

# Laboratory Service PHYSICAL TEST REPORT



**R-Tech**  
Rue de Mons 3 – B-4000 Liège – Belgium  
Tel.: +32 4 224 71 40 – Fax: +32 4 224 25 90  
Member of Schröder Group

**Subject:** CITEA MINI NG 48 led's

Sample n°: P-E16015, P-E16098

**Test purpose:** Thermal test evaluation @ 350 & 500 mA following IEC/EN 60598-1 Standard

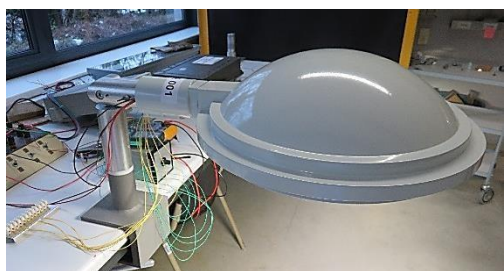
**Remarks:**

Test request n°: P-D16142

Folder n°: P-F16004

**TEST CONDITIONS:**

Operator: LEONARD Philippe



Load: 48 led's  
PCBA: 2x 24 led's

Driver: PHILIPS Xi LP 75 W 0.2 – 0.7 A SI 230 V S240 sXt  
Ref: 9290 009 63206

**Measurement device:**

Yokogawa TX10: thermal measurement

Yokogawa WT 210: primary EM

Fluke 87: secondary and led's EM

**Junction Temperature measurement method**

Junction temperature measurement by base temperature measurement and electrical measurement.

$$T^{\circ}_j = T^{\circ}_b + R_{jb} \times P_{led}$$

**CONCLUSIONS:**



@ 500 mA

Ta (IEC): 55 °C limited by Driver

Tq (IEC): >35 °C limited by Driver

Tq given for 100 khrs of lifetime

T° given without wind effect to comply with IEC 62722-2-1

Duplicate to: Mr M. Thijs

LAB 09/03/2016

L. Maghe

//P-16CR142