

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: INVUE

Report Number: P159942

Luminaire Tested: **ENC-F02-LED-E1-BL2-ULG**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: P159942
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (P20107) AND DOWNLIGHT
Test Lab: INNOVATION CENTER-P3
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: ENC-F02-LED-E1-BL2-ULG
Description: ENTRI LED LUMINAIRE WITH UPLIGHT
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 2
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4836.3 lumens
Efficiency: N/A
Efficacy: 84.4 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U3 - G1

Input Watts (W): 57.3
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

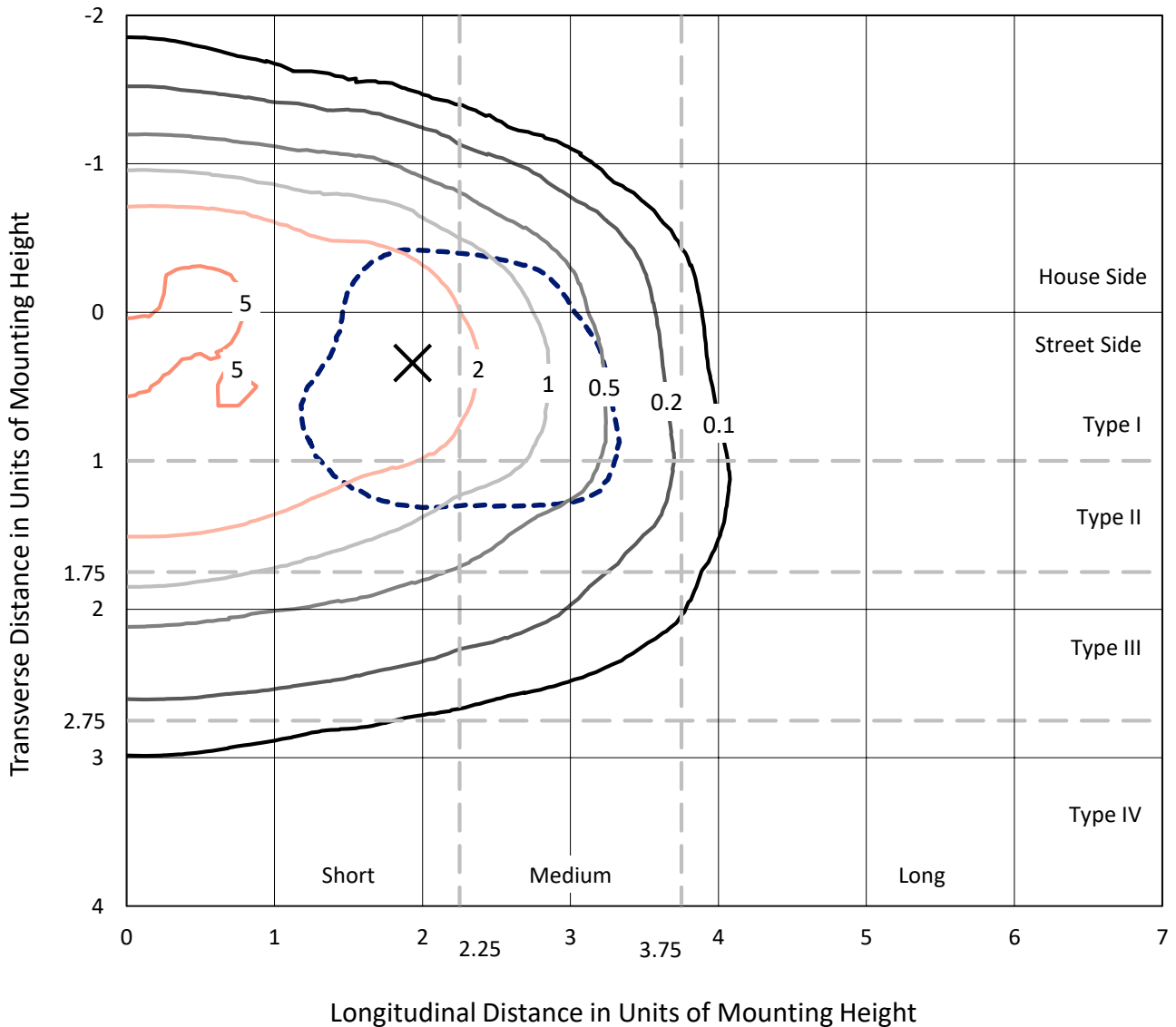


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Iso-Footcandle Lines of Horizontal Illumination

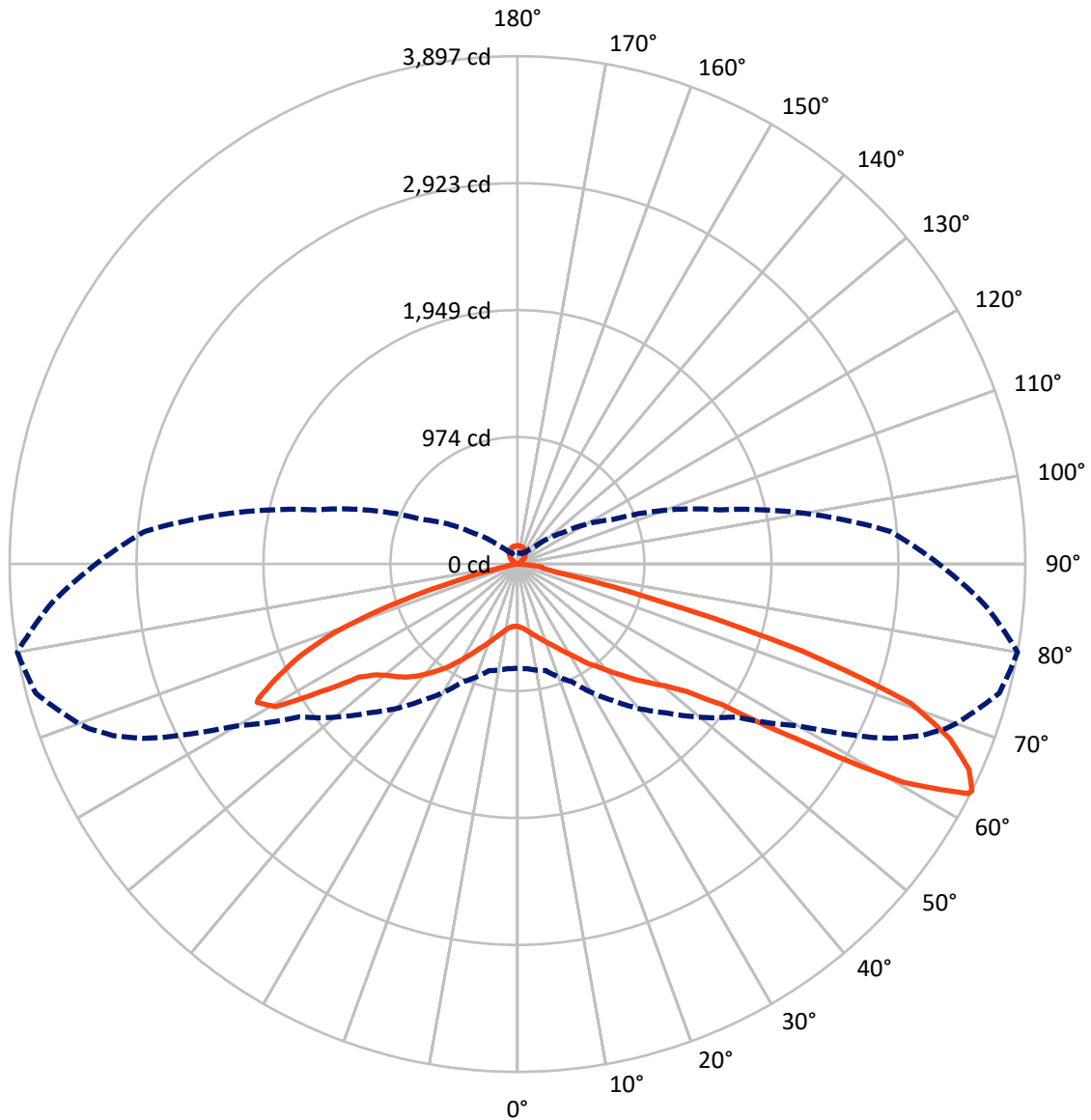
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 5.9 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 80-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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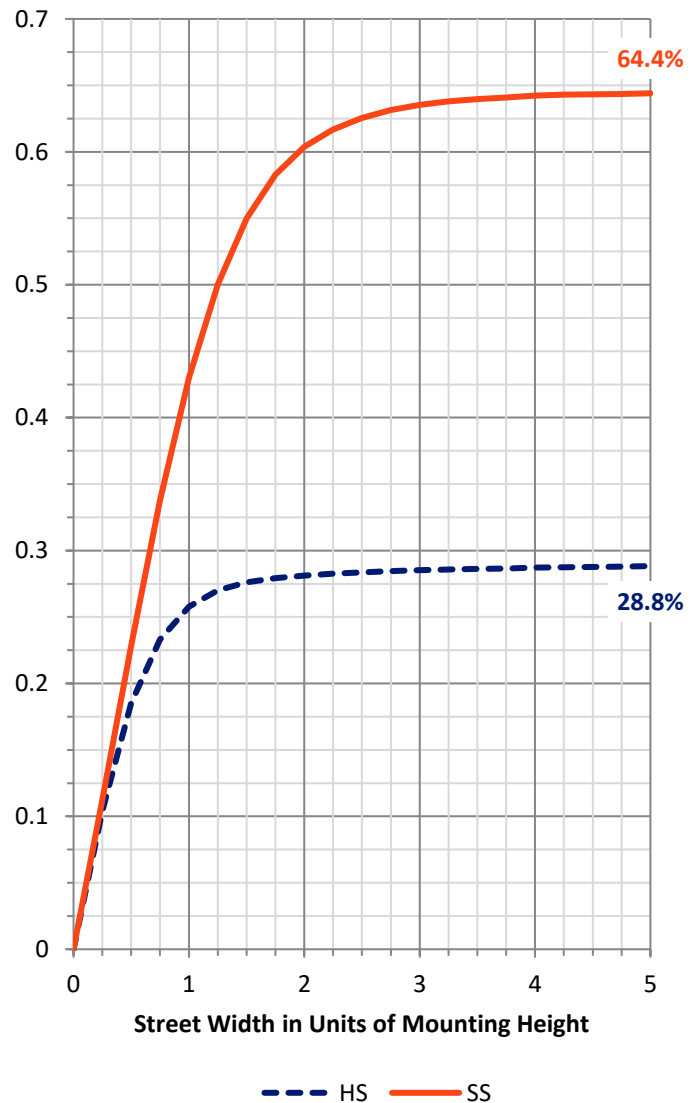
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1407.9 | 157.7 | 1565.7 |
| | % Fixture | 29.1 | 3.3 | 32.4 |
| Street Side | Lumens | 3112.9 | 157.7 | 3270.6 |
| | % Fixture | 64.4 | 3.3 | 67.6 |
| Total | Lumens | 4520.8 | 315.5 | 4836.3 |
| | % Fixture | 93.5 | 6.5 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 48.0 | 1.0 |
| 10°-20° | 164.6 | 3.4 |
| 20°-30° | 309.3 | 6.4 |
| 30°-40° | 490.9 | 10.1 |
| 40°-50° | 740.9 | 15.3 |
| 50°-60° | 1041.4 | 21.5 |
| 60°-70° | 1215.1 | 25.1 |
| 70°-80° | 469.7 | 9.7 |
| 80°-90° | 40.9 | 0.8 |
| 90°-100° | 1.3 | 0.0 |
| 100°-110° | 12.3 | 0.3 |
| 110°-120° | 25.2 | 0.5 |
| 120°-130° | 43.0 | 0.9 |
| 130°-140° | 60.0 | 1.2 |
| 140°-150° | 65.4 | 1.4 |
| 150°-160° | 56.9 | 1.2 |
| 160°-170° | 38.2 | 0.8 |
| 170°-180° | 13.3 | 0.3 |
| 0°-90° | 4520.8 | 93.5 |
| 0°-180° | 4836.3 | 100.0 |



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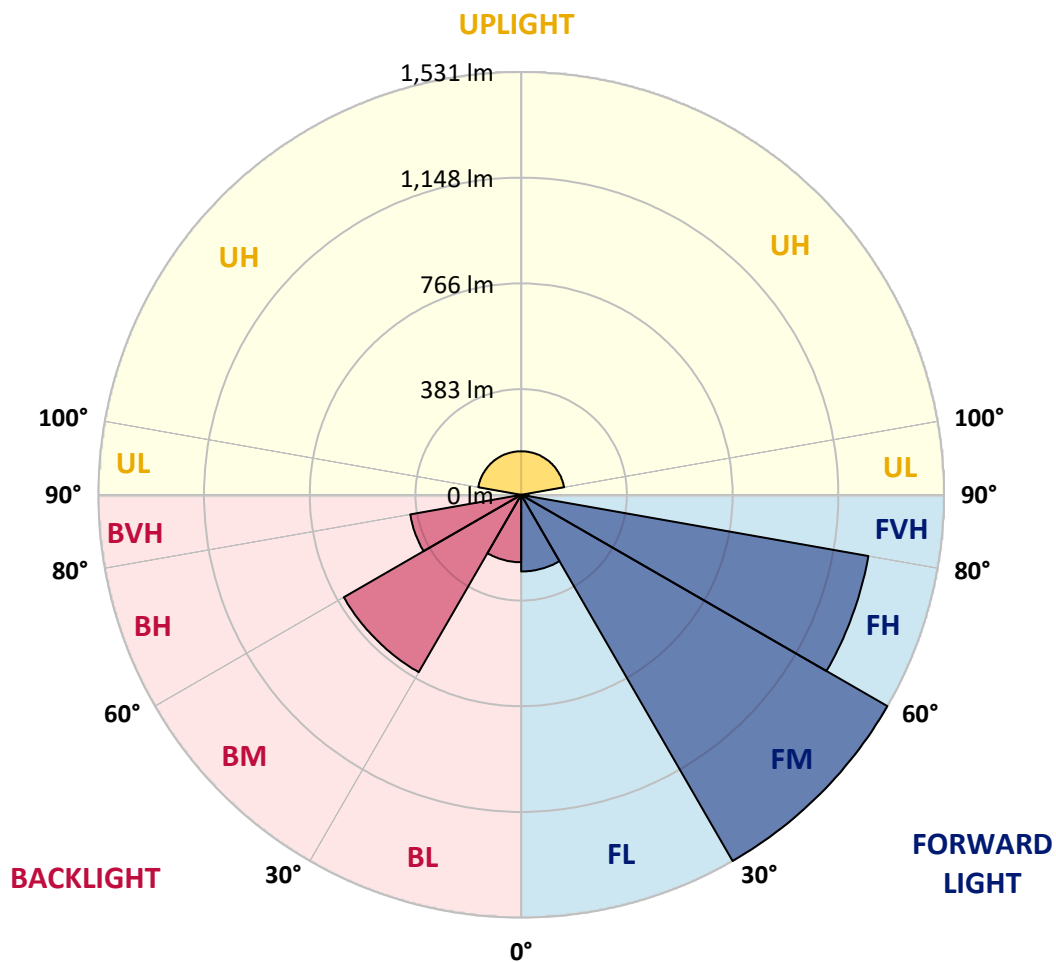
CATALOG NUMBER: ENC-F02-LED-E1-BL2-ULG

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|--------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 277.7 | 5.7 | | | |
| FM | (30°-60°) | 1531.3 | 31.7 | | | |
| FH | (60°-80°) | 1276.6 | 26.4 | | | G1/1800 |
| FVH | (80°-90°) | 27.2 | 0.6 | | | G1/100 |
| BL | (0°-30°) | 244.2 | 5.0 | B1/500 | | |
| BM | (30°-60°) | 741.9 | 15.3 | B1/1000 | | |
| BH | (60°-80°) | 408.2 | 8.4 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 13.7 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 1.3 | 0.0 | | U1/10 | |
| UH | (100°-180°) | 157.7 | 3.3 | | U3/500 | |

BUG Rating: B1-U3-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 60° | 61° | 62° | 64° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 |
| 2.5° | 502.7 | 501.1 | 501.9 | 501.1 | 501.1 | 499.4 | 494.5 | 494.5 | 493.7 | 494.5 | 492.8 |
| 5° | 530.0 | 529.2 | 528.3 | 526.7 | 526.7 | 523.4 | 515.1 | 513.5 | 514.3 | 512.7 | 509.3 |
| 7.5° | 560.5 | 559.7 | 558.1 | 554.8 | 553.1 | 548.1 | 536.6 | 534.9 | 534.1 | 532.5 | 530.0 |
| 10° | 591.1 | 590.3 | 587.8 | 583.6 | 579.5 | 572.1 | 560.5 | 556.4 | 555.6 | 554.8 | 552.3 |
| 12.5° | 622.4 | 620.0 | 620.8 | 613.4 | 606.8 | 597.7 | 584.5 | 580.3 | 579.5 | 578.7 | 577.9 |
| 15° | 657.1 | 656.3 | 654.6 | 644.7 | 632.4 | 620.0 | 606.8 | 601.8 | 598.5 | 599.3 | 598.5 |
| 17.5° | 690.1 | 689.3 | 683.5 | 669.5 | 653.0 | 639.0 | 622.4 | 619.1 | 619.1 | 618.3 | 618.3 |
| 20° | 714.1 | 713.3 | 707.5 | 690.1 | 668.7 | 653.0 | 639.8 | 639.8 | 639.0 | 639.8 | 640.6 |
| 22.5° | 724.8 | 724.8 | 717.4 | 698.4 | 675.3 | 663.7 | 659.6 | 662.1 | 662.9 | 663.7 | 665.4 |
| 25° | 728.9 | 728.9 | 721.5 | 699.2 | 677.8 | 679.4 | 684.4 | 688.5 | 690.1 | 690.1 | 695.9 |
| 27.5° | 736.4 | 737.2 | 727.3 | 703.3 | 686.0 | 701.7 | 714.1 | 719.9 | 722.3 | 724.0 | 731.4 |
| 30° | 758.7 | 757.8 | 749.6 | 724.0 | 710.8 | 733.1 | 755.4 | 761.1 | 766.9 | 766.9 | 775.2 |
| 32.5° | 791.7 | 790.9 | 785.9 | 766.1 | 760.3 | 788.4 | 808.2 | 820.6 | 819.7 | 821.4 | 827.2 |
| 35° | 835.4 | 836.3 | 839.6 | 834.6 | 839.6 | 867.6 | 889.9 | 894.9 | 895.7 | 896.5 | 897.3 |
| 37.5° | 885.0 | 885.8 | 903.9 | 919.6 | 941.9 | 983.2 | 996.4 | 998.9 | 993.1 | 993.1 | 991.5 |
| 40° | 922.1 | 926.2 | 966.7 | 1008.0 | 1055.0 | 1111.2 | 1131.0 | 1126.0 | 1121.9 | 1118.6 | 1108.7 |
| 42.5° | 998.1 | 1000.5 | 1043.5 | 1102.9 | 1168.9 | 1246.5 | 1281.2 | 1264.7 | 1263.9 | 1249.0 | 1241.6 |
| 45° | 1074.0 | 1080.6 | 1126.8 | 1193.7 | 1273.0 | 1380.3 | 1431.5 | 1417.4 | 1414.9 | 1408.3 | 1387.7 |
| 47.5° | 1134.3 | 1143.4 | 1194.5 | 1273.8 | 1364.6 | 1488.4 | 1580.1 | 1590.0 | 1584.2 | 1576.8 | 1560.2 |
| 50° | 1185.5 | 1192.9 | 1244.9 | 1331.6 | 1435.6 | 1571.0 | 1702.2 | 1737.7 | 1742.7 | 1739.4 | 1735.3 |
| 52.5° | 1218.5 | 1225.9 | 1277.1 | 1369.5 | 1476.9 | 1632.1 | 1793.0 | 1863.2 | 1878.1 | 1877.2 | 1894.6 |
| 55° | 1219.3 | 1227.6 | 1280.4 | 1381.9 | 1500.0 | 1674.2 | 1877.2 | 1987.9 | 2006.0 | 2028.3 | 2065.5 |
| 57.5° | 1173.9 | 1182.2 | 1248.2 | 1365.4 | 1506.6 | 1707.2 | 1959.0 | 2153.8 | 2203.3 | 2247.1 | 2349.4 |
| 60° | 1047.6 | 1050.9 | 1123.5 | 1280.4 | 1475.2 | 1699.8 | 2020.9 | 2296.6 | 2366.8 | 2461.7 | 2626.8 |
| 62.5° | 853.6 | 860.2 | 904.8 | 1057.5 | 1329.1 | 1634.5 | 2045.7 | 2455.9 | 2571.5 | 2710.2 | 2974.4 |
| 63° | 799.9 | 805.7 | 847.0 | 998.1 | 1279.6 | 1613.9 | 2044.8 | 2481.5 | 2608.7 | 2751.5 | 3036.3 |
| 65° | 617.5 | 619.1 | 649.7 | 763.6 | 1050.1 | 1463.7 | 2000.2 | 2445.2 | 2606.2 | 2772.9 | 3071.8 |
| 67.5° | 497.8 | 503.6 | 534.1 | 614.2 | 829.7 | 1229.2 | 1800.5 | 2118.3 | 2228.1 | 2392.4 | 2748.2 |
| 70° | 389.6 | 399.6 | 428.4 | 519.3 | 707.5 | 989.8 | 1514.8 | 1768.3 | 1836.0 | 1914.4 | 2216.5 |
| 72.5° | 257.6 | 260.0 | 265.0 | 315.4 | 493.7 | 770.2 | 1260.6 | 1433.1 | 1459.5 | 1515.7 | 1663.4 |
| 75° | 121.4 | 130.4 | 137.9 | 163.5 | 238.6 | 504.4 | 913.9 | 1017.9 | 1049.2 | 1107.9 | 1161.5 |
| 77.5° | 52.8 | 52.0 | 55.3 | 75.1 | 125.5 | 224.5 | 568.8 | 752.1 | 762.8 | 749.6 | 726.5 |
| 80° | 16.5 | 17.3 | 18.2 | 19.8 | 39.6 | 107.3 | 246.0 | 505.2 | 558.1 | 593.6 | 583.6 |
| 82.5° | 1.7 | 0.8 | 2.5 | 5.0 | 8.3 | 15.7 | 92.5 | 236.9 | 298.0 | 365.7 | 452.4 |
| 85° | 0.0 | 0.0 | 0.8 | 0.8 | 1.7 | 3.3 | 5.8 | 24.8 | 41.3 | 47.9 | 94.9 |
| 87.5° | 0.0 | 0.0 | 0.8 | 0.8 | 1.7 | 2.5 | 2.5 | 3.3 | 3.3 | 3.3 | 3.3 |
| 90° | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 92.5° | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 95° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 97.5° | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 100° | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 102.5° | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 |
| 105° | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 |
| 107.5° | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 |



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CATALOG NUMBER: ENC-F02-LED-E1-BL2-ULG

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 60° | 61° | 62° | 64° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110° | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 |
| 112.5° | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 |
| 115° | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| 117.5° | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 |
| 120° | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 |
| 122.5° | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 |
| 125° | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 |
| 127.5° | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 |
| 130° | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 |
| 132.5° | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 |
| 135° | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| 137.5° | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 |
| 140° | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 |
| 142.5° | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 |
| 145° | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 |
| 147.5° | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 |
| 150° | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 |
| 152.5° | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 |
| 155° | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 |
| 157.5° | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 |
| 160° | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 |
| 162.5° | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 |
| 165° | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 |
| 167.5° | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 |
| 170° | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 |
| 172.5° | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 |
| 175° | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 |
| 177.5° | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 |
| 180° | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 |



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CATALOG NUMBER: ENC-F02-LED-E1-BL2-ULG

CANDELA DISTRIBUTION (continued):

| | 65° | 66° | 67° | 68° | 69° | 70° | 75° | 80° | 85° | 90° | 95° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 |
| 2.5° | 492.0 | 492.0 | 490.4 | 491.2 | 490.4 | 490.4 | 488.7 | 487.1 | 486.2 | 482.1 | 479.6 |
| 5° | 509.3 | 509.3 | 508.5 | 506.9 | 506.9 | 506.0 | 501.9 | 497.8 | 495.3 | 490.4 | 485.4 |
| 7.5° | 529.2 | 528.3 | 526.7 | 525.0 | 525.0 | 524.2 | 518.4 | 514.3 | 509.3 | 501.9 | 496.1 |
| 10° | 552.3 | 551.5 | 549.8 | 547.3 | 547.3 | 546.5 | 540.7 | 534.1 | 530.0 | 520.9 | 513.5 |
| 12.5° | 577.0 | 574.6 | 573.7 | 572.1 | 570.4 | 570.4 | 565.5 | 558.9 | 555.6 | 545.7 | 538.2 |
| 15° | 597.7 | 596.0 | 595.2 | 594.4 | 593.6 | 591.9 | 587.8 | 582.0 | 579.5 | 571.3 | 565.5 |
| 17.5° | 617.5 | 617.5 | 618.3 | 616.7 | 615.8 | 614.2 | 611.7 | 610.1 | 607.6 | 600.2 | 596.9 |
| 20° | 640.6 | 640.6 | 642.3 | 641.4 | 640.6 | 643.1 | 642.3 | 641.4 | 641.4 | 634.8 | 632.4 |
| 22.5° | 667.8 | 667.0 | 669.5 | 668.7 | 669.5 | 672.0 | 675.3 | 673.6 | 676.9 | 672.8 | 671.2 |
| 25° | 699.2 | 698.4 | 700.9 | 702.5 | 704.2 | 705.8 | 712.4 | 714.1 | 718.2 | 717.4 | 714.1 |
| 27.5° | 734.7 | 735.5 | 736.4 | 740.5 | 743.0 | 744.6 | 753.7 | 758.7 | 766.9 | 763.6 | 766.9 |
| 30° | 776.0 | 780.1 | 783.4 | 787.6 | 788.4 | 790.0 | 804.9 | 809.8 | 814.0 | 816.4 | 821.4 |
| 32.5° | 833.0 | 835.4 | 836.3 | 841.2 | 842.9 | 845.3 | 861.0 | 867.6 | 873.4 | 874.2 | 883.3 |
| 35° | 902.3 | 903.9 | 906.4 | 908.9 | 912.2 | 910.6 | 928.7 | 938.6 | 946.1 | 946.9 | 956.8 |
| 37.5° | 993.9 | 988.2 | 990.6 | 987.3 | 982.4 | 982.4 | 988.2 | 998.1 | 1006.3 | 1012.9 | 1022.8 |
| 40° | 1103.7 | 1099.6 | 1098.8 | 1091.3 | 1083.1 | 1075.7 | 1072.4 | 1078.1 | 1084.7 | 1090.5 | 1102.9 |
| 42.5° | 1229.2 | 1225.1 | 1211.0 | 1206.1 | 1192.1 | 1183.8 | 1161.5 | 1164.0 | 1175.5 | 1178.8 | 1186.3 |
| 45° | 1376.2 | 1361.3 | 1356.3 | 1325.8 | 1320.0 | 1308.5 | 1266.4 | 1263.1 | 1273.0 | 1273.8 | 1268.8 |
| 47.5° | 1543.7 | 1533.0 | 1521.4 | 1500.0 | 1477.7 | 1458.7 | 1394.3 | 1360.5 | 1371.2 | 1370.4 | 1346.4 |
| 50° | 1726.2 | 1724.5 | 1707.2 | 1693.2 | 1673.3 | 1646.1 | 1531.3 | 1469.4 | 1477.7 | 1470.3 | 1426.5 |
| 52.5° | 1900.4 | 1895.4 | 1894.6 | 1883.8 | 1876.4 | 1867.3 | 1727.8 | 1621.3 | 1602.3 | 1586.7 | 1530.5 |
| 55° | 2083.6 | 2096.0 | 2087.8 | 2105.1 | 2118.3 | 2116.6 | 2058.9 | 1902.8 | 1806.2 | 1793.9 | 1708.0 |
| 57.5° | 2389.1 | 2418.8 | 2458.4 | 2460.1 | 2495.6 | 2546.7 | 2650.8 | 2538.5 | 2296.6 | 2248.7 | 2134.0 |
| 60° | 2739.1 | 2815.9 | 2914.9 | 2963.6 | 3039.6 | 3118.8 | 3379.7 | 3397.0 | 3058.6 | 2873.7 | 2663.1 |
| 62.5° | 3090.8 | 3191.5 | 3308.7 | 3384.7 | 3478.8 | 3540.7 | 3816.4 | 3882.4 | 3573.7 | 3232.8 | 2886.0 |
| 63° | 3165.1 | 3268.3 | 3369.8 | 3444.1 | 3523.3 | 3580.3 | 3828.0 | 3897.3 | 3601.8 | 3233.6 | 2872.0 |
| 65° | 3203.9 | 3300.4 | 3379.7 | 3445.7 | 3498.6 | 3537.4 | 3733.0 | 3808.1 | 3564.6 | 3113.9 | 2714.3 |
| 67.5° | 2909.1 | 3064.3 | 3164.2 | 3244.3 | 3298.0 | 3351.6 | 3531.6 | 3578.7 | 3406.1 | 2881.1 | 2474.9 |
| 70° | 2408.1 | 2587.2 | 2744.9 | 2869.5 | 2962.0 | 3043.7 | 3232.8 | 3200.6 | 3052.0 | 2503.8 | 2099.3 |
| 72.5° | 1771.6 | 1927.6 | 2081.1 | 2222.3 | 2342.8 | 2446.9 | 2571.5 | 2280.1 | 2053.9 | 1665.1 | 1452.9 |
| 75° | 1191.2 | 1225.1 | 1295.2 | 1365.4 | 1409.2 | 1438.9 | 1362.1 | 1085.6 | 881.7 | 790.9 | 691.8 |
| 77.5° | 703.3 | 680.2 | 682.7 | 665.4 | 653.8 | 651.3 | 546.5 | 303.8 | 160.2 | 163.5 | 171.7 |
| 80° | 561.4 | 535.8 | 508.5 | 478.0 | 458.2 | 436.7 | 355.8 | 194.8 | 69.3 | 56.1 | 58.6 |
| 82.5° | 454.0 | 447.4 | 432.6 | 401.2 | 369.8 | 332.7 | 254.3 | 187.4 | 39.6 | 31.4 | 33.8 |
| 85° | 88.3 | 99.1 | 89.2 | 97.4 | 72.6 | 68.5 | 40.5 | 43.8 | 15.7 | 14.0 | 17.3 |
| 87.5° | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 6.6 |
| 90° | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 92.5° | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 95° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 97.5° | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 100° | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 102.5° | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 |
| 105° | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 |
| 107.5° | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 |



REPORT NUMBER: P159942

CATALOG NUMBER: ENC-F02-LED-E1-BL2-ULG

CANDELA DISTRIBUTION (continued):

| | 65° | 66° | 67° | 68° | 69° | 70° | 75° | 80° | 85° | 90° | 95° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110° | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 |
| 112.5° | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 |
| 115° | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| 117.5° | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 |
| 120° | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 |
| 122.5° | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 |
| 125° | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 |
| 127.5° | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 |
| 130° | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 |
| 132.5° | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 |
| 135° | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| 137.5° | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 |
| 140° | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 |
| 142.5° | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 |
| 145° | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 |
| 147.5° | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 |
| 150° | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 |
| 152.5° | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 |
| 155° | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 |
| 157.5° | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 |
| 160° | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 |
| 162.5° | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 |
| 165° | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 |
| 167.5° | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 |
| 170° | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 |
| 172.5° | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 |
| 175° | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 |
| 177.5° | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 |
| 180° | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 |



REPORT NUMBER: P159942

CATALOG NUMBER: ENC-F02-LED-E1-BL2-ULG

CANDELA DISTRIBUTION (continued):

| | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 | 478.8 |
| 2.5° | 475.5 | 472.2 | 469.7 | 466.4 | 464.8 | 462.3 | 461.5 | 459.0 | 459.8 |
| 5° | 477.2 | 471.4 | 466.4 | 461.5 | 458.2 | 456.5 | 454.9 | 453.2 | 453.2 |
| 7.5° | 485.4 | 478.0 | 472.2 | 466.4 | 463.9 | 460.6 | 459.8 | 457.3 | 457.3 |
| 10° | 502.7 | 494.5 | 487.1 | 480.5 | 477.2 | 473.0 | 471.4 | 468.9 | 468.9 |
| 12.5° | 528.3 | 520.9 | 512.7 | 502.7 | 496.1 | 491.2 | 487.1 | 485.4 | 485.4 |
| 15° | 557.2 | 551.5 | 544.8 | 531.6 | 520.9 | 511.8 | 503.6 | 500.3 | 499.4 |
| 17.5° | 591.9 | 586.9 | 580.3 | 565.5 | 548.1 | 529.2 | 515.1 | 508.5 | 507.7 |
| 20° | 634.0 | 629.0 | 619.1 | 598.5 | 571.3 | 541.5 | 519.3 | 509.3 | 508.5 |
| 22.5° | 676.9 | 676.9 | 660.4 | 626.6 | 586.1 | 546.5 | 516.8 | 503.6 | 501.1 |
| 25° | 724.0 | 726.5 | 701.7 | 648.9 | 594.4 | 544.0 | 506.0 | 489.5 | 486.2 |
| 27.5° | 780.9 | 778.5 | 737.2 | 666.2 | 595.2 | 534.1 | 488.7 | 468.9 | 465.6 |
| 30° | 843.7 | 827.2 | 766.1 | 676.1 | 589.4 | 516.0 | 465.6 | 443.3 | 440.8 |
| 32.5° | 906.4 | 870.9 | 787.6 | 677.8 | 572.9 | 489.5 | 435.1 | 411.9 | 408.6 |
| 35° | 973.3 | 909.7 | 800.8 | 668.7 | 545.7 | 454.0 | 397.1 | 374.8 | 371.5 |
| 37.5° | 1029.4 | 939.4 | 804.9 | 644.7 | 504.4 | 412.8 | 362.4 | 339.3 | 333.5 |
| 40° | 1080.6 | 960.9 | 797.5 | 605.9 | 458.2 | 372.3 | 326.1 | 306.3 | 304.6 |
| 42.5° | 1127.7 | 970.8 | 771.0 | 555.6 | 411.9 | 337.6 | 295.5 | 276.6 | 274.9 |
| 45° | 1164.0 | 964.2 | 726.5 | 500.3 | 374.0 | 307.9 | 268.3 | 251.0 | 247.7 |
| 47.5° | 1187.1 | 940.3 | 665.4 | 454.0 | 342.6 | 277.4 | 238.6 | 220.4 | 217.1 |
| 50° | 1205.3 | 904.8 | 603.5 | 418.5 | 312.0 | 246.0 | 208.0 | 191.5 | 189.0 |
| 52.5° | 1229.2 | 859.4 | 549.8 | 386.3 | 276.6 | 210.5 | 176.7 | 161.0 | 158.5 |
| 55° | 1282.0 | 820.6 | 511.8 | 350.8 | 238.6 | 173.4 | 145.3 | 135.4 | 132.1 |
| 57.5° | 1461.2 | 833.8 | 487.9 | 307.9 | 194.8 | 139.5 | 120.5 | 114.7 | 113.9 |
| 60° | 1649.4 | 889.9 | 476.3 | 258.4 | 151.1 | 113.1 | 102.4 | 100.7 | 99.9 |
| 62.5° | 1639.5 | 839.6 | 428.4 | 203.1 | 116.4 | 93.3 | 88.3 | 89.2 | 89.2 |
| 63° | 1606.5 | 809.0 | 412.8 | 190.7 | 110.6 | 90.8 | 85.9 | 85.9 | 85.9 |
| 65° | 1406.7 | 686.0 | 335.2 | 144.5 | 92.5 | 80.9 | 76.8 | 77.6 | 78.4 |
| 67.5° | 1161.5 | 495.3 | 220.4 | 100.7 | 83.4 | 73.5 | 68.5 | 66.9 | 66.9 |
| 70° | 888.3 | 333.5 | 130.4 | 87.5 | 82.6 | 68.5 | 60.3 | 58.6 | 58.6 |
| 72.5° | 582.8 | 203.9 | 88.3 | 87.5 | 81.7 | 65.2 | 56.1 | 52.8 | 52.8 |
| 75° | 267.5 | 100.7 | 73.5 | 84.2 | 77.6 | 60.3 | 49.5 | 45.4 | 44.6 |
| 77.5° | 104.0 | 63.6 | 66.0 | 71.0 | 60.3 | 49.5 | 44.6 | 41.3 | 40.5 |
| 80° | 60.3 | 51.2 | 57.8 | 51.2 | 43.8 | 38.0 | 38.0 | 35.5 | 34.7 |
| 82.5° | 43.8 | 43.8 | 44.6 | 37.1 | 33.0 | 31.4 | 31.4 | 28.9 | 28.1 |
| 85° | 31.4 | 32.2 | 37.1 | 29.7 | 25.6 | 22.3 | 20.6 | 20.6 | 19.8 |
| 87.5° | 15.7 | 25.6 | 20.6 | 12.4 | 11.6 | 10.7 | 10.7 | 10.7 | 9.9 |
| 90° | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 92.5° | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 |
| 95° | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| 97.5° | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 | 1.5 |
| 100° | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 102.5° | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 | 8.8 |
| 105° | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 | 11.8 |
| 107.5° | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 | 14.7 |



REPORT NUMBER: P159942

CATALOG NUMBER: ENC-F02-LED-E1-BL2-ULG

CANDELA DISTRIBUTION (continued):

| | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 110° | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 | 17.8 |
| 112.5° | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 | 21.2 |
| 115° | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 | 25.0 |
| 117.5° | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 | 29.5 |
| 120° | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 | 34.8 |
| 122.5° | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 | 40.9 |
| 125° | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 | 47.8 |
| 127.5° | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 | 55.3 |
| 130° | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 | 63.0 |
| 132.5° | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 | 70.5 |
| 135° | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 | 77.9 |
| 137.5° | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 | 85.3 |
| 140° | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 | 92.5 |
| 142.5° | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 | 99.2 |
| 145° | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 | 104.9 |
| 147.5° | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 | 110.1 |
| 150° | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 | 115.1 |
| 152.5° | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 | 119.7 |
| 155° | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 | 123.7 |
| 157.5° | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 | 127.0 |
| 160° | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 | 130.3 |
| 162.5° | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 | 133.5 |
| 165° | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 | 136.0 |
| 167.5° | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 | 137.1 |
| 170° | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 | 137.4 |
| 172.5° | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 | 138.6 |
| 175° | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 | 140.5 |
| 177.5° | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 | 141.1 |
| 180° | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 | 140.8 |

(END OF REPORT)