

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: EPHESUS

Report Number: P574844

Luminaire Tested: **EPH-VN-04-730-U-5NQ**

Issue Date: 10/19/2021



**Test Information**

Test Method: LM-79-08  
Report Number: P574844  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 10/19/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHEBUS  
Catalog Number: EPH-VN-04-730-U-5NQ  
Description: EPHEBUS LUMAVISION – Middle Tier Light Square Luminaire w/ 5NQ distribution lens  
Light Source: (64) 3000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

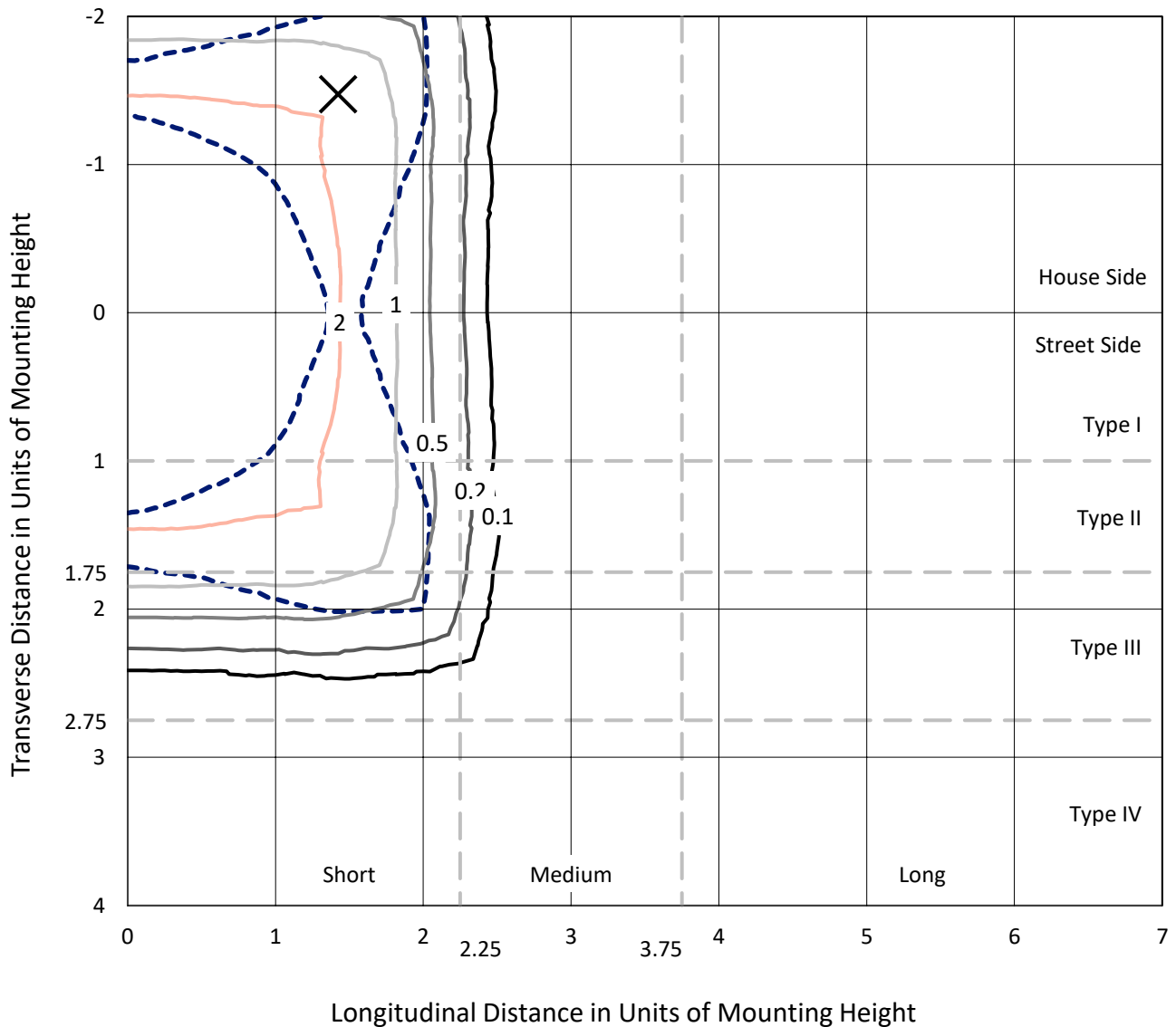
Lumens per Lamp: N/A  
Luminaire Lumens: 31764.3 lumens  
Efficiency: N/A  
Efficacy: 104.6 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type V - Short  
BUG Rating: B5 - U0 - G2

Input Watts (W): 303.8  
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

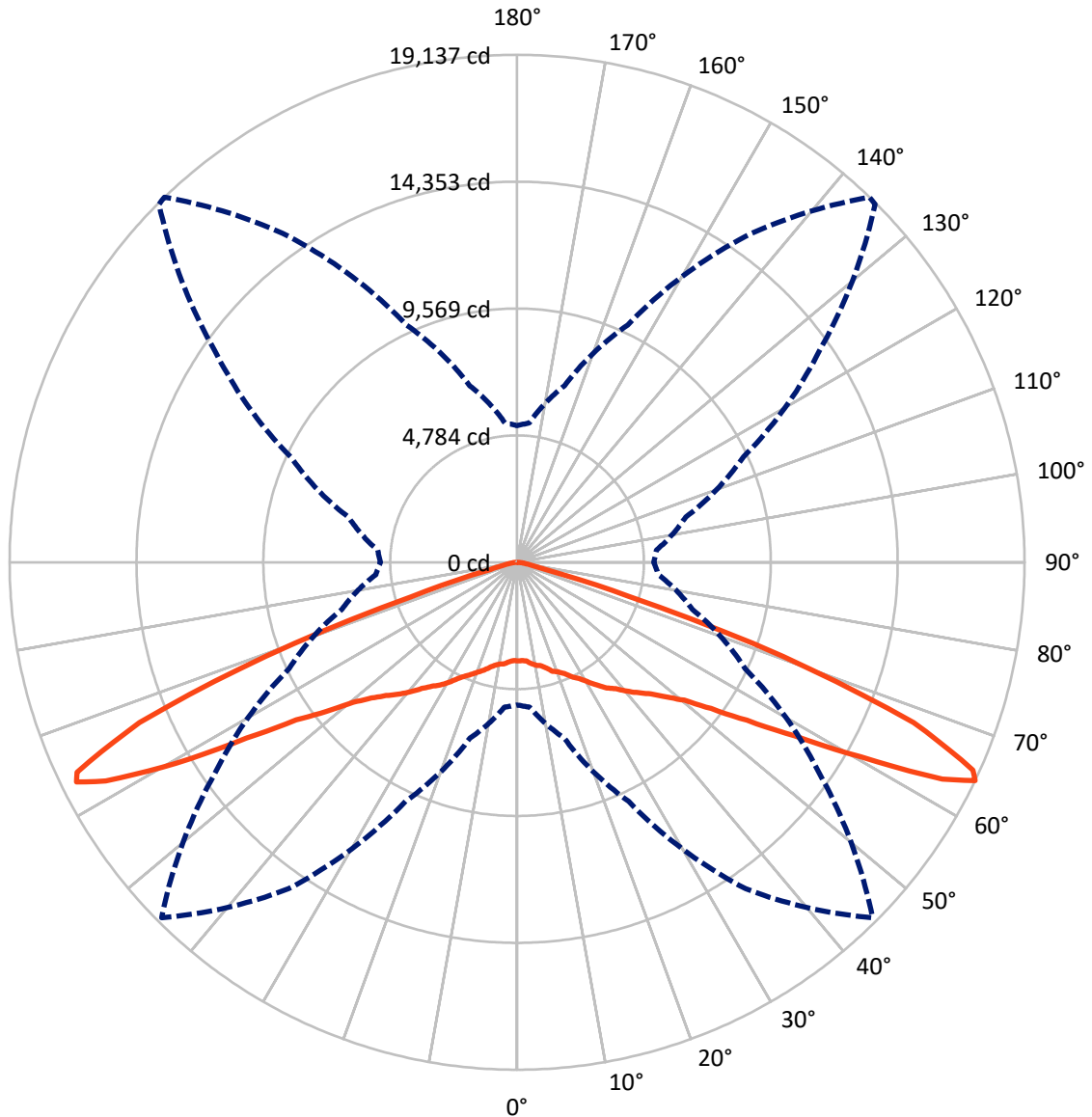
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.2 fc  
 Type V - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 136-Deg Lateral      - - - Horizontal Cone Through 64-Deg Vertical

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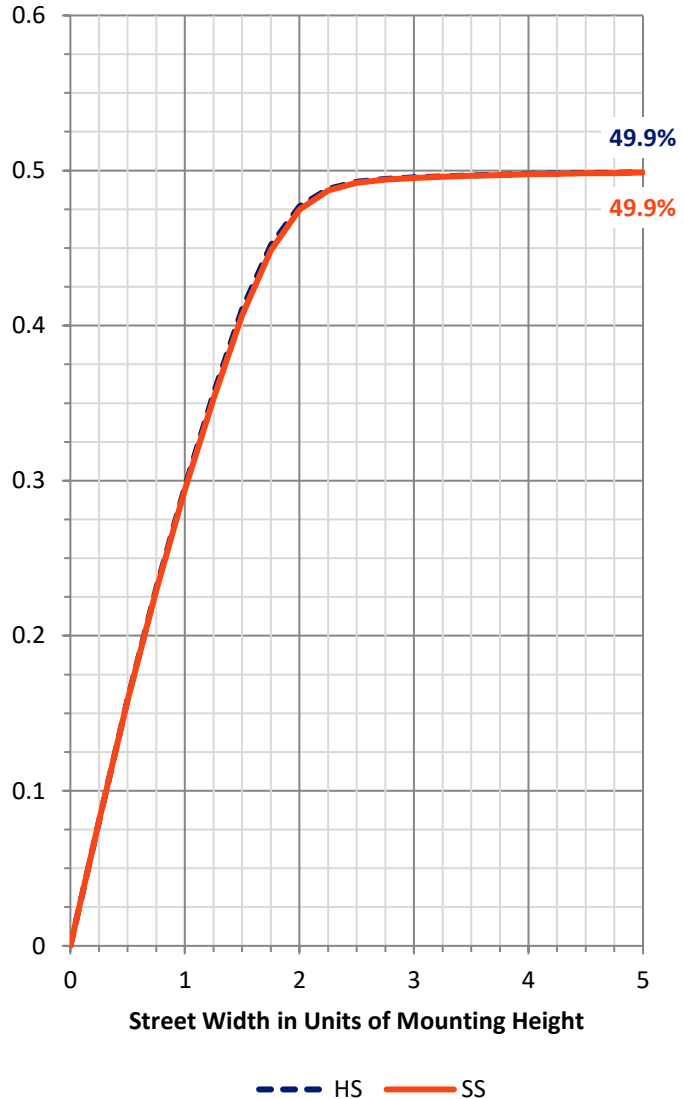
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 15897.3  | 0.0    | 15897.3 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Street Side</b> | Lumens    | 15867.0  | 0.0    | 15867.0 |
|                    | % Fixture | 50.0     | 0.0    | 50.0    |
| <b>Total</b>       | Lumens    | 31764.3  | 0.0    | 31764.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 365.4   | 1.2       |
| 10°-20°   | 1177.7  | 3.7       |
| 20°-30°   | 2213.4  | 7.0       |
| 30°-40°   | 3650.3  | 11.5      |
| 40°-50°   | 5708.9  | 18.0      |
| 50°-60°   | 9224.2  | 29.0      |
| 60°-70°   | 8305.8  | 26.1      |
| 70°-80°   | 983.9   | 3.1       |
| 80°-90°   | 134.7   | 0.4       |
| 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°    | 31764.3 | 100.0     |
| 0°-180°   | 31764.3 | 100.0     |

**Coefficient of Utilization**



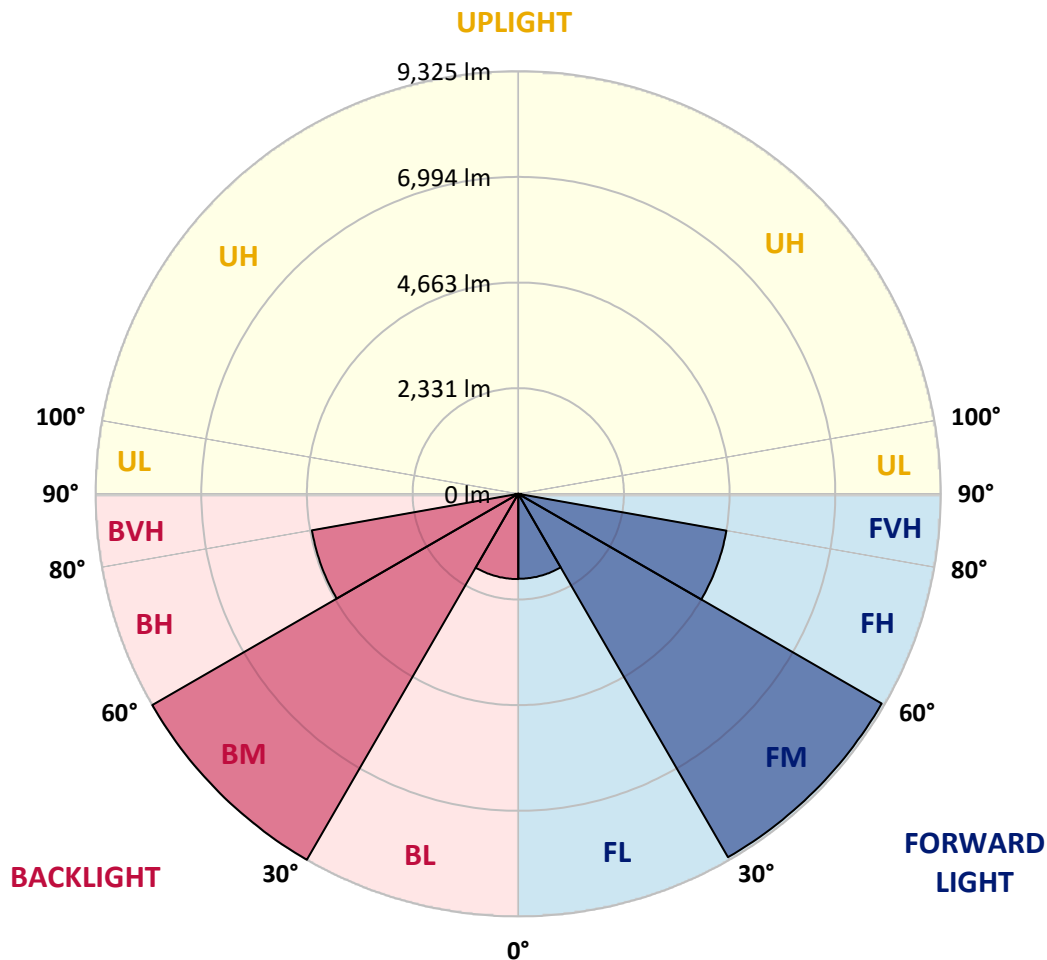
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone           | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|----------------|--------|-----------|-------------------------|------|---------|
|                |        |           | B                       | U    | G       |
| FL (0°-30°)    | 1874.7 | 5.9       |                         |      |         |
| FM (30°-60°)   | 9258.3 | 29.1      |                         |      |         |
| FH (60°-80°)   | 4664.9 | 14.7      |                         |      | G2/5000 |
| FVH (80°-90°)  | 69.1   | 0.2       |                         |      | G1/100  |
| BL (0°-30°)    | 1881.9 | 5.9       | B3/2500                 |      |         |
| BM (30°-60°)   | 9325.1 | 29.4      | B5                      |      |         |
| BH (60°-80°)   | 4624.7 | 14.6      | B4/5000                 |      | G2/5000 |
| BVH (80°-90°)  | 65.6   | 0.2       |                         |      | G1/100  |
| UL (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B5-U0-G2**

Type V Short





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| 0°    | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9 |
| 2.5°  | 3675.2  | 3682.5  | 3748.1  | 3722.6  | 3744.4  | 3704.4  | 3733.5  | 3795.4  | 3722.6  | 3777.2 |
| 5°    | 3715.3  | 3726.2  | 3726.2  | 3751.7  | 3766.3  | 3759.0  | 3777.2  | 3751.7  | 3820.9  | 3791.8 |
| 7.5°  | 3861.0  | 3842.8  | 3813.6  | 3835.5  | 3839.1  | 3857.4  | 3875.6  | 3908.4  | 3897.4  | 3871.9 |
| 10°   | 3886.5  | 3871.9  | 3915.6  | 3919.3  | 3901.1  | 3886.5  | 3904.7  | 3904.7  | 3937.5  | 3944.8 |
| 12.5° | 3930.2  | 3944.8  | 3941.1  | 3970.3  | 3973.9  | 3963.0  | 3992.1  | 4046.8  | 4032.2  | 4043.1 |
| 15°   | 4097.8  | 4079.5  | 4075.9  | 4105.0  | 4152.4  | 4083.2  | 4134.2  | 4130.5  | 4116.0  | 4137.8 |
| 17.5° | 4243.5  | 4185.2  | 4210.7  | 4258.0  | 4239.8  | 4254.4  | 4319.9  | 4261.7  | 4276.2  | 4250.7 |
| 20°   | 4370.9  | 4323.6  | 4327.2  | 4345.4  | 4345.4  | 4389.2  | 4414.7  | 4392.8  | 4378.2  | 4374.6 |
| 22.5° | 4513.0  | 4458.4  | 4462.0  | 4538.5  | 4564.0  | 4549.4  | 4531.2  | 4567.6  | 4574.9  | 4545.8 |
| 25°   | 4618.6  | 4676.9  | 4695.1  | 4731.5  | 4676.9  | 4717.0  | 4702.4  | 4771.6  | 4815.3  | 4757.0 |
| 27.5° | 4895.5  | 4870.0  | 4917.3  | 4913.7  | 4957.4  | 4917.3  | 4942.8  | 4964.7  | 4982.9  | 4986.5 |
| 30°   | 5143.1  | 5154.1  | 5106.7  | 5234.2  | 5132.2  | 5197.8  | 5241.5  | 5252.4  | 5274.3  | 5274.3 |
| 32.5° | 5405.4  | 5383.5  | 5460.0  | 5430.9  | 5412.7  | 5463.7  | 5416.3  | 5565.7  | 5478.2  | 5529.2 |
| 35°   | 5700.4  | 5700.4  | 5729.6  | 5809.7  | 5700.4  | 5667.7  | 5755.1  | 5817.0  | 5817.0  | 5725.9 |
| 37.5° | 6031.9  | 6002.8  | 6039.2  | 6141.2  | 6057.4  | 5948.1  | 6108.4  | 6133.9  | 6115.7  | 6090.2 |
| 40°   | 6265.0  | 6257.7  | 6330.6  | 6465.4  | 6345.2  | 6323.3  | 6352.4  | 6421.6  | 6443.5  | 6469.0 |
| 42.5° | 6658.4  | 6691.2  | 6902.4  | 6869.7  | 6771.3  | 6694.8  | 6687.5  | 6946.2  | 6884.2  | 6818.7 |
| 45°   | 7241.2  | 7212.1  | 7321.3  | 7325.0  | 7197.5  | 7029.9  | 7066.4  | 7303.1  | 7408.7  | 7263.1 |
| 47.5° | 7703.8  | 7718.4  | 7794.8  | 7951.5  | 7656.4  | 7481.6  | 7616.4  | 7998.8  | 7966.0  | 7911.4 |
| 50°   | 8323.0  | 8388.6  | 8629.0  | 8574.3  | 8312.1  | 8097.2  | 8392.2  | 8752.8  | 8792.9  | 8592.5 |
| 52.5° | 9179.0  | 9281.0  | 9412.1  | 9455.8  | 9204.5  | 9128.0  | 9146.2  | 9594.2  | 9495.9  | 9302.8 |
| 55°   | 9929.3  | 9976.7  | 10217.1 | 10577.7 | 10559.5 | 10191.6 | 10402.8 | 10570.4 | 10169.7 | 9772.7 |
| 57.5° | 10249.9 | 10271.7 | 10941.9 | 11663.1 | 12092.9 | 12176.7 | 11936.3 | 11371.7 | 10417.4 | 9652.5 |
| 60°   | 9452.2  | 9659.8  | 10468.4 | 12096.6 | 14059.9 | 15028.8 | 13429.7 | 11462.8 | 9838.3  | 8909.4 |
| 62.5° | 7554.4  | 7565.4  | 8767.4  | 11237.0 | 15283.7 | 17822.5 | 14001.6 | 10606.8 | 8293.9  | 7241.2 |
| 64°   | 5379.9  | 5481.9  | 6862.4  | 9947.5  | 15028.8 | 18959.0 | 13932.4 | 9488.6  | 6836.9  | 5343.5 |
| 65°   | 3861.0  | 4003.1  | 5336.2  | 8636.3  | 14431.4 | 18824.2 | 13724.8 | 8527.0  | 5529.2  | 4079.5 |
| 67.5° | 1420.6  | 1478.8  | 2094.4  | 4319.9  | 10362.8 | 16041.4 | 10876.4 | 4687.8  | 2429.5  | 1730.2 |
| 70°   | 659.3   | 662.9   | 775.8   | 1427.8  | 4531.2  | 10727.0 | 5190.5  | 1759.3  | 914.3   | 724.8  |
| 72.5° | 484.4   | 495.4   | 542.7   | 659.3   | 1333.1  | 4542.1  | 1704.7  | 721.2   | 535.4   | 473.5  |
| 75°   | 393.4   | 400.7   | 415.2   | 477.2   | 615.6   | 1216.6  | 692.1   | 499.0   | 426.2   | 382.5  |
| 77.5° | 302.3   | 302.3   | 335.1   | 364.2   | 408.0   | 568.2   | 458.9   | 397.0   | 346.0   | 302.3  |
| 80°   | 218.5   | 222.2   | 262.3   | 284.1   | 276.8   | 375.2   | 331.5   | 327.8   | 284.1   | 236.8  |
| 82.5° | 127.5   | 138.4   | 189.4   | 204.0   | 196.7   | 222.2   | 240.4   | 255.0   | 222.2   | 163.9  |
| 85°   | 72.8    | 76.5    | 109.3   | 112.9   | 112.9   | 105.6   | 138.4   | 153.0   | 149.3   | 102.0  |
| 87.5° | 21.9    | 21.9    | 29.1    | 29.1    | 32.8    | 36.4    | 54.6    | 65.6    | 72.8    | 51.0   |
| 90°   | 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°    | 136°    | 145°    | 155°    | 165°    | 175°    |
|--------|-------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 3718.9 | 0°    | 3718.9 | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9  | 3718.9  |
| 3795.4 | 2.5°  | 3777.2 | 3722.6  | 3726.2  | 3740.8  | 3693.4  | 3711.7  | 3766.3  | 3726.2  | 3715.3  | 3693.4  |
| 3835.5 | 5°    | 3759.0 | 3817.3  | 3795.4  | 3802.7  | 3791.8  | 3740.8  | 3733.5  | 3766.3  | 3784.5  | 3751.7  |
| 3915.6 | 7.5°  | 3886.5 | 3861.0  | 3831.9  | 3842.8  | 3817.3  | 3861.0  | 3890.1  | 3824.6  | 3857.4  | 3839.1  |
| 3944.8 | 10°   | 3959.3 | 3912.0  | 3933.8  | 3926.6  | 3908.4  | 3952.1  | 3922.9  | 3915.6  | 3886.5  | 3846.4  |
| 4017.6 | 12.5° | 3984.8 | 4039.5  | 4075.9  | 4014.0  | 4024.9  | 4003.1  | 3984.8  | 3984.8  | 3952.1  | 3941.1  |
| 4079.5 | 15°   | 4097.8 | 4145.1  | 4130.5  | 4177.9  | 4116.0  | 4137.8  | 4159.7  | 4105.0  | 4134.2  | 4054.0  |
| 4232.5 | 17.5° | 4305.4 | 4265.3  | 4316.3  | 4254.4  | 4276.2  | 4319.9  | 4250.7  | 4250.7  | 4272.6  | 4228.9  |
| 4381.9 | 20°   | 4436.5 | 4418.3  | 4400.1  | 4403.7  | 4367.3  | 4407.4  | 4385.5  | 4374.6  | 4341.8  | 4356.4  |
| 4578.6 | 22.5° | 4560.4 | 4534.9  | 4542.1  | 4553.1  | 4578.6  | 4560.4  | 4549.4  | 4560.4  | 4480.2  | 4553.1  |
| 4797.1 | 25°   | 4713.3 | 4782.5  | 4760.7  | 4808.0  | 4735.2  | 4782.5  | 4778.9  | 4709.7  | 4753.4  | 4724.3  |
| 4968.3 | 27.5° | 4968.3 | 4931.9  | 4964.7  | 4906.4  | 4957.4  | 4961.0  | 4917.3  | 5033.9  | 4982.9  | 4975.6  |
| 5219.6 | 30°   | 5296.1 | 5270.6  | 5248.8  | 5216.0  | 5256.1  | 5223.3  | 5259.7  | 5270.6  | 5223.3  | 5186.9  |
| 5467.3 | 32.5° | 5481.9 | 5551.1  | 5576.6  | 5496.5  | 5500.1  | 5518.3  | 5485.5  | 5452.8  | 5481.9  | 5492.8  |
| 5747.8 | 35°   | 5744.1 | 5809.7  | 5824.3  | 5762.4  | 5729.6  | 5820.6  | 5755.1  | 5864.3  | 5769.6  | 5773.3  |
| 6046.5 | 37.5° | 6050.1 | 6068.3  | 6192.2  | 6123.0  | 6093.8  | 6050.1  | 6170.3  | 6155.7  | 6177.6  | 6002.8  |
| 6410.7 | 40°   | 6396.1 | 6461.7  | 6530.9  | 6356.1  | 6352.4  | 6392.5  | 6385.2  | 6469.0  | 6428.9  | 6403.4  |
| 6785.9 | 42.5° | 6775.0 | 6913.4  | 6924.3  | 6807.7  | 6734.9  | 6727.6  | 6764.0  | 6949.8  | 6953.4  | 6785.9  |
| 7317.7 | 45°   | 7277.6 | 7430.6  | 7390.5  | 7164.7  | 7084.6  | 7073.6  | 7252.1  | 7332.3  | 7401.5  | 7335.9  |
| 7962.4 | 47.5° | 7904.1 | 8006.1  | 7977.0  | 7769.4  | 7510.7  | 7583.6  | 7758.4  | 8009.8  | 7936.9  | 7849.5  |
| 8556.1 | 50°   | 8574.3 | 8694.5  | 8632.6  | 8425.0  | 8177.3  | 8177.3  | 8392.2  | 8712.7  | 8690.9  | 8519.7  |
| 9179.0 | 52.5° | 9317.4 | 9492.2  | 9634.3  | 9339.2  | 9131.6  | 9164.4  | 9503.2  | 9619.7  | 9565.1  | 9444.9  |
| 9805.5 | 55°   | 9871.0 | 10206.2 | 10497.5 | 10512.1 | 10523.0 | 10519.4 | 10606.8 | 10723.4 | 10333.6 | 10140.6 |
| 9605.1 | 57.5° | 9736.3 | 10370.1 | 11368.1 | 12045.6 | 12245.9 | 12351.6 | 12322.4 | 11783.3 | 10861.8 | 10228.0 |
| 8840.2 | 60°   | 8774.7 | 9809.1  | 11419.1 | 13593.6 | 15050.6 | 14904.9 | 14373.1 | 12242.3 | 10570.4 | 9499.5  |
| 6964.4 | 62.5° | 7000.8 | 8246.5  | 10563.1 | 14030.7 | 18044.7 | 18001.0 | 15218.2 | 11182.3 | 8807.5  | 7452.5  |
| 5150.4 | 64°   | 5274.3 | 6585.6  | 9423.0  | 13917.8 | 19093.7 | 19137.4 | 15003.3 | 9878.3  | 6891.5  | 5274.3  |
| 3882.9 | 65°   | 4035.8 | 5252.4  | 8304.8  | 13684.7 | 18867.9 | 18893.4 | 14405.9 | 8530.6  | 5237.8  | 3744.4  |
| 1555.3 | 67.5° | 1606.3 | 2236.5  | 4505.7  | 10377.3 | 16201.6 | 16132.4 | 10279.0 | 4126.9  | 2003.3  | 1304.0  |
| 673.9  | 70°   | 684.8  | 852.3   | 1580.8  | 4917.3  | 10847.2 | 10646.9 | 4425.6  | 1340.4  | 743.1   | 622.9   |
| 462.6  | 72.5° | 469.9  | 520.9   | 677.5   | 1518.9  | 4509.4  | 4403.7  | 1260.3  | 622.9   | 506.3   | 466.2   |
| 367.9  | 75°   | 378.8  | 415.2   | 491.7   | 637.4   | 1194.7  | 1151.0  | 593.7   | 458.9   | 404.3   | 375.2   |
| 291.4  | 77.5° | 295.0  | 331.5   | 386.1   | 440.7   | 546.4   | 542.7   | 397.0   | 346.0   | 313.3   | 291.4   |
| 218.5  | 80°   | 233.1  | 269.5   | 306.0   | 313.3   | 357.0   | 349.7   | 269.5   | 273.2   | 255.0   | 211.3   |
| 149.3  | 82.5° | 160.3  | 218.5   | 244.0   | 222.2   | 211.3   | 211.3   | 193.0   | 193.0   | 178.5   | 131.1   |
| 91.1   | 85°   | 98.3   | 145.7   | 153.0   | 131.1   | 98.3    | 98.3    | 105.6   | 102.0   | 94.7    | 69.2    |
| 47.4   | 87.5° | 51.0   | 69.2    | 61.9    | 51.0    | 32.8    | 32.8    | 29.1    | 21.9    | 21.9    | 18.2    |
| 0.0    | 90°   | 0.0    | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

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| <u>180°</u> |
|-------------|
| 3718.9      |
| 3682.5      |
| 3817.3      |
| 3802.7      |
| 3904.7      |
| 3952.1      |
| 4116.0      |
| 4174.3      |
| 4385.5      |
| 4451.1      |
| 4702.4      |
| 4961.0      |
| 5117.6      |
| 5481.9      |
| 5674.9      |
| 6090.2      |
| 6341.5      |
| 6713.0      |
| 7274.0      |
| 7776.6      |
| 8454.1      |
| 9390.2      |
| 9943.9      |
| 10293.6     |
| 9364.7      |
| 7368.7      |
| 5146.8      |
| 3606.0      |
| 1278.5      |
| 619.2       |
| 466.2       |
| 371.5       |
| 284.1       |
| 207.6       |
| 120.2       |
| 65.6        |
| 18.2        |
| 0.0         |

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