

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: P962507

Luminaire Tested: **NAV-SB2C-750-U-AFL-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P962507  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB2C-750-U-AFL-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(2) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE  
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13847.7 lumens  
Efficiency: N/A  
Efficacy: 137.2 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B1 - U0 - G2

Input Watts (W): 100.9  
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



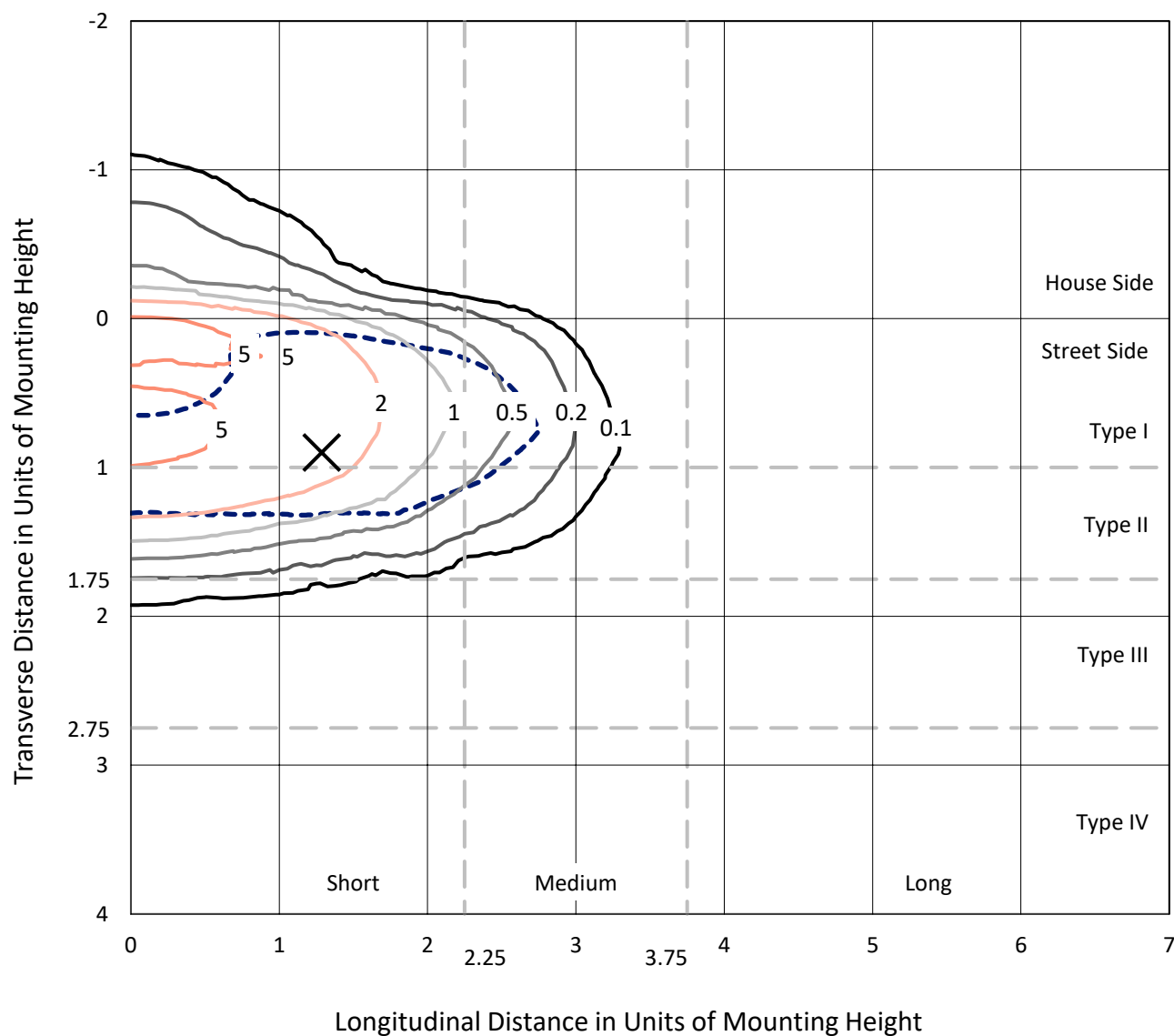
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

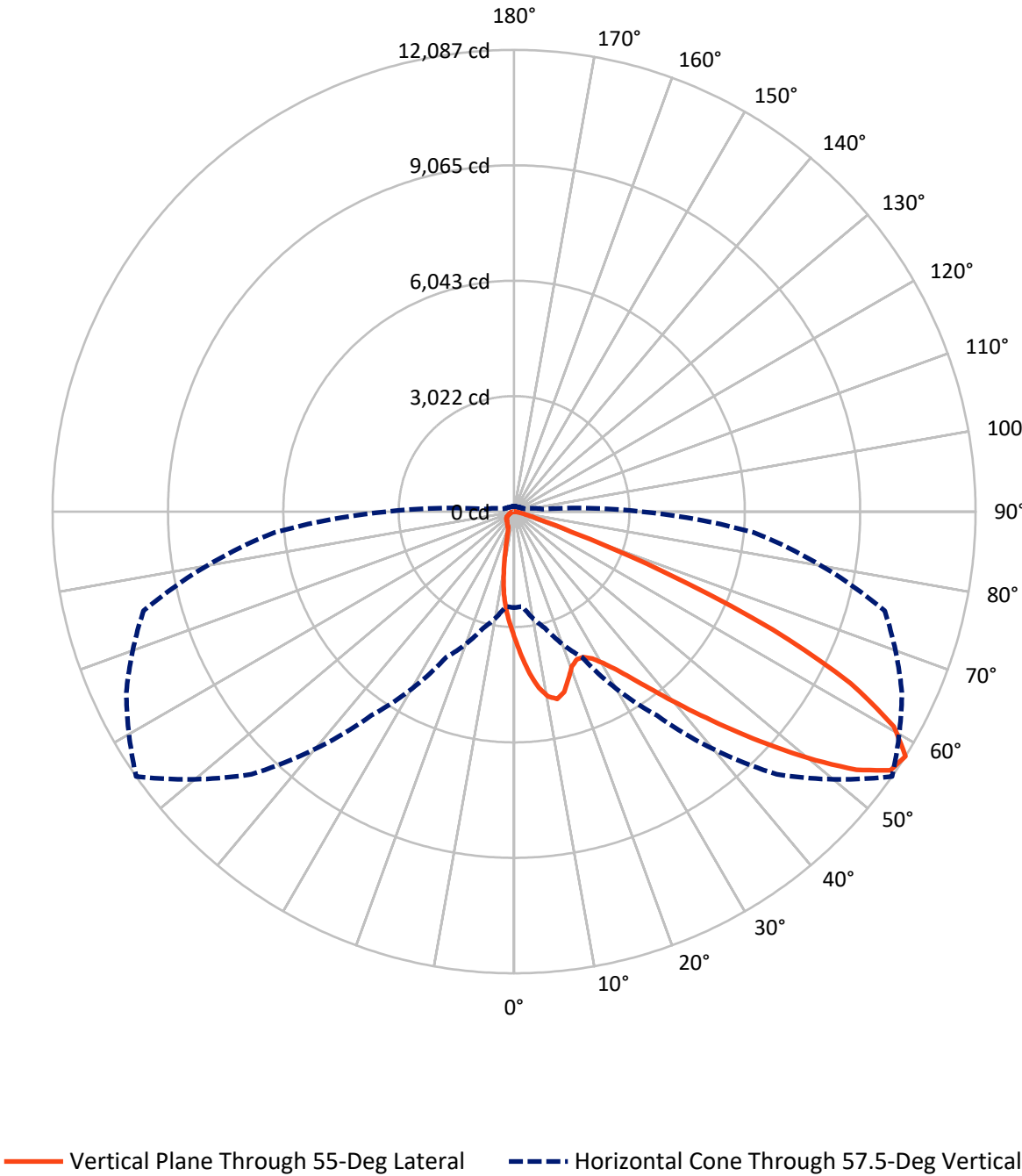


Based on 25 foot mounting height. Maximum calculated value = 7.6 fc

Type II - 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    | 1081.4   | 0.0    | 1081.4  |
|                    | % Fixture | 7.8      | 0.0    | 7.8     |
| <b>Street Side</b> | Lumens    | 12766.3  | 0.0    | 12766.3 |
|                    | % Fixture | 92.2     | 0.0    | 92.2    |
| <b>Total</b>       | Lumens    | 13847.7  | 0.0    | 13847.7 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 310.5   | 2.2       |
| 10°-20°   | 750.0   | 5.4       |
| 20°-30°   | 1200.0  | 8.7       |
| 30°-40°   | 2031.0  | 14.7      |
| 40°-50°   | 3334.5  | 24.1      |
| 50°-60°   | 3664.8  | 26.5      |
| 60°-70°   | 2102.1  | 15.2      |
| 70°-80°   | 429.5   | 3.1       |
| 80°-90°   | 25.3    | 0.2       |
| 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°    | 13847.7 | 100.0     |
| 0°-180°   | 13847.7 | 100.0     |

**Coefficient of Utilization**



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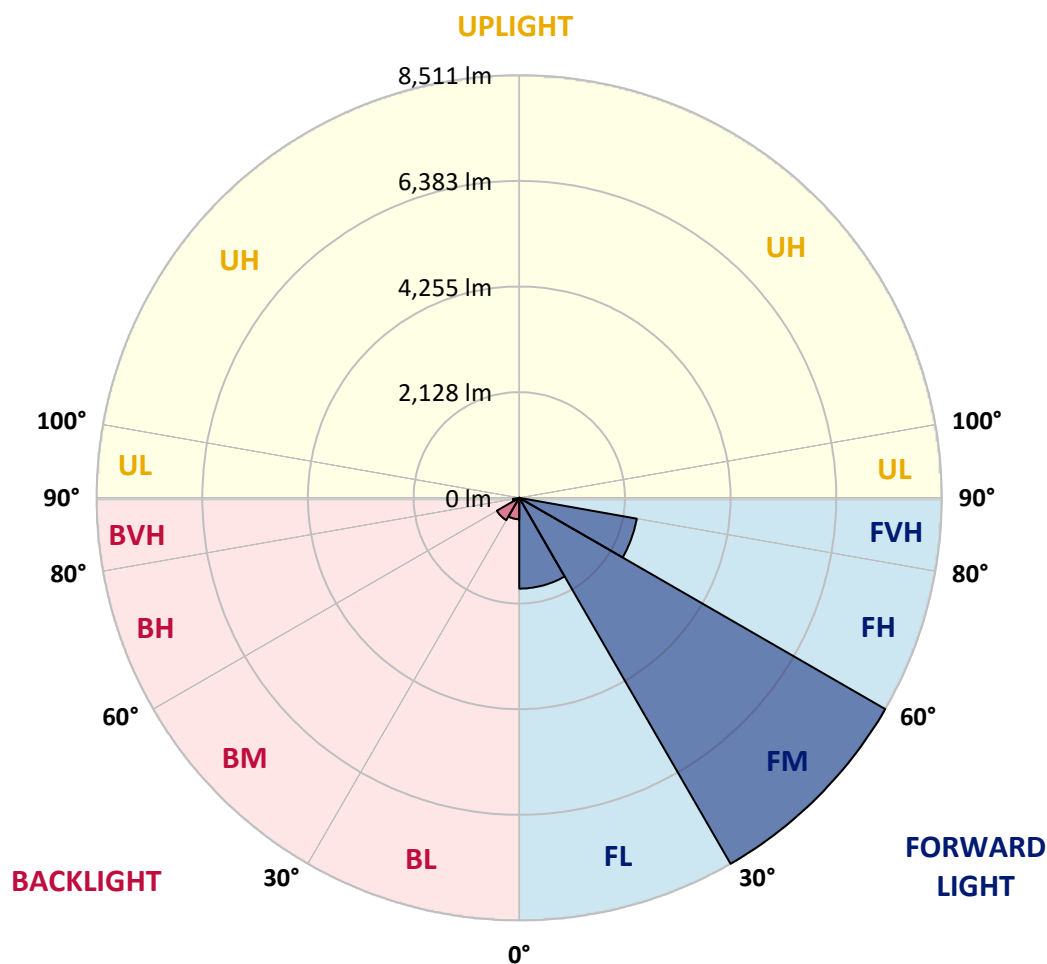
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|--------|-----------|-------------------------|------|---------|
|      |             |        |           | B                       | U    | G       |
| FL   | (0°-30°)    | 1828.7 | 13.2      |                         |      |         |
| FM   | (30°-60°)   | 8510.9 | 61.5      |                         |      |         |
| FH   | (60°-80°)   | 2403.1 | 17.4      |                         |      | G2/5000 |
| FVH  | (80°-90°)   | 23.6   | 0.2       |                         |      | G1/100  |
| BL   | (0°-30°)    | 431.7  | 3.1       | B1/500                  |      |         |
| BM   | (30°-60°)   | 519.4  | 3.8       | B1/1000                 |      |         |
| BH   | (60°-80°)   | 128.6  | 0.9       | B1/500                  |      | G1/500  |
| BVH  | (80°-90°)   | 1.7    | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0    | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0    | 0.0       |                         | U0/0 |         |

**BUG Rating: B1-U0-G2**

Type II Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°     | 5°     | 15°    | 25°    | 35°    | 45°     | 55°     | 65°     | 75°     | 85°    | 90°    |
|-------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|--------|
| 0°    | 3337.0 | 3337.0 | 3337.0 | 3337.0 | 3337.0 | 3337.0  | 3337.0  | 3337.0  | 3337.0  | 3337.0 | 3337.0 |
| 2.5°  | 4140.5 | 4088.4 | 4080.7 | 4070.5 | 3971.4 | 3897.2  | 3789.5  | 3671.7  | 3539.3  | 3404.4 | 3344.7 |
| 5°    | 4783.5 | 4742.5 | 4734.8 | 4686.9 | 4574.3 | 4447.9  | 4256.6  | 4014.9  | 3768.2  | 3477.8 | 3353.2 |
| 7.5°  | 4908.1 | 4900.4 | 4935.5 | 4933.7 | 4918.4 | 4818.4  | 4657.1  | 4369.3  | 3998.7  | 3568.3 | 3375.4 |
| 10°   | 4352.3 | 4371.8 | 4476.1 | 4567.4 | 4814.2 | 4957.6  | 4922.7  | 4685.3  | 4236.1  | 3671.7 | 3400.1 |
| 12.5° | 3845.9 | 3822.8 | 3897.2 | 4000.5 | 4287.4 | 4714.3  | 5032.8  | 4949.1  | 4507.6  | 3788.7 | 3436.8 |
| 15°   | 3528.3 | 3518.8 | 3560.6 | 3608.5 | 3827.1 | 4257.4  | 4904.7  | 5163.4  | 4768.9  | 3927.0 | 3492.4 |
| 17.5° | 3426.6 | 3419.0 | 3431.7 | 3443.7 | 3585.4 | 3918.5  | 4599.9  | 5294.9  | 5019.1  | 4084.9 | 3553.9 |
| 20°   | 3509.5 | 3499.2 | 3497.5 | 3488.1 | 3547.0 | 3774.2  | 4324.1  | 5304.3  | 5243.7  | 4228.4 | 3606.8 |
| 22.5° | 3751.1 | 3739.1 | 3697.3 | 3659.8 | 3664.9 | 3793.8  | 4201.1  | 5210.4  | 5412.7  | 4362.5 | 3640.1 |
| 25°   | 4189.2 | 4169.5 | 4082.4 | 3956.0 | 3875.7 | 3930.4  | 4219.9  | 5086.6  | 5574.2  | 4467.5 | 3623.9 |
| 27.5° | 4737.3 | 4711.7 | 4599.9 | 4412.0 | 4228.4 | 4161.8  | 4355.6  | 5001.2  | 5708.2  | 4547.7 | 3588.8 |
| 30°   | 5274.4 | 5241.1 | 5130.9 | 4985.0 | 4716.8 | 4506.8  | 4600.7  | 5038.8  | 5867.9  | 4631.5 | 3542.7 |
| 32.5° | 5854.2 | 5822.6 | 5676.6 | 5495.5 | 5273.5 | 4990.9  | 4936.3  | 5222.4  | 6063.4  | 4748.4 | 3510.3 |
| 35°   | 6587.7 | 6538.2 | 6330.7 | 6083.9 | 5848.2 | 5562.2  | 5390.6  | 5539.1  | 6323.8  | 4926.9 | 3528.3 |
| 37.5° | 7422.7 | 7356.2 | 7132.5 | 6791.8 | 6484.4 | 6164.1  | 5943.9  | 5974.6  | 6705.6  | 5166.0 | 3583.7 |
| 40°   | 8210.0 | 8149.5 | 7942.8 | 7621.7 | 7235.8 | 6847.3  | 6612.5  | 6544.1  | 7232.4  | 5457.2 | 3681.1 |
| 42.5° | 8682.3 | 8627.6 | 8540.5 | 8404.8 | 8079.5 | 7683.2  | 7387.0  | 7239.2  | 7855.7  | 5805.5 | 3799.8 |
| 45°   | 8708.7 | 8660.9 | 8777.9 | 8935.8 | 8871.8 | 8607.9  | 8246.7  | 7976.1  | 8481.6  | 6132.6 | 3922.8 |
| 47.5° | 8285.2 | 8252.8 | 8607.9 | 9159.6 | 9434.5 | 9545.5  | 9212.5  | 8651.5  | 8998.2  | 6367.4 | 3973.1 |
| 50°   | 7130.7 | 7118.8 | 7849.8 | 8862.5 | 9648.8 | 10367.0 | 10231.2 | 9279.9  | 9398.6  | 6488.7 | 3925.3 |
| 52.5° | 6182.9 | 6139.4 | 6565.5 | 7911.3 | 9337.2 | 10799.0 | 11226.8 | 9896.5  | 9678.8  | 6511.7 | 3813.4 |
| 55°   | 4689.5 | 4651.0 | 5185.6 | 6319.5 | 8332.1 | 10645.3 | 11955.2 | 10532.6 | 9879.4  | 6452.8 | 3612.8 |
| 57.5° | 2515.6 | 2491.7 | 3167.0 | 4206.2 | 6513.4 | 9723.2  | 12086.7 | 11205.5 | 10048.5 | 6296.5 | 3331.9 |
| 60°   | 979.4  | 975.1  | 1227.8 | 2040.8 | 3958.6 | 7910.3  | 11423.2 | 11609.4 | 10154.4 | 6104.4 | 3097.0 |
| 62.5° | 592.6  | 605.4  | 646.4  | 916.2  | 1748.8 | 4914.1  | 9893.9  | 11149.9 | 10225.2 | 5928.5 | 2903.2 |
| 65°   | 490.2  | 491.0  | 496.1  | 629.3  | 837.6  | 2056.1  | 7448.4  | 9638.6  | 10050.2 | 5615.2 | 2628.2 |
| 67.5° | 420.1  | 427.8  | 447.4  | 499.5  | 590.9  | 901.7   | 4288.2  | 7466.3  | 8985.4  | 4885.9 | 2199.5 |
| 70°   | 331.3  | 341.5  | 366.3  | 410.7  | 456.0  | 564.4   | 1584.8  | 4967.9  | 6864.3  | 3682.8 | 1663.4 |
| 72.5° | 279.2  | 278.4  | 291.2  | 333.8  | 362.0  | 397.1   | 609.7   | 2783.7  | 3989.3  | 1758.2 | 823.2  |
| 75°   | 216.1  | 224.6  | 240.8  | 279.2  | 296.3  | 287.7   | 330.5   | 1017.0  | 1429.4  | 532.8  | 280.0  |
| 77.5° | 169.0  | 175.9  | 190.4  | 228.0  | 245.1  | 204.1   | 190.4   | 363.8   | 459.4   | 191.3  | 126.4  |
| 80°   | 76.0   | 82.0   | 129.8  | 168.2  | 199.8  | 140.9   | 103.3   | 186.1   | 204.1   | 87.1   | 64.1   |
| 82.5° | 13.6   | 23.1   | 76.0   | 88.8   | 102.5  | 91.3    | 53.8    | 96.5    | 99.9    | 35.1   | 22.2   |
| 85°   | 0.8    | 1.7    | 26.4   | 32.5   | 41.0   | 29.9    | 16.2    | 38.4    | 33.3    | 12.0   | 8.5    |
| 87.5° | 0.0    | 0.0    | 0.0    | 0.8    | 0.8    | 4.3     | 5.1     | 6.9     | 5.1     | 4.3    | 3.4    |
| 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):**

|       | 95°    | 105°   | 115°   | 125°   | 135°   | 145°   | 155°   | 165°   | 175°   | 180°   |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0°    | 3337.0 | 3337.0 | 3337.0 | 3337.0 | 3337.0 | 3337.0 | 3337.0 | 3337.0 | 3337.0 | 3337.0 |
| 2.5°  | 3283.2 | 3161.9 | 3044.0 | 2947.6 | 2891.2 | 2795.6 | 2732.4 | 2722.2 | 2695.7 | 2718.7 |
| 5°    | 3219.9 | 3003.1 | 2783.7 | 2587.3 | 2425.9 | 2217.5 | 2062.1 | 1996.4 | 1939.2 | 1958.8 |
| 7.5°  | 3190.1 | 2847.7 | 2506.1 | 2170.5 | 1825.6 | 1492.6 | 1245.0 | 1141.6 | 1063.1 | 1074.2 |
| 10°   | 3149.9 | 2686.3 | 2151.0 | 1638.6 | 1176.6 | 847.9  | 677.1  | 614.0  | 578.9  | 579.7  |
| 12.5° | 3119.2 | 2493.3 | 1738.5 | 1110.9 | 716.4  | 541.4  | 488.4  | 473.0  | 462.8  | 463.6  |
| 15°   | 3103.9 | 2266.2 | 1331.2 | 740.4  | 512.3  | 458.6  | 445.8  | 438.9  | 432.0  | 431.2  |
| 17.5° | 3078.3 | 2013.4 | 974.3  | 540.5  | 448.3  | 429.5  | 418.4  | 410.7  | 402.2  | 400.5  |
| 20°   | 3039.8 | 1726.5 | 712.2  | 456.8  | 420.1  | 405.6  | 390.2  | 380.0  | 369.7  | 368.0  |
| 22.5° | 2968.9 | 1423.4 | 547.3  | 422.7  | 399.6  | 383.3  | 364.6  | 352.7  | 342.5  | 340.7  |
| 25°   | 2837.4 | 1139.1 | 461.0  | 401.3  | 381.7  | 362.0  | 341.5  | 325.3  | 315.9  | 314.3  |
| 27.5° | 2670.9 | 894.8  | 418.4  | 381.7  | 358.6  | 340.7  | 317.6  | 302.3  | 293.8  | 292.0  |
| 30°   | 2474.6 | 689.1  | 393.6  | 359.5  | 331.3  | 315.9  | 295.4  | 282.6  | 277.5  | 277.5  |
| 32.5° | 2262.8 | 550.7  | 383.3  | 337.3  | 307.4  | 290.3  | 274.1  | 269.0  | 267.2  | 266.4  |
| 35°   | 2063.8 | 478.2  | 378.2  | 319.4  | 286.1  | 269.8  | 263.0  | 263.8  | 267.2  | 267.2  |
| 37.5° | 1887.1 | 455.1  | 375.7  | 306.6  | 267.2  | 252.8  | 257.0  | 264.7  | 261.3  | 261.3  |
| 40°   | 1727.4 | 457.7  | 374.0  | 297.1  | 251.9  | 243.3  | 251.9  | 245.9  | 237.4  | 236.6  |
| 42.5° | 1605.3 | 479.0  | 370.5  | 289.5  | 242.5  | 236.6  | 233.1  | 223.8  | 222.8  | 224.6  |
| 45°   | 1516.5 | 497.8  | 369.7  | 286.1  | 232.3  | 221.2  | 216.9  | 207.5  | 224.6  | 228.9  |
| 47.5° | 1411.4 | 497.8  | 369.7  | 274.1  | 215.1  | 210.9  | 204.1  | 193.8  | 210.9  | 215.1  |
| 50°   | 1275.7 | 466.2  | 355.3  | 260.5  | 201.5  | 199.0  | 187.0  | 174.1  | 170.8  | 173.3  |
| 52.5° | 1104.0 | 409.0  | 318.5  | 241.7  | 187.9  | 182.8  | 168.2  | 158.8  | 156.2  | 156.2  |
| 55°   | 908.6  | 342.5  | 269.0  | 214.3  | 173.3  | 163.9  | 153.6  | 149.4  | 146.9  | 145.1  |
| 57.5° | 738.6  | 281.0  | 216.1  | 190.4  | 159.7  | 147.7  | 144.3  | 139.2  | 134.9  | 132.3  |
| 60°   | 606.3  | 221.2  | 178.5  | 169.0  | 146.1  | 134.9  | 134.1  | 127.2  | 116.1  | 114.4  |
| 62.5° | 467.9  | 162.3  | 150.3  | 146.9  | 132.3  | 123.0  | 121.3  | 107.6  | 90.5   | 87.1   |
| 65°   | 330.5  | 126.4  | 121.3  | 128.9  | 117.9  | 109.3  | 105.1  | 84.6   | 66.6   | 64.1   |
| 67.5° | 232.3  | 105.9  | 95.6   | 112.7  | 102.5  | 91.3   | 88.8   | 71.8   | 55.5   | 53.8   |
| 70°   | 165.6  | 86.2   | 78.5   | 96.5   | 82.0   | 80.3   | 75.1   | 59.8   | 45.3   | 43.6   |
| 72.5° | 117.0  | 65.7   | 60.6   | 83.6   | 56.4   | 69.2   | 61.5   | 46.1   | 34.1   | 32.5   |
| 75°   | 86.2   | 46.9   | 42.7   | 48.7   | 41.0   | 52.1   | 43.6   | 30.7   | 21.3   | 20.5   |
| 77.5° | 63.1   | 29.9   | 25.6   | 23.9   | 23.9   | 32.5   | 23.9   | 12.8   | 9.4    | 8.5    |
| 80°   | 44.4   | 13.6   | 12.0   | 10.2   | 9.4    | 7.7    | 3.4    | 1.7    | 0.8    | 0.8    |
| 82.5° | 26.4   | 5.9    | 5.9    | 4.3    | 2.6    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 5.9    | 2.6    | 2.6    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 0.8    | 0.8    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 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    |

(END OF REPORT)