

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: P832807

Luminaire Tested: **TTN-D0-735-U-DL-UPL1**

Issue Date: 5/15/2024

Test Information

Test Method: LM-79-08
Report Number: P832807
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-D0-735-U-DL-UPL1
Description: TOPTIER NANO LED PARKING GARAGE LUMINAIRE WITH UPLIGHT
3500K, 70 CRI LEDS AND DRIVE LANE DISTRIBUTION
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1392.9 lumens
Efficiency: N/A
Efficacy: 104.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 0.71' x H: 0.1')
IES Classification: Type IV - Short
BUG Rating: B0 - U3 - G1

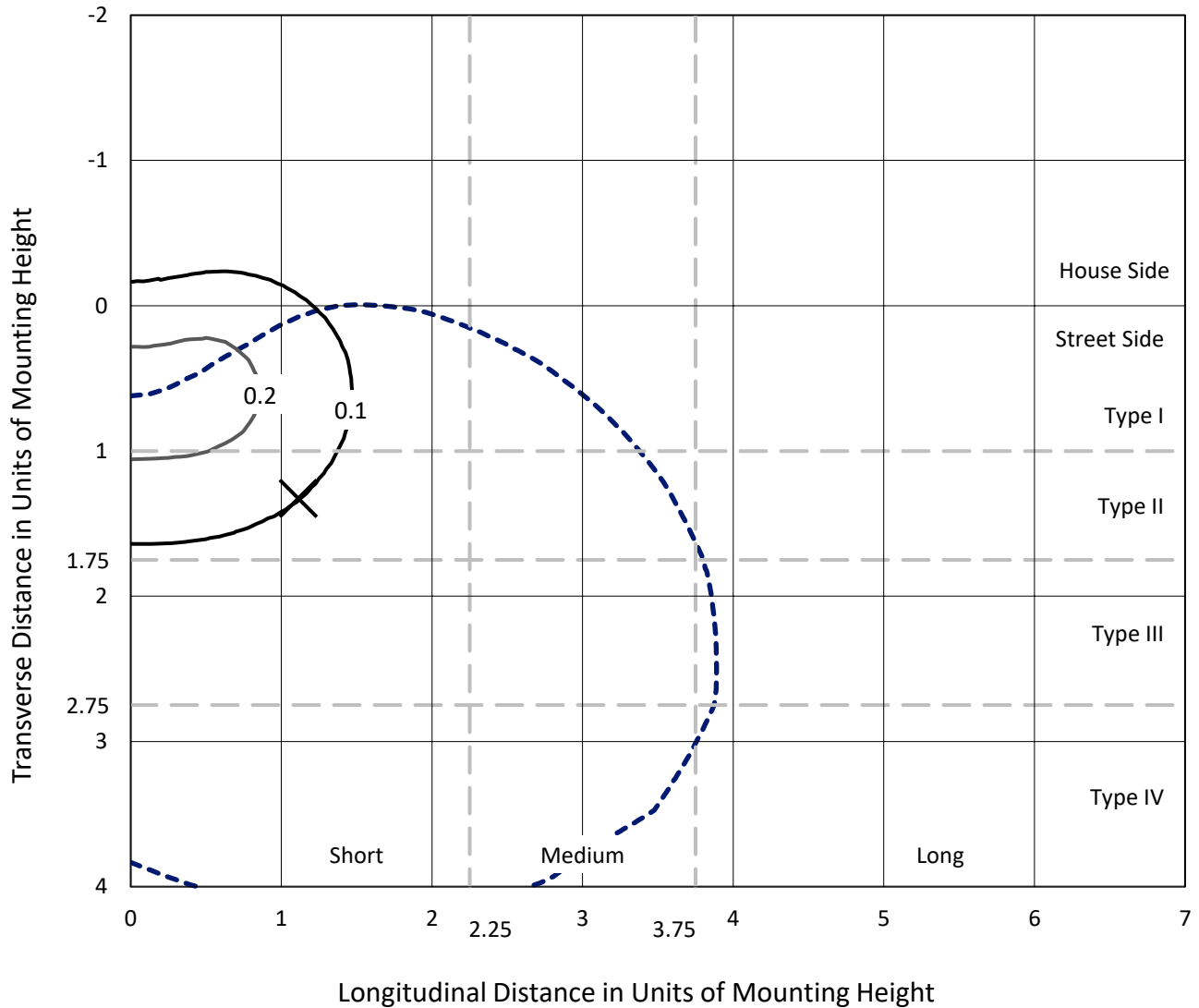
Input Watts (W): 13.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P832807
 CATALOG NUMBER: TTN-D0-735-U-DL-UPL1

Iso-Footcandle Lines of Horizontal Illumination

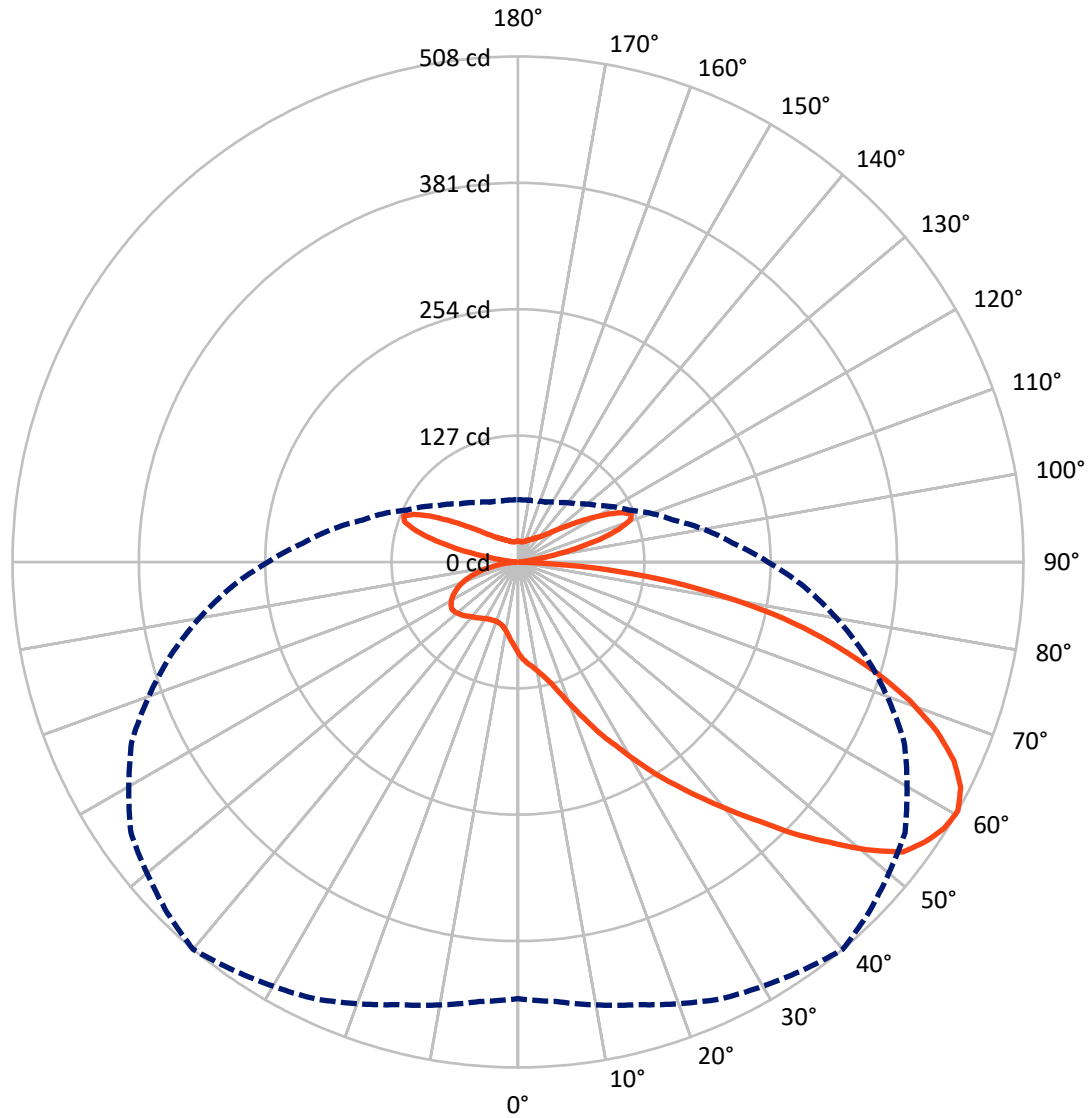
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

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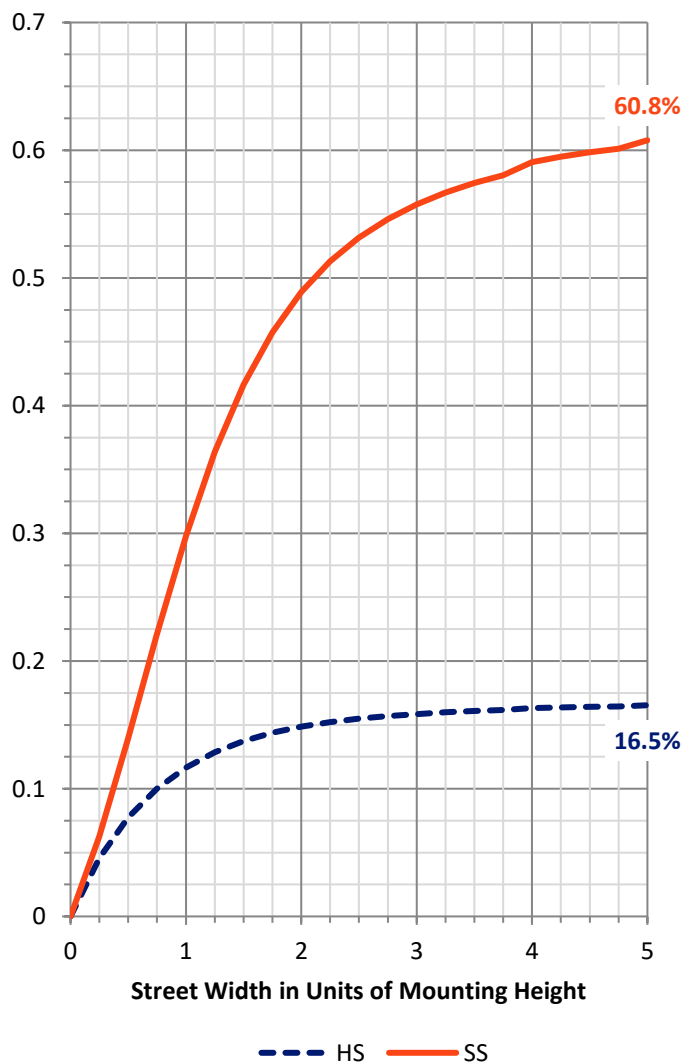
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 232.7 | 150.2 | 383.0 |
| | % Fixture | 16.7 | 10.8 | 27.5 |
| Street Side | Lumens | 859.7 | 150.2 | 1009.9 |
| | % Fixture | 61.7 | 10.8 | 72.5 |
| Total | Lumens | 1092.4 | 300.5 | 1392.9 |
| | % Fixture | 78.4 | 21.6 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 8.7 | 0.6 |
| 10°-20° | 27.7 | 2.0 |
| 20°-30° | 58.5 | 4.2 |
| 30°-40° | 106.9 | 7.7 |
| 40°-50° | 173.7 | 12.5 |
| 50°-60° | 241.4 | 17.3 |
| 60°-70° | 250.2 | 18.0 |
| 70°-80° | 179.3 | 12.9 |
| 80°-90° | 46.1 | 3.3 |
| 90°-100° | 6.7 | 0.5 |
| 100°-110° | 68.2 | 4.9 |
| 110°-120° | 99.6 | 7.2 |
| 120°-130° | 57.8 | 4.2 |
| 130°-140° | 30.6 | 2.2 |
| 140°-150° | 18.2 | 1.3 |
| 150°-160° | 11.2 | 0.8 |
| 160°-170° | 6.1 | 0.4 |
| 170°-180° | 2.0 | 0.1 |
| 0°-90° | 1092.4 | 78.4 |
| 0°-180° | 1392.9 | 100.0 |

Coefficient of Utilization



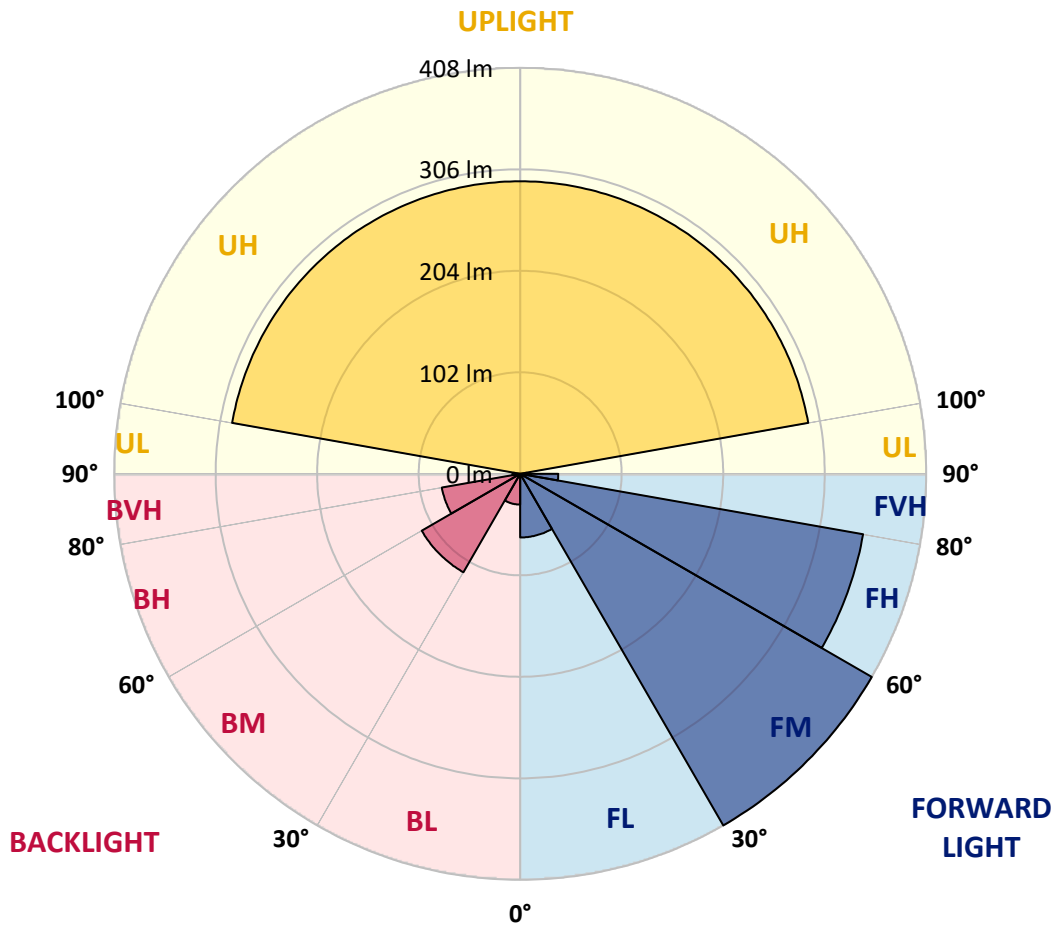
REPORT NUMBER: P832807
 CATALOG NUMBER: TTN-D0-735-U-DL-UPL1

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|--------|--------|
| | | | B | U | G |
| FL (0°-30°) | 63.9 | 4.6 | | | |
| FM (30°-60°) | 407.8 | 29.3 | | | |
| FH (60°-80°) | 349.7 | 25.1 | | | G0/660 |
| FVH (80°-90°) | 38.3 | 2.7 | | | G1/100 |
| BL (0°-30°) | 30.9 | 2.2 | B0/110 | | |
| BM (30°-60°) | 114.2 | 8.2 | B0/220 | | |
| BH (60°-80°) | 79.8 | 5.7 | B0/110 | | G0/110 |
| BVH (80°-90°) | 7.8 | 0.6 | | | G0/10 |
| UL (90°-100°) | 6.7 | 0.5 | | U1/10 | |
| UH (100°-180°) | 293.8 | 21.1 | | U3/500 | |

BUG Rating: B0-U3-G1

Type IV Short





REPORT NUMBER: P832807
 CATALOG NUMBER: TTN-D0-735-U-DL-UPL1

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 |
| 2.5° | 98.6 | 98.6 | 98.6 | 98.6 | 97.7 | 97.7 | 96.7 | 95.8 | 94.8 | 93.9 | 92.0 |
| 5° | 107.1 | 107.1 | 106.2 | 105.2 | 103.3 | 102.4 | 101.5 | 99.6 | 97.7 | 95.8 | 92.9 |
| 7.5° | 110.9 | 110.9 | 110.9 | 110.0 | 107.1 | 106.2 | 104.3 | 101.5 | 98.6 | 95.8 | 92.0 |
| 10° | 117.6 | 117.6 | 116.6 | 115.7 | 112.8 | 111.9 | 110.0 | 106.2 | 101.5 | 96.7 | 92.0 |
| 12.5° | 126.1 | 125.2 | 124.2 | 123.3 | 120.4 | 118.5 | 115.7 | 111.9 | 106.2 | 100.5 | 94.8 |
| 15° | 136.5 | 134.6 | 134.6 | 132.7 | 129.9 | 127.1 | 125.2 | 119.5 | 113.8 | 106.2 | 98.6 |
| 17.5° | 147.9 | 147.0 | 146.0 | 144.1 | 141.3 | 139.4 | 136.5 | 129.9 | 122.3 | 112.8 | 104.3 |
| 20° | 162.1 | 160.2 | 161.2 | 158.3 | 155.5 | 154.5 | 149.8 | 142.2 | 132.7 | 122.3 | 111.9 |
| 22.5° | 179.2 | 177.3 | 177.3 | 174.5 | 172.6 | 170.7 | 165.9 | 157.4 | 145.1 | 133.7 | 120.4 |
| 25° | 198.2 | 196.3 | 196.3 | 194.4 | 192.5 | 190.6 | 184.9 | 175.4 | 161.2 | 147.0 | 131.8 |
| 27.5° | 219.0 | 217.1 | 217.1 | 216.2 | 211.4 | 208.6 | 203.9 | 193.4 | 179.2 | 161.2 | 143.2 |
| 30° | 240.8 | 238.9 | 240.8 | 238.9 | 236.1 | 230.4 | 224.7 | 213.3 | 197.2 | 177.3 | 155.5 |
| 32.5° | 257.9 | 257.9 | 258.8 | 260.7 | 258.8 | 254.1 | 247.5 | 238.0 | 216.2 | 191.5 | 166.9 |
| 35° | 277.8 | 277.8 | 279.7 | 282.5 | 281.6 | 276.9 | 270.2 | 259.8 | 237.0 | 207.6 | 179.2 |
| 37.5° | 299.6 | 299.6 | 301.5 | 306.3 | 304.4 | 301.5 | 296.8 | 283.5 | 257.9 | 223.8 | 192.5 |
| 40° | 323.3 | 322.4 | 324.3 | 330.9 | 331.9 | 328.1 | 322.4 | 309.1 | 279.7 | 244.6 | 206.7 |
| 42.5° | 347.0 | 346.1 | 349.9 | 356.5 | 357.5 | 356.5 | 350.8 | 335.6 | 302.5 | 265.5 | 220.9 |
| 45° | 370.7 | 370.7 | 376.4 | 386.8 | 391.6 | 389.7 | 384.9 | 366.0 | 330.9 | 287.3 | 239.9 |
| 47.5° | 395.4 | 395.4 | 403.0 | 416.2 | 421.9 | 421.0 | 419.1 | 396.3 | 358.4 | 310.0 | 256.0 |
| 50° | 414.3 | 414.3 | 426.7 | 441.8 | 451.3 | 455.1 | 445.6 | 424.8 | 382.1 | 330.0 | 269.3 |
| 52.5° | 433.3 | 433.3 | 445.6 | 469.3 | 478.8 | 484.5 | 472.2 | 450.4 | 408.7 | 348.0 | 281.6 |
| 55° | 442.8 | 444.7 | 461.7 | 484.5 | 499.7 | 496.8 | 501.6 | 472.2 | 425.7 | 361.2 | 289.2 |
| 57.5° | 443.7 | 446.6 | 465.5 | 489.2 | 506.3 | 505.4 | 506.3 | 479.8 | 432.4 | 364.1 | 290.1 |
| 60° | 439.0 | 443.7 | 460.8 | 484.5 | 500.6 | 508.2 | 498.7 | 475.0 | 428.6 | 361.2 | 289.2 |
| 62.5° | 427.6 | 437.1 | 455.1 | 473.1 | 496.8 | 499.7 | 492.1 | 472.2 | 418.1 | 358.4 | 284.4 |
| 65° | 402.0 | 412.4 | 438.0 | 458.9 | 477.9 | 481.7 | 473.1 | 456.1 | 407.7 | 345.1 | 269.3 |
| 67.5° | 376.4 | 383.1 | 404.9 | 437.1 | 450.4 | 454.2 | 451.3 | 431.4 | 389.7 | 318.6 | 251.3 |
| 70° | 347.0 | 355.6 | 372.6 | 405.8 | 419.1 | 418.1 | 426.7 | 403.9 | 362.2 | 295.8 | 232.3 |
| 72.5° | 307.2 | 319.5 | 336.6 | 364.1 | 380.2 | 374.5 | 387.8 | 368.8 | 326.2 | 267.4 | 206.7 |
| 75° | 260.7 | 271.2 | 293.0 | 314.8 | 332.8 | 326.2 | 336.6 | 323.3 | 284.4 | 233.2 | 177.3 |
| 77.5° | 208.6 | 220.9 | 240.8 | 260.7 | 273.1 | 273.1 | 277.8 | 266.4 | 236.1 | 191.5 | 145.1 |
| 80° | 154.5 | 165.9 | 183.9 | 198.2 | 209.5 | 210.5 | 215.2 | 209.5 | 182.0 | 148.9 | 110.9 |
| 82.5° | 102.4 | 108.1 | 124.2 | 135.6 | 147.0 | 146.0 | 153.6 | 149.8 | 127.1 | 102.4 | 74.0 |
| 85° | 43.6 | 47.4 | 60.7 | 70.2 | 80.6 | 76.8 | 87.2 | 86.3 | 68.3 | 49.3 | 33.2 |
| 87.5° | 1.9 | 2.8 | 2.8 | 1.9 | 2.8 | 0.9 | 2.8 | 3.8 | 2.8 | 1.9 | 1.9 |
| 90° | 2.6 | 2.6 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 2.6 |
| 92.5° | 2.6 | 2.6 | 2.6 | 3.6 | 4.1 | 3.8 | 3.6 | 4.1 | 3.1 | 3.1 | 2.6 |
| 95° | 3.1 | 3.1 | 3.6 | 4.6 | 5.7 | 6.0 | 6.2 | 6.2 | 3.6 | 3.6 | 3.1 |
| 97.5° | 4.1 | 4.6 | 4.6 | 5.7 | 9.3 | 13.2 | 17.0 | 10.3 | 5.1 | 5.1 | 4.6 |
| 100° | 6.7 | 7.2 | 7.2 | 12.9 | 27.2 | 31.8 | 36.5 | 26.2 | 13.4 | 9.8 | 7.2 |
| 102.5° | 21.6 | 22.6 | 27.8 | 41.6 | 61.7 | 58.8 | 56.0 | 47.3 | 44.7 | 30.8 | 24.7 |
| 105° | 55.0 | 54.5 | 58.6 | 69.4 | 86.4 | 85.6 | 84.8 | 78.1 | 70.9 | 61.2 | 56.5 |
| 107.5° | 72.5 | 72.5 | 76.1 | 85.3 | 98.2 | 106.4 | 114.6 | 116.2 | 92.0 | 80.7 | 75.6 |
| 110° | 81.7 | 81.7 | 84.8 | 92.5 | 109.5 | 121.0 | 132.6 | 131.6 | 113.6 | 99.7 | 93.0 |



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 CATALOG NUMBER: TTN-D0-735-U-DL-UPL1

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 35° | 40° | 45° | 55° | 65° | 75° | 85° |
|--------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 83.8 | 84.3 | 88.4 | 100.2 | 118.7 | 123.8 | 129.0 | 124.4 | 117.2 | 111.0 | 105.9 |
| 115° | 86.9 | 86.9 | 91.5 | 102.8 | 113.1 | 115.2 | 117.2 | 112.1 | 106.4 | 102.3 | 100.2 |
| 117.5° | 85.8 | 87.4 | 88.4 | 94.6 | 101.3 | 102.8 | 104.4 | 101.8 | 94.1 | 91.0 | 90.0 |
| 120° | 79.7 | 79.7 | 80.7 | 83.8 | 87.4 | 88.2 | 88.9 | 87.9 | 82.8 | 80.2 | 79.7 |
| 122.5° | 70.9 | 71.5 | 70.9 | 72.5 | 75.0 | 75.8 | 76.6 | 75.6 | 71.5 | 70.4 | 70.4 |
| 125° | 62.2 | 62.2 | 61.7 | 62.7 | 64.3 | 64.0 | 63.7 | 64.3 | 62.2 | 61.7 | 61.7 |
| 127.5° | 56.0 | 55.5 | 54.5 | 55.0 | 55.5 | 55.5 | 55.5 | 56.0 | 54.0 | 54.5 | 55.0 |
| 130° | 49.9 | 49.9 | 48.8 | 48.8 | 48.8 | 48.3 | 47.8 | 48.8 | 47.8 | 48.3 | 48.8 |
| 132.5° | 44.2 | 44.2 | 42.7 | 42.2 | 42.2 | 42.2 | 42.2 | 42.7 | 42.2 | 43.2 | 44.2 |
| 135° | 39.6 | 39.6 | 38.0 | 38.6 | 38.6 | 38.3 | 38.0 | 38.6 | 38.0 | 39.1 | 39.6 |
| 137.5° | 36.0 | 36.0 | 35.0 | 35.0 | 35.0 | 34.7 | 34.4 | 35.0 | 35.0 | 35.5 | 36.5 |
| 140° | 32.9 | 32.9 | 32.4 | 32.4 | 31.9 | 32.2 | 32.4 | 32.4 | 32.4 | 32.9 | 33.4 |
| 142.5° | 31.4 | 30.8 | 30.3 | 29.8 | 30.3 | 30.3 | 30.3 | 30.3 | 29.8 | 30.3 | 31.4 |
| 145° | 28.8 | 28.8 | 28.3 | 28.3 | 28.3 | 28.6 | 28.8 | 28.3 | 28.3 | 28.8 | 28.8 |
| 147.5° | 27.2 | 27.2 | 26.7 | 27.2 | 27.2 | 27.2 | 27.2 | 27.2 | 26.7 | 27.2 | 27.2 |
| 150° | 26.7 | 26.2 | 25.7 | 26.2 | 26.2 | 26.0 | 25.7 | 25.7 | 25.7 | 25.7 | 26.2 |
| 152.5° | 25.2 | 25.2 | 24.7 | 25.2 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 25.2 |
| 155° | 24.2 | 24.2 | 23.6 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 |
| 157.5° | 23.1 | 23.6 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.6 |
| 160° | 22.6 | 22.6 | 22.6 | 22.6 | 22.1 | 22.1 | 22.1 | 22.1 | 22.6 | 22.6 | 22.6 |
| 162.5° | 22.1 | 22.1 | 22.1 | 22.1 | 21.6 | 21.6 | 21.6 | 21.6 | 21.6 | 22.1 | 22.1 |
| 165° | 22.1 | 21.6 | 21.6 | 21.6 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.6 | 22.1 |
| 167.5° | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 20.8 | 20.6 | 20.6 | 21.1 | 21.1 | 21.1 |
| 170° | 21.1 | 21.1 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 |
| 172.5° | 21.1 | 21.1 | 21.1 | 21.1 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 21.1 |
| 175° | 21.1 | 21.1 | 21.1 | 21.1 | 20.6 | 20.6 | 20.6 | 20.6 | 21.1 | 21.1 | 21.1 |
| 177.5° | 21.1 | 21.1 | 21.1 | 21.1 | 20.6 | 20.8 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 |
| 180° | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 |



REPORT NUMBER: P832807
 CATALOG NUMBER: TTN-D0-735-U-DL-UPL1

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|--------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 0° | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 | 92.0 |
| 2.5° | 92.0 | 91.0 | 89.1 | 88.2 | 87.2 | 85.3 | 85.3 | 84.4 | 84.4 | 84.4 | 83.4 |
| 5° | 92.0 | 90.1 | 88.2 | 85.3 | 83.4 | 81.5 | 79.6 | 77.7 | 76.8 | 76.8 | 75.9 |
| 7.5° | 90.1 | 88.2 | 85.3 | 82.5 | 79.6 | 75.9 | 74.0 | 70.2 | 69.2 | 68.3 | 68.3 |
| 10° | 90.1 | 88.2 | 83.4 | 79.6 | 75.9 | 72.1 | 69.2 | 65.4 | 62.6 | 61.6 | 61.6 |
| 12.5° | 91.0 | 88.2 | 83.4 | 78.7 | 74.0 | 69.2 | 65.4 | 61.6 | 58.8 | 56.9 | 56.9 |
| 15° | 94.8 | 91.0 | 85.3 | 78.7 | 73.0 | 67.3 | 63.5 | 58.8 | 55.9 | 54.0 | 54.0 |
| 17.5° | 99.6 | 95.8 | 87.2 | 79.6 | 73.0 | 66.4 | 61.6 | 56.9 | 54.0 | 52.1 | 51.2 |
| 20° | 106.2 | 100.5 | 91.0 | 80.6 | 73.0 | 66.4 | 60.7 | 55.9 | 52.1 | 50.3 | 50.3 |
| 22.5° | 113.8 | 107.1 | 94.8 | 82.5 | 74.0 | 66.4 | 60.7 | 55.0 | 51.2 | 49.3 | 49.3 |
| 25° | 123.3 | 114.7 | 100.5 | 86.3 | 75.9 | 67.3 | 60.7 | 55.0 | 51.2 | 49.3 | 49.3 |
| 27.5° | 133.7 | 124.2 | 106.2 | 90.1 | 77.7 | 68.3 | 60.7 | 55.0 | 51.2 | 49.3 | 49.3 |
| 30° | 143.2 | 132.7 | 111.9 | 93.9 | 80.6 | 69.2 | 61.6 | 55.9 | 52.1 | 50.3 | 49.3 |
| 32.5° | 153.6 | 140.3 | 117.6 | 97.7 | 82.5 | 71.1 | 62.6 | 56.9 | 52.1 | 50.3 | 50.3 |
| 35° | 164.0 | 149.8 | 123.3 | 102.4 | 85.3 | 73.0 | 63.5 | 57.8 | 53.1 | 51.2 | 51.2 |
| 37.5° | 175.4 | 160.2 | 129.9 | 106.2 | 88.2 | 74.9 | 65.4 | 58.8 | 54.0 | 52.1 | 52.1 |
| 40° | 188.7 | 170.7 | 136.5 | 110.9 | 91.0 | 76.8 | 66.4 | 60.7 | 55.9 | 54.0 | 54.0 |
| 42.5° | 201.0 | 180.1 | 143.2 | 114.7 | 93.9 | 78.7 | 68.3 | 61.6 | 57.8 | 55.9 | 55.9 |
| 45° | 213.3 | 191.5 | 149.8 | 119.5 | 96.7 | 81.5 | 70.2 | 64.5 | 59.7 | 57.8 | 57.8 |
| 47.5° | 227.6 | 202.0 | 157.4 | 123.3 | 99.6 | 83.4 | 72.1 | 66.4 | 61.6 | 60.7 | 59.7 |
| 50° | 238.9 | 209.5 | 162.1 | 127.1 | 101.5 | 85.3 | 74.0 | 67.3 | 63.5 | 61.6 | 61.6 |
| 52.5° | 249.4 | 217.1 | 165.9 | 128.9 | 102.4 | 86.3 | 75.9 | 69.2 | 65.4 | 63.5 | 63.5 |
| 55° | 255.1 | 220.0 | 168.8 | 128.9 | 103.3 | 87.2 | 75.9 | 69.2 | 65.4 | 64.5 | 63.5 |
| 57.5° | 255.1 | 220.0 | 166.9 | 127.1 | 101.5 | 85.3 | 74.9 | 68.3 | 65.4 | 63.5 | 63.5 |
| 60° | 251.3 | 217.1 | 162.1 | 123.3 | 98.6 | 82.5 | 73.0 | 66.4 | 63.5 | 62.6 | 62.6 |
| 62.5° | 245.6 | 212.4 | 158.3 | 118.5 | 94.8 | 78.7 | 70.2 | 63.5 | 61.6 | 61.6 | 60.7 |
| 65° | 230.4 | 198.2 | 149.8 | 111.9 | 89.1 | 74.0 | 66.4 | 60.7 | 58.8 | 57.8 | 56.9 |
| 67.5° | 214.3 | 184.9 | 136.5 | 104.3 | 81.5 | 69.2 | 61.6 | 56.9 | 54.0 | 54.0 | 53.1 |
| 70° | 198.2 | 170.7 | 124.2 | 93.9 | 73.0 | 63.5 | 55.9 | 51.2 | 49.3 | 49.3 | 49.3 |
| 72.5° | 176.4 | 152.7 | 110.0 | 82.5 | 64.5 | 55.9 | 50.3 | 45.5 | 44.6 | 44.6 | 43.6 |
| 75° | 150.8 | 129.9 | 92.9 | 70.2 | 54.0 | 47.4 | 42.7 | 37.9 | 37.9 | 37.9 | 37.9 |
| 77.5° | 123.3 | 105.2 | 74.0 | 55.9 | 42.7 | 37.9 | 35.1 | 31.3 | 31.3 | 31.3 | 31.3 |
| 80° | 92.9 | 77.7 | 54.0 | 40.8 | 31.3 | 27.5 | 25.6 | 23.7 | 24.7 | 24.7 | 23.7 |
| 82.5° | 60.7 | 51.2 | 34.1 | 25.6 | 19.9 | 18.0 | 18.0 | 16.1 | 17.1 | 17.1 | 17.1 |
| 85° | 26.5 | 22.8 | 14.2 | 11.4 | 9.5 | 9.5 | 9.5 | 8.5 | 9.5 | 9.5 | 9.5 |
| 87.5° | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 1.9 | 0.0 | 0.9 | 1.9 | 0.9 |
| 90° | 2.6 | 2.6 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 3.1 | 2.6 | 2.6 |
| 92.5° | 2.6 | 2.6 | 3.1 | 3.1 | 4.1 | 3.6 | 4.1 | 3.6 | 2.6 | 2.6 | 2.6 |
| 95° | 3.1 | 3.1 | 3.6 | 3.6 | 6.2 | 6.2 | 5.7 | 4.6 | 3.6 | 3.1 | 3.1 |
| 97.5° | 4.1 | 4.6 | 5.1 | 5.1 | 10.3 | 17.0 | 9.3 | 5.7 | 4.6 | 4.6 | 4.1 |
| 100° | 7.2 | 7.2 | 9.8 | 13.4 | 26.2 | 36.5 | 27.2 | 12.9 | 7.2 | 7.2 | 6.7 |
| 102.5° | 23.6 | 24.7 | 30.8 | 44.7 | 47.3 | 56.0 | 61.7 | 41.6 | 27.8 | 22.6 | 21.6 |
| 105° | 56.5 | 56.5 | 61.2 | 70.9 | 78.1 | 84.8 | 86.4 | 69.4 | 58.6 | 54.5 | 55.0 |
| 107.5° | 75.0 | 75.6 | 80.7 | 92.0 | 116.2 | 114.6 | 98.2 | 85.3 | 76.1 | 72.5 | 72.5 |
| 110° | 92.0 | 93.0 | 99.7 | 113.6 | 131.6 | 132.6 | 109.5 | 92.5 | 84.8 | 81.7 | 81.7 |



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 CATALOG NUMBER: TTN-D0-735-U-DL-UPL1

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| 112.5° | 104.9 | 105.9 | 111.0 | 117.2 | 124.4 | 129.0 | 118.7 | 100.2 | 88.4 | 84.3 | 83.8 |
| 115° | 101.3 | 100.2 | 102.3 | 106.4 | 112.1 | 117.2 | 113.1 | 102.8 | 91.5 | 86.9 | 86.9 |
| 117.5° | 88.4 | 90.0 | 91.0 | 94.1 | 101.8 | 104.4 | 101.3 | 94.6 | 88.4 | 87.4 | 85.8 |
| 120° | 78.6 | 79.7 | 80.2 | 82.8 | 87.9 | 88.9 | 87.4 | 83.8 | 80.7 | 79.7 | 79.7 |
| 122.5° | 69.4 | 70.4 | 70.4 | 71.5 | 75.6 | 76.6 | 75.0 | 72.5 | 70.9 | 71.5 | 70.9 |
| 125° | 61.2 | 61.7 | 61.7 | 62.2 | 64.3 | 63.7 | 64.3 | 62.7 | 61.7 | 62.2 | 62.2 |
| 127.5° | 54.5 | 55.0 | 54.5 | 54.0 | 56.0 | 55.5 | 55.5 | 55.0 | 54.5 | 55.5 | 56.0 |
| 130° | 49.3 | 48.8 | 48.3 | 47.8 | 48.8 | 47.8 | 48.8 | 48.8 | 48.8 | 49.9 | 49.9 |
| 132.5° | 44.2 | 44.2 | 43.2 | 42.2 | 42.7 | 42.2 | 42.2 | 42.2 | 42.7 | 44.2 | 44.2 |
| 135° | 39.6 | 39.6 | 39.1 | 38.0 | 38.6 | 38.0 | 38.6 | 38.6 | 38.0 | 39.6 | 39.6 |
| 137.5° | 37.0 | 36.5 | 35.5 | 35.0 | 35.0 | 34.4 | 35.0 | 35.0 | 35.0 | 36.0 | 36.0 |
| 140° | 33.4 | 33.4 | 32.9 | 32.4 | 32.4 | 32.4 | 31.9 | 32.4 | 32.4 | 32.9 | 32.9 |
| 142.5° | 31.4 | 31.4 | 30.3 | 29.8 | 30.3 | 30.3 | 30.3 | 29.8 | 30.3 | 30.8 | 31.4 |
| 145° | 29.3 | 28.8 | 28.8 | 28.3 | 28.3 | 28.8 | 28.3 | 28.3 | 28.3 | 28.8 | 28.8 |
| 147.5° | 27.8 | 27.2 | 27.2 | 26.7 | 27.2 | 27.2 | 27.2 | 27.2 | 26.7 | 27.2 | 27.2 |
| 150° | 26.2 | 26.2 | 25.7 | 25.7 | 25.7 | 25.7 | 26.2 | 26.2 | 25.7 | 26.2 | 26.7 |
| 152.5° | 25.7 | 25.2 | 24.7 | 24.7 | 24.7 | 24.7 | 24.7 | 25.2 | 24.7 | 25.2 | 25.2 |
| 155° | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 24.2 | 23.6 | 24.2 | 24.2 |
| 157.5° | 23.6 | 23.6 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.1 | 23.6 | 23.1 |
| 160° | 23.1 | 22.6 | 22.6 | 22.6 | 22.1 | 22.1 | 22.1 | 22.6 | 22.6 | 22.6 | 22.6 |
| 162.5° | 22.6 | 22.1 | 22.1 | 21.6 | 21.6 | 21.6 | 21.6 | 22.1 | 22.1 | 22.1 | 22.1 |
| 165° | 21.6 | 22.1 | 21.6 | 21.1 | 21.1 | 21.1 | 21.1 | 21.6 | 21.6 | 21.6 | 22.1 |
| 167.5° | 21.6 | 21.1 | 21.1 | 21.1 | 20.6 | 20.6 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 |
| 170° | 21.1 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 21.1 | 21.1 |
| 172.5° | 21.1 | 21.1 | 20.6 | 20.6 | 20.6 | 20.6 | 20.6 | 21.1 | 21.1 | 21.1 | 21.1 |
| 175° | 20.6 | 21.1 | 21.1 | 21.1 | 20.6 | 20.6 | 20.6 | 21.1 | 21.1 | 21.1 | 21.1 |
| 177.5° | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 20.6 | 21.1 | 21.1 | 21.1 | 21.1 |
| 180° | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 | 21.1 |

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