

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: P836273

Luminaire Tested: **ARCH3-160-740-U-T2U**

Issue Date: 5/16/2024

### Test Information

Test Method: LM-79-08  
Report Number: P836273  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/16/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH3-160-740-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 4000K, 1245mA LIGHTSQUARE WITH 40 LEDS AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 23552 lumens  
Efficiency: N/A  
Efficacy: 146.3 lumens/watt  
Luminous Opening: Rectangular (W 0.58' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 161  
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



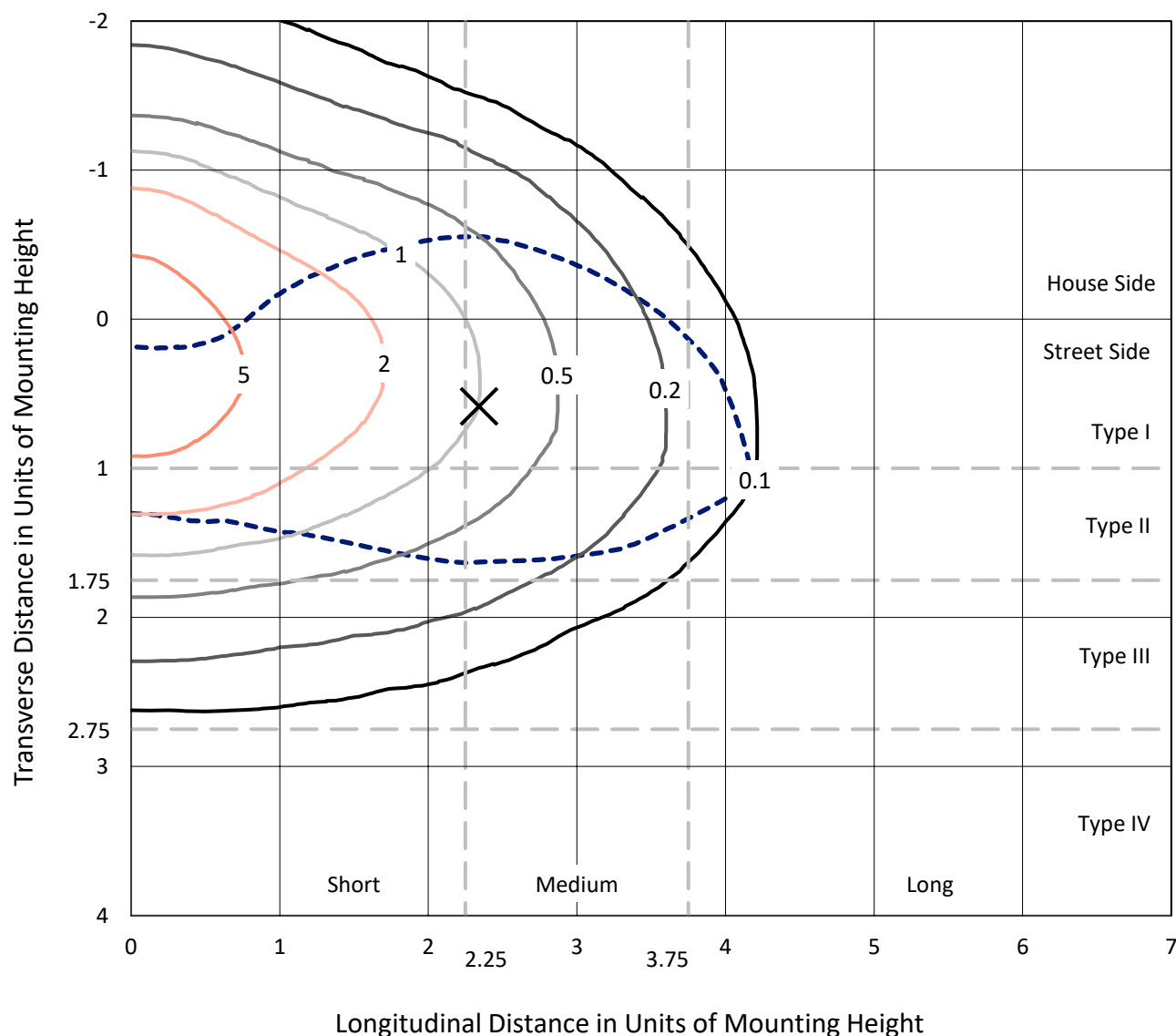
REPORT NUMBER: P836273

CATALOG NUMBER: ARCH3-160-740-U-T2U

## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

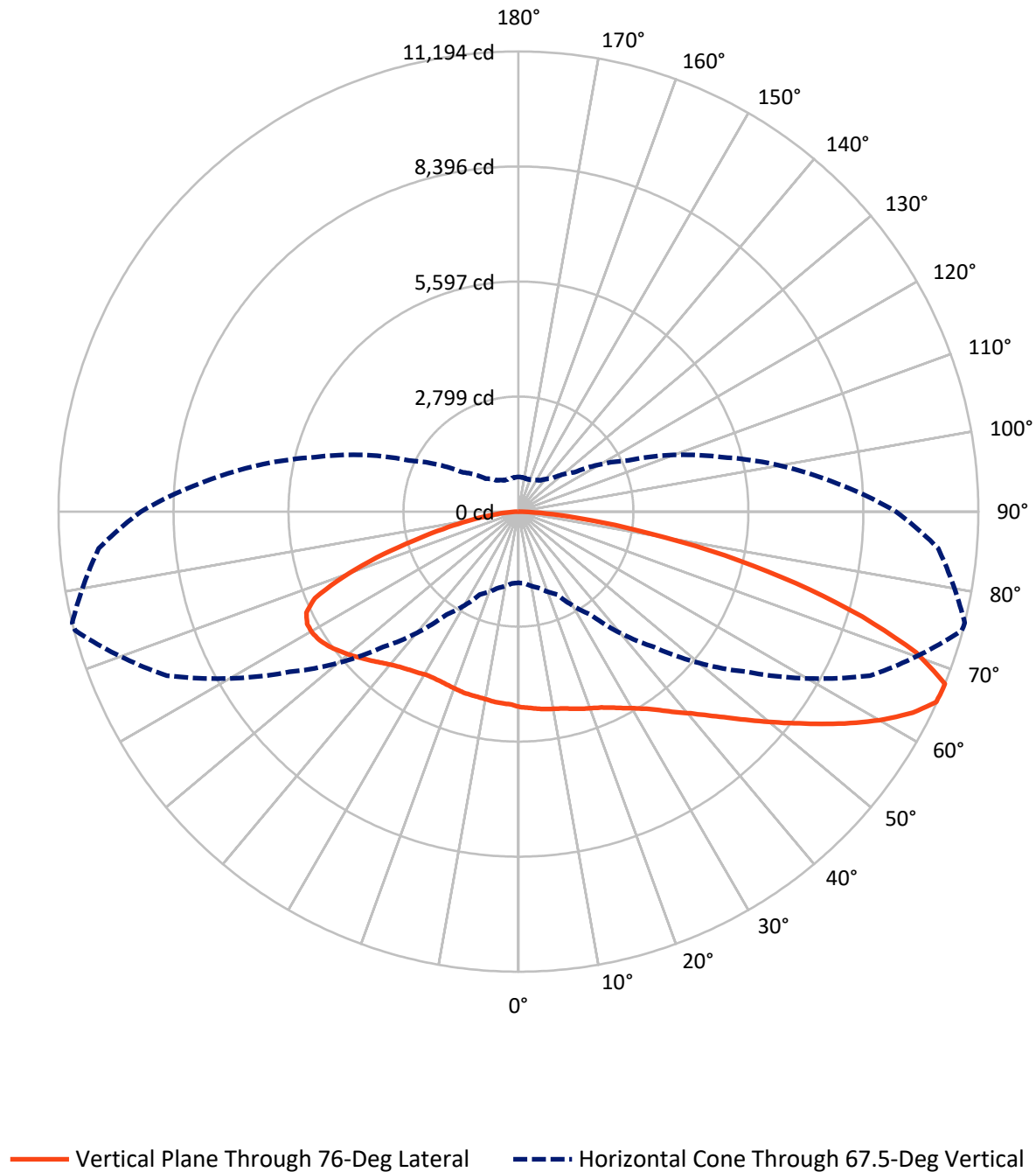
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.6 fc  
 Type II - Medium - N/A

REPORT NUMBER: P836273  
CATALOG NUMBER: ARCH3-160-740-U-T2U

## Luminous Intensity Polar Plot



REPORT NUMBER: P836273

CATALOG NUMBER: ARCH3-160-740-U-T2U

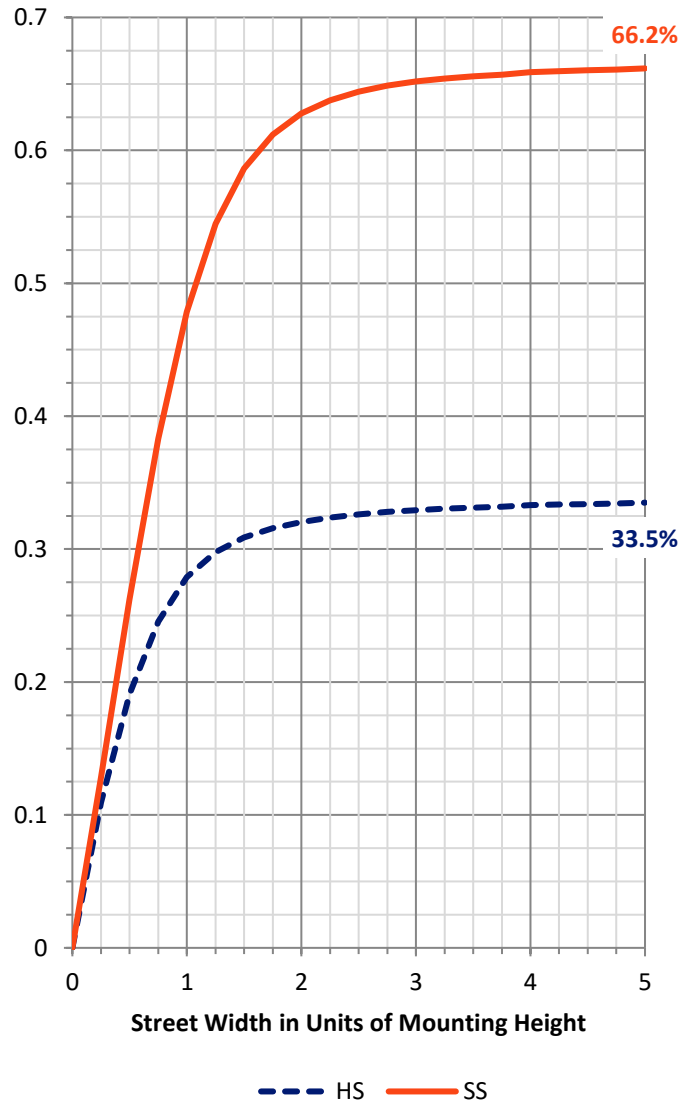
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 7958.3   | 0.0    | 7958.3  |
|                    | % Fixture | 33.8     | 0.0    | 33.8    |
| <b>Street Side</b> | Lumens    | 15593.7  | 0.0    | 15593.7 |
|                    | % Fixture | 66.2     | 0.0    | 66.2    |
| <b>Total</b>       | Lumens    | 23552.0  | 0.0    | 23552.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 458.7   | 1.9       |
| 10°-20°   | 1402.5  | 6.0       |
| 20°-30°   | 2382.9  | 10.1      |
| 30°-40°   | 3390.5  | 14.4      |
| 40°-50°   | 4282.0  | 18.2      |
| 50°-60°   | 4636.1  | 19.7      |
| 60°-70°   | 4312.1  | 18.3      |
| 70°-80°   | 2316.0  | 9.8       |
| 80°-90°   | 371.1   | 1.6       |
| 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°    | 23552.0 | 100.0     |
| 0°-180°   | 23552.0 | 100.0     |

**Coefficient of Utilization**



REPORT NUMBER: P836273

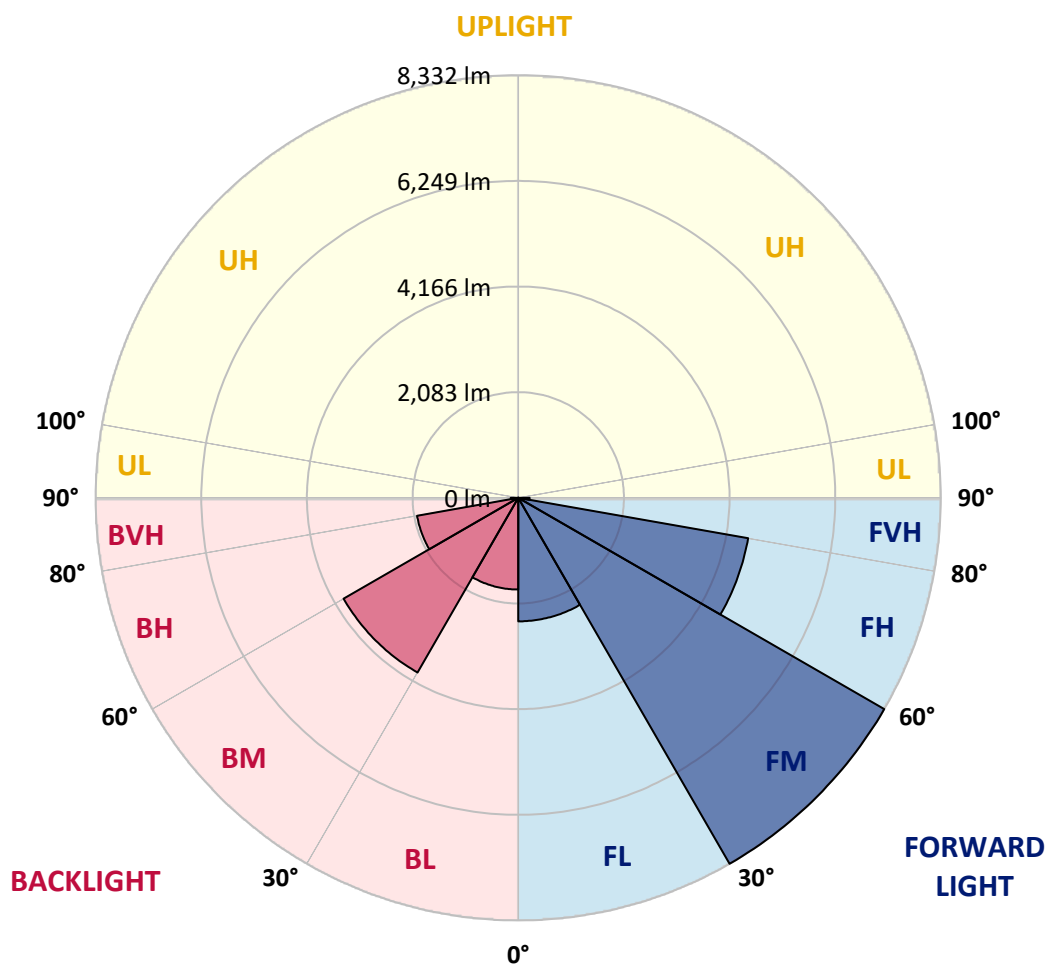
CATALOG NUMBER: ARCH3-160-740-U-T2U

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2435.5 | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 8331.8 | 35.4      |                         |      |         |
| FH   | (60°-80°)   | 4601.8 | 19.5      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 224.5  | 1.0       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1808.6 | 7.7       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3976.9 | 16.9      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2026.3 | 8.6       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 146.6  | 0.6       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B3-U0-G3**

Type II Medium



REPORT NUMBER: P836273

CATALOG NUMBER: ARCH3-160-740-U-T2U

**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°    | 75°     | 76°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0°    | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5  | 4757.5  | 4757.5  |
| 2.5°  | 4901.7 | 4893.0 | 4858.0 | 4862.4 | 4862.4 | 4858.0 | 4805.6 | 4783.7 | 4783.7  | 4779.3  | 4731.2  |
| 5°    | 5076.7 | 5063.5 | 5024.2 | 5015.4 | 4997.9 | 4976.1 | 4893.0 | 4844.9 | 4823.0  | 4818.7  | 4753.1  |
| 7.5°  | 5282.2 | 5264.7 | 5216.6 | 5190.3 | 5146.6 | 5089.8 | 4984.8 | 4910.5 | 4858.0  | 4853.7  | 4761.8  |
| 10°   | 5487.7 | 5470.2 | 5413.4 | 5365.3 | 5304.0 | 5212.2 | 5076.7 | 4967.3 | 4884.3  | 4875.5  | 4766.2  |
| 12.5° | 5732.6 | 5715.1 | 5645.1 | 5583.9 | 5492.1 | 5369.6 | 5190.3 | 5041.7 | 4928.0  | 4914.9  | 4779.3  |
| 15°   | 5990.5 | 5964.3 | 5894.3 | 5824.4 | 5710.7 | 5553.3 | 5339.0 | 5142.2 | 4997.9  | 4976.1  | 4818.7  |
| 17.5° | 6204.8 | 6169.8 | 6113.0 | 6043.0 | 5916.2 | 5732.6 | 5487.7 | 5242.8 | 5063.5  | 5046.0  | 4858.0  |
| 20°   | 6388.5 | 6362.2 | 6301.0 | 6235.4 | 6099.9 | 5898.7 | 5627.6 | 5343.4 | 5124.8  | 5102.9  | 4888.6  |
| 22.5° | 6563.4 | 6528.4 | 6493.4 | 6445.3 | 6296.6 | 6073.6 | 5789.4 | 5465.8 | 5203.5  | 5177.2  | 4928.0  |
| 25°   | 6764.5 | 6725.1 | 6712.0 | 6685.8 | 6510.9 | 6283.5 | 5986.2 | 5618.9 | 5312.8  | 5282.2  | 4997.9  |
| 27.5° | 7013.7 | 6970.0 | 6943.8 | 6943.8 | 6733.9 | 6497.8 | 6196.1 | 5798.1 | 5439.6  | 5413.4  | 5085.4  |
| 30°   | 7276.1 | 7223.6 | 7184.3 | 7184.3 | 6948.2 | 6712.0 | 6401.6 | 5977.4 | 5583.9  | 5553.3  | 5199.1  |
| 32.5° | 7507.9 | 7455.4 | 7411.7 | 7407.3 | 7162.4 | 6926.3 | 6615.8 | 6174.2 | 5758.8  | 5719.4  | 5339.0  |
| 35°   | 7687.1 | 7639.0 | 7599.7 | 7608.4 | 7376.7 | 7144.9 | 6856.3 | 6436.6 | 5977.4  | 5933.7  | 5522.7  |
| 37.5° | 7796.4 | 7779.0 | 7757.1 | 7787.7 | 7573.4 | 7354.8 | 7105.6 | 6690.2 | 6226.7  | 6187.3  | 5750.0  |
| 40°   | 7853.3 | 7840.2 | 7927.6 | 7967.0 | 7739.6 | 7542.8 | 7354.8 | 6952.5 | 6497.8  | 6454.0  | 6012.4  |
| 42.5° | 7936.4 | 8045.7 | 8080.7 | 8071.9 | 7862.0 | 7687.1 | 7582.2 | 7236.7 | 6817.0  | 6777.6  | 6327.2  |
| 45°   | 7639.0 | 7612.8 | 7805.2 | 7910.1 | 7870.8 | 7779.0 | 7796.4 | 7577.8 | 7188.6  | 7149.3  | 6690.2  |
| 47.5° | 7241.1 | 7206.1 | 7315.5 | 7573.4 | 7726.5 | 7813.9 | 7988.8 | 7932.0 | 7617.2  | 7582.2  | 7114.3  |
| 50°   | 6401.6 | 6449.7 | 6856.3 | 7201.8 | 7503.5 | 7805.2 | 8150.6 | 8312.4 | 8089.4  | 8054.4  | 7569.1  |
| 52.5° | 5470.2 | 5518.3 | 5942.4 | 6738.3 | 7232.4 | 7739.6 | 8268.7 | 8692.8 | 8601.0  | 8561.7  | 8054.4  |
| 55°   | 4792.4 | 4897.4 | 5378.4 | 5955.6 | 6847.6 | 7534.1 | 8338.7 | 9082.0 | 9152.0  | 9117.0  | 8583.5  |
| 57.5° | 4119.0 | 4197.8 | 4560.7 | 5072.3 | 6322.9 | 7175.5 | 8334.3 | 9444.9 | 9729.2  | 9694.2  | 9121.4  |
| 60°   | 3327.6 | 3428.2 | 3716.8 | 4267.7 | 5623.2 | 6747.0 | 8211.9 | 9729.2 | 10284.5 | 10258.3 | 9641.7  |
| 62.5° | 2785.4 | 2816.0 | 3021.5 | 3498.1 | 4722.5 | 6204.8 | 7936.4 | 9882.2 | 10787.3 | 10769.9 | 10109.6 |
| 65°   | 2243.2 | 2247.5 | 2435.6 | 2833.5 | 3852.3 | 5531.4 | 7468.5 | 9825.4 | 11167.8 | 11176.5 | 10446.3 |
| 67.5° | 1731.6 | 1753.4 | 1924.0 | 2225.7 | 3060.9 | 4656.9 | 6799.5 | 9440.6 | 11172.1 | 11194.0 | 10253.9 |
| 70°   | 1198.1 | 1215.6 | 1473.6 | 1766.6 | 2365.6 | 3712.4 | 5894.3 | 8421.7 | 10253.9 | 10271.4 | 9191.3  |
| 72.5° | 843.9  | 852.7  | 1128.1 | 1412.4 | 1849.6 | 2798.5 | 4447.0 | 6965.6 | 8740.9  | 8754.1  | 7730.9  |
| 75°   | 629.7  | 638.4  | 795.8  | 1071.3 | 1416.7 | 1937.1 | 3039.0 | 5334.6 | 6983.1  | 6983.1  | 6104.2  |
| 77.5° | 446.0  | 450.4  | 516.0  | 739.0  | 944.5  | 1307.4 | 1827.8 | 3493.8 | 5124.8  | 5133.5  | 4447.0  |
| 80°   | 301.7  | 306.1  | 336.7  | 498.5  | 590.3  | 708.4  | 992.6  | 1832.1 | 3231.4  | 3244.5  | 2824.7  |
| 82.5° | 157.4  | 166.2  | 188.0  | 253.6  | 297.3  | 393.5  | 511.6  | 931.4  | 1788.4  | 1823.4  | 1696.6  |
| 85°   | 61.2   | 61.2   | 70.0   | 83.1   | 109.3  | 153.0  | 236.1  | 354.2  | 808.9   | 835.2   | 747.7   |
| 87.5° | 21.9   | 21.9   | 26.2   | 26.2   | 30.6   | 35.0   | 39.4   | 52.5   | 91.8    | 91.8    | 87.5    |
| 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: P836273

CATALOG NUMBER: ARCH3-160-740-U-T2U

**CANDELA DISTRIBUTION (continued):**

|       | 90°    | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 | 4757.5 |
| 2.5°  | 4713.7 | 4713.7 | 4691.9 | 4700.6 | 4696.2 | 4687.5 | 4678.7 | 4691.9 | 4678.7 | 4648.1 | 4643.8 |
| 5°    | 4722.5 | 4713.7 | 4678.7 | 4674.4 | 4661.3 | 4643.8 | 4621.9 | 4630.6 | 4608.8 | 4582.5 | 4578.2 |
| 7.5°  | 4726.8 | 4709.4 | 4661.3 | 4643.8 | 4617.5 | 4582.5 | 4547.6 | 4547.6 | 4517.0 | 4490.7 | 4486.3 |
| 10°   | 4718.1 | 4696.2 | 4630.6 | 4595.7 | 4547.6 | 4495.1 | 4447.0 | 4433.9 | 4398.9 | 4368.3 | 4368.3 |
| 12.5° | 4722.5 | 4691.9 | 4608.8 | 4551.9 | 4486.3 | 4420.8 | 4359.5 | 4342.0 | 4311.4 | 4280.8 | 4276.5 |
| 15°   | 4748.7 | 4705.0 | 4600.0 | 4525.7 | 4429.5 | 4355.2 | 4289.6 | 4276.5 | 4250.2 | 4228.4 | 4228.4 |
| 17.5° | 4774.9 | 4718.1 | 4586.9 | 4482.0 | 4363.9 | 4280.8 | 4219.6 | 4219.6 | 4202.1 | 4189.0 | 4189.0 |
| 20°   | 4788.1 | 4722.5 | 4560.7 | 4420.8 | 4285.2 | 4197.8 | 4140.9 | 4149.7 | 4145.3 | 4140.9 | 4140.9 |
| 22.5° | 4818.7 | 4731.2 | 4538.8 | 4363.9 | 4202.1 | 4110.3 | 4057.8 | 4070.9 | 4066.6 | 4066.6 | 4070.9 |
| 25°   | 4866.8 | 4753.1 | 4521.3 | 4311.4 | 4123.4 | 4022.8 | 3966.0 | 3974.7 | 3974.7 | 3974.7 | 3974.7 |
| 27.5° | 4932.4 | 4796.8 | 4517.0 | 4263.3 | 4044.7 | 3931.0 | 3861.1 | 3861.1 | 3843.6 | 3847.9 | 3852.3 |
| 30°   | 5032.9 | 4879.9 | 4525.7 | 4219.6 | 3961.6 | 3817.3 | 3734.3 | 3721.1 | 3716.8 | 3725.5 | 3729.9 |
| 32.5° | 5155.4 | 4993.6 | 4578.2 | 4189.0 | 3874.2 | 3690.5 | 3585.6 | 3581.2 | 3568.1 | 3568.1 | 3568.1 |
| 35°   | 5308.4 | 5102.9 | 4626.3 | 4184.6 | 3786.7 | 3555.0 | 3441.3 | 3428.2 | 3397.6 | 3384.4 | 3384.4 |
| 37.5° | 5505.2 | 5273.4 | 4683.1 | 4154.0 | 3712.4 | 3423.8 | 3288.2 | 3244.5 | 3209.5 | 3205.2 | 3205.2 |
| 40°   | 5745.7 | 5465.8 | 4766.2 | 4119.0 | 3633.7 | 3288.2 | 3109.0 | 3034.6 | 3039.0 | 3056.5 | 3056.5 |
| 42.5° | 6029.9 | 5701.9 | 4871.1 | 4101.6 | 3520.0 | 3148.3 | 2899.1 | 2811.6 | 2842.2 | 2859.7 | 2864.1 |
| 45°   | 6362.2 | 5981.8 | 4989.2 | 4079.7 | 3415.0 | 2990.9 | 2676.1 | 2566.8 | 2579.9 | 2584.2 | 2588.6 |
| 47.5° | 6747.0 | 6292.3 | 5111.6 | 4062.2 | 3297.0 | 2794.1 | 2431.2 | 2286.9 | 2282.5 | 2256.3 | 2265.0 |
| 50°   | 7149.3 | 6620.2 | 5238.4 | 4031.6 | 3152.7 | 2562.4 | 2173.2 | 2002.7 | 1967.7 | 1928.3 | 1932.7 |
| 52.5° | 7577.8 | 6956.9 | 5356.5 | 3983.5 | 2973.4 | 2326.3 | 1928.3 | 1744.7 | 1674.7 | 1631.0 | 1639.7 |
| 55°   | 8050.1 | 7302.3 | 5470.2 | 3909.2 | 2785.4 | 2090.1 | 1709.7 | 1521.7 | 1434.2 | 1399.3 | 1403.6 |
| 57.5° | 8483.0 | 7634.7 | 5553.3 | 3817.3 | 2579.9 | 1875.9 | 1517.3 | 1333.7 | 1276.8 | 1272.4 | 1276.8 |
| 60°   | 8902.7 | 7914.5 | 5588.3 | 3690.5 | 2370.0 | 1679.1 | 1338.0 | 1198.1 | 1158.8 | 1180.6 | 1185.0 |
| 62.5° | 9256.9 | 8093.8 | 5570.8 | 3520.0 | 2155.7 | 1491.1 | 1193.7 | 1093.2 | 1066.9 | 1110.7 | 1115.0 |
| 65°   | 9462.4 | 8150.6 | 5448.3 | 3275.1 | 1924.0 | 1307.4 | 1058.2 | 948.9  | 935.7  | 962.0  | 975.1  |
| 67.5° | 9191.3 | 7796.4 | 5116.0 | 2938.4 | 1666.0 | 1136.9 | 927.0  | 839.6  | 817.7  | 839.6  | 839.6  |
| 70°   | 8146.3 | 6755.8 | 4328.9 | 2405.0 | 1381.8 | 970.7  | 804.6  | 743.4  | 725.9  | 743.4  | 739.0  |
| 72.5° | 6786.4 | 5618.9 | 3410.7 | 1875.9 | 1088.8 | 817.7  | 699.6  | 642.8  | 625.3  | 607.8  | 599.1  |
| 75°   | 5264.7 | 4267.7 | 2474.9 | 1377.4 | 822.1  | 655.9  | 585.9  | 533.5  | 489.7  | 507.2  | 498.5  |
| 77.5° | 3856.7 | 2995.3 | 1753.4 | 953.2  | 590.3  | 507.2  | 459.1  | 419.8  | 389.2  | 424.1  | 419.8  |
| 80°   | 2483.7 | 1937.1 | 1171.9 | 638.4  | 406.7  | 354.2  | 336.7  | 314.8  | 345.4  | 450.4  | 459.1  |
| 82.5° | 1517.3 | 1228.7 | 699.6  | 415.4  | 266.7  | 236.1  | 218.6  | 218.6  | 354.2  | 389.2  | 393.5  |
| 85°   | 677.8  | 651.5  | 380.4  | 214.3  | 148.7  | 135.6  | 122.4  | 157.4  | 144.3  | 104.9  | 109.3  |
| 87.5° | 109.3  | 113.7  | 83.1   | 74.3   | 56.8   | 56.8   | 43.7   | 30.6   | 21.9   | 13.1   | 13.1   |
| 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)