

EMI TEST REPORT

Test Report No. : 22FE0027-YW

Applicant:	Sharp Corporation
Type of Equipment:	Facsimile Equipment / Cordless Handset
Model No.:	UX-CL220 (Facsimile Equipment) UX-CL220K (Cordless Handset)
Test standard:	FCC Part 15 Subpart C Section 15.247
FCC ID:	APYHRO00025
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: January 25-30, 2002

Issued date: April 2, 2002

Tested by:



Makoto Kosaka
EMC Section

Approved by:



Kazutoyo Nakanishi
Site Operation Manager of EMC Section

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MF060b(22.05.01)

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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 : +81-743-55-4085
Facsimile Number : +81-743-52-9514
Contact Person : Shigekazu Fujiwara

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

Type of Equipment : Facsimile Equipment / Cordless Handset
Model No. : UX-CL220 (Facsimile Equipment)
UX-CL220K (Cordless Handset)
Serial No. : Sample No. 5 / No. 45 (Facsimile Equipment)
Sample No. 1 / No. 000055 (Cordless Handset)
*Facsimile Equipment, Sample No. 45, and Cordless Handset,
Sample No. 000055, were made over for conducted test of radio.
Rating : AC 120V/ 60Hz (Facsimile Equipment)
DC 3.6V Ni-MH Battery (Cordless Handset)
AC120V/60Hz (AC Adaptor with Cordless Handset)
Country of Manufacture : Thailand
Receipt Date of Sample : January 22, 2002

2.2 Product Description

Model: UX-CL220 is a Facsimile Equipment and Model: UX-CL220K is a Cordless Handset.

They are referred to as the EUT in this report.

Frequency Characteristics : 2404.8MHz-2475.0MHz (Facsimile Equipment and Cordless Handset)
Channel Characteristics : 40channels selectable by 1.8MHz spacing.
Modulation : DBPSK (Differential Binary Phase Shift Keyed)
Antenna type : Dipole Antenna (Facsimile Equipment), Whip Antenna (Cordless Handset)
Antenna Gain : 2.9dBi (Facsimile Equipment), 3.08dBi (Cordless Handset)
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)	Radiated
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, Facsimile 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.

The test date is referred to the files: Processing_Gain.PDF, processin_gain_B.PDF, and processing_gain_K.PDF

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;

Facsimile Equipment

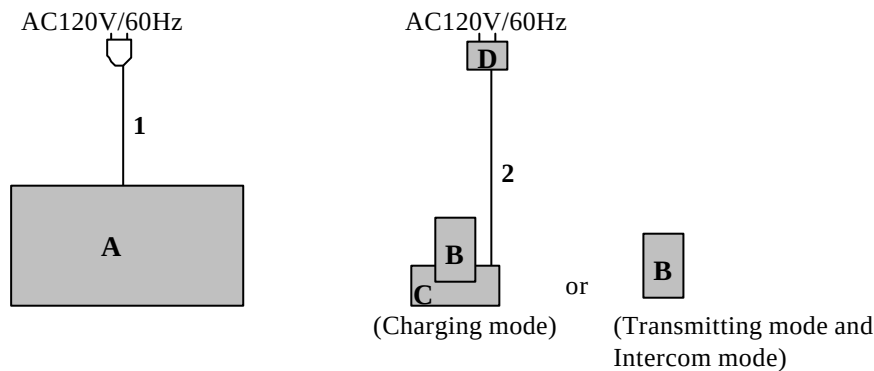
- Transmitting mode (ch1: 2404.8MHz, ch20: 2439MHz, ch40: 2475MHz)
- Intercom mode (Conducted emission only)

Cordless Handset

- Transmitting mode (ch1: 2404.8MHz, ch20: 2439MHz, ch40: 2475MHz / Except for Conducted emission test)
- Intercom mode (Conducted emission only)
- 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	Facsimile Equipment	UX-CL220	Sample No.5 / No.45	SHARP	APYHRO00025
B	Cordless Handset	UX-CL220K	Sample No.1 / No.000055	SHARP	APYHRO00025
C	Cordless Handset Charger	-	-	SHARP	-
D	AC Adaptor	A20930N	-	SHARP	-

*C and D are intended to be supplied with the products.

List of cables used

No.	Name	Length (m)	Shield	Remark
1	AC Power Cable	1.85	N	-
2	DC Power Cable	1.95	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.

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

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

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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, 1m by 1.5m, 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 A13 (APPENDIX 3)

Photographs of test setup : Page 18-21

Test result : Pass

Test instruments : LS-03, LS-04, SA-04, TR-05

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	1.512	> 500	Pass
	Handset	1.542	> 500	Pass
Ch20 2.4390	Base	1.512	> 500	Pass
	Handset	1.530	> 500	Pass
Ch40 2.4750	Base	1.528	> 500	Pass
	Handset	1.510	> 500	Pass

Test data : Page A14 to A15 (APPENDIX 3)

Test result : Pass

Test instruments :SA-06, AT-15

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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 A16 to A17 (APPENDIX 3)

Test result : Pass

Test instruments : PS-01, PM-01, SA-06, AT-15

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 A18 to A20 (APPENDIX 3)

Test result : Pass

Test instruments : SA-06, AT-15

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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, and then the worst case in these positions was 90 degrees under both of the horizontal and vertical antenna polarization. The cordless handset was also previously checked at each position of three axes X, Y and Z to find that X axis was worst in these positions under the horizontal antenna polarization and that Y axis was worst in these positions under the vertical antenna polarization. The position in which the maximum noise occurred was chosen to put into measurement. See the photographs in the 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 A21 to A26 (APPENDIX 3)

: 1 – 26GHz : Page A27 to A32 (APPENDIX 3)

: Restricted Band Edges:2390MHz/2483.5MHz : Page A33 to A50 (APPENDIX 3)

Photographs of test setup : Page 22-23

Test result : Pass

**Test instruments : AF-01, AF-06, BA-03, LA-06, HA-02, SA-04, SA-06,
AT-06, EST-10, HF-04**

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 = $20 \log (T_{\text{width}} / T_{\text{period}}) = 20 \log (945 \times 10^{-6} / 2 \times 10^{-3}) = -6.512$

Test instruments : SA-06, AT-15

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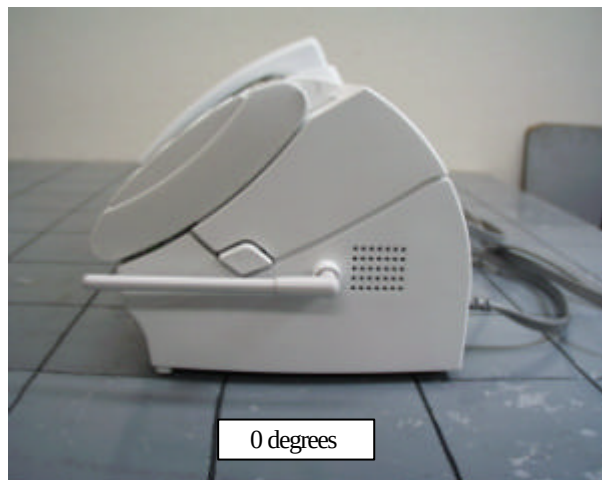
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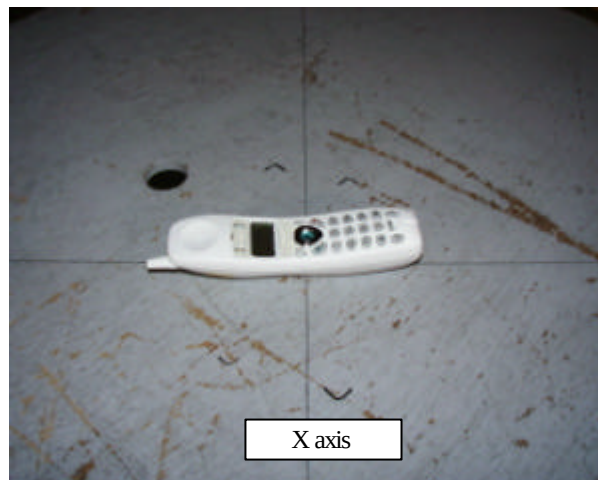
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Pre check of worse-case position

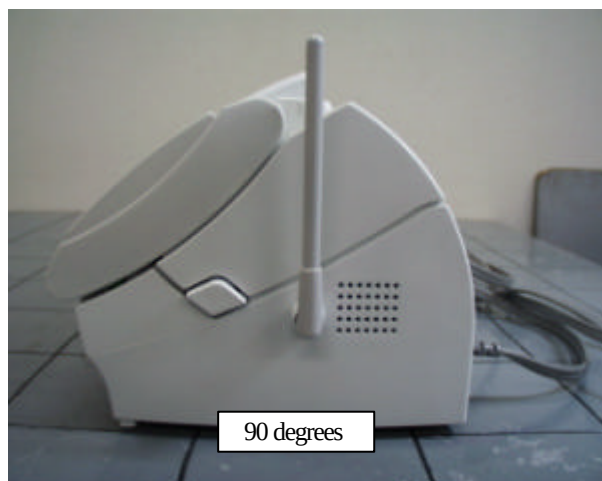
Facsimile Equipment



Cordless Handset



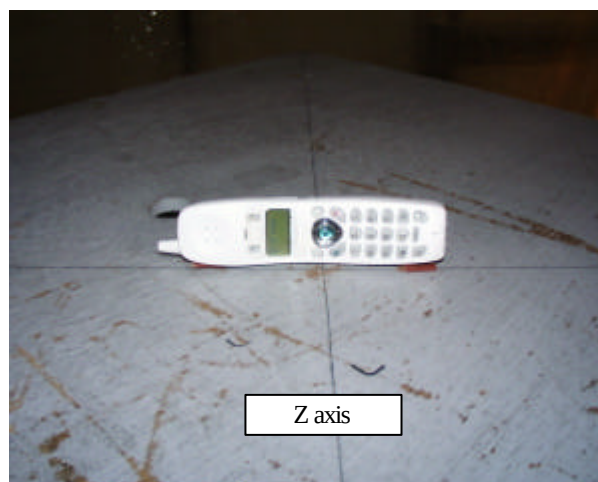
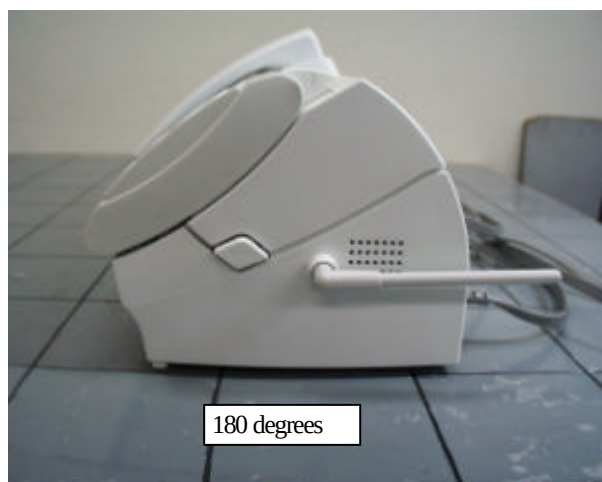
Worse case (Antenna: Horizontal)



Worse case (Antenna: Vertical / Horizontal)



Worse case (Antenna: Vertical)



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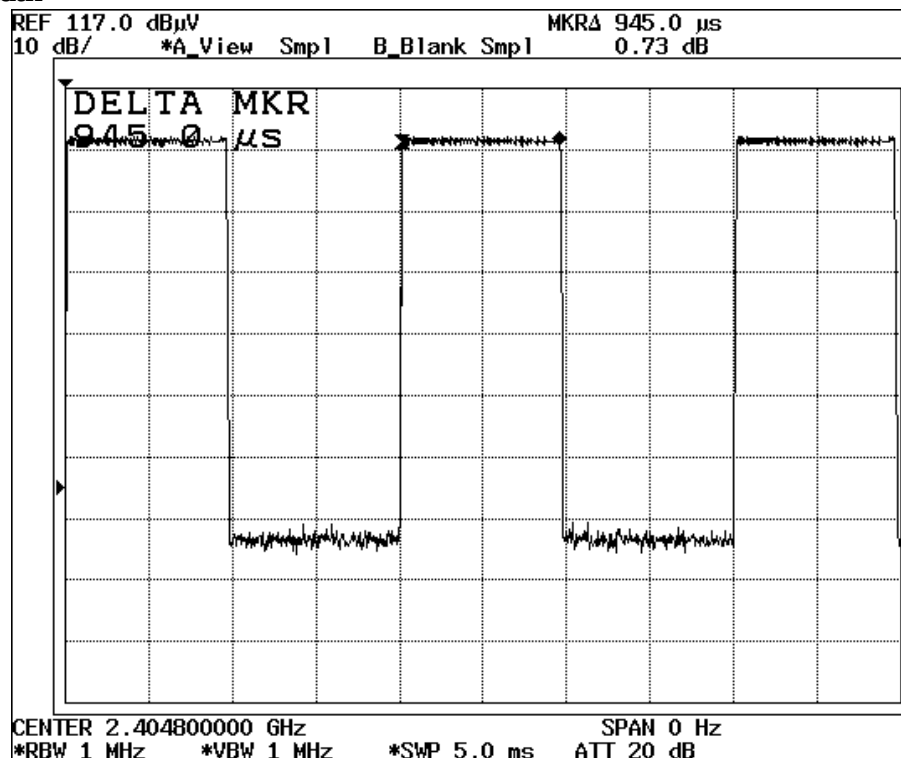
Telephone: int +81 596 39 1485

Facsimile: int +81 596 39 0232

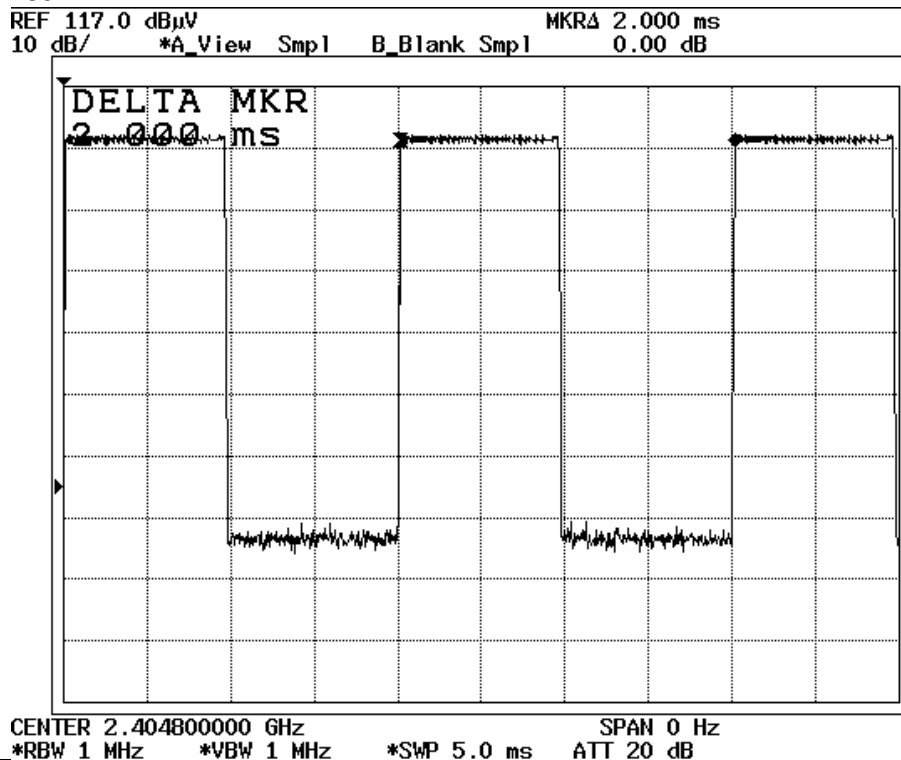
Duty cycle under normal operation

(Facsimile Equipment)

T width



T period



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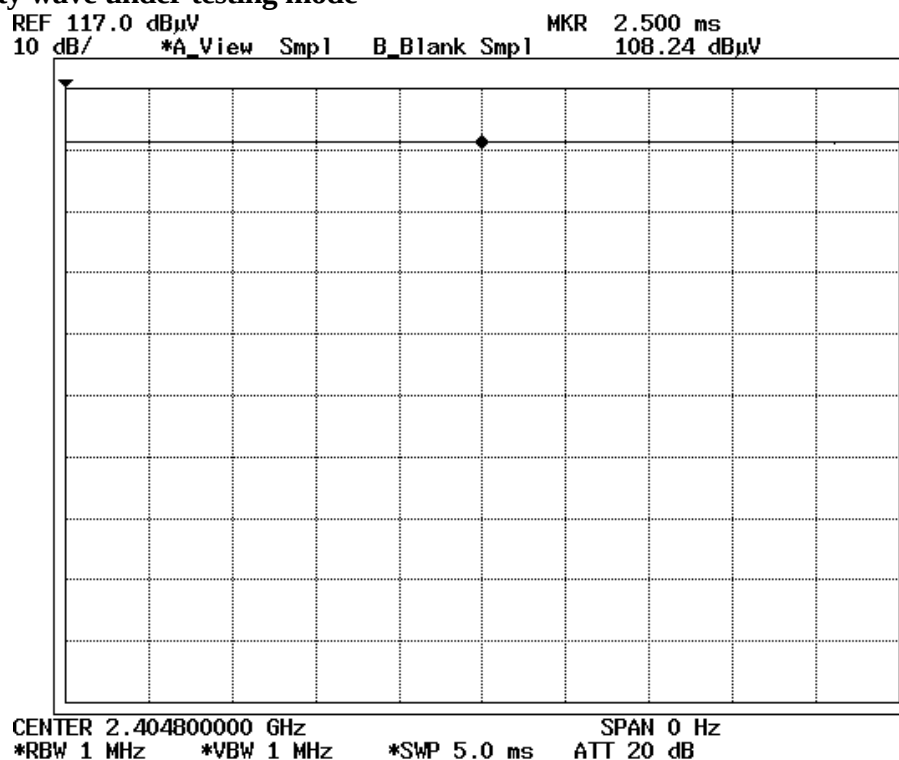
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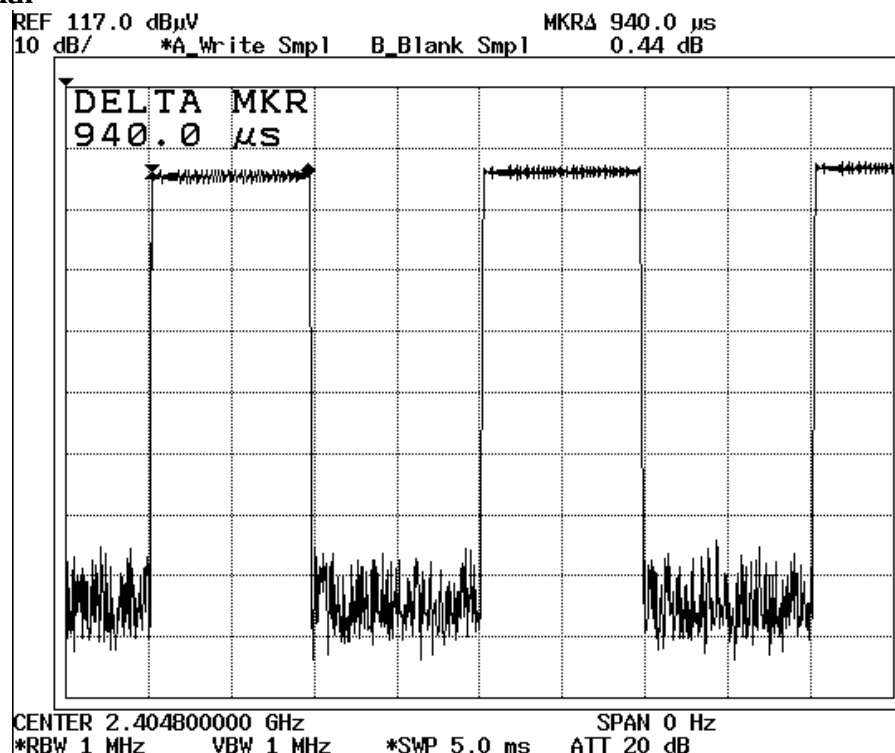
Facsimile: int +81 596 39 0232

Duty wave under testing mode



(Cordless Handset)

T width



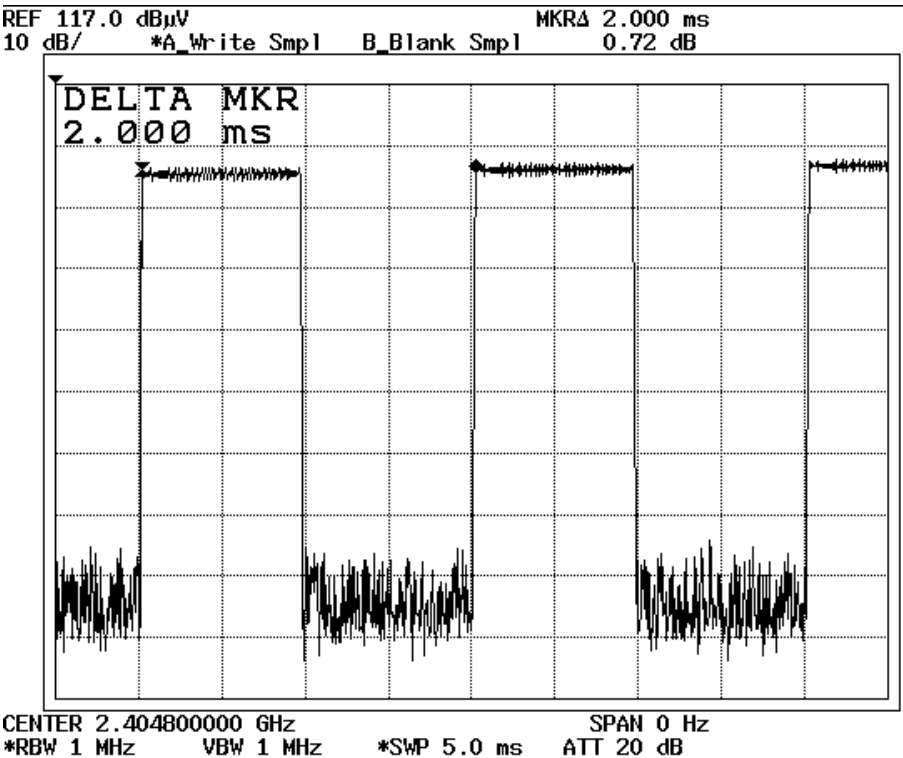
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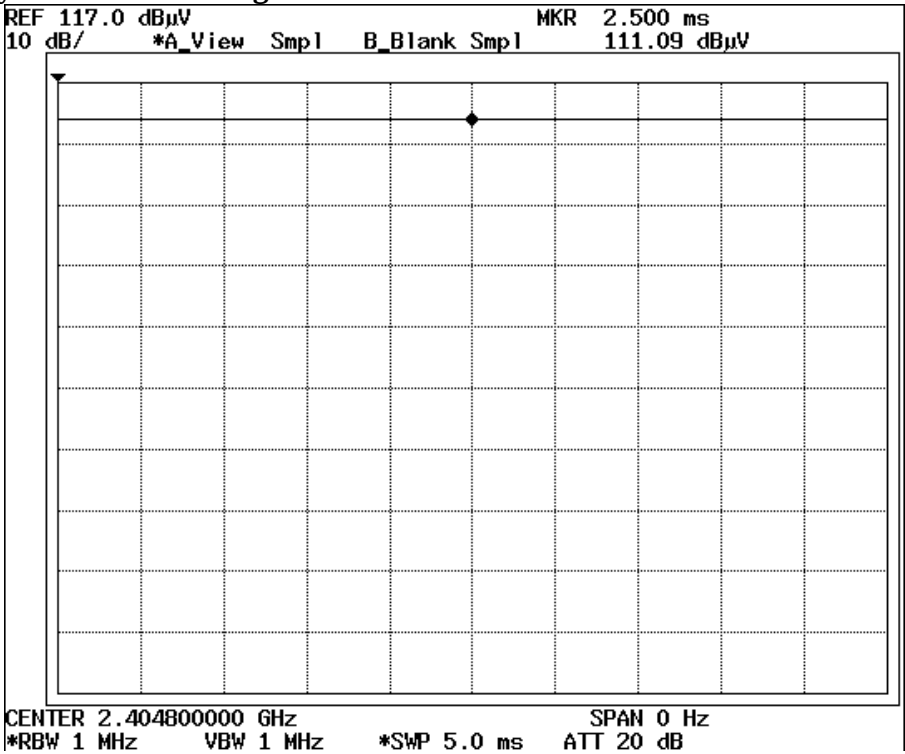
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T period



Duty wave under testing mode



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 A51 to A64 (APPENDIX 3)

Test result : Pass

Test instruments : SA-06, AT-15

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 A65 to A68 (APPENDIX 3)

Test result : Pass

Test instruments : SA-06, AT-15

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APPENDIX 1: Photographs of test setup

Page 18-21: Conducted emission (AC Mains)

Page 22-23: Radiated emission

APPENDIX 2: Test instruments

Page 24: Test instruments

APPENDIX 3: Data of EMI test

Page A1-A13: Conducted emission (AC Mains)

Page A14-A15: 6dB Bandwidth (Conducted)

Page A16-A17: Maximum peak output power (Conducted)

Page A18-A20: Variation of input power (Conducted)

Page A21-A50: Out of band emissions (Radiated)

Page A51-A64: Out of band emissions (Conducted)

Page A65-A68: Power density (Conducted)

Conducted emission (Facsimile Euipment; Worse case position)

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



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



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Intercom mode (Facsimile Equipment)



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Conducted emission (Cordless Handset; Worse case position)

Charging mode / Front view



Charging mode / Side view



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Intercom mode (Cordless Handset)



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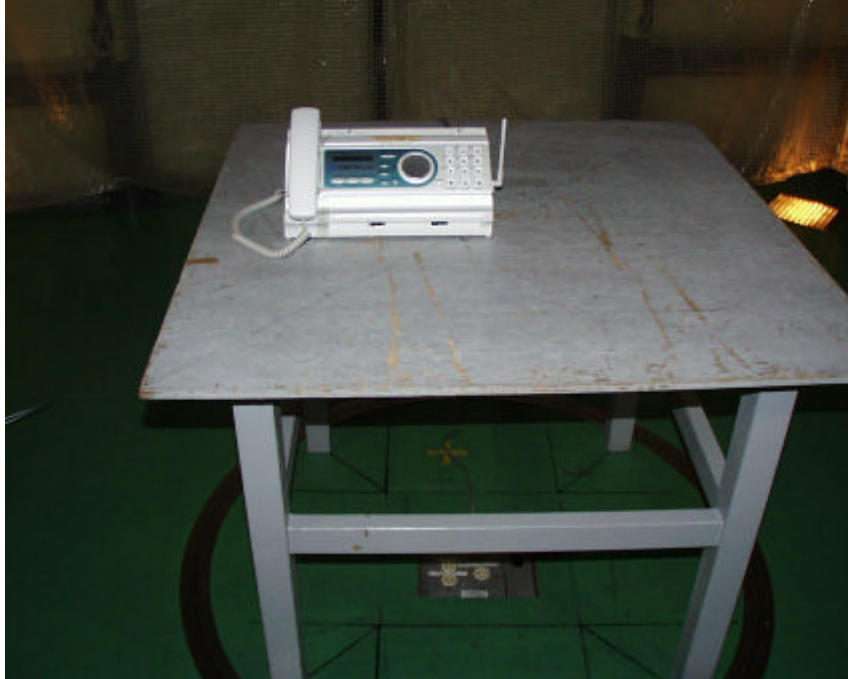
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Telephone: int +81 596 39 1485

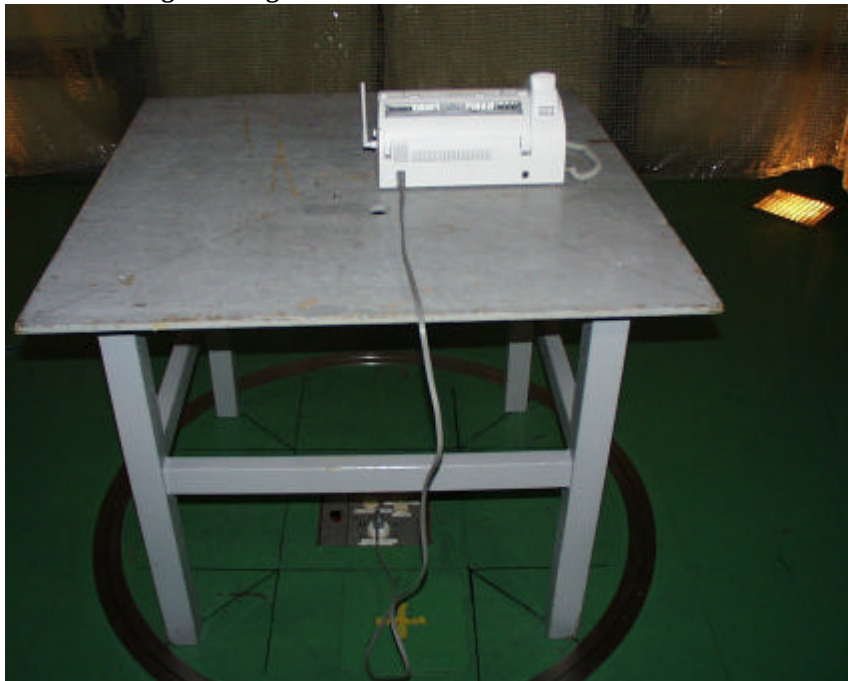
Facsimile: int +81 596 39 0232

Radiated emission (Facsimile Equipment; Worse case position)

Antennal angle: 90 degees / Front view



Antennal angle: 90 degees / Rear view



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Radiated emission (Cordless Handset; Worse case position)

Horizontal antenna polarization



Vertical antenna polarization



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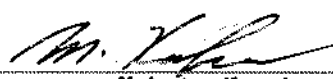
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DATA OF CONDUCTION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Facsimile Equipment
Model No. : UX-CL220
Serial No. : Sample No. 5
Power : AC120V/60Hz
Mode : Transmitting(ch1 2.4048GHz)
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation : FCC Part15.207


Engineer : Makoto Kosaka

No.	FREQ. [MHz]	READING (N)		READING (L1)		LISN FACTOR [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	27.0	-	26.7	-	0.1	0.1	0.0	27.2	-	48.0	0.0	20.8	-
2.	0.5410	33.9	-	32.1	-	0.1	0.1	0.0	34.1	-	48.0	0.0	13.9	-
3.	0.8113	31.4	-	32.3	-	0.1	0.1	0.0	32.5	-	48.0	0.0	15.5	-
4.	1.3541	32.8	-	32.4	-	0.1	0.1	0.0	33.0	-	48.0	0.0	15.0	-
5.	1.8960	28.5	-	27.5	-	0.1	0.2	0.0	28.8	-	48.0	0.0	19.2	-
6.	2.1656	26.1	-	27.8	-	0.2	0.2	0.0	28.2	-	48.0	0.0	19.8	-
7.	7.0413	22.5	-	23.5	-	0.3	0.3	0.0	24.1	-	48.0	0.0	23.9	-
8.	7.5834	20.5	-	21.8	-	0.4	0.3	0.0	22.5	-	48.0	0.0	25.5	-
9.	25.7396	34.7	-	34.4	-	0.9	0.5	0.0	36.1	-	48.0	0.0	11.9	-
10.	28.8000	39.7	-	39.3	-	0.9	0.5	0.0	41.1	-	48.0	0.0	6.9	-

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

All other spurious emissions were less than 20dB for the limit.

DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

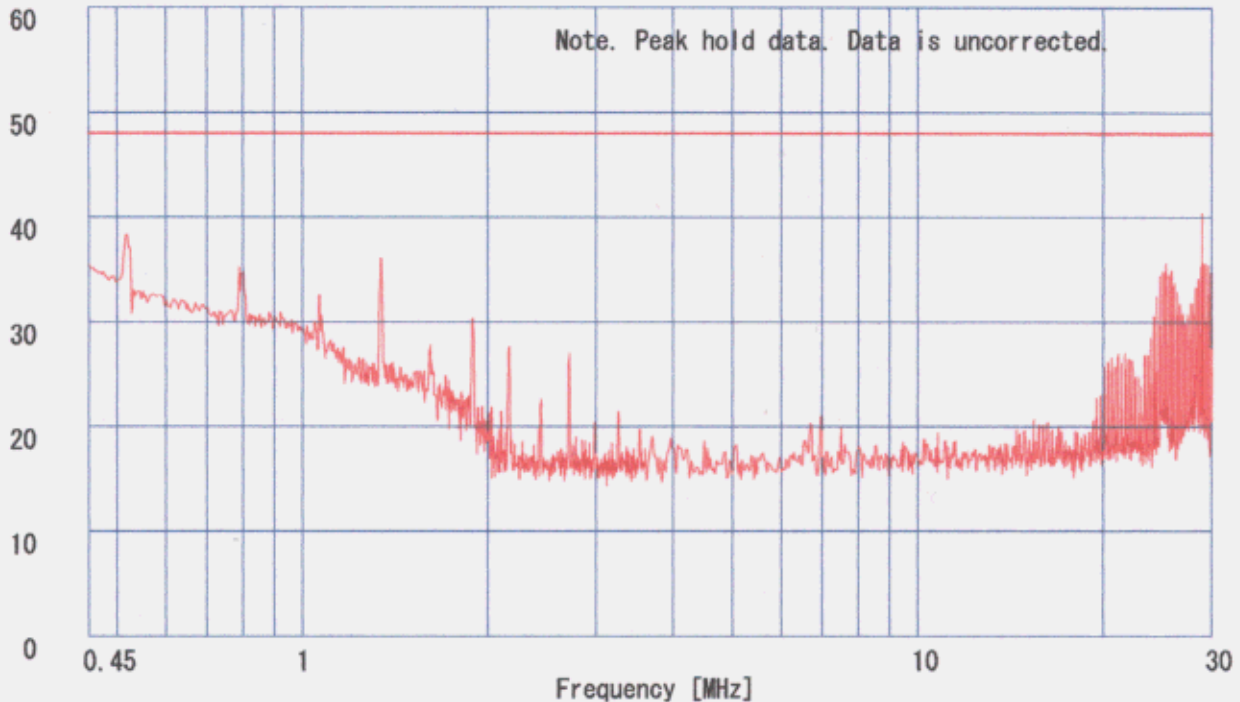
Report No. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Facsimile Equipment
Model No. : UX-CL220
Serial No. : Sample No.5
Power : AC120V/60Hz
Mode : Transmitting(ch1 2.4048GHz)
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207


Engineer : Makoto Kosaka

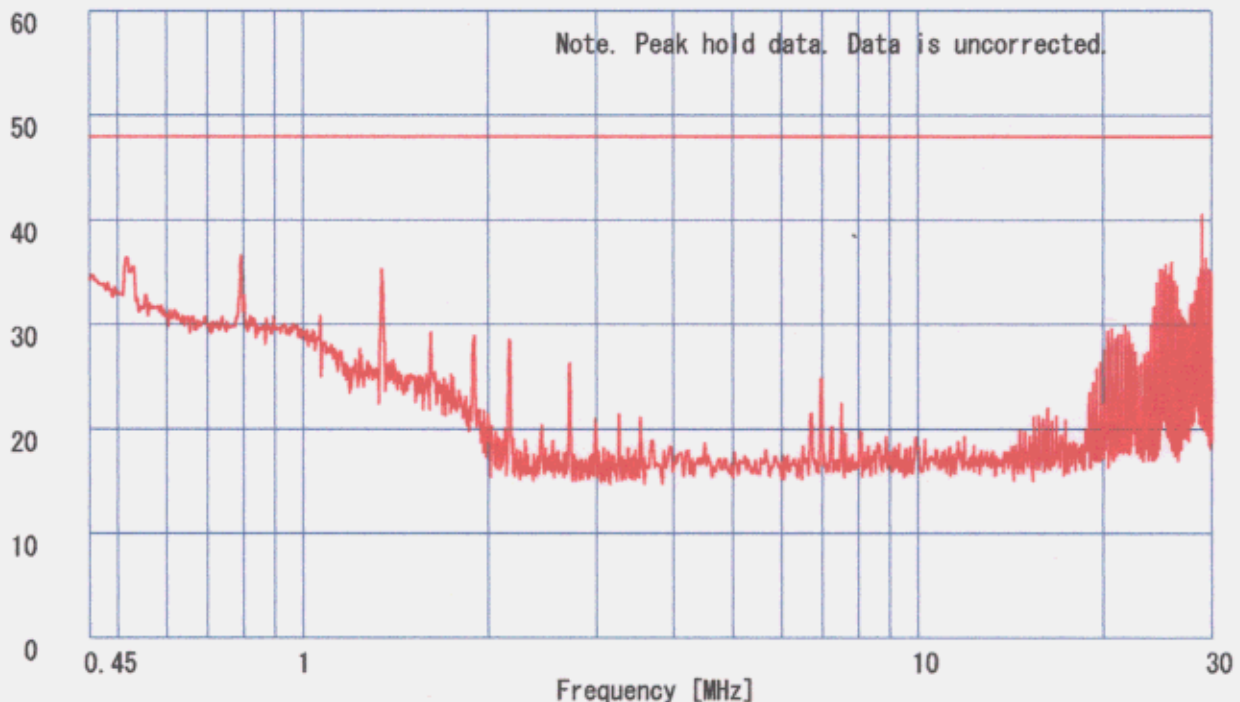
Emission Level [dB μ V]

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. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Facsimile Equipment
Model No. : UX-CL220
Serial No. : Sample No. 5
Power : AC120V/60Hz
Mode : Transmitting(ch20 2.439GHz)
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation : FCC Part15. 207


Engineer : Makoto Kosaka

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV				QP	AV	QP	AV	QP	AV
		[dBuV]		[dBuV]					[dBuV]		[dBuV]		[dB]	
1.	0.4500	27.1	-	26.7	-	0.1	0.1	0.0	27.3	-	48.0	0.0	20.7	-
2.	0.5410	34.1	-	32.1	-	0.1	0.1	0.0	34.3	-	48.0	0.0	13.7	-
3.	0.8113	31.8	-	32.4	-	0.1	0.1	0.0	32.6	-	48.0	0.0	15.4	-
4.	1.3532	32.9	-	32.5	-	0.1	0.1	0.0	33.1	-	48.0	0.0	14.9	-
5.	1.8944	28.6	-	27.5	-	0.1	0.2	0.0	28.9	-	48.0	0.0	19.1	-
6.	2.1655	26.4	-	27.9	-	0.2	0.2	0.0	28.3	-	48.0	0.0	19.7	-
7.	7.0401	23.1	-	23.9	-	0.3	0.3	0.0	24.5	-	48.0	0.0	23.5	-
8.	7.5812	21.0	-	22.3	-	0.4	0.3	0.0	23.0	-	48.0	0.0	25.0	-
9.	25.7332	35.0	-	34.6	-	0.9	0.5	0.0	36.4	-	48.0	0.0	11.6	-
10.	28.8000	39.8	-	39.4	-	0.9	0.5	0.0	41.2	-	48.0	0.0	6.8	-

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

All other spurious emissions were less than 20dB for the limit.

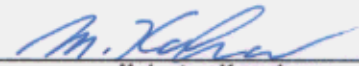
DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

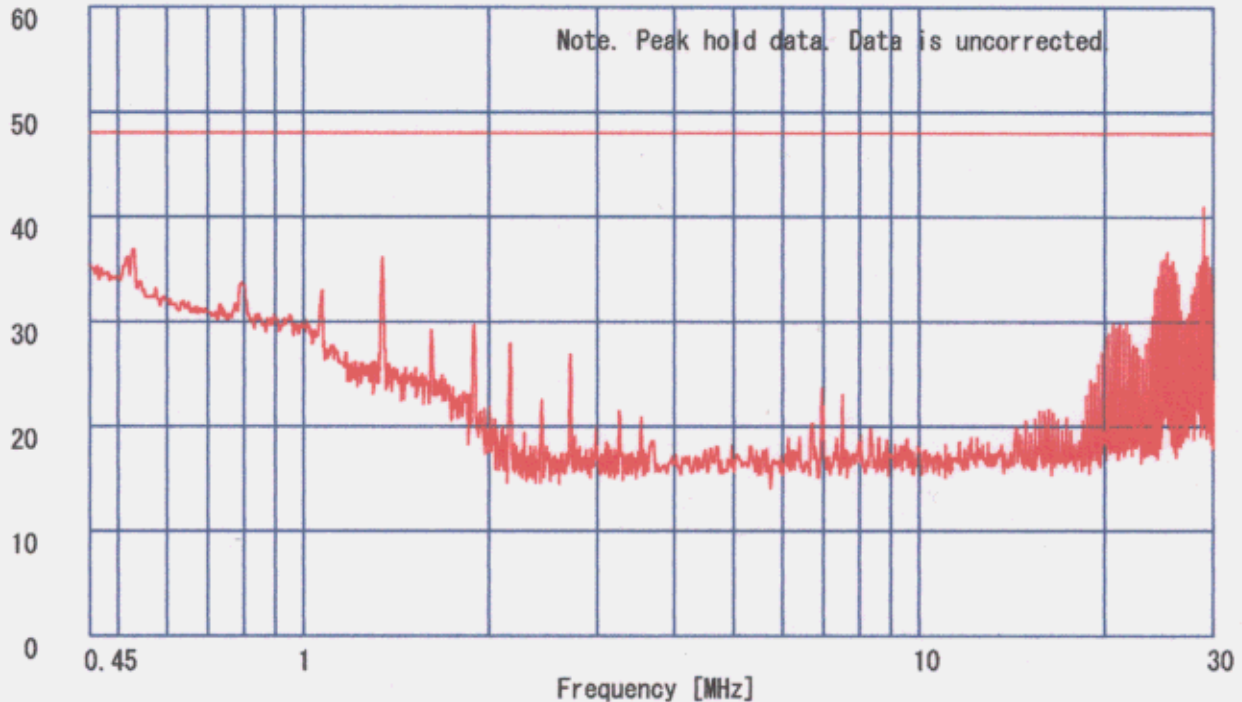
Report No. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Facsimile Equipment
Model No. : UX-CL220
Serial No. : Sample No.5
Power : AC120V/60Hz
Mode : Transmitting(ch20 2.439GHz)
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207


Engineer : Makoto Kosaka

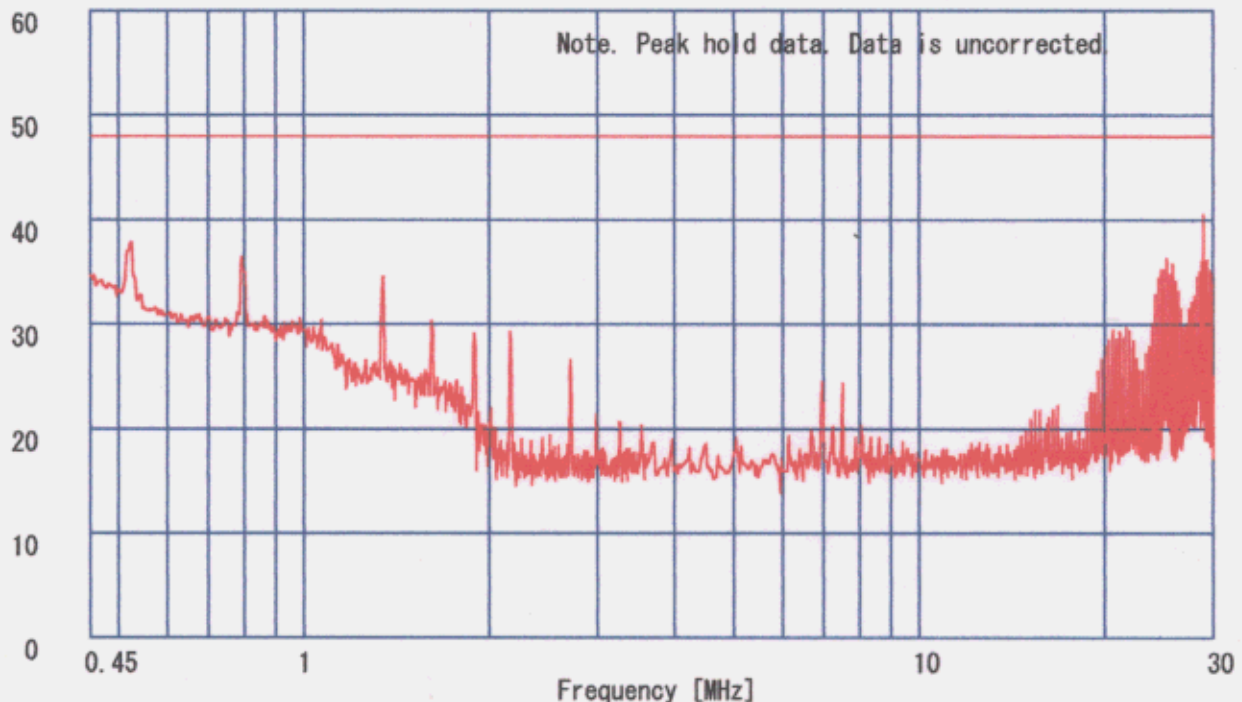
Emission Level [dB μ V]

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. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Facsimile Equipment
Model No. : UX-GL220
Serial No. : Sample No. 5
Power : AC120V/60Hz
Mode : Transmitting (ch40 2.475GHz)
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation : FCC Part15.207


Engineer : Makoto Kosaka

No.	FREQ. [MHz]	READING (N)		READING (L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV				QP	AV	QP	AV	QP	AV
		[dBuV]		[dBuV]					[dBuV]		[dBuV]		[dB]	
1.	0.4500	27.0	-	26.8	-	0.1	0.1	0.0	27.2	-	48.0	0.0	20.8	-
2.	0.5400	34.1	-	32.0	-	0.1	0.1	0.0	34.3	-	48.0	0.0	13.7	-
3.	0.8091	31.8	-	32.2	-	0.1	0.1	0.0	32.4	-	48.0	0.0	15.6	-
4.	1.3501	32.9	-	32.1	-	0.1	0.1	0.0	33.1	-	48.0	0.0	14.9	-
5.	1.8906	28.3	-	26.9	-	0.1	0.2	0.0	28.6	-	48.0	0.0	19.4	-
6.	2.1629	26.4	-	27.8	-	0.2	0.2	0.0	28.2	-	48.0	0.0	19.8	-
7.	7.0271	23.8	-	24.5	-	0.3	0.3	0.0	25.1	-	48.0	0.0	22.9	-
8.	7.5670	20.9	-	22.0	-	0.4	0.3	0.0	22.7	-	48.0	0.0	25.3	-
9.	25.1493	35.2	-	34.8	-	0.9	0.5	0.0	36.6	-	48.0	0.0	11.4	-
10.	28.8000	39.9	-	39.6	-	0.9	0.5	0.0	41.3	-	48.0	0.0	6.7	-

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

All other spurious emissions were less than 20dB for the limit.

DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

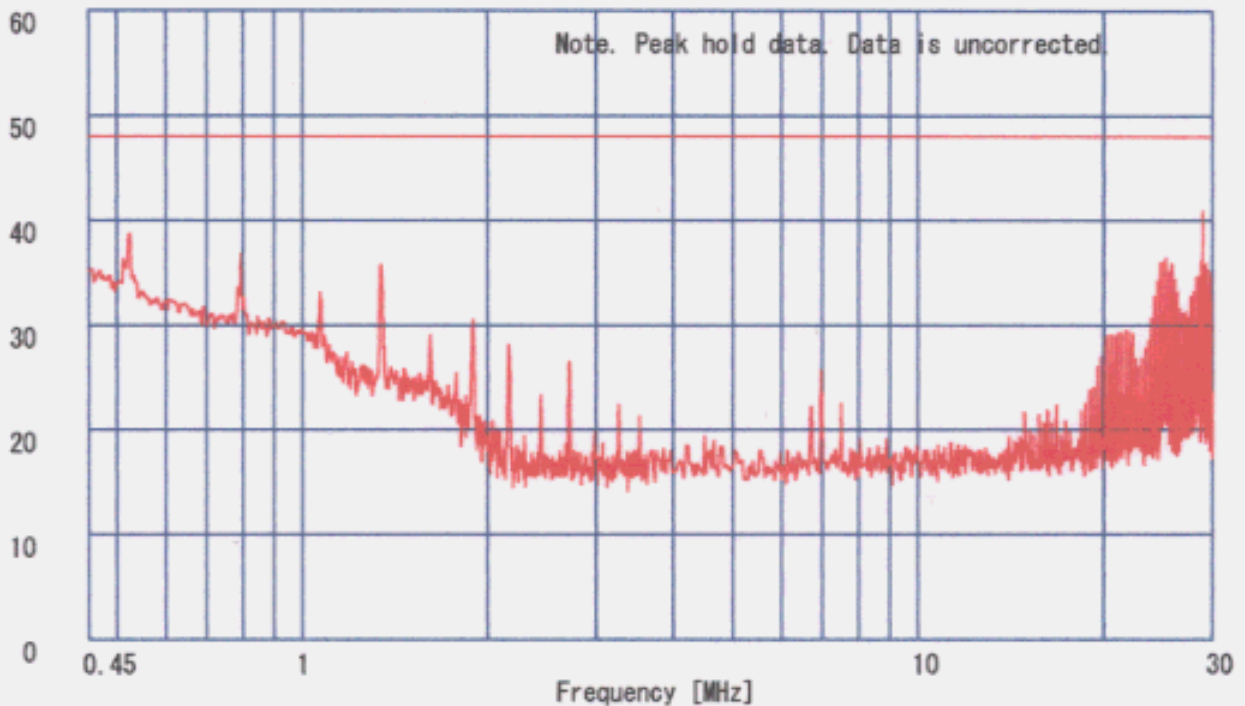
Report No. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Facsimile Equipment
Model No. : UX-CL220
Serial No. : Sample No.5
Power : AC120V/60Hz
Mode : Transmitting(ch40 2.475GHz)
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207


Engineer : Makoto Kosaka

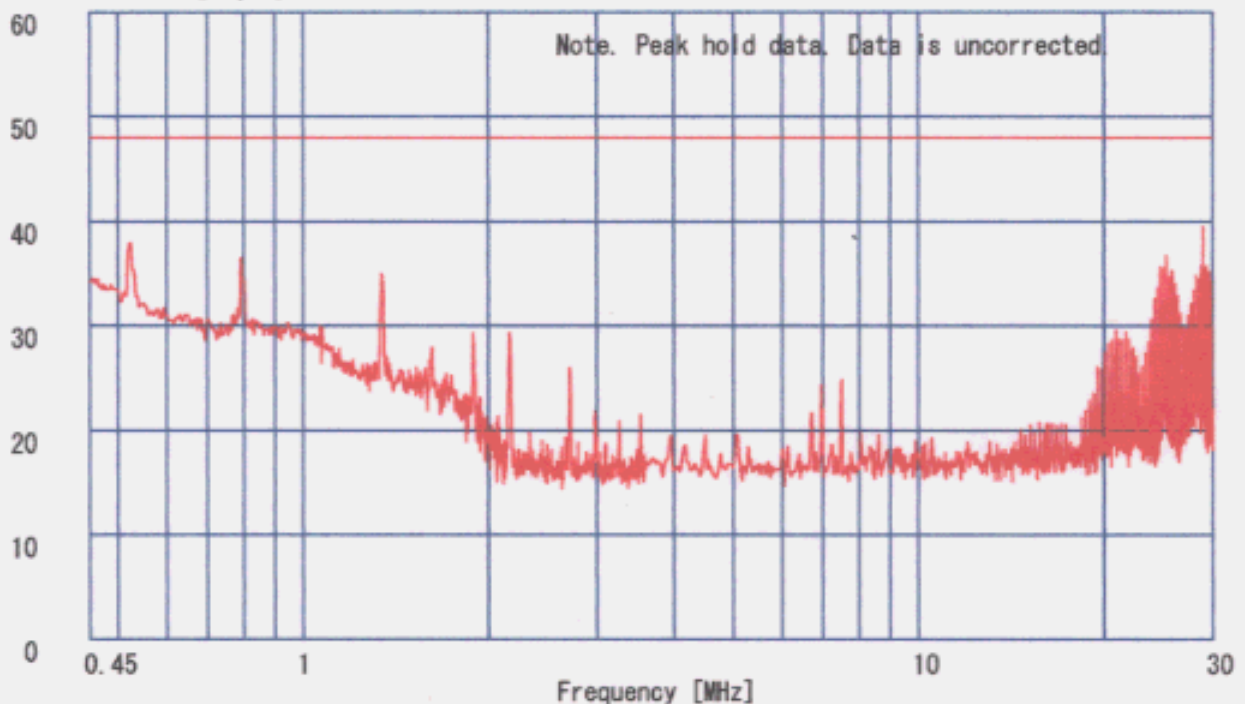
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

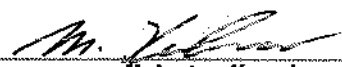
PHASE:L1



DATA OF CONDUCTION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Facsimile Equipment
Model No. : UX-CL220
Serial No. : Sample No. 5
Power : AC120V/60Hz
Mode : Intercom
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation : FCC Part15. 207


Engineer : Makoto Kosaka

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV				QP	AV	QP	AV	QP	AV
		[dBuV]		[dBuV]					[dBuV]		[dBuV]		[dB]	
1.	0.4500	26.9	-	26.5	-	0.1	0.1	0.0	27.1	-	48.0	0.0	20.9	-
2.	0.5449	33.0	-	31.1	-	0.1	0.1	0.0	33.2	-	48.0	0.0	14.8	-
3.	0.7976	32.5	-	32.9	-	0.1	0.1	0.0	33.1	-	48.0	0.0	14.9	-
4.	1.3619	31.4	-	31.2	-	0.1	0.1	0.0	31.6	-	48.0	0.0	16.4	-
5.	1.9070	27.6	-	27.0	-	0.1	0.2	0.0	27.9	-	48.0	0.0	20.1	-
6.	2.1797	23.3	-	25.5	-	0.2	0.2	0.0	25.9	-	48.0	0.0	22.1	-
7.	6.9182	22.0	-	22.6	-	0.3	0.2	0.0	23.1	-	48.0	0.0	24.9	-
8.	25.7660	24.7	-	23.9	-	0.9	0.5	0.0	26.1	-	48.0	0.0	21.9	-
9.	28.7989	39.1	-	39.0	-	0.9	0.5	0.0	40.5	-	48.0	0.0	7.5	-

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

All other spurious emissions were less than 20dB for the limit.

DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

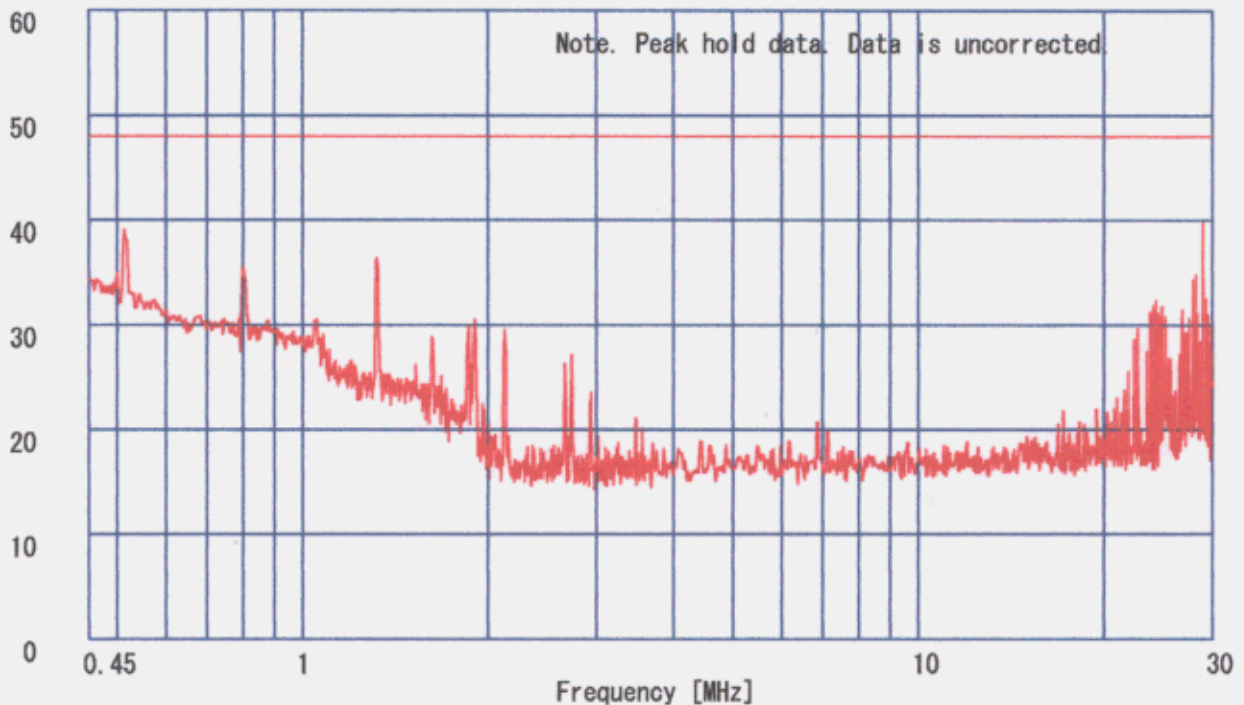
Report No. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Facsimile Equipment
Model No. : UX-CL220
Serial No. : Sample No.5
Power : AC120V/60Hz
Mode : Intercom
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207


Engineer : Makoto Kosaka

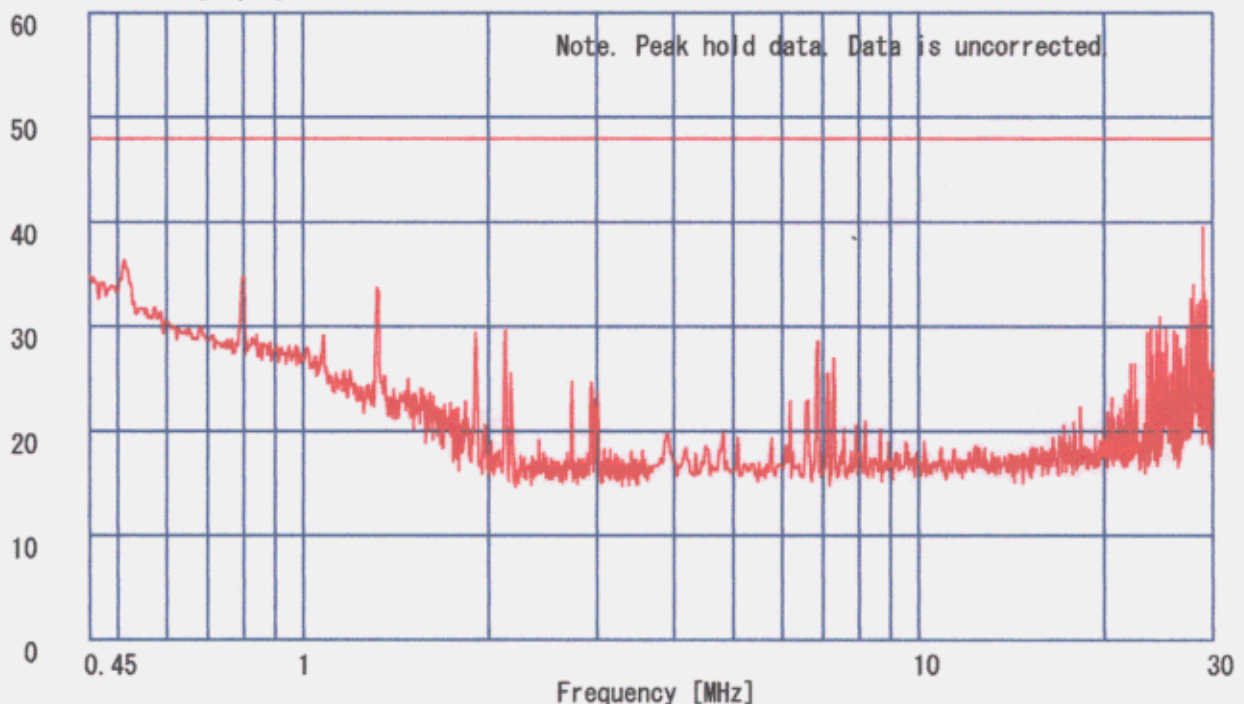
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

PHASE:L1



DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

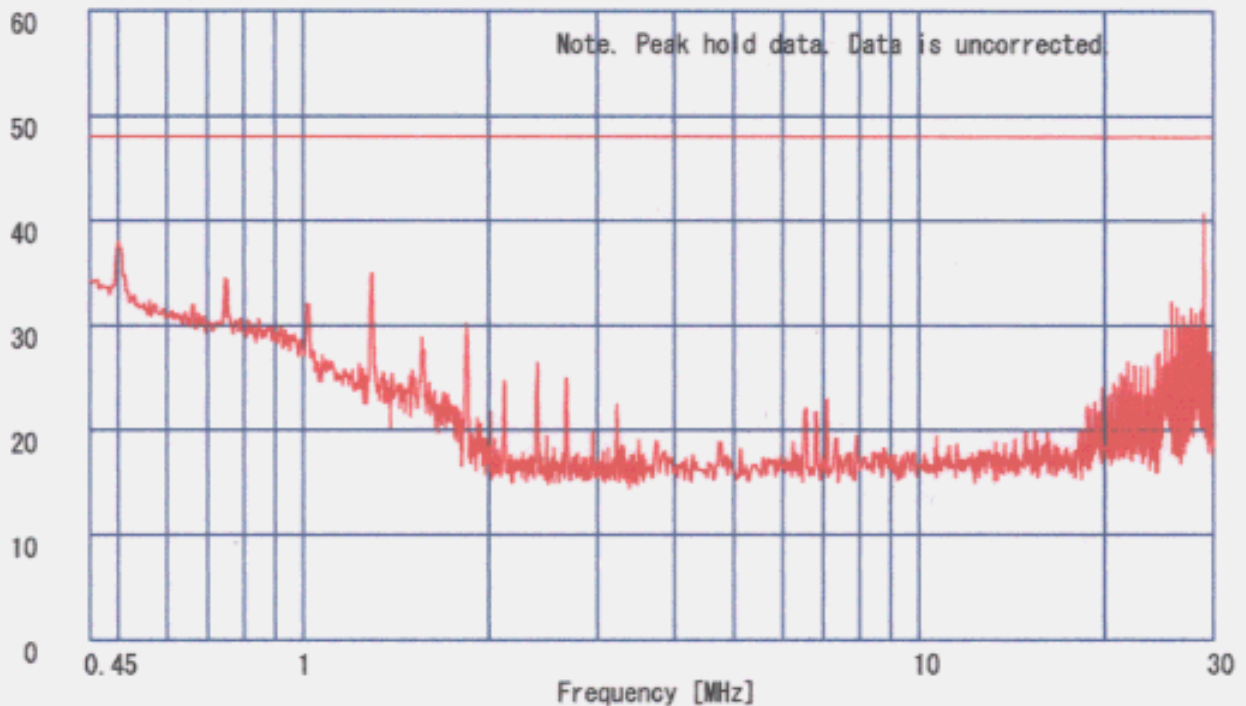
Report No.: 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Facsimile Equipment
Model No. : UX-CL220
Serial No. : Sample No. 5
Power : AC120V/60Hz
Mode : Stand-by
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207


Engineer : Makoto Kosaka

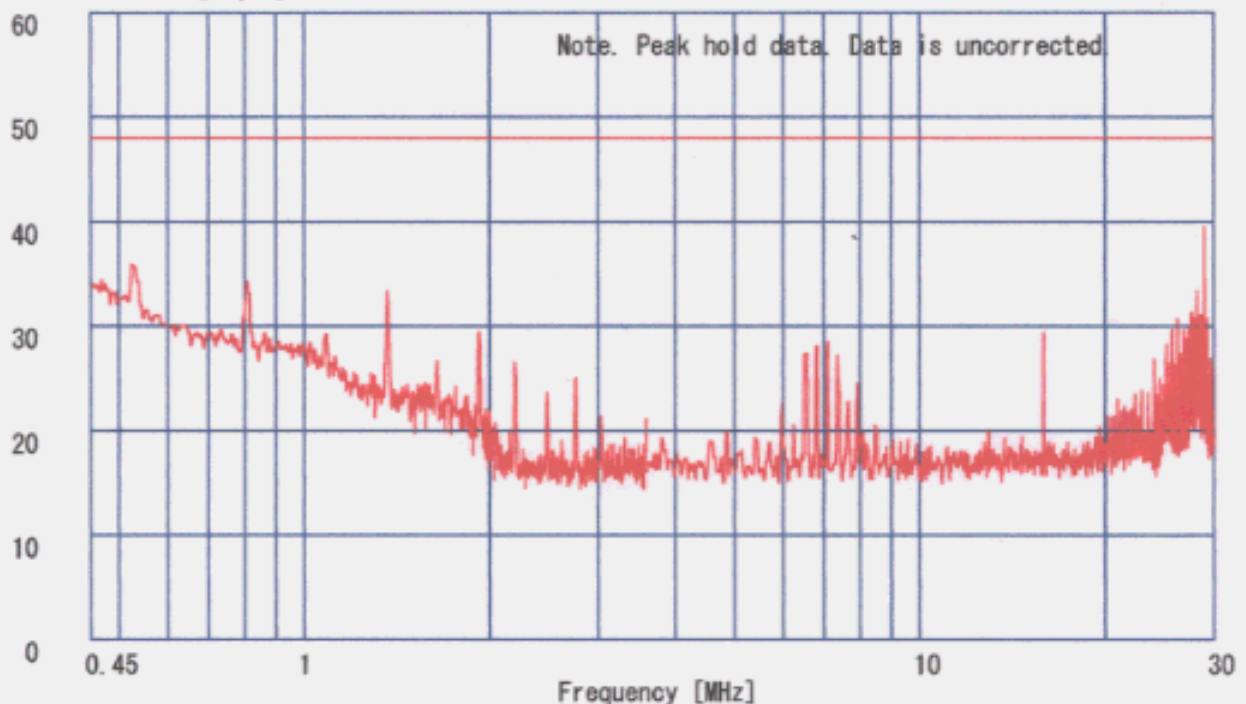
Emission Level [dB μ V]

PHASE:N



Emission Level [dB μ V]

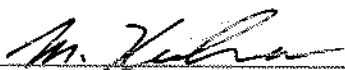
PHASE:L1



DATA OF CONDUCTION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Handset
Model No. : UX-CL220K
Serial No. : Sample No. 1
Power : AC120V/60Hz
Mode : Charging
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation : FCC Part15. 207


Engineer : Makoto Kosaka

No.	FREQ. [MHz]	READING(N)		READING(L1)		LISN FACTOR [dB]	CABLE LOSS [dB]	ATTEN. [dB]	RESULT		LIMITS		MARGIN	
		QP	AV	QP	AV				QP	AV	QP	AV	QP	AV
		[dBuV]		[dBuV]					[dBuV]		[dBuV]		[dB]	
1.	0.4500	25.7	-	26.3	-	0.1	0.1	0.0	26.5	-	48.0	0.0	21.5	-
2.	0.5000	22.4	-	22.9	-	0.1	0.1	0.0	23.1	-	48.0	0.0	24.9	-
3.	0.6000	11.3	-	11.8	-	0.1	0.1	0.0	12.0	-	48.0	0.0	36.0	-
4.	0.8176	11.8	-	12.2	-	0.1	0.1	0.0	12.4	-	48.0	0.0	35.6	-
5.	1.5320	1.2	-	3.2	-	0.1	0.1	0.0	3.4	-	48.0	0.0	44.6	-
6.	28.7996	18.6	-	21.7	-	0.9	0.5	0.0	23.1	-	48.0	0.0	24.9	-

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

All other spurious emissions were less than 20dB for the limit.

DATA OF CONDUCTION TEST CHART

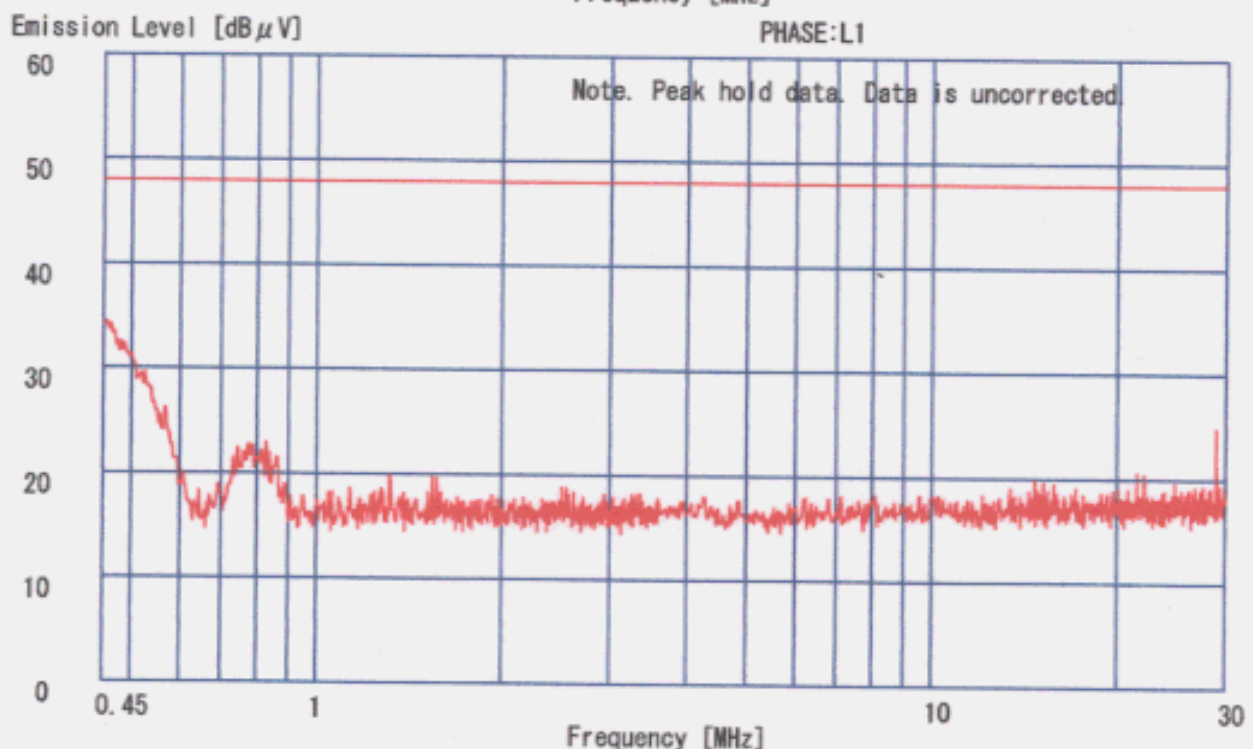
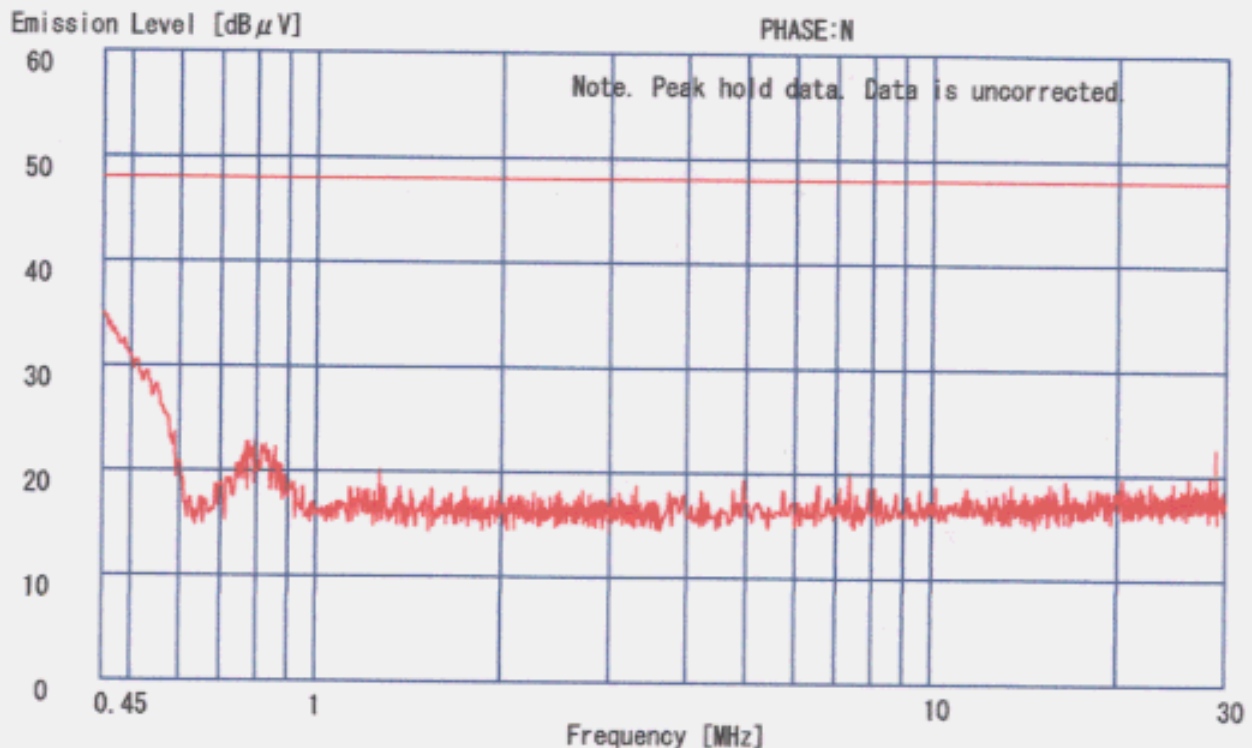
A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

Report No. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Handset
Model No. : UX-CL220K
Serial No. : Sample No. 1
Power : AC120V/60Hz
Mode : Charging
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207

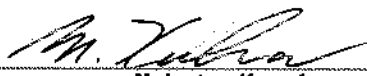

Engineer : Makoto Kosaka



DATA OF CONDUCTION TEST

A-PEX INTERNATIONAL CO., LTD.
YOKOWA No.3 OPEN TEST SITE
Report No. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Handset
Model No. : UX-GL220K
Serial No. : Sample No. 1
Power : AC120V/60Hz
Mode : Intercom
Remarks : FCC ID: APYHRO00025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation : FCC Part15. 207


Engineer : Makoto Kosaka

No.	FREQ. [MHz]	READING (N)		READING (L1)		LISN FACTOR [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	25.8	-	27.6	-	0.1	0.1	0.0	27.8	-	48.0	0.0	20.2	-
2.	0.5000	22.5	-	24.5	-	0.1	0.1	0.0	24.7	-	48.0	0.0	23.3	-
3.	0.6000	11.5	-	11.8	-	0.1	0.1	0.0	12.0	-	48.0	0.0	36.0	-
4.	0.8176	12.2	-	13.5	-	0.1	0.1	0.0	13.7	-	48.0	0.0	34.3	-
5.	1.5320	1.1	-	2.3	-	0.1	0.1	0.0	2.5	-	48.0	0.0	45.5	-
6.	28.7995	19.9	-	22.9	-	0.9	0.5	0.0	24.3	-	48.0	0.0	23.7	-

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

All other spurious emissions were less than 20dB for the limit.

DATA OF CONDUCTION TEST CHART

A-PEX INTERNATIONAL CO., LTD.

YOKOWA No.3 OPEN TEST SITE

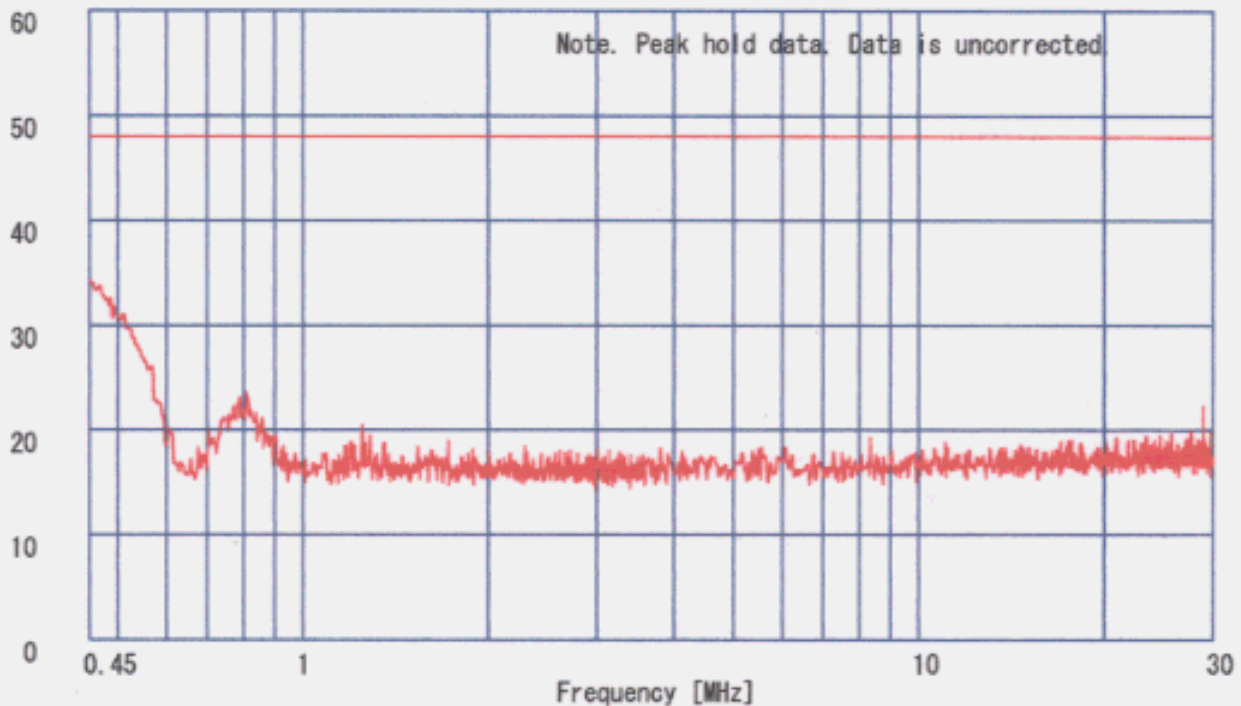
Report No. : 22FE0027-YW

Applicant : SHARP Corporation
Kind of Equipment : Cordless Handset
Model No. : UX-CL220K
Serial No. : Sample No. 1
Power : AC120V/60Hz
Mode : Intercom
Remarks : FCC ID: APYHR000025
Date : 1/30/2002
Phase : Single Phase
Temperature : 24 °C
Humidity : 23 %
Regulation 1 : FCC Part15.207
Regulation 2 : FCC Part15.207


Engineer : Makoto Kosaka

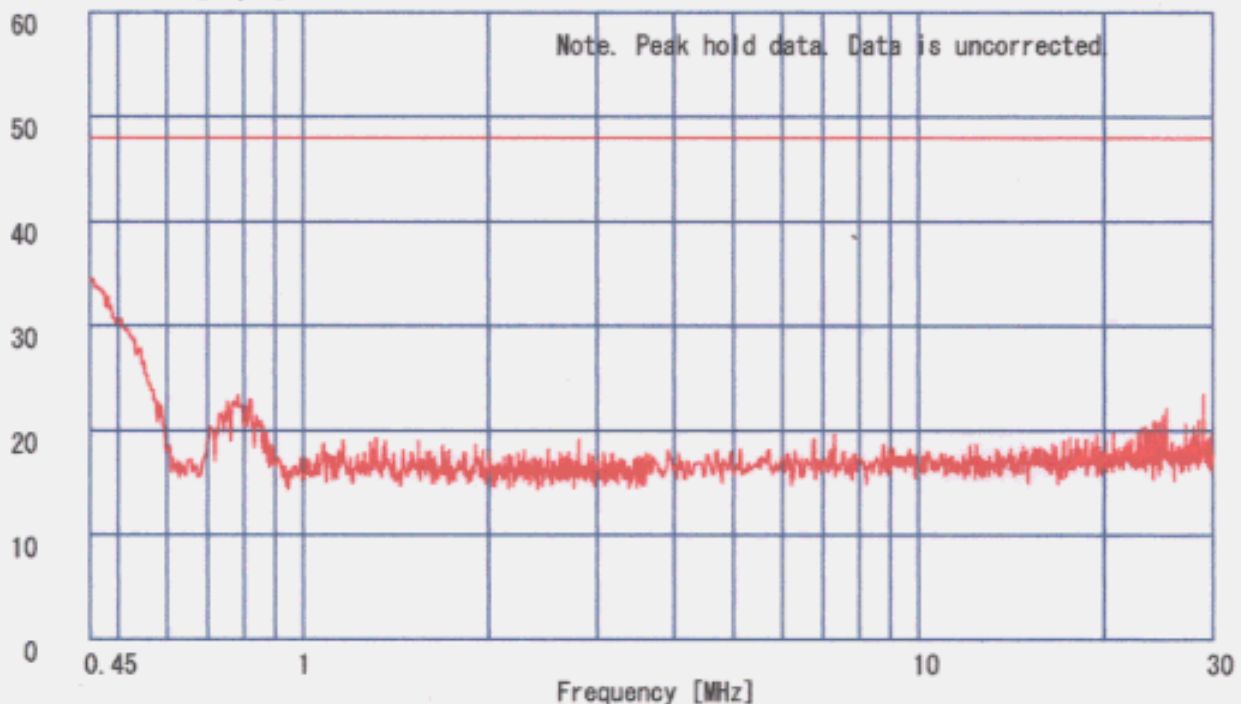
Emission Level [dB μ V]

PHASE:N

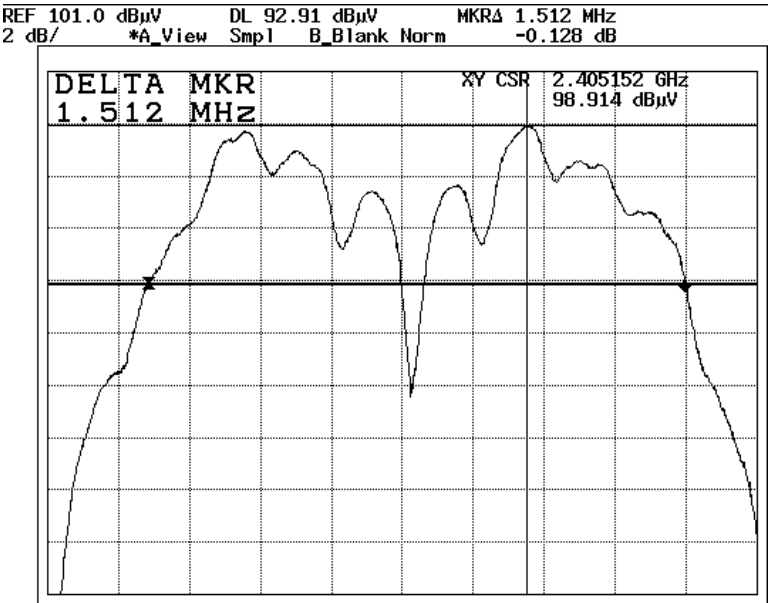


Emission Level [dB μ V]

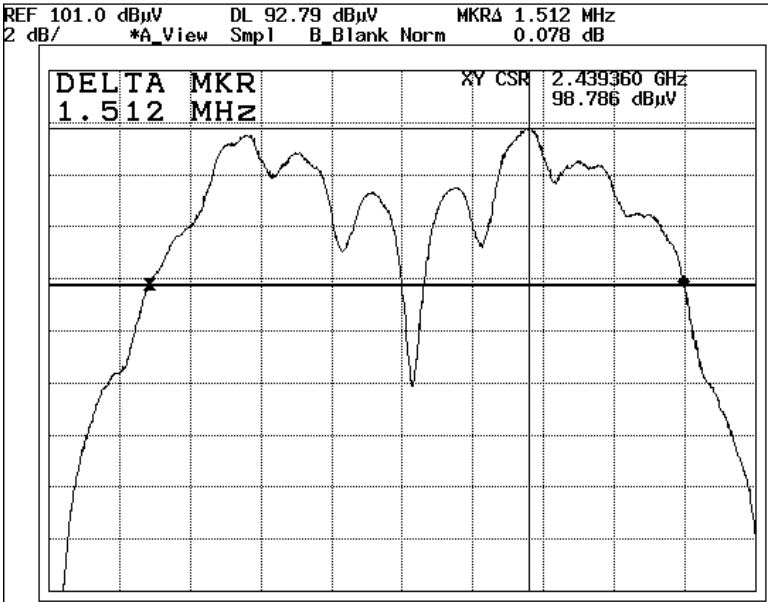
PHASE:L1



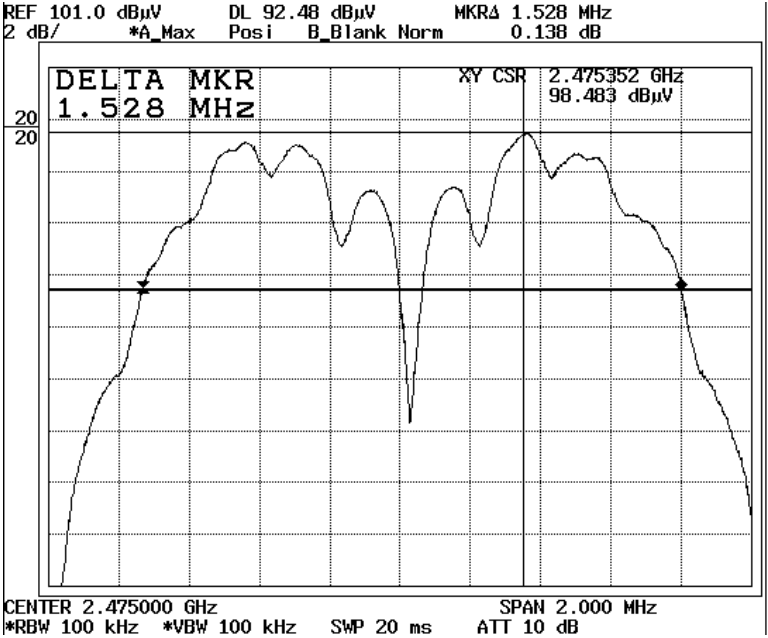
1. ch 1: 2.4048GHz: External Attenuator 10dB



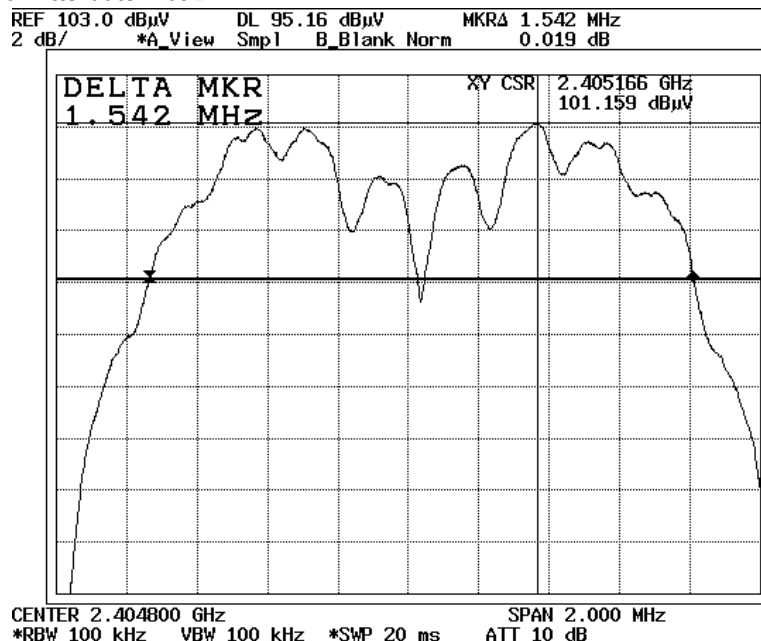
2. ch 20: 2.439GHz: External Attenuator 10dB



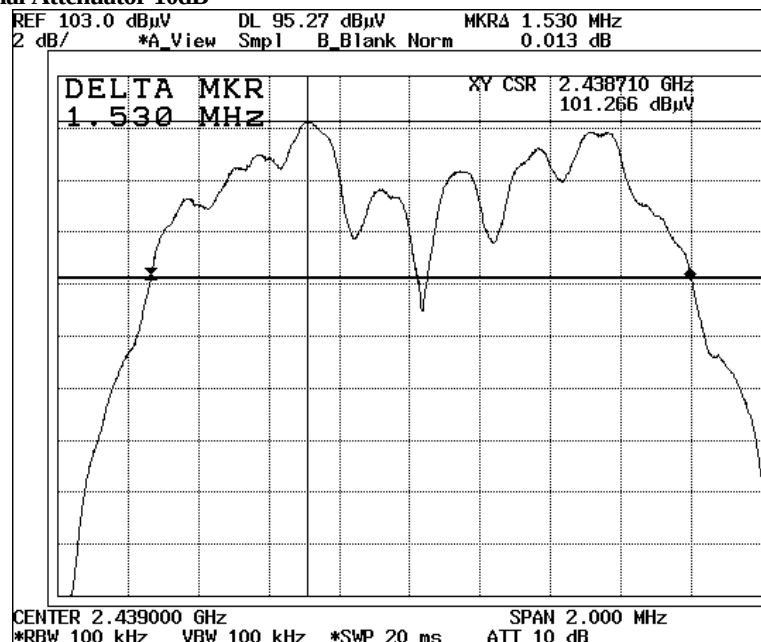
3. ch 40: 2.475GHz: External Attenuator 10dB



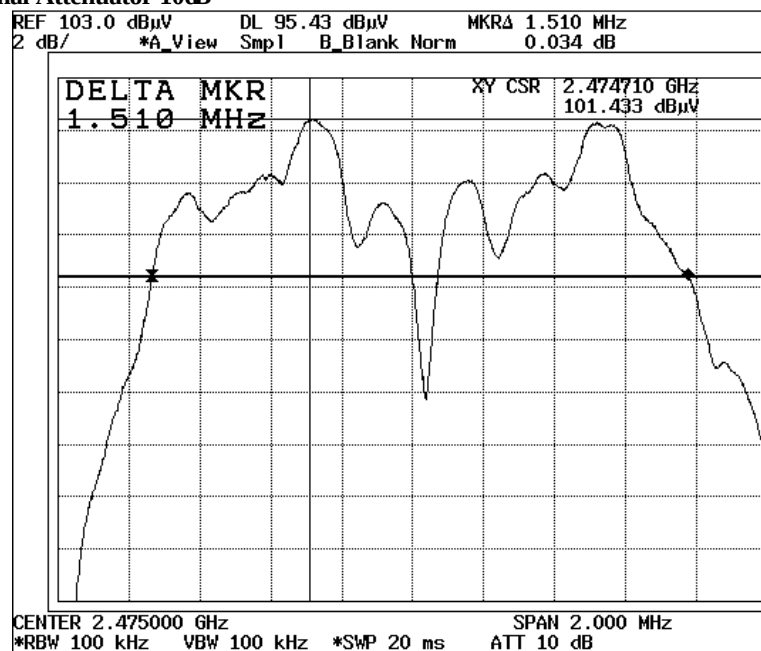
1. ch 1: 2.4048GHz: External Attenuator 10dB



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



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

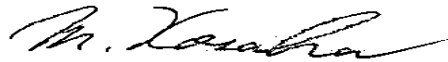


Maximum Peak Output Power (Conducted)

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

Company : SHARP Corporation
Equipment : Facsimile Equipment
Model : UX-CL220
Sample No. : 45
FCC ID : APYHRO00025
Power : AC120V/60Hz
Mode : Transmitting(ch1,20,40)

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247(b)(1)
Date : 2002/1/26
Temperature : 28degrees centigrade
Humidity : 22%



ENGINEER : Makoto Kosaka

ch	FREQ [MHz]	P/M Reading [dBm]	ATTEN. [dB]	RESULT [dBm]	convert [mW]	Limit (1W) [dBm]	Margin [dB]
ch1	2404.8	-0.2	10.0	9.8	9.5	30.0	20.2
ch20	2439.0	-0.5	10.0	9.5	8.9	30.0	20.5
ch40	2475.0	-0.6	10.0	9.4	8.7	30.0	20.6

REMARKS:

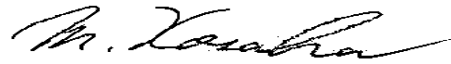
CALCULATION : P = Power Meter Reading + ATTEN

Maximum Peak Output Power (Conducted)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : UX-CL220K
Sample No. : 000055
FCC ID : APYHRO00025
Power : DC 3.6V
Mode : Transmitting(ch1,20,40)

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247(b)(1)
Date : 2002/1/27
Temperature : 22degrees centigrade
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	2439.0	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:

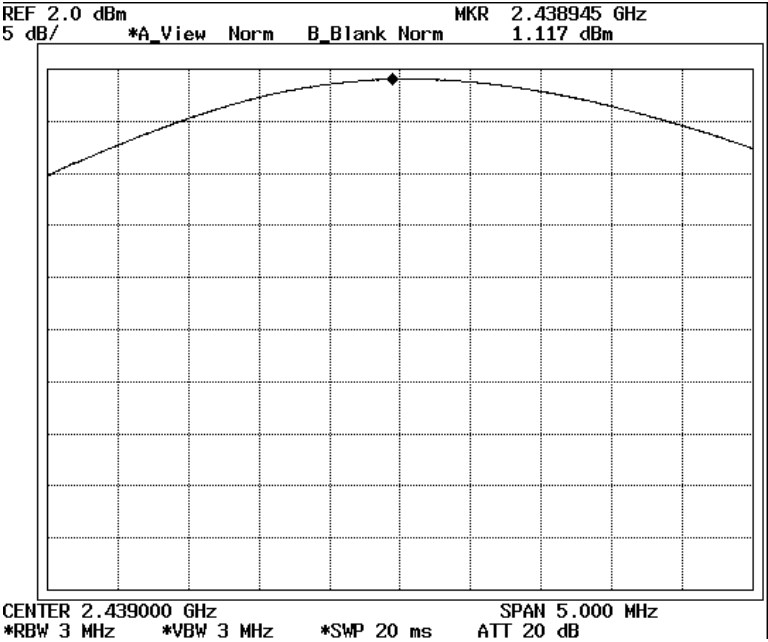
CALCULATION : P = Power Meter Reading + ATTEN

REF 2.0 dBm MKR 2.404795 GHz
5 dB/ *A_View Norm B_Blank Norm 1.340 dBm

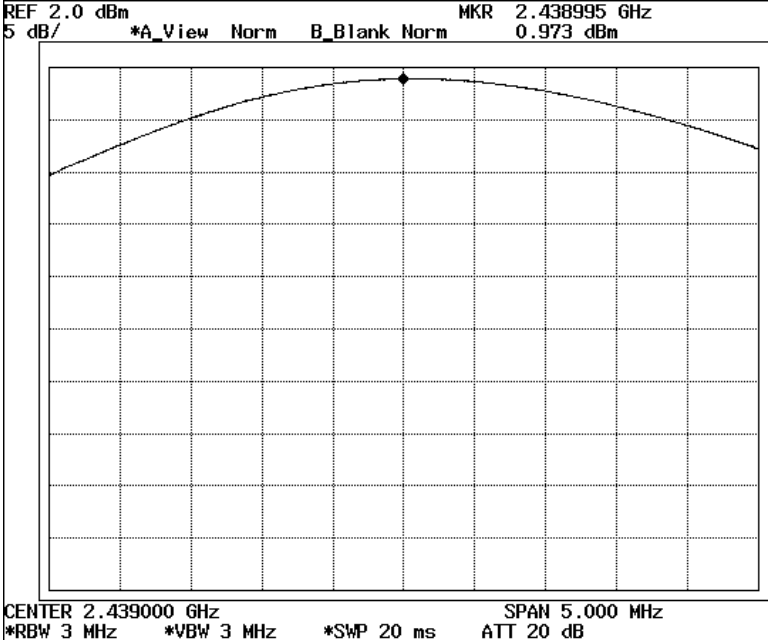
CENTER 2.404800 GHz SPAN 5.000 MHz
 *RBW 3 MHz *VBW 3 MHz *SWP 20 ms ATT 20 dB
 2.4048GHz): External Attenuator 10dB
 REF 2.0 dBm MKR 2.404945 GHz
 5 dB/ *A_View Norm B_Blank Norm 1.160 dBm

REF 2.0 dBm MKR 2.404790 GHz
5 dB/ *A_View Norm B_Blank Norm 1.508 dBm

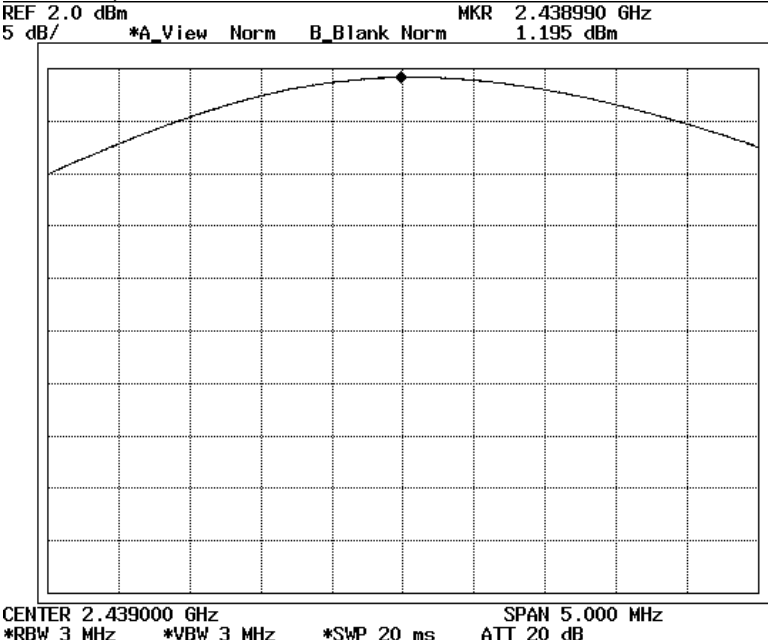
CENTER 2.404800 GHz SPAN 5.000 MHz
*RBW 3 MHz *VBW 3 MHz *SWP 20 ms ATT 20 dB

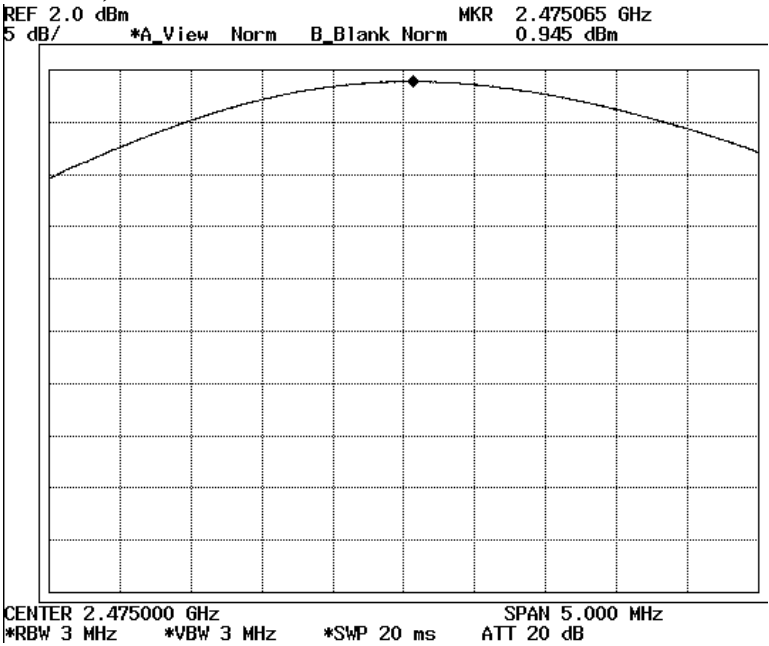


5. AC 120V (100 %) / (ch 20: 2.439GHz): External Attenuator 10dB

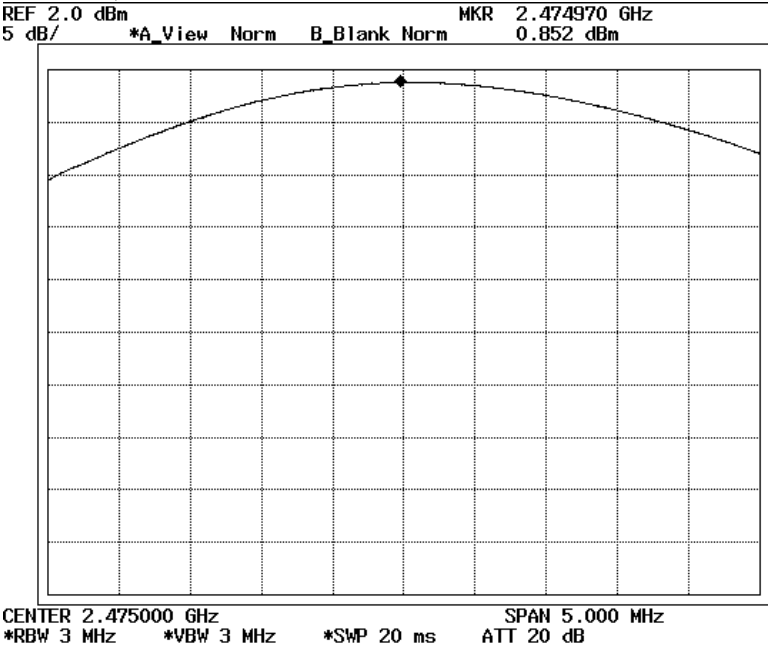


6. AC 138V (115 %) / (ch 20: 2.439GHz): External Attenuator 10dB

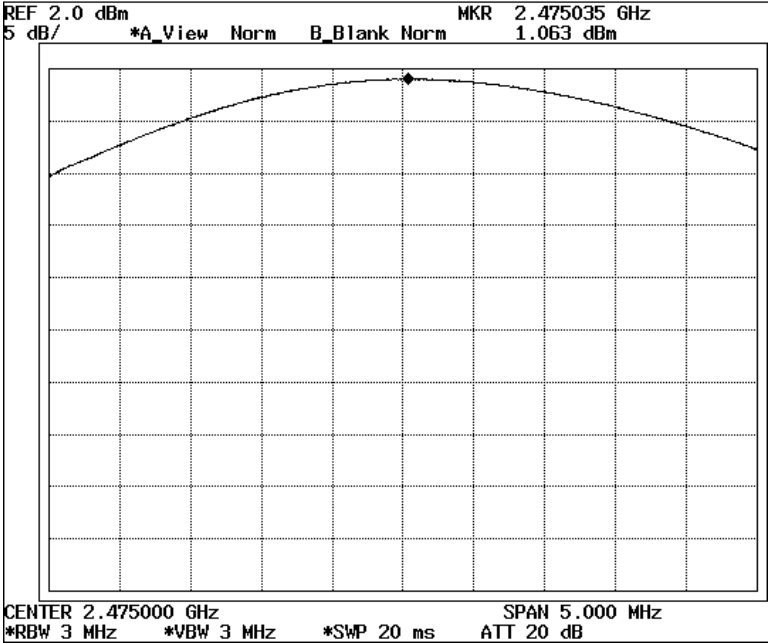




8. AC 120V (100 %) / (ch 40: 2.475GHz): External Attenuator 10dB



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

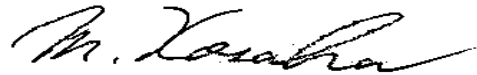


DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Facsimile Equipment
Model : UX-CL220
Sample No. : 5
FCC ID : APYHRO00025
Power : AC120V/60Hz
Mode : Transmitting (ch1: 2404.8MHz)
Antenna angle of EUT: 90degrees

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/01/26
Temperature : 27degrees centigrade
Humidity : 23%



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	72.590	33.8	33.8	6.2	5.9	1.6	27.9	19.6	19.6	40.0	20.4	20.4
2	88.710	33.5	37.4	7.6	5.9	1.8	27.9	20.9	24.8	43.5	22.6	18.7
3	145.150	40.5	37.5	14.3	5.9	2.3	27.8	35.2	32.2	43.5	8.3	11.3
4	153.220	37.3	34.1	14.6	5.9	2.4	27.8	32.4	29.2	43.5	11.1	14.3
5	161.290	43.1	35.2	14.9	5.9	2.5	27.8	38.6	30.7	43.5	4.9	12.8
6	185.470	39.9	35.0	16.0	5.9	2.7	27.8	36.7	31.8	43.5	6.8	11.7
7	201.600	40.6	31.9	16.4	5.9	2.8	27.8	37.9	29.2	43.5	5.6	14.3
8	322.570	44.0	40.9	14.5	5.8	3.6	27.6	40.3	37.2	46.0	5.7	8.8
9	393.620	45.0	42.3	15.3	5.8	4.1	27.5	42.7	40.0	46.0	3.3	6.0
10	403.210	41.8	38.8	15.5	5.8	4.2	27.5	39.8	36.8	46.0	6.2	9.2
11	422.420	41.5	39.5	16.0	5.8	4.4	27.6	40.1	38.1	46.0	5.9	7.9
12	460.810	37.4	36.9	17.0	5.8	4.6	27.6	37.2	36.7	46.0	8.8	9.3
13	480.000	34.9	34.2	17.6	5.8	4.7	27.5	35.5	34.8	46.0	10.5	11.2
14	645.140	31.0	28.1	19.6	5.9	5.5	27.1	34.9	32.0	46.0	11.1	14.0

REMARKS

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

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

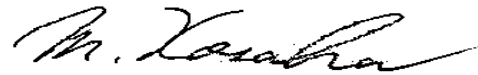
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Facsimile Equipment
Model : UX-CL220
Sample No. : 5
FCC ID : APYHRO00025
Power : AC120V/60Hz
Mode : Transmitting (ch20: 2439MHz)
Antenna angle of EUT: 90degrees

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/01/26
Temperature : 27degrees centigrade
Humidity : 23%



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	72.580	34.2	33.7	6.2	5.9	1.6	27.9	20.0	19.5	40.0	20.0	20.5
2	88.710	33.0	37.8	7.6	5.9	1.8	27.9	20.4	25.2	43.5	23.1	18.3
3	145.160	40.5	37.7	14.3	5.9	2.3	27.8	35.2	32.4	43.5	8.3	11.1
4	153.220	37.1	34.0	14.6	5.9	2.4	27.8	32.2	29.1	43.5	11.3	14.4
5	161.300	43.1	34.9	14.9	5.9	2.5	27.8	38.6	30.4	43.5	4.9	13.1
6	185.470	39.8	35.5	16.0	5.9	2.7	27.8	36.6	32.3	43.5	6.9	11.2
7	201.610	40.3	32.7	16.4	5.9	2.8	27.8	37.6	30.0	43.5	5.9	13.5
8	322.580	43.9	41.0	14.5	5.8	3.6	27.6	40.2	37.3	46.0	5.8	8.7
9	393.600	45.0	42.3	15.3	5.8	4.1	27.5	42.7	40.0	46.0	3.3	6.0
10	403.210	41.3	38.3	15.5	5.8	4.2	27.5	39.3	36.3	46.0	6.7	9.7
11	422.420	41.7	38.7	16.0	5.8	4.4	27.6	40.3	37.3	46.0	5.7	8.7
12	460.810	37.6	37.0	17.0	5.8	4.6	27.6	37.4	36.8	46.0	8.6	9.2
13	480.000	35.3	33.8	17.6	5.8	4.7	27.5	35.9	34.4	46.0	10.1	11.6
14	645.140	31.2	28.5	19.6	5.9	5.5	27.1	35.1	32.4	46.0	10.9	13.6

REMARKS

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

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

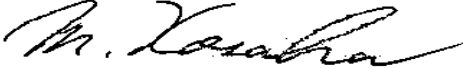
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Facsimile Equipment
Model : UX-CL220
Sample No. : 5
FCC ID : APYHRO00025
Power : AC120V/60Hz
Mode : Transmitting (ch40: 2475MHz)
Antenna angle of EUT: 90degrees

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/01/26
Temperature : 27degrees centigrade
Humidity : 23%



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	72.590	33.5	33.9	6.2	5.9	1.6	27.9	19.3	19.7	40.0	20.7	20.3
2	88.700	33.3	37.3	7.6	5.9	1.8	27.9	20.7	24.7	43.5	22.8	18.8
3	145.160	40.6	37.5	14.3	5.9	2.3	27.8	35.3	32.2	43.5	8.2	11.3
4	153.220	37.2	34.1	14.6	5.9	2.4	27.8	32.3	29.2	43.5	11.2	14.3
5	161.290	43.1	36.6	14.9	5.9	2.5	27.8	38.6	32.1	43.5	4.9	11.4
6	185.470	39.5	33.8	16.0	5.9	2.7	27.8	36.3	30.6	43.5	7.2	12.9
7	201.160	37.8	29.8	16.4	5.9	2.8	27.8	35.1	27.1	43.5	8.4	16.4
8	322.580	44.2	40.7	14.5	5.8	3.6	27.6	40.5	37.0	46.0	5.5	9.0
9	393.600	45.1	41.4	15.3	5.8	4.1	27.5	42.8	39.1	46.0	3.2	6.9
10	403.210	41.6	39.2	15.5	5.8	4.2	27.5	39.6	37.2	46.0	6.4	8.8
11	422.420	41.7	39.7	16.0	5.8	4.4	27.6	40.3	38.3	46.0	5.7	7.7
12	460.810	37.7	37.1	17.0	5.8	4.6	27.6	37.5	36.9	46.0	8.5	9.1
13	480.000	35.3	31.5	17.6	5.8	4.7	27.5	35.9	32.1	46.0	10.1	13.9
14	645.140	31.9	28.6	19.6	5.9	5.5	27.1	35.8	32.5	46.0	10.2	13.5

REMARKS

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

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

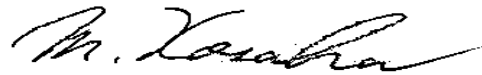
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : UX-CL220K
Sample No. : 1
FCC ID : APYHRO00025
Power : DC 3.6V
Mode : Transmitting (ch1: 2404.8MHz)

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/01/30
Temperature : 19degrees centigrade
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.

*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

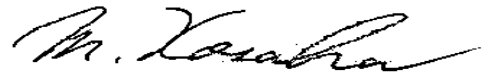
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : UX-CL220K
Sample No. : 1
FCC ID : APYHRO00025
Power : DC 3.6V
Mode : Transmitting (ch20: 2439.0MHz)

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/01/30
Temperature : 19degrees centigrade
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

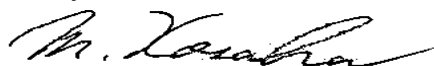
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(30MHz to 1000MHz)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : UX-CL220K
Sample No. : 1
FCC ID : APYHRO00025
Power : DC 3.6V
Mode : Transmitting (ch40: 2475.0MHz)

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/01/30
Temperature : 19degrees centigrade
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	28.7	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

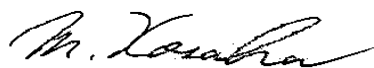
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

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

Company : SHARP Corporation
Equipment : Facsimile Equipment
Model : UX-CL220
Sample No. : 5
FCC ID : APYHRO00025
Power : AC120V/60Hz
Mode : Transmitting (ch1: 2404.8MHz)

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m and 0.5m
Date : 2002/01/26
Temperature : 29degrees centigrade
Humidity : 28%


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	2.35688	46.3	46.8	31.2	38.0	3.1	0.0	10.0	-6.5	0.0	46.0	46.6	54.0	8.0	7.4
2	2.37616	49.8	50.1	31.2	38.0	3.1	0.0	10.0	-6.5	0.0	49.5	49.8	54.0	4.5	4.2
3	4.80966	54.8	50.4	35.3	38.0	5.2	1.1	0.0	-6.5	0.0	51.9	47.5	54.0	2.1	6.5
4	7.21448	43.1	46.1	38.5	38.2	6.3	0.5	0.0	-6.5	0.0	43.7	46.7	54.0	10.3	7.3
5	9.61920	36.7	40.8	38.4	38.5	7.9	0.5	0.0	-6.5	0.0	38.5	42.6	54.0	15.5	11.4
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
6	12.02412	32.3	32.8	42.9	38.5	8.7	0.5	0.0	-6.5	15.6	23.8	24.3	54.0	30.2	29.7
7	14.42880	36.2	35.4	41.7	38.5	9.2	0.6	0.0	-6.5	15.6	27.1	26.3	54.0	26.9	27.7
8	16.83360	36.4	36.3	38.6	38.5	9.6	0.6	0.0	-6.5	15.6	24.6	24.5	54.0	29.4	29.5
9	19.23840	34.8	34.6	38.5	38.5	10.3	1.0	0.0	-6.5	15.6	24.0	23.8	54.0	30.0	30.2
10	21.64320	36.0	36.0	38.8	38.5	11.3	0.6	0.0	-6.5	15.6	26.1	26.1	54.0	27.9	27.9
11	24.04800	36.1	36.1	39.3	38.5	12.2	0.7	0.0	-6.5	15.6	27.7	27.7	54.0	26.3	26.3

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	2.35688	51.7	52.7	31.2	38.0	3.1	0.0	10.0	-6.5	0.0	51.5	52.5	74.0	22.5	21.5
2	2.37616	54.8	54.4	31.2	38.0	3.1	0.0	10.0	-6.5	0.0	54.6	54.2	74.0	19.4	19.8
3	4.80966	57.4	54.3	35.3	38.0	5.2	1.1	0.0	-6.5	0.0	54.5	51.4	74.0	19.5	22.6
4	7.21448	51.3	51.6	38.5	38.2	6.3	0.5	0.0	-6.5	0.0	51.9	52.2	74.0	22.1	21.8
5	9.61920	48.7	50.0	38.4	38.5	7.9	0.5	0.0	-6.5	0.0	50.5	51.7	74.0	23.5	22.3
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
6	12.02412	45.6	45.6	42.9	38.5	8.7	0.5	0.0	-6.5	15.6	37.1	37.1	74.0	36.9	36.9
7	14.42880	45.8	45.2	41.7	38.5	9.2	0.6	0.0	-6.5	15.6	36.7	36.1	74.0	37.3	37.9
8	16.83360	47.9	47.8	38.6	38.5	9.6	0.6	0.0	-6.5	15.6	36.1	36.0	74.0	37.9	38.0
9	19.23840	46.3	46.3	38.5	38.5	10.3	1.0	0.0	-6.5	15.6	35.5	35.5	74.0	38.5	38.5
10	21.64320	46.7	46.5	38.8	38.5	11.3	0.6	0.0	-6.5	15.6	36.8	36.6	74.0	37.2	37.4
11	24.04800	46.7	46.7	39.3	38.5	12.2	0.7	0.0	-6.5	15.6	38.3	38.3	74.0	35.7	35.7

*Test Distance 0.5m : Distance Factor(Dfac) = 20log(3/0.5) =15.6dB

* Duty factor =20log (+Width / Period) =20log (945*10-6 / 2*10-3) = -6.5119

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

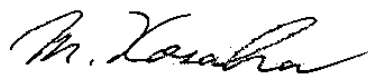
DATA OF SUPURIOUS EMISSIONS(1GHz to 26GHz)

A-PEX INTERNATIONAL CO., LTD.

YOKOWA NO.3 OPEN SITE

Company : SHARP Corporation
Equipment : Facsimile Equipment
Model : UX-CL220
Sample No. : 5
FCC ID : APYHRO00025
Power : AC120V/60Hz
Mode : Transmitting (ch20: 2439.0MHz)

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m and 0.5m
Date : 2002/01/26
Temperature : 29degrees centigrade
Humidity : 28%



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	4.87806	53.7	51.5	35.6	37.9	5.2	1.1	0.0	-6.5	0.0	51.2	49.0	54.0	2.8	5.0
2	7.31710	41.7	44.8	38.6	38.2	6.4	0.5	0.0	-6.5	0.0	42.5	45.5	54.0	11.5	8.5
3	9.75612	38.6	39.6	38.5	38.5	8.0	0.5	0.0	-6.5	0.0	40.6	41.6	54.0	13.4	12.4
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
4	12.19518	32.6	32.6	43.1	38.5	8.7	0.5	0.0	-6.5	15.6	24.3	24.3	54.0	29.7	29.7
5	14.63400	36.2	35.4	42.1	38.5	9.3	0.5	0.0	-6.5	15.6	27.5	26.7	54.0	26.5	27.3
6	17.07300	36.4	36.3	38.5	38.5	9.6	0.6	0.0	-6.5	15.6	24.5	24.4	54.0	29.5	29.6
7	19.51200	34.8	34.6	38.1	38.5	10.4	1.3	0.0	-6.5	15.6	24.0	23.8	54.0	30.0	30.2
8	21.95100	36.2	36.0	38.7	38.5	11.6	0.2	0.0	-6.5	15.6	26.1	25.9	54.0	27.9	28.1
9	24.39000	36.1	36.1	39.4	38.5	12.4	0.9	0.0	-6.5	15.6	28.2	28.2	54.0	25.8	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	4.87806	56.8	54.9	35.6	37.9	5.2	1.1	0.0	-6.5	0.0	54.3	52.4	74.0	19.7	21.6
2	7.31710	50.4	52.1	38.6	38.2	6.4	0.5	0.0	-6.5	0.0	51.2	52.9	74.0	22.8	21.1
3	9.75612	49.3	48.9	38.5	38.5	8.0	0.5	0.0	-6.5	0.0	51.3	50.9	74.0	22.7	23.1
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
4	12.19518	45.7	45.7	43.1	38.5	8.7	0.5	0.0	-6.5	15.6	37.4	37.4	74.0	36.6	36.6
5	14.63400	45.8	45.2	42.1	38.5	9.3	0.5	0.0	-6.5	15.6	37.1	36.5	74.0	36.9	37.5
6	17.07300	47.9	47.8	38.5	38.5	9.6	0.6	0.0	-6.5	15.6	36.0	35.9	74.0	38.0	38.1
7	19.51200	46.3	46.3	38.1	38.5	10.4	1.3	0.0	-6.5	15.6	35.5	35.5	74.0	38.5	38.5
8	21.95100	46.7	46.5	38.7	38.5	11.6	0.2	0.0	-6.5	15.6	36.6	36.4	74.0	37.4	37.6
9	24.39000	46.7	46.7	39.4	38.5	12.4	0.9	0.0	-6.5	15.6	38.8	38.8	74.0	35.2	35.2

*Test Distance 0.5m : Distance Factor(Dfac) = 20log(3/0.5) =15.6dB

* Duty factor =20log (+Width / Period) =20log (945*10-6 / 2*10-3) = -6.5119

*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 : Facsimile Equipment
Model : UX-CL220
Sample No. : 5
FCC ID : APYHRO00025
Power : AC120V/60Hz
Mode : Transmitting (ch40: 2475MHz)

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m and 0.5m
Date : 2002/01/26
Temperature : 29degrees centigrade
Humidity : 28%



ENGINEER : Makoto Kosaka

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

No.	FREQ [GHz]	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	H-Pass Filter	ATTN [dB]	Duty Factor	D-fac [dB]	RESULT		Limit A V	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	2.48464	40.6	43.3	31.4	38.0	3.2	0.0	0.0	-6.5	0.0	30.7	33.4	54.0	23.3	20.6
2	4.95003	52.8	51.5	35.9	37.9	5.3	1.1	0.0	-6.5	0.0	50.7	49.4	54.0	3.3	4.6
3	7.42505	41.3	43.4	38.7	38.3	6.5	0.5	0.0	-6.5	0.0	42.2	44.3	54.0	11.8	9.7
4	9.89999	37.1	37.1	38.5	38.5	8.2	0.5	0.0	-6.5	0.0	39.3	39.3	54.0	14.7	14.7
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
5	12.37500	32.6	33.8	43.4	38.5	8.7	0.5	0.0	-6.5	15.6	24.6	25.8	54.0	29.4	28.2
6	14.85000	36.2	35.4	42.4	38.5	9.4	0.5	0.0	-6.5	15.6	27.9	27.1	54.0	26.1	26.9
7	17.32500	36.4	36.3	38.1	38.5	9.8	0.6	0.0	-6.5	15.6	24.3	24.2	54.0	29.7	29.8
8	19.80000	34.8	34.6	38.3	38.5	10.5	1.6	0.0	-6.5	15.6	24.6	24.4	54.0	29.4	29.6
9	22.27500	36.0	36.1	38.8	38.5	11.6	0.3	0.0	-6.5	15.6	26.1	26.2	54.0	27.9	27.8
10	24.75000	36.1	36.1	39.4	38.6	12.6	1.0	0.0	-6.5	15.6	28.4	28.4	54.0	25.6	25.6

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

No.	FREQ [GHz]	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
		[dBuV]									[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + (High Pass or ATTEN) + Duty Factor															
1	2.48472	50.7	52.2	31.4	38.0	3.2	0.0	0.0	-6.5	0.0	40.8	42.3	74.0	33.2	31.7
2	4.95003	56.5	55.4	35.9	37.9	5.3	1.1	0.0	-6.5	0.0	54.4	53.3	74.0	19.6	20.7
3	7.42505	49.8	50.4	38.7	38.3	6.5	0.5	0.0	-6.5	0.0	50.7	51.2	74.0	23.3	22.8
4	9.89999	48.8	49.2	38.5	38.5	8.2	0.5	0.0	-6.5	0.0	51.0	51.3	74.0	23.0	22.7
Test distance 0.5meters RESULT=Reading + ANT Factor - Amp Gain + CABLE LOSS + High Pass + Duty Factor - Dfac															
5	12.37500	46.0	46.7	43.4	38.5	8.7	0.5	0.0	-6.5	15.6	38.0	38.7	74.0	36.0	35.3
6	14.85000	45.8	45.2	42.4	38.5	9.4	0.5	0.0	-6.5	15.6	37.5	36.9	74.0	36.5	37.1
7	17.32500	47.9	47.8	38.1	38.5	9.8	0.6	0.0	-6.5	15.6	35.8	35.7	74.0	38.2	38.3
8	19.80000	46.3	46.3	38.3	38.5	10.5	1.6	0.0	-6.5	15.6	36.1	36.1	74.0	37.9	37.9
9	22.27500	46.6	46.5	38.8	38.5	11.6	0.3	0.0	-6.5	15.6	36.7	36.6	74.0	37.3	37.4
10	24.75000	46.7	46.6	39.4	38.6	12.6	1.0	0.0	-6.5	15.6	39.0	38.9	74.0	35.0	35.1

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

* Duty factor = $20\log(+\text{Width} / \text{Period}) = 20\log(945 \times 10^{-6} / 2 \times 10^{-3}) = -6.5119$

*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 : UX-CL220K

Sample No. : 1

FCC ID : APYHRO00025

Power : DC 3.6V

Mode : Transmitting (ch1: 2404.8MHz)

Report No. : 22FE0027-YW

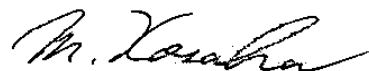
Regulation : Fcc Part15SubpartC 247 / 209

Test Distance : 3m and 0.5m

Date : 2002/01/27

Temperature : 22degrees centigrade

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	4.80966	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 [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	4.80966	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.

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

*Test Distance 0.5m : Distance Factor(Dfac) = 20log(3/0.5) = 15.6dB

* Duty factor = 20log (+Width / Period) = 20log (940*10⁻⁶ / 2*10⁻³) = -6.5580

*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 : UX-CL220K

Sample No. : 1

FCC ID : APYHRO00025

Power : DC 3.6V

Mode : Transmitting (ch20: 2439.0MHz)

Report No. : 22FE0027-YW

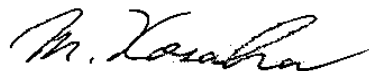
Regulation : Fcc Part15SubpartC 247 / 209

Test Distance : 3m and 0.5m

Date : 2002/01/27

Temperature : 22degrees centigrade

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	4.87808	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.

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

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

* Duty factor = $20\log(+\text{Width} / \text{Period}) = 20\log(940 \times 10^{-6} / 2 \times 10^{-3}) = -6.5580$

*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 : UX-CL220K

Sample No. : 1

FCC ID : APYHRO00025

Power : DC 3.6V

Mode : Transmitting (ch40: 2475MHz)

Report No. : 22FE0027-YW

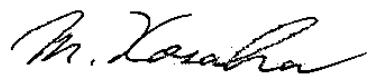
Regulation : Fcc Part15SubpartC 247 / 209

Test Distance : 3m and 0.5m

Date : 2002/01/27

Temperature : 22degrees centigrade

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]													
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]													
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.

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

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

* Duty factor = $20\log(+\text{Width} / \text{Period}) = 20\log(940 \times 10^{-6} / 2 \times 10^{-3}) = -6.5580$

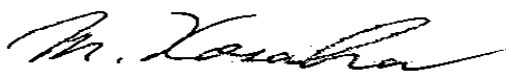
*Except for the above table : All other spurious emissions were less than 20dB for the limit.

Restricted Band Edges(Radiated)

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

Company : SHARP Corporation
Equipment : Facsimile Equipment
Model : UX-CL220
Sample No. : 5
FCC ID : APYHRO00025
Power : AC120V/60Hz
Mode : Transmitting

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/02/01
Temperature : 18degrees centigrade
Humidity : 35%



ENGINEER : Makoto Kosaka

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

AV DETECT(S/A, RDW, IMHz and VEW Only)													
ch	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN [dB]	Duty Factor [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
		[dBuV]							[dBuV/m]			[dB]	
Ch1	2.3900	35.5	35.3	31.2	38.0	3.1	10.0	-6.6	35.2	35.0	54.0	18.8	19.0
Ch40	2.4835	37.9	40.6	31.4	38.0	3.2	10.0	-6.6	37.9	40.6	54.0	16.1	13.4

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

ch	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN [dB]	Duty Factor [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
		[dBuV]							[dBuV/m]			[dB]	
Ch1	2.3900	46.6	47.3	31.2	38.0	3.1	10.0	-6.6	46.3	47.0	74.0	27.7	27.0
Ch40	2.4835	48.5	50.8	31.4	38.0	3.2	10.0	-6.6	48.5	50.8	74.0	25.5	23.2

Sample Calculation :

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

* Duty factor = $20\log(T_{duty} / T_{cycle}) = 20\log(945 \times 10^{-6} / 2 \times 10^{-3}) = -6.512$

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

*Ch1: 2404.8MHz Transmitting

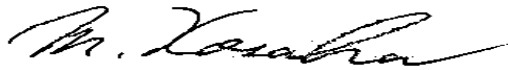
*C40: 2475.0MHz Transmitting

Restricted Band Edges(Radiated)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : UX-CL220K
Sample No. : 1
FCC ID : APYHRO00025
Power : DC 3.6V
Mode : Transmitting

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247 / 209
Test Distance : 3m
Date : 2002/02/01
Temperature : 18degrees centigrade
Humidity : 35%



ENGINEER : Makoto Kosaka

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

ch	FREQ [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN [dB]	Duty Factor [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
		[dBuV]							[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 [GHz]	S/A READING		ANT Factor [dB]	AMP GAIN [dB]	CABLE LOSS [dB]	ATTEN [dB]	Duty Factor [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER						HOR	VER		HOR	VER
		[dBuV]							[dBuV/m]			[dB]	
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

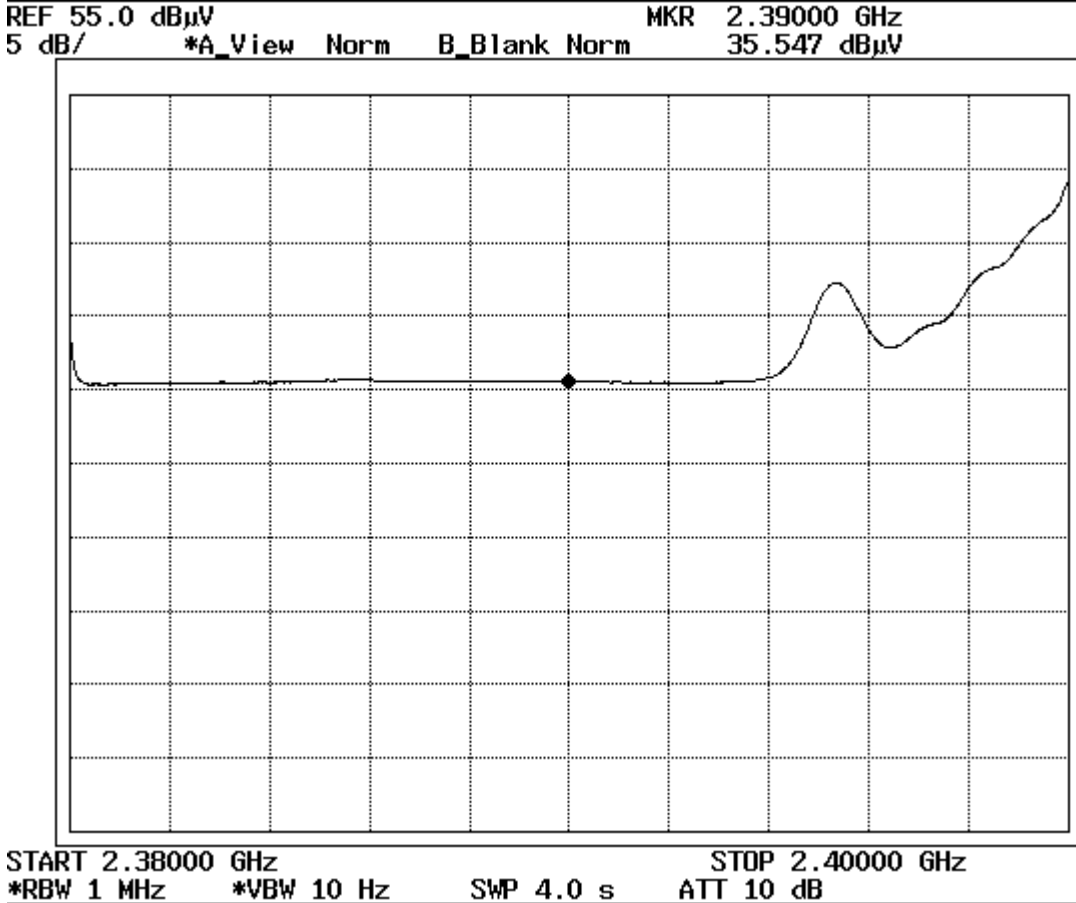
* Duty factor = $20\log(T_{duty} / T_{cycle}) = 20\log(945 \times 10^{-6} / 2 \times 10^{-3}) = -6.512$

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

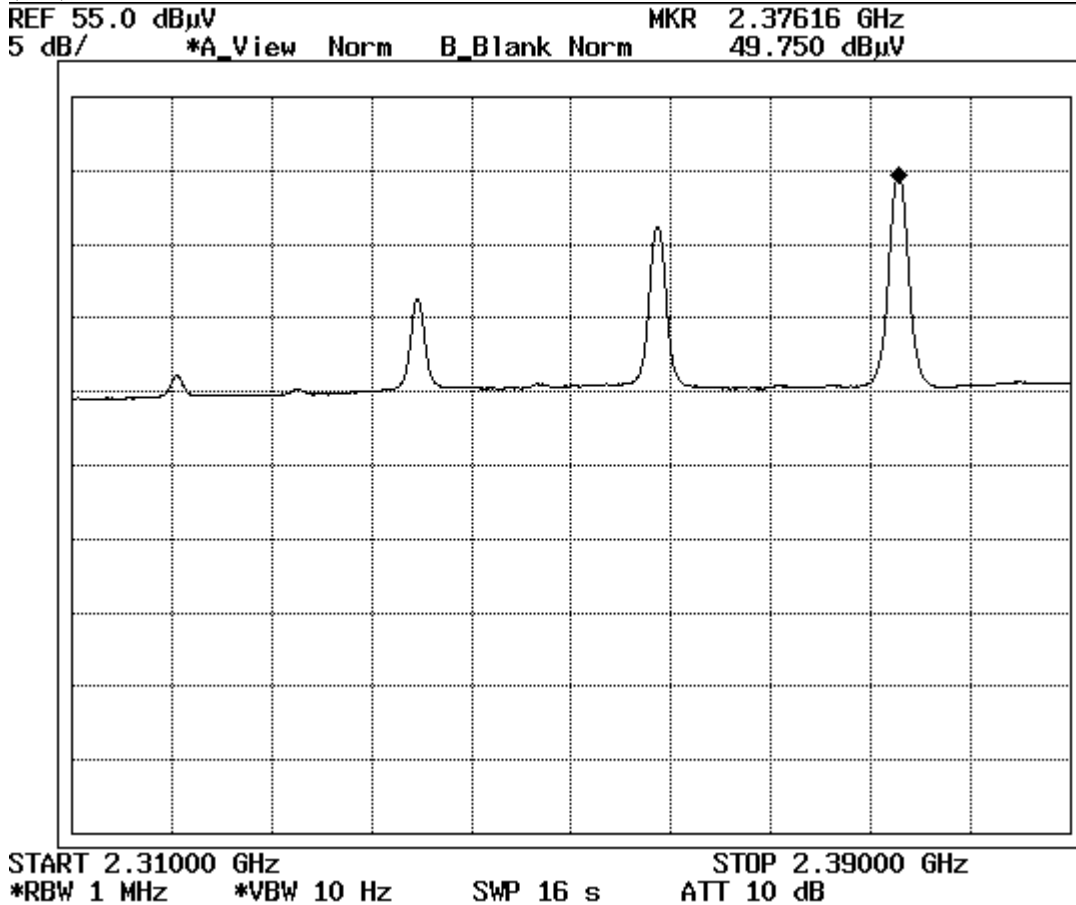
*Ch1: 2404.8MHz Transmitting

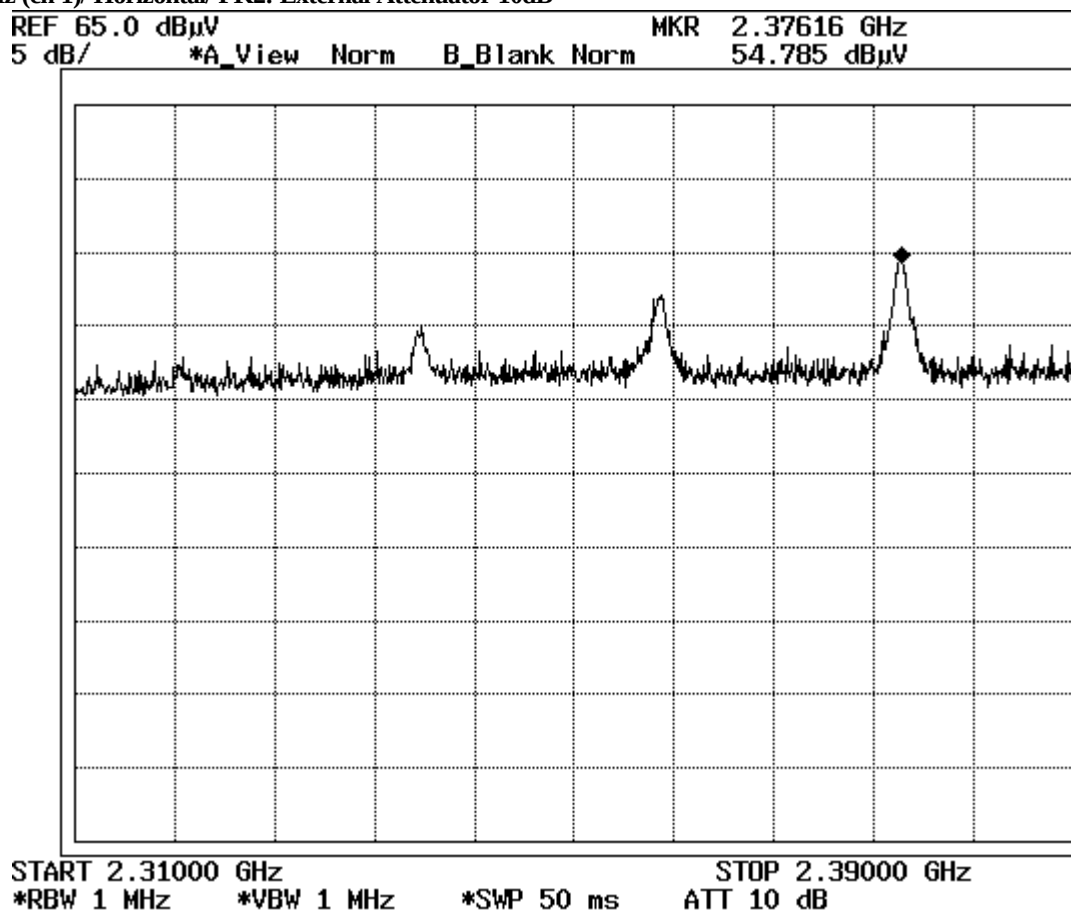
*C40: 2475.0MHz Transmitting

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

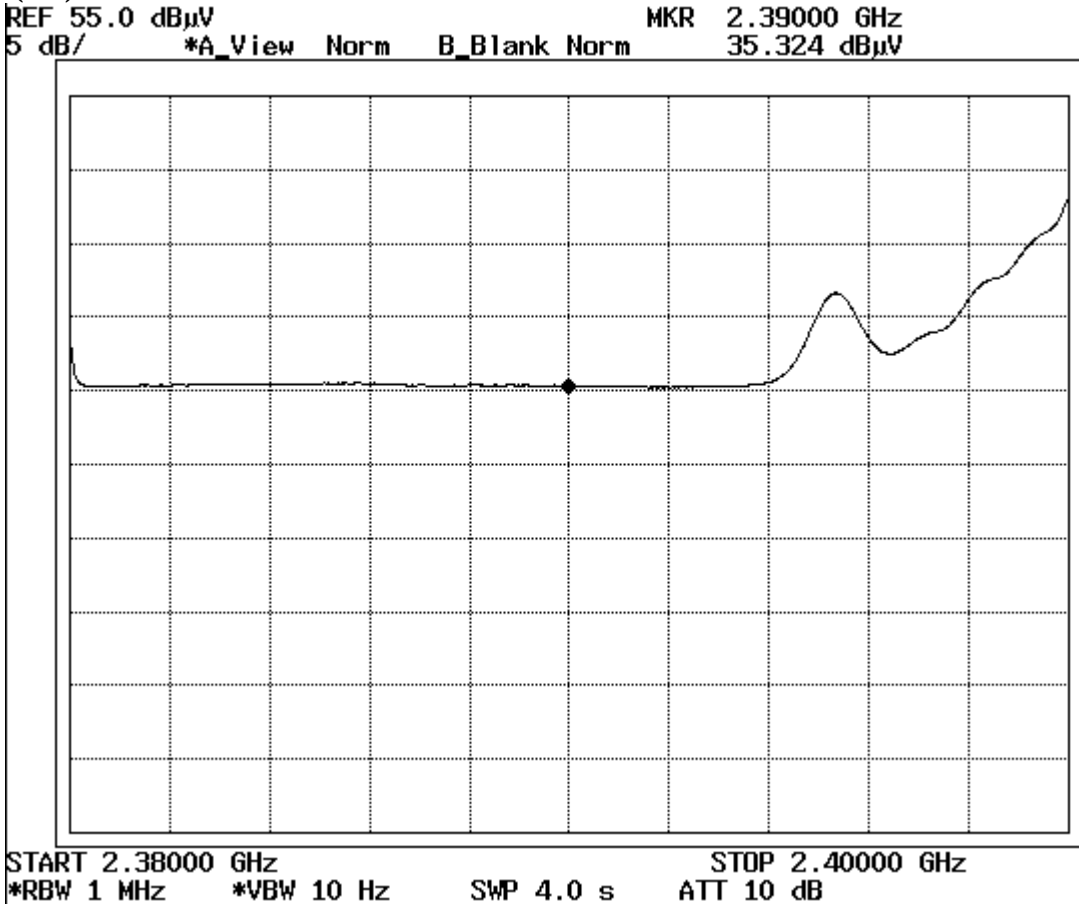


2. 2.4048GHz(ch 1)/ Horizontal/ AV2: External Attenuator 10dB

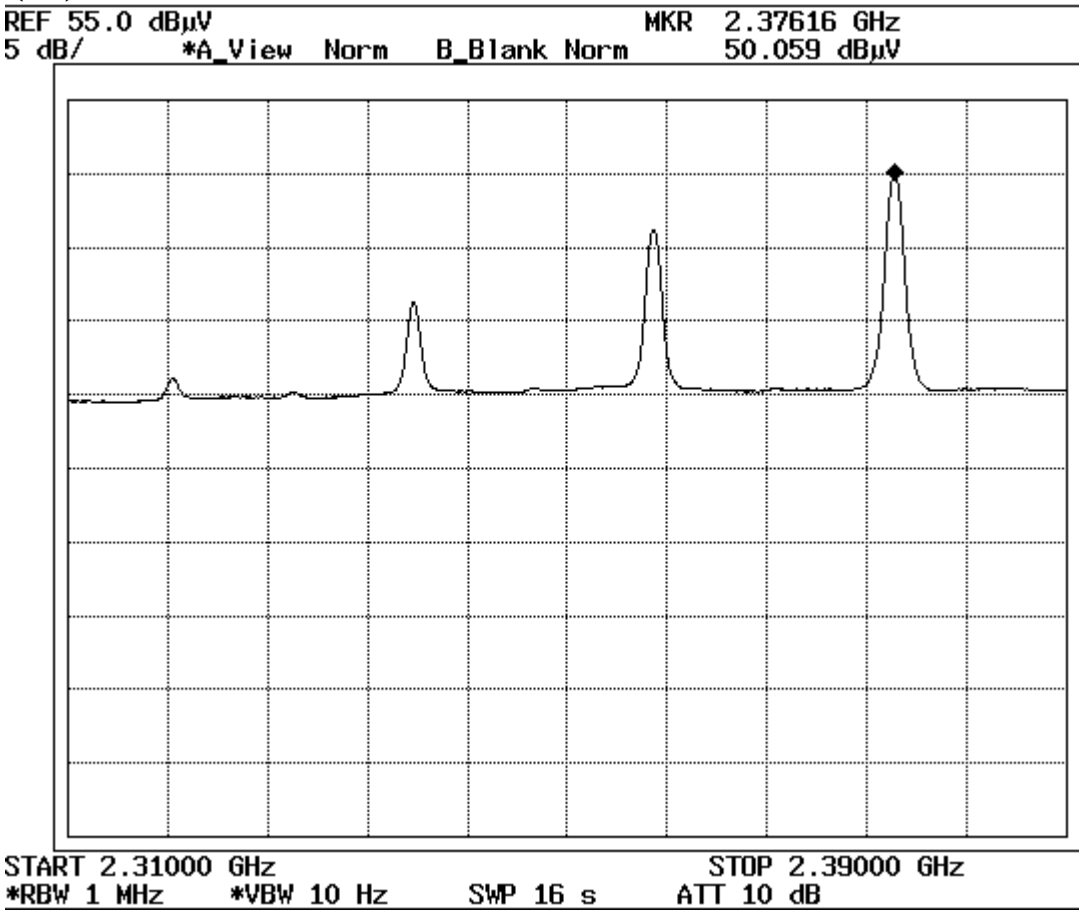




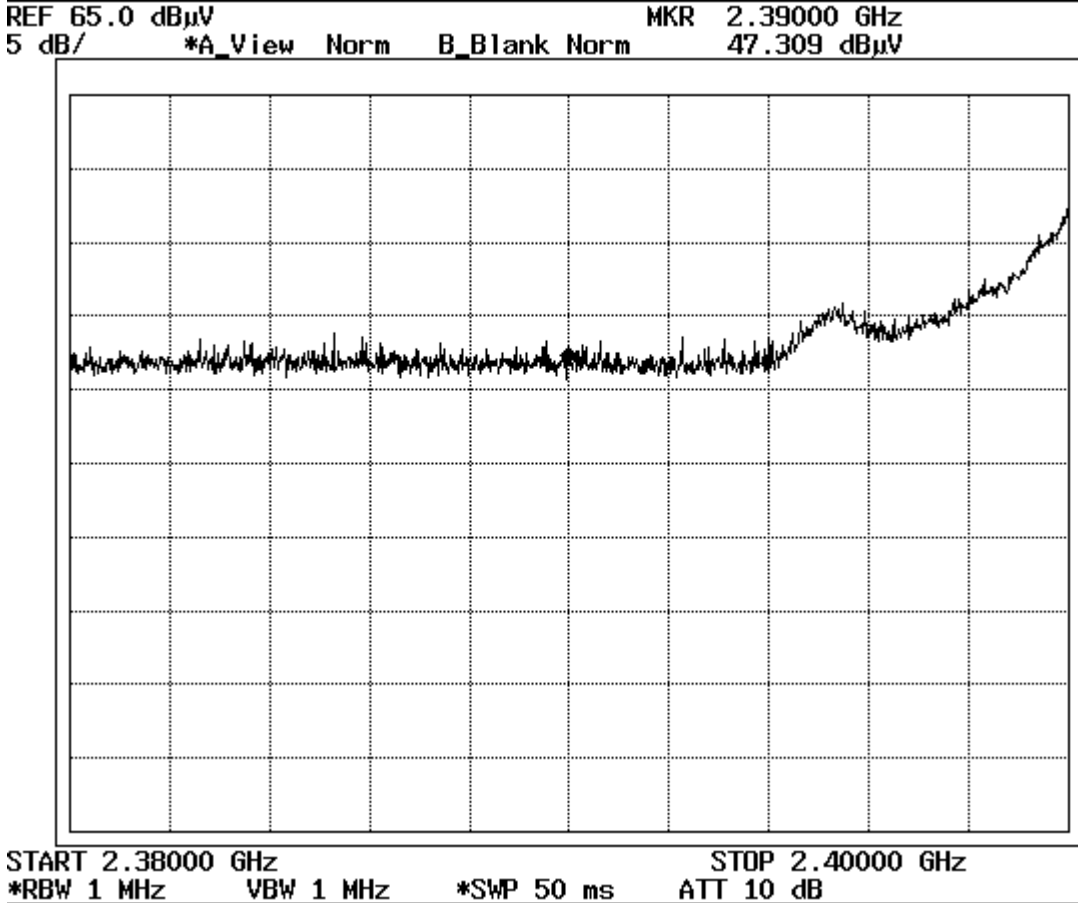
5. 2.4048GHz (ch 1)/ Vertical/ AV: External Attenuator 10dB



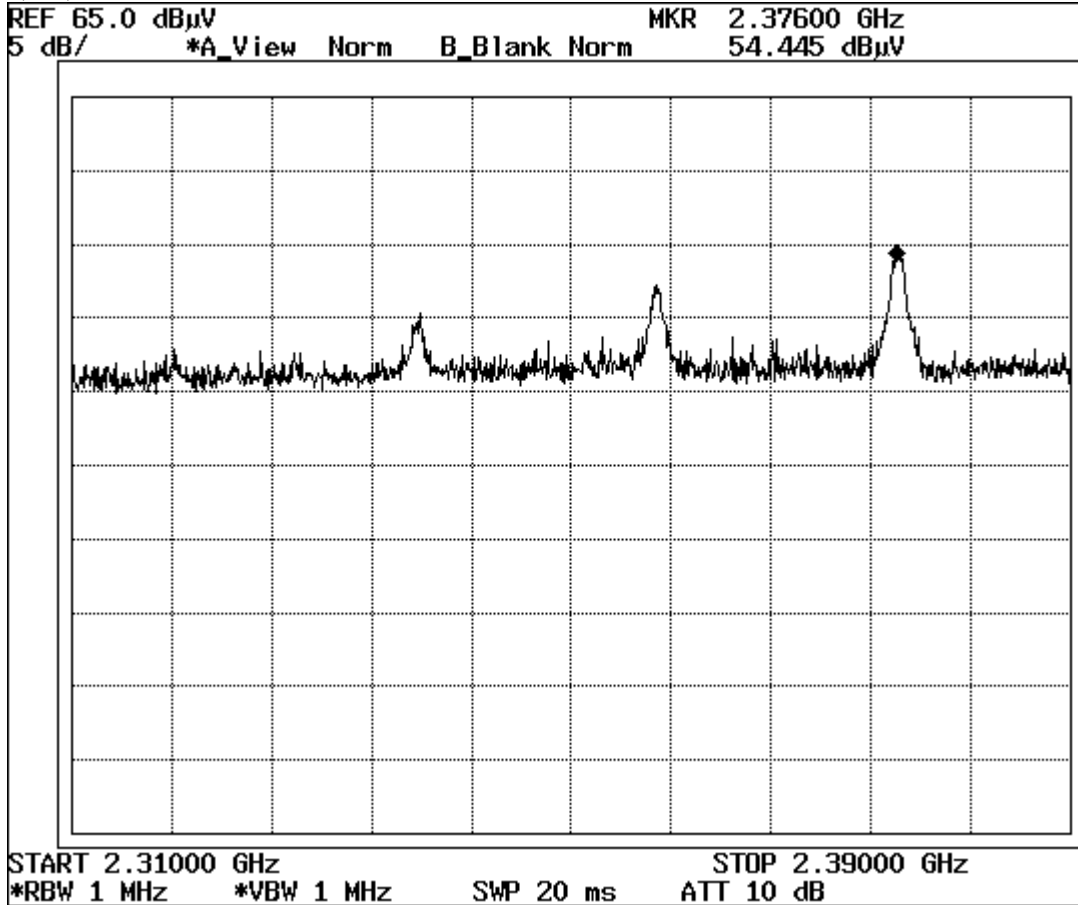
6. 2.4048GHz (ch 1)/ Vertical/ AV: External Attenuator 10dB



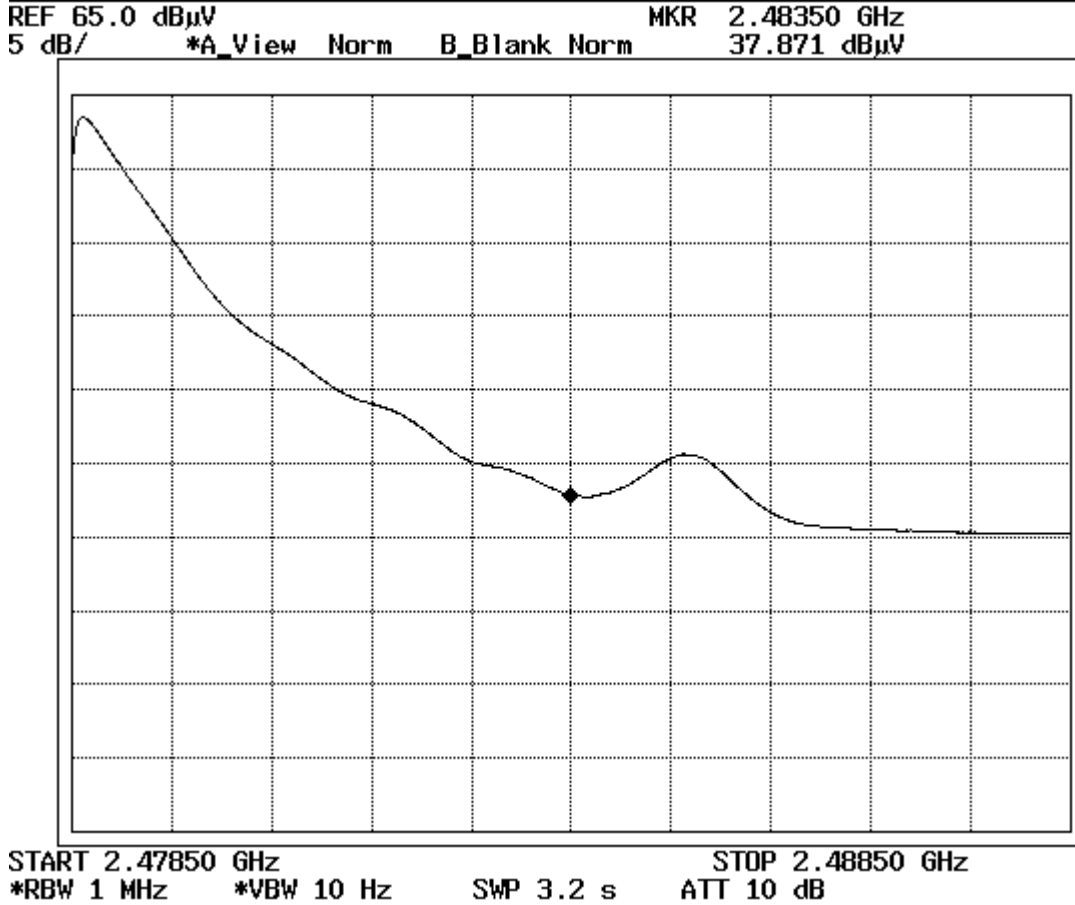
7. 2.4048GHz (ch 1)/ Vertical/ PK: External Attenuator 10dB



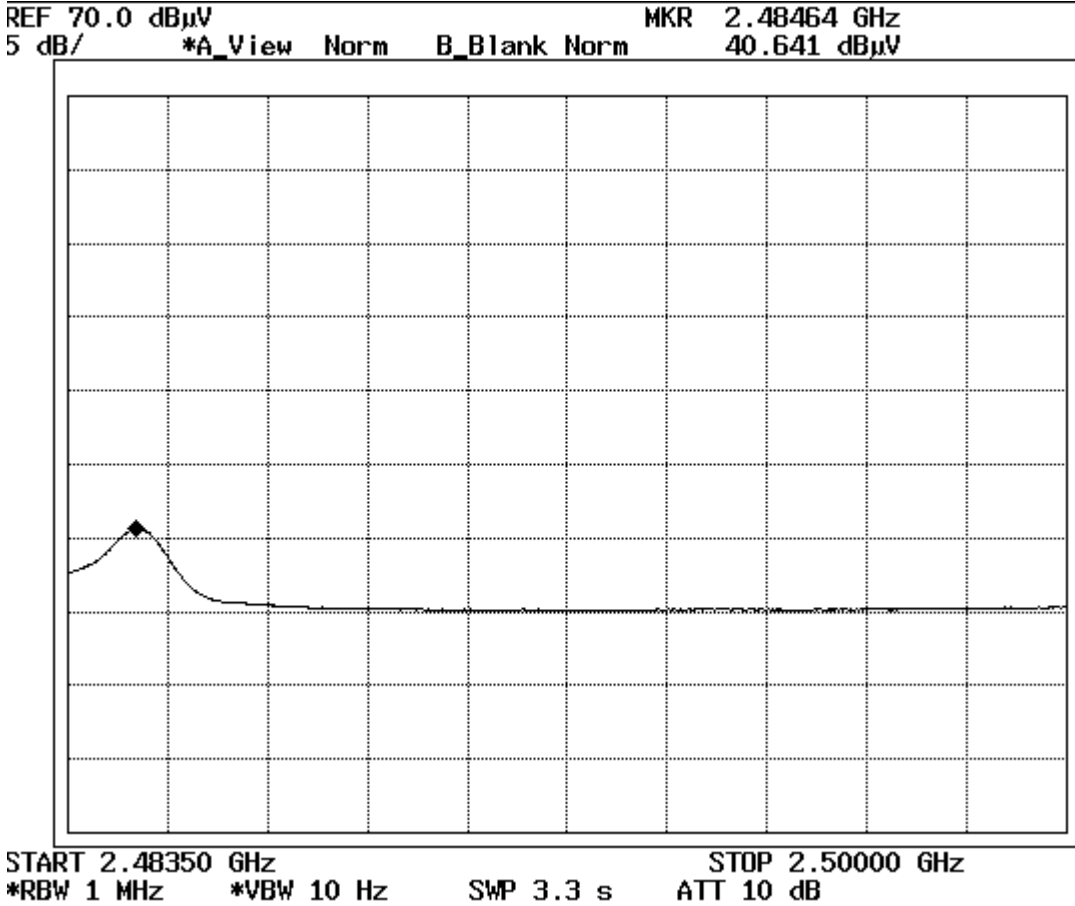
8. 2.4048GHz (ch 1)/ Vertical/ PK2: External Attenuator 10dB



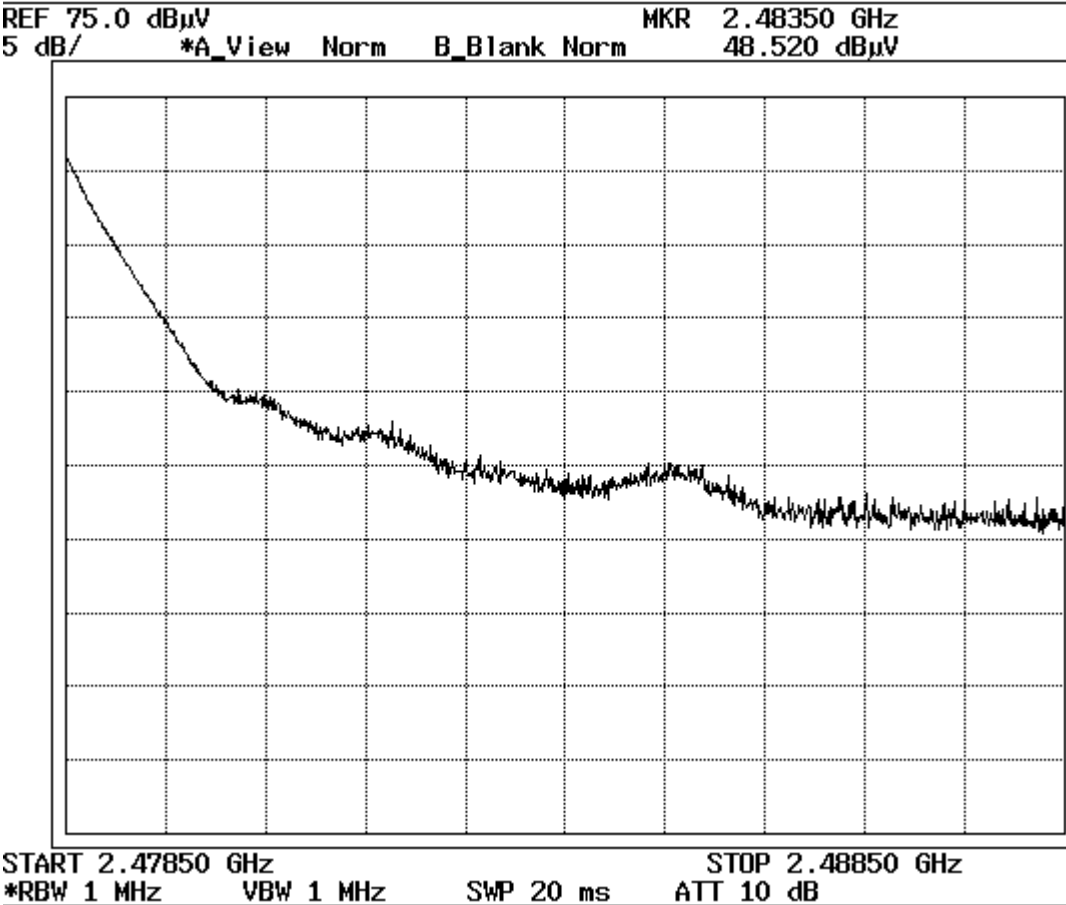
9. 2.475GHz (ch 40)/ Horizontal/ AV: External Attenuator 10dB



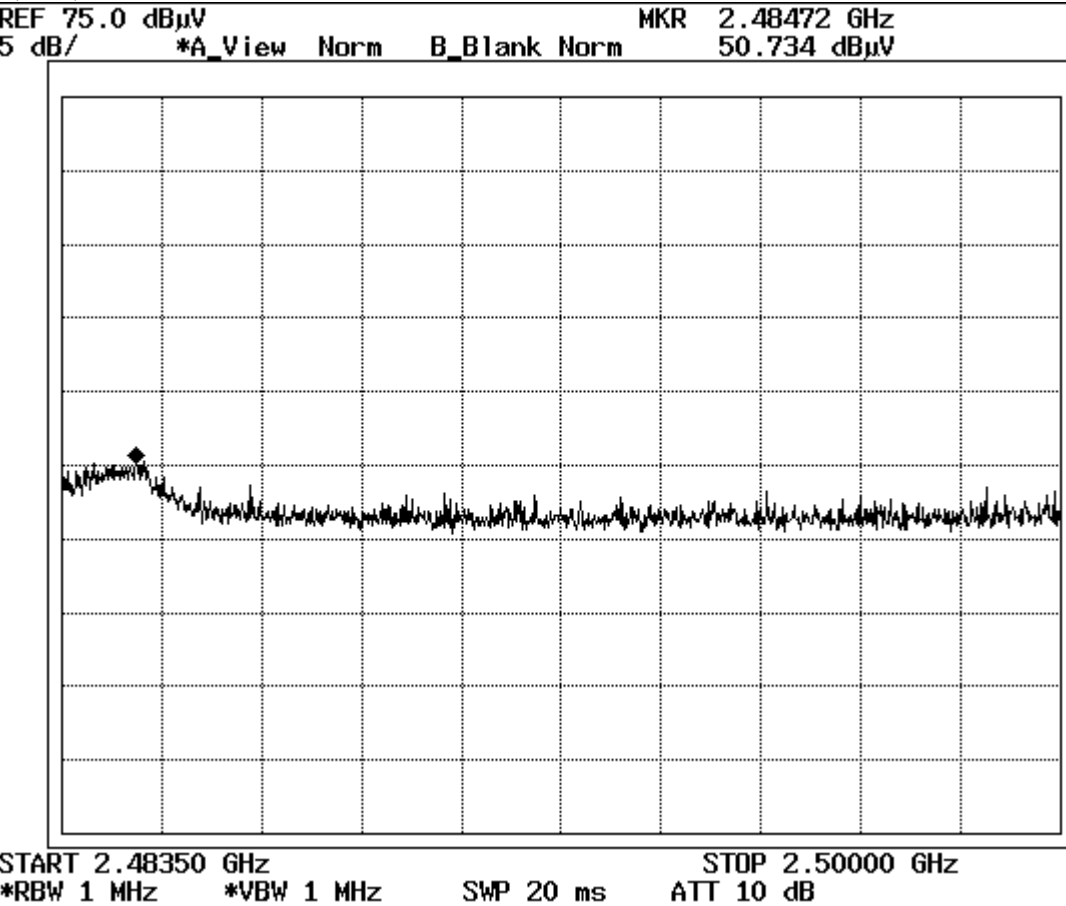
10. 2.475GHz (ch 40)/ Horizontal/ AV2: External Attenuator 10dB



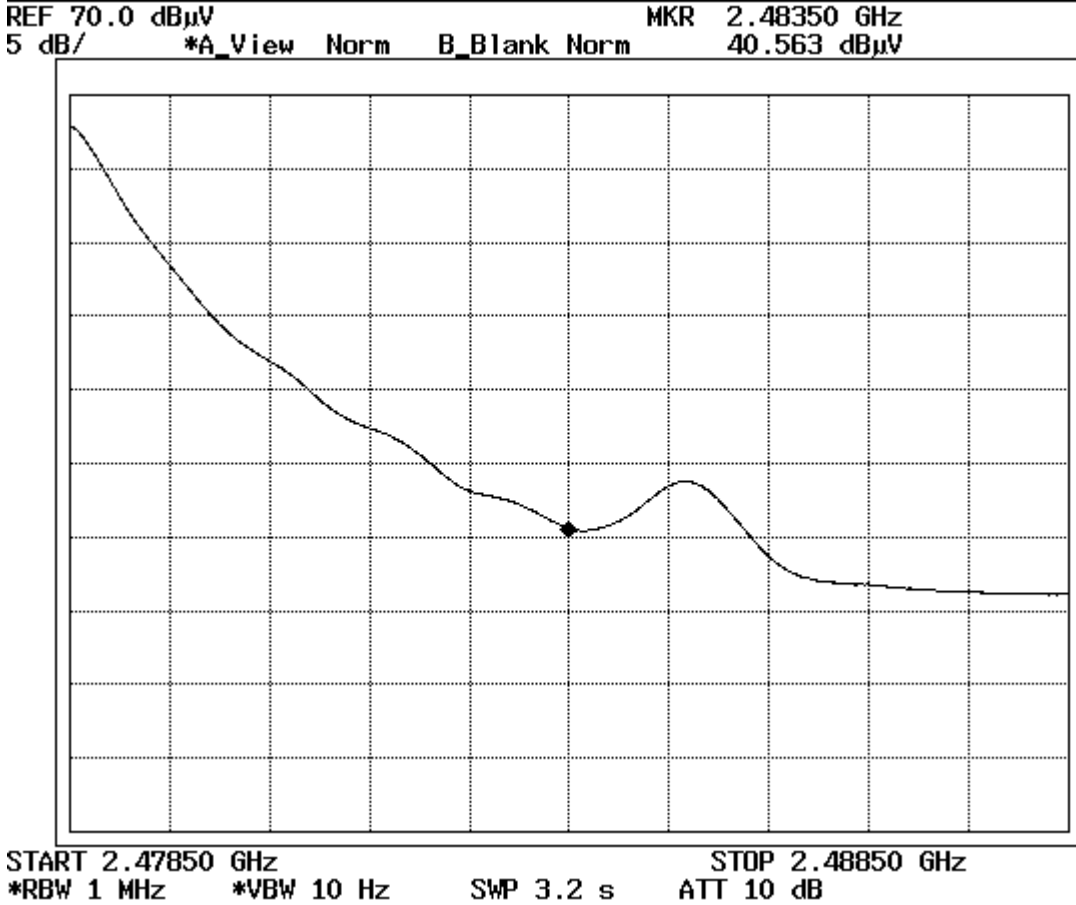
11. 2.475GHz (ch 40)/ Horizontal/ PK: External Attenuator 10dB



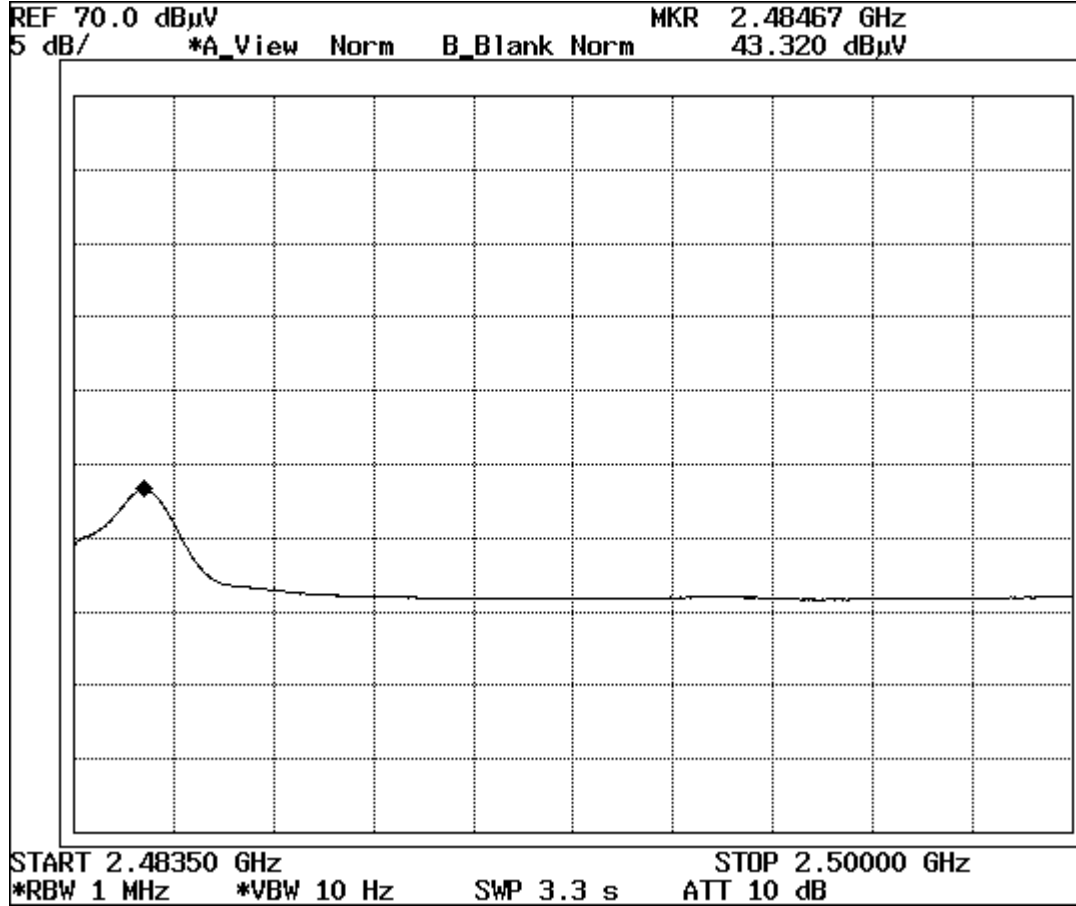
12. 2.475GHz (ch 40)/ Horizontal/ PK2: External Attenuator 10dB



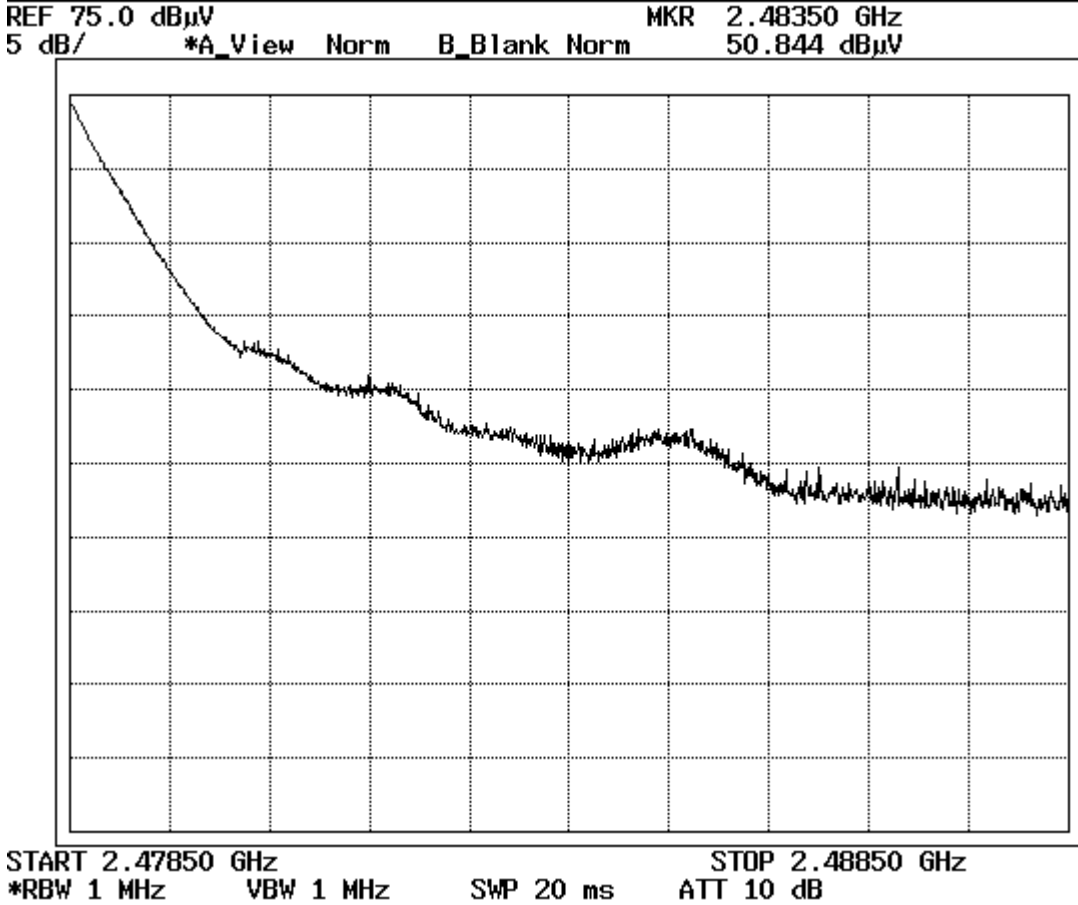
13.. 2.475GHz (ch 40)/ Vertical/ AV: External Attenuator 10dB



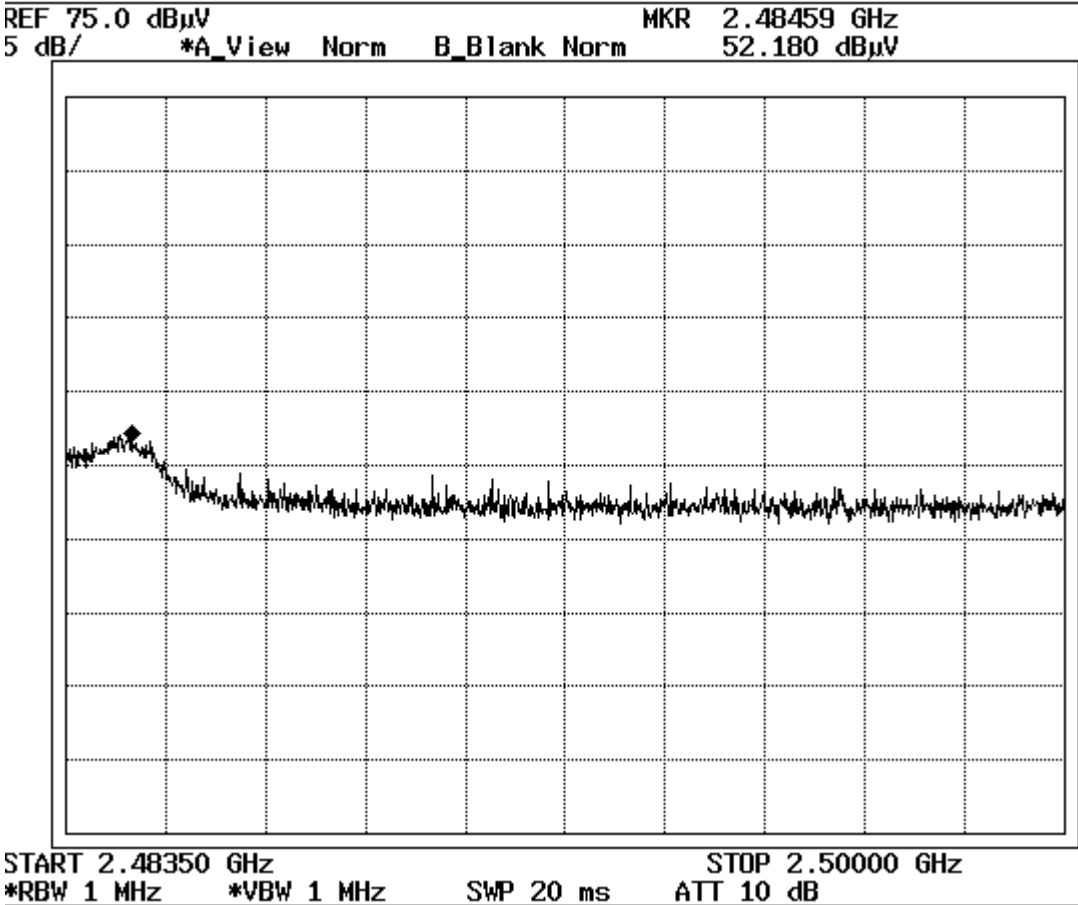
14. 2.475GHz (ch 40)/ Vertical/ AV2: External Attenuator 10dB



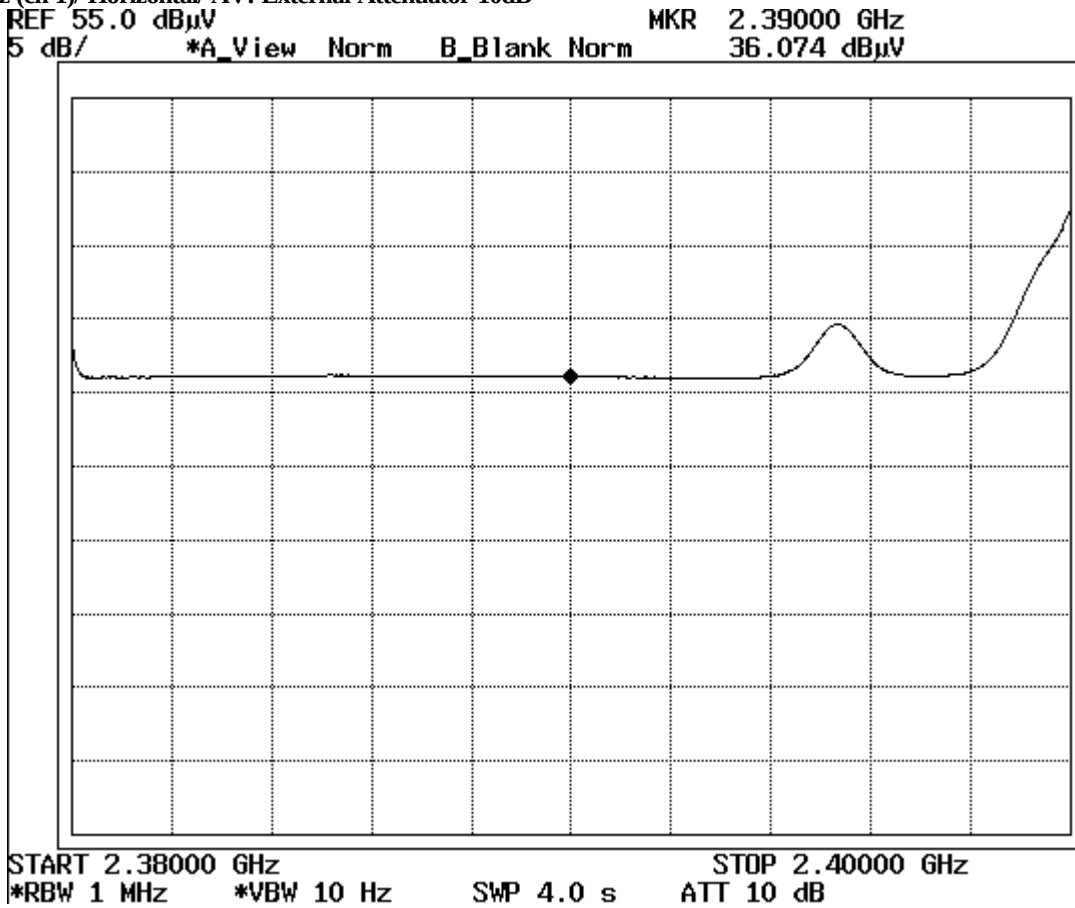
15. 2.475GHz (ch 40)/ Vertical/ PK: External Attenuator 10dB



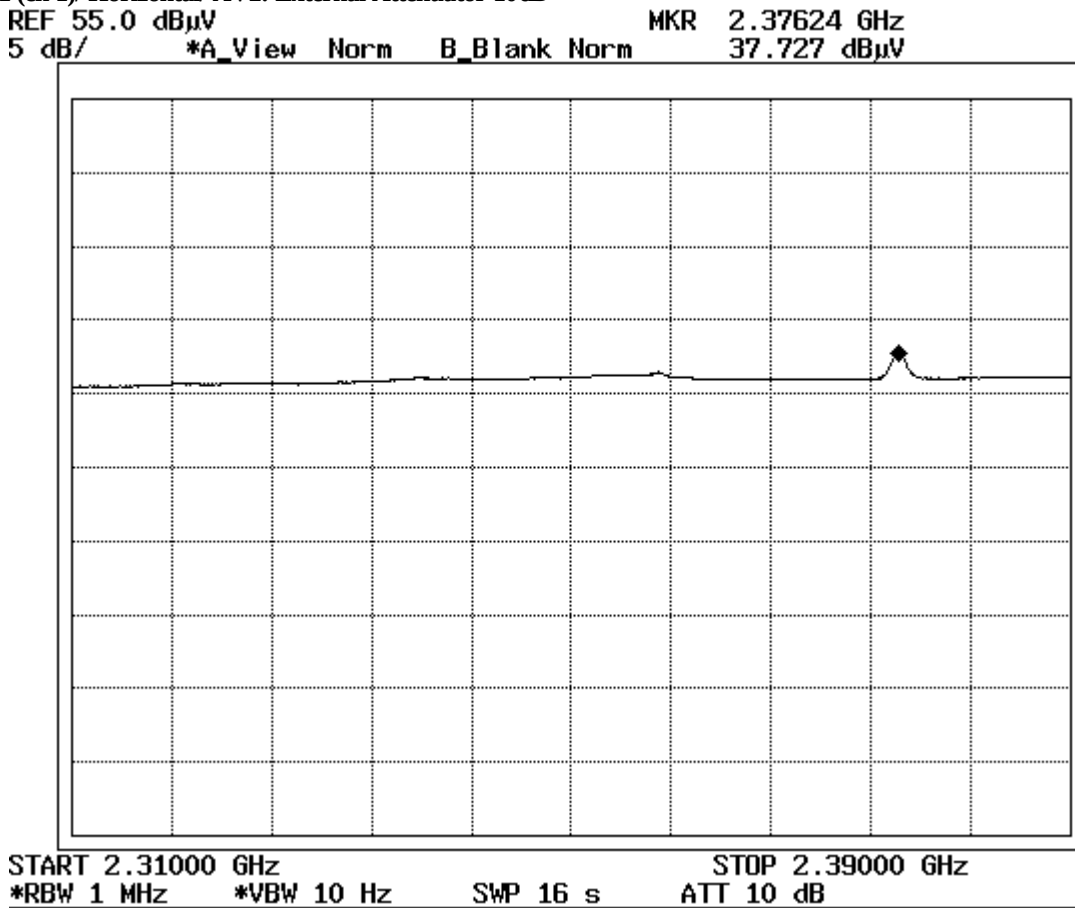
16. 2.475GHz (ch 40)/ Vertical/ PK2: External Attenuator 10dB

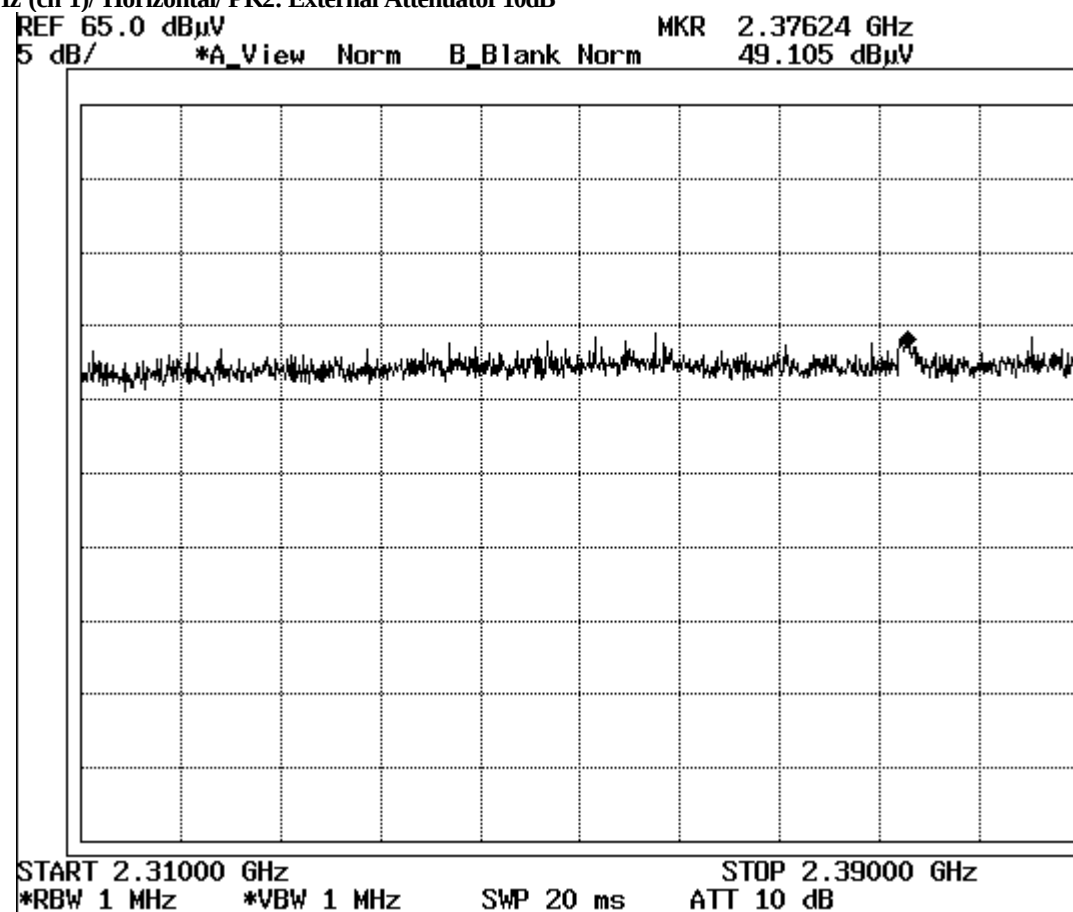


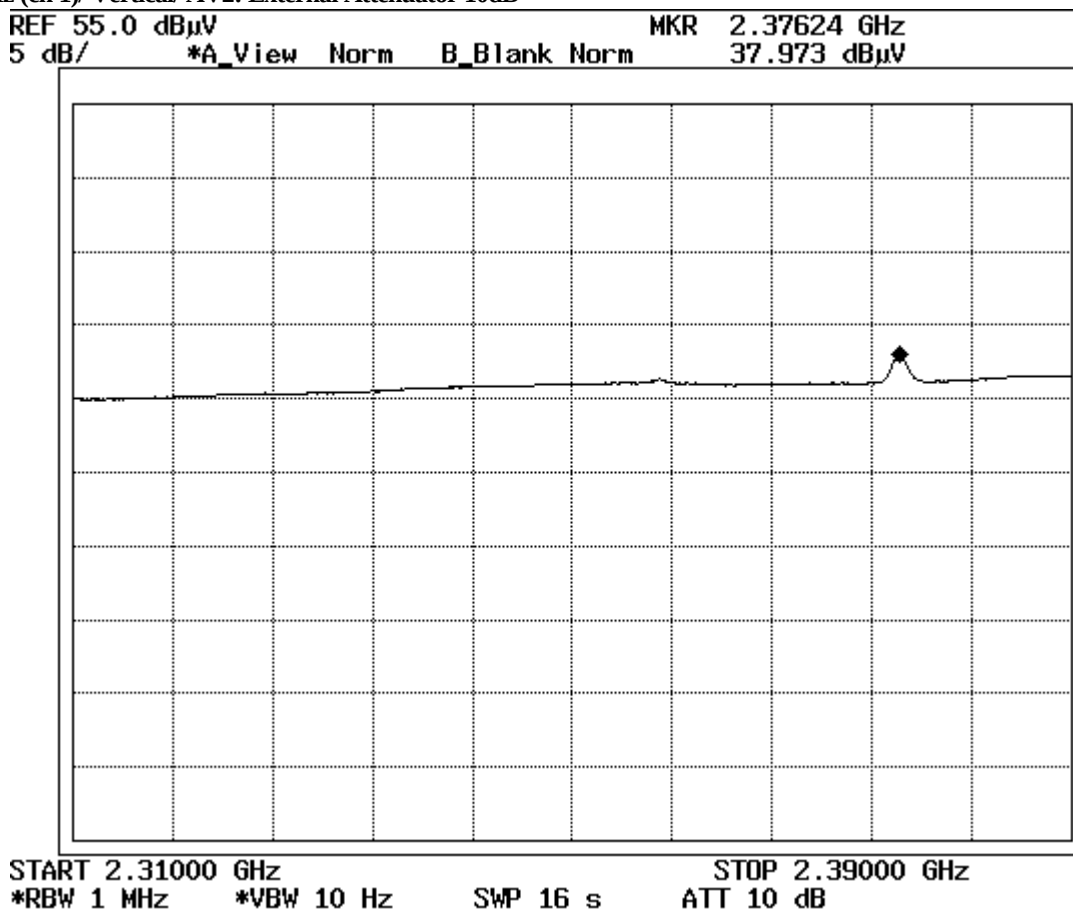
1. 2.4048GHz (ch 1)/ Horizontal/ AV: External Attenuator 10dB



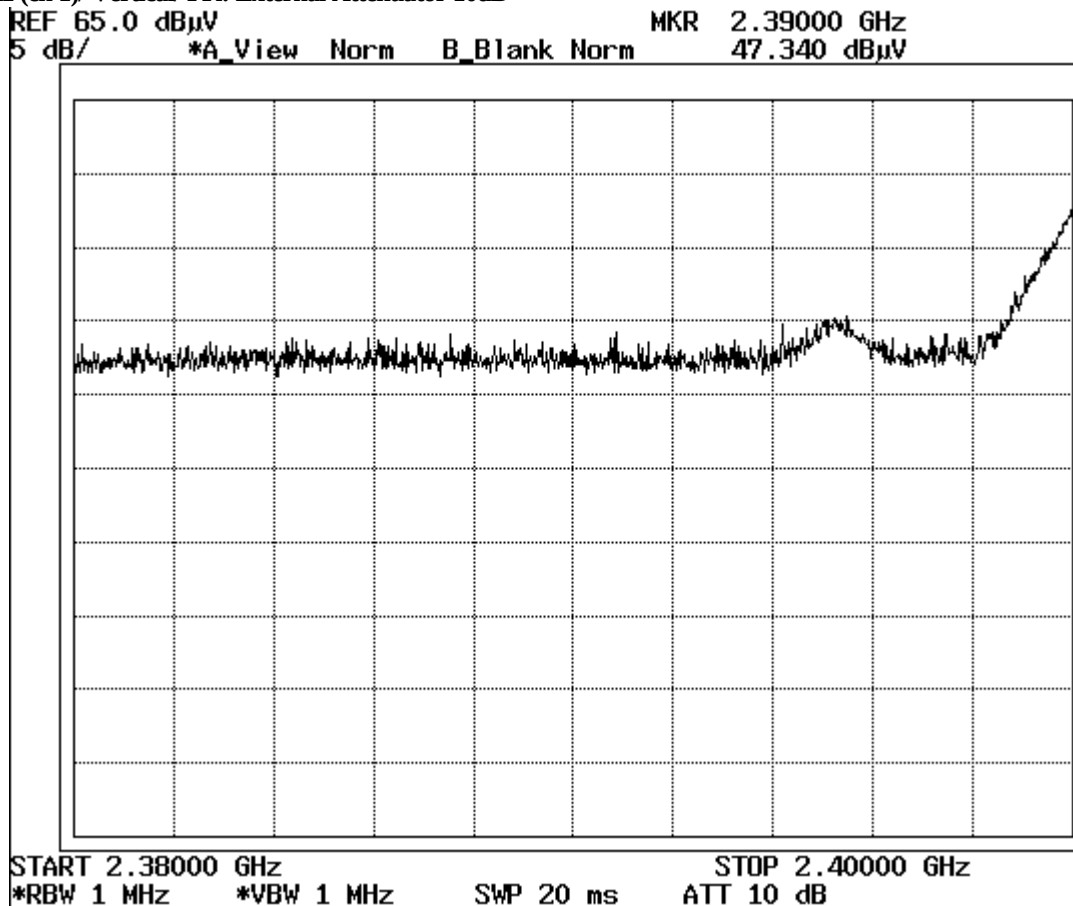
2. 2.4048GHz (ch 1)/ Horizontal/ AV2: External Attenuator 10dB



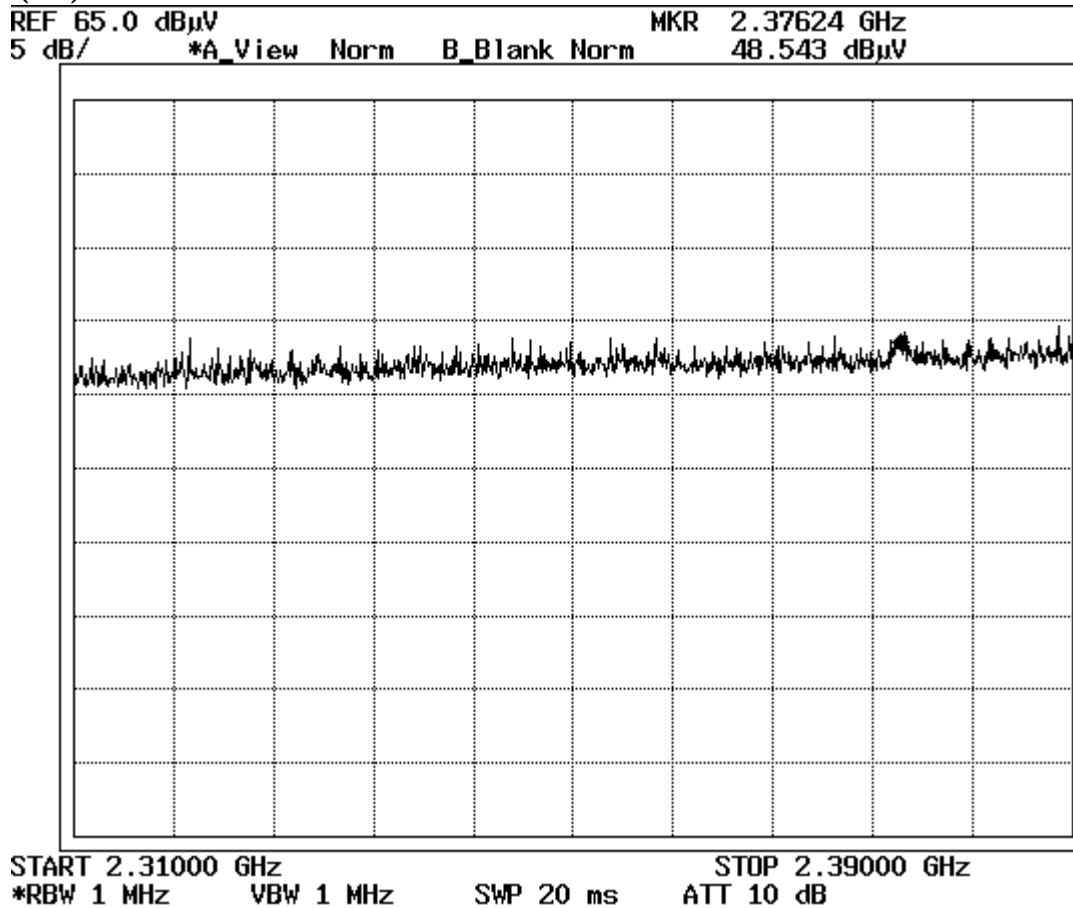




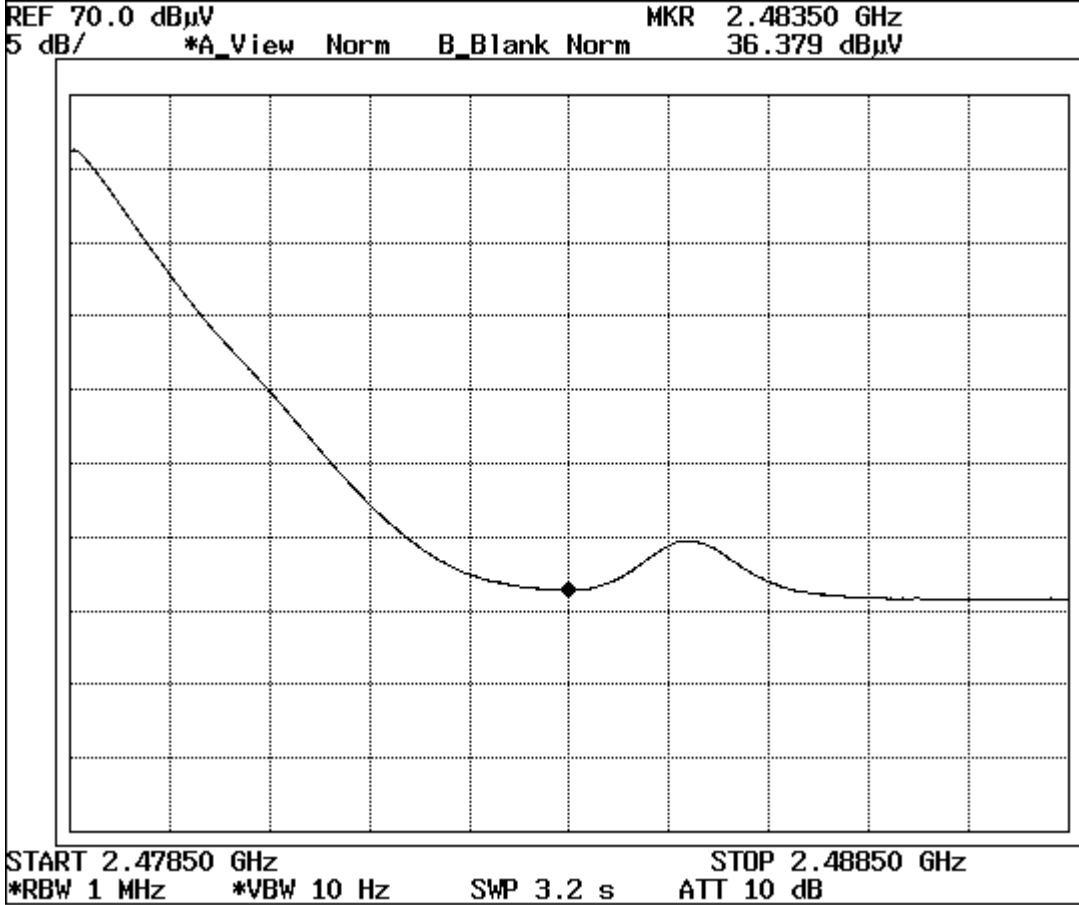
7. 2.4048GHz (ch 1)/ Vertical/ PK: External Attenuator 10dB



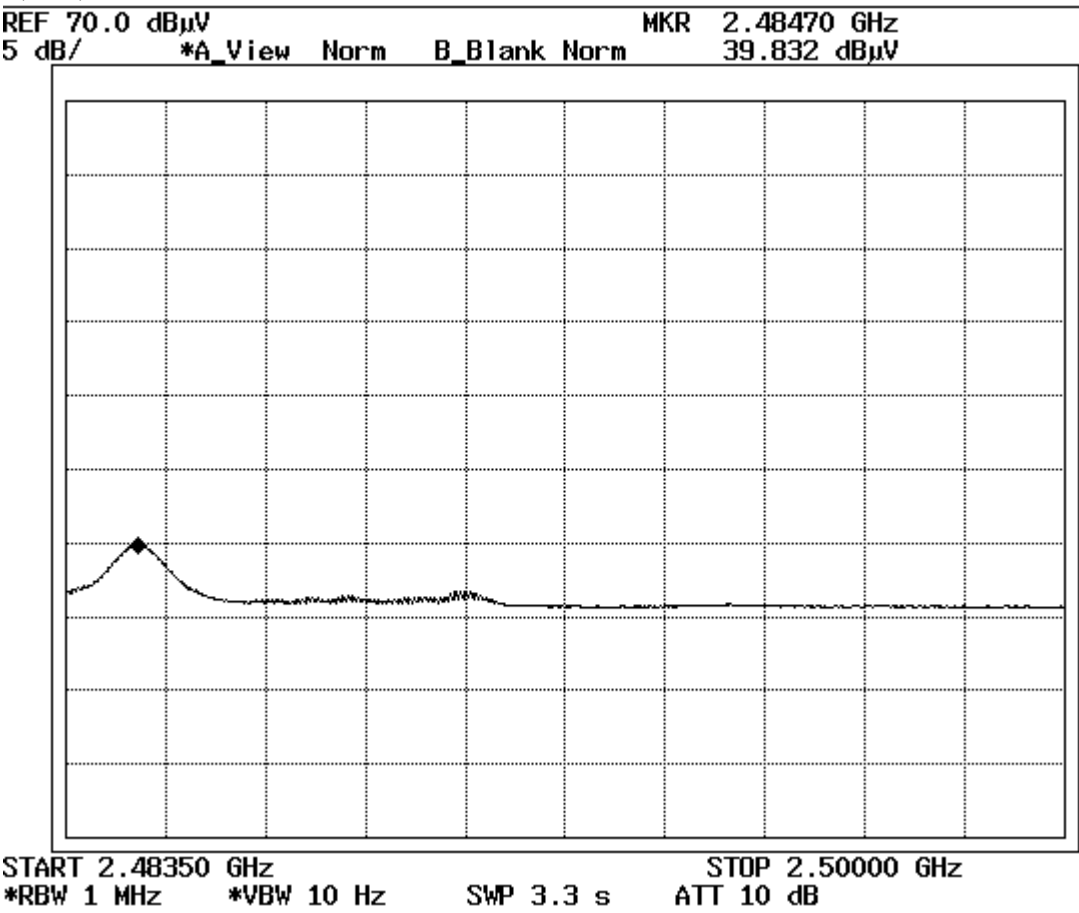
8. 2.4048GHz (ch 1)/ Vertical/ PK: External Attenuator 10dB



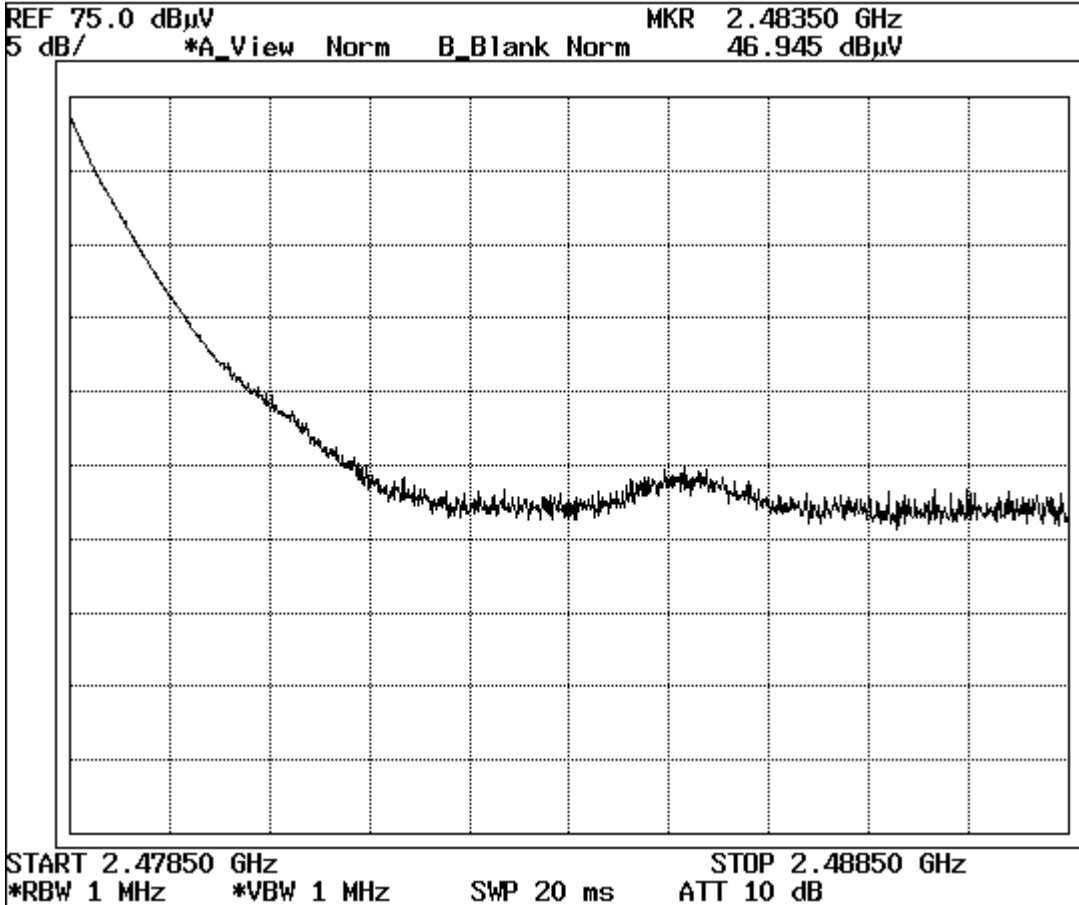
9. 2.475GHz (ch 40)/ Horizontal/ AV: External Attenuator 10dB



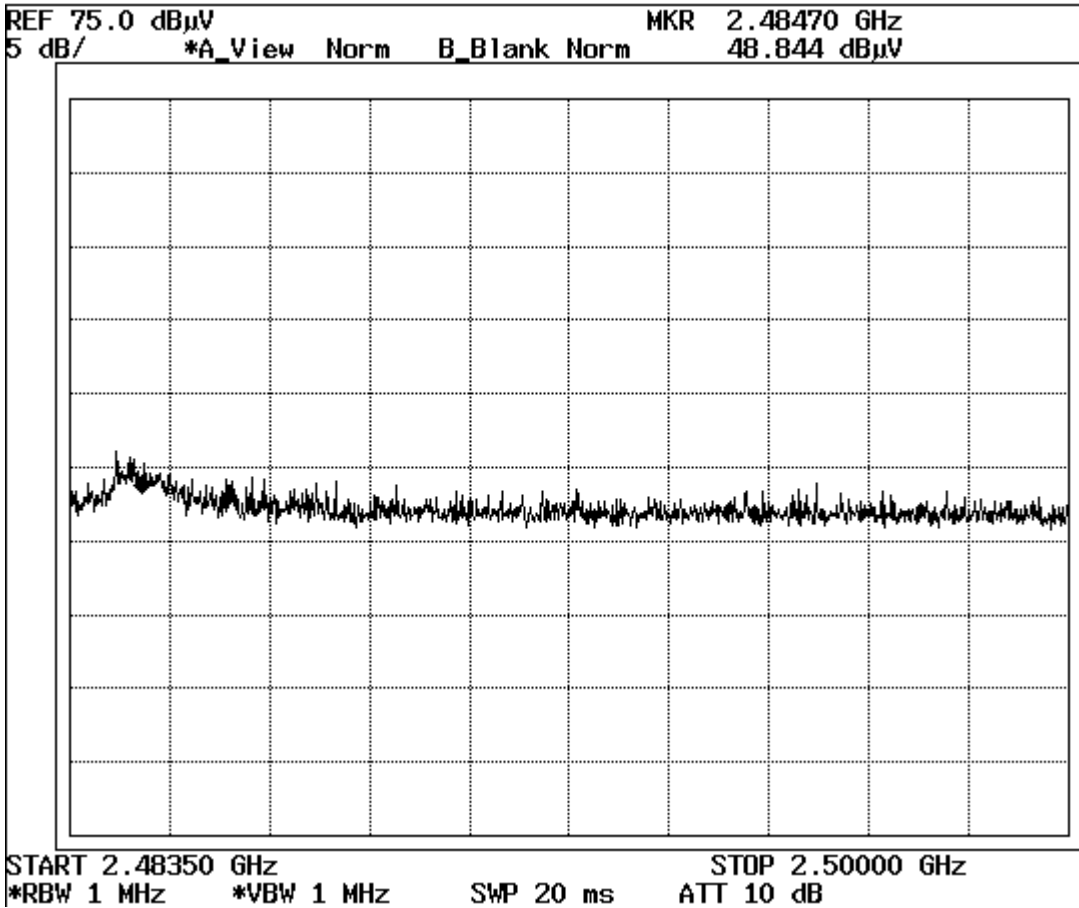
10. 2.475GHz (ch 40)/ Horizontal/ AV2: External Attenuator 10dB



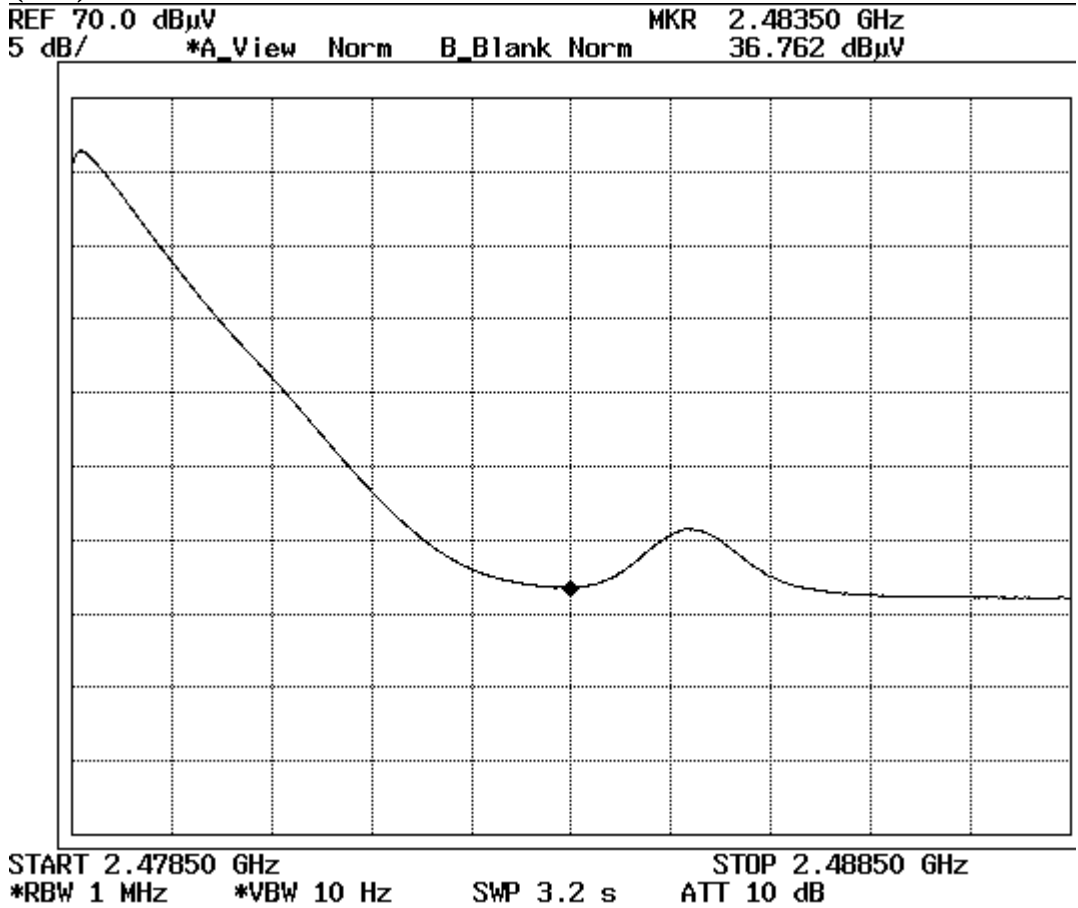
11. 2.475GHz (ch 40)/ Horizontal/ PK: External Attenuator 10dB



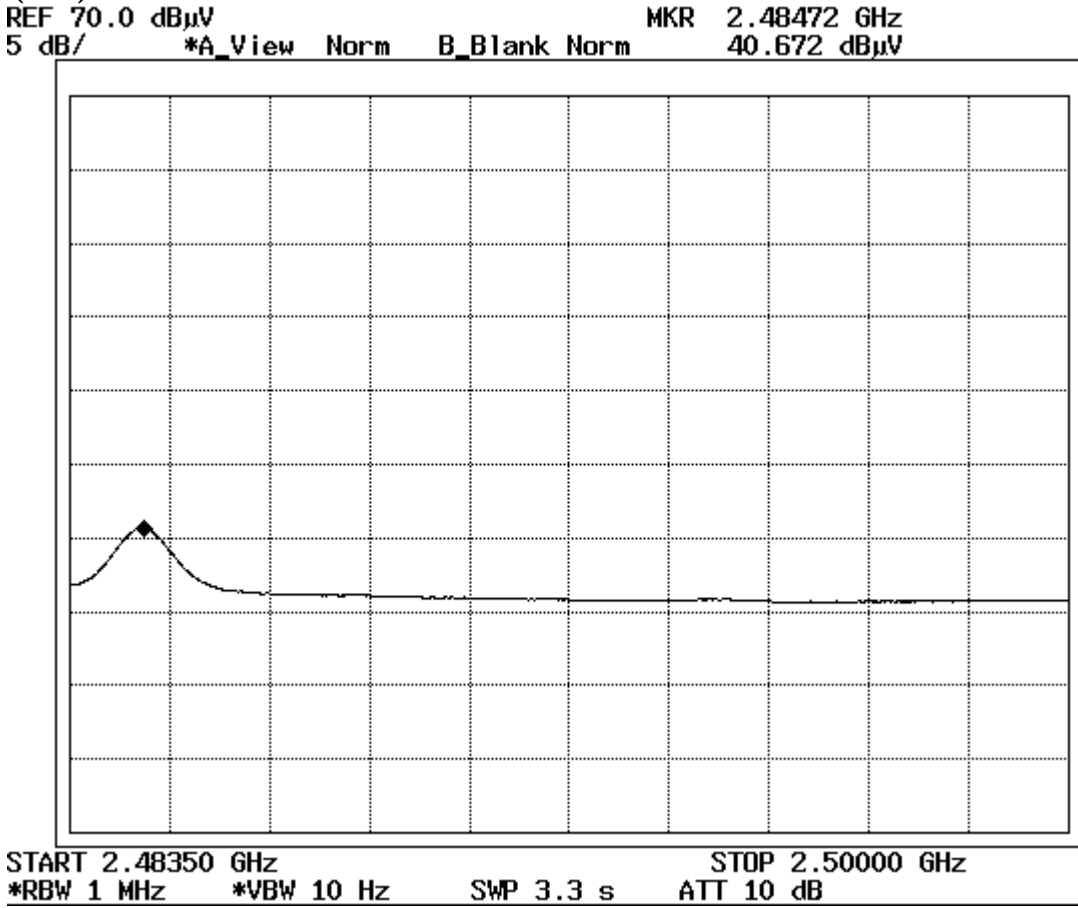
12. 2.475GHz (ch 40)/ Horizontal/ PK2: External Attenuator 10dB



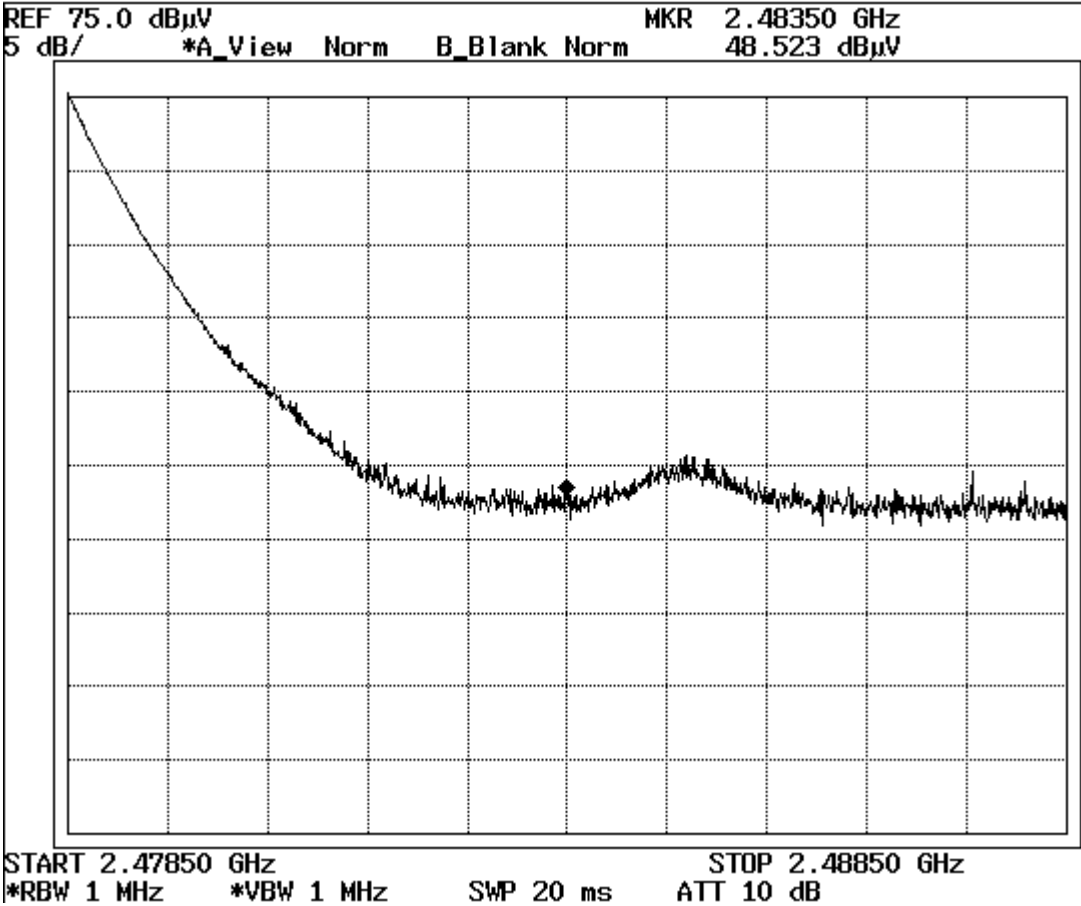
13. 2.475GHz (ch 40)/ Vertical/ AV: External Attenuator 10dB



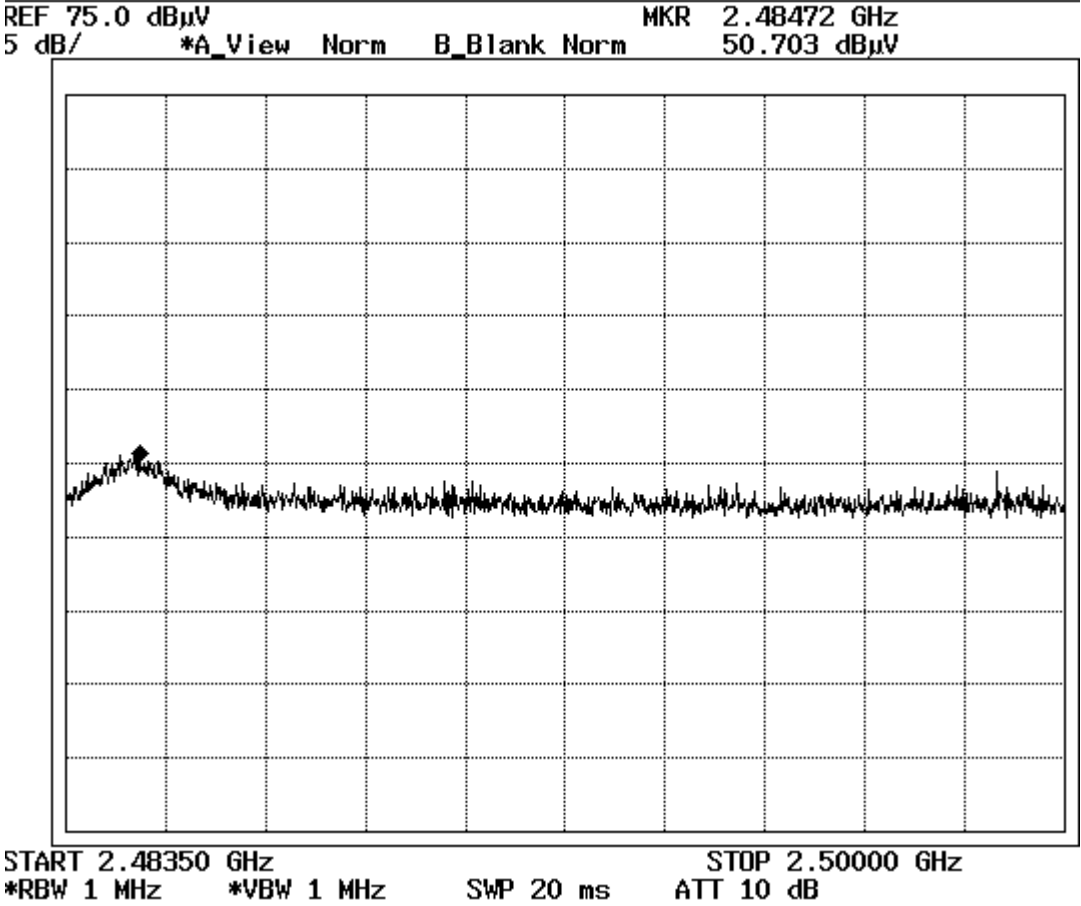
14. 2.475GHz (ch 40)/ Vertical/ AV2: External Attenuator 10dB



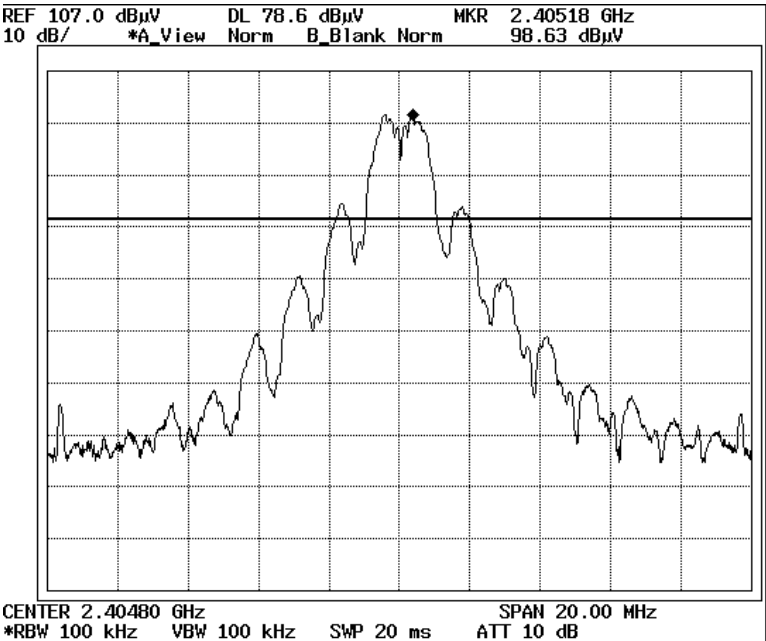
15. 2.475GHz (ch 40)/ Vertical/ PK: External Attenuator 10dB



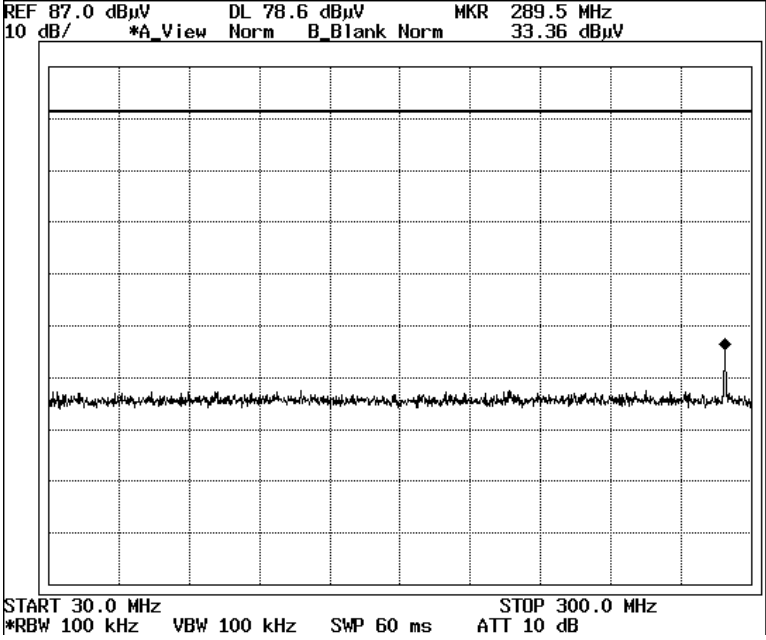
16. 2.475GHz (ch 40)/ Vertical/ PK2: External Attenuator 10dB



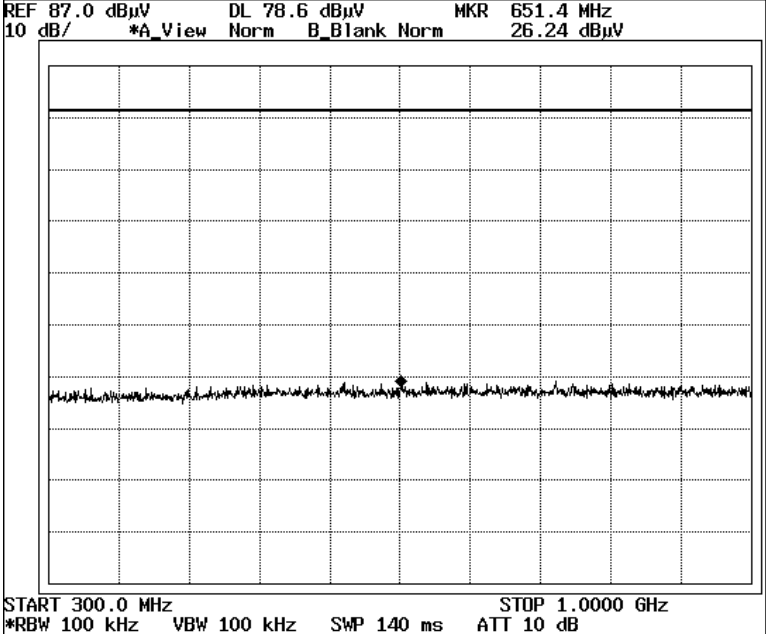
1. ch 1: 2.4048GHz: External Attenuator 10dB



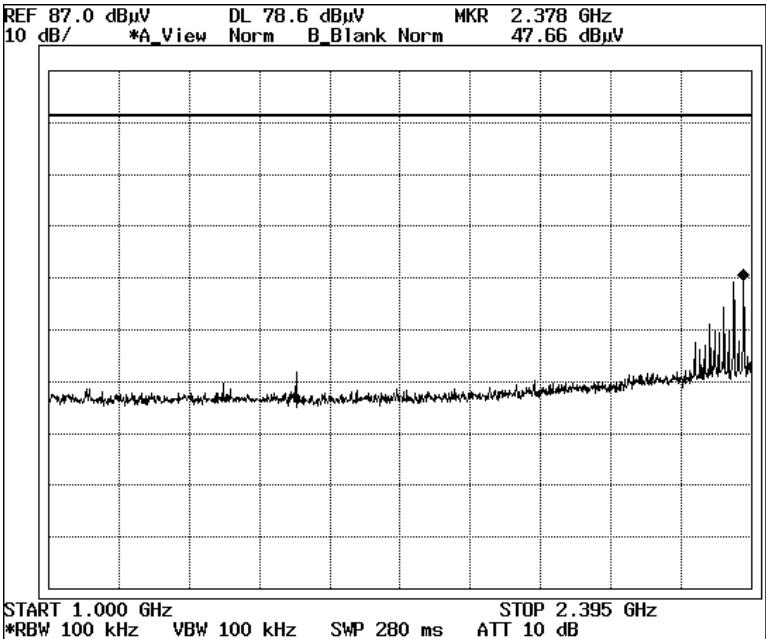
2. ch 1: 2.4048GHz: External Attenuator 10dB



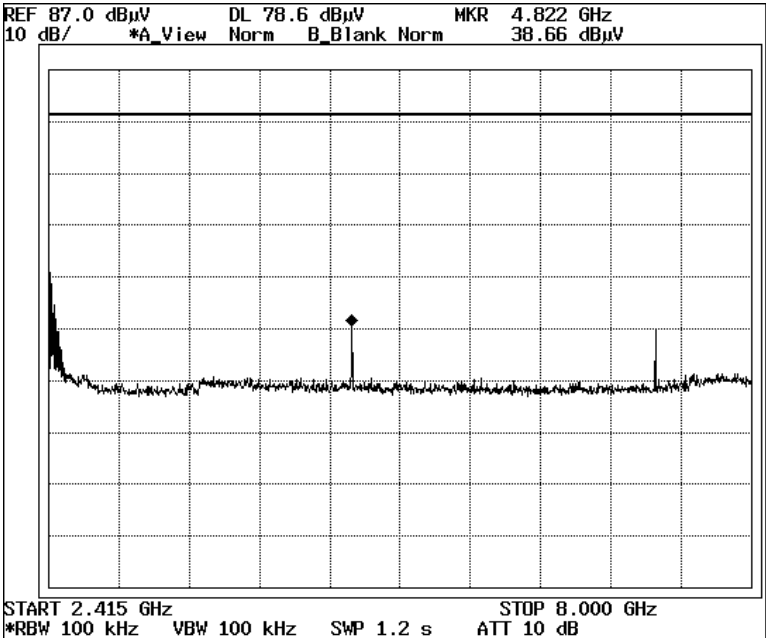
3. ch 1: 2.4048GHz: External Attenuator 10dB



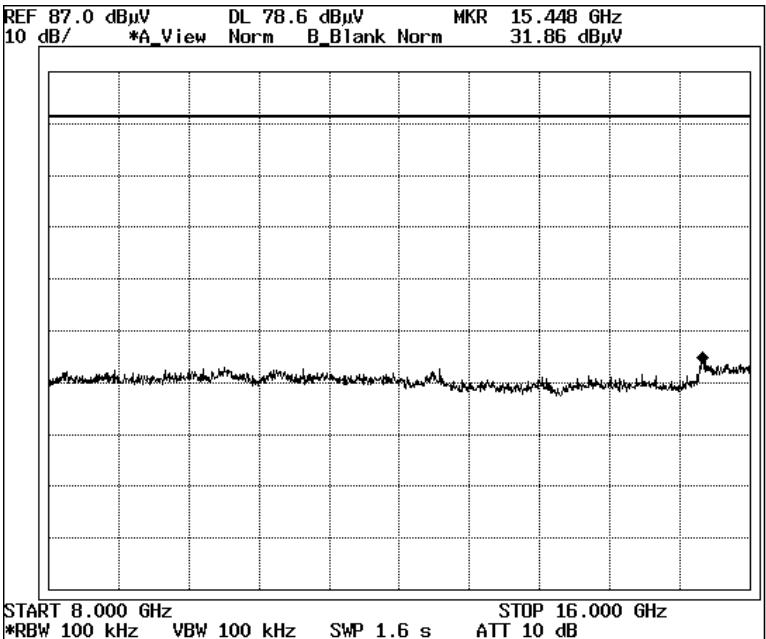
4. ch 1: 2.4048GHz: External Attenuator 10dB

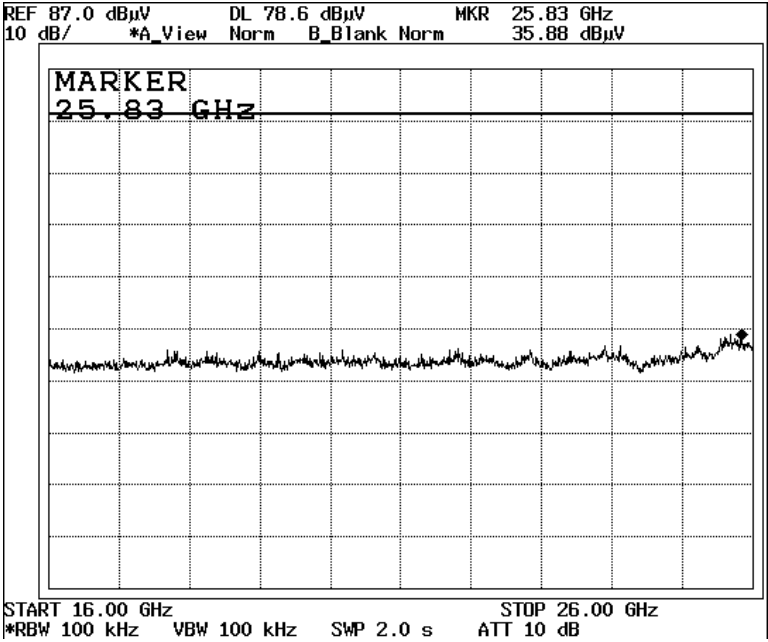


5. ch 1: 2.4048GHz: External Attenuator 10dB

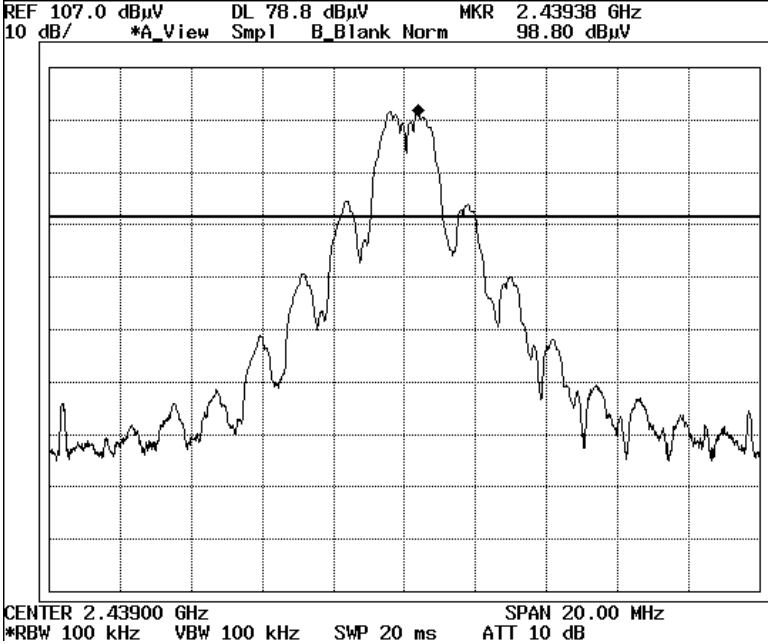


6. ch 1: 2.4048GHz: External Attenuator 10dB

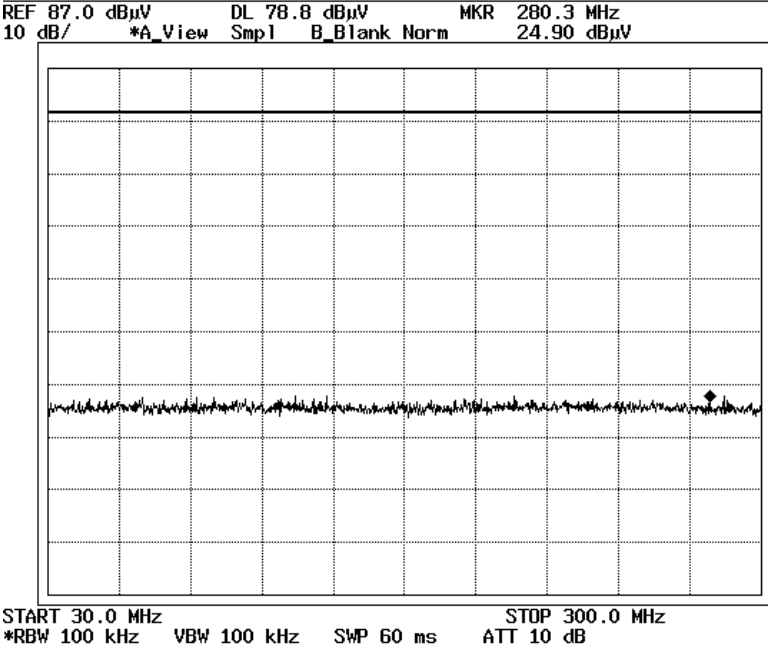




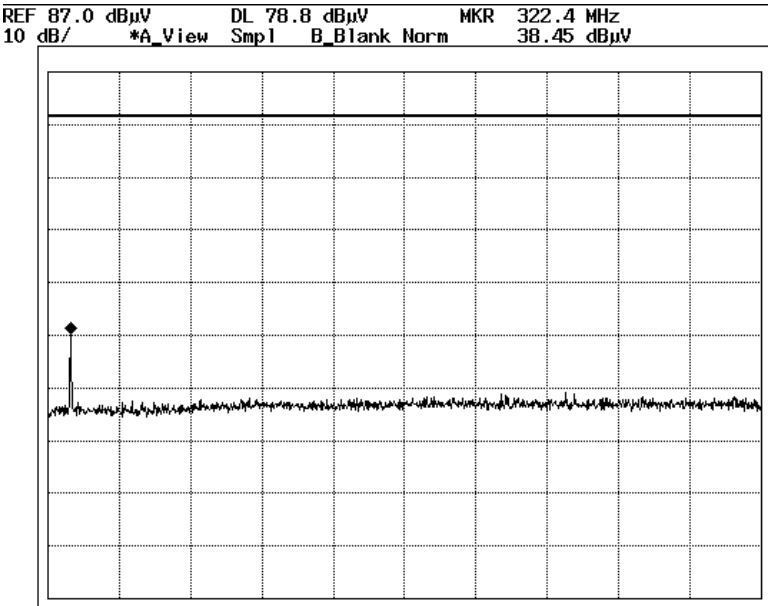
8. ch 20: 2.439GHz: External Attenuator 10dB



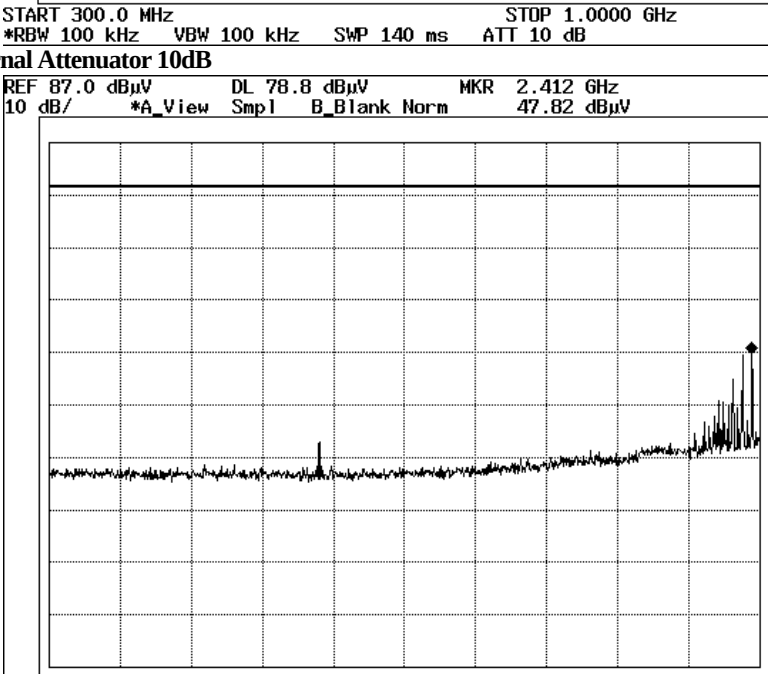
9. ch 20: 2.439GHz: External Attenuator 10dB



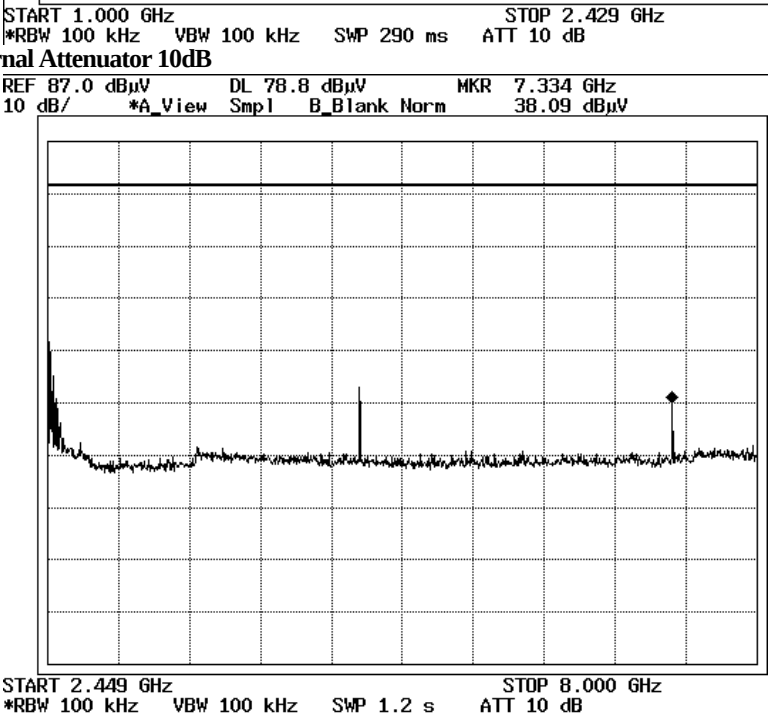
10. ch 20: 2.439GHz: External Attenuator 10dB

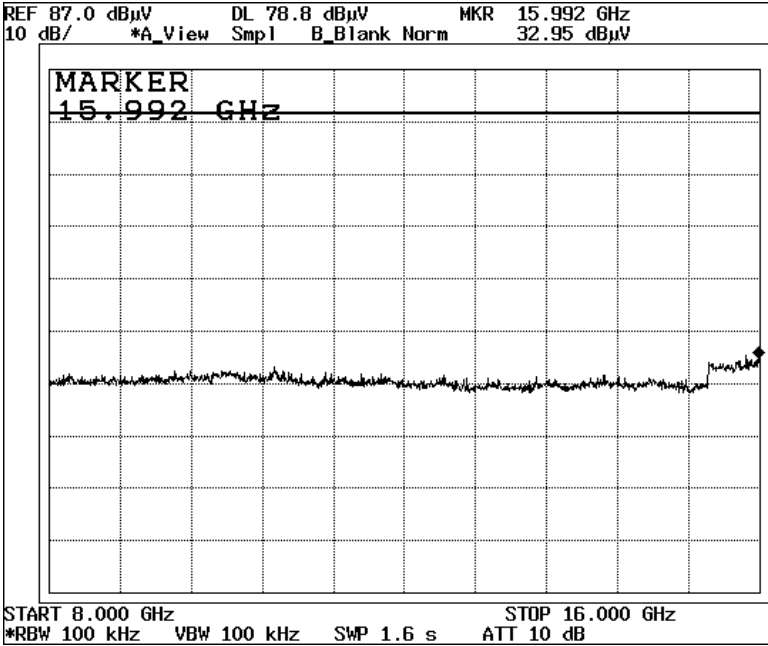


11. ch 20: 2.439GHz: External Attenuator 10dB

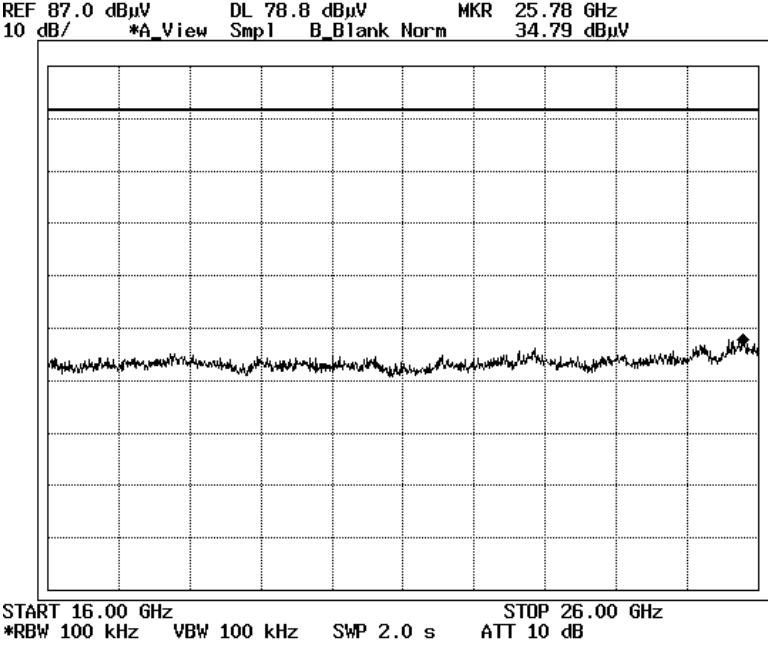


12. ch 20: 2.439GHz: External Attenuator 10dB

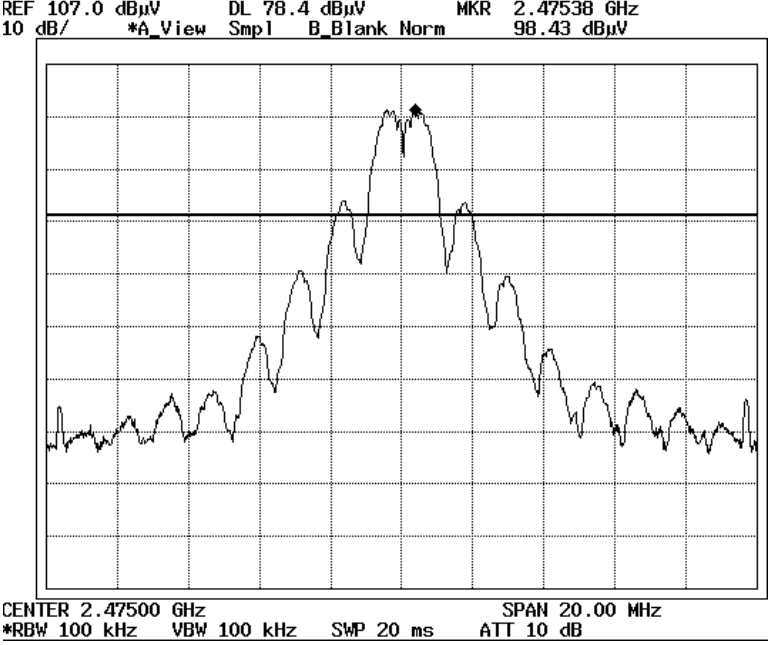




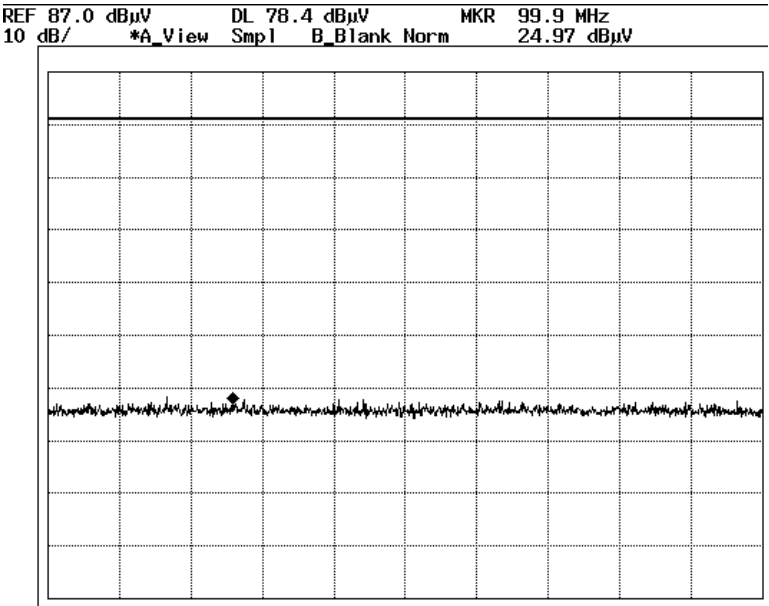
14. ch 20: 2.439GHz: External Attenuator 10dB



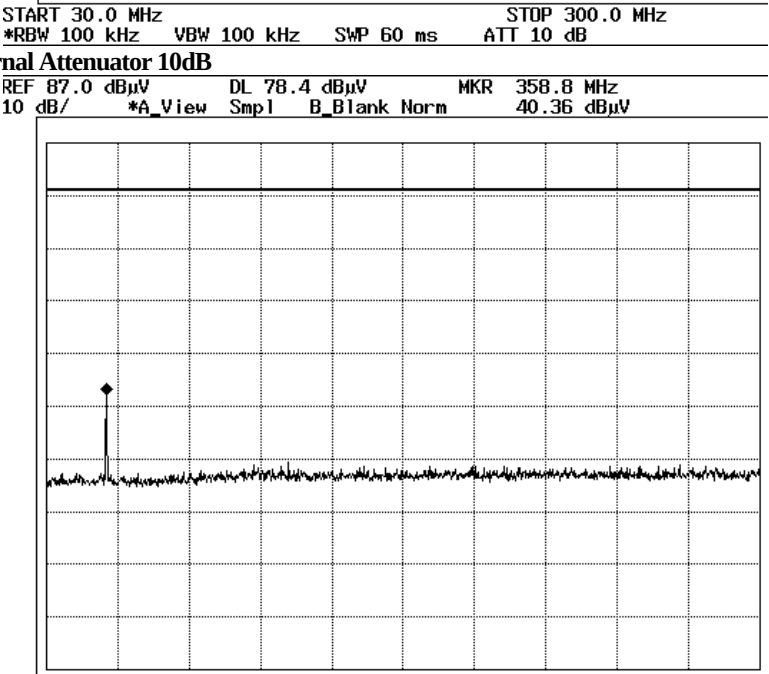
15. ch 40: 2.475GHz: External Attenuator 10dB



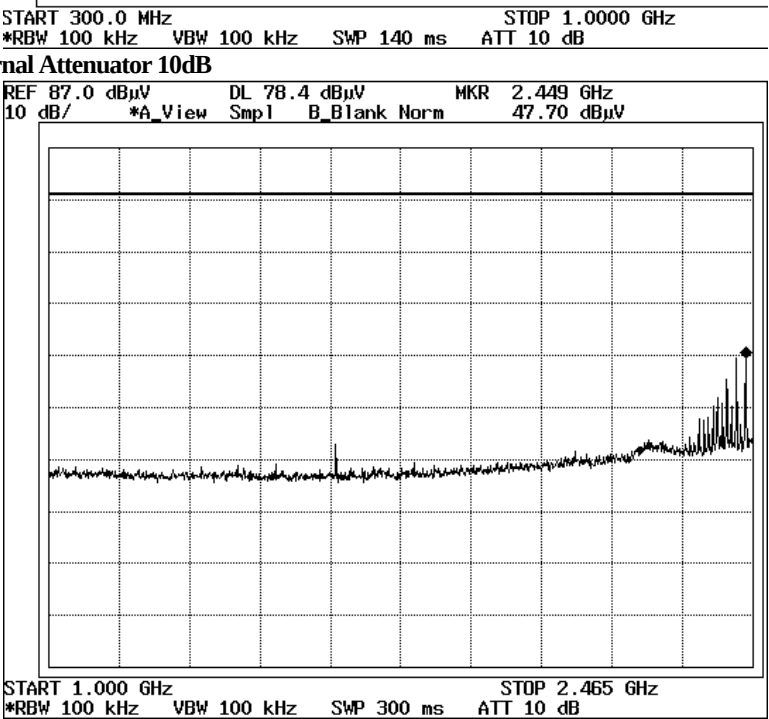
16. ch 40: 2.475GHz: External Attenuator 10dB



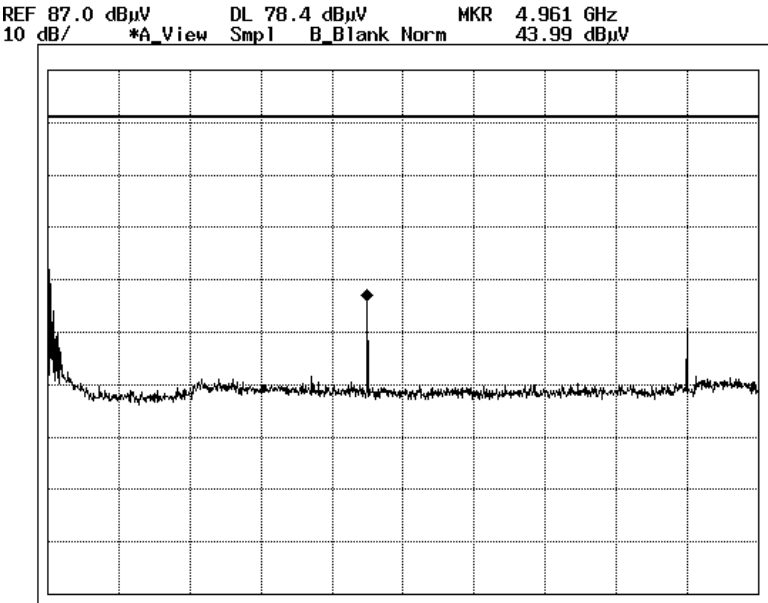
17. ch 40: 2.475GHz: External Attenuator 10dB



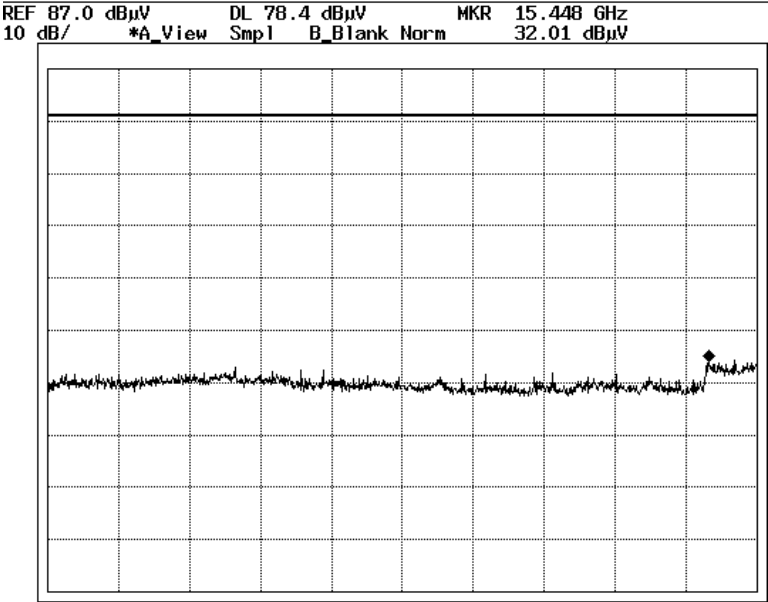
18. ch 40: 2.475GHz: External Attenuator 10dB



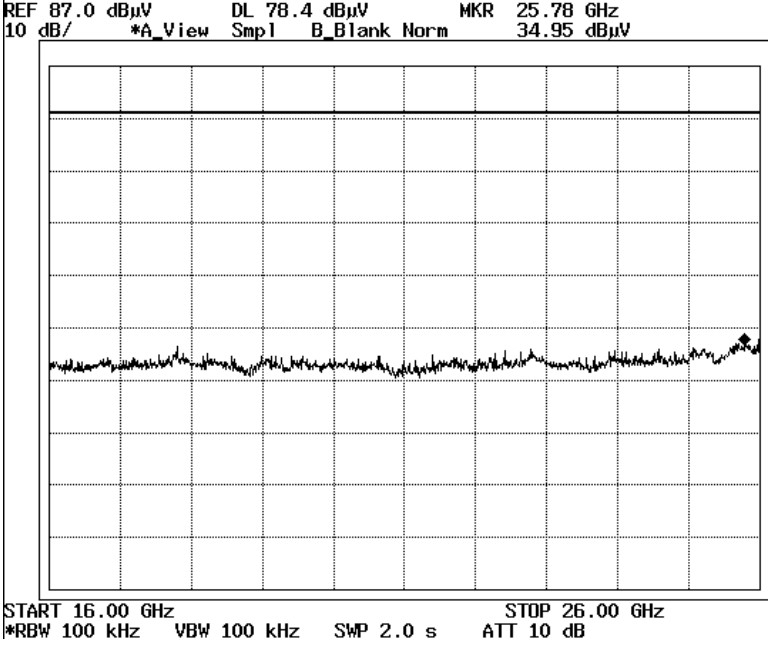
19. ch 40: 2.475GHz: External Attenuator 10dB



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



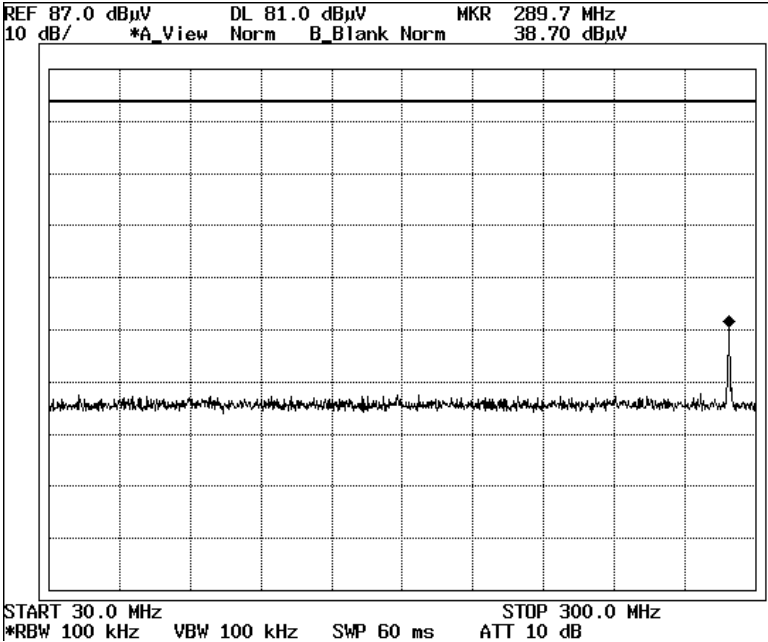
21. ch 40: 2.475GHz: External Attenuator 10dB



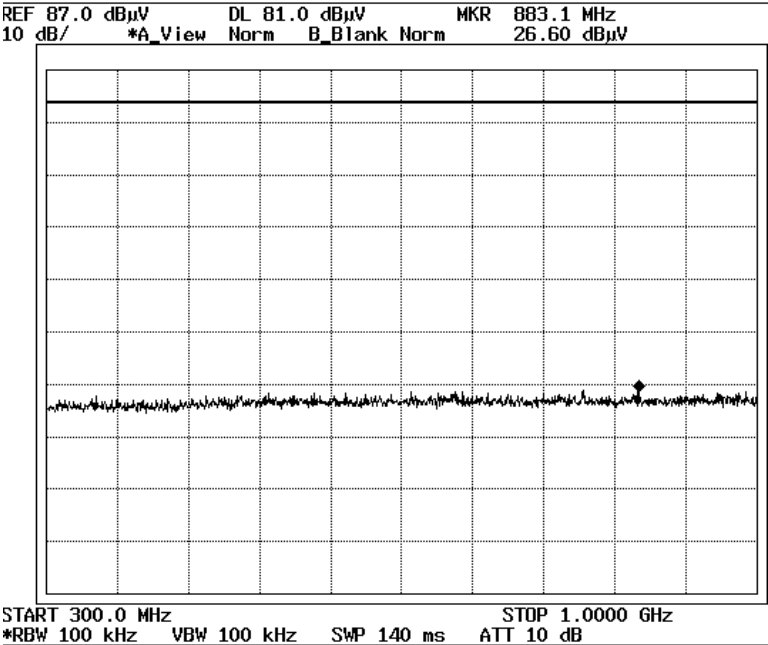
1. ch 1: 2.4048GHz: External Attenuator 10dB



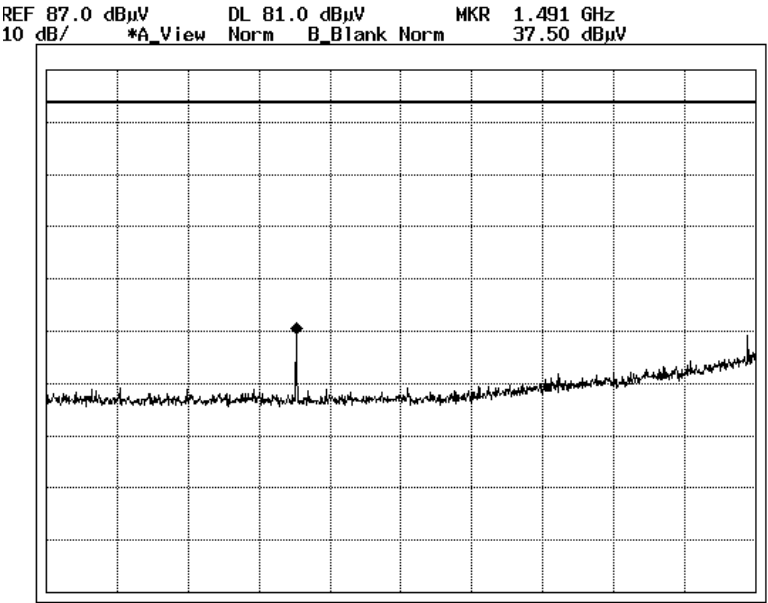
2. ch 1: 2.4048GHz: External Attenuator 10dB



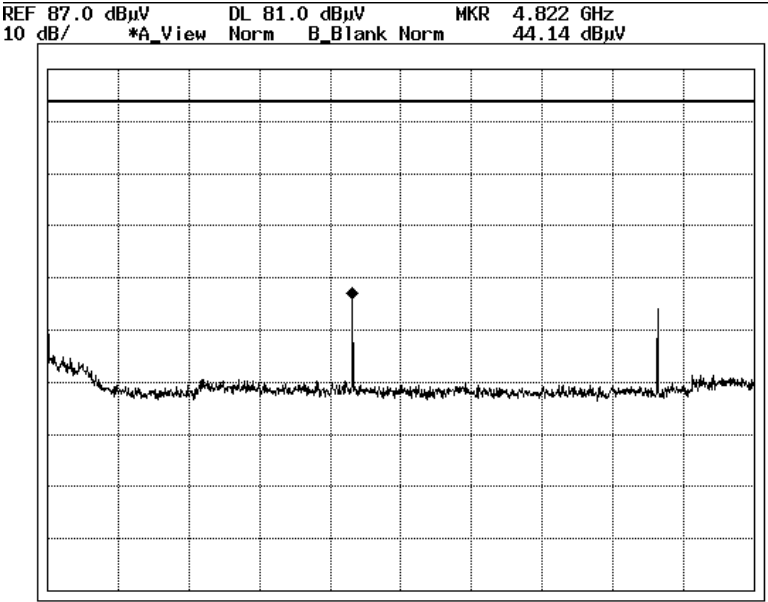
3. ch 1: 2.4048GHz: External Attenuator 10dB



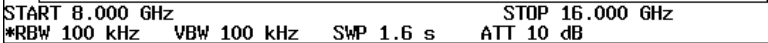
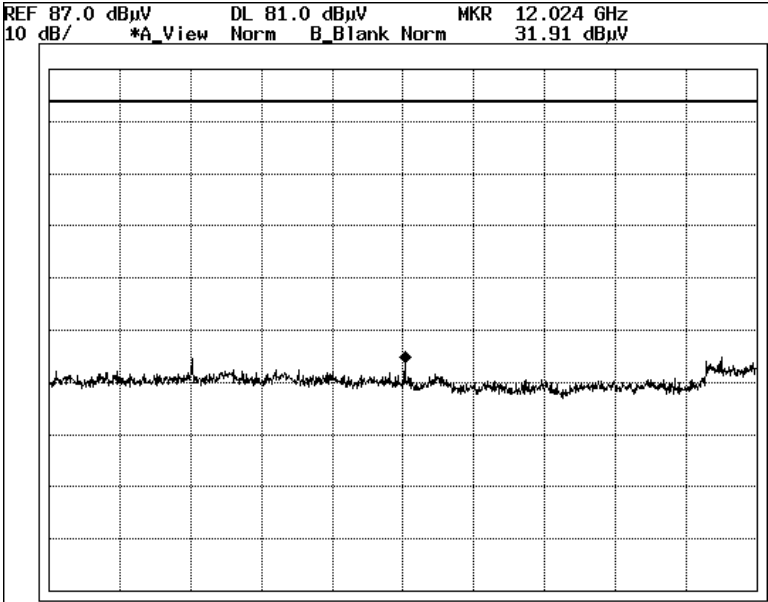
4. ch 1: 2.4048GHz: External Attenuator 10dB

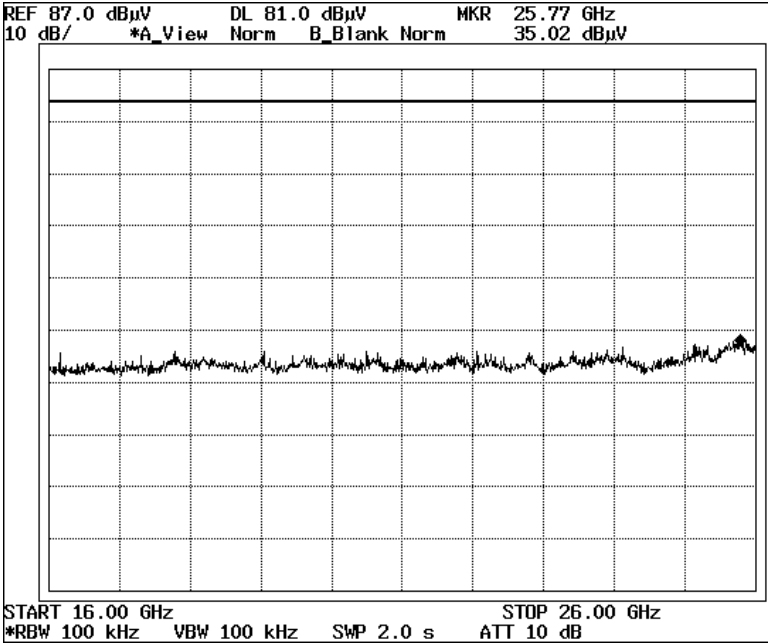


5. ch 1: 2.4048GHz: External Attenuator 10dB

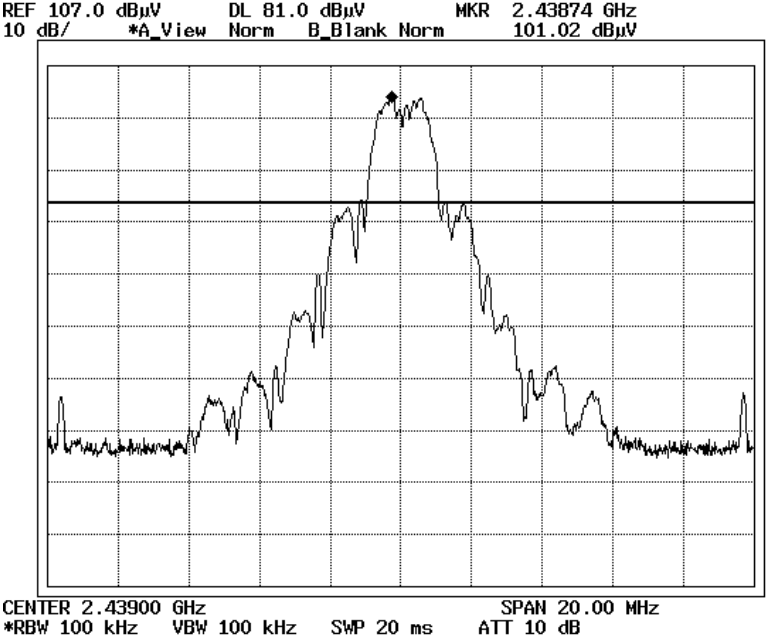


6. ch 1: 2.4048GHz: External Attenuator 10dB

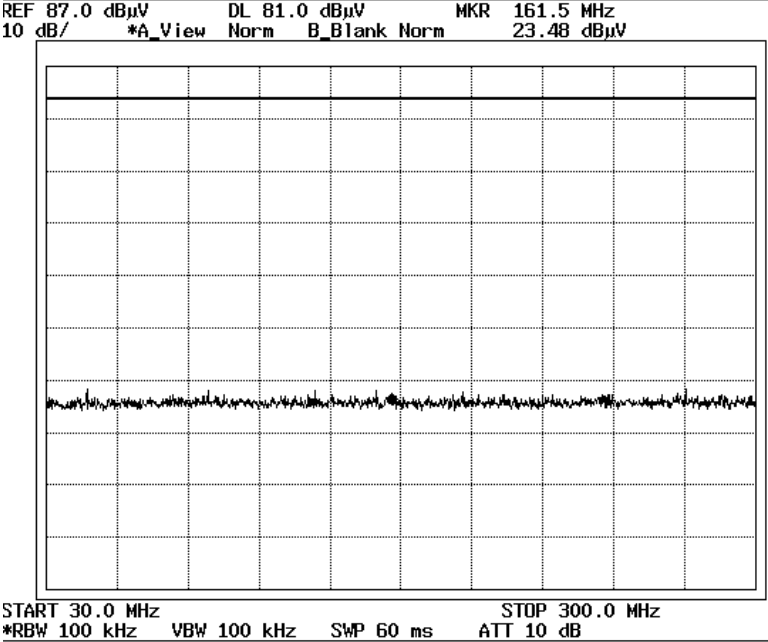




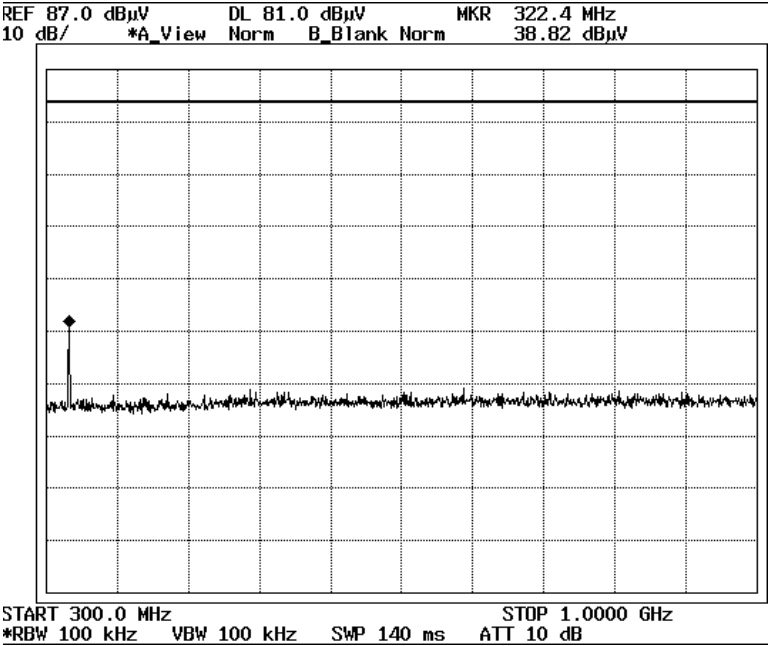
8. ch 20: 2.439GHz: External Attenuator 10dB



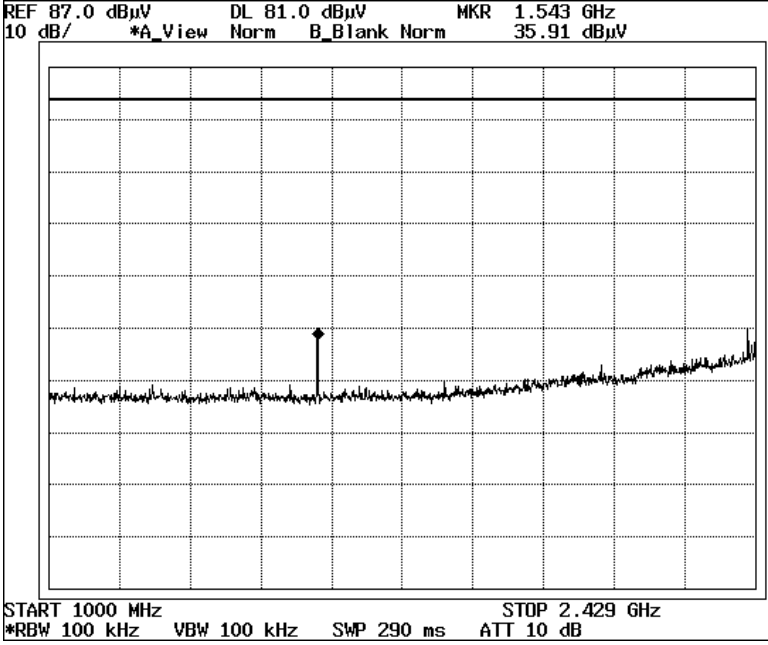
9. ch 20: 2.439GHz: External Attenuator 10dB



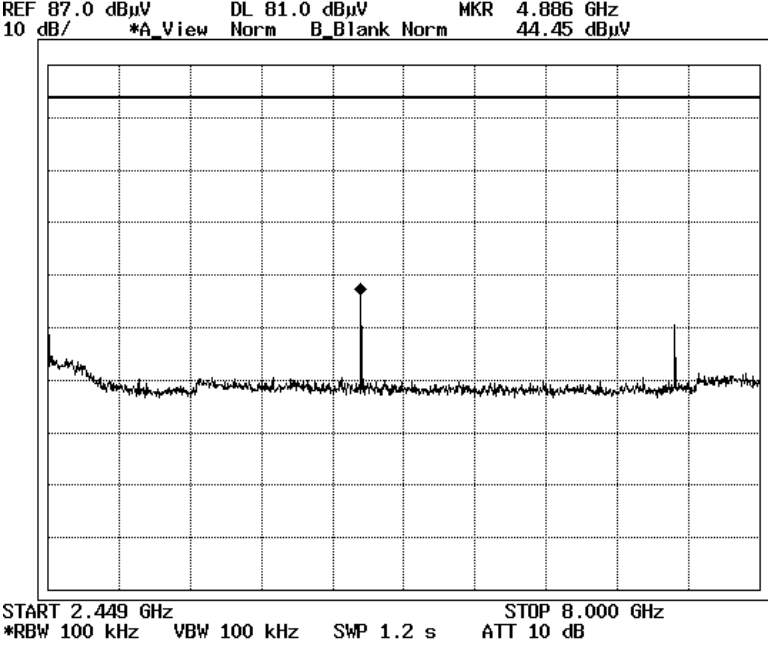
10. ch 20: 2.439GHz: External Attenuator 10dB



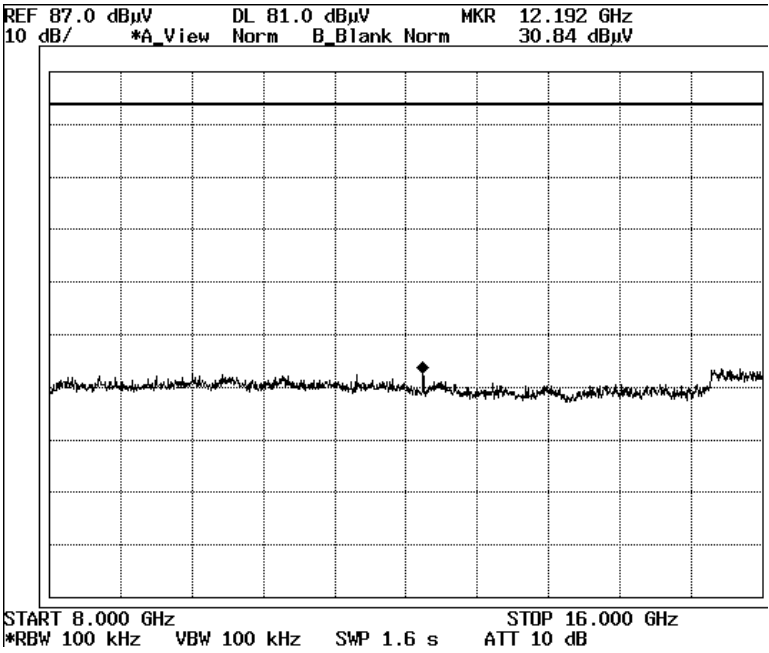
11. ch 20: 2.439GHz: External Attenuator 10dB



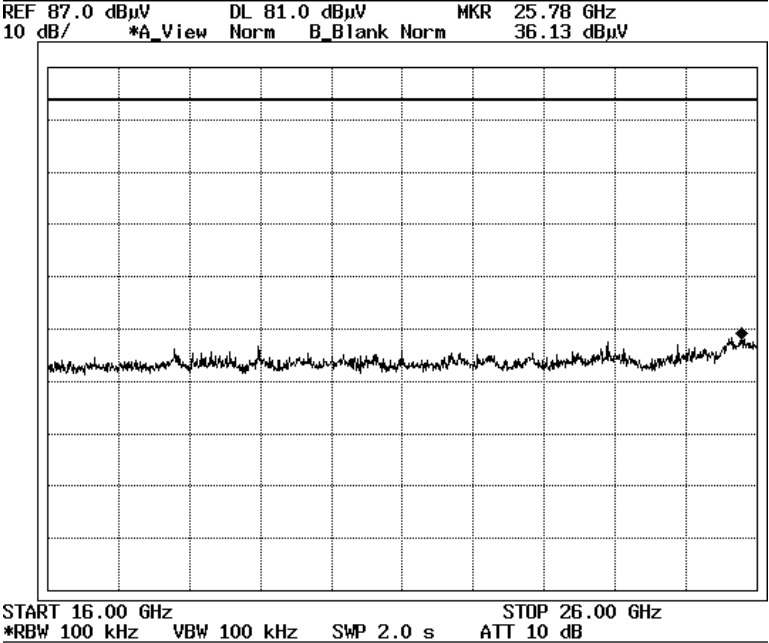
12. ch 20: 2.439GHz: External Attenuator 10dB



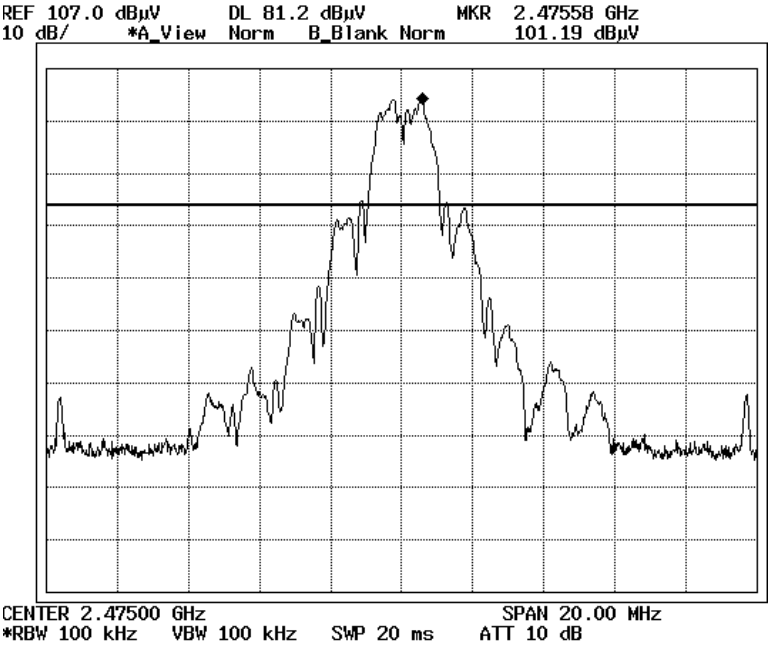
13. ch 20: 2.439GHz: External Attenuator 10dB

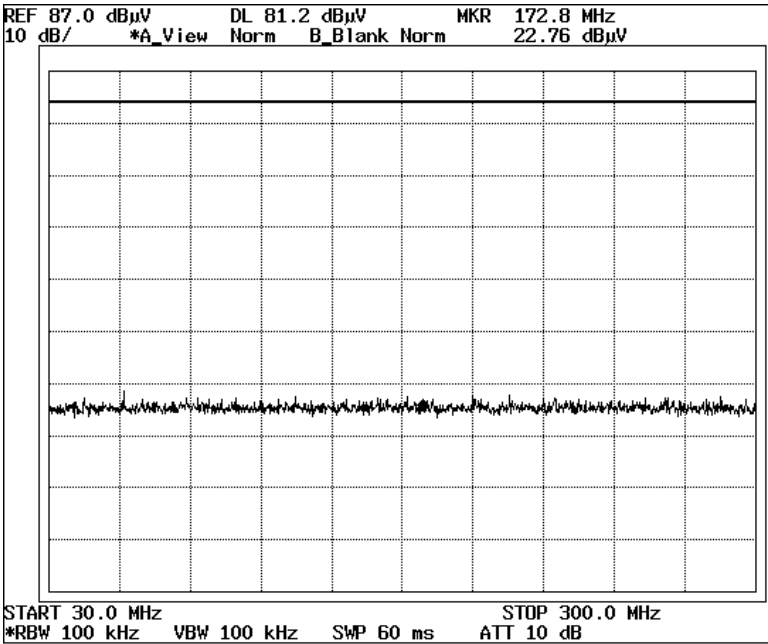


14. ch 20: 2.439GHz: External Attenuator 10dB

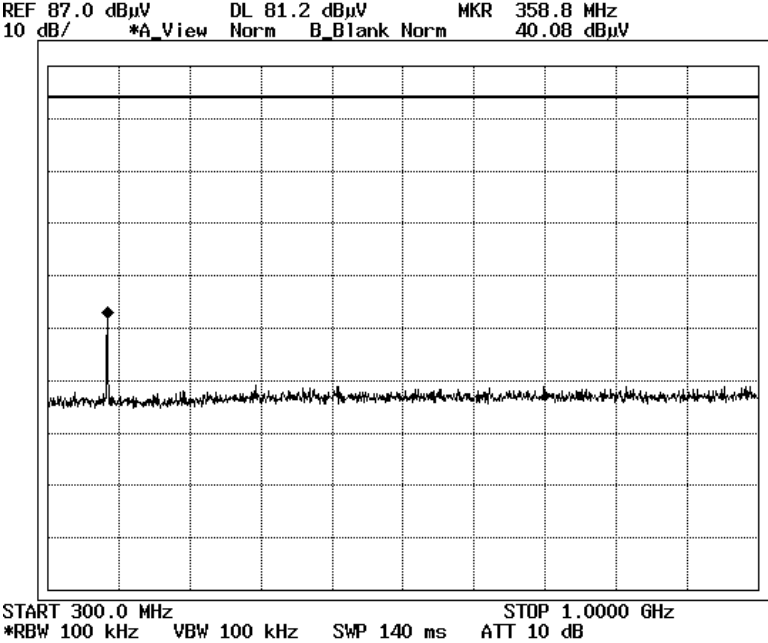


15. ch 40: 2.475GHz: External Attenuator 10dB

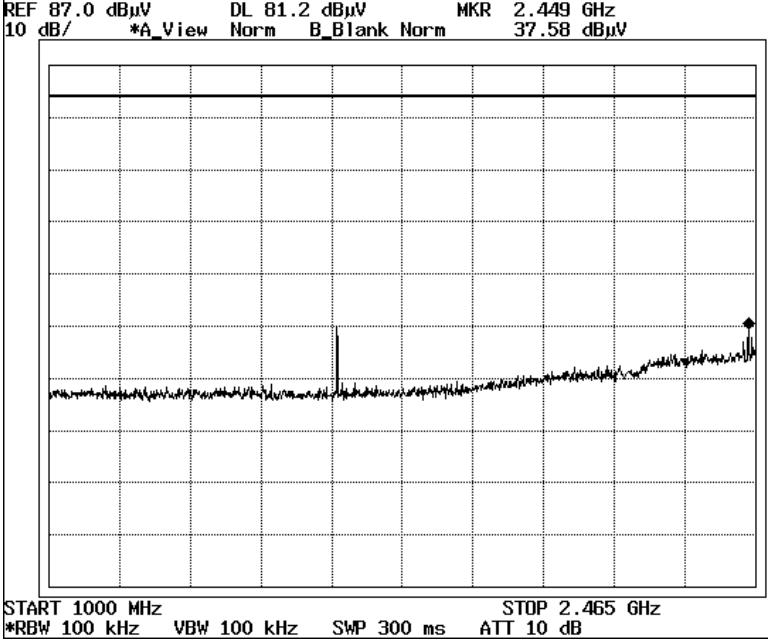




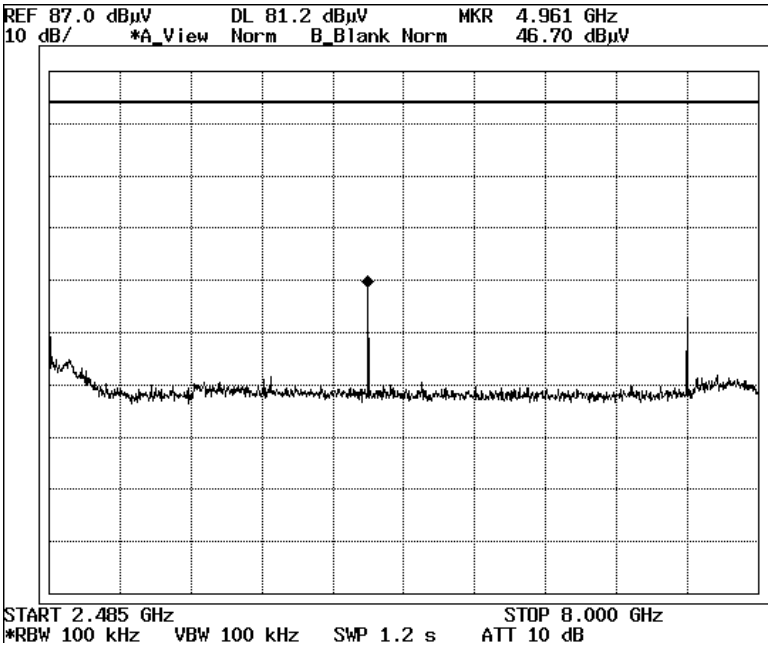
17. ch 40: 2.475GHz: External Attenuator 10dB



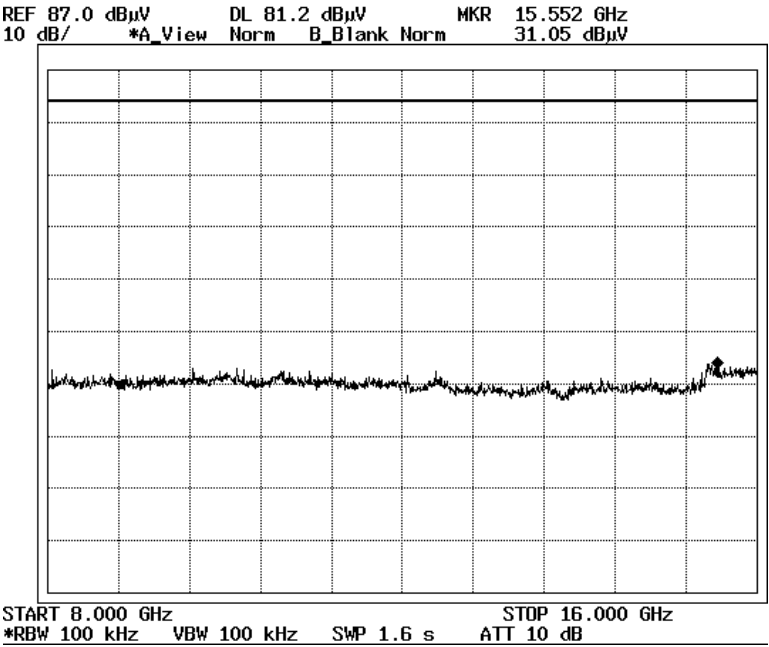
18. ch 40: 2.475GHz: External Attenuator 10dB



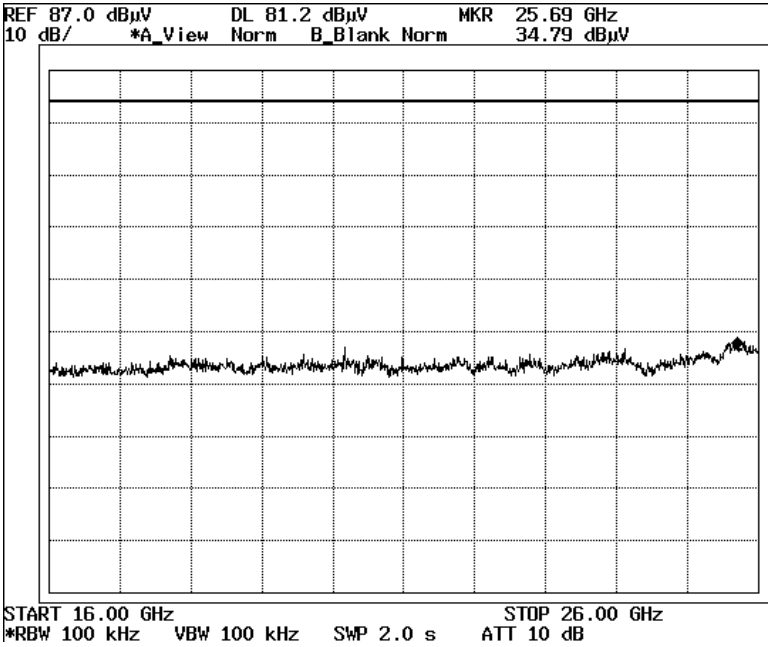
19. ch 40: 2.475GHz: External Attenuator 10dB



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



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

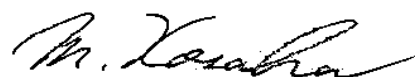


Peak Power Density(Conducted)

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

Company : SHARP Corporation
Equipment : Facsimile Equipment
Model : UX-CL220
Sample No. : 45
FCC ID : APYHRO00025
Power : AC120V/60Hz
Mode : Transmitting(ch1,20,40)

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247(d)
Date : 2002/1/26
Temperature : 28degrees centigrade
Humidity : 22%



ENGINEER : Makoto Kosaka

ch	FREQ [GHz]	S/A Reading [dBuV]	Cable Loss [dB]	ATTEN. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
ch1 : 2404.8MHz	2.405126	97.8	0.5	10.0	1.3	8.0	6.8
ch20: 2439.0MHz	2.439325	97.6	0.5	10.0	1.1	8.0	6.9
ch40: 2475.0MHz	2.475325	97.1	0.5	10.0	0.6	8.0	7.4

Sample Calculation :

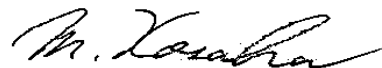
RESULT=Reading (-107:Converted to dBm) + CABLE LOSS + ATTEN.

Peak Power Density(Conducted)

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

Company : SHARP Corporation
Equipment : Cordless Handset
Model : UX-CL220K
Sample No. : 000055
FCC ID : APYHRO00025
Power : DC 3.6V
Mode : Transmitting(ch1,20,40)

Report No. : 22FE0027-YW
Regulation : Fcc Part15SubpartC 247(d)
Date : 2002/1/26
Temperature : 28degrees centigrade
Humidity : 22%



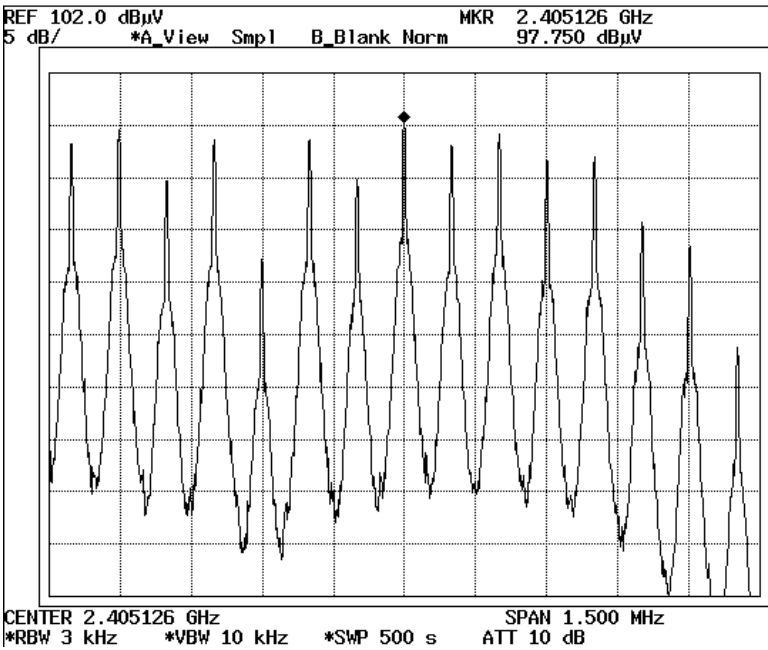
ENGINEER : Makoto Kosaka

ch	FREQ [GHz]	S/A Reading [dBuV]	Cable Loss [dB]	ATTEN. [dB]	Result [dBm]	Limit [dBm]	Margin [dB]
ch1 : 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
ch40: 2475.0MHz	2.474732	100.5	0.5	10.0	4.0	8.0	4.0

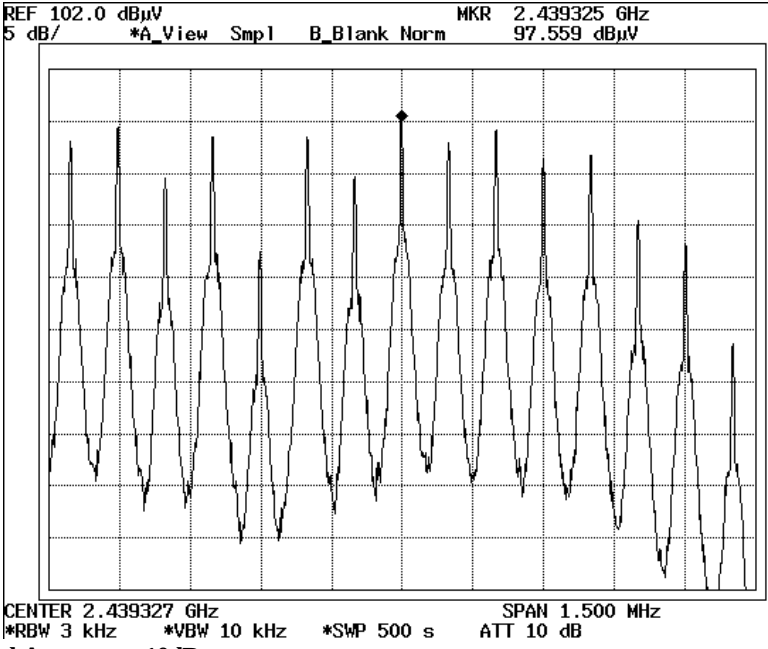
Sample Calculation :

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

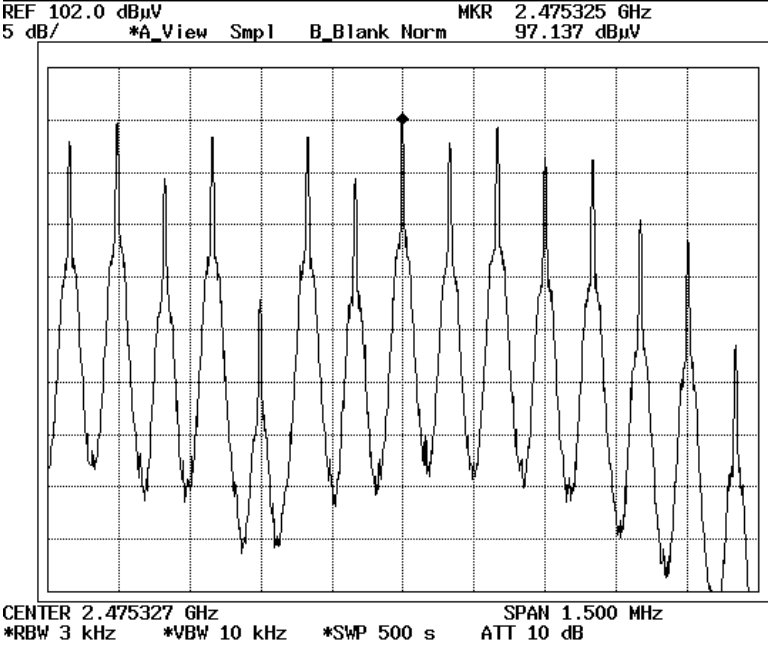
1. ch 1: 2.4048GHz: External Attenuator 10dB



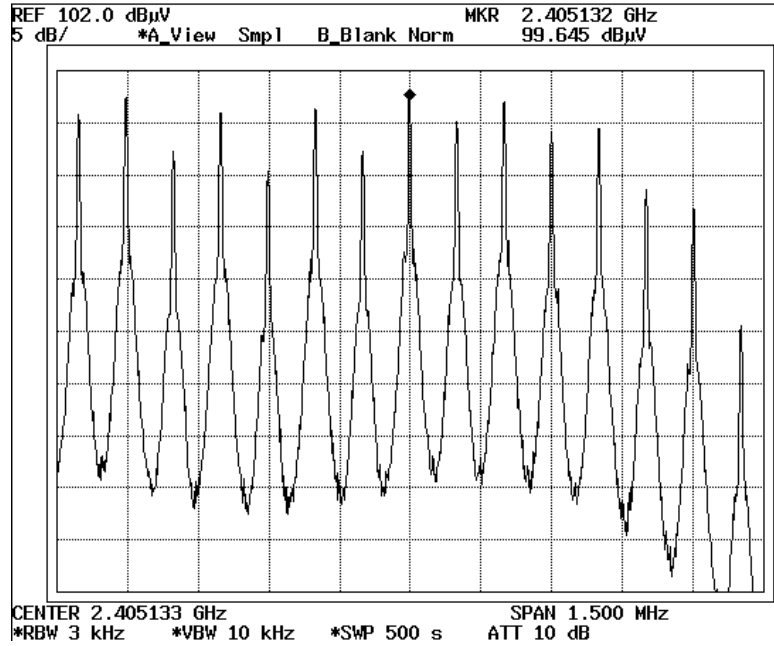
2. ch 20: 2.439GHz: External Attenuator 10dB



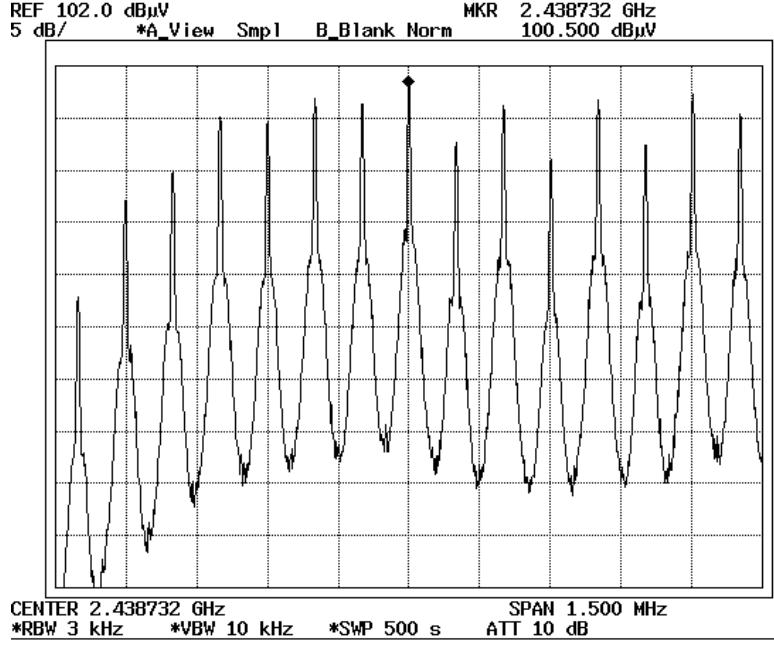
3. ch 40: 2.475GHz: External Attenuator 10dB



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



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



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

