

EMI TEST REPORT

Test Report No. : 22HE0078-YW

Applicant: Sharp Corporation

Type of Equipment: Cordless Telephone Equipment

Model No.: BB-HC1 (Cordless Telephone Equipment)
BB-HC1K (Cordless Handset)

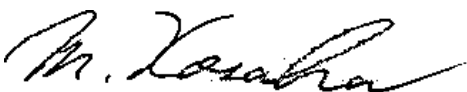
Test standard: FCC Part 15 Subpart C Section 15.247
* Except Section 15.247(e) Processing Gain

FCC ID: APYHRO00026

Test Result: Complied

1. This test report shall not be reproduced in full or partial, without the written approval of A-Pex International Co., Ltd.
2. The results in this report apply only to the sample tested.
3. This equipment is in compliance with above regulation. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this report are traceable to the national or international standards.
5. This test report does not constitute an endorsement by NIST/NVLAP or U.S. Government.

Date of test: April 10, 17, 18 and 19, 2002

Tested by: 
Makoto Kosaka
EMC Section

Approved by: 
Kazutoyo Nakanishi
Site Operation Manager of EMC Section

A-pex International Co., Ltd.

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SECTION 1: Client information

Company name : Sharp Corporation
Trade name : SHARP
Address : 492 Minosho-cho, Yamatokoriyama-shi, Nara 639-1186 Japan
Telephone Number : +81-743-52-9065
Facsimile Number : +81-743-52-9514
Contact Person : Sadaaki Shimonaga

SECTION 2: Equipment under test (E.U.T.)

Type of Equipment : Cordless Telephone Equipment
Model No. : BB-HC1 (Cordless Telephone Equipment)
BB-HC1K (Cordless Handset)
Serial No. : Sample No. 2 (Cordless Telephone Equipment)
Sample No. 1 / No. 000055 (Cordless Handset)
*Cordless Handset Sample No. 000055 was made over for conducted
test of radio.
Rating : DC 3.6V Ni-MH Battery (Cordless Handset)
AC120V/60Hz (AC Adaptor with Cordless Telephone Equipment)
Other Clock Frequency : 19.2MHz (Cordless Telephone Equipment, Cordless Handset)
28.0MHz (Cordless Telephone Equipment)
Country of Manufacture : Japan (Cordless Telephone Equipment)
Thailand (Cordless Handset)
Receipt Date of Sample : April 17, 2002

2.2 Product Description

Model: BB-HC1 / BB-HC1K are a Cordless Telephone Equipment / Cordless Handset.

They are referred to as the EUT in this report.

Frequency Characteristics : 2404.8MHz-2475.0MHz (Cordless Telephone Equipment and Cordless Handset)
Channel Characteristics : 40channels selectable by 1.8MHz spacing.
Modulation : DBPSK (Differential Binary Phase Shift Keyed)
Antenna type : Lambda/ 2 Dipole Antenna (Cordless Telephone Equipment)
Whip Antenna (Cordless Handset)
Antenna Gain : 0.43dBi (Base), 3.08dBi (Hand)
Spread Method : DSSS (Direct Sequence Spread Spectrum)

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SECTION 3: Test specification, methods & procedures

3.1 Test Specification

Test Specification : FCC Part 15 Subpart C
Title : FCC 47CFR Part15 Radio Frequency Device
Subpart C Intentional Radiators
Section 15.247 Operation within the bands 902-928MHz, 2400-2483.5MH
and 5725-5850MHz

3.2 Methods & Procedures

No.	Item	Test Procedure	Specification	Remarks
1	Conducted Emission	ANSI C63.4:1992	Section 15.207	AC Mains only
2	6dB Bandwidth	ANSI C63.4:1992	Section 15.247(a)(2)	Conducted
3	Maximum Peak Output Power	ANSI C63.4:1992	Section 15.247(b)	Conducted
4	Variation of Input Power	ANSI C63.4:1992	Section 15.31(e)	Conducted, Telephone equipment only
5	Out of Band Emissions	ANSI C63.4:1992	Section 15.205 Section 15.209 Section 15.247(c)	Conducted / Radiated
6	Power Density	ANSI C63.4:1992	Section 15.247(d)	Conducted
7	Processing Gain	ANSI C63.4:1992	Section 15.247(e)	-

*These tests were also referred to FCC 97-114 "Guidance on Measurement for Direct Sequence Spread Spectrum Systems."

*These tests were performed without any deviations from test procedure except for the following exclusions.

3.3 Exclusion from standard

No.	Item	Test Procedure	Specification	Remarks
1	Processing Gain	ANSI C63.4:1992	Section 15.247(e)	-

The test was not performed since it had been measured at another laboratory.

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SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The EUT exercise program used during radiated and conducted testing was designed to exercise the various system components in a manner similar to typical use.

The operating mode/system were as follows:

Operation mode is as follows;

Cordless Telephone Equipment

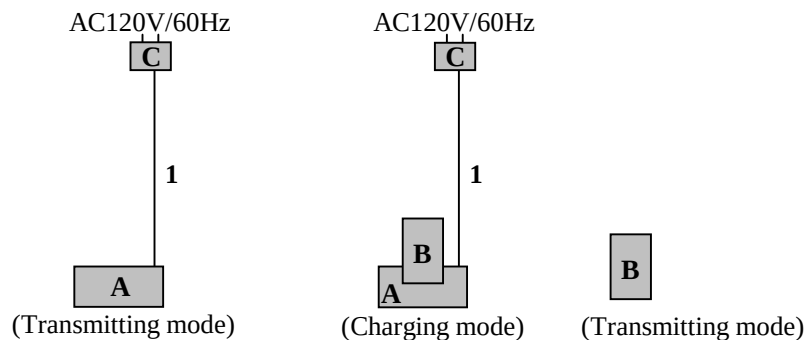
- Transmitting mode (ch1: 2404.8MHz, ch20: 2439MHz, ch40: 2475MHz)
- Charging mode (Conducted emission only)

Cordless Handset

- Transmitting mode (ch1: 2404.8MHz, ch20: 2439MHz, ch40: 2475MHz / Except for Conducted emission test)
- Charging mode (Conducted emission only)

Justification: The system was configured in typical fashion (as a customer would normally use it) for testing.

4.2 Configuration and peripherals



Description of EUT

No.	Item	Model number	Serial number	Manufacturer	FCC ID
A	Cordless Telephone Equipment	BB-HC1	Sample No. 2	SHARP	APYHRO00026
B	Cordless Handset	BB-HC1K	Sample No. 1 / No. 000055	SHARP	APYHRO00026
C	AC Adaptor	410905003CT	-	SHARP	-

*C is intended to be supplied with the products.

List of cables used

No.	Name	Length (m)	Shield	Remark
1	DC Power Cable	1.83	N	-

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4.3 Verification of the frequency and channel

The following table verifies the frequency pairs.

Channel	Base (GHz)	Handset (GHz)	Channel	Base (GHz)	Handset (GHz)	Channel	Base (GHz)	Handset (GHz)
*1	2.4048	2.4048	16	2.4318	2.4318	31	2.4588	2.4588
2	2.4066	2.4066	17	2.4336	2.4336	32	2.4606	2.4606
3	2.4084	2.4088	18	2.4354	2.4354	33	2.4624	2.4624
4	2.4102	2.4102	19	2.4372	2.4372	34	2.4642	2.4642
5	2.4120	2.4120	*20	2.4390	2.4390	35	2.4660	2.4660
6	2.4138	2.4138	21	2.4408	2.4408	36	2.4678	2.4678
7	2.4156	2.4156	22	2.4426	2.4426	37	2.4696	2.4696
8	2.4174	2.4174	23	2.4444	2.4444	38	2.4714	2.4714
9	2.4192	2.4192	24	2.4462	2.4462	39	2.4732	2.4372
10	2.4210	2.4210	25	2.4480	2.4480	*40	2.4750	2.4750
11	2.4228	2.4228	26	2.4498	2.4498			
12	2.4246	2.4246	27	2.4516	2.4516			
13	2.4264	2.4264	28	2.4534	2.4534			
14	2.4282	2.4282	29	2.4552	2.4552			
15	2.4300	2.4300	30	2.4570	2.4570			

*Tested channel

Note 1: This is for sure that all frequencies are in 2.4048GHz to 2.4750GHz.

Note 2: Section 15.31(m): Measurements on intentional radiators or receivers shall be performed at three frequencies for operating frequency range over 10MHz. (The locations of these frequencies one near the top, one near the middle and one near the bottom.)

Note 3: After test, the EUT operating frequencies are in 2.4048GHz to 2.4750GHz. So all the items as followed in testing report are needed to test these three frequencies: top: channel 1, middle: channel 20, bottom: channel 40.

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SECTION 5: Summary of test results

5.1 Test results

No.	Item	Test Procedure	Specification	Remarks	Result
1	Conducted Emission	ANSI C63.4:1992	Section 15.207	AC Mains only	Complied
2	6dB Bandwidth	ANSI C63.4:1992	Section 15.247(a)(2)	Conducted	Complied
3	Maximum Peak Output Power	ANSI C63.4:1992	Section 15.247(b)	Conducted	Complied
4	Variation of Input Power	ANSI C63.4:1992	Section 15.31(e)	Conducted, Facsimile equipment only	Complied
5	Out of Band Emissions	ANSI C63.4:1992	Section 15.205 Section 15.209 Section 15.247(c)	Conducted / Radiated	Complied
6	Power Density	ANSI C63.4:1992	Section 15.247(d)	Conducted	Complied

*The applicant declares that BB-HC1K, Cordless Handset, has the same hardware, for example electronic circuit and control type, as UX-CL220K which will be supplied with Facsimile at any moment.

The difference between these models are as follows;

1. coating painting
2. marking
3. software

The test result of BB-HC1, therefore, is quoted from test report No. 22FE0027-YW, FCC ID: APYHRO00025 which is issued by A-PEX.

A-PEX INTERNATIONAL hereby confirms that E.U.T., in the configuration tested, complies with the specifications FCC Part 15 Subpart C Section 15.247.

5.2 Uncertainty

Conducted Emission Test

The measurement uncertainty (with a 95% confidence level) for this test was $\pm 2.0\text{dB}$.

☐ The data listed in this test report may exceed the test limit because it does not have enough margin.

☒ The data listed in this test report has enough margin, more than site margin.

Radiated Emission Test

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is $\pm 4.4\text{dB}$.

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is $\pm 4.8\text{dB}$.

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is $\pm 5.8\text{dB}$.

☒ The data listed in this test report may exceed the test limit because it does not have enough margin.

☐ The data listed in this test report has enough margin.

5.3 Test Location

A-PEX International Co., Ltd. Yokowa No.3 test site

108 Yokowa-cho, Ise-shi, Mie-ken 516-1106 Japan

Telephone number : +81-596-39-1485

Facsimile number : +81-596-39-0232

The site has been fully described in a report submitted to FCC office, and listed on September 12, 2000

(Registration number: 90412).

*NVLAP Lab. code : 200109-0

5.4 Photographs of test setup

Refer to Appendix 1.

5.5 Test instruments

Refer to Appendix 2.

5.6 Data of EMI Test

Refer to Appendix 3.

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SECTION 6: Conducted Emissions (AC Mains), Section 15.207

Test Procedure

EUT was placed on a platform of nominal size, 1.0m by 1.0m, raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT was aligned and flushed with rear of tabletop. All other surfaces of tabletop was at least 80cm from any other grounded conducting surface. AC cables and DC cables were bundled in center. They were folded back and forth forming a bundle 30cm to 40cm long and were hanged at a 40cm height to the ground plane. Each EUT current-carrying power lead, except the ground (safety) lead, was individually connected through a LISN to the input power source. All unused 50 ohm connectors of the LISN were resistively terminated in 50 ohm when not connected to the measuring equipment. The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT on a shielded room. The EUT was connected to a Line Impedance Stabilization Network (LISN). The facsimile equipment was tested under transmitting mode and intercom mode. The cordless handset was tested under intercom mode and charging mode. It was not operated under transmitting mode since it was not possible to transmit with the handset put on the charger. An overview sweep with peak detection has been performed. The measurements have been performed with a CISPR quasi-peak detector(IF BW 10kHz) . The frequency range measured is 450kHz to 30MHz.

Test data : Page A1 to A8 (APPENDIX 3)

Photographs of test setup : Page 17-18

Test result : Pass

Test instruments : LS-04, SA-04, TR-05

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SECTION 7: 6dB Bandwidth (Conducted), Section 15.247(a)(2)

Test Procedure

The minimum 6dB bandwidth was measured with a spectrum analyzer connected to the antenna port.

Frequency (GHz)	Base / Handset	6dB Band width (MHz)	Limit (kHz)	Result
Ch1 2.4048	Base	1.550	> 500	Pass
	Handset	1.542	> 500	Pass
Ch20 2.4390	Base	1.550	> 500	Pass
	Handset	1.530	> 500	Pass
Ch40 2.4750	Base	1.564	> 500	Pass
	Handset	1.510	> 500	Pass

Test data : Page A9 to A10 (APPENDIX 3)

Test result : Pass

Test instruments :SA-06, AT-14

SECTION 8: Maximum Peak Output Power (Conducted), 15.247(b)

Test Procedure

The Maximum Peak Output power was measured with a power meter connected to the antenna port.

* Antenna Gain dose not exceed 6dBi.

Test data : Page A11to A12(APPENDIX 3)

Test result : Pass

Test instruments : PS-03, PM-02, SA-06, AT-14

SECTION 9: Variation of Input Power (Conducted), Section 15.31(e)

Test Procedure

The Variation of Input Power was measured with a spectrum analyzer.

Test data : Page A13 to A15 (APPENDIX 3)

Test result : Pass

Test instruments : SA-06, AT-14

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SECTION 10: Out of Band Emissions (Radiated), Section 15.247(c)

Test Procedure

EUT was placed on a platform of nominal size, 1m by 1m, raised 80cm above the conducting ground plane.

Test was made with the antenna positioned in both the horizontal and vertical planes of polarization.

The Radiated Electric Field Strength intensity has been measured on an open test site with a ground plane and at a distance of 3m.

The measuring antenna height was varied between 1 to 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity. The measurements were performed for both vertical and horizontal antenna polarization.

For the facsimile equipment, Pre-check was performed at the each antenna angle of 0 degrees, 90 degrees and 180 degrees to compare and detect the maximum noise level. The cordless handset was also previously checked at each position of three axes X, Y and Z to find the worst position.. The position in which the maximum noise occurred was chosen to put into measurement. Worst cases are referred to following page.

It was operated under transmitting mode.

Radiated Spurious emissions

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on a radiated measurement. The result was also satisfied the general limits specified in Sec.15.209(a).

Measurement range : 30MHz to 1000MHz CISPR QP Detector, IF BW 120kHz
: 1GHz to 26GHz PK and AV Detector

Test data : 30 –1000MHz : Page A16 to A21 (APPENDIX 3)

: 1 – 26GHz : Page A22 to A27(APPENDIX 3)

: Restricted Band Edges:2390MHz/2483.5MHz : Page A28 to A45 (APPENDIX 3)

Photographs of test setup : Page 19-20

Test result : Pass

**Test instruments : AF-01, AF-06, BA-03, LA-06, HA-01, SA-04, SA-06,
AT-06, EST-10, HF-04, AT-14**

Duty Cycle Factor Measurement

The duty cycle factor measurement is performed in a shield enclosure. The test condition and setup is as same as above paragraph.

Set the RB = 1MHz, VB=1MHz, and span=0MHz. Link the base and handset, then get the Time of duty and cycle.

The duty cycle factor = $20 \log (T_{\text{width}} / T_{\text{period}}) = 20 \log (940 \times 10^{-6} / 2 \times 10^{-3}) = -6.511$ (Cordless Telephone Equipment)

The duty cycle factor = $20 \log (T_{\text{width}} / T_{\text{period}}) = 20 \log (940 \times 10^{-6} / 2 \times 10^{-3}) = -6.558$ (Cordless Handset)

Test instruments : SA-06, AT-14

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Pre check of worse-case position

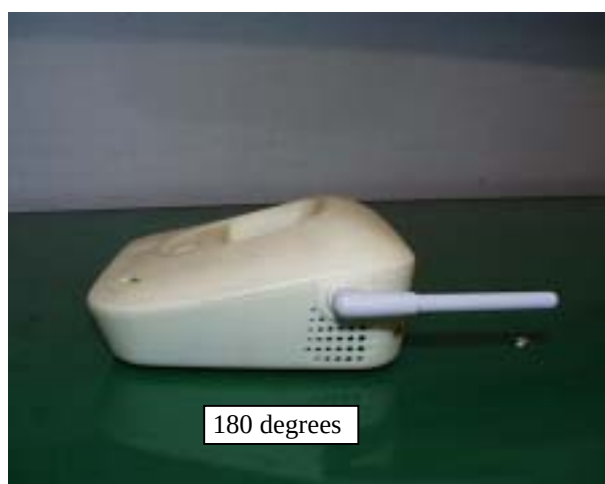
Telephone Equipment



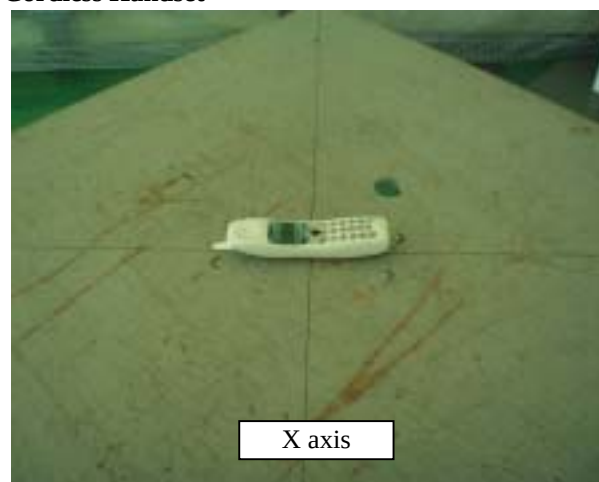
Worse case (30MHz-26GHz, Antenna: Horizontal)



Worse case (30MHz-26GHz, Antenna: Vertical)



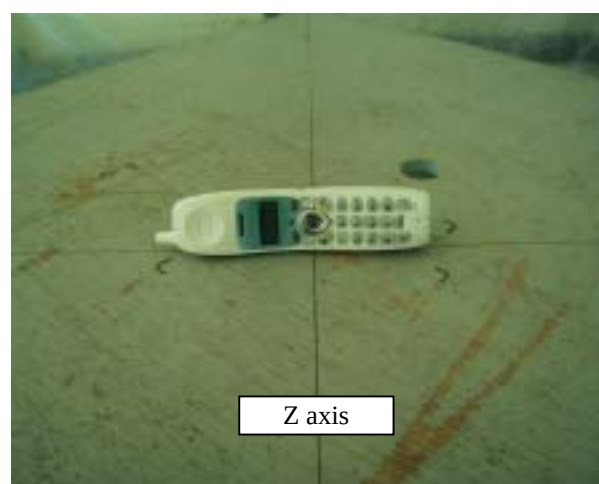
Cordless Handset



Worse case (30MHz-26GHz , Antenna: Horizontal)



Worse case (30MHz-26GHz, Antenna: Vertical)



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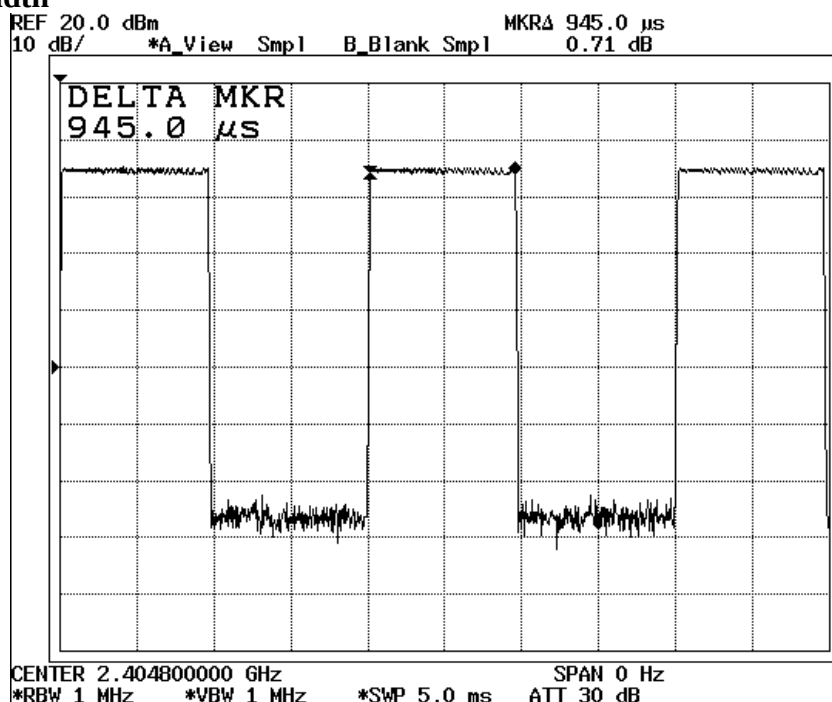
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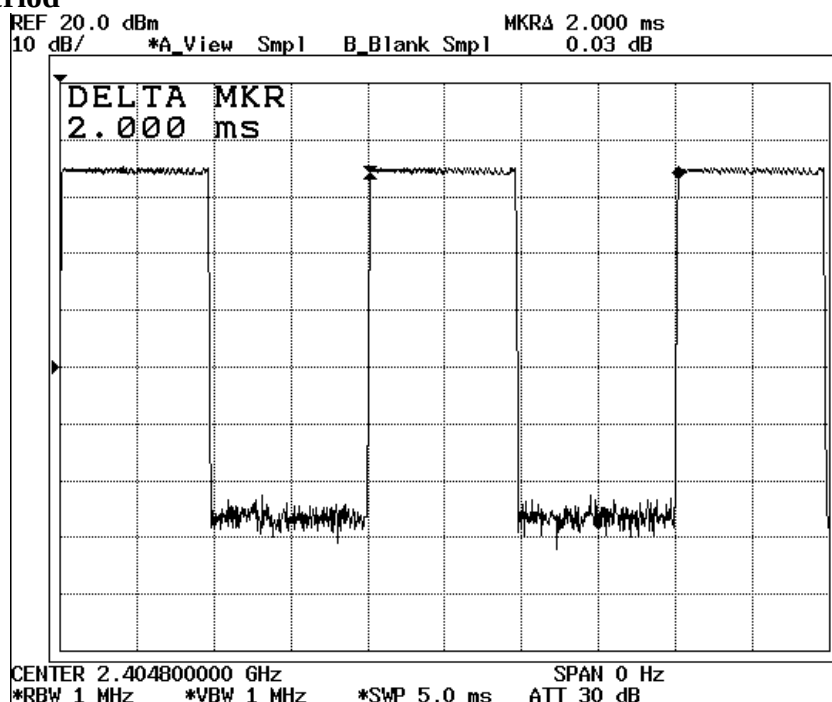
Facsimile: int +81 596 39 0232

Duty cycle under normal operation
(Facsimile Equipment)

T width



T period



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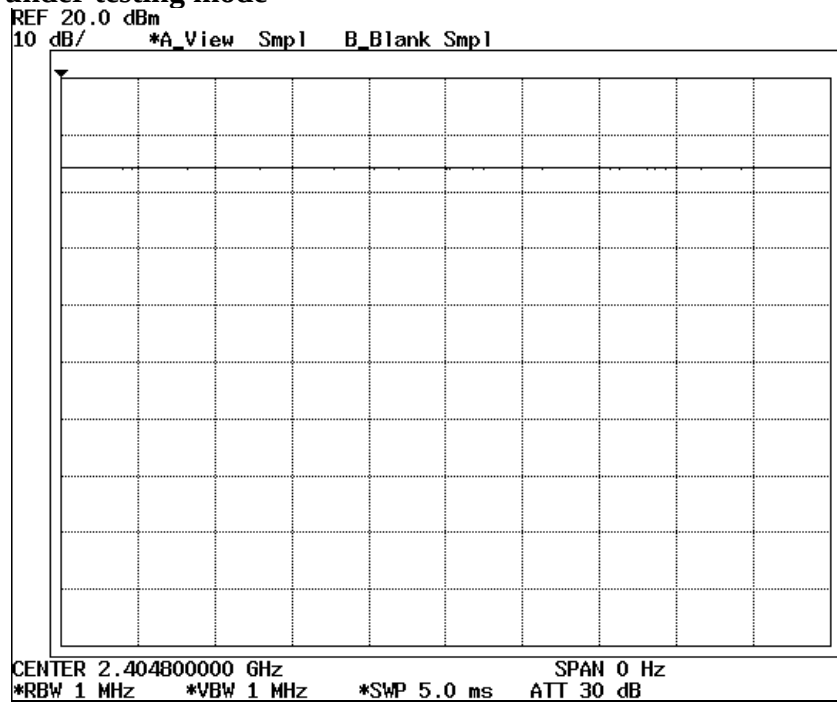
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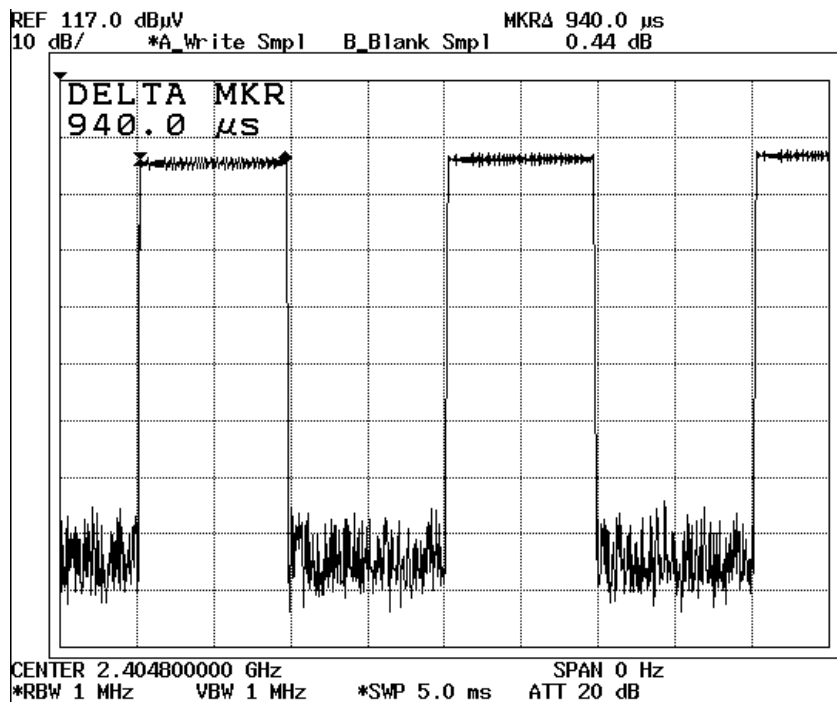
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Duty wave under testing mode



(Cordless Handset)

T width



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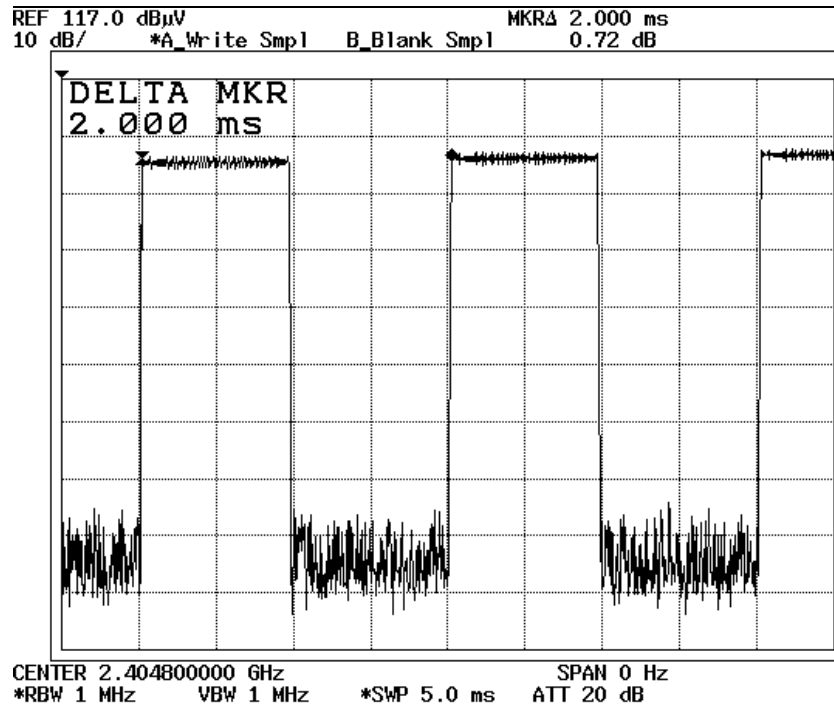
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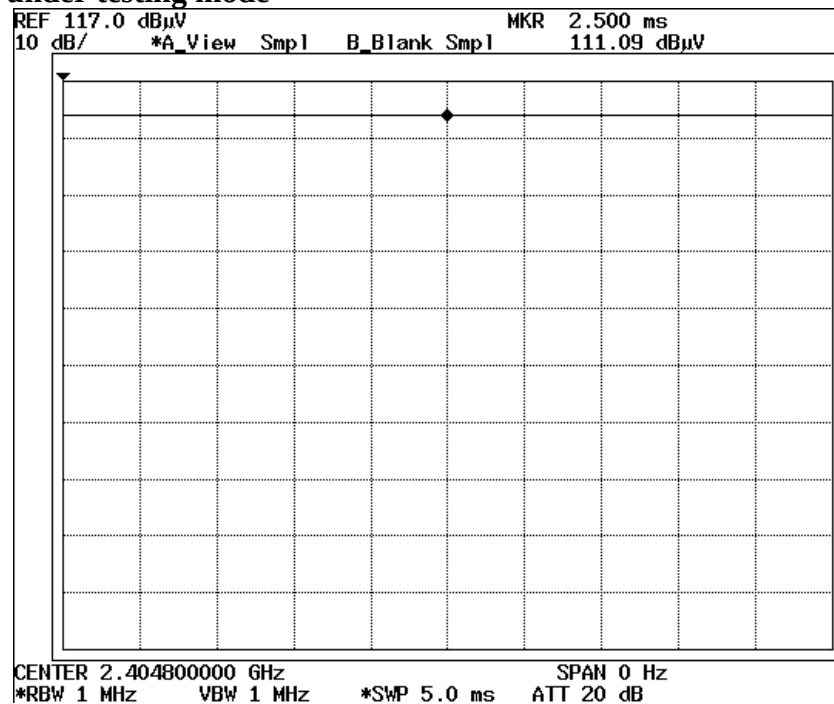
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T period



Duty wave under testing mode



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SECTION 11: Out of Band Emissions (Conducted), Section 15.247(c)

Test Procedure

The Out of Band Emissions was measured with a spectrum analyzer connected to the antenna port.
At 100kHz(RBW and VBW 100kHz), spurious emission in the frequency range 30MHz-26GHz which was out of 2400-2483.5MHz was lower 20 dB than radio frequency power.
It was operated under transmitting mode.

Test data : Page A46 to A59 (APPENDIX 3)

Test result : Pass

Test instruments : SA-06, AT-14

SECTION 12: Power Density(Conducted), Section 15.247(d)

Test Procedure

The Power Density was measured with a spectrum analyzer connected to the antenna port.
It was operated under transmitting mode.

Test data : Page A60 to A63 (APPENDIX 3)

Test result : Pass

Test instruments : SA-06, AT-14

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APPENDIX 1: Photographs of test setup

Page 17-18: Conducted emission (AC Mains)

Page 19-20: Radiated emission

APPENDIX 2: Test instruments

Page 21: Test instruments

APPENDIX 3: Data of EMI test

Page A1-A8: Conducted emission (AC Mains)

Page A9-A10: 6dB Bandwidth (Conducted)

Page A11-A12: Maximum peak output power (Conducted)

Page A13-A15: Variation of input power (Conducted)

Page A16-A45: Out of band emissions (Radiated)

Page A46-A59: Out of band emissions (Conducted)

Page A60-A63: Power density (Conducted)

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Conducted emission AC Mains (Cordless Telephone Equipment)

Charging mode (ch1, ch20, ch40) / Front view



Charging mode (ch1, ch20, ch40) / Side view



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Transmitting mode (ch1, ch20, ch40) (Cordless Telephone Equipment)



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Radiated emission (Cordless Telephone Equipment; Worse case position)

Horizontal antenna polarization: EUT Antenna angle: 0 degrees



Vertical antenna polarization: EUT Antenna angle: 90 degrees



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Radiated emission (Cordless Handset; Worse case position)

Horizontal antenna polarization (X axis, 30MHz-26GHz)



Vertical antenna polarization (Y axis, 30MHz-26GHz)



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Test Report No : 22HE0078-YW

APPENDIX 2

Test Instruments

EMI test equipment

Control No	Instrument	Manufacturer	Model No	Test Item	Calibration Date + Interval (month)
AF-01	Pre Amplifier	Hewlett Packard	8447D	RE	2002/04/01 * 12
AF-06	Pre Amplifier	Agilent	HP8449B	RE	2001/12/21 * 12
AT-06	Attenuator	Anritsu	MP721B	RE	2002/04/04 * 12
AT-14	Attenuator	Weinschel	2	RE	2002/04/23 * 12
BA-03	Biconical Antenna	Schwarzbeck	BBA9106	RE	2001/05/01 * 12
LA-06	Logperiodic Antenna	Schwarzbeck	UHALP9108-A	RE	2001/05/01 * 12
HA-02	Horn Antenna	A.H.Systems	SAS-200/571	RE	2001/05/20 * 12
EST-10	Horn Antenna	Schwarzbeck	BBHA9170	RE	2001/10/17 * 36
SA-04	Spectrum Analyzer	Hewlett Packard	8567A	RE / CE	2002/04/03 * 12
SA-06	Spectrum Analyzer	Advantest	R3273	RE / CE	2001/11/20 * 12
TR-05	Test Receiver	Rohde & Schwarz	ESHS10	CE	2001/08/24 * 12
TR-06	Test Receiver	Rohde & Schwarz	ESVS10	RE	2001/11/22 * 12
HF-04	High Pass Filter	Tokimec	TF323DCA	RE	2001/10/15 * 12
CC-30RC	Yokowa No.3 open coaxial(0.01-1000MHz)	A-PEX	CC-31,CC-32,C C-33,CC-34,CC-35,CC-36,CC-37,SW-31,SW-32	RE	2002/03/30 * 12
CC-3S	Yokowa No.3 shield coaxial(0.01-1000MHz)	A-PEX	CC-34,CC-35,C C-36,CC-38,SW-31,SW-32	CE	2002/03/30 * 12
CC-C10	Microwave Cable	Storm	421-014(7m)	RE	2001/12/22 * 12
CC-C13	Microwave Cable	Suhner	SUCOFLEX	RE	2002/01/13 * 12
YOATS-03	Open Test Site	JSE	10m	RE	2001/05/01 * 12
LS-04	LISN	Rohde & Schwarz	ESH3-Z5	CE (EUT)	2001/11/06 * 12
PM-02	Power Meter	Agilent	E4416A	CE	2002/03/22 * 12
PS-03	Power sensor	Agilent	E9327A	CE	2002/03/12 * 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.

DATA OF CONDUCTION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22HE0078-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Telephone Equipment
Model No. : BB-HC1
Serial No. : No. 2
Power : AC120V/60Hz
Mode : Charging
Remarks : FCC ID: APYHR000026
Date : 4/19/2002
Phase : Single Phase
Temperature : 25 °C
Humidity : 36 %
Regulation : FCC Part15. 207


Engineer : Makoto Kosaka

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]					QP [dBuV]	AV [dBuV]	QP [dBuV]	AV [dBuV]	QP [dB]	AV [dB]
1.	0.4500	3.1	-	2.9	-	0.1	0.0	0.1	0.0	3.3	-	48.0	0.0	44.7	-
2.	0.5985	32.8	-	33.9	-	0.1	0.0	0.3	0.0	34.3	-	48.0	0.0	13.7	-
3.	1.1841	29.7	-	31.4	-	0.1	0.0	0.1	0.0	31.6	-	48.0	0.0	16.4	-
4.	1.7722	21.0	-	22.5	-	0.1	0.0	0.2	0.0	22.8	-	48.0	0.0	25.2	-
5.	2.3616	9.4	-	10.6	-	0.2	0.0	0.2	0.0	11.0	-	48.0	0.0	37.0	-
6.	9.5979	14.5	-	15.9	-	0.4	0.0	0.3	0.0	16.6	-	48.0	0.0	31.4	-
7.	18.4289	6.0	-	9.1	-	0.8	0.0	0.5	0.0	10.4	-	48.0	0.0	37.6	-
8.	27.9968	34.3	-	36.8	-	0.9	0.0	0.5	0.0	38.2	-	48.0	0.0	9.8	-
9.	28.7985	18.3	-	21.1	-	0.9	0.0	0.6	0.0	22.6	-	48.0	0.0	25.4	-

CALCULATION: READING + LISN FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

All other spurious emissions were less than 20dB for the limit.
Used LISN : LS-04

DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

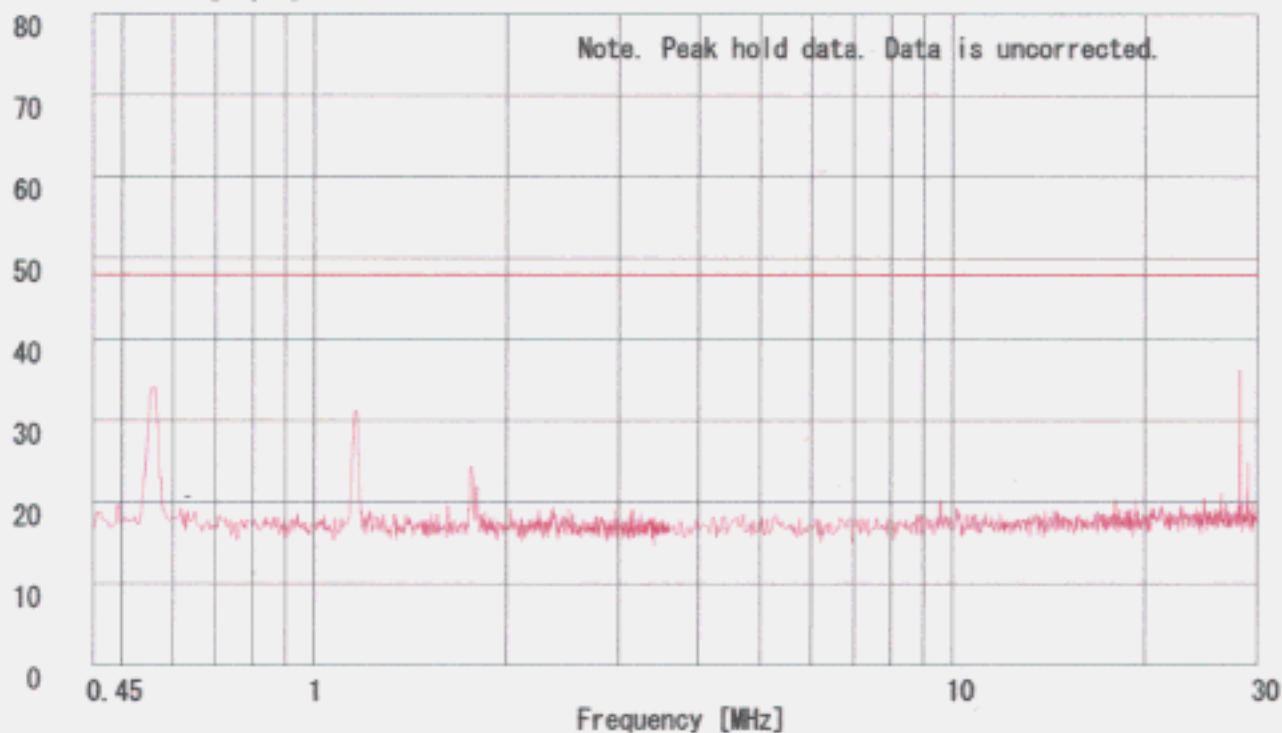
Report No. : 22HE0078-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Telephone Equipment
Model No. : BB-HC1
Serial No. : No. 2
Power : AC120V/60Hz
Mode : Charging
Remarks : FCC ID: APYHR000026
Date : 4/19/2002
Phase : Single Phase
Temperature : 25 °C
Humidity : 36 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207

Engineer : Makoto Kosaka

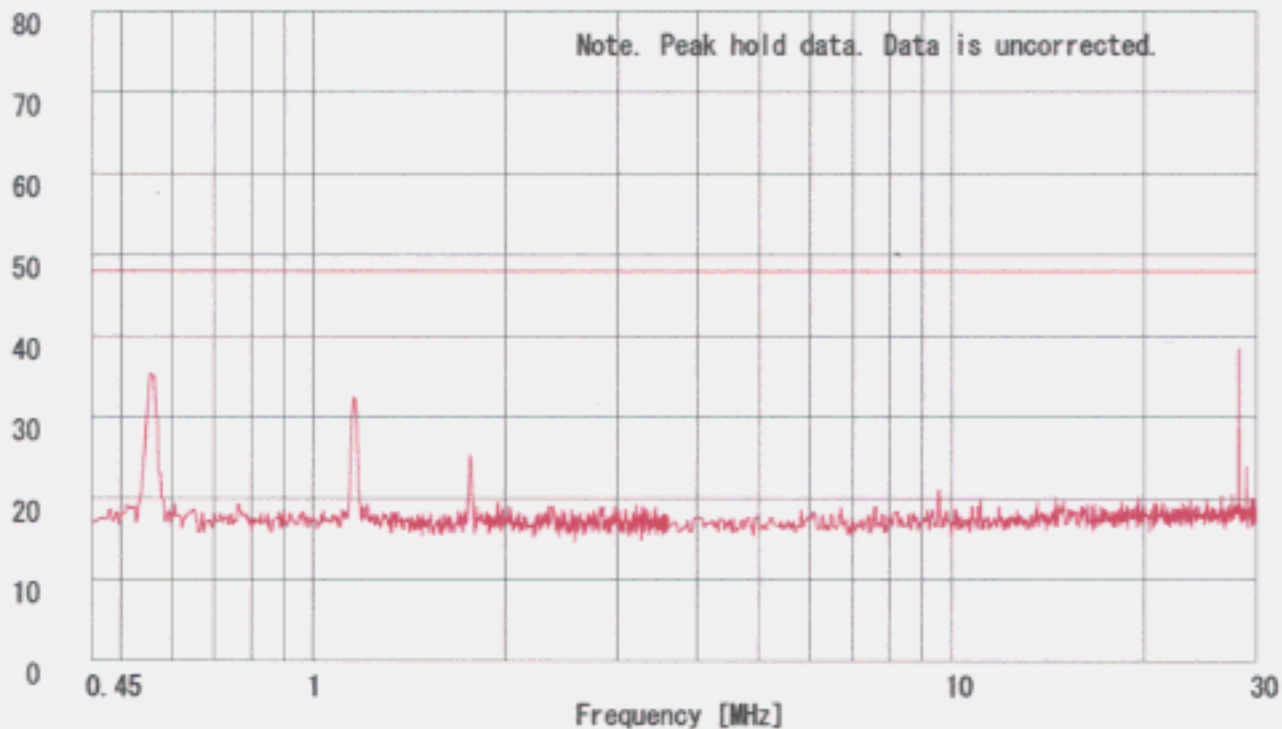
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22HE0078-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Telephone Equipment
Model No. : BB-HC1
Serial No. : No. 2
Power : AC120V/60Hz
Mode : Transmitting(ch1 2.4048GHz)
Remarks : FCC ID: APYHR000026
Date : 4/19/2002
Phase : Single Phase
Temperature : 25 °C
Humidity : 36 %
Regulation : FCC Part15.207


Engineer : Makoto Kosaka

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	AMP GAIN [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.	9.5998	18.9	-	21.3	-	0.4	0.0	0.3	0.0	22.0	-	48.0	0.0	26.0	-
2.	10.2370	7.5	-	9.0	-	0.5	0.0	0.3	0.0	9.8	-	48.0	0.0	38.2	-
3.	14.3342	7.1	-	10.1	-	0.6	0.0	0.4	0.0	11.1	-	48.0	0.0	36.9	-
4.	18.4296	7.8	-	10.8	-	0.8	0.0	0.5	0.0	12.1	-	48.0	0.0	35.9	-
5.	22.5255	8.0	-	10.8	-	0.9	0.0	0.5	0.0	12.2	-	48.0	0.0	35.8	-
6.	26.6222	9.5	-	12.1	-	0.9	0.0	0.5	0.0	13.5	-	48.0	0.0	34.5	-
7.	27.9981	37.0	-	39.6	-	0.9	0.0	0.5	0.0	41.0	-	48.0	0.0	7.0	-
8.	28.7997	21.2	-	23.8	-	0.9	0.0	0.6	0.0	25.3	-	48.0	0.0	22.7	-

CALCULATION: READING + LISN FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

All other spurious emissions were less than 20dB for the limit.
Used LISN : LS-04

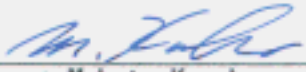
DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

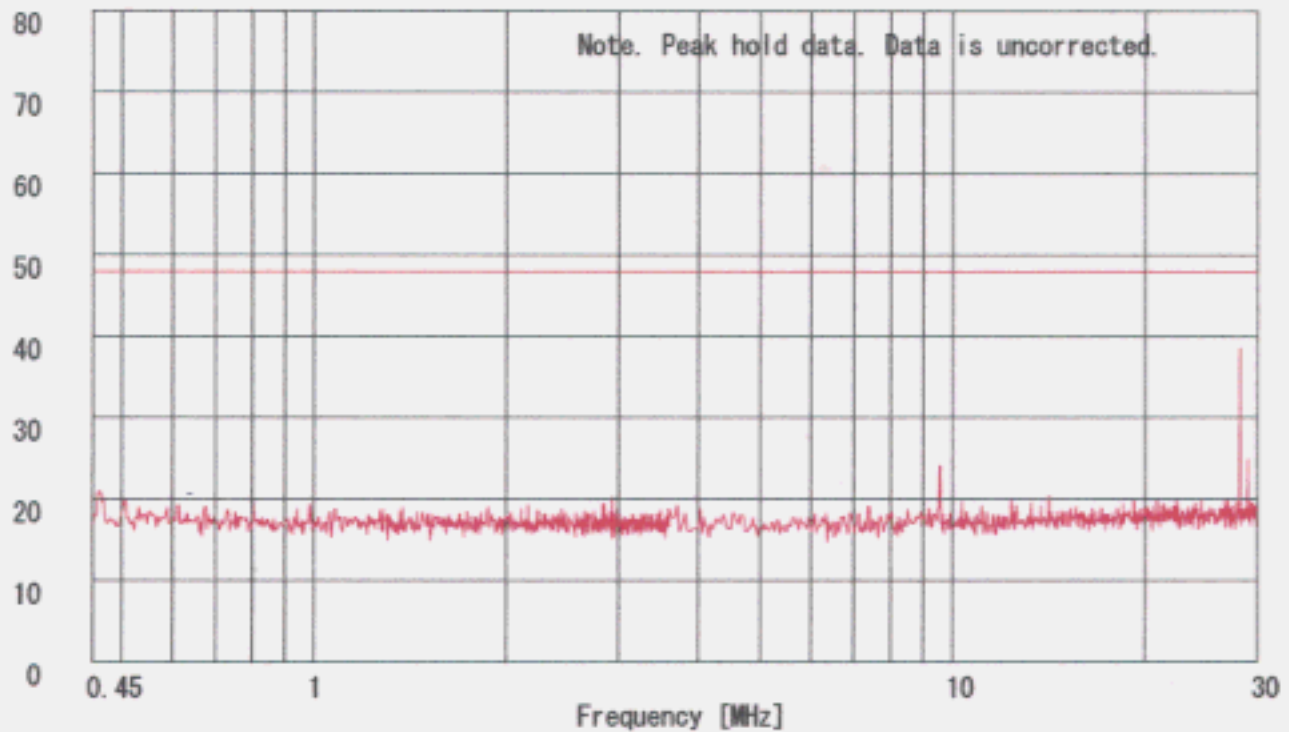
Report No. : 22HE0078-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Telephone Equipment
Model No. : BB-HC1
Serial No. : No. 2
Power : AC120V/60Hz
Mode : Transmitting(ch1 2.4048GHz)
Remarks : FCC ID: APYHR000026
Date : 4/19/2002
Phase : Single Phase
Temperature : 25 °C
Humidity : 36 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207


Engineer : Makoto Kosaka

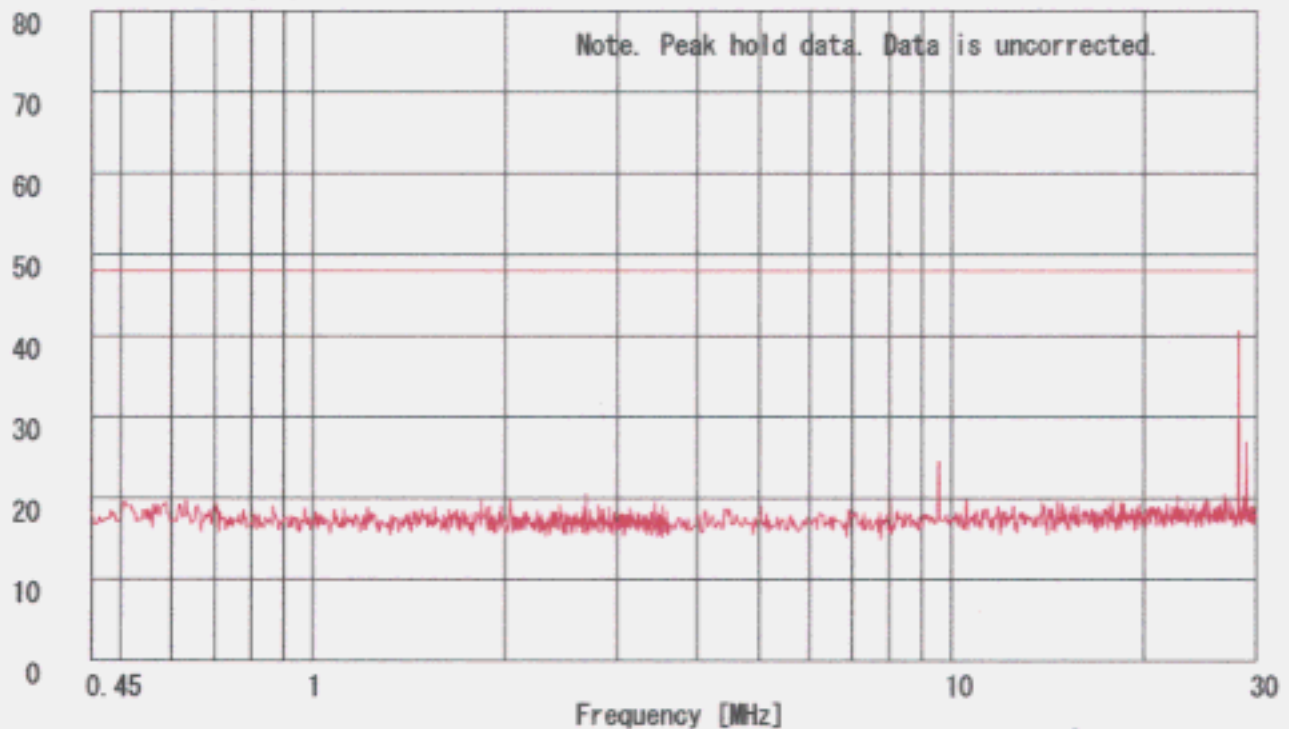
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22HE0078-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Telephone Equipment
Model No. : BB-HC1
Serial No. : No. 2
Power : AC120V/60Hz
Mode : Transmitting(ch20 2.439GHz)
Remarks : FCC ID: APYHRO00026
Date : 4/19/2002
Phase : Single Phase
Temperature : 25 °C
Humidity : 36 %
Regulation : FCC Part15.207


Engineer : Makoto Kosaka

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	AMP GAIN [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.	9.5999	18.9	-	21.3	-	0.4	0.0	0.3	0.0	22.0	-	48.0	0.0	26.0	-
2.	10.2382	7.4	-	9.1	-	0.5	0.0	0.3	0.0	9.9	-	48.0	0.0	38.1	-
3.	14.3339	7.1	-	10.1	-	0.6	0.0	0.4	0.0	11.1	-	48.0	0.0	36.9	-
4.	18.4297	7.7	-	10.8	-	0.8	0.0	0.5	0.0	12.1	-	48.0	0.0	35.9	-
5.	22.5257	8.4	-	10.9	-	0.9	0.0	0.5	0.0	12.3	-	48.0	0.0	35.7	-
6.	26.6218	9.8	-	12.2	-	0.9	0.0	0.5	0.0	13.6	-	48.0	0.0	34.4	-
7.	27.9980	37.1	-	39.5	-	0.9	0.0	0.5	0.0	40.9	-	48.0	0.0	7.1	-
8.	28.8002	21.3	-	23.6	-	0.9	0.0	0.6	0.0	25.1	-	48.0	0.0	22.9	-

CALCULATION: READING + LISN FACTOR + CABLE LOSS - AMP. GAIN + ATTEN.

All other spurious emissions were less than 20dB for the limit.
Used LISN : LS-04

DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

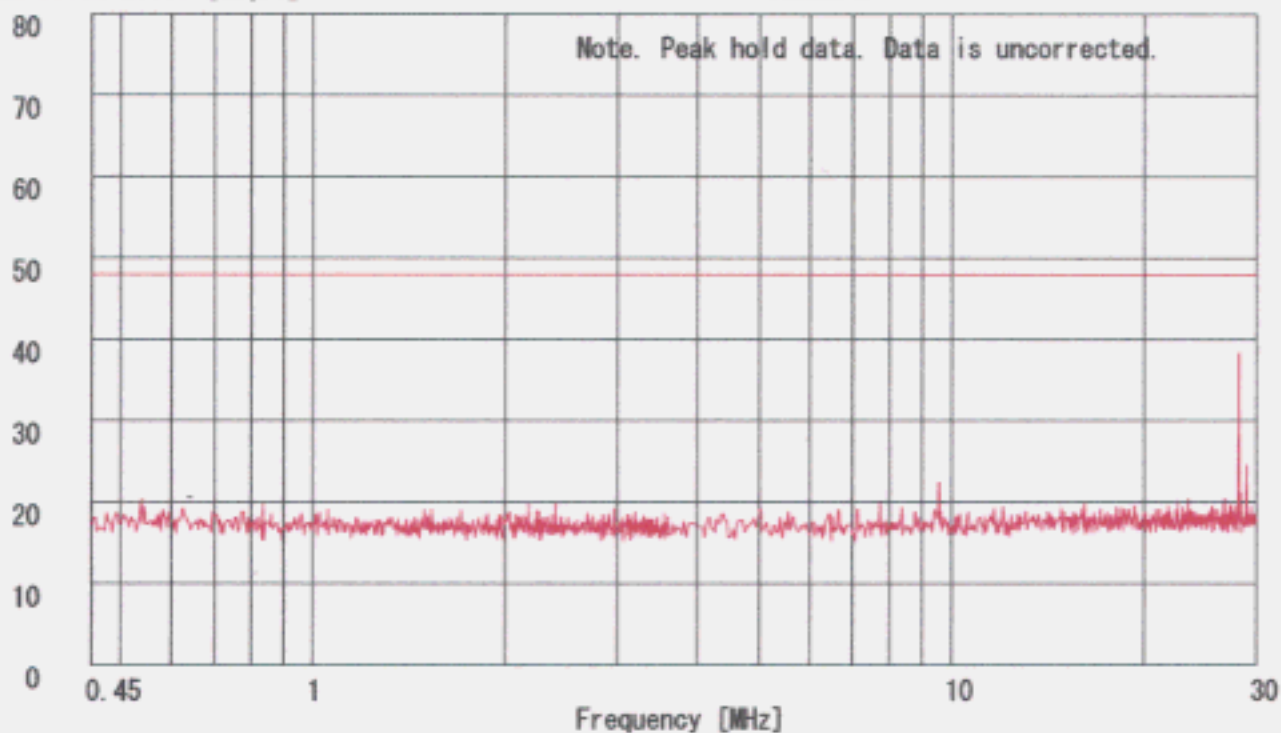
Report No. : 22HE0078-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Telephone Equipment
Model No. : BB-HC1
Serial No. : No. 2
Power : AC120V/60Hz
Mode : Transmitting(ch20 2.439GHz)
Remarks : FCC ID: APYHR000026
Date : 4/19/2002
Phase : Single Phase
Temperature : 25 °C
Humidity : 36 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207


Engineer : Makoto Kosaka

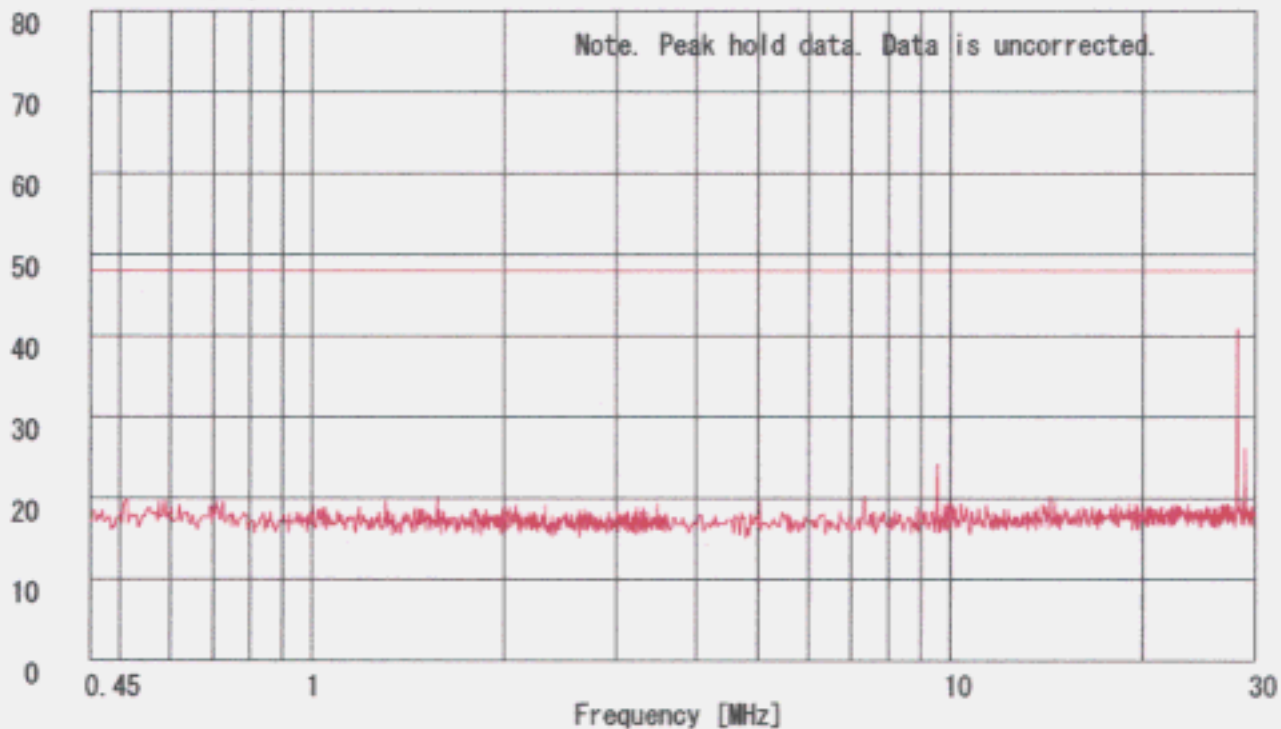
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22HE0078-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Telephone Equipment
Model No. : BB-HC1
Serial No. : No. 2
Power : AC120V/60Hz
Mode : Transmitting(ch40 2.475GHz)
Remarks : FCC ID: APYHR000026
Date : 4/19/2002
Phase : Single Phase
Temperature : 25 °C
Humidity : 36 %
Regulation : FCC Part15.207


Engineer : Makoto Kosaka

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	AMP GAIN [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.	9.5997	18.9	-	21.3	-	0.4	0.0	0.3	0.0	22.0	-	48.0	0.0	26.0	-
2.	10.2382	7.4	-	9.1	-	0.5	0.0	0.3	0.0	9.9	-	48.0	0.0	38.1	-
3.	14.3339	7.1	-	10.1	-	0.6	0.0	0.4	0.0	11.1	-	48.0	0.0	36.9	-
4.	18.4297	7.7	-	10.8	-	0.8	0.0	0.5	0.0	12.1	-	48.0	0.0	35.9	-
5.	22.5257	8.4	-	10.9	-	0.9	0.0	0.5	0.0	12.3	-	48.0	0.0	35.7	-
6.	26.6218	9.8	-	12.2	-	0.9	0.0	0.5	0.0	13.6	-	48.0	0.0	34.4	-
7.	27.9981	37.1	-	39.5	-	0.9	0.0	0.5	0.0	40.9	-	48.0	0.0	7.1	-
8.	28.8002	21.3	-	23.6	-	0.9	0.0	0.6	0.0	25.1	-	48.0	0.0	22.9	-

CALCULATION: READING + LISN FACTOR + CABLE LOSS - AMP.GAIN + ATTEN.

All other spurious emissions were less than 20dB for the limit.
Used LISN : LS-04

DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

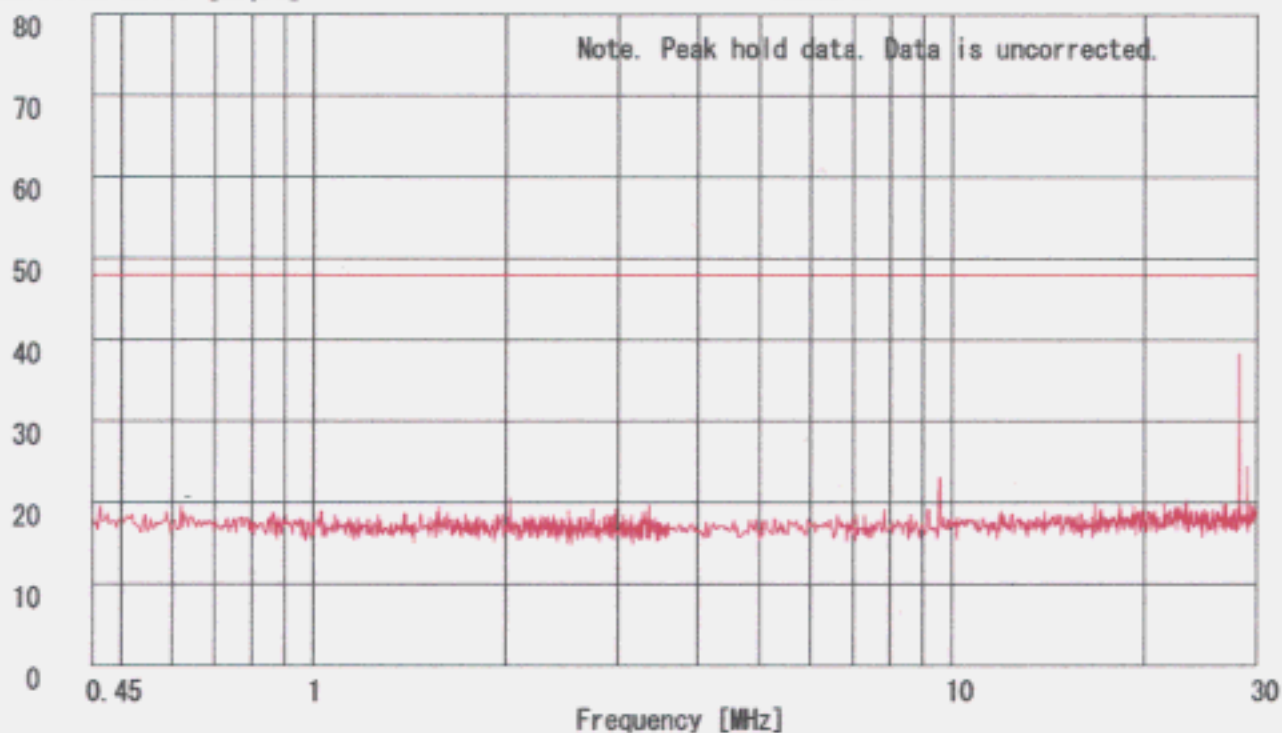
Report No. : 22HE0078-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Telephone Equipment
Model No. : BB-HC1
Serial No. : No. 2
Power : AC120V/60Hz
Mode : Transmitting(ch40 2.475GHz)
Remarks : FCC ID: APYHR000026
Date : 4/19/2002
Phase : Single Phase
Temperature : 25 °C
Humidity : 36 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207


Engineer : Makoto Kosaka

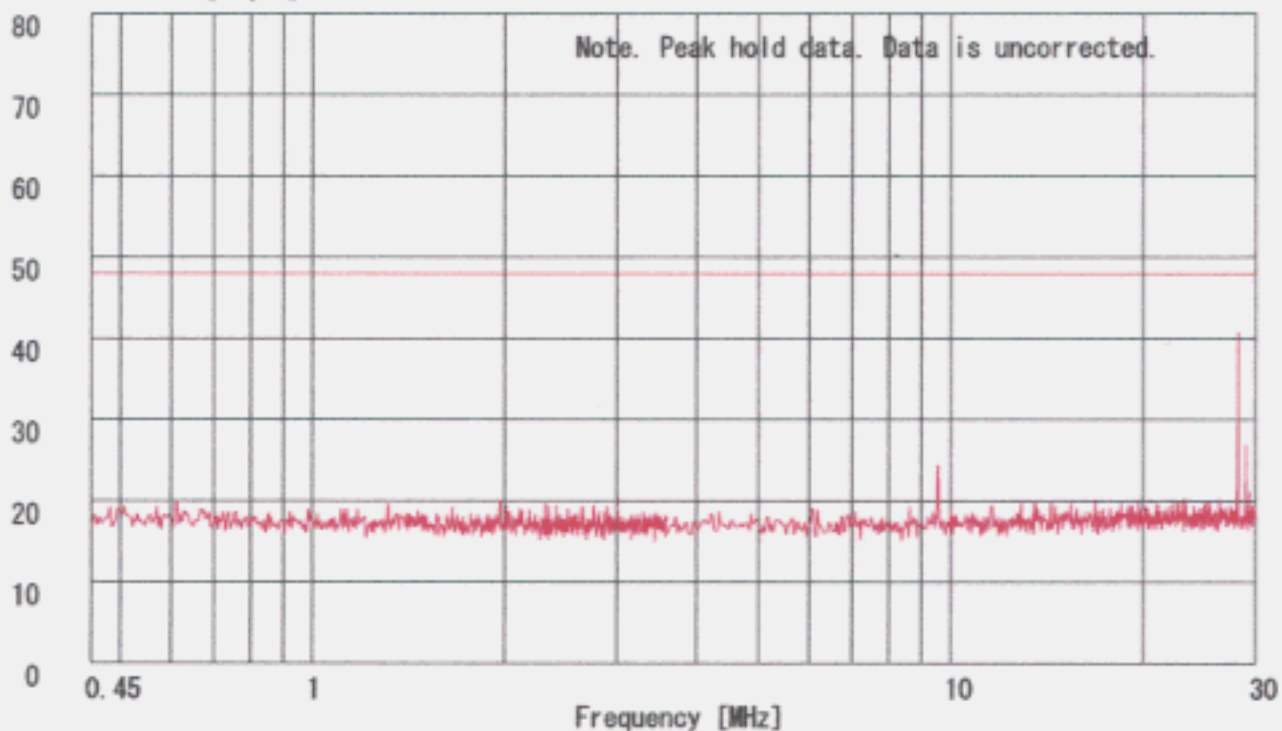
Emission Level [dB μ V]

PHASE:N

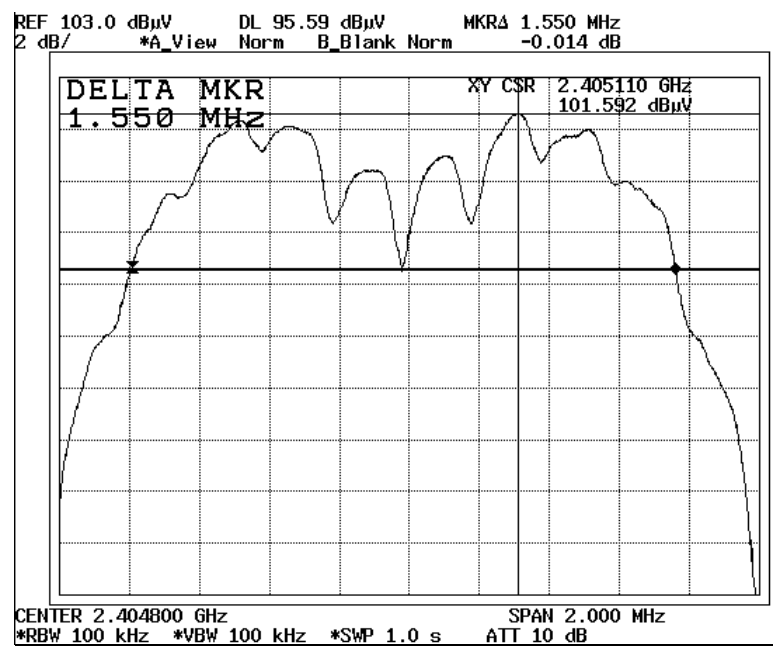


Emission Level [dB μ V]

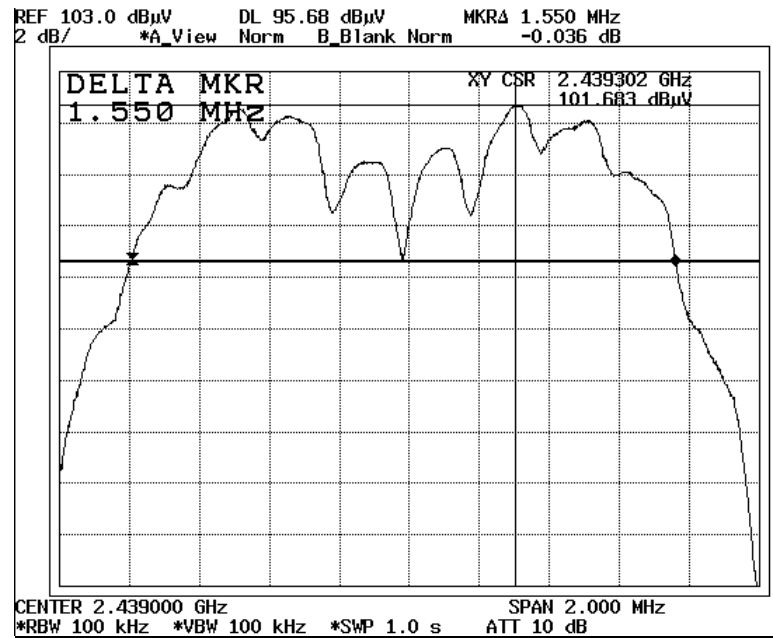
PHASE:L1



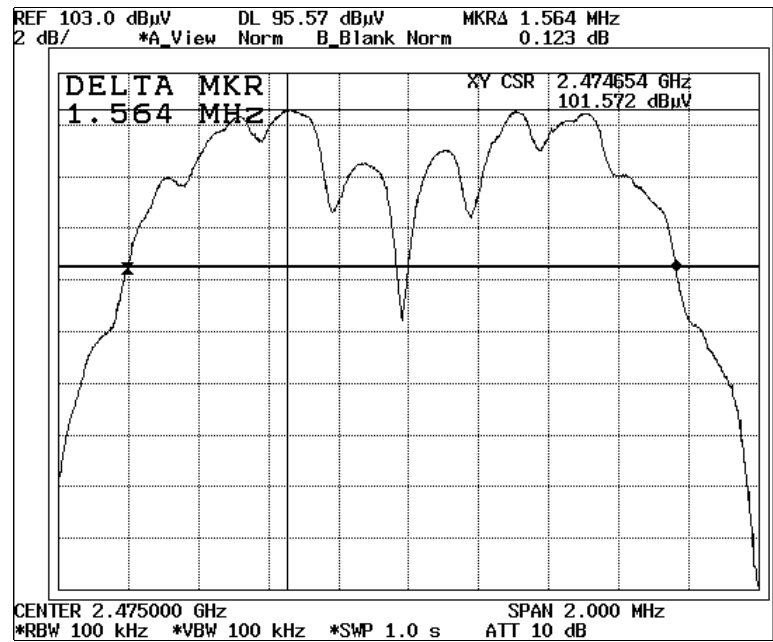
1. ch 1: 2.4048GHz



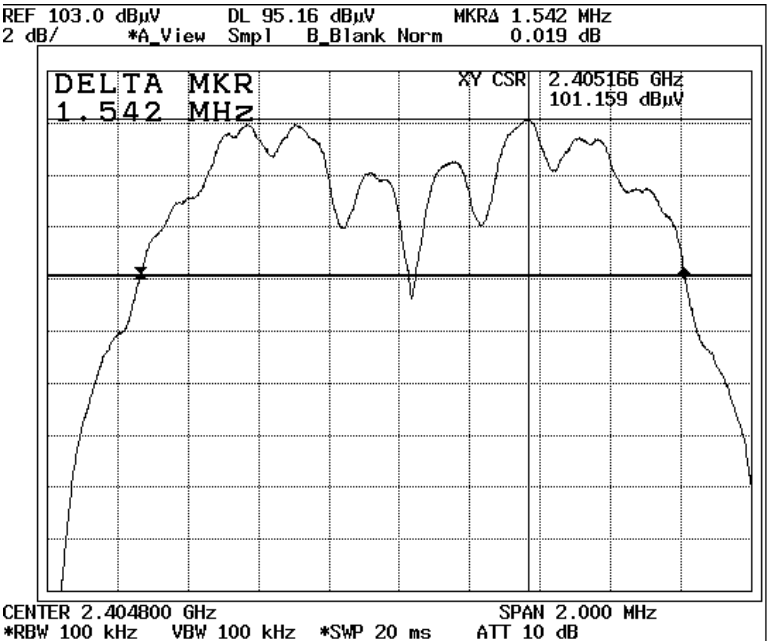
2. ch 20: 2.439GHz



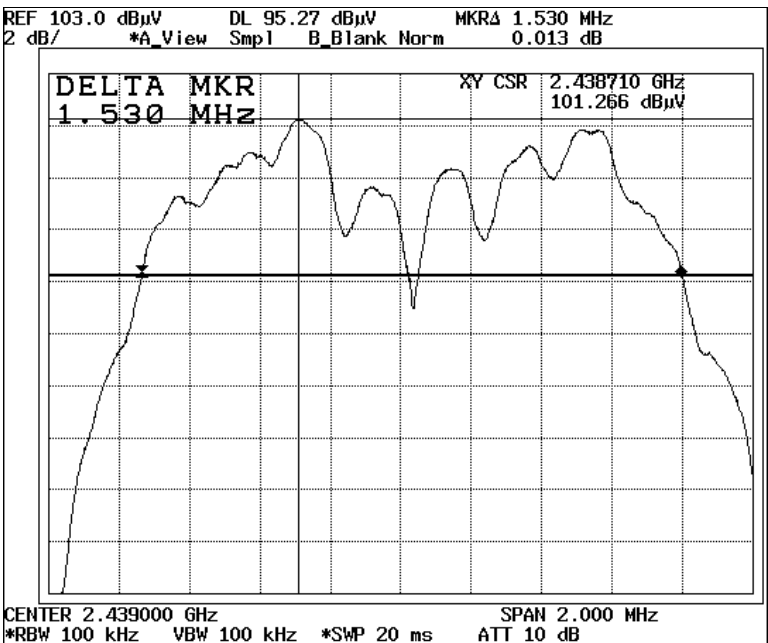
3. ch 40: 2.475GHz



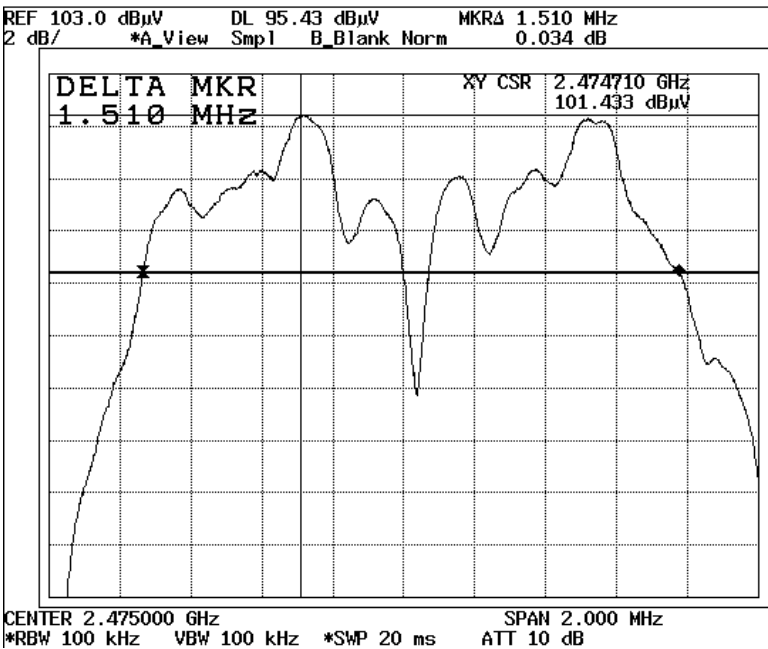
1. ch 1: 2.4048GHz



2. ch 20: 2.439GHz



3. ch 40: 2.475GHz

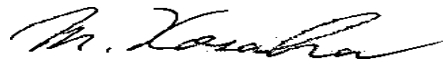


Maximum Peak Output Power (Conducted)

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

Company : SHARP Corporation
Equipment : Cordless Telephone Equipment
Model : BB-HC1
Sample No. : 1
FCC ID : APYHRO00026
Power : AC120V/60Hz
Mode : Transmitting(ch1,20,40)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247(b)(1)
Date : 2002/04/20
Temperature : 23deg.C
Humidity : 55%



ENGINEER : Makoto Kosaka

ch	FREQ [MHz]	P/M Reading [dBm]	ATTEN. [dB]	RESULT [dBm]	convert [mW]	Limit (1W) [dBm]	Margin [dB]
ch1	2404.8	4.9	10.0	14.9	31.0	30.0	15.1
ch20	2439.0	4.9	10.0	14.9	30.8	30.0	15.1
ch40	2475.0	4.7	10.0	14.7	29.6	30.0	15.3

REMARKS:

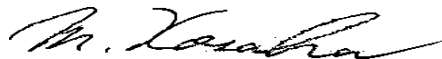
CALCULATION : P = Power Meter Reading + ATTEN

Maximum Peak Output Power (Conducted)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : BB-HC1K
Sample No. : 000055
FCC ID : APYHRO00026
Power : DC 3.6V
Mode : Transmitting(ch1,20,40)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247(b)(1)
Date : 2002/01/27
Temperature : 22deg.C
Humidity : 31%

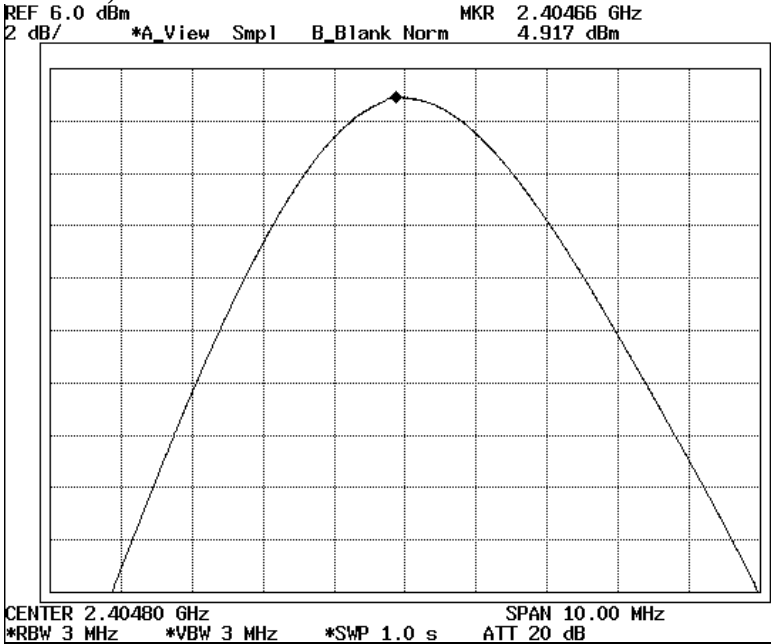


ENGINEER : Makoto Kosaka

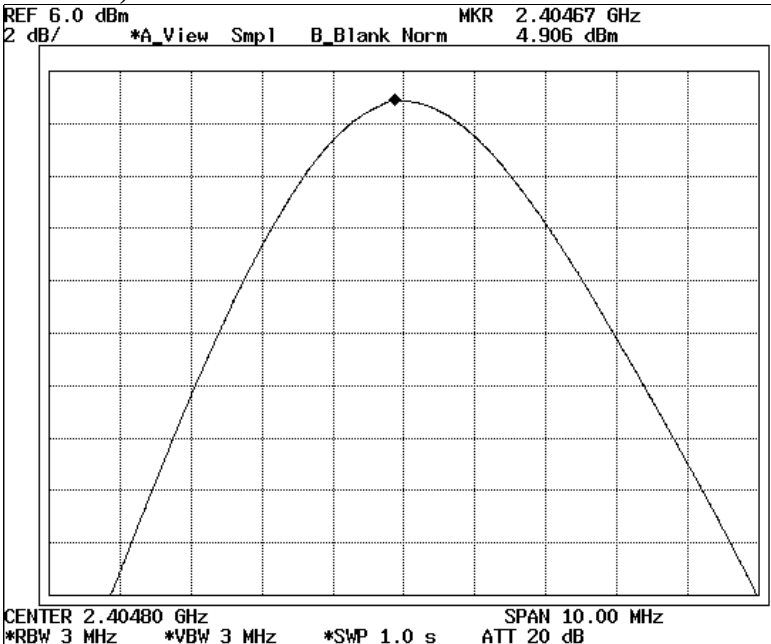
ch	FREQ [MHz]	P/M Reading [dBm]	ATTEN. [dB]	RESULT [dBm]	convert [mW]	Limit (1W) [dBm]	Margin [dB]
ch1	2404.8	3.0	10.0	13.0	20.0	30.0	17.0
ch20	2440.8	2.9	10.0	12.9	19.5	30.0	17.1
ch40	2475.0	2.8	10.0	12.8	19.1	30.0	17.2

REMARKS:

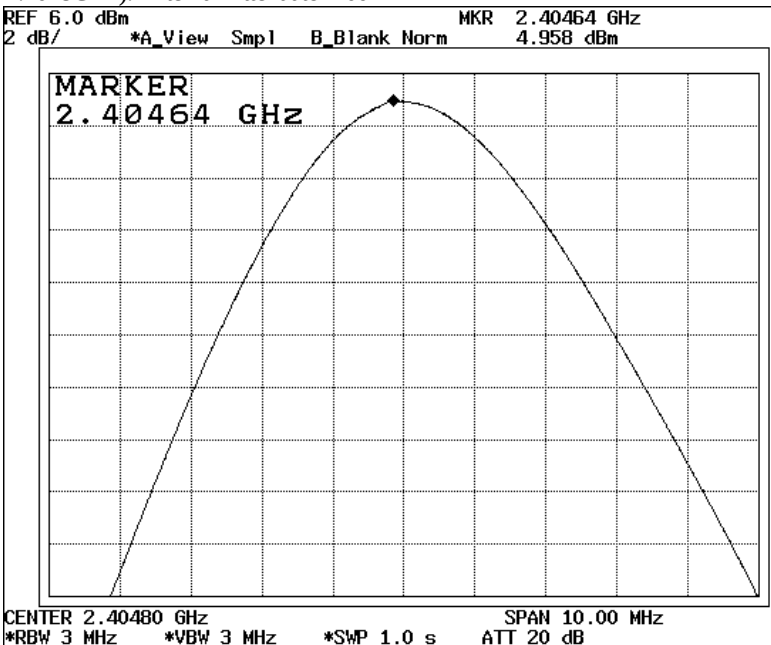
CALCULATION : P = Power Meter Reading + ATTEN



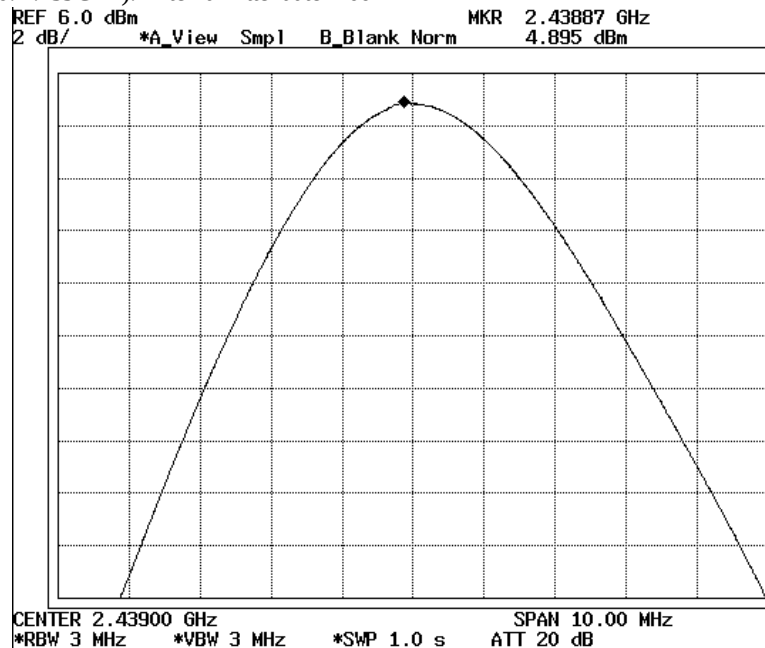
2. AC 120V (100 %) / (ch 1: 2.4048GHz): External Attenuator 10dB



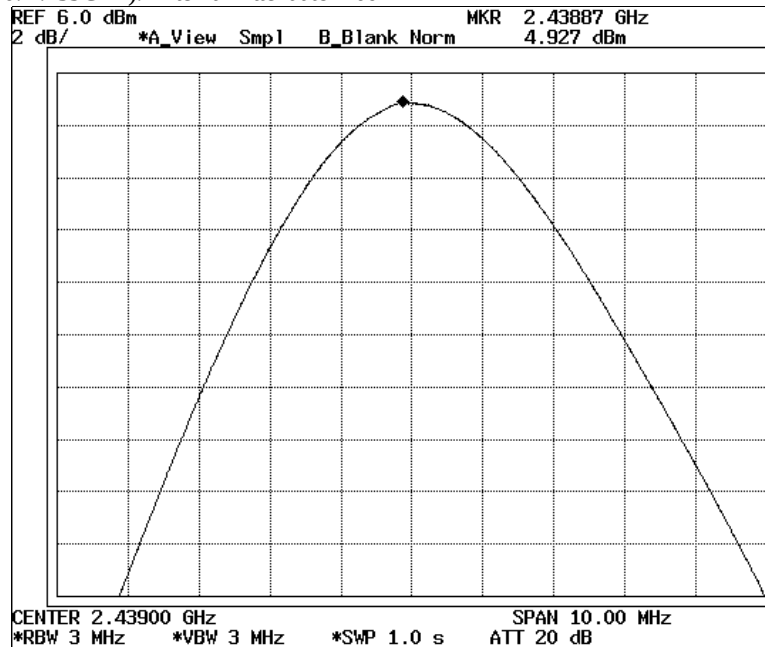
3. AC 138V (115 %) / (ch 1: 2.4048GHz): External Attenuator 10dB



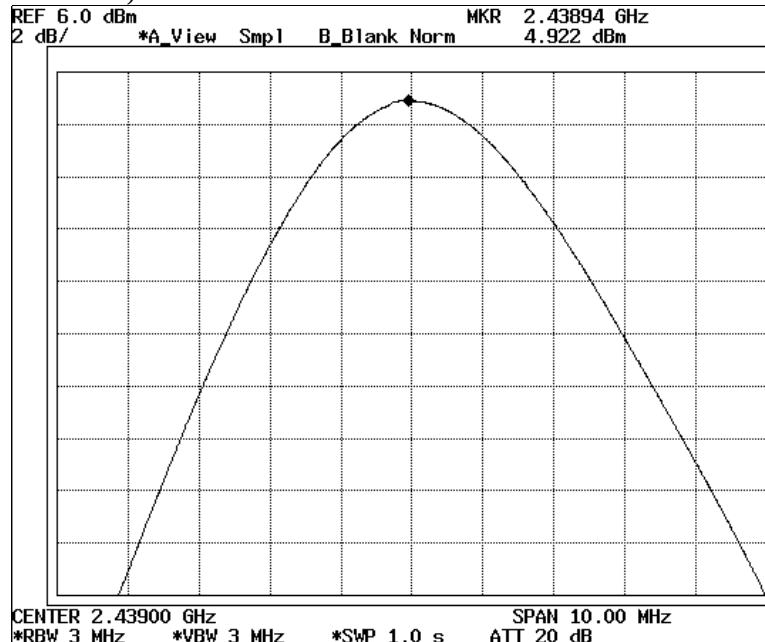
4. AC 102V (85 %) / (ch 20: 2.439GHz): External Attenuator 10dB

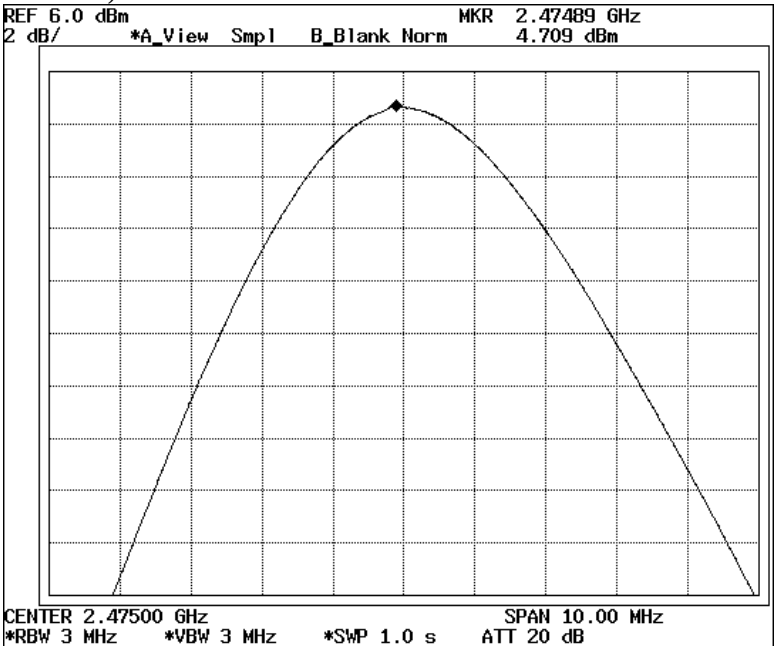


5. AC 120V (100 %) / (ch 20: 2.439GHz): External Attenuator 10dB

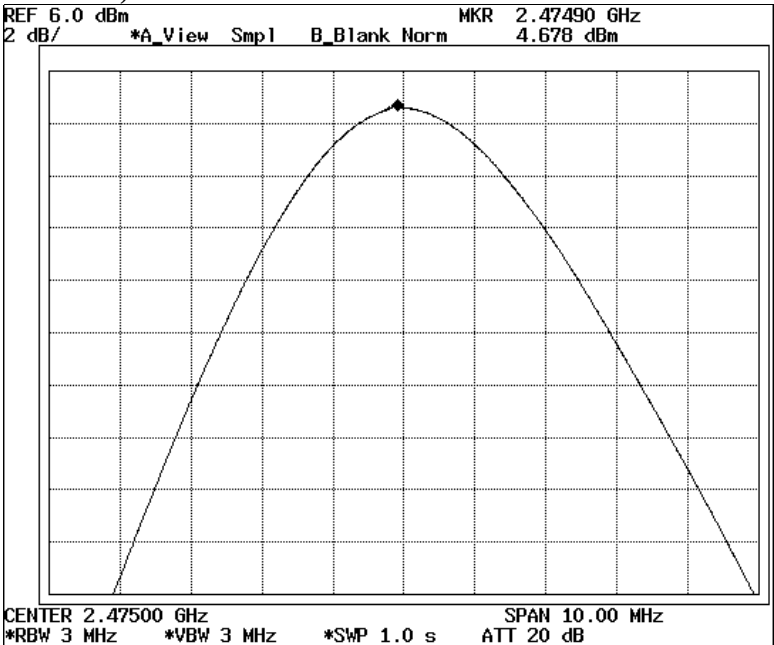


6. AC 138V (115 %) / (ch 20: 2.439GHz): External Attenuator 10dB

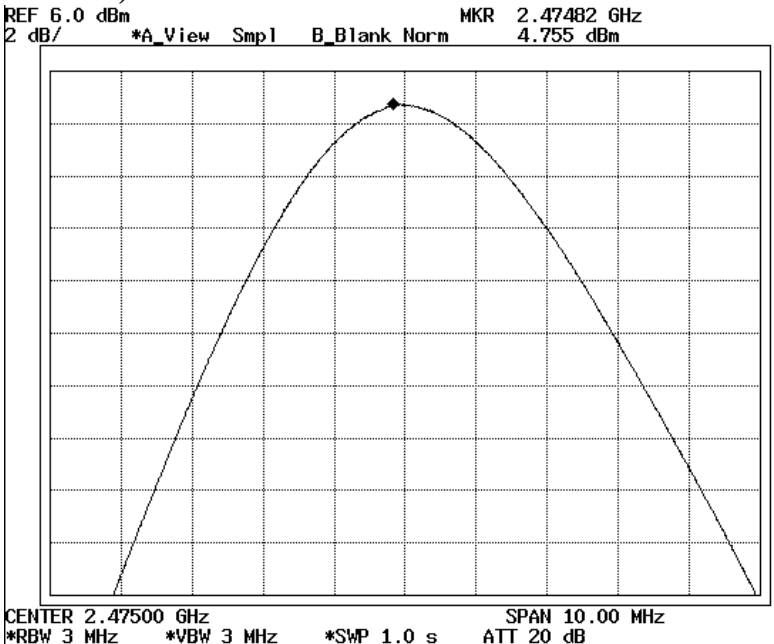




8. AC 120V (100 %) / (ch 40: 2.475GHz): External Attenuator 10dB



9. AC 138V (115 %) / (ch 40: 2.475GHz): External Attenuator 10dB

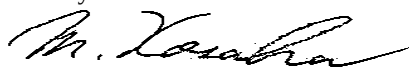


DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Cordless Telephone Equipment
Model : BB-HC1
Sample No. : 2
FCC ID : APYHRO00026
Power : AC120V/60Hz
Mode : Transmitting (ch1: 2404.8MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/04/17
Temperature : 22deg.C
Humidity : 79%



ENGINEER : Makoto Kosaka

QP DETECT(Test Receiver: BW 120kHz)

No.	FREQ [MHz]	READING		ANT Factor [dB]	ATTEN [dB]	CABLE LOSS [dB]	AMP GAIN [dB]	RESULT		LIMIT [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
1	56.000	33.7	41.1	8.8	6.0	1.6	27.8	22.3	29.7	40.0	17.7	10.3
2	84.000	38.0	42.2	6.9	6.0	1.9	27.8	25.0	29.2	40.0	15.0	10.8
3	112.000	43.9	40.8	12.0	6.0	2.3	27.9	36.3	33.2	43.5	7.2	10.3
4	115.200	33.5	28.1	12.5	6.0	2.3	27.9	26.4	21.0	43.5	17.1	22.5
5	140.000	41.1	40.2	14.1	6.0	2.6	27.9	35.9	35.0	43.5	7.6	8.5
6	168.000	40.2	40.8	15.2	6.0	2.8	27.8	36.4	37.0	43.5	7.1	6.5
7	196.000	37.2	33.6	16.3	6.0	3.1	27.8	34.8	31.2	43.5	8.7	12.3
8	224.000	44.1	38.7	16.5	6.0	3.2	27.8	42.0	36.6	46.0	4.0	9.4
9	252.000	41.3	36.8	16.7	6.0	3.1	27.3	39.8	35.3	46.0	6.2	10.7
10	289.080	22.6	22.6	18.7	6.1	3.8	27.8	23.4	23.4	46.0	22.6	22.6
11	307.990	41.8	40.6	14.3	6.1	3.9	27.9	38.2	37.0	46.0	7.8	9.0
12	335.990	48.0	42.8	14.6	6.1	4.3	28.0	45.0	39.8	46.0	1.0	6.2
13	559.980	37.4	35.8	18.5	6.0	5.6	27.7	39.8	38.2	46.0	6.2	7.8
14	671.970	38.7	38.1	20.1	6.1	6.2	27.4	43.7	43.1	46.0	2.3	2.9

REMARKS

*The antenna of EUT was angled 0 degrees when the measurement antenna was positioned horizontally.(wors case)

*The antenna of EUT was angled 90 degrees when the measurement antenna was positioned vertically.(wors case)

ANTENNA TYPE: 30-300MHz Biconical / 300-1000MHz Logperiodic

CALCULATION(30MHz to 1000MHz) : READING + ANT Factor + ATTEN + Cable Loss - AMP Gain

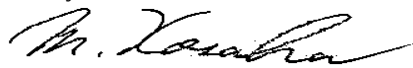
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Cordless Telephone Equipment
Model : BB-HC1
Sample No. : 2
FCC ID : APYHRO00026
Power : AC120V/60Hz
Mode : Transmitting (ch20: 2439MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/04/17
Temperature : 22deg.C
Humidity : 79%



ENGINEER : Makoto Kosaka

QP DETECT(Test Receiver: BW 120kHz)

No.	FREQ [MHz]	READING		ANT Factor [dB]	ATTEN [dB]	CABLE LOSS [dB]	AMP GAIN [dB]	RESULT		LIMIT [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
1	56.000	33.8	41.1	8.8	6.0	1.6	27.8	22.4	29.7	40.0	17.6	10.3
2	84.000	38.0	42.2	6.9	6.0	1.9	27.8	25.0	29.2	40.0	15.0	10.8
3	112.000	43.9	40.8	12.0	6.0	2.3	27.9	36.3	33.2	43.5	7.2	10.3
4	115.200	33.5	28.2	12.5	6.0	2.3	27.9	26.4	21.1	43.5	17.1	22.4
5	140.000	41.1	40.2	14.1	6.0	2.6	27.9	35.9	35.0	43.5	7.6	8.5
6	168.000	40.2	40.8	15.2	6.0	2.8	27.8	36.4	37.0	43.5	7.1	6.5
7	196.000	37.3	33.6	16.3	6.0	3.1	27.8	34.9	31.2	43.5	8.6	12.3
8	224.000	44.1	38.7	16.5	6.0	3.2	27.8	42.0	36.6	46.0	4.0	9.4
9	252.000	41.3	36.8	16.7	6.0	3.1	27.3	39.8	35.3	46.0	6.2	10.7
10	307.990	43.5	40.6	14.3	6.1	3.9	27.9	39.9	37.0	46.0	6.1	9.0
11	323.270	29.9	22.4	14.5	6.1	4.0	28.0	26.5	19.0	46.0	19.5	27.0
12	335.990	48.2	42.8	14.6	6.1	4.3	28.0	45.2	39.8	46.0	0.8	6.2
13	559.980	37.4	35.8	18.5	6.0	5.6	27.7	39.8	38.2	46.0	6.2	7.8
14	671.970	38.7	38.1	20.1	6.1	6.2	27.4	43.7	43.1	46.0	2.3	2.9

REMARKS

*The antenna of EUT was angled 0 degrees when the measurement antenna was positioned horizontally.(wors case)

*The antenna of EUT was angled 90 degrees when the measurement antenna was positioned vertically.(wors case)

ANTENNA TYPE: 30-300MHz Biconical / 300-1000MHz Logperiodic

CALCULATION(30MHz to 1000MHz) : READING + ANT Factor + ATTEN + Cable Loss - AMP Gain

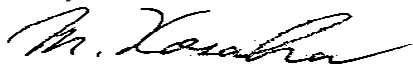
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Cordless Telephone Equipment
Model : BB-HC1
Sample No. : 2
FCC ID : APYHRO00026
Power : AC120V/60Hz
Mode : Transmitting (ch40: 2475MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/04/17
Temperature : 22deg.C
Humidity : 79%



ENGINEER : Makoto Kosaka

QP DETECT(Test Receiver: BW 120kHz)

No.	FREQ [MHz]	READING		ANT Factor [dB]	ATTEN [dB]	CABLE LOSS [dB]	AMP GAIN [dB]	RESULT		LIMIT [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
1	56.000	31.3	41.1	8.8	6.0	1.6	27.8	19.9	29.7	40.0	20.1	10.3
2	84.000	38.6	42.3	6.9	6.0	1.9	27.8	25.6	29.3	40.0	14.4	10.7
3	112.000	43.8	40.8	12.0	6.0	2.3	27.9	36.2	33.2	43.5	7.3	10.3
4	115.200	33.4	28.1	12.5	6.0	2.3	27.9	26.3	21.0	43.5	17.2	22.5
5	140.000	41.2	40.3	14.1	6.0	2.6	27.9	36.0	35.1	43.5	7.5	8.4
6	168.000	40.5	40.9	15.2	6.0	2.8	27.8	36.7	37.1	43.5	6.8	6.4
7	196.000	37.0	33.7	16.3	6.0	3.1	27.8	34.6	31.3	43.5	8.9	12.2
8	224.000	44.5	38.7	16.5	6.0	3.2	27.8	42.4	36.6	46.0	3.6	9.4
9	252.000	41.6	36.7	16.7	6.0	3.1	27.3	40.1	35.2	46.0	5.9	10.8
10	308.000	41.3	38.0	14.3	6.1	3.9	27.9	37.7	34.4	46.0	8.3	11.6
11	336.000	48.1	43.4	14.6	6.1	4.3	28.0	45.1	40.4	46.0	0.9	5.6
12	359.280	25.0	22.2	14.9	6.0	4.6	27.9	22.6	19.8	46.0	23.4	26.2
13	560.000	35.9	36.1	18.5	6.0	5.6	27.7	38.3	38.5	46.0	7.7	7.5
14	671.970	38.6	35.4	20.1	6.1	6.2	27.4	43.6	40.4	46.0	2.4	5.6

REMARKS

*The antenna of EUT was angled 0 degrees when the measurement antenna was positioned horizontally.(wors case)

*The antenna of EUT was angled 90 degrees when the measurement antenna was positioned vertically.(wors case)

ANTENNA TYPE: 30-300MHz Biconical / 300-1000MHz Logperiodic

CALCULATION(30MHz to 1000MHz) : READING + ANT Factor + ATTEN + Cable Loss - AMP Gain

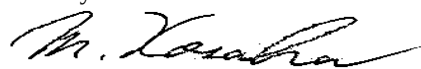
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : BB-HC1K
Sample No. : 1
FCC ID : APYHRO00026
Power : DC 3.6V
Mode : Transmitting (ch1: 2404.8MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/01/30
Temperature : 19deg.C
Humidity : 29%



ENGINEER : Makoto Kosaka

QP DETECT(Test Receiver: BW 120kHz)

No.	FREQ [MHz]	READING		ANT Factor [dB]	ATTEN [dB]	CABLE LOSS [dB]	AMP GAIN [dB]	RESULT		LIMIT [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
1	115.220	28.6	29.1	12.5	5.9	2.1	27.9	21.2	21.7	43.5	22.3	21.8
2	192.020	28.0	25.8	16.2	5.9	2.7	27.8	25.0	22.8	43.5	18.5	20.7
3	230.420	26.4	24.0	16.5	5.9	3.1	27.7	24.2	21.8	46.0	21.8	24.2
4	364.820	30.2	29.2	15.0	5.8	3.9	27.6	27.3	26.3	46.0	18.7	19.7
5	384.020	32.5	32.9	15.2	5.8	4.0	27.5	30.0	30.4	46.0	16.0	15.6
6	441.610	30.5	32.1	16.5	5.9	4.5	27.6	29.8	31.4	46.0	16.2	14.6
7	480.020	28.8	29.4	17.6	5.8	4.7	27.5	29.4	30.0	46.0	16.6	16.0
8	518.420	26.5	26.7	18.2	5.9	4.9	27.5	28.0	28.2	46.0	18.0	17.8

REMARKS

*EUT was placed in X axis when the measurement antenna was positioned horizontally.(wors case)

*EUT was placed in Y axis when the measurement antenna was positioned vertically.

ANTENNA TYPE: 30-300MHz Biconical / 300-1000MHz Logperiodic

CALCULATION(30MHz to 1000MHz) : READING + ANT Factor + ATTEN + Cable Loss - AMP Gain

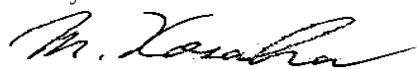
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : BB-HC1K
Sample No. : 1
FCC ID : APYHRO00026
Power : DC 3.6V
Mode : Transmitting (ch20: 2439MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/01/30
Temperature : 19deg.C
Humidity : 29%



ENGINEER : Makoto Kosaka

QP DETECT(Test Receiver: BW 120kHz)

No.	FREQ [MHz]	READING		ANT Factor [dB]	ATTEN [dB]	CABLE LOSS [dB]	AMP GAIN [dB]	RESULT		LIMIT [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
1	115.210	28.7	29.3	12.5	5.9	2.1	27.9	21.3	21.9	43.5	22.2	21.6
2	192.020	28.0	25.6	16.2	5.9	2.7	27.8	25.0	22.6	43.5	18.5	20.9
3	230.420	26.3	24.0	16.5	5.9	3.1	27.7	24.1	21.8	46.0	21.9	24.2
4	364.820	30.2	29.2	15.0	5.8	3.9	27.6	27.3	26.3	46.0	18.7	19.7
5	384.020	31.7	32.5	15.2	5.8	4.0	27.5	29.2	30.0	46.0	16.8	16.0
6	441.610	30.2	31.4	16.5	5.9	4.5	27.6	29.5	30.7	46.0	16.5	15.3
7	480.020	28.7	29.1	17.6	5.8	4.7	27.5	29.3	29.7	46.0	16.7	16.3
8	518.420	26.5	26.9	18.2	5.9	4.9	27.5	28.0	28.4	46.0	18.0	17.6

REMARKS

*EUT was placed in X axis when the measurement antenna was positioned horizontally.

*EUT was placed in Y axis when the measurement antenna was positioned vertically.

ANTENNA TYPE: 30-300MHz Biconical / 300-1000MHz Logperiodic

CALCULATION(30MHz to 1000MHz) : READING + ANT Factor + ATTEN + Cable Loss - AMP Gain

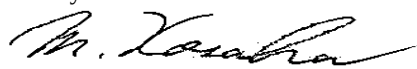
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : BB-HC1K
Sample No. : 1
FCC ID : APYHRO00026
Power : DC 3.6V
Mode : Transmitting (ch40: 2475.0MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/01/30
Temperature : 19deg.C
Humidity : 29%



ENGINEER : Makoto Kosaka

QP DETECT(Test Receiver: BW 120kHz)

No.	FREQ [MHz]	READING		ANT Factor [dB]	ATTEN [dB]	CABLE LOSS [dB]	AMP GAIN [dB]	RESULT		LIMIT [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
1	115.210	28.7	29.2	12.5	5.9	2.1	27.9	21.3	21.8	43.5	22.2	21.7
2	192.020	28.1	25.7	16.2	5.9	2.7	27.8	25.1	22.7	43.5	18.4	20.8
3	230.420	26.5	24.1	16.5	5.9	3.1	27.7	24.3	21.9	46.0	21.7	24.1
4	364.820	30.2	29.2	15.0	5.8	3.9	27.6	27.3	26.3	46.0	18.7	19.7
5	384.020	31.7	32.5	15.2	5.8	4.0	27.5	29.2	30.0	46.0	16.8	16.0
6	441.610	30.2	31.4	16.5	5.9	4.5	27.6	29.5	30.7	46.0	16.5	15.3
7	480.020	28.7	29.1	17.6	5.8	4.7	27.5	29.3	29.7	46.0	16.7	16.3
8	518.420	26.4	26.9	18.2	5.9	4.9	27.5	27.9	28.4	46.0	18.1	17.6

REMARKS

*EUT was placed in X axis when the measurement antenna was positioned horizontally.

*EUT was placed in Y axis when the measurement antenna was positioned vertically.

ANTENNA TYPE: 30-300MHz Biconical / 300-1000MHz Logperiodic

CALCULATION(30MHz to 1000MHz) : READING + ANT Factor + ATTEN + Cable Loss - AMP Gain

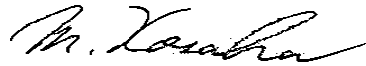
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

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

Company : SHARP Corporation
Equipment : Cordless Telephone Equipment
Model : BB-HC1
Sample No. : 2
FCC ID : APYHRO00026
Power : AC120V/60Hz
Mode : Transmitting (ch1: 2404.8MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m and 0.5m
Date : 2002/04/18
Temperature : 21deg.C
Humidity : 41%


ENGINEER : Makoto Kosaka

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTN) + Duty Factor															
1	1.49148	35.2	35.5	26.8	38.5	4.2	0.0	10.0	-6.5	0.0	31.2	31.5	54.0	22.8	22.5
2	4.80959	57.7	55.1	35.3	38.0	4.2	1.1	0.0	-6.5	0.0	53.8	51.2	54.0	0.2	2.8
3	7.21445	51.3	52.1	38.5	38.2	5.7	0.5	0.0	-6.5	0.0	51.3	52.1	54.0	2.7	1.9
4	9.61922	38.3	38.5	38.4	38.5	6.2	0.5	0.0	-6.5	0.0	38.4	38.6	54.0	15.6	15.4
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
5	12.02412	40.9	44.2	42.9	38.5	7.5	0.5	0.0	-6.5	15.6	31.2	34.5	54.0	22.8	19.5
6	14.42880	33.4	34.3	41.7	38.5	7.9	0.6	0.0	-6.5	15.6	23.0	23.9	54.0	31.0	30.1
7	16.83362	33.5	33.5	43.3	38.5	8.1	0.6	0.0	-6.5	15.6	24.9	24.9	54.0	29.1	29.1
8	19.23840	34.3	34.1	38.5	38.5	8.6	1.0	0.0	-6.5	15.6	21.8	21.6	54.0	32.2	32.4
9	21.64320	35.2	35.3	38.8	38.5	10.1	0.6	0.0	-6.5	15.6	24.1	24.2	54.0	29.9	29.8
10	24.04800	36.4	36.2	39.3	38.5	12.6	0.7	0.0	-6.5	15.6	28.4	28.2	54.0	25.6	25.8

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

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN) + Duty Factor															
1	1.49148	46.3	46.4	26.8	38.5	4.2	0.0	10.0	-6.5	0.0	42.3	42.4	74.0	31.7	31.6
2	4.80959	61.4	59.1	35.3	38.0	4.2	1.1	0.0	-6.5	0.0	57.5	55.2	74.0	16.5	18.8
3	7.21445	57.6	57.4	38.5	38.2	5.7	0.5	0.0	-6.5	0.0	57.6	57.4	74.0	16.4	16.6
4	9.61922	47.2	47.9	38.4	38.5	6.2	0.5	0.0	-6.5	0.0	47.3	48.0	74.0	26.7	26.0
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
5	12.02412	49.4	52.3	42.9	38.5	7.5	0.5	0.0	-6.5	15.6	39.7	42.6	74.0	34.3	31.4
6	14.42880	43.5	45.1	41.7	38.5	7.9	0.6	0.0	-6.5	15.6	33.1	34.7	74.0	40.9	39.3
7	16.83362	44.3	44.3	43.3	38.5	8.1	0.6	0.0	-6.5	15.6	35.7	35.7	74.0	38.3	38.3
8	19.23840	46.0	45.2	38.5	38.5	8.6	1.0	0.0	-6.5	15.6	33.5	32.7	74.0	40.5	41.3
9	21.64320	46.2	46.3	38.8	38.5	10.1	0.6	0.0	-6.5	15.6	35.1	35.2	74.0	38.9	38.8
10	24.04800	47.9	47.1	39.3	38.5	12.6	0.7	0.0	-6.5	15.6	39.9	39.1	74.0	34.1	34.9

REMARKS

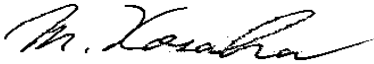
- *The antenna of EUT was angled 0 degrees when the measurement antenna was positioned horizontally.(wors case)
- *The antenna of EUT was angled 90 degrees when the measurement antenna was positioned vertically.(wors case)
- *Test Distance 0.5m : Distance Factor(D-fac) = $20\log(3/0.5) = 15.6\text{dB}$
- * Duty factor = $20\log(T\text{width} / T\text{period}) = 20\log(945 \times 10^{-6} / 2 \times 10^{-3}) = -6.511$
- *Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

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

Company : SHARP Corporation
Equipment : Cordless Telephone Equipment
Model : BB-HC1
Sample No. : 2
FCC ID : APYHRO00026
Power : AC120V/60Hz
Mode : Transmitting (ch20: 2439.0MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m and 0.5m
Date : 2002/04/18
Temperature : 21deg.C
Humidity : 41%


ENGINEER : Makoto Kosaka

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTN) + Duty Factor															
1	1.54561	35.1	35.7	27.1	38.5	2.0	0.0	10.0	-6.5	0.0	29.2	29.8	54.0	24.8	24.2
2	4.87802	56.2	55.8	35.6	37.9	4.2	1.1	0.0	-6.5	0.0	52.7	52.3	54.0	1.3	1.7
3	7.31700	50.2	49.3	38.6	38.2	5.7	0.5	0.0	-6.5	0.0	50.3	49.4	54.0	3.7	4.6
4	9.75605	35.4	37.3	38.5	38.5	6.2	0.5	0.0	-6.5	0.0	35.6	37.5	54.0	18.4	16.5
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
5	12.19518	40.6	44.5	43.1	38.5	7.5	0.5	0.0	-6.5	15.6	31.1	35.0	54.0	22.9	19.0
6	14.63400	33.4	34.3	42.1	38.5	8.0	0.5	0.0	-6.5	15.6	23.4	24.3	54.0	30.6	29.7
7	17.07300	33.5	33.5	43.5	38.5	8.1	0.6	0.0	-6.5	15.6	25.1	25.1	54.0	28.9	28.9
8	19.51200	34.3	34.1	38.1	38.5	9.4	1.3	0.0	-6.5	15.6	22.5	22.3	54.0	31.5	31.7
9	21.95100	35.3	35.5	38.7	38.5	9.6	0.2	0.0	-6.5	15.6	23.2	23.4	54.0	30.8	30.6
10	24.39000	36.3	36.2	39.4	38.5	12.5	0.9	0.0	-6.5	15.6	28.5	28.4	54.0	25.5	25.6

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

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTN) + Duty Factor															
1	1.54561	46.1	46.7	27.1	38.5	2.0	0.0	10.0	-6.5	0.0	40.2	40.8	74.0	33.8	33.2
2	4.87802	59.3	58.5	35.6	37.9	4.2	1.1	0.0	-6.5	0.0	55.8	55.0	74.0	18.2	19.0
3	7.31700	56.1	55.0	38.6	38.2	5.7	0.5	0.0	-6.5	0.0	56.2	55.1	74.0	17.8	18.9
4	9.75605	45.5	47.4	38.5	38.5	6.2	0.5	0.0	-6.5	0.0	45.7	47.6	74.0	28.3	26.4
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
5	12.19505	49.8	52.5	43.1	38.5	7.5	0.5	0.0	-6.5	15.6	40.3	43.0	74.0	33.7	31.0
6	14.63400	43.5	45.1	42.1	38.5	8.0	0.5	0.0	-6.5	15.6	33.5	35.1	74.0	40.5	38.9
7	17.07300	44.3	44.3	43.5	38.5	8.1	0.6	0.0	-6.5	15.6	35.9	35.9	74.0	38.1	38.1
8	19.51200	46.0	45.3	38.1	38.5	9.4	1.3	0.0	-6.5	15.6	34.2	33.5	74.0	39.8	40.5
9	21.95100	46.2	46.3	38.7	38.5	9.6	0.2	0.0	-6.5	15.6	34.1	34.2	74.0	39.9	39.8
10	24.39000	47.7	47.4	39.4	38.5	12.5	0.9	0.0	-6.5	15.6	39.9	39.6	74.0	34.1	34.4

REMARKS

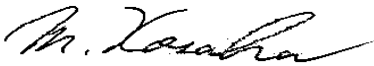
- *The antenna of EUT was angled 0 degrees when the measurement antenna was positioned horizontally.(wors case)
- *The antenna of EUT was angled 90 degrees when the measurement antenna was positioned vertically.(wors case)
- *Test Distance 0.5m : Distance Factor(D-fac) = $20\log(3/0.5) = 15.6\text{dB}$
- * Duty factor = $20\log(\text{Twidth} / \text{Tperiod}) = 20\log(945 \times 10^{-6} / 2 \times 10^{-3}) = -6.511$
- *Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

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

Company : SHARP Corporation
Equipment : Cordless Telephone Equipment
Model : BB-HC1
Sample No. : 2
FCC ID : APYHRO00026
Power : AC120V/60Hz
Mode : Transmitting (ch40: 2475MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m and 0.5m
Date : 2002/04/18
Temperature : 21deg.C
Humidity : 41%


ENGINEER : Makoto Kosaka

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN) + Duty Factor															
1	1.59681	35.3	35.8	27.5	38.4	2.0	0.0	10.0	-6.5	0.0	29.9	30.4	54.0	24.1	23.6
2	4.95004	56.7	55.9	35.9	37.9	4.3	1.1	0.0	-6.5	0.0	53.6	52.8	54.0	0.4	1.2
3	7.42502	49.1	48.8	38.7	38.3	5.8	0.5	0.0	-6.5	0.0	49.3	49.0	54.0	4.7	5.0
4	9.90000	34.3	37.1	38.5	38.5	6.1	0.5	0.0	-6.5	0.0	34.4	37.2	54.0	19.6	16.8
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
5	12.37500	40.7	44.4	43.4	38.5	7.4	0.5	0.0	-6.5	15.6	31.4	35.1	54.0	22.6	18.9
6	14.85000	33.4	34.6	42.4	38.5	8.1	0.5	0.0	-6.5	15.6	23.8	25.0	54.0	30.2	29.0
7	17.32500	33.5	33.5	43.6	38.5	8.2	0.6	0.0	-6.5	15.6	25.3	25.3	54.0	28.7	28.7
8	19.80000	34.5	34.3	38.3	38.5	10.1	1.6	0.0	-6.5	15.6	23.9	23.7	54.0	30.1	30.3
9	22.27500	35.2	35.3	38.8	38.5	9.6	0.3	0.0	-6.5	15.6	23.3	23.4	54.0	30.7	30.6
10	24.75000	36.7	36.2	39.4	38.6	12.3	1.0	0.0	-6.5	15.6	28.7	28.2	54.0	25.3	25.8

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

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTN) + Duty Factor															
1	1.59681	46.1	46.2	27.5	38.4	2.0	0.0	10.0	-6.5	0.0	40.7	40.8	74.0	33.3	33.2
2	4.95004	59.0	58.2	35.9	37.9	4.3	1.1	0.0	-6.5	0.0	55.9	55.1	74.0	18.1	18.9
3	7.42502	57.2	54.4	38.7	38.3	5.8	0.5	0.0	-6.5	0.0	57.4	54.6	74.0	16.6	19.4
4	9.90000	44.5	46.5	38.5	38.5	6.1	0.5	0.0	-6.5	0.0	44.6	46.6	74.0	29.4	27.4
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
5	12.37500	49.8	52.5	43.4	38.5	7.4	0.5	0.0	-6.5	15.6	40.5	43.2	74.0	33.5	30.8
6	14.85000	43.5	45.1	42.4	38.5	8.1	0.5	0.0	-6.5	15.6	33.9	35.5	74.0	40.1	38.5
7	17.32500	44.3	44.3	43.6	38.5	8.2	0.6	0.0	-6.5	15.6	36.1	36.1	74.0	37.9	37.9
8	19.80000	46.0	45.3	38.3	38.5	10.1	1.6	0.0	-6.5	15.6	35.4	34.7	74.0	38.6	39.3
9	22.27500	46.2	46.3	38.8	38.5	9.6	0.3	0.0	-6.5	15.6	34.3	34.4	74.0	39.7	39.6
10	24.75000	47.7	47.4	39.4	38.6	12.3	1.0	0.0	-6.5	15.6	39.7	39.4	74.0	34.3	34.6

REMARKS

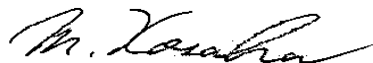
- *The antenna of EUT was angled 0 degrees when the measurement antenna was positioned horizontally.(wors case)
- *The antenna of EUT was angled 90 degrees when the measurement antenna was positioned vertically.(wors case)
- *Test Distance 0.5m : Distance Factor(D-fac) = $20\log(3/0.5) = 15.6\text{dB}$
- * Duty factor = $20\log(\text{Twidth} / \text{Tperiod}) = 20\log(945 \times 10^{-6} / 2 \times 10^{-3}) = -6.511$
- *Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : BB-HC1K
Sample No. : 1
FCC ID : APYHRO00026
Power : DC 3.6V
Mode : Transmitting (ch1: 2404.8MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m and 0.5m
Date : 2002/01/27
Temperature : 22deg.C
Humidity : 31%



ENGINEER : Makoto Kosaka

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTN) + Duty Factor															
1	4.80966	54.2	49.8	35.3	38.0	5.2	1.1	0.0	-6.6	0.0	51.2	46.8	54.0	2.8	7.2
2	7.21451	51.0	49.0	38.5	38.2	6.3	0.5	0.0	-6.6	0.0	51.5	49.5	54.0	2.5	4.5
3	9.61934	40.6	37.7	38.4	38.5	7.9	0.5	0.0	-6.6	0.0	42.3	39.4	54.0	11.8	14.6
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
4	12.02417	41.1	45.1	42.9	38.5	8.7	0.5	0.0	-6.6	15.6	32.5	36.5	54.0	21.5	17.5
5	14.42880	36.2	35.4	41.7	38.5	9.2	0.6	0.0	-6.6	15.6	27.0	26.2	54.0	27.0	27.8
6	16.83360	36.4	36.3	38.6	38.5	9.6	0.6	0.0	-6.6	15.6	24.5	24.4	54.0	29.5	29.6
7	19.23840	34.8	34.6	38.5	38.5	10.3	1.0	0.0	-6.6	15.6	23.9	23.7	54.0	30.1	30.3
8	21.64320	36.0	36.0	38.8	38.5	11.3	0.6	0.0	-6.6	15.6	26.0	26.0	54.0	28.0	28.0
9	24.04800	36.1	36.1	39.3	38.5	12.2	0.7	0.0	-6.6	15.6	27.6	27.6	54.0	26.4	26.4

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

No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	H-Pass Filter	ATTN	Duty Factor	D-fac	RESULT		Limit PK	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
	[GHz]	[dBuV]		[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]	[dBuV/m]	[dB]		
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTN) + Duty Factor															
1	4.80966	56.6	53.3	35.3	38.0	5.2	1.1	0.0	-6.6	0.0	53.6	50.3	74.0	20.4	23.7
2	7.21451	57.3	55.6	38.5	38.2	6.3	0.5	0.0	-6.6	0.0	57.8	56.1	74.0	16.2	17.9
3	9.61934	48.5	47.0	38.4	38.5	7.9	0.5	0.0	-6.6	0.0	50.2	48.7	74.0	23.8	25.3
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
4	12.02417	49.5	51.4	42.9	38.5	8.7	0.5	0.0	-6.6	15.6	40.9	42.8	74.0	33.1	31.2
5	14.42880	45.8	45.2	41.7	38.5	9.2	0.6	0.0	-6.6	15.6	36.6	36.0	74.0	37.4	38.0
6	16.83360	47.9	47.8	38.6	38.5	9.6	0.6	0.0	-6.6	15.6	36.0	35.9	74.0	38.0	38.1
7	19.23840	46.3	46.3	38.5	38.5	10.3	1.0	0.0	-6.6	15.6	35.4	35.4	74.0	38.6	38.6
8	21.64320	46.7	46.5	38.8	38.5	11.3	0.6	0.0	-6.6	15.6	36.7	36.5	74.0	37.3	37.5
9	24.04800	46.7	46.7	39.3	38.5	12.2	0.7	0.0	-6.6	15.6	38.2	38.2	74.0	35.8	35.8

REMARKS

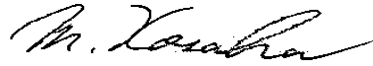
- *EUT was placed in X axis when the measurement antenna was positioned horizontally.(wors case)
- *EUT was placed in Y axis when the measurement antenna was positioned vertically.(wors case)
- *Test Distance 0.5m : Distance Factor(D-fac) = $20\log(3/0.5) = 15.6\text{dB}$
- * Duty factor = $20\log(\text{Twidht} / \text{Tperiod}) = 20\log(940 \times 10^{-6} / 2 \times 10^{-3}) = -6.558$
- *Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : BB-HC1K
Sample No. : 1
FCC ID : APYHRO00026
Power : DC 3.6V
Mode : Transmitting (ch20: 2439.0MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m and 0.5m
Date : 2002/01/27
Temperature : 22deg.C
Humidity : 31%



ENGINEER : Makoto Kosaka

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN) + Duty Factor															
1	4.87808	55.6	52.3	35.6	37.9	5.2	1.1	0.0	-6.6	0.0	53.0	49.7	54.0	1.0	4.3
2	7.31672	46.3	47.3	38.6	38.2	6.4	0.5	0.0	-6.6	0.0	47.0	48.0	54.0	7.0	6.0
3	9.75614	40.5	39.3	38.5	38.5	8.0	0.5	0.0	-6.6	0.0	42.4	41.2	54.0	11.6	12.8
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
4	12.19500	41.1	45.1	43.1	38.5	8.7	0.5	0.0	-6.6	15.6	32.7	36.7	54.0	21.3	17.3
5	14.63400	36.2	35.4	42.1	38.5	9.3	0.5	0.0	-6.6	15.6	27.4	26.6	54.0	26.6	27.4
6	17.07300	36.4	36.3	38.5	38.5	9.6	0.6	0.0	-6.6	15.6	24.4	24.3	54.0	29.6	29.7
7	19.51200	34.8	34.6	38.1	38.5	10.4	1.3	0.0	-6.6	15.6	23.9	23.7	54.0	30.1	30.3
8	21.95100	36.2	36.0	38.7	38.5	11.6	0.2	0.0	-6.6	15.6	26.0	25.8	54.0	28.0	28.2
9	24.39000	36.1	36.1	39.4	38.5	12.4	0.9	0.0	-6.6	15.6	28.1	28.1	54.0	25.9	25.9

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

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN) + Duty Factor															
1	4.87808	58.3	55.1	35.6	37.9	5.2	1.1	0.0	-6.6	0.0	55.7	52.5	74.0	18.3	21.5
2	7.31672	52.8	53.2	38.6	38.2	6.4	0.5	0.0	-6.6	0.0	53.5	53.9	74.0	20.5	20.1
3	9.75614	48.6	48.8	38.5	38.5	8.0	0.5	0.0	-6.6	0.0	50.5	50.7	74.0	23.5	23.3
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
4	12.19500	49.5	51.4	43.1	38.5	8.7	0.5	0.0	-6.6	15.6	41.1	43.0	74.0	32.9	31.0
5	14.63400	45.8	45.2	42.1	38.5	9.3	0.5	0.0	-6.6	15.6	37.0	36.4	74.0	37.0	37.6
6	17.07300	47.9	47.8	38.5	38.5	9.6	0.6	0.0	-6.6	15.6	35.9	35.8	74.0	38.1	38.2
7	19.51200	46.3	46.3	38.1	38.5	10.4	1.3	0.0	-6.6	15.6	35.4	35.4	74.0	38.6	38.6
8	21.95100	46.7	46.5	38.7	38.5	11.6	0.2	0.0	-6.6	15.6	36.5	36.3	74.0	37.5	37.7
9	24.39000	46.7	46.7	39.4	38.5	12.4	0.9	0.0	-6.6	15.6	38.7	38.7	74.0	35.3	35.3

REMARKS

- *EUT was placed in X axis when the measurement antenna was positioned horizontally.(wors case)
- *EUT was placed in Y axis when the measurement antenna was positioned vertically.(wors case)
- *Test Distance 0.5m : Distance Factor(D-fac) = $20\log(3/0.5) = 15.6\text{dB}$
- * Duty factor = $20\log(\text{Twidht} / \text{Tperiod}) = 20\log(940 \times 10^{-6} / 2 \times 10^{-3}) = -6.558$
- *Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : BB-HC1K
Sample No. : 1
FCC ID : APYHRO00026
Power : DC 3.6V
Mode : Transmitting (ch40: 2475.0MHz)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m and 0.5m
Date : 2002/01/27
Temperature : 22deg.C
Humidity : 31%



ENGINEER : Makoto Kosaka

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTN) + Duty Factor															
1	2.48470	39.8	40.7	31.4	38.0	3.2	0.0	10.0	-6.6	0.0	39.8	40.7	54.0	14.2	13.3
2	4.95008	55.2	53.4	35.9	37.9	5.3	1.1	0.0	-6.6	0.0	53.0	51.2	54.0	1.0	2.8
3	7.42512	45.1	44.4	38.7	38.3	6.5	0.5	0.0	-6.6	0.0	45.9	45.2	54.0	8.1	8.8
4	9.90015	38.5	36.6	38.5	38.5	8.2	0.5	0.0	-6.6	0.0	40.6	38.7	54.0	13.4	15.3
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
5	12.37500	41.1	45.1	43.4	38.5	8.7	0.5	0.0	-6.6	15.6	33.0	37.0	54.0	21.0	17.0
6	14.85000	36.2	35.4	42.4	38.5	9.4	0.5	0.0	-6.6	15.6	27.8	27.0	54.0	26.2	27.0
7	17.32500	36.4	36.3	38.1	38.5	9.8	0.6	0.0	-6.6	15.6	24.2	24.1	54.0	29.8	29.9
8	19.80000	34.8	34.6	38.3	38.5	10.5	1.6	0.0	-6.6	15.6	24.5	24.3	54.0	29.5	29.7
9	22.27500	36.0	36.1	38.8	38.5	11.6	0.3	0.0	-6.6	15.6	26.0	26.1	54.0	28.0	27.9
10	24.75000	36.1	36.1	39.4	38.6	12.6	1.0	0.0	-6.6	15.6	28.3	28.3	54.0	25.7	25.7

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

No.	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	H-Pass Filter [dB]	ATTN [dB]	Duty Factor [dB]	D-fac [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER								HOR	VER		HOR	VER
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTN) + Duty Factor															
1	2.48470	48.8	50.7	31.4	38.0	3.2	0.0	10.0	-6.6	0.0	48.8	50.7	74.0	25.2	23.3
2	4.95008	58.2	56.3	35.9	37.9	5.3	1.1	0.0	-6.6	0.0	56.0	54.1	74.0	18.0	19.9
3	7.42512	50.5	50.1	38.7	38.3	6.5	0.5	0.0	-6.6	0.0	51.3	50.9	74.0	22.7	23.1
4	9.90015	48.0	47.4	38.5	38.5	8.2	0.5	0.0	-6.6	0.0	50.1	49.5	74.0	23.9	24.5
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
5	12.37500	49.5	51.4	43.4	38.5	8.7	0.5	0.0	-6.6	15.6	41.4	43.3	74.0	32.6	30.7
6	14.85000	45.8	45.2	42.4	38.5	9.4	0.5	0.0	-6.6	15.6	37.4	36.8	74.0	36.6	37.2
7	17.32500	47.9	47.8	38.1	38.5	9.8	0.6	0.0	-6.6	15.6	35.7	35.6	74.0	38.3	38.4
8	19.80000	46.3	46.3	38.3	38.5	10.5	1.6	0.0	-6.6	15.6	36.0	36.0	74.0	38.0	38.0
9	22.27500	46.6	46.5	38.8	38.5	11.6	0.3	0.0	-6.6	15.6	36.6	36.5	74.0	37.4	37.5
10	24.75000	46.7	46.6	39.4	38.6	12.6	1.0	0.0	-6.6	15.6	38.9	38.8	74.0	35.1	35.2

REMARKS

*EUT was placed in X axis when the measurement antenna was positioned horizontally.(wors case)

*EUT was placed in Y axis when the measurement antenna was positioned vertically.(wors case)

*Test Distance 0.5m : Distance Factor(D-fac) = $20\log(3/0.5) = 15.6\text{dB}$

* Duty factor = $20\log(\text{Twidth} / \text{Tperiod}) = 20\log(940 \times 10^{-6} / 2 \times 10^{-3}) = -6.558$

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

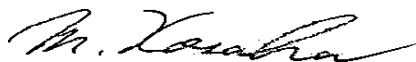
Page: A27

Restricted Band Edges(Radiated)

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

Company : SHARP Corporation
Equipment : Cordless Telephone Equipment
Model : BB-HC1
Sample No. : 1
FCC ID : APYHRO00026
Power : AC120V/60Hz
Mode : Transmitting

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/04/18
Temperature : 21deg.C
Humidity : 40%



ENGINEER : Makoto Kosaka

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

ch	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	ATTEN	Duty Factor	RESULT		Limit AV	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
		[dBuV]							[dBuV/m]			[dB]	
	[GHz]			[dB]	[dB]	[dB]	[dB]			[dBuV/m]			
Ch1	2.3900	35.2	35.0	31.2	38.0	3.1	10.0	-6.5	35.0	34.8	54.0	19.0	19.2
Ch40	2.4835	34.8	34.6	31.4	38.0	3.2	10.0	-6.5	34.9	34.7	54.0	19.1	19.3

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

ch	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	ATTEN	Duty Factor	RESULT		Limit PK	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
		[dBuV]							[dBuV/m]			[dB]	
	[GHz]			[dB]	[dB]	[dB]	[dB]	[dB]			[dBuV/m]		
Ch1	2.3900	46.8	46.5	31.2	38.0	3.1	10.0	-6.5	46.6	46.3	74.0	27.4	27.7
Ch40	2.4835	45.6	45.2	31.4	38.0	3.2	10.0	-6.5	45.7	45.3	74.0	28.3	28.7

Sample Calculation :

RESULT= S/A Reading + ANT Factor - Amp Gain + CABLE LOSS + ATTEN + Duty Factor

REMARKS

*The antenna of EUT was angled 0 degrees when the measurement antenna was positioned horizontally.(wors case)

*The antenna of EUT was angled 90 degrees when the measurement antenna was positioned vertically.(wors case)

* Duty factor = $20\log(Twidth / Tperiod) = 20\log(945 \times 10^{-6} / 2 \times 10^{-3}) = -6.511$

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

*Ch1 : 2404.8MHz Transmitting

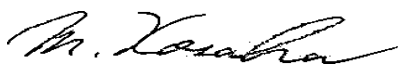
*Ch40: 2475.0MHz Transmitting

Restricted Band Edges(Radiated)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : BB-HC1K
Sample No. : 1
FCC ID : APYHRO00026
Power : DC 3.6V
Mode : Transmitting

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/02/1
Temperature : 18deg.C
Humidity : 35%


ENGINEER : Makoto Kosaka

AV DETECT(S/A : RBW 1MHz and VBW 10Hz)

ch	FREQ	S/A READING		ANT	AMP	CABLE	ATTEN	Duty	RESULT		Limit	MARGIN						
		HOR	VER						Factor	GAIN		LOSS	Factor	HOR	VER	AV	HOR	VER
	[GHz]	[dBuV]		[dB]	[dB]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]						
Ch1	2.3900	36.1	36.3	31.2	38.0	3.1	10.0	-6.6	35.8	36.0	54.0	18.2	18.0					
Ch40	2.4835	36.4	36.8	31.4	38.0	3.2	10.0	-6.6	36.4	36.8	54.0	17.6	17.2					

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

ch	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	ATTEN	Duty Factor	RESULT		Limit PK	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
		[dBuV]							[dBuV/m]			[dB]	
	[GHz]			[dB]	[dB]	[dB]	[dB]	[dB]			[dBuV/m]		
Ch1	2.3900	48.0	47.3	31.2	38.0	3.1	10.0	-6.6	47.7	47.0	74.0	26.3	27.0
Ch40	2.4835	46.9	48.5	31.4	38.0	3.2	10.0	-6.6	46.9	48.5	74.0	27.1	25.5

Sample Calculation :

RESULT= S/A Reading + ANT Factor - Amp Gain + CABLE LOSS + ATTEN + Duty Factor

REMARKS

*EUT was placed in X axis when the measurement antenna was positioned horizontally.(wors case)

*EUT was placed in Y axis when the measurement antenna was positioned vertically.(wors case)

* Duty factor = $20\log(Twidth / Tperiod) = 20\log(940 \times 10^{-6} / 2 \times 10^{-3}) = -6.558$

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

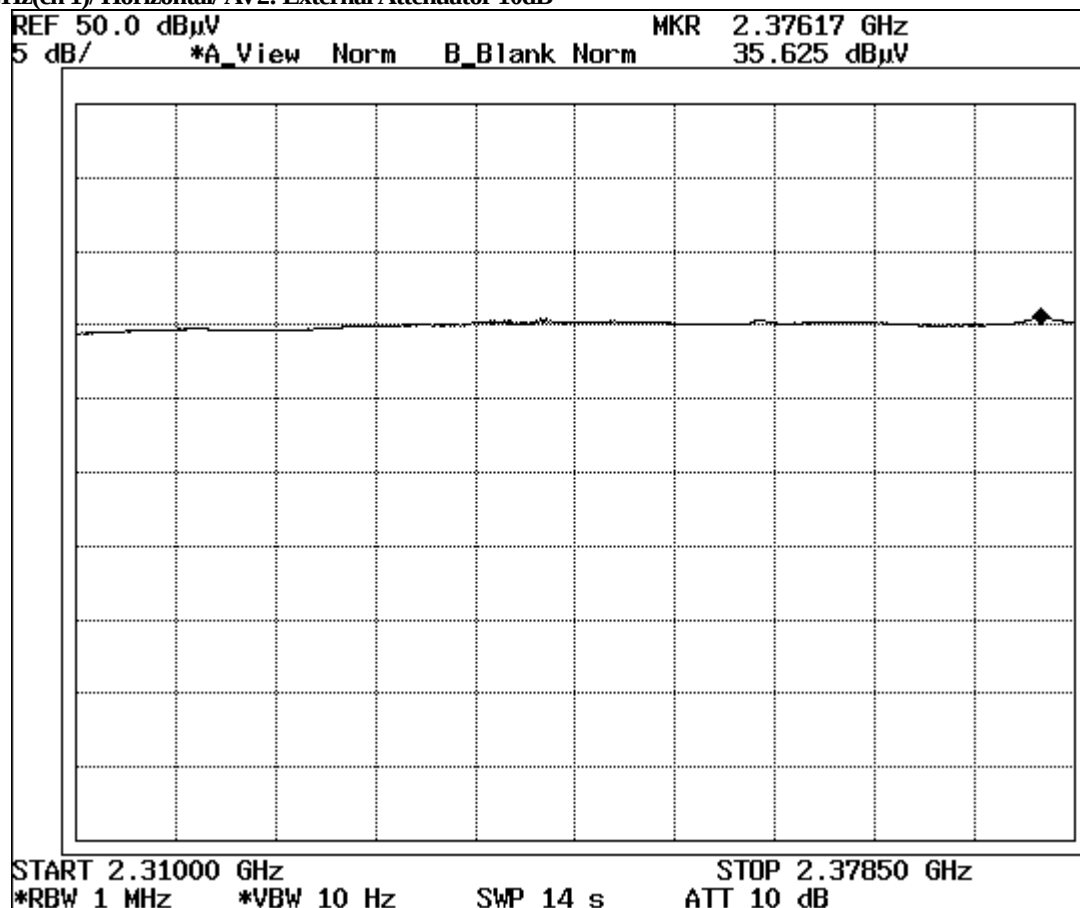
*Ch00: 2404.8MHz Transmitting

*Ch39: 2475.0MHz Transmitting

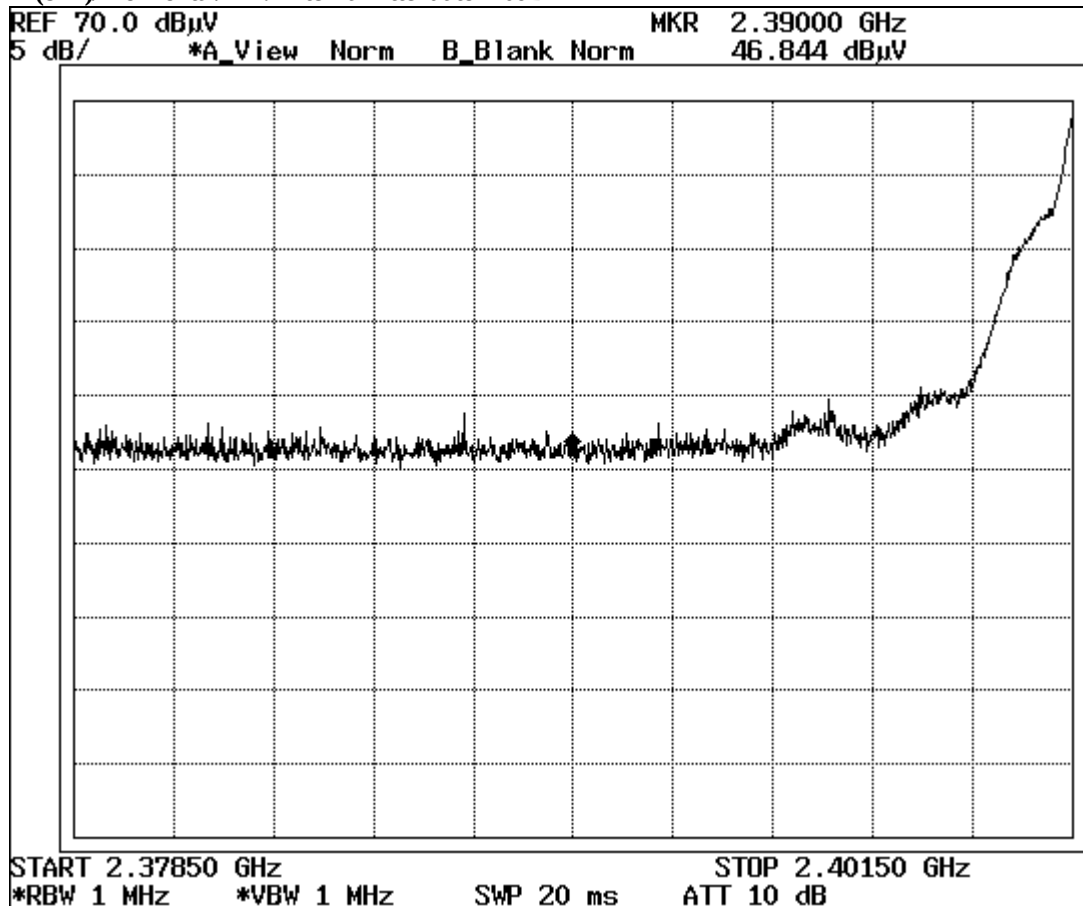
1. 2.4048GHz (ch 1)/ Horizontal/ AV: External Attenuator 10dB



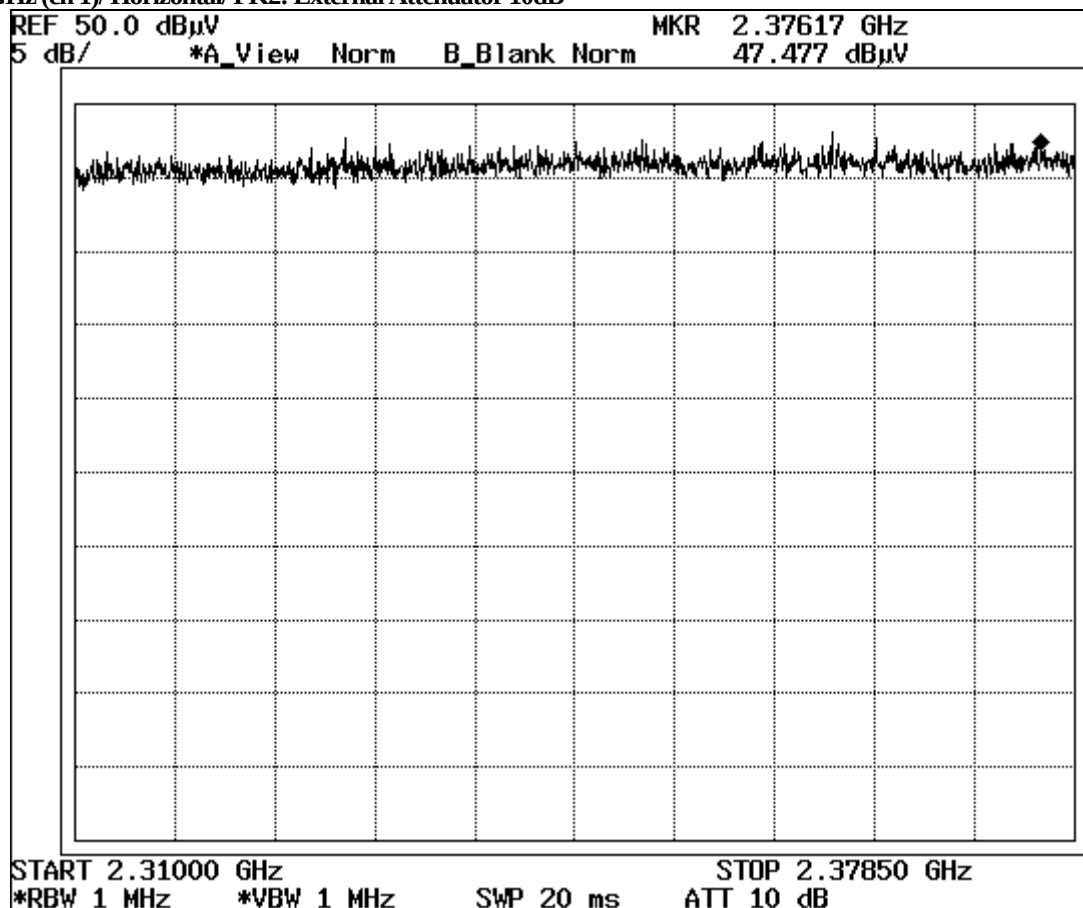
2. 2.4048GHz(ch 1)/ Horizontal/ AV2: External Attenuator 10dB



3. 2.4048GHz (ch 1)/ Horizontal/ PK: External Attenuator 10dB



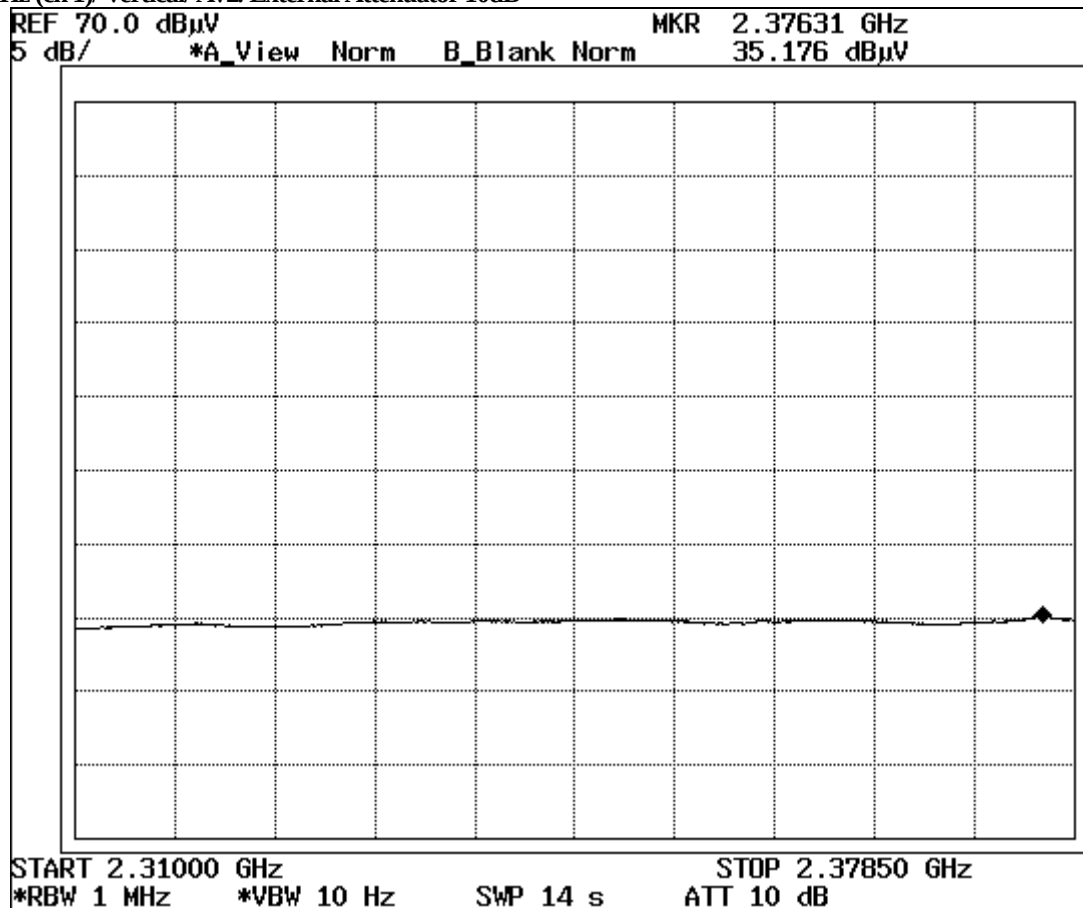
4. 2.4048GHz (ch 1)/ Horizontal/ PK2: External Attenuator 10dB



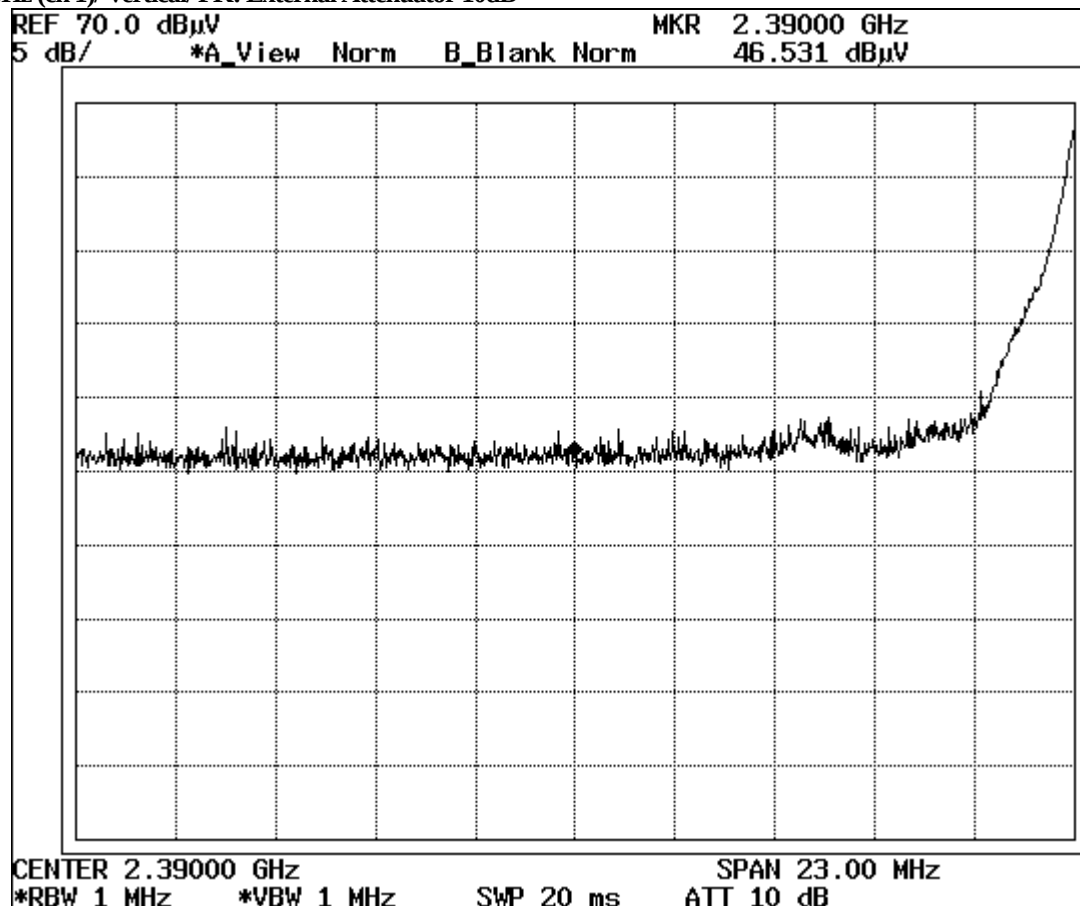
5. 2.4048GHz (ch 1)/ Vertical/ AV: External Attenuator 10dB



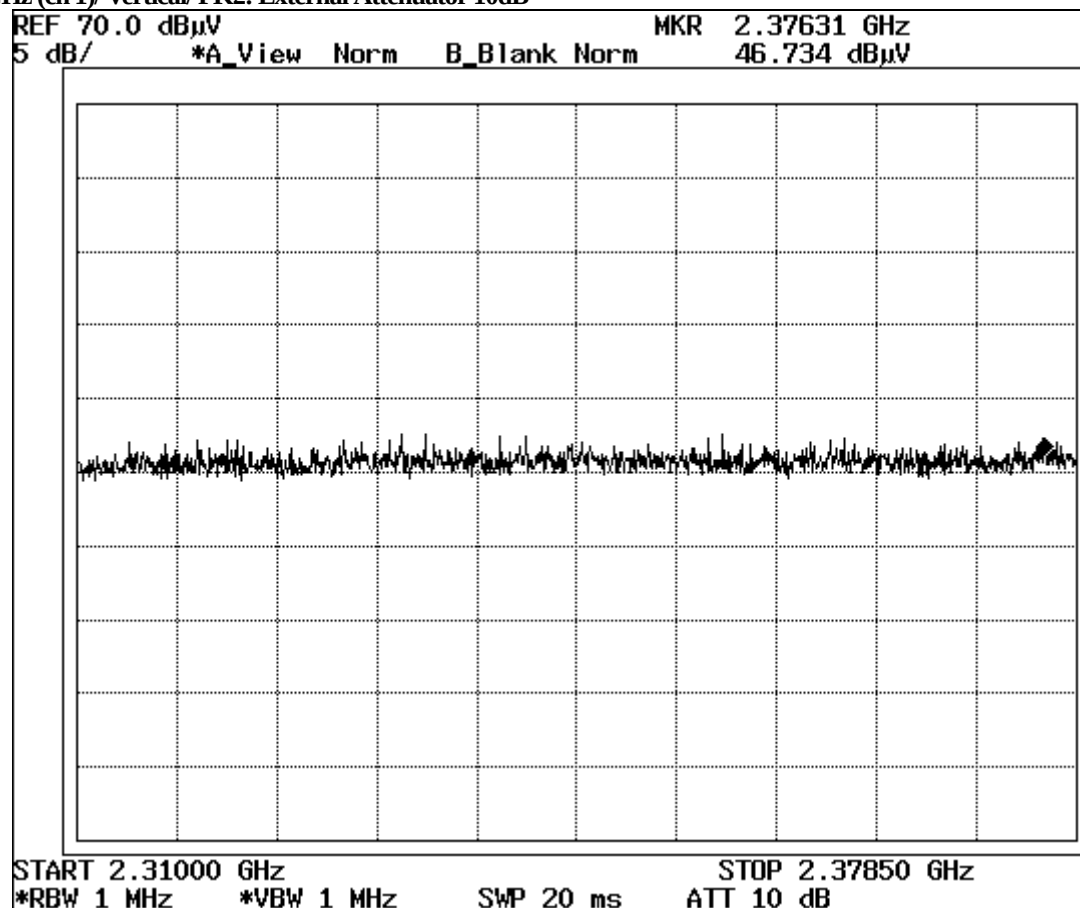
6. 2.4048GHz (ch 1)/ Vertical/ AV2: External Attenuator 10dB



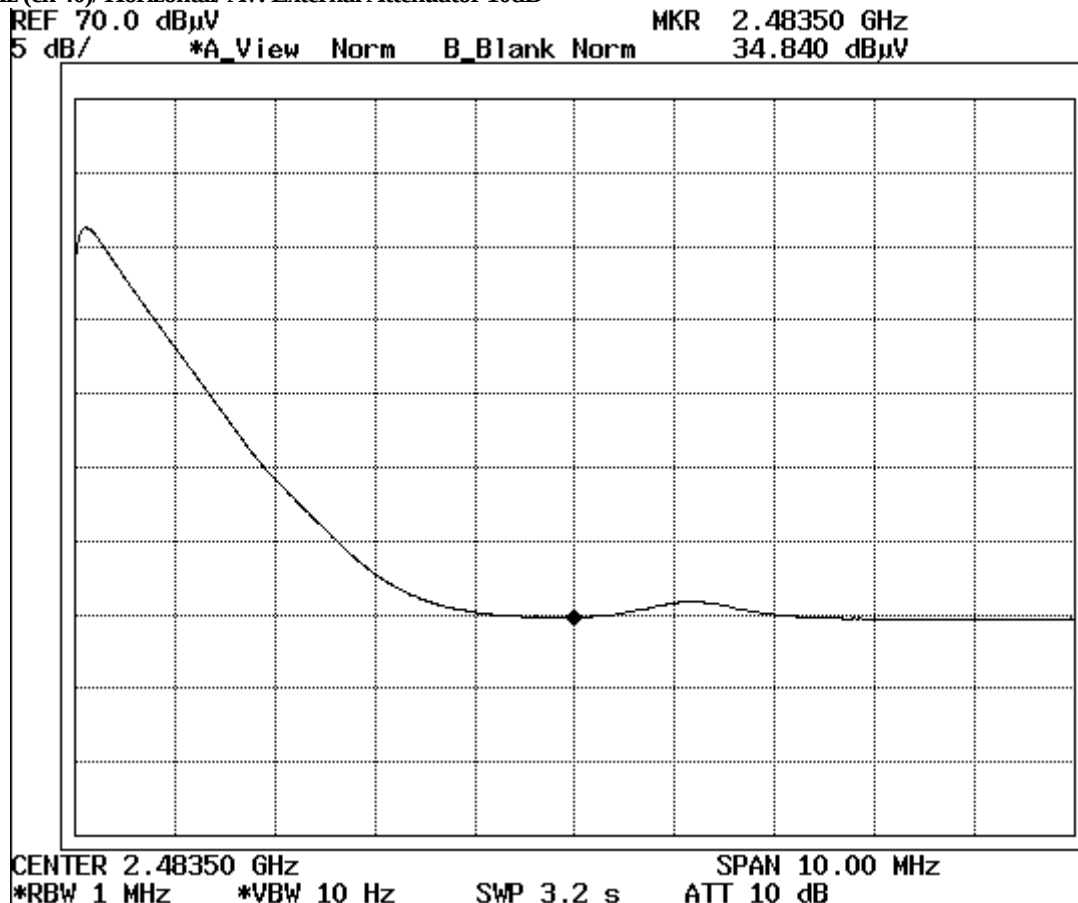
7. 2.4048GHz (ch 1)/ Vertical/ PK: External Attenuator 10dB



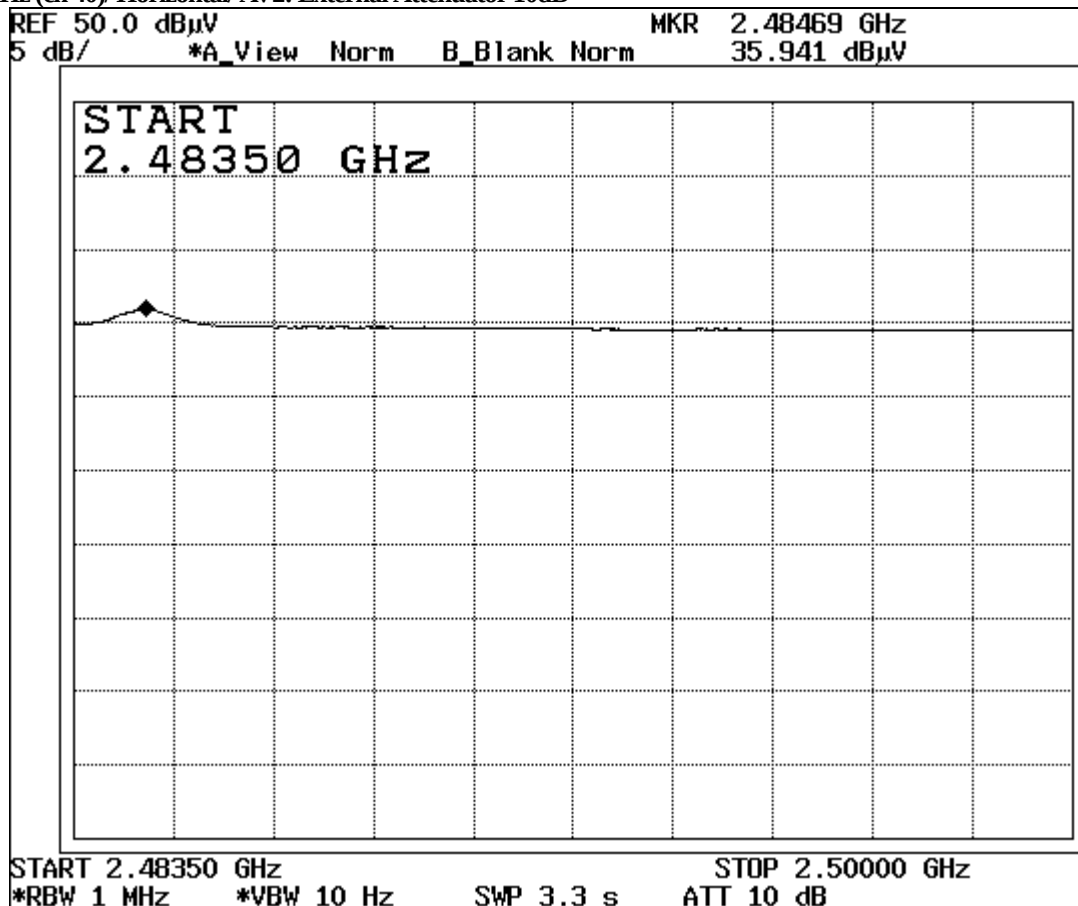
8. 2.4048GHz (ch 1)/ Vertical/ PK2: External Attenuator 10dB



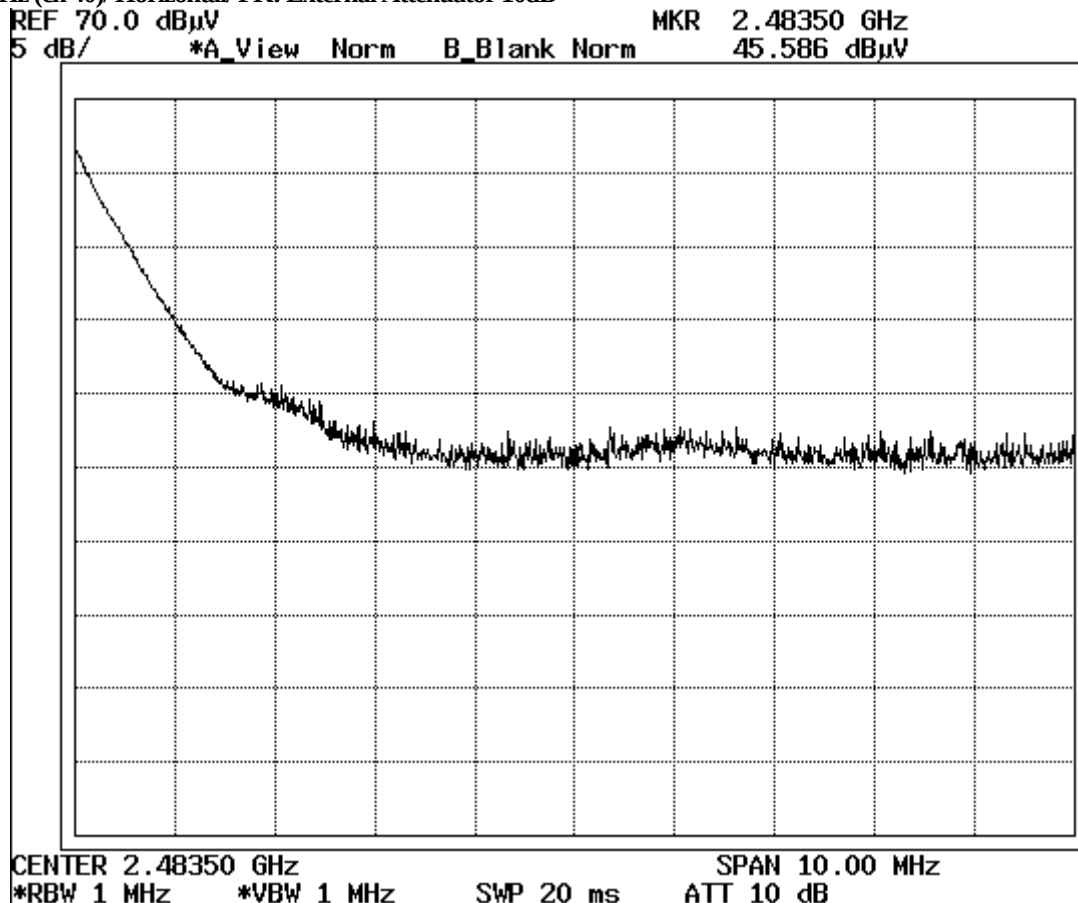
9. 2.475GHz (ch 40)/ Horizontal/ AV: External Attenuator 10dB



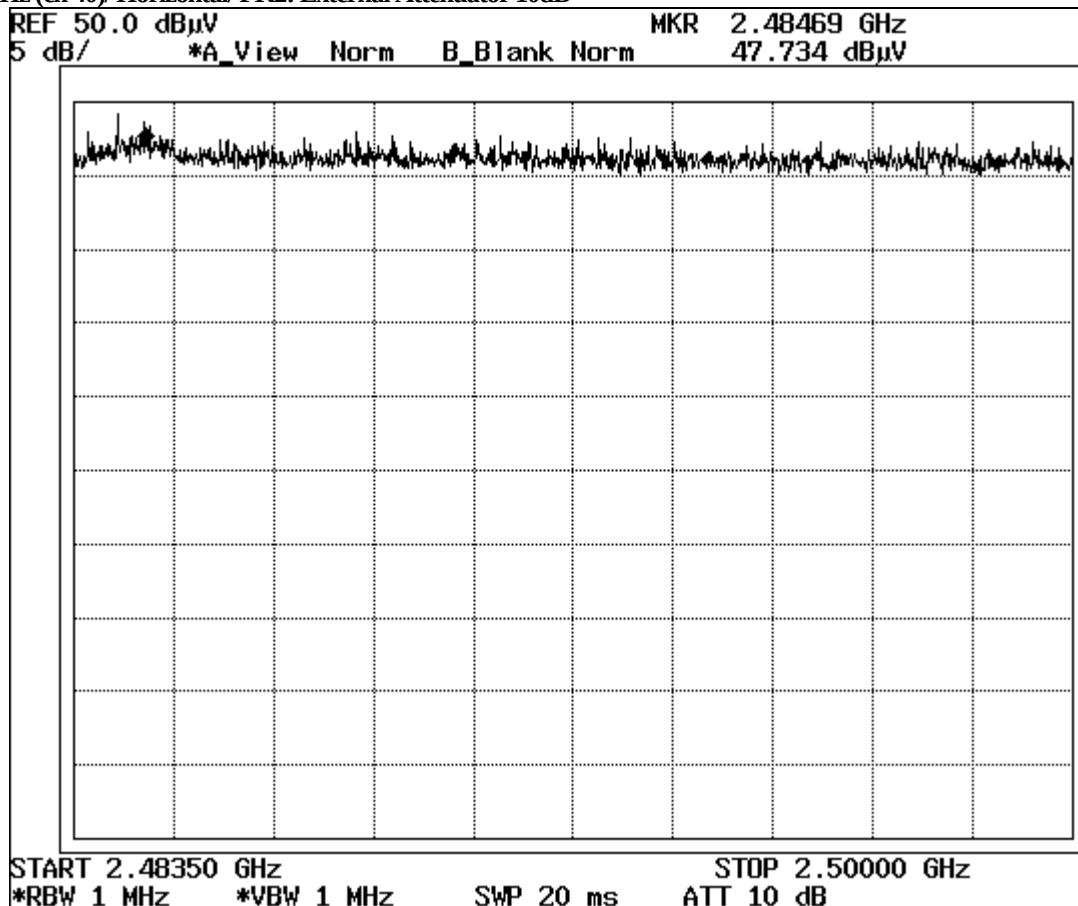
10. 2.475GHz (ch 40)/ Horizontal/ AV2: External Attenuator 10dB



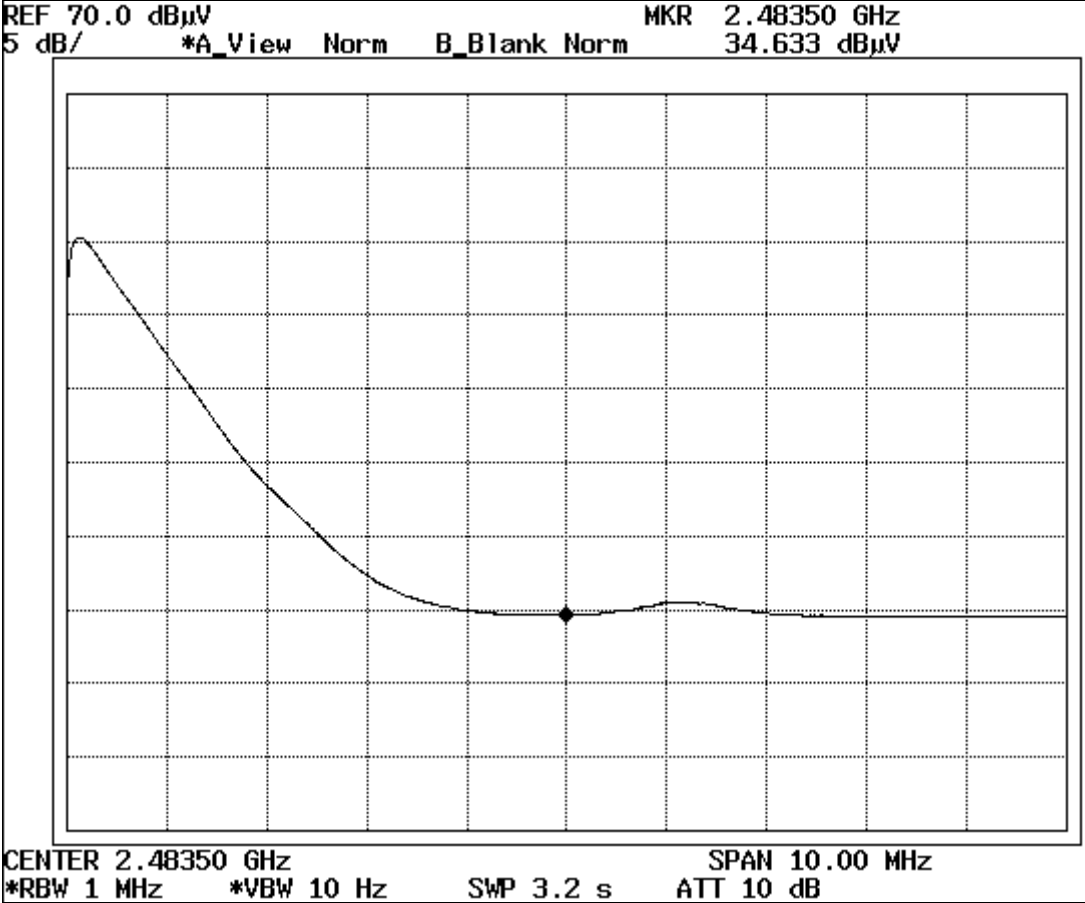
11. 2.475GHz (ch 40)/ Horizontal/ PK: External Attenuator 10dB



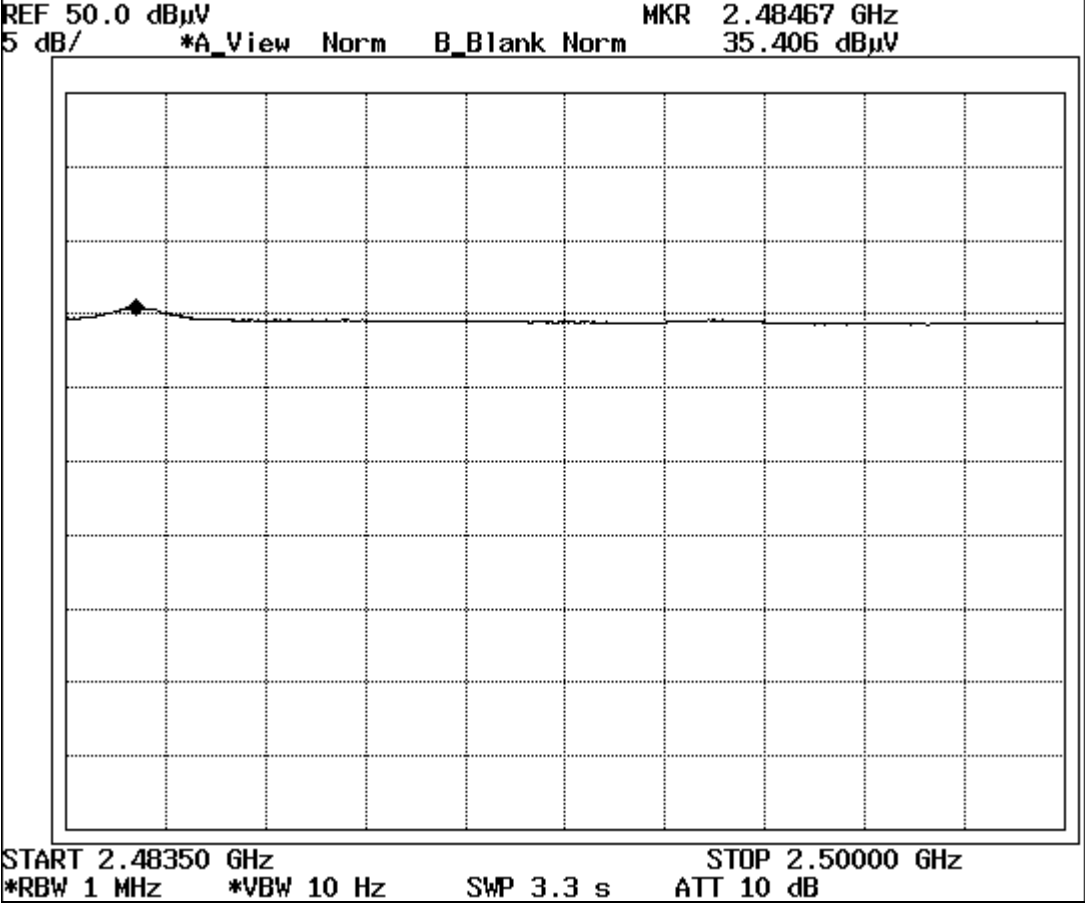
12. 2.475GHz (ch 40)/ Horizontal/ PK2: External Attenuator 10dB



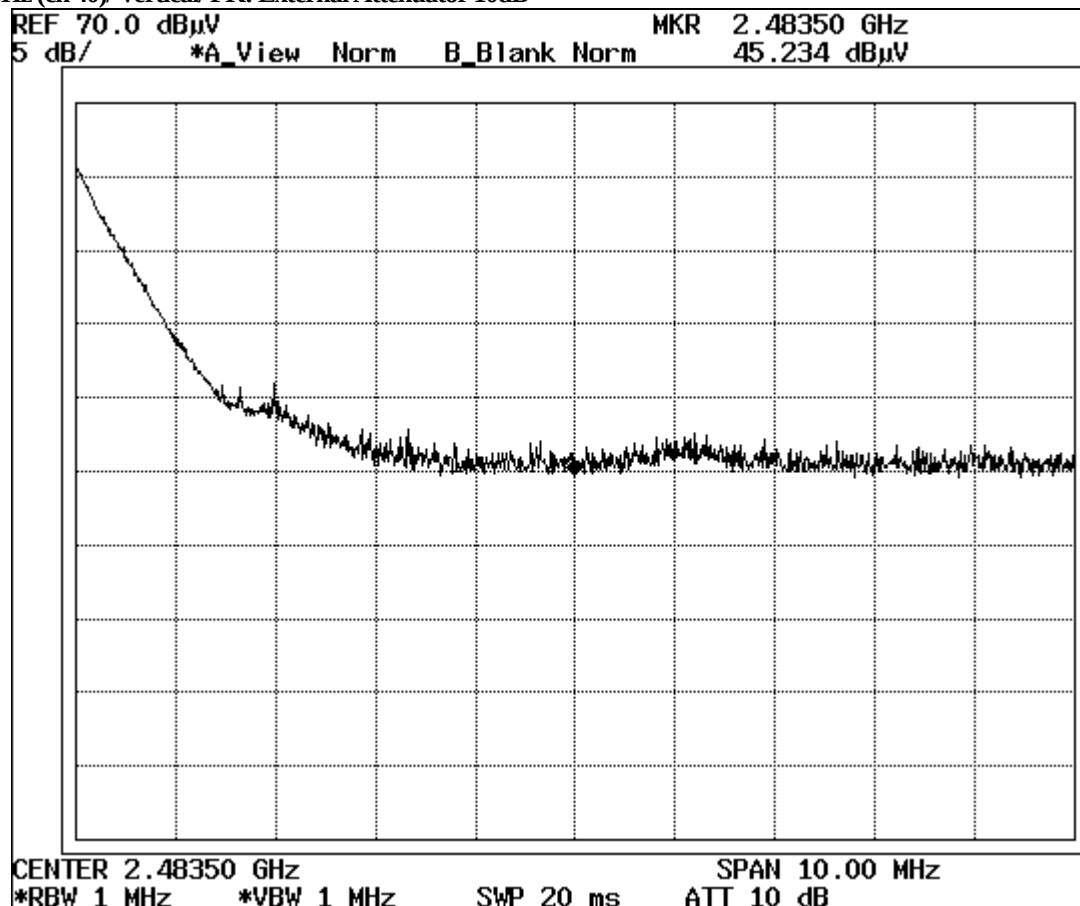
13. 2.475GHz (ch 40)/ Vertical/ AV: External Attenuator 10dB



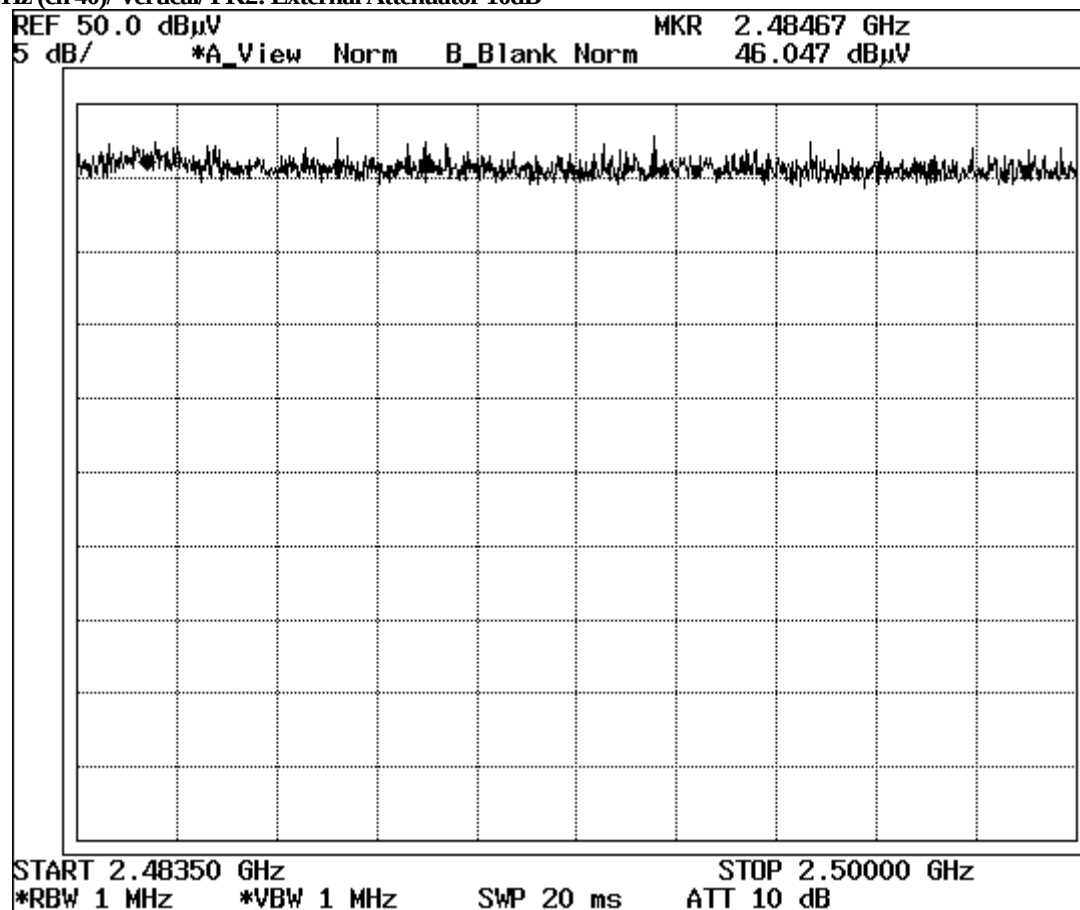
14. 2.475GHz (ch 40)/ Vertical/ AV2: External Attenuator 10dB



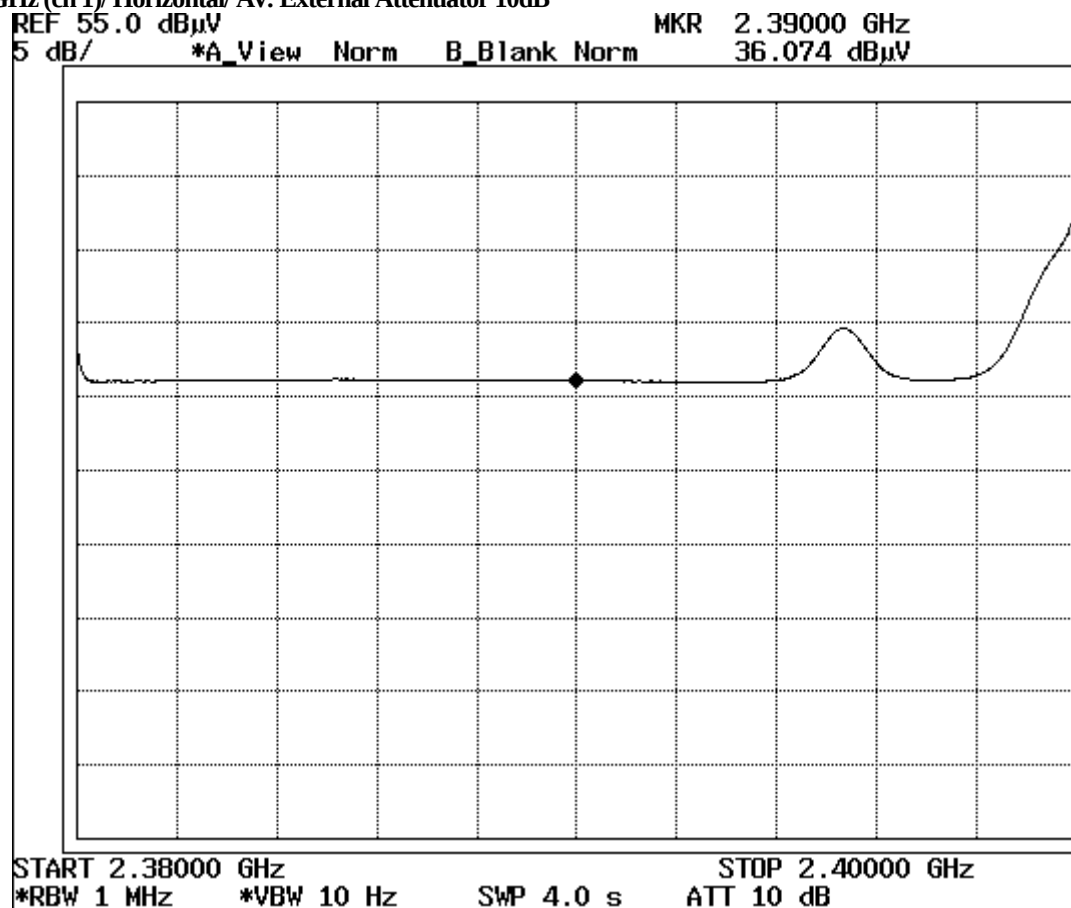
15. 2.475GHz (ch 40)/ Vertical/ PK: External Attenuator 10dB



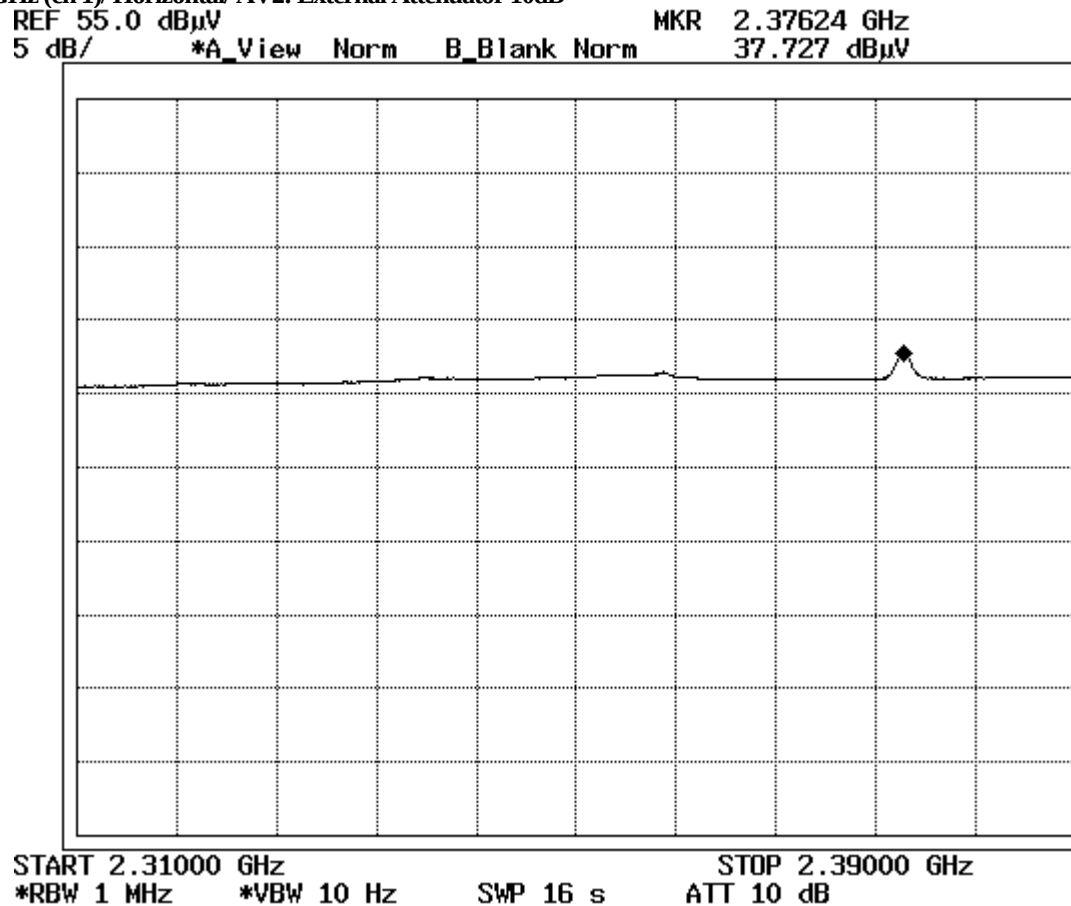
16. 2.475GHz (ch 40)/ Vertical/ PK2: External Attenuator 10dB

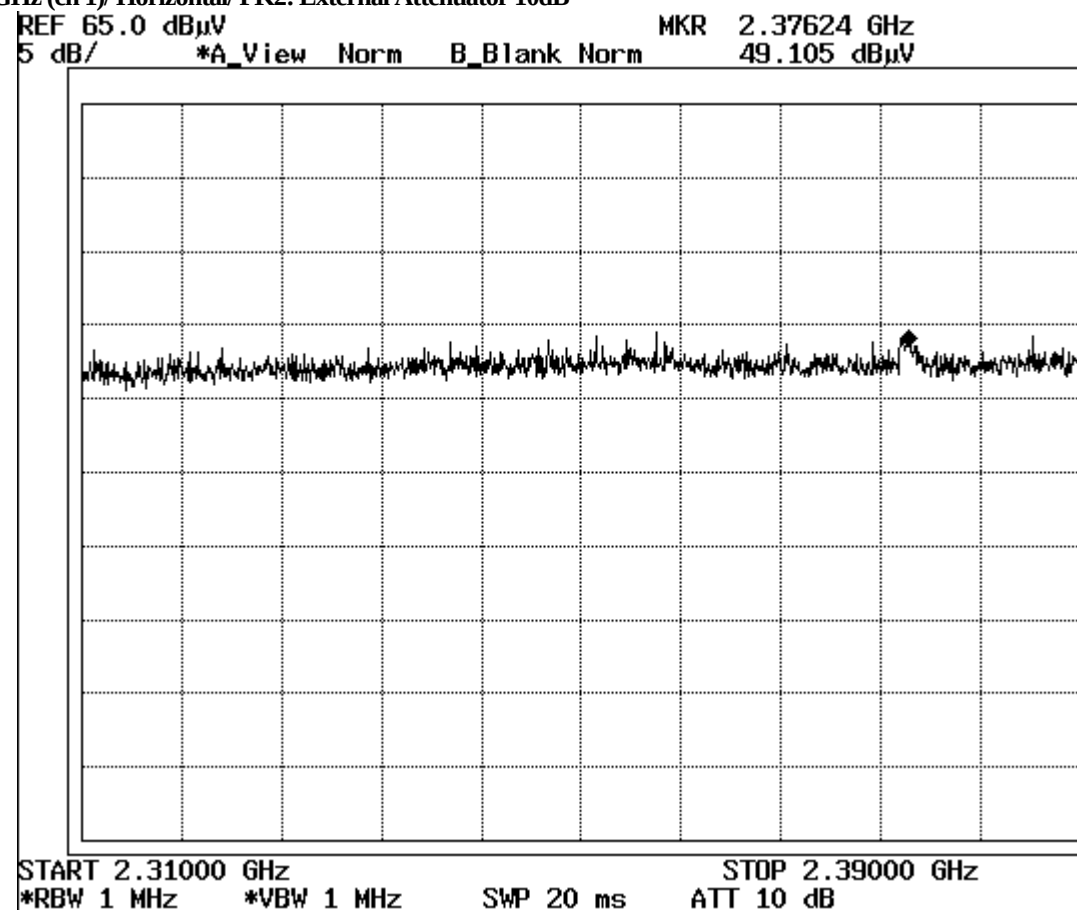


17. 2.4048GHz (ch 1)/ Horizontal/ AV: External Attenuator 10dB

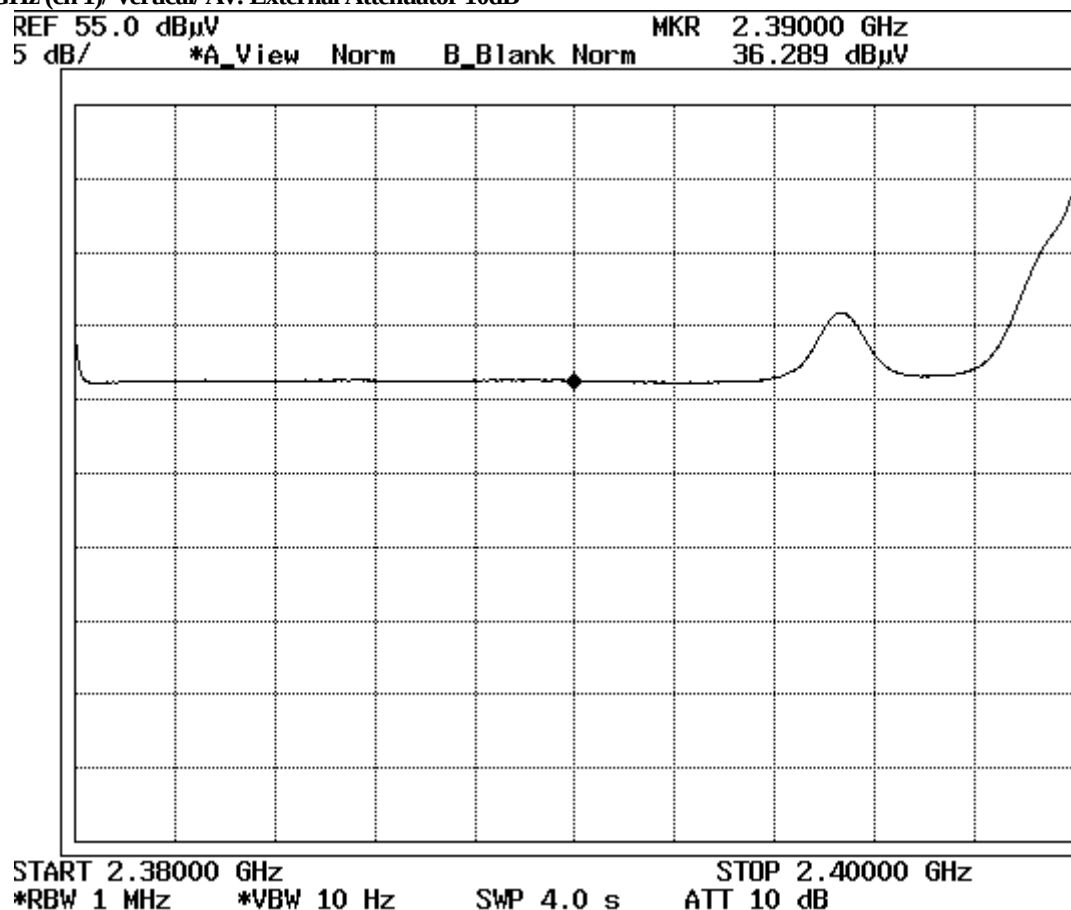


18. 2.4048GHz (ch 1)/ Horizontal/ AV2: External Attenuator 10dB

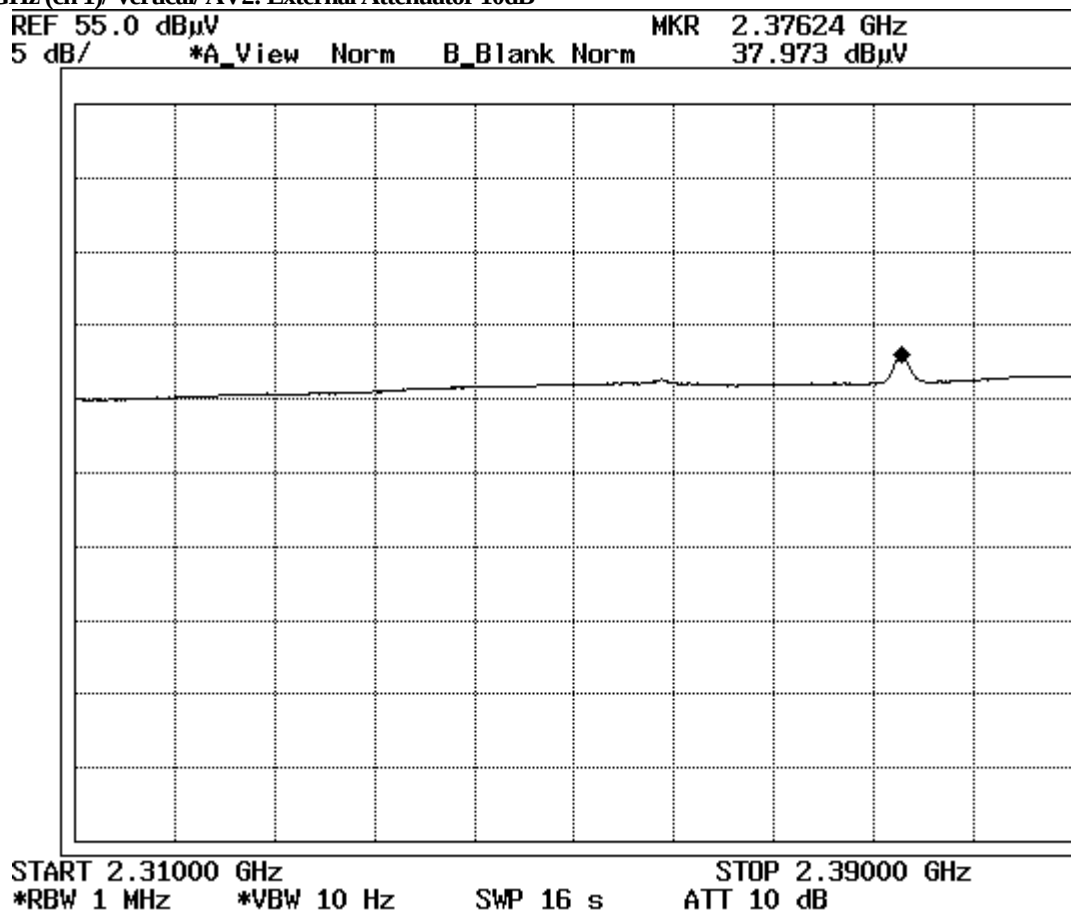


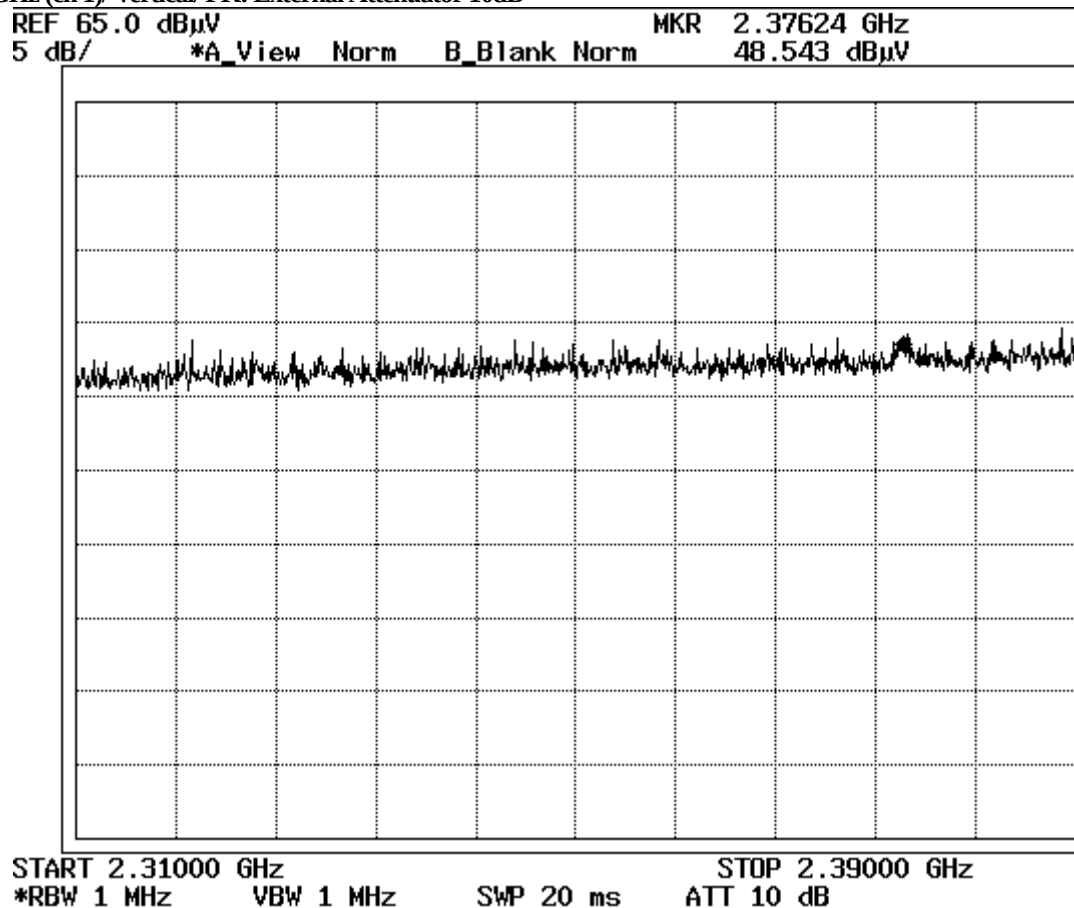


21. 2.4048GHz (ch 1)/ Vertical/ AV: External Attenuator 10dB

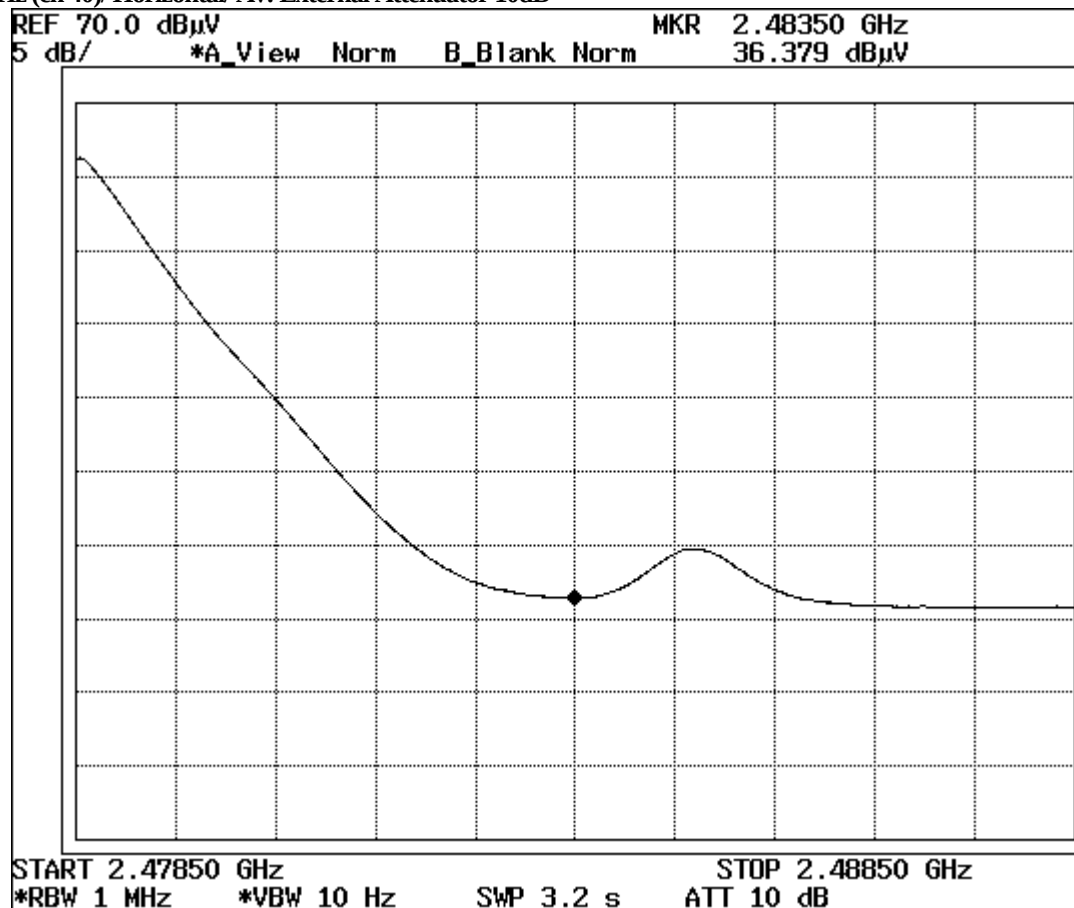


22. 2.4048GHz (ch 1)/ Vertical/ AV2: External Attenuator 10dB

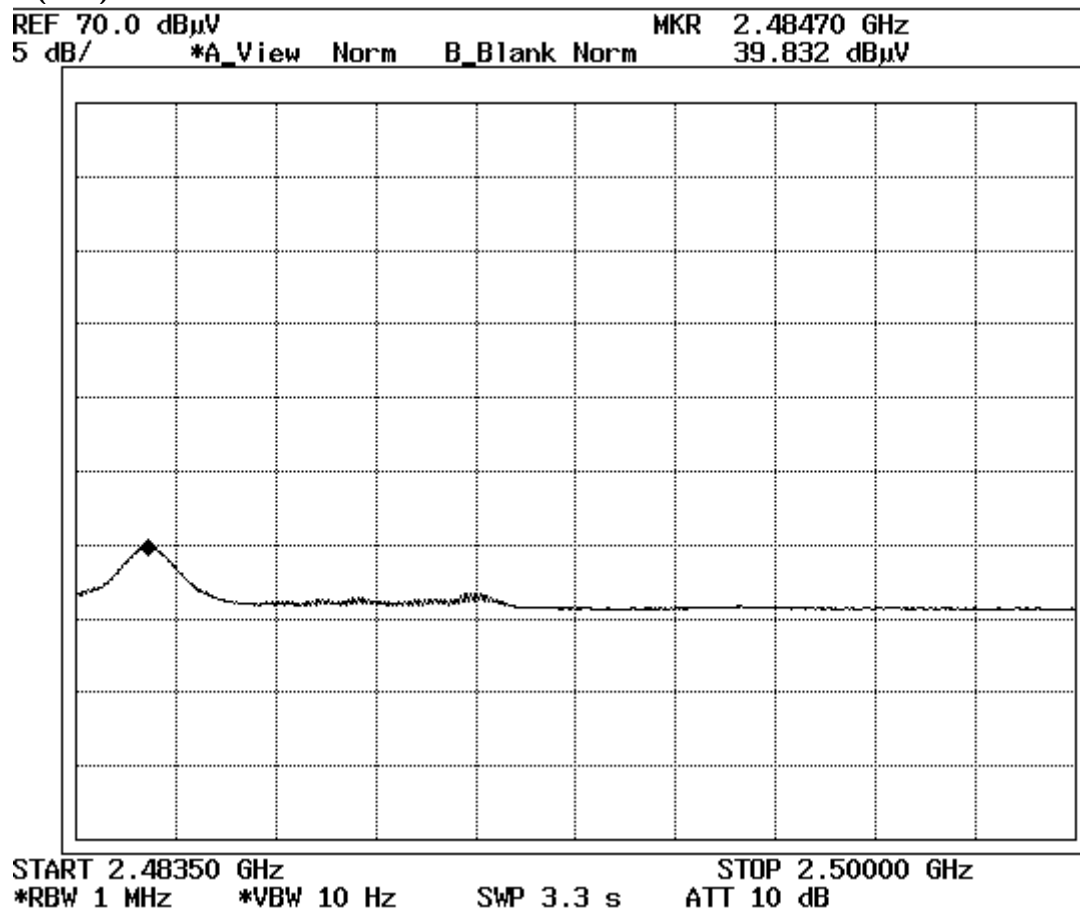




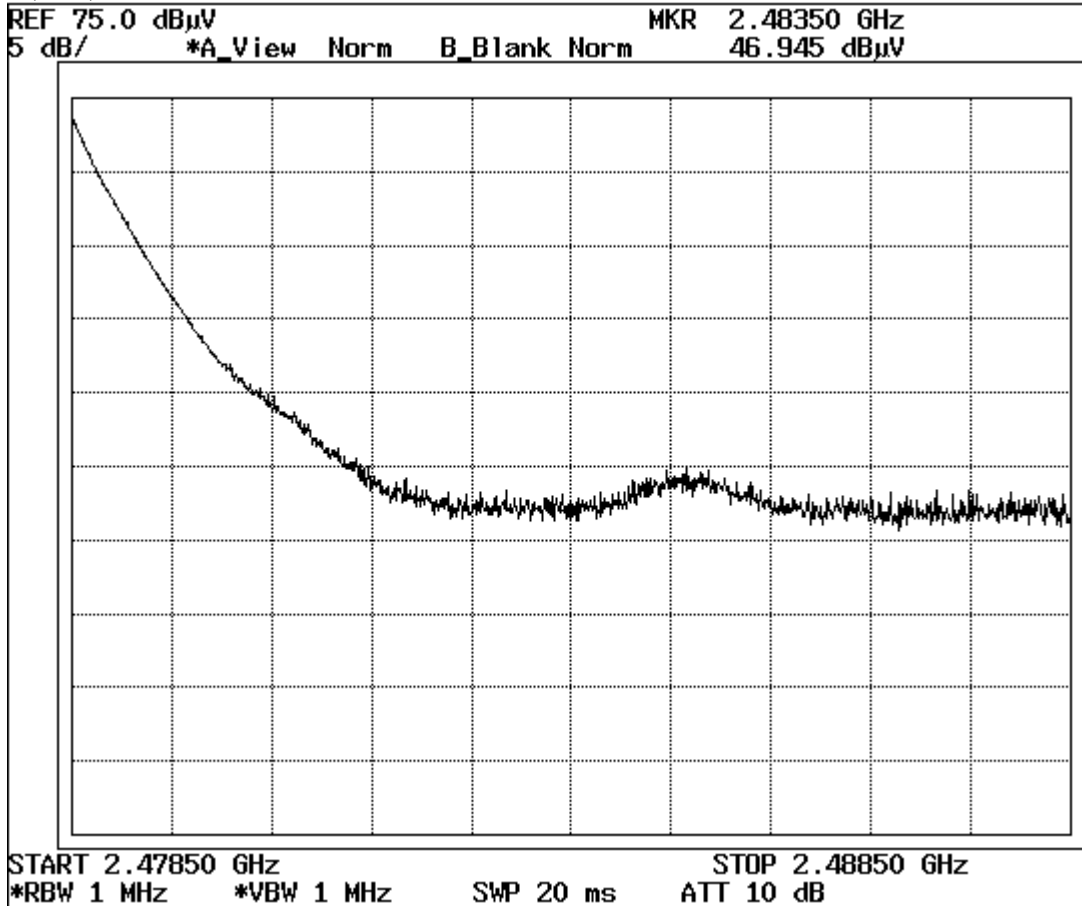
25. 2.475GHz (ch 40)/ Horizontal/ AV: External Attenuator 10dB



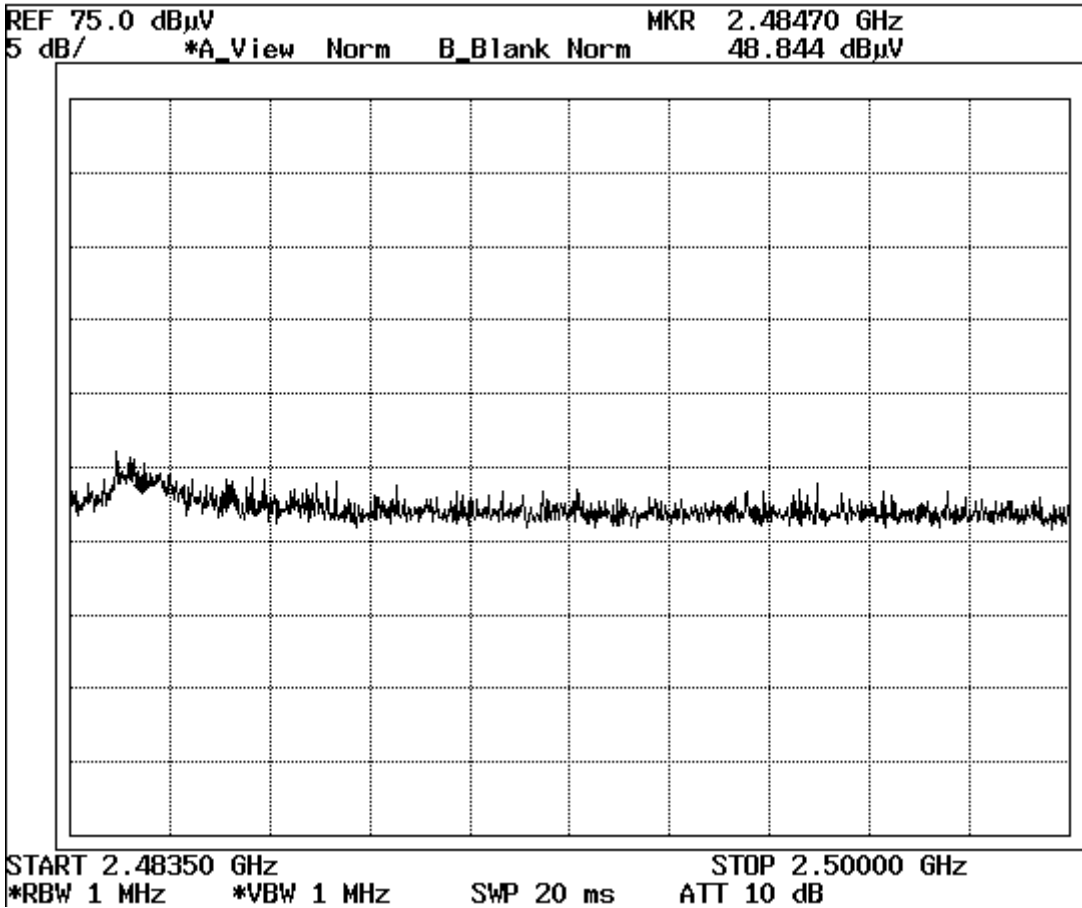
26. 2.475GHz (ch 40)/ Horizontal/ AV2: External Attenuator 10dB



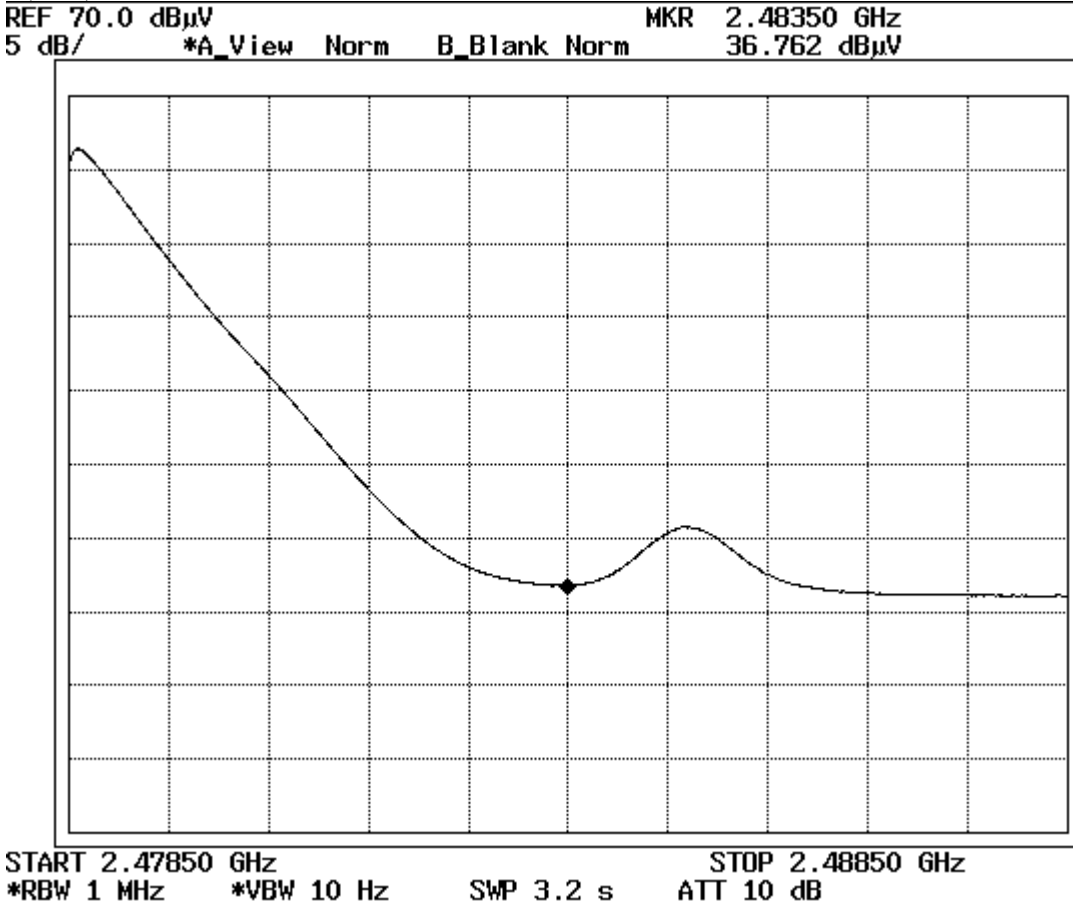
27. 2.475GHz (ch 40)/ Horizontal/ PK: External Attenuator 10dB



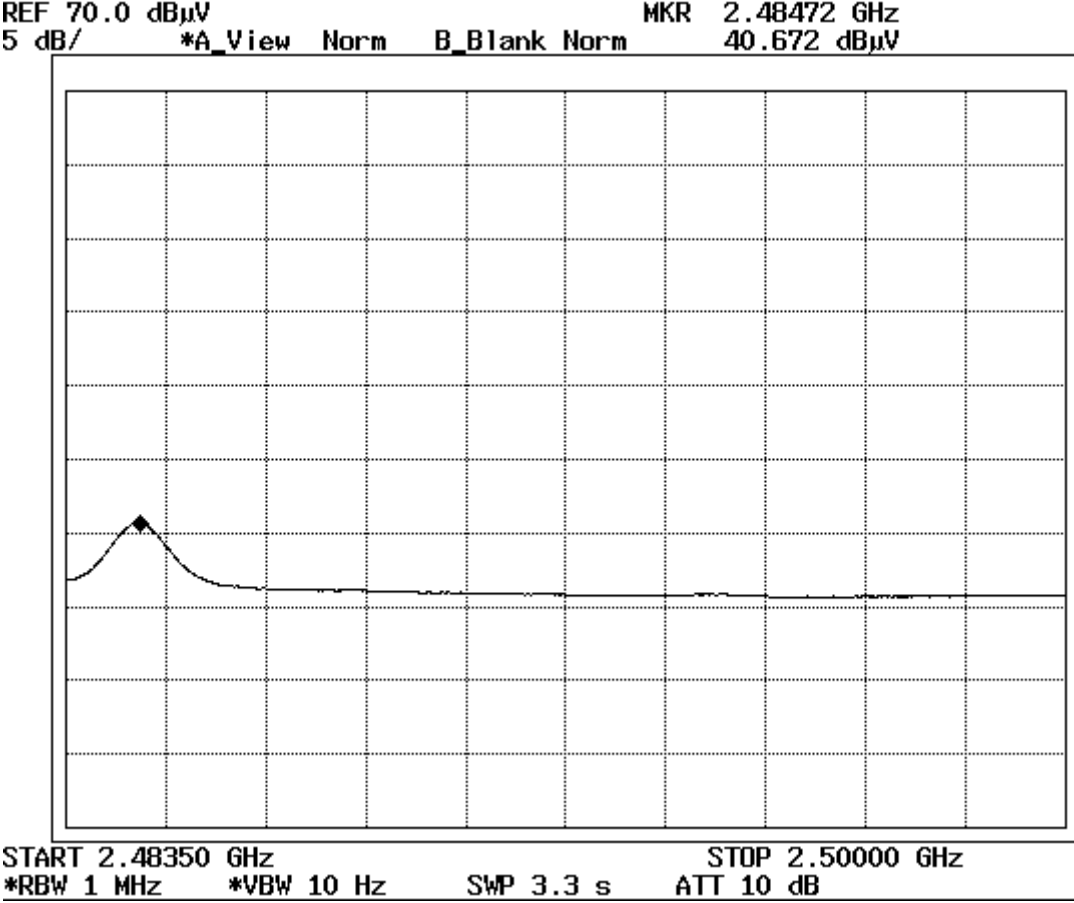
28. 2.475GHz (ch 40)/ Horizontal/ PK2: External Attenuator 10dB



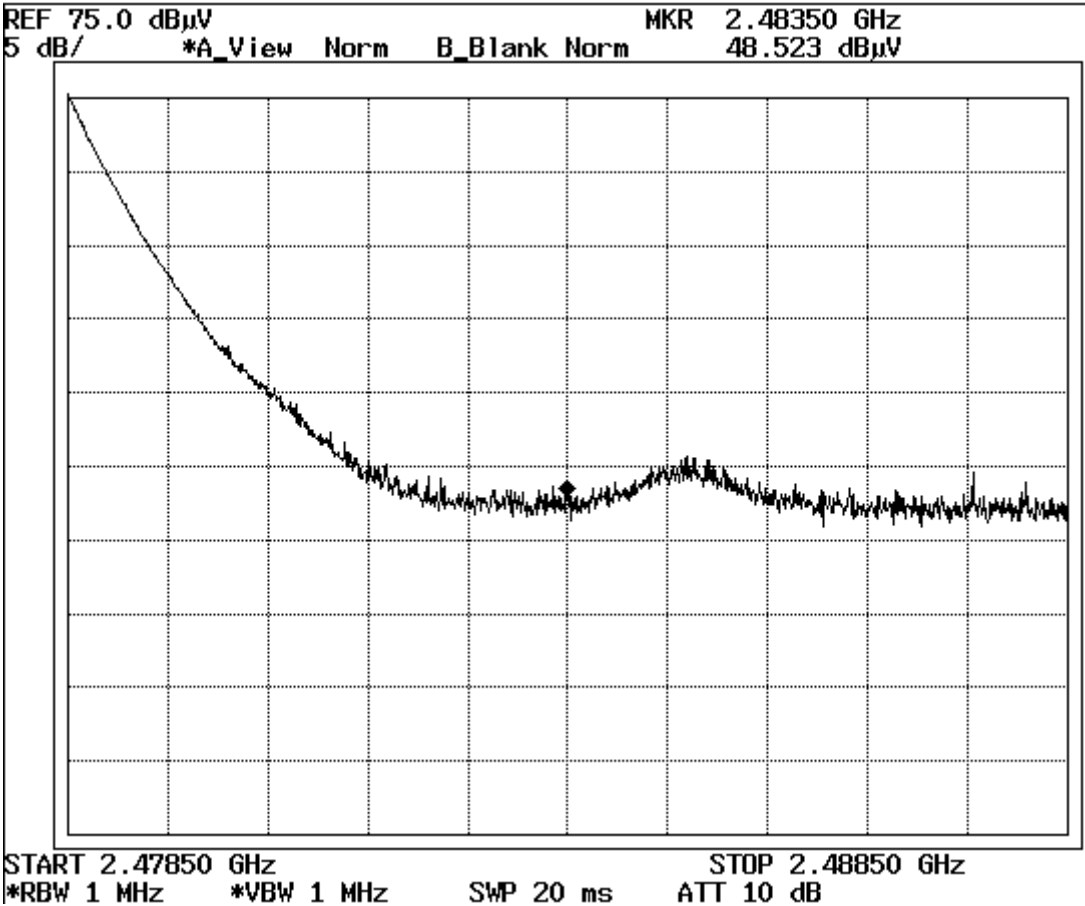
29. 2.475GHz (ch 40)/ Vertical/ AV: External Attenuator 10dB



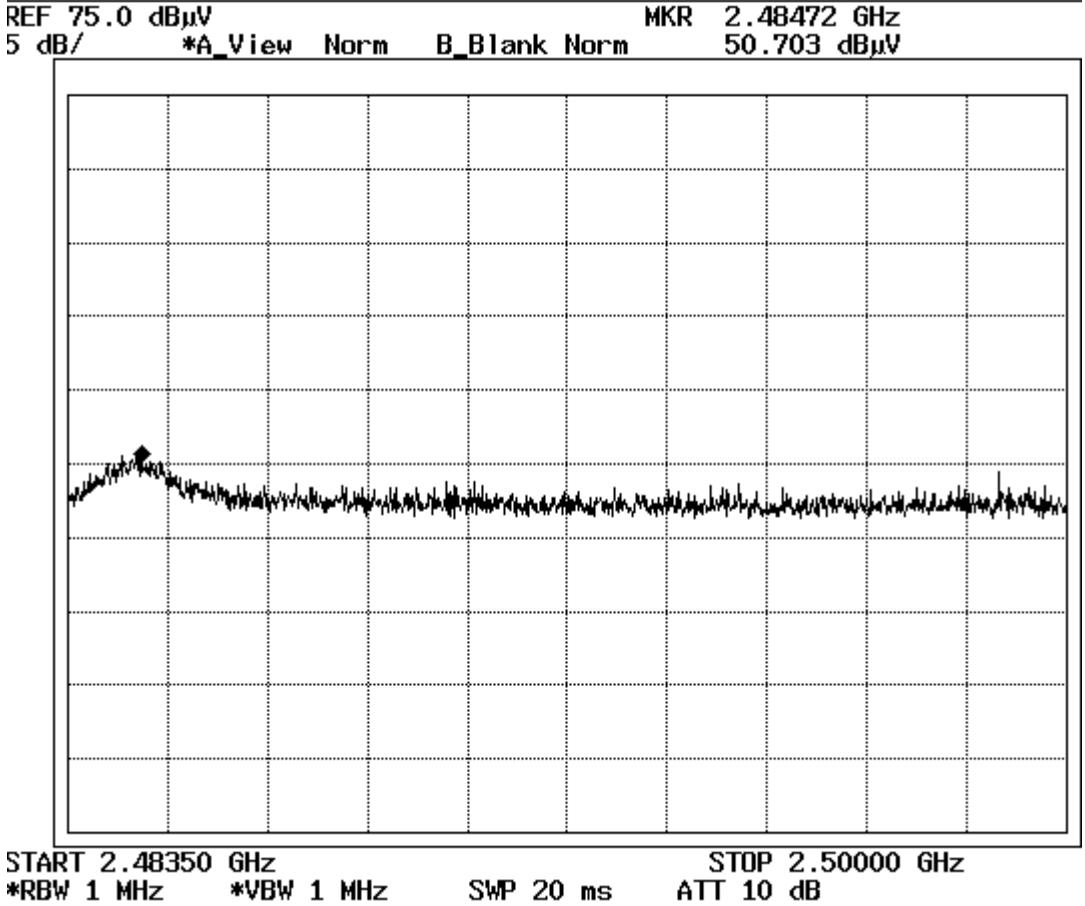
30. 2.475GHz (ch 40)/ Vertical/ AV2: External Attenuator 10dB



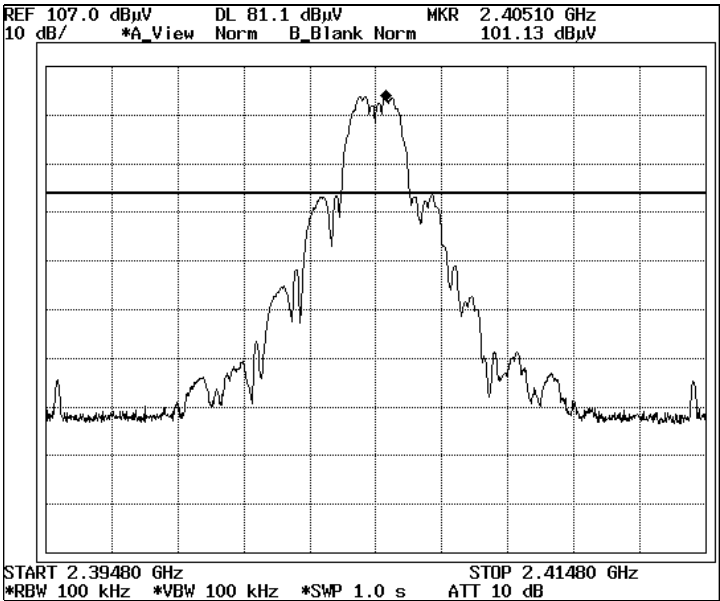
31. 2.475GHz (ch 40)/ Vertical/ PK: External Attenuator 10dB



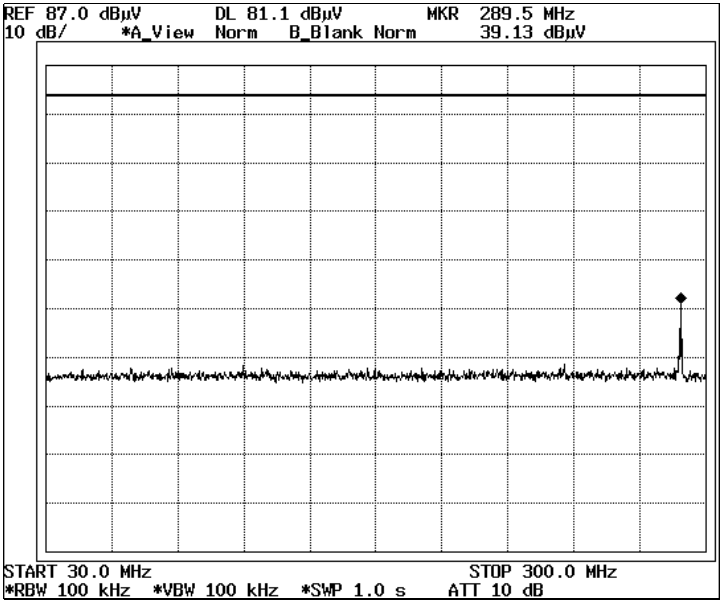
32. 2.475GHz (ch 40)/ Vertical/ PK2: External Attenuator 10dB



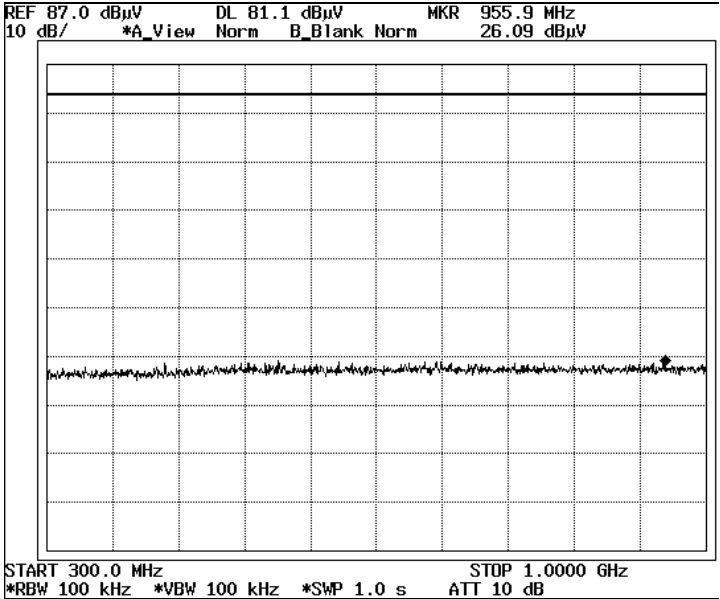
1. ch 1: 2.4048GHz: External Attenuator 10dB



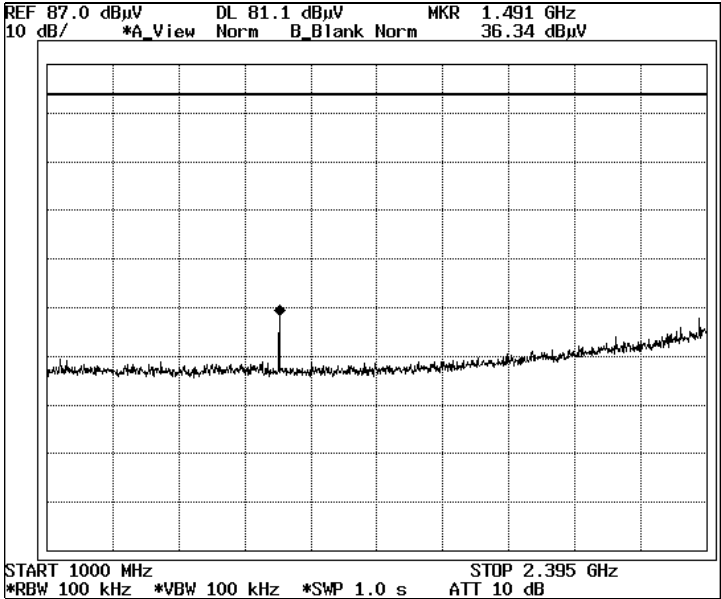
2. ch 1: 2.4048GHz: External Attenuator 10dB



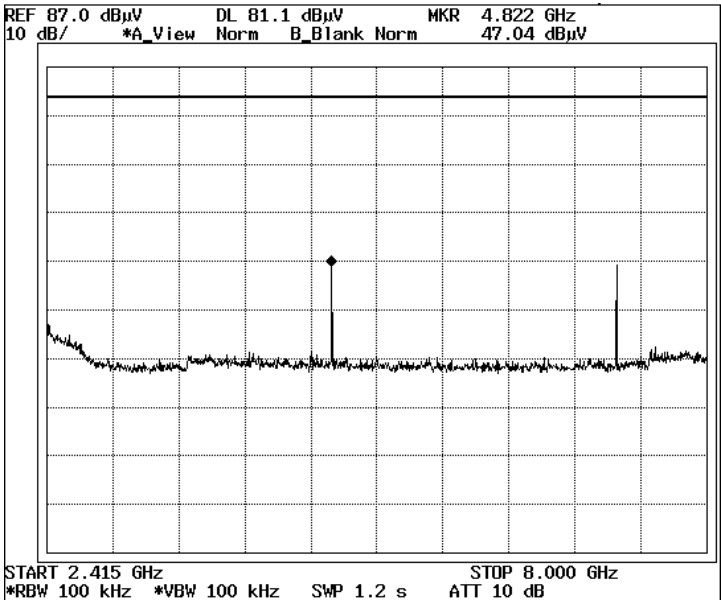
3. ch 1: 2.4048GHz: External Attenuator 10dB



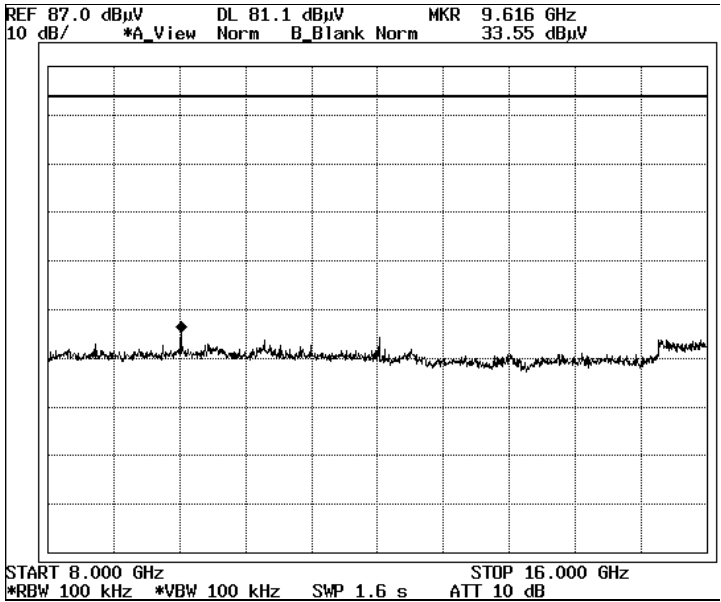
4. ch 1: 2.4048GHz: External Attenuator 10dB



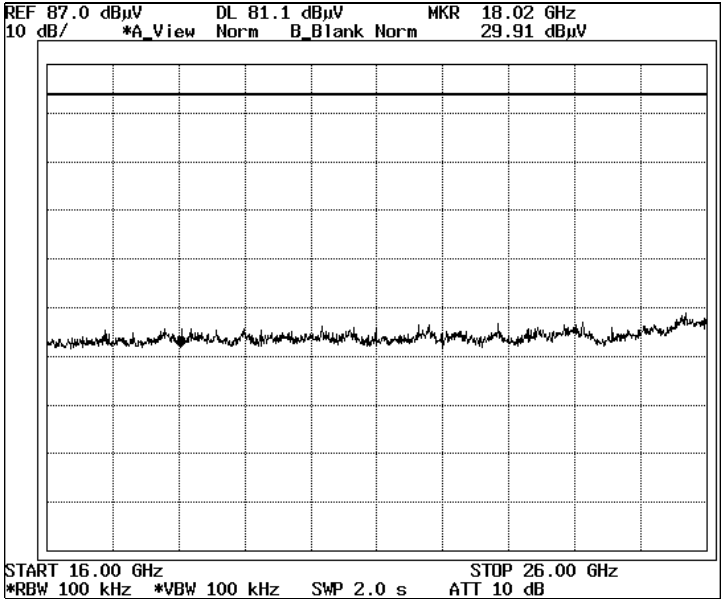
5. ch 1: 2.4048GHz: External Attenuator 10dB



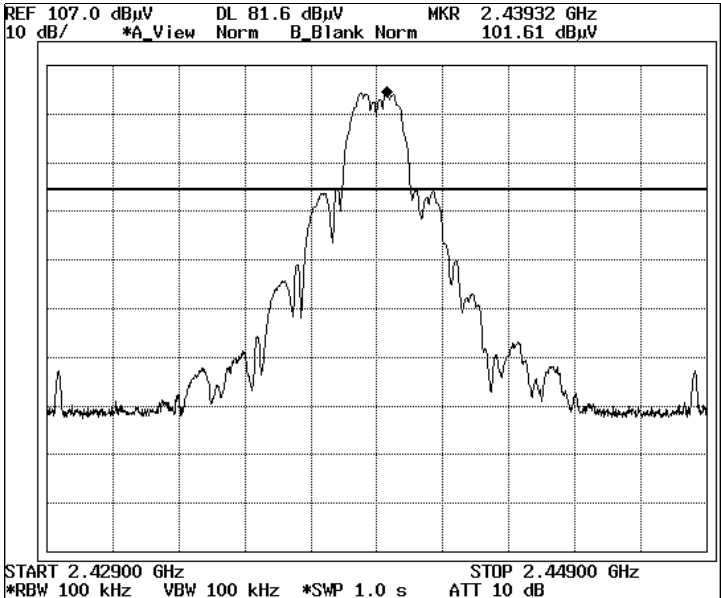
6. ch 1: 2.4048GHz: External Attenuator 10dB



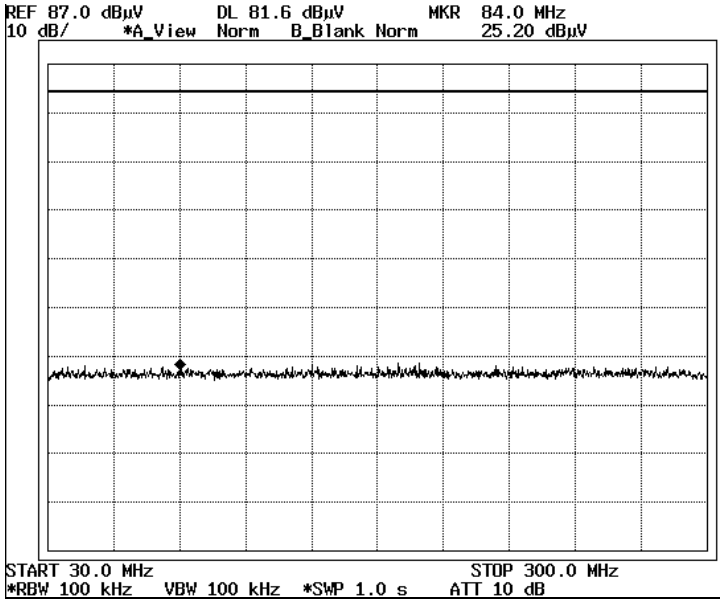
7. ch 1: 2.4048GHz: External Attenuator 10dB



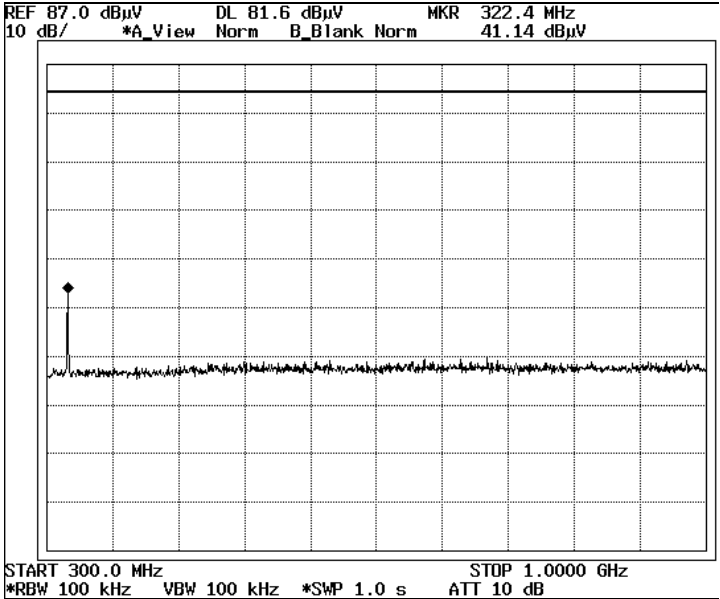
8. ch 20: 2.439GHz: External Attenuator 10dB



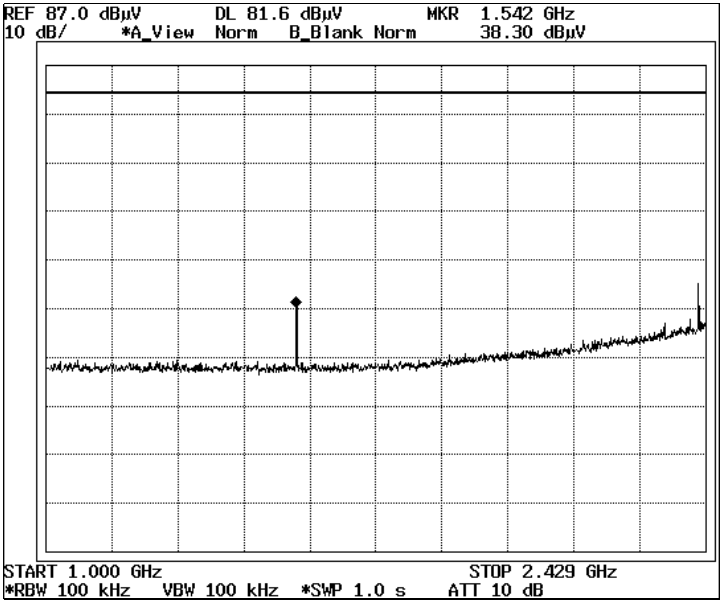
9. ch 20: 2.439GHz: External Attenuator 10dB



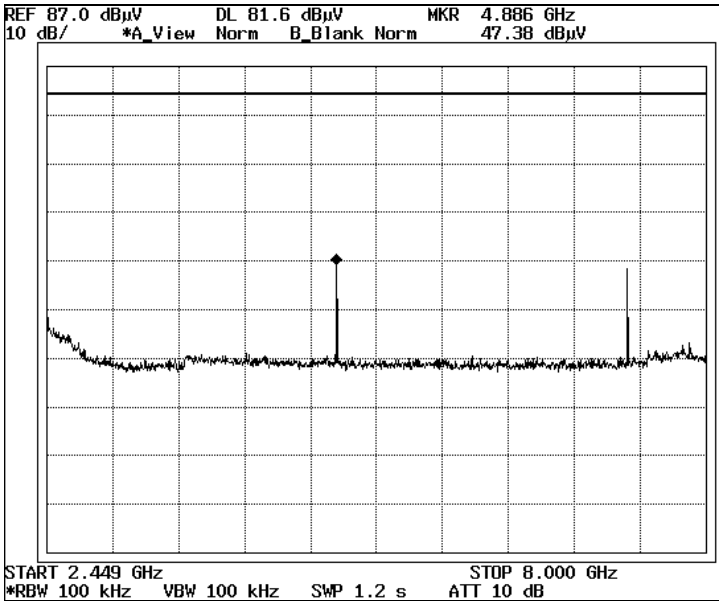
10. ch 20: 2.439GHz: External Attenuator 10dB



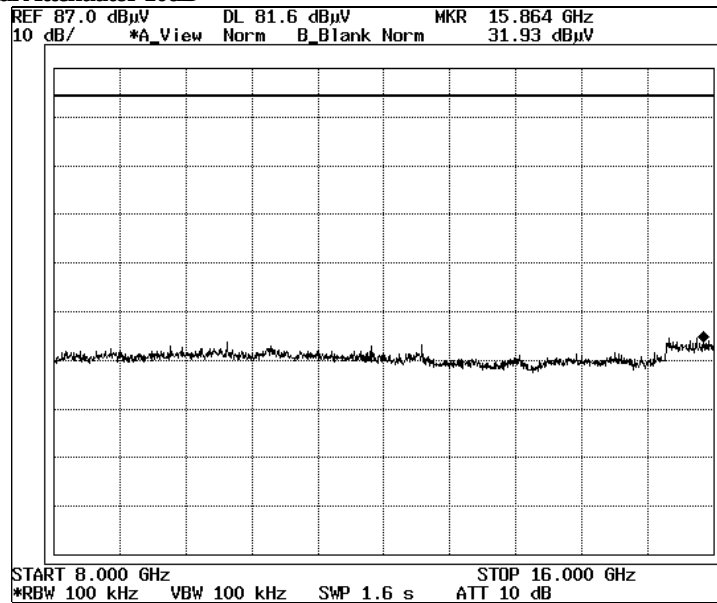
11. ch 20: 2.439GHz: External Attenuator 10dB



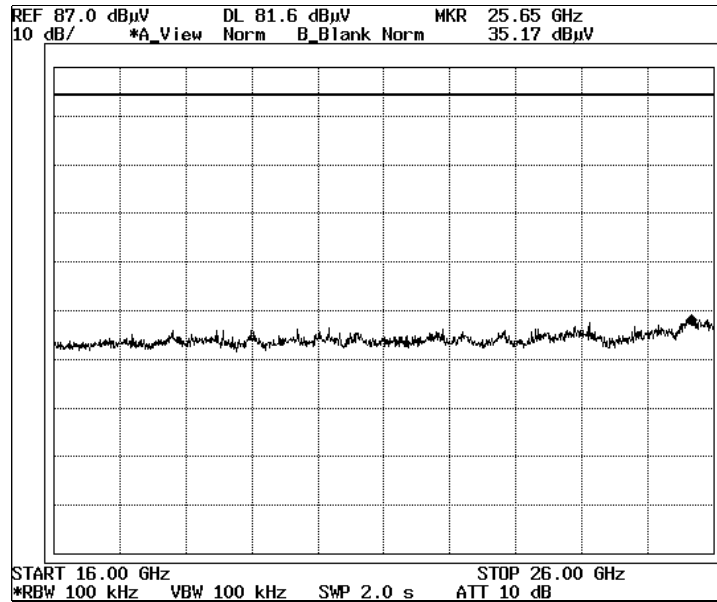
12. ch 20: 2.439GHz: External Attenuator 10dB



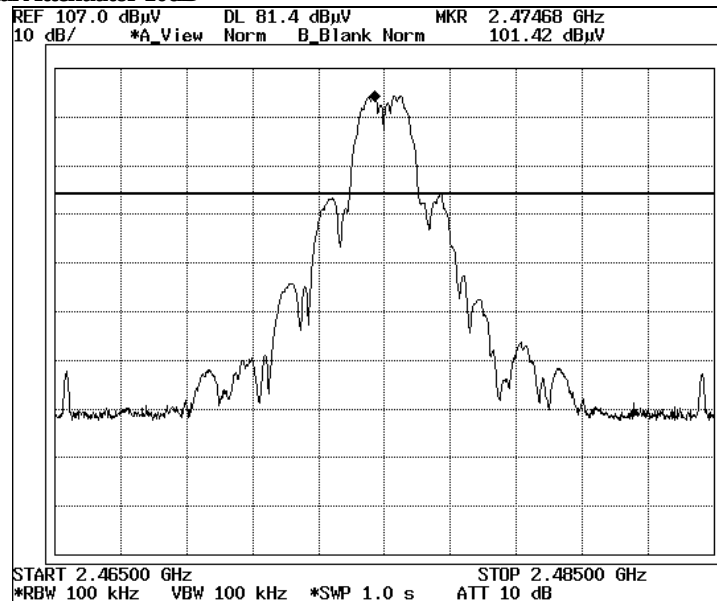
13. ch 20: 2.439GHz: External Attenuator 10dB



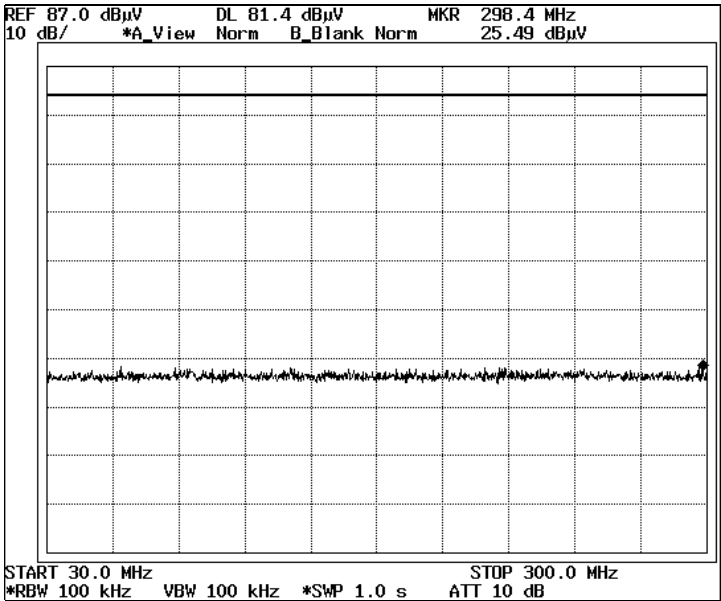
14. ch 20: 2.439GHz: External Attenuator 10dB



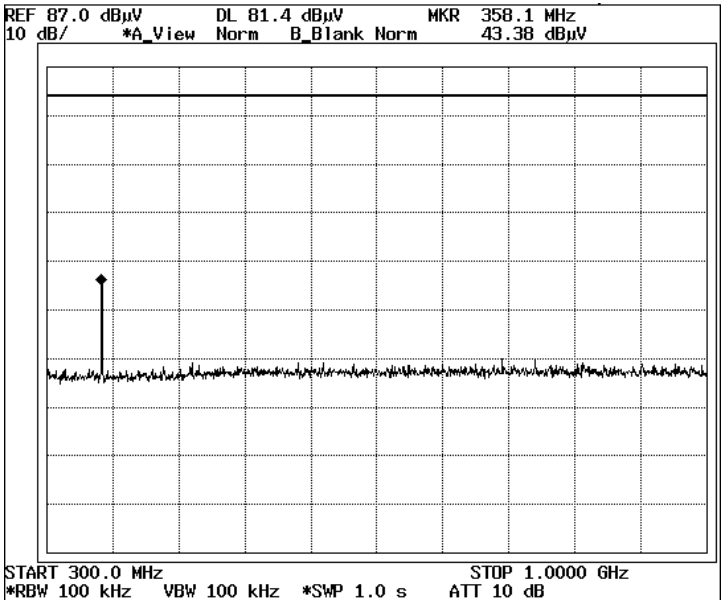
15. ch 40: 2.475GHz: External Attenuator 10dB



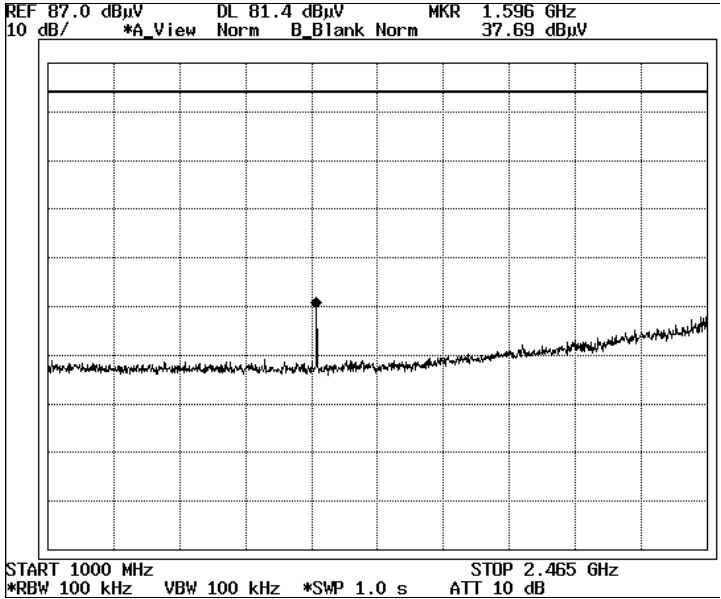
16. ch 40: 2.475GHz: External Attenuator 10dB



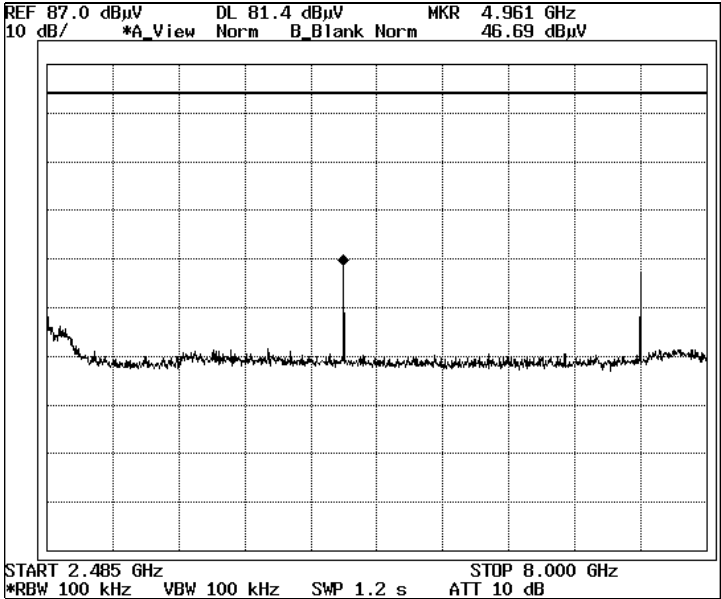
17. ch 40: 2.475GHz: External Attenuator 10dB



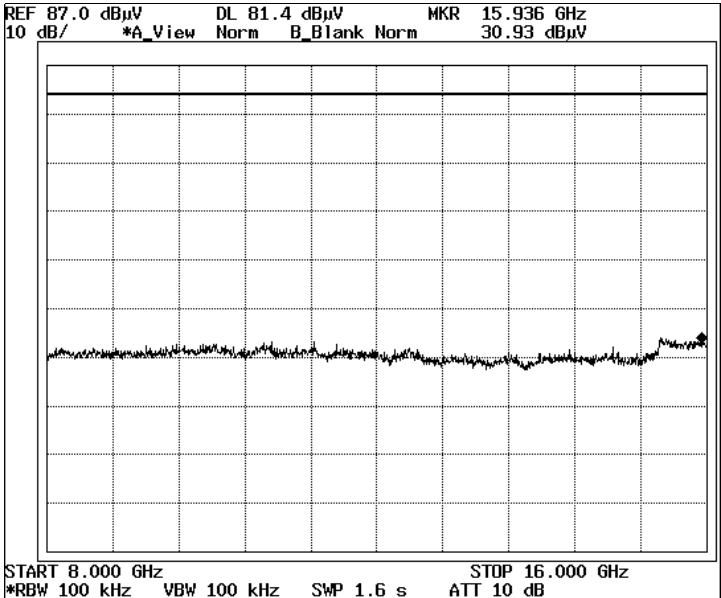
18. ch 40: 2.475GHz: External Attenuator 10dB



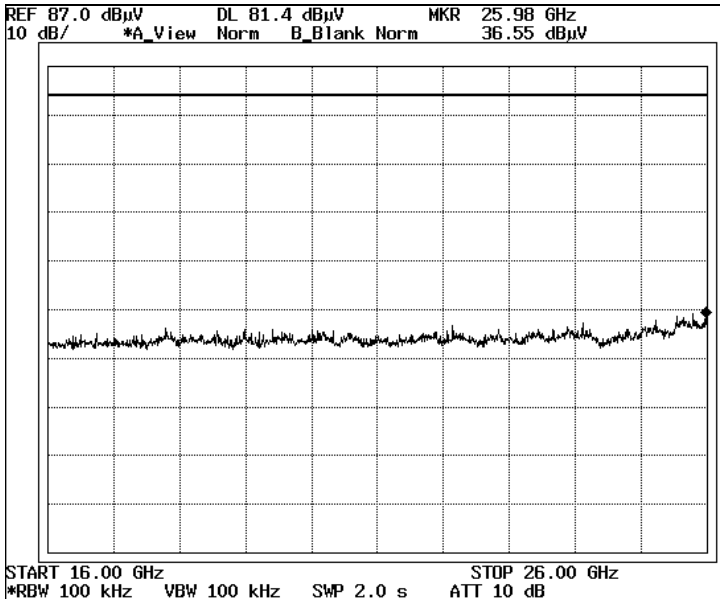
19. ch 40: 2.475GHz: External Attenuator 10dB



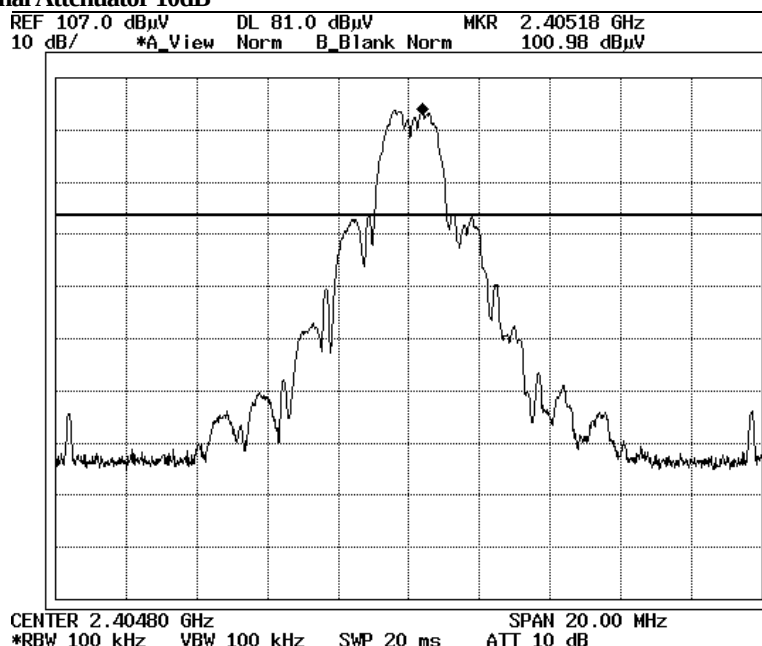
20. ch 40: 2.475GHz: External Attenuator 10dB



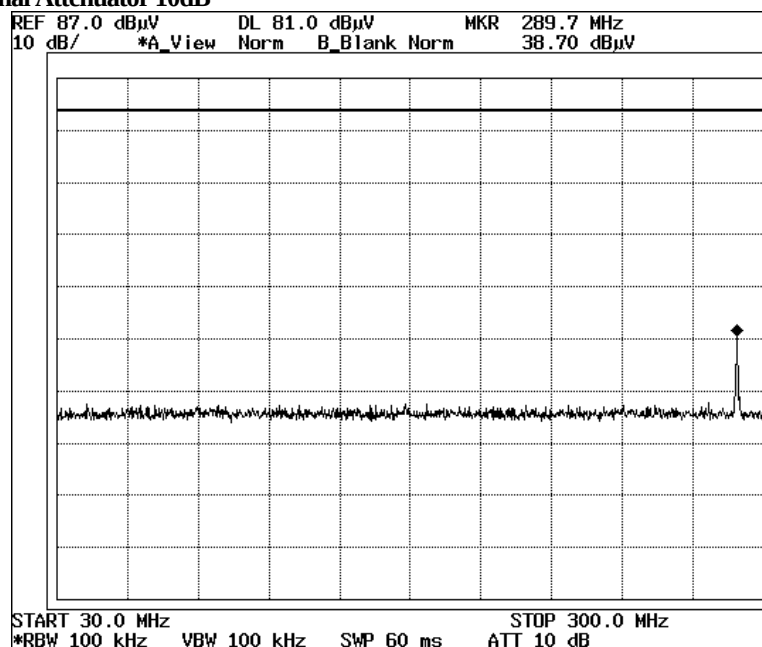
21. ch 40: 2.475GHz: External Attenuator 10dB



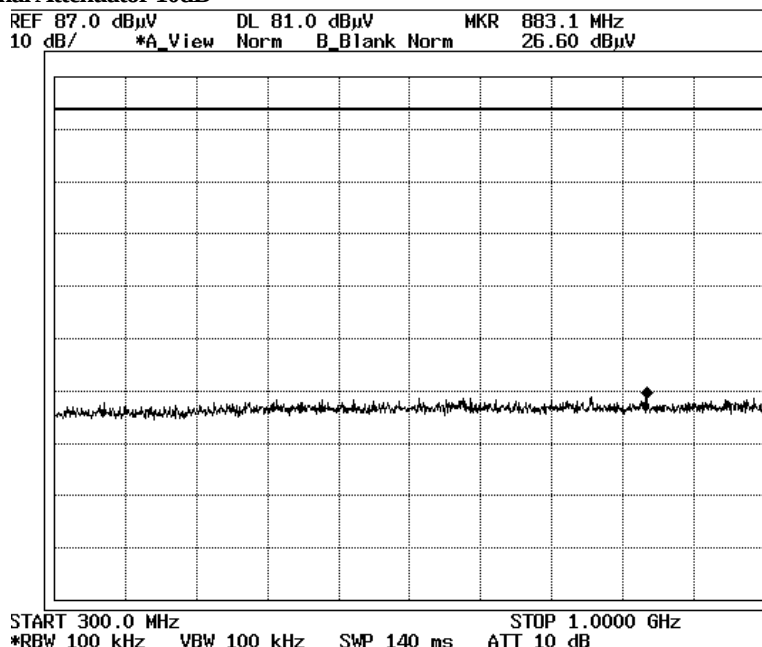
1. ch 1: 2.4048GHz: External Attenuator 10dB



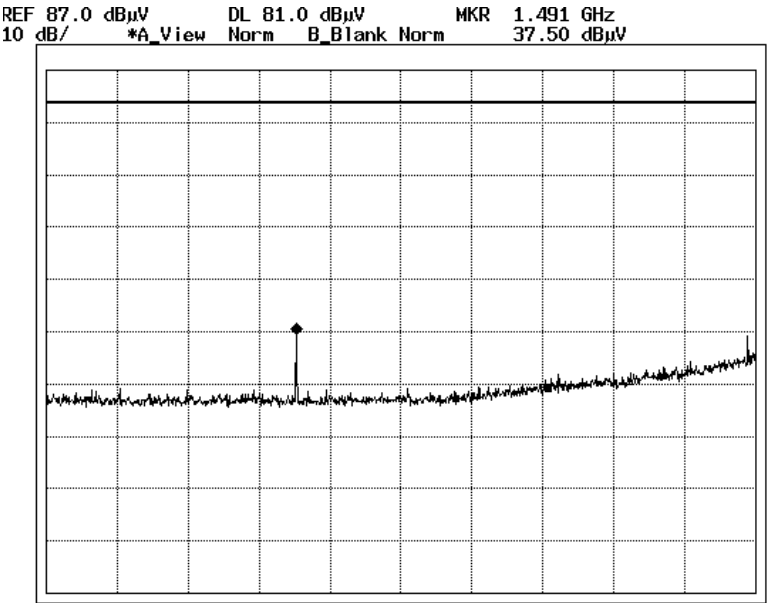
2. ch 1: 2.4048GHz: External Attenuator 10dB



3. ch 1: 2.4048GHz: External Attenuator 10dB

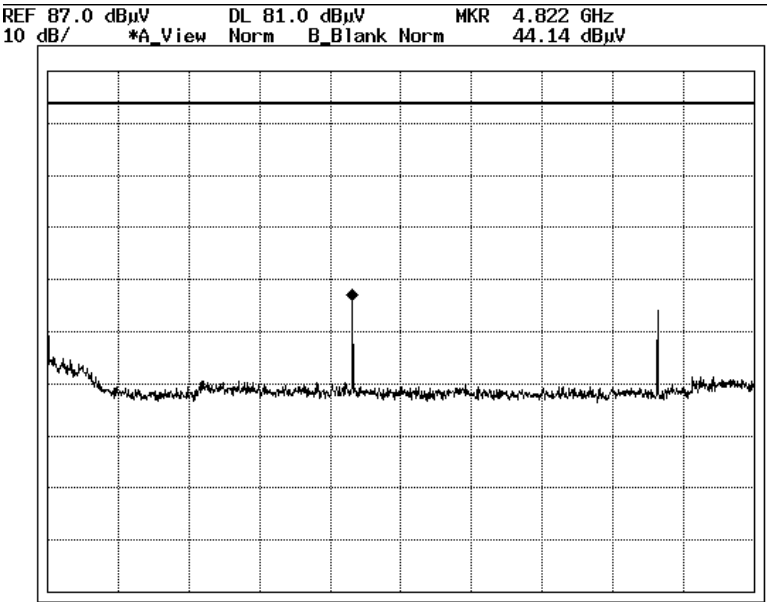


4. ch 1: 2.4048GHz: External Attenuator 10dB



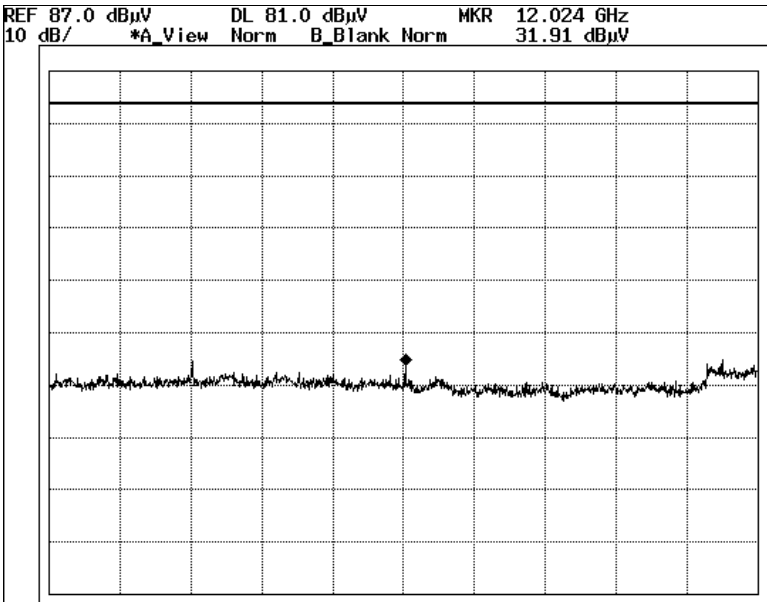
START 1000 MHz STOP 2.395 GHz
*RBW 100 kHz VBW 100 kHz SWP 280 ms ATT 10 dB

5. ch 1: 2.4048GHz: External Attenuator 10dB



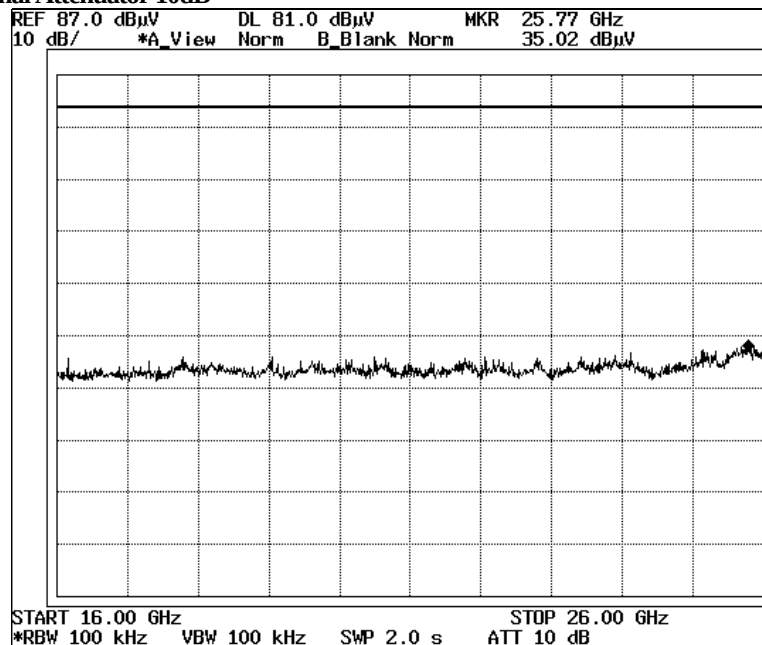
START 2.415 GHz STOP 8.000 GHz
*RBW 100 kHz VBW 100 kHz SWP 1.2 s ATT 10 dB

6. ch 1: 2.4048GHz: External Attenuator 10dB

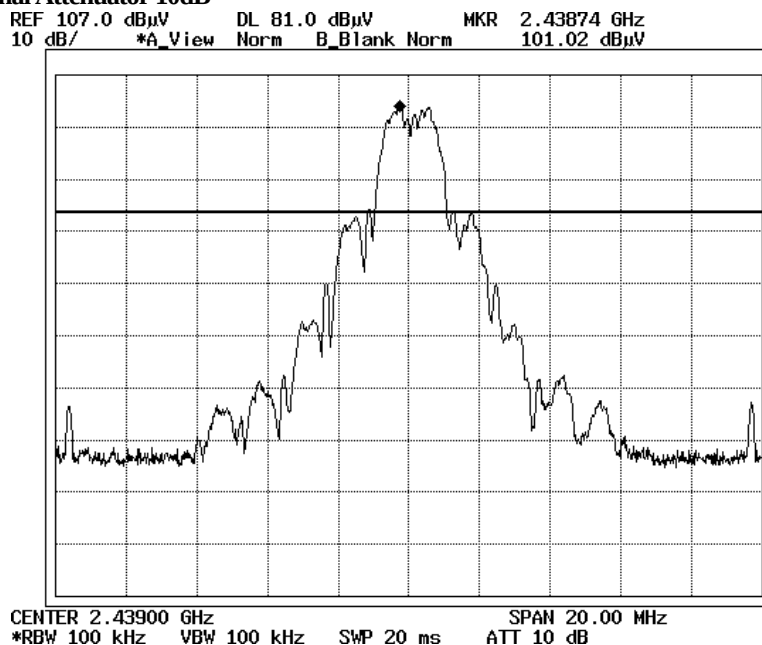


START 8.000 GHz STOP 16.000 GHz
*RBW 100 kHz VBW 100 kHz SWP 1.6 s ATT 10 dB

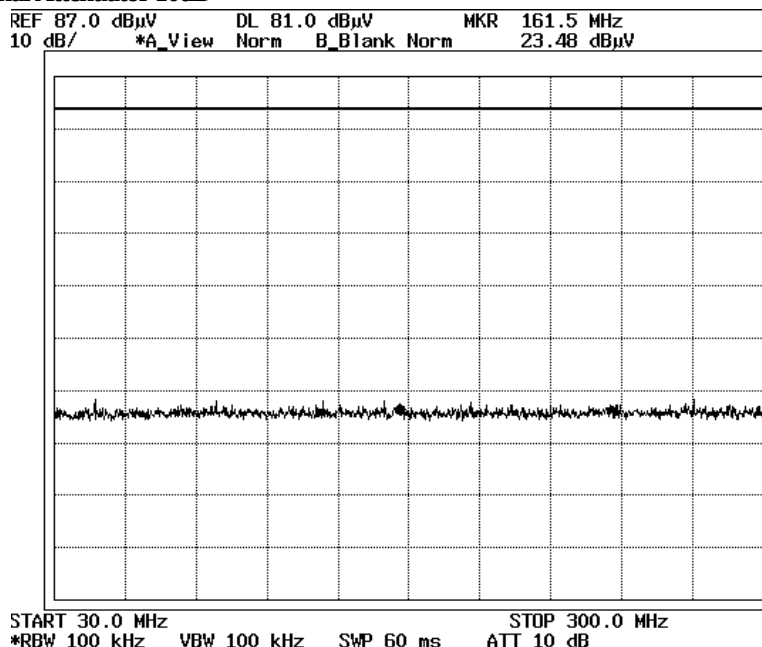
7. ch 1: 2.4048GHz: External Attenuator 10dB



8. ch 20: 2.439GHz: External Attenuator 10dB

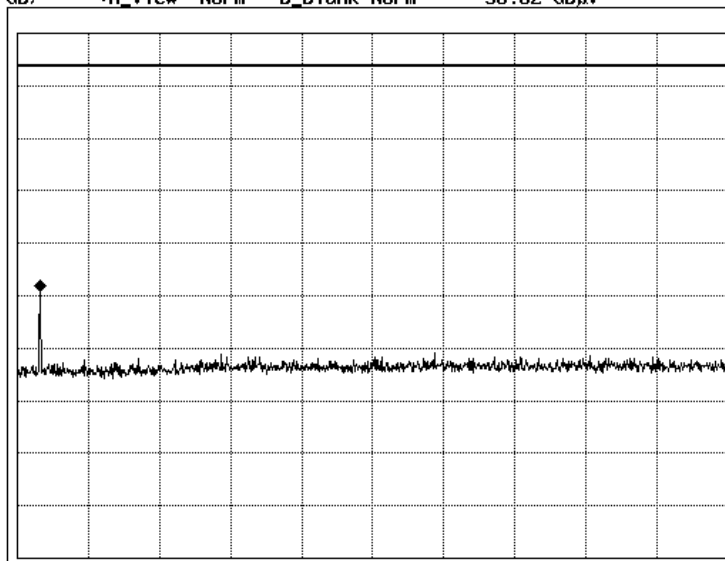


9. ch 20: 2.439GHz: External Attenuator 10dB



10. ch 20: 2.439GHz: External Attenuator 10dB

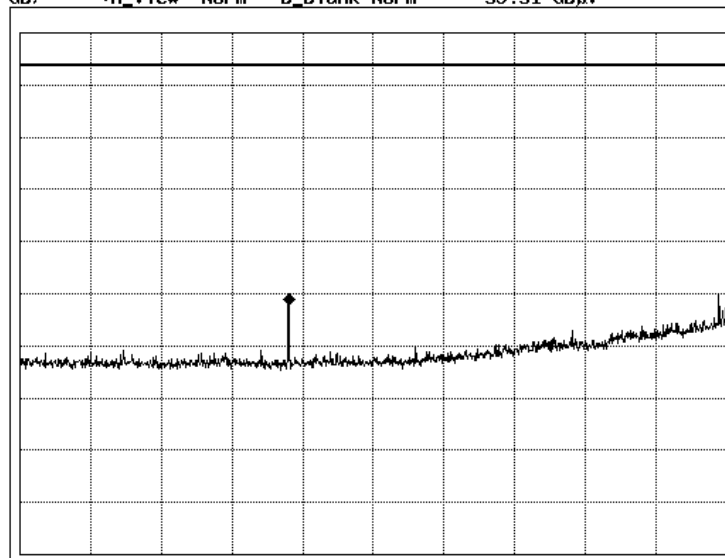
REF 87.0 dB μ V DL 81.0 dB μ V MKR 322.4 MHz
10 dB/ *A_View Norm B_Blank Norm 38.82 dB μ V



START 300.0 MHz STOP 1.0000 GHz
*RBW 100 kHz VBW 100 kHz SWP 140 ms ATT 10 dB

11. ch 20: 2.439GHz: External Attenuator 10dB

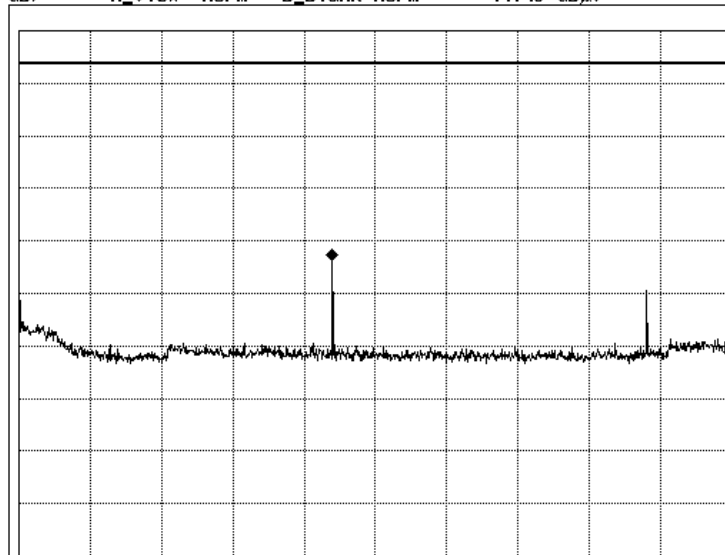
REF 87.0 dB μ V DL 81.0 dB μ V MKR 1.543 GHz
10 dB/ *A_View Norm B_Blank Norm 35.91 dB μ V



START 1000 MHz STOP 2.429 GHz
*RBW 100 kHz VBW 100 kHz SWP 290 ms ATT 10 dB

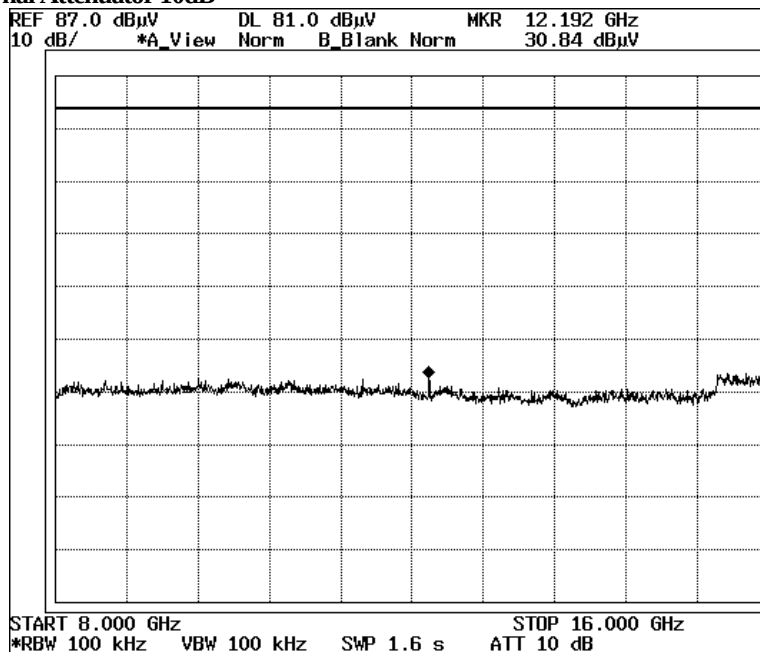
12. ch 20: 2.439GHz: External Attenuator 10dB

REF 87.0 dB μ V DL 81.0 dB μ V MKR 4.886 GHz
10 dB/ *A_View Norm B_Blank Norm 44.45 dB μ V

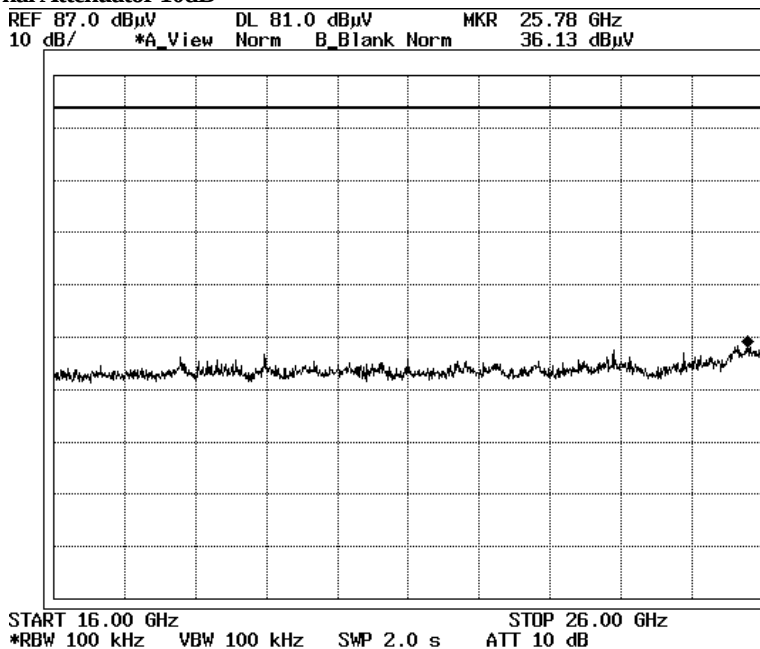


START 2.449 GHz STOP 8.000 GHz
*RBW 100 kHz VBW 100 kHz SWP 1.2 s ATT 10 dB

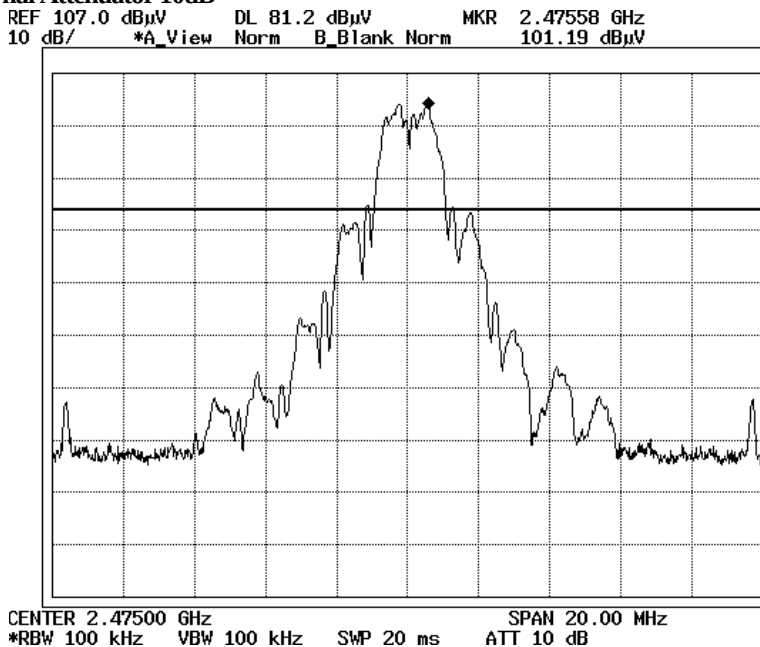
13. ch 20: 2.439GHz: External Attenuator 10dB



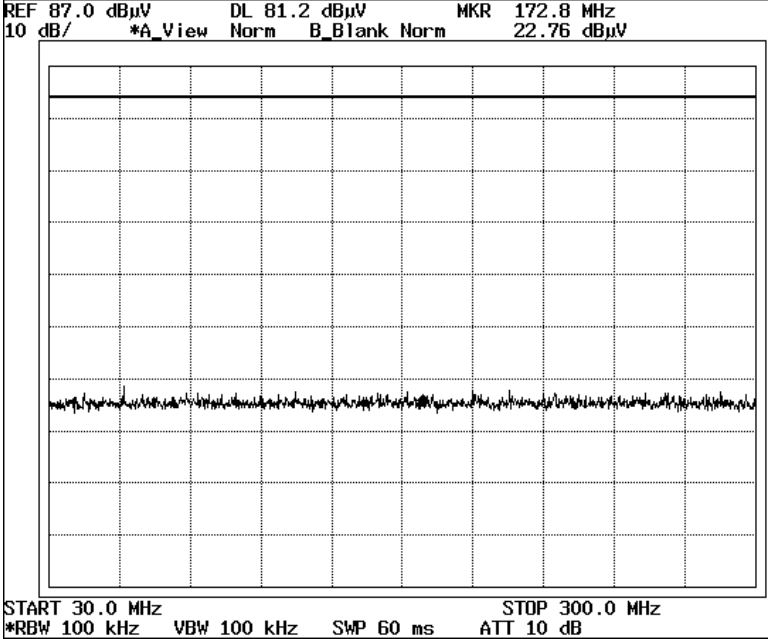
14. ch 20: 2.439GHz: External Attenuator 10dB



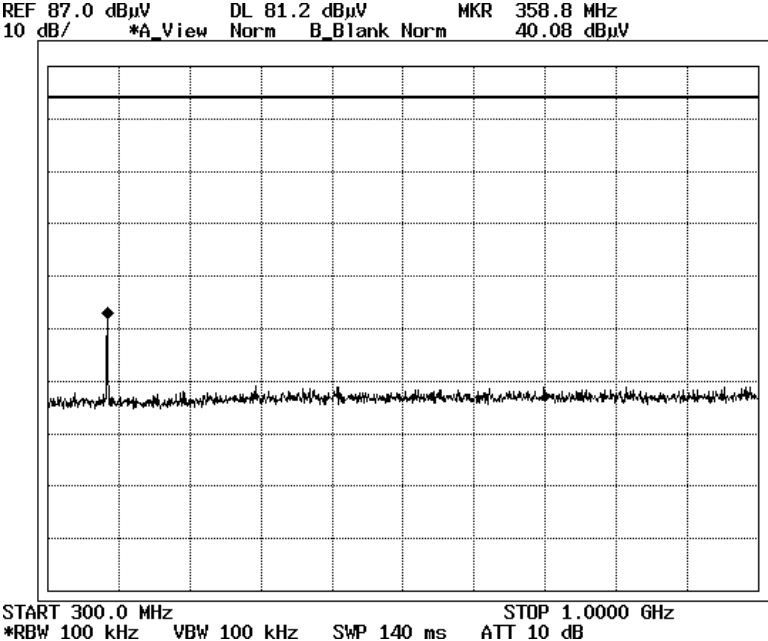
15. ch 40: 2.475GHz: External Attenuator 10dB



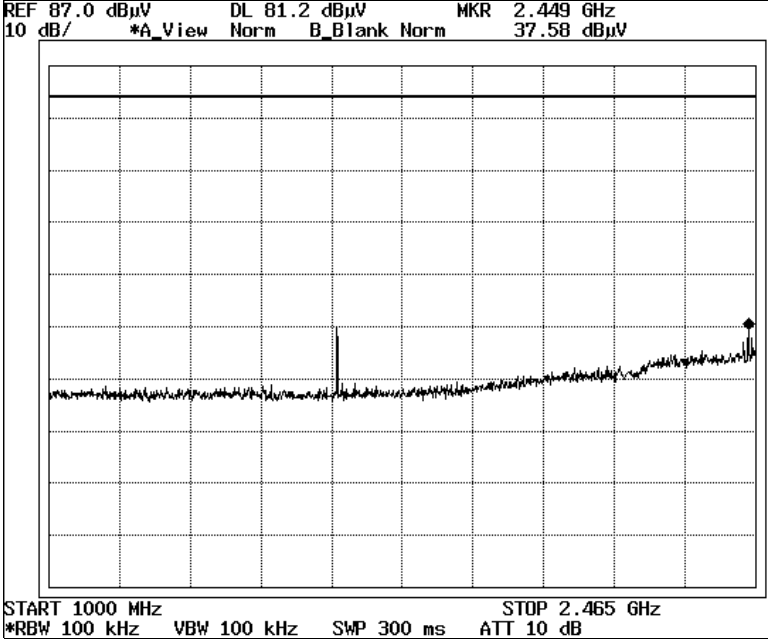
16. ch 40: 2.475GHz: External Attenuator 10dB



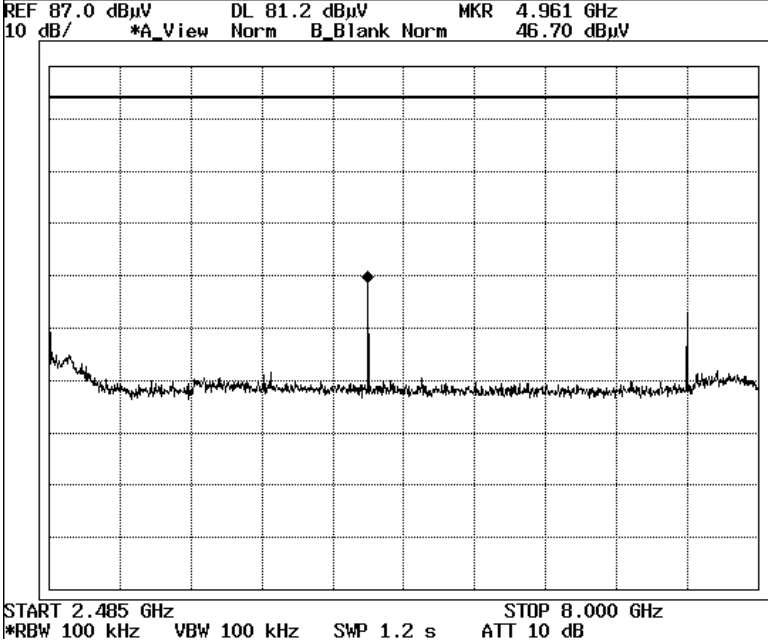
17. ch 40: 2.475GHz: External Attenuator 10dB



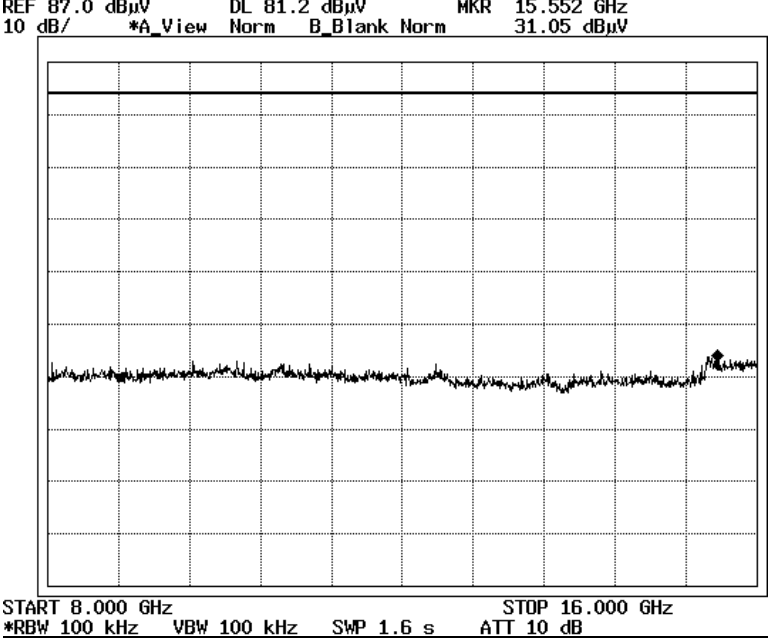
18. ch 40: 2.475GHz: External Attenuator 10dB



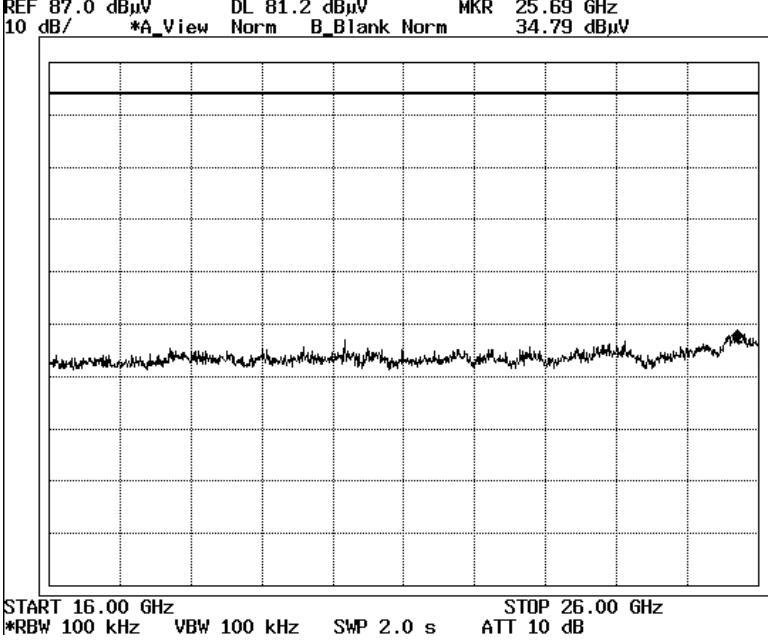
19. ch 40: 2.475GHz: External Attenuator 10dB



20. ch 40: 2.475GHz: External Attenuator 10dB



21. ch 40: 2.475GHz: External Attenuator 10dB

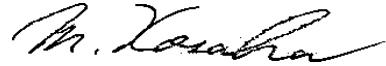


Peak Power Density(Conducted)

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

Company : SHARP Corporation
Equipment : Cordless Telephone Equipment
Model : BB-HC1
Sample No. : 1
FCC ID : APYHRO00026
Power : AC120V/60Hz
Mode : Transmitting(ch1,20,40)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247(d)
Date : 2002/04/17
Temperature : 23deg.C
Humidity : 70%



ENGINEER : Makoto Kosaka

ch	FREQ [GHz]	S/A Reading [dBuV]	Cable Loss [dB]	ATTEN. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
ch00 : 2404.8MHz	2.405083	99.6	0.5	10.0	3.1	8.0	4.9
ch20: 2439.0MHz	2.439284	99.8	0.5	10.0	3.3	8.0	4.7
ch39: 2475.0MHz	2.474683	100.1	0.5	10.0	3.6	8.0	4.5

Sample Calculation :

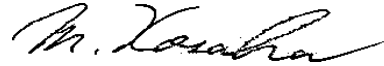
RESULT=Reading (-107:Converted to dBm) + ATTEN.

Peak Power Density(Conducted)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : BB-HC1K
Sample No. : 1
FCC ID : APYHRO00026
Power : DC 3.6V
Mode : Transmitting(ch1,20,40)

Report No. : 22HE0078-YW
Regulation : Fcc Part15SubpartC 247(d)
Date : 2002/01/26
Temperature : 28deg.C
Humidity : 22%



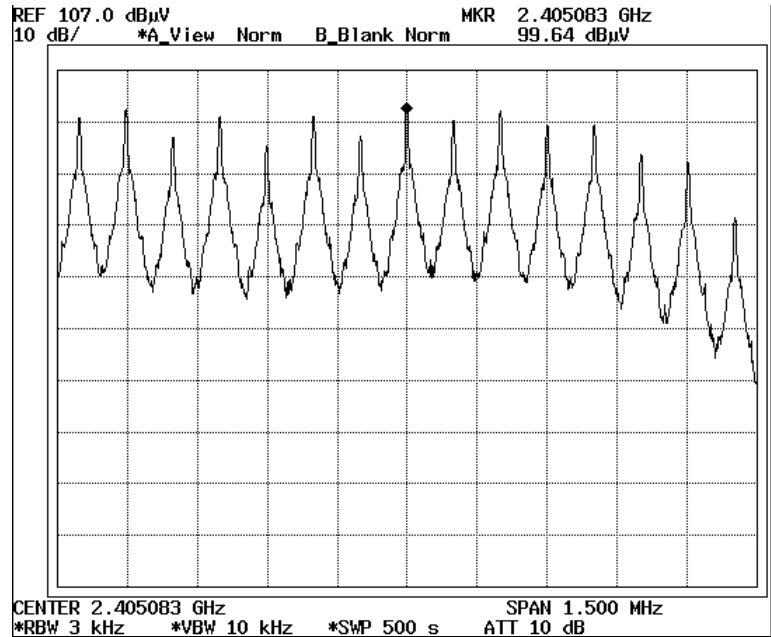
ENGINEER : Makoto Kosaka

ch	FREQ [GHz]	S/A Reading [dBuV]	Cable Loss [dB]	ATTEN. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
ch00 : 2404.8MHz	2.405132	99.6	0.5	10.0	3.1	8.0	4.9
ch20: 2439.0MHz	2.438732	100.5	0.5	10.0	4.0	8.0	4.0
ch39: 2475.0MHz	2.474732	100.5	0.5	10.0	4.0	8.0	4.0

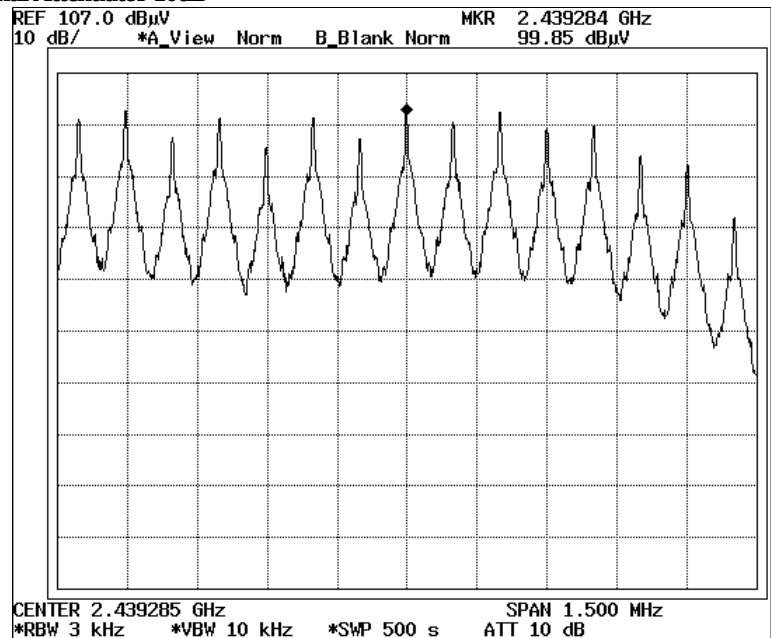
Sample Calculation :

RESULT=Reading (-107:Converted to dBm) + ATTEN.

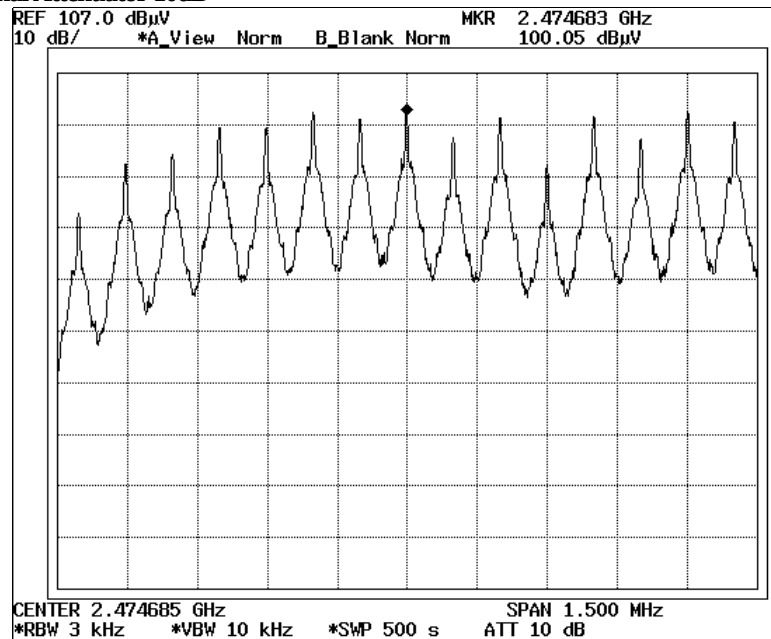
1. ch 1: 2.4048GHz: External Attenuator 10dB



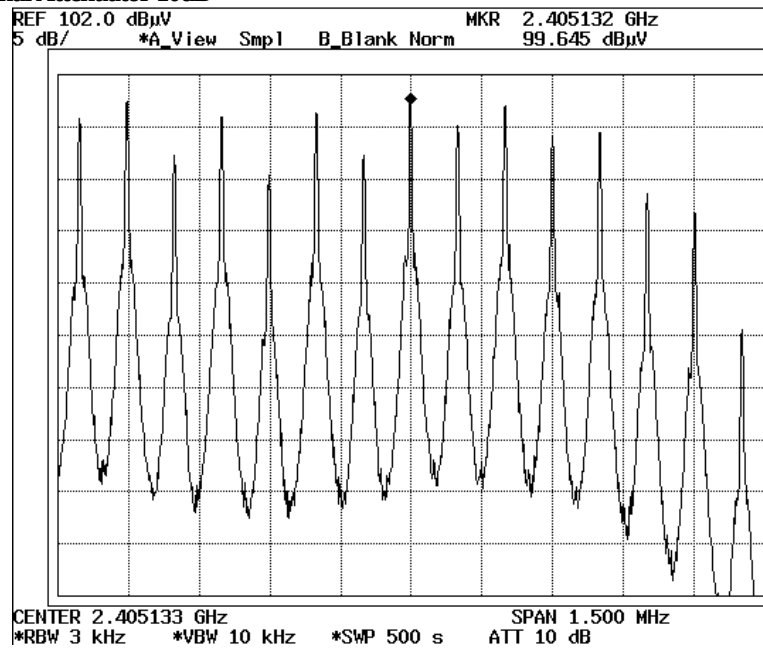
2. ch 20: 2.439GHz: External Attenuator 10dB



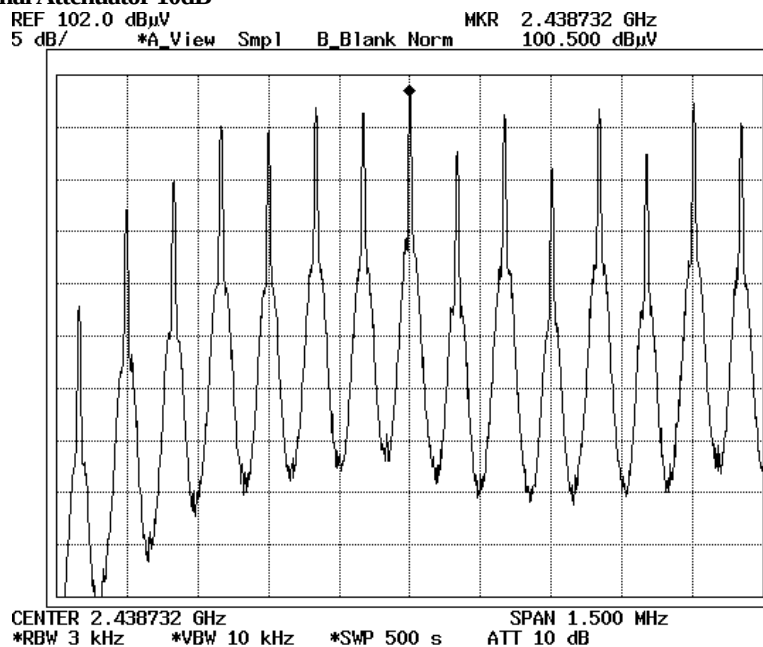
3. ch 40: 2.475GHz: External Attenuator 10dB



1. ch 1: 2.4048GHz: External Attenuator 10dB



2. ch 20: 2.439GHz: External Attenuator 10dB



3. ch 40: 2.475GHz: External Attenuator 10dB

