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Photometric Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002, UL 1598-2008

Prepared For
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United States

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SL44SS1B30FL0XX
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The results contained in this report pertain only to the tested sample.
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Laboratory results may not be representative of field performance
Ballast factors have not been applied



Luminaire Description: White formed steel housing, frosted plastic lens enclosure
Lamp: 216 white LEDs
Mounting: Surface – Ceiling
Ballast/Driver: One Universal Lighting Technologies D23CC90UNVTZ-F driver

Luminaire



Luminaire Characteristics

Luminous Length: 48.00 in.
Luminous Width: 4.500 in.
Luminous Height: 1.00 in.

Summary of Results

Distribution

Total Luminaire Output: 9879 Lumens
Luminaire Efficacy: 109.5 lm/w
Maximum Candela: 2971 Candela

Electrical Data at 277 VAC

Test Temperature: 24.7 °C
Voltage: 277.0 VAC
Current: 0.3283 A
Power: 88.97 W
Power Factor: 0.978
Frequency: 60 Hz
Current THD: 9.91 %

In-Situ

LED Temperature: 62.1 °C
Driver Temperature: 75.9 °C
Measured LED Current: 0.1191 A

Temperature is offset to an ambient temperature of 25°C as described in UL1598-2008.



Distribution - Goniophotometer

Distribution Test Conditions

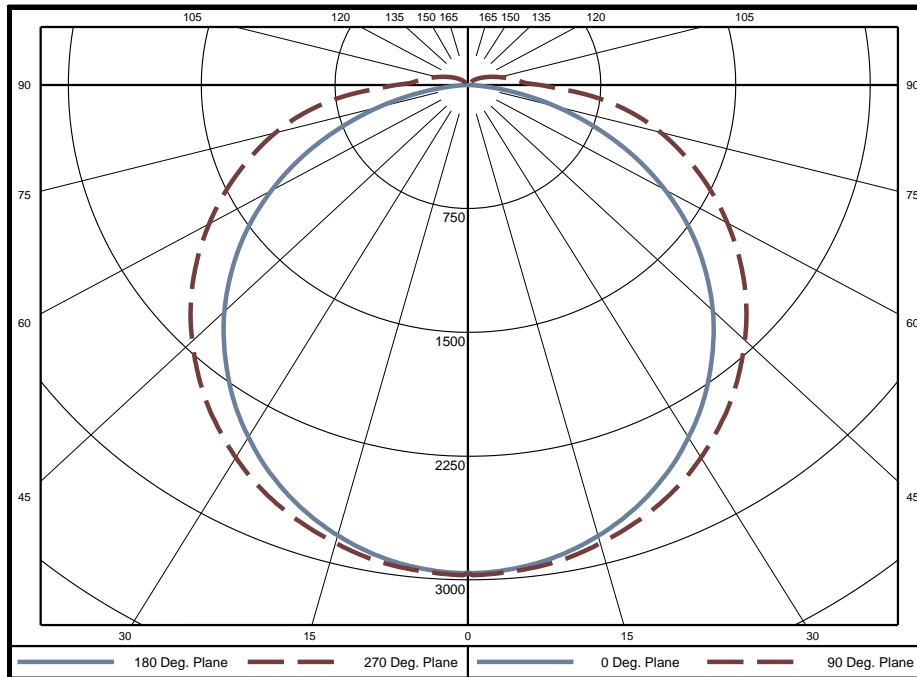
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.5 °C	120.0 VAC	0.7532 A	90.21 W	0.998	60 Hz	5.70 %

Summary of Results

Spacing Criteria
 0-180: 1.24
 90-270: 1.31

Total Lumen Output: 9879 Lumens
Luminaire Efficacy: 109.5 lm/w
Maximum Candela: 2971 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	70.6	0.7%	60-65	667.7	6.8%	120-125	14.6	0.1%
5-10	209.3	2.1%	65-70	588.8	6.0%	125-130	9.2	0.1%
10-15	341.0	3.5%	70-75	499.1	5.1%	130-135	4.8	0.0%
15-20	461.8	4.7%	75-80	403.0	4.1%	135-140	1.7	0.0%
20-25	568.2	5.8%	80-85	297.4	3.0%	140-145	0.2	0.0%
25-30	656.7	6.6%	85-90	178.6	1.8%	145-150	0	0.0%
30-35	724.9	7.3%	90-95	98.7	1.0%	150-155	0	0.0%
35-40	771.2	7.8%	95-100	72.0	0.7%	155-160	0	0.0%
40-45	795.0	8.0%	100-105	53.9	0.5%	160-165	0	0.0%
45-50	795.9	8.1%	105-110	40.0	0.4%	165-170	0	0.0%
50-55	774.1	7.8%	110-115	29.1	0.3%	170-175	0	0.0%
55-60	730.6	7.4%	115-120	20.8	0.2%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	3804	38.5%
0-60	6899	69.8%
0-90	9534	96.5%
90-180	345	3.5%



Candela Tabulation
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	2958	2958	2958	2958	2958	2958	2958	2958	2958	2958	2958	2958	2958	2958	2958	2958
5	2943	2943	2940	2942	2958	2942	2940	2943	2943	2943	2940	2942	2958	2942	2940	2943
10	2899	2899	2901	2909	2930	2909	2901	2899	2899	2899	2901	2909	2930	2909	2901	2899
15	2828	2830	2840	2851	2874	2851	2840	2830	2828	2830	2840	2851	2874	2851	2840	2830
20	2733	2738	2758	2778	2806	2778	2758	2738	2733	2738	2758	2778	2806	2778	2758	2738
25	2613	2622	2655	2685	2717	2685	2655	2622	2613	2622	2655	2685	2717	2685	2655	2622
30	2470	2486	2533	2571	2608	2571	2533	2486	2470	2486	2533	2571	2608	2571	2533	2486
35	2311	2332	2392	2441	2482	2441	2392	2332	2311	2332	2392	2441	2482	2441	2392	2332
40	2131	2161	2234	2297	2344	2297	2234	2161	2131	2161	2234	2297	2344	2297	2234	2161
45	1941	1977	2064	2140	2192	2140	2064	1977	1941	1977	2064	2140	2192	2140	2064	1977
50	1734	1777	1877	1972	2032	1972	1877	1777	1734	1777	1877	1972	2032	1972	1877	1777
55	1515	1565	1683	1796	1859	1796	1683	1565	1515	1565	1683	1796	1859	1796	1683	1565
60	1278	1343	1481	1612	1678	1612	1481	1343	1278	1343	1481	1612	1678	1612	1481	1343
65	1032	1111	1276	1426	1494	1426	1276	1111	1032	1111	1276	1426	1494	1426	1276	1111
70	772	879	1070	1241	1307	1241	1070	879	772	879	1070	1241	1307	1241	1070	879
75	522	657	882	1058	1119	1058	882	657	522	657	882	1058	1119	1058	882	657
80	285	456	694	858	913	858	694	456	285	456	694	858	913	858	694	456
85	92	278	484	619	663	619	484	278	92	278	484	619	663	619	484	278
90	1	111	256	362	402	362	256	111	1	111	256	362	402	362	256	111
95	0	49	162	253	285	253	162	49	0	49	162	253	285	253	162	49
100	0	28	118	200	230	200	118	28	0	28	118	200	230	200	118	28
105	0	17	86	156	183	156	86	17	0	17	86	156	183	156	86	17
110	0	9	64	121	144	121	64	9	0	9	64	121	144	121	64	9
115	0	2	47	93	112	93	47	2	0	2	47	93	112	93	47	2
120	0	0	34	70	87	70	34	0	0	0	34	70	87	70	34	0
125	0	0	20	52	65	52	20	0	0	0	20	52	65	52	20	0
130	0	0	6	35	46	35	6	0	0	0	6	35	46	35	6	0
135	0	0	0	18	27	18	0	0	0	0	0	18	27	18	0	0
140	0	0	0	4	9	4	0	0	0	0	0	4	9	4	0	0
145	0	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	0
155	0	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	0
165	0	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	0
175	0	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	0

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

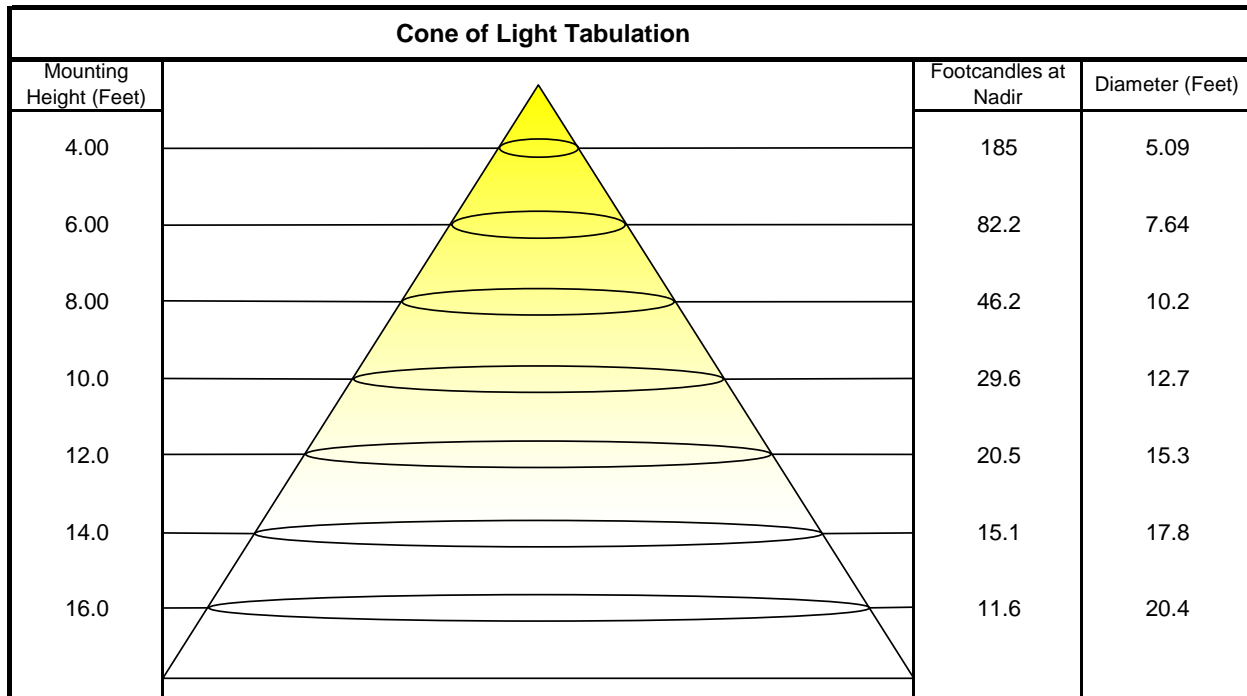
	0	45	90
0	21230	21230	21230
45	19300	17880	18200
55	18410	16910	17650
65	16770	15830	17180
75	13430	14890	16960
85	6086	13440	15420



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	11678	11678	11678	11678	11367	11367	11367	11367	10785	10785	10785	10253	10253	10253	9764	9764	9764	9534
1	10495	9952	9466	9027	10181	9690	9247	8846	9199	8835	8500	8748	8451	8176	8333	8094	7871	7630
2	9474	8577	7836	7212	9171	8357	7675	7097	7942	7370	6876	7560	7084	6665	7206	6814	6464	6219
3	8596	7476	6609	5918	8312	7290	6487	5841	6939	6254	5690	6614	6033	5545	6313	5823	5404	5162
4	7846	6590	5670	4968	7583	6432	5575	4913	6134	5392	4805	5858	5218	4700	5601	5052	4598	4361
5	7200	5866	4935	4247	6960	5732	4859	4206	5479	4713	4126	5243	4573	4048	5022	4439	3971	3743
6	6638	5267	4347	3686	6420	5153	4285	3655	4935	4167	3593	4733	4052	3533	4543	3943	3473	3255
7	6147	4765	3869	3241	5950	4666	3818	3216	4480	3720	3167	4304	3625	3119	4140	3534	3071	2863
8	5717	4340	3474	2879	5539	4255	3432	2859	4094	3350	2820	3942	3271	2781	3799	3194	2742	2544
9	5338	3978	3145	2582	5177	3904	3109	2566	3763	3040	2533	3630	2973	2501	3505	2908	2469	2280
10	5002	3666	2866	2334	4856	3601	2836	2321	3478	2777	2293	3362	2720	2266	3252	2664	2240	2060

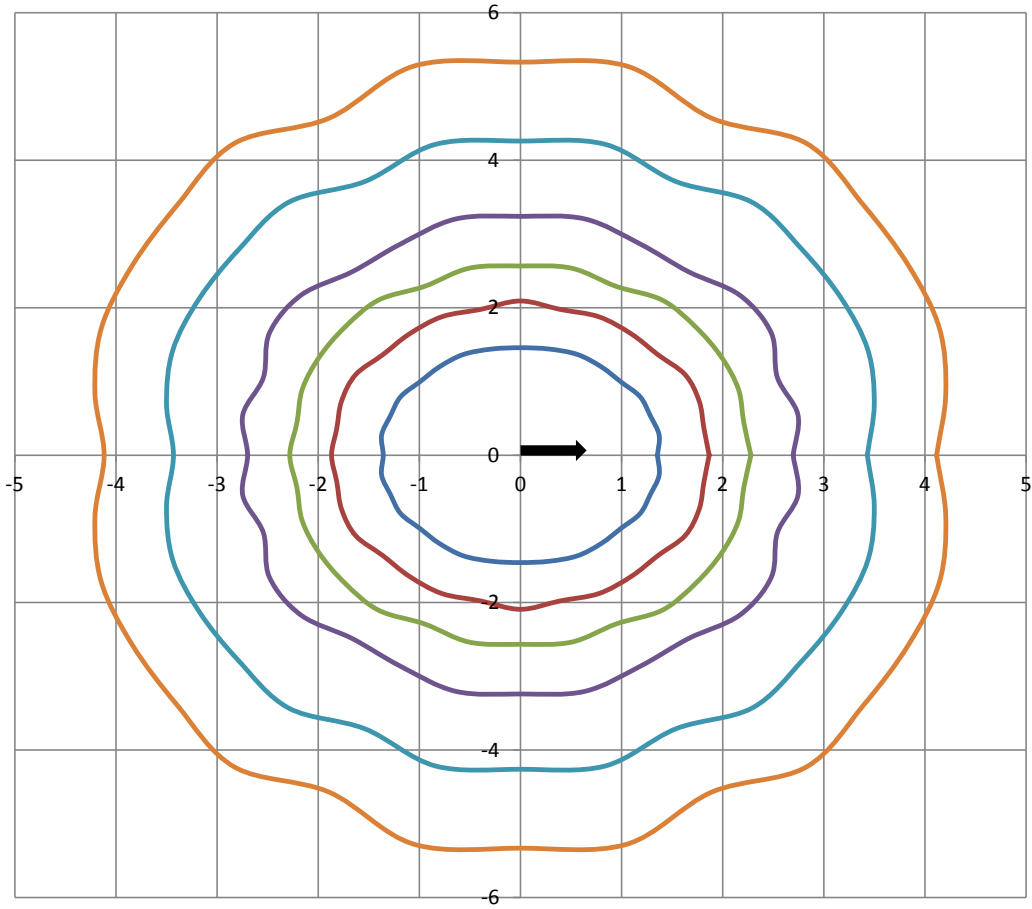
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	2958 Candela
Central Cone Intensity:	2953 Candela
Beam Flux:	6969.3 Lumens
Beam Angle (0-180):	111.6 Degrees
Beam Angle (90-270):	130.8 Degrees
Field Angle (0-180):	159.5 Degrees
Field Angle (90-270):	188.2 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height





In-Situ Test

In-Situ Test Conditions

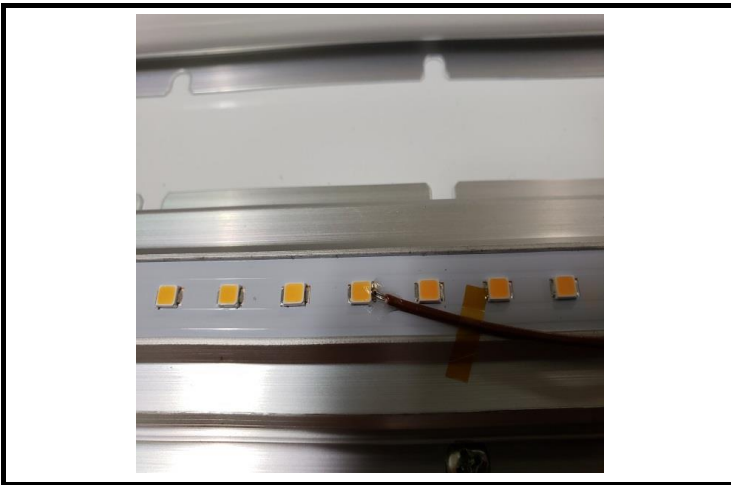
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
23.5 °C	121.4 VAC	N/A	N/A	N/A	60 Hz	N/A

Summary of Results

LED Temperature: 62.1 °C
Driver Temperature: 75.9 °C
Measured LED Current: 0.1191 A

Temperatures are offset to an ambient temperature of 25°C as described in UL1598-2008

LED Temperature Location



Thermocouple Reference



Driver Temperature Location

