

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: McGRAW-EDISON

Report Number: P149516

Luminaire Tested: **TLM-F02-LED-E1-SL2-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: P149516
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33726)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TLM-F02-LED-E1-SL2-HSS-7050
Description: TALON MEDIUM LED SITE LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (14) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3106.4 lumens
Efficiency: N/A
Efficacy: 56.5 lumens/watt
Spacing Criteria (0/90/45): 3.83 / 3.85 / 3.8
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
CIE Type: Direct

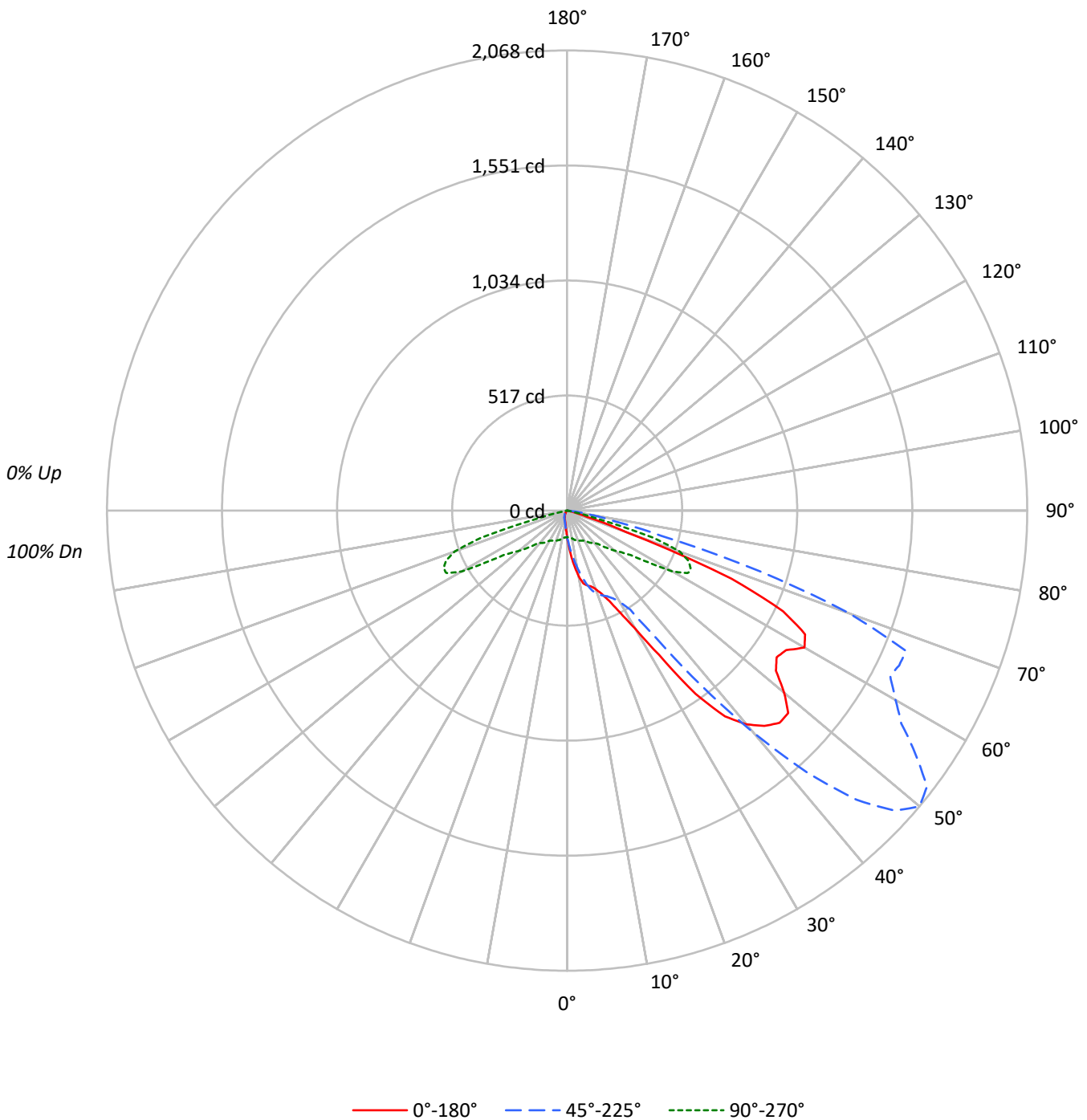
Input Watts (W): 55
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P149516

CATALOG NUMBER: TLM-F02-LED-E1-SL2-HSS-7050

Luminous Intensity Polar Plot





TEST NUMBER: P149516

CATALOG NUMBER: TLM-F02-LED-E1-SL2-HSS-7050

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 | 0 |
| RCR | | | | | | | | | | | | | | | | | | |
| 0 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 106 | 100 | 94 | 89 | 103 | 97 | 92 | 88 | 93 | 89 | 85 | 89 | 86 | 82 | 85 | 82 | 80 | 78 |
| 2 | 93 | 82 | 73 | 66 | 90 | 80 | 72 | 65 | 76 | 69 | 63 | 73 | 67 | 62 | 70 | 65 | 60 | 58 |
| 3 | 82 | 68 | 58 | 49 | 79 | 66 | 57 | 49 | 63 | 55 | 48 | 60 | 53 | 47 | 57 | 51 | 46 | 43 |
| 4 | 72 | 57 | 46 | 38 | 70 | 56 | 45 | 37 | 53 | 44 | 37 | 50 | 42 | 36 | 48 | 41 | 35 | 33 |
| 5 | 65 | 49 | 38 | 29 | 62 | 47 | 37 | 29 | 45 | 36 | 29 | 43 | 35 | 28 | 41 | 34 | 28 | 25 |
| 6 | 58 | 42 | 31 | 23 | 56 | 41 | 31 | 23 | 39 | 30 | 23 | 37 | 29 | 23 | 35 | 28 | 22 | 20 |
| 7 | 53 | 37 | 26 | 19 | 51 | 36 | 26 | 19 | 34 | 25 | 19 | 33 | 24 | 18 | 31 | 24 | 18 | 16 |
| 8 | 49 | 33 | 23 | 16 | 47 | 32 | 22 | 16 | 30 | 22 | 15 | 29 | 21 | 15 | 28 | 20 | 15 | 13 |
| 9 | 45 | 29 | 20 | 13 | 43 | 29 | 19 | 13 | 27 | 19 | 13 | 26 | 18 | 13 | 25 | 18 | 13 | 11 |
| 10 | 42 | 26 | 17 | 11 | 40 | 26 | 17 | 11 | 25 | 17 | 11 | 24 | 16 | 11 | 23 | 16 | 11 | 9 |

AVERAGE LUMINANCE (cd/sqm):

| | 0° | 90° | 180° |
|-----|-------|-------|------|
| 0° | 3888 | 3888 | 3888 |
| 5° | 6693 | 3975 | 2276 |
| 10° | 9950 | 4210 | 1666 |
| 15° | 11765 | 4653 | 1374 |
| 20° | 13034 | 5019 | 1139 |
| 25° | 16138 | 5344 | 875 |
| 30° | 23035 | 5872 | 682 |
| 35° | 40002 | 7016 | 494 |
| 40° | 53382 | 8077 | 264 |
| 45° | 62232 | 10448 | 78 |
| 50° | 64593 | 14244 | 30 |
| 55° | 65352 | 19813 | 0 |
| 60° | 80312 | 35658 | 0 |
| 65° | 82684 | 47250 | 0 |
| 70° | 27037 | 51270 | 0 |
| 75° | 4625 | 16938 | 0 |
| 80° | 1165 | 2329 | 0 |
| 85° | 0 | 1272 | 0 |



TEST NUMBER: P149516

CATALOG NUMBER: TLM-F02-LED-E1-SL2-HSS-7050

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 13.2 | 0.4 |
| 10°-20° | 51.1 | 1.6 |
| 20°-30° | 103.7 | 3.3 |
| 30°-40° | 253.5 | 8.2 |
| 40°-50° | 566.9 | 18.2 |
| 50°-60° | 797.1 | 25.7 |
| 60°-70° | 937.3 | 30.2 |
| 70°-80° | 338.4 | 10.9 |
| 80°-90° | 45.3 | 1.5 |
| 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° | 168.0 | 5.4 |
| 0°-40° | 421.5 | 13.6 |
| 0°-60° | 1785.4 | 57.5 |
| 0°-90° | 3106.4 | 100.0 |
| 90°-120° | 0.0 | 0.0 |
| 90°-150° | 0.0 | 0.0 |
| 90°-180° | 0.0 | 0.0 |
| 0°-180° | 3106.4 | 100.0 |

CANDELA DISTRIBUTION:

| | 0° | 45° | 90° | 135° | 180° | Flux |
|-----|------|------|-----|------|------|------|
| 0° | 119 | 119 | 119 | 119 | 119 | |
| 5° | 204 | 180 | 121 | 78 | 70 | 22 |
| 15° | 348 | 345 | 138 | 45 | 41 | 99 |
| 25° | 448 | 425 | 148 | 30 | 24 | 219 |
| 35° | 1005 | 699 | 176 | 18 | 12 | 616 |
| 45° | 1349 | 1838 | 226 | 7 | 2 | 1021 |
| 55° | 1149 | 1913 | 348 | 1 | 0 | 1065 |
| 65° | 1071 | 1647 | 612 | 0 | 0 | 946 |
| 75° | 37 | 437 | 134 | 0 | 0 | 76 |
| 85° | 0 | 7 | 3 | 0 | 0 | 1 |
| 90° | 0 | 0 | 0 | 0 | 0 | |



TEST NUMBER: P149516

CATALOG NUMBER: TLM-F02-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 56° | 57° | 58° | 59° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 |
| 2.5° | 155.9 | 157.6 | 156.4 | 153.6 | 150.2 | 145.7 | 141.7 | 141.7 | 141.2 | 139.5 | 140.0 |
| 5° | 204.4 | 205.0 | 202.7 | 196.0 | 189.7 | 180.1 | 169.4 | 168.3 | 167.2 | 165.5 | 164.9 |
| 7.5° | 251.9 | 254.1 | 251.9 | 244.5 | 232.1 | 217.4 | 200.5 | 198.8 | 195.4 | 195.4 | 193.1 |
| 10° | 300.4 | 300.4 | 298.2 | 289.7 | 278.4 | 257.5 | 236.1 | 233.2 | 229.3 | 228.1 | 224.8 |
| 12.5° | 334.9 | 334.9 | 333.7 | 329.2 | 320.2 | 301.6 | 275.6 | 272.8 | 267.7 | 266.0 | 262.0 |
| 15° | 348.4 | 348.4 | 349.0 | 352.9 | 353.5 | 345.0 | 317.9 | 315.7 | 310.6 | 306.1 | 304.4 |
| 17.5° | 356.9 | 356.3 | 356.3 | 362.0 | 372.1 | 377.8 | 360.3 | 358.0 | 352.4 | 350.1 | 344.5 |
| 20° | 375.5 | 374.4 | 371.0 | 371.0 | 380.6 | 400.4 | 400.4 | 399.8 | 393.6 | 391.9 | 389.1 |
| 22.5° | 403.2 | 402.1 | 391.9 | 383.4 | 388.0 | 412.8 | 436.0 | 434.8 | 432.6 | 430.3 | 428.6 |
| 25° | 448.4 | 444.4 | 426.9 | 402.1 | 398.1 | 424.7 | 463.1 | 465.9 | 467.6 | 467.6 | 468.7 |
| 27.5° | 516.7 | 511.6 | 480.6 | 434.3 | 416.8 | 443.9 | 493.0 | 498.6 | 503.7 | 504.9 | 509.9 |
| 30° | 611.6 | 602.6 | 557.9 | 490.2 | 450.1 | 472.1 | 537.0 | 543.3 | 550.6 | 552.9 | 560.8 |
| 32.5° | 767.5 | 762.4 | 719.4 | 617.8 | 532.0 | 527.4 | 598.6 | 606.5 | 616.1 | 620.1 | 629.7 |
| 35° | 1004.6 | 1005.8 | 970.7 | 879.3 | 760.7 | 698.6 | 708.7 | 715.5 | 718.9 | 730.7 | 735.8 |
| 37.5° | 1165.6 | 1168.4 | 1176.3 | 1140.2 | 1055.5 | 992.2 | 912.6 | 919.9 | 902.4 | 904.1 | 904.7 |
| 40° | 1253.7 | 1262.7 | 1309.0 | 1344.0 | 1337.3 | 1300.5 | 1236.7 | 1240.7 | 1207.9 | 1200.6 | 1165.0 |
| 42.5° | 1312.4 | 1324.3 | 1398.2 | 1506.7 | 1562.0 | 1595.3 | 1580.6 | 1578.9 | 1553.5 | 1543.9 | 1514.0 |
| 45° | 1349.1 | 1359.8 | 1453.0 | 1612.8 | 1740.5 | 1837.6 | 1877.7 | 1882.2 | 1860.7 | 1851.1 | 1826.3 |
| 47.5° | 1347.4 | 1359.8 | 1459.8 | 1652.4 | 1840.4 | 1995.7 | 2108.7 | 2114.3 | 2127.3 | 2118.8 | 2120.5 |
| 50° | 1272.9 | 1284.7 | 1385.3 | 1585.2 | 1811.0 | 2068.0 | 2274.7 | 2292.8 | 2313.6 | 2327.8 | 2334.5 |
| 52.5° | 1182.5 | 1191.0 | 1280.2 | 1470.0 | 1685.7 | 2038.1 | 2372.9 | 2404.0 | 2435.1 | 2461.6 | 2480.2 |
| 55° | 1149.2 | 1158.8 | 1228.8 | 1386.4 | 1585.2 | 1912.7 | 2418.7 | 2464.4 | 2508.5 | 2552.0 | 2587.5 |
| 57.5° | 1166.7 | 1175.7 | 1226.0 | 1346.9 | 1525.3 | 1780.6 | 2431.7 | 2502.8 | 2575.1 | 2645.7 | 2715.7 |
| 60° | 1231.1 | 1240.7 | 1283.6 | 1383.6 | 1509.5 | 1704.3 | 2380.8 | 2498.9 | 2619.2 | 2742.3 | 2858.0 |
| 62.5° | 1205.7 | 1209.6 | 1272.9 | 1447.9 | 1622.4 | 1639.4 | 2196.2 | 2361.1 | 2544.6 | 2734.4 | 2921.3 |
| 63° | 1181.4 | 1185.9 | 1250.3 | 1430.4 | 1656.9 | 1629.8 | 2139.1 | 2313.1 | 2506.8 | 2711.2 | 2914.5 |
| 65° | 1071.3 | 1071.8 | 1121.0 | 1263.3 | 1618.5 | 1646.7 | 1885.0 | 2051.1 | 2273.6 | 2518.6 | 2775.6 |
| 67.5° | 799.6 | 795.7 | 843.1 | 951.5 | 1270.6 | 1647.3 | 1617.9 | 1711.1 | 1865.8 | 2083.2 | 2313.6 |
| 70° | 283.5 | 277.3 | 354.1 | 504.3 | 791.7 | 1347.4 | 1390.3 | 1396.5 | 1439.5 | 1556.9 | 1701.5 |
| 72.5° | 92.0 | 93.7 | 112.9 | 184.7 | 364.8 | 906.9 | 1258.8 | 1239.6 | 1228.3 | 1227.7 | 1246.9 |
| 75° | 36.7 | 37.3 | 45.2 | 81.9 | 163.8 | 437.1 | 1102.3 | 1113.1 | 1117.0 | 1122.7 | 1128.9 |
| 77.5° | 17.5 | 19.2 | 25.4 | 45.7 | 81.3 | 216.3 | 788.9 | 879.8 | 931.8 | 971.9 | 996.2 |
| 80° | 6.2 | 7.3 | 14.1 | 28.2 | 37.8 | 99.4 | 415.6 | 501.5 | 577.7 | 676.0 | 760.7 |
| 82.5° | 0.0 | 0.0 | 2.8 | 19.8 | 20.9 | 40.1 | 170.5 | 199.9 | 228.7 | 296.5 | 380.6 |
| 85° | 0.0 | 0.0 | 0.0 | 5.6 | 6.2 | 6.8 | 57.6 | 69.5 | 77.9 | 90.9 | 105.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 1.7 | 3.4 | 8.5 | 13.0 |
| 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: P149516

CATALOG NUMBER: TLM-F02-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (continued):

| | 60° | 61° | 62° | 64° | 65° | 66° | 67° | 68° | 69° | 70° | 71° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 |
| 2.5° | 138.9 | 138.4 | 138.4 | 137.2 | 136.7 | 135.5 | 135.0 | 133.3 | 132.7 | 132.7 | 132.7 |
| 5° | 164.3 | 162.1 | 160.9 | 158.1 | 156.4 | 155.9 | 153.0 | 151.9 | 150.2 | 150.8 | 148.0 |
| 7.5° | 192.6 | 188.6 | 186.9 | 183.0 | 181.8 | 177.9 | 176.8 | 173.9 | 172.2 | 168.9 | 167.7 |
| 10° | 223.6 | 218.5 | 215.7 | 209.5 | 207.8 | 205.0 | 201.6 | 198.2 | 195.4 | 192.0 | 190.3 |
| 12.5° | 259.2 | 254.7 | 252.4 | 244.0 | 240.0 | 236.1 | 231.5 | 227.0 | 222.5 | 219.7 | 215.7 |
| 15° | 301.0 | 293.7 | 291.4 | 283.5 | 276.7 | 271.6 | 265.4 | 259.8 | 256.4 | 250.7 | 246.8 |
| 17.5° | 342.2 | 334.9 | 333.2 | 321.3 | 314.0 | 310.6 | 303.8 | 296.5 | 290.3 | 284.6 | 278.4 |
| 20° | 383.4 | 378.4 | 373.8 | 362.5 | 354.6 | 349.0 | 340.0 | 332.6 | 327.5 | 319.6 | 311.7 |
| 22.5° | 424.7 | 419.6 | 416.2 | 404.3 | 397.0 | 389.1 | 381.2 | 373.3 | 365.9 | 356.3 | 347.3 |
| 25° | 467.0 | 463.6 | 461.9 | 451.2 | 444.4 | 437.1 | 429.2 | 420.1 | 411.1 | 400.4 | 390.8 |
| 27.5° | 511.1 | 512.2 | 508.8 | 506.6 | 499.2 | 494.1 | 481.7 | 475.5 | 468.7 | 455.7 | 443.9 |
| 30° | 567.0 | 570.4 | 569.2 | 570.9 | 566.4 | 563.0 | 553.4 | 545.5 | 537.6 | 525.2 | 511.6 |
| 32.5° | 637.6 | 642.1 | 644.3 | 650.6 | 648.3 | 647.2 | 644.3 | 633.0 | 627.4 | 605.9 | 600.3 |
| 35° | 746.6 | 744.3 | 753.9 | 759.0 | 756.7 | 755.6 | 752.2 | 746.0 | 739.2 | 724.0 | 709.8 |
| 37.5° | 888.3 | 890.6 | 893.9 | 883.8 | 877.0 | 876.4 | 866.3 | 860.1 | 850.5 | 833.5 | 816.6 |
| 40° | 1148.1 | 1134.0 | 1118.1 | 1075.2 | 1056.6 | 1045.9 | 1015.9 | 1007.5 | 991.1 | 967.9 | 950.4 |
| 42.5° | 1485.8 | 1471.7 | 1424.2 | 1352.5 | 1314.1 | 1261.0 | 1236.7 | 1206.8 | 1183.6 | 1145.8 | 1125.5 |
| 45° | 1821.2 | 1780.6 | 1774.9 | 1691.3 | 1643.9 | 1573.9 | 1530.4 | 1480.1 | 1427.6 | 1377.9 | 1341.8 |
| 47.5° | 2104.1 | 2095.1 | 2067.4 | 2016.6 | 1972.6 | 1913.8 | 1857.9 | 1780.6 | 1726.3 | 1655.8 | 1590.8 |
| 50° | 2330.6 | 2330.0 | 2319.9 | 2290.5 | 2253.8 | 2206.3 | 2157.2 | 2091.7 | 2030.2 | 1943.8 | 1874.3 |
| 52.5° | 2500.0 | 2509.0 | 2512.4 | 2503.4 | 2489.3 | 2447.5 | 2422.6 | 2367.9 | 2315.9 | 2242.5 | 2167.4 |
| 55° | 2624.2 | 2657.6 | 2674.5 | 2693.7 | 2689.7 | 2675.1 | 2673.9 | 2638.4 | 2614.6 | 2556.5 | 2503.4 |
| 57.5° | 2777.8 | 2832.6 | 2885.1 | 2978.3 | 2981.7 | 3014.5 | 3031.4 | 3048.3 | 3052.9 | 3029.7 | 3012.2 |
| 60° | 2973.2 | 3085.0 | 3184.4 | 3379.3 | 3430.1 | 3510.3 | 3562.2 | 3618.7 | 3666.7 | 3670.7 | 3669.5 |
| 62.5° | 3111.0 | 3283.3 | 3443.6 | 3732.8 | 3831.6 | 3924.2 | 3993.7 | 4048.5 | 4081.8 | 4115.7 | 4131.5 |
| 63° | 3115.0 | 3303.6 | 3474.1 | 3772.3 | 3876.2 | 3964.3 | 4030.4 | 4081.2 | 4116.2 | 4136.6 | 4146.7 |
| 65° | 3019.5 | 3248.3 | 3451.6 | 3748.6 | 3846.3 | 3934.9 | 3969.4 | 4002.7 | 4019.7 | 4027.6 | 3997.6 |
| 67.5° | 2559.3 | 2782.9 | 3020.1 | 3352.2 | 3435.7 | 3541.9 | 3570.1 | 3587.1 | 3595.0 | 3593.3 | 3567.9 |
| 70° | 1913.8 | 2101.3 | 2365.0 | 2744.5 | 2855.2 | 2959.1 | 3023.5 | 3051.2 | 3060.2 | 3057.4 | 3019.5 |
| 72.5° | 1336.1 | 1446.2 | 1663.7 | 2086.1 | 2236.8 | 2370.1 | 2449.7 | 2491.0 | 2499.4 | 2482.5 | 2447.5 |
| 75° | 1122.1 | 1127.7 | 1176.9 | 1407.8 | 1549.0 | 1691.3 | 1781.1 | 1807.1 | 1790.2 | 1738.8 | 1649.5 |
| 77.5° | 1001.8 | 1014.2 | 1014.2 | 1048.7 | 1076.4 | 1115.9 | 1124.4 | 1061.1 | 987.7 | 892.8 | 816.0 |
| 80° | 840.3 | 883.8 | 914.3 | 939.7 | 942.5 | 934.6 | 913.7 | 878.1 | 821.7 | 749.4 | 669.2 |
| 82.5° | 510.5 | 596.3 | 631.4 | 762.4 | 826.7 | 870.2 | 866.8 | 819.4 | 776.5 | 701.4 | 633.0 |
| 85° | 128.8 | 138.9 | 150.8 | 196.0 | 219.7 | 268.2 | 298.7 | 312.9 | 317.9 | 292.0 | 264.3 |
| 87.5° | 12.4 | 8.5 | 14.1 | 10.7 | 15.2 | 11.3 | 15.2 | 14.1 | 17.5 | 18.6 | 20.3 |
| 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: P149516

CATALOG NUMBER: TLM-F02-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (continued):

| | 72° | 73° | 74° | 75° | 76° | 77° | 78° | 79° | 80° | 81° | 82° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 |
| 2.5° | 131.6 | 131.0 | 130.4 | 129.9 | 129.3 | 128.8 | 127.6 | 127.6 | 126.5 | 125.9 | 125.4 |
| 5° | 146.3 | 145.1 | 144.6 | 143.4 | 141.7 | 140.6 | 138.9 | 136.7 | 135.0 | 134.4 | 133.3 |
| 7.5° | 164.9 | 162.1 | 160.9 | 159.3 | 157.0 | 153.6 | 151.3 | 149.7 | 146.8 | 145.1 | 141.7 |
| 10° | 185.8 | 183.0 | 179.6 | 176.2 | 172.8 | 168.9 | 166.0 | 163.8 | 159.3 | 157.0 | 153.0 |
| 12.5° | 212.3 | 207.3 | 203.3 | 198.8 | 194.3 | 189.7 | 186.4 | 179.6 | 175.6 | 170.5 | 167.2 |
| 15° | 239.4 | 234.9 | 230.4 | 224.8 | 218.0 | 210.6 | 207.3 | 201.0 | 196.0 | 188.1 | 183.5 |
| 17.5° | 272.2 | 263.7 | 256.9 | 250.2 | 244.0 | 237.2 | 230.4 | 220.8 | 213.5 | 206.7 | 197.7 |
| 20° | 304.4 | 294.2 | 286.9 | 277.8 | 268.8 | 258.1 | 250.2 | 243.4 | 233.2 | 224.2 | 214.6 |
| 22.5° | 338.8 | 328.7 | 316.8 | 307.8 | 295.3 | 286.9 | 276.1 | 264.9 | 254.7 | 242.8 | 231.0 |
| 25° | 380.6 | 369.9 | 356.3 | 344.5 | 330.4 | 318.5 | 305.5 | 292.5 | 280.1 | 266.5 | 251.3 |
| 27.5° | 432.0 | 420.7 | 406.0 | 391.9 | 373.3 | 358.6 | 346.2 | 328.7 | 312.9 | 295.9 | 278.4 |
| 30° | 497.0 | 484.5 | 466.5 | 446.1 | 427.5 | 411.1 | 393.6 | 370.5 | 352.9 | 332.6 | 310.0 |
| 32.5° | 581.7 | 567.0 | 542.7 | 523.5 | 500.3 | 478.9 | 454.6 | 431.4 | 406.6 | 380.1 | 354.1 |
| 35° | 688.4 | 674.8 | 646.6 | 618.4 | 593.0 | 567.5 | 537.0 | 510.5 | 475.5 | 443.3 | 410.0 |
| 37.5° | 799.1 | 774.8 | 748.8 | 718.3 | 686.7 | 656.2 | 618.9 | 582.2 | 542.1 | 507.1 | 465.3 |
| 40° | 925.6 | 896.2 | 874.7 | 842.0 | 797.4 | 753.9 | 719.4 | 673.7 | 623.4 | 576.6 | 527.4 |
| 42.5° | 1098.9 | 1066.2 | 1027.8 | 978.1 | 945.9 | 895.1 | 850.5 | 796.3 | 730.2 | 677.7 | 618.4 |
| 45° | 1299.4 | 1254.8 | 1217.5 | 1169.5 | 1130.6 | 1067.3 | 1015.4 | 943.1 | 877.0 | 808.1 | 735.8 |
| 47.5° | 1528.1 | 1472.8 | 1418.6 | 1371.1 | 1309.0 | 1246.9 | 1180.8 | 1104.0 | 1019.3 | 943.6 | 857.8 |
| 50° | 1790.7 | 1712.2 | 1637.1 | 1576.1 | 1490.9 | 1419.1 | 1347.4 | 1261.0 | 1167.3 | 1080.3 | 982.6 |
| 52.5° | 2082.7 | 1991.8 | 1892.4 | 1798.6 | 1699.8 | 1607.7 | 1521.3 | 1422.0 | 1317.5 | 1211.3 | 1102.3 |
| 55° | 2435.1 | 2366.7 | 2249.8 | 2130.7 | 1998.5 | 1875.4 | 1764.2 | 1641.1 | 1514.0 | 1374.5 | 1259.9 |
| 57.5° | 2986.8 | 2953.5 | 2855.8 | 2736.6 | 2564.4 | 2414.7 | 2226.1 | 2075.3 | 1891.2 | 1699.2 | 1551.3 |
| 60° | 3734.5 | 3693.2 | 3638.5 | 3541.9 | 3405.2 | 3201.9 | 2994.1 | 2759.8 | 2479.7 | 2213.7 | 1961.3 |
| 62.5° | 4133.2 | 4118.5 | 4073.9 | 4007.2 | 3879.6 | 3719.2 | 3509.7 | 3252.2 | 2936.0 | 2612.9 | 2291.1 |
| 63° | 4145.0 | 4126.4 | 4088.0 | 4020.2 | 3907.8 | 3752.5 | 3547.0 | 3296.8 | 2987.4 | 2658.1 | 2329.5 |
| 65° | 3984.6 | 3977.3 | 3938.3 | 3864.4 | 3787.6 | 3669.0 | 3509.7 | 3294.6 | 3034.8 | 2723.6 | 2396.7 |
| 67.5° | 3534.0 | 3512.0 | 3452.1 | 3429.5 | 3375.9 | 3293.4 | 3172.0 | 3024.1 | 2838.3 | 2593.7 | 2311.4 |
| 70° | 2989.0 | 2956.3 | 2881.2 | 2841.1 | 2775.6 | 2723.6 | 2649.7 | 2544.1 | 2429.4 | 2258.9 | 2048.2 |
| 72.5° | 2411.3 | 2343.6 | 2274.7 | 2170.2 | 2078.7 | 1986.1 | 1904.2 | 1829.7 | 1703.8 | 1634.9 | 1475.0 |
| 75° | 1566.0 | 1442.9 | 1324.8 | 1166.7 | 1024.4 | 898.5 | 775.9 | 713.8 | 584.5 | 532.0 | 456.9 |
| 77.5° | 743.2 | 674.3 | 581.7 | 509.9 | 418.5 | 341.7 | 279.0 | 209.5 | 164.3 | 128.8 | 98.3 |
| 80° | 599.7 | 541.6 | 485.7 | 420.7 | 351.8 | 280.7 | 215.2 | 160.9 | 114.1 | 79.1 | 55.9 |
| 82.5° | 534.8 | 471.5 | 402.6 | 358.0 | 311.2 | 254.7 | 208.9 | 170.5 | 125.9 | 92.0 | 62.7 |
| 85° | 207.8 | 175.1 | 135.0 | 110.1 | 85.8 | 70.6 | 63.8 | 44.0 | 34.4 | 27.1 | 20.9 |
| 87.5° | 18.1 | 14.7 | 11.9 | 7.9 | 8.5 | 4.5 | 5.1 | 3.4 | 2.8 | 2.8 | 2.3 |
| 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: P149516

CATALOG NUMBER: TLM-F02-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (continued):

| | 83° | 84° | 85° | 86° | 87° | 88° | 89° | 90° | 95° | 105° | 115° |
|-------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|
| 0° | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 |
| 2.5° | 124.8 | 124.2 | 123.7 | 122.5 | 122.5 | 121.4 | 120.8 | 120.3 | 117.5 | 111.2 | 106.2 |
| 5° | 131.0 | 129.9 | 128.8 | 127.1 | 125.9 | 124.2 | 123.1 | 121.4 | 115.2 | 103.3 | 93.2 |
| 7.5° | 140.0 | 137.8 | 136.1 | 132.7 | 131.0 | 128.8 | 127.1 | 124.2 | 114.1 | 96.0 | 81.9 |
| 10° | 150.8 | 146.8 | 144.0 | 140.0 | 136.7 | 133.8 | 131.0 | 127.1 | 112.9 | 88.1 | 71.7 |
| 12.5° | 163.8 | 159.3 | 153.6 | 149.1 | 144.6 | 140.6 | 136.7 | 131.6 | 111.2 | 81.3 | 63.8 |
| 15° | 176.8 | 170.0 | 166.0 | 159.8 | 153.6 | 148.0 | 142.3 | 137.8 | 111.8 | 74.0 | 57.0 |
| 17.5° | 191.4 | 184.7 | 176.2 | 169.4 | 162.6 | 155.3 | 148.5 | 139.5 | 109.0 | 68.3 | 52.0 |
| 20° | 205.6 | 196.0 | 188.1 | 179.6 | 170.0 | 160.9 | 152.5 | 144.6 | 106.7 | 62.7 | 47.4 |
| 22.5° | 220.8 | 209.5 | 199.3 | 188.6 | 176.8 | 166.6 | 156.4 | 146.3 | 102.8 | 57.6 | 43.5 |
| 25° | 239.4 | 226.5 | 211.8 | 198.8 | 186.4 | 173.9 | 160.9 | 148.5 | 98.8 | 53.1 | 40.7 |
| 27.5° | 262.0 | 245.1 | 230.4 | 214.0 | 196.5 | 180.7 | 166.6 | 153.0 | 94.9 | 49.7 | 37.8 |
| 30° | 290.8 | 271.1 | 250.2 | 229.3 | 210.6 | 192.6 | 172.8 | 155.9 | 90.9 | 46.3 | 35.0 |
| 32.5° | 329.2 | 304.4 | 279.0 | 254.7 | 229.8 | 206.7 | 185.8 | 163.8 | 88.7 | 43.5 | 32.2 |
| 35° | 380.1 | 347.9 | 316.8 | 286.3 | 256.4 | 228.1 | 201.0 | 176.2 | 88.7 | 40.1 | 28.8 |
| 37.5° | 428.1 | 390.8 | 351.3 | 313.4 | 277.8 | 245.1 | 212.9 | 183.0 | 84.1 | 37.3 | 26.0 |
| 40° | 480.0 | 435.4 | 389.1 | 344.5 | 301.6 | 260.9 | 224.2 | 189.7 | 80.2 | 33.9 | 23.2 |
| 42.5° | 559.6 | 503.2 | 442.7 | 390.8 | 339.4 | 289.1 | 243.4 | 202.7 | 75.1 | 30.5 | 20.3 |
| 45° | 664.1 | 592.4 | 521.2 | 458.0 | 392.5 | 330.9 | 276.7 | 226.5 | 74.0 | 27.7 | 17.5 |
| 47.5° | 775.9 | 691.2 | 607.6 | 526.9 | 450.1 | 378.4 | 313.4 | 253.0 | 74.0 | 24.8 | 15.2 |
| 50° | 887.2 | 781.0 | 691.8 | 598.0 | 511.6 | 426.9 | 349.6 | 280.7 | 74.5 | 22.6 | 12.4 |
| 52.5° | 987.7 | 874.2 | 774.2 | 665.8 | 570.4 | 472.1 | 388.0 | 307.8 | 73.4 | 19.8 | 10.2 |
| 55° | 1127.2 | 993.9 | 878.1 | 758.4 | 646.6 | 535.9 | 440.5 | 348.4 | 74.0 | 17.5 | 8.5 |
| 57.5° | 1384.1 | 1227.7 | 1088.2 | 931.2 | 802.5 | 659.6 | 543.8 | 432.0 | 80.8 | 14.7 | 6.2 |
| 60° | 1752.9 | 1549.6 | 1353.6 | 1162.2 | 998.4 | 828.4 | 678.2 | 546.6 | 94.9 | 11.9 | 4.5 |
| 62.5° | 2000.8 | 1734.8 | 1501.0 | 1289.8 | 1099.5 | 921.6 | 757.9 | 608.2 | 104.5 | 9.6 | 2.8 |
| 63° | 2026.2 | 1751.2 | 1516.3 | 1298.3 | 1104.0 | 926.1 | 761.2 | 612.7 | 105.0 | 9.0 | 2.8 |
| 65° | 2074.2 | 1779.4 | 1524.7 | 1300.0 | 1099.5 | 919.9 | 759.0 | 612.2 | 106.2 | 7.3 | 2.3 |
| 67.5° | 2019.4 | 1735.9 | 1475.6 | 1251.4 | 1060.0 | 883.2 | 730.7 | 589.6 | 105.6 | 5.1 | 1.7 |
| 70° | 1806.0 | 1571.0 | 1342.3 | 1133.4 | 959.5 | 799.6 | 665.2 | 537.6 | 97.1 | 3.4 | 1.1 |
| 72.5° | 1326.0 | 1166.1 | 988.8 | 838.0 | 722.8 | 600.3 | 512.2 | 403.8 | 75.1 | 2.3 | 0.6 |
| 75° | 393.0 | 358.0 | 301.0 | 265.4 | 234.4 | 193.7 | 172.2 | 134.4 | 38.4 | 1.1 | 0.0 |
| 77.5° | 78.5 | 71.2 | 63.8 | 58.2 | 54.8 | 46.9 | 44.6 | 36.7 | 15.8 | 0.6 | 0.0 |
| 80° | 41.2 | 33.9 | 28.8 | 25.4 | 22.0 | 18.1 | 15.2 | 12.4 | 2.8 | 0.0 | 0.0 |
| 82.5° | 39.5 | 26.5 | 19.2 | 15.8 | 13.6 | 10.7 | 8.5 | 6.2 | 1.7 | 0.0 | 0.0 |
| 85° | 14.7 | 11.3 | 8.5 | 6.8 | 5.6 | 5.1 | 4.0 | 3.4 | 0.0 | 0.0 | 0.0 |
| 87.5° | 2.3 | 1.7 | 1.7 | 1.1 | 1.1 | 0.6 | 0.6 | 0.6 | 0.0 | 0.0 | 0.0 |
| 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: P149516

CATALOG NUMBER: TLM-F02-LED-E1-SL2-HSS-7050

CANDELA DISTRIBUTION (continued):

| | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 | 119.2 |
| 2.5° | 101.1 | 96.6 | 94.3 | 91.5 | 91.5 | 90.9 | 92.0 |
| 5° | 84.1 | 77.9 | 73.4 | 70.0 | 70.6 | 68.9 | 69.5 |
| 7.5° | 71.2 | 64.9 | 61.0 | 58.7 | 58.2 | 57.6 | 57.6 |
| 10° | 61.6 | 55.9 | 52.5 | 50.8 | 50.3 | 50.3 | 50.3 |
| 12.5° | 54.8 | 49.1 | 46.3 | 45.2 | 45.2 | 44.6 | 44.6 |
| 15° | 49.1 | 44.6 | 41.8 | 40.7 | 40.7 | 40.1 | 40.7 |
| 17.5° | 44.6 | 40.1 | 37.8 | 36.7 | 36.7 | 36.1 | 36.1 |
| 20° | 40.7 | 36.7 | 34.4 | 32.8 | 32.8 | 32.2 | 32.8 |
| 22.5° | 37.3 | 33.3 | 30.5 | 29.4 | 28.8 | 28.2 | 28.8 |
| 25° | 33.9 | 29.9 | 27.1 | 25.4 | 24.8 | 24.8 | 24.3 |
| 27.5° | 31.1 | 27.1 | 23.7 | 22.0 | 21.5 | 21.5 | 20.9 |
| 30° | 28.2 | 23.7 | 20.3 | 18.6 | 18.1 | 18.1 | 18.1 |
| 32.5° | 25.4 | 20.3 | 17.5 | 15.8 | 15.2 | 15.2 | 15.2 |
| 35° | 22.6 | 17.5 | 14.7 | 13.0 | 12.4 | 12.4 | 12.4 |
| 37.5° | 19.2 | 14.7 | 11.3 | 10.2 | 9.6 | 9.0 | 9.0 |
| 40° | 16.4 | 11.3 | 8.5 | 7.3 | 6.2 | 6.2 | 6.2 |
| 42.5° | 13.6 | 9.0 | 6.2 | 4.5 | 4.0 | 3.4 | 4.0 |
| 45° | 11.3 | 6.8 | 4.0 | 2.3 | 1.7 | 1.7 | 1.7 |
| 47.5° | 9.0 | 4.5 | 1.7 | 0.6 | 0.6 | 0.6 | 0.6 |
| 50° | 6.8 | 2.8 | 0.6 | 0.0 | 0.0 | 0.6 | 0.6 |
| 52.5° | 5.1 | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 55° | 2.8 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 57.5° | 1.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 60° | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 62.5° | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 63° | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 65° | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 77.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)