

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: P968857

Luminaire Tested: **NAV-SB5C-750-U-T4W-HSS**

Issue Date: 1/21/2025

### Test Information

Test Method: LM-79-08  
Report Number: P968857  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-750-U-T4W-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 5000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE  
OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

### Summary

Lumens per Lamp: N/A  
Luminaire Lumens: 31600.8 lumens  
Efficiency: N/A  
Efficacy: 126.7 lumens/watt  
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B2 - U0 - G5

Input Watts (W): 249.5  
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

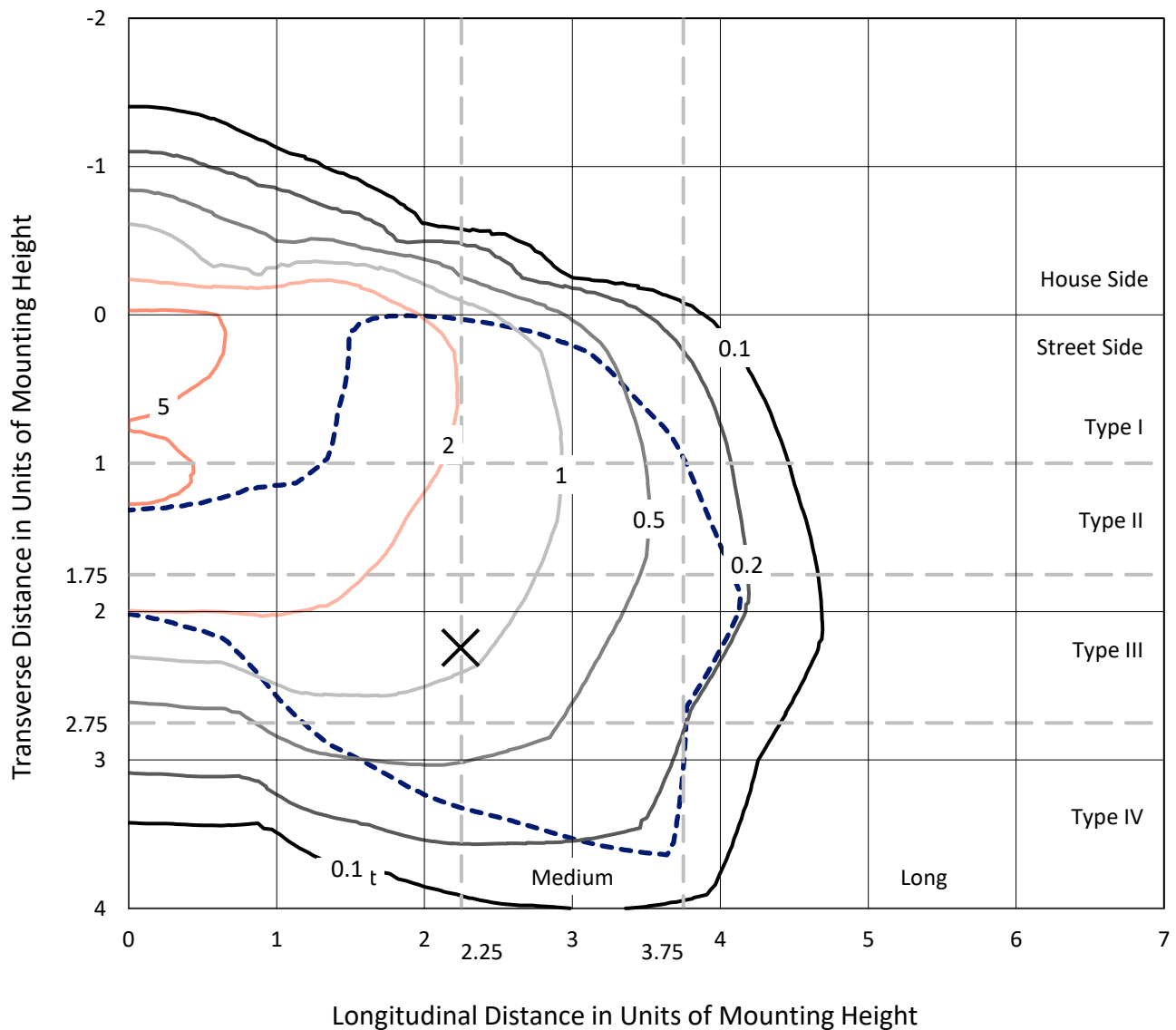


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## Iso-Footcandle Lines of Horizontal Illumination

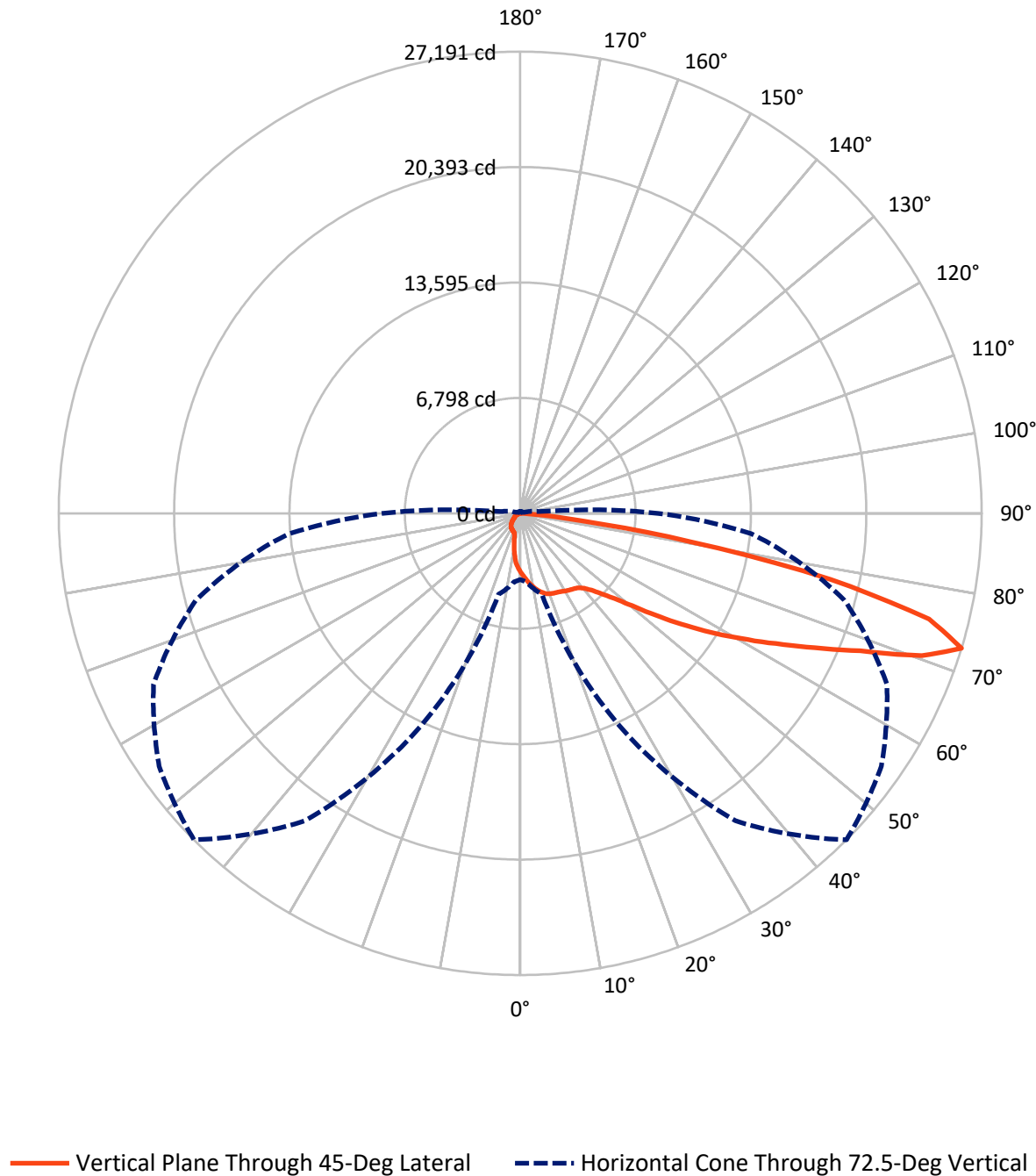
× Max cd  
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc  
Type IV - Short - N/A

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## Luminous Intensity Polar Plot



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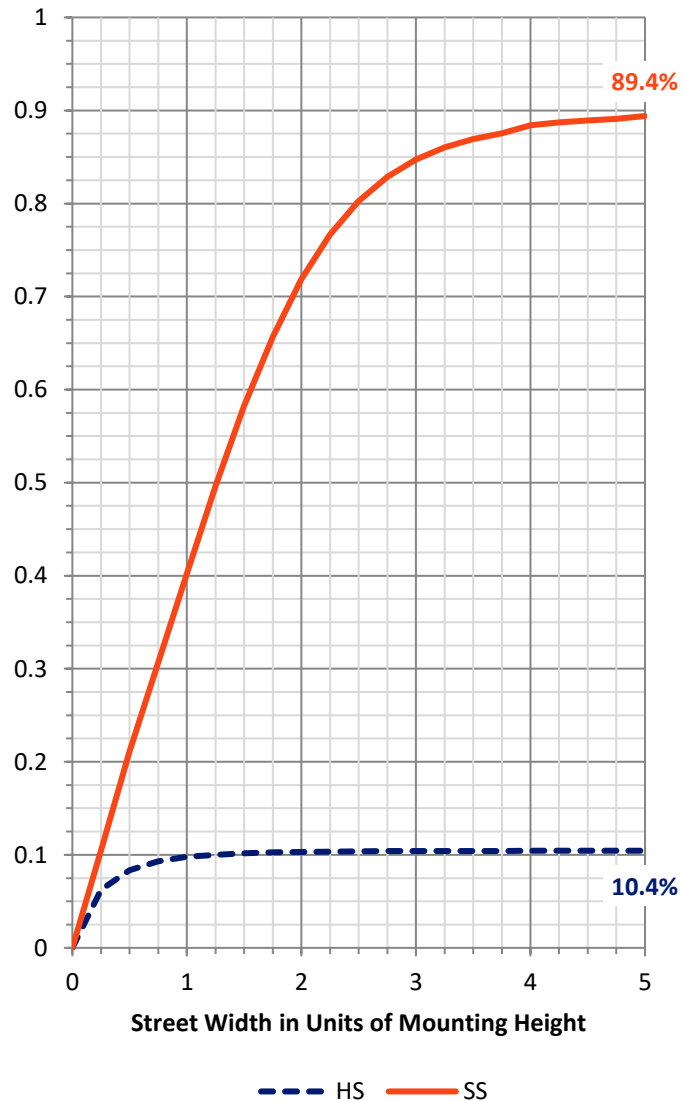
**FLUX DISTRIBUTION:**

|                    |           | Downward | Upward | Total   |
|--------------------|-----------|----------|--------|---------|
| <b>House Side</b>  | Lumens    | 3320.4   | 0.0    | 3320.4  |
|                    | % Fixture | 10.5     | 0.0    | 10.5    |
| <b>Street Side</b> | Lumens    | 28280.4  | 0.0    | 28280.4 |
|                    | % Fixture | 89.5     | 0.0    | 89.5    |
| <b>Total</b>       | Lumens    | 31600.8  | 0.0    | 31600.8 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 326.2   | 1.0       |
| 10°-20°   | 953.3   | 3.0       |
| 20°-30°   | 1565.5  | 5.0       |
| 30°-40°   | 2220.2  | 7.0       |
| 40°-50°   | 3669.7  | 11.6      |
| 50°-60°   | 6592.3  | 20.9      |
| 60°-70°   | 9153.7  | 29.0      |
| 70°-80°   | 6639.8  | 21.0      |
| 80°-90°   | 480.0   | 1.5       |
| 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°    | 31600.8 | 100.0     |
| 0°-180°   | 31600.8 | 100.0     |

**Coefficient of Utilization**



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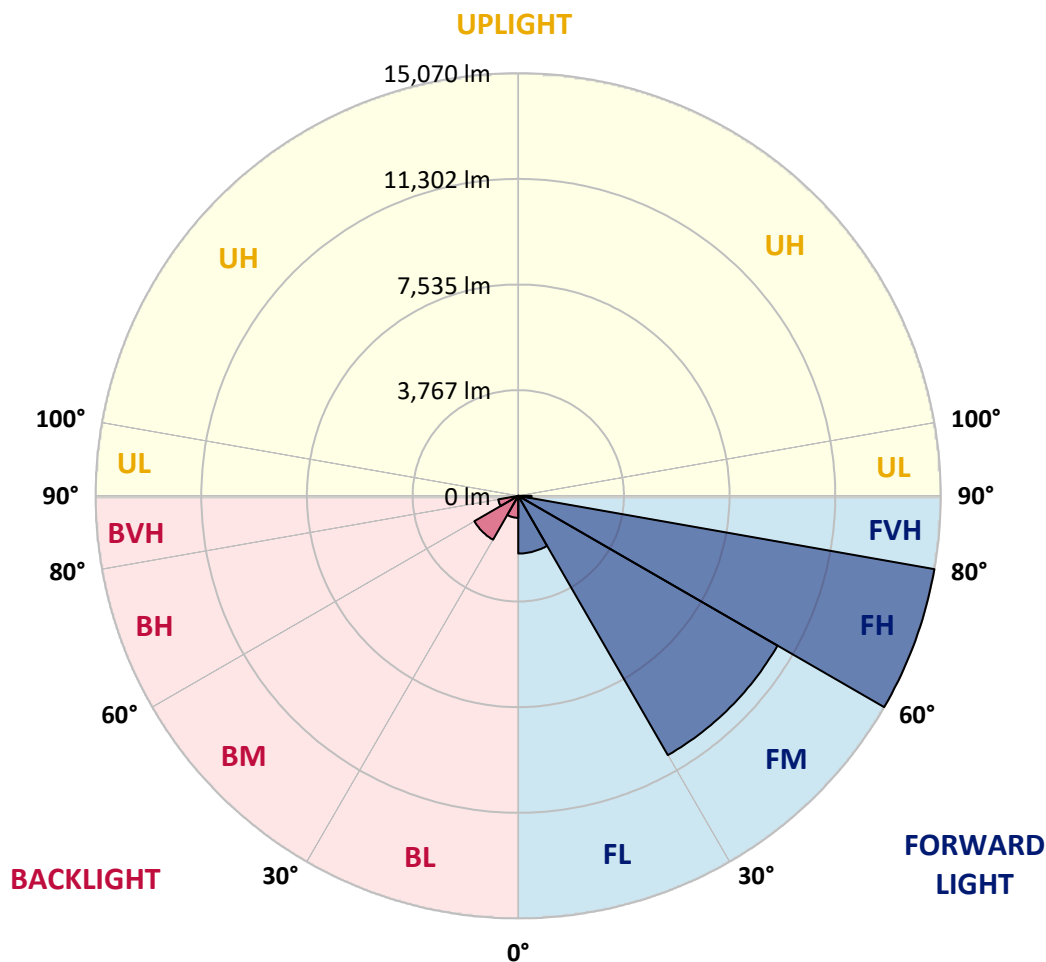
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |         |
|------|-------------|---------|-----------|-------------------------|------|---------|
|      |             |         |           | B                       | U    | G       |
| FL   | (0°-30°)    | 2058.5  | 6.5       |                         |      |         |
| FM   | (30°-60°)   | 10676.4 | 33.8      |                         |      |         |
| FH   | (60°-80°)   | 15069.5 | 47.7      |                         |      | G5      |
| FVH  | (80°-90°)   | 476.0   | 1.5       |                         |      | G3/500  |
| BL   | (0°-30°)    | 786.5   | 2.5       | B2/1000                 |      |         |
| BM   | (30°-60°)   | 1805.8  | 5.7       | B2/2500                 |      |         |
| BH   | (60°-80°)   | 724.1   | 2.3       | B2/1000                 |      | G2/1000 |
| BVH  | (80°-90°)   | 4.0     | 0.0       |                         |      | G0/10   |
| UL   | (90°-100°)  | 0.0     | 0.0       |                         | U0/0 |         |
| UH   | (100°-180°) | 0.0     | 0.0       |                         | U0/0 |         |

**BUG Rating: B2-U0-G5**

Type IV Short



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**CANDELA DISTRIBUTION (FULL):**

|       | 0°      | 5°      | 15°     | 25°     | 35°     | 45°     | 46°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 3461.9  | 3461.9  | 3461.9  | 3461.9  | 3461.9  | 3461.9  | 3461.9  | 3461.9  | 3461.9  | 3461.9  | 3461.9  |
| 2.5°  | 3781.1  | 3787.6  | 3783.3  | 3757.4  | 3714.3  | 3690.6  | 3677.6  | 3634.4  | 3606.5  | 3556.9  | 3505.1  |
| 5°    | 4128.4  | 4154.3  | 4139.3  | 4087.5  | 4005.5  | 3947.3  | 3930.0  | 3841.6  | 3761.7  | 3669.0  | 3561.2  |
| 7.5°  | 4497.3  | 4510.2  | 4482.2  | 4415.3  | 4305.3  | 4206.1  | 4191.0  | 4068.0  | 3940.8  | 3798.4  | 3651.8  |
| 10°   | 4816.5  | 4831.6  | 4788.5  | 4691.4  | 4566.3  | 4443.4  | 4421.7  | 4285.9  | 4135.0  | 3960.2  | 3772.5  |
| 12.5° | 5084.0  | 5099.1  | 5043.0  | 4926.6  | 4788.5  | 4661.2  | 4639.7  | 4497.3  | 4331.1  | 4137.1  | 3904.1  |
| 15°   | 5286.7  | 5314.7  | 5239.3  | 5114.1  | 4965.3  | 4838.1  | 4827.2  | 4687.1  | 4525.3  | 4309.6  | 4061.6  |
| 17.5° | 5405.3  | 5433.4  | 5362.2  | 5211.2  | 5084.0  | 4976.2  | 4963.2  | 4846.7  | 4695.7  | 4488.7  | 4214.7  |
| 20°   | 5424.8  | 5450.6  | 5375.2  | 5243.6  | 5137.9  | 5051.6  | 5045.2  | 4961.0  | 4851.0  | 4652.6  | 4380.7  |
| 22.5° | 5366.5  | 5398.9  | 5329.9  | 5224.2  | 5150.8  | 5105.5  | 5096.9  | 5049.5  | 4986.9  | 4818.6  | 4536.1  |
| 25°   | 5306.1  | 5332.0  | 5280.3  | 5187.5  | 5148.7  | 5144.4  | 5150.8  | 5142.2  | 5129.3  | 4986.9  | 4717.3  |
| 27.5° | 5301.8  | 5329.9  | 5271.6  | 5183.2  | 5161.6  | 5206.9  | 5213.4  | 5254.4  | 5265.1  | 5140.1  | 4892.0  |
| 30°   | 5338.5  | 5357.9  | 5301.8  | 5209.0  | 5198.3  | 5301.8  | 5304.0  | 5377.4  | 5394.6  | 5269.4  | 5064.5  |
| 32.5° | 5418.3  | 5439.9  | 5383.8  | 5247.9  | 5232.8  | 5377.4  | 5383.8  | 5480.9  | 5508.9  | 5407.5  | 5245.7  |
| 35°   | 5605.9  | 5631.9  | 5567.1  | 5355.7  | 5301.8  | 5448.5  | 5467.9  | 5582.3  | 5638.3  | 5554.2  | 5433.4  |
| 37.5° | 6074.0  | 5998.5  | 5910.0  | 5573.6  | 5459.3  | 5560.6  | 5593.0  | 5726.8  | 5826.0  | 5728.9  | 5657.7  |
| 40°   | 7236.6  | 6999.3  | 6723.3  | 5944.6  | 5735.4  | 5800.1  | 5826.0  | 5959.7  | 6095.6  | 6000.7  | 5966.1  |
| 42.5° | 8981.6  | 8701.2  | 8256.9  | 6798.7  | 6151.6  | 6184.0  | 6203.4  | 6319.9  | 6511.9  | 6436.4  | 6445.0  |
| 45°   | 10536.8 | 10435.4 | 9982.5  | 8256.9  | 6930.3  | 6770.7  | 6794.4  | 6854.8  | 7137.4  | 7109.4  | 7165.5  |
| 47.5° | 11731.7 | 11673.5 | 11324.1 | 9930.7  | 8246.1  | 7489.0  | 7555.9  | 7583.9  | 7991.5  | 8090.7  | 8241.7  |
| 50°   | 12650.7 | 12629.0 | 12316.3 | 11419.0 | 9965.2  | 8548.1  | 8571.8  | 8511.4  | 9121.8  | 9367.7  | 9654.6  |
| 52.5° | 13517.7 | 13591.0 | 13360.3 | 12801.6 | 11800.7 | 9935.0  | 9930.7  | 9646.0  | 10469.9 | 10840.9 | 11330.6 |
| 55°   | 14300.7 | 14326.5 | 14350.3 | 14212.2 | 13647.2 | 11513.9 | 11472.9 | 11007.0 | 12033.7 | 12417.7 | 12948.3 |
| 57.5° | 15036.2 | 15047.0 | 15258.4 | 15540.9 | 15568.9 | 13209.3 | 13133.7 | 12575.1 | 13742.1 | 14016.0 | 14341.7 |
| 60°   | 15530.2 | 15579.8 | 16026.3 | 16811.4 | 17154.3 | 14958.5 | 14917.5 | 14348.2 | 15480.6 | 15607.8 | 15547.4 |
| 62.5° | 14818.3 | 15120.3 | 16246.2 | 17803.6 | 18651.3 | 16897.6 | 16878.3 | 16343.3 | 17309.7 | 17206.2 | 16688.4 |
| 65°   | 11994.9 | 12506.1 | 14486.2 | 18474.4 | 20120.1 | 19063.3 | 19091.3 | 18521.9 | 19188.4 | 18851.9 | 17616.0 |
| 67.5° | 8390.5  | 8929.8  | 11272.3 | 18528.3 | 21761.7 | 21606.3 | 21768.1 | 20875.1 | 21183.6 | 20428.7 | 17835.9 |
| 70°   | 5802.2  | 6080.5  | 7605.5  | 17367.9 | 23040.7 | 25109.2 | 25104.9 | 23765.4 | 23168.0 | 21146.9 | 16714.4 |
| 72.5° | 3902.0  | 4046.5  | 4939.5  | 13778.7 | 22100.2 | 27190.7 | 27065.6 | 25974.2 | 23836.6 | 19777.2 | 13655.8 |
| 75°   | 1645.7  | 1751.4  | 2286.4  | 7743.5  | 17484.3 | 24876.2 | 24537.7 | 22954.5 | 21179.3 | 15573.3 | 8520.0  |
| 77.5° | 522.0   | 567.2   | 901.6   | 2771.7  | 9630.9  | 18698.8 | 18340.6 | 14335.2 | 14195.0 | 7812.6  | 3114.7  |
| 80°   | 248.0   | 289.0   | 506.9   | 1112.9  | 3789.8  | 10170.0 | 10120.4 | 6503.2  | 6106.3  | 2109.6  | 625.6   |
| 82.5° | 107.8   | 127.3   | 280.4   | 595.3   | 1695.4  | 3628.0  | 3701.4  | 2213.1  | 1831.3  | 800.2   | 192.0   |
| 85°   | 34.5    | 45.3    | 129.5   | 274.0   | 716.1   | 901.6   | 890.8   | 526.3   | 737.7   | 435.7   | 66.8    |
| 87.5° | 0.0     | 0.0     | 43.2    | 62.5    | 73.3    | 51.8    | 58.2    | 45.3    | 204.9   | 120.7   | 23.7    |
| 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°    | 3461.9  | 3461.9 | 3461.9 | 3461.9 | 3461.9 | 3461.9 | 3461.9 | 3461.9 | 3461.9 | 3461.9 | 3461.9 |
| 2.5°  | 3479.2  | 3444.7 | 3384.2 | 3328.2 | 3278.6 | 3229.0 | 3198.8 | 3155.7 | 3151.4 | 3151.4 | 3162.1 |
| 5°    | 3502.9  | 3446.9 | 3338.9 | 3224.6 | 3093.0 | 2968.0 | 2842.8 | 2722.1 | 2683.2 | 2655.3 | 2668.2 |
| 7.5°  | 3571.9  | 3483.5 | 3313.1 | 3095.3 | 2845.0 | 2571.1 | 2379.1 | 2172.1 | 2092.2 | 2049.1 | 2055.6 |
| 10°   | 3671.1  | 3550.4 | 3291.5 | 2909.8 | 2504.3 | 2131.1 | 1857.2 | 1632.8 | 1546.5 | 1509.8 | 1509.8 |
| 12.5° | 3781.1  | 3632.3 | 3252.7 | 2678.9 | 2131.1 | 1684.6 | 1417.2 | 1313.6 | 1300.6 | 1300.6 | 1300.6 |
| 15°   | 3912.7  | 3731.5 | 3185.8 | 2407.2 | 1740.7 | 1333.0 | 1238.1 | 1242.4 | 1255.3 | 1264.0 | 1264.0 |
| 17.5° | 4048.6  | 3837.3 | 3080.1 | 2103.0 | 1395.5 | 1199.2 | 1201.4 | 1207.9 | 1218.7 | 1227.3 | 1227.3 |
| 20°   | 4195.3  | 3943.0 | 2939.9 | 1779.5 | 1197.1 | 1160.4 | 1167.0 | 1173.4 | 1182.0 | 1186.3 | 1188.5 |
| 22.5° | 4352.8  | 4042.2 | 2773.9 | 1462.5 | 1130.3 | 1128.1 | 1130.3 | 1136.7 | 1147.5 | 1147.5 | 1151.8 |
| 25°   | 4521.0  | 4152.2 | 2584.0 | 1231.6 | 1095.7 | 1095.7 | 1100.0 | 1104.3 | 1112.9 | 1112.9 | 1115.2 |
| 27.5° | 4693.6  | 4253.5 | 2383.4 | 1110.8 | 1065.6 | 1063.3 | 1063.3 | 1069.9 | 1074.2 | 1076.4 | 1078.5 |
| 30°   | 4883.4  | 4372.1 | 2182.8 | 1085.0 | 1041.8 | 1031.0 | 1024.6 | 1028.9 | 1033.2 | 1035.4 | 1039.7 |
| 32.5° | 5077.5  | 4486.5 | 2003.8 | 1095.7 | 1018.1 | 998.7  | 977.1  | 972.8  | 972.8  | 981.4  | 987.9  |
| 35°   | 5293.2  | 4611.6 | 1865.8 | 1132.4 | 1005.1 | 951.2  | 916.8  | 897.3  | 899.4  | 912.4  | 918.9  |
| 37.5° | 5552.0  | 4762.6 | 1764.4 | 1164.8 | 996.5  | 897.3  | 841.2  | 817.5  | 802.4  | 817.5  | 813.1  |
| 40°   | 5890.7  | 4984.8 | 1691.0 | 1190.6 | 985.7  | 834.8  | 759.2  | 720.5  | 692.4  | 701.0  | 696.7  |
| 42.5° | 6388.9  | 5334.2 | 1663.1 | 1192.8 | 962.0  | 761.4  | 675.2  | 623.4  | 582.4  | 584.6  | 575.9  |
| 45°   | 7087.8  | 5886.4 | 1807.6 | 1164.8 | 910.2  | 681.6  | 586.7  | 517.6  | 491.8  | 485.3  | 476.7  |
| 47.5° | 8045.4  | 6690.9 | 2141.8 | 1106.5 | 834.8  | 603.9  | 500.4  | 442.2  | 422.8  | 411.9  | 405.5  |
| 50°   | 9328.8  | 7724.1 | 2512.9 | 1041.8 | 759.2  | 530.6  | 429.3  | 392.6  | 379.7  | 368.8  | 366.6  |
| 52.5° | 10817.1 | 8772.4 | 2817.0 | 977.1  | 683.8  | 465.9  | 384.0  | 362.3  | 351.6  | 343.0  | 340.8  |
| 55°   | 12182.5 | 9495.0 | 2799.8 | 908.0  | 610.4  | 414.1  | 351.6  | 338.7  | 325.7  | 317.0  | 312.7  |
| 57.5° | 13032.4 | 9596.4 | 2308.0 | 832.6  | 526.3  | 373.2  | 321.3  | 312.7  | 297.7  | 286.9  | 284.7  |
| 60°   | 13422.8 | 9018.3 | 1617.8 | 733.4  | 442.2  | 334.4  | 289.0  | 284.7  | 265.3  | 250.2  | 245.9  |
| 62.5° | 13494.0 | 7944.1 | 1078.5 | 610.4  | 368.8  | 297.7  | 256.7  | 250.2  | 224.4  | 198.4  | 185.5  |
| 65°   | 13205.0 | 6408.3 | 746.3  | 476.7  | 314.9  | 258.8  | 220.0  | 207.0  | 179.1  | 153.1  | 144.5  |
| 67.5° | 12290.4 | 4499.4 | 519.8  | 343.0  | 267.4  | 204.9  | 174.8  | 170.4  | 148.8  | 127.3  | 120.7  |
| 70°   | 10614.4 | 2564.7 | 347.3  | 256.7  | 211.4  | 140.2  | 138.1  | 142.4  | 120.7  | 103.5  | 94.9   |
| 72.5° | 8138.2  | 1173.4 | 215.7  | 187.7  | 144.5  | 94.9   | 110.0  | 112.1  | 92.8   | 77.7   | 69.0   |
| 75°   | 4790.6  | 502.6  | 135.9  | 120.7  | 73.3   | 62.5   | 79.8   | 82.0   | 62.5   | 49.6   | 43.2   |
| 77.5° | 1630.7  | 189.8  | 86.3   | 71.1   | 36.7   | 34.5   | 51.8   | 51.8   | 34.5   | 19.4   | 15.1   |
| 80°   | 370.9   | 71.1   | 43.2   | 28.1   | 17.2   | 15.1   | 17.2   | 15.1   | 8.6    | 2.2    | 0.0    |
| 82.5° | 105.7   | 28.1   | 17.2   | 10.8   | 6.5    | 6.5    | 2.2    | 0.0    | 0.0    | 0.0    | 0.0    |
| 85°   | 30.2    | 12.9   | 4.3    | 4.3    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| 87.5° | 12.9    | 2.2    | 0.0    | 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    | 0.0    |

(END OF REPORT)