

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: P191661

Luminaire Tested: **GAN-AF-03-LED-U-5NQ-7050-1200-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191661
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24141)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: GAN-AF-03-LED-U-5NQ-7050-1200-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20564 lumens
Efficiency: N/A
Efficacy: 107.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 191
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: 28.75 FT

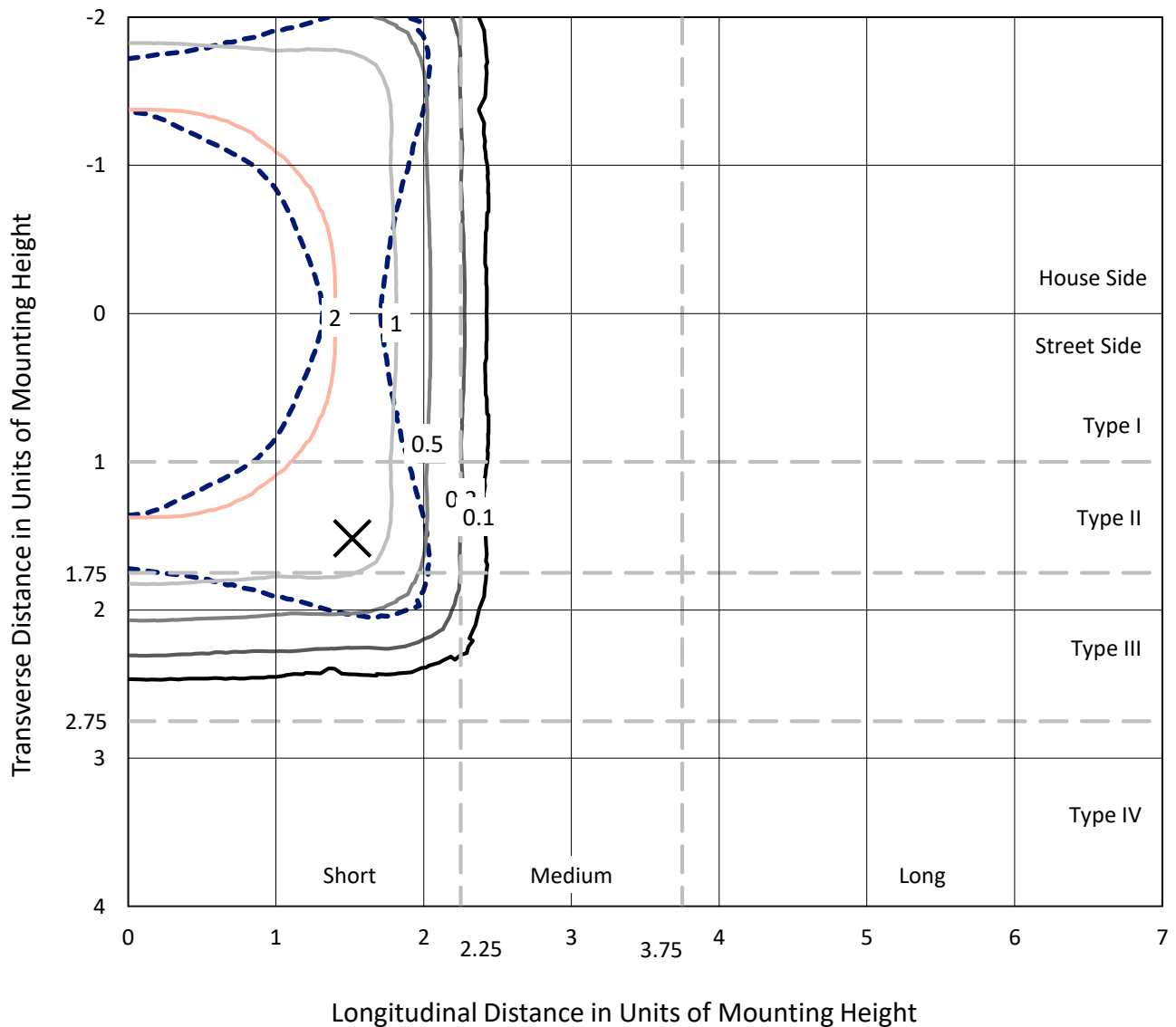


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

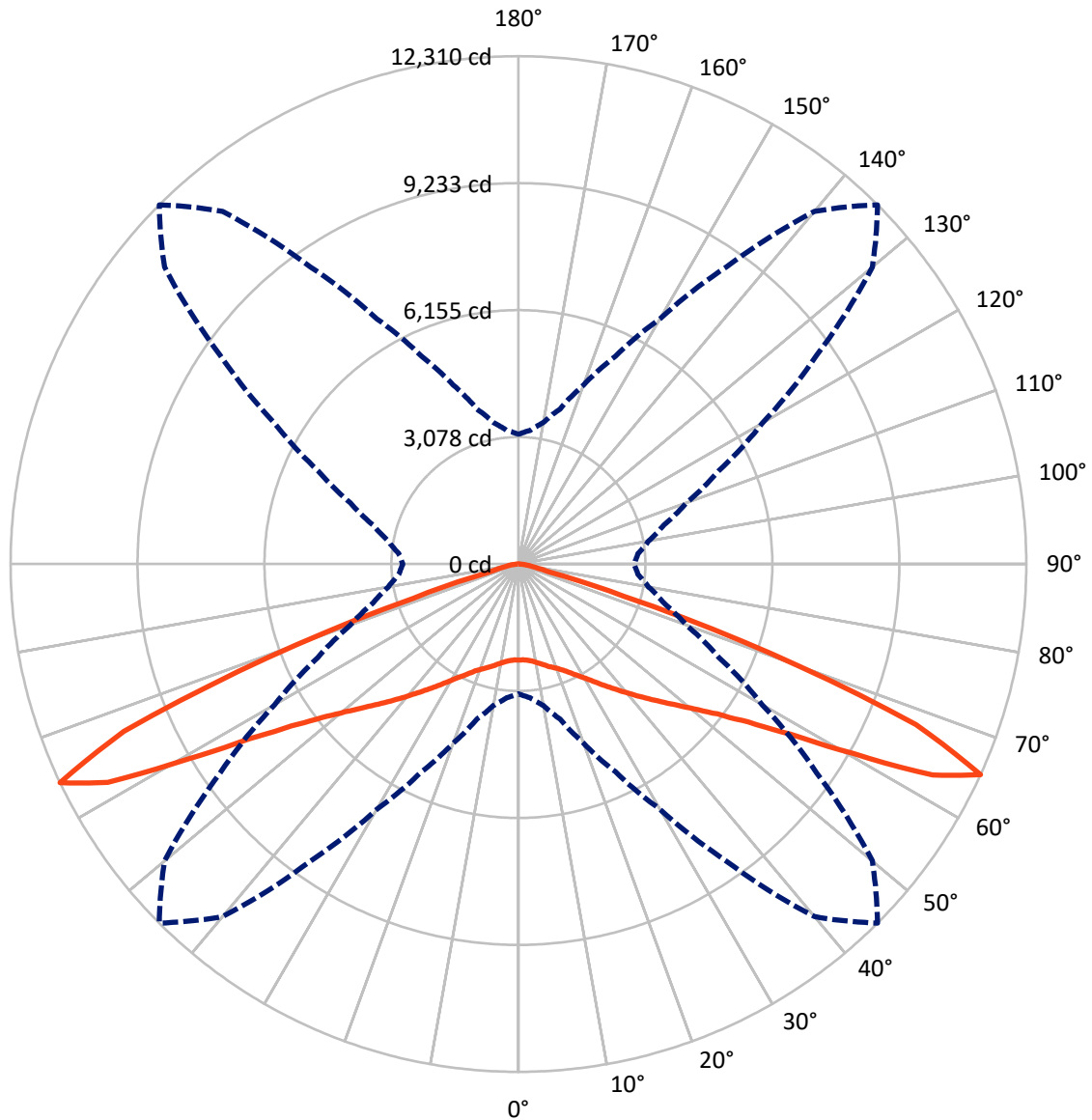


Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 10282.0 | 0.0 | 10282.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 10282.0 | 0.0 | 10282.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 20564.0 | 0.0 | 20564.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 226.8 | 1.1 |
| 10°-20° | 727.4 | 3.5 |
| 20°-30° | 1360.0 | 6.6 |
| 30°-40° | 2300.2 | 11.2 |
| 40°-50° | 3761.0 | 18.3 |
| 50°-60° | 5980.6 | 29.1 |
| 60°-70° | 5406.1 | 26.3 |
| 70°-80° | 684.2 | 3.3 |
| 80°-90° | 117.7 | 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° | 20564.0 | 100.0 |
| 0°-180° | 20564.0 | 100.0 |



REPORT NUMBER: P191661

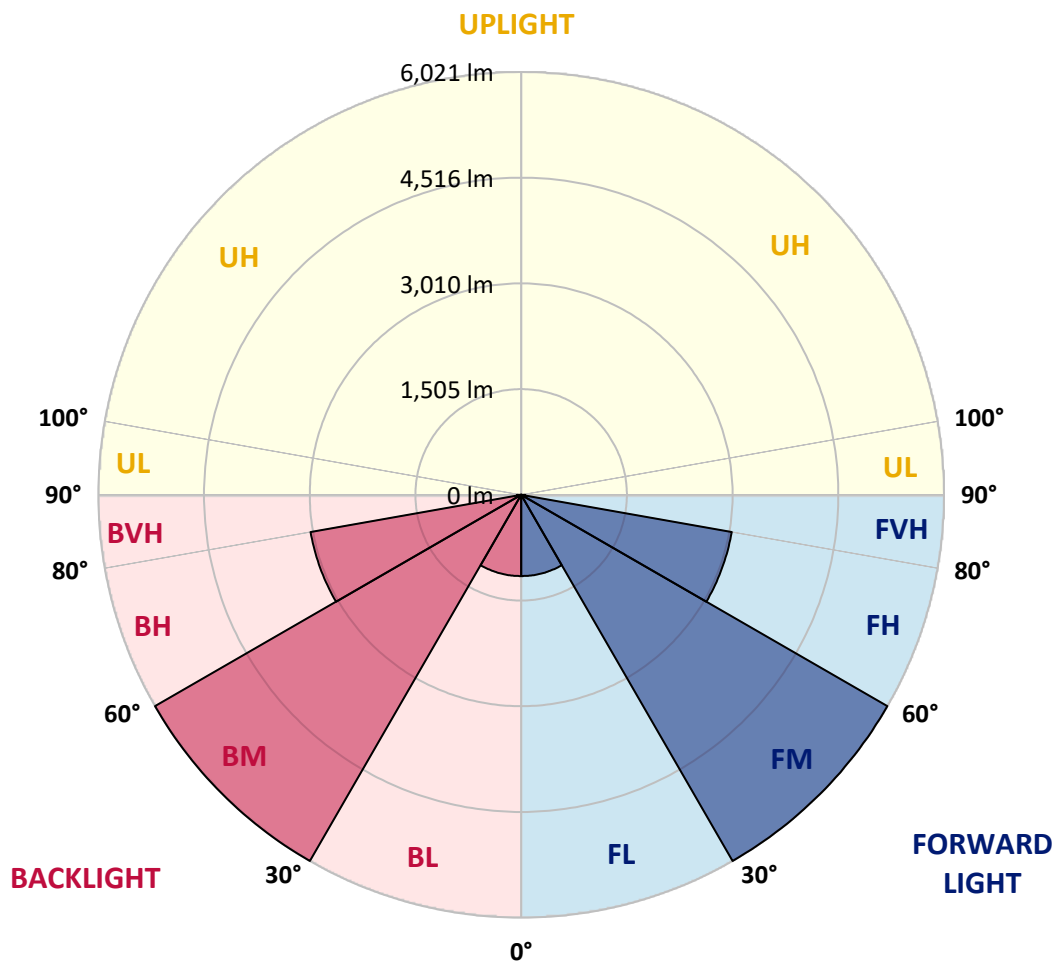
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1157.1 | 5.6 | | | |
| FM | (30°-60°) | 6020.9 | 29.3 | | | |
| FH | (60°-80°) | 3045.1 | 14.8 | | | G2/5000 |
| FVH | (80°-90°) | 58.8 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 1157.1 | 5.6 | B3/2500 | | |
| BM | (30°-60°) | 6020.9 | 29.3 | B4/8500 | | |
| BH | (60°-80°) | 3045.1 | 14.8 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 58.8 | 0.3 | | | G1/100 |
| UL | (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH | (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B4-U0-G2

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|
| 0° | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 |
| 2.5° | 2328.8 | 2330.7 | 2332.6 | 2330.7 | 2332.6 | 2329.7 | 2327.8 | 2330.7 | 2327.8 | 2324.9 | 2326.8 |
| 5° | 2349.0 | 2349.9 | 2349.9 | 2347.1 | 2349.9 | 2348.0 | 2345.1 | 2349.0 | 2346.1 | 2343.2 | 2345.1 |
| 7.5° | 2382.7 | 2386.5 | 2383.6 | 2380.8 | 2382.7 | 2380.8 | 2378.8 | 2379.8 | 2378.8 | 2375.9 | 2376.9 |
| 10° | 2428.0 | 2430.8 | 2428.9 | 2428.0 | 2429.9 | 2428.9 | 2427.0 | 2426.0 | 2427.0 | 2424.1 | 2424.1 |
| 12.5° | 2482.8 | 2481.9 | 2480.9 | 2481.9 | 2484.8 | 2484.8 | 2483.8 | 2484.8 | 2486.7 | 2487.7 | 2485.7 |
| 15° | 2536.8 | 2538.7 | 2538.7 | 2538.7 | 2544.5 | 2549.3 | 2552.2 | 2554.1 | 2558.0 | 2558.9 | 2555.1 |
| 17.5° | 2604.2 | 2604.2 | 2603.2 | 2604.2 | 2610.0 | 2617.7 | 2620.6 | 2624.4 | 2628.3 | 2631.2 | 2626.3 |
| 20° | 2679.3 | 2681.2 | 2681.2 | 2683.2 | 2690.9 | 2699.5 | 2699.5 | 2701.5 | 2699.5 | 2701.5 | 2698.6 |
| 22.5° | 2770.8 | 2776.6 | 2776.6 | 2777.6 | 2785.3 | 2795.9 | 2793.0 | 2795.9 | 2791.0 | 2794.9 | 2791.0 |
| 25° | 2890.2 | 2898.9 | 2897.0 | 2897.0 | 2902.8 | 2909.5 | 2910.5 | 2916.2 | 2915.3 | 2920.1 | 2917.2 |
| 27.5° | 3025.1 | 3038.6 | 3042.4 | 3041.4 | 3045.3 | 3052.0 | 3054.0 | 3060.7 | 3056.9 | 3060.7 | 3058.8 |
| 30° | 3186.9 | 3192.6 | 3200.4 | 3203.2 | 3208.1 | 3214.8 | 3214.8 | 3215.8 | 3210.9 | 3216.7 | 3219.6 |
| 32.5° | 3354.4 | 3365.0 | 3372.7 | 3390.1 | 3398.7 | 3403.6 | 3402.6 | 3404.5 | 3399.7 | 3407.4 | 3413.2 |
| 35° | 3576.0 | 3583.7 | 3596.2 | 3609.7 | 3621.2 | 3620.3 | 3617.4 | 3618.3 | 3618.3 | 3625.1 | 3630.9 |
| 37.5° | 3842.7 | 3844.7 | 3861.0 | 3880.3 | 3886.1 | 3880.3 | 3863.0 | 3859.1 | 3850.4 | 3859.1 | 3868.7 |
| 40° | 4124.9 | 4131.7 | 4164.4 | 4176.9 | 4179.8 | 4169.2 | 4144.2 | 4129.7 | 4110.5 | 4121.1 | 4134.5 |
| 42.5° | 4420.6 | 4434.1 | 4463.9 | 4486.1 | 4495.7 | 4489.0 | 4454.3 | 4432.1 | 4407.1 | 4412.9 | 4426.4 |
| 45° | 4748.0 | 4764.4 | 4806.8 | 4828.0 | 4846.3 | 4835.7 | 4802.0 | 4768.3 | 4728.8 | 4731.7 | 4752.9 |
| 47.5° | 5114.0 | 5130.4 | 5185.3 | 5220.9 | 5230.5 | 5228.6 | 5191.1 | 5144.8 | 5090.9 | 5089.0 | 5107.3 |
| 50° | 5524.3 | 5540.7 | 5609.0 | 5663.9 | 5691.9 | 5689.0 | 5644.7 | 5579.2 | 5513.7 | 5514.7 | 5537.8 |
| 52.5° | 5924.9 | 5945.2 | 6016.4 | 6110.8 | 6165.7 | 6205.2 | 6178.2 | 6116.6 | 6036.7 | 6038.6 | 6059.8 |
| 55° | 6300.5 | 6334.2 | 6416.1 | 6544.2 | 6646.3 | 6757.0 | 6788.8 | 6786.9 | 6738.7 | 6752.2 | 6773.4 |
| 57.5° | 6482.6 | 6532.6 | 6658.8 | 6861.1 | 7069.1 | 7294.5 | 7485.1 | 7627.7 | 7688.4 | 7779.8 | 7758.7 |
| 60° | 6137.8 | 6217.7 | 6403.6 | 6701.2 | 7112.4 | 7582.4 | 8086.1 | 8578.3 | 8998.2 | 9315.0 | 9133.0 |
| 62.5° | 5025.4 | 5129.4 | 5354.8 | 5736.2 | 6358.3 | 7110.5 | 8074.6 | 9238.0 | 10505.4 | 11270.1 | 10724.0 |
| 65° | 3144.5 | 3252.4 | 3481.6 | 3889.9 | 4618.0 | 5553.2 | 6861.1 | 8789.2 | 11157.4 | 12310.2 | 11198.8 |
| 67.5° | 1226.0 | 1284.8 | 1409.0 | 1670.0 | 2217.0 | 3049.1 | 4361.8 | 6550.0 | 9382.4 | 10392.7 | 9208.1 |
| 70° | 614.5 | 620.2 | 643.3 | 691.5 | 809.0 | 1050.7 | 1598.7 | 3036.6 | 5380.8 | 6498.9 | 5187.2 |
| 72.5° | 444.0 | 444.9 | 456.5 | 477.7 | 515.3 | 569.2 | 673.2 | 929.4 | 1749.9 | 2674.5 | 1640.1 |
| 75° | 340.0 | 343.8 | 350.6 | 362.1 | 382.3 | 409.3 | 446.9 | 535.5 | 663.6 | 769.5 | 647.2 |
| 77.5° | 262.0 | 269.7 | 274.5 | 285.1 | 297.6 | 315.9 | 326.5 | 360.2 | 418.9 | 441.1 | 434.4 |
| 80° | 199.4 | 206.1 | 216.7 | 225.4 | 234.0 | 242.7 | 238.8 | 254.3 | 285.1 | 303.4 | 293.7 |
| 82.5° | 127.1 | 134.8 | 165.7 | 173.4 | 177.2 | 183.0 | 176.2 | 177.2 | 190.7 | 202.2 | 190.7 |
| 85° | 81.9 | 86.7 | 105.0 | 114.6 | 115.6 | 119.4 | 116.5 | 109.8 | 109.8 | 100.2 | 112.7 |
| 87.5° | 37.6 | 38.5 | 47.2 | 55.9 | 57.8 | 52.0 | 51.0 | 49.1 | 39.5 | 37.6 | 40.4 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 | 2326.8 |
| 2.5° | 2325.9 | 2327.8 | 2328.8 | 2331.6 | 2332.6 | 2332.6 | 2333.6 | 2335.5 |
| 5° | 2344.2 | 2347.1 | 2348.0 | 2351.9 | 2352.8 | 2351.9 | 2353.8 | 2354.8 |
| 7.5° | 2376.9 | 2381.7 | 2383.6 | 2387.5 | 2384.6 | 2388.5 | 2389.4 | 2389.4 |
| 10° | 2425.1 | 2429.9 | 2430.8 | 2434.7 | 2432.8 | 2434.7 | 2434.7 | 2432.8 |
| 12.5° | 2488.6 | 2489.6 | 2486.7 | 2489.6 | 2485.7 | 2487.7 | 2484.8 | 2482.8 |
| 15° | 2558.9 | 2556.0 | 2549.3 | 2549.3 | 2543.5 | 2544.5 | 2543.5 | 2542.6 |
| 17.5° | 2627.3 | 2621.5 | 2616.7 | 2614.8 | 2610.0 | 2609.0 | 2606.1 | 2606.1 |
| 20° | 2702.4 | 2699.5 | 2696.7 | 2692.8 | 2688.0 | 2683.2 | 2682.2 | 2684.1 |
| 22.5° | 2793.0 | 2792.0 | 2792.0 | 2790.1 | 2783.3 | 2778.5 | 2775.6 | 2775.6 |
| 25° | 2914.3 | 2905.6 | 2905.6 | 2904.7 | 2901.8 | 2898.9 | 2893.1 | 2896.0 |
| 27.5° | 3051.1 | 3046.3 | 3050.1 | 3049.1 | 3046.3 | 3046.3 | 3042.4 | 3042.4 |
| 30° | 3219.6 | 3217.7 | 3223.5 | 3218.6 | 3209.0 | 3208.1 | 3204.2 | 3199.4 |
| 32.5° | 3414.2 | 3412.2 | 3420.9 | 3415.1 | 3399.7 | 3391.0 | 3383.3 | 3379.5 |
| 35° | 3630.9 | 3631.8 | 3642.4 | 3638.6 | 3621.2 | 3615.4 | 3602.0 | 3600.0 |
| 37.5° | 3867.8 | 3883.2 | 3901.5 | 3905.3 | 3890.9 | 3887.0 | 3872.6 | 3864.9 |
| 40° | 4146.1 | 4166.3 | 4194.3 | 4201.0 | 4185.6 | 4182.7 | 4162.5 | 4151.9 |
| 42.5° | 4442.7 | 4477.4 | 4512.1 | 4517.9 | 4502.4 | 4487.0 | 4467.8 | 4460.1 |
| 45° | 4774.0 | 4815.5 | 4860.7 | 4872.3 | 4849.2 | 4830.9 | 4805.8 | 4805.8 |
| 47.5° | 5145.8 | 5197.8 | 5248.8 | 5280.6 | 5259.4 | 5240.2 | 5210.3 | 5191.1 |
| 50° | 5585.0 | 5656.2 | 5722.7 | 5755.4 | 5721.7 | 5685.1 | 5633.1 | 5615.8 |
| 52.5° | 6135.9 | 6212.9 | 6270.7 | 6253.3 | 6201.3 | 6150.3 | 6093.5 | 6070.4 |
| 55° | 6838.9 | 6864.9 | 6864.9 | 6799.4 | 6695.4 | 6609.7 | 6520.1 | 6490.3 |
| 57.5° | 7718.2 | 7618.0 | 7464.0 | 7268.4 | 7022.9 | 6809.1 | 6664.6 | 6596.2 |
| 60° | 8751.6 | 8270.1 | 7725.9 | 7191.4 | 6752.2 | 6390.1 | 6175.3 | 6077.1 |
| 62.5° | 9440.2 | 8180.5 | 7090.3 | 6232.2 | 5600.4 | 5164.1 | 4867.5 | 4751.9 |
| 65° | 8822.9 | 6822.5 | 5362.5 | 4335.8 | 3647.2 | 3203.2 | 2909.5 | 2801.6 |
| 67.5° | 6462.3 | 4275.2 | 2855.6 | 2046.6 | 1499.5 | 1196.2 | 1075.8 | 1025.7 |
| 70° | 2900.8 | 1505.3 | 922.6 | 720.4 | 621.2 | 570.1 | 548.0 | 540.3 |
| 72.5° | 874.5 | 632.8 | 533.6 | 481.5 | 442.1 | 417.0 | 398.7 | 396.8 |
| 75° | 527.8 | 439.2 | 390.1 | 359.2 | 334.2 | 314.0 | 304.3 | 301.4 |
| 77.5° | 368.9 | 322.6 | 299.5 | 277.4 | 258.1 | 242.7 | 234.0 | 227.3 |
| 80° | 259.1 | 236.9 | 226.3 | 213.8 | 201.3 | 186.8 | 174.3 | 168.5 |
| 82.5° | 173.4 | 168.5 | 168.5 | 160.8 | 150.2 | 136.8 | 111.7 | 105.9 |
| 85° | 111.7 | 110.8 | 112.7 | 109.8 | 102.1 | 87.6 | 72.2 | 68.4 |
| 87.5° | 52.0 | 53.0 | 58.7 | 57.8 | 55.9 | 46.2 | 36.6 | 34.7 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)