

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: P594510

Luminaire Tested: **ISS-PA1A-830-U-T3-HSS**

Issue Date: 3/22/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P594510  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2201-510-11)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/22/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: ISS-PA1A-830-U-T3-HSS  
Description: IMPACT ELITE LED QUARTER SPHERE LUMINAIRE  
(1) 80 CRI, 3000K, 350mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS  
WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2525 lumens  
Efficiency: N/A  
Efficacy: 87.4 lumens/watt  
Luminous Opening: Rectangular (W 0.75' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B0 - U0 - G1

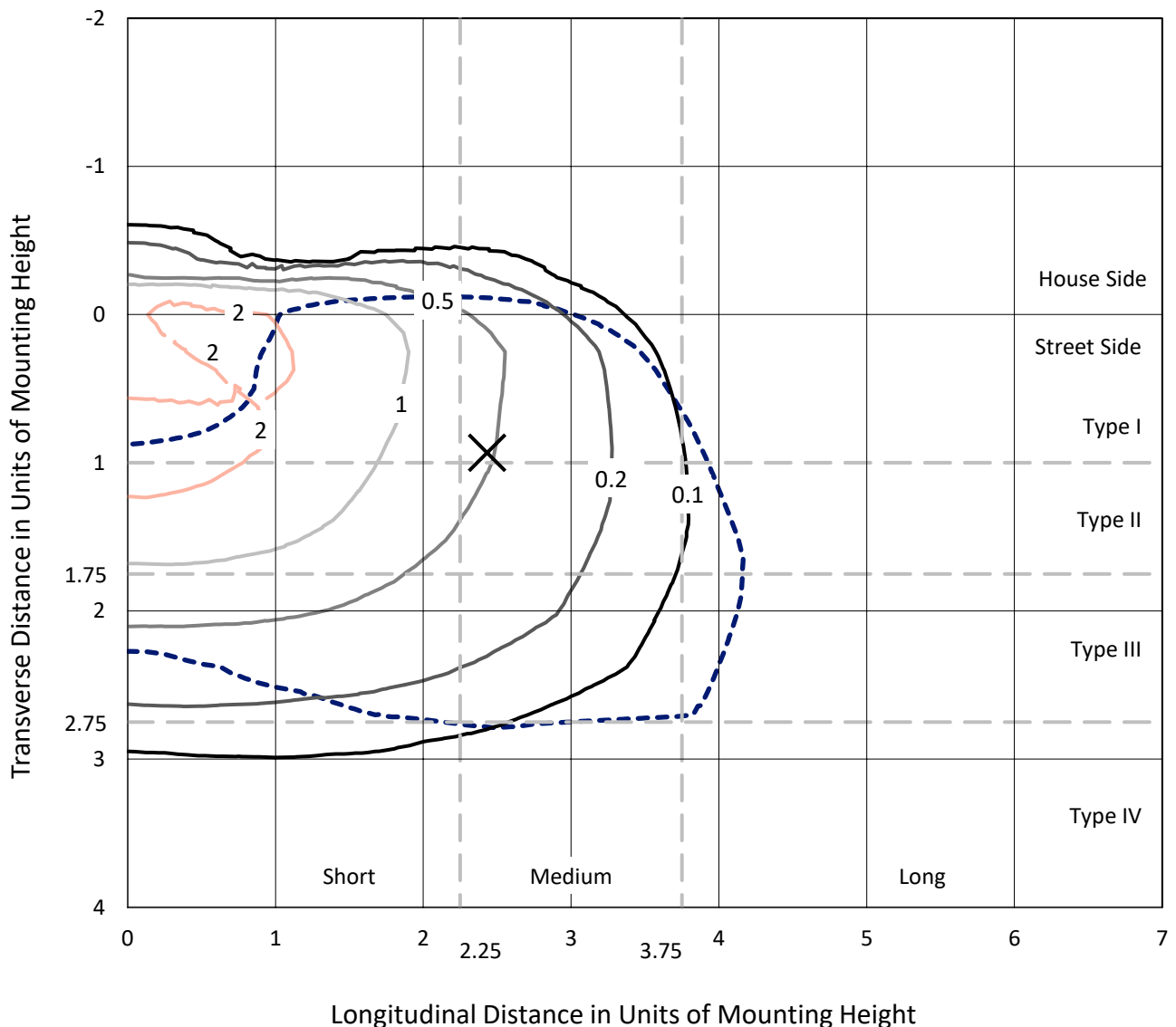
Input Watts (W): 28.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

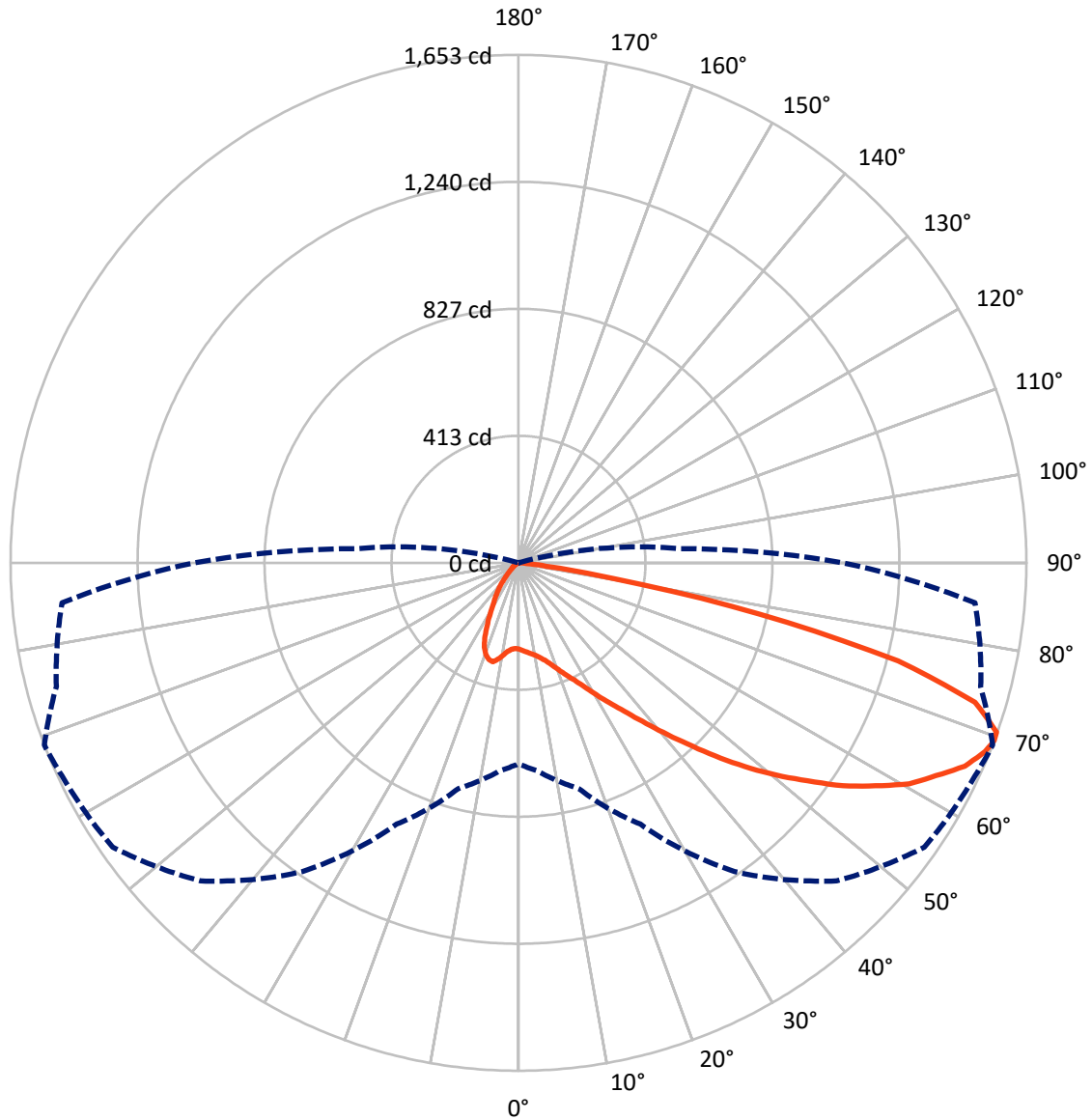
✕ Max cd  
 - - - 1/2 Max cd



Based on 12 foot mounting height. Maximum calculated value = 2.4 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 69-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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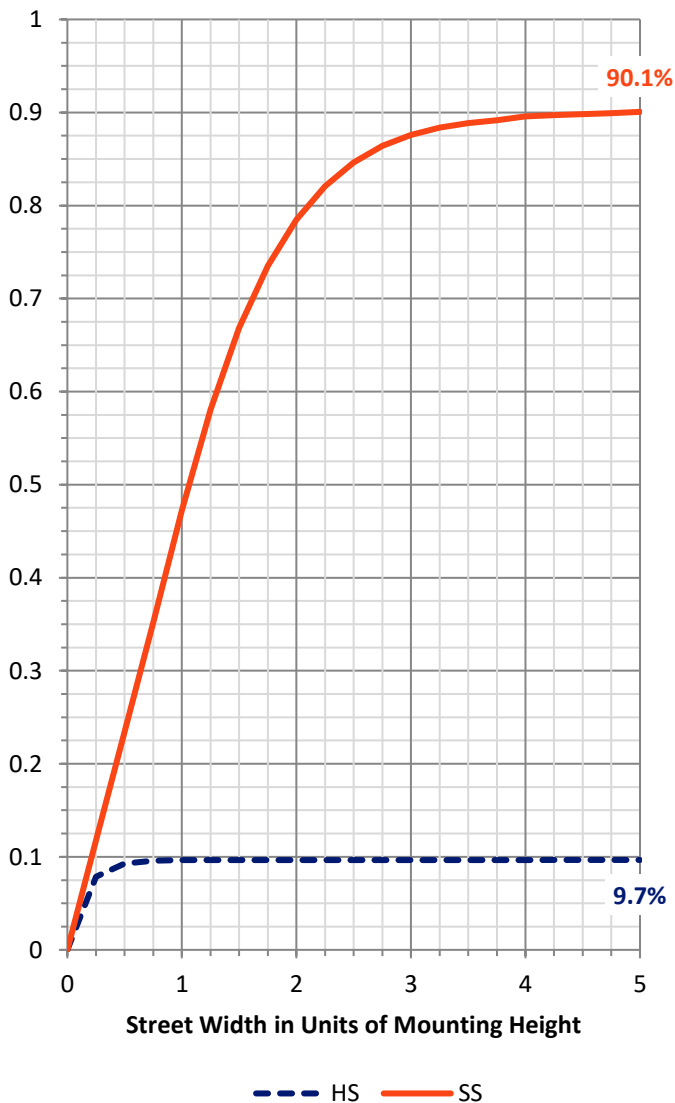
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total  |
|--------------------|-----------|----------|--------|--------|
| <b>House Side</b>  | Lumens    | 246.0    | 0.0    | 246.0  |
|                    | % Fixture | 9.7      | 0.0    | 9.7    |
| <b>Street Side</b> | Lumens    | 2279.0   | 0.0    | 2279.0 |
|                    | % Fixture | 90.3     | 0.0    | 90.3   |
| <b>Total</b>       | Lumens    | 2525.0   | 0.0    | 2525.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0  |

**Coefficient of Utilization**

**ZONAL LUMENS:**

| Zone      | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10°    | 26.8   | 1.1       |
| 10°-20°   | 70.9   | 2.8       |
| 20°-30°   | 118.0  | 4.7       |
| 30°-40°   | 212.4  | 8.4       |
| 40°-50°   | 385.1  | 15.3      |
| 50°-60°   | 601.8  | 23.8      |
| 60°-70°   | 696.3  | 27.6      |
| 70°-80°   | 389.4  | 15.4      |
| 80°-90°   | 24.3   | 1.0       |
| 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°    | 2525.0 | 100.0     |
| 0°-180°   | 2525.0 | 100.0     |

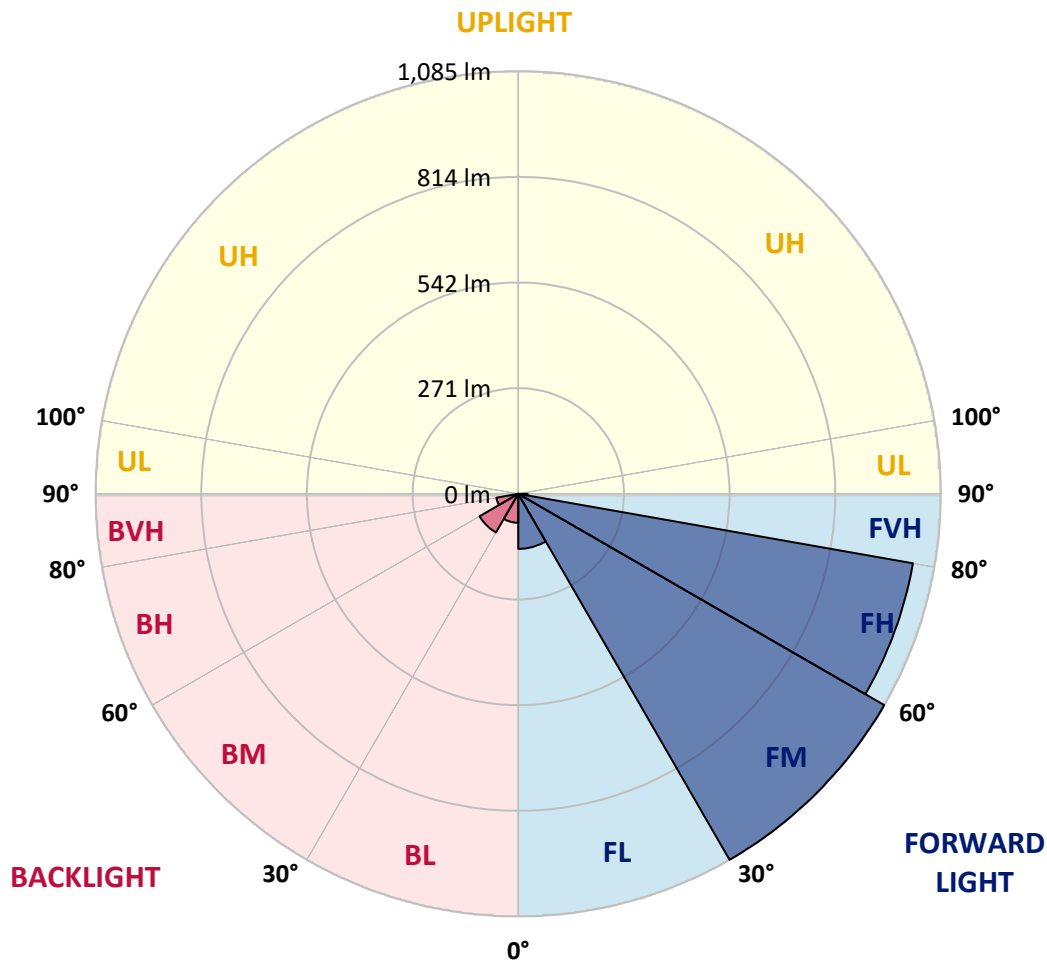


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 141.3  | 5.6       |                         |      |         |
| FM (30°-60°)   | 1084.8 | 43.0      |                         |      |         |
| FH (60°-80°)   | 1028.8 | 40.7      |                         |      | G1/1800 |
| FVH (80°-90°)  | 24.1   | 1.0       |                         |      | G1/100  |
| BL (0°-30°)    | 74.4   | 2.9       | B0/110                  |      |         |
| BM (30°-60°)   | 114.5  | 4.5       | B0/220                  |      |         |
| BH (60°-80°)   | 57.0   | 2.3       | B0/110                  |      | G0/110  |
| BVH (80°-90°)  | 0.2    | 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 III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 69°    | 75°    | 85°    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 280.9  | 280.9  | 280.9  | 280.9  | 280.9  | 280.9  | 280.9  | 280.9  | 280.9  | 280.9  | 280.9  |
| 2.5°  | 291.0  | 291.0  | 291.0  | 289.3  | 290.1  | 289.3  | 288.4  | 285.9  | 286.8  | 285.9  | 283.4  |
| 5°    | 280.9  | 281.7  | 284.2  | 285.9  | 290.1  | 291.8  | 292.6  | 292.6  | 291.8  | 290.1  | 288.4  |
| 7.5°  | 261.5  | 261.5  | 264.0  | 269.1  | 277.5  | 286.8  | 294.3  | 298.5  | 299.4  | 299.4  | 296.8  |
| 10°   | 256.5  | 256.5  | 259.8  | 263.2  | 271.6  | 282.5  | 294.3  | 304.4  | 306.1  | 307.8  | 306.9  |
| 12.5° | 254.0  | 254.8  | 258.2  | 264.0  | 275.0  | 285.1  | 297.7  | 312.0  | 317.0  | 321.2  | 322.1  |
| 15°   | 257.3  | 257.3  | 260.7  | 266.6  | 279.2  | 293.5  | 309.5  | 325.4  | 330.5  | 336.4  | 340.6  |
| 17.5° | 262.4  | 264.0  | 265.7  | 271.6  | 283.4  | 301.0  | 322.1  | 343.1  | 349.0  | 356.5  | 359.9  |
| 20°   | 270.8  | 270.8  | 272.5  | 277.5  | 290.1  | 311.1  | 340.6  | 365.8  | 370.8  | 375.9  | 380.1  |
| 22.5° | 280.9  | 281.7  | 281.7  | 285.9  | 300.2  | 322.9  | 356.5  | 387.7  | 396.1  | 398.6  | 400.3  |
| 25°   | 311.1  | 309.5  | 303.6  | 301.0  | 312.0  | 336.4  | 375.9  | 413.7  | 423.0  | 425.5  | 422.1  |
| 27.5° | 374.2  | 367.5  | 351.5  | 334.7  | 333.0  | 357.4  | 402.0  | 446.5  | 456.6  | 457.5  | 445.7  |
| 30°   | 453.3  | 454.1  | 428.0  | 391.9  | 367.5  | 380.1  | 430.5  | 487.7  | 497.8  | 493.6  | 475.1  |
| 32.5° | 550.8  | 546.6  | 527.3  | 475.1  | 426.3  | 415.4  | 461.7  | 530.6  | 542.4  | 535.7  | 511.3  |
| 35°   | 634.0  | 636.6  | 613.0  | 566.8  | 505.4  | 470.1  | 499.5  | 578.5  | 592.8  | 581.1  | 550.8  |
| 37.5° | 703.8  | 707.2  | 692.9  | 655.1  | 600.4  | 544.9  | 549.1  | 634.9  | 654.2  | 642.5  | 604.6  |
| 40°   | 781.2  | 783.7  | 777.8  | 736.6  | 687.9  | 634.0  | 615.5  | 699.6  | 725.7  | 709.7  | 670.2  |
| 42.5° | 866.1  | 875.4  | 865.3  | 832.5  | 782.1  | 735.8  | 708.1  | 778.7  | 804.8  | 794.7  | 741.7  |
| 45°   | 982.2  | 983.0  | 971.3  | 938.5  | 886.3  | 848.5  | 814.8  | 862.8  | 896.4  | 883.8  | 821.6  |
| 47.5° | 1068.0 | 1073.8 | 1067.1 | 1044.4 | 1002.4 | 977.1  | 930.9  | 955.3  | 990.6  | 974.6  | 904.0  |
| 50°   | 1133.6 | 1149.5 | 1143.6 | 1150.4 | 1129.3 | 1118.4 | 1047.8 | 1051.1 | 1085.6 | 1072.2 | 988.1  |
| 52.5° | 1169.7 | 1189.9 | 1191.6 | 1226.1 | 1243.7 | 1270.6 | 1161.3 | 1156.3 | 1178.1 | 1166.3 | 1073.8 |
| 55°   | 1164.7 | 1169.7 | 1211.8 | 1274.8 | 1343.8 | 1405.2 | 1272.3 | 1251.3 | 1281.6 | 1248.8 | 1164.7 |
| 57.5° | 1115.9 | 1128.5 | 1202.5 | 1280.7 | 1402.6 | 1491.8 | 1368.2 | 1344.6 | 1369.9 | 1326.1 | 1258.0 |
| 60°   | 1046.1 | 1064.6 | 1159.6 | 1271.5 | 1437.1 | 1543.9 | 1461.5 | 1438.0 | 1460.7 | 1407.7 | 1364.0 |
| 62.5° | 983.0  | 991.4  | 1078.9 | 1232.8 | 1416.9 | 1541.4 | 1533.8 | 1512.0 | 1525.4 | 1469.9 | 1454.8 |
| 65°   | 893.1  | 896.4  | 983.0  | 1163.0 | 1372.4 | 1524.6 | 1573.4 | 1581.8 | 1596.1 | 1522.1 | 1519.5 |
| 67.5° | 754.3  | 761.9  | 847.6  | 1041.1 | 1298.4 | 1491.8 | 1604.5 | 1621.3 | 1638.1 | 1549.8 | 1531.3 |
| 69°   | 654.2  | 678.6  | 761.0  | 938.5  | 1226.9 | 1464.0 | 1612.9 | 1639.8 | 1653.2 | 1557.4 | 1491.8 |
| 70°   | 572.7  | 593.7  | 688.7  | 859.4  | 1163.8 | 1432.9 | 1618.8 | 1637.3 | 1650.7 | 1541.4 | 1427.0 |
| 72.5° | 287.6  | 314.5  | 444.8  | 627.3  | 925.0  | 1290.8 | 1588.5 | 1568.3 | 1554.0 | 1417.8 | 1154.6 |
| 75°   | 111.0  | 115.2  | 190.9  | 357.4  | 578.5  | 947.7  | 1356.4 | 1318.6 | 1276.5 | 1075.5 | 684.5  |
| 77.5° | 61.4   | 60.5   | 83.3   | 158.1  | 246.4  | 463.3  | 917.4  | 856.9  | 798.9  | 577.7  | 277.5  |
| 80°   | 26.1   | 27.8   | 36.2   | 75.7   | 129.5  | 160.6  | 445.7  | 396.1  | 315.3  | 183.3  | 66.4   |
| 82.5° | 16.0   | 16.8   | 25.2   | 46.3   | 90.0   | 61.4   | 144.6  | 123.6  | 90.8   | 49.6   | 16.0   |
| 85°   | 5.0    | 5.9    | 17.7   | 31.1   | 43.7   | 25.2   | 32.8   | 28.6   | 25.2   | 21.0   | 5.0    |
| 87.5° | 0.8    | 0.8    | 6.7    | 16.8   | 11.8   | 4.2    | 3.4    | 5.9    | 9.3    | 10.1   | 1.7    |
| 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°    | 280.9  | 280.9 | 280.9 | 280.9 | 280.9 | 280.9 | 280.9 | 280.9 | 280.9 | 280.9 | 280.9 |
| 2.5°  | 282.5  | 280.9 | 279.2 | 278.3 | 278.3 | 276.7 | 275.8 | 275.0 | 275.0 | 274.1 | 274.1 |
| 5°    | 285.9  | 284.2 | 282.5 | 281.7 | 280.0 | 279.2 | 279.2 | 279.2 | 278.3 | 279.2 | 280.0 |
| 7.5°  | 294.3  | 291.8 | 291.0 | 290.1 | 290.1 | 287.6 | 283.4 | 272.5 | 261.5 | 258.2 | 254.8 |
| 10°   | 306.1  | 305.3 | 305.3 | 305.3 | 299.4 | 277.5 | 247.2 | 220.3 | 206.0 | 194.3 | 194.3 |
| 12.5° | 322.9  | 322.9 | 322.1 | 319.5 | 289.3 | 236.3 | 189.2 | 148.8 | 125.3 | 111.8 | 113.5 |
| 15°   | 341.4  | 340.6 | 342.3 | 326.3 | 254.8 | 182.5 | 114.4 | 80.7  | 68.1  | 66.4  | 66.4  |
| 17.5° | 360.8  | 362.4 | 360.8 | 308.6 | 209.4 | 112.7 | 68.1  | 61.4  | 59.7  | 59.7  | 59.7  |
| 20°   | 380.9  | 379.3 | 376.7 | 278.3 | 152.2 | 70.6  | 58.9  | 57.2  | 55.5  | 54.7  | 54.7  |
| 22.5° | 401.1  | 399.4 | 382.6 | 239.7 | 95.0  | 58.0  | 55.5  | 52.1  | 49.6  | 48.8  | 48.8  |
| 25°   | 420.5  | 420.5 | 371.7 | 190.0 | 64.8  | 54.7  | 50.5  | 47.1  | 44.6  | 42.0  | 42.0  |
| 27.5° | 444.8  | 446.5 | 354.0 | 132.9 | 54.7  | 50.5  | 45.4  | 40.4  | 37.0  | 35.3  | 35.3  |
| 30°   | 472.6  | 475.1 | 325.4 | 86.6  | 49.6  | 44.6  | 39.5  | 33.6  | 28.6  | 26.9  | 26.1  |
| 32.5° | 505.4  | 507.9 | 292.6 | 57.2  | 44.6  | 38.7  | 32.8  | 25.2  | 20.2  | 19.3  | 18.5  |
| 35°   | 547.4  | 541.5 | 253.1 | 45.4  | 38.7  | 32.8  | 25.2  | 17.7  | 14.3  | 13.5  | 13.5  |
| 37.5° | 599.6  | 587.0 | 207.7 | 39.5  | 32.8  | 26.1  | 18.5  | 11.8  | 9.3   | 9.3   | 8.4   |
| 40°   | 659.3  | 624.0 | 160.6 | 35.3  | 27.8  | 20.2  | 11.8  | 7.6   | 5.9   | 5.9   | 5.9   |
| 42.5° | 724.9  | 655.1 | 114.4 | 31.1  | 22.7  | 14.3  | 7.6   | 4.2   | 3.4   | 3.4   | 3.4   |
| 45°   | 800.6  | 683.7 | 78.2  | 26.9  | 19.3  | 10.1  | 4.2   | 1.7   | 1.7   | 1.7   | 1.7   |
| 47.5° | 876.2  | 702.2 | 52.1  | 23.5  | 14.3  | 5.9   | 2.5   | 0.8   | 0.8   | 0.8   | 0.8   |
| 50°   | 952.8  | 716.5 | 40.4  | 20.2  | 10.1  | 3.4   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   |
| 52.5° | 1020.9 | 726.6 | 32.8  | 16.8  | 6.7   | 2.5   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   |
| 55°   | 1079.7 | 727.4 | 28.6  | 13.5  | 5.0   | 1.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 57.5° | 1139.4 | 720.7 | 24.4  | 10.1  | 3.4   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 60°   | 1175.6 | 703.0 | 19.3  | 7.6   | 2.5   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 62.5° | 1197.5 | 673.6 | 15.1  | 5.0   | 1.7   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 65°   | 1184.8 | 636.6 | 10.9  | 3.4   | 1.7   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 67.5° | 1126.0 | 579.4 | 7.6   | 2.5   | 0.8   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 69°   | 1056.2 | 527.3 | 6.7   | 1.7   | 0.8   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 70°   | 994.8  | 486.9 | 5.9   | 1.7   | 0.8   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 72.5° | 740.8  | 313.7 | 5.0   | 1.7   | 0.8   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 75°   | 416.3  | 105.1 | 3.4   | 0.8   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 77.5° | 156.4  | 26.9  | 1.7   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 80°   | 34.5   | 6.7   | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 82.5° | 7.6    | 1.7   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 85°   | 2.5    | 0.8   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   | 0.0   |
| 87.5° | 0.8    | 0.0   | 0.0   | 0.0   | 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)