

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: P458523

Luminaire Tested: **GALN-SA1A-735-U-SL4-HSS**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P458523
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-19)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA1A-735-U-SL4-HSS
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 3500K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV SPILL LIGHT
ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3546 lumens
Efficiency: N/A
Efficacy: 107.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B0 - U0 - G1

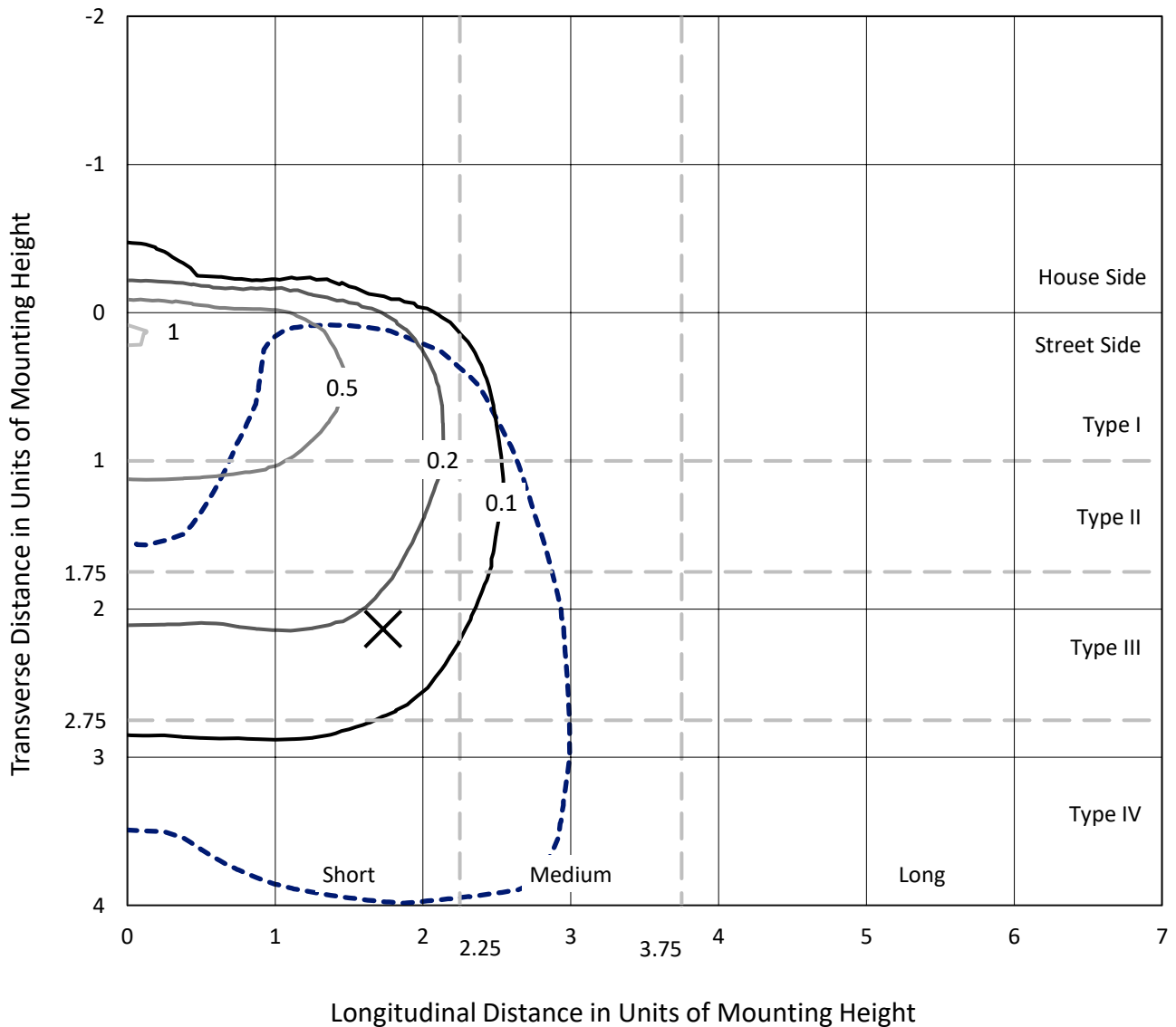
Input Watts (W): 33
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

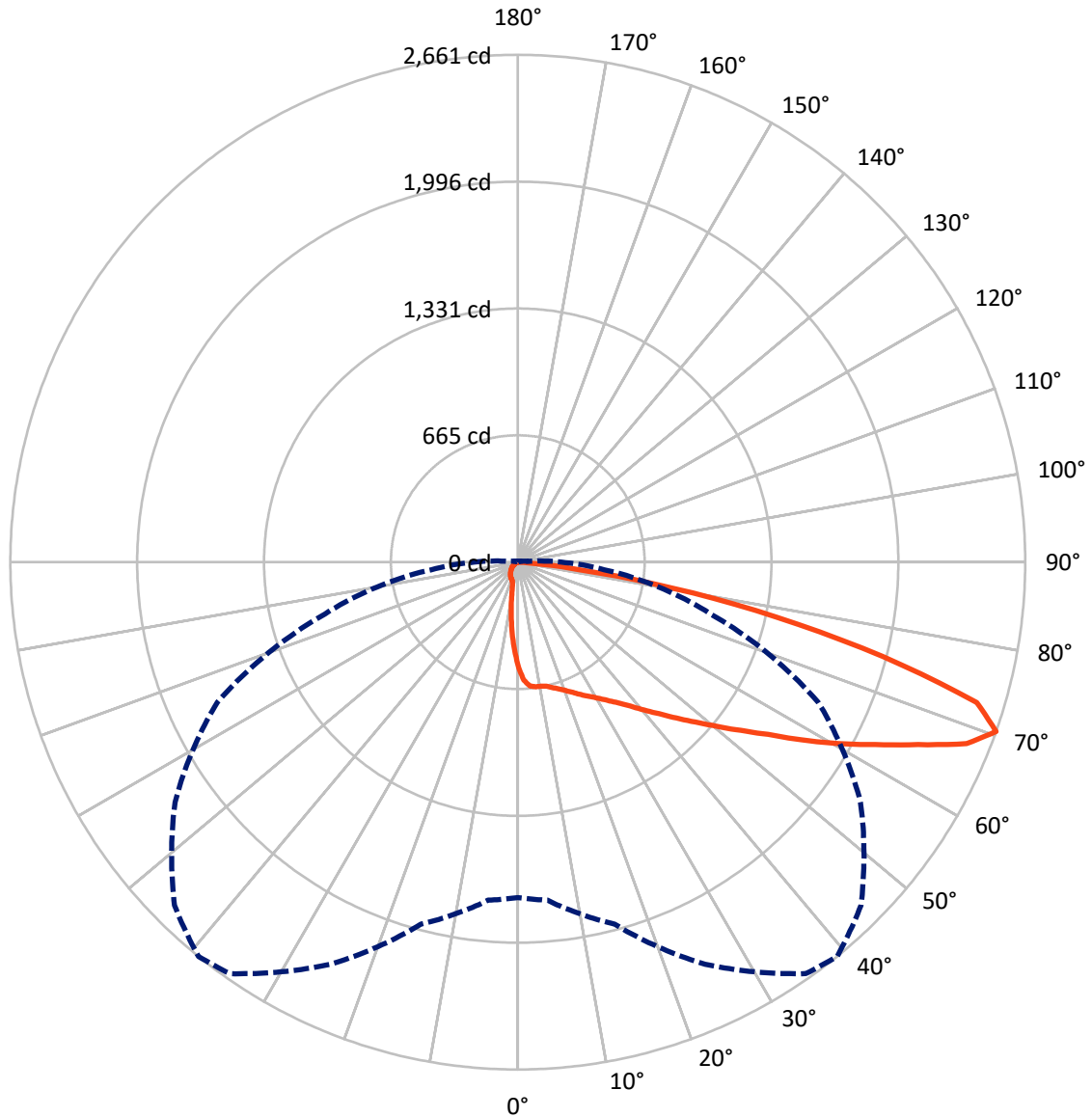
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 1.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 231.2 | 0.0 | 231.2 |
| | % Fixture | 6.5 | 0.0 | 6.5 |
| Street Side | Lumens | 3314.8 | 0.0 | 3314.8 |
| | % Fixture | 93.5 | 0.0 | 93.5 |
| Total | Lumens | 3546.0 | 0.0 | 3546.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 47.2 | 1.3 |
| 10°-20° | 122.6 | 3.5 |
| 20°-30° | 205.5 | 5.8 |
| 30°-40° | 318.6 | 9.0 |
| 40°-50° | 504.9 | 14.2 |
| 50°-60° | 740.2 | 20.9 |
| 60°-70° | 948.7 | 26.8 |
| 70°-80° | 596.1 | 16.8 |
| 80°-90° | 62.1 | 1.8 |
| 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° | 3546.0 | 100.0 |
| 0°-180° | 3546.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P458523

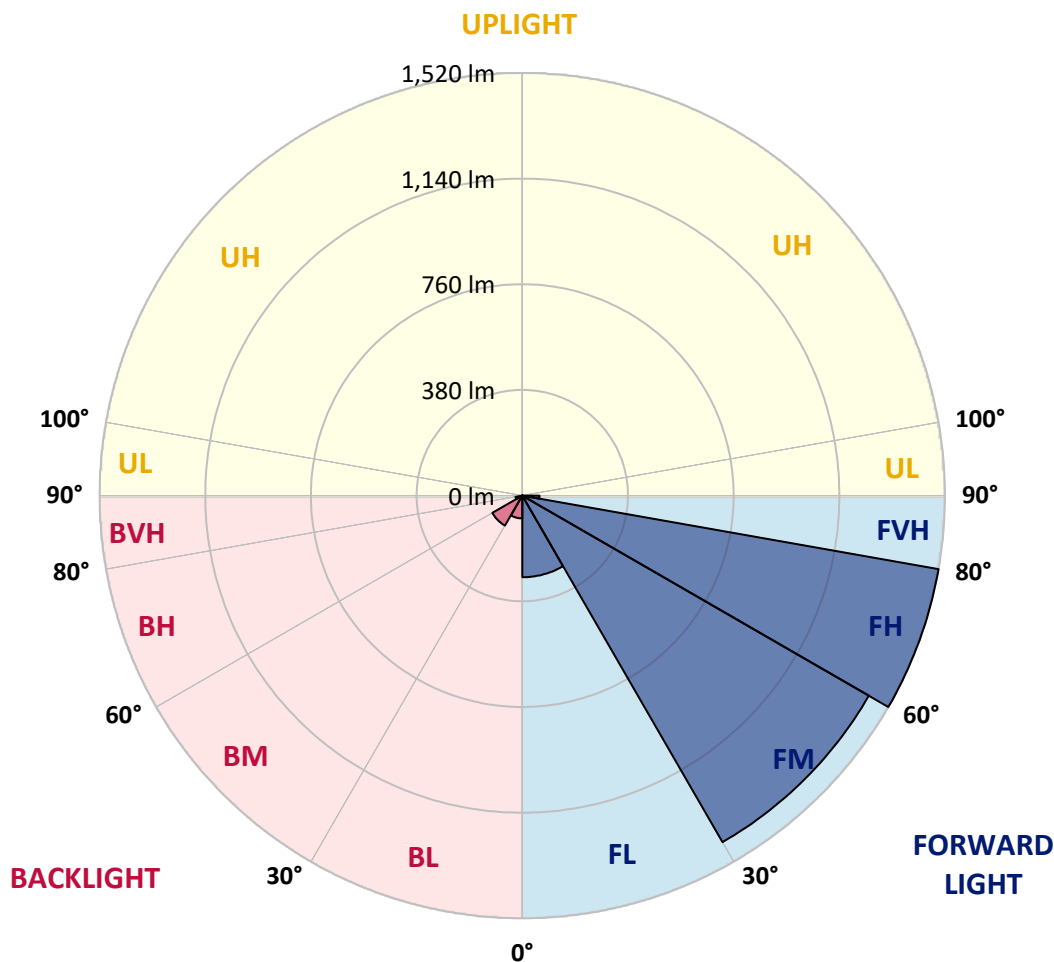
CATALOG NUMBER: GALN-SA1A-735-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 293.4 | 8.3 | | | |
| FM | (30°-60°) | 1439.3 | 40.6 | | | |
| FH | (60°-80°) | 1520.4 | 42.9 | | | G1/1800 |
| FVH | (80°-90°) | 61.6 | 1.7 | | | G1/100 |
| BL | (0°-30°) | 81.9 | 2.3 | B0/110 | | |
| BM | (30°-60°) | 124.4 | 3.5 | B0/220 | | |
| BH | (60°-80°) | 24.5 | 0.7 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 0.5 | 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 IV Short





REPORT NUMBER: P458523

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 39° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 |
| 2.5° | 639.3 | 637.2 | 634.3 | 631.0 | 621.4 | 619.8 | 614.1 | 601.9 | 587.4 | 575.5 | 559.0 |
| 5° | 669.6 | 670.8 | 668.6 | 662.7 | 655.8 | 651.7 | 644.6 | 625.7 | 606.9 | 582.8 | 555.9 |
| 7.5° | 676.5 | 678.9 | 676.3 | 670.5 | 663.9 | 659.6 | 653.9 | 637.7 | 615.7 | 588.3 | 551.4 |
| 10° | 675.8 | 678.6 | 677.0 | 671.7 | 666.2 | 662.2 | 656.0 | 643.1 | 625.5 | 596.7 | 552.8 |
| 12.5° | 674.6 | 678.4 | 678.2 | 675.5 | 671.0 | 667.9 | 664.1 | 652.7 | 636.2 | 608.8 | 560.7 |
| 15° | 671.2 | 676.0 | 680.3 | 682.4 | 682.7 | 682.7 | 677.9 | 665.8 | 650.0 | 624.8 | 570.9 |
| 17.5° | 672.7 | 678.2 | 688.9 | 695.1 | 699.4 | 698.9 | 693.9 | 680.8 | 663.4 | 641.2 | 581.7 |
| 20° | 681.5 | 688.9 | 703.9 | 716.3 | 720.6 | 719.1 | 712.5 | 697.2 | 677.4 | 655.3 | 592.1 |
| 22.5° | 703.2 | 709.9 | 728.7 | 743.2 | 746.3 | 742.5 | 733.0 | 712.2 | 694.4 | 670.5 | 604.8 |
| 25° | 735.6 | 743.4 | 760.8 | 771.8 | 771.8 | 769.7 | 756.3 | 732.0 | 713.4 | 691.7 | 621.2 |
| 27.5° | 774.9 | 781.6 | 798.7 | 808.5 | 802.8 | 796.6 | 783.2 | 753.9 | 736.1 | 718.4 | 641.0 |
| 30° | 814.7 | 819.0 | 837.1 | 841.4 | 835.4 | 827.6 | 813.3 | 784.0 | 768.2 | 754.6 | 669.6 |
| 32.5° | 852.3 | 861.6 | 876.7 | 875.7 | 867.6 | 863.8 | 850.7 | 819.5 | 810.6 | 809.2 | 709.6 |
| 35° | 890.0 | 897.1 | 910.5 | 913.8 | 906.7 | 906.0 | 896.4 | 873.3 | 873.6 | 882.8 | 772.0 |
| 37.5° | 922.4 | 928.8 | 944.6 | 951.9 | 953.4 | 957.0 | 953.1 | 937.9 | 959.6 | 985.1 | 854.7 |
| 40° | 949.6 | 958.6 | 978.6 | 991.5 | 1006.3 | 1019.4 | 1020.1 | 1023.4 | 1067.0 | 1110.9 | 962.7 |
| 42.5° | 970.8 | 983.4 | 1012.5 | 1036.3 | 1070.1 | 1086.8 | 1100.2 | 1118.5 | 1191.9 | 1257.4 | 1089.9 |
| 45° | 998.4 | 1012.9 | 1049.2 | 1086.6 | 1139.5 | 1166.9 | 1185.5 | 1234.6 | 1338.7 | 1428.0 | 1220.5 |
| 47.5° | 1044.2 | 1051.8 | 1088.7 | 1143.3 | 1212.9 | 1251.9 | 1288.2 | 1362.5 | 1496.2 | 1576.3 | 1329.2 |
| 50° | 1103.0 | 1108.0 | 1135.9 | 1211.7 | 1301.8 | 1353.2 | 1419.2 | 1506.7 | 1659.7 | 1699.2 | 1390.6 |
| 52.5° | 1168.1 | 1169.7 | 1190.7 | 1287.0 | 1401.4 | 1466.2 | 1540.0 | 1648.0 | 1792.9 | 1786.9 | 1431.4 |
| 55° | 1243.6 | 1241.2 | 1259.1 | 1368.7 | 1519.3 | 1593.4 | 1679.4 | 1792.6 | 1908.4 | 1849.1 | 1454.7 |
| 57.5° | 1330.1 | 1323.7 | 1341.1 | 1477.1 | 1670.4 | 1759.0 | 1846.5 | 1917.5 | 1998.0 | 1901.3 | 1465.9 |
| 60° | 1420.7 | 1407.8 | 1428.5 | 1598.9 | 1848.4 | 1932.5 | 2005.2 | 2024.2 | 2092.4 | 1942.7 | 1446.6 |
| 62.5° | 1492.9 | 1493.1 | 1531.7 | 1728.5 | 2031.4 | 2105.0 | 2143.6 | 2160.8 | 2173.6 | 1933.7 | 1345.1 |
| 65° | 1605.6 | 1609.4 | 1671.1 | 1908.4 | 2243.2 | 2307.1 | 2333.5 | 2277.8 | 2177.2 | 1821.2 | 1192.6 |
| 67.5° | 1721.8 | 1734.0 | 1846.9 | 2156.2 | 2487.9 | 2539.4 | 2505.3 | 2300.4 | 2080.0 | 1564.6 | 904.3 |
| 70° | 1759.7 | 1779.8 | 1965.9 | 2326.9 | 2634.7 | 2661.4 | 2546.1 | 2194.8 | 1738.8 | 1046.1 | 455.1 |
| 72.5° | 1612.5 | 1644.9 | 1897.5 | 2264.7 | 2541.1 | 2518.0 | 2278.0 | 1840.8 | 1105.4 | 397.2 | 138.9 |
| 75° | 1137.1 | 1151.4 | 1577.0 | 1878.6 | 2043.8 | 1978.2 | 1732.8 | 1186.7 | 454.6 | 111.5 | 47.7 |
| 77.5° | 587.1 | 580.2 | 937.9 | 1246.5 | 1457.6 | 1389.7 | 1134.7 | 614.3 | 172.3 | 46.5 | 29.5 |
| 80° | 303.6 | 308.6 | 405.8 | 653.1 | 889.8 | 818.7 | 605.0 | 284.8 | 91.7 | 25.7 | 22.6 |
| 82.5° | 170.1 | 159.7 | 233.3 | 285.2 | 416.0 | 326.2 | 232.1 | 201.6 | 40.0 | 15.5 | 21.4 |
| 85° | 31.0 | 32.4 | 128.0 | 154.2 | 144.4 | 91.7 | 74.8 | 134.6 | 11.7 | 8.6 | 15.0 |
| 87.5° | 0.5 | 0.5 | 24.8 | 44.3 | 28.1 | 12.9 | 23.6 | 19.3 | 2.4 | 3.3 | 2.6 |
| 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° | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 | 553.3 |
| 2.5° | 550.7 | 541.6 | 524.7 | 508.0 | 486.8 | 469.4 | 457.7 | 445.6 | 433.2 | 434.2 | 437.0 |
| 5° | 541.1 | 525.4 | 492.1 | 456.8 | 423.0 | 392.5 | 362.4 | 335.5 | 324.5 | 314.5 | 315.0 |
| 7.5° | 531.6 | 509.5 | 460.6 | 405.3 | 354.1 | 302.1 | 264.5 | 233.5 | 217.1 | 204.7 | 201.1 |
| 10° | 527.3 | 498.0 | 431.8 | 355.8 | 283.1 | 226.4 | 178.0 | 152.7 | 133.2 | 127.0 | 128.7 |
| 12.5° | 529.2 | 492.3 | 405.8 | 311.0 | 224.5 | 157.7 | 123.9 | 111.0 | 106.8 | 106.0 | 105.6 |
| 15° | 532.8 | 488.2 | 380.3 | 261.4 | 164.9 | 117.2 | 104.1 | 101.7 | 101.3 | 100.8 | 101.0 |
| 17.5° | 537.6 | 484.7 | 353.1 | 214.9 | 126.5 | 102.5 | 98.6 | 97.5 | 97.2 | 97.2 | 97.2 |
| 20° | 542.3 | 480.6 | 322.9 | 173.5 | 105.6 | 96.7 | 94.4 | 93.6 | 93.4 | 93.4 | 93.2 |
| 22.5° | 547.8 | 477.0 | 292.1 | 136.3 | 97.2 | 92.7 | 90.5 | 90.1 | 89.8 | 89.6 | 89.6 |
| 25° | 555.7 | 472.5 | 259.5 | 111.5 | 92.0 | 88.9 | 86.7 | 86.3 | 86.0 | 85.1 | 85.3 |
| 27.5° | 566.2 | 469.2 | 225.9 | 96.3 | 87.2 | 84.1 | 82.7 | 82.0 | 81.5 | 80.8 | 81.0 |
| 30° | 580.5 | 466.3 | 190.2 | 87.9 | 81.7 | 79.1 | 77.7 | 77.2 | 76.7 | 76.0 | 76.0 |
| 32.5° | 605.2 | 467.5 | 152.5 | 81.3 | 76.7 | 73.6 | 72.2 | 71.7 | 71.2 | 70.5 | 70.5 |
| 35° | 642.4 | 474.4 | 122.0 | 75.5 | 70.8 | 67.7 | 66.2 | 66.2 | 65.5 | 64.6 | 64.3 |
| 37.5° | 703.2 | 492.1 | 97.9 | 70.1 | 65.1 | 62.2 | 60.5 | 60.0 | 59.3 | 57.9 | 57.7 |
| 40° | 774.9 | 519.5 | 82.4 | 64.6 | 59.8 | 57.0 | 55.5 | 54.1 | 52.2 | 50.8 | 50.5 |
| 42.5° | 865.0 | 547.6 | 71.5 | 59.1 | 54.8 | 52.2 | 50.5 | 48.1 | 45.3 | 43.4 | 43.1 |
| 45° | 958.9 | 573.3 | 64.1 | 54.1 | 50.0 | 47.9 | 46.0 | 42.2 | 38.6 | 36.2 | 36.0 |
| 47.5° | 1028.9 | 578.1 | 58.1 | 49.3 | 46.0 | 43.8 | 41.2 | 36.5 | 31.7 | 29.5 | 28.8 |
| 50° | 1062.0 | 555.0 | 51.9 | 44.6 | 41.9 | 39.6 | 36.2 | 30.7 | 25.5 | 22.9 | 22.4 |
| 52.5° | 1073.7 | 514.9 | 46.9 | 40.3 | 37.9 | 35.0 | 31.0 | 24.8 | 20.0 | 17.4 | 17.2 |
| 55° | 1068.9 | 464.4 | 42.4 | 36.2 | 33.1 | 29.8 | 25.7 | 19.8 | 14.8 | 12.6 | 12.2 |
| 57.5° | 1043.9 | 400.1 | 37.9 | 32.2 | 28.4 | 25.0 | 20.5 | 14.8 | 10.0 | 8.1 | 7.9 |
| 60° | 976.5 | 312.4 | 33.4 | 27.6 | 24.1 | 20.5 | 16.2 | 10.5 | 6.2 | 4.5 | 4.5 |
| 62.5° | 862.6 | 231.9 | 29.1 | 23.1 | 20.3 | 16.4 | 11.4 | 6.7 | 3.3 | 2.4 | 2.1 |
| 65° | 720.8 | 171.1 | 24.3 | 19.5 | 16.9 | 12.9 | 8.1 | 4.1 | 1.7 | 0.7 | 0.5 |
| 67.5° | 503.0 | 105.6 | 20.3 | 16.0 | 13.8 | 9.3 | 5.0 | 1.7 | 0.7 | 0.0 | 0.0 |
| 70° | 228.5 | 50.3 | 15.5 | 12.2 | 10.5 | 6.7 | 2.6 | 1.0 | 0.5 | 0.0 | 0.0 |
| 72.5° | 71.0 | 26.4 | 11.0 | 8.8 | 7.1 | 4.3 | 1.4 | 0.7 | 0.5 | 0.0 | 0.0 |
| 75° | 32.9 | 16.9 | 6.9 | 4.8 | 4.1 | 2.1 | 1.0 | 0.5 | 0.2 | 0.0 | 0.0 |
| 77.5° | 24.5 | 13.1 | 4.1 | 2.6 | 2.1 | 1.4 | 0.7 | 0.5 | 0.2 | 0.0 | 0.0 |
| 80° | 21.4 | 6.7 | 2.4 | 1.7 | 1.2 | 1.0 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 |
| 82.5° | 19.3 | 3.3 | 1.4 | 1.0 | 0.7 | 0.5 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 |
| 85° | 10.5 | 1.9 | 1.0 | 0.7 | 0.5 | 0.2 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| 87.5° | 1.9 | 1.0 | 0.7 | 0.5 | 0.5 | 0.2 | 0.2 | 0.2 | 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)