

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: P450274

Luminaire Tested: **GALN-SA1A-740-U-T4FT**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P450274
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-28)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: GALN-SA1A-740-U-T4FT
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS AND TYPE IV FORWARD
THROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4617 lumens
Efficiency: N/A
Efficacy: 139.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B1 - U0 - G2

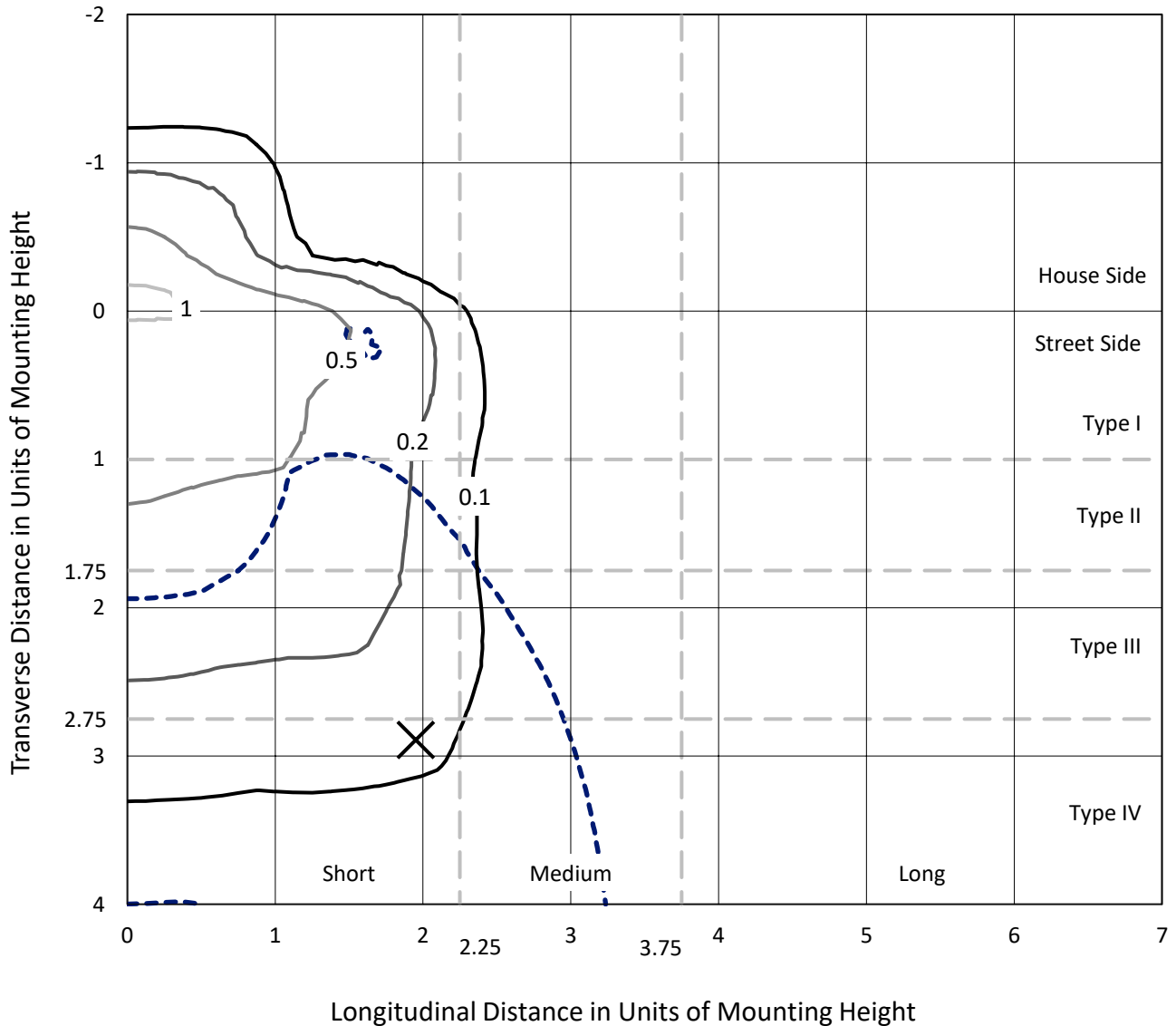
Input Watts (W): 33
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P450274
 CATALOG NUMBER: GALN-SA1A-740-U-T4FT

Iso-Footcandle Lines of Horizontal Illumination

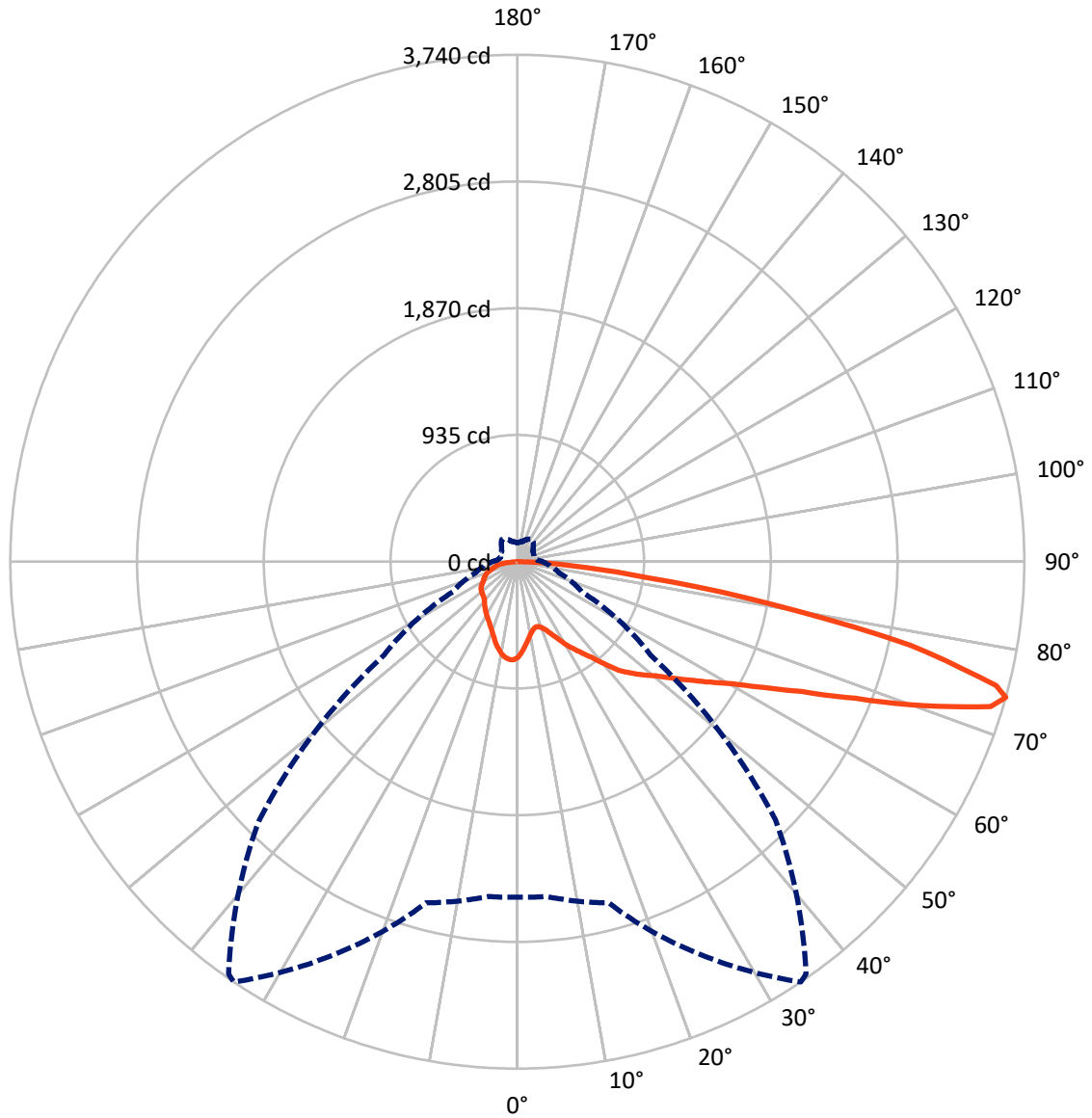
× Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P450274
CATALOG NUMBER: GALN-SA1A-740-U-T4FT

Luminous Intensity Polar Plot



— Vertical Plane Through 34-Deg Lateral - - - Horizontal Cone Through 74-Deg Vertical

REPORT NUMBER: P450274

CATALOG NUMBER: GALN-SA1A-740-U-T4FT

FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 982.5 | 0.0 | 982.5 |
| | % Fixture | 21.3 | 0.0 | 21.3 |
| Street Side | Lumens | 3634.5 | 0.0 | 3634.5 |
| | % Fixture | 78.7 | 0.0 | 78.7 |
| Total | Lumens | 4617.0 | 0.0 | 4617.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 64.1 | 1.4 |
| 10°-20° | 175.5 | 3.8 |
| 20°-30° | 289.3 | 6.3 |
| 30°-40° | 433.4 | 9.4 |
| 40°-50° | 630.1 | 13.6 |
| 50°-60° | 880.0 | 19.1 |
| 60°-70° | 1101.8 | 23.9 |
| 70°-80° | 911.1 | 19.7 |
| 80°-90° | 131.6 | 2.9 |
| 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° | 4617.0 | 100.0 |
| 0°-180° | 4617.0 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P450274

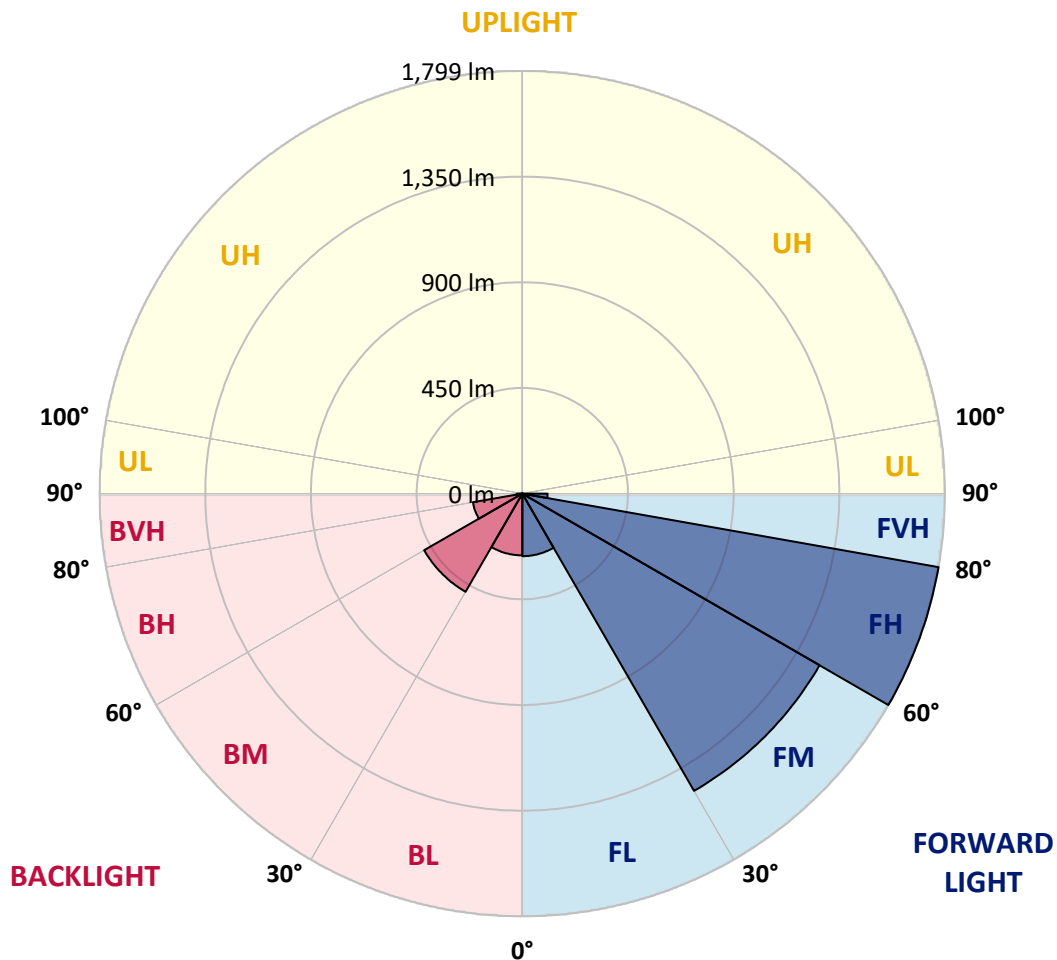
CATALOG NUMBER: GALN-SA1A-740-U-T4FT

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 266.1 | 5.8 | | | |
| FM (30°-60°) | 1461.0 | 31.6 | | | |
| FH (60°-80°) | 1799.5 | 39.0 | | | G1/1800 |
| FVH (80°-90°) | 107.8 | 2.3 | | | G2/225 |
| BL (0°-30°) | 262.8 | 5.7 | B1/500 | | |
| BM (30°-60°) | 482.5 | 10.5 | B1/1000 | | |
| BH (60°-80°) | 213.4 | 4.6 | B1/500 | | G1/500 |
| BVH (80°-90°) | 23.8 | 0.5 | | | 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





REPORT NUMBER: P450274

CATALOG NUMBER: GALN-SA1A-740-U-T4FT

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 34° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 |
| 2.5° | 651.5 | 654.8 | 656.6 | 663.0 | 664.5 | 666.6 | 671.9 | 679.1 | 688.3 | 696.5 | 703.6 |
| 5° | 597.2 | 602.4 | 605.4 | 611.1 | 622.1 | 623.1 | 637.4 | 653.8 | 672.4 | 689.8 | 704.2 |
| 7.5° | 545.8 | 551.5 | 554.0 | 564.2 | 578.8 | 581.1 | 602.1 | 627.9 | 659.1 | 685.5 | 707.5 |
| 10° | 507.2 | 510.0 | 515.6 | 523.3 | 540.7 | 542.2 | 569.6 | 604.1 | 644.6 | 683.4 | 713.1 |
| 12.5° | 486.2 | 487.8 | 489.0 | 497.2 | 514.4 | 516.7 | 545.3 | 584.5 | 633.1 | 685.0 | 722.3 |
| 15° | 489.3 | 489.8 | 484.2 | 485.7 | 499.5 | 502.9 | 531.3 | 571.4 | 625.9 | 688.8 | 736.1 |
| 17.5° | 515.1 | 513.3 | 499.5 | 492.4 | 502.1 | 503.6 | 528.4 | 566.3 | 622.6 | 696.0 | 750.5 |
| 20° | 555.8 | 553.2 | 529.5 | 513.6 | 519.2 | 520.5 | 537.6 | 570.1 | 625.9 | 707.7 | 772.7 |
| 22.5° | 606.4 | 605.4 | 569.4 | 550.2 | 549.9 | 549.9 | 558.9 | 583.9 | 635.9 | 723.9 | 796.0 |
| 25° | 677.3 | 671.9 | 624.9 | 600.1 | 593.1 | 592.6 | 591.6 | 606.7 | 648.7 | 741.0 | 823.6 |
| 27.5° | 749.9 | 740.7 | 698.8 | 660.7 | 645.8 | 644.0 | 637.4 | 638.9 | 665.0 | 760.4 | 855.1 |
| 30° | 815.2 | 809.3 | 769.9 | 727.7 | 710.0 | 705.9 | 687.5 | 679.1 | 692.4 | 795.5 | 905.2 |
| 32.5° | 865.0 | 861.5 | 830.8 | 792.4 | 766.3 | 765.5 | 738.7 | 731.8 | 735.1 | 837.9 | 962.5 |
| 35° | 905.5 | 906.7 | 891.1 | 857.9 | 828.0 | 823.6 | 805.7 | 797.0 | 787.3 | 899.3 | 1034.6 |
| 37.5° | 960.7 | 963.5 | 962.5 | 933.8 | 897.3 | 898.3 | 894.2 | 879.9 | 854.0 | 967.9 | 1114.7 |
| 40° | 1021.6 | 1023.6 | 1023.4 | 1012.4 | 993.2 | 994.2 | 992.7 | 976.3 | 937.7 | 1055.1 | 1203.7 |
| 42.5° | 1105.7 | 1096.0 | 1070.7 | 1081.7 | 1092.9 | 1097.8 | 1108.3 | 1092.7 | 1039.7 | 1148.2 | 1287.3 |
| 45° | 1199.9 | 1181.4 | 1124.1 | 1129.3 | 1171.0 | 1180.2 | 1238.0 | 1216.5 | 1150.5 | 1255.1 | 1385.8 |
| 47.5° | 1259.2 | 1241.0 | 1192.7 | 1191.7 | 1246.9 | 1255.9 | 1358.2 | 1350.3 | 1251.3 | 1370.5 | 1506.0 |
| 50° | 1312.1 | 1309.6 | 1255.1 | 1268.1 | 1322.1 | 1335.4 | 1489.1 | 1481.7 | 1351.8 | 1506.5 | 1637.0 |
| 52.5° | 1390.7 | 1369.9 | 1326.5 | 1353.3 | 1424.7 | 1442.1 | 1619.1 | 1597.3 | 1444.1 | 1626.7 | 1764.1 |
| 55° | 1426.0 | 1421.1 | 1418.5 | 1441.8 | 1539.8 | 1552.3 | 1745.4 | 1695.6 | 1522.9 | 1728.5 | 1860.8 |
| 57.5° | 1520.3 | 1511.4 | 1536.7 | 1552.6 | 1675.3 | 1694.5 | 1877.4 | 1798.1 | 1592.0 | 1809.4 | 1907.8 |
| 60° | 1642.6 | 1637.7 | 1661.0 | 1689.7 | 1826.8 | 1855.9 | 2027.8 | 1885.6 | 1647.5 | 1850.0 | 1882.0 |
| 62.5° | 1825.2 | 1824.7 | 1820.4 | 1881.8 | 2041.4 | 2068.2 | 2200.5 | 1970.8 | 1656.2 | 1819.6 | 1748.5 |
| 65° | 2087.1 | 2077.9 | 2040.1 | 2107.1 | 2308.4 | 2339.9 | 2380.3 | 2018.3 | 1603.7 | 1663.3 | 1472.3 |
| 67.5° | 2361.1 | 2360.6 | 2329.9 | 2416.8 | 2691.8 | 2724.3 | 2605.1 | 2007.9 | 1458.2 | 1347.4 | 1045.6 |
| 70° | 2588.2 | 2577.2 | 2616.4 | 2848.1 | 3181.6 | 3219.2 | 2801.8 | 1884.3 | 1161.5 | 889.9 | 621.3 |
| 72.5° | 2642.7 | 2643.2 | 2724.5 | 3180.6 | 3652.0 | 3657.9 | 2872.6 | 1527.3 | 777.3 | 490.8 | 310.8 |
| 74° | 2474.9 | 2479.3 | 2605.4 | 3197.2 | 3739.7 | 3713.1 | 2691.6 | 1200.4 | 525.6 | 320.5 | 224.1 |
| 75° | 2259.0 | 2231.7 | 2414.0 | 3086.5 | 3648.7 | 3620.0 | 2479.5 | 963.3 | 401.1 | 256.0 | 196.2 |
| 77.5° | 1207.8 | 1235.7 | 1517.0 | 2303.3 | 2964.2 | 2931.2 | 1681.2 | 461.9 | 216.6 | 178.3 | 141.2 |
| 80° | 430.0 | 474.2 | 666.6 | 1205.2 | 1900.4 | 1910.7 | 802.4 | 211.8 | 152.4 | 131.5 | 99.8 |
| 82.5° | 175.5 | 180.3 | 286.2 | 534.8 | 965.1 | 974.3 | 327.7 | 125.8 | 109.0 | 90.5 | 59.6 |
| 85° | 68.5 | 70.6 | 126.6 | 240.4 | 411.8 | 438.7 | 113.3 | 66.5 | 67.0 | 51.9 | 30.4 |
| 87.5° | 23.0 | 26.1 | 51.9 | 80.1 | 139.9 | 137.1 | 33.0 | 19.7 | 24.0 | 22.5 | 9.5 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |



REPORT NUMBER: P450274
 CATALOG NUMBER: GALN-SA1A-740-U-T4FT

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 | 704.9 |
| 2.5° | 707.2 | 712.1 | 715.4 | 719.0 | 722.3 | 723.3 | 722.6 | 724.9 | 725.1 | 725.4 | 725.6 |
| 5° | 711.3 | 718.0 | 724.4 | 727.9 | 729.5 | 728.2 | 723.9 | 721.6 | 719.5 | 718.0 | 718.5 |
| 7.5° | 716.9 | 726.4 | 732.3 | 733.8 | 729.7 | 723.9 | 713.1 | 704.7 | 699.3 | 695.7 | 695.5 |
| 10° | 725.6 | 734.9 | 739.7 | 735.4 | 724.1 | 709.8 | 692.9 | 677.0 | 665.0 | 661.4 | 661.2 |
| 12.5° | 736.6 | 747.1 | 746.9 | 734.1 | 714.4 | 688.8 | 661.4 | 643.0 | 626.7 | 618.5 | 621.8 |
| 15° | 751.0 | 758.9 | 751.5 | 728.5 | 697.3 | 662.2 | 628.4 | 603.4 | 585.0 | 576.3 | 576.8 |
| 17.5° | 767.6 | 774.5 | 754.8 | 718.5 | 673.2 | 628.2 | 589.1 | 565.3 | 550.7 | 544.3 | 543.8 |
| 20° | 788.3 | 790.4 | 754.8 | 701.1 | 642.3 | 588.5 | 551.2 | 534.6 | 526.4 | 523.1 | 524.1 |
| 22.5° | 810.6 | 806.5 | 750.7 | 676.5 | 601.6 | 547.1 | 522.0 | 514.6 | 510.5 | 510.0 | 510.5 |
| 25° | 835.6 | 824.1 | 742.3 | 643.3 | 559.1 | 511.3 | 496.7 | 498.0 | 498.8 | 498.8 | 500.6 |
| 27.5° | 866.3 | 843.3 | 728.2 | 601.3 | 509.5 | 478.0 | 474.0 | 482.9 | 487.0 | 487.8 | 489.0 |
| 30° | 906.7 | 864.3 | 704.9 | 548.9 | 467.3 | 448.1 | 455.3 | 467.3 | 471.9 | 474.7 | 474.2 |
| 32.5° | 954.8 | 887.3 | 673.5 | 496.5 | 433.3 | 427.1 | 435.8 | 448.1 | 453.2 | 454.8 | 452.7 |
| 35° | 1011.3 | 913.4 | 632.0 | 447.4 | 403.6 | 407.2 | 417.4 | 421.3 | 425.9 | 425.9 | 426.9 |
| 37.5° | 1072.2 | 934.4 | 581.4 | 402.3 | 380.6 | 393.6 | 401.1 | 397.5 | 395.4 | 392.9 | 394.2 |
| 40° | 1134.1 | 950.0 | 515.6 | 357.8 | 357.6 | 379.6 | 381.6 | 371.4 | 363.2 | 360.6 | 359.4 |
| 42.5° | 1188.1 | 959.7 | 456.3 | 323.3 | 335.8 | 365.8 | 367.3 | 350.9 | 337.9 | 330.2 | 327.7 |
| 45° | 1251.8 | 970.9 | 398.2 | 294.7 | 315.6 | 354.8 | 358.6 | 336.6 | 317.4 | 301.3 | 297.2 |
| 47.5° | 1339.0 | 996.5 | 352.5 | 272.4 | 301.1 | 347.9 | 353.2 | 324.8 | 299.5 | 278.5 | 275.2 |
| 50° | 1437.5 | 1031.6 | 316.9 | 257.3 | 289.8 | 341.7 | 348.4 | 312.8 | 282.9 | 259.6 | 257.1 |
| 52.5° | 1527.8 | 1050.5 | 286.2 | 243.8 | 278.8 | 330.5 | 342.0 | 304.1 | 266.5 | 240.7 | 238.4 |
| 55° | 1577.1 | 1019.8 | 256.0 | 230.5 | 263.7 | 315.9 | 333.0 | 292.1 | 250.7 | 230.7 | 227.4 |
| 57.5° | 1583.8 | 956.4 | 228.7 | 216.1 | 247.8 | 298.0 | 316.4 | 277.5 | 240.4 | 223.8 | 221.0 |
| 60° | 1532.4 | 861.7 | 207.4 | 204.4 | 231.7 | 277.8 | 297.7 | 264.7 | 229.9 | 216.1 | 213.3 |
| 62.5° | 1404.5 | 758.9 | 192.6 | 193.6 | 215.4 | 256.5 | 283.9 | 252.5 | 220.0 | 207.7 | 205.1 |
| 65° | 1184.5 | 626.4 | 178.3 | 182.6 | 200.8 | 239.9 | 271.4 | 242.2 | 210.0 | 201.3 | 199.0 |
| 67.5° | 822.8 | 452.2 | 166.5 | 171.1 | 187.0 | 223.0 | 256.8 | 231.2 | 198.7 | 194.1 | 190.6 |
| 70° | 455.5 | 278.3 | 152.7 | 158.1 | 172.7 | 204.1 | 240.4 | 214.6 | 182.4 | 180.3 | 175.2 |
| 72.5° | 239.4 | 177.3 | 137.1 | 143.0 | 153.2 | 179.8 | 215.4 | 196.4 | 166.3 | 157.6 | 150.9 |
| 74° | 187.0 | 145.3 | 126.6 | 132.7 | 139.7 | 165.5 | 200.5 | 183.4 | 154.7 | 144.5 | 139.4 |
| 75° | 162.9 | 129.4 | 117.7 | 125.6 | 131.7 | 155.8 | 189.0 | 174.2 | 148.4 | 138.6 | 134.0 |
| 77.5° | 115.1 | 96.9 | 96.2 | 105.6 | 109.0 | 136.6 | 170.3 | 158.6 | 132.2 | 122.0 | 117.7 |
| 80° | 80.8 | 72.6 | 76.2 | 82.1 | 86.7 | 120.7 | 158.1 | 137.1 | 108.4 | 96.4 | 94.9 |
| 82.5° | 52.7 | 47.6 | 54.5 | 59.9 | 61.4 | 89.0 | 127.6 | 104.1 | 79.0 | 64.2 | 59.6 |
| 85° | 24.3 | 23.8 | 31.2 | 30.4 | 30.2 | 43.5 | 75.7 | 60.9 | 45.5 | 34.0 | 32.0 |
| 87.5° | 6.1 | 5.9 | 7.7 | 6.4 | 7.7 | 6.7 | 6.9 | 1.8 | 0.3 | 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)