

DATA OF CONDUCTION TEST

A-Pex International Co., Ltd.
No.2 SEMI ANECHOIC CHAMBER
Report No. : 23BE0019-H0- 1 0

Applicant : Sony Corporation
Kind of Equipment : Digital Photo Printer
Model No. : UP-DX100
Serial No. : 30004
Power : AC120V/60Hz
Mode : Tx (2441MHz)
Remarks :
Date : 1/9/2003
Phase : Single Phase
Temperature : 26 °C
Humidity : 31 %
Regulation : FCC 15.207 (0.15-30MHz)


Engineer : Hiroka Umeyama

No.	FREQ. [MHz]	READING (N)		READING (L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV				QP	AV	QP	AV	QP	AV
		[dBuV]		[dBuV]					[dBuV]		[dBuV]		[dB]	
1.	0.1808	38.3	35.0	40.9	35.9	0.0	9.9	0.0	50.8	45.8	64.4	54.4	13.6	8.6
2.	0.3700	26.1	-	29.1	-	0.0	9.9	0.0	39.0	-	58.5	48.5	19.5	-
3.	1.0366	31.8	15.8	32.0	18.2	0.1	10.0	0.0	42.1	28.3	56.0	46.0	13.9	17.7
4.	1.4615	31.8	19.2	31.9	19.8	0.1	10.1	0.0	42.1	30.0	56.0	46.0	13.9	16.0
5.	2.4426	23.6	-	25.1	-	0.1	10.2	0.0	35.4	-	56.0	46.0	20.6	-
6.	5.9887	30.3	22.0	30.4	22.5	0.2	10.4	0.0	41.0	33.1	60.0	50.0	19.0	16.9

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

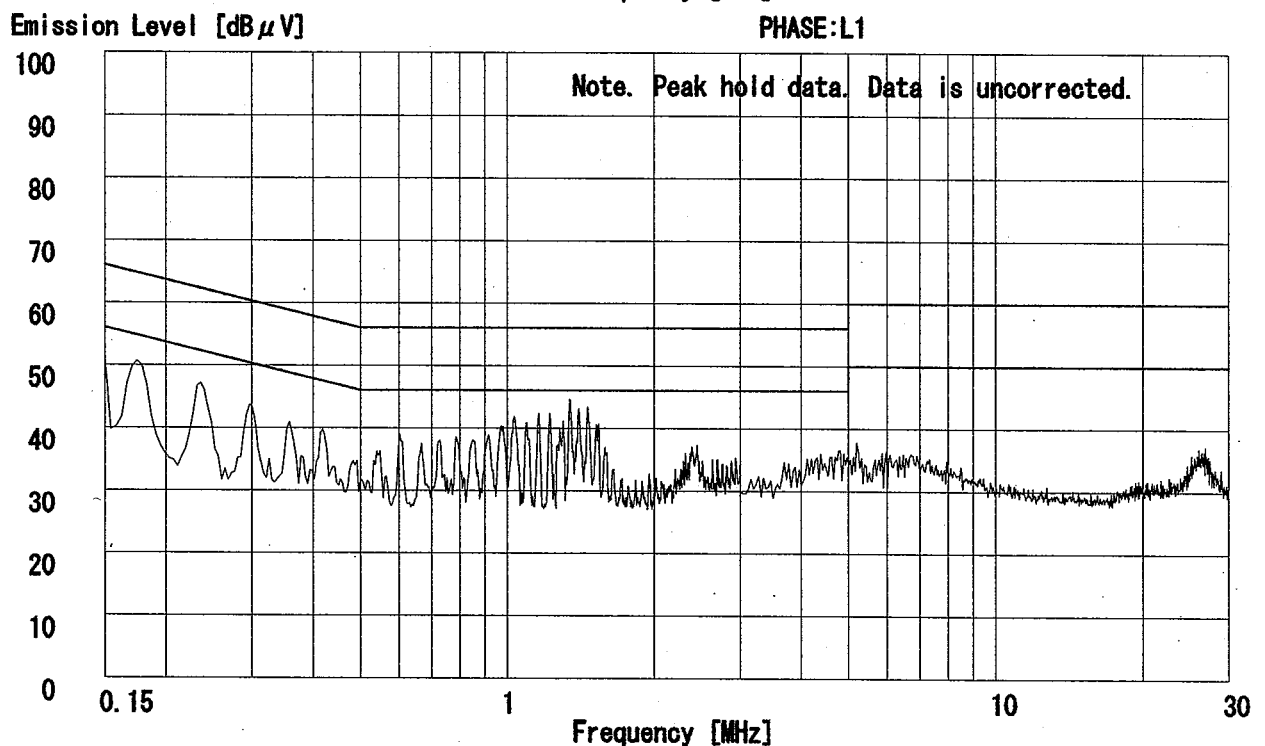
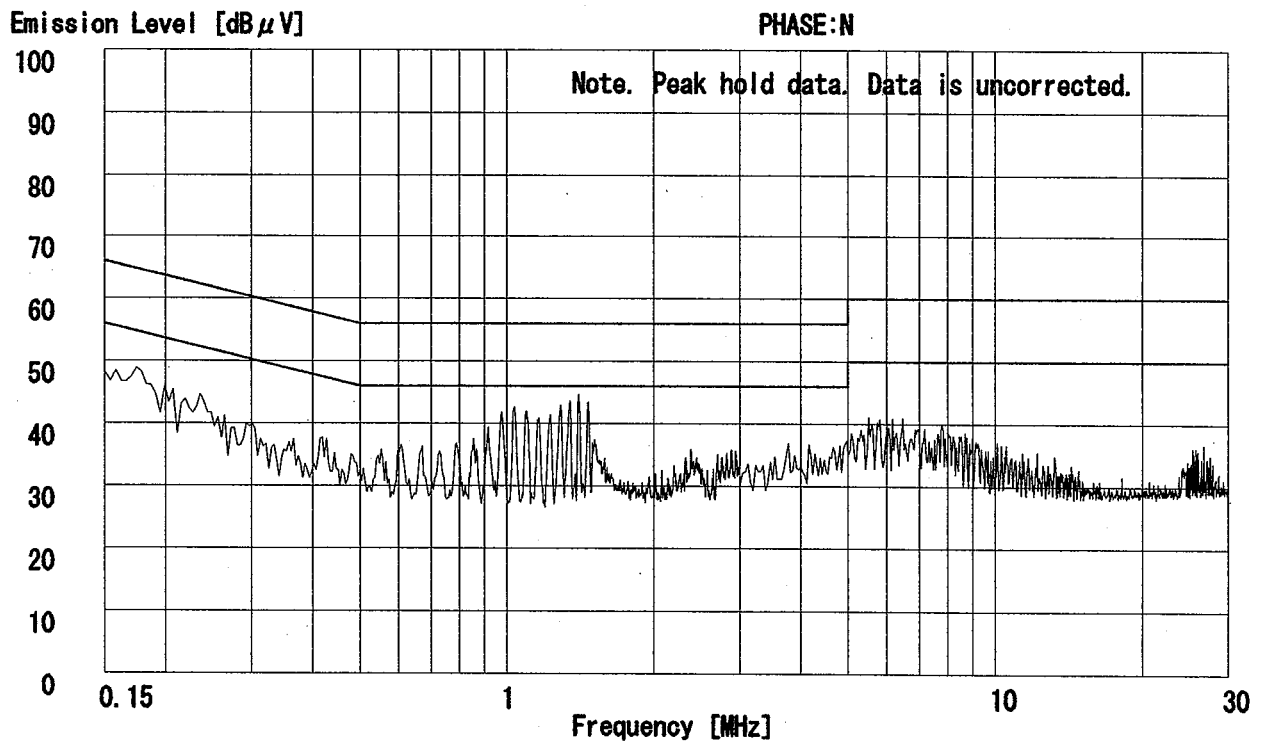
Except for the above table : adequate margin data below the limits.
LISN:MLS-06

DATA OF CONDUCTION TEST CHART

A-Pex International Co., Ltd.
No.2 SEMI ANECHOIC CHAMBER
Report No. : 23BE0019-H0- 1 0

Applicant : Sony Corporation
Kind of Equipment : Digital Photo Printer
Model No. : UP-DX100
Serial No. : 30004
Power : AC120V/60Hz
Mode : Tx(2402MHz)
Remarks :
Date : 1/9/2003
Phase : Single Phase
Temperature : 26 °C
Humidity : 31 %
Regulation 1 : FCC 15.207 (0.15-30MHz)
Regulation 2 : None

S. Umeyama
Engineer : Hiroka Umeyama



DATA OF CONDUCTION TEST CHART

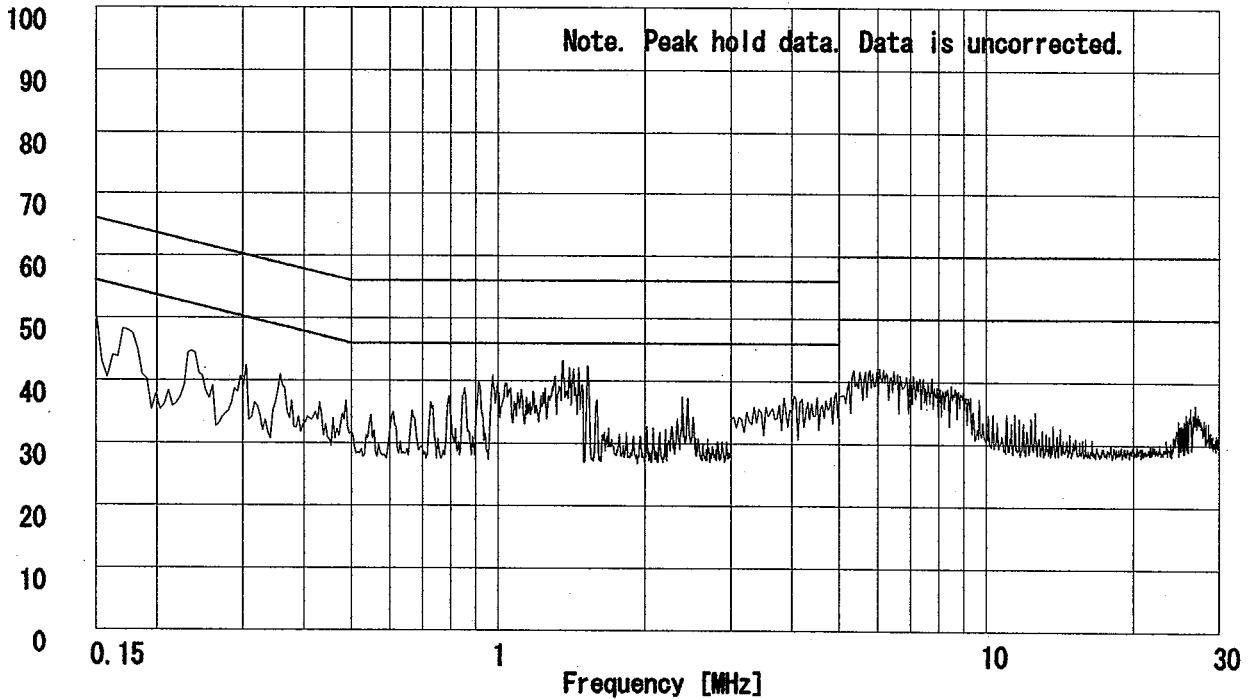
A-Pex International Co., Ltd.
No.2 SEMI ANECHOIC CHAMBER
Report No. : 23BE0019-H0-10

Applicant : Sony Corporation
Kind of Equipment : Digital Photo Printer
Model No. : UP-DX100
Serial No. : 30004
Power : AC120V/60Hz
Mode : Tx (2441MHz)
Remarks :
Date : 1/9/2003
Phase : Single Phase
Temperature : 26 °C
Humidity : 31 %
Regulation 1 : FCC 15.207 (0.15-30MHz)
Regulation 2 : None

Hiroka Uneyama
Engineer : Hiroka Uneyama

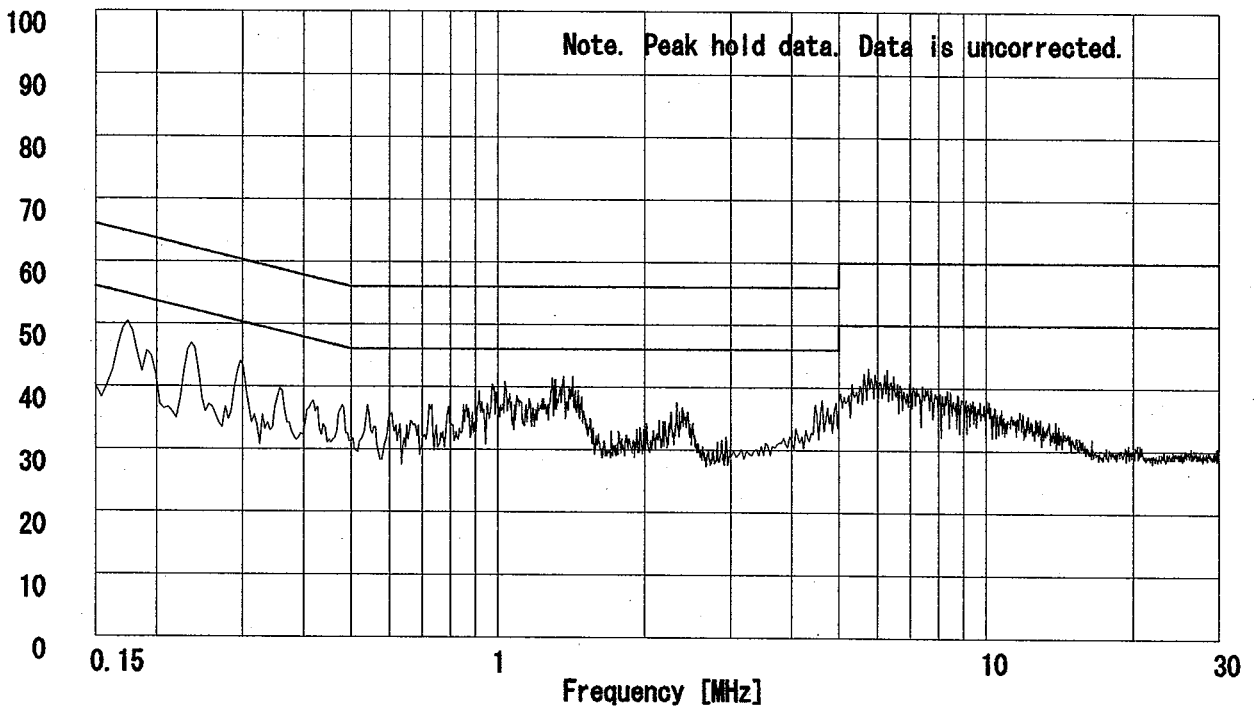
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST CHART

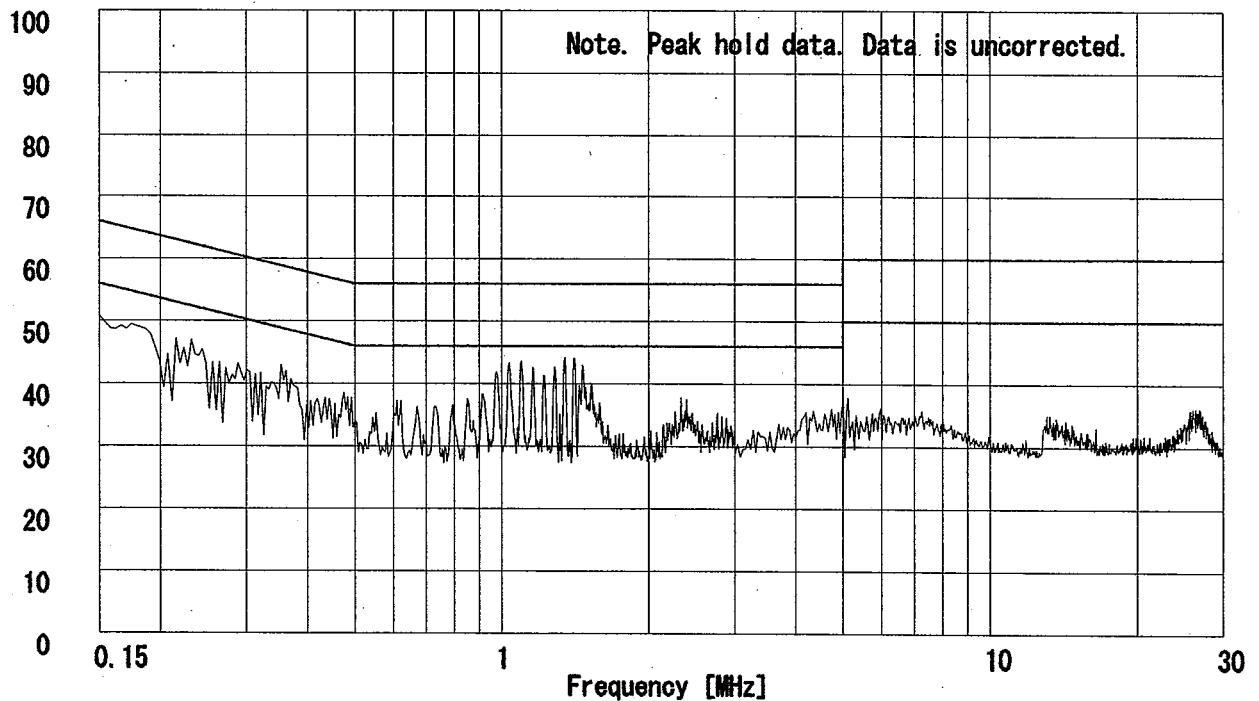
A-Pex International Co., Ltd.
No.2 SEMI ANECHOIC CHAMBER
Report No. : 23BE0019-H0- 1 0

Applicant : Sony Corporation
Kind of Equipment : Digital Photo Printer
Model No. : UP-DX100
Serial No. : 30004
Power : AC120V/60Hz
Mode : Tx (2480MHz)
Remarks :
Date : 1/9/2003
Phase : Single Phase
Temperature : 26 °C
Humidity : 31 %
Regulation 1 : FCC 15.207 (0.15-30MHz)
Regulation 2 : None


Engineer : Hiroka Umeyama

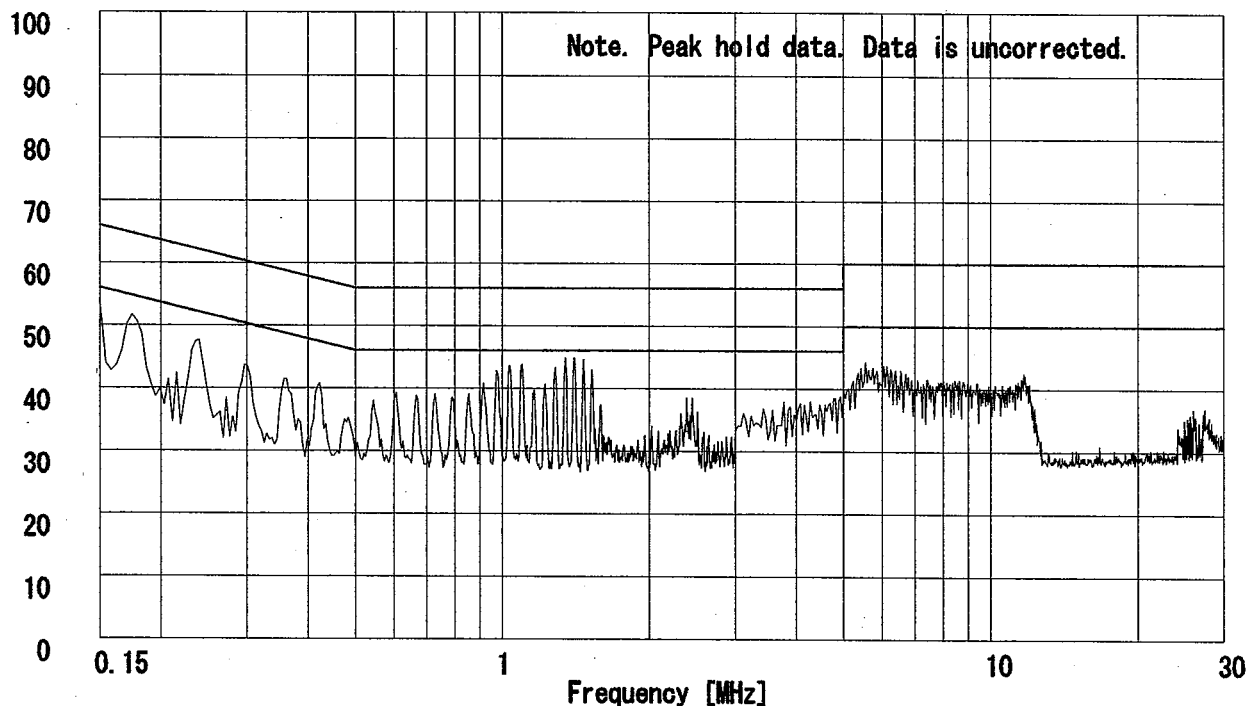
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CARRIER FREQUENCY SEPARATION

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.1 SEMI ANECHOIC CHAMBER

COMPANY : Sony Corporation
EQUIPMENT : Digital Photo Printer
MODEL : UP-DX100
S/ N : 30011
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100
POWER : AC120V/60Hz
MODE : Tx (Hopping on) /Inquiry

REPORT NO : 23BE0019-HO - 10
REGULATION : Fcc Part15 Subpart C 15.247(a)(1)
TEST DISTANCE : -
DATE : 01/10/2003
TEMPERATURE : 19°C
HUMIDITY : 31%

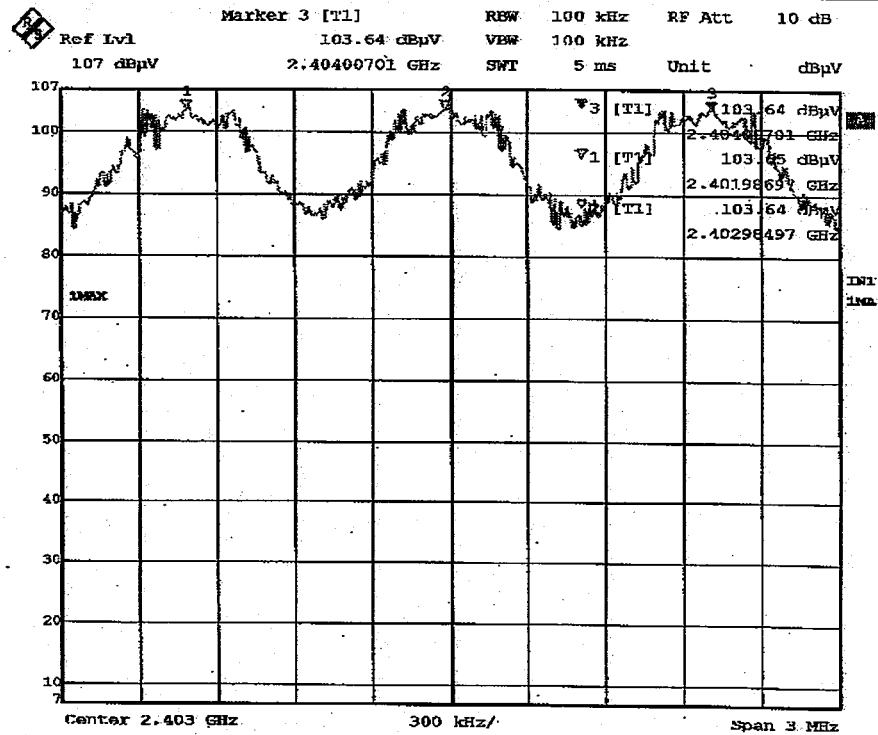

Engineer: Hiroka Umeyama

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

CH	FREQ	Channel separation	Limit
	[MHz]	[MHz]	
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]

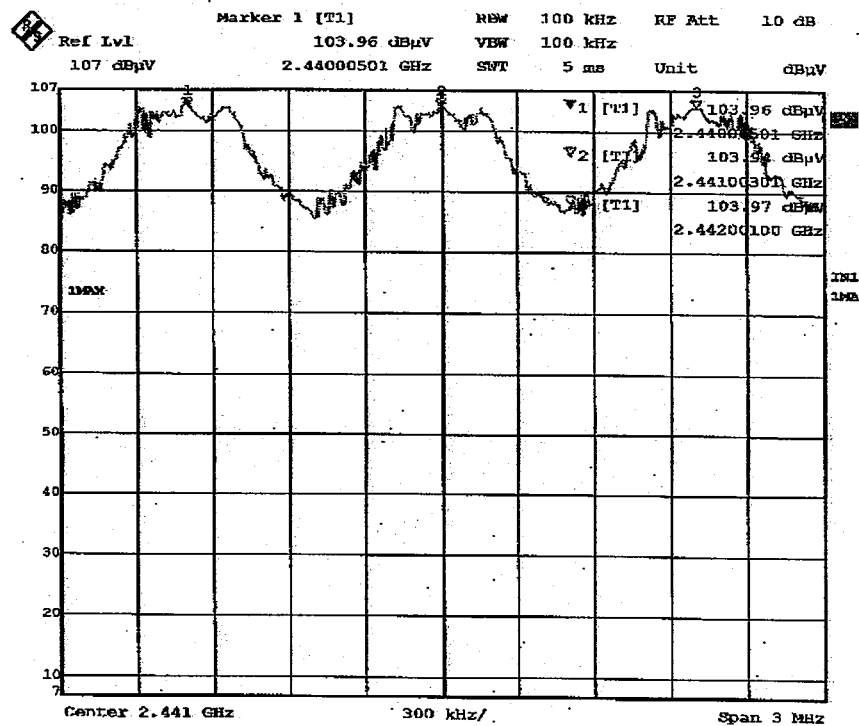
Test report No. : 23BE0019-HO = 1 0
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100

Carrier Frequency Separation :Tx(Hopping on)2402MHz:UP-DX100



Date: 10.JAN.2003 10:43:31

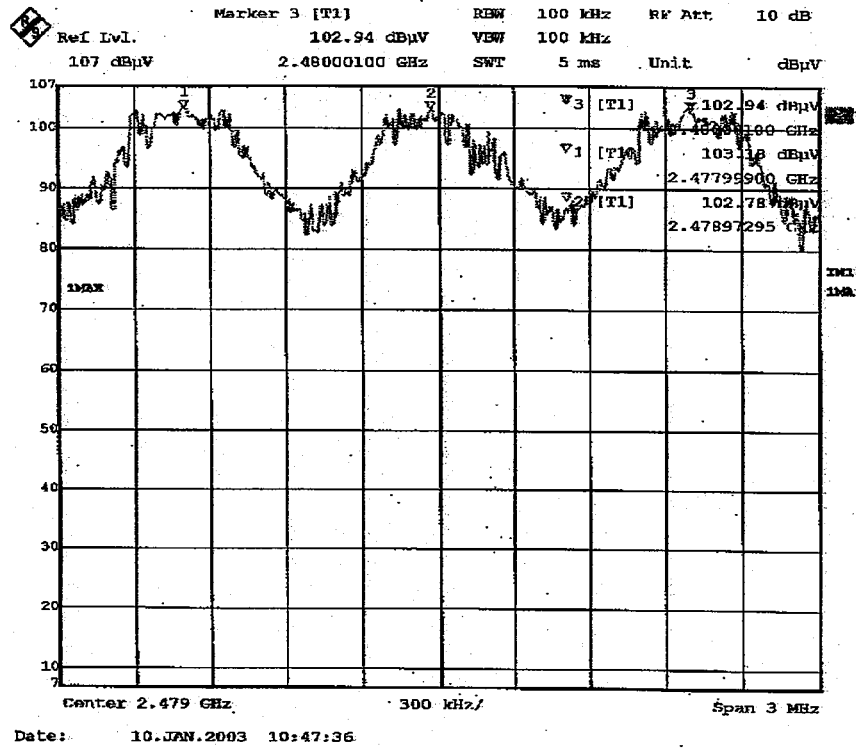
Carrier Frequency Separation :Tx(Hopping on)2441MHz:UP-DX100



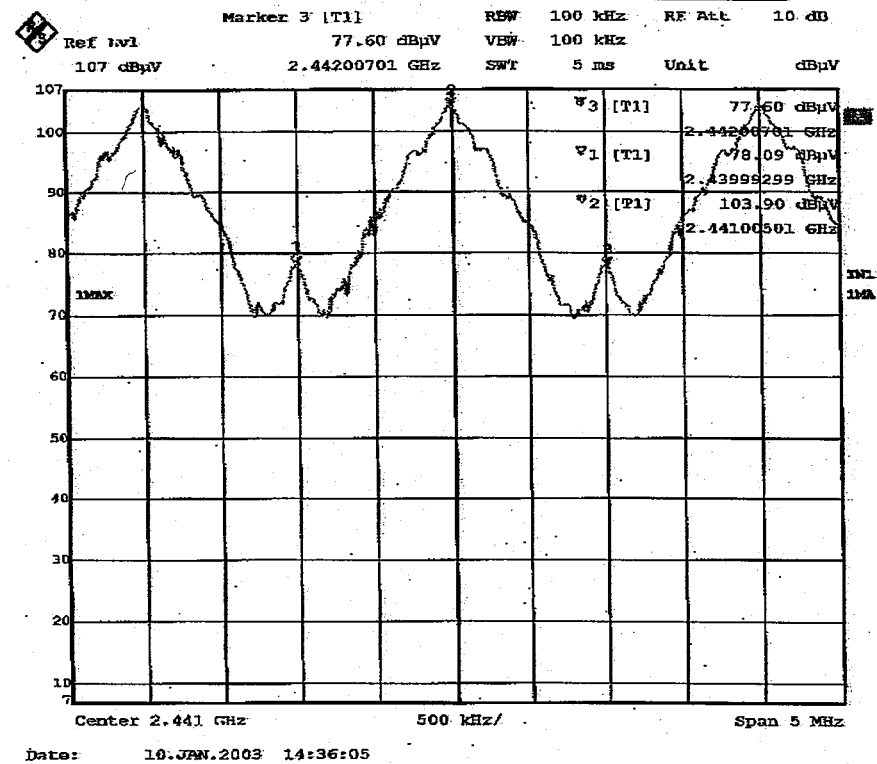
Date: 10.JAN.2003 10:46:06

Test report No. : 23BE0019-HO - 10
 FCC ID : AK8UPDX100
 IC Number : 409B-UPDX100

Carrier Frequency Separation :Tx(Hopping on)2480MHz:UP-DX100



Carrier Frequency Separation :Inquiry:UP-DX100



DATA OF 20dB BANDWIDTH

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.1 SEMI ANECHOIC CHAMBER

COMPANY : Sony Corporation
EQUIPMENT : Digital Photo Printer
MODEL : UP-DX100
S/N : 30011
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100
POWER : AC120V/60Hz
MODE : Tx (Hopping off) /Inquiry

REPORT NO : 23BE0019-HO - 10
REGULATION : Fcc Part15 Subpart C 15.247(a)(1)
TEST DISTANCE : -
DATE : 01/10/2003
TEMPERATURE : 19°C
HUMIDITY : 31%

Engineer:

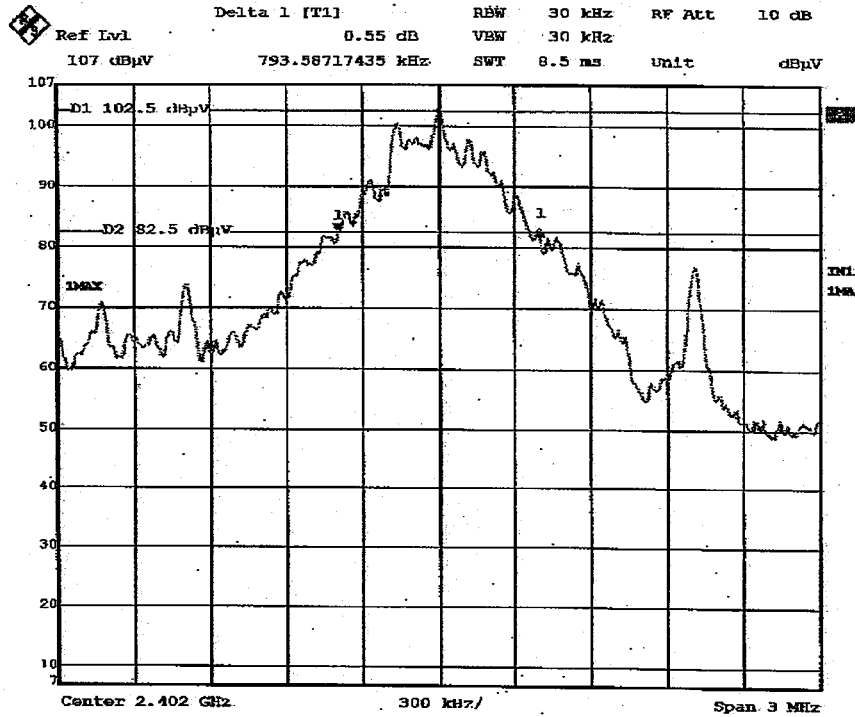

Hiroka Umeyama

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

CH	FREQ	20dB Bandwidth	Limit
	[MHz]	[MHz]	[MHz]
Low	2402.0	0.794	1.0
Mid	2441.0	0.818	1.0
High	2480.0	0.733	1.0
Inquiry	2441.0	0.800	1.0

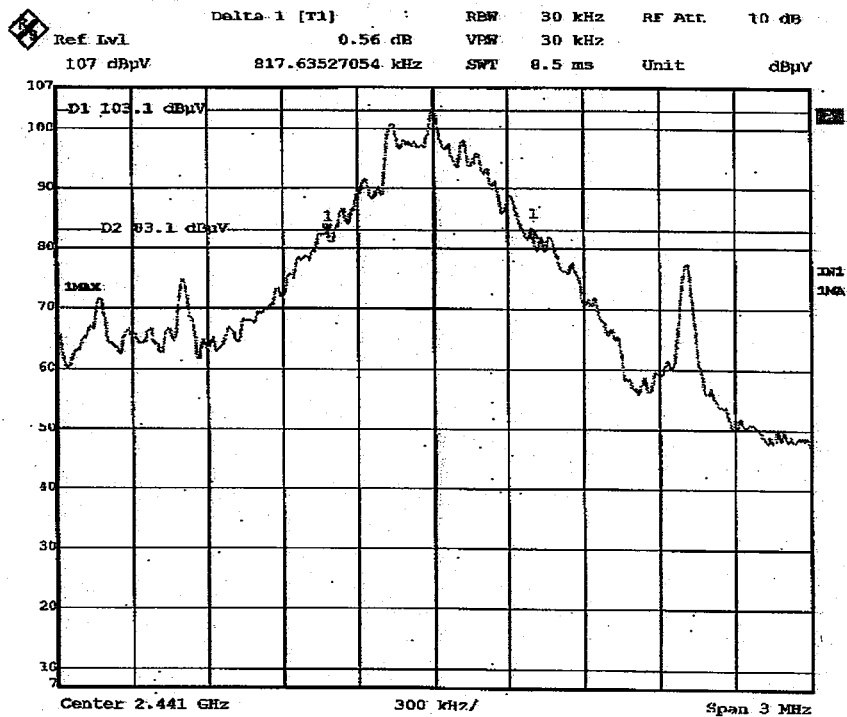
Test report No. : 23BE0019-HO 1 0
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100

20dB Bandwidth:Tx(Hopping off)2402MHz:UP-DX100



Date: 10.JAN.2003 12:37:32

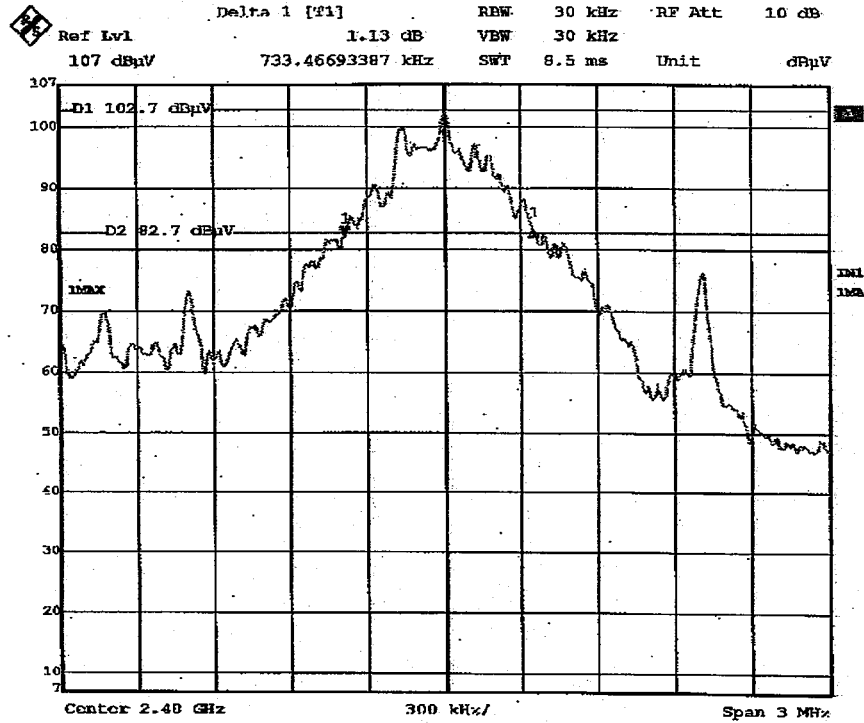
20dB Bandwidth:Tx(Hopping off)2441MHz:UP-DX100



Date: 10.JAN.2003 12:39:34

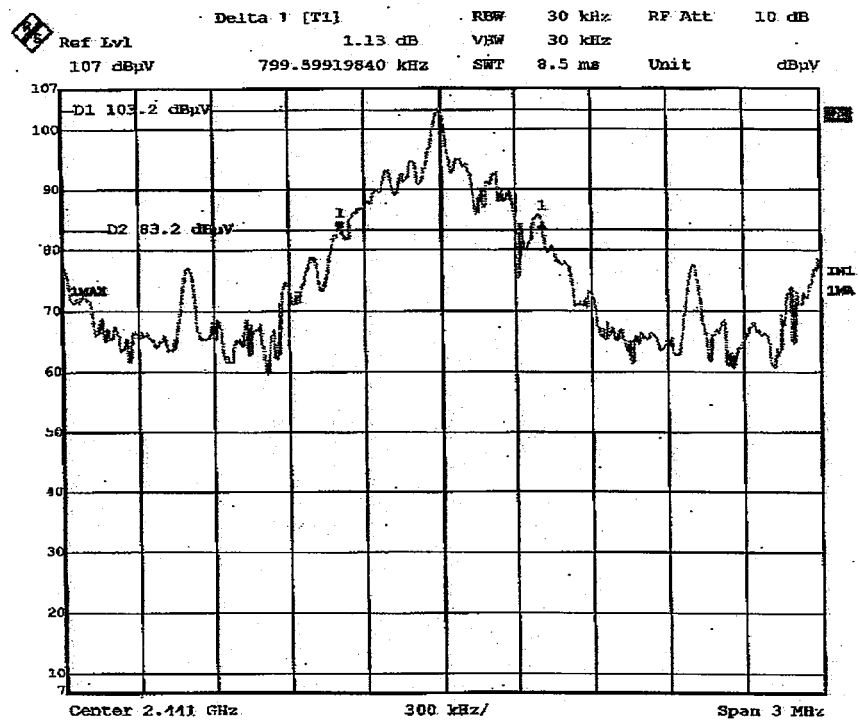
Test report No. : 23BE0019-HO - 1 0
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100

20dB Bandwidth:Tx(Hopping off)2480MHz:UP-DX100



Date: 10.JAN.2003 12:36:21

20dB Bandwidth:Inquiry:UP-DX100



Date: 10.JAN.2003 14:39:48

DATA OF NUMBER OF HOPPING FREQUENCY

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.1 SEMI ANECHOIC CHAMBER

COMPANY : Sony Corporation
EQUIPMENT : Digital Photo Printer
MODEL : UP-DX100
S/N : 30011
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100
POWER : AC120V/60Hz
MODE : Tx (Hopping on) /Inquiry

REPORT NO : 23BE0019-HO-10
REGULATION : Fcc Part15 Subpart C 15.247(a)(1)(iii)
TEST DISTANCE : -
DATE : 01/10/2003
TEMPERATURE : 19°C
HUMIDITY : 31%

Engineer : 
Hiroka Umeyama

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

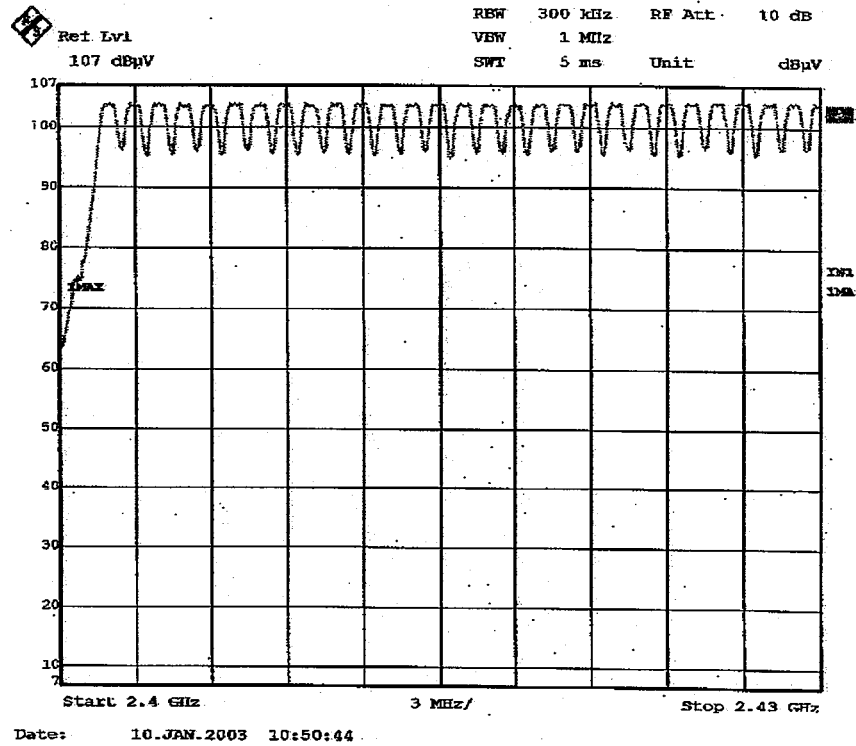
Mode	Number of channel	Limit
	[time]	[time]
Tx(Hoppng on)	79	≥ 15

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

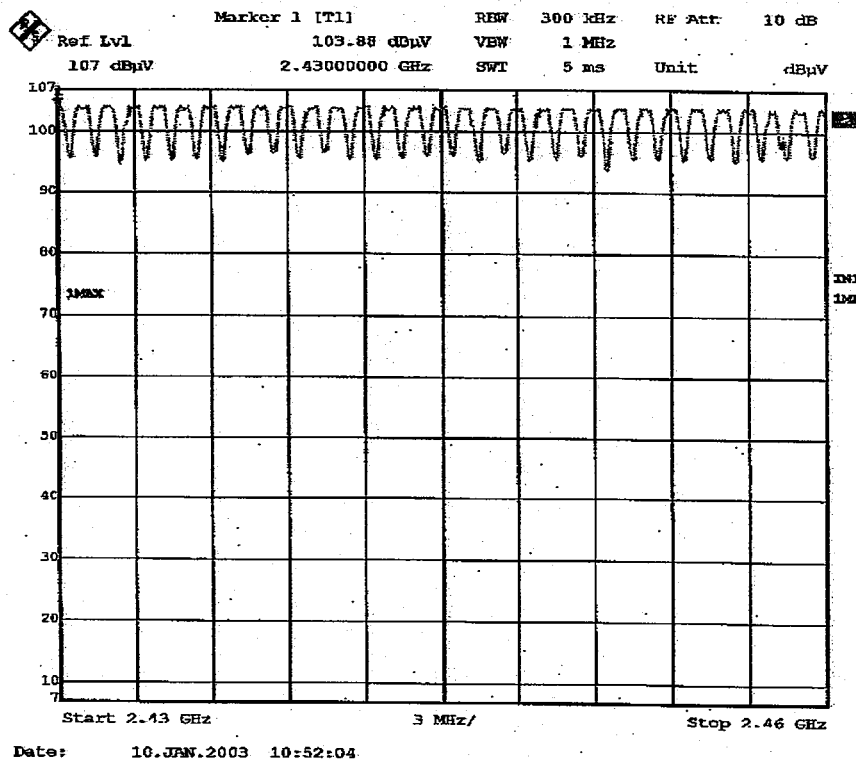
Mode	Number of channel	Limit
	[time]	[time]
Inquiry	32	≥ 15

Test report No. : 23BE0019-HO - 1 0
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100

Number of Hopping Frequency :Tx(Hopping on)2400-2430MHz:UP-DX100

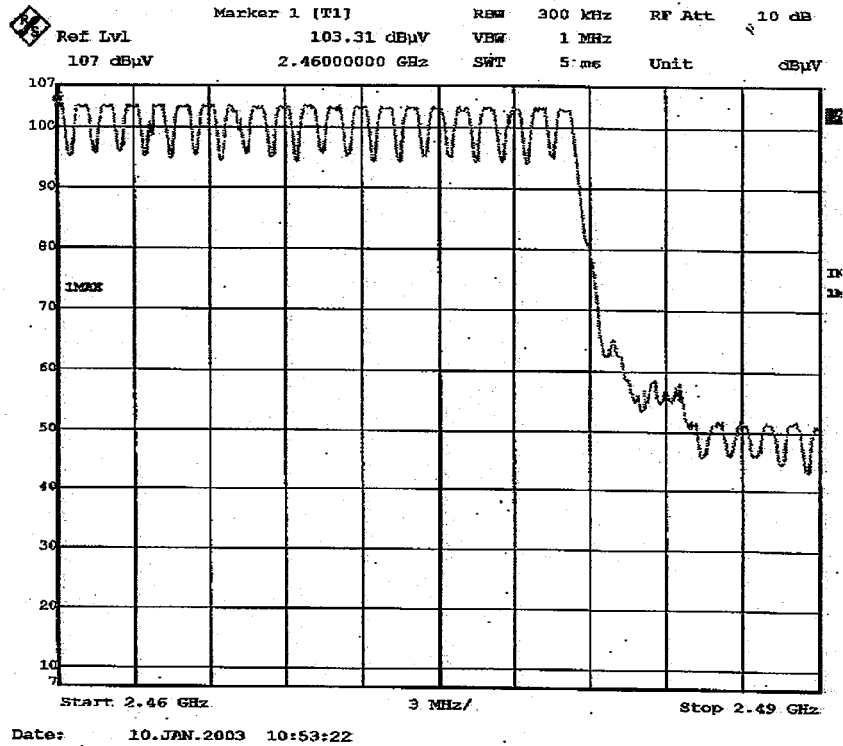


Number of Hopping Frequency :Tx(Hopping on)2430-2460MHz:UP-DX100

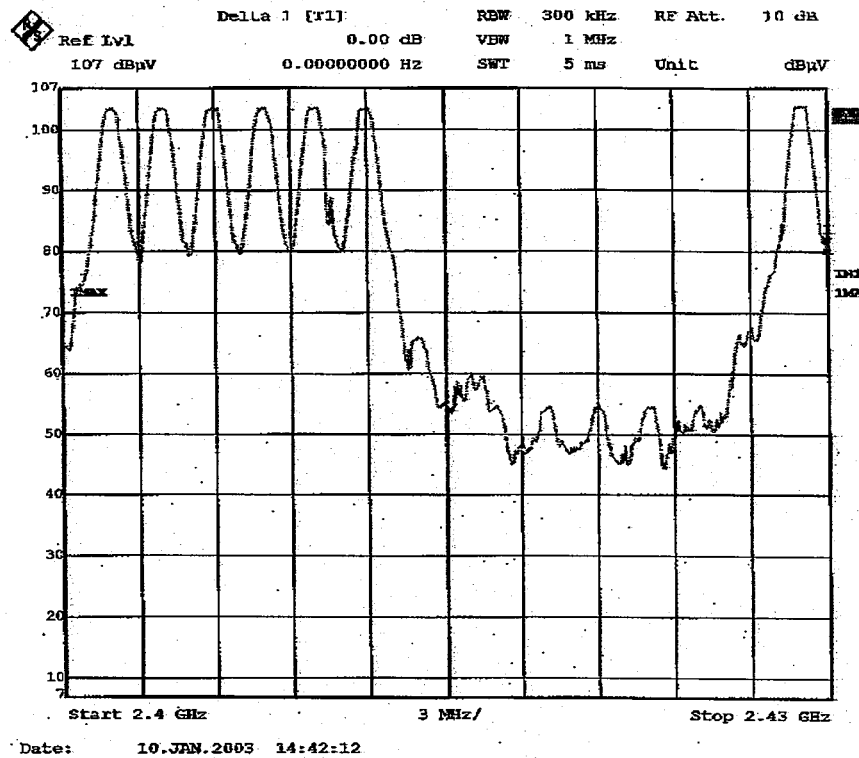


Test report No. : 23BE0019-HO - 1 0
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100

Number of Hopping Frequency :Tx(Hopping on)2460-2490MHz:UP-DX100

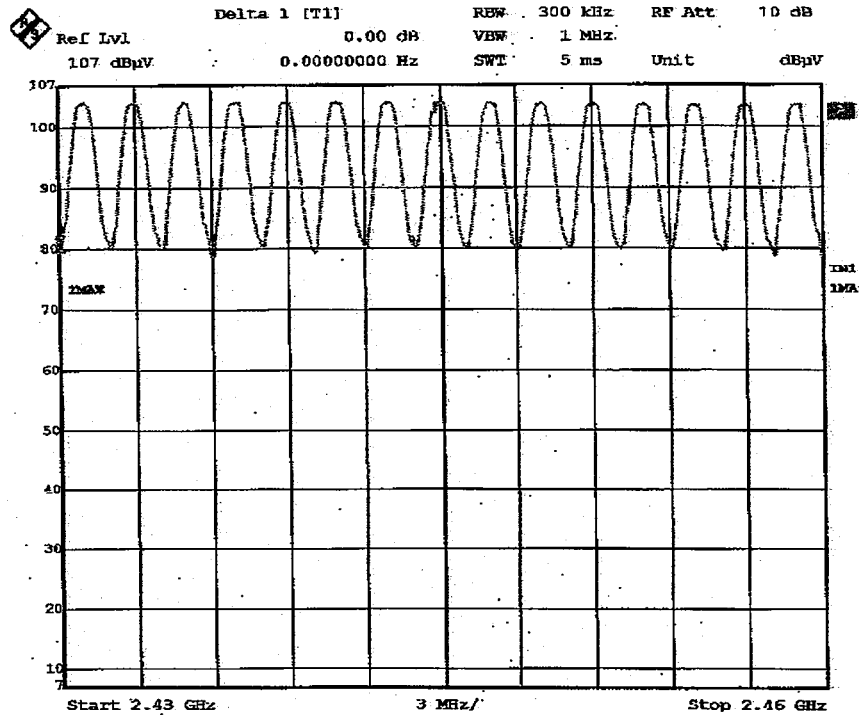


Number of Hopping Frequency :Inquiry2400-2430MHz:UP-DX100



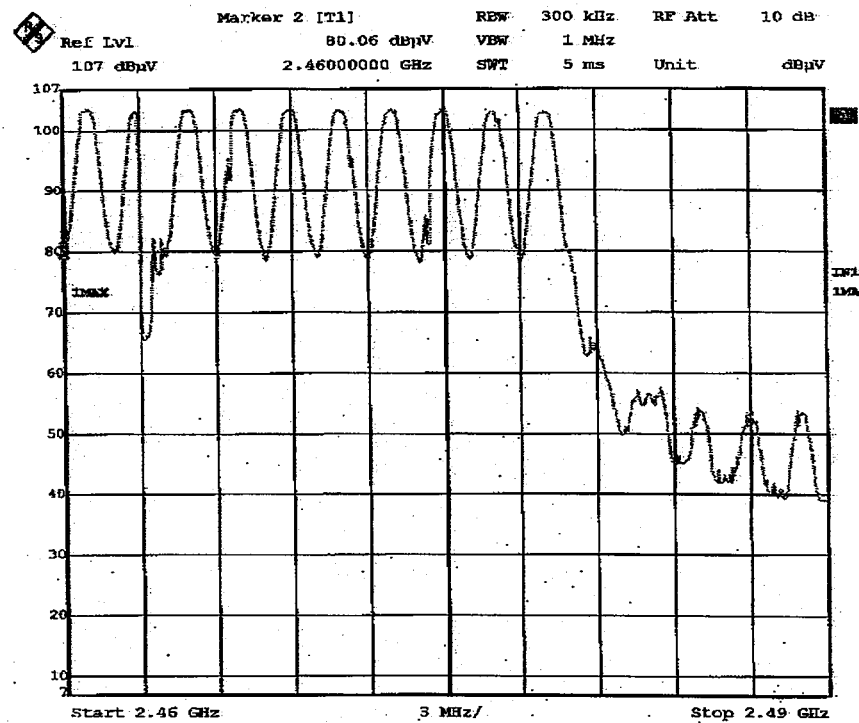
Test report No. : 23BE0019-HO - 1 0
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100

Number of Hopping Frequency :Inquiry2430-2460MHz:UP-DX100



Date: 10.JAN.2003 14:43:59

Number of Hopping Frequency :Inquiry2460-2490MHz:UP-DX100



Date: 10.JAN.2003 14:45:34

DATA OF DWELL TIME

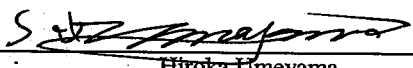
A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.1 SEMI ANECHOIC CHAMBER

COMPANY : Sony Corporation
EQUIPMENT : Digital Photo Printer
MODEL : UP-DX100
S/N : 30011
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100
POWER : AC120V/60Hz
MODE : Tx (Hopping off) /Inquiry

REPORT NO : 23BE0019-HO - 10
REGULATION : Fcc Part15 Subpart C 15.247(a)(1)(iii)
TEST DISTANCE : -
DATE : 01/10/2003
TEMPERATURE : 19°C
HUMIDITY : 31%

Engineer :

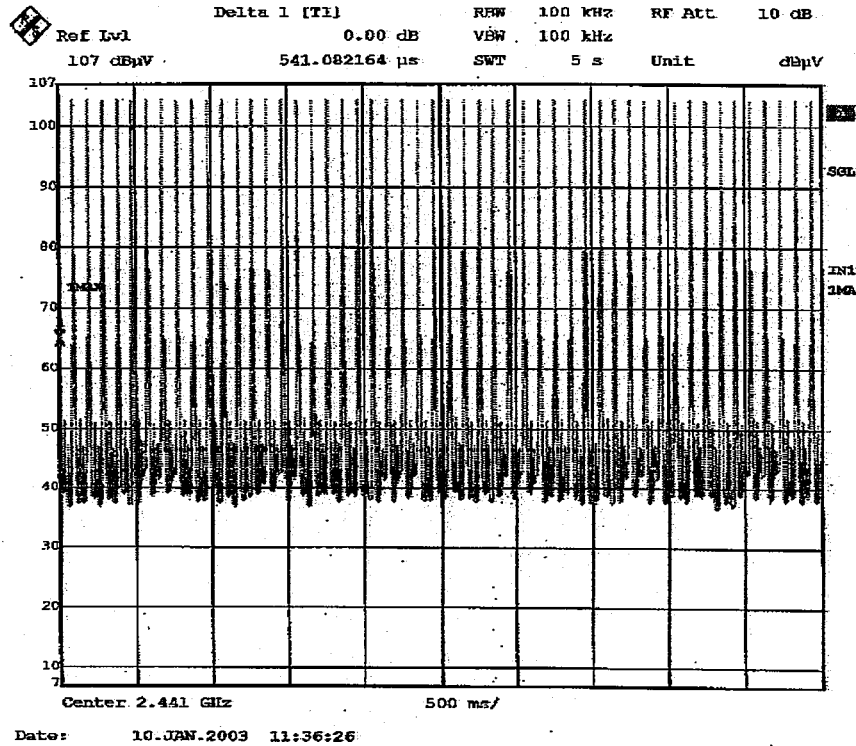

Hiroka Umeyama

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

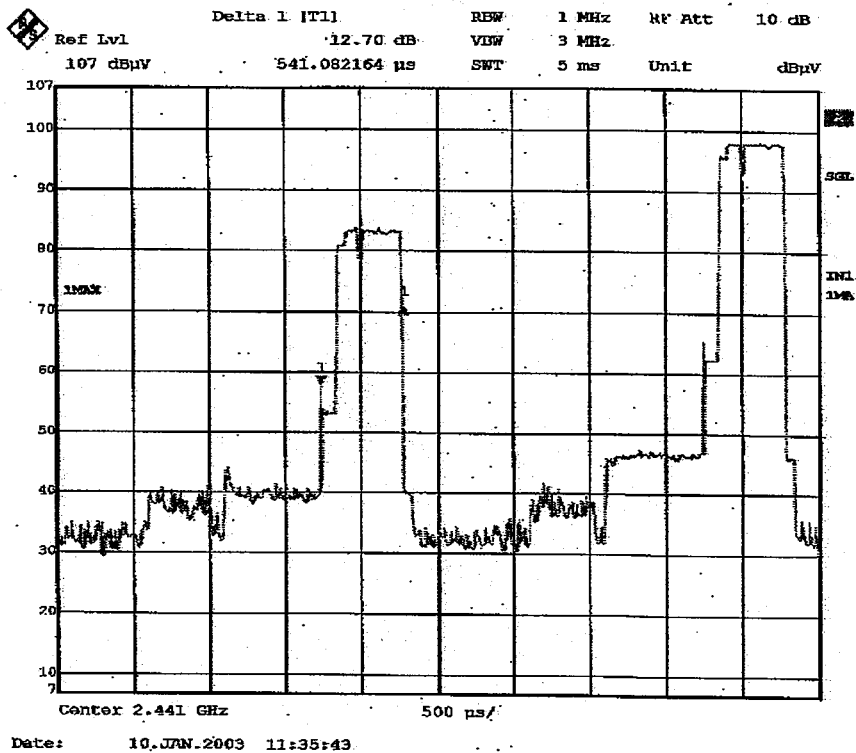
Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	50 times /5sec. x 6.32 = 316 times	0.541	171	400
DH3	25 times / 5sec. x 6.32 = 158 times	1.700	269	400
DH5	17 times / 5 sec. x 6.32 = 108 times	2.936	318	400
Inquiry	100 times / 1sec. x 12.8 = 1280 times	0.244	313	400

Test report No. : 23BE0019-HO - 1 0
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100

Dwell time :Tx(Hopping on)DH1(1):UP-DX100

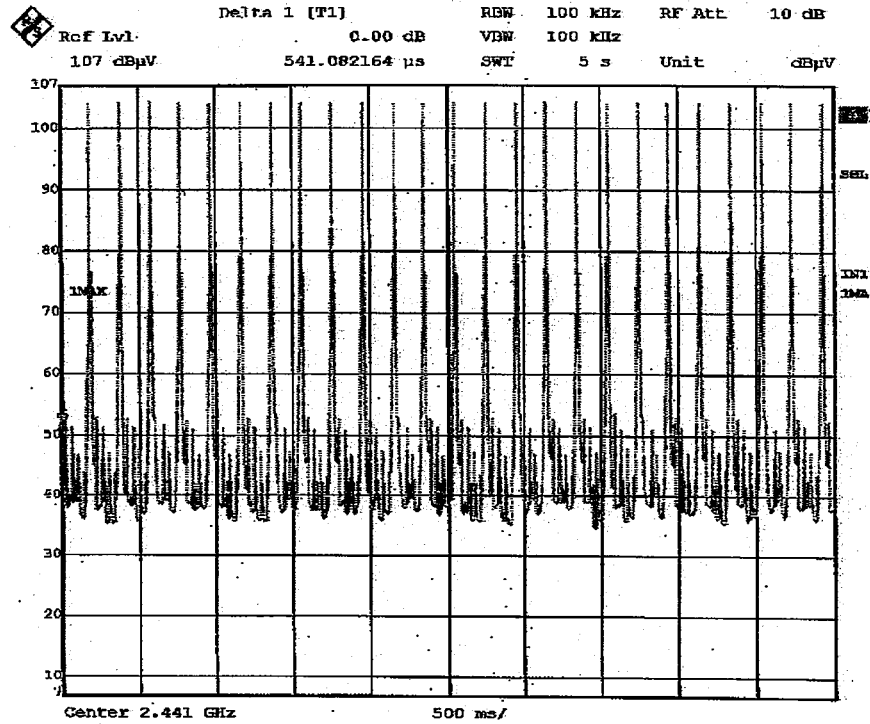


Dwell time :Tx(Hopping on)DH1(2):UP-DX100



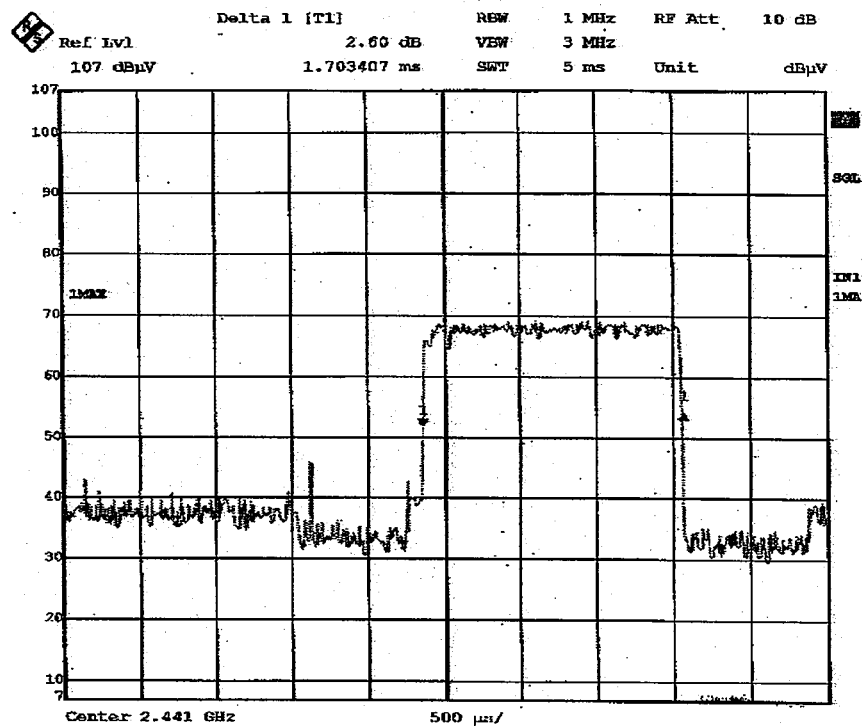
Test report No. : 23BE0019-HO - 1 0
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100

Dwell time :Tx(Hopping on)DH3(1):UP-DX100



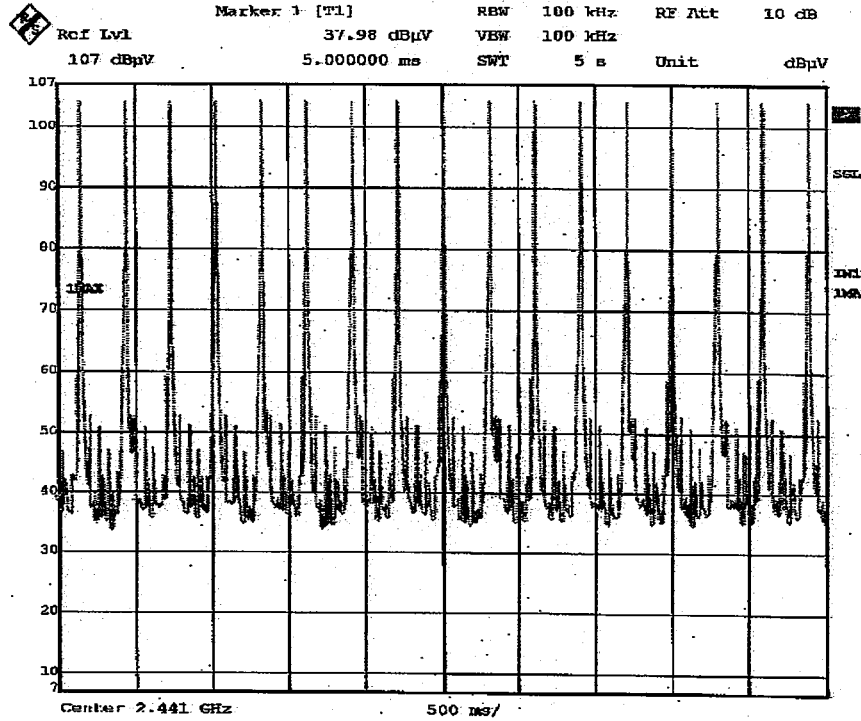
Date: 10.JAN.2003 11:38:52

Dwell time :Tx(Hopping on)DH3(2):UP-DX100



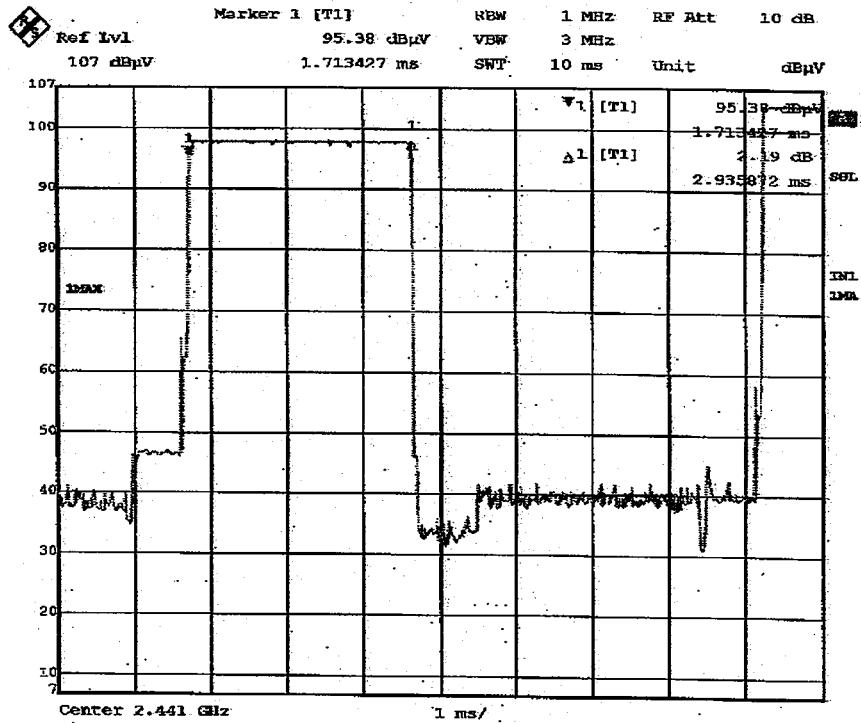
Date: 10.JAN.2003 11:40:08

Dwell time :Tx(Hopping on)DH5(1):UP-DX100



Date: 10.JAN.2003 10:59:14

Dwell time :Tx(Hopping on)DH5(2):UP-DX100

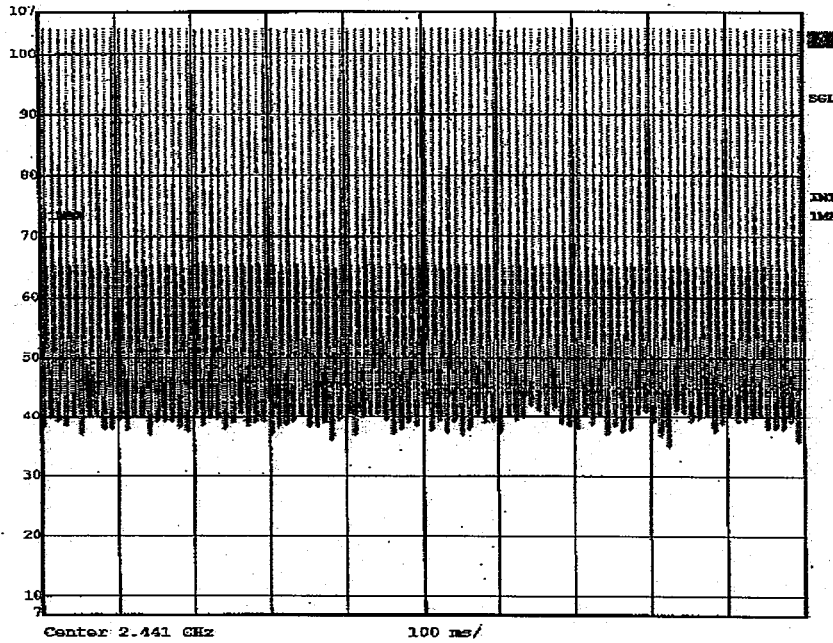


Date: 10.JAN.2003 11:00:12

Test report No. : 23BE0019-HO - 1 0
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100

Dwell time :Inquiry (1):UP-DX100

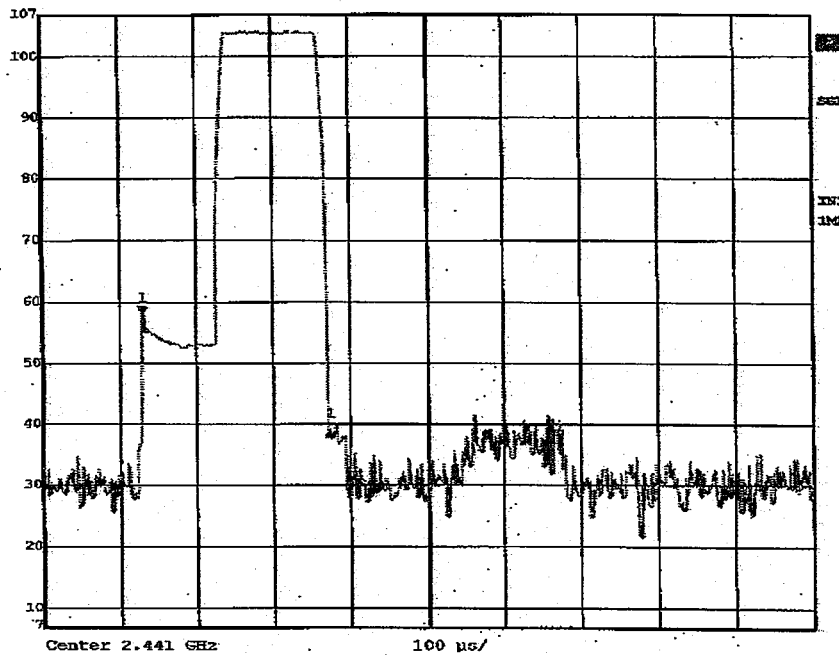
Marker 2: [T1] ~
Ref Lvl 107 dBuV
52.89 dBuV
5.000000 ms
RSW 100 kHz
VSW 100 kHz
SWT 1 s
Unit dBuV
RF Att 10 dB



Date: 10.JAN.2003 14:47:36

Dwell time :Inquiry (2):UP-DX100

Delta 1 [T1]
Ref Lvl 107 dBuV
-19.08 dB
244.488978 ps
RSW 1 MHz
VSW 3 MHz
SWT 1 ms
Unit dBuV
RF Att 10 dB



Date: 10.JAN.2003 14:49:40

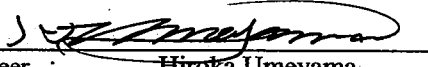
DATA OF PEAK OUTPUT POWER(CONDUCTED)

A-Pex International Co., Ltd.

EMC HEAD OFFICE DIVISION No.1 SEMI ANECHOIC CHAMBER

COMPANY : Sony Corporation
EQUIPMENT : Digital Photo Printer
MODEL : UP-DX100
S/N : 30011
FCC ID : AK8UPDX100
IC Number : 409B-UPDX100
POWER : AC120V/60Hz
MODE : Tx (Hopping off) /Inquiry

REPORT NO : 23BE0019-HO - 10
REGULATION : Fcc Part15 Subpart C 15.247(b)(1)
TEST DISTANCE : -
DATE : 01/10/2003
TEMPERATURE : 19°C
HUMIDITY : 31%

Engineer : 
Hiroka Umeyama

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

CH	FREQ [MHz]	S/A Reading [dBuV]	Cable Loss [dB]	Result [dBuV]	Result [dBm]	Limit (1W) [dBm]
Low	2402.0	103.5	1.7	105.2	-1.80	30.0
Mid	2441.0	103.8	1.8	105.6	-1.40	30.0
High	2480.0	103.0	1.8	104.8	-2.20	30.0
Inquiry	2441.0	103.8	1.8	105.6	-1.40	21.0

Sample Calculation :

Result = S/A Reading + Cable Loss