

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: P977478

Luminaire Tested: **EPH-VN-08-E-735-U-SL2**

Issue Date: 03/26/2025



**Test Information**

Test Method: LM-79-08  
Report Number: P977478  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 03/26/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: EPHESUS  
Catalog Number: EPH-VN-08-E-735-U-SL2  
Description: EPHESUS LUMAVISION – Middle Tier Light Square Luminaire w/ SL2  
distribution lens  
Light Source: (128) 3500K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 66406.5 lumens  
Efficiency: N/A  
Efficacy: 105.9 lumens/watt  
Luminous Opening: Rectangular (W 1' x L: 0.5' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B4 - U0 - G5

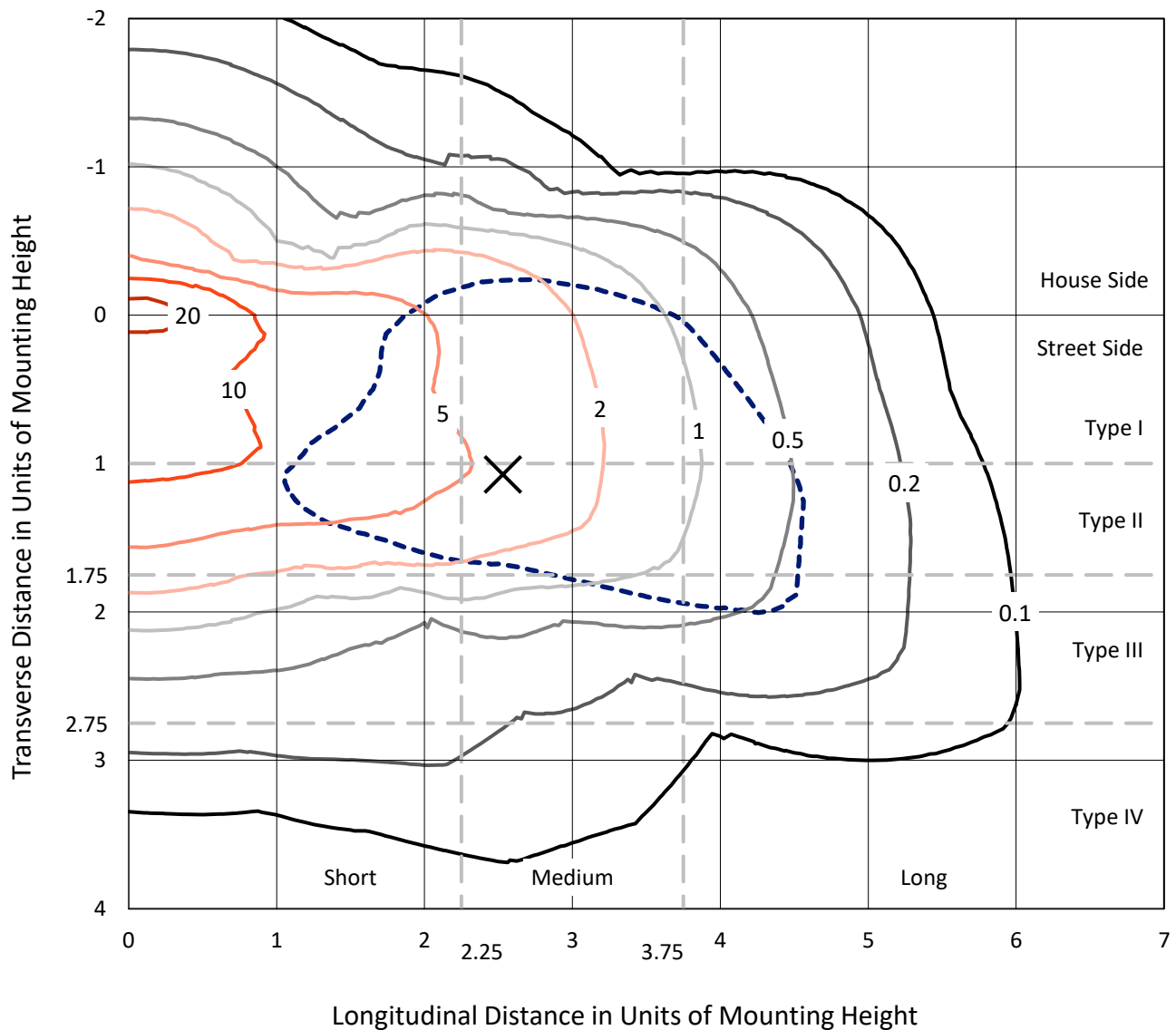
Input Watts (W): 626.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT

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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
- - - 1/2 Max cd

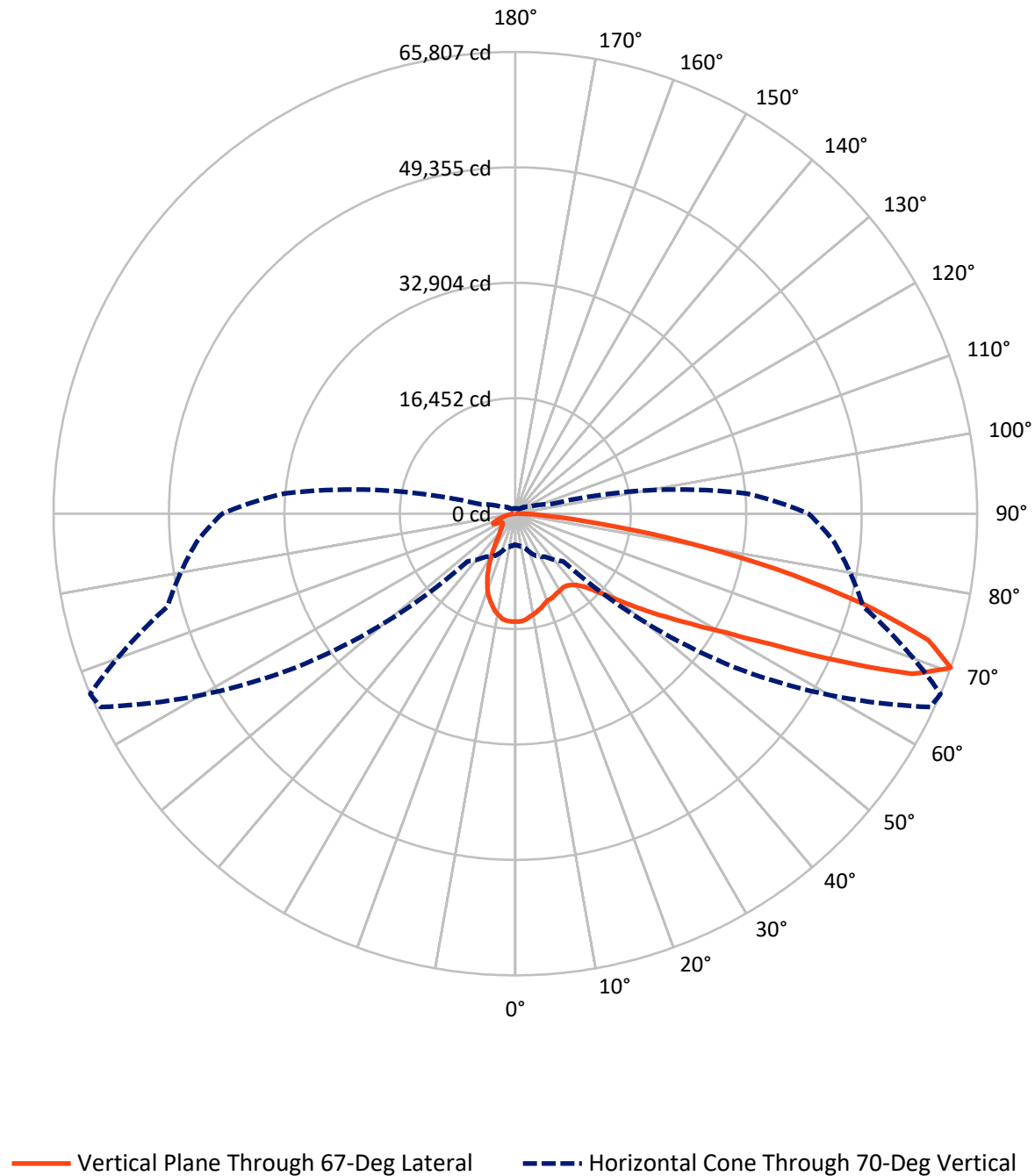


Based on 25 foot mounting height. Maximum calculated value = 24.8 fc  
Type III - Medium - N/A

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## Luminous Intensity Polar Plot



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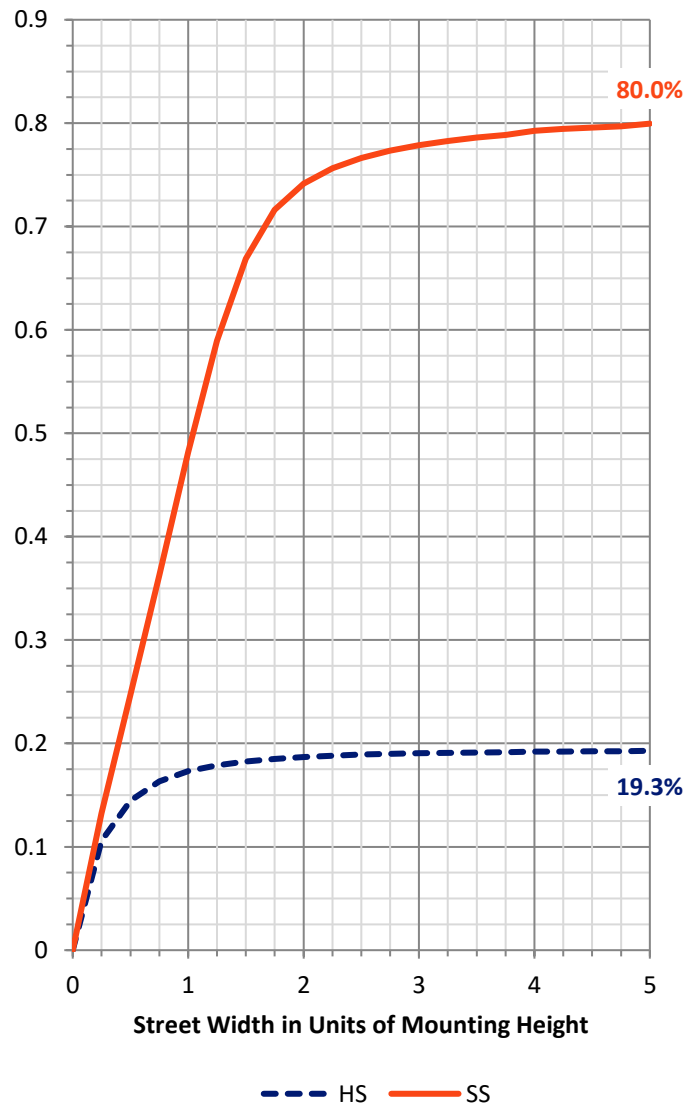
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 12933.3  | 0.0    | 12933.3 |
|                    | % Fixture | 19.5     | 0.0    | 19.5    |
| <b>Street Side</b> | Lumens    | 53473.2  | 0.0    | 53473.2 |
|                    | % Fixture | 80.5     | 0.0    | 80.5    |
| <b>Total</b>       | Lumens    | 66406.5  | 0.0    | 66406.5 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 1341.3  | 2.0       |
| 10°-20°   | 3212.4  | 4.8       |
| 20°-30°   | 4338.1  | 6.5       |
| 30°-40°   | 5804.8  | 8.7       |
| 40°-50°   | 8535.8  | 12.9      |
| 50°-60°   | 13305.2 | 20.0      |
| 60°-70°   | 16389.8 | 24.7      |
| 70°-80°   | 11580.9 | 17.4      |
| 80°-90°   | 1898.2  | 2.9       |
| 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°    | 66406.5 | 100.0     |
| 0°-180°   | 66406.5 | 100.0     |

**Coefficient of Utilization**



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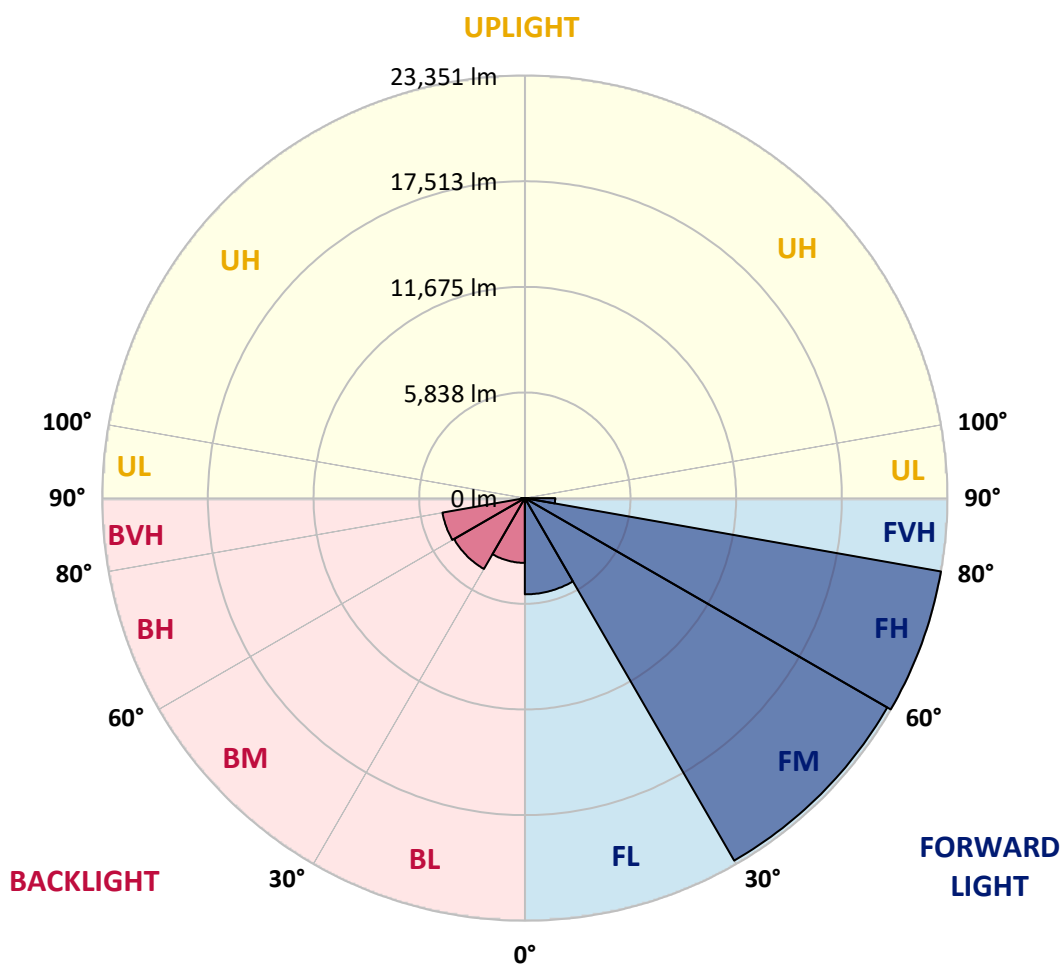
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 5315.3  | 8.0       |                         |      |         |
| FM   | (30°-60°)   | 23127.9 | 34.8      |                         |      |         |
| FH   | (60°-80°)   | 23350.7 | 35.2      |                         |      | G5      |
| FVH  | (80°-90°)   | 1679.2  | 2.5       |                         |      | G5      |
| BL   | (0°-30°)    | 3576.5  | 5.4       | B4/5000                 |      |         |
| BM   | (30°-60°)   | 4517.9  | 6.8       | B3/5000                 |      |         |
| BH   | (60°-80°)   | 4619.9  | 7.0       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 219.0   | 0.3       |                         |      | G2/225  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B4-U0-G5**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 55°     | 65°     | 67°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 |
| 2.5°  | 14314.2 | 14476.0 | 14534.8 | 14623.0 | 14850.9 | 15020.0 | 15122.9 | 15240.6 | 15380.2 | 15497.9 | 15571.4 |
| 5°    | 13314.3 | 13402.6 | 13542.3 | 13637.8 | 13924.6 | 14380.4 | 14689.2 | 15189.1 | 15174.4 | 15358.2 | 15637.6 |
| 7.5°  | 12343.9 | 12432.1 | 12498.3 | 12689.4 | 13101.1 | 13512.9 | 14078.9 | 14887.7 | 14828.8 | 15255.3 | 15689.0 |
| 10°   | 11741.0 | 11674.9 | 11696.9 | 12020.4 | 12343.9 | 12807.1 | 13520.2 | 14343.6 | 14556.8 | 15218.5 | 15836.1 |
| 12.5° | 11174.9 | 11101.4 | 11277.9 | 11483.7 | 11880.7 | 12299.8 | 13152.6 | 13895.2 | 14218.6 | 15086.2 | 15902.2 |
| 15°   | 10822.0 | 10770.6 | 10991.1 | 11079.4 | 11549.9 | 12049.8 | 12652.7 | 13557.0 | 13909.9 | 14924.4 | 15799.3 |
| 17.5° | 10623.5 | 10667.7 | 10748.5 | 10939.7 | 11241.1 | 11667.5 | 12329.2 | 13329.1 | 13483.4 | 14725.9 | 15777.2 |
| 20°   | 10660.3 | 10711.8 | 10719.1 | 10800.0 | 11005.8 | 11336.7 | 12013.1 | 13086.4 | 13189.4 | 14689.2 | 15836.1 |
| 22.5° | 10954.4 | 10880.9 | 10910.3 | 10858.8 | 10917.6 | 11174.9 | 11770.4 | 12763.0 | 13160.0 | 14380.4 | 15711.1 |
| 25°   | 11395.5 | 11292.6 | 11277.9 | 11101.4 | 10991.1 | 11064.7 | 11726.3 | 12682.1 | 12939.4 | 14284.8 | 15703.7 |
| 27.5° | 12174.8 | 12020.4 | 12020.4 | 11755.7 | 11307.3 | 11189.6 | 11601.3 | 12549.7 | 12777.7 | 14196.6 | 15534.6 |
| 30°   | 12924.7 | 12924.7 | 12932.0 | 12557.1 | 12057.2 | 11476.4 | 11652.8 | 12498.3 | 12645.3 | 13931.9 | 15306.7 |
| 32.5° | 13836.3 | 13814.3 | 13777.5 | 13593.7 | 12821.8 | 11954.2 | 11902.8 | 12432.1 | 12505.6 | 13843.7 | 15240.6 |
| 35°   | 14725.9 | 14667.1 | 14953.8 | 14792.1 | 14005.4 | 12887.9 | 12160.1 | 12461.5 | 12623.3 | 13711.4 | 15034.7 |
| 37.5° | 15394.9 | 15431.7 | 16027.2 | 16130.1 | 15453.8 | 13946.6 | 12887.9 | 12755.6 | 12910.0 | 13902.5 | 15034.7 |
| 40°   | 16262.5 | 16409.5 | 16968.3 | 17313.8 | 16902.1 | 15343.5 | 14042.2 | 13248.2 | 13358.5 | 14328.9 | 15358.2 |
| 42.5° | 17402.0 | 17527.0 | 18240.1 | 18688.6 | 18571.0 | 17122.6 | 15181.7 | 14277.5 | 14189.2 | 15042.1 | 15843.4 |
| 45°   | 18909.2 | 18931.2 | 19651.7 | 20269.3 | 20511.9 | 18982.7 | 16990.3 | 15578.7 | 15505.2 | 16269.8 | 16733.0 |
| 47.5° | 20703.0 | 20681.0 | 21129.5 | 21791.1 | 22445.4 | 21203.0 | 19070.9 | 17556.4 | 17291.7 | 18026.9 | 18210.7 |
| 50°   | 22438.1 | 22342.5 | 22445.4 | 23290.9 | 24548.1 | 23982.0 | 21600.0 | 19975.2 | 19710.5 | 20114.9 | 20431.0 |
| 52.5° | 23393.8 | 23511.5 | 23232.1 | 24349.6 | 26783.1 | 27268.3 | 24952.5 | 22864.5 | 22636.6 | 22835.1 | 23386.5 |
| 55°   | 22724.8 | 22967.4 | 22783.6 | 23842.3 | 27760.9 | 31275.1 | 29290.1 | 26209.6 | 25915.6 | 25842.0 | 26746.3 |
| 57.5° | 19879.6 | 20320.7 | 20357.5 | 22033.7 | 27422.7 | 34377.6 | 35392.2 | 30157.6 | 29716.5 | 28966.6 | 29900.3 |
| 60°   | 15262.6 | 15703.7 | 16041.9 | 18026.9 | 24526.0 | 36230.3 | 42464.8 | 35774.5 | 34318.8 | 32377.9 | 32936.7 |
| 62.5° | 10697.1 | 10998.5 | 11336.7 | 12557.1 | 18909.2 | 35142.2 | 48581.6 | 43685.2 | 41001.7 | 35973.0 | 36671.4 |
| 65°   | 7793.0  | 8028.3  | 8373.9  | 9094.3  | 11616.1 | 29076.9 | 51419.4 | 53080.9 | 50537.2 | 40545.9 | 40457.7 |
| 67.5° | 5866.8  | 6013.9  | 6469.7  | 7624.0  | 8050.4  | 17960.8 | 48478.6 | 63006.1 | 60947.5 | 45626.1 | 43501.4 |
| 70°   | 4440.6  | 4565.5  | 4992.0  | 6572.6  | 7521.0  | 9631.0  | 38244.8 | 65219.0 | 65807.1 | 51323.8 | 45545.2 |
| 72.5° | 3058.4  | 3198.1  | 3676.0  | 5477.2  | 7160.8  | 7638.7  | 24004.1 | 59249.2 | 61476.9 | 53669.1 | 43354.3 |
| 75°   | 1874.7  | 1970.3  | 2249.7  | 4153.8  | 7109.3  | 7469.6  | 13211.4 | 48552.2 | 50912.1 | 49588.8 | 37928.6 |
| 77.5° | 1323.3  | 1316.0  | 1367.5  | 2433.5  | 6160.9  | 7513.7  | 8145.9  | 35576.0 | 37869.8 | 36546.5 | 25739.1 |
| 80°   | 963.1   | 970.5   | 1021.9  | 1455.7  | 4183.2  | 7638.7  | 6418.2  | 23827.6 | 24511.3 | 19056.2 | 10153.0 |
| 82.5° | 580.8   | 610.2   | 735.2   | 985.2   | 2514.4  | 6896.1  | 5933.0  | 13240.8 | 12388.0 | 6116.8  | 2793.7  |
| 85°   | 308.8   | 308.8   | 433.8   | 624.9   | 1338.1  | 5146.4  | 5712.5  | 6300.6  | 5278.7  | 1896.8  | 1036.6  |
| 87.5° | 73.5    | 73.5    | 125.0   | 250.0   | 536.7   | 2462.9  | 3896.5  | 2507.0  | 2007.1  | 639.6   | 426.4   |
| 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):**

|       | 90°     | 95°     | 105°    | 115°    | 125°    | 135°    | 145°    | 155°    | 165°    | 175°    | 180°    |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 | 15372.9 |
| 2.5°  | 15542.0 | 15453.8 | 15564.0 | 15343.5 | 15167.0 | 15174.4 | 14902.4 | 14887.7 | 14850.9 | 14659.8 | 14725.9 |
| 5°    | 15718.4 | 15644.9 | 15519.9 | 15277.3 | 14887.7 | 14498.0 | 14262.7 | 13961.3 | 13836.3 | 13770.2 | 13799.6 |
| 7.5°  | 15887.5 | 15755.2 | 15394.9 | 15056.8 | 14453.9 | 13718.7 | 13292.3 | 12887.9 | 12373.3 | 12314.5 | 12211.6 |
| 10°   | 15931.6 | 15652.3 | 15189.1 | 14468.6 | 13667.2 | 12851.2 | 11880.7 | 11130.8 | 10733.8 | 10425.0 | 10307.4 |
| 12.5° | 15865.5 | 15747.8 | 14858.3 | 13931.9 | 12718.8 | 11439.6 | 10307.4 | 9248.7  | 8513.5  | 8131.2  | 8028.3  |
| 15°   | 15858.1 | 15652.3 | 14490.7 | 13115.8 | 11564.6 | 9895.7  | 8285.6  | 7013.7  | 6241.8  | 5925.7  | 5925.7  |
| 17.5° | 15865.5 | 15372.9 | 14056.9 | 12292.4 | 10204.5 | 7947.4  | 6175.6  | 5131.6  | 4705.2  | 4661.1  | 4697.9  |
| 20°   | 15718.4 | 15167.0 | 13601.1 | 11322.0 | 8498.8  | 5969.8  | 4484.7  | 4058.3  | 4058.3  | 4117.1  | 4139.1  |
| 22.5° | 15586.1 | 14858.3 | 12880.6 | 10123.6 | 6763.8  | 4322.9  | 3646.6  | 3521.6  | 3661.3  | 3764.2  | 3808.3  |
| 25°   | 15402.3 | 14600.9 | 12145.4 | 8881.1  | 5146.4  | 3484.8  | 3168.7  | 3198.1  | 3330.4  | 3514.2  | 3499.5  |
| 27.5° | 15137.6 | 14152.5 | 11270.5 | 7440.2  | 3830.4  | 3006.9  | 2926.1  | 2940.8  | 3080.5  | 3161.3  | 3146.6  |
| 30°   | 14836.2 | 13696.6 | 10461.8 | 6006.5  | 3036.3  | 2757.0  | 2749.6  | 2786.4  | 2808.4  | 2852.5  | 2845.2  |
| 32.5° | 14453.9 | 13093.8 | 9601.6  | 4668.5  | 2734.9  | 2617.3  | 2587.9  | 2565.8  | 2587.9  | 2580.5  | 2558.5  |
| 35°   | 14181.9 | 12770.3 | 8726.7  | 3558.3  | 2565.8  | 2492.3  | 2470.2  | 2433.5  | 2404.1  | 2360.0  | 2352.6  |
| 37.5° | 14108.4 | 12446.8 | 7807.8  | 2904.0  | 2433.5  | 2396.7  | 2323.2  | 2257.0  | 2220.3  | 2198.2  | 2183.5  |
| 40°   | 14064.2 | 12233.6 | 6910.8  | 2551.1  | 2323.2  | 2286.5  | 2198.2  | 2110.0  | 2073.2  | 2051.2  | 2058.5  |
| 42.5° | 14218.6 | 12116.0 | 5999.2  | 2374.7  | 2227.6  | 2161.5  | 2065.9  | 1963.0  | 1955.6  | 1940.9  | 1963.0  |
| 45°   | 14762.7 | 12263.0 | 5153.7  | 2249.7  | 2132.1  | 2021.8  | 1896.8  | 1845.3  | 1838.0  | 1823.3  | 1838.0  |
| 47.5° | 15997.8 | 12630.6 | 4433.2  | 2168.8  | 2029.1  | 1933.6  | 1801.2  | 1727.7  | 1720.4  | 1713.0  | 1713.0  |
| 50°   | 17703.5 | 13762.8 | 3830.4  | 2073.2  | 1963.0  | 1830.6  | 1705.6  | 1624.8  | 1610.1  | 1580.7  | 1580.7  |
| 52.5° | 20379.6 | 15667.0 | 3470.1  | 2021.8  | 1845.3  | 1735.1  | 1602.7  | 1514.5  | 1477.7  | 1448.3  | 1448.3  |
| 55°   | 23393.8 | 18026.9 | 3403.9  | 1933.6  | 1720.4  | 1617.4  | 1499.8  | 1411.6  | 1374.8  | 1338.1  | 1323.3  |
| 57.5° | 26827.2 | 21151.5 | 3874.5  | 1874.7  | 1632.1  | 1499.8  | 1367.5  | 1286.6  | 1257.2  | 1220.4  | 1205.7  |
| 60°   | 30025.3 | 24268.7 | 5337.5  | 1786.5  | 1551.3  | 1389.5  | 1257.2  | 1176.3  | 1139.5  | 1102.8  | 1102.8  |
| 62.5° | 33723.3 | 28128.5 | 7815.1  | 1786.5  | 1477.7  | 1271.9  | 1139.5  | 1080.7  | 1058.7  | 1021.9  | 1014.6  |
| 65°   | 38097.7 | 32120.6 | 9623.7  | 1896.8  | 1455.7  | 1169.0  | 1029.3  | 970.5   | 948.4   | 926.3   | 919.0   |
| 67.5° | 41428.1 | 34414.4 | 8278.3  | 2190.9  | 1551.3  | 1080.7  | 919.0   | 882.2   | 867.5   | 845.5   | 830.8   |
| 70°   | 41781.0 | 33017.5 | 4992.0  | 2367.3  | 1646.8  | 992.5   | 823.4   | 786.7   | 786.7   | 764.6   | 749.9   |
| 72.5° | 38612.3 | 29297.4 | 3359.8  | 2110.0  | 1492.4  | 889.6   | 727.8   | 698.4   | 683.7   | 669.0   | 661.7   |
| 75°   | 32311.7 | 24849.5 | 2654.0  | 1683.6  | 1146.9  | 735.2   | 632.3   | 602.9   | 580.8   | 573.5   | 558.7   |
| 77.5° | 21702.9 | 16152.2 | 1963.0  | 1316.0  | 845.5   | 595.5   | 529.3   | 499.9   | 477.9   | 470.5   | 448.5   |
| 80°   | 8337.1  | 6153.6  | 1264.5  | 955.8   | 595.5   | 470.5   | 419.1   | 389.7   | 374.9   | 352.9   | 338.2   |
| 82.5° | 2455.5  | 1992.4  | 705.8   | 588.2   | 382.3   | 323.5   | 301.4   | 279.4   | 257.3   | 235.3   | 227.9   |
| 85°   | 1014.6  | 911.6   | 433.8   | 308.8   | 235.3   | 191.2   | 176.4   | 154.4   | 132.3   | 117.6   | 102.9   |
| 87.5° | 470.5   | 389.7   | 198.5   | 117.6   | 80.9    | 44.1    | 22.1    | 7.4     | 0.0     | 0.0     | 0.0     |
| 90°   | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     | 0.0     |

(END OF REPORT)