Laboratory
Test report

R-Tech
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Member of Schréder Group

FORM L-54 Edition 01 – Revision 01 - Date: 10/09/2019

Electrical measurements

General information

Subject : IZYLUM Size 1 - 20 led's LH351C - OSRAM 50W driver 700mA - Nema - CL I

Asked by : SZÜGYI János Péter

Created on : 23/10/2019

Validated on : 30/10/2019

Test number : D190982

Sample(s) : E190743

Folder : P-F19084

Test conditions

Luminaire : IZYLUM 1

Number of LED : 20

LED : Samsung LH351C

Driver : Optotronic OT50/120-277/800 2DIM LT2 P / 00-14-564

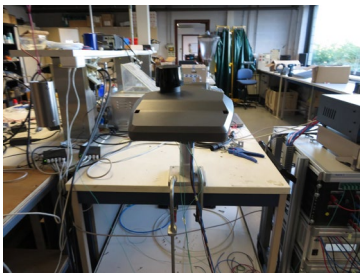
Number of driver(s) : 1

Driver info : Tc (max): 85°C

Driver current (mA) : 700

SPD : Izyhub Full Control Fuse CLI - 01-01-808

Operator : KOY Fiston



IMG_5301

Conclusion

Informative

Conclusion :

PF : 0,97
Efficiency : 85,3%
THD : 12,3%
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 : 05/11/2019

Test(s) details

Test(s)

Name	Description	Result
Test @ 700mA		Informative

Test @ 700mA

Annex(es)

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

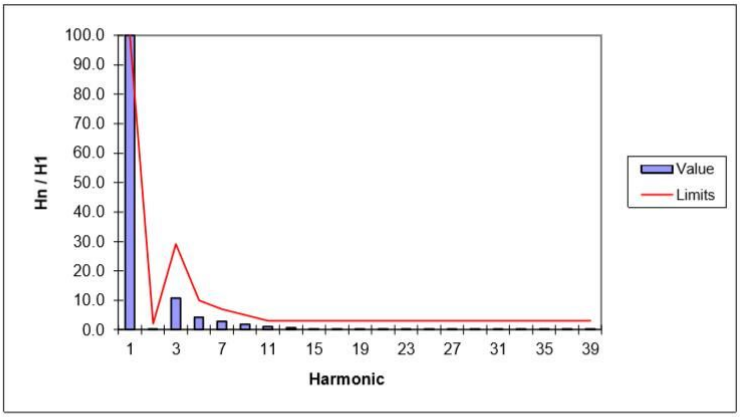
Driver : Optotronic OT50/120-277/800 2DIM LT2 P / 00-14-564 Tc (max) 85°C

Date 29/10/2019

Operator FKY Norma AQ number E110

Power Factor 0.9714 Cos φ (H01) 0.9786

Harmonic	Taux (%)	Limite (% H1)
1	**100.0**	100.0
2	0.2	2.0
3	10.7	29.1
5	4.3	10.0
7	2.8	7.0
9	1.9	5.0
11	1.1	3.0
13	0.7	3.0
15	0.2	3.0
17	0.2	3.0
19	0.1	3.0
21	0.3	3.0
23	0.1	3.0
25	0.3	3.0
27	0.3	3.0
29	0.2	3.0
31	0.2	3.0
33	0.1	3.0
35	0.0	3.0
37	0.2	3.0
39	0.1	3.0



input		output 1	
Urms	230.0 V	Urms	57.2 V
Irms	0.208 A	Irms	0.694 A
Prms	46.6 W	Prms	39.7 W
S	48.0 VA		
Q	-11.4 VAR		
PF	0.9714		
$I_{(H01)}$	0.207 A	Uavg	57.2 V
Cos φ (H01)	0.9786	Iavg	0.694 A
η rms	85.3%	Pavg	39.7 W
η avg	85.3%		
THD	12.3%		

IZYLUM Size 1 - 20 LH351C - OSRAM 50W - 700mA - Nema - CL I

Test room temperature (°C) : **24.9**

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: ± 0,27 m/s

Decision rules

No pass/fail criteria applied on electrical measurements

Pass/fail criteria on thermal qualification

At the announced Ta, no component is above its maximum limit of operation reduced by the uncertainty on the temperature measurement: pass

At the announced Ta, at least 1 component is above its maximum limit of operation augmented by the uncertainty on the temperature measurement: fail

At the announced Ta, at least 1 component is at its maximum limit of operation ± the uncertainty on the temperature measurement and no other component is above its maximum limit of operation augmented by the uncertainty on the temperature measurement: pass with remark

According to IEC 60598-2-3 and IEC 60598-2-5 Standards, the maximum limit of every component can be augmented by 10 K provided that the luminaire is intended for outdoor use only.

At the announced Tq, no component is above its selected performance limit of operation reduced by the uncertainty on the temperature measurement: pass

At the announced Tq, at least 1 component is above its selected performance limit of operation augmented by the uncertainty on the temperature measurement: fail

At the announced Tq, at least 1 component is at its selected performance limit of operation ± the uncertainty on the temperature measurement and no other component is above its selected performance limit of operation augmented by the uncertainty on the temperature measurement: pass with remark

According to IEC 62722-2-1, the selected performance limit cannot be augmented by 10 K even if the luminaire is intended for outdoor use.

Any Ta/Tq defined value will be rounded down to the nearest multiple of 5.

End of test report----------