



# EMI TEST REPORT

**Test Report No.: 26BE0270-HO-1b**

**Applicant** : FUJITSU TEN Limited  
**Type of Equipment** : DISPLAY  
**Model No.** : BT005A  
**FCC ID** : BABBT005A  
**Test standard** : FCC Part 15 Subpart C  
Section 15.207, Section 15.247: 2005  
**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 the 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:** Nov. 1, 2, and Dec. 8, 2005

**Tested by:**

  
Makoto Kosaka  
EMC Services

  
Mitsuru Fujimura  
EMC Services

**Approved by :**

  
Naoki Sakamoto  
Group Leader of  
EMC Services

**UL Apex Co., Ltd.**

**Head Office EMC Lab.**

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## **SECTION 1: Client information**

Company Name : FUJITSU TEN Limited  
Brand Name : FUJITSU TEN  
Address : 2-28 Goshō-Dori 1-chome, Hyogo-ku, Kobe, 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 : DISPLAY  
Model No. : BT005A  
Serial No. : 2M-No.16  
Country of Manufacture : Japan  
Condition of EUT : Production prototype  
(Not for Sale: This sample is equivalent to mass-produced items.)  
Rating : DC13.2V  
Receipt Date of Sample : October 24, 2005

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## 2.2 Product Description

Model No: BT005A (referred to as the EUT in this report) is the DISPLAY with built-in Bluetooth. It is installed in vehicle, and displays the information on navigation, audio & visual, and others on a screen. It has the interface which can be operated by touching a screen top. Moreover, Bluetooth is used and the service linked to a cellular phone is offered.

Clock frequency(ies) in the system	:	12.55MHz, 5MHz, 4MHz for Microprocessor, 12.079MHz,14.549MHz(CPU), 16.616MHz,33.231MHz,27MHz,32.768KHz(Drawing dot clock)
Equipment Type	:	Transceiver
Frequency of Operation	:	2402-2480MHz
Bandwidth & Channel spacing	:	79MHz & 1MHz
Modulation	:	FHSS
Mode of Operation	:	Duplex
ITU code	:	F1D
Power Supply	:	DC13.2V (EUT) DC3.3V (RF Module part)
Antenna Type	:	Reverse F type (ANT0450-16B/U-BT)
Antenna Connector Type	:	U.FL (SMT Type )
Antenna Gain	:	-1.26dBi

### **FCC 15.31 (e)**

The stable voltage (DC3.3V) is constantly supplied to RF Module by DC-DC converter. 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.

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### **SECTION 3: Test specification, procedures & results**

#### **3.1 Test Specification**

Test Specification : FCC Part15 Subpart C : 2005

Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators  
Section 15.207 Conducted limits: 2005  
Section 15.247 Operation within the bands 902-928MHz,  
2400-2483.5MHz, and 5725-5850MHz: 2005

### 3.2 Procedures and results

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst Margin*0)	Results
1	Conducted Emission	FCC: ANSI C63.4:2003 7. AC powerline conducted emission measurements IC: RSS-Gen 7.2.2	FCC: Section 15.207 IC: RSS-Gen 7.2.2	-	N/A	N/A	N/A*1)
2	Carrier Frequency Separation	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247(a)(1) IC: RSS-210 A8.1 (2)	Conducted	N/A	See data.	Complied
3	20dB Bandwidth	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247(a)(1) IC: RSS-210 A8.1 (1)	Conducted	N/A		Complied
4	Number of Hopping Frequency	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247(a)(1)(iii) IC: RSS-210 A8.1 (4)	Conducted	N/A		Complied
5	Dwell time	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247(a)(1)(iii) IC: RSS-210 A8.1 (4)	Conducted	N/A		Complied
6	Maximum Peak Output Power	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: RSS-Gen 4.6	FCC: Section 15.247(b)(1) IC: RSS-210 A8.4 (2)	Conducted	N/A		Complied
7	Band Edge Compliance	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: -	FCC: Section 15.247(d) IC: RSS-210 A8.5	Conducted	N/A		Complied
8	Spurious Emission	FCC: ANSI C63.4:2003 13. Measurement of intentional radiators IC: RSS-Gen 4.7	FCC: Section 15.247(d) IC: RSS-210 A8.5	Conducted Radiated	N/A		0.7dB (731.095MH, Vert, QP)

Note: UL Apex's EMI Work Procedures No. QPM05 and QPM15.

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

\*1) This test is not applicable, because the EUT does not have AC mains and is installed into vehicle.

**Uncertainty:**

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is  $\pm 4.5\text{dB}(3\text{m})/\pm 4.7\text{dB}(10\text{m})$ .

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is  $\pm 5.2\text{dB}(3\text{m})/\pm 3.8\text{dB}(10\text{m})$ .

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is  $\pm 6.6\text{dB}$ .

The data listed in this report meets the limits unless the uncertainty is taken into consideration.

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is  $\pm 3.0\text{dB}$ .

The data listed in this test report has enough margin, more than the site margin.

\*These tests were also referred to FCC Public Notice DA 00-705 "Guidance on Measurement for Frequency Hopping Spread Spectrum Systems".

\*These tests were performed without any deviations from test procedure except for additions or exclusions.

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### 3.3 Addition to standards

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

### 3.4 Test Location

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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.

### 3.5 Test set up, Test instruments and Data of EMI

Refer to APPENDIX 1 to 3.

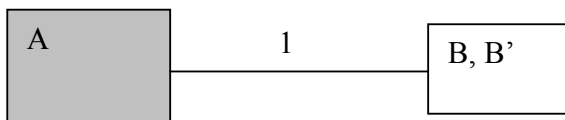
## SECTION 4: Operation of E.U.T. during testing

### 4.1 Operating Modes

The mode used for test: Transmitting mode(Packet size DH5)  
Low Channel : 2402MHz  
Mid Channel : 2441MHz  
High Channel : 2480MHz  
Inquiry

\*Remarks: Test was not performed at AFH mode, because the decrease of number of channel (min: 20ch) at AFH mode does not influence on the output power and bandwidth of the EUT. However, the limit level 125mWof AFH mode was used for the test.

### 4.2 Configuration and peripherals



\* Cabling was 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	FCC ID	Remarks
A	DISPLAY (EUT)	BT005A	2M-No.16	FUJITSU TEN	BABBT005A	-
B	Car Battery	40B10L	A030402	YUASA	-	Used for Radiated Emission (RE) test
B'	DC Power Supply	6654A	MY40000510	Agilent	-	Used for other tests than RE

#### List of cables used

No.	Name	Length (m)	Shield
1	DC Cable	1.6	N

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## **SECTION 5: Spurious Emission**

### **[Conducted]**

#### **Test Procedure**

The Out of Band Emission was measured with a spectrum analyzer connected to the antenna port.

**Test data** : APPENDIX 3

**Test result** : Pass

### **[Radiated]**

#### **Test Procedure**

EUT was placed on a platform of nominal size, 0.5m by 1.0m, raised 80cm above the conducting ground plane.

The Radiated Electric Field Strength intensity has been measured in a Semi Anechoic Chamber with a ground plane and at a distance of 3m(Below 10GHz) and 1m(Upper 10GHz).

The height of the measuring 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 (in linear mode).

The test was made with the detector (RBW/VBW) in the following table.

When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on a radiated measurement.

#### **20dBc was applied to the frequency over the limit of FCC 15.209 and outside the restricted band of 15.205.**

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver / Spectrum Analyzer	Spectrum Analyzer
Detector	QP: BW 120kHz(T/R)	PK: RBW:1MHz/VBW: 1MHz
IF Bandwidth	20dBc : RBW: 100kHz VBW: 300kHz (S/A)	AV: RBW:1MHz/VBW:10Hz 20dBc : RBW:100kHz/VBW:300kHz

**Test data** : APPENDIX 3

**Test result** : Pass

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## **SECTION 6: Bandwidth**

### **Test Procedure**

The bandwidth was measured with a spectrum analyzer connected to the antenna port.

**Test data** : APPENDIX 3  
**Test result** : Pass

## **SECTION 7: Maximum Peak Output Power**

### **Test Procedure**

The test was made with the spectrum analyzer that has a function of channel-power measurements.  
The Maximum Peak Output Power was measured with a spectrum analyzer connected to the antenna port.

**Test data** : APPENDIX 3  
**Test result** : Pass

## **SECTION 8: Carrier Frequency Separation**

### **Test Procedure**

The carrier frequency separation was measured with a spectrum analyzer connected to the antenna port.

**Test data** : APPENDIX 3  
**Test result** : Pass

## **SECTION 9: Number of Hopping Frequency**

### **Test Procedure**

The Number of Hopping Frequency was measured with a spectrum analyzer connected to the antenna port.

**Test data** : APPENDIX 3  
**Test result** : Pass

## **SECTION 10: Dwell time**

### **Test Procedure**

The Dwell time was measured with a spectrum analyzer connected to the antenna port.

**Test data** : APPENDIX 3  
**Test result** : Pass

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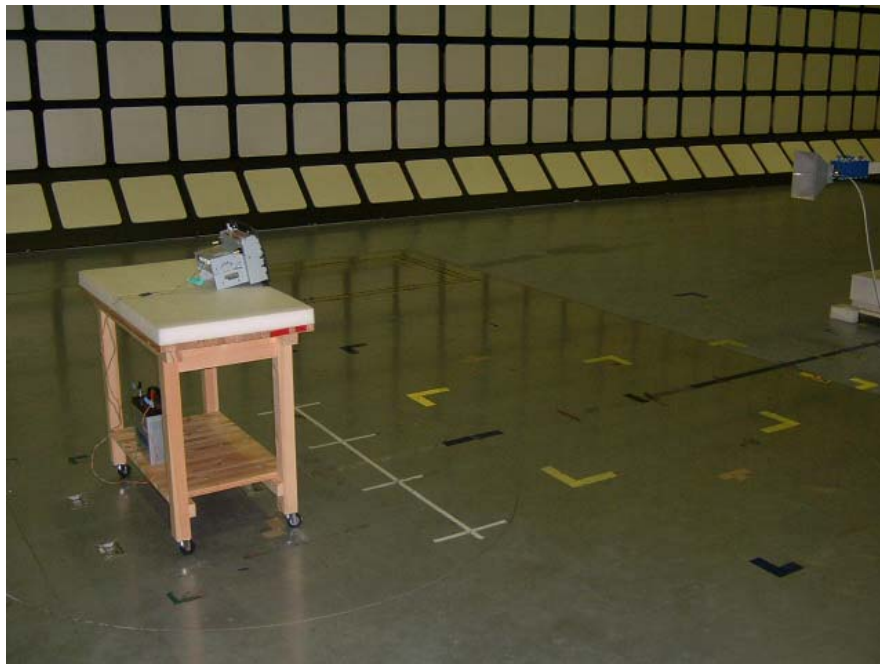
**APPENDIX 1: Photographs of test setup**

**Spurious Emission (Radiated)**

**Front**



**Rear**



## **APPENDIX 2:Test instruments**

### **EMI test equipment**

<b>Control No.</b>	<b>Instrument</b>	<b>Manufacturer</b>	<b>Model No</b>	<b>Test Item</b>	<b>Calibration Date * Interval(month)</b>
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE	2004/11/13 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ESI40	RE	2004/11/12 * 12
MCC-01	Coaxial Cable 0.1-3000MHz	Suhner/storm/Agilent/TSJ	-	RE	2004/12/19 * 12
MPA-04	Pre Amplifier	Agilent	8447D	RE	2005/05/24 * 12
MAT-06	Attenuator(6dB)	Weinschel Corp	2	RE	2004/12/16 * 12
MBA-01	Biconical Antenna	Schwarzbeck	BBA9106	RE	2005/10/10 * 12
MLA-01	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2005/10/14 * 12
MCC-18	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2005/02/03 * 12
MCC-26	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX104	RE	2005/08/30 * 12
MPA-05	Pre Amplifier	TSJ	TSJ 1-26.5GHz PreAmp	RE	2005/07/08 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2005/09/27 * 12
MHA-05	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2005/01/10 * 12
MHA-01	Horn Antenna	EMCO	3160-09	RE	2005/01/10 * 12
MRENT-21	Spectrum Analyzer	Advantest	R3273	AT	2005/08/19 * 12
MAT-23	Attenuator(10dB)(above1GHz)	Orient Microwave	BX10-0476-00	AT	2005/03/16 * 12
MDPS-02	DC Power Supply	Agilent	6654A	AT	Pre-check
MSA-03	Spectrum Analyzer	Agilent	E4448A	AT	2005/09/16 * 12
MAT-24	Attenuator(10dB)(above1GHz)	Agilent	8493C	AT	2005/06/03 * 12

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

#### **Test Item:**

**RE: Radiated emission,**

**AT: Antenna terminal measurements**

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### APPENDIX 3: Data of EMI test

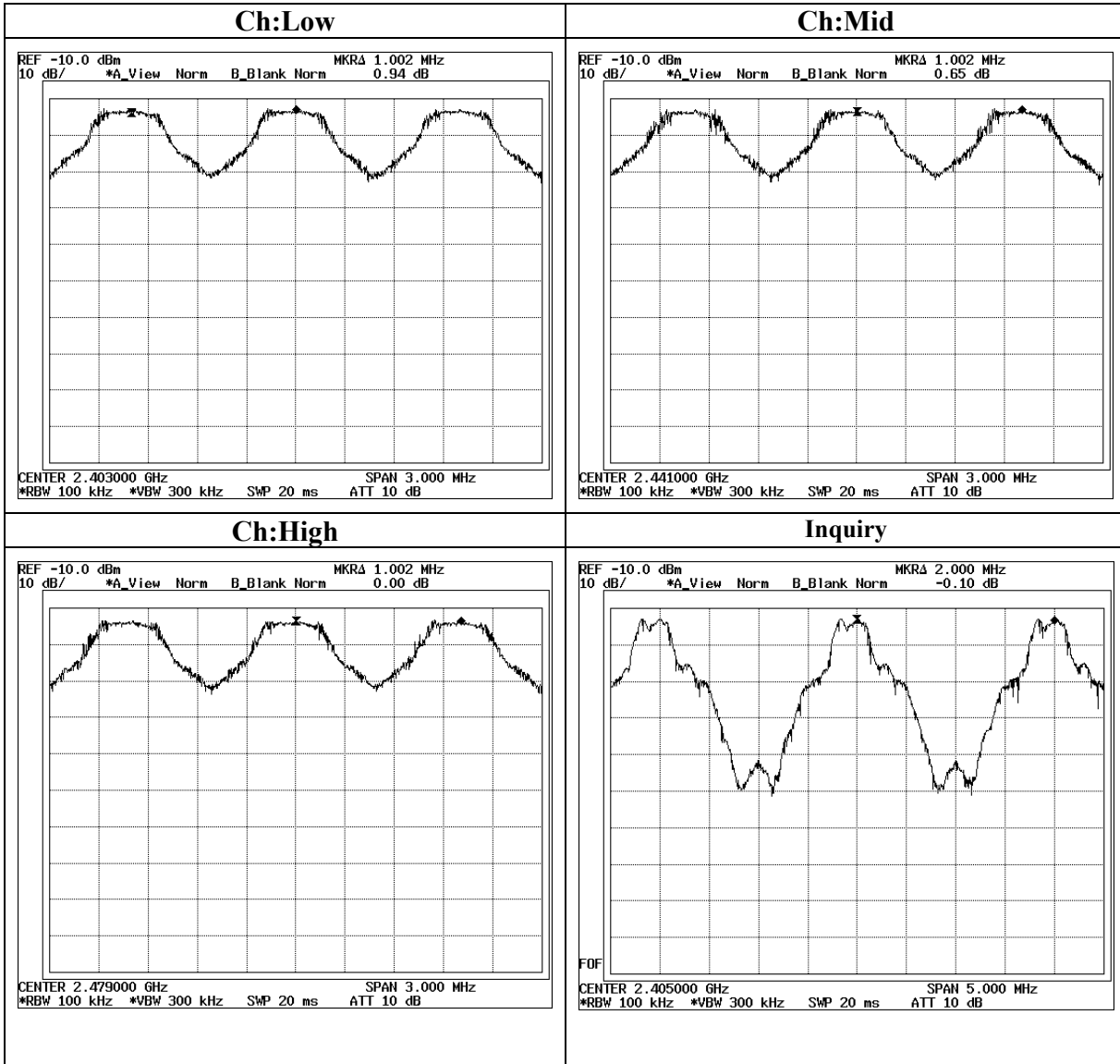
#### Carrier Frequency Separation

UL Apex Co., Ltd.  
Head Office EMC Lab. No.3 Shielded Room

COMPANY : FUJITSU TEN LIMITED      REGULATION : Fcc Part15 Subpart C 15.247(a)(1)  
EQUIPMENT : DISPLAY      TEST DISTANCE : -  
MODEL : BT005A      DATE : 11/01/2005  
S/N : 2M-No.16      TEMPERATURE : 23deg.C  
POWER : DC13.2V      HUMIDITY : 36%  
MODE : Tx(Hopping on)/Inquiry      ENGINEER : Makoto Kosaka

Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.002	>20dB Bandwidth and 25[kHz]
Mid	2441.0	1.002	>20dB Bandwidth and 25[kHz]
High	2480.0	1.002	>20dB Bandwidth and 25[kHz]
Inquiry	2441.0	2.000	>20dB Bandwidth and 25[kHz]

**Carrier Frequency Separation**



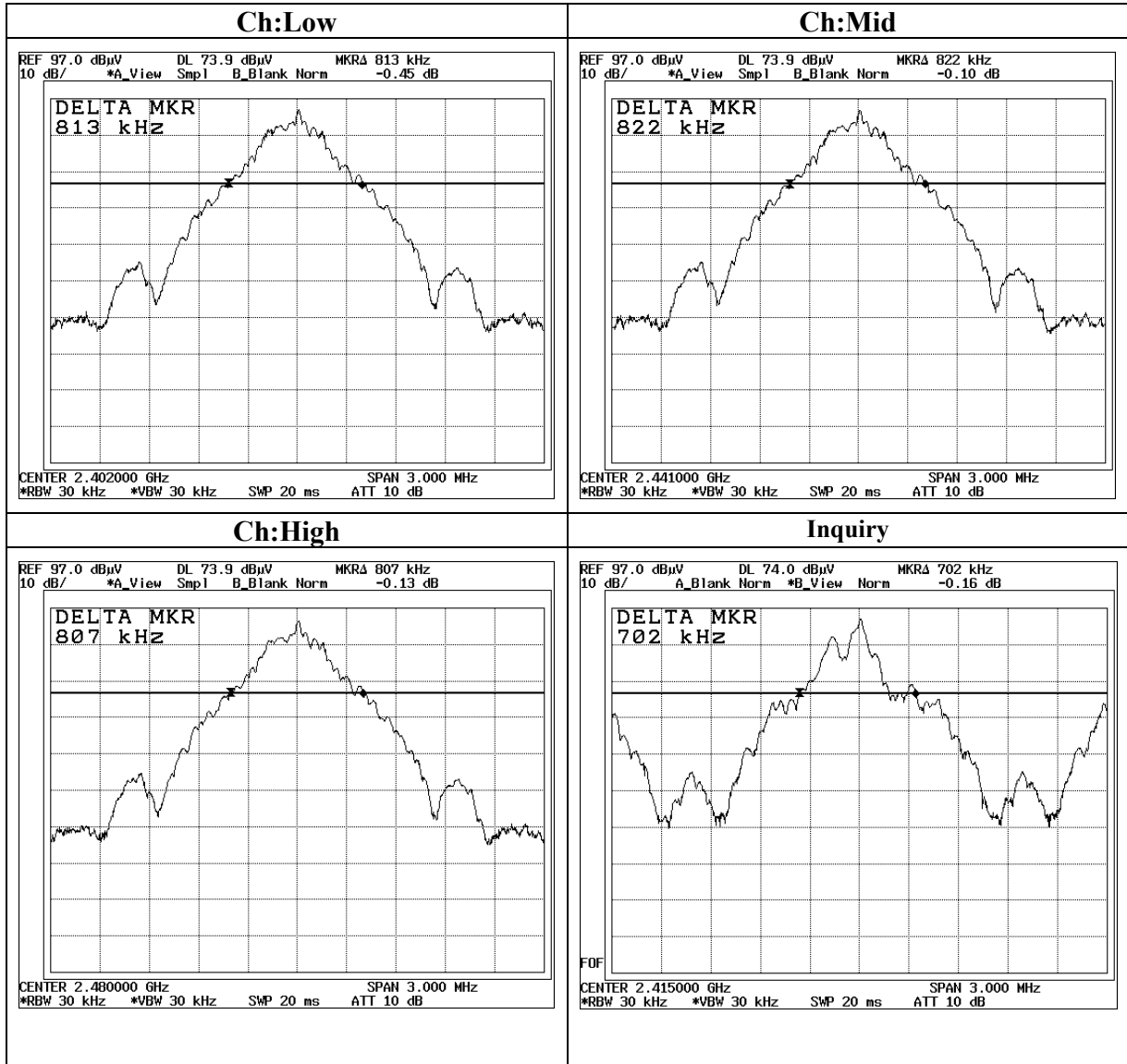
## 20dB Bandwidth

UL Apex Co., Ltd.  
Head Office EMC Lab. No.3 Shielded Room

COMPANY	: FUJITSU TEN LIMITED	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: DISPLAY	TEST DISTANCE	: -
MODEL	: BT005A	DATE	: 11/01/2005
S/ N	: 2M-No.16	TEMPERATURE	: 23deg.C
POWER	: DC13.2V	HUMIDITY	: 36%
MODE	: Tx(Hopping off)/Inquiry	ENGINEER	: Makoto Kosaka

Ch	Freq. [MHz]	20dB Bandwidth [MHz]	Limit [MHz]
Low	2402.0	0.813	-
Mid	2441.0	0.822	-
High	2480.0	0.807	-
Inquiry	2441.0	0.702	-

**20dB Bandwidth**





### Number of Hopping Frequency

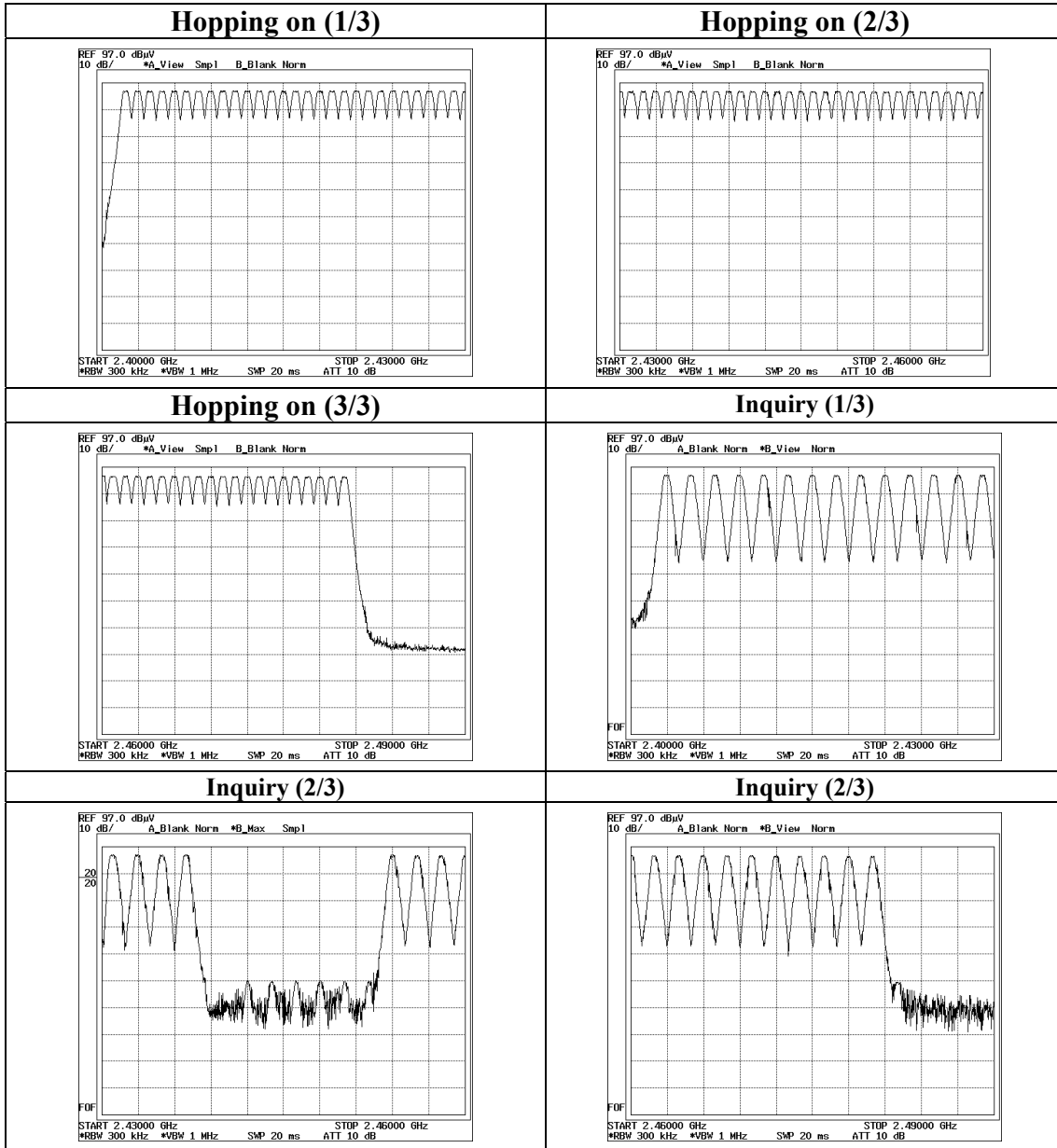
UL Apex Co., Ltd.  
Head Office EMC Lab. No.3 Shielded Room

COMPANY : FUJITSU TEN LIMITED      REGULATION : Fcc Part15 Subpart C 15.247(a)(1)(iii)  
EQUIPMENT : DISPLAY      TEST DISTANCE : -  
MODEL : BT005A      DATE : 11/01/2005  
S/N : 2M-No.16      TEMPERATURE : 23deg.C  
POWER : DC13.2V      HUMIDITY : 36%  
MODE : Tx(Hopping on)/Inquiry      ENGINEER : Makoto Kosaka

Mode	Number of channel [time]	Limit [time]
Tx(Hoppng on)	79	$\geq 15$

Mode	Number of channel [time]	Limit [time]
Inquiry	32	$\geq 15$

**Number of Hopping Frequency**



### Dwell time

UL Apex Co., Ltd.  
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COMPANY : FUJITSU TEN LIMITED      REGULATION : Fcc Part15 Subpart C 15.247(a)(1)(iii)  
EQUIPMENT : DISPLAY      TEST DISTANCE : -  
MODEL : BT005A      DATE : 11/01 and 12/08/2005  
S/N : 2M-No.16      TEMPERATURE : 23deg.C 26deg.C  
POWER : DC13.2V      HUMIDITY : 36% 22%  
MODE : Tx (Hopping on) /Inquiry      ENGINEER : Makoto Kosaka

Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	27 times /5sec. x 31.6 = 170.6 times	0.474	81	400
DH3	18 times / 5sec. x 31.6 = 113.8 times	1.725	196	400
DH5	13 times / 5 sec. x 31.6 = 82.2 times	2.975	245	400
Inquiry	38times / 1sec. x 12.8 = 1280 times	0.188	241	400

※Average data of 5 tests

#### **Dwell time factor**

Dwell time factor= $20\log_{10}(\text{dwell time}/100\text{ms})$

= $20\log_{10}((1.8\text{times} * 2.975\text{ms})/100\text{ms})$

= $20\log_{10}((5.355\text{ms})/100\text{ms})$

= -25.4

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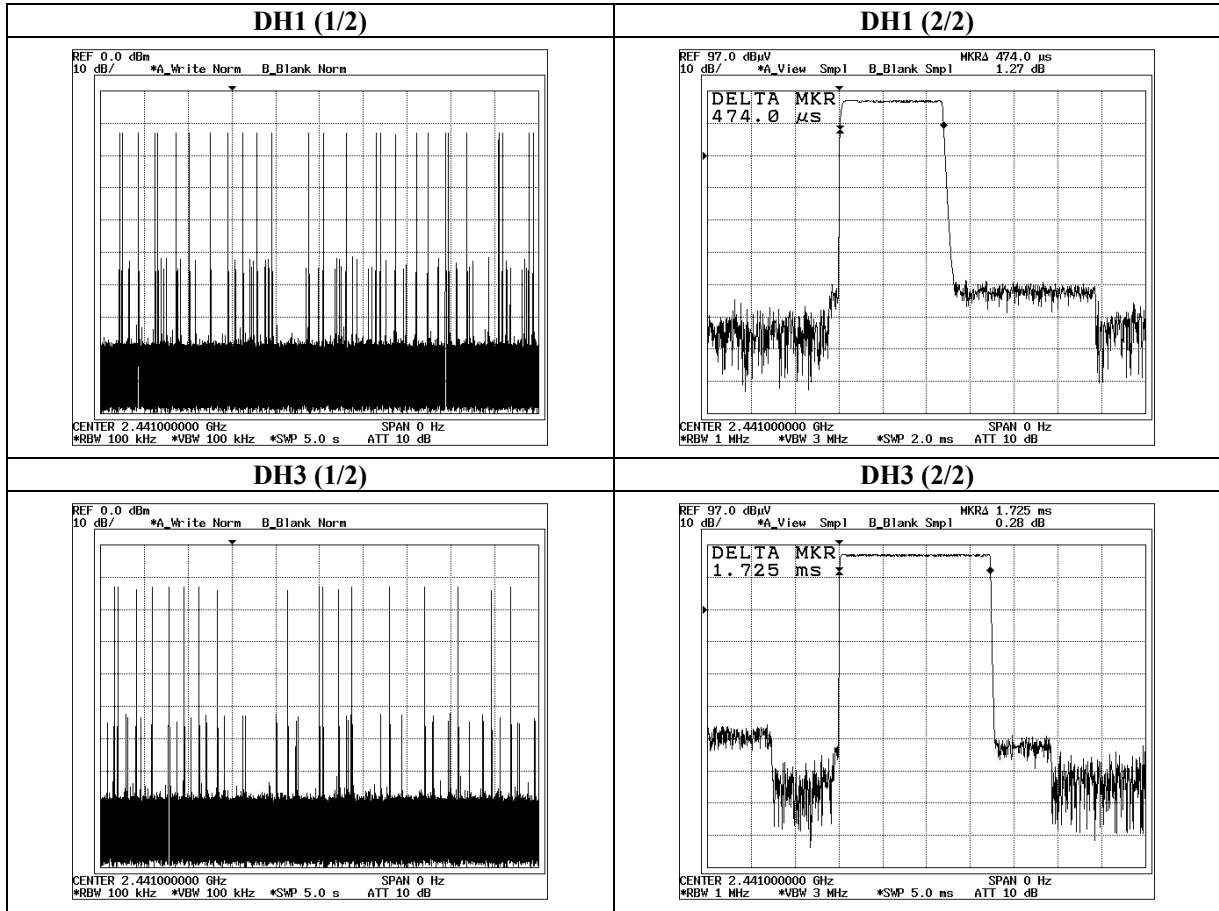
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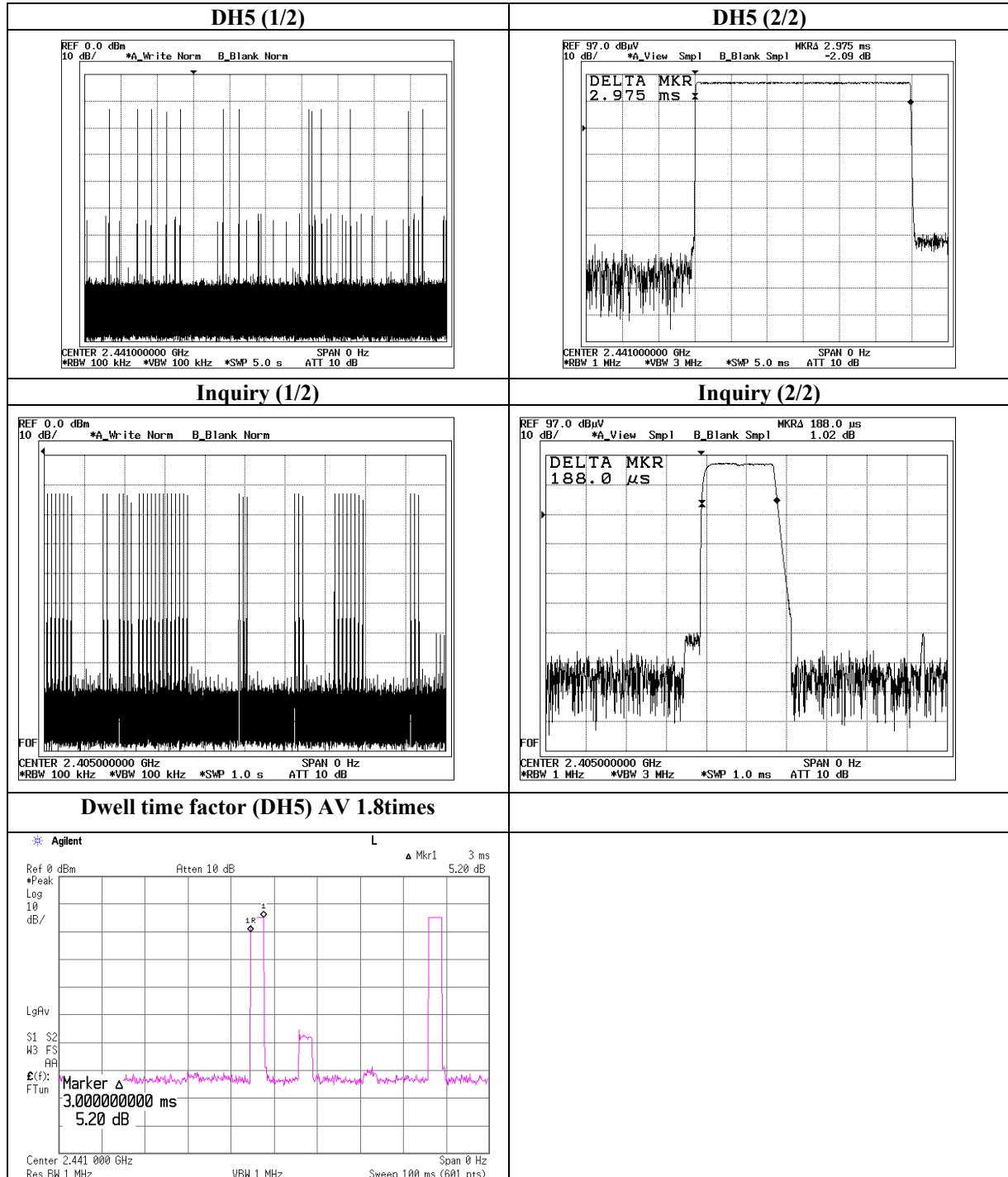
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**Dwell time**



**Dwell time**



## Maximum Peak Output Power

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COMPANY : FUJITSU TEN LIMITED  
EQUIPMENT : DISPLAY  
MODEL : BT005A  
S/N : 2M-No.16  
POWER : DC13.2V  
MODE : Tx (Hopping off) /Inquiry

REGULATION : Fcc Part15 Subpart C 15.247(b)(1)  
TEST DISTANCE : -  
DATE : 11/01/2005  
TEMPERATURE : 23deg.C  
HUMIDITY : 36%  
ENGINEER : Makoto Kosaka

Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
Low	2402.0	-12.94	0.46	10.68	-1.80	20.96	22.76
Mid	2441.0	-13.06	0.42	10.68	-1.96	20.96	22.92
High	2480.0	-13.59	0.39	10.68	-2.52	20.96	23.48
Inquiry	2441.0	-12.89	0.42	10.68	-1.79	20.96	22.75

Sample Calculation:

Result = Reading + Cable Loss (supplied by customer)+ Attenuator

\* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

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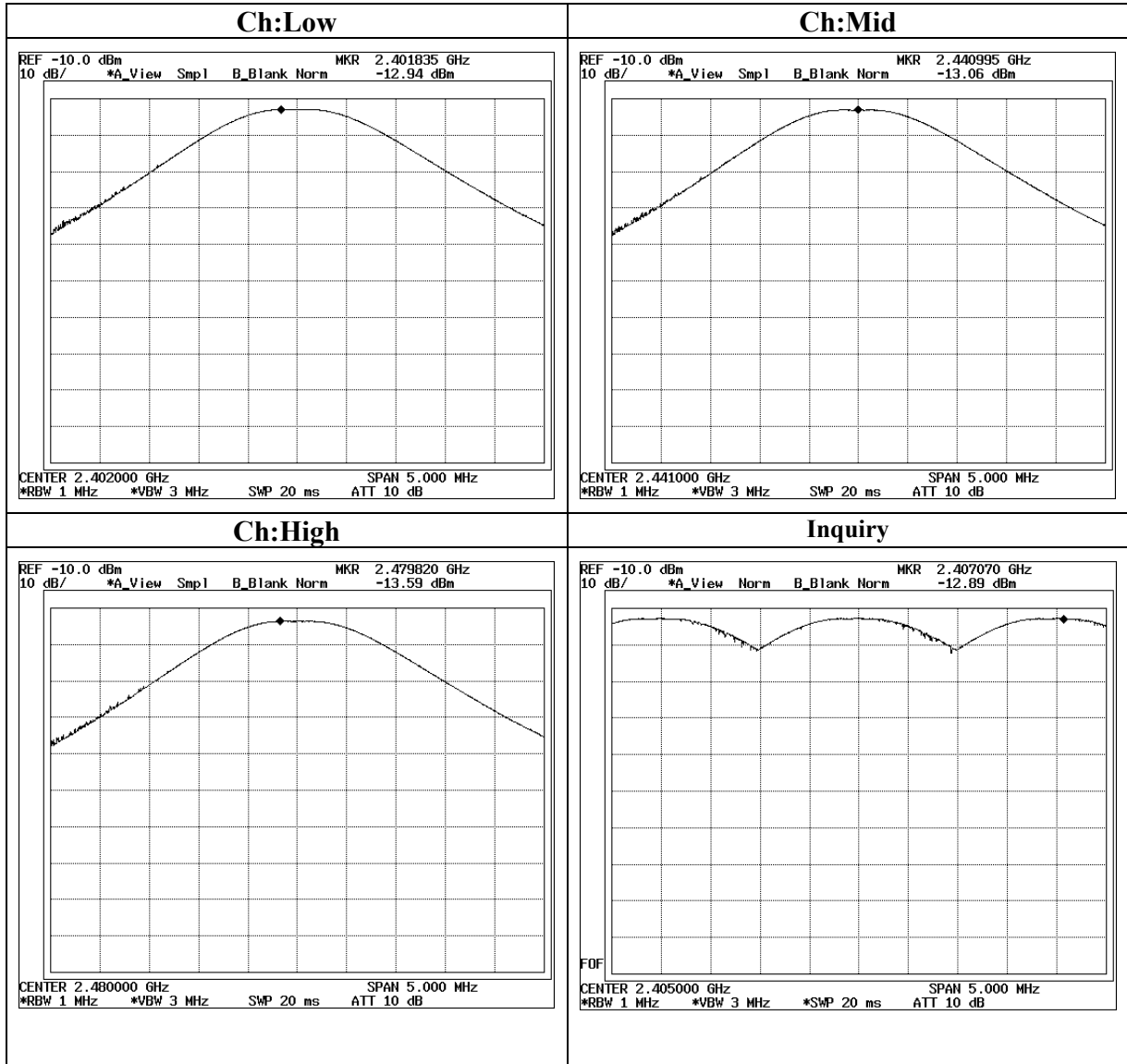
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**Maximum Peak Output Power**



## Radiated Spurious Emission (30MHz-1GHz)

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

### DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2005/11/02 00:42:58

Applicant : FUJITSU TEN Limited	Report No. : 26BE0270-HO
Kind of EUT : DISPLAY	Power : DC12V
Model No. : BT005A	Temp./Humi. : 21deg.C / 40%
Serial No. : 2M-No.16	Operator : Mitsuru Fujimura

Mode / Remarks : Bluetooth Transmitting 2402MHz

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV  
All other spurious emissions were less than 20dB for the limit.

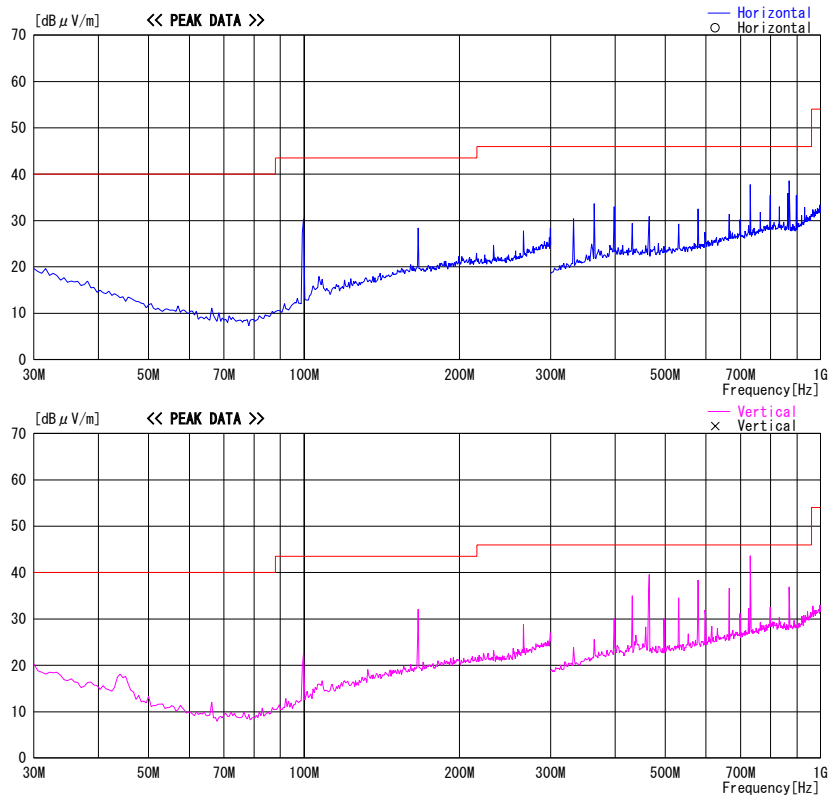


CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN  
 CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)  
 Except for the data below : adequate margin data below the limits.



### Radiated Spurious Emission (30MHz-1GHz)

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

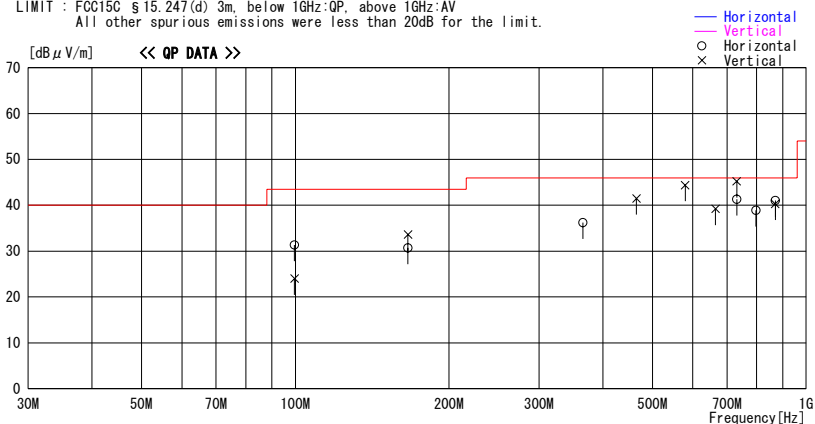
#### DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2005/11/02 00:42:58

Applicant : FUJITSU TEN Limited  
Kind of EUT : DISPLAY  
Model No. : BT005A  
Serial No. : 2M-No.16  
Report No. : 26BE0270-HO  
Power : DC12V  
Temp./Humi. : 21deg.C / 40%  
Operator : Mitsuru Fujimura

Mode / Remarks : Bluetooth Transmitting 2402MHz

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV  
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBμV]	DET	Antenna		Level [dBμV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBμV/m]	Margin [dB]	Comment
			Factor [dB]	Loss & Gain [dB]							
99.701	40.6	QP	10.4	-19.7	31.3	279	330	Hori.	43.5	12.2	
99.700	33.3	QP	10.4	-19.7	24.0	121	100	Vert.	43.5	19.5	
166.165	33.2	QP	16.1	-18.6	30.7	285	344	Hori.	43.5	12.8	
166.161	36.1	QP	16.1	-18.6	33.6	184	100	Vert.	43.5	9.9	
365.543	36.6	QP	16.6	-17.0	36.2	213	100	Hori.	46.0	9.8	
465.242	41.0	QP	17.8	-17.3	41.5	242	118	Vert.	46.0	4.5	
579.810	42.4	QP	18.9	-16.9	44.4	172	100	Vert.	46.0	1.6	
664.623	35.7	QP	20.0	-16.5	39.2	332	100	Vert.	46.0	6.8	
731.093	40.5	QP	20.9	-16.2	45.2	0	100	Vert.	46.0	0.8	
731.093	36.6	QP	20.9	-16.2	41.3	303	120	Hori.	46.0	4.7	
797.548	33.0	QP	21.6	-15.7	38.9	46	100	Hori.	46.0	7.1	
869.701	34.6	QP	21.1	-15.4	40.3	176	104	Vert.	46.0	5.7	
869.713	35.3	QP	21.1	-15.4	41.0	83	100	Hori.	46.0	5.0	

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)  
Except for the data below : adequate margin data below the limits.

## Radiated Spurious Emission (30MHz-1GHz)

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

### DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2005/11/02 02:00:23

Applicant : FUJITSU TEN Limited	Report No. : 26BE0270-HO
Kind of EUT : DISPLAY	Power : DC12V
Model No. : BT005A	Temp./Humi. : 21deg.C / 40%
Serial No. : 2M-No.16	Operator : Mitsuru Fujimura

Mode / Remarks : Bluetooth Transmitting 2441MHz

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV  
All other spurious emissions were less than 20dB for the limit.

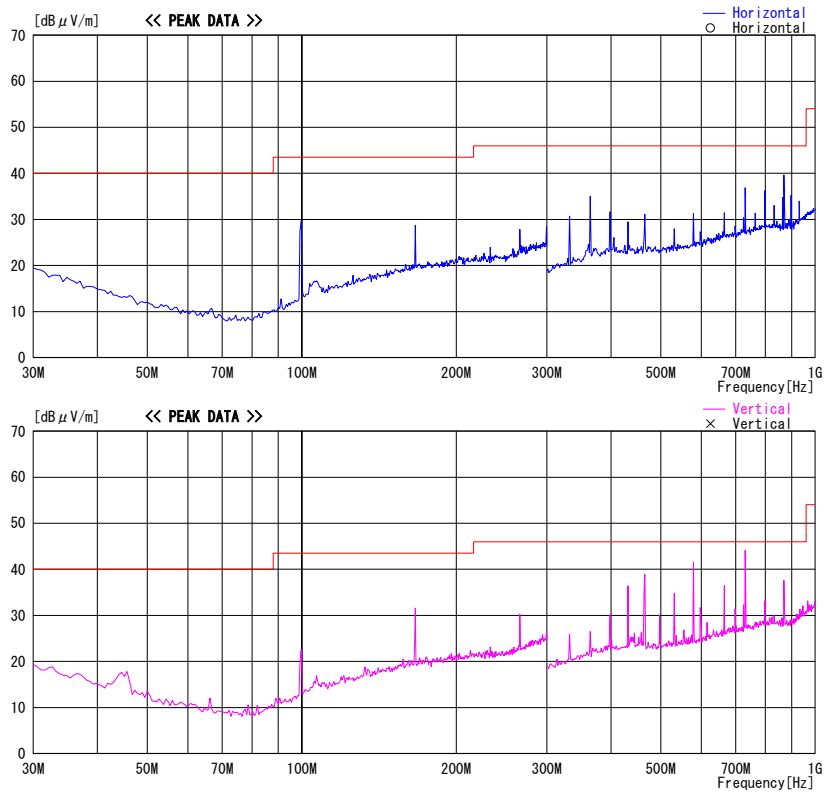


CHART: WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN  
 CALCULATION: RESULT = READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - GAIN (AMP)  
 Except for the data below : adequate margin data below the limits.

## Radiated Spurious Emission (30MHz-1GHz)

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

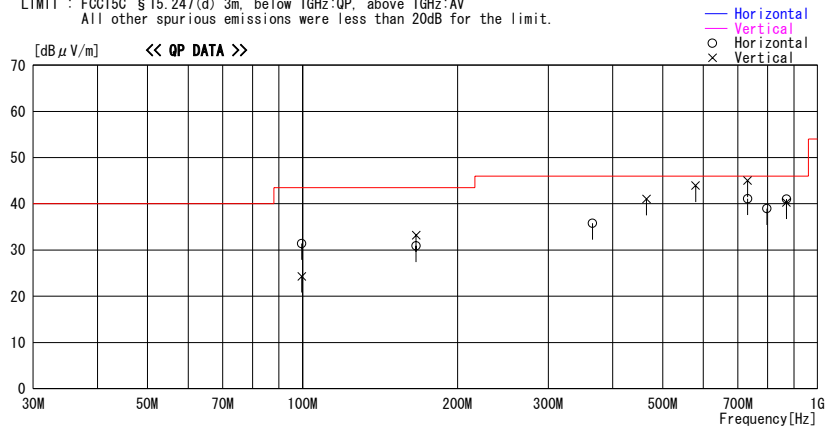
### DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2005/11/02 02:00:23

Applicant : FUJITSU TEN Limited  
Kind of EUT : DISPLAY  
Model No. : BT005A  
Serial No. : 2M-No.16  
Report No. : 26BE0270-HO  
Power : DC12V  
Temp./Humi. : 21deg. C / 40%  
Operator : Mitsuru Fujimura

Mode / Remarks : Bluetooth Transmitting 2441MHz

LIMIT : FCC15C § 15.247(d) 3m, below 1GHz:QP, above 1GHz:AV  
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBuV]	DET	Antenna		Level [dBuV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBuV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
99.695	40.7	QP	10.4	-19.7	31.4	278	319	Hori.	43.5	12.1	
99.693	33.6	QP	10.4	-19.7	24.3	133	109	Vert.	43.5	19.2	
166.166	33.4	QP	16.1	-18.8	30.9	279	333	Hori.	43.5	12.6	
166.153	35.7	QP	16.1	-18.8	33.2	180	100	Vert.	43.5	10.3	
365.545	36.2	QP	16.6	-17.0	35.8	215	106	Hori.	46.0	10.2	
465.240	40.5	QP	17.8	-17.3	41.0	243	111	Vert.	46.0	5.0	
579.816	41.9	QP	18.9	-16.9	43.9	182	100	Vert.	46.0	2.1	
731.096	36.4	QP	20.9	-16.2	41.1	309	125	Hori.	46.0	4.9	
731.097	40.3	QP	20.9	-16.2	45.0	0	163	Vert.	46.0	1.0	
797.563	33.1	QP	21.6	-15.7	39.0	49	105	Hori.	46.0	7.0	
869.713	35.3	QP	21.1	-15.4	41.0	81	100	Hori.	46.0	5.0	
869.705	34.6	QP	21.1	-15.4	40.3	161	116	Vert.	46.0	5.7	

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)  
Except for the data below : adequate margin data below the limits.

## Radiated Spurious Emission (30MHz-1GHz)

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

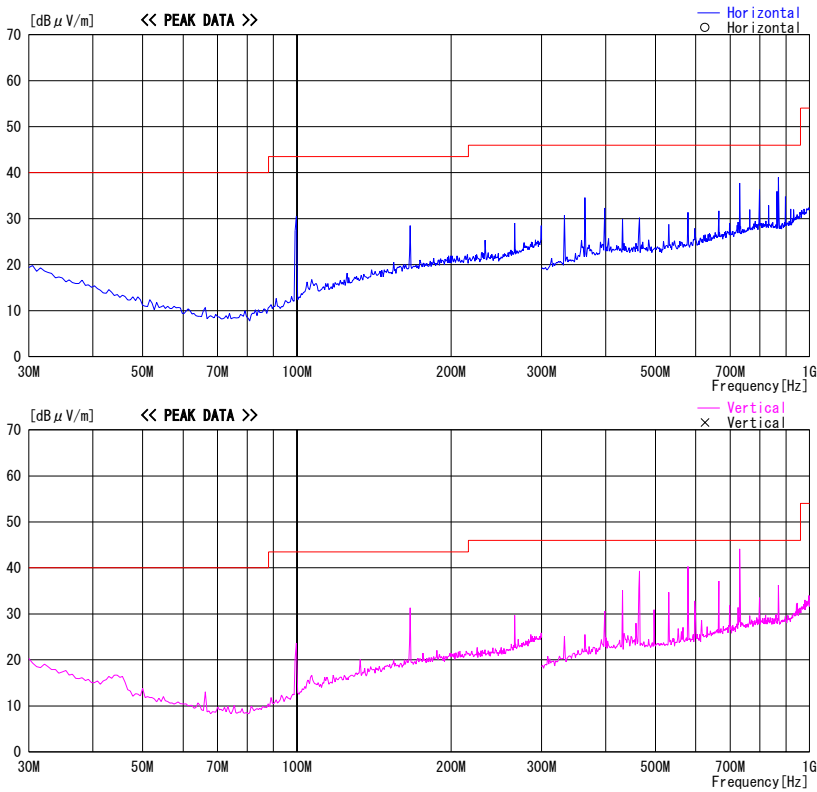
### DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2005/11/02 02:24:58

Applicant	: FUJITSU TEN Limited	Report No.	: 26BE0270-HO
Kind of EUT	: DISPLAY	Power	: DC12V
Model No.	: BT005A	Temp./Humi.	: 21deg.C / 40%
Serial No.	: 2M-No.16	Operator	: Mitsuru Fujimura

Mode / Remarks : Bluetooth Transmitting 2480MHz

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:OP, above 1GHz:AV  
All other spurious emissions were less than 20dB for the limit.



\*20dBc is applied (please refer to page 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)  
 Except for the data below : adequate margin data below the limits.

## Radiated Spurious Emission (30MHz-1GHz)

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

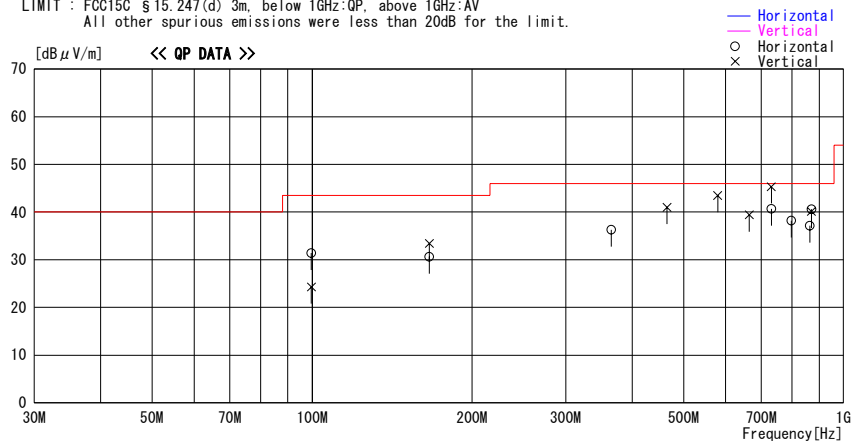
### DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.1 Semi Anechoic Chamber  
Date : 2005/11/02 02:31:13

Applicant : FUJITSU TEN Limited  
Kind of EUT : DISPLAY  
Model No. : BT005A  
Serial No. : 2M-No.16  
Report No. : 26BE0270-HO  
Power : DC12V  
Temp./Humi. : 21deg. C / 40%  
Operator : Mitsuru Fujimura

Mode / Remarks : Bluetooth Transmitting 2480MHz

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV  
All other spurious emissions were less than 20dB for the limit.



Frequency [MHz]	Reading [dBμV]	DET	Antenna		Level [dBμV/m]	Angle [Deg]	Height [cm]	Polar.	Limit [dBμV/m]	Margin [dB]	Comment
			Factor [dB/m]	Loss& Gain [dB]							
99.700	40.7	QP	10.4	-19.7	31.4	269	314	Hori.	43.5	12.1	
99.698	33.6	QP	10.4	-19.7	24.3	126	109	Vert.	43.5	19.2	
166.164	33.1	QP	16.1	-18.6	30.6	261	328	Hori.	43.5	12.9	
166.164	35.9	QP	16.1	-18.6	33.4	180	100	Vert.	43.5	10.1	
365.551	36.7	QP	16.6	-17.0	36.3	216	100	Hori.	46.0	9.7	
465.245	40.5	QP	17.8	-17.3	41.0	236	118	Vert.	46.0	5.0	
579.828	41.5	QP	18.9	-16.9	43.5	167	100	Vert.	46.0	2.5	
664.630	35.9	QP	20.0	-16.5	39.4	325	100	Vert.	46.0	6.6	
731.089	36.0	QP	20.9	-16.2	40.7	303	129	Hori.	46.0	5.3	
731.095	40.6	QP	20.9	-16.2	45.3	0	100	Vert.	46.0	0.7	
797.565	32.3	QP	21.6	-15.7	38.2	305	100	Hori.	46.0	7.8	
864.024	31.4	QP	21.1	-15.4	37.1	256	100	Hori.	46.0	8.9	
869.699	34.9	QP	21.1	-15.4	40.6	88	100	Hori.	46.0	5.4	
869.704	34.5	QP	21.1	-15.4	40.2	180	180	Vert.	46.0	5.8	

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)  
Except for the data below : adequate margin data below the limits.

## Radiated Spurious Emission (1GHz-26GHz)

Company : FUJITSU TEN Limited  
Equipment : DISPLAY  
Model : BT005A  
Sample No. : 2M-No. 16  
Power : DC 12V (Car Battery)  
Mode : Bluetooth, Tx 2402MHz(DH5)  
Remarks : X-axis

UL Apex Co., Ltd.  
Head Office EMC Lab. No.1 Semi Anechoic Chamber  
: 26BE0270-HO  
REGULATION : Fcc Part15 Subpart C 15.247(d)  
TEST DISTANCE : 3/1m  
DATE : 11/01/2005  
TEMPERATURE : 21deg.C  
HUMIDITY : 40%  
ENGINEER : Mitsuru Fujimura

**PK DETECT** (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING [dBuV]		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT [dBuV/m]		Limit PK [dBuV/m]	MARGIN [dB]	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1159.6	64.5	65.4	23.0	41.4	2.6	0.0	48.7	49.6	74.0	25.3	24.4
2	2390.0	51.8	52.2	30.9	41.2	3.1	0.0	44.6	45.0	74.0	29.4	29.0
3*	2400.0	85.9	76.9	30.9	41.2	3.1	0.0	78.7	69.7	74.0	-4.7	4.3
4	4804.2	62.8	61.0	34.9	42.5	4.3	0.8	60.3	58.5	74.0	13.7	15.5
5	7206.0	49.1	49.0	37.6	41.8	5.1	0.3	50.3	50.2	74.0	23.7	23.8
6	9608.0	46.6	46.7	36.3	40.8	6.1	0.7	48.9	49.0	74.0	25.1	25.0
7	12010.0	49.1	48.6	41.4	40.3	7.2	0.0	57.4	56.9	74.0	16.6	17.1
8	14412.0	48.5	48.3	41.7	42.1	7.6	0.0	55.7	55.5	74.0	18.4	18.5
9	16814.0	49.2	48.8	44.7	41.8	8.3	0.0	60.4	60.0	74.0	13.6	14.0
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
10	19216.0	45.8	45.3	41.7	40.2	9.0	0.0	46.8	46.3	74.0	27.2	27.7
11	21618.0	45.4	45.8	40.4	40.2	9.3	0.0	45.4	45.8	74.0	28.6	28.2
12	24020.0	45.5	45.1	41.0	39.1	9.4	0.0	47.3	46.9	74.0	26.7	27.1

**AV DETECT** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING [dBuV]		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT [dBuV/m]		Limit AV [dBuV/m]	MARGIN [dB]	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	1159.6	54.9	56.1	23.0	41.4	2.6	0.0	39.1	40.3	54.0	14.9	13.7
2	2390.0	38.4	37.6	30.9	41.2	3.1	0.0	31.2	30.4	54.0	22.8	23.6
3*	2400.0	72.3	65.0	30.9	41.2	3.1	0.0	65.1	57.8	54.0	-11.1	-3.8
4*	4804.2	56.0	55.3	34.9	42.5	4.3	0.8	53.5	52.8	54.0	0.5	1.2
5	7206.0	35.7	35.5	37.6	41.8	5.1	0.3	36.9	36.7	54.0	17.1	17.3
6	9608.0	33.2	33.3	36.3	40.8	6.1	0.7	35.5	35.6	54.0	18.5	18.4
7	12010.0	36.1	35.3	41.4	40.3	7.2	0.0	44.4	43.6	54.0	9.7	10.4
8	14412.0	35.2	35.2	41.7	42.1	7.6	0.0	42.4	42.4	54.0	11.6	11.6
9	16814.0	35.7	35.7	44.7	41.8	8.3	0.0	46.9	46.9	54.0	7.1	7.1
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
10	19216.0	32.1	31.8	41.7	40.2	9.0	0.0	33.1	32.8	54.0	21.0	21.2
11	21618.0	32.5	32.5	40.4	40.2	9.3	0.0	32.5	32.5	54.0	21.5	21.5
12	24020.0	32.1	32.1	41.0	39.1	9.4	0.0	33.9	33.9	54.0	20.1	20.1

\* Reference data

**20dBc(Fundamental 2402MHz)** (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING [dBuV]		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT [dBuV/m]		Limit 20dBc [dBuV/m]	MARGIN [dB]	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
0	2402.0	109.8	101.2	30.9	41.2	3.2	0.0	102.7	94.1	-	-	-
3	2400.0	54.5	46.1	30.9	41.2	3.1	0.0	47.3	38.9	Funda-20dB	35.4	35.1

**AV DETECT (Include Dwell-time-factor)** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING [dBuV]		ANT Factor [dB/m]	AMP GAIN [dB]	Cable+ filter Loss [dB]	Dwell time Factor [dB]	RESULT [dBuV/m]		Limit AV [dBuV/m]	MARGIN [dB]	
		HOR	VER					HOR	VER		HOR	VER
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Hi Pass + Dwell Factor												
4	4804.2	56.0	55.3	34.9	42.5	5.1	-25.4	28.1	27.4	54.0	25.9	26.6

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

\*Except for the above table : All other spurious emissions were less than 20dB for the limit.

\*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

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

\*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

\*Dwell time factor: See dwell time data page 19.

## Radiated Spurious Emission (1GHz-26GHz)

UL Apex Co., Ltd.  
Head Office EMC Lab. No.1 Semi Anechoic Chamber

Company : FUJITSU TEN Limited	REPORT NO : 26BE0270-HO
Equipment : DISPLAY	REGULATION : Fcc Part15 SUBpart C 15.247(d)
Model : BT005A	TEST DISTANCE : 3/1m
Sample No. : 2M-No. 16	DATE : 11/01/2005
Power : DC 12V (Car Battery)	TEMPERATURE : 21deg.C
Mode : Bluetooth, Tx 2441MHz(DH5)	HUMIDITY : 40%
Remarks : X-axis	ENGINEER : Mitsuru Fujimura

**PK DETECT** (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss</b>												
1	1159.6	64.0	65.0	23.0	41.4	2.6	0.0	48.2	49.2	74.0	25.8	24.8
2	4882.0	63.8	61.2	35.4	42.5	4.3	0.8	61.8	59.2	74.0	12.2	14.8
3	7323.0	49.7	48.6	37.8	41.8	5.2	0.3	51.2	50.1	74.0	22.8	23.9
4	9764.0	46.6	46.7	36.2	40.7	6.2	0.6	48.9	49.0	74.0	25.1	25.0
5	12205.0	48.6	48.5	41.5	40.6	7.2	0.0	56.7	56.6	74.0	17.3	17.5
6	14646.0	47.5	47.7	42.2	41.8	7.5	0.0	55.4	55.6	74.0	18.6	18.4
7	17087.0	47.5	48.2	44.5	41.8	8.4	0.0	58.6	59.3	74.0	15.4	14.7
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac</b>												
8	19528.0	44.5	44.8	41.4	40.1	9.0	0.0	45.3	45.6	74.0	28.7	28.4
9	21969.0	47.8	48.1	40.5	40.1	9.3	0.0	48.0	48.3	74.0	26.0	25.7
10	24410.0	44.4	44.7	41.1	39.7	9.3	0.0	45.6	45.9	74.0	28.4	28.1

**AV DETECT** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss</b>												
1	1159.6	54.5	56.2	23.0	41.4	2.6	0.0	38.7	40.4	54.0	15.3	13.6
2*	4882.0	56.7	53.9	35.4	42.5	4.3	0.8	54.7	51.9	54.0	-0.7	2.1
3	7323.0	36.5	35.6	37.8	41.8	5.2	0.3	38.0	37.1	54.0	16.0	16.9
4	9764.0	33.4	33.4	36.2	40.7	6.2	0.6	35.7	35.7	54.0	18.3	18.3
5	12205.0	35.7	35.7	41.5	40.6	7.2	0.0	43.8	43.8	54.0	10.2	10.2
6	14646.0	34.2	34.6	42.2	41.8	7.5	0.0	42.1	42.5	54.0	11.9	11.5
7	17087.0	34.6	34.6	44.5	41.8	8.4	0.0	45.7	45.7	54.0	8.3	8.3
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac</b>												
8	19528.0	31.9	31.8	41.4	40.1	9.0	0.0	32.7	32.6	54.0	21.3	21.4
9	21969.0	34.6	34.6	40.5	40.1	9.3	0.0	34.8	34.8	54.0	19.3	19.2
10	24410.0	31.7	31.7	41.1	39.7	9.3	0.0	32.9	32.9	54.0	21.1	21.1

\*Reference data

**AV DETECT (include Dwell-time-factor)** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	Cable+ filter Loss [dB]	Dwell time Factor [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV]	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Hi Pass + Dwell Factor</b>												
2	4882.0	56.7	53.9	35.4	42.5	5.1	-25.4	29.3	26.5	54.0	24.7	27.5

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

\*Except for the above table : All other spurious emissions were less than 20dB for the limit.

\*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

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

\*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

\*Dwell time factor: See dwell time data page 19.

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MF060b(01.06.05)

## Radiated Spurious Emission (1GHz-26GHz)

UL Apex Co., Ltd.  
Head Office EMC Lab. No.1 Semi Anechoic Chamber

Company : FUJITSU TEN Limited	REPORT NO : 26BE0270-HO
Equipment : DISPLAY	REGULATION : Fcc Part15 Subpart C 15.247(d)
Model : BT005A	TEST DISTANCE : 3/1m
Sample No. : 2M-No. 16	DATE : 11/01/2005
Power : DC 12V (Car Battery)	TEMPERATURE : 21deg.C
Mode : Bluetooth, Tx 2480MHz(DH5)	HUMIDITY : 40%
Remarks : X-axis	ENGINEER : Mitsuru Fujimura

**PK DETECT** (RBW: 1MHz, VBW: 1MHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss</b>												
1	1377.1	61.0	65.7	23.3	41.1	2.7	0.0	45.9	50.6	74.0	28.2	23.4
2	2483.5	62.4	57.7	30.8	41.3	3.1	0.0	55.0	50.3	74.0	19.0	23.7
3	4960.0	62.0	58.7	35.8	42.5	4.3	0.8	60.4	57.1	74.0	13.6	16.9
4	7440.0	48.7	49.7	37.9	41.8	5.3	0.3	50.4	51.4	74.0	23.6	22.6
5	9920.0	48.1	49.4	36.2	40.6	6.3	0.6	50.6	51.9	74.0	23.4	22.1
6	12400.0	48.6	48.7	41.6	41.0	7.3	0.0	56.5	56.6	74.0	17.5	17.4
7	14880.0	48.3	48.3	42.6	41.5	7.6	0.0	57.0	57.0	74.0	17.0	17.0
8	17360.0	48.3	48.3	44.4	42.0	8.6	0.0	59.3	59.3	74.0	14.7	14.7
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac</b>												
9	19840.0	45.9	45.1	41.1	40.0	9.0	0.0	46.5	45.7	74.0	27.5	28.3
10	22320.0	47.0	47.1	40.4	39.9	9.4	0.0	47.4	47.5	74.0	26.6	26.5
11	24800.0	46.2	46.3	41.1	40.2	9.4	0.0	47.0	47.1	74.0	27.0	26.9

**AV DETECT** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss</b>												
1	1377.1	40.3	45.6	23.3	41.1	2.7	0.0	25.2	30.5	54.0	28.9	23.5
2	2483.5	55.6	51.6	30.8	41.3	3.1	0.0	48.2	44.2	54.0	5.8	9.8
3*	4960.0	55.0	51.2	35.8	42.5	4.3	0.8	53.4	49.6	54.0	0.6	4.4
4	7440.0	35.2	35.7	37.9	41.8	5.3	0.3	36.9	37.4	54.0	17.1	16.6
5	9920.0	34.2	35.1	36.2	40.6	6.3	0.6	36.7	37.6	54.0	17.3	16.4
6	12400.0	35.5	35.6	41.6	41.0	7.3	0.0	43.4	43.5	54.0	10.6	10.6
7	14880.0	34.9	34.8	42.6	41.5	7.6	0.0	43.6	43.5	54.0	10.4	10.5
8	17360.0	35.2	35.2	44.4	42.0	8.6	0.0	46.2	46.2	54.0	7.8	7.8
<b>*Reference data 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac</b>												
9	19840.0	31.8	31.8	41.1	40.0	9.0	0.0	32.4	32.4	54.0	21.6	21.7
10	22320.0	33.7	34.0	40.4	39.9	9.4	0.0	34.1	34.4	54.0	19.9	19.7
11	24800.0	33.2	33.2	41.1	40.2	9.4	0.0	34.0	34.0	54.0	20.0	20.0

**AV DETECT (Include Dwell-time-factor)** (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	Cable+ filter Loss [dB]	Dwell time Factor [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Hi Pass + Dwell Factor</b>												
3	4960.0	55.0	51.2	35.8	42.5	5.1	-25.4	28.0	24.2	54.0	26.0	29.8

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

\*Except for the above table : All other spurious emissions were less than 20dB for the limit.

\*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

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

\*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

\*Dwell time factor: See dwell time data page 19.

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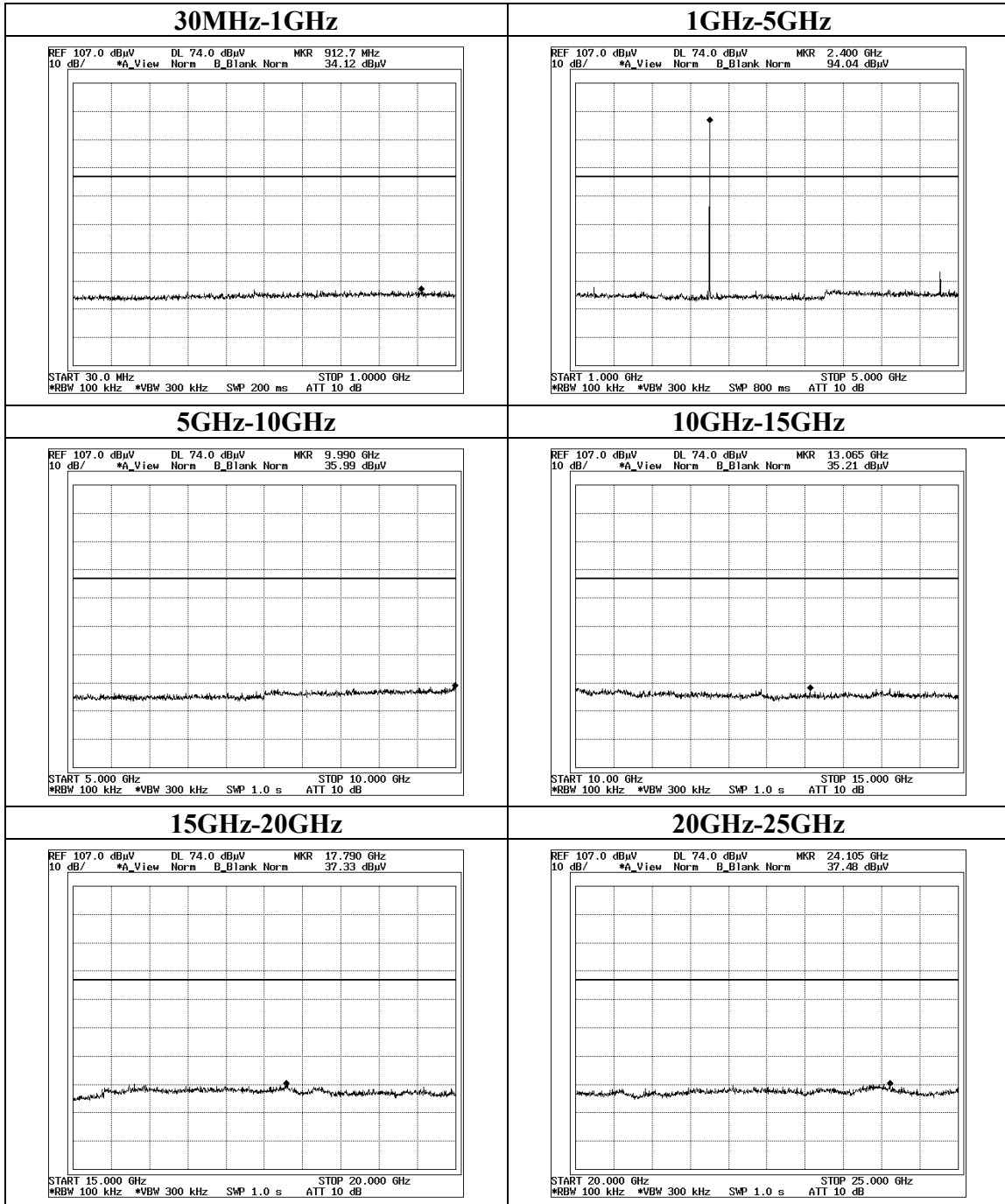
Facsimile : +81 596 24 8124

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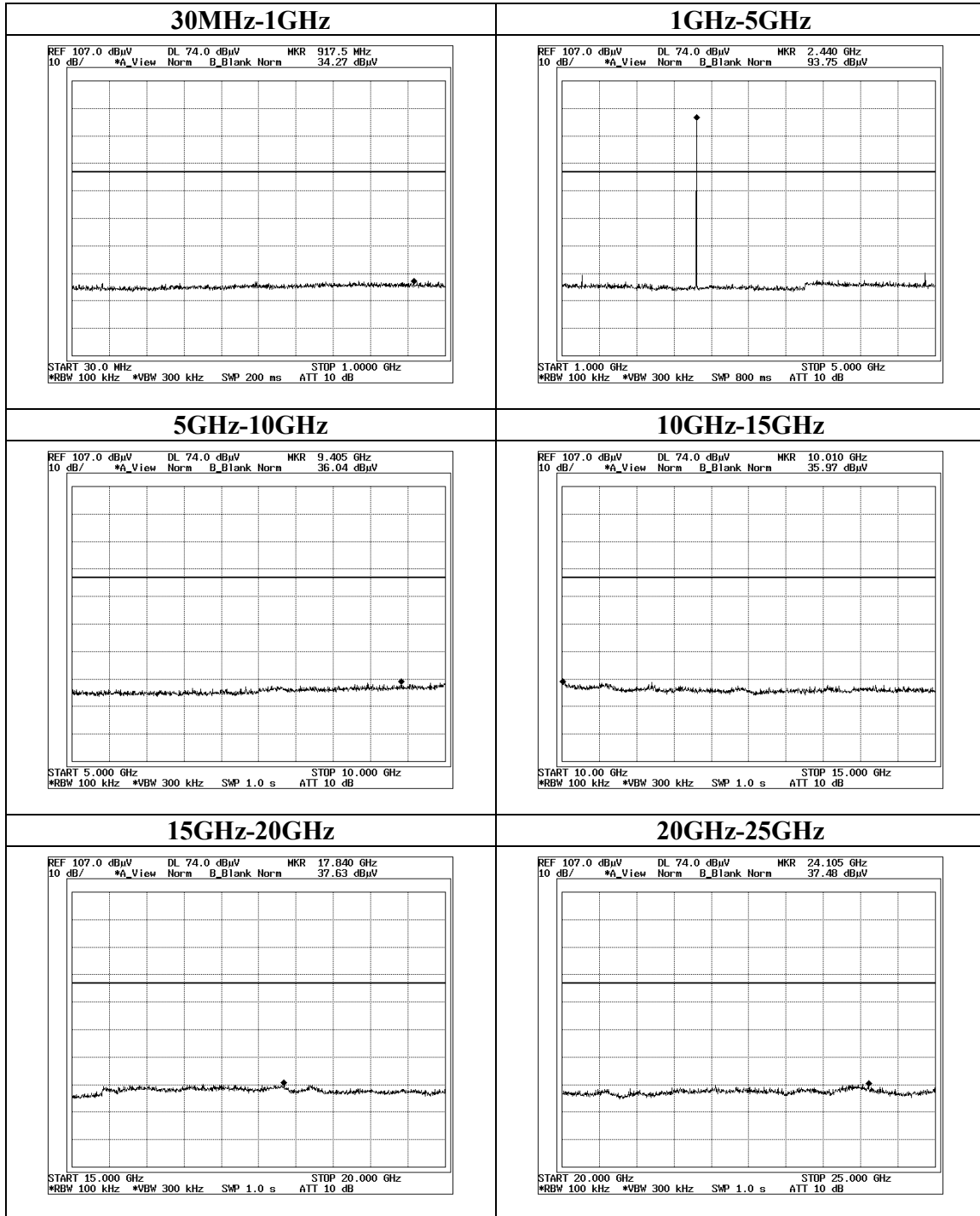


**Conducted Spurious Emission**

Ch:Low

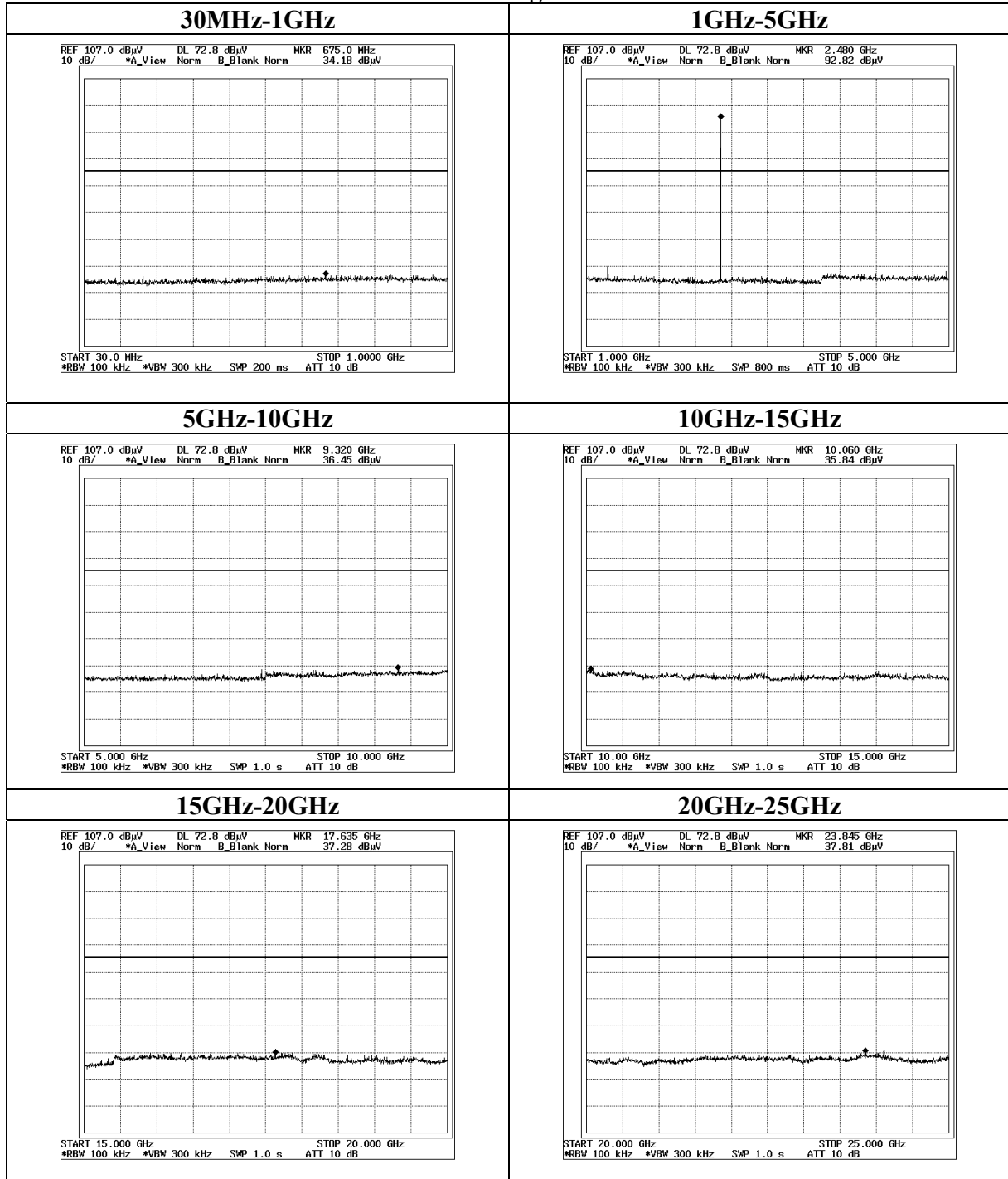


**Conducted Spurious Emission**  
**Ch:Mid**

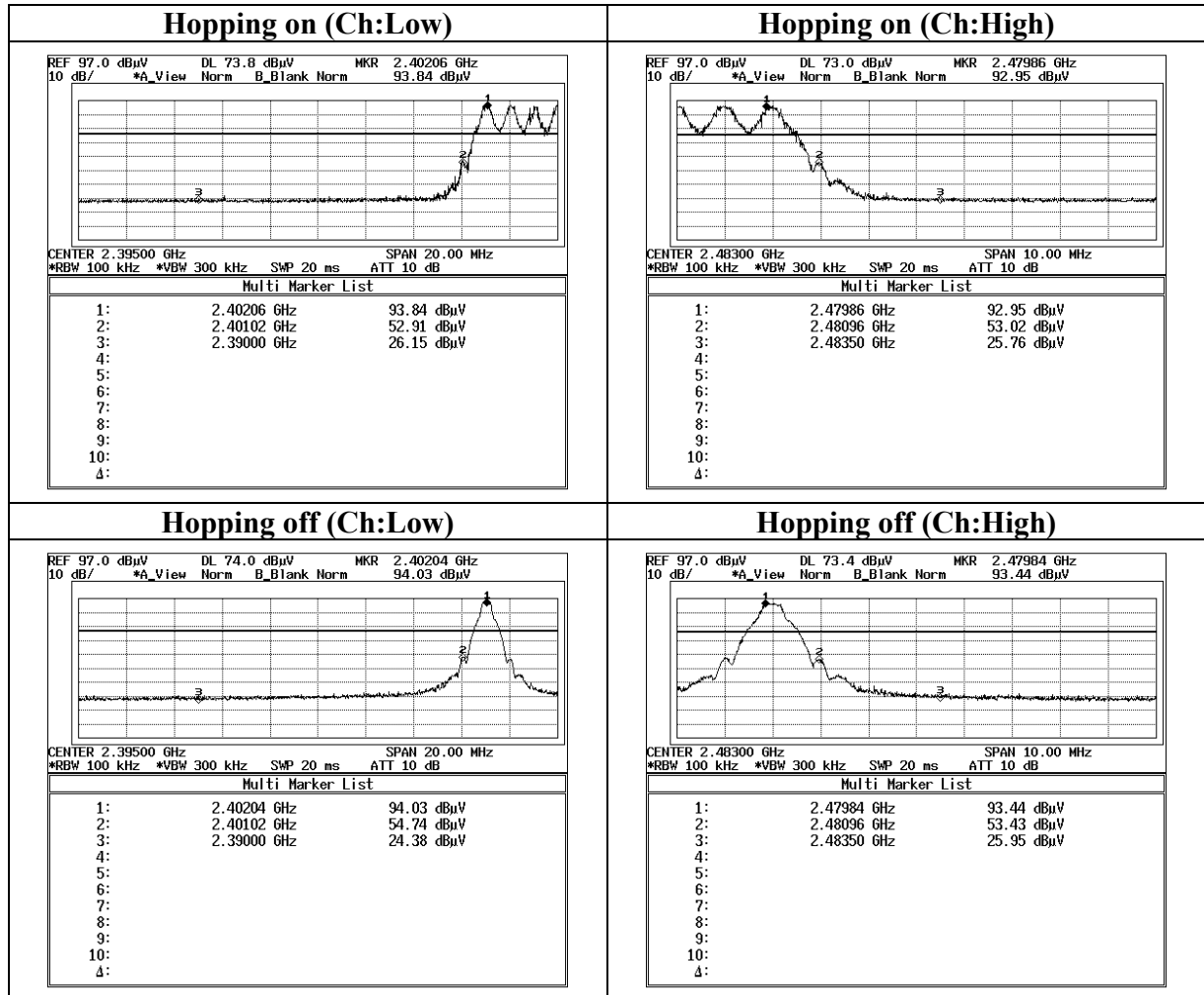


**Conducted Spurious Emission**

Ch:High



**Conducted Spurious Emission  
Band Edge compliance**



### 99% Occupied Bandwidth

