

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: P191643

Luminaire Tested: **GAN-AF-05-LED-U-5NQ-7050-800-ADJ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191643
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-05-LED-U-5NQ-7050-800-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V NARROW OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24794 lumens
Efficiency: N/A
Efficacy: 118.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B4 - U0 - G2

Input Watts (W): 210
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

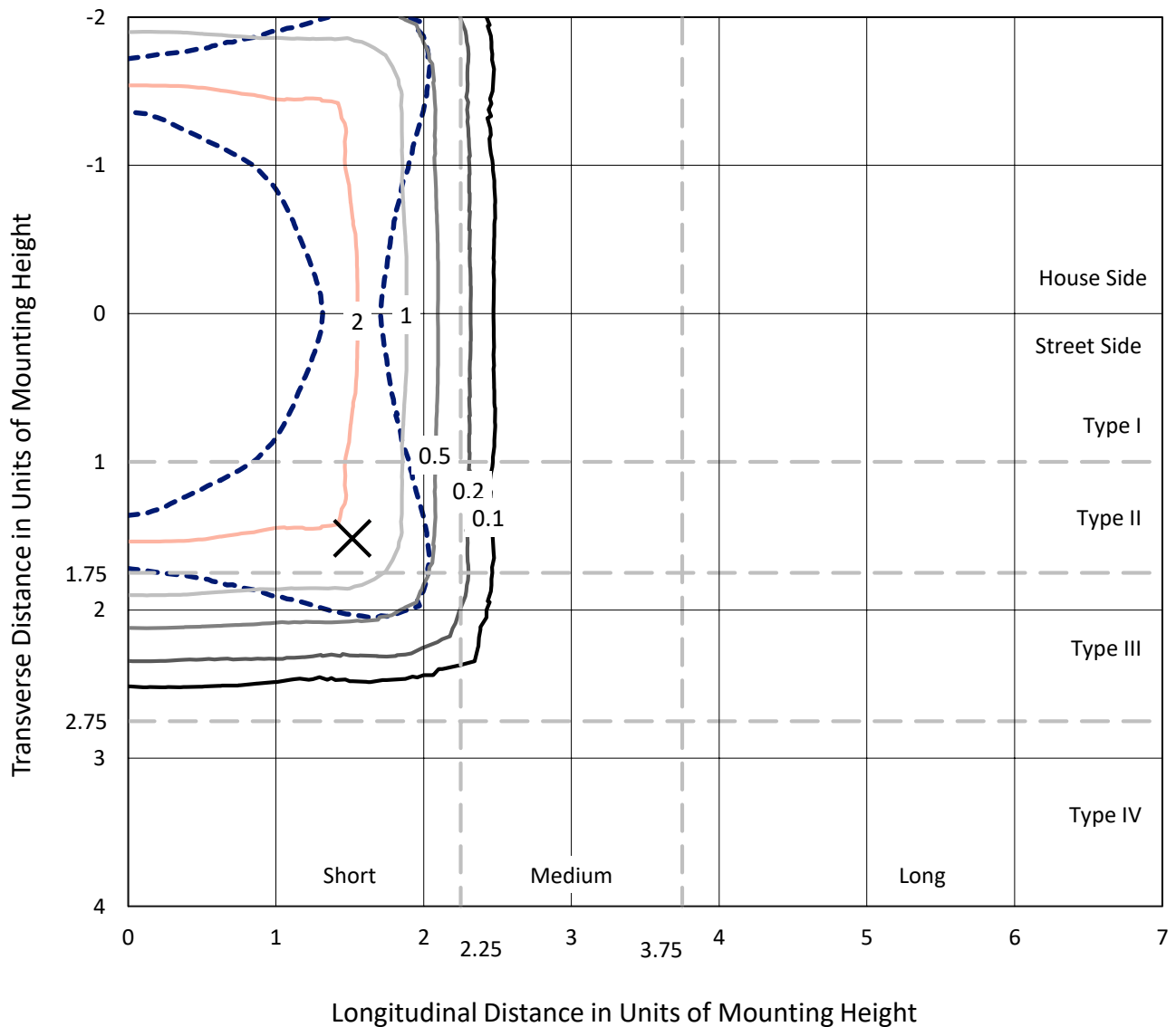


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

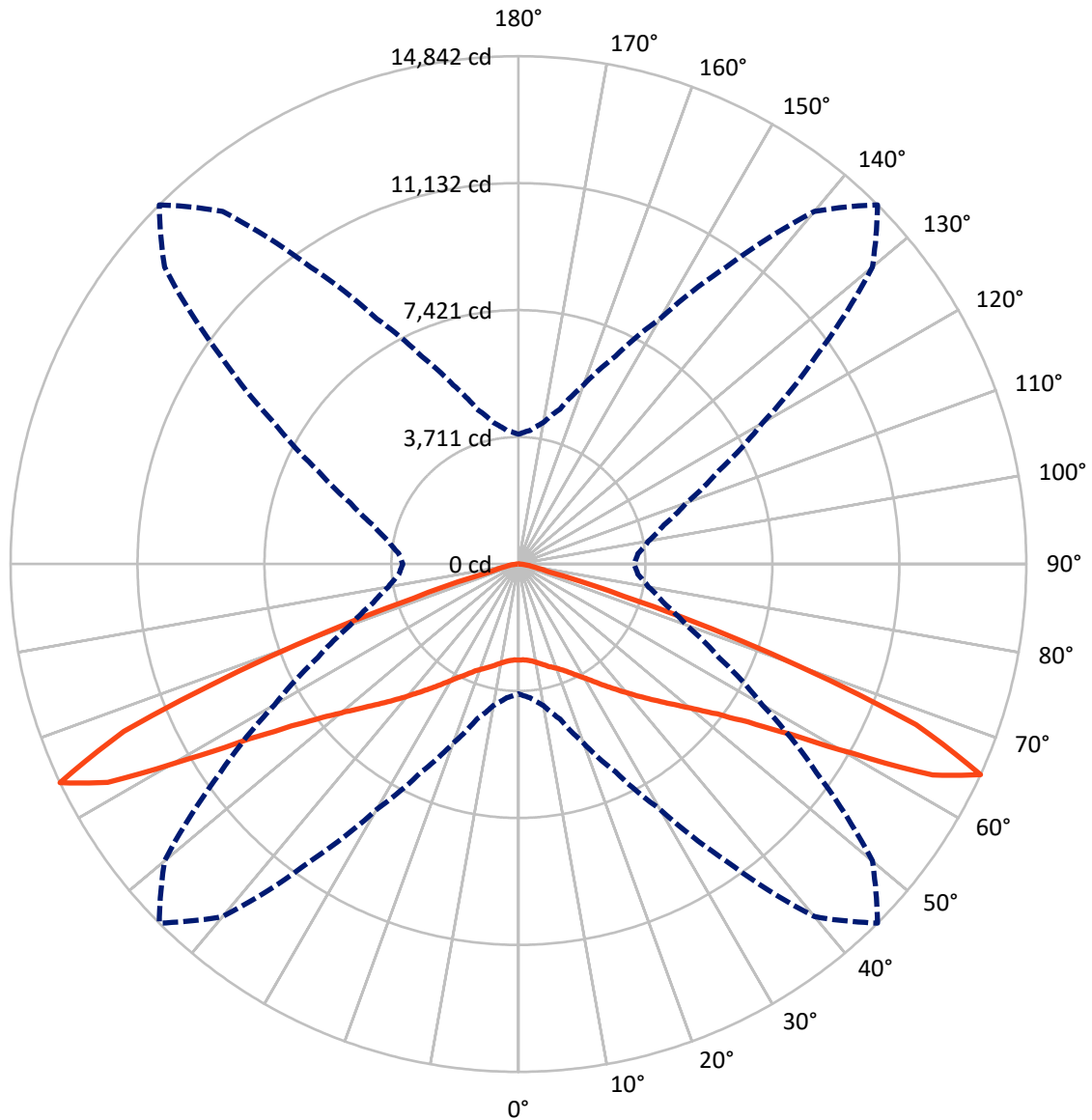


Based on 25 foot mounting height. Maximum calculated value = 4.5 fc
 Type V - Short - Full Cutoff

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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 | 12397.0 | 0.0 | 12397.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 12397.0 | 0.0 | 12397.0 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 24794.0 | 0.0 | 24794.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 273.4 | 1.1 |
| 10°-20° | 877.0 | 3.5 |
| 20°-30° | 1639.8 | 6.6 |
| 30°-40° | 2773.3 | 11.2 |
| 40°-50° | 4534.7 | 18.3 |
| 50°-60° | 7210.9 | 29.1 |
| 60°-70° | 6518.1 | 26.3 |
| 70°-80° | 824.9 | 3.3 |
| 80°-90° | 141.9 | 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° | 24794.0 | 100.0 |
| 0°-180° | 24794.0 | 100.0 |



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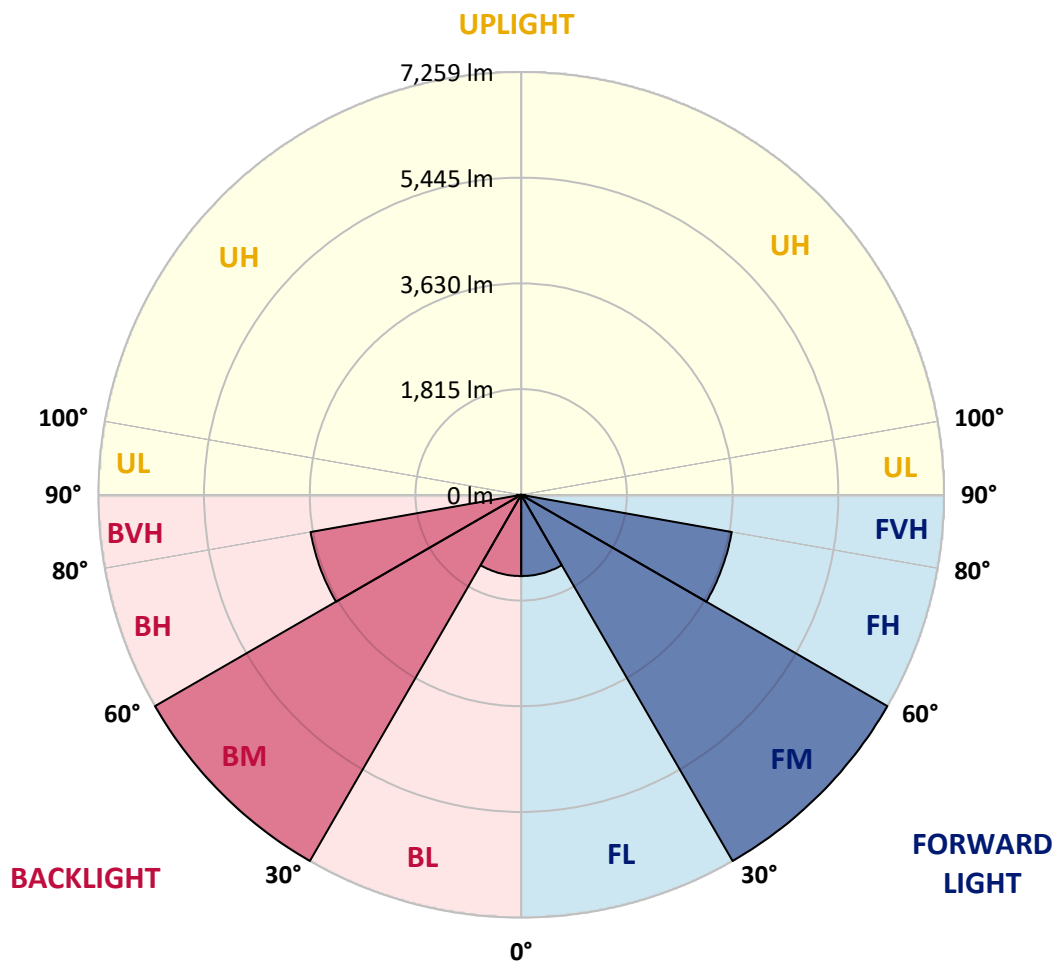
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1395.1 | 5.6 | | | |
| FM | (30°-60°) | 7259.4 | 29.3 | | | |
| FH | (60°-80°) | 3671.5 | 14.8 | | | G2/5000 |
| FVH | (80°-90°) | 70.9 | 0.3 | | | G1/100 |
| BL | (0°-30°) | 1395.1 | 5.6 | B3/2500 | | |
| BM | (30°-60°) | 7259.4 | 29.3 | B4/8500 | | |
| BH | (60°-80°) | 3671.5 | 14.8 | B4/5000 | | G2/5000 |
| BVH | (80°-90°) | 70.9 | 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° | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 |
| 2.5° | 2807.8 | 2810.1 | 2812.4 | 2810.1 | 2812.4 | 2808.9 | 2806.6 | 2810.1 | 2806.6 | 2803.1 | 2805.5 |
| 5° | 2832.2 | 2833.3 | 2833.3 | 2829.8 | 2833.3 | 2831.0 | 2827.5 | 2832.2 | 2828.7 | 2825.2 | 2827.5 |
| 7.5° | 2872.8 | 2877.4 | 2874.0 | 2870.5 | 2872.8 | 2870.5 | 2868.2 | 2869.3 | 2868.2 | 2864.7 | 2865.8 |
| 10° | 2927.4 | 2930.9 | 2928.5 | 2927.4 | 2929.7 | 2928.5 | 2926.2 | 2925.1 | 2926.2 | 2922.7 | 2922.7 |
| 12.5° | 2993.6 | 2992.4 | 2991.2 | 2992.4 | 2995.9 | 2995.9 | 2994.7 | 2995.9 | 2998.2 | 2999.4 | 2997.1 |
| 15° | 3058.6 | 3060.9 | 3060.9 | 3060.9 | 3067.9 | 3073.7 | 3077.2 | 3079.5 | 3084.1 | 3085.3 | 3080.7 |
| 17.5° | 3139.9 | 3139.9 | 3138.7 | 3139.9 | 3146.8 | 3156.1 | 3159.6 | 3164.3 | 3168.9 | 3172.4 | 3166.6 |
| 20° | 3230.5 | 3232.8 | 3232.8 | 3235.1 | 3244.4 | 3254.8 | 3254.8 | 3257.2 | 3254.8 | 3257.2 | 3253.7 |
| 22.5° | 3340.8 | 3347.7 | 3347.7 | 3348.9 | 3358.2 | 3371.0 | 3367.5 | 3371.0 | 3365.2 | 3369.8 | 3365.2 |
| 25° | 3484.8 | 3495.2 | 3492.9 | 3492.9 | 3499.9 | 3508.0 | 3509.1 | 3516.1 | 3514.9 | 3520.8 | 3517.3 |
| 27.5° | 3647.3 | 3663.6 | 3668.2 | 3667.1 | 3671.7 | 3679.8 | 3682.2 | 3690.3 | 3685.6 | 3690.3 | 3688.0 |
| 30° | 3842.4 | 3849.4 | 3858.7 | 3862.1 | 3868.0 | 3876.1 | 3876.1 | 3877.2 | 3871.4 | 3878.4 | 3881.9 |
| 32.5° | 4044.5 | 4057.2 | 4066.5 | 4087.4 | 4097.9 | 4103.7 | 4102.5 | 4104.8 | 4099.0 | 4108.3 | 4115.3 |
| 35° | 4311.5 | 4320.8 | 4335.9 | 4352.2 | 4366.1 | 4364.9 | 4361.5 | 4362.6 | 4362.6 | 4370.7 | 4377.7 |
| 37.5° | 4633.2 | 4635.5 | 4655.2 | 4678.5 | 4685.4 | 4678.5 | 4657.6 | 4652.9 | 4642.5 | 4652.9 | 4664.5 |
| 40° | 4973.4 | 4981.5 | 5021.0 | 5036.1 | 5039.6 | 5026.8 | 4996.6 | 4979.2 | 4956.0 | 4968.8 | 4985.0 |
| 42.5° | 5329.9 | 5346.2 | 5382.2 | 5408.9 | 5420.5 | 5412.3 | 5370.5 | 5343.8 | 5313.6 | 5320.6 | 5336.9 |
| 45° | 5724.7 | 5744.4 | 5795.5 | 5821.1 | 5843.1 | 5830.4 | 5789.7 | 5749.1 | 5701.5 | 5705.0 | 5730.5 |
| 47.5° | 6166.0 | 6185.7 | 6251.9 | 6294.9 | 6306.5 | 6304.1 | 6258.9 | 6203.1 | 6138.1 | 6135.8 | 6157.8 |
| 50° | 6660.6 | 6680.4 | 6762.8 | 6829.0 | 6862.7 | 6859.2 | 6805.8 | 6726.8 | 6647.9 | 6649.0 | 6676.9 |
| 52.5° | 7143.7 | 7168.1 | 7254.0 | 7367.8 | 7434.0 | 7481.6 | 7449.1 | 7374.8 | 7278.4 | 7280.7 | 7306.3 |
| 55° | 7596.6 | 7637.2 | 7735.9 | 7890.3 | 8013.4 | 8147.0 | 8185.3 | 8183.0 | 8124.9 | 8141.2 | 8166.7 |
| 57.5° | 7816.0 | 7876.4 | 8028.5 | 8272.4 | 8523.2 | 8794.9 | 9024.8 | 9196.7 | 9269.8 | 9380.2 | 9354.6 |
| 60° | 7400.3 | 7496.7 | 7720.8 | 8079.6 | 8575.4 | 9142.1 | 9749.4 | 10342.8 | 10849.1 | 11231.1 | 11011.6 |
| 62.5° | 6059.1 | 6184.5 | 6456.3 | 6916.1 | 7666.2 | 8573.1 | 9735.5 | 11138.2 | 12666.3 | 13588.3 | 12929.9 |
| 65° | 3791.3 | 3921.4 | 4197.7 | 4690.1 | 5567.9 | 6695.5 | 8272.4 | 10597.1 | 13452.5 | 14842.4 | 13502.4 |
| 67.5° | 1478.2 | 1549.0 | 1698.8 | 2013.5 | 2673.1 | 3676.4 | 5259.1 | 7897.3 | 11312.4 | 12530.5 | 11102.2 |
| 70° | 740.8 | 747.8 | 775.7 | 833.7 | 975.4 | 1266.9 | 1927.6 | 3661.3 | 6487.6 | 7835.8 | 6254.2 |
| 72.5° | 535.3 | 536.5 | 550.4 | 576.0 | 621.2 | 686.3 | 811.7 | 1120.6 | 2109.9 | 3224.6 | 1977.5 |
| 75° | 409.9 | 414.5 | 422.7 | 436.6 | 461.0 | 493.5 | 538.8 | 645.6 | 800.1 | 927.8 | 780.3 |
| 77.5° | 315.8 | 325.1 | 330.9 | 343.7 | 358.8 | 380.9 | 393.6 | 434.3 | 505.1 | 531.8 | 523.7 |
| 80° | 240.4 | 248.5 | 261.3 | 271.7 | 282.2 | 292.6 | 288.0 | 306.6 | 343.7 | 365.8 | 354.2 |
| 82.5° | 153.3 | 162.6 | 199.7 | 209.0 | 213.7 | 220.6 | 212.5 | 213.7 | 229.9 | 243.9 | 229.9 |
| 85° | 98.7 | 104.5 | 126.6 | 138.2 | 139.3 | 144.0 | 140.5 | 132.4 | 132.4 | 120.8 | 135.9 |
| 87.5° | 45.3 | 46.4 | 56.9 | 67.3 | 69.7 | 62.7 | 61.5 | 59.2 | 47.6 | 45.3 | 48.8 |
| 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):

| | 55° | 60° | 65° | 70° | 75° | 80° | 85° | 90° |
|-------|---------|--------|--------|--------|--------|--------|--------|--------|
| 0° | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 | 2805.5 |
| 2.5° | 2804.3 | 2806.6 | 2807.8 | 2811.3 | 2812.4 | 2812.4 | 2813.6 | 2815.9 |
| 5° | 2826.4 | 2829.8 | 2831.0 | 2835.6 | 2836.8 | 2835.6 | 2838.0 | 2839.1 |
| 7.5° | 2865.8 | 2871.6 | 2874.0 | 2878.6 | 2875.1 | 2879.8 | 2880.9 | 2880.9 |
| 10° | 2923.9 | 2929.7 | 2930.9 | 2935.5 | 2933.2 | 2935.5 | 2935.5 | 2933.2 |
| 12.5° | 3000.5 | 3001.7 | 2998.2 | 3001.7 | 2997.1 | 2999.4 | 2995.9 | 2993.6 |
| 15° | 3085.3 | 3081.8 | 3073.7 | 3073.7 | 3066.7 | 3067.9 | 3066.7 | 3065.6 |
| 17.5° | 3167.7 | 3160.8 | 3155.0 | 3152.7 | 3146.8 | 3145.7 | 3142.2 | 3142.2 |
| 20° | 3258.3 | 3254.8 | 3251.4 | 3246.7 | 3240.9 | 3235.1 | 3233.9 | 3236.3 |
| 22.5° | 3367.5 | 3366.3 | 3366.3 | 3364.0 | 3355.9 | 3350.1 | 3346.6 | 3346.6 |
| 25° | 3513.8 | 3503.3 | 3503.3 | 3502.2 | 3498.7 | 3495.2 | 3488.2 | 3491.7 |
| 27.5° | 3678.7 | 3672.9 | 3677.5 | 3676.4 | 3672.9 | 3672.9 | 3668.2 | 3668.2 |
| 30° | 3881.9 | 3879.6 | 3886.5 | 3880.7 | 3869.1 | 3868.0 | 3863.3 | 3857.5 |
| 32.5° | 4116.4 | 4114.1 | 4124.6 | 4117.6 | 4099.0 | 4088.6 | 4079.3 | 4074.6 |
| 35° | 4377.7 | 4378.9 | 4391.7 | 4387.0 | 4366.1 | 4359.1 | 4342.9 | 4340.6 |
| 37.5° | 4663.4 | 4682.0 | 4704.0 | 4708.7 | 4691.2 | 4686.6 | 4669.2 | 4659.9 |
| 40° | 4999.0 | 5023.3 | 5057.0 | 5065.1 | 5046.6 | 5043.1 | 5018.7 | 5005.9 |
| 42.5° | 5356.6 | 5398.4 | 5440.2 | 5447.2 | 5428.6 | 5410.0 | 5386.8 | 5377.5 |
| 45° | 5756.1 | 5806.0 | 5860.6 | 5874.5 | 5846.6 | 5824.6 | 5794.4 | 5794.4 |
| 47.5° | 6204.3 | 6267.0 | 6328.5 | 6366.8 | 6341.3 | 6318.1 | 6282.1 | 6258.9 |
| 50° | 6733.8 | 6819.7 | 6899.8 | 6939.3 | 6898.7 | 6854.6 | 6791.8 | 6770.9 |
| 52.5° | 7398.0 | 7490.9 | 7560.6 | 7539.7 | 7477.0 | 7415.4 | 7346.9 | 7319.0 |
| 55° | 8245.7 | 8277.0 | 8277.0 | 8198.1 | 8072.6 | 7969.3 | 7861.3 | 7825.3 |
| 57.5° | 9305.8 | 9185.1 | 8999.3 | 8763.6 | 8467.5 | 8209.7 | 8035.5 | 7953.0 |
| 60° | 10551.8 | 9971.2 | 9315.1 | 8670.7 | 8141.2 | 7704.5 | 7445.6 | 7327.2 |
| 62.5° | 11382.1 | 9863.2 | 8548.7 | 7514.1 | 6752.4 | 6226.3 | 5868.7 | 5729.4 |
| 65° | 10637.7 | 8225.9 | 6465.6 | 5227.7 | 4397.5 | 3862.1 | 3508.0 | 3377.9 |
| 67.5° | 7791.6 | 5154.6 | 3443.0 | 2467.5 | 1808.0 | 1442.2 | 1297.1 | 1236.7 |
| 70° | 3497.5 | 1815.0 | 1112.4 | 868.6 | 749.0 | 687.4 | 660.7 | 651.4 |
| 72.5° | 1054.4 | 762.9 | 643.3 | 580.6 | 533.0 | 502.8 | 480.7 | 478.4 |
| 75° | 636.3 | 529.5 | 470.3 | 433.1 | 402.9 | 378.6 | 366.9 | 363.5 |
| 77.5° | 444.7 | 389.0 | 361.1 | 334.4 | 311.2 | 292.6 | 282.2 | 274.0 |
| 80° | 312.4 | 285.7 | 272.9 | 257.8 | 242.7 | 225.3 | 210.2 | 203.2 |
| 82.5° | 209.0 | 203.2 | 203.2 | 193.9 | 181.1 | 164.9 | 134.7 | 127.7 |
| 85° | 134.7 | 133.5 | 135.9 | 132.4 | 123.1 | 105.7 | 87.1 | 82.4 |
| 87.5° | 62.7 | 63.9 | 70.8 | 69.7 | 67.3 | 55.7 | 44.1 | 41.8 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)