

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: STREETWORKS

Report Number: P271227

Luminaire Tested: **XNV-AF-01-LED-U-SL2-7027-600-HSS**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271227
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24258)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV-AF-01-LED-U-SL2-7027-600-HSS
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 2700K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2823.7 lumens
Efficiency: N/A
Efficacy: 83.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium - Semi-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 34
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

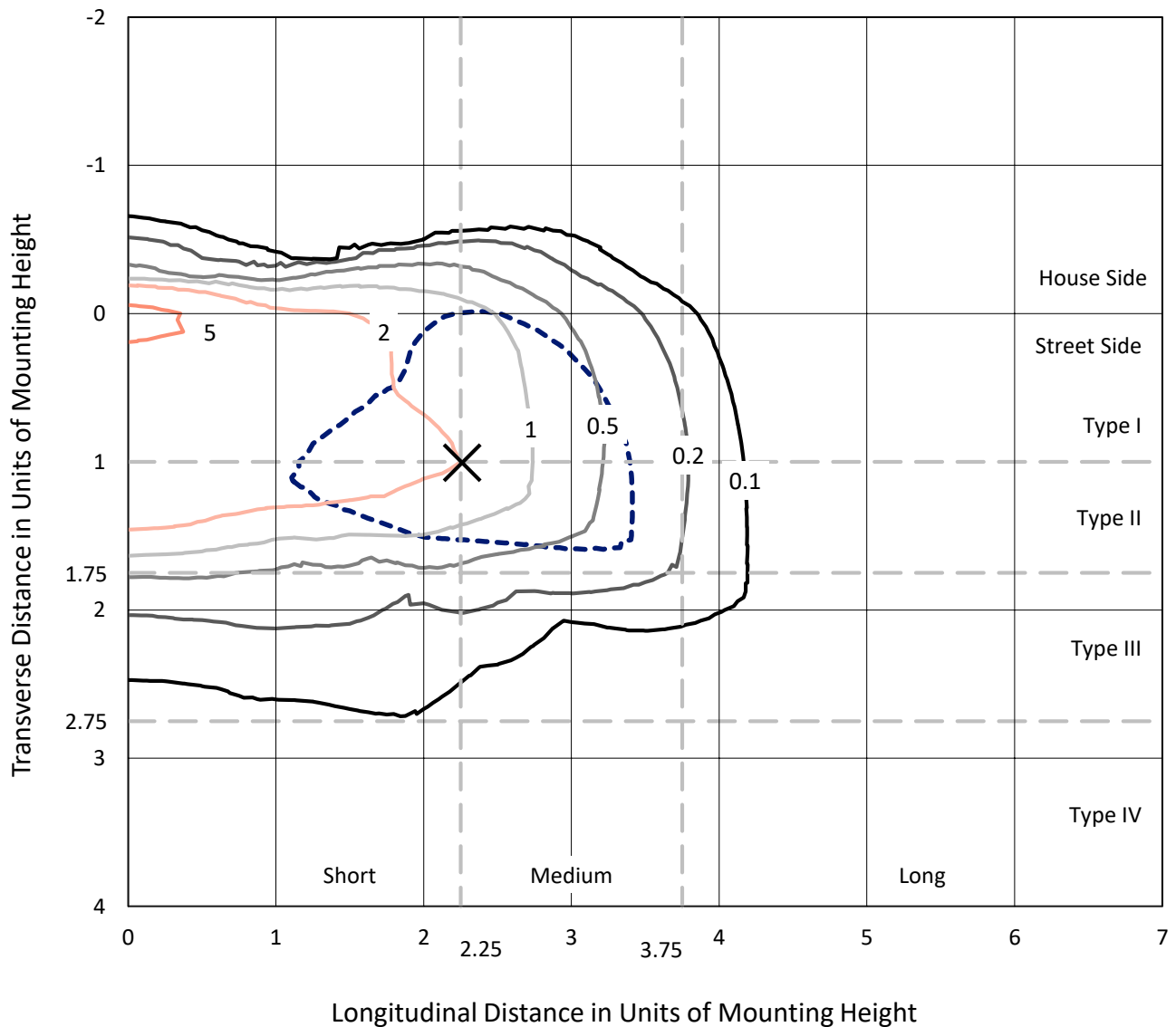


REPORT NUMBER: P271227

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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

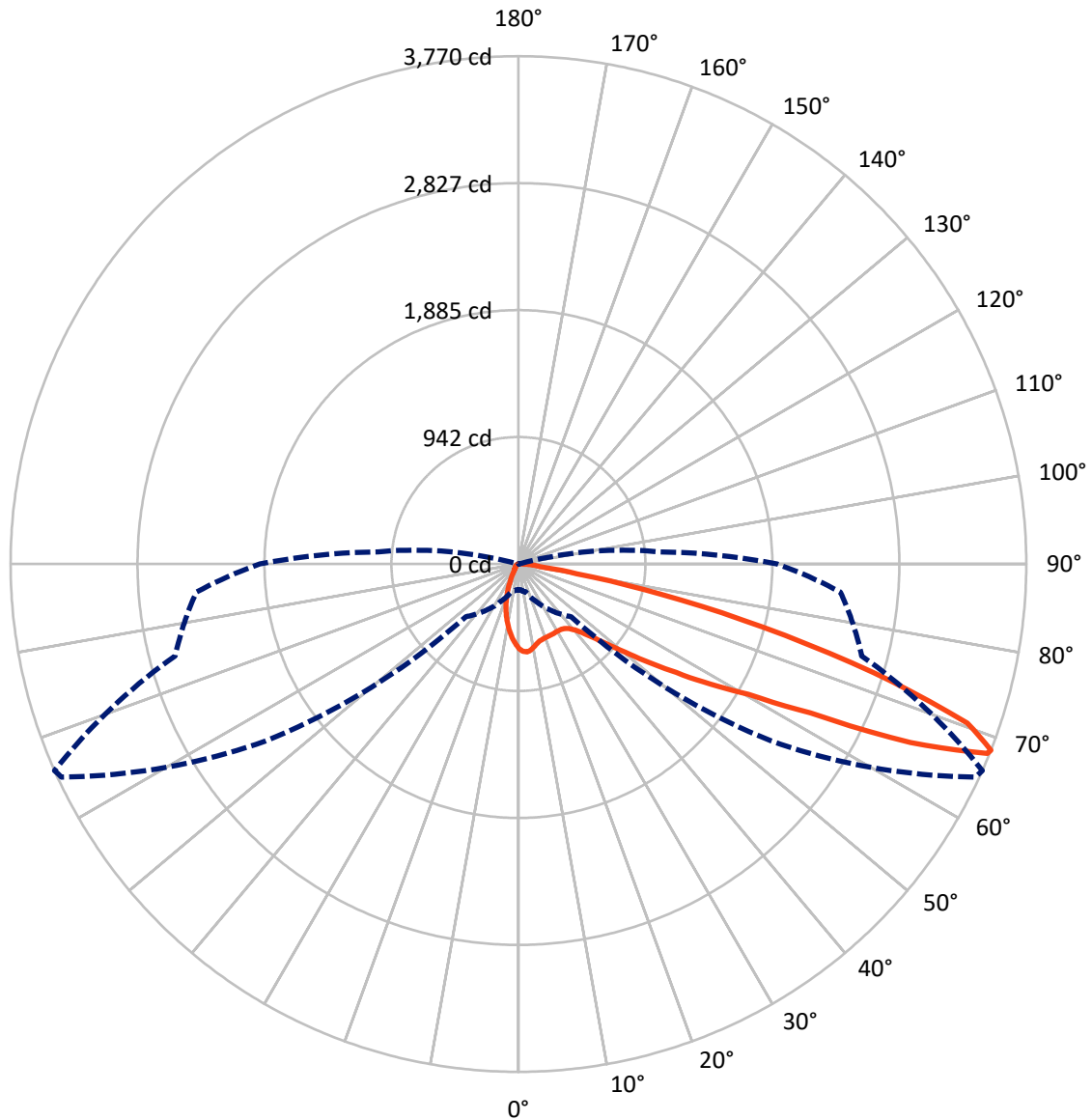


Based on 10 foot mounting height. Maximum calculated value = 6.3 fc
 Type II - Medium - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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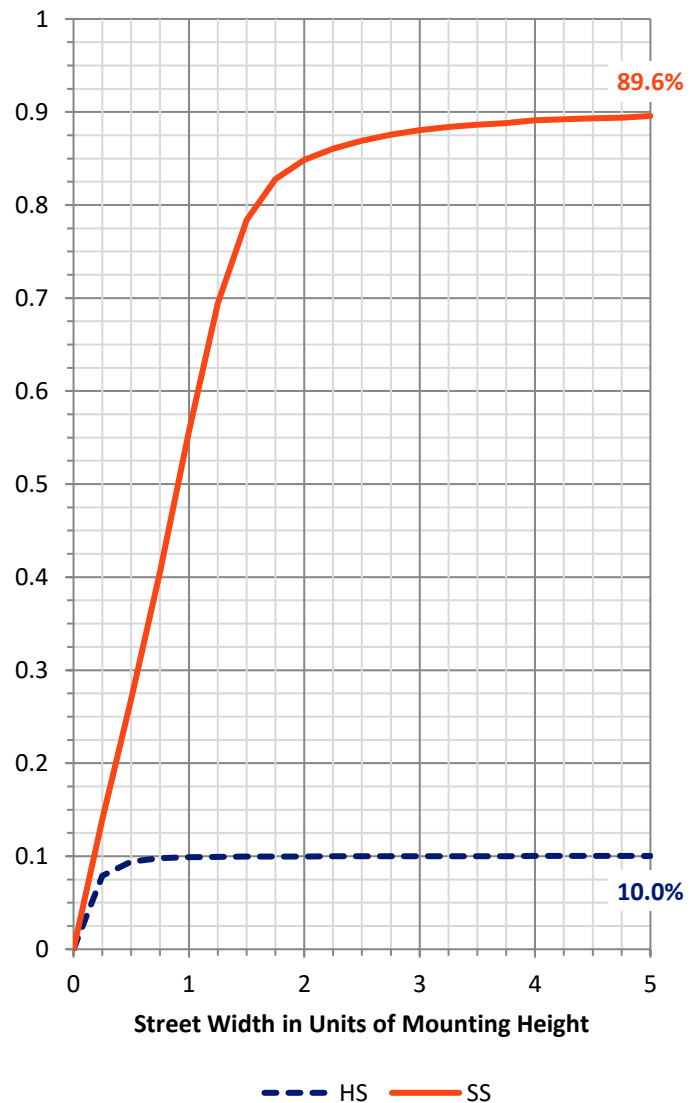
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 286.0 | 0.0 | 286.0 |
| | % Fixture | 10.1 | 0.0 | 10.1 |
| Street Side | Lumens | 2537.7 | 0.0 | 2537.7 |
| | % Fixture | 89.9 | 0.0 | 89.9 |
| Total | Lumens | 2823.7 | 0.0 | 2823.7 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 51.6 | 1.8 |
| 10°-20° | 111.0 | 3.9 |
| 20°-30° | 160.8 | 5.7 |
| 30°-40° | 246.2 | 8.7 |
| 40°-50° | 421.0 | 14.9 |
| 50°-60° | 658.6 | 23.3 |
| 60°-70° | 758.4 | 26.9 |
| 70°-80° | 379.5 | 13.4 |
| 80°-90° | 36.7 | 1.3 |
| 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° | 2823.7 | 100.0 |
| 0°-180° | 2823.7 | 100.0 |

Coefficient of Utilization



REPORT NUMBER: P271227

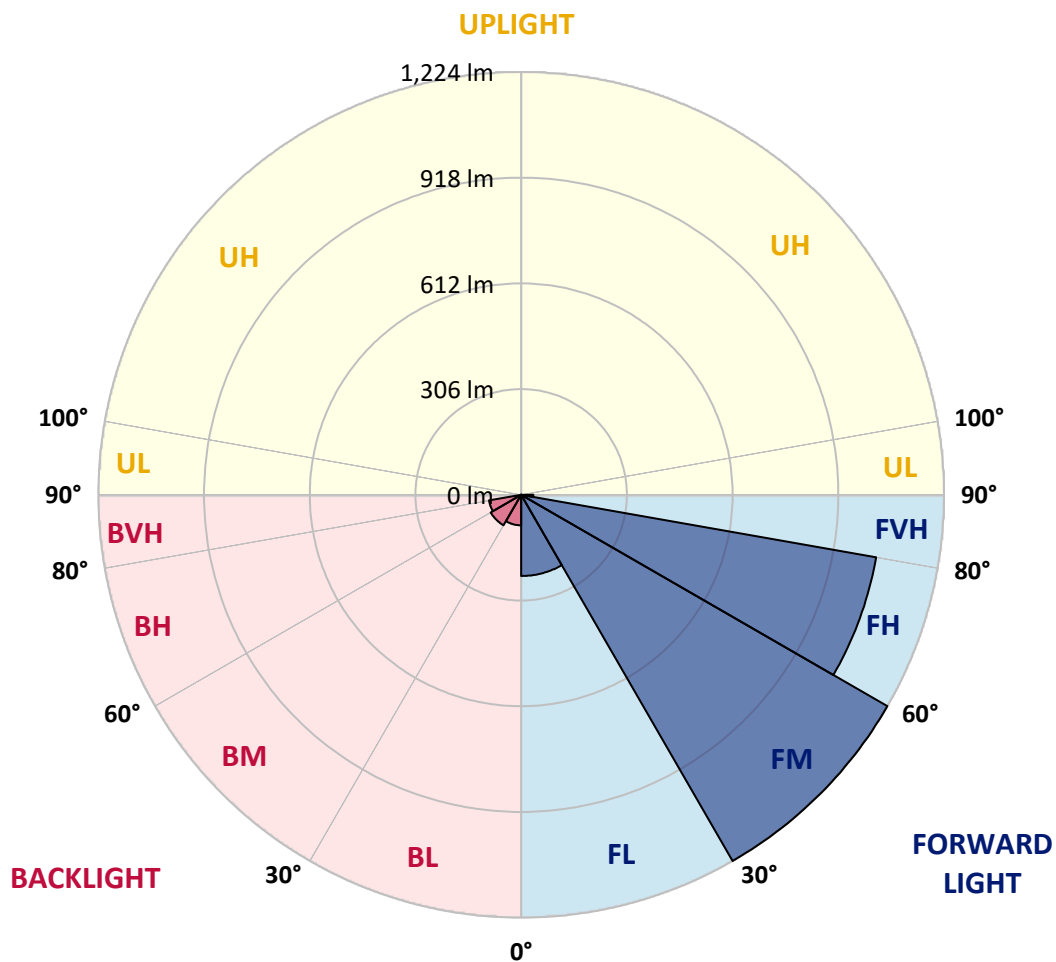
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 235.1 | 8.3 | | | |
| FM | (30°-60°) | 1223.9 | 43.3 | | | |
| FH | (60°-80°) | 1043.4 | 37.0 | | | G1/1800 |
| FVH | (80°-90°) | 35.4 | 1.3 | | | G1/100 |
| BL | (0°-30°) | 88.3 | 3.1 | B0/110 | | |
| BM | (30°-60°) | 101.8 | 3.6 | B0/220 | | |
| BH | (60°-80°) | 94.5 | 3.3 | B0/110 | | G0/110 |
| BVH | (80°-90°) | 1.4 | 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





REPORT NUMBER: P271227

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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 45° | 55° | 65° | 66° | 75° | 85° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 |
| 2.5° | 661.7 | 662.1 | 662.0 | 662.6 | 662.1 | 658.7 | 655.3 | 647.7 | 648.3 | 638.6 | 627.7 |
| 5° | 615.1 | 618.9 | 622.6 | 626.5 | 635.6 | 643.5 | 653.1 | 655.3 | 655.3 | 646.8 | 630.9 |
| 7.5° | 567.6 | 567.9 | 572.1 | 577.3 | 589.4 | 604.0 | 626.2 | 646.2 | 646.6 | 648.8 | 631.2 |
| 10° | 531.9 | 533.1 | 536.0 | 541.6 | 553.7 | 568.2 | 593.1 | 624.2 | 626.7 | 643.0 | 626.8 |
| 12.5° | 504.3 | 505.7 | 508.7 | 515.2 | 526.2 | 541.0 | 567.3 | 602.9 | 606.3 | 637.5 | 625.6 |
| 15° | 483.0 | 484.7 | 487.2 | 493.7 | 505.7 | 521.3 | 549.9 | 588.7 | 592.7 | 635.3 | 629.7 |
| 17.5° | 474.1 | 474.1 | 473.9 | 478.3 | 490.4 | 506.3 | 536.2 | 581.3 | 586.4 | 637.1 | 636.9 |
| 20° | 477.9 | 477.3 | 472.6 | 471.5 | 478.7 | 494.7 | 525.4 | 576.4 | 582.1 | 640.4 | 645.5 |
| 22.5° | 497.9 | 496.6 | 486.2 | 477.4 | 475.3 | 486.0 | 518.1 | 572.9 | 579.9 | 647.3 | 657.0 |
| 25° | 540.2 | 536.2 | 521.8 | 502.3 | 484.7 | 483.6 | 512.9 | 571.2 | 578.6 | 655.3 | 669.6 |
| 27.5° | 595.1 | 594.0 | 571.1 | 544.8 | 511.1 | 491.1 | 511.3 | 570.0 | 577.3 | 661.1 | 679.8 |
| 30° | 663.5 | 663.8 | 637.3 | 603.1 | 552.2 | 511.7 | 516.3 | 569.3 | 576.8 | 661.4 | 684.2 |
| 32.5° | 733.9 | 734.4 | 712.3 | 675.6 | 608.2 | 547.1 | 530.0 | 572.4 | 579.2 | 659.6 | 684.1 |
| 35° | 801.7 | 802.5 | 789.2 | 759.6 | 683.3 | 596.3 | 556.0 | 583.0 | 587.9 | 660.9 | 683.6 |
| 37.5° | 887.5 | 890.2 | 873.8 | 846.4 | 777.2 | 668.6 | 598.4 | 604.5 | 608.5 | 669.9 | 686.9 |
| 40° | 1033.9 | 1030.4 | 983.4 | 936.8 | 879.1 | 756.6 | 659.4 | 641.5 | 642.8 | 693.4 | 699.6 |
| 42.5° | 1204.4 | 1199.9 | 1119.5 | 1039.2 | 984.1 | 862.7 | 737.7 | 698.3 | 698.1 | 732.8 | 727.1 |
| 45° | 1351.1 | 1348.4 | 1263.7 | 1156.7 | 1100.2 | 980.1 | 834.2 | 780.1 | 777.5 | 801.1 | 777.2 |
| 47.5° | 1455.3 | 1453.1 | 1389.0 | 1281.7 | 1234.5 | 1109.0 | 954.4 | 891.6 | 886.0 | 890.4 | 858.5 |
| 50° | 1465.5 | 1463.0 | 1440.6 | 1371.7 | 1391.5 | 1298.3 | 1103.3 | 1037.6 | 1030.5 | 1023.7 | 981.6 |
| 52.5° | 1370.2 | 1369.9 | 1381.7 | 1377.2 | 1501.3 | 1541.9 | 1285.7 | 1218.3 | 1209.8 | 1192.4 | 1150.5 |
| 55° | 1175.3 | 1174.2 | 1218.7 | 1283.5 | 1498.9 | 1793.2 | 1563.9 | 1433.3 | 1422.2 | 1387.3 | 1332.2 |
| 57.5° | 858.8 | 853.0 | 946.0 | 1083.3 | 1393.6 | 1903.2 | 2005.6 | 1700.4 | 1682.0 | 1571.0 | 1486.2 |
| 60° | 474.1 | 476.5 | 596.0 | 758.6 | 1144.3 | 1881.5 | 2412.2 | 2011.8 | 1963.5 | 1729.4 | 1644.1 |
| 62.5° | 265.8 | 271.3 | 360.4 | 493.0 | 729.6 | 1705.3 | 2630.3 | 2547.9 | 2431.5 | 1914.4 | 1843.6 |
| 65° | 201.0 | 204.4 | 249.2 | 380.4 | 459.9 | 1191.7 | 2665.1 | 3297.4 | 3196.9 | 2194.5 | 2161.3 |
| 67.5° | 189.4 | 192.0 | 213.8 | 315.5 | 419.0 | 618.0 | 2403.1 | 3740.7 | 3753.3 | 2576.7 | 2407.4 |
| 68° | 190.6 | 193.9 | 216.0 | 303.4 | 418.3 | 552.8 | 2291.3 | 3742.9 | 3769.6 | 2638.3 | 2399.0 |
| 70° | 175.1 | 176.0 | 228.3 | 297.7 | 405.5 | 435.6 | 1657.6 | 3486.4 | 3534.6 | 2711.7 | 2177.8 |
| 72.5° | 67.0 | 67.2 | 102.3 | 257.9 | 424.7 | 438.1 | 835.1 | 2755.6 | 2758.1 | 2359.8 | 1697.7 |
| 75° | 34.9 | 29.3 | 32.1 | 80.7 | 405.7 | 427.0 | 419.0 | 1881.5 | 1869.8 | 1596.0 | 1040.2 |
| 77.5° | 24.0 | 20.4 | 21.5 | 27.9 | 168.7 | 426.8 | 302.5 | 1082.0 | 1079.6 | 678.9 | 296.8 |
| 80° | 13.6 | 11.8 | 12.8 | 23.4 | 59.2 | 400.6 | 282.0 | 465.1 | 438.3 | 119.3 | 48.1 |
| 82.5° | 6.8 | 5.7 | 6.8 | 19.8 | 36.8 | 252.1 | 274.3 | 182.4 | 162.5 | 28.3 | 31.3 |
| 85° | 1.7 | 1.7 | 3.4 | 13.7 | 22.8 | 82.6 | 245.9 | 131.7 | 118.3 | 12.3 | 22.2 |
| 87.5° | 0.4 | 0.2 | 1.3 | 5.1 | 8.3 | 18.0 | 136.4 | 73.4 | 63.2 | 6.4 | 12.8 |
| 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: P271227

CATALOG NUMBER: XNV-AF-01-LED-U-SL2-7027-600-HSS

CANDELA DISTRIBUTION (continued):

| | 90° | 95° | 105° | 115° | 125° | 135° | 145° | 155° | 165° | 175° | 180° |
|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 | 629.2 |
| 2.5° | 623.3 | 617.1 | 605.0 | 591.2 | 581.5 | 570.9 | 564.6 | 557.0 | 551.3 | 546.2 | 549.9 |
| 5° | 621.1 | 609.1 | 582.1 | 551.6 | 526.2 | 501.9 | 483.6 | 466.4 | 453.4 | 445.1 | 448.4 |
| 7.5° | 615.3 | 597.6 | 553.7 | 506.3 | 464.7 | 425.3 | 393.5 | 364.9 | 342.8 | 330.8 | 334.4 |
| 10° | 605.5 | 580.6 | 521.6 | 455.8 | 397.5 | 342.1 | 294.6 | 252.1 | 219.8 | 204.9 | 208.3 |
| 12.5° | 598.5 | 565.5 | 488.4 | 407.0 | 330.2 | 251.5 | 188.6 | 139.9 | 114.9 | 99.7 | 101.1 |
| 15° | 595.3 | 553.7 | 457.2 | 355.5 | 256.9 | 161.5 | 102.0 | 73.8 | 65.1 | 62.1 | 62.3 |
| 17.5° | 595.8 | 544.5 | 427.9 | 302.1 | 182.8 | 92.9 | 62.5 | 56.4 | 54.9 | 54.3 | 54.3 |
| 20° | 597.0 | 535.1 | 397.2 | 246.4 | 117.0 | 59.8 | 52.1 | 50.0 | 49.4 | 48.6 | 48.8 |
| 22.5° | 600.2 | 528.1 | 366.4 | 190.6 | 72.0 | 48.8 | 46.2 | 44.3 | 43.2 | 42.0 | 42.1 |
| 25° | 605.4 | 522.8 | 336.1 | 137.3 | 50.8 | 42.6 | 40.2 | 37.6 | 35.8 | 34.1 | 34.3 |
| 27.5° | 608.5 | 515.2 | 303.6 | 93.6 | 42.1 | 37.2 | 34.0 | 30.6 | 28.3 | 27.0 | 26.8 |
| 30° | 606.3 | 503.1 | 266.8 | 61.4 | 37.2 | 32.1 | 28.1 | 24.3 | 22.2 | 21.1 | 21.1 |
| 32.5° | 600.2 | 487.2 | 226.4 | 44.7 | 33.1 | 27.7 | 22.8 | 19.6 | 18.0 | 17.2 | 17.4 |
| 35° | 593.4 | 470.8 | 183.2 | 37.9 | 29.7 | 23.4 | 18.7 | 16.0 | 15.4 | 15.1 | 15.1 |
| 37.5° | 589.6 | 456.7 | 141.7 | 34.3 | 26.6 | 19.6 | 15.4 | 13.7 | 13.0 | 13.0 | 13.0 |
| 40° | 593.9 | 445.7 | 104.8 | 31.7 | 23.4 | 16.2 | 12.8 | 11.8 | 11.5 | 11.5 | 11.5 |
| 42.5° | 611.8 | 442.0 | 76.6 | 29.5 | 20.4 | 13.6 | 11.0 | 10.2 | 10.1 | 10.2 | 10.2 |
| 45° | 646.8 | 450.2 | 58.1 | 27.3 | 17.4 | 11.0 | 9.5 | 8.9 | 8.9 | 9.2 | 9.2 |
| 47.5° | 706.2 | 471.3 | 47.7 | 25.1 | 14.6 | 9.3 | 8.3 | 7.7 | 7.7 | 7.9 | 7.9 |
| 50° | 798.5 | 510.2 | 42.8 | 22.5 | 12.1 | 7.9 | 6.8 | 6.6 | 6.6 | 6.8 | 7.0 |
| 52.5° | 938.5 | 584.5 | 40.3 | 20.2 | 10.1 | 6.6 | 5.7 | 5.5 | 5.7 | 6.0 | 6.0 |
| 55° | 1094.3 | 679.7 | 37.5 | 17.7 | 8.4 | 5.5 | 4.6 | 4.6 | 4.9 | 5.3 | 5.3 |
| 57.5° | 1239.7 | 771.5 | 34.9 | 14.6 | 7.4 | 4.4 | 3.8 | 3.8 | 4.2 | 4.6 | 4.6 |
| 60° | 1393.0 | 861.5 | 31.3 | 11.8 | 6.2 | 3.6 | 3.1 | 3.1 | 3.8 | 4.2 | 4.4 |
| 62.5° | 1582.5 | 966.0 | 26.6 | 9.3 | 4.9 | 2.6 | 2.2 | 2.9 | 3.6 | 4.2 | 4.2 |
| 65° | 1856.4 | 1096.1 | 20.8 | 7.4 | 3.8 | 1.9 | 1.7 | 2.6 | 3.4 | 4.0 | 4.2 |
| 67.5° | 1956.0 | 1079.6 | 15.7 | 6.0 | 2.9 | 1.5 | 1.5 | 2.4 | 3.4 | 4.0 | 4.0 |
| 68° | 1919.7 | 1043.2 | 15.1 | 5.7 | 2.6 | 1.5 | 1.5 | 2.4 | 3.4 | 4.0 | 4.0 |
| 70° | 1672.7 | 852.9 | 12.3 | 4.4 | 2.2 | 1.3 | 1.3 | 2.2 | 3.4 | 3.8 | 4.0 |
| 72.5° | 1252.4 | 566.7 | 10.6 | 2.9 | 1.9 | 1.3 | 1.1 | 2.2 | 3.1 | 3.8 | 3.8 |
| 75° | 718.5 | 235.1 | 9.2 | 2.2 | 1.7 | 1.1 | 1.1 | 1.9 | 3.1 | 3.8 | 3.8 |
| 77.5° | 203.0 | 54.9 | 7.4 | 1.7 | 1.5 | 1.1 | 0.9 | 1.9 | 2.9 | 3.6 | 3.6 |
| 80° | 37.2 | 16.3 | 5.7 | 1.5 | 1.3 | 1.1 | 0.9 | 1.9 | 2.9 | 3.6 | 3.6 |
| 82.5° | 24.7 | 7.7 | 4.2 | 1.5 | 1.3 | 1.1 | 0.9 | 1.7 | 2.6 | 3.4 | 3.4 |
| 85° | 18.3 | 5.5 | 2.6 | 1.5 | 1.3 | 1.1 | 0.9 | 1.7 | 2.6 | 3.4 | 3.4 |
| 87.5° | 10.2 | 2.4 | 1.9 | 1.7 | 1.5 | 1.1 | 0.9 | 1.5 | 2.4 | 3.1 | 3.1 |
| 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)