



**FCC CFR47 PART 15 SUBPART B
ICES-003 ISSUE 4**

**TEST REPORT
FOR**

BT 2.1 + EDR HEADSET WITH VIDEO CAMERA

MODEL NUMBER: LX1

**FCC ID: YJ8-LX1
IC: 9087A-LX1**

REPORT NUMBER: 10U13339-2, Revision B

ISSUE DATE: AUGUST 30, 2010

Prepared for
**LOOXCIE, INC.
1196 BORREGAS AVE, SUITE 200
SUNNYVALE, CA 94089, U.S.A.**

Prepared by
**COMPLIANCE CERTIFICATION SERVICES
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
---	08/12/10	Initial Issue	F. Ibrahim
A	08/25/10	Revised FCC ID per clients request	A. Zaffar
B	08/30/10	Added radiated and conducted data for second configuration (EUT connected to PC).	F. Ibrahim

TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION	5
4. CALIBRATION AND UNCERTAINTY	5
4.1. MEASURING INSTRUMENT CALIBRATION	5
4.2. SAMPLE CALCULATION	5
4.3. MEASUREMENT UNCERTAINTY	5
5. EQUIPMENT UNDER TEST	6
5.1. DESCRIPTION OF EUT	6
5.2. TEST CONFIGURATIONS	6
5.3. MODE(S) OF OPERATION	6
5.4. MODIFICATIONS	6
5.5. DETAILS OF TESTED SYSTEM	7
6. TEST AND MEASUREMENT EQUIPMENT	10
7. APPLICABLE LIMITS AND TEST RESULTS	11
7.1. RADIATED EMISSIONS	11
7.1.1. CONFIGURATION 1	12
7.1.2. CONFIGURATION 2	15
7.2. AC POWER LINE CONDUCTED EMISSIONS	18
7.2.1. CONFIGURATION 1	19
7.2.2. CONFIGURATION 2	22
8. SETUP PHOTOS	25

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: LOOXCIE, INC.
1196 BORREGAS AVE, SUITE 200
SUNNYVALE, CA 94089, U.S.A.

EUT DESCRIPTION: BT 2.1 + EDR Headset with video camera

MODEL: LX1

SERIAL NUMBER: 02124

DATE TESTED: AUGUST 09-27, 2010

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART B	Pass
ICES-003 ISSUE 4	Pass

Compliance Certification Services, Inc. (CCS) tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by CCS based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by CCS and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by CCS will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For CCS By:



FRANK IBRAHIM
EMC SUPERVISOR
COMPLIANCE CERTIFICATION SERVICES

Tested By:



TOM CHEN
EMC ENGINEER
COMPLIANCE CERTIFICATION SERVICES

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.4-2003.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

CCS is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://www.ccsemc.com>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamplifier Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Bluetooth v2.1 + EDR headset with a video camera.

GENERAL INFORMATION

Power Requirements	5.0 Volts Battery
List of frequencies generated or used by the EUT	32KHz , 26MHz, 48MHz

5.2. TEST CONFIGURATIONS

The following configurations were investigated during testing:

EUT Configuration	Description
Configuration 1	EUT is stand alone unit with Charger (normal) mode.
Configuration 2	EUT with Peripherals (normal) mode.

5.3. MODE(S) OF OPERATION

Mode	Description
Configuration 1	TX ON and Charging.
Configuration 2	Laptop PC Playing movie file from EUT.

5.4. MODIFICATIONS

No modifications were made during testing.

5.5. DETAILS OF TESTED SYSTEM

SUPPORT EQUIPMENT & PERIPHERALS

PERIPHERAL SUPPORT EQUIPMENT LIST			
Description	Manufacturer	Model	Serial Number
Laptop PC	Dell	PP18L	NR139A00
AC Adapter	Dell	LA65NS0-00	71615-72M-2925
Modem	ACEEX	1414	9013538
Printer	Microline 186	D22300A	AC5C018494A0
USB Mouse	Dell	OYH958	831890-0000

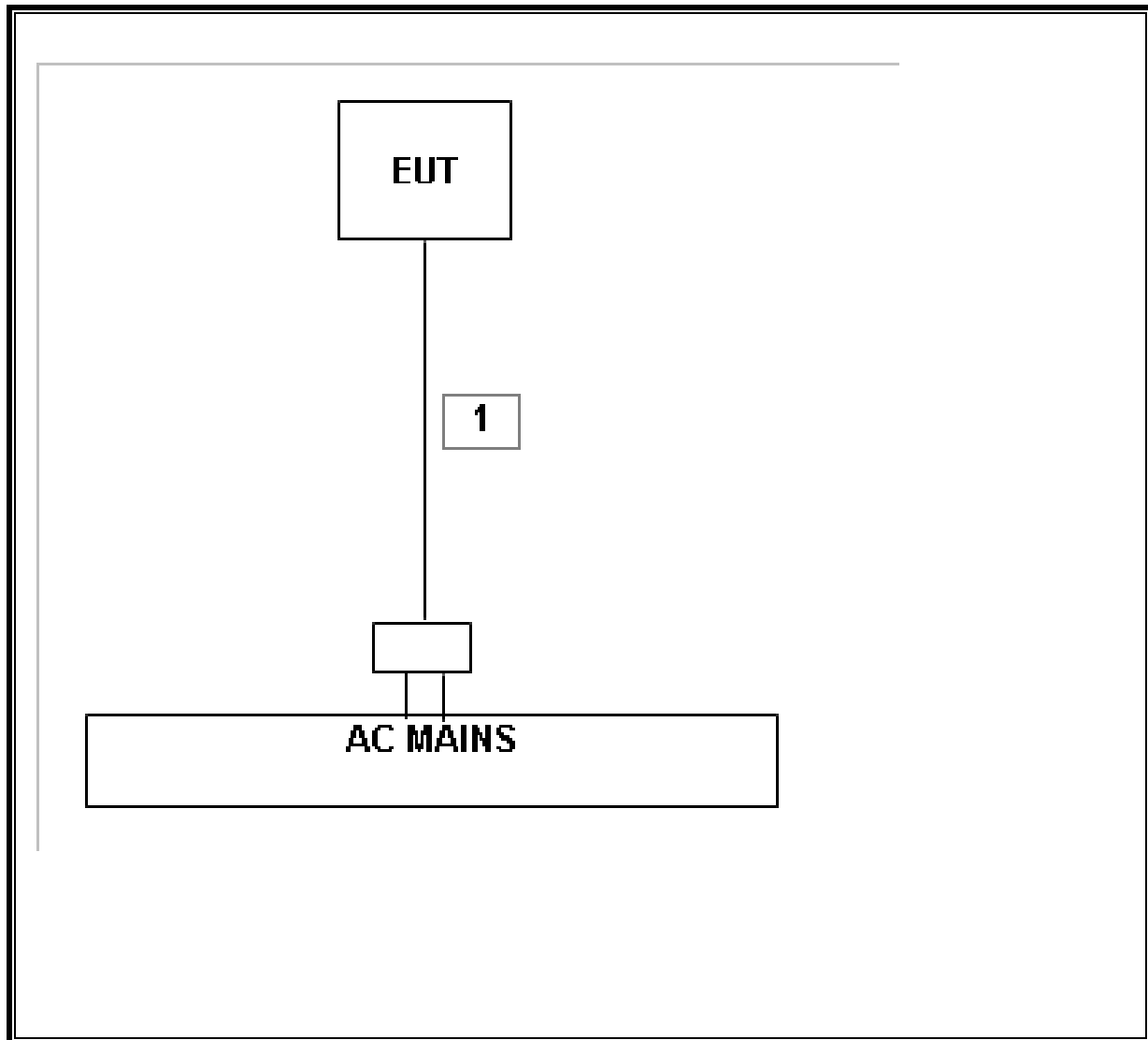
I/O CABLES (CONFIGURATION 1)

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	USB	1	MINI USB	Shielded	0.3m	N/A

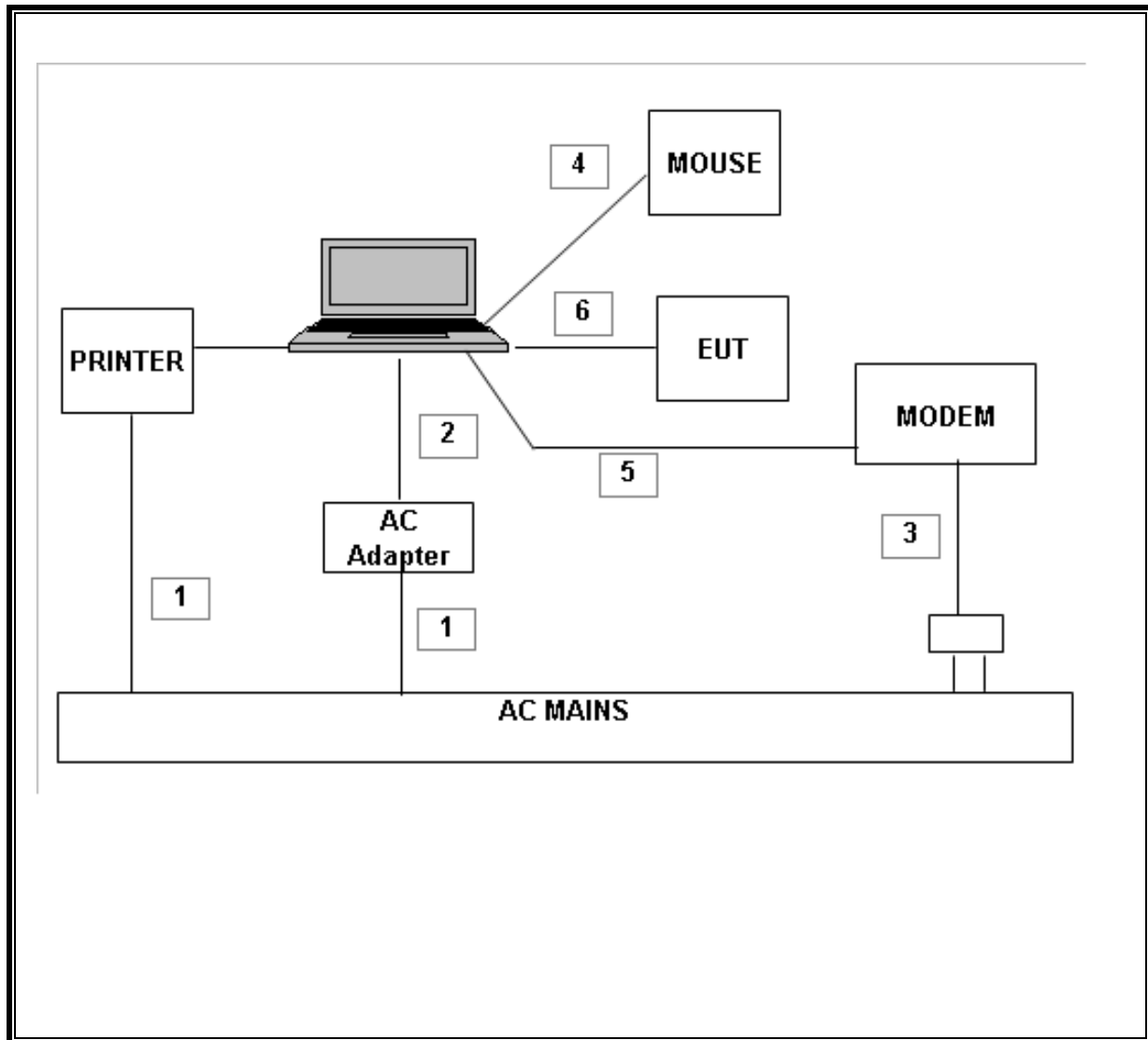
I/O CABLES (CONFIGURATION 2)

I/O CABLE LIST						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length	Remarks
1	AC	2	US 115V	Un-shielded	2.0m	N/A
2	DC	1	DC	Un-shielded	1.5m	N/A
3	DC	1	Jack	Un-shielded	1.8m	N/A
4	USB	1	USB	Shielded	1.5m	N/A
5	Serial	1	DB9	Shielded	1.0m	N/A
6	USB	2	MINI USB	Shielded	0.3m	N/A

SETUP DIAGRAM CONFIGURATION 1



SETUP DIAGRAM CONFIGURATION 2



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

TEST EQUIPMENT LIST				
Description	Manufacturer	Model	Asset	Cal Due
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01159	05/08/11
Antenna, Bilog, 2 GHz	Sunol Sciences	JB1	C01016	07/14/11
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00580	07/06/11
LISN, 30 MHz	FCC	LISN-50/250-25-2	N02625	11/06/10
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	05/06/11

7. APPLICABLE LIMITS AND TEST RESULTS

7.1. RADIATED EMISSIONS

TEST PROCEDURE

ANSI C63.4

The highest clock frequency generated or used in the EUT is 48 MHz; therefore the frequency range was investigated from 30 MHz to 1000 MHz.

LIMIT

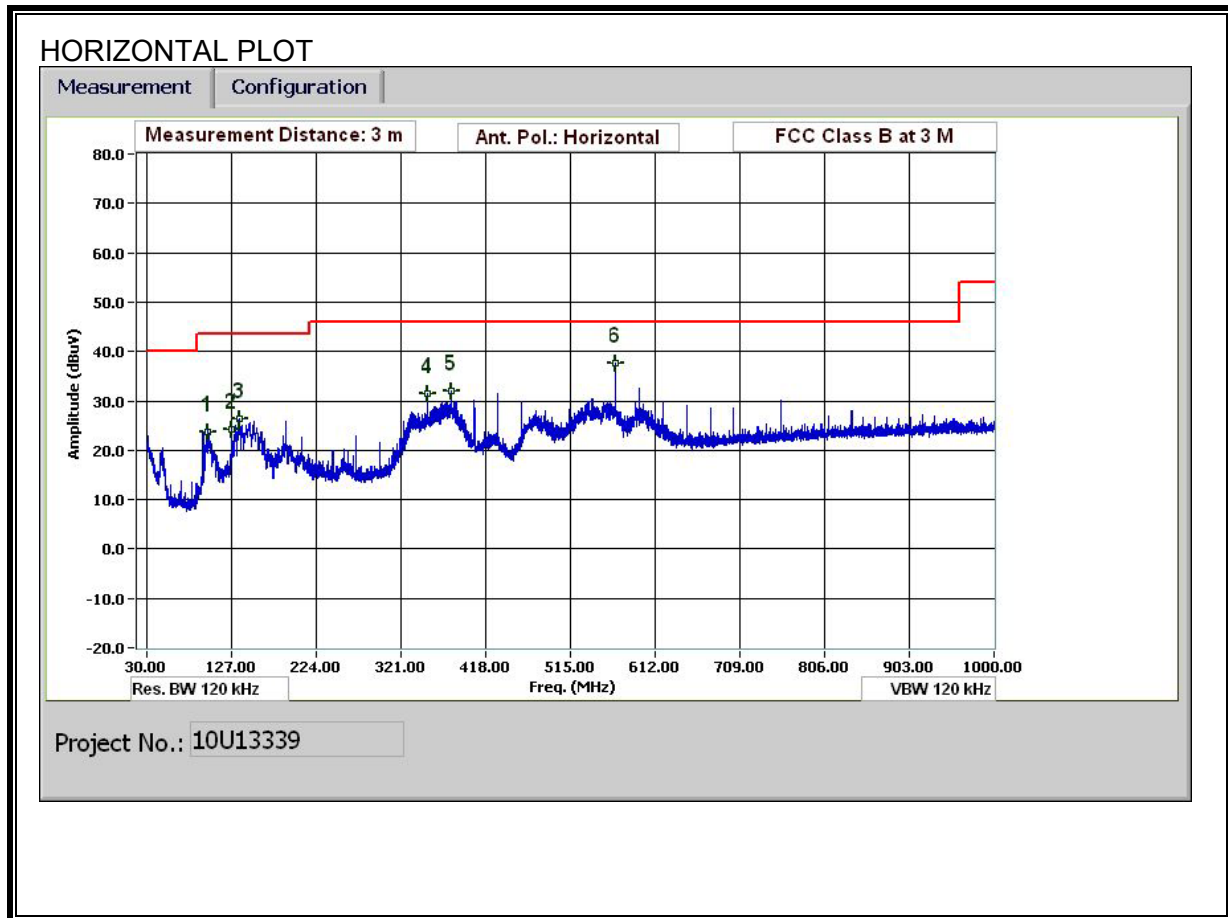
§15.109 (a) except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Limits for radiated disturbance of Class B ITE at measuring distance of 3 m	
Frequency range (MHz)	Quasi-peak limits (dB μ V/m)
30 to 88	40
88 to 216	43.5
216 to 960	46
Above 960 MHz	54
Note: The lower limit shall apply at the transition frequency.	

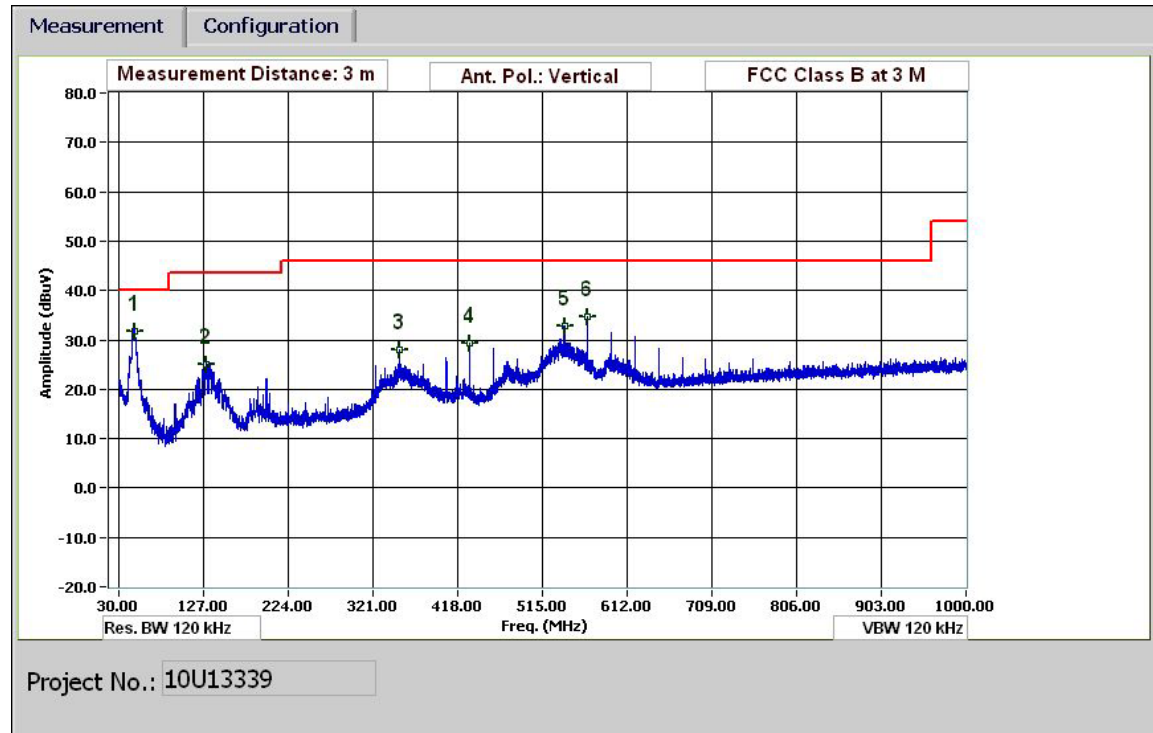
TEST RESULT

7.1.1. CONFIGURATION 1

SPURIOUS EMISSIONS 30 TO 1000 MHz (DIGITAL DEVICE, HORIZONTAL)



VERTICAL PLOT



HORIZONTAL & VERTICAL DATA

30-1000MHz Frequency Measurement

Compliance Certification Services, Fremont 5m Chamber

Test Engr: Tom Chen
Date: 08/04/10
Project #: 10U13339
Company: Looxcie
EUT Description: BT 2.1 + EDR Headset with video camera
EUT M/N: EUT only
Test Target: FCC Class B
Mode Oper: TX mode, Worst Case

f	Measurement Frequency	Amp	Preamplifier Gain	Margin	Margin vs. Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters		
Read	Analyzer Reading	Filter	Filter Insert Loss		
AF	Antenna Factor	Corr.	Calculated Field Strength		
CL	Cable Loss	Limit	Field Strength Limit		

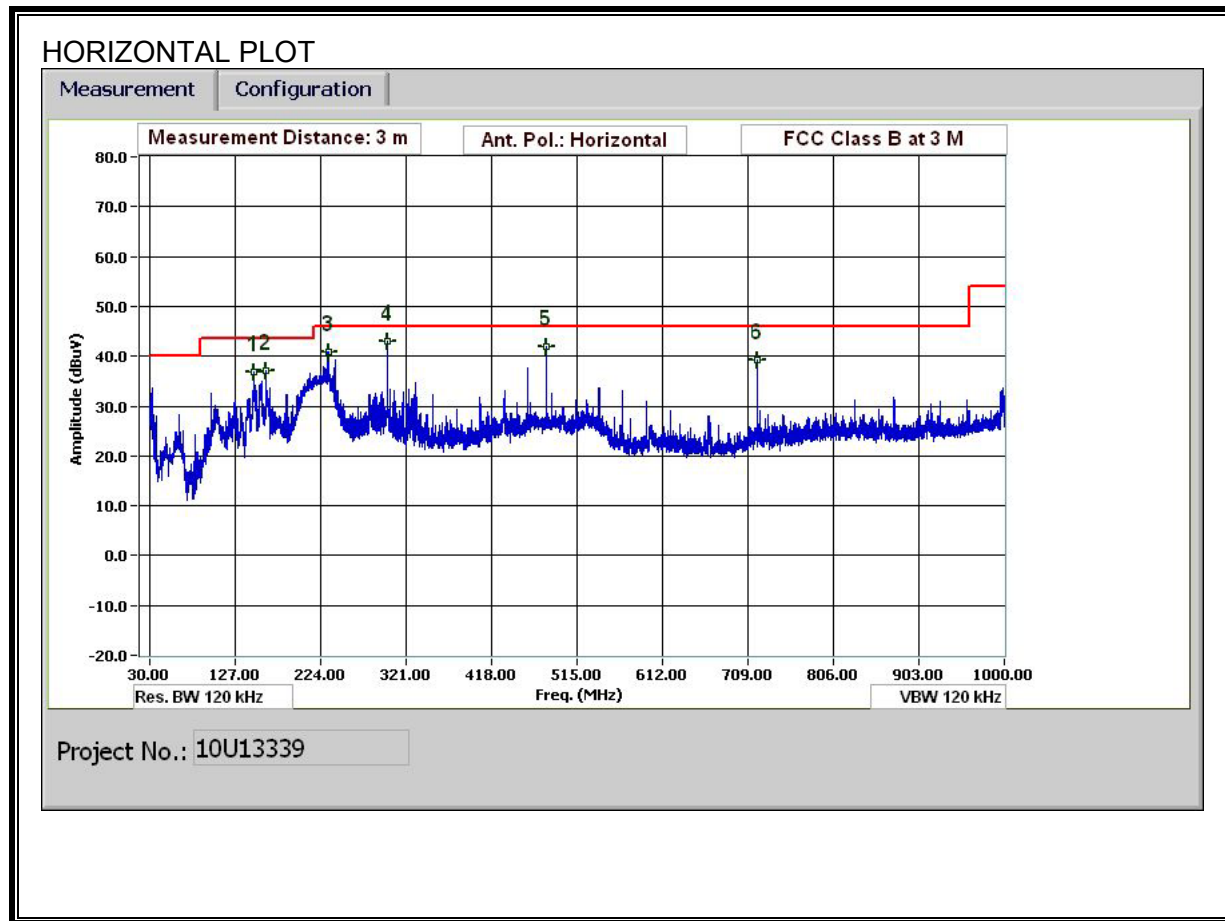
f MHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filter dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
Horizontal													
99.363	3.0	41.3	9.8	0.9	28.3	0.0	0.0	23.7	43.5	-19.8	H	P	
127.444	3.0	38.0	13.6	1.1	28.3	0.0	0.0	24.3	43.5	-19.2	H	P	
135.844	3.0	40.1	13.4	1.1	28.3	0.0	0.0	26.3	43.5	-17.2	H	P	
351.013	3.0	43.8	14.2	1.7	28.1	0.0	0.0	31.6	46.0	-14.4	H	P	
378.014	3.0	43.7	14.6	1.7	28.1	0.0	0.0	31.9	46.0	-14.1	H	P	
567.022	3.0	45.2	17.9	2.2	27.6	0.0	0.0	37.6	46.0	-8.4	H	P	
Vertical													
48.241	3.0	50.2	9.2	0.6	28.4	0.0	0.0	31.7	40.0	-8.3	V	P	
130.684	3.0	38.8	13.5	1.1	28.3	0.0	0.0	25.1	43.5	-18.4	V	P	
351.013	3.0	40.2	14.2	1.7	28.1	0.0	0.0	28.0	46.0	-18.0	V	P	
432.017	3.0	39.9	15.5	1.9	28.0	0.0	0.0	29.2	46.0	-16.8	V	P	
540.021	3.0	41.0	17.4	2.1	27.7	0.0	0.0	32.8	46.0	-13.2	V	P	
567.022	3.0	42.3	17.9	2.2	27.6	0.0	0.0	34.7	46.0	-11.3	V	P	

Rev. 1.27.09

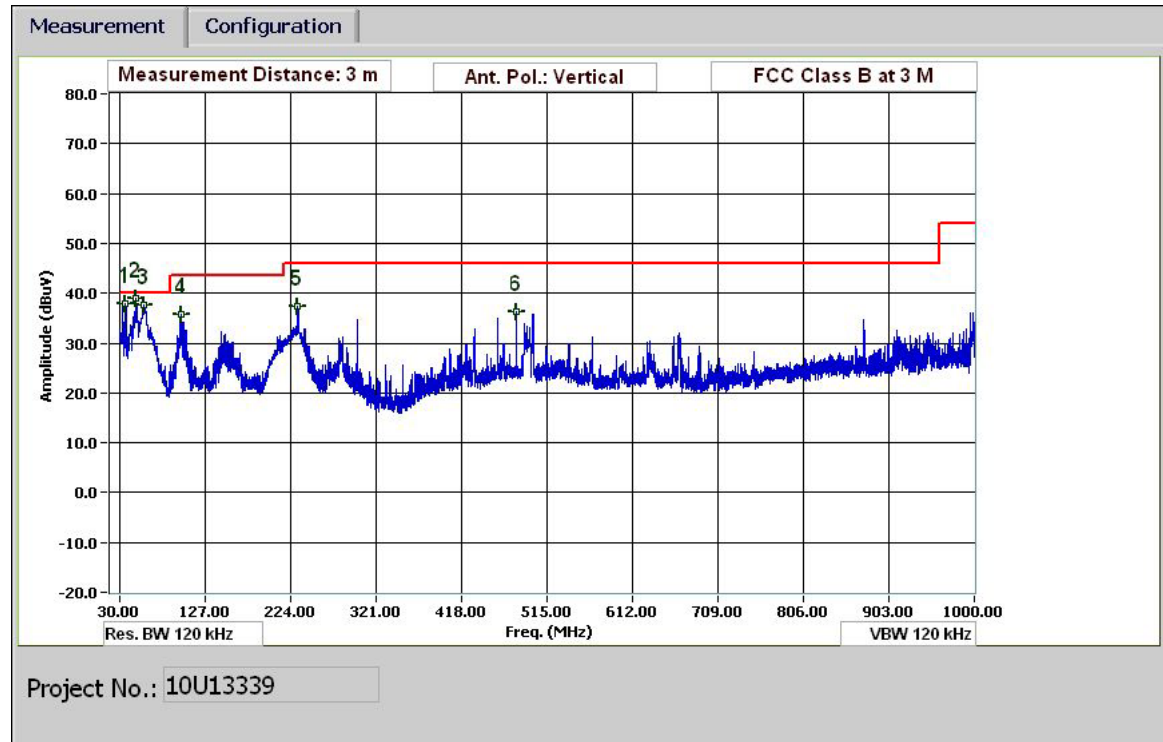
Note: No other emissions were detected above the system noise floor.

7.1.2. CONFIGURATION 2

SPURIOUS EMISSIONS 30 TO 1000 MHz (DIGITAL DEVICE, HORIZONTAL)



VERTICAL PLOT



HORIZONTAL & VERTICAL DATA

30-1000MHz Frequency Measurement

Compliance Certification Services, Fremont 5m Chamber

Test Engr: Tom Chen
Date: 08/27/10
Project #: 10U13339
Company: Loxxie
EUT Description: BT 2.1 + EDR Headset with video camera
EUT M/N: EUT only
Test Target: FCC Class B
Mode Oper: Normal mode

f	Measurement Frequency	Amp	Preamp Gain	Margin	Margin vs. Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters		
Read	Analyzer Reading	Filter	Filter Insert Loss		
AF	Antenna Factor	Corr.	Calculated Field Strength		
CL	Cable Loss	Limit	Field Strength Limit		

f MHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filter dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
Horizontal													
148.565	3.0	50.8	12.7	1.0	27.8	0.0	0.0	36.7	43.5	-6.8	H	P	
162.005	3.0	51.0	12.8	1.1	27.7	0.0	0.0	37.2	43.5	-6.3	H	P	
232.448	3.0	55.2	11.8	1.3	27.4	0.0	0.0	40.9	46.0	-5.1	H	P	
299.411	3.0	55.6	13.5	1.5	27.4	0.0	0.0	43.1	46.0	-2.9	H	P	
480.019	3.0	51.9	16.5	1.9	28.5	0.0	0.0	41.8	46.0	-4.2	H	P	
720.148	3.0	45.9	19.3	2.4	28.5	0.0	0.0	39.2	46.0	-6.8	H	P	
Vertical													
35.880	3.0	49.0	16.8	0.5	28.4	0.0	0.0	37.9	40.0	-2.1	V	P	
48.241	3.0	56.6	10.2	0.6	28.3	0.0	0.0	39.0	40.0	-1.0	V	P	
57.721	3.0	57.1	8.2	0.7	28.3	0.0	0.0	37.7	40.0	-2.3	V	P	
100.443	3.0	53.7	9.4	0.8	28.2	0.0	0.0	35.7	43.5	-7.8	V	P	
232.328	3.0	51.5	11.8	1.3	27.4	0.0	0.0	37.3	46.0	-8.7	V	P	
480.019	3.0	46.3	16.5	1.9	28.5	0.0	0.0	36.2	46.0	-9.8	V	P	

Rev. 1.27.09

Note: No other emissions were detected above the system noise floor.

7.2. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 [*]	56 to 46 [*]
0.5-5	56	46
5-30	60	50

^{*} Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

7.2.1. CONFIGURATION 1

6 WORST EMISSIONS

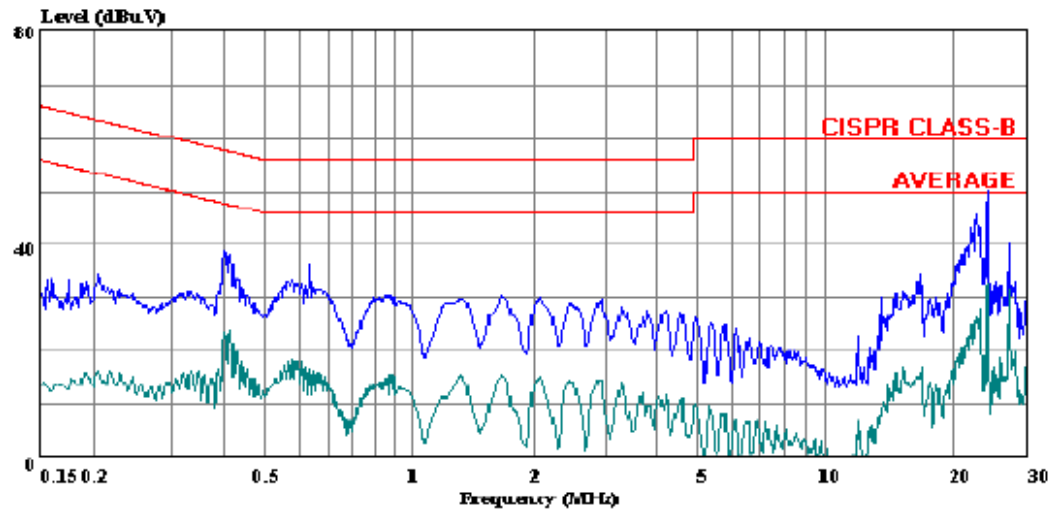
CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Closs	Limit	EN B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.40	38.71	--	23.51	0.00	57.81	47.81	-19.10	-24.30	L1
0.64	36.49	--	15.24	0.00	56.00	46.00	-19.51	-30.76	L1
24.01	50.15	--	36.08	0.00	60.00	50.00	-9.85	-13.92	L1
0.40	36.57	--	25.46	0.00	57.81	47.81	-21.24	-22.35	L2
0.57	30.97	--	15.73	0.00	56.00	46.00	-25.03	-30.27	L2
24.01	46.01	--	32.44	0.00	60.00	50.00	-13.99	-17.56	L2
6 Worst Data									

LINE 1 RESULTS



Compliance Certification Services
47173 Benicia Street
Fremont, CA 94538
Tel: (510) 771-1000
Fax: (510) 661-0888

Data#: 7 File#: 10U13339-LC.EMI Date: 08-06-2010 Time: 09:08:02

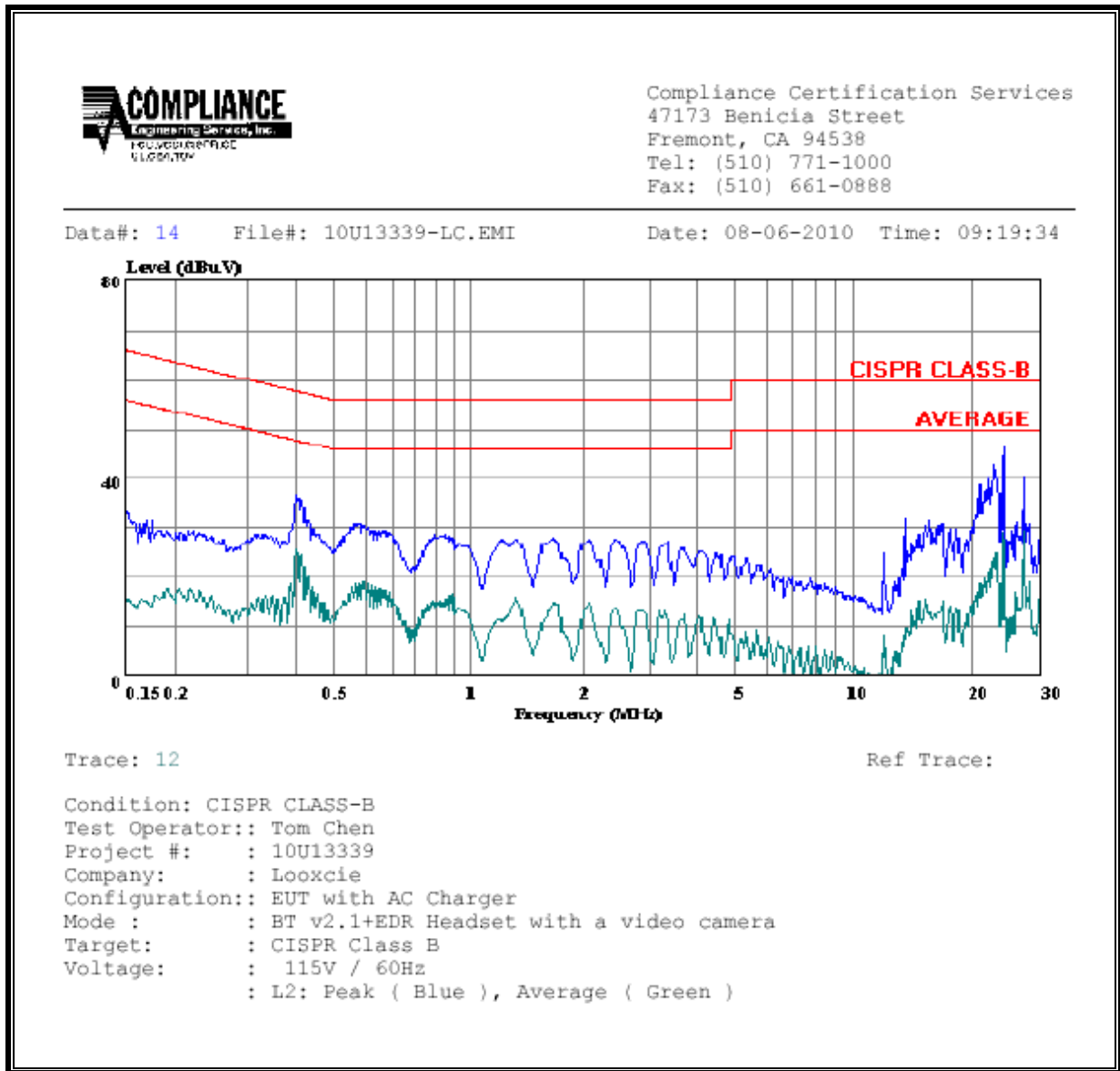


Trace: 5

Ref Trace:

Condition: CISPR CLASS-B
Test Operator:: Tom Chen
Project #: 10U13339
Company: Lookcie
Configuration: EUT with AC Charger
Mode: BT v2.1+EDR Headset with a video camera
Target: CISPR Class B
Voltage: 115V / 60Hz
: L1: Peak (Blue), Average (Green)

LINE 2 RESULTS

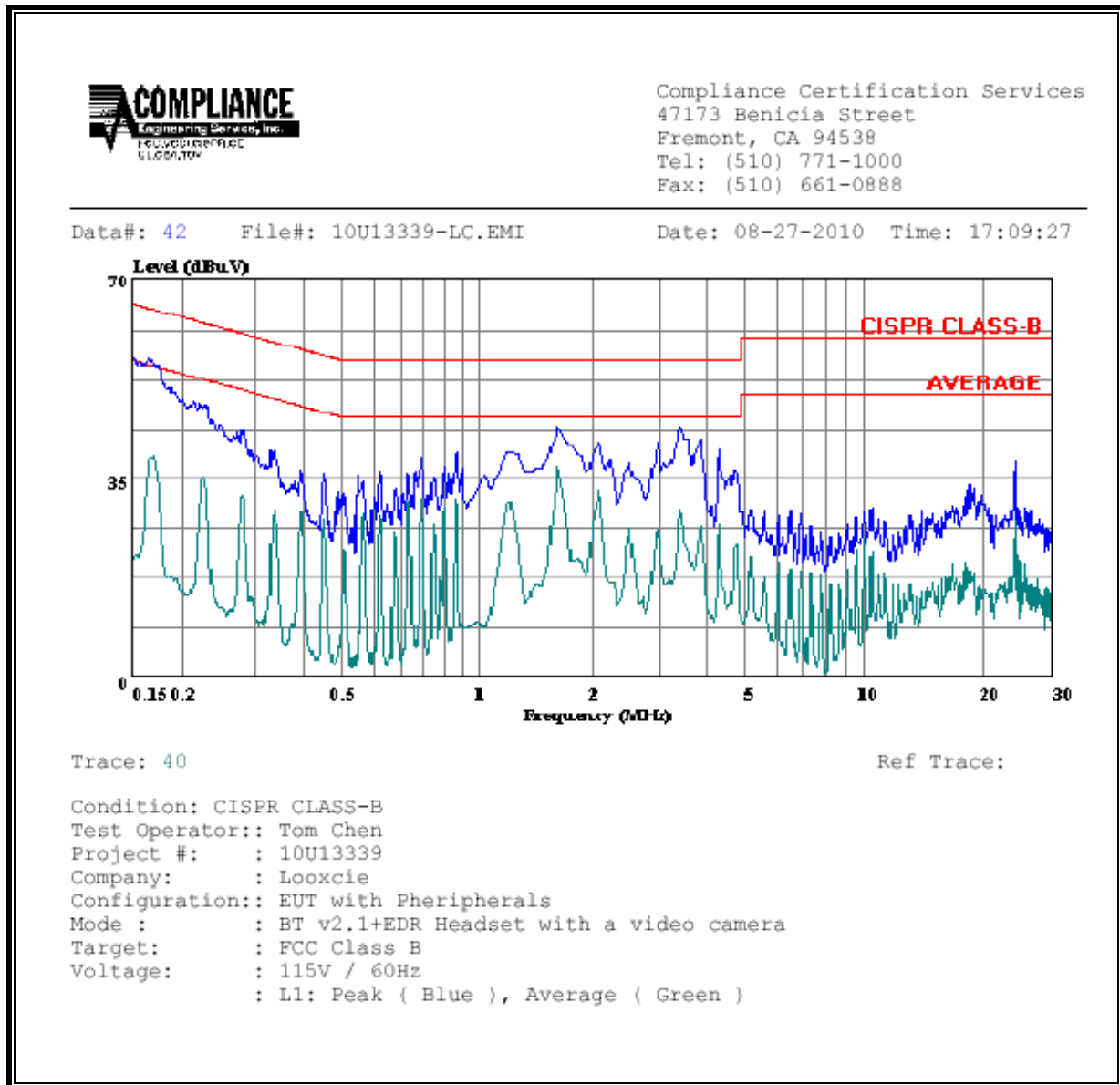


7.2.2. CONFIGURATION 2

6 WORST EMISSIONS

CONDUCTED EMISSIONS DATA (115VAC 60Hz)									
Freq.	Reading			Class	Limit	EN_B	Margin		Remark
(MHz)	PK (dBuV)	QP (dBuV)	AV (dBuV)	(dB)	QP	AV	QP (dB)	AV (dB)	L1 / L2
0.16	56.18	--	36.53	0.00	65.26	55.26	-9.08	-18.73	L1
1.73	44.08	--	37.20	0.00	56.00	46.00	-11.92	-8.80	L1
3.49	44.20	--	29.50	0.00	56.00	46.00	-11.80	-16.50	L1
0.16	56.23	--	36.77	0.00	65.26	55.26	-9.03	-18.49	L2
0.96	49.31	--	31.40	0.00	56.00	46.00	-6.69	-14.60	L2
3.57	47.43	--	27.14	0.00	56.00	46.00	-8.57	-18.86	L2
6 Worst Data									

LINE 1 RESULTS



LINE 2 RESULTS

