



**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : KH15QC1X37U4KC.IES**

**DESCRIPTIVE INFORMATION (From Photometric File)**

IESNA:LM-63-2002  
[TEST] Q2016041603 (scaled to 4K)  
[TESTLAB] QSSI  
[ISSUE DATE] 04/16/2016  
[MANUFAC] DuraGuard  
[LUMCAT] KH15QC1X37U4KC  
[LUMINAIRE] KH15 WITH ONE 37W QSSI LED ARRAY, TYPE III OPTICS  
[LAMP CAT] SAMSUNG 351B LEDs  
[LAMP] 24 SAMSUNG 351B LEDs

**CHARACTERISTICS**

|   |                                 |
|---|---------------------------------|
| IES Classification                              | Type III                        |
| Longitudinal Classification                     | Very Short                      |
| Lumens Per Lamp                                 | N.A. (absolute)                 |
| Total Lamp Lumens                               | N.A. (absolute)                 |
| Luminaire Lumens                                | 3157                            |
| Downward Total Efficiency                       | N.A. (absolute)                 |
| Total Luminaire Efficiency                      | N.A. (absolute)                 |
| Luminaire Efficacy Rating (LER)                 | 76                              |
| Total Luminaire Watts                           | 41.3                            |
| Ballast Factor                                  | 1.00                            |
| Upward Waste Light Ratio                        | 0.01                            |
| Maximum Candela                                 | 1253.854                        |
| Maximum Candela Angle                           | 40H 55V                         |
| Maximum Candela (<90 Degrees Vertical)          | 1253.854                        |
| Maximum Candela Angle (<90 Degrees Vertical)    | 40H 55V                         |
| Maximum Candela At 90 Degrees Vertical          | 3.106 (0.1% Luminaire Lumens)   |
| Maximum Candela from 80 to <90 Degrees Vertical | 146.132 (4.6% Luminaire Lumens) |
| Cutoff Classification (deprecated)              | N.A. (absolute)                 |

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**LUMINAIRE CLASSIFICATION SYSTEM (LCS)**

|                               | Lumens   | % Lamp | % Luminaire |
|-------------------------------|----------|--------|-------------|
| FL - Front-Low (0-30)         | 438.2    | N.A.   | 13.9        |
| FM - Front-Medium (30-60)     | 1304.2   | N.A.   | 41.3        |
| FH - Front-High (60-80)       | 445.1    | N.A.   | 14.1        |
| FVH - Front-Very High (80-90) | 3.2      | N.A.   | 0.1         |
| BL - Back-Low (0-30)          | 192.0    | N.A.   | 6.1         |
| BM - Back-Medium (30-60)      | 506.3    | N.A.   | 16.0        |
| BH - Back-High (60-80)        | 240.4    | N.A.   | 7.6         |
| BVH - Back-Very High (80-90)  | 5.6      | N.A.   | 0.2         |
| UL - Uplight-Low (90-100)     | 1.9      | N.A.   | 0.1         |
| UH - Uplight-High (100-180)   | 20.1     | N.A.   | 0.6         |
| Total                         | 3157.0   | N.A.   | 100.0       |
| BUG Rating                    | B1-U2-G1 |        |             |

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**CANDELA TABULATION**

| Vert. Angles | Horizontal Angles |          |          |          |          |          |          |          |          |          |
|--------------|-------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
|              | 0                 | 10       | 20       | 30       | 40       | 50       | 60       | 70       | 80       | 90       |
| 0.0          | 600.721           | 600.721  | 600.721  | 600.721  | 600.721  | 600.721  | 600.721  | 600.721  | 600.721  | 600.721  |
| 2.5          | 721.341           | 730.595  | 728.678  | 722.002  | 712.815  | 686.378  | 676.200  | 652.538  | 629.406  | 617.443  |
| 5.0          | 834.427           | 843.085  | 842.622  | 826.826  | 802.107  | 771.704  | 750.951  | 714.269  | 679.240  | 639.254  |
| 7.5          | 913.012           | 923.322  | 929.535  | 906.204  | 880.229  | 841.102  | 814.466  | 770.977  | 717.640  | 666.153  |
| 10.0         | 973.619           | 985.119  | 987.564  | 968.067  | 949.363  | 899.991  | 869.257  | 823.918  | 759.675  | 696.424  |
| 12.5         | 1025.106          | 1038.258 | 1042.223 | 1022.330 | 1000.849 | 952.072  | 927.419  | 875.140  | 803.429  | 725.307  |
| 15.0         | 1067.207          | 1082.276 | 1089.943 | 1070.445 | 1051.080 | 999.528  | 978.113  | 922.727  | 846.125  | 752.537  |
| 17.5         | 1103.227          | 1119.222 | 1130.788 | 1110.696 | 1094.041 | 1044.339 | 1021.867 | 965.621  | 886.905  | 778.445  |
| 20.0         | 1135.415          | 1152.929 | 1167.536 | 1145.131 | 1136.208 | 1085.448 | 1064.497 | 1006.335 | 923.388  | 804.156  |
| 22.5         | 1165.488          | 1182.737 | 1196.419 | 1175.070 | 1163.571 | 1122.592 | 1105.343 | 1042.951 | 957.227  | 830.659  |
| 25.0         | 1188.554          | 1203.887 | 1215.520 | 1196.485 | 1189.149 | 1157.028 | 1140.967 | 1079.169 | 990.869  | 855.510  |
| 27.5         | 1220.543          | 1227.218 | 1230.523 | 1211.224 | 1206.333 | 1182.606 | 1168.594 | 1109.771 | 1019.553 | 878.048  |
| 30.0         | 1253.589          | 1245.791 | 1245.063 | 1218.032 | 1214.132 | 1195.956 | 1189.612 | 1127.351 | 1044.669 | 900.123  |
| 32.5         | 1244.337          | 1248.038 | 1234.621 | 1214.198 | 1215.321 | 1209.770 | 1204.681 | 1152.665 | 1069.388 | 923.454  |
| 35.0         | 1205.870          | 1221.204 | 1214.991 | 1204.813 | 1207.853 | 1216.181 | 1214.925 | 1172.097 | 1092.587 | 949.627  |
| 37.5         | 1169.453          | 1210.695 | 1197.543 | 1187.034 | 1196.485 | 1220.146 | 1221.468 | 1187.761 | 1112.877 | 979.964  |
| 40.0         | 1156.763          | 1207.853 | 1188.157 | 1171.898 | 1187.299 | 1214.330 | 1226.029 | 1193.643 | 1128.475 | 1010.962 |
| 42.5         | 1150.947          | 1207.655 | 1189.545 | 1166.016 | 1181.945 | 1208.448 | 1224.310 | 1197.278 | 1142.421 | 1043.083 |
| 45.0         | 1158.217          | 1205.540 | 1193.908 | 1170.709 | 1181.878 | 1201.905 | 1217.238 | 1198.005 | 1154.582 | 1068.264 |
| 47.5         | 1166.280          | 1211.885 | 1214.792 | 1182.737 | 1182.671 | 1196.485 | 1211.290 | 1195.097 | 1163.306 | 1082.011 |
| 50.0         | 1086.770          | 1139.314 | 1222.196 | 1206.002 | 1196.221 | 1200.120 | 1201.045 | 1188.488 | 1141.694 | 1070.379 |
| 52.5         | 977.783           | 1012.547 | 1100.320 | 1213.141 | 1222.393 | 1206.399 | 1183.134 | 1093.842 | 1021.470 | 952.072  |
| 55.0         | 1029.930          | 1069.388 | 1048.767 | 1099.857 | 1253.854 | 1217.767 | 1072.230 | 990.803  | 999.461  | 944.604  |
| 57.5         | 951.147           | 1004.021 | 1066.876 | 1081.681 | 1177.252 | 1154.979 | 989.944  | 972.825  | 999.725  | 947.050  |
| 60.0         | 859.146           | 920.744  | 991.597  | 1053.063 | 1067.670 | 1051.609 | 980.756  | 950.684  | 993.976  | 946.587  |
| 62.5         | 671.507           | 759.741  | 864.499  | 975.271  | 920.480  | 952.271  | 961.854  | 914.663  | 970.777  | 944.736  |
| 65.0         | 371.443           | 431.522  | 616.848  | 828.479  | 766.681  | 762.847  | 911.425  | 869.919  | 932.311  | 939.845  |
| 67.5         | 98.942            | 146.330  | 284.597  | 538.329  | 635.949  | 649.035  | 749.431  | 765.689  | 761.526  | 840.772  |
| 70.0         | 46.001            | 60.805   | 81.031   | 201.452  | 446.790  | 496.426  | 443.221  | 554.918  | 651.679  | 734.163  |
| 72.5         | 22.802            | 31.460   | 38.268   | 77.857   | 191.009  | 312.026  | 296.891  | 433.902  | 557.298  | 676.266  |
| 75.0         | 9.253             | 12.426   | 19.629   | 31.923   | 70.522   | 167.216  | 179.840  | 229.607  | 339.917  | 465.428  |
| 77.5         | 5.420             | 5.750    | 6.279    | 8.856    | 30.997   | 61.137   | 76.206   | 104.163  | 206.343  | 323.790  |
| 80.0         | 3.569             | 3.767    | 4.097    | 4.230    | 5.089    | 16.457   | 20.952   | 37.012   | 93.852   | 146.132  |
| 82.5         | 2.446             | 2.578    | 2.643    | 3.041    | 3.437    | 3.834    | 4.494    | 5.817    | 7.733    | 15.862   |
| 85.0         | 1.454             | 1.520    | 1.718    | 1.917    | 2.247    | 2.578    | 3.238    | 3.834    | 4.494    | 5.883    |
| 87.5         | 0.661             | 0.727    | 0.793    | 0.859    | 0.991    | 1.124    | 1.652    | 2.115    | 2.974    | 4.296    |
| 90.0         | 0.661             | 0.727    | 0.727    | 0.793    | 0.859    | 0.925    | 1.190    | 1.388    | 1.652    | 2.313    |
| 92.5         | 0.595             | 0.727    | 0.793    | 0.793    | 0.925    | 0.991    | 1.255    | 1.520    | 1.718    | 2.446    |
| 95.0         | 0.661             | 0.661    | 0.727    | 0.727    | 0.859    | 1.058    | 1.255    | 1.587    | 1.851    | 2.578    |
| 97.5         | 0.661             | 0.661    | 0.727    | 0.793    | 0.925    | 1.124    | 1.322    | 1.652    | 1.983    | 2.710    |
| 100.0        | 0.727             | 0.661    | 0.727    | 0.793    | 0.859    | 1.058    | 1.388    | 1.718    | 2.049    | 2.710    |
| 102.5        | 0.727             | 0.727    | 0.661    | 0.793    | 0.925    | 1.124    | 1.454    | 1.718    | 2.115    | 2.776    |
| 105.0        | 0.727             | 0.661    | 0.727    | 0.793    | 0.925    | 1.124    | 1.454    | 1.784    | 2.115    | 2.776    |
| 107.5        | 0.727             | 0.727    | 0.727    | 0.793    | 0.925    | 1.124    | 1.454    | 1.784    | 2.115    | 2.776    |
| 110.0        | 0.727             | 0.727    | 0.727    | 0.793    | 0.925    | 1.124    | 1.454    | 1.784    | 2.115    | 2.776    |
| 112.5        | 0.727             | 0.727    | 0.727    | 0.793    | 0.859    | 1.124    | 1.454    | 1.851    | 2.115    | 2.776    |
| 115.0        | 0.727             | 0.727    | 0.727    | 0.793    | 0.925    | 1.190    | 1.454    | 1.851    | 2.115    | 2.776    |
| 117.5        | 0.727             | 0.727    | 0.661    | 0.727    | 0.859    | 1.190    | 1.454    | 1.784    | 2.115    | 2.710    |
| 120.0        | 0.727             | 0.727    | 0.727    | 0.793    | 0.925    | 1.124    | 1.388    | 1.784    | 2.115    | 2.643    |
| 122.5        | 0.793             | 0.727    | 0.727    | 0.793    | 0.925    | 1.124    | 1.388    | 1.784    | 2.181    | 2.710    |
| 125.0        | 0.859             | 0.793    | 0.793    | 0.793    | 0.925    | 1.124    | 1.520    | 1.851    | 2.181    | 2.710    |
| 127.5        | 0.859             | 0.859    | 0.859    | 0.859    | 0.991    | 1.190    | 1.520    | 1.917    | 2.247    | 2.710    |
| 130.0        | 0.925             | 0.925    | 0.925    | 0.925    | 1.058    | 1.255    | 1.652    | 2.049    | 2.379    | 2.842    |

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**CANDELA TABULATION - (Cont.)**

|              |        |        |        |        |        |        |        |        |        |        |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>132.5</b> | 1.058  | 0.991  | 0.991  | 1.058  | 1.124  | 1.388  | 1.718  | 2.181  | 2.512  | 2.974  |
| <b>135.0</b> | 1.058  | 1.124  | 1.124  | 1.190  | 1.255  | 1.520  | 1.851  | 2.247  | 2.578  | 3.041  |
| <b>137.5</b> | 1.190  | 1.190  | 1.190  | 1.255  | 1.388  | 1.587  | 1.983  | 2.313  | 2.643  | 3.106  |
| <b>140.0</b> | 1.388  | 1.322  | 1.388  | 1.520  | 1.652  | 1.917  | 2.115  | 2.512  | 2.842  | 3.305  |
| <b>142.5</b> | 1.587  | 1.587  | 1.652  | 1.718  | 1.917  | 2.181  | 2.446  | 2.776  | 3.106  | 3.635  |
| <b>145.0</b> | 1.917  | 1.983  | 2.049  | 2.181  | 2.379  | 2.578  | 2.908  | 3.172  | 3.503  | 3.900  |
| <b>147.5</b> | 2.379  | 2.512  | 2.578  | 2.710  | 2.842  | 3.106  | 3.371  | 3.701  | 3.900  | 4.230  |
| <b>150.0</b> | 3.238  | 3.437  | 3.371  | 3.569  | 3.635  | 3.900  | 4.097  | 4.429  | 4.693  | 4.693  |
| <b>152.5</b> | 4.494  | 4.560  | 4.560  | 4.957  | 4.891  | 5.089  | 5.288  | 5.552  | 5.684  | 5.618  |
| <b>155.0</b> | 6.609  | 6.477  | 6.676  | 6.676  | 6.939  | 7.138  | 7.204  | 7.468  | 7.468  | 8.592  |
| <b>157.5</b> | 9.187  | 9.055  | 9.187  | 9.187  | 9.385  | 9.518  | 9.518  | 9.385  | 9.518  | 12.095 |
| <b>160.0</b> | 12.161 | 12.095 | 12.227 | 12.095 | 12.293 | 12.095 | 12.161 | 12.227 | 11.897 | 14.474 |
| <b>162.5</b> | 14.937 | 14.805 | 14.937 | 14.805 | 14.805 | 14.805 | 14.540 | 14.144 | 13.946 | 16.061 |
| <b>165.0</b> | 16.325 | 16.325 | 16.391 | 16.325 | 16.325 | 16.193 | 15.928 | 15.532 | 15.135 | 16.722 |
| <b>167.5</b> | 17.052 | 17.118 | 17.118 | 17.052 | 16.986 | 16.788 | 16.589 | 16.193 | 15.730 | 17.118 |
| <b>170.0</b> | 17.449 | 17.449 | 17.449 | 17.382 | 17.316 | 17.052 | 16.788 | 16.523 | 16.061 | 17.118 |
| <b>172.5</b> | 17.382 | 17.449 | 17.449 | 17.382 | 17.185 | 17.052 | 16.853 | 16.523 | 16.193 | 16.457 |
| <b>175.0</b> | 16.986 | 17.052 | 17.118 | 16.986 | 16.853 | 16.722 | 16.523 | 16.325 | 16.061 | 15.069 |
| <b>177.5</b> | 16.127 | 16.259 | 16.325 | 16.259 | 16.193 | 16.061 | 16.061 | 15.862 | 15.730 | 14.343 |
| <b>180.0</b> | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 |

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

|             | <b>100</b> | <b>110</b> | <b>120</b> | <b>130</b> | <b>140</b> | <b>150</b> | <b>160</b> | <b>170</b> | <b>180</b> | <b>190</b> |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <b>0.0</b>  | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    |
| <b>2.5</b>  | 596.359    | 572.698    | 555.315    | 545.666    | 529.737    | 522.401    | 514.073    | 513.346    | 511.694    | 508.521    |
| <b>5.0</b>  | 592.988    | 550.556    | 522.401    | 507.728    | 489.354    | 480.035    | 472.501    | 470.055    | 469.064    | 467.014    |
| <b>7.5</b>  | 597.285    | 535.818    | 498.938    | 478.581    | 465.494    | 452.871    | 447.451    | 442.560    | 442.428    | 440.181    |
| <b>10.0</b> | 606.008    | 525.969    | 483.405    | 461.264    | 445.799    | 432.184    | 426.367    | 421.476    | 421.741    | 419.163    |
| <b>12.5</b> | 618.169    | 522.004    | 471.707    | 446.394    | 427.160    | 414.801    | 408.522    | 403.433    | 403.896    | 401.450    |
| <b>15.0</b> | 631.653    | 521.475    | 462.718    | 433.704    | 415.594    | 399.269    | 393.321    | 387.570    | 388.165    | 385.587    |
| <b>17.5</b> | 646.523    | 523.525    | 455.977    | 423.724    | 403.235    | 385.786    | 379.243    | 373.229    | 373.889    | 371.047    |
| <b>20.0</b> | 662.650    | 527.490    | 450.293    | 415.858    | 392.659    | 373.955    | 366.950    | 361.199    | 362.851    | 359.878    |
| <b>22.5</b> | 679.702    | 534.694    | 446.856    | 408.720    | 383.737    | 364.570    | 356.639    | 351.682    | 354.326    | 352.673    |
| <b>25.0</b> | 698.341    | 544.344    | 446.591    | 404.094    | 376.731    | 357.168    | 348.113    | 344.742    | 347.782    | 344.346    |
| <b>27.5</b> | 715.789    | 555.910    | 448.377    | 401.648    | 371.840    | 352.475    | 341.173    | 338.397    | 340.909    | 340.050    |
| <b>30.0</b> | 734.626    | 566.617    | 451.284    | 400.260    | 367.214    | 347.188    | 335.951    | 332.053    | 335.026    | 333.638    |
| <b>32.5</b> | 756.569    | 578.051    | 455.646    | 399.864    | 364.834    | 342.627    | 331.655    | 326.566    | 330.136    | 328.483    |
| <b>35.0</b> | 779.173    | 590.609    | 459.810    | 400.062    | 363.711    | 342.363    | 328.813    | 323.658    | 326.369    | 322.403    |
| <b>37.5</b> | 803.693    | 604.554    | 466.486    | 400.393    | 364.108    | 341.635    | 327.360    | 321.676    | 322.865    | 310.373    |
| <b>40.0</b> | 823.059    | 618.169    | 474.153    | 403.433    | 366.421    | 341.702    | 326.369    | 319.032    | 318.173    | 299.403    |
| <b>42.5</b> | 848.703    | 629.141    | 480.564    | 406.804    | 368.271    | 342.627    | 324.055    | 316.256    | 304.954    | 298.874    |
| <b>45.0</b> | 870.910    | 641.500    | 487.305    | 412.157    | 371.510    | 342.164    | 322.865    | 313.810    | 304.029    | 276.733    |
| <b>47.5</b> | 888.755    | 652.207    | 492.659    | 416.783    | 372.634    | 342.164    | 320.948    | 306.342    | 270.189    | 254.922    |
| <b>50.0</b> | 902.106    | 661.659    | 496.756    | 419.758    | 372.831    | 340.975    | 285.985    | 251.221    | 230.930    | 200.857    |
| <b>52.5</b> | 812.219    | 638.526    | 499.598    | 420.023    | 371.180    | 305.681    | 259.878    | 246.329    | 218.768    | 196.297    |
| <b>55.0</b> | 798.868    | 575.341    | 469.593    | 416.850    | 358.952    | 271.049    | 253.468    | 240.447    | 206.806    | 211.366    |
| <b>57.5</b> | 804.949    | 575.077    | 420.948    | 396.758    | 289.356    | 261.399    | 246.263    | 234.895    | 200.064    | 201.056    |
| <b>60.0</b> | 806.535    | 569.723    | 413.347    | 327.029    | 275.873    | 250.692    | 238.266    | 227.030    | 198.214    | 199.403    |
| <b>62.5</b> | 805.808    | 559.148    | 395.568    | 255.054    | 254.988    | 237.870    | 227.559    | 215.067    | 180.699    | 204.955    |
| <b>65.0</b> | 802.239    | 543.616    | 370.915    | 235.953    | 208.657    | 218.768    | 210.111    | 198.940    | 165.960    | 167.348    |
| <b>67.5</b> | 756.370    | 514.734    | 283.143    | 210.771    | 182.880    | 192.727    | 184.466    | 177.989    | 153.667    | 149.437    |
| <b>70.0</b> | 624.515    | 401.780    | 228.748    | 179.840    | 155.121    | 140.249    | 118.307    | 112.887    | 105.815    | 106.278    |
| <b>72.5</b> | 587.304    | 347.981    | 161.598    | 136.020    | 118.373    | 86.317     | 93.720     | 89.688     | 73.165     | 75.941     |
| <b>75.0</b> | 452.738    | 225.510    | 116.390    | 84.798     | 62.855     | 62.722     | 64.441     | 61.203     | 49.306     | 50.891     |
| <b>77.5</b> | 309.647    | 113.812    | 61.996     | 43.423     | 37.475     | 37.607     | 27.429     | 26.834     | 21.877     | 22.340     |

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**CANDELA TABULATION - (Cont.)**

|              |         |        |        |        |        |        |        |        |        |        |
|--------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>80.0</b>  | 145.802 | 48.711 | 28.024 | 24.323 | 17.118 | 17.185 | 14.739 | 15.598 | 11.501 | 13.880 |
| <b>82.5</b>  | 23.331  | 13.880 | 12.227 | 9.715  | 9.055  | 7.733  | 7.601  | 6.808  | 6.477  | 7.006  |
| <b>85.0</b>  | 6.213   | 6.279  | 5.883  | 5.948  | 5.684  | 5.552  | 5.420  | 5.023  | 5.089  | 5.155  |
| <b>87.5</b>  | 4.626   | 4.759  | 4.626  | 4.693  | 4.759  | 4.560  | 4.429  | 4.296  | 4.230  | 4.296  |
| <b>90.0</b>  | 2.512   | 2.776  | 3.041  | 2.974  | 3.106  | 2.974  | 2.908  | 2.710  | 2.643  | 2.710  |
| <b>92.5</b>  | 2.643   | 2.643  | 2.643  | 2.512  | 2.379  | 2.181  | 1.851  | 1.718  | 1.652  | 1.718  |
| <b>95.0</b>  | 2.776   | 2.842  | 2.776  | 2.710  | 2.512  | 2.313  | 2.049  | 1.917  | 1.851  | 1.917  |
| <b>97.5</b>  | 2.908   | 3.041  | 2.974  | 2.842  | 2.710  | 2.512  | 2.247  | 2.115  | 1.983  | 2.049  |
| <b>100.0</b> | 2.974   | 3.106  | 3.172  | 3.041  | 2.842  | 2.643  | 2.313  | 2.247  | 2.181  | 2.181  |
| <b>102.5</b> | 3.041   | 3.172  | 3.238  | 3.106  | 2.974  | 2.842  | 2.512  | 2.379  | 2.313  | 2.379  |
| <b>105.0</b> | 3.041   | 3.238  | 3.238  | 3.238  | 3.041  | 2.908  | 2.643  | 2.512  | 2.446  | 2.512  |
| <b>107.5</b> | 3.041   | 3.238  | 3.305  | 3.238  | 3.106  | 2.908  | 2.710  | 2.578  | 2.578  | 2.578  |
| <b>110.0</b> | 3.041   | 3.238  | 3.305  | 3.305  | 3.106  | 2.974  | 2.776  | 2.710  | 2.710  | 2.710  |
| <b>112.5</b> | 3.041   | 3.238  | 3.305  | 3.238  | 3.106  | 2.974  | 2.776  | 2.776  | 2.776  | 2.776  |
| <b>115.0</b> | 2.974   | 3.172  | 3.238  | 3.238  | 3.106  | 2.908  | 2.776  | 2.776  | 2.776  | 2.776  |
| <b>117.5</b> | 2.974   | 3.172  | 3.238  | 3.172  | 3.041  | 2.908  | 2.776  | 2.710  | 2.776  | 2.776  |
| <b>120.0</b> | 2.908   | 3.106  | 3.172  | 3.106  | 3.041  | 2.842  | 2.710  | 2.710  | 2.710  | 2.710  |
| <b>122.5</b> | 2.908   | 3.106  | 3.172  | 3.106  | 3.041  | 2.908  | 2.776  | 2.710  | 2.776  | 2.776  |
| <b>125.0</b> | 2.974   | 3.172  | 3.172  | 3.172  | 3.106  | 2.974  | 2.908  | 2.842  | 2.842  | 2.842  |
| <b>127.5</b> | 3.041   | 3.238  | 3.305  | 3.305  | 3.238  | 3.172  | 3.041  | 2.974  | 2.974  | 3.041  |
| <b>130.0</b> | 3.172   | 3.437  | 3.503  | 3.503  | 3.503  | 3.371  | 3.238  | 3.172  | 3.238  | 3.238  |
| <b>132.5</b> | 3.238   | 3.569  | 3.701  | 3.701  | 3.701  | 3.635  | 3.569  | 3.503  | 3.569  | 3.569  |
| <b>135.0</b> | 3.371   | 3.635  | 3.834  | 3.900  | 3.966  | 3.966  | 3.966  | 3.900  | 3.900  | 3.900  |
| <b>137.5</b> | 3.503   | 3.701  | 3.966  | 4.031  | 4.230  | 4.230  | 4.230  | 4.230  | 4.230  | 4.230  |
| <b>140.0</b> | 3.701   | 3.966  | 4.164  | 4.362  | 4.429  | 4.560  | 4.626  | 4.626  | 4.626  | 4.626  |
| <b>142.5</b> | 3.900   | 4.164  | 4.362  | 4.560  | 4.759  | 4.891  | 4.891  | 4.891  | 4.957  | 5.023  |
| <b>145.0</b> | 4.164   | 4.429  | 4.693  | 4.891  | 5.023  | 5.155  | 5.221  | 5.288  | 5.420  | 5.485  |
| <b>147.5</b> | 4.560   | 4.759  | 4.957  | 5.221  | 5.420  | 5.485  | 5.618  | 5.750  | 5.817  | 5.817  |
| <b>150.0</b> | 4.957   | 5.221  | 5.420  | 5.684  | 5.817  | 6.014  | 6.080  | 6.213  | 6.345  | 6.279  |
| <b>152.5</b> | 5.684   | 6.080  | 6.147  | 6.477  | 6.411  | 6.676  | 6.676  | 6.939  | 7.006  | 6.939  |
| <b>155.0</b> | 8.262   | 8.526  | 8.327  | 8.659  | 8.592  | 8.790  | 8.725  | 8.592  | 8.856  | 8.790  |
| <b>157.5</b> | 11.501  | 11.236 | 10.972 | 10.972 | 10.905 | 10.972 | 10.972 | 10.972 | 11.104 | 11.038 |
| <b>160.0</b> | 13.483  | 13.285 | 12.822 | 12.492 | 12.492 | 12.426 | 12.426 | 12.360 | 12.492 | 12.492 |
| <b>162.5</b> | 15.334  | 14.739 | 14.276 | 13.880 | 13.747 | 13.549 | 13.417 | 13.219 | 13.020 | 13.417 |
| <b>165.0</b> | 16.127  | 15.598 | 15.069 | 14.673 | 14.343 | 14.144 | 13.880 | 13.549 | 13.152 | 13.549 |
| <b>167.5</b> | 16.523  | 16.061 | 15.598 | 15.202 | 14.937 | 14.540 | 14.078 | 13.747 | 13.417 | 13.747 |
| <b>170.0</b> | 16.656  | 16.193 | 15.730 | 15.268 | 14.805 | 14.276 | 13.946 | 13.615 | 13.483 | 13.615 |
| <b>172.5</b> | 16.127  | 15.598 | 15.003 | 14.540 | 14.011 | 13.615 | 13.285 | 13.086 | 13.152 | 13.285 |
| <b>175.0</b> | 14.606  | 14.343 | 14.011 | 13.615 | 13.417 | 13.285 | 13.086 | 12.955 | 13.020 | 13.152 |
| <b>177.5</b> | 14.144  | 13.946 | 13.747 | 13.681 | 13.483 | 13.483 | 13.417 | 13.351 | 13.285 | 13.351 |
| <b>180.0</b> | 14.594  | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 |

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

|             | <u>200</u> | <u>210</u> | <u>220</u> | <u>230</u> | <u>240</u> | <u>250</u> | <u>260</u> | <u>270</u> | <u>280</u> | <u>290</u> |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| <b>0.0</b>  | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    |
| <b>2.5</b>  | 515.858    | 515.593    | 522.863    | 527.423    | 542.427    | 554.389    | 570.715    | 601.316    | 625.176    | 643.285    |
| <b>5.0</b>  | 471.575    | 473.360    | 479.374    | 488.296    | 504.291    | 524.714    | 556.175    | 608.917    | 657.826    | 697.349    |
| <b>7.5</b>  | 443.155    | 446.129    | 452.607    | 464.701    | 479.374    | 504.357    | 551.680    | 626.960    | 698.407    | 750.620    |
| <b>10.0</b> | 421.079    | 425.178    | 432.844    | 447.649    | 461.463    | 490.478    | 551.019    | 650.225    | 740.509    | 797.877    |
| <b>12.5</b> | 402.772    | 407.332    | 415.858    | 434.034    | 448.377    | 482.679    | 556.571    | 676.001    | 780.891    | 847.116    |
| <b>15.0</b> | 386.711    | 391.206    | 401.185    | 421.146    | 438.727    | 478.713    | 563.973    | 701.117    | 819.159    | 893.778    |
| <b>17.5</b> | 372.435    | 377.260    | 388.761    | 411.364    | 431.325    | 476.268    | 574.548    | 725.967    | 857.030    | 937.399    |
| <b>20.0</b> | 360.142    | 365.826    | 378.515    | 403.367    | 425.641    | 478.911    | 587.106    | 750.554    | 891.597    | 976.196    |
| <b>22.5</b> | 350.493    | 356.639    | 370.321    | 396.427    | 422.336    | 481.291    | 602.175    | 775.406    | 923.256    | 1011.622   |
| <b>25.0</b> | 343.156    | 350.228    | 364.108    | 391.536    | 421.807    | 487.768    | 621.077    | 800.653    | 953.394    | 1042.554   |

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : KH15QC1X37U4KC.IES**

**CANDELA TABULATION - (Cont.)**

|       |         |         |         |         |         |         |         |          |          |          |
|-------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|
| 27.5  | 338.133 | 346.460 | 359.349 | 388.496 | 422.534 | 495.963 | 640.443 | 825.438  | 984.789  | 1070.114 |
| 30.0  | 333.903 | 341.900 | 355.317 | 386.645 | 423.658 | 505.745 | 657.826 | 849.429  | 1006.666 | 1096.024 |
| 32.5  | 328.153 | 332.184 | 353.599 | 384.332 | 426.103 | 516.121 | 681.487 | 873.686  | 1031.979 | 1117.966 |
| 35.0  | 317.909 | 333.638 | 346.527 | 382.878 | 428.813 | 526.829 | 697.416 | 896.951  | 1058.482 | 1137.596 |
| 37.5  | 300.129 | 312.092 | 342.958 | 382.878 | 433.043 | 538.527 | 718.103 | 923.256  | 1083.796 | 1154.714 |
| 40.0  | 303.037 | 295.701 | 343.618 | 369.792 | 439.256 | 549.037 | 743.813 | 947.909  | 1102.633 | 1166.214 |
| 42.5  | 289.819 | 285.787 | 312.422 | 367.280 | 444.344 | 559.479 | 760.865 | 970.843  | 1120.148 | 1169.849 |
| 45.0  | 260.077 | 284.399 | 280.566 | 361.861 | 450.491 | 570.186 | 781.618 | 993.182  | 1135.415 | 1170.577 |
| 47.5  | 253.996 | 260.870 | 296.957 | 338.067 | 429.870 | 581.355 | 803.892 | 1012.085 | 1150.616 | 1172.163 |
| 50.0  | 205.352 | 264.505 | 291.008 | 323.130 | 429.011 | 592.592 | 822.596 | 1024.841 | 1156.433 | 1169.981 |
| 52.5  | 196.957 | 210.837 | 276.071 | 317.578 | 431.325 | 597.945 | 809.311 | 936.408  | 1077.848 | 1137.662 |
| 55.0  | 198.412 | 181.888 | 285.324 | 311.167 | 416.783 | 538.065 | 718.103 | 886.442  | 984.127  | 985.780  |
| 57.5  | 186.978 | 197.289 | 203.633 | 322.799 | 340.181 | 493.055 | 725.174 | 893.051  | 977.122  | 956.765  |
| 60.0  | 213.018 | 199.007 | 215.729 | 263.382 | 339.058 | 483.471 | 730.066 | 896.819  | 963.573  | 938.193  |
| 62.5  | 205.418 | 215.001 | 186.317 | 173.891 | 314.075 | 470.055 | 728.545 | 897.281  | 947.116  | 905.874  |
| 65.0  | 197.486 | 201.452 | 165.960 | 176.866 | 281.425 | 448.442 | 719.358 | 881.882  | 917.439  | 856.304  |
| 67.5  | 176.998 | 170.917 | 126.039 | 154.262 | 213.878 | 398.079 | 696.424 | 810.170  | 821.671  | 766.087  |
| 70.0  | 113.482 | 142.960 | 118.902 | 139.390 | 174.883 | 321.081 | 543.353 | 681.156  | 645.400  | 555.910  |
| 72.5  | 90.085  | 76.932  | 93.192  | 95.438  | 111.036 | 255.119 | 514.470 | 628.216  | 555.777  | 429.870  |
| 75.0  | 62.987  | 56.642  | 59.021  | 63.317  | 85.261  | 152.742 | 396.824 | 419.428  | 360.604  | 234.102  |
| 77.5  | 28.486  | 36.681  | 36.484  | 30.800  | 57.832  | 77.527  | 260.407 | 290.414  | 226.303  | 109.120  |
| 80.0  | 15.202  | 17.052  | 16.193  | 17.382  | 24.454  | 34.434  | 117.646 | 107.666  | 87.441   | 36.681   |
| 82.5  | 7.271   | 7.006   | 7.468   | 7.667   | 10.377  | 10.377  | 21.414  | 8.725    | 7.865    | 5.948    |
| 85.0  | 5.354   | 5.089   | 5.023   | 5.023   | 5.288   | 5.618   | 6.213   | 5.288    | 4.693    | 4.164    |
| 87.5  | 4.429   | 4.296   | 4.164   | 4.097   | 4.031   | 4.296   | 4.494   | 3.569    | 2.842    | 2.115    |
| 90.0  | 2.908   | 2.710   | 2.643   | 2.446   | 2.446   | 2.379   | 2.247   | 1.917    | 1.718    | 1.454    |
| 92.5  | 1.851   | 1.983   | 2.049   | 2.181   | 2.313   | 2.379   | 2.313   | 2.049    | 1.851    | 1.587    |
| 95.0  | 1.983   | 2.115   | 2.247   | 2.313   | 2.512   | 2.512   | 2.512   | 2.181    | 1.983    | 1.652    |
| 97.5  | 2.181   | 2.247   | 2.379   | 2.512   | 2.643   | 2.710   | 2.643   | 2.247    | 2.049    | 1.718    |
| 100.0 | 2.313   | 2.446   | 2.512   | 2.643   | 2.776   | 2.842   | 2.710   | 2.379    | 2.049    | 1.718    |
| 102.5 | 2.446   | 2.512   | 2.710   | 2.776   | 2.908   | 2.974   | 2.842   | 2.379    | 2.115    | 1.851    |
| 105.0 | 2.512   | 2.643   | 2.776   | 2.908   | 3.041   | 3.041   | 2.908   | 2.446    | 2.181    | 1.851    |
| 107.5 | 2.643   | 2.776   | 2.842   | 2.908   | 3.041   | 3.106   | 2.974   | 2.379    | 2.181    | 1.917    |
| 110.0 | 2.710   | 2.776   | 2.908   | 3.041   | 3.106   | 3.172   | 3.041   | 2.446    | 2.247    | 1.917    |
| 112.5 | 2.776   | 2.842   | 2.908   | 3.041   | 3.172   | 3.172   | 3.041   | 2.512    | 2.247    | 1.917    |
| 115.0 | 2.776   | 2.842   | 2.974   | 3.106   | 3.172   | 3.172   | 3.041   | 2.512    | 2.247    | 1.917    |
| 117.5 | 2.776   | 2.842   | 2.908   | 3.041   | 3.172   | 3.172   | 2.974   | 2.512    | 2.313    | 1.983    |
| 120.0 | 2.710   | 2.842   | 2.974   | 3.041   | 3.106   | 3.106   | 2.908   | 2.578    | 2.313    | 1.983    |
| 122.5 | 2.842   | 2.908   | 2.974   | 3.041   | 3.106   | 3.106   | 2.974   | 2.643    | 2.313    | 1.983    |
| 125.0 | 2.908   | 2.974   | 3.041   | 3.172   | 3.172   | 3.172   | 3.041   | 2.710    | 2.379    | 2.049    |
| 127.5 | 3.106   | 3.106   | 3.238   | 3.238   | 3.305   | 3.238   | 3.041   | 2.908    | 2.512    | 2.115    |
| 130.0 | 3.305   | 3.371   | 3.437   | 3.437   | 3.437   | 3.371   | 3.172   | 2.908    | 2.578    | 2.181    |
| 132.5 | 3.569   | 3.635   | 3.635   | 3.635   | 3.635   | 3.503   | 3.305   | 3.041    | 2.643    | 2.247    |
| 135.0 | 3.900   | 3.966   | 3.966   | 3.900   | 3.834   | 3.635   | 3.437   | 3.106    | 2.710    | 2.313    |
| 137.5 | 4.230   | 4.230   | 4.230   | 4.164   | 3.966   | 3.834   | 3.635   | 3.238    | 2.842    | 2.446    |
| 140.0 | 4.560   | 4.560   | 4.494   | 4.429   | 4.296   | 4.097   | 3.834   | 3.371    | 3.041    | 2.643    |
| 142.5 | 4.957   | 4.891   | 4.825   | 4.759   | 4.560   | 4.296   | 4.097   | 3.635    | 3.305    | 2.908    |
| 145.0 | 5.354   | 5.288   | 5.155   | 5.023   | 4.825   | 4.626   | 4.362   | 3.966    | 3.569    | 3.305    |
| 147.5 | 5.750   | 5.750   | 5.552   | 5.485   | 5.221   | 5.023   | 4.825   | 4.362    | 4.031    | 3.701    |
| 150.0 | 6.279   | 6.213   | 6.080   | 5.948   | 5.750   | 5.485   | 5.288   | 4.957    | 4.626    | 4.429    |
| 152.5 | 7.006   | 6.873   | 6.873   | 6.742   | 6.676   | 6.477   | 6.477   | 5.883    | 5.618    | 5.420    |
| 155.0 | 8.922   | 8.856   | 9.055   | 8.922   | 9.187   | 9.121   | 9.584   | 7.336    | 7.138    | 7.138    |
| 157.5 | 11.169  | 11.169  | 11.434  | 11.567  | 11.897  | 11.963  | 12.557  | 8.856    | 8.922    | 8.922    |
| 160.0 | 12.492  | 12.690  | 12.822  | 13.086  | 13.483  | 14.011  | 14.540  | 11.169   | 11.236   | 11.302   |
| 162.5 | 13.615  | 13.814  | 14.078  | 14.474  | 14.871  | 15.466  | 16.061  | 12.888   | 13.351   | 13.615   |
| 165.0 | 14.078  | 14.474  | 14.805  | 15.202  | 15.532  | 16.193  | 16.788  | 14.011   | 14.474   | 14.937   |

**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : KH15QC1X37U4KC.IES**

**CANDELA TABULATION - (Cont.)**

|              |        |        |        |        |        |        |        |        |        |        |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>167.5</b> | 14.144 | 14.739 | 15.202 | 15.664 | 16.127 | 16.656 | 17.185 | 14.673 | 15.069 | 15.466 |
| <b>170.0</b> | 13.814 | 14.474 | 15.202 | 15.730 | 16.325 | 16.722 | 17.250 | 14.937 | 15.334 | 15.730 |
| <b>172.5</b> | 13.417 | 13.681 | 14.276 | 14.871 | 15.532 | 15.994 | 16.523 | 15.069 | 15.466 | 15.797 |
| <b>175.0</b> | 13.285 | 13.351 | 13.615 | 14.011 | 14.409 | 14.805 | 15.202 | 15.003 | 15.268 | 15.598 |
| <b>177.5</b> | 13.483 | 13.681 | 13.814 | 13.946 | 14.144 | 14.474 | 14.673 | 14.673 | 14.871 | 15.069 |
| <b>180.0</b> | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 |

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

|              | <b>300</b> | <b>310</b> | <b>320</b> | <b>330</b> | <b>340</b> | <b>350</b> | <b>360</b> |
|--------------|------------|------------|------------|------------|------------|------------|------------|
| <b>0.0</b>   | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    | 600.721    |
| <b>2.5</b>   | 663.906    | 690.211    | 699.001    | 717.706    | 723.456    | 737.798    | 721.341    |
| <b>5.0</b>   | 736.609    | 774.744    | 795.630    | 821.671    | 842.820    | 852.470    | 834.427    |
| <b>7.5</b>   | 799.463    | 847.844    | 868.795    | 898.999    | 915.325    | 932.972    | 913.012    |
| <b>10.0</b>  | 856.105    | 901.776    | 926.957    | 960.003    | 977.188    | 995.495    | 973.619    |
| <b>12.5</b>  | 908.913    | 954.981    | 977.783    | 1014.663   | 1031.384   | 1048.965   | 1025.106   |
| <b>15.0</b>  | 958.219    | 1002.567   | 1023.387   | 1062.911   | 1075.601   | 1092.388   | 1067.207   |
| <b>17.5</b>  | 1003.757   | 1044.206   | 1064.431   | 1103.558   | 1112.151   | 1130.458   | 1103.227   |
| <b>20.0</b>  | 1043.677   | 1073.882   | 1098.866   | 1137.596   | 1145.527   | 1158.746   | 1135.415   |
| <b>22.5</b>  | 1077.121   | 1105.541   | 1126.294   | 1163.637   | 1174.939   | 1193.180   | 1165.488   |
| <b>25.0</b>  | 1105.078   | 1133.498   | 1150.484   | 1179.169   | 1193.577   | 1212.281   | 1188.554   |
| <b>27.5</b>  | 1131.780   | 1152.732   | 1171.039   | 1190.867   | 1207.589   | 1238.190   | 1220.543   |
| <b>30.0</b>  | 1155.045   | 1167.735   | 1182.011   | 1197.278   | 1220.213   | 1249.425   | 1253.589   |
| <b>32.5</b>  | 1172.163   | 1177.648   | 1184.853   | 1195.560   | 1211.686   | 1247.509   | 1244.337   |
| <b>35.0</b>  | 1180.028   | 1185.712   | 1185.712   | 1186.770   | 1194.568   | 1226.293   | 1205.870   |
| <b>37.5</b>  | 1188.950   | 1189.942   | 1182.737   | 1172.559   | 1179.565   | 1209.440   | 1169.453   |
| <b>40.0</b>  | 1196.551   | 1189.347   | 1182.474   | 1157.688   | 1171.105   | 1204.218   | 1156.763   |
| <b>42.5</b>  | 1198.138   | 1186.373   | 1175.468   | 1150.815   | 1170.114   | 1207.060   | 1150.947   |
| <b>45.0</b>  | 1194.767   | 1180.491   | 1172.956   | 1155.111   | 1172.757   | 1209.770   | 1158.217   |
| <b>47.5</b>  | 1187.826   | 1177.912   | 1175.137   | 1166.809   | 1191.594   | 1220.411   | 1166.280   |
| <b>50.0</b>  | 1183.795   | 1184.456   | 1184.390   | 1193.510   | 1201.905   | 1156.763   | 1086.770   |
| <b>52.5</b>  | 1171.701   | 1195.493   | 1206.069   | 1209.440   | 1093.313   | 1034.953   | 977.783    |
| <b>55.0</b>  | 1116.248   | 1212.479   | 1237.331   | 1113.274   | 1035.614   | 1080.756   | 1029.930   |
| <b>57.5</b>  | 972.033    | 1203.227   | 1182.208   | 1067.801   | 1059.078   | 1023.982   | 951.147    |
| <b>60.0</b>  | 954.848    | 1058.350   | 1071.833   | 1051.147   | 991.927    | 923.586    | 859.146    |
| <b>62.5</b>  | 931.848    | 940.506    | 942.225    | 972.628    | 876.726    | 765.095    | 671.507    |
| <b>65.0</b>  | 880.163    | 761.856    | 760.336    | 831.518    | 638.923    | 472.236    | 371.443    |
| <b>67.5</b>  | 732.049    | 643.483    | 630.728    | 572.235    | 307.664    | 153.005    | 98.942     |
| <b>70.0</b>  | 465.693    | 504.423    | 461.925    | 229.410    | 87.640     | 62.392     | 46.001     |
| <b>72.5</b>  | 303.699    | 309.647    | 232.318    | 83.278     | 40.185     | 32.980     | 22.802     |
| <b>75.0</b>  | 192.397    | 163.779    | 78.783     | 31.130     | 20.291     | 12.557     | 9.253      |
| <b>77.5</b>  | 85.062     | 56.840     | 29.874     | 9.650      | 6.014      | 5.750      | 5.420      |
| <b>80.0</b>  | 22.604     | 14.144     | 8.130      | 4.230      | 4.031      | 3.701      | 3.569      |
| <b>82.5</b>  | 4.825      | 3.900      | 3.437      | 2.974      | 2.776      | 2.578      | 2.446      |
| <b>85.0</b>  | 3.305      | 2.710      | 2.181      | 1.784      | 1.652      | 1.587      | 1.454      |
| <b>87.5</b>  | 1.520      | 1.124      | 0.859      | 0.727      | 0.727      | 0.661      | 0.661      |
| <b>90.0</b>  | 1.190      | 0.991      | 0.793      | 0.727      | 0.727      | 0.661      | 0.661      |
| <b>92.5</b>  | 1.255      | 0.991      | 0.793      | 0.727      | 0.661      | 0.661      | 0.595      |
| <b>95.0</b>  | 1.322      | 1.058      | 0.859      | 0.727      | 0.661      | 0.661      | 0.661      |
| <b>97.5</b>  | 1.388      | 1.058      | 0.859      | 0.727      | 0.661      | 0.661      | 0.661      |
| <b>100.0</b> | 1.454      | 1.058      | 0.859      | 0.727      | 0.661      | 0.661      | 0.727      |
| <b>102.5</b> | 1.454      | 1.190      | 0.859      | 0.793      | 0.727      | 0.661      | 0.727      |
| <b>105.0</b> | 1.520      | 1.190      | 0.991      | 0.859      | 0.793      | 0.727      | 0.727      |
| <b>107.5</b> | 1.520      | 1.190      | 0.991      | 0.859      | 0.727      | 0.727      | 0.727      |
| <b>110.0</b> | 1.520      | 1.255      | 0.991      | 0.859      | 0.793      | 0.793      | 0.727      |
| <b>112.5</b> | 1.587      | 1.255      | 1.058      | 0.925      | 0.793      | 0.793      | 0.727      |

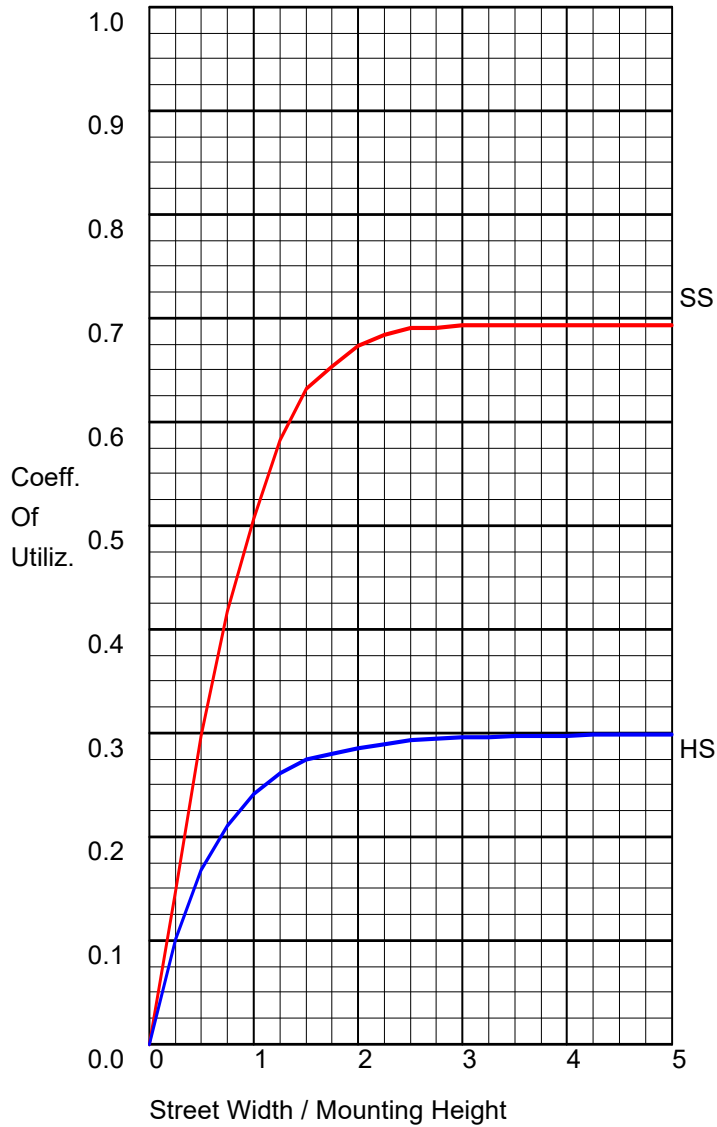
**IES ROAD REPORT**  
**PHOTOMETRIC FILENAME : KH15QC1X37U4KC.IES**

**CANDELA TABULATION - (Cont.)**

|              |        |        |        |        |        |        |        |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| <b>115.0</b> | 1.587  | 1.255  | 1.058  | 0.925  | 0.793  | 0.793  | 0.727  |
| <b>117.5</b> | 1.587  | 1.322  | 1.058  | 0.925  | 0.859  | 0.793  | 0.727  |
| <b>120.0</b> | 1.587  | 1.255  | 1.058  | 0.925  | 0.859  | 0.793  | 0.727  |
| <b>122.5</b> | 1.587  | 1.322  | 1.058  | 0.991  | 0.925  | 0.793  | 0.793  |
| <b>125.0</b> | 1.652  | 1.322  | 1.124  | 0.991  | 0.925  | 0.859  | 0.859  |
| <b>127.5</b> | 1.718  | 1.388  | 1.190  | 0.991  | 0.925  | 0.925  | 0.859  |
| <b>130.0</b> | 1.784  | 1.454  | 1.190  | 1.124  | 0.991  | 0.991  | 0.925  |
| <b>132.5</b> | 1.851  | 1.587  | 1.322  | 1.255  | 1.124  | 1.058  | 1.058  |
| <b>135.0</b> | 1.983  | 1.652  | 1.454  | 1.322  | 1.190  | 1.124  | 1.058  |
| <b>137.5</b> | 2.115  | 1.784  | 1.587  | 1.388  | 1.322  | 1.255  | 1.190  |
| <b>140.0</b> | 2.313  | 2.049  | 1.784  | 1.587  | 1.520  | 1.388  | 1.388  |
| <b>142.5</b> | 2.643  | 2.313  | 2.049  | 1.784  | 1.652  | 1.587  | 1.587  |
| <b>145.0</b> | 2.974  | 2.643  | 2.379  | 2.115  | 2.115  | 1.983  | 1.917  |
| <b>147.5</b> | 3.371  | 3.172  | 2.842  | 2.710  | 2.578  | 2.512  | 2.379  |
| <b>150.0</b> | 4.097  | 3.834  | 3.569  | 3.437  | 3.371  | 3.371  | 3.238  |
| <b>152.5</b> | 5.288  | 4.957  | 4.759  | 4.693  | 4.560  | 4.560  | 4.494  |
| <b>155.0</b> | 6.873  | 6.676  | 6.676  | 6.609  | 6.609  | 6.742  | 6.609  |
| <b>157.5</b> | 9.055  | 9.187  | 9.121  | 9.055  | 9.121  | 9.055  | 9.187  |
| <b>160.0</b> | 11.632 | 11.632 | 12.029 | 11.963 | 12.161 | 12.029 | 12.161 |
| <b>162.5</b> | 13.946 | 14.210 | 14.606 | 14.606 | 14.805 | 14.739 | 14.937 |
| <b>165.0</b> | 15.268 | 15.598 | 15.862 | 16.061 | 16.259 | 16.259 | 16.325 |
| <b>167.5</b> | 15.862 | 16.259 | 16.457 | 16.656 | 16.853 | 16.986 | 17.052 |
| <b>170.0</b> | 16.127 | 16.457 | 16.656 | 16.986 | 17.118 | 17.316 | 17.449 |
| <b>172.5</b> | 16.127 | 16.523 | 16.722 | 16.920 | 17.185 | 17.250 | 17.382 |
| <b>175.0</b> | 15.862 | 16.061 | 16.325 | 16.457 | 16.722 | 16.853 | 16.986 |
| <b>177.5</b> | 15.202 | 15.399 | 15.532 | 15.664 | 15.862 | 16.061 | 16.127 |
| <b>180.0</b> | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 | 14.594 |



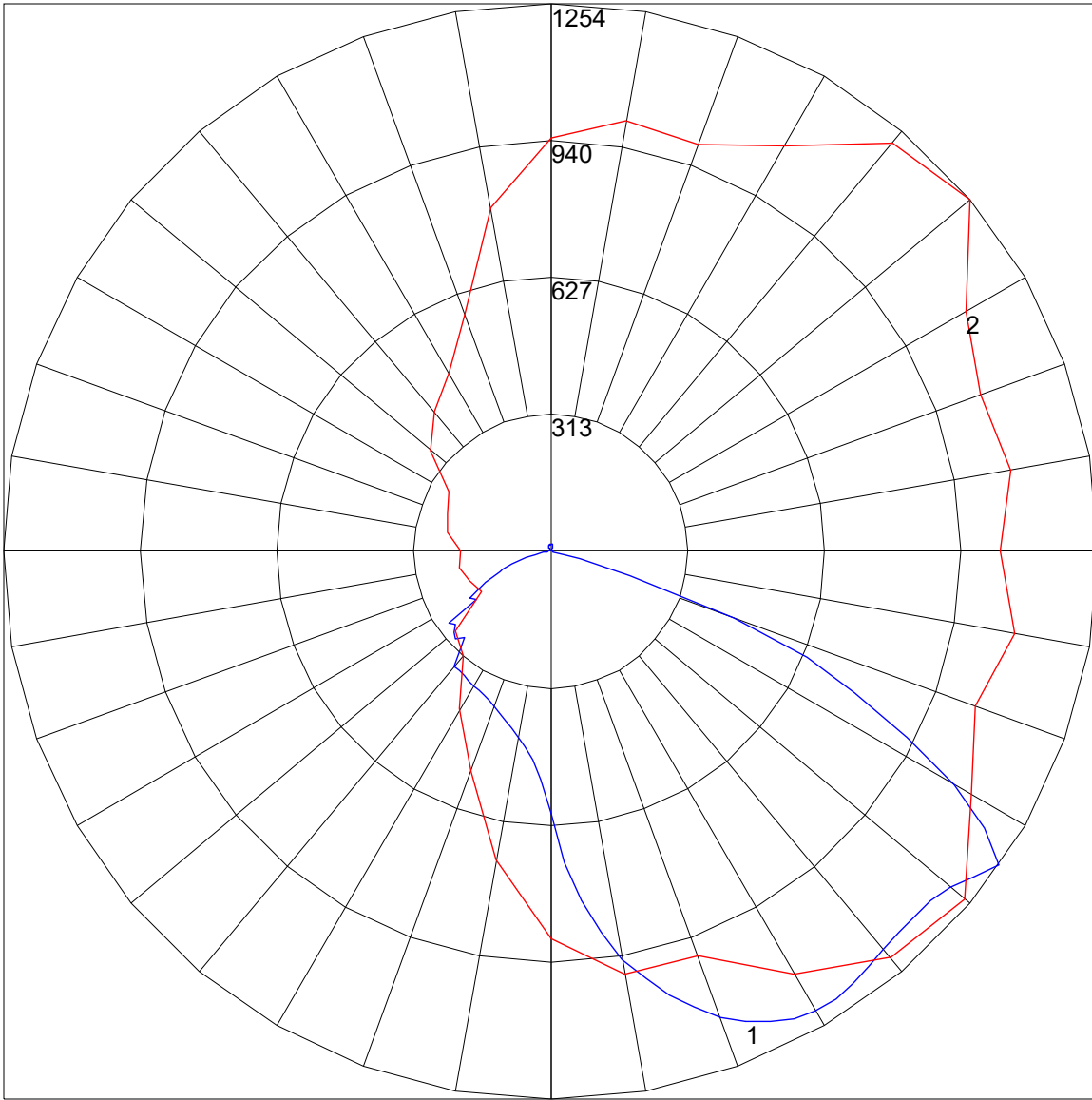
**COEFFICIENTS OF UTILIZATION**



**FLUX DISTRIBUTION**

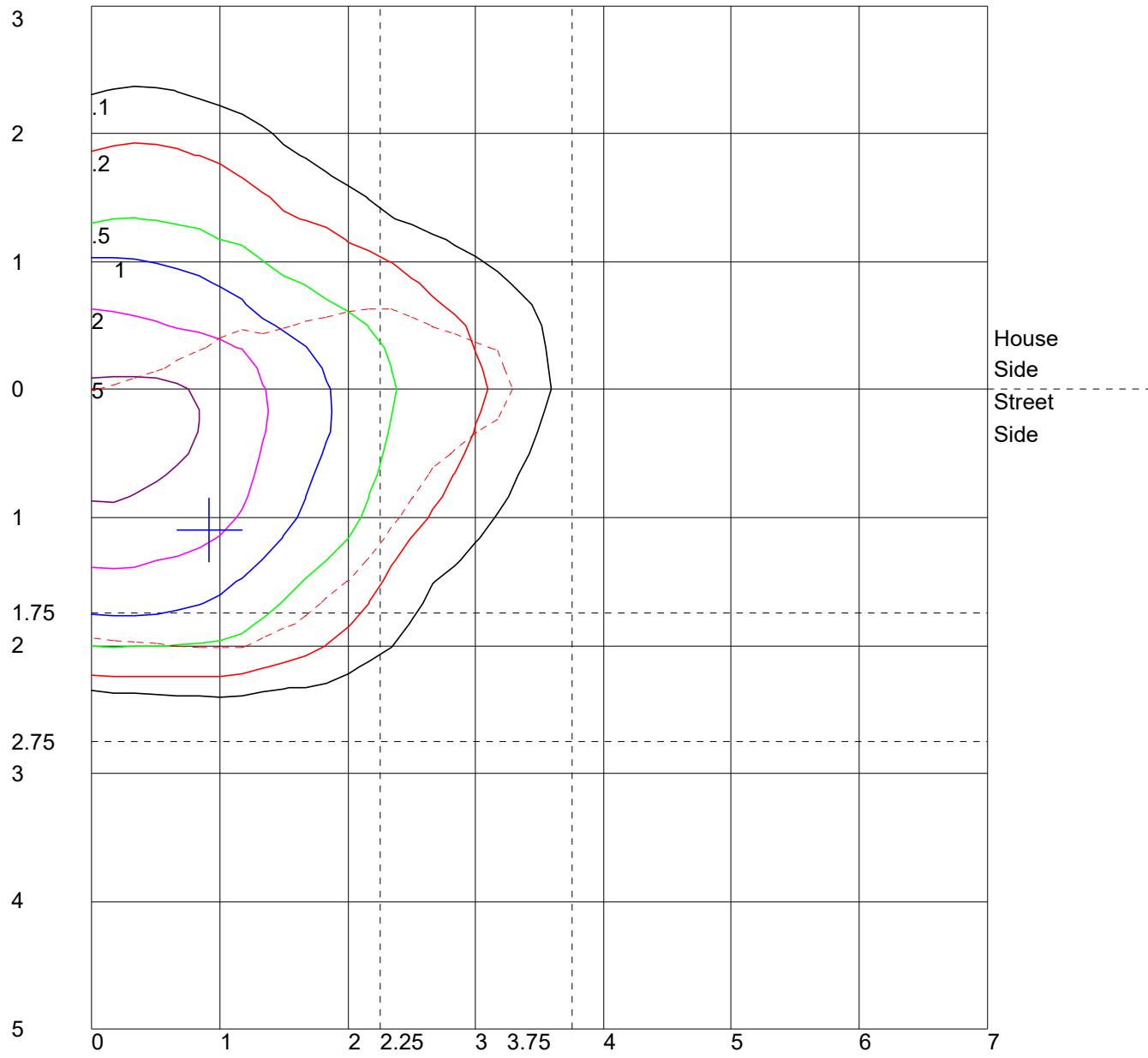
|                      | Lumens        | Percent Of Luminaire |
|----------------------|---------------|----------------------|
| Downward Street Side | 2190.6        | 69.4                 |
| Downward House Side  | 944.3         | 29.9                 |
| Downward Total       | 3134.9        | 99.3                 |
| Upward Street Side   | 8.6           | 0.3                  |
| Upward House Side    | 13.4          | 0.4                  |
| Upward Total         | 22.0          | 0.7                  |
| <b>Total Flux</b>    | <b>3156.9</b> | <b>100.0</b>         |

POLAR GRAPH



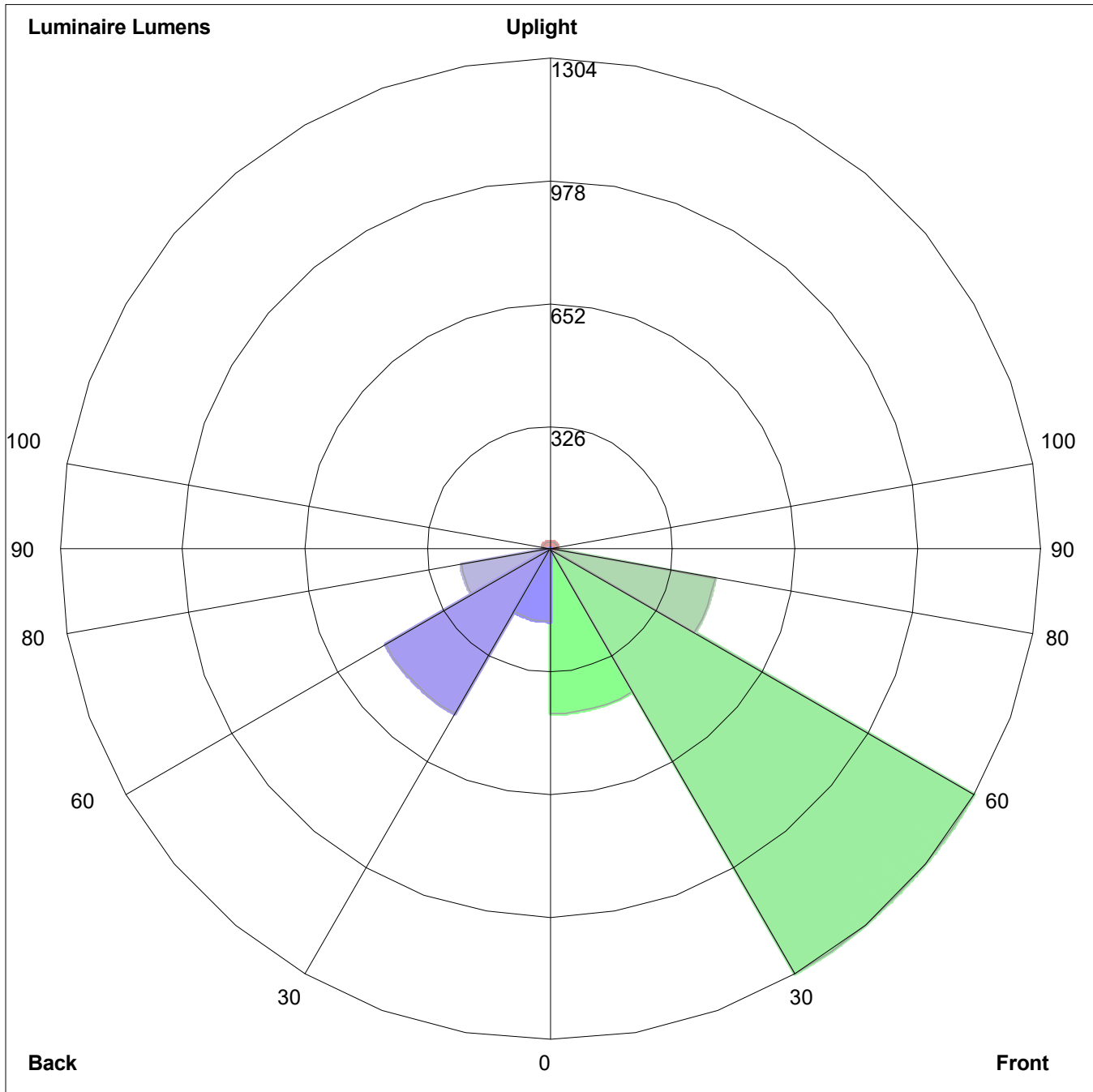
Maximum Candela = 1253.854 Located At Horizontal Angle = 40, Vertical Angle = 55  
# 1 - Vertical Plane Through Horizontal Angles (40 - 220) (Through Max. Cd.)  
# 2 - Horizontal Cone Through Vertical Angle (55) (Through Max. Cd.)

ISOFOOTCANDLE LINES OF HORIZONTAL ILLUMINANCE



Distance In Units Of Mounting Height  
 Values Based On 10 Foot Mounting Height  
 1/2 Maximum Candela Trace Shown As Dashed Curve  
 (+) = Maximum Candela Point

LUMINAIRE CLASSIFICATION SYSTEM (LCS) GRAPH



Luminaire Lumens:  
 Front: Low=438.2, Medium=1304.2, High=445.1, Very High=3.2  
 Back: Low=192.0, Medium=506.3, High=240.4, Very High=5.6  
 Uplight: Low=1.9, High=20.1

BUG Rating : B1-U2-G1