

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: P885300

Luminaire Tested: **NAV-SB6C-735-U-T4FT-HSS**

Issue Date: 10/7/2024

Test Information

Test Method: LM-79-08
Report Number: P885300
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-25)
Test Lab: INNOVATION CENTER
Issue Date: 10/7/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6C-735-U-T4FT-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34417 lumens
Efficiency: N/A
Efficacy: 114.4 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1.5' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

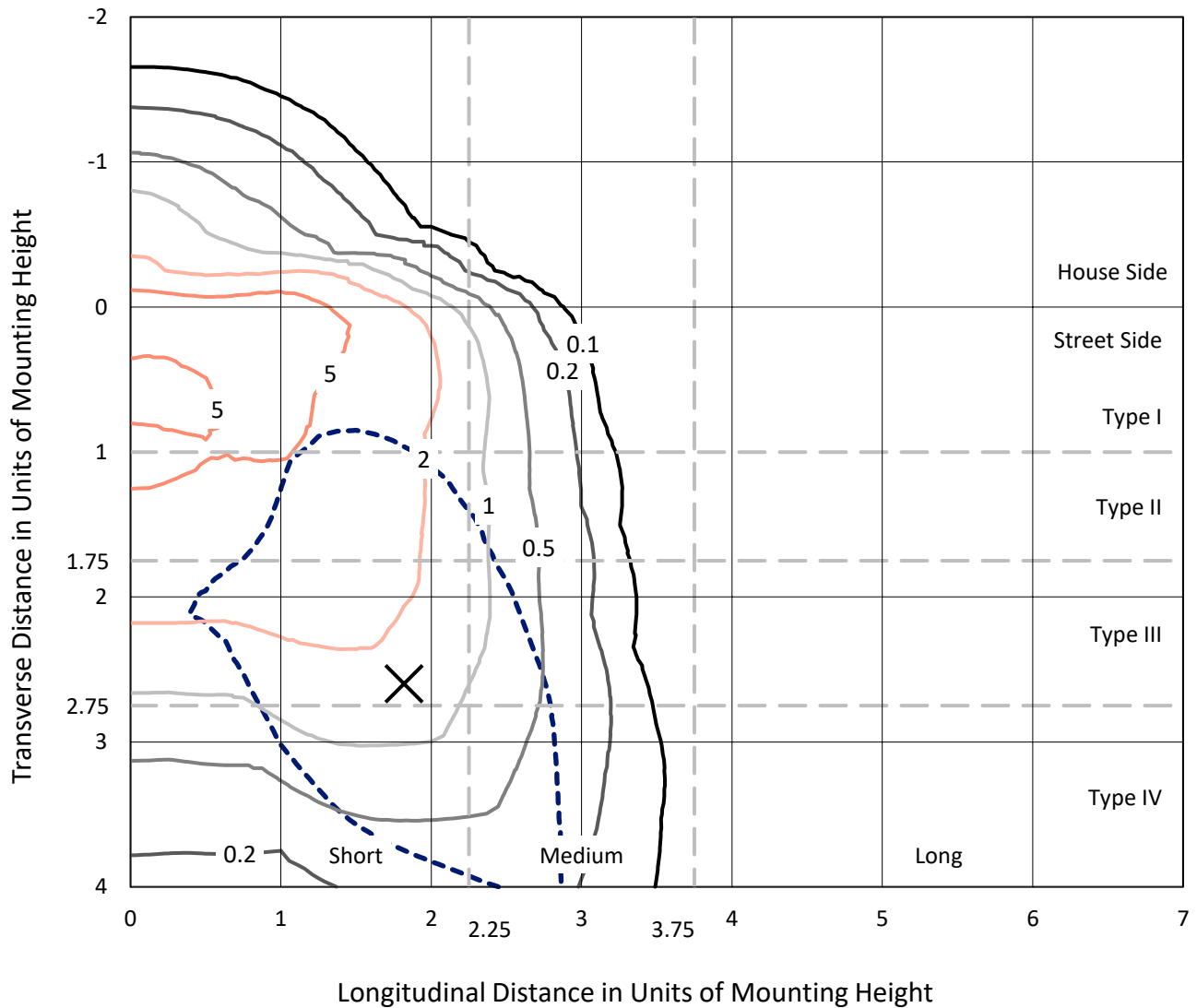
Input Watts (W): 300.9
Input Voltage (V): 120.0
Input Current (Ain): 2.518
Voltage Rise (V): NR
Power Factor: 0.997
Total Harmonic Distortion (THDi): 6.297
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

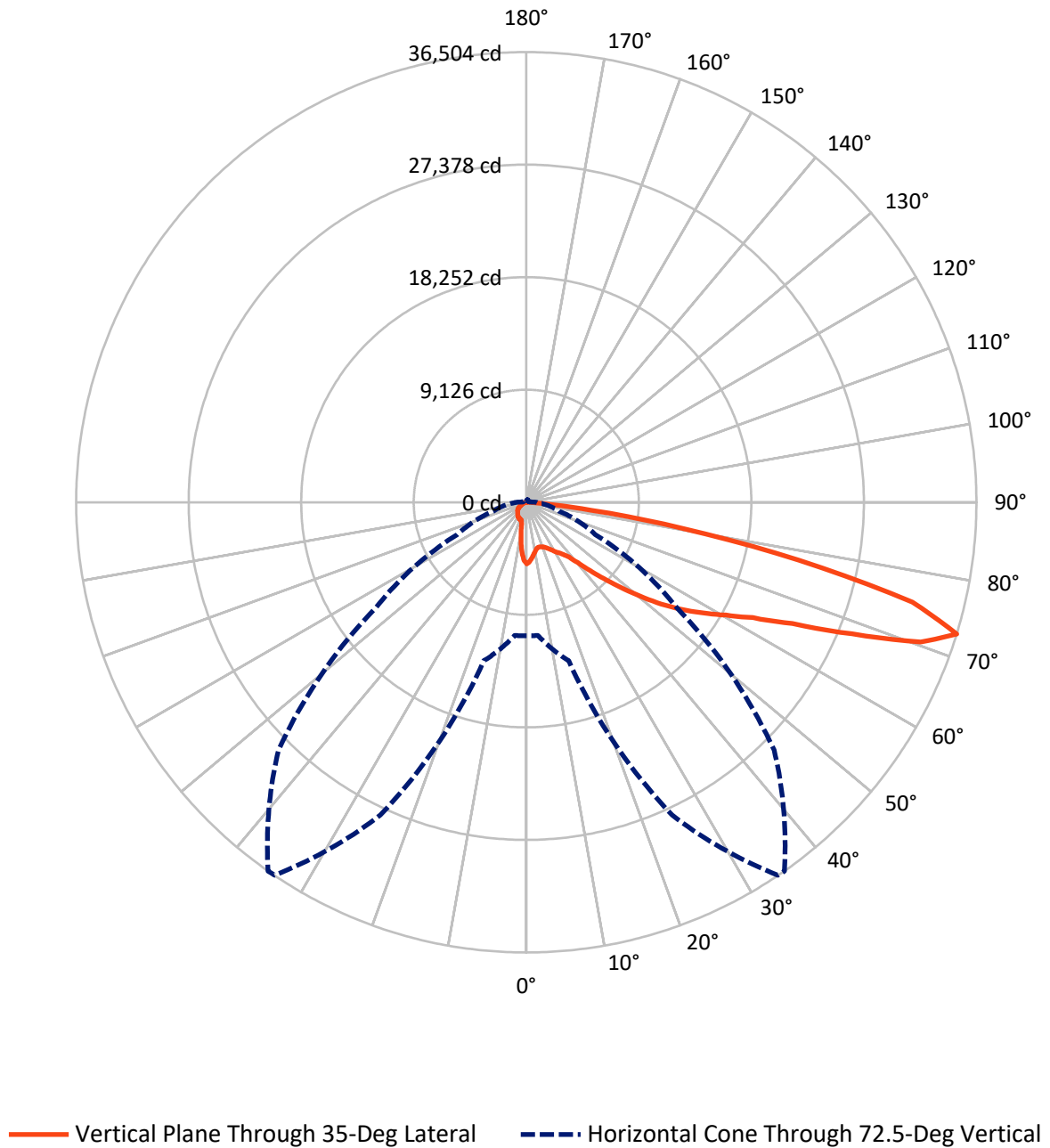
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

| | | Downward | Upward | Total |
|--------------------|-----------|----------|--------|---------|
| House Side | Lumens | 3873.5 | 0.0 | 3873.5 |
| | % Fixture | 11.3 | 0.0 | 11.3 |
| Street Side | Lumens | 30543.5 | 0.0 | 30543.5 |
| | % Fixture | 88.7 | 0.0 | 88.7 |
| Total | Lumens | 34417.0 | 0.0 | 34417.0 |
| | % Fixture | 100.0 | 0.0 | 100.0 |

ZONAL LUMENS:

| Zone | Lumens | % Fixture |
|-----------|---------|-----------|
| 0°-10° | 409.9 | 1.2 |
| 10°-20° | 958.9 | 2.8 |
| 20°-30° | 1557.7 | 4.5 |
| 30°-40° | 2599.0 | 7.6 |
| 40°-50° | 4917.4 | 14.3 |
| 50°-60° | 7813.8 | 22.7 |
| 60°-70° | 9666.2 | 28.1 |
| 70°-80° | 6008.5 | 17.5 |
| 80°-90° | 485.6 | 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° | 34417.0 | 100.0 |
| 0°-180° | 34417.0 | 100.0 |

Coefficient of Utilization



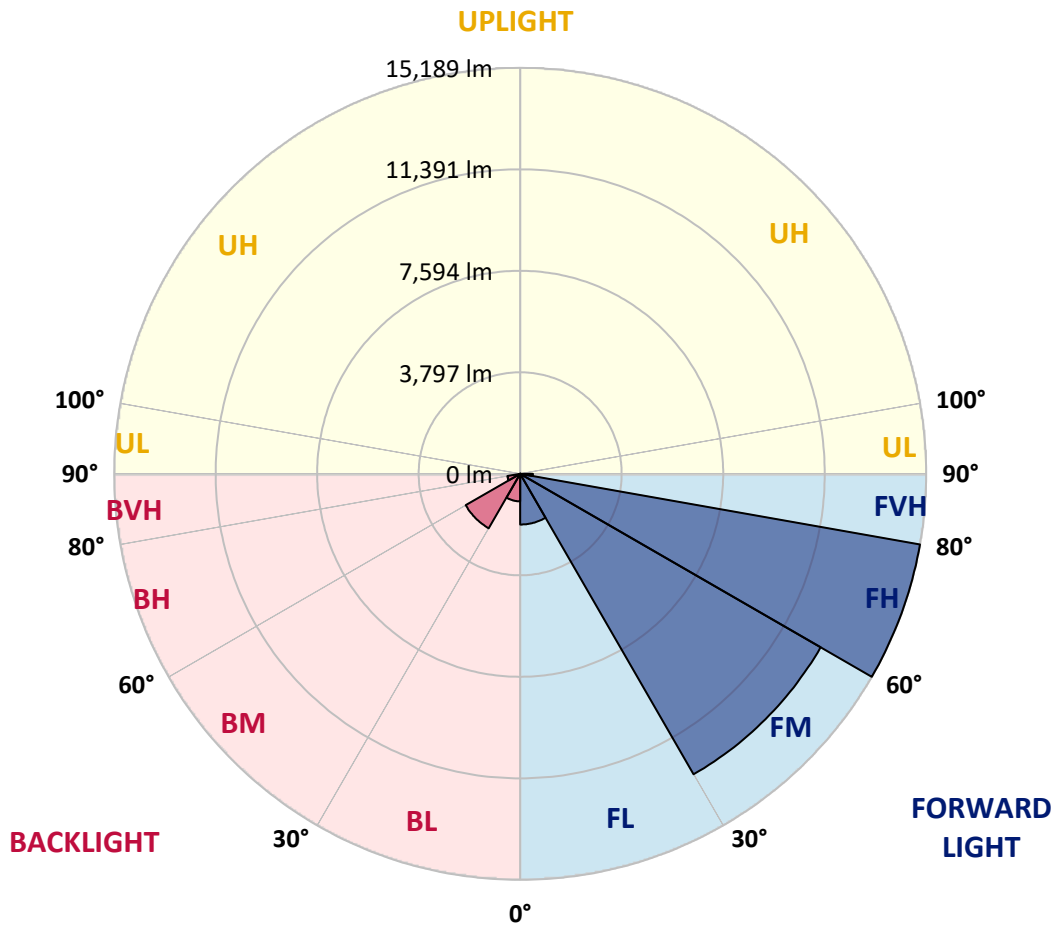
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

| Zone | Lumens | % Fixture | Zone Rating/Lumen Limit | | |
|----------------|---------|-----------|-------------------------|------|--------|
| | | | B | U | G |
| FL (0°-30°) | 1897.3 | 5.5 | | | |
| FM (30°-60°) | 12978.7 | 37.7 | | | |
| FH (60°-80°) | 15188.6 | 44.1 | | | G5 |
| FVH (80°-90°) | 479.0 | 1.4 | | | G3/500 |
| BL (0°-30°) | 1029.3 | 3.0 | B3/2500 | | |
| BM (30°-60°) | 2351.5 | 6.8 | B2/2500 | | |
| BH (60°-80°) | 486.1 | 1.4 | B1/500 | | G1/500 |
| BVH (80°-90°) | 6.6 | 0.0 | | | G0/10 |
| UL (90°-100°) | 0.0 | 0.0 | | U0/0 | |
| UH (100°-180°) | 0.0 | 0.0 | | U0/0 | |

BUG Rating: B3-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

| | 0° | 5° | 15° | 25° | 34° | 35° | 45° | 55° | 65° | 75° | 85° |
|-------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 0° | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 |
| 2.5° | 4766.3 | 4806.6 | 4814.2 | 4826.8 | 4826.8 | 4841.9 | 4867.1 | 4902.4 | 4960.4 | 4990.7 | 5010.9 |
| 5° | 4393.0 | 4423.3 | 4461.1 | 4491.4 | 4549.4 | 4556.9 | 4655.3 | 4751.1 | 4884.8 | 4985.7 | 5056.3 |
| 7.5° | 4017.3 | 4052.6 | 4103.0 | 4176.1 | 4251.8 | 4274.5 | 4423.3 | 4584.7 | 4796.5 | 4985.7 | 5104.2 |
| 10° | 3752.5 | 3755.0 | 3800.4 | 3873.5 | 3994.6 | 4022.3 | 4203.9 | 4433.4 | 4698.2 | 4955.4 | 5149.6 |
| 12.5° | 3603.7 | 3621.3 | 3641.5 | 3697.0 | 3813.0 | 3830.7 | 4024.8 | 4294.7 | 4599.8 | 4937.7 | 5202.5 |
| 15° | 3603.7 | 3616.3 | 3628.9 | 3656.7 | 3750.0 | 3765.1 | 3936.6 | 4206.4 | 4549.4 | 4945.3 | 5288.3 |
| 17.5° | 3641.5 | 3661.7 | 3651.6 | 3684.4 | 3782.7 | 3792.8 | 3944.1 | 4181.2 | 4546.9 | 4993.2 | 5419.4 |
| 20° | 3732.3 | 3747.4 | 3727.3 | 3747.4 | 3845.8 | 3866.0 | 4022.3 | 4229.1 | 4589.7 | 5076.4 | 5583.3 |
| 22.5° | 3876.1 | 3883.6 | 3835.7 | 3850.8 | 3951.7 | 3976.9 | 4158.5 | 4365.3 | 4693.1 | 5210.1 | 5802.7 |
| 25° | 4057.6 | 4072.8 | 3999.6 | 4017.3 | 4113.1 | 4143.4 | 4352.7 | 4569.6 | 4857.0 | 5394.2 | 6082.7 |
| 27.5° | 4266.9 | 4274.5 | 4211.5 | 4208.9 | 4332.5 | 4375.4 | 4587.2 | 4821.7 | 5076.4 | 5626.2 | 6435.7 |
| 30° | 4506.5 | 4529.2 | 4468.7 | 4458.6 | 4614.9 | 4650.3 | 4859.6 | 5131.9 | 5399.2 | 5974.2 | 6937.6 |
| 32.5° | 4695.6 | 4713.3 | 4678.0 | 4703.2 | 4862.1 | 4889.8 | 5189.9 | 5570.7 | 5906.1 | 6468.5 | 7621.0 |
| 35° | 4968.0 | 4978.1 | 4897.4 | 4942.8 | 5124.4 | 5195.0 | 5641.3 | 6186.0 | 6544.1 | 7088.9 | 8513.7 |
| 37.5° | 5954.0 | 5954.0 | 5611.1 | 5386.6 | 5560.6 | 5623.7 | 6259.2 | 6960.2 | 7331.0 | 7921.1 | 9638.4 |
| 40° | 7318.3 | 7295.7 | 6793.8 | 6334.8 | 6312.1 | 6435.7 | 7139.3 | 7936.2 | 8347.3 | 8919.7 | 10904.4 |
| 42.5° | 8773.4 | 8738.1 | 8054.7 | 7600.8 | 7525.1 | 7568.0 | 8155.6 | 9139.1 | 9557.7 | 10137.8 | 12266.2 |
| 45° | 10064.6 | 10054.5 | 9429.1 | 8818.8 | 8682.7 | 8818.8 | 9424.1 | 10546.3 | 10846.4 | 11456.7 | 13625.4 |
| 47.5° | 11146.5 | 11146.5 | 10690.0 | 10291.6 | 10221.0 | 10301.7 | 11141.4 | 12107.3 | 12079.6 | 12861.3 | 14949.4 |
| 50° | 12392.3 | 12382.2 | 11948.4 | 11776.9 | 11850.1 | 11963.6 | 13118.6 | 13751.5 | 13355.6 | 14240.8 | 16132.1 |
| 52.5° | 13264.8 | 13325.3 | 13176.6 | 13148.8 | 13522.0 | 13718.7 | 15125.9 | 15360.5 | 14498.0 | 15549.6 | 17017.3 |
| 55° | 13955.8 | 14026.4 | 14197.9 | 14392.1 | 15110.8 | 15368.0 | 17070.3 | 16886.2 | 15453.8 | 16684.4 | 17526.7 |
| 57.5° | 14934.3 | 14833.4 | 15098.2 | 15481.5 | 16644.1 | 16954.3 | 18954.1 | 18326.1 | 16222.9 | 17604.9 | 17582.2 |
| 60° | 16122.1 | 16137.2 | 16182.6 | 16666.8 | 18174.8 | 18573.3 | 20810.1 | 19687.9 | 16717.2 | 18169.8 | 16966.9 |
| 62.5° | 17549.4 | 17572.1 | 17665.4 | 18409.3 | 20230.1 | 20605.9 | 22787.2 | 20802.6 | 16944.2 | 18010.9 | 15378.1 |
| 65° | 17451.1 | 17546.9 | 18588.4 | 21132.9 | 23354.7 | 23725.4 | 25094.7 | 21584.3 | 16601.2 | 16558.3 | 12520.9 |
| 67.5° | 15897.6 | 16054.0 | 17796.5 | 24386.1 | 28065.4 | 28479.0 | 27883.9 | 21738.2 | 15120.9 | 12876.5 | 8168.2 |
| 70° | 13860.0 | 13915.5 | 16011.1 | 27311.4 | 33520.1 | 33938.8 | 30380.5 | 20046.0 | 11474.3 | 7182.2 | 3659.2 |
| 72.5° | 10823.7 | 10836.3 | 13295.1 | 27989.8 | 36480.8 | 36503.5 | 28421.0 | 14881.3 | 6170.9 | 2758.9 | 1271.0 |
| 75° | 7731.9 | 7656.3 | 8904.6 | 22699.0 | 32095.3 | 32352.5 | 21306.9 | 6980.4 | 2357.9 | 1303.8 | 633.0 |
| 77.5° | 4145.9 | 4229.1 | 5038.6 | 13461.5 | 22171.9 | 22610.7 | 11625.6 | 2012.4 | 1200.4 | 887.7 | 418.6 |
| 80° | 1281.1 | 1351.7 | 2065.4 | 6163.3 | 12558.7 | 12823.5 | 4309.8 | 895.2 | 837.2 | 633.0 | 274.9 |
| 82.5° | 403.5 | 418.6 | 963.3 | 2589.9 | 5212.6 | 5333.7 | 1248.3 | 506.9 | 572.5 | 418.6 | 161.4 |
| 85° | 116.0 | 118.5 | 428.7 | 965.9 | 1288.7 | 1313.9 | 350.5 | 196.7 | 327.8 | 259.7 | 83.2 |
| 87.5° | 12.6 | 40.3 | 161.4 | 161.4 | 113.5 | 111.0 | 37.8 | 42.9 | 93.3 | 32.8 | 15.1 |
| 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° | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 | 4988.2 |
| 2.5° | 4998.3 | 5000.8 | 4968.0 | 4912.5 | 4852.0 | 4801.6 | 4738.5 | 4688.1 | 4652.8 | 4642.7 | 4660.3 |
| 5° | 5033.6 | 5015.9 | 4922.6 | 4753.6 | 4551.9 | 4377.9 | 4183.7 | 4029.9 | 3929.0 | 3886.1 | 3901.3 |
| 7.5° | 5086.5 | 5036.1 | 4831.8 | 4498.9 | 4113.1 | 3770.1 | 3422.1 | 3152.3 | 2980.8 | 2895.1 | 2907.7 |
| 10° | 5131.9 | 5031.0 | 4680.5 | 4130.8 | 3540.6 | 3021.2 | 2552.1 | 2226.8 | 2045.2 | 1959.5 | 1962.0 |
| 12.5° | 5174.8 | 5028.5 | 4483.8 | 3694.5 | 2895.1 | 2259.6 | 1823.3 | 1661.9 | 1611.4 | 1593.8 | 1588.8 |
| 15° | 5255.5 | 5036.1 | 4236.7 | 3195.2 | 2252.0 | 1707.3 | 1548.4 | 1545.9 | 1556.0 | 1550.9 | 1548.4 |
| 17.5° | 5366.5 | 5043.7 | 3956.7 | 2665.6 | 1737.5 | 1505.5 | 1498.0 | 1520.7 | 1535.8 | 1528.2 | 1525.7 |
| 20° | 5510.2 | 5073.9 | 3659.2 | 2141.0 | 1492.9 | 1455.1 | 1472.7 | 1492.9 | 1505.5 | 1492.9 | 1490.4 |
| 22.5° | 5711.9 | 5126.9 | 3333.9 | 1719.9 | 1414.7 | 1424.8 | 1440.0 | 1462.7 | 1475.3 | 1457.6 | 1455.1 |
| 25° | 5959.1 | 5210.1 | 3013.6 | 1495.4 | 1376.9 | 1389.5 | 1412.2 | 1437.4 | 1452.6 | 1434.9 | 1432.4 |
| 27.5° | 6279.4 | 5343.8 | 2718.5 | 1445.0 | 1339.1 | 1346.7 | 1379.4 | 1417.3 | 1437.4 | 1414.7 | 1414.7 |
| 30° | 6743.4 | 5563.2 | 2463.8 | 1467.7 | 1316.4 | 1298.7 | 1344.1 | 1397.1 | 1419.8 | 1399.6 | 1397.1 |
| 32.5° | 7358.7 | 5873.3 | 2307.5 | 1503.0 | 1306.3 | 1243.3 | 1286.1 | 1354.2 | 1392.0 | 1379.4 | 1379.4 |
| 35° | 8165.7 | 6344.9 | 2246.9 | 1543.4 | 1298.7 | 1185.3 | 1215.5 | 1288.7 | 1354.2 | 1366.8 | 1366.8 |
| 37.5° | 9144.2 | 7000.6 | 2264.6 | 1561.0 | 1276.0 | 1137.3 | 1152.5 | 1215.5 | 1301.3 | 1341.6 | 1351.7 |
| 40° | 10256.3 | 7764.7 | 2365.5 | 1543.4 | 1250.8 | 1097.0 | 1099.5 | 1147.4 | 1223.1 | 1283.6 | 1303.8 |
| 42.5° | 11403.7 | 8657.4 | 2552.1 | 1477.8 | 1228.1 | 1061.7 | 1054.1 | 1086.9 | 1137.3 | 1180.2 | 1197.9 |
| 45° | 12495.7 | 9575.4 | 2736.2 | 1387.0 | 1200.4 | 1026.4 | 1008.7 | 1021.3 | 1031.4 | 1049.1 | 1059.2 |
| 47.5° | 13448.9 | 10221.0 | 2683.2 | 1303.8 | 1162.6 | 986.0 | 955.8 | 950.7 | 920.5 | 917.9 | 915.4 |
| 50° | 14107.1 | 10362.2 | 2383.1 | 1220.6 | 1107.1 | 940.6 | 892.7 | 862.5 | 809.5 | 784.3 | 786.8 |
| 52.5° | 14316.4 | 9804.9 | 1946.9 | 1137.3 | 1016.3 | 880.1 | 812.0 | 764.1 | 698.5 | 675.9 | 673.3 |
| 55° | 14039.0 | 8712.9 | 1556.0 | 1036.5 | 890.2 | 799.4 | 723.8 | 660.7 | 607.8 | 580.0 | 580.0 |
| 57.5° | 13360.6 | 7323.4 | 1230.7 | 917.9 | 756.5 | 708.6 | 633.0 | 569.9 | 524.5 | 496.8 | 491.8 |
| 60° | 12235.9 | 5815.3 | 973.4 | 776.7 | 645.6 | 610.3 | 532.1 | 491.8 | 451.4 | 418.6 | 411.1 |
| 62.5° | 10528.6 | 4150.9 | 764.1 | 615.3 | 539.7 | 499.3 | 453.9 | 423.7 | 375.8 | 330.4 | 322.8 |
| 65° | 8216.1 | 2539.5 | 590.1 | 451.4 | 433.8 | 413.6 | 385.8 | 358.1 | 300.1 | 254.7 | 247.1 |
| 67.5° | 5182.4 | 1202.9 | 421.1 | 340.4 | 343.0 | 332.9 | 320.3 | 297.6 | 254.7 | 214.4 | 209.3 |
| 70° | 2282.3 | 582.5 | 277.4 | 259.7 | 254.7 | 254.7 | 264.8 | 257.2 | 216.9 | 179.0 | 171.5 |
| 72.5° | 776.7 | 312.7 | 206.8 | 196.7 | 184.1 | 181.6 | 221.9 | 214.4 | 174.0 | 138.7 | 131.1 |
| 75° | 406.0 | 209.3 | 151.3 | 141.2 | 111.0 | 133.7 | 176.5 | 166.4 | 123.6 | 90.8 | 83.2 |
| 77.5° | 264.8 | 148.8 | 103.4 | 90.8 | 63.0 | 88.3 | 131.1 | 116.0 | 73.1 | 45.4 | 40.3 |
| 80° | 166.4 | 98.4 | 60.5 | 42.9 | 30.3 | 47.9 | 70.6 | 50.4 | 27.7 | 10.1 | 7.6 |
| 82.5° | 88.3 | 50.4 | 22.7 | 15.1 | 12.6 | 15.1 | 17.7 | 12.6 | 5.0 | 0.0 | 0.0 |
| 85° | 35.3 | 17.7 | 7.6 | 5.0 | 2.5 | 0.0 | 5.0 | 2.5 | 0.0 | 0.0 | 0.0 |
| 87.5° | 12.6 | 2.5 | 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)