



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : HZX-EX-Q1-80W-5000K-D120.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] HZX-EX-Q1-80W-5000K-D120  
 [TESTLAB] EVERFINE  
 [TESTDATE] 25 November 2024  
 [ISSUEDATE] 2024-11-25 16:52:15  
 [NEARFIELD]  
 [LAMPPOSITION] 0,0  
 [OTHER] EVERFINE GO-3000H\_V1 SYSTEM  
 [MANUFAC] BELUCE CANADA INC  
 [LUMINAIRE] HZX-EX-Q1-80W-5000K-D120  
 [LUMCAT] HZX-EX-Q1-80W-5000K-D120  
 [LAMP] 12969 LUMENS  
 [\_SEARCH\_SOURCETYPE] LED  
 [\_SEARCH\_CERTIFICATION] CSA

### CHARACTERISTICS

Lumens Per Lamp	N.A. (absolute)
Total Lamp Lumens	N.A. (absolute)
Luminaire Lumens	12969
Total Luminaire Efficiency	N.A.
Luminaire Efficacy Rating (LER)	160
Total Luminaire Watts	80.9067
Ballast Factor	1.00
CIE Type	Direct
Spacing Criterion (0-180)	1.26
Spacing Criterion (90-270)	1.26
Spacing Criterion (Diagonal)	1.36
Basic Luminous Shape	Circular
Luminous Length (0-180)	0.24 m (Diameter)
Luminous Width (90-270)	0.24 m (Diameter)
Luminous Height	0.00 m

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

Angle In Degrees	Average 0-Deg	Average 45-Deg	Average 90-Deg
45	108132	106459	104785
55	99724	96789	93854
65	84894	80234	75574
75	54407	48441	42474
85	14975	11510	8044

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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>
<b>0.0</b>	4975.900	4975.900	4975.900	4975.900	4975.900	4975.900	4975.900	4975.900	4975.900	4975.900
<b>2.5</b>	4974.800	4974.075	4973.350	4972.625	4971.900	4970.550	4969.200	4967.850	4966.500	4967.500
<b>5.0</b>	4964.200	4962.575	4960.950	4959.325	4957.700	4955.175	4952.650	4950.125	4947.600	4949.775
<b>7.5</b>	4944.650	4941.925	4939.200	4936.475	4933.750	4930.125	4926.500	4922.875	4919.250	4922.638
<b>10.0</b>	4917.600	4913.600	4909.600	4905.600	4901.600	4896.575	4891.550	4886.525	4881.500	4886.425
<b>12.5</b>	4880.900	4874.925	4868.950	4862.975	4857.000	4851.313	4845.625	4839.938	4834.250	4840.500
<b>15.0</b>	4834.600	4827.900	4821.200	4814.500	4807.800	4800.475	4793.150	4785.825	4778.500	4786.500
<b>17.5</b>	4784.750	4776.725	4768.700	4760.675	4752.650	4742.150	4731.650	4721.150	4710.650	4720.000
<b>20.0</b>	4722.700	4712.750	4702.800	4692.850	4682.900	4670.075	4657.250	4644.425	4631.600	4640.975
<b>22.5</b>	4632.400	4624.013	4615.625	4607.238	4598.850	4581.325	4563.800	4546.275	4528.750	4537.050
<b>25.0</b>	4509.000	4504.425	4499.850	4495.275	4490.700	4465.550	4440.400	4415.250	4390.100	4398.100
<b>27.5</b>	4361.400	4356.313	4351.225	4346.138	4341.050	4314.200	4287.350	4260.500	4233.650	4243.638
<b>30.0</b>	4216.700	4206.700	4196.700	4186.700	4176.700	4153.200	4129.700	4106.200	4082.700	4094.950
<b>32.5</b>	4079.300	4064.188	4049.075	4033.963	4018.850	3997.625	3976.400	3955.175	3933.950	3949.175
<b>35.0</b>	3940.100	3921.875	3903.650	3885.425	3867.200	3846.275	3825.350	3804.425	3783.500	3800.700
<b>37.5</b>	3796.400	3775.750	3755.100	3734.450	3713.800	3692.550	3671.300	3650.050	3628.800	3647.900
<b>40.0</b>	3646.400	3623.775	3601.150	3578.525	3555.900	3533.900	3511.900	3489.900	3467.900	3489.325
<b>42.5</b>	3489.950	3465.350	3440.750	3416.150	3391.550	3368.650	3345.750	3322.850	3299.950	3322.625
<b>45.0</b>	3317.800	3292.125	3266.450	3240.775	3215.100	3186.225	3157.350	3128.475	3099.600	3124.175
<b>47.5</b>	3108.150	3080.113	3052.075	3024.038	2996.000	2965.250	2934.500	2903.750	2873.000	2900.163
<b>50.0</b>	2894.500	2862.875	2831.250	2799.625	2768.000	2740.300	2712.600	2684.900	2657.200	2686.825
<b>52.5</b>	2690.100	2655.763	2621.425	2587.088	2552.750	2525.875	2499.000	2472.125	2445.250	2476.725
<b>55.0</b>	2482.000	2445.475	2408.950	2372.425	2335.900	2309.025	2282.150	2255.275	2228.400	2261.975
<b>57.5</b>	2268.000	2230.600	2193.200	2155.800	2118.400	2085.612	2052.825	2020.037	1987.250	2025.162
<b>60.0</b>	2024.300	1984.750	1945.200	1905.650	1866.100	1834.000	1801.900	1769.800	1737.700	1775.925
<b>62.5</b>	1786.700	1747.488	1708.275	1669.063	1629.850	1598.400	1566.950	1535.500	1504.050	1542.538
<b>65.0</b>	1556.800	1514.075	1471.350	1428.625	1385.900	1353.125	1320.350	1287.575	1254.800	1295.500
<b>67.5</b>	1301.900	1261.163	1220.425	1179.688	1138.950	1108.303	1077.655	1047.008	1016.360	1055.283
<b>70.0</b>	1064.700	1026.653	988.605	950.558	912.510	879.750	846.990	814.230	781.470	823.460
<b>72.5</b>	830.070	792.255	754.440	716.625	678.810	651.029	623.248	595.466	567.685	603.971
<b>75.0</b>	611.030	577.525	544.020	510.515	477.010	451.513	426.015	400.518	375.020	407.160
<b>77.5</b>	417.110	387.283	357.455	327.628	297.800	278.733	259.665	240.598	221.530	246.940
<b>80.0</b>	252.220	229.908	207.595	185.283	162.970	150.145	137.320	124.495	111.670	130.425
<b>82.5</b>	132.580	118.576	104.572	90.567	76.563	69.193	61.823	54.452	47.082	58.110
<b>85.0</b>	56.634	50.081	43.529	36.976	30.423	28.304	26.185	24.066	21.947	25.353
<b>87.5</b>	24.904	22.507	20.110	17.713	15.316	13.592	11.867	10.143	8.419	10.751
<b>90.0</b>	9.382	8.718	8.053	7.389	6.724	6.747	6.770	6.792	6.815	6.572
<b>92.5</b>	5.952	6.231	6.510	6.790	7.069	7.173	7.277	7.381	7.485	7.133
<b>95.0</b>	6.413	6.784	7.155	7.525	7.896	8.022	8.148	8.273	8.399	8.011
<b>97.5</b>	7.325	7.712	8.099	8.486	8.873	9.013	9.153	9.293	9.433	9.025
<b>100.0</b>	8.335	8.736	9.138	9.539	9.940	10.082	10.224	10.366	10.508	10.096
<b>102.5</b>	9.421	9.831	10.240	10.650	11.059	11.215	11.371	11.527	11.683	11.259
<b>105.0</b>	10.566	10.987	11.407	11.828	12.248	12.411	12.573	12.736	12.898	12.463
<b>107.5</b>	11.782	12.204	12.626	13.048	13.470	13.640	13.809	13.979	14.148	13.711
<b>110.0</b>	13.038	13.462	13.886	14.310	14.734	14.912	15.090	15.268	15.446	15.006
<b>112.5</b>	14.322	14.755	15.189	15.622	16.056	16.240	16.424	16.608	16.793	16.344
<b>115.0</b>	15.638	16.078	16.518	16.958	17.398	17.581	17.764	17.947	18.130	17.683
<b>117.5</b>	16.991	17.421	17.852	18.282	18.712	18.906	19.101	19.295	19.489	19.037
<b>120.0</b>	18.301	18.740	19.179	19.618	20.057	20.254	20.452	20.649	20.846	20.388
<b>122.5</b>	19.639	20.078	20.517	20.956	21.395	21.590	21.785	21.980	22.175	21.724
<b>125.0</b>	20.980	21.414	21.848	22.282	22.716	22.908	23.099	23.291	23.482	23.037
<b>127.5</b>	22.284	22.717	23.150	23.584	24.017	24.212	24.407	24.602	24.797	24.353
<b>130.0</b>	23.598	24.019	24.441	24.862	25.283	25.484	25.685	25.885	26.086	25.649
<b>132.5</b>	24.891	25.315	25.740	26.165	26.590	26.781	26.972	27.164	27.355	26.926

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**CANDELA TABULATION - (Cont.)**

<b>135.0</b>	26.190	26.605	27.020	27.435	27.850	28.039	28.229	28.418	28.607	28.191
<b>137.5</b>	27.489	27.887	28.286	28.685	29.084	29.264	29.444	29.624	29.804	29.419
<b>140.0</b>	28.808	29.177	29.547	29.916	30.285	30.462	30.639	30.815	30.992	30.640
<b>142.5</b>	30.106	30.450	30.795	31.140	31.485	31.646	31.807	31.967	32.128	31.821
<b>145.0</b>	31.424	31.726	32.028	32.329	32.631	32.790	32.949	33.107	33.266	32.996
<b>147.5</b>	32.686	32.914	33.142	33.370	33.599	33.748	33.898	34.047	34.197	34.000
<b>150.0</b>	33.879	34.055	34.232	34.408	34.584	34.732	34.880	35.028	35.176	35.029
<b>152.5</b>	35.043	35.175	35.308	35.440	35.573	35.703	35.833	35.963	36.093	36.003
<b>155.0</b>	36.146	36.232	36.317	36.403	36.488	36.601	36.713	36.826	36.938	36.908
<b>157.5</b>	37.183	37.219	37.255	37.290	37.326	37.428	37.530	37.632	37.735	37.753
<b>160.0</b>	38.158	38.142	38.126	38.109	38.093	38.194	38.295	38.396	38.497	38.561
<b>162.5</b>	39.068	39.024	38.980	38.936	38.892	38.977	39.063	39.149	39.235	39.334
<b>165.0</b>	39.896	39.883	39.870	39.857	39.844	39.909	39.974	40.038	40.103	40.188
<b>167.5</b>	40.605	40.628	40.650	40.673	40.696	40.734	40.772	40.811	40.849	40.919
<b>170.0</b>	41.212	41.268	41.324	41.380	41.436	41.460	41.484	41.507	41.531	41.569
<b>172.5</b>	41.755	41.818	41.881	41.944	42.007	42.023	42.040	42.056	42.073	42.085
<b>175.0</b>	42.162	42.239	42.316	42.393	42.470	42.472	42.475	42.477	42.479	42.473
<b>177.5</b>	42.457	42.518	42.580	42.641	42.703	42.683	42.663	42.643	42.623	42.628
<b>180.0</b>	42.000	42.000	42.000	42.000	42.000	42.000	42.000	42.000	42.000	42.000

**Vert. Angles**      **Horizontal Angles**

	<u><b>225.0</b></u>	<u><b>247.5</b></u>	<u><b>270.0</b></u>	<u><b>292.5</b></u>	<u><b>315.0</b></u>	<u><b>337.5</b></u>	<u><b>360.0</b></u>
<b>0.0</b>	4975.900	4975.900	4975.900	4975.900	4975.900	4975.900	4975.900
<b>2.5</b>	4968.500	4969.500	4970.500	4971.575	4972.650	4973.725	4974.800
<b>5.0</b>	4951.950	4954.125	4956.300	4958.275	4960.250	4962.225	4964.200
<b>7.5</b>	4926.025	4929.413	4932.800	4935.763	4938.725	4941.688	4944.650
<b>10.0</b>	4891.350	4896.275	4901.200	4905.300	4909.400	4913.500	4917.600
<b>12.5</b>	4846.750	4853.000	4859.250	4864.663	4870.075	4875.488	4880.900
<b>15.0</b>	4794.500	4802.500	4810.500	4816.525	4822.550	4828.575	4834.600
<b>17.5</b>	4729.350	4738.700	4748.050	4757.225	4766.400	4775.575	4784.750
<b>20.0</b>	4650.350	4659.725	4669.100	4682.500	4695.900	4709.300	4722.700
<b>22.5</b>	4545.350	4553.650	4561.950	4579.563	4597.175	4614.788	4632.400
<b>25.0</b>	4406.100	4414.100	4422.100	4443.825	4465.550	4487.275	4509.000
<b>27.5</b>	4253.625	4263.613	4273.600	4295.550	4317.500	4339.450	4361.400
<b>30.0</b>	4107.200	4119.450	4131.700	4152.950	4174.200	4195.450	4216.700
<b>32.5</b>	3964.400	3979.625	3994.850	4015.963	4037.075	4058.188	4079.300
<b>35.0</b>	3817.900	3835.100	3852.300	3874.250	3896.200	3918.150	3940.100
<b>37.5</b>	3667.000	3686.100	3705.200	3728.000	3750.800	3773.600	3796.400
<b>40.0</b>	3510.750	3532.175	3553.600	3576.800	3600.000	3623.200	3646.400
<b>42.5</b>	3345.300	3367.975	3390.650	3415.475	3440.300	3465.125	3489.950
<b>45.0</b>	3148.750	3173.325	3197.900	3227.875	3257.850	3287.825	3317.800
<b>47.5</b>	2927.325	2954.488	2981.650	3013.275	3044.900	3076.525	3108.150
<b>50.0</b>	2716.450	2746.075	2775.700	2805.400	2835.100	2864.800	2894.500
<b>52.5</b>	2508.200	2539.675	2571.150	2600.888	2630.625	2660.363	2690.100
<b>55.0</b>	2295.550	2329.125	2362.700	2392.525	2422.350	2452.175	2482.000
<b>57.5</b>	2063.075	2100.987	2138.900	2171.175	2203.450	2235.725	2268.000
<b>60.0</b>	1814.150	1852.375	1890.600	1924.025	1957.450	1990.875	2024.300
<b>62.5</b>	1581.025	1619.513	1658.000	1690.175	1722.350	1754.525	1786.700
<b>65.0</b>	1336.200	1376.900	1417.600	1452.400	1487.200	1522.000	1556.800
<b>67.5</b>	1094.205	1133.128	1172.050	1204.513	1236.975	1269.438	1301.900
<b>70.0</b>	865.450	907.440	949.430	978.248	1007.065	1035.883	1064.700
<b>72.5</b>	640.258	676.544	712.830	742.140	771.450	800.760	830.070
<b>75.0</b>	439.300	471.440	503.580	530.443	557.305	584.168	611.030
<b>77.5</b>	272.350	297.760	323.170	346.655	370.140	393.625	417.110
<b>80.0</b>	149.180	167.935	186.690	203.073	219.455	235.838	252.220

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**CANDELA TABULATION - (Cont.)**

82.5	69.138	80.166	91.194	101.541	111.887	122.234	132.580
85.0	28.759	32.164	35.570	40.836	46.102	51.368	56.634
87.5	13.083	15.415	17.747	19.536	21.325	23.115	24.904
90.0	6.329	6.086	5.843	6.728	7.613	8.497	9.382
92.5	6.781	6.429	6.077	6.046	6.014	5.983	5.952
95.0	7.623	7.234	6.846	6.738	6.630	6.521	6.413
97.5	8.616	8.208	7.800	7.681	7.562	7.443	7.325
100.0	9.685	9.273	8.861	8.730	8.598	8.467	8.335
102.5	10.835	10.412	9.988	9.846	9.705	9.563	9.421
105.0	12.028	11.593	11.158	11.010	10.862	10.714	10.566
107.5	13.273	12.836	12.399	12.244	12.090	11.936	11.782
110.0	14.565	14.125	13.684	13.523	13.361	13.200	13.038
112.5	15.895	15.446	14.997	14.828	14.660	14.491	14.322
115.0	17.236	16.788	16.341	16.165	15.990	15.814	15.638
117.5	18.585	18.133	17.681	17.509	17.336	17.164	16.991
120.0	19.931	19.473	19.015	18.837	18.658	18.480	18.301
122.5	21.274	20.824	20.374	20.190	20.007	19.823	19.639
125.0	22.593	22.148	21.703	21.522	21.342	21.161	20.980
127.5	23.909	23.464	23.020	22.836	22.652	22.468	22.284
130.0	25.212	24.774	24.337	24.152	23.968	23.783	23.598
132.5	26.498	26.069	25.640	25.453	25.265	25.078	24.891
135.0	27.776	27.360	26.944	26.756	26.567	26.379	26.190
137.5	29.034	28.649	28.264	28.070	27.876	27.682	27.489
140.0	30.288	29.936	29.584	29.390	29.196	29.002	28.808
142.5	31.515	31.208	30.902	30.703	30.504	30.305	30.106
145.0	32.727	32.457	32.187	31.996	31.806	31.615	31.424
147.5	33.804	33.608	33.412	33.230	33.049	32.867	32.686
150.0	34.883	34.736	34.589	34.412	34.234	34.057	33.879
152.5	35.913	35.822	35.732	35.560	35.387	35.215	35.043
155.0	36.878	36.847	36.817	36.649	36.482	36.314	36.146
157.5	37.772	37.791	37.810	37.653	37.496	37.340	37.183
160.0	38.625	38.688	38.752	38.604	38.455	38.307	38.158
162.5	39.433	39.532	39.631	39.490	39.350	39.209	39.068
165.0	40.273	40.357	40.442	40.306	40.169	40.033	39.896
167.5	40.989	41.058	41.128	40.997	40.867	40.736	40.605
170.0	41.607	41.645	41.683	41.565	41.448	41.330	41.212
172.5	42.098	42.111	42.124	42.031	41.939	41.847	41.755
175.0	42.467	42.460	42.454	42.381	42.308	42.235	42.162
177.5	42.633	42.637	42.642	42.596	42.549	42.503	42.457
180.0	42.000	42.000	42.000	42.000	42.000	42.000	42.000

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**ZONAL LUMEN SUMMARY**

Zone	Lumens	%Lamp	%Fixt
0-20	1829.01	N.A.	14.10
0-30	3875.72	N.A.	29.90
0-40	6292.12	N.A.	48.50
0-60	10847.77	N.A.	83.60
0-80	12774.61	N.A.	98.50
0-90	12837.78	N.A.	99.00
10-90	12366.45	N.A.	95.40
20-40	4463.11	N.A.	34.40
20-50	6924.31	N.A.	53.40
40-70	5941.5	N.A.	45.80
60-80	1926.84	N.A.	14.90
70-80	540.99	N.A.	4.20
80-90	63.16	N.A.	0.50
90-110	20.79	N.A.	0.20
90-120	37.51	N.A.	0.30
90-130	57.39	N.A.	0.40
90-150	98.79	N.A.	0.80
90-180	130.96	N.A.	1.00
110-180	110.17	N.A.	0.80
0-180	12968.74	N.A.	100.00

Total Luminaire Efficiency = N.A. %

**ZONAL LUMEN SUMMARY**

Zone	Lumens
0-10	471.33
10-20	1357.68
20-30	2046.71
30-40	2416.4
40-50	2461.2
50-60	2094.45
60-70	1385.85
70-80	541.00
80-90	63.16
90-100	8.37
100-110	12.42
110-120	16.72
120-130	19.88
130-140	21.16
140-150	20.24
150-160	16.86
160-170	11.29
170-180	4.01

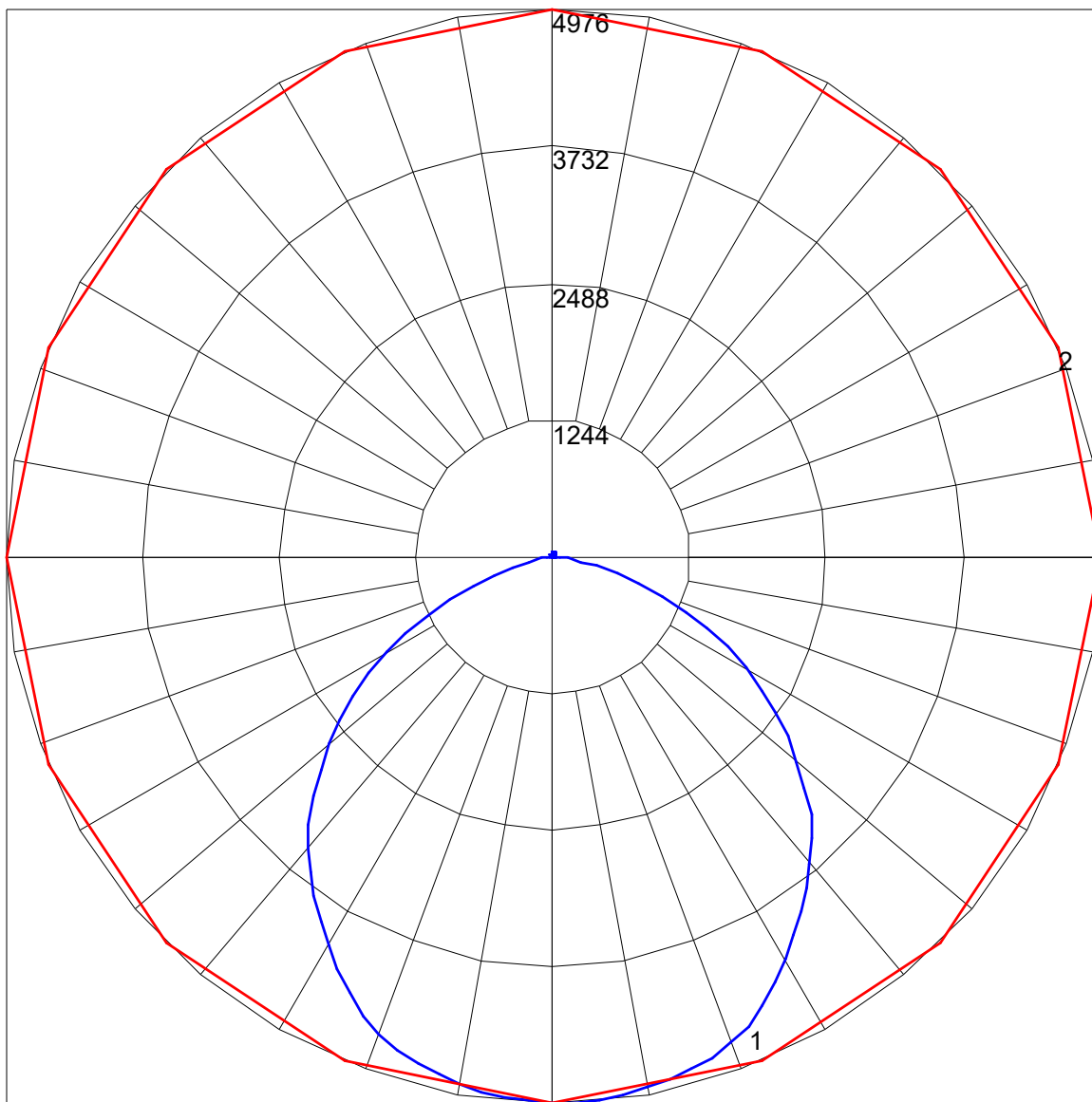
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-Q1-80W-5000K-D120.IES**

**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	105	102	98	107	103	100	96	99	96	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	62
4	84	73	64	58	82	71	64	58	69	62	57	66	61	56	64	59	55	53
5	78	65	57	50	75	64	56	50	62	55	49	60	54	49	58	52	48	46
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	42	40
7	67	53	45	39	65	53	45	39	51	44	38	49	43	38	48	42	38	36
8	62	49	41	35	60	48	40	35	47	40	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	37	31	43	36	31	42	35	31	41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

POLAR GRAPH



Maximum Candela = 4975.9 Located At Horizontal Angle = 0, Vertical Angle = 0  
# 1 - Vertical Plane Through Horizontal Angles (0 - 180) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (0) (Through Max. Cd.)