

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: McGRAW-EDISON

Report Number: P191606

Luminaire Tested: **GLEON-AF-08-LED-E1-5MQ-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P191606
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: MCGRAW-EDISON
Catalog Number: GLEON-AF-08-LED-E1-5MQ-7050-800
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(8) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE V MEDIUM OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40489 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G4

Input Watts (W): 334
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: 25 FT

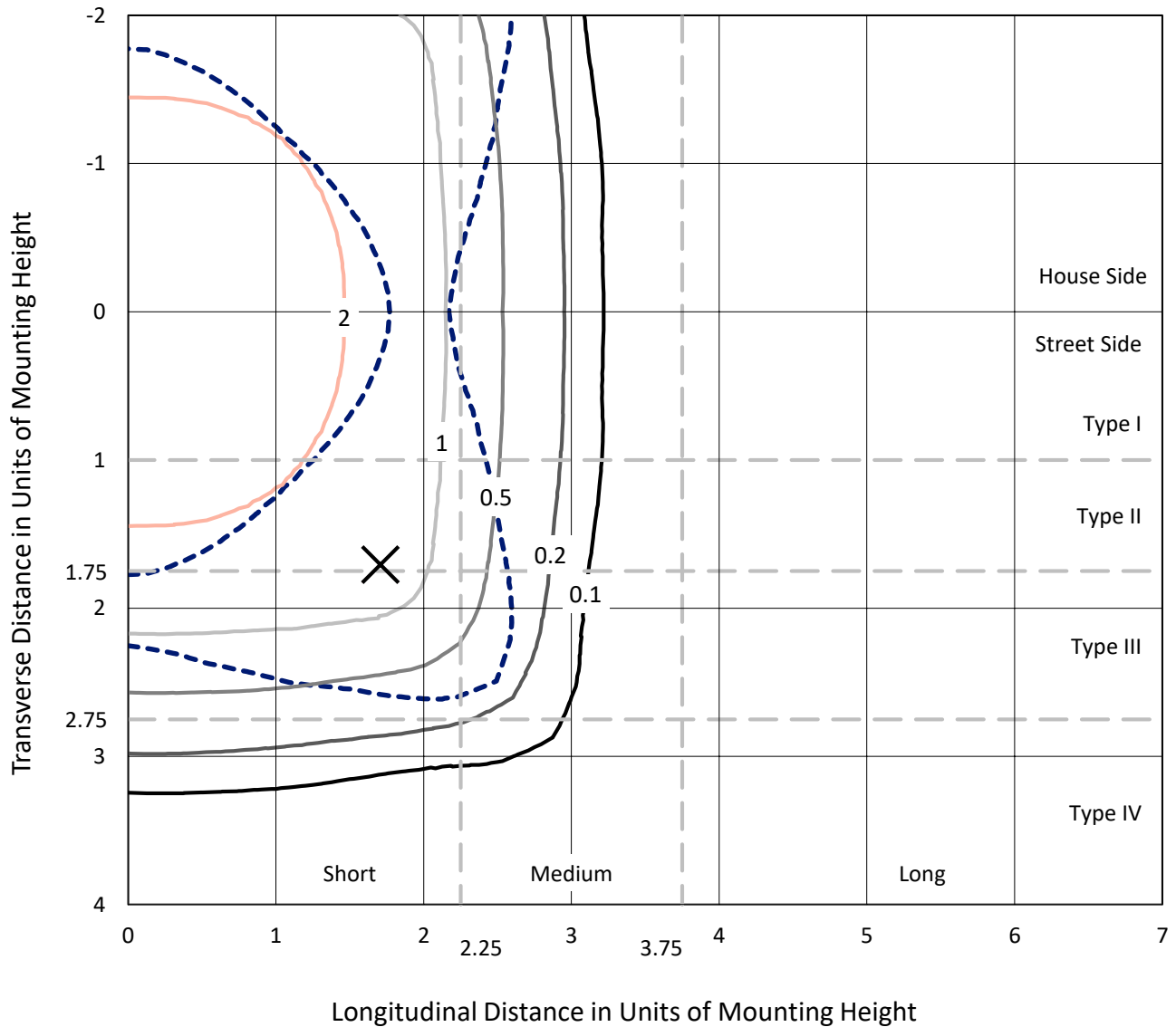


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Iso-Footcandle Lines of Horizontal Illumination

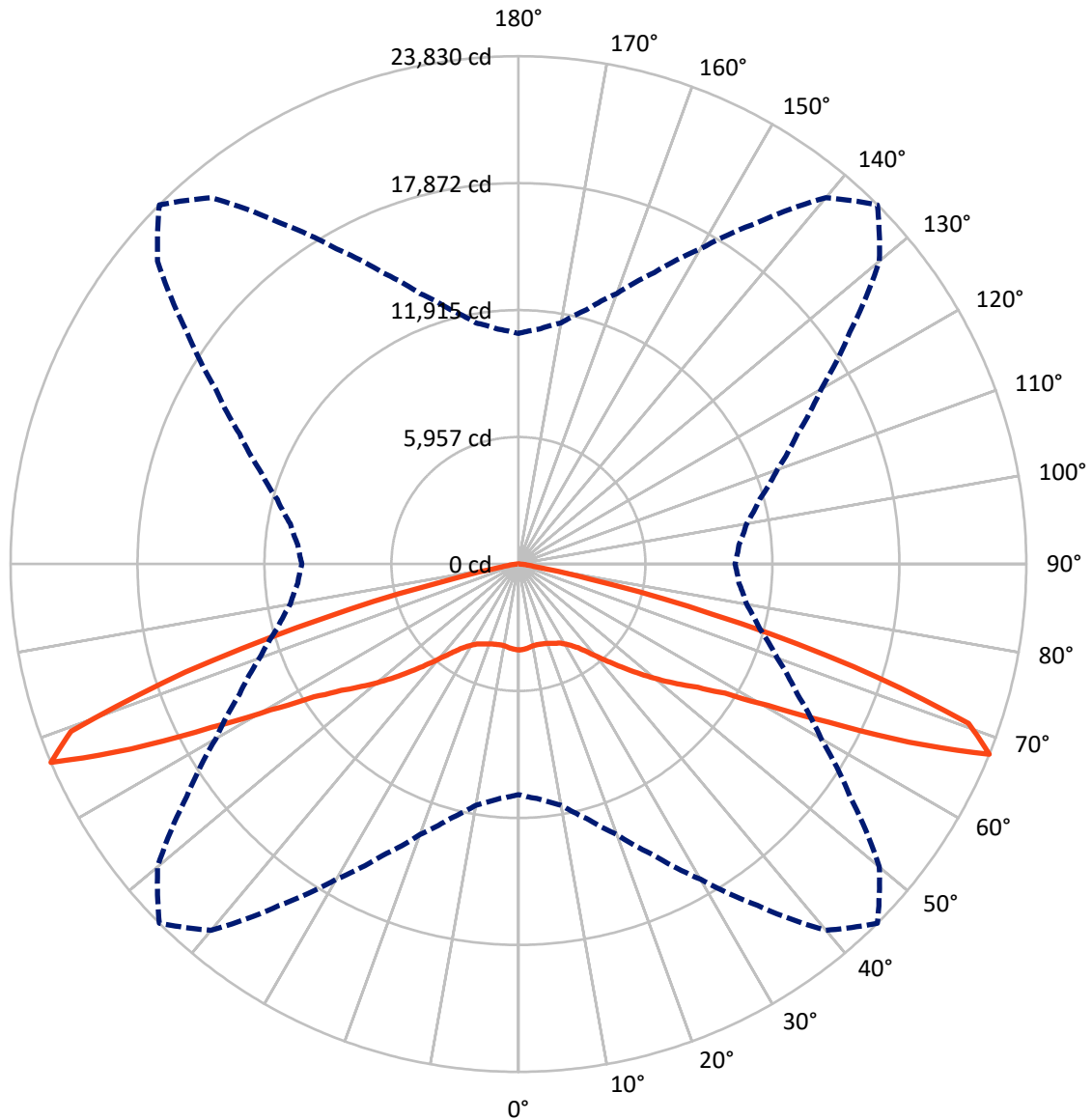
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 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 67.5-Deg Vertical

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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 20244.5 | 0.0 | 20244.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Street Side | Lumens | 20244.5 | 0.0 | 20244.5 |
| | % Fixture | 50.0 | 0.0 | 50.0 |
| Total | Lumens | 40489.0 | 0.0 | 40489.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

Coefficient of Utilization

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 377.6 | 0.9 |
| 10°-20° | 1095.9 | 2.7 |
| 20°-30° | 1862.9 | 4.6 |
| 30°-40° | 3045.3 | 7.5 |
| 40°-50° | 5436.5 | 13.4 |
| 50°-60° | 9166.1 | 22.6 |
| 60°-70° | 14224.4 | 35.1 |
| 70°-80° | 4997.8 | 12.3 |
| 80°-90° | 282.4 | 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° | 40489.0 | 100.0 |
| 0°-180° | 40489.0 | 100.0 |



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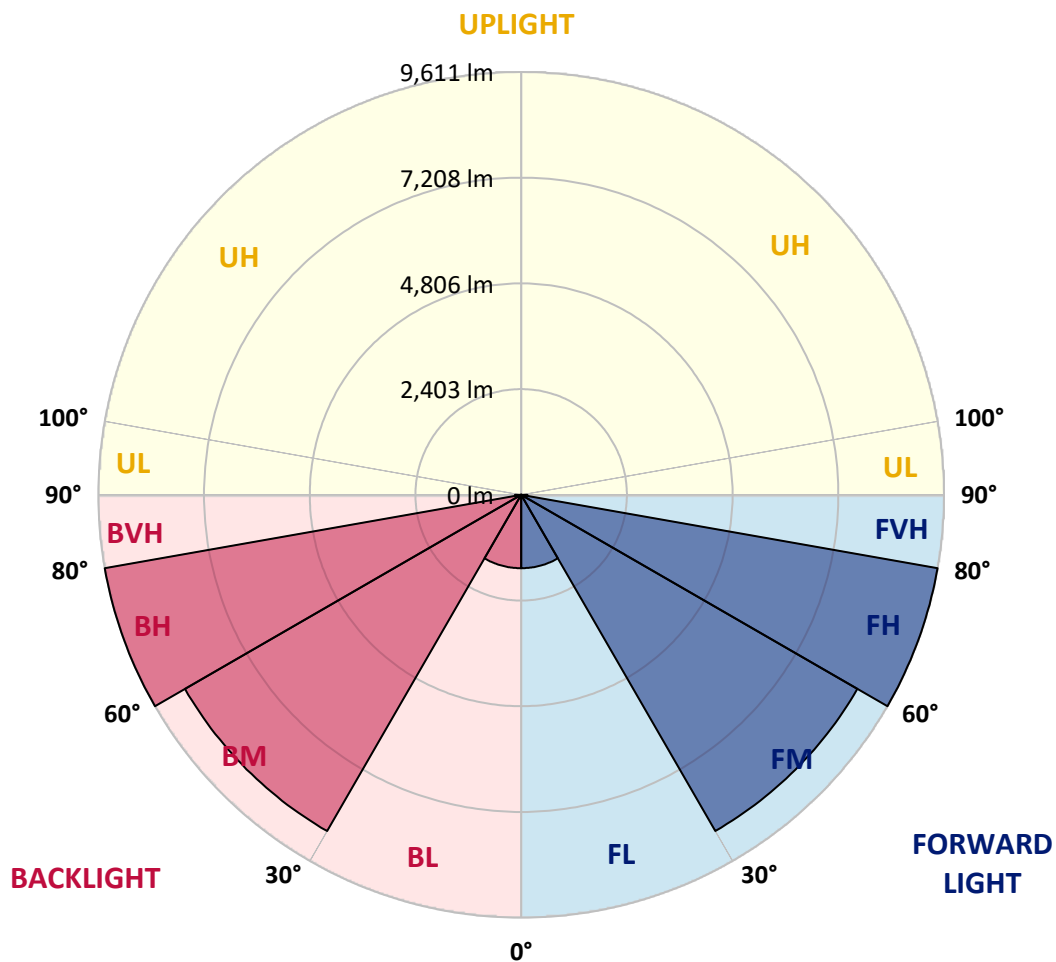
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|------|-------------|--------|-----------|-------------------------|------|----------|
| | | | | B | U | G |
| FL | (0°-30°) | 1668.2 | 4.1 | | | |
| FM | (30°-60°) | 8824.0 | 21.8 | | | |
| FH | (60°-80°) | 9611.1 | 23.7 | | | G4/12000 |
| FVH | (80°-90°) | 141.2 | 0.3 | | | G2/225 |
| BL | (0°-30°) | 1668.2 | 4.1 | B3/2500 | | |
| BM | (30°-60°) | 8824.0 | 21.8 | B5 | | |
| BH | (60°-80°) | 9611.1 | 23.7 | B5 | | G4/12000 |
| BVH | (80°-90°) | 141.2 | 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-G4

Type V Short





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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 10° | 15° | 20° | 25° | 30° | 35° | 40° | 45° | 50° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 |
| 2.5° | 4020.0 | 4023.7 | 4023.7 | 4023.7 | 4021.9 | 4021.9 | 4018.1 | 4021.9 | 4020.0 | 4014.4 | 4016.3 |
| 5° | 3986.5 | 3990.2 | 3990.2 | 3988.4 | 3993.9 | 3992.1 | 3986.5 | 3990.2 | 3988.4 | 3984.6 | 3986.5 |
| 7.5° | 3938.1 | 3943.7 | 3943.7 | 3941.8 | 3947.4 | 3945.5 | 3941.8 | 3943.7 | 3943.7 | 3938.1 | 3938.1 |
| 10° | 3884.1 | 3887.8 | 3887.8 | 3885.9 | 3895.3 | 3895.3 | 3893.4 | 3899.0 | 3900.8 | 3895.3 | 3891.5 |
| 12.5° | 3833.8 | 3839.4 | 3839.4 | 3846.8 | 3856.2 | 3859.9 | 3869.2 | 3876.6 | 3884.1 | 3882.2 | 3874.8 |
| 15° | 3804.0 | 3807.7 | 3815.2 | 3824.5 | 3839.4 | 3852.4 | 3867.3 | 3884.1 | 3899.0 | 3902.7 | 3891.5 |
| 17.5° | 3785.4 | 3791.0 | 3802.2 | 3815.2 | 3835.7 | 3858.0 | 3880.4 | 3902.7 | 3923.2 | 3930.6 | 3917.6 |
| 20° | 3779.8 | 3783.5 | 3794.7 | 3817.0 | 3845.0 | 3878.5 | 3910.1 | 3936.2 | 3964.1 | 3973.5 | 3964.1 |
| 22.5° | 3791.0 | 3798.4 | 3811.5 | 3837.5 | 3874.8 | 3917.6 | 3954.8 | 3990.2 | 4025.6 | 4042.3 | 4029.3 |
| 25° | 3841.3 | 3848.7 | 3865.5 | 3899.0 | 3939.9 | 3984.6 | 4027.5 | 4068.4 | 4100.1 | 4116.8 | 4107.5 |
| 27.5° | 3934.4 | 3943.7 | 3964.1 | 3997.7 | 4042.3 | 4090.8 | 4137.3 | 4170.8 | 4196.9 | 4202.5 | 4191.3 |
| 30° | 4074.0 | 4094.5 | 4118.7 | 4155.9 | 4208.1 | 4249.0 | 4295.6 | 4325.4 | 4357.0 | 4357.0 | 4347.7 |
| 32.5° | 4291.9 | 4312.3 | 4338.4 | 4373.8 | 4414.7 | 4459.4 | 4500.4 | 4526.5 | 4560.0 | 4561.8 | 4539.5 |
| 35° | 4617.7 | 4627.0 | 4649.4 | 4671.7 | 4708.9 | 4748.0 | 4783.4 | 4800.2 | 4828.1 | 4830.0 | 4809.5 |
| 37.5° | 5047.8 | 5049.7 | 5064.6 | 5072.0 | 5105.5 | 5148.4 | 5181.9 | 5193.0 | 5219.1 | 5215.4 | 5194.9 |
| 40° | 5548.7 | 5558.0 | 5563.6 | 5574.8 | 5610.1 | 5651.1 | 5686.5 | 5692.1 | 5720.0 | 5714.4 | 5688.3 |
| 42.5° | 6127.8 | 6131.5 | 6163.1 | 6179.9 | 6213.4 | 6233.9 | 6278.6 | 6284.2 | 6317.7 | 6302.8 | 6273.0 |
| 45° | 6777.6 | 6811.1 | 6840.9 | 6874.4 | 6909.8 | 6934.0 | 6969.4 | 6961.9 | 6984.3 | 6961.9 | 6945.2 |
| 47.5° | 7460.9 | 7485.1 | 7552.2 | 7604.3 | 7662.0 | 7682.5 | 7732.8 | 7710.4 | 7732.8 | 7701.1 | 7695.5 |
| 50° | 8213.2 | 8256.0 | 8313.7 | 8373.3 | 8434.7 | 8468.3 | 8533.4 | 8505.5 | 8535.3 | 8505.5 | 8488.7 |
| 52.5° | 8954.2 | 8965.4 | 9092.0 | 9179.5 | 9265.2 | 9304.3 | 9343.4 | 9330.4 | 9332.2 | 9330.4 | 9313.6 |
| 55° | 9658.1 | 9684.1 | 9810.7 | 9929.9 | 10078.9 | 10188.7 | 10255.8 | 10248.3 | 10231.6 | 10214.8 | 10186.9 |
| 57.5° | 10451.3 | 10477.3 | 10622.6 | 10769.7 | 10939.1 | 11095.5 | 11231.4 | 11371.1 | 11425.1 | 11440.0 | 11378.5 |
| 60° | 11523.8 | 11521.9 | 11715.5 | 11894.3 | 12136.4 | 12369.1 | 12667.0 | 12970.5 | 13318.7 | 13480.7 | 13266.6 |
| 62.5° | 12614.9 | 12659.6 | 12938.9 | 13255.4 | 13754.4 | 14240.4 | 14789.7 | 15329.6 | 15880.8 | 16329.5 | 15852.9 |
| 65° | 12484.5 | 12655.8 | 13071.1 | 13787.9 | 14709.6 | 15804.4 | 16988.7 | 18241.8 | 19373.8 | 20152.2 | 19278.9 |
| 67.5° | 10819.9 | 11063.9 | 11486.5 | 12357.9 | 13510.5 | 15089.4 | 17078.0 | 19556.3 | 22436.8 | 23829.6 | 22103.5 |
| 70° | 7842.6 | 8118.2 | 8561.4 | 9412.3 | 10553.7 | 12054.4 | 14214.3 | 17189.8 | 21003.1 | 22407.0 | 20505.9 |
| 72.5° | 3902.7 | 4051.7 | 4325.4 | 4867.2 | 5731.2 | 6948.9 | 8907.7 | 11767.7 | 15141.6 | 16430.1 | 14692.8 |
| 75° | 1325.7 | 1394.6 | 1441.2 | 1618.1 | 1891.8 | 2370.3 | 3344.1 | 5144.6 | 7848.2 | 9408.6 | 7736.5 |
| 77.5° | 765.3 | 767.1 | 798.8 | 830.4 | 877.0 | 929.1 | 1059.5 | 1390.9 | 2405.7 | 3416.7 | 2489.5 |
| 80° | 495.3 | 493.4 | 519.5 | 543.7 | 575.4 | 601.4 | 608.9 | 644.2 | 742.9 | 880.7 | 787.6 |
| 82.5° | 257.0 | 288.6 | 346.3 | 378.0 | 437.6 | 448.7 | 433.8 | 420.8 | 445.0 | 461.8 | 472.9 |
| 85° | 141.5 | 122.9 | 184.3 | 238.3 | 264.4 | 268.1 | 268.1 | 253.2 | 262.5 | 257.0 | 279.3 |
| 87.5° | 65.2 | 59.6 | 72.6 | 117.3 | 124.8 | 106.1 | 111.7 | 98.7 | 70.8 | 68.9 | 78.2 |
| 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° | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 | 4034.9 |
| 2.5° | 4016.3 | 4018.1 | 4018.1 | 4023.7 | 4025.6 | 4029.3 | 4033.0 | 4034.9 |
| 5° | 3984.6 | 3990.2 | 3986.5 | 3992.1 | 3992.1 | 3995.8 | 3995.8 | 3997.7 |
| 7.5° | 3938.1 | 3943.7 | 3943.7 | 3943.7 | 3941.8 | 3947.4 | 3947.4 | 3947.4 |
| 10° | 3889.7 | 3893.4 | 3891.5 | 3887.8 | 3884.1 | 3889.7 | 3887.8 | 3885.9 |
| 12.5° | 3874.8 | 3865.5 | 3858.0 | 3854.3 | 3846.8 | 3848.7 | 3843.1 | 3843.1 |
| 15° | 3884.1 | 3867.3 | 3854.3 | 3848.7 | 3841.3 | 3837.5 | 3833.8 | 3835.7 |
| 17.5° | 3908.3 | 3887.8 | 3871.0 | 3861.7 | 3852.4 | 3846.8 | 3839.4 | 3841.3 |
| 20° | 3951.1 | 3926.9 | 3902.7 | 3884.1 | 3867.3 | 3858.0 | 3852.4 | 3850.6 |
| 22.5° | 4014.4 | 3979.0 | 3943.7 | 3915.7 | 3893.4 | 3880.4 | 3874.8 | 3871.0 |
| 25° | 4087.0 | 4047.9 | 4007.0 | 3975.3 | 3953.0 | 3936.2 | 3925.0 | 3925.0 |
| 27.5° | 4178.3 | 4146.6 | 4109.4 | 4072.1 | 4051.7 | 4034.9 | 4027.5 | 4023.7 |
| 30° | 4331.0 | 4301.2 | 4271.4 | 4236.0 | 4209.9 | 4193.2 | 4180.1 | 4169.0 |
| 32.5° | 4526.5 | 4502.3 | 4478.0 | 4452.0 | 4427.8 | 4405.4 | 4385.0 | 4375.6 |
| 35° | 4802.0 | 4783.4 | 4766.7 | 4736.9 | 4727.6 | 4714.5 | 4703.3 | 4694.0 |
| 37.5° | 5181.9 | 5174.4 | 5174.4 | 5142.8 | 5135.3 | 5129.7 | 5118.6 | 5120.4 |
| 40° | 5680.9 | 5688.3 | 5679.0 | 5667.9 | 5662.3 | 5647.4 | 5647.4 | 5660.4 |
| 42.5° | 6271.1 | 6276.7 | 6297.2 | 6278.6 | 6299.1 | 6280.4 | 6269.3 | 6278.6 |
| 45° | 6956.3 | 6976.8 | 7017.8 | 6999.2 | 7012.2 | 6980.5 | 6941.4 | 6943.3 |
| 47.5° | 7725.3 | 7744.0 | 7760.7 | 7747.7 | 7749.5 | 7697.4 | 7645.3 | 7632.2 |
| 50° | 8524.1 | 8531.6 | 8540.9 | 8522.3 | 8526.0 | 8468.3 | 8408.7 | 8410.5 |
| 52.5° | 9313.6 | 9349.0 | 9386.2 | 9335.9 | 9324.8 | 9259.6 | 9175.8 | 9142.3 |
| 55° | 10216.7 | 10266.9 | 10224.1 | 10136.6 | 10049.1 | 9961.6 | 9851.7 | 9833.1 |
| 57.5° | 11330.1 | 11244.5 | 11110.4 | 10944.7 | 10823.7 | 10700.8 | 10589.1 | 10542.5 |
| 60° | 12879.3 | 12557.2 | 12315.1 | 12069.3 | 11914.8 | 11764.0 | 11616.9 | 11594.5 |
| 62.5° | 15069.0 | 14512.2 | 14030.0 | 13521.7 | 13106.4 | 12782.5 | 12523.6 | 12451.0 |
| 65° | 17813.5 | 16497.1 | 15355.7 | 14290.7 | 13365.3 | 12667.0 | 12227.6 | 12033.9 |
| 67.5° | 18994.0 | 16394.7 | 14437.8 | 12925.8 | 11715.5 | 10870.2 | 10395.4 | 10158.9 |
| 70° | 16690.7 | 13596.1 | 11467.9 | 9954.1 | 8851.8 | 7950.6 | 7520.5 | 7267.3 |
| 72.5° | 11482.8 | 8648.9 | 6839.0 | 5582.2 | 4701.5 | 3947.4 | 3649.5 | 3627.1 |
| 75° | 5155.8 | 3414.9 | 2353.5 | 1813.6 | 1526.8 | 1327.6 | 1266.1 | 1219.6 |
| 77.5° | 1443.0 | 1066.9 | 951.5 | 890.0 | 830.4 | 761.5 | 735.5 | 741.1 |
| 80° | 702.0 | 662.9 | 636.8 | 597.7 | 543.7 | 486.0 | 459.9 | 471.1 |
| 82.5° | 465.5 | 459.9 | 476.7 | 448.7 | 370.5 | 314.7 | 264.4 | 242.1 |
| 85° | 283.0 | 286.7 | 292.3 | 294.2 | 249.5 | 175.0 | 119.2 | 134.1 |
| 87.5° | 111.7 | 128.5 | 139.6 | 145.2 | 135.9 | 83.8 | 67.0 | 68.9 |
| 90° | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

(END OF REPORT)