

IES INDOOR REPORT**PHOTOMETRIC FILENAME : SGE5LEDOS-45L35KE1-AR5223OSMWSO.IES****DESCRIPTION INFORMATION (From Photometric File)**

IESNA:LM-63-2002
[TEST]20141007_M-45L-Gen3
[TESTLAB]OSRAM SYLVANIA
[TESTDATE]8/12/2014
[ISSUE DATE]8/12/2014
[UPDATE]1/4/2017
[MANUFAC]Spectrum Lighting
[LUMCAT]SGE5LEDOS-45L-35K-EX-AR5223OS-MW-SO
[LUMINAIRE]5" DIAM., OPEN APERTURE LED DOWNLIGHT
[OTHER]SHALLOW PROFILE, MATTE WHITE LOWER CONE
[OTHER]INTEGRAL, REGRESSED SOLITE GLASS LENS
[OTHER]70.2 DEGREE BEAM ANGLE
[LAMP]N/A
[LAMPCAT]N/A
[OTHER]TOTAL LUMINAIRE WATTS IS APPROXIMATE
[OTHER]PHOTOMETRIC MEASUREMENTS TAKEN AT 120VAC
[OTHER]CCT OUTPUT MULTIPLIERS: 40K x 1.0, 30K x 1.0, 27K x 0.945
[OTHER]THIS REPORT UPDATED BY SPECTRUM LIGHTING, SCALED FROM 30L, GEN2

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	3616
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	88
Total Luminaire Watts	41.1
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.10
Spacing Criterion (90-270)	1.10
Spacing Criterion (Diagonal)	1.04
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.42 ft (Diameter)
Luminous Width (90-270)	0.42 ft (Diameter)
Luminous Height	0.00 ft

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LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	55362	55572	55459
55	31437	31558	31560
65	20546	20643	20705
75	15549	15580	15655
85	12424	12621	12765

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CANDELA TABULATION

	<u>0.0</u>	<u>22.5</u>	<u>45.0</u>	<u>67.5</u>	<u>90.0</u>	<u>112.5</u>	<u>135.0</u>	<u>157.5</u>	<u>180.0</u>	<u>202.5</u>
0.0	2660.847	2660.847	2660.847	2660.847	2660.847	2660.847	2660.847	2660.847	2660.847	2660.847
2.5	2671.696	2663.978	2663.567	2660.097	2658.069	2660.097	2663.567	2663.978	2671.696	2663.978
5.0	2666.051	2654.629	2655.849	2653.894	2649.896	2653.894	2655.849	2654.629	2666.051	2654.629
7.5	2655.011	2643.707	2648.014	2644.148	2640.267	2644.148	2648.014	2643.707	2655.011	2643.707
10.0	2634.225	2628.904	2624.215	2621.010	2621.833	2621.010	2624.215	2628.904	2634.225	2628.904
12.5	2605.443	2594.771	2598.901	2594.006	2588.538	2594.006	2598.901	2594.771	2605.443	2594.771
15.0	2569.340	2560.622	2557.256	2552.199	2553.581	2552.199	2557.256	2560.622	2569.340	2560.622
17.5	2519.139	2512.994	2507.261	2503.234	2501.426	2503.234	2507.261	2512.994	2519.139	2512.994
20.0	2453.504	2444.448	2445.360	2441.009	2437.172	2441.009	2445.360	2444.448	2453.504	2444.448
22.5	2357.718	2346.649	2348.090	2342.519	2345.062	2342.519	2348.090	2346.649	2357.718	2346.649
25.0	2223.787	2219.994	2213.688	2216.422	2211.880	2216.422	2213.688	2219.994	2223.787	2219.994
27.5	2061.998	2055.530	2048.563	2048.710	2051.253	2048.710	2048.563	2055.530	2061.998	2055.530
30.0	1863.490	1859.388	1854.302	1849.892	1848.334	1849.892	1854.302	1859.388	1863.490	1859.388
32.5	1616.383	1607.945	1606.166	1602.770	1604.167	1602.770	1606.166	1607.945	1616.383	1607.945
35.0	1343.683	1340.434	1340.537	1336.480	1340.640	1336.480	1340.537	1340.434	1343.683	1340.434
37.5	1077.686	1075.937	1073.085	1076.040	1074.056	1076.040	1073.085	1075.937	1077.686	1075.937
40.0	837.533	837.547	834.534	836.165	837.371	836.165	834.534	837.547	837.533	837.547
42.5	644.860	647.550	646.609	644.551	646.153	644.551	646.609	647.550	644.860	647.550
45.0	504.342	506.827	506.253	505.313	505.224	505.313	506.253	506.827	504.342	506.827
47.5	404.324	404.426	403.647	405.470	404.265	405.470	403.647	404.426	404.324	404.426
50.0	329.927	330.471	330.397	331.529	331.000	331.529	330.397	330.471	329.927	330.471
52.5	275.463	276.566	276.507	275.948	276.198	275.948	276.507	276.566	275.463	276.566
55.0	232.304	233.774	233.201	233.142	233.216	233.142	233.201	233.774	232.304	233.774
57.5	197.303	197.730	198.009	198.818	198.494	198.818	198.009	197.730	197.303	197.730
60.0	165.801	166.331	166.448	166.948	166.816	166.948	166.448	166.331	165.801	166.331
62.5	135.990	136.343	136.798	136.666	137.313	136.666	136.798	136.343	135.990	136.343
65.0	111.867	112.235	112.396	112.573	112.734	112.573	112.396	112.235	111.867	112.235
67.5	87.392	87.568	87.465	87.877	87.994	87.877	87.465	87.568	87.392	87.568
70.0	74.485	74.617	74.500	74.779	74.926	74.779	74.500	74.617	74.485	74.617
72.5	62.990	63.019	62.990	63.137	63.342	63.137	62.990	63.019	62.990	63.019
75.0	51.847	51.950	51.950	52.259	52.200	52.259	51.950	51.950	51.847	51.950
77.5	41.454	41.675	41.586	42.101	41.822	42.101	41.586	41.675	41.454	41.675
80.0	31.826	31.914	32.002	32.458	32.164	32.458	32.002	31.914	31.826	31.914
82.5	22.623	22.712	23.006	23.285	22.991	23.285	23.006	22.712	22.623	22.712
85.0	13.950	14.230	14.171	14.538	14.333	14.538	14.171	14.230	13.950	14.230
87.5	5.954	6.644	6.556	6.468	6.218	6.468	6.556	6.644	5.954	6.644
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Vert. Angles **Horizontal Angles**

	<u>225.0</u>	<u>247.5</u>	<u>270.0</u>	<u>292.5</u>	<u>315.0</u>	<u>337.5</u>	<u>360.0</u>
0.0	2660.847	2660.847	2660.847	2660.847	2660.847	2660.847	2660.847
2.5	2663.567	2660.097	2658.069	2660.097	2663.567	2663.978	2671.696
5.0	2655.849	2653.894	2649.896	2653.894	2655.849	2654.629	2666.051
7.5	2648.014	2644.148	2640.267	2644.148	2648.014	2643.707	2655.011
10.0	2624.215	2621.010	2621.833	2621.010	2624.215	2628.904	2634.225
12.5	2598.901	2594.006	2588.538	2594.006	2598.901	2594.771	2605.443
15.0	2557.256	2552.199	2553.581	2552.199	2557.256	2560.622	2569.340
17.5	2507.261	2503.234	2501.426	2503.234	2507.261	2512.994	2519.139
20.0	2445.360	2441.009	2437.172	2441.009	2445.360	2444.448	2453.504
22.5	2348.090	2342.519	2345.062	2342.519	2348.090	2346.649	2357.718
25.0	2213.688	2216.422	2211.880	2216.422	2213.688	2219.994	2223.787
27.5	2048.563	2048.710	2051.253	2048.710	2048.563	2055.530	2061.998
30.0	1854.302	1849.892	1848.334	1849.892	1854.302	1859.388	1863.490
32.5	1606.166	1602.770	1604.167	1602.770	1606.166	1607.945	1616.383
35.0	1340.537	1336.480	1340.640	1336.480	1340.537	1340.434	1343.683
37.5	1073.085	1076.040	1074.056	1076.040	1073.085	1075.937	1077.686
40.0	834.534	836.165	837.371	836.165	834.534	837.547	837.533
42.5	646.609	644.551	646.153	644.551	646.609	647.550	644.860
45.0	506.253	505.313	505.224	505.313	506.253	506.827	504.342
47.5	403.647	405.470	404.265	405.470	403.647	404.426	404.324
50.0	330.397	331.529	331.000	331.529	330.397	330.471	329.927
52.5	276.507	275.948	276.198	275.948	276.507	276.566	275.463
55.0	233.201	233.142	233.216	233.142	233.201	233.774	232.304
57.5	198.009	198.818	198.494	198.818	198.009	197.730	197.303
60.0	166.448	166.948	166.816	166.948	166.448	166.331	165.801
62.5	136.798	136.666	137.313	136.666	136.798	136.343	135.990
65.0	112.396	112.573	112.734	112.573	112.396	112.235	111.867
67.5	87.465	87.877	87.994	87.877	87.465	87.568	87.392
70.0	74.500	74.779	74.926	74.779	74.500	74.617	74.485
72.5	62.990	63.137	63.342	63.137	62.990	63.019	62.990
75.0	51.950	52.259	52.200	52.259	51.950	51.950	51.847
77.5	41.586	42.101	41.822	42.101	41.586	41.675	41.454
80.0	32.002	32.458	32.164	32.458	32.002	31.914	31.826

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82.5	23.006	23.285	22.991	23.285	23.006	22.712	22.623
85.0	14.171	14.538	14.333	14.538	14.171	14.230	13.950
87.5	6.556	6.468	6.218	6.468	6.556	6.644	5.954
90.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
95.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
97.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
100.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
102.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
105.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
107.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
110.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
112.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
115.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
117.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
120.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
122.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
125.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
127.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
130.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
132.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
135.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
137.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
140.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
142.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
145.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
147.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
150.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
152.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
155.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
157.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
160.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
162.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
165.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
167.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
170.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
172.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
175.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
177.5	0.000	0.000	0.000	0.000	0.000	0.000	0.000
180.0	0.000	0.000	0.000	0.000	0.000	0.000	0.000

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	972.69	N.A.	26.90
0-30	1979.08	N.A.	54.70
0-40	2809.37	N.A.	77.70
0-60	3431.48	N.A.	94.90
0-80	3599.79	N.A.	99.60
0-90	3616.03	N.A.	100.00
10-90	3363.41	N.A.	93.00
20-40	1836.68	N.A.	50.80
20-50	2245.72	N.A.	62.10
40-70	734.98	N.A.	20.30
60-80	168.30	N.A.	4.70
70-80	55.44	N.A.	1.50
80-90	16.24	N.A.	0.40
90-110	0.00	N.A.	0.00
90-120	0.00	N.A.	0.00
90-130	0.00	N.A.	0.00
90-150	0.00	N.A.	0.00
90-180	0.00	N.A.	0.00
110-180	0.00	N.A.	0.00
0-180	3616.03	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

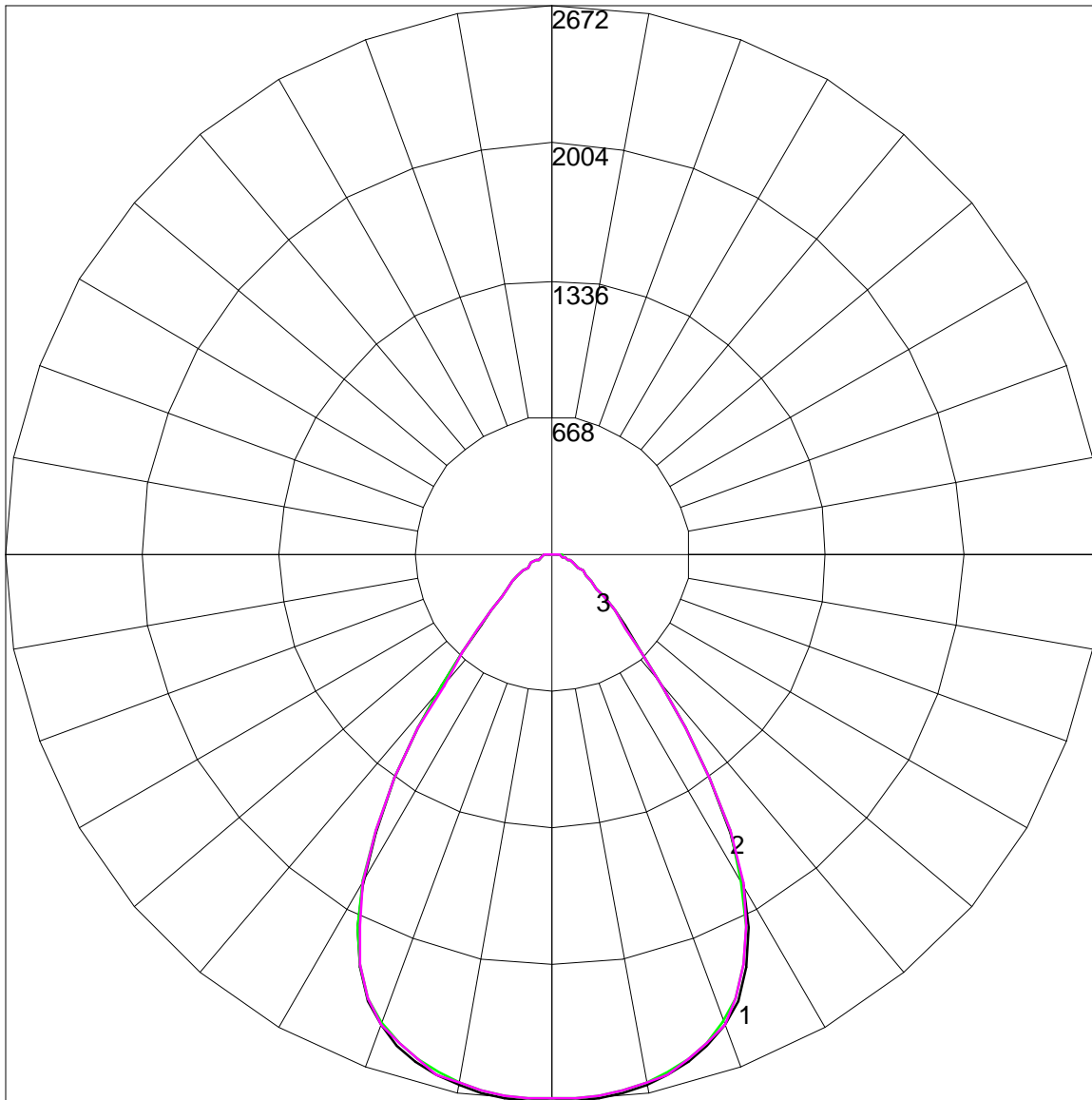
Zone	Lumens
0-10	252.62
10-20	720.06
20-30	1006.39
30-40	830.29
40-50	409.04
50-60	213.07
60-70	112.86
70-80	55.44
80-90	16.24
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	103	110	107	104	101	103	100	98	99	97	95	95	94	93	91
2	105	99	94	90	103	98	93	89	94	91	87	91	88	85	88	86	84	82
3	99	91	85	80	97	89	84	80	87	82	78	84	80	77	82	79	76	74
4	93	84	77	72	91	82	76	72	80	75	71	78	73	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	69	64	72	67	64	71	66	63	61
6	82	71	64	59	80	70	64	59	69	63	59	67	62	58	66	61	58	56
7	77	66	59	54	76	66	59	54	64	58	54	63	58	54	62	57	53	52
8	73	62	55	50	71	61	55	50	60	54	50	59	53	49	58	53	49	48
9	69	58	51	46	67	57	51	46	56	50	46	55	50	46	54	49	46	44
10	65	54	47	43	64	54	47	43	53	47	43	52	46	43	51	46	43	41

POLAR GRAPH



Maximum Candela = 2671.696 Located At Horizontal Angle = 0, Vertical Angle = 2.5

1 - Vertical Plane Through Horizontal Angles (0 - 180)

2 - Vertical Plane Through Horizontal Angles (90 - 270)

3 - Vertical Plane Through Horizontal Angles (45 - 225)