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## Indoor Distribution Test Report

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

Prepared For  
**Rosco Laboratories Inc**  
52 Harbor View Ave  
Stamford, CT 06902-5914  
United States

Catalog Number  
**SL1 MIX with flat diffuser: LEDs tuned to 5600K**  
Order Number  
12451557  
Test Number  
12451557.16

Test Date

2018-08-09

Prepared By

Cordaryl Cousar, Technician

Approved By

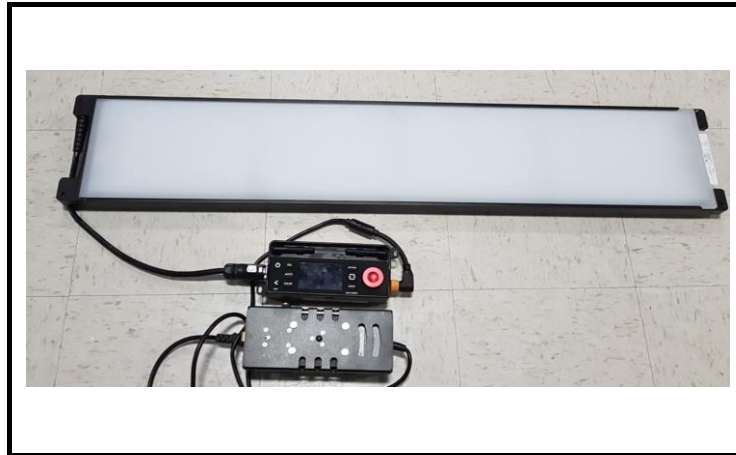
Kevin Rodriguez, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Black formed aluminum housing, frosted plastic lens enclosure  
**Lamp:** 576 white/colored LEDs  
**Mounting:** Surface – Ceiling  
**Ballast/Driver:** One Mean Well GST220A24-R7B

**Luminaire**



**Luminaire Characteristics**

Luminous Length: 44.00 in.  
Luminous Width: 8.000 in.  
Luminous Height: 0.25 in.

**Summary of Results**

Total Luminaire Output: 13180 Lumens  
Luminaire Efficacy: 72.9 lm/w  
Maximum Candela: 4559 Candela

**Test Conditions**

Test Temperature: 24.5 °C  
Voltage: 120.0 VAC  
Current: 1.523 A  
Power: 180.9 W  
Power Factor: 0.990  
Frequency: 60 Hz  
Current THD: 11.1 %

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



## Distribution - Goniophotometer

### Distribution Test Conditions

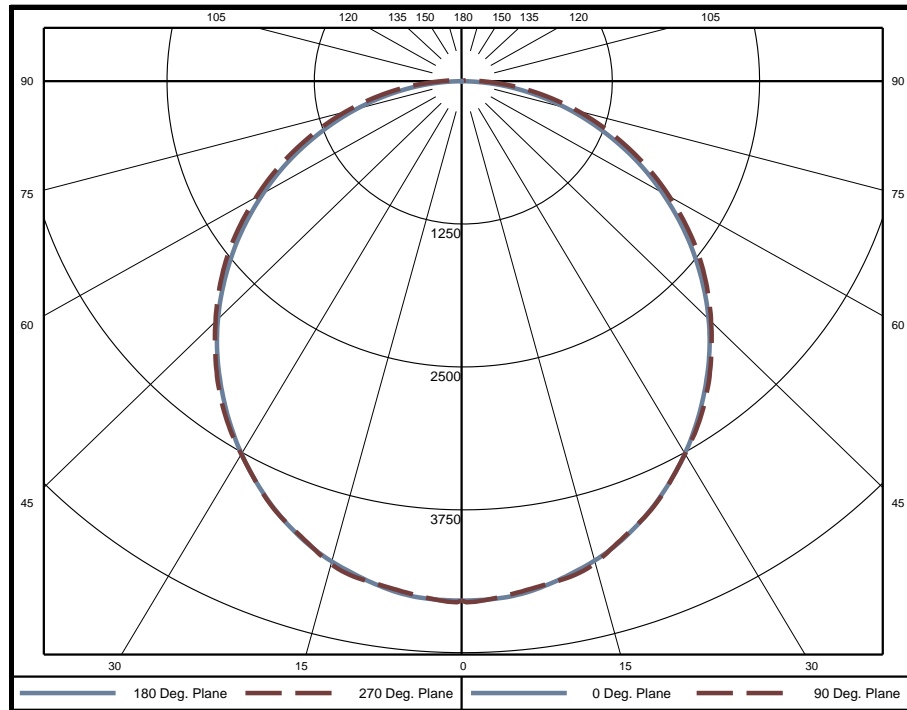
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	120.0 VAC	1.523 A	180.9 W	0.990	60 Hz	11.1 %

### Summary of Results

**Spacing Criteria**  
 0-180: 1.23  
 90-270: 1.24

**Total Lumen Output:** 13180 Lumens  
**Luminaire Efficacy:** 72.9 lm/w  
**Maximum Candela:** 4559 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	108	0.8%	60-65	885	6.7%	120-125	0	0.0%
5-10	320	2.4%	65-70	748	5.7%	125-130	0	0.0%
10-15	521	4.0%	70-75	596	4.5%	130-135	0	0.0%
15-20	702	5.3%	75-80	434	3.3%	135-140	0	0.0%
20-25	857	6.5%	80-85	270	2.0%	140-145	0	0.0%
25-30	980	7.4%	85-90	119	0.9%	145-150	0	0.0%
30-35	1072	8.1%	90-95	38	0.3%	150-155	0	0.0%
35-40	1129	8.6%	95-100	19	0.1%	155-160	0	0.0%
40-45	1150	8.7%	100-105	9	0.1%	160-165	0	0.0%
45-50	1134	8.6%	105-110	2	0.0%	165-170	0	0.0%
50-55	1084	8.2%	110-115	0	0.0%	170-175	0	0.0%
55-60	998	7.6%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	5689	43.2%
0-60	10055	76.3%
0-90	13107	99.4%
90-180	68	0.5%



### Candela Tabulation

Horizontal Angle (Degrees)

Vertical 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	4544	4544	4544	4544	4544	4544	4544	4544	4544	4544	4544	4544	4544	4544	4544
	5	4528	4514	4520	4504	4512	4504	4520	4514	4528	4514	4520	4504	4512	4504	4520
	10	4452	4437	4452	4444	4451	4444	4452	4437	4452	4437	4452	4444	4451	4444	4452
	15	4342	4325	4340	4342	4362	4342	4340	4325	4342	4325	4340	4342	4362	4342	4340
	20	4189	4180	4192	4174	4181	4174	4192	4180	4189	4180	4192	4174	4181	4174	4192
	25	3994	3983	3993	3984	3998	3984	3993	3983	3994	3983	3993	3984	3998	3984	3993
	30	3767	3756	3765	3756	3770	3756	3765	3756	3767	3756	3765	3756	3770	3756	3765
	35	3514	3507	3520	3519	3538	3519	3520	3507	3514	3507	3520	3519	3538	3519	3520
	40	3244	3241	3252	3251	3268	3251	3252	3241	3244	3241	3252	3251	3268	3251	3252
	45	2951	2953	2961	2960	2977	2960	2961	2953	2951	2953	2961	2960	2977	2960	2961
	50	2634	2638	2653	2663	2683	2663	2653	2638	2634	2638	2653	2663	2683	2663	2653
	55	2303	2309	2326	2346	2367	2346	2326	2309	2303	2309	2326	2346	2367	2346	2326
	60	1961	1967	1986	2013	2030	2013	1986	1967	1961	1967	1986	2013	2030	2013	1986
	65	1618	1624	1645	1674	1694	1674	1645	1624	1618	1624	1645	1674	1694	1674	1645
	70	1265	1274	1305	1339	1353	1339	1305	1274	1265	1274	1305	1339	1353	1339	1305
	75	925	939	975	1010	1024	1010	975	939	925	939	975	1010	1024	1010	975
	80	592	613	654	689	702	689	654	613	592	613	654	689	702	689	654
	85	281	309	353	389	403	389	353	309	281	309	353	389	403	389	353
	90	12	71	121	159	172	159	121	71	12	71	121	159	172	159	121
	95	5	15	48	77	89	77	48	15	5	15	48	77	89	77	48
	100	3	1	21	45	54	45	21	1	3	1	21	45	54	45	21
	105	0	0	2	20	28	20	2	0	0	0	2	20	28	20	2
	110	0	0	0	1	5	1	0	0	0	0	0	1	5	1	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

### Average Luminance (cd/m<sup>2</sup>)

Horizontal Angle (Degrees)

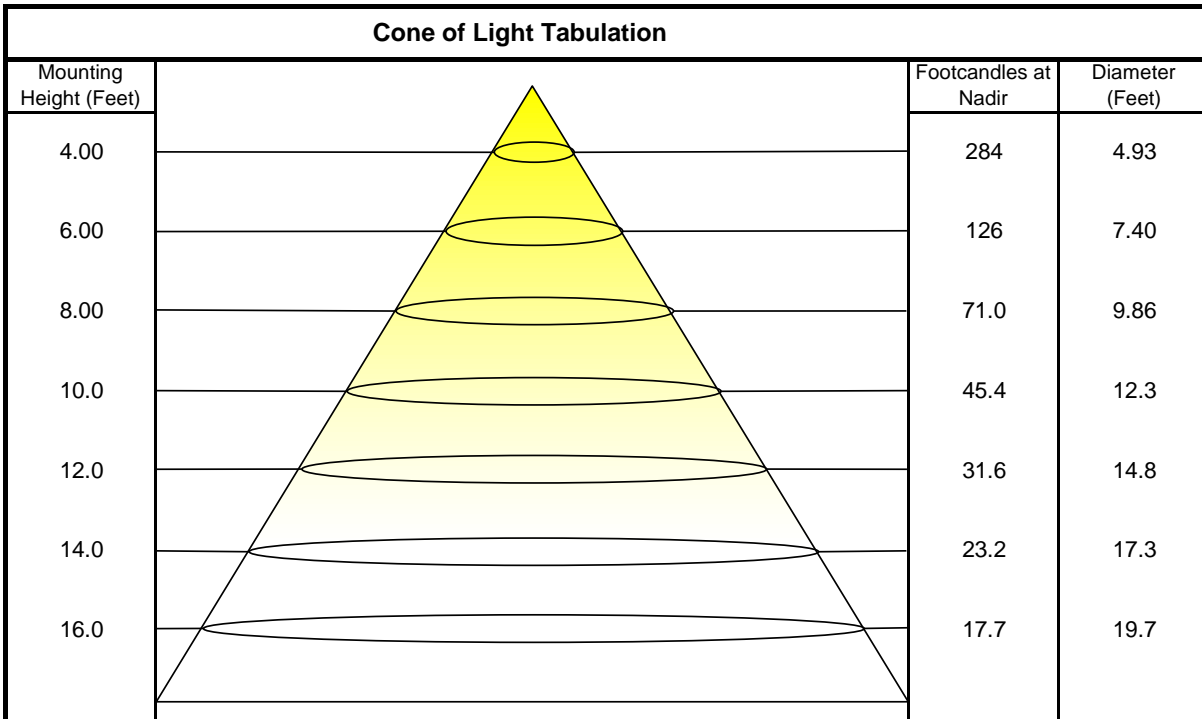
Vertical Angle (Degrees)	0	45	90
	0	20010	20010
	45	18270	17980
	55	17540	17400
	65	16650	16540
	75	15410	15600
	85	13310	14990



### Coefficients of Utilization - 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 percent of total lumen output delivered to the task surface **																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	99
1	108	103	98	94	105	101	96	93	96	93	90	92	89	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	74	80	76	72	77	73	70	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	54	49	44	42
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	49	43	39	36
7	64	50	42	35	62	50	41	35	48	40	35	46	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	35	29	25	23

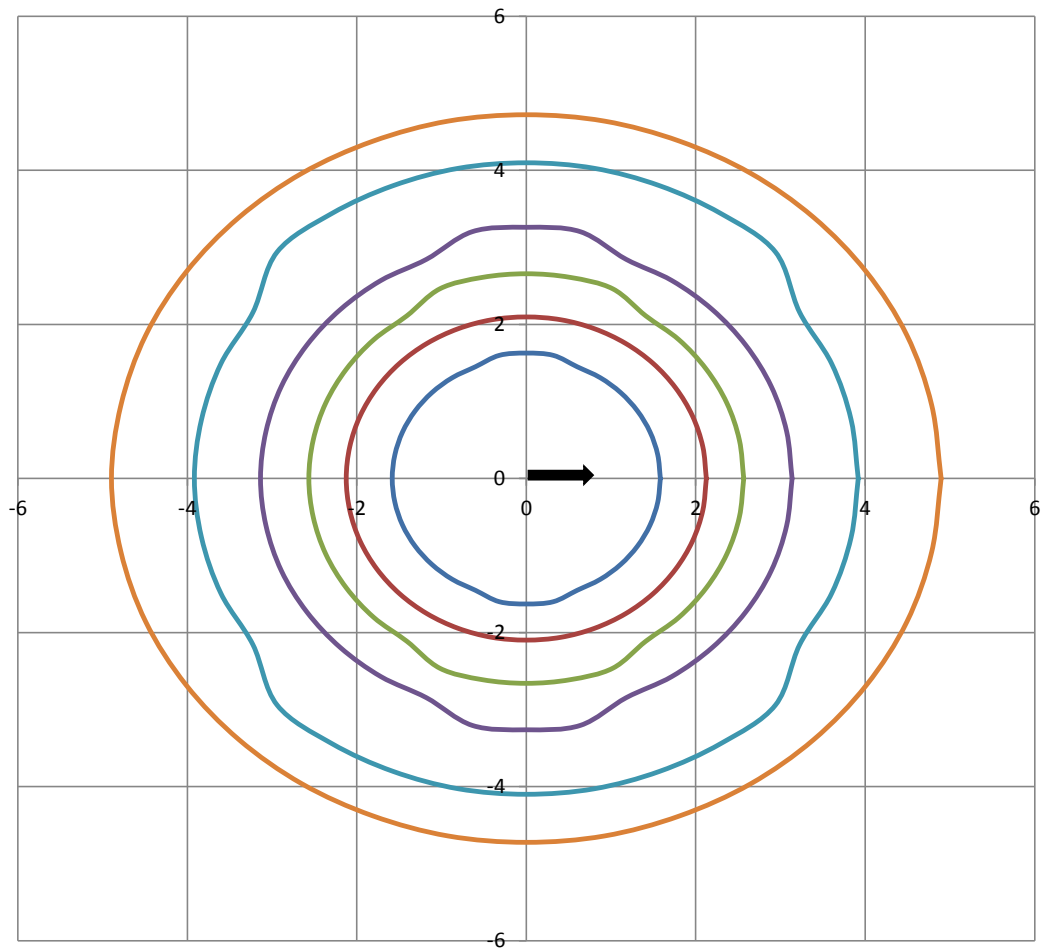
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	4544 Candela
Central Cone Intensity:	4533 Candela
Beam Flux:	9239.7 Lumens
Beam Angle (0-180):	111.0 Degrees
Beam Angle (90-270):	112.8 Degrees
Field Angle (0-180):	164.4 Degrees
Field Angle (90-270):	168.2 Degrees





## ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

5 fc    2 fc    1 fc    0.5 fc    0.2 fc    0.1 fc