

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: P841186

Luminaire Tested: **ARCH4-140-740-U-T3**

Issue Date: 5/27/2024

### Test Information

Test Method: LM-79-08  
Report Number: P841186  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2310-189-18)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/27/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: ARCH4-140-740-U-T3  
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 24569 lumens  
Efficiency: N/A  
Efficacy: 173.9 lumens/watt  
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

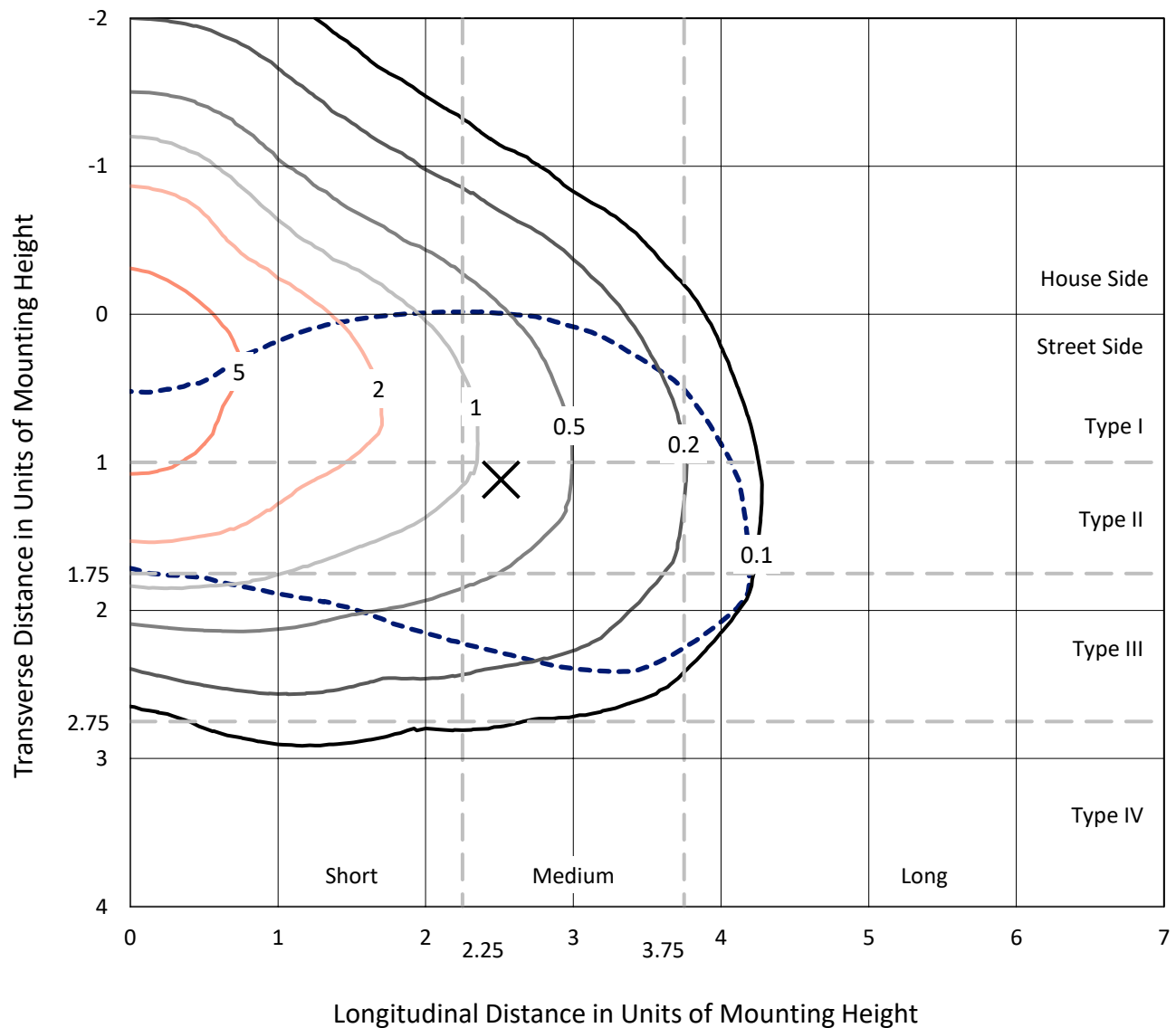
Input Watts (W): 141.3  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

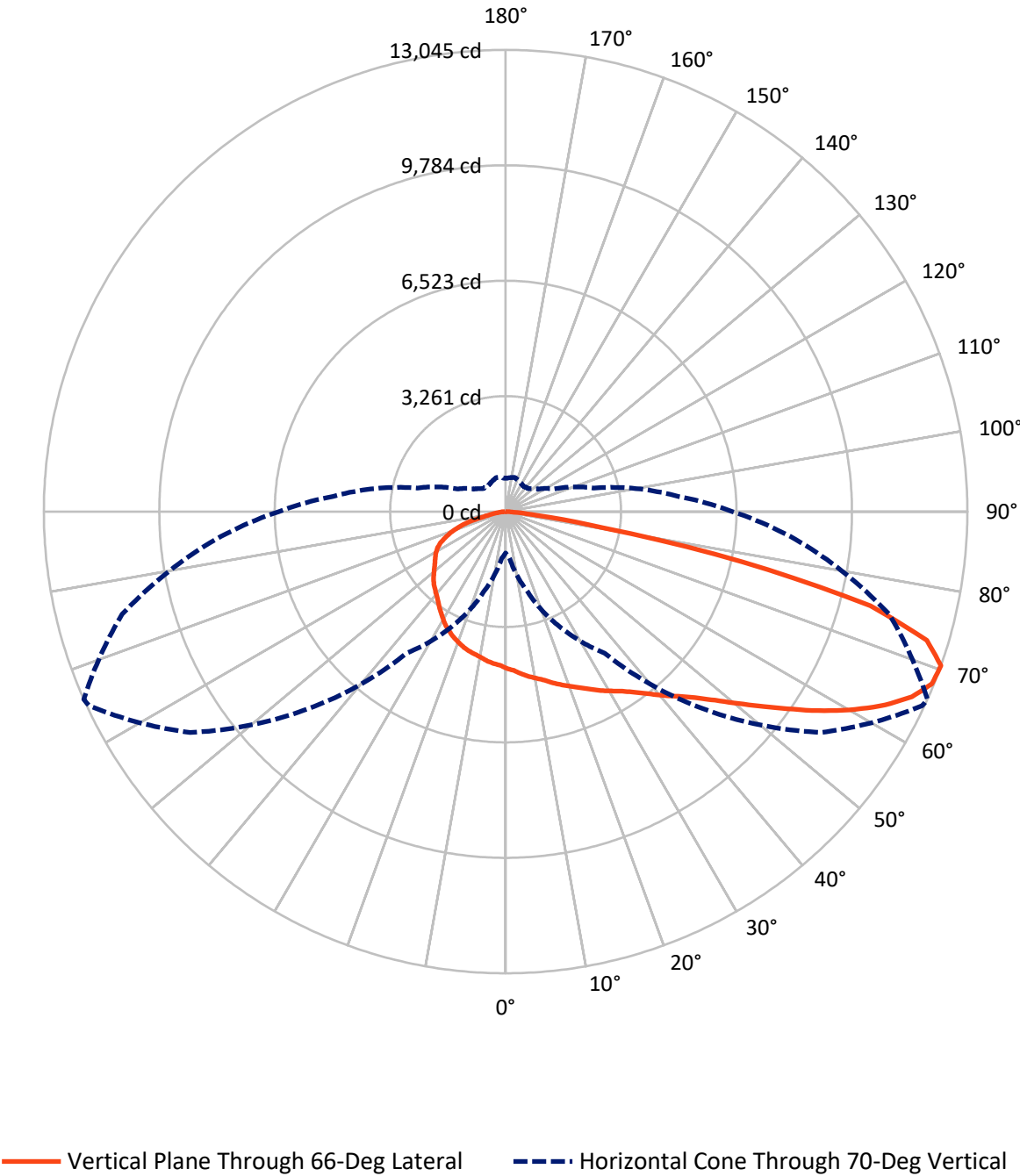
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc  
Type III - 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    | 6510.2   | 0.0    | 6510.2  |
|                    | % Fixture | 26.5     | 0.0    | 26.5    |
| <b>Street Side</b> | Lumens    | 18058.8  | 0.0    | 18058.8 |
|                    | % Fixture | 73.5     | 0.0    | 73.5    |
| <b>Total</b>       | Lumens    | 24569.0  | 0.0    | 24569.0 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 426.1   | 1.7       |
| 10°-20°   | 1278.1  | 5.2       |
| 20°-30°   | 2142.5  | 8.7       |
| 30°-40°   | 3208.0  | 13.1      |
| 40°-50°   | 4289.1  | 17.5      |
| 50°-60°   | 5007.6  | 20.4      |
| 60°-70°   | 4979.3  | 20.3      |
| 70°-80°   | 2947.8  | 12.0      |
| 80°-90°   | 290.5   | 1.2       |
| 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°    | 24569.0 | 100.0     |
| 0°-180°   | 24569.0 | 100.0     |

**Coefficient of Utilization**



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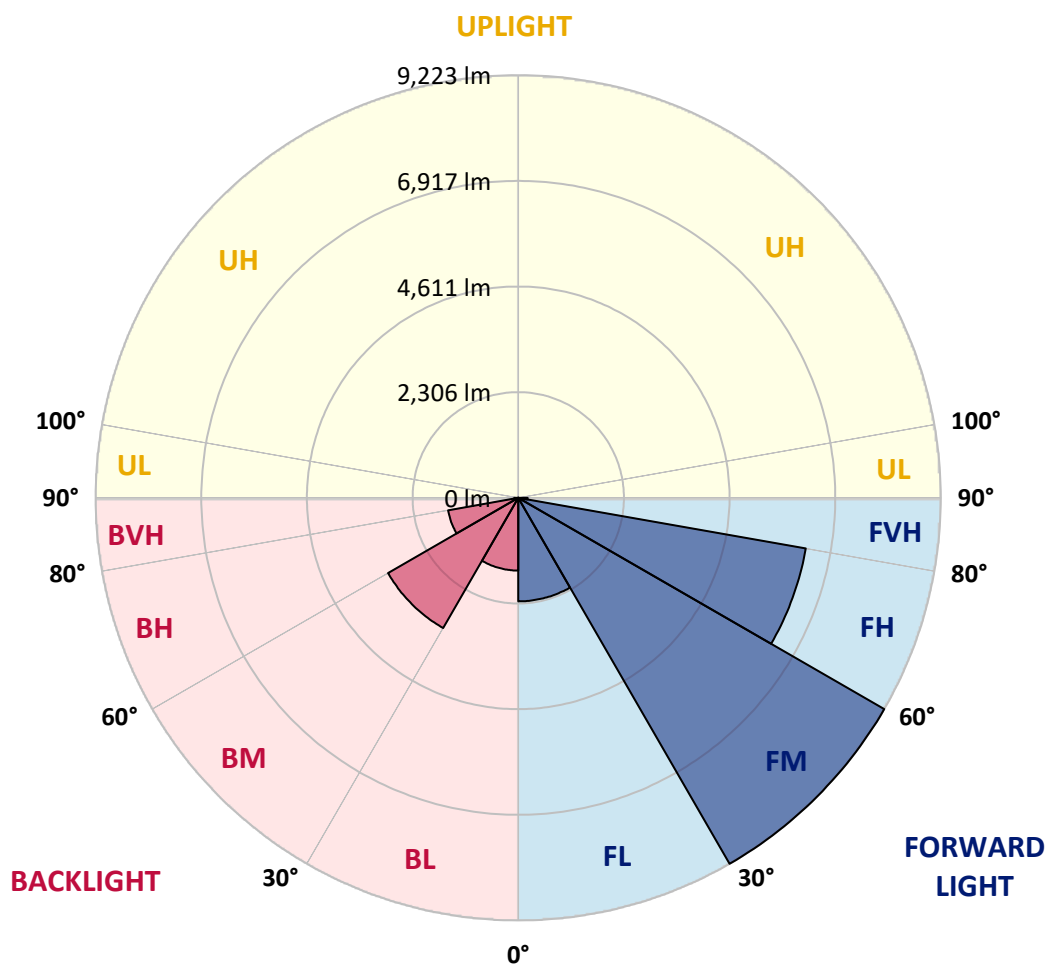
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2259.7 | 9.2       |                         |      |         |
| FM   | (30°-60°)   | 9222.9 | 37.5      |                         |      |         |
| FH   | (60°-80°)   | 6372.0 | 25.9      |                         |      | G3/7500 |
| FVH  | (80°-90°)   | 204.2  | 0.8       |                         |      | G2/225  |
| BL   | (0°-30°)    | 1586.9 | 6.5       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 3281.8 | 13.4      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 1555.1 | 6.3       | B3/2500                 |      | G3/2500 |
| BVH  | (80°-90°)   | 86.4   | 0.4       |                         |      | G1/100  |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

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

Type III Medium



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°    | 55°     | 65°     | 66°     | 75°     | 85°    |
|-------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|
| 0°    | 4434.1 | 4434.1 | 4434.1 | 4434.1 | 4434.1 | 4434.1 | 4434.1  | 4434.1  | 4434.1  | 4434.1  | 4434.1 |
| 2.5°  | 4597.2 | 4589.9 | 4586.3 | 4571.8 | 4539.2 | 4553.7 | 4521.1  | 4499.4  | 4495.7  | 4445.0  | 4416.0 |
| 5°    | 4785.5 | 4781.9 | 4774.7 | 4752.9 | 4702.2 | 4709.5 | 4655.1  | 4615.3  | 4604.4  | 4524.7  | 4463.1 |
| 7.5°  | 4944.9 | 4937.7 | 4934.1 | 4905.1 | 4850.8 | 4847.1 | 4781.9  | 4724.0  | 4705.8  | 4597.2  | 4503.0 |
| 10°   | 5068.1 | 5057.2 | 5064.5 | 5035.5 | 4977.5 | 4966.7 | 4883.4  | 4807.3  | 4789.2  | 4651.5  | 4521.1 |
| 12.5° | 5173.2 | 5165.9 | 5176.8 | 5151.4 | 5104.3 | 5093.5 | 5010.1  | 4912.3  | 4890.6  | 4731.2  | 4560.9 |
| 15°   | 5289.1 | 5263.7 | 5285.5 | 5274.6 | 5242.0 | 5238.4 | 5162.3  | 5053.6  | 5024.6  | 4832.6  | 4622.5 |
| 17.5° | 5350.7 | 5336.2 | 5361.5 | 5365.2 | 5350.7 | 5376.0 | 5303.6  | 5173.2  | 5147.8  | 4926.8  | 4676.9 |
| 20°   | 5394.2 | 5372.4 | 5401.4 | 5423.1 | 5434.0 | 5484.7 | 5426.8  | 5300.0  | 5271.0  | 5017.4  | 4727.6 |
| 22.5° | 5542.7 | 5495.6 | 5499.2 | 5513.7 | 5520.9 | 5593.4 | 5557.2  | 5434.0  | 5405.0  | 5129.7  | 4789.2 |
| 25°   | 5915.8 | 5821.6 | 5760.0 | 5716.6 | 5665.9 | 5727.4 | 5705.7  | 5586.2  | 5560.8  | 5263.7  | 4865.2 |
| 27.5° | 6495.4 | 6375.9 | 6252.7 | 6125.9 | 5926.7 | 5901.3 | 5865.1  | 5756.4  | 5727.4  | 5397.8  | 4941.3 |
| 30°   | 7154.8 | 7035.2 | 6890.3 | 6687.4 | 6314.3 | 6118.7 | 6035.4  | 5915.8  | 5883.2  | 5517.3  | 5013.8 |
| 32.5° | 7810.5 | 7705.4 | 7560.5 | 7314.2 | 6781.6 | 6383.1 | 6205.6  | 6082.5  | 6049.9  | 5647.7  | 5100.7 |
| 35°   | 8321.3 | 8256.1 | 8161.9 | 7853.9 | 7245.3 | 6694.7 | 6452.0  | 6303.4  | 6267.2  | 5854.2  | 5260.1 |
| 37.5° | 8734.3 | 8687.2 | 8607.5 | 8285.0 | 7582.2 | 7006.2 | 6734.5  | 6564.3  | 6524.4  | 6078.8  | 5430.4 |
| 40°   | 9342.9 | 9219.7 | 9154.5 | 8687.2 | 7875.7 | 7288.8 | 7053.3  | 6875.8  | 6832.4  | 6317.9  | 5568.0 |
| 42.5° | 9860.9 | 9770.3 | 9690.6 | 9045.8 | 8154.6 | 7531.5 | 7354.0  | 7191.0  | 7133.0  | 6553.4  | 5716.6 |
| 45°   | 9947.8 | 9984.1 | 9944.2 | 9223.3 | 8596.6 | 7770.6 | 7658.3  | 7553.3  | 7498.9  | 6872.2  | 5941.2 |
| 47.5° | 9951.5 | 9951.5 | 9716.0 | 9324.7 | 9143.6 | 8038.7 | 7984.4  | 8020.6  | 7962.6  | 7277.9  | 6209.3 |
| 50°   | 9690.6 | 9737.7 | 9614.6 | 9350.1 | 9288.5 | 8306.8 | 8382.9  | 8578.5  | 8520.5  | 7709.0  | 6499.1 |
| 52.5° | 9150.9 | 9306.6 | 9303.0 | 9310.3 | 9078.4 | 8535.0 | 8803.1  | 9248.7  | 9150.9  | 8194.5  | 6807.0 |
| 55°   | 8198.1 | 8509.6 | 8788.6 | 9027.7 | 8897.3 | 8672.7 | 9317.5  | 9962.3  | 9860.9  | 8737.9  | 7118.5 |
| 57.5° | 7383.0 | 7582.2 | 7930.0 | 8607.5 | 8683.5 | 8792.2 | 9799.3  | 10708.6 | 10618.0 | 9339.2  | 7444.6 |
| 60°   | 6452.0 | 6727.3 | 7075.1 | 8038.7 | 8422.7 | 8948.0 | 10328.2 | 11436.8 | 11349.8 | 9947.8  | 7759.8 |
| 62.5° | 5021.0 | 5376.0 | 6071.6 | 7165.6 | 8042.3 | 9045.8 | 10744.8 | 12078.0 | 12038.1 | 10523.8 | 8042.3 |
| 65°   | 3499.5 | 3814.7 | 4789.2 | 6093.3 | 7437.3 | 9002.3 | 11078.1 | 12650.4 | 12614.1 | 10994.8 | 8241.6 |
| 67.5° | 2043.2 | 2409.1 | 3510.4 | 4905.1 | 6368.6 | 8701.6 | 11186.8 | 12987.3 | 12987.3 | 11281.0 | 8295.9 |
| 70°   | 1166.5 | 1336.8 | 2314.9 | 3575.6 | 4883.4 | 7872.1 | 10882.5 | 12983.6 | 13045.2 | 11215.8 | 8071.3 |
| 72.5° | 815.1  | 891.2  | 1557.7 | 2405.5 | 3311.1 | 6368.6 | 10085.5 | 12356.9 | 12440.2 | 10599.9 | 7303.3 |
| 75°   | 634.0  | 688.3  | 1097.7 | 1641.1 | 2086.7 | 4325.5 | 8343.0  | 10418.8 | 10639.8 | 9034.9  | 5904.9 |
| 77.5° | 481.8  | 521.7  | 641.2  | 1025.2 | 1336.8 | 2485.1 | 5506.5  | 6832.4  | 6846.8  | 5531.8  | 3166.2 |
| 80°   | 351.4  | 391.2  | 427.5  | 626.7  | 710.0  | 1162.9 | 2079.4  | 2854.7  | 2775.0  | 2677.2  | 1713.5 |
| 82.5° | 210.1  | 250.0  | 260.8  | 340.5  | 347.8  | 496.3  | 728.2   | 920.2   | 883.9   | 1177.4  | 804.2  |
| 85°   | 90.6   | 126.8  | 134.0  | 155.8  | 148.5  | 202.9  | 289.8   | 242.7   | 217.4   | 250.0   | 173.9  |
| 87.5° | 21.7   | 36.2   | 36.2   | 39.8   | 32.6   | 50.7   | 54.3    | 39.8    | 36.2    | 43.5    | 43.5   |
| 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°    | 4434.1 | 4434.1 | 4434.1 | 4434.1 | 4434.1 | 4434.1 | 4434.1 | 4434.1 | 4434.1 | 4434.1 | 4434.1 |
| 2.5°  | 4408.8 | 4397.9 | 4401.5 | 4340.0 | 4321.8 | 4303.7 | 4292.9 | 4285.6 | 4278.4 | 4289.2 | 4300.1 |
| 5°    | 4441.4 | 4416.0 | 4387.1 | 4296.5 | 4260.3 | 4220.4 | 4191.4 | 4166.1 | 4155.2 | 4155.2 | 4166.1 |
| 7.5°  | 4466.7 | 4423.3 | 4361.7 | 4242.1 | 4176.9 | 4122.6 | 4075.5 | 4042.9 | 4024.8 | 4024.8 | 4035.7 |
| 10°   | 4470.4 | 4408.8 | 4311.0 | 4166.1 | 4079.1 | 3999.4 | 3945.1 | 3908.9 | 3883.5 | 3883.5 | 3890.7 |
| 12.5° | 4492.1 | 4408.8 | 4282.0 | 4108.1 | 3999.4 | 3901.6 | 3836.4 | 3782.1 | 3771.2 | 3771.2 | 3778.4 |
| 15°   | 4528.3 | 4426.9 | 4263.9 | 4057.4 | 3927.0 | 3814.7 | 3742.2 | 3684.3 | 3662.5 | 3677.0 | 3680.6 |
| 17.5° | 4560.9 | 4437.8 | 4231.3 | 3992.2 | 3836.4 | 3713.2 | 3633.5 | 3582.8 | 3553.8 | 3586.4 | 3586.4 |
| 20°   | 4582.7 | 4437.8 | 4184.2 | 3908.9 | 3738.6 | 3600.9 | 3524.9 | 3463.3 | 3441.5 | 3481.4 | 3485.0 |
| 22.5° | 4615.3 | 4434.1 | 4133.5 | 3825.5 | 3633.5 | 3488.6 | 3412.6 | 3365.5 | 3354.6 | 3398.1 | 3412.6 |
| 25°   | 4651.5 | 4441.4 | 4079.1 | 3731.3 | 3517.6 | 3376.3 | 3318.4 | 3296.6 | 3303.9 | 3358.2 | 3376.3 |
| 27.5° | 4691.4 | 4455.9 | 4024.8 | 3626.3 | 3390.8 | 3264.0 | 3231.4 | 3242.3 | 3271.3 | 3340.1 | 3361.8 |
| 30°   | 4727.6 | 4459.5 | 3948.7 | 3503.1 | 3245.9 | 3126.4 | 3140.9 | 3187.9 | 3231.4 | 3300.3 | 3325.6 |
| 32.5° | 4774.7 | 4463.1 | 3869.0 | 3369.1 | 3090.1 | 3003.2 | 3068.4 | 3144.5 | 3187.9 | 3253.2 | 3282.1 |
| 35°   | 4890.6 | 4524.7 | 3807.4 | 3238.7 | 2945.2 | 2898.1 | 3006.8 | 3104.6 | 3130.0 | 3187.9 | 3213.3 |
| 37.5° | 5024.6 | 4626.1 | 3774.8 | 3104.6 | 2803.9 | 2793.1 | 2930.7 | 3028.6 | 3035.8 | 3072.0 | 3097.4 |
| 40°   | 5108.0 | 4669.6 | 3738.6 | 2992.3 | 2677.2 | 2684.4 | 2825.7 | 2901.8 | 2887.3 | 2912.6 | 2930.7 |
| 42.5° | 5191.3 | 4684.1 | 3662.5 | 2898.1 | 2557.6 | 2564.8 | 2673.5 | 2727.9 | 2735.1 | 2789.5 | 2814.8 |
| 45°   | 5332.6 | 4724.0 | 3579.2 | 2811.2 | 2448.9 | 2423.6 | 2488.8 | 2561.2 | 2655.4 | 2760.5 | 2789.5 |
| 47.5° | 5520.9 | 4807.3 | 3492.3 | 2706.1 | 2343.9 | 2260.5 | 2285.9 | 2412.7 | 2510.5 | 2608.3 | 2626.4 |
| 50°   | 5712.9 | 4890.6 | 3412.6 | 2579.3 | 2238.8 | 2086.7 | 2097.5 | 2213.4 | 2293.1 | 2369.2 | 2380.1 |
| 52.5° | 5901.3 | 4963.1 | 3343.7 | 2459.8 | 2119.3 | 1880.2 | 1923.6 | 2043.2 | 2097.5 | 2133.8 | 2144.6 |
| 55°   | 6089.7 | 5024.6 | 3282.1 | 2358.4 | 1981.6 | 1717.1 | 1757.0 | 1869.3 | 1923.6 | 1941.7 | 1949.0 |
| 57.5° | 6285.3 | 5097.1 | 3235.0 | 2271.4 | 1825.8 | 1572.2 | 1597.6 | 1677.3 | 1728.0 | 1749.7 | 1742.5 |
| 60°   | 6448.3 | 5158.7 | 3209.7 | 2180.8 | 1670.0 | 1438.2 | 1431.0 | 1503.4 | 1575.9 | 1597.6 | 1590.4 |
| 62.5° | 6575.1 | 5198.5 | 3169.8 | 2064.9 | 1532.4 | 1304.2 | 1267.9 | 1362.1 | 1438.2 | 1452.7 | 1463.6 |
| 65°   | 6644.0 | 5202.2 | 3072.0 | 1916.4 | 1391.1 | 1159.3 | 1133.9 | 1228.1 | 1275.2 | 1289.7 | 1289.7 |
| 67.5° | 6633.1 | 5144.2 | 2880.0 | 1717.1 | 1260.7 | 1028.8 | 1007.1 | 1065.1 | 1133.9 | 1144.8 | 1133.9 |
| 70°   | 6408.5 | 4905.1 | 2572.1 | 1507.0 | 1104.9 | 912.9  | 873.1  | 931.0  | 996.2  | 956.4  | 938.3  |
| 72.5° | 5770.9 | 4285.6 | 2119.3 | 1275.2 | 931.0  | 768.0  | 749.9  | 807.9  | 811.5  | 818.7  | 800.6  |
| 75°   | 4553.7 | 3191.6 | 1586.7 | 992.6  | 753.5  | 644.8  | 641.2  | 630.3  | 644.8  | 673.8  | 652.1  |
| 77.5° | 2391.0 | 1594.0 | 858.6  | 608.6  | 547.0  | 518.0  | 492.7  | 489.1  | 532.5  | 550.6  | 528.9  |
| 80°   | 1296.9 | 894.8  | 492.7  | 365.9  | 333.3  | 336.9  | 369.5  | 362.3  | 409.4  | 420.2  | 402.1  |
| 82.5° | 565.1  | 423.9  | 242.7  | 221.0  | 221.0  | 217.4  | 228.2  | 253.6  | 304.3  | 304.3  | 242.7  |
| 85°   | 123.2  | 105.1  | 94.2   | 108.7  | 123.2  | 123.2  | 123.2  | 123.2  | 86.9   | 47.1   | 32.6   |
| 87.5° | 39.8   | 39.8   | 39.8   | 43.5   | 47.1   | 47.1   | 39.8   | 29.0   | 18.1   | 3.6    | 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)