

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: P239398

Luminaire Tested: **UTLD-AF24-20-D-U-5WQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239398
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-9-U0)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-20-D-U-5WQ
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS
PHOTOMETRIC DATA REPORTED FOR LOWER HEMISPHERE ONLY. MINIMAL LIGHT IN
UPPER HEMISPHERE NOT REPORTED.
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2510 lumens
Efficiency: N/A
Efficacy: 119.5 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')
IES Classification: Type V - Short - Non-Cutoff
BUG Rating: B2 - U0 - G1

Input Watts (W): 21
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

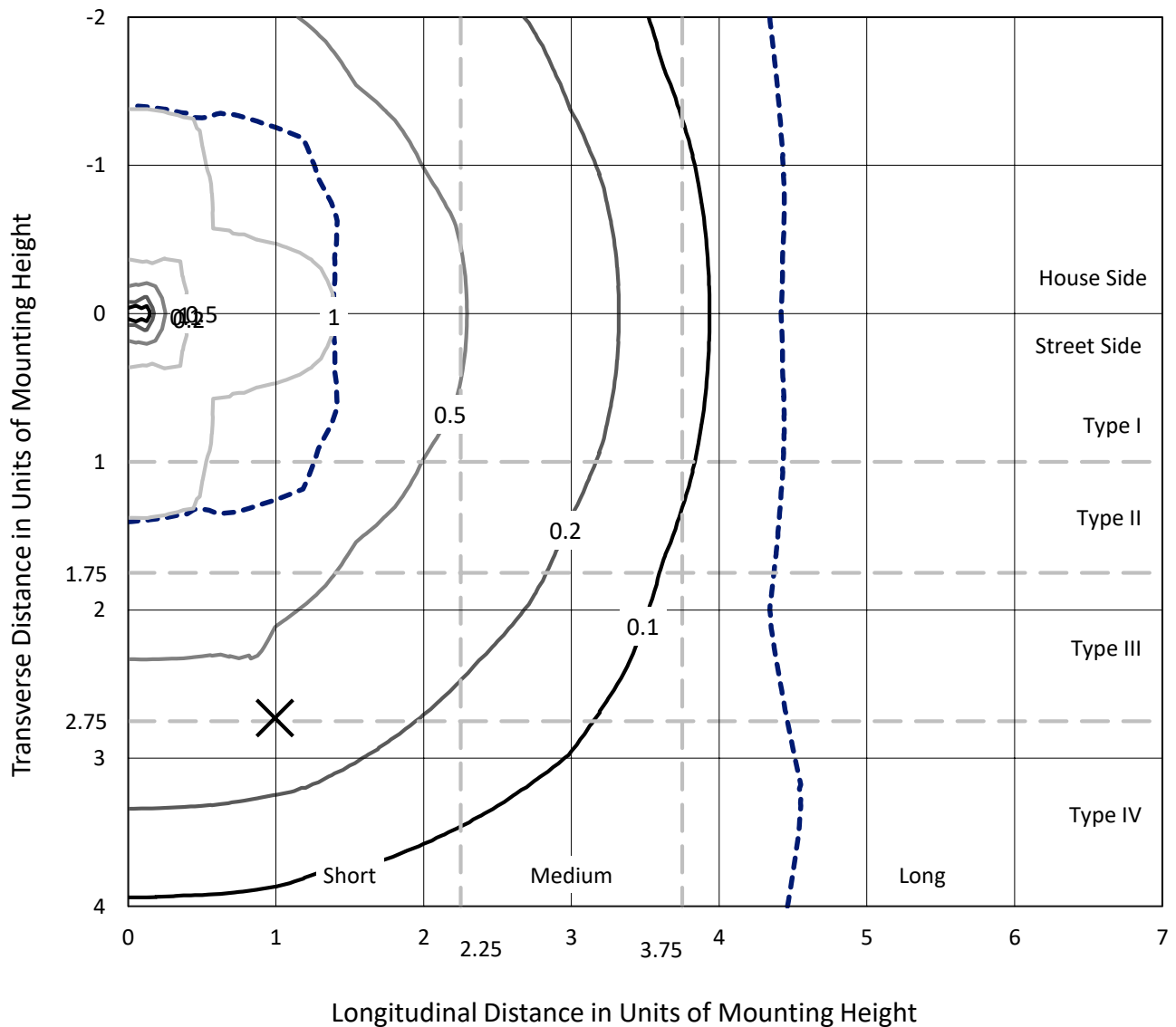


REPORT NUMBER: P239398

CATALOG NUMBER: UTLD-AF24-20-D-U-5WQ

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

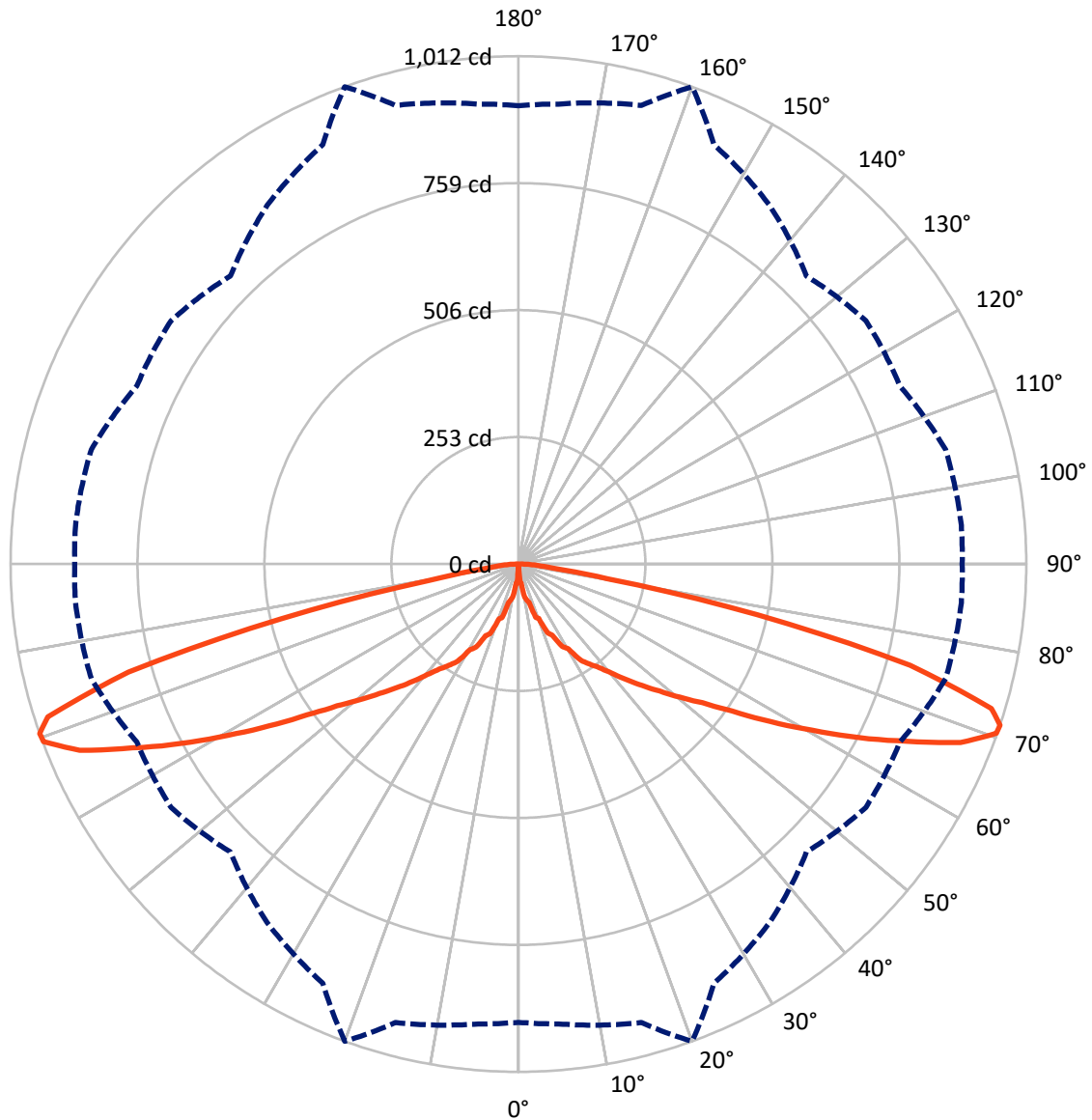


Based on 10 foot mounting height. Maximum calculated value = 1.5 fc
 Type V - Short - Non-Cutoff

REPORT NUMBER: P239398

CATALOG NUMBER: UTLD-AF24-20-D-U-5WQ

Luminous Intensity Polar Plot



— Vertical Plane Through 20-Deg Lateral - - - Horizontal Cone Through 71-Deg Vertical

REPORT NUMBER: P239398

CATALOG NUMBER: UTLD-AF24-20-D-U-5WQ

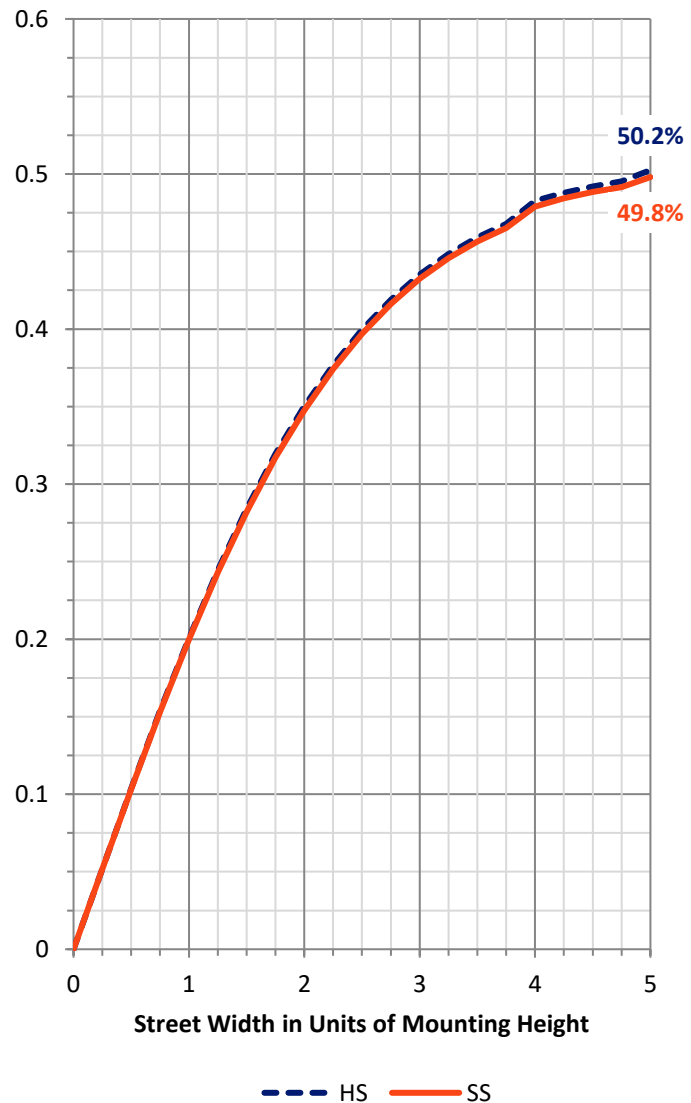
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|--------|
| House Side | Lumens | 1255.0 | 0.0 | 1255.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 1255.0 | 0.0 | 1255.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 2510.0 | 0.0 | 2510.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|--------|-----------|
| 0°-10° | 1.7 | 0.1 |
| 10°-20° | 20.7 | 0.8 |
| 20°-30° | 70.2 | 2.8 |
| 30°-40° | 143.1 | 5.7 |
| 40°-50° | 245.1 | 9.8 |
| 50°-60° | 431.8 | 17.2 |
| 60°-70° | 735.3 | 29.3 |
| 70°-80° | 760.5 | 30.3 |
| 80°-90° | 101.6 | 4.0 |
| 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° | 2510.0 | 100.0 |
| 0°-180° | 2510.0 | 100.0 |



REPORT NUMBER: P239398

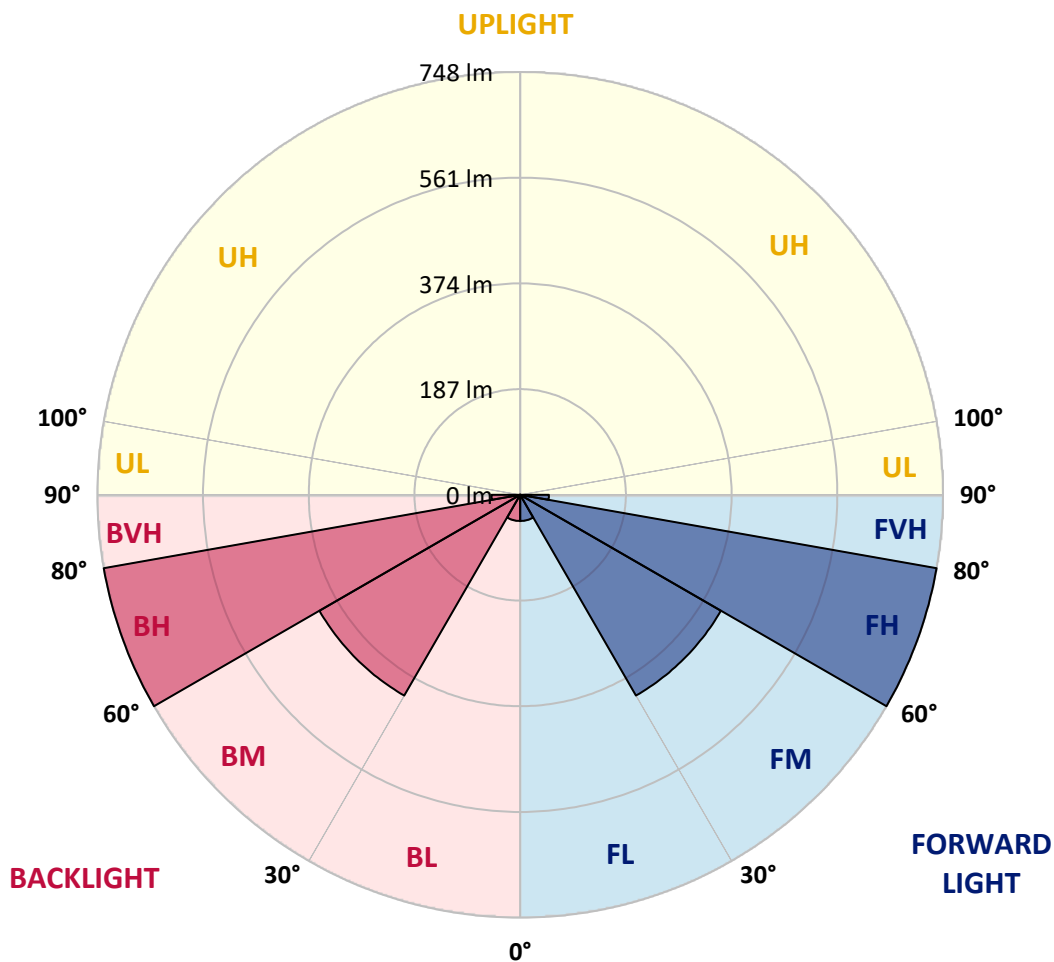
CATALOG NUMBER: UTLD-AF24-20-D-U-5WQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 46.3 | 1.8 | | | |
| FM (30°-60°) | 410.0 | 16.3 | | | |
| FH (60°-80°) | 747.9 | 29.8 | | | G1/1800 |
| FVH (80°-90°) | 50.8 | 2.0 | | | G1/100 |
| BL (0°-30°) | 46.3 | 1.8 | B0/110 | | |
| BM (30°-60°) | 410.0 | 16.3 | B1/1000 | | |
| BH (60°-80°) | 747.9 | 29.8 | B2/1000 | | G1/1800 |
| BVH (80°-90°) | 50.8 | 2.0 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B2-U0-G1

Type V Short





REPORT NUMBER: P239398

CATALOG NUMBER: UTLD-AF24-20-D-U-5WQ

CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 20° | 25° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|
| 0° | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 |
| 2.5° | 5.6 | 5.3 | 5.0 | 9.2 | 4.7 | 3.9 | 1.9 | 1.1 | 0.8 | 0.8 | 0.8 |
| 5° | 19.8 | 19.8 | 19.8 | 37.9 | 19.5 | 18.9 | 16.4 | 14.5 | 3.9 | 1.1 | 0.8 |
| 7.5° | 34.5 | 34.5 | 26.7 | 38.4 | 23.4 | 20.0 | 19.2 | 18.7 | 15.0 | 3.1 | 1.4 |
| 10° | 55.1 | 54.9 | 53.2 | 66.0 | 51.0 | 38.1 | 23.1 | 19.5 | 17.3 | 9.5 | 5.8 |
| 12.5° | 59.3 | 58.8 | 57.4 | 73.2 | 55.4 | 54.0 | 41.8 | 28.7 | 38.4 | 57.4 | 48.7 |
| 15° | 89.1 | 89.7 | 78.8 | 79.6 | 69.9 | 57.1 | 62.7 | 74.1 | 61.5 | 66.0 | 56.3 |
| 17.5° | 98.0 | 97.5 | 95.5 | 111.7 | 91.6 | 76.6 | 85.2 | 86.9 | 74.1 | 86.6 | 88.3 |
| 20° | 121.7 | 120.0 | 112.5 | 115.8 | 97.7 | 106.9 | 100.0 | 101.6 | 114.2 | 111.9 | 113.9 |
| 22.5° | 141.2 | 140.9 | 137.3 | 149.3 | 122.2 | 120.3 | 114.4 | 123.9 | 126.1 | 122.2 | 140.6 |
| 25° | 160.4 | 158.7 | 143.1 | 157.1 | 139.0 | 138.4 | 136.7 | 135.6 | 149.8 | 162.9 | 171.8 |
| 27.5° | 182.4 | 181.6 | 176.0 | 186.0 | 161.8 | 147.6 | 148.4 | 157.9 | 166.5 | 171.0 | 200.2 |
| 30° | 203.6 | 203.3 | 184.6 | 196.3 | 179.6 | 168.8 | 163.5 | 172.4 | 188.5 | 215.8 | 233.6 |
| 32.5° | 233.1 | 232.0 | 218.9 | 228.9 | 195.5 | 184.9 | 181.0 | 187.4 | 210.5 | 223.9 | 242.8 |
| 35° | 265.1 | 264.0 | 237.0 | 245.0 | 214.1 | 199.4 | 192.1 | 206.9 | 216.1 | 236.1 | 257.6 |
| 37.5° | 281.8 | 279.9 | 265.9 | 262.0 | 242.0 | 217.8 | 207.7 | 216.9 | 229.2 | 251.7 | 273.5 |
| 40° | 301.6 | 300.7 | 289.3 | 285.4 | 259.0 | 235.0 | 220.0 | 230.3 | 247.6 | 270.1 | 294.9 |
| 42.5° | 325.2 | 324.7 | 314.4 | 314.7 | 281.3 | 256.7 | 235.0 | 249.8 | 267.9 | 297.7 | 325.2 |
| 45° | 353.9 | 352.0 | 345.0 | 345.3 | 309.7 | 280.7 | 256.5 | 275.7 | 289.3 | 324.4 | 356.2 |
| 47.5° | 386.2 | 386.0 | 378.2 | 378.2 | 338.3 | 308.8 | 282.1 | 308.3 | 323.3 | 364.8 | 389.3 |
| 50° | 423.3 | 422.7 | 417.1 | 417.1 | 375.9 | 339.4 | 313.0 | 344.5 | 360.9 | 401.0 | 428.0 |
| 52.5° | 463.9 | 463.6 | 462.3 | 459.2 | 417.7 | 382.3 | 352.0 | 387.9 | 402.1 | 446.9 | 470.3 |
| 55° | 512.4 | 516.0 | 514.9 | 517.1 | 472.6 | 435.5 | 399.3 | 438.0 | 453.3 | 498.5 | 516.3 |
| 57.5° | 573.9 | 572.8 | 578.4 | 592.6 | 536.9 | 503.5 | 458.9 | 502.9 | 508.5 | 551.1 | 567.8 |
| 60° | 630.2 | 631.6 | 642.4 | 672.5 | 603.7 | 580.9 | 529.9 | 572.0 | 572.2 | 608.7 | 621.3 |
| 62.5° | 690.3 | 692.8 | 711.5 | 762.4 | 674.2 | 659.1 | 607.6 | 639.9 | 637.1 | 668.9 | 681.4 |
| 65° | 758.0 | 761.3 | 786.7 | 851.3 | 752.7 | 734.0 | 680.6 | 706.5 | 705.6 | 748.0 | 746.8 |
| 67.5° | 840.1 | 844.3 | 867.1 | 950.1 | 846.0 | 803.9 | 742.1 | 773.6 | 770.8 | 812.8 | 809.8 |
| 70° | 905.8 | 910.3 | 935.1 | 1010.8 | 908.6 | 858.0 | 794.2 | 828.2 | 830.4 | 869.9 | 874.4 |
| 71° | 913.4 | 920.1 | 946.2 | 1012.2 | 922.0 | 872.7 | 811.7 | 845.4 | 839.0 | 881.3 | 886.1 |
| 72.5° | 891.1 | 897.5 | 931.7 | 986.0 | 927.6 | 879.7 | 837.3 | 857.7 | 832.6 | 872.4 | 872.4 |
| 75° | 756.3 | 756.3 | 804.5 | 806.4 | 846.5 | 847.9 | 854.6 | 836.8 | 758.3 | 761.0 | 748.5 |
| 77.5° | 472.0 | 477.0 | 527.4 | 486.2 | 616.2 | 719.3 | 789.7 | 713.2 | 580.9 | 527.1 | 486.2 |
| 80° | 179.3 | 177.1 | 235.6 | 179.9 | 327.5 | 485.6 | 594.5 | 487.6 | 308.0 | 203.0 | 152.3 |
| 82.5° | 41.2 | 52.6 | 73.0 | 70.7 | 109.2 | 214.4 | 330.3 | 216.6 | 98.9 | 76.9 | 59.3 |
| 85° | 20.3 | 21.4 | 36.5 | 38.7 | 43.4 | 58.8 | 109.4 | 67.4 | 50.7 | 50.4 | 37.0 |
| 87.5° | 8.4 | 9.7 | 20.3 | 19.8 | 19.5 | 24.5 | 22.3 | 31.5 | 32.3 | 34.3 | 21.7 |
| 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: P239398

CATALOG NUMBER: UTLD-AF24-20-D-U-5WQ

CANDELA DISTRIBUTION (continued):

| | 90° |
|-------|--------------|
| 0° | 0.8 |
| 2.5° | 0.8 |
| 5° | 0.8 |
| 7.5° | 1.4 |
| 10° | 5.8 |
| 12.5° | 46.5 |
| 15° | 58.8 |
| 17.5° | 88.0 |
| 20° | 114.4 |
| 22.5° | 143.7 |
| 25° | 171.0 |
| 27.5° | 204.1 |
| 30° | 235.6 |
| 32.5° | 251.7 |
| 35° | 264.3 |
| 37.5° | 279.9 |
| 40° | 299.9 |
| 42.5° | 327.2 |
| 45° | 357.5 |
| 47.5° | 391.2 |
| 50° | 430.2 |
| 52.5° | 471.4 |
| 55° | 516.0 |
| 57.5° | 569.2 |
| 60° | 619.0 |
| 62.5° | 681.1 |
| 65° | 745.2 |
| 67.5° | 808.9 |
| 70° | 870.5 |
| 71° | 884.4 |
| 72.5° | 867.1 |
| 75° | 745.7 |
| 77.5° | 477.6 |
| 80° | 144.8 |
| 82.5° | 55.4 |
| 85° | 35.4 |
| 87.5° | 20.3 |
| 90° | 0.0 |

(END OF REPORT)