

Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269



Scaled data based on original data using  
LM-79-2024 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P242414

Luminaire Tested: S122RDRP-S675D935-X4F0-XX-UDD-A-W

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-2024  
Report Number: P242414  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1802-639-29)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: NEO-RAY  
Catalog Number: S122RDRP-S675D935-X4F0-XX-UDD-A-W  
Description: DEFINE 2 REGRESSED DIRECT RECESSED WITH ASYMMETRIC FLUSH DIFFUSER  
STANDARD LIGHT ENGINE  
Light Source: (92) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: -

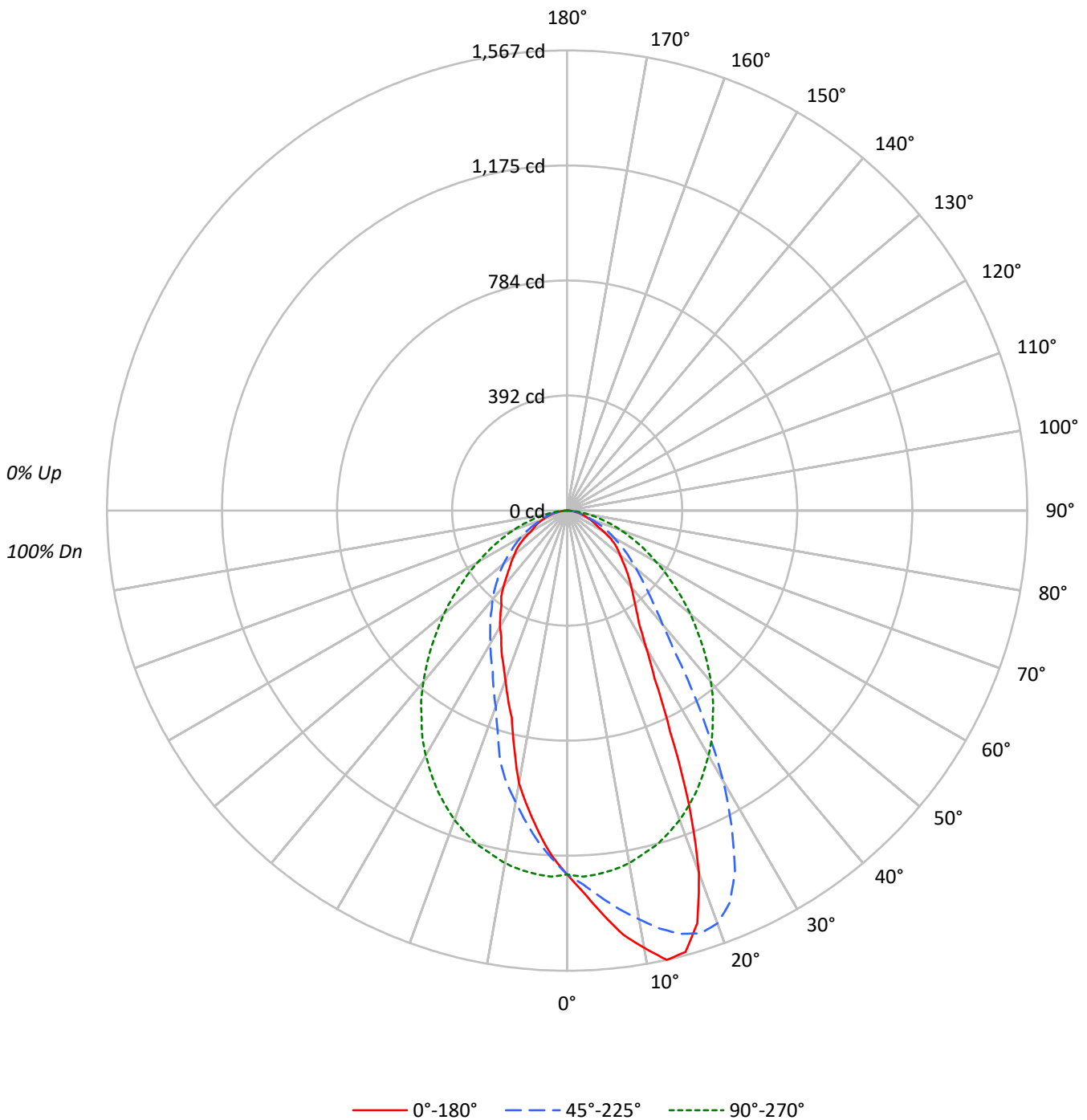
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2141.1 lumens  
Efficiency: N/A  
Efficacy: 81.1 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 1.16 / 1.02  
Luminous Opening: Rectangular (W 3.88' x L: 0.15' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 26.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT

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CATALOG NUMBER: S122RDRP-S675D935-X4F0-XX-UDD-A-W

### Luminous Intensity Polar Plot



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

|     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |     |   |  |   |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|----|----|----|-----|---|--|---|
| RF  | 20  |     |     |     |     | 20  |     |     |     |     | 20  |     |     |     |     | 20  |     |     |    |    | 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  | 50  | 30 | 10 | 50 | 30 | 10  | 0 |  |   |
| RCR |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |    |    |    |     |   |  |   |
| 0   | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |    |    |    |    | 100 |   |  |   |
| 1   | 111 | 106 | 103 | 100 | 108 | 104 | 101 | 98  | 100 | 97  | 95  | 96  | 94  | 92  | 93  | 91  | 89  |     |    |    |    | 87 |     |   |  |   |
| 2   | 102 | 95  | 89  | 84  | 100 | 93  | 88  | 83  | 90  | 85  | 81  | 87  | 83  | 80  | 84  | 81  | 78  |     |    |    |    | 76 |     |   |  |   |
| 3   | 94  | 85  | 78  | 72  | 92  | 84  | 77  | 72  | 81  | 75  | 71  | 78  | 73  | 69  | 76  | 72  | 68  |     |    |    |    | 66 |     |   |  |   |
| 4   | 87  | 77  | 69  | 63  | 85  | 76  | 68  | 63  | 73  | 67  | 62  | 71  | 66  | 61  | 69  | 64  | 60  |     |    |    |    | 59 |     |   |  |   |
| 5   | 81  | 70  | 62  | 56  | 79  | 69  | 61  | 56  | 67  | 60  | 55  | 65  | 59  | 55  | 63  | 58  | 54  |     |    |    |    | 52 |     |   |  |   |
| 6   | 76  | 64  | 56  | 50  | 74  | 63  | 55  | 50  | 61  | 54  | 49  | 60  | 54  | 49  | 58  | 53  | 49  |     |    |    |    | 47 |     |   |  |   |
| 7   | 71  | 59  | 51  | 45  | 69  | 58  | 50  | 45  | 56  | 50  | 45  | 55  | 49  | 44  | 54  | 48  | 44  |     |    |    |    | 42 |     |   |  |   |
| 8   | 66  | 54  | 46  | 41  | 65  | 53  | 46  | 41  | 52  | 45  | 41  | 51  | 45  | 40  | 50  | 44  | 40  |     |    |    |    | 39 |     |   |  |   |
| 9   | 62  | 50  | 43  | 38  | 61  | 50  | 42  | 37  | 49  | 42  | 37  | 47  | 41  | 37  | 47  | 41  | 37  |     |    |    |    | 35 |     |   |  |   |
| 10  | 59  | 47  | 39  | 35  | 58  | 46  | 39  | 35  | 45  | 39  | 34  | 44  | 38  | 34  | 44  | 38  | 34  |     |    |    |    | 33 |     |   |  |   |

**AVERAGE LUMINANCE (cd/sqm):**

|     | 0°    | 45°   | 90°   | 135°  | 180°  |
|-----|-------|-------|-------|-------|-------|
| 0°  | 23600 | 23600 | 23600 | 23600 | 23600 |
| 5°  | 26358 | 25272 | 23750 | 21641 | 21057 |
| 10° | 29244 | 27337 | 23581 | 19502 | 18253 |
| 15° | 30682 | 29426 | 23236 | 17395 | 14382 |
| 20° | 26598 | 30334 | 22725 | 14408 | 12444 |
| 25° | 17444 | 28421 | 22024 | 12612 | 11112 |
| 30° | 11741 | 23398 | 21172 | 11485 | 10056 |
| 35° | 9510  | 17089 | 20102 | 10592 | 9071  |
| 40° | 8457  | 12557 | 18937 | 9774  | 8392  |
| 45° | 7653  | 10438 | 17569 | 9056  | 7491  |
| 50° | 6967  | 9044  | 16215 | 8368  | 6940  |
| 55° | 6549  | 8007  | 14711 | 7562  | 6462  |
| 60° | 5478  | 6971  | 13333 | 6937  | 5413  |
| 65° | 4620  | 6211  | 12106 | 6170  | 5237  |
| 70° | 4266  | 4940  | 10815 | 5441  | 4940  |
| 75° | 3989  | 4467  | 9413  | 5130  | 4563  |
| 80° | 3686  | 4059  | 7744  | 4486  | 4059  |
| 85° | 3387  | 3475  | 6119  | 3584  | 3584  |

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 70°  
 Vertical Angle: 45°  
 Luminance: 25596 cd/sqm



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**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 117.5  | 5.5       |
| 10°-20°   | 328.0  | 15.3      |
| 20°-30°   | 422.2  | 19.7      |
| 30°-40°   | 400.5  | 18.7      |
| 40°-50°   | 343.2  | 16.0      |
| 50°-60°   | 261.4  | 12.2      |
| 60°-70°   | 164.9  | 7.7       |
| 70°-80°   | 82.3   | 3.8       |
| 80°-90°   | 21.2   | 1.0       |
| 90°-100°  | 0.0    | 0.0       |
| 100°-110° | 0.0    | 0.0       |
| 110°-120° | 0.0    | 0.0       |
| 120°-130° | 0.0    | 0.0       |
| 130°-140° | 0.0    | 0.0       |
| 140°-150° | 0.0    | 0.0       |
| 150°-160° | 0.0    | 0.0       |
| 160°-170° | 0.0    | 0.0       |
| 170°-180° | 0.0    | 0.0       |
| 0°-30°    | 867.7  | 40.5      |
| 0°-40°    | 1268.2 | 59.2      |
| 0°-60°    | 1872.8 | 87.5      |
| 0°-90°    | 2141.1 | 100.0     |
| 90°-120°  | 0.0    | 0.0       |
| 90°-150°  | 0.0    | 0.0       |
| 90°-180°  | 0.0    | 0.0       |
| 0°-180°   | 2141.1 | 100.0     |

**CANDELA DISTRIBUTION:**

|     | 0°   | 45°  | 90°  | 135° | 180° | Flux |
|-----|------|------|------|------|------|------|
| 0°  | 1239 | 1239 | 1239 | 1239 | 1239 |      |
| 5°  | 1378 | 1322 | 1242 | 1132 | 1101 | 136  |
| 15° | 1556 | 1492 | 1178 | 882  | 729  | 423  |
| 25° | 830  | 1352 | 1048 | 600  | 529  | 392  |
| 35° | 409  | 735  | 864  | 456  | 390  | 260  |
| 45° | 284  | 388  | 652  | 336  | 278  | 220  |
| 55° | 197  | 241  | 443  | 228  | 195  | 174  |
| 65° | 102  | 138  | 269  | 137  | 116  | 104  |
| 75° | 54   | 61   | 128  | 70   | 62   | 57   |
| 85° | 16   | 16   | 28   | 16   | 16   | 17   |
| 90° | 0    | 0    | 0    | 0    | 0    |      |



TEST NUMBER: P242414

CATALOG NUMBER: S122RDRP-S675D935-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 |
| 2.5°  | 1301.9 | 1303.2 | 1304.5 | 1301.5 | 1301.5 | 1298.9 | 1293.3 | 1289.0 | 1276.9 | 1275.2 | 1275.2 |
| 5°    | 1378.5 | 1377.7 | 1379.4 | 1373.8 | 1366.1 | 1364.3 | 1356.1 | 1345.4 | 1334.2 | 1321.7 | 1319.1 |
| 7.5°  | 1456.0 | 1450.9 | 1448.7 | 1451.3 | 1443.1 | 1431.9 | 1418.1 | 1405.2 | 1385.9 | 1369.9 | 1360.0 |
| 10°   | 1512.0 | 1526.2 | 1517.6 | 1502.5 | 1505.5 | 1485.3 | 1474.5 | 1456.0 | 1440.5 | 1413.4 | 1407.4 |
| 12.5° | 1567.1 | 1570.5 | 1569.3 | 1562.4 | 1556.8 | 1544.3 | 1528.8 | 1513.3 | 1481.4 | 1457.8 | 1432.8 |
| 15°   | 1555.9 | 1564.1 | 1566.2 | 1563.7 | 1565.8 | 1565.0 | 1557.2 | 1543.9 | 1518.9 | 1492.2 | 1468.9 |
| 17.5° | 1473.3 | 1482.7 | 1490.5 | 1497.4 | 1508.1 | 1529.2 | 1535.7 | 1538.3 | 1527.9 | 1509.0 | 1489.6 |
| 20°   | 1312.2 | 1302.8 | 1342.4 | 1362.6 | 1379.8 | 1422.9 | 1459.9 | 1474.1 | 1496.9 | 1496.5 | 1492.2 |
| 22.5° | 1084.1 | 1089.2 | 1126.2 | 1151.2 | 1209.8 | 1252.8 | 1296.3 | 1359.6 | 1409.1 | 1445.7 | 1468.1 |
| 25°   | 830.0  | 846.4  | 883.9  | 916.6  | 972.6  | 1052.6 | 1125.4 | 1209.8 | 1289.4 | 1352.3 | 1412.1 |
| 27.5° | 645.8  | 647.9  | 681.9  | 715.1  | 749.5  | 818.9  | 916.2  | 1017.3 | 1131.0 | 1212.8 | 1316.1 |
| 30°   | 533.8  | 531.3  | 543.8  | 562.3  | 590.7  | 641.5  | 710.4  | 809.4  | 922.6  | 1063.8 | 1189.5 |
| 32.5° | 454.6  | 455.5  | 464.1  | 476.6  | 499.0  | 529.1  | 570.9  | 646.6  | 752.1  | 890.3  | 1043.2 |
| 35°   | 409.0  | 408.6  | 415.5  | 425.4  | 435.3  | 457.2  | 489.5  | 531.7  | 605.3  | 734.9  | 885.6  |
| 37.5° | 371.1  | 373.3  | 376.3  | 382.7  | 394.8  | 407.7  | 427.9  | 457.6  | 513.6  | 594.1  | 729.3  |
| 40°   | 340.1  | 341.0  | 345.7  | 350.9  | 357.3  | 366.8  | 382.7  | 405.6  | 443.9  | 505.0  | 597.6  |
| 42.5° | 311.7  | 312.6  | 315.6  | 320.3  | 325.0  | 334.5  | 347.0  | 365.9  | 395.2  | 439.6  | 511.9  |
| 45°   | 284.1  | 284.1  | 287.2  | 289.3  | 294.9  | 303.5  | 314.3  | 330.6  | 352.2  | 387.5  | 438.3  |
| 47.5° | 257.5  | 257.5  | 259.6  | 263.5  | 267.4  | 274.2  | 285.4  | 299.2  | 314.7  | 343.6  | 388.8  |
| 50°   | 235.1  | 235.5  | 236.8  | 239.8  | 242.0  | 248.0  | 256.2  | 267.8  | 284.1  | 305.2  | 341.4  |
| 52.5° | 217.0  | 216.6  | 218.3  | 219.1  | 220.4  | 224.3  | 229.9  | 239.8  | 254.0  | 271.7  | 300.1  |
| 55°   | 197.2  | 195.5  | 198.0  | 200.2  | 201.5  | 203.2  | 206.7  | 213.1  | 225.6  | 241.1  | 263.5  |
| 57.5° | 173.9  | 173.1  | 174.4  | 176.5  | 180.4  | 184.7  | 186.8  | 191.2  | 197.6  | 209.7  | 233.3  |
| 60°   | 143.8  | 143.8  | 147.7  | 149.0  | 153.7  | 159.7  | 165.8  | 169.2  | 175.7  | 183.0  | 199.3  |
| 62.5° | 117.1  | 117.5  | 118.8  | 120.1  | 122.3  | 130.0  | 139.1  | 147.7  | 153.7  | 160.6  | 170.1  |
| 65°   | 102.5  | 103.3  | 103.3  | 104.2  | 105.9  | 107.6  | 111.1  | 117.1  | 127.9  | 137.8  | 145.9  |
| 67.5° | 89.5   | 89.5   | 90.0   | 90.8   | 91.3   | 93.4   | 94.7   | 97.7   | 99.9   | 111.1  | 122.3  |
| 70°   | 76.6   | 77.9   | 77.5   | 78.4   | 78.8   | 79.6   | 81.4   | 82.7   | 86.5   | 88.7   | 94.7   |
| 72.5° | 64.6   | 65.4   | 65.4   | 65.9   | 67.2   | 67.2   | 68.5   | 69.7   | 71.9   | 73.6   | 76.2   |
| 75°   | 54.2   | 53.8   | 54.2   | 55.1   | 55.5   | 56.0   | 56.0   | 57.7   | 59.0   | 60.7   | 62.9   |
| 77.5° | 43.9   | 44.3   | 44.3   | 44.3   | 44.3   | 45.2   | 45.2   | 46.1   | 47.4   | 48.2   | 49.5   |
| 80°   | 33.6   | 34.0   | 33.6   | 34.0   | 34.4   | 34.9   | 34.4   | 34.9   | 36.2   | 37.0   | 37.0   |
| 82.5° | 24.1   | 24.1   | 24.5   | 24.5   | 24.5   | 24.5   | 25.4   | 25.4   | 26.3   | 25.8   | 26.3   |
| 85°   | 15.5   | 15.1   | 15.1   | 15.1   | 15.5   | 15.9   | 15.5   | 15.5   | 15.9   | 15.9   | 15.9   |
| 87.5° | 6.9    | 7.3    | 7.3    | 7.3    | 7.3    | 7.3    | 7.3    | 7.7    | 7.3    | 7.7    | 7.3    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



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**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    | 100°   | 105°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 |
| 2.5°  | 1276.1 | 1272.6 | 1269.6 | 1261.9 | 1258.0 | 1249.4 | 1248.1 | 1247.7 | 1236.5 | 1225.7 | 1222.7 |
| 5°    | 1312.2 | 1305.3 | 1295.0 | 1283.0 | 1270.5 | 1257.6 | 1248.9 | 1242.1 | 1224.8 | 1208.5 | 1199.0 |
| 7.5°  | 1348.0 | 1335.5 | 1319.1 | 1298.5 | 1280.8 | 1260.1 | 1245.9 | 1233.0 | 1209.3 | 1187.8 | 1173.6 |
| 10°   | 1388.9 | 1364.8 | 1341.1 | 1309.7 | 1285.1 | 1261.0 | 1238.6 | 1219.2 | 1191.7 | 1160.7 | 1138.7 |
| 12.5° | 1414.3 | 1387.1 | 1352.3 | 1321.7 | 1288.1 | 1255.8 | 1224.0 | 1197.7 | 1164.1 | 1131.8 | 1104.7 |
| 15°   | 1436.7 | 1408.2 | 1368.6 | 1324.7 | 1283.8 | 1243.8 | 1209.3 | 1178.3 | 1136.2 | 1097.8 | 1066.0 |
| 17.5° | 1457.3 | 1418.1 | 1377.2 | 1326.4 | 1281.2 | 1232.6 | 1189.1 | 1150.4 | 1104.3 | 1059.1 | 1022.9 |
| 20°   | 1466.4 | 1427.6 | 1378.5 | 1327.7 | 1271.8 | 1211.9 | 1164.1 | 1121.1 | 1070.7 | 1020.3 | 977.3  |
| 22.5° | 1460.8 | 1432.8 | 1376.8 | 1313.5 | 1255.8 | 1192.5 | 1137.0 | 1085.3 | 1028.1 | 976.4  | 924.8  |
| 25°   | 1431.5 | 1421.2 | 1369.5 | 1303.2 | 1237.8 | 1165.0 | 1102.6 | 1047.9 | 984.2  | 929.1  | 874.8  |
| 27.5° | 1377.7 | 1392.7 | 1356.1 | 1284.3 | 1213.6 | 1135.3 | 1067.3 | 1005.7 | 940.7  | 879.1  | 824.9  |
| 30°   | 1292.4 | 1343.7 | 1329.9 | 1264.4 | 1183.1 | 1106.4 | 1027.7 | 962.6  | 892.0  | 828.3  | 774.9  |
| 32.5° | 1175.8 | 1268.8 | 1289.0 | 1236.9 | 1152.1 | 1066.0 | 982.5  | 917.9  | 843.4  | 775.4  | 723.7  |
| 35°   | 1050.5 | 1177.1 | 1235.2 | 1200.3 | 1115.9 | 1025.1 | 939.8  | 864.5  | 790.4  | 724.1  | 672.5  |
| 37.5° | 901.9  | 1070.7 | 1160.3 | 1156.4 | 1075.9 | 983.3  | 890.8  | 816.3  | 740.1  | 674.6  | 620.8  |
| 40°   | 758.2  | 945.0  | 1071.1 | 1099.1 | 1033.7 | 931.7  | 837.8  | 761.6  | 687.5  | 623.8  | 559.7  |
| 42.5° | 629.0  | 815.0  | 977.3  | 1031.1 | 982.5  | 881.3  | 787.0  | 706.5  | 635.0  | 575.6  | 509.7  |
| 45°   | 529.5  | 692.3  | 863.2  | 950.2  | 921.3  | 827.5  | 728.0  | 652.2  | 584.7  | 532.6  | 469.7  |
| 47.5° | 458.5  | 576.9  | 748.7  | 862.3  | 858.9  | 769.8  | 670.8  | 598.0  | 534.3  | 486.1  | 432.7  |
| 50°   | 399.5  | 499.4  | 639.3  | 772.8  | 784.0  | 712.1  | 619.1  | 547.2  | 488.6  | 437.4  | 396.5  |
| 52.5° | 346.6  | 424.5  | 546.8  | 673.3  | 710.4  | 650.5  | 561.0  | 496.0  | 439.6  | 393.5  | 359.9  |
| 55°   | 301.8  | 365.5  | 461.1  | 580.8  | 629.0  | 585.1  | 505.0  | 443.0  | 396.9  | 357.3  | 327.2  |
| 57.5° | 262.6  | 312.6  | 392.2  | 492.5  | 547.2  | 517.5  | 449.0  | 397.8  | 356.9  | 319.9  | 295.8  |
| 60°   | 226.0  | 265.2  | 330.2  | 410.7  | 472.7  | 453.3  | 396.9  | 350.0  | 316.4  | 285.4  | 263.0  |
| 62.5° | 191.6  | 223.9  | 277.3  | 338.8  | 394.4  | 389.2  | 345.7  | 308.3  | 279.8  | 252.3  | 234.2  |
| 65°   | 159.7  | 184.3  | 227.7  | 279.0  | 324.6  | 328.5  | 295.3  | 268.6  | 242.4  | 220.0  | 203.2  |
| 67.5° | 132.2  | 149.0  | 181.7  | 226.9  | 261.8  | 273.8  | 251.4  | 229.9  | 208.4  | 190.3  | 175.2  |
| 70°   | 107.2  | 120.1  | 142.5  | 177.4  | 208.8  | 221.7  | 210.1  | 194.2  | 176.1  | 161.9  | 149.4  |
| 72.5° | 81.8   | 94.3   | 109.4  | 132.6  | 158.4  | 172.6  | 170.5  | 160.2  | 146.4  | 135.2  | 123.6  |
| 75°   | 65.4   | 69.3   | 80.5   | 97.7   | 118.8  | 130.9  | 133.9  | 127.9  | 116.2  | 107.2  | 100.3  |
| 77.5° | 50.8   | 53.4   | 59.4   | 69.7   | 84.4   | 95.1   | 99.9   | 99.0   | 90.4   | 84.4   | 77.9   |
| 80°   | 38.7   | 40.0   | 42.6   | 46.5   | 56.8   | 67.6   | 70.6   | 70.6   | 65.0   | 62.9   | 56.4   |
| 82.5° | 27.1   | 28.0   | 29.3   | 31.0   | 34.4   | 43.5   | 46.9   | 47.8   | 44.8   | 41.8   | 37.0   |
| 85°   | 16.8   | 16.4   | 17.2   | 18.5   | 19.4   | 22.0   | 27.1   | 28.0   | 27.1   | 23.7   | 22.4   |
| 87.5° | 7.3    | 7.7    | 7.7    | 7.3    | 7.7    | 8.2    | 10.3   | 12.5   | 10.8   | 9.5    | 8.6    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



TEST NUMBER: P242414

CATALOG NUMBER: S122RDRP-S675D935-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 110°   | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   | 150°   | 155°   | 160°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 | 1239.0 |
| 2.5°  | 1217.1 | 1214.1 | 1208.5 | 1199.9 | 1194.7 | 1185.7 | 1179.6 | 1183.1 | 1183.9 | 1183.1 | 1182.2 |
| 5°    | 1188.7 | 1179.6 | 1167.1 | 1155.1 | 1143.9 | 1131.8 | 1125.0 | 1121.9 | 1115.9 | 1112.5 | 1110.7 |
| 7.5°  | 1156.4 | 1143.0 | 1125.4 | 1106.0 | 1087.9 | 1070.7 | 1063.0 | 1056.9 | 1045.7 | 1039.7 | 1034.1 |
| 10°   | 1119.4 | 1094.8 | 1077.2 | 1049.6 | 1032.8 | 1008.3 | 991.5  | 991.9  | 975.1  | 965.7  | 958.8  |
| 12.5° | 1078.5 | 1050.9 | 1018.6 | 994.5  | 969.5  | 951.0  | 929.9  | 919.6  | 901.5  | 892.5  | 870.9  |
| 15°   | 1032.4 | 1001.0 | 970.0  | 936.4  | 912.7  | 882.1  | 852.9  | 817.1  | 788.3  | 763.3  | 756.4  |
| 17.5° | 983.3  | 944.6  | 914.0  | 879.6  | 842.5  | 787.0  | 750.8  | 728.9  | 711.7  | 698.7  | 688.4  |
| 20°   | 932.5  | 892.9  | 859.8  | 800.3  | 745.7  | 710.8  | 685.8  | 669.9  | 651.8  | 637.6  | 629.9  |
| 22.5° | 879.1  | 837.4  | 789.1  | 721.1  | 681.5  | 655.3  | 633.7  | 614.8  | 604.0  | 593.7  | 586.8  |
| 25°   | 829.2  | 784.0  | 709.5  | 663.9  | 629.4  | 600.1  | 584.7  | 573.5  | 560.5  | 545.5  | 538.6  |
| 27.5° | 777.1  | 705.2  | 648.8  | 615.6  | 580.3  | 561.8  | 548.5  | 530.0  | 518.3  | 512.8  | 505.0  |
| 30°   | 717.3  | 645.4  | 603.6  | 566.6  | 543.3  | 522.2  | 505.9  | 496.4  | 485.2  | 473.6  | 468.8  |
| 32.5° | 650.5  | 596.7  | 557.1  | 527.8  | 504.1  | 486.9  | 474.9  | 458.1  | 450.8  | 444.7  | 433.5  |
| 35°   | 597.6  | 554.1  | 517.5  | 492.5  | 470.1  | 455.5  | 440.4  | 431.4  | 416.7  | 410.7  | 406.8  |
| 37.5° | 549.3  | 511.5  | 483.9  | 456.4  | 439.1  | 421.9  | 413.3  | 398.2  | 392.6  | 383.2  | 375.4  |
| 40°   | 509.7  | 472.7  | 446.5  | 424.9  | 405.1  | 393.1  | 381.4  | 369.8  | 360.3  | 356.5  | 346.6  |
| 42.5° | 469.3  | 440.9  | 414.6  | 390.5  | 378.9  | 365.9  | 350.4  | 342.7  | 332.8  | 325.9  | 320.7  |
| 45°   | 432.7  | 406.0  | 383.6  | 364.2  | 349.6  | 336.2  | 326.8  | 312.6  | 307.0  | 294.5  | 289.3  |
| 47.5° | 400.4  | 374.6  | 353.0  | 334.1  | 319.4  | 311.7  | 297.9  | 285.4  | 277.7  | 269.1  | 261.8  |
| 50°   | 365.5  | 344.8  | 324.2  | 307.8  | 294.9  | 282.4  | 268.2  | 262.6  | 248.8  | 245.0  | 241.1  |
| 52.5° | 333.7  | 314.3  | 295.8  | 279.8  | 266.9  | 254.9  | 242.8  | 235.1  | 226.9  | 223.0  | 220.4  |
| 55°   | 304.4  | 285.4  | 267.4  | 253.1  | 240.2  | 227.7  | 220.0  | 211.0  | 206.7  | 203.6  | 200.2  |
| 57.5° | 274.2  | 257.0  | 242.8  | 228.2  | 215.3  | 204.9  | 195.5  | 190.3  | 186.0  | 182.5  | 177.8  |
| 60°   | 245.8  | 229.5  | 217.0  | 203.6  | 190.3  | 182.1  | 175.2  | 168.8  | 163.6  | 157.6  | 155.8  |
| 62.5° | 215.7  | 201.9  | 190.7  | 177.8  | 166.6  | 159.3  | 152.8  | 146.8  | 140.4  | 130.9  | 128.3  |
| 65°   | 188.6  | 177.4  | 165.3  | 154.6  | 144.2  | 136.9  | 127.4  | 120.5  | 118.0  | 117.1  | 116.7  |
| 67.5° | 163.6  | 152.8  | 142.5  | 131.3  | 121.8  | 113.7  | 108.1  | 107.2  | 105.5  | 105.0  | 103.8  |
| 70°   | 138.6  | 128.7  | 118.4  | 108.1  | 99.0   | 97.7   | 96.0   | 94.3   | 92.1   | 91.3   | 90.4   |
| 72.5° | 116.2  | 105.9  | 95.6   | 87.8   | 85.2   | 83.5   | 81.8   | 80.1   | 78.8   | 77.9   | 77.5   |
| 75°   | 92.6   | 83.1   | 76.2   | 73.2   | 71.0   | 69.7   | 67.2   | 65.9   | 65.0   | 63.7   | 63.3   |
| 77.5° | 70.6   | 64.6   | 61.1   | 59.4   | 56.8   | 55.5   | 53.8   | 52.5   | 51.2   | 51.2   | 50.4   |
| 80°   | 50.8   | 48.2   | 46.1   | 43.5   | 42.6   | 40.9   | 40.5   | 39.2   | 39.6   | 38.3   | 38.3   |
| 82.5° | 36.6   | 33.2   | 31.4   | 30.6   | 29.7   | 28.4   | 28.0   | 27.6   | 27.6   | 26.7   | 26.7   |
| 85°   | 20.2   | 19.4   | 18.5   | 17.7   | 17.7   | 16.4   | 16.8   | 16.4   | 16.4   | 15.5   | 15.1   |
| 87.5° | 8.2    | 7.7    | 6.9    | 6.9    | 6.9    | 6.5    | 6.5    | 6.0    | 6.0    | 6.0    | 5.6    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P242414

CATALOG NUMBER: S122RDRP-S675D935-X4F0-XX-UDD-A-W

**CANDELA DISTRIBUTION (continued):**

|       | 165°   | 170°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|
| 0°    | 1239.0 | 1239.0 | 1239.0 | 1239.0 |
| 2.5°  | 1177.5 | 1178.3 | 1177.1 | 1177.9 |
| 5°    | 1108.6 | 1103.4 | 1102.6 | 1101.3 |
| 7.5°  | 1027.2 | 1026.8 | 1024.2 | 1021.2 |
| 10°   | 949.3  | 947.2  | 946.7  | 943.7  |
| 12.5° | 858.0  | 841.2  | 839.5  | 830.9  |
| 15°   | 746.1  | 743.5  | 734.9  | 729.3  |
| 17.5° | 683.7  | 675.1  | 672.0  | 670.8  |
| 20°   | 623.8  | 616.1  | 614.8  | 613.9  |
| 22.5° | 582.5  | 574.3  | 570.4  | 567.4  |
| 25°   | 534.3  | 531.3  | 529.5  | 528.7  |
| 27.5° | 496.4  | 488.6  | 487.8  | 485.6  |
| 30°   | 465.0  | 462.8  | 459.8  | 457.2  |
| 32.5° | 427.9  | 426.2  | 423.6  | 422.8  |
| 35°   | 402.5  | 396.5  | 393.9  | 390.1  |
| 37.5° | 374.6  | 371.1  | 366.8  | 368.5  |
| 40°   | 341.0  | 338.8  | 338.0  | 337.5  |
| 42.5° | 314.3  | 307.4  | 304.8  | 304.8  |
| 45°   | 287.2  | 281.6  | 277.7  | 278.1  |
| 47.5° | 257.9  | 258.3  | 255.7  | 256.6  |
| 50°   | 238.1  | 235.5  | 233.8  | 234.2  |
| 52.5° | 219.1  | 217.0  | 215.7  | 217.8  |
| 55°   | 198.0  | 195.5  | 195.0  | 194.6  |
| 57.5° | 175.2  | 173.9  | 171.8  | 170.5  |
| 60°   | 150.3  | 146.8  | 142.5  | 142.1  |
| 62.5° | 127.4  | 127.4  | 127.4  | 127.4  |
| 65°   | 115.8  | 115.4  | 115.8  | 116.2  |
| 67.5° | 103.8  | 102.9  | 102.0  | 102.5  |
| 70°   | 89.5   | 89.1   | 88.7   | 88.7   |
| 72.5° | 75.8   | 75.8   | 75.3   | 74.9   |
| 75°   | 62.9   | 62.0   | 62.0   | 62.0   |
| 77.5° | 50.4   | 49.9   | 49.5   | 49.1   |
| 80°   | 37.9   | 37.5   | 37.0   | 37.0   |
| 82.5° | 26.7   | 26.3   | 26.3   | 25.8   |
| 85°   | 15.5   | 15.9   | 15.5   | 16.4   |
| 87.5° | 5.6    | 5.2    | 5.6    | 5.2    |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    |

TEST NUMBER: P242414  
 CATALOG NUMBER: S122RDRP-S675D935-X4F0-XX-UDD-A-W

**CIE UGR TABLE:**

| Reflectances:   |      |                  |       |       |       |       |                |       |       |       |       |
|-----------------|------|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Ceiling         |      | 0.7              | 0.7   | 0.5   | 0.5   | 0.3   | 0.7            | 0.7   | 0.5   | 0.5   | 0.3   |
| Wall            |      | 0.5              | 0.3   | 0.5   | 0.3   | 0.3   | 0.5            | 0.3   | 0.5   | 0.3   | 0.3   |
| Reference plane |      | 0.2              | 0.2   | 0.2   | 0.2   | 0.2   | 0.2            | 0.2   | 0.2   | 0.2   | 0.2   |
| Room dimensions |      | Viewed crosswise |       |       |       |       | Viewed endwise |       |       |       |       |
| X=2H            | Y=2H | 16.52            | 17.97 | 16.88 | 18.28 | 18.60 | 22.42          | 23.87 | 22.78 | 24.18 | 24.50 |
|                 | 3H   | 17.63            | 18.93 | 18.01 | 19.26 | 19.62 | 23.57          | 24.87 | 23.95 | 25.20 | 25.56 |
|                 | 4H   | 18.08            | 19.30 | 18.49 | 19.65 | 20.03 | 23.97          | 25.19 | 24.37 | 25.54 | 25.92 |
|                 | 6H   | 18.45            | 19.57 | 18.86 | 19.94 | 20.33 | 24.24          | 25.36 | 24.65 | 25.73 | 26.12 |
|                 | 8H   | 18.57            | 19.64 | 19.00 | 20.03 | 20.43 | 24.31          | 25.37 | 24.73 | 25.76 | 26.17 |
|                 | 12H  | 18.66            | 19.68 | 19.09 | 20.06 | 20.49 | 24.34          | 25.36 | 24.78 | 25.75 | 26.18 |
| 4H              | 2H   | 17.23            | 18.45 | 17.63 | 18.79 | 19.17 | 22.38          | 23.60 | 22.78 | 23.95 | 24.33 |
|                 | 3H   | 18.50            | 19.50 | 18.91 | 19.91 | 20.31 | 23.68          | 24.68 | 24.09 | 25.08 | 25.49 |
|                 | 4H   | 19.05            | 19.95 | 19.48 | 20.37 | 20.81 | 24.17          | 25.07 | 24.60 | 25.49 | 25.93 |
|                 | 6H   | 19.52            | 20.30 | 19.98 | 20.75 | 21.21 | 24.56          | 25.34 | 25.02 | 25.78 | 26.25 |
|                 | 8H   | 19.68            | 20.41 | 20.14 | 20.86 | 21.33 | 24.67          | 25.40 | 25.14 | 25.85 | 26.32 |
|                 | 12H  | 19.80            | 20.45 | 20.28 | 20.93 | 21.40 | 24.75          | 25.40 | 25.23 | 25.88 | 26.35 |
| 8H              | 4H   | 19.39            | 20.12 | 19.86 | 20.57 | 21.04 | 24.16          | 24.89 | 24.62 | 25.33 | 25.80 |
|                 | 6H   | 19.96            | 20.56 | 20.46 | 21.06 | 21.54 | 24.58          | 25.19 | 25.08 | 25.68 | 26.16 |
|                 | 8H   | 20.19            | 20.73 | 20.70 | 21.24 | 21.73 | 24.73          | 25.27 | 25.25 | 25.79 | 26.27 |
|                 | 12H  | 20.37            | 20.85 | 20.88 | 21.34 | 21.91 | 24.86          | 25.33 | 25.37 | 25.83 | 26.39 |
| 12H             | 4H   | 19.43            | 20.09 | 19.92 | 20.57 | 21.04 | 24.13          | 24.79 | 24.62 | 25.26 | 25.74 |
|                 | 6H   | 20.02            | 20.57 | 20.54 | 21.08 | 21.57 | 24.56          | 25.10 | 25.07 | 25.61 | 26.10 |
|                 | 8H   | 20.30            | 20.78 | 20.81 | 21.27 | 21.84 | 24.74          | 25.22 | 25.25 | 25.71 | 26.28 |