

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: P400694

Luminaire Tested: **ENV-SA1-722-U-SL2-XXB**

Issue Date: 5/20/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P400694  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2004-754-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/20/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: INVUE  
Catalog Number: ENV-SA1-722-U-SL2-XXB  
Description: ENTRI LED LUMINAIRE  
(1) 70 CRI, 2200K LIGHTSQUARE IN BATTERY OPERATION WITH 16 LEDS AND TYPE II SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 560 lumens  
Efficiency: N/A  
Efficacy: 43.1 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium - Non-Cutoff  
BUG Rating: B0 - U0 - G1

Input Watts (W): 13  
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

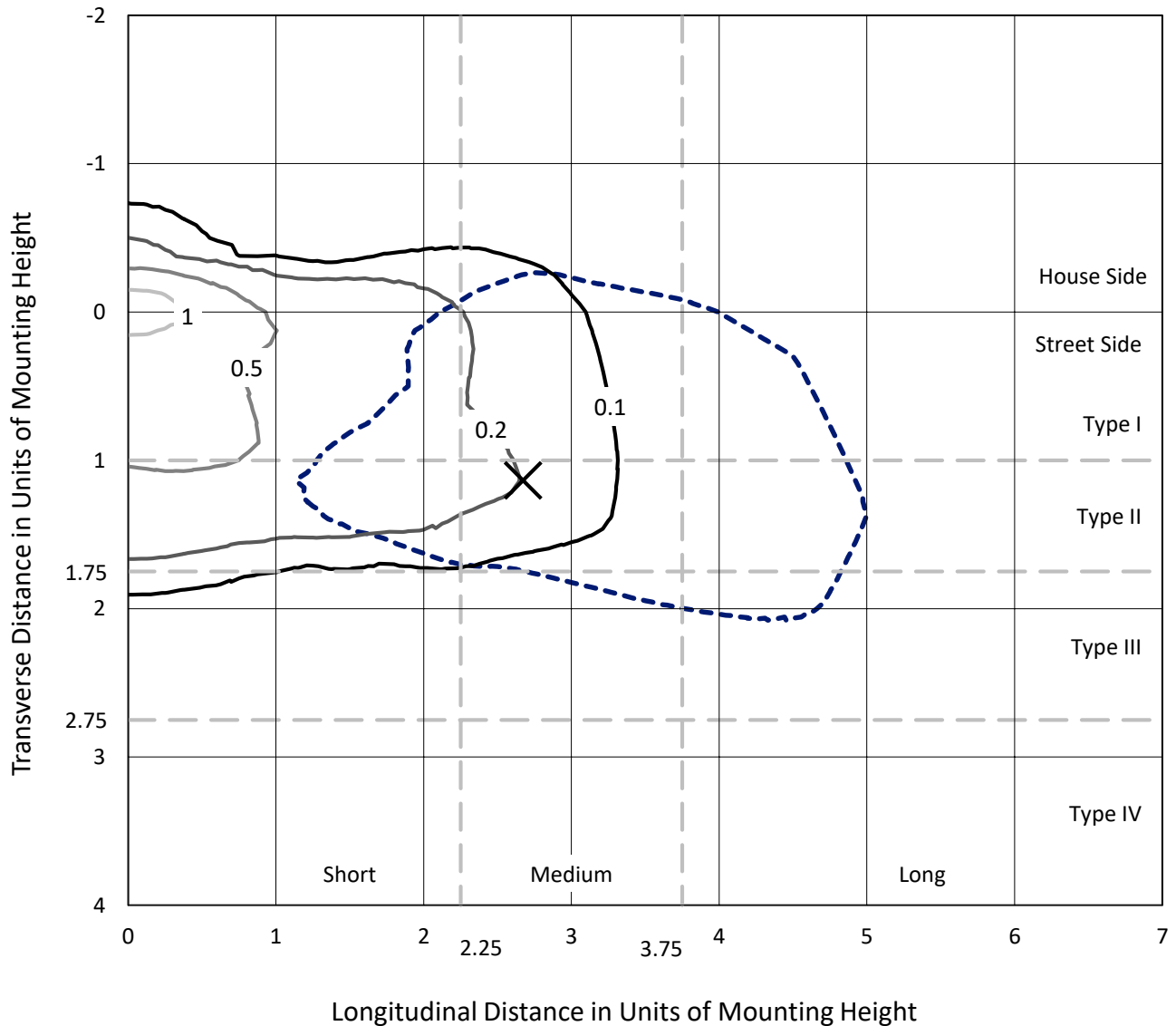


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

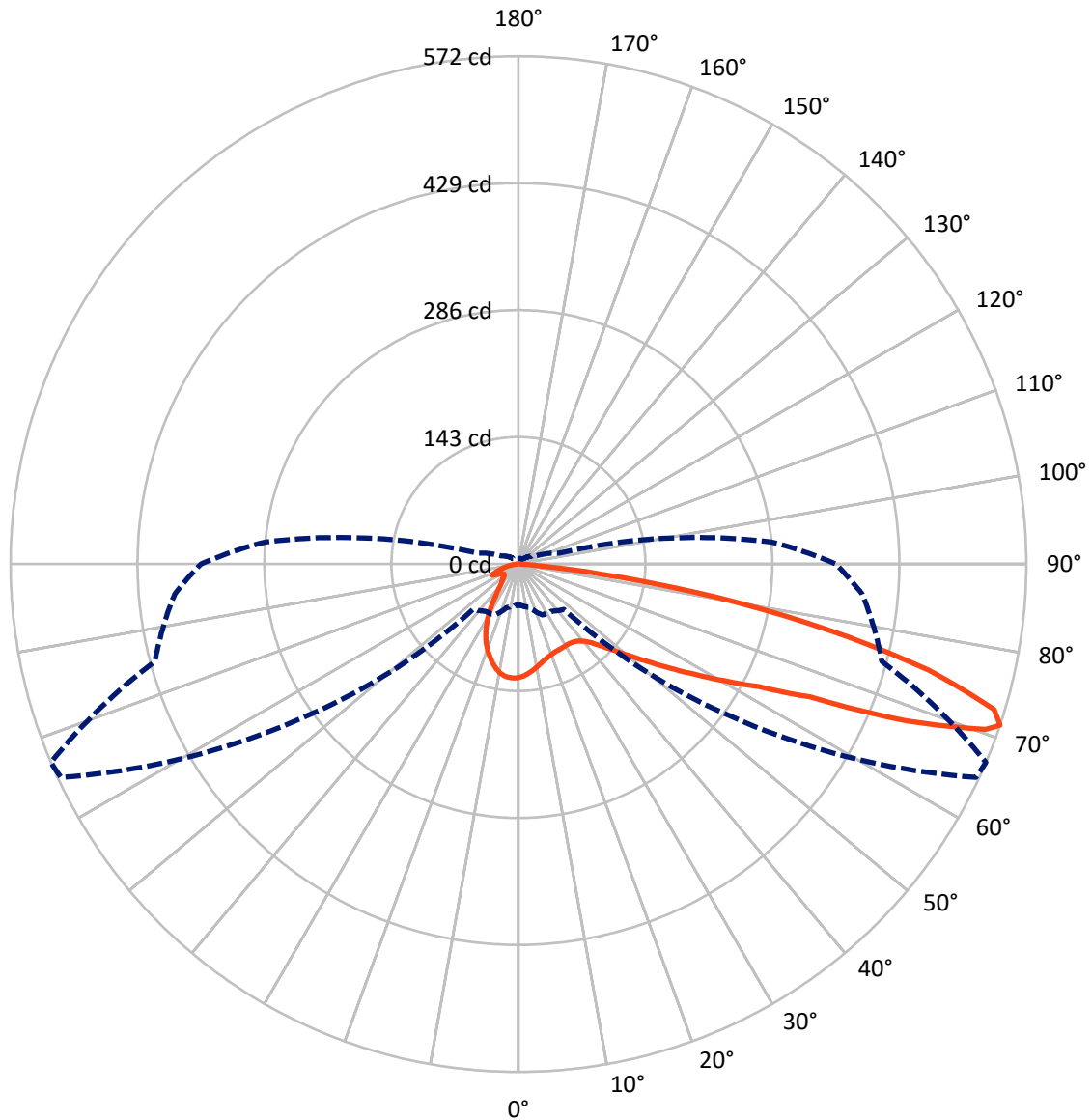


Based on 10 foot mounting height. Maximum calculated value = 1.3 fc  
 Type III - Medium - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral    - - - Horizontal Cone Through 71-Deg Vertical

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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total |
|--------------------|-----------|----------|--------|-------|
| <b>House Side</b>  | Lumens    | 114.7    | 0.0    | 114.7 |
|                    | % Fixture | 20.5     | 0.0    | 20.5  |
| <b>Street Side</b> | Lumens    | 445.3    | 0.0    | 445.3 |
|                    | % Fixture | 79.5     | 0.0    | 79.5  |
| <b>Total</b>       | Lumens    | 560.0    | 0.0    | 560.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0 |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 11.3   | 2.0       |
| 10°-20°   | 27.8   | 5.0       |
| 20°-30°   | 37.5   | 6.7       |
| 30°-40°   | 49.4   | 8.8       |
| 40°-50°   | 70.4   | 12.6      |
| 50°-60°   | 107.6  | 19.2      |
| 60°-70°   | 134.3  | 24.0      |
| 70°-80°   | 108.4  | 19.4      |
| 80°-90°   | 13.1   | 2.3       |
| 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°    | 560.0  | 100.0     |
| 0°-180°   | 560.0  | 100.0     |



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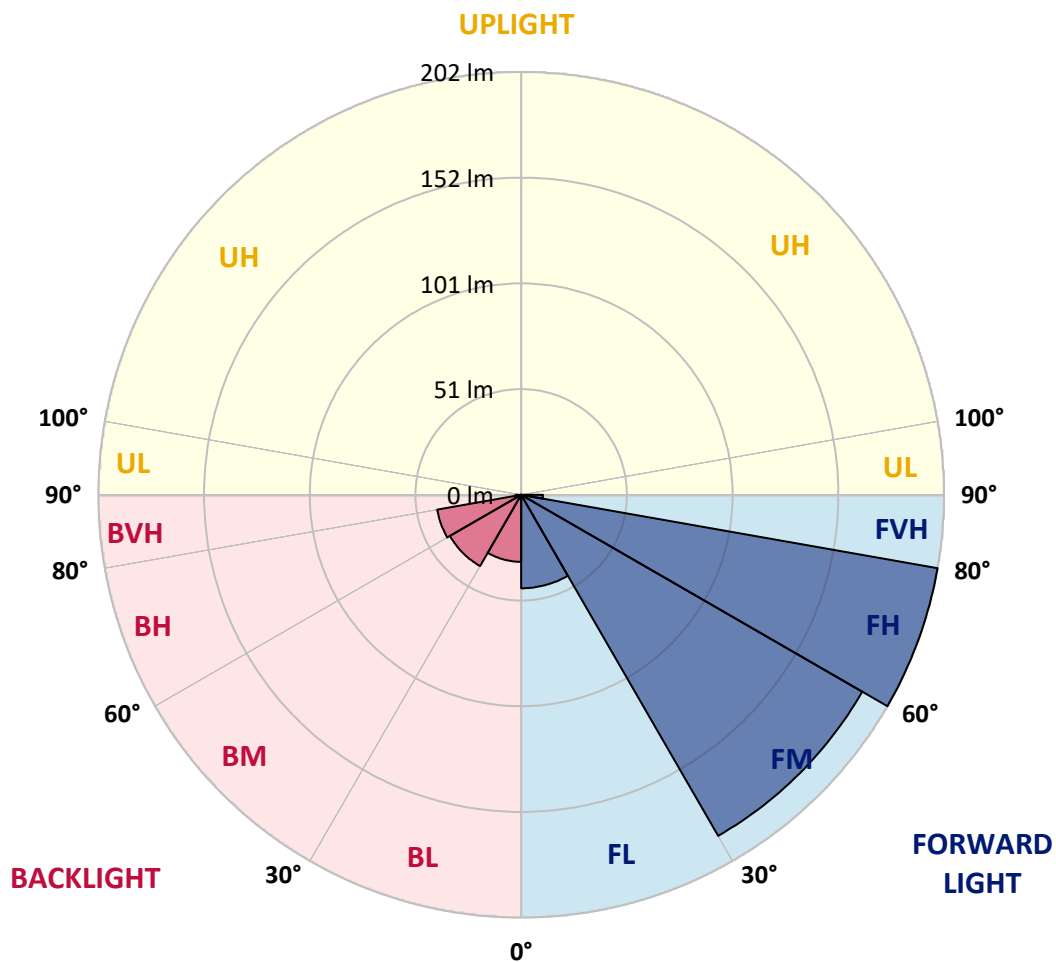
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|--------|-----------|-------------------------|------|--------|
|      |             |        |           | B                       | U    | G      |
| FL   | (0°-30°)    | 44.7   | 8.0       |                         |      |        |
| FM   | (30°-60°)   | 188.2  | 33.6      |                         |      |        |
| FH   | (60°-80°)   | 202.0  | 36.1      |                         |      | G0/660 |
| FVH  | (80°-90°)   | 10.4   | 1.9       |                         |      | G1/100 |
| BL   | (0°-30°)    | 32.0   | 5.7       | B0/110                  |      |        |
| BM   | (30°-60°)   | 39.3   | 7.0       | B0/220                  |      |        |
| BH   | (60°-80°)   | 40.8   | 7.3       | B0/110                  |      | G0/110 |
| BVH  | (80°-90°)   | 2.6    | 0.5       |                         |      | G0/10  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |        |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |        |

**BUG Rating: B0-U0-G1**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°    | 5°    | 15°   | 25°   | 35°   | 45°   | 55°   | 65°   | 67°   | 75°   | 85°   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 |
| 2.5°  | 120.4 | 121.0 | 121.1 | 122.2 | 122.6 | 123.9 | 124.6 | 125.8 | 126.0 | 126.7 | 127.2 |
| 5°    | 112.6 | 112.7 | 113.2 | 114.2 | 115.7 | 118.0 | 119.8 | 122.8 | 123.3 | 125.4 | 127.3 |
| 7.5°  | 105.6 | 106.0 | 106.8 | 108.3 | 110.0 | 112.8 | 115.5 | 119.6 | 120.4 | 123.8 | 127.4 |
| 10°   | 100.8 | 101.3 | 101.9 | 103.5 | 105.3 | 108.3 | 111.7 | 116.4 | 117.3 | 122.0 | 127.1 |
| 12.5° | 97.1  | 97.5  | 97.9  | 99.7  | 101.7 | 104.7 | 108.1 | 113.4 | 114.3 | 119.7 | 126.6 |
| 15°   | 94.6  | 94.6  | 95.3  | 96.7  | 98.9  | 101.9 | 105.3 | 110.8 | 111.8 | 117.9 | 126.4 |
| 17.5° | 93.0  | 93.2  | 93.8  | 94.9  | 96.8  | 99.7  | 103.0 | 108.6 | 109.8 | 116.5 | 126.5 |
| 20°   | 93.1  | 93.3  | 93.6  | 94.0  | 95.4  | 97.9  | 101.3 | 107.0 | 108.2 | 115.6 | 127.0 |
| 22.5° | 94.8  | 94.9  | 95.0  | 94.4  | 94.9  | 96.7  | 100.0 | 105.8 | 107.1 | 115.2 | 127.7 |
| 25°   | 98.0  | 98.0  | 97.9  | 96.6  | 95.5  | 96.3  | 99.3  | 105.4 | 106.7 | 114.9 | 128.3 |
| 27.5° | 102.5 | 102.8 | 102.0 | 100.4 | 98.0  | 96.8  | 99.2  | 105.1 | 106.4 | 114.9 | 128.7 |
| 30°   | 108.5 | 108.7 | 108.3 | 106.3 | 102.4 | 99.1  | 99.6  | 104.9 | 106.2 | 114.7 | 128.7 |
| 32.5° | 114.6 | 115.1 | 115.5 | 113.7 | 109.0 | 103.1 | 101.6 | 105.2 | 106.3 | 114.6 | 128.5 |
| 35°   | 120.8 | 121.2 | 123.1 | 122.8 | 117.6 | 109.2 | 104.7 | 106.5 | 107.5 | 115.0 | 128.7 |
| 37.5° | 126.2 | 126.9 | 129.7 | 131.9 | 127.9 | 117.4 | 110.1 | 109.3 | 109.9 | 117.1 | 129.5 |
| 40°   | 131.9 | 132.9 | 137.1 | 141.2 | 139.5 | 127.7 | 117.8 | 114.4 | 114.2 | 120.8 | 131.7 |
| 42.5° | 138.3 | 139.5 | 144.9 | 150.9 | 151.5 | 140.8 | 128.0 | 121.6 | 121.4 | 127.1 | 136.5 |
| 45°   | 145.9 | 147.0 | 154.4 | 161.5 | 164.9 | 155.5 | 140.6 | 131.7 | 131.8 | 136.0 | 144.1 |
| 47.5° | 155.3 | 157.0 | 164.1 | 173.2 | 179.4 | 172.0 | 155.8 | 145.9 | 145.3 | 149.4 | 156.5 |
| 50°   | 168.4 | 169.9 | 175.7 | 184.5 | 195.4 | 192.0 | 175.0 | 163.0 | 162.5 | 164.5 | 173.1 |
| 52.5° | 182.2 | 182.7 | 185.5 | 194.6 | 212.9 | 216.3 | 198.6 | 184.2 | 182.4 | 183.4 | 193.7 |
| 55°   | 183.0 | 184.0 | 185.9 | 197.4 | 228.6 | 245.4 | 224.7 | 209.2 | 206.8 | 206.1 | 217.2 |
| 57.5° | 166.2 | 167.9 | 170.3 | 185.3 | 229.3 | 279.0 | 261.7 | 238.4 | 234.0 | 230.4 | 242.2 |
| 60°   | 130.7 | 132.9 | 137.3 | 155.6 | 212.9 | 298.2 | 323.4 | 271.1 | 267.2 | 254.9 | 266.8 |
| 62.5° | 94.5  | 95.4  | 99.6  | 107.9 | 169.0 | 299.3 | 387.8 | 313.8 | 304.2 | 278.8 | 287.9 |
| 65°   | 76.1  | 77.6  | 78.8  | 78.8  | 100.0 | 265.5 | 430.5 | 389.9 | 360.9 | 305.5 | 311.1 |
| 67.5° | 62.7  | 63.2  | 66.3  | 71.8  | 68.0  | 164.0 | 434.8 | 500.9 | 471.6 | 341.4 | 338.7 |
| 70°   | 52.4  | 52.6  | 55.7  | 65.5  | 65.1  | 84.6  | 364.5 | 564.9 | 557.8 | 400.4 | 381.8 |
| 71°   | 45.9  | 47.2  | 50.7  | 63.4  | 64.8  | 72.3  | 309.7 | 568.3 | 571.8 | 423.6 | 388.5 |
| 72.5° | 36.1  | 36.1  | 41.0  | 58.2  | 65.4  | 66.7  | 228.2 | 549.8 | 560.0 | 449.8 | 376.9 |
| 75°   | 21.2  | 21.0  | 23.7  | 40.5  | 66.8  | 66.5  | 124.6 | 456.9 | 477.6 | 454.6 | 348.8 |
| 77.5° | 11.9  | 12.2  | 13.6  | 22.6  | 53.0  | 63.8  | 71.6  | 332.7 | 357.1 | 380.3 | 295.0 |
| 80°   | 5.5   | 5.8   | 6.9   | 11.0  | 31.3  | 55.1  | 51.1  | 216.0 | 225.3 | 228.5 | 139.4 |
| 82.5° | 1.5   | 1.6   | 2.1   | 4.2   | 12.1  | 37.6  | 37.8  | 90.5  | 93.4  | 54.0  | 29.9  |
| 85°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.2   | 4.6   | 10.7  | 16.3  | 13.5  | 7.2   | 6.1   |
| 87.5° | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.2   | 0.2   | 0.3   | 0.3   | 0.3   | 0.4   |
| 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):**

|       | 90°   | 95°   | 105°  | 115°  | 125°  | 135°  | 145°  | 155°  | 165°  | 175°  | 180°  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0°    | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 | 127.7 |
| 2.5°  | 127.6 | 127.9 | 128.5 | 128.4 | 128.3 | 127.3 | 127.9 | 127.3 | 127.2 | 127.0 | 127.0 |
| 5°    | 127.9 | 128.4 | 128.7 | 128.0 | 126.8 | 124.7 | 124.0 | 122.1 | 120.9 | 120.3 | 120.0 |
| 7.5°  | 128.4 | 128.7 | 128.6 | 126.6 | 123.4 | 119.5 | 116.1 | 113.4 | 110.6 | 110.1 | 110.0 |
| 10°   | 128.4 | 128.7 | 127.5 | 123.6 | 118.2 | 112.0 | 106.8 | 102.5 | 98.1  | 96.5  | 96.7  |
| 12.5° | 128.1 | 128.3 | 125.3 | 119.1 | 111.2 | 102.8 | 95.5  | 88.4  | 82.8  | 79.4  | 78.8  |
| 15°   | 127.9 | 127.6 | 122.4 | 113.4 | 103.0 | 92.5  | 81.6  | 71.9  | 65.3  | 60.9  | 60.3  |
| 17.5° | 127.9 | 127.0 | 118.9 | 107.0 | 94.1  | 79.6  | 65.1  | 54.7  | 47.3  | 44.7  | 44.7  |
| 20°   | 128.0 | 126.1 | 115.2 | 100.3 | 83.0  | 64.3  | 48.6  | 39.7  | 36.9  | 36.5  | 36.6  |
| 22.5° | 128.2 | 124.9 | 111.2 | 92.7  | 70.5  | 48.0  | 34.7  | 31.5  | 31.8  | 32.7  | 32.6  |
| 25°   | 128.0 | 123.3 | 106.4 | 84.2  | 57.0  | 34.6  | 28.1  | 27.2  | 28.7  | 29.8  | 30.2  |
| 27.5° | 127.6 | 121.2 | 101.3 | 74.2  | 43.5  | 27.2  | 24.5  | 24.4  | 25.9  | 26.9  | 26.8  |
| 30°   | 126.4 | 118.7 | 95.4  | 63.5  | 31.4  | 23.2  | 22.1  | 22.3  | 23.3  | 24.3  | 24.3  |
| 32.5° | 125.1 | 115.8 | 89.2  | 51.9  | 24.1  | 21.0  | 20.6  | 20.7  | 21.4  | 22.1  | 22.0  |
| 35°   | 123.7 | 113.1 | 82.9  | 39.8  | 21.1  | 19.8  | 19.6  | 19.5  | 19.8  | 19.9  | 19.9  |
| 37.5° | 122.9 | 110.7 | 75.9  | 30.0  | 19.5  | 18.9  | 18.6  | 18.3  | 18.2  | 18.1  | 17.9  |
| 40°   | 123.3 | 109.1 | 69.1  | 23.2  | 18.5  | 18.1  | 17.6  | 17.1  | 16.8  | 16.6  | 16.5  |
| 42.5° | 125.5 | 108.6 | 61.6  | 20.0  | 17.7  | 17.3  | 16.6  | 15.8  | 15.5  | 15.5  | 15.4  |
| 45°   | 130.8 | 110.0 | 54.6  | 18.4  | 16.8  | 16.4  | 15.3  | 14.8  | 14.5  | 14.6  | 14.6  |
| 47.5° | 139.0 | 114.2 | 48.3  | 17.6  | 16.3  | 15.6  | 14.3  | 13.8  | 13.6  | 13.7  | 13.7  |
| 50°   | 151.3 | 121.9 | 41.8  | 16.8  | 15.6  | 14.7  | 13.6  | 13.0  | 12.7  | 12.7  | 12.7  |
| 52.5° | 169.4 | 134.6 | 37.2  | 16.4  | 15.1  | 13.9  | 12.9  | 12.2  | 11.9  | 11.9  | 11.8  |
| 55°   | 191.4 | 151.2 | 35.4  | 16.0  | 14.3  | 13.3  | 12.2  | 11.4  | 11.0  | 10.8  | 10.9  |
| 57.5° | 215.5 | 172.8 | 38.0  | 16.0  | 13.5  | 12.6  | 11.4  | 10.6  | 10.1  | 10.0  | 9.9   |
| 60°   | 240.3 | 194.1 | 45.4  | 15.6  | 12.9  | 11.7  | 10.6  | 9.8   | 9.4   | 9.2   | 9.1   |
| 62.5° | 261.8 | 215.4 | 57.6  | 15.2  | 12.4  | 10.9  | 9.8   | 9.0   | 8.6   | 8.4   | 8.4   |
| 65°   | 287.6 | 239.8 | 76.3  | 15.6  | 12.2  | 10.1  | 8.9   | 8.3   | 8.0   | 7.7   | 7.7   |
| 67.5° | 322.9 | 276.0 | 90.5  | 17.6  | 12.7  | 9.4   | 8.1   | 7.6   | 7.3   | 7.2   | 7.2   |
| 70°   | 357.7 | 296.3 | 63.0  | 20.6  | 14.2  | 8.9   | 7.3   | 6.9   | 6.8   | 6.6   | 6.6   |
| 71°   | 357.2 | 285.5 | 47.3  | 21.4  | 14.7  | 8.7   | 6.9   | 6.7   | 6.5   | 6.4   | 6.4   |
| 72.5° | 339.3 | 259.5 | 33.9  | 20.7  | 14.4  | 8.2   | 6.5   | 6.3   | 6.1   | 6.1   | 6.0   |
| 75°   | 304.3 | 228.7 | 26.5  | 17.3  | 12.1  | 7.3   | 5.8   | 5.6   | 5.5   | 5.4   | 5.5   |
| 77.5° | 249.3 | 183.0 | 20.9  | 13.7  | 9.2   | 6.0   | 5.2   | 4.9   | 4.8   | 4.8   | 4.8   |
| 80°   | 114.6 | 79.7  | 15.2  | 10.6  | 6.9   | 4.8   | 4.4   | 4.3   | 4.2   | 4.1   | 4.1   |
| 82.5° | 27.6  | 22.3  | 8.1   | 7.1   | 4.7   | 3.7   | 3.5   | 3.5   | 3.5   | 3.4   | 3.4   |
| 85°   | 6.0   | 6.0   | 3.3   | 3.3   | 2.8   | 2.6   | 2.7   | 2.7   | 2.7   | 2.6   | 2.6   |
| 87.5° | 0.3   | 1.0   | 1.0   | 1.5   | 1.6   | 1.5   | 1.9   | 1.9   | 1.9   | 1.8   | 1.7   |
| 90°   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |

(END OF REPORT)