ARTIKA FOR LIVING

TEST REPORT

SCOPE OF WORK
PERFORMANCE TEST ACCORDING TO LM79 - LED SOURCE PRODUCTS
MODEL NO.: 36BOL-DS-followed by six characters

REPORT NUMBER
220500032HZH-001

ISSUE DATE	**[REVISED DATE]**
9-May-2022	[None]

PAGES
10

DOCUMENT CONTROL NUMBER
Test Template _ HZH_ LM79 ED2.0

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TEST REPORT

REPORT NO. 220500032HZH-001

TEST OF LM-79
For <LED Luminaire>

MODEL NO. 36BOL-DS-followed by six characters

RENDERED TO

ARTIKA FOR LIVING
1756 50th avenue, Qc, CanadaH8T 2V5

STATEMENT OF ACCREDITATION AND LIMITATION

This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government.

STANDARDS USED

The following standards or test guides were used in part or totally to test each specimen:

ORGANIZATION	IDENTIFIER	TITLE
IESNA	LM-79-2008	Approved Method for Electrical and Photometric Measurements of Solid-State Lighting Products
ANSI / ANSLG	C78.377-2015	Specifications of the Chromaticity of Solid State Lighting Products

DESCRIPTION OF SAMPLE

The client submitted LED produced on May of 2022, total 1 sample of model number 20365. The sample was received by Intertek Hangzhou on May 5, 2022 in normal condition, and the sample was tested as received.

DATES OF TESTS

May 5, 2022 to May 9, 2022

Issued by Intertek Testing Services Zhejiang ltd Hangzhou branch
Test Location: 4th floor,Building 4#,No.22,22nd Street,Qiantang District, Hangzhou, 310018 China

TEST REPORT

SUMMARY

TEST MODEL:	36BOL-DS-followed by six characters
DFAMILY MODEL:	NA
DESIGN CATEGORY:	Lighting Technology
RATED VALUE	220-240VAC, 50/60Hz, 13W
COLOR-TUNABLE:	N/A
REMARK	According to applicant's requirement, all measured regulated to 120V AC,60Hz.

Criteria	Result
Input Voltage(Vac)	120
Frequency(Hz)	60
Total Power (W)	12.52
Power Factor	0.977
Total Lumen Output (Lumens)	433.2
Luminaire Efficacy (LPW)	34.60
Correlated Color Temperature (CCT - K)	3110
Color Rendering Index (CRI) – Ra	91.7
Color Rendering Index (CRI) - R9	56
Duv	-0.0011
Chromaticity Coordinate (x)	0.4279
Chromaticity Coordinate (y)	0.3981
Chromaticity Coordinate (u')	0.2473
Chromaticity Coordinate (v')	0.5177

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EQUIPMENT LIST

Equipment Used	Control Number	Model Number	Manufacturer
Fluke Temperature Meter	EH1513	52II	Fluke
Power Supply for integrating sphere	EH2324-2	APW-105N	Allpower
Digital Power Meter for integrating sphere	EH2106	2053AH	XITRON
Integrating sphere	EH2108-2	2m	Sensing
Spectroradiometer	EH2385	MCS-2000	Sensing
Power source for Goniophotometer System	EH2453-1	DPS1060_V200	Everfine
Digital Power Meter for goniophotometer	EH2453-3	WT-310E	Everfine
Goniophotometer System	EH2453	GO-R5000	Everfine

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TEST REPORT

TEST METHODS

SEASONING IN SAMPLE ORIENTATION – LED PRODUCTS
No seasoning was performed in accordance with IESNA LM-79

TEST CONDITION

The voltage of power supply (RMS value) applied for all EUTs was regulated to 120VAC or other rated voltage within ±0.2 percent at 60Hz. Each EUT was pre-conditioned to stabilization status according to IESNA LM-79 before testing. Temperature of 25ºC±1 was maintained for initial photometric testing.

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS – DISTRIBUTION METHOD

Total light output (luminous flux) and light distribution were measured using a Go-R5000 Type-C Rotating Mirror Goniophotometer measurement system, Goniometer was used to measure the intensity (candelas) at each angle of distribution for each sample. Ambient temperature was measured equal to the height of the sample mounted on the Goniometer equipment. Electrical measurements including voltage, current, and power were measured using the power analyzer. Some graphics were created with Photometrics Plus software.

PHOTOMETRIC AND ELECTRICAL MEASUREMENTS – INTEGRATING SPHERE METHOD

A spectroradiometer and two meters sphere was used to measure correlated color temperature, chromaticity coordinates, and the color rendering index for each SSL unit. Ambient temperature was measured at a position inside the sphere. Electrical measurements including voltage, current, and power were measured using the power analyzer.

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TEST REPORT

RESULTS OF TESTS

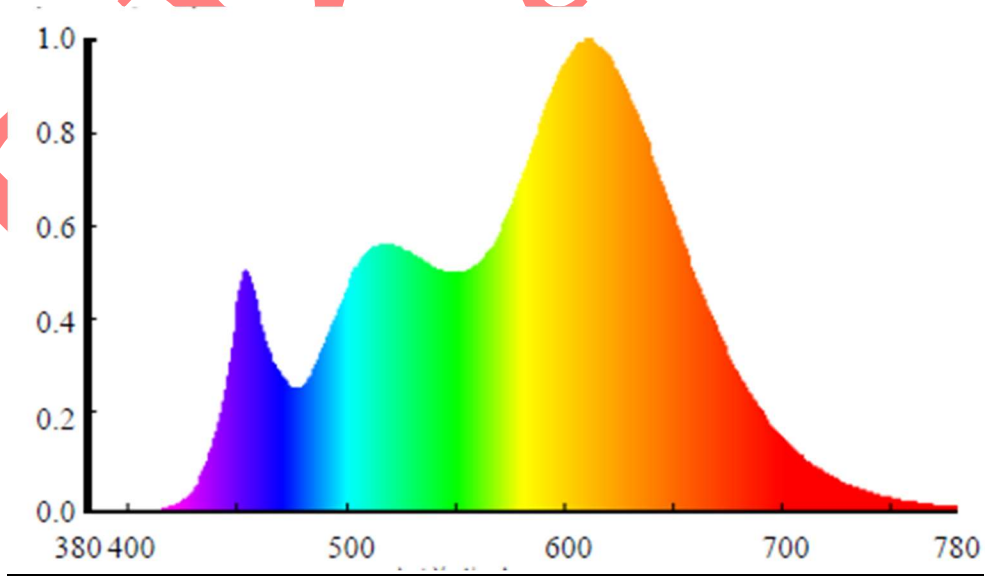
PHOTOMETRIC AND ELECTRICAL MEASUREMENTS AT 25°C

MODEL NO .	INPUT VOLTAGE (Vac)	INPUT CURRENT (A)	INPUT POWER (WATTS)	INPUT POWER FACTOR	CURRENT ATHD (%)	ABSOLUTE LUMINOUS FLUX (LUMENS)	EFFICACY (LUMENS PER WATT)	STABILIZED TIME (MIN.)
36BOL-DS- followed by six characters	120.0	0.107	12.52	0.977	--	433.2	34.60	30

COLOR MEASUREMENTS AT 25°C (SPHERE METHOD)

CCT (K)	CRI -RA	CRI -R9	DUV	CIE 31' CHROMATICITY COORDINATE (X)	CIE 31' CHROMATICITY COORDINATE (Y)	CIE 76' CHROMATICITY COORDINATE (U')	CIE 76' CHROMATICITY COORDINATE (V')
3110	91.7	56	-0.0011	0.4279	0.3981	0.2473	0.5177

SPECTRAL DATA OVER VISIBLE WAVELENGTHS



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TEST REPORT

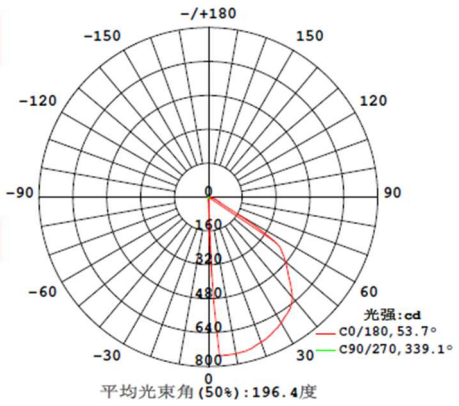
RESULTS OF TESTS(CONT'D)

ZONAL LUMEN SUMMARY AND PERCENTAGES AT 25°C(DISTRIBUTE METHOD)

Zone	Lumens (lm)	% Luminaire %
0-30	132.3	30.5
0-60	396.8	91.6
0-90	430.3	99.3
0-120	432.9	99.9
0-180	433.2	100.0

INTENSITY (CANDLEPOWER) SUMMARY AT 25°C – CANDELAS

	HORIZONTAL				
VERTICAL Angle	0	22.5	45	67.5	90
0	0.9	0.9	0.9	0.9	0.9
5	751.5	841.9	885.6	79.0	0.2
10	749.9	832.7	873.9	355.6	1.2
15	744.2	819.4	853.1	554.9	3.5
20	728.6	803.2	831.7	616.0	4.9
25	709.5	780.1	806.7	634.6	5.8
30	686.3	756.3	778.4	631.4	6.3
35	659.1	721.2	742.5	624.9	6.4
40	615.8	665.5	680.3	593.9	6.3
45	538.0	582.2	608.4	530.6	5.9
50	475.7	510.0	517.6	466.0	5.4
55	413.0	435.2	431.8	380.8	4.6
60	157.5	168.8	244.3	270.1	3.8
65	58.6	58.6	47.3	102.3	2.8
70	42.3	40.8	27.1	13.6	1.6
75	28.3	26.3	13.9	6.6	0.6
80	18.3	16.7	6.1	3.1	0.1
85	14.1	13.5	4.3	2.2	0.0
90	13.0	12.4	4.0	1.8	0.0



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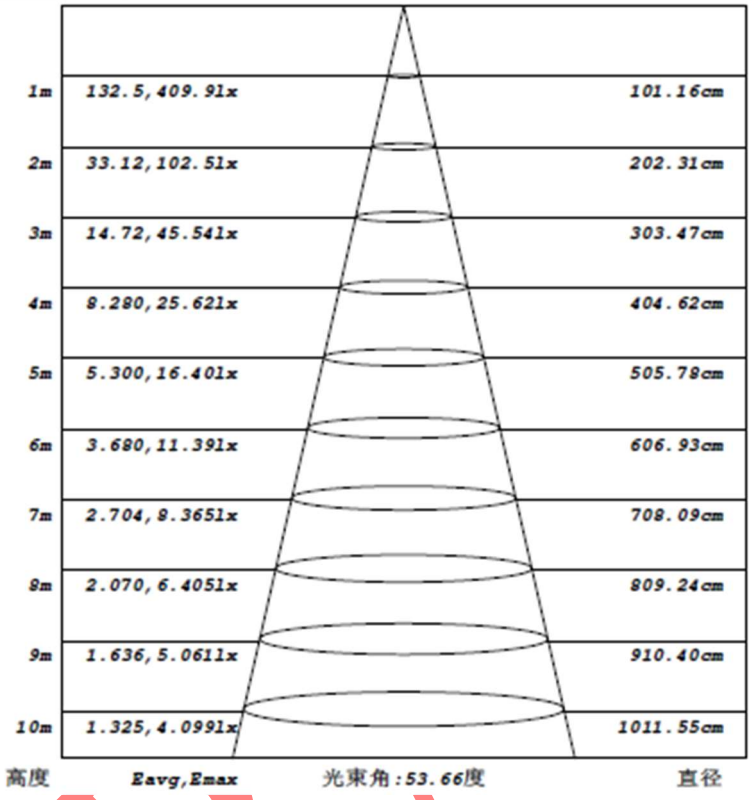
RESULTS OF TESTS(CONT'D)

ILLUMINANCE - CONE OF LIGHT



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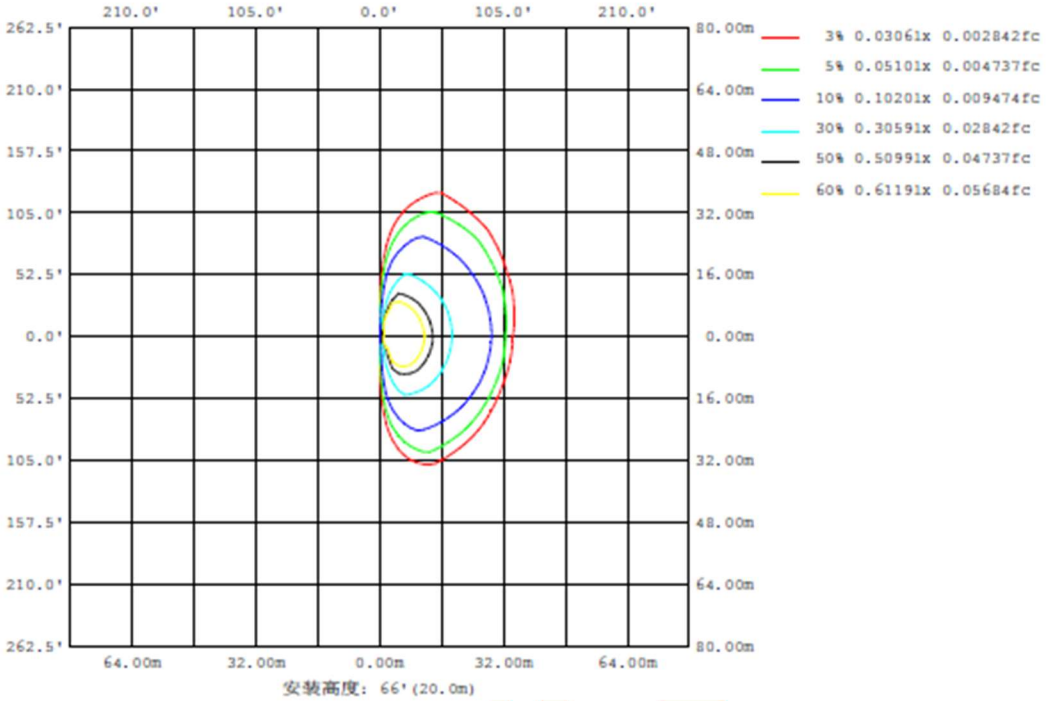
ISOILLUMINATION PLOT



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PICTURES:

Overview

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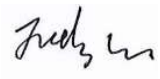
TEST REPORT

CONCLUSION

1. The results tabulated in this report are representative of the actual test samples submitted for this report only. Compliance to the referenced specification requirements was not determined in this report.

Attachment: None

In Charge of Tests:
Judy Hu



Engineer
Lighting Division

Report Reviewed By:
Meng Wang

Reviewer
Lighting Division

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