

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: P198185

Luminaire Tested: **TT-C2-LED-E1-T4-PM-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198185
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34703)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: TT-C2-LED-E1-T4-PM-8030
Description: TOPTIER LED AREA/SITE LUMINAIRE
DRIVE LANE DISTRIBUTION
Light Source: (160) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2937.6 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Luminous Opening: Circular (Dia: 1.12' x H: 0')
IES Classification: Type IV - Short - Non-Cutoff
BUG Rating: B1 - U0 - G2

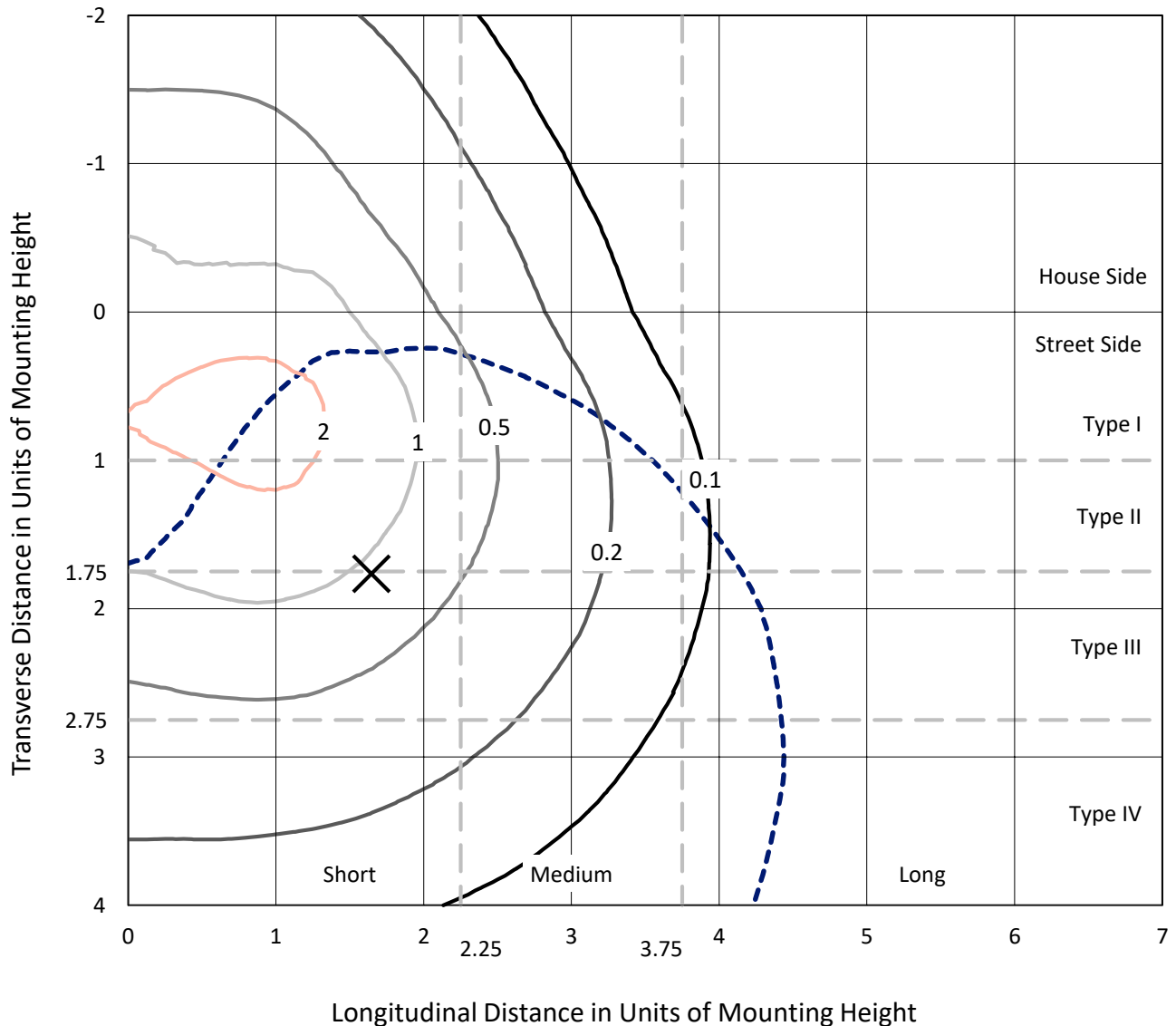
Input Watts (W): 41.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

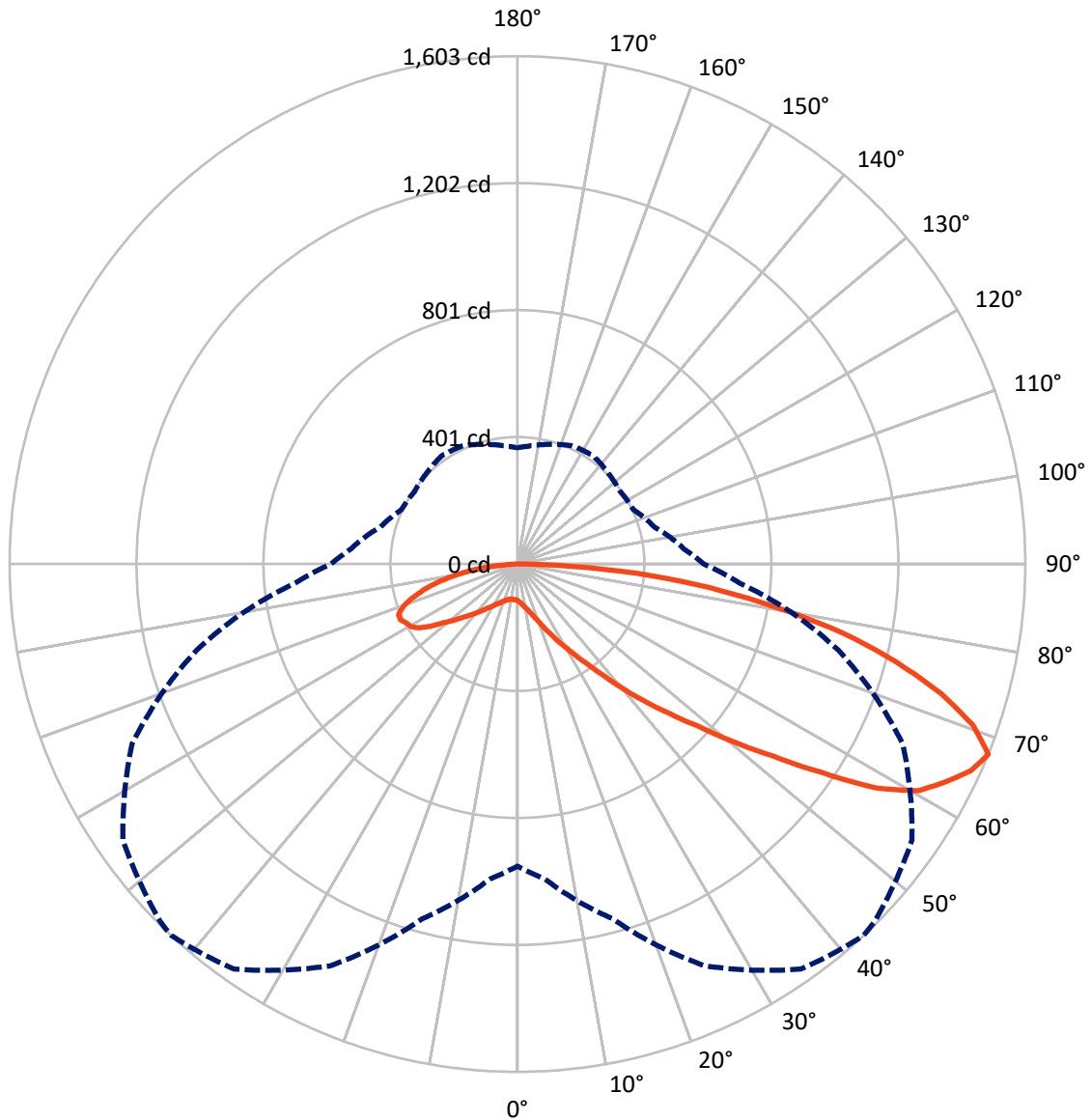
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 2.4 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 43-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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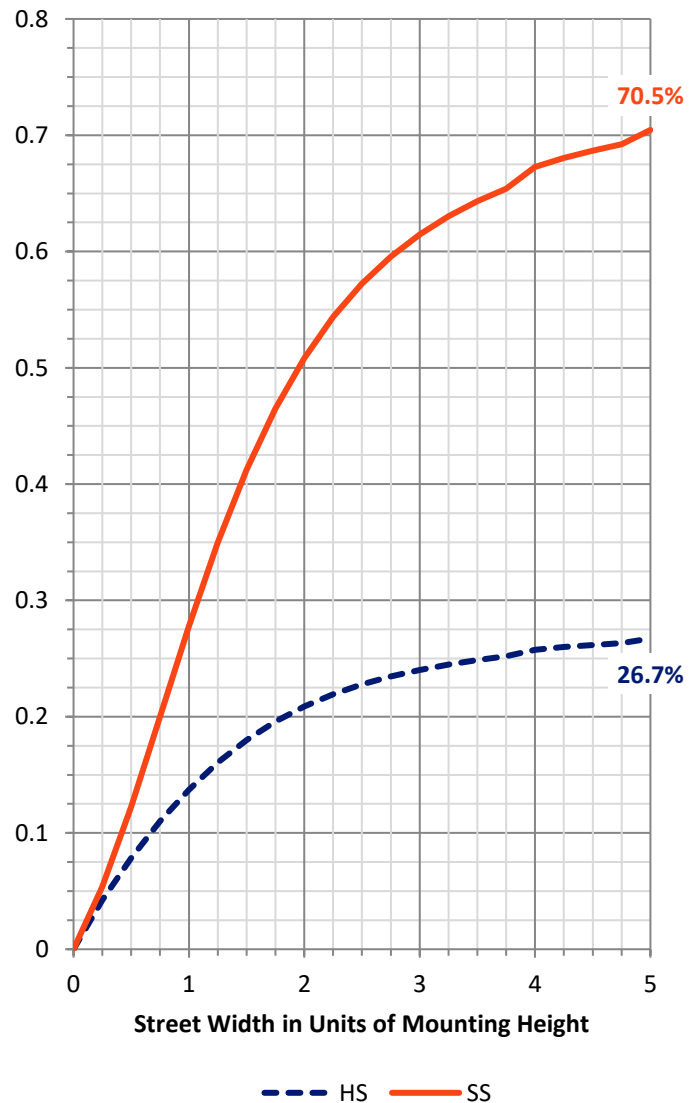
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 801.7 | 0.0 | 801.7 |
| | % Fixture | 27.3 | 0.0 | 27.3 |
| Street Side | Lumens | 2135.9 | 0.0 | 2135.9 |
| | % Fixture | 72.7 | 0.0 | 72.7 |
| Total | Lumens | 2937.6 | 0.0 | 2937.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 11.6 | 0.4 |
| 10°-20° | 40.1 | 1.4 |
| 20°-30° | 87.6 | 3.0 |
| 30°-40° | 173.5 | 5.9 |
| 40°-50° | 328.5 | 11.2 |
| 50°-60° | 583.3 | 19.9 |
| 60°-70° | 807.8 | 27.5 |
| 70°-80° | 692.9 | 23.6 |
| 80°-90° | 212.3 | 7.2 |
| 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° | 2937.6 | 100.0 |
| 0°-180° | 2937.6 | 100.0 |



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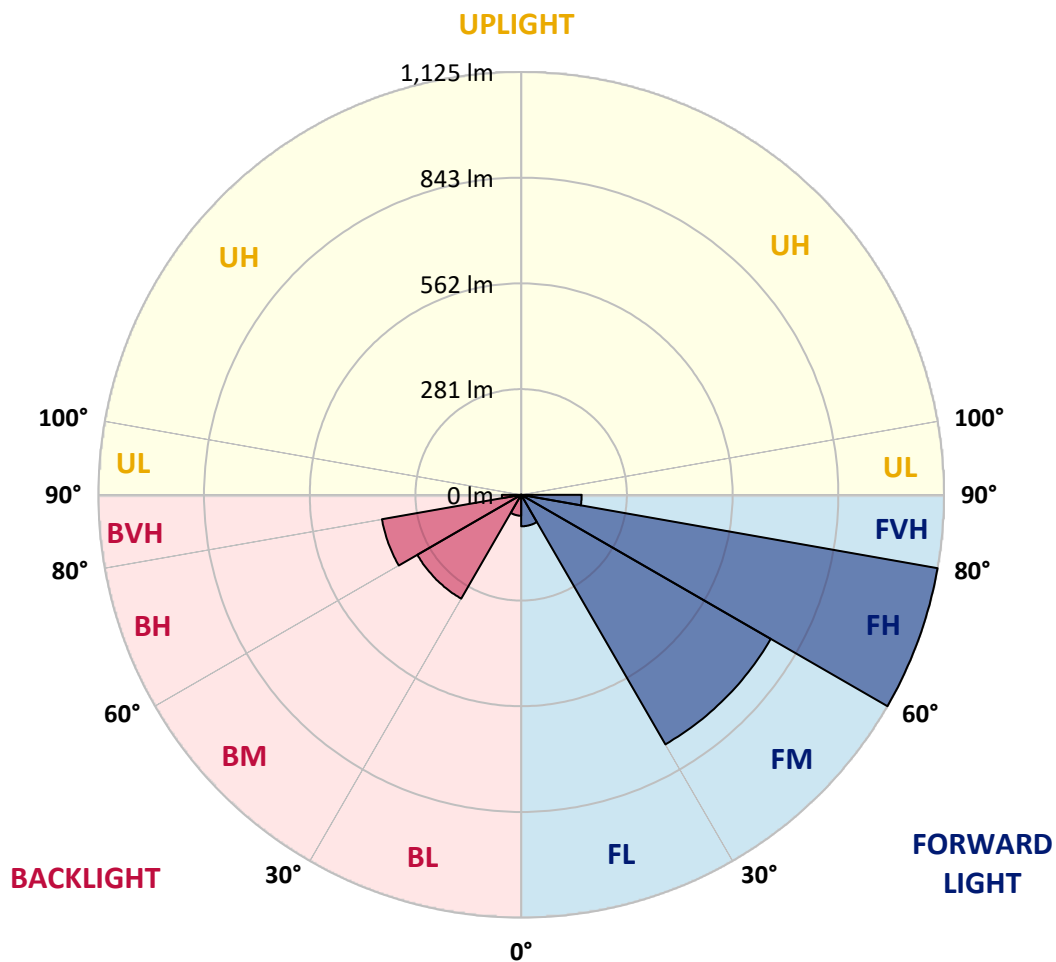
CATALOG NUMBER: TT-C2-LED-E1-T4-PM-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 83.7 | 2.8 | | | |
| FM (30°-60°) | 766.5 | 26.1 | | | |
| FH (60°-80°) | 1124.6 | 38.3 | | | G1/1800 |
| FVH (80°-90°) | 161.1 | 5.5 | | | G2/225 |
| BL (0°-30°) | 55.6 | 1.9 | B0/110 | | |
| BM (30°-60°) | 318.8 | 10.9 | B1/1000 | | |
| BH (60°-80°) | 376.0 | 12.8 | B1/500 | | G1/500 |
| BVH (80°-90°) | 51.3 | 1.7 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B1-U0-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 43° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 0° | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 |
| 2.5° | 121.1 | 120.6 | 120.6 | 120.6 | 120.1 | 119.5 | 119.5 | 119.0 | 118.5 | 117.9 | 116.8 |
| 5° | 127.5 | 126.5 | 126.5 | 126.5 | 125.9 | 125.4 | 124.9 | 123.8 | 122.2 | 120.6 | 119.5 |
| 7.5° | 135.0 | 135.5 | 135.5 | 133.9 | 132.9 | 131.8 | 131.3 | 129.1 | 127.0 | 124.3 | 122.2 |
| 10° | 144.1 | 144.6 | 144.6 | 143.5 | 141.4 | 140.3 | 139.3 | 137.1 | 133.4 | 129.7 | 126.5 |
| 12.5° | 154.2 | 155.3 | 155.8 | 154.2 | 151.5 | 149.4 | 149.9 | 146.2 | 141.4 | 136.6 | 131.8 |
| 15° | 169.1 | 168.6 | 170.2 | 167.0 | 164.3 | 161.7 | 161.1 | 155.8 | 151.0 | 144.6 | 138.7 |
| 17.5° | 187.3 | 185.1 | 185.1 | 183.5 | 181.9 | 177.7 | 175.5 | 170.2 | 162.2 | 154.7 | 145.7 |
| 20° | 206.0 | 205.4 | 204.4 | 203.3 | 200.1 | 195.3 | 195.8 | 187.3 | 177.7 | 167.0 | 155.8 |
| 22.5° | 227.8 | 230.0 | 226.8 | 226.8 | 224.1 | 220.4 | 218.8 | 207.6 | 194.7 | 179.8 | 167.0 |
| 25° | 251.3 | 251.8 | 251.8 | 252.9 | 252.4 | 246.0 | 242.8 | 232.6 | 217.7 | 198.0 | 179.3 |
| 27.5° | 275.3 | 277.5 | 276.9 | 279.6 | 281.2 | 276.9 | 274.2 | 262.5 | 241.2 | 219.3 | 195.8 |
| 30° | 302.0 | 303.6 | 306.3 | 312.7 | 314.3 | 310.0 | 307.9 | 294.0 | 272.6 | 241.7 | 212.4 |
| 32.5° | 332.4 | 334.5 | 337.2 | 349.5 | 355.4 | 350.5 | 347.3 | 335.1 | 308.4 | 274.2 | 236.9 |
| 35° | 366.0 | 366.0 | 375.1 | 390.0 | 399.1 | 395.9 | 397.0 | 384.2 | 355.4 | 312.7 | 266.8 |
| 37.5° | 403.4 | 403.4 | 415.1 | 433.8 | 451.4 | 452.5 | 458.3 | 443.4 | 408.2 | 353.2 | 296.1 |
| 40° | 436.5 | 443.4 | 461.0 | 485.0 | 512.7 | 521.8 | 524.5 | 509.5 | 466.3 | 401.2 | 328.7 |
| 42.5° | 474.9 | 482.9 | 504.7 | 540.5 | 575.7 | 595.5 | 596.5 | 582.1 | 537.3 | 462.1 | 375.6 |
| 45° | 513.8 | 524.0 | 550.6 | 596.0 | 649.9 | 673.4 | 673.9 | 674.4 | 633.3 | 534.6 | 430.6 |
| 47.5° | 558.1 | 566.1 | 601.3 | 655.2 | 724.0 | 762.5 | 775.3 | 776.9 | 720.8 | 609.9 | 478.6 |
| 50° | 606.1 | 608.8 | 657.3 | 733.6 | 826.5 | 879.8 | 887.3 | 892.6 | 813.7 | 695.2 | 529.3 |
| 52.5° | 655.7 | 659.5 | 716.0 | 821.7 | 938.5 | 1004.7 | 1017.5 | 1019.6 | 956.1 | 819.0 | 627.5 |
| 55° | 707.0 | 710.2 | 783.3 | 926.8 | 1071.9 | 1158.9 | 1181.8 | 1196.2 | 1096.5 | 898.5 | 666.9 |
| 57.5° | 759.3 | 767.3 | 864.9 | 1036.2 | 1219.2 | 1334.4 | 1350.4 | 1328.6 | 1176.0 | 939.1 | 678.2 |
| 60° | 811.5 | 825.9 | 953.5 | 1158.4 | 1364.3 | 1453.4 | 1457.7 | 1396.9 | 1214.4 | 961.5 | 682.4 |
| 62.5° | 860.6 | 884.6 | 1046.3 | 1271.5 | 1460.9 | 1514.8 | 1514.8 | 1434.2 | 1269.3 | 1034.0 | 731.5 |
| 65° | 910.3 | 939.1 | 1116.2 | 1352.0 | 1513.7 | 1572.9 | 1579.9 | 1534.5 | 1364.3 | 1078.3 | 745.9 |
| 67.5° | 953.5 | 997.8 | 1158.9 | 1399.0 | 1560.7 | 1602.8 | 1594.8 | 1520.1 | 1341.4 | 1047.4 | 705.9 |
| 70° | 1001.5 | 1031.9 | 1189.3 | 1397.9 | 1518.5 | 1525.4 | 1521.2 | 1440.6 | 1268.8 | 989.8 | 654.7 |
| 72.5° | 1020.7 | 1045.2 | 1168.5 | 1325.4 | 1398.5 | 1397.4 | 1389.9 | 1319.0 | 1156.2 | 900.1 | 584.2 |
| 75° | 1001.0 | 999.4 | 1072.5 | 1177.6 | 1234.1 | 1234.7 | 1228.8 | 1168.5 | 1011.1 | 773.1 | 494.6 |
| 77.5° | 893.7 | 890.5 | 922.5 | 986.5 | 1047.4 | 1052.7 | 1042.6 | 975.3 | 842.0 | 640.3 | 413.5 |
| 80° | 721.4 | 708.0 | 732.0 | 784.3 | 831.3 | 826.5 | 835.0 | 761.4 | 654.1 | 494.1 | 312.7 |
| 82.5° | 488.2 | 492.5 | 522.4 | 553.8 | 604.5 | 608.8 | 599.7 | 559.2 | 473.3 | 358.6 | 219.8 |
| 85° | 252.4 | 258.2 | 296.1 | 345.2 | 362.8 | 383.1 | 381.0 | 352.7 | 286.0 | 208.1 | 130.7 |
| 87.5° | 44.3 | 38.4 | 53.9 | 81.6 | 99.2 | 118.5 | 117.9 | 84.3 | 66.2 | 44.8 | 27.7 |
| 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° | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 | 114.7 |
| 2.5° | 116.8 | 116.3 | 115.8 | 114.7 | 113.6 | 113.1 | 112.6 | 112.0 | 112.0 | 111.5 | 111.5 |
| 5° | 119.0 | 117.9 | 116.8 | 115.2 | 114.2 | 113.1 | 112.0 | 111.5 | 111.0 | 110.4 | 110.4 |
| 7.5° | 121.1 | 120.1 | 117.9 | 115.8 | 113.6 | 112.6 | 112.0 | 111.0 | 110.4 | 109.9 | 109.9 |
| 10° | 124.9 | 123.3 | 120.1 | 116.8 | 114.7 | 113.1 | 111.5 | 111.0 | 110.4 | 110.4 | 109.9 |
| 12.5° | 129.1 | 126.5 | 122.7 | 119.0 | 115.8 | 113.6 | 112.6 | 112.0 | 111.5 | 111.5 | 111.0 |
| 15° | 135.5 | 132.9 | 127.0 | 121.7 | 119.0 | 116.3 | 114.7 | 114.2 | 113.6 | 114.2 | 113.6 |
| 17.5° | 141.9 | 138.7 | 131.3 | 125.9 | 121.7 | 119.5 | 117.9 | 117.4 | 116.8 | 117.9 | 117.9 |
| 20° | 150.5 | 145.7 | 137.7 | 130.7 | 125.9 | 123.3 | 122.7 | 121.7 | 122.2 | 122.7 | 122.7 |
| 22.5° | 159.5 | 153.7 | 144.1 | 136.1 | 131.8 | 128.6 | 128.1 | 128.1 | 128.1 | 128.6 | 129.1 |
| 25° | 170.7 | 163.3 | 151.0 | 143.0 | 137.7 | 135.0 | 134.5 | 134.5 | 135.0 | 135.5 | 135.5 |
| 27.5° | 184.6 | 175.0 | 160.1 | 149.9 | 144.1 | 141.4 | 140.9 | 141.4 | 142.5 | 143.0 | 143.0 |
| 30° | 200.6 | 189.4 | 170.2 | 159.5 | 152.6 | 149.4 | 149.4 | 149.9 | 151.0 | 152.1 | 150.5 |
| 32.5° | 219.8 | 205.4 | 184.1 | 169.7 | 162.2 | 159.0 | 159.0 | 160.1 | 159.5 | 160.1 | 161.7 |
| 35° | 244.4 | 227.3 | 200.6 | 183.5 | 173.9 | 170.2 | 170.2 | 170.7 | 170.7 | 171.8 | 172.3 |
| 37.5° | 270.5 | 249.7 | 218.2 | 199.6 | 188.9 | 183.5 | 181.9 | 182.5 | 183.5 | 183.0 | 184.1 |
| 40° | 299.3 | 274.2 | 239.0 | 215.6 | 204.4 | 198.5 | 195.3 | 195.3 | 194.7 | 194.2 | 193.7 |
| 42.5° | 337.7 | 308.4 | 264.6 | 235.8 | 222.0 | 215.6 | 210.2 | 208.6 | 207.6 | 208.1 | 204.4 |
| 45° | 386.3 | 352.1 | 297.2 | 265.7 | 242.8 | 232.6 | 227.3 | 224.1 | 221.4 | 219.3 | 217.2 |
| 47.5° | 427.4 | 384.2 | 327.1 | 291.3 | 267.3 | 255.0 | 246.5 | 241.2 | 235.8 | 233.7 | 233.7 |
| 50° | 471.7 | 427.9 | 361.8 | 315.3 | 294.0 | 279.1 | 270.0 | 260.4 | 252.9 | 248.1 | 250.8 |
| 52.5° | 557.6 | 502.1 | 414.0 | 361.2 | 321.7 | 305.2 | 294.5 | 281.7 | 271.6 | 265.2 | 265.7 |
| 55° | 582.6 | 524.5 | 442.3 | 391.6 | 357.5 | 341.5 | 324.9 | 307.9 | 292.4 | 283.3 | 283.9 |
| 57.5° | 586.4 | 527.2 | 447.7 | 403.4 | 383.6 | 373.0 | 358.6 | 336.1 | 316.4 | 302.0 | 300.4 |
| 60° | 583.7 | 525.6 | 447.1 | 402.3 | 387.9 | 390.0 | 385.8 | 366.6 | 339.9 | 322.3 | 320.1 |
| 62.5° | 622.7 | 554.9 | 470.1 | 411.4 | 392.7 | 395.9 | 401.2 | 390.0 | 363.9 | 339.9 | 336.1 |
| 65° | 625.9 | 560.2 | 473.3 | 423.1 | 408.7 | 408.7 | 411.9 | 403.4 | 382.0 | 357.5 | 351.6 |
| 67.5° | 588.0 | 529.3 | 448.2 | 404.4 | 397.0 | 405.5 | 416.7 | 411.4 | 390.6 | 373.0 | 367.1 |
| 70° | 545.8 | 488.2 | 415.6 | 374.0 | 370.3 | 382.0 | 400.2 | 405.0 | 395.4 | 381.0 | 378.8 |
| 72.5° | 479.7 | 435.9 | 368.2 | 335.6 | 334.5 | 346.3 | 365.0 | 378.3 | 381.0 | 381.5 | 380.4 |
| 75° | 413.5 | 368.7 | 313.7 | 289.2 | 291.3 | 304.1 | 320.7 | 335.1 | 349.5 | 361.2 | 366.0 |
| 77.5° | 338.8 | 305.7 | 262.0 | 238.5 | 242.8 | 257.2 | 270.5 | 284.9 | 299.9 | 320.1 | 322.8 |
| 80° | 259.8 | 237.4 | 198.0 | 187.8 | 187.3 | 199.0 | 215.0 | 223.6 | 244.9 | 261.4 | 259.8 |
| 82.5° | 183.5 | 165.9 | 143.5 | 134.5 | 136.6 | 144.6 | 154.7 | 160.6 | 176.1 | 185.1 | 187.8 |
| 85° | 108.3 | 100.8 | 88.0 | 79.5 | 81.6 | 89.6 | 91.2 | 98.7 | 102.4 | 108.3 | 106.7 |
| 87.5° | 22.9 | 19.7 | 17.6 | 18.1 | 16.0 | 16.5 | 18.7 | 18.1 | 18.1 | 21.3 | 20.3 |
| 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)