Certification Of Conformity

Product:	Fixed Luminaires
Model /Type ref.:	MS-B series and MS-P series (refer to test report 4788537005-E01-00 for details.)
Applicant:	YANTAI MISUNG BEAUTY ORNAMENT CO LTD No 22 Dongxing Rd Shengquan Industrial Park Laishan District Yantai City, Shandong, 264003
Manufacturer:	YANTAI MISUNG BEAUTY ORNAMENT CO LTD No 22 Dongxing Rd Shengquan Industrial Park Laishan District Yantai City, Shandong, 264003
Trade Mark:	MISUNG
Electrical Rating:	12 or 24VDC, 66W max per LED strip
Insulation Class:	Class III
Degree of Protection:	IP 20

This certificate is only valid for products submitted to Underwriters Laboratories for verification, which are identical to the tested and certified product. It is confirmed that a sample of the product has been tested and found in conformity with the following standards:

Standards: Ministerial Ordinance Appendix 10 Chapter 7

Detailed specification of the tested and certified product are shown in the following Test Report:

Test Report Ref. No.: 4788537005-E01-00 Issued Date: 2019/11/13 By: UL-CCIC Company Limited

Date: 2019/11/13

Signature.....

Daniel Luo

Title: Engineering Manager

UL-CCIC Company Limited
Electronic Building, Parage Electronic Industrial Park,
No.8 Nanyun Er Road, Guangzhou Science Park,
Guangzhou 510663, China
Tel: +86 20 3213 1000 Fax: +86 20 8348 6777

EMC TEST REPORT

For

Fixed Luminaires

MODEL NUMBER: MS-B series and MS-P series, refer to page 5 for details.

REPORT NUMBER: 4788537005-E01-00

ISSUE DATE: November 13, 2019

Prepared for

YANTAI MISUNG BEAUTY ORNAMENT CO LTD
No 22 Dongxing Rd Shengquan Industrial Park
Laishan District Yantai City, Shandong, 264003

Prepared by

UL-CCIC Company Limited
Electronic Building, parage Electronic Industrial Park, No.8 Nanyun Er Road, Guangzhou Science Park, Guangzhou.
Website: www.ul.com

Revision History

Rev.	Issue Date	Revisions	Revised By
--	11/13/2019	Initial Issue	--

Test Summary

According to the specifications of the manufacture, the EUT must complies with the following standards' requirements:
METI Standard Ordinance 1 Appendix 10 Chapter 7.

Electromagnetic Interference (EMI)

Test Items	Test Method	Test Limits	Result
Disturbance Voltage at mains terminals	METI standard ordinance 1 appendix 10, chapter 7, clause 4.2	METI standard ordinance 1 appendix 10, chapter 7, clause 1.2	PASS
Disturbance Voltage at load/additional terminals	METI standard ordinance 1 appendix 10, chapter 7, clause 4.2	METI standard ordinance 1 appendix 10, chapter 7, clause 1.2	N/A[1),2)]
Disturbance Power	METI standard ordinance 1 appendix 10, chapter 7, clause 4.1	METI standard ordinance 1 appendix 10, chapter 7, clause 1.1	PASS

Note:
1) N/A= not applicable.
2) The EUTs have no load or additional terminals incorporated, therefore this test is not applicable for this EUT.
3) All models have no contain any active electronic components inside.
4) Model MS-B-1500*18.8*9.7mm-24V-2-49.2W/DC and MS-P-S-1500*1500*8mm-24V-4-104.8W/DC were selected as a typical models for all necessary tests.

CONTENTS

1 ATTESTATION OF TEST RESULTS

Applicant Information	
Company Name:	YANTAI MISUNG BEAUTY ORNAMENT CO LTD
Address:	No 22 Dongxing Rd Shengquan Industrial Park Laishan District Yantai City, Shandong, 264003
Manufacturer Information	
Company Name:	Same as applicant
Address:	Same as applicant
EUT Description	
Product Name	Fixed Luminaires
Brand Name	MISUNG
Models and difference	Nomenclature Designation:

I	II	III	IV	V
MS-B	-	-L X W	-R	-1/2
MS-P	-R/-S/-C	-L X W	-R	-1/2/4

I	Series, MS-B - LED Bar, MS-P – LED PANEL
II	Luminaire Shape, -R – Rectangle, -S – Square, -C - Circle
III	Luminaire Size L - Length, min 52mm max 3000mm. W - Width, min 30mm max 1500mm.
IV	Supply Input Class 2 Voltage, R – Rating, 12 or 24VDC, wattage Max 66W per LED strip.
V	Number of Driver, 1 – one, 2 – two, 4 – four sides

Test Model	MS-B-1500*18.8*9.7mm-24V-2-49.2W/DC, MS-P-S-1500*1500*8mm-24V-4-104.8W/DC
Date Tested	Oct 19, 2018~ Oct 29, 2018

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
METI Standard Ordinance 1 Appendix 10 Chapter 7.	**PASS**

Prepare By:

Ryan Pang
Project Engineer

Reviewed By:

Linda Ni
Senior Project Engineer

2 TEST METHODOLOGY

All tests were performed in accordance with the procedures documented
METI Standard Ordinance 1 Appendix 10 Chapter 7.

3 FACILITIES AND ACCREDITATION

Test Location	Shenzhen STS Test Services Co., Ltd.
Address	1/F., Building B, Zhuoke Science Park, No.190, Chongqing Road, Fuyong Street, Bao'an District, Shenzhen, Guangdong, China
Accreditation Certificate	The Laboratory has been assessed and proved to be in compliance with ISO 17025, The Certificate Registration Number is L7649.

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 MEASUREMENT UNCERTAINTY

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

Test Item	Measurement Frequency Range	K	U(dB)
Disturbance Voltage at mains terminals	0.15MHz ~ 30MHz	2	2.68
Disturbance Power	30MHz~300MHz	2	4.2
Note: This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.			

5 EQUIPMENT UNDER TEST

5.1 DESCRIPTION FOR THE EUT

Product Name:	Fixed Luminaires
Trade Mark:	MISUNG
Rated Input:	DC 12V or 24V
Cable Type:	Unshielded
Test Model:	MS-B-1500*18.8*9.7mm-24V-2-49.2W/DC, MS-P-S-1500*1500*8mm-24V-4-104.8W/DC
Test voltage:	DC 24V

5.2 TEST MODE

mode 1	On, lighting.

5.3 DESCRIPTION OF TEST SETUP

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.
N/A	N/A	N/A

5.4 MEASURING INSTRUMENT AND SOFTWARE USED

Disturbance Voltage at mains terminals						
No.	**Test Equipment**	**Manufacturer**	**Model**	**Serial No.**	**Last Cal.**	**Cal. Due**
1	EMI Test Receiver	R&S	ESCI	102086	2018.10.12	2019.10.12
2	LISN	R&S	ENV216	101242	2018.10.12	2019.10.12

Disturbance Power						
No.	**Test Equipment**	**Manufacturer**	**Model**	**Serial No.**	**Last Cal.**	**Cal. Due**
1	EMI Test Receiver	R&S	ESCI	102086	2018.10.12	2019.10.12
2	Absorbing clamp	R&S	MDS-21	100668	2018.10.12	2019.10.12

6 ELECTROMAGNETIC COMPATIBILITY (EMC)

6.1 ELECTROMAGNETIC INTERFERENCE (EMI)

6.1.1 DISTURBANCE VOLTAGE

<table>
<tr><td>Test Method:</td><td colspan="6">METI standard ordinance 1 appendix 10, chapter 7, clause 4.2</td></tr>
<tr><td>Detector:</td><td colspan="6">Peak for pre-scan (9kHz Resolution Bandwidth)</td></tr>
<tr><td></td><td colspan="6">Quasi-Peak if maximized peak within 6dB of Quasi-Peak limit</td></tr>
<tr><td>EUT Operation:</td><td colspan="6"></td></tr>
<tr><td>Ambient:</td><td>Temp.: 26.1</td><td>°C</td><td>Humid.: 60</td><td>%</td><td>Press.: 1005</td><td>mbar</td></tr>
<tr><td>Test Mode:</td><td colspan="6">Mode1</td></tr>
<tr><td>Test Status:</td><td colspan="6">Normal</td></tr>
<tr><td>Limit:</td><td colspan="6">Limits for conducted disturbance at the mains ports
<table>
<tr><td rowspan="2">Frequency Range (MHz)</td><td>At mains terminals (dBuV)</td></tr>
<tr><td>Quasi-peak</td></tr>
<tr><td>0.5265 to 5.0</td><td>56</td></tr>
<tr><td>5.0 to 30</td><td>60</td></tr>
</table></td></tr>
</table>