FCC CFR47 PART 15 DIGITAL DEVICE

TEST REPORT

FOR

WIRELESS INTER-TAINMENT COMPUTER

MODEL: CY44801

TRADE NAME: CYBIKO

FCC ID: OU2CY44801

REPORT NUMBER: 01O9685

ISSUE DATE: August 30, 2001

Prepared for

Cybiko Inc.
One Tiffany Pointe, Suite 105, Bloomingdale,
IL 60108, U. S. A.

Prepared by

COMPLIANCE ENGINEERING SERVICES, INC.
No. 199, CHUNG SHENG ROAD
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LAB CODE: SL2-IN-E-0005

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COMPLIANCE ENGINEERING SERVICES, INC. DOCUMENT NO:CCSTP4002B
NO.199, CHUNG SHENG ROAD, HSIN TIEN, TAIPEI, TAIWAN R.O.C. TEL:(02)2217-0894/FAX:2217-1254

1 VERIFICATION OF COMPLIANCE

COMPANY NAME: Cybiko Inc.

MANUFACTURE: Invent Besta Co., Ltd.

CONTACT PERSON: Aleksey Logoshin / Director of Production

TELEPHONE NO.: 630-5291029

EUT DESCRIPTION: WIRELESS INTER-TAINMENT COMPUTER

MODEL NAME/NUMBER: CY44801

FCC ID: OU2CY44801

DATE TESTED: August 10, 2001 ~ August 28, 2001

LIMITS APPLY TO: FCC PART 15 SECTION 15.249	
TECHNICAL LIMITS	**TEST RESULT**
Radiated Emission of fundamental Frequency	Complies
Radiated Emission of Harmonic Frequence	Complies
Radiated Emission Outside the Band	Complies
LIMITS APPLY TO: FCC PART 15 SECTION 15.209	
Radiated Emission Digital Device	Complies
LIMITS APPLY TO: FCC PART 15 SECTION 15.207	
AC Line Conducted Emission	Complies

The above equipment was tested by Compliance Engineering Services, Inc. for compliance with the requirements set forth in the FCC CFR 47, PART 15. The results of testing in this report apply to the product/system which was tested only. Other similar equipment will not necessarily produce the same results due to production tolerance and measurement uncertainties. **Warning** : This document reports conditions under which testing was conducted and results of tests performed. This document may not be altered or revised in any way unless done so by Compliance Engineering Services, Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Compliance Engineering Services, Inc. will constitute fraud and shall nullify the document.

Rick Yeo

RICK YEO / EMC MANAGER
COMPLIANCE ENGINEERING SERVICES, INC.

2 GENERAL INFORMATION

2.1 Product Description

a) Type of EUT : WIRELESS INTER-TAINMENT COMPUTER

b) Trade Name : CYBIKO

c) Model No. : CY44801

d) Power Source : 1) AC Power Adaptor: I/P: 120VAC, 60Hz, 4W; O/P: 5VDC, 300mA
2) Via PC, USB Port

2.2 Characteristics of Device

The Cybiko (Cybiko, wireless inter-tainment computer, EUT) is a hand-held communucation drvice that transmits and receives short digital messages to and from other devices of the same type via waves. It also utilizes a microprocessor memory and RF transceiver and power source. The transmitter operates in the frequency range 902 ~ 928 MHz.
The Cybiko(EUT) have a USB interface cable, which was connected to USB port of PC and AC power adaptor power source.

2.3 Test Methodology

For The Cybiko, wireless inter-tainment computer, EUT, both conducted and radiated emissions were performed according to the procedures illustrated in ANSI C63.4(1992). Other required measurements were illustrated in separate sections of this test report for details.

2.4 Test Facility

The open area test sites and conducted measurement facilities used to collect the radiated data are located at No. 199, Chung Sheng Road, Hsin Tien City, Taipei, Taiwan R.O.C. The sites are constructed in conformance with the requirements of ANSI C63.7, ANSI C63.4 and CISPR Publication 22.

3 PROVISIONS APPLICABLE

3.1 Definition

Unintentional radiator:
A device that intentionally generates and radio frequency energy for use within the device, or that sends radio frequency signals by conduction to associated equipment via connecting wiring, but which is not intended to emit RF energy by radiation or induction.

Class A Digital Device:
A digital device which is marketed for use in commercial or business environment; exclusive of a device which is market for use by the general public, or which is intended to be used in the home.

Class B Digital Device :
A digital device which is marketed for use in a residential environment notwithstanding use in a commercial, business of industrial environment. Example of such devices that are marketed for the general public.

Note : A manufacturer may also qualify a device intended to be marketed in a commercial, business, or industrial environment as a Class B digital device, and in fact is encouraged to do so, provided the device complies with the technical specifications for a Class B Digital Device. In the event that a particular type of device has been found to repeatedly cause harmful interference to radio communications, the Commission may classify such a digital device as a Class B Digital Device, Regardless of its intended use.

Intentional radiator:
A device that intentionally generates and emits radio frequency energy by radiation or induction.

3.2 Requirement for Compliance

(1) Conducted Emission Requirement

For unintentional device, according to § 15.107(a) Line Conducted Emission Limits is as following:

Frequency MHz	Emissions μV	Emissions dBμV
0.45 - 30.0	250	48.0

For intentional device, according to § 15.207(a) Line Conducted Emission Limits is same as above table.

(2) Radiated Emission Requirement

For unintentional device, according to § 15.109(a), except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency MHz	Distance Meters	Radiated dBμV/m	Radiated μV/m
30 - 88	3	40.0	100
88 - 216	3	43.5	150
216 - 960	3	46.0	200
above 960	3	54.0	500

For intentional device, according to § 15.209(a), the general requirement of field strength of radiated emissions from intentional radiators at a distance of 3 meters shall not exceed the above table.

For intentional radiator device, per § 15.249(a), the field strength of emissions shall comply with the following :

Frequency MHz	Distance Meters	Fundamental		Harmonic	
		dB μV/m	mV/m	dB μV/m	μV/m
902 - 928	3	94	50	54	500
2400 - 2483.5	3	94	50	54	500
5725 - 5875	3	94	50	54	500
24000 - 24250	3	108	250	68	2500

In accordance with § 15.249(d), limits shown in above table are based on average limits for frequencies above 1000 MHz, and frequencies below 1000 MHz are based on quasi peak. However, the peak field strength of any emission shall not exceed the maximum permitted average limits by more than 20 dB.

(3) Spurious in Out Band Requirement

For intentional device, according to § 15.249 (c), emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of fundamental or to the general radiated emission limits in § 15.209.

(4) Antenna Requirement

For intentional device, according to § 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

3.3 Restricted Bands of Operation

Only spurious emissions are permitted in any of the frequency bands listed below :

MHz	MHz	MHz	GHz
0.090 - 0.110	16.42-16.423	399.9-410	4.5-5.15
0.495 - 0.505 **	16.69475 - 16.69525	608-614	5.35-5.46
2.1735 - 2.1905	16.80425 - 16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	108-121.94	1718.8-1722.2	13.25-13.4
6.31175-6.31225	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475 - 156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2655-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3360-4400	Above 38.6*
13.36-13.41			

** : Until February 1, 1999, this restricted band shall be 0.490-0.510 MHz

* : Above 38.6

3.4 Labeling Requirement

The device shall bear the following statement in a conspicuous location on the device :

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions : (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

3.5 User Information

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

For a Class B digital device or peripheral, the instructions furnished the user shall include the following or similar statement, placed in a prominent location in the text of the manual.

The Federal Communications Commission Radio Frequency Interference Statement includes the following paragraph.

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction may cause harmful interference to radio communication. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio / TV technician for help.

4 SYSTEM TEST CONFIGURATION

4.1 Justification

All measurement were intentional to maximum the emissions from EUT by varying the connection cables, therefore, the test result is sure to meet the applicable requirement.

4.2 Devices for Tested System

Device Type	Manufacturer	Model Number	Serial No.	FCC ID / DoC	Description
Modem	HAYES	07-00038	N/A	DOC	Shielded, 1.4m
Printer	HP	2225C	2550540697	BS46XU2225C	Shielded, 1.8m
Keyboard	ACER	6311-TW4C/6	N/A	N/A	Un-Shielded, 1.8m
Mouse	LOGITECH	M-M34	LZED1303050	DZL211029	Un-Shielded, 1.8m
Monitor	Samsung	PN19MSIT	N/A	DOC	Un-Shielded, 1.8m
Host Computer	VIVA	VIVA 686-350	HS-12	DOC	Un-Shielded, 1.8m
* Wireless inter-tainment computer	Inventec Besta co., Ltd.	CY44801	N/A	OU2CY44801	Shielded, 1.8m With AC Adaptor (Two Ferrite core on the cable ends.) , also use to PC USB Port

Remark " * " means equipment under test.

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5 RADIATED EMISSION MEASUREMENT

5.1 Applicable Standard

For intentional radiators, according to § 15.249 (a), operation within the frequency band of 902MHz to 928MHz, the fundamental field strength shall not exceed 94 dBuV/m and the harmonics shall not exceed 54 dBuV/m. For out band emission except for harmonics shall be comply with § 15.209 or at least attenuated by 50 dB below the level of the fundamental.

5.2 Measurement Procedure

1. Setup the configuration per figure 1 and 2 for frequencies measured below and above 1 GHz, and use a block of foamn and combined it with EUT wrapping rubber band around it, This way it can test X, Y and Z axis to actirate continuous transmission, place a small plastic block between rubber band and EUT.

2. For emission frequencies measured below 1 GHz, a pre-scan is performed in a shielded chamber to determine the accurate frequencies of higher emissions will be checked on a open test site. As the same purpose, for emission frequencies measured above 1 GHz, a pre-scan also be performed with a 1 meter measuring distance before final test.

3. For emission frequencies measured below and above 1 GHz, set the spectrum analyzer on a 100 kHz and 1 MHz resolution bandwidth respectively for each frequency measured in step 2.

4. The search antenna is to be raised and lowered over a range from 1 to 4 meters in horizontally polarized orientation. Position the highness when the highest value is indicated on spectrum analyzer, then change the orientation of EUT on test table over a range from 0 ° to 360 ° with a speed as slow as possible, and keep the azimuth that highest emission is indicated on the spectrum analyzer. Vary the antenna position again and record the highest value as a final reading. A RF test receiver is also used to confirm emissions measured.

   Note : A Hi pass filter was used to avoid pre-amplifier saturated when measure TX operation mode in testing Harmonics Frequency band.

5. Repeat step 4 until all frequencies need to be measured were complete.

6. Repeat step 5 with search antenna in vertical polarized orientations.

7. Check the three frequencies of highest emission with varying the placement of cables associated with EUT to obtain the worse case and record the result.

Figure 1 : Frequencies measured below 1 GHz configuration

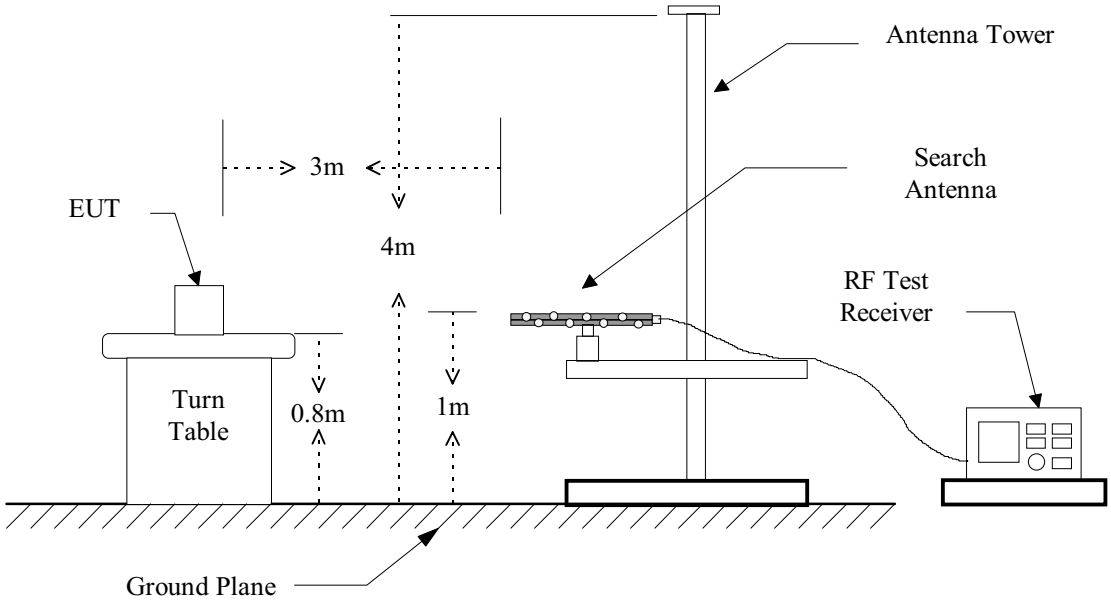
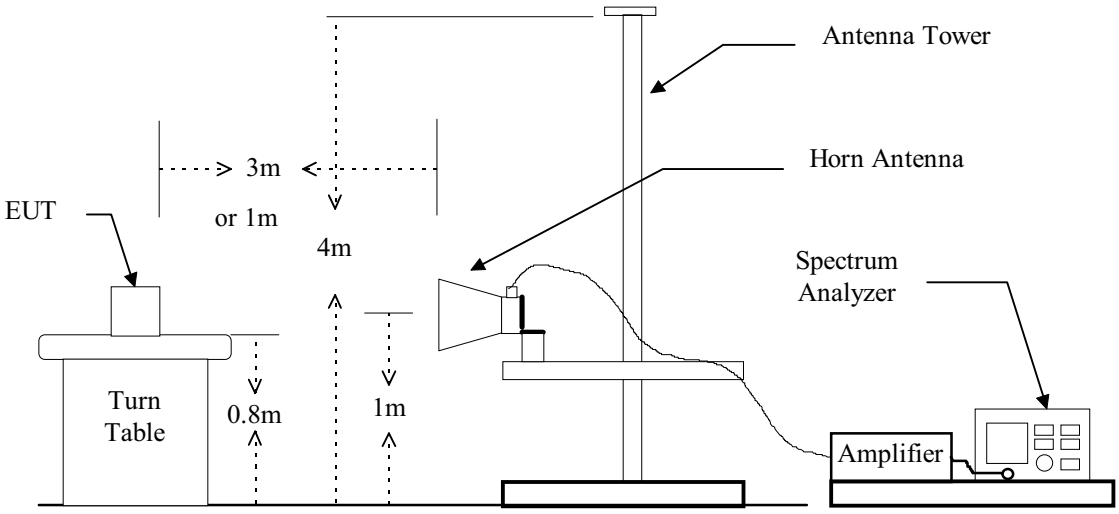


Figure 2 : Frequencies measured above 1 GHz configuration



5.3 Measuring Instrument

The following instrument are used for radiated emissions measurement :

Equipment	Manuf.	Model No.	Serial No.	Cal Date	Due Date
Spectrum Analyzer	ADVANTEST	R3271A	850603212	10/03/01	10/03/02
Horm Antenna	EMCO	3115	9602-4659	04/05/01	04/05/02
Tunable Band Reject Filter	K&L Microwave incorporated	3TNF-00008	287	08/01/01	08/01/02
Spectrum Analyzer	H.P.	8566B	2937A06102	06/06/01	06/06/02
Spectrum Display	H.P.	85662A	2848A18276	06/06/01	06/06/02
Quasi-Peak Detector	H.P.	85650A	2811A01439	06/07/01	06/07/02
Amplifier	H.P.	8447D B	1644A02328	05/07/01	05/07/02
Antenna	EMCO	3142	1310	06/30/01	06/30/02
Cable	TIME MICROWAVE	LMR-400	N-TYPE04	07/09/01	07/09/02
Antenna (1-18GHz)	EMCO	3115	5761	02/23/01	02/23/02
Cable (1-26.56GHz)	FLEXCO	FC195	N/A	02/02/01	02/02/02
Amplifier (1-26GHz)	HP	8449B	3008A00965	10/03/01	10/02/01

Measuring instrument setup in measured frequency band when specified detector function is used :

Frequency Band (MHz)	Instrument	Function	Resolution bandwidth	Video Bandwidth
30 to 1000	RF Test Receiver	Quasi-Peak	120 kHz	N/A
	Spectrum Analyzer	Peak	100 kHz	100 kHz
Above 1000	Spectrum Analyzer	Peak	1 MHz	1 MHz
	Spectrum Analyzer	Average	1 MHz	10 Hz

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5.4 Radiated Emission Data

5.4.1 Tx Portion

Operation Mode : Transmitting

Fundamental Frequency : 903.189MHz (CH3, X axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
903.189	77.50	23.21	3.61	23.88	---	---	80.44	114.00	-33.56	P	3mV	1.5	30
903.189	76.77	23.21	3.61	23.88	---	---	79.71	94.00	-14.29	A	3mV	1.5	30
1806.32	44.62	26.90	4.10	36.40	1	-9.5	30.72	74.00	-43.28	P	1mV	1.0	315
1806.32	34.15	26.90	4.10	36.40	1	-9.5	20.25	54.00	-33.75	A	1mV	1.0	315
2709.67	45.12	29.70	4.10	36.00	1	-9.5	34.42	74.00	-39.58	P	1mV	1.5	327
2709.67*	32.35	29.70	4.10	36.00	1	-9.5	21.65	54.00	-32.35	A	1mV	1.5	327
3612.86*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mV	---	---
3612.86*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mV	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mV	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mV	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mV	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mV	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mV	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mV	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mV	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mV	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz , P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 903.189MHz (CH3, X axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
903.190	84.20	23.21	3.61	23.88	---	---	87.14	114.00	-26.86	P	3mH	1.3	55
903.190	84.10	23.21	3.61	23.88	---	---	87.04	94.00	-6.96	A	3mH	1.3	55
1806.32	52.40	26.90	4.10	36.40	1.00	-9.50	38.50	74.00	-35.50	P	1mH	1.0	320
1806.32	48.70	26.90	4.10	36.40	1.00	-9.50	34.80	54.00	-19.20	A	1mH	1.0	320
2709.67*	55.17	29.70	4.10	36.00	1.00	-9.50	44.47	74.00	-29.53	P	1mH	1.5	315
2709.67*	52.81	29.70	4.10	36.00	1.00	-9.50	42.11	54.00	-11.89	A	1mH	1.5	315
3612.86*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mH	---	---
3612.86*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mH	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mH	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mH	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mH	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mH	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mH	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mH	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mH	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mH	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz , P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 903.202MHz (CH3, Y axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
903.202	81.90	23.21	3.61	23.88	---	---	84.84	114.00	-29.16	P	3mV	1.0	0
903.200	81.70	23.21	3.61	23.88	---	---	84.64	94.00	-9.36	A	3mV	1.0	0
1806.32	56.60	26.90	4.10	36.40	1	-9.5	42.70	74.00	-31.30	P	1mV	1.8	315
1806.32	55.23	26.90	4.10	36.40	1	-9.5	41.33	54.00	-12.67	A	1mV	1.8	315
2709.67*	49.57	29.70	4.10	36.00	1	-9.5	38.87	74.00	-35.13	P	1mV	1.5	330
2709.67*	39.15	29.70	4.10	36.00	1	-9.5	28.45	54.00	-25.55	A	1mV	1.5	330
3612.86*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mV	---	---
3612.86*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mV	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mV	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mV	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mV	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mV	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mV	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mV	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mV	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mV	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 903.192MHz (CH3, Y axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
903.192	80.00	23.21	3.61	23.88	---	---	82.94	114.00	-31.06	P	3mH	1.3	55
903.192	79.90	23.21	3.61	23.88	---	---	82.84	94.00	-11.16	A	3mH	1.3	55
1806.32	53.84	26.90	4.10	36.40	1	-9.5	39.94	74.00	-34.06	P	1mH	1.0	320
1806.32	50.14	26.90	4.10	36.40	1	-9.5	36.24	54.00	-17.76	A	1mH	1.0	320
2709.67*	49.02	29.70	4.10	36.00	1	-9.5	38.32	74.00	-35.68	P	1mH	1.5	315
2709.67*	41.45	29.70	4.10	36.00	1	-9.5	30.75	54.00	-23.25	A	1mH	1.5	315
3612.86*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mH	---	---
3612.86*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mH	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mH	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mH	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mH	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mH	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mH	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mH	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mH	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mH	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 903.189MHz (CH3, Z axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
903.192	78.77	23.21	3.61	23.88	---	---	81.71	114.00	-32.29	P	3mV	1.0	50
903.189	76.77	23.21	3.61	23.88	---	---	79.71	94.00	-14.29	A	3mV	1.0	50
1806.32	46.11	26.90	4.10	36.40	1	-9.5	32.21	74.00	-41.79	P	1mV	1.5	320
1806.32	36.32	26.90	4.10	36.40	1	-9.5	22.42	54.00	-31.58	A	1mV	1.5	320
2709.67*	46.73	29.70	4.10	36.00	1	-9.5	36.03	74.00	-37.97	P	1mV	1.0	270
2709.67*	35.70	29.70	4.10	36.00	1	-9.5	25.00	54.00	-29.00	A	1mV	1.0	270
3612.86*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mV	---	---
3612.86*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mV	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mV	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mV	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mV	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mV	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mV	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mV	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mV	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mV	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 903.189MHz (CH3, Z axis)

Test Date : August 27, 2001 Temperature : 31℃ Humidity : 62 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
903.192	76.40	23.21	3.61	23.88	---	---	79.34	114.00	-34.66	P	3mH	1.2	50
903.189	76.30	23.21	3.61	23.88	---	---	79.24	94.00	-14.76	A	3mH	1.2	50
1806.32	46.11	26.90	4.10	36.40	1	-9.5	32.21	74.00	-41.79	P	1mH	1.5	330
1806.32	36.32	26.90	4.10	36.40	1	-9.5	22.42	54.00	-31.58	A	1mH	1.5	330
2709.67*	46.33	29.70	4.10	36.00	1	-9.5	35.63	74.00	-38.37	P	1mH	1.0	345
2709.67*	34.69	29.70	4.10	36.00	1	-9.5	23.99	54.00	-30.01	A	1mH	1.0	345
3612.86*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mH	---	---
3612.86*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mH	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mH	---	---
4516.05*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mH	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mH	---	---
5419.24*	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mH	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
6322.43	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
7225.62	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mH	---	---
8128.80*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mH	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mH	---	---
9031.99*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mH	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 915.197MHz (CH33, X axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
915.197	73.80	23.34	3.63	23.92	---	---	76.85	114.00	-37.15	P	3mV	1.2	0
915.195	73.70	23.34	3.63	23.92	---	---	76.75	94.00	-17.25	A	3mV	1.2	0
1830.40	53.86	26.90	4.10	36.40	1	-9.5	39.96	74.00	-34.04	P	1mV	1.0	310
1830.40	48.25	26.90	4.10	36.40	1	-9.5	34.35	54.00	-19.65	A	1mV	1.0	310
2745.60*	43.98	29.70	4.10	36.00	1	-9.5	33.28	74.00	-40.72	P	1mV	1.5	330
2745.60*	34.29	29.70	4.10	36.00	1	-9.5	23.59	54.00	-30.41	A	1mV	1.5	330
3660.79*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mV	---	---
3660.79*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mV	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mV	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mV	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mV	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mV	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
7321.58*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
7321.58*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mV	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mV	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mV	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mV	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 915.189MHz (CH33, X axis)

Test Date : August 27, 2001 Temperature : 24 ℃ Humidity : 55 %

Freq.	Reading	AF	Closs	Pre-amp	Filter	Dist	Level	Limit	Margin	Mark	Pol	Az	Height
(MHz)	(dBuV)	(dBuV)	(dB)	(dB)	dB	dB	(dBuV/m)	FCC_B	(dB)	(P/Q/A)	(H/V)	(Deg)	(Meter)
915.189	84.80	23.34	3.63	23.92	---	---	87.85	114.00	-26.15	P	3mH	1.2	0
915.190	84.70	23.34	3.63	23.92	---	---	87.75	94.00	-6.25	A	3mH	1.2	0
1830.40	50.43	26.90	4.10	36.40	1	-9.5	36.53	74.00	-37.47	P	1mH	1.5	345
1830.40	49.03	26.90	4.10	36.40	1	-9.5	35.13	54.00	-18.87	A	1mH	1.5	345
2745.60*	53.70	29.70	4.10	36.00	1	-9.5	43.00	74.00	-31.00	P	1mH	1.0	330
2745.60*	51.24	29.70	4.10	36.00	1	-9.5	40.54	54.00	-13.46	A	1mH	1.0	330
3660.79*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mH	---	---
3660.79*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mH	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mH	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mH	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mH	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mH	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
7321.58*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
7321.58*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mH	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mH	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mH	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mH	---	---

Note :

1. Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 915.187MHz (CH33, Y axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq.	Reading	AF	Closs	Pre-amp	Filter	Dist	Level	Limit	Margin	Mark	Pol	Az	Height
(MHz)	(dBuV)	(dBuV)	(dB)	(dB)	dB	dB	(dBuV/m)	FCC_B	(dB)	(P/Q/A)	(H/V)	(Deg)	(Meter)
915.187	81.30	23.34	3.63	23.92	---	---	84.35	114.00	-29.65	P	3mV	1.5	0
915.192	78.60	23.34	3.63	23.92	---	---	81.65	94.00	-12.35	A	3mV	1.5	0
1830.40	55.89	26.90	4.10	36.40	1	-9.5	41.99	74.00	-32.01	P	1mV	1.3	330
1830.40	53.27	26.90	4.10	36.40	1	-9.5	39.37	54.00	-14.63	A	1mV	1.3	330
2745.60*	47.60	29.70	4.10	36.00	1	-9.5	36.90	74.00	-37.10	P	1mV	1.2	345
2745.60*	40.12	29.70	4.10	36.00	1	-9.5	29.42	54.00	-24.58	A	1mV	1.2	345
3660.79*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mV	---	---
3660.79*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mV	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mV	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mV	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mV	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mV	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
7321.58*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
7321.58*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mV	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mV	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mV	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mV	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 915.190MHz (CH33, Y axis)

Test Date : August 27, 2001 Temperature : 24 ℃ Humidity : 55 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
915.191	77.90	23.34	3.63	23.92	---	---	80.95	114.00	-33.05	P	3mH	1.0	50
915.190	75.80	23.34	3.63	23.92	---	---	78.85	94.00	-15.15	A	3mH	1.0	50
1830.40	47.60	26.90	4.10	36.40	1	-9.5	33.70	74.00	-40.30	P	1mH	1.2	315
1830.40	38.81	26.90	4.10	36.40	1	-9.5	24.91	54.00	-29.09	A	1mH	1.2	315
2745.60*	46.69	29.70	4.10	36.00	1	-9.5	35.99	74.00	-38.01	P	1mH	1.5	330
2745.60*	35.64	29.70	4.10	36.00	1	-9.5	24.94	54.00	-29.06	A	1mH	1.5	330
3660.79*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mH	---	---
3660.79*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mH	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mH	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mH	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mH	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mH	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
7321.58*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
7321.58*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mH	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mH	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mH	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mH	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 915.188MHz (CH33, Z axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
915.188	74.50	23.34	3.63	23.92	---	---	77.55	114.00	-36.45	P	3mV	1.5	45
915.197	74.01	23.34	3.63	23.92	---	---	77.06	94.00	-16.94	A	3mV	1.5	45
1830.40	54.76	26.90	4.10	36.40	1	-9.5	40.86	74.00	-33.14	P	1mV	1.2	315
1830.40	48.27	26.90	4.10	36.40	1	-9.5	34.37	54.00	-19.63	A	1mV	1.2	315
2745.60*	48.82	29.70	4.10	36.00	1	-9.5	38.12	74.00	-35.88	P	1mV	1.0	330
2745.60*	42.11	29.70	4.10	36.00	1	-9.5	31.41	54.00	-22.59	A	1mV	1.0	330
3660.79*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mV	---	---
3660.79*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mV	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mV	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mV	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mV	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mV	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
7321.58	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
7321.58	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mV	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mV	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mV	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mV	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 915.188MHz (CH33, Z axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
915.188	77.30	23.34	3.63	23.92	---	---	80.35	114.00	-33.65	P	3mH	1.2	30
915.197	77.10	23.34	3.63	23.92	---	---	80.15	94.00	-13.85	A	3mH	1.2	30
1830.40	54.55	26.90	4.10	36.40	1	-9.5	40.65	74.00	-33.35	P	1mH	1.5	330
1830.40	50.41	26.90	4.10	36.40	1	-9.5	36.51	54.00	-17.49	A	1mH	1.5	330
2745.60*	47.04	29.70	4.10	36.00	1	-9.5	36.34	74.00	-37.66	P	1mH	1.0	315
2745.60*	35.45	29.70	4.10	36.00	1	-9.5	24.75	54.00	-29.25	A	1mH	1.0	315
3660.79*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mH	---	---
3660.79*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mH	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mH	---	---
4575.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mH	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mH	---	---
5491.18	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mH	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
6406.38	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
7321.58*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
7321.58*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mH	---	---
8236.77*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mH	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mH	---	---
9151.97*	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mH	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 926.794MHz (CH62, X axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 62 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
926.794	74.70	23.46	3.65	23.96	---	---	77.85	114.00	-36.15	P	3mV	1.7	60
926.794	73.30	23.46	3.65	23.96	---	---	76.45	94.00	-17.55	A	3mV	1.7	60
1853.58	49.15	26.90	4.10	36.40	1	-9.5	35.25	74.00	-38.75	P	1mV	1.0	315
1853.58	42.32	26.90	4.10	36.40	1	-9.5	28.42	54.00	-25.58	A	1mV	1.0	315
2780.40*	44.76	29.70	4.10	36.00	1	-9.5	34.06	74.00	-39.94	P	1mV	1.3	320
2780.40*	32.46	29.70	4.10	36.00	1	-9.5	21.76	54.00	-32.24	A	1mV	1.3	320
3707.19*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mV	---	---
3707.19*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mV	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mV	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mV	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mV	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mV	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mV	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mV	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mV	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mV	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

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NO.199, CHUNG SHENG ROAD, HSIN TIEN, TAIPEI, TAIWAN R.O.C. TEL:(02)2217-0894/FAX:2217-1254

Operation Mode : Transmitting

Fundamental Frequency : 926.785MHz (CH62, X axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 62 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
926.785	83.50	23.46	3.65	23.96	---	---	86.65	114.00	-27.35	P	3mH	1.2	0
926.800	83.40	23.46	3.65	23.96	---	---	86.55	94.00	-7.45	A	3mH	1.2	0
1853.58	50.99	26.90	4.10	36.40	1	-9.5	37.09	74.00	-36.91	P	1mH	1.5	330
1853.58	45.56	26.90	4.10	36.40	1	-9.5	31.66	54.00	-22.34	A	1mH	1.5	330
2780.40*	52.90	29.70	4.10	36.00	1	-9.5	42.20	74.00	-31.80	P	1mH	1.0	315
2780.40*	49.96	29.70	4.10	36.00	1	-9.5	39.26	54.00	-14.74	A	1mH	1.0	315
3707.19*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mH	---	---
3707.19*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mH	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mH	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mH	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mH	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mH	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mH	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mH	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mH	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mH	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 926.789MHz (CH62, Y axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
926.789	80.40	23.46	3.65	23.96	---	---	83.55	114.00	-30.45	P	3mV	1.5	0
926.788	78.60	23.46	3.65	23.96	---	---	81.75	94.00	-12.25	A	3mV	1.5	0
1853.58	54.22	26.90	4.10	36.40	1	-9.5	40.32	74.00	-33.68	P	1mV	1.2	310
1853.58	50.85	26.90	4.10	36.40	1	-9.5	36.95	54.00	-17.05	A	1mV	1.2	310
2780.40*	45.25	29.70	4.10	36.00	1	-9.5	34.55	74.00	-39.45	P	1mV	1.0	320
2780.40*	33.64	29.70	4.10	36.00	1	-9.5	22.94	54.00	-31.06	A	1mV	1.0	320
3707.19*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mV	---	---
3707.19*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mV	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mV	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mV	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mV	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mV	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mV	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mV	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mV	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mV	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 926.788MHz (CH62, Y axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
926.788	74.60	23.46	3.65	23.96	---	---	77.75	114.00	-36.25	P	3mH	1.0	45
926.793	74.50	23.46	3.65	23.96	---	---	77.65	94.00	-16.35	A	3mH	1.0	45
1853.58	48.46	26.90	4.10	36.40	1	-9.5	34.56	74.00	-39.44	P	1mH	1.3	310
1853.58	40.58	26.90	4.10	36.40	1	-9.5	26.68	54.00	-27.32	A	1mH	1.3	310
2780.40*	46.97	29.70	4.10	36.00	1	-9.5	36.27	74.00	-37.73	P	1mH	1.0	330
2780.40*	37.10	29.70	4.10	36.00	1	-9.5	26.40	54.00	-27.60	A	1mH	1.0	330
3707.19*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mH	---	---
3707.19*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mH	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mH	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mH	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mH	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mH	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mH	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mH	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mH	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mH	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 926.794Hz (CH62, Z axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
926.794	80.23	23.46	3.65	23.96	---	---	83.38	114.00	-30.62	P	3mV	1.5	45
926.794	79.92	23.46	3.65	23.96	---	---	83.07	94.00	-10.93	A	3mV	1.5	45
1853.58	49.12	26.90	4.10	36.40	1	-9.5	35.22	74.00	-38.78	P	1mV	1.0	315
1853.58	43.68	26.90	4.10	36.40	1	-9.5	29.78	54.00	-24.22	A	1mV	1.0	315
2780.40*	47.25	29.70	4.10	36.00	1	-9.5	36.55	74.00	-37.45	P	1mV	1.0	330
2780.40*	35.40	29.70	4.10	36.00	1	-9.5	24.70	54.00	-29.30	A	1mV	1.0	330
3707.19*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mV	---	---
3707.19*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mV	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mV	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mV	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mV	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mV	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mV	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mV	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mV	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mV	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mV	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mV	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

Operation Mode : Transmitting

Fundamental Frequency : 926.794Hz (CH62, Z axis)

Test Date : August 27, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Filter dB	Dist dB	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
926.794	76.30	23.46	3.65	23.96	---	---	79.45	114.00	-34.55	P	3mH	1.2	30
926.794	76.10	23.46	3.65	23.96	---	---	79.25	94.00	-14.75	A	3mH	1.2	30
1853.58	53.78	26.90	4.10	36.40	1	-9.5	39.88	74.00	-34.12	P	1mH	1.5	310
1853.58	49.96	26.90	4.10	36.40	1	-9.5	36.06	54.00	-17.94	A	1mH	1.5	310
2780.40*	49.61	29.70	4.10	36.00	1	-9.5	38.91	74.00	-35.09	P	1mH	1.5	330
2780.40*	43.79	29.70	4.10	36.00	1	-9.5	33.09	54.00	-20.91	A	1mH	1.5	330
3707.19*	---	32.10	5.80	---	1	-9.5	---	74.00	---	P	1mH	---	---
3707.19*	---	32.10	5.80	---	1	-9.5	---	54.00	---	A	1mH	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	74.00	---	P	1mH	---	---
4633.99*	---	33.00	6.70	---	1	-9.5	---	54.00	---	A	1mH	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	74.00	---	P	1mH	---	---
5560.78	---	34.60	7.50	---	1	-9.5	---	54.00	---	A	1mH	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
6487.58	---	35.20	8.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	74.00	---	P	1mH	---	---
7414.37*	---	36.50	9.00	---	1	-9.5	---	54.00	---	A	1mH	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	74.00	---	P	1mH	---	---
8341.16*	---	38.10	9.60	---	1	-9.5	---	54.00	---	A	1mH	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	74.00	---	P	1mH	---	---
9267.96	---	38.70	10.1	---	1	-9.5	---	54.00	---	A	1mH	---	---

Note :

1. Measurement was up to 10th harmonic, Remark "---" means that the emissions level is too low to be measured.
2. Remark " * " means that restricted band.
3. The above field strength limits are based on average limits; however, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above more than 20dB.
4. A(Average): RBW = 1MHz; VBW = 10Hz, P(Peak): RBW=VBW=1MHz, Distance= 20log(1/3)=-9.5dB.

4.4.2 Other Emissions

Operation Mode : Transmitting

Fundamental Frequency : 915.188Hz (CH33, Z axis)

Test Date : August 28, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
165.795*	46.50	10.69	1.50	23.01	35.68	43.50	-7.82	P	3mV	1.2	90
202.625	49.10	11.83	1.70	22.71	39.92	43.50	-3.58	P	3mV	1.2	110
221.545	41.50	12.00	1.74	22.77	32.47	46.00	-13.53	P	3mV	1.2	110
276.324*	41.80	13.56	1.85	23.00	34.21	46.00	-11.79	P	3mV	1.5	180
294.756	39.40	14.51	1.89	23.10	32.70	46.00	-13.30	P	3mV	1.5	180
331.597	38.30	15.29	2.06	23.18	32.47	46.00	-13.53	P	3mV	1.0	90
368.437	37.20	15.85	2.24	23.23	32.06	46.00	-13.94	P	3mV	1.0	180
386.859	35.50	16.13	2.33	23.26	30.70	46.00	-15.30	P	3mV	1.0	180
405.278*	38.60	16.41	2.41	23.31	34.11	46.00	-11.89	P	3mV	1.2	180
755.290	30.60	21.63	3.37	23.41	32.19	46.00	-13.81	P	3mV	1.0	220
792.142	30.10	21.76	3.56	23.34	32.08	46.00	-13.92	P	3mV	1.0	20
828.987	30.80	22.18	3.60	23.47	33.11	46.00	-12.89	P	3mV	1.5	270
865.831	32.40	22.69	3.60	23.68	35.01	46.00	-10.99	P	3mV	1.5	270

Note :
1. The channel 33 and Z axis of highest emission the worse cass check by other channel
2. Remark " * " means that restricted band.

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Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
165.780*	50.10	10.69	1.50	23.01	39.28	43.50	-4.22	P	3mH	2.0	90
202.639	51.64	11.83	1.70	22.71	42.46	43.50	-1.04	P	3mH	2.0	120
202.639	50.39	11.83	1.70	22.71	41.21	43.50	-2.29	Q	3mH	2.0	90
221.035	50.00	11.99	1.74	22.77	40.96	46.00	-5.04	P	3mH	2.0	120
276.310*	49.50	13.56	1.85	23.00	41.91	46.00	-4.09	P	3mH	1.6	180
294.745	48.60	14.51	1.89	23.10	41.90	46.00	-4.10	P	3mH	1.5	180
331.575	43.80	15.29	2.06	23.18	37.97	46.00	-8.03	P	3mH	1.8	180
386.845	44.80	16.13	2.33	23.26	40.00	46.00	-6.00	P	3mH	1.8	180
405.285*	44.60	16.41	2.41	23.31	40.11	46.00	-5.89	P	3mH	2.0	180
755.310	37.00	21.63	3.37	23.41	38.59	46.00	-7.41	P	3mH	2.0	350
792.150	36.70	21.76	3.56	23.34	38.68	46.00	-7.32	P	3mH	2.0	350
828.990	38.00	22.18	3.60	23.47	40.31	46.00	-5.69	P	3mH	2.0	0
865.820	37.90	22.69	3.60	23.68	40.51	46.00	-5.49	P	3mH	2.0	0

Note :
1. The channel 33 and Z axis of highest emission the worse cass check by other channel
2. Remark " * " means that restricted band.

Operation Mode : PC Link

Test Date : August 28, 2001 Temperature : 31 ℃ Humidity : 63 %

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
80.844	46.80	7.35	1.00	24.13	31.02	40.00	-8.98	Q	3mV	1.2	90
120.010*	48.50	8.47	1.20	23.99	34.18	43.50	-9.32	Q	3mV	1.2	110
202.623	46.60	11.83	1.70	22.71	37.42	43.50	-6.08	Q	3mV	1.1	120
221.050	44.10	11.99	1.74	22.77	35.06	46.00	-10.94	Q	3mV	1.1	180
239.468	32.10	12.15	1.78	22.83	23.20	46.00	-22.80	Q	3mV	1.5	180
276.312*	41.80	13.56	1.85	23.00	34.21	46.00	-11.79	Q	3mV	1.5	90
500.017	37.90	17.86	2.70	23.86	34.60	46.00	-11.40	Q	3mV	1.0	90
703.759	39.80	21.44	3.11	23.50	40.85	46.00	-5.15	Q	3mV	1.0	180
828.974	32.90	22.18	3.60	23.47	35.21	46.00	-10.79	Q	3mV	1.0	270
902.678	33.30	23.20	3.60	23.88	36.22	46.00	-9.78	Q	3mV	1.0	270

Freq. (MHz)	Reading (dBuV)	AF (dBuV)	Closs (dB)	Pre-amp (dB)	Level (dBuV/m)	Limit FCC_B	Margin (dB)	Mark (P/Q/A)	Pol (H/V)	Az (Deg)	Height (Meter)
80.844	49.14	7.35	1.00	24.13	33.36	40.00	-6.64	Q	3mH	2.0	90
120.011*	52.96	8.47	1.20	23.99	38.64	43.50	-4.86	Q	3mH	2.0	90
202.623	50.70	11.83	1.70	22.71	41.52	43.50	-1.98	Q	3mH	2.0	120
221.050	51.03	11.99	1.74	22.77	41.99	46.00	-4.01	Q	3mH	2.0	120
239.468	48.36	12.15	1.78	22.83	39.46	46.00	-6.54	Q	3mH	1.5	180
240.017*	48.46	12.16	1.78	22.83	39.57	46.00	-6.43	Q	3mH	1.5	180
500.017	44.54	17.86	2.70	23.86	41.24	46.00	-4.76	Q	3mH	1.8	270
703.759	39.89	21.44	3.11	23.50	40.94	46.00	-5.06	Q	3mH	1.8	270
828.974	38.11	22.18	3.60	23.47	40.42	46.00	-5.58	Q	3mH	2.0	30
902.678	38.54	23.20	3.60	23.88	41.46	46.00	-4.54	Q	3mH	2.0	30

Note :

1. Item of margin shown in above table refers to Q.P. limit.
2. Remark " * " means that restricted band.

5.5 Field Strength Calculation

The field strength is calculated by adding the Antenna Factor, High Pass Filter Loss(if used) and Cable Loss, and subtracting the Amplifier Gain (if any) from the measured reading. The basic equation calculation is as follows:

Result = Reading + AF + closs – pre-amp + filter

where

AF = antenna Factor

Closs = cable loss

Pre-amp = Amplifier Gain

Filter = High Pass Filter Insertion loss

Dist = correction to extrapolate reading to 3 m specification

Distance, 20log (1/3) = -9.5dB.

5.6 Photos of Radiation Measuring Setup

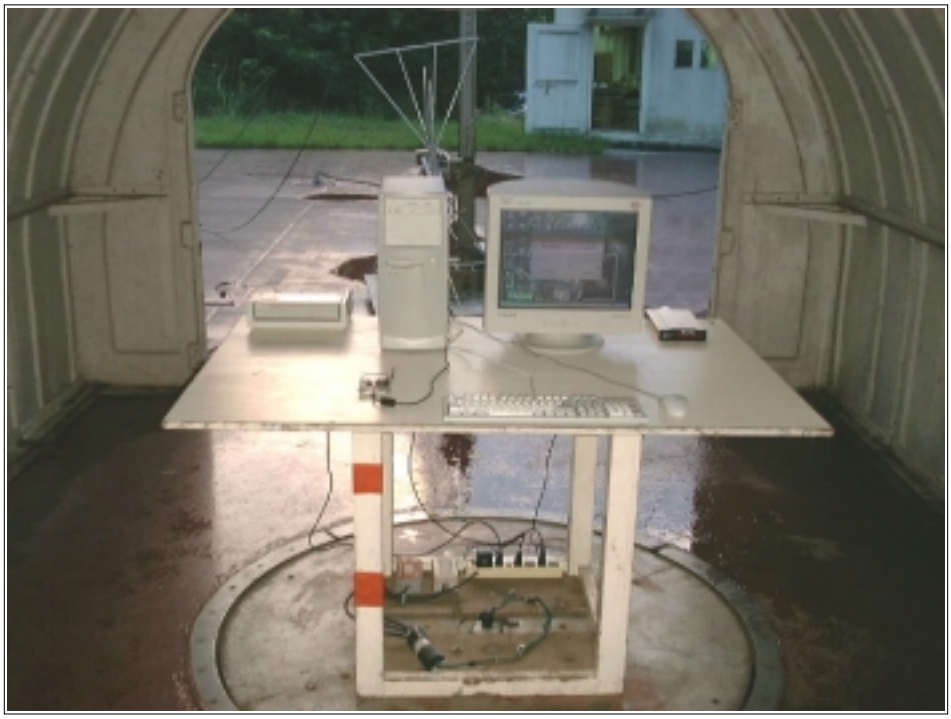
The Photos of Radiation Measuring setup for Transmitting Operation Mode

Please see setup photos in Exhibit-X

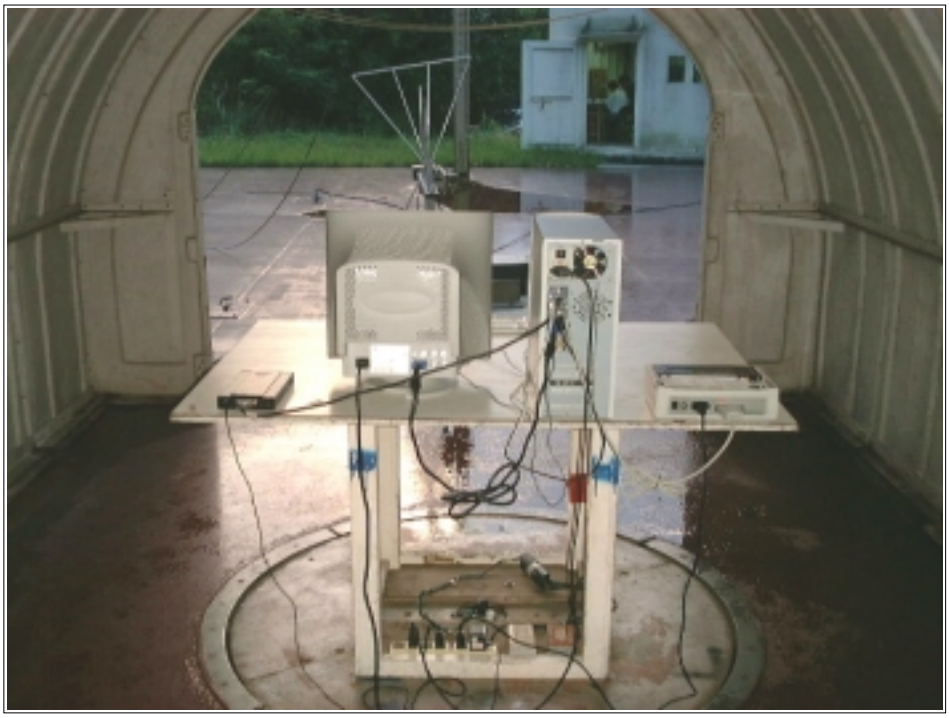
Please see setup photos in Exhibit-Y & Z

The Photos of Radiation Measuring setup for PC Link Operation Mode

Please see setup photos in Exhibit-F



Please see setup photos in Exhibit-F



6 CONDUCTED EMISSION MEASUREMENT

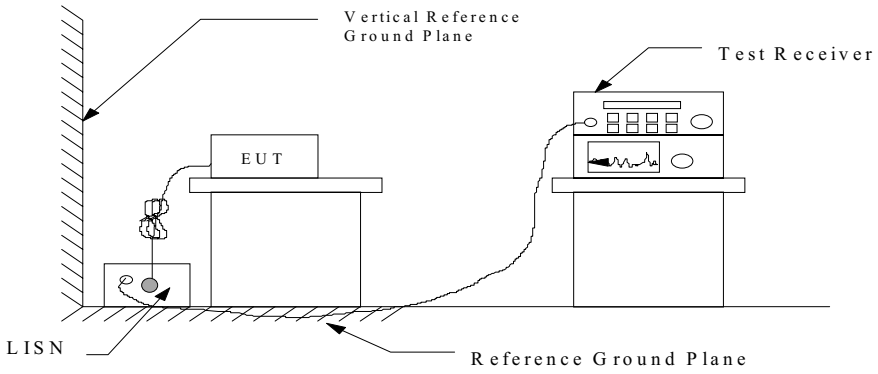
6.1 Standard Applicable

For intentional device, Line Conducted Emission Limits are in accordance to § 15.207(a), any emissions level shall not exceed 48 dBuV.

6.2 Measurement Procedure

1. Setup the configuration per figure 3.
2. A preliminary scan with a spectrum monitor is performed to identify the frequency of emission that has the highest amplitude relative to the limit by operating the EUT in selected modes of operation, typical cable positions, and with a typical system configuration.
3. Record the highest emissions relative to the limit.
4. Measure each frequency obtained from step 3 by a test receiver set on quasi peak detector function, and then record the accuracy frequency and emission level. If all emissions measured in the specified band are attenuated more than 20 dB from the limit, this step would be ignored, and the peak detector function would be used.
5. Confirm the highest three emissions with variation of the EUT cable configuration and record the final data.
6. Repeat all above procedures on measuring each operation mode of EUT.

Figure 3 : Conducted emissions measurement configuration



6.3 Conducted Emission Data

Operation Mode : Transmitting (CH3)

Test Date :August 23, 2001 Temperature : 20 ℃ Humidity: 50 %

Freq.	Reading	C.F.	Corrected Reading	Limit	Margin	Reading Type	Mark
(MHz)	(dBuV)	(dB)	(dBuV/m)	FCC_B	(dB)	(P/Q/A)	(L/N)
0.150	41.95	0.02	41.97	66.00	-24.03	P	L
0.285	36.72	0.02	36.74	60.68	-23.93	P	L
0.444	34.91	0.05	34.96	56.98	-22.02	P	L
0.871	27.62	0.07	27.69	56.00	-28.31	P	L
1.388	23.70	0.10	23.80	56.00	-32.20	P	L
18.426	25.87	0.43	26.30	60.00	-33.70	P	L
0.150	40.51	0.02	40.53	66.00	-25.47	P	N
0.186	39.55	0.02	39.57	64.20	-24.63	P	N
0.428	32.84	0.05	32.89	57.29	-24.40	P	N
0.567	29.29	0.06	29.35	56.00	-26.65	P	N
0.857	30.50	0.07	30.57	56.00	-25.43	P	N
18.426	24.42	0.43	24.85	60.00	-35.15	P	N

Operation Mode : Transmitting (CH33)

Test Date : August 23, 2001 Temperature : 20 ℃ Humidity: 50 %

Freq.	Reading	C.F.	Corrected Reading	Limit	Margin	Reading Type	Mark
(MHz)	(dBuV)	(dB)	(dBuV/m)	FCC_B	(dB)	(P/Q/A)	(L/N)
0.152	40.85	0.02	40.87	65.91	-25.04	P	L
0.449	33.91	0.05	33.96	56.89	-22.93	P	L
0.675	28.76	0.06	28.82	56.00	-27.18	P	L
0.871	27.28	0.07	27.35	56.00	-28.65	P	L
1.762	22.82	0.12	22.94	56.00	-33.06	P	L
18.426	26.73	0.43	27.16	60.00	-32.84	P	L
0.158	42.59	0.02	42.61	65.66	-23.05	P	N
0.266	38.97	0.02	38.99	61.25	-22.26	P	N
0.555	35.13	0.05	35.18	56.00	-20.82	P	N
0.830	31.04	0.07	31.11	56.00	-24.89	P	N
1.117	28.72	0.09	28.81	56.00	-27.19	P	N
18.426	27.65	0.43	28.08	60.00	-31.92	P	N

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Operation Mode : Transmitting (CH62)

Test Date : August 23, 2001 Temperature : 20 ℃ Humidity: 50 %

Freq.	Reading	C.F.	Corrected Reading	Limit	Margin	Reading Type	Mark
(MHz)	(dBuV)	(dB)	(dBuV/m)	FCC_B	(dB)	(P/Q/A)	(L/N)
0.150	40.51	0.02	40.53	66.00	-25.47	P	L
0.243	36.32	0.02	36.34	62.00	-25.66	P	L
0.428	33.64	0.05	33.69	57.29	-23.60	P	L
0.724	28.70	0.07	28.77	56.00	-27.23	P	L
1.858	22.95	0.12	23.07	56.00	-32.93	P	L
18.426	23.63	0.43	24.06	60.00	-35.94	P	L
0.150	42.85	0.02	42.87	66.00	-23.13	P	N
0.188	42.37	0.02	42.39	64.11	-21.72	P	N
0.527	35.31	0.05	35.36	56.00	-20.64	P	N
0.817	31.42	0.07	31.49	56.00	-24.51	P	N
1.037	29.57	0.08	29.65	56.00	-26.35	P	N
16.055	27.53	0.41	27.94	60.00	-32.06	P	N

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Operation Mode : PC Link

Test Date : August 23, 2001 Temperature : 20 ℃ Humidity: 50 %

Freq.	Reading	C.F.	Corrected Reading	Limit	Margin	Reading Type	Mark
(MHz)	(dBuV)	(dB)	(dBuV/m)	FCC_B	(dB)	(P/Q/A)	(L/N)
0.158	45.51	0.02	45.53	65.56	-20.03	P	L
0.198	36.18	0.02	36.20	63.71	-27.51	P	L
0.223	31.65	0.02	31.67	62.70	-31.03	P	L
0.299	31.60	0.02	31.62	60.28	-28.66	P	L
11.621	27.22	0.36	27.58	60.00	-32.42	P	L
16.055	31.13	0.41	31.54	60.00	-28.46	P	L
0.158	44.93	0.02	44.95	65.56	-20.61	P	N
0.198	33.39	0.02	33.41	63.71	-30.30	P	N
0.223	32.57	0.02	32.59	62.70	-30.11	P	N
0.299	30.76	0.02	30.78	60.28	-29.50	P	N
16.055	30.10	0.41	30.51	60.00	-29.49	P	N
24.015	27.40	0.49	27.89	60.00	-32.11	P	N

Note : Please see appendix 1 for Plotted Data

6.4 Result Data Calculation

The result data is calculated by adding the Cable Loss Factor to the measured reading. The basic equation with a sample calculation is as follows:

Corrected Reading = Reading + C. F.

Assume a receiver reading of 40.51 dB μ V is obtained, and Cable Loss Factor is 0.02 dB, then the total of disturbance voltage is 40.53 dB μ V.

Corrected Reading = 40.51 + 0.02 = 40.53 dB μ V

6.5 Conducted Measurement Equipment

The following test equipment are used during the conducted test .

Equipment	Manuf.	Model No.	Serial No.	Cal Date	Due Date
TEST RECEIVER	ROHDE & SCHWARZ	ESHS20	840455/006	03/15/01	03/15/02
LISN	SOLAR	8012-50-R-24-BNC	8305114	07/23/01	07/23/02
LISN(EUT)	EMCO	3825/2	14.5	01/10/01	01/10/02

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6.6 Photos of Conduction Measuring Setup

The Photos of Conduction Measuring setup for Transmittion Operation Mode.

Please see setup photos in Exhibit-F

Please see setup photos in Exhibit-B

The Photos of Conduction Measuring setup for PC Link Operation Mode

Please see setup photos in Exhibit-F

Please see setup photos in Exhibit-B

7 BAND EDGES MEASUREMENT

7.1 Standard Applicable

According to 15.249(c), out band emission except for harmonics shall be comply with § 15.209 or at least attenuated by 50 dB below the level of the fundamental.

7.2 Measurement Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT as lowered and highest channel frequencies band, Then set it to any one measured frequency within its operating range and make sure the instrument is operated in its linear range.
3. Set both RBW and VBW of spectrum analyzer to 300 kHz with a convenient frequency span including 100kHz bandwidth from band edge.
4. Measure the highest amplitude appearing on spectral display and set it as a reference level. Plot the graph with marking the highest point and edge frequency.
5. Repeat above procedures until all measured frequencies were complete.

7.3 Measurement Equipment

Equipment	Manuf.	Model No.	Serial No.	Cal Date	Due Date
Spectrum Analyzer	ADVANTEST	R3271A	850603212	10/03/01	10/03/02
Spectrum Analyzer	H.P.	8566B	2937A06102	06/06/01	06/06/01
ANTENNA	EMCO	3142	1310	06/30/01	06/30/02
ANTENNA	EMCO	3115	5761	02/23/01	02/23/02
PLOTTER	HEWKELL-PACKARD	7475	2325A82294	N/A	N/A

7.4 Measurement Data

Test Date : August 22, 2001 Temperature : 24 ℃ Humidity: 55 %

Note : Please see appendix 2 for Plotted Data

APPENDIX 1 : PLOTTED DATA OF CONDUCTED EMISSIONS

COMPLIANCE
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UL,CSA,TUV

No. 199, Chung Sheng Road,
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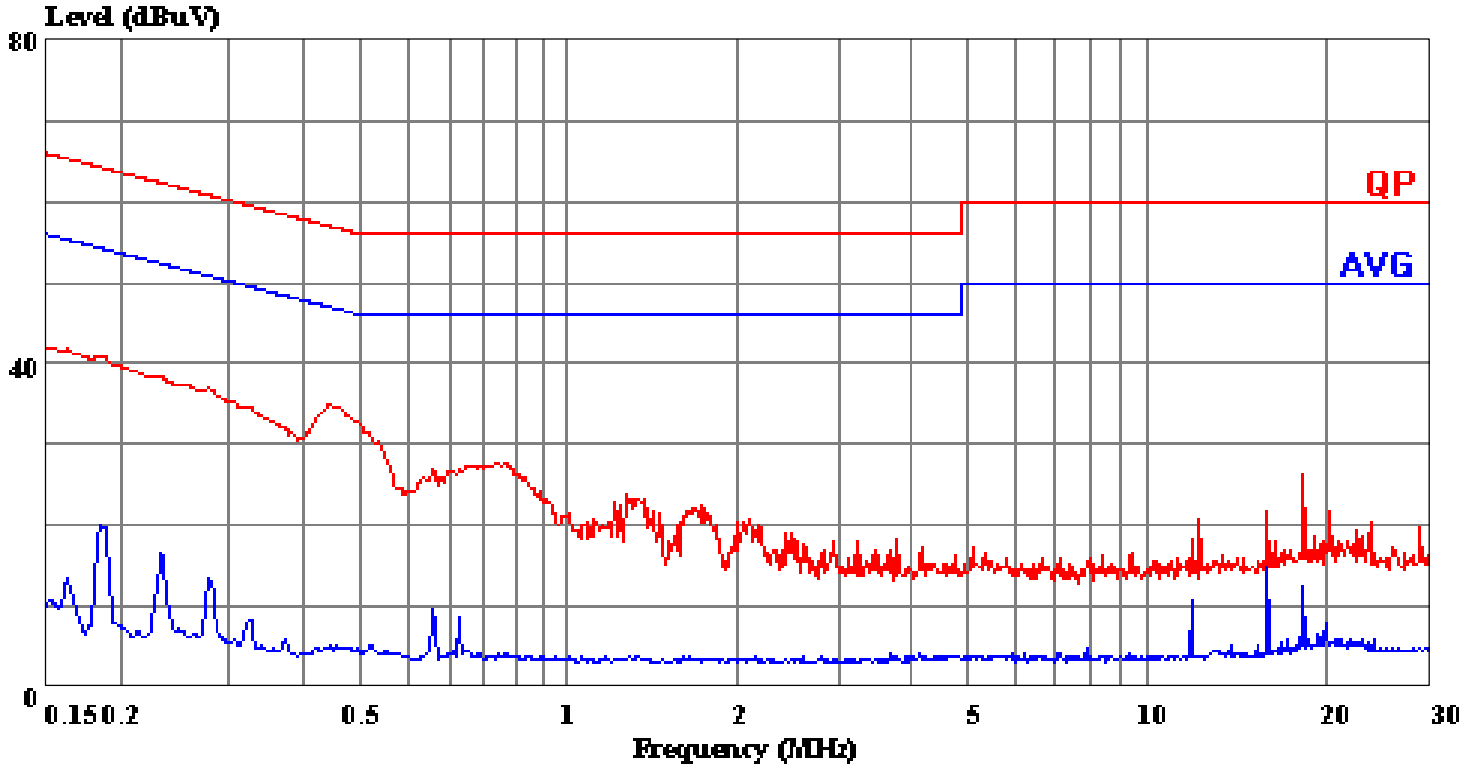
Taiwan, R.O.C.
Tel:02-2217-0894 Fax:02-2217-1254

Data#: 8 File#: CYBIKOe.EMI Date: 2001-08-10 Time: 22:08:44



(CES Conducted)

Trace: 7 Ref Trace:

Condition: LINE
Report No. : 01O9685
Test Engr. : PETER LU
Company   : Cybiko Inc.
EUT   : CY44801
Test Config : EUT / ALL PERIPHERALS
Type of Test: FCC CLASS B
Mode of Op. : CHANNEL 3 MODE

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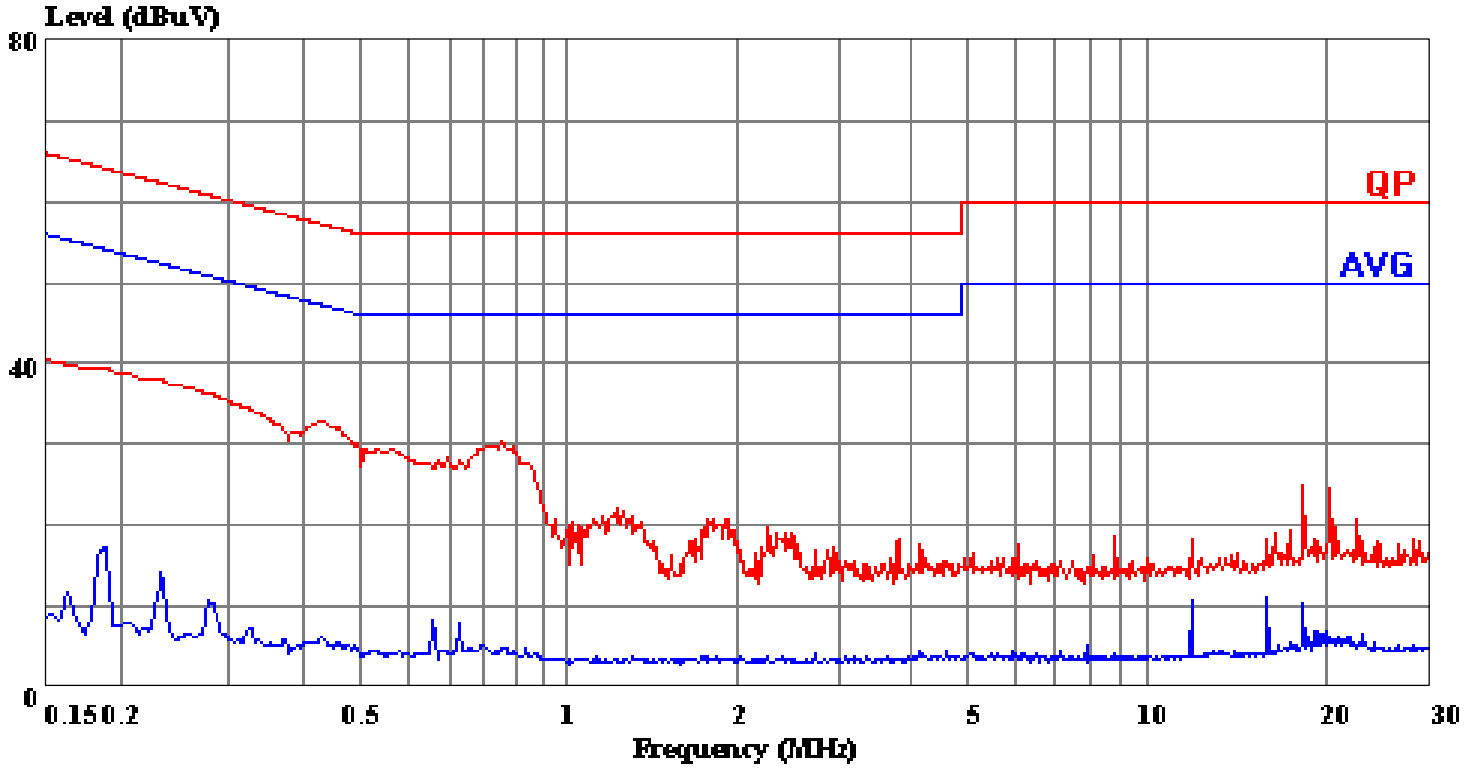
Tel:02-2217-0894 Fax:02-2217-1254

Data#: 32 File#: CYBIKOe.EMI Date: 2001-08-10 Time: 22:44:00



(CES Conducted)

Trace: 31 Ref Trace:

Condition: NEUTRAL
Report No. : 01O9685
Test Engr. : PETER LU
Company : Cybiko Inc.
EUT : CY44801
Test Config : EUT / ALL PERIPHERALS
Type of Test: FCC CLASS B
Mode of Op. : CHANNEL 3 MODE

COMPLIANCE
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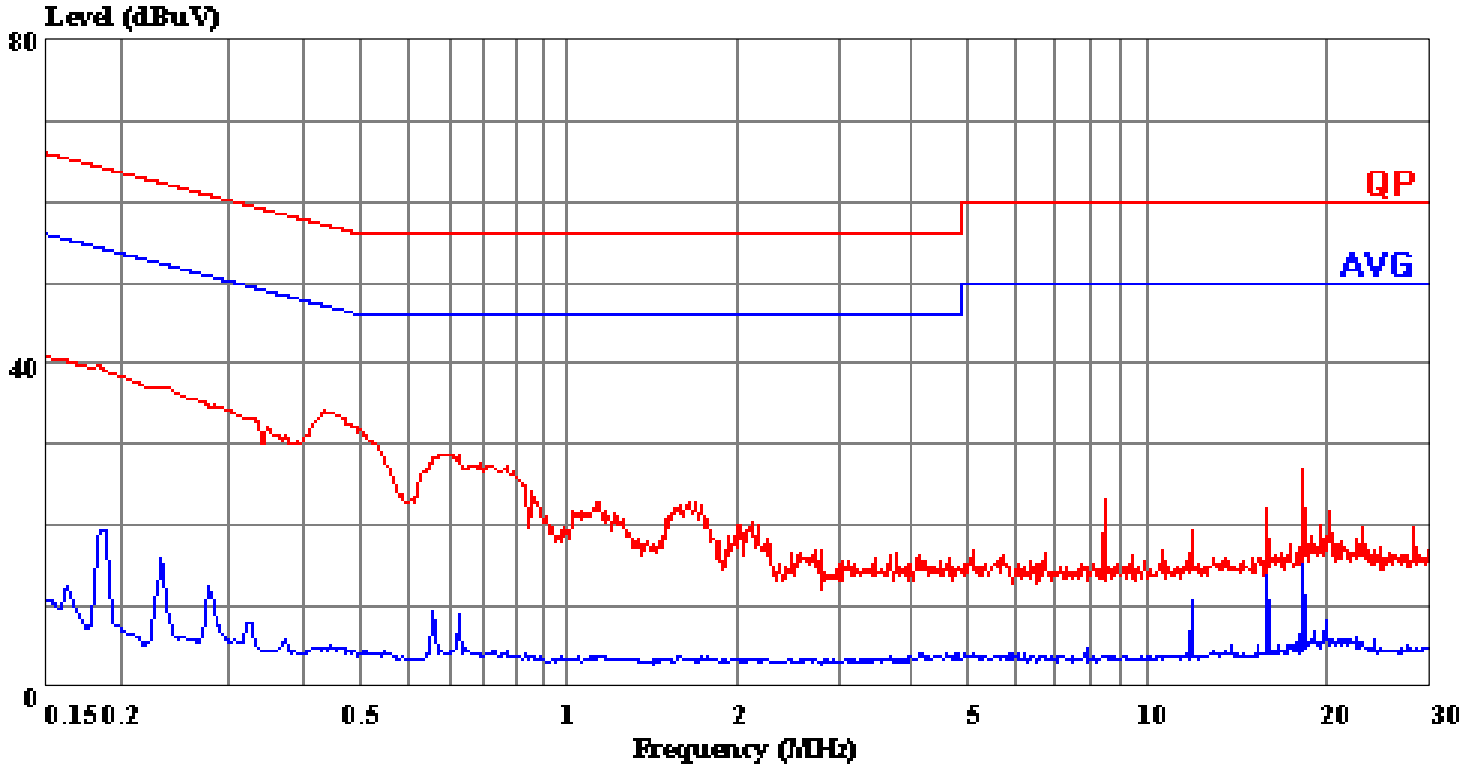
Data#: 16 File#: CYBIKOe.EMI Date: 2001-08-10 Time: 22:16:52



(CES Conducted)

Trace: 15 Ref Trace:

Condition: LINE
Report No. : 01O9685
Test Engr. : PETER LU
Company   : Cybiko Inc.
EUT   : CY44801
Test Config : EUT/ALL PERIPHERALS
Type of Test: FCC CLASS B
Mode of Op. : CHANNEL 33 MODE

COMPLIANCE
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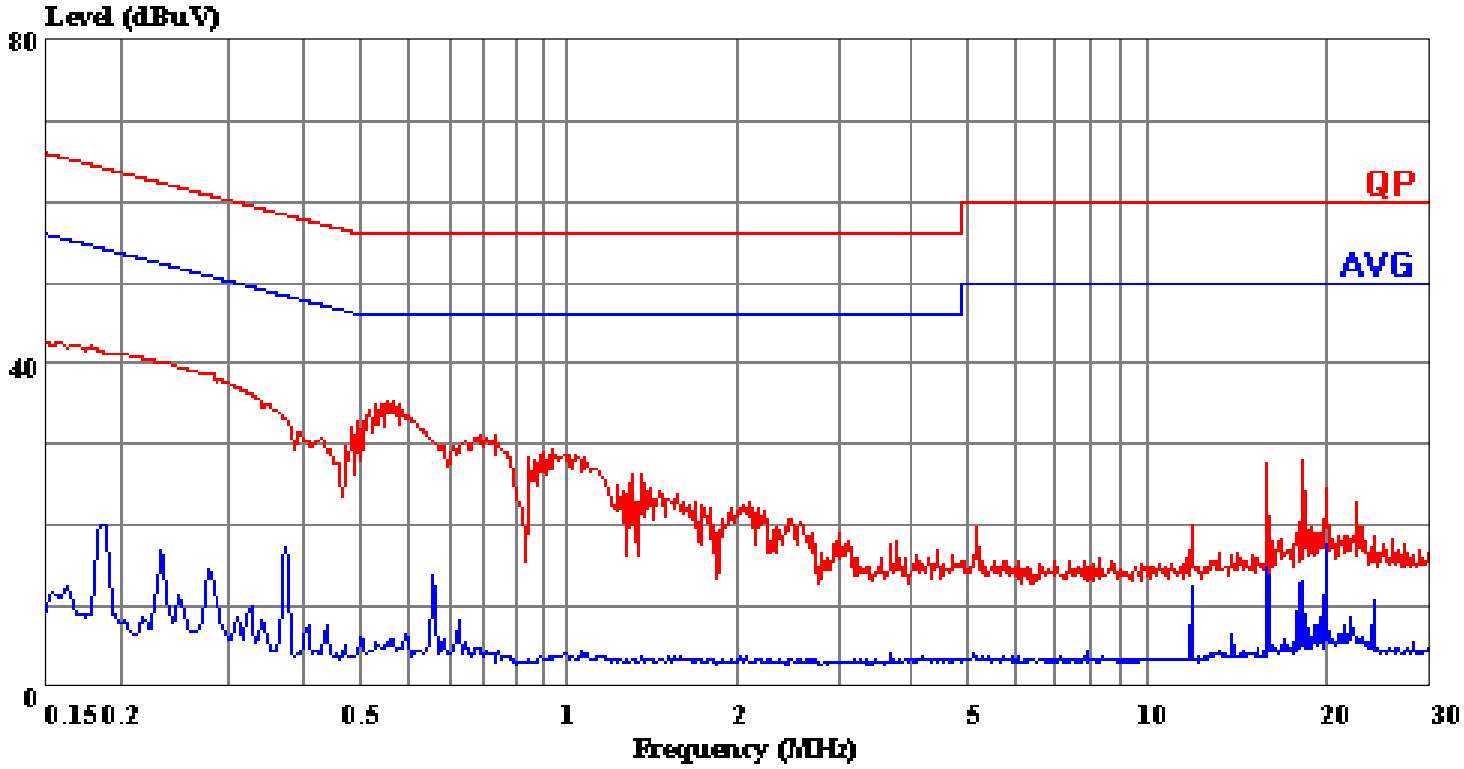
Tel:02-2217-0894 Fax:02-2217-1254

Data#: 42 File#: CYBIKOe.EMI Date: 2001-08-23 Time: 11:10:56



(CES Conducted)

Trace: 41 Ref Trace:

Condition: NEUTRAL
Report No. : 01O9685
Test Engr. : BILL HUANG
Company   : Cybiko Inc.
EUT   : CY44801
Test Config : SINGLE
Type of Test: FCC CLASS B
Mode of Op. : CHANNEL 33

COMPLIANCE
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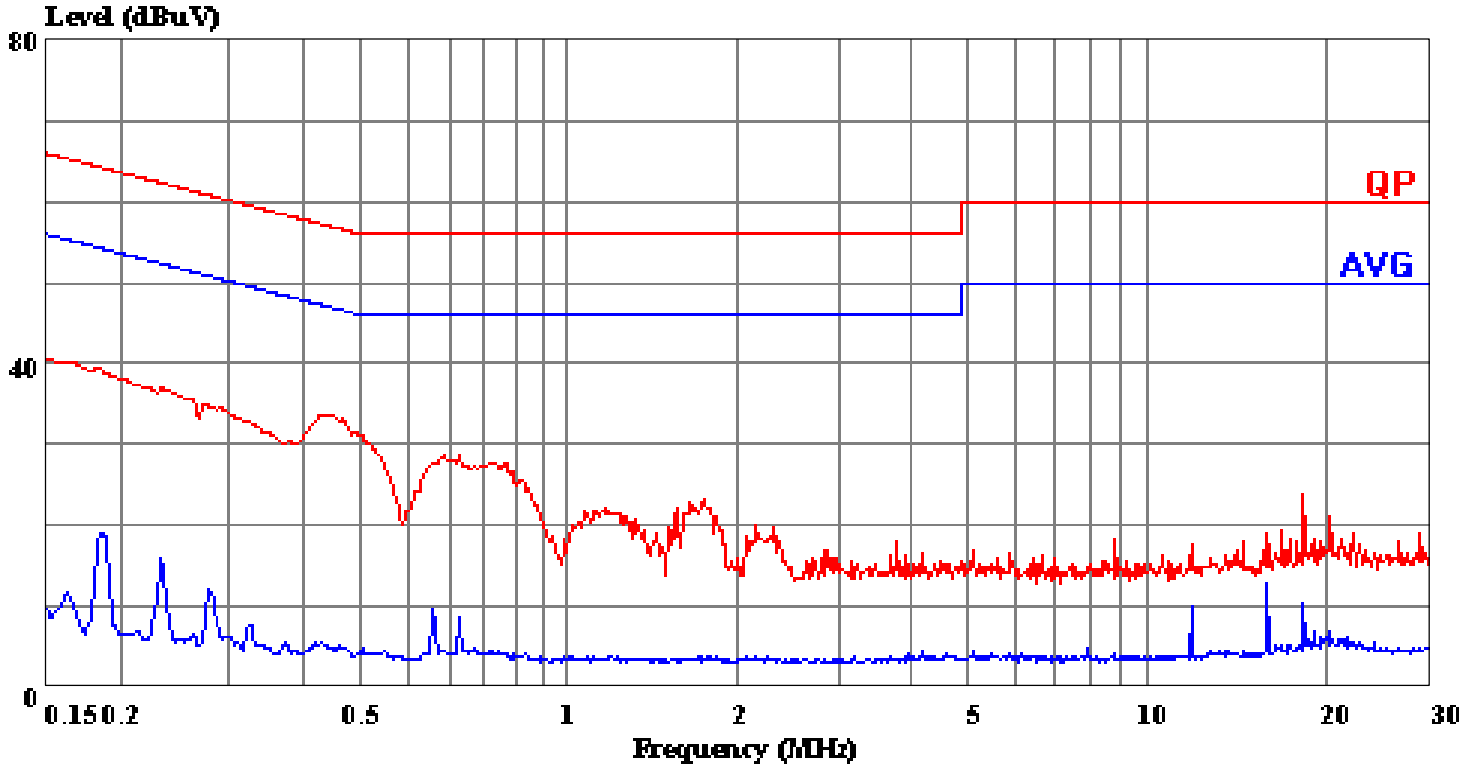
Tel:02-2217-0894 Fax:02-2217-1254

Data#: 24 File#: CYBIKOe.EMI Date: 2001-08-10 Time: 22:28:58



(CES Conducted)

Trace: 23 Ref Trace:

Condition: LINE
Report No. : 01O9685
Test Engr. : PETER LU
Company   : Cybiko Inc.
EUT   : CY44801
Test Config : EUT/ALL PERIPHERALS
Type of Test: FCC CLASS B
Mode of Op. : CHANNEL 62 MODE

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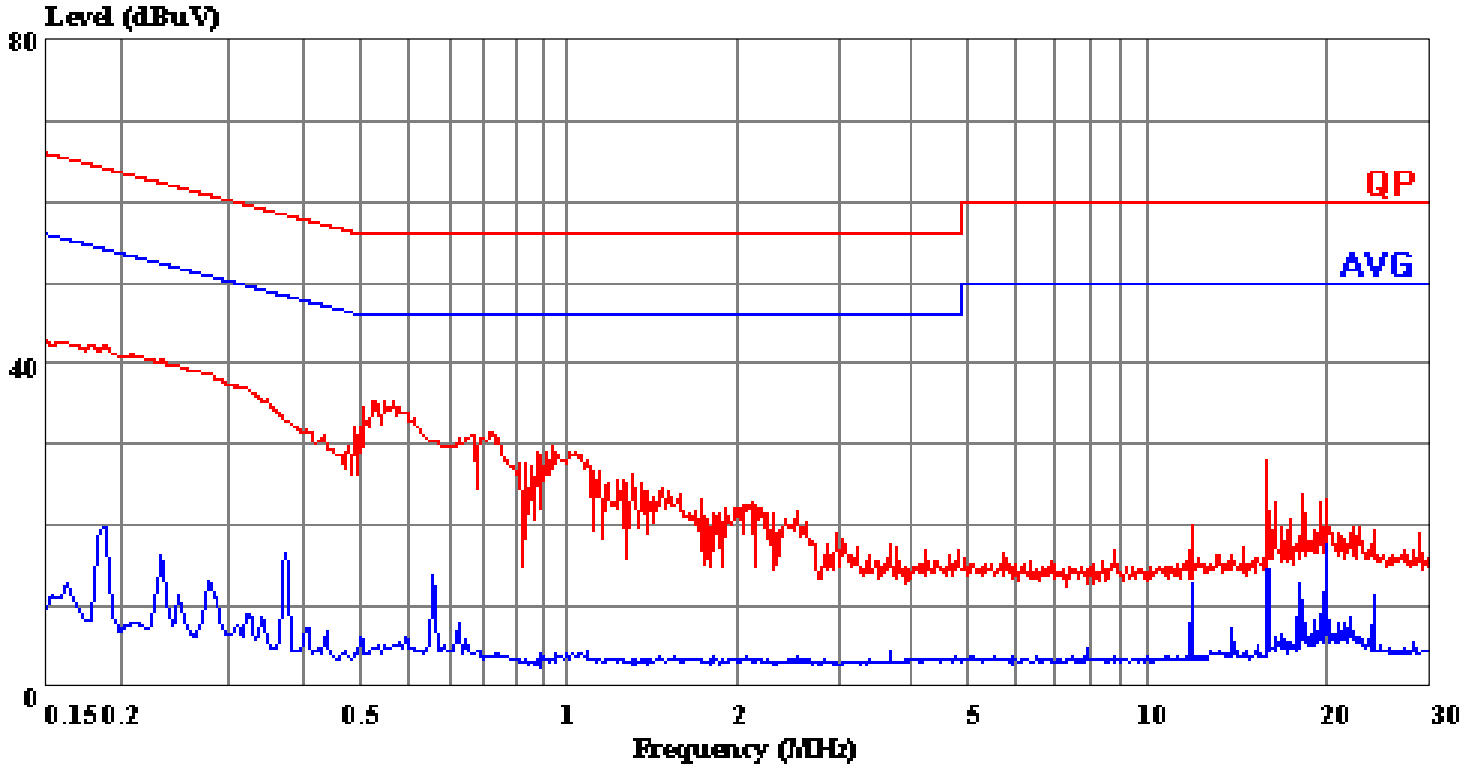
Tel:02-2217-0894 Fax:02-2217-1254

Data#: 50 File#: CYBIKOe.EMI Date: 2001-08-23 Time: 11:19:07



(CES Conducted)

Trace: 49 Ref Trace:

Condition: NEUTRAL
Report No. : 01O9685
Test Engr. : BILL HUANG
Company   : Cybiko Inc.
EUT   : CY44801
Test Config : SINGLE
Type of Test: FCC CLASS B
Mode of Op. : CHANNEL 62

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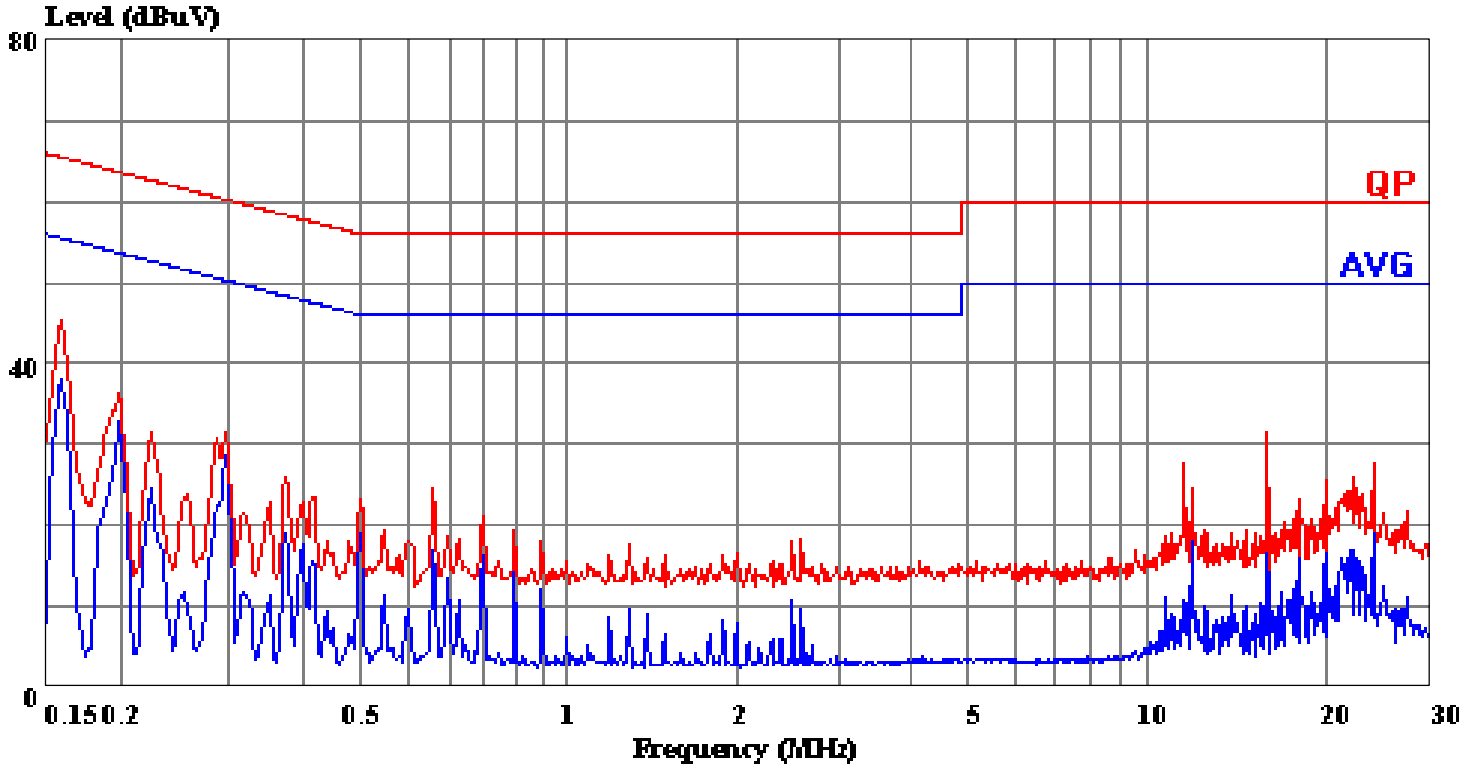
Tel:02-2217-0894 Fax:02-2217-1254

Data#: 66 File#: CYBIKOe.EMI Date: 2001-08-23 Time: 11:56:21



(CES Conducted)

Trace: 65 Ref Trace:

Condition: LINE
Report No. : 01O9685
Test Engr. : BILL HUANG
Company   : Cybiko Inc.
EUT   : CY44801
Test Config : EUT/ALL PERIPHERALS
Type of Test: FCC CLASS B
Mode of Op. : PC LINK TEST

COMPLIANCE Engineering Service, Inc.
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UL,CSA,TUV

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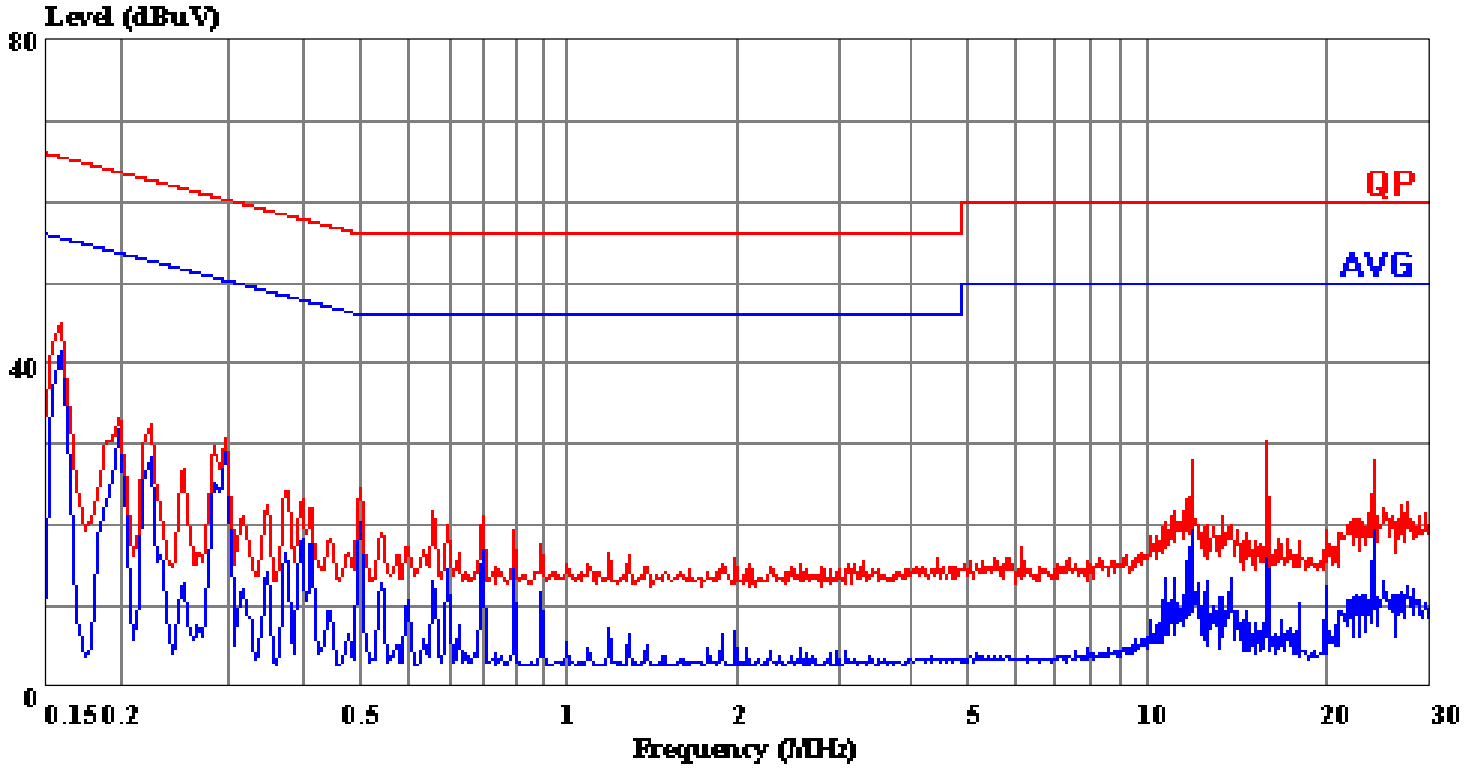
Tel:02-2217-0894 Fax:02-2217-1254

Data#: 58 File#: CYBIKOe.EMI Date: 2001-08-23 Time: 11:48:42



(CES Conducted)

Trace: 57 Ref Trace:

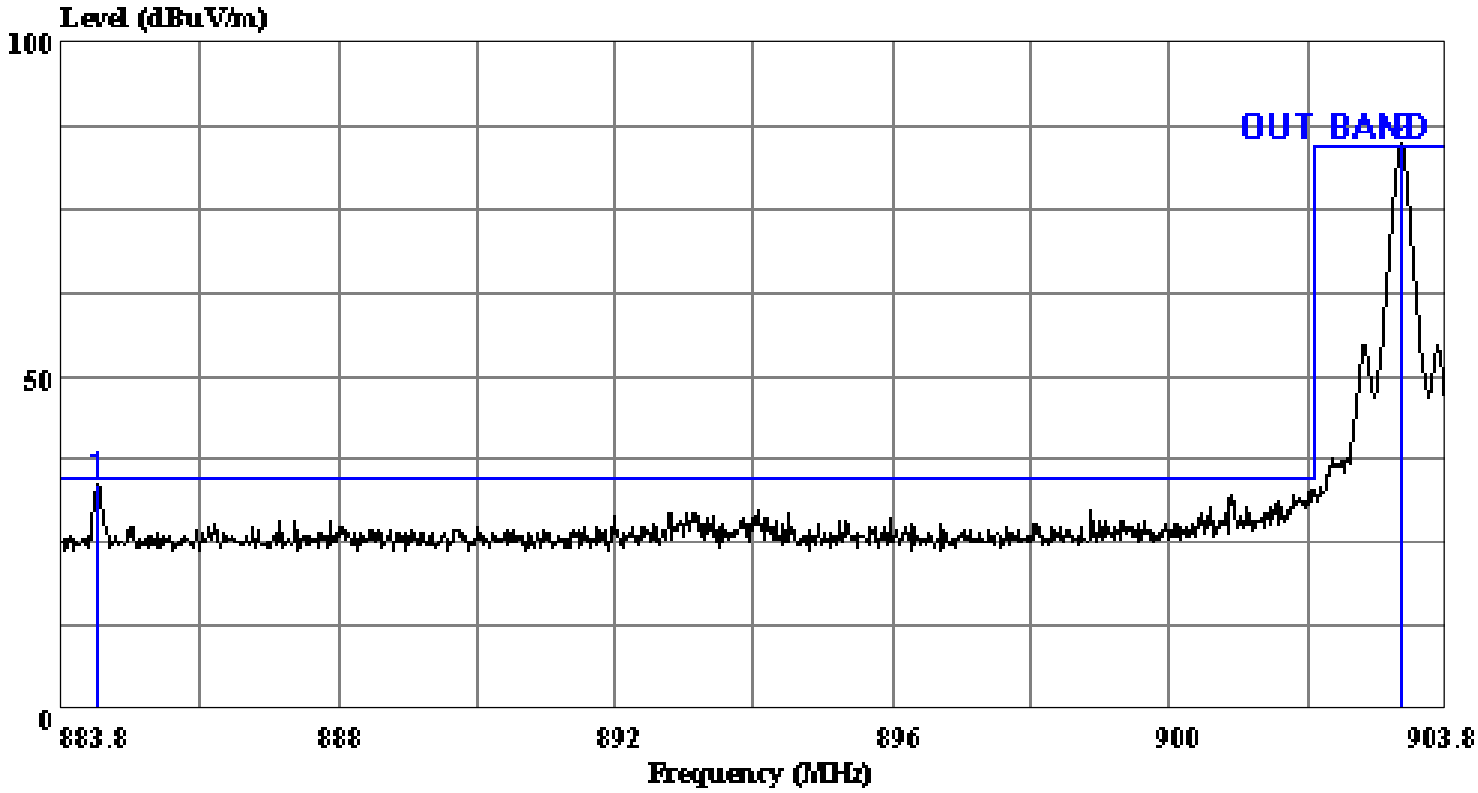
Condition: NEUTRAL
Report No. : 01O9685
Test Engr. : BILL HUANG
Company   : Cybiko Inc.
EUT   : CY44801
Test Config : EUT/ALL PERIPHERALS
Type of Test: FCC CLASS B
Mode of Op. : PC LINK TEST

APPENDIX 2 : PLOTTED DATA OF BAND EDGES EMISSIONS

COMPLIANCE Engineering Service, Inc.
FCC,VCCI,CISPR,CE
UL,CSA,TUV

No. 199 Chung Sheng Road,
Hsin Tien City, Taipei,
Taiwan, R. O. C.
Tel:02-2217-0894 Fax:02-2217-1254

Data#: 12 File#: 01o9685.emi Date: 2001-08-22 Time: 19:26:26



(CCS E-Site)

Trace: 11 Ref Trace:

Condition: VERTICAL
Report No. : 01O9685
Test Engr. : BILL HUANG
Company : Cybiko Inc.
EUT : PDA
Test Config : EUT ONLY
Type of Test: FCC CLASS B
Mode of Op. : CHANNEL 3

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	884.312	30.90	2.78	33.68	34.60	-0.92	Peak
2	903.172	81.50	2.94	84.44	84.60	-0.16	Peak

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UL,CSA,TUV

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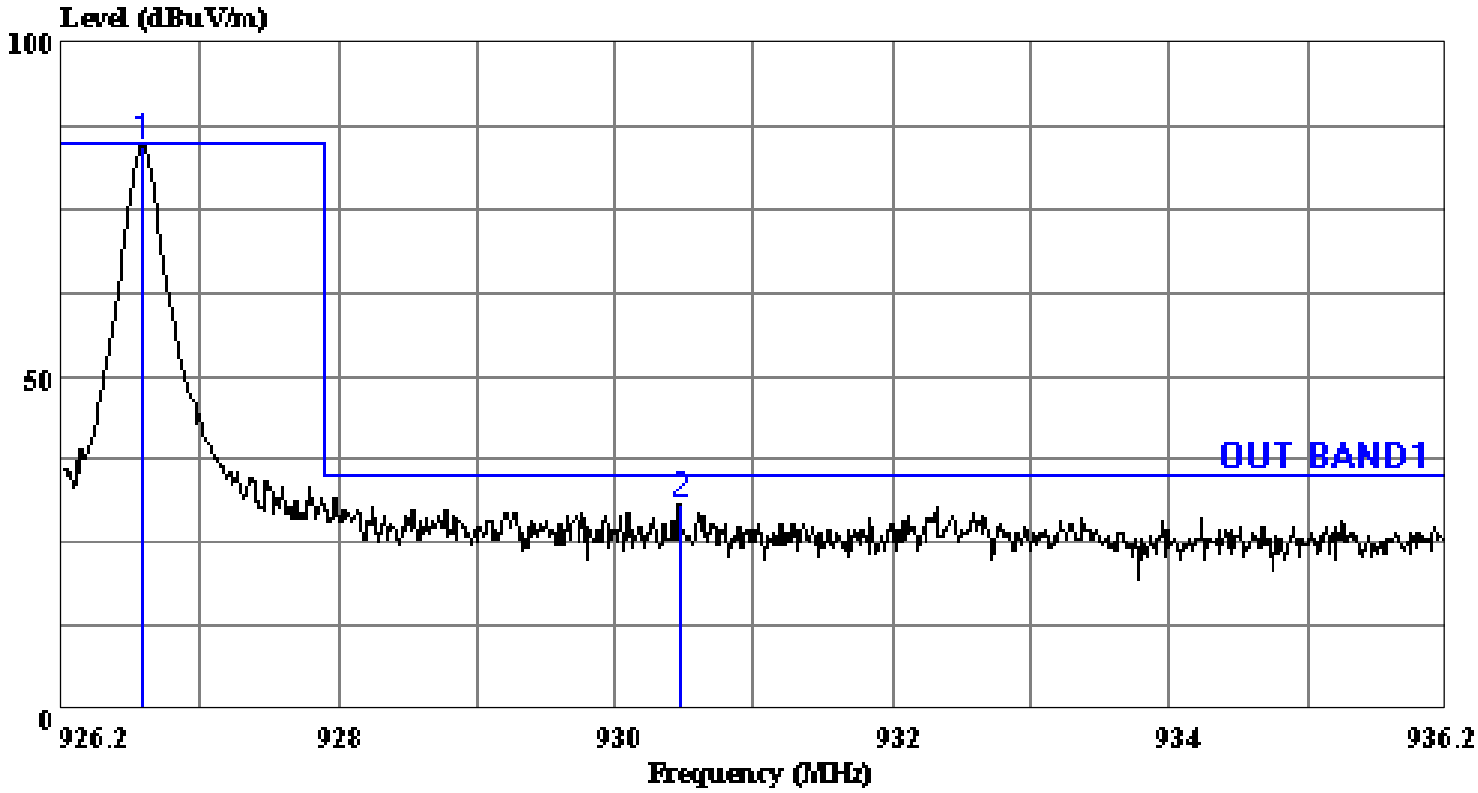
Tel:02-2217-0894 Fax:02-2217-1254

Data#: 20 File#: 01o9685.emi Date: 2001-08-22 Time: 20:05:57



(CCS E-Site)

Trace: 19 Ref Trace:

Condition: VERTICAL
Report No. : 01O9685
Test Engr. : BILL HUANG
Company   : Cybiko Inc.
EUT   : CY44801
Test Config : EUT ONLY
Type of Test: FCC CLASS B
Mode of Op. : CHANNEL 62

	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV/m	dBuV/m	dB	
1	926.782	81.40	3.16	84.56	84.86	-0.30	Peak
2	930.662	27.70	3.20	30.90	34.86	-3.96	Peak

APPENDIX 3 : PHOTOGRPHS OF EUT