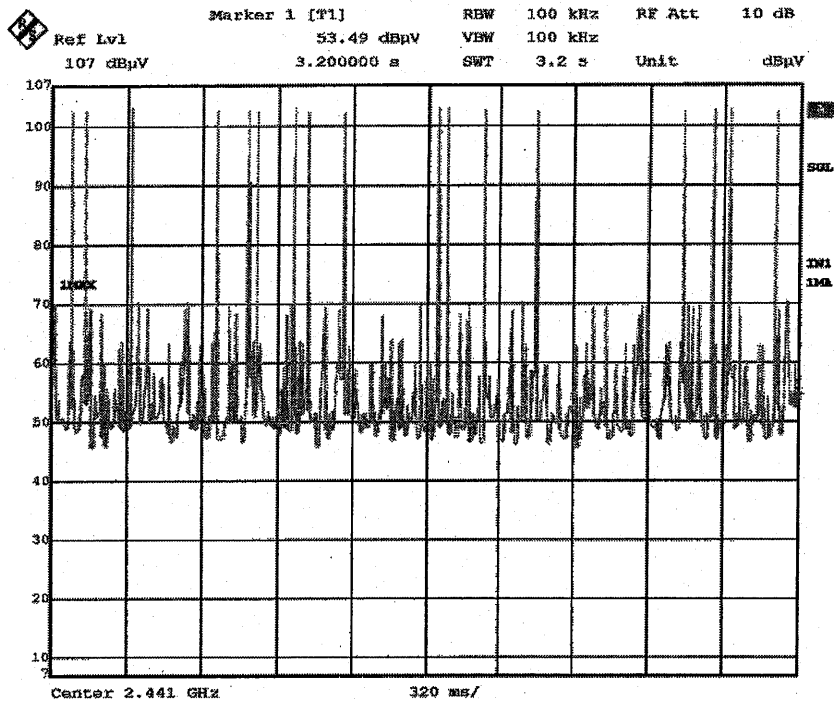
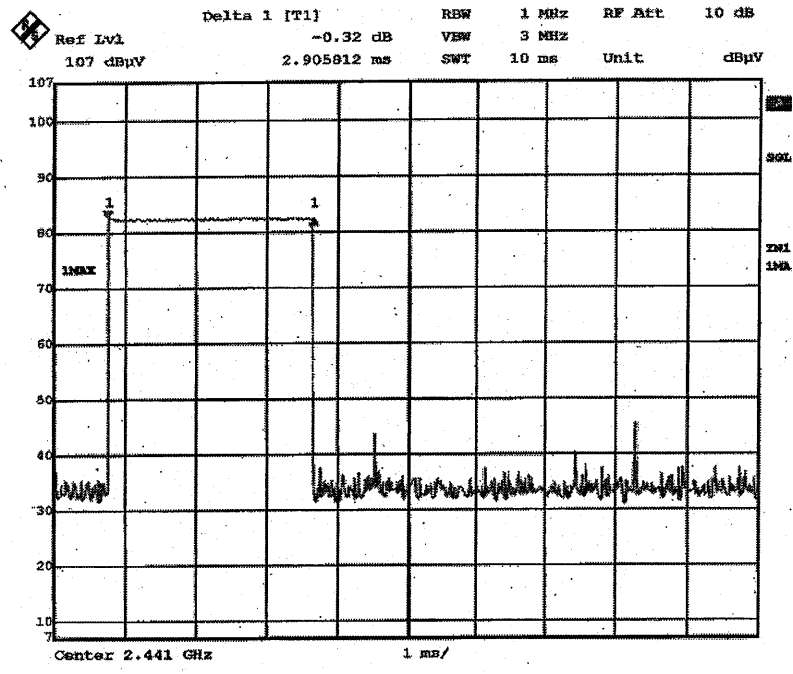


### Dwell time : Tx(Hopping on) DH3(11)



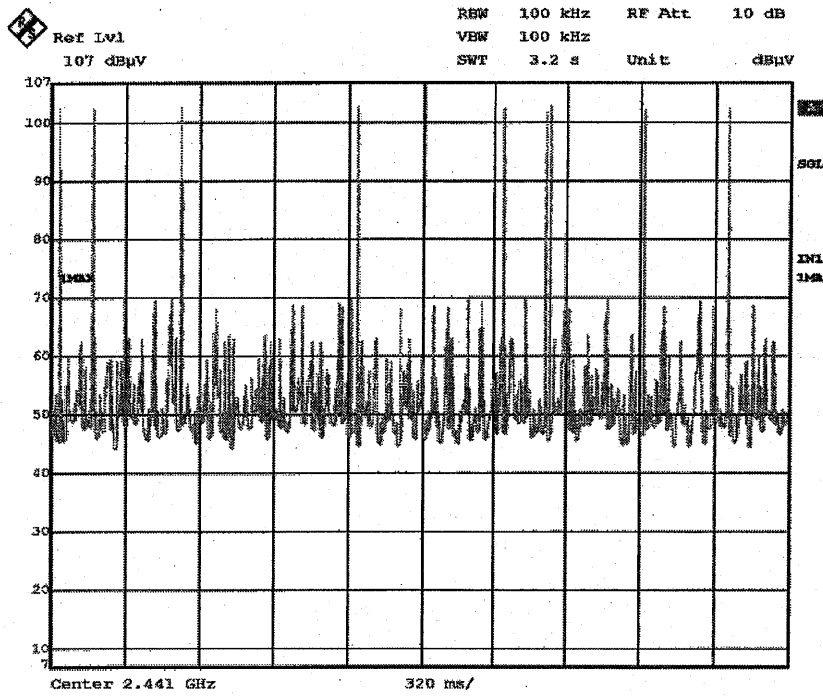
Date: 25.SEP.2002 18:03:02

Dwell time : Tx(Hopping on) DH5(1)



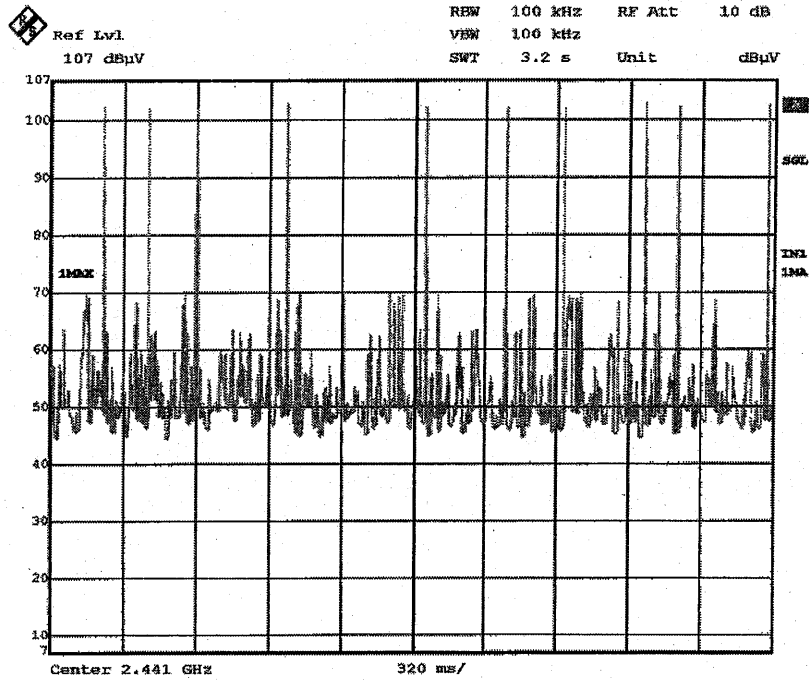
Date: 20.SEP.2002 17:40:26

Dwell time : Tx(Hopping on) DH5(2)



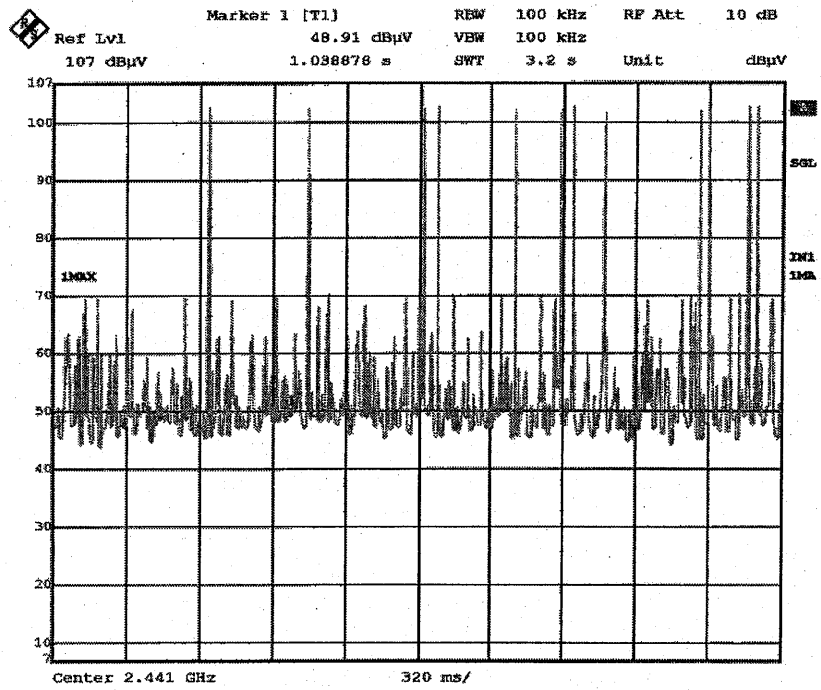
Date: 25.SEP.2002 17:30:55

Dwell time : Tx(Hopping on) DH5(3)



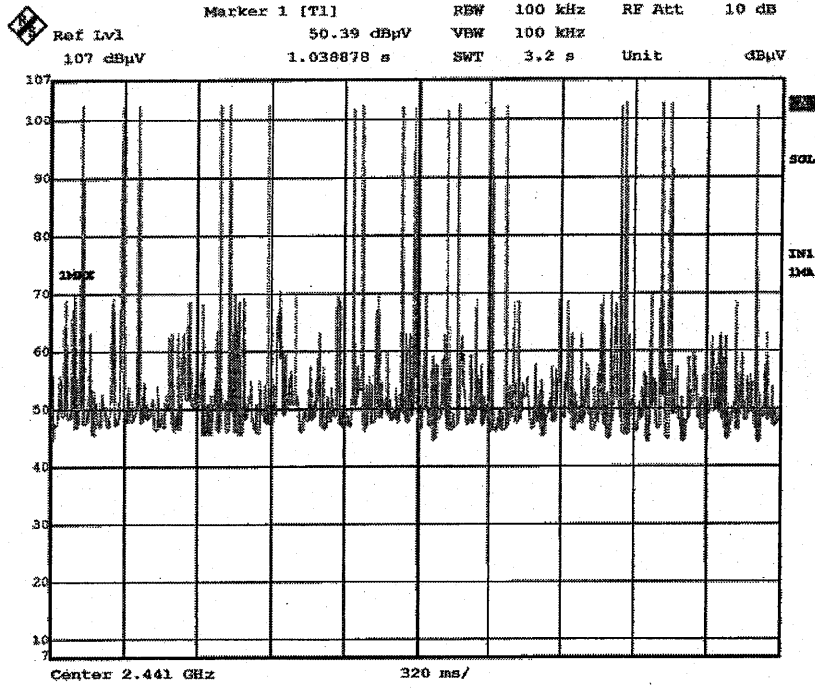
Date: 25.SEP.2002 17:32:02

Dwell time : Tx(Hopping on) DH5(4)



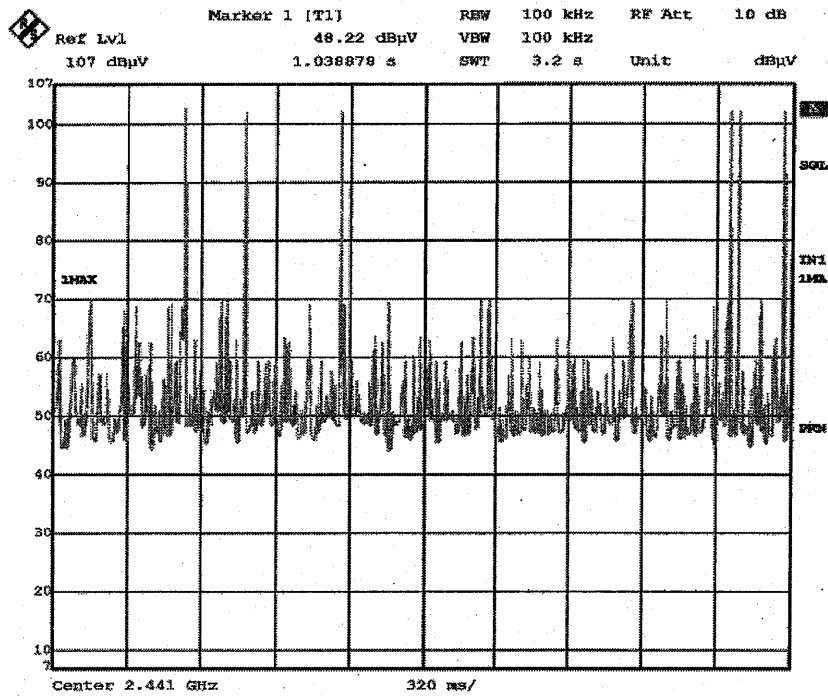
Date: 25.SEP.2002 17:32:48

Dwell time : Tx(Hopping on) DH5(5)



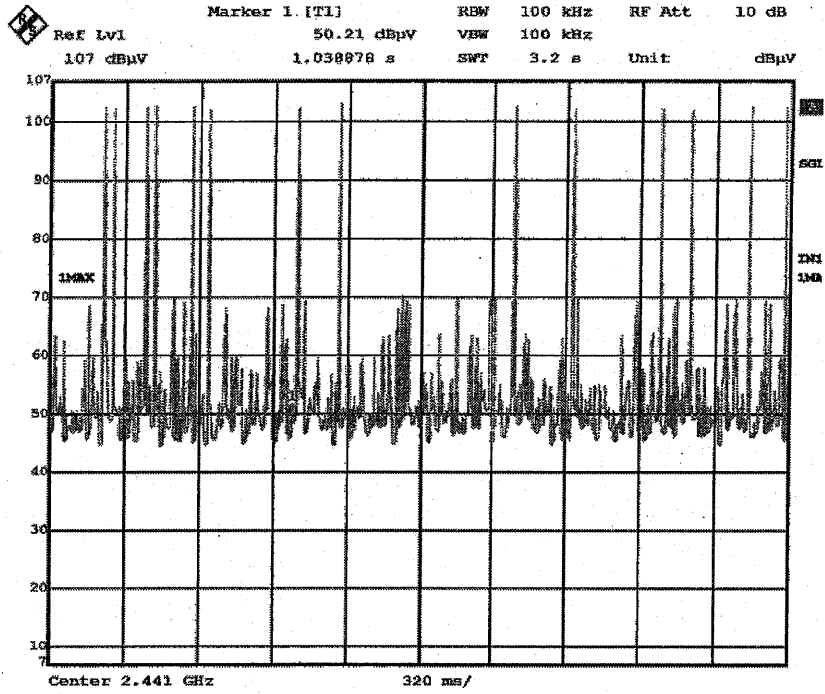
Date: 25.SEP.2002 17:33:53

Dwell time : Tx(Hopping on) DH5(6)



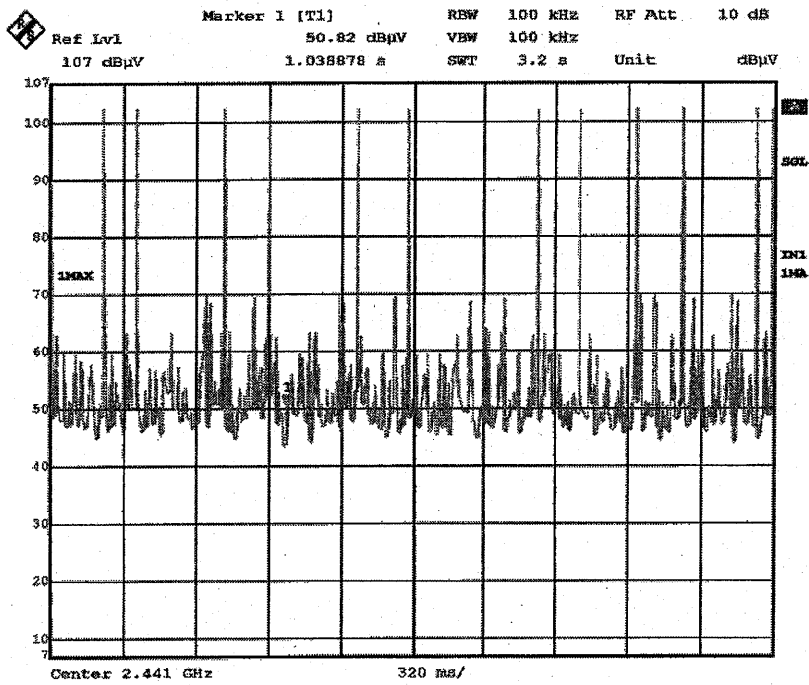
Date: 25.SEP.2002 17:34:10

Dwell time : Tx(Hopping on) DH5(7)



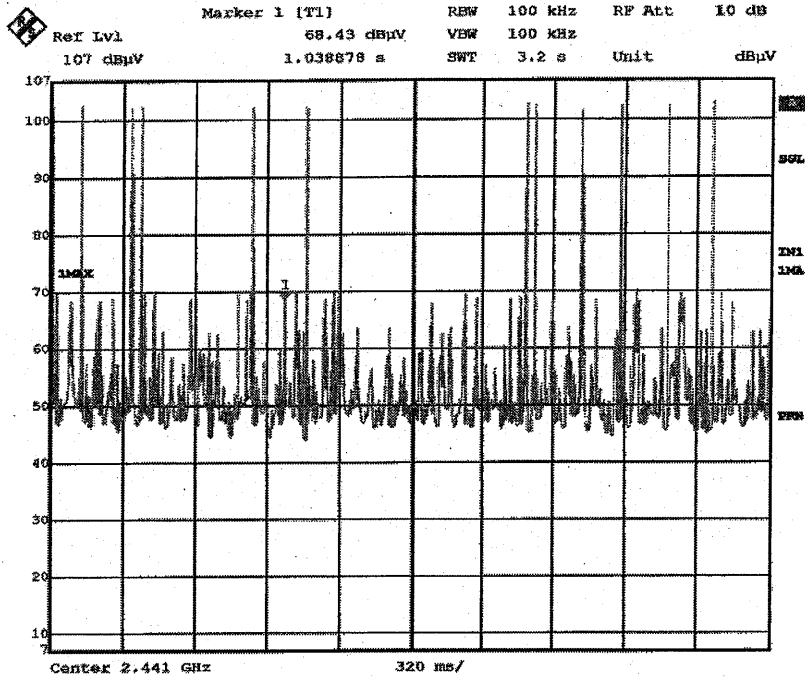
Date: 25.SEP.2002 17:34:58

Dwell time : Tx(Hopping on) DH5(8)



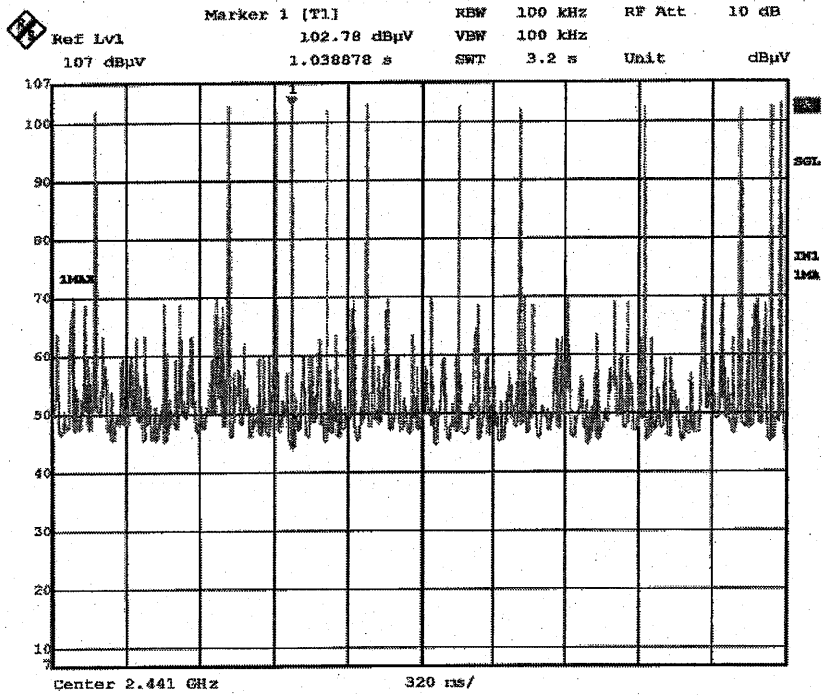
Date: 25.SEP.2002 17:35:45

Dwell time : Tx(Hopping on) DH5(9)



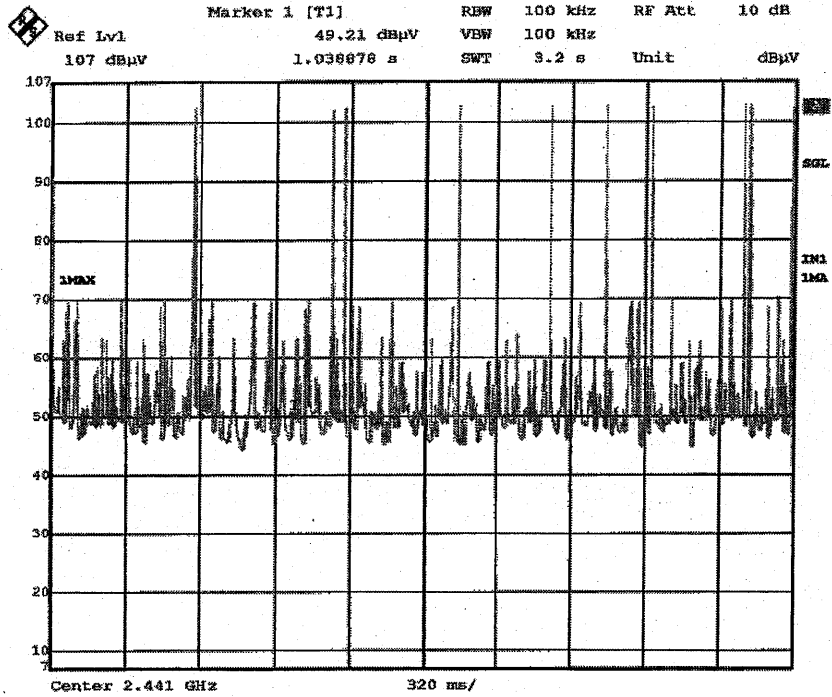
Date: 25.SEP.2002 17:36:01

Dwell time : Tx(Hopping on) DH5(10)



Date: 25.SEP.2002 17:42:39

### Dwell time : Tx(Hopping on) DH5(11)



Date: 25.SEP.2002 17:43:24

# DATA OF MAXIMUM PEAK OUTPUT POWER

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.3 MEASUREMENT ROOM

COMPANY	: SEIKO EPSON CORPORATION	REPORT NO	: 23AE0021-HO
EQUIPMENT	: Bluetooth Unit	REGULATION	: Fcc Part15 Subpart C 15.247(b)(1)
MODEL	: EU-62	TEST DISTANCE	: -
S/N	: 00110	DATE	: 2002/9/20
FCC ID	: BKMFBEU-62	TEMPERATURE	: 26°C
POWER	: DC 5V (AC230V / 60Hz)	HUMIDITY	: 61%
MODE	: Tx (Hopping on)		

*Y. Iwasa*

ENGINEER : Yoshiaki Iwasa

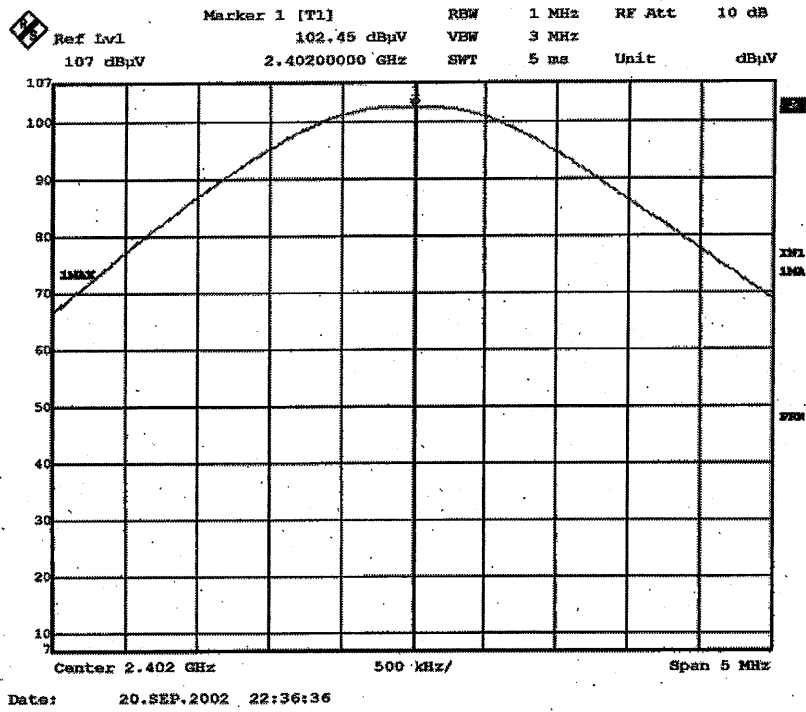
CH	FREQ [MHz]	T/R Reading [dBuV]	Cable Loss [dB]	Result [dBuV]	Result [dBm]	Limit (1W) [dBm]
Low	2402.0	101.9	1.8	103.7	-3.35	30.0
Mid	2441.0	102.5	1.8	104.3	-2.72	30.0
High	2480.0	102.9	1.8	104.7	-2.28	30.0

Sample Calculation :

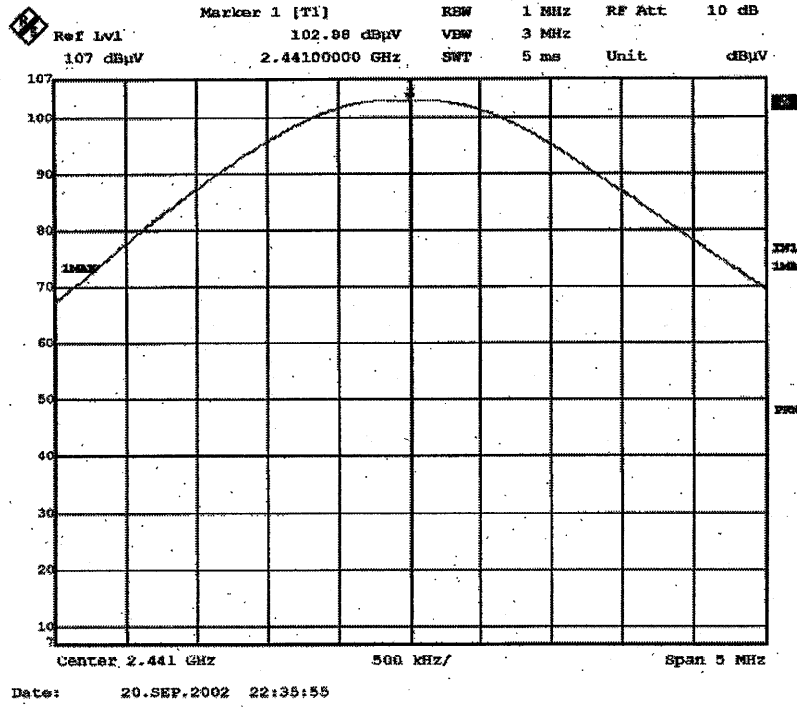
Result = T/R Reading + Cable Loss



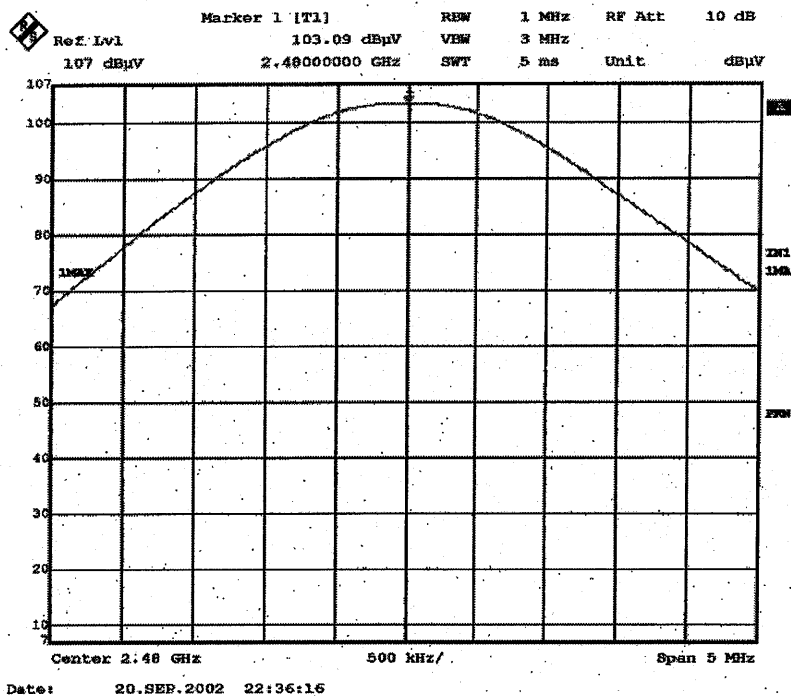
### Maximum Peak Output Power(Conducted) : Tx(2402MHz)



### Maximum Peak Output Power(Conducted) : Tx(2441MHz)



Maximum Peak Output Power(Conducted) : Tx(2480MHz)



## DATA OF BAND EDGE COMPLIANCE

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.3 MEASUREMENT ROOM

COMPANY : SEIKO EPSON CORPORATION	REPORT NO : 23AE0021-HO	
EQUIPMENT : Bluetooth Unit	REGULATION : Fcc Part15 Subpart C 15.247( c )	
MODEL : EU-62	TEST DISTANCE : -	
S/N : 00110	DATE : 2002/9/20	
FCC ID : BKMFBUEU-62	TEMPERATURE : 26°C	
POWER : DC 5V (AC230V / 60Hz)	HUMIDITY : 61%	
MODE : Tx (Hopping on) ,Tx (Hopping off 2402/2480MHz)		

*Y. Iwasa*

ENGINEER : Yoshiaki Iwasa

PK DETECT(S/A :Span 20/10MHz, RBW 200kHz, VBW 200kHz, sweep time AUTO)

[Hopping on] Conducted

Frequency [MHz]	Reading [dBuV]	Cable Loss [dB]	E [dBuV]	P [mW]	Difference of level [dB]	Field Strength [dBuV/m]	Limit
2389.0	54.0	1.7	55.7	0.000007464	-	26.0	<54[dBuV/m]
2400.0	60.6	1.7	62.4	-	42.1 *	-	>20[dB]
2483.7	62.6	1.8	64.4	0.000054576	-	34.6	<54[dBuV/m]

\* Reference : Reading (102.7[dBuV]) + Cable Loss (1.8[dB]) = E (104.5[dBuV]) at 2480MHz.

[Hopping off Tx (2402/2480MHz)] Conducted

Frequency [MHz]	Reading [dBuV]	Cable Loss [dB]	E [dBuV]	P [mW]	Difference of level [dB]	Field Strength [dBuV/m]	Limit
2388.3	36.4	1.7	38.1	0.000000129	-	8.4	<54[dBuV/m]
2400.0	45.1	1.7	46.8	-	72.3 *	-	>20[dB]
2483.9	42.9	1.8	44.7	0.000000586	-	15.0	<54[dBuV/m]

\* Reference : Reading (102.8[dBuV]) + Cable Loss (1.8[dB]) = E (104.6[dBuV]) at 2480MHz.

Sample Calculation:

Field Strength =  $(\sqrt{30 * P * 0.001 * G}) / d$ 

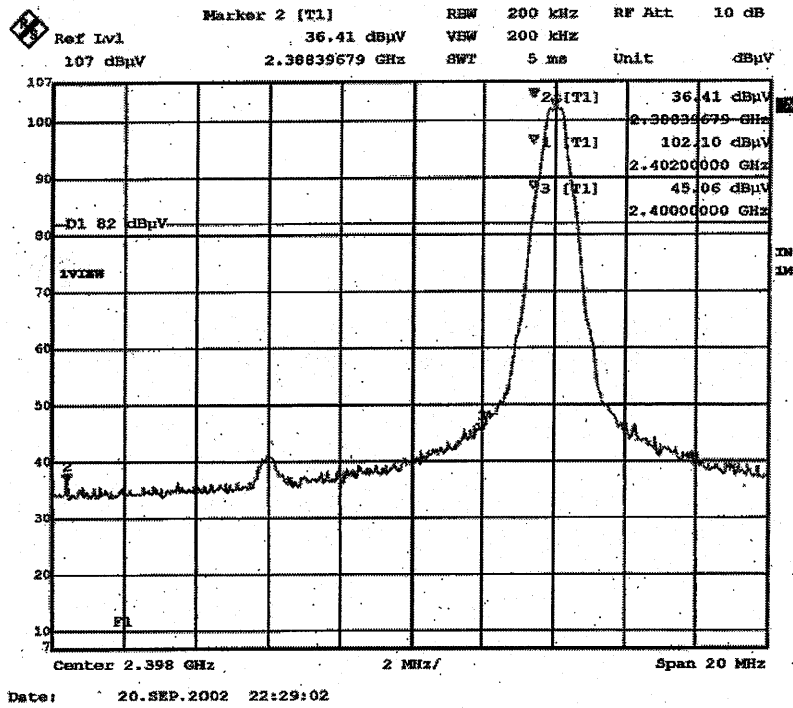
E : Reading + Cable Loss

P : Converted to mW

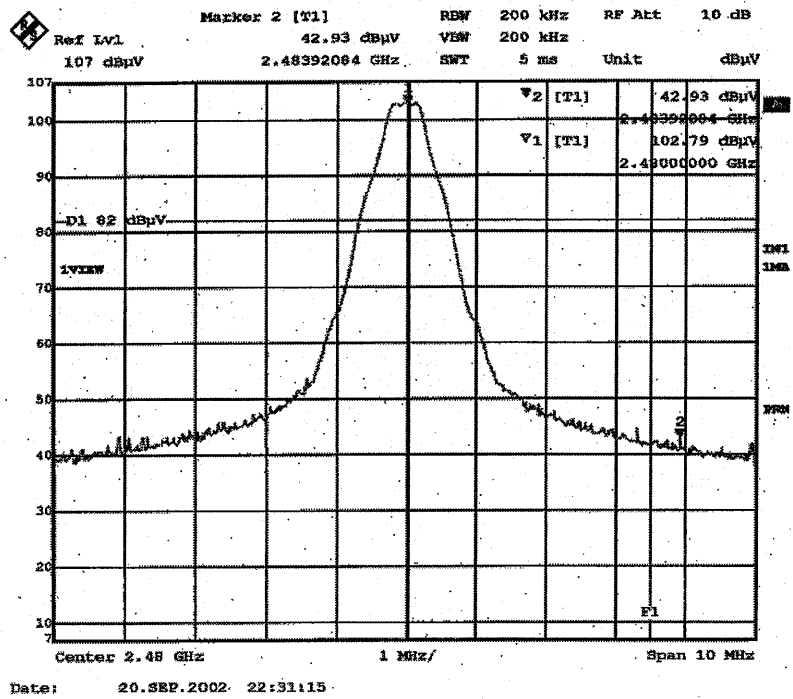
d : Test distance(3.0m)

G : Numeric Antenna Gain (1.60)

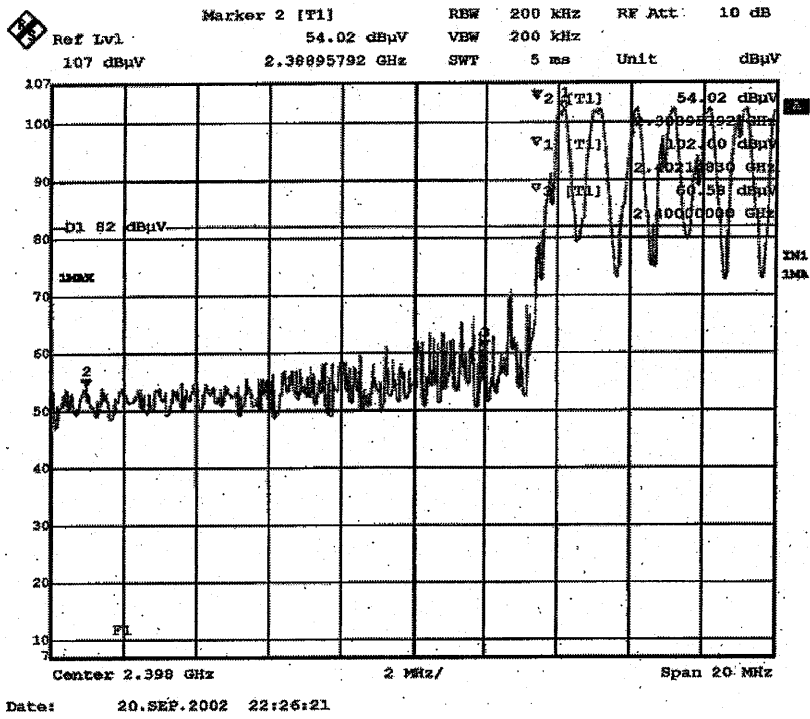
**Band Edge Compliance : Tx(Hopping off) 2402MHz**



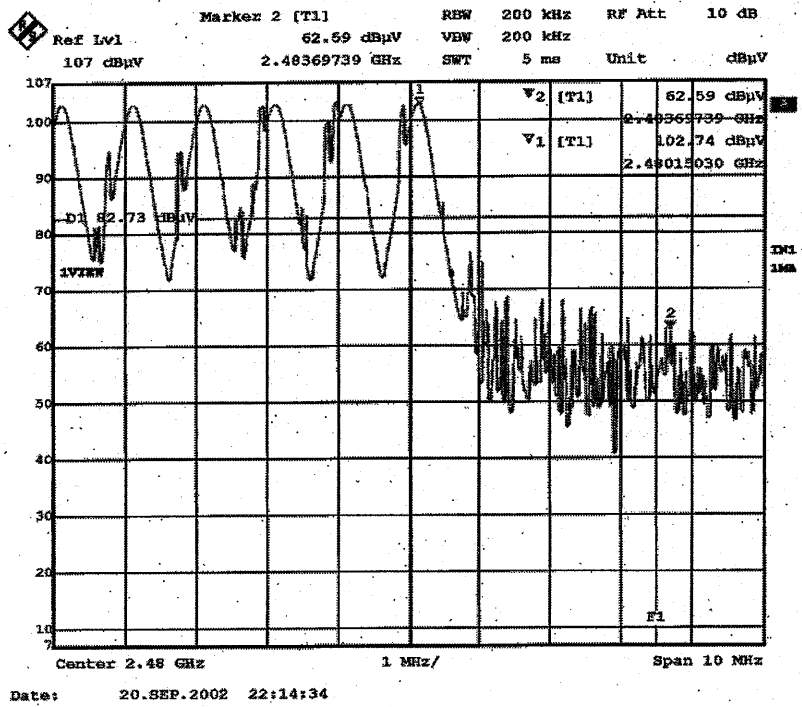
**Band Edge Compliance : Tx(Hopping off) 2480MHz**



Band Edge Compliance : Tx(Hopping on) 2402MHz



Band Edge Compliance : Tx(Hopping on) 2480MHz



# DATA OF RADIATION TEST

A-Pex International Co., Ltd.  
No.2 SEMI ANECHOIC CHAMBER  
Report No. : 23AE0021-H0

Applicant : SEIKO EPSON CORPORATION  
 Kind of Equipment : Bluetooth Unit  
 Model No. : EU-62  
 Serial No. : 00110  
 Power : DC 5V (AC230V/60Hz)  
 Mode : Tx (2402MHz)  
 Remarks :  
 Date : 9/19/2002  
 Test Distance : 3 m  
 Temperature : 28 °C  
 Humidity : 50 %  
 Regulation : FCC § 15. 247 (C)

*J. Iwasa*  
 \_\_\_\_\_  
 Engineer : Yoshiaki Iwasa

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	88.47	BB	26.9	31.8	8.2	27.0	1.1	5.8	15.0	19.9	43.5	28.5	23.6
2.	192.00	BB	34.6	27.5	17.1	26.1	1.6	5.8	33.0	25.9	43.5	10.5	17.6
3.	288.00	BB	33.8	30.6	19.3	26.2	1.9	5.7	34.5	31.3	46.0	11.5	14.7
4.	432.00	BB	34.3	32.3	17.7	27.2	2.5	5.8	33.1	31.1	46.0	12.9	14.9
5.	528.00	BB	31.8	31.7	18.7	27.6	2.8	5.8	31.5	31.4	46.0	14.5	14.6
6.	960.00	BB	33.3	29.6	22.8	27.0	4.0	5.7	38.8	35.1	46.0	7.2	10.9

**CALCULATION: READING[dB μ V] + ANT. FACTOR[dB/m] + CABLE LOSS[dB] - AMP. GAIN[dB] + ATTEN[dB].**

All other spurious emissions were less than 20dB for the limit.  
 ANT. TYPE : 30-300MHz Biconical, 300-1000MHz Logperiodic, 1000MHz- Horn

DATA OF RADIATION TEST

A-Pex International Co., Ltd.  
 No.2 SEMI ANECHOIC CHAMBER  
 Report No. : 23AE0021-H0

Applicant : SEIKO EPSON CORPORATION  
 Kind of Equipment : Bluetooth Unit  
 Model No. : EU-62  
 Serial No. : 00110  
 Power : DC 5V (AC230V/60Hz)  
 Mode : Tx (2441MHz)  
 Remarks :  
 Date : 9/19/2002  
 Test Distance : 3 m  
 Temperature : 28 °C  
 Humidity : 50 %  
 Regulation : FCC § 15. 247 (C)

*M. Iwasa*  
 Engineer : Yoshiaki Iwasa

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS [dB μ V/m]	MARGIN	
			HOR [dB μ V]	VER					HOR [dB μ V/m]	VER		HOR [dB]	VER
1.	92.00	BB	23.4	29.5	8.8	27.0	1.1	5.8	12.1	18.2	43.5	31.4	25.3
2.	192.00	BB	33.9	25.6	17.1	26.1	1.6	5.8	32.3	24.0	43.5	11.2	19.5
3.	288.00	BB	33.3	30.5	19.3	26.2	1.9	5.7	34.0	31.2	46.0	12.0	14.8
4.	432.00	BB	33.5	33.9	17.7	27.2	2.5	5.8	32.3	32.7	46.0	13.7	13.3
5.	528.00	BB	32.7	32.2	18.7	27.6	2.8	5.8	32.4	31.9	46.0	13.6	14.1
6.	960.00	BB	31.3	30.0	22.8	27.0	4.0	5.7	36.8	35.5	46.0	9.2	10.5

CALCULATION:  $READING[dB \mu V] + ANT.FACTOR[dB/m] + CABLE LOSS[dB] - AMP.GAIN[dB] + ATTEN[dB]$ .

All other spurious emissions were less than 20dB for the limit.

ANT.TYPE : 30-300MHz Biconical, 300-1000MHz Logperiodic, 1000MHz- Horn

DATA OF RADIATION TEST

A-Pex International Co., Ltd.  
 No.2 SEMI ANECHOIC CHAMBER  
 Report No. : 23AE0021-H0

Applicant : SEIKO EPSON CORPORATION  
 Kind of Equipment : Bluetooth Unit  
 Model No. : EU-62  
 Serial No. : 00110  
 Power : DC 5V (AC230V/60Hz)  
 Mode : Tx (2480MHz)  
 Remarks :  
 Date : 9/19/2002  
 Test Distance : 3 m  
 Temperature : 28 °C  
 Humidity : 50 %  
 Regulation : FCC § 15. 247 (C)

*Y. Iwasa*  
 Engineer : Yoshiaki Iwasa

No.	FREQ. [MHz]	ANT TYPE	READING		ANT FACTOR [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
			HOR [dB μV]	VER [dB μV]					HOR [dB μV/m]	VER [dB μV/m]	HOR [dB]	VER [dB]		
1.	88.47	BB	25.5	35.2	8.2	27.0	1.1	5.8	13.6	23.3	43.5	29.9	20.2	
2.	192.00	BB	35.0	26.7	17.1	26.1	1.6	5.8	33.4	25.1	43.5	10.1	18.4	
3.	288.00	BB	33.5	30.5	19.3	26.2	1.9	5.7	34.2	31.2	46.0	11.8	14.8	
4.	432.00	BB	35.0	31.0	17.7	27.2	2.5	5.8	33.8	29.8	46.0	12.2	16.2	
5.	528.00	BB	31.1	32.7	18.7	27.6	2.8	5.8	30.8	32.4	46.0	15.2	13.6	
6.	960.00	BB	31.1	27.6	22.8	27.0	4.0	5.7	36.6	33.1	46.0	9.4	12.9	

CALCULATION: READING[dB μV] + ANT. FACTOR[dB/m] + CABLE LOSS[dB] - AMP. GAIN[dB] + ATTEN[dB].

All other spurious emissions were less than 20dB for the limit.

ANT. TYPE : 30-300MHz Biconical, 300-1000MHz Logperiodic, 1000MHz- Horn



# DATA OF SPURIOUS EMISSIONS(1GHz to 26GHz)

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.1 SEMI ANECHOIC CHAMBER

COMPANY : SEIKO EPSON CORPORATION  
 EQUIPMENT : Bluetooth Unit  
 MODEL : EU-62  
 S/N : 00110  
 FCC ID : BKMFBUE-62  
 POWER : DC 5V (AC230V / 60Hz)  
 MODE : Tx (2402MHz)

REPORT NO : 23AE0021-HO  
 REGULATION : FCC Part 15 Subpart C 15.247(c)  
 TEST DISTANCE : 3 and 1 m  
 DATE : 2002/9/18  
 TEMPERATURE : 26°C  
 HUMIDITY : 61%

*Y. Iwasa*  
 ENGINEER : Yoshiaki Iwasa

## PK DETECT

No.	FREQ [MHz]	T/R READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]			
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass.</b>												
0	1200.0	51.0	55.0	25.1	37.3	3.3	0.0	42.1	46.1	74.0	31.9	27.9
1	4804.0	43.0	43.0	31.1	36.4	9.8	0.3	47.8	47.8	74.0	26.2	26.2
2	7206.0	43.0	43.0	35.3	36.5	9.1	0.0	50.9	50.9	74.0	23.1	23.1
3	9608.0	43.0	44.0	38.0	37.0	10.7	0.0	54.7	55.7	74.0	19.3	18.3
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass - Dfac)</b>												
4	12010.0	44.0	44.0	38.9	35.9	12.2	0.0	49.7	49.7	74.0	24.3	24.3
5	14412.0	43.0	43.0	40.6	35.8	13.3	0.0	51.6	51.6	74.0	22.4	22.4
6	16814.0	43.0	43.0	39.3	37.2	13.5	0.0	49.1	49.1	74.0	24.9	24.9
7	19216.0	43.0	43.0	40.9	35.8	15.0	0.0	53.6	53.6	74.0	20.4	20.4
8	21618.0	44.0	44.0	40.3	37.0	17.5	0.0	55.3	55.3	74.0	18.7	18.7
9	24020.0	43.0	44.0	39.8	35.5	16.9	0.0	54.7	55.7	74.0	19.3	18.3

## AV DETECT

No.	FREQ [MHz]	T/R READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]			
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass.</b>												
0	1200.0	37.2	40.5	25.1	37.3	3.3	0.0	28.3	31.6	54.0	25.7	22.4
1	4804.0	30.2	30.9	31.1	36.4	9.8	0.3	35.0	35.7	54.0	19.0	18.3
2	7206.0	30.3	30.3	35.3	36.5	9.1	0.0	38.2	38.2	54.0	15.8	15.8
3	9608.0	30.7	31.7	38.0	37.0	10.7	0.0	42.4	43.4	54.0	11.6	10.6
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass - Dfac)</b>												
4	12010.0	30.9	30.9	38.9	35.9	12.2	0.0	36.6	36.6	54.0	17.4	17.4
5	14412.0	30.0	30.1	40.6	35.8	13.3	0.0	38.6	38.7	54.0	15.4	15.3
6	16814.0	30.1	30.1	39.3	37.2	13.5	0.0	36.2	36.2	54.0	17.8	17.8
7	19216.0	30.1	29.9	40.9	35.8	15.0	0.0	40.7	40.5	54.0	13.3	13.5
8	21618.0	31.0	31.0	40.3	37.0	17.5	0.0	42.3	42.3	54.0	11.7	11.7
9	24020.0	30.8	31.0	39.8	35.5	16.9	0.0	42.5	42.7	54.0	11.5	11.3

Test Distance 1.0m : Distance Factor(Dfac) =  $20\log(3/1.0) =$

9.5 dB

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

# DATA OF SPURIOUS EMISSIONS(1GHz to 26GHz)

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISON No.1 SEMI ANECHOIC CHAMBER

COMPANY : SEIKO EPSON CORPORATION  
 EQUIPMENT : Bluetooth Unit  
 MODEL : EU-62  
 S/N : 00110  
 FCC ID : BKMFBUEU-62  
 POWER : DC 5V (AC230V / 60Hz)  
 MODE : Tx (2441MHz)

REPORT NO : 23AE0021-HO  
 REGULATION : FCC Part 15 Subpart C 15.247(c)  
 TEST DISTANCE : 3 and 1 m  
 DATE : 2002/9/18  
 TEMPERATURE : 26°C  
 HUMIDITY : 61%

*f. iwasa*

ENGINEER : Yoshiaki Iwasa

## PK DETECT

No.	FREQ [MHz]	T/R READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]			
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass.</b>												
0	1220.0	51.0	52.0	25.1	37.3	3.4	0.0	42.2	43.2	74.0	31.8	30.8
1	4882.0	42.0	43.0	31.3	36.4	9.9	0.4	47.2	48.2	74.0	26.9	25.9
2	7323.0	43.0	43.0	35.5	36.6	9.1	0.0	51.0	51.0	74.0	23.0	23.0
3	9764.0	43.0	43.0	38.2	37.0	10.9	0.0	55.1	55.1	74.0	18.9	18.9
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass - Dfac)</b>												
4	12205.0	43.0	43.0	38.8	36.0	12.2	0.0	48.5	48.5	74.0	25.5	25.5
5	14646.0	43.0	43.0	40.6	36.1	13.5	0.0	51.5	51.5	74.0	22.5	22.5
6	17087.0	42.0	42.0	39.6	37.0	13.5	0.0	48.6	48.6	74.0	25.4	25.4
7	19528.0	43.0	42.0	40.4	36.1	15.5	0.0	53.3	52.3	74.0	20.7	21.7
8	21969.0	45.0	45.0	40.5	36.7	18.4	0.0	57.7	57.7	74.0	16.3	16.3
9	24410.0	43.0	43.0	40.2	36.4	17.5	0.0	54.8	54.8	74.0	19.2	19.2

## AV DETECT

No.	FREQ [MHz]	T/R READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]			
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass.</b>												
0	1220.0	33.3	33.8	25.1	37.3	3.4	0.0	24.5	25.0	54.0	29.5	29.0
1	4882.0	29.8	30.5	31.3	36.4	9.9	0.4	35.0	35.7	54.0	19.1	18.4
2	7323.0	30.6	30.6	35.5	36.6	9.1	0.0	38.6	38.6	54.0	15.4	15.4
3	9764.0	30.5	30.8	38.2	37.0	11.2	0.0	42.9	43.2	54.0	11.1	10.8
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass - Dfac)</b>												
4	12205.0	30.6	30.6	38.8	36.0	12.2	0.0	36.1	36.1	54.0	17.9	17.9
5	14646.0	30.5	30.5	40.6	36.1	13.5	0.0	39.0	39.0	54.0	15.0	15.0
6	17087.0	29.6	29.6	39.6	37.0	13.5	0.0	36.2	36.2	54.0	17.8	17.8
7	19528.0	29.8	29.8	40.4	36.1	15.5	0.0	40.1	40.1	54.0	13.9	13.9
8	21969.0	32.1	32.2	40.5	36.7	18.4	0.0	44.8	44.9	54.0	9.2	9.1
9	24410.0	31.0	31.0	40.2	36.4	17.5	0.0	42.8	42.8	54.0	11.2	11.2

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

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

# DATA OF SPURIOUS EMISSIONS(1GHz to 26GHz)

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISON No.1 SEMI ANECHOIC CHAMBER

COMPANY : SEIKO EPSON CORPORATION

REPORT NO : 23AE0021-HO

EQUIPMENT : Bluetooth Unit

REGULATION : FCC Part 15 Subpart C 15.247(c)

MODEL : EU-62

TEST DISTANCE : 3 and 1 m

S/N : 00110

DATE : 2002/9/18

FCC ID : BKMFBUEU-62

TEMPERATURE : 26°C

POWER : DC 5V (AC230V / 60Hz)

HUMIDITY : 61%

MODE : Tx (2480MHz)

*J. Iwasa*  
ENGINEER : Yoshiaki Iwasa

## PK DETECT

No.	FREQ [MHz]	T/R READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]			
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass.</b>												
0	1240.0	54.0	52.0	25.1	37.3	3.4	0.0	45.3	43.3	74.0	28.7	30.7
1	4960.0	43.0	43.0	31.4	36.4	9.9	0.5	48.4	47.9	74.0	25.6	26.1
2	7440.0	43.0	43.0	35.6	36.7	9.1	0.0	51.0	51.0	74.0	23.0	23.0
3	9920.0	43.0	43.0	38.3	37.1	10.9	0.0	55.1	55.1	74.0	18.9	18.9
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass - Dfac)</b>												
4	12400.0	43.0	43.0	38.8	36.0	12.3	0.0	48.6	48.6	74.0	25.4	25.4
5	14880.0	43.0	43.0	40.5	36.4	13.7	0.0	51.3	51.3	74.0	22.7	22.7
6	17360.0	43.0	43.0	40.4	36.6	13.8	0.0	51.1	51.1	74.0	22.9	22.9
7	19840.0	43.0	43.0	40.7	36.3	16.0	0.0	53.9	53.9	74.0	20.1	20.1
8	22320.0	45.0	45.0	40.7	36.7	17.8	0.0	57.3	57.3	74.0	16.7	16.7
9	24800.0	44.0	44.0	40.2	36.5	18.1	0.0	56.3	56.3	74.0	17.7	17.7

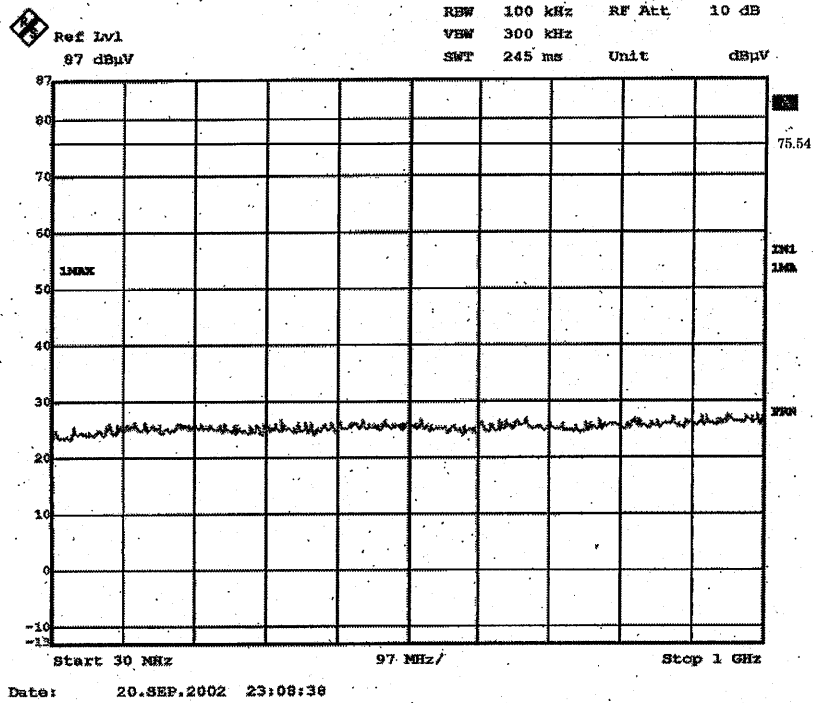
## AV DETECT

No.	FREQ [MHz]	T/R READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Band-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR [dBuV/m]	VER [dBuV/m]					HOR [dB]	VER [dB]			
<b>Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass.</b>												
0	1240.0	34.8	34.2	25.1	37.3	3.4	0.0	26.1	25.5	54.0	27.9	28.5
1	4960.0	30.2	30.6	31.4	36.4	9.9	0.5	35.6	36.0	54.0	18.4	18.0
2	7440.0	30.7	30.7	35.6	36.7	9.1	0.0	38.7	38.7	54.0	15.3	15.3
3	9920.0	30.6	30.6	38.3	37.1	10.9	0.0	42.7	42.7	54.0	11.3	11.3
<b>Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + Band Pass - Dfac)</b>												
4	12400.0	31.1	31.1	38.8	36.0	12.3	0.0	36.7	36.7	54.0	17.3	17.3
5	14880.0	30.5	30.5	40.5	36.4	13.7	0.0	38.8	38.8	54.0	15.2	15.2
6	17360.0	29.9	29.9	40.4	36.6	13.8	0.0	38.0	38.0	54.0	16.0	16.0
7	19840.0	29.9	29.8	40.7	36.3	16.0	0.0	40.8	40.7	54.0	13.2	13.3
8	22320.0	32.3	32.4	40.7	36.7	17.8	0.0	44.6	44.7	54.0	9.4	9.3
9	24800.0	31.3	31.3	40.2	36.5	18.1	0.0	43.6	43.6	54.0	10.4	10.4

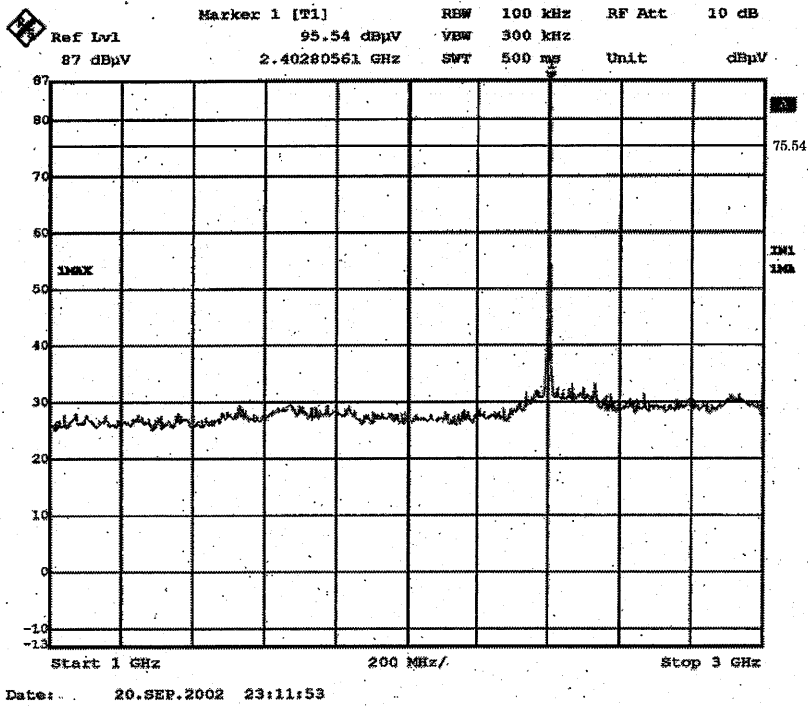
Test Distance 1.0m : Distance Factor(Dfac) =  $20\log(3/1.0) = 9.5$  dB

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

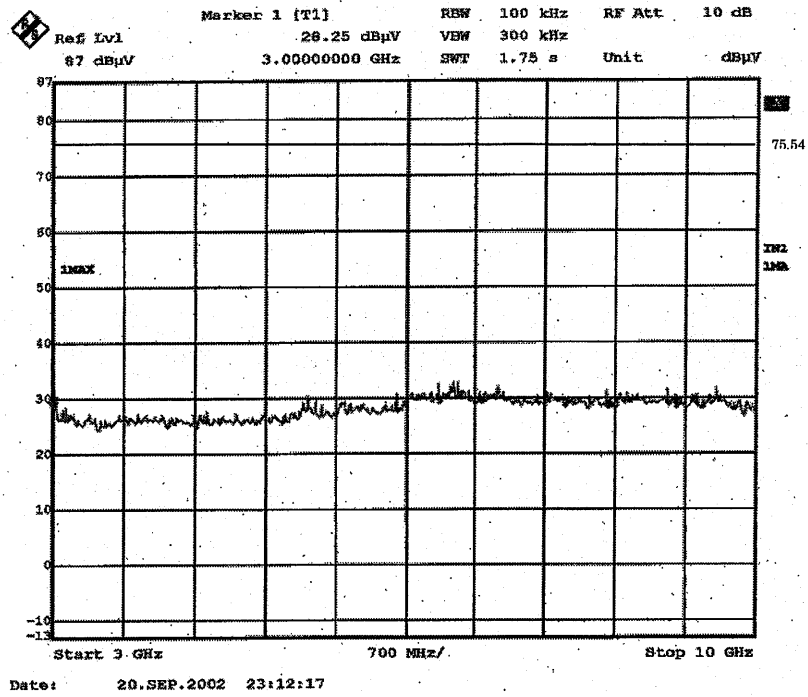
**Spurious Emission(Conducted) : Tx(2402MHz)**



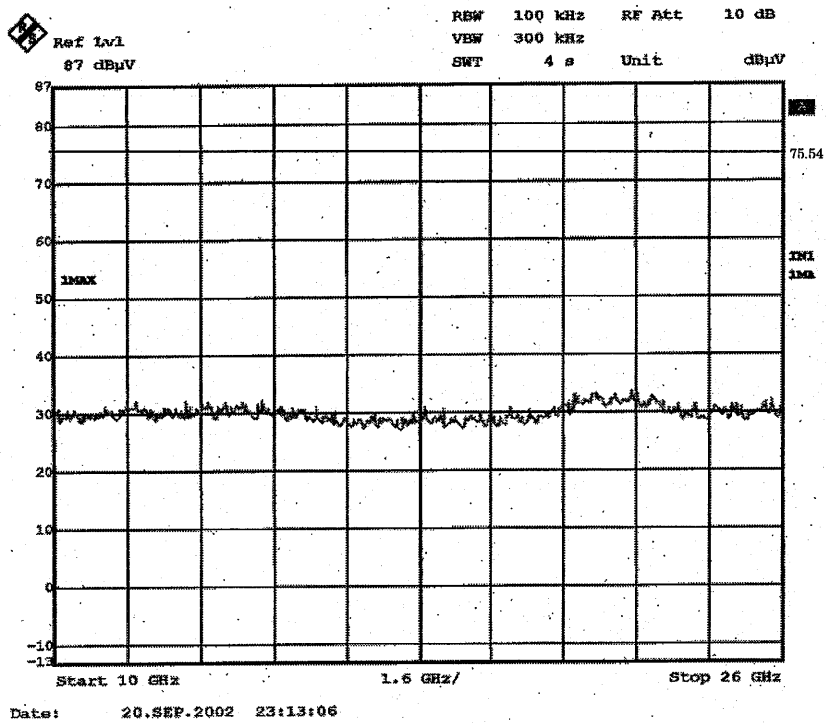
**Spurious Emission(Conducted) : Tx(2402MHz)**



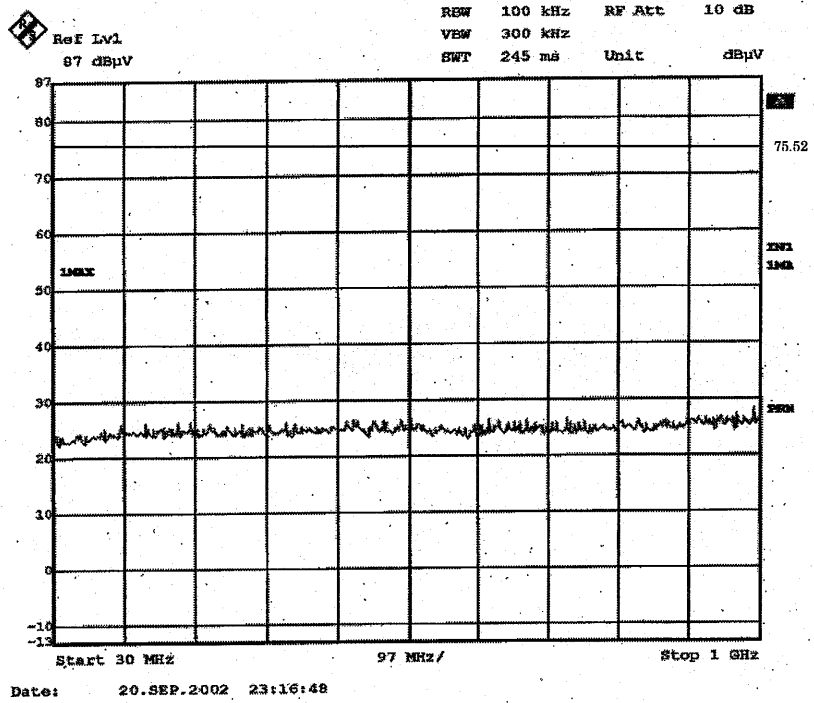
### Spurious Emission(Conducted) : Tx(2402MHz)



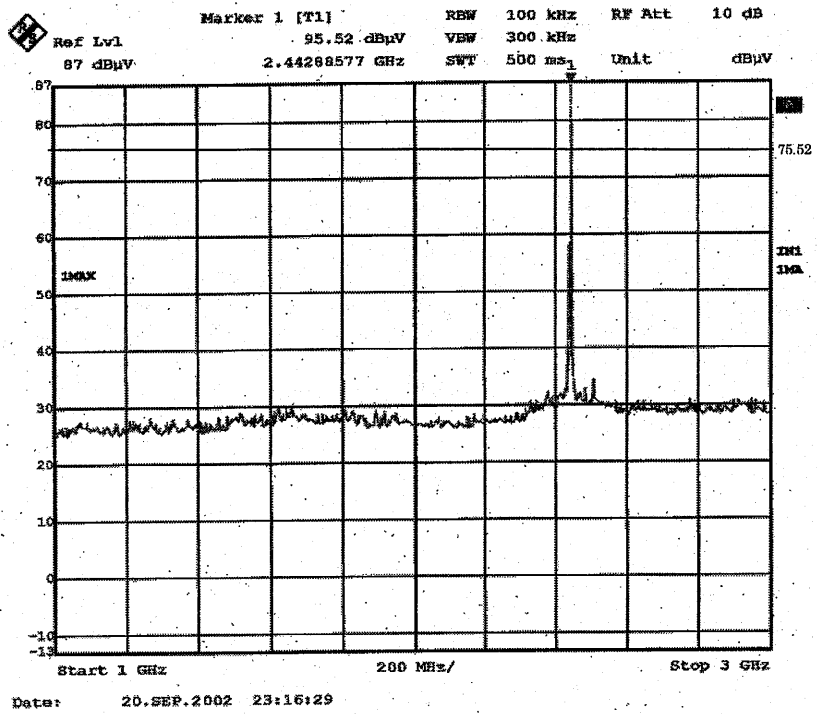
### Spurious Emission(Conducted) : Tx(2402MHz)



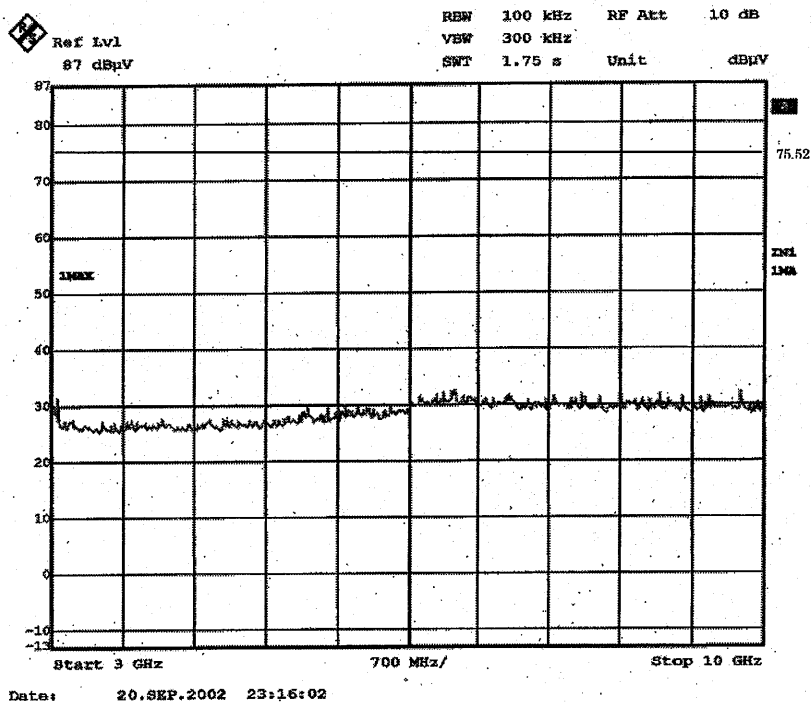
### Spurious Emission(Conducted) : Tx(2441MHz)



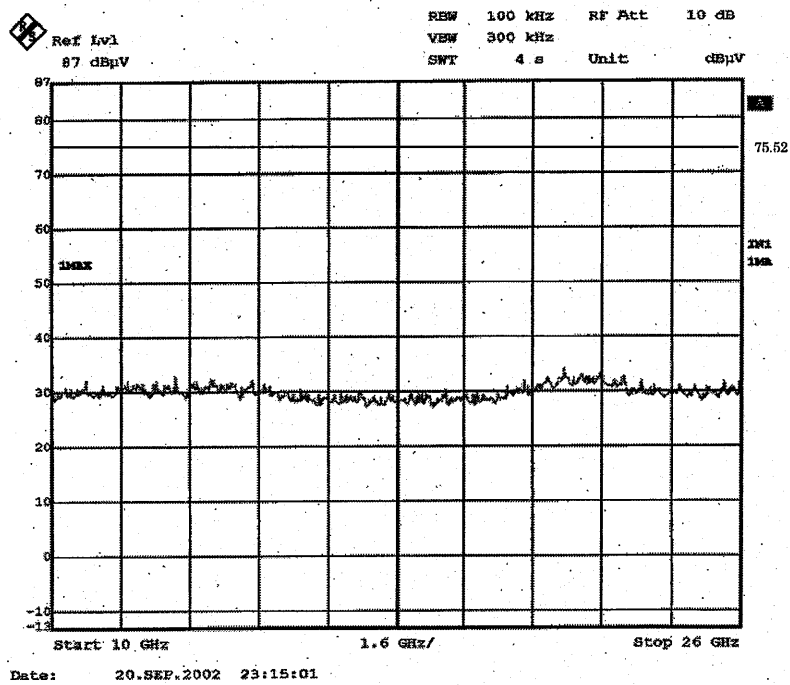
### Spurious Emission(Conducted) : Tx(2441MHz)



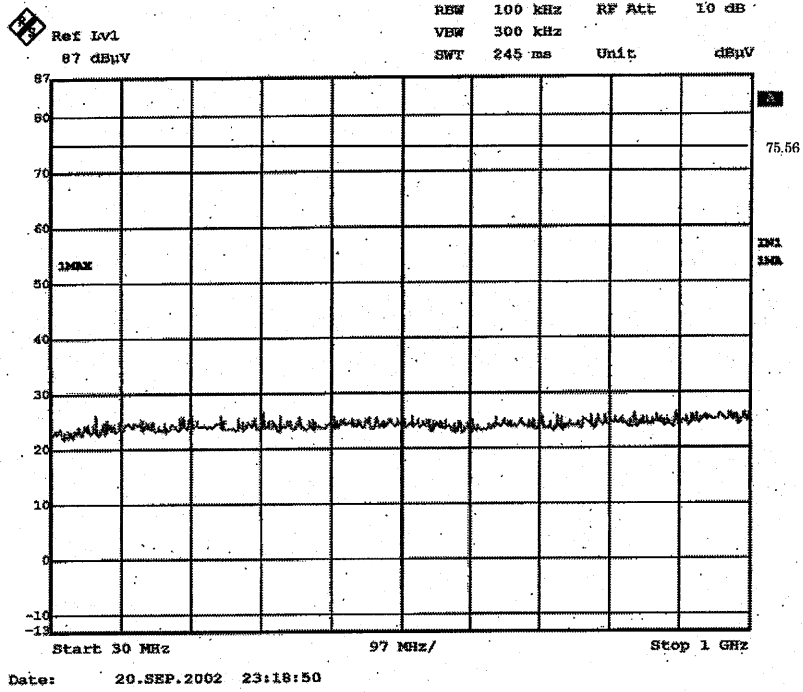
### Spurious Emission(Conducted) : Tx(2441MHz)



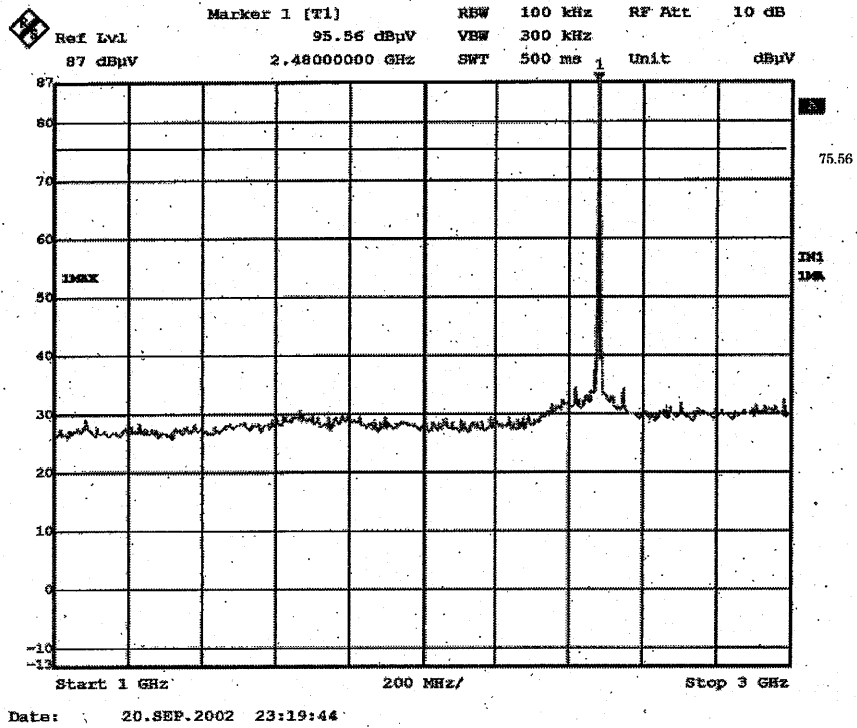
### Spurious Emission(Conducted) : Tx(2441MHz)



### Spurious Emission(Conducted) : Tx(2480MHz)

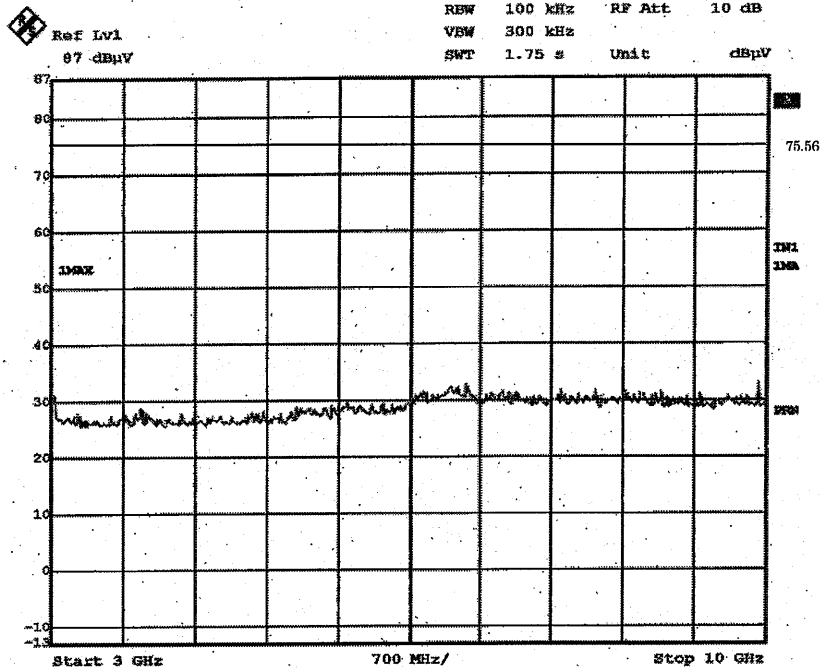


### Spurious Emission(Conducted) : Tx(2480MHz)



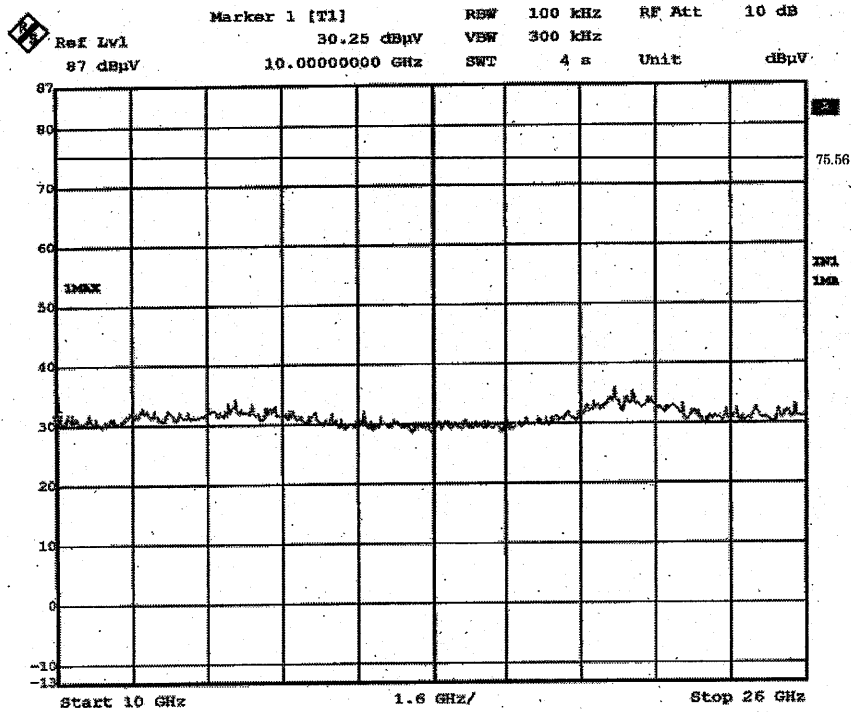


### Spurious Emission(Conducted) : Tx(2480MHz)



Date: 20.SEP.2002 23:19:59

### Spurious Emission(Conducted) : Tx(2480MHz)



Date: 20.SEP.2002 23:21:10

### **APPENDIX 3: Test instruments**

#### **EMI test equipment**

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-01	Anechoic Chamber	TDK	Semi Anechoic Chamber 10m	RE	2001/12/29 * 12
MAEC-02	Anechoic Camber	TDK	Semi Anechoic Chamber 3m	RE/CE	2002/04/12 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	MCC-12-01(8D-2W-15m) MCC-12-02(5D-2W-0.7m) MCC-12-05(RF SW) MCC-12-03(5D-2W-0.8m) MCC-12-06(RF SW) MCC-12-04(5D-2W-1m)	RE	2002/05/09 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	MCC-12-01(8D-2W-15m) MCC-12-02(5D-2W-0.7m) MCC-12-05(RF SW) MCC-12-03(5D-2W-0.8m) MCC-12-06(RF SW) MCC-12-04(5D-2W-1m)	CE	2002/05/09 * 12
MLS-06	LISN	Schwarzbeck	NSLK8127	CE(EUT)	2002/03/19 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	RE/CE	2001/10/05 * 12
MSA-02	Spectrum Analyzer	Advantest	R3265A	RE/CE	2001/10/11 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2001/12/27 * 12
MTR-01	EMI TEST RECEIVER	Rohde & Schwarz	ESI40	RE	2001/11/13 * 12
MCC-05	Microwave Cable	Storm	421-011	RE	2002/01/14 * 12
MCC-06	Microwave Cable	Storm	421-011	RE	2002/01/14 * 12
MPA-01	Pre Amplifier	Agilent	8449B	RE	2002/02/09 * 12
MPA-04	Pre Amplifier	Agilent	8747D	RE	2002/03/13 * 12
MBA-03	Biconical Antenna	Schwarzbeck	BBA9106	RE	2002/05/02 * 12
MHA-01	Horn Antenna	EMCO	3160-09	RE	2002/01/13 * 12
MHA-05	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2002/01/13 * 12
MBF-01	SHF Bandpass Filter	M-City	5GHz BPF	RE	2002/04/30 * 12
MLA-03	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2002/05/02 * 12
MCC-04	Microwave Cable	Storm	421-011	RE	2002/01/14 * 12
MPA-02	Pre Amplifier	Agilent	87405A	RE	2001/12/27 * 12

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

**Test Item :**

**CE: Conducted emission,**

**RE: Radiated emission,**

**A-Pex International Co., Ltd.**  
**EMC Head Office Division.**  
4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124