

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: McGRAW-EDISON

Report Number: P145015

Luminaire Tested: **VPL-F02-LED-E1-GL2**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P145015
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33701)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: VPL-F02-LED-E1-GL2
Description: VALET LED LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ GLARE CONTROL
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4834.2 lumens
Efficiency: N/A
Efficacy: 87.9 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B1 - U0 - G1

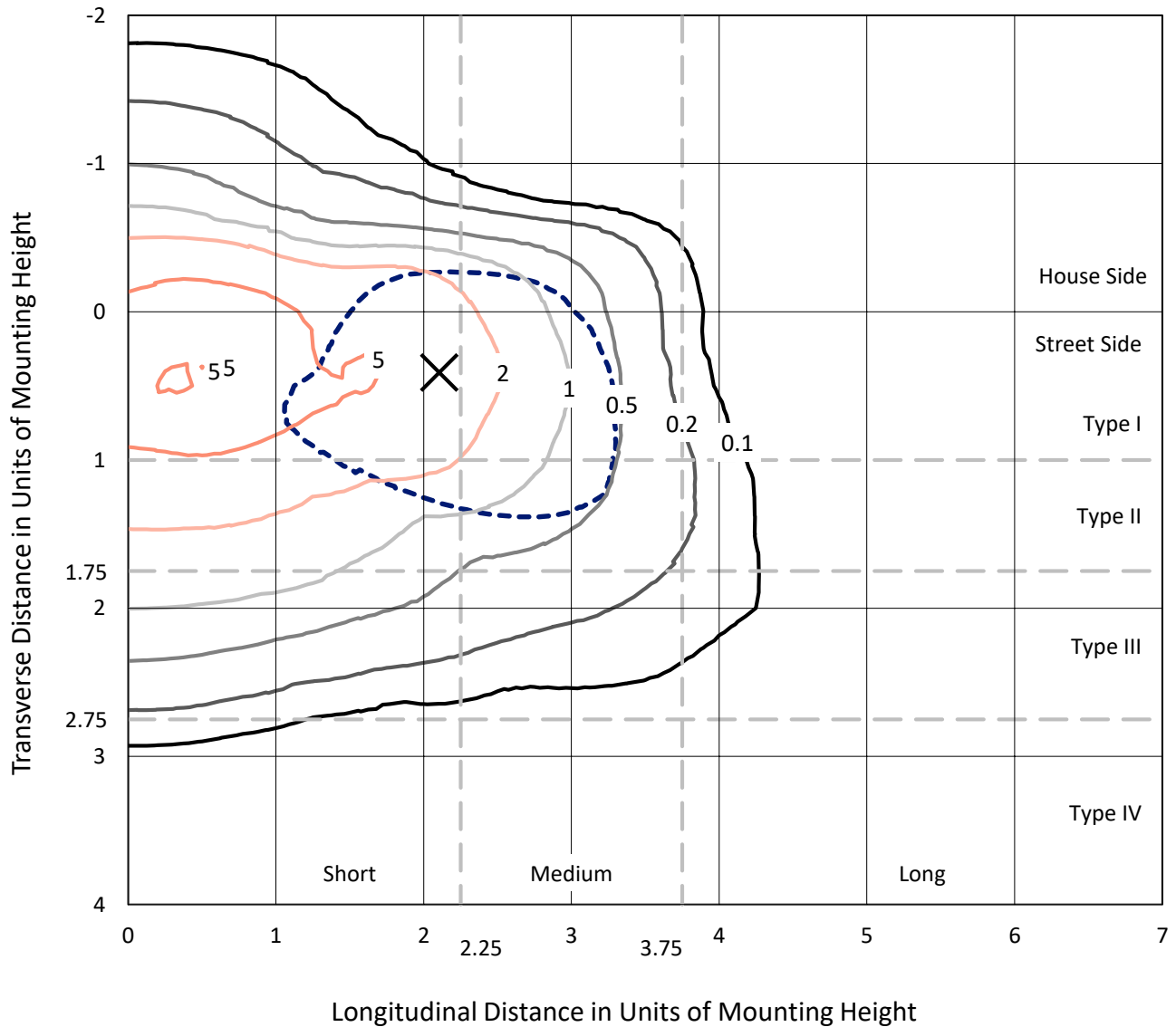
Input Watts (W): 55
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

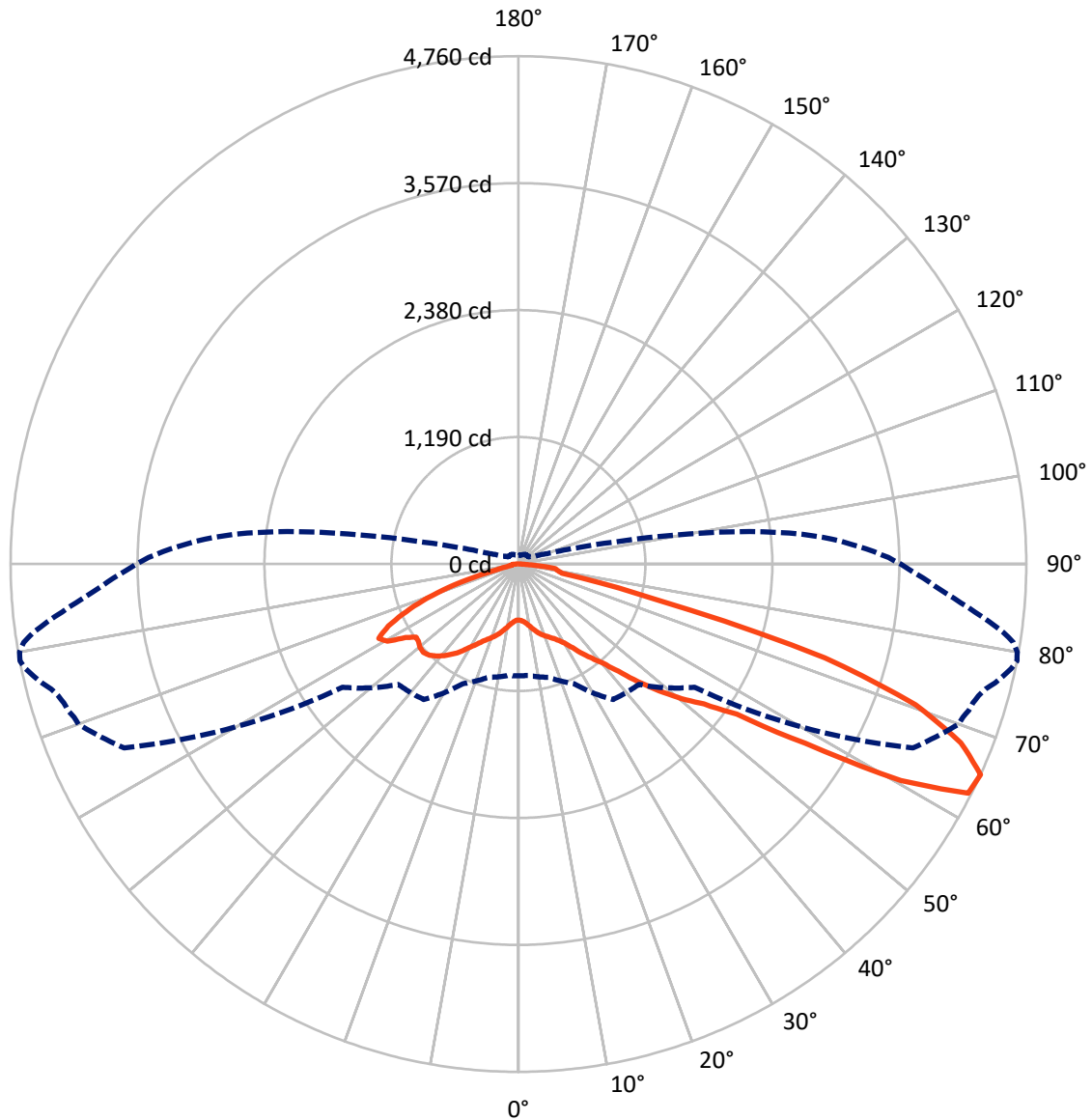
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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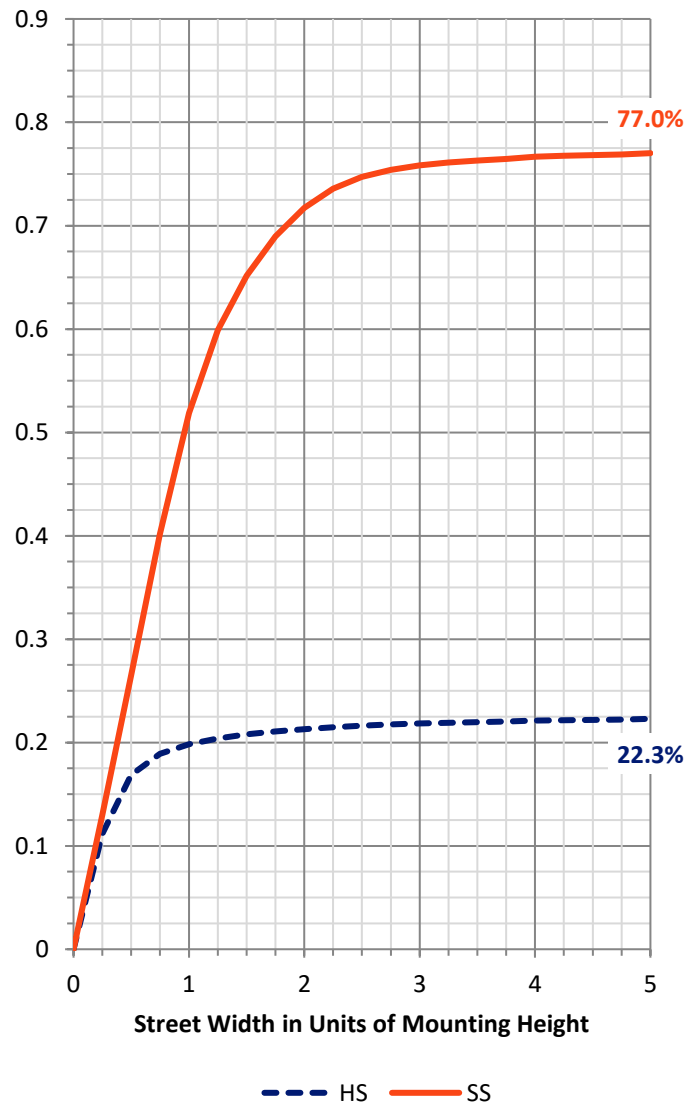
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1097.3 | 0.0 | 1097.3 |
| | % Fixture | 22.7 | 0.0 | 22.7 |
| Street Side | Lumens | 3736.9 | 0.0 | 3736.9 |
| | % Fixture | 77.3 | 0.0 | 77.3 |
| Total | Lumens | 4834.2 | 0.0 | 4834.2 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 52.2 | 1.1 |
| 10°-20° | 169.7 | 3.5 |
| 20°-30° | 292.6 | 6.1 |
| 30°-40° | 477.2 | 9.9 |
| 40°-50° | 796.7 | 16.5 |
| 50°-60° | 1077.3 | 22.3 |
| 60°-70° | 1338.3 | 27.7 |
| 70°-80° | 535.9 | 11.1 |
| 80°-90° | 94.2 | 1.9 |
| 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° | 4834.2 | 100.0 |
| 0°-180° | 4834.2 | 100.0 |



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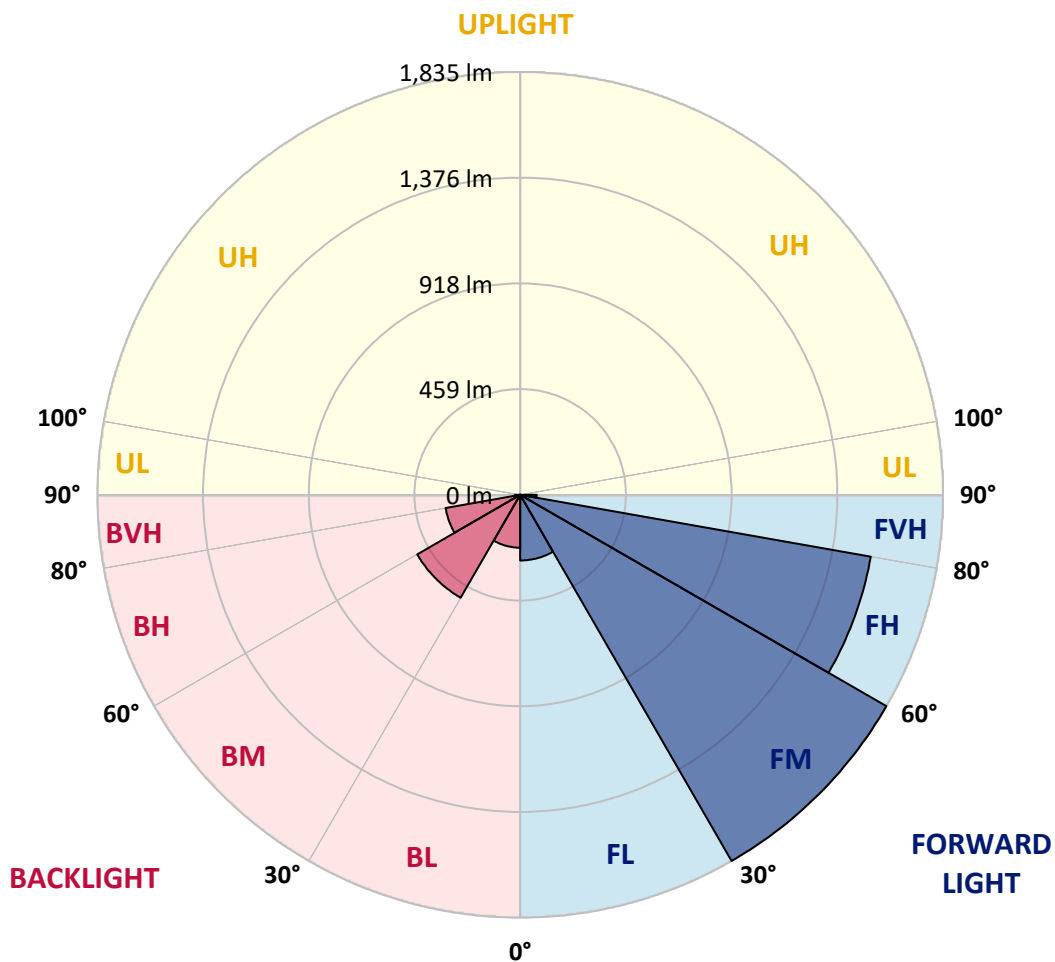
CATALOG NUMBER: VPL-F02-LED-E1-GL2

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 285.1 | 5.9 | | | |
| FM | (30°-60°) | 1835.1 | 38.0 | | | |
| FH | (60°-80°) | 1545.3 | 32.0 | | | G1/1800 |
| FVH | (80°-90°) | 71.4 | 1.5 | | | G1/100 |
| BL | (0°-30°) | 229.5 | 4.7 | B1/500 | | |
| BM | (30°-60°) | 516.1 | 10.7 | B1/1000 | | |
| BH | (60°-80°) | 329.0 | 6.8 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 22.7 | 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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 70° | 71° | 72° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 |
| 2.5° | 529.3 | 529.0 | 530.6 | 532.0 | 532.0 | 532.6 | 532.3 | 530.3 | 530.6 | 531.3 | 530.6 |
| 5° | 535.3 | 533.9 | 535.6 | 537.6 | 538.9 | 540.6 | 542.2 | 542.5 | 543.9 | 543.9 | 543.5 |
| 7.5° | 548.1 | 547.2 | 549.5 | 550.1 | 553.1 | 555.7 | 559.0 | 561.4 | 562.7 | 563.3 | 564.3 |
| 10° | 570.3 | 569.6 | 570.3 | 571.6 | 572.9 | 575.9 | 581.5 | 586.5 | 589.4 | 589.4 | 590.7 |
| 12.5° | 597.0 | 594.4 | 595.0 | 592.4 | 593.1 | 599.3 | 605.9 | 614.2 | 619.1 | 619.8 | 620.5 |
| 15° | 617.8 | 616.5 | 615.5 | 611.9 | 614.5 | 622.8 | 633.0 | 644.9 | 649.2 | 652.8 | 652.5 |
| 17.5° | 637.3 | 635.7 | 633.3 | 628.4 | 631.0 | 644.2 | 659.8 | 673.0 | 680.2 | 680.9 | 681.6 |
| 20° | 660.4 | 658.4 | 654.1 | 643.9 | 643.2 | 661.7 | 682.5 | 696.7 | 703.3 | 706.3 | 707.3 |
| 22.5° | 689.8 | 687.2 | 679.2 | 659.4 | 654.1 | 675.9 | 700.7 | 718.2 | 725.1 | 728.1 | 729.8 |
| 25° | 727.5 | 722.2 | 709.6 | 678.6 | 667.7 | 690.5 | 720.2 | 741.3 | 750.9 | 753.9 | 755.9 |
| 27.5° | 761.5 | 757.5 | 742.3 | 705.7 | 686.8 | 710.0 | 744.0 | 771.0 | 784.2 | 787.9 | 790.9 |
| 30° | 801.1 | 795.5 | 783.3 | 744.3 | 719.2 | 739.7 | 782.9 | 817.3 | 833.4 | 833.8 | 840.4 |
| 32.5° | 894.2 | 890.6 | 879.3 | 836.4 | 794.2 | 795.5 | 835.8 | 883.0 | 899.2 | 901.8 | 907.7 |
| 35° | 1032.2 | 1030.9 | 1030.6 | 1006.8 | 975.4 | 943.1 | 946.1 | 982.0 | 992.9 | 997.2 | 999.2 |
| 37.5° | 1123.0 | 1134.6 | 1162.7 | 1179.8 | 1171.9 | 1178.8 | 1142.5 | 1098.6 | 1092.3 | 1087.7 | 1089.7 |
| 40° | 1201.3 | 1211.5 | 1268.3 | 1347.6 | 1395.8 | 1429.8 | 1397.8 | 1263.1 | 1212.9 | 1198.3 | 1192.7 |
| 42.5° | 1247.5 | 1259.1 | 1340.3 | 1467.1 | 1590.0 | 1670.5 | 1679.1 | 1491.9 | 1364.4 | 1362.8 | 1341.6 |
| 45° | 1272.6 | 1284.2 | 1381.3 | 1552.0 | 1725.7 | 1871.0 | 1946.3 | 1773.6 | 1586.3 | 1572.5 | 1543.1 |
| 47.5° | 1267.7 | 1278.6 | 1379.6 | 1583.4 | 1805.9 | 2004.0 | 2154.6 | 2058.2 | 1842.2 | 1808.9 | 1768.3 |
| 50° | 1207.2 | 1215.2 | 1321.2 | 1532.2 | 1784.5 | 2059.5 | 2297.3 | 2319.4 | 2131.8 | 2086.6 | 2025.8 |
| 52.5° | 1144.8 | 1159.0 | 1246.9 | 1441.4 | 1687.0 | 2025.2 | 2382.5 | 2557.1 | 2402.3 | 2371.2 | 2293.3 |
| 55° | 1111.2 | 1122.4 | 1194.0 | 1360.1 | 1584.3 | 1908.0 | 2417.8 | 2781.4 | 2730.8 | 2718.3 | 2663.1 |
| 57.5° | 1109.8 | 1120.7 | 1177.9 | 1310.9 | 1500.8 | 1785.8 | 2428.0 | 3127.7 | 3276.0 | 3279.3 | 3263.5 |
| 60° | 1164.0 | 1175.2 | 1223.1 | 1334.7 | 1475.0 | 1681.1 | 2391.4 | 3619.1 | 3946.7 | 3975.7 | 4024.3 |
| 62.5° | 1171.6 | 1176.9 | 1234.7 | 1385.2 | 1568.8 | 1602.8 | 2240.5 | 4028.2 | 4407.6 | 4434.4 | 4461.1 |
| 65° | 1048.1 | 1047.8 | 1098.9 | 1237.6 | 1549.3 | 1594.9 | 2013.6 | 4078.4 | 4389.2 | 4405.3 | 4438.7 |
| 67.5° | 781.6 | 775.0 | 804.1 | 930.9 | 1229.4 | 1596.9 | 1744.8 | 3699.7 | 4047.1 | 4077.8 | 4089.0 |
| 70° | 402.9 | 413.1 | 432.9 | 510.5 | 780.6 | 1285.5 | 1498.8 | 3121.5 | 3552.7 | 3564.3 | 3604.2 |
| 72.5° | 165.4 | 161.1 | 174.7 | 214.6 | 390.6 | 849.6 | 1239.9 | 2463.4 | 2934.2 | 2926.3 | 2933.6 |
| 75° | 92.1 | 93.4 | 97.4 | 111.9 | 189.9 | 426.6 | 1065.3 | 1743.8 | 1995.5 | 1858.8 | 1817.5 |
| 77.5° | 74.0 | 74.6 | 75.0 | 77.6 | 103.7 | 227.5 | 817.6 | 1148.5 | 1003.5 | 931.9 | 904.4 |
| 80° | 54.2 | 57.8 | 61.7 | 62.4 | 71.3 | 129.1 | 448.4 | 966.9 | 847.0 | 787.6 | 738.7 |
| 82.5° | 43.6 | 45.2 | 53.8 | 55.1 | 56.8 | 76.9 | 203.1 | 908.1 | 843.7 | 782.9 | 715.6 |
| 85° | 26.1 | 29.1 | 43.9 | 44.2 | 44.9 | 46.9 | 112.3 | 369.8 | 460.0 | 406.5 | 372.1 |
| 87.5° | 9.2 | 11.9 | 21.8 | 18.2 | 23.1 | 19.2 | 49.2 | 123.8 | 152.6 | 145.0 | 128.5 |
| 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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 CATALOG NUMBER: VPL-F02-LED-E1-GL2

CANDELA DISTRIBUTION (continued):

| | 73° | 74° | 75° | 76° | 77° | 78° | 79° | 80° | 81° | 82° | 83° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 |
| 2.5° | 530.3 | 530.3 | 531.0 | 530.6 | 530.6 | 530.6 | 530.6 | 530.0 | 530.0 | 529.0 | 529.7 |
| 5° | 543.5 | 543.2 | 543.5 | 543.9 | 543.5 | 544.2 | 543.9 | 543.5 | 543.9 | 543.5 | 543.9 |
| 7.5° | 564.7 | 563.0 | 565.3 | 564.0 | 563.7 | 565.6 | 564.7 | 565.6 | 566.0 | 565.6 | 565.3 |
| 10° | 591.4 | 592.4 | 592.4 | 592.4 | 591.7 | 593.7 | 594.0 | 594.7 | 595.0 | 596.4 | 596.4 |
| 12.5° | 622.1 | 622.4 | 623.8 | 623.4 | 624.1 | 626.4 | 628.1 | 628.4 | 628.7 | 629.7 | 628.4 |
| 15° | 655.1 | 655.8 | 655.8 | 658.8 | 657.8 | 661.1 | 662.1 | 662.1 | 662.4 | 666.4 | 666.7 |
| 17.5° | 684.5 | 684.5 | 687.2 | 687.2 | 689.8 | 690.5 | 693.4 | 693.8 | 695.1 | 698.7 | 699.1 |
| 20° | 709.3 | 710.6 | 712.3 | 714.2 | 715.2 | 717.2 | 719.2 | 721.2 | 722.8 | 725.8 | 726.1 |
| 22.5° | 732.7 | 734.1 | 736.7 | 738.0 | 740.3 | 741.7 | 743.3 | 745.6 | 748.3 | 752.2 | 753.2 |
| 25° | 759.8 | 761.1 | 764.1 | 766.1 | 768.7 | 770.7 | 773.7 | 776.7 | 778.3 | 782.3 | 785.2 |
| 27.5° | 794.2 | 798.1 | 802.1 | 803.1 | 805.1 | 809.7 | 813.6 | 817.6 | 821.2 | 823.2 | 826.8 |
| 30° | 844.3 | 844.3 | 852.6 | 852.6 | 856.2 | 860.5 | 863.2 | 867.5 | 874.1 | 876.0 | 880.7 |
| 32.5° | 911.7 | 913.4 | 916.3 | 925.2 | 931.9 | 933.8 | 935.8 | 942.1 | 946.1 | 951.0 | 956.6 |
| 35° | 1007.8 | 1009.5 | 1011.1 | 1019.7 | 1027.3 | 1029.3 | 1031.2 | 1035.2 | 1041.8 | 1050.4 | 1047.8 |
| 37.5° | 1094.0 | 1095.0 | 1100.3 | 1109.8 | 1114.1 | 1119.4 | 1121.1 | 1128.3 | 1132.0 | 1139.9 | 1140.2 |
| 40° | 1197.7 | 1195.4 | 1198.3 | 1209.2 | 1215.8 | 1215.5 | 1220.8 | 1234.0 | 1236.6 | 1240.3 | 1249.5 |
| 42.5° | 1342.3 | 1333.7 | 1343.0 | 1346.6 | 1356.5 | 1362.8 | 1373.3 | 1382.3 | 1388.5 | 1402.4 | 1409.0 |
| 45° | 1529.2 | 1520.3 | 1527.9 | 1529.5 | 1550.0 | 1556.3 | 1572.1 | 1584.0 | 1597.6 | 1613.4 | 1618.0 |
| 47.5° | 1742.2 | 1725.7 | 1716.4 | 1726.7 | 1751.1 | 1761.3 | 1776.9 | 1788.1 | 1802.3 | 1810.5 | 1807.9 |
| 50° | 1988.9 | 1949.2 | 1930.7 | 1925.5 | 1943.0 | 1957.5 | 1981.6 | 1986.9 | 1993.5 | 1993.1 | 1993.5 |
| 52.5° | 2263.9 | 2222.6 | 2184.0 | 2157.3 | 2154.6 | 2174.1 | 2180.0 | 2181.4 | 2179.4 | 2164.5 | 2155.3 |
| 55° | 2623.2 | 2620.2 | 2579.6 | 2524.1 | 2520.5 | 2518.2 | 2483.5 | 2479.2 | 2471.3 | 2448.5 | 2417.1 |
| 57.5° | 3275.0 | 3308.0 | 3281.3 | 3280.0 | 3250.9 | 3231.8 | 3168.0 | 3136.3 | 3103.0 | 3041.2 | 2992.0 |
| 60° | 4028.6 | 4076.4 | 4102.9 | 4114.4 | 4171.2 | 4171.2 | 4119.0 | 4074.1 | 4020.0 | 3925.9 | 3834.1 |
| 62.5° | 4482.3 | 4524.2 | 4563.2 | 4624.3 | 4696.6 | 4728.6 | 4731.2 | 4691.3 | 4622.9 | 4515.6 | 4385.8 |
| 65° | 4453.5 | 4484.6 | 4531.8 | 4603.8 | 4663.6 | 4721.0 | 4759.6 | 4747.4 | 4695.3 | 4587.9 | 4446.6 |
| 67.5° | 4128.3 | 4173.5 | 4234.6 | 4301.0 | 4356.5 | 4410.6 | 4473.0 | 4477.6 | 4463.8 | 4361.7 | 4234.0 |
| 70° | 3626.4 | 3684.5 | 3723.1 | 3806.7 | 3831.8 | 3886.6 | 3949.3 | 3979.4 | 3956.9 | 3878.3 | 3803.4 |
| 72.5° | 2946.1 | 2992.0 | 2998.6 | 2962.3 | 2974.9 | 2988.4 | 3003.6 | 2933.3 | 2906.2 | 2801.2 | 2753.0 |
| 75° | 1786.4 | 1726.0 | 1675.2 | 1624.6 | 1473.7 | 1420.2 | 1338.0 | 1175.9 | 1157.4 | 1046.1 | 968.8 |
| 77.5° | 849.6 | 824.2 | 778.3 | 701.4 | 599.0 | 500.9 | 415.7 | 337.8 | 308.7 | 254.3 | 216.6 |
| 80° | 711.3 | 680.9 | 639.6 | 582.5 | 510.8 | 439.5 | 372.1 | 314.4 | 256.2 | 208.7 | 166.8 |
| 82.5° | 652.5 | 599.7 | 541.5 | 492.3 | 441.8 | 393.3 | 348.0 | 295.9 | 265.2 | 214.0 | 174.7 |
| 85° | 329.9 | 288.9 | 234.1 | 197.1 | 166.4 | 135.4 | 117.2 | 100.1 | 89.2 | 71.0 | 61.7 |
| 87.5° | 110.6 | 90.5 | 67.4 | 57.1 | 51.5 | 44.2 | 40.6 | 38.6 | 37.6 | 33.4 | 29.7 |
| 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):

| | 84° | 85° | 86° | 87° | 88° | 89° | 90° | 91° | 92° | 93° | 94° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 |
| 2.5° | 529.7 | 529.7 | 529.7 | 529.7 | 529.3 | 529.3 | 529.3 | 529.3 | 529.3 | 529.3 | 529.7 |
| 5° | 543.2 | 543.2 | 543.5 | 544.5 | 542.5 | 543.2 | 543.9 | 542.9 | 543.9 | 542.9 | 544.2 |
| 7.5° | 565.0 | 566.0 | 565.3 | 566.6 | 566.0 | 568.0 | 566.6 | 565.6 | 566.3 | 566.3 | 566.6 |
| 10° | 595.7 | 597.0 | 596.0 | 596.7 | 596.7 | 598.0 | 596.4 | 596.7 | 597.0 | 596.4 | 596.7 |
| 12.5° | 629.7 | 630.4 | 630.0 | 632.0 | 631.0 | 632.0 | 631.0 | 632.4 | 633.0 | 633.7 | 633.7 |
| 15° | 666.7 | 667.4 | 669.3 | 669.0 | 671.0 | 670.3 | 670.7 | 669.0 | 672.3 | 670.3 | 671.0 |
| 17.5° | 700.7 | 700.4 | 703.0 | 704.0 | 704.3 | 704.7 | 705.7 | 704.3 | 704.7 | 705.7 | 705.0 |
| 20° | 727.1 | 729.4 | 730.1 | 732.7 | 734.7 | 735.4 | 735.0 | 736.0 | 737.4 | 736.0 | 736.0 |
| 22.5° | 755.2 | 758.5 | 759.5 | 761.1 | 763.1 | 763.4 | 765.4 | 766.4 | 767.1 | 766.7 | 767.1 |
| 25° | 788.9 | 791.2 | 793.5 | 796.8 | 799.1 | 799.4 | 801.1 | 802.4 | 802.7 | 802.4 | 804.4 |
| 27.5° | 830.1 | 833.1 | 836.1 | 840.1 | 842.7 | 843.4 | 847.0 | 847.0 | 849.0 | 850.0 | 850.6 |
| 30° | 883.3 | 884.3 | 891.9 | 895.9 | 894.9 | 899.5 | 904.4 | 904.1 | 906.4 | 907.1 | 908.7 |
| 32.5° | 960.6 | 960.6 | 967.2 | 972.1 | 977.4 | 975.8 | 983.4 | 982.0 | 985.7 | 987.7 | 986.7 |
| 35° | 1054.4 | 1057.7 | 1062.6 | 1065.6 | 1071.2 | 1074.2 | 1079.5 | 1082.4 | 1084.1 | 1083.7 | 1080.1 |
| 37.5° | 1151.1 | 1156.4 | 1158.4 | 1165.6 | 1171.3 | 1176.2 | 1176.9 | 1173.6 | 1174.9 | 1168.3 | 1166.3 |
| 40° | 1261.7 | 1269.3 | 1274.0 | 1284.8 | 1284.2 | 1290.5 | 1291.1 | 1281.5 | 1279.9 | 1271.3 | 1262.4 |
| 42.5° | 1416.3 | 1426.8 | 1430.5 | 1438.7 | 1432.1 | 1435.1 | 1418.6 | 1414.6 | 1401.4 | 1387.5 | 1367.4 |
| 45° | 1624.6 | 1619.3 | 1621.7 | 1619.3 | 1601.8 | 1589.0 | 1575.4 | 1555.9 | 1536.5 | 1509.7 | 1481.0 |
| 47.5° | 1807.9 | 1810.5 | 1793.4 | 1782.5 | 1754.1 | 1735.9 | 1711.1 | 1677.1 | 1653.4 | 1617.4 | 1579.4 |
| 50° | 1985.9 | 1956.5 | 1932.4 | 1907.3 | 1882.2 | 1848.8 | 1811.5 | 1781.5 | 1746.8 | 1701.9 | 1655.3 |
| 52.5° | 2130.5 | 2092.5 | 2063.5 | 2027.8 | 1993.8 | 1956.8 | 1917.9 | 1874.3 | 1828.7 | 1783.8 | 1726.3 |
| 55° | 2386.8 | 2331.6 | 2294.3 | 2231.9 | 2193.3 | 2141.4 | 2111.0 | 2054.6 | 1991.2 | 1931.7 | 1870.6 |
| 57.5° | 2936.6 | 2854.0 | 2811.4 | 2776.1 | 2716.0 | 2630.8 | 2576.6 | 2483.8 | 2393.4 | 2330.0 | 2228.3 |
| 60° | 3764.7 | 3680.9 | 3610.2 | 3526.6 | 3434.5 | 3318.9 | 3267.4 | 3158.1 | 3028.7 | 2924.0 | 2789.6 |
| 62.5° | 4280.8 | 4164.9 | 4050.4 | 3933.1 | 3840.7 | 3750.2 | 3643.5 | 3533.2 | 3405.1 | 3262.8 | 3115.9 |
| 65° | 4301.6 | 4162.6 | 4025.6 | 3906.1 | 3797.7 | 3680.2 | 3580.1 | 3468.2 | 3333.5 | 3186.9 | 3034.3 |
| 67.5° | 4085.7 | 3930.2 | 3783.2 | 3652.1 | 3528.3 | 3419.3 | 3314.6 | 3209.3 | 3065.0 | 2942.2 | 2786.0 |
| 70° | 3655.4 | 3513.4 | 3380.4 | 3231.1 | 3136.3 | 3013.8 | 2911.8 | 2800.8 | 2697.5 | 2582.6 | 2436.3 |
| 72.5° | 2684.9 | 2577.9 | 2426.1 | 2362.7 | 2311.8 | 2182.0 | 2106.1 | 2096.8 | 2030.8 | 1893.1 | 1783.8 |
| 75° | 998.6 | 850.0 | 805.1 | 831.8 | 787.2 | 802.1 | 796.5 | 764.8 | 766.1 | 742.6 | 714.9 |
| 77.5° | 195.5 | 181.6 | 170.7 | 173.7 | 161.5 | 156.2 | 167.4 | 164.1 | 158.2 | 159.8 | 157.2 |
| 80° | 133.1 | 112.6 | 102.0 | 98.1 | 93.1 | 90.8 | 90.1 | 89.2 | 87.2 | 86.2 | 83.2 |
| 82.5° | 131.1 | 97.4 | 76.9 | 66.0 | 62.1 | 60.1 | 58.4 | 58.1 | 57.5 | 57.1 | 58.1 |
| 85° | 52.2 | 42.3 | 38.6 | 35.3 | 34.3 | 33.4 | 33.4 | 33.0 | 32.7 | 33.4 | 34.7 |
| 87.5° | 25.4 | 21.5 | 19.5 | 17.8 | 17.2 | 16.8 | 16.8 | 17.2 | 17.5 | 18.8 | 21.5 |
| 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):

| | 95° | 96° | 97° | 98° | 99° | 100° | 101° | 102° | 103° | 104° | 105° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0° | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 |
| 2.5° | 529.0 | 529.3 | 528.7 | 529.0 | 528.7 | 528.0 | 527.7 | 528.7 | 528.3 | 528.0 | 528.0 |
| 5° | 542.5 | 543.9 | 543.2 | 542.5 | 542.5 | 542.2 | 542.2 | 542.2 | 541.9 | 542.2 | 541.2 |
| 7.5° | 566.0 | 565.6 | 565.6 | 565.0 | 564.3 | 565.0 | 564.7 | 563.7 | 564.0 | 563.3 | 562.3 |
| 10° | 596.0 | 595.0 | 596.7 | 596.7 | 595.4 | 595.0 | 594.4 | 593.4 | 593.4 | 592.4 | 592.4 |
| 12.5° | 631.7 | 630.7 | 633.0 | 631.4 | 629.4 | 629.0 | 627.1 | 626.4 | 627.4 | 627.1 | 626.4 |
| 15° | 668.0 | 668.3 | 669.3 | 669.0 | 666.7 | 666.7 | 664.1 | 664.4 | 662.4 | 661.7 | 660.1 |
| 17.5° | 703.3 | 703.7 | 702.7 | 702.7 | 701.0 | 700.0 | 697.1 | 697.4 | 696.1 | 693.4 | 691.5 |
| 20° | 735.0 | 734.7 | 732.4 | 734.4 | 731.1 | 730.4 | 727.8 | 725.1 | 725.8 | 723.2 | 719.2 |
| 22.5° | 766.1 | 765.4 | 764.8 | 763.8 | 762.1 | 761.5 | 758.5 | 758.2 | 754.9 | 750.9 | 747.6 |
| 25° | 802.1 | 801.7 | 800.8 | 801.1 | 797.8 | 798.1 | 792.8 | 791.5 | 789.5 | 785.2 | 782.6 |
| 27.5° | 848.6 | 848.6 | 846.0 | 845.0 | 844.0 | 842.7 | 838.1 | 834.8 | 829.8 | 824.9 | 819.6 |
| 30° | 905.8 | 905.1 | 904.4 | 901.8 | 898.2 | 896.2 | 887.9 | 882.7 | 876.0 | 866.8 | 858.9 |
| 32.5° | 987.3 | 981.7 | 977.1 | 971.1 | 965.2 | 958.9 | 946.1 | 937.1 | 926.6 | 911.7 | 899.2 |
| 35° | 1078.1 | 1068.6 | 1063.6 | 1051.4 | 1040.2 | 1027.6 | 1012.1 | 993.9 | 979.4 | 959.9 | 939.4 |
| 37.5° | 1153.1 | 1145.8 | 1132.6 | 1118.8 | 1102.9 | 1079.1 | 1061.6 | 1042.1 | 1016.7 | 995.3 | 970.5 |
| 40° | 1245.6 | 1229.0 | 1210.2 | 1187.1 | 1165.3 | 1138.6 | 1114.5 | 1086.4 | 1055.4 | 1024.3 | 992.0 |
| 42.5° | 1342.6 | 1317.2 | 1286.2 | 1259.4 | 1226.4 | 1191.4 | 1160.0 | 1122.1 | 1082.4 | 1040.8 | 997.6 |
| 45° | 1441.7 | 1410.3 | 1369.1 | 1331.1 | 1285.2 | 1241.3 | 1196.4 | 1144.5 | 1090.4 | 1034.9 | 980.4 |
| 47.5° | 1532.5 | 1486.6 | 1439.7 | 1388.5 | 1335.7 | 1279.2 | 1215.5 | 1147.5 | 1076.2 | 1003.2 | 935.2 |
| 50° | 1603.8 | 1546.4 | 1487.3 | 1428.2 | 1363.4 | 1290.1 | 1209.9 | 1121.1 | 1033.2 | 945.7 | 867.5 |
| 52.5° | 1666.9 | 1602.5 | 1529.9 | 1456.6 | 1376.6 | 1286.5 | 1186.1 | 1081.4 | 974.4 | 877.7 | 789.9 |
| 55° | 1789.1 | 1708.2 | 1612.4 | 1518.0 | 1416.9 | 1303.3 | 1178.2 | 1050.1 | 926.9 | 821.6 | 728.1 |
| 57.5° | 2120.9 | 2011.6 | 1863.4 | 1732.3 | 1604.2 | 1438.7 | 1262.4 | 1104.6 | 947.7 | 823.2 | 719.2 |
| 60° | 2643.7 | 2465.7 | 2295.9 | 2096.2 | 1888.8 | 1661.9 | 1425.5 | 1212.9 | 1021.7 | 865.5 | 740.3 |
| 62.5° | 2946.8 | 2758.9 | 2540.6 | 2298.6 | 2029.8 | 1753.4 | 1482.0 | 1233.7 | 1024.0 | 853.9 | 715.2 |
| 65° | 2864.9 | 2676.0 | 2436.0 | 2188.3 | 1902.3 | 1619.7 | 1350.2 | 1111.8 | 908.4 | 751.2 | 618.5 |
| 67.5° | 2621.9 | 2424.4 | 2198.9 | 1924.1 | 1650.7 | 1388.9 | 1143.2 | 918.6 | 738.7 | 592.1 | 474.8 |
| 70° | 2268.2 | 2092.5 | 1875.3 | 1622.0 | 1356.8 | 1121.4 | 914.4 | 711.9 | 559.7 | 425.3 | 332.9 |
| 72.5° | 1683.4 | 1527.9 | 1392.2 | 1180.5 | 986.3 | 801.7 | 633.0 | 495.3 | 364.2 | 275.4 | 212.0 |
| 75° | 706.6 | 654.1 | 632.0 | 554.4 | 482.1 | 395.3 | 297.5 | 237.1 | 192.2 | 163.5 | 129.8 |
| 77.5° | 171.4 | 171.4 | 161.1 | 150.9 | 138.7 | 125.5 | 111.0 | 99.1 | 93.1 | 87.8 | 83.5 |
| 80° | 83.2 | 82.6 | 79.9 | 79.6 | 77.3 | 74.3 | 72.6 | 70.3 | 69.3 | 68.0 | 67.4 |
| 82.5° | 58.4 | 58.1 | 57.1 | 58.4 | 58.1 | 59.4 | 60.1 | 60.4 | 60.4 | 60.8 | 61.1 |
| 85° | 37.0 | 38.3 | 40.9 | 44.2 | 47.2 | 50.9 | 54.2 | 56.8 | 58.8 | 60.4 | 61.7 |
| 87.5° | 23.4 | 26.7 | 28.7 | 33.7 | 38.6 | 44.2 | 50.5 | 53.2 | 55.5 | 55.8 | 53.8 |
| 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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 CATALOG NUMBER: VPL-F02-LED-E1-GL2

CANDELA DISTRIBUTION (continued):

| | 106° | 107° | 108° | 109° | 110° | 115° | 125° | 135° | 145° | 155° | 165° |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 | 525.4 |
| 2.5° | 528.0 | 527.7 | 528.3 | 527.7 | 527.7 | 527.3 | 526.4 | 525.4 | 524.4 | 524.0 | 523.1 |
| 5° | 540.9 | 540.9 | 541.5 | 540.2 | 540.6 | 539.2 | 536.3 | 533.0 | 530.0 | 527.3 | 524.4 |
| 7.5° | 562.7 | 561.7 | 562.0 | 561.7 | 561.0 | 558.4 | 551.8 | 543.5 | 535.6 | 527.3 | 520.7 |
| 10° | 591.7 | 589.8 | 589.8 | 589.1 | 588.1 | 584.5 | 570.6 | 554.1 | 537.6 | 522.7 | 511.8 |
| 12.5° | 624.1 | 624.4 | 621.8 | 620.1 | 618.5 | 610.9 | 590.1 | 563.7 | 537.6 | 513.8 | 496.3 |
| 15° | 657.8 | 657.4 | 654.5 | 653.5 | 649.9 | 638.6 | 607.3 | 568.6 | 531.3 | 496.3 | 470.2 |
| 17.5° | 688.2 | 686.8 | 683.9 | 681.9 | 677.9 | 663.1 | 618.8 | 566.3 | 514.8 | 468.9 | 436.2 |
| 20° | 715.9 | 714.2 | 711.6 | 708.0 | 704.0 | 682.5 | 623.1 | 554.4 | 488.7 | 436.2 | 403.2 |
| 22.5° | 744.6 | 741.0 | 738.0 | 733.1 | 728.8 | 700.0 | 620.1 | 533.3 | 459.0 | 399.9 | 364.6 |
| 25° | 776.7 | 772.4 | 766.1 | 760.1 | 753.5 | 714.2 | 611.9 | 506.9 | 423.3 | 360.6 | 324.9 |
| 27.5° | 811.3 | 805.1 | 796.8 | 789.2 | 778.6 | 724.8 | 597.7 | 477.5 | 384.4 | 321.6 | 284.6 |
| 30° | 848.0 | 836.4 | 826.2 | 814.6 | 801.1 | 729.8 | 577.2 | 441.2 | 341.4 | 282.0 | 245.0 |
| 32.5° | 883.6 | 868.1 | 852.9 | 836.1 | 817.6 | 727.8 | 548.1 | 398.2 | 298.5 | 245.0 | 214.0 |
| 35° | 920.0 | 897.5 | 876.4 | 853.6 | 831.1 | 717.9 | 508.2 | 350.7 | 257.9 | 214.3 | 191.9 |
| 37.5° | 944.7 | 916.7 | 888.6 | 861.2 | 834.1 | 696.4 | 455.0 | 297.5 | 221.2 | 192.2 | 176.0 |
| 40° | 957.3 | 922.9 | 888.6 | 854.6 | 821.2 | 660.8 | 392.9 | 249.0 | 195.2 | 175.7 | 164.1 |
| 42.5° | 953.6 | 911.0 | 868.5 | 828.2 | 787.2 | 604.0 | 325.6 | 209.0 | 177.0 | 162.8 | 152.6 |
| 45° | 923.6 | 872.7 | 824.2 | 781.6 | 730.4 | 531.0 | 267.5 | 184.3 | 163.1 | 152.2 | 142.7 |
| 47.5° | 867.1 | 810.3 | 750.9 | 702.7 | 654.8 | 446.4 | 222.6 | 168.7 | 150.9 | 142.0 | 132.4 |
| 50° | 795.1 | 729.4 | 670.0 | 617.8 | 570.9 | 367.5 | 191.9 | 155.5 | 141.0 | 133.4 | 123.2 |
| 52.5° | 715.9 | 645.2 | 591.1 | 536.3 | 490.4 | 306.8 | 170.4 | 141.0 | 131.4 | 123.5 | 115.2 |
| 55° | 650.2 | 584.8 | 529.7 | 474.5 | 428.3 | 268.5 | 152.6 | 129.8 | 122.5 | 114.3 | 107.6 |
| 57.5° | 632.7 | 558.1 | 498.0 | 445.8 | 398.2 | 245.0 | 139.7 | 119.5 | 114.6 | 108.3 | 101.0 |
| 60° | 639.9 | 557.7 | 490.4 | 433.2 | 383.4 | 226.2 | 130.1 | 112.6 | 108.6 | 103.0 | 95.4 |
| 62.5° | 613.9 | 527.0 | 459.0 | 398.2 | 351.0 | 202.4 | 123.2 | 109.3 | 106.7 | 99.1 | 90.5 |
| 65° | 523.1 | 443.5 | 378.1 | 325.6 | 285.0 | 170.4 | 117.6 | 112.3 | 109.6 | 96.4 | 87.2 |
| 67.5° | 398.2 | 331.9 | 279.4 | 240.1 | 210.7 | 141.0 | 116.2 | 122.2 | 116.9 | 97.7 | 86.2 |
| 70° | 275.4 | 225.2 | 191.5 | 167.7 | 149.3 | 118.9 | 120.5 | 133.1 | 125.5 | 102.0 | 91.8 |
| 72.5° | 174.7 | 146.0 | 129.4 | 120.5 | 111.6 | 100.4 | 119.5 | 131.8 | 121.5 | 102.7 | 91.8 |
| 75° | 111.9 | 100.1 | 94.4 | 91.1 | 88.5 | 87.5 | 105.3 | 108.3 | 97.7 | 89.2 | 85.5 |
| 77.5° | 79.3 | 77.3 | 76.3 | 75.9 | 76.3 | 78.6 | 87.2 | 81.6 | 71.0 | 71.3 | 73.3 |
| 80° | 67.0 | 67.0 | 66.4 | 66.7 | 67.4 | 68.4 | 69.7 | 60.1 | 54.5 | 58.8 | 65.4 |
| 82.5° | 61.4 | 62.4 | 63.1 | 63.7 | 64.7 | 63.4 | 59.1 | 45.6 | 43.9 | 57.1 | 64.1 |
| 85° | 62.4 | 62.4 | 62.7 | 63.4 | 63.7 | 57.1 | 49.2 | 34.3 | 33.7 | 64.1 | 60.4 |
| 87.5° | 53.5 | 52.8 | 50.5 | 48.9 | 46.6 | 39.3 | 32.7 | 19.2 | 19.8 | 39.6 | 42.3 |
| 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: P145015

CATALOG NUMBER: VPL-F02-LED-E1-GL2

CANDELA DISTRIBUTION (continued):

| | 175° | 180° |
|-------|-------|-------|
| 0° | 525.4 | 525.4 |
| 2.5° | 522.7 | 522.7 |
| 5° | 522.7 | 522.7 |
| 7.5° | 518.4 | 517.1 |
| 10° | 505.9 | 504.2 |
| 12.5° | 486.7 | 485.1 |
| 15° | 457.3 | 455.4 |
| 17.5° | 420.7 | 417.4 |
| 20° | 382.4 | 377.8 |
| 22.5° | 344.1 | 340.4 |
| 25° | 304.8 | 301.5 |
| 27.5° | 266.1 | 262.8 |
| 30° | 230.5 | 229.2 |
| 32.5° | 204.1 | 202.7 |
| 35° | 184.6 | 183.9 |
| 37.5° | 171.4 | 170.7 |
| 40° | 159.8 | 159.2 |
| 42.5° | 149.3 | 148.3 |
| 45° | 138.7 | 139.0 |
| 47.5° | 128.1 | 127.8 |
| 50° | 118.9 | 118.9 |
| 52.5° | 111.3 | 111.0 |
| 55° | 104.3 | 104.0 |
| 57.5° | 97.4 | 97.1 |
| 60° | 91.5 | 90.5 |
| 62.5° | 85.9 | 85.2 |
| 65° | 82.2 | 81.9 |
| 67.5° | 79.6 | 78.6 |
| 70° | 78.9 | 76.3 |
| 72.5° | 76.9 | 73.6 |
| 75° | 72.3 | 70.7 |
| 77.5° | 63.7 | 61.7 |
| 80° | 49.2 | 45.6 |
| 82.5° | 41.3 | 35.7 |
| 85° | 30.4 | 28.1 |
| 87.5° | 22.1 | 17.5 |
| 90° | 0.0 | 0.0 |

(END OF REPORT)