



CONFORMANCE TEST REPORT FOR EN 62493:2010

Report No.: **15-04-MAS-050**

Client: **GLACIALTECH INC.**
 Product: **LED Flood Light**
 Model: **GL-FL100xyz**
 (xyz maybe any character or number or blank for marketing purpose only)
 Comment Issues: **N/A**
 Manufacturer: **GLACIALTECH INC.**

Date test item received: 2015/04/09
 Date test campaign completed: 2015/04/23
 Date of issue: 2015/04/24

The test result only corresponds to the tested sample. It is not permitted to copy this report, in part or in full, without the permission of the test laboratory.

Total number of pages of this test report: 09 pages

Total number of pages of this test photos: 01 pages



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|---------------------------------|-----------------------------|--------------------------------|
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|---------------------------------|-----------------------------|--------------------------------|

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- ① ISO9001: TÜV Product Service
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- ⑤ FCC Registration Number: 90588, 91094, 91095

CONTENTS

| | |
|---|-------|
| ● EMC TEST REPORT | 1 |
| ● CONTENTS | 2 |
| 1 TEST REPORT CERTIFICATION | 3 |
| 2 GENERAL INFORMATIONS | 4 |
| 2.1 Description of EUT:..... | 4 |
| 2.2 Related Information of EUT:..... | 4 |
| 2.3 Tested Configuration: | 4 |
| 2.4 Deviation Record:..... | 4 |
| 2.5 Modification Record:..... | 4 |
| 3 GENERAL REQUIREMENTS | 5 |
| 4 MEASUREMENT PROCEDURE | 6 |
| 4.1 Measurement Set-up | 6 |
| 5 LIMITS | 7 |
| 5.1 Application Of Limits..... | 7 |
| 6 SUMMARY OF TEST RESULTS..... | 8 |
| 6.1 Emissions:..... | 8 |
| 7 TEST DATA & RELATED INFORMATIONS | 9 |
| 7.1 Emissions:..... | 9 |
| 7.1.1 Induced Current Density Test Data:..... | 9 |
| ANNEX A: PHOTOS | A1~A1 |

1 TEST REPORT CERTIFICATION

Client : GLACIALTECH INC.
Address : 9Fl., No. 352, Sec. 2, Jung Shan Rd., Jung He City, Taipei 235, Taiwan
Manufacturer : GLACIALTECH INC.
Address : 9Fl., No. 352, Sec. 2, Jung Shan Rd., Jung He City, Taipei 235, Taiwan
EUT : LED Flood Light
Model No. : GL-FL100xyz
(xyz maybe any character or number or blank for marketing purpose only)
Comment Issues : N/A
Test Standard : Emissions
EN 62493:2010

The testing described in this report has been carried out to the best of our knowledge and ability, and our responsibility is limited to the exercise of reasonable care. This certification is not intended to believe the sellers from their legal and/or contractual obligations.

2 GENERAL INFORMATIONS

2.1 Description of EUT:

LED Flood Light

2.2 Related Information of EUT:

Power Supply : AC 230V/50Hz

Power Line : Nonshielded Shielded None, Length: 1.2 m

Control Line : Nonshielded Shielded None, Length: m

* For more detailed features, please refer to User's Manual.

2.3 Tested Configuration:

No devices were required.

| Product | Manufacturer | Model No. | Serial No. | I/O Cable |
|---------|--------------|-----------|------------|-----------|
| -- | -- | -- | -- | -- |

2.4 Deviation Record:

(If any deviation from additions to or exclusions from test method must be stated)

N/A

2.5 Modification Record:

No modifications were required. (That is the EUT complied with the requirement as tested.)

3 GENERAL REQUIREMENTS

3.1 Supply Voltage

Measurements shall be carried out within $\pm 2\%$ of the maximum rated supply voltage.

Equipment which can be operated from an AC- and/or DC supply shall be measured from one AC supply at a single frequency.

3.2 Measurement Frequency Range

The measurement frequency range considered is from 20 kHz to 10 MHz (see Annex E).

3.3 Ambient Temperature

Measurements shall be carried out in the ambient temperature range 15 °C to 25 °C.

3.4 Measurement Equipment Requirements

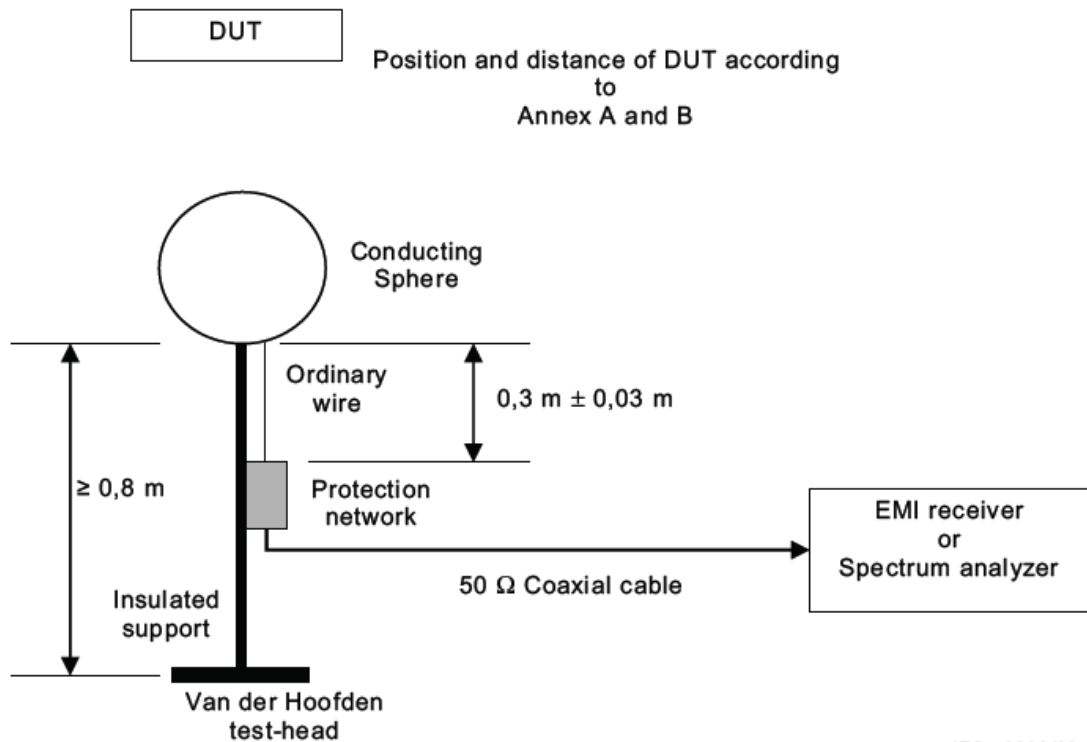
An electromagnetic interference (EMI) test receiver or spectrum analyser according to CISPR 16-1-1 is required, with the settings given in Table 2:

Receiver or spectrum analyser settings

| Frequency range | B_6 according to CISPR 16-1-1 | Measurement time | f_{step} | Detector |
|------------------|---------------------------------|------------------|-------------------|----------|
| 20 kHz – 150 kHz | 200 Hz | 100 ms | 220 Hz | Peak |
| 150 kHz – 10 MHz | 9 kHz | 20 ms | 10 kHz | Peak |

4 MEASUREMENT PROCEDURE

4.1 Measurement Set-up



DUT = device under test.

NOTE The EMI receiver or spectrum analyzer must be powered by mains including protective earth.

Measurement set-up

5 LIMITS

5.1 Application Of Limits

- CISPR 15:2005:
 - § 4.3.1: Disturbance voltage mains terminals in the frequency range from 20 kHz to 30 MHz;
 - § 4.4: Radiated electromagnetic disturbances in the frequency range from 100 kHz to 30 MHz;
- CISPR 15:2005, Amendment 1 (2006):
 - § 4.4.2: Radiated electromagnetic disturbances in the frequency range from 30 MHz to 300MHz;
- the measured (weighted and summarized) induced current density due to the electric field in the frequency range 20 kHz to 10 MHz does not exceed the factor (F) 0,85 as defined in Annex D.

$$\sum_{f_j = 20 \text{ kHz}}^{150 \text{ kHz}} \frac{J_{\text{culot}}(f_j, d)}{J_{\text{Lim}}(f_j)} + \sum_{f_j = 150 \text{ kHz}}^{10 \text{ MHz}} \frac{J_{\text{culot}}(f_j, d)}{J_{\text{Lim}}(f_j)} \leq 0,85$$

Pas = 220 Hz Pas = 10 kHz

6 SUMMARY OF TEST RESULTS

6.1 Emissions:

| APPLICATION OF LIMITS | | | |
|------------------------------|---|-------------------------------|---------------------|
| NO. | Test item | Reference from.... | Test results |
| (1) | Disturbance voltage mains terminals in the frequency range from 20 kHz to 30 MHz | 1502015E-01 | PASS |
| (2) | Radiated electromagnetic disturbances in the frequency range from 100 kHz to 30 MHz | 1502015E-01 | PASS |
| (3) | Radiated electromagnetic disturbances in the frequency range from 30 MHz to 300 MHz | 1502015E-01 | PASS |
| (4) | Induced current density from 20 KHz to 10MHz | See measurement results below | PASS |

7 TEST DATA & RELATED INFORMATIONS

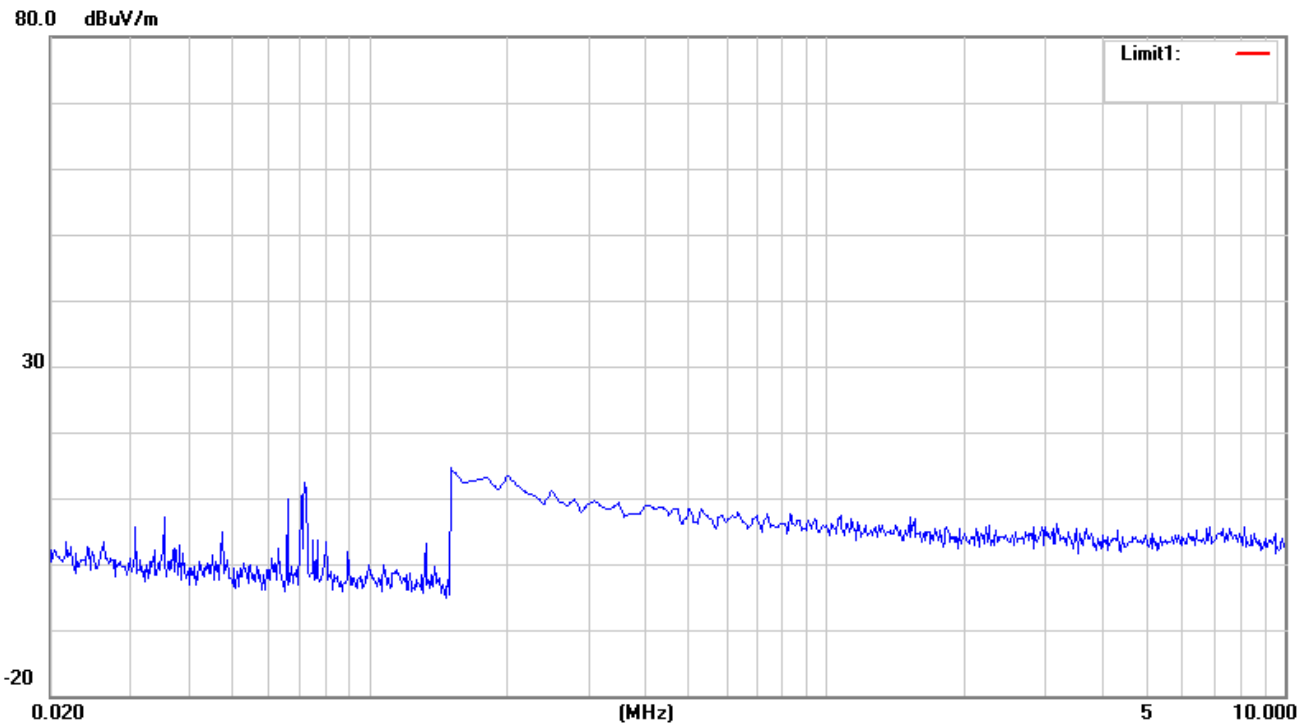
7.1 Emissions:

7.1.1 Induced Current Density Test Data:

A. Operating Conditions of the EUT: Operation Mode

Test Date: Apr. 23, 2015

| | | | |
|---------------------|--|----------------------------------|---------------------------------------|
| Test Specification | EN 62493:2010 | | |
| Test Equipment | Van Der Hoofden Test Head \ AFJ \ VDH30 EMI receiver \ R&S \ ESCI | | |
| Climatic Condition | Ambient Temperature: <u>23</u> °C | Relative Humidity: <u>62</u> %RH | Atmospheric Pressure: <u>983</u> mbar |
| Test Result | PASS , F= 0.024665 | Frequency Range: 20KHz~10MHz | |
| Power Supply System | AC Power: <u>230</u> V <u>50</u> Hz | | |



| | | |
|---|----------------------------|---------------------|
| Measuring Distance(cm): <u>200</u> | | |
| Frequency | F (Limit:F<0.85) | TEST RESULTS |
| 20KHz~10MHz | 0.024665 | PASS |

ANNEX A: PHOTOS**1. Induced Current Density Test Setup Photos**