

# Electrical measurements

## General information

Subject : IZYLUM Size 3 - 60 led's LH351C - OSRAM 100W driver 600mA - Nema - CL II

Asked by : SZÜGYI János Péter

Created on : 25/10/2019

Test number : D191001

Sample(s) : E190757

Folder : P-F19086

## Test conditions

Luminaire : IZYLUM 3

Number of LED : 60

LED : Samsung LH351C

Driver : Optotronic OT100/120-277/800 2DIM LT2 P / 00-14-566

Number of driver(s) : 1

Driver current (mA) : 600

Driver info : Tc (max ) 85 °C


SPD : Izyhub full control fuse CLII 01-01-810

Operator : KOY Fiston



IMG\_5370

## Conclusion

 Informative

Conclusion :

PF : 0,98

Efficiency : 90,9%

THD : 11,4%

Harmonics : OK according to IEC 61000-3-2, Class C, > 25 W

Validated by :

GHYSENS Gilles

Duplicate to : SZÜGYI János Péter, HORVÁTH Csaba, BEDŐ

Péter, BOS Peter

LAB : 19/11/2019

**D191001**

1/3



# Test(s) details

## Test(s)

| Name         | Description | Result  |
|--------------|-------------|---------|
| Test @ 600mA |             | Success |

## Test @ 600mA

## Annex(es)

### Harmonic current emissions (IEC 61000-3-2, Class C, > 25W)

Driver : Optotronic OT100/120-277/800 2DIM LT2 P / 00-14-566

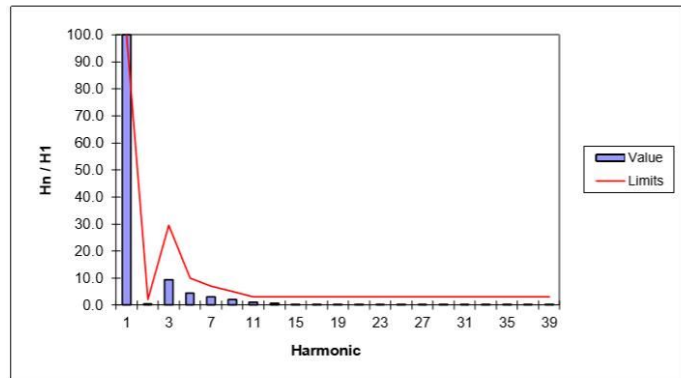
Tc (max) 85 °C

Date 05/11/2019

Operator FKY Norma AQ number E110

| Harmonic | Taux (%) | Limite (% H1) |
|----------|----------|---------------|
| 1        | 100.0    | 100.0         |
| 2        | 0.4      | 2.0           |
| 3        | 9.4      | 29.5          |
| 5        | 4.3      | 10.0          |
| 7        | 3.0      | 7.0           |
| 9        | 2.0      | 5.0           |
| 11       | 1.2      | 3.0           |
| 13       | 0.7      | 3.0           |
| 15       | 0.4      | 3.0           |
| 17       | 0.2      | 3.0           |
| 19       | 0.1      | 3.0           |
| 21       | 0.1      | 3.0           |
| 23       | 0.2      | 3.0           |
| 25       | 0.2      | 3.0           |
| 27       | 0.2      | 3.0           |
| 29       | 0.2      | 3.0           |
| 31       | 0.2      | 3.0           |
| 33       | 0.1      | 3.0           |
| 35       | 0.2      | 3.0           |
| 37       | 0.1      | 3.0           |
| 39       | 0.1      | 3.0           |

Power Factor 0.9826 Cos φ (H01) 0.9889



| input            |           | output 1 |         |
|------------------|-----------|----------|---------|
| Urms             | 229.9 V   | Urms     | 170.2 V |
| Irms             | 0.520 A   | Irms     | 0.628 A |
| Prms             | 117.5 W   | Prms     | 106.8 W |
| S                | 119.6 VA  |          |         |
| Q                | -22.2 VAR |          |         |
| PF               | 0.9826    |          |         |
| I <sub>H01</sub> | 0.517 A   | Uavg     | 170.2 V |
| Cos φ (H01)      | 0.9889    | Iavg     | 0.627 A |
| η rms            | 90.9%     | Pavg     | 106.7 W |
| η avg            | 90.9%     |          |         |
| THD              | 11.4%     |          |         |

IZYLUM Size 3 - 60 LH351C - OSRAM 100W

**Measurement equipment :**

Norma 4000 (E110)

APT (E102)

**Quantities measured :**

Qualification of the thermal limits and measurement of the electrical behavior of a luminaire according to PT-S-07

**Uncertainties :**

Statement of uncertainties (K=2, 95% of confidence level):

Temperature: 0,6 °K

Voltage (AC): 0,33%

Current (AC): 0,33 %

Power (AC): 0,27%

Voltage (DC): 0,3 %

Current (DC): 0,3%

Power (DC): 0,23%

Anemometer:  $\pm 0,27$  m/s

**Decision rules :**

No pass/fail criteria applied on electrical measurements

**End of test report :**

---