

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: P173836

Luminaire Tested: **ENV-FXX-LED-E1-BL3-7030-ULG-BBB**

Issue Date: 03/03/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P173836  
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: ENV-FXX-LED-E1-BL3-7030-ULG-BBB  
Description: ENTRI LED LUMINAIRE WITH UPLIGHT, EMERGENCY MODE  
LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL  
Light Source: (14) 3000K CCT, 70 CRI LEDs  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1421.5 lumens  
Efficiency: N/A  
Efficacy: 258.5 lumens/watt  
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B0 - U3 - G1

Input Watts (W): 5.5  
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

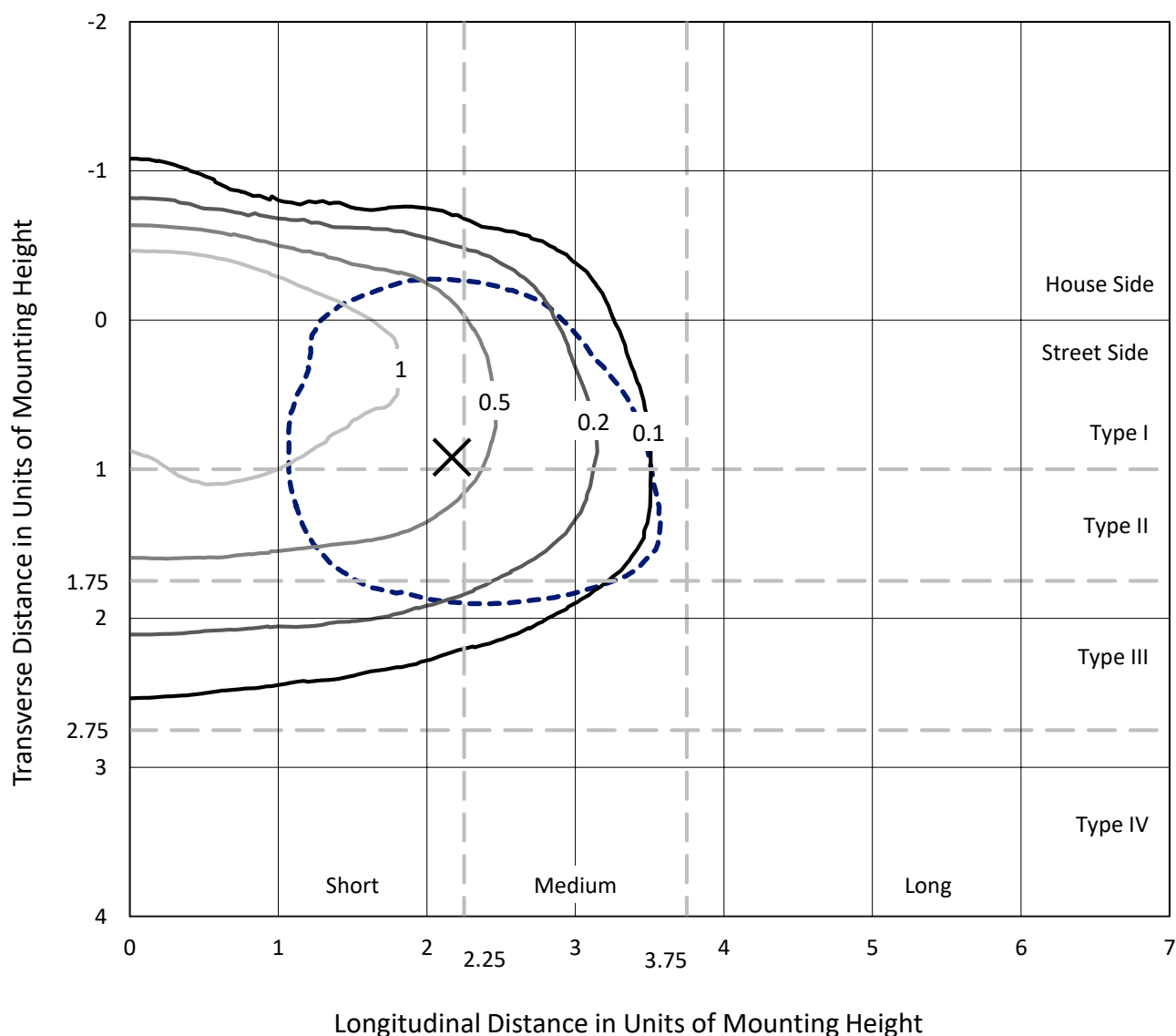


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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 --- 1/2 Max cd

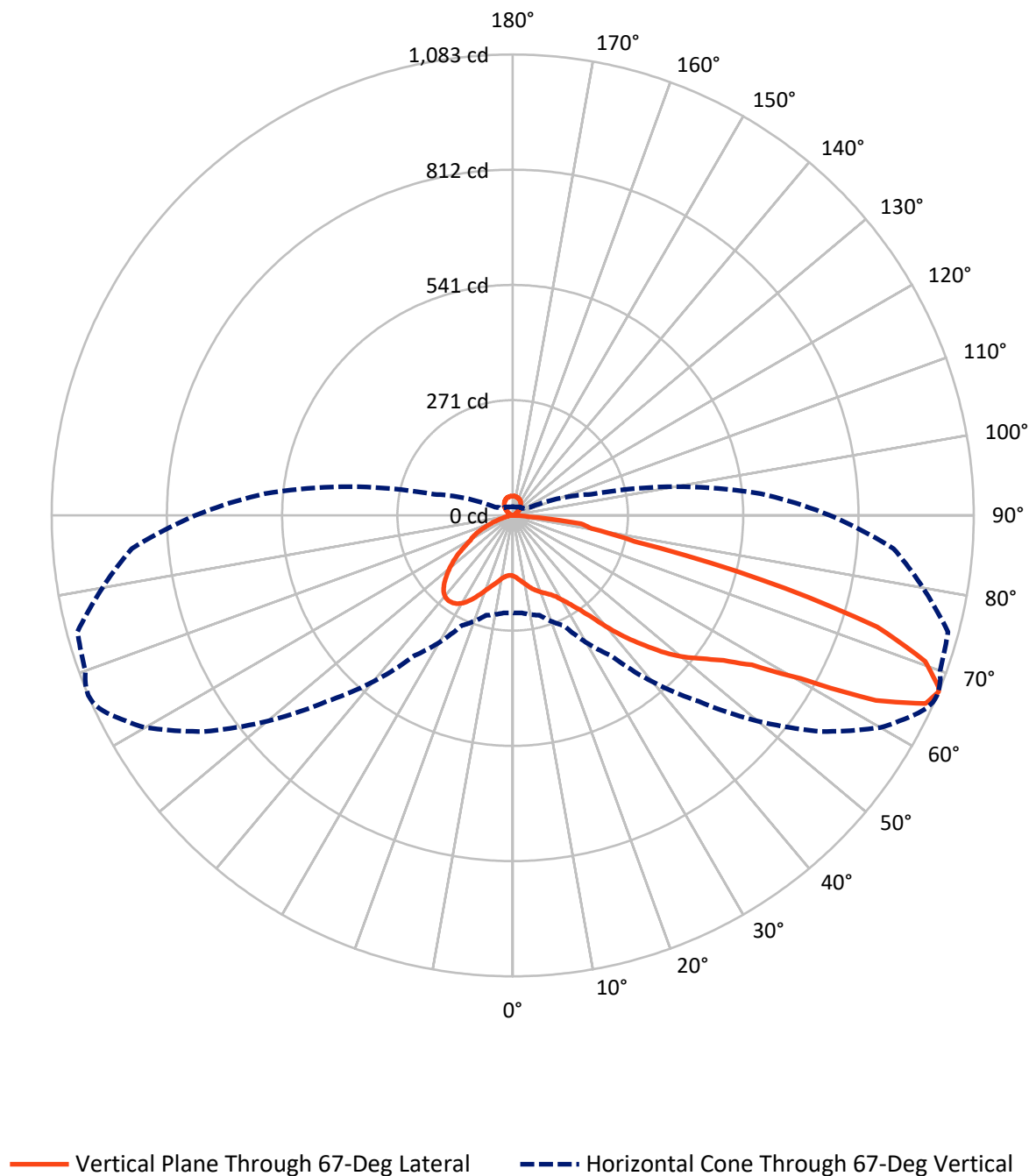


Based on 10 foot mounting height. Maximum calculated value = 1.8 fc  
 Type III - Short - Semi-Cutoff

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## Luminous Intensity Polar Plot



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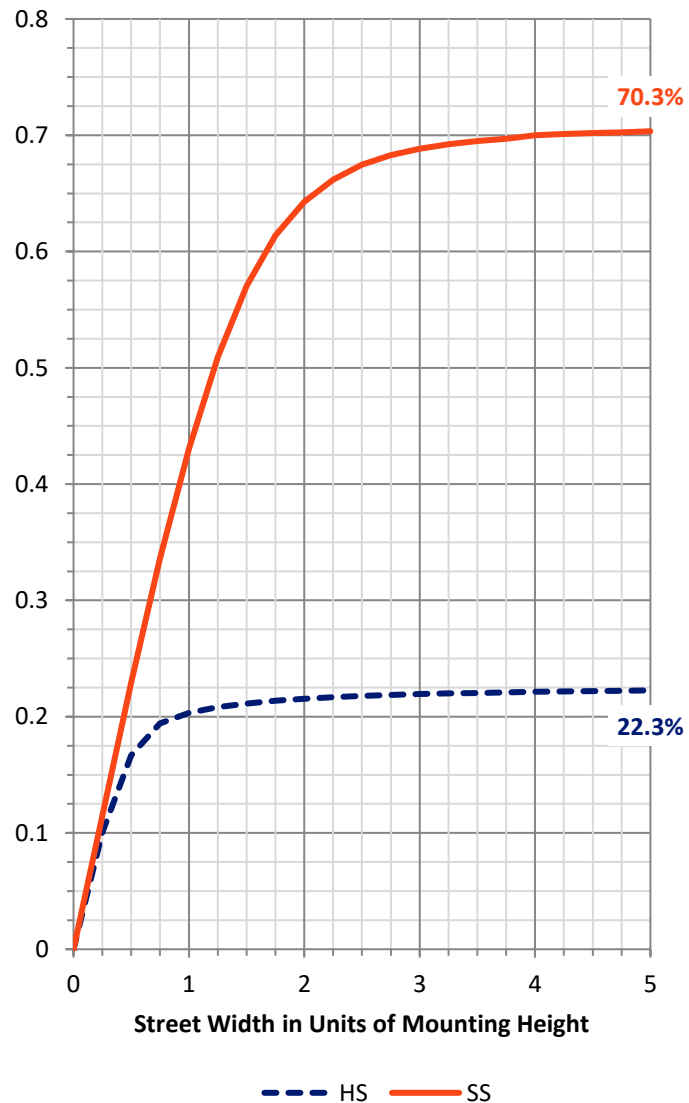
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 320.4    | 51.1   | 371.4  |
|                    | % Fixture | 22.5     | 3.6    | 26.1   |
| <b>Street Side</b> | Lumens    | 999.0    | 51.1   | 1050.1 |
|                    | % Fixture | 70.3     | 3.6    | 73.9   |
| <b>Total</b>       | Lumens    | 1319.4   | 102.1  | 1421.5 |
|                    | % Fixture | 92.8     | 7.2    | 100.0  |

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 14.3   | 1.0       |
| 10°-20°   | 49.5   | 3.5       |
| 20°-30°   | 89.8   | 6.3       |
| 30°-40°   | 131.3  | 9.2       |
| 40°-50°   | 198.8  | 14.0      |
| 50°-60°   | 285.2  | 20.1      |
| 60°-70°   | 364.4  | 25.6      |
| 70°-80°   | 170.1  | 12.0      |
| 80°-90°   | 15.9   | 1.1       |
| 90°-100°  | 0.4    | 0.0       |
| 100°-110° | 4.0    | 0.3       |
| 110°-120° | 8.2    | 0.6       |
| 120°-130° | 13.9   | 1.0       |
| 130°-140° | 19.4   | 1.4       |
| 140°-150° | 21.2   | 1.5       |
| 150°-160° | 18.4   | 1.3       |
| 160°-170° | 12.4   | 0.9       |
| 170°-180° | 4.3    | 0.3       |
| 0°-90°    | 1319.4 | 92.8      |
| 0°-180°   | 1421.5 | 100.0     |

**Coefficient of Utilization**



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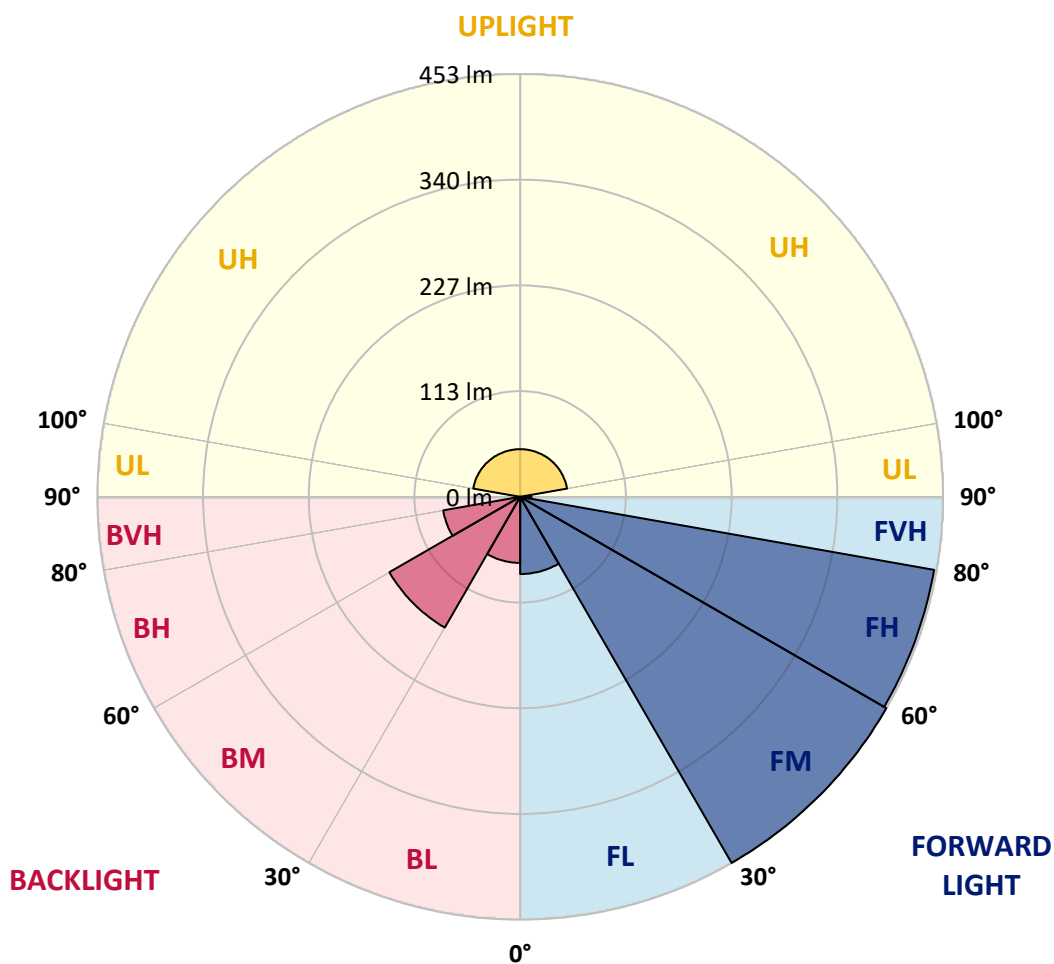
CATALOG NUMBER: ENV-FXX-LED-E1-BL3-7030-ULG-BBB

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |        |        |
|------|-------------|--------|-----------|-------------------------|--------|--------|
|      |             |        |           | B                       | U      | G      |
| FL   | (0°-30°)    | 82.8   | 5.8       |                         |        |        |
| FM   | (30°-60°)   | 453.4  | 31.9      |                         |        |        |
| FH   | (60°-80°)   | 450.7  | 31.7      |                         |        | G0/660 |
| FVH  | (80°-90°)   | 12.1   | 0.9       |                         |        | G1/100 |
| BL   | (0°-30°)    | 70.9   | 5.0       | B0/110                  |        |        |
| BM   | (30°-60°)   | 161.8  | 11.4      | B0/220                  |        |        |
| BH   | (60°-80°)   | 83.8   | 5.9       | B0/110                  |        | G0/110 |
| BVH  | (80°-90°)   | 3.8    | 0.3       |                         |        | G0/10  |
| UL   | (90°-100°)  | 0.4    | 0.0       |                         | U1/10  |        |
| UH   | (100°-180°) | 51.1   | 3.6       |                         | U3/500 |        |

**BUG Rating: B0-U3-G1**

Type III Short



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**CANDELA DISTRIBUTION (FULL):**

|        | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 60°   | 61°    | 62°    | 64°    |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| 0°     | 142.1 | 142.1 | 142.1 | 142.1 | 142.1 | 142.1 | 142.1 | 142.1 | 142.1  | 142.1  | 142.1  |
| 2.5°   | 147.7 | 147.7 | 147.9 | 147.9 | 147.7 | 147.7 | 146.2 | 146.2 | 146.2  | 146.0  | 146.0  |
| 5°     | 155.7 | 156.0 | 156.0 | 155.7 | 155.2 | 154.3 | 152.3 | 152.3 | 152.3  | 152.1  | 151.6  |
| 7.5°   | 165.0 | 164.8 | 165.0 | 164.3 | 163.3 | 162.1 | 159.4 | 159.2 | 158.7  | 158.7  | 158.2  |
| 10°    | 175.3 | 174.5 | 175.3 | 174.3 | 172.3 | 170.1 | 167.0 | 166.0 | 166.0  | 166.0  | 165.0  |
| 12.5°  | 185.8 | 185.5 | 186.0 | 184.3 | 180.9 | 178.5 | 175.3 | 174.1 | 173.8  | 173.8  | 173.3  |
| 15°    | 197.2 | 197.0 | 195.5 | 192.9 | 188.5 | 186.3 | 182.6 | 181.1 | 180.9  | 180.9  | 180.1  |
| 17.5°  | 209.2 | 209.2 | 205.6 | 199.9 | 193.8 | 190.7 | 188.0 | 187.0 | 186.7  | 186.7  | 186.5  |
| 20°    | 219.4 | 219.4 | 214.6 | 205.3 | 196.5 | 193.1 | 192.1 | 192.1 | 192.1  | 192.1  | 192.3  |
| 22.5°  | 227.0 | 226.3 | 219.7 | 208.2 | 197.5 | 194.5 | 197.0 | 197.2 | 197.2  | 197.7  | 198.0  |
| 25°    | 230.5 | 230.2 | 222.4 | 208.7 | 197.2 | 196.8 | 202.1 | 202.9 | 203.4  | 203.8  | 204.6  |
| 27.5°  | 230.7 | 230.7 | 222.9 | 208.5 | 197.0 | 200.7 | 208.5 | 210.7 | 211.2  | 212.1  | 213.4  |
| 30°    | 228.3 | 228.5 | 221.9 | 208.2 | 198.7 | 208.0 | 218.5 | 222.6 | 223.6  | 225.1  | 227.0  |
| 32.5°  | 225.3 | 225.8 | 221.9 | 210.7 | 206.3 | 220.7 | 234.6 | 240.5 | 241.4  | 243.4  | 245.3  |
| 35°    | 225.8 | 226.5 | 227.3 | 220.4 | 223.1 | 242.4 | 262.4 | 265.8 | 265.6  | 268.8  | 269.8  |
| 37.5°  | 229.0 | 230.7 | 236.1 | 237.3 | 247.5 | 274.4 | 295.4 | 302.7 | 302.7  | 305.6  | 304.7  |
| 40°    | 229.5 | 232.1 | 245.6 | 259.7 | 280.0 | 312.9 | 341.8 | 350.3 | 350.3  | 351.5  | 351.0  |
| 42.5°  | 240.9 | 243.4 | 262.7 | 287.8 | 316.6 | 355.4 | 387.2 | 394.7 | 396.4  | 395.2  | 396.2  |
| 45°    | 261.7 | 263.4 | 287.1 | 318.8 | 352.0 | 396.2 | 431.6 | 438.9 | 440.6  | 439.4  | 438.0  |
| 47.5°  | 288.1 | 290.5 | 315.6 | 353.2 | 387.4 | 433.8 | 477.0 | 485.5 | 487.3  | 485.3  | 486.0  |
| 50°    | 310.0 | 314.7 | 341.5 | 386.0 | 421.6 | 466.0 | 512.2 | 523.9 | 525.3  | 525.3  | 525.8  |
| 52.5°  | 330.0 | 334.2 | 360.1 | 409.6 | 449.2 | 495.1 | 538.3 | 553.4 | 555.1  | 556.4  | 557.3  |
| 55°    | 338.3 | 342.5 | 368.4 | 419.9 | 466.0 | 522.2 | 568.6 | 588.8 | 589.8  | 593.0  | 597.1  |
| 57.5°  | 338.6 | 342.0 | 367.4 | 419.6 | 474.8 | 546.6 | 609.8 | 641.3 | 645.2  | 649.3  | 656.4  |
| 60°    | 315.6 | 319.8 | 345.2 | 407.4 | 482.1 | 573.9 | 672.3 | 730.1 | 735.7  | 747.7  | 763.3  |
| 62.5°  | 281.0 | 283.9 | 305.9 | 367.1 | 482.1 | 611.7 | 772.9 | 868.6 | 887.4  | 906.9  | 935.7  |
| 65°    | 248.7 | 250.9 | 264.9 | 317.8 | 448.0 | 642.5 | 878.1 | 988.2 | 1008.4 | 1023.1 | 1047.5 |
| 67°    | 228.7 | 229.7 | 242.9 | 286.1 | 402.0 | 617.9 | 885.2 | 996.5 | 1013.8 | 1028.9 | 1059.7 |
| 67.5°  | 221.9 | 222.6 | 235.1 | 278.0 | 387.9 | 603.0 | 874.4 | 989.6 | 1008.4 | 1023.8 | 1055.1 |
| 70°    | 170.6 | 168.5 | 179.2 | 218.7 | 313.4 | 481.1 | 767.7 | 900.5 | 922.0  | 942.5  | 980.4  |
| 72.5°  | 101.8 | 98.6  | 105.4 | 126.9 | 203.1 | 338.1 | 582.2 | 738.9 | 766.3  | 791.9  | 841.5  |
| 75°    | 61.3  | 61.5  | 66.6  | 81.5  | 110.8 | 212.6 | 376.2 | 480.9 | 506.5  | 530.7  | 569.8  |
| 77.5°  | 30.5  | 30.3  | 34.9  | 47.4  | 80.8  | 132.1 | 218.5 | 277.3 | 285.8  | 297.3  | 292.7  |
| 80°    | 9.8   | 9.5   | 10.3  | 13.0  | 29.0  | 88.6  | 137.4 | 174.1 | 178.0  | 180.1  | 182.8  |
| 82.5°  | 1.5   | 1.7   | 1.9   | 3.2   | 5.4   | 21.2  | 85.4  | 121.1 | 126.5  | 132.8  | 145.0  |
| 85°    | 0.0   | 0.0   | 0.3   | 0.3   | 0.7   | 1.7   | 8.1   | 20.8  | 21.7   | 26.4   | 31.0   |
| 87.5°  | 0.0   | 0.0   | 0.0   | 0.3   | 0.5   | 0.7   | 1.2   | 1.2   | 1.2    | 1.2    | 1.2    |
| 90°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0    | 0.0    |
| 92.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0    | 0.0    | 0.0    |
| 95°    | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2    | 0.2    | 0.2    |
| 97.5°  | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5    | 0.5    | 0.5    |
| 100°   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6    | 1.6    | 1.6    |
| 102.5° | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8    | 2.8    | 2.8    |
| 105°   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8    | 3.8    | 3.8    |
| 107.5° | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8    | 4.8    | 4.8    |

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**CANDELA DISTRIBUTION (continued):**

|        | 0°   | 5°   | 15°  | 25°  | 35°  | 45°  | 55°  | 60°  | 61°  | 62°  | 64°  |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 110°   | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  |
| 112.5° | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  |
| 115°   | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  |
| 117.5° | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  |
| 120°   | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 |
| 122.5° | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 |
| 125°   | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 |
| 127.5° | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 |
| 130°   | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 |
| 132.5° | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 |
| 135°   | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 |
| 137.5° | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 |
| 140°   | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| 142.5° | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 |
| 145°   | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 |
| 147.5° | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 |
| 150°   | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 |
| 152.5° | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 |
| 155°   | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| 157.5° | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 |
| 160°   | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 |
| 162.5° | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 |
| 165°   | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 |
| 167.5° | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 |
| 170°   | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 |
| 172.5° | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 |
| 175°   | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 |
| 177.5° | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 |
| 180°   | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 |

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**CANDELA DISTRIBUTION (continued):**

|        | 65°    | 66°    | 67°    | 68°    | 69°    | 70°    | 75°    | 85°   | 90°   | 95°   | 105°  |
|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|
| 0°     | 142.1  | 142.1  | 142.1  | 142.1  | 142.1  | 142.1  | 142.1  | 142.1 | 142.1 | 142.1 | 142.1 |
| 2.5°   | 145.7  | 145.7  | 145.5  | 145.2  | 145.2  | 145.2  | 144.8  | 144.5 | 143.0 | 142.6 | 141.6 |
| 5°     | 151.6  | 151.6  | 151.1  | 150.9  | 150.6  | 150.6  | 149.9  | 148.4 | 146.5 | 145.2 | 143.3 |
| 7.5°   | 157.9  | 157.7  | 157.2  | 157.2  | 156.2  | 156.2  | 155.2  | 152.6 | 150.6 | 148.9 | 146.5 |
| 10°    | 165.3  | 165.0  | 164.3  | 164.1  | 163.6  | 163.1  | 162.1  | 158.9 | 157.0 | 154.8 | 151.8 |
| 12.5°  | 173.3  | 172.8  | 172.3  | 172.1  | 171.6  | 171.1  | 170.1  | 167.2 | 165.3 | 163.1 | 159.6 |
| 15°    | 180.4  | 180.1  | 179.7  | 179.4  | 179.4  | 178.9  | 178.2  | 175.5 | 173.6 | 171.1 | 168.5 |
| 17.5°  | 186.7  | 186.5  | 186.3  | 186.3  | 186.0  | 186.0  | 185.8  | 183.3 | 182.1 | 180.1 | 177.5 |
| 20°    | 192.1  | 192.3  | 192.3  | 192.3  | 192.6  | 192.9  | 193.4  | 192.1 | 190.9 | 189.2 | 187.7 |
| 22.5°  | 198.0  | 198.2  | 199.0  | 199.0  | 199.4  | 199.7  | 201.4  | 201.2 | 200.7 | 199.4 | 198.2 |
| 25°    | 205.1  | 205.6  | 206.0  | 206.8  | 207.0  | 207.7  | 210.7  | 211.9 | 210.9 | 210.2 | 211.4 |
| 27.5°  | 214.3  | 215.3  | 215.8  | 216.8  | 217.3  | 218.2  | 222.6  | 225.3 | 224.6 | 224.8 | 227.5 |
| 30°    | 228.3  | 229.2  | 230.7  | 231.2  | 232.9  | 233.4  | 238.5  | 242.7 | 242.7 | 242.2 | 247.0 |
| 32.5°  | 246.8  | 247.5  | 249.2  | 250.5  | 251.4  | 252.4  | 257.3  | 261.7 | 262.2 | 263.6 | 265.6 |
| 35°    | 271.2  | 271.7  | 272.7  | 274.6  | 274.4  | 274.9  | 277.6  | 282.0 | 284.4 | 287.8 | 282.0 |
| 37.5°  | 303.4  | 305.1  | 304.7  | 304.9  | 302.9  | 304.2  | 305.1  | 309.8 | 314.9 | 318.3 | 295.6 |
| 40°    | 349.3  | 350.5  | 349.3  | 347.6  | 346.2  | 345.4  | 344.0  | 349.1 | 353.5 | 351.0 | 306.4 |
| 42.5°  | 394.0  | 394.5  | 393.5  | 390.6  | 389.4  | 386.9  | 383.0  | 389.4 | 391.8 | 380.3 | 312.0 |
| 45°    | 438.2  | 437.5  | 435.8  | 435.3  | 432.8  | 430.4  | 428.2  | 432.3 | 431.3 | 408.9 | 314.4 |
| 47.5°  | 484.6  | 483.8  | 482.6  | 480.7  | 478.0  | 477.5  | 475.5  | 475.1 | 468.0 | 433.3 | 313.2 |
| 50°    | 525.1  | 525.6  | 522.9  | 523.9  | 522.6  | 520.2  | 518.5  | 519.5 | 502.6 | 454.8 | 310.7 |
| 52.5°  | 560.0  | 560.0  | 558.8  | 560.0  | 559.5  | 558.3  | 559.8  | 575.6 | 540.7 | 485.1 | 307.1 |
| 55°    | 600.5  | 602.0  | 601.0  | 602.2  | 603.0  | 605.7  | 611.7  | 648.9 | 597.6 | 522.2 | 298.8 |
| 57.5°  | 659.8  | 663.5  | 662.5  | 667.4  | 671.8  | 678.9  | 701.1  | 740.2 | 668.1 | 562.9 | 282.5 |
| 60°    | 766.3  | 778.2  | 777.7  | 786.3  | 795.1  | 803.1  | 841.9  | 849.5 | 748.0 | 616.2 | 270.2 |
| 62.5°  | 943.5  | 953.3  | 957.4  | 966.7  | 972.3  | 973.8  | 1005.0 | 949.6 | 819.2 | 664.5 | 263.4 |
| 65°    | 1058.2 | 1062.1 | 1065.8 | 1064.6 | 1061.2 | 1055.6 | 1057.5 | 940.3 | 795.6 | 633.5 | 226.1 |
| 67°    | 1071.9 | 1080.0 | 1082.9 | 1080.9 | 1075.8 | 1068.0 | 1058.5 | 898.3 | 745.3 | 585.1 | 191.1 |
| 67.5°  | 1068.0 | 1076.3 | 1079.0 | 1077.3 | 1072.9 | 1067.0 | 1055.8 | 882.5 | 728.2 | 569.5 | 182.1 |
| 70°    | 1005.2 | 1017.2 | 1028.2 | 1031.9 | 1032.1 | 1031.2 | 1019.9 | 770.4 | 619.8 | 478.2 | 138.2 |
| 72.5°  | 857.1  | 872.5  | 895.4  | 888.1  | 899.8  | 892.2  | 866.6  | 526.6 | 424.7 | 341.8 | 96.9  |
| 75°    | 578.3  | 585.1  | 603.7  | 582.4  | 584.4  | 571.0  | 471.4  | 305.9 | 263.4 | 222.4 | 58.3  |
| 77.5°  | 291.0  | 295.4  | 292.5  | 279.8  | 274.9  | 263.9  | 204.1  | 66.4  | 66.4  | 79.1  | 30.5  |
| 80°    | 184.5  | 186.3  | 188.2  | 191.1  | 194.8  | 195.3  | 141.6  | 19.5  | 17.6  | 18.3  | 16.6  |
| 82.5°  | 151.4  | 156.0  | 162.1  | 163.3  | 164.8  | 166.0  | 97.6   | 10.7  | 8.8   | 9.8   | 11.7  |
| 85°    | 35.2   | 38.1   | 36.4   | 32.2   | 34.4   | 26.6   | 13.7   | 4.4   | 3.9   | 4.9   | 8.1   |
| 87.5°  | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2    | 1.2   | 1.0   | 1.7   | 4.1   |
| 90°    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   |
| 92.5°  | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0   | 0.0   | 0.0   | 0.0   |
| 95°    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2    | 0.2   | 0.2   | 0.2   | 0.2   |
| 97.5°  | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5    | 0.5   | 0.5   | 0.5   | 0.5   |
| 100°   | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 1.6    | 1.6   | 1.6   | 1.6   | 1.6   |
| 102.5° | 2.8    | 2.8    | 2.8    | 2.8    | 2.8    | 2.8    | 2.8    | 2.8   | 2.8   | 2.8   | 2.8   |
| 105°   | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8    | 3.8   | 3.8   | 3.8   | 3.8   |
| 107.5° | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8    | 4.8   | 4.8   | 4.8   | 4.8   |

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CATALOG NUMBER: ENV-FXX-LED-E1-BL3-7030-ULG-BBB

**CANDELA DISTRIBUTION (continued):**

|        | 65°  | 66°  | 67°  | 68°  | 69°  | 70°  | 75°  | 85°  | 90°  | 95°  | 105° |
|--------|------|------|------|------|------|------|------|------|------|------|------|
| 110°   | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  |
| 112.5° | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  |
| 115°   | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  |
| 117.5° | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  |
| 120°   | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 |
| 122.5° | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 |
| 125°   | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 |
| 127.5° | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 |
| 130°   | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 |
| 132.5° | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 |
| 135°   | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 |
| 137.5° | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 |
| 140°   | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| 142.5° | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 |
| 145°   | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 |
| 147.5° | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 |
| 150°   | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 |
| 152.5° | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 |
| 155°   | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| 157.5° | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 |
| 160°   | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 |
| 162.5° | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 |
| 165°   | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 |
| 167.5° | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 |
| 170°   | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 |
| 172.5° | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 |
| 175°   | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 |
| 177.5° | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 |
| 180°   | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 |

REPORT NUMBER: P173836

CATALOG NUMBER: ENV-FXX-LED-E1-BL3-7030-ULG-BBB

**CANDELA DISTRIBUTION (continued):**

|        | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°     | 142.1 | 142.1 | 142.1 | 142.1 | 142.1 | 142.1 | 142.1 | 142.1 |
| 2.5°   | 140.6 | 139.9 | 138.9 | 138.7 | 138.4 | 137.9 | 137.7 | 137.4 |
| 5°     | 141.4 | 139.9 | 138.4 | 137.4 | 137.0 | 136.5 | 136.0 | 136.0 |
| 7.5°   | 144.3 | 142.6 | 140.4 | 139.4 | 138.4 | 137.7 | 137.2 | 137.2 |
| 10°    | 149.2 | 147.2 | 144.5 | 143.3 | 142.1 | 141.4 | 140.9 | 140.4 |
| 12.5°  | 156.5 | 154.0 | 150.9 | 148.9 | 147.7 | 147.4 | 147.0 | 146.7 |
| 15°    | 165.5 | 162.8 | 159.4 | 157.4 | 155.5 | 155.0 | 154.5 | 154.3 |
| 17.5°  | 174.5 | 172.3 | 169.7 | 166.3 | 162.3 | 159.2 | 157.7 | 157.4 |
| 20°    | 184.8 | 183.8 | 179.7 | 172.1 | 163.6 | 157.0 | 154.3 | 154.3 |
| 22.5°  | 197.7 | 195.0 | 185.0 | 171.6 | 158.9 | 149.6 | 146.0 | 146.0 |
| 25°    | 211.9 | 202.9 | 184.3 | 166.3 | 150.6 | 139.2 | 134.3 | 134.3 |
| 27.5°  | 224.3 | 205.1 | 179.9 | 157.2 | 138.2 | 125.7 | 120.1 | 119.9 |
| 30°    | 234.1 | 203.8 | 172.1 | 144.5 | 123.5 | 109.4 | 103.0 | 103.0 |
| 32.5°  | 239.5 | 199.7 | 161.4 | 129.6 | 105.7 | 89.6  | 81.8  | 82.0  |
| 35°    | 240.9 | 192.6 | 147.2 | 109.9 | 84.2  | 68.3  | 61.3  | 61.3  |
| 37.5°  | 239.5 | 181.4 | 129.6 | 88.1  | 63.0  | 51.7  | 46.4  | 45.9  |
| 40°    | 234.6 | 164.5 | 106.2 | 64.5  | 46.9  | 40.3  | 38.1  | 37.6  |
| 42.5°  | 224.8 | 144.3 | 79.8  | 46.1  | 37.6  | 34.9  | 34.4  | 34.2  |
| 45°    | 209.4 | 116.9 | 55.4  | 36.1  | 33.7  | 33.0  | 33.0  | 32.7  |
| 47.5°  | 190.2 | 89.4  | 39.5  | 32.0  | 31.7  | 31.7  | 31.7  | 31.7  |
| 50°    | 168.7 | 63.2  | 32.2  | 30.3  | 30.0  | 30.5  | 30.8  | 30.8  |
| 52.5°  | 146.5 | 44.2  | 29.5  | 29.0  | 28.6  | 29.3  | 29.5  | 29.5  |
| 55°    | 122.3 | 34.7  | 28.3  | 27.8  | 27.1  | 27.3  | 27.8  | 27.8  |
| 57.5°  | 97.4  | 30.8  | 27.8  | 27.1  | 25.6  | 25.6  | 26.1  | 26.1  |
| 60°    | 77.4  | 29.5  | 27.6  | 25.9  | 23.9  | 23.9  | 24.4  | 24.7  |
| 62.5°  | 64.7  | 29.3  | 27.6  | 24.7  | 23.2  | 22.5  | 23.0  | 23.0  |
| 65°    | 53.9  | 29.3  | 26.8  | 24.7  | 22.0  | 21.0  | 21.5  | 21.5  |
| 67°    | 45.2  | 28.8  | 26.4  | 24.7  | 21.5  | 20.3  | 20.3  | 20.3  |
| 67.5°  | 42.7  | 28.6  | 26.6  | 24.7  | 21.2  | 20.0  | 19.8  | 19.8  |
| 70°    | 32.0  | 25.9  | 26.6  | 24.9  | 20.8  | 18.3  | 17.8  | 17.8  |
| 72.5°  | 24.9  | 23.7  | 25.9  | 25.6  | 20.3  | 16.8  | 15.9  | 15.6  |
| 75°    | 20.3  | 21.5  | 26.1  | 24.9  | 19.0  | 15.4  | 13.9  | 13.7  |
| 77.5°  | 17.3  | 18.3  | 22.0  | 20.0  | 15.9  | 13.7  | 12.2  | 11.9  |
| 80°    | 13.7  | 15.6  | 15.6  | 13.7  | 11.7  | 11.0  | 10.3  | 10.3  |
| 82.5°  | 11.0  | 11.9  | 10.3  | 9.3   | 8.8   | 8.5   | 8.1   | 8.1   |
| 85°    | 9.0   | 9.8   | 7.6   | 6.8   | 6.6   | 6.3   | 5.9   | 5.9   |
| 87.5°  | 7.1   | 6.1   | 3.9   | 3.7   | 3.7   | 3.4   | 3.4   | 3.7   |
| 90°    | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 92.5°  | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 95°    | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   | 0.2   |
| 97.5°  | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   | 0.5   |
| 100°   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   | 1.6   |
| 102.5° | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   | 2.8   |
| 105°   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   | 3.8   |
| 107.5° | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   | 4.8   |

REPORT NUMBER: P173836

CATALOG NUMBER: ENV-FXX-LED-E1-BL3-7030-ULG-BBB

**CANDELA DISTRIBUTION (continued):**

|        | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|------|------|------|------|------|------|------|------|
| 110°   | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  | 5.8  |
| 112.5° | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  | 6.9  |
| 115°   | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  | 8.1  |
| 117.5° | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  | 9.6  |
| 120°   | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 | 11.3 |
| 122.5° | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 | 13.2 |
| 125°   | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 | 15.5 |
| 127.5° | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 | 17.9 |
| 130°   | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 | 20.4 |
| 132.5° | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 | 22.8 |
| 135°   | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 | 25.2 |
| 137.5° | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 | 27.6 |
| 140°   | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 | 29.9 |
| 142.5° | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 | 32.1 |
| 145°   | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 | 34.0 |
| 147.5° | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 | 35.6 |
| 150°   | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 | 37.3 |
| 152.5° | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 | 38.8 |
| 155°   | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 |
| 157.5° | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 | 41.1 |
| 160°   | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 | 42.2 |
| 162.5° | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 | 43.2 |
| 165°   | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 | 44.0 |
| 167.5° | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 | 44.4 |
| 170°   | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 | 44.5 |
| 172.5° | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 | 44.9 |
| 175°   | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 | 45.5 |
| 177.5° | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 | 45.7 |
| 180°   | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 | 45.6 |

(END OF REPORT)