

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: P479193

Luminaire Tested: **IFLD-M-SA4D-722-U-5MQ**

Issue Date: 02/26/2021



Test Information

Test Method: LM-79-08
Report Number: P479193
Test Lab: INNOVATION CENTER(G2)
Issue Date: 02/26/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: IFLD-M-SA4D-722-U-5MQ
Description: Infrastructure Flood – Middle Tier Light Square Luminaire w/ 5MQ distribution lens
Light Source: (64) 2200K CCT, 70 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

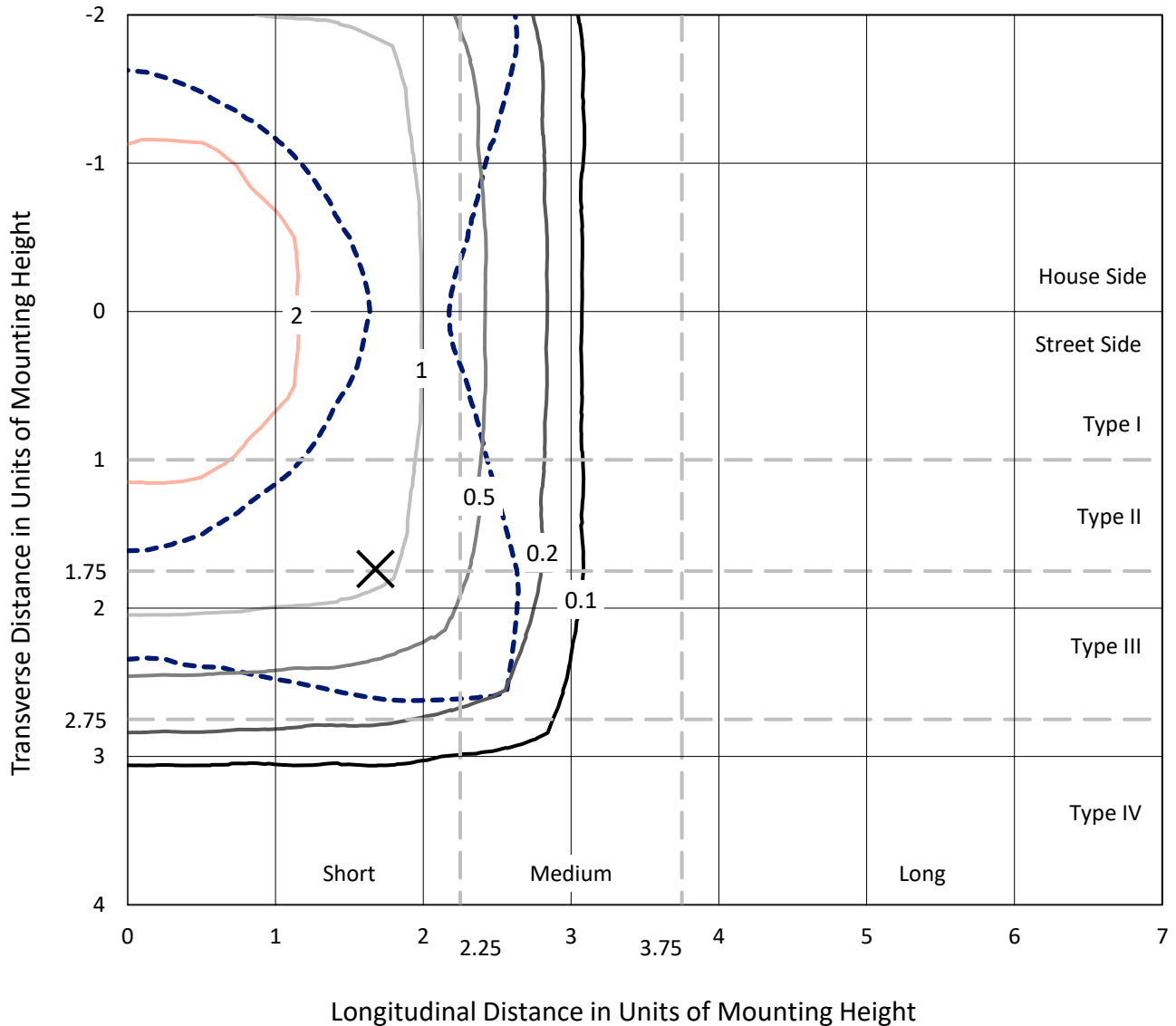
Lumens per Lamp: N/A
Luminaire Lumens: 23260.5 lumens
Efficiency: N/A
Efficacy: 93.2 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')
IES Classification: Type V - Short
BUG Rating: B5 - U0 - G3

Input Watts (W): 249.7
Input Voltage (V): 120
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

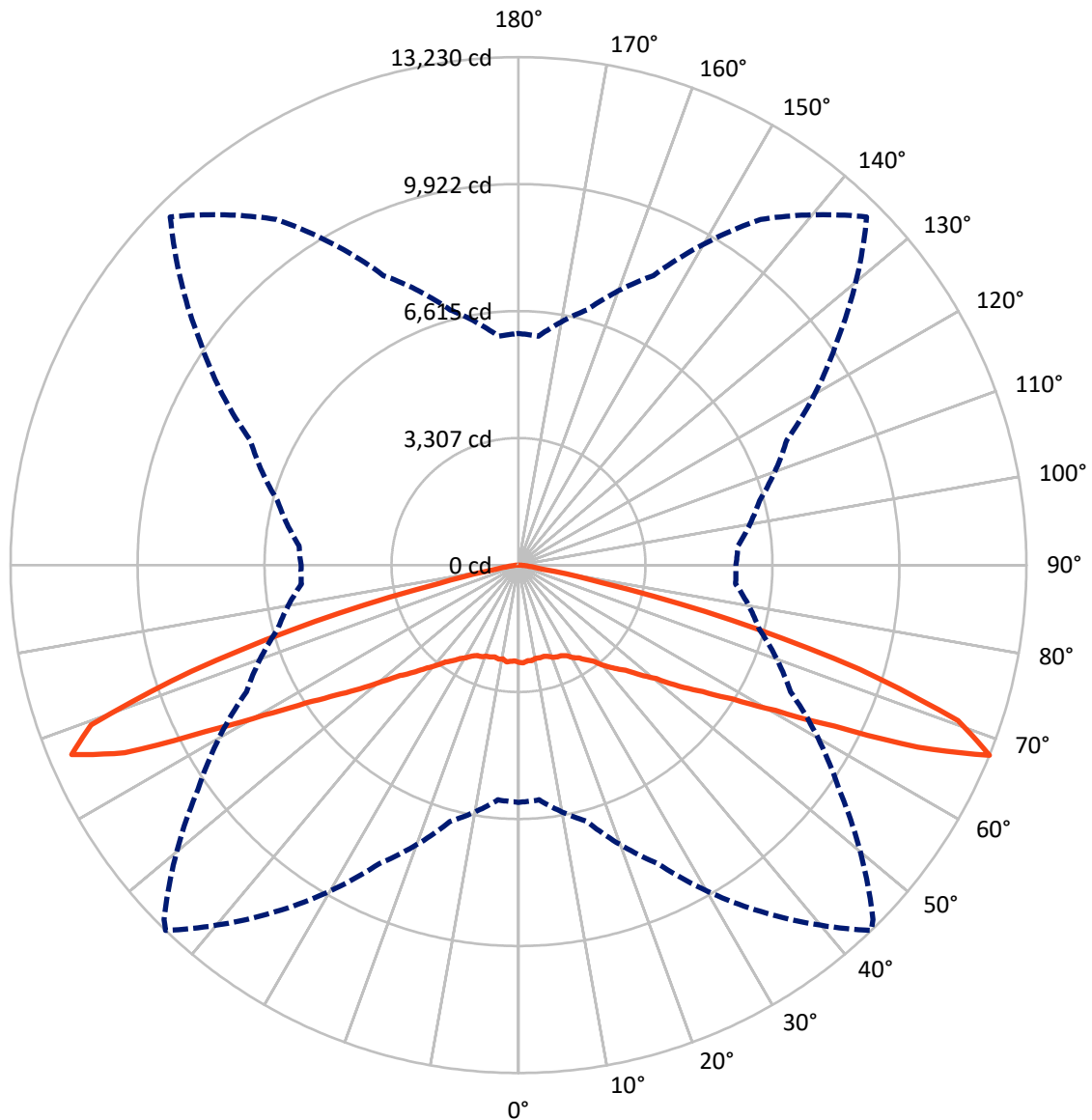
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 fc
 Type V - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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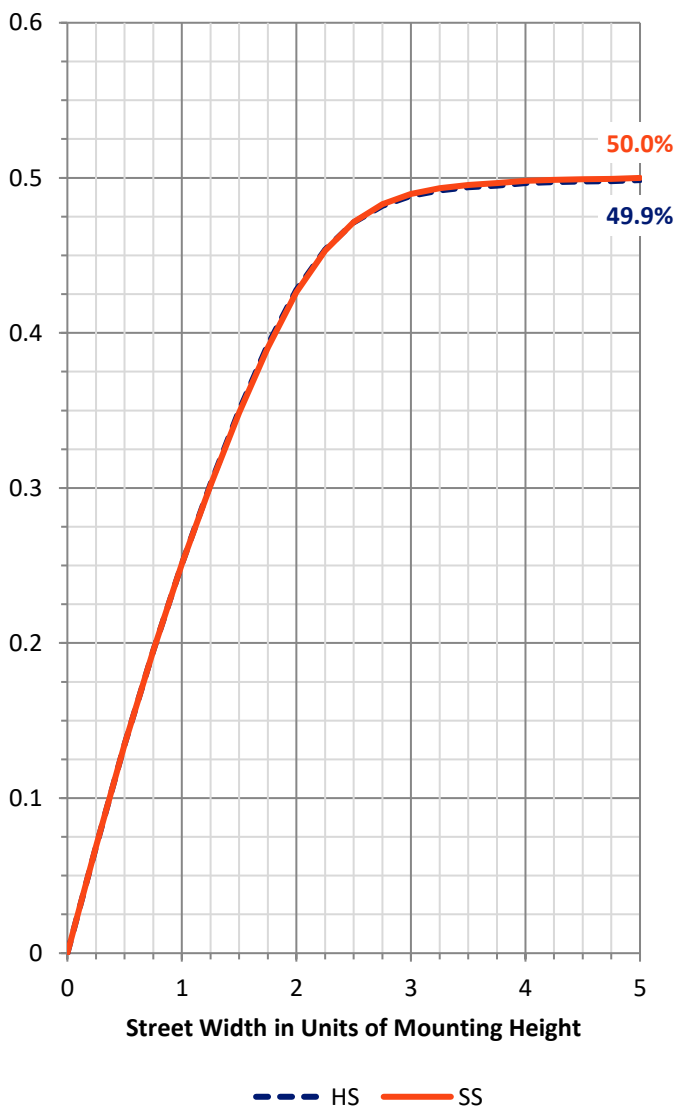
FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 11600.5 | 0.0 | 11600.5 |
| | % Fixture | 49.9 | 0.0 | 49.9 |
| Street Side | Lumens | 11660.1 | 0.0 | 11660.1 |
| | % Fixture | 50.1 | 0.0 | 50.1 |
| Total | Lumens | 23260.5 | 0.0 | 23260.5 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 240.4 | 1.0 |
| 10°-20° | 702.4 | 3.0 |
| 20°-30° | 1194.5 | 5.1 |
| 30°-40° | 1894.0 | 8.1 |
| 40°-50° | 3088.3 | 13.3 |
| 50°-60° | 5274.3 | 22.7 |
| 60°-70° | 8022.2 | 34.5 |
| 70°-80° | 2704.0 | 11.6 |
| 80°-90° | 140.4 | 0.6 |
| 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° | 23260.5 | 100.0 |
| 0°-180° | 23260.5 | 100.0 |

Coefficient of Utilization



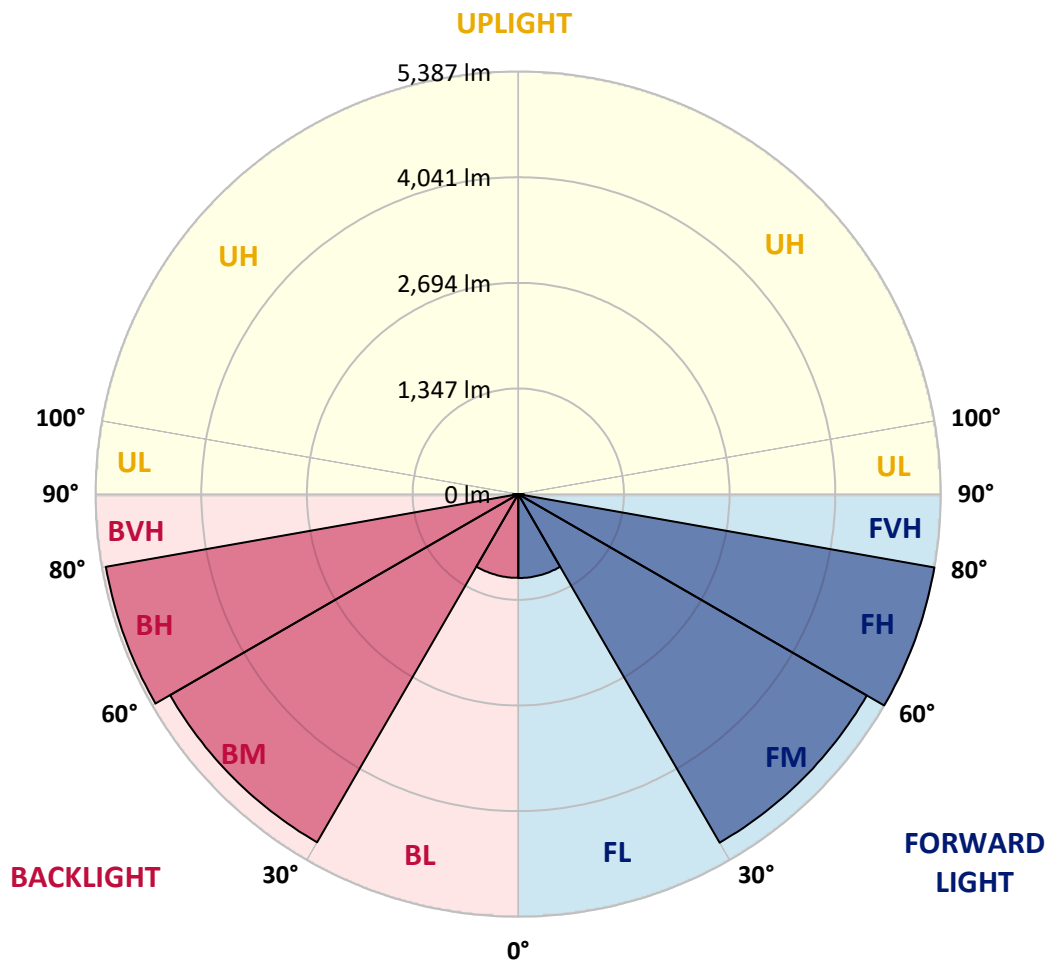
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|--------|-----------|-------------------------|------|---------|
| | | | B | U | G |
| FL (0°-30°) | 1069.8 | 4.6 | | | |
| FM (30°-60°) | 5131.1 | 22.1 | | | |
| FH (60°-80°) | 5387.4 | 23.2 | | | G3/7500 |
| FVH (80°-90°) | 71.8 | 0.3 | | | G1/100 |
| BL (0°-30°) | 1067.6 | 4.6 | B3/2500 | | |
| BM (30°-60°) | 5125.5 | 22.0 | B4/8500 | | |
| BH (60°-80°) | 5338.8 | 23.0 | B5 | | G3/7500 |
| BVH (80°-90°) | 68.6 | 0.3 | | | G1/100 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B5-U0-G3

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 35° | 44° | 45° | 55° | 65° | 75° | 85° |
|-------|--------|--------|--------|--------|---------|---------|---------|---------|--------|--------|--------|
| 0° | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 |
| 2.5° | 2482.4 | 2511.6 | 2532.8 | 2530.2 | 2538.2 | 2546.1 | 2535.5 | 2551.4 | 2540.8 | 2559.4 | 2570.0 |
| 5° | 2530.2 | 2522.2 | 2524.9 | 2509.0 | 2546.1 | 2503.6 | 2503.6 | 2524.9 | 2551.4 | 2519.6 | 2538.2 |
| 7.5° | 2501.0 | 2495.7 | 2482.4 | 2506.3 | 2514.3 | 2514.3 | 2535.5 | 2495.7 | 2540.8 | 2551.4 | 2554.1 |
| 10° | 2469.1 | 2439.9 | 2479.7 | 2503.6 | 2509.0 | 2466.5 | 2485.1 | 2495.7 | 2482.4 | 2495.7 | 2503.6 |
| 12.5° | 2442.6 | 2458.5 | 2458.5 | 2458.5 | 2450.5 | 2479.7 | 2498.3 | 2495.7 | 2469.1 | 2493.0 | 2450.5 |
| 15° | 2439.9 | 2432.0 | 2455.9 | 2477.1 | 2463.8 | 2469.1 | 2477.1 | 2501.0 | 2450.5 | 2461.2 | 2461.2 |
| 17.5° | 2437.3 | 2447.9 | 2455.9 | 2453.2 | 2498.3 | 2498.3 | 2490.4 | 2474.4 | 2514.3 | 2493.0 | 2463.8 |
| 20° | 2447.9 | 2439.9 | 2461.2 | 2469.1 | 2501.0 | 2564.7 | 2540.8 | 2527.5 | 2506.3 | 2479.7 | 2479.7 |
| 22.5° | 2461.2 | 2455.9 | 2485.1 | 2519.6 | 2580.6 | 2596.6 | 2593.9 | 2578.0 | 2540.8 | 2509.0 | 2503.6 |
| 25° | 2509.0 | 2461.2 | 2493.0 | 2559.4 | 2580.6 | 2612.5 | 2633.7 | 2612.5 | 2562.1 | 2570.0 | 2522.2 |
| 27.5° | 2580.6 | 2572.7 | 2615.2 | 2660.3 | 2641.7 | 2670.9 | 2652.3 | 2668.3 | 2670.9 | 2631.1 | 2583.3 |
| 30° | 2665.6 | 2641.7 | 2668.3 | 2755.9 | 2763.8 | 2795.7 | 2763.8 | 2721.4 | 2734.6 | 2700.1 | 2676.2 |
| 32.5° | 2787.7 | 2779.8 | 2830.2 | 2888.6 | 2899.2 | 2883.3 | 2867.4 | 2891.3 | 2835.5 | 2809.0 | 2766.5 |
| 35° | 2867.4 | 2901.9 | 2963.0 | 3008.1 | 3042.6 | 3026.7 | 3034.6 | 3010.7 | 3024.0 | 2968.3 | 2949.7 |
| 37.5° | 3103.7 | 3090.4 | 3103.7 | 3180.7 | 3188.6 | 3180.7 | 3188.6 | 3215.2 | 3196.6 | 3148.8 | 3101.0 |
| 40° | 3326.7 | 3305.4 | 3337.3 | 3424.9 | 3419.6 | 3446.2 | 3393.1 | 3422.3 | 3422.3 | 3332.0 | 3313.4 |
| 42.5° | 3494.0 | 3565.6 | 3602.8 | 3674.5 | 3701.0 | 3677.1 | 3666.5 | 3671.8 | 3730.2 | 3624.0 | 3584.2 |
| 45° | 3839.1 | 3836.4 | 3948.0 | 3987.8 | 3913.4 | 3908.1 | 3886.9 | 3950.6 | 3990.4 | 3929.4 | 3913.4 |
| 47.5° | 4213.5 | 4232.0 | 4295.8 | 4311.7 | 4356.8 | 4274.5 | 4274.5 | 4282.5 | 4423.2 | 4279.8 | 4205.5 |
| 50° | 4550.6 | 4574.5 | 4702.0 | 4826.8 | 4741.8 | 4654.2 | 4688.7 | 4731.2 | 4808.2 | 4672.8 | 4609.0 |
| 52.5° | 4959.5 | 5089.6 | 5174.6 | 5240.9 | 5302.0 | 5240.9 | 5161.3 | 5209.1 | 5360.4 | 5179.9 | 5100.2 |
| 55° | 5548.9 | 5652.4 | 5732.1 | 5854.2 | 5904.7 | 5822.4 | 5814.4 | 5809.1 | 5894.1 | 5702.9 | 5594.0 |
| 57.5° | 6207.3 | 6164.9 | 6292.3 | 6480.8 | 6664.0 | 6584.3 | 6560.5 | 6565.8 | 6587.0 | 6316.2 | 6233.9 |
| 60° | 7025.1 | 7072.9 | 7224.2 | 7388.8 | 7582.6 | 7694.1 | 7537.5 | 7447.2 | 7465.8 | 7096.8 | 6969.3 |
| 62.5° | 7492.3 | 7598.5 | 7941.0 | 8506.6 | 8896.8 | 9244.6 | 9268.5 | 8681.8 | 8288.8 | 7572.0 | 7030.4 |
| 65° | 7266.7 | 7250.7 | 7895.9 | 8942.0 | 10420.8 | 11432.3 | 11281.0 | 9857.9 | 8485.3 | 7346.3 | 6618.9 |
| 67.5° | 6180.8 | 6138.3 | 6918.9 | 8578.2 | 11020.8 | 13229.8 | 13057.2 | 10189.8 | 7821.6 | 6499.4 | 5676.3 |
| 70° | 3982.5 | 3971.8 | 4818.8 | 6539.2 | 9839.4 | 12146.5 | 12210.2 | 9255.3 | 6366.6 | 4760.4 | 3945.3 |
| 72.5° | 1447.0 | 1534.6 | 2025.7 | 3515.2 | 6682.6 | 9292.4 | 9332.2 | 6852.5 | 3661.2 | 2201.0 | 1622.2 |
| 75° | 533.7 | 549.6 | 639.8 | 1141.6 | 3045.3 | 5705.5 | 5854.2 | 3324.0 | 1300.9 | 716.8 | 584.1 |
| 77.5° | 308.0 | 310.6 | 342.5 | 424.8 | 902.7 | 2227.5 | 2317.8 | 1008.9 | 504.4 | 382.3 | 353.1 |
| 80° | 209.7 | 207.1 | 241.6 | 276.1 | 361.1 | 631.9 | 671.7 | 422.1 | 318.6 | 265.5 | 223.0 |
| 82.5° | 122.1 | 130.1 | 177.9 | 196.5 | 220.4 | 278.8 | 284.1 | 262.8 | 238.9 | 196.5 | 146.0 |
| 85° | 74.3 | 61.1 | 98.2 | 108.9 | 127.4 | 124.8 | 124.8 | 143.4 | 154.0 | 138.1 | 82.3 |
| 87.5° | 18.6 | 18.6 | 23.9 | 26.5 | 34.5 | 26.5 | 29.2 | 55.8 | 74.3 | 69.0 | 42.5 |
| 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° | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 | 2540.8 |
| 2.5° | 2546.1 | 2538.2 | 2543.5 | 2572.7 | 2554.1 | 2498.3 | 2511.6 | 2540.8 | 2516.9 | 2503.6 | 2501.0 |
| 5° | 2535.5 | 2551.4 | 2532.8 | 2538.2 | 2556.7 | 2511.6 | 2519.6 | 2556.7 | 2540.8 | 2546.1 | 2516.9 |
| 7.5° | 2538.2 | 2546.1 | 2530.2 | 2506.3 | 2506.3 | 2543.5 | 2522.2 | 2527.5 | 2503.6 | 2543.5 | 2490.4 |
| 10° | 2522.2 | 2501.0 | 2482.4 | 2495.7 | 2490.4 | 2479.7 | 2471.8 | 2487.7 | 2463.8 | 2498.3 | 2461.2 |
| 12.5° | 2474.4 | 2479.7 | 2474.4 | 2469.1 | 2479.7 | 2506.3 | 2463.8 | 2469.1 | 2432.0 | 2437.3 | 2455.9 |
| 15° | 2455.9 | 2471.8 | 2466.5 | 2495.7 | 2509.0 | 2469.1 | 2501.0 | 2469.1 | 2439.9 | 2424.0 | 2453.2 |
| 17.5° | 2463.8 | 2487.7 | 2479.7 | 2501.0 | 2477.1 | 2506.3 | 2511.6 | 2498.3 | 2463.8 | 2450.5 | 2463.8 |
| 20° | 2471.8 | 2463.8 | 2474.4 | 2511.6 | 2546.1 | 2516.9 | 2516.9 | 2509.0 | 2477.1 | 2458.5 | 2458.5 |
| 22.5° | 2490.4 | 2477.1 | 2493.0 | 2522.2 | 2532.8 | 2578.0 | 2538.2 | 2519.6 | 2466.5 | 2418.7 | 2463.8 |
| 25° | 2527.5 | 2535.5 | 2546.1 | 2535.5 | 2593.9 | 2588.6 | 2583.3 | 2570.0 | 2487.7 | 2490.4 | 2482.4 |
| 27.5° | 2599.2 | 2554.1 | 2567.4 | 2631.1 | 2639.0 | 2660.3 | 2633.7 | 2657.6 | 2570.0 | 2572.7 | 2519.6 |
| 30° | 2686.8 | 2639.0 | 2681.5 | 2737.3 | 2734.6 | 2774.5 | 2761.2 | 2766.5 | 2705.4 | 2670.9 | 2599.2 |
| 32.5° | 2782.4 | 2777.1 | 2803.7 | 2838.2 | 2851.4 | 2872.7 | 2870.0 | 2870.0 | 2832.9 | 2742.6 | 2755.9 |
| 35° | 2888.6 | 2925.8 | 2957.6 | 2994.8 | 3000.1 | 3026.7 | 2989.5 | 2994.8 | 2957.6 | 2891.3 | 2912.5 |
| 37.5° | 3098.4 | 3095.7 | 3130.2 | 3175.4 | 3180.7 | 3159.4 | 3188.6 | 3175.4 | 3124.9 | 3079.8 | 3045.3 |
| 40° | 3342.6 | 3289.5 | 3321.4 | 3427.6 | 3435.5 | 3398.4 | 3395.7 | 3393.1 | 3355.9 | 3257.7 | 3236.4 |
| 42.5° | 3555.0 | 3624.0 | 3618.7 | 3653.3 | 3629.4 | 3610.8 | 3677.1 | 3640.0 | 3610.8 | 3507.2 | 3488.6 |
| 45° | 3828.5 | 3849.7 | 3918.7 | 4030.3 | 3916.1 | 3916.1 | 3961.2 | 3932.0 | 3916.1 | 3839.1 | 3767.4 |
| 47.5° | 4168.3 | 4186.9 | 4325.0 | 4332.9 | 4258.6 | 4208.1 | 4348.9 | 4354.2 | 4287.8 | 4229.4 | 4141.8 |
| 50° | 4566.6 | 4574.5 | 4699.3 | 4826.8 | 4744.4 | 4648.9 | 4792.2 | 4848.0 | 4699.3 | 4619.7 | 4510.8 |
| 52.5° | 5004.6 | 4980.7 | 5084.3 | 5323.2 | 5243.6 | 5214.4 | 5368.4 | 5381.6 | 5179.9 | 5055.1 | 5084.3 |
| 55° | 5509.1 | 5477.2 | 5758.6 | 5920.6 | 5870.2 | 5817.1 | 5886.1 | 5917.9 | 5756.0 | 5551.6 | 5623.2 |
| 57.5° | 6162.2 | 6178.1 | 6318.8 | 6478.1 | 6560.5 | 6573.7 | 6605.6 | 6573.7 | 6409.1 | 6202.0 | 6135.7 |
| 60° | 6815.3 | 6863.1 | 7136.6 | 7436.6 | 7463.1 | 7696.8 | 7654.3 | 7495.0 | 7261.4 | 6966.7 | 6979.9 |
| 62.5° | 7056.9 | 7017.1 | 7457.8 | 8190.6 | 8814.5 | 9242.0 | 9053.5 | 8488.0 | 7946.4 | 7410.0 | 7449.9 |
| 65° | 6571.1 | 6669.3 | 7269.3 | 8416.3 | 9770.3 | 11461.5 | 10458.0 | 8894.2 | 7800.3 | 7107.4 | 7030.4 |
| 67.5° | 5663.1 | 5737.4 | 6499.4 | 7710.1 | 10112.8 | 12826.2 | 10989.0 | 8320.7 | 6879.0 | 5981.7 | 6029.5 |
| 70° | 3945.3 | 3982.5 | 4728.5 | 6316.2 | 9170.3 | 12104.0 | 9913.7 | 6390.5 | 4749.8 | 3786.0 | 3839.1 |
| 72.5° | 1587.7 | 1677.9 | 2169.1 | 3804.6 | 6770.2 | 9196.8 | 6674.6 | 3353.2 | 1970.0 | 1465.5 | 1330.1 |
| 75° | 586.8 | 589.4 | 692.9 | 1308.9 | 3215.2 | 5779.9 | 3010.7 | 1077.9 | 629.2 | 515.1 | 491.2 |
| 77.5° | 339.8 | 337.2 | 361.1 | 472.6 | 931.9 | 2256.7 | 854.9 | 422.1 | 342.5 | 308.0 | 294.7 |
| 80° | 212.4 | 209.7 | 246.9 | 313.3 | 408.9 | 618.6 | 361.1 | 262.8 | 231.0 | 199.1 | 199.1 |
| 82.5° | 135.4 | 138.1 | 193.8 | 231.0 | 249.6 | 273.5 | 209.7 | 185.8 | 172.6 | 114.2 | 111.5 |
| 85° | 87.6 | 79.6 | 135.4 | 154.0 | 138.1 | 122.1 | 116.8 | 98.2 | 90.3 | 55.8 | 61.1 |
| 87.5° | 39.8 | 42.5 | 69.0 | 77.0 | 50.4 | 29.2 | 29.2 | 21.2 | 21.2 | 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 |

(END OF REPORT)