

Signify Classified - Internal
Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269



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: LUMARK

Report Number: P1449802

Luminaire Tested: **AXCS5ARL-GRF-W**

Issue Date: 5/12/2026

Test Information

Test Method: LM-79-08
Report Number: P1449802
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1901-095-3)
Test Lab: INNOVATION CENTER
Issue Date: 5/12/2026
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: AXCS5ARL-GRF-W
Description: 5A AXCENT LED REFRACTIVE LENS WALLPACK WITH 3000K 80CRI LEDS AND GLARE REDUCTING LENS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5474 lumens
Efficiency: N/A
Efficacy: 122.7 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.17' x L: 0.5' x H: 0.17')
IES Classification: Type IV - Short
BUG Rating: B1 - U4 - G3

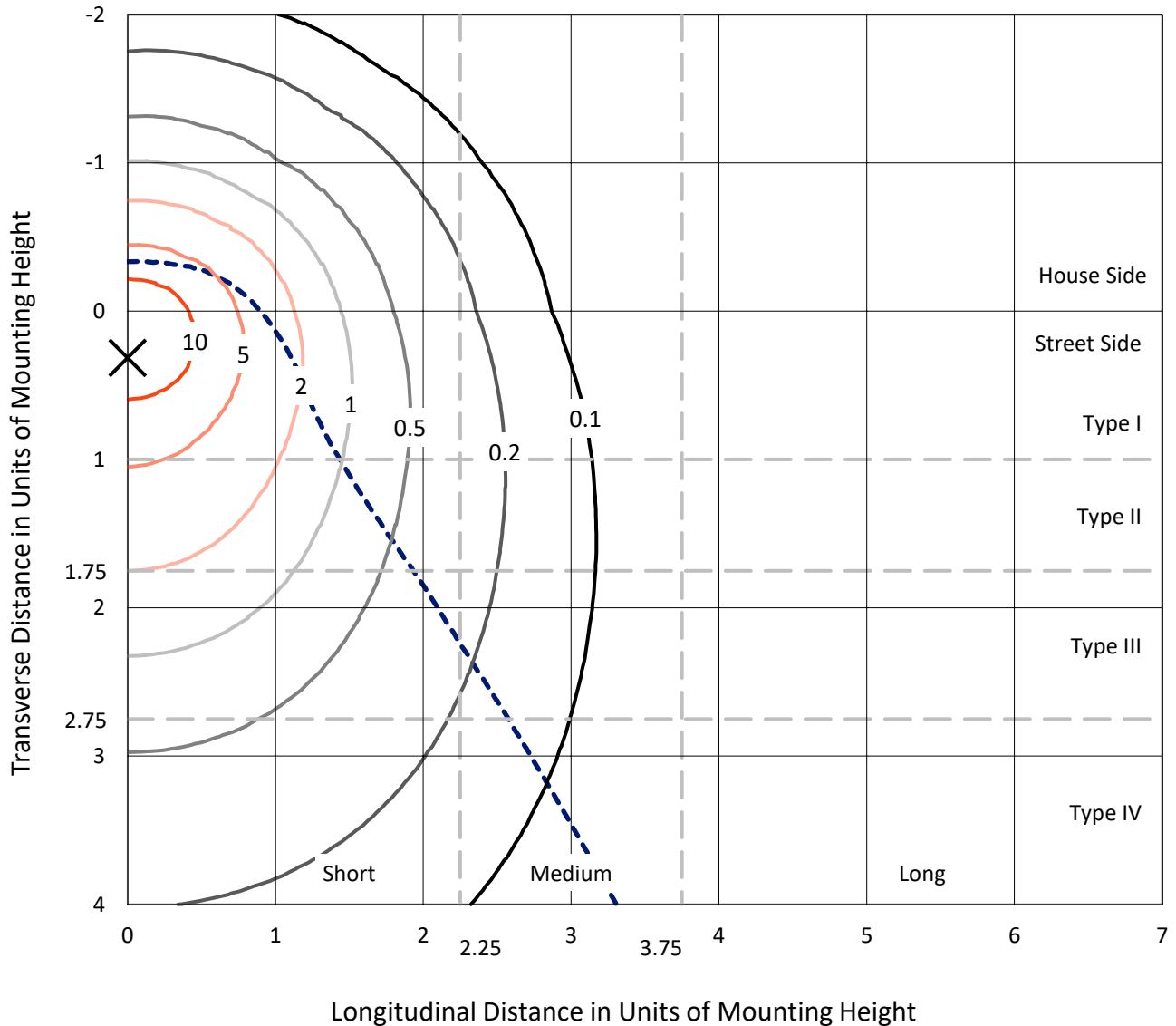
Input Watts (W): 44.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Iso-Footcandle Lines of Horizontal Illumination

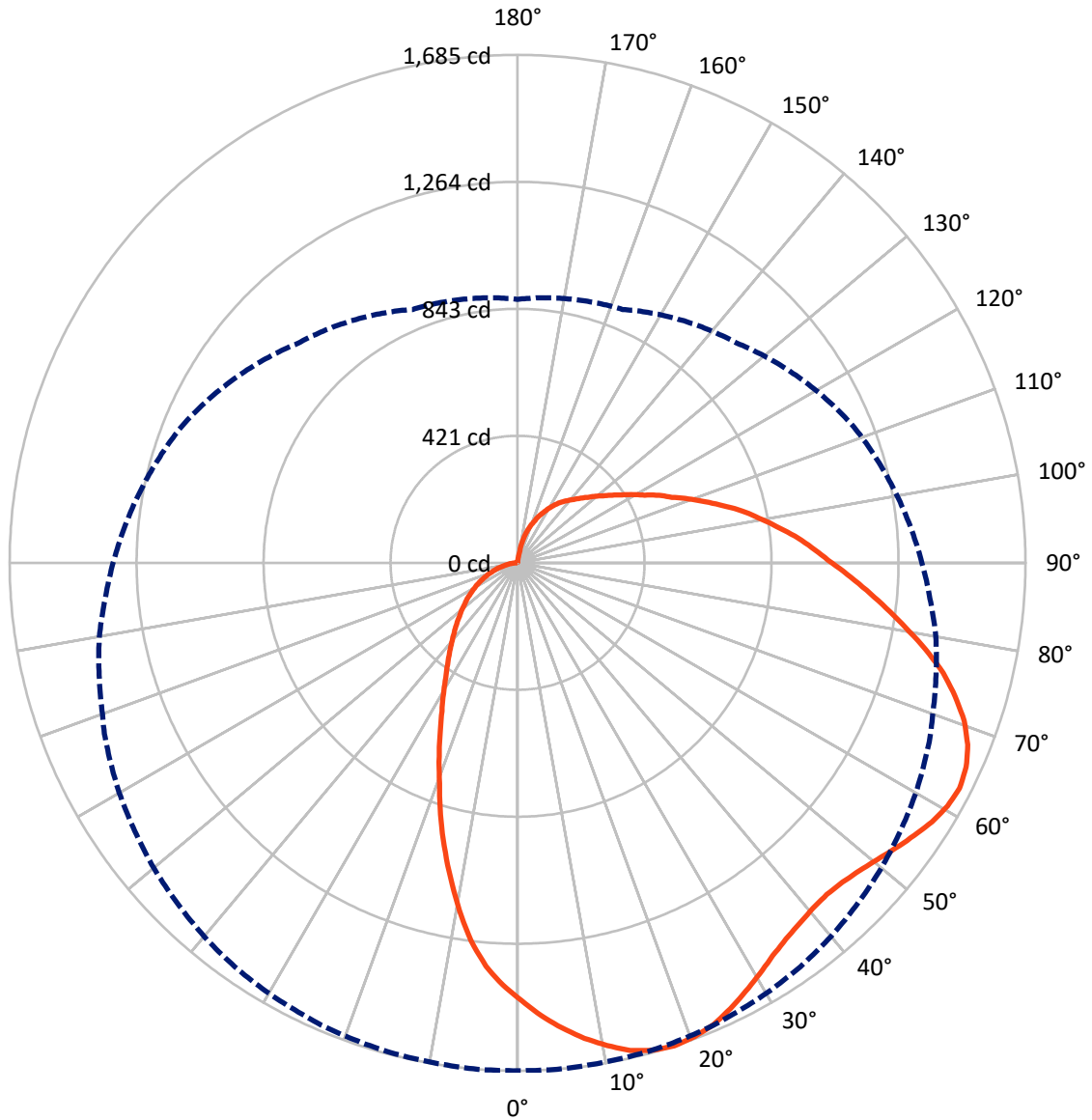
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 17.5-Deg Vertical

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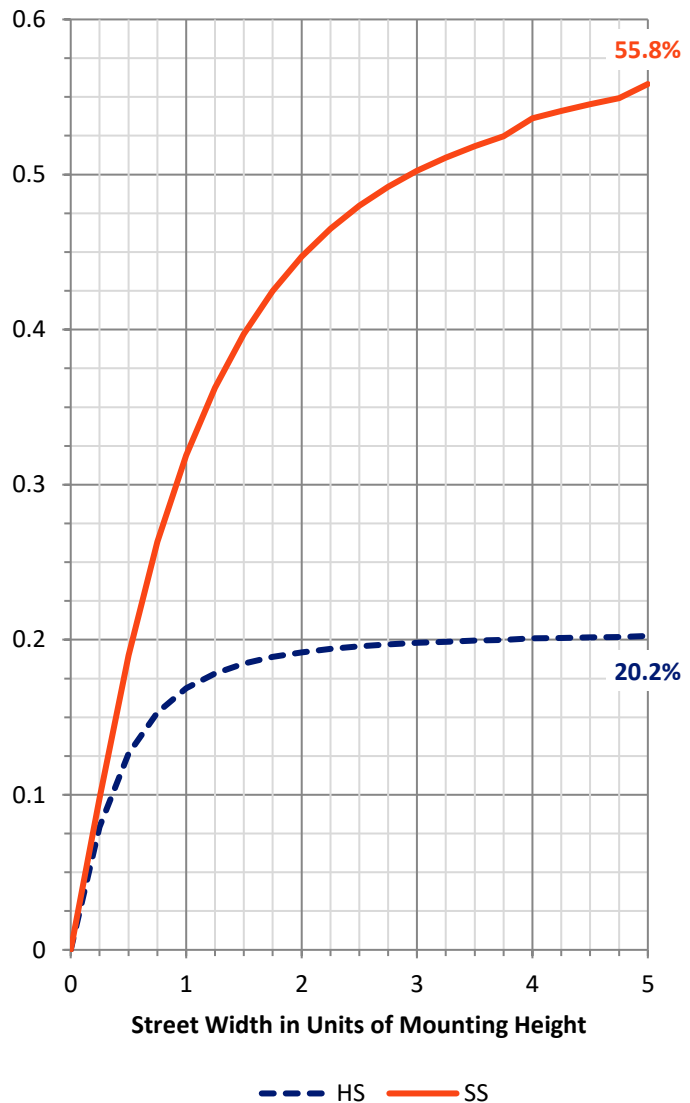
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1127.1 | 77.1 | 1204.2 |
| | % Fixture | 20.6 | 1.4 | 22.0 |
| Street Side | Lumens | 3313.6 | 956.1 | 4269.7 |
| | % Fixture | 60.5 | 17.5 | 78.0 |
| Total | Lumens | 4440.8 | 1033.2 | 5474.0 |
| | % Fixture | 81.1 | 18.9 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 136.8 | 2.5 |
| 10°-20° | 380.2 | 6.9 |
| 20°-30° | 543.2 | 9.9 |
| 30°-40° | 618.6 | 11.3 |
| 40°-50° | 636.4 | 11.6 |
| 50°-60° | 630.3 | 11.5 |
| 60°-70° | 596.4 | 10.9 |
| 70°-80° | 508.2 | 9.3 |
| 80°-90° | 390.8 | 7.1 |
| 90°-100° | 309.1 | 5.6 |
| 100°-110° | 242.9 | 4.4 |
| 110°-120° | 178.4 | 3.3 |
| 120°-130° | 126.6 | 2.3 |
| 130°-140° | 86.8 | 1.6 |
| 140°-150° | 54.0 | 1.0 |
| 150°-160° | 27.1 | 0.5 |
| 160°-170° | 7.9 | 0.1 |
| 170°-180° | 0.4 | 0.0 |
| 0°-90° | 4440.8 | 81.1 |
| 0°-180° | 5474.0 | 100.0 |

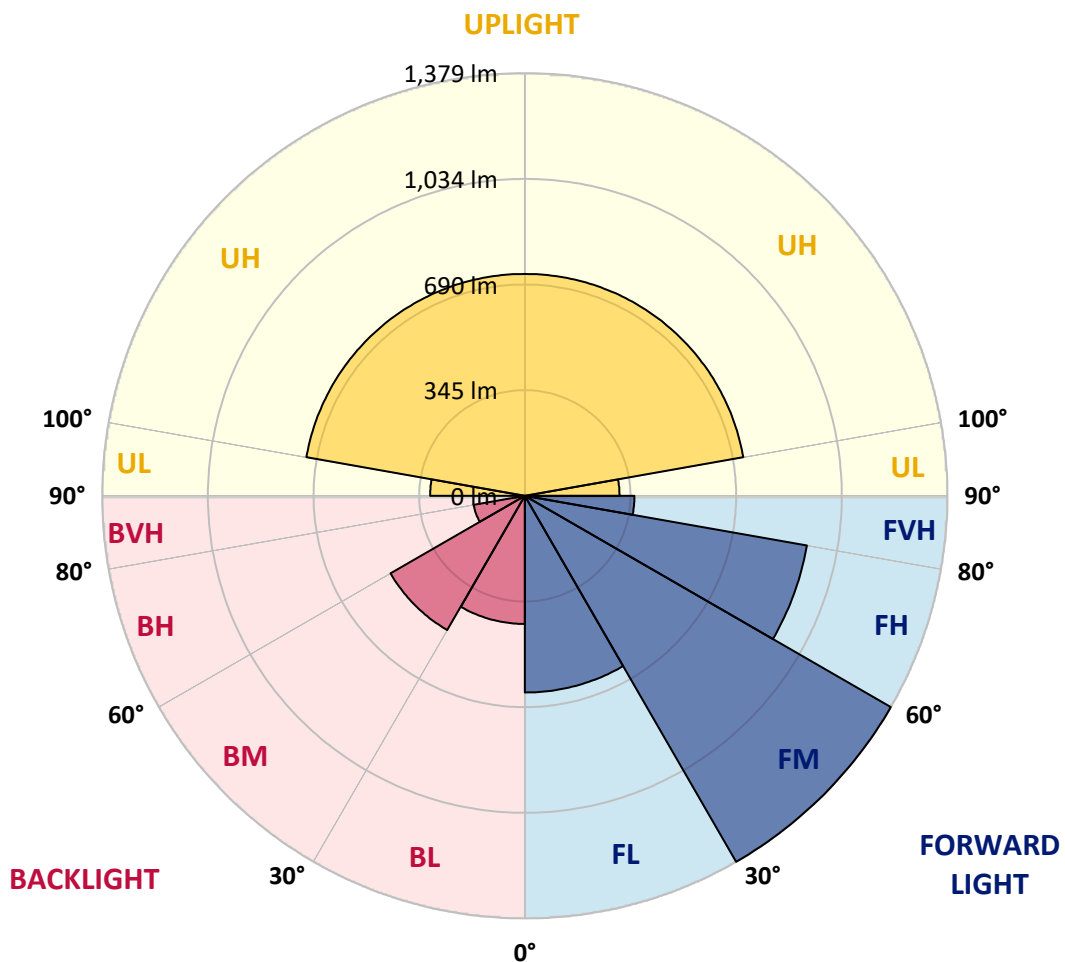


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|---------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 642.0 | 11.7 | | | |
| FM | (30°-60°) | 1379.3 | 25.2 | | | |
| FH | (60°-80°) | 934.9 | 17.1 | | | G1/1800 |
| FVH | (80°-90°) | 357.5 | 6.5 | | | G3/500 |
| BL | (0°-30°) | 418.2 | 7.6 | B1/500 | | |
| BM | (30°-60°) | 506.0 | 9.2 | B1/1000 | | |
| BH | (60°-80°) | 169.6 | 3.1 | B1/500 | | G1/500 |
| BVH | (80°-90°) | 33.3 | 0.6 | | | G1/100 |
| UL | (90°-100°) | 309.1 | 5.6 | | U3/500 | |
| UH | (100°-180°) | 724.1 | 13.2 | | U4/1000 | |

BUG Rating: B1-U4-G3
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 |
| 2.5° | 1504.5 | 1504.5 | 1504.5 | 1501.0 | 1501.0 | 1501.0 | 1501.0 | 1501.0 | 1493.9 | 1493.9 | 1490.4 |
| 5° | 1550.5 | 1550.5 | 1550.5 | 1547.0 | 1547.0 | 1543.5 | 1539.9 | 1536.4 | 1532.8 | 1525.8 | 1522.2 |
| 7.5° | 1593.0 | 1589.5 | 1589.5 | 1585.9 | 1582.4 | 1582.4 | 1578.9 | 1571.8 | 1564.7 | 1554.1 | 1547.0 |
| 10° | 1628.4 | 1628.4 | 1624.9 | 1621.3 | 1617.8 | 1614.3 | 1610.7 | 1600.1 | 1589.5 | 1578.9 | 1568.2 |
| 12.5° | 1660.3 | 1656.7 | 1656.7 | 1649.7 | 1642.6 | 1639.0 | 1635.5 | 1628.4 | 1614.3 | 1600.1 | 1582.4 |
| 15° | 1678.0 | 1678.0 | 1674.4 | 1667.4 | 1660.3 | 1656.7 | 1653.2 | 1642.6 | 1628.4 | 1610.7 | 1593.0 |
| 17.5° | 1685.1 | 1685.1 | 1681.5 | 1678.0 | 1670.9 | 1667.4 | 1660.3 | 1649.7 | 1635.5 | 1617.8 | 1596.6 |
| 20° | 1678.0 | 1678.0 | 1674.4 | 1670.9 | 1667.4 | 1660.3 | 1656.7 | 1646.1 | 1632.0 | 1614.3 | 1593.0 |
| 22.5° | 1663.8 | 1663.8 | 1660.3 | 1656.7 | 1649.7 | 1646.1 | 1642.6 | 1632.0 | 1617.8 | 1600.1 | 1578.9 |
| 25° | 1639.0 | 1635.5 | 1635.5 | 1632.0 | 1624.9 | 1621.3 | 1617.8 | 1607.2 | 1593.0 | 1578.9 | 1557.6 |
| 27.5° | 1610.7 | 1607.2 | 1603.6 | 1600.1 | 1596.6 | 1589.5 | 1585.9 | 1578.9 | 1564.7 | 1547.0 | 1525.8 |
| 30° | 1582.4 | 1578.9 | 1578.9 | 1571.8 | 1564.7 | 1561.2 | 1554.1 | 1543.5 | 1529.3 | 1508.1 | 1490.4 |
| 32.5° | 1554.1 | 1554.1 | 1547.0 | 1543.5 | 1532.8 | 1525.8 | 1522.2 | 1504.5 | 1490.4 | 1469.1 | 1444.3 |
| 35° | 1532.8 | 1532.8 | 1525.8 | 1518.7 | 1504.5 | 1497.4 | 1490.4 | 1469.1 | 1451.4 | 1426.6 | 1398.3 |
| 37.5° | 1518.7 | 1515.1 | 1508.1 | 1493.9 | 1479.7 | 1472.7 | 1462.0 | 1437.3 | 1412.5 | 1384.2 | 1355.8 |
| 40° | 1508.1 | 1504.5 | 1493.9 | 1483.3 | 1462.0 | 1451.4 | 1437.3 | 1408.9 | 1377.1 | 1341.7 | 1306.3 |
| 42.5° | 1504.5 | 1501.0 | 1490.4 | 1472.7 | 1447.9 | 1433.7 | 1416.0 | 1380.6 | 1345.2 | 1302.7 | 1260.3 |
| 45° | 1511.6 | 1504.5 | 1490.4 | 1469.1 | 1437.3 | 1419.6 | 1401.9 | 1359.4 | 1313.4 | 1267.3 | 1217.8 |
| 47.5° | 1525.8 | 1518.7 | 1501.0 | 1476.2 | 1440.8 | 1416.0 | 1394.8 | 1345.2 | 1288.6 | 1235.5 | 1175.3 |
| 50° | 1547.0 | 1536.4 | 1518.7 | 1486.8 | 1444.3 | 1419.6 | 1391.2 | 1331.1 | 1267.3 | 1203.6 | 1139.9 |
| 52.5° | 1571.8 | 1561.2 | 1539.9 | 1504.5 | 1455.0 | 1426.6 | 1394.8 | 1324.0 | 1253.2 | 1178.8 | 1104.5 |
| 55° | 1596.6 | 1589.5 | 1561.2 | 1522.2 | 1465.6 | 1433.7 | 1398.3 | 1320.4 | 1239.0 | 1154.1 | 1072.6 |
| 57.5° | 1621.3 | 1610.7 | 1585.9 | 1539.9 | 1479.7 | 1444.3 | 1401.9 | 1316.9 | 1224.9 | 1132.8 | 1044.3 |
| 60° | 1639.0 | 1628.4 | 1600.1 | 1550.5 | 1486.8 | 1444.3 | 1401.9 | 1309.8 | 1210.7 | 1111.6 | 1012.5 |
| 62.5° | 1646.1 | 1632.0 | 1603.6 | 1554.1 | 1483.3 | 1444.3 | 1398.3 | 1299.2 | 1193.0 | 1083.3 | 984.1 |
| 65° | 1635.5 | 1624.9 | 1596.6 | 1547.0 | 1472.7 | 1430.2 | 1384.2 | 1281.5 | 1171.8 | 1058.5 | 952.3 |
| 67.5° | 1610.7 | 1600.1 | 1571.8 | 1522.2 | 1451.4 | 1405.4 | 1359.4 | 1253.2 | 1139.9 | 1026.6 | 916.9 |
| 70° | 1571.8 | 1564.7 | 1532.8 | 1486.8 | 1412.5 | 1370.0 | 1324.0 | 1217.8 | 1104.5 | 991.2 | 881.5 |
| 72.5° | 1518.7 | 1511.6 | 1483.3 | 1433.7 | 1366.5 | 1324.0 | 1278.0 | 1175.3 | 1065.6 | 952.3 | 839.0 |
| 75° | 1458.5 | 1444.3 | 1416.0 | 1373.5 | 1309.8 | 1267.3 | 1224.9 | 1125.7 | 1019.5 | 906.3 | 800.1 |
| 77.5° | 1384.2 | 1377.1 | 1348.8 | 1309.8 | 1242.6 | 1207.2 | 1164.7 | 1069.1 | 966.4 | 860.2 | 757.6 |
| 80° | 1306.3 | 1302.7 | 1281.5 | 1235.5 | 1178.8 | 1143.4 | 1101.0 | 1012.5 | 913.3 | 810.7 | 711.6 |
| 82.5° | 1231.9 | 1228.4 | 1207.2 | 1164.7 | 1108.0 | 1076.2 | 1040.8 | 952.3 | 860.2 | 764.7 | 672.6 |
| 85° | 1161.1 | 1154.1 | 1136.4 | 1097.4 | 1044.3 | 1012.5 | 977.1 | 895.6 | 807.1 | 722.2 | 630.1 |
| 87.5° | 1093.9 | 1086.8 | 1065.6 | 1030.2 | 984.1 | 948.7 | 916.9 | 842.5 | 761.1 | 679.7 | 598.3 |
| 90° | 1030.2 | 1026.6 | 1005.4 | 977.1 | 927.5 | 899.2 | 867.3 | 800.1 | 722.2 | 644.3 | 566.4 |
| 92.5° | 977.1 | 973.5 | 955.8 | 920.4 | 877.9 | 853.2 | 821.3 | 761.1 | 690.3 | 616.0 | 548.7 |
| 95° | 924.0 | 916.9 | 899.2 | 874.4 | 831.9 | 810.7 | 778.8 | 722.2 | 658.5 | 591.2 | 523.9 |
| 97.5° | 867.3 | 863.8 | 849.6 | 821.3 | 785.9 | 764.7 | 739.9 | 683.2 | 626.6 | 566.4 | 506.2 |
| 100° | 814.2 | 810.7 | 800.1 | 775.3 | 739.9 | 718.6 | 697.4 | 647.8 | 594.7 | 538.1 | 481.4 |
| 102.5° | 764.7 | 757.6 | 747.0 | 722.2 | 693.9 | 672.6 | 654.9 | 608.9 | 559.3 | 506.2 | 460.2 |
| 105° | 708.0 | 704.5 | 690.3 | 676.2 | 644.3 | 630.1 | 608.9 | 569.9 | 523.9 | 477.9 | 431.9 |
| 107.5° | 654.9 | 651.4 | 640.8 | 626.6 | 601.8 | 584.1 | 566.4 | 531.0 | 492.1 | 449.6 | 407.1 |
| 110° | 605.3 | 601.8 | 594.7 | 580.6 | 555.8 | 545.2 | 531.0 | 499.1 | 463.7 | 424.8 | 385.9 |



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 CATALOG NUMBER: AXCS5ARL-GRF-W

CANDELA DISTRIBUTION (continued):

| | 0° | 5° | 10° | 15° | 20° | 22.5° | 25° | 30° | 35° | 40° | 45° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 112.5° | 555.8 | 555.8 | 548.7 | 538.1 | 516.8 | 502.7 | 492.1 | 463.7 | 431.9 | 400.0 | 364.6 |
| 115° | 520.4 | 513.3 | 509.8 | 495.6 | 481.4 | 470.8 | 460.2 | 431.9 | 407.1 | 375.2 | 346.9 |
| 117.5° | 477.9 | 477.9 | 470.8 | 460.2 | 446.0 | 435.4 | 428.3 | 403.6 | 378.8 | 354.0 | 325.7 |
| 120° | 446.0 | 442.5 | 439.0 | 428.3 | 414.2 | 407.1 | 400.0 | 378.8 | 357.5 | 332.8 | 308.0 |
| 122.5° | 414.2 | 410.6 | 407.1 | 400.0 | 389.4 | 382.3 | 375.2 | 357.5 | 336.3 | 315.1 | 293.8 |
| 125° | 385.9 | 385.9 | 382.3 | 375.2 | 364.6 | 357.5 | 350.5 | 336.3 | 318.6 | 297.4 | 276.1 |
| 127.5° | 361.1 | 361.1 | 357.5 | 350.5 | 343.4 | 336.3 | 329.2 | 318.6 | 300.9 | 283.2 | 265.5 |
| 130° | 339.8 | 336.3 | 336.3 | 329.2 | 322.1 | 315.1 | 311.5 | 297.4 | 283.2 | 269.0 | 251.3 |
| 132.5° | 318.6 | 318.6 | 315.1 | 308.0 | 304.4 | 297.4 | 293.8 | 283.2 | 269.0 | 254.9 | 237.2 |
| 135° | 300.9 | 300.9 | 297.4 | 293.8 | 286.7 | 283.2 | 279.7 | 269.0 | 254.9 | 240.7 | 226.6 |
| 137.5° | 283.2 | 283.2 | 279.7 | 276.1 | 272.6 | 269.0 | 262.0 | 254.9 | 240.7 | 226.6 | 212.4 |
| 140° | 269.0 | 269.0 | 265.5 | 262.0 | 254.9 | 251.3 | 247.8 | 240.7 | 230.1 | 215.9 | 201.8 |
| 142.5° | 254.9 | 254.9 | 251.3 | 247.8 | 240.7 | 237.2 | 233.6 | 226.6 | 215.9 | 201.8 | 187.6 |
| 145° | 240.7 | 237.2 | 237.2 | 233.6 | 226.6 | 223.0 | 219.5 | 212.4 | 201.8 | 187.6 | 173.5 |
| 147.5° | 223.0 | 223.0 | 219.5 | 215.9 | 208.9 | 205.3 | 201.8 | 194.7 | 184.1 | 173.5 | 159.3 |
| 150° | 205.3 | 205.3 | 201.8 | 198.2 | 194.7 | 191.2 | 187.6 | 180.5 | 169.9 | 159.3 | 145.1 |
| 152.5° | 187.6 | 187.6 | 184.1 | 180.5 | 177.0 | 173.5 | 169.9 | 162.8 | 152.2 | 145.1 | 134.5 |
| 155° | 169.9 | 169.9 | 166.4 | 162.8 | 159.3 | 155.8 | 152.2 | 145.1 | 138.1 | 127.4 | 120.4 |
| 157.5° | 148.7 | 148.7 | 148.7 | 145.1 | 141.6 | 138.1 | 134.5 | 127.4 | 120.4 | 113.3 | 106.2 |
| 160° | 131.0 | 131.0 | 127.4 | 127.4 | 123.9 | 120.4 | 116.8 | 113.3 | 106.2 | 99.1 | 92.0 |
| 162.5° | 113.3 | 109.7 | 109.7 | 106.2 | 106.2 | 102.7 | 99.1 | 95.6 | 88.5 | 85.0 | 67.3 |
| 165° | 92.0 | 92.0 | 92.0 | 88.5 | 85.0 | 85.0 | 81.4 | 74.3 | 60.2 | 49.6 | 38.9 |
| 167.5° | 63.7 | 63.7 | 60.2 | 53.1 | 49.6 | 46.0 | 42.5 | 35.4 | 31.9 | 28.3 | 28.3 |
| 170° | 24.8 | 24.8 | 24.8 | 24.8 | 24.8 | 24.8 | 24.8 | 24.8 | 24.8 | 21.2 | 21.2 |
| 172.5° | 17.7 | 17.7 | 17.7 | 14.2 | 14.2 | 14.2 | 14.2 | 14.2 | 14.2 | 10.6 | 10.6 |
| 175° | 3.5 | 3.5 | 3.5 | 3.5 | 7.1 | 3.5 | 7.1 | 7.1 | 3.5 | 3.5 | 3.5 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P1449802

CATALOG NUMBER: AXCS5ARL-GRF-W

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 112.5° |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 | 1451.4 |
| 2.5° | 1486.8 | 1479.7 | 1479.7 | 1472.7 | 1472.7 | 1469.1 | 1465.6 | 1458.5 | 1455.0 | 1451.4 | 1426.6 |
| 5° | 1515.1 | 1508.1 | 1497.4 | 1490.4 | 1486.8 | 1479.7 | 1472.7 | 1462.0 | 1455.0 | 1444.3 | 1401.9 |
| 7.5° | 1536.4 | 1525.8 | 1511.6 | 1501.0 | 1493.9 | 1486.8 | 1472.7 | 1462.0 | 1447.9 | 1433.7 | 1373.5 |
| 10° | 1554.1 | 1539.9 | 1525.8 | 1508.1 | 1501.0 | 1490.4 | 1472.7 | 1455.0 | 1437.3 | 1416.0 | 1338.1 |
| 12.5° | 1568.2 | 1550.5 | 1529.3 | 1508.1 | 1501.0 | 1490.4 | 1465.6 | 1444.3 | 1423.1 | 1398.3 | 1295.7 |
| 15° | 1575.3 | 1554.1 | 1529.3 | 1504.5 | 1493.9 | 1479.7 | 1455.0 | 1426.6 | 1401.9 | 1373.5 | 1249.6 |
| 17.5° | 1575.3 | 1550.5 | 1525.8 | 1497.4 | 1483.3 | 1465.6 | 1437.3 | 1408.9 | 1373.5 | 1341.7 | 1200.1 |
| 20° | 1568.2 | 1539.9 | 1511.6 | 1479.7 | 1465.6 | 1447.9 | 1416.0 | 1380.6 | 1345.2 | 1306.3 | 1143.4 |
| 22.5° | 1554.1 | 1525.8 | 1493.9 | 1458.5 | 1440.8 | 1423.1 | 1387.7 | 1348.8 | 1309.8 | 1267.3 | 1083.3 |
| 25° | 1529.3 | 1501.0 | 1465.6 | 1433.7 | 1412.5 | 1391.2 | 1352.3 | 1309.8 | 1267.3 | 1221.3 | 1019.5 |
| 27.5° | 1501.0 | 1469.1 | 1437.3 | 1398.3 | 1377.1 | 1355.8 | 1309.8 | 1267.3 | 1221.3 | 1175.3 | 959.4 |
| 30° | 1462.0 | 1430.2 | 1394.8 | 1355.8 | 1334.6 | 1313.4 | 1267.3 | 1221.3 | 1171.8 | 1118.7 | 899.2 |
| 32.5° | 1419.6 | 1387.7 | 1348.8 | 1309.8 | 1285.0 | 1263.8 | 1217.8 | 1168.2 | 1118.7 | 1065.6 | 831.9 |
| 35° | 1373.5 | 1338.1 | 1299.2 | 1256.7 | 1235.5 | 1210.7 | 1161.1 | 1111.6 | 1062.0 | 1008.9 | 771.7 |
| 37.5° | 1320.4 | 1285.0 | 1246.1 | 1203.6 | 1178.8 | 1157.6 | 1104.5 | 1054.9 | 1001.8 | 945.2 | 711.6 |
| 40° | 1270.9 | 1231.9 | 1189.5 | 1147.0 | 1122.2 | 1097.4 | 1047.9 | 994.8 | 938.1 | 885.0 | 658.5 |
| 42.5° | 1217.8 | 1175.3 | 1132.8 | 1086.8 | 1062.0 | 1033.7 | 984.1 | 931.0 | 877.9 | 821.3 | 601.8 |
| 45° | 1168.2 | 1122.2 | 1072.6 | 1026.6 | 1001.8 | 977.1 | 920.4 | 870.9 | 814.2 | 761.1 | 552.2 |
| 47.5° | 1122.2 | 1069.1 | 1019.5 | 966.4 | 941.7 | 916.9 | 863.8 | 810.7 | 757.6 | 708.0 | 506.2 |
| 50° | 1076.2 | 1019.5 | 962.9 | 909.8 | 885.0 | 860.2 | 803.6 | 754.0 | 697.4 | 647.8 | 463.7 |
| 52.5° | 1033.7 | 970.0 | 909.8 | 856.7 | 828.4 | 803.6 | 750.5 | 693.9 | 644.3 | 594.7 | 421.3 |
| 55° | 994.8 | 924.0 | 860.2 | 800.1 | 775.3 | 750.5 | 693.9 | 640.8 | 591.2 | 541.6 | 385.9 |
| 57.5° | 959.4 | 881.5 | 814.2 | 754.0 | 722.2 | 697.4 | 644.3 | 591.2 | 541.6 | 492.1 | 350.5 |
| 60° | 924.0 | 842.5 | 768.2 | 704.5 | 676.2 | 647.8 | 594.7 | 545.2 | 495.6 | 449.6 | 318.6 |
| 62.5° | 885.0 | 803.6 | 725.7 | 662.0 | 630.1 | 601.8 | 548.7 | 499.1 | 449.6 | 403.6 | 286.7 |
| 65° | 849.6 | 764.7 | 686.8 | 619.5 | 587.6 | 559.3 | 506.2 | 456.7 | 407.1 | 364.6 | 258.4 |
| 67.5° | 814.2 | 725.7 | 647.8 | 577.0 | 545.2 | 516.8 | 463.7 | 414.2 | 368.2 | 329.2 | 230.1 |
| 70° | 778.8 | 686.8 | 605.3 | 541.6 | 509.8 | 477.9 | 424.8 | 375.2 | 329.2 | 290.3 | 205.3 |
| 72.5° | 739.9 | 651.4 | 573.5 | 502.7 | 470.8 | 442.5 | 389.4 | 339.8 | 293.8 | 258.4 | 180.5 |
| 75° | 700.9 | 612.4 | 534.5 | 467.3 | 435.4 | 407.1 | 350.5 | 304.4 | 258.4 | 223.0 | 159.3 |
| 77.5° | 658.5 | 573.5 | 499.1 | 431.9 | 403.6 | 371.7 | 318.6 | 269.0 | 226.6 | 194.7 | 134.5 |
| 80° | 623.0 | 538.1 | 467.3 | 400.0 | 371.7 | 343.4 | 286.7 | 240.7 | 198.2 | 169.9 | 116.8 |
| 82.5° | 584.1 | 502.7 | 431.9 | 368.2 | 339.8 | 311.5 | 258.4 | 212.4 | 169.9 | 141.6 | 99.1 |
| 85° | 548.7 | 474.4 | 403.6 | 343.4 | 315.1 | 286.7 | 237.2 | 187.6 | 148.7 | 123.9 | 85.0 |
| 87.5° | 520.4 | 449.6 | 382.3 | 322.1 | 293.8 | 269.0 | 215.9 | 169.9 | 131.0 | 106.2 | 74.3 |
| 90° | 495.6 | 428.3 | 364.6 | 308.0 | 283.2 | 254.9 | 205.3 | 159.3 | 120.4 | 99.1 | 63.7 |
| 92.5° | 481.4 | 417.7 | 357.5 | 304.4 | 276.1 | 251.3 | 201.8 | 155.8 | 116.8 | 95.6 | 63.7 |
| 95° | 463.7 | 403.6 | 346.9 | 293.8 | 269.0 | 244.3 | 194.7 | 152.2 | 116.8 | 95.6 | 63.7 |
| 97.5° | 446.0 | 389.4 | 336.3 | 286.7 | 262.0 | 237.2 | 191.2 | 148.7 | 113.3 | 92.0 | 60.2 |
| 100° | 428.3 | 375.2 | 322.1 | 276.1 | 251.3 | 230.1 | 184.1 | 145.1 | 109.7 | 88.5 | 60.2 |
| 102.5° | 407.1 | 357.5 | 311.5 | 265.5 | 244.3 | 219.5 | 180.5 | 141.6 | 109.7 | 88.5 | 60.2 |
| 105° | 385.9 | 339.8 | 297.4 | 254.9 | 233.6 | 212.4 | 173.5 | 134.5 | 106.2 | 85.0 | 56.6 |
| 107.5° | 368.2 | 325.7 | 283.2 | 244.3 | 223.0 | 205.3 | 166.4 | 131.0 | 102.7 | 81.4 | 56.6 |
| 110° | 346.9 | 308.0 | 272.6 | 233.6 | 215.9 | 198.2 | 162.8 | 127.4 | 99.1 | 77.9 | 56.6 |



REPORT NUMBER: P1449802
 CATALOG NUMBER: AXCS5ARL-GRF-W

CANDELA DISTRIBUTION (continued):

| | 50° | 55° | 60° | 65° | 67.5° | 70° | 75° | 80° | 85° | 90° | 112.5° |
|--------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|--------|
| 112.5° | 329.2 | 293.8 | 258.4 | 226.6 | 205.3 | 187.6 | 155.8 | 123.9 | 95.6 | 74.3 | 53.1 |
| 115° | 311.5 | 279.7 | 247.8 | 215.9 | 198.2 | 180.5 | 148.7 | 116.8 | 88.5 | 70.8 | 49.6 |
| 117.5° | 297.4 | 265.5 | 237.2 | 205.3 | 187.6 | 173.5 | 141.6 | 113.3 | 85.0 | 67.3 | 49.6 |
| 120° | 283.2 | 254.9 | 226.6 | 194.7 | 180.5 | 166.4 | 134.5 | 106.2 | 81.4 | 63.7 | 46.0 |
| 122.5° | 269.0 | 240.7 | 215.9 | 187.6 | 173.5 | 159.3 | 131.0 | 102.7 | 77.9 | 60.2 | 42.5 |
| 125° | 254.9 | 230.1 | 205.3 | 180.5 | 166.4 | 152.2 | 123.9 | 99.1 | 74.3 | 56.6 | 42.5 |
| 127.5° | 244.3 | 219.5 | 194.7 | 169.9 | 155.8 | 145.1 | 116.8 | 92.0 | 70.8 | 53.1 | 38.9 |
| 130° | 230.1 | 208.9 | 187.6 | 162.8 | 148.7 | 138.1 | 109.7 | 88.5 | 63.7 | 49.6 | 38.9 |
| 132.5° | 219.5 | 198.2 | 177.0 | 152.2 | 141.6 | 127.4 | 106.2 | 81.4 | 60.2 | 46.0 | 35.4 |
| 135° | 208.9 | 187.6 | 166.4 | 145.1 | 131.0 | 120.4 | 99.1 | 77.9 | 56.6 | 46.0 | 31.9 |
| 137.5° | 194.7 | 177.0 | 155.8 | 134.5 | 123.9 | 113.3 | 92.0 | 70.8 | 53.1 | 42.5 | 31.9 |
| 140° | 184.1 | 166.4 | 145.1 | 127.4 | 116.8 | 106.2 | 85.0 | 67.3 | 46.0 | 38.9 | 28.3 |
| 142.5° | 169.9 | 152.2 | 134.5 | 116.8 | 109.7 | 99.1 | 77.9 | 60.2 | 42.5 | 35.4 | 24.8 |
| 145° | 159.3 | 145.1 | 127.4 | 109.7 | 99.1 | 92.0 | 74.3 | 56.6 | 38.9 | 31.9 | 24.8 |
| 147.5° | 145.1 | 131.0 | 116.8 | 99.1 | 92.0 | 81.4 | 67.3 | 49.6 | 31.9 | 28.3 | 21.2 |
| 150° | 134.5 | 120.4 | 106.2 | 92.0 | 81.4 | 74.3 | 60.2 | 46.0 | 28.3 | 24.8 | 17.7 |
| 152.5° | 120.4 | 109.7 | 95.6 | 81.4 | 70.8 | 63.7 | 53.1 | 38.9 | 24.8 | 21.2 | 17.7 |
| 155° | 109.7 | 99.1 | 85.0 | 67.3 | 60.2 | 56.6 | 46.0 | 35.4 | 21.2 | 17.7 | 14.2 |
| 157.5° | 95.6 | 85.0 | 67.3 | 56.6 | 53.1 | 49.6 | 38.9 | 28.3 | 17.7 | 14.2 | 10.6 |
| 160° | 81.4 | 63.7 | 49.6 | 46.0 | 46.0 | 42.5 | 31.9 | 21.2 | 14.2 | 14.2 | 10.6 |
| 162.5° | 53.1 | 42.5 | 42.5 | 38.9 | 35.4 | 31.9 | 24.8 | 17.7 | 10.6 | 10.6 | 7.1 |
| 165° | 35.4 | 35.4 | 31.9 | 28.3 | 28.3 | 24.8 | 17.7 | 10.6 | 10.6 | 7.1 | 7.1 |
| 167.5° | 28.3 | 24.8 | 24.8 | 21.2 | 17.7 | 14.2 | 10.6 | 7.1 | 7.1 | 7.1 | 3.5 |
| 170° | 17.7 | 17.7 | 14.2 | 10.6 | 10.6 | 10.6 | 7.1 | 3.5 | 3.5 | 3.5 | 3.5 |
| 172.5° | 10.6 | 10.6 | 7.1 | 7.1 | 7.1 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 0.0 |
| 175° | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 3.5 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P1449802
 CATALOG NUMBER: AXCS5ARL-GRF-W

CANDELA DISTRIBUTION (continued):

| | 135° | 157.5° | 180° |
|--------|--------|--------|--------|
| 0° | 1451.4 | 1451.4 | 1451.4 |
| 2.5° | 1408.9 | 1398.3 | 1401.9 |
| 5° | 1366.5 | 1341.7 | 1341.7 |
| 7.5° | 1316.9 | 1274.4 | 1263.8 |
| 10° | 1253.2 | 1185.9 | 1168.2 |
| 12.5° | 1185.9 | 1101.0 | 1069.1 |
| 15° | 1108.0 | 1001.8 | 970.0 |
| 17.5° | 1030.2 | 909.8 | 874.4 |
| 20° | 952.3 | 821.3 | 775.3 |
| 22.5° | 874.4 | 736.3 | 693.9 |
| 25° | 800.1 | 662.0 | 619.5 |
| 27.5° | 729.3 | 594.7 | 552.2 |
| 30° | 662.0 | 538.1 | 499.1 |
| 32.5° | 605.3 | 488.5 | 449.6 |
| 35° | 548.7 | 439.0 | 410.6 |
| 37.5° | 499.1 | 403.6 | 375.2 |
| 40° | 460.2 | 371.7 | 343.4 |
| 42.5° | 417.7 | 339.8 | 315.1 |
| 45° | 382.3 | 311.5 | 290.3 |
| 47.5° | 350.5 | 286.7 | 265.5 |
| 50° | 322.1 | 265.5 | 244.3 |
| 52.5° | 297.4 | 244.3 | 223.0 |
| 55° | 269.0 | 223.0 | 205.3 |
| 57.5° | 247.8 | 201.8 | 184.1 |
| 60° | 226.6 | 184.1 | 166.4 |
| 62.5° | 201.8 | 166.4 | 148.7 |
| 65° | 184.1 | 148.7 | 131.0 |
| 67.5° | 162.8 | 131.0 | 113.3 |
| 70° | 145.1 | 113.3 | 95.6 |
| 72.5° | 127.4 | 95.6 | 81.4 |
| 75° | 109.7 | 81.4 | 67.3 |
| 77.5° | 92.0 | 67.3 | 49.6 |
| 80° | 77.9 | 53.1 | 38.9 |
| 82.5° | 63.7 | 42.5 | 28.3 |
| 85° | 53.1 | 31.9 | 17.7 |
| 87.5° | 42.5 | 21.2 | 7.1 |
| 90° | 31.9 | 7.1 | 0.0 |
| 92.5° | 31.9 | 7.1 | 0.0 |
| 95° | 31.9 | 7.1 | 0.0 |
| 97.5° | 31.9 | 7.1 | 0.0 |
| 100° | 31.9 | 7.1 | 0.0 |
| 102.5° | 28.3 | 7.1 | 0.0 |
| 105° | 28.3 | 7.1 | 0.0 |
| 107.5° | 28.3 | 7.1 | 0.0 |
| 110° | 28.3 | 7.1 | 0.0 |



REPORT NUMBER: P1449802
CATALOG NUMBER: AXCS5ARL-GRF-W

CANDELA DISTRIBUTION (continued):

| | 135° | 157.5° | 180° |
|--------|------|--------|------|
| 112.5° | 28.3 | 7.1 | 0.0 |
| 115° | 24.8 | 7.1 | 0.0 |
| 117.5° | 24.8 | 7.1 | 0.0 |
| 120° | 24.8 | 3.5 | 0.0 |
| 122.5° | 21.2 | 3.5 | 0.0 |
| 125° | 21.2 | 3.5 | 0.0 |
| 127.5° | 21.2 | 3.5 | 0.0 |
| 130° | 17.7 | 3.5 | 0.0 |
| 132.5° | 17.7 | 3.5 | 0.0 |
| 135° | 17.7 | 3.5 | 0.0 |
| 137.5° | 14.2 | 3.5 | 0.0 |
| 140° | 14.2 | 0.0 | 0.0 |
| 142.5° | 10.6 | 0.0 | 0.0 |
| 145° | 10.6 | 0.0 | 0.0 |
| 147.5° | 10.6 | 0.0 | 0.0 |
| 150° | 7.1 | 0.0 | 0.0 |
| 152.5° | 7.1 | 0.0 | 0.0 |
| 155° | 7.1 | 0.0 | 0.0 |
| 157.5° | 3.5 | 0.0 | 0.0 |
| 160° | 3.5 | 0.0 | 0.0 |
| 162.5° | 3.5 | 0.0 | 0.0 |
| 165° | 0.0 | 0.0 | 0.0 |
| 167.5° | 0.0 | 0.0 | 0.0 |
| 170° | 0.0 | 0.0 | 0.0 |
| 172.5° | 0.0 | 0.0 | 0.0 |
| 175° | 0.0 | 0.0 | 0.0 |
| 177.5° | 0.0 | 0.0 | 0.0 |
| 180° | 0.0 | 0.0 | 0.0 |

LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

Lumark

Report Number: SP1-2512-637-1

Test Date: 01/12/2026

Luminaire Tested: AXCS4A-W

Data in this report applies to families of products including AXCS4A-W

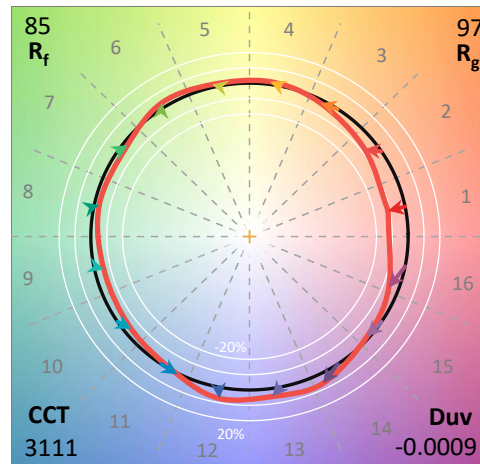
Test Information

Test Method: LM-79-2019
 Report Number: SP1-2512-637-1
 Test Lab: COOPER LIGHTING SOLUTIONS
 Photometer: SP1 - 76IN SPHERE
 Measurement Geometry: 4π
 Issue Date: 01/13/2026
 Manufacturer: COOPER LIGHTING SOLUTIONS
 Product Line: Lumark
 Catalog Number: **AXCS4A-W**
 Description: 4A AXCENT SMALL WALLPACK, FULL CUTOFF, 3000K

Spectral Parameters

CCT (K): 3111
 CIE u': 0.2472
 CIE v': 0.5179
 Duv: -0.0009
 CIE x: 0.4280
 CIE y: 0.3986
 CIE z: 0.1733
 Peak Wavelength (nm): 601
 Dominant Wavelength (nm): 582
 Purity: 48.11977
 Rf: 85.3
 Rg: 96.7

| | | | |
|-----------|------|------|------|
| CRI (Ra): | 83.4 | | |
| R1: | 82.0 | R9: | 8.9 |
| R2: | 91.4 | R10: | 80.6 |
| R3: | 96.3 | R11: | 81.8 |
| R4: | 81.9 | R12: | 73.2 |
| R5: | 82.5 | R13: | 84.3 |
| R6: | 89.7 | R14: | 98.6 |
| R7: | 83.1 | R15: | 74.6 |
| R8: | 60.2 | | |



Test Conditions

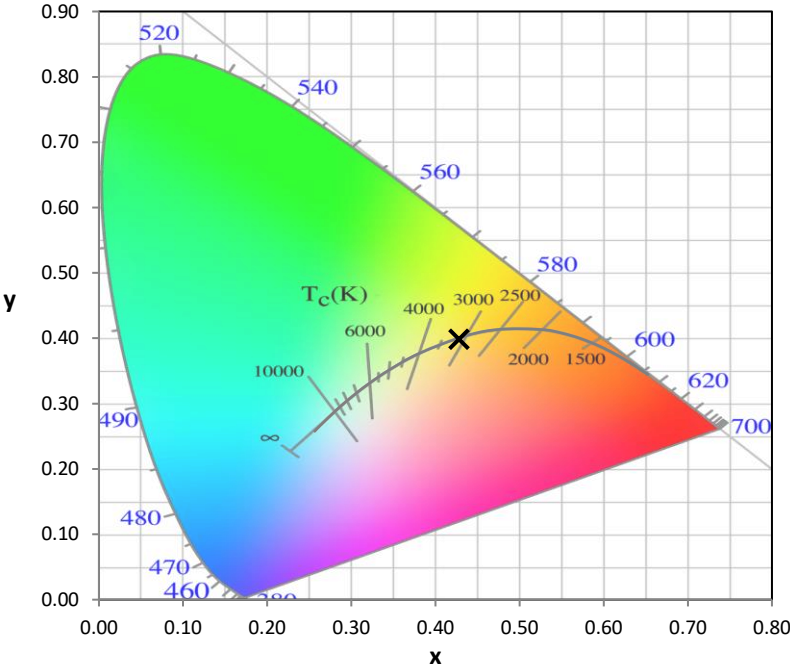
Stabilization Time: 52M
 Operation Time: 1H 52M
 Sphere Temperature (°C): 25.1

REPORT NUMBER: SP1-2512-637-1

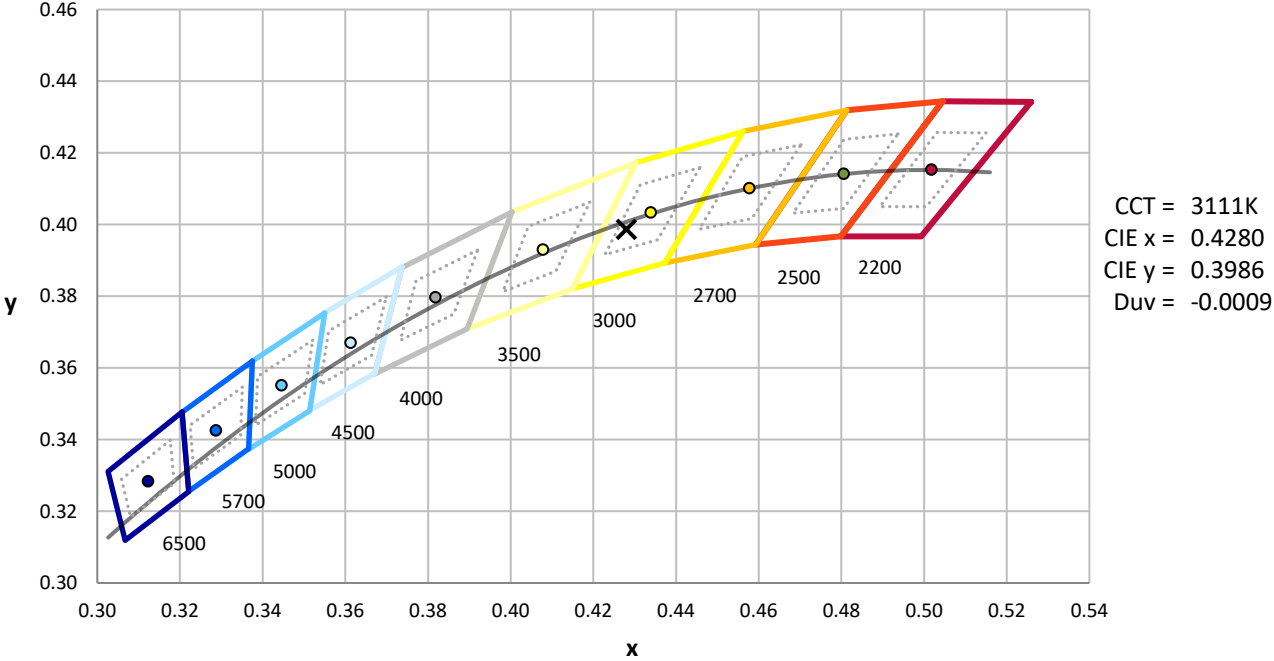
| Measurement and Test Equipment | | | |
|--------------------------------|-----------------------|------------------|----------------------|
| Instrument | Identification Number | Calibration Date | Calibration Due Date |
| Photometer | 76INCH SPHERE IN0058 | 12/16/2025 | 6/16/2026 |
| Power Meter | XITRON INXT2011004 | 10/21/2025 | 10/21/2026 |
| AC Power Source | CHROMA 61603 IN0063 | 10/21/2025 | 10/21/2026 |
| DC Power Source | AGILENT E3634A IN0208 | 10/21/2025 | 10/21/2026 |
| Sphere Thermometer | ONSET IN0085 | 10/21/2025 | 10/21/2026 |
| Room Thermometer | ONSET IN0046 | 10/21/2025 | 10/21/2026 |

REPORT NUMBER: SP1-2512-637-1

CIE 1931 Chromaticity Diagram



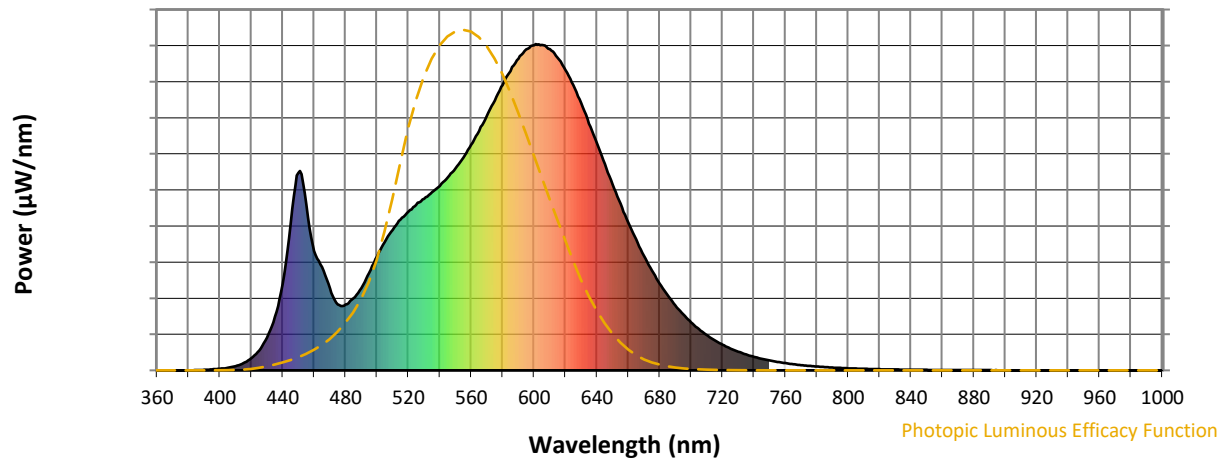
CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles



Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2512-637-1

Photopic Flux vs. Wavelength

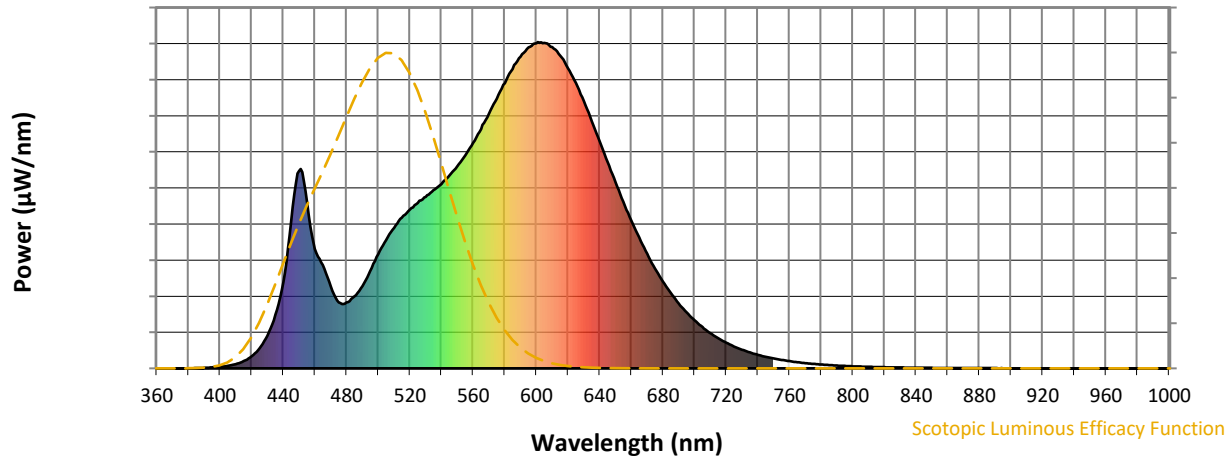


Photopic Lumens: NR

| λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) | λ (nm) | Power W [^] /nm | Lumens (ϕ /nm) |
|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|-------------------|-----------------------------|-------------------------|
| 360 | 0 | NR | 490 | 252 | NR | 620 | 920 | NR | 750 | 30 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 298 | NR | 625 | 875 | NR | 755 | 26 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 349 | NR | 630 | 819 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 394 | NR | 635 | 756 | NR | 765 | 19 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 431 | NR | 640 | 696 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 1 | NR | 515 | 462 | NR | 645 | 633 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 487 | NR | 650 | 570 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 3 | NR | 525 | 507 | NR | 655 | 511 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 5 | NR | 530 | 525 | NR | 660 | 453 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 546 | NR | 665 | 401 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 13 | NR | 540 | 565 | NR | 670 | 352 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 22 | NR | 545 | 591 | NR | 675 | 306 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 38 | NR | 550 | 619 | NR | 680 | 266 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 61 | NR | 555 | 652 | NR | 685 | 230 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 100 | NR | 560 | 691 | NR | 690 | 199 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 165 | NR | 565 | 734 | NR | 695 | 171 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 265 | NR | 570 | 780 | NR | 700 | 147 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 450 | NR | 575 | 826 | NR | 705 | 126 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 605 | NR | 580 | 874 | NR | 710 | 108 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 508 | NR | 585 | 917 | NR | 715 | 92 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 366 | NR | 590 | 956 | NR | 720 | 79 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 317 | NR | 595 | 983 | NR | 725 | 67 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 251 | NR | 600 | 997 | NR | 730 | 57 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 202 | NR | 605 | 997 | NR | 735 | 49 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 202 | NR | 610 | 984 | NR | 740 | 42 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 220 | NR | 615 | 958 | NR | 745 | 35 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2512-637-1

Scotopic Flux vs. Wavelength



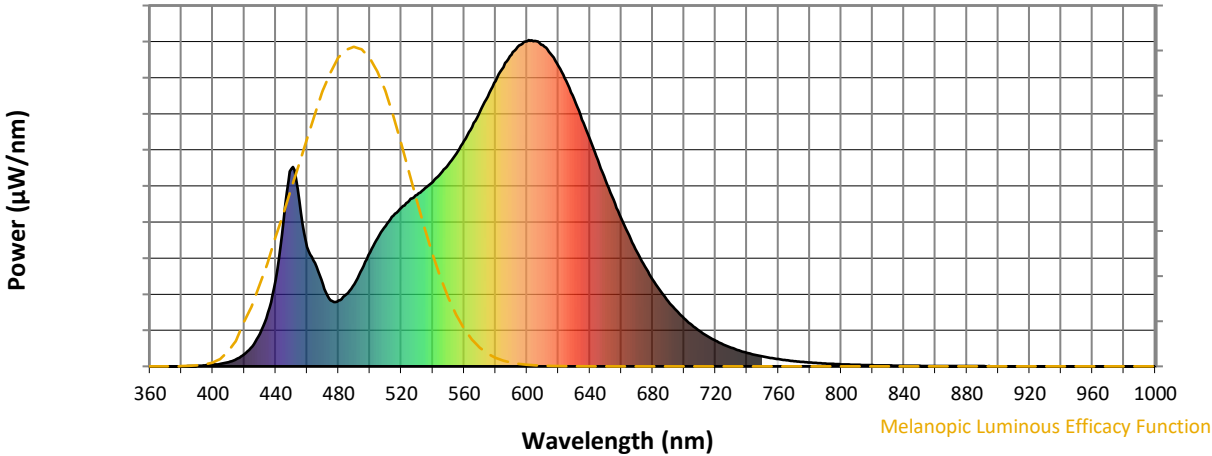
Scotopic Lumens: NR

S/P: 1.4

| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 252 | NR | 620 | 920 | NR | 750 | 30 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 298 | NR | 625 | 875 | NR | 755 | 26 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 349 | NR | 630 | 819 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 394 | NR | 635 | 756 | NR | 765 | 19 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 431 | NR | 640 | 696 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 1 | NR | 515 | 462 | NR | 645 | 633 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 487 | NR | 650 | 570 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 3 | NR | 525 | 507 | NR | 655 | 511 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 5 | NR | 530 | 525 | NR | 660 | 453 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 546 | NR | 665 | 401 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 13 | NR | 540 | 565 | NR | 670 | 352 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 22 | NR | 545 | 591 | NR | 675 | 306 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 38 | NR | 550 | 619 | NR | 680 | 266 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 61 | NR | 555 | 652 | NR | 685 | 230 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 100 | NR | 560 | 691 | NR | 690 | 199 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 165 | NR | 565 | 734 | NR | 695 | 171 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 265 | NR | 570 | 780 | NR | 700 | 147 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 450 | NR | 575 | 826 | NR | 705 | 126 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 605 | NR | 580 | 874 | NR | 710 | 108 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 508 | NR | 585 | 917 | NR | 715 | 92 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 366 | NR | 590 | 956 | NR | 720 | 79 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 317 | NR | 595 | 983 | NR | 725 | 67 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 251 | NR | 600 | 997 | NR | 730 | 57 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 202 | NR | 605 | 997 | NR | 735 | 49 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 202 | NR | 610 | 984 | NR | 740 | 42 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 220 | NR | 615 | 958 | NR | 745 | 35 | NR | 875 | 1 | NR | | | |

REPORT NUMBER: SP1-2512-637-1

Melanopic Flux vs. Wavelength



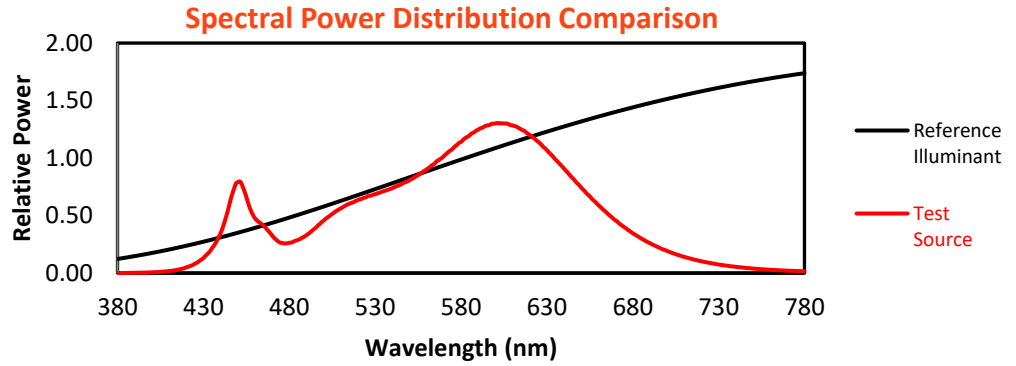
Melanopic Lumens: NR

M/P: 2.73

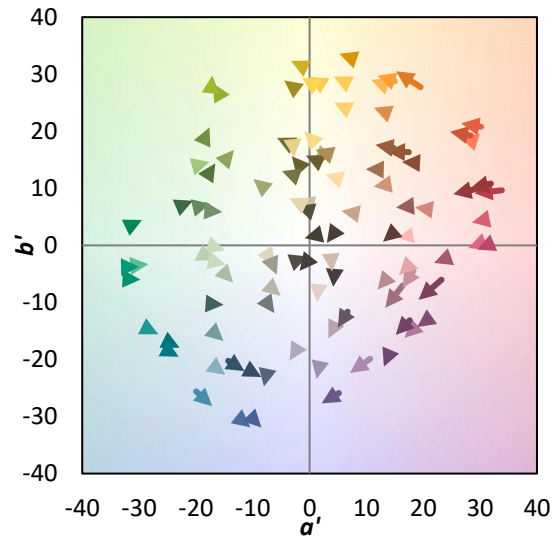
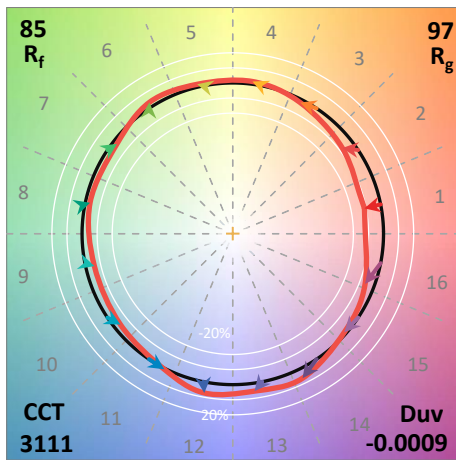
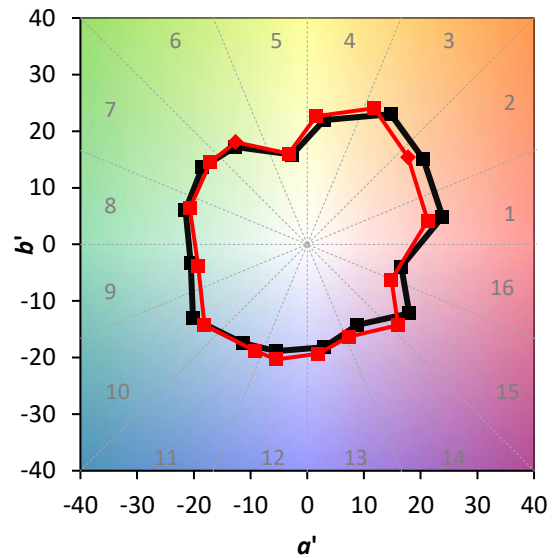
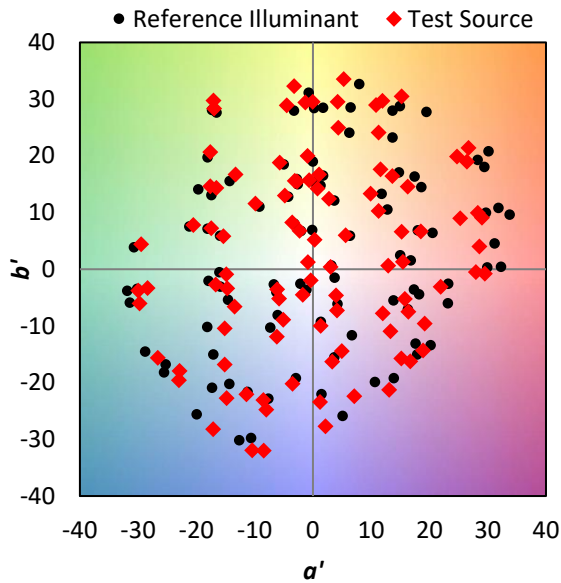
| λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) | λ (nm) | Power W [^] /nm | Lumens (φ/nm) |
|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|--------|--------------------------|---------------|
| 360 | 0 | NR | 490 | 252 | NR | 620 | 920 | NR | 750 | 30 | NR | 880 | 1 | NR |
| 365 | 0 | NR | 495 | 298 | NR | 625 | 875 | NR | 755 | 26 | NR | 885 | 1 | NR |
| 370 | 0 | NR | 500 | 349 | NR | 630 | 819 | NR | 760 | 22 | NR | 890 | 1 | NR |
| 375 | 0 | NR | 505 | 394 | NR | 635 | 756 | NR | 765 | 19 | NR | 895 | 0 | NR |
| 380 | 0 | NR | 510 | 431 | NR | 640 | 696 | NR | 770 | 16 | NR | 900 | 1 | NR |
| 385 | 1 | NR | 515 | 462 | NR | 645 | 633 | NR | 775 | 14 | NR | 905 | 0 | NR |
| 390 | 2 | NR | 520 | 487 | NR | 650 | 570 | NR | 780 | 12 | NR | 910 | 0 | NR |
| 395 | 3 | NR | 525 | 507 | NR | 655 | 511 | NR | 785 | 10 | NR | 915 | 0 | NR |
| 400 | 5 | NR | 530 | 525 | NR | 660 | 453 | NR | 790 | 9 | NR | 920 | 0 | NR |
| 405 | 8 | NR | 535 | 546 | NR | 665 | 401 | NR | 795 | 7 | NR | 925 | 0 | NR |
| 410 | 13 | NR | 540 | 565 | NR | 670 | 352 | NR | 800 | 6 | NR | 930 | 0 | NR |
| 415 | 22 | NR | 545 | 591 | NR | 675 | 306 | NR | 805 | 6 | NR | 935 | 0 | NR |
| 420 | 38 | NR | 550 | 619 | NR | 680 | 266 | NR | 810 | 5 | NR | 940 | 0 | NR |
| 425 | 61 | NR | 555 | 652 | NR | 685 | 230 | NR | 815 | 4 | NR | 945 | 0 | NR |
| 430 | 100 | NR | 560 | 691 | NR | 690 | 199 | NR | 820 | 4 | NR | 950 | 0 | NR |
| 435 | 165 | NR | 565 | 734 | NR | 695 | 171 | NR | 825 | 3 | NR | 955 | 0 | NR |
| 440 | 265 | NR | 570 | 780 | NR | 700 | 147 | NR | 830 | 3 | NR | 960 | 0 | NR |
| 445 | 450 | NR | 575 | 826 | NR | 705 | 126 | NR | 835 | 2 | NR | 965 | 0 | NR |
| 450 | 605 | NR | 580 | 874 | NR | 710 | 108 | NR | 840 | 2 | NR | 970 | 0 | NR |
| 455 | 508 | NR | 585 | 917 | NR | 715 | 92 | NR | 845 | 2 | NR | 975 | 0 | NR |
| 460 | 366 | NR | 590 | 956 | NR | 720 | 79 | NR | 850 | 2 | NR | 980 | 0 | NR |
| 465 | 317 | NR | 595 | 983 | NR | 725 | 67 | NR | 855 | 1 | NR | 985 | 0 | NR |
| 470 | 251 | NR | 600 | 997 | NR | 730 | 57 | NR | 860 | 1 | NR | 990 | 0 | NR |
| 475 | 202 | NR | 605 | 997 | NR | 735 | 49 | NR | 865 | 1 | NR | 995 | 0 | NR |
| 480 | 202 | NR | 610 | 984 | NR | 740 | 42 | NR | 870 | 1 | NR | 1000 | 0 | NR |
| 485 | 220 | NR | 615 | 958 | NR | 745 | 35 | NR | 875 | 1 | NR | | | |

Summary

$R_f = 85.3$
 $R_g = 96.7$
 $CIE R_a = 83.4$
 $R_9 = 8.9$

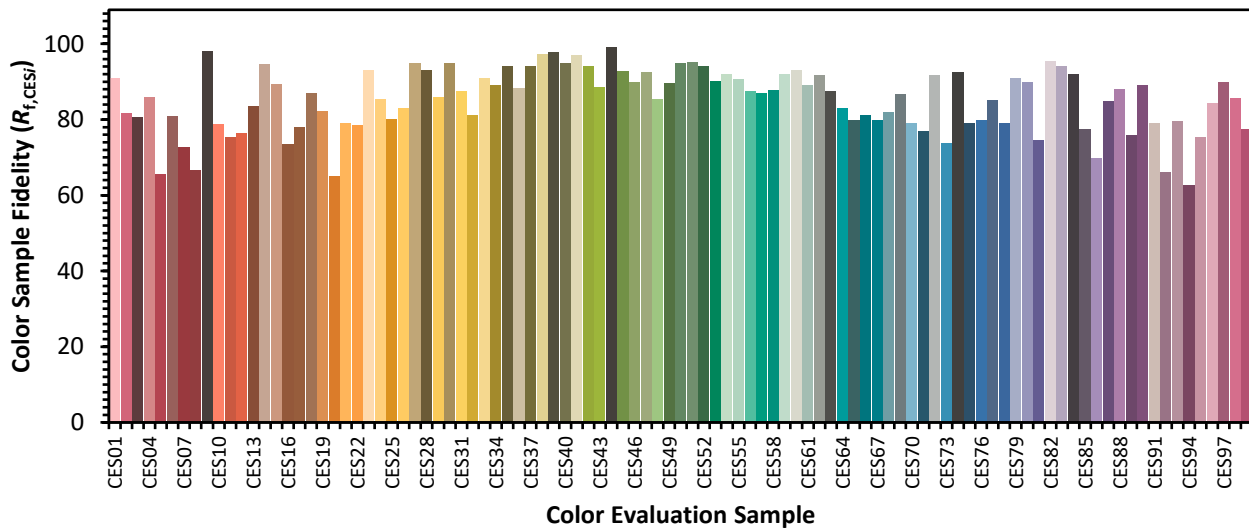


Color Vector Graphics

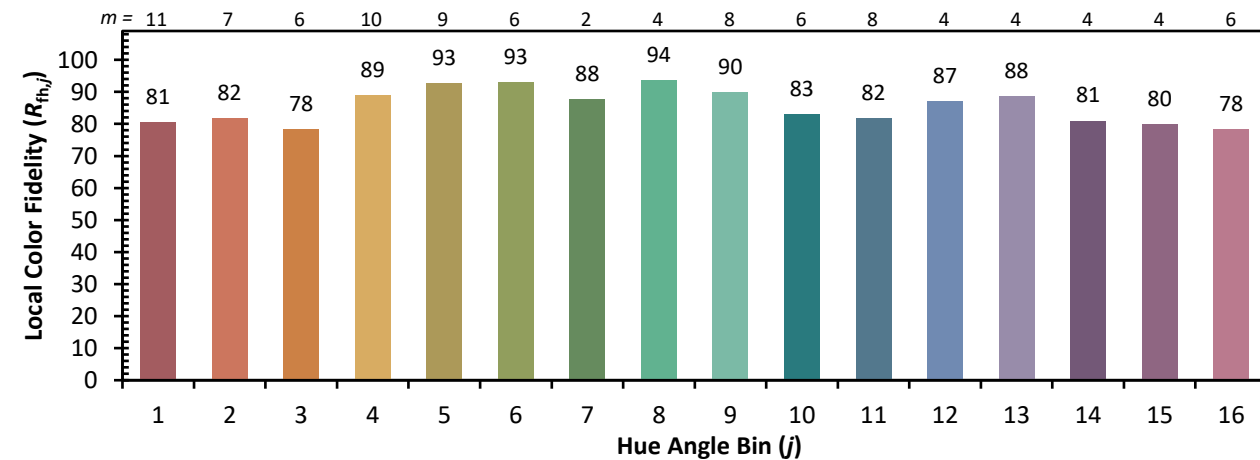
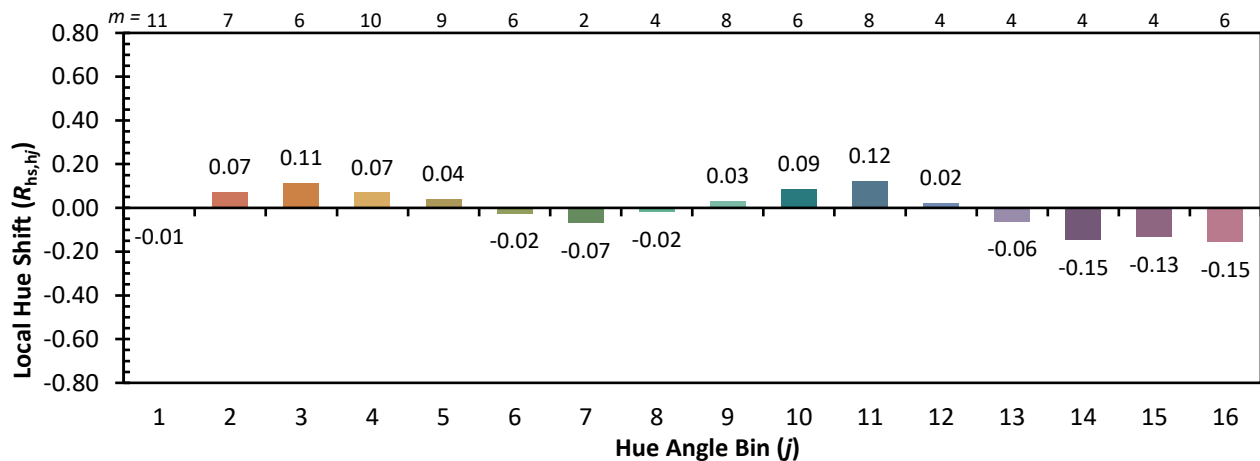
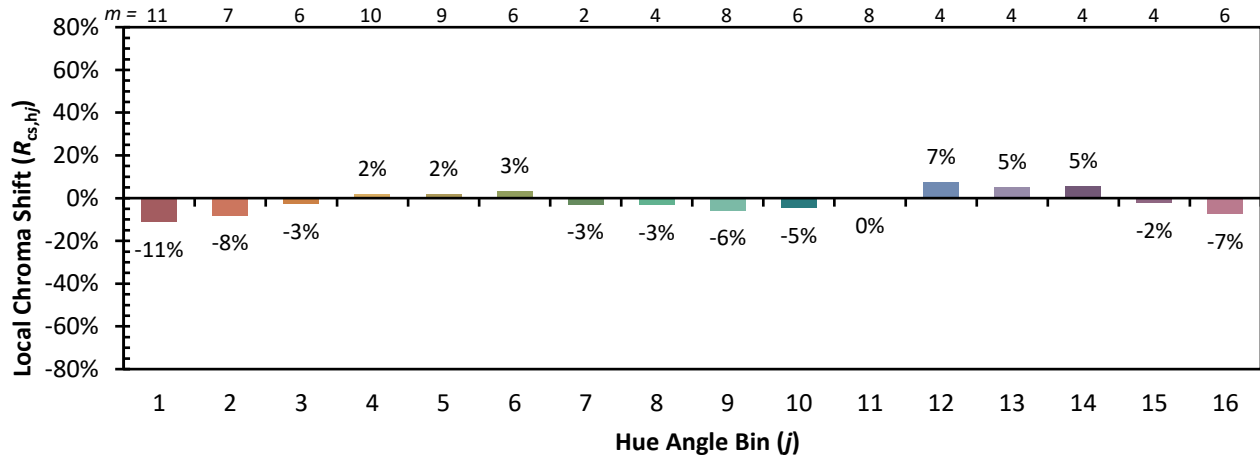


Individual Sample Fidelity Index ($R_{f,i}$)

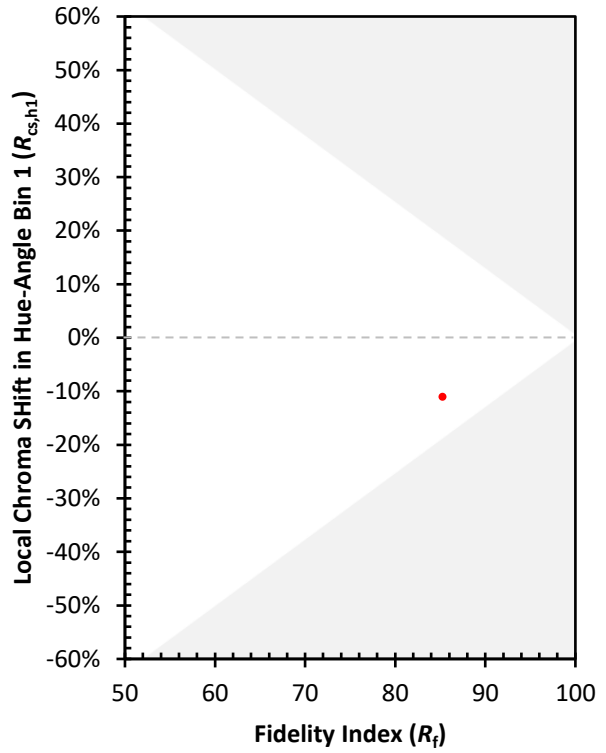
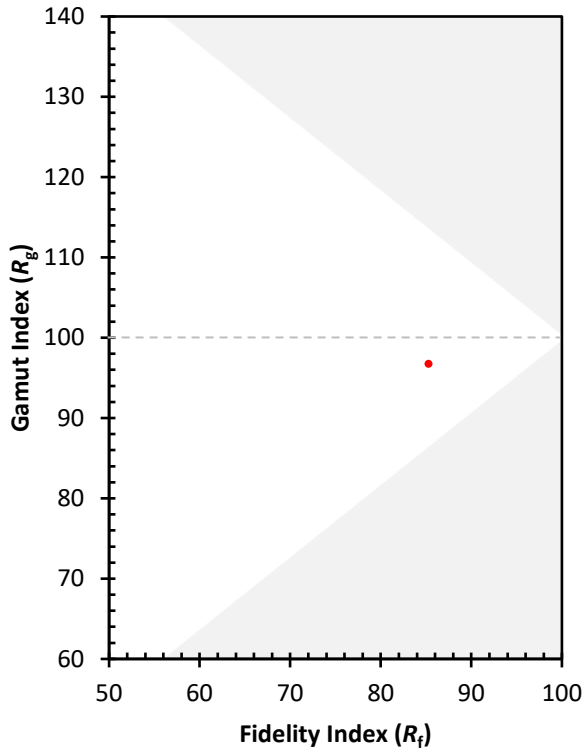
| | | | |
|------------|------------|------------|------------|
| CES01 = 86 | CES26 = 83 | CES51 = 95 | CES76 = 80 |
| CES02 = 63 | CES27 = 95 | CES52 = 94 | CES77 = 85 |
| CES03 = 31 | CES28 = 93 | CES53 = 90 | CES78 = 79 |
| CES04 = 70 | CES29 = 86 | CES54 = 92 | CES79 = 91 |
| CES05 = 49 | CES30 = 95 | CES55 = 91 | CES80 = 90 |
| CES06 = 51 | CES31 = 87 | CES56 = 88 | CES81 = 74 |
| CES07 = 42 | CES32 = 81 | CES57 = 87 | CES82 = 95 |
| CES08 = 41 | CES33 = 91 | CES58 = 88 | CES83 = 94 |
| CES09 = 29 | CES34 = 89 | CES59 = 92 | CES84 = 92 |
| CES10 = 76 | CES35 = 94 | CES60 = 93 | CES85 = 78 |
| CES11 = 59 | CES36 = 88 | CES61 = 89 | CES86 = 70 |
| CES12 = 65 | CES37 = 94 | CES62 = 92 | CES87 = 85 |
| CES13 = 43 | CES38 = 97 | CES63 = 87 | CES88 = 88 |
| CES14 = 74 | CES39 = 98 | CES64 = 83 | CES89 = 76 |
| CES15 = 71 | CES40 = 95 | CES65 = 80 | CES90 = 89 |
| CES16 = 47 | CES41 = 97 | CES66 = 81 | CES91 = 79 |
| CES17 = 50 | CES42 = 94 | CES67 = 80 | CES92 = 66 |
| CES18 = 56 | CES43 = 89 | CES68 = 82 | CES93 = 80 |
| CES19 = 72 | CES44 = 99 | CES69 = 87 | CES94 = 63 |
| CES20 = 66 | CES45 = 93 | CES70 = 79 | CES95 = 75 |
| CES21 = 87 | CES46 = 90 | CES71 = 77 | CES96 = 84 |
| CES22 = 79 | CES47 = 93 | CES72 = 92 | CES97 = 90 |
| CES23 = 92 | CES48 = 86 | CES73 = 74 | CES98 = 86 |
| CES24 = 91 | CES49 = 90 | CES74 = 93 | CES99 = 77 |
| CES25 = 72 | CES50 = 95 | CES75 = 79 | |



Color Rendition by Hue-Angle Bin



Measure Comparisons



(END OF REPORT)