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 Printing System
MODEL   :   DKC-C200X
S/ N   :   59810048
FCC ID   :   AK8DKCC200X
IC Number   :   409B-DKCC200X
POWER   :   AC120V/60Hz
MODE   :   Tx (Hopping on) /Inquiry

REPORT NO   :   23BE0019-HO – 9
REGULATION   :   Fcc Part15 Subpart C 15.247(a)(1)(iii)
TEST DISTANCE   :   -
DATE   :   01/10/2003
TEMPERATURE   :   19℃
HUMIDITY   :   31%

Engineer   :   Hiroka Umeyama

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

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

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

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

Number of Hopping Frequency :Tx(Hopping on)2400-2430MHz:DKC-C200X

	Marker 1 [T1]	RBW	300 kHz	RF Att	10 dB
Ref Lvl	103.74 dBμV	VBW	1 MHz		
107 dBμV	2.43000000 GHz	SWT	5 ms	Unit	dBμV

Start 2.4 GHz   3 MHz/   Stop 2.43 GHz

Date: 10.JAN.2003   16:54:30
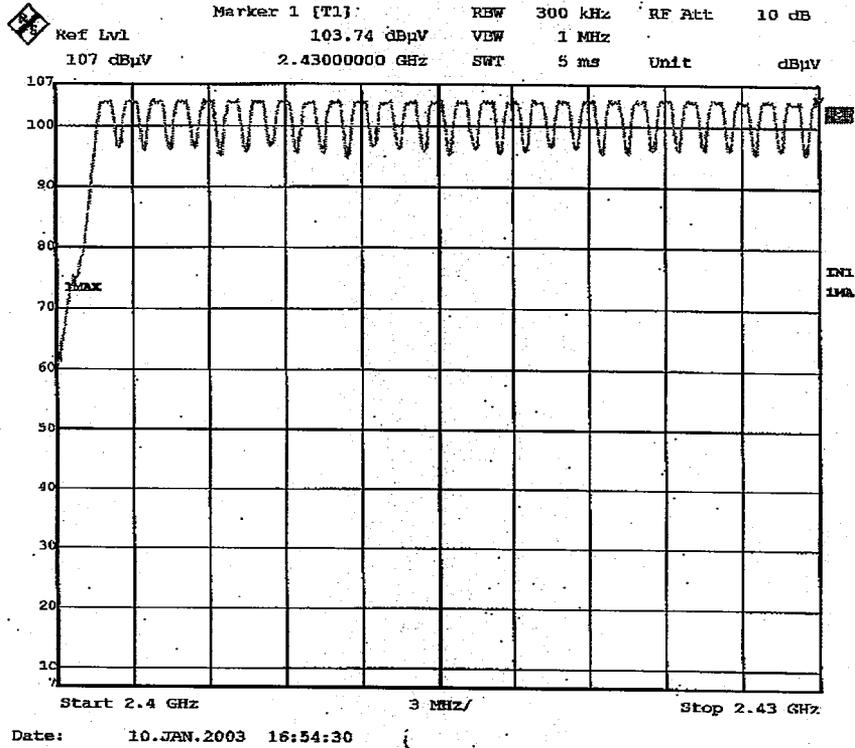
Number of Hopping Frequency :Tx(Hopping on)2430-2460MHz:DKC-C200X
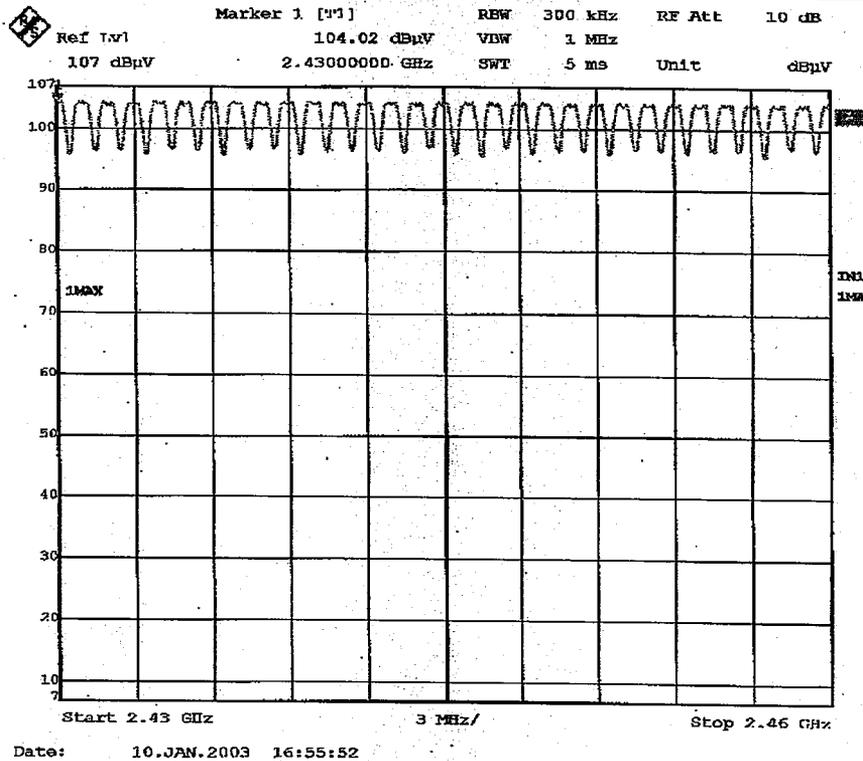
	Marker 1 [T1]	RBW	300 kHz	RF Att	10 dB
Ref Lvl	104.02 dBμV	VBW	1 MHz		
107 dBμV	2.43000000 GHz	SWT	5 ms	Unit	dBμV

Start 2.43 GHz   3 MHz/   Stop 2.46 GHz

Date: 10.JAN.2003   16:55:52

28

Number of Hopping Frequency :Tx(Hopping on)2460-2490MHz:DKC-C200X

Ref Lvl	Marker 1 [T1]	RBW	300 kHz	RF Att	10 dB
107 dBμV	103.68 dBμV	VBW	1 MHz		
	2.46000000 GHz	SWT	5 ms	Unit	dBμV

Start 2.46 GHz   3 MHz/   Stop 2.49 GHz

Date: 10.JAN.2003 16:57:12
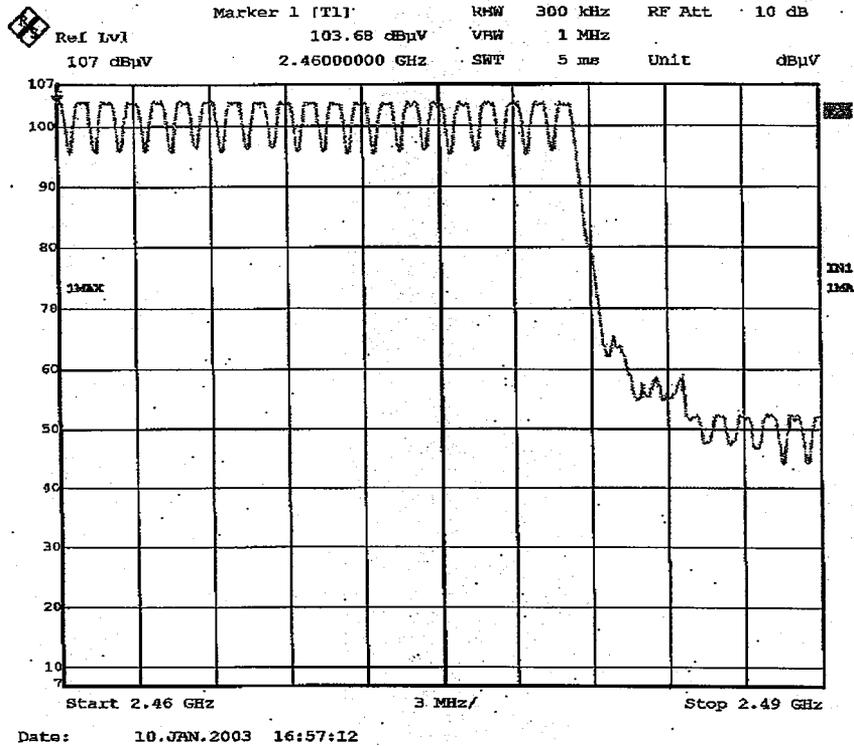
Number of Hopping Frequency :Inquiry2400-2430MHz:DKC-C200X
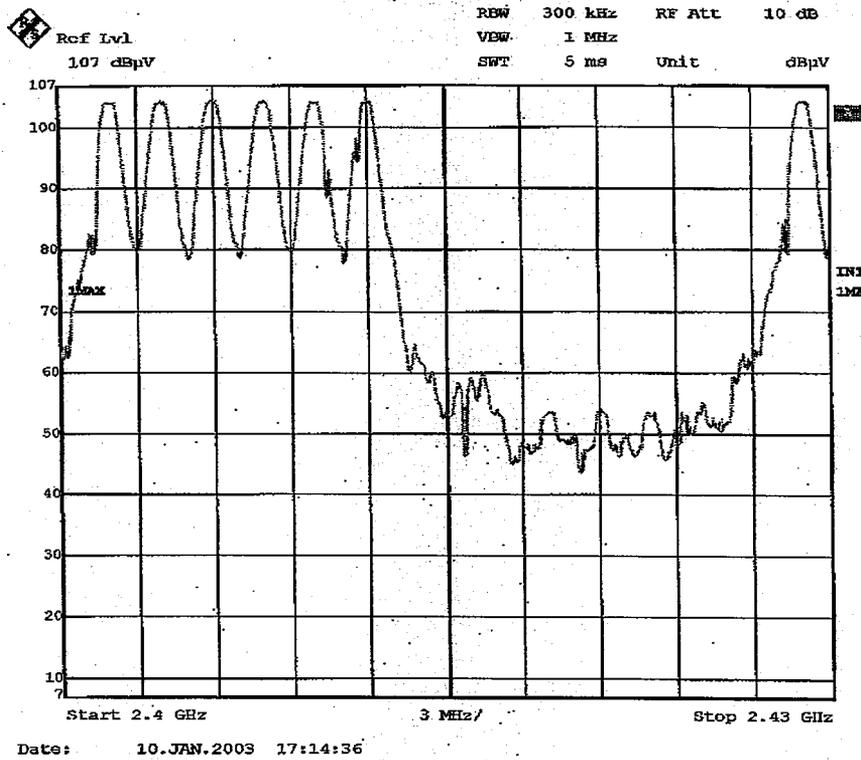
Ref Lvl		RBW	300 kHz	RF Att	10 dB
107 dBμV		VBW	1 MHz		
		SWT	5 ms	Unit	dBμV

Start 2.4 GHz   3 MHz/   Stop 2.43 GHz

Date: 10.JAN.2003 17:14:36

29

Number of Hopping Frequency :Inquiry2430-2460MHz:DKC-C200X

		RBW	300 kHz	RF Att	10 dB
Ref Lvl		VBW	1 MHz		
107 dBμV		SWT	5 ms	Unit	dBμV

Start 2.43 GHz   3 MHz/   Stop 2.46 GHz

Date: 10.JAN.2003 17:13:54
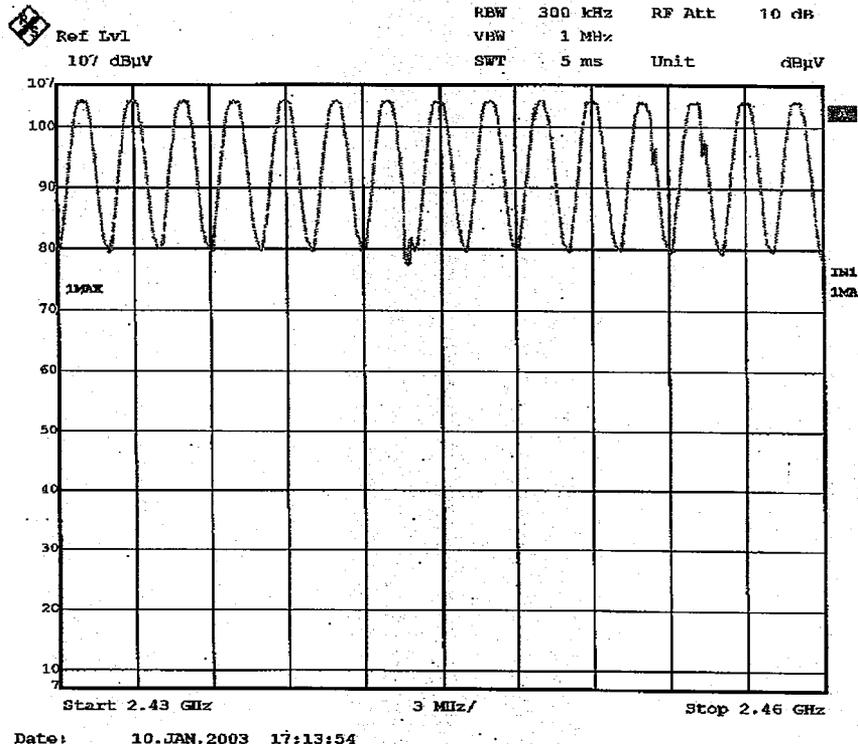
Number of Hopping Frequency :Inquiry2460-2490MHz:DKC-C200X

		RBW	300 kHz	RF Att	10 dB
Ref Lvl		VBW	1 MHz		
107 dBμV		SWT	5 ms	Unit	dBμV

Start 2.46 GHz   3 MHz/   Stop 2.49 GHz

Date: 10.JAN.2003 17:16:22

30
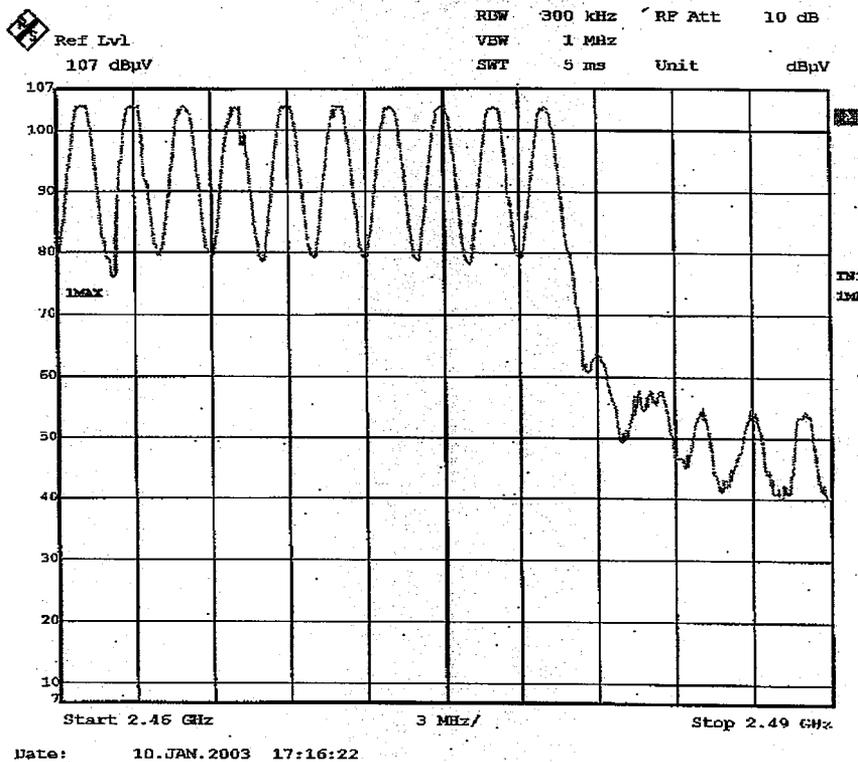
DATA OF DWELL TIME

A-Pex International Co., Ltd.
EMC HEAD OFFICE DIVISION No.1 SEMI ANECHOIC CHAMBER

COMPANY   :   Sony Corporation
EQUIPMENT   :   Digital Printing System
MODEL   :   DKC-C200X
S/N   :   59810048
FCC ID   :   AK8DKCC200X
IC Number   :   409B-DKCC200X
POWER   :   AC120V/60Hz
MODE   :   Tx (Hopping off) /Inquiry

REPORT NO   :   23BE0019-HO＝ 9
REGULATION   :   Fcc Part15 Subpart C 15.247(a)(1)(iii)
TEST DISTANCE   :   -
DATE   :   01/10/2003
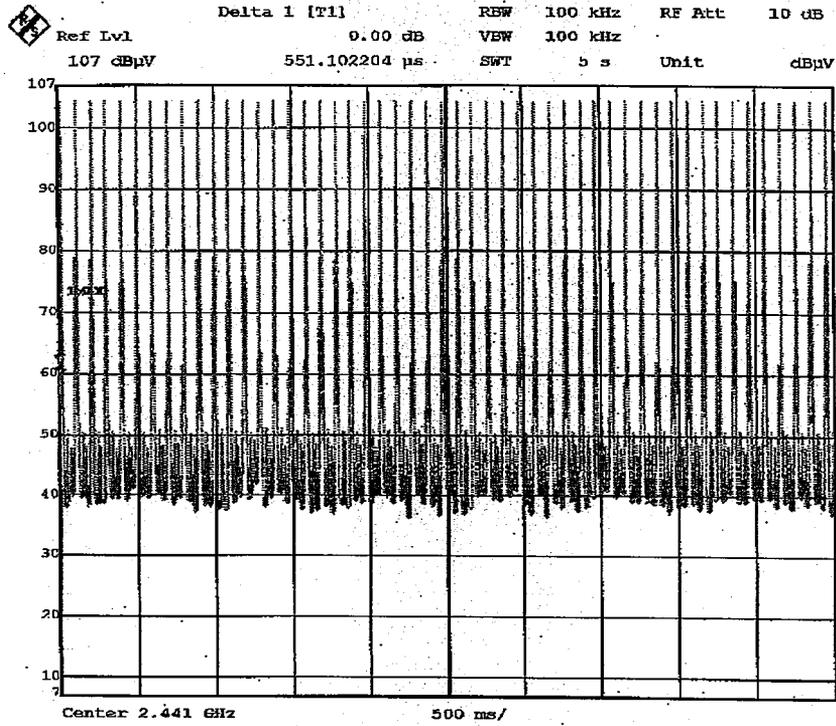TEMPERATURE   :   19℃
HUMIDITY   :   31%
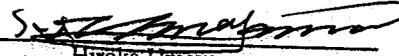
Engineer :   Hiroka Umeyama

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	0.551	174	400
DH3	25 times / 5sec. x 6.32 = 158 times	1.683	266	400
DH5	17 times / 5 sec. x 6.32 = 108 times	2.956	320	400
Inquiry	100 times / 1sec. x 12.8 = 1280 times	0.156	200	400

Dwell time :Tx(Hopping on)DH1(1):DKC-C200X

	Delta 1 [T1]		RBW	100 kHz	RF Att	10 dB
Ref Lvl		0.00 dB	VBW	100 kHz		
107 dBμV		551.102204 μs	SWT	5 s	Unit	dBμV

Center 2.441 GHz   500 ms/

Date: 10.JAN.2003   17:02:57

Dwell time :Tx(Hopping on)DH1(2):DKC-C200X

	Delta 1 [T1]		RBW	1 MHz	RF Att	10 dB
Rel Lvl		-0.05 dB	VBW	3 MHz		
107 dBμV		551.102204 μs	SWT	5 ms	Unit	dBμV

Center 2.441 GHz   500 μs/

Date: 10.JAN.2003   17:02:39

32
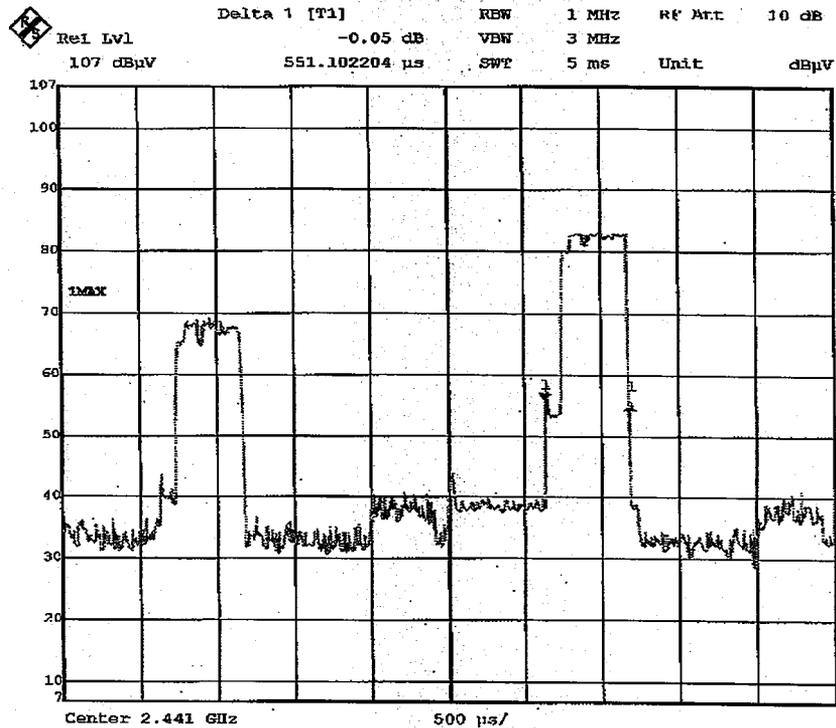
Dwell time :Tx(Hopping on)DH3(1):DKC-C200X

	Delta 1 [T1]		RBW	100 kHz	RF Att	10 dB
Ref Lvl		0.00 dB	VBW	100 kHz		
107 dBµV		551.102204 µs	SWT	5 s	Unit	dBµV

Center 2.441 GHz   500 ms/
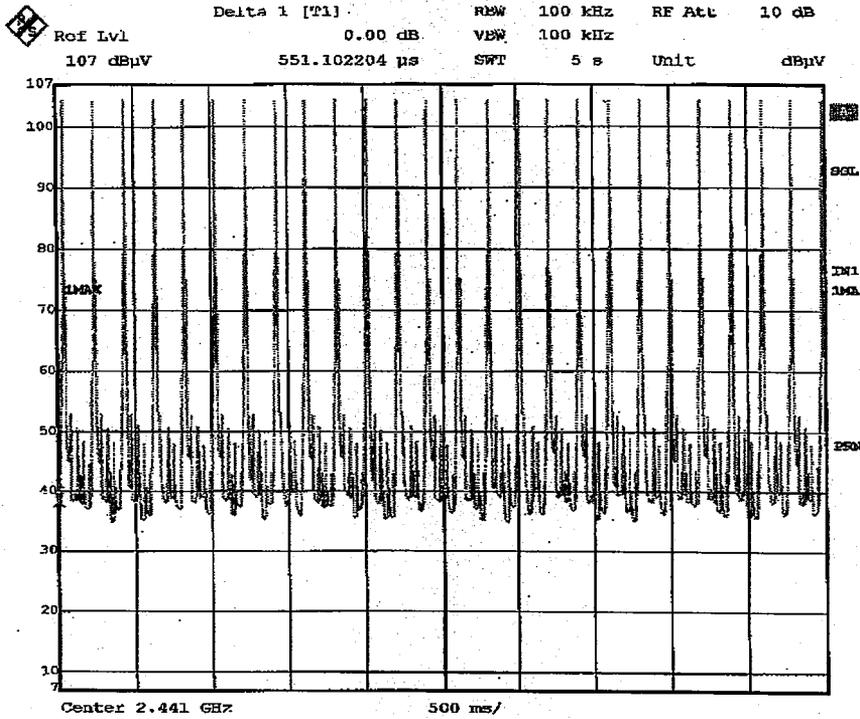
Date: 10.JAN.2003   17:03:24

Dwell time :Tx(Hopping on)DH3(2):DKC-C200X

	Delta 1 [T1]		RBW	100 kHz	RF Att	10 dB
Ref Lvl		-1.60 dB	VBW	3 MHz		
107 dBµV		1.683367 ms	SWT	5 ms	Unit	dBµV

Center 2.441 GHz   500 µs/
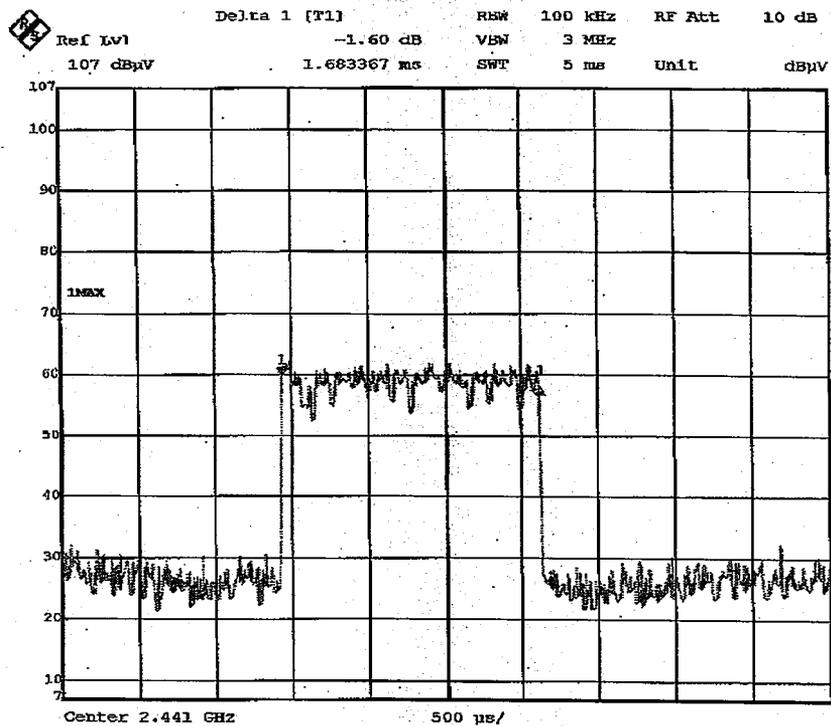
Date: 10.JAN.2003   17:05:41

33

Dwell time :Tx(Hopping on)DH5(1):DKC-C200X

	Marker 1 [T1]	RBW 100 kHz	RF Att 10 dB
Ref Lvl	38.82 dBµV	VBW 100 kHz	
107 dBµV	5.000000 ms	SWT 5 s	Unit dBµV

Center 2.441 GHz   500 ms/
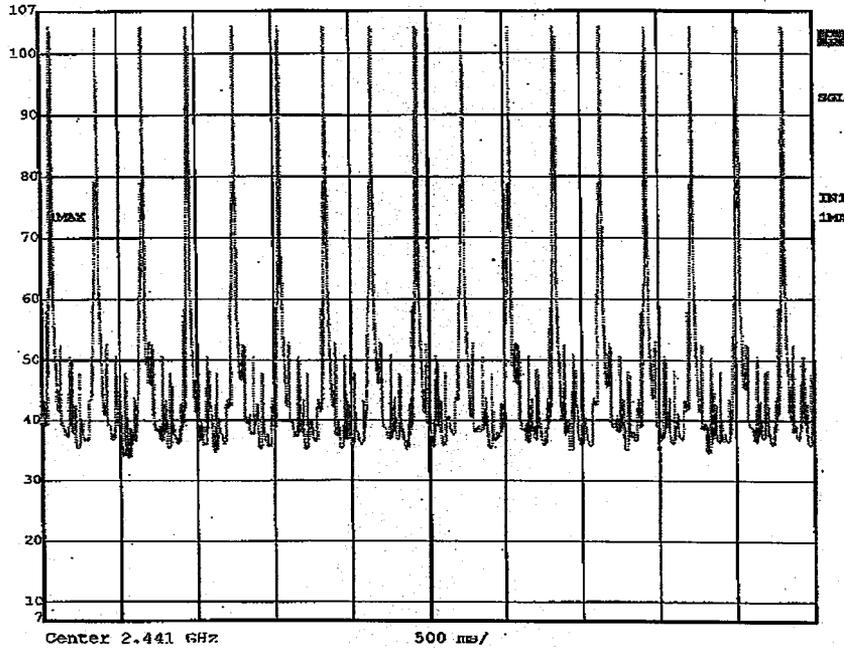
Date: 10.JAN.2003 16:59:02

Dwell time :Tx(Hopping on)DH5(2):DKC-C200X

	Delta 1 [T1]	RBW 1 MHz	RF Att 10 dB
Ref Lvl	15.51 dB	VBW 3 MHz	
107 dBµV	2.955912 ms	SWT 10 ms	Unit dBµV

Center 2.441 GHz   1 ms/
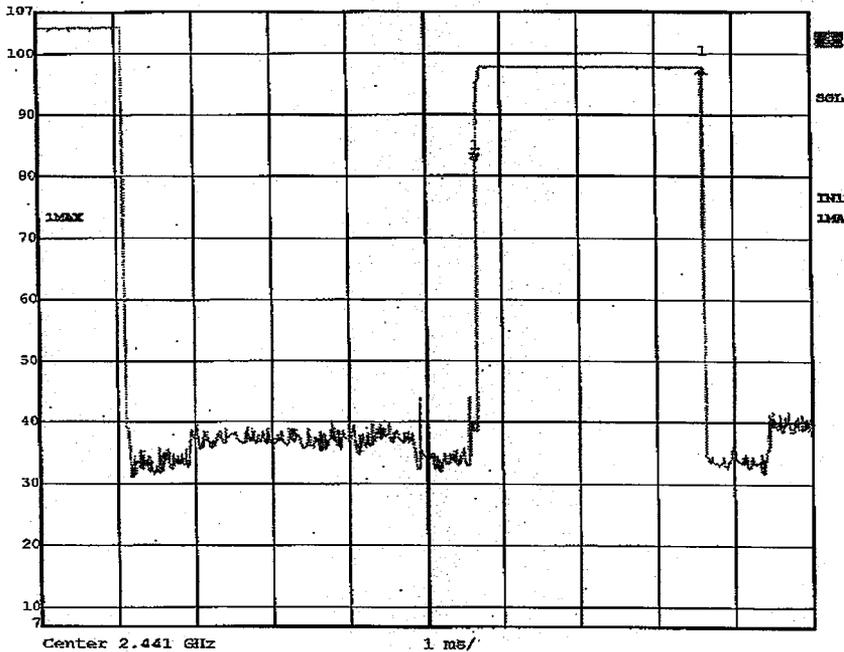
Date: 10.JAN.2003 17:00:43

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Dwell time :Inquiry (1):DKC-C200X

	Delta 1 [T1]		RBW	100 kHz	RF Att	10 dB
Ref Lvl		0.00 dB	VBW	100 kHz		
107 dBµV		156.312625 µs	SWT	1 s	Unit	dBµV

Center 2.441 GHz   100 ms/
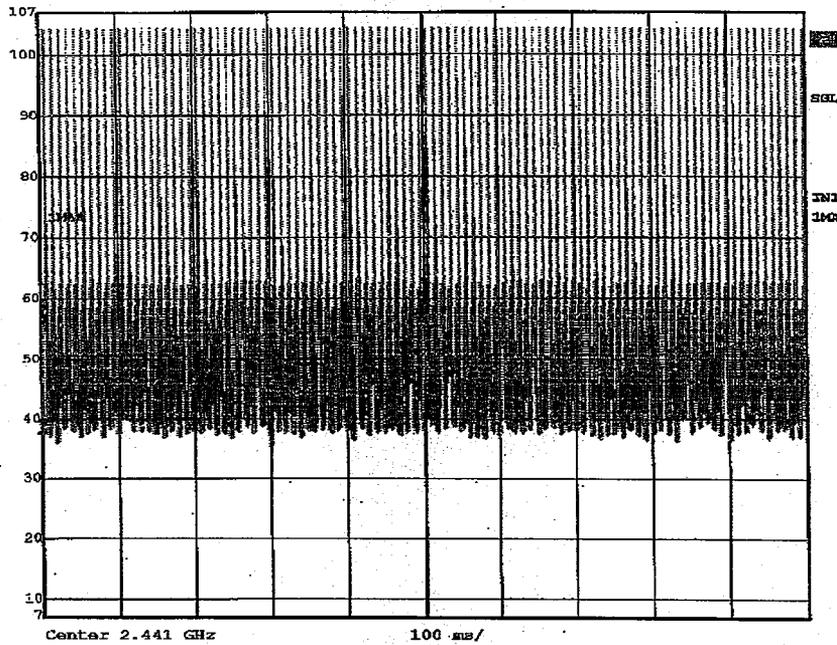
Date: 10.JAN.2003 17:08:36

Dwell time :Inquiry (2):DKC-C200X

	Delta 1 [T1]		RBW	100 kHz	RF Att	10 dB
Ref Lvl		0.55 dB	VBW	3 MHz		
107 dBµV		156.312625 µs	SWT	1 ms	Unit	dBµV

Center 2.441 GHz   100 µs/
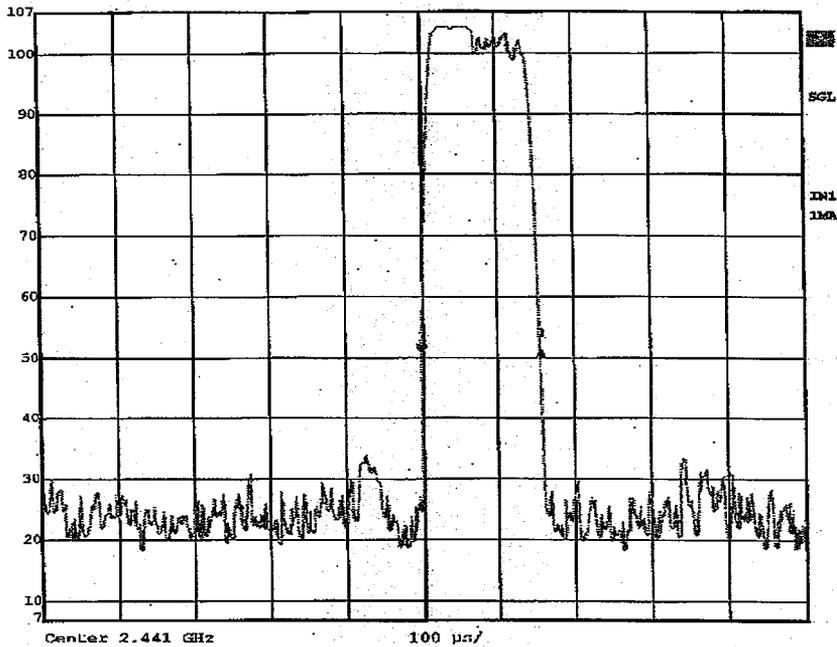
Date: 10.JAN.2003 17:08:00

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DATA OF PEAK OUTPUT POWER(CONDUCTED)

A-Pex International Co., Ltd.
EMC HEAD OFFICE DIVISION No.1 SEMI ANECHOIC CHAMBER

COMPANY	: Sony Corporation	REPORT NO	:	23BE0019-HO - 9
EQUIPMENT	: Digital Printing System	REGULATION	:	Fcc Part15 Subpart C 15.247(b)(1)
MODEL	: DKC-C200X	TEST DISTANCE	:	-
S/ N	: 59810048	DATE	:	01/10/2003
FCC ID	: AK8DKCC200X	TEMPERATURE	:	19°C
IC Number	: 409B-DKCC200X	HUMIDITY	:	31%
POWER	: AC120V/60Hz			
MODE	: Tx (Hopping off) /Inquiry			
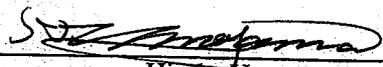
Engineer :   Hiroka Umeyama

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

CH	FREQ [MHz]	S/A Reading [dBuV]	Cable Loss [dB]	Result [dBuV]	Result [dBm]	Limit (1W) [dBm]
Low	2402.0	104.2	1.7	105.9	-1.10	30.0
Mid	2441.0	104.2	1.8	106.0	-1.00	30.0
High	2480.0	103.7	1.8	105.5	-1.50	30.0
Inquiry	2441.0	104.0	1.8	105.8	-1.20	21.0

Sample Calculation :
Result = S/A Reading + Cable Loss

Peak Output Power(Conducted):Tx(2402MHz):DKC-C200X

	Marker 1 [T1]	RBW	1 MHz	RF Att	10 dB
Ref Lvl	104.15 dBµV	VBW	3 MHz		
107 dBµV	2.40194489 GHz	SWT	5 ms	Unit	dBµV

Center 2.402 GHz   500 kHz/   Span 5 MHz
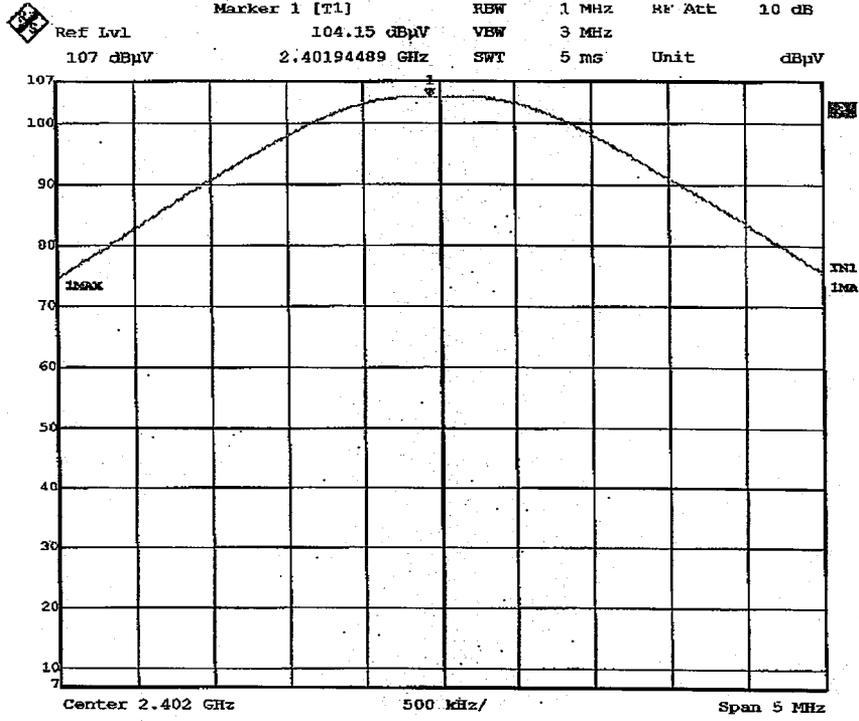
Date: 10.JAN.2003 15:27:35

Peak Output Power(Conducted):Tx(2441MHz):DKC-C200X
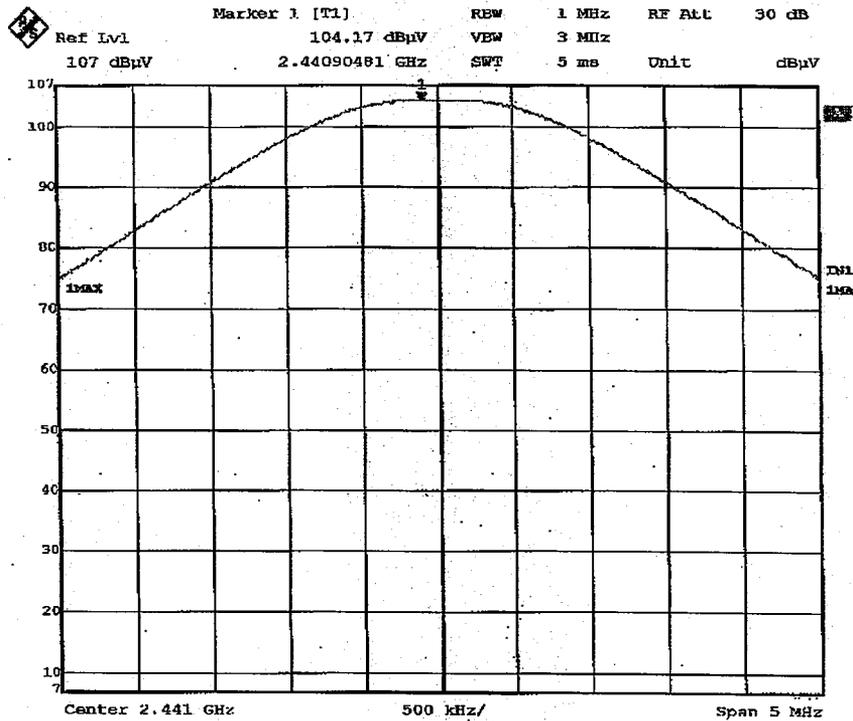
	Marker 1 [T1]	RBW	1 MHz	RF Att	30 dB
Ref Lvl	104.17 dBµV	VBW	3 MHz		
107 dBµV	2.44090481 GHz	SWT	5 ms	Unit	dBµV

Center 2.441 GHz   500 kHz/   Span 5 MHz

Date: 10.JAN.2003 15:29:48

Peak Output Power(Conducted):Tx(2480MHz):DKC-C200X

	Marker 1 [T1]	RBW	1 MHz	RF Att	30 dB
Ref Lvl	103.73 dBµV	VBW	3 MHz		
107 dBµV	2.48019539 GHz	SWT	5 ms	Unit	dBµV

Center 2.48 GHz   500 kHz/   Span 5 MHz
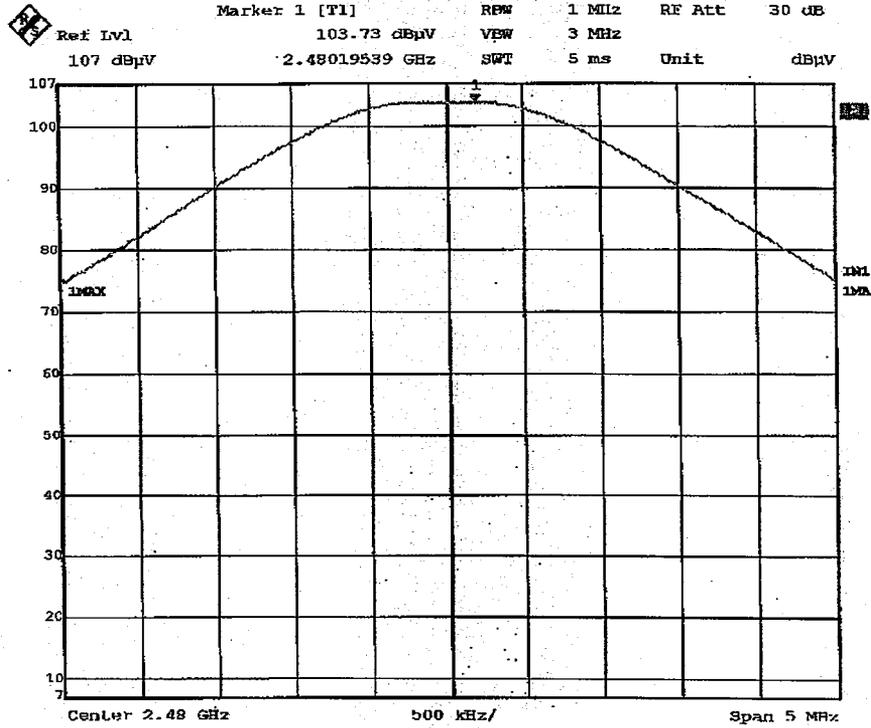
Date: 10.JAN.2003   15:31:22

Peak Output Power(Conducted):Inquiry:DKC-C200X

	Marker 1 [T1]	RBW	1 MHz	RF Att	10 dB
Ref Lvl	104.04 dBµV	VBW	3 MHz		
107 dBµV	2.44100501 GHz	SWT	5 ms	Unit	dBµV

Center 2.441 GHz   500 kHz/   Span 5 MHz
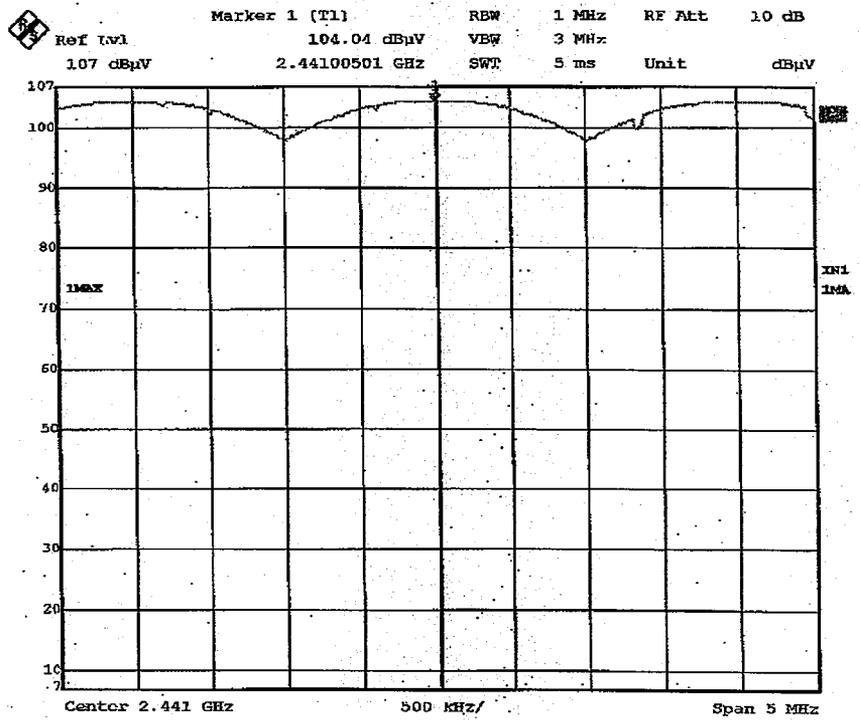
Date: 10.JAN.2003   17:11:08

DATA OF BAND EDGE

A-Pex International Co., Ltd.
EMC HEAD OFFICE DIVISION No.1 SEMI ANECHOIC CHAMBER

COMPANY	: Sony Corporation	REPORT NO	: 23BE0019-HO - 9
EQUIPMEN	: Digital Printing System	REGULATION	: Fcc Part15 Subpart C 15.247(c)
MODEL	: DKC-C200X	TEST DISTANCE	: -
S/ N	: 59810048	DATE	: 01/10/2003
FCC ID	: AK8DKCC200X	TEMPERATURE	: 19℃ .
IC Number	: 409B-DKCC200X	HUMIDITY	: 31%
POWER	: AC120V/60Hz		
MODE	: Tx (Hopping on/off)		

Engineer   :   Hiroka Umeyama

PK DETECT(S/A :Span 20/10MHz, RBW 200/100kHz/1MHz ,VBW 200/100kHz/1MHz, sweep time AUTO)
[Hopping on] Conducted

Frequency [MHz]	Reading [dBuV]	Cable Loss [dB]	E [dBuV]	P [nW]	Difference of level [dB]	Field Strength [dBuV/m]	Limit
2390.0	50.3	1.7	52.0	3.16	-	43.8	<74[dBuV/m]
2400.0	60.4	1.7	62.1	-	43.3*	-	>20[dB]
2483.5	56.2	1.8	58.0	12.59	-	49.8	<74[dBuV/m]

* Reference : Reading (103.7[dBuV]) + Cable Loss (1.7[dB]) = E (105.4[dBuV]) at 2402MHz.

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

Frequency [MHz]	Reading [dBuV]	Cable Loss [dB]	E [dBuV]	P [nW]	Difference of level [dB]	Field Strength [dBuV/m]	Limit
2390.0	40.3	1.7	42.0	0.32	-	33.8	<74[dBuV/m]
2400.0	62.5	1.7	64.2	-	41.5*	-	>20[dB]
2483.5	57.6	1.8	59.4	17.38	-	51.2	<74[dBuV/m]

* Reference : Reading (104.0[dBuV]) + Cable Loss (1.7[dB]) = E (105.7[dBuV]) at 2402MHz.

Sample Calculation:
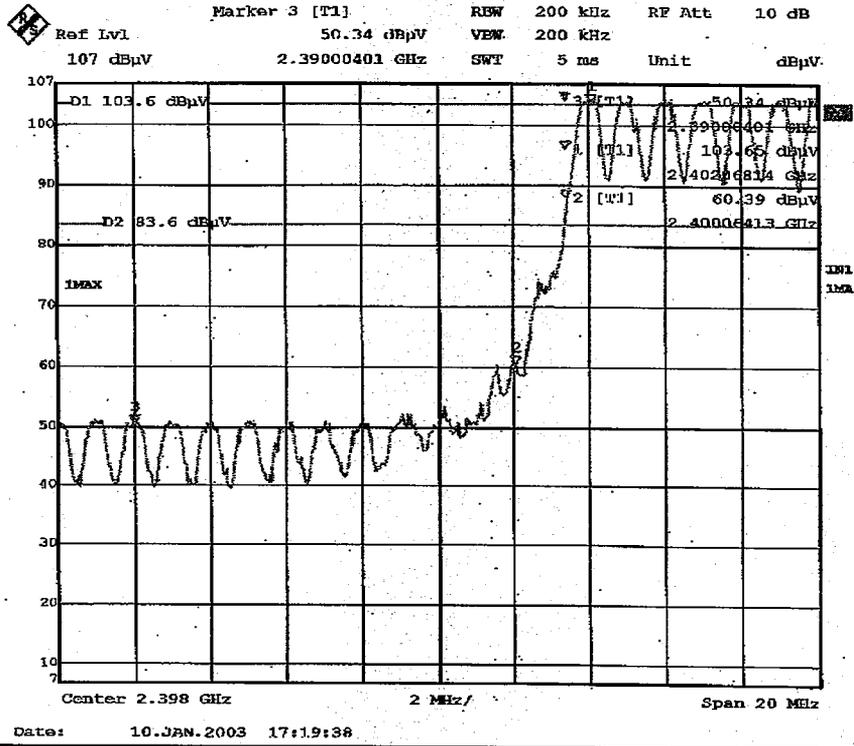
Field Strength $= (\sqrt{30*P*10^{-9}*G}) / d$

E : Reading + Cable Loss
P : Converted to nW
d : Test distance(3.0m)
G : Numeric Antenna Gain (2.27)

Band Edge :Tx(Hopping on)2402MHz:DKC-C200X

Marker 3 [T1]   RBW 200 kHz   RF Att   10 dB
Ref Lvl   50.34 dBμV   VBW 200 kHz
107 dBμV   2.39000401 GHz SWT   5 ms   Unit   dBμV.

Center 2.398 GHz   2 MHz/   Span 20 MHz

Date: 10.JAN.2003 17:19:38

Band Edge :Tx(Hopping on)2480MHz:DKC-C200X

Marker 2 [T1]   RBW 100 kHz   RF Att   10 dB
Ref Lvl   56.17 dBμV   VBW 100 kHz
107 dBμV   2.48349699 GHz SWT   5 ms   Unit   dBμV

Center 2.48 GHz   1 MHz/   Span 10 MHz

Date: 10.JAN.2003 17:21:07