

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: LUMARK

Report Number: P971028

Luminaire Tested: **NAV-SB6C-827-U-T4W**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P971028  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB6C-827-U-T4W  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(6) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 40399.3 lumens  
Efficiency: N/A  
Efficacy: 134.3 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5

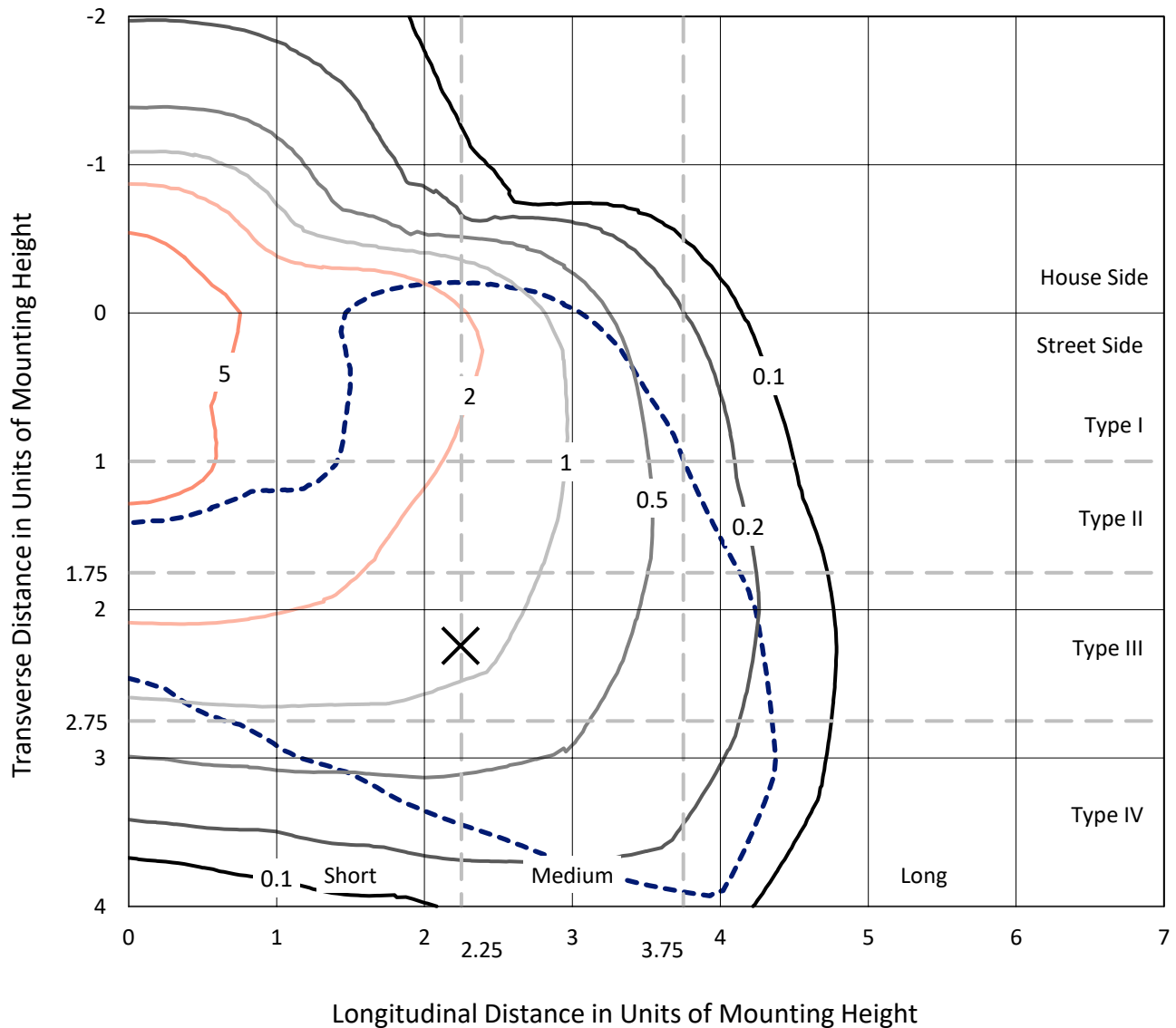
Input Watts (W): 300.9  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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## Iso-Footcandle Lines of Horizontal Illumination

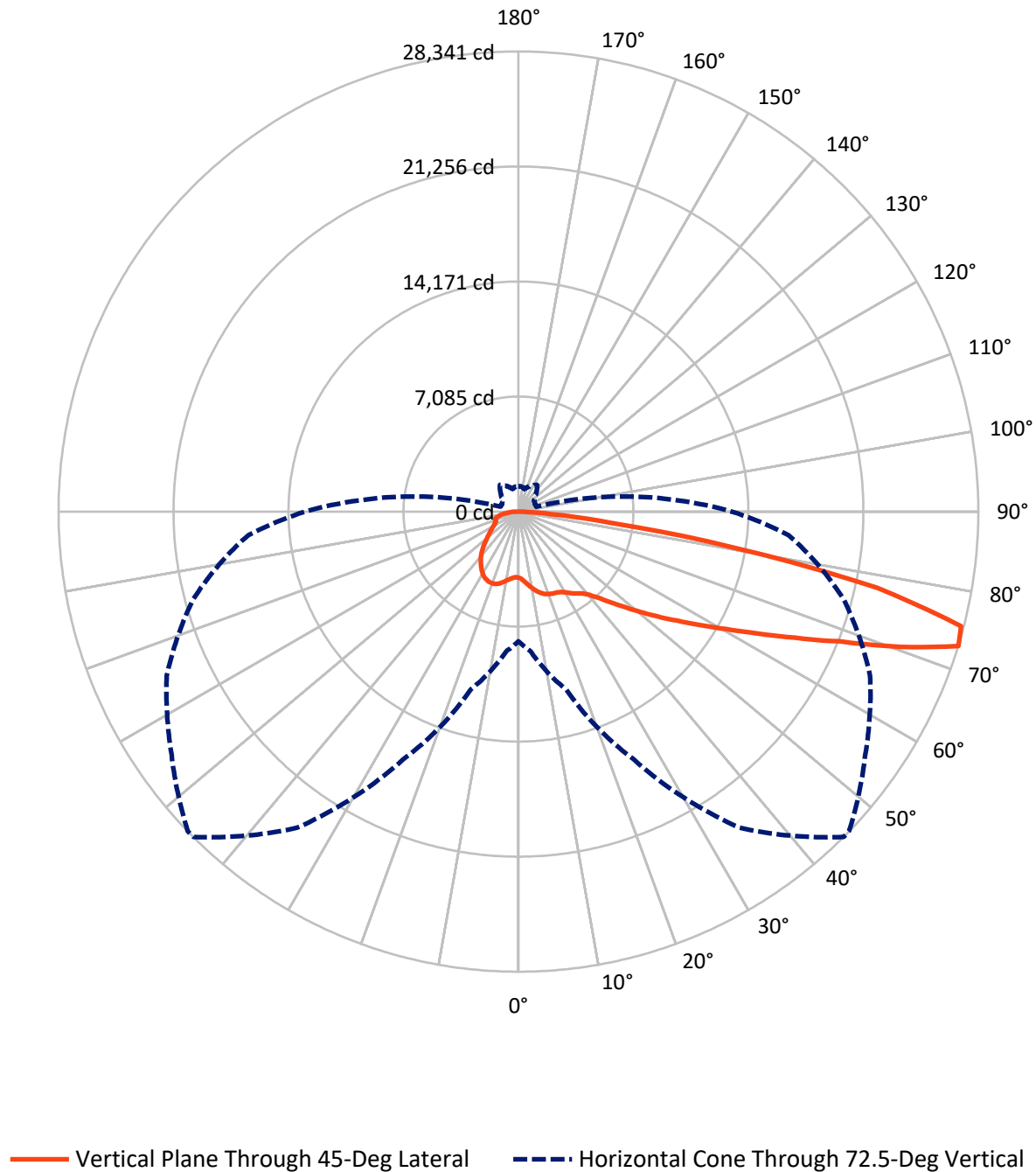
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.1 fc  
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 9132.9   | 0.0    | 9132.9  |
|                    | % Fixture | 22.6     | 0.0    | 22.6    |
| <b>Street Side</b> | Lumens    | 31266.4  | 0.0    | 31266.4 |
|                    | % Fixture | 77.4     | 0.0    | 77.4    |
| <b>Total</b>       | Lumens    | 40399.3  | 0.0    | 40399.3 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 414.8   | 1.0       |
| 10°-20°   | 1383.0  | 3.4       |
| 20°-30°   | 2405.8  | 6.0       |
| 30°-40°   | 3448.9  | 8.5       |
| 40°-50°   | 4856.2  | 12.0      |
| 50°-60°   | 7438.3  | 18.4      |
| 60°-70°   | 10775.5 | 26.7      |
| 70°-80°   | 8604.9  | 21.3      |
| 80°-90°   | 1071.7  | 2.7       |
| 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°    | 40399.3 | 100.0     |
| 0°-180°   | 40399.3 | 100.0     |

**Coefficient of Utilization**



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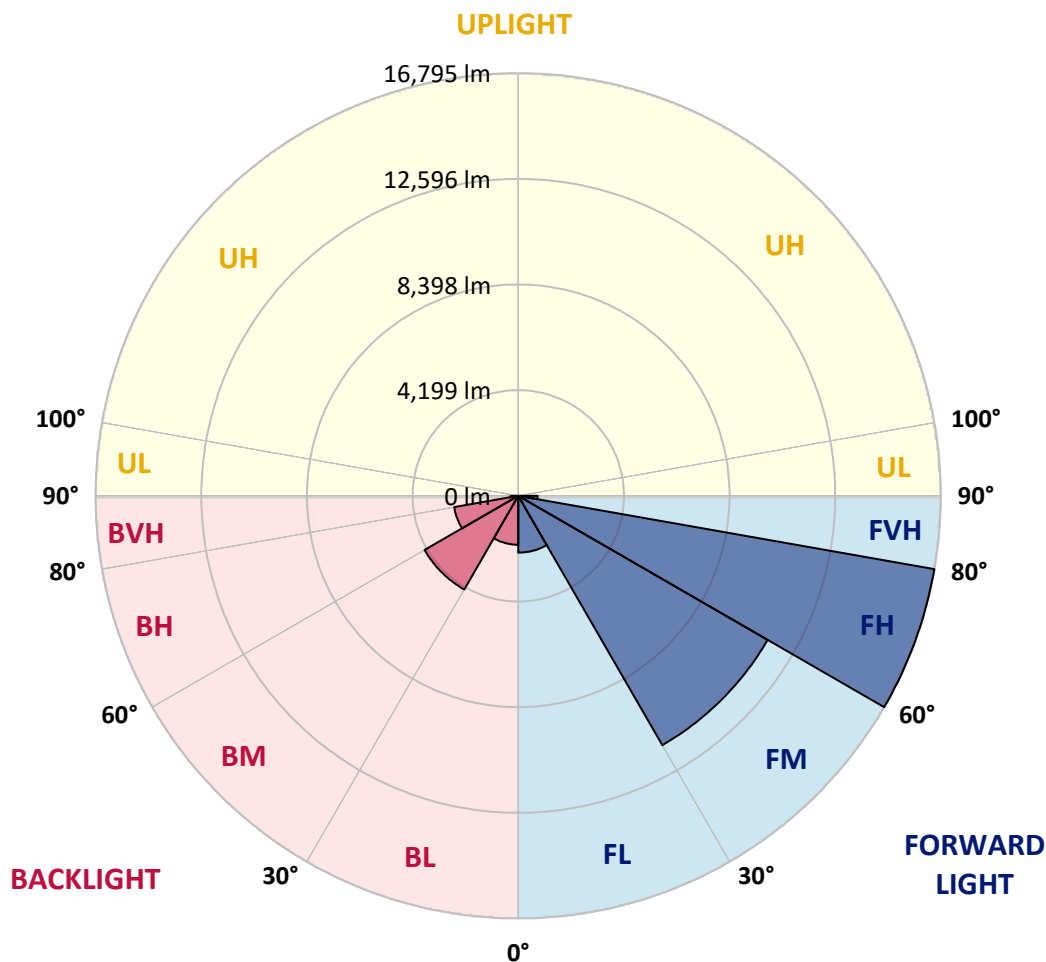
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2259.2  | 5.6       |                         |      |         |
| FM   | (30°-60°)   | 11443.2 | 28.3      |                         |      |         |
| FH   | (60°-80°)   | 16795.2 | 41.6      |                         |      | G5      |
| FVH  | (80°-90°)   | 768.9   | 1.9       |                         |      | G5      |
| BL   | (0°-30°)    | 1944.5  | 4.8       | B3/2500                 |      |         |
| BM   | (30°-60°)   | 4300.3  | 10.6      | B3/5000                 |      |         |
| BH   | (60°-80°)   | 2585.3  | 6.4       | B4/5000                 |      | G4/5000 |
| BVH  | (80°-90°)   | 302.8   | 0.7       |                         |      | G3/500  |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

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

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 46°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4075.5  | 4075.5  | 4075.5  | 4075.5  | 4075.5  | 4075.5  | 4075.5  | 4075.5  | 4075.5  | 4075.5  | 4075.5  |
| 2.5°  | 4235.1  | 4262.8  | 4237.2  | 4213.9  | 4203.2  | 4175.5  | 4173.4  | 4156.4  | 4145.7  | 4116.0  | 4107.4  |
| 5°    | 4530.9  | 4567.1  | 4524.6  | 4477.7  | 4435.2  | 4367.1  | 4358.6  | 4309.6  | 4254.3  | 4190.4  | 4154.2  |
| 7.5°  | 4865.1  | 4897.0  | 4848.0  | 4777.8  | 4703.3  | 4590.6  | 4588.4  | 4499.0  | 4411.8  | 4303.3  | 4241.6  |
| 10°   | 5156.7  | 5199.2  | 5133.2  | 5037.5  | 4943.8  | 4816.2  | 4801.2  | 4699.1  | 4588.4  | 4448.0  | 4354.3  |
| 12.5° | 5414.2  | 5444.0  | 5380.1  | 5263.1  | 5154.5  | 5026.8  | 5007.6  | 4894.9  | 4771.5  | 4611.8  | 4492.7  |
| 15°   | 5618.4  | 5656.8  | 5571.6  | 5446.0  | 5331.1  | 5205.6  | 5188.5  | 5086.4  | 4962.9  | 4794.8  | 4641.6  |
| 17.5° | 5752.5  | 5784.5  | 5697.2  | 5556.7  | 5446.0  | 5341.8  | 5329.0  | 5243.9  | 5135.4  | 4965.1  | 4801.2  |
| 20°   | 5803.7  | 5837.7  | 5746.2  | 5603.6  | 5501.4  | 5420.5  | 5414.2  | 5352.4  | 5277.9  | 5122.5  | 4956.6  |
| 22.5° | 5854.7  | 5886.6  | 5767.5  | 5618.4  | 5529.1  | 5478.0  | 5475.9  | 5435.5  | 5405.6  | 5277.9  | 5116.2  |
| 25°   | 6061.1  | 6069.6  | 5910.0  | 5695.1  | 5567.4  | 5522.7  | 5520.5  | 5518.4  | 5531.2  | 5431.2  | 5288.6  |
| 27.5° | 6239.9  | 6237.7  | 6101.5  | 5899.4  | 5701.5  | 5607.8  | 5605.7  | 5626.9  | 5667.4  | 5584.4  | 5467.3  |
| 30°   | 6501.7  | 6478.2  | 6316.5  | 6105.8  | 5924.9  | 5780.2  | 5767.5  | 5748.3  | 5780.2  | 5714.3  | 5646.1  |
| 32.5° | 7057.1  | 6982.6  | 6720.8  | 6346.3  | 6110.0  | 5999.4  | 5982.4  | 5863.2  | 5876.0  | 5835.5  | 5801.5  |
| 35°   | 7853.0  | 7755.2  | 7406.1  | 6801.7  | 6339.9  | 6182.4  | 6173.9  | 6022.8  | 5997.3  | 5961.1  | 5973.9  |
| 37.5° | 8800.1  | 8678.8  | 8272.4  | 7461.5  | 6735.8  | 6395.3  | 6382.5  | 6246.2  | 6142.0  | 6103.7  | 6176.0  |
| 40°   | 9751.4  | 9598.2  | 9261.9  | 8265.9  | 7318.9  | 6750.6  | 6710.3  | 6503.8  | 6384.6  | 6320.8  | 6474.0  |
| 42.5° | 10675.1 | 10547.4 | 10260.0 | 9168.3  | 8038.3  | 7269.9  | 7180.5  | 6827.3  | 6737.9  | 6678.3  | 6954.9  |
| 45°   | 11492.3 | 11377.4 | 11166.7 | 10132.3 | 8881.0  | 7976.6  | 7889.2  | 7312.6  | 7284.9  | 7284.9  | 7684.9  |
| 47.5° | 12156.3 | 12130.8 | 11907.3 | 11115.6 | 9874.8  | 8781.0  | 8629.9  | 7987.1  | 8061.6  | 8176.5  | 8721.4  |
| 50°   | 12892.7 | 12822.4 | 12584.0 | 12083.9 | 11043.2 | 9702.4  | 9579.0  | 8815.0  | 9093.8  | 9408.8  | 10219.7 |
| 52.5° | 13569.5 | 13607.7 | 13341.7 | 13092.7 | 12362.7 | 10730.4 | 10513.3 | 9791.8  | 10394.1 | 10915.5 | 11975.4 |
| 55°   | 14265.3 | 14267.5 | 14193.0 | 14158.9 | 13746.1 | 11866.8 | 11628.5 | 10966.6 | 11924.3 | 12571.3 | 14022.7 |
| 57.5° | 14918.7 | 14923.0 | 15033.6 | 15333.7 | 15350.7 | 13177.8 | 12907.5 | 12409.6 | 13624.7 | 14284.5 | 16133.9 |
| 60°   | 15501.8 | 15531.6 | 15833.8 | 16536.1 | 16761.7 | 14680.4 | 14424.9 | 14114.2 | 15382.7 | 16046.7 | 18353.6 |
| 62.5° | 15697.7 | 15806.1 | 16478.7 | 17476.8 | 18155.7 | 16523.4 | 16272.3 | 16087.1 | 17229.9 | 17847.1 | 20209.4 |
| 65°   | 15365.7 | 15614.6 | 16915.0 | 18253.6 | 19590.1 | 18713.3 | 18464.2 | 18262.1 | 19149.6 | 19730.5 | 21733.2 |
| 67.5° | 14550.5 | 14871.9 | 16889.4 | 19068.7 | 21331.0 | 21348.0 | 21116.0 | 20641.4 | 21207.6 | 21431.0 | 22229.1 |
| 70°   | 12403.1 | 12884.1 | 15401.8 | 19373.0 | 23329.3 | 24951.1 | 24727.6 | 23506.0 | 23261.2 | 22180.1 | 20833.0 |
| 72.5° | 7991.4  | 8638.4  | 11341.2 | 16868.1 | 23774.2 | 28341.2 | 28328.5 | 26091.8 | 23910.4 | 20724.5 | 16708.5 |
| 75°   | 2915.6  | 3311.5  | 5269.4  | 10587.8 | 19956.1 | 28168.8 | 28251.9 | 25649.1 | 21826.9 | 16008.3 | 10409.1 |
| 77.5° | 1062.0  | 1162.0  | 1719.5  | 4069.1  | 12273.3 | 22601.6 | 22773.9 | 20505.2 | 15535.9 | 8033.9  | 4124.5  |
| 80°   | 557.6   | 612.9   | 881.1   | 1579.1  | 5258.8  | 13422.6 | 13692.9 | 12186.1 | 7301.9  | 2419.7  | 1236.5  |
| 82.5° | 308.6   | 334.2   | 493.7   | 857.6   | 2368.7  | 5739.8  | 5901.5  | 4814.0  | 2568.8  | 1025.8  | 510.8   |
| 85°   | 166.0   | 176.6   | 232.0   | 468.2   | 1157.7  | 1989.8  | 2034.5  | 1438.7  | 1023.7  | 602.3   | 246.9   |
| 87.5° | 49.0    | 59.6    | 76.6    | 148.9   | 453.4   | 446.9   | 457.6   | 285.2   | 404.4   | 304.3   | 80.9    |
| 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°    | 4075.5  | 4075.5  | 4075.5 | 4075.5 | 4075.5 | 4075.5 | 4075.5 | 4075.5 | 4075.5 | 4075.5 | 4075.5 |
| 2.5°  | 4094.7  | 4088.3  | 4064.8 | 4054.2 | 4041.5 | 4039.3 | 4050.0 | 4052.1 | 4054.2 | 4056.3 | 4064.8 |
| 5°    | 4133.0  | 4111.7  | 4090.4 | 4077.7 | 4081.9 | 4084.0 | 4105.3 | 4120.2 | 4130.9 | 4139.4 | 4143.6 |
| 7.5°  | 4207.4  | 4190.4  | 4154.2 | 4152.2 | 4158.5 | 4177.7 | 4205.4 | 4239.4 | 4258.6 | 4273.4 | 4277.7 |
| 10°   | 4318.1  | 4286.2  | 4243.6 | 4250.1 | 4262.8 | 4290.4 | 4347.9 | 4375.6 | 4407.5 | 4435.2 | 4428.8 |
| 12.5° | 4430.9  | 4403.3  | 4354.3 | 4358.6 | 4379.8 | 4428.8 | 4484.2 | 4518.2 | 4539.4 | 4560.7 | 4569.2 |
| 15°   | 4577.8  | 4528.9  | 4475.6 | 4475.6 | 4513.9 | 4567.1 | 4592.6 | 4620.3 | 4633.1 | 4656.5 | 4665.0 |
| 17.5° | 4728.8  | 4665.0  | 4594.8 | 4590.6 | 4637.3 | 4662.9 | 4677.8 | 4682.0 | 4686.3 | 4711.8 | 4720.3 |
| 20°   | 4879.9  | 4809.7  | 4709.7 | 4701.2 | 4711.8 | 4707.6 | 4705.5 | 4701.2 | 4707.6 | 4739.5 | 4752.3 |
| 22.5° | 5029.0  | 4948.1  | 4809.7 | 4771.5 | 4741.6 | 4701.2 | 4699.1 | 4697.0 | 4701.2 | 4733.1 | 4754.4 |
| 25°   | 5203.4  | 5105.5  | 4920.4 | 4805.5 | 4705.5 | 4650.1 | 4656.5 | 4658.6 | 4662.9 | 4688.5 | 4722.5 |
| 27.5° | 5392.8  | 5284.3  | 5022.6 | 4794.8 | 4613.9 | 4575.6 | 4565.0 | 4571.4 | 4586.3 | 4626.7 | 4667.1 |
| 30°   | 5582.3  | 5454.5  | 5116.2 | 4752.3 | 4499.0 | 4445.8 | 4411.8 | 4426.7 | 4473.5 | 4513.9 | 4558.6 |
| 32.5° | 5754.7  | 5626.9  | 5190.7 | 4658.6 | 4352.2 | 4269.1 | 4224.4 | 4243.6 | 4290.4 | 4305.3 | 4358.6 |
| 35°   | 5956.9  | 5812.2  | 5222.6 | 4509.7 | 4192.6 | 4064.8 | 4005.3 | 3977.6 | 4001.0 | 3986.1 | 4033.0 |
| 37.5° | 6182.4  | 6031.3  | 5218.4 | 4313.9 | 4005.3 | 3858.4 | 3775.4 | 3671.1 | 3622.2 | 3571.1 | 3603.1 |
| 40°   | 6516.5  | 6299.4  | 5167.2 | 4077.7 | 3773.3 | 3639.3 | 3490.2 | 3313.6 | 3202.9 | 3102.9 | 3109.3 |
| 42.5° | 6971.9  | 6671.9  | 5073.6 | 3818.0 | 3511.5 | 3386.0 | 3183.8 | 2977.3 | 2802.9 | 2636.8 | 2622.0 |
| 45°   | 7650.9  | 7159.3  | 4956.6 | 3541.4 | 3228.4 | 3105.0 | 2885.9 | 2653.8 | 2455.9 | 2243.1 | 2217.6 |
| 47.5° | 8629.9  | 7814.8  | 4845.9 | 3226.4 | 2930.6 | 2817.7 | 2619.8 | 2404.9 | 2170.7 | 1964.3 | 1940.9 |
| 50°   | 9974.9  | 8755.4  | 4743.8 | 2919.9 | 2636.8 | 2551.7 | 2394.2 | 2175.0 | 1938.8 | 1772.8 | 1762.2 |
| 52.5° | 11685.9 | 10034.4 | 4701.2 | 2624.1 | 2362.3 | 2330.3 | 2204.8 | 2000.5 | 1777.0 | 1636.6 | 1626.0 |
| 55°   | 13650.3 | 11564.7 | 4701.2 | 2341.0 | 2121.9 | 2132.4 | 2045.2 | 1855.8 | 1662.1 | 1536.6 | 1523.8 |
| 57.5° | 15655.0 | 13114.0 | 4616.1 | 2079.2 | 1917.5 | 1962.2 | 1906.9 | 1740.9 | 1566.4 | 1436.5 | 1415.2 |
| 60°   | 17502.4 | 14412.2 | 4271.3 | 1840.9 | 1736.7 | 1806.9 | 1770.7 | 1628.1 | 1415.2 | 1306.7 | 1289.7 |
| 62.5° | 18921.8 | 15144.3 | 3607.3 | 1651.5 | 1587.6 | 1668.5 | 1649.3 | 1479.1 | 1387.5 | 1342.9 | 1328.0 |
| 65°   | 19632.6 | 15025.1 | 2758.2 | 1483.4 | 1462.1 | 1587.6 | 1547.2 | 1540.8 | 1468.4 | 1417.4 | 1400.4 |
| 67.5° | 19196.4 | 13999.3 | 2000.5 | 1360.0 | 1389.7 | 1513.1 | 1668.5 | 1694.0 | 1559.9 | 1459.9 | 1442.9 |
| 70°   | 17283.1 | 12143.5 | 1489.7 | 1242.9 | 1298.2 | 1515.3 | 1902.6 | 1772.8 | 1530.2 | 1413.2 | 1394.0 |
| 72.5° | 13148.1 | 9055.5  | 1155.6 | 1119.4 | 1179.1 | 1525.9 | 2006.8 | 1736.7 | 1445.0 | 1562.1 | 1549.3 |
| 75°   | 7519.0  | 4971.5  | 927.9  | 968.3  | 1030.0 | 1425.9 | 1953.6 | 1643.0 | 1379.0 | 1434.4 | 1434.4 |
| 77.5° | 2866.7  | 1911.1  | 766.2  | 819.4  | 827.9  | 1245.0 | 1868.6 | 1636.6 | 1313.1 | 1281.1 | 1168.4 |
| 80°   | 993.8   | 747.0   | 634.2  | 651.2  | 640.6  | 1106.7 | 1791.9 | 1423.7 | 1074.7 | 962.0  | 930.0  |
| 82.5° | 406.5   | 372.5   | 502.2  | 480.9  | 455.4  | 859.8  | 1447.2 | 1164.1 | 878.9  | 776.7  | 768.2  |
| 85°   | 176.6   | 236.3   | 332.0  | 291.6  | 263.9  | 595.9  | 1159.9 | 985.3  | 742.7  | 640.6  | 638.5  |
| 87.5° | 36.2    | 89.4    | 140.4  | 131.9  | 136.2  | 398.0  | 823.6  | 700.2  | 525.6  | 393.7  | 308.6  |
| 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)