NVLAP LAB CODE 200707-0

FCC PART 18
MEASUREMENT AND TEST REPORT

For

WENTAI ENTERPRISE CO., LTD

6F-3, No 123, Lane235, Pao-chiao Road, Shintien city, Taipei Hsien, Taiwan

FCC ID: VY5D155N12001

This Report Concerns:	Equipment Type:
☒ Original Report	Electronic Ballast

Test Engineer:	Amanda Wei
Report Number:	RSZ08013052
Test Date:	2008-02-04
Report Date:	2008-02-14
Reviewed By:	EMC Manager: Green Xu
Prepared By:	Bay Area Compliance Laboratories Corp. (Shenzhen). 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone Shenzhen, Guangdong, China Tel: +86-755-33320018 Fax: +86-755-33320008

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GENERAL INFORMATION

Product Description for Equipment under Test (EUT)

The *WENTAI ENTERPRISE CO., LTD*'s model: *WTEB-D155-120, WTEB-D138-120,* or the "EUT" as referred to in this report is a *Electronic Ballast* which measures approximately WTEB-D155-120: 9.5 cm L x 9.5 cm W x 3.5 cm H, WTEB-D138-120: 9.5 cm L x 9.5 cm W x 3.5 cm H, rated input voltage: AC 120V/60Hz.

Note: The series products, model *WTEB-D155-120, WTEB-D138-120*. The models have the same circuit diagram and PCB. Model WTEB-D155-120 was tested to represent both models.

** All measurement and test data in this report was gathered from production sample serial number: 0801053 (Assigned by BACL, Shenzhen). The EUT were received on 2008-01-30.*

Objective

The following test report is prepared on behalf of *WENTAI ENTERPRISE CO., LTD* in accordance with Part 2, Subpart J, and Part 18, Subparts A, B and C of the Federal Communication Commissions rules and regulations.

The objective of the manufacturer is to determine compliance with FCC Part 18 limits.

Related Submittal(s)/Grant(s)

No related submittal(s).

Test Methodology

All measurements contained in this report were conducted with MP-5, FCC Methods of Measurements of Radio Noise Emissions from ISM Equipment, February 1986. All measurement was performed at Bay Area Compliance Laboratories Corp. (ShenZhen). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

Test Facility

The Test site used by Bay Area Compliance Laboratories Corp. (Shenzhen) to collect test data is located in the 6/F, the 3rd Phase of WanLi Industrial Building, ShiHua Road, FuTian Free Trade Zone, ShenZhen, Guangdong 518038, P.R. of China.

Test site at Bay Area Compliance Laboratories Corp. (Shenzhen) has been fully described in reports submitted to the Federal Communication Commission (FCC). The details of these reports have been found to be in compliance with the requirements of Section 2.948 of the FCC Rules on November 04, 2004. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2003.

The Federal Communications Commission has the reports on file and is listed under FCC Registration No.: 382179 and Industrial Canada registration test site No.: 5500A. The test site has been approved by the FCC for public use and is listed in the FCC Public Access Link (PAL) database.

Additionally, Bay Area Compliance Laboratories Corp. (Shenzhen) is a National Institute of Standards and Technology (NIST) accredited laboratory, under the National Voluntary Laboratory Accredited Program (Lab Code 200707-0).

NVLAP LAB CODE 200707-0

The current scope of accreditations can be found at
http://ts.nist.gov/Standards/scopes/2007070.htm .

SYSTEM TEST CONFIGURATION

Justification

The system was configured for testing in a typical fashion (as normally used by a typical user).

Equipment Modifications

No modifications were made to the unit tested.

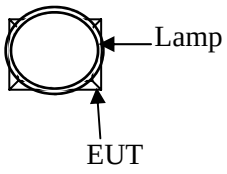
Local Support Equipment List and Details

Manufacturer	Description	Model	Serial Number	FCC ID
Jinling	Lamp	2D-38W	N/A	N/A
Yaguang	Lamp	2D-55W	N/A	N/A

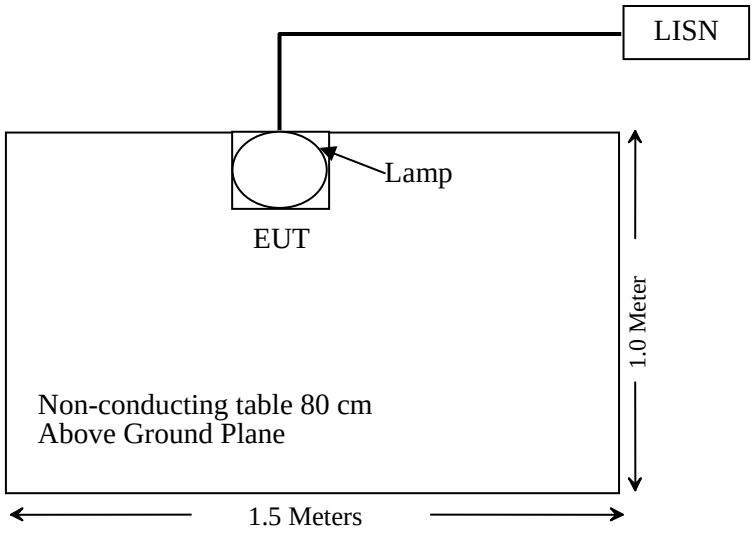
External I/O Cable

Cable Description	Length (M)	From/Port	To
Unshielded Undetachable AC Power Cable	1.2	EUT	AC Power

Configuration of Test Setup



Block Diagram of Test Setup



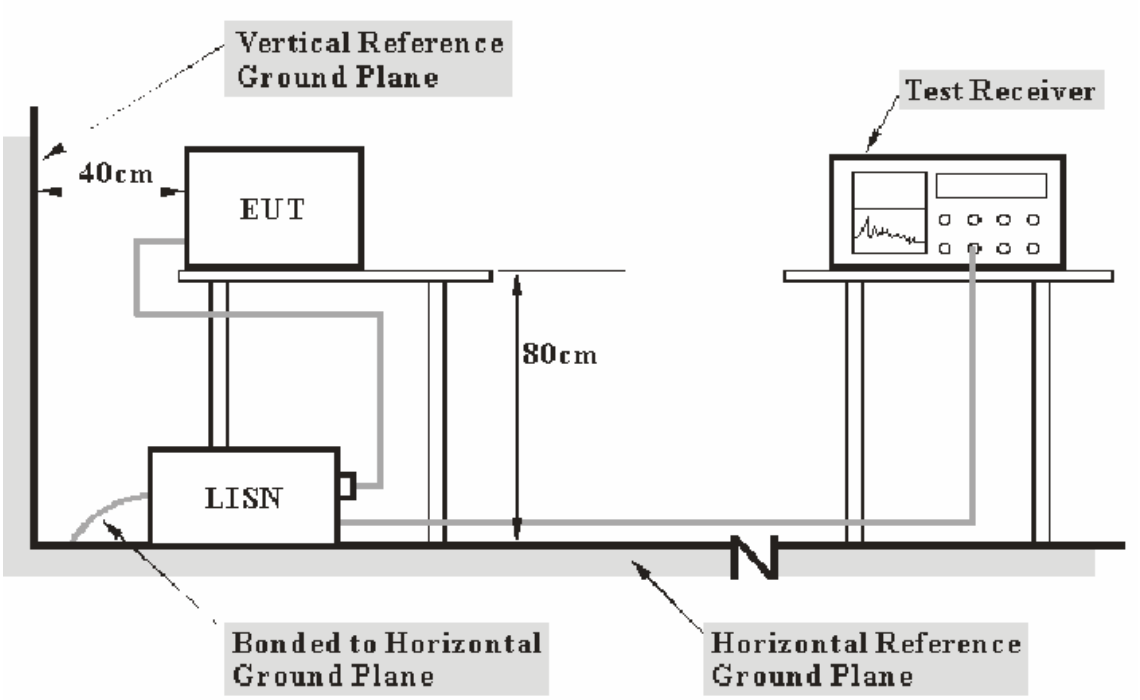
CONDUCTED EMISSIONS

Measurement Uncertainty

All measurements involve certain levels of uncertainties, especially in field of EMC. The factors contributing to uncertainties are spectrum analyzer, cable loss, and LISN.

Based on NIS 81, The Treatment of Uncertainty in EMC Measurements, the best estimate of the uncertainty of any conducted emissions measurement at Bay Area Compliance Laboratories Corp. (ShenZhen) is ±2.4 dB.

EUT Setup



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The setup of EUT is according with MP-5: 1986 measurement procedure. Specification used was with the FCC Part 18 limits.

The EUT was connected to a 120 VAC/ 60Hz power source.

EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 450 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	***IFBW***
450 kHz – 30 MHz	9 kHz

Test Equipment List and Details

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
Com-Power	L.I.S.N.	LI-200	12005	N/A	N/A
Com-Power	L.I.S.N.	LI-200	12208	N/A	N/A
Rohde & Schwarz	EMI Test Receiver	ESCS30	DE25330	2007-03-26	2008-03-26
Rohde & Schwarz	L.I.S.N.	ESH2-Z5	892107/021	2007-03-26	2008-03-26

***** Com-Power's LISN were used as the supporting equipment.
*** Statement of Traceability:** Bay Area Compliance Laboratories Corp. (ShenZhen) attests that all calibrations have been performed in accordance to NVLAP requirements, traceable to the NIST.

Test Procedure

During the conducted emission test, the EUT power cord was connected to the outlet of the LISN.

Maximizing procedure were performed on the six (6) highest emissions of the EUT.

All data was recorded in the Peak detection mode.

Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 18, with the worst margin reading of:

WTEB-D155-120: 4.50 dB at **0.470 MHz** in the **Hot** conductor mode.
WTEB-D138-120: 6.40 dB at **0.560 MHz** in the **Hot** conductor mode.

Test Data

Environmental Conditions

Temperature:	25 °C
Relative Humidity:	56 %
ATM Pressure:	100.0 kPa

The testing was performed by Amanda Wei on 2008-02-04.

Test Mode: ON (WTEB-D155-120)

LINE CONDUCTED EMISSIONS				FCC Part 18	
Frequency (MHz)	**Amplitude (dBµV)**	**Detector PK**	**Conductor Hot/Neutral**	**Limit (dBµV)**	**Margin (dB)**
0.470	43.50	PK	Hot	48.00	4.50
26.230	41.20	PK	Hot	48.00	6.80
26.350	40.80	PK	Neutral	48.00	7.20
0.555	39.20	PK	Hot	48.00	8.80
0.640	39.10	PK	Hot	48.00	8.90
0.565	38.90	PK	Neutral	48.00	9.10
0.605	38.60	PK	Neutral	48.00	9.40
0.520	38.60	PK	Neutral	48.00	9.40
0.595	38.40	PK	Hot	48.00	9.60
0.725	37.40	PK	Hot	48.00	10.60
0.735	33.40	PK	Neutral	48.00	14.60
1.000	31.50	PK	Neutral	48.00	16.50

Test Mode: ON (WTEB-D138-120)

LINE CONDUCTED EMISSIONS				FCC Part 18	
Frequency (MHz)	**Amplitude (dBμV)**	**Detector QP, PK, Ave.**	**Conductor Hot/Neutral**	**Limit (dBμV)**	**Margin (dB)**
0.560	41.60	PK	Hot	48.00	6.40
0.560	41.30	PK	Neutral	48.00	6.70
0.730	40.60	PK	Neutral	48.00	7.40
0.820	40.50	PK	Hot	48.00	7.50
0.735	39.40	PK	Hot	48.00	8.60
0.995	39.40	PK	Hot	48.00	8.60
0.645	39.00	PK	Hot	48.00	9.00
0.985	38.10	PK	Neutral	48.00	9.90
0.815	38.00	PK	Neutral	48.00	10.00
0.900	37.20	PK	Neutral	48.00	10.80
26.165	35.10	PK	Neutral	48.00	12.90
26.420	34.50	PK	Hot	48.00	13.50

Plot(s) of Test Data

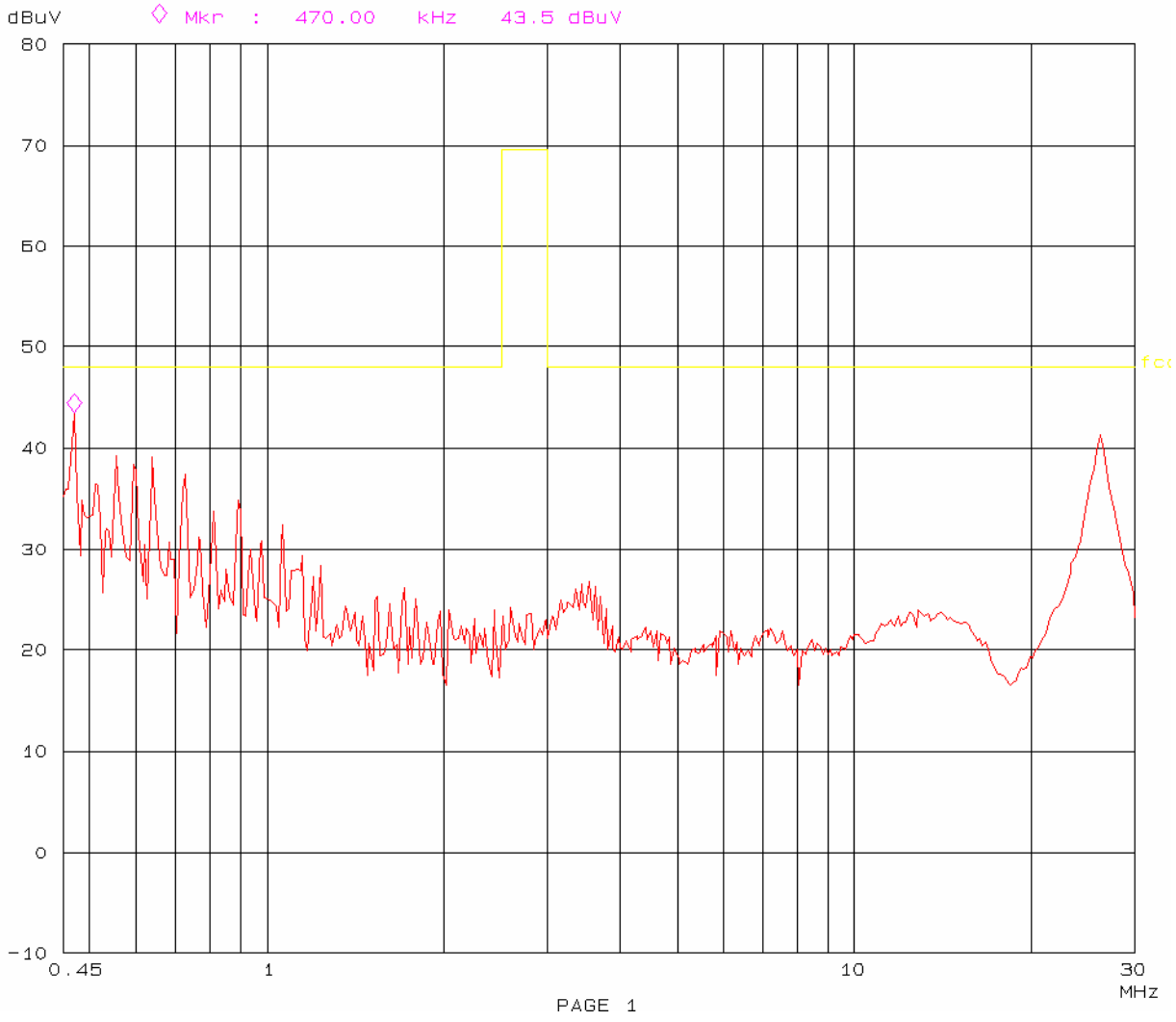
Plot(s) of Test Data is presented hereinafter as reference.

CONDUCTED EMISSION TEST

04. Feb 08 15:03

FCC 18

EUT: Electronic Ballast M/N:WTEB-D155-120
Manuf: WENTAI
Op Cond: On
Operator: Amanda
Test Spec: AC 120V/60HZ H
Comment: Temp:25 Humi:56%

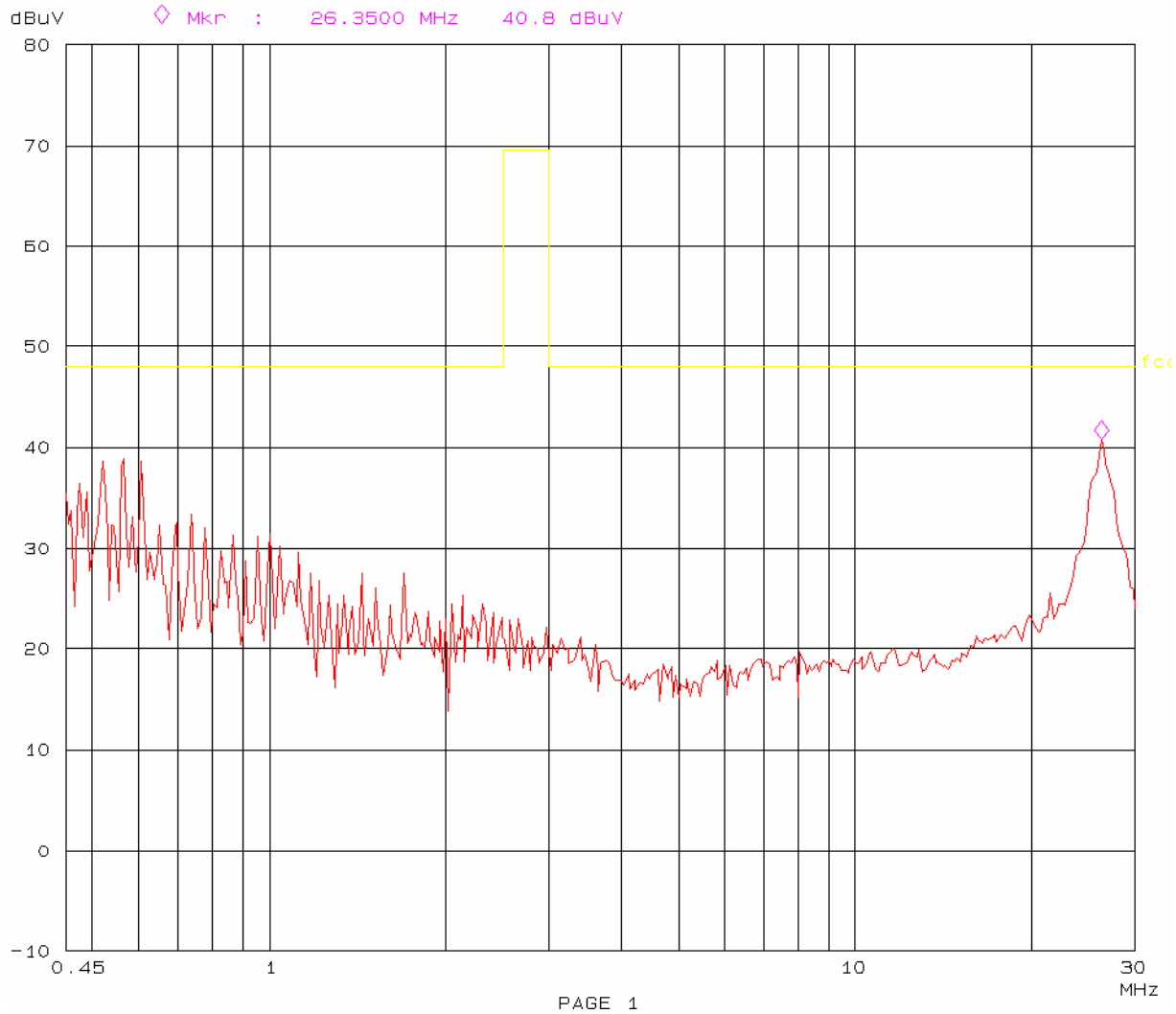


CONDUCTED EMISSION TEST

04. Feb 08 14:52

FCC 18

EUT: Electronic Ballast M/N: WTEB-D155-120
Manuf: WENTAI
Op Cond: On
Operator: Amanda
Test Spec: AC 120V/60HZ N
Comment: Temp: 25 Humi: 56%



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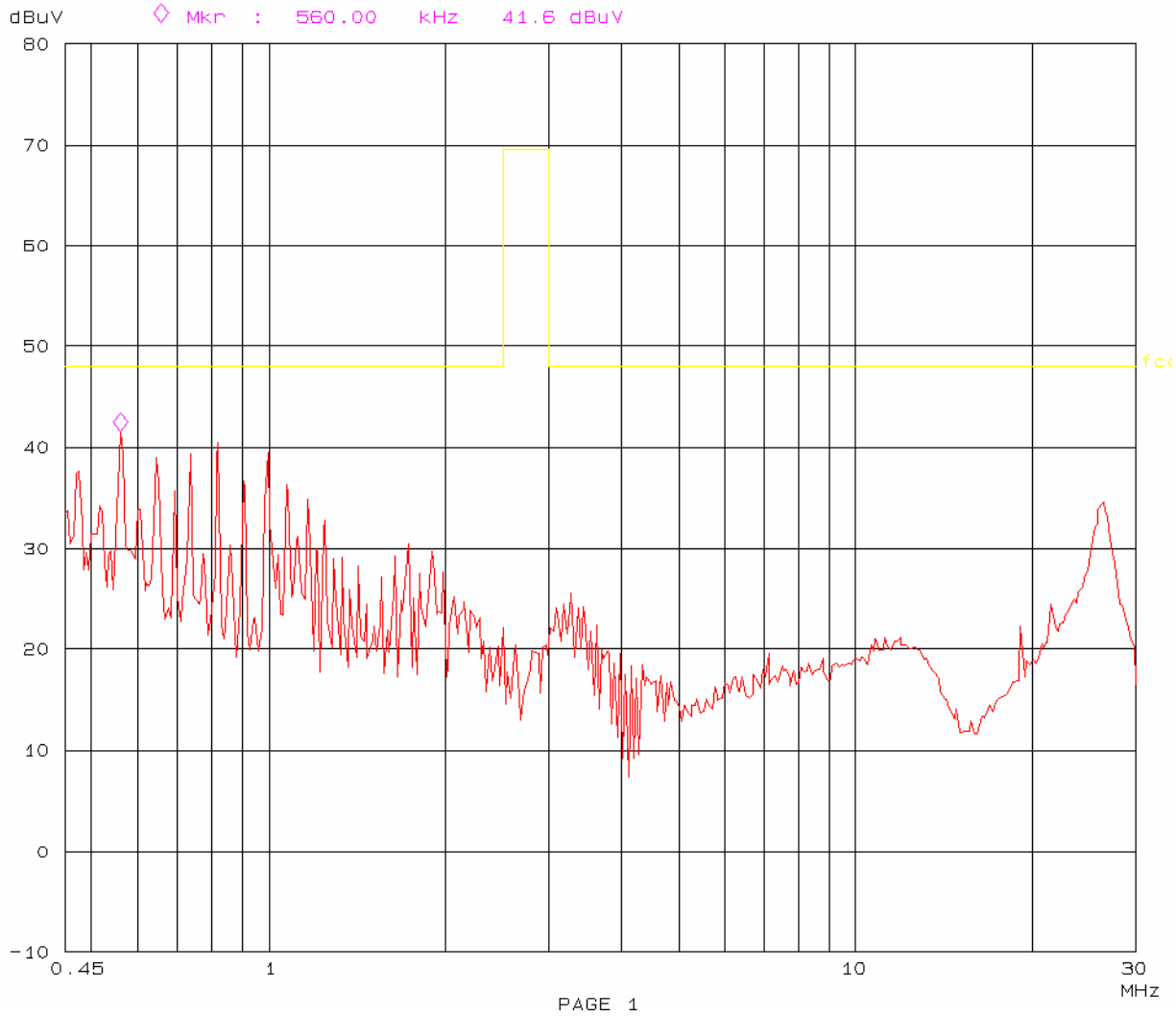
CONDUCTED EMISSION TEST

04. Feb 08 15:26

FCC 18

EUT:	Electronic Ballast M/N: WTEB-D138-120
Manuf:	WENTAI
Op Cond:	On
Operator:	Amanda
Test Spec:	AC 120V/60HZ H
Comment:	Temp: 25 Humi: 56%



CONDUCTED EMISSION TEST

04. Feb 08 15:21

FCC 18

EUT:	Electronic Ballast M/N: WTEB-D138-120
Manuf:	WENTAI
Op Cond:	On
Operator:	Amanda
Test Spec:	AC 120V/60HZ N
Comment:	Temp: 25 Humi: 56%