



## LM-79-08 Test Report

For

### JOINT Lighting Inc.

(Brand Name: N/A)

One Greenway Plaza, Suite 1018, HOUSTON TX 77046

### Model name(s):

**JNT18-SLA750A-XXK-N-U-Z-X-Y**

**Report Type:** Testing and Report According to IES LM-79-2008

**Type of Luminaire:** Architectural Flood and Spot Luminaires

**Report Date:** 2020-07-14

Ningbo TengLi Testing Co., Ltd

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Test & Report By:

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Engineer: Xeon Ren

Review By:

*Johnson Sun*

Manager: Johnson Sun

Note: 1. The results contained in this report pertain only to the tested samples

2. This report does not imply product certification, approval, or endorsement by A2LA, or any agency of the Federal Government.



<b>1.1 Product Information:</b>		
Model Number	JNT18-SLA750A-XXK-N-U-Z-X-Y	
Remark	<p>Where "XX" represents CCT (40=4000K,50=5000K,57=5700K).</p> <p>Where "N" represents lens Optics, can be 3 to 5(3-NEMA3; 4-NEMA4; 5-NEMA5).</p> <p>Where "U" represents finish, can be B=Black.</p> <p>Where "Z" represents Installation, can be Z1 to Z2 (Z1- Trunnion; Z2-Slip Fitter;)</p> <p>Where "X" represents driver manufacturer, can be "X1" represents Meanwell, "X2" represents Inventronics.</p> <p>Where "Y" represents different driver house, can be Y1=Round driver housing, Y2=Square driver housing.</p>	
Representative (Tested) Model	JNT18-SLA750A-40K-4-B-Z1-X2-Y2	
Model Difference	All construction and rating are the same, except CCT	
SKU (if available)	N/A	
Type of Luminaire (for integral lamps, list base type and lamp type)	Architectural Flood and Spot Luminaires	
LED Manufacturer	LUMILEDS	
LED Model	L150-AABB50CC00000	
Dimming	Dimmable	
Integral Controls	Yes	
Sample Number	STD200446NB-I1(4000K)	
Date of Receipt	Jul.01, 2020	
Luminaire Aperture (for downlights)	--	in.
Luminaire Length	--	mm
Luminaires Width	--	mm
Number of Units (modular products)	N/A	s

<b>1.2 Rated Values:</b>	
Rated Voltage / Frequency	100-277Vac, 50/60 Hz
Nominal Power	750W
Rated Initial Lamp Lumen	--
Declared CCT	4000K



### 1.3 Test Specifications:

Test item	<ol style="list-style-type: none"> <li>1. Total Luminous Flux</li> <li>2. Luminous Distribution Intensity</li> <li>3. Luminous Efficacy</li> <li>4. Electrical Parameters</li> </ol>
Reference Standard	<ol style="list-style-type: none"> <li>1. IES LM-79-2008 Electrical and Photometric Measurements of Solid-State Lighting Products</li> </ol>

### 1.4 Test Methods

#### 1) Photometric and Light Distribution Measurement – Goniophotometer Method:

Photometric parameters were measured using the goniophotometer and software. The ambient temperature shall be maintained at  $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ , measured at a point not more than 1 m from the sample and at the same height as the sample. The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Luminous flux, luminaire efficacy, zonal lumen were calculated from the software taken at  $1\text{ }^{\circ}$  vertical intervals and  $22.5\text{ }^{\circ}$  horizontal intervals.

#### 2) Electrical Measurements:

Electrical parameters were measured using power meters incorporated in goniophotometer or sphere-spectroradiometer system. The ambient temperature surrounding the sample was maintained at  $25\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ . The sample was operated at 120 or rated Volts AC, 60Hz. It was stabilized before measurement was made. Voltage, frequency, current, power, power factor and total harmonic distortion were measured by and read from the power meter.



**2.1 Summary of Test Result**

Criteria Item	Measured Value		Compliance	Requirement (DLC V5.1)		
	120V	277V				
Power (W)	4000K	752.1	N/A	N/A		
		744.7				
Power Factor	4000K	0.9984	Pass	>= 0.9(-3%)		
		0.9483				
THD %	4000K	4.12	Pass	≤ 20(+5)		
		9.76				
Luminous Intensity Distribution	Zonal lumens in the (0-90 °) :		99.7	Pass	≥85(-3)	
Total Luminous	4000K	98352	Pass	≥1000(-10%)		
		94651				
Luminous Efficacy	4000K	130.77	Pass	Standard: ≥105(-3%)	Premium: ≥120(-3%)	
		127.10				



**2.2 Electrical, Photometric and Chromaticity Measurements**

<b>Test date</b>	2020-07-03	<b>Test Ambient:</b>	25.2 °C
<b>Test Orientation</b>	As intended	<b>Stabilization Time (min)</b>	60
<b>Model Number</b>	JNT18-SLA750A-40K-4-B-Z1-X2-Y2	<b>Total Operating Time(min)</b>	75

**Electrical Measurement:**

Sample No.	Voltage (Vac)	Frequency (Hz)	Current (A)	Power (W)	Power Factor	THD %
STD200446	119.9	60.01	6.283	752.1	0.9984	4.12
NB-I1	276.9	60.01	2.836	744.7	0.9483	9.76

**Photometric Measurement – Goniophotometer Method(Tset Dstance: 26.00m):**

Parameter	Result	
	Test Voltage (V)	120.0
Frequency (Hz)	60	60
Total Luminous (lm)	98352	94651
Luminous Efficacy (lm/W)	130.77	127.10
Zonal lumens in the (0 °-90 °)zone (%)	99.7	--
Beam Angle ( °)	29.9	--
Center Beam Candle Power (cd)	269203	--
BUG ratings	B5-U3-G2	

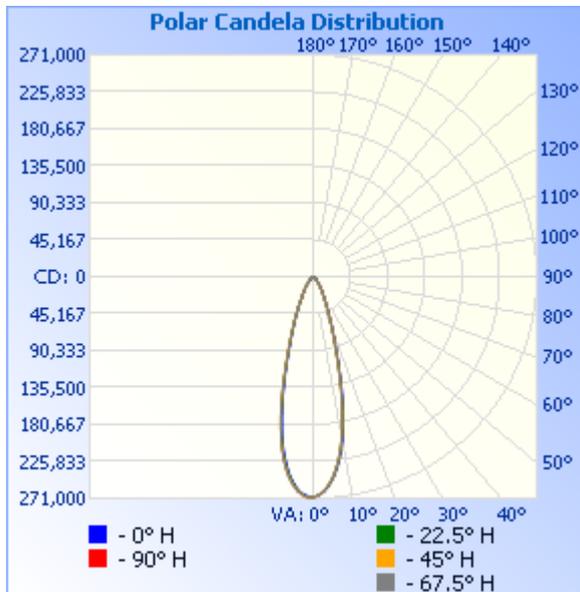


**Zonal Lumen Tabulation**

Zonal Lumen Summary		
Zone	Lumens	% Luminaire
0-30	78,382.6	79.7%
0-40	88,241.7	89.8%
0-60	95,812.5	97.5%
60-90	2,214.3	2.3%
70-100	914.1	0.9%
90-120	59.2	0.1%
0-90	98,026.8	99.7%
90-180	264.4	0.3%
0-180	98,291.2	100%

Lumens Per Zone					
Zone	Lumens	%Total	Zone	Lumens	% Total
0-10	22,732.3	23.1%	90-100	50.3	0.1%
10-20	36,198.7	36.8%	100-110	5.5	0%
20-30	19,451.6	19.8%	110-120	3.4	0%
30-40	9,859.1	10.0%	120-130	6.2	0%
40-50	4,876.5	5.0%	130-140	14.7	0%
50-60	2,694.3	2.7%	140-150	35.3	0%
60-70	1,350.5	1.4%	150-160	62.4	0.1%
70-80	643.9	0.7%	160-170	61.1	0.1%
80-90	219.9	0.2%	170-180	25.5	0%

**Photometric Data**



**Illuminance at a Distance**

	Center Beam fc	Beam Width	
3.3R	24,720 fc	1.8 ft	1.8 ft
6.7R	5,997 fc	3.6 ft	3.6 ft
10.0R	2,692 fc	5.3 ft	5.3 ft
13.3R	1,522 fc	7.1 ft	7.1 ft
16.7R	965 fc	8.9 ft	8.9 ft
20.0R	673 fc	10.6 ft	10.7 ft

■ Vert. Spread: 29.7°  
■ Horiz. Spread: 29.8°

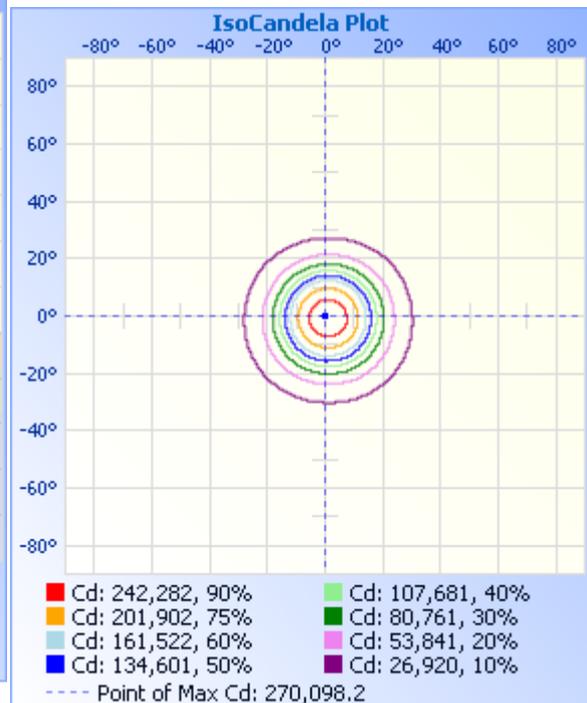
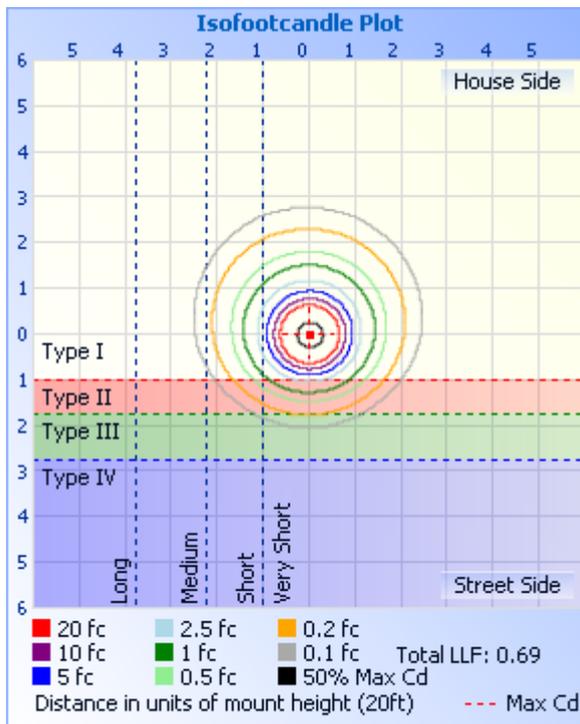




Table--1 UNIT: ×100cd

C (DEG) γ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5	
0	2692	2692	2692	2692	2692	2692	2692	2692	2692	2692	2692	2692	2692	2692	2692	2692	
5	2582	2564	2566	2530	2509	2507	2499	2490	2498	2506	2529	2543	2555	2569	2580	2589	
10	2150	2124	2101	2068	2029	2004	1990	1980	1999	2011	2045	2076	2109	2137	2158	2163	
15	1425	1397	1358	1305	1255	1219	1207	1210	1235	1259	1299	1335	1383	1419	1441	1449	
20	800	773	735	690	657	645	645	650	673	693	722	747	779	800	816	814	
25	458	432	406	375	355	350	352	359	381	399	417	429	449	463	473	468	
30	263	250	235	222	213	213	218	227	234	245	250	259	264	271	273	272	
35	167	158	147	137	132	131	137	142	150	157	164	169	173	176	176	175	
40	101	94.2	86.3	79.4	75.3	76.2	80.0	85.7	92.0	98.9	103	107	109	111	110	108	
45	66.3	59.5	52.9	46.7	42.7	43.5	47.2	52.1	58.0	64.9	69.3	72.8	74.2	76.1	75.6	72.9	
50	47.4	41.7	35.1	29.6	26.4	27.8	31.3	36.2	41.4	47.1	51.4	54.1	55.2	57.0	55.9	53.3	
55	33.2	25.9	21.1	17.8	16.3	16.4	19.4	23.3	28.8	32.8	35.7	37.7	40.4	40.2	39.9	37.3	
60	21.5	17.6	13.0	10.4	9.50	9.75	11.6	14.9	18.5	22.5	25.7	27.9	28.5	29.5	28.1	25.7	
65	14.6	10.9	7.68	6.31	5.39	5.79	6.62	9.17	12.5	15.6	18.5	20.1	21.0	21.5	20.9	17.9	
70	9.76	6.68	4.59	2.93	1.76	2.65	3.96	5.37	8.11	10.7	13.1	14.7	15.5	15.9	14.8	12.6	
75	6.36	3.94	2.55	1.03	0.08	0.98	2.15	3.07	5.26	7.54	9.46	11.0	11.4	11.9	10.7	8.97	
80	3.55	1.86	1.10	0.28	0.00	0.24	0.84	1.45	2.61	4.53	6.20	7.36	7.80	8.09	7.36	5.76	
85	1.37	0.62	0.22	0.02	0.00	0.01	0.12	0.33	0.80	2.20	3.46	4.31	4.67	4.84	4.30	3.05	
90	0.12	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.92	1.75	2.28	2.49	2.52	2.14	1.28	
95	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.35	0.84	1.24	1.45	1.39	1.09	0.55	
100	0.01	0.01	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.10	0.34	0.38	0.36	0.41	0.44	0.17	
105	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.12	0.03	0.05	0.04	0.16	0.03	
110	0.02	0.02	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.04	0.01	0.01	0.01	0.05	0.02	
115	0.03	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.03	0.02	0.01	0.02	0.03	0.03	
120	0.04	0.05	0.05	0.04	0.05	0.05	0.05	0.05	0.07	0.06	0.04	0.03	0.02	0.02	0.04	0.05	
125	0.06	0.07	0.07	0.06	0.07	0.06	0.08	0.08	0.10	0.09	0.07	0.04	0.04	0.03	0.05	0.07	
130	0.10	0.11	0.10	0.11	0.13	0.12	0.11	0.12	0.17	0.14	0.11	0.09	0.08	0.08	0.09	0.12	
135	0.17	0.17	0.15	0.19	0.19	0.19	0.17	0.20	0.27	0.24	0.18	0.17	0.16	0.16	0.14	0.19	
140	0.29	0.27	0.24	0.30	0.29	0.32	0.29	0.33	0.45	0.44	0.32	0.33	0.27	0.29	0.25	0.33	
145	0.48	0.45	0.41	0.50	0.50	0.54	0.50	0.54	0.82	0.74	0.60	0.65	0.54	0.51	0.50	0.59	
150	0.79	0.75	0.69	0.81	0.84	0.86	0.80	0.91	1.29	1.17	0.99	1.10	0.92	0.93	0.86	0.92	
155	1.20	1.16	1.09	1.17	1.24	1.23	1.28	1.35	1.80	1.70	1.48	1.71	1.33	1.32	1.55	1.40	
160	1.75	1.65	1.59	1.56	1.66	1.70	1.81	1.78	2.28	2.12	2.12	2.24	1.56	1.58	2.06	1.88	
165	2.18	2.05	2.02	1.95	2.00	2.00	2.10	2.17	2.63	2.58	2.45	2.39	1.93	2.10	2.25	2.28	
170	2.46	2.44	2.36	2.39	2.45	2.32	2.40	2.47	2.91	2.89	2.62	2.50	2.38	2.58	2.75	2.69	
175	2.71	2.74	2.60	2.64	2.78	2.62	2.68	2.80	2.93	2.92	2.76	2.58	2.59	2.88	2.83	2.84	
180	2.87	2.92	2.57	2.60	2.81	2.71	2.72	3.03	2.89	2.88	2.88	2.56	2.58	2.77	2.68	2.72	

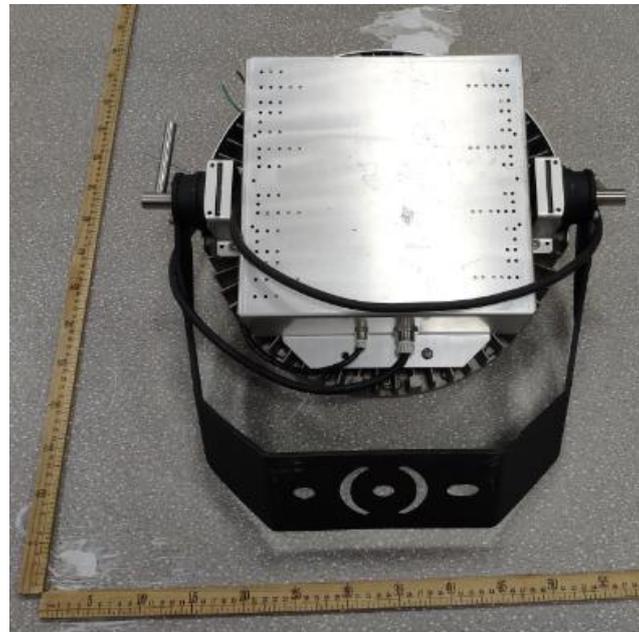


### 3. Test Equipment

Equipment ID	Equipment Name	Last Calibration Date	Next Calibration Date
ST-R-714	Goniophotometer system	Verified by D908S standard lamp	
ST-R-710	Standard Lamp D908S	2020-02-22	ST-R-710
ST-R-711	Power Meter for Goniophotometer	2020-01-05	ST-R-711

Uncertainty(K=2):  
Photometric Measurement(Goniophotometer):3.96%

#### 4. Product Photo



\*\*\*\*\* END OF REPORT \*\*\*\*\*