

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: LUMARK

Report Number: P146873

Luminaire Tested: **LDRL-T4-F04-E-8030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P146873  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33696)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: LDRL-T4-F04-E-8030  
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE  
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT  
Light Source: (28) 3000K CCT, 80 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8189.7 lumens  
Efficiency: N/A  
Efficacy: 80.1 lumens/watt  
Luminous Opening: Rectangular (W 0.67' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Semi-Cutoff  
BUG Rating: B1 - U0 - G2

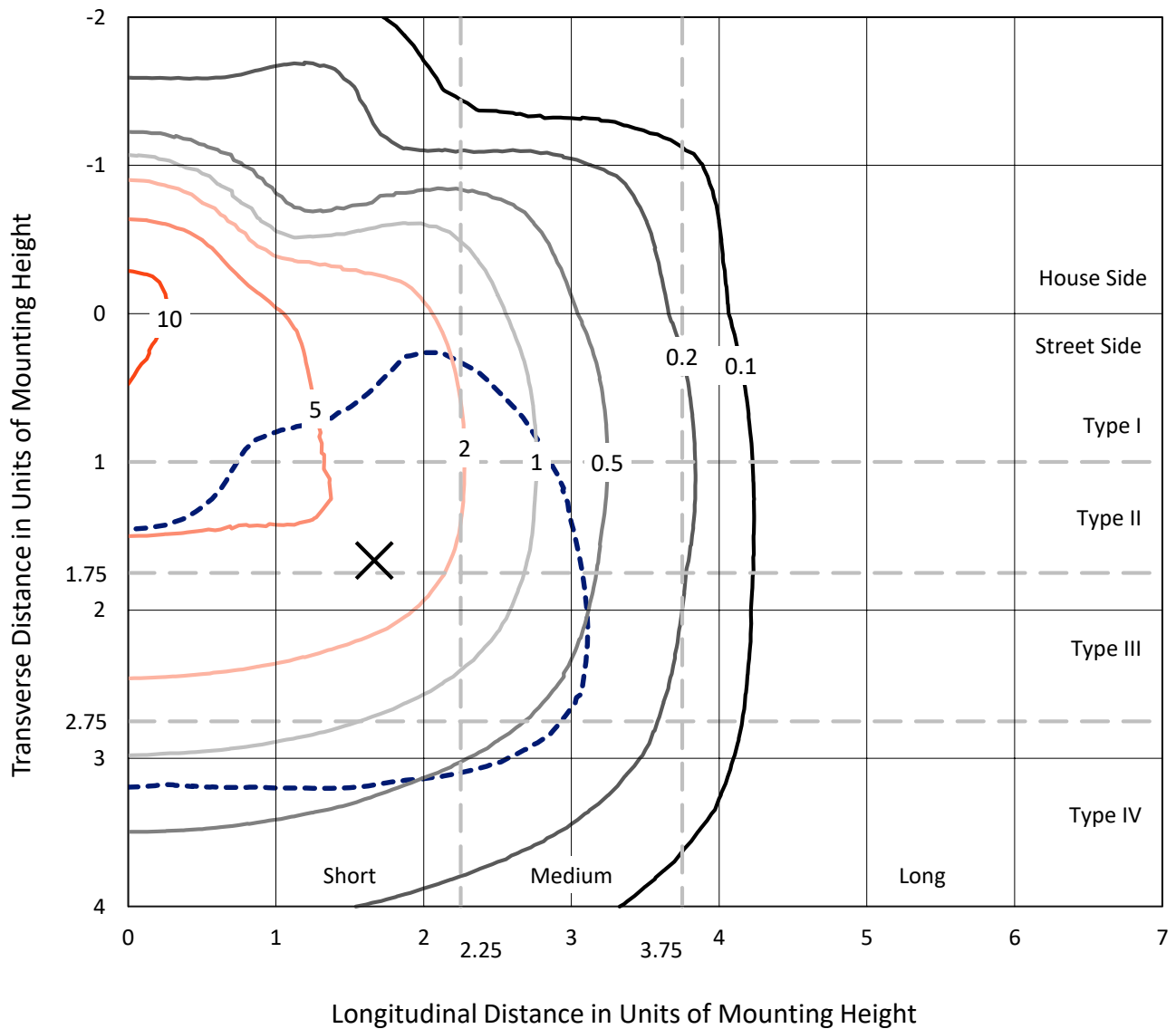
Input Watts (W): 102.2  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



REPORT NUMBER: P146873  
 CATALOG NUMBER: LDRL-T4-F04-E-8030

### Iso-Footcandle Lines of Horizontal Illumination

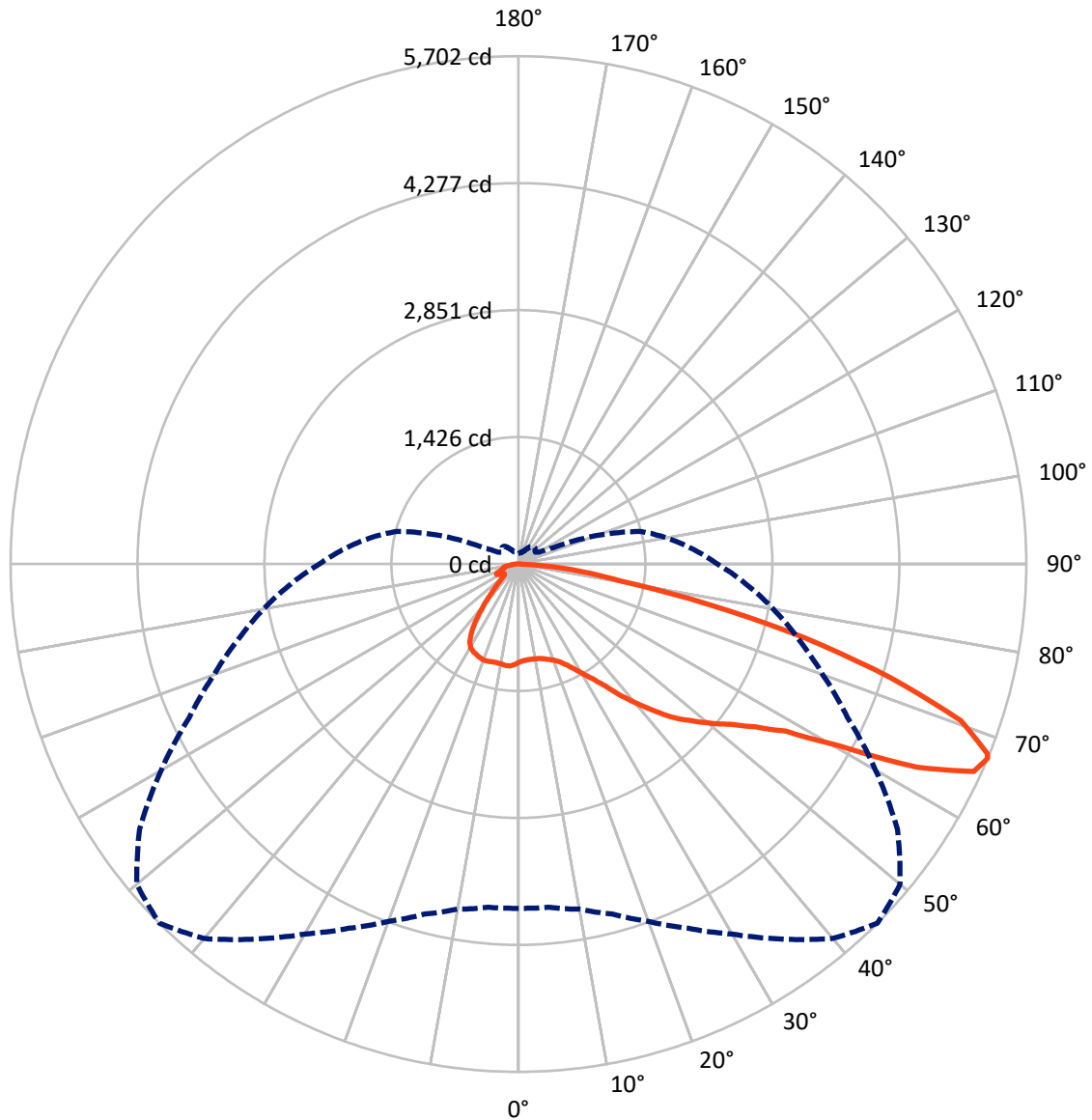
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.2 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P146873  
CATALOG NUMBER: LDRL-T4-F04-E-8030

### Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral      - - - Horizontal Cone Through 67-Deg Vertical

REPORT NUMBER: P146873

CATALOG NUMBER: LDRL-T4-F04-E-8030

**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 1659.4   | 0.0    | 1659.4 |
|                    | % Fixture | 20.3     | 0.0    | 20.3   |
| <b>Street Side</b> | Lumens    | 6530.3   | 0.0    | 6530.3 |
|                    | % Fixture | 79.7     | 0.0    | 79.7   |
| <b>Total</b>       | Lumens    | 8189.7   | 0.0    | 8189.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 106.3  | 1.3       |
| 10°-20°   | 319.1  | 3.9       |
| 20°-30°   | 542.3  | 6.6       |
| 30°-40°   | 815.0  | 10.0      |
| 40°-50°   | 1059.8 | 12.9      |
| 50°-60°   | 1455.0 | 17.8      |
| 60°-70°   | 2295.3 | 28.0      |
| 70°-80°   | 1386.9 | 16.9      |
| 80°-90°   | 210.1  | 2.6       |
| 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°-90°    | 8189.7 | 100.0     |
| 0°-180°   | 8189.7 | 100.0     |



REPORT NUMBER: P146873

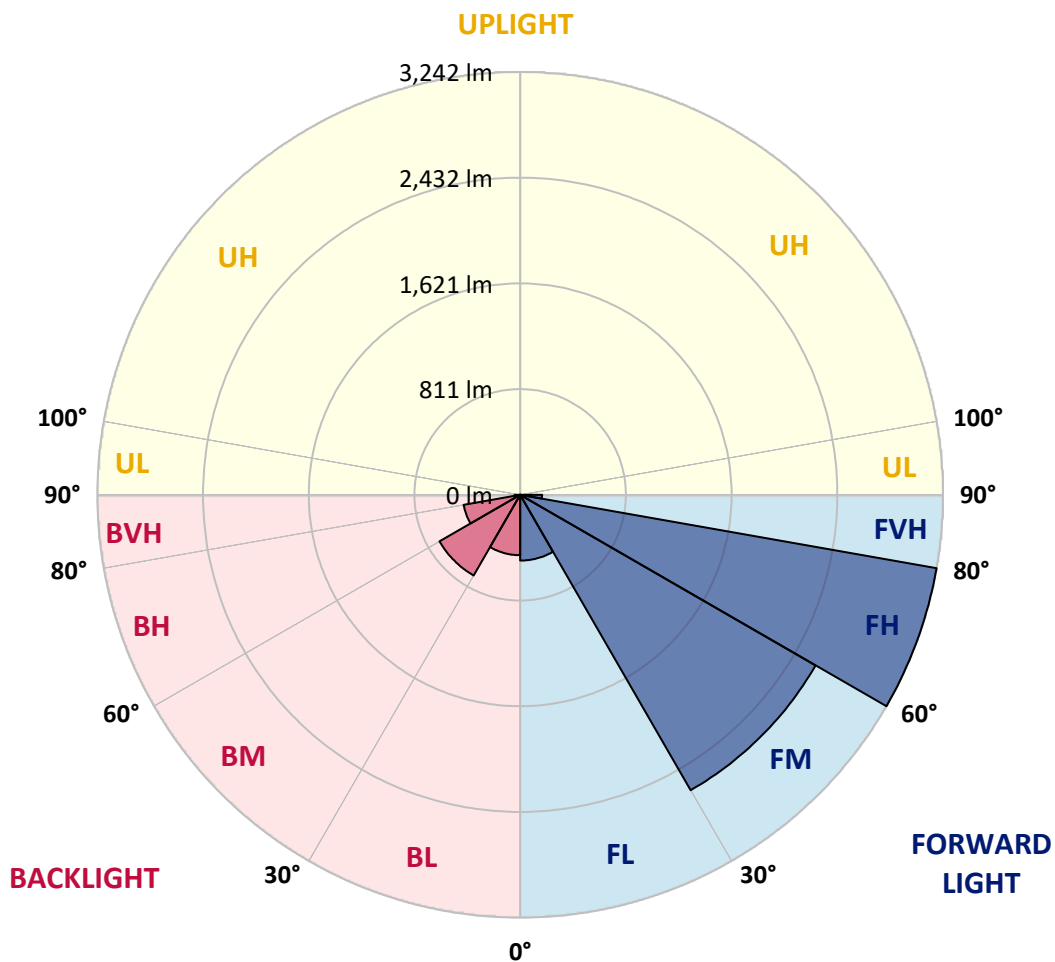
CATALOG NUMBER: LDRL-T4-F04-E-8030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 504.3  | 6.2       |                         |      |         |
| FM   | (30°-60°)   | 2615.7 | 31.9      |                         |      |         |
| FH   | (60°-80°)   | 3242.5 | 39.6      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 167.8  | 2.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 463.3  | 5.7       | B1/500                  |      |         |
| BM   | (30°-60°)   | 714.1  | 8.7       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 439.7  | 5.4       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 42.3   | 0.5       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type IV Short





REPORT NUMBER: P146873

CATALOG NUMBER: LDRL-T4-F04-E-8030

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 10°    | 15°    | 20°    | 25°    | 30°    | 35°    | 40°    | 45°    | 50°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 |
| 2.5°  | 1078.0 | 1080.2 | 1078.5 | 1078.5 | 1079.1 | 1079.7 | 1080.8 | 1083.0 | 1083.6 | 1086.9 | 1087.5 |
| 5°    | 1056.3 | 1056.8 | 1056.8 | 1057.4 | 1060.7 | 1063.5 | 1066.3 | 1070.2 | 1073.5 | 1079.7 | 1083.6 |
| 7.5°  | 1048.4 | 1050.7 | 1050.1 | 1051.2 | 1054.6 | 1057.4 | 1060.7 | 1066.3 | 1074.6 | 1079.7 | 1085.2 |
| 10°   | 1061.3 | 1062.9 | 1061.3 | 1061.8 | 1062.4 | 1065.2 | 1066.3 | 1070.2 | 1076.9 | 1081.3 | 1086.4 |
| 12.5° | 1090.8 | 1090.8 | 1089.1 | 1088.0 | 1086.4 | 1086.9 | 1084.7 | 1084.1 | 1087.5 | 1088.0 | 1088.6 |
| 15°   | 1129.8 | 1134.3 | 1128.7 | 1124.3 | 1122.0 | 1119.8 | 1112.5 | 1109.8 | 1109.2 | 1104.2 | 1099.2 |
| 17.5° | 1169.4 | 1170.5 | 1167.2 | 1162.2 | 1158.8 | 1153.8 | 1147.7 | 1142.1 | 1135.4 | 1127.6 | 1117.6 |
| 20°   | 1213.4 | 1214.0 | 1209.5 | 1202.3 | 1198.4 | 1192.3 | 1184.5 | 1175.0 | 1166.6 | 1154.4 | 1143.2 |
| 22.5° | 1274.7 | 1274.2 | 1265.3 | 1259.1 | 1253.6 | 1246.3 | 1235.2 | 1222.4 | 1209.0 | 1194.5 | 1178.9 |
| 25°   | 1345.0 | 1345.0 | 1338.8 | 1328.8 | 1326.0 | 1315.4 | 1303.2 | 1288.1 | 1274.2 | 1253.6 | 1234.6 |
| 27.5° | 1425.2 | 1425.8 | 1414.7 | 1409.1 | 1402.9 | 1391.8 | 1383.4 | 1371.7 | 1352.8 | 1332.2 | 1312.6 |
| 30°   | 1520.6 | 1517.8 | 1508.9 | 1497.1 | 1494.9 | 1486.0 | 1474.3 | 1465.9 | 1442.5 | 1428.0 | 1406.3 |
| 32.5° | 1610.9 | 1615.3 | 1613.1 | 1599.7 | 1601.9 | 1593.0 | 1583.0 | 1576.9 | 1552.3 | 1538.4 | 1518.3 |
| 35°   | 1745.7 | 1749.6 | 1753.0 | 1748.0 | 1750.8 | 1745.7 | 1737.4 | 1721.2 | 1701.1 | 1682.8 | 1654.9 |
| 37.5° | 1850.5 | 1854.4 | 1856.7 | 1868.9 | 1886.8 | 1904.0 | 1911.8 | 1903.5 | 1904.6 | 1876.7 | 1839.4 |
| 40°   | 1936.4 | 1945.8 | 1959.2 | 1982.6 | 2018.3 | 2051.2 | 2069.0 | 2083.0 | 2090.2 | 2064.0 | 2015.5 |
| 42.5° | 2022.2 | 2032.2 | 2050.6 | 2088.0 | 2137.0 | 2184.4 | 2221.8 | 2264.7 | 2272.5 | 2265.8 | 2224.5 |
| 45°   | 2111.9 | 2123.6 | 2146.5 | 2188.9 | 2246.3 | 2308.1 | 2368.3 | 2429.1 | 2459.8 | 2464.8 | 2414.6 |
| 47.5° | 2220.1 | 2236.8 | 2258.0 | 2305.9 | 2361.7 | 2431.3 | 2506.6 | 2584.6 | 2632.5 | 2632.5 | 2574.6 |
| 50°   | 2355.0 | 2373.9 | 2391.8 | 2439.7 | 2495.4 | 2567.3 | 2654.3 | 2741.2 | 2806.5 | 2810.4 | 2740.1 |
| 52.5° | 2543.9 | 2546.7 | 2557.3 | 2601.3 | 2649.8 | 2730.1 | 2812.6 | 2913.5 | 2988.7 | 2992.1 | 2911.2 |
| 55°   | 2773.6 | 2773.6 | 2785.8 | 2822.6 | 2867.8 | 2934.1 | 3019.4 | 3131.4 | 3210.6 | 3227.8 | 3124.2 |
| 57.5° | 3075.7 | 3086.8 | 3092.9 | 3135.9 | 3166.5 | 3236.8 | 3308.1 | 3430.2 | 3531.1 | 3542.2 | 3436.9 |
| 60°   | 3567.3 | 3546.1 | 3580.1 | 3618.0 | 3689.9 | 3741.2 | 3862.7 | 3985.3 | 4114.1 | 4144.7 | 4031.6 |
| 62.5° | 4051.7 | 4074.5 | 4116.3 | 4184.9 | 4308.1 | 4422.9 | 4596.8 | 4783.0 | 4983.1 | 5024.3 | 4937.9 |
| 65°   | 4081.8 | 4095.7 | 4153.7 | 4271.8 | 4440.2 | 4644.7 | 4884.4 | 5164.8 | 5463.0 | 5617.4 | 5472.4 |
| 67°   | 3865.5 | 3869.4 | 3935.2 | 4069.5 | 4271.3 | 4513.7 | 4797.4 | 5139.7 | 5489.7 | 5702.1 | 5594.0 |
| 67.5° | 3796.9 | 3804.2 | 3868.8 | 4006.0 | 4210.0 | 4458.0 | 4747.3 | 5099.0 | 5457.4 | 5679.2 | 5581.7 |
| 70°   | 3394.5 | 3394.5 | 3464.2 | 3602.4 | 3793.6 | 4035.5 | 4338.2 | 4693.2 | 5082.8 | 5269.6 | 5186.5 |
| 72.5° | 2889.5 | 2871.1 | 2949.7 | 3054.5 | 3210.6 | 3421.8 | 3665.4 | 3945.8 | 4238.9 | 4374.9 | 4342.1 |
| 75°   | 2100.2 | 2134.8 | 2175.5 | 2253.0 | 2388.4 | 2555.1 | 2697.8 | 2948.0 | 3178.2 | 3328.7 | 3289.1 |
| 77.5° | 1146.0 | 1159.4 | 1272.0 | 1318.2 | 1436.9 | 1560.7 | 1717.3 | 1892.9 | 2074.0 | 2168.8 | 2130.3 |
| 80°   | 681.1  | 707.3  | 774.2  | 829.4  | 893.5  | 987.7  | 1101.4 | 1139.9 | 1175.5 | 1173.3 | 1103.6 |
| 82.5° | 430.3  | 462.1  | 534.5  | 581.9  | 615.4  | 670.0  | 731.9  | 780.3  | 790.9  | 738.5  | 657.7  |
| 85°   | 69.7   | 115.4  | 301.5  | 354.5  | 375.7  | 405.2  | 450.9  | 471.6  | 440.3  | 384.6  | 398.5  |
| 87.5° | 27.3   | 32.9   | 92.0   | 116.5  | 123.2  | 64.7   | 112.0  | 131.5  | 66.9   | 34.0   | 76.9   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P146873  
 CATALOG NUMBER: LDRL-T4-F04-E-8030

**CANDELA DISTRIBUTION (continued):**

|       | 55°    | 60°    | 65°    | 70°    | 75°    | 80°    | 85°    | 90°    | 95°    | 100°   | 105°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 |
| 2.5°  | 1090.8 | 1093.6 | 1096.4 | 1099.7 | 1100.8 | 1103.6 | 1108.6 | 1108.1 | 1112.0 | 1113.7 | 1116.4 |
| 5°    | 1088.6 | 1094.7 | 1099.2 | 1105.3 | 1107.5 | 1113.7 | 1120.4 | 1122.6 | 1127.6 | 1131.5 | 1134.8 |
| 7.5°  | 1093.0 | 1099.7 | 1105.3 | 1112.5 | 1117.6 | 1122.6 | 1127.6 | 1133.7 | 1138.2 | 1141.0 | 1143.2 |
| 10°   | 1094.7 | 1102.0 | 1108.6 | 1114.8 | 1120.4 | 1124.3 | 1129.8 | 1134.8 | 1139.3 | 1141.0 | 1141.5 |
| 12.5° | 1095.3 | 1100.3 | 1107.0 | 1113.7 | 1118.7 | 1123.7 | 1127.6 | 1133.2 | 1136.5 | 1137.1 | 1136.0 |
| 15°   | 1099.7 | 1100.3 | 1104.7 | 1112.5 | 1117.6 | 1122.6 | 1125.4 | 1128.2 | 1130.4 | 1128.7 | 1127.0 |
| 17.5° | 1113.1 | 1109.2 | 1109.2 | 1113.1 | 1115.9 | 1118.1 | 1118.7 | 1118.1 | 1115.9 | 1112.5 | 1109.8 |
| 20°   | 1134.8 | 1127.0 | 1120.9 | 1118.7 | 1114.2 | 1108.6 | 1101.4 | 1094.7 | 1086.4 | 1082.4 | 1081.9 |
| 22.5° | 1168.8 | 1157.1 | 1146.0 | 1134.8 | 1120.4 | 1104.2 | 1087.5 | 1073.0 | 1061.3 | 1055.1 | 1055.7 |
| 25°   | 1226.8 | 1209.5 | 1196.7 | 1177.2 | 1153.8 | 1130.9 | 1109.2 | 1089.7 | 1075.8 | 1064.6 | 1066.8 |
| 27.5° | 1304.8 | 1285.3 | 1274.2 | 1251.9 | 1225.1 | 1196.2 | 1170.5 | 1143.8 | 1123.7 | 1109.8 | 1112.5 |
| 30°   | 1396.3 | 1390.7 | 1372.3 | 1350.0 | 1324.9 | 1292.0 | 1253.6 | 1213.4 | 1177.2 | 1154.4 | 1149.9 |
| 32.5° | 1506.6 | 1500.5 | 1480.4 | 1461.5 | 1429.1 | 1392.9 | 1342.7 | 1279.2 | 1222.4 | 1178.9 | 1159.9 |
| 35°   | 1642.6 | 1627.6 | 1603.0 | 1584.7 | 1548.4 | 1501.6 | 1436.9 | 1351.1 | 1264.7 | 1199.5 | 1152.1 |
| 37.5° | 1812.1 | 1774.7 | 1734.0 | 1686.1 | 1632.6 | 1575.7 | 1501.0 | 1400.7 | 1293.7 | 1201.2 | 1117.0 |
| 40°   | 1973.7 | 1913.5 | 1846.1 | 1770.3 | 1705.1 | 1636.5 | 1559.0 | 1444.2 | 1313.2 | 1189.5 | 1064.1 |
| 42.5° | 2153.7 | 2060.1 | 1968.7 | 1864.5 | 1778.6 | 1697.2 | 1608.6 | 1474.8 | 1317.1 | 1157.7 | 995.5  |
| 45°   | 2327.1 | 2206.7 | 2084.1 | 1955.3 | 1846.1 | 1755.8 | 1654.9 | 1501.0 | 1316.0 | 1124.3 | 927.5  |
| 47.5° | 2481.5 | 2337.7 | 2186.1 | 2041.2 | 1914.1 | 1814.9 | 1704.5 | 1536.7 | 1331.0 | 1114.8 | 882.3  |
| 50°   | 2625.9 | 2459.8 | 2281.9 | 2120.9 | 1982.6 | 1881.2 | 1767.5 | 1593.0 | 1377.3 | 1136.5 | 875.7  |
| 52.5° | 2774.7 | 2594.1 | 2390.6 | 2217.3 | 2072.9 | 1955.3 | 1840.5 | 1664.9 | 1442.0 | 1181.1 | 890.7  |
| 55°   | 2968.7 | 2761.3 | 2544.5 | 2352.2 | 2186.6 | 2060.1 | 1927.4 | 1751.9 | 1511.6 | 1232.9 | 919.1  |
| 57.5° | 3257.4 | 3014.9 | 2768.5 | 2561.8 | 2370.6 | 2212.8 | 2067.4 | 1866.1 | 1627.0 | 1311.0 | 981.6  |
| 60°   | 3775.7 | 3507.1 | 3221.7 | 2951.4 | 2731.2 | 2546.7 | 2361.7 | 2111.9 | 1839.9 | 1488.2 | 1124.8 |
| 62.5° | 4622.4 | 4250.6 | 3856.0 | 3500.4 | 3197.7 | 2948.0 | 2687.2 | 2387.3 | 2070.1 | 1703.4 | 1341.6 |
| 65°   | 5131.3 | 4618.5 | 4116.3 | 3703.8 | 3346.0 | 3026.1 | 2710.6 | 2388.4 | 2081.3 | 1760.8 | 1439.2 |
| 67°   | 5194.3 | 4631.9 | 4076.2 | 3637.0 | 3253.5 | 2905.1 | 2562.9 | 2233.5 | 1958.7 | 1690.0 | 1412.4 |
| 67.5° | 5175.4 | 4605.1 | 4038.3 | 3594.6 | 3207.2 | 2870.0 | 2533.3 | 2196.1 | 1928.6 | 1659.9 | 1392.4 |
| 70°   | 4801.9 | 4244.0 | 3683.2 | 3251.8 | 2880.6 | 2535.6 | 2217.3 | 1879.5 | 1672.7 | 1480.4 | 1249.1 |
| 72.5° | 3985.3 | 3550.0 | 3080.1 | 2720.6 | 2400.1 | 2101.4 | 1821.5 | 1538.9 | 1372.8 | 1236.8 | 1074.1 |
| 75°   | 2955.3 | 2556.2 | 2158.8 | 1942.5 | 1693.9 | 1454.8 | 1238.5 | 1029.5 | 965.4  | 933.1  | 837.2  |
| 77.5° | 1824.9 | 1466.5 | 1167.2 | 971.5  | 772.5  | 605.3  | 481.6  | 391.8  | 408.6  | 475.5  | 506.1  |
| 80°   | 908.5  | 671.1  | 519.5  | 413.0  | 333.9  | 269.8  | 197.9  | 144.9  | 173.3  | 205.7  | 233.0  |
| 82.5° | 546.8  | 432.0  | 341.7  | 289.3  | 235.2  | 181.7  | 128.8  | 98.1   | 108.7  | 146.0  | 160.5  |
| 85°   | 339.4  | 272.0  | 217.4  | 181.7  | 150.5  | 111.5  | 73.0   | 72.5   | 76.9   | 97.0   | 110.9  |
| 87.5° | 99.8   | 67.4   | 53.5   | 55.7   | 61.9   | 51.3   | 38.5   | 32.9   | 40.7   | 55.7   | 62.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |





REPORT NUMBER: P146873

CATALOG NUMBER: LDRL-T4-F04-E-8030

**CANDELA DISTRIBUTION (continued):**

|       | 110°   | 115°   | 120°   | 125°   | 130°   | 135°   | 140°   | 145°   | 150°   | 155°   | 160°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 | 1102.5 |
| 2.5°  | 1117.0 | 1120.9 | 1122.6 | 1123.1 | 1123.7 | 1127.0 | 1127.0 | 1130.4 | 1131.5 | 1131.5 | 1132.6 |
| 5°    | 1138.2 | 1142.1 | 1143.8 | 1144.3 | 1145.4 | 1147.1 | 1146.5 | 1148.8 | 1149.9 | 1149.3 | 1149.3 |
| 7.5°  | 1146.0 | 1147.1 | 1147.1 | 1148.8 | 1150.4 | 1148.8 | 1147.7 | 1148.8 | 1148.2 | 1148.8 | 1148.8 |
| 10°   | 1143.2 | 1142.1 | 1142.1 | 1141.0 | 1142.6 | 1139.3 | 1139.3 | 1140.4 | 1139.9 | 1141.0 | 1142.6 |
| 12.5° | 1136.5 | 1136.0 | 1134.3 | 1133.7 | 1136.0 | 1133.7 | 1134.3 | 1136.0 | 1137.1 | 1139.3 | 1142.1 |
| 15°   | 1127.0 | 1125.4 | 1125.4 | 1127.6 | 1133.2 | 1134.8 | 1137.1 | 1139.9 | 1140.4 | 1141.5 | 1142.6 |
| 17.5° | 1110.9 | 1113.7 | 1120.4 | 1128.2 | 1138.7 | 1142.6 | 1143.8 | 1142.1 | 1136.5 | 1132.1 | 1127.6 |
| 20°   | 1088.6 | 1100.8 | 1118.1 | 1134.8 | 1147.7 | 1147.1 | 1139.9 | 1129.3 | 1115.9 | 1106.4 | 1100.3 |
| 22.5° | 1069.6 | 1093.6 | 1120.4 | 1140.4 | 1148.8 | 1138.2 | 1121.5 | 1105.3 | 1089.7 | 1075.8 | 1063.5 |
| 25°   | 1083.0 | 1105.9 | 1128.7 | 1141.0 | 1140.4 | 1122.0 | 1099.7 | 1081.9 | 1060.7 | 1041.2 | 1020.6 |
| 27.5° | 1126.5 | 1140.4 | 1147.1 | 1143.2 | 1131.5 | 1107.0 | 1082.4 | 1057.4 | 1030.1 | 1006.6 | 982.7  |
| 30°   | 1156.0 | 1156.0 | 1149.3 | 1133.7 | 1113.1 | 1085.8 | 1055.7 | 1023.4 | 991.0  | 963.7  | 936.4  |
| 32.5° | 1146.5 | 1124.8 | 1105.3 | 1084.1 | 1060.7 | 1031.2 | 996.6  | 961.5  | 924.7  | 892.9  | 869.5  |
| 35°   | 1105.3 | 1058.5 | 1017.8 | 987.7  | 963.2  | 928.1  | 887.9  | 847.8  | 817.7  | 796.0  | 782.6  |
| 37.5° | 1031.7 | 957.0  | 898.0  | 861.2  | 823.3  | 787.0  | 740.8  | 722.4  | 695.6  | 682.2  | 677.2  |
| 40°   | 942.5  | 833.3  | 759.2  | 711.8  | 671.7  | 626.5  | 595.3  | 583.6  | 573.6  | 570.8  | 568.5  |
| 42.5° | 840.0  | 703.4  | 615.4  | 566.3  | 517.8  | 484.9  | 471.0  | 463.7  | 462.1  | 462.1  | 464.9  |
| 45°   | 733.5  | 571.3  | 469.9  | 430.3  | 390.2  | 372.9  | 369.5  | 366.2  | 366.8  | 365.1  | 366.2  |
| 47.5° | 651.0  | 458.7  | 354.5  | 318.3  | 297.6  | 292.1  | 288.2  | 287.1  | 287.1  | 284.3  | 280.9  |
| 50°   | 608.1  | 383.5  | 278.1  | 249.7  | 238.0  | 234.1  | 234.1  | 231.9  | 227.4  | 224.6  | 217.4  |
| 52.5° | 597.0  | 344.5  | 240.8  | 216.3  | 206.2  | 202.9  | 199.5  | 196.2  | 189.5  | 183.4  | 175.0  |
| 55°   | 605.9  | 332.2  | 229.1  | 206.2  | 195.1  | 191.2  | 188.4  | 182.8  | 173.3  | 164.4  | 155.0  |
| 57.5° | 643.2  | 340.0  | 233.5  | 209.0  | 199.0  | 196.2  | 193.4  | 185.1  | 173.3  | 160.5  | 149.9  |
| 60°   | 745.2  | 376.8  | 252.5  | 224.1  | 215.7  | 216.3  | 212.4  | 201.8  | 185.1  | 166.7  | 151.1  |
| 62.5° | 876.8  | 428.1  | 277.0  | 245.3  | 244.1  | 249.7  | 249.7  | 231.3  | 204.0  | 176.1  | 155.0  |
| 65°   | 952.0  | 444.2  | 280.4  | 248.0  | 257.5  | 273.7  | 272.6  | 248.0  | 210.7  | 176.1  | 153.3  |
| 67°   | 933.1  | 427.0  | 266.4  | 231.9  | 243.0  | 261.4  | 259.2  | 235.8  | 200.7  | 168.9  | 148.8  |
| 67.5° | 918.0  | 421.4  | 263.1  | 228.0  | 239.1  | 254.2  | 254.2  | 230.8  | 196.2  | 166.7  | 147.2  |
| 70°   | 808.2  | 372.3  | 246.4  | 212.9  | 212.9  | 216.8  | 214.0  | 197.3  | 173.9  | 153.3  | 140.5  |
| 72.5° | 673.9  | 325.5  | 233.0  | 202.3  | 191.7  | 189.5  | 185.6  | 173.9  | 158.9  | 144.4  | 133.2  |
| 75°   | 522.3  | 288.2  | 222.4  | 191.2  | 177.2  | 172.2  | 168.3  | 159.4  | 147.7  | 135.4  | 126.0  |
| 77.5° | 365.6  | 246.9  | 208.5  | 181.7  | 166.7  | 162.8  | 156.6  | 146.6  | 137.1  | 126.5  | 117.6  |
| 80°   | 226.9  | 204.0  | 181.7  | 163.9  | 148.3  | 142.7  | 134.9  | 126.0  | 118.2  | 112.0  | 105.3  |
| 82.5° | 161.6  | 149.9  | 135.4  | 126.0  | 109.8  | 93.1   | 99.8   | 100.3  | 95.3   | 91.4   | 89.7   |
| 85°   | 108.1  | 97.5   | 90.3   | 81.9   | 72.5   | 65.2   | 66.9   | 71.9   | 72.5   | 70.8   | 70.8   |
| 87.5° | 59.1   | 50.2   | 48.5   | 50.2   | 43.5   | 41.2   | 41.8   | 46.3   | 46.8   | 46.8   | 47.4   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |



REPORT NUMBER: P146873

CATALOG NUMBER: LDRL-T4-F04-E-8030

**CANDELA DISTRIBUTION (continued):**

|       | 165°   | 170°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|
| 0°    | 1102.5 | 1102.5 | 1102.5 | 1102.5 |
| 2.5°  | 1133.2 | 1134.8 | 1134.3 | 1135.4 |
| 5°    | 1150.4 | 1151.6 | 1151.0 | 1151.6 |
| 7.5°  | 1147.7 | 1149.9 | 1151.0 | 1149.3 |
| 10°   | 1143.2 | 1146.5 | 1148.8 | 1148.8 |
| 12.5° | 1144.3 | 1149.9 | 1153.2 | 1153.2 |
| 15°   | 1143.2 | 1147.7 | 1148.8 | 1148.8 |
| 17.5° | 1125.9 | 1125.9 | 1126.5 | 1124.3 |
| 20°   | 1095.8 | 1092.5 | 1091.4 | 1087.5 |
| 22.5° | 1052.9 | 1045.1 | 1040.1 | 1037.3 |
| 25°   | 1003.9 | 991.6  | 983.8  | 979.3  |
| 27.5° | 963.2  | 952.6  | 944.8  | 940.3  |
| 30°   | 918.0  | 905.8  | 901.3  | 898.0  |
| 32.5° | 852.8  | 841.1  | 837.8  | 835.0  |
| 35°   | 768.1  | 764.2  | 755.3  | 749.1  |
| 37.5° | 670.0  | 665.0  | 661.6  | 659.4  |
| 40°   | 567.4  | 568.0  | 565.2  | 560.2  |
| 42.5° | 464.9  | 470.4  | 464.9  | 463.7  |
| 45°   | 365.1  | 371.2  | 371.2  | 372.9  |
| 47.5° | 281.5  | 280.4  | 282.6  | 283.2  |
| 50°   | 212.9  | 209.6  | 208.5  | 206.8  |
| 52.5° | 168.9  | 165.0  | 162.8  | 160.0  |
| 55°   | 148.8  | 144.4  | 142.1  | 141.6  |
| 57.5° | 142.1  | 136.6  | 133.2  | 132.7  |
| 60°   | 140.5  | 132.7  | 128.2  | 127.1  |
| 62.5° | 140.5  | 131.0  | 126.0  | 124.3  |
| 65°   | 138.8  | 129.3  | 124.9  | 123.2  |
| 67°   | 136.6  | 128.2  | 123.7  | 122.6  |
| 67.5° | 135.4  | 127.6  | 123.7  | 122.1  |
| 70°   | 132.7  | 126.0  | 121.5  | 119.8  |
| 72.5° | 126.5  | 121.0  | 116.5  | 115.4  |
| 75°   | 119.8  | 114.8  | 112.0  | 110.9  |
| 77.5° | 112.0  | 107.6  | 104.2  | 101.4  |
| 80°   | 100.3  | 95.3   | 90.3   | 89.2   |
| 82.5° | 85.3   | 79.7   | 75.8   | 75.2   |
| 85°   | 68.6   | 64.1   | 59.6   | 59.6   |
| 87.5° | 47.9   | 45.1   | 42.4   | 39.6   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    |

(END OF REPORT)