

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HZL-4-L400-840-HIA-ND-XXXX-DIM-UNV_.IES

DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002
[TEST] GEN FROM 14469285.03
[TESTLAB] UL Solutions
[ISSUE DATE] 11/19/2025
[TEST DATE] 11/2/2022
[MANUFAC] H E Williams Inc
[LUMCAT] HZL-4-L400-840-HIA-ND-DIM-UNV
[LUMINAIRE] 4-foot enclosed and gasketed industrial luminaire with nar
[MORE] row distribution
[LAMP] 224 White LEDs
[OTHER] This test was performed using the calibrated photodetector met
[MORE] hod of absolute photometry.

CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	37597
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	139
Total Luminaire Watts	270
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.14
Spacing Criterion (Diagonal)	1.24
Basic Luminous Shape	Rectangular w/Sides
Luminous Length (0-180)	4.13 ft
Luminous Width (90-270)	1.04 ft
Luminous Height	0.19 ft



LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	37692	25543	15476
55	32192	15666	8099
65	25758	9478	4920
75	19050	5798	3297
85	10902	2977	2194

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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>
0.0	17756.42117756.42117756.42117756.42117756.421				
0.5	17800.01517832.71017721.00017715.55117721.000				
1.0	17802.73917832.71017723.72517723.72517729.174				
1.5	17800.01517832.71017731.89917737.34817745.522				
2.0	17791.84117832.71017740.07317753.69617767.319				
2.5	17786.39217829.98617748.24717775.49317794.566				
3.0	17780.94217829.98617759.14517800.01517819.087				
3.5	17772.76817827.26117775.49317829.98617854.507				
4.0	17759.14517824.53617789.11617859.95717892.652				
4.5	17750.97117821.81217805.46417895.37717933.522				
5.0	17737.34817816.36317819.08717928.07217974.391				
5.5	17718.27617813.63817838.16017963.49318015.261				
6.0	17704.65317805.46417854.50718001.63718061.579				
6.5	17688.30517802.73917870.85518034.33318105.173				
7.0	17669.23217797.29017887.20318069.75318148.768				
7.5	17647.43517786.39217900.82618105.17318186.912				
8.0	17628.36317778.21817917.17418137.86918225.057				
8.5	17603.84117770.04417930.79718165.11518257.753				
9.0	17579.32017756.42117944.42018192.36218284.999				
9.5	17552.07317748.24717955.31918214.15918306.796				
10.0	17524.82717731.89917963.49318233.23118325.869				
10.5	17497.58117718.27617971.66718246.85418339.492				
11.0	17467.61017704.65317977.11618257.75318347.666				
11.5	17434.91417688.30517982.56518263.20218347.666				
12.0	17402.21917669.23217979.84018257.75318339.492				
12.5	17366.79817650.16017977.11618252.30418325.869				
13.0	17328.65417631.08817974.39118235.95618306.796				
13.5	17290.50917606.56617960.76818214.15918279.550				
14.0	17249.63917584.76917947.14518186.91218241.405				
14.5	17208.77017557.52317928.07218151.49218195.086				
15.0	17165.17617530.27617906.27518107.89818140.594				
15.5	17118.85717497.58117876.30418058.85518080.652				
16.0	17072.53817467.61017846.33418001.63718012.536				
16.5	17023.49517434.91417808.18917938.97117938.971				
17.0	16971.72717399.49417770.04417868.13117857.232				
17.5	16917.23417361.34917721.00017789.11617764.595				
18.0	16862.74217320.48017671.95717704.65317663.783				
18.5	16808.24917276.88617614.74017614.74017557.523				
19.0	16751.03217233.29217554.79817516.65317443.088				
19.5	16691.09017184.24817486.68217410.39317317.755				
20.0	16631.14817135.20517413.11717298.68317189.697				
20.5	16565.75717080.71217336.82817181.52417045.292				
21.0	16503.09017026.22017252.36417056.19116898.162				
21.5	16434.97516969.00217162.45116922.68416742.858				
22.0	16369.58316906.33617069.81416786.45216584.829				
22.5	16298.74316843.66916974.45216639.32216421.351				
23.0	16227.90316778.27816868.19116486.74316252.424				
23.5	16154.33816707.43816759.20616328.71416078.048				
24.0	16080.77316633.87316647.49616165.23615898.222				
24.5	16007.20816560.30816527.61215990.86015707.498				
25.0	15925.46916484.01816405.00415816.48315508.600				
25.5	15846.45416399.55416274.22115631.20815304.253				
26.0	15764.71516317.81516129.81615440.48415089.007				
26.5	15680.25216233.35215988.13515244.31114868.312				

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CANDELA TABULATION - (Cont.)

27.0	15593.06416143.43915851.90415037.23914655.791
27.5	15505.87516050.80215704.77314830.16714456.892
28.0	15415.96315952.71515552.19414612.19614181.705
28.5	15323.32515857.35315394.16614394.22613906.517
29.0	15219.78915753.81715236.13714165.35713661.300
29.5	15121.70215647.55615069.93413936.48813410.634
30.0	15023.61615541.29614903.73213704.89413154.519
30.5	14922.80415429.58614726.63113465.12712895.679
31.0	14819.26815315.15114549.53013225.35912625.940
31.5	14713.00815200.71714366.98012974.69312356.202
32.0	14606.74715075.38414178.98012726.75212078.290
32.5	14500.48714950.05113988.25612473.36111794.928
33.0	14388.77714824.71813789.35812214.52111508.842
33.5	14279.79114691.21113587.73511952.95711214.581
34.0	14162.63214557.70413386.11211685.94310923.046
34.5	14048.19814421.47213179.04011416.20410631.510
35.0	13931.03914279.79112971.96911143.74110337.250
35.5	13816.60414138.11112759.44710871.27810051.164
36.0	13693.99613990.98112546.92610566.1199765.078
36.5	13571.38713841.12612331.68010301.8309481.716
37.0	13446.05413688.54712108.26010042.9909195.630
37.5	13315.27213533.24311887.5659786.875 8912.268
38.0	13184.49013375.21411658.6969508.962 8637.080
38.5	13050.98313217.18511429.8279211.978 8350.994
39.0	12914.75113053.70711195.5098936.790 8075.806
39.5	12778.52012890.23010961.1918667.051 7797.894
40.0	12636.83912721.30210724.1488400.038 7519.982
40.5	12492.43312552.37510489.8308133.024 7252.968
41.0	12345.30312377.99910252.7877871.459 6988.679
41.5	12198.17312203.62310018.4687612.619 6732.563
42.0	12051.04312026.5229781.426 7356.504 6487.347
42.5	11901.18911846.6969547.107 7108.562 6247.579
43.0	11751.33411664.1469310.064 6860.621 6015.985
43.5	11596.03011484.3209078.471 6623.578 5798.015
44.0	11443.45011296.3208841.428 6389.260 5580.044
44.5	11290.87111111.046 8607.110 6163.115 5370.248
45.0	11138.29210923.0468372.791 5942.420 5163.176
45.5	10982.98810735.0468138.473 5727.175 4964.278
46.0	10827.68410544.3227906.879 5517.378 4759.930
46.5	10672.38010353.5987680.735 5313.031 4531.061
47.0	10514.35110162.8747457.315 5114.133 4383.931
47.5	10356.3239969.425 7250.243 4923.408 4228.627
48.0	10198.2949775.976 7037.722 4738.133 4056.976
48.5	10037.5419582.527 6806.128 4558.308 3898.947
49.0	9876.788 9389.079 6596.332 4386.656 3743.643
49.5	9710.585 9195.630 6391.984 4220.454 3599.238
50.0	9547.107 9004.906 6193.086 4059.700 3460.281
50.5	9380.905 8814.182 5994.188 3904.396 3326.775
51.0	9211.978 8620.733 5800.740 3757.266 3198.717
51.5	9043.051 8432.733 5607.291 3615.585 3073.384
52.0	8874.123 8242.009 5422.016 3476.629 2953.500
52.5	8705.196 8054.009 5239.466 3345.847 2839.066
53.0	8536.269 7866.010 5065.089 3220.514 2727.356
53.5	8364.617 7678.010 4890.713 3097.906 2622.185
54.0	8195.690 7492.735 4724.510 2983.471 2521.101
54.5	8029.488 7307.461 4563.757 2871.761 2425.194

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55.0	7860.561	7124.910	4411.178	2765.501	2335.281
55.5	7694.358	6945.085	4261.323	2662.782	2249.183
56.0	7533.605	6765.259	4114.193	2564.150	2167.989
56.5	7370.127	6585.433	3972.512	2460.887	2090.064
57.0	7209.374	6411.057	3836.281	2375.333	2014.865
57.5	7048.621	6239.405	3700.049	2291.960	1943.479
58.0	6890.592	6081.377	3571.991	2210.221	1874.274
58.5	6735.288	5909.725	3446.658	2131.751	1808.065
59.0	6579.984	5729.899	3324.050	2056.007	1743.764
59.5	6424.680	5563.697	3206.891	1982.714	1681.370
60.0	6272.101	5405.668	3092.456	1912.963	1621.973
60.5	6119.521	5261.263	2983.471	1845.393	1564.756
61.0	5966.942	5086.886	2877.210	1780.819	1510.535
61.5	5814.363	4931.582	2776.399	1718.425	1458.495
62.0	5664.508	4779.003	2679.130	1658.755	1408.907
62.5	5511.929	4631.873	2583.768	1601.538	1363.405
63.0	5362.074	4484.743	2490.585	1546.773	1317.904
63.5	5214.944	4340.337	2403.125	1493.643	1274.310
64.0	5065.089	4201.381	2315.664	1442.965	1231.806
64.5	4920.684	4062.425	2231.473	1394.194	1191.754
65.0	4776.278	3928.918	2149.734	1346.513	1152.519
65.5	4631.873	3795.411	2071.537	1301.011	1114.102
66.0	4490.192	3664.629	1996.337	1257.417	1077.047
66.5	4351.236	3539.296	1923.317	1214.641	1041.626
67.0	4215.004	3413.963	1852.477	1173.499	1007.841
67.5	4081.497	3291.354	1784.088	1133.447	974.873
68.0	3961.614	3171.471	1717.335	1094.484	942.177
68.5	3852.628	3051.587	1652.761	1056.612	910.844
69.0	3678.252	2937.152	1591.185	1020.374	880.328
69.5	3547.470	2822.718	1530.970	984.137	852.265
70.0	3441.209	2713.733	1472.663	949.534	823.384
70.5	3324.050	2606.655	1418.988	915.749	795.592
71.0	3204.166	2502.029	1359.318	882.236	768.618
71.5	3087.007	2398.765	1302.101	850.357	741.372
72.0	2972.572	2297.954	1248.971	819.297	714.943
72.5	2858.138	2199.322	1196.658	788.781	689.877
73.0	2743.703	2103.688	1145.980	759.082	663.993
73.5	2632.811	2009.688	1096.392	730.201	640.288
74.0	2522.463	1918.140	1048.710	701.593	615.494
74.5	2413.478	1827.683	1002.119	674.074	592.335
75.0	2305.855	1740.222	957.435	647.372	570.810
75.5	2199.322	1654.941	913.024	620.671	548.741
76.0	2093.879	1571.295	870.247	594.787	527.761
76.5	1989.798	1489.283	828.288	569.993	507.599
77.0	1889.259	1409.724	784.694	545.744	487.164
77.5	1787.903	1331.527	745.187	521.494	466.729
78.0	1690.361	1255.510	707.587	498.607	446.839
78.5	1594.727	1182.217	670.532	475.993	427.767
79.0	1501.544	1109.197	633.477	453.924	409.512
79.5	1410.542	1039.174	595.332	432.671	391.529
80.0	1322.536	971.059	561.274	412.237	374.092
80.5	1235.075	904.305	528.306	393.437	357.744
81.0	1151.974	840.549	496.428	374.637	340.579
81.5	1070.780	778.972	466.457	355.292	325.048
82.0	990.948	719.848	437.031	337.037	309.791
82.5	914.931	662.630	409.240	320.144	295.622

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83.0	841.366	608.955	383.628	304.069	281.999
83.5	771.071	558.277	358.289	287.994	268.921
84.0	703.500	509.778	335.130	274.098	257.205
84.5	638.654	464.277	313.333	260.475	244.944
85.0	577.622	422.318	293.170	247.941	234.046
85.5	521.222	383.356	274.370	235.681	223.692
86.0	467.819	347.663	256.933	224.510	213.611
86.5	418.503	315.512	240.857	213.884	204.347
87.0	375.182	283.634	225.872	204.075	195.356
87.5	337.037	259.930	212.521	194.539	187.455
88.0	304.886	238.133	200.533	185.820	179.553
88.5	277.640	218.788	188.817	178.191	172.469
89.0	258.023	201.623	178.736	170.289	165.930
89.5	243.854	186.910	169.200	162.933	159.391
90.0	234.046	173.559	160.208	156.939	153.942
90.5	226.417	164.295	152.852	150.945	148.220
91.0	223.147	156.666	145.495	144.678	143.316
91.5	219.878	149.582	139.229	140.319	138.956
92.0	217.426	144.405	133.779	135.687	134.052
92.5	215.246	140.319	128.603	131.327	129.420
93.0	213.066	137.049	124.516	127.513	126.150
93.5	211.976	135.687	121.519	123.698	122.881
94.0	211.159	134.597	118.521	120.974	119.611
94.5	210.069	133.507	116.342	117.977	117.159
95.0	208.979	132.962	114.435	115.252	114.707
95.5	208.434	132.690	113.072	113.617	113.072
96.0	207.889	132.417	112.255	111.710	110.620
96.5	207.889	132.145	110.892	110.620	108.985
97.0	206.799	131.872	110.892	108.985	107.350
97.5	206.255	131.872	110.892	108.168	106.533
98.0	206.255	131.055	110.620	107.350	105.716
98.5	205.437	130.510	110.620	106.806	105.443
99.0	204.075	130.782	110.892	106.806	104.898
99.5	203.530	130.237	111.437	106.533	104.081
100.0	202.168	130.237	111.437	106.261	104.353
100.5	201.078	129.692	111.437	106.261	104.081
101.0	200.260	129.420	112.255	106.533	104.353
101.5	198.898	128.875	111.710	106.533	104.081
102.0	197.808	128.330	111.982	106.806	104.353
102.5	195.629	127.785	111.982	107.078	104.898
103.0	194.266	126.968	112.255	106.806	105.443
103.5	192.359	126.695	111.982	107.350	104.898
104.0	189.907	125.605	112.255	107.623	105.443
104.5	188.272	124.788	111.982	107.895	105.716
105.0	185.547	124.243	112.255	107.895	106.261
105.5	183.095	122.881	111.982	107.623	105.171
106.0	180.916	122.336	111.437	107.895	106.261
106.5	178.191	120.974	111.437	107.623	105.716
107.0	174.921	119.884	110.892	108.168	105.988
107.5	172.197	118.794	110.892	107.895	106.806
108.0	168.927	117.432	110.075	107.623	106.261
108.5	166.202	116.069	109.530	107.623	106.261
109.0	163.478	114.707	109.530	107.623	106.261
109.5	160.481	113.345	108.985	107.350	106.806
110.0	156.939	111.710	108.168	107.078	106.261
110.5	154.759	110.075	107.895	107.078	106.261

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111.0	151.762	108.440	106.533	106.806	106.533
111.5	147.675	106.806	106.261	106.806	106.533
112.0	144.405	105.171	105.171	106.806	105.988
112.5	141.681	102.991	104.626	106.261	106.261
113.0	138.684	101.356	103.536	105.716	105.716
113.5	135.414	99.449	102.174	104.898	105.988
114.0	132.417	97.542	101.356	104.626	105.443
114.5	129.692	95.907	100.266	104.353	105.171
115.0	125.878	94.000	99.449	103.808	105.171
115.5	122.881	91.820	98.632	102.991	104.898
116.0	120.156	90.185	97.542	102.174	104.353
116.5	116.614	87.733	95.635	101.629	104.353
117.0	113.617	86.098	94.817	101.356	103.536
117.5	110.892	83.919	93.182	100.266	103.808
118.0	108.440	81.739	91.820	99.721	102.446
118.5	105.443	80.104	90.730	99.177	101.901
119.0	102.446	77.652	88.551	98.359	101.356
119.5	99.449	76.017	87.733	96.997	100.811
120.0	96.724	73.838	85.826	96.179	99.721
120.5	94.545	71.658	84.191	94.817	99.177
121.0	91.548	70.023	82.556	93.727	98.632
121.5	89.368	68.388	81.466	92.910	97.814
122.0	86.916	66.753	80.104	91.548	96.997
122.5	85.008	65.119	77.924	90.730	95.635
123.0	82.556	62.939	76.562	89.368	95.362
123.5	80.104	61.577	74.655	88.551	93.727
124.0	77.924	59.942	73.293	86.916	93.182
124.5	75.745	58.035	71.385	85.553	92.093
125.0	74.110	56.672	70.023	84.191	91.003
125.5	71.658	55.310	68.388	83.101	90.185
126.0	70.295	53.675	66.753	81.466	88.278
126.5	68.388	52.313	64.846	80.377	87.461
127.0	66.753	51.496	63.484	79.014	86.371
127.5	64.574	49.861	62.122	77.924	85.008
128.0	62.939	48.771	60.487	76.835	83.919
128.5	61.577	47.681	58.852	75.200	82.556
129.0	60.214	46.591	56.945	73.838	82.011
129.5	58.852	45.229	55.310	72.748	79.287
130.0	57.490	44.411	53.948	71.113	78.197
130.5	55.855	43.049	52.313	69.478	77.107
131.0	53.948	41.959	50.678	67.843	76.017
131.5	53.130	41.414	49.043	66.481	74.655
132.0	51.496	40.325	47.681	65.391	73.293
132.5	50.406	39.235	46.046	64.029	72.203
133.0	49.043	38.962	44.684	62.394	70.295
133.5	47.954	37.872	42.777	61.032	68.661
134.0	46.319	36.783	42.232	59.397	67.571
134.5	45.501	36.238	40.052	58.035	65.664
135.0	44.139	35.693	38.690	56.672	64.574
135.5	43.594	34.603	37.872	54.765	62.939
136.0	42.232	34.330	36.510	53.948	61.849
136.5	41.142	33.513	34.603	52.585	59.669
137.0	40.597	32.968	33.513	51.223	58.580
137.5	39.780	31.878	32.151	49.588	56.945
138.0	38.145	31.606	30.788	48.498	55.855
138.5	38.417	31.061	29.971	46.864	54.765

IES INDOOR REPORT**PHOTOMETRIC FILENAME : HZL-4-L400-840-HIA-ND-XXXX-DIM-UNV_.IES****CANDELA TABULATION - (Cont.)**

139.0	36.783	30.243	28.881	45.774	52.858
139.5	36.783	29.698	28.064	44.411	51.223
140.0	35.693	29.154	27.246	43.594	50.133
140.5	34.603	28.609	26.156	41.687	48.771
141.0	34.058	28.064	25.339	40.869	47.136
141.5	33.240	27.791	25.067	39.507	46.046
142.0	32.968	27.791	24.249	38.962	45.229
142.5	32.423	26.701	23.977	37.600	44.411
143.0	31.606	26.429	23.704	36.510	42.504
143.5	30.788	26.156	22.614	35.965	41.959
144.0	30.516	25.612	22.887	35.420	40.597
144.5	29.698	25.067	22.887	34.058	39.780
145.0	29.154	25.067	22.614	33.240	38.145
145.5	28.881	24.794	22.887	32.151	37.600
146.0	28.064	24.522	22.342	31.606	36.238
146.5	27.519	23.977	22.614	30.243	35.148
147.0	26.974	23.704	22.070	29.426	34.330
147.5	26.156	23.432	21.797	28.336	33.513
148.0	26.156	23.432	21.797	28.064	32.423
148.5	25.884	23.432	21.797	27.246	32.151
149.0	25.612	23.159	22.342	26.974	30.788
149.5	25.612	23.432	21.797	26.701	29.971
150.0	25.339	23.432	22.070	26.156	29.426
150.5	25.339	23.977	22.614	25.884	28.609
151.0	25.612	23.432	22.887	25.612	28.064
151.5	25.067	23.704	22.887	25.339	27.791
152.0	25.339	23.977	23.159	25.339	26.974
152.5	25.067	24.249	23.159	24.794	26.974
153.0	25.612	24.249	23.432	24.522	26.156
153.5	25.339	24.522	23.432	24.522	26.156
154.0	25.339	24.522	23.977	24.522	25.884
154.5	25.339	24.522	23.704	23.977	25.067
155.0	25.067	24.794	23.704	23.977	25.339
155.5	25.067	25.067	23.977	23.977	24.794
156.0	25.339	25.067	23.977	23.977	24.249
156.5	25.339	24.794	24.249	23.977	23.977
157.0	25.339	25.067	24.249	23.704	23.432
157.5	25.612	25.339	24.522	23.977	24.249
158.0	25.884	25.339	25.067	24.249	24.249
158.5	25.884	25.612	25.067	23.977	24.794
159.0	26.156	25.612	24.794	24.794	24.522
159.5	26.429	25.612	25.067	24.794	24.794
160.0	26.429	25.884	25.612	25.067	25.612
160.5	25.884	26.156	25.612	25.067	24.794
161.0	26.974	26.156	25.612	25.339	25.612
161.5	26.701	26.429	25.884	25.884	25.612
162.0	26.701	26.429	25.884	26.156	26.156
162.5	27.246	26.156	26.429	26.156	25.884
163.0	26.701	26.701	26.156	26.156	25.884
163.5	26.974	26.429	25.612	26.156	25.884
164.0	26.156	25.884	25.612	25.884	25.884
164.5	25.884	25.612	25.612	25.612	25.339
165.0	25.884	25.612	25.612	25.339	25.339
165.5	25.884	25.884	25.339	25.339	25.612
166.0	25.339	25.339	25.612	25.067	25.339
166.5	25.884	25.612	25.339	25.339	25.339

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HZL-4-L400-840-HIA-ND-XXXX-DIM-UNV_.IES

CANDELA TABULATION - (Cont.)

167.0	25.339	25.612	25.339	25.884	26.429
167.5	26.156	25.612	25.884	25.884	26.701
168.0	26.156	26.156	26.429	26.156	26.974
168.5	26.974	26.429	26.701	26.701	27.246
169.0	26.701	26.974	27.246	27.519	28.336
169.5	28.336	27.519	27.791	28.336	28.336
170.0	27.791	28.064	27.791	28.336	29.154
170.5	28.064	28.064	28.064	28.881	29.698
171.0	28.336	27.791	28.064	29.154	29.971
171.5	28.881	28.336	28.881	28.609	30.243
172.0	28.881	28.881	28.881	29.154	30.243
172.5	28.336	28.336	28.336	29.426	30.516
173.0	28.881	28.609	29.154	28.881	30.243
173.5	28.881	28.881	28.609	29.426	30.243
174.0	28.881	28.609	28.881	29.698	30.243
174.5	29.426	28.881	29.154	29.426	30.788
175.0	29.154	29.426	29.154	29.698	30.516
175.5	29.154	28.881	29.154	29.971	30.516
176.0	29.154	29.154	29.426	29.971	31.061
176.5	28.881	29.698	29.426	29.971	31.061
177.0	29.426	29.154	29.154	29.971	31.061
177.5	29.698	29.971	29.426	30.243	31.333
178.0	29.698	29.698	29.698	30.516	31.061
178.5	29.698	29.698	29.971	30.243	31.606
179.0	29.698	29.698	29.971	30.516	31.333
179.5	30.243	29.971	30.243	30.516	31.878
180.0	30.243	30.243	30.243	30.243	30.243

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HZL-4-L400-840-HIA-ND-XXXX-DIM-UNV_.IES

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-20	6720.95	N.A.	17.90
0-30	14100.85	N.A.	37.50
0-40	21960.54	N.A.	58.40
0-60	32783.8	N.A.	87.20
0-80	36667.45	N.A.	97.50
0-90	37074.43	N.A.	98.60
10-90	35365.92	N.A.	94.10
20-40	15239.59	N.A.	40.50
20-50	21687.22	N.A.	57.70
40-70	13424.85	N.A.	35.70
60-80	3883.66	N.A.	10.30
70-80	1282.06	N.A.	3.40
80-90	406.98	N.A.	1.10
90-110	277.71	N.A.	0.70
90-120	379.80	N.A.	1.00
90-130	446.09	N.A.	1.20
90-150	500.92	N.A.	1.30
90-180	522.51	N.A.	1.40
110-180	244.79	N.A.	0.70
0-180	37596.94	N.A.	100.00

Total Luminaire Efficiency = N.A. %

ZONAL LUMEN SUMMARY

Zone	Lumens
0-10	1708.51
10-20	5012.44
20-30	7379.89
30-40	7859.7
40-50	6447.64
50-60	4375.62
60-70	2601.6
70-80	1282.06
80-90	406.98
90-100	149.10
100-110	128.61
110-120	102.09
120-130	66.28
130-140	36.44
140-150	18.39
150-160	11.42
160-170	7.39
170-180	2.78

IES INDOOR REPORT
PHOTOMETRIC FILENAME : HZL-4-L400-840-HIA-ND-XXXX-DIM-UNV_.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	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101	99
1	110	106	103	99	107	104	100	98	99	97	94	95	93	91	92	90	88	86
2	102	95	89	84	99	93	87	83	89	85	81	86	82	79	83	80	77	75
3	94	85	78	72	92	83	77	71	80	75	70	77	73	69	75	71	67	65
4	87	76	69	63	85	75	68	62	72	66	61	70	65	60	68	63	59	57
5	81	69	61	55	79	68	61	55	66	59	54	64	58	54	62	57	53	51
6	75	63	55	49	73	62	54	49	60	53	48	58	52	48	57	52	47	45
7	70	58	50	44	68	57	49	44	55	48	44	54	48	43	52	47	43	41
8	65	53	45	40	64	52	45	40	51	44	39	50	44	39	48	43	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	35	34
10	58	45	38	33	56	45	38	33	44	37	33	43	37	33	42	37	33	31

IES INDOOR REPORT

PHOTOMETRIC FILENAME : HZL-4-L400-840-HIA-ND-XXXX-DIM-UNV_.IES

UGR TABLE - CORRECTED

Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

Room Size UGR Viewed Crosswise

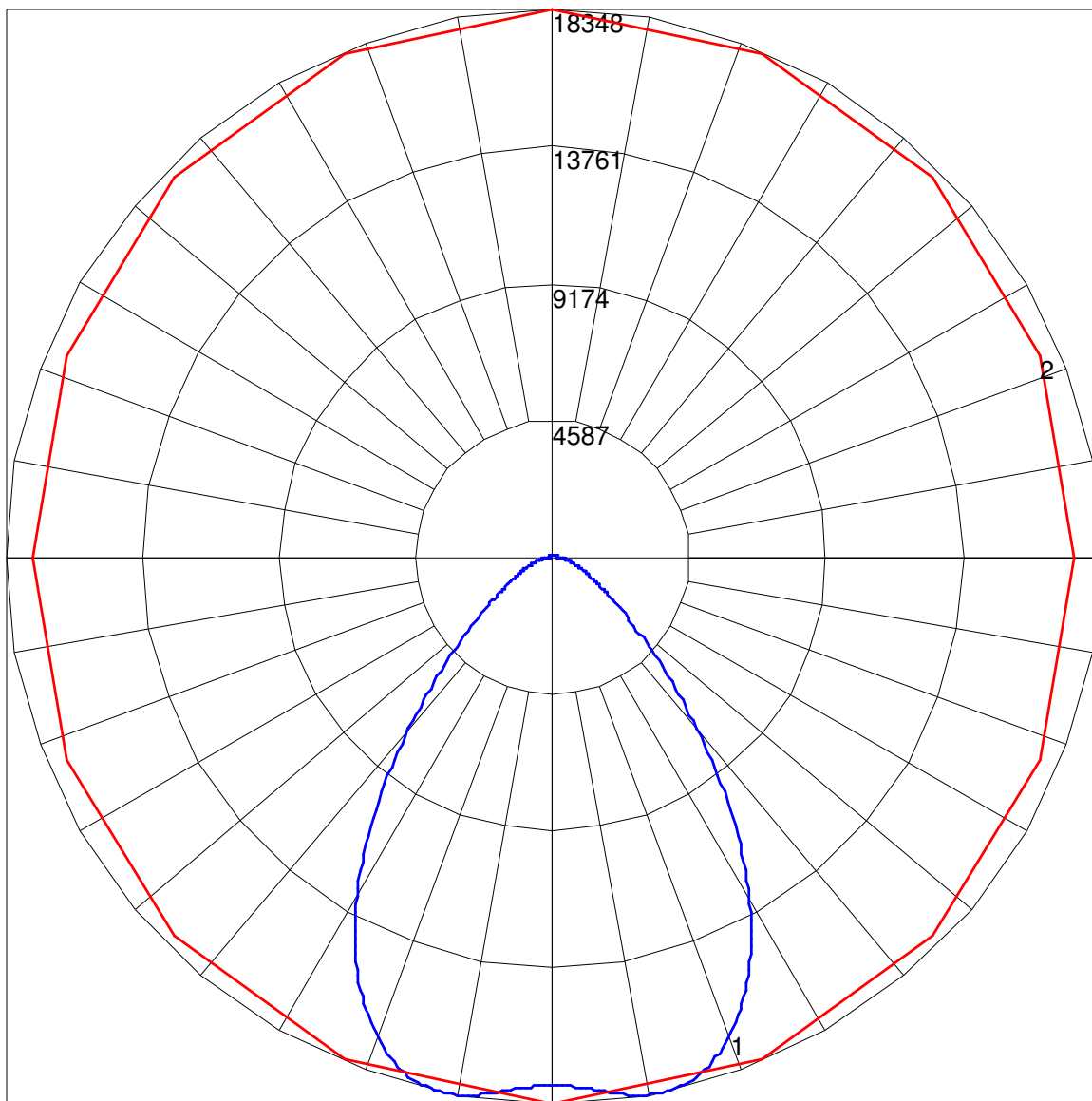
X=2H	Y=2H	23.3	24.7	23.7	25.1	25.4	16.3	17.7	16.7	18.1	18.5
	3H	24.6	25.8	25.0	26.2	26.6	17.3	18.5	17.7	18.9	19.3
	4H	25.0	26.2	25.4	26.5	27.0	17.6	18.8	18.1	19.2	19.6
	6H	25.2	26.3	25.7	26.7	27.2	17.9	19.0	18.4	19.4	19.8
	8H	25.3	26.3	25.7	26.7	27.2	18.0	19.0	18.5	19.5	19.9
	12H	25.3	26.3	25.8	26.7	27.2	18.1	19.1	18.6	19.5	20.0

UGR Viewed Endwise

4H	2H	23.3	24.4	23.7	24.8	25.3	17.3	18.5	17.8	18.9	19.3
	3H	24.7	25.7	25.2	26.1	26.6	18.4	19.4	18.8	19.8	20.3
	4H	25.2	26.1	25.7	26.6	27.0	18.8	19.7	19.3	20.1	20.6
	6H	25.6	26.3	26.1	26.8	27.3	19.1	19.9	19.6	20.3	20.9
	8H	25.7	26.4	26.2	26.9	27.4	19.2	19.9	19.7	20.4	20.9
	12H	25.7	26.4	26.2	26.9	27.4	19.3	20.0	19.9	20.5	21.0
8H	4H	25.2	25.9	25.7	26.4	26.9	19.3	20.0	19.8	20.4	21.0
	6H	25.6	26.2	26.1	26.7	27.2	19.6	20.2	20.2	20.8	21.3
	8H	25.7	26.2	26.3	26.8	27.3	19.8	20.3	20.4	20.9	21.4
	12H	25.8	26.3	26.3	26.8	27.4	20.0	20.4	20.5	21.0	21.6
12H	4H	25.1	25.8	25.7	26.3	26.8	19.3	20.0	19.8	20.5	21.0
	6H	25.6	26.1	26.1	26.6	27.2	19.7	20.3	20.3	20.8	21.4
	8H	25.7	26.2	26.2	26.7	27.3	19.9	20.4	20.5	20.9	21.5

Maximum UGR = 27.4

POLAR GRAPH



Maximum Candela = 18347.666 Located At Horizontal Angle = 90, Vertical Angle = 11
1 - Vertical Plane Through Horizontal Angles (90 - 270) (Through Max. Cd.)
2 - Horizontal Cone Through Vertical Angle (11) (Through Max. Cd.)