

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: P163832

Luminaire Tested: **LDRL-SL4-F05-E-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P163832
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: LDRL-SL4-F05-E-HSS
Description: RL LED ROADWAY LARGE CUTOFF COBRAHEAD LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (35) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8146.8 lumens
Efficiency: N/A
Efficacy: 61.1 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

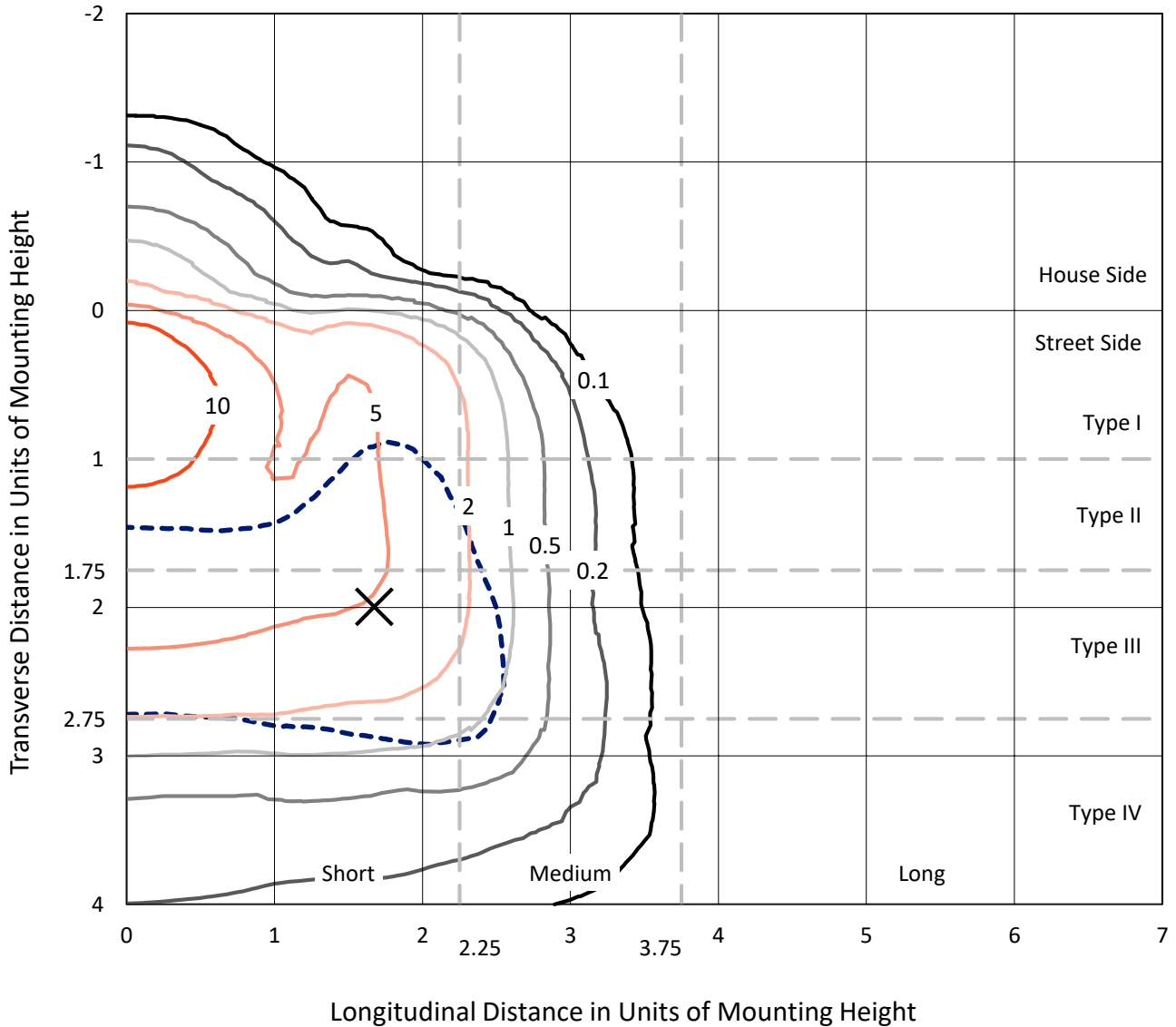
Input Watts (W): 133.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



REPORT NUMBER: P163832
 CATALOG NUMBER: LDRL-SL4-F05-E-HSS

Iso-Footcandle Lines of Horizontal Illumination

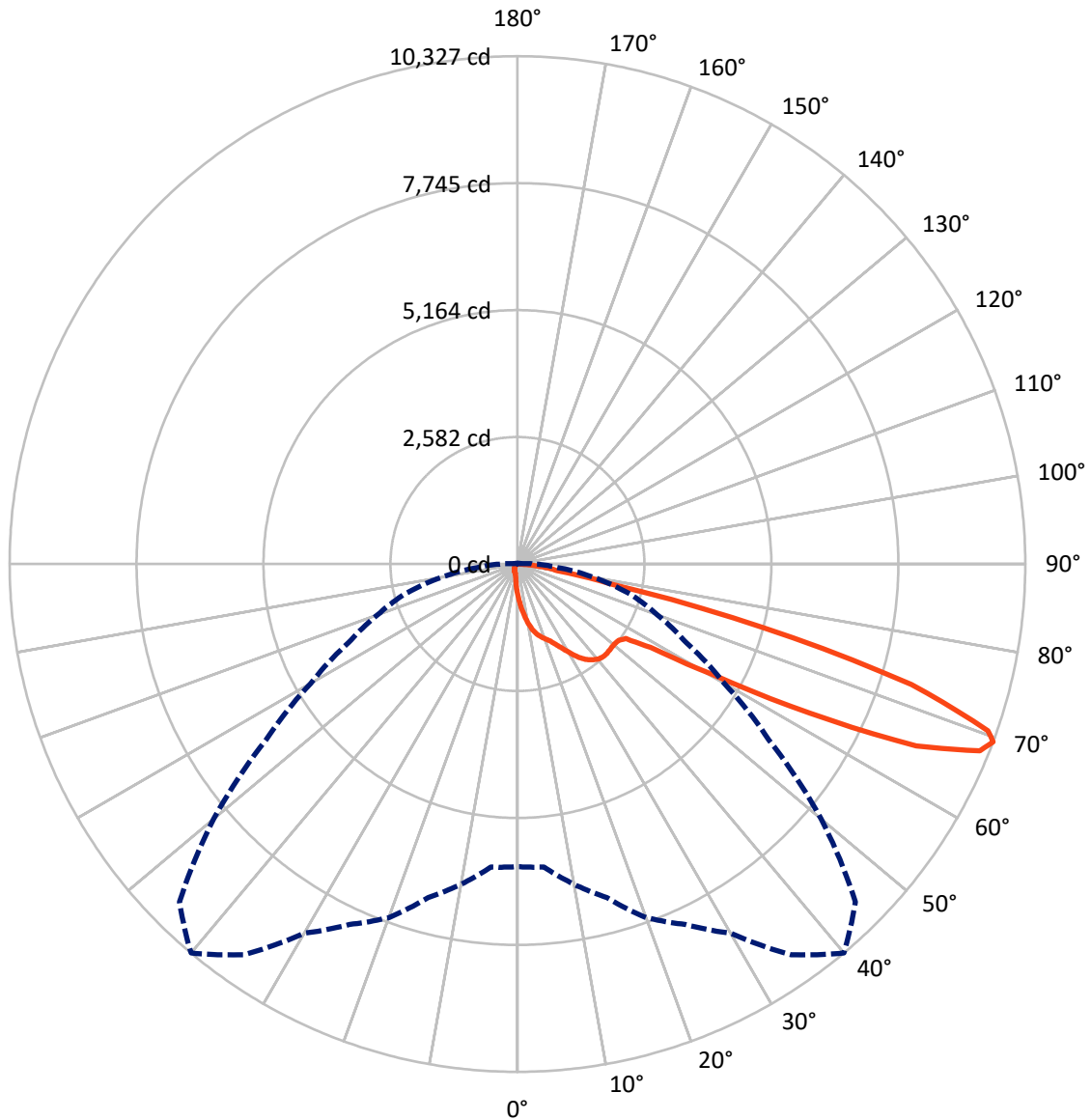
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.2 fc
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P163832
CATALOG NUMBER: LDRL-SL4-F05-E-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P163832

CATALOG NUMBER: LDRL-SL4-F05-E-HSS

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 242.6 | 0.0 | 242.6 |
| | % Fixture | 3.0 | 0.0 | 3.0 |
| Street Side | Lumens | 7904.3 | 0.0 | 7904.3 |
| | % Fixture | 97.0 | 0.0 | 97.0 |
| Total | Lumens | 8146.8 | 0.0 | 8146.8 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 63.2 | 0.8 |
| 10°-20° | 218.0 | 2.7 |
| 20°-30° | 417.3 | 5.1 |
| 30°-40° | 694.0 | 8.5 |
| 40°-50° | 939.0 | 11.5 |
| 50°-60° | 1468.6 | 18.0 |
| 60°-70° | 3019.4 | 37.1 |
| 70°-80° | 1214.9 | 14.9 |
| 80°-90° | 112.4 | 1.4 |
| 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° | 8146.8 | 100.0 |
| 0°-180° | 8146.8 | 100.0 |



REPORT NUMBER: P163832

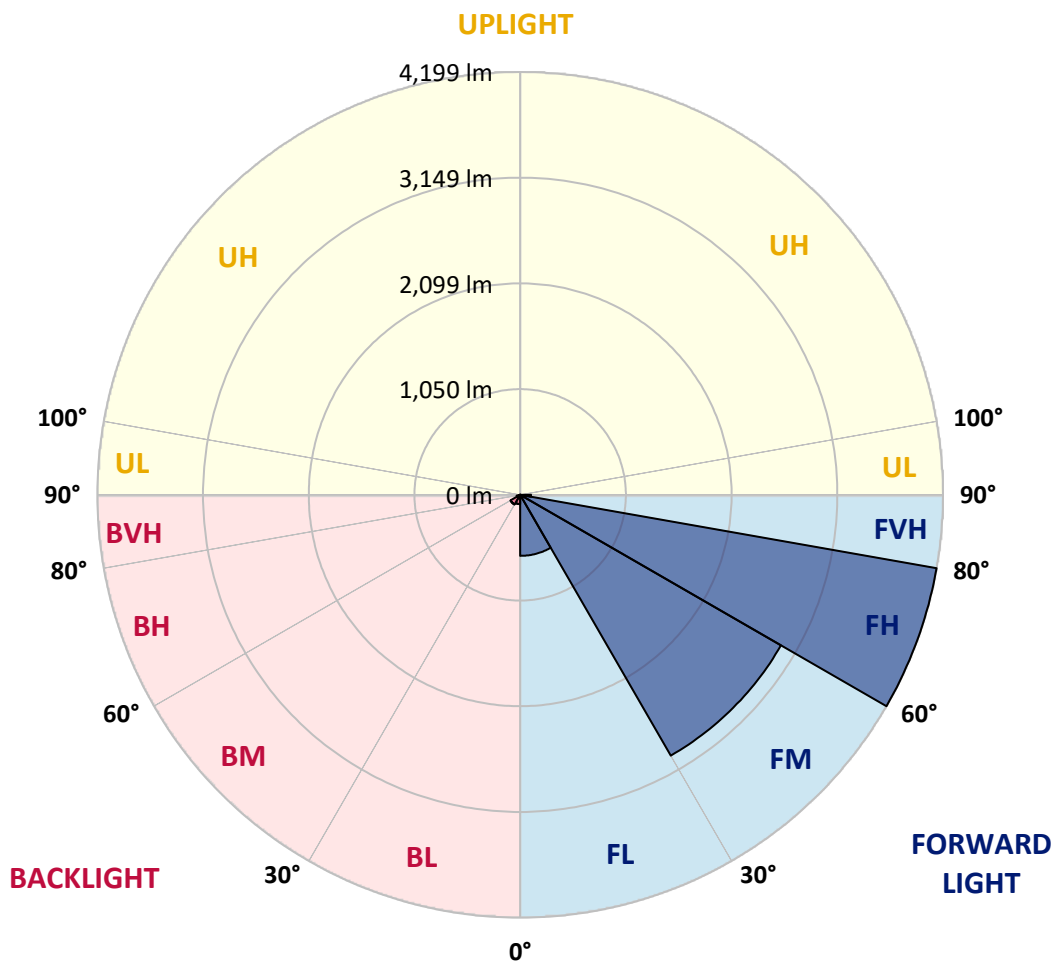
CATALOG NUMBER: LDRL-SL4-F05-E-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 606.3 | 7.4 | | | |
| FM (30°-60°) | 2990.8 | 36.7 | | | |
| FH (60°-80°) | 4198.9 | 51.5 | | | G2/5000 |
| FVH (80°-90°) | 108.2 | 1.3 | | | G2/225 |
| BL (0°-30°) | 92.3 | 1.1 | B0/110 | | |
| BM (30°-60°) | 110.8 | 1.4 | B0/220 | | |
| BH (60°-80°) | 35.4 | 0.4 | B0/110 | | G0/110 |
| BVH (80°-90°) | 4.2 | 0.1 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B0-U0-G2

Type IV Short





REPORT NUMBER: P163832

CATALOG NUMBER: LDRL-SL4-F05-E-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|
| 0° | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 |
| 2.5° | 820.7 | 811.4 | 800.8 | 800.8 | 787.4 | 787.4 | 779.4 | 758.1 | 755.4 | 743.4 | 731.3 |
| 5° | 1047.7 | 1039.7 | 1026.3 | 1014.3 | 1003.6 | 984.9 | 971.6 | 946.2 | 918.2 | 891.5 | 867.5 |
| 7.5° | 1269.2 | 1265.2 | 1241.2 | 1237.1 | 1219.8 | 1189.1 | 1162.4 | 1125.0 | 1077.0 | 1039.7 | 995.6 |
| 10° | 1474.7 | 1465.4 | 1460.0 | 1437.3 | 1412.0 | 1378.6 | 1337.3 | 1291.9 | 1235.8 | 1177.1 | 1114.4 |
| 12.5° | 1637.5 | 1632.2 | 1608.2 | 1598.8 | 1572.1 | 1538.8 | 1486.7 | 1428.0 | 1371.9 | 1295.9 | 1222.5 |
| 15° | 1758.9 | 1749.6 | 1733.6 | 1718.9 | 1686.9 | 1657.6 | 1609.5 | 1545.5 | 1477.4 | 1394.6 | 1306.6 |
| 17.5° | 1860.4 | 1843.1 | 1839.0 | 1816.4 | 1783.0 | 1748.3 | 1694.9 | 1636.2 | 1556.1 | 1473.4 | 1377.3 |
| 20° | 1996.5 | 1972.5 | 1964.5 | 1931.2 | 1892.4 | 1844.4 | 1783.0 | 1709.6 | 1625.5 | 1534.7 | 1436.0 |
| 22.5° | 2156.7 | 2139.3 | 2122.0 | 2092.6 | 2043.3 | 1975.2 | 1885.7 | 1805.7 | 1698.9 | 1598.8 | 1492.1 |
| 25° | 2383.5 | 2368.9 | 2340.9 | 2300.8 | 2239.4 | 2158.0 | 2049.9 | 1932.5 | 1807.0 | 1678.9 | 1553.5 |
| 27.5° | 2603.8 | 2590.4 | 2570.4 | 2539.7 | 2470.3 | 2380.9 | 2247.4 | 2098.0 | 1939.2 | 1784.4 | 1645.5 |
| 30° | 2810.7 | 2798.6 | 2778.6 | 2747.9 | 2686.5 | 2598.4 | 2447.6 | 2287.4 | 2090.0 | 1909.8 | 1742.9 |
| 32.5° | 3033.5 | 3029.5 | 3006.8 | 2962.8 | 2909.4 | 2790.6 | 2626.5 | 2454.3 | 2254.1 | 2045.9 | 1851.1 |
| 35° | 3285.8 | 3255.0 | 3233.7 | 3189.7 | 3098.9 | 2972.1 | 2780.0 | 2591.7 | 2380.9 | 2167.3 | 1949.8 |
| 37.5° | 3499.3 | 3469.9 | 3443.3 | 3387.2 | 3276.4 | 3115.0 | 2897.3 | 2690.6 | 2473.0 | 2255.4 | 2033.9 |
| 40° | 3655.4 | 3640.7 | 3608.7 | 3535.3 | 3411.2 | 3219.1 | 2984.1 | 2758.6 | 2539.7 | 2320.9 | 2102.0 |
| 42.5° | 3771.6 | 3748.9 | 3712.8 | 3636.8 | 3489.9 | 3271.1 | 3018.9 | 2786.6 | 2570.4 | 2360.9 | 2146.0 |
| 45° | 3814.3 | 3795.6 | 3762.2 | 3679.4 | 3520.6 | 3285.8 | 3017.5 | 2778.6 | 2571.8 | 2372.9 | 2175.3 |
| 47.5° | 3788.9 | 3770.2 | 3740.9 | 3663.4 | 3507.3 | 3268.4 | 2993.4 | 2755.9 | 2558.4 | 2376.9 | 2202.1 |
| 50° | 3704.8 | 3694.1 | 3671.4 | 3606.1 | 3465.9 | 3235.1 | 2972.1 | 2743.9 | 2555.7 | 2396.9 | 2239.4 |
| 52.5° | 3696.8 | 3690.1 | 3662.1 | 3596.7 | 3453.9 | 3224.3 | 2969.4 | 2750.6 | 2578.4 | 2422.3 | 2266.1 |
| 55° | 4517.6 | 4422.8 | 4210.6 | 4030.5 | 3734.2 | 3381.8 | 3104.2 | 2858.7 | 2674.5 | 2522.4 | 2412.9 |
| 57.5° | 6420.7 | 6279.2 | 6000.3 | 5657.3 | 4976.7 | 4308.0 | 3772.9 | 3385.8 | 3195.0 | 3125.6 | 3167.0 |
| 60° | 7312.2 | 7286.8 | 7242.8 | 7079.9 | 6731.7 | 6156.4 | 5515.8 | 4823.2 | 4545.6 | 4521.6 | 4605.7 |
| 62.5° | 7735.3 | 7719.2 | 7732.6 | 7712.5 | 7604.5 | 7436.3 | 7252.2 | 6953.1 | 6678.2 | 6500.8 | 6124.4 |
| 65° | 7930.1 | 7940.8 | 8016.8 | 8076.9 | 8090.2 | 8134.3 | 8269.1 | 8641.4 | 8913.7 | 8455.9 | 7411.0 |
| 67.5° | 7435.0 | 7497.7 | 7672.5 | 7891.4 | 8147.6 | 8395.8 | 8796.2 | 9581.0 | 10140.2 | 9602.3 | 8118.3 |
| 69° | 6155.1 | 6185.8 | 6612.9 | 7025.2 | 7651.2 | 8088.9 | 8669.5 | 9698.4 | 10327.0 | 9719.8 | 8062.2 |
| 70° | 4845.9 | 4873.9 | 5331.7 | 5892.2 | 6950.5 | 7513.7 | 8273.1 | 9499.6 | 10152.2 | 9563.6 | 7774.0 |
| 72.5° | 2186.1 | 2146.0 | 2307.5 | 2607.8 | 3758.2 | 4652.3 | 5980.3 | 7696.5 | 8375.9 | 7661.9 | 5816.2 |
| 75° | 1526.7 | 1509.4 | 1526.7 | 1528.1 | 1706.9 | 2202.1 | 2778.6 | 4171.9 | 5159.5 | 4452.1 | 2778.6 |
| 77.5° | 1182.5 | 1170.4 | 1158.5 | 1145.1 | 1166.5 | 1306.6 | 1362.6 | 1480.1 | 1921.8 | 1817.7 | 1059.6 |
| 80° | 935.6 | 924.8 | 954.2 | 944.9 | 944.9 | 960.9 | 950.3 | 906.2 | 823.5 | 763.4 | 683.3 |
| 82.5° | 435.1 | 437.8 | 437.8 | 475.1 | 572.5 | 668.6 | 699.3 | 655.3 | 581.9 | 495.1 | 399.1 |
| 85° | 41.4 | 46.7 | 78.8 | 121.4 | 241.5 | 272.3 | 273.6 | 226.9 | 226.9 | 178.8 | 144.1 |
| 87.5° | 0.0 | 1.3 | 1.3 | 1.3 | 12.0 | 33.4 | 28.0 | 8.0 | 4.0 | 4.0 | 6.7 |
| 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: P163832

CATALOG NUMBER: LDRL-SL4-F05-E-HSS

CANDELA DISTRIBUTION (continued):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° | 95° | 100° | 105° |
|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 0° | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 |
| 2.5° | 710.0 | 706.0 | 690.0 | 674.0 | 659.3 | 643.2 | 628.6 | 613.9 | 597.9 | 585.9 | 571.2 |
| 5° | 830.1 | 800.8 | 767.4 | 735.4 | 703.3 | 670.0 | 635.2 | 604.5 | 572.5 | 543.2 | 515.1 |
| 7.5° | 951.6 | 894.2 | 848.8 | 791.4 | 739.3 | 687.3 | 639.3 | 589.9 | 544.5 | 501.8 | 461.8 |
| 10° | 1054.4 | 984.9 | 914.2 | 840.8 | 766.1 | 696.7 | 630.0 | 571.2 | 511.2 | 459.1 | 409.7 |
| 12.5° | 1138.4 | 1050.3 | 963.6 | 871.5 | 787.4 | 699.3 | 616.6 | 545.8 | 475.1 | 416.4 | 365.7 |
| 15° | 1214.5 | 1113.1 | 1009.0 | 902.2 | 795.4 | 695.3 | 603.2 | 515.1 | 443.1 | 376.4 | 319.0 |
| 17.5° | 1275.8 | 1159.8 | 1042.3 | 922.2 | 807.4 | 690.0 | 585.9 | 493.8 | 409.7 | 340.3 | 284.2 |
| 20° | 1329.3 | 1207.8 | 1081.0 | 946.2 | 815.5 | 688.7 | 571.2 | 467.1 | 380.3 | 306.9 | 252.2 |
| 22.5° | 1378.6 | 1257.2 | 1121.1 | 976.9 | 827.4 | 687.3 | 557.9 | 447.1 | 355.0 | 281.6 | 226.9 |
| 25° | 1434.7 | 1306.6 | 1163.7 | 1009.0 | 848.8 | 692.6 | 549.9 | 431.1 | 332.3 | 257.6 | 206.9 |
| 27.5° | 1497.4 | 1362.6 | 1214.5 | 1049.0 | 876.8 | 703.3 | 547.2 | 413.8 | 312.3 | 234.9 | 190.9 |
| 30° | 1585.5 | 1429.3 | 1265.2 | 1089.0 | 902.2 | 715.3 | 544.5 | 403.0 | 292.2 | 217.5 | 174.8 |
| 32.5° | 1662.9 | 1494.7 | 1321.3 | 1130.4 | 930.2 | 727.4 | 543.2 | 388.3 | 273.6 | 200.2 | 162.8 |
| 35° | 1744.3 | 1554.8 | 1369.3 | 1170.4 | 954.2 | 740.7 | 541.9 | 377.7 | 256.2 | 182.9 | 150.8 |
| 37.5° | 1815.0 | 1605.5 | 1406.6 | 1205.1 | 980.9 | 752.7 | 543.2 | 368.3 | 240.2 | 168.2 | 140.1 |
| 40° | 1875.1 | 1657.6 | 1448.1 | 1237.1 | 1009.0 | 771.4 | 544.5 | 359.0 | 224.2 | 154.8 | 130.8 |
| 42.5° | 1928.5 | 1706.9 | 1492.1 | 1273.2 | 1041.0 | 792.8 | 552.5 | 351.0 | 210.8 | 142.8 | 121.4 |
| 45° | 1969.9 | 1752.3 | 1540.1 | 1323.9 | 1093.0 | 827.4 | 567.2 | 345.6 | 197.5 | 132.1 | 113.4 |
| 47.5° | 2012.5 | 1819.0 | 1621.5 | 1404.0 | 1169.1 | 882.2 | 592.6 | 344.3 | 186.8 | 124.1 | 106.7 |
| 50° | 2071.2 | 1885.7 | 1693.6 | 1485.4 | 1238.5 | 938.2 | 623.3 | 345.6 | 173.5 | 116.1 | 100.1 |
| 52.5° | 2114.0 | 1953.9 | 1787.0 | 1626.9 | 1404.0 | 1109.0 | 742.1 | 369.7 | 166.8 | 109.5 | 92.0 |
| 55° | 2366.2 | 2338.2 | 2342.2 | 2368.9 | 2196.7 | 1887.1 | 1241.2 | 533.9 | 196.1 | 124.1 | 90.7 |
| 57.5° | 3336.4 | 3435.3 | 3492.6 | 3491.3 | 3207.0 | 2659.8 | 1666.9 | 686.0 | 218.8 | 144.1 | 108.1 |
| 60° | 4612.3 | 4537.6 | 4432.2 | 4171.9 | 3794.2 | 3036.2 | 1864.4 | 738.0 | 189.5 | 114.7 | 98.7 |
| 62.5° | 5740.0 | 5302.3 | 4913.9 | 4492.2 | 3997.1 | 3167.0 | 1904.5 | 734.1 | 165.5 | 86.8 | 69.4 |
| 65° | 6443.4 | 5656.0 | 5028.7 | 4500.2 | 3917.0 | 3057.5 | 1801.7 | 674.0 | 140.1 | 70.7 | 57.4 |
| 67.5° | 6611.5 | 5465.1 | 4577.6 | 3903.7 | 3272.4 | 2379.6 | 1322.6 | 507.1 | 109.5 | 58.7 | 50.7 |
| 69° | 6244.5 | 4857.9 | 3792.9 | 3028.2 | 2380.9 | 1578.8 | 818.1 | 320.3 | 84.0 | 53.4 | 46.7 |
| 70° | 5744.1 | 4225.3 | 3089.5 | 2430.3 | 1763.0 | 1109.0 | 572.5 | 225.5 | 68.0 | 49.4 | 42.7 |
| 72.5° | 3695.5 | 2219.4 | 1518.7 | 1057.0 | 727.4 | 441.7 | 224.2 | 101.5 | 52.0 | 41.4 | 34.7 |
| 75° | 1433.4 | 820.7 | 595.2 | 452.4 | 353.7 | 245.6 | 136.1 | 65.4 | 44.0 | 34.7 | 26.7 |
| 77.5° | 706.0 | 540.5 | 441.7 | 303.0 | 176.2 | 109.5 | 73.4 | 50.7 | 36.0 | 25.3 | 17.3 |
| 80° | 557.9 | 371.0 | 221.6 | 137.4 | 104.1 | 78.8 | 56.1 | 41.4 | 26.7 | 16.0 | 12.0 |
| 82.5° | 285.6 | 156.1 | 114.7 | 93.4 | 77.4 | 61.4 | 45.4 | 29.4 | 17.3 | 10.6 | 9.3 |
| 85° | 89.4 | 65.4 | 58.7 | 57.4 | 53.4 | 44.0 | 32.0 | 18.7 | 10.6 | 6.7 | 6.7 |
| 87.5° | 6.7 | 9.3 | 12.0 | 9.3 | 10.6 | 9.3 | 12.0 | 8.0 | 5.4 | 5.4 | 4.0 |
| 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: P163832

CATALOG NUMBER: LDRL-SL4-F05-E-HSS

CANDELA DISTRIBUTION (continued):

| | 110° | 115° | 120° | 125° | 130° | 135° | 140° | 145° | 150° | 155° | 160° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 | 615.3 |
| 2.5° | 560.5 | 544.5 | 529.8 | 520.5 | 503.2 | 496.5 | 489.8 | 487.1 | 475.1 | 477.8 | 467.1 |
| 5° | 489.8 | 461.8 | 440.4 | 419.0 | 399.1 | 384.4 | 372.3 | 357.7 | 345.6 | 340.3 | 329.6 |
| 7.5° | 425.7 | 389.7 | 361.7 | 339.0 | 314.9 | 296.3 | 280.3 | 269.6 | 258.9 | 248.2 | 242.9 |
| 10° | 369.7 | 331.0 | 298.9 | 276.2 | 253.6 | 237.6 | 225.5 | 217.5 | 210.8 | 206.9 | 205.6 |
| 12.5° | 317.7 | 280.3 | 250.9 | 230.9 | 213.6 | 205.6 | 200.2 | 196.1 | 194.8 | 193.5 | 193.5 |
| 15° | 277.6 | 240.2 | 217.5 | 202.8 | 194.8 | 190.9 | 189.5 | 186.8 | 184.2 | 182.9 | 182.9 |
| 17.5° | 240.2 | 212.2 | 196.1 | 188.1 | 184.2 | 181.5 | 178.8 | 176.2 | 173.5 | 172.1 | 172.1 |
| 20° | 214.9 | 192.2 | 184.2 | 178.8 | 174.8 | 172.1 | 168.2 | 165.5 | 164.1 | 162.8 | 161.5 |
| 22.5° | 194.8 | 180.1 | 174.8 | 170.8 | 165.5 | 161.5 | 158.8 | 156.1 | 153.5 | 152.1 | 150.8 |
| 25° | 180.1 | 170.8 | 166.8 | 161.5 | 156.1 | 152.1 | 148.1 | 144.1 | 141.5 | 140.1 | 137.4 |
| 27.5° | 169.5 | 162.8 | 157.5 | 150.8 | 145.5 | 141.5 | 137.4 | 133.5 | 130.8 | 128.1 | 126.8 |
| 30° | 160.2 | 153.5 | 146.8 | 141.5 | 134.8 | 130.8 | 125.5 | 121.4 | 120.1 | 117.5 | 114.7 |
| 32.5° | 150.8 | 144.1 | 137.4 | 130.8 | 124.1 | 118.8 | 116.1 | 110.8 | 108.1 | 106.7 | 104.1 |
| 35° | 140.1 | 133.5 | 125.5 | 120.1 | 113.4 | 108.1 | 104.1 | 100.1 | 97.4 | 94.8 | 93.4 |
| 37.5° | 130.8 | 122.8 | 114.7 | 108.1 | 102.8 | 97.4 | 93.4 | 89.4 | 86.8 | 84.0 | 82.7 |
| 40° | 120.1 | 112.1 | 104.1 | 97.4 | 92.0 | 88.1 | 84.0 | 80.1 | 77.4 | 76.0 | 76.0 |
| 42.5° | 110.8 | 101.5 | 93.4 | 88.1 | 84.0 | 78.8 | 74.7 | 70.7 | 69.4 | 68.0 | 69.4 |
| 45° | 101.5 | 92.0 | 85.4 | 80.1 | 76.0 | 70.7 | 66.7 | 64.1 | 62.7 | 64.1 | 65.4 |
| 47.5° | 93.4 | 84.0 | 77.4 | 73.4 | 69.4 | 65.4 | 61.4 | 58.7 | 58.7 | 61.4 | 64.1 |
| 50° | 85.4 | 76.0 | 70.7 | 68.0 | 64.1 | 60.0 | 54.7 | 53.4 | 54.7 | 57.4 | 60.0 |
| 52.5° | 77.4 | 66.7 | 62.7 | 61.4 | 57.4 | 53.4 | 49.4 | 48.0 | 49.4 | 52.0 | 50.7 |
| 55° | 69.4 | 58.7 | 57.4 | 56.1 | 52.0 | 46.7 | 42.7 | 42.7 | 42.7 | 41.4 | 38.7 |
| 57.5° | 66.7 | 52.0 | 50.7 | 49.4 | 45.4 | 40.0 | 37.4 | 34.7 | 33.4 | 29.4 | 28.0 |
| 60° | 69.4 | 46.7 | 46.7 | 44.0 | 40.0 | 34.7 | 30.7 | 26.7 | 24.0 | 21.4 | 21.4 |
| 62.5° | 56.1 | 42.7 | 41.4 | 38.7 | 33.4 | 28.0 | 24.0 | 20.0 | 18.7 | 17.3 | 17.3 |
| 65° | 45.4 | 38.7 | 36.0 | 32.0 | 28.0 | 22.7 | 18.7 | 16.0 | 14.7 | 14.7 | 16.0 |
| 67.5° | 41.4 | 34.7 | 30.7 | 26.7 | 22.7 | 17.3 | 14.7 | 13.4 | 13.4 | 14.7 | 14.7 |
| 69° | 38.7 | 32.0 | 28.0 | 24.0 | 20.0 | 16.0 | 13.4 | 13.4 | 13.4 | 13.4 | 14.7 |
| 70° | 36.0 | 30.7 | 26.7 | 22.7 | 17.3 | 13.4 | 12.0 | 12.0 | 13.4 | 13.4 | 14.7 |
| 72.5° | 28.0 | 24.0 | 22.7 | 18.7 | 13.4 | 12.0 | 10.6 | 12.0 | 12.0 | 13.4 | 13.4 |
| 75° | 21.4 | 17.3 | 17.3 | 14.7 | 10.6 | 9.3 | 9.3 | 10.6 | 10.6 | 12.0 | 12.0 |
| 77.5° | 14.7 | 12.0 | 12.0 | 10.6 | 9.3 | 8.0 | 8.0 | 9.3 | 10.6 | 10.6 | 12.0 |
| 80° | 10.6 | 9.3 | 8.0 | 9.3 | 8.0 | 6.7 | 8.0 | 9.3 | 9.3 | 10.6 | 10.6 |
| 82.5° | 8.0 | 8.0 | 8.0 | 8.0 | 6.7 | 6.7 | 8.0 | 8.0 | 9.3 | 10.6 | 10.6 |
| 85° | 6.7 | 6.7 | 6.7 | 6.7 | 6.7 | 6.7 | 6.7 | 8.0 | 8.0 | 9.3 | 9.3 |
| 87.5° | 4.0 | 4.0 | 4.0 | 5.4 | 5.4 | 6.7 | 6.7 | 6.7 | 6.7 | 8.0 | 8.0 |
| 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: P163832

CATALOG NUMBER: LDRL-SL4-F05-E-HSS

CANDELA DISTRIBUTION (continued):

| | 165° | 170° | 175° | 180° |
|-------|-------|-------|-------|-------|
| 0° | 615.3 | 615.3 | 615.3 | 615.3 |
| 2.5° | 464.4 | 463.1 | 457.8 | 459.1 |
| 5° | 325.7 | 317.7 | 322.9 | 321.6 |
| 7.5° | 238.9 | 237.6 | 236.2 | 238.9 |
| 10° | 204.2 | 204.2 | 202.8 | 204.2 |
| 12.5° | 192.2 | 192.2 | 192.2 | 192.2 |
| 15° | 182.9 | 182.9 | 181.5 | 181.5 |
| 17.5° | 172.1 | 172.1 | 172.1 | 170.8 |
| 20° | 161.5 | 160.2 | 160.2 | 160.2 |
| 22.5° | 149.5 | 148.1 | 148.1 | 148.1 |
| 25° | 137.4 | 136.1 | 136.1 | 136.1 |
| 27.5° | 125.5 | 124.1 | 122.8 | 122.8 |
| 30° | 113.4 | 112.1 | 110.8 | 110.8 |
| 32.5° | 101.5 | 100.1 | 98.7 | 98.7 |
| 35° | 90.7 | 90.7 | 89.4 | 88.1 |
| 37.5° | 81.4 | 81.4 | 81.4 | 81.4 |
| 40° | 74.7 | 76.0 | 76.0 | 76.0 |
| 42.5° | 70.7 | 72.1 | 73.4 | 74.7 |
| 45° | 68.0 | 70.7 | 72.1 | 72.1 |
| 47.5° | 66.7 | 68.0 | 69.4 | 69.4 |
| 50° | 61.4 | 60.0 | 60.0 | 60.0 |
| 52.5° | 49.4 | 46.7 | 45.4 | 44.0 |
| 55° | 36.0 | 34.7 | 32.0 | 32.0 |
| 57.5° | 25.3 | 25.3 | 24.0 | 24.0 |
| 60° | 20.0 | 20.0 | 18.7 | 20.0 |
| 62.5° | 17.3 | 17.3 | 17.3 | 17.3 |
| 65° | 16.0 | 16.0 | 16.0 | 16.0 |
| 67.5° | 16.0 | 16.0 | 16.0 | 16.0 |
| 69° | 14.7 | 14.7 | 14.7 | 14.7 |
| 70° | 14.7 | 14.7 | 14.7 | 14.7 |
| 72.5° | 13.4 | 13.4 | 13.4 | 13.4 |
| 75° | 12.0 | 13.4 | 13.4 | 13.4 |
| 77.5° | 12.0 | 12.0 | 12.0 | 12.0 |
| 80° | 10.6 | 10.6 | 12.0 | 12.0 |
| 82.5° | 10.6 | 10.6 | 10.6 | 10.6 |
| 85° | 9.3 | 9.3 | 10.6 | 10.6 |
| 87.5° | 8.0 | 8.0 | 9.3 | 9.3 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)