

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: P678988

Luminaire Tested: **CCW-SA-1-AMB-U-SL2-HSS**

Issue Date: 04/26/2023



Test Information

Test Method: LM-79-08
Report Number: P678988
Test Lab: INNOVATION CENTER(G1)
Issue Date: 04/26/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: INVUE
Catalog Number: CCW-SA-1-AMB-U-SL2-HSS
Description: INVUE CLEAR CURVE Wall Pack MOUNT Light Square Luminaire @500mA w/
SL2 distribution lens and House Side Shield
Light Source: (16) 1620 CCT, 0 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

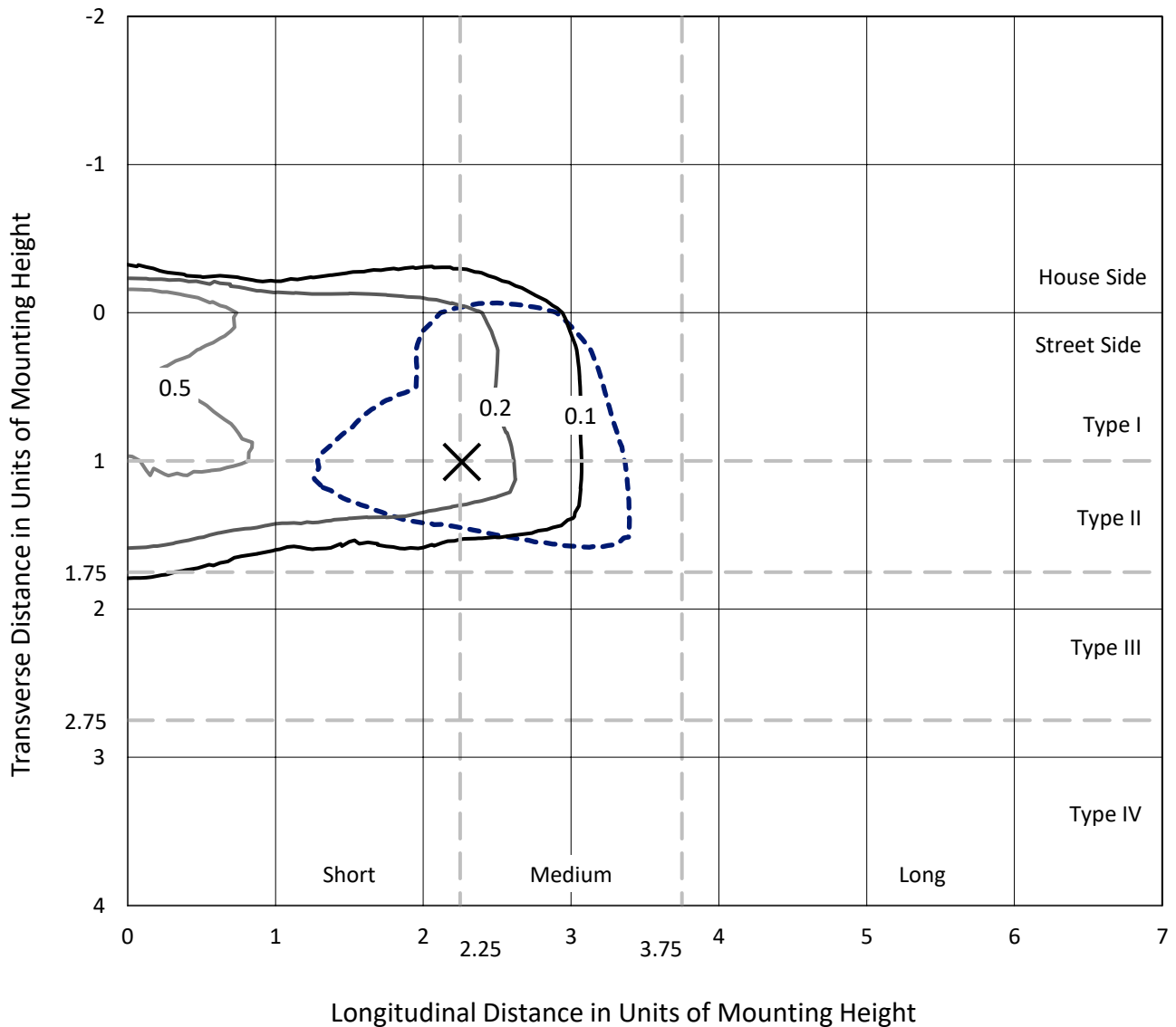
Lumens per Lamp: N/A
Luminaire Lumens: 940.6 lumens
Efficiency: N/A
Efficacy: 41.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B0 - U0 - G1

Input Watts (W): 22.6
Input Voltage (V): 120
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

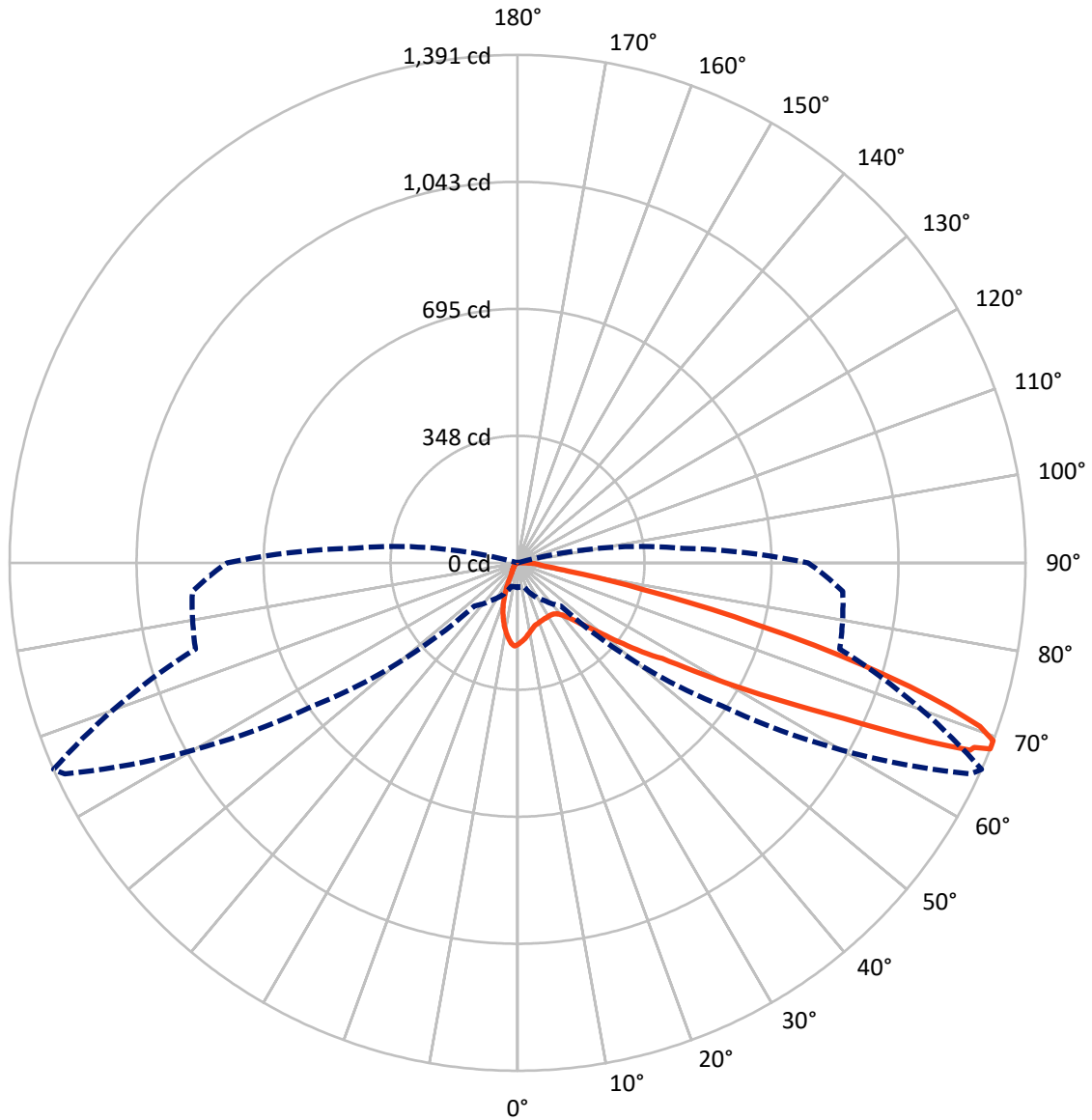
× Max cd
 - - - 1/2 Max cd



Based on 15 foot mounting height. Maximum calculated value = 1 fc
 Type II - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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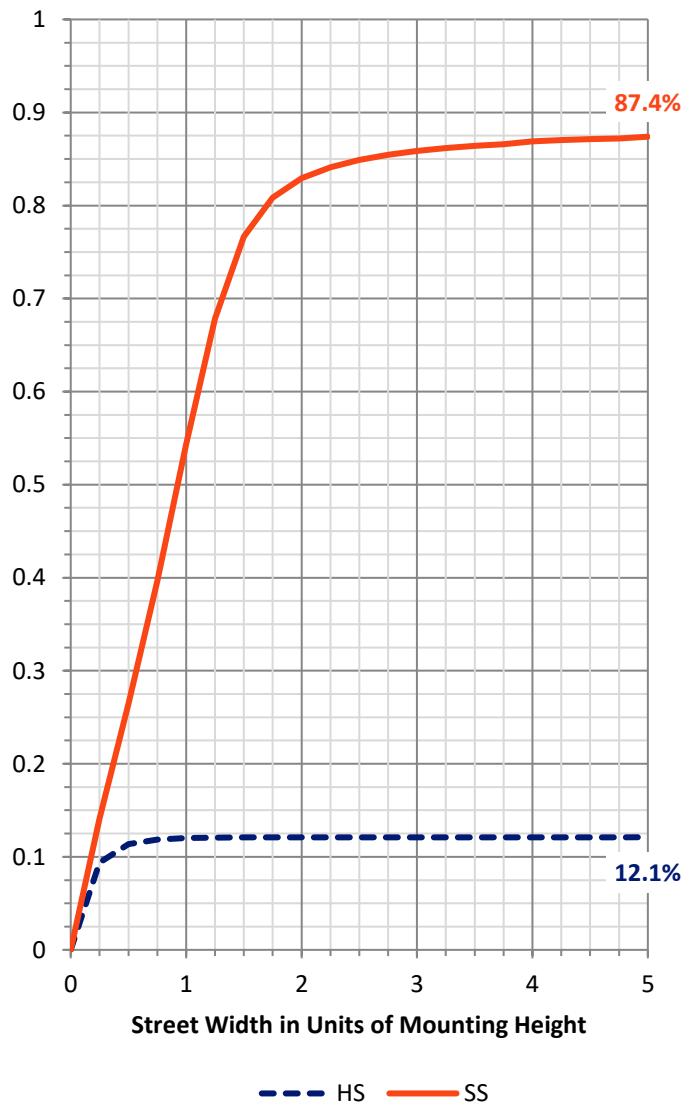
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|-------|
| House Side | Lumens | 114.9 | 0.0 | 114.9 |
| | % Fixture | 12.2 | 0.0 | 12.2 |
| Street Side | Lumens | 825.7 | 0.0 | 825.7 |
| | % Fixture | 87.8 | 0.0 | 87.8 |
| Total | Lumens | 940.6 | 0.0 | 940.6 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 18.2 | 1.9 |
| 10°-20° | 38.0 | 4.0 |
| 20°-30° | 52.6 | 5.6 |
| 30°-40° | 77.0 | 8.2 |
| 40°-50° | 127.3 | 13.5 |
| 50°-60° | 215.2 | 22.9 |
| 60°-70° | 265.0 | 28.2 |
| 70°-80° | 133.5 | 14.2 |
| 80°-90° | 13.8 | 1.5 |
| 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° | 940.6 | 100.0 |
| 0°-180° | 940.6 | 100.0 |

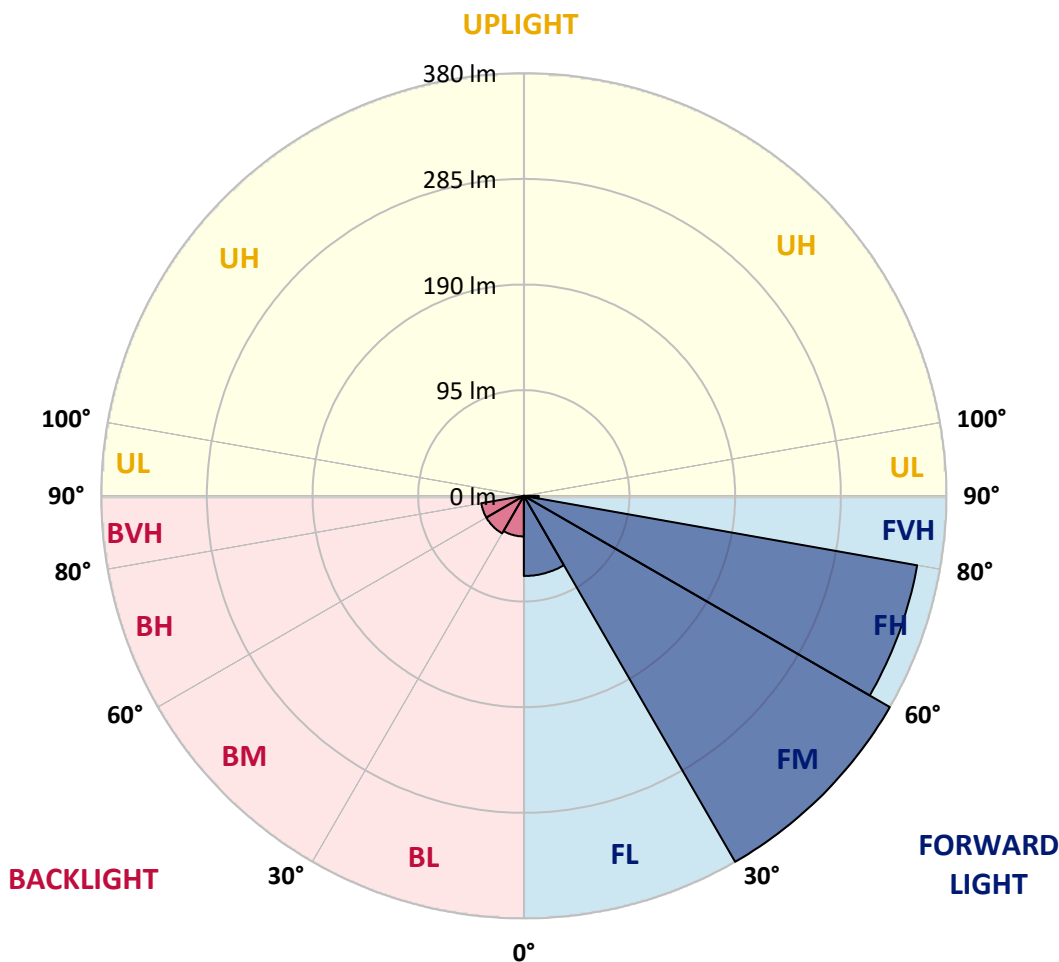


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 72.2 | 7.7 | | | |
| FM (30°-60°) | 380.5 | 40.5 | | | |
| FH (60°-80°) | 359.6 | 38.2 | | | G0/660 |
| FVH (80°-90°) | 13.5 | 1.4 | | | G1/100 |
| BL (0°-30°) | 36.6 | 3.9 | B0/110 | | |
| BM (30°-60°) | 39.0 | 4.1 | B0/220 | | |
| BH (60°-80°) | 38.9 | 4.1 | B0/110 | | G0/110 |
| BVH (80°-90°) | 0.3 | 0.0 | | | 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 II Medium





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CATALOG NUMBER: CCW-SA-1-AMB-U-SL2-HSS

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|
| 0° | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 |
| 2.5° | 205.1 | 205.7 | 206.4 | 209.1 | 209.1 | 211.8 | 212.4 | 214.4 | 215.8 | 217.8 | 219.8 |
| 5° | 185.0 | 188.4 | 188.4 | 188.4 | 193.7 | 197.1 | 202.4 | 209.7 | 209.1 | 212.4 | 219.1 |
| 7.5° | 170.3 | 172.3 | 173.7 | 175.7 | 179.7 | 185.7 | 191.7 | 197.7 | 199.7 | 205.1 | 215.1 |
| 10° | 160.3 | 159.6 | 161.0 | 165.0 | 168.3 | 174.3 | 179.7 | 189.7 | 191.7 | 203.1 | 215.8 |
| 12.5° | 151.6 | 151.0 | 152.3 | 154.3 | 158.3 | 165.7 | 171.7 | 183.0 | 184.4 | 200.4 | 214.4 |
| 15° | 143.6 | 145.0 | 146.3 | 147.6 | 152.3 | 158.3 | 165.0 | 176.3 | 177.7 | 194.4 | 213.8 |
| 17.5° | 143.6 | 142.3 | 142.9 | 144.3 | 147.0 | 154.3 | 161.7 | 173.7 | 175.7 | 193.7 | 219.8 |
| 20° | 145.0 | 145.6 | 144.3 | 142.9 | 145.6 | 149.6 | 157.0 | 172.3 | 173.0 | 191.7 | 220.4 |
| 22.5° | 149.6 | 151.0 | 148.3 | 146.3 | 143.6 | 147.0 | 157.0 | 169.7 | 171.7 | 189.0 | 221.1 |
| 25° | 159.6 | 157.6 | 157.6 | 155.0 | 147.0 | 146.3 | 156.3 | 169.0 | 169.7 | 189.7 | 223.8 |
| 27.5° | 170.3 | 172.3 | 167.7 | 164.3 | 157.0 | 149.0 | 155.6 | 166.3 | 169.7 | 186.4 | 225.8 |
| 30° | 187.0 | 187.0 | 187.7 | 183.0 | 169.0 | 155.0 | 157.6 | 167.7 | 169.0 | 184.4 | 229.1 |
| 32.5° | 212.4 | 207.7 | 209.7 | 200.4 | 186.4 | 167.0 | 160.3 | 168.3 | 169.7 | 183.7 | 229.8 |
| 35° | 231.1 | 228.4 | 230.5 | 231.8 | 211.1 | 184.4 | 168.3 | 171.0 | 171.7 | 184.4 | 229.8 |
| 37.5° | 248.5 | 249.2 | 253.8 | 257.2 | 235.1 | 207.1 | 181.0 | 175.7 | 177.0 | 187.0 | 230.5 |
| 40° | 265.9 | 267.2 | 276.5 | 287.9 | 272.5 | 234.5 | 198.4 | 187.7 | 187.7 | 193.0 | 235.1 |
| 42.5° | 290.6 | 288.6 | 304.6 | 311.3 | 305.9 | 268.5 | 222.4 | 205.7 | 205.1 | 207.7 | 245.1 |
| 45° | 311.9 | 318.0 | 332.7 | 350.7 | 344.7 | 311.9 | 258.5 | 231.8 | 231.8 | 225.8 | 267.2 |
| 47.5° | 369.4 | 363.4 | 370.7 | 390.1 | 397.4 | 354.0 | 295.2 | 267.9 | 265.9 | 256.5 | 297.9 |
| 50° | 408.8 | 411.5 | 408.8 | 426.8 | 446.9 | 417.5 | 342.0 | 316.6 | 312.6 | 302.6 | 335.3 |
| 52.5° | 432.2 | 425.5 | 420.2 | 441.5 | 498.3 | 493.0 | 400.8 | 374.7 | 376.7 | 349.4 | 384.1 |
| 55° | 387.4 | 382.1 | 385.4 | 414.1 | 501.0 | 587.2 | 502.3 | 448.9 | 448.2 | 420.8 | 452.2 |
| 56° | 358.0 | 358.7 | 352.7 | 392.1 | 492.3 | 621.9 | 559.1 | 483.0 | 474.9 | 447.5 | 482.3 |
| 57° | 326.6 | 321.3 | 323.3 | 362.7 | 475.6 | 644.6 | 605.9 | 529.0 | 517.7 | 478.3 | 512.3 |
| 58° | 289.2 | 283.9 | 282.6 | 319.3 | 452.2 | 649.9 | 663.3 | 579.8 | 567.1 | 509.7 | 540.4 |
| 59° | 243.1 | 243.1 | 245.1 | 273.9 | 410.8 | 652.0 | 743.5 | 630.6 | 623.9 | 535.7 | 566.4 |
| 60° | 211.1 | 214.4 | 205.1 | 231.8 | 355.4 | 633.9 | 820.3 | 702.0 | 686.0 | 563.1 | 596.5 |
| 61° | 191.7 | 186.4 | 178.4 | 198.4 | 293.2 | 600.5 | 859.7 | 768.2 | 754.2 | 600.5 | 627.2 |
| 62° | 162.3 | 161.7 | 158.3 | 173.7 | 230.5 | 553.1 | 879.1 | 833.0 | 823.6 | 626.6 | 662.0 |
| 63° | 138.9 | 137.6 | 138.9 | 156.3 | 191.0 | 498.3 | 906.5 | 913.1 | 900.4 | 665.3 | 692.0 |
| 64° | 120.2 | 118.9 | 119.6 | 139.6 | 167.7 | 413.5 | 903.1 | 1012.7 | 988.6 | 701.4 | 734.1 |
| 65° | 102.2 | 102.9 | 105.5 | 124.9 | 146.3 | 309.3 | 888.4 | 1150.9 | 1101.5 | 760.8 | 771.5 |
| 66° | 88.2 | 88.2 | 89.5 | 117.6 | 134.9 | 238.5 | 843.7 | 1257.1 | 1229.8 | 815.6 | 823.0 |
| 67° | 77.5 | 76.1 | 76.8 | 108.2 | 127.6 | 196.4 | 782.9 | 1325.9 | 1340.6 | 864.4 | 863.7 |
| 67.5° | 74.1 | 71.5 | 71.5 | 103.5 | 127.6 | 182.4 | 734.1 | 1358.0 | 1348.0 | 893.8 | 877.7 |
| 68° | 68.1 | 65.5 | 66.8 | 96.9 | 124.9 | 167.0 | 684.0 | 1367.4 | 1390.7 | 913.1 | 893.8 |
| 69° | 58.8 | 57.4 | 58.1 | 88.2 | 121.6 | 142.9 | 566.4 | 1372.0 | 1390.1 | 943.2 | 885.7 |
| 70° | 49.4 | 48.8 | 51.4 | 78.2 | 115.6 | 134.3 | 440.9 | 1319.9 | 1342.6 | 940.5 | 869.0 |
| 71° | 40.1 | 39.4 | 43.4 | 68.8 | 112.9 | 129.6 | 332.7 | 1237.8 | 1245.8 | 911.1 | 821.6 |
| 72° | 31.4 | 31.4 | 36.7 | 60.8 | 110.9 | 125.6 | 244.5 | 1092.8 | 1126.2 | 869.0 | 733.4 |
| 72.5° | 28.1 | 28.1 | 33.4 | 56.1 | 108.9 | 123.6 | 214.4 | 1039.4 | 1052.7 | 818.3 | 686.7 |
| 73° | 24.0 | 24.7 | 30.1 | 52.8 | 106.9 | 122.2 | 183.0 | 953.9 | 986.6 | 772.2 | 629.2 |
| 74° | 18.0 | 18.0 | 22.7 | 44.1 | 101.5 | 119.6 | 149.0 | 823.0 | 842.3 | 676.0 | 499.0 |
| 75° | 14.7 | 14.0 | 16.7 | 36.7 | 93.5 | 115.6 | 128.9 | 661.3 | 676.7 | 528.4 | 394.1 |



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CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|-----|-----|------|------|------|-------|-------|-------|-------|-------|-------|
| 77.5° | 8.7 | 8.7 | 10.0 | 18.0 | 62.1 | 110.9 | 107.5 | 332.0 | 350.7 | 225.1 | 119.6 |
| 80° | 5.3 | 5.3 | 6.7 | 10.7 | 30.1 | 111.6 | 96.2 | 143.6 | 141.6 | 54.8 | 32.7 |
| 82.5° | 2.7 | 2.7 | 4.0 | 8.0 | 14.7 | 84.2 | 86.8 | 76.8 | 72.8 | 16.0 | 14.7 |
| 85° | 1.3 | 1.3 | 2.0 | 5.3 | 8.0 | 40.7 | 76.1 | 61.5 | 57.4 | 7.3 | 9.4 |
| 87.5° | 0.7 | 0.7 | 0.7 | 2.7 | 4.0 | 20.0 | 45.4 | 41.4 | 38.1 | 2.7 | 5.3 |
| 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° | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 | 223.1 |
| 2.5° | 223.1 | 223.8 | 227.1 | 228.4 | 227.8 | 225.8 | 222.4 | 221.8 | 218.4 | 217.1 | 215.8 |
| 5° | 223.8 | 224.4 | 225.1 | 221.1 | 213.1 | 205.7 | 197.7 | 191.0 | 186.4 | 182.4 | 181.7 |
| 7.5° | 222.4 | 225.1 | 219.1 | 205.7 | 191.7 | 178.4 | 162.3 | 154.3 | 147.0 | 140.9 | 140.3 |
| 10° | 220.4 | 223.1 | 211.8 | 189.7 | 165.7 | 146.3 | 126.9 | 110.2 | 96.2 | 90.2 | 91.5 |
| 12.5° | 223.1 | 225.8 | 202.4 | 171.7 | 140.9 | 110.9 | 82.2 | 60.8 | 44.8 | 40.1 | 41.4 |
| 15° | 226.4 | 222.4 | 191.7 | 152.3 | 112.9 | 71.5 | 40.7 | 30.7 | 28.1 | 27.4 | 27.4 |
| 17.5° | 226.4 | 223.1 | 180.4 | 131.6 | 79.5 | 38.7 | 27.4 | 26.1 | 24.7 | 24.7 | 24.7 |
| 20° | 231.8 | 216.4 | 168.3 | 109.5 | 49.4 | 26.7 | 24.0 | 23.4 | 22.7 | 22.0 | 22.0 |
| 22.5° | 230.5 | 214.4 | 154.3 | 84.2 | 30.1 | 23.4 | 21.4 | 20.0 | 20.0 | 19.4 | 19.4 |
| 25° | 229.1 | 207.1 | 140.9 | 60.1 | 23.4 | 20.7 | 18.7 | 17.4 | 16.7 | 16.0 | 16.0 |
| 27.5° | 229.1 | 203.7 | 125.6 | 37.4 | 20.7 | 18.7 | 16.7 | 14.7 | 13.4 | 12.7 | 12.7 |
| 30° | 223.8 | 197.1 | 109.5 | 25.4 | 18.7 | 16.7 | 14.0 | 12.0 | 10.7 | 10.0 | 10.0 |
| 32.5° | 220.4 | 192.4 | 92.2 | 20.7 | 16.7 | 14.0 | 12.0 | 10.0 | 8.7 | 8.0 | 8.0 |
| 35° | 216.4 | 183.0 | 74.1 | 18.7 | 15.4 | 12.7 | 10.0 | 8.0 | 7.3 | 6.7 | 6.7 |
| 37.5° | 213.8 | 175.7 | 55.4 | 16.7 | 14.0 | 10.7 | 8.7 | 6.7 | 6.0 | 6.0 | 5.3 |
| 40° | 214.4 | 171.0 | 38.1 | 15.4 | 12.7 | 9.4 | 7.3 | 6.0 | 4.7 | 4.7 | 4.7 |
| 42.5° | 219.8 | 168.3 | 26.7 | 14.0 | 10.7 | 8.0 | 6.0 | 4.7 | 4.0 | 3.3 | 3.3 |
| 45° | 229.1 | 169.7 | 20.7 | 13.4 | 9.4 | 6.7 | 5.3 | 4.0 | 3.3 | 2.7 | 2.7 |
| 47.5° | 251.2 | 179.7 | 19.4 | 12.0 | 8.0 | 6.0 | 4.0 | 3.3 | 2.7 | 2.0 | 2.0 |
| 50° | 277.9 | 191.7 | 18.0 | 10.7 | 6.7 | 4.7 | 3.3 | 2.7 | 2.0 | 1.3 | 1.3 |
| 52.5° | 318.6 | 208.4 | 17.4 | 9.4 | 6.0 | 4.0 | 2.7 | 2.0 | 1.3 | 0.7 | 0.7 |
| 55° | 378.7 | 239.8 | 15.4 | 8.0 | 4.7 | 3.3 | 2.0 | 1.3 | 0.7 | 0.7 | 0.7 |
| 56° | 402.1 | 256.5 | 14.7 | 7.3 | 4.7 | 3.3 | 2.0 | 1.3 | 0.7 | 0.7 | 0.0 |
| 57° | 430.8 | 274.5 | 14.7 | 7.3 | 4.7 | 2.7 | 2.0 | 1.3 | 0.7 | 0.7 | 0.0 |
| 58° | 450.2 | 287.9 | 13.4 | 6.7 | 4.0 | 2.7 | 1.3 | 0.7 | 0.7 | 0.0 | 0.0 |
| 59° | 480.9 | 307.3 | 12.7 | 6.0 | 4.0 | 2.7 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 |
| 60° | 509.7 | 326.0 | 12.0 | 5.3 | 3.3 | 2.0 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 |
| 61° | 540.4 | 342.7 | 10.7 | 5.3 | 3.3 | 2.0 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 |
| 62° | 578.5 | 364.0 | 10.0 | 4.7 | 2.7 | 1.3 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 |
| 63° | 618.6 | 390.8 | 9.4 | 4.0 | 2.7 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 64° | 668.6 | 416.8 | 8.7 | 4.0 | 2.0 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 65° | 700.7 | 437.5 | 8.0 | 3.3 | 2.0 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 66° | 744.8 | 453.6 | 7.3 | 3.3 | 2.0 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67° | 783.5 | 464.2 | 6.7 | 2.7 | 1.3 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 67.5° | 794.2 | 462.2 | 6.0 | 2.7 | 1.3 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 |
| 68° | 795.6 | 455.6 | 6.0 | 2.7 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 69° | 782.9 | 430.8 | 5.3 | 2.0 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 70° | 750.8 | 392.1 | 4.7 | 2.0 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 71° | 692.0 | 347.4 | 4.7 | 2.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72° | 611.9 | 295.9 | 4.0 | 1.3 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 72.5° | 565.1 | 263.2 | 4.0 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 73° | 521.0 | 229.8 | 3.3 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 74° | 414.1 | 155.6 | 3.3 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 75° | 302.6 | 98.2 | 2.7 | 0.7 | 0.7 | 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° |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 77.5° | 85.5 | 21.4 | 2.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 80° | 23.4 | 7.3 | 1.3 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 82.5° | 12.0 | 3.3 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 85° | 8.7 | 2.0 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 4.7 | 0.7 | 0.7 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 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)