

DATA OF CONDUCTION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22DE0036-YW-2

Applicant : DENSO WAVE INCORPORATED
Kind of Equipment : BARCODE HANDY TERMINAL
Model No. : BHT-100BF
Serial No. : 5496310181100005
Power : DC3.6V(AC120V/60Hz)
Mode : Transmitting
Remarks : FCC ID: PZWBHT-100F
Date : 11/27/2001
Phase : Single Phase
Temperature : 26 °C
Humidity : 25 %
Regulation : FCC Part15.207

Engineer : Naoki Sakamoto

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.	0.4500	45.8	-	38.6	-	0.1	0.1	0.0	46.0	-	48.0	0.0	2.0	-
2.	0.8775	29.4	-	18.5	-	0.1	0.1	0.0	29.6	-	48.0	0.0	18.4	-
3.	1.3610	22.6	-	10.8	-	0.1	0.1	0.0	22.8	-	48.0	0.0	25.2	-
4.	2.3492	11.6	-	8.1	-	0.1	0.2	0.0	11.9	-	48.0	0.0	36.1	-
5.	9.2219	14.0	-	12.4	-	0.3	0.3	0.0	14.6	-	48.0	0.0	33.4	-
6.	24.0031	18.6	-	19.2	-	0.8	0.4	0.0	20.4	-	48.0	0.0	27.6	-
7.	28.4479	24.0	-	24.5	-	1.0	0.5	0.0	26.0	-	48.0	0.0	22.0	-

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

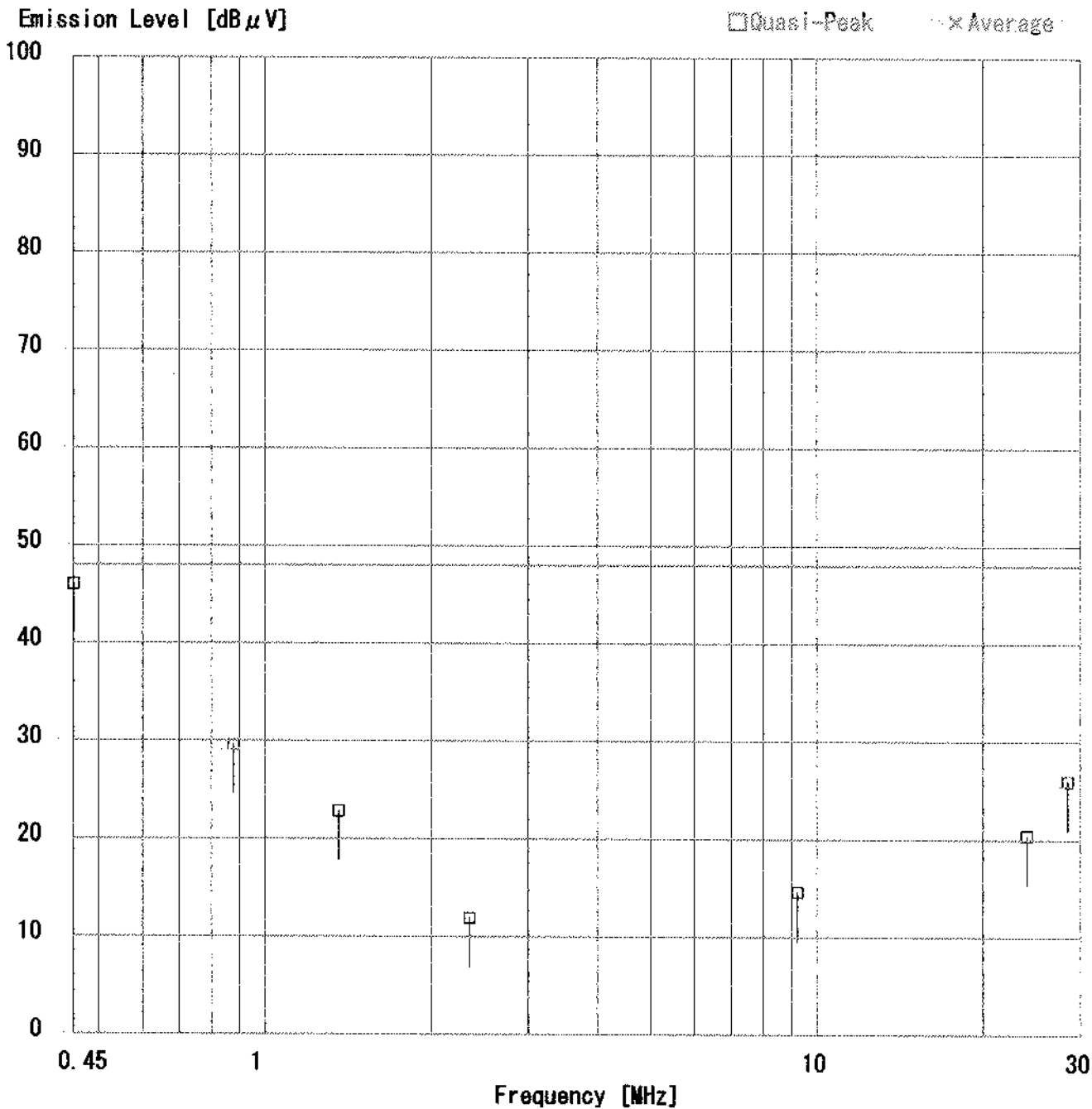
All other spurious emissions are more than 20dB below the limits.

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DATA OF CONDUCTION TEST CHART

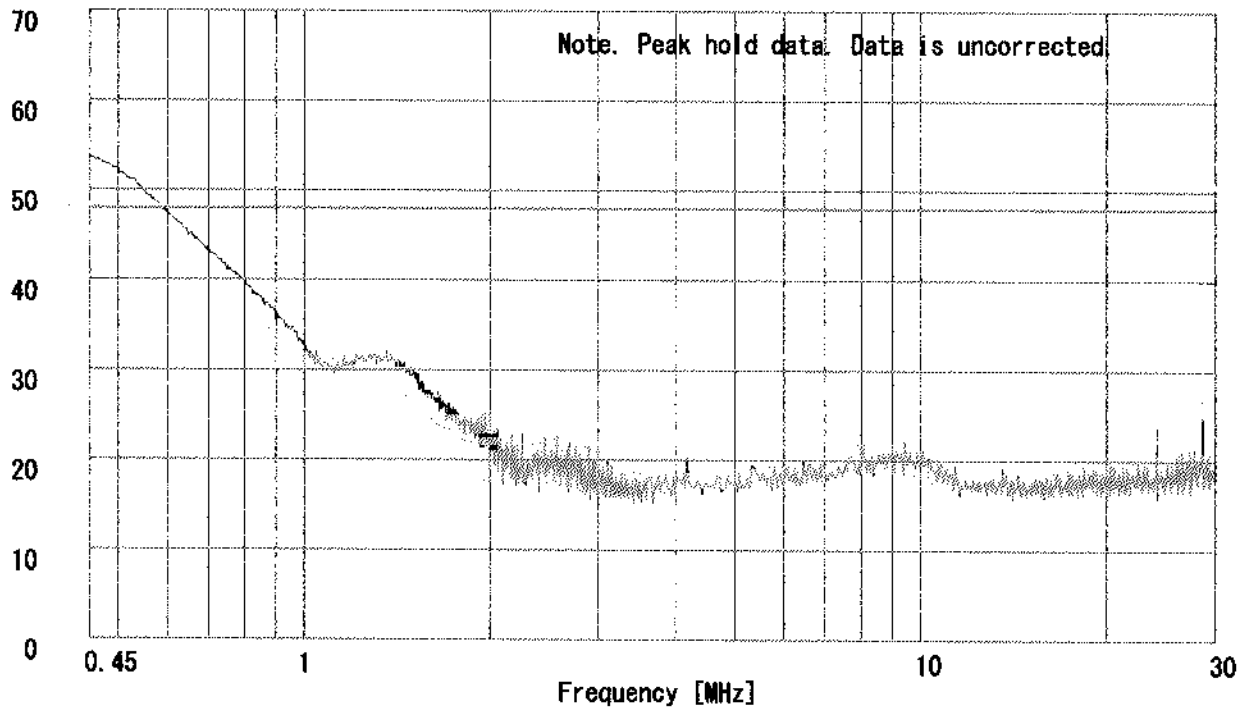
A-PEX INTERNATIONAL CO., LTD.
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Temperature : 26 °C
Humidity : 25 %
Regulation 1 : FCC Part15.207
Regulation 2 : None

Engineer : Naoki Sakamoto

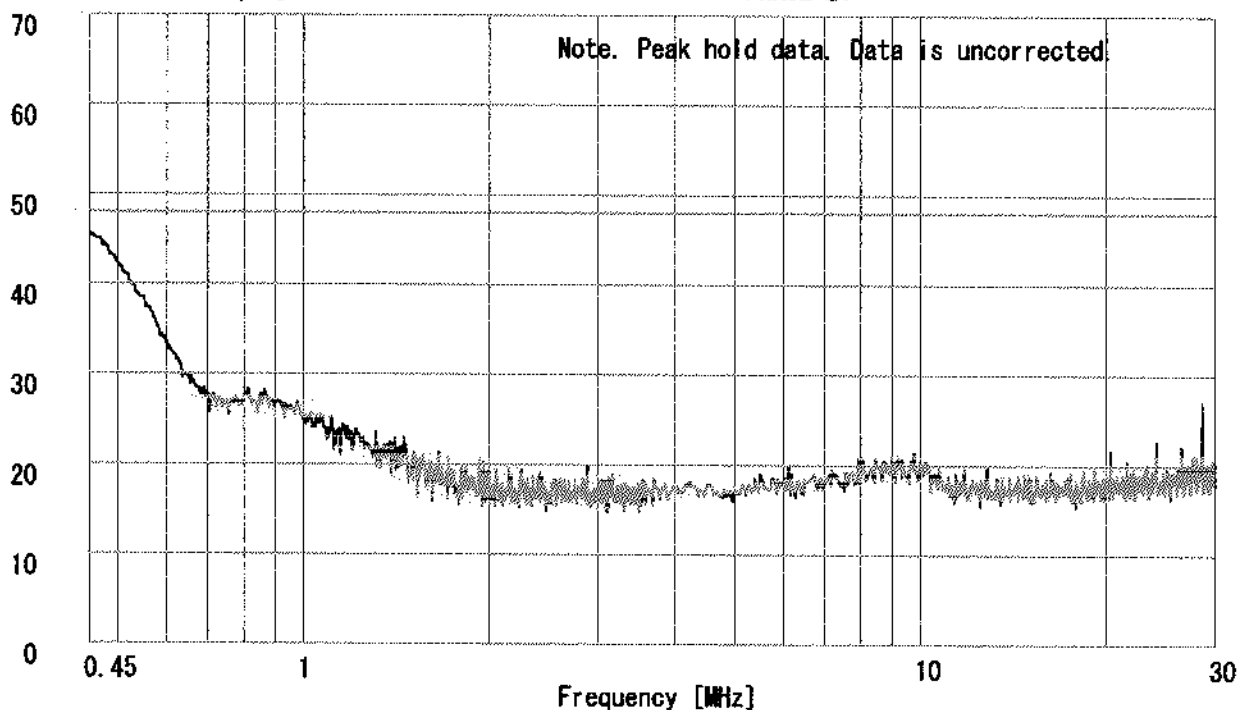
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST

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YOKOWA No.3 OPEN TEST SITE
Report No. : 22DE0036-YW-2

Applicant : DENSO WAVE INCORPORATED
Kind of Equipment : BARCODE HANDY TERMINAL
Model No. : BHT-100QF
Serial No. : 5496900011100028
Power : DC3.6V(AC120V/60Hz)
Mode : Transmitting
Remarks : FCC ID: PZWBHT-100F
Date : 11/27/2001
Phase : Single Phase
Temperature : 26 °C
Humidity : 25 %
Regulation : FCC Part15.207

Engineer : Naoki Sakamoto

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR	CABLE LOSS	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV				QP	AV	QP	AV	QP	AV
		[dBuV]		[dBuV]		[dB]	[dB]		[dBuV]		[dBuV]		[dB]	
1.	0.4500	45.7	-	38.6	-	0.1	0.1	0.0	45.9	-	48.0	0.0	2.1	-
2.	0.8707	30.1	-	18.0	-	0.1	0.1	0.0	30.3	-	48.0	0.0	17.7	-
3.	1.3788	21.6	-	13.0	-	0.1	0.1	0.0	21.8	-	48.0	0.0	26.2	-
4.	2.3489	8.8	-	5.8	-	0.2	0.2	0.0	9.2	-	48.0	0.0	38.8	-
5.	9.2921	13.6	-	12.3	-	0.4	0.3	0.0	14.3	-	48.0	0.0	33.7	-
6.	24.0019	18.9	-	19.2	-	0.9	0.4	0.0	20.5	-	48.0	0.0	27.5	-
7.	28.4494	23.8	-	24.6	-	0.9	0.5	0.0	26.0	-	48.0	0.0	22.0	-

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

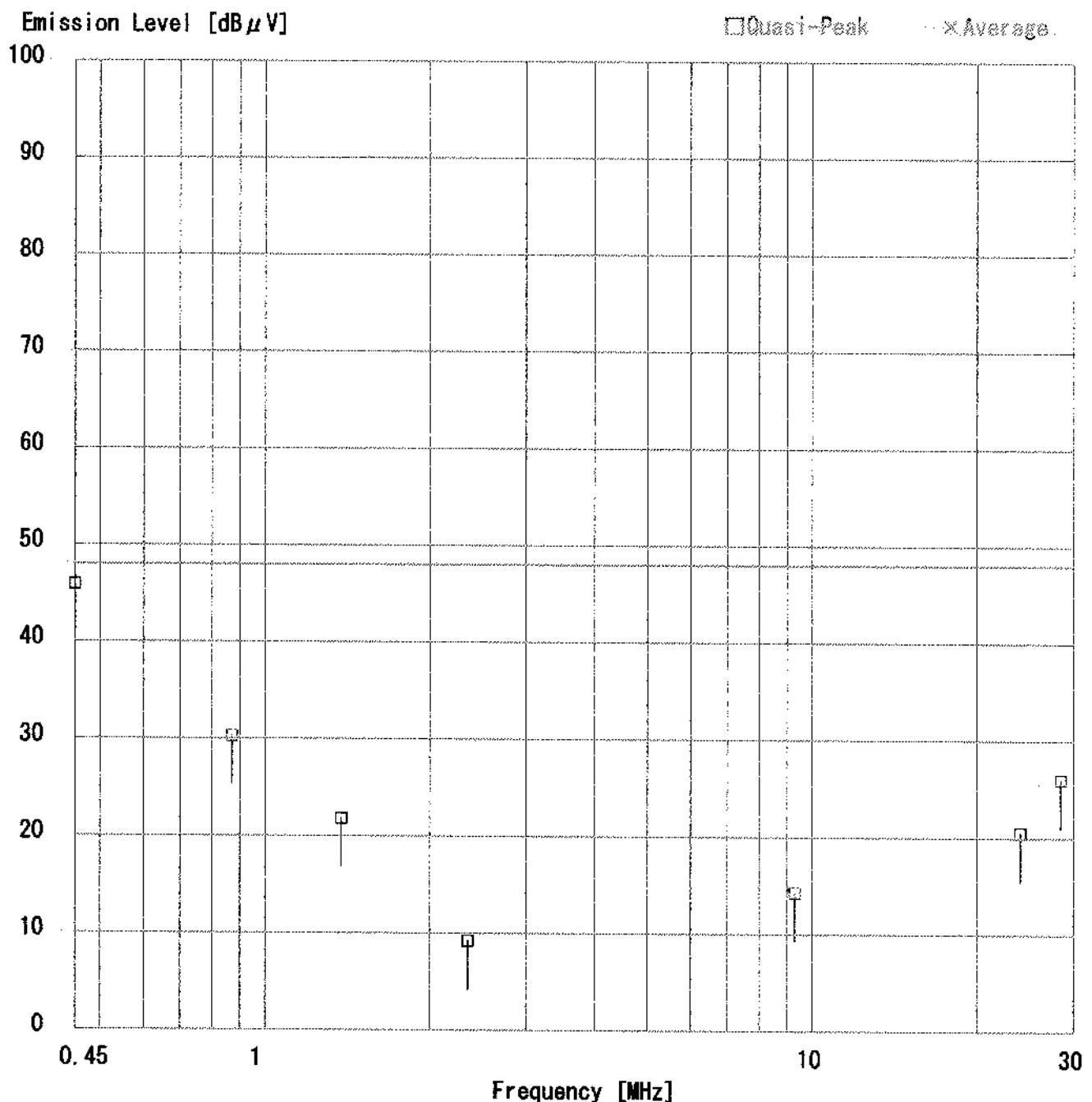
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Regulation : FCC Part15.207

Engineer : Naoki Sakamoto

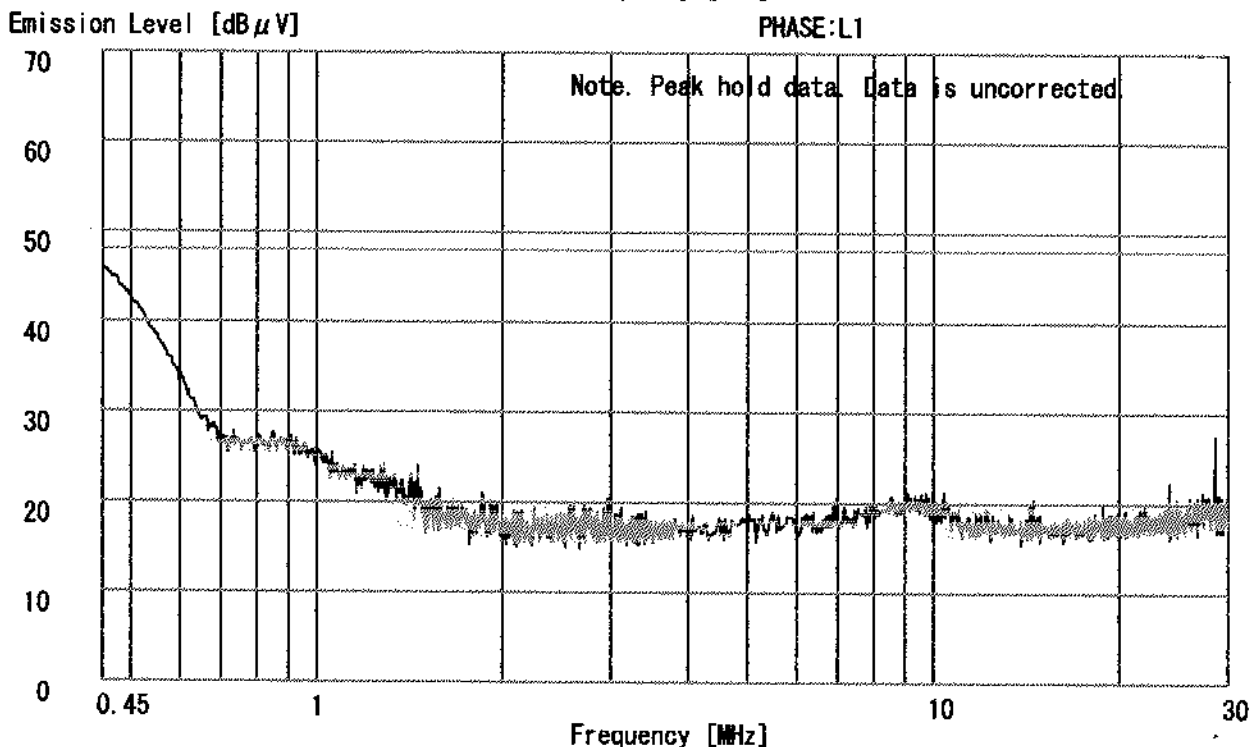
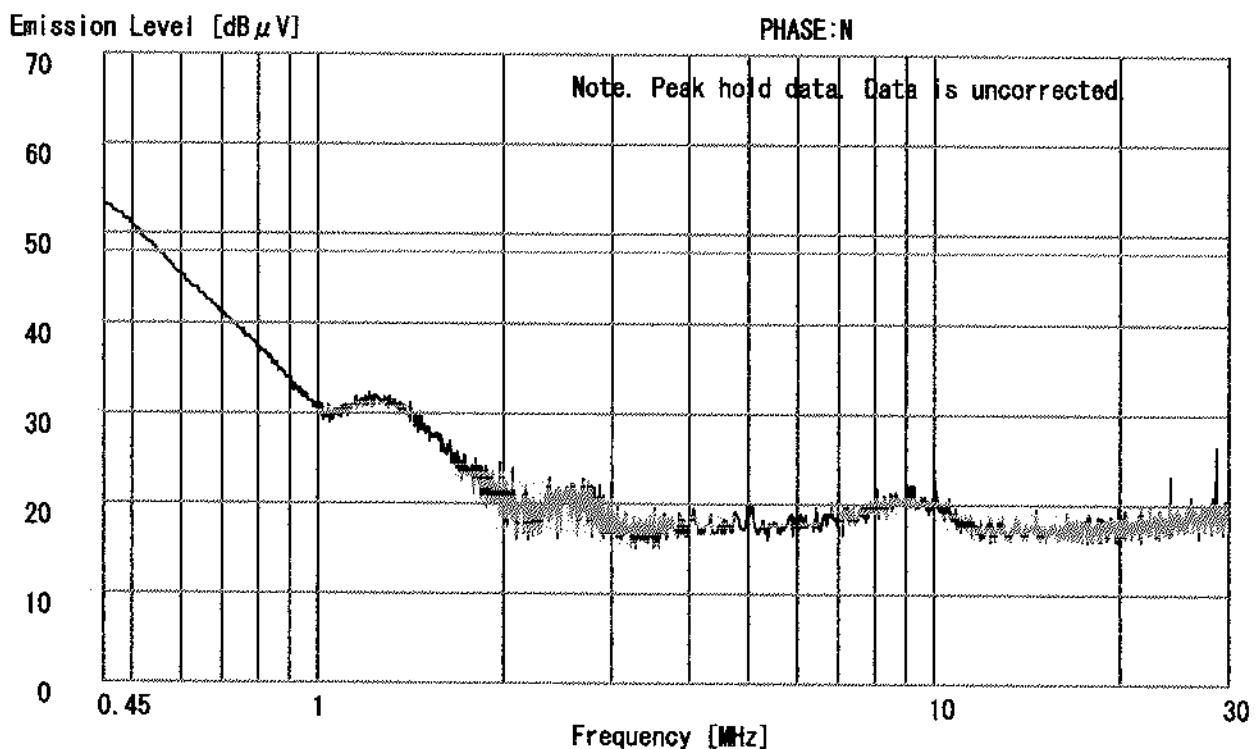


DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
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Applicant : DENSO WAVE INCORPORATED
Kind of Equipment : BARCODE HANDY TERMINAL
Model No. : BHT-100QF
Serial No. : 5496900011100028
Power : DC3.6V(AC120V/60Hz)
Mode : Transmitting
Remarks : FCC ID: PZWBHT-100F
Date : 11/27/2001
Phase : Single Phase
Temperature : 26 °C
Humidity : 25 %
Regulation 1 : FCC Part15.207
Regulation 2 : None

Engineer : Naoki Sakamoto

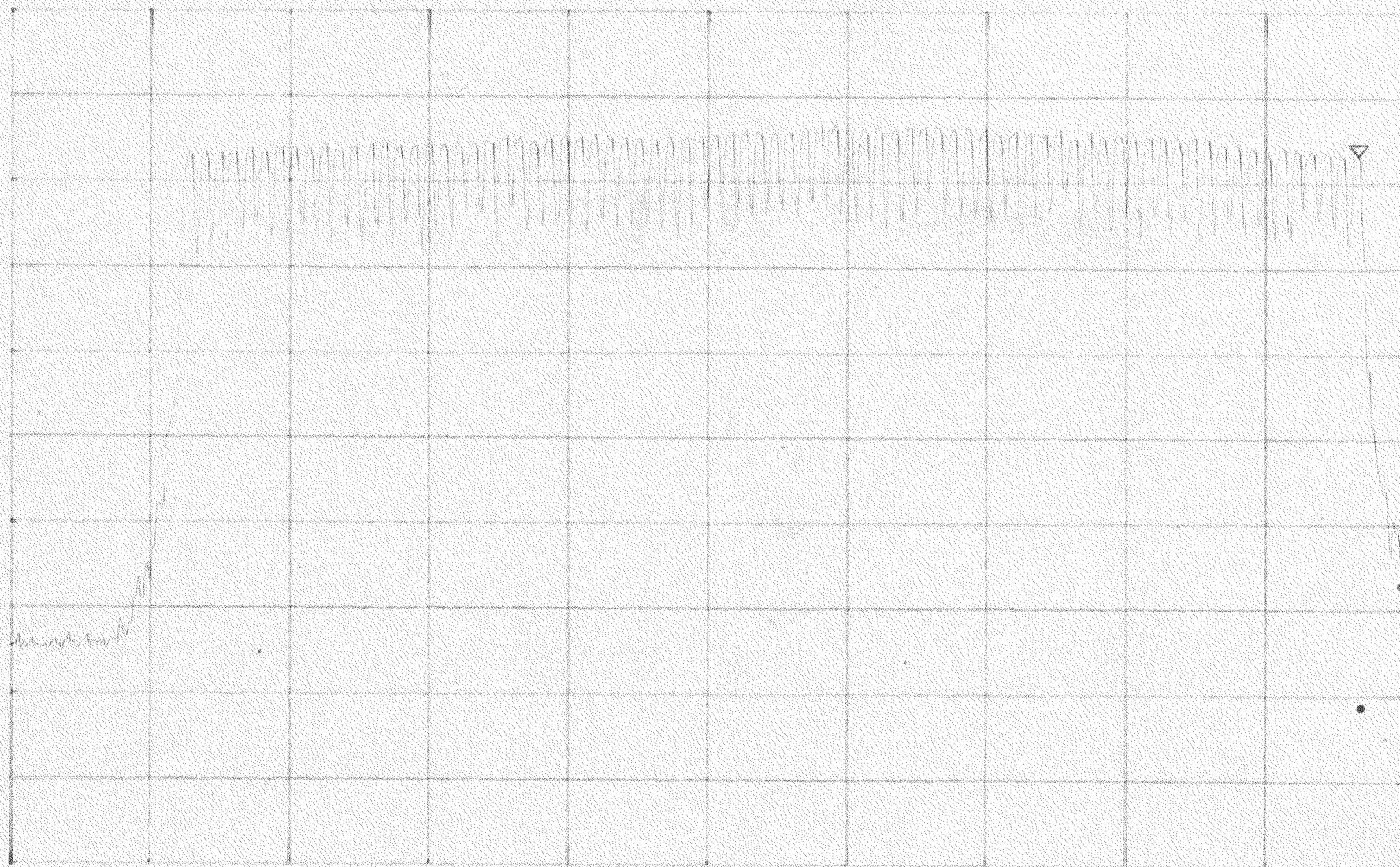


*ATTEN 30dB

ΔMKR -51.34dB

RL 127.0dB μ V 10dB/

3.12MHz



START 2.39000GHz

STOP 2.48350GHz

*RBW 100kHz

*VBW 100kHz

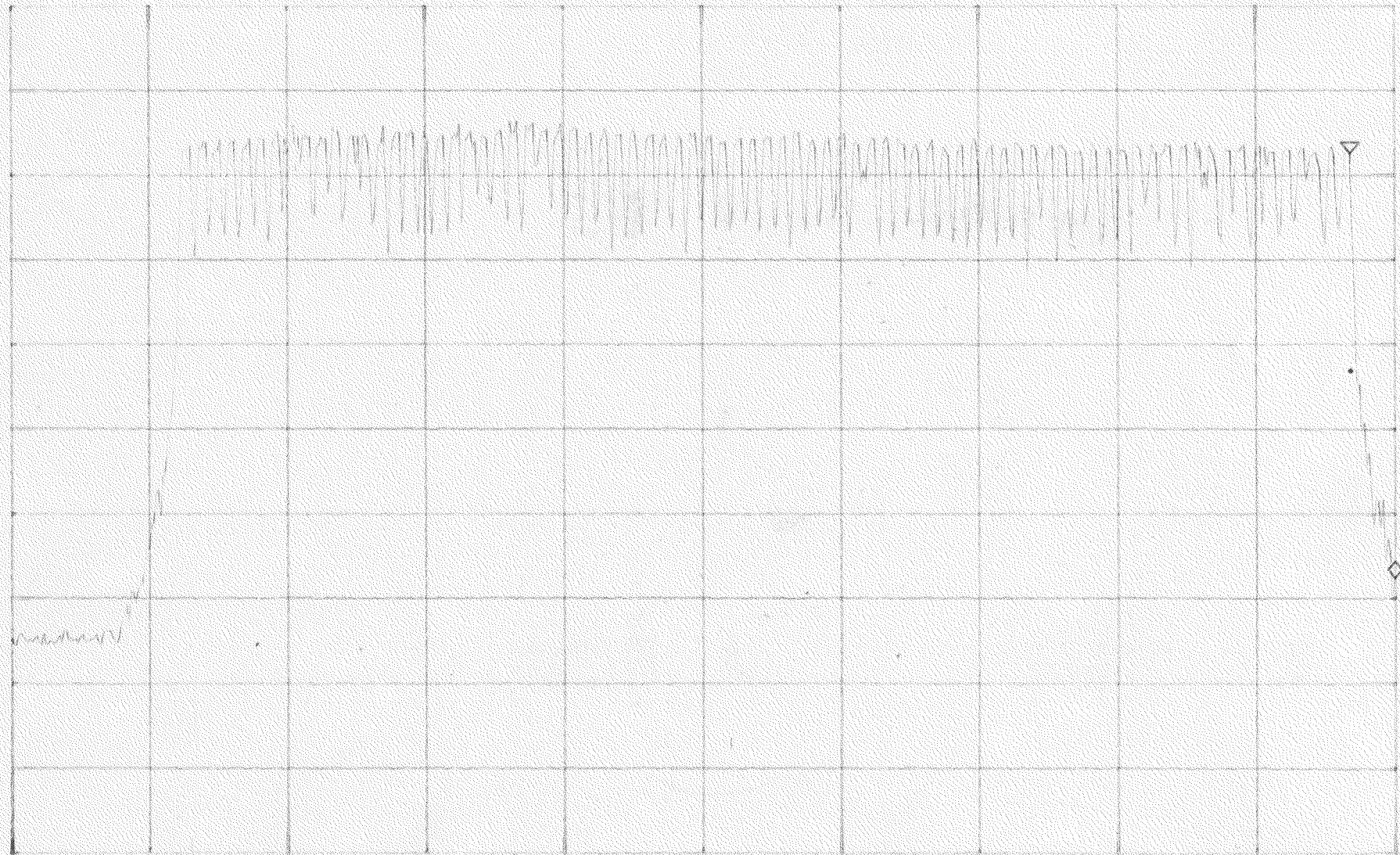
SWP 50ms

*ATTEN 30dB

ΔMKR -50.17dB

RL 127.0dBμV 10dB/

2.96MHz



START 2.39000GHz

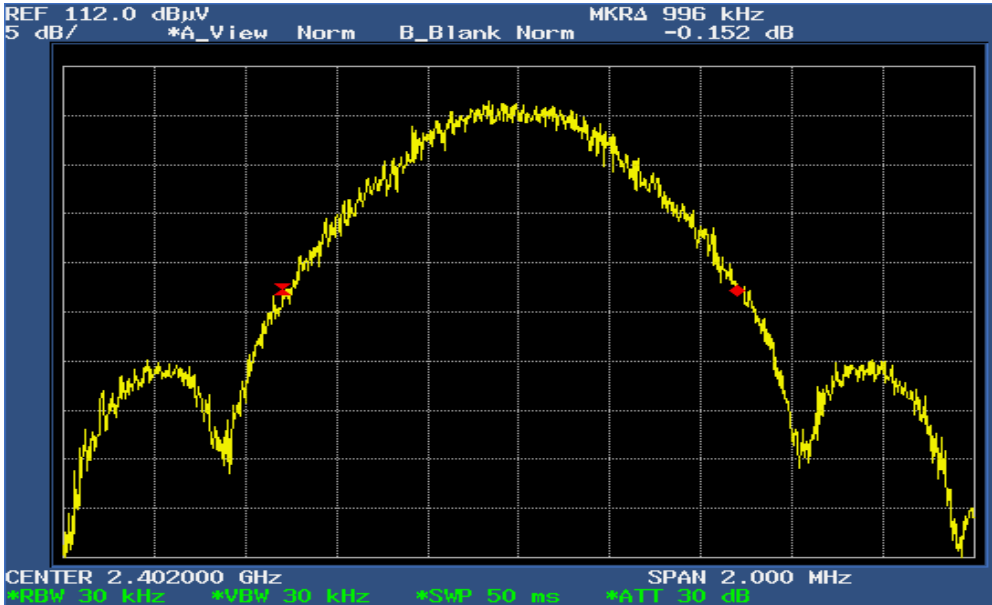
STOP 2.48350GHz

*RBW 100kHz

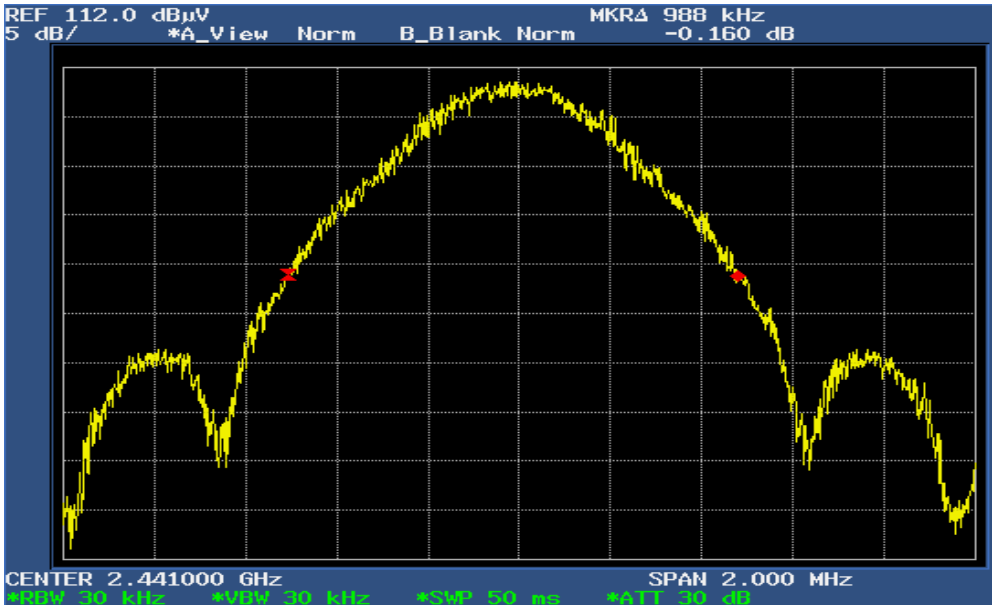
*VBW 100kHz

SWP 50ms

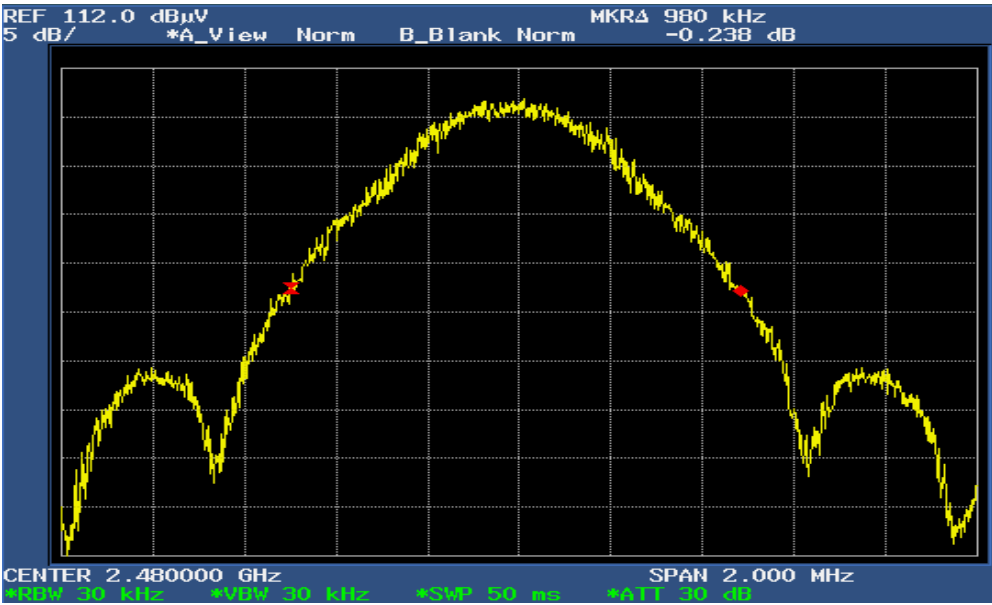
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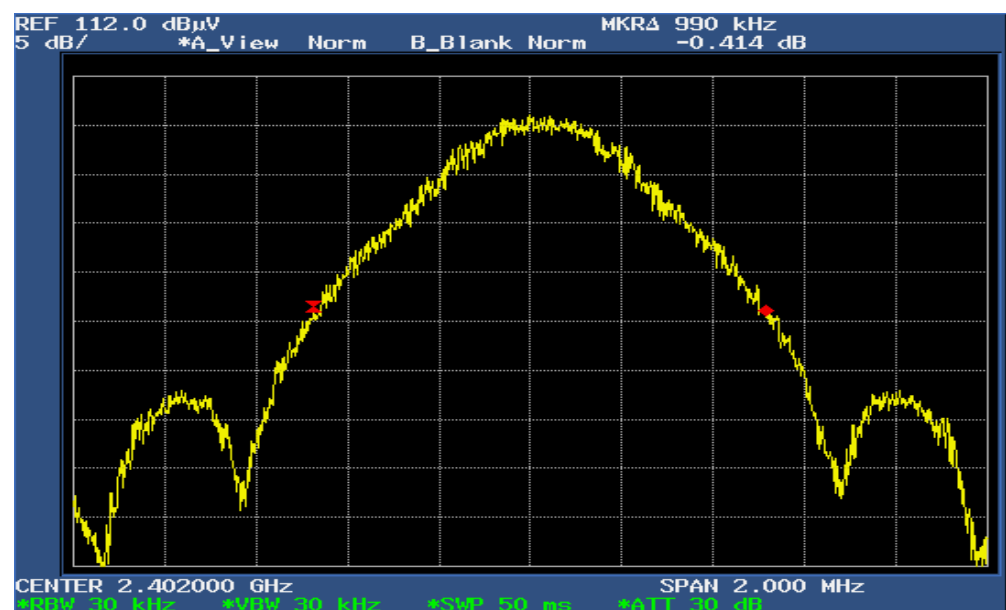
2.



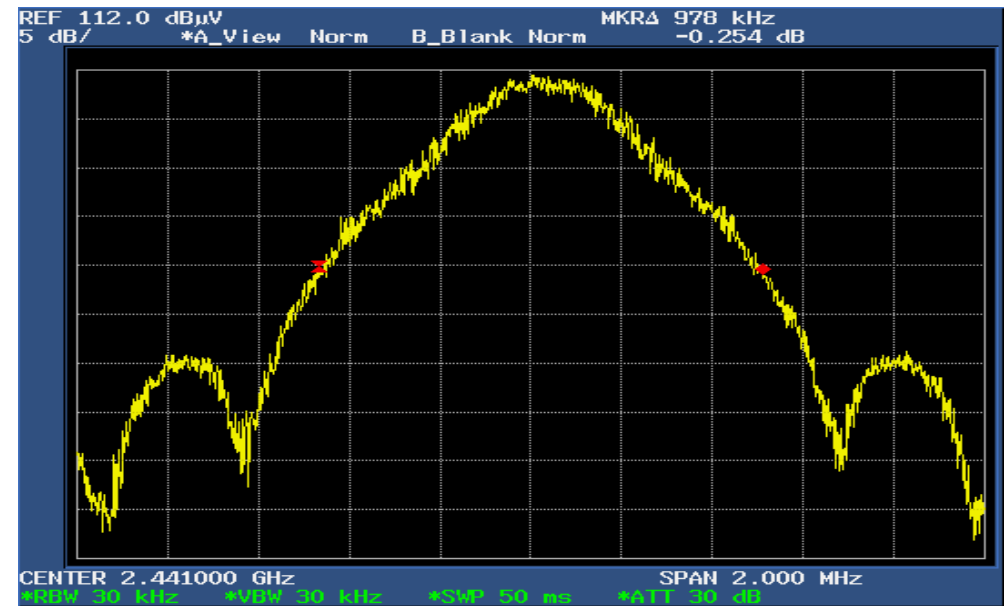
3.



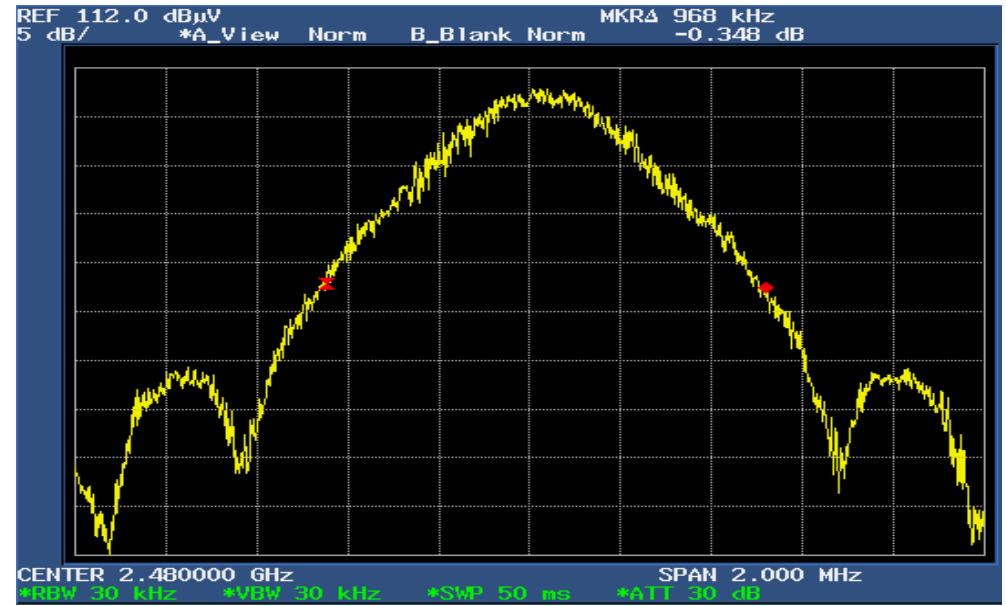
1.



2.



3.

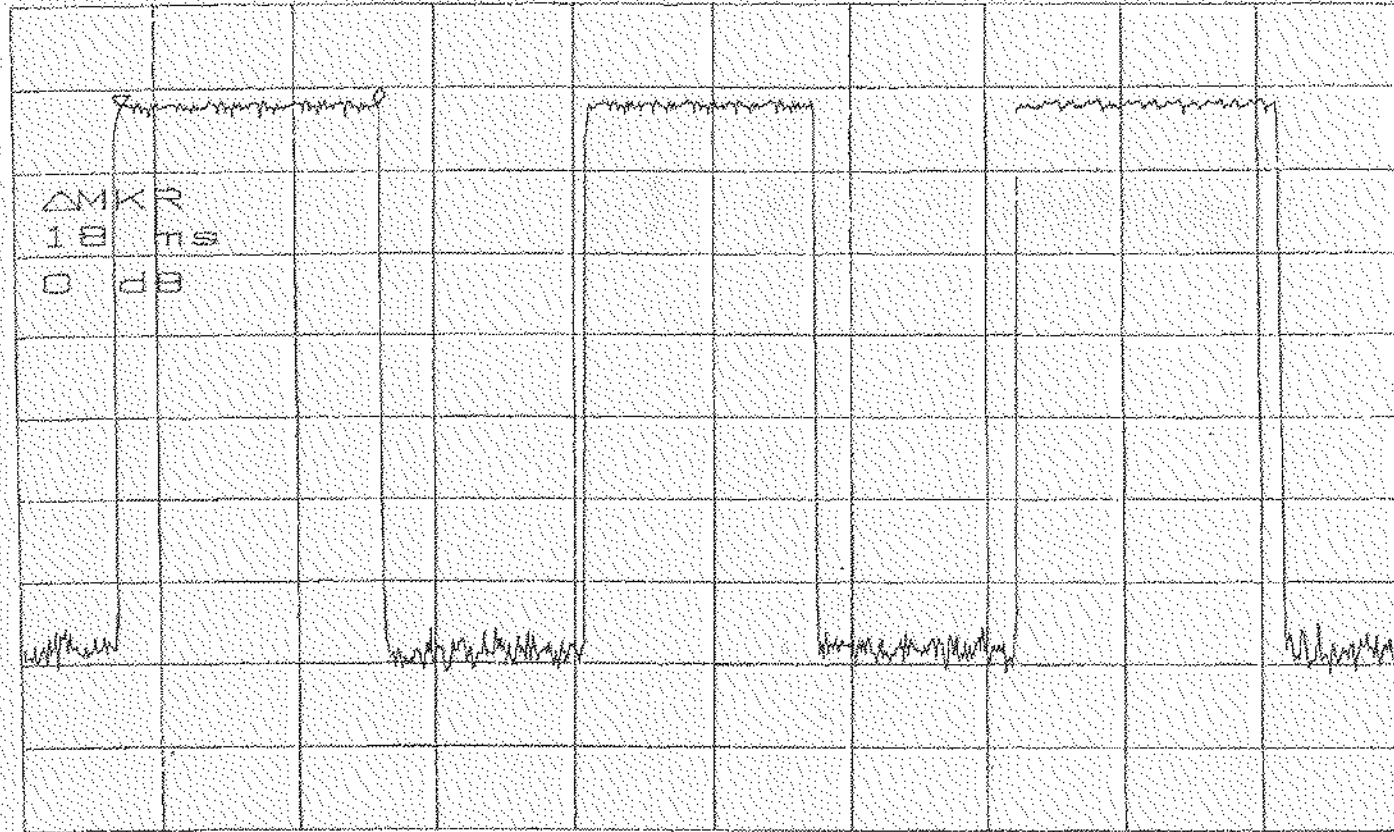


ATTEN 40dB
RL 30.0dBm

10dB/

ΔMKR 0dB
18ms

FCC ID PZWBHT-100F



CENTER 2.4020000000GHz
*RBW 100kHz VBW 100kHz

SPAN 0Hz
*SWP 100ms

DWELL TIME

A11

Peak Out Put Power(Radiated)

A-PEX INTERNATIONAL CO., LTD.
YOKOWA NO.3 OPEN SITE

COMPANY : DENSO WAVE INCORPORATED
EQUIPMENT : BARCODE HANDY TERMINAL
MODEL : BHT-100BF
FCC ID : PZWBHT-100F
POWER : DC3.6V
Mode : Transmitting

REPORT NO : 22DE0036-YW-2
REGULATION : Fcc Part15SubpartC 247 (b)

DATE : 2001/11/28
Temp./Humi. : 25deg.C/33%

ENGINEER : Naoki Sakamoto

PK DETECT(S/A : RBW 1MHz and VBW 1MHz)

Ch	FREQ [GHz]	S/A READING		All Factor [dB]	E1		E		Limit (1W) [mW]	Result	
		HOR	VER		HOR	VER	HOR	VER		HOR	VER
		[dB μ V]			[dB μ V/m]		[V/m]			[mW]	
Low	2.4020	109.4	107.5	3.1	112.5	110.6	0.4198	0.3404	1000.0	52.9	34.8
Mid	2.4410	112.3	111.1	3.2	115.5	114.3	0.5970	0.5191	1000.0	106.9	80.8
High	2.4800	110.6	108.0	3.4	114.0	111.4	0.5040	0.3729	1000.0	76.2	41.7

Sample Calculation :

All Factor = ANT Factor - Amp Gain + CABLE LOSS + ATTEN

Low(2402MHz):ANT Factor(31.3dB) - Amp Gain(37.7dB) + CABLE LOSS(3.4dB) + ATTEN(6.1dB)

Mid(2441MHz):ANT Factor(31.4dB) - Amp Gain(37.8dB) + CABLE LOSS(3.5dB) + ATTEN(6.1dB)

High(2480MHz):ANT Factor(31.5dB) - Amp Gain(37.7dB) + CABLE LOSS(3.5dB) + ATTEN(6.1dB)

RESULT = (E*d)(E*d)/(30G)

E : Converted to V/m

E1: S/A Reading + All Factor

d : Test distance(3.0m)

G : Antenna Gaine(1.0)

Peak Out Put Power / 2402MHz (Hor) / BHT-100BF / 22DE0036-YW-2 Wed 2001 Nov 28 11:41

REF 110.0 dB μ V

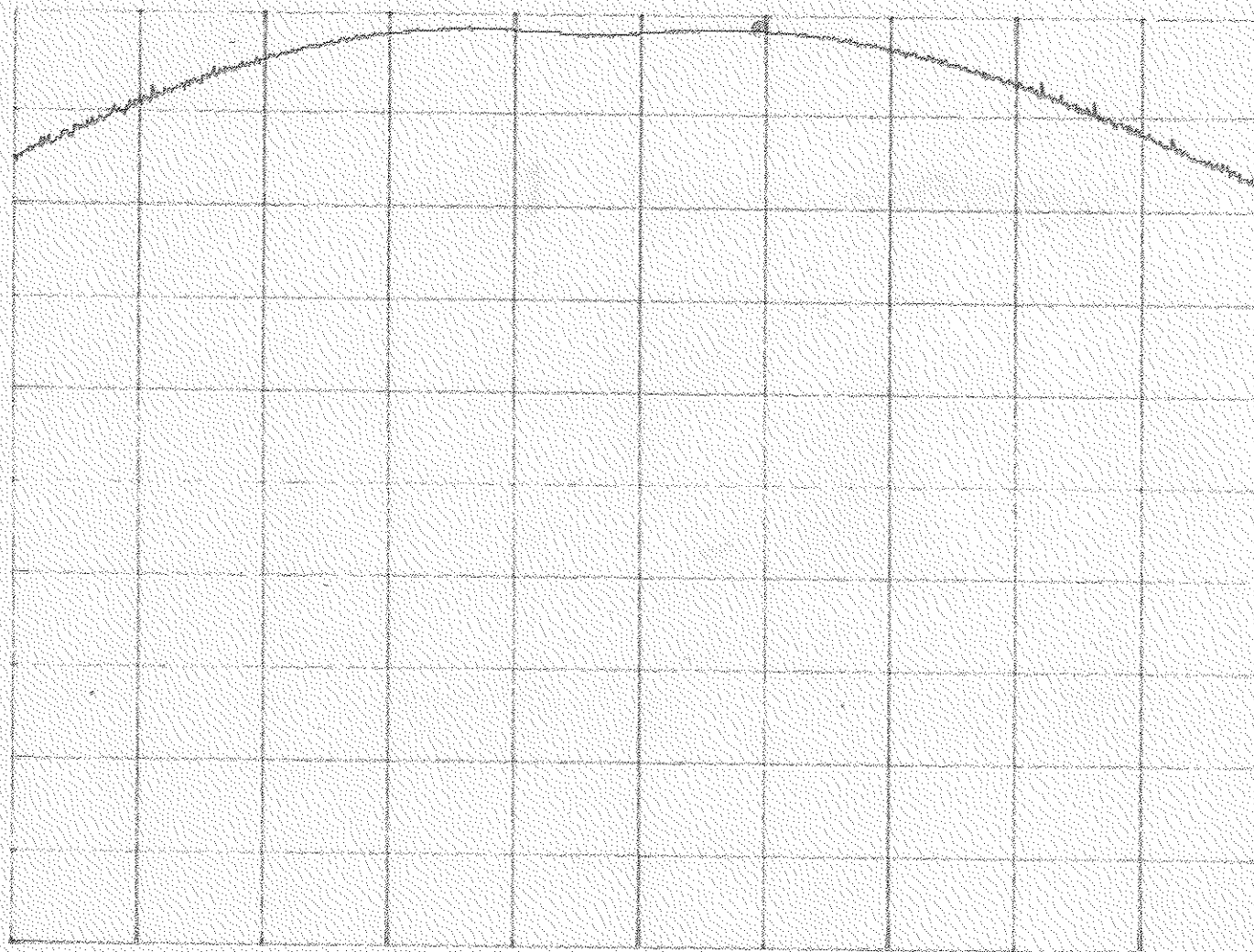
A_View

B_Blank

MKR 2.402188 GHz

5 dB/

109.363 dB μ V



CENTER 2.402000 GHz

SPAN 2.000 MHz

SPBW 1 MHz

*VBW 1 MHz

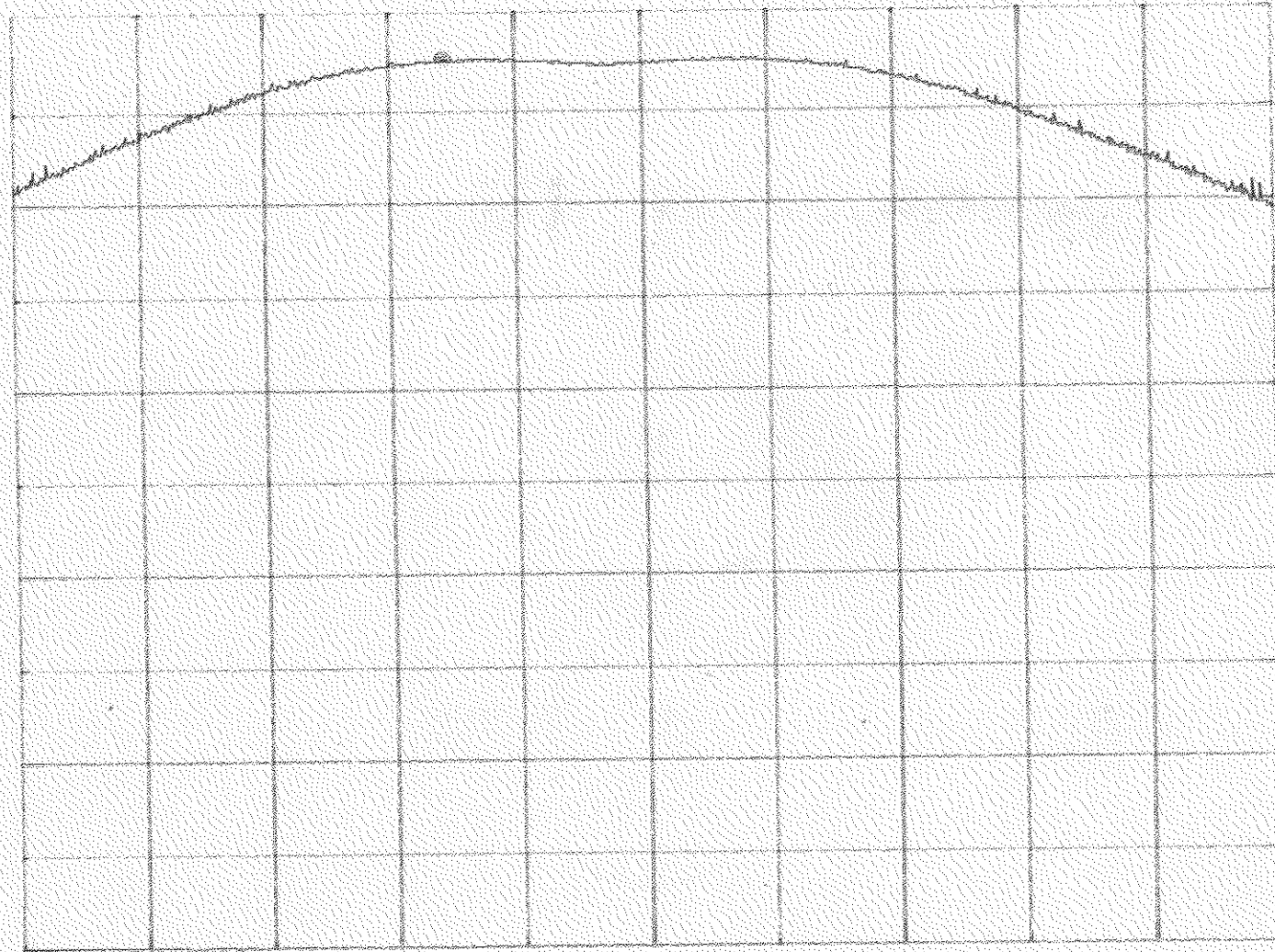
*SNP 100 ms

ATT 20 dB

Peak Out Put Power / 2402MHz (Ver) / BHT-100BF / 22DE0036-YW-2 Wed 2001 Nov 28 11:06

REF 110.0 dBm A_View B_Blank MKR 2.401686 GHz

5 dB 107.543 dBm



CENTER 2.402000 GHz

SPAN 2.000 MHz

BP 02 J1A

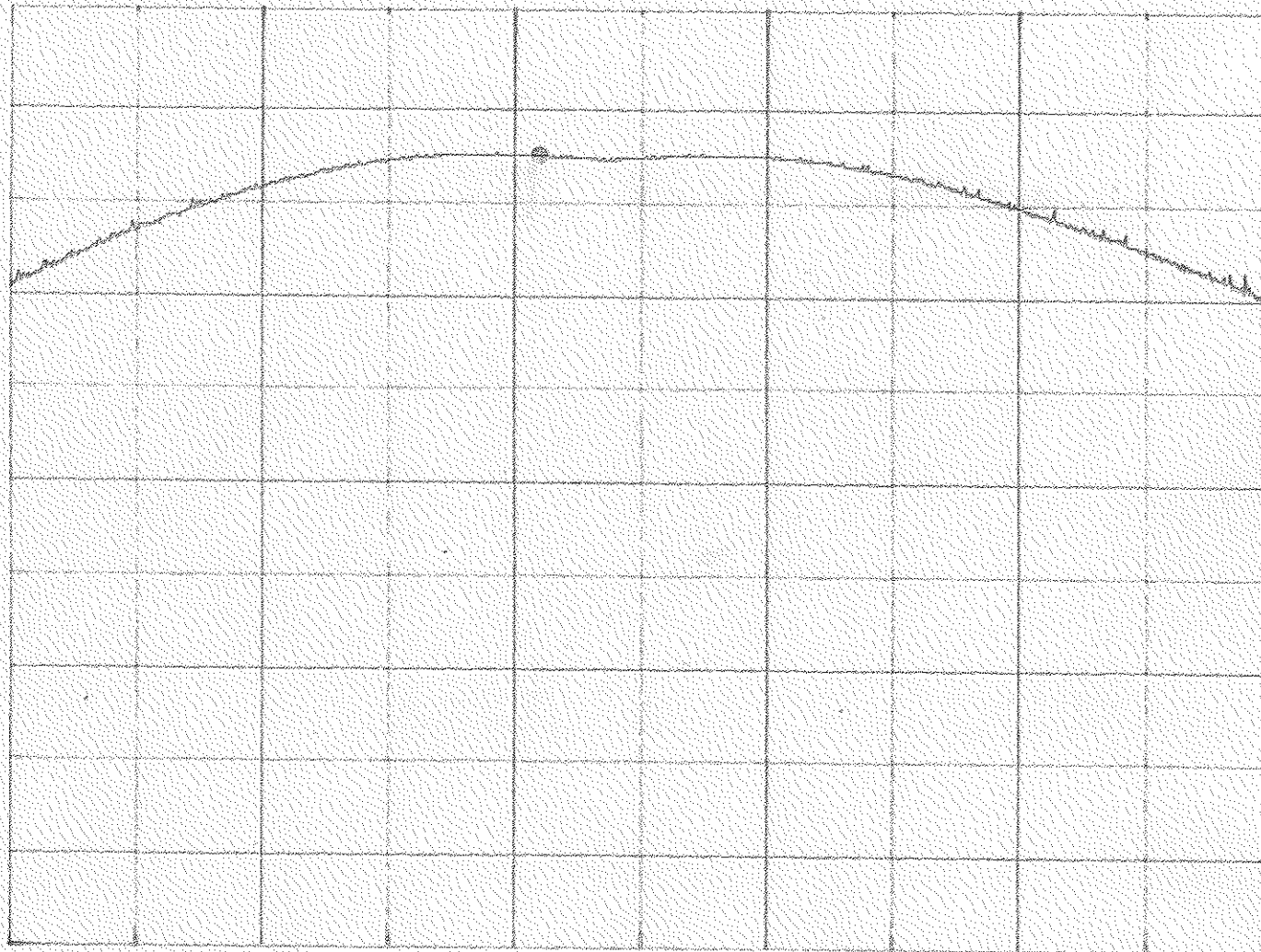
SM 001 PWS*

XVBW 1 MHz

Peak Out Put Power / 2441MHz (Hor) / BHT-100BF / 22DE0036-YW-2 Wed 2001 Nov 28 13:15

REF 120.0 dBm A_View B_Blank MKR 2.440836 GHz

5 dB 112.324 dBm



CENTER 2.441000 GHz

*RBW 1 MHz

*VBW 1 MHz

*SWP 100 ms

SPAN 2.000 MHz

ATT 30 dB

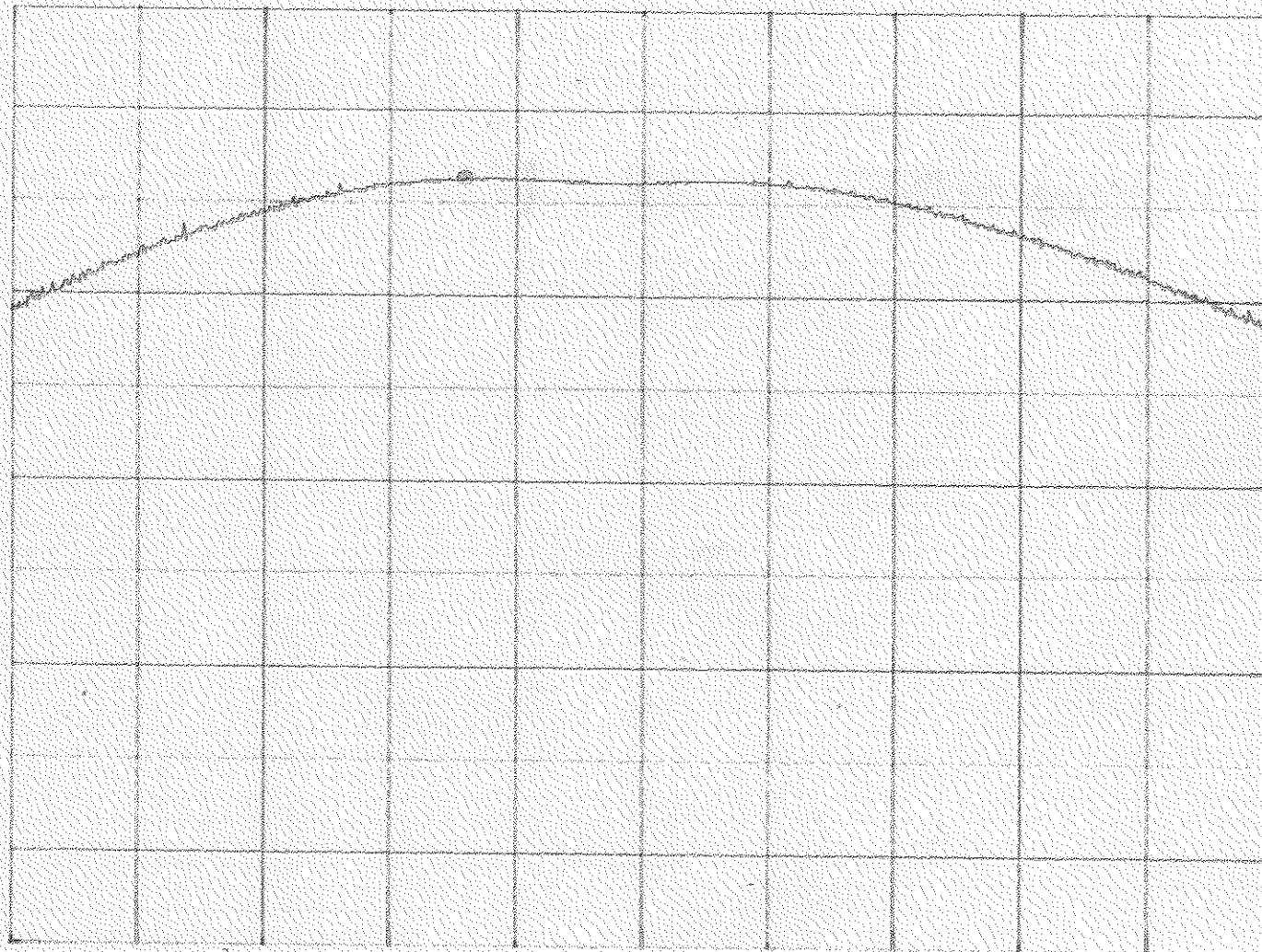
MET 120.0 dBμV

A View

B Blank

MK 2.440718 GHz

111.105 dBμV



CENTER 2.441000 GHz

SPAN 1 MHz

*VBW 1 MHz

*SWP 100 Hz

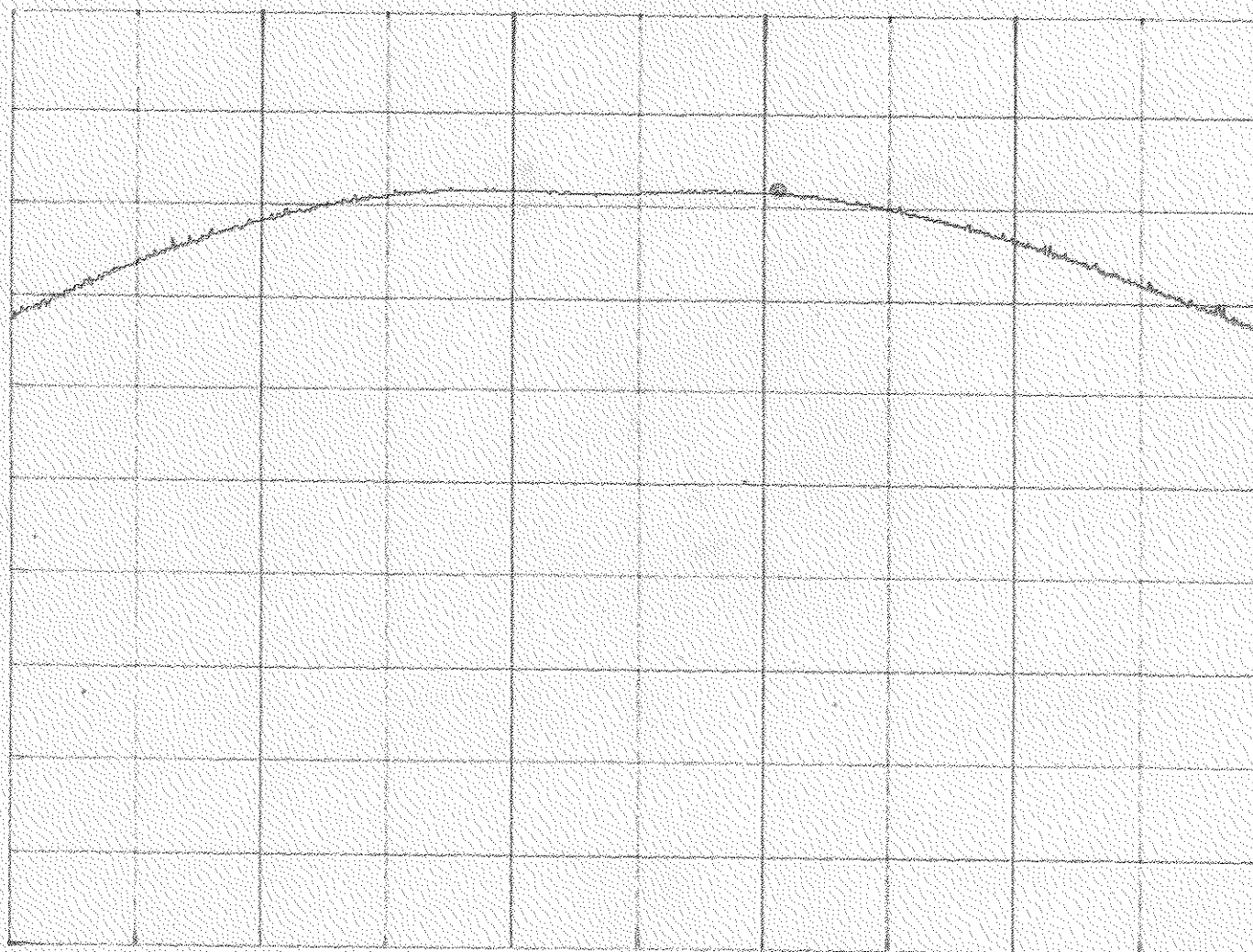
SPAN 2.000 MHz

ATT 30 dB

Peak Out Put Power / 2480MHz (Hor) / BHT-100BF / 22DE0036-YW-2 Wed 2001 Nov 28 13:18

REF 120.0 dB μ V A_Max B_Blank MKR 2.480222 GHz

5 dB 110.648 dB μ V



CENTER 2.480000 GHz

SPAN 2.000 MHz

RBW 1 MHz

VBW 1 MHz

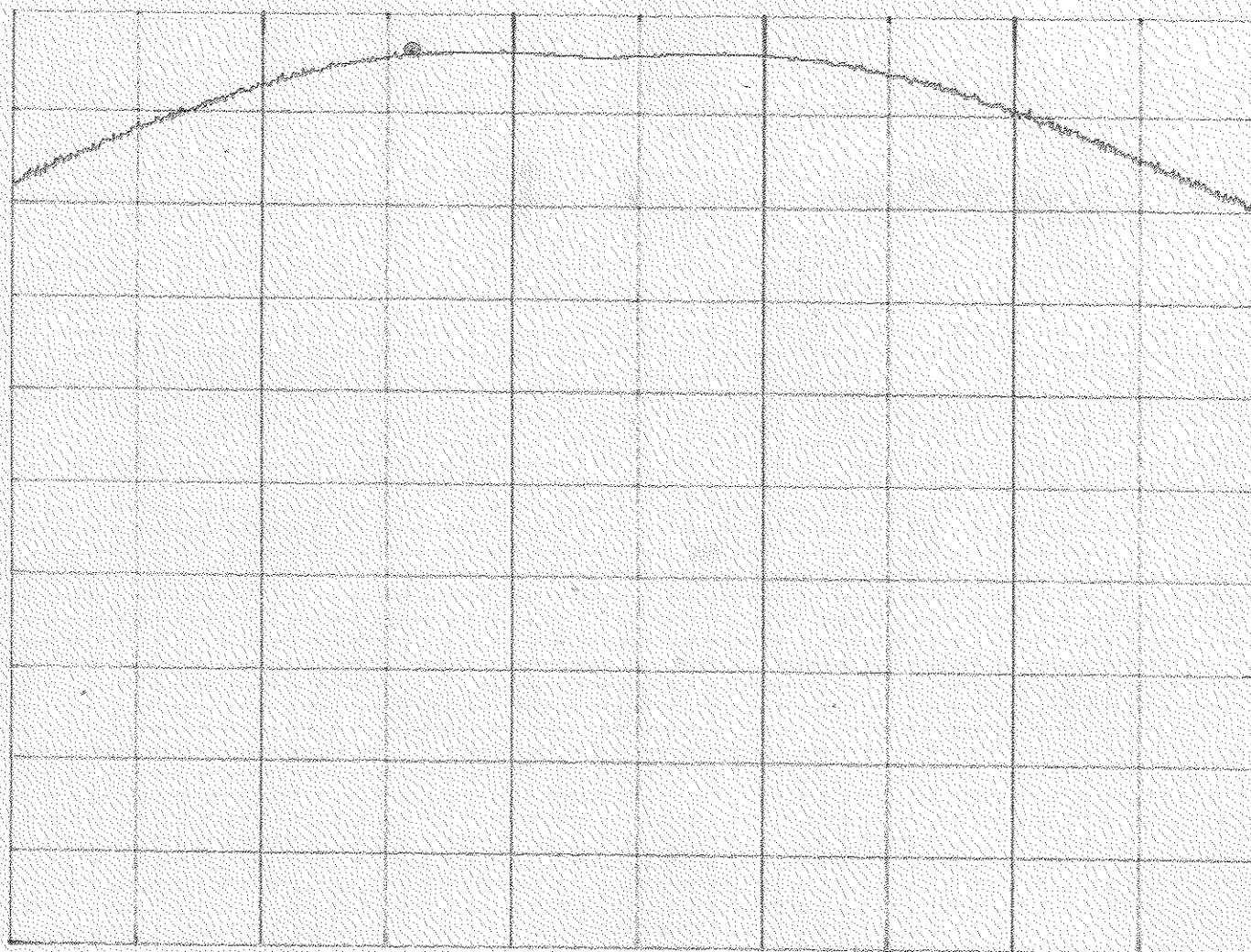
SWP 100 ms

ATT 30 dB

Peak Out Put Power / 2480MHz (Ver) / BHT-100BF / 22DE0036-YW-2 Wed 2001 Nov 28 13:28

REF 110.0 dB μ V A_View B_Blank MKR 2.479638 GHz

5 dB 108.031 dB μ V



CENTER 2.480000 GHz

*RBW 1 MHz

*VBW 1 MHz

*SWP 100 ms

SPAN 2.000 MHz

ATT 20 dB