



IES INDOOR REPORT

PHOTOMETRIC FILENAME : HRZ-4-LED-6040-FL-SS-35.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L250_3500K_SS(750)_6040_N2S_5-17-2016

[TESTLAB] Orb Optronix, Inc.

[ISSUE DATE] 05-17-2016

[TEST DATE] 01-12-2017

[MANUFACT] LSI INDUSTRIES, INC

[LUMCAT] HRZ-4-LED-6040-FL-SS-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	3944
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	107
Total Luminaire Watts	36.7
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	2132	1845	1746
55	2041	1694	1578
65	1891	1477	1344
75	1655	1154	1008
85	1591	794	623

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

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	502.456	502.456	502.456	502.456	502.456	502.456	502.456	502.456	502.456	502.456
10	496.564	496.380	495.549	494.563	494.119	494.139	492.839	493.065	492.322	492.144
20	475.814	475.395	474.165	472.471	470.902	469.908	468.510	468.026	466.975	466.371
30	436.479	436.300	434.961	432.112	430.155	427.978	425.960	424.234	423.724	423.022
40	383.826	383.308	382.865	379.606	377.513	374.663	372.881	371.004	369.543	368.185
50	314.621	314.146	314.019	312.935	310.230	307.787	305.994	303.428	302.238	301.399
60	234.883	235.855	236.684	234.850	233.528	231.563	229.450	227.809	225.993	225.427
70	148.347	149.109	149.710	150.456	149.744	148.561	147.747	145.925	144.202	143.128
80	66.550	67.250	68.408	69.028	69.412	69.545	68.501	67.288	65.404	64.579
90	18.022	18.828	19.599	20.175	20.997	21.863	21.881	24.324	24.182	17.557
100	121.843	126.956	134.035	142.393	146.946	146.306	139.966	126.502	111.593	92.333
110	430.331	432.672	424.253	413.067	388.891	363.667	326.091	280.402	215.846	186.303
120	583.326	588.417	574.732	553.190	523.845	486.075	432.507	364.997	303.855	284.946
130	641.869	649.260	631.468	608.643	578.359	532.983	479.232	418.299	388.215	379.581
140	649.446	654.517	643.202	610.482	574.075	538.924	501.568	471.907	460.562	459.208
150	607.992	610.249	604.662	586.183	563.151	538.850	519.006	510.368	505.744	505.380
160	563.785	566.539	566.734	563.955	557.971	553.855	550.430	550.007	548.766	548.674
170	560.305	561.314	563.519	565.882	567.585	569.138	569.258	568.440	568.059	567.338
180	561.706	561.706	561.706	561.706	561.706	561.706	561.706	561.706	561.706	561.706

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

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	184.33	N.A.	4.70
0-30	392.69	N.A.	10.00
0-40	645.81	N.A.	16.40
0-60	1153.57	N.A.	29.20
0-80	1456.12	N.A.	36.90
0-90	1504.61	N.A.	38.10
10-90	1457.05	N.A.	36.90
20-40	461.47	N.A.	11.70
20-50	726.77	N.A.	18.40
40-70	696.20	N.A.	17.60
60-80	302.55	N.A.	7.70
70-80	114.11	N.A.	2.90
80-90	48.49	N.A.	1.20
90-110	337.91	N.A.	8.60
90-120	746.81	N.A.	18.90
90-130	1198.33	N.A.	30.40
90-150	1969.42	N.A.	49.90
90-180	2439.88	N.A.	61.90
110-180	2101.97	N.A.	53.30
0-180	3944.49	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	47.57
10-20	136.77
20-30	208.36
30-40	253.11
40-50	265.30
50-60	242.47
60-70	188.44
70-80	114.11
80-90	48.49
90-100	83.13
100-110	254.78
110-120	408.90
120-130	451.52
130-140	421.93
140-150	349.16
150-160	257.39
160-170	159.24
170-180	53.84

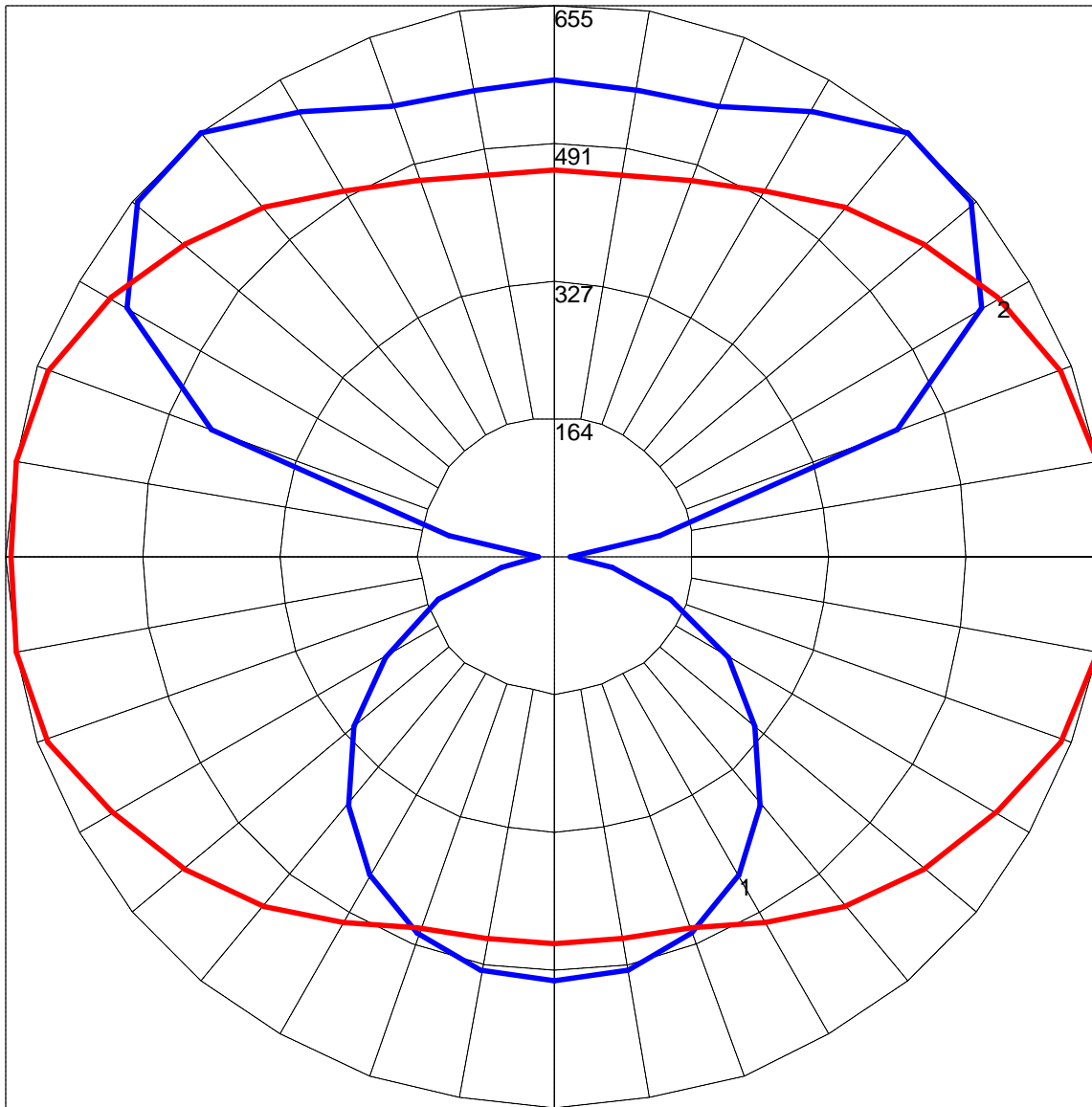
IES INDOOR REPORT
PHOTOMETRIC FILENAME : HRZ-4-LED-6040-FL-SS-35.IES

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	77	77	77	60	60	60	45	45	45	38
1	95	90	86	83	86	82	79	76	67	64	62	52	51	49	39	38	37	31
2	86	79	72	67	78	72	66	62	58	54	51	46	43	41	34	33	31	26
3	78	69	62	56	71	63	56	51	51	46	43	40	37	34	30	28	26	22
4	72	61	53	47	65	55	49	43	45	40	36	36	32	29	27	24	22	18
5	66	54	46	40	59	49	42	37	40	35	31	32	28	25	24	22	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	56	43	36	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	52	39	32	26	47	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	26	21	40	30	24	19	25	20	17	20	16	14	16	13	11	9

POLAR GRAPH



Maximum Candela = 654.517 Located At Horizontal Angle = 10, Vertical Angle = 140
1 - Vertical Plane Through Horizontal Angles (10 - 190) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (140) (Through Max. Cd.)