

TEST REPORT

IES LM-79-08

Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products.

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Intertek Report No	CE-JOB-NDB-20-000154-001
Date of Report issue:	28.02.2020
Total number of pages	. 08
Testing Laboratory	Intertek India Private Limited
Address:	E-26, Block B1, Mohan Co-Operative Industrial Area, Mathura Road, New Delhi -110044, India
Customer / Applicant's name:	R. STAHL Private Ltd.
Address	Plot No. 5, Malrosapuram Main Road Sengundram Ind. Area Singaperumal Koil Kancheepuram Dist Tamilnadu PIN 603 204 India
Discipline:	Photometry
Product Group:	Light Sources (Electric Lamp)
Test specification:	
Standard:	IES LM-79-08
Non-standard test method:	N/A
Test Report Form No	LFT-APAC-IN-OP-10t
Version:	27 th Jan 2020
Test item description:	LED Flood Light
Trade Mark	STAHL
Manufacturer	R. STAHL Private Ltd.
Model/Type reference:	6525/2, 6125/2 -225W wide beam LED flood light

Tested by (Name + Signature + Function).........: SHASHANK PANDEY Private (Engineer)

Reviewed by (Name + Signature + Function)......: HARI OM

(Technical Leader - Lighting Performance)

An independent organization testing for safety, performance, and certification.

230V AC, 50Hz, 225W, 1.00A

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Registered Off.: Intertek India Private Limited

Ratings....:

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Total Quality. Assured

General product information:

The LED Light is provided with supply cord for connection.

Binning details: N6 B2 K2, 5700K, CRI70

LED Details*:

Make: Osram, Model: ----, No. of LEDs:----

LED Controlgear/Driver Details*:

Make: ----, Model: ----, No. of LED Drivers: ----

LEDs provided with Lenses /Glass/-Diffuser-....: Yes/No.

Note:

*As declared by the Customer / Applicant.

Testing:

Condition of Sample Received........ Physically good

Sample Identification no(s)...... D26200131-008

Sample Serial no(s).....

Date (s) of performance of tests......: 10.02,2020 & 11.02,2020

Laboratory conditions:

Ambient Temperature..... 25 ± 4°C

Relative humidity...... Less than 70 %

General remarks (If any):

The test results reported in this report relate only to the sample tested.

This report shall not be reproduced, except in full, without the written approval of report issuing testing laboratory.

Remarks:

The results tabulated in this report are representative of the actual test sample(s) submitted for this report only. The data is provided to the customer for further evaluation. Compliance to the referenced specification requirements is not determined in this report.

The report format is customized as per customer (R. STAHL Private Ltd.) request

This report includes Annexure A (total 5pages) and shall be read in conjunction with this report no. CE-JOB-NDB-20-000154-001



SUMMARY OF TEST RESULTS								
Sr. No.	Tests performed (name of test and test clause)	Verdict						
1.	Electrical and Photometric measurements (Clause 8, 9, 10 and 11)	To be evaluated by customer						
2.	Colorimetric measurements (Clause 12)	To be evaluated by customer						

EQUIPMENTS USED								
Sr. No. Equipment ID		Equipment name	Last calibration date	Next calibration date				
1	ETL-LED-0094	High Speed Type-C Goniophotometer	Verified before use	Verified before use				
2	ETL-LED-0095	Luminous Intensity Standard Lamp	05.10.2015	After 50Hrs. burning time				
3	ETL-LED-0096	Luminous Intensity Standard Lamp	05.10.2015	After 50Hrs. burning time				
4	ETL-LED-0097	Luminous Intensity Standard Lamp	05.10.2015	After 50Hrs. burning time				
5	ETL-LED-0100	Digital Power Meter	13.06.2019	12.06.2020				
6	ETL-LED-0105	Integrating Sphere	Verified before use	Verified before use				
7	ETL-LED-0106 Spectral Flux Calibrated Standard Lamp		11.11.2015	After 50Hrs. burning time				
8	ETL-LED-0111	Digital Power Meter	17.04.2019	16.04.2020				
9	ETL-LED-0294	Humidity-cum Temperature Meter	12.11.2019	11.11.2020				



Test No.01 Electrical and Photometric measurements - Distribution Method

TEST METHOD:

A LSI Type C High Speed Model 6440 Mirror Goniometer was used to measure the intensity (candelas) at each angle of distribution for each sample. Photometric distance was more than five times of the largest dimension of the test sample i.e. 8.63meter.

Ambient temperature was measured equal to the height of the sample mounted on the Goniometer equipment. The ambient temperature was maintained at 25.1°C during testing.

Sample was operated at input rated voltage in its designated orientation as specified by Manufacturer.

Electrical measurements including voltage, current, and power were measured using the Yokogawa WT310 digital power meter.

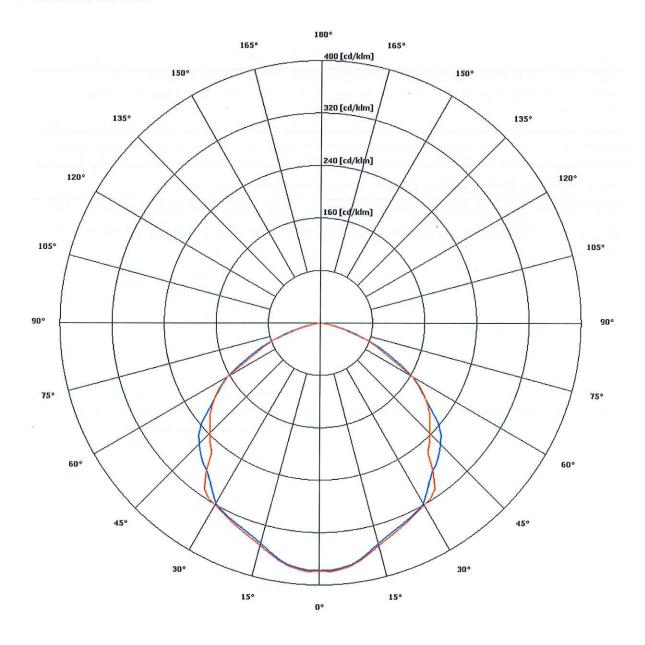
Each sample was allowed to stabilize before measurements were made. The condition of the sample tested was new. Stabilization time before testing was 90 minutes.

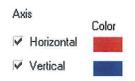
TEST RESULTS

Input Voltage	Input Frequency	Input Current	Input Power	Input Power	
(Vac)	(Hz)	(A)	(W)	Factor	
230.04	50.0	0.976	220.46	0.982	

Total Luminous	Luminous				
Flux (lm)	Efficacy (lm/W)				
22654.0	102.8				









Total Quality. Assured.

Test No.02 Colorimetric Measurements - Integrating Sphere Method

TEST METHOD:

A Labsphere Three Meter Integrating Sphere was used to measure correlated color temperature, chromaticity coordinates and the color rendering index for each sample. 4π geometry was used.

Orientation (burning position) of product during testing was its normal burning position as specified by manufacturer.

Ambient temperature was measured at a position inside the sphere and was maintained at 25.1°C during testing.

Sample was allowed to stabilize for at least thirty minutes before measurements were made. The Stabilization time for the sample was **87** minutes. The condition of the sample tested was new.

Electrical measurements including voltage, current, and power were measure using the Xitron Power Meter.

The calibration of the sphere spectroradiometer system is traceable to the National Institute of Standards and Technology.

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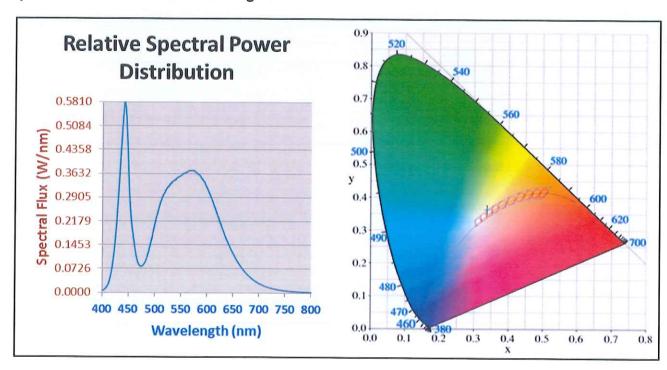


Spectral Distribution

Dominant Wavelength nm	Radiant Flux	Peak Wavelength nm
561	67.307	442

C	CT	С	RI	,	(y	D	uv	ι	ı'	1	<i>i</i> '
528	36.0	71	.7	0.3	383	0.3	633	0.0	085	0.2	025	0.4	892
R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
67.8	75.4	83.9	73.3	70.6	69.5	78.9	53.9	-42	44.6	73.3	53.3	68.4	91.1

Spectral Data over Visible Wavelengths





SAMPLE PHOTOGRAPHS:



Front View



Rear View

*****End of report****