



## IES INDOOR REPORT

PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES

### DESCRIPTION INFORMATION (From Photometric File)

IESNA:LM-63-2002  
 [TEST] HZX-EX-B4-300W-5000K-D120  
 [TESTLAB] EVERFINE  
 [TESTDATE] 23 August 2021  
 [ISSUEDATE] 2021-08-23 10:48:51  
 [NEARFIELD]  
 [LAMPPOSITION] 0,0  
 [OTHER] EVERFINE GO-2000A\_V1 SYSTEM  
 [MANUFAC] BELUCE CANADA INC.  
 [LUMINAIRE] HZX-EX-B4-300W-5000K-D120  
 [LUMCAT] HZX-EX-B4-300W-5000K-D120  
 [LAMP] 43215 LUMENS  
 [\_SEARCH\_SOURCETYPE] LED

Note: Candela values converted from Type-B to Type-C

### CHARACTERISTICS

|                                 |                |
|---------------------------------|----------------|
| Lumens Per Lamp                 | 43215 (1 lamp) |
| Total Lamp Lumens               | 43215          |
| Luminaire Lumens                | 42778          |
| Total Luminaire Efficiency      | 99 %           |
| Luminaire Efficacy Rating (LER) | 143            |
| Total Luminaire Watts           | 298.766        |
| Ballast Factor                  | 1.00           |
| CIE Type                        | Direct         |
| Spacing Criterion (0-180)       | 1.16           |
| 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<br>Degrees | Average<br>0-Deg | Average<br>45-Deg | Average<br>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>2.5</u> | <u>5.0</u> | <u>7.5</u> | <u>10.0</u> | <u>12.5</u> | <u>15.0</u> | <u>17.5</u> | <u>20.0</u> | <u>22.5</u> |
|-------------|------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>0.0</b>  | 14779.57   | 14779.57   | 14779.57   | 14779.57   | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    |
| <b>2.5</b>  | 14551.36   | 14551.13   | 14551.33   | 14551.96   | 14553.03    | 14554.53    | 14556.45    | 14558.80    | 14561.57    | 14564.57    |
| <b>5.0</b>  | 14323.15   | 14322.73   | 14323.18   | 14324.50   | 14326.67    | 14329.34    | 14332.29    | 14336.09    | 14340.74    | 14345.49    |
| <b>7.5</b>  | 14094.94   | 14094.39   | 14095.13   | 14097.08   | 14099.15    | 14102.32    | 14106.25    | 14111.22    | 14116.63    | 14123.32    |
| <b>10.0</b> | 13866.73   | 13866.10   | 13867.17   | 13868.62   | 13871.18    | 13874.61    | 13878.32    | 13883.65    | 13889.64    | 13897.25    |
| <b>12.5</b> | 13638.52   | 13637.85   | 13638.93   | 13640.07   | 13642.46    | 13644.85    | 13648.73    | 13653.80    | 13659.94    | 13667.09    |
| <b>15.0</b> | 13410.31   | 13409.65   | 13410.18   | 13411.14   | 13412.21    | 13414.31    | 13417.64    | 13421.54    | 13426.97    | 13432.53    |
| <b>17.5</b> | 13048.17   | 13048.05   | 13050.36   | 13054.82   | 13061.07    | 13069.64    | 13080.66    | 13094.30    | 13107.80    | 13128.88    |
| <b>20.0</b> | 12686.03   | 12685.66   | 12687.56   | 12691.25   | 12697.20    | 12705.65    | 12716.37    | 12727.09    | 12744.93    | 12762.61    |
| <b>22.5</b> | 12323.89   | 12323.04   | 12324.07   | 12327.86   | 12333.23    | 12340.43    | 12350.26    | 12362.24    | 12376.11    | 12392.81    |
| <b>25.0</b> | 11961.75   | 11960.49   | 11961.39   | 11964.00   | 11968.34    | 11974.43    | 11983.09    | 11992.78    | 12004.93    | 12020.36    |
| <b>27.5</b> | 11599.61   | 11597.60   | 11597.81   | 11599.69   | 11602.58    | 11608.04    | 11614.05    | 11620.84    | 11632.25    | 11644.39    |
| <b>30.0</b> | 11237.47   | 11234.72   | 11234.36   | 11235.43   | 11236.41    | 11240.57    | 11243.05    | 11248.72    | 11256.17    | 11265.31    |
| <b>32.5</b> | 10597.38   | 10597.21   | 10604.68   | 10618.28   | 10636.50    | 10661.96    | 10692.98    | 10732.27    | 10777.24    | 10828.84    |
| <b>35.0</b> | 9957.29    | 9957.13    | 9964.42    | 9976.03    | 9993.53     | 10016.86    | 10047.12    | 10082.02    | 10126.94    | 10176.42    |
| <b>37.5</b> | 9317.20    | 9317.08    | 9323.91    | 9333.45    | 9349.59     | 9370.70     | 9400.23     | 9433.93     | 9474.02     | 9520.78     |
| <b>40.0</b> | 8677.11    | 8677.08    | 8682.79    | 8690.54    | 8704.10     | 8724.37     | 8750.83     | 8781.74     | 8818.23     | 8861.76     |
| <b>42.5</b> | 8037.03    | 8037.10    | 8041.60    | 8047.20    | 8058.55     | 8076.94     | 8100.78     | 8127.42     | 8160.29     | 8199.01     |
| <b>45.0</b> | 7396.94    | 7397.16    | 7400.35    | 7403.24    | 7412.81     | 7429.14     | 7448.42     | 7471.71     | 7500.18     | 7534.44     |
| <b>47.5</b> | 6599.48    | 6600.53    | 6608.19    | 6620.34    | 6642.23     | 6672.00     | 6708.17     | 6750.84     | 6799.39     | 6855.08     |
| <b>50.0</b> | 5802.02    | 5801.47    | 5809.32    | 5823.02    | 5845.36     | 5873.60     | 5911.00     | 5954.26     | 6002.33     | 6059.15     |
| <b>52.5</b> | 5004.56    | 5003.21    | 5010.29    | 5025.60    | 5046.89     | 5075.84     | 5116.00     | 5158.23     | 5206.38     | 5265.50     |
| <b>55.0</b> | 4207.10    | 4204.51    | 4211.86    | 4229.94    | 4251.37     | 4278.79     | 4321.67     | 4362.86     | 4412.60     | 4474.26     |
| <b>57.5</b> | 3409.64    | 3405.66    | 3413.35    | 3433.83    | 3453.92     | 3483.05     | 3528.08     | 3568.26     | 3620.91     | 3685.58     |
| <b>60.0</b> | 2612.18    | 2606.84    | 2615.20    | 2638.14    | 2656.53     | 2688.54     | 2734.81     | 2774.89     | 2831.39     | 2899.51     |
| <b>62.5</b> | 2183.60    | 2176.36    | 2175.61    | 2181.73    | 2176.84     | 2181.23     | 2189.15     | 2186.03     | 2192.58     | 2203.27     |
| <b>65.0</b> | 1755.01    | 1749.51    | 1750.24    | 1757.12    | 1754.98     | 1763.34     | 1771.78     | 1774.79     | 1785.86     | 1798.24     |
| <b>67.5</b> | 1326.43    | 1322.78    | 1324.98    | 1332.42    | 1334.29     | 1345.98     | 1356.43     | 1365.42     | 1381.10     | 1396.07     |
| <b>70.0</b> | 897.84     | 896.14     | 899.83     | 908.53     | 914.34      | 929.05      | 942.78      | 957.69      | 978.22      | 997.51      |
| <b>72.5</b> | 469.26     | 469.58     | 474.76     | 484.49     | 495.02      | 512.25      | 530.60      | 551.45      | 576.91      | 602.01      |
| <b>75.0</b> | 40.67      | 43.10      | 49.75      | 60.85      | 76.20       | 96.14       | 119.71      | 146.39      | 176.86      | 209.40      |
| <b>77.5</b> | 20.34      | 20.48      | 20.61      | 20.87      | 21.34       | 22.09       | 23.06       | 23.94       | 25.09       | 26.59       |
| <b>80.0</b> | 0.00       | 0.08       | 0.30       | 0.68       | 1.20        | 1.88        | 2.72        | 3.68        | 4.80        | 6.13        |
| <b>82.5</b> | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| <b>85.0</b> | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| <b>87.5</b> | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |
| <b>90.0</b> | 0.00       | 0.00       | 0.00       | 0.00       | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        | 0.00        |

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

|             | <u>25.0</u> | <u>27.5</u> | <u>30.0</u> | <u>32.5</u> | <u>35.0</u> | <u>37.5</u> | <u>40.0</u> | <u>42.5</u> | <u>45.0</u> | <u>47.5</u> |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>0.0</b>  | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    |
| <b>2.5</b>  | 14568.09    | 14571.65    | 14575.61    | 14579.97    | 14584.71    | 14589.84    | 14595.33    | 14601.18    | 14607.37    | 14613.90    |
| <b>5.0</b>  | 14352.00    | 14358.18    | 14365.19    | 14373.01    | 14381.63    | 14390.91    | 14400.58    | 14411.01    | 14422.19    | 14434.10    |
| <b>7.5</b>  | 14130.80    | 14139.14    | 14148.73    | 14159.48    | 14170.34    | 14182.44    | 14195.75    | 14210.00    | 14224.65    | 14248.01    |
| <b>10.0</b> | 13905.64    | 13914.94    | 13925.55    | 13937.07    | 13949.84    | 13964.08    | 13979.04    | 13995.68    | 14013.74    | 14032.34    |
| <b>12.5</b> | 13675.27    | 13684.50    | 13695.28    | 13707.44    | 13721.11    | 13735.41    | 13751.87    | 13769.08    | 13788.40    | 13809.24    |
| <b>15.0</b> | 13439.97    | 13449.18    | 13458.61    | 13469.81    | 13482.26    | 13496.96    | 13512.77    | 13531.07    | 13550.68    | 13573.10    |
| <b>17.5</b> | 13150.21    | 13173.34    | 13200.33    | 13224.47    | 13233.44    | 13249.00    | 13264.19    | 13280.63    | 13299.67    | 13321.33    |
| <b>20.0</b> | 12783.19    | 12807.31    | 12834.10    | 12863.91    | 12897.02    | 12933.61    | 12973.94    | 13020.59    | 13035.06    | 13054.52    |
| <b>22.5</b> | 12412.79    | 12435.60    | 12461.59    | 12489.77    | 12522.30    | 12558.05    | 12597.47    | 12640.63    | 12689.18    | 12741.23    |
| <b>25.0</b> | 12038.06    | 12058.48    | 12081.62    | 12108.96    | 12139.04    | 12167.29    | 12210.67    | 12252.44    | 12300.03    | 12353.54    |
| <b>27.5</b> | 11658.95    | 11675.85    | 11696.52    | 11719.83    | 11746.65    | 11777.38    | 11812.39    | 11853.58    | 11898.05    | 11940.12    |
| <b>30.0</b> | 11275.29    | 11289.01    | 11304.95    | 11323.95    | 11346.07    | 11373.31    | 11404.91    | 11440.78    | 11481.88    | 11528.88    |

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**CANDELA TABULATION - (Cont.)**

|      |          |          |          |          |          |          |          |          |          |          |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 32.5 | 10888.72 | 10897.08 | 10907.58 | 10920.78 | 10935.31 | 10960.83 | 10986.58 | 11017.36 | 11053.54 | 11095.44 |
| 35.0 | 10234.49 | 10297.89 | 10369.81 | 10447.46 | 10524.10 | 10539.09 | 10558.55 | 10582.53 | 10606.11 | 10649.03 |
| 37.5 | 9569.70  | 9635.70  | 9704.96  | 9784.09  | 9870.80  | 9967.56  | 10073.52 | 10137.99 | 10160.32 | 10189.52 |
| 40.0 | 8911.61  | 8968.85  | 9035.41  | 9109.35  | 9192.71  | 9285.42  | 9388.61  | 9502.13  | 9627.11  | 9719.32  |
| 42.5 | 8244.79  | 8299.04  | 8359.64  | 8429.09  | 8507.85  | 8596.63  | 8711.13  | 8804.36  | 8926.16  | 9058.59  |
| 45.0 | 7575.78  | 7624.81  | 7679.25  | 7744.13  | 7812.37  | 7900.53  | 7994.03  | 8098.78  | 8214.01  | 8340.77  |
| 47.5 | 6904.68  | 6939.22  | 6995.79  | 7054.83  | 7122.52  | 7199.18  | 7286.98  | 7384.46  | 7492.84  | 7602.60  |
| 50.0 | 6124.44  | 6193.10  | 6270.86  | 6356.29  | 6422.89  | 6493.23  | 6573.55  | 6663.64  | 6764.00  | 6874.37  |
| 52.5 | 5331.20  | 5400.19  | 5478.12  | 5561.88  | 5653.72  | 5753.08  | 5855.16  | 5937.71  | 6032.71  | 6133.69  |
| 55.0 | 4541.00  | 4609.57  | 4688.20  | 4770.76  | 4863.95  | 4954.34  | 5063.34  | 5174.94  | 5293.91  | 5395.84  |
| 57.5 | 3752.06  | 3818.62  | 3896.48  | 3981.14  | 4075.19  | 4174.53  | 4276.09  | 4389.99  | 4506.46  | 4631.93  |
| 60.0 | 2964.56  | 3037.88  | 3114.30  | 3203.47  | 3297.75  | 3391.87  | 3498.58  | 3610.82  | 3731.17  | 3856.73  |
| 62.5 | 2197.48  | 2255.57  | 2333.09  | 2427.44  | 2519.89  | 2615.84  | 2727.72  | 2841.81  | 2965.89  | 3093.81  |
| 65.0 | 1799.52  | 1802.19  | 1799.96  | 1806.68  | 1795.95  | 1848.67  | 1962.50  | 2084.75  | 2211.50  | 2338.23  |
| 67.5 | 1405.41  | 1413.76  | 1423.33  | 1432.10  | 1429.58  | 1432.04  | 1428.75  | 1427.13  | 1469.70  | 1599.64  |
| 70.0 | 1015.21  | 1030.86  | 1050.12  | 1065.16  | 1073.89  | 1086.61  | 1094.04  | 1100.88  | 1104.11  | 1096.66  |
| 72.5 | 628.18   | 653.00   | 681.15   | 705.30   | 726.79   | 749.35   | 769.88   | 786.66   | 799.37   | 803.74   |
| 75.0 | 244.05   | 279.15   | 316.35   | 351.65   | 386.69   | 420.16   | 452.87   | 485.01   | 506.82   | 525.64   |
| 77.5 | 28.16    | 29.76    | 31.55    | 33.74    | 51.31    | 97.70    | 142.97   | 186.06   | 224.87   | 259.31   |
| 80.0 | 7.58     | 9.15     | 10.90    | 12.89    | 15.07    | 17.12    | 19.37    | 21.82    | 24.03    | 26.08    |
| 82.5 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.78     | 3.25     | 5.71     |
| 85.0 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 87.5 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 90.0 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |

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

|      | <u>50.0</u> | <u>52.5</u> | <u>55.0</u> | <u>57.5</u> | <u>60.0</u> | <u>62.5</u> | <u>65.0</u> | <u>67.5</u> | <u>70.0</u> | <u>72.5</u> |
|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 0.0  | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    | 14779.57    |
| 2.5  | 14620.02    | 14627.77    | 14635.15    | 14642.62    | 14650.37    | 14658.39    | 14666.67    | 14675.19    | 14683.93    | 14692.88    |
| 5.0  | 14446.71    | 14459.44    | 14473.53    | 14487.55    | 14502.22    | 14517.49    | 14533.35    | 14549.75    | 14566.67    | 14584.08    |
| 7.5  | 14257.47    | 14274.18    | 14294.24    | 14313.78    | 14334.36    | 14355.97    | 14378.54    | 14399.91    | 14426.29    | 14451.17    |
| 10.0 | 14052.61    | 14071.85    | 14097.23    | 14121.17    | 14150.15    | 14173.66    | 14201.93    | 14231.16    | 14261.80    | 14293.81    |
| 12.5 | 13831.58    | 13856.09    | 13882.07    | 13909.88    | 13939.81    | 13971.46    | 14004.16    | 14038.92    | 14075.66    | 14110.00    |
| 15.0 | 13596.09    | 13621.91    | 13649.73    | 13679.85    | 13710.19    | 13746.90    | 13783.67    | 13823.18    | 13865.03    | 13908.86    |
| 17.5 | 13344.57    | 13370.29    | 13398.71    | 13429.99    | 13464.41    | 13501.35    | 13541.85    | 13585.17    | 13631.10    | 13680.47    |
| 20.0 | 13077.00    | 13102.12    | 13130.28    | 13161.64    | 13196.83    | 13235.66    | 13278.19    | 13322.67    | 13371.56    | 13424.63    |
| 22.5 | 12793.73    | 12818.04    | 12844.82    | 12874.05    | 12907.37    | 12945.40    | 12987.48    | 13034.25    | 13085.96    | 13141.77    |
| 25.0 | 12409.79    | 12471.61    | 12538.33    | 12565.90    | 12597.81    | 12635.29    | 12676.51    | 12722.36    | 12775.56    | 12833.48    |
| 27.5 | 12003.26    | 12065.11    | 12133.63    | 12201.04    | 12268.13    | 12301.83    | 12341.90    | 12388.83    | 12450.75    | 12502.52    |
| 30.0 | 11581.82    | 11641.01    | 11707.10    | 11775.14    | 11864.11    | 11951.52    | 11982.93    | 12031.09    | 12081.94    | 12141.09    |
| 32.5 | 11143.97    | 11200.11    | 11275.29    | 11331.39    | 11415.98    | 11504.34    | 11612.61    | 11646.89    | 11696.44    | 11756.15    |
| 35.0 | 10693.13    | 10744.03    | 10802.68    | 10861.54    | 10946.10    | 11032.95    | 11131.57    | 11243.02    | 11288.30    | 11345.42    |
| 37.5 | 10226.71    | 10275.67    | 10312.03    | 10384.51    | 10457.84    | 10540.04    | 10634.80    | 10743.81    | 10853.13    | 10906.16    |
| 40.0 | 9746.12     | 9781.58     | 9826.92     | 9879.04     | 9942.39     | 10017.76    | 10107.52    | 10214.43    | 10341.11    | 10443.12    |
| 42.5 | 9203.74     | 9276.94     | 9306.55     | 9345.49     | 9396.81     | 9462.15     | 9546.75     | 9652.87     | 9780.83     | 9932.93     |
| 45.0 | 8477.44     | 8622.92     | 8758.85     | 8779.45     | 8815.27     | 8872.63     | 8949.64     | 9053.28     | 9186.38     | 9349.47     |
| 47.5 | 7749.06     | 7870.68     | 8006.02     | 8149.56     | 8199.98     | 8242.43     | 8304.39     | 8415.01     | 8560.67     | 8720.01     |
| 50.0 | 6981.51     | 7109.19     | 7236.41     | 7364.12     | 7499.87     | 7589.88     | 7657.44     | 7765.48     | 7887.99     | 8016.75     |
| 52.5 | 6240.03     | 6353.78     | 6466.40     | 6587.24     | 6721.33     | 6870.85     | 6982.26     | 7078.26     | 7183.13     | 7302.65     |
| 55.0 | 5498.98     | 5602.99     | 5711.87     | 5826.82     | 5949.60     | 6091.55     | 6247.23     | 6387.21     | 6473.46     | 6577.54     |
| 57.5 | 4762.32     | 4868.80     | 4969.01     | 5065.79     | 5165.47     | 5314.67     | 5475.51     | 5661.98     | 5782.79     | 5872.83     |
| 60.0 | 3985.83     | 4114.05     | 4222.14     | 4293.34     | 4411.58     | 4544.11     | 4703.58     | 4876.69     | 5073.17     | 5181.27     |
| 62.5 | 3222.20     | 3340.65     | 3445.31     | 3548.18     | 3656.89     | 3793.26     | 3937.48     | 4103.77     | 4286.92     | 4487.28     |
| 65.0 | 2468.71     | 2585.29     | 2695.20     | 2812.53     | 2934.50     | 3049.00     | 3187.72     | 3344.29     | 3506.19     | 3655.27     |
| 67.5 | 1736.12     | 1867.35     | 1992.04     | 2119.38     | 2243.17     | 2355.17     | 2467.23     | 2605.87     | 2734.20     | 2875.91     |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

|             |         |         |         |         |         |         |         |         |         |         |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>70.0</b> | 1085.98 | 1174.64 | 1315.62 | 1456.06 | 1584.56 | 1709.25 | 1826.45 | 1913.09 | 2021.72 | 2160.65 |
| <b>72.5</b> | 804.56  | 803.82  | 794.53  | 821.57  | 963.88  | 1106.06 | 1226.25 | 1327.02 | 1408.39 | 1501.63 |
| <b>75.0</b> | 541.71  | 551.18  | 555.84  | 550.72  | 543.27  | 540.56  | 683.22  | 801.02  | 901.10  | 960.72  |
| <b>77.5</b> | 289.53  | 314.17  | 333.87  | 342.76  | 350.73  | 349.87  | 344.31  | 339.35  | 458.52  | 548.96  |
| <b>80.0</b> | 47.67   | 88.99   | 124.22  | 151.87  | 174.53  | 189.51  | 196.65  | 201.38  | 195.96  | 200.01  |
| <b>82.5</b> | 8.15    | 10.73   | 13.24   | 15.66   | 18.26   | 42.90   | 67.31   | 85.15   | 95.00   | 100.45  |
| <b>85.0</b> | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 2.57    | 5.71    | 9.55    | 14.54   | 27.32   |
| <b>87.5</b> | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
| <b>90.0</b> | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |

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

|             | <u><b>75.0</b></u> | <u><b>77.5</b></u> | <u><b>80.0</b></u> | <u><b>82.5</b></u> | <u><b>85.0</b></u> | <u><b>87.5</b></u> | <u><b>90.0</b></u> | <u><b>92.5</b></u> | <u><b>95.0</b></u> | <u><b>97.5</b></u> |
|-------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b>0.0</b>  | 14779.57           | 14779.57           | 14779.57           | 14779.57           | 14779.57           | 14779.57           | 14779.57           | 14779.57           | 14779.57           | 14779.57           |
| <b>2.5</b>  | 14702.03           | 14711.34           | 14720.81           | 14730.42           | 14740.15           | 14749.98           | 14759.89           | 14763.39           | 14766.95           | 14770.56           |
| <b>5.0</b>  | 14601.93           | 14620.21           | 14637.30           | 14656.99           | 14676.80           | 14696.68           | 14716.60           | 14723.42           | 14730.23           | 14737.02           |
| <b>7.5</b>  | 14476.91           | 14503.44           | 14530.73           | 14558.72           | 14587.34           | 14616.55           | 14646.29           | 14656.80           | 14667.75           | 14679.13           |
| <b>10.0</b> | 14327.12           | 14361.66           | 14397.38           | 14430.60           | 14470.44           | 14510.43           | 14550.51           | 14564.53           | 14578.52           | 14592.46           |
| <b>12.5</b> | 14154.58           | 14196.33           | 14239.84           | 14285.02           | 14331.79           | 14380.07           | 14429.74           | 14448.00           | 14467.52           | 14488.27           |
| <b>15.0</b> | 13955.25           | 14004.11           | 14055.37           | 14108.91           | 14160.97           | 14221.51           | 14282.17           | 14303.38           | 14324.54           | 14353.89           |
| <b>17.5</b> | 13733.19           | 13788.78           | 13847.02           | 13908.33           | 13972.63           | 14039.81           | 14109.73           | 14135.73           | 14164.30           | 14195.37           |
| <b>20.0</b> | 13481.10           | 13541.80           | 13606.63           | 13675.44           | 13741.37           | 13822.83           | 13904.49           | 13933.03           | 13961.49           | 14005.11           |
| <b>22.5</b> | 13202.81           | 13263.27           | 13339.53           | 13414.93           | 13495.31           | 13580.51           | 13670.37           | 13705.27           | 13744.56           | 13788.12           |
| <b>25.0</b> | 12897.63           | 12967.77           | 13044.28           | 13127.00           | 13215.76           | 13307.66           | 13410.56           | 13447.12           | 13494.38           | 13544.14           |
| <b>27.5</b> | 12568.86           | 12642.90           | 12724.16           | 12811.70           | 12906.94           | 13009.68           | 13119.69           | 13163.99           | 13215.15           | 13272.99           |
| <b>30.0</b> | 12209.46           | 12285.83           | 12370.87           | 12465.06           | 12568.25           | 12676.11           | 12800.76           | 12846.00           | 12907.65           | 12973.10           |
| <b>32.5</b> | 11825.74           | 11905.42           | 11988.60           | 12095.39           | 12205.55           | 12326.41           | 12457.70           | 12511.73           | 12575.68           | 12649.29           |
| <b>35.0</b> | 11413.90           | 11494.82           | 11586.73           | 11691.42           | 11808.75           | 11932.62           | 12080.52           | 12134.58           | 12212.16           | 12295.12           |
| <b>37.5</b> | 10973.63           | 11054.45           | 11149.75           | 11259.10           | 11382.74           | 11521.15           | 11674.02           | 11739.28           | 11818.46           | 11911.34           |
| <b>40.0</b> | 10507.60           | 10587.73           | 10683.83           | 10797.04           | 10927.57           | 11067.12           | 11239.15           | 11301.48           | 11395.90           | 11498.15           |
| <b>42.5</b> | 10017.55           | 10096.55           | 10193.16           | 10308.56           | 10442.08           | 10594.85           | 10767.10           | 10843.60           | 10939.20           | 11053.31           |
| <b>45.0</b> | 9511.08            | 9581.05            | 9672.71            | 9784.91            | 9920.95            | 10069.39           | 10263.68           | 10335.36           | 10452.53           | 10578.84           |
| <b>47.5</b> | 8901.48            | 9005.42            | 9086.25            | 9192.06            | 9343.07            | 9517.86            | 9721.38            | 9811.32            | 9926.85            | 10060.34           |
| <b>50.0</b> | 8191.55            | 8346.40            | 8422.82            | 8552.44            | 8714.46            | 8897.67            | 9146.43            | 9232.19            | 9378.55            | 9537.95            |
| <b>52.5</b> | 7441.66            | 7603.13            | 7723.10            | 7855.89            | 8023.65            | 8227.59            | 8471.13            | 8595.54            | 8759.24            | 8956.34            |
| <b>55.0</b> | 6706.53            | 6863.91            | 7020.97            | 7140.65            | 7294.50            | 7464.53            | 7722.94            | 7837.32            | 8045.93            | 8276.30            |
| <b>57.5</b> | 5991.91            | 6139.56            | 6319.90            | 6430.81            | 6572.19            | 6757.36            | 6990.21            | 7125.07            | 7310.30            | 7547.76            |
| <b>60.0</b> | 5282.06            | 5411.77            | 5575.92            | 5716.16            | 5846.95            | 6001.63            | 6263.49            | 6372.96            | 6593.78            | 6841.02            |
| <b>62.5</b> | 4537.79            | 4651.58            | 4814.70            | 4999.10            | 5119.78            | 5293.83            | 5526.64            | 5669.82            | 5874.88            | 6138.63            |
| <b>65.0</b> | 3795.65            | 3902.10            | 4058.02            | 4249.56            | 4371.40            | 4543.09            | 4789.92            | 4937.50            | 5154.99            | 5405.15            |
| <b>67.5</b> | 3036.40            | 3173.71            | 3284.70            | 3429.71            | 3576.11            | 3750.54            | 3989.89            | 4164.34            | 4415.14            | 4642.55            |
| <b>70.0</b> | 2308.68            | 2461.18            | 2568.06            | 2701.11            | 2856.51            | 2988.15            | 3202.80            | 3364.04            | 3624.35            | 3818.38            |
| <b>72.5</b> | 1627.79            | 1774.17            | 1866.09            | 1994.28            | 2154.89            | 2274.11            | 2476.37            | 2635.74            | 2884.35            | 3037.50            |
| <b>75.0</b> | 1033.91            | 1168.07            | 1272.34            | 1370.29            | 1478.19            | 1595.40            | 1764.71            | 1925.19            | 2139.96            | 2319.83            |
| <b>77.5</b> | 622.76             | 656.18             | 752.29             | 836.37             | 923.53             | 1026.58            | 1150.16            | 1297.09            | 1452.37            | 1638.32            |
| <b>80.0</b> | 288.09             | 335.18             | 362.00             | 434.34             | 496.66             | 563.92             | 636.64             | 778.89             | 887.15             | 1044.43            |
| <b>82.5</b> | 99.11              | 115.09             | 158.23             | 171.64             | 216.35             | 246.87             | 300.10             | 369.28             | 434.88             | 551.76             |
| <b>85.0</b> | 38.60              | 45.53              | 51.51              | 67.56              | 67.47              | 82.99              | 97.34              | 96.65              | 106.15             | 176.20             |
| <b>87.5</b> | 0.00               | 4.78               | 14.01              | 23.83              | 29.68              | 32.77              | 30.53              | 17.54              | 28.73              | 52.01              |
| <b>90.0</b> | 0.00               | 0.00               | 0.00               | 0.00               | 0.00               | 0.00               | 15.68              | 0.00               | 0.00               | 0.00               |

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

|            | <u><b>100.0</b></u> | <u><b>102.5</b></u> | <u><b>105.0</b></u> | <u><b>107.5</b></u> | <u><b>110.0</b></u> | <u><b>112.5</b></u> | <u><b>115.0</b></u> | <u><b>117.5</b></u> | <u><b>120.0</b></u> | <u><b>122.5</b></u> |
|------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>0.0</b> | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            |
| <b>2.5</b> | 14774.21            | 14777.90            | 14781.62            | 14785.36            | 14789.12            | 14792.88            | 14796.65            | 14800.42            | 14804.17            | 14807.91            |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

|      |          |          |          |          |          |          |          |          |          |          |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 5.0  | 14743.76 | 14752.94 | 14760.66 | 14768.51 | 14776.47 | 14784.52 | 14792.65 | 14800.85 | 14809.10 | 14817.39 |
| 7.5  | 14690.89 | 14703.03 | 14715.52 | 14728.32 | 14741.41 | 14752.41 | 14767.77 | 14781.16 | 14794.70 | 14808.36 |
| 10.0 | 14612.61 | 14629.84 | 14647.67 | 14666.06 | 14684.96 | 14704.32 | 14724.11 | 14743.86 | 14763.76 | 14783.93 |
| 12.5 | 14510.21 | 14533.28 | 14557.43 | 14577.91 | 14607.72 | 14634.02 | 14661.10 | 14688.93 | 14716.29 | 14743.77 |
| 15.0 | 14381.26 | 14410.28 | 14440.88 | 14473.01 | 14506.60 | 14540.64 | 14575.38 | 14611.18 | 14645.24 | 14684.20 |
| 17.5 | 14228.87 | 14264.72 | 14302.20 | 14341.33 | 14382.46 | 14425.50 | 14469.26 | 14513.77 | 14559.72 | 14606.45 |
| 20.0 | 14045.09 | 14088.14 | 14134.15 | 14183.03 | 14233.41 | 14286.01 | 14340.89 | 14396.40 | 14453.55 | 14511.52 |
| 22.5 | 13835.84 | 13881.52 | 13941.52 | 13999.16 | 14060.03 | 14123.33 | 14191.67 | 14257.70 | 14327.07 | 14397.86 |
| 25.0 | 13598.99 | 13658.81 | 13723.46 | 13792.23 | 13865.10 | 13940.24 | 14020.12 | 14101.66 | 14182.57 | 14265.78 |
| 27.5 | 13337.32 | 13406.65 | 13481.53 | 13562.08 | 13646.78 | 13735.73 | 13828.01 | 13923.38 | 14021.48 | 14076.73 |
| 30.0 | 13046.30 | 13127.01 | 13214.27 | 13306.88 | 13405.84 | 13508.98 | 13610.82 | 13730.29 | 13776.55 | 13818.96 |
| 32.5 | 12724.64 | 12822.54 | 12921.64 | 13028.30 | 13141.82 | 13261.83 | 13382.67 | 13432.49 | 13488.49 | 13544.02 |
| 35.0 | 12389.05 | 12493.55 | 12605.75 | 12726.79 | 12855.53 | 12991.95 | 13047.81 | 13111.74 | 13182.13 | 13248.55 |
| 37.5 | 12016.99 | 12134.75 | 12264.55 | 12402.89 | 12551.49 | 12627.63 | 12695.32 | 12772.11 | 12857.35 | 12948.04 |
| 40.0 | 11616.07 | 11748.68 | 11893.64 | 12050.77 | 12161.46 | 12236.51 | 12322.15 | 12415.74 | 12516.19 | 12623.43 |
| 42.5 | 11184.54 | 11333.27 | 11497.46 | 11653.09 | 11731.26 | 11822.14 | 11924.13 | 12037.03 | 12159.19 | 12285.08 |
| 45.0 | 10726.49 | 10892.21 | 11076.63 | 11179.22 | 11274.13 | 11385.08 | 11507.18 | 11640.88 | 11782.06 | 11931.43 |
| 47.5 | 10232.29 | 10420.06 | 10586.18 | 10682.58 | 10796.47 | 10914.83 | 11057.99 | 11227.76 | 11391.30 | 11542.55 |
| 50.0 | 9717.99  | 9928.34  | 10043.66 | 10142.27 | 10293.59 | 10449.32 | 10610.84 | 10798.87 | 10947.66 | 11041.81 |
| 52.5 | 9178.74  | 9381.38  | 9485.17  | 9620.02  | 9775.39  | 9949.25  | 10140.72 | 10302.72 | 10413.36 | 10533.36 |
| 55.0 | 8546.86  | 8720.92  | 8865.96  | 9038.89  | 9231.32  | 9443.11  | 9592.83  | 9722.96  | 9867.73  | 10016.05 |
| 57.5 | 7824.61  | 7967.53  | 8152.90  | 8373.62  | 8622.49  | 8835.29  | 8963.87  | 9115.95  | 9275.27  | 9486.21  |
| 60.0 | 7055.94  | 7210.77  | 7412.17  | 7658.78  | 7919.95  | 8088.51  | 8268.88  | 8464.56  | 8684.66  | 8908.42  |
| 62.5 | 6303.73  | 6481.43  | 6699.43  | 6973.99  | 7137.54  | 7334.71  | 7554.78  | 7783.86  | 8041.29  | 8272.88  |
| 65.0 | 5558.46  | 5762.76  | 6016.84  | 6210.31  | 6402.50  | 6619.54  | 6860.26  | 7115.92  | 7295.65  | 7487.42  |
| 67.5 | 4818.94  | 5055.94  | 5273.53  | 5461.58  | 5685.46  | 5939.93  | 6181.94  | 6349.43  | 6532.73  | 6731.14  |
| 70.0 | 4043.03  | 4315.60  | 4500.07  | 4734.72  | 4994.18  | 5215.22  | 5398.93  | 5598.85  | 5803.54  | 6013.28  |
| 72.5 | 3247.54  | 3481.42  | 3717.36  | 3994.64  | 4234.92  | 4410.55  | 4620.31  | 4860.58  | 5099.44  | 5327.31  |
| 75.0 | 2530.35  | 2742.89  | 2975.40  | 3206.31  | 3422.94  | 3640.23  | 3856.95  | 4140.08  | 4367.10  | 4546.38  |
| 77.5 | 1825.65  | 2074.89  | 2264.15  | 2461.13  | 2685.20  | 2909.75  | 3119.12  | 3340.42  | 3580.18  | 3778.76  |
| 80.0 | 1236.14  | 1400.28  | 1590.12  | 1762.27  | 2009.56  | 2207.43  | 2401.86  | 2603.77  | 2839.04  | 3040.67  |
| 82.5 | 692.38   | 840.10   | 1017.71  | 1198.60  | 1376.39  | 1560.67  | 1735.16  | 1922.04  | 2055.64  | 1888.15  |
| 85.0 | 281.70   | 420.83   | 561.84   | 696.72   | 760.08   | 654.56   | 489.13   | 254.99   | 0.00     | 0.00     |
| 87.5 | 77.65    | 56.30    | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 90.0 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |

**Vert. Horizontal Angles**

|      | <u>125.0</u> | <u>127.5</u> | <u>130.0</u> | <u>132.5</u> | <u>135.0</u> | <u>137.5</u> | <u>140.0</u> | <u>142.5</u> | <u>145.0</u> | <u>147.5</u> |
|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.0  | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     |
| 2.5  | 14811.62     | 14815.07     | 14817.78     | 14821.80     | 14824.98     | 14828.10     | 14831.13     | 14834.07     | 14836.91     | 14839.66     |
| 5.0  | 14825.70     | 14833.27     | 14841.50     | 14849.08     | 14856.58     | 14864.00     | 14871.30     | 14878.49     | 14885.16     | 14891.54     |
| 7.5  | 14822.12     | 14834.31     | 14848.86     | 14861.98     | 14875.06     | 14888.10     | 14900.48     | 14912.58     | 14924.54     | 14936.34     |
| 10.0 | 14804.33     | 14821.90     | 14843.77     | 14863.10     | 14882.43     | 14901.00     | 14919.33     | 14937.53     | 14954.70     | 14971.47     |
| 12.5 | 14771.70     | 14799.45     | 14826.29     | 14853.22     | 14879.75     | 14905.87     | 14931.83     | 14956.51     | 14979.35     | 15001.89     |
| 15.0 | 14721.35     | 14758.59     | 14795.41     | 14832.68     | 14867.72     | 14902.95     | 14935.53     | 14967.46     | 14998.40     | 15028.75     |
| 17.5 | 14654.20     | 14701.78     | 14748.51     | 14795.17     | 14841.11     | 14886.41     | 14930.93     | 14973.03     | 15011.26     | 15049.98     |
| 20.0 | 14570.18     | 14628.75     | 14686.77     | 14745.13     | 14803.75     | 14858.09     | 14878.96     | 14900.51     | 14921.60     | 14942.28     |
| 22.5 | 14468.68     | 14539.88     | 14614.29     | 14644.60     | 14673.08     | 14700.52     | 14731.51     | 14760.65     | 14789.33     | 14817.67     |
| 25.0 | 14352.00     | 14386.56     | 14422.44     | 14458.85     | 14496.52     | 14535.33     | 14573.97     | 14605.46     | 14650.23     | 14686.75     |
| 27.5 | 14125.12     | 14167.09     | 14212.14     | 14252.44     | 14309.29     | 14357.85     | 14407.21     | 14456.00     | 14502.27     | 14548.43     |
| 30.0 | 13877.09     | 13932.78     | 13990.64     | 14049.30     | 14109.30     | 14170.98     | 14231.31     | 14291.30     | 14350.45     | 14405.78     |
| 32.5 | 13614.88     | 13682.66     | 13752.99     | 13826.03     | 13899.89     | 13973.47     | 14047.94     | 14119.97     | 14186.54     | 14259.32     |
| 35.0 | 13336.20     | 13420.44     | 13504.92     | 13591.80     | 13671.49     | 13767.68     | 13854.99     | 13941.85     | 14025.06     | 14066.81     |
| 37.5 | 13031.96     | 13142.01     | 13243.55     | 13347.99     | 13450.18     | 13552.82     | 13628.84     | 13675.01     | 13722.88     | 13769.25     |
| 40.0 | 12737.34     | 12853.34     | 12971.49     | 13091.54     | 13175.06     | 13228.28     | 13285.30     | 13345.28     | 13403.60     | 13463.07     |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

|      |          |          |          |          |          |          |          |          |          |          |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 42.5 | 12416.27 | 12553.46 | 12663.06 | 12726.31 | 12794.15 | 12867.26 | 12936.76 | 13008.41 | 13081.21 | 13151.25 |
| 45.0 | 12085.74 | 12165.20 | 12243.14 | 12324.90 | 12409.17 | 12495.34 | 12584.73 | 12667.96 | 12746.63 | 12837.13 |
| 47.5 | 11626.11 | 11718.78 | 11813.59 | 11904.44 | 12015.97 | 12119.67 | 12223.36 | 12325.72 | 12422.84 | 12521.18 |
| 50.0 | 11147.36 | 11258.17 | 11366.24 | 11495.91 | 11617.97 | 11738.54 | 11859.63 | 11978.63 | 12091.74 | 12191.95 |
| 52.5 | 10658.29 | 10792.80 | 10925.84 | 11071.74 | 11214.49 | 11353.54 | 11488.19 | 11568.50 | 11639.99 | 11706.29 |
| 55.0 | 10166.55 | 10319.84 | 10481.08 | 10642.40 | 10787.57 | 10873.54 | 10959.16 | 11040.21 | 11138.53 | 11221.67 |
| 57.5 | 9671.78  | 9848.38  | 10010.00 | 10096.57 | 10196.40 | 10308.26 | 10420.90 | 10530.25 | 10628.51 | 10730.52 |
| 60.0 | 9166.18  | 9265.92  | 9353.72  | 9464.88  | 9593.53  | 9732.78  | 9873.16  | 10004.57 | 10131.89 | 10246.62 |
| 62.5 | 8431.72  | 8565.05  | 8688.35  | 8821.45  | 8978.98  | 9145.90  | 9318.30  | 9478.13  | 9626.01  | 9758.50  |
| 65.0 | 7663.76  | 7849.46  | 8004.75  | 8160.42  | 8354.27  | 8553.51  | 8756.74  | 8947.10  | 9089.27  | 9179.90  |
| 67.5 | 6938.50  | 7140.29  | 7327.30  | 7506.55  | 7725.52  | 7915.90  | 8079.71  | 8225.80  | 8347.25  | 8453.88  |
| 70.0 | 6229.49  | 6441.92  | 6637.33  | 6802.70  | 6977.11  | 7151.56  | 7321.45  | 7477.30  | 7610.80  | 7729.72  |
| 72.5 | 5508.66  | 5678.27  | 5847.22  | 6037.94  | 6228.02  | 6405.01  | 6579.00  | 6737.59  | 6880.55  | 7008.88  |
| 75.0 | 4715.49  | 4905.41  | 5094.26  | 5293.93  | 5493.31  | 5676.17  | 5849.53  | 6009.74  | 6155.98  | 6292.16  |
| 77.5 | 3958.11  | 4148.48  | 4346.88  | 4558.83  | 4772.21  | 4963.26  | 5133.81  | 5292.80  | 5439.42  | 5536.62  |
| 80.0 | 3221.33  | 3414.44  | 3613.25  | 3612.90  | 3402.71  | 3152.04  | 2874.06  | 2591.90  | 2307.89  | 2029.13  |
| 82.5 | 1654.84  | 1390.34  | 1101.37  | 788.72   | 459.12   | 112.58   | 0.00     | 0.00     | 0.00     | 0.00     |
| 85.0 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 87.5 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 90.0 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |

**Vert.  
Angles**

**Horizontal Angles**

|      | <u>150.0</u> | <u>152.5</u> | <u>155.0</u> | <u>157.5</u> | <u>160.0</u> | <u>162.5</u> | <u>165.0</u> | <u>167.5</u> | <u>170.0</u> | <u>172.5</u> |
|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.0  | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     |
| 2.5  | 14842.31     | 14844.84     | 14847.26     | 14849.17     | 14851.04     | 14852.58     | 14853.99     | 14855.26     | 14856.38     | 14857.36     |
| 5.0  | 14897.76     | 14903.78     | 14909.61     | 14913.97     | 14919.17     | 14923.30     | 14927.17     | 14930.78     | 14935.82     | 14936.66     |
| 7.5  | 14946.63     | 14956.55     | 14966.21     | 14975.18     | 14983.38     | 14991.23     | 14997.79     | 15003.85     | 15008.91     | 15013.32     |
| 10.0 | 14987.52     | 15003.32     | 15018.40     | 15032.12     | 15044.32     | 15055.97     | 15066.22     | 15075.89     | 15083.55     | 15092.49     |
| 12.5 | 15023.77     | 15044.66     | 15064.66     | 15083.79     | 15102.04     | 15118.30     | 15132.62     | 15145.49     | 15157.14     | 15165.94     |
| 15.0 | 15056.46     | 15083.24     | 15108.45     | 15132.53     | 15155.54     | 15177.28     | 15197.41     | 15214.10     | 15228.91     | 15241.33     |
| 17.5 | 15069.04     | 15081.94     | 15094.23     | 15106.19     | 15115.83     | 15130.37     | 15142.65     | 15154.11     | 15163.74     | 15172.45     |
| 20.0 | 14961.93     | 14979.00     | 14996.27     | 15012.78     | 15028.50     | 15041.21     | 15058.31     | 15072.70     | 15084.83     | 15095.41     |
| 22.5 | 14845.63     | 14871.42     | 14894.35     | 14916.19     | 14936.84     | 14956.01     | 14973.83     | 14990.66     | 15006.21     | 15018.73     |
| 25.0 | 14721.78     | 14755.83     | 14787.92     | 14816.62     | 14842.84     | 14867.15     | 14889.10     | 14908.88     | 14927.05     | 14941.92     |
| 27.5 | 14593.45     | 14635.60     | 14675.70     | 14713.31     | 14746.88     | 14776.00     | 14803.73     | 14827.12     | 14847.66     | 14865.03     |
| 30.0 | 14459.17     | 14511.66     | 14560.09     | 14605.68     | 14647.43     | 14684.11     | 14716.50     | 14745.09     | 14768.61     | 14788.48     |
| 32.5 | 14322.38     | 14382.91     | 14441.98     | 14465.44     | 14488.30     | 14509.94     | 14528.02     | 14544.55     | 14558.42     | 14570.67     |
| 35.0 | 14106.30     | 14138.26     | 14171.87     | 14203.55     | 14232.82     | 14258.35     | 14284.94     | 14306.13     | 14324.14     | 14338.76     |
| 37.5 | 13814.43     | 13857.95     | 13892.52     | 13938.71     | 13976.18     | 14009.70     | 14040.93     | 14066.55     | 14089.47     | 14106.96     |
| 40.0 | 13519.11     | 13572.87     | 13623.29     | 13671.66     | 13716.87     | 13757.64     | 13794.85     | 13827.17     | 13853.35     | 13875.28     |
| 42.5 | 13220.42     | 13285.43     | 13345.11     | 13401.46     | 13456.25     | 13504.75     | 13548.66     | 13585.97     | 13617.08     | 13643.46     |
| 45.0 | 12917.74     | 12995.37     | 13065.46     | 13131.55     | 13194.94     | 13250.89     | 13300.49     | 13344.51     | 13380.62     | 13410.87     |
| 47.5 | 12612.96     | 12694.65     | 12785.71     | 12843.67     | 12883.04     | 12918.62     | 12950.40     | 12978.99     | 13002.92     | 13023.23     |
| 50.0 | 12249.16     | 12303.76     | 12357.68     | 12405.37     | 12451.28     | 12494.19     | 12532.19     | 12566.34     | 12595.21     | 12618.62     |
| 52.5 | 11776.95     | 11842.80     | 11906.88     | 11966.10     | 12018.99     | 12069.67     | 12114.06     | 12153.94     | 12185.05     | 12212.67     |
| 55.0 | 11301.91     | 11381.46     | 11455.87     | 11525.26     | 11587.20     | 11644.52     | 11695.24     | 11740.77     | 11778.92     | 11808.97     |
| 57.5 | 10820.97     | 10912.56     | 11004.57     | 11083.54     | 11156.37     | 11219.46     | 11276.59     | 11327.52     | 11370.21     | 11404.06     |
| 60.0 | 10353.30     | 10455.62     | 10553.16     | 10641.96     | 10725.03     | 10795.05     | 10856.43     | 10914.76     | 10961.82     | 10999.44     |
| 62.5 | 9880.90      | 9992.67      | 10091.38     | 10146.34     | 10198.43     | 10242.95     | 10284.41     | 10321.96     | 10354.09     | 10380.16     |
| 65.0 | 9253.79      | 9328.44      | 9400.54      | 9465.85      | 9527.10      | 9580.69      | 9629.66      | 9672.89      | 9710.78      | 9740.85      |
| 67.5 | 8545.55      | 8621.54      | 8710.27      | 8786.05      | 8855.99      | 8918.77      | 8975.31      | 9024.30      | 9067.25      | 9099.72      |
| 70.0 | 7834.83      | 7931.59      | 8022.89      | 8107.43      | 8186.00      | 8257.19      | 8321.09      | 8376.20      | 8423.95      | 8462.11      |
| 72.5 | 7125.06      | 7235.52      | 7336.40      | 7429.45      | 7517.04      | 7596.18      | 7666.75      | 7725.17      | 7780.89      | 7822.68      |
| 75.0 | 6420.87      | 6540.69      | 6651.93      | 6753.22      | 6848.30      | 6935.84      | 7013.00      | 7081.31      | 7138.12      | 7183.47      |
| 77.5 | 5117.39      | 4904.35      | 4699.22      | 4502.78      | 4327.61      | 4168.20      | 4026.10      | 3904.67      | 3803.75      | 3724.46      |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

|             |         |         |         |         |        |        |        |        |        |      |
|-------------|---------|---------|---------|---------|--------|--------|--------|--------|--------|------|
| <b>80.0</b> | 1763.26 | 1506.64 | 1263.22 | 1036.29 | 827.95 | 640.43 | 474.57 | 332.04 | 213.82 | 0.00 |
| <b>82.5</b> | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00 |
| <b>85.0</b> | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00 |
| <b>87.5</b> | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00 |
| <b>90.0</b> | 0.00    | 0.00    | 0.00    | 0.00    | 0.00   | 0.00   | 0.00   | 0.00   | 0.00   | 0.00 |

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

|             | <u><b>175.0</b></u> | <u><b>177.5</b></u> | <u><b>180.0</b></u> | <u><b>182.5</b></u> | <u><b>185.0</b></u> | <u><b>187.5</b></u> | <u><b>190.0</b></u> | <u><b>192.5</b></u> | <u><b>195.0</b></u> | <u><b>197.5</b></u> |
|-------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>0.0</b>  | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            |
| <b>2.5</b>  | 14858.19            | 14858.86            | 14859.39            | 14859.31            | 14859.09            | 14858.71            | 14858.18            | 14857.50            | 14856.68            | 14855.70            |
| <b>5.0</b>  | 14937.51            | 14938.36            | 14939.21            | 14939.21            | 14939.21            | 14939.22            | 14939.22            | 14935.45            | 14932.50            | 14929.63            |
| <b>7.5</b>  | 15015.73            | 15017.60            | 15019.03            | 15018.81            | 15018.14            | 15017.02            | 15014.12            | 15010.68            | 15006.82            | 15001.46            |
| <b>10.0</b> | 15095.86            | 15097.35            | 15098.84            | 15098.85            | 15098.87            | 15097.55            | 15090.90            | 15085.60            | 15078.46            | 15070.81            |
| <b>12.5</b> | 15173.16            | 15176.55            | 15178.66            | 15178.31            | 15177.22            | 15172.66            | 15166.91            | 15158.46            | 15148.42            | 15136.39            |
| <b>15.0</b> | 15252.49            | 15256.55            | 15258.48            | 15258.50            | 15257.23            | 15250.49            | 15241.29            | 15230.00            | 15216.11            | 15198.15            |
| <b>17.5</b> | 15178.99            | 15183.25            | 15185.03            | 15185.50            | 15184.68            | 15182.34            | 15178.23            | 15171.85            | 15163.24            | 15153.09            |
| <b>20.0</b> | 15102.05            | 15109.04            | 15111.58            | 15111.59            | 15108.46            | 15106.59            | 15100.49            | 15092.02            | 15082.55            | 15067.55            |
| <b>22.5</b> | 15028.66            | 15035.74            | 15038.13            | 15038.69            | 15036.35            | 15031.14            | 15023.13            | 15011.62            | 14997.30            | 14981.81            |
| <b>25.0</b> | 14951.90            | 14961.27            | 14964.67            | 14964.66            | 14959.28            | 14955.27            | 14945.21            | 14931.29            | 14914.24            | 14895.30            |
| <b>27.5</b> | 14878.94            | 14887.75            | 14891.22            | 14891.16            | 14886.94            | 14879.13            | 14867.27            | 14850.74            | 14831.21            | 14807.26            |
| <b>30.0</b> | 14801.06            | 14813.03            | 14817.77            | 14816.61            | 14809.57            | 14803.31            | 14790.29            | 14770.40            | 14746.35            | 14717.48            |
| <b>32.5</b> | 14580.24            | 14587.11            | 14590.78            | 14591.31            | 14590.22            | 14587.37            | 14580.88            | 14572.03            | 14560.18            | 14546.28            |
| <b>35.0</b> | 14350.91            | 14356.71            | 14363.79            | 14361.58            | 14362.26            | 14356.70            | 14347.88            | 14335.60            | 14318.88            | 14300.72            |
| <b>37.5</b> | 14121.50            | 14130.96            | 14136.81            | 14136.54            | 14134.57            | 14126.22            | 14116.32            | 14097.55            | 14079.51            | 14052.70            |
| <b>40.0</b> | 13891.64            | 13900.43            | 13909.82            | 13906.77            | 13905.34            | 13895.59            | 13880.24            | 13859.70            | 13833.72            | 13804.18            |
| <b>42.5</b> | 13661.80            | 13674.80            | 13682.83            | 13681.92            | 13676.59            | 13665.78            | 13645.64            | 13620.31            | 13592.94            | 13554.54            |
| <b>45.0</b> | 13432.00            | 13444.23            | 13455.84            | 13452.19            | 13447.85            | 13433.06            | 13412.21            | 13380.93            | 13345.16            | 13304.20            |
| <b>47.5</b> | 13037.69            | 13048.48            | 13056.24            | 13056.93            | 13054.71            | 13047.12            | 13034.46            | 13017.96            | 12998.47            | 12975.83            |
| <b>50.0</b> | 12635.85            | 12643.36            | 12656.64            | 12653.00            | 12654.12            | 12644.34            | 12628.38            | 12607.89            | 12582.89            | 12553.82            |
| <b>52.5</b> | 12233.42            | 12248.01            | 12257.04            | 12257.63            | 12253.62            | 12241.59            | 12222.41            | 12198.00            | 12167.28            | 12131.00            |
| <b>55.0</b> | 11831.95            | 11843.72            | 11857.44            | 11854.00            | 11854.11            | 11838.20            | 11815.94            | 11787.37            | 11751.07            | 11708.14            |
| <b>57.5</b> | 11429.92            | 11447.47            | 11457.83            | 11457.91            | 11451.61            | 11434.67            | 11409.50            | 11376.46            | 11334.85            | 11285.24            |
| <b>60.0</b> | 11012.85            | 11043.40            | 11058.23            | 11054.28            | 11035.50            | 11031.31            | 11003.40            | 10965.77            | 10919.09            | 10867.50            |
| <b>62.5</b> | 10400.98            | 10415.30            | 10424.94            | 10426.35            | 10423.82            | 10413.03            | 10397.28            | 10377.42            | 10346.08            | 10312.26            |
| <b>65.0</b> | 9743.92             | 9775.93             | 9791.65             | 9787.12             | 9767.04             | 9774.74             | 9756.92             | 9727.07             | 9692.69             | 9652.54             |
| <b>67.5</b> | 9129.23             | 9147.17             | 9158.37             | 9158.46             | 9152.74             | 9136.44             | 9112.75             | 9079.78             | 9039.93             | 8992.59             |
| <b>70.0</b> | 8475.53             | 8508.70             | 8525.08             | 8520.04             | 8499.52             | 8499.11             | 8470.47             | 8432.82             | 8391.06             | 8332.57             |
| <b>72.5</b> | 7857.44             | 7879.13             | 7891.79             | 7890.49             | 7881.95             | 7859.65             | 7828.39             | 7786.22             | 7735.11             | 7673.28             |
| <b>75.0</b> | 7207.74             | 7241.68             | 7258.50             | 7253.04             | 7232.81             | 7221.36             | 7186.56             | 7142.38             | 7083.29             | 7014.79             |
| <b>77.5</b> | 3670.05             | 3637.43             | 3629.25             | 3643.17             | 3683.01             | 3744.36             | 3830.09             | 3937.63             | 4067.87             | 4219.87             |
| <b>80.0</b> | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 215.32              | 334.87              | 479.55              | 648.07              |
| <b>82.5</b> | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                |
| <b>85.0</b> | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                |
| <b>87.5</b> | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                |
| <b>90.0</b> | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                | 0.00                |

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

|             | <u><b>200.0</b></u> | <u><b>202.5</b></u> | <u><b>205.0</b></u> | <u><b>207.5</b></u> | <u><b>210.0</b></u> | <u><b>212.5</b></u> | <u><b>215.0</b></u> | <u><b>217.5</b></u> | <u><b>220.0</b></u> | <u><b>222.5</b></u> |
|-------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>0.0</b>  | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            |
| <b>2.5</b>  | 14854.59            | 14853.33            | 14851.92            | 14849.70            | 14847.59            | 14845.37            | 14843.03            | 14840.58            | 14838.02            | 14835.36            |
| <b>5.0</b>  | 14926.48            | 14923.06            | 14918.95            | 14914.28            | 14909.38            | 14904.27            | 14898.95            | 14893.77            | 14886.78            | 14880.16            |
| <b>7.5</b>  | 14995.44            | 14989.06            | 14981.59            | 14973.19            | 14964.48            | 14955.78            | 14944.42            | 14933.29            | 14922.00            | 14911.69            |
| <b>10.0</b> | 15060.85            | 15050.42            | 15038.17            | 15024.32            | 15010.16            | 14994.62            | 14978.79            | 14964.34            | 14945.42            | 14928.13            |
| <b>12.5</b> | 15122.07            | 15105.42            | 15087.55            | 15068.55            | 15048.73            | 15028.01            | 15006.60            | 14984.75            | 14961.17            | 14936.61            |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

|      |          |          |          |          |          |          |          |          |          |          |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 15.0 | 15180.14 | 15156.09 | 15133.03 | 15108.97 | 15083.31 | 15056.90 | 15028.20 | 15001.34 | 14968.01 | 14939.44 |
| 17.5 | 15142.14 | 15131.22 | 15120.40 | 15109.72 | 15098.10 | 15080.35 | 15044.99 | 15008.04 | 14969.62 | 14927.87 |
| 20.0 | 15054.16 | 15040.03 | 15025.28 | 15013.20 | 14994.05 | 14978.04 | 14961.19 | 14944.09 | 14924.00 | 14905.15 |
| 22.5 | 14964.82 | 14946.38 | 14926.85 | 14906.28 | 14886.58 | 14860.89 | 14835.37 | 14809.34 | 14783.19 | 14757.30 |
| 25.0 | 14873.58 | 14850.19 | 14824.83 | 14797.49 | 14767.33 | 14735.33 | 14704.00 | 14667.91 | 14632.78 | 14598.30 |
| 27.5 | 14783.86 | 14751.10 | 14718.47 | 14682.54 | 14644.05 | 14603.62 | 14561.29 | 14518.53 | 14475.43 | 14430.35 |
| 30.0 | 14685.26 | 14650.01 | 14607.73 | 14563.35 | 14516.21 | 14466.36 | 14416.39 | 14363.39 | 14307.46 | 14251.90 |
| 32.5 | 14530.33 | 14512.92 | 14493.52 | 14440.74 | 14383.99 | 14327.23 | 14265.27 | 14206.47 | 14132.80 | 14063.72 |
| 35.0 | 14278.66 | 14254.68 | 14230.84 | 14200.87 | 14174.82 | 14146.85 | 14106.54 | 14029.38 | 13948.18 | 13866.41 |
| 37.5 | 14026.64 | 13994.33 | 13961.10 | 13925.91 | 13890.09 | 13858.11 | 13811.87 | 13770.37 | 13733.48 | 13659.62 |
| 40.0 | 13770.34 | 13731.89 | 13690.26 | 13647.85 | 13599.87 | 13552.32 | 13499.89 | 13450.86 | 13393.92 | 13341.97 |
| 42.5 | 13513.60 | 13468.56 | 13418.30 | 13364.07 | 13308.33 | 13247.32 | 13183.36 | 13117.83 | 13051.55 | 12986.75 |
| 45.0 | 13255.53 | 13201.77 | 13143.13 | 13083.18 | 13012.36 | 12938.87 | 12862.77 | 12783.29 | 12708.66 | 12622.74 |
| 47.5 | 12948.61 | 12918.85 | 12865.15 | 12794.44 | 12713.34 | 12627.78 | 12540.39 | 12445.61 | 12350.64 | 12254.11 |
| 50.0 | 12520.32 | 12486.11 | 12441.12 | 12399.91 | 12353.19 | 12305.14 | 12216.90 | 12104.96 | 11992.71 | 11877.95 |
| 52.5 | 12090.09 | 12044.12 | 11995.78 | 11941.96 | 11884.20 | 11823.95 | 11770.80 | 11699.41 | 11627.17 | 11499.02 |
| 55.0 | 11659.82 | 11605.69 | 11548.55 | 11483.18 | 11414.18 | 11341.19 | 11271.66 | 11191.67 | 11108.91 | 11027.16 |
| 57.5 | 11229.26 | 11167.05 | 11099.15 | 11023.45 | 10943.59 | 10859.77 | 10774.40 | 10679.34 | 10579.84 | 10476.99 |
| 60.0 | 10798.67 | 10728.55 | 10649.72 | 10563.51 | 10472.19 | 10377.79 | 10278.98 | 10167.43 | 10047.75 | 9920.94  |
| 62.5 | 10275.38 | 10235.61 | 10191.09 | 10104.72 | 10002.51 | 9898.58  | 9782.32  | 9653.03  | 9509.54  | 9354.66  |
| 65.0 | 9611.44  | 9557.73  | 9500.76  | 9442.52  | 9381.97  | 9326.50  | 9256.27  | 9137.19  | 8968.48  | 8780.95  |
| 67.5 | 8939.33  | 8879.58  | 8812.96  | 8735.79  | 8670.66  | 8598.73  | 8514.73  | 8414.85  | 8297.16  | 8155.23  |
| 70.0 | 8271.76  | 8207.46  | 8125.49  | 8044.46  | 7962.88  | 7872.13  | 7772.27  | 7658.84  | 7525.60  | 7373.93  |
| 72.5 | 7607.34  | 7524.95  | 7439.60  | 7346.73  | 7249.87  | 7147.90  | 7034.28  | 6909.22  | 6764.82  | 6607.85  |
| 75.0 | 6938.69  | 6849.09  | 6762.04  | 6650.38  | 6543.02  | 6426.57  | 6300.83  | 6169.96  | 6016.45  | 5855.86  |
| 77.5 | 4387.91  | 4572.77  | 4776.86  | 4992.03  | 5221.39  | 5458.31  | 5578.80  | 5432.58  | 5280.92  | 5119.69  |
| 80.0 | 839.65   | 1051.80  | 1284.38  | 1534.81  | 1799.55  | 2077.89  | 2365.65  | 2660.10  | 2957.44  | 3251.84  |
| 82.5 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 116.36   |
| 85.0 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 87.5 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 90.0 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |

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

|      | <u>225.0</u> | <u>227.5</u> | <u>230.0</u> | <u>232.5</u> | <u>235.0</u> | <u>237.5</u> | <u>240.0</u> | <u>242.5</u> | <u>245.0</u> | <u>247.5</u> |
|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.0  | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     |
| 2.5  | 14832.59     | 14829.74     | 14826.80     | 14823.78     | 14820.89     | 14817.18     | 14813.77     | 14810.32     | 14806.84     | 14803.32     |
| 5.0  | 14873.41     | 14866.53     | 14859.55     | 14852.47     | 14846.48     | 14836.83     | 14828.89     | 14820.97     | 14813.07     | 14805.21     |
| 7.5  | 14898.08     | 14885.71     | 14873.30     | 14860.88     | 14847.97     | 14834.91     | 14821.92     | 14809.03     | 14796.26     | 14783.64     |
| 10.0 | 14912.10     | 14892.03     | 14873.50     | 14854.99     | 14835.79     | 14816.39     | 14797.17     | 14778.18     | 14761.29     | 14740.15     |
| 12.5 | 14911.95     | 14886.62     | 14860.65     | 14834.80     | 14808.56     | 14782.29     | 14756.33     | 14733.46     | 14703.46     | 14677.29     |
| 15.0 | 14904.38     | 14872.07     | 14836.70     | 14801.68     | 14766.13     | 14730.60     | 14695.74     | 14660.33     | 14625.62     | 14591.89     |
| 17.5 | 14885.02     | 14841.27     | 14796.48     | 14751.42     | 14706.05     | 14660.79     | 14622.06     | 14571.29     | 14527.84     | 14485.45     |
| 20.0 | 14853.16     | 14798.05     | 14742.66     | 14686.31     | 14630.18     | 14574.57     | 14519.16     | 14464.11     | 14414.91     | 14356.72     |
| 22.5 | 14730.57     | 14705.05     | 14681.78     | 14607.19     | 14538.52     | 14469.56     | 14401.62     | 14335.29     | 14271.72     | 14205.37     |
| 25.0 | 14563.82     | 14529.46     | 14495.13     | 14463.15     | 14432.51     | 14349.81     | 14267.91     | 14189.55     | 14110.57     | 14035.74     |
| 27.5 | 14389.16     | 14340.91     | 14296.87     | 14254.02     | 14214.38     | 14179.76     | 14119.21     | 14023.57     | 13930.98     | 13840.43     |
| 30.0 | 14195.54     | 14138.60     | 14084.36     | 14031.47     | 13978.97     | 13930.84     | 13883.48     | 13839.00     | 13728.53     | 13622.11     |
| 32.5 | 13994.24     | 13926.04     | 13857.07     | 13790.49     | 13724.88     | 13663.34     | 13604.10     | 13550.66     | 13503.63     | 13386.42     |
| 35.0 | 13782.95     | 13702.12     | 13623.86     | 13543.48     | 13458.17     | 13380.12     | 13309.18     | 13241.46     | 13179.64     | 13125.40     |
| 37.5 | 13561.64     | 13463.07     | 13363.72     | 13267.13     | 13172.95     | 13079.83     | 12992.56     | 12910.26     | 12835.10     | 12769.26     |
| 40.0 | 13296.49     | 13216.15     | 13101.13     | 12985.77     | 12874.16     | 12765.69     | 12661.97     | 12565.75     | 12474.93     | 12392.47     |
| 42.5 | 12920.88     | 12858.64     | 12798.00     | 12696.10     | 12565.83     | 12438.94     | 12315.57     | 12199.85     | 12089.80     | 11989.85     |
| 45.0 | 12543.16     | 12462.88     | 12389.21     | 12319.78     | 12244.27     | 12096.65     | 11953.01     | 11815.80     | 11687.59     | 11567.49     |
| 47.5 | 12155.43     | 12060.96     | 11968.53     | 11878.70     | 11796.99     | 11720.63     | 11575.71     | 11414.58     | 11265.07     | 11124.17     |
| 50.0 | 11763.57     | 11650.31     | 11537.75     | 11428.91     | 11326.12     | 11228.26     | 11141.43     | 11001.60     | 10825.24     | 10669.08     |



**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

|             |          |          |          |          |          |          |          |          |          |          |
|-------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>52.5</b> | 11367.42 | 11232.63 | 11095.18 | 10971.41 | 10842.51 | 10725.83 | 10615.25 | 10514.74 | 10370.21 | 10176.90 |
| <b>55.0</b> | 10947.06 | 10809.46 | 10655.77 | 10501.32 | 10353.38 | 10210.74 | 10074.50 | 9949.33  | 9840.72  | 9685.96  |
| <b>57.5</b> | 10374.10 | 10276.12 | 10190.28 | 10029.63 | 9857.48  | 9686.60  | 9519.33  | 9356.29  | 9224.09  | 9119.82  |
| <b>60.0</b> | 9788.96  | 9664.26  | 9547.48  | 9452.30  | 9355.70  | 9149.32  | 8928.88  | 8728.91  | 8552.12  | 8399.66  |
| <b>62.5</b> | 9194.04  | 9036.49  | 8896.04  | 8770.64  | 8653.61  | 8518.12  | 8304.12  | 8055.23  | 7841.25  | 7650.68  |
| <b>65.0</b> | 8589.28  | 8401.31  | 8234.08  | 8081.53  | 7924.21  | 7747.19  | 7558.58  | 7375.54  | 7133.88  | 6905.13  |
| <b>67.5</b> | 7976.18  | 7763.22  | 7579.67  | 7387.66  | 7195.70  | 6994.02  | 6792.93  | 6614.17  | 6442.10  | 6204.79  |
| <b>70.0</b> | 7208.34  | 7044.33  | 6894.29  | 6699.82  | 6489.64  | 6273.93  | 6059.82  | 5857.11  | 5662.49  | 5477.61  |
| <b>72.5</b> | 6437.92  | 6261.69  | 6089.13  | 5919.60  | 5758.90  | 5587.01  | 5355.13  | 5132.75  | 4900.04  | 4682.30  |
| <b>75.0</b> | 5695.77  | 5497.64  | 5301.91  | 5122.18  | 4937.35  | 4774.43  | 4606.44  | 4433.11  | 4168.97  | 3907.81  |
| <b>77.5</b> | 4943.86  | 4747.43  | 4529.24  | 4330.22  | 4152.45  | 3970.31  | 3794.81  | 3597.36  | 3371.49  | 3162.63  |
| <b>80.0</b> | 3530.08  | 3762.05  | 3772.74  | 3565.88  | 3382.21  | 3194.14  | 3013.77  | 2798.34  | 2595.91  | 2406.17  |
| <b>82.5</b> | 476.71   | 822.32   | 1148.78  | 1453.58  | 1737.10  | 1981.89  | 2184.87  | 2055.51  | 1873.20  | 1702.29  |
| <b>85.0</b> | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 274.39   | 525.71   | 716.39   |
| <b>87.5</b> | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| <b>90.0</b> | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |

**Vert. Horizontal Angles**

|             | <u><b>250.0</b></u> | <u><b>252.5</b></u> | <u><b>255.0</b></u> | <u><b>257.5</b></u> | <u><b>260.0</b></u> | <u><b>262.5</b></u> | <u><b>265.0</b></u> | <u><b>267.5</b></u> | <u><b>270.0</b></u> | <u><b>272.5</b></u> |
|-------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>0.0</b>  | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            | 14779.57            |
| <b>2.5</b>  | 14799.78            | 14796.23            | 14792.66            | 14789.09            | 14785.53            | 14781.97            | 14778.43            | 14774.91            | 14771.42            | 14761.47            |
| <b>5.0</b>  | 14797.40            | 14789.66            | 14781.99            | 14774.42            | 14766.96            | 14759.61            | 14752.40            | 14745.33            | 14738.41            | 14718.49            |
| <b>7.5</b>  | 14772.33            | 14758.29            | 14745.85            | 14733.70            | 14721.86            | 14710.35            | 14699.20            | 14688.43            | 14678.05            | 14648.24            |
| <b>10.0</b> | 14721.45            | 14703.20            | 14685.42            | 14668.17            | 14651.47            | 14635.36            | 14619.89            | 14605.08            | 14590.97            | 14551.17            |
| <b>12.5</b> | 14651.81            | 14627.07            | 14606.30            | 14579.47            | 14557.00            | 14535.58            | 14515.23            | 14496.01            | 14477.96            | 14428.14            |
| <b>15.0</b> | 14563.39            | 14526.54            | 14495.46            | 14465.74            | 14437.47            | 14410.68            | 14385.46            | 14361.85            | 14339.90            | 14279.98            |
| <b>17.5</b> | 14444.16            | 14404.60            | 14366.84            | 14335.64            | 14295.35            | 14262.46            | 14231.84            | 14203.58            | 14177.74            | 14107.48            |
| <b>20.0</b> | 14305.18            | 14258.85            | 14208.35            | 14163.47            | 14121.30            | 14081.96            | 14045.55            | 14012.18            | 13981.94            | 13901.87            |
| <b>22.5</b> | 14150.43            | 14083.63            | 14026.88            | 13973.50            | 13923.08            | 13876.10            | 13832.97            | 13793.83            | 13758.85            | 13668.51            |
| <b>25.0</b> | 13960.49            | 13889.06            | 13831.07            | 13758.03            | 13699.00            | 13644.65            | 13595.13            | 13550.55            | 13511.04            | 13410.14            |
| <b>27.5</b> | 13752.52            | 13669.03            | 13589.69            | 13515.68            | 13452.64            | 13383.24            | 13325.79            | 13274.78            | 13230.37            | 13119.23            |
| <b>30.0</b> | 13523.59            | 13423.45            | 13332.24            | 13246.24            | 13166.42            | 13093.66            | 13028.25            | 12970.45            | 12920.51            | 12798.73            |
| <b>32.5</b> | 13268.22            | 13155.07            | 13048.76            | 12950.23            | 12860.19            | 12777.51            | 12703.69            | 12639.33            | 12584.62            | 12451.81            |
| <b>35.0</b> | 12989.67            | 12861.65            | 12741.26            | 12637.89            | 12526.86            | 12433.66            | 12350.74            | 12278.55            | 12217.54            | 12073.90            |
| <b>37.5</b> | 12697.60            | 12550.79            | 12415.83            | 12284.72            | 12168.04            | 12062.67            | 11969.24            | 11889.21            | 11822.81            | 11667.92            |
| <b>40.0</b> | 12320.01            | 12210.06            | 12054.03            | 11910.28            | 11778.83            | 11660.79            | 11557.23            | 11468.76            | 11395.89            | 11229.62            |
| <b>42.5</b> | 11902.46            | 11828.73            | 11673.72            | 11510.48            | 11362.01            | 11240.09            | 11115.16            | 11018.38            | 10940.18            | 10762.19            |
| <b>45.0</b> | 11460.34            | 11367.26            | 11280.22            | 11083.00            | 10917.33            | 10768.37            | 10640.91            | 10533.76            | 10448.90            | 10259.68            |
| <b>47.5</b> | 10997.61            | 10883.85            | 10787.34            | 10630.60            | 10438.50            | 10276.66            | 10136.88            | 10022.20            | 9932.74             | 9724.19             |
| <b>50.0</b> | 10516.68            | 10373.98            | 10257.58            | 10136.68            | 9932.96             | 9754.30             | 9604.30             | 9483.25             | 9391.03             | 9149.45             |
| <b>52.5</b> | 10000.51            | 9842.35             | 9709.93             | 9590.21             | 9397.43             | 9194.19             | 9017.79             | 8872.69             | 8763.47             | 8498.42             |
| <b>55.0</b> | 9483.73             | 9292.66             | 9120.86             | 8977.70             | 8807.46             | 8554.28             | 8335.93             | 8159.87             | 8028.94             | 7763.99             |
| <b>57.5</b> | 8925.47             | 8679.25             | 8454.99             | 8263.89             | 8113.58             | 7832.76             | 7592.16             | 7406.25             | 7272.89             | 7013.89             |
| <b>60.0</b> | 8253.82             | 7987.80             | 7723.38             | 7501.58             | 7327.53             | 7106.29             | 6862.62             | 6674.62             | 6542.46             | 6282.93             |
| <b>62.5</b> | 7453.32             | 7297.40             | 7015.82             | 6773.60             | 6581.54             | 6407.83             | 6175.71             | 5951.04             | 5813.39             | 5551.27             |
| <b>65.0</b> | 6695.48             | 6518.15             | 6365.26             | 6069.84             | 5848.23             | 5681.06             | 5425.70             | 5214.32             | 5071.94             | 4797.63             |
| <b>67.5</b> | 5966.68             | 5763.02             | 5590.08             | 5366.21             | 5113.87             | 4920.13             | 4693.61             | 4457.98             | 4300.23             | 4011.53             |
| <b>70.0</b> | 5270.82             | 5023.73             | 4814.66             | 4648.48             | 4375.88             | 4120.64             | 3901.89             | 3636.35             | 3475.02             | 3215.43             |
| <b>72.5</b> | 4504.34             | 4295.68             | 4002.21             | 3793.98             | 3583.04             | 3302.54             | 3115.46             | 2871.79             | 2719.92             | 2478.21             |
| <b>75.0</b> | 3702.34             | 3448.08             | 3239.56             | 2995.96             | 2810.70             | 2586.50             | 2371.81             | 2156.53             | 1994.28             | 1774.27             |
| <b>77.5</b> | 2930.24             | 2693.10             | 2481.89             | 2284.39             | 2077.85             | 1905.80             | 1661.78             | 1482.33             | 1347.37             | 1157.25             |
| <b>80.0</b> | 2208.34             | 2011.37             | 1793.72             | 1598.34             | 1414.39             | 1232.25             | 1083.94             | 919.72              | 804.16              | 654.60              |
| <b>82.5</b> | 1520.49             | 1350.04             | 1184.62             | 1007.42             | 829.54              | 715.75              | 586.89              | 484.21              | 395.50              | 319.38              |
| <b>85.0</b> | 829.71              | 783.65              | 651.97              | 523.86              | 359.10              | 252.60              | 167.39              | 172.32              | 147.41              | 112.93              |
| <b>87.5</b> | 0.00                | 0.00                | 0.00                | 68.18               | 99.75               | 74.00               | 43.49               | 26.06               | 48.10               | 45.38               |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

90.0 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 22.41 0.00

**Vert.  
Angles**

**Horizontal Angles**

|      | <u>275.0</u> | <u>277.5</u> | <u>280.0</u> | <u>282.5</u> | <u>285.0</u> | <u>287.5</u> | <u>290.0</u> | <u>292.5</u> | <u>295.0</u> | <u>297.5</u> |
|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.0  | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     |
| 2.5  | 14751.58     | 14741.77     | 14732.05     | 14722.43     | 14712.95     | 14703.61     | 14694.43     | 14685.44     | 14676.65     | 14668.07     |
| 5.0  | 14698.78     | 14679.31     | 14660.13     | 14641.25     | 14622.74     | 14604.61     | 14586.91     | 14569.66     | 14552.91     | 14536.68     |
| 7.5  | 14618.91     | 14590.12     | 14561.92     | 14534.37     | 14507.53     | 14481.44     | 14457.49     | 14431.39     | 14407.24     | 14383.96     |
| 10.0 | 14512.19     | 14474.09     | 14436.96     | 14400.87     | 14365.88     | 14332.07     | 14299.50     | 14268.23     | 14240.40     | 14209.31     |
| 12.5 | 14379.63     | 14332.52     | 14286.91     | 14242.88     | 14203.87     | 14159.69     | 14120.44     | 14083.03     | 14047.53     | 14017.19     |
| 15.0 | 14221.89     | 14165.76     | 14111.70     | 14059.80     | 14010.18     | 13962.93     | 13922.54     | 13875.30     | 13834.74     | 13796.81     |
| 17.5 | 14039.85     | 13975.00     | 13913.05     | 13859.30     | 13797.56     | 13743.60     | 13692.86     | 13645.46     | 13600.87     | 13559.20     |
| 20.0 | 13825.18     | 13751.99     | 13682.45     | 13616.67     | 13554.77     | 13499.80     | 13442.16     | 13391.35     | 13348.88     | 13300.76     |
| 22.5 | 13582.66     | 13501.49     | 13425.16     | 13353.49     | 13286.01     | 13223.58     | 13173.01     | 13113.41     | 13065.53     | 13021.79     |
| 25.0 | 13314.66     | 13224.84     | 13140.89     | 13063.02     | 13000.77     | 12925.10     | 12864.53     | 12810.12     | 12760.75     | 12719.10     |
| 27.5 | 13015.10     | 12918.24     | 12834.50     | 12745.58     | 12669.03     | 12599.65     | 12546.12     | 12483.50     | 12435.43     | 12393.20     |
| 30.0 | 12685.31     | 12580.47     | 12484.43     | 12397.35     | 12318.74     | 12247.89     | 12188.94     | 12132.34     | 12087.14     | 12044.27     |
| 32.5 | 12329.04     | 12216.50     | 12114.12     | 12021.58     | 11940.11     | 11869.03     | 11807.28     | 11755.01     | 11717.59     | 11607.11     |
| 35.0 | 11942.14     | 11822.55     | 11715.32     | 11628.61     | 11537.23     | 11466.38     | 11404.64     | 11352.88     | 11243.96     | 11145.69     |
| 37.5 | 11527.20     | 11400.93     | 11288.55     | 11190.31     | 11109.59     | 11035.29     | 10977.19     | 10867.45     | 10758.67     | 10661.74     |
| 40.0 | 11079.84     | 10946.89     | 10830.99     | 10731.59     | 10647.56     | 10579.31     | 10476.31     | 10352.16     | 10245.22     | 10153.30     |
| 42.5 | 10603.29     | 10473.18     | 10343.41     | 10242.89     | 10160.37     | 10074.69     | 9925.84      | 9800.70      | 9697.16      | 9612.81      |
| 45.0 | 10092.87     | 9948.82      | 9827.70      | 9728.08      | 9665.18      | 9491.60      | 9335.04      | 9208.88      | 9108.56      | 9033.58      |
| 47.5 | 9543.29      | 9392.18      | 9268.27      | 9182.09      | 9058.58      | 8873.16      | 8714.45      | 8584.42      | 8480.79      | 8413.27      |
| 50.0 | 8940.37      | 8767.48      | 8633.88      | 8541.82      | 8379.10      | 8210.64      | 8067.98      | 7940.34      | 7831.91      | 7763.34      |
| 52.5 | 8272.37      | 8085.10      | 7939.18      | 7811.30      | 7648.66      | 7494.23      | 7368.45      | 7258.30      | 7164.82      | 7038.13      |
| 55.0 | 7543.28      | 7363.18      | 7220.01      | 7057.67      | 6899.37      | 6769.63      | 6661.64      | 6569.00      | 6432.93      | 6250.45      |
| 57.5 | 6802.75      | 6636.88      | 6503.92      | 6318.64      | 6170.71      | 6056.05      | 5965.71      | 5834.91      | 5633.80      | 5459.51      |
| 60.0 | 6075.96      | 5918.35      | 5761.19      | 5589.61      | 5453.47      | 5349.25      | 5240.78      | 5029.12      | 4837.89      | 4668.19      |
| 62.5 | 5371.71      | 5199.67      | 5005.95      | 4850.90      | 4740.85      | 4657.61      | 4432.08      | 4235.30      | 4045.04      | 3886.53      |
| 65.0 | 4597.36      | 4455.50      | 4245.04      | 4084.14      | 4004.06      | 3831.76      | 3641.50      | 3454.09      | 3276.61      | 3112.02      |
| 67.5 | 3800.96      | 3629.88      | 3472.41      | 3345.42      | 3192.69      | 3008.24      | 2852.78      | 2693.73      | 2542.29      | 2421.20      |
| 70.0 | 3037.03      | 2867.58      | 2732.19      | 2619.20      | 2439.82      | 2262.44      | 2099.44      | 1980.98      | 1883.68      | 1765.96      |
| 72.5 | 2324.25      | 2154.14      | 2045.14      | 1900.43      | 1739.31      | 1578.79      | 1466.31      | 1375.05      | 1268.39      | 1145.07      |
| 75.0 | 1620.26      | 1507.32      | 1397.27      | 1250.87      | 1092.72      | 1030.30      | 943.83       | 840.08       | 711.63       | 561.39       |
| 77.5 | 1040.60      | 947.03       | 838.46       | 700.76       | 649.79       | 579.75       | 487.81       | 356.49       | 364.03       | 361.86       |
| 80.0 | 581.00       | 509.22       | 403.96       | 364.47       | 309.98       | 216.36       | 210.09       | 211.06       | 210.75       | 196.65       |
| 82.5 | 258.98       | 200.80       | 177.96       | 128.16       | 109.33       | 108.55       | 101.95       | 90.36        | 71.82        | 45.89        |
| 85.0 | 84.11        | 79.33        | 57.04        | 49.84        | 41.63        | 28.74        | 14.89        | 10.01        | 6.18         | 2.87         |
| 87.5 | 36.16        | 26.32        | 14.38        | 4.85         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |
| 90.0 | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |

**Vert.  
Angles**

**Horizontal Angles**

|      | <u>300.0</u> | <u>302.5</u> | <u>305.0</u> | <u>307.5</u> | <u>310.0</u> | <u>312.5</u> | <u>315.0</u> | <u>317.5</u> | <u>320.0</u> | <u>322.5</u> |
|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.0  | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     |
| 2.5  | 14659.72     | 14651.63     | 14644.14     | 14636.19     | 14628.73     | 14621.57     | 14614.72     | 14608.19     | 14601.99     | 14596.14     |
| 5.0  | 14521.01     | 14505.92     | 14493.08     | 14477.43     | 14463.60     | 14450.42     | 14437.93     | 14426.16     | 14415.12     | 14405.35     |
| 7.5  | 14361.61     | 14340.22     | 14319.84     | 14300.25     | 14281.09     | 14270.56     | 14246.01     | 14231.32     | 14214.94     | 14200.75     |
| 10.0 | 14185.00     | 14155.15     | 14130.31     | 14106.66     | 14083.73     | 14062.38     | 14044.21     | 14023.19     | 14005.05     | 13990.19     |
| 12.5 | 13981.47     | 13950.58     | 13921.77     | 13894.69     | 13868.95     | 13845.33     | 13823.15     | 13802.44     | 13783.88     | 13765.67     |
| 15.0 | 13761.34     | 13727.14     | 13695.63     | 13666.40     | 13639.13     | 13614.64     | 13590.71     | 13572.47     | 13549.60     | 13534.48     |
| 17.5 | 13526.79     | 13484.89     | 13451.79     | 13421.50     | 13393.82     | 13368.63     | 13345.16     | 13324.17     | 13305.59     | 13288.41     |
| 20.0 | 13260.96     | 13224.24     | 13190.65     | 13160.38     | 13133.21     | 13108.41     | 13086.74     | 13069.35     | 13019.89     | 12977.97     |
| 22.5 | 12980.74     | 12943.98     | 12910.65     | 12881.42     | 12859.83     | 12801.10     | 12745.77     | 12695.12     | 12647.39     | 12604.48     |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

|      |          |          |          |          |          |          |          |          |          |          |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 25.0 | 12678.28 | 12644.70 | 12616.00 | 12545.38 | 12478.11 | 12416.21 | 12360.65 | 12310.26 | 12264.34 | 12223.08 |
| 27.5 | 12355.90 | 12292.08 | 12214.35 | 12143.15 | 12078.73 | 12020.32 | 11968.25 | 11913.98 | 11870.35 | 11830.84 |
| 30.0 | 11955.05 | 11872.66 | 11795.48 | 11724.50 | 11660.91 | 11604.41 | 11554.23 | 11508.64 | 11465.88 | 11429.98 |
| 32.5 | 11515.84 | 11434.02 | 11366.02 | 11289.69 | 11230.03 | 11176.16 | 11129.18 | 11088.98 | 11054.05 | 11027.20 |
| 35.0 | 11056.93 | 10975.82 | 10906.25 | 10848.19 | 10789.72 | 10737.86 | 10694.33 | 10658.18 | 10628.78 | 10604.68 |
| 37.5 | 10575.50 | 10502.87 | 10438.39 | 10382.84 | 10326.43 | 10283.34 | 10247.67 | 10218.92 | 10150.43 | 10033.46 |
| 40.0 | 10075.29 | 10008.38 | 9950.47  | 9903.85  | 9861.30  | 9822.52  | 9723.89  | 9584.42  | 9461.46  | 9353.20  |
| 42.5 | 9545.64  | 9490.81  | 9446.18  | 9409.11  | 9328.35  | 9171.39  | 9019.93  | 8886.45  | 8782.64  | 8658.91  |
| 45.0 | 8979.05  | 8941.09  | 8915.72  | 8762.41  | 8599.66  | 8448.81  | 8311.46  | 8178.71  | 8066.80  | 7959.88  |
| 47.5 | 8371.71  | 8319.93  | 8160.88  | 8005.90  | 7868.30  | 7714.79  | 7583.18  | 7463.79  | 7351.97  | 7255.10  |
| 50.0 | 7672.16  | 7520.97  | 7377.24  | 7236.67  | 7100.28  | 6970.19  | 6846.96  | 6735.74  | 6633.68  | 6543.68  |
| 52.5 | 6876.11  | 6727.72  | 6592.92  | 6465.32  | 6338.50  | 6216.99  | 6104.78  | 5999.62  | 5908.22  | 5796.35  |
| 55.0 | 6089.80  | 5951.31  | 5820.69  | 5697.37  | 5579.00  | 5464.81  | 5351.81  | 5229.18  | 5111.80  | 5000.97  |
| 57.5 | 5309.85  | 5179.09  | 5062.41  | 4945.65  | 4824.61  | 4689.37  | 4558.75  | 4436.44  | 4321.77  | 4210.20  |
| 60.0 | 4526.54  | 4408.35  | 4305.51  | 4180.82  | 4042.91  | 3908.03  | 3776.41  | 3650.65  | 3535.90  | 3425.03  |
| 62.5 | 3746.67  | 3635.06  | 3523.65  | 3403.82  | 3273.45  | 3137.37  | 3005.76  | 2875.66  | 2755.19  | 2646.78  |
| 65.0 | 2998.67  | 2879.66  | 2767.31  | 2645.57  | 2516.22  | 2378.24  | 2246.20  | 2109.84  | 1983.16  | 1871.49  |
| 67.5 | 2293.99  | 2170.98  | 2038.58  | 1909.57  | 1776.65  | 1632.87  | 1492.37  | 1448.47  | 1445.99  | 1447.03  |
| 70.0 | 1631.50  | 1497.66  | 1347.47  | 1201.28  | 1112.81  | 1120.09  | 1121.55  | 1121.15  | 1108.66  | 1097.65  |
| 72.5 | 1004.29  | 855.78   | 822.17   | 821.06   | 825.10   | 823.06   | 814.48   | 802.78   | 780.90   | 758.81   |
| 75.0 | 569.56   | 578.41   | 579.18   | 565.15   | 555.50   | 539.69   | 520.55   | 495.10   | 461.59   | 427.75   |
| 77.5 | 366.66   | 361.33   | 348.72   | 324.97   | 298.33   | 268.27   | 232.41   | 192.08   | 148.44   | 102.23   |
| 80.0 | 182.39   | 160.99   | 131.49   | 94.32    | 51.93    | 29.78    | 27.32    | 24.66    | 21.73    | 19.12    |
| 82.5 | 20.38    | 17.70    | 14.89    | 12.14    | 9.33     | 6.54     | 3.71     | 0.89     | 0.00     | 0.00     |
| 85.0 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 87.5 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |
| 90.0 | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     | 0.00     |

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

|      | <u>325.0</u> | <u>327.5</u> | <u>330.0</u> | <u>332.5</u> | <u>335.0</u> | <u>337.5</u> | <u>340.0</u> | <u>342.5</u> | <u>345.0</u> | <u>347.5</u> |
|------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0.0  | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     |
| 2.5  | 14590.65     | 14585.53     | 14580.79     | 14576.43     | 14572.72     | 14568.72     | 14565.11     | 14561.91     | 14559.13     | 14556.77     |
| 5.0  | 14394.59     | 14384.89     | 14375.95     | 14367.81     | 14360.46     | 14353.68     | 14347.40     | 14341.95     | 14337.33     | 14333.93     |
| 7.5  | 14187.76     | 14176.37     | 14164.34     | 14153.83     | 14144.58     | 14135.79     | 14127.29     | 14120.04     | 14113.87     | 14108.25     |
| 10.0 | 13972.47     | 13957.74     | 13944.62     | 13932.37     | 13921.81     | 13912.22     | 13903.53     | 13896.53     | 13888.63     | 13882.41     |
| 12.5 | 13749.62     | 13733.98     | 13719.73     | 13706.49     | 13694.45     | 13684.05     | 13675.29     | 13667.77     | 13661.57     | 13655.36     |
| 15.0 | 13515.56     | 13501.49     | 13487.77     | 13475.92     | 13464.08     | 13453.49     | 13445.76     | 13436.67     | 13431.05     | 13426.62     |
| 17.5 | 13273.62     | 13259.80     | 13233.42     | 13204.78     | 13178.01     | 13153.57     | 13131.60     | 13111.75     | 13095.39     | 13082.40     |
| 20.0 | 12937.54     | 12901.82     | 12869.72     | 12843.46     | 12813.72     | 12790.09     | 12768.89     | 12749.76     | 12734.59     | 12719.39     |
| 22.5 | 12565.62     | 12530.31     | 12500.01     | 12470.51     | 12444.93     | 12422.27     | 12402.32     | 12384.50     | 12368.81     | 12355.75     |
| 25.0 | 12186.62     | 12151.32     | 12121.07     | 12094.22     | 12071.45     | 12050.93     | 12032.73     | 12016.80     | 12002.79     | 11991.15     |
| 27.5 | 11795.97     | 11764.78     | 11737.24     | 11713.38     | 11692.53     | 11675.91     | 11663.61     | 11647.11     | 11635.01     | 11625.06     |
| 30.0 | 11398.94     | 11371.25     | 11347.86     | 11327.27     | 11310.33     | 11297.19     | 11285.43     | 11274.51     | 11265.19     | 11257.71     |
| 32.5 | 10993.99     | 10971.94     | 10952.19     | 10936.85     | 10923.90     | 10860.71     | 10805.46     | 10758.15     | 10716.39     | 10680.13     |
| 35.0 | 10581.81     | 10503.51     | 10416.87     | 10338.51     | 10271.13     | 10208.15     | 10154.61     | 10110.24     | 10069.90     | 10035.86     |
| 37.5 | 9930.55      | 9841.12      | 9751.56      | 9676.30      | 9610.16      | 9551.85      | 9502.93      | 9458.20      | 9424.55      | 9390.12      |
| 40.0 | 9250.47      | 9161.05      | 9078.96      | 9009.44      | 8945.88      | 8891.75      | 8845.45      | 8804.98      | 8772.04      | 8743.87      |
| 42.5 | 8562.81      | 8478.26      | 8402.24      | 8336.06      | 8278.58      | 8227.89      | 8186.18      | 8150.44      | 8123.17      | 8095.44      |
| 45.0 | 7869.26      | 7789.24      | 7719.42      | 7661.16      | 7606.97      | 7561.20      | 7524.35      | 7493.83      | 7466.87      | 7446.54      |
| 47.5 | 7170.96      | 7094.88      | 7031.63      | 6976.45      | 6931.18      | 6880.25      | 6820.53      | 6771.18      | 6724.91      | 6686.39      |
| 50.0 | 6469.66      | 6391.22      | 6303.10      | 6221.60      | 6146.77      | 6084.68      | 6021.85      | 5972.64      | 5925.66      | 5884.88      |
| 52.5 | 5698.37      | 5596.81      | 5510.35      | 5428.72      | 5351.33      | 5284.86      | 5224.50      | 5175.35      | 5128.15      | 5084.73      |
| 55.0 | 4899.54      | 4802.60      | 4720.17      | 4639.55      | 4559.53      | 4489.49      | 4428.35      | 4378.52      | 4331.45      | 4285.53      |
| 57.5 | 4105.92      | 4010.94      | 3930.21      | 3852.74      | 3771.17      | 3696.12      | 3633.93      | 3582.02      | 3536.00      | 3487.58      |
| 60.0 | 3317.92      | 3222.61      | 3139.61      | 3067.54      | 2986.47      | 2906.36      | 2840.98      | 2789.35      | 2742.12      | 2690.88      |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**CANDELA TABULATION - (Cont.)**

|      |         |         |         |         |         |         |         |         |         |         |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 62.5 | 2535.55 | 2437.81 | 2351.13 | 2283.73 | 2224.28 | 2207.47 | 2199.19 | 2195.08 | 2195.66 | 2184.04 |
| 65.0 | 1809.79 | 1810.82 | 1812.92 | 1825.04 | 1822.63 | 1804.56 | 1792.38 | 1781.79 | 1778.57 | 1765.17 |
| 67.5 | 1446.36 | 1436.52 | 1431.15 | 1430.80 | 1425.20 | 1404.05 | 1385.17 | 1371.02 | 1362.87 | 1347.67 |
| 70.0 | 1089.38 | 1070.65 | 1056.33 | 1042.62 | 1029.93 | 1006.46 | 981.48  | 962.32  | 948.94  | 930.65  |
| 72.5 | 738.74  | 711.37  | 685.62  | 660.75  | 638.21  | 608.97  | 579.97  | 555.12  | 534.41  | 514.03  |
| 75.0 | 393.88  | 357.14  | 320.26  | 284.00  | 249.83  | 213.71  | 179.58  | 149.14  | 121.96  | 97.73   |
| 77.5 | 55.19   | 37.33   | 34.88   | 32.59   | 30.39   | 28.51   | 26.85   | 25.50   | 24.21   | 23.00   |
| 80.0 | 16.68   | 14.27   | 12.05   | 10.04   | 8.19    | 6.57    | 5.14    | 3.92    | 2.86    | 1.96    |
| 82.5 | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
| 85.0 | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
| 87.5 | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |
| 90.0 | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    | 0.00    |

**Vert.  
Angles**

**Horizontal Angles**

|      | <u>350.0</u> | <u>352.5</u> | <u>355.0</u> | <u>357.5</u> | <u>360.0</u> |
|------|--------------|--------------|--------------|--------------|--------------|
| 0.0  | 14779.57     | 14779.57     | 14779.57     | 14779.57     | 14779.57     |
| 2.5  | 14554.82     | 14553.31     | 14552.23     | 14551.58     | 14551.36     |
| 5.0  | 14330.06     | 14327.04     | 14324.88     | 14323.58     | 14323.15     |
| 7.5  | 14103.91     | 14100.74     | 14097.52     | 14095.59     | 14094.94     |
| 10.0 | 13877.12     | 13873.07     | 13870.14     | 13867.59     | 13866.73     |
| 12.5 | 13649.81     | 13645.26     | 13642.74     | 13639.58     | 13638.52     |
| 15.0 | 13421.63     | 13417.40     | 13414.02     | 13411.57     | 13410.31     |
| 17.5 | 13072.55     | 13062.28     | 13055.03     | 13050.45     | 13048.17     |
| 20.0 | 12708.90     | 12700.13     | 12693.06     | 12688.58     | 12686.03     |
| 22.5 | 12345.36     | 12337.69     | 12331.02     | 12326.69     | 12323.89     |
| 25.0 | 11981.36     | 11974.21     | 11968.48     | 11964.79     | 11961.75     |
| 27.5 | 11616.95     | 11610.15     | 11605.47     | 11602.16     | 11599.61     |
| 30.0 | 11252.65     | 11246.22     | 11242.30     | 11239.77     | 11237.47     |
| 32.5 | 10651.70     | 10629.23     | 10612.25     | 10602.05     | 10597.38     |
| 35.0 | 10008.22     | 9986.78      | 9971.62      | 9961.67      | 9957.29      |
| 37.5 | 9365.82      | 9344.23      | 9331.25      | 9321.26      | 9317.20      |
| 40.0 | 8719.25      | 8701.24      | 8689.16      | 8680.82      | 8677.11      |
| 42.5 | 8073.94      | 8058.75      | 8047.39      | 8040.35      | 8037.02      |
| 45.0 | 7429.46      | 7413.47      | 7405.43      | 7399.84      | 7396.94      |
| 47.5 | 6654.76      | 6630.34      | 6612.73      | 6602.00      | 6599.48      |
| 50.0 | 5854.08      | 5832.19      | 5813.52      | 5802.24      | 5802.02      |
| 52.5 | 5053.07      | 5034.19      | 5014.65      | 5002.31      | 5004.56      |
| 55.0 | 4251.80      | 4235.40      | 4216.58      | 4202.60      | 4207.10      |
| 57.5 | 3450.71      | 3436.14      | 3417.42      | 3402.43      | 3409.64      |
| 60.0 | 2649.83      | 2636.73      | 2619.25      | 2602.54      | 2612.18      |
| 62.5 | 2171.32      | 2179.38      | 2179.40      | 2172.95      | 2183.59      |
| 65.0 | 1751.78      | 1754.64      | 1753.63      | 1746.94      | 1755.01      |
| 67.5 | 1332.48      | 1330.64      | 1327.86      | 1320.99      | 1326.42      |
| 70.0 | 913.95       | 907.57       | 902.07       | 895.08       | 897.84       |
| 72.5 | 495.69       | 484.40       | 476.28       | 469.21       | 469.26       |
| 75.0 | 77.66        | 62.06        | 50.48        | 43.36        | 40.67        |
| 77.5 | 22.17        | 21.53        | 20.98        | 20.61        | 20.34        |
| 80.0 | 1.25         | 0.70         | 0.31         | 0.08         | 0.00         |
| 82.5 | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |
| 85.0 | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |
| 87.5 | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |
| 90.0 | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         |

**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens   | %Lamp | %Fixt  |
|---------|----------|-------|--------|
| 0-20    | 5419.42  | 12.50 | 12.70  |
| 0-30    | 11613.09 | 26.90 | 27.10  |
| 0-40    | 19221.08 | 44.50 | 44.90  |
| 0-60    | 34338.96 | 79.50 | 80.30  |
| 0-80    | 42534.27 | 98.40 | 99.40  |
| 0-90    | 42777.7  | 99.00 | 100.00 |
| 10-90   | 41383.81 | 95.80 | 96.70  |
| 20-40   | 13801.66 | 31.90 | 32.30  |
| 20-50   | 21779.2  | 50.40 | 50.90  |
| 40-70   | 20430.42 | 47.30 | 47.80  |
| 60-80   | 8195.32  | 19.00 | 19.20  |
| 70-80   | 2882.78  | 6.70  | 6.70   |
| 80-90   | 243.43   | 0.60  | 0.60   |
| 90-110  | 0.00     | 0.00  | 0.00   |
| 90-120  | 0.00     | 0.00  | 0.00   |
| 90-130  | 0.00     | 0.00  | 0.00   |
| 90-150  | 0.00     | 0.00  | 0.00   |
| 90-180  | 0.00     | 0.00  | 0.00   |
| 110-180 | 0.00     | 0.00  | 0.00   |
| 0-180   | 42777.7  | 99.00 | 100.00 |

Total Luminaire Efficiency = 99.00%

**ZONAL LUMEN SUMMARY**

| Zone    | Lumens  |
|---------|---------|
| 0-10    | 1393.89 |
| 10-20   | 4025.53 |
| 20-30   | 6193.67 |
| 30-40   | 7607.99 |
| 40-50   | 7977.54 |
| 50-60   | 7140.35 |
| 60-70   | 5312.54 |
| 70-80   | 2882.77 |
| 80-90   | 243.43  |
| 90-100  | 0.00    |
| 100-110 | 0.00    |
| 110-120 | 0.00    |
| 120-130 | 0.00    |
| 130-140 | 0.00    |
| 140-150 | 0.00    |
| 150-160 | 0.00    |
| 160-170 | 0.00    |
| 170-180 | 0.00    |

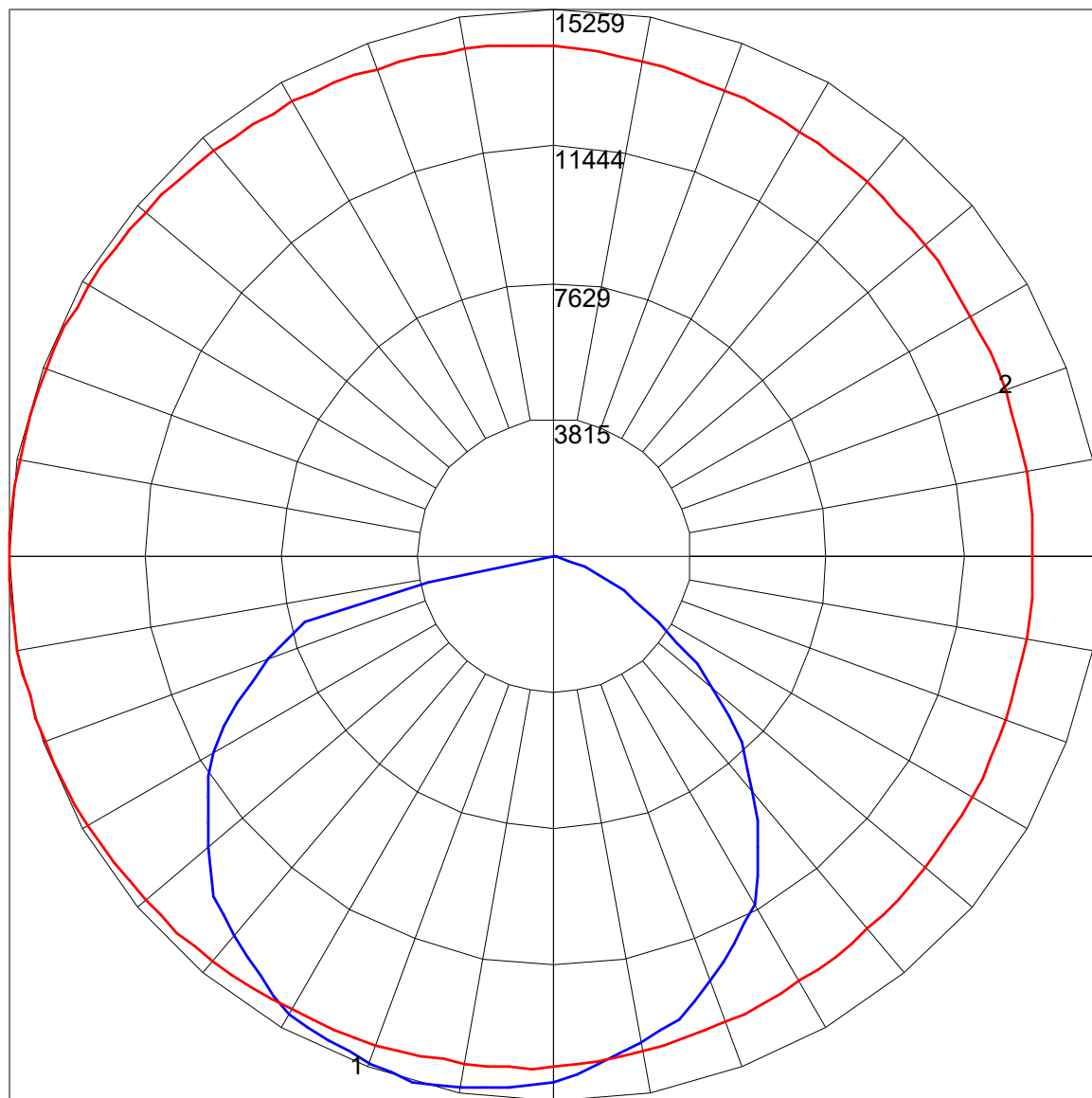
**IES INDOOR REPORT**  
**PHOTOMETRIC FILENAME : HZX-EX-B4-300W-5000K-D120.IES**

**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  | 118 | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 110 | 110 | 110 | 105 | 105 | 105 | 101 | 101 | 101 | 99 |
| 1  | 108 | 104 | 99  | 96  | 105 | 101 | 98  | 94  | 97  | 94  | 91  | 93  | 91  | 88  | 90  | 88  | 86  | 84 |
| 2  | 98  | 90  | 84  | 78  | 96  | 88  | 82  | 77  | 85  | 80  | 75  | 82  | 77  | 74  | 79  | 75  | 72  | 70 |
| 3  | 90  | 79  | 71  | 65  | 87  | 78  | 70  | 64  | 75  | 68  | 63  | 72  | 66  | 62  | 69  | 65  | 61  | 59 |
| 4  | 82  | 70  | 61  | 55  | 80  | 69  | 61  | 54  | 66  | 59  | 54  | 64  | 58  | 53  | 62  | 57  | 52  | 50 |
| 5  | 75  | 63  | 54  | 47  | 73  | 61  | 53  | 47  | 59  | 52  | 46  | 57  | 51  | 46  | 55  | 50  | 45  | 43 |
| 6  | 69  | 56  | 47  | 41  | 68  | 55  | 47  | 41  | 53  | 46  | 40  | 52  | 45  | 40  | 50  | 44  | 40  | 38 |
| 7  | 64  | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 40  | 35  | 46  | 40  | 35  | 33 |
| 8  | 60  | 46  | 38  | 32  | 58  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 36  | 32  | 42  | 36  | 31  | 30 |
| 9  | 56  | 43  | 34  | 29  | 54  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 27 |
| 10 | 52  | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 36  | 30  | 26  | 24 |

POLAR GRAPH



Maximum Candela = 15258.5 Located At Horizontal Angle = 182.5, Vertical Angle = 15  
# 1 - Vertical Plane Through Horizontal Angles (182.5 - 2.5) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (15) (Through Max. Cd.)