

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: P832853

Luminaire Tested: **TTN-D0-740-U-WQ-CG-UPL2**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P832853
REPORT IS FROM IESNA LM-79-08 TEST DATA - UPLIGHT (G3-2308-121-4) AND
Test Lab: INNOVATION CENTER
Issue Date: 5/15/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: TTN-D0-740-U-WQ-CG-UPL2
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
4000K, 70 CRI LEDS AND WIDE DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1739.5 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type V - Short
BUG Rating: B1 - U4 - G1

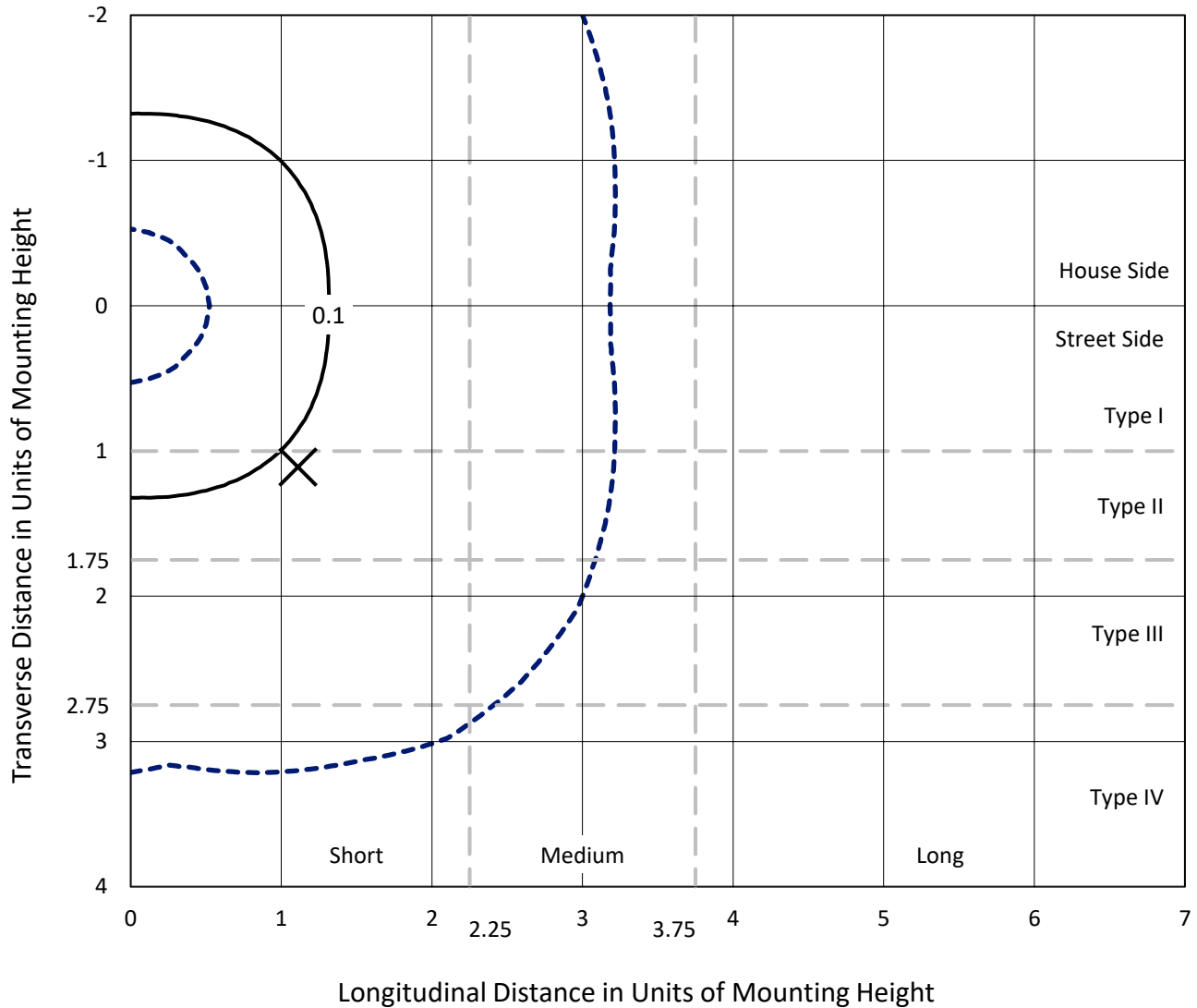
Input Watts (W): 15.2
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

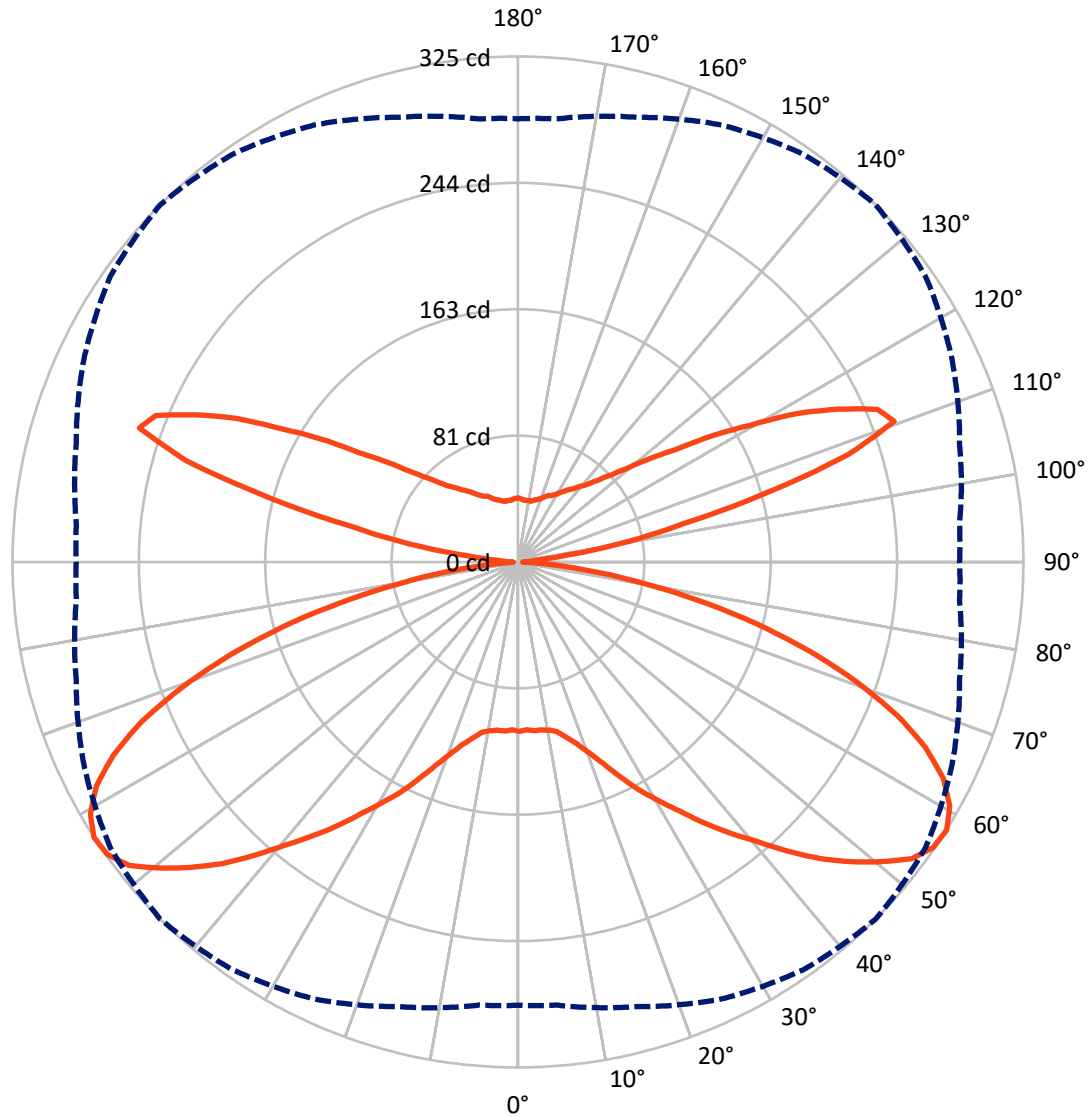
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 0.2 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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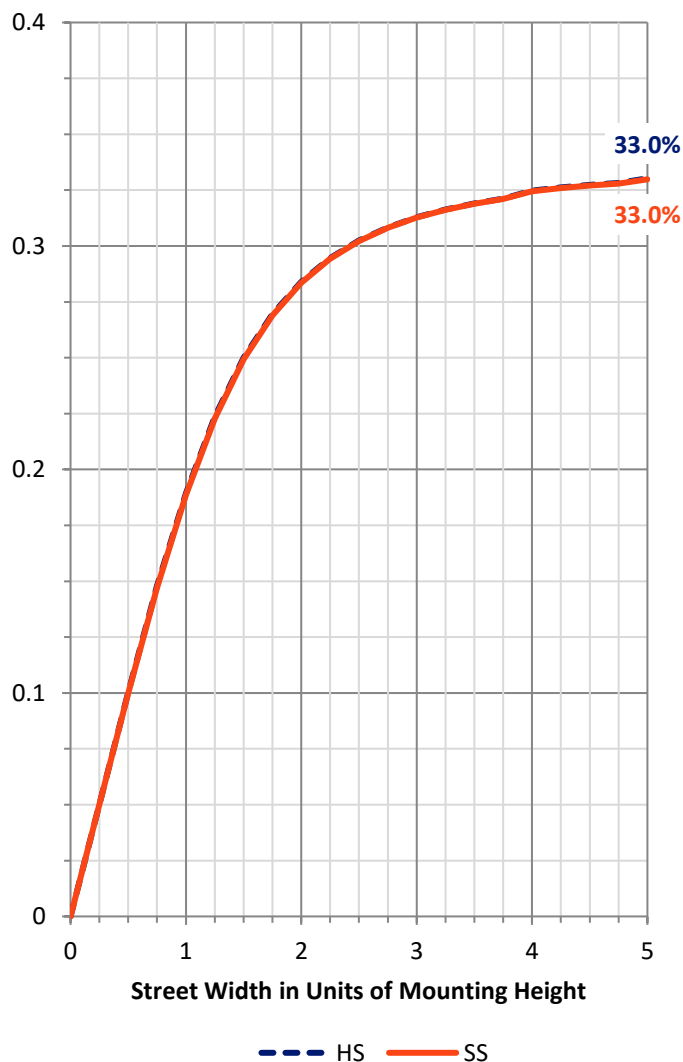
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 577.3 | 292.5 | 869.8 |
| | % Fixture | 33.2 | 16.8 | 50.0 |
| Street Side | Lumens | 577.3 | 292.5 | 869.8 |
| | % Fixture | 33.2 | 16.8 | 50.0 |
| Total | Lumens | 1154.6 | 584.9 | 1739.5 |
| | % Fixture | 66.4 | 33.6 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 10.4 | 0.6 |
| 10°-20° | 33.6 | 1.9 |
| 20°-30° | 70.7 | 4.1 |
| 30°-40° | 127.5 | 7.3 |
| 40°-50° | 202.6 | 11.6 |
| 50°-60° | 270.4 | 15.5 |
| 60°-70° | 261.2 | 15.0 |
| 70°-80° | 151.4 | 8.7 |
| 80°-90° | 26.9 | 1.5 |
| 90°-100° | 13.1 | 0.8 |
| 100°-110° | 132.7 | 7.6 |
| 110°-120° | 194.0 | 11.2 |
| 120°-130° | 112.6 | 6.5 |
| 130°-140° | 59.7 | 3.4 |
| 140°-150° | 35.4 | 2.0 |
| 150°-160° | 21.8 | 1.3 |
| 160°-170° | 11.9 | 0.7 |
| 170°-180° | 3.9 | 0.2 |
| 0°-90° | 1154.6 | 66.4 |
| 0°-180° | 1739.5 | 100.0 |

Coefficient of Utilization

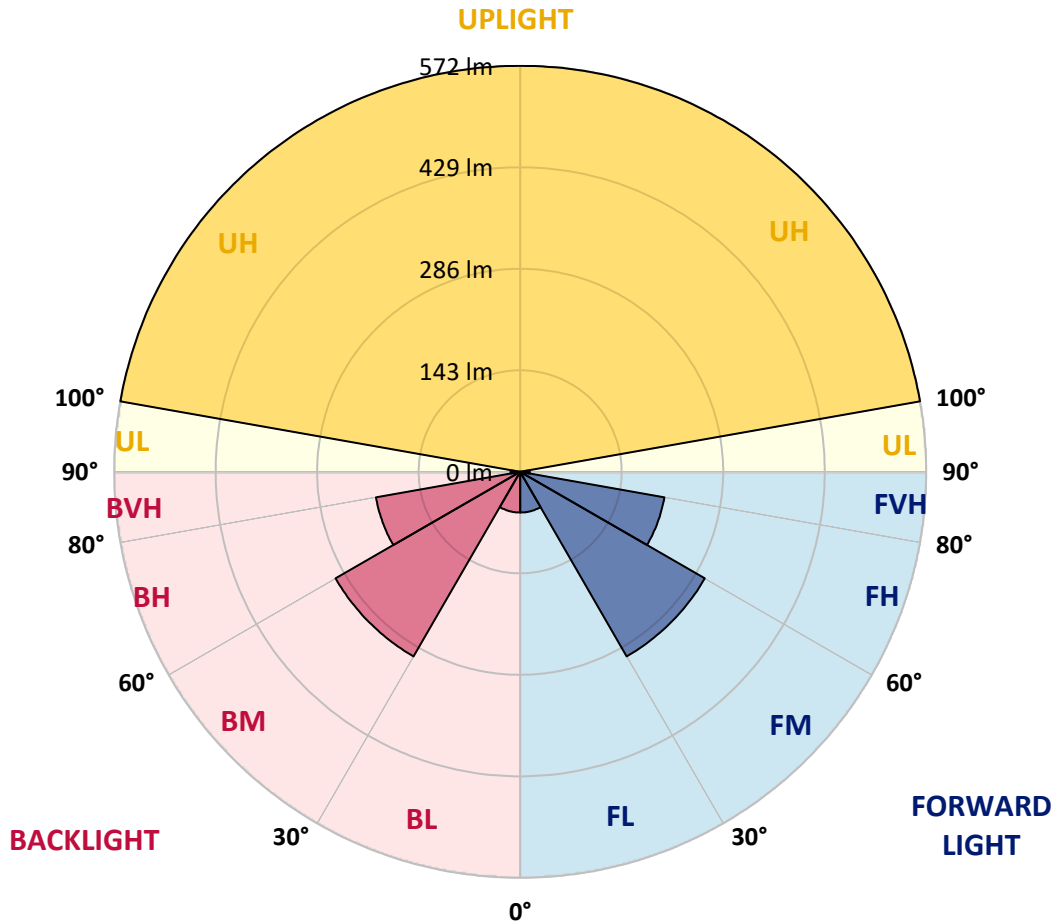


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|---------|--------|
| | | | B | U | G |
| FL (0°-30°) | 57.4 | 3.3 | | | |
| FM (30°-60°) | 300.2 | 17.3 | | | |
| FH (60°-80°) | 206.3 | 11.9 | | | G0/660 |
| FVH (80°-90°) | 13.4 | 0.8 | | | G1/100 |
| BL (0°-30°) | 57.4 | 3.3 | B0/110 | | |
| BM (30°-60°) | 300.2 | 17.3 | B1/1000 | | |
| BH (60°-80°) | 206.3 | 11.9 | B1/500 | | G0/660 |
| BVH (80°-90°) | 13.4 | 0.8 | | | G1/100 |
| UL (90°-100°) | 13.1 | 0.8 | | U2/50 | |
| UH (100°-180°) | 571.8 | 32.9 | | U4/1000 | |

BUG Rating: B1-U4-G1
 Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 |
| 2.5° | 108.0 | 108.0 | 108.0 | 108.0 | 108.0 | 108.0 | 108.0 | 108.0 | 108.0 | 108.0 | 108.0 |
| 5° | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 |
| 7.5° | 108.0 | 108.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 109.0 | 108.0 | 108.0 |
| 10° | 109.0 | 109.0 | 109.0 | 110.0 | 110.0 | 110.0 | 110.0 | 110.0 | 109.0 | 109.0 | 109.0 |
| 12.5° | 111.0 | 111.0 | 112.0 | 112.0 | 112.0 | 112.0 | 112.0 | 112.0 | 112.0 | 111.0 | 111.0 |
| 15° | 116.0 | 116.0 | 116.0 | 117.0 | 117.0 | 117.0 | 117.0 | 117.0 | 116.0 | 116.0 | 116.0 |
| 17.5° | 121.0 | 121.0 | 122.0 | 122.0 | 123.0 | 123.0 | 123.0 | 122.0 | 122.0 | 122.0 | 122.0 |
| 20° | 128.0 | 128.0 | 129.0 | 129.0 | 130.0 | 131.0 | 131.0 | 130.0 | 129.0 | 129.0 | 129.0 |
| 22.5° | 137.0 | 138.0 | 138.0 | 138.0 | 139.0 | 141.0 | 140.0 | 139.0 | 138.0 | 138.0 | 138.0 |
| 25° | 148.0 | 149.0 | 150.0 | 150.0 | 151.0 | 153.0 | 153.0 | 150.0 | 150.0 | 150.0 | 150.0 |
| 27.5° | 161.0 | 162.0 | 163.0 | 163.0 | 164.0 | 166.0 | 165.0 | 163.0 | 163.0 | 162.0 | 162.0 |
| 30° | 173.0 | 174.0 | 175.0 | 176.0 | 177.0 | 178.0 | 178.0 | 176.0 | 175.0 | 174.0 | 173.0 |
| 32.5° | 185.0 | 185.0 | 187.0 | 189.0 | 191.0 | 191.0 | 192.0 | 189.0 | 187.0 | 185.0 | 184.0 |
| 35° | 197.0 | 198.0 | 199.0 | 202.0 | 205.0 | 206.0 | 205.0 | 202.0 | 199.0 | 197.0 | 197.0 |
| 37.5° | 210.0 | 211.0 | 212.0 | 216.0 | 219.0 | 221.0 | 219.0 | 216.0 | 212.0 | 210.0 | 209.0 |
| 40° | 224.0 | 225.0 | 226.0 | 231.0 | 234.0 | 236.0 | 233.0 | 230.0 | 226.0 | 224.0 | 223.0 |
| 42.5° | 237.0 | 239.0 | 241.0 | 247.0 | 252.0 | 254.0 | 251.0 | 246.0 | 242.0 | 237.0 | 236.0 |
| 45° | 253.0 | 255.0 | 258.0 | 264.0 | 269.0 | 272.0 | 268.0 | 263.0 | 257.0 | 253.0 | 252.0 |
| 47.5° | 266.0 | 268.0 | 271.0 | 279.0 | 286.0 | 288.0 | 284.0 | 278.0 | 270.0 | 265.0 | 264.0 |
| 50° | 276.0 | 278.0 | 284.0 | 293.0 | 301.0 | 303.0 | 299.0 | 291.0 | 282.0 | 275.0 | 274.0 |
| 52.5° | 284.0 | 286.0 | 293.0 | 305.0 | 314.0 | 317.0 | 312.0 | 303.0 | 291.0 | 283.0 | 282.0 |
| 55° | 288.0 | 289.0 | 298.0 | 311.0 | 320.0 | 324.0 | 319.0 | 309.0 | 296.0 | 287.0 | 286.0 |
| 57.5° | 285.0 | 286.0 | 296.0 | 310.0 | 320.0 | 325.0 | 320.0 | 308.0 | 294.0 | 285.0 | 284.0 |
| 60° | 279.0 | 279.0 | 288.0 | 304.0 | 316.0 | 319.0 | 314.0 | 302.0 | 287.0 | 278.0 | 277.0 |
| 62.5° | 268.0 | 267.0 | 278.0 | 292.0 | 304.0 | 307.0 | 303.0 | 291.0 | 276.0 | 267.0 | 266.0 |
| 65° | 247.0 | 245.0 | 261.0 | 274.0 | 285.0 | 288.0 | 285.0 | 274.0 | 260.0 | 246.0 | 244.0 |
| 67.5° | 222.0 | 219.0 | 234.0 | 249.0 | 259.0 | 263.0 | 259.0 | 250.0 | 234.0 | 220.0 | 219.0 |
| 70° | 196.0 | 193.0 | 205.0 | 218.0 | 229.0 | 231.0 | 227.0 | 218.0 | 203.0 | 194.0 | 194.0 |
| 72.5° | 165.0 | 162.0 | 173.0 | 183.0 | 194.0 | 196.0 | 192.0 | 184.0 | 173.0 | 164.0 | 163.0 |
| 75° | 131.0 | 128.0 | 138.0 | 146.0 | 157.0 | 158.0 | 156.0 | 147.0 | 138.0 | 129.0 | 129.0 |
| 77.5° | 97.0 | 94.0 | 102.0 | 109.0 | 118.0 | 118.0 | 117.0 | 110.0 | 102.0 | 96.0 | 96.0 |
| 80° | 64.0 | 62.0 | 69.0 | 72.0 | 80.0 | 80.0 | 79.0 | 74.0 | 68.0 | 64.0 | 63.0 |
| 82.5° | 36.0 | 34.0 | 40.0 | 41.0 | 47.0 | 47.0 | 46.0 | 42.0 | 38.0 | 35.0 | 35.0 |
| 85° | 14.0 | 12.0 | 16.0 | 17.0 | 20.0 | 20.0 | 19.0 | 18.0 | 15.0 | 13.0 | 13.0 |
| 87.5° | 1.0 | 1.0 | 2.0 | 2.0 | 3.0 | 3.0 | 3.0 | 2.0 | 2.0 | 1.0 | 1.0 |
| 90° | 5.0 | 5.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 | 5.0 | 5.0 |
| 92.5° | 5.0 | 5.0 | 5.0 | 7.0 | 8.0 | 7.0 | 8.0 | 6.0 | 6.0 | 5.0 | 5.0 |
| 95° | 6.0 | 6.0 | 7.0 | 9.0 | 11.0 | 12.0 | 12.0 | 7.0 | 7.0 | 6.0 | 6.0 |
| 97.5° | 8.0 | 9.0 | 9.0 | 11.0 | 18.0 | 33.0 | 20.0 | 10.0 | 10.0 | 9.0 | 8.0 |
| 100° | 13.0 | 14.0 | 14.0 | 25.0 | 53.0 | 71.1 | 51.0 | 26.0 | 19.0 | 14.0 | 14.0 |
| 102.5° | 42.0 | 44.0 | 54.0 | 81.1 | 120.1 | 109.1 | 92.1 | 87.1 | 60.0 | 48.0 | 46.0 |
| 105° | 107.1 | 106.1 | 114.1 | 135.1 | 168.1 | 165.1 | 152.1 | 138.1 | 119.1 | 110.1 | 110.1 |
| 107.5° | 141.1 | 141.1 | 148.1 | 166.1 | 191.1 | 223.2 | 226.2 | 179.1 | 157.1 | 147.1 | 146.1 |
| 110° | 159.1 | 159.1 | 165.1 | 180.1 | 213.2 | 258.2 | 256.2 | 221.2 | 194.1 | 181.1 | 179.1 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 163.1 | 164.1 | 172.1 | 195.1 | 231.2 | 251.2 | 242.2 | 228.2 | 216.2 | 206.2 | 204.2 |
| 115° | 169.1 | 169.1 | 178.1 | 200.2 | 220.2 | 228.2 | 218.2 | 207.2 | 199.2 | 195.1 | 197.1 |
| 117.5° | 167.1 | 170.1 | 172.1 | 184.1 | 197.1 | 203.2 | 198.1 | 183.1 | 177.1 | 175.1 | 172.1 |
| 120° | 155.1 | 155.1 | 157.1 | 163.1 | 170.1 | 173.1 | 171.1 | 161.1 | 156.1 | 155.1 | 153.1 |
| 122.5° | 138.1 | 139.1 | 138.1 | 141.1 | 146.1 | 149.1 | 147.1 | 139.1 | 137.1 | 137.1 | 135.1 |
| 125° | 121.1 | 121.1 | 120.1 | 122.1 | 125.1 | 124.1 | 125.1 | 121.1 | 120.1 | 120.1 | 119.1 |
| 127.5° | 109.1 | 108.1 | 106.1 | 107.1 | 108.1 | 108.1 | 109.1 | 105.1 | 106.1 | 107.1 | 106.1 |
| 130° | 97.1 | 97.1 | 95.1 | 95.1 | 95.1 | 93.1 | 95.1 | 93.1 | 94.1 | 95.1 | 96.1 |
| 132.5° | 86.1 | 86.1 | 83.1 | 82.1 | 82.1 | 82.1 | 83.1 | 82.1 | 84.1 | 86.1 | 86.1 |
| 135° | 77.1 | 77.1 | 74.1 | 75.1 | 75.1 | 74.1 | 75.1 | 74.1 | 76.1 | 77.1 | 77.1 |
| 137.5° | 70.1 | 70.1 | 68.1 | 68.1 | 68.1 | 67.1 | 68.1 | 68.1 | 69.1 | 71.1 | 72.1 |
| 140° | 64.0 | 64.0 | 63.0 | 63.0 | 62.0 | 63.0 | 63.0 | 63.0 | 64.0 | 65.0 | 65.0 |
| 142.5° | 61.0 | 60.0 | 59.0 | 58.0 | 59.0 | 59.0 | 59.0 | 58.0 | 59.0 | 61.0 | 61.0 |
| 145° | 56.0 | 56.0 | 55.0 | 55.0 | 55.0 | 56.0 | 55.0 | 55.0 | 56.0 | 56.0 | 57.0 |
| 147.5° | 53.0 | 53.0 | 52.0 | 53.0 | 53.0 | 53.0 | 53.0 | 52.0 | 53.0 | 53.0 | 54.0 |
| 150° | 52.0 | 51.0 | 50.0 | 51.0 | 51.0 | 50.0 | 50.0 | 50.0 | 50.0 | 51.0 | 51.0 |
| 152.5° | 49.0 | 49.0 | 48.0 | 49.0 | 48.0 | 48.0 | 48.0 | 48.0 | 48.0 | 49.0 | 50.0 |
| 155° | 47.0 | 47.0 | 46.0 | 47.0 | 47.0 | 47.0 | 47.0 | 47.0 | 47.0 | 47.0 | 47.0 |
| 157.5° | 45.0 | 46.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 45.0 | 46.0 | 46.0 |
| 160° | 44.0 | 44.0 | 44.0 | 44.0 | 43.0 | 43.0 | 43.0 | 44.0 | 44.0 | 44.0 | 45.0 |
| 162.5° | 43.0 | 43.0 | 43.0 | 43.0 | 42.0 | 42.0 | 42.0 | 42.0 | 43.0 | 43.0 | 44.0 |
| 165° | 43.0 | 42.0 | 42.0 | 42.0 | 41.0 | 41.0 | 41.0 | 41.0 | 42.0 | 43.0 | 42.0 |
| 167.5° | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 40.0 | 40.0 | 41.0 | 41.0 | 41.0 | 42.0 |
| 170° | 41.0 | 41.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 41.0 |
| 172.5° | 41.0 | 41.0 | 41.0 | 41.0 | 40.0 | 40.0 | 40.0 | 40.0 | 40.0 | 41.0 | 41.0 |
| 175° | 41.0 | 41.0 | 41.0 | 41.0 | 40.0 | 40.0 | 40.0 | 41.0 | 41.0 | 41.0 | 40.0 |
| 177.5° | 41.0 | 41.0 | 41.0 | 41.0 | 40.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 |
| 180° | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 | 41.0 |

(END OF REPORT)