

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: P832848

Luminaire Tested: **TTN-D0-740-U-RW-CG-UPL3**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P832848
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-RW-CG-UPL3
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
4000K, 70 CRI LEDS AND RECTANGULAR DISTRIBUTION WITH CLEAR GLASS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1923.6 lumens
Efficiency: N/A
Efficacy: 108.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type II - Short
BUG Rating: B1 - U4 - G1

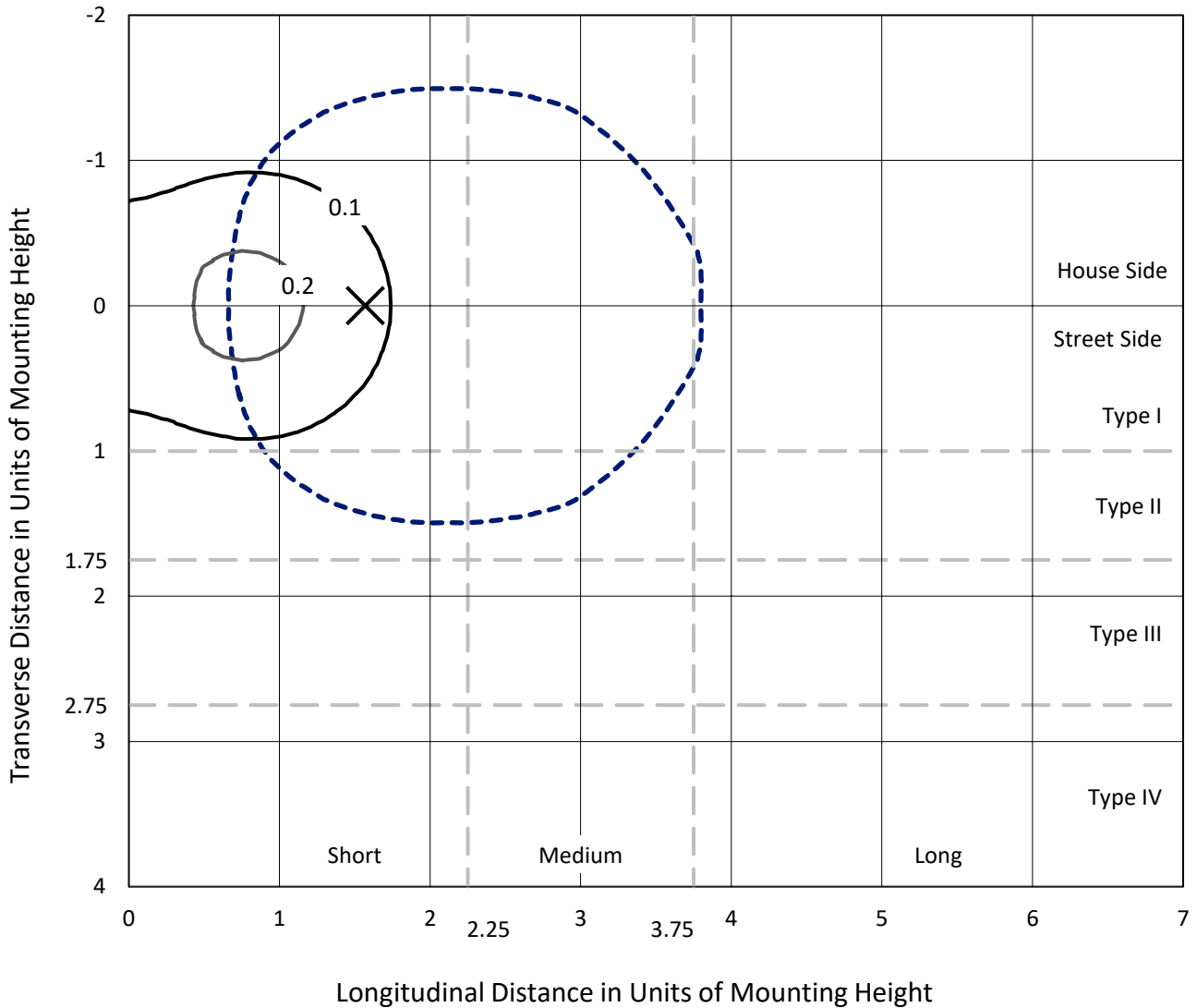
Input Watts (W): 17.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

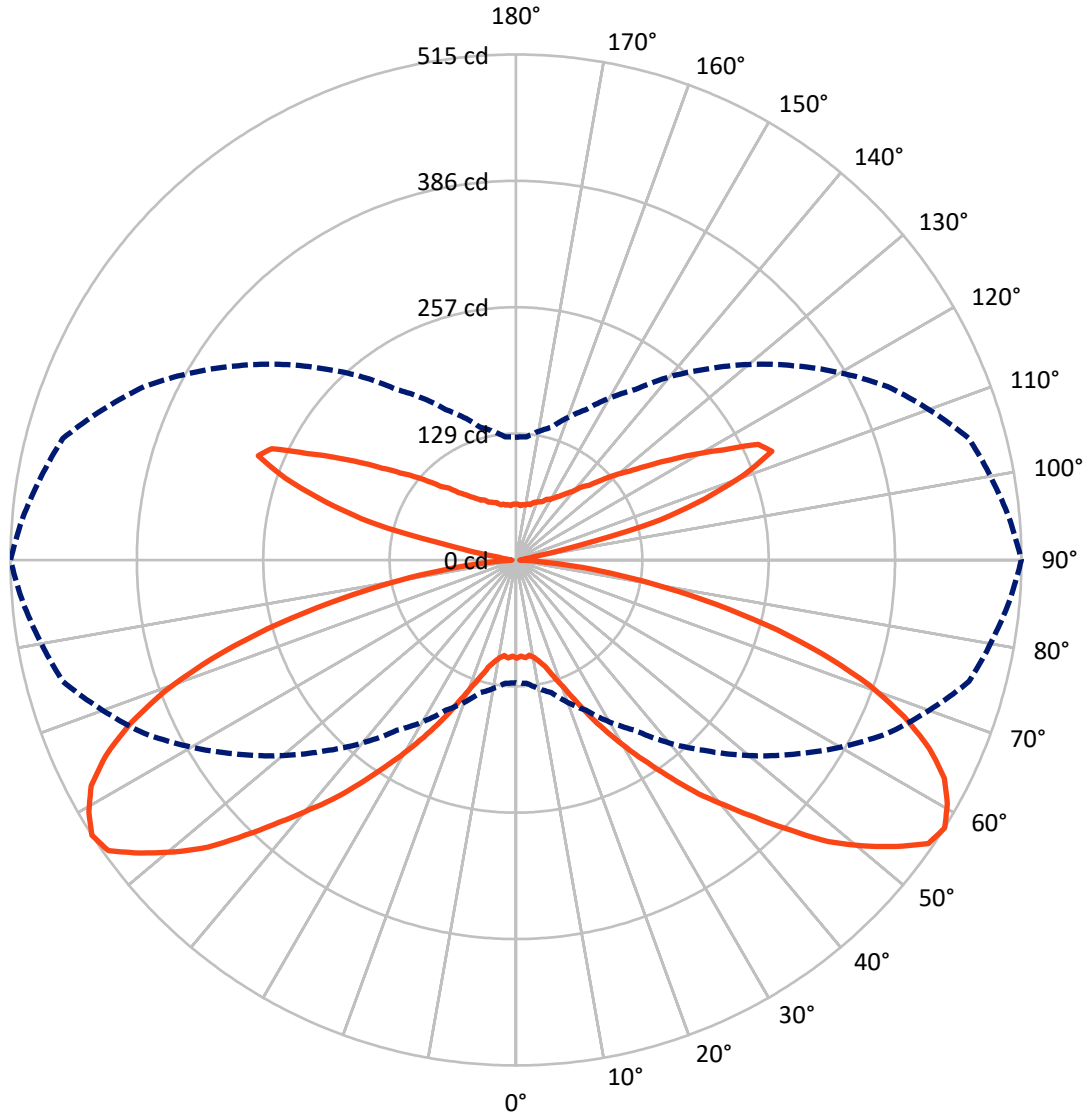
✕ Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 90-Deg Lateral - - - Horizontal Cone Through 57.5-Deg Vertical

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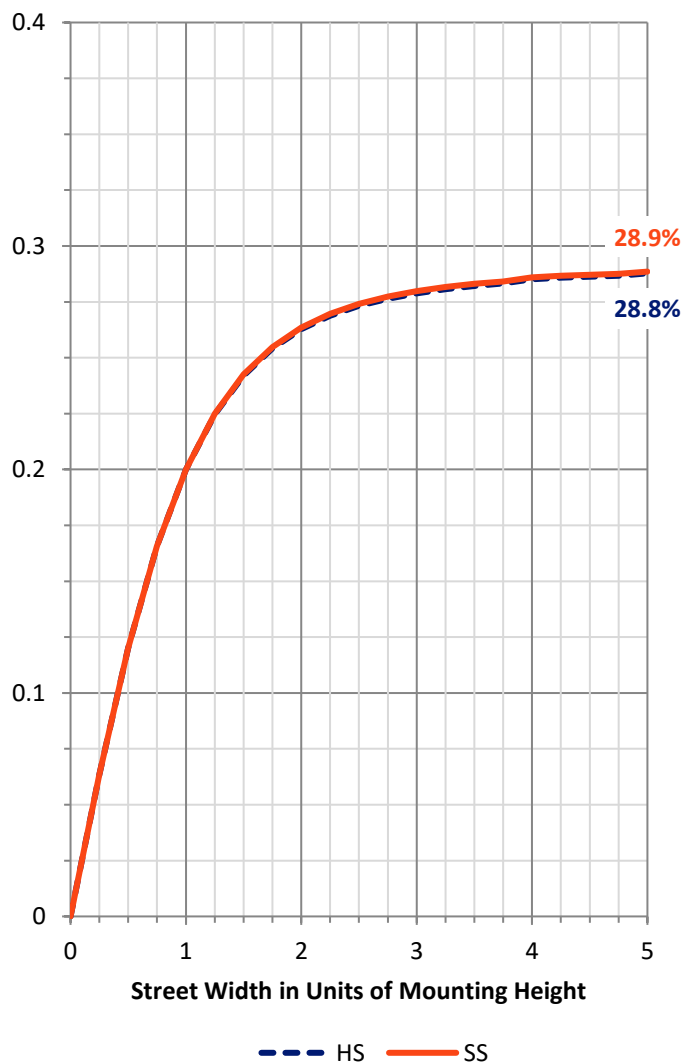
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 556.1 | 405.8 | 961.8 |
| | % Fixture | 28.9 | 21.1 | 50.0 |
| Street Side | Lumens | 556.1 | 405.8 | 961.8 |
| | % Fixture | 28.9 | 21.1 | 50.0 |
| Total | Lumens | 1112.1 | 811.5 | 1923.6 |
| | % Fixture | 57.8 | 42.2 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 9.5 | 0.5 |
| 10°-20° | 30.7 | 1.6 |
| 20°-30° | 65.3 | 3.4 |
| 30°-40° | 120.4 | 6.3 |
| 40°-50° | 193.9 | 10.1 |
| 50°-60° | 262.4 | 13.6 |
| 60°-70° | 255.2 | 13.3 |
| 70°-80° | 148.5 | 7.7 |
| 80°-90° | 26.2 | 1.4 |
| 90°-100° | 18.1 | 0.9 |
| 100°-110° | 184.1 | 9.6 |
| 110°-120° | 269.1 | 14.0 |
| 120°-130° | 156.2 | 8.1 |
| 130°-140° | 82.7 | 4.3 |
| 140°-150° | 49.1 | 2.6 |
| 150°-160° | 30.3 | 1.6 |
| 160°-170° | 16.5 | 0.9 |
| 170°-180° | 5.4 | 0.3 |
| 0°-90° | 1112.1 | 57.8 |
| 0°-180° | 1923.6 | 100.0 |

Coefficient of Utilization

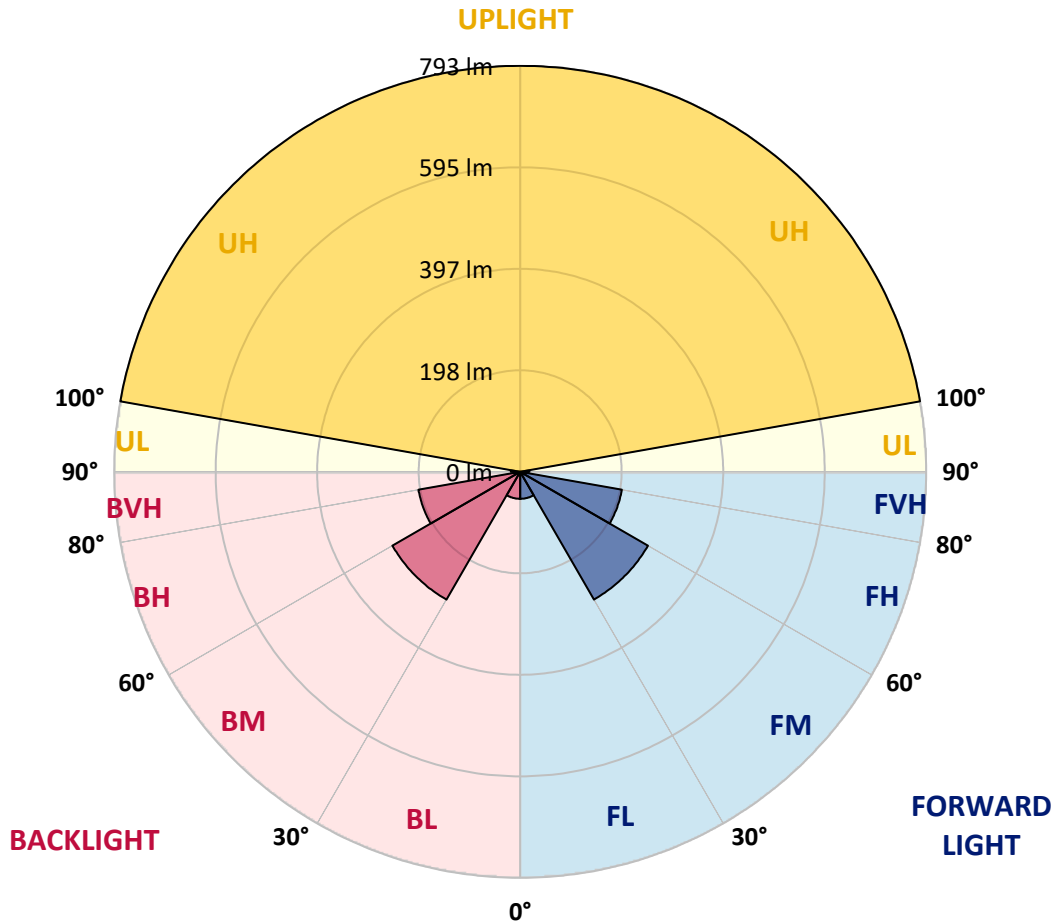


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|---------|--------|
| | | | B | U | G |
| FL (0°-30°) | 52.8 | 2.7 | | | |
| FM (30°-60°) | 288.4 | 15.0 | | | |
| FH (60°-80°) | 201.8 | 10.5 | | | G0/660 |
| FVH (80°-90°) | 13.1 | 0.7 | | | G1/100 |
| BL (0°-30°) | 52.8 | 2.7 | B0/110 | | |
| BM (30°-60°) | 288.4 | 15.0 | B1/1000 | | |
| BH (60°-80°) | 201.8 | 10.5 | B1/500 | | G1/500 |
| BVH (80°-90°) | 13.1 | 0.7 | | | G1/100 |
| UL (90°-100°) | 18.1 | 0.9 | | U2/50 | |
| UH (100°-180°) | 793.4 | 41.2 | | U4/1000 | |

BUG Rating: B1-U4-G1
 Type II Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2.5° | 100.0 | 100.0 | 100.0 | 100.0 | 99.0 | 99.0 | 99.0 | 98.0 | 98.0 | 98.0 | 98.0 |
| 5° | 100.0 | 100.0 | 100.0 | 101.0 | 101.0 | 101.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 7.5° | 100.0 | 101.0 | 101.0 | 100.0 | 100.0 | 99.0 | 99.0 | 99.0 | 98.0 | 98.0 | 98.0 |
| 10° | 100.0 | 100.0 | 100.0 | 100.0 | 99.0 | 99.0 | 100.0 | 100.0 | 101.0 | 101.0 | 101.0 |
| 12.5° | 99.0 | 99.0 | 100.0 | 100.0 | 100.0 | 101.0 | 103.0 | 104.0 | 105.0 | 106.0 | 106.0 |
| 15° | 100.0 | 100.0 | 101.0 | 102.0 | 103.0 | 105.0 | 108.0 | 111.0 | 113.0 | 114.0 | 113.0 |
| 17.5° | 100.0 | 101.0 | 102.0 | 104.0 | 107.0 | 110.0 | 115.0 | 119.0 | 123.0 | 124.0 | 125.0 |
| 20° | 102.0 | 102.0 | 103.0 | 107.0 | 112.0 | 117.0 | 124.0 | 130.9 | 135.9 | 137.9 | 137.9 |
| 22.5° | 103.0 | 104.0 | 105.0 | 110.0 | 118.0 | 126.0 | 135.9 | 143.9 | 150.9 | 154.9 | 155.9 |
| 25° | 106.0 | 106.0 | 108.0 | 115.0 | 125.0 | 136.9 | 149.9 | 161.9 | 170.9 | 175.9 | 176.9 |
| 27.5° | 108.0 | 109.0 | 112.0 | 121.0 | 133.9 | 148.9 | 166.9 | 180.9 | 191.9 | 197.9 | 198.9 |
| 30° | 110.0 | 111.0 | 117.0 | 127.0 | 142.9 | 160.9 | 181.9 | 199.9 | 213.9 | 220.9 | 221.9 |
| 32.5° | 113.0 | 114.0 | 121.0 | 131.9 | 150.9 | 172.9 | 196.9 | 218.9 | 238.9 | 244.9 | 245.9 |
| 35° | 116.0 | 117.0 | 125.0 | 137.9 | 159.9 | 184.9 | 212.9 | 238.9 | 262.9 | 270.9 | 272.9 |
| 37.5° | 119.0 | 120.0 | 128.0 | 143.9 | 168.9 | 197.9 | 230.9 | 261.9 | 287.9 | 298.9 | 301.9 |
| 40° | 122.0 | 123.0 | 131.9 | 149.9 | 177.9 | 211.9 | 249.9 | 283.9 | 313.9 | 326.9 | 328.9 |
| 42.5° | 124.0 | 125.0 | 134.9 | 154.9 | 186.9 | 224.9 | 269.9 | 307.9 | 339.9 | 356.9 | 358.9 |
| 45° | 127.0 | 128.0 | 138.9 | 161.9 | 194.9 | 239.9 | 288.9 | 334.9 | 371.9 | 390.8 | 392.8 |
| 47.5° | 129.0 | 129.9 | 141.9 | 165.9 | 203.9 | 253.9 | 308.9 | 358.9 | 402.8 | 422.8 | 428.8 |
| 50° | 129.9 | 130.9 | 143.9 | 169.9 | 209.9 | 263.9 | 324.9 | 382.9 | 429.8 | 454.8 | 457.8 |
| 52.5° | 129.9 | 131.9 | 144.9 | 172.9 | 213.9 | 272.9 | 337.9 | 402.8 | 455.8 | 483.8 | 484.8 |
| 55° | 129.0 | 129.9 | 143.9 | 171.9 | 215.9 | 276.9 | 346.9 | 414.8 | 473.8 | 500.8 | 509.8 |
| 57.5° | 125.0 | 126.0 | 139.9 | 168.9 | 211.9 | 274.9 | 344.9 | 417.8 | 477.8 | 503.8 | 514.8 |
| 60° | 119.0 | 121.0 | 133.9 | 161.9 | 205.9 | 267.9 | 338.9 | 411.8 | 471.8 | 503.8 | 504.8 |
| 62.5° | 112.0 | 113.0 | 126.0 | 152.9 | 196.9 | 256.9 | 327.9 | 399.8 | 457.8 | 490.8 | 489.8 |
| 65° | 102.0 | 103.0 | 114.0 | 141.9 | 180.9 | 235.9 | 305.9 | 380.9 | 430.8 | 465.8 | 462.8 |
| 67.5° | 91.0 | 92.0 | 102.0 | 127.0 | 161.9 | 212.9 | 275.9 | 348.9 | 392.8 | 428.8 | 426.8 |
| 70° | 79.0 | 79.0 | 88.0 | 109.0 | 141.9 | 186.9 | 242.9 | 306.9 | 350.9 | 380.9 | 381.9 |
| 72.5° | 65.0 | 65.0 | 73.0 | 91.0 | 119.0 | 156.9 | 204.9 | 261.9 | 297.9 | 323.9 | 325.9 |
| 75° | 51.0 | 50.0 | 57.0 | 72.0 | 94.0 | 125.0 | 161.9 | 210.9 | 238.9 | 263.9 | 262.9 |
| 77.5° | 36.0 | 36.0 | 40.0 | 52.0 | 68.0 | 93.0 | 120.0 | 158.9 | 177.9 | 198.9 | 194.9 |
| 80° | 23.0 | 23.0 | 25.0 | 34.0 | 45.0 | 62.0 | 79.0 | 108.0 | 121.0 | 136.9 | 131.9 |
| 82.5° | 12.0 | 11.0 | 13.0 | 18.0 | 24.0 | 34.0 | 44.0 | 63.0 | 69.0 | 81.0 | 77.0 |
| 85° | 4.0 | 4.0 | 4.0 | 6.0 | 9.0 | 13.0 | 17.0 | 27.0 | 28.0 | 36.0 | 33.0 |
| 87.5° | 1.0 | 0.0 | 0.0 | 1.0 | 1.0 | 1.0 | 1.0 | 3.0 | 3.0 | 6.0 | 4.0 |
| 90° | 6.9 | 6.9 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 8.3 | 6.9 | 6.9 |
| 92.5° | 6.9 | 6.9 | 6.9 | 9.7 | 11.1 | 9.7 | 11.1 | 8.3 | 8.3 | 6.9 | 6.9 |
| 95° | 8.3 | 8.3 | 9.7 | 12.5 | 15.3 | 16.7 | 16.7 | 9.7 | 9.7 | 8.3 | 8.3 |
| 97.5° | 11.1 | 12.5 | 12.5 | 15.3 | 25.0 | 45.8 | 27.8 | 13.9 | 13.9 | 12.5 | 11.1 |
| 100° | 18.0 | 19.4 | 19.4 | 34.7 | 73.6 | 98.6 | 70.8 | 36.1 | 26.4 | 19.4 | 19.4 |
| 102.5° | 58.3 | 61.1 | 75.0 | 112.5 | 166.6 | 151.3 | 127.7 | 120.8 | 83.3 | 66.6 | 63.9 |
| 105° | 148.6 | 147.2 | 158.3 | 187.4 | 233.3 | 229.1 | 211.0 | 191.6 | 165.2 | 152.7 | 152.7 |
| 107.5° | 195.8 | 195.8 | 205.5 | 230.5 | 265.2 | 309.6 | 313.8 | 248.5 | 218.0 | 204.1 | 202.7 |
| 110° | 220.8 | 220.8 | 229.1 | 249.9 | 295.7 | 358.2 | 355.4 | 306.8 | 269.4 | 251.3 | 248.5 |



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CATALOG NUMBER: TTN-D0-740-U-RW-CG-UPL3

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 75° | 85° | 90° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 226.3 | 227.7 | 238.8 | 270.7 | 320.7 | 348.5 | 336.0 | 316.6 | 299.9 | 286.0 | 283.2 |
| 115° | 234.6 | 234.6 | 247.1 | 277.7 | 305.5 | 316.6 | 302.7 | 287.4 | 276.3 | 270.7 | 273.5 |
| 117.5° | 231.9 | 236.0 | 238.8 | 255.5 | 273.5 | 281.8 | 274.9 | 254.1 | 245.8 | 243.0 | 238.8 |
| 120° | 215.2 | 215.2 | 218.0 | 226.3 | 236.0 | 240.2 | 237.4 | 223.5 | 216.6 | 215.2 | 212.4 |
| 122.5° | 191.6 | 193.0 | 191.6 | 195.8 | 202.7 | 206.9 | 204.1 | 193.0 | 190.2 | 190.2 | 187.4 |
| 125° | 168.0 | 168.0 | 166.6 | 169.4 | 173.6 | 172.2 | 173.6 | 168.0 | 166.6 | 166.6 | 165.2 |
| 127.5° | 151.3 | 149.9 | 147.2 | 148.6 | 149.9 | 149.9 | 151.3 | 145.8 | 147.2 | 148.6 | 147.2 |
| 130° | 134.7 | 134.7 | 131.9 | 131.9 | 131.9 | 129.1 | 131.9 | 129.1 | 130.5 | 131.9 | 133.3 |
| 132.5° | 119.4 | 119.4 | 115.2 | 113.9 | 113.9 | 113.9 | 115.2 | 113.9 | 116.6 | 119.4 | 119.4 |
| 135° | 106.9 | 106.9 | 102.7 | 104.1 | 104.1 | 102.7 | 104.1 | 102.7 | 105.5 | 106.9 | 106.9 |
| 137.5° | 97.2 | 97.2 | 94.4 | 94.4 | 94.4 | 93.0 | 94.4 | 94.4 | 95.8 | 98.6 | 100.0 |
| 140° | 88.9 | 88.9 | 87.5 | 87.5 | 86.1 | 87.5 | 87.5 | 87.5 | 88.9 | 90.2 | 90.2 |
| 142.5° | 84.7 | 83.3 | 81.9 | 80.5 | 81.9 | 81.9 | 81.9 | 80.5 | 81.9 | 84.7 | 84.7 |
| 145° | 77.8 | 77.8 | 76.4 | 76.4 | 76.4 | 77.8 | 76.4 | 76.4 | 77.8 | 77.8 | 79.1 |
| 147.5° | 73.6 | 73.6 | 72.2 | 73.6 | 73.6 | 73.6 | 73.6 | 72.2 | 73.6 | 73.6 | 75.0 |
| 150° | 72.2 | 70.8 | 69.4 | 70.8 | 70.8 | 69.4 | 69.4 | 69.4 | 69.4 | 70.8 | 70.8 |
| 152.5° | 68.0 | 68.0 | 66.6 | 68.0 | 66.6 | 66.6 | 66.6 | 66.6 | 66.6 | 68.0 | 69.4 |
| 155° | 65.3 | 65.3 | 63.9 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 | 65.3 |
| 157.5° | 62.5 | 63.9 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 62.5 | 63.9 | 63.9 |
| 160° | 61.1 | 61.1 | 61.1 | 61.1 | 59.7 | 59.7 | 59.7 | 61.1 | 61.1 | 61.1 | 62.5 |
| 162.5° | 59.7 | 59.7 | 59.7 | 59.7 | 58.3 | 58.3 | 58.3 | 58.3 | 59.7 | 59.7 | 61.1 |
| 165° | 59.7 | 58.3 | 58.3 | 58.3 | 56.9 | 56.9 | 56.9 | 56.9 | 58.3 | 59.7 | 58.3 |
| 167.5° | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 | 55.5 | 55.5 | 56.9 | 56.9 | 56.9 | 58.3 |
| 170° | 56.9 | 56.9 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 56.9 |
| 172.5° | 56.9 | 56.9 | 56.9 | 56.9 | 55.5 | 55.5 | 55.5 | 55.5 | 55.5 | 56.9 | 56.9 |
| 175° | 56.9 | 56.9 | 56.9 | 56.9 | 55.5 | 55.5 | 55.5 | 56.9 | 56.9 | 56.9 | 55.5 |
| 177.5° | 56.9 | 56.9 | 56.9 | 56.9 | 55.5 | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 |
| 180° | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 | 56.9 |

(END OF REPORT)