

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: P841545

Luminaire Tested: **ARCH4-190-740-U-T3-HSS**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841545  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-26)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-190-740-U-T3-HSS  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1530mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 21203 lumens  
Efficiency: N/A  
Efficacy: 111.6 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Short  
BUG Rating: B2 - U0 - G3

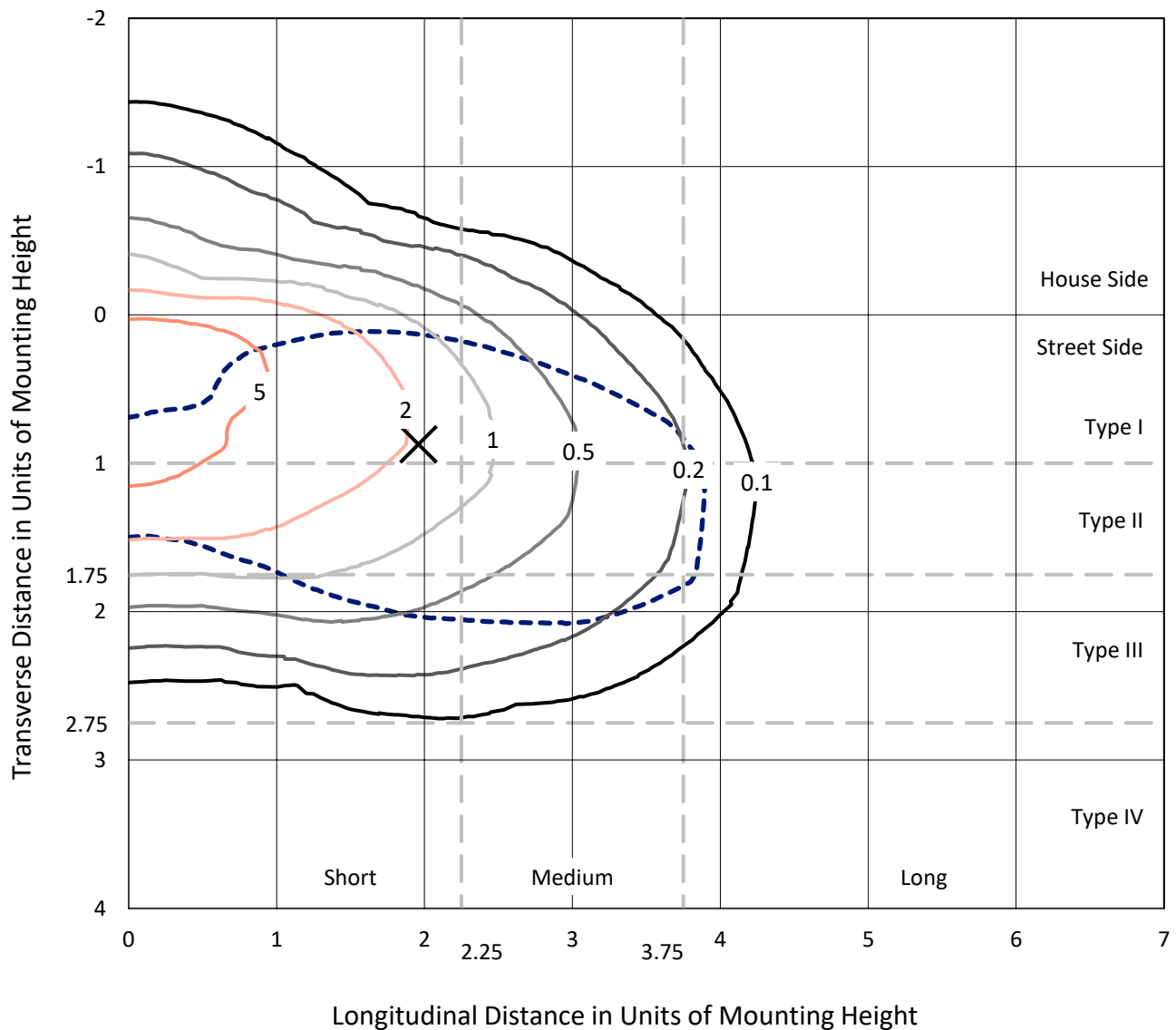
Input Watts (W): 190  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P841545  
CATALOG NUMBER: ARCH4-190-740-U-T3-HSS

## Iso-Footcandle Lines of Horizontal Illumination

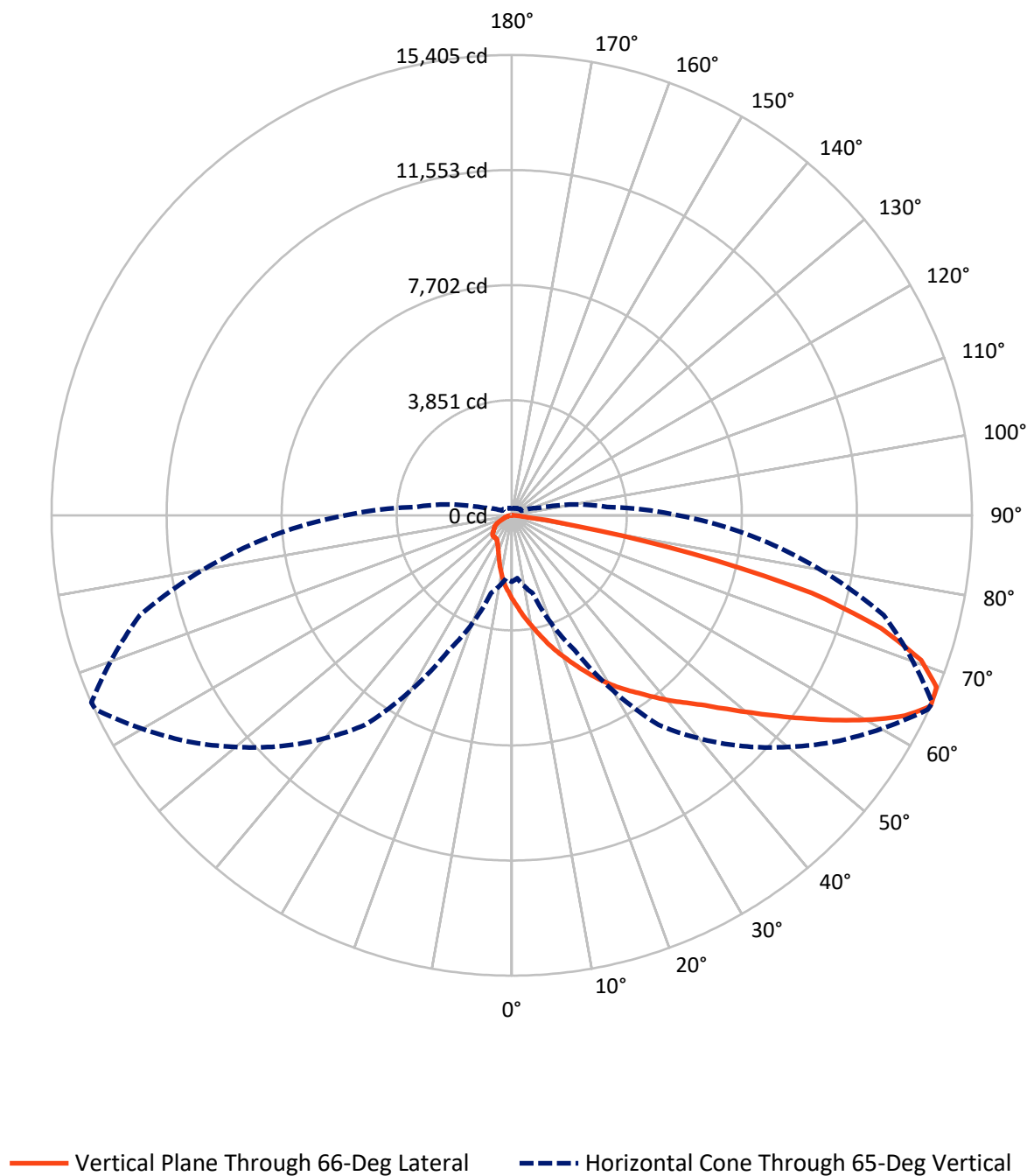
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc  
Type III - Short - N/A

REPORT NUMBER: P841545  
CATALOG NUMBER: ARCH4-190-740-U-T3-HSS

## Luminous Intensity Polar Plot



REPORT NUMBER: P841545

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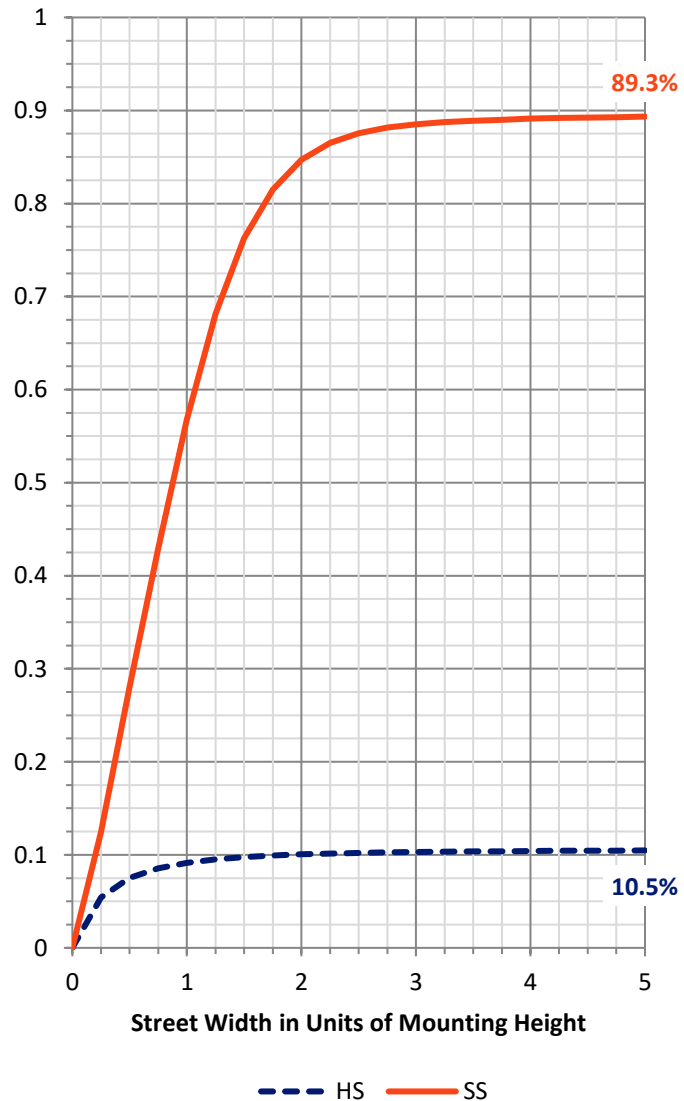
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 2242.7   | 0.0    | 2242.7  |
|                    | % Fixture | 10.6     | 0.0    | 10.6    |
| <b>Street Side</b> | Lumens    | 18960.3  | 0.0    | 18960.3 |
|                    | % Fixture | 89.4     | 0.0    | 89.4    |
| <b>Total</b>       | Lumens    | 21203.0  | 0.0    | 21203.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 277.0   | 1.3       |
| 10°-20°   | 902.7   | 4.3       |
| 20°-30°   | 1633.3  | 7.7       |
| 30°-40°   | 2554.0  | 12.0      |
| 40°-50°   | 3874.4  | 18.3      |
| 50°-60°   | 4922.5  | 23.2      |
| 60°-70°   | 4599.6  | 21.7      |
| 70°-80°   | 2286.0  | 10.8      |
| 80°-90°   | 153.6   | 0.7       |
| 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°    | 21203.0 | 100.0     |
| 0°-180°   | 21203.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P841545

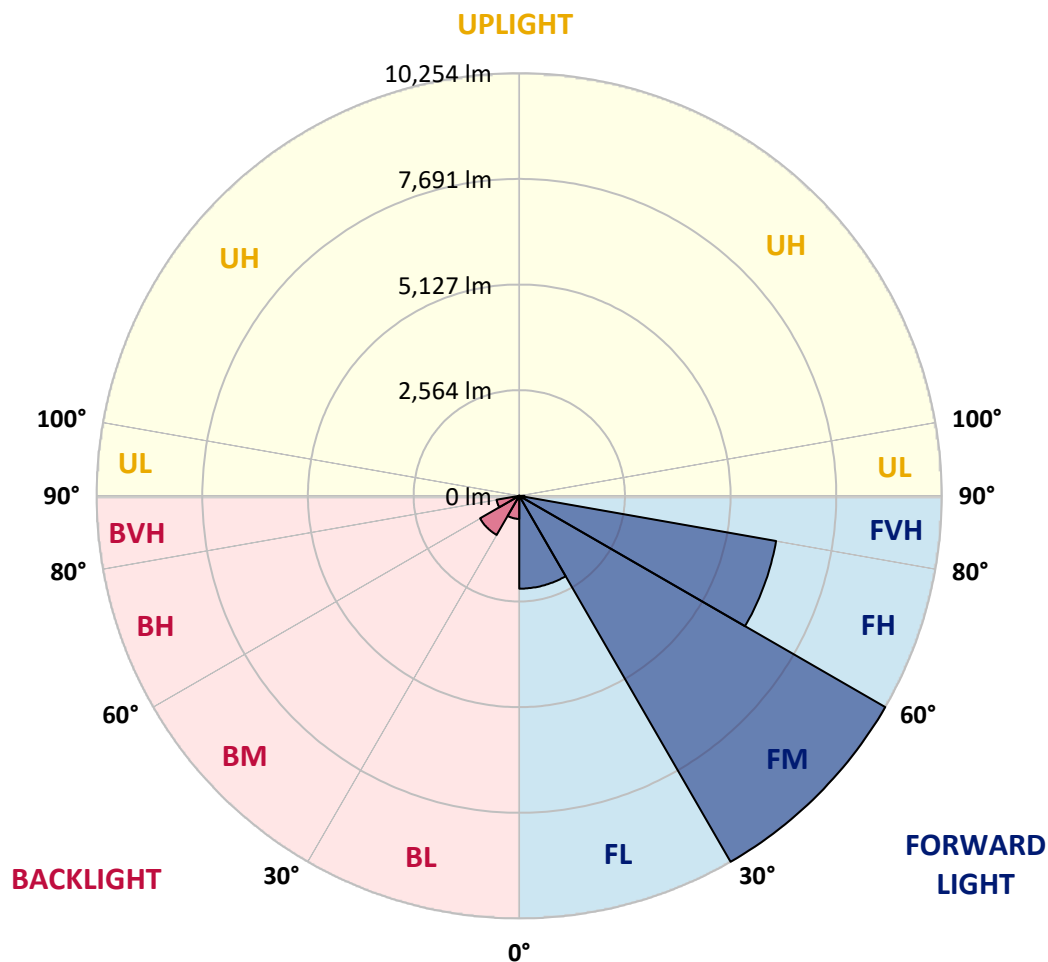
CATALOG NUMBER: ARCH4-190-740-U-T3-HSS

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2252.8  | 10.6      |                         |      |         |
| FM   | (30°-60°)   | 10254.0 | 48.4      |                         |      |         |
| FH   | (60°-80°)   | 6327.1  | 29.8      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 126.4   | 0.6       |                         |      | G2/225  |
| BL   | (0°-30°)    | 560.1   | 2.6       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1096.9  | 5.2       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 558.5   | 2.6       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 27.2    | 0.1       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G3**

Type III Short



REPORT NUMBER: P841545

CATALOG NUMBER: ARCH4-190-740-U-T3-HSS

**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 66°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 2806.1  | 2806.1  | 2806.1  | 2806.1  | 2806.1  | 2806.1  | 2806.1  | 2806.1  | 2806.1  | 2806.1  | 2806.1 |
| 2.5°  | 3277.5  | 3304.2  | 3317.5  | 3322.0  | 3219.7  | 3175.2  | 3130.7  | 3028.5  | 3006.2  | 2948.4  | 2872.8 |
| 5°    | 3855.6  | 3891.2  | 3882.3  | 3864.5  | 3740.0  | 3597.7  | 3482.1  | 3290.8  | 3259.7  | 3121.8  | 2952.9 |
| 7.5°  | 4424.8  | 4456.0  | 4447.1  | 4380.4  | 4242.5  | 4042.4  | 3851.2  | 3571.0  | 3526.5  | 3304.2  | 3032.9 |
| 10°   | 4900.7  | 4927.4  | 4922.9  | 4856.2  | 4691.7  | 4447.1  | 4215.8  | 3842.3  | 3788.9  | 3473.2  | 3099.6 |
| 12.5° | 5292.0  | 5327.6  | 5323.1  | 5278.7  | 5131.9  | 4865.1  | 4602.7  | 4153.6  | 4086.9  | 3677.7  | 3193.0 |
| 15°   | 5598.9  | 5643.3  | 5643.3  | 5625.5  | 5523.3  | 5300.9  | 5003.0  | 4496.0  | 4415.9  | 3913.4  | 3308.6 |
| 17.5° | 5785.6  | 5821.2  | 5852.3  | 5883.5  | 5812.3  | 5643.3  | 5372.1  | 4838.4  | 4753.9  | 4144.7  | 3428.7 |
| 20°   | 5883.5  | 5919.0  | 5941.3  | 6008.0  | 6021.3  | 5936.8  | 5723.4  | 5176.4  | 5087.4  | 4407.0  | 3566.5 |
| 22.5° | 6043.6  | 6074.7  | 6079.1  | 6137.0  | 6163.6  | 6185.9  | 6052.5  | 5509.9  | 5438.8  | 4696.1  | 3722.2 |
| 25°   | 6310.4  | 6346.0  | 6332.6  | 6359.3  | 6363.8  | 6390.4  | 6377.1  | 5892.4  | 5821.2  | 5025.2  | 3909.0 |
| 27.5° | 6652.8  | 6697.3  | 6688.4  | 6661.7  | 6621.7  | 6599.5  | 6657.3  | 6279.3  | 6212.6  | 5354.3  | 4100.2 |
| 30°   | 7021.9  | 7075.3  | 7061.9  | 7008.6  | 6901.9  | 6808.5  | 6888.5  | 6643.9  | 6581.7  | 5692.2  | 4313.7 |
| 32.5° | 7395.5  | 7457.7  | 7453.3  | 7364.3  | 7182.0  | 7021.9  | 7142.0  | 6986.3  | 6941.9  | 6056.9  | 4544.9 |
| 35°   | 7640.1  | 7720.1  | 7711.2  | 7657.9  | 7422.2  | 7284.3  | 7431.1  | 7337.7  | 7306.5  | 6501.6  | 4878.4 |
| 37.5° | 8035.9  | 8120.3  | 8044.7  | 7911.3  | 7640.1  | 7568.9  | 7746.8  | 7733.5  | 7711.2  | 6973.0  | 5229.8 |
| 40°   | 8996.4  | 9120.9  | 8920.8  | 8373.8  | 7929.1  | 7866.9  | 8120.3  | 8173.7  | 8151.5  | 7439.9  | 5545.5 |
| 42.5° | 10001.5 | 10188.2 | 9876.9  | 9120.9  | 8453.9  | 8227.1  | 8529.5  | 8605.1  | 8578.4  | 7840.2  | 5830.1 |
| 45°   | 10610.7 | 10690.8 | 10379.5 | 9792.4  | 9383.3  | 8662.9  | 8965.3  | 9089.8  | 9067.6  | 8320.5  | 6194.8 |
| 47.5° | 11108.8 | 11077.6 | 10721.9 | 10326.1 | 10401.7 | 9276.6  | 9458.9  | 9703.5  | 9685.7  | 8849.7  | 6595.0 |
| 50°   | 11215.5 | 11144.4 | 11002.0 | 10753.0 | 10953.1 | 9899.2  | 9979.2  | 10401.7 | 10383.9 | 9436.7  | 6999.7 |
| 52.5° | 10464.0 | 10370.6 | 10757.5 | 10966.5 | 10899.8 | 10352.8 | 10552.9 | 11166.6 | 11157.7 | 10072.6 | 7386.6 |
| 55°   | 8587.3  | 8511.7  | 9552.3  | 10632.9 | 10842.0 | 10673.0 | 11188.8 | 11962.6 | 12011.5 | 10748.6 | 7737.9 |
| 57.5° | 6755.1  | 6675.1  | 7697.9  | 9796.9  | 10628.5 | 10966.5 | 11931.5 | 12874.3 | 12936.5 | 11482.3 | 8071.4 |
| 60°   | 5385.4  | 5265.3  | 6048.0  | 8480.6  | 10228.3 | 11193.3 | 12647.5 | 13874.9 | 13883.8 | 12153.8 | 8276.0 |
| 62.5° | 3659.9  | 3526.5  | 4393.7  | 6812.9  | 9556.8  | 11228.8 | 13198.9 | 14737.6 | 14773.2 | 12656.4 | 8311.6 |
| 65°   | 2223.5  | 2112.4  | 2699.4  | 4976.3  | 8565.1  | 10926.4 | 13207.8 | 15373.5 | 15404.6 | 12887.6 | 8098.1 |
| 67.5° | 1289.7  | 1245.2  | 1543.1  | 3099.6  | 6919.6  | 10112.6 | 12651.9 | 15275.7 | 15333.5 | 12789.8 | 7613.4 |
| 70°   | 751.6   | 747.1   | 858.3   | 1534.2  | 4882.9  | 8498.3  | 11411.2 | 14453.0 | 14537.5 | 12278.4 | 6870.7 |
| 72.5° | 551.4   | 560.3   | 604.8   | 822.7   | 2828.3  | 6119.2  | 9663.5  | 12798.7 | 12927.6 | 11277.8 | 5812.3 |
| 75°   | 435.8   | 440.3   | 480.3   | 560.3   | 1485.3  | 3459.8  | 7239.8  | 10272.7 | 10375.0 | 9494.5  | 4540.5 |
| 77.5° | 324.6   | 333.5   | 364.7   | 395.8   | 689.3   | 1587.6  | 4073.5  | 6328.2  | 6159.2  | 5212.0  | 2192.4 |
| 80°   | 235.7   | 257.9   | 271.3   | 284.6   | 364.7   | 613.7   | 1222.9  | 2205.7  | 2188.0  | 2276.9  | 1036.2 |
| 82.5° | 151.2   | 169.0   | 182.3   | 191.2   | 217.9   | 293.5   | 364.7   | 493.6   | 533.6   | 885.0   | 413.6  |
| 85°   | 66.7    | 75.6    | 84.5    | 102.3   | 93.4    | 102.3   | 151.2   | 97.8    | 84.5    | 133.4   | 75.6   |
| 87.5° | 0.0     | 0.0     | 13.3    | 22.2    | 17.8    | 8.9     | 26.7    | 17.8    | 13.3    | 13.3    | 13.3   |
| 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: P841545

CATALOG NUMBER: ARCH4-190-740-U-T3-HSS

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 2806.1 | 2806.1 | 2806.1 | 2806.1 | 2806.1 | 2806.1 | 2806.1 | 2806.1 | 2806.1 | 2806.1 | 2806.1 |
| 2.5°  | 2832.8 | 2783.9 | 2681.6 | 2583.7 | 2525.9 | 2450.3 | 2383.6 | 2321.4 | 2316.9 | 2299.1 | 2268.0 |
| 5°    | 2868.4 | 2775.0 | 2583.7 | 2401.4 | 2263.6 | 2116.8 | 1992.3 | 1894.5 | 1858.9 | 1832.2 | 1796.6 |
| 7.5°  | 2903.9 | 2757.2 | 2472.6 | 2205.7 | 1987.8 | 1783.3 | 1636.5 | 1503.1 | 1463.1 | 1427.5 | 1405.3 |
| 10°   | 2917.3 | 2726.1 | 2343.6 | 1987.8 | 1703.2 | 1485.3 | 1329.7 | 1231.8 | 1196.3 | 1178.5 | 1165.1 |
| 12.5° | 2957.3 | 2708.3 | 2223.5 | 1783.3 | 1454.2 | 1254.1 | 1142.9 | 1085.1 | 1071.7 | 1058.4 | 1045.1 |
| 15°   | 3010.7 | 2708.3 | 2103.5 | 1583.2 | 1258.5 | 1098.4 | 1031.7 | 991.7  | 982.8  | 978.4  | 969.5  |
| 17.5° | 3068.5 | 2708.3 | 1987.8 | 1414.2 | 1116.2 | 996.1  | 947.2  | 925.0  | 920.5  | 916.1  | 911.6  |
| 20°   | 3148.5 | 2712.7 | 1863.3 | 1267.4 | 1013.9 | 920.5  | 880.5  | 853.8  | 849.4  | 844.9  | 844.9  |
| 22.5° | 3228.6 | 2721.6 | 1743.3 | 1156.2 | 947.2  | 862.7  | 813.8  | 787.1  | 778.2  | 778.2  | 778.2  |
| 25°   | 3330.9 | 2748.3 | 1632.1 | 1062.8 | 889.4  | 809.4  | 747.1  | 724.9  | 720.4  | 720.4  | 716.0  |
| 27.5° | 3450.9 | 2779.4 | 1534.2 | 991.7  | 831.6  | 747.1  | 684.8  | 662.6  | 653.7  | 653.7  | 649.3  |
| 30°   | 3579.9 | 2810.5 | 1454.2 | 938.3  | 773.8  | 684.8  | 627.0  | 600.4  | 591.5  | 595.9  | 591.5  |
| 32.5° | 3722.2 | 2855.0 | 1391.9 | 902.8  | 720.4  | 631.5  | 578.1  | 547.0  | 542.5  | 542.5  | 538.1  |
| 35°   | 3962.3 | 2979.5 | 1383.0 | 885.0  | 676.0  | 591.5  | 538.1  | 507.0  | 502.5  | 502.5  | 498.1  |
| 37.5° | 4220.3 | 3121.8 | 1423.1 | 876.1  | 640.4  | 555.9  | 507.0  | 475.8  | 471.4  | 471.4  | 471.4  |
| 40°   | 4438.2 | 3228.6 | 1467.5 | 876.1  | 618.1  | 524.8  | 480.3  | 453.6  | 453.6  | 453.6  | 453.6  |
| 42.5° | 4584.9 | 3237.5 | 1458.6 | 876.1  | 600.4  | 502.5  | 462.5  | 435.8  | 435.8  | 440.3  | 435.8  |
| 45°   | 4802.8 | 3281.9 | 1423.1 | 862.7  | 587.0  | 484.7  | 444.7  | 422.5  | 418.0  | 422.5  | 422.5  |
| 47.5° | 5060.8 | 3362.0 | 1387.5 | 809.4  | 582.6  | 466.9  | 431.4  | 404.7  | 400.2  | 404.7  | 400.2  |
| 50°   | 5305.4 | 3433.1 | 1369.7 | 738.2  | 573.7  | 449.2  | 413.6  | 386.9  | 382.4  | 386.9  | 382.4  |
| 52.5° | 5509.9 | 3464.3 | 1338.6 | 689.3  | 551.4  | 431.4  | 395.8  | 369.1  | 360.2  | 364.7  | 364.7  |
| 55°   | 5674.5 | 3455.4 | 1294.1 | 649.3  | 511.4  | 413.6  | 373.6  | 351.3  | 338.0  | 338.0  | 333.5  |
| 57.5° | 5825.7 | 3459.8 | 1254.1 | 609.2  | 466.9  | 386.9  | 355.8  | 329.1  | 311.3  | 306.8  | 302.4  |
| 60°   | 5883.5 | 3437.6 | 1182.9 | 555.9  | 422.5  | 364.7  | 333.5  | 302.4  | 284.6  | 280.2  | 275.7  |
| 62.5° | 5803.4 | 3357.5 | 1089.5 | 462.5  | 382.4  | 338.0  | 311.3  | 280.2  | 262.4  | 257.9  | 253.5  |
| 65°   | 5576.6 | 3206.3 | 947.2  | 364.7  | 346.9  | 306.8  | 284.6  | 262.4  | 240.1  | 231.2  | 226.8  |
| 67.5° | 5189.7 | 2988.4 | 769.3  | 293.5  | 306.8  | 280.2  | 266.8  | 240.1  | 213.5  | 204.6  | 200.1  |
| 70°   | 4638.3 | 2699.4 | 578.1  | 249.0  | 271.3  | 249.0  | 240.1  | 213.5  | 191.2  | 182.3  | 177.9  |
| 72.5° | 3864.5 | 2232.4 | 404.7  | 213.5  | 235.7  | 217.9  | 209.0  | 191.2  | 169.0  | 155.6  | 155.6  |
| 75°   | 2921.7 | 1600.9 | 266.8  | 182.3  | 195.7  | 186.8  | 173.4  | 160.1  | 146.8  | 137.9  | 133.4  |
| 77.5° | 1258.5 | 622.6  | 164.5  | 137.9  | 160.1  | 155.6  | 137.9  | 129.0  | 124.5  | 115.6  | 115.6  |
| 80°   | 542.5  | 253.5  | 102.3  | 102.3  | 115.6  | 111.2  | 106.7  | 97.8   | 97.8   | 93.4   | 88.9   |
| 82.5° | 200.1  | 102.3  | 62.3   | 75.6   | 84.5   | 75.6   | 75.6   | 75.6   | 75.6   | 71.2   | 71.2   |
| 85°   | 48.9   | 31.1   | 31.1   | 44.5   | 48.9   | 44.5   | 48.9   | 44.5   | 44.5   | 44.5   | 40.0   |
| 87.5° | 13.3   | 13.3   | 17.8   | 17.8   | 17.8   | 17.8   | 17.8   | 13.3   | 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)