



IES INDOOR REPORT
PHOTOMETRIC FILENAME : HRZ-4-LED-6040-FL-HO-35.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] L250_3500K_HO(950)_6040_N2S_5-16-2016
[TESTLAB] Orb Optronix, Inc.
[ISSUEDATE] 05-16-2016
[TESTDATE] 01-12-2017
[MANUFAC] LSI INDUSTRIES, INC
[LUMCAT] HRZ-4-LED-6040-FL-HO-35
[OTHER] TEST PROCEDURE: IESNA LM-79-08
[_ABSOLUTE] NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED
[_SEARCH_SOURCETYPE] LED
[_SEARCH_APPLICATION] Indoor

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	4628
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	103
Total Luminaire Watts	44.9
Ballast Factor	1.00
CIE Type	Semi-Indirect
Spacing Criterion (0-180)	N.A.
Spacing Criterion (90-270)	N.A.
Spacing Criterion (Diagonal)	N.A.
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.00 ft
Luminous Width (90-270)	0.60 ft
Luminous Height	0.13 ft

LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	2504	2162	2053
55	2372	1968	1841
65	2151	1685	1546
75	1782	1251	1111
85	1407	824	578

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CANDELA TABULATION

	<u>0</u>	<u>10</u>	<u>20</u>	<u>30</u>	<u>40</u>	<u>50</u>	<u>60</u>	<u>70</u>	<u>80</u>	<u>90</u>
0	596.063	596.063	596.063	596.063	596.063	596.063	596.063	596.063	596.063	596.063
10	588.887	588.000	587.873	586.785	585.748	584.663	583.847	584.015	583.467	582.544
20	564.213	563.509	561.031	558.641	557.696	555.477	554.254	552.952	552.087	552.073
30	515.999	515.594	513.232	510.445	507.887	504.782	503.204	501.049	499.782	499.710
40	452.418	450.980	450.821	446.184	443.330	440.542	437.823	435.767	434.755	434.120
50	367.988	367.215	366.700	365.608	362.055	359.318	356.804	354.881	353.315	353.305
60	270.554	270.684	271.118	271.038	269.597	267.242	265.266	262.960	262.155	261.425
70	165.383	165.836	166.642	167.713	167.498	166.761	165.984	164.148	162.934	162.430
80	65.985	66.508	67.614	69.056	69.724	69.906	69.463	69.003	67.233	66.474
90	8.794	9.772	10.875	11.749	12.649	36.543	14.647	17.115	16.578	9.706
100	143.784	151.613	160.167	164.462	168.627	167.593	159.462	142.946	120.864	97.545
110	529.787	537.255	524.096	510.046	473.785	437.844	392.719	330.846	248.756	210.772
120	703.996	716.060	701.968	663.465	633.271	585.988	510.415	423.530	351.482	326.661
130	772.464	781.374	766.448	731.328	689.380	627.384	558.301	491.773	451.976	438.970
140	766.444	770.951	759.168	729.482	687.293	641.770	592.864	548.252	530.244	527.894
150	720.115	723.866	716.797	696.724	671.757	639.741	614.361	597.687	590.749	588.304
160	664.218	665.359	666.747	661.132	654.442	646.656	642.549	640.342	637.360	636.443
170	650.347	649.588	651.463	654.122	656.491	656.181	655.585	654.142	653.955	653.029
180	646.176	646.176	646.176	646.176	646.176	646.176	646.176	646.176	646.176	646.176

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ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	218.35	N.A.	4.70
0-30	464.63	N.A.	10.00
0-40	762.94	N.A.	16.50
0-60	1355.74	N.A.	29.30
0-80	1694.46	N.A.	36.60
0-90	1740.15	N.A.	37.60
10-90	1683.76	N.A.	36.40
20-40	544.59	N.A.	11.80
20-50	855.66	N.A.	18.50
40-70	807.74	N.A.	17.50
60-80	338.71	N.A.	7.30
70-80	123.79	N.A.	2.70
80-90	45.70	N.A.	1.00
90-110	395.22	N.A.	8.50
90-120	887.51	N.A.	19.20
90-130	1426.06	N.A.	30.80
90-150	2337.89	N.A.	50.50
90-180	2887.63	N.A.	62.40
110-180	2492.41	N.A.	53.90
0-180	4627.78	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	56.40
10-20	161.95
20-30	246.29
30-40	298.30
40-50	311.07
50-60	281.74
60-70	214.93
70-80	123.79
80-90	45.70
90-100	90.65
100-110	304.56
110-120	492.29
120-130	538.56
130-140	499.55
140-150	412.28
150-160	302.68
160-170	185.01
170-180	62.04

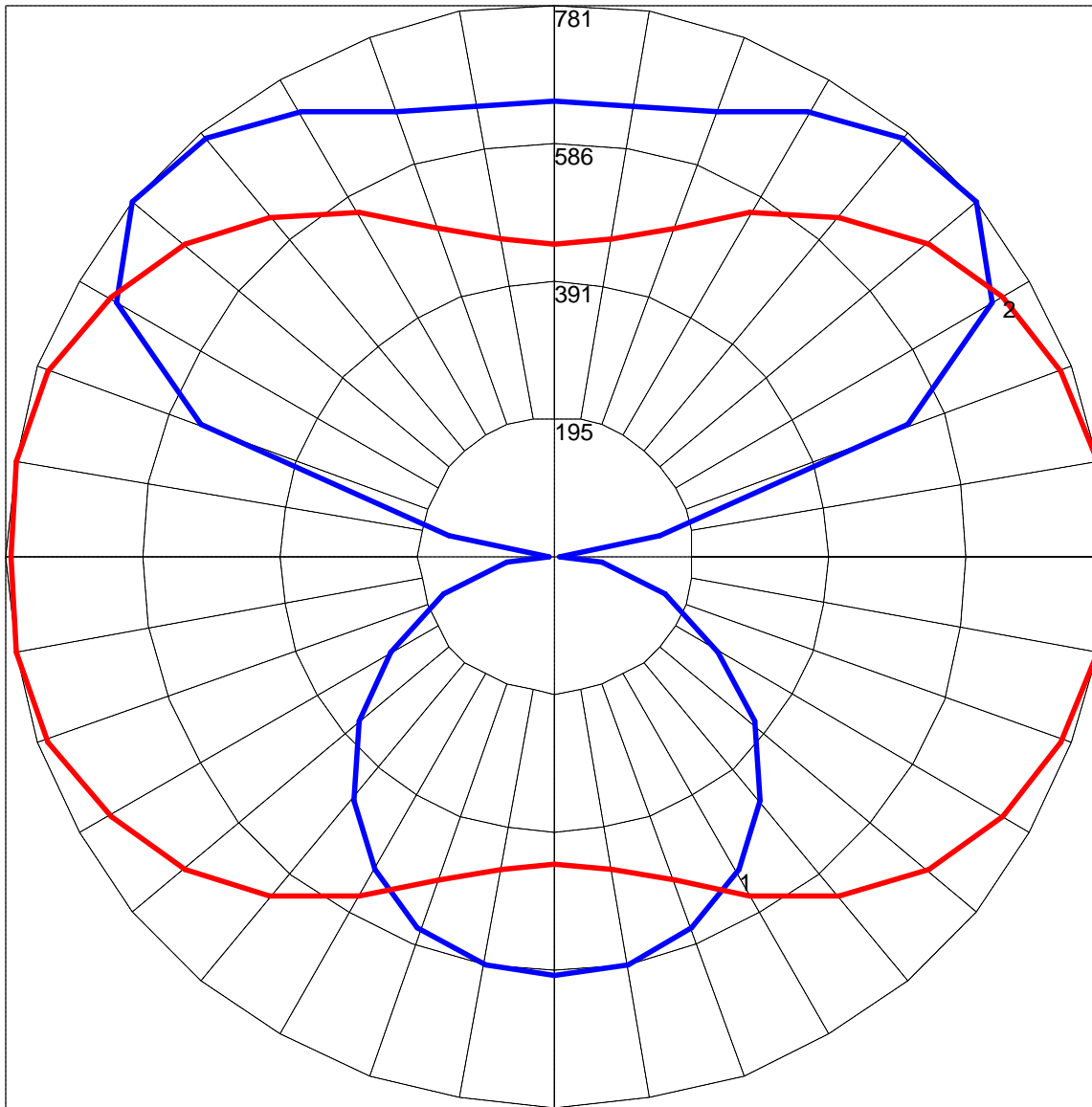
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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

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	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45	38
1	95	90	87	83	86	82	79	76	67	64	62	52	51	49	39	38	37	31
2	86	79	73	68	78	72	66	62	58	54	51	46	43	41	34	33	31	26
3	78	69	62	56	71	63	57	51	51	47	43	40	37	34	30	28	26	22
4	72	61	53	47	65	56	49	43	45	40	36	36	32	29	27	24	23	19
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	22	20	16
6	60	48	40	35	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	44	36	30	50	40	33	28	33	27	24	26	22	19	20	17	15	12
8	52	39	32	27	47	36	29	25	30	25	21	24	20	17	18	15	13	11
9	48	36	28	24	43	33	26	22	27	22	19	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	16	14	16	13	11	9

POLAR GRAPH



Maximum Candela = 781.374 Located At Horizontal Angle = 10, Vertical Angle = 130
1 - Vertical Plane Through Horizontal Angles (10 - 190) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (130) (Through Max. Cd.)