



UL LLC  
1075 W Lambert Rd Suite B  
Brea, CA 92821

## Indoor Distribution Test Report

Relevant Standards  
IES LM-79-2008  
ANSI C82.77-2002

Prepared For  
**Tempo Industries Inc**

1961 McGaw Ave  
Irvine, CA 92614-0909  
United States

Catalog Number  
**SPL-WH-35K-ST-12-3**

Order Number  
11416292  
Test Number  
1277797

Test Date

2016-08-30

Prepared By

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Approved By

Yilmaz Yucelidag, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Rectangular gray aluminum housing with white aluminum face plate, and frosted lens with a linear white aluminum reflector  
**Lamp:** Four (4) White LEDs  
**Mounting:** Step

**Luminaire**



**Luminaire Characteristics**

Luminous Width 2.50 in.  
Luminous Height 1.13 in.

**Summary of Results**

Total Luminaire Output: 57.31 Lumens  
Luminaire Efficacy: 16.7 lm/w  
Maximum Candela: 26 Candela

**Test Conditions**

Test Temperature: 24.2 °C  
Voltage: 12.07 VAC  
Current: 0.2930 A  
Power: 3.439 W  
Power Factor: 0.972  
Frequency: 60 Hz  
Current THD: 22.5 %

Laboratory results may not be representative of field performance  
Ballast factors have not been applied



## Distribution - Goniophotometer

### Distribution Test Conditions

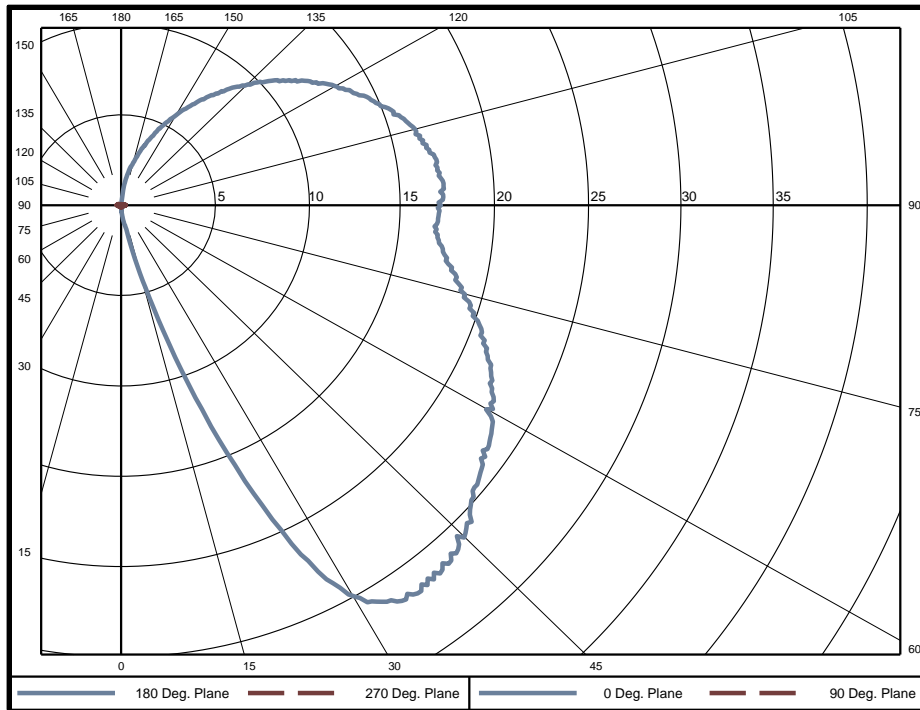
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.2 °C	12.07 VAC	0.2930 A	3.439 W	0.972	60 Hz	22.5 %

### Summary of Results

**Spacing Criteria**  
 0-180: N/A  
 90-270: N/A

**Total Lumen Output:** 57.31 Lumens  
**Luminaire Efficacy:** 16.7 lm/w  
**Maximum Candela:** 26 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.000	0.0%	60-65	3.329	5.8%	120-125	1.554	2.7%
5-10	0.005	0.0%	65-70	3.262	5.7%	125-130	1.303	2.3%
10-15	0.039	0.1%	70-75	3.127	5.5%	130-135	1.063	1.9%
15-20	0.211	0.4%	75-80	2.939	5.1%	135-140	0.839	1.5%
20-25	0.636	1.1%	80-85	2.756	4.8%	140-145	0.639	1.1%
25-30	1.269	2.2%	85-90	2.666	4.7%	145-150	0.463	0.8%
30-35	1.887	3.3%	90-95	2.679	4.7%	150-155	0.315	0.5%
35-40	2.396	4.2%	95-100	2.606	4.5%	155-160	0.194	0.3%
40-45	2.780	4.9%	100-105	2.462	4.3%	160-165	0.105	0.2%
45-50	3.055	5.3%	105-110	2.274	4.0%	165-170	0.042	0.1%
50-55	3.233	5.6%	110-115	2.044	3.6%	170-175	0.004	0.0%
55-60	3.325	5.8%	115-120	1.805	3.1%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	6	11.2%
0-60	19	32.9%
0-90	37	64.4%
90-180	20	35.6%



**Candela Tabulation**  
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)															
	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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.60	0.43	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.43
15	3.41	2.70	0.70	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.70	2.70
20	9.95	7.96	2.92	0.34	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.34	2.92	7.96
25	18.69	15.59	6.60	0.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.58	6.60	15.59
30	24.50	21.52	11.45	1.40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.40	11.45	21.52
35	26.13	23.68	15.76	2.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.62	15.76	23.68
40	26.10	23.93	18.05	4.30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.30	18.05	23.93
45	25.51	23.44	18.42	6.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.06	18.42	23.44
50	24.10	22.37	18.01	7.55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.55	18.01	22.37
55	23.17	21.36	17.25	8.39	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.39	17.25	21.36
60	22.09	20.42	16.21	8.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.37	16.21	20.42
65	21.38	19.59	15.21	7.75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.75	15.21	19.59
70	20.09	18.28	14.28	7.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.15	14.28	18.28
75	18.58	17.07	13.22	6.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.49	13.22	17.07
80	17.17	15.79	11.92	5.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.84	11.92	15.79
85	16.40	14.84	11.06	5.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.09	11.06	14.84
90	16.64	15.04	10.94	4.85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.85	10.94	15.04
95	16.70	15.12	10.93	4.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.62	10.93	15.12
100	16.29	14.69	10.57	4.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.35	10.57	14.69
105	15.80	14.06	9.98	4.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.10	9.98	14.06
110	14.91	13.11	9.25	3.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.76	9.25	13.11
115	13.85	12.23	8.42	3.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.45	8.42	12.23
120	12.71	11.13	7.69	3.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.13	7.69	11.13
125	11.51	10.02	6.90	2.77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.77	6.90	10.02
130	10.26	8.93	6.03	2.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.43	6.03	8.93
135	8.86	7.78	5.25	2.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.09	5.25	7.78
140	7.57	6.59	4.50	1.74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.74	4.50	6.59
145	6.35	5.53	3.73	1.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.47	3.73	5.53
150	5.14	4.44	2.97	1.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.22	2.97	4.44
155	3.99	3.40	2.25	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	2.25	3.40
160	2.88	2.46	1.67	0.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.62	1.67	2.46
165	1.83	1.65	1.11	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24	1.11	1.65
170	1.00	0.79	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.79	1.00
175	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
180	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**Average Luminance (cd/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
0	0	0	0
45	19880	20300	0
55	15590	16420	0
65	13000	13080	0
75	10600	10660	0
85	9072	8650	0



### Utilization of Lumens - Zonal Cavity Method

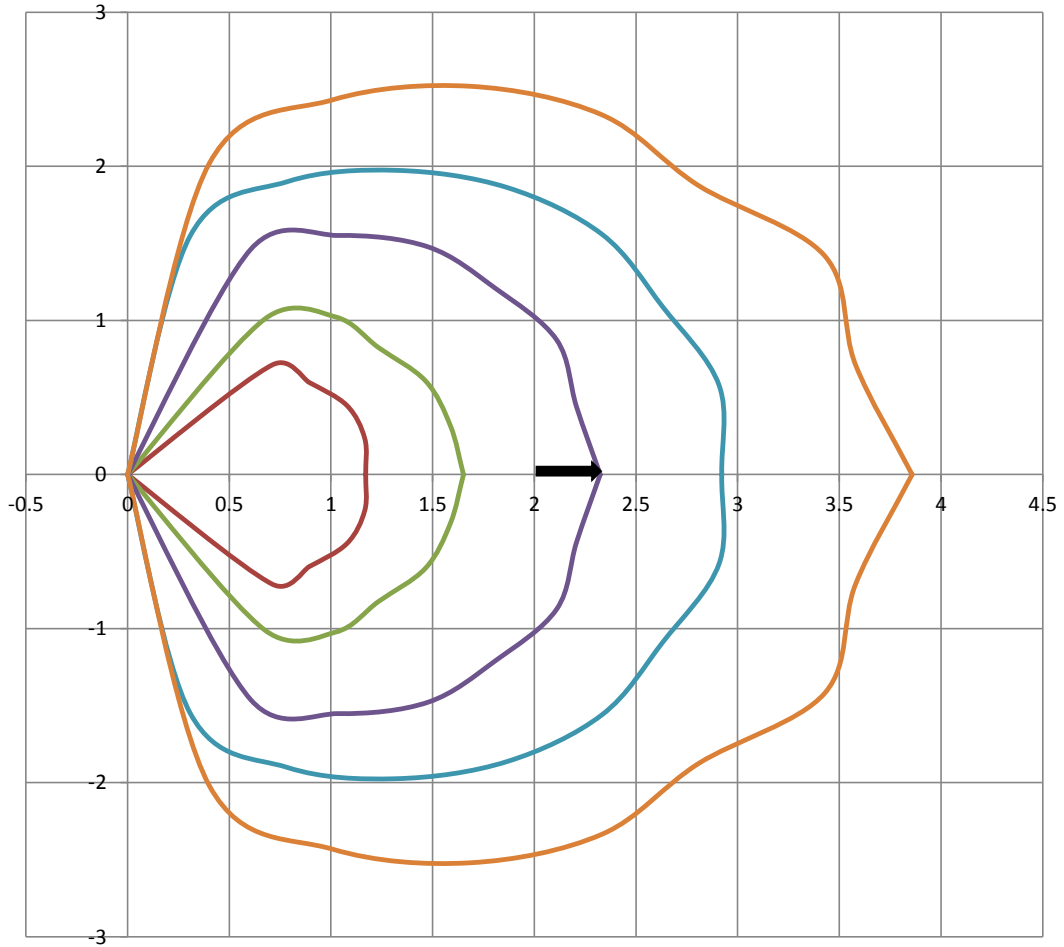
Effective Floor Cavity Reflectance 20%

Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as Lumens delivered to the task surface **																	
0	63	63	63	63	60	60	60	60	52	52	52	46	46	46	40	40	40	37
1	55	51	48	45	51	48	45	42	42	39	37	36	34	32	31	29	28	25
2	49	43	38	34	45	40	36	32	35	31	28	30	27	24	25	23	21	18
3	44	36	31	27	40	34	29	25	29	25	22	25	22	19	21	18	16	14
4	39	31	26	21	36	29	24	20	25	21	18	21	18	15	18	15	13	11
5	36	27	22	17	33	26	20	16	22	18	14	19	15	12	16	13	10	9
6	32	24	19	15	30	22	17	14	19	15	12	16	13	10	14	11	9	7
7	30	21	16	12	28	20	15	12	17	13	10	15	11	9	12	9	7	6
8	27	19	14	10	25	18	13	10	15	11	9	13	10	7	11	8	6	5
9	25	17	12	9	23	16	12	8	14	10	7	12	9	6	10	7	5	4
10	24	16	11	8	22	15	10	7	13	9	6	11	8	5	9	6	4	3



### ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

