



IES INDOOR REPORT

PHOTOMETRIC FILENAME : HRZ-4-LED-6040-FL-SS-30.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] L250_3000K_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-30

[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	3826
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	104
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	2068	1790	1694
55	1980	1643	1530
65	1835	1432	1304
75	1605	1120	977
85	1543	770	605

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HRZ-4-LED-6040-FL-SS-30.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	487.388	487.388	487.388	487.388	487.388	487.388	487.388	487.388	487.388	487.388
10	481.672	481.494	480.687	479.732	479.300	479.320	478.059	478.278	477.557	477.385
20	461.545	461.138	459.945	458.302	456.780	455.815	454.459	453.990	452.971	452.384
30	423.389	423.215	421.917	419.153	417.255	415.143	413.185	411.511	411.017	410.336
40	372.315	371.813	371.383	368.221	366.191	363.427	361.698	359.878	358.460	357.144
50	305.186	304.725	304.601	303.550	300.926	298.557	296.817	294.328	293.174	292.361
60	227.839	228.782	229.586	227.807	226.524	224.618	222.569	220.977	219.215	218.667
70	143.899	144.637	145.220	145.944	145.253	144.106	143.316	141.549	139.877	138.835
80	64.554	65.233	66.357	66.958	67.331	67.459	66.447	65.270	63.443	62.642
90	17.482	18.264	19.011	19.570	20.368	21.207	21.225	23.594	23.457	17.030
100	118.189	123.149	130.015	138.122	142.539	141.918	135.769	122.708	108.246	89.564
110	417.426	419.696	411.530	400.679	377.228	352.761	316.311	271.993	209.373	180.716
120	565.833	570.770	557.496	536.600	508.135	471.498	419.536	354.051	294.742	276.400
130	622.620	629.789	612.531	590.390	561.014	516.999	464.860	405.754	376.572	368.198
140	629.969	634.888	623.913	592.173	556.859	522.761	486.527	457.754	446.750	445.437
150	589.758	591.947	586.529	568.603	546.262	522.690	503.441	495.062	490.577	490.224
160	546.877	549.549	549.737	547.043	541.237	537.245	533.923	533.513	532.308	532.219
170	543.502	544.480	546.620	548.911	550.564	552.069	552.187	551.393	551.023	550.324
180	544.861	544.861	544.861	544.861	544.861	544.861	544.861	544.861	544.861	544.861

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HRZ-4-LED-6040-FL-SS-30.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	178.81	N.A.	4.70
0-30	380.91	N.A.	10.00
0-40	626.44	N.A.	16.40
0-60	1118.97	N.A.	29.20
0-80	1412.45	N.A.	36.90
0-90	1459.49	N.A.	38.10
10-90	1413.35	N.A.	36.90
20-40	447.63	N.A.	11.70
20-50	704.97	N.A.	18.40
40-70	675.32	N.A.	17.60
60-80	293.48	N.A.	7.70
70-80	110.69	N.A.	2.90
80-90	47.04	N.A.	1.20
90-110	327.77	N.A.	8.60
90-120	724.41	N.A.	18.90
90-130	1162.39	N.A.	30.40
90-150	1910.35	N.A.	49.90
90-180	2366.71	N.A.	61.90
110-180	2038.93	N.A.	53.30
0-180	3826.2	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	46.14
10-20	132.67
20-30	202.11
30-40	245.52
40-50	257.34
50-60	235.19
60-70	182.78
70-80	110.69
80-90	47.04
90-100	80.64
100-110	247.14
110-120	396.64
120-130	437.98
130-140	409.28
140-150	338.68
150-160	249.67
160-170	154.46
170-180	52.22

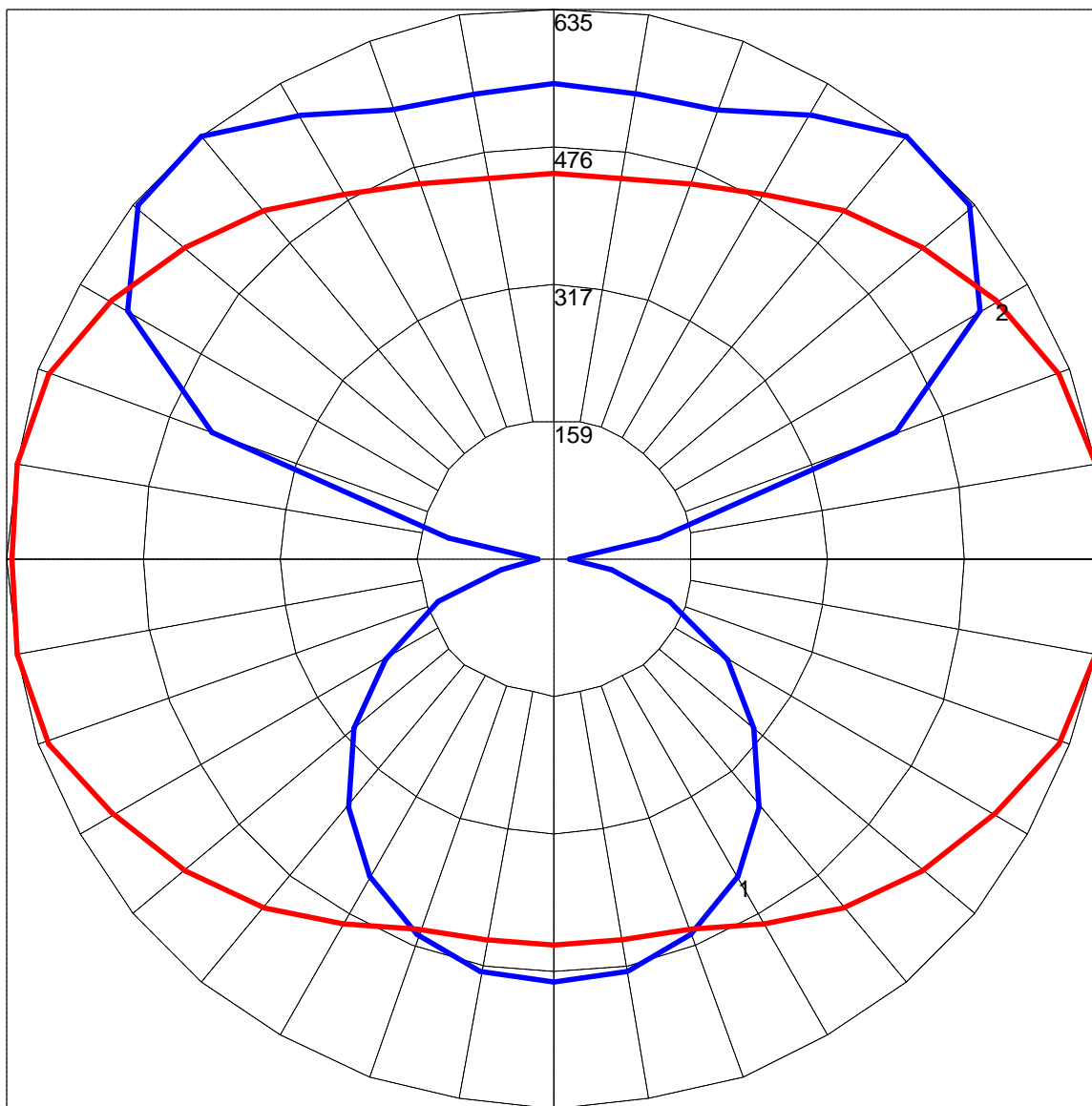
IES INDOOR REPORT
PHOTOMETRIC FILENAME : HRZ-4-LED-6040-FL-SS-30.IES

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 = 634.888 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.)