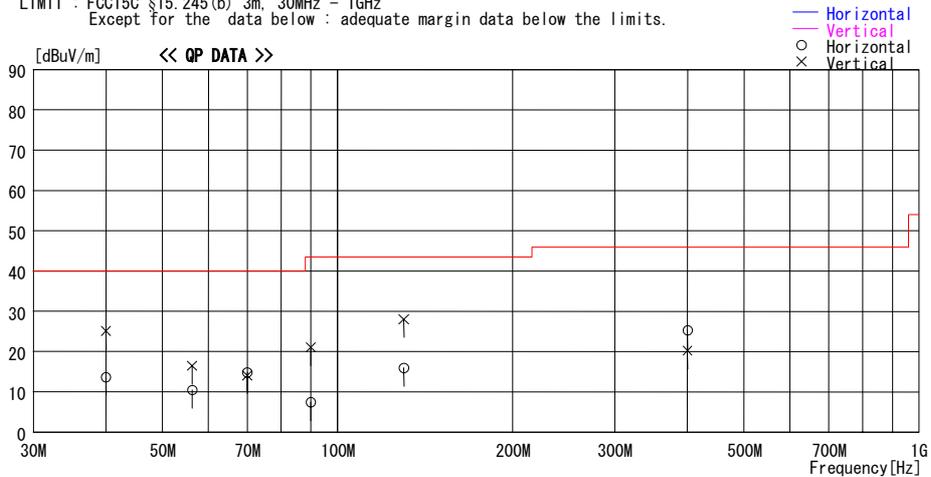
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/02/03 21:29:07

Applicant : FUJITSU TEN LIMITED
Kind of EUT : Motion Sensor
Model No. : FTL358
Serial No. : 12
Report No. : 26FE0042-HO
Power : DC 12V
Temp./Humi. : 27deg.C / 26%
Operator : Kenichi Adachi

Mode / Remarks : Transmitting 24.15GHz / EUT-Max-axis: X-axis

LIMIT : FCC15C §15.245(b) 3m, 30MHz - 1GHz
Except for the data below : adequate margin data below the limits.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit		Margin
			Factor [dB/m]	Loss& Gain [dB]					[dBuV/m]	[dB]	
39.998	22.6	QP	13.6	-22.5	13.7	0	100	Hori.	40.0	26.3	
39.998	34.0	QP	13.6	-22.5	25.1	0	100	Vert.	40.0	14.9	
56.260	30.0	QP	8.9	-22.4	16.5	0	100	Vert.	40.0	23.5	
56.260	24.0	QP	8.9	-22.4	10.5	0	100	Hori.	40.0	29.5	
70.000	30.6	QP	6.6	-22.3	14.9	0	100	Hori.	40.0	25.1	
70.000	29.8	QP	6.6	-22.3	14.1	0	100	Vert.	40.0	25.9	
90.002	21.5	QP	7.9	-22.0	7.4	236	100	Hori.	43.5	36.1	
90.002	35.2	QP	7.9	-22.0	21.1	0	100	Vert.	43.5	22.4	
130.000	24.0	QP	13.4	-21.4	16.0	0	185	Hori.	43.5	27.5	
130.000	36.1	QP	13.4	-21.4	28.1	0	137	Vert.	43.5	15.4	
400.001	27.5	QP	17.8	-20.0	25.3	0	100	Hori.	46.0	20.7	
400.001	22.4	QP	17.8	-20.0	20.2	114	100	Vert.	46.0	25.8	

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Radiated Emission
(Spurious Emission)

DATA OF RADIATED EMISSION TEST

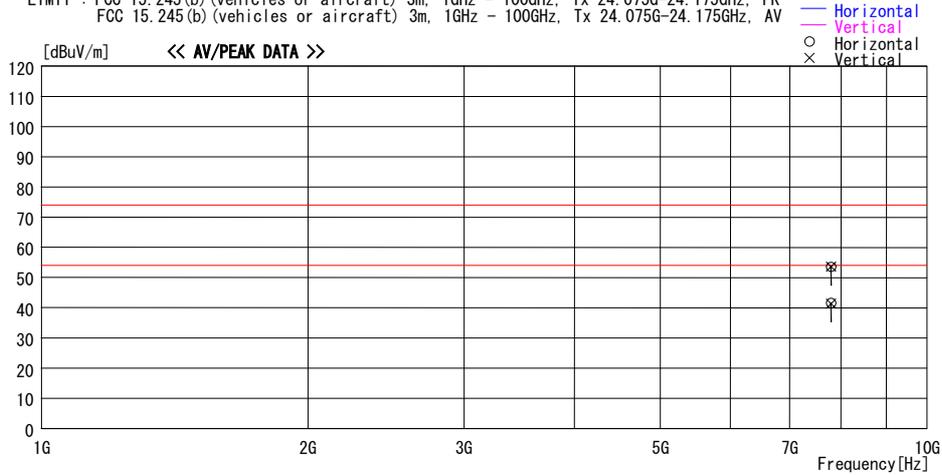
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/02/04 01:53:33

Applicant : FUJITSU TEN LIMITED
Kind of EUT : Motion Sensor
Model No. : FTL358
Serial No. : 12

Report No. : 26FE0042-HO
Power : DC 12V
Temp./Humi. : 27deg. C / 26%
Operator : Kenichi Adachi

Mode / Remarks : Transmitting 24.15GHz / EUT-Max-axis: H:Y, V:Z

LIMIT : FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, PK
FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, AV



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Gain [dB]				
7795.000	42.5	PK	37.4	-26.4	53.5	Hori.	73.9	20.4
7795.000	42.5	PK	37.4	-26.4	53.5	Vert.	73.9	20.4
7795.000	30.5	AV	37.4	-26.4	41.5	Hori.	53.9	12.4
7795.000	30.3	AV	37.4	-26.4	41.3	Vert.	53.9	12.6

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Radiated Emission
(Spurious Emission)

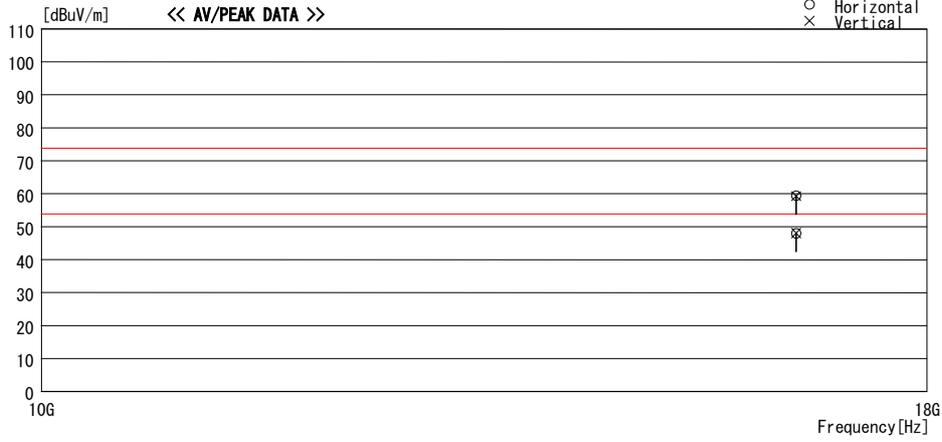
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/02/04 01:45:12

Applicant : FUJITSU TEN LIMITED
Kind of EUT : Motion Sensor
Model No. : FTL358
Serial No. : 12
Report No. : 26FE0042-HO
Power : DC 12V
Temp./Humi. : 27deg. C / 26%
Operator : Kenichi Adachi

Mode / Remarks : Transmitting 24.15GHz / EUT-Max-axis: H:Y, V:Z

LIMIT : FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, PK
FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, AV



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
16504.000	44.5	PK	46.8	-31.9	59.4	Hori.	73.9	14.5
16504.000	44.4	PK	46.8	-31.9	59.3	Vert.	73.9	14.6
16504.000	33.1	AV	46.8	-31.9	48.0	Hori.	53.9	5.9
16504.000	33.1	AV	46.8	-31.9	48.0	Vert.	53.9	5.9

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Radiated Emission
(Fundamental and Spurious Emission)

DATA OF RADIATED EMISSION TEST

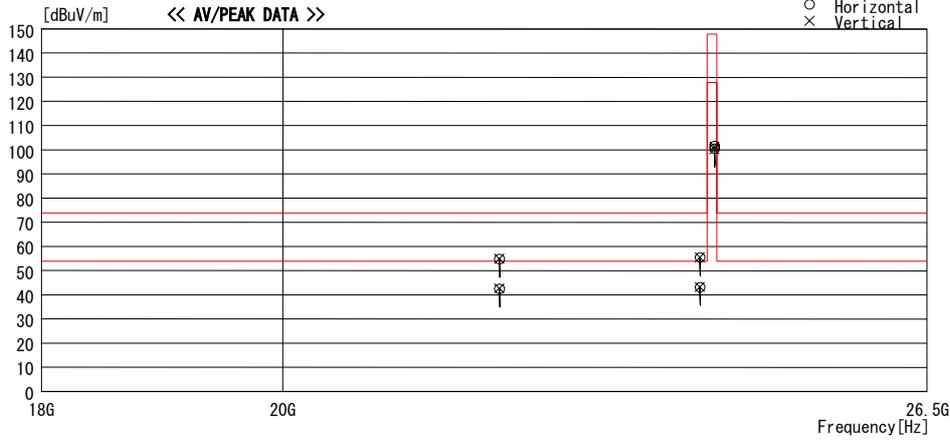
UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/02/04 01:33:13

Applicant : FUJITSU TEN LIMITED
Kind of EUT : Motion Sensor
Model No. : FTL358
Serial No. : 12

Report No. : 26FE0042-HO
Power : DC 12V
Temp./Humi. : 27deg. C / 26%
Operator : Kenichi Adachi

Mode / Remarks : Transmitting 24.15GHz / EUT-Max-axis: H:Y, V:Z

LIMIT : FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, PK
FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, AV



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss& Gain [dB]				
21986.500	45.5	PK	39.6	-30.2	54.9	Vert.	73.9	19.0
21986.500	33.2	AV	39.6	-30.2	42.6	Vert.	53.9	11.3
21986.500	45.4	PK	39.6	-30.2	54.8	Hori.	73.9	19.1
21986.500	33.1	AV	39.6	-30.2	42.5	Hori.	53.9	11.4
24000.000	45.5	PK	39.1	-29.1	55.5	Vert.	73.9	18.4
24000.000	33.3	AV	39.1	-29.1	43.3	Vert.	53.9	10.6
24000.000	45.5	PK	39.1	-29.1	55.5	Hori.	73.9	18.4
24000.000	33.2	AV	39.1	-29.1	43.2	Hori.	53.9	10.7
24150.360	91.6	PK	39.1	-29.1	101.6	Hori.	147.9	46.3
24150.360	91.4	PK	39.1	-29.1	101.4	Vert.	147.9	46.5
24150.360	90.5	AV	39.1	-29.1	100.5	Hori.	127.9	27.4
24150.360	90.3	AV	39.1	-29.1	100.3	Vert.	127.9	27.6

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Radiated Emission
(Spurious Emission)

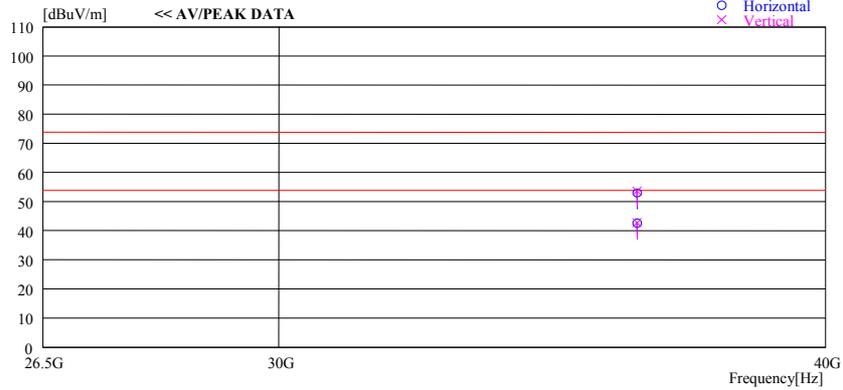
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
Date : 2006/02/12 10:36:50

Applicant : FUJITSU TEN LIMITED Report No. : 26FE0042-HO
Kind of EUT : Motion Sensor Power : DC 12V
Model No. : FTL358 Temp./Humi. : 20deg.C / 30%
Serial No. : 12 Operator : Hiroka Umeyama

Mode / Remarks : Transmitting 24.15GHz / EUT-Max-axis: H:Y, V:Z

LIMIT : FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, PK Horizontal
FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, AV Vertical



Frequency	Reading	DET	Antenna	Loss&	Level	Polar.	Limit	Margin
			Factor	Gain			[dBuV/m]	[dB]
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
36225.000	40.9	PK	45.0	-32.3	53.6	Vert.	73.9	20.3
36225.000	30.0	AV	45.0	-32.3	42.7	Vert.	53.9	11.2
36225.000	40.3	PK	45.0	-32.3	53.0	Hori.	73.9	20.9
36225.000	30.0	AV	45.0	-32.3	42.7	Hori.	53.9	11.2

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Radiated Emission
(Spurious Emission)

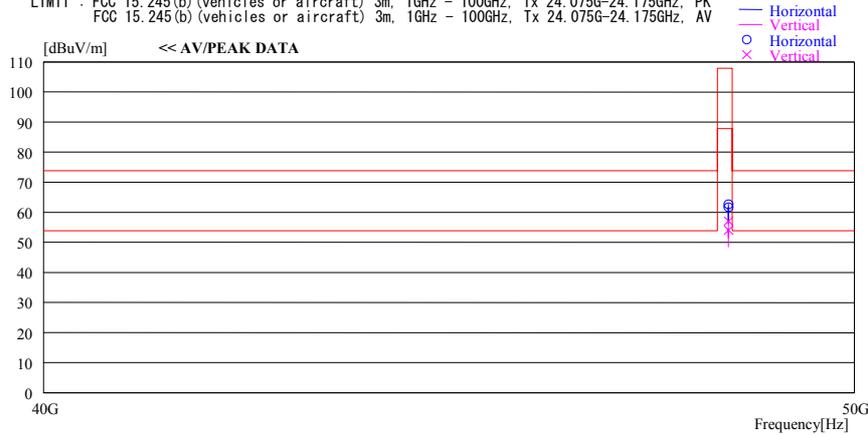
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
 Date : 2006/02/12 12:48:52

Applicant : FUJITSU TEN LIMITED
 Kind of EUT : Motion Sensor
 Model No. : FTL358
 Serial No. : 12
 Report No. : 26FE0042-HO
 Power : DC 12V
 Temp./Humi. : 20deg. C / 30%
 Operator : Hiroka Umeyama

Mode / Remarks : Transmitting 24.15GHz / EUT-Max-axis: H:Y, V:Z

LIMIT : FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, PK
 FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, AV



Frequency	Reading	DET	Antenna Factor	Loss& Gain	Level	Polar.	Limit	Margin
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]		[dBuV/m]	[dB]
48300.000	48.9	PK	40.4	-32.2	57.1	Vert.	107.9	50.8
48300.000	45.9	AV	40.4	-32.2	54.1	Vert.	87.9	33.8
48300.000	54.5	PK	40.4	-32.2	62.7	Hori.	107.9	45.2
48300.000	53.5	AV	40.4	-32.2	61.7	Hori.	87.9	26.2

CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
 CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

Radiated Emission
(Spurious Emission)

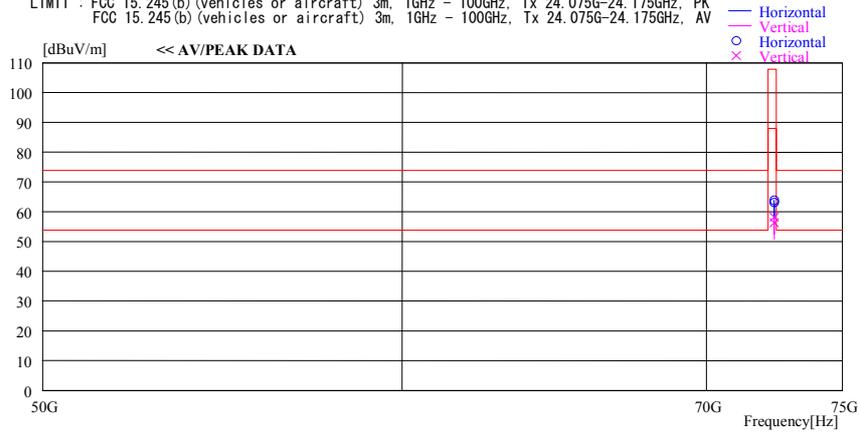
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber
Date : 2006/02/12 15:46:38

Applicant : FUJITSU TEN LIMITED
Kind of EUT : Motion Sensor
Model No. : FTL358
Serial No. : 12
Report No. : 26FE0042-HO
Power : DC 12V
Temp./Humi. : 20deg.C / 30%
Operator : Hiroka Umeyama

Mode / Remarks : Transmitting 24.15GHz / EUT-Max-axis: H:Y, V:Z

LIMIT : FCC 15.245 (b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, PK
FCC 15.245 (b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, AV



Frequency [MHz]	Reading [dBuV]	DET	Antenna	Loss&	Level [dBuV/m]	Polar.	Limit	Margin
			Factor [dB/m]	Gain [dB]			[dBuV/m]	[dB]
72450.000	51.7	PK	41.7	-29.5	63.9	Hori.	107.9	44.0
72450.000	50.9	AV	41.7	-29.5	63.1	Hori.	87.9	24.8
72450.000	46.0	PK	41.7	-29.5	58.2	Vert.	107.9	49.7
72450.000	44.1	AV	41.7	-29.5	56.3	Vert.	87.9	31.6

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION:RESULT = READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - GAIN(AMP)

Radiated Emission
(Spurious Emission)

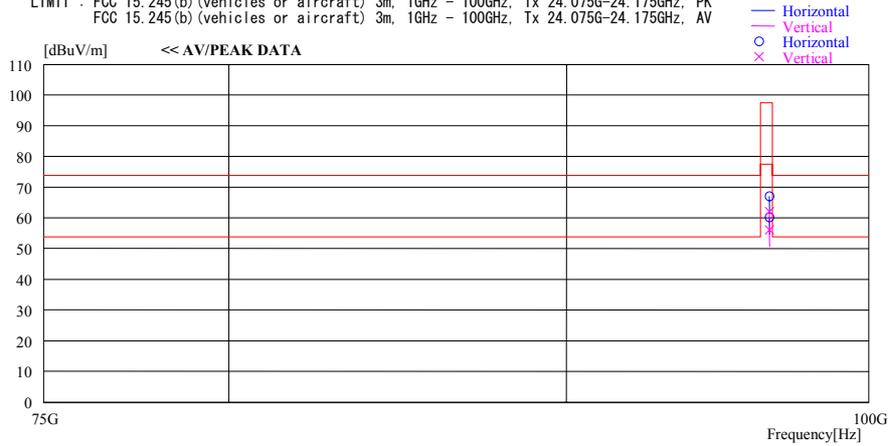
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber
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LIMIT : FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, PK
FCC 15.245(b) (vehicles or aircraft) 3m, 1GHz - 100GHz, Tx 24.075G-24.175GHz, AV



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Polar.	Limit [dBuV/m]	Margin [dB]
			Factor [dB/m]	Loss&Gain [dB]				
96600.000	50.9	PK	45.6	-29.5	67.0	Hori.	97.5	30.5
96600.000	46.0	PK	45.6	-29.5	62.1	Vert.	97.5	35.4
96600.000	44.1	AV	45.6	-29.5	60.2	Hori.	77.5	17.3
96600.000	40.0	AV	45.6	-29.5	56.1	Vert.	77.5	21.4

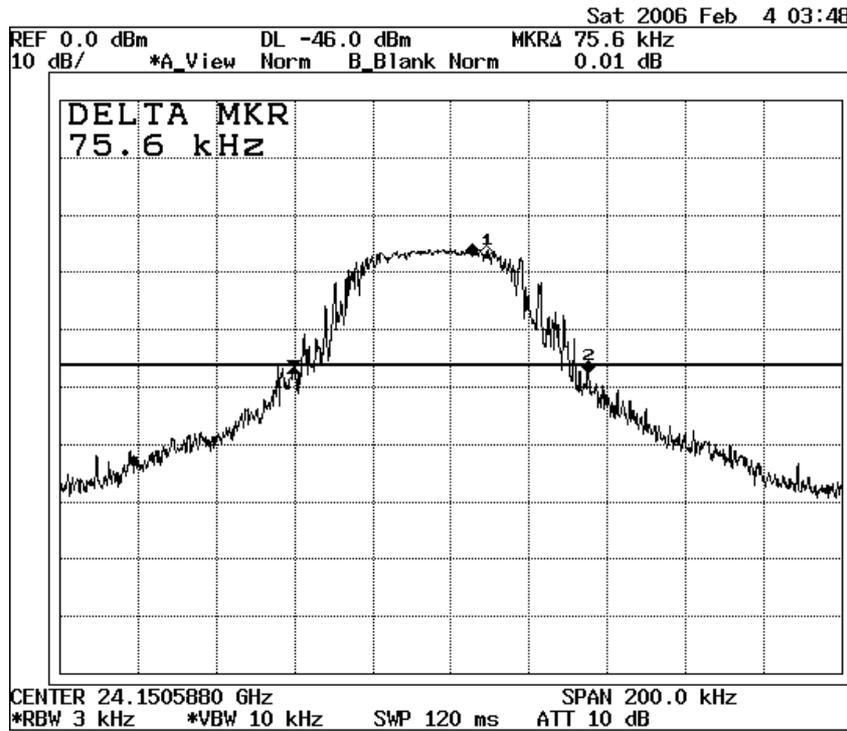
CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)

-20dB Bandwidth

Company : FUJITSU TEN LIMITED
 Equipment : Motion Sensor
 Model : FTL358
 S/N : 12
 Power : DC 12V
 Mode : Transmitting

UL-Apex
 Head Office EMC Lab. No.2 Semi Anechoic Chamber
 Regulation : FCC 15.215(c)
 Test Distance : 3m
 Date : 02/03/2006
 Temperature : 27 deg.C.
 Humidity : 26 %
 Engineer : Kenichi Adachi

Freq.	20dB Bandwidth
[GHz]	[kHz]
24.15	75.600



99% Occupied Bandwidth

<p>Company : FUJITSU TEN LIMITED Equipment : Motion Sensor Model : FTL358 S/N : 12 Power : DC 12V Mode : Transmitting</p>	<p>UL-Apex Head Office EMC Lab. No.2 Semi Anechoic Chamber Regulation : RSS-Gen Test Distance : 3m Date : 02/03/2006 Temperature : 27 deg.C. Humidity : 26 % Engineer : Kenichi Adachi</p>
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Freq.	99% Occupied Bandwidth
[GHz]	[kHz]
24.15	79.000

