

Laboratory Test report



226-TEST

NBN EN ISO/IEC 17025 :2017



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FORM L-54 Edition 01 – Revision 02 - Date: 14/11/2019

Electrical measurements

General information

Subject : IZYLUM 4 - 240 Osconiq S3030 - 2x LG 110W - Nema - CL I

Asked by : SZÜGYI János Péter

Created on : 08/04/2020

Started on : 10/04/2020

Test number : D200475

Sample(s) : E200256

Folder : P-F20015

Test conditions

Luminaire : IZYLUM 4

Operator : CLOSSET Frédéric

Number of LED : 240

LED : Osram OSCONIQ 3030S

Driver : LG 110W 200-700A Prog Modular EU / 00-36-982

Number of driver(s) : 2

SPD : Izyhub 01-01-808 Tc 80°C

Additional components : NEMA 7P

Conclusion



Informative

Conclusion :

PF : 0.99 (@700mA); 0.99 (@500mA)

Efficiency : 94.1% (@700mA); 93.6% (@500mA)

THD : 6.0% (@700mA); 7.9% (@500mA)

Harmonics : OK according to IEC 61000-3-2, Class C, P > 25 W (@100% dimming)

Validated by :

GHYSENS Gilles

Duplicate to : RACANELLI Frank, SZÜGYI János Péter,

HEYMANS Tom, HORVÁTH Csaba, BEDŐ Péter

LAB : 20/04/2020

D200475

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Test(s) details

Test(s)

Name	Description	Result
Test @ 500mA		Informative
Test @ 700mA		Informative

Test @ 500mA

Annex(es)

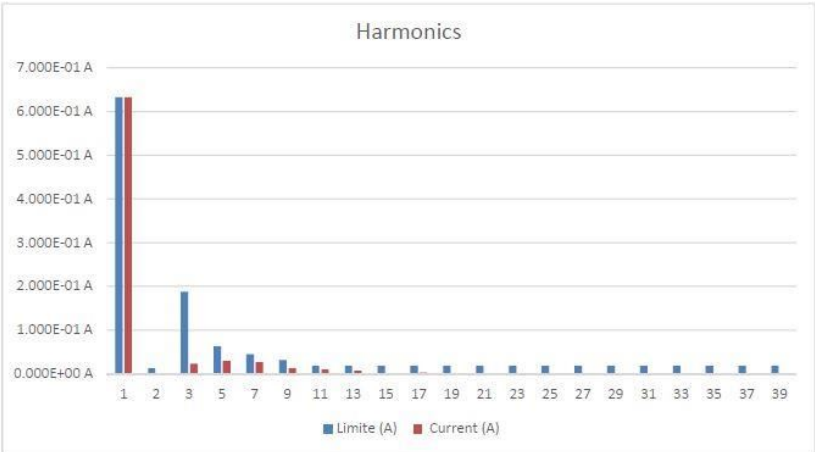
Harmonic current emissions (IEC 61000-3-2, Class C, > 25W)

IZYLUM Size 4 - 240 Osconiq S3030 - 2x LG 110W - Nema - CL I

Date09/04/2020

OperatorFCTNorma AQ numberE116
Power Factor0.9905Cos $\varphi_{(H01)}$ 0.9936

Harmonic	Current (A)	Limite (A)
1	6.327E-01 A	6.327E-01 A
2	1.449E-03 A	1.265E-02 A
3	2.316E-02 A	1.880E-01 A
5	2.923E-02 A	6.327E-02 A
7	2.682E-02 A	4.429E-02 A
9	1.286E-02 A	3.164E-02 A
11	1.051E-02 A	1.898E-02 A
13	7.311E-03 A	1.898E-02 A
15	2.067E-03 A	1.898E-02 A
17	2.724E-03 A	1.898E-02 A
19	2.661E-04 A	1.898E-02 A
21	9.636E-04 A	1.898E-02 A
23	1.384E-03 A	1.898E-02 A
25	1.766E-03 A	1.898E-02 A
27	7.665E-04 A	1.898E-02 A
29	1.212E-03 A	1.898E-02 A
31	8.430E-04 A	1.898E-02 A
33	1.052E-03 A	1.898E-02 A
35	6.535E-04 A	1.898E-02 A
37	5.658E-04 A	1.898E-02 A
39	4.524E-04 A	1.898E-02 A



input		output 1		output 2	
Urms	229.7 V	Urms	137.3 V	Urms	137.8 V
Irms	0.635 A	Irms	0.492 A	Irms	0.491 A
Prms	144.4 W	Prms	67.5 W	Prms	67.6 W
S	145.8 VA				
Q	-20.0 VAR				
PF	0.9905				
I_{H01}	0.633 A	Uavg	137.3 V	Uavg	137.8 V
$\cos \varphi_{(H01)}$	0.9936	Iavg	0.492 A	Iavg	0.491 A
η_{rms}	93.6%	Pavg	67.5 W	Pavg	67.6 W
η_{avg}	93.6%				
THD	7.9%				

2020-04-16 16_10_39-Window

Test @ 700mA

Annex(es)

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

IZYLUM Size 4 - 240 Osconiq S3030 - 2x LG 110W - Nema - CL I

Date 10/04/2020

Operator

FCT

Norma AQ number

E116

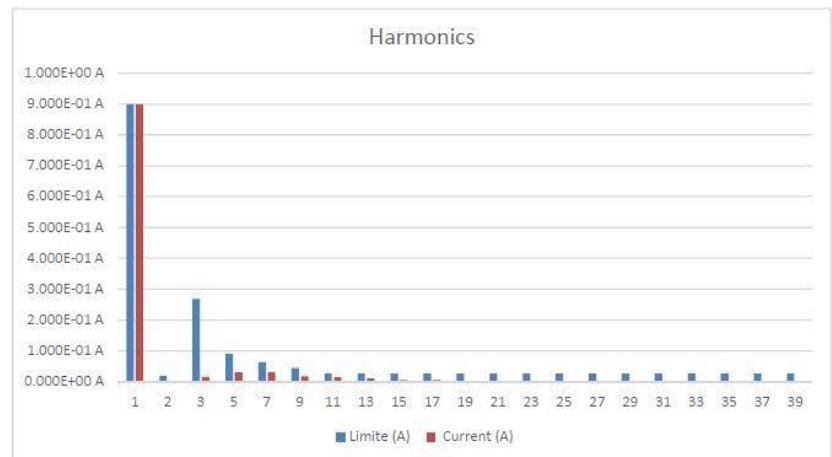
Power Factor

0.9947

Cos $\varphi_{(H01)}$

0.9965

Harmonic	Current (A)	Limite (A)
1	8.990E-01 A	8.990E-01 A
2	1.961E-03 A	1.798E-02 A
3	1.582E-02 A	2.683E-01 A
5	3.057E-02 A	8.990E-02 A
7	3.085E-02 A	6.293E-02 A
9	1.692E-02 A	4.495E-02 A
11	1.503E-02 A	2.697E-02 A
13	1.043E-02 A	2.697E-02 A
15	5.374E-03 A	2.697E-02 A
17	5.497E-03 A	2.697E-02 A
19	2.388E-03 A	2.697E-02 A
21	1.347E-03 A	2.697E-02 A
23	3.273E-04 A	2.697E-02 A
25	8.267E-04 A	2.697E-02 A
27	1.807E-04 A	2.697E-02 A
29	9.749E-04 A	2.697E-02 A
31	9.364E-04 A	2.697E-02 A
33	1.009E-03 A	2.697E-02 A
35	1.124E-03 A	2.697E-02 A
37	1.187E-03 A	2.697E-02 A
39	7.230E-04 A	2.697E-02 A



input		output 1		output 2	
Urms	229.6 V	Urms	140.3 V	Urms	140.9 V
Irms	0.901 A	Irms	0.689 A	Irms	0.688 A
Prms	205.8 W	Prms	96.7 W	Prms	97.0 W
S	206.9 VA				
Q	-21.2 VAR				
PF	0.9947				
$I_{(H01)}$	0.899 A	Uavg	140.3 V	Uavg	140.9 V
Cos $\varphi_{(H01)}$	0.9965	Iavg	0.689 A	Iavg	0.688 A
η_{rms}	94.1%	Pavg	96.7 W	Pavg	97.0 W
η_{avg}	94.1%				
THD	6.0%				

2020-04-16 16_10_57-Window

Test room temperature (°C) :

24.1 °C @ 0.5A

24.8 °C @ 0.7A

Measurement equipment :

Norma 4000 (E116)

APT (E108)

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 :
