



## Test Report

Product Name: Cable Modem  
Model No.: BEFCMU10 ver.3  
FCC ID. : Q87-BEFCMU10V3

Applicant : Cisco-Linksys, LLC

Address : 17401 Armstrong Avenue, Irvine, CA 92614 USA

Date of Receipt : Jun. 19, 2003

Date of Test : Jun. 24, 2003

Report No. : 036H064FI

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of Quietek Corporation.

This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

# Test Report Certification

Test Date : Jun. 24, 2003

Report No. : 036H064FI



Accredited by NIST (NVLAP)  
NVLAP Lab Code: 200347-0


Product Name : Cable Modem  
Applicant : Cisco-Linksys, LLC  
Address : 17401 Armstrong Avenue, Irvine, CA 92614 USA  
Manufacturer : ASKEY COMPUTER CORP.  
Model No. : BEFCMU10 ver.3  
FCC ID. : Q87-BEFCMU10V3  
Rated Voltage : AC 120V/60Hz  
Trade Name : Linksys  
Measurement Standard : FCC Part 15 Subpart B: 2002, CISPR 22:1997.  
Measurement Procedure : ANSI C63.4: 1992  
Classification : Class B  
Test Result : Complied




The Test Results relate only to the samples tested.

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This report must not be used to claim product endorsement by NVLAP any agency of the U.S. Government

Documented By :   
( Lydia Tsai )

Tested By :   
( Allen Wu )

Approved By :   
( Kevin Wang )

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## 1. GENERAL INFORMATION

### 1.1. EUT Description

Product Name : Cable Modem  
Trade Name : Linksys  
Model No. : BEFCMU10 ver.3  
FCC ID. : Q87-BEFCMU10V3  
USB Cable : Non-shielded, 1.5m  
LAN Cable : Non-shielded, 3.0m  
Power Adapter (Mode1) : OEM, AD-121ANDT  
Cable IN: Non-shielded, 1.9m  
Cable Out: Non-shielded, 1.9m  
Power Adapter (Mode2) : DELTA, ADP-12SB Rev. B  
Cable Out: Non-shielded, 1.8m  
Power Cord : Non-shielded, 1.8m

Note:

1. This EUT is a Cable Modem.
2. Quietek has verified both construction and function in typical operation. All the test modes were carried out with the EUT in normal operation, which was shown in this test report and defined as:

EMI Mode: Mode 1: Cable Modem OEM AD-121ANDT

Mode 2: Cable Modem DELTA ADP-12SB Rev. B

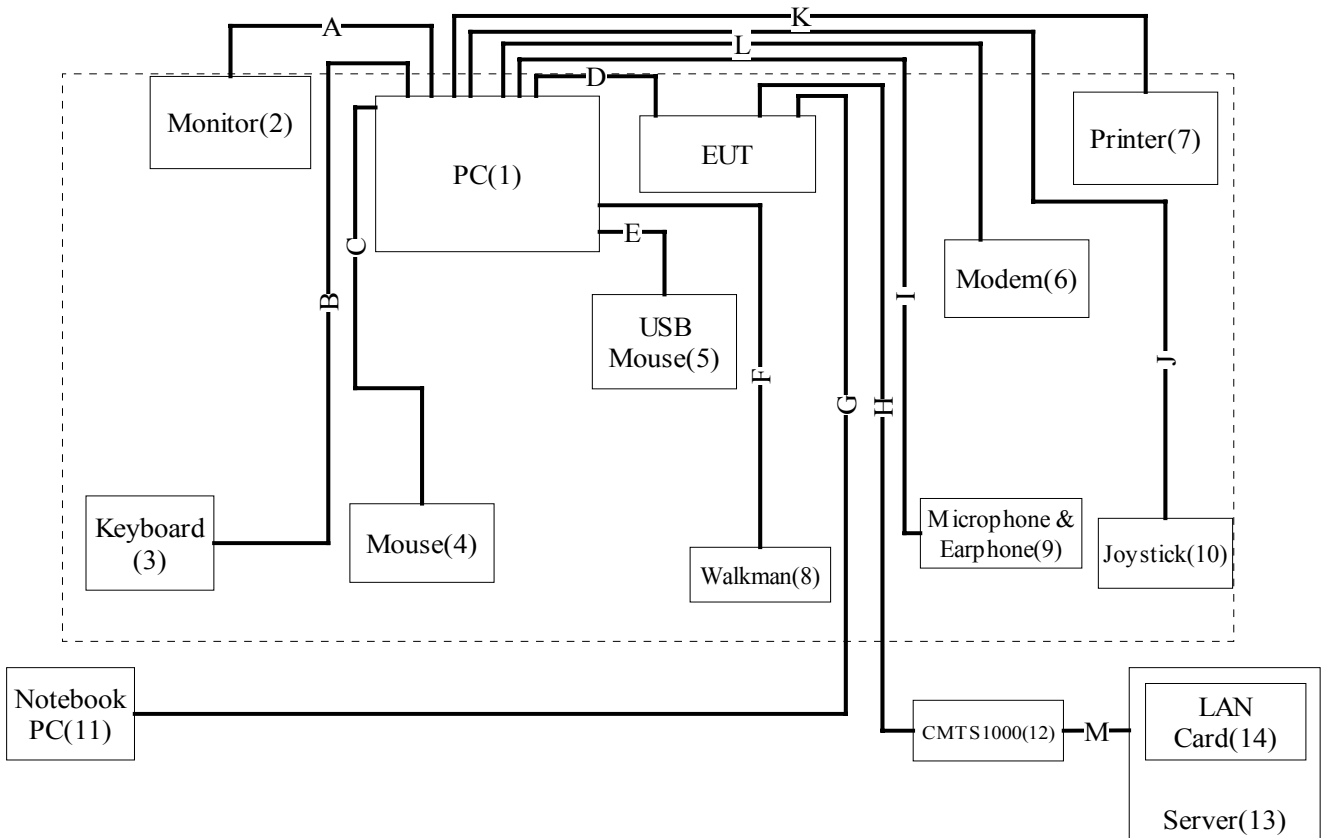
## 1.2. Tested System Details

The types for all equipment, plus descriptions of all cables used in the tested system (including inserted cards) are:

	Product	Manufacturer	Model No.	Serial No.	Power Cord
(1)	PC	HP	DTPC27	SG21200950	Non-shielded, 1.8m
(2)	Monitor	LEMEL	VA-570	OS243014320	Non-shielded, 1.8m
(3)	Keyboard	ACER	6311-TW4C/6	N/A	--
(4)	Mouse	Logitech	M-S35	LZA74956375	--
(5)	USB Mouse	Logitech	M-UE55	N/A	--
(6)	Modem	ACEEX	DM-1414	0102027546	Non-shielded, 1.6m
(7)	Printer	HP	C2642A	MY75N1D2BC	Non-shielded, 0.7m
(8)	Walkman	TOBISHI	TB-1027	TBS720101	--
(9)	Microphone & Earphone	TOKTO	SX-MI	N/A	--
(10)	Joystick	Logitech	863132-0000	LCB73202216	--
(11)	Notebook PC	ACER	500	9145B0160C91000CF2M	Non-shielded, 1.8m
(12)	CMTS1000	Nortel	Dess01E02	01425900	Non-shielded, 1.8m
(13)	Server	Mitac	6835E-43036	N/A	Non-shielded, 1.8m
(14)	LAN Card	D-LINK	DFE-500TX	0080C8 958320	--

	Signal Cable Type	Signal cable Description
A	VGA Cable	Shielded, 1.6m, a ferrite core bonded.
B	Keyboard Cable	Shielded, 1.8m
C	Mouse Cable	Shielded, 1.8m
D	USB Cable	Shielded, 1.5m
E	USB Mouse Cable	Shielded, 1.0m
F	Walkman Cable	Non-Shielded, 1.6m
G	LAN Cable	Non-Shielded, 10m
H	Coaxial Cable	Shielded, 10m
I	Microphone & Earphone Cable	Non-Shielded, 1.2m
J	Joystick Cable	Shielded, 2.0m
K	Printer Cable	Shielded, 1.2m
L	Modem Cable	Shielded, 1.5m
M	LAN Cable	Non-Shielded, 3.0m

### 1.3. Configuration of tested System



### 1.4. EUT Exercise Software

- (1) Setup the EUT and simulators as shown on 1.4.
- (2) Turn on the power of all equipment.
- (3) Boot the PC from Hard Disk.
- (4) Data will communicate between personal computer and EUT.
- (5) The personal computer's monitor will show the transmitting and receiving characteristics when the communication is success.
- (6) Repeat the above procedure (4) to (5)

**1.5. Test Facility**

Ambient conditions in the laboratory:

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

Site Description: November 3, 1998 File on  
 Federal Communications Commission  
 FCC Engineering Laboratory  
 7435 Oakland Mills Road  
 Columbia, MD 21046  
 Reference 31040/SIT1300F2  
 August 30, 2001 Accreditation on NVLAP  
 NVLAP Lab Code: 200347-0



Site Name: Quietek Corporation

Site Address: No.75-1, Wang-Yeh Valley, Yung-Hsing,  
 Chiung-Lin, Hsin-Chu County,  
 Taiwan, R.O.C.  
 TEL: 886-3-592-8858 / FAX: 886-3-592-8859  
 E-Mail: [service@quietek.com](mailto:service@quietek.com)

## 2. Conducted Emission

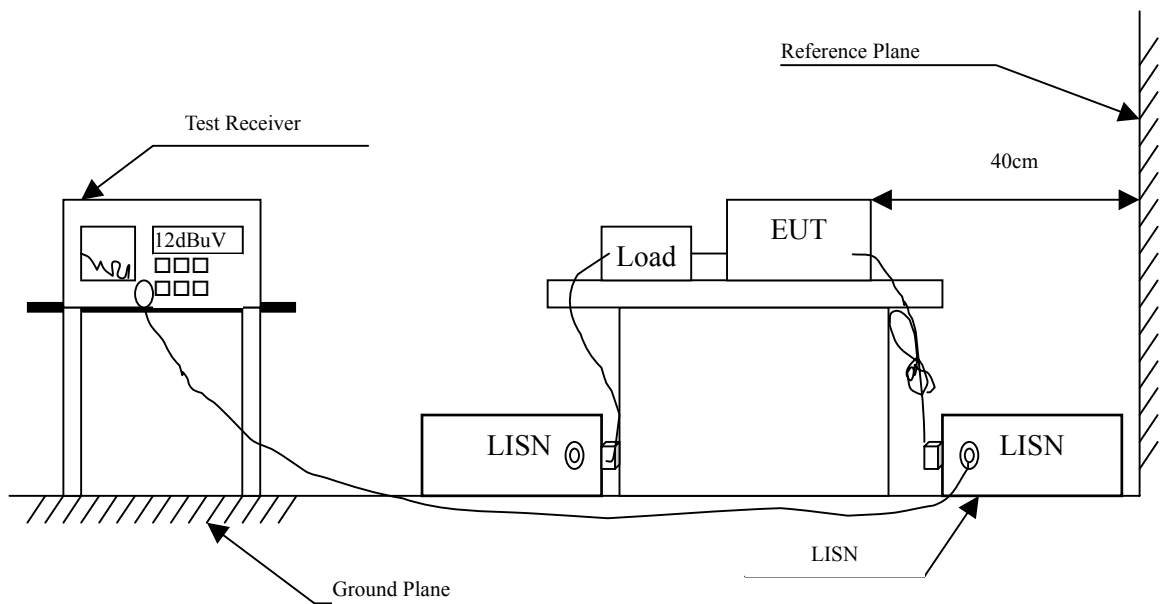
### 2.1. Test Equipment

The following test equipment are used during the test:

Item	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
1	Test Receiver	R & S	ESCS 30 / 825442/018	Aug., 2002	
2	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2003	Peripherals
3	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2003	EUT
4	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2003	
5	No.2 Shielded Room			N/A	

Note: All equipment upon which need to calibrated are with calibration period of 1 year.

### 2.2. Test Setup





**2.3. Limits**

<b>FCC Part 15 Subpart B Limits (dBuV)</b>				
Frequency MHz	Class A		Class B	
	QP	AV	QP	AV
0.15 - 0.50	79	66	66-56	56-46
0.50-5.0	73	60	56	46
5.0 - 30	73	60	60	50

Remarks : In the above table, the tighter limit applies at the band edges.

**2.4. Test Procedure**

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm/50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and the entire interface cables must be changed according to ANSI C63.4: 1992 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

**2.5. Test Result**

The emission from the EUT was below the specified limits. The worst-case emissions are shown in section 5. The acceptance criterion was met and the EUT passed the test.

### 3. Radiated Emission

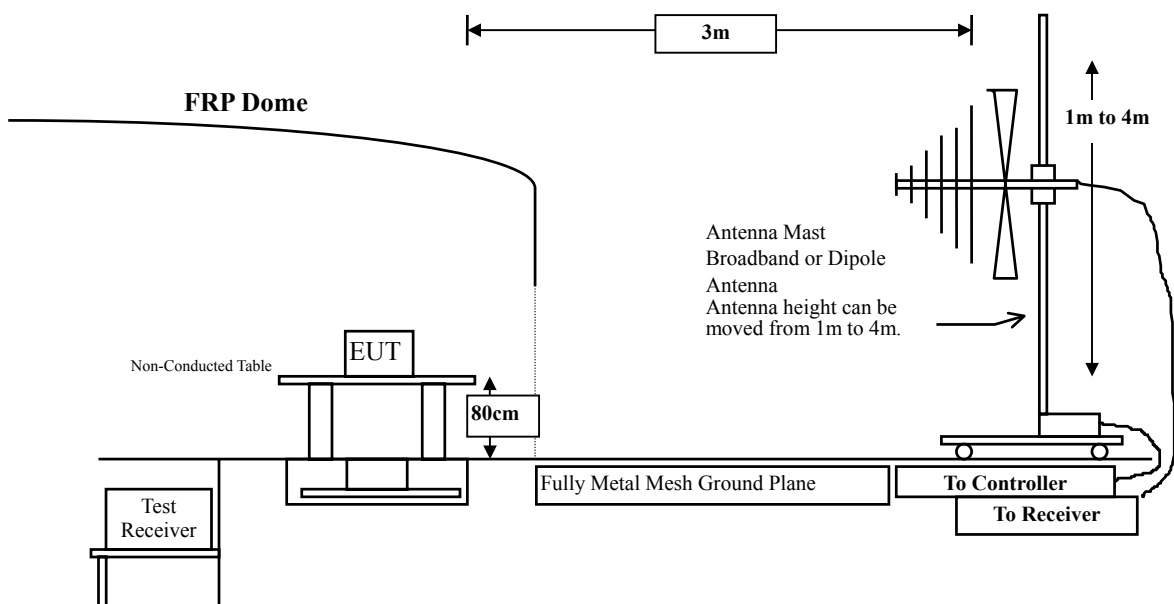
#### 3.1. Test Equipment

The following test equipment are used during the test:

Test Site	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.
OATS # 1	X Test Receiver	R & S	ESCS 30 / 825442/017	Jan., 2003
	X Spectrum Analyzer	Advantest	R3261C / 81720266	N/A
	X Pre-Amplifier	HP	8447D / 2944A09276	N/A
	X Bilog Antenna	Chase	CBL6112B / 2455	Sep., 2002
OATS # 2	Test Receiver	R & S	ESCS 30 / 836858/023	Jan., 2003
	Spectrum Analyzer	Advantest	R3261C / 81720471	N/A
	Pre-Amplifier	Quietek	QTK-AMP / AMP1	N/A
	Bilog Antenna	Chase	CBL6112B / 2708	Sep., 2002
OATS # 3	Test Receiver	R & S	ESCS 30 / 825442/014	Jun., 2003
	Spectrum Analyzer	Advantest	R3162 / 91700283	N/A
	Pre-Amplifier	Advantest	BB525C / N/A	N/A
	Bilog Antenna	Schaffner	CBL6112B / 2673	Sep., 2002

- Note:
1. All equipments that need to calibrate are with calibration period of 1 year.
  2. Mark "X" test instruments are used to measure the final test results.

#### 3.2. Test Setup



### 3.3. Limits

CISPR 22 Limits (dBuV)				
Frequency MHz	Class A		Class B	
	Distance (m)	dBuV/m	Distance (m)	dBuV/m
30 – 230	10	40	10	30
230 – 1000	10	47	10	37

- Remark:
1. The tighter limit shall apply at the edge between two frequency bands.
  2. Distance refers to the distance in meters between the measuring instrument antenna and the closed point of any part of the device or system.
  3. RF Line Voltage (dBuV/m) = 20 log RF Line Voltage (uV/m)

### 3.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 10 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.4:1992 on radiated measurement.

Radiated emissions were investigated over the frequency range from 30MHz to 1GHz using a receiver bandwidth of 120kHz. Radiated was performed at an antenna to EUT distance of 10 meters.

### 3.5. Test Result

The emission from the EUT was below the specified limits. The worst-case emissions are shown in section 5. The acceptance criterion was met and the EUT passed the test

#### 4. EMI Reduction Method During Compliance Testing

No modification was made during testing.

## 5. Summary of Test Datas

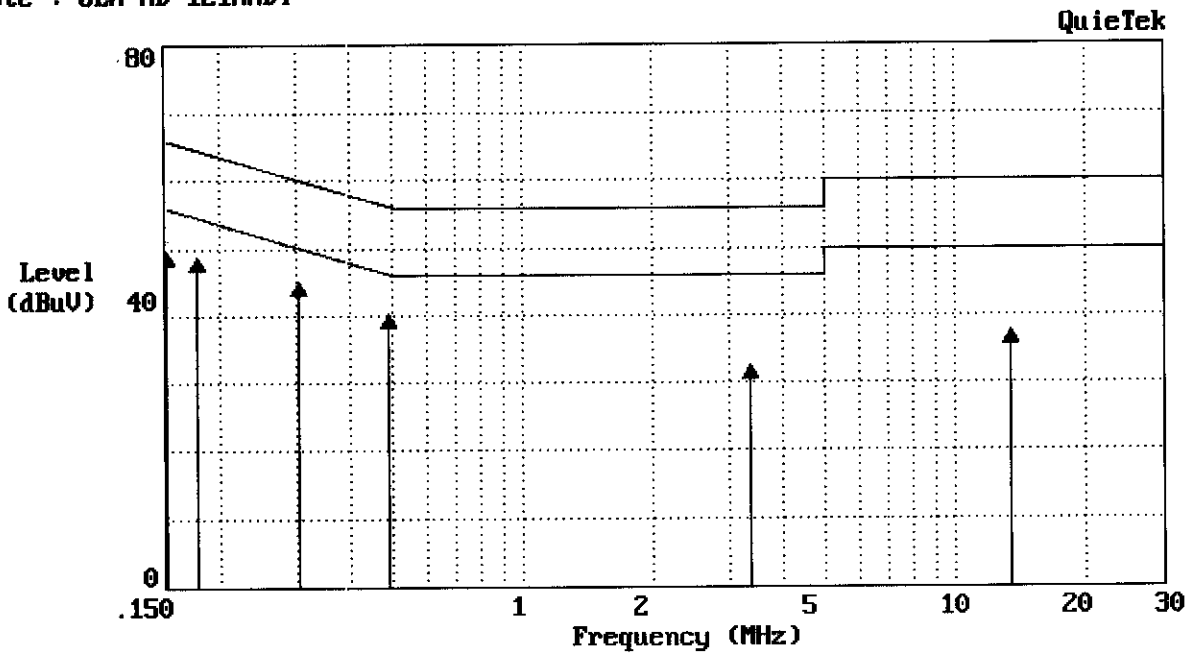
The test results in the emission was performed according to the requirements of measurement standard and process. Quietek Corporation is assumed full responsibility for the accuracy and completeness of these measurements. The test data of the emission is listed as below.

All the tests were carried out with the EUT in normal operation, which was defined as:

EMI Mode: Mode 1: Cable Modem OEM AD-121ANDT

Mode 2: Cable Modem DELTA ADP-12SB Rev. B

File#: 36H064CE.EMI - 1      Discrete    Date : 06-19,2003 Thu    Time: 06:57:39 pm  
 Site : SHIELDED ROOM 2      Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS-B      Margin: 10 dB  
 EUT : BEFCMU10 ver.3      Std :  
 Power: AC 120V/60HZ      Trace :  
 Note : OEM AD-121ANDT

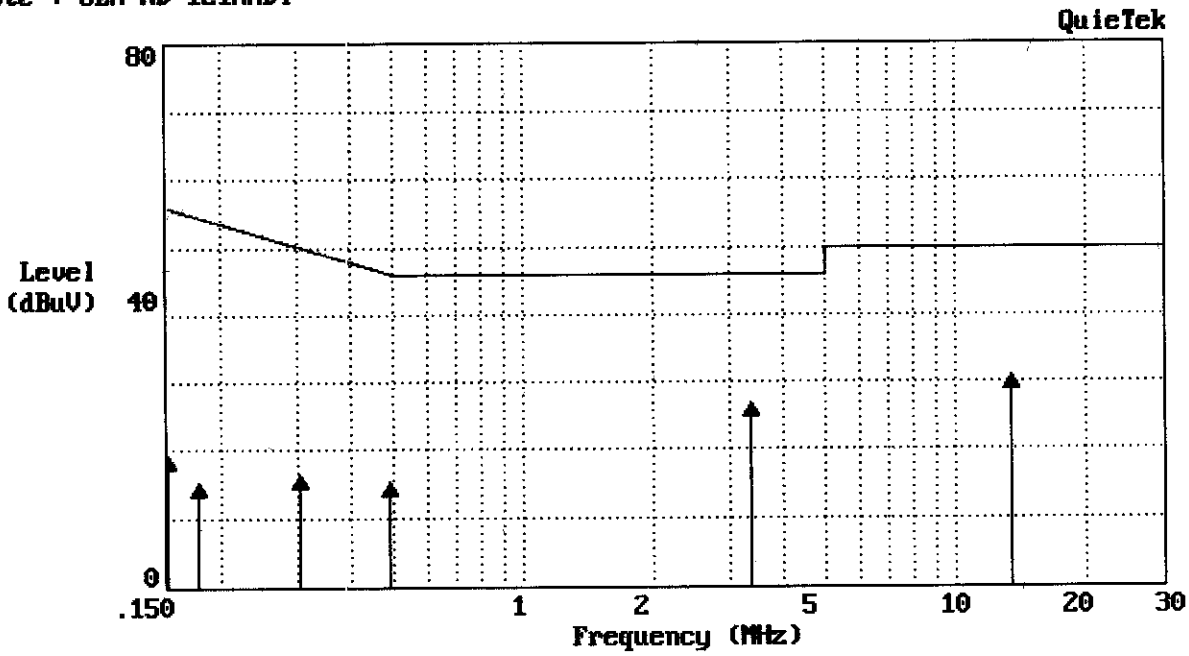


File#: 36H064CE.EMI - 1      Discrete    Date : 06-19,2003 Thu    Time:06:57:39 pm  
 Site : SHIELDED ROOM 2      Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS-B      Margin: 10 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : OEM AD-121ANDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.150	49.61	49.45	-16.39	66.00	0.10	0.06	0.00	0	0
0.177	48.85	48.68	-15.76	64.61	0.12	0.05	0.00	0	0
0.302	45.12	44.95	-15.06	60.18	0.17	0.00	0.00	0	0
0.490	40.21	39.97	-15.96	56.17	0.21	0.03	0.00	0	0
3.369	32.68	32.06	-23.32	56.00	0.39	0.22	0.00	0	0
13.420	37.76	37.23	-22.24	60.00	0.52	0.01	0.00	0	0

File#: 36H064CE.EMI - 2  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS B-AVG  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : OEM AD-121ANDT

Discrete Date : 06-19,2003 Thu Time: 06:59:02 pm  
 Probe : QTK-LSNSR2 Line1  
 Margin: 0 dB  
 Std :  
 Trace :



File#: 36H064CE.EMI - 2 Discrete Date : 06-19,2003 Thu Time:06:59:02 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS B-AVG Margin: 0 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : OEM AD-121ANDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.150	19.26	19.10	-36.74	56.00	0.10	0.06	0.00	0	0
0.177	15.37	15.20	-39.26	54.63	0.12	0.05	0.00	0	0
0.302	16.37	16.20	-33.82	50.19	0.17	0.00	0.00	0	0
0.490	15.44	15.20	-30.73	46.17	0.21	0.03	0.00	0	0
3.369	27.02	26.40	-18.98	46.00	0.39	0.22	0.00	0	0
13.420	30.93	30.40	-19.07	50.00	0.52	0.01	0.00	0	0

### 5.1. Test Data of conducted Emission

Product : Cable Modem  
 Test Item : Conducted Emission Test  
 Power Line : Line 1  
 Test Mode : Mode 1: Cable Modem OEM AD-121ANDT

Frequency MHz	Cable Loss dB	LISN Factor dB	Reading Level dBuV	Emission Level dBuV	Limits dBuV
------------------	---------------------	----------------------	--------------------------	---------------------------	----------------

#### Quasi-Peak

0.150	0.06	0.10	49.45	49.61	66.00
0.177	0.05	0.12	48.68	48.85	64.61
*0.302	0.00	0.17	44.95	45.12	60.18
0.490	0.03	0.21	39.97	40.21	56.17
3.369	0.22	0.39	32.06	32.68	56.00
13.420	0.01	0.52	37.23	37.76	60.00

#### Average:

0.150	0.06	0.10	19.10	19.26	56.00
0.177	0.05	0.12	15.20	15.37	54.63
0.302	0.00	0.17	16.20	16.37	50.19
0.490	0.03	0.21	15.20	15.44	46.17
3.369	0.22	0.39	26.40	27.02	46.00
13.420	0.01	0.52	30.40	30.93	50.00

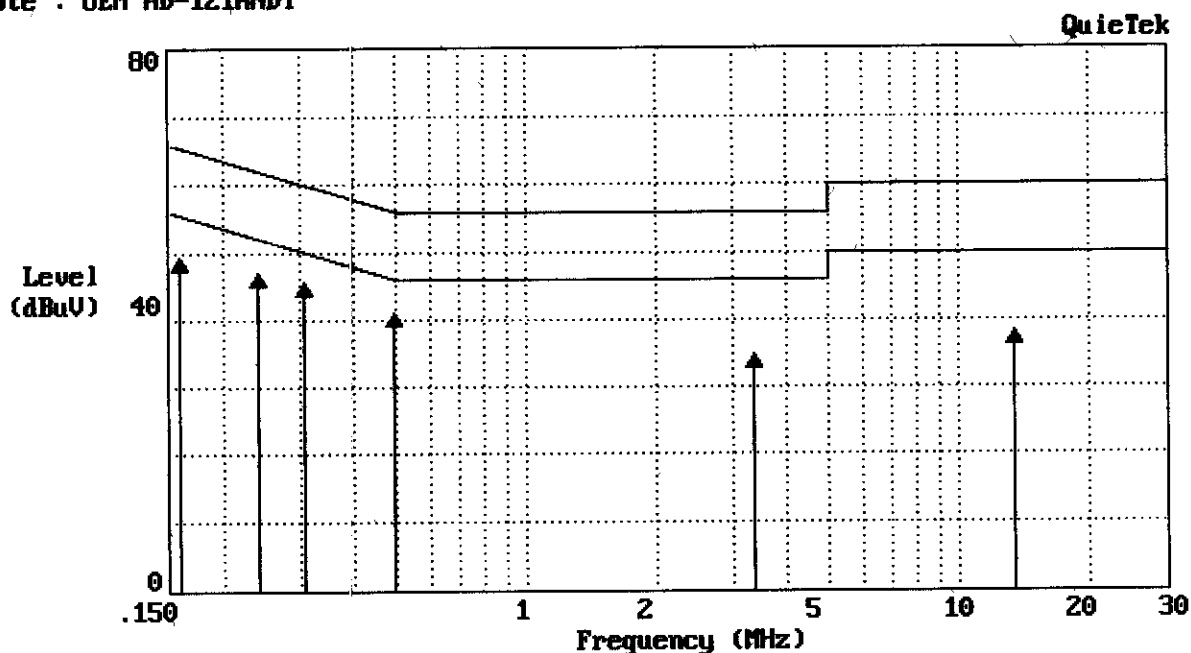
Note:

1. All Reading Levels are Quasi-Peak and average value.
2. “ \* ”, means this data is the worst emission level.
3. Emission Level = Reading Level + LISN Factor + Cable loss.



File#: 36H064CE.EMI - 3  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS-B  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : OEM AD-121ANDT

Discrete Date : 06-19,2003 Thu Time: 06:59:41 pm  
 Probe : QTK-LSNSR2 Line2  
 Margin: 10 dB  
 Std :  
 Trace :



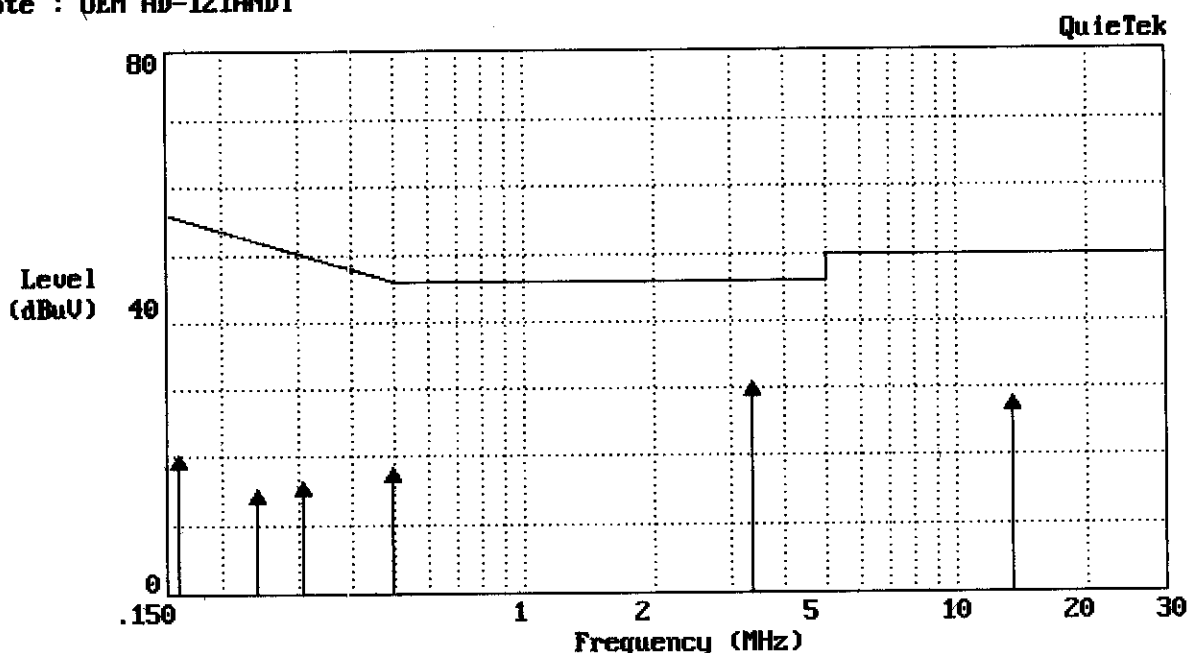
File#: 36H064CE.EMI - 3  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS-B  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : OEM AD-121ANDT

Discrete Date : 06-19,2003 Thu Time:06:59:41 pm  
 Probe : QTK-LSNSR2 Line2  
 Margin: 10 dB

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.158	49.40	49.31	-16.18	65.58	0.10	-0.01	0.00	0	0
0.240	47.11	46.96	-14.99	62.10	0.14	0.01	0.00	0	0
0.306	45.70	45.53	-14.37	60.07	0.17	0.00	0.00	0	0
0.494	41.11	40.87	-14.99	56.10	0.21	0.03	0.00	0	0
3.353	35.00	34.38	-21.00	56.00	0.39	0.22	0.00	0	0
13.420	38.41	37.88	-21.59	60.00	0.52	0.01	0.00	0	0

File#: 36H064CE.EMI - 4  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS B-AVG  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : OEM AD-121ANDT

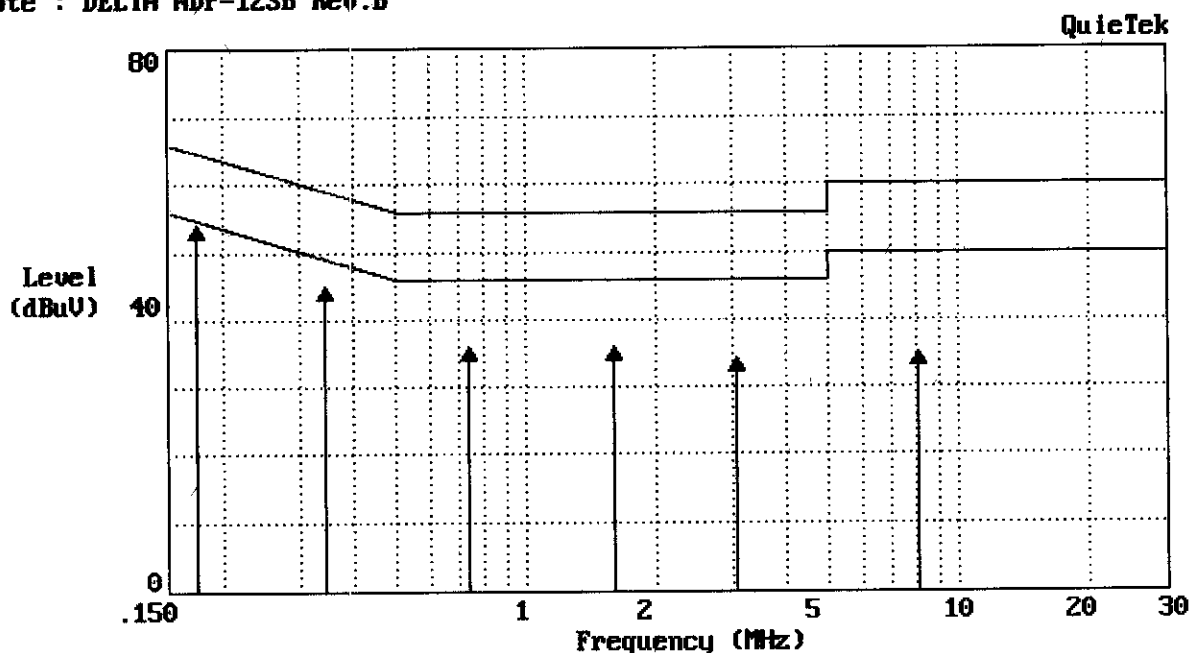
Discrete Date : 06-19,2003 Thu Time: 07:04:05 pm  
 Probe : QTK-LSNSR2 Line2  
 Margin: 0 dB  
 Std :  
 Trace :



File#: 36H064CE.EMI - 4 Discrete Date : 06-19,2003 Thu Time:07:04:05 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line2  
 Limit: CISPR CLASS B-AVG Margin: 0 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : OEM AD-121ANDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.158	20.49	20.40	-35.08	55.57	0.10	-0.01	0.00	0	0
0.240	15.35	15.20	-36.75	52.10	0.14	0.01	0.00	0	0
0.306	16.37	16.20	-33.71	50.08	0.17	0.00	0.00	0	0
0.494	18.44	18.20	-27.66	46.10	0.21	0.03	0.00	0	0
3.353	30.82	30.20	-15.18	46.00	0.39	0.22	0.00	0	0
13.420	28.73	28.20	-21.27	50.00	0.52	0.01	0.00	0	0

File#: 36H064CE.EMI - 5      Discrete Date : 06-19,2003 Thu Time: 07:09:45 pm  
 Site : SHIELDED ROOM 2      Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS-B      Margin: 10 dB  
 EUT : BEFCMU10 ver.3      Std :  
 Power: AC 120V/60HZ      Trace :  
 Note : DELTA ADP-12SB Rev.B

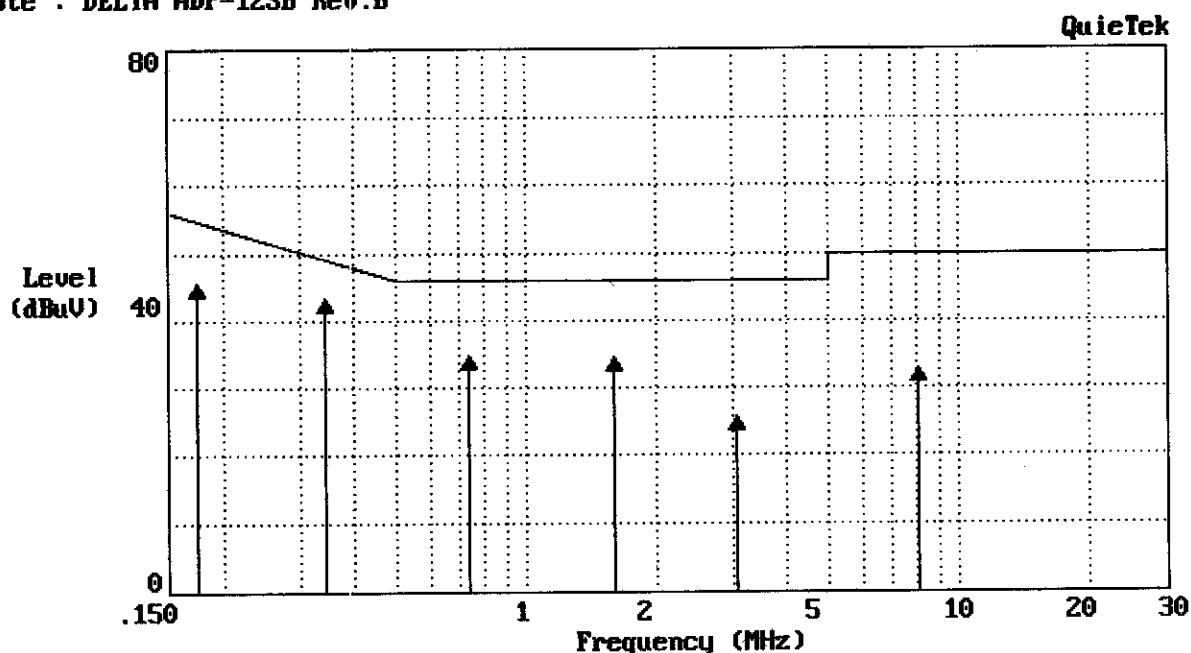


File#: 36H064CE.EMI - 5      Discrete Date : 06-19,2003 Thu Time:07:09:45 pm  
 Site : SHIELDED ROOM 2      Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS-B      Margin: 10 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.173	54.26	54.16	-10.53	64.79	0.11	-0.01	0.00	0	0
0.343	45.14	44.94	-13.98	59.12	0.18	0.02	0.00	0	0
0.733	36.08	35.80	-19.92	56.00	0.25	0.03	0.00	0	0
1.591	36.12	35.70	-19.88	56.00	0.32	0.09	0.00	0	0
3.056	34.35	33.77	-21.65	56.00	0.38	0.19	0.00	0	0
8.062	35.07	34.37	-24.93	60.00	0.48	0.22	0.00	0	0

File#: 36H064CE.EMI - 6  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS B-AVG  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Discrete Date : 06-19,2003 Thu Time: 07:11:47 pm  
 Probe : QTK-LSNSR2 Line1  
 Margin: 0 dB  
 Std :  
 Trace :



File#: 36H064CE.EMI - 6 Discrete Date : 06-19,2003 Thu Time:07:11:47 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS B-AVG Margin: 0 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.173	45.80	45.70	-9.01	54.82	0.11	-0.01	0.00	0	0
0.343	43.50	43.30	-5.63	49.13	0.18	0.02	0.00	0	0
0.733	34.88	34.60	-11.12	46.00	0.25	0.03	0.00	0	0
1.591	34.62	34.20	-11.38	46.00	0.32	0.09	0.00	0	0
3.056	25.78	25.20	-20.22	46.00	0.38	0.19	0.00	0	0
8.062	32.90	32.20	-17.10	50.00	0.48	0.22	0.00	0	0

Product : Cable Modem  
 Test Item : Conducted Emission Test  
 Power Line : Line 2  
 Test Mode : Mode 1: Cable Modem OEM AD-121ANDT

Frequency MHz	Cable Loss dB	LISN Factor dB	Reading Level dBuV	Emission Level dBuV	Limits dBuV
------------------	---------------------	----------------------	--------------------------	---------------------------	----------------

**Quasi-Peak**

0.158	-0.01	0.10	49.31	49.40	65.58
0.240	0.01	0.14	46.96	47.11	62.10
*0.306	0.00	0.17	45.53	45.70	60.07
0.494	0.03	0.21	40.87	41.11	56.10
3.353	0.22	0.39	34.38	35.00	56.00
13.420	0.01	0.52	37.88	38.41	60.00

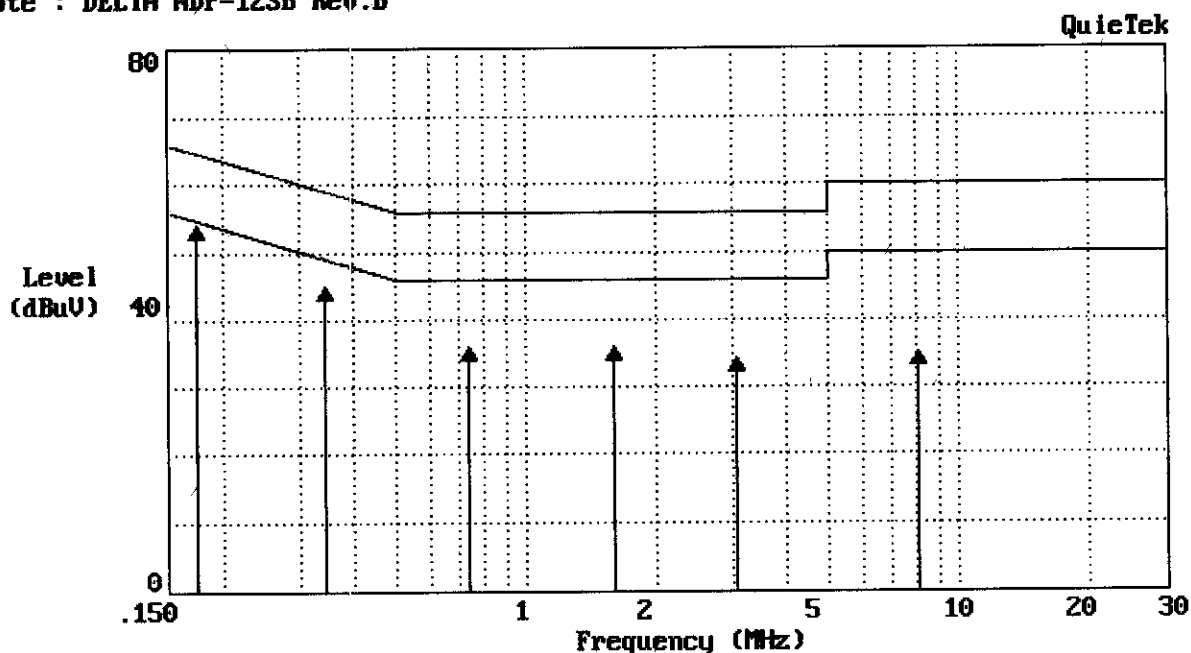
**Average:**

0.158	-0.01	0.10	20.40	20.49	55.57
0.240	0.01	0.14	15.20	15.35	52.10
0.306	0.00	0.17	16.20	16.37	50.08
0.494	0.03	0.21	18.20	18.44	46.10
3.353	0.22	0.39	30.20	30.82	46.00
13.420	0.01	0.52	28.20	28.73	50.00

**Note:**

1. All Reading Levels are Quasi-Peak and average value.
2. “ \* ”, means this data is the worst emission level.
3. Emission Level = Reading Level + LISN Factor + Cable loss.

File#: 36H064CE.EMI - 5      Discrete Date : 06-19,2003 Thu Time: 07:09:45 pm  
 Site : SHIELDED ROOM 2      Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS-B      Margin: 10 dB  
 EUT : BEFCMU10 ver.3      Std :  
 Power: AC 120V/60HZ      Trace :  
 Note : DELTA ADP-12SB Rev.B

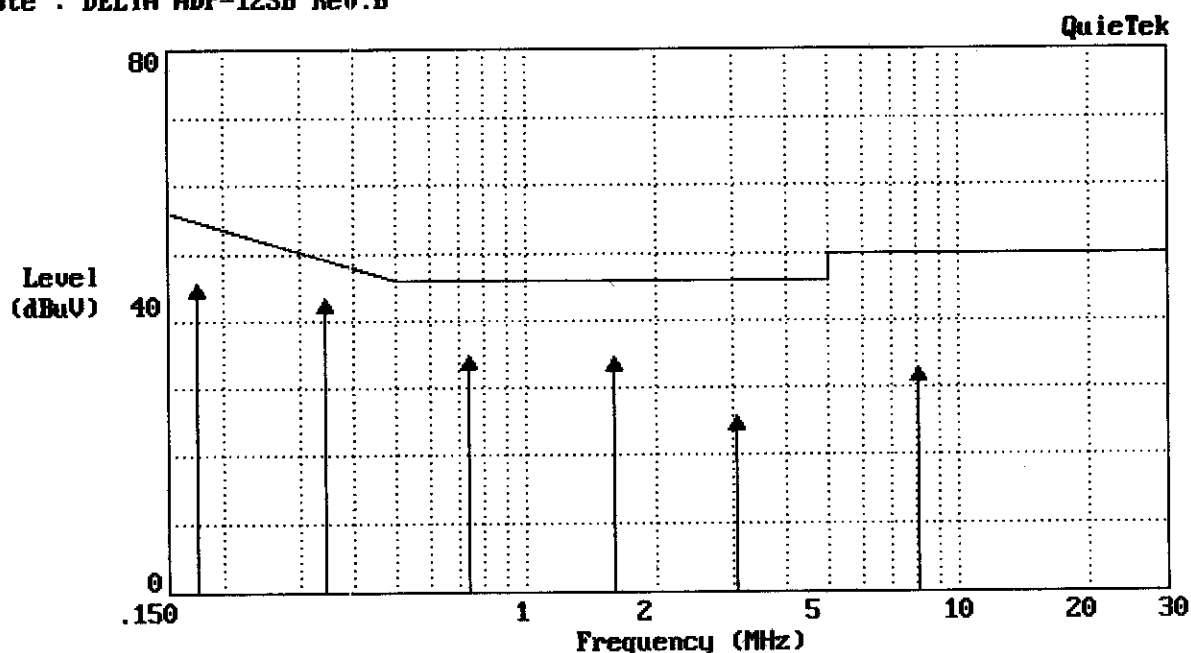


File#: 36H064CE.EMI - 5      Discrete Date : 06-19,2003 Thu Time:07:09:45 pm  
 Site : SHIELDED ROOM 2      Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS-B      Margin: 10 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.173	54.26	54.16	-10.53	64.79	0.11	-0.01	0.00	0	0
0.343	45.14	44.94	-13.98	59.12	0.18	0.02	0.00	0	0
0.733	36.08	35.80	-19.92	56.00	0.25	0.03	0.00	0	0
1.591	36.12	35.70	-19.88	56.00	0.32	0.09	0.00	0	0
3.056	34.35	33.77	-21.65	56.00	0.38	0.19	0.00	0	0
8.062	35.07	34.37	-24.93	60.00	0.48	0.22	0.00	0	0

File#: 36H064CE.EMI - 6  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS B-AVG  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

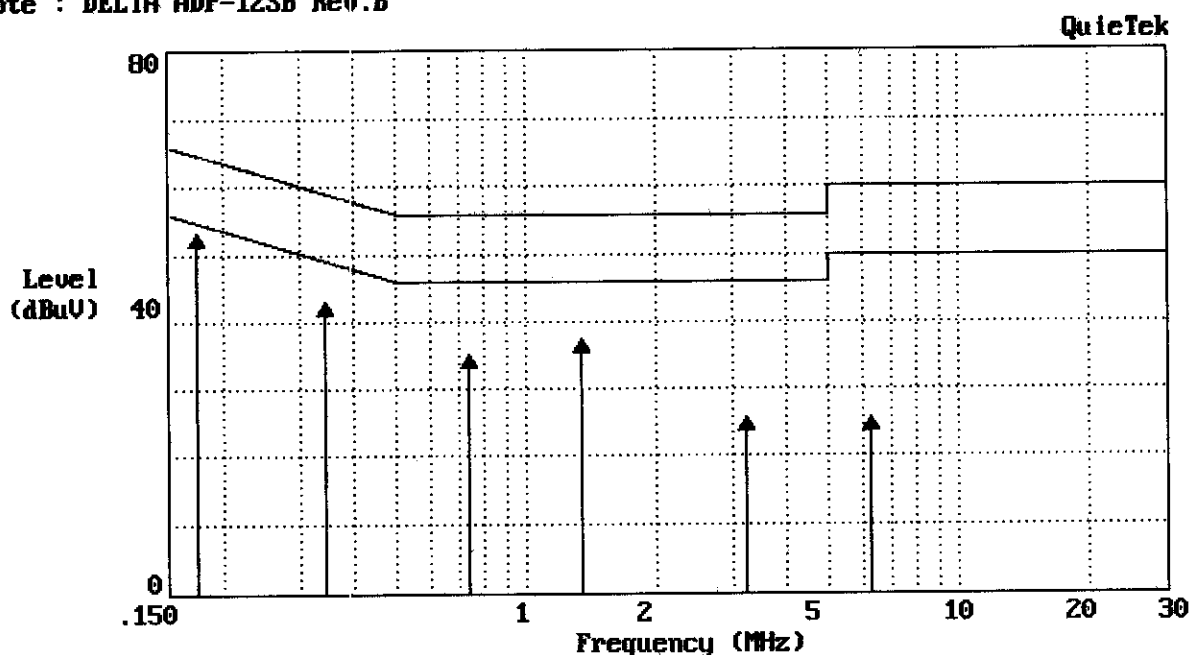
Discrete Date : 06-19,2003 Thu Time: 07:11:47 pm  
 Probe : QTK-LSNSR2 Line1  
 Margin: 0 dB  
 Std :  
 Trace :



File#: 36H064CE.EMI - 6 Discrete Date : 06-19,2003 Thu Time:07:11:47 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS B-AVG Margin: 0 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.173	45.80	45.70	-9.01	54.82	0.11	-0.01	0.00	0	0
0.343	43.50	43.30	-5.63	49.13	0.18	0.02	0.00	0	0
0.733	34.88	34.60	-11.12	46.00	0.25	0.03	0.00	0	0
1.591	34.62	34.20	-11.38	46.00	0.32	0.09	0.00	0	0
3.056	25.78	25.20	-20.22	46.00	0.38	0.19	0.00	0	0
8.062	32.90	32.20	-17.10	50.00	0.48	0.22	0.00	0	0

File#: 36H064CE.EMI - 7      Discrete Date : 06-19,2003 Thu Time: 07:12:25 pm  
 Site : SHIELDED ROOM 2      Probe : QTK-LSNSR2 Line2  
 Limit: CISPR CLASS-B      Margin: 10 dB  
 EUT : BEFCMU10 ver.3      Std :  
 Power: AC 120V/60HZ      Trace :  
 Note : DELTA ADP-12SB Rev.B



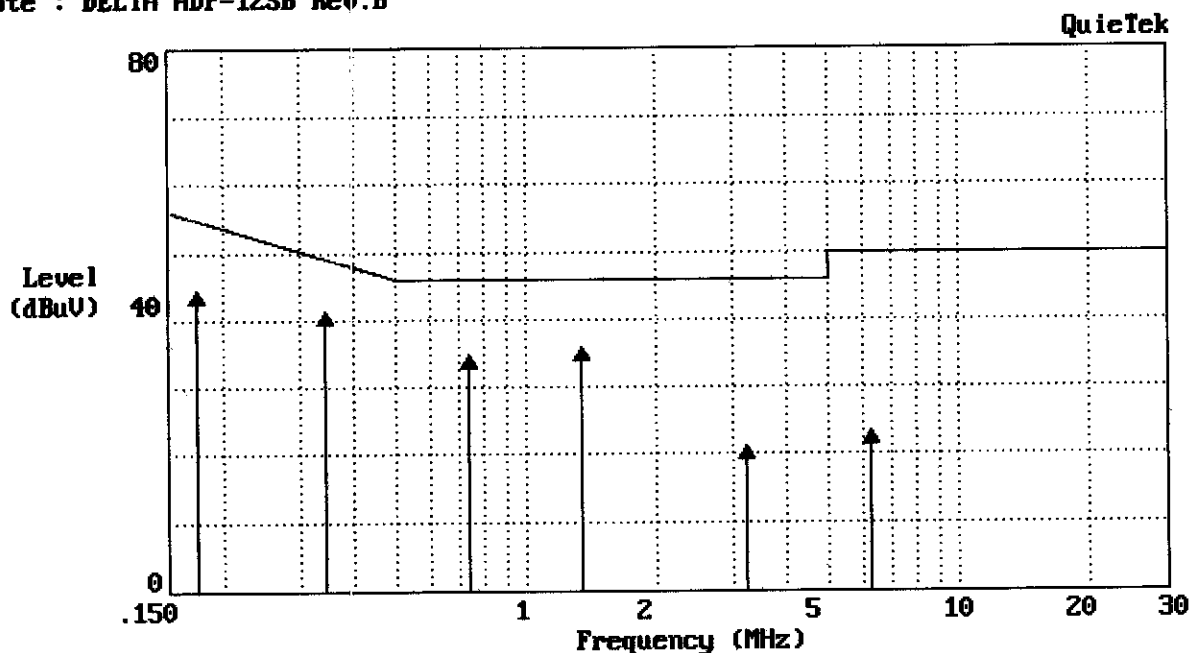
File#: 36H064CE.EMI - 7      Discrete Date : 06-19,2003 Thu Time:07:12:25 pm  
 Site : SHIELDED ROOM 2      Probe : QTK-LSNSR2 Line2  
 Limit: CISPR CLASS-B      Margin: 10 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.173	53.34	53.24	-11.45	64.79	0.11	-0.01	0.00	0	0
0.343	43.18	42.98	-15.94	59.12	0.18	0.02	0.00	0	0
0.733	35.22	34.94	-20.78	56.00	0.25	0.03	0.00	0	0
1.339	37.42	37.06	-18.58	56.00	0.31	0.06	0.00	0	0
3.235	25.73	25.13	-30.27	56.00	0.39	0.21	0.00	0	0
6.222	25.92	25.15	-34.08	60.00	0.45	0.32	0.00	0	0



File#: 36H064CE.EMI - 8  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS B-AUG  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Discrete Date : 06-19,2003 Thu Time: 07:16:47 pm  
 Probe : QTK-LSNSR2 Line2  
 Margin: 0 dB  
 Std :  
 Trace :

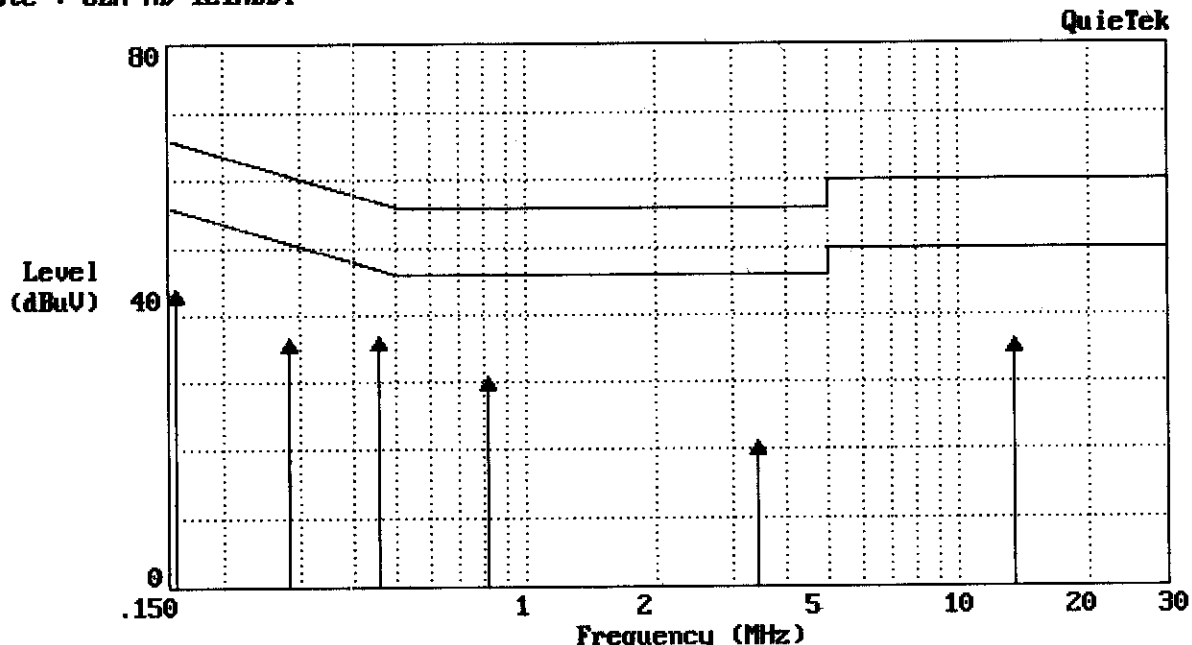


File#: 36H064CE.EMI - 8 Discrete Date : 06-19,2003 Thu Time:07:16:47 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line2  
 Limit: CISPR CLASS B-AUG Margin: 0 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.173	44.40	44.30	-10.41	54.82	0.11	-0.01	0.00	0	0
0.343	41.50	41.30	-7.63	49.13	0.18	0.02	0.00	0	0
0.733	34.88	34.60	-11.12	46.00	0.25	0.03	0.00	0	0
1.339	35.96	35.60	-10.04	46.00	0.31	0.06	0.00	0	0
3.235	21.20	20.60	-24.80	46.00	0.39	0.21	0.00	0	0
6.222	23.57	22.80	-26.43	50.00	0.45	0.32	0.00	0	0

File#: 36H064CE.EMI - 17  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS-B  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Discrete Date : 06-19,2003 Thu Time: 07:39:28 pm  
 Probe : QTK-LSNSR2 Line1  
 Margin: 10 dB  
 Std :  
 Trace :

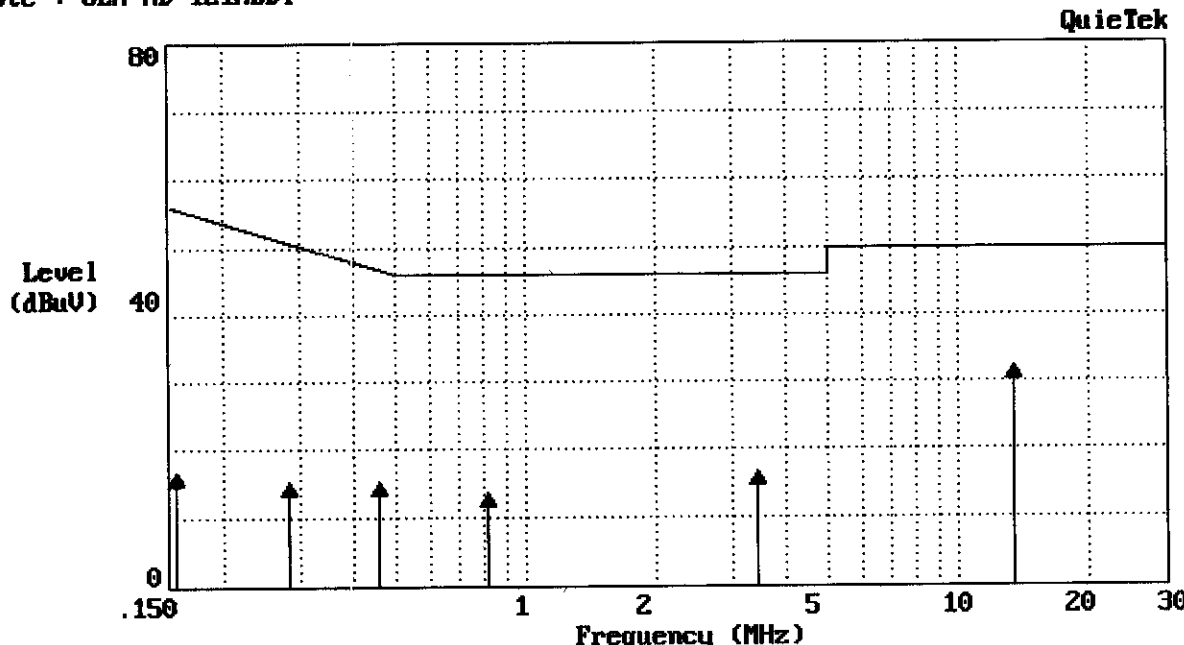


File#: 36H064CE.EMI - 17 Discrete Date : 06-19,2003 Thu Time:07:39:28 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS-B Margin: 10 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.155	44.10	44.01	-21.61	65.71	0.10	-0.01	0.00	0	0
0.283	36.56	36.38	-24.17	60.73	0.16	0.02	0.00	0	0
0.455	36.85	36.63	-19.94	56.79	0.20	0.02	0.00	0	0
0.814	31.02	30.73	-24.98	56.00	0.26	0.03	0.00	0	0
3.431	21.40	20.80	-34.60	56.00	0.40	0.20	0.00	0	0
13.357	36.41	35.89	-23.59	60.00	0.52	0.00	0.00	0	0

File#: 36H064CE.EMI - 18  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS B-AVG  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Discrete Date : 06-19,2003 Thu Time: 07:41:13 pm  
 Probe : QTK-LSNSR2 Line1  
 Margin: 0 dB  
 Std :  
 Trace :



File#: 36H064CE.EMI - 18 Discrete Date : 06-19,2003 Thu Time:07:41:13 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS B-AVG Margin: 0 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.155	16.79	16.70	-38.94	55.73	0.10	-0.01	0.00	0	0
0.283	15.38	15.20	-35.35	50.73	0.16	0.02	0.00	0	0
0.455	15.42	15.20	-31.36	46.78	0.20	0.02	0.00	0	0
0.814	13.49	13.20	-32.51	46.00	0.26	0.03	0.00	0	0
3.431	16.80	16.20	-29.20	46.00	0.40	0.20	0.00	0	0
13.357	32.22	31.70	-17.78	50.00	0.52	0.00	0.00	0	0

Product : Cable Modem  
 Test Item : Conducted Emission Test  
 Power Line : Line 1  
 Test Mode : Mode 2: Cable Modem DELTA ADP-12SB Rev. B

Frequency MHz	Cable Loss dB	LISN Factor dB	Reading Level dBuV	Emission Level dBuV	Limits dBuV
------------------	---------------------	----------------------	--------------------------	---------------------------	----------------

**Quasi-Peak**

*0.173	-0.01	0.11	54.16	54.26	64.79
0.343	0.02	0.18	44.94	45.14	59.12
0.733	0.03	0.25	35.80	36.08	56.00
1.591	0.09	0.32	35.70	36.12	56.00
3.056	0.19	0.38	33.77	34.35	56.00
8.062	0.22	0.48	34.37	35.07	60.00

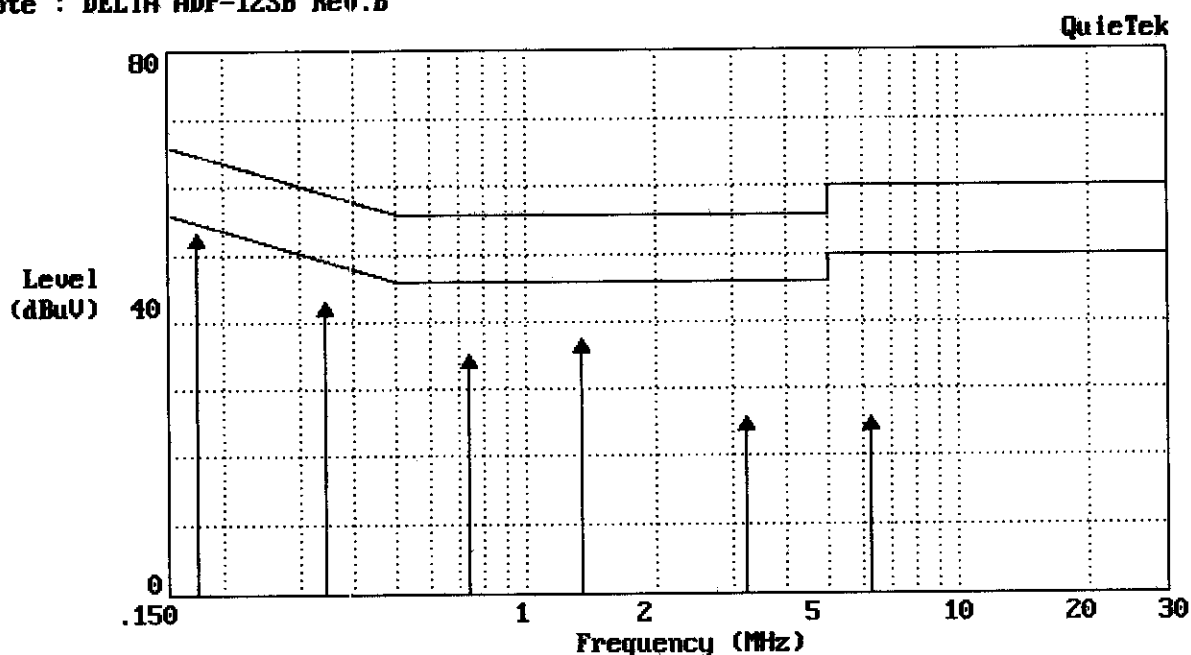
**Average:**

0.173	-0.01	0.11	45.70	45.80	54.82
0.343	0.02	0.18	43.30	43.50	49.13
0.733	0.03	0.25	34.60	34.88	46.00
1.591	0.09	0.32	34.20	34.62	46.00
3.056	0.19	0.38	25.20	25.78	46.00
8.062	0.22	0.48	32.20	32.90	50.00

**Note:**

1. All Reading Levels are Quasi-Peak and average value.
2. “ \* ”, means this data is the worst emission level.
3. Emission Level = Reading Level + LISN Factor + Cable loss.

File#: 36H064CE.EMI - 7      Discrete Date : 06-19,2003 Thu Time: 07:12:25 pm  
 Site : SHIELDED ROOM 2      Probe : QTK-LSNSR2 Line2  
 Limit: CISPR CLASS-B      Margin: 10 dB  
 EUT : BEFCMU10 ver.3      Std :  
 Power: AC 120V/60HZ      Trace :  
 Note : DELTA ADP-12SB Rev.B

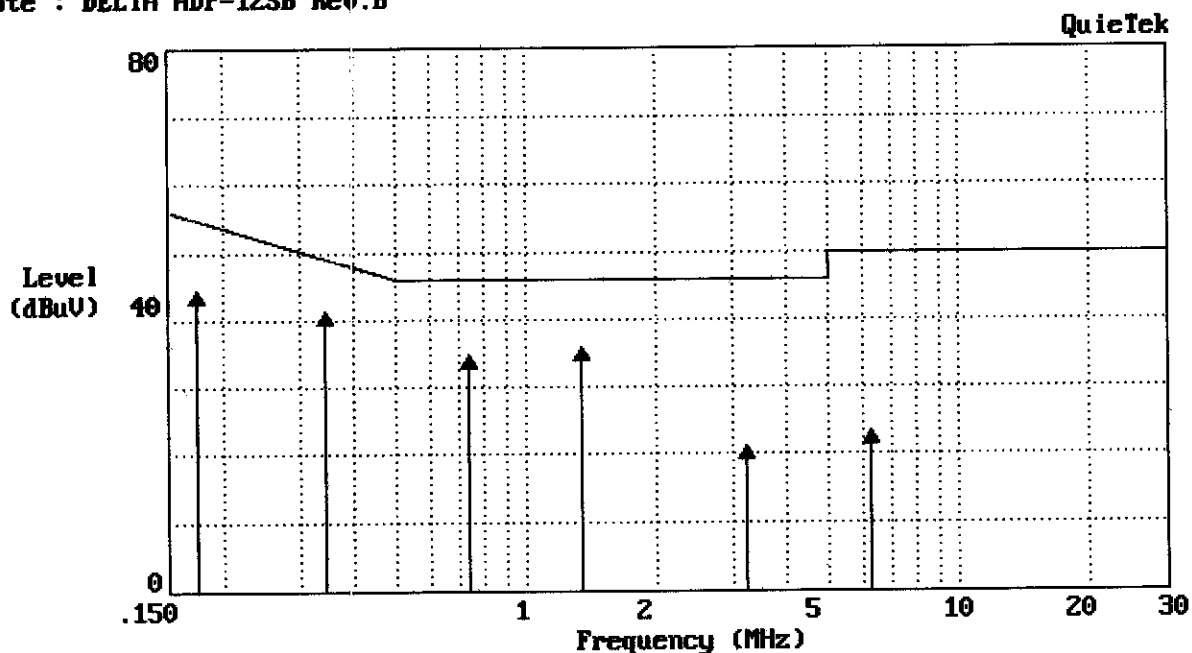


File#: 36H064CE.EMI - 7      Discrete Date : 06-19,2003 Thu Time:07:12:25 pm  
 Site : SHIELDED ROOM 2      Probe : QTK-LSNSR2 Line2  
 Limit: CISPR CLASS-B      Margin: 10 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.173	53.34	53.24	-11.45	64.79	0.11	-0.01	0.00	0	0
0.343	43.18	42.98	-15.94	59.12	0.18	0.02	0.00	0	0
0.733	35.22	34.94	-20.78	56.00	0.25	0.03	0.00	0	0
1.339	37.42	37.06	-18.58	56.00	0.31	0.06	0.00	0	0
3.235	25.73	25.13	-30.27	56.00	0.39	0.21	0.00	0	0
6.222	25.92	25.15	-34.08	60.00	0.45	0.32	0.00	0	0

File#: 36H064CE.EMI - 8  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS B-AUG  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Discrete Date : 06-19,2003 Thu Time: 07:16:47 pm  
 Probe : QTK-LSNSR2 Line2  
 Margin: 0 dB  
 Std :  
 Trace :

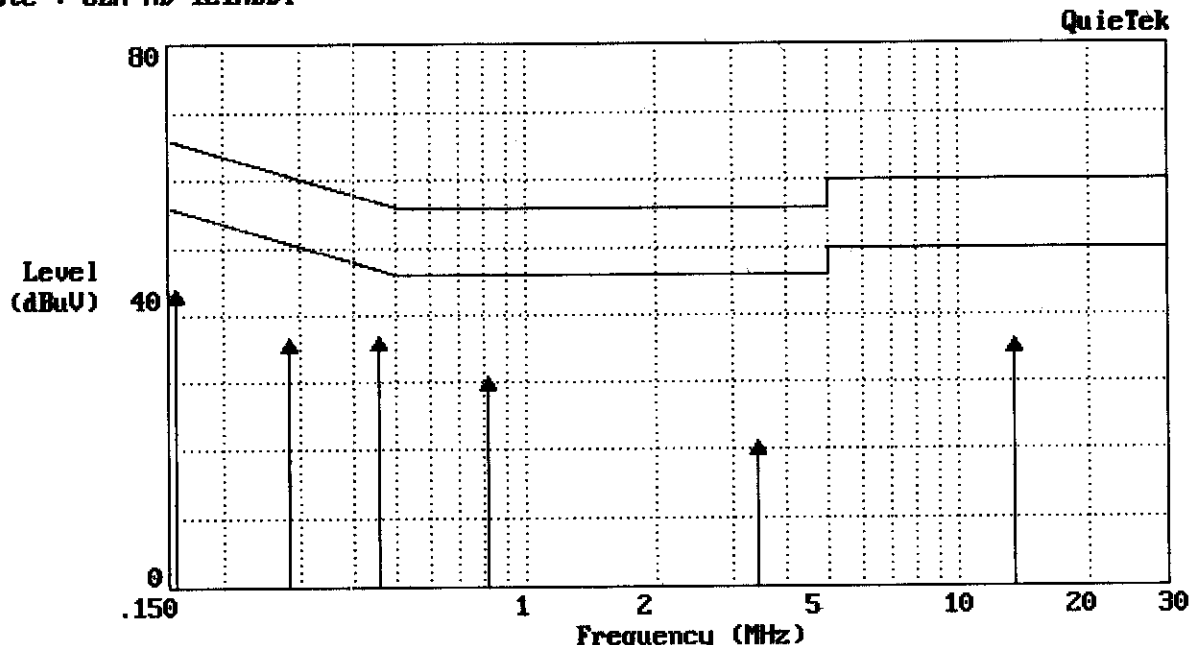


File#: 36H064CE.EMI - 8 Discrete Date : 06-19,2003 Thu Time:07:16:47 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line2  
 Limit: CISPR CLASS B-AUG Margin: 0 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 120V/60HZ  
 Note : DELTA ADP-12SB Rev.B

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.173	44.40	44.30	-10.41	54.82	0.11	-0.01	0.00	0	0
0.343	41.50	41.30	-7.63	49.13	0.18	0.02	0.00	0	0
0.733	34.88	34.60	-11.12	46.00	0.25	0.03	0.00	0	0
1.339	35.96	35.60	-10.04	46.00	0.31	0.06	0.00	0	0
3.235	21.20	20.60	-24.80	46.00	0.39	0.21	0.00	0	0
6.222	23.57	22.80	-26.43	50.00	0.45	0.32	0.00	0	0

File#: 36H064CE.EMI - 17  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS-B  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Discrete Date : 06-19,2003 Thu Time: 07:39:28 pm  
 Probe : QTK-LSNSR2 Line1  
 Margin: 10 dB  
 Std :  
 Trace :

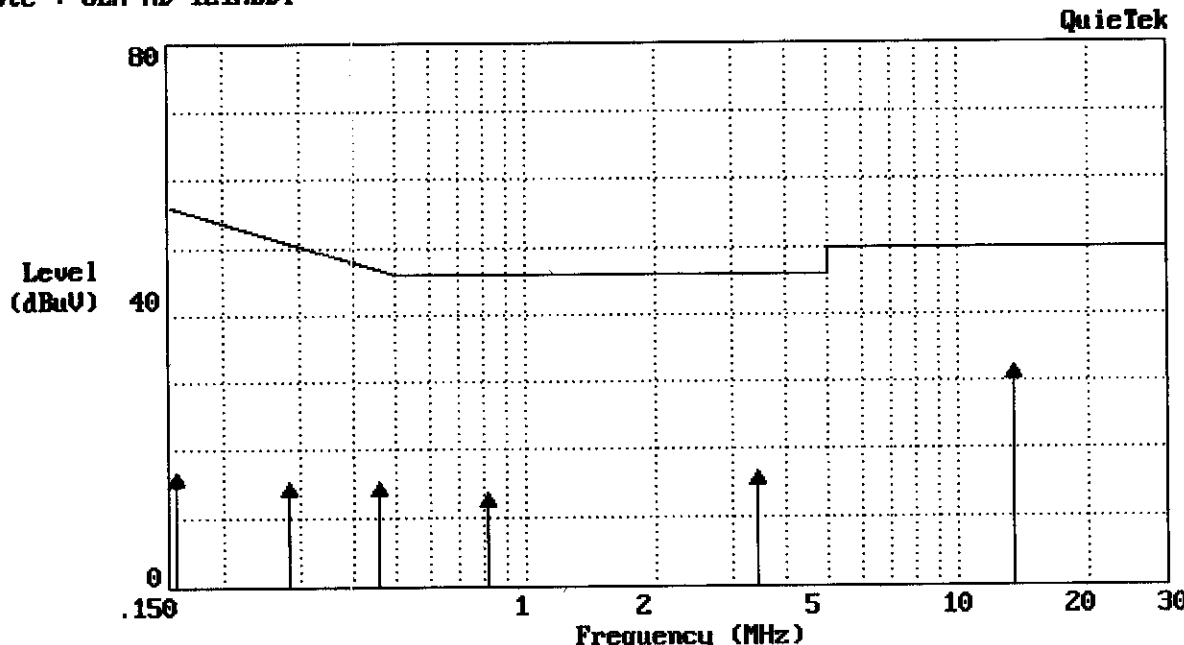


File#: 36H064CE.EMI - 17 Discrete Date : 06-19,2003 Thu Time:07:39:28 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS-B Margin: 10 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.155	44.10	44.01	-21.61	65.71	0.10	-0.01	0.00	0	0
0.283	36.56	36.38	-24.17	60.73	0.16	0.02	0.00	0	0
0.455	36.85	36.63	-19.94	56.79	0.20	0.02	0.00	0	0
0.814	31.02	30.73	-24.98	56.00	0.26	0.03	0.00	0	0
3.431	21.40	20.80	-34.60	56.00	0.40	0.20	0.00	0	0
13.357	36.41	35.89	-23.59	60.00	0.52	0.00	0.00	0	0

File#: 36H064CE.EMI - 18  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS B-AVG  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Discrete Date : 06-19,2003 Thu Time: 07:41:13 pm  
 Probe : QTK-LSNSR2 Line1  
 Margin: 0 dB  
 Std :  
 Trace :



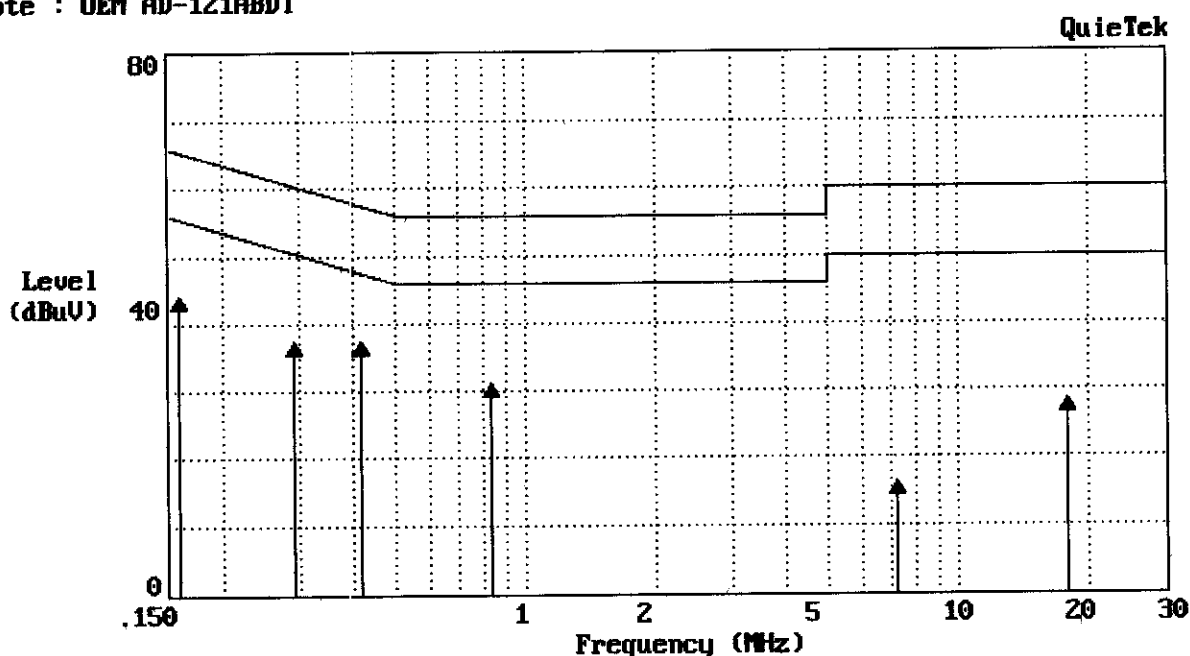
File#: 36H064CE.EMI - 18 Discrete Date : 06-19,2003 Thu Time:07:41:13 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS B-AVG Margin: 0 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.155	16.79	16.70	-38.94	55.73	0.10	-0.01	0.00	0	0
0.283	15.38	15.20	-35.35	50.73	0.16	0.02	0.00	0	0
0.455	15.42	15.20	-31.36	46.78	0.20	0.02	0.00	0	0
0.814	13.49	13.20	-32.51	46.00	0.26	0.03	0.00	0	0
3.431	16.80	16.20	-29.20	46.00	0.40	0.20	0.00	0	0
13.357	32.22	31.70	-17.78	50.00	0.52	0.00	0.00	0	0



File#: 36H064CE.EMI - 19  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS-B  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Discrete Date : 06-19,2003 Thu Time: 07:42:02 pm  
 Probe : QTK-LSNSR2 Line2  
 Margin: 10 dB  
 Std :  
 Trace :

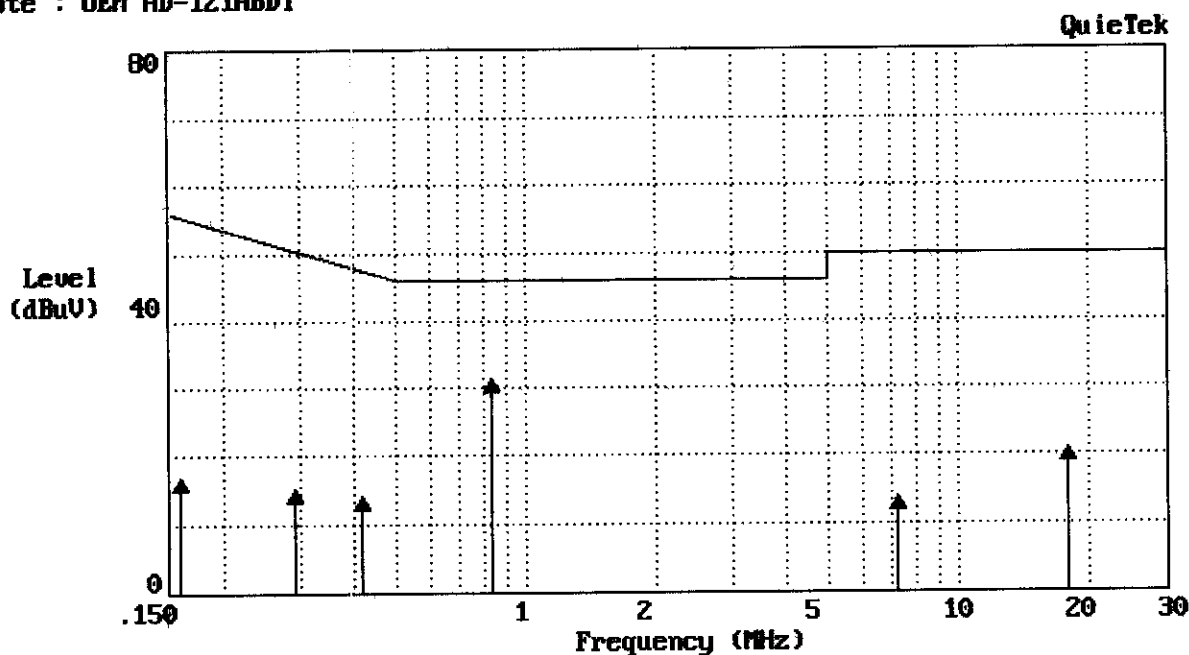


File#: 36H064CE.EMI - 19 Discrete Date : 06-19,2003 Thu Time:07:42:02 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line2  
 Limit: CISPR CLASS-B Margin: 10 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.158	44.36	44.27	-21.22	65.58	0.10	-0.01	0.00	0	0
0.291	37.49	37.31	-23.02	60.51	0.16	0.02	0.00	0	0
0.416	37.45	37.24	-20.09	57.54	0.20	0.01	0.00	0	0
0.830	31.28	30.99	-24.72	56.00	0.26	0.03	0.00	0	0
7.216	16.45	15.70	-43.55	60.00	0.47	0.29	0.00	0	0
17.908	28.73	27.95	-31.27	60.00	0.55	0.23	0.00	0	0

File#: 36H064CE.EMI - 20  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS B-AVG  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Discrete Date : 06-19,2003 Thu Time: 07:45:29 pm  
 Probe : QTK-LSNSR2 Line2  
 Margin: 0 dB  
 Std :  
 Trace :

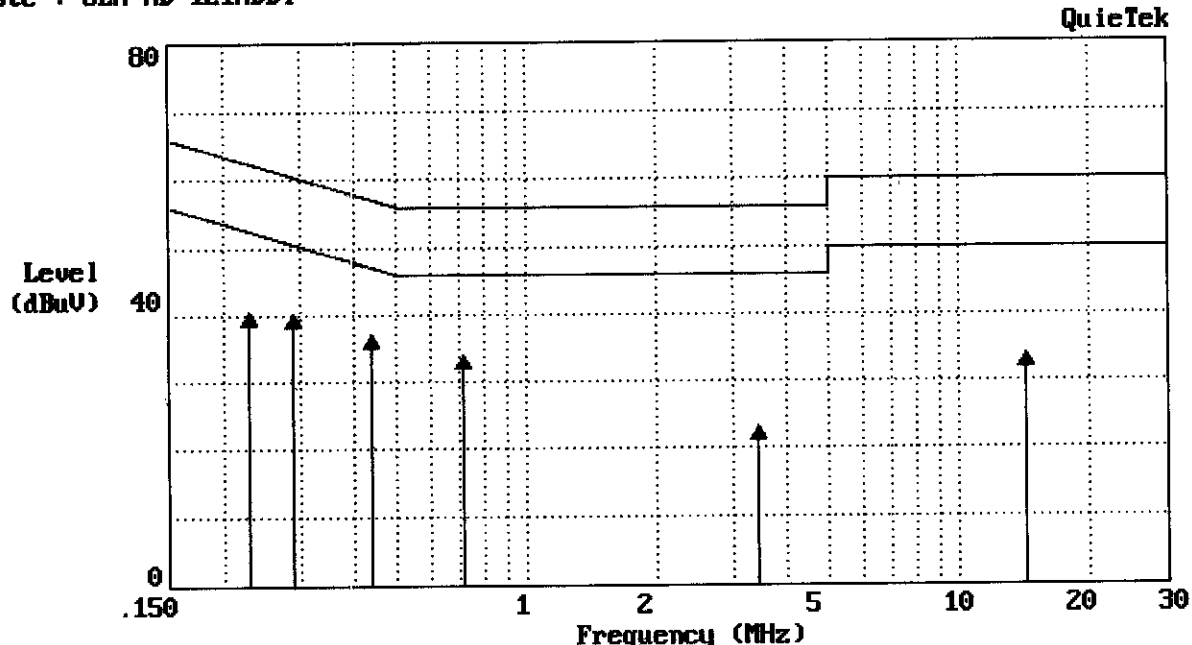


File#: 36H064CE.EMI - 20 Discrete Date : 06-19,2003 Thu Time:07:45:29 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line2  
 Limit: CISPR CLASS B-AVG Margin: 0 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ABDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.158	16.99	16.90	-38.58	55.57	0.10	-0.01	0.00	0	0
0.291	15.38	15.20	-35.12	50.50	0.16	0.02	0.00	0	0
0.416	14.31	14.10	-33.22	47.53	0.20	0.01	0.00	0	0
0.830	31.39	31.10	-14.61	46.00	0.26	0.03	0.00	0	0
7.216	13.95	13.20	-36.05	50.00	0.47	0.29	0.00	0	0
17.908	20.98	20.20	-29.02	50.00	0.55	0.23	0.00	0	0

File#: 36H064CE.EMI - 13  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS-B  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ADDT

Discrete Date : 06-19,2003 Thu Time: 07:29:29 pm  
 Probe : QTK-LSNSR2 Line1  
 Margin: 10 dB  
 Std :  
 Trace :

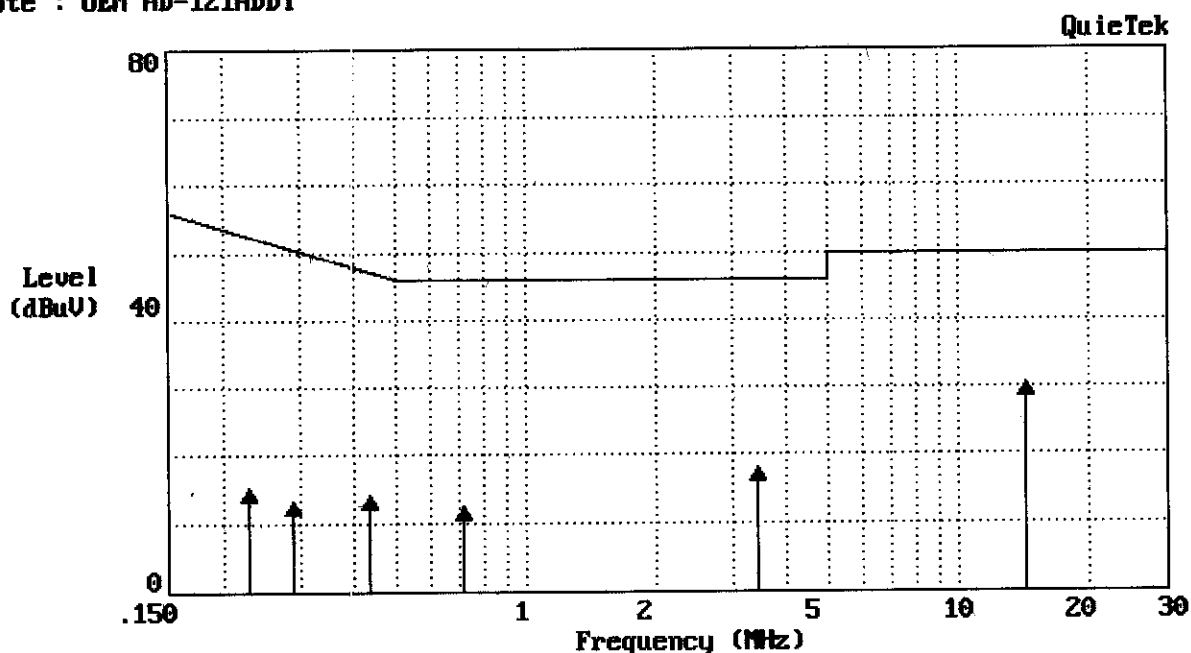


File#: 36H064CE.EMI - 13 Discrete Date : 06-19,2003 Thu Time:07:29:29 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS-B Margin: 10 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ADDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.228	40.44	40.33	-22.07	62.52	0.14	-0.03	0.00	0	0
0.287	40.26	40.08	-20.36	60.62	0.16	0.02	0.00	0	0
0.435	37.24	37.03	-19.91	57.15	0.20	0.01	0.00	0	0
0.712	34.00	33.74	-22.00	56.00	0.25	0.01	0.00	0	0
3.435	23.15	22.55	-32.85	56.00	0.40	0.20	0.00	0	0
14.275	34.03	33.45	-25.97	60.00	0.53	0.05	0.00	0	0

File#: 36H064CE.EMI - 14  
 Site : SHIELDED ROOM 2  
 Limit: CISPR CLASS B-AVG  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ADDT

Discrete Date : 06-19,2003 Thu Time: 07:31:25 pm  
 Probe : QTK-LSNSR2 Line1  
 Margin: 0 dB  
 Std :  
 Trace :



File#: 36H064CE.EMI - 14 Discrete Date : 06-19,2003 Thu Time:07:31:25 pm  
 Site : SHIELDED ROOM 2 Probe : QTK-LSNSR2 Line1  
 Limit: CISPR CLASS B-AVG Margin: 0 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 230V/50HZ  
 Note : OEM AD-121ADDT

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
0.228	15.31	15.20	-37.21	52.52	0.14	-0.03	0.00	0	0
0.287	13.28	13.10	-37.33	50.61	0.16	0.02	0.00	0	0
0.435	14.31	14.10	-32.84	47.16	0.20	0.01	0.00	0	0
0.712	12.36	12.10	-33.64	46.00	0.25	0.01	0.00	0	0
3.435	18.20	17.60	-27.80	46.00	0.40	0.20	0.00	0	0
14.275	30.58	30.00	-19.42	50.00	0.53	0.05	0.00	0	0

Product : Cable Modem  
 Test Item : Conducted Emission Test  
 Power Line : Line 2  
 Test Mode : Mode 2: Cable Modem DELTA ADP-12SB Rev. B

Frequency MHz	Cable Loss dB	LISN Factor dB	Reading Level dBuV	Emission Level dBuV	Limits dBuV
------------------	---------------------	----------------------	--------------------------	---------------------------	----------------

**Quasi-Peak**

*0.173	-0.01	0.11	53.24	53.34	64.79
0.343	0.02	0.18	42.98	43.18	59.12
0.733	0.03	0.25	34.94	35.22	56.00
1.339	0.06	0.31	37.06	37.42	56.00
3.235	0.21	0.39	25.13	25.73	56.00
6.222	0.32	0.45	25.15	25.92	60.00

**Average:**

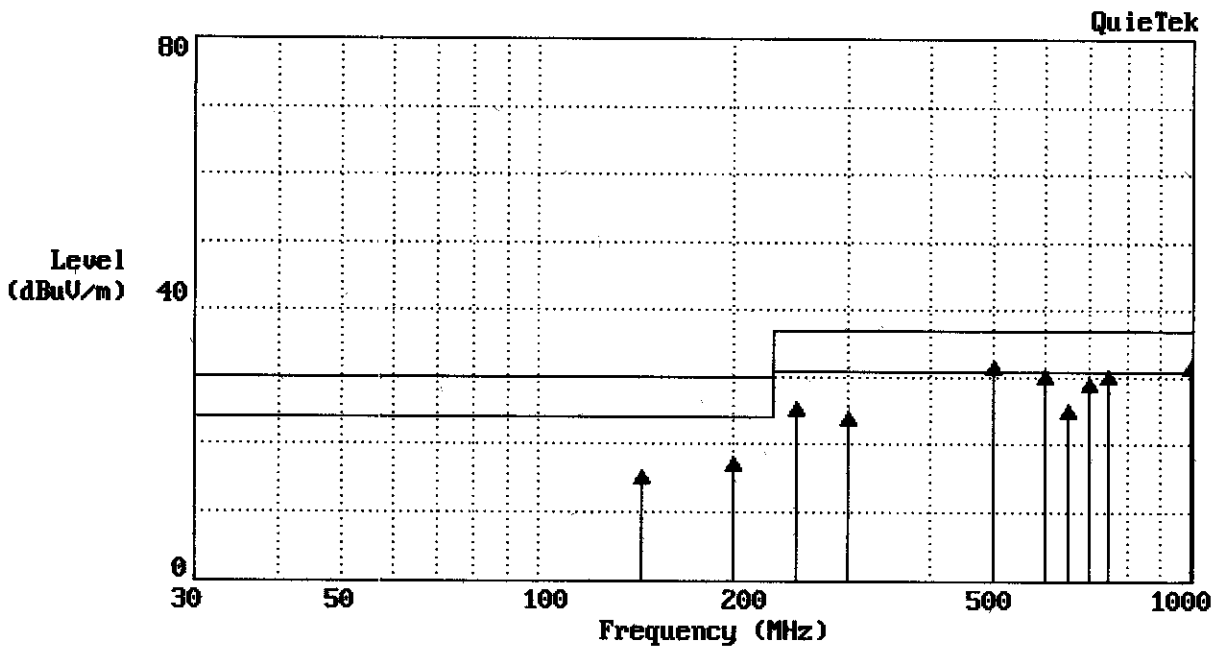
0.173	-0.01	0.11	44.30	44.40	54.82
0.343	0.02	0.18	41.30	41.50	49.13
0.733	0.03	0.25	34.60	34.88	46.00
1.339	0.06	0.31	35.60	35.96	46.00
3.235	0.21	0.39	20.60	21.20	46.00
6.222	0.32	0.45	22.80	23.57	50.00

**Note:**

1. All Reading Levels are Quasi-Peak and average value.
2. “ \* ”, means this data is the worst emission level.
3. Emission Level = Reading Level + LISN Factor + Cable loss.

File#: 36H064RE.EMI - 1  
 Site : Quietek-SITE 1  
 Limit: CISPR CLASS-B 10m  
 EUT : BEFCMU10 ver.3  
 Power: AC 110V/60Hz  
 Note : OEM AD-121ANDT

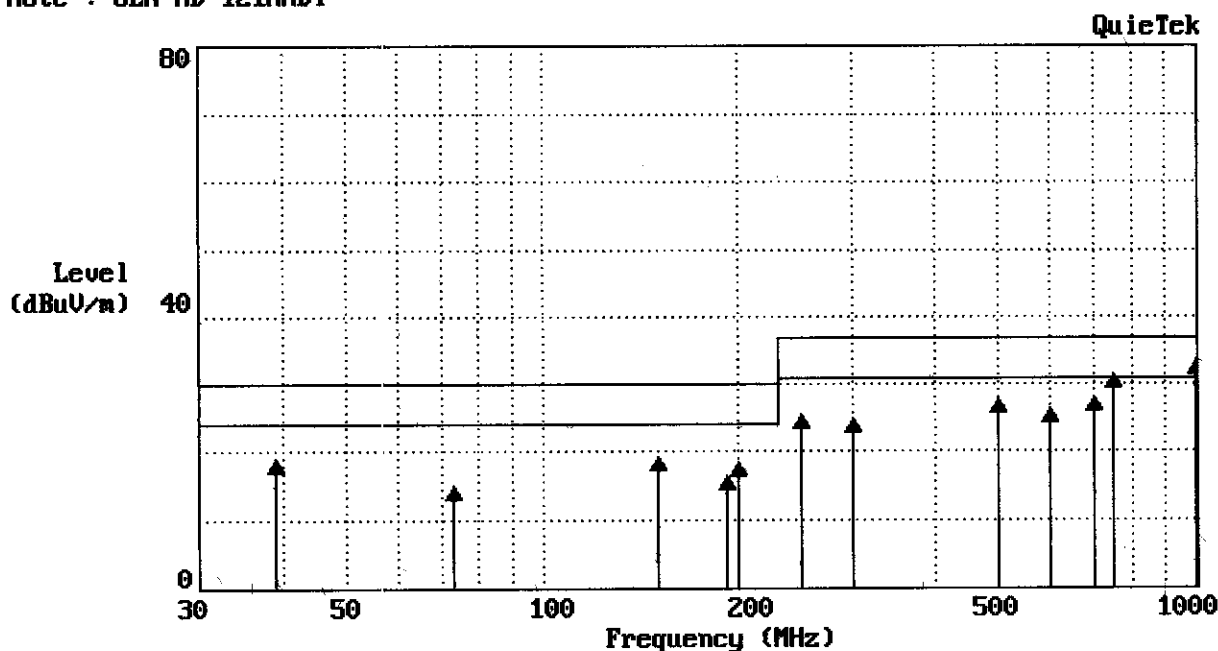
Discrete Date : 06-18,2003 Wed Time: 03:45:27 pm  
 Probe : QTKANT-01A Horizontal  
 Margin: 6 dB  
 Std :  
 Trace :



File#: 36H064RE.EMI - 1 Discrete Date : 06-18,2003 Wed Time:03:45:27 pm  
 Site : Quietek-SITE 1 Probe : QTKANT-01A Horizontal  
 Limit: CISPR CLASS-B 10m Margin: 6 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 110V/60Hz  
 Note : OEM AD-121ANDT

Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
144.000	16.12	2.72	-13.88	30.00	11.16	2.24	0.00	401	202
200.000	18.25	6.17	-11.75	30.00	9.30	2.78	0.00	401	152
250.000	26.43	10.55	-10.57	37.00	12.61	3.27	0.00	294	79
300.000	24.92	7.81	-12.08	37.00	13.36	3.76	0.00	294	79
! 500.000	32.57	10.44	-4.43	37.00	17.34	4.79	0.00	210	168
! 600.000	31.18	7.02	-5.82	37.00	18.85	5.31	0.00	175	203
650.000	26.07	1.34	-10.93	37.00	19.15	5.58	0.00	131	197
700.000	30.03	5.01	-6.97	37.00	19.19	5.83	0.00	131	25
! 750.000	31.32	5.23	-5.68	37.00	19.99	6.10	0.00	131	150
! 999.990	32.72	4.03	-4.28	37.00	21.29	7.40	0.00	104	39

File#: 36H064RE.EMI - 2 Discrete Date : 06-18,2003 Wed Time: 03:55:46 pm  
 Site : Quietek-SITE 1 Probe : QTKANT-01A Vertical  
 Limit: CISPR CLASS-B 10m Margin: 6 dB  
 EUT : BEFCMU10 ver.3 Std :  
 Power: AC 110V/60Hz Trace :  
 Note : OEM AD-121ANDT



File#: 36H064RE.EMI - 2 Discrete Date : 06-18,2003 Wed Time:03:55:46 pm  
 Site : Quietek-SITE 1 Probe : QTKANT-01A Vertical  
 Limit: CISPR CLASS-B 10m Margin: 6 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 110V/60Hz  
 Note : OEM AD-121ANDT

Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
39.000	18.96	4.79	-11.04	30.00	12.94	1.23	0.00	102	10
73.000	14.95	7.09	-15.05	30.00	6.30	1.56	0.00	102	74
150.000	19.29	6.55	-10.71	30.00	10.43	2.31	0.00	102	109
192.000	16.45	4.86	-13.55	30.00	8.88	2.71	0.00	102	109
200.000	18.36	6.50	-11.64	30.00	9.07	2.78	0.00	102	183
250.000	25.67	10.14	-11.33	37.00	12.26	3.27	0.00	102	73
300.000	25.10	7.79	-11.90	37.00	13.56	3.76	0.00	102	129
500.000	27.94	6.01	-9.06	37.00	17.14	4.79	0.00	329	203
600.000	26.30	2.56	-10.70	37.00	18.42	5.31	0.00	362	44
700.000	27.95	3.43	-9.05	37.00	18.69	5.83	0.00	298	38
! 750.000	31.48	6.34	-5.52	37.00	19.04	6.10	0.00	298	176
! 999.990	33.39	5.20	-3.61	37.00	20.79	7.40	0.00	167	164

## 5.2 Test Data of Radiated Emission

Product : Cable Modem  
 Test Item : Radiated Emission  
 Test Site : No.1 OATS  
 Test Mode : Mode 1: Cable Modem OEM AD-121ANDT

Freq.	Cable Loss	Probe Factor	PreAMP	Reading Level	Emission Level	Margin	Limit
MHz	dB	dB/m	dB	dBuV	dBuV/m	dB	dBuV/m

### Horizontal

144.000	2.24	11.16	0.00	2.72	16.12	13.88	30.00
200.000	2.78	9.30	0.00	6.17	18.25	11.75	30.00
250.000	3.27	12.61	0.00	10.55	26.43	10.57	37.00
300.000	3.76	13.36	0.00	7.81	24.92	12.08	37.00
500.000	4.79	17.34	0.00	10.44	32.57	4.43	37.00
600.000	5.31	18.85	0.00	7.02	31.18	5.82	37.00
650.000	5.58	19.15	0.00	1.34	26.07	10.93	37.00
700.000	5.83	19.19	0.00	5.01	30.03	6.97	37.00
750.000	6.10	19.99	0.00	5.23	31.32	5.68	37.00
*999.990	7.40	21.29	0.00	4.03	32.72	4.28	37.00

### Vertical

39.000	1.23	12.94	0.00	4.79	18.96	11.04	30.00
73.000	1.56	6.30	0.00	7.09	14.95	15.05	30.00
150.000	2.31	10.43	0.00	6.55	19.29	10.71	30.00
192.000	2.71	8.88	0.00	4.86	16.45	13.55	30.00
200.000	2.78	9.07	0.00	6.50	18.36	11.64	30.00
250.000	3.27	12.26	0.00	10.14	25.67	11.33	37.00
300.000	3.76	13.56	0.00	7.79	25.10	11.90	37.00
500.000	4.79	17.14	0.00	6.01	27.94	9.06	37.00
600.000	5.31	18.42	0.00	2.56	26.30	10.70	37.00
700.000	5.83	18.69	0.00	3.43	27.95	9.05	37.00
750.000	6.10	19.04	0.00	6.34	31.48	5.52	37.00
*999.990	7.40	20.79	0.00	5.20	33.39	3.61	37.00

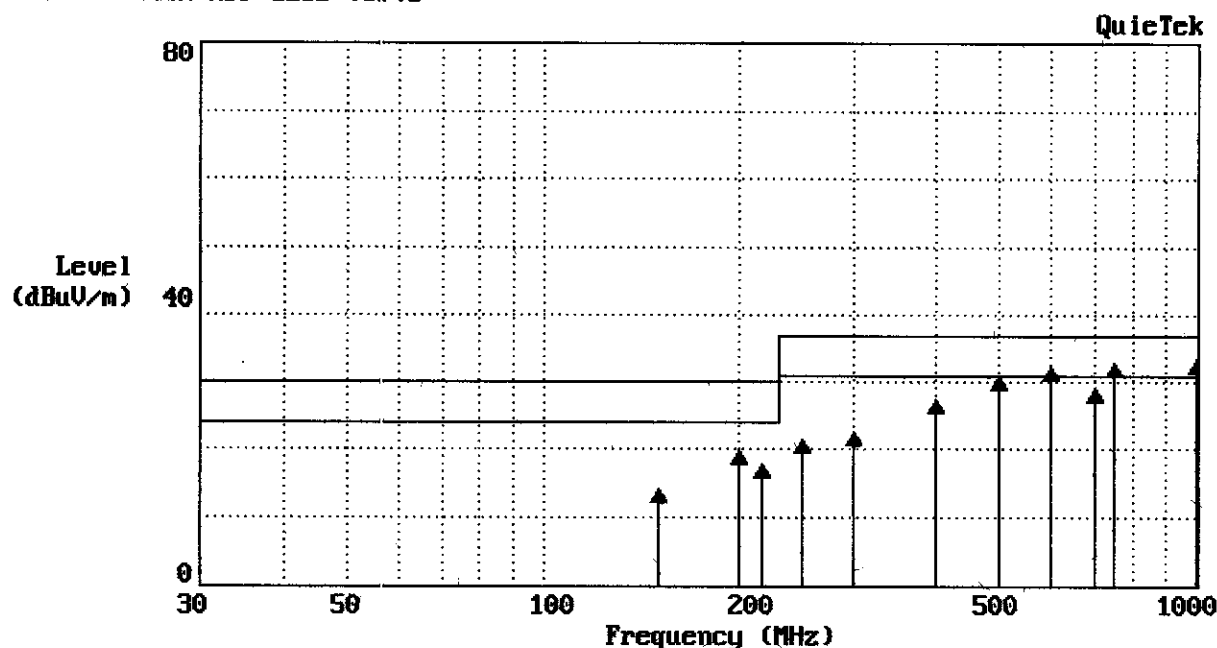
Note:

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. “ \* ”, means this data is the worst emission level.
3. Emission Level = Reading Level + Probe Factor + Cable loss.



File#: 36H064RE.EMI - 4  
 Site : Quietek-SITE 1  
 Limit: CISPR CLASS-B 10m  
 EUT : BEFCMU10 ver.3  
 Power: AC 110V/60Hz  
 Note : DELTA ADP-12SB ver.B

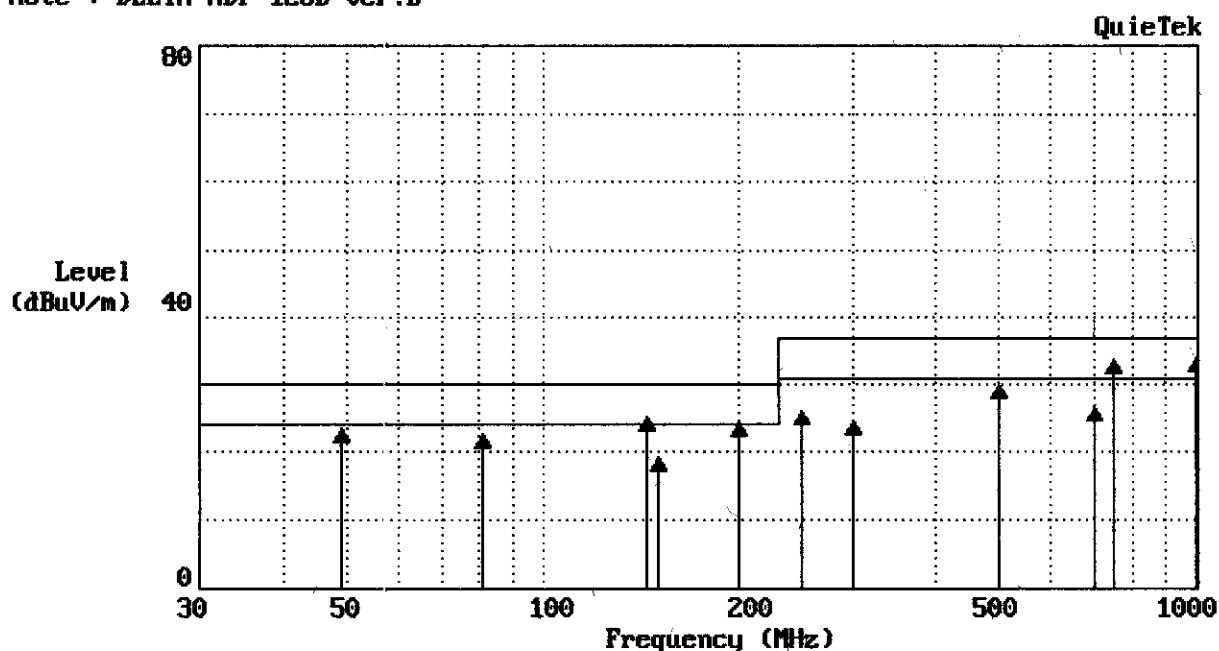
Discrete Date : 06-18,2003 Wed Time: 04:19:33 pm  
 Probe : QTKANT-01A Horizontal  
 Margin: 6 dB  
 Std :  
 Trace :



File#: 36H064RE.EMI - 4 Discrete Date : 06-18,2003 Wed Time:04:19:33 pm  
 Site : Quietek-SITE 1 Probe : QTKANT-01A Horizontal  
 Limit: CISPR CLASS-B 10m Margin: 6 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 110V/60Hz  
 Note : DELTA ADP-12SB ver.B

Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
150.000	14.32	1.29	-15.68	30.00	10.72	2.31	0.00	401	148
200.000	19.79	7.71	-10.21	30.00	9.30	2.78	0.00	401	7
216.000	17.88	5.83	-12.12	30.00	9.11	2.94	0.00	311	64
250.000	21.49	5.61	-15.51	37.00	12.61	3.27	0.00	311	170
300.000	22.63	5.52	-14.37	37.00	13.36	3.76	0.00	322	202
400.000	27.41	7.28	-9.59	37.00	15.85	4.28	0.00	279	50
500.000	30.83	8.70	-6.17	37.00	17.34	4.79	0.00	210	202
! 600.000	32.27	8.11	-4.73	37.00	18.85	5.31	0.00	141	202
! 700.000	29.12	4.10	-7.88	37.00	19.19	5.83	0.00	141	152
! 750.000	32.92	6.83	-4.08	37.00	19.99	6.10	0.00	141	124
! 999.990	33.47	4.78	-3.53	37.00	21.29	7.40	0.00	141	202

File#: 36H064RE.EMI - 3 Discrete Date : 06-18,2003 Wed Time: 04:09:16 pm  
 Site : Quietek-SITE 1 Probe : QTKANT-01A Vertical  
 Limit: CISPR CLASS-B 10m Margin: 6 dB  
 EUT : BEFCMU10 ver.3 Std :  
 Power: AC 110V/60Hz Trace :  
 Note : DELTA ADP-12SB ver.B



File#: 36H064RE.EMI - 3 Discrete Date : 06-18,2003 Wed Time:04:09:16 pm  
 Site : Quietek-SITE 1 Probe : QTKANT-01A Vertical  
 Limit: CISPR CLASS-B 10m Margin: 6 dB  
 EUT : BEFCMU10 ver.3  
 Power: AC 110V/60Hz  
 Note : DELTA ADP-12SB ver.B

Quietek									
Frequency	Measure Level	Reading Level	Over Limit	Limit	Probe Factor	Cable Loss	Amp Factor	Ant Pos	Tabl Pos
MHz	dB	dB	dB	dB	dB	dB	dB	cm	deg
49.000	23.56	14.42	-6.44	30.00	7.80	1.34	0.00	102	146
81.000	22.75	13.67	-7.25	30.00	7.43	1.65	0.00	102	146
! 144.000	25.29	12.19	-4.71	30.00	10.86	2.24	0.00	102	48
150.000	19.31	6.57	-10.69	30.00	10.43	2.31	0.00	102	7
! 200.000	24.36	12.50	-5.64	30.00	9.07	2.78	0.00	102	84
250.000	26.02	10.49	-10.98	37.00	12.26	3.27	0.00	102	74
300.000	24.69	7.38	-12.31	37.00	13.56	3.76	0.00	102	7
500.000	30.08	8.15	-6.92	37.00	17.14	4.79	0.00	326	202
700.001	26.72	2.20	-10.28	37.00	18.69	5.83	0.00	257	194
! 749.979	33.71	8.57	-3.29	37.00	19.04	6.10	0.00	257	133
! 999.990	33.93	5.74	-3.07	37.00	20.79	7.40	0.00	183	103

Product : Cable Modem  
 Test Item : Radiated Emission  
 Test Site : No.1 OATS  
 Test Mode : Mode 2: Cable Modem DELTA ADP-12SB Rev. B

Freq.	Cable Loss	Probe Factor	PreAMP	Reading Level	Emission Level	Margin	Limit
MHz	dB	dB/m	dB	dBuV	dBuV/m	dB	dBuV/m

**Horizontal**

150.000	2.31	10.72	0.00	1.29	14.32	15.68	30.00
200.000	2.78	9.30	0.00	7.71	19.79	10.21	30.00
216.000	2.94	9.11	0.00	5.83	17.88	12.12	30.00
250.000	3.27	12.61	0.00	5.61	21.49	15.51	37.00
300.000	3.76	13.36	0.00	5.52	22.63	14.37	37.00
400.000	4.28	15.85	0.00	7.28	27.41	9.59	37.00
500.000	4.79	17.34	0.00	8.70	30.83	6.17	37.00
600.000	5.31	18.85	0.00	8.11	32.27	4.73	37.00
700.000	5.83	19.19	0.00	4.10	29.12	7.88	37.00
750.000	6.10	19.99	0.00	6.83	32.92	4.08	37.00
*999.990	7.40	21.29	0.00	4.78	33.47	3.53	37.00

**Vertical**

49.000	1.34	7.80	0.00	14.42	23.56	6.44	30.00
81.000	1.65	7.43	0.00	13.67	22.75	7.25	30.00
144.000	2.24	10.86	0.00	12.19	25.29	4.71	30.00
150.000	2.31	10.43	0.00	6.57	19.31	10.69	30.00
200.000	2.78	9.07	0.00	12.50	24.36	5.64	30.00
250.000	3.27	12.26	0.00	10.49	26.02	10.98	37.00
300.000	3.76	13.56	0.00	7.38	24.69	12.31	37.00
500.000	4.79	17.14	0.00	8.15	30.08	6.92	37.00
700.001	5.83	18.69	0.00	2.20	26.72	10.28	37.00
749.979	6.10	19.04	0.00	8.57	33.71	3.29	37.00
*999.990	7.40	20.79	0.00	5.74	33.93	3.07	37.00

**Note:**

1. All Readings below 1GHz are Quasi-Peak, above are performed with peak and/or average measurements as necessary.
2. “ \* ”, means this data is the worst emission level.
3. Emission Level = Reading Level + LISN Factor + Cable loss.

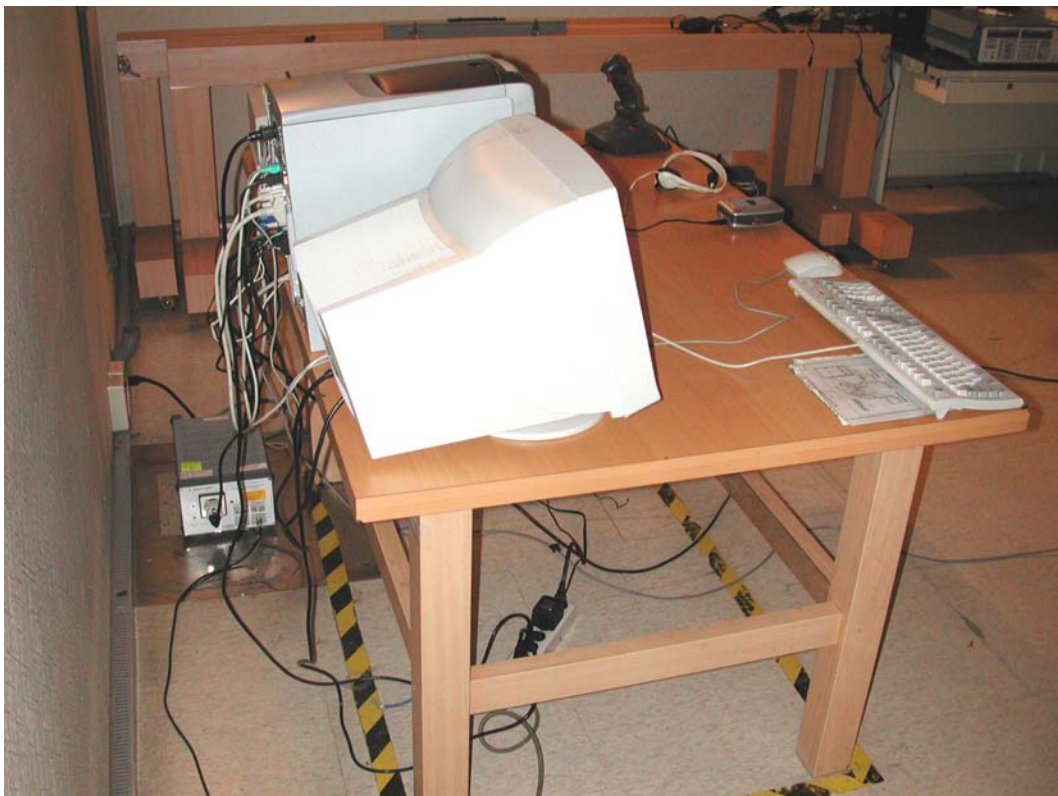
## Attachment 1: EUT Test Photographs

## Attachment 1 : EUT Test Photographs

Front View of Conducted Test (Mode 1)



Back View of Conducted Test (Mode 1)



Front View of Conducted Test (Mode 2)



Back View of Conducted Test (Mode2)



Front View of Radiated Test (Mode 1)



Back View of Radiated Test (Mode 1)



Front View of Radiated Test (Mode 2)



Back View of Radiated Test (Mode 2)





## Attachment 2: EUT Detailed Photographs