

# DATA OF CONDUCTION TEST

A-Pex International Co., Ltd.  
No.2 SEMI ANECHOIC CHAMBER  
Report No. : 23EE0036-H0- I

Applicant : Sony Corporation  
 Kind of Equipment : Personal Entertainment Organizer  
 Model No. : PEG-TG50/U  
 Serial No. : PVT31  
 Power : DC5. 2V (AC120V/60Hz)  
 Mode : Tx (2441MHz)  
 Remarks : FCC ID:AK8PEGTG50 IC Number:409B-PEGTG50  
 Date : 12/26/2002  
 Phase : Single Phase  
 Temperature : 25 °C  
 Humidity : 36 %  
 Regulation : FCC 15.207 (0.15-30MHz)

*S. Hiroka Umeyama*  
 Engineer : Hiroka Umeyama

No.	FREQ. [MHz]	READING (N)		READING (L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dBuV]	AV	QP [dBuV]	AV				QP [dBuV]	AV	QP [dBuV]	AV	QP [dB]	AV
1.	0.1723	46.2	-	45.5	-	0.0	0.1	0.0	46.3	-	64.8	54.8	18.5	-
2.	0.2146	41.9	-	41.8	-	0.0	0.1	0.0	42.0	-	63.0	53.0	21.0	-
3.	0.3047	35.5	-	34.7	-	0.0	0.1	0.0	35.6	-	60.1	50.1	24.5	-
4.	0.5166	26.2	-	25.8	-	0.1	0.1	0.0	26.4	-	56.0	46.0	29.6	-
5.	2.1545	29.0	-	26.9	-	0.1	0.3	0.0	29.4	-	56.0	46.0	26.6	-
6.	5.0024	24.1	-	23.7	-	0.2	0.6	0.0	24.9	-	60.0	50.0	35.1	-
7.	8.2310	21.9	-	22.5	-	0.3	0.7	0.0	23.5	-	60.0	50.0	36.5	-

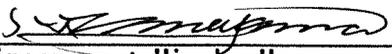
CALCULATION: READING + LISN FACTOR + CABLE LOSS + ATTEN.

Except for the above table : adequate margin data below the limits.  
 LISN:MLS-06

# DATA OF CONDUCTION TEST

A-Pex International Co., Ltd.  
No.2 SEMI ANECHOIC CHAMBER  
Report No. : 23EE0036-H0- 1

Applicant : Sony Corporation  
Kind of Equipment : Personal Entertainment Organizer  
Model No. : PEG-TG50/U  
Serial No. : PVT31  
Power : DC5.2V (AC120V/60Hz)  
Mode : Tx (2441MHz)  
Remarks : FCC ID:AK8PEGTG50 IC Number:409B-PEGTG50  
Date : 12/26/2002  
Phase : Single Phase  
Temperature : 25 °C  
Humidity : 36 %  
Regulation : FCC 15.207 (0.15-30MHz)

  
Engineer : Hiroka Umeyama

Emission Level [dB $\mu$ V]

□ Quasi-Peak

× Average

100

90

80

70

60

50

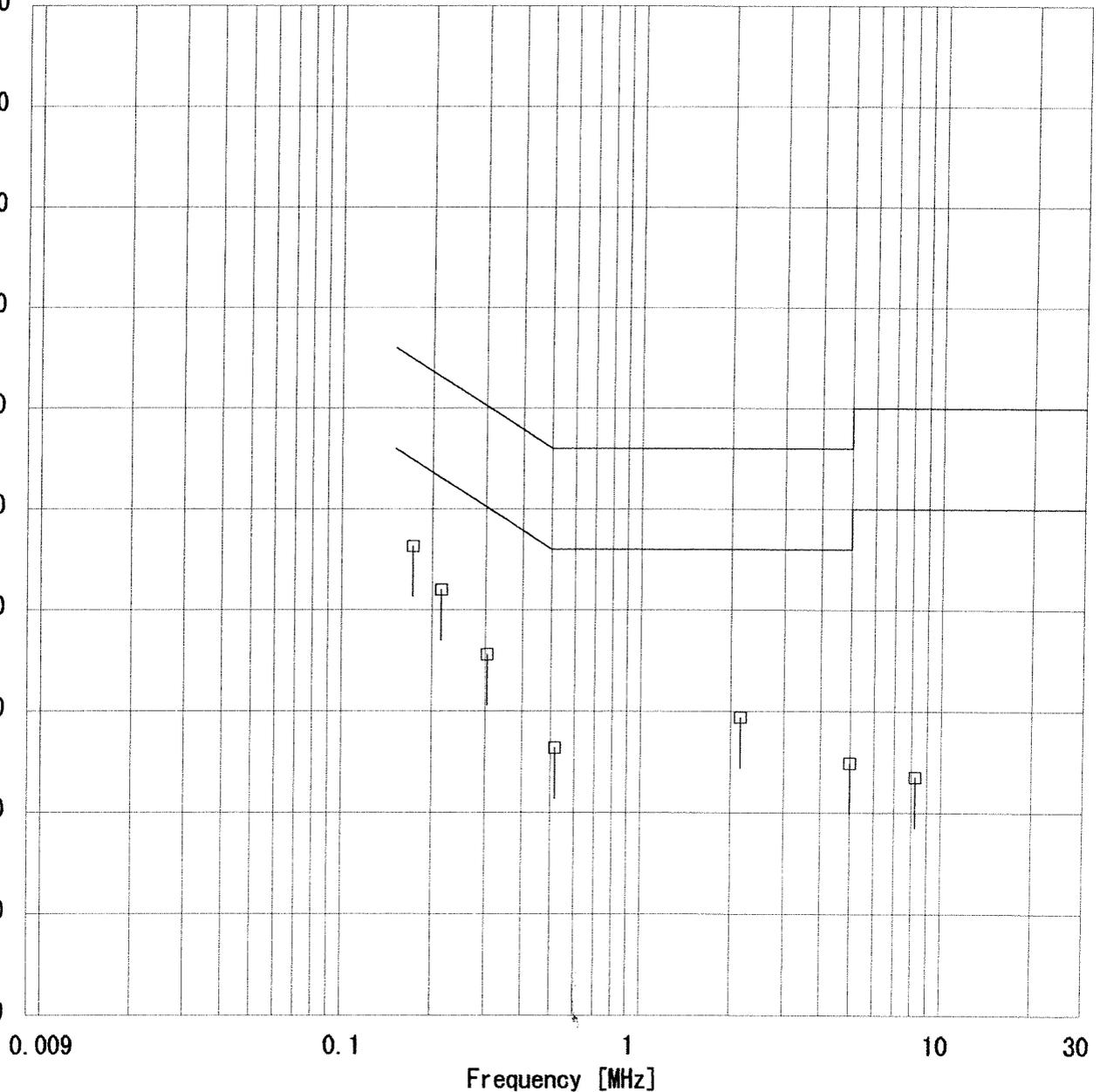
40

30

20

10

0



0.009

0.1

1

10

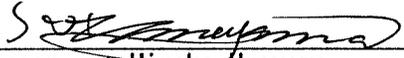
30

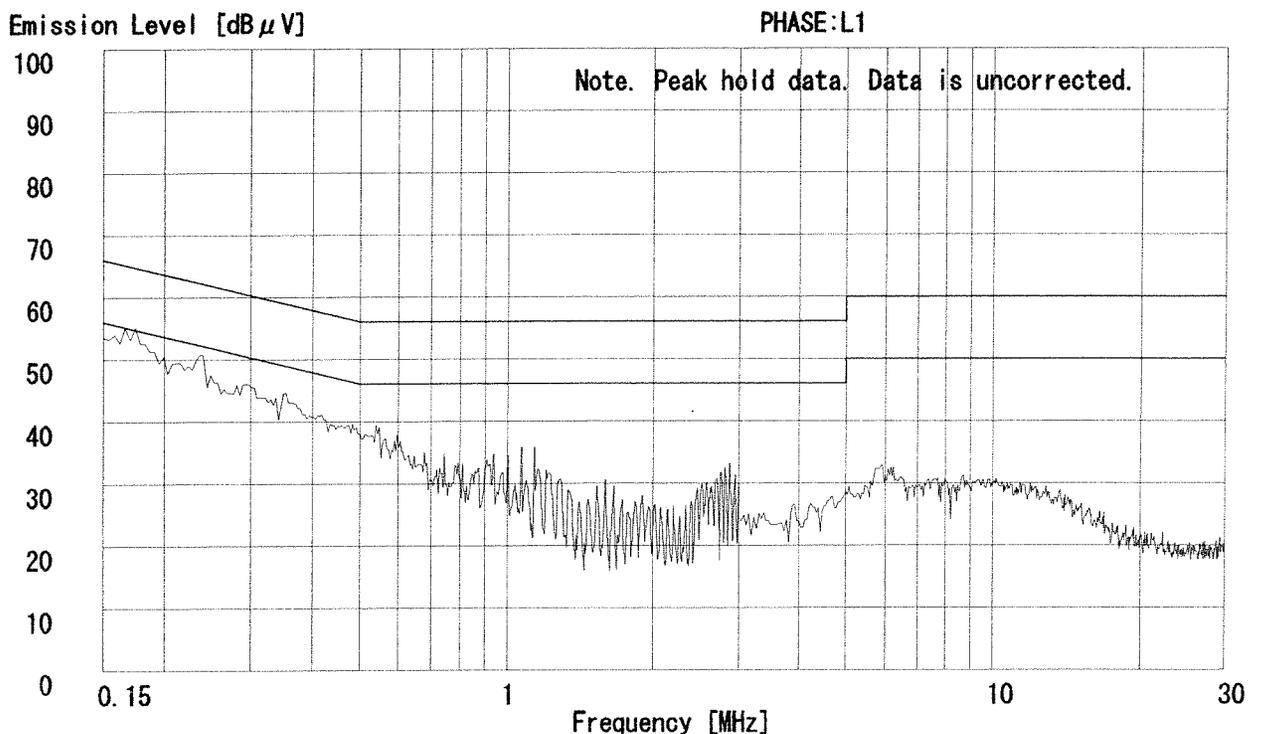
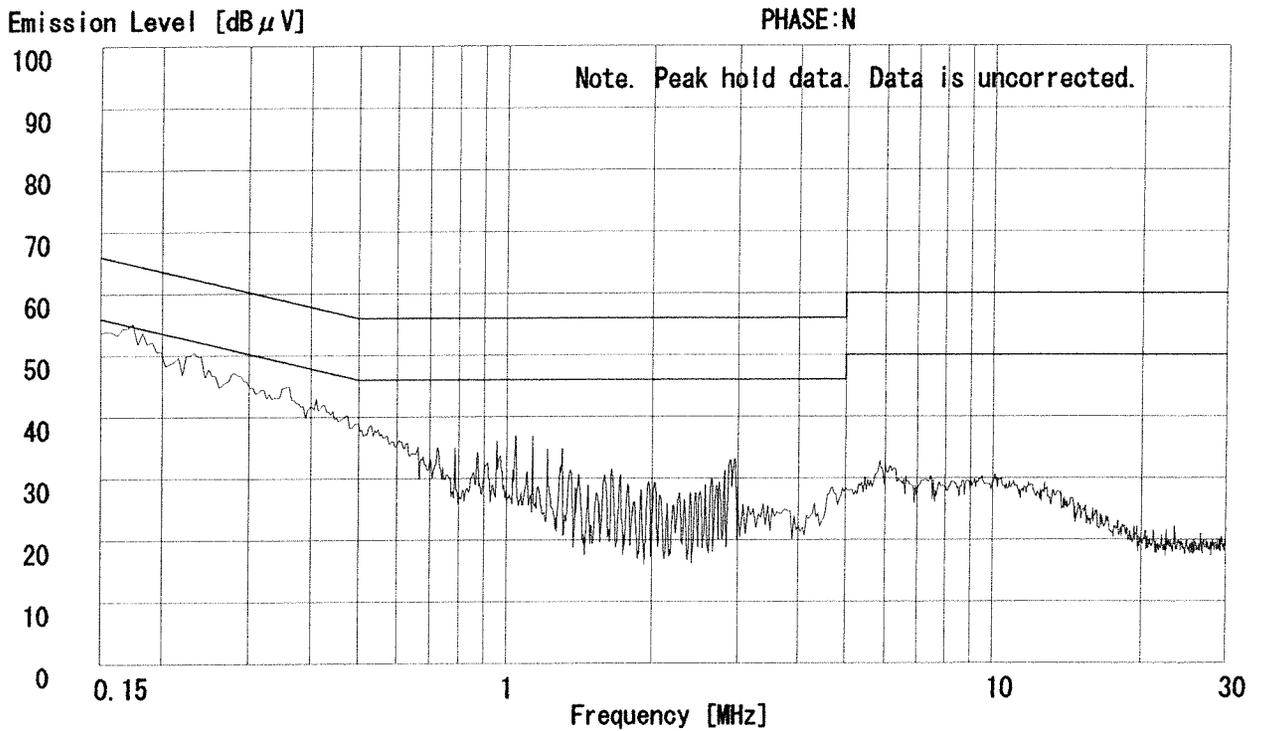
Frequency [MHz]

# DATA OF CONDUCTION TEST CHART

A-Pex International Co., Ltd.  
No.2 SEMI ANECHOIC CHAMBER  
Report No. : 23EE0036-H0- 1

Applicant : Sony Corporation  
Kind of Equipment : Personal Entertainment Organizer  
Model No. : PEG-TG50/U  
Serial No. : PVT31  
Power : DC5. 2V (AC120V/60Hz)  
Mode : Tx (2402MHz)  
Remarks : FCC ID:AK8PEGTG50 IC Number:409B-PEGTG50  
Date : 12/26/2002  
Phase : Single Phase  
Temperature : 25 °C  
Humidity : 36 %  
Regulation 1 : FCC 15. 207 (0.15-30MHz)  
Regulation 2 : None

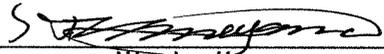
  
Engineer : Hiroka Umeyama

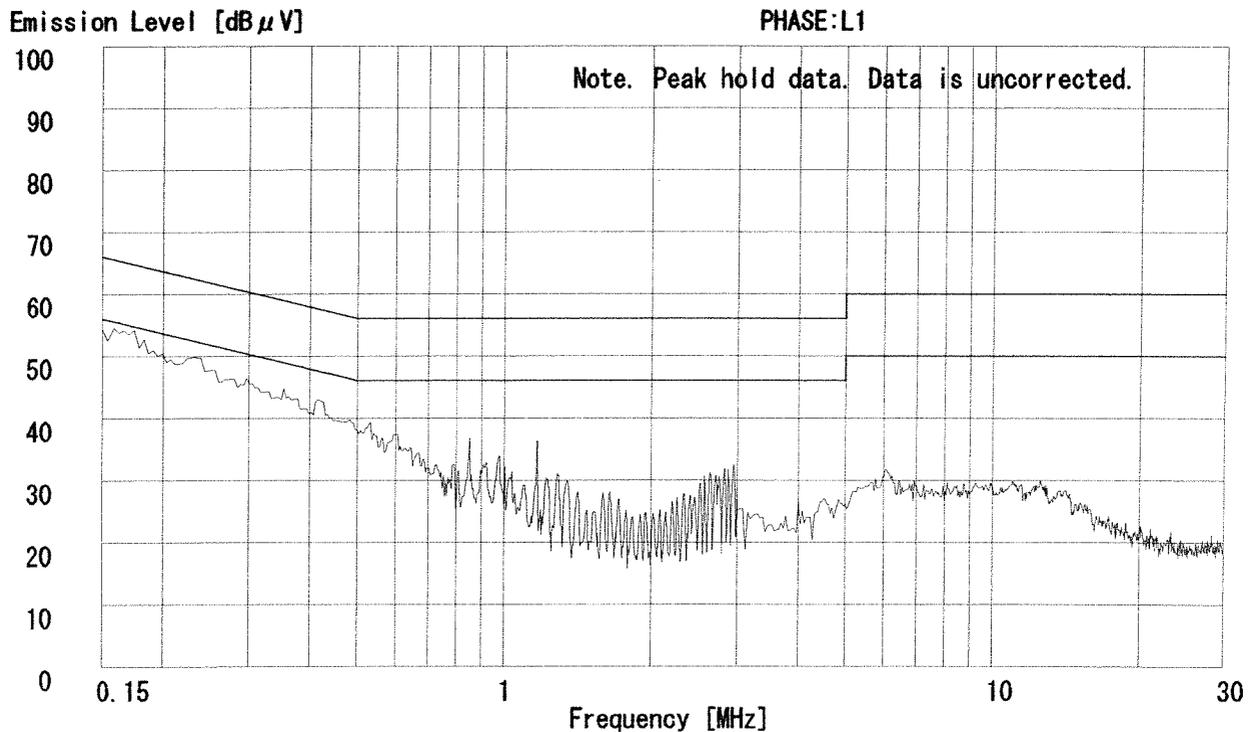
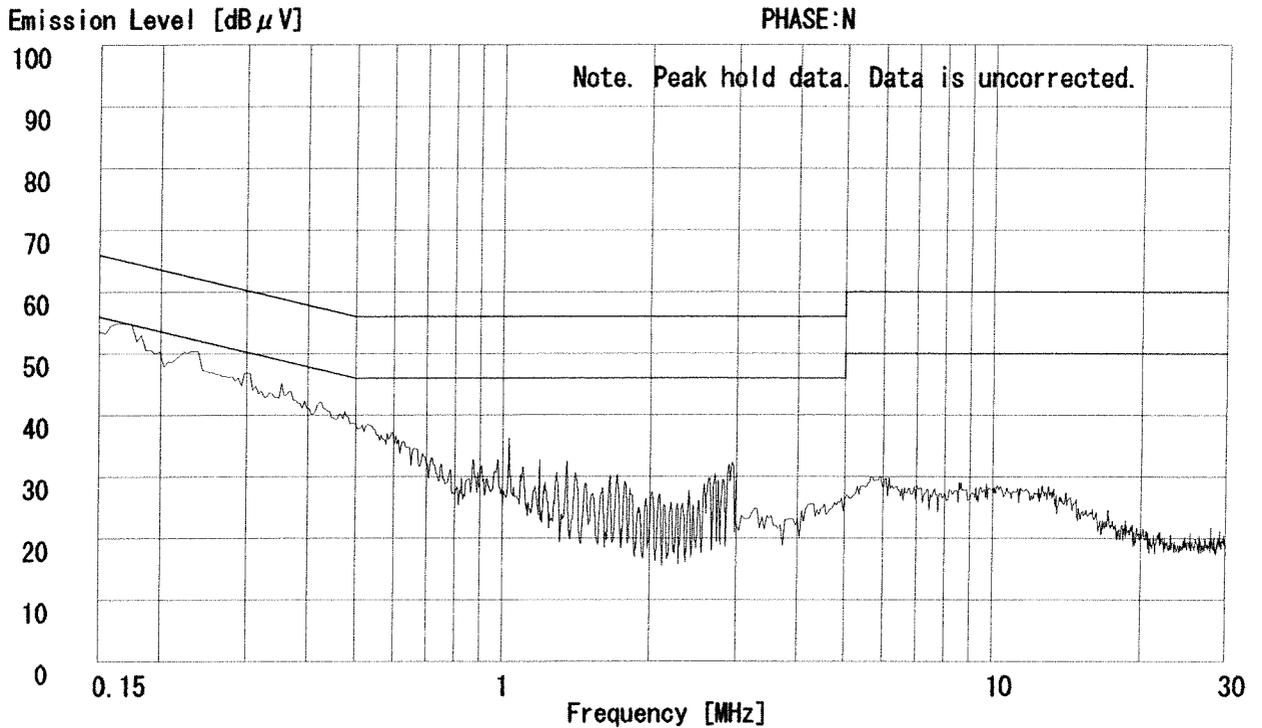


# DATA OF CONDUCTION TEST CHART

A-Pex International Co., Ltd.  
No.2 SEMI ANECHOIC CHAMBER  
Report No. : 23EE0036-H0-1

Applicant : Sony Corporation  
Kind of Equipment : Personal Entertainment Organizer  
Model No. : PEG-TG50/U  
Serial No. : PVT31  
Power : DC5.2V (AC120V/60Hz)  
Mode : Tx (2441MHz)  
Remarks : FCC ID:AK8PEGTG50 IC Number:409B-PEGTG50  
Date : 12/26/2002  
Phase : Single Phase  
Temperature : 25 °C  
Humidity : 36 %  
Regulation 1 : FCC 15.207 (0.15-30MHz)  
Regulation 2 : None

  
Engineer : Hiroka Uneyama

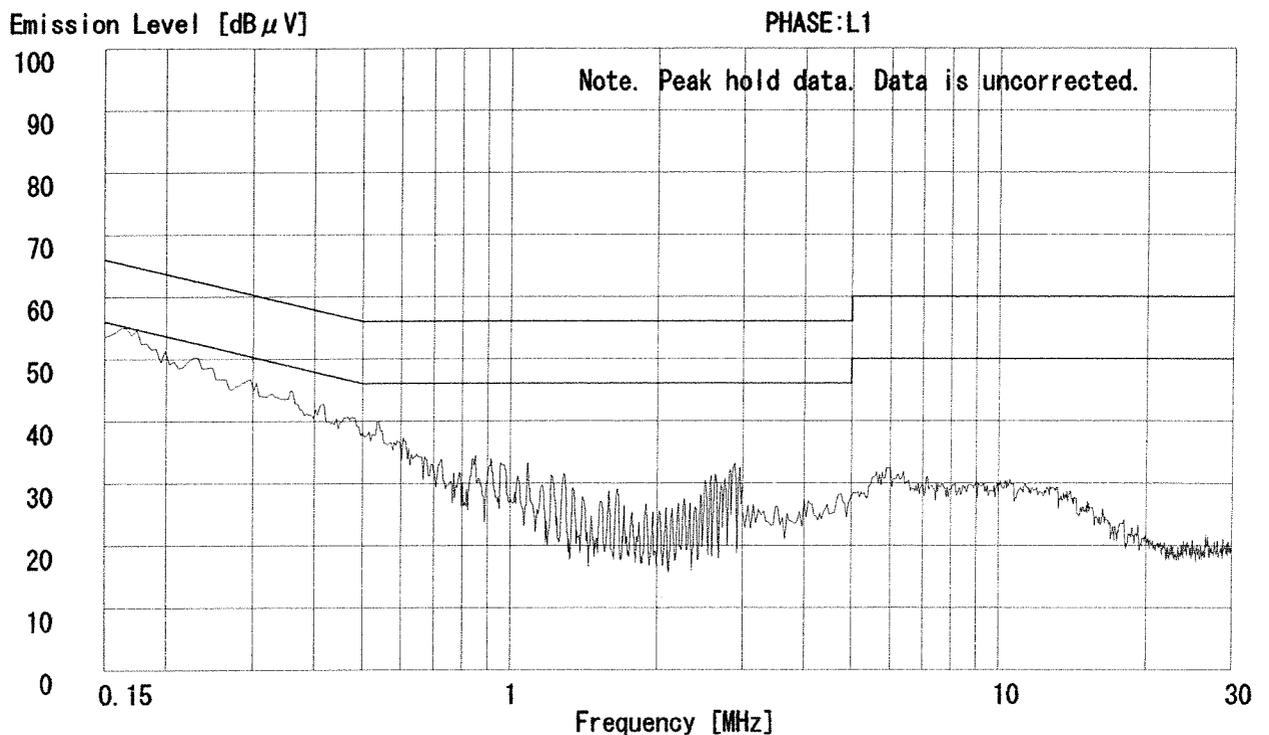
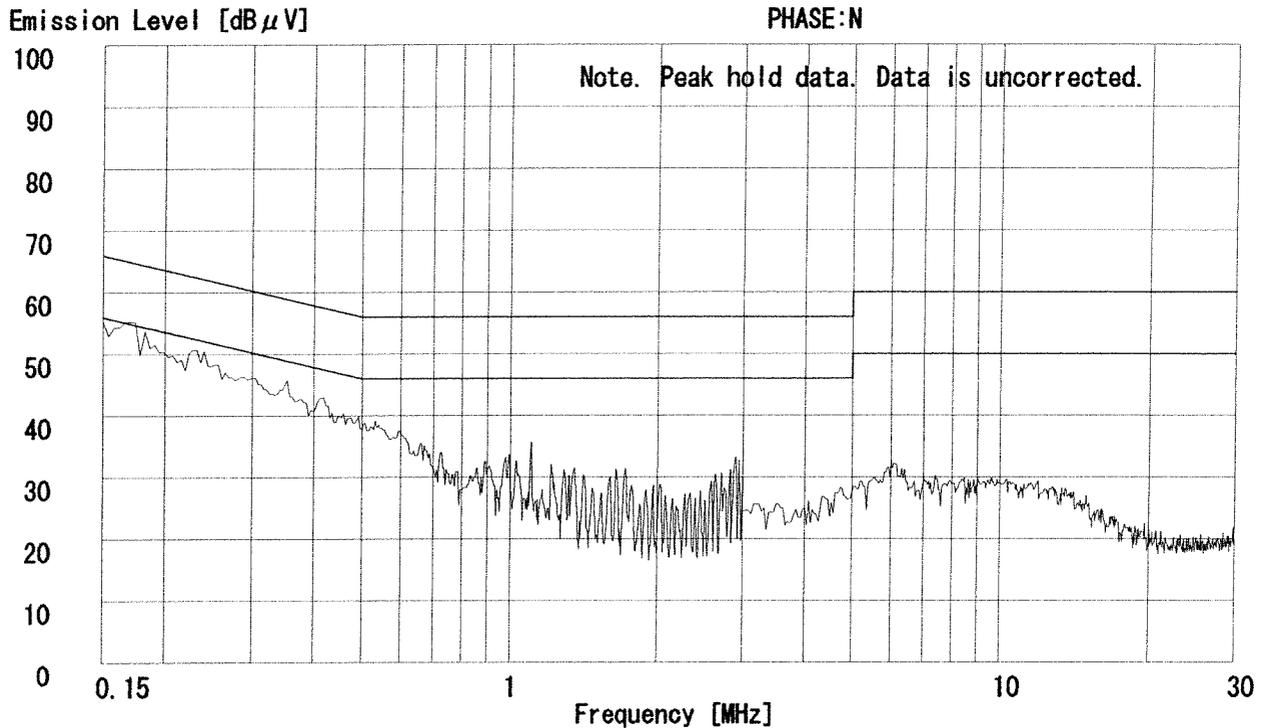


# DATA OF CONDUCTION TEST CHART

A-Pex International Co., Ltd.  
No.2 SEMI ANECHOIC CHAMBER  
Report No. : 23EE0036-H0- 1

Applicant : Sony Corporation  
Kind of Equipment : Personal Entertainment Organizer  
Model No. : PEG-TG50/U  
Serial No. : PVT31  
Power : DC5.2V (AC120V/60Hz)  
Mode : Tx (2480MHz)  
Remarks : FCC ID:AK8PEGTG50 IC Number:409B-PEGTG50  
Date : 12/26/2002  
Phase : Single Phase  
Temperature : 25 °C  
Humidity : 36 %  
Regulation 1 : FCC 15.207 (0.15-30MHz)  
Regulation 2 : None

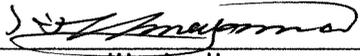
*S. Umeyama*  
Engineer : Hiroka Umeyama

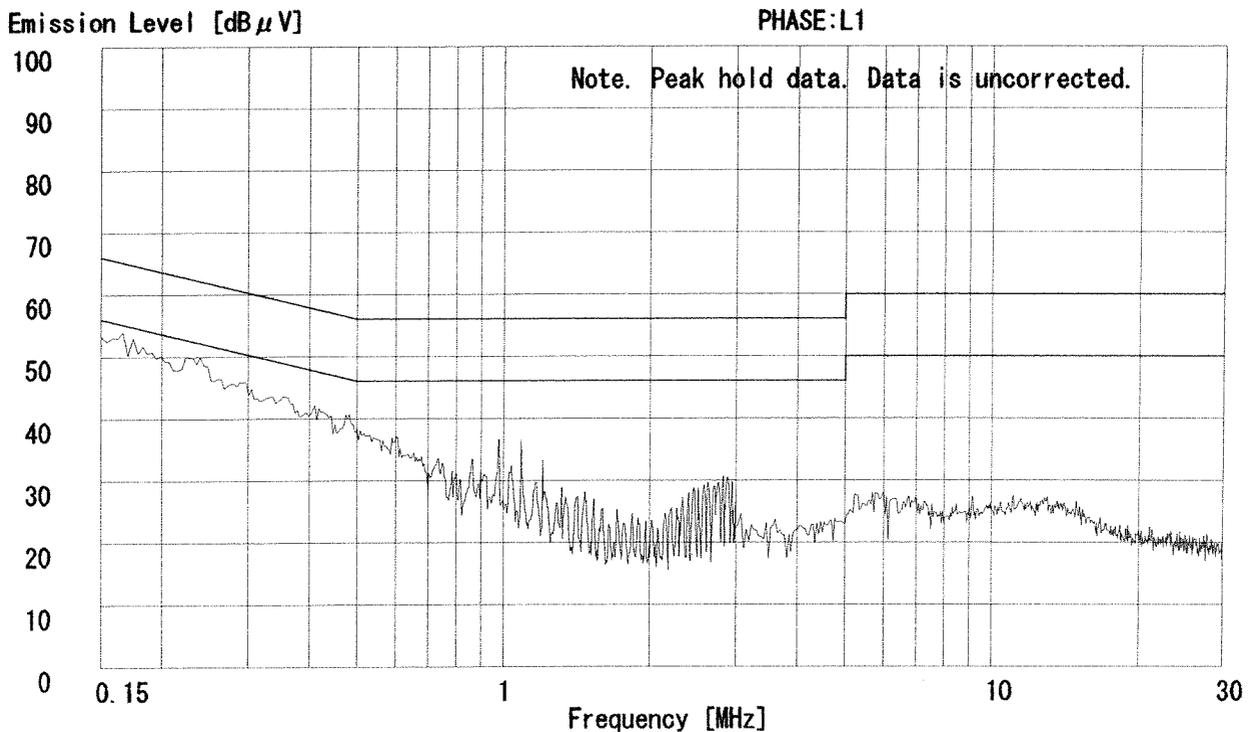
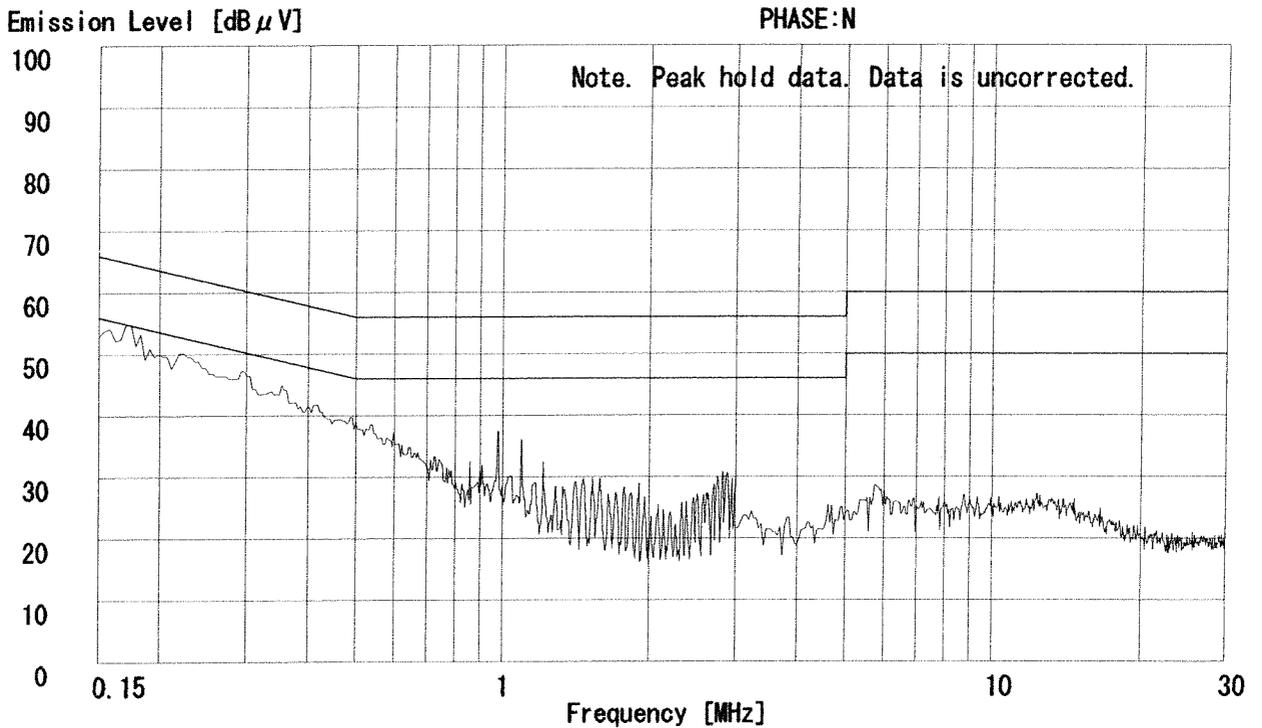


# DATA OF CONDUCTION TEST CHART

A-Pex International Co., Ltd.  
No.2 SEMI ANECHOIC CHAMBER  
Report No. : 23EE0036-H0 - 1

Applicant : Sony Corporation  
Kind of Equipment : Personal Entertainment Organizer  
Model No. : PEG-TG50/U  
Serial No. : PVT31  
Power : DC5.2V (AC120V/60Hz)  
Mode : Standby  
Remarks : FCC ID:AK8PEGTG50 IC Number:409B-PEGTG50  
Date : 12/26/2002  
Phase : Single Phase  
Temperature : 25 °C  
Humidity : 36 %  
Regulation 1 : FCC 15.207 (0.15-30MHz)  
Regulation 2 : None

  
Engineer : Hiroka Umeyama



# DATA OF CARRIER FREQUENCY SEPARATION

A-Pex International Co., Ltd.  
EMC HEAD OFFICE DIVISION No.2 SEMI ANECHOIC CHAMBER

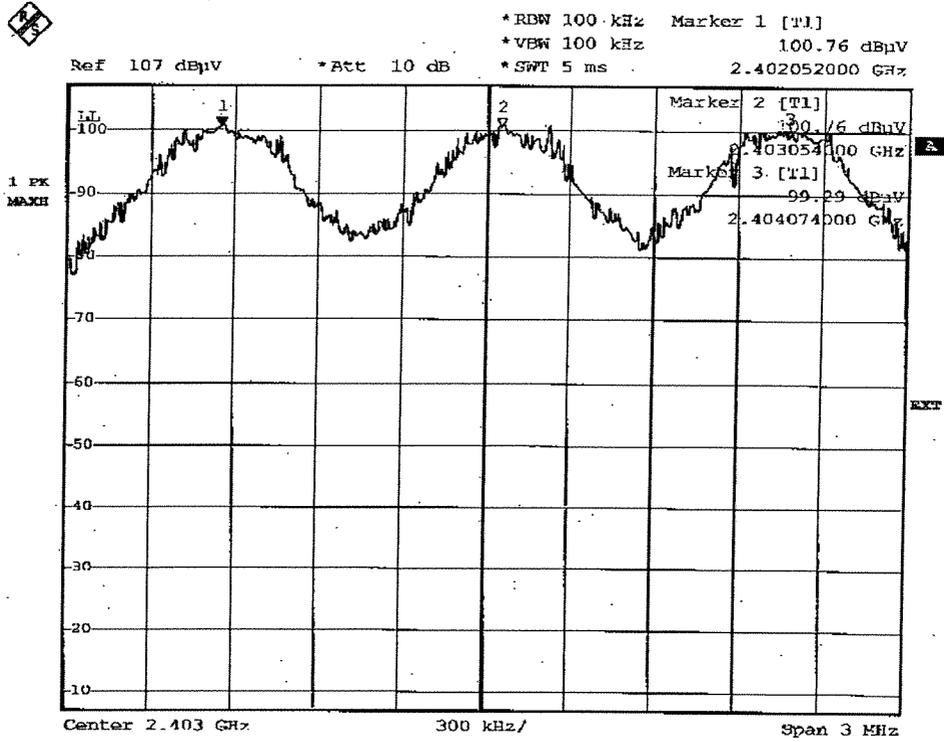
COMPANY	: Sony Corporation	REPORT NO	: 23EE0036-HO - 1
EQUIPMENT	: Personal Entertainment Organizer	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)
MODEL	: PEG-TG50/U	TEST DISTANCE	: -
S/N	: PVT28	DATE	: 12/27/2002
FCC ID	: AK8PEGTG50	TEMPERATURE	: 19°C
IC Number	: 409B-PEGTG50	HUMIDITY	: 31%
POWER	: DC5.2V(AC120V/60Hz)		
MODE	: Tx (Hopping on) /Inquiry		

  
 Engineer: Hiroka Umeyama

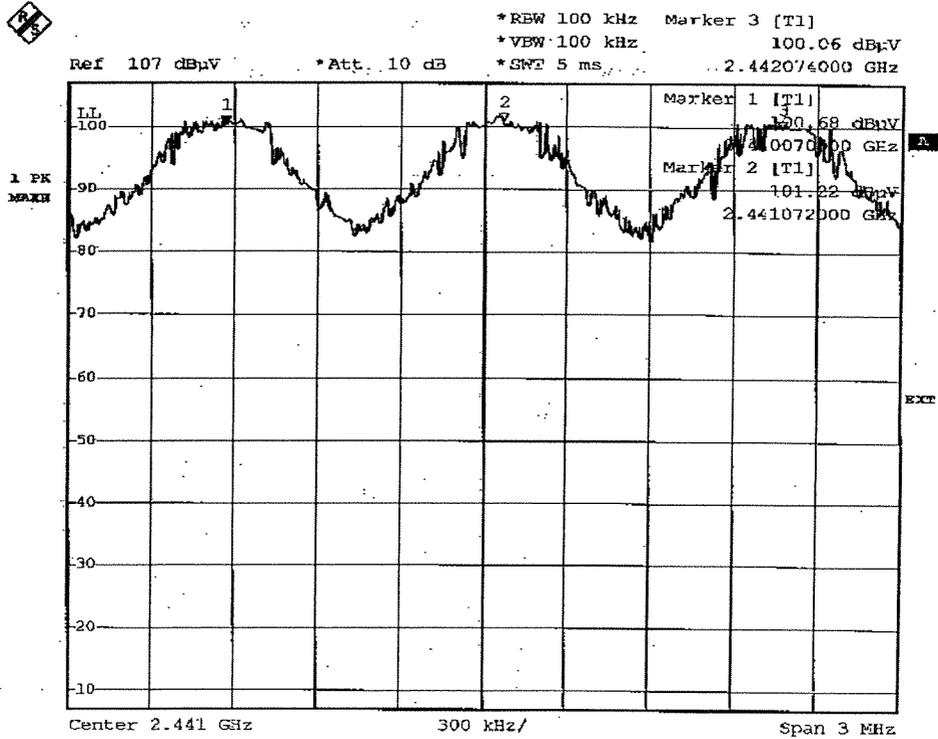
**PK DETECT(S/A :span 3MHz, RBW 100kHz, VBW 100kHz, sweep time AUTO )**

CH	FREQ [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.000	>20dB Bandwidth and 25[kHz]
Mid	2441.0	1.000	>20dB Bandwidth and 25[kHz]
High	2480.0	1.000	>20dB Bandwidth and 25[kHz]
Inquiry	2441.0	1.000	>20dB Bandwidth and 25[kHz]

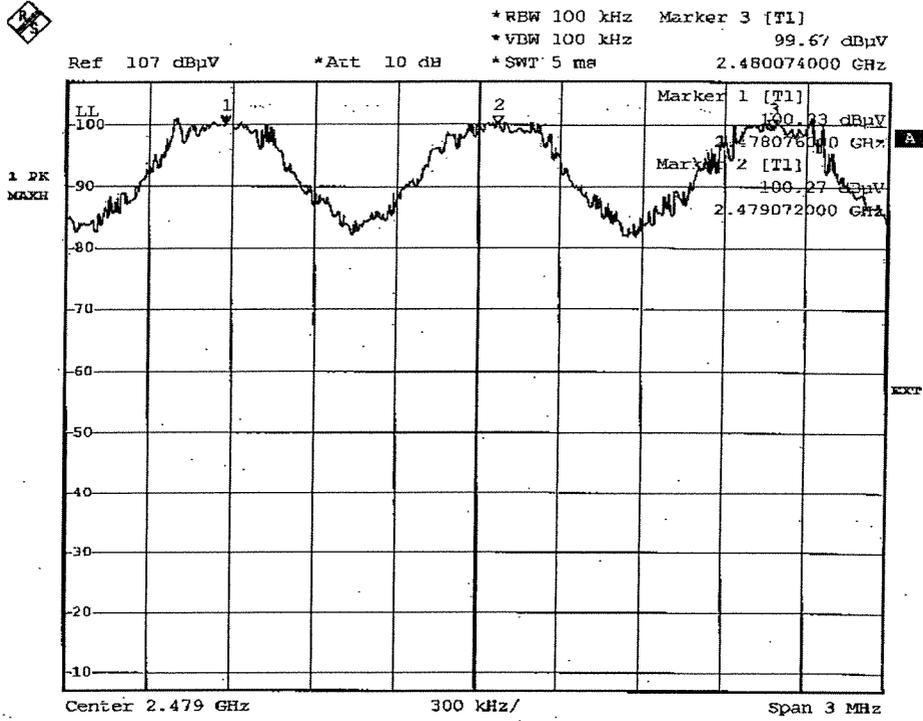
**Carrier Frequency Separation :Tx(Hopping on)2402MHz**



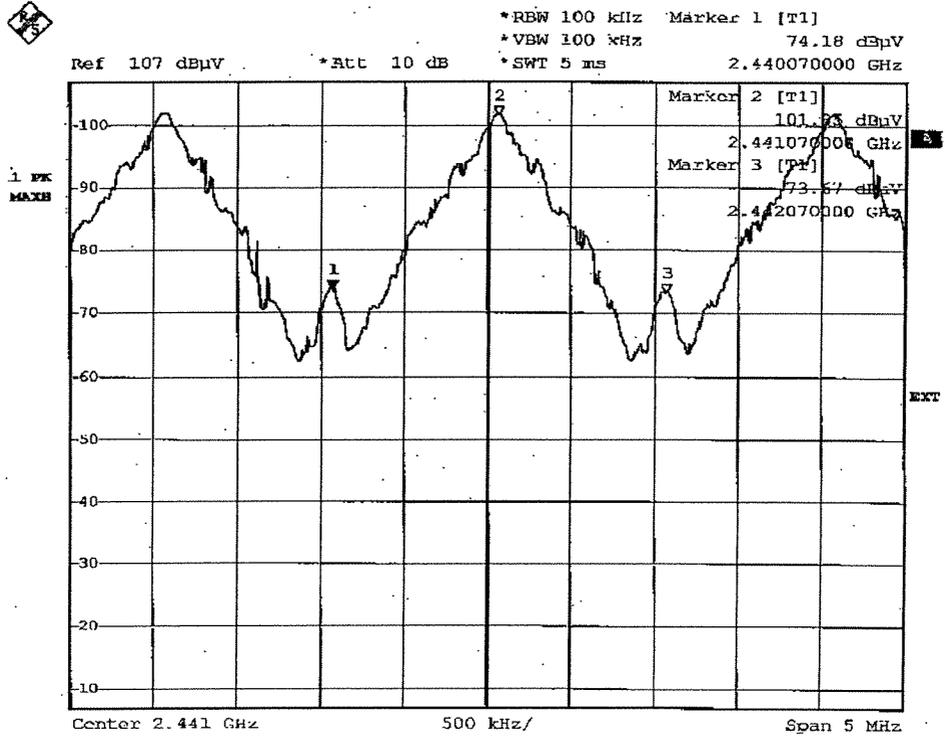
**Carrier Frequency Separation :Tx(Hopping on)2441MHz**



**Carrier Frequency Separation :Tx(Hopping on)2480MHz**



**Carrier Frequency Separation :Inquiry**



# DATA OF 20dB BANDWIDTH

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.2 SEMI ANECHOIC CHAMBER

COMPANY : Sony Corporation  
EQUIPMENT : Personal Entertainment Organizer  
MODEL : PEG-TG50/U  
S/ N : PVT28  
FCC ID : AK8PEGTG50  
IC Number : 409B-PEGTG50  
POWER : DC5.2V(AC120V/60Hz)  
MODE : Tx (Hopping off) /Inquiry

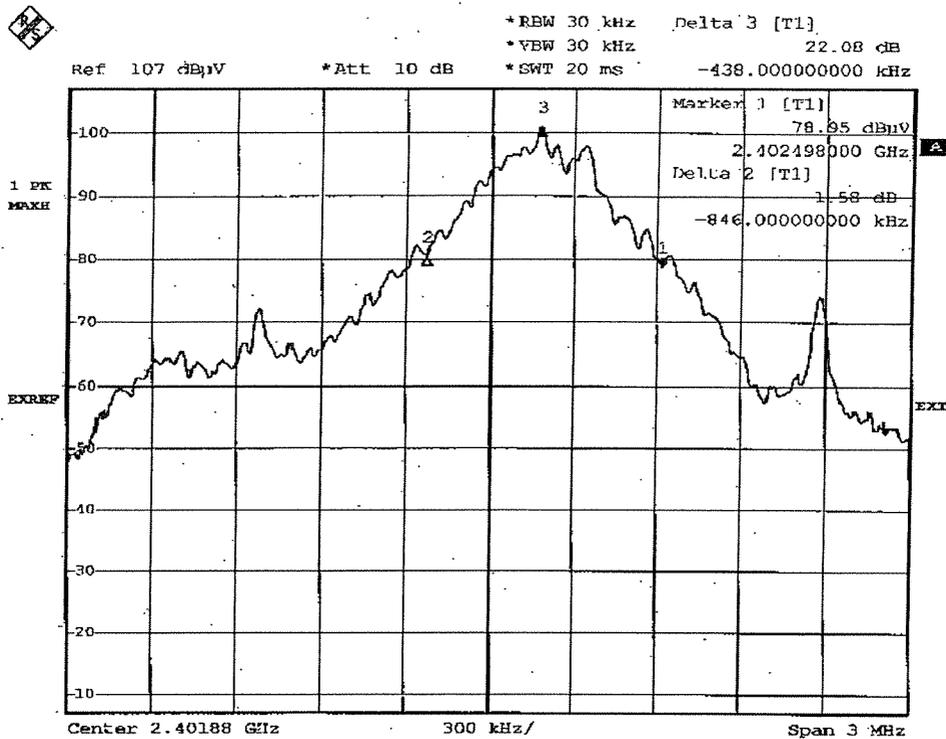
REPORT NO : 23EE0036-HO- 1  
REGULATION : Fcc Part15 Subpart C 15.247(a)(1)  
TEST DISTANCE : -  
DATE : 12/27/2002  
TEMPERATURE : 19°C  
HUMIDITY : 31%

  
Engineer: Hiroka Umeyama

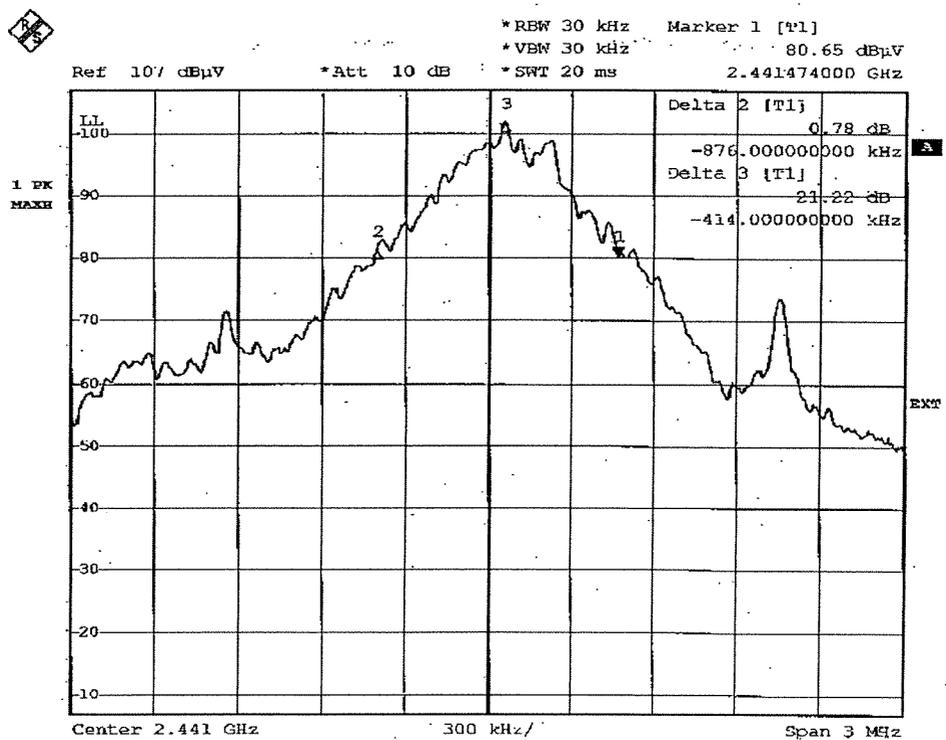
**PK DETECT(S/A: span 3MHz, RBW 30kHz, VBW 30kHz, sweep time AUTO)**

CH	FREQ	20dB Bandwidth	Limit
	[MHz]	[MHz]	[MHz]
Low	2402.0	0.846	1.0
Mid	2441.0	0.876	1.0
High	2480.0	0.828	1.0
Inquiry	2441.0	0.824	1.0

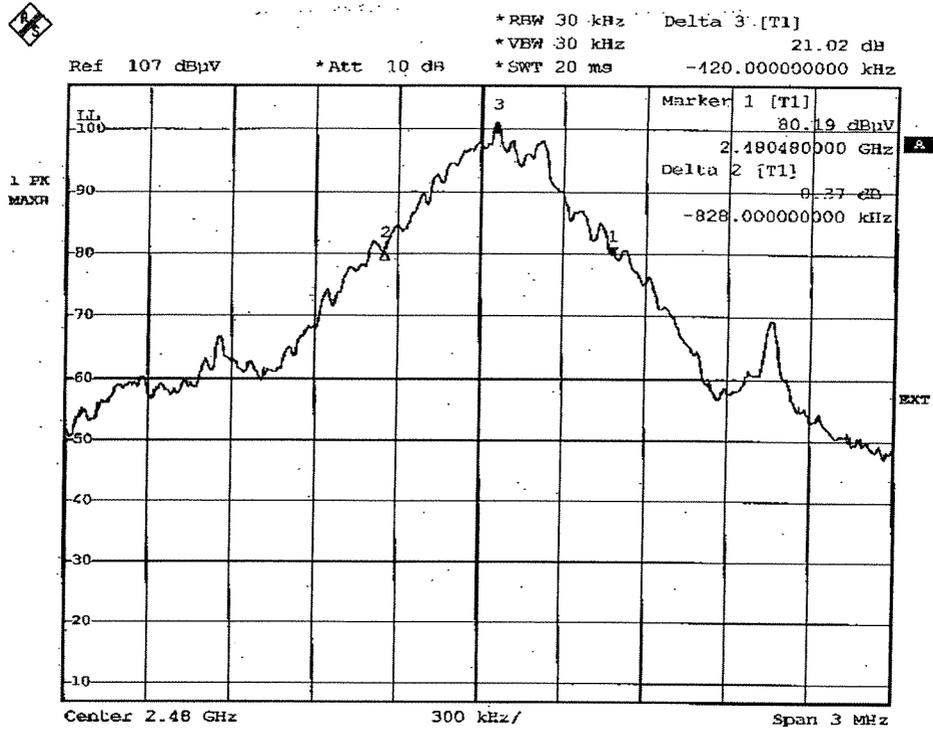
**20dB Bandwidth:Tx(Hopping off)2402MHz**



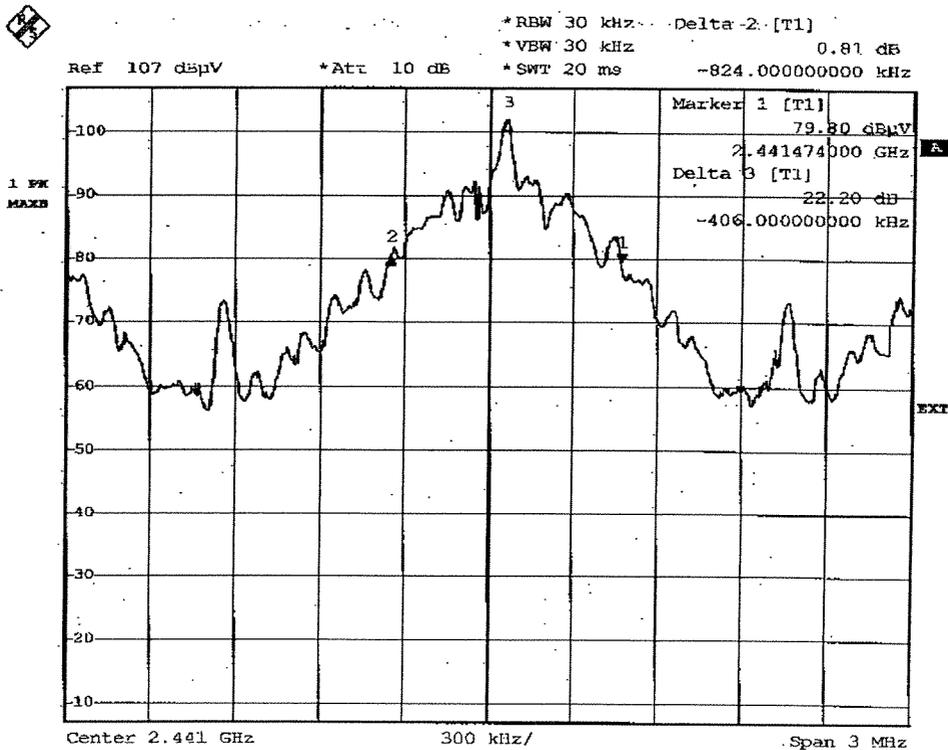
**20dB Bandwidth:Tx(Hopping off)2441MHz**



**20dB Bandwidth:Tx(Hopping off)2480MHz**



**20dB Bandwidth:Inquiry**

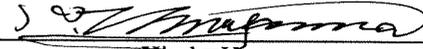


# DATA OF NUMBER OF HOPPING FREQUENCY

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.2 SEMI ANECHOIC CHAMBER

COMPANY	: Sony Corporation	REPORT NO	: 23EE0036-HO - <b>1</b>
EQUIPMENT	: Personal Entertainment Organizer	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)(iii)
MODEL	: PEG-TG50/U	TEST DISTANCE	: -
S/ N	: PVT28	DATE	: 12/27/2002
FCC ID	: AK8PEGTG50	TEMPERATURE	: 19°C
IC Number	: 409B-PEGTG50	HUMIDITY	: 31%
POWER	: DC5.2V(AC120V/60Hz)		
MODE	: Tx (Hopping on) /Inquiry		

  
 Engineer : Hiroka Umeyama

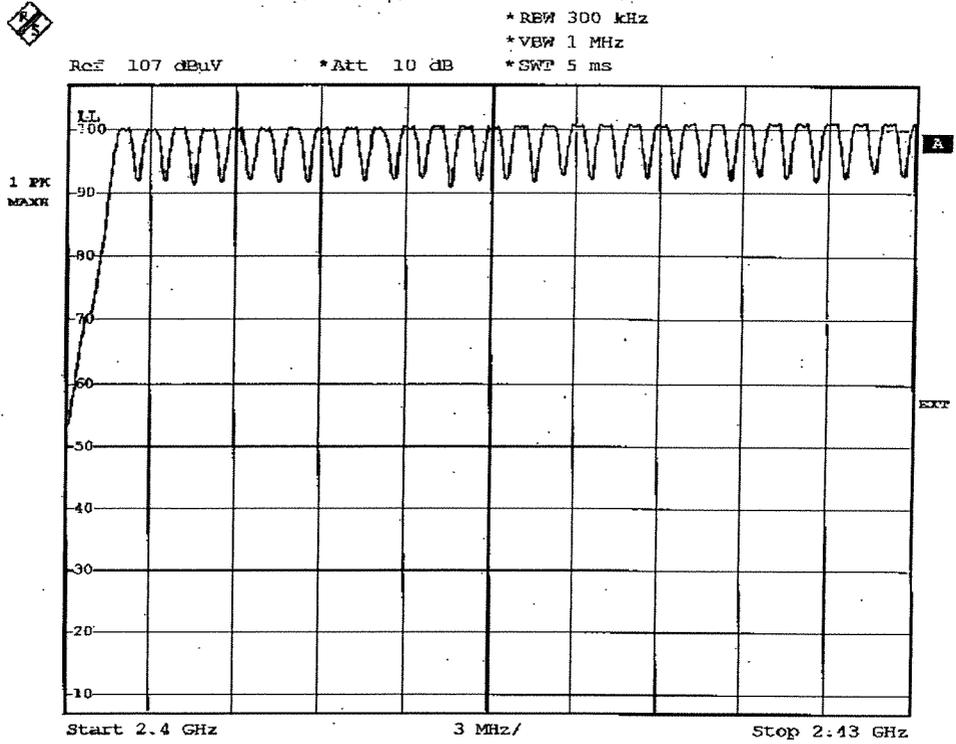
**PK DETECT(S/A : RBW 300kHz ,VBW 1MHz, sweep time AUTO )**

Mode	Number of channe	Limit
	[time]	[time]
Tx(Hoppng on)	79	≥ 15

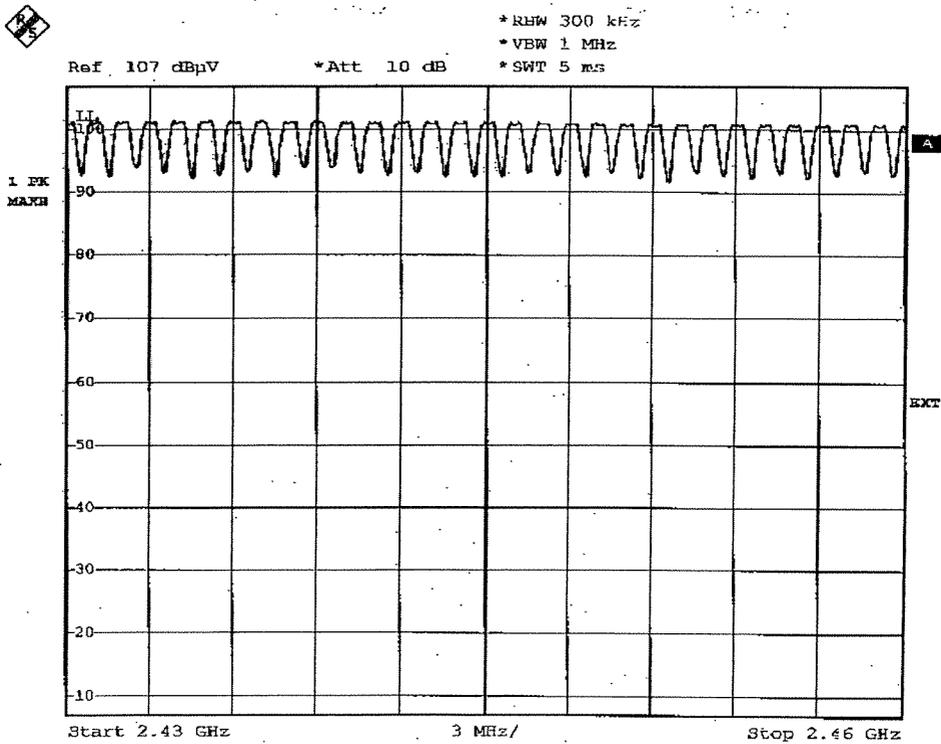
**PK DETECT(S/A : RBW 300kHz ,VBW 1MHz, sweep time AUTO )**

Mode	Number of channe	Limit
	[time]	[time]
Inquiry	32	≥ 15

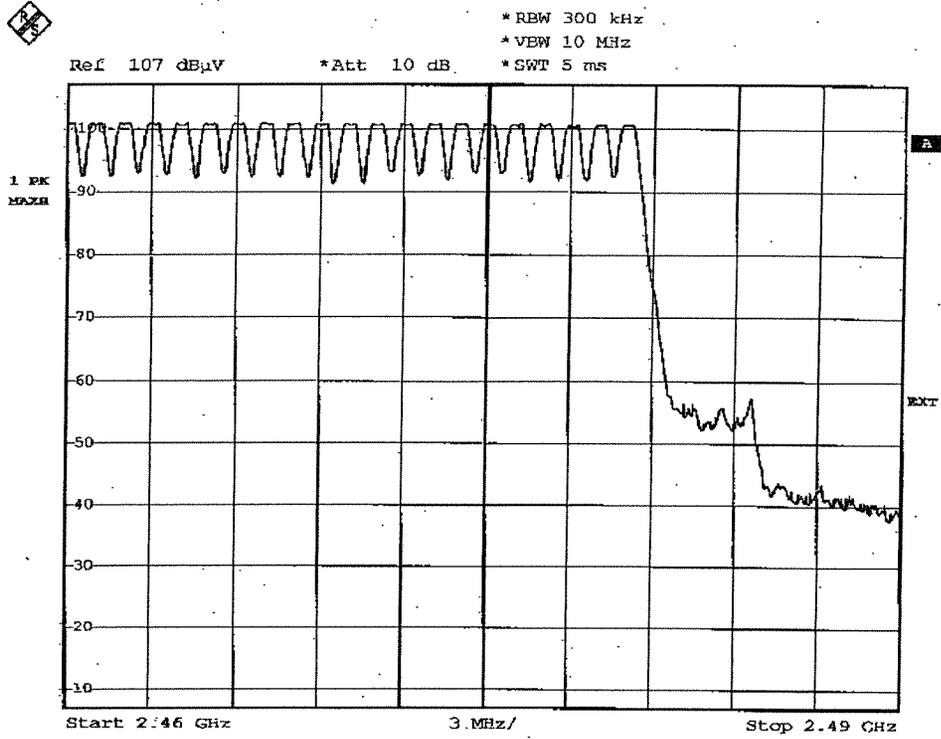
**Number of Hopping Frequency :Tx(Hopping on)2400-2430MHz**



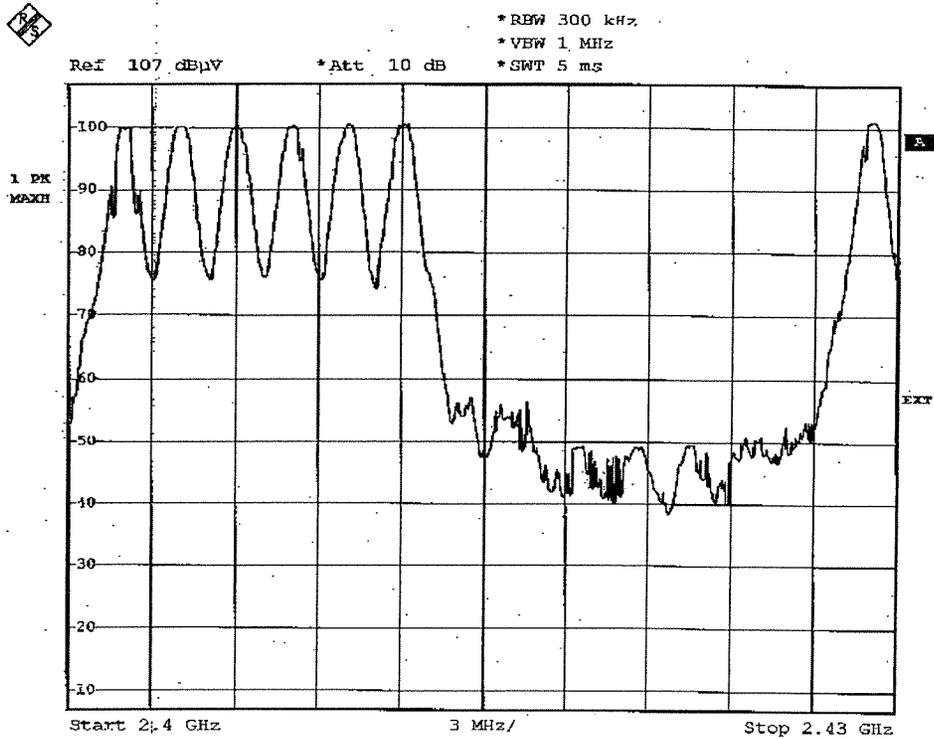
**Number of Hopping Frequency :Tx(Hopping on)2430-2460MHz**



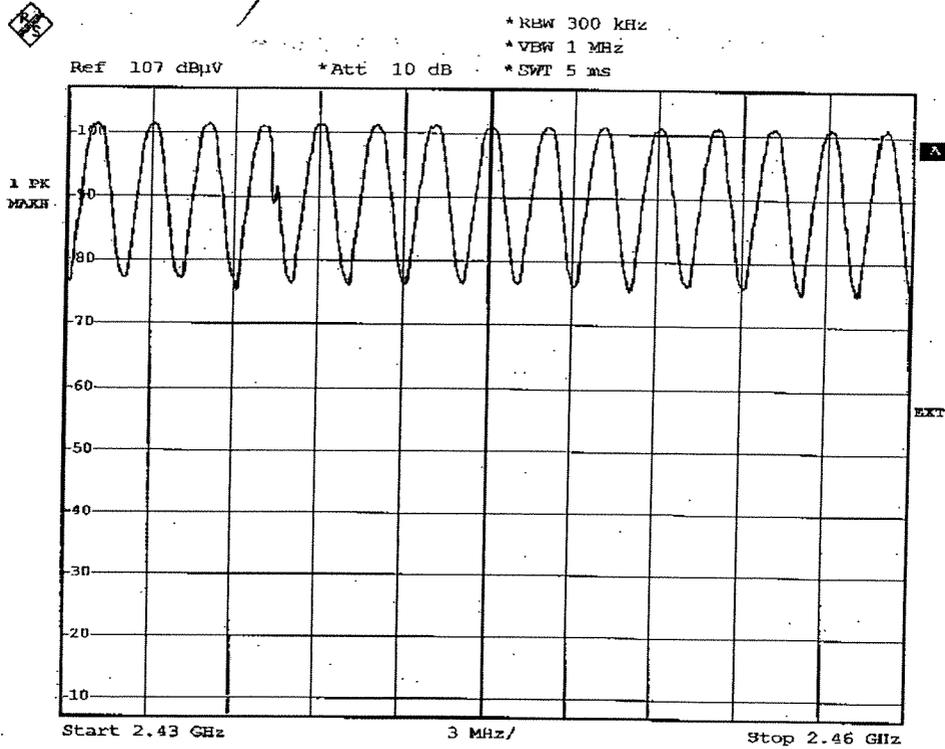
**Number of Hopping Frequency :Tx(Hopping on)2460-2490MHz**



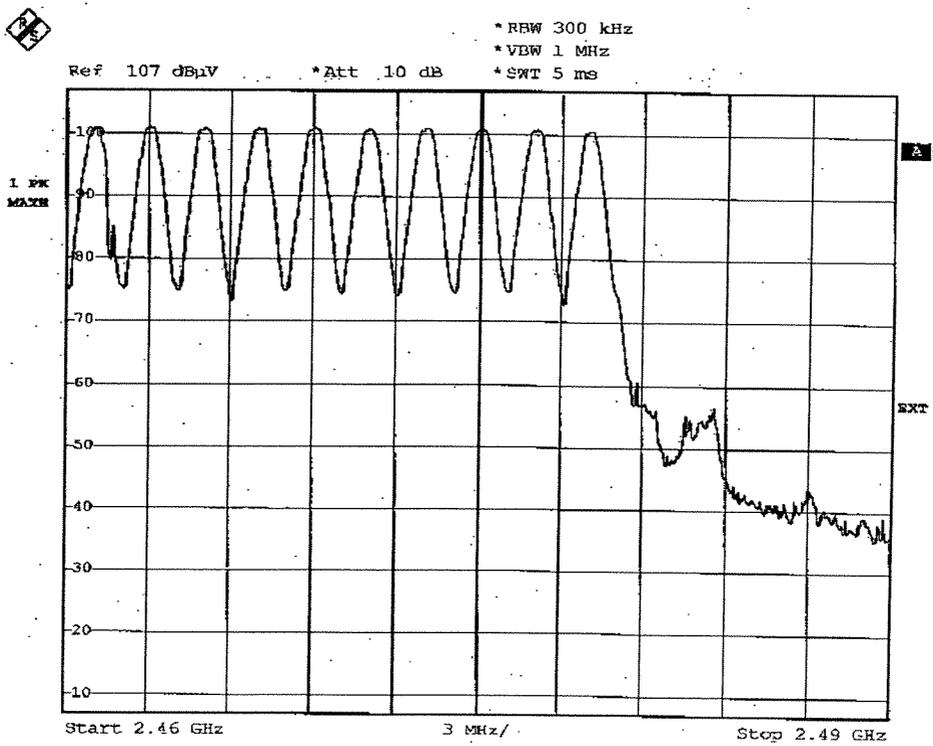
**Number of Hopping Frequency :Inquiry2400-2430MHz**



**Number of Hopping Frequency : Inquiry 2430-2460MHz**



**Number of Hopping Frequency : Inquiry 2460-2490MHz**



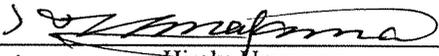
## DATA OF DWELL TIME

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.2 SEMI ANECHOIC CHAMBER

COMPANY : Sony Corporation  
 EQUIPMENT : Personal Entertainment Organizer  
 MODEL : PEG-TG50/U  
 S/N : PVT28  
 FCC ID : AK8PEGTG50  
 IC Number : 409B-PEGTG50  
 POWER : DC5.2V(AC120V/60Hz)  
 MODE : Tx (Hopping off) /Inquiry

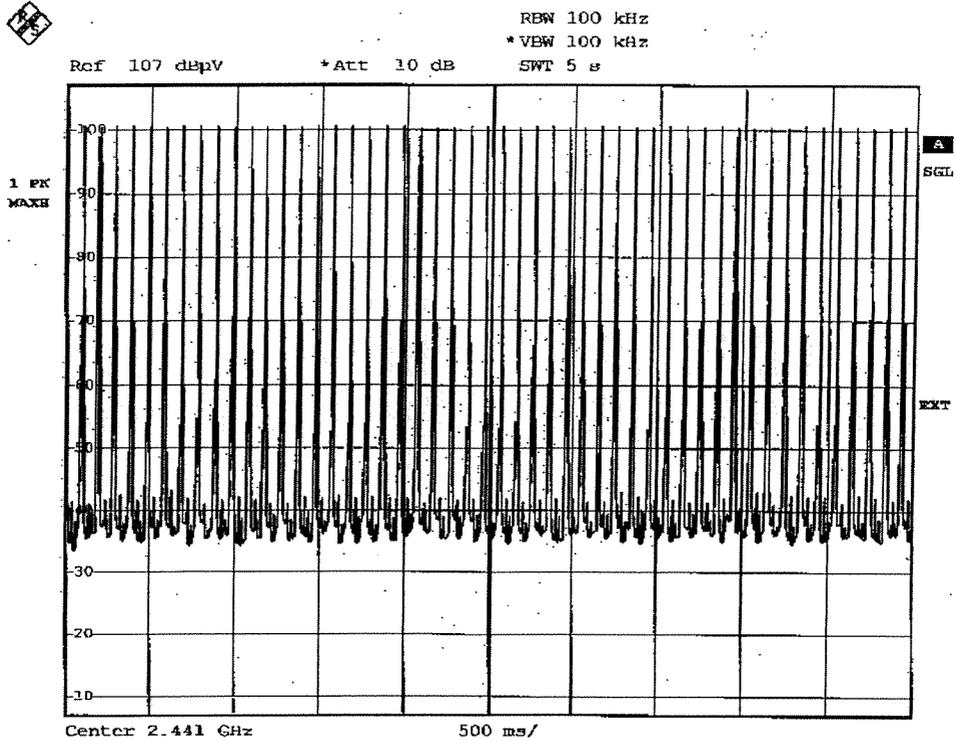
REPORT NO : 23EE0036-HO-1  
 REGULATION : Fcc Part15 Subpart C 15.247(a)(1)(iii)  
 TEST DISTANCE : -  
 DATE : 12/27/2002  
 TEMPERATURE : 19°C  
 HUMIDITY : 31%

  
 Engineer : Hiroka Umeyama

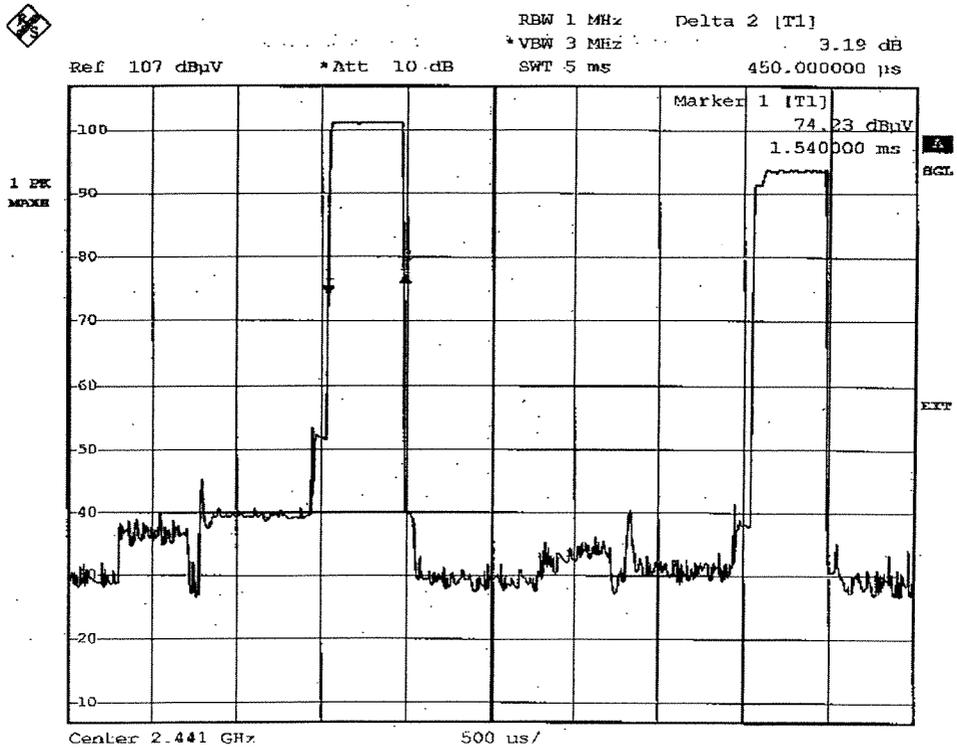
**PK DETECT(S/A :span ZERO, RBW 1MHz, VBW 3MHz, sweep time 1ms-10ms )**

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	50 times /5sec. x 6.32 = 316 times	0.450	143	400
DH3	25 times / 5sec. x 6.32 = 158 times	1.690	268	400
DH5	17 times / 5 sec. x 6.32 = 108 times	2.880	312	400
Inquiry	100 times / 1sec. x 12.8 = 1280 times	0.266	341	400

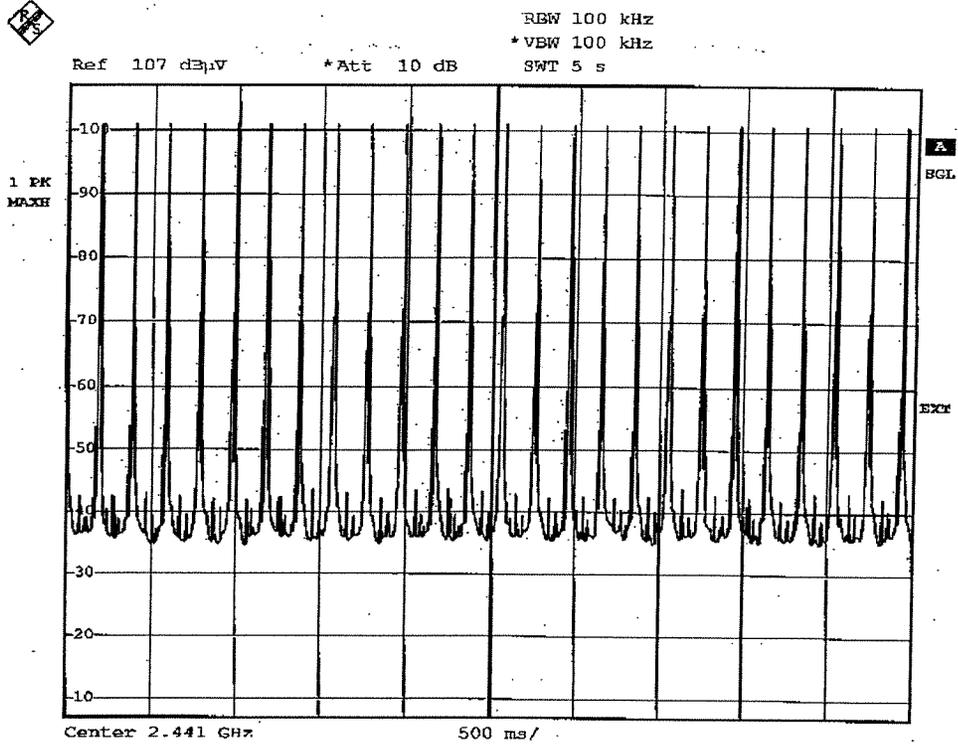
**Dwell time :Tx(Hopping on)DH1(1)**



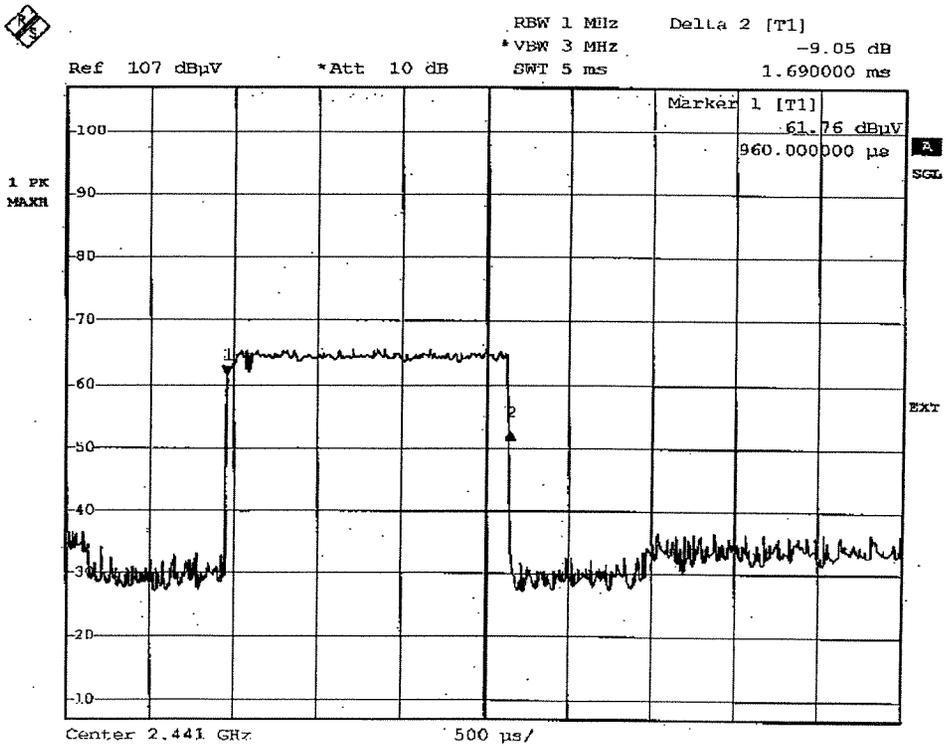
**Dwell time :Tx(Hopping on)DH1(2)**



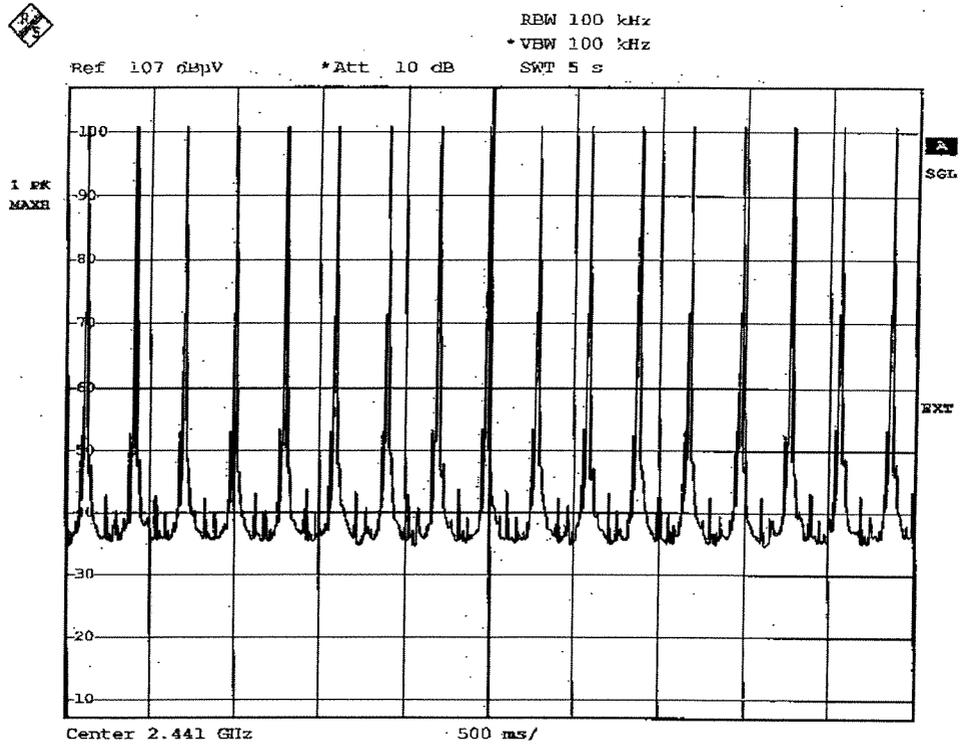
**Dwell time :Tx(Hopping on)DH3(1)**



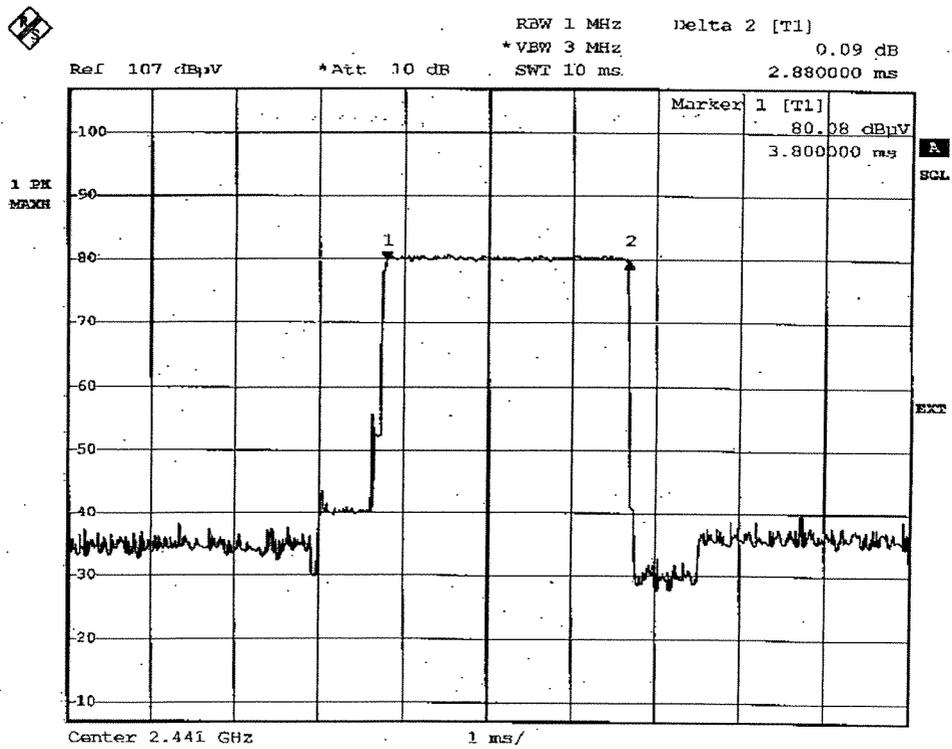
**Dwell time :Tx(Hopping on)DH3(2)**



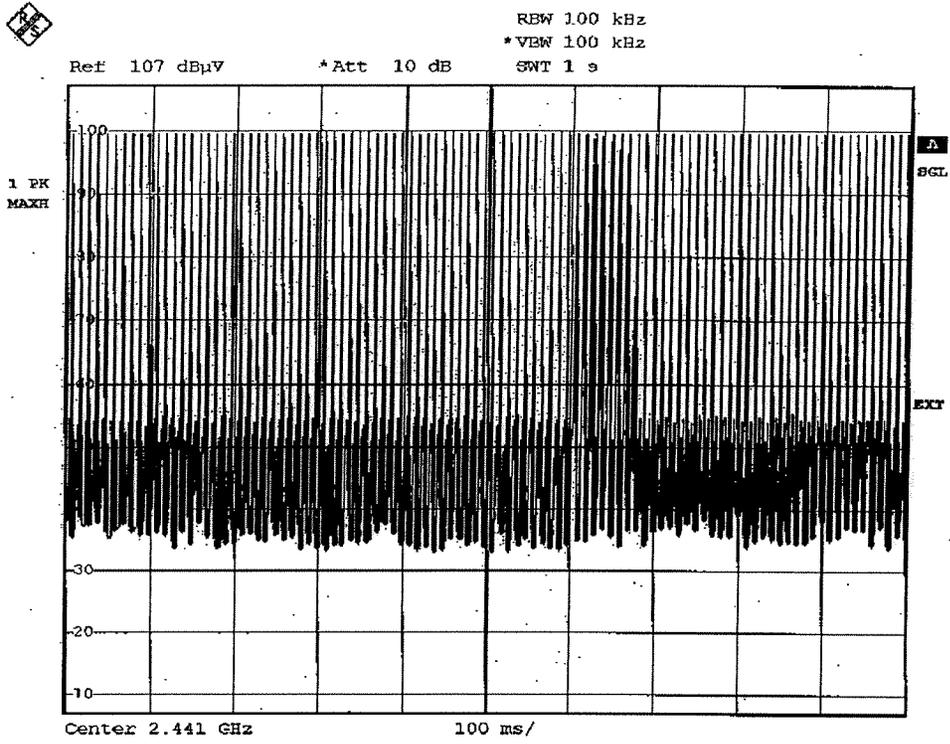
### Dwell time :Tx(Hopping on)DH5(1)



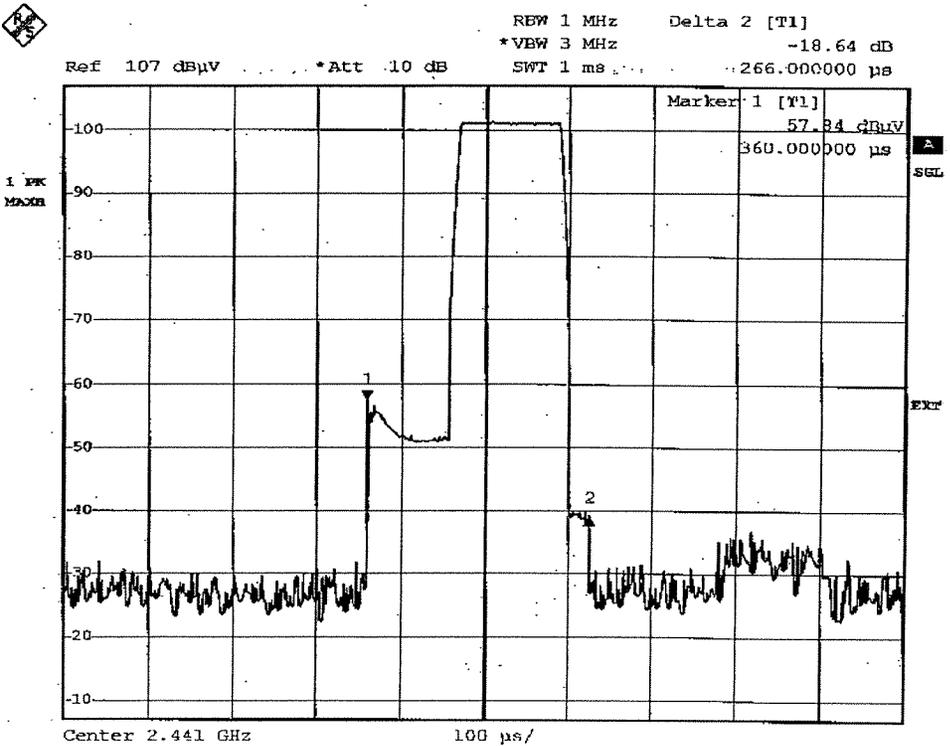
### Dwell time :Tx(Hopping on)DH5(2)



**Dwell time :Inquiry (1)**



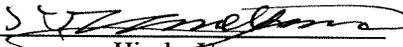
**Dwell time :Inquiry (2)**



# DATA OF PEAK OUTPUT POWER(CONDUCTED)

A-Pex International Co., Ltd.  
EMC HEAD OFFICE DIVISION No.2 SEMI ANECHOIC CHAMBER

COMPANY	: Sony Corporation	REPORT NO	: 23EE0036-HO- <b>1</b>
EQUIPMENT	: Personal Entertainment Organizer	REGULATION	: Fcc Part15 Subpart C 15.247(b)(1)
MODEL	: PEG-TG50/U	TEST DISTANCE	: -
S/ N	: PVT28	DATE	: 12/27/2002
FCC ID	: AK8PEGTG50	TEMPERATURE	: 19°C
IC Number	: 409B-PEGTG50	HUMIDITY	: 31%
POWER	: DC5.2V(AC120V/60Hz)		
MODE	: Tx (Hopping off) /Inquiry		

  
 Engineer : Hiroka Umeyama

**PK DETECT(S/A: span 5MHz, RBW 1MHz, VBW 3MHz, sweep time AUTO)**

CH	FREQ [MHz]	T/R Reading [dBuV]	Cable Loss [dB]	Result [dBuV]	Result [dBm]	Limit (1W) [dBm]
Low	2402.0	100.6	2.4	103.0	-3.99	30.0
Mid	2441.0	101.4	2.4	103.8	-3.22	30.0
High	2480.0	100.7	2.4	103.1	-3.91	30.0
Inquiry	2441.0	101.4	2.4	103.8	-3.22	21.0

Sample Calculation :

Result = S/A Reading + Cable Loss (MCC-05 + U.FL-2LP(V)-04-A-100)