

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: P191613

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191613
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24142)
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-5MQ-7050-ADJ
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(5) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V
MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31253 lumens
Efficiency: N/A
Efficacy: 112.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

Input Watts (W): 279
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

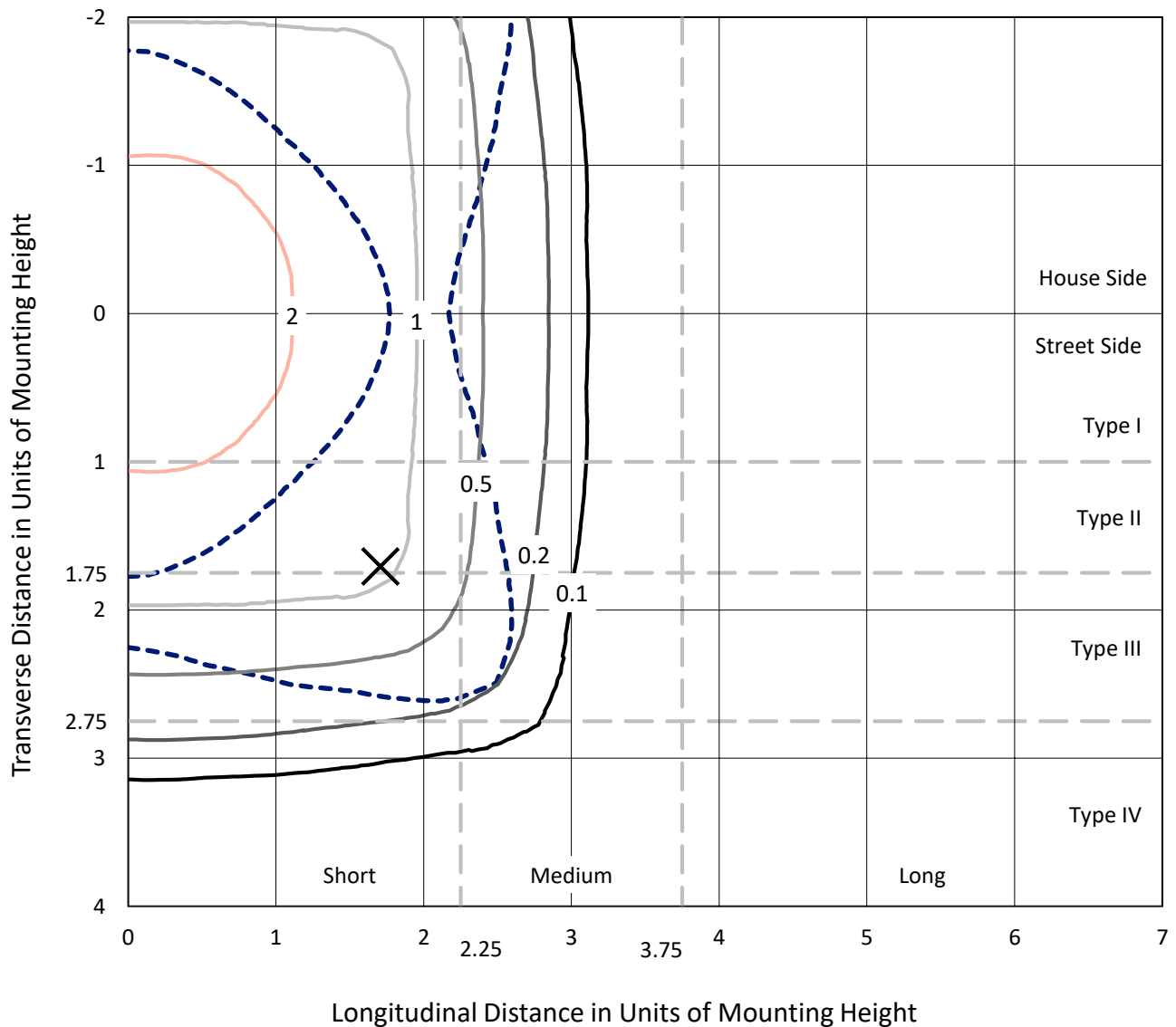


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Iso-Footcandle Lines of Horizontal Illumination

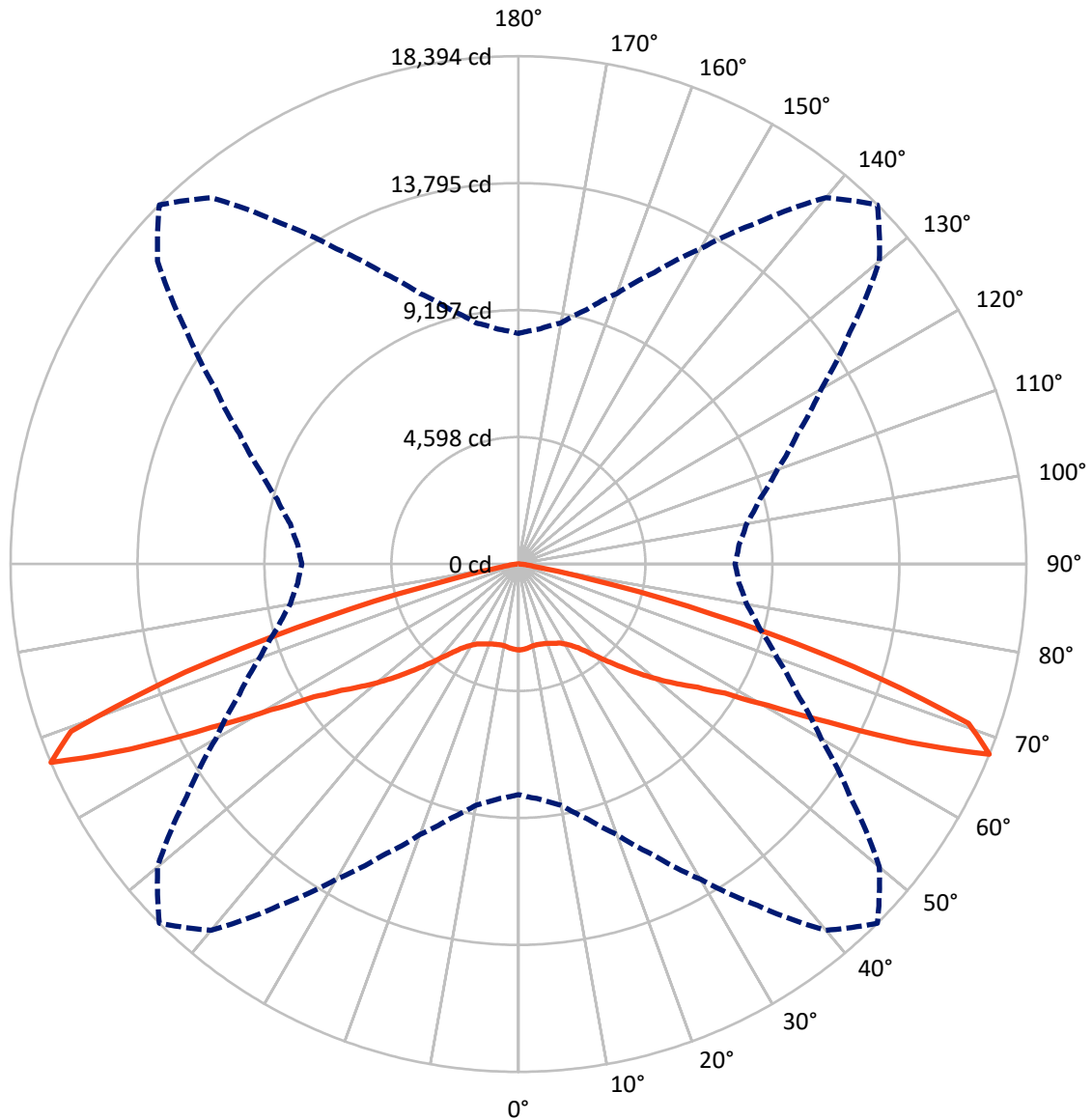
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.5 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 45-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 15626.5 | 0.0 | 15626.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 15626.5 | 0.0 | 15626.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 31253.0 | 0.0 | 31253.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 291.5 | 0.9 |
| 10°-20° | 845.9 | 2.7 |
| 20°-30° | 1438.0 | 4.6 |
| 30°-40° | 2350.7 | 7.5 |
| 40°-50° | 4196.4 | 13.4 |
| 50°-60° | 7075.2 | 22.6 |
| 60°-70° | 10979.6 | 35.1 |
| 70°-80° | 3857.8 | 12.3 |
| 80°-90° | 218.0 | 0.7 |
| 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° | 31253.0 | 100.0 |
| 0°-180° | 31253.0 | 100.0 |

Coefficient of Utilization



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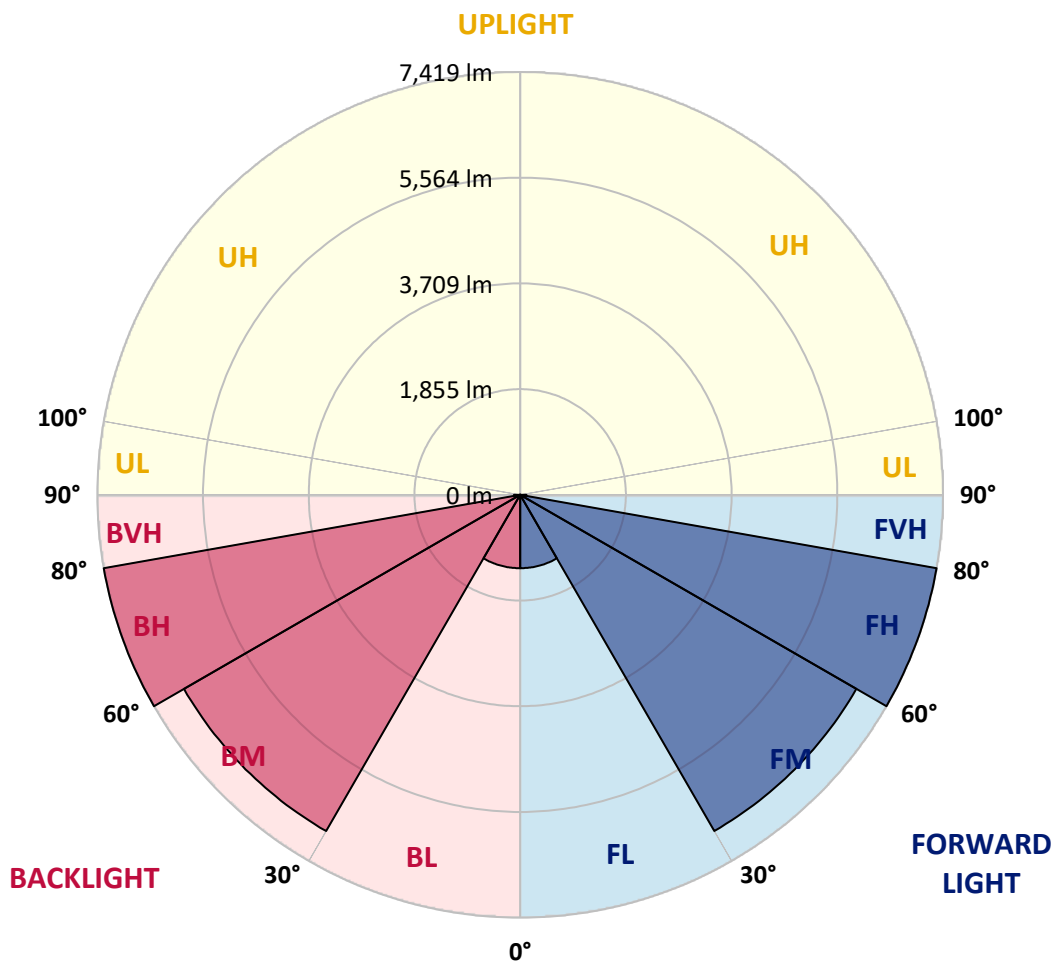
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|---------|
| | | | | B | U | G |
| FL | (0°-30°) | 1287.7 | 4.1 | | | |
| FM | (30°-60°) | 6811.1 | 21.8 | | | |
| FH | (60°-80°) | 7418.7 | 23.7 | | | G3/7500 |
| FVH | (80°-90°) | 109.0 | 0.3 | | | G2/225 |
| BL | (0°-30°) | 1287.7 | 4.1 | B3/2500 | | |
| BM | (30°-60°) | 6811.1 | 21.8 | B4/8500 | | |
| BH | (60°-80°) | 7418.7 | 23.7 | B5 | | G3/7500 |
| BVH | (80°-90°) | 109.0 | 0.3 | | | G2/225 |
| 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° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 |
| 2.5° | 3103.0 | 3105.9 | 3105.9 | 3105.9 | 3104.4 | 3104.4 | 3101.6 | 3104.4 | 3103.0 | 3098.7 | 3100.1 |
| 5° | 3077.1 | 3080.0 | 3080.0 | 3078.6 | 3082.9 | 3081.4 | 3077.1 | 3080.0 | 3078.6 | 3075.7 | 3077.1 |
| 7.5° | 3039.8 | 3044.1 | 3044.1 | 3042.6 | 3046.9 | 3045.5 | 3042.6 | 3044.1 | 3044.1 | 3039.8 | 3039.8 |
| 10° | 2998.1 | 3001.0 | 3001.0 | 2999.5 | 3006.7 | 3006.7 | 3005.3 | 3009.6 | 3011.0 | 3006.7 | 3003.8 |
| 12.5° | 2959.3 | 2963.6 | 2963.6 | 2969.3 | 2976.5 | 2979.4 | 2986.6 | 2992.3 | 2998.1 | 2996.6 | 2990.9 |
| 15° | 2936.3 | 2939.2 | 2944.9 | 2952.1 | 2963.6 | 2973.6 | 2985.1 | 2998.1 | 3009.6 | 3012.4 | 3003.8 |
| 17.5° | 2921.9 | 2926.2 | 2934.8 | 2944.9 | 2960.7 | 2978.0 | 2995.2 | 3012.4 | 3028.3 | 3034.0 | 3023.9 |
| 20° | 2917.6 | 2920.5 | 2929.1 | 2946.3 | 2967.9 | 2993.8 | 3018.2 | 3038.3 | 3059.9 | 3067.1 | 3059.9 |
| 22.5° | 2926.2 | 2932.0 | 2942.0 | 2962.1 | 2990.9 | 3023.9 | 3052.7 | 3080.0 | 3107.3 | 3120.2 | 3110.2 |
| 25° | 2965.0 | 2970.8 | 2983.7 | 3009.6 | 3041.2 | 3075.7 | 3108.7 | 3140.4 | 3164.8 | 3177.7 | 3170.5 |
| 27.5° | 3036.9 | 3044.1 | 3059.9 | 3085.7 | 3120.2 | 3157.6 | 3193.5 | 3219.4 | 3239.5 | 3243.8 | 3235.2 |
| 30° | 3144.7 | 3160.5 | 3179.2 | 3207.9 | 3248.2 | 3279.8 | 3315.7 | 3338.7 | 3363.1 | 3363.1 | 3355.9 |
| 32.5° | 3312.8 | 3328.6 | 3348.8 | 3376.1 | 3407.7 | 3442.2 | 3473.8 | 3493.9 | 3519.8 | 3521.2 | 3504.0 |
| 35° | 3564.3 | 3571.5 | 3588.8 | 3606.0 | 3634.8 | 3665.0 | 3692.3 | 3705.2 | 3726.8 | 3728.2 | 3712.4 |
| 37.5° | 3896.4 | 3897.8 | 3909.3 | 3915.0 | 3940.9 | 3974.0 | 3999.8 | 4008.5 | 4028.6 | 4025.7 | 4009.9 |
| 40° | 4283.0 | 4290.2 | 4294.5 | 4303.1 | 4330.4 | 4362.0 | 4389.3 | 4393.6 | 4415.2 | 4410.9 | 4390.8 |
| 42.5° | 4729.9 | 4732.8 | 4757.3 | 4770.2 | 4796.1 | 4811.9 | 4846.4 | 4850.7 | 4876.5 | 4865.0 | 4842.1 |
| 45° | 5231.5 | 5257.4 | 5280.4 | 5306.3 | 5333.6 | 5352.3 | 5379.6 | 5373.8 | 5391.1 | 5373.8 | 5360.9 |
| 47.5° | 5759.0 | 5777.7 | 5829.4 | 5869.7 | 5914.2 | 5930.0 | 5968.8 | 5951.6 | 5968.8 | 5944.4 | 5940.1 |
| 50° | 6339.7 | 6372.7 | 6417.3 | 6463.3 | 6510.7 | 6536.6 | 6586.9 | 6565.3 | 6588.3 | 6565.3 | 6552.4 |
| 52.5° | 6911.7 | 6920.3 | 7018.0 | 7085.6 | 7151.7 | 7181.9 | 7212.1 | 7202.0 | 7203.4 | 7202.0 | 7189.1 |
| 55° | 7454.9 | 7475.1 | 7572.8 | 7664.8 | 7779.8 | 7864.6 | 7916.3 | 7910.6 | 7897.6 | 7884.7 | 7863.1 |
| 57.5° | 8067.2 | 8087.3 | 8199.4 | 8313.0 | 8443.8 | 8564.5 | 8669.4 | 8777.2 | 8818.9 | 8830.4 | 8783.0 |
| 60° | 8895.1 | 8893.6 | 9043.1 | 9181.1 | 9367.9 | 9547.6 | 9777.5 | 10011.8 | 10280.6 | 10405.6 | 10240.3 |
| 62.5° | 9737.3 | 9771.8 | 9987.4 | 10231.7 | 10616.9 | 10992.0 | 11416.0 | 11832.8 | 12258.2 | 12604.6 | 12236.6 |
| 65° | 9636.7 | 9768.9 | 10089.4 | 10642.7 | 11354.2 | 12199.3 | 13113.4 | 14080.6 | 14954.5 | 15555.2 | 14881.2 |
| 67.5° | 8351.8 | 8540.1 | 8866.3 | 9538.9 | 10428.6 | 11647.4 | 13182.3 | 15095.3 | 17318.7 | 18393.8 | 17061.4 |
| 70° | 6053.6 | 6266.4 | 6608.4 | 7265.2 | 8146.3 | 9304.7 | 10971.9 | 13268.6 | 16212.0 | 17295.7 | 15828.3 |
| 72.5° | 3012.4 | 3127.4 | 3338.7 | 3756.9 | 4423.8 | 5363.8 | 6875.7 | 9083.3 | 11687.6 | 12682.2 | 11341.2 |
| 75° | 1023.3 | 1076.5 | 1112.4 | 1249.0 | 1460.2 | 1829.6 | 2581.3 | 3971.1 | 6058.0 | 7262.4 | 5971.7 |
| 77.5° | 590.7 | 592.1 | 616.6 | 641.0 | 676.9 | 717.2 | 817.8 | 1073.6 | 1856.9 | 2637.3 | 1921.6 |
| 80° | 382.3 | 380.9 | 401.0 | 419.7 | 444.1 | 464.2 | 470.0 | 497.3 | 573.5 | 679.8 | 608.0 |
| 82.5° | 198.3 | 222.8 | 267.3 | 291.8 | 337.8 | 346.4 | 334.9 | 324.8 | 343.5 | 356.4 | 365.1 |
| 85° | 109.2 | 94.9 | 142.3 | 184.0 | 204.1 | 207.0 | 207.0 | 195.5 | 202.7 | 198.3 | 215.6 |
| 87.5° | 50.3 | 46.0 | 56.1 | 90.5 | 96.3 | 81.9 | 86.2 | 76.2 | 54.6 | 53.2 | 60.4 |
| 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° | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 | 3114.5 |
| 2.5° | 3100.1 | 3101.6 | 3101.6 | 3105.9 | 3107.3 | 3110.2 | 3113.1 | 3114.5 |
| 5° | 3075.7 | 3080.0 | 3077.1 | 3081.4 | 3081.4 | 3084.3 | 3084.3 | 3085.7 |
| 7.5° | 3039.8 | 3044.1 | 3044.1 | 3044.1 | 3042.6 | 3046.9 | 3046.9 | 3046.9 |
| 10° | 3002.4 | 3005.3 | 3003.8 | 3001.0 | 2998.1 | 3002.4 | 3001.0 | 2999.5 |
| 12.5° | 2990.9 | 2983.7 | 2978.0 | 2975.1 | 2969.3 | 2970.8 | 2966.5 | 2966.5 |
| 15° | 2998.1 | 2985.1 | 2975.1 | 2970.8 | 2965.0 | 2962.1 | 2959.3 | 2960.7 |
| 17.5° | 3016.8 | 3001.0 | 2988.0 | 2980.8 | 2973.6 | 2969.3 | 2963.6 | 2965.0 |
| 20° | 3049.8 | 3031.1 | 3012.4 | 2998.1 | 2985.1 | 2978.0 | 2973.6 | 2972.2 |
| 22.5° | 3098.7 | 3071.4 | 3044.1 | 3022.5 | 3005.3 | 2995.2 | 2990.9 | 2988.0 |
| 25° | 3154.7 | 3124.6 | 3092.9 | 3068.5 | 3051.3 | 3038.3 | 3029.7 | 3029.7 |
| 27.5° | 3225.2 | 3200.7 | 3172.0 | 3143.2 | 3127.4 | 3114.5 | 3108.7 | 3105.9 |
| 30° | 3343.0 | 3320.0 | 3297.0 | 3269.7 | 3249.6 | 3236.7 | 3226.6 | 3218.0 |
| 32.5° | 3493.9 | 3475.2 | 3456.6 | 3436.4 | 3417.8 | 3400.5 | 3384.7 | 3377.5 |
| 35° | 3706.6 | 3692.3 | 3679.3 | 3656.3 | 3649.1 | 3639.1 | 3630.5 | 3623.3 |
| 37.5° | 3999.8 | 3994.1 | 3994.1 | 3969.6 | 3963.9 | 3959.6 | 3951.0 | 3952.4 |
| 40° | 4385.0 | 4390.8 | 4383.6 | 4375.0 | 4370.6 | 4359.1 | 4359.1 | 4369.2 |
| 42.5° | 4840.6 | 4844.9 | 4860.7 | 4846.4 | 4862.2 | 4847.8 | 4839.2 | 4846.4 |
| 45° | 5369.5 | 5385.3 | 5416.9 | 5402.6 | 5412.6 | 5388.2 | 5358.0 | 5359.5 |
| 47.5° | 5963.1 | 5977.5 | 5990.4 | 5980.3 | 5981.8 | 5941.5 | 5901.3 | 5891.2 |
| 50° | 6579.7 | 6585.4 | 6592.6 | 6578.2 | 6581.1 | 6536.6 | 6490.6 | 6492.0 |
| 52.5° | 7189.1 | 7216.4 | 7245.1 | 7206.3 | 7197.7 | 7147.4 | 7082.7 | 7056.8 |
| 55° | 7886.1 | 7924.9 | 7891.9 | 7824.3 | 7756.8 | 7689.2 | 7604.4 | 7590.1 |
| 57.5° | 8745.6 | 8679.5 | 8576.0 | 8448.1 | 8354.7 | 8259.8 | 8173.6 | 8137.6 |
| 60° | 9941.4 | 9692.7 | 9505.9 | 9316.2 | 9196.9 | 9080.5 | 8966.9 | 8949.7 |
| 62.5° | 11631.6 | 11201.8 | 10829.6 | 10437.2 | 10116.7 | 9866.6 | 9666.9 | 9610.8 |
| 65° | 13750.0 | 12733.9 | 11852.9 | 11030.8 | 10316.5 | 9777.5 | 9438.3 | 9288.9 |
| 67.5° | 14661.3 | 12654.9 | 11144.3 | 9977.3 | 9043.1 | 8390.6 | 8024.1 | 7841.6 |
| 70° | 12883.4 | 10494.7 | 8851.9 | 7683.5 | 6832.6 | 6137.0 | 5805.0 | 5609.5 |
| 72.5° | 8863.4 | 6676.0 | 5279.0 | 4308.8 | 3629.0 | 3046.9 | 2817.0 | 2799.7 |
| 75° | 3979.7 | 2635.9 | 1816.7 | 1399.9 | 1178.5 | 1024.8 | 977.3 | 941.4 |
| 77.5° | 1113.9 | 823.5 | 734.4 | 687.0 | 641.0 | 587.8 | 567.7 | 572.0 |
| 80° | 541.8 | 511.7 | 491.5 | 461.4 | 419.7 | 375.1 | 355.0 | 363.6 |
| 82.5° | 359.3 | 355.0 | 367.9 | 346.4 | 286.0 | 242.9 | 204.1 | 186.8 |
| 85° | 218.5 | 221.3 | 225.6 | 227.1 | 192.6 | 135.1 | 92.0 | 103.5 |
| 87.5° | 86.2 | 99.2 | 107.8 | 112.1 | 104.9 | 64.7 | 51.7 | 53.2 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)