

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: P968793

Luminaire Tested: **NAV-SB5C-735-U-T4FT-HSS**

Issue Date: 1/21/2025

**Test Information**

Test Method: LM-79-08  
Report Number: P968793  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/21/2025  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: LUMARK  
Catalog Number: NAV-SB5C-735-U-T4FT-HSS  
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE  
(5) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV  
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29359.1 lumens  
Efficiency: N/A  
Efficacy: 117.7 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



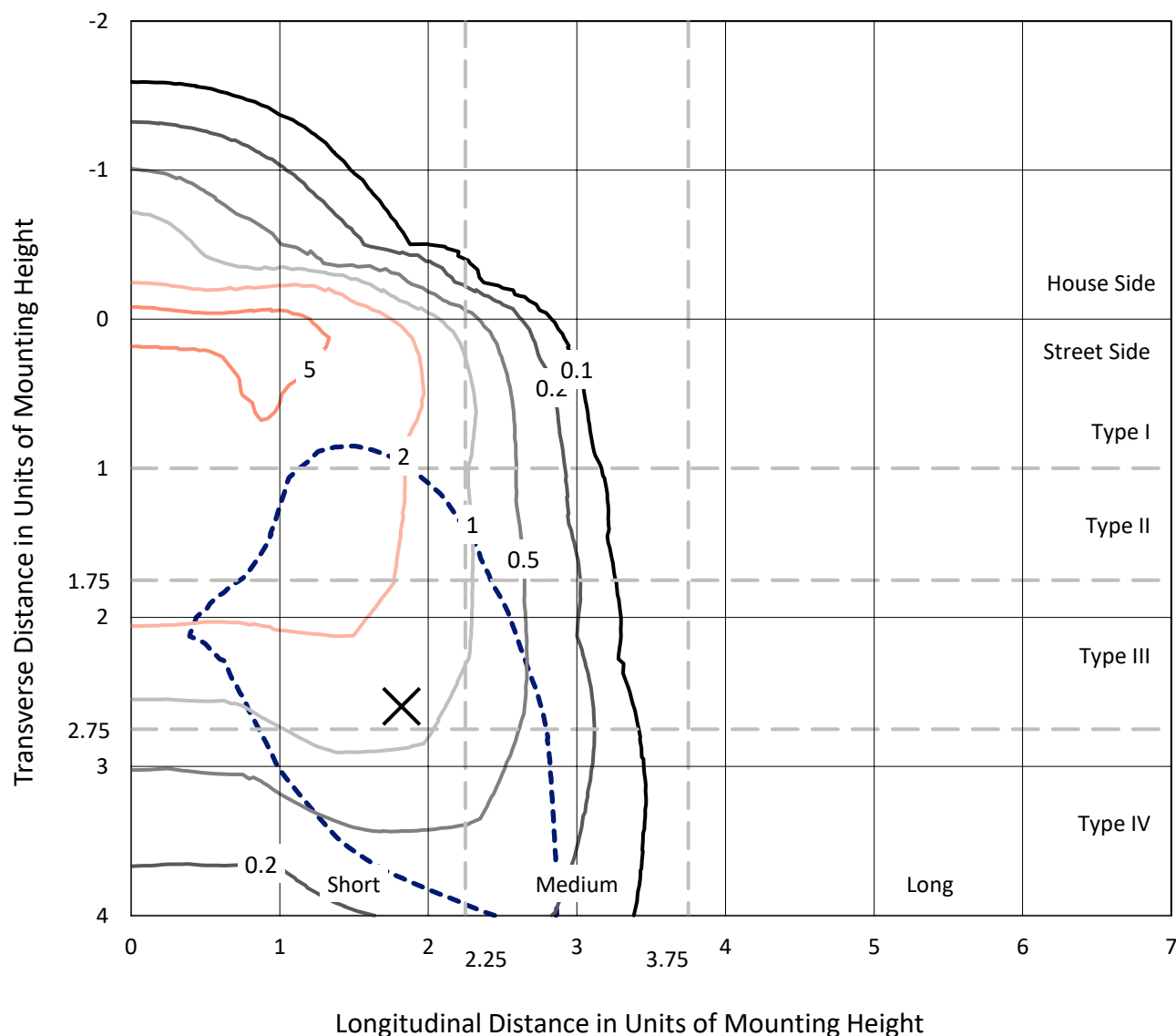
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## Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

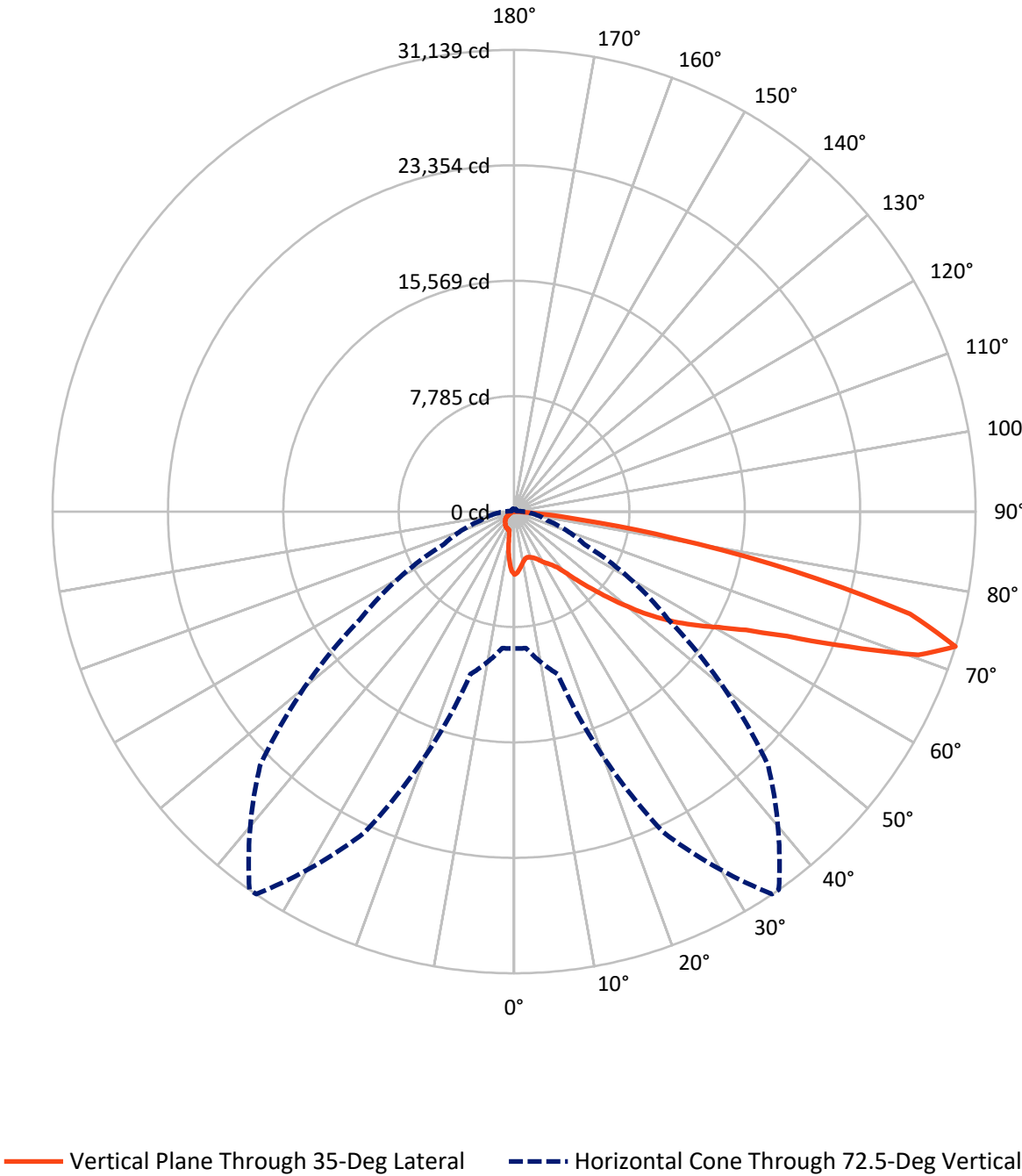


Based on 25 foot mounting height. Maximum calculated value = 6.8 fc

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    | 3304.2   | 0.0    | 3304.2  |
|                    | % Fixture | 11.3     | 0.0    | 11.3    |
| <b>Street Side</b> | Lumens    | 26054.8  | 0.0    | 26054.8 |
|                    | % Fixture | 88.7     | 0.0    | 88.7    |
| <b>Total</b>       | Lumens    | 29359.1  | 0.0    | 29359.1 |
|                    | % Fixture | 100.0    | 0.0    | 100.0   |

**ZONAL LUMENS:**

| Zone      | Lumens  | % Fixture |
|-----------|---------|-----------|
| 0°-10°    | 349.7   | 1.2       |
| 10°-20°   | 818.0   | 2.8       |
| 20°-30°   | 1328.8  | 4.5       |
| 30°-40°   | 2217.1  | 7.6       |
| 40°-50°   | 4194.8  | 14.3      |
| 50°-60°   | 6665.4  | 22.7      |
| 60°-70°   | 8245.6  | 28.1      |
| 70°-80°   | 5125.5  | 17.5      |
| 80°-90°   | 414.2   | 1.4       |
| 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°    | 29359.1 | 100.0     |
| 0°-180°   | 29359.1 | 100.0     |

**Coefficient of Utilization**



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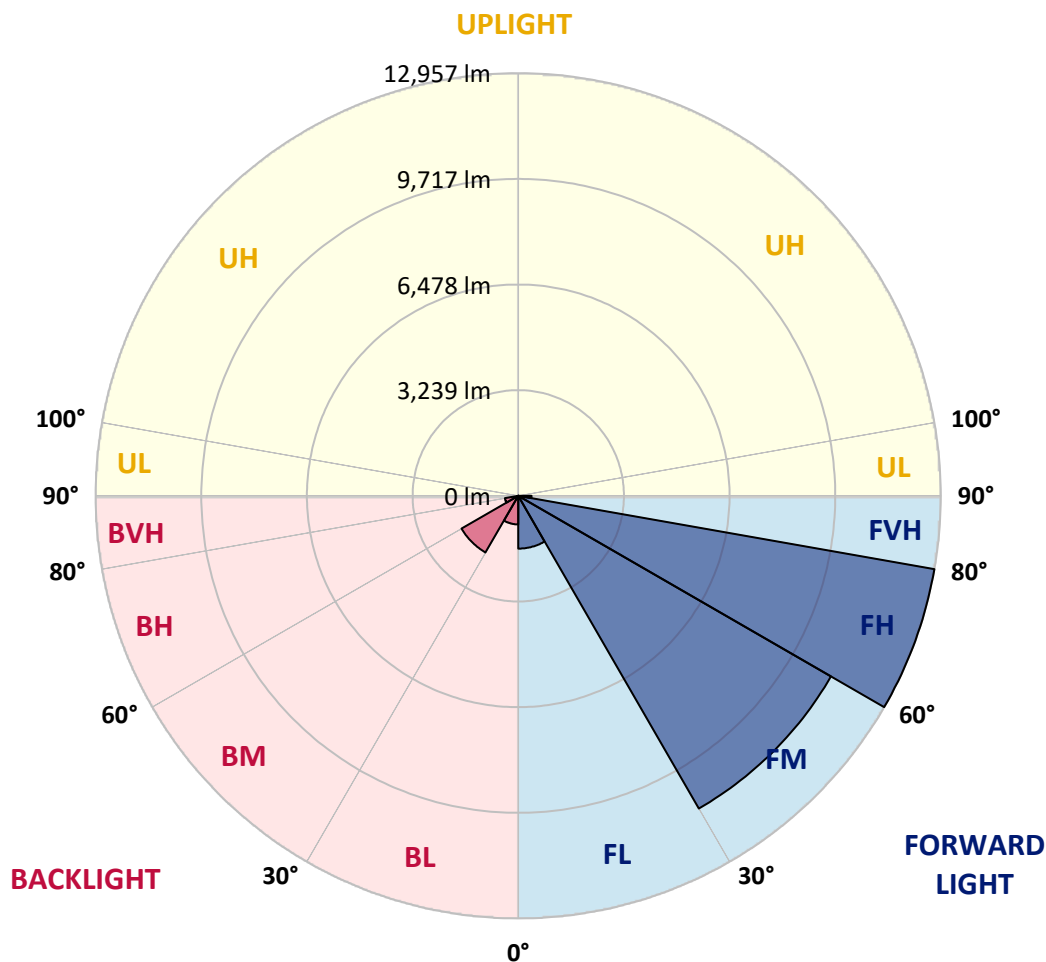
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

| Zone |             | Lumens  | % Fixture | Zone Rating/Lumen Limit |      |        |
|------|-------------|---------|-----------|-------------------------|------|--------|
|      |             |         |           | B                       | U    | G      |
| FL   | (0°-30°)    | 1618.4  | 5.5       |                         |      |        |
| FM   | (30°-60°)   | 11071.3 | 37.7      |                         |      |        |
| FH   | (60°-80°)   | 12956.5 | 44.1      |                         |      | G5     |
| FVH  | (80°-90°)   | 408.6   | 1.4       |                         |      | G3/500 |
| BL   | (0°-30°)    | 878.0   | 3.0       | B2/1000                 |      |        |
| BM   | (30°-60°)   | 2006.0  | 6.8       | B2/2500                 |      |        |
| BH   | (60°-80°)   | 414.6   | 1.4       | B1/500                  |      | G1/500 |
| BVH  | (80°-90°)   | 5.6     | 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°     | 34°     | 35°     | 45°     | 55°     | 65°     | 75°     | 85°     |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0°    | 4255.1  | 4255.1  | 4255.1  | 4255.1  | 4255.1  | 4255.1  | 4255.1  | 4255.1  | 4255.1  | 4255.1  | 4255.1  |
| 2.5°  | 4065.8  | 4100.2  | 4106.7  | 4117.4  | 4117.4  | 4130.3  | 4151.9  | 4182.0  | 4231.4  | 4257.2  | 4274.5  |
| 5°    | 3747.4  | 3773.2  | 3805.5  | 3831.3  | 3880.8  | 3887.2  | 3971.2  | 4052.8  | 4166.9  | 4252.9  | 4313.2  |
| 7.5°  | 3426.9  | 3457.0  | 3500.1  | 3562.4  | 3627.0  | 3646.3  | 3773.2  | 3910.9  | 4091.6  | 4252.9  | 4354.1  |
| 10°   | 3201.0  | 3203.1  | 3241.9  | 3304.3  | 3407.5  | 3431.2  | 3586.1  | 3781.8  | 4007.7  | 4227.1  | 4392.8  |
| 12.5° | 3074.1  | 3089.1  | 3106.4  | 3153.7  | 3252.6  | 3267.7  | 3433.3  | 3663.6  | 3923.8  | 4212.1  | 4437.9  |
| 15°   | 3074.1  | 3084.8  | 3095.6  | 3119.3  | 3198.8  | 3211.7  | 3358.1  | 3588.2  | 3880.8  | 4218.6  | 4511.1  |
| 17.5° | 3106.4  | 3123.6  | 3115.0  | 3143.0  | 3226.8  | 3235.4  | 3364.5  | 3566.7  | 3878.6  | 4259.4  | 4623.0  |
| 20°   | 3183.9  | 3196.7  | 3179.5  | 3196.7  | 3280.6  | 3297.8  | 3431.2  | 3607.6  | 3915.2  | 4330.4  | 4762.8  |
| 22.5° | 3306.4  | 3312.9  | 3272.0  | 3284.9  | 3370.9  | 3392.4  | 3547.3  | 3723.7  | 4003.4  | 4444.4  | 4949.9  |
| 25°   | 3461.3  | 3474.2  | 3411.8  | 3426.9  | 3508.7  | 3534.4  | 3713.0  | 3898.0  | 4143.3  | 4601.4  | 5188.8  |
| 27.5° | 3639.9  | 3646.3  | 3592.5  | 3590.4  | 3695.8  | 3732.3  | 3913.0  | 4113.1  | 4330.4  | 4799.4  | 5489.9  |
| 30°   | 3844.3  | 3863.6  | 3812.0  | 3803.4  | 3936.7  | 3966.9  | 4145.4  | 4377.8  | 4605.7  | 5096.2  | 5918.0  |
| 32.5° | 4005.6  | 4020.7  | 3990.5  | 4012.1  | 4147.6  | 4171.2  | 4427.2  | 4752.0  | 5038.2  | 5517.9  | 6501.0  |
| 35°   | 4237.9  | 4246.5  | 4177.7  | 4216.4  | 4371.3  | 4431.5  | 4812.3  | 5276.9  | 5582.5  | 6047.1  | 7262.5  |
| 37.5° | 5079.1  | 5079.1  | 4786.4  | 4595.0  | 4743.4  | 4797.2  | 5339.3  | 5937.4  | 6253.6  | 6757.0  | 8221.9  |
| 40°   | 6242.9  | 6223.5  | 5795.3  | 5403.9  | 5384.5  | 5489.9  | 6090.1  | 6769.9  | 7120.6  | 7608.9  | 9301.9  |
| 42.5° | 7484.1  | 7454.0  | 6871.0  | 6483.7  | 6419.3  | 6455.9  | 6957.1  | 7796.0  | 8153.2  | 8647.9  | 10463.5 |
| 45°   | 8585.5  | 8576.9  | 8043.4  | 7522.8  | 7406.6  | 7522.8  | 8039.1  | 8996.4  | 9252.4  | 9773.0  | 11623.1 |
| 47.5° | 9508.4  | 9508.4  | 9119.0  | 8779.1  | 8718.9  | 8787.7  | 9504.1  | 10328.0 | 10304.3 | 10971.2 | 12752.4 |
| 50°   | 10571.1 | 10562.5 | 10192.5 | 10046.2 | 10108.6 | 10205.4 | 11190.6 | 11730.6 | 11392.9 | 12148.0 | 13761.3 |
| 52.5° | 11315.4 | 11367.0 | 11240.2 | 11216.5 | 11534.8 | 11702.6 | 12903.0 | 13103.1 | 12367.3 | 13264.4 | 14516.5 |
| 55°   | 11904.9 | 11965.1 | 12111.4 | 12277.0 | 12890.1 | 13109.5 | 14561.7 | 14404.5 | 13182.7 | 14232.4 | 14951.0 |
| 57.5° | 12739.5 | 12653.5 | 12879.3 | 13206.3 | 14198.1 | 14462.6 | 16168.6 | 15632.9 | 13838.8 | 15017.7 | 14998.3 |
| 60°   | 13752.7 | 13765.6 | 13804.4 | 14217.5 | 15503.8 | 15843.7 | 17751.9 | 16794.6 | 14260.4 | 15499.5 | 14473.4 |
| 62.5° | 14970.3 | 14989.7 | 15069.3 | 15703.9 | 17257.1 | 17577.6 | 19438.4 | 17745.4 | 14454.0 | 15364.0 | 13118.2 |
| 65°   | 14886.5 | 14968.2 | 15856.6 | 18027.2 | 19922.4 | 20238.7 | 21406.8 | 18412.3 | 14161.5 | 14124.9 | 10680.8 |
| 67.5° | 13561.3 | 13694.7 | 15181.2 | 20802.3 | 23940.9 | 24293.7 | 23786.0 | 18543.5 | 12898.7 | 10984.1 | 6967.8  |
| 70°   | 11823.1 | 11870.4 | 13658.1 | 23297.7 | 28594.0 | 28951.1 | 25915.8 | 17100.1 | 9788.0  | 6126.6  | 3121.4  |
| 72.5° | 9233.0  | 9243.8  | 11341.2 | 23876.4 | 31119.5 | 31138.9 | 24244.2 | 12694.3 | 5264.0  | 2353.4  | 1084.2  |
| 75°   | 6595.7  | 6531.1  | 7596.0  | 19363.2 | 27378.6 | 27598.0 | 18175.7 | 5954.5  | 2011.4  | 1112.2  | 540.0   |
| 77.5° | 3536.6  | 3607.6  | 4298.1  | 11483.2 | 18913.5 | 19287.8 | 9917.1  | 1716.7  | 1024.0  | 757.3   | 357.1   |
| 80°   | 1092.9  | 1153.0  | 1761.9  | 5257.5  | 10713.1 | 10939.0 | 3676.5  | 763.7   | 714.2   | 540.0   | 234.5   |
| 82.5° | 344.2   | 357.1   | 821.7   | 2209.3  | 4446.6  | 4549.9  | 1064.9  | 432.3   | 488.3   | 357.1   | 137.7   |
| 85°   | 98.9    | 101.1   | 365.7   | 823.9   | 1099.3  | 1120.7  | 299.0   | 167.8   | 279.6   | 221.6   | 71.0    |
| 87.5° | 10.8    | 34.4    | 137.7   | 137.7   | 96.8    | 94.6    | 32.3    | 36.6    | 79.6    | 28.0    | 12.9    |
| 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°    | 4255.1  | 4255.1 | 4255.1 | 4255.1 | 4255.1 | 4255.1 | 4255.1 | 4255.1 | 4255.1 | 4255.1 | 4255.1 |
| 2.5°  | 4263.7  | 4265.8 | 4237.9 | 4190.6 | 4139.0 | 4095.9 | 4042.2 | 3999.1 | 3969.0 | 3960.4 | 3975.5 |
| 5°    | 4293.8  | 4278.8 | 4199.2 | 4055.0 | 3882.9 | 3734.5 | 3568.8 | 3437.6 | 3351.6 | 3315.1 | 3328.0 |
| 7.5°  | 4339.0  | 4296.0 | 4121.7 | 3837.8 | 3508.7 | 3216.0 | 2919.2 | 2689.0 | 2542.7 | 2469.6 | 2480.4 |
| 10°   | 4377.8  | 4291.7 | 3992.7 | 3523.7 | 3020.3 | 2577.2 | 2177.0 | 1899.5 | 1744.7 | 1671.5 | 1673.6 |
| 12.5° | 4414.3  | 4289.5 | 3824.9 | 3151.6 | 2469.6 | 1927.5 | 1555.3 | 1417.7 | 1374.6 | 1359.6 | 1355.3 |
| 15°   | 4483.1  | 4296.0 | 3614.0 | 2725.6 | 1921.1 | 1456.4 | 1320.8 | 1318.7 | 1327.3 | 1323.0 | 1320.8 |
| 17.5° | 4577.8  | 4302.4 | 3375.2 | 2273.9 | 1482.1 | 1284.3 | 1277.9 | 1297.1 | 1310.1 | 1303.6 | 1301.4 |
| 20°   | 4700.4  | 4328.3 | 3121.4 | 1826.3 | 1273.6 | 1241.3 | 1256.3 | 1273.6 | 1284.3 | 1273.6 | 1271.4 |
| 22.5° | 4872.5  | 4373.5 | 2843.9 | 1467.1 | 1206.8 | 1215.4 | 1228.4 | 1247.7 | 1258.5 | 1243.4 | 1241.3 |
| 25°   | 5083.4  | 4444.4 | 2570.7 | 1275.7 | 1174.5 | 1185.3 | 1204.7 | 1226.2 | 1239.1 | 1224.1 | 1221.9 |
| 27.5° | 5356.5  | 4558.5 | 2319.1 | 1232.7 | 1142.3 | 1148.7 | 1176.7 | 1209.0 | 1226.2 | 1206.8 | 1206.8 |
| 30°   | 5752.4  | 4745.5 | 2101.8 | 1252.0 | 1122.9 | 1107.9 | 1146.6 | 1191.8 | 1211.1 | 1193.9 | 1191.8 |
| 32.5° | 6277.3  | 5010.2 | 1968.4 | 1282.2 | 1114.4 | 1060.6 | 1097.2 | 1155.2 | 1187.5 | 1176.7 | 1176.7 |
| 35°   | 6965.7  | 5412.5 | 1916.7 | 1316.5 | 1107.9 | 1011.1 | 1036.9 | 1099.3 | 1155.2 | 1165.9 | 1165.9 |
| 37.5° | 7800.4  | 5971.8 | 1931.8 | 1331.6 | 1088.6 | 970.2  | 983.1  | 1036.9 | 1110.1 | 1144.4 | 1153.0 |
| 40°   | 8749.0  | 6623.7 | 2017.8 | 1316.5 | 1067.0 | 935.8  | 938.0  | 978.8  | 1043.3 | 1095.0 | 1112.2 |
| 42.5° | 9727.9  | 7385.1 | 2177.0 | 1260.6 | 1047.7 | 905.7  | 899.2  | 927.2  | 970.2  | 1006.8 | 1021.8 |
| 45°   | 10659.3 | 8168.2 | 2334.0 | 1183.2 | 1024.0 | 875.6  | 860.5  | 871.2  | 879.9  | 894.9  | 903.5  |
| 47.5° | 11472.4 | 8718.9 | 2288.9 | 1112.2 | 991.7  | 841.1  | 815.3  | 811.0  | 785.2  | 783.0  | 780.8  |
| 50°   | 12033.9 | 8839.4 | 2032.9 | 1041.2 | 944.4  | 802.4  | 761.6  | 735.7  | 690.5  | 669.0  | 671.2  |
| 52.5° | 12212.5 | 8363.9 | 1660.7 | 970.2  | 866.9  | 750.8  | 692.7  | 651.8  | 595.9  | 576.6  | 574.4  |
| 55°   | 11975.9 | 7432.5 | 1327.3 | 884.2  | 759.4  | 681.9  | 617.4  | 563.6  | 518.4  | 494.8  | 494.8  |
| 57.5° | 11397.2 | 6247.2 | 1049.8 | 783.0  | 645.3  | 604.4  | 540.0  | 486.2  | 447.4  | 423.8  | 419.5  |
| 60°   | 10437.7 | 4960.7 | 830.4  | 662.6  | 550.7  | 520.6  | 453.9  | 419.5  | 385.1  | 357.1  | 350.7  |
| 62.5° | 8981.4  | 3540.9 | 651.8  | 524.9  | 460.3  | 426.0  | 387.2  | 361.4  | 320.5  | 281.8  | 275.3  |
| 65°   | 7008.6  | 2166.2 | 503.4  | 385.1  | 370.0  | 352.8  | 329.1  | 305.4  | 256.0  | 217.3  | 210.8  |
| 67.5° | 4420.7  | 1026.1 | 359.3  | 290.4  | 292.5  | 283.9  | 273.2  | 253.9  | 217.3  | 182.9  | 178.6  |
| 70°   | 1946.9  | 496.9  | 236.7  | 221.6  | 217.3  | 217.3  | 225.9  | 219.5  | 185.0  | 152.7  | 146.3  |
| 72.5° | 662.6   | 266.7  | 176.4  | 167.8  | 157.0  | 154.9  | 189.3  | 182.9  | 148.4  | 118.3  | 111.8  |
| 75°   | 346.3   | 178.6  | 129.0  | 120.4  | 94.6   | 114.0  | 150.6  | 142.0  | 105.4  | 77.5   | 71.0   |
| 77.5° | 225.9   | 126.9  | 88.1   | 77.5   | 53.8   | 75.3   | 111.8  | 98.9   | 62.4   | 38.7   | 34.4   |
| 80°   | 142.0   | 83.9   | 51.7   | 36.6   | 25.8   | 40.9   | 60.3   | 43.0   | 23.7   | 8.6    | 6.5    |
| 82.5° | 75.3    | 43.0   | 19.4   | 12.9   | 10.8   | 12.9   | 15.1   | 10.8   | 4.3    | 0.0    | 0.0    |
| 85°   | 30.1    | 15.1   | 6.5    | 4.3    | 2.2    | 0.0    | 4.3    | 2.2    | 0.0    | 0.0    | 0.0    |
| 87.5° | 10.8    | 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)