



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : HZX-EX-D4-60W-5000K-D120.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] HZX-EX-D4-60W-4000K-D120  
 [TESTLAB] EVERFINE  
 [TESTDATE] 28 April 2024  
 [ISSUEDATE] 2024-04-28 16:43:32  
 [NEARFIELD]  
 [LAMPPOSITION] 0,0  
 [OTHER] EVERFINE GO-2000H\_V1 SYSTEM  
 [MANUFAC] BELUCE CANADA INC.  
 [LUMINAIRE] HZX-EX-D4-60W-5000K-D120  
 [LUMCAT] ] HZX-EX-D4-60W-4000K-D120  
 [LAMP] 8073 LUMENS  
 [\_SEARCH\_SOURCETYPE] LED

### CHARACTERISTICS

Lumens Per Lamp	8072.5 (1 lamp)
Total Lamp Lumens	8072.5
Luminaire Lumens	8073
Total Luminaire Efficiency	100 %
Luminaire Efficacy Rating (LER)	136
Total Luminaire Watts	59.2505
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.24
Spacing Criterion (90-270)	1.28
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Rectangular
Luminous Length (0-180)	0.17 m
Luminous Width (90-270)	0.12 m
Luminous Height	0.00 m

### LUMINANCE DATA (cd/sq.m)

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	139996	143953	139955
55	126526	120512	121887
65	97741	92180	86422
75	54086	42687	31610
85	13328	14821	14683

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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	3204.900	3204.900	3204.900	3204.900	3204.900	3204.900	3204.900	3204.900	3204.900	3204.900
1	3205.600	3204.400	3203.400	3202.100	3202.000	3201.500	3201.800	3202.700	3203.700	3205.100
2	3204.800	3203.000	3201.300	3199.900	3199.400	3199.000	3199.100	3200.500	3202.700	3205.400
3	3202.400	3200.300	3199.500	3197.500	3196.300	3195.600	3196.300	3197.900	3200.700	3204.500
4	3199.600	3196.900	3195.600	3194.300	3192.400	3191.800	3192.800	3194.400	3197.800	3202.300
5	3195.900	3192.600	3190.700	3190.300	3188.300	3187.700	3188.200	3190.000	3193.300	3198.800
6	3191.100	3187.000	3185.500	3186.200	3184.900	3183.900	3183.100	3183.400	3188.000	3194.000
7	3185.800	3181.300	3180.800	3182.000	3181.500	3179.700	3177.400	3176.500	3181.200	3188.000
8	3179.800	3175.000	3175.800	3178.400	3177.800	3175.000	3171.100	3168.500	3173.400	3181.500
9	3172.300	3168.100	3171.100	3174.000	3173.600	3169.900	3163.800	3159.600	3164.800	3173.800
10	3163.500	3160.100	3165.400	3169.100	3168.900	3164.400	3156.300	3149.700	3155.900	3165.700
11	3153.400	3150.500	3158.600	3163.400	3163.200	3157.900	3148.000	3139.400	3145.700	3157.100
12	3142.400	3140.300	3150.000	3157.100	3157.300	3151.200	3138.500	3128.300	3135.400	3147.000
13	3131.300	3129.500	3141.100	3149.900	3150.200	3143.800	3129.200	3116.900	3124.400	3136.300
14	3118.800	3118.000	3131.700	3141.800	3142.600	3135.100	3118.800	3104.800	3112.100	3124.600
15	3106.100	3106.100	3121.500	3133.800	3134.900	3126.700	3107.800	3092.100	3098.400	3112.200
16	3092.600	3093.800	3110.600	3125.900	3127.200	3117.000	3096.400	3077.800	3082.700	3098.300
17	3077.800	3080.900	3098.900	3116.800	3118.000	3106.000	3083.800	3062.100	3065.700	3083.100
18	3061.500	3066.300	3086.200	3106.500	3106.500	3093.300	3070.300	3044.800	3048.600	3066.500
19	3044.600	3050.700	3072.300	3095.500	3093.800	3080.200	3056.300	3027.100	3031.000	3050.200
20	3027.300	3034.400	3059.100	3082.500	3077.600	3065.700	3042.100	3009.200	3013.000	3032.600
21	3009.800	3017.500	3044.800	3067.400	3054.800	3049.500	3026.400	2990.900	2995.300	3013.900
22	2990.900	2999.900	3029.800	3047.700	3016.000	3029.900	3009.500	2972.900	2976.600	2995.300
23	2968.900	2982.100	3013.300	3014.900	2978.600	2998.300	2991.100	2954.600	2957.700	2976.700
24	2930.800	2962.700	2994.700	2974.300	2941.200	2958.800	2971.200	2935.300	2939.400	2956.600
25	2875.300	2942.100	2974.800	2935.400	2915.000	2920.100	2950.900	2916.100	2921.500	2935.700
26	2796.400	2908.900	2952.400	2900.600	2892.000	2884.500	2929.800	2898.000	2902.600	2915.900
27	2732.200	2865.000	2927.400	2876.000	2868.100	2857.600	2907.300	2879.700	2884.000	2896.000
28	2693.900	2795.300	2894.000	2852.200	2841.200	2831.900	2881.900	2860.100	2857.500	2873.900
29	2671.400	2724.800	2853.400	2826.800	2799.500	2805.300	2851.500	2840.500	2800.900	2851.800
30	2645.800	2674.500	2814.700	2796.300	2756.000	2776.100	2814.500	2801.500	2726.100	2828.000
31	2619.700	2647.400	2773.100	2752.100	2709.300	2733.900	2776.000	2733.700	2673.300	2779.000
32	2593.100	2621.500	2735.700	2707.800	2667.300	2689.500	2739.200	2665.100	2633.300	2707.900
33	2569.500	2594.500	2697.600	2660.900	2635.900	2642.000	2701.400	2620.700	2609.800	2644.700
34	2547.500	2567.800	2653.500	2619.000	2605.600	2596.200	2667.200	2585.600	2587.300	2600.600
35	2517.000	2541.400	2597.300	2585.400	2565.700	2561.100	2638.000	2562.400	2563.300	2566.800
36	2482.800	2518.200	2527.800	2552.600	2503.200	2526.700	2607.900	2538.300	2538.100	2541.700
37	2448.300	2493.300	2453.100	2512.400	2436.300	2488.900	2563.900	2513.400	2509.800	2514.500
38	2413.900	2459.800	2387.200	2450.500	2377.600	2430.900	2497.500	2486.100	2477.000	2488.000
39	2365.700	2424.500	2336.500	2383.000	2338.500	2364.100	2416.700	2455.300	2442.100	2460.100
40	2292.500	2388.200	2285.900	2323.200	2303.900	2299.200	2353.300	2421.500	2406.200	2424.800
41	2201.300	2351.200	2241.800	2280.700	2253.800	2251.000	2295.800	2386.500	2370.100	2386.000
42	2136.800	2302.000	2204.500	2244.600	2180.100	2213.500	2247.800	2350.500	2323.300	2345.300
43	2096.400	2230.200	2166.000	2198.600	2111.000	2172.800	2210.700	2313.500	2227.400	2298.700
44	2058.200	2136.500	2129.500	2124.000	2064.100	2103.800	2174.800	2261.000	2147.100	2246.500
45	2020.300	2058.400	2077.400	2052.500	2019.700	2031.500	2134.800	2164.900	2086.700	2175.300
46	1982.000	2003.400	2011.300	1999.000	1965.000	1974.500	2089.100	2088.700	2044.000	2066.500
47	1942.400	1955.700	1947.700	1956.100	1892.200	1934.600	2024.500	2028.500	2000.000	1979.700
48	1902.100	1908.700	1894.400	1903.700	1830.500	1884.300	1954.000	1982.300	1954.600	1913.000
49	1861.700	1864.100	1847.500	1833.500	1789.200	1817.300	1893.200	1933.300	1906.900	1865.700
50	1811.300	1820.100	1799.800	1766.400	1740.900	1750.800	1842.300	1878.300	1856.800	1815.300
51	1713.100	1774.800	1736.200	1715.700	1668.300	1700.600	1796.600	1821.800	1807.600	1764.100
52	1617.700	1728.900	1648.500	1669.600	1609.000	1659.500	1734.600	1761.800	1718.100	1712.600
53	1570.200	1676.100	1543.400	1603.100	1564.800	1601.600	1623.800	1700.900	1618.700	1653.700

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**CANDELA TABULATION - (Cont.)**

54	1526.600	1587.600	1466.700	1529.500	1500.700	1532.500	1527.400	1598.100	1558.400	1588.300
55	1481.100	1485.700	1410.700	1474.100	1426.800	1472.400	1455.300	1510.600	1508.900	1476.100
56	1436.500	1426.800	1352.400	1411.700	1378.600	1402.200	1402.800	1455.500	1458.000	1380.700
57	1390.500	1372.000	1289.200	1320.100	1307.100	1310.600	1344.500	1404.300	1405.400	1319.700
58	1322.000	1316.600	1236.900	1248.800	1224.900	1249.100	1275.600	1351.200	1351.800	1267.900
59	1210.200	1266.600	1190.200	1182.200	1172.200	1190.000	1210.300	1292.400	1238.800	1214.200
60	1156.300	1214.000	1133.300	1094.800	1090.700	1105.900	1156.600	1221.900	1165.500	1156.400
61	1108.800	1136.900	1070.000	1043.600	1024.900	1050.500	1081.500	1105.600	1111.600	1077.700
62	1062.500	1032.500	1008.300	975.070	958.220	975.090	978.120	1037.900	1058.800	968.200
63	1013.900	972.200	916.350	910.050	882.720	906.260	920.840	980.840	1005.300	904.310
64	908.660	913.780	841.760	847.390	822.650	840.370	864.810	923.710	900.820	852.580
65	843.020	862.670	795.060	777.050	745.400	772.900	797.610	852.570	834.990	802.150
66	796.790	802.360	728.720	719.610	679.350	710.310	743.090	761.190	782.270	709.860
67	749.570	705.260	672.640	649.410	620.740	643.440	648.710	693.910	726.400	632.660
68	660.650	648.100	613.130	585.100	545.330	563.210	584.620	639.260	633.600	585.200
69	603.020	597.110	529.010	527.870	481.960	493.590	523.350	554.780	582.690	530.960
70	558.890	533.110	475.520	461.320	426.940	431.670	462.940	500.520	520.280	448.190
71	482.180	479.270	427.490	394.790	371.930	370.060	402.590	443.020	466.340	403.820
72	433.350	425.370	371.600	333.080	315.370	312.880	347.150	373.600	412.280	338.630
73	391.320	359.710	307.150	281.430	264.660	262.300	301.350	330.600	341.530	295.860
74	322.420	314.630	266.680	237.030	214.740	220.580	246.110	268.340	290.480	238.990
75	285.690	266.920	225.480	199.280	166.970	179.000	203.480	224.600	244.870	202.380
76	235.110	222.510	184.280	160.440	124.050	136.930	158.230	189.860	194.940	166.070
77	184.450	175.100	149.370	116.020	82.849	99.860	125.390	149.390	151.700	129.480
78	148.630	143.900	115.260	82.308	59.179	66.477	96.756	114.500	115.400	100.060
79	113.490	111.160	90.638	56.642	53.988	53.843	72.866	86.580	86.265	75.960
80	77.076	82.971	67.110	51.272	46.360	47.457	54.904	61.191	57.059	57.547
81	50.999	58.183	48.932	44.797	40.506	41.033	41.053	44.273	40.845	42.423
82	35.714	41.480	39.315	39.474	34.785	35.451	35.490	35.634	34.697	34.011
83	31.129	33.301	34.785	34.229	30.973	30.808	30.183	29.762	28.362	28.668
84	27.341	29.249	30.448	30.669	29.102	27.950	25.602	24.783	23.560	24.115
85	23.707	25.417	26.363	28.227	26.118	24.368	21.324	20.898	21.170	20.283
86	20.985	21.843	22.735	24.210	20.481	18.343	16.171	16.322	16.778	15.662
87	19.271	18.440	18.244	18.360	14.468	11.978	10.066	10.101	10.663	9.724
88	14.679	13.497	12.523	12.000	7.747	5.553	4.367	4.140	4.107	4.301
89	9.679	8.167	7.006	5.893	2.862	2.601	2.367	2.451	2.458	2.503
90	4.441	4.122	3.833	3.534	2.116	2.182	2.330	2.468	2.577	2.505
91	3.776	3.627	3.409	3.251	2.264	2.311	2.489	2.632	2.759	2.692
92	3.942	3.829	3.595	3.432	2.417	2.462	2.676	2.828	2.957	2.888
93	4.152	4.050	3.792	3.635	2.596	2.642	2.865	3.025	3.160	3.095
94	4.388	4.279	4.020	3.834	2.762	2.836	3.063	3.236	3.366	3.299
95	4.623	4.521	4.241	4.053	2.966	3.034	3.274	3.455	3.589	3.524
96	4.879	4.763	4.474	4.281	3.176	3.253	3.485	3.667	3.817	3.746
97	5.145	5.014	4.725	4.506	3.388	3.454	3.716	3.901	4.053	3.980
98	5.413	5.284	4.988	4.751	3.598	3.695	3.947	4.136	4.294	4.228
99	5.697	5.559	5.248	5.013	3.840	3.921	4.201	4.390	4.549	4.486
100	5.989	5.824	5.528	5.280	4.079	4.169	4.442	4.639	4.808	4.750
101	6.268	6.124	5.808	5.544	4.327	4.413	4.705	4.911	5.073	5.023
102	6.585	6.414	6.100	5.824	4.576	4.680	4.970	5.183	5.350	5.297
103	6.879	6.713	6.389	6.118	4.841	4.937	5.242	5.464	5.630	5.575
104	7.204	7.025	6.691	6.394	5.112	5.209	5.514	5.733	5.909	5.853
105	7.517	7.341	7.003	6.702	5.398	5.487	5.801	6.020	6.205	6.149
106	7.832	7.661	7.314	7.005	5.675	5.760	6.098	6.299	6.501	6.444
107	8.170	7.987	7.630	7.325	5.963	6.069	6.392	6.603	6.805	6.747
108	8.507	8.314	7.966	7.643	6.261	6.346	6.679	6.902	7.107	7.053
109	8.844	8.653	8.292	7.961	6.548	6.649	6.996	7.215	7.429	7.368

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**CANDELA TABULATION - (Cont.)**

110	9.187	8.994	8.630	8.299	6.863	6.962	7.304	7.522	7.747	7.696
111	9.557	9.333	8.972	8.636	7.173	7.273	7.611	7.835	8.081	8.022
112	9.888	9.669	9.311	8.977	7.495	7.590	7.946	8.159	8.404	8.353
113	10.225	10.013	9.655	9.325	7.811	7.912	8.272	8.475	8.716	8.690
114	10.573	10.338	10.006	9.664	8.145	8.242	8.594	8.812	9.049	9.023
115	10.935	10.688	10.333	10.010	8.475	8.576	8.933	9.140	9.400	9.360
116	11.287	11.039	10.683	10.353	8.806	8.905	9.269	9.478	9.727	9.706
117	11.634	11.383	11.025	10.701	9.149	9.247	9.597	9.811	10.046	10.038
118	12.001	11.732	11.371	11.059	9.491	9.597	9.942	10.138	10.377	10.366
119	12.364	12.087	11.725	11.419	9.834	9.944	10.255	10.473	10.725	10.708
120	12.707	12.438	12.079	11.763	10.172	10.264	10.591	10.810	11.078	11.055
121	13.056	12.785	12.432	12.130	10.538	10.605	10.939	11.161	11.413	11.397
122	13.418	13.142	12.775	12.475	10.880	10.955	11.277	11.501	11.755	11.737
123	13.766	13.479	13.115	12.830	11.235	11.303	11.612	11.829	12.108	12.068
124	14.099	13.826	13.464	13.178	11.580	11.639	11.955	12.165	12.438	12.406
125	14.443	14.153	13.805	13.523	11.935	11.980	12.279	12.499	12.766	12.740
126	14.786	14.497	14.135	13.884	12.272	12.325	12.611	12.820	13.121	13.074
127	15.117	14.834	14.482	14.221	12.615	12.676	12.952	13.162	13.452	13.406
128	15.455	15.168	14.809	14.563	12.975	13.007	13.289	13.495	13.777	13.739
129	15.780	15.500	15.144	14.917	13.316	13.350	13.606	13.819	14.101	14.043
130	16.116	15.828	15.467	15.252	13.656	13.664	13.933	14.135	14.434	14.383
131	16.452	16.160	15.794	15.598	13.990	13.974	14.240	14.444	14.750	14.703
132	16.764	16.477	16.130	15.926	14.319	14.299	14.557	14.763	15.076	15.018
133	17.098	16.808	16.456	16.261	14.635	14.621	14.875	15.082	15.401	15.347
134	17.416	17.116	16.786	16.590	14.960	14.939	15.186	15.397	15.717	15.676
135	17.741	17.439	17.106	16.923	15.303	15.271	15.508	15.721	16.037	15.986
136	18.035	17.761	17.428	17.253	15.607	15.576	15.822	16.032	16.354	16.296
137	18.343	18.049	17.749	17.583	15.927	15.899	16.130	16.332	16.664	16.621
138	18.670	18.369	18.050	17.909	16.250	16.220	16.440	16.660	16.979	16.932
139	18.978	18.681	18.368	18.214	16.578	16.533	16.760	16.969	17.293	17.249
140	19.281	18.989	18.678	18.540	16.910	16.858	17.084	17.277	17.624	17.562
141	19.589	19.306	18.998	18.868	17.247	17.190	17.398	17.603	17.932	17.874
142	19.879	19.601	19.307	19.178	17.545	17.475	17.703	17.886	18.228	18.176
143	20.189	19.885	19.612	19.492	17.826	17.747	17.980	18.184	18.528	18.453
144	20.474	20.172	19.917	19.795	18.136	18.041	18.256	18.455	18.809	18.745
145	20.768	20.457	20.225	20.110	18.440	18.351	18.545	18.742	19.097	19.040
146	21.036	20.732	20.511	20.400	18.737	18.653	18.863	19.023	19.385	19.320
147	21.297	21.011	20.816	20.695	19.023	18.942	19.154	19.292	19.663	19.607
148	21.568	21.283	21.105	20.990	19.312	19.210	19.401	19.558	19.920	19.906
149	21.797	21.554	21.399	21.275	19.593	19.502	19.683	19.845	20.191	20.160
150	22.055	21.813	21.671	21.566	19.892	19.802	19.963	20.127	20.456	20.455
151	22.303	22.079	21.931	21.846	20.155	20.068	20.233	20.380	20.706	20.703
152	22.561	22.344	22.202	22.117	20.419	20.324	20.480	20.637	20.939	20.946
153	22.795	22.607	22.465	22.384	20.685	20.610	20.730	20.895	21.183	21.188
154	23.052	22.858	22.724	22.639	20.983	20.910	21.010	21.166	21.447	21.459
155	23.271	23.098	22.973	22.904	21.241	21.164	21.256	21.405	21.679	21.702
156	23.498	23.350	23.217	23.163	21.496	21.408	21.492	21.625	21.892	21.928
157	23.718	23.590	23.452	23.405	21.720	21.658	21.723	21.854	22.127	22.180
158	23.927	23.826	23.680	23.647	21.963	21.898	21.958	22.065	22.337	22.434
159	24.147	24.045	23.915	23.875	22.187	22.146	22.185	22.268	22.548	22.653
160	24.352	24.264	24.142	24.093	22.406	22.371	22.410	22.477	22.746	22.861
161	24.540	24.475	24.347	24.297	22.638	22.597	22.621	22.682	22.942	23.079
162	24.742	24.688	24.543	24.509	22.848	22.809	22.839	22.895	23.139	23.284
163	24.925	24.861	24.724	24.714	23.059	23.049	23.065	23.090	23.350	23.490
164	25.116	25.043	24.898	24.903	23.294	23.276	23.293	23.307	23.553	23.699
165	25.282	25.194	25.065	25.086	23.518	23.485	23.517	23.513	23.759	23.904

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-D4-60W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

166	25.411	25.344	25.245	25.268	23.770	23.740	23.771	23.754	23.993	24.139
167	25.523	25.481	25.408	25.425	24.029	24.005	24.049	24.025	24.241	24.404
168	25.628	25.603	25.557	25.576	24.281	24.268	24.311	24.261	24.482	24.637
169	25.735	25.701	25.679	25.713	24.525	24.523	24.565	24.499	24.688	24.866
170	25.832	25.822	25.808	25.857	24.754	24.736	24.772	24.714	24.884	25.083
171	25.932	25.934	25.922	25.993	25.016	25.015	25.039	24.991	25.133	25.328
172	26.007	26.019	26.021	26.099	25.234	25.217	25.251	25.182	25.322	25.510
173	26.075	26.124	26.134	26.189	25.444	25.423	25.470	25.385	25.526	25.684
174	26.128	26.184	26.203	26.265	25.604	25.596	25.637	25.545	25.676	25.834
175	26.166	26.230	26.286	26.348	25.791	25.769	25.839	25.725	25.850	25.993
176	26.196	26.283	26.362	26.402	25.972	25.943	26.004	25.884	26.001	26.123
177	26.212	26.313	26.407	26.469	26.151	26.100	26.163	26.043	26.136	26.237
178	26.227	26.335	26.453	26.499	26.286	26.213	26.291	26.141	26.235	26.328
179	26.227	26.335	26.475	26.514	26.369	26.282	26.366	26.209	26.302	26.366
180	26.217	26.217	26.217	26.217	26.217	26.217	26.217	26.217	26.217	26.217

**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	3204.900	3204.900	3204.900	3204.900	3204.900	3204.900	3204.900
1	3206.900	3207.900	3208.300	3208.000	3207.400	3206.800	3205.600
2	3208.100	3209.300	3210.200	3210.500	3209.100	3207.200	3204.800
3	3208.100	3209.100	3210.900	3211.600	3209.400	3206.400	3202.400
4	3206.000	3206.700	3209.400	3210.700	3208.600	3205.100	3199.600
5	3203.100	3203.500	3206.800	3208.800	3206.200	3203.100	3195.900
6	3199.300	3200.700	3205.500	3205.700	3203.600	3200.700	3191.100
7	3195.600	3197.900	3203.000	3203.400	3199.700	3197.200	3185.800
8	3190.500	3193.300	3199.100	3199.800	3194.900	3191.600	3179.800
9	3184.500	3187.500	3193.700	3194.900	3189.000	3184.900	3172.300
10	3177.000	3180.500	3187.300	3188.700	3183.100	3176.300	3163.500
11	3168.200	3171.800	3179.900	3181.300	3175.800	3166.900	3153.400
12	3157.700	3162.400	3170.400	3173.600	3167.500	3156.900	3142.400
13	3146.800	3152.000	3160.200	3164.900	3158.000	3146.600	3131.300
14	3135.200	3140.900	3149.700	3154.200	3147.000	3135.900	3118.800
15	3123.500	3128.800	3138.600	3142.600	3134.800	3124.300	3106.100
16	3110.800	3115.200	3127.400	3129.900	3122.000	3112.300	3092.600
17	3096.800	3100.600	3113.600	3115.800	3108.400	3099.300	3077.800
18	3081.600	3085.100	3097.500	3100.800	3093.800	3084.500	3061.500
19	3066.000	3068.500	3080.200	3085.500	3078.700	3068.500	3044.600
20	3049.000	3050.800	3062.200	3068.900	3062.600	3051.900	3027.300
21	3030.500	3030.300	3024.600	3050.600	3045.500	3034.300	3009.800
22	3010.900	2990.400	2973.100	3031.700	3027.600	3016.600	2990.900
23	2990.300	2939.500	2924.600	2999.500	3008.500	2998.100	2968.900
24	2968.700	2891.100	2885.500	2948.200	2987.300	2977.000	2930.800
25	2945.500	2850.500	2859.600	2897.800	2965.000	2944.100	2875.300
26	2921.700	2822.100	2829.400	2854.200	2940.600	2899.000	2796.400
27	2890.800	2792.000	2798.100	2821.400	2915.400	2828.300	2732.200
28	2845.100	2759.800	2757.600	2793.300	2889.400	2755.400	2693.900
29	2795.500	2721.100	2703.700	2760.400	2862.100	2704.500	2671.400
30	2747.700	2668.600	2647.900	2725.100	2821.700	2676.400	2645.800
31	2705.400	2614.100	2595.700	2677.500	2760.300	2650.300	2619.700
32	2672.100	2559.500	2557.200	2623.100	2689.700	2623.000	2593.100
33	2639.700	2517.000	2523.600	2567.800	2604.900	2595.300	2569.500
34	2603.500	2479.500	2492.400	2518.000	2523.700	2568.600	2547.500
35	2565.900	2445.500	2438.800	2478.800	2464.600	2544.900	2517.000
36	2523.300	2402.700	2372.500	2441.200	2421.200	2518.900	2482.800

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-D4-60W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

37	2472.700	2339.000	2308.900	2404.900	2383.700	2485.700	2448.300
38	2422.700	2272.900	2261.900	2352.800	2345.800	2450.400	2413.900
39	2361.300	2217.200	2227.100	2287.800	2303.300	2415.000	2365.700
40	2285.400	2177.100	2191.500	2222.900	2249.900	2378.600	2292.500
41	2208.900	2141.800	2123.500	2170.000	2198.900	2325.500	2201.300
42	2151.200	2091.100	2046.100	2129.800	2150.100	2250.200	2136.800
43	2100.000	2015.800	1989.100	2091.300	2099.100	2160.100	2096.400
44	2045.400	1944.400	1949.700	2033.700	2055.400	2095.500	2058.200
45	1987.500	1900.100	1905.000	1958.900	2009.800	2054.800	2020.300
46	1928.300	1857.400	1833.700	1892.300	1963.000	2014.600	1982.000
47	1880.100	1800.800	1761.400	1841.600	1913.500	1975.000	1942.400
48	1839.400	1723.500	1711.400	1787.400	1846.100	1934.200	1902.100
49	1795.700	1661.300	1672.200	1716.100	1762.000	1891.700	1861.700
50	1729.600	1619.500	1608.000	1621.400	1665.700	1845.900	1811.300
51	1657.800	1570.100	1533.700	1542.000	1588.200	1793.100	1713.100
52	1595.000	1494.700	1486.300	1485.500	1536.900	1726.300	1617.700
53	1548.000	1435.800	1439.400	1426.900	1488.500	1620.200	1570.200
54	1490.700	1389.300	1360.400	1353.100	1422.500	1522.900	1526.600
55	1388.600	1323.700	1301.400	1299.200	1357.500	1469.200	1481.100
56	1292.400	1255.800	1251.300	1258.900	1303.800	1419.000	1436.500
57	1228.500	1207.900	1164.200	1192.700	1256.200	1372.000	1390.500
58	1181.600	1134.600	1106.100	1128.500	1204.500	1322.300	1322.000
59	1113.500	1065.200	1044.600	1082.600	1134.900	1269.300	1210.200
60	1045.800	1006.100	965.820	1008.100	1046.500	1187.200	1156.300
61	998.760	913.020	913.400	946.420	971.840	1081.100	1108.800
62	930.970	845.780	836.900	889.300	915.830	1024.400	1062.500
63	849.500	773.130	779.910	816.160	852.480	969.000	1013.900
64	772.020	712.360	704.640	761.880	804.810	917.100	908.660
65	697.010	644.020	655.870	685.770	753.160	857.610	843.020
66	646.980	595.420	579.310	619.890	683.710	756.270	796.790
67	582.220	524.330	522.950	539.830	610.340	708.050	749.570
68	529.540	467.230	466.870	495.730	547.040	654.790	660.650
69	466.730	415.300	403.880	440.490	502.530	592.730	603.020
70	403.930	358.450	343.660	385.280	448.060	512.700	558.890
71	354.680	301.630	290.620	336.020	384.180	471.790	482.180
72	298.210	245.600	245.840	288.330	332.220	418.120	433.350
73	245.380	209.440	209.340	237.580	291.580	353.140	391.320
74	205.700	173.480	172.970	191.850	241.800	316.860	322.420
75	161.810	130.240	128.230	157.850	205.850	255.830	285.690
76	130.240	94.422	92.796	125.640	170.030	219.730	235.110
77	100.880	65.756	59.327	89.724	133.790	174.210	184.450
78	76.937	52.611	52.708	65.408	102.020	135.270	148.630
79	56.419	47.360	47.875	48.753	81.268	101.240	113.490
80	42.837	41.329	42.257	44.642	61.170	74.636	77.076
81	37.778	36.081	37.153	39.494	45.861	54.396	50.999
82	32.736	31.260	32.122	35.016	35.994	37.467	35.714
83	28.249	28.570	29.777	30.616	31.770	31.925	31.129
84	24.293	25.852	27.850	27.815	27.947	27.938	27.341
85	20.464	21.510	24.952	25.173	24.355	24.192	23.707
86	15.272	15.831	19.616	21.273	20.899	20.904	20.985
87	9.578	9.870	14.260	15.893	16.930	18.013	19.271
88	4.285	4.008	8.002	10.254	11.836	13.512	14.679
89	2.514	2.594	4.124	4.945	7.034	8.595	9.679
90	2.456	2.372	3.434	3.705	4.155	4.357	4.441
91	2.644	2.548	3.558	3.645	3.727	3.792	3.776
92	2.833	2.747	3.760	3.856	3.925	4.012	3.942

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-D4-60W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

93	3.039	2.937	3.970	4.070	4.159	4.243	4.152
94	3.236	3.148	4.188	4.296	4.370	4.464	4.388
95	3.454	3.358	4.427	4.527	4.625	4.721	4.623
96	3.697	3.588	4.671	4.776	4.876	4.971	4.879
97	3.932	3.828	4.918	5.038	5.139	5.243	5.145
98	4.184	4.064	5.196	5.311	5.408	5.507	5.413
99	4.441	4.320	5.460	5.585	5.688	5.787	5.697
100	4.697	4.573	5.739	5.862	5.970	6.071	5.989
101	4.969	4.843	6.034	6.150	6.261	6.361	6.268
102	5.244	5.132	6.325	6.455	6.568	6.667	6.585
103	5.523	5.411	6.631	6.756	6.865	6.972	6.879
104	5.824	5.707	6.950	7.079	7.194	7.298	7.204
105	6.122	5.999	7.265	7.402	7.519	7.620	7.517
106	6.412	6.290	7.594	7.729	7.837	7.939	7.832
107	6.729	6.607	7.917	8.059	8.162	8.283	8.170
108	7.034	6.920	8.267	8.394	8.499	8.617	8.507
109	7.358	7.242	8.606	8.732	8.840	8.964	8.844
110	7.683	7.579	8.950	9.075	9.178	9.297	9.187
111	8.008	7.904	9.303	9.431	9.533	9.646	9.557
112	8.344	8.236	9.662	9.792	9.881	9.999	9.888
113	8.680	8.575	10.008	10.123	10.203	10.327	10.225
114	9.015	8.914	10.348	10.478	10.557	10.679	10.573
115	9.361	9.269	10.708	10.829	10.913	11.033	10.935
116	9.701	9.613	11.065	11.193	11.268	11.387	11.287
117	10.030	9.961	11.429	11.546	11.618	11.735	11.634
118	10.371	10.289	11.796	11.902	11.972	12.090	12.001
119	10.712	10.645	12.161	12.265	12.331	12.460	12.364
120	11.061	10.992	12.523	12.625	12.689	12.807	12.707
121	11.408	11.362	12.890	12.987	13.042	13.160	13.056
122	11.741	11.705	13.252	13.350	13.385	13.517	13.418
123	12.080	12.035	13.609	13.694	13.726	13.856	13.766
124	12.414	12.389	13.960	14.033	14.052	14.181	14.099
125	12.742	12.731	14.316	14.380	14.387	14.519	14.443
126	13.089	13.070	14.662	14.716	14.734	14.865	14.786
127	13.407	13.403	15.000	15.047	15.066	15.204	15.117
128	13.748	13.745	15.350	15.404	15.396	15.536	15.455
129	14.067	14.058	15.678	15.728	15.722	15.876	15.780
130	14.394	14.380	16.013	16.053	16.054	16.208	16.116
131	14.710	14.711	16.350	16.383	16.392	16.529	16.452
132	15.044	15.020	16.685	16.700	16.715	16.852	16.764
133	15.360	15.327	17.013	17.029	17.038	17.184	17.098
134	15.679	15.659	17.338	17.364	17.358	17.506	17.416
135	15.997	15.980	17.660	17.692	17.687	17.819	17.741
136	16.315	16.292	17.964	17.995	17.974	18.121	18.035
137	16.624	16.607	18.294	18.324	18.285	18.429	18.343
138	16.944	16.925	18.612	18.633	18.601	18.755	18.670
139	17.246	17.230	18.939	18.967	18.906	19.062	18.978
140	17.562	17.554	19.258	19.283	19.216	19.368	19.281
141	17.904	17.849	19.564	19.588	19.528	19.692	19.589
142	18.188	18.163	19.872	19.894	19.836	19.991	19.879
143	18.482	18.448	20.194	20.198	20.136	20.297	20.189
144	18.790	18.754	20.484	20.493	20.431	20.588	20.474
145	19.082	19.055	20.790	20.780	20.728	20.868	20.768
146	19.373	19.325	21.068	21.052	21.019	21.153	21.036
147	19.662	19.636	21.347	21.329	21.300	21.417	21.297
148	19.940	19.908	21.613	21.601	21.583	21.680	21.568

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-D4-60W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

149	20.210	20.175	21.890	21.864	21.848	21.940	21.797
150	20.510	20.453	22.155	22.129	22.117	22.202	22.055
151	20.776	20.734	22.416	22.396	22.386	22.459	22.303
152	21.027	20.998	22.678	22.654	22.649	22.700	22.561
153	21.288	21.282	22.936	22.918	22.910	22.950	22.795
154	21.577	21.559	23.171	23.168	23.145	23.199	23.052
155	21.821	21.809	23.417	23.417	23.393	23.433	23.271
156	22.063	22.068	23.656	23.663	23.629	23.677	23.498
157	22.305	22.303	23.875	23.904	23.870	23.901	23.718
158	22.538	22.531	24.088	24.129	24.093	24.127	23.927
159	22.774	22.765	24.312	24.354	24.305	24.340	24.147
160	22.978	22.975	24.516	24.566	24.503	24.536	24.352
161	23.191	23.205	24.718	24.768	24.692	24.731	24.540
162	23.396	23.431	24.916	24.972	24.872	24.927	24.742
163	23.598	23.644	25.112	25.153	25.054	25.116	24.925
164	23.797	23.849	25.307	25.333	25.203	25.283	25.116
165	24.007	24.030	25.449	25.485	25.363	25.449	25.282
166	24.242	24.270	25.592	25.612	25.491	25.599	25.411
167	24.496	24.516	25.720	25.742	25.635	25.706	25.523
168	24.734	24.748	25.841	25.868	25.770	25.825	25.628
169	24.955	24.974	25.954	25.996	25.898	25.955	25.735
170	25.166	25.151	26.044	26.101	25.981	26.059	25.832
171	25.425	25.392	26.141	26.185	26.071	26.165	25.932
172	25.620	25.560	26.217	26.259	26.162	26.248	26.007
173	25.803	25.756	26.277	26.327	26.245	26.300	26.075
174	25.978	25.923	26.353	26.380	26.298	26.338	26.128
175	26.151	26.089	26.413	26.410	26.343	26.338	26.166
176	26.287	26.241	26.459	26.402	26.381	26.338	26.196
177	26.393	26.333	26.474	26.402	26.381	26.338	26.212
178	26.491	26.416	26.496	26.402	26.381	26.338	26.227
179	26.513	26.454	26.481	26.402	26.381	26.338	26.227
180	26.217	26.217	26.217	26.217	26.217	26.217	26.217



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-D4-60W-5000K-D120.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1186.01	14.70	14.70
0-30	2530.82	31.40	31.40
0-40	4117.69	51.00	51.00
0-60	6974.36	86.40	86.40
0-80	7968.97	98.70	98.70
0-90	7994.84	99.00	99.00
10-90	7690.55	95.30	95.30
20-40	2931.68	36.30	36.30
20-50	4505.62	55.80	55.80
40-70	3620.8	44.90	44.90
60-80	994.61	12.30	12.30
70-80	230.47	2.90	2.90
80-90	25.88	0.30	0.30
90-110	11.30	0.10	0.10
90-120	21.09	0.30	0.30
90-130	33.01	0.40	0.40
90-150	58.15	0.70	0.70
90-180	77.85	1.00	1.00
110-180	66.54	0.80	0.80
0-180	8072.69	100.00	100.00

Total Luminaire Efficiency = 100.00%

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	304.29
10-20	881.72
20-30	1344.81
30-40	1586.88
40-50	1573.93
50-60	1282.73
60-70	764.14
70-80	230.47
80-90	25.88
90-100	4.31
100-110	6.99
110-120	9.78
120-130	11.92
130-140	12.82
140-150	12.32
150-160	10.31
160-170	6.92
170-180	2.47

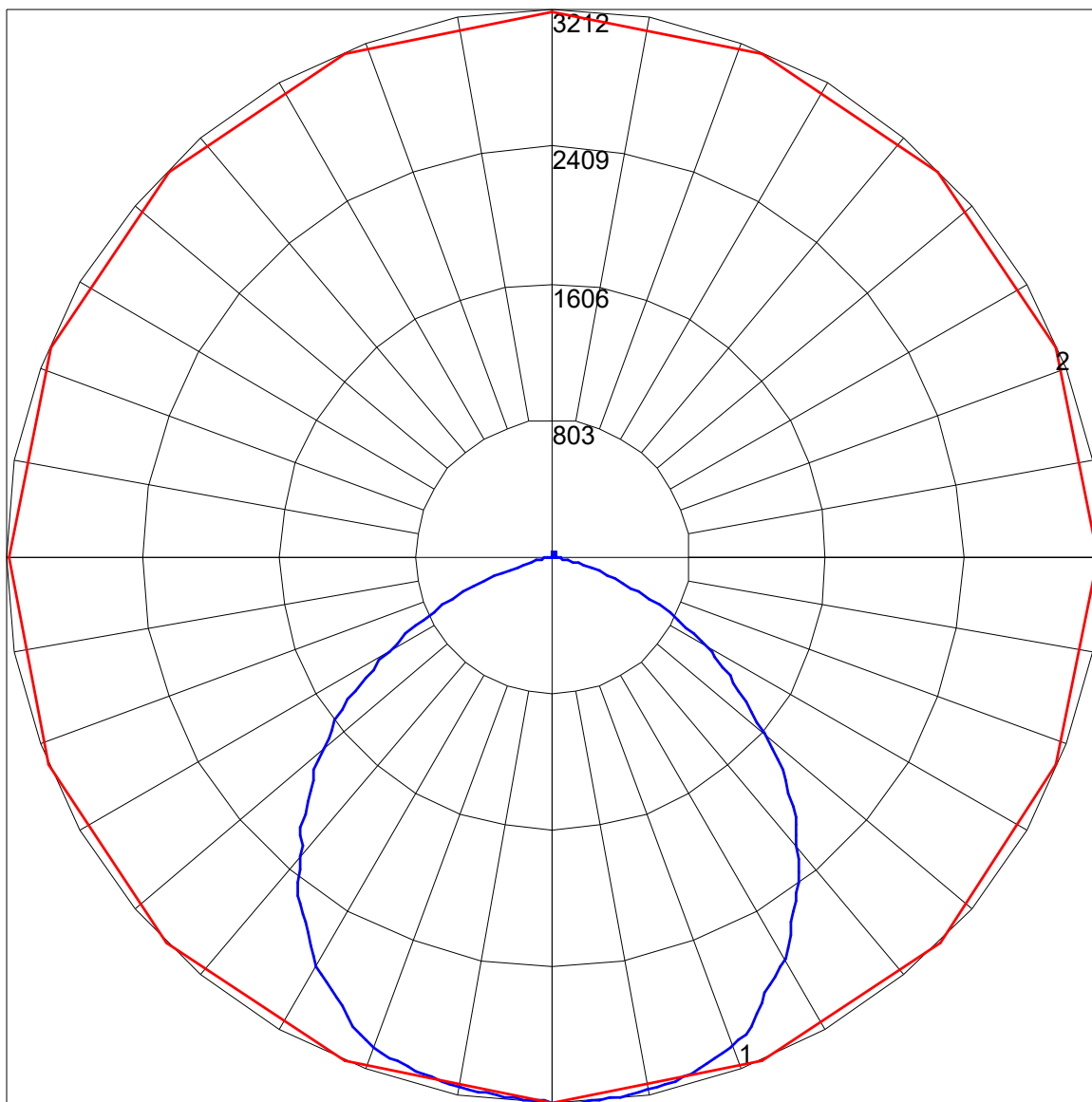
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-D4-60W-5000K-D120.IES**

**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	111	111	111	106	106	106	101	101	101	99
1	110	106	102	99	107	104	100	97	99	97	94	95	93	91	92	90	88	86
2	101	94	88	83	98	92	86	82	88	84	80	85	81	78	82	79	76	74
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	73	69	65	63
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	66	61	57	55
5	79	67	58	52	77	65	58	52	63	56	51	61	55	50	59	54	50	48
6	73	60	52	46	71	59	51	45	57	50	45	56	49	44	54	48	44	42
7	68	55	46	40	66	54	46	40	52	45	40	51	44	40	49	44	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	33	57	45	38	33	44	37	32	43	37	32	42	36	32	30
10	55	42	35	30	54	42	34	30	41	34	29	40	34	29	39	33	29	27

POLAR GRAPH



Maximum Candela = 3211.6 Located At Horizontal Angle = 292.5, Vertical Angle = 3  
# 1 - Vertical Plane Through Horizontal Angles (292.5 - 112.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (3) (Through Max. Cd.)