

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: P841337

Luminaire Tested: **ARCH4-160-750-U-T2U**

Issue Date: 5/27/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P841337  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2401-285-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-160-750-U-T2U  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1305mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II U OPTICS  
Light Source: -  
Ballast/Driver: -

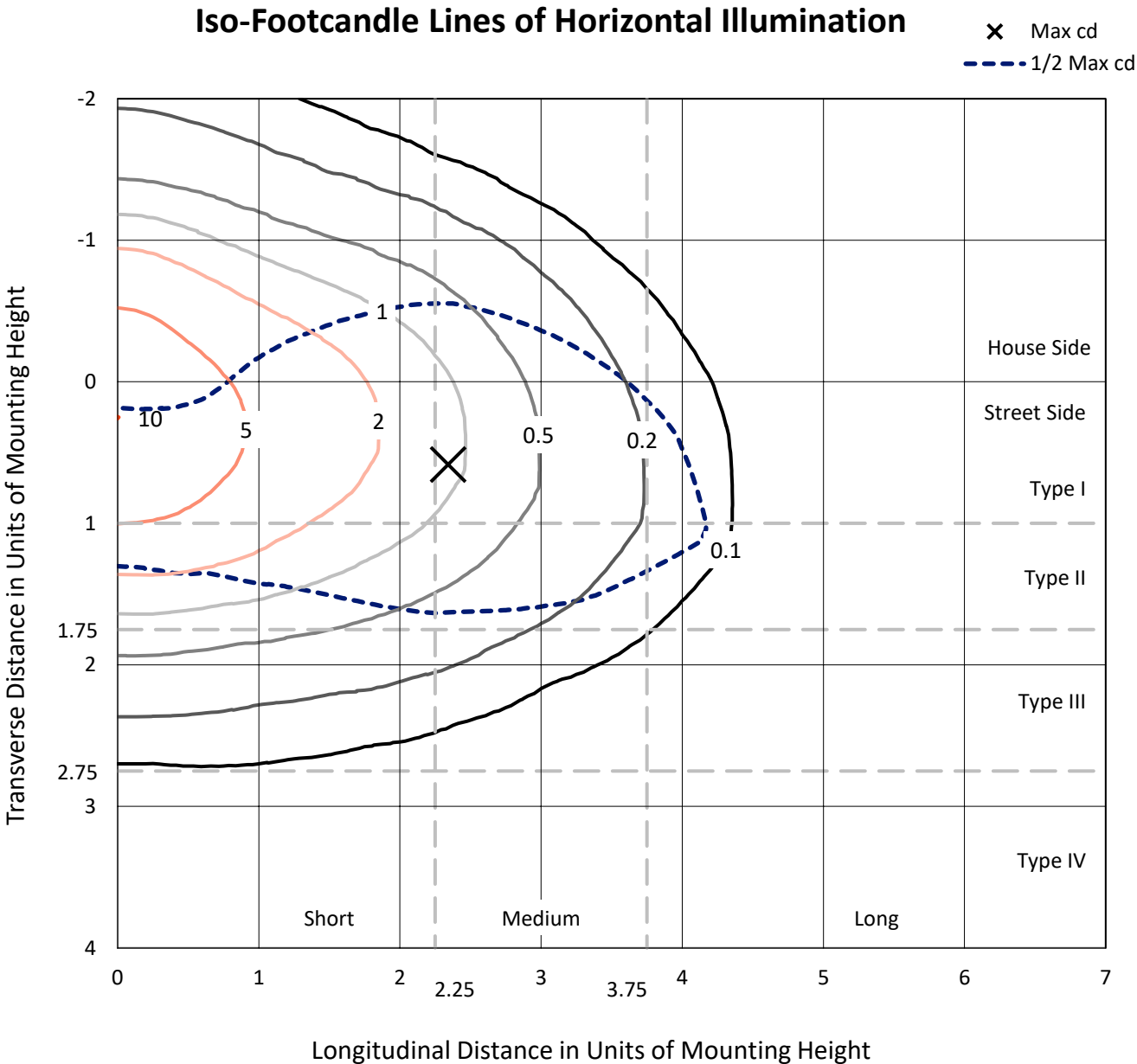
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27414 lumens  
Efficiency: N/A  
Efficacy: 170.6 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type II - Medium  
BUG Rating: B3 - U0 - G3

Input Watts (W): 160.7  
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



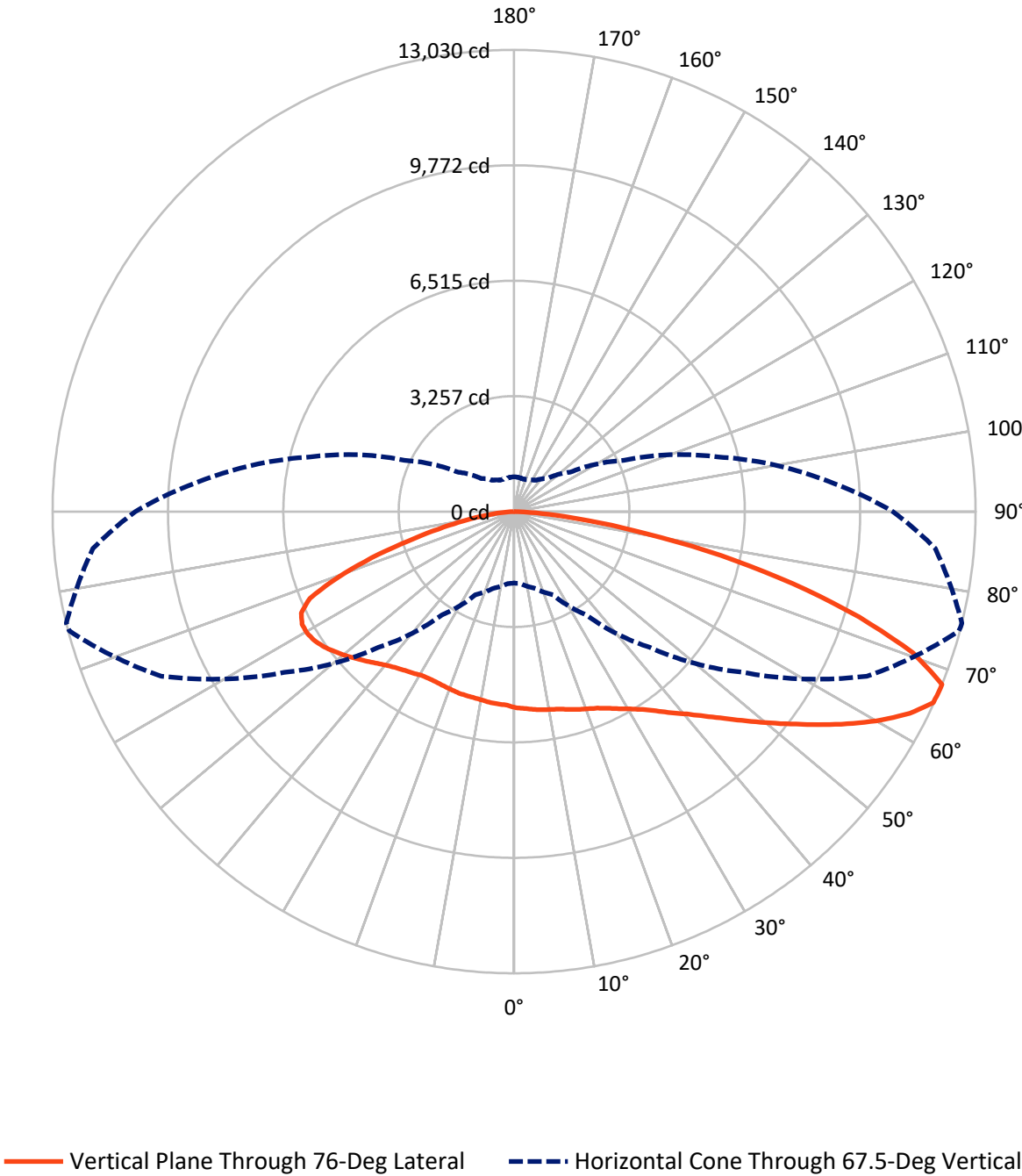
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CATALOG NUMBER: ARCH4-160-750-U-T2U



Based on 25 foot mounting height. Maximum calculated value = 10 fc  
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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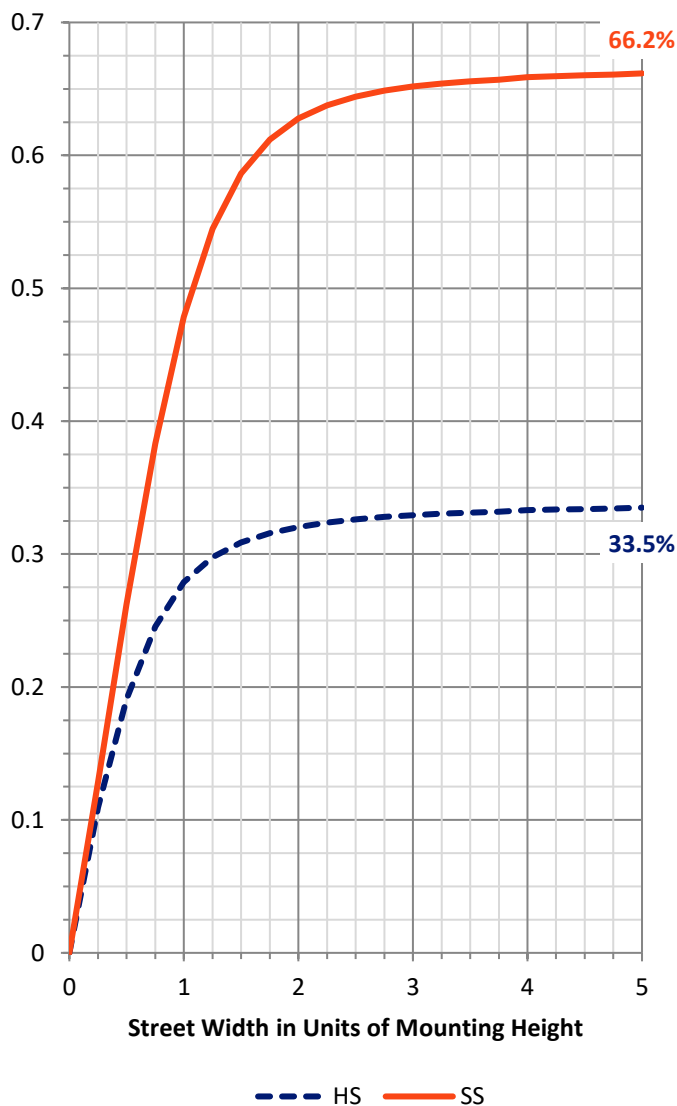
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9263.3   | 0.0    | 9263.3  |
|                    | % Fixture | 33.8     | 0.0    | 33.8    |
| <b>Street Side</b> | Lumens    | 18150.7  | 0.0    | 18150.7 |
|                    | % Fixture | 66.2     | 0.0    | 66.2    |
| <b>Total</b>       | Lumens    | 27414.0  | 0.0    | 27414.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 534.0   | 1.9       |
| 10°-20°   | 1632.5  | 6.0       |
| 20°-30°   | 2773.6  | 10.1      |
| 30°-40°   | 3946.5  | 14.4      |
| 40°-50°   | 4984.2  | 18.2      |
| 50°-60°   | 5396.4  | 19.7      |
| 60°-70°   | 5019.2  | 18.3      |
| 70°-80°   | 2695.8  | 9.8       |
| 80°-90°   | 432.0   | 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°    | 27414.0 | 100.0     |
| 0°-180°   | 27414.0 | 100.0     |

**Coefficient of Utilization**



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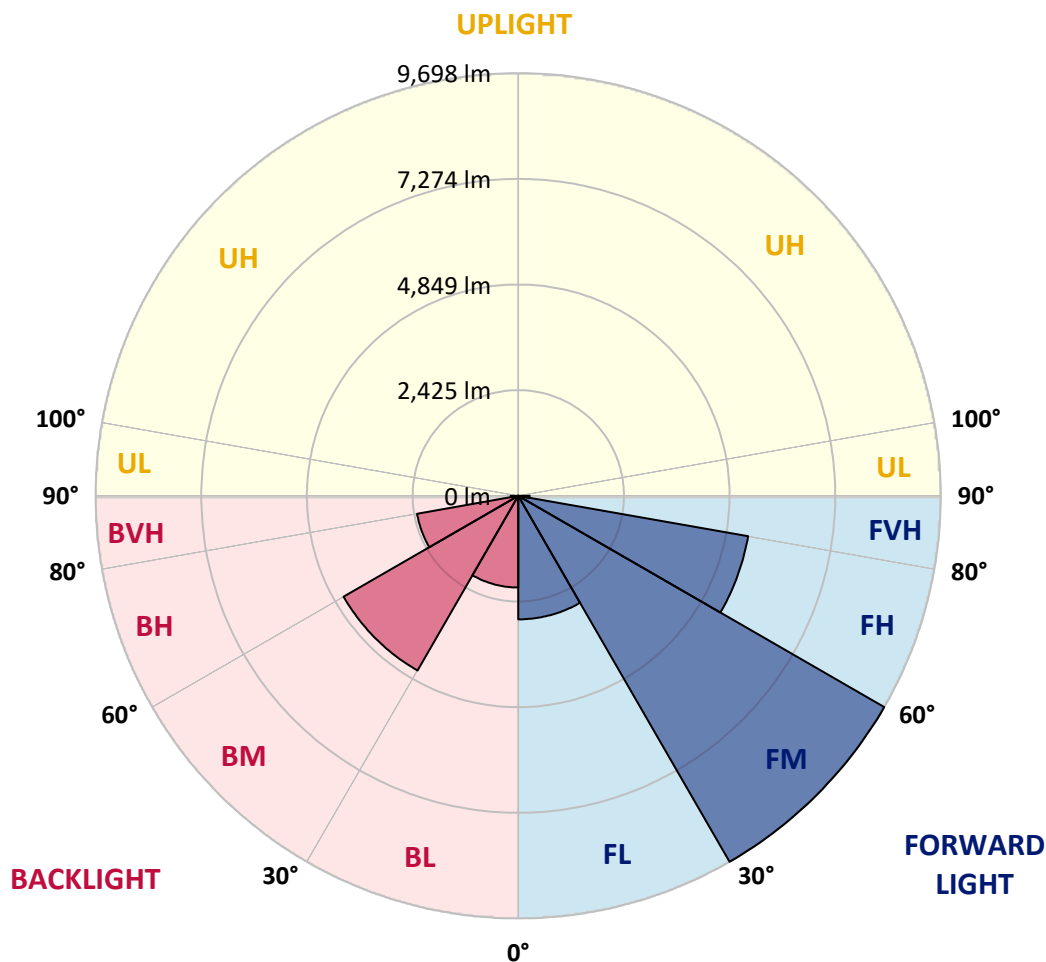
CATALOG NUMBER: ARCH4-160-750-U-T2U

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

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2834.9 | 10.3      |                         |      |         |
| FM   | (30°-60°)   | 9698.0 | 35.4      |                         |      |         |
| FH   | (60°-80°)   | 5356.4 | 19.5      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 261.3  | 1.0       |                         |      | G3/500  |
| BL   | (0°-30°)    | 2105.1 | 7.7       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4629.0 | 16.9      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2358.5 | 8.6       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 170.7  | 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



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°    | 65°     | 75°     | 76°     | 85°     |
|-------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| 0°    | 5537.6 | 5537.6 | 5537.6 | 5537.6 | 5537.6 | 5537.6 | 5537.6 | 5537.6  | 5537.6  | 5537.6  | 5537.6  |
| 2.5°  | 5705.5 | 5695.3 | 5654.6 | 5659.7 | 5659.7 | 5654.6 | 5593.6 | 5568.1  | 5568.1  | 5563.0  | 5507.0  |
| 5°    | 5909.1 | 5893.8 | 5848.0 | 5837.9 | 5817.5 | 5792.1 | 5695.3 | 5639.4  | 5613.9  | 5608.8  | 5532.5  |
| 7.5°  | 6148.3 | 6128.0 | 6072.0 | 6041.4 | 5990.5 | 5924.4 | 5802.2 | 5715.7  | 5654.6  | 5649.5  | 5542.7  |
| 10°   | 6387.5 | 6367.2 | 6301.0 | 6245.0 | 6173.8 | 6066.9 | 5909.1 | 5781.9  | 5685.2  | 5675.0  | 5547.7  |
| 12.5° | 6672.6 | 6652.2 | 6570.8 | 6499.5 | 6392.6 | 6250.1 | 6041.4 | 5868.4  | 5736.1  | 5720.8  | 5563.0  |
| 15°   | 6972.9 | 6942.3 | 6860.9 | 6779.4 | 6647.1 | 6463.9 | 6214.5 | 5985.5  | 5817.5  | 5792.1  | 5608.8  |
| 17.5° | 7222.3 | 7181.5 | 7115.4 | 7033.9 | 6886.3 | 6672.6 | 6387.5 | 6102.5  | 5893.8  | 5873.5  | 5654.6  |
| 20°   | 7436.0 | 7405.5 | 7334.2 | 7257.9 | 7100.1 | 6866.0 | 6550.4 | 6219.6  | 5965.1  | 5939.7  | 5690.3  |
| 22.5° | 7639.6 | 7598.9 | 7558.2 | 7502.2 | 7329.1 | 7069.6 | 6738.7 | 6362.1  | 6056.7  | 6026.2  | 5736.1  |
| 25°   | 7873.7 | 7827.9 | 7812.7 | 7782.1 | 7578.5 | 7313.9 | 6967.8 | 6540.2  | 6184.0  | 6148.3  | 5817.5  |
| 27.5° | 8163.8 | 8112.9 | 8082.4 | 8082.4 | 7838.1 | 7563.3 | 7212.1 | 6748.9  | 6331.6  | 6301.0  | 5919.3  |
| 30°   | 8469.2 | 8408.1 | 8362.3 | 8362.3 | 8087.5 | 7812.7 | 7451.3 | 6957.6  | 6499.5  | 6463.9  | 6051.6  |
| 32.5° | 8739.0 | 8677.9 | 8627.0 | 8621.9 | 8336.9 | 8062.0 | 7700.7 | 7186.6  | 6703.1  | 6657.3  | 6214.5  |
| 35°   | 8947.7 | 8891.7 | 8845.9 | 8856.0 | 8586.3 | 8316.5 | 7980.6 | 7492.0  | 6957.6  | 6906.7  | 6428.3  |
| 37.5° | 9074.9 | 9054.5 | 9029.1 | 9064.7 | 8815.3 | 8560.8 | 8270.7 | 7787.2  | 7247.7  | 7201.9  | 6692.9  |
| 40°   | 9141.1 | 9125.8 | 9227.6 | 9273.4 | 9008.7 | 8779.7 | 8560.8 | 8092.6  | 7563.3  | 7512.4  | 6998.3  |
| 42.5° | 9237.8 | 9365.0 | 9405.7 | 9395.5 | 9151.2 | 8947.7 | 8825.5 | 8423.4  | 7934.8  | 7889.0  | 7364.8  |
| 45°   | 8891.7 | 8861.1 | 9085.1 | 9207.2 | 9161.4 | 9054.5 | 9074.9 | 8820.4  | 8367.4  | 8321.6  | 7787.2  |
| 47.5° | 8428.5 | 8387.8 | 8515.0 | 8815.3 | 8993.5 | 9095.3 | 9298.8 | 9232.7  | 8866.2  | 8825.5  | 8280.9  |
| 50°   | 7451.3 | 7507.3 | 7980.6 | 8382.7 | 8733.9 | 9085.1 | 9487.2 | 9675.5  | 9415.9  | 9375.2  | 8810.2  |
| 52.5° | 6367.2 | 6423.2 | 6916.9 | 7843.2 | 8418.3 | 9008.7 | 9624.6 | 10118.3 | 10011.4 | 9965.6  | 9375.2  |
| 55°   | 5578.3 | 5700.4 | 6260.3 | 6932.1 | 7970.4 | 8769.5 | 9706.0 | 10571.3 | 10652.7 | 10612.0 | 9991.0  |
| 57.5° | 4794.5 | 4886.1 | 5308.5 | 5904.0 | 7359.7 | 8352.2 | 9700.9 | 10993.7 | 11324.5 | 11283.8 | 10617.1 |
| 60°   | 3873.2 | 3990.3 | 4326.2 | 4967.5 | 6545.3 | 7853.4 | 9558.4 | 11324.5 | 11970.9 | 11940.4 | 11222.7 |
| 62.5° | 3242.1 | 3277.8 | 3517.0 | 4071.7 | 5496.9 | 7222.3 | 9237.8 | 11502.7 | 12556.2 | 12535.9 | 11767.3 |
| 65°   | 2611.0 | 2616.1 | 2834.9 | 3298.1 | 4484.0 | 6438.4 | 8693.2 | 11436.5 | 12999.0 | 13009.2 | 12159.2 |
| 67.5° | 2015.5 | 2041.0 | 2239.5 | 2590.6 | 3562.8 | 5420.5 | 7914.4 | 10988.6 | 13004.1 | 13029.6 | 11935.3 |
| 70°   | 1394.6 | 1414.9 | 1715.2 | 2056.2 | 2753.5 | 4321.1 | 6860.9 | 9802.7  | 11935.3 | 11955.6 | 10698.5 |
| 72.5° | 982.3  | 992.5  | 1313.1 | 1644.0 | 2152.9 | 3257.4 | 5176.2 | 8107.9  | 10174.3 | 10189.5 | 8998.5  |
| 75°   | 732.9  | 743.1  | 926.3  | 1247.0 | 1649.1 | 2254.7 | 3537.3 | 6209.4  | 8128.2  | 8128.2  | 7105.2  |
| 77.5° | 519.1  | 524.2  | 600.6  | 860.2  | 1099.4 | 1521.8 | 2127.5 | 4066.7  | 5965.1  | 5975.3  | 5176.2  |
| 80°   | 351.2  | 356.3  | 391.9  | 580.2  | 687.1  | 824.5  | 1155.4 | 2132.6  | 3761.3  | 3776.5  | 3287.9  |
| 82.5° | 183.2  | 193.4  | 218.9  | 295.2  | 346.1  | 458.1  | 595.5  | 1084.1  | 2081.7  | 2122.4  | 1974.8  |
| 85°   | 71.3   | 71.3   | 81.4   | 96.7   | 127.2  | 178.1  | 274.8  | 412.3   | 941.6   | 972.1   | 870.3   |
| 87.5° | 25.4   | 25.4   | 30.5   | 30.5   | 35.6   | 40.7   | 45.8   | 61.1    | 106.9   | 106.9   | 101.8   |
| 90°   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     |

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**CANDELA DISTRIBUTION (continued):**

|       | 90°     | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 5537.6  | 5537.6 | 5537.6 | 5537.6 | 5537.6 | 5537.6 | 5537.6 | 5537.6 | 5537.6 | 5537.6 | 5537.6 |
| 2.5°  | 5486.7  | 5486.7 | 5461.2 | 5471.4 | 5466.3 | 5456.1 | 5446.0 | 5461.2 | 5446.0 | 5410.3 | 5405.2 |
| 5°    | 5496.9  | 5486.7 | 5446.0 | 5440.9 | 5425.6 | 5405.2 | 5379.8 | 5390.0 | 5364.5 | 5334.0 | 5328.9 |
| 7.5°  | 5501.9  | 5481.6 | 5425.6 | 5405.2 | 5374.7 | 5334.0 | 5293.3 | 5293.3 | 5257.6 | 5227.1 | 5222.0 |
| 10°   | 5491.8  | 5466.3 | 5390.0 | 5349.2 | 5293.3 | 5232.2 | 5176.2 | 5160.9 | 5120.2 | 5084.6 | 5084.6 |
| 12.5° | 5496.9  | 5461.2 | 5364.5 | 5298.4 | 5222.0 | 5145.7 | 5074.4 | 5054.0 | 5018.4 | 4982.8 | 4977.7 |
| 15°   | 5527.4  | 5476.5 | 5354.3 | 5267.8 | 5155.8 | 5069.3 | 4993.0 | 4977.7 | 4947.2 | 4921.7 | 4921.7 |
| 17.5° | 5557.9  | 5491.8 | 5339.1 | 5216.9 | 5079.5 | 4982.8 | 4911.5 | 4911.5 | 4891.2 | 4875.9 | 4875.9 |
| 20°   | 5573.2  | 5496.9 | 5308.5 | 5145.7 | 4987.9 | 4886.1 | 4819.9 | 4830.1 | 4825.0 | 4819.9 | 4819.9 |
| 22.5° | 5608.8  | 5507.0 | 5283.1 | 5079.5 | 4891.2 | 4784.3 | 4723.2 | 4738.5 | 4733.4 | 4733.4 | 4738.5 |
| 25°   | 5664.8  | 5532.5 | 5262.7 | 5018.4 | 4799.6 | 4682.5 | 4616.3 | 4626.5 | 4626.5 | 4626.5 | 4626.5 |
| 27.5° | 5741.2  | 5583.4 | 5257.6 | 4962.4 | 4708.0 | 4575.6 | 4494.2 | 4494.2 | 4473.8 | 4478.9 | 4484.0 |
| 30°   | 5858.2  | 5680.1 | 5267.8 | 4911.5 | 4611.2 | 4443.3 | 4346.6 | 4331.3 | 4326.2 | 4336.4 | 4341.5 |
| 32.5° | 6000.7  | 5812.4 | 5328.9 | 4875.9 | 4509.5 | 4295.7 | 4173.5 | 4168.4 | 4153.2 | 4153.2 | 4153.2 |
| 35°   | 6178.9  | 5939.7 | 5384.9 | 4870.8 | 4407.7 | 4137.9 | 4005.6 | 3990.3 | 3954.7 | 3939.4 | 3939.4 |
| 37.5° | 6407.9  | 6138.1 | 5451.0 | 4835.2 | 4321.1 | 3985.2 | 3827.4 | 3776.5 | 3735.8 | 3730.7 | 3730.7 |
| 40°   | 6687.8  | 6362.1 | 5547.7 | 4794.5 | 4229.5 | 3827.4 | 3618.8 | 3532.2 | 3537.3 | 3557.7 | 3557.7 |
| 42.5° | 7018.7  | 6636.9 | 5669.9 | 4774.1 | 4097.2 | 3664.6 | 3374.5 | 3272.7 | 3308.3 | 3328.6 | 3333.7 |
| 45°   | 7405.5  | 6962.7 | 5807.3 | 4748.7 | 3975.0 | 3481.3 | 3114.9 | 2987.6 | 3002.9 | 3008.0 | 3013.1 |
| 47.5° | 7853.4  | 7324.0 | 5949.8 | 4728.3 | 3837.6 | 3252.3 | 2829.9 | 2661.9 | 2656.8 | 2626.3 | 2636.5 |
| 50°   | 8321.6  | 7705.8 | 6097.4 | 4692.7 | 3669.7 | 2982.6 | 2529.6 | 2331.1 | 2290.4 | 2244.5 | 2249.6 |
| 52.5° | 8820.4  | 8097.7 | 6234.9 | 4636.7 | 3461.0 | 2707.7 | 2244.5 | 2030.8 | 1949.3 | 1898.4 | 1908.6 |
| 55°   | 9370.1  | 8499.8 | 6367.2 | 4550.2 | 3242.1 | 2432.9 | 1990.1 | 1771.2 | 1669.4 | 1628.7 | 1633.8 |
| 57.5° | 9874.0  | 8886.6 | 6463.9 | 4443.3 | 3002.9 | 2183.5 | 1766.1 | 1552.4 | 1486.2 | 1481.1 | 1486.2 |
| 60°   | 10362.6 | 9212.3 | 6504.6 | 4295.7 | 2758.6 | 1954.4 | 1557.4 | 1394.6 | 1348.8 | 1374.2 | 1379.3 |
| 62.5° | 10774.8 | 9421.0 | 6484.2 | 4097.2 | 2509.2 | 1735.6 | 1389.5 | 1272.4 | 1241.9 | 1292.8 | 1297.9 |
| 65°   | 11014.1 | 9487.2 | 6341.7 | 3812.2 | 2239.5 | 1521.8 | 1231.7 | 1104.5 | 1089.2 | 1119.7 | 1135.0 |
| 67.5° | 10698.5 | 9074.9 | 5954.9 | 3420.3 | 1939.2 | 1323.3 | 1079.0 | 977.2  | 951.8  | 977.2  | 977.2  |
| 70°   | 9482.1  | 7863.5 | 5038.8 | 2799.3 | 1608.3 | 1129.9 | 936.5  | 865.2  | 844.9  | 865.2  | 860.2  |
| 72.5° | 7899.2  | 6540.2 | 3969.9 | 2183.5 | 1267.3 | 951.8  | 814.3  | 748.2  | 727.8  | 707.5  | 697.3  |
| 75°   | 6128.0  | 4967.5 | 2880.8 | 1603.2 | 956.9  | 763.5  | 682.0  | 620.9  | 570.0  | 590.4  | 580.2  |
| 77.5° | 4489.1  | 3486.4 | 2041.0 | 1109.5 | 687.1  | 590.4  | 534.4  | 488.6  | 453.0  | 493.7  | 488.6  |
| 80°   | 2890.9  | 2254.7 | 1364.0 | 743.1  | 473.3  | 412.3  | 391.9  | 366.5  | 402.1  | 524.2  | 534.4  |
| 82.5° | 1766.1  | 1430.2 | 814.3  | 483.5  | 310.5  | 274.8  | 254.5  | 254.5  | 412.3  | 453.0  | 458.1  |
| 85°   | 788.9   | 758.4  | 442.8  | 249.4  | 173.0  | 157.8  | 142.5  | 183.2  | 168.0  | 122.2  | 127.2  |
| 87.5° | 127.2   | 132.3  | 96.7   | 86.5   | 66.2   | 66.2   | 50.9   | 35.6   | 25.4   | 15.3   | 15.3   |
| 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)