



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : HZX-EX-S1-40W-4000K-D120.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002

[TEST] HZX-EX-S1-40W-4000K-D120

[TESTLAB] Standard-tech Co., Ltd Testing Center

[TESTDATE] 2018-02-07

[ISSUEDATE] 2018-02-07 22:35:23

[NEARFIELD]

[LAMPPOSITION] 0,0

[OTHER] EVERFINE GO-R5000\_V2 SYSTEM

[MANUFAC] BELUCE CANADA INC.

[LUMINAIRE] HZX-EX-S1-40W-4000K-D120

[LUMCAT] ] HZX-EX-S1-40W-4000K-D120

[LAMP] 6491 LUMENS

[\_SEARCH\_SOURCE] LED

[OTHER]

[OTHER]	Gamma(deg)	Fz(lm)	Ft(lm)	%Lum	%Lamp
[OTHER]	0- 10	222.77	222.77	3.43	3.43
[OTHER]	10- 20	642.96	865.72	13.34	13.34
[OTHER]	20- 30	986.01	1851.74	28.53	28.53
[OTHER]	30- 40	1205.51	3057.24	47.10	47.10
[OTHER]	40- 50	1262.87	4320.11	66.56	66.56
[OTHER]	50- 60	1111.08	5431.19	83.67	83.67
[OTHER]	60- 70	732.38	6163.57	94.96	94.96
[OTHER]	70- 80	282.80	6446.37	99.31	99.31
[OTHER]	80- 90	27.36	6473.73	99.74	99.74
[OTHER]	90-100	0.78	6474.51	99.75	99.75
[OTHER]	100-110	1.32	6475.82	99.77	99.77
[OTHER]	110-120	2.18	6478.01	99.80	99.80
[OTHER]	120-130	2.90	6480.91	99.85	99.85
[OTHER]	130-140	2.98	6483.89	99.89	99.89
[OTHER]	140-150	2.69	6486.59	99.93	99.93
[OTHER]	150-160	2.22	6488.81	99.97	99.97
[OTHER]	160-170	1.47	6490.28	99.99	99.99
[OTHER]	170-180	0.59	6490.86	100.00	100.00
[OTHER]					

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**CHARACTERISTICS**

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	6491
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	156
Total Luminaire Watts	41.7
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.32
Spacing Criterion (90-270)	1.30
Spacing Criterion (Diagonal)	1.42
Basic Luminous Shape	Point
Luminous Length (0-180)	0.00 m
Luminous Width (90-270)	0.00 m
Luminous Height	0.00 m

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	0	0	0
55	0	0	0
65	0	0	0
75	0	0	0
85	0	0	0

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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	2346.72	2346.72	2346.72	2346.72	2346.72	2346.72	2346.72	2346.72	2346.72	2346.72
1	2345.83	2347.84	2345.89	2346.26	2345.66	2345.39	2345.13	2346.77	2347.19	2345.65
2	2344.76	2348.33	2345.41	2345.52	2344.35	2344.52	2343.48	2346.34	2346.54	2344.14
3	2344.40	2348.64	2343.67	2344.34	2342.33	2343.30	2342.51	2345.77	2345.57	2342.54
4	2343.52	2348.90	2341.62	2342.36	2339.50	2341.54	2340.45	2345.29	2343.96	2339.90
5	2342.47	2348.55	2338.96	2340.05	2336.41	2339.92	2337.72	2343.83	2341.42	2337.38
6	2340.08	2346.59	2335.96	2336.76	2332.77	2336.91	2334.14	2340.81	2337.71	2333.67
7	2337.64	2344.33	2333.12	2332.87	2328.64	2334.17	2330.62	2337.20	2333.60	2330.37
8	2334.71	2340.70	2328.43	2328.74	2323.83	2330.25	2326.02	2332.00	2328.44	2325.81
9	2330.72	2335.90	2322.85	2323.11	2318.35	2325.28	2320.51	2326.70	2323.20	2321.40
10	2325.60	2329.30	2317.57	2317.06	2312.38	2319.81	2314.10	2319.87	2317.69	2315.52
11	2318.81	2321.51	2311.74	2310.64	2306.14	2313.51	2306.99	2313.34	2312.40	2309.66
12	2310.88	2312.42	2304.57	2302.81	2298.68	2306.66	2299.81	2306.03	2306.66	2301.75
13	2301.50	2302.64	2298.05	2294.53	2290.78	2299.21	2291.34	2299.26	2299.54	2293.90
14	2292.06	2291.95	2290.09	2286.06	2281.64	2291.31	2281.53	2290.21	2291.28	2285.11
15	2282.24	2279.80	2281.82	2276.04	2271.61	2282.36	2271.16	2280.56	2283.33	2275.45
16	2271.62	2267.36	2272.26	2265.46	2261.07	2272.65	2260.31	2270.06	2272.84	2264.57
17	2261.00	2254.57	2262.06	2254.93	2250.57	2261.70	2248.01	2257.93	2261.86	2253.33
18	2250.51	2241.86	2250.69	2243.69	2238.85	2250.94	2235.96	2246.23	2250.54	2240.84
19	2239.38	2228.35	2237.11	2231.28	2226.94	2239.39	2223.55	2234.22	2238.40	2226.69
20	2228.60	2214.38	2223.77	2219.09	2215.10	2225.52	2209.91	2221.71	2225.68	2211.26
21	2215.91	2200.53	2208.68	2206.04	2201.78	2210.80	2195.27	2207.82	2212.83	2195.61
22	2202.37	2184.98	2192.74	2192.59	2187.74	2194.51	2179.76	2192.90	2199.42	2179.78
23	2187.05	2169.58	2176.51	2177.52	2172.53	2177.31	2164.86	2177.69	2184.65	2163.28
24	2171.50	2153.33	2160.46	2160.86	2155.72	2160.18	2148.32	2161.16	2168.90	2146.12
25	2154.91	2136.24	2143.38	2142.83	2138.14	2142.62	2132.04	2143.59	2152.95	2128.35
26	2136.89	2118.04	2126.22	2123.99	2119.57	2124.57	2114.21	2125.53	2134.92	2111.31
27	2116.78	2098.88	2109.35	2104.46	2099.36	2106.81	2095.60	2106.95	2115.96	2092.40
28	2095.80	2079.31	2091.52	2085.24	2078.98	2088.30	2075.24	2087.18	2095.81	2072.77
29	2074.82	2059.45	2071.87	2066.39	2059.05	2069.57	2054.33	2067.29	2075.37	2053.28
30	2053.91	2038.19	2051.41	2046.87	2038.72	2048.76	2033.39	2046.37	2053.03	2031.50
31	2033.12	2015.85	2028.39	2027.13	2017.63	2027.04	2011.90	2024.74	2030.30	2010.11
32	2012.04	1992.71	2005.60	2005.98	1996.94	2004.71	1990.14	2003.14	2007.66	1987.65
33	1991.93	1969.65	1981.31	1983.92	1974.85	1980.45	1967.75	1980.22	1983.69	1964.34
34	1969.88	1946.39	1957.04	1960.00	1951.37	1955.84	1943.93	1956.83	1959.54	1940.97
35	1946.18	1922.92	1932.15	1936.19	1926.99	1931.75	1920.49	1931.80	1933.43	1916.46
36	1921.00	1900.04	1906.68	1911.17	1902.91	1906.68	1895.22	1905.54	1906.91	1890.74
37	1894.86	1877.25	1879.81	1884.96	1877.80	1881.53	1870.11	1878.79	1880.13	1864.04
38	1866.40	1853.22	1851.68	1859.08	1851.41	1854.74	1845.16	1852.43	1853.52	1837.89
39	1838.07	1827.22	1822.67	1832.15	1823.69	1827.17	1818.55	1823.50	1825.55	1810.81
40	1809.60	1799.72	1794.52	1804.12	1795.19	1799.42	1791.63	1793.55	1795.53	1784.21
41	1780.87	1770.82	1765.69	1775.36	1766.78	1770.75	1764.34	1763.65	1766.04	1755.35
42	1750.79	1741.28	1736.64	1745.70	1736.81	1740.30	1735.22	1732.84	1734.62	1725.74
43	1720.71	1710.30	1706.86	1715.92	1706.26	1708.49	1704.94	1699.99	1702.38	1693.59
44	1689.08	1678.32	1676.06	1683.93	1677.24	1676.44	1673.49	1668.48	1670.42	1661.70
45	1654.23	1645.53	1644.82	1650.99	1645.50	1642.68	1639.91	1635.32	1639.45	1629.47
46	1619.32	1612.55	1613.84	1617.18	1611.47	1608.85	1605.17	1600.04	1607.68	1595.34
47	1583.45	1578.78	1582.34	1582.93	1577.40	1573.69	1569.80	1565.67	1573.25	1560.32
48	1547.58	1544.18	1547.90	1547.75	1542.15	1540.48	1536.20	1531.27	1538.79	1525.65
49	1510.62	1507.60	1511.58	1511.83	1504.96	1506.27	1502.03	1495.00	1503.70	1491.23
50	1473.72	1469.82	1475.00	1474.85	1467.58	1471.58	1467.37	1457.53	1465.96	1454.87
51	1436.63	1431.05	1437.20	1435.79	1429.85	1435.06	1430.93	1418.61	1427.77	1418.40
52	1399.12	1393.91	1399.26	1395.31	1388.62	1394.75	1393.69	1379.90	1388.33	1380.02
53	1359.87	1353.84	1358.47	1352.05	1344.29	1350.05	1351.39	1341.04	1345.48	1340.67

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54	1314.57	1309.30	1313.39	1305.80	1296.59	1299.98	1303.10	1297.20	1299.93	1298.30
55	1266.96	1261.01	1265.46	1258.11	1244.75	1248.00	1251.44	1249.99	1251.25	1250.94
56	1216.19	1212.19	1213.31	1208.13	1191.05	1194.01	1197.60	1197.85	1201.33	1198.95
57	1163.01	1159.55	1157.79	1155.40	1137.16	1139.35	1140.80	1143.60	1151.45	1144.46
58	1107.00	1104.55	1102.56	1102.00	1085.32	1087.33	1086.98	1089.34	1098.55	1090.80
59	1051.33	1050.01	1050.95	1049.30	1034.56	1039.00	1037.05	1036.50	1042.10	1036.37
60	998.37	997.94	1001.21	1000.66	985.11	990.06	987.10	984.21	989.21	982.87
61	946.30	947.44	950.14	951.20	936.84	939.38	935.45	932.35	937.58	931.28
62	896.17	897.09	899.70	903.80	888.85	889.83	886.70	882.65	885.44	879.53
63	847.47	848.25	849.87	854.82	841.61	841.57	835.80	832.20	834.66	827.98
64	798.51	799.44	800.80	806.47	794.42	794.70	787.45	784.03	785.31	778.30
65	751.52	752.42	753.26	757.73	745.99	746.80	739.44	736.06	737.11	731.35
66	701.74	706.17	706.00	708.37	697.57	698.33	691.13	688.72	688.03	684.17
67	652.12	657.46	657.35	658.31	650.94	647.70	643.49	642.26	640.99	637.67
68	603.50	604.98	603.00	603.91	599.44	593.51	591.49	592.62	589.47	586.00
69	551.13	550.03	548.14	547.47	545.34	540.18	537.11	539.53	535.31	530.80
70	498.17	497.39	496.22	493.92	493.17	491.18	485.27	483.71	480.70	476.09
71	449.85	448.75	447.73	445.09	442.01	444.87	436.96	430.52	429.34	426.63
72	403.93	402.31	401.75	400.35	396.73	397.78	391.37	384.70	381.29	379.39
73	360.85	358.49	358.54	358.13	352.62	351.75	346.43	341.68	336.07	333.28
74	319.54	315.16	316.61	316.51	309.18	307.41	304.60	299.62	293.66	290.71
75	273.77	273.36	275.17	270.83	265.89	266.45	260.16	257.01	250.90	247.86
76	228.90	230.08	232.77	230.70	225.57	225.65	218.65	216.00	209.70	206.46
77	192.21	190.87	193.39	195.81	189.50	185.37	183.42	178.52	174.77	171.47
78	155.13	156.15	159.00	159.33	154.65	151.62	147.24	144.75	141.37	138.59
79	121.74	125.54	127.18	124.50	121.57	120.41	117.20	113.28	111.31	110.01
80	95.02	96.07	95.79	95.72	92.74	91.62	91.33	87.15	85.18	83.17
81	71.27	73.03	72.85	72.60	70.92	69.70	67.03	65.75	62.85	61.39
82	51.39	51.73	52.40	52.15	51.66	49.33	47.60	45.76	44.18	43.44
83	35.99	36.74	37.77	36.28	36.04	34.32	32.74	31.83	30.45	30.08
84	24.28	24.94	25.12	24.94	24.10	22.88	21.29	21.00	20.13	19.76
85	15.37	15.85	16.01	16.12	15.40	14.82	14.02	13.17	13.15	13.12
86	10.40	10.56	10.81	10.68	10.51	10.22	9.70	9.50	9.33	9.35
87	7.62	7.84	7.88	7.95	7.76	7.57	7.35	6.93	6.75	6.58
88	4.81	5.00	5.01	4.96	4.66	4.62	4.45	4.09	3.90	3.88
89	2.67	2.86	2.97	3.07	2.61	2.51	2.15	1.88	1.79	1.57
90	0.95	1.01	1.12	1.06	0.79	0.73	0.73	0.58	0.69	0.68
91	0.64	0.69	0.85	0.85	0.79	0.68	0.63	0.58	0.63	0.63
92	0.69	0.63	0.74	0.74	0.73	0.68	0.63	0.58	0.63	0.63
93	0.63	0.68	0.68	0.74	0.68	0.68	0.63	0.58	0.63	0.63
94	0.63	0.63	0.68	0.74	0.68	0.74	0.63	0.63	0.63	0.68
95	0.63	0.63	0.63	0.68	0.73	0.74	0.63	0.68	0.69	0.74
96	0.63	0.63	0.63	0.68	0.74	0.74	0.79	0.68	0.69	0.79
97	0.63	0.63	0.68	0.68	0.84	0.84	0.74	0.68	0.69	0.79
98	0.63	0.63	0.68	0.68	0.84	0.84	0.79	0.74	0.79	0.84
99	0.74	0.68	0.79	0.79	0.84	0.89	0.84	0.74	0.79	0.89
100	0.74	0.68	0.79	0.74	1.00	0.89	0.89	0.84	0.79	0.90
101	0.74	0.79	0.79	0.79	1.10	0.95	0.89	0.89	0.90	0.95
102	0.74	0.74	0.79	0.89	1.10	1.00	0.95	0.95	1.11	1.00
103	0.79	0.84	0.89	1.00	1.26	1.16	1.05	1.05	1.11	1.11
104	0.84	1.00	1.05	1.10	1.31	1.21	1.11	1.05	1.11	1.21
105	1.10	1.05	1.05	1.21	1.42	1.32	1.31	1.16	1.27	1.16
106	1.32	1.21	1.31	1.42	1.52	1.37	1.37	1.22	1.32	1.32
107	1.47	1.42	1.52	1.47	1.63	1.47	1.47	1.37	1.38	1.32
108	1.58	1.58	1.47	1.58	1.68	1.58	1.52	1.42	1.58	1.42
109	1.64	1.68	1.58	1.63	1.89	1.74	1.52	1.53	1.64	1.58

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**CANDELA TABULATION - (Cont.)**

110	1.69	1.63	1.68	1.79	1.89	1.84	1.63	1.63	1.79	1.74
111	1.74	1.63	1.68	2.10	2.05	1.95	1.68	1.73	1.80	1.79
112	1.79	1.68	1.84	2.16	2.15	2.00	1.73	1.68	1.95	1.79
113	2.00	1.84	2.00	2.31	2.15	2.21	1.74	1.74	2.11	1.95
114	2.06	1.84	2.05	2.42	2.20	2.37	1.94	1.74	2.17	1.90
115	2.21	1.95	2.26	2.47	2.41	2.37	2.10	1.74	2.32	1.95
116	2.42	1.89	2.42	2.58	2.47	2.47	2.21	1.74	2.32	1.90
117	2.58	1.89	2.52	2.68	2.57	2.47	2.31	1.95	2.32	2.00
118	2.53	2.00	2.47	2.79	2.52	2.69	2.47	2.10	2.43	2.11
119	2.53	2.36	2.63	2.89	2.73	4.49	2.57	2.32	2.53	2.21
120	2.53	2.47	2.73	2.89	2.73	2.69	2.63	2.63	2.59	2.48
121	2.95	2.79	2.84	3.16	2.83	2.84	2.73	2.79	2.75	2.69
122	3.27	3.05	2.89	3.26	2.94	2.79	2.73	2.90	3.07	2.90
123	3.53	3.32	2.95	3.21	2.94	2.94	2.73	3.10	3.27	3.00
124	3.69	3.42	3.10	3.26	3.04	2.95	2.73	3.05	3.43	3.16
125	3.96	3.52	3.10	3.52	3.09	3.21	2.78	3.21	3.59	3.16
126	4.06	3.63	3.21	3.58	3.15	3.21	2.84	3.31	3.69	3.32
127	4.12	3.79	3.26	3.73	3.36	3.31	2.84	3.32	3.75	3.37
128	4.12	3.89	3.36	3.74	3.41	3.31	2.99	3.52	3.85	3.58
129	4.17	4.05	3.37	4.05	3.57	3.36	3.05	3.68	3.91	3.63
130	4.22	4.10	3.37	4.00	3.67	3.36	3.05	3.73	3.91	3.74
131	4.17	4.11	3.37	4.00	3.62	3.36	3.15	3.74	3.91	3.90
132	4.17	4.16	3.37	4.00	3.67	3.42	3.25	3.95	4.01	3.95
133	4.22	4.21	3.42	4.00	3.62	3.42	3.20	4.05	4.01	4.05
134	4.33	4.31	3.47	4.00	3.88	3.52	3.20	4.10	4.17	4.00
135	4.33	4.32	3.63	4.00	3.93	3.53	3.20	4.21	4.38	4.00
136	4.38	4.42	3.63	4.05	3.93	3.63	3.20	4.21	4.33	4.00
137	4.38	4.47	3.68	4.05	3.98	3.73	3.20	4.21	4.33	4.05
138	4.43	4.42	3.68	4.10	4.04	3.79	3.20	4.21	4.38	4.11
139	4.49	4.53	3.68	4.11	3.99	3.89	3.20	4.21	4.43	4.26
140	4.59	4.53	3.68	4.11	4.09	3.94	3.20	4.26	4.38	4.32
141	4.54	4.68	3.68	4.11	4.19	4.00	3.31	4.26	4.38	4.58
142	4.54	4.68	3.68	4.11	4.25	4.15	3.36	4.31	4.38	4.58
143	4.54	4.84	3.68	4.11	4.40	4.15	3.52	4.31	4.38	4.58
144	4.54	4.95	3.68	4.11	4.46	4.10	3.47	4.31	4.49	4.63
145	4.54	4.95	3.68	4.11	4.51	4.20	3.68	4.31	4.49	4.69
146	4.85	4.95	3.79	4.16	4.51	4.15	3.78	4.31	4.65	4.84
147	4.96	4.95	3.95	4.21	4.56	4.16	3.94	4.31	4.75	4.79
148	4.96	5.05	4.10	4.31	4.56	4.36	4.10	4.31	4.80	4.84
149	4.96	5.00	4.21	4.32	4.56	4.36	4.20	4.36	4.91	4.84
150	4.96	5.00	4.31	4.37	4.56	4.57	4.25	4.31	4.86	5.00
151	4.96	5.10	4.47	4.52	4.56	4.68	4.46	4.52	5.07	5.05
152	5.12	5.05	4.78	4.47	4.56	4.68	4.52	4.52	5.01	5.00
153	5.17	5.10	4.94	4.47	4.56	4.78	4.62	4.58	5.01	5.10
154	5.33	5.11	4.95	4.47	4.56	4.78	4.67	4.63	4.91	4.94
155	5.28	5.11	5.00	4.73	4.56	4.84	4.73	4.58	4.86	4.79
156	5.28	5.21	5.10	4.89	4.56	4.78	4.78	4.68	4.86	4.74
157	5.33	5.21	5.26	4.89	4.56	4.78	4.73	4.63	4.91	4.74
158	5.33	5.21	5.21	4.95	4.67	4.78	4.73	4.63	4.91	4.79
159	5.33	5.21	5.21	4.90	4.72	4.78	4.73	4.73	5.07	4.84
160	5.33	5.21	5.21	4.89	4.77	4.78	4.88	4.79	5.01	4.95
161	5.33	5.21	5.21	4.89	4.93	4.78	4.88	4.89	5.01	4.95
162	5.33	5.21	5.21	4.89	4.98	4.78	4.88	5.05	5.07	4.95
163	5.33	5.21	5.26	4.89	5.03	4.84	4.88	5.05	4.96	5.00
164	5.33	5.21	5.26	4.89	5.03	4.79	4.88	5.10	4.96	5.05
165	5.33	5.21	5.26	4.89	5.09	5.05	4.94	5.21	5.01	5.05

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**CANDELA TABULATION - (Cont.)**

166	5.33	5.21	5.31	4.89	5.14	5.21	5.04	5.21	4.97	5.11
167	5.38	5.52	5.57	4.95	5.40	5.41	5.09	5.42	5.33	5.22
168	5.44	5.74	6.05	4.95	5.56	5.52	5.25	5.90	5.72	5.74
169	5.85	6.05	6.10	5.00	5.51	5.63	5.41	6.21	6.18	6.06
170	5.86	6.05	6.05	5.10	5.92	5.94	5.67	6.31	6.65	6.53
171	6.11	6.10	6.15	5.21	5.98	5.99	5.88	6.41	6.75	6.95
172	6.23	6.16	6.31	5.26	5.98	5.94	5.83	6.36	6.70	6.89
173	6.59	6.16	6.31	5.26	5.98	5.94	5.83	6.31	6.70	6.89
174	6.60	6.16	6.42	5.26	5.98	5.94	5.83	6.36	6.70	6.89
175	6.75	6.21	6.58	5.58	5.98	5.99	5.83	6.21	6.65	6.90
176	6.81	6.31	6.58	5.68	5.92	5.89	5.83	6.20	6.59	6.95
177	6.81	6.32	6.68	5.74	5.92	5.89	5.83	6.15	6.22	6.89
178	6.81	6.32	6.63	5.74	5.82	5.89	5.72	6.15	6.07	6.79
179	6.81	6.32	6.63	5.68	5.82	5.89	5.72	6.16	6.07	6.79
180	6.81	6.81	6.81	6.81	6.81	6.81	6.81	6.81	6.81	6.81

**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	2346.72	2346.72	2346.72	2346.72	2346.72	2346.72	2346.72
1	2346.72	2346.47	2346.33	2346.86	2347.85	2346.57	2345.83
2	2347.20	2345.77	2345.13	2346.28	2348.28	2345.68	2344.76
3	2347.09	2344.90	2343.29	2345.31	2349.45	2345.26	2344.40
4	2347.04	2343.04	2341.28	2343.54	2349.23	2343.81	2343.52
5	2346.42	2340.63	2338.07	2340.88	2347.54	2341.01	2342.47
6	2344.17	2338.17	2334.05	2337.24	2343.92	2337.72	2340.08
7	2340.44	2333.92	2329.05	2333.35	2339.68	2333.89	2337.64
8	2335.14	2329.57	2324.64	2328.64	2334.31	2329.08	2334.71
9	2329.19	2324.12	2319.00	2323.15	2328.09	2322.71	2330.72
10	2322.01	2318.56	2313.24	2316.45	2321.06	2314.90	2325.60
11	2313.74	2312.71	2306.44	2309.73	2313.32	2306.99	2318.81
12	2304.47	2306.00	2298.79	2301.69	2304.77	2298.77	2310.88
13	2294.73	2298.33	2290.21	2292.91	2295.38	2290.29	2301.50
14	2284.47	2289.12	2279.92	2283.64	2285.54	2281.03	2292.06
15	2273.81	2279.46	2267.97	2274.39	2275.09	2272.32	2282.24
16	2262.01	2268.87	2256.06	2264.10	2264.51	2262.86	2271.62
17	2250.34	2257.64	2243.70	2253.27	2253.42	2252.73	2261.00
18	2238.06	2245.40	2230.73	2241.37	2240.65	2241.82	2250.51
19	2225.04	2231.97	2216.86	2227.96	2227.28	2228.74	2239.38
20	2211.43	2218.55	2203.84	2214.74	2212.86	2213.86	2228.60
21	2197.12	2204.24	2190.65	2200.96	2197.51	2198.22	2215.91
22	2182.34	2188.82	2177.75	2187.25	2182.19	2182.99	2202.37
23	2166.99	2171.97	2164.12	2171.61	2165.88	2166.77	2187.05
24	2151.28	2155.17	2148.87	2155.86	2148.89	2150.52	2171.50
25	2135.39	2137.21	2132.94	2139.22	2130.27	2134.49	2154.91
26	2118.71	2118.41	2115.32	2121.12	2111.16	2117.77	2136.89
27	2101.44	2099.40	2097.61	2102.89	2091.32	2100.72	2116.78
28	2081.92	2080.08	2077.25	2081.93	2071.53	2082.58	2095.80
29	2061.76	2060.92	2054.31	2060.10	2050.54	2062.47	2074.82
30	2041.83	2040.89	2030.85	2037.91	2029.21	2041.86	2053.91
31	2020.76	2020.49	2006.39	2014.95	2006.99	2020.05	2033.12
32	2000.59	1999.41	1981.82	1991.48	1985.24	1996.56	2012.04
33	1979.80	1977.57	1959.26	1967.45	1962.88	1973.16	1991.93
34	1958.49	1954.52	1936.50	1943.69	1939.80	1949.99	1969.88
35	1934.47	1930.76	1913.36	1920.49	1916.71	1926.09	1946.18
36	1907.11	1905.38	1889.72	1897.20	1892.43	1901.21	1921.00

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**CANDELA TABULATION - (Cont.)**

37	1879.05	1878.49	1864.65	1871.28	1867.58	1875.77	1894.86
38	1849.65	1851.62	1836.94	1844.83	1841.85	1849.79	1866.40
39	1820.45	1822.72	1808.55	1817.96	1815.24	1823.18	1838.07
40	1789.17	1793.32	1780.96	1791.15	1787.44	1795.89	1809.60
41	1756.26	1763.23	1752.96	1762.38	1758.03	1766.94	1780.87
42	1723.62	1730.75	1723.11	1732.52	1727.89	1737.19	1750.79
43	1690.52	1696.05	1693.34	1701.42	1696.71	1707.40	1720.71
44	1658.07	1662.21	1660.95	1669.78	1665.76	1675.84	1689.08
45	1623.50	1629.30	1627.66	1637.39	1634.36	1643.82	1654.23
46	1589.85	1595.83	1592.80	1604.80	1601.13	1610.77	1619.32
47	1555.26	1562.73	1558.01	1570.79	1565.02	1575.57	1583.45
48	1521.95	1527.87	1522.69	1533.99	1528.20	1538.48	1547.58
49	1486.71	1491.37	1486.34	1494.10	1491.21	1501.63	1510.62
50	1450.90	1454.08	1449.19	1455.53	1453.98	1465.21	1473.72
51	1412.27	1415.01	1410.07	1416.48	1417.07	1426.67	1436.63
52	1373.95	1375.80	1369.37	1378.19	1378.76	1388.58	1399.12
53	1334.13	1334.84	1328.66	1340.69	1341.61	1349.78	1359.87
54	1294.16	1293.23	1286.61	1300.22	1300.74	1307.69	1314.57
55	1250.87	1249.78	1244.30	1257.46	1255.93	1260.88	1266.96
56	1201.06	1202.78	1198.22	1209.06	1206.88	1210.34	1216.19
57	1148.86	1153.60	1147.37	1154.84	1155.61	1158.33	1163.01
58	1092.44	1100.59	1092.75	1098.39	1101.16	1103.92	1107.00
59	1035.07	1045.18	1037.78	1041.83	1045.48	1051.25	1051.33
60	981.27	990.47	984.83	989.20	992.86	1001.18	998.37
61	928.58	937.90	932.03	937.62	941.75	951.50	946.30
62	877.51	886.19	880.32	886.30	890.97	900.80	896.17
63	826.41	833.76	831.47	837.44	840.28	847.99	847.47
64	775.97	782.13	782.50	789.42	790.46	795.93	798.51
65	725.98	731.21	733.52	741.82	739.98	747.29	751.52
66	677.98	681.80	684.53	692.16	691.90	697.90	701.74
67	632.22	633.64	635.06	641.95	644.37	648.61	652.12
68	583.66	582.95	585.19	589.78	592.90	596.50	603.50
69	530.40	530.75	532.33	533.76	538.32	542.22	551.13
70	477.65	474.86	477.43	478.30	483.84	489.74	498.17
71	425.14	422.99	424.50	428.13	434.98	438.00	449.85
72	378.82	375.82	377.93	382.58	386.84	392.10	403.93
73	334.70	333.26	335.51	337.38	341.95	349.95	360.85
74	291.55	293.34	293.70	295.07	302.47	307.44	319.54
75	250.59	248.64	251.69	253.98	261.78	265.76	273.77
76	209.45	207.82	210.65	212.35	218.45	223.92	228.90
77	171.21	174.86	174.16	175.03	180.41	185.38	192.21
78	138.26	138.94	141.50	141.30	144.39	151.37	155.13
79	107.77	107.91	108.69	111.33	114.86	118.31	121.74
80	81.44	83.10	83.75	83.99	87.83	90.36	95.02
81	61.83	60.91	61.76	62.48	64.42	68.20	71.27
82	43.21	43.01	43.65	44.03	46.50	48.26	51.39
83	29.32	29.45	29.69	31.31	32.26	33.89	35.99
84	19.39	19.18	19.34	20.34	21.34	22.75	24.28
85	12.91	13.04	13.09	13.41	14.19	14.73	15.37
86	9.39	9.35	9.42	9.70	9.90	10.03	10.40
87	6.42	6.38	6.50	6.67	6.87	7.18	7.62
88	3.82	3.93	4.09	4.21	4.47	4.58	4.81
89	1.52	1.52	1.55	1.82	2.03	2.34	2.67
90	0.79	0.79	0.86	0.87	0.82	0.84	0.95
91	0.63	0.74	0.84	0.74	0.79	0.74	0.64
92	0.68	0.74	0.84	0.63	0.68	0.68	0.69

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**CANDELA TABULATION - (Cont.)**

93	0.63	0.74	0.74	0.63	0.68	0.63	0.63
94	0.74	0.74	0.73	0.63	0.58	0.58	0.63
95	0.69	0.79	0.73	0.63	0.53	0.58	0.63
96	0.79	0.74	0.73	0.63	0.53	0.58	0.63
97	0.79	0.95	0.73	0.63	0.58	0.58	0.63
98	0.79	0.90	0.73	0.63	0.68	0.58	0.63
99	0.79	0.95	0.73	0.73	0.73	0.63	0.74
100	0.85	1.11	0.78	0.74	0.79	0.68	0.74
101	1.05	1.11	0.73	0.79	0.89	0.74	0.74
102	1.05	1.21	0.94	0.89	0.84	0.79	0.74
103	1.21	1.37	1.05	0.89	0.89	0.84	0.79
104	1.27	1.32	1.15	1.00	1.05	0.84	0.84
105	1.42	1.47	1.36	1.25	1.05	1.05	1.10
106	1.47	1.53	1.57	1.31	1.15	1.05	1.32
107	1.48	1.68	1.62	1.47	1.36	1.26	1.47
108	1.63	1.68	1.68	1.52	1.52	1.42	1.58
109	1.58	1.90	1.73	1.73	1.57	1.52	1.64
110	1.69	1.95	1.88	1.84	1.63	1.53	1.69
111	1.84	2.11	1.99	2.00	1.68	1.58	1.74
112	1.84	2.16	2.25	2.15	1.78	1.58	1.79
113	1.84	2.27	2.46	2.26	1.89	1.73	2.00
114	2.00	2.37	2.52	2.31	2.15	1.79	2.06
115	2.11	2.42	2.52	2.47	2.36	1.79	2.21
116	2.16	2.42	2.62	2.58	2.41	1.79	2.42
117	2.26	2.53	2.72	2.63	2.52	1.84	2.58
118	2.32	2.53	2.78	2.58	2.52	1.89	2.53
119	2.53	2.53	2.83	2.78	2.67	2.30	2.53
120	2.58	2.58	3.19	2.94	2.63	2.68	2.53
121	2.63	2.74	3.25	2.94	2.78	2.94	2.95
122	2.63	2.74	3.25	3.05	2.83	3.05	3.27
123	2.74	2.79	3.30	3.21	2.94	3.26	3.53
124	2.68	2.90	3.46	3.31	3.04	3.36	3.69
125	2.69	3.00	3.51	3.41	3.10	3.37	3.96
126	2.89	3.16	3.67	3.57	3.10	3.57	4.06
127	3.00	3.16	3.72	3.63	3.15	3.63	4.12
128	3.00	3.26	3.87	3.73	3.15	3.68	4.12
129	3.16	3.21	4.08	3.68	3.15	3.78	4.17
130	3.16	3.27	4.14	3.68	3.20	3.94	4.22
131	3.16	3.37	4.14	3.68	3.20	4.00	4.17
132	3.16	3.47	4.14	3.68	3.20	4.20	4.17
133	3.16	3.47	4.14	3.68	3.31	4.26	4.22
134	3.21	3.53	4.14	3.68	3.26	4.26	4.33
135	3.10	3.58	4.19	3.73	3.31	4.31	4.33
136	3.10	3.58	4.30	3.83	3.26	4.31	4.38
137	3.10	3.63	4.30	3.94	3.41	4.36	4.38
138	3.11	3.94	4.30	3.99	3.36	4.36	4.43
139	3.16	5.65	4.30	4.05	3.41	4.36	4.49
140	3.26	3.95	4.30	4.10	3.57	4.52	4.59
141	3.32	4.05	4.30	4.10	3.57	4.52	4.54
142	3.48	4.05	4.30	4.10	3.62	4.52	4.54
143	3.58	4.11	4.30	4.10	3.62	4.68	4.54
144	3.74	4.16	4.30	4.00	3.67	4.78	4.54
145	3.84	4.16	4.30	3.99	3.93	4.79	4.54
146	4.06	4.21	4.40	3.99	4.14	4.84	4.85
147	4.32	4.16	4.35	3.99	4.10	5.00	4.96
148	4.53	4.32	4.35	3.99	4.20	4.94	4.96



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**CANDELA TABULATION - (Cont.)**

<b>149</b>	4.74	4.42	4.35	4.05	4.30	5.05	4.96
<b>150</b>	4.89	4.47	4.50	4.10	4.56	5.00	4.96
<b>151</b>	4.95	4.58	4.46	4.10	4.93	5.00	4.96
<b>152</b>	4.94	4.58	4.46	4.10	4.94	5.05	5.12
<b>153</b>	4.84	4.68	4.46	4.15	5.04	5.05	5.17
<b>154</b>	4.84	4.69	4.46	4.15	4.99	5.10	5.33
<b>155</b>	4.84	4.79	4.46	4.20	5.19	5.20	5.28
<b>156</b>	4.90	4.84	4.46	4.31	5.15	5.21	5.28
<b>157</b>	5.00	4.95	4.51	4.26	5.15	5.21	5.33
<b>158</b>	4.94	4.95	4.41	4.26	5.15	5.21	5.33
<b>159</b>	4.89	4.95	4.46	4.31	5.15	5.21	5.33
<b>160</b>	4.89	4.95	4.46	4.36	5.15	5.21	5.33
<b>161</b>	4.89	4.95	4.51	4.46	5.15	5.21	5.33
<b>162</b>	4.95	5.21	4.66	4.42	5.20	5.21	5.33
<b>163</b>	4.84	5.26	4.67	4.57	5.25	5.21	5.33
<b>164</b>	4.89	5.26	4.87	4.57	5.20	5.21	5.33
<b>165</b>	4.84	5.26	4.88	4.62	5.20	5.21	5.33
<b>166</b>	5.06	5.32	4.93	4.73	5.25	5.21	5.33
<b>167</b>	5.42	5.48	5.08	4.78	5.25	5.26	5.38
<b>168</b>	5.85	5.85	5.29	4.84	5.72	5.36	5.44
<b>169</b>	6.11	6.47	5.45	4.99	5.82	5.67	5.85
<b>170</b>	6.37	6.53	5.45	4.99	5.83	5.94	5.86
<b>171</b>	6.58	6.79	5.66	5.15	5.93	6.04	6.11
<b>172</b>	6.58	6.74	5.71	5.15	6.04	6.00	6.23
<b>173</b>	6.52	6.79	5.82	5.30	6.04	5.99	6.59
<b>174</b>	6.52	6.74	5.82	5.36	6.09	5.99	6.60
<b>175</b>	6.52	6.73	5.82	5.68	6.14	6.05	6.75
<b>176</b>	6.26	6.63	5.87	5.68	6.35	6.05	6.81
<b>177</b>	6.31	6.68	5.87	5.73	6.30	6.05	6.81
<b>178</b>	6.26	6.68	5.87	5.73	6.30	6.05	6.81
<b>179</b>	6.31	6.63	5.87	5.73	6.30	6.05	6.81
<b>180</b>	6.81	6.81	6.81	6.81	6.81	6.81	6.81

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-S1-40W-4000K-D120.IES**

**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	865.72	N.A.	13.30
0-30	1851.73	N.A.	28.50
0-40	3057.24	N.A.	47.10
0-60	5431.18	N.A.	83.70
0-80	6446.36	N.A.	99.30
0-90	6473.72	N.A.	99.70
10-90	6250.96	N.A.	96.30
20-40	2191.52	N.A.	33.80
20-50	3454.39	N.A.	53.20
40-70	3106.32	N.A.	47.90
60-80	1015.18	N.A.	15.60
70-80	282.80	N.A.	4.40
80-90	27.36	N.A.	0.40
90-110	2.10	N.A.	0.00
90-120	4.28	N.A.	0.10
90-130	7.18	N.A.	0.10
90-150	12.86	N.A.	0.20
90-180	17.14	N.A.	0.30
110-180	15.04	N.A.	0.20
0-180	6490.86	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	222.77
10-20	642.95
20-30	986.01
30-40	1205.51
40-50	1262.86
50-60	1111.08
60-70	732.38
70-80	282.80
80-90	27.36
90-100	0.78
100-110	1.32
110-120	2.18
120-130	2.90
130-140	2.98
140-150	2.69
150-160	2.22
160-170	1.47
170-180	0.59

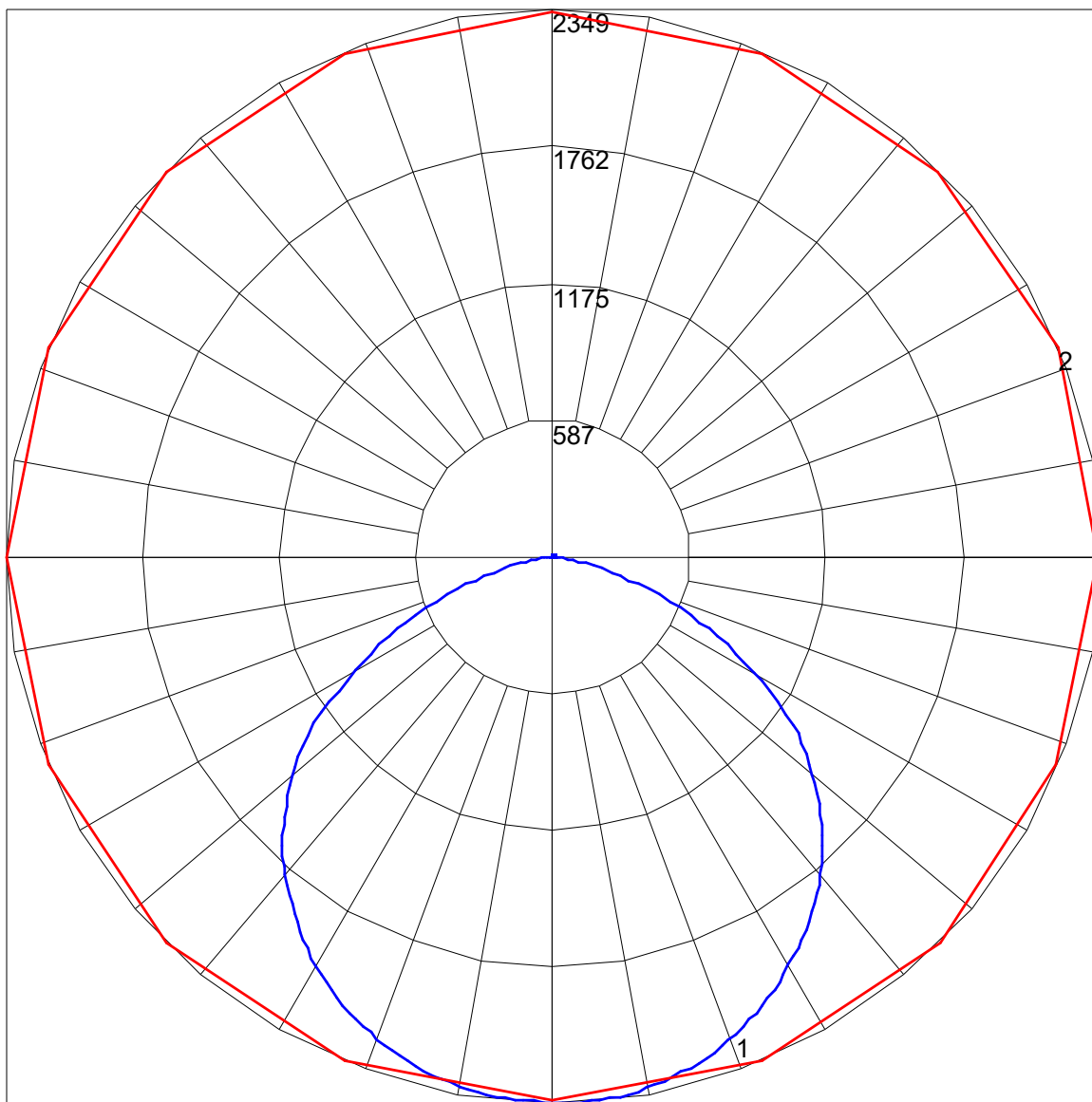
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-S1-40W-4000K-D120.IES**

**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	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	89	88	86
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52
5	77	65	56	49	75	63	55	49	61	54	49	59	53	48	58	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

POLAR GRAPH



Maximum Candela = 2349.45 Located At Horizontal Angle = 315, Vertical Angle = 3  
# 1 - Vertical Plane Through Horizontal Angles (315 - 135) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (3) (Through Max. Cd.)