

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: P967750

Luminaire Tested: **NAV-SB5A-740-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967750
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5A-740-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24423.7 lumens
Efficiency: N/A
Efficacy: 172.4 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 141.7
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



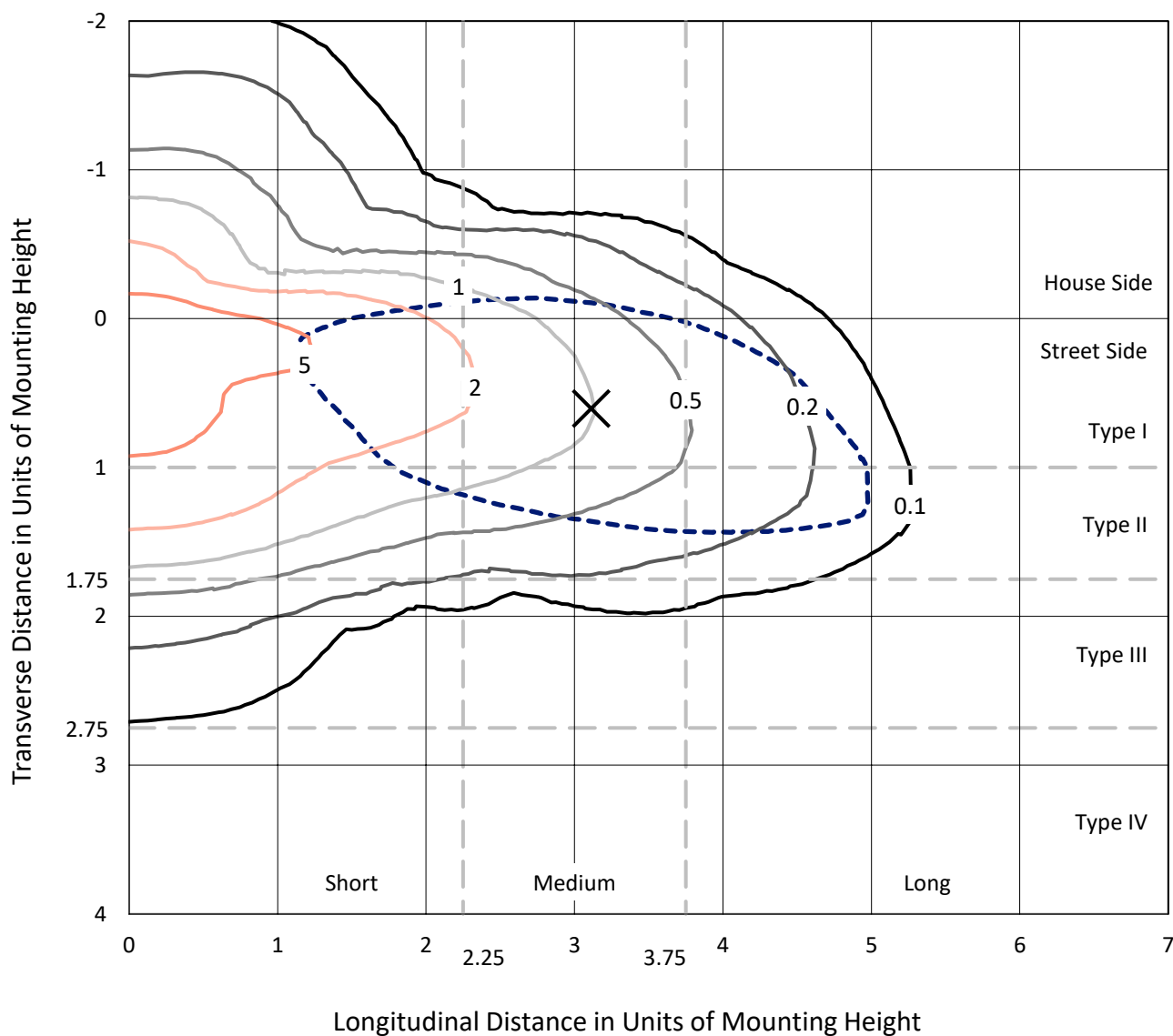
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

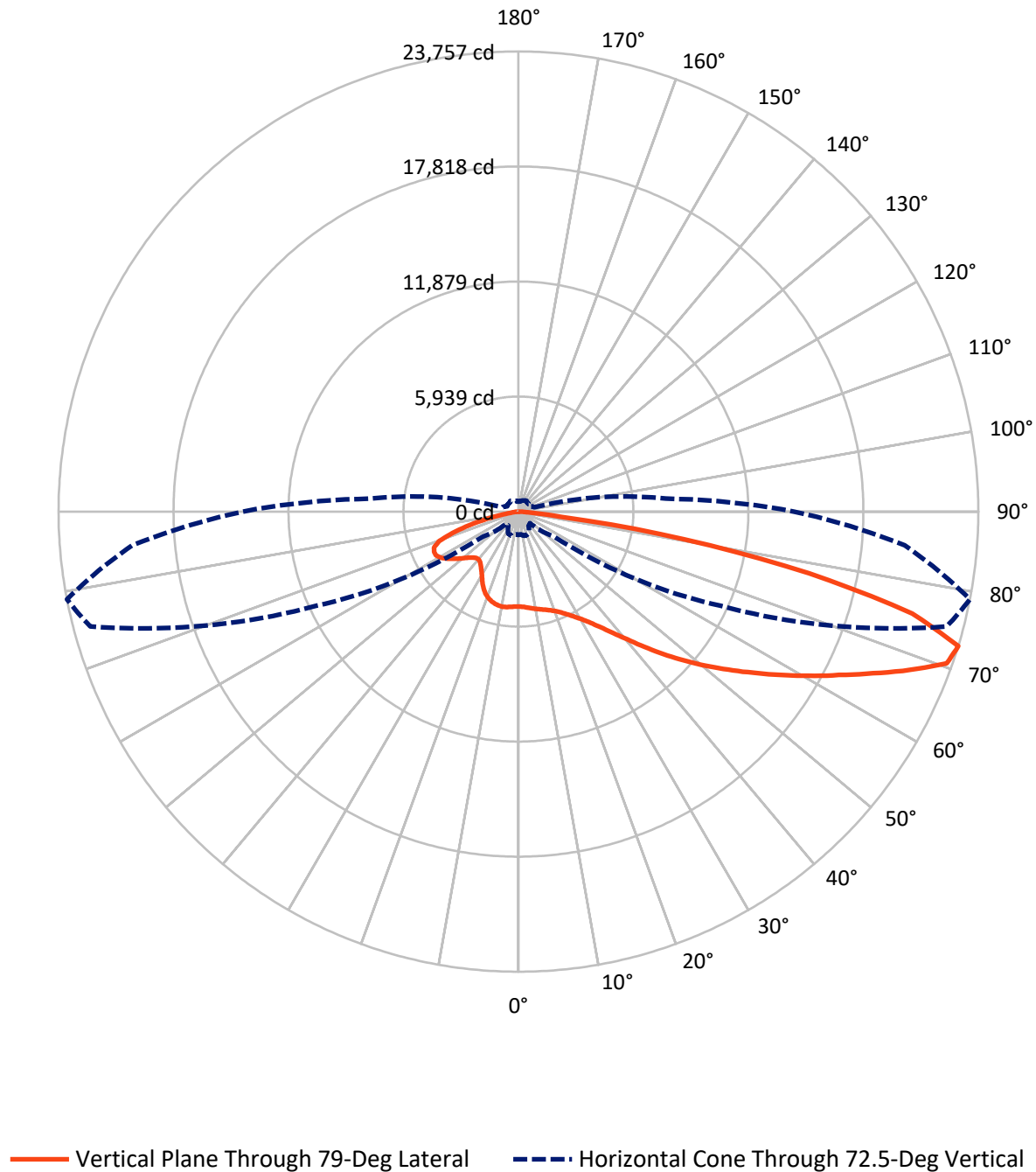
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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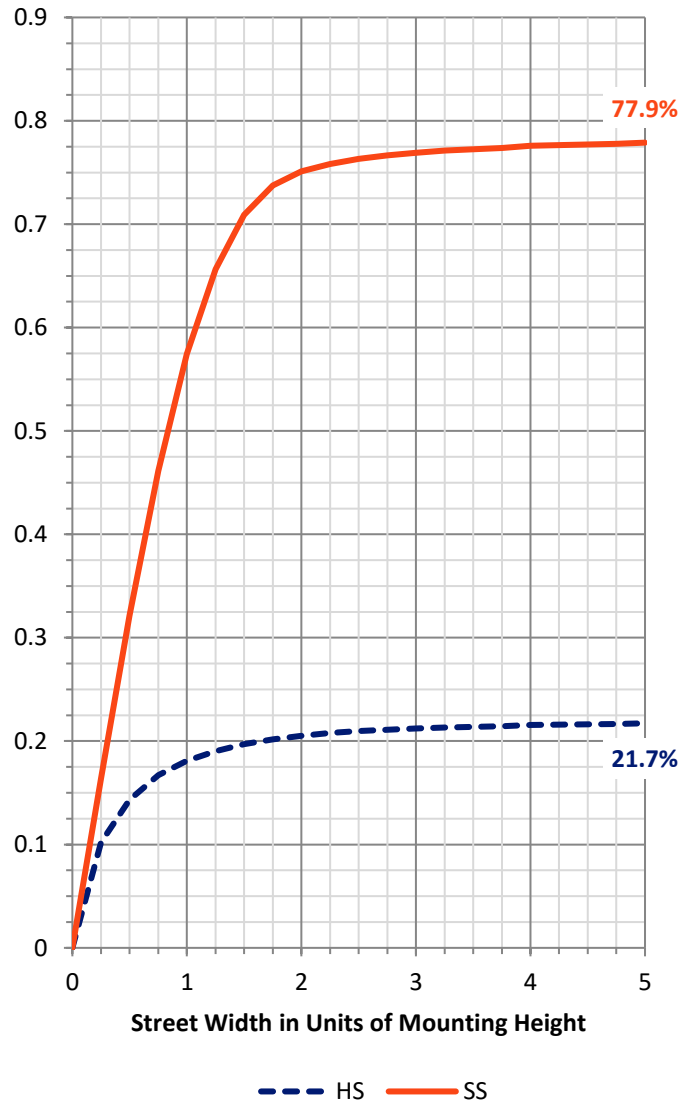
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5374.6	0.0	5374.6
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	19049.1	0.0	19049.1
	% Fixture	78.0	0.0	78.0
Total	Lumens	24423.7	0.0	24423.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	445.0	1.8
10°-20°	1163.5	4.8
20°-30°	1877.5	7.7
30°-40°	2817.8	11.5
40°-50°	3997.3	16.4
50°-60°	5048.0	20.7
60°-70°	5126.9	21.0
70°-80°	3494.2	14.3
80°-90°	453.3	1.9
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°	24423.7	100.0
0°-180°	24423.7	100.0

Coefficient of Utilization



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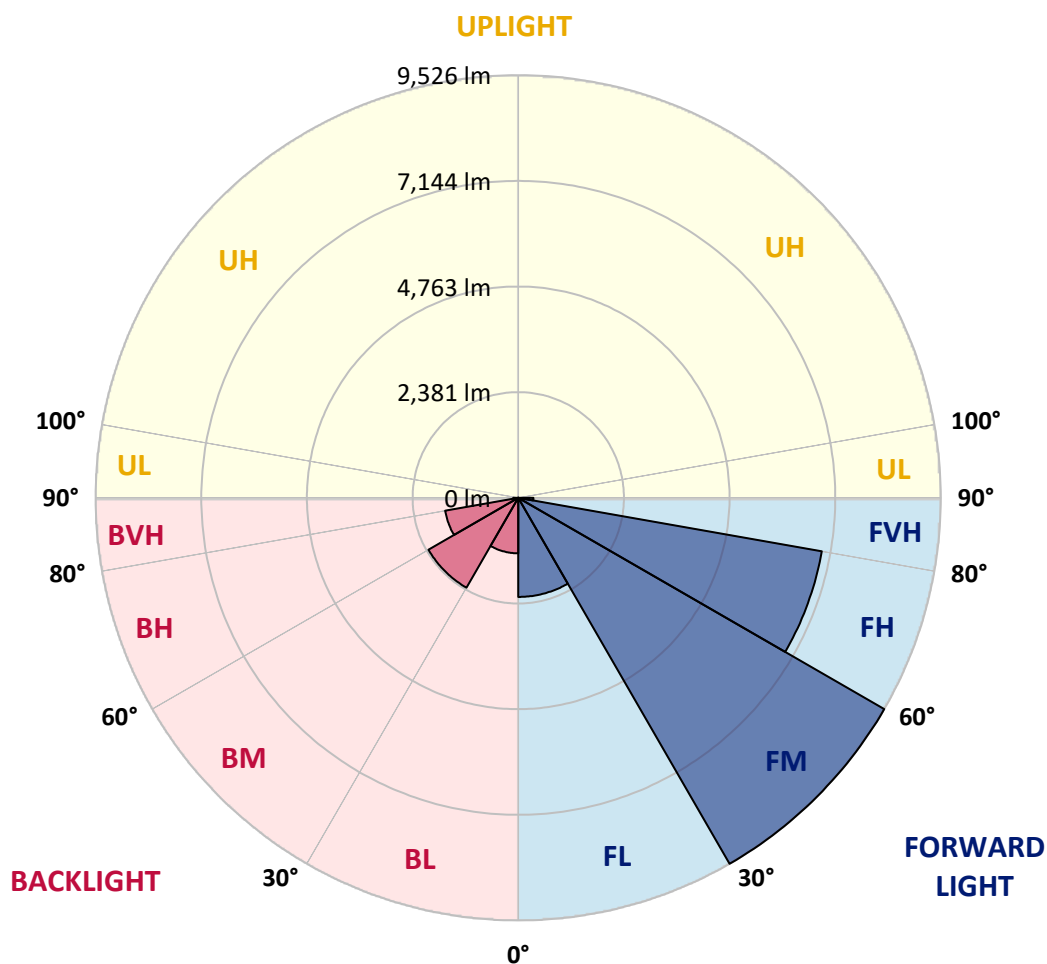
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2234.2	9.1			
FM	(30°-60°)	9525.7	39.0			
FH	(60°-80°)	6947.7	28.4			G3/7500
FVH	(80°-90°)	341.5	1.4			G3/500
BL	(0°-30°)	1251.9	5.1	B3/2500		
BM	(30°-60°)	2337.4	9.6	B2/2500		
BH	(60°-80°)	1673.5	6.9	B3/2500		G3/2500
BVH	(80°-90°)	111.8	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8
2.5°	4905.4	4882.2	4896.3	4891.2	4897.7	4905.4	4908.0	4911.9	4924.8	4923.5	4922.3
5°	4895.1	4871.8	4891.2	4884.7	4901.5	4919.6	4935.2	4949.3	4970.0	4979.0	4966.1
7.5°	4873.2	4857.6	4877.0	4896.3	4927.4	4954.5	4976.5	5008.8	5038.5	5043.6	5052.7
10°	4745.2	4733.6	4778.8	4829.2	4914.5	4988.1	5035.9	5073.3	5105.6	5110.9	5123.8
12.5°	4612.2	4597.9	4648.3	4716.7	4855.0	4988.1	5088.8	5137.9	5166.4	5183.2	5202.6
15°	4590.2	4578.6	4607.0	4666.4	4781.4	4953.2	5125.0	5215.5	5240.0	5259.4	5267.2
17.5°	4696.1	4674.2	4685.8	4706.5	4773.6	4920.9	5153.5	5303.3	5340.8	5361.5	5361.5
20°	4941.6	4910.6	4892.5	4851.1	4839.5	4926.0	5150.8	5409.2	5458.3	5484.2	5490.6
22.5°	5268.4	5247.8	5209.0	5104.4	4990.7	4989.4	5199.9	5544.9	5636.7	5661.2	5645.7
25°	5663.7	5632.8	5583.7	5441.5	5223.2	5114.8	5282.6	5718.1	5871.7	5878.3	5833.0
27.5°	6118.5	6072.0	6004.9	5817.5	5522.9	5311.0	5409.2	5917.0	6141.8	6139.2	6046.2
30°	6597.8	6551.3	6480.3	6252.9	5882.1	5575.9	5584.9	6131.4	6462.2	6448.0	6289.1
32.5°	6948.0	6913.0	6898.9	6723.2	6295.5	5888.5	5786.5	6369.1	6857.5	6844.5	6622.3
35°	7216.6	7171.4	7188.2	7099.0	6746.3	6238.7	6033.3	6652.0	7338.1	7336.8	7060.3
37.5°	7482.8	7442.7	7457.0	7397.5	7163.7	6683.1	6334.3	6998.3	7933.7	7962.1	7590.0
40°	7725.6	7683.0	7739.9	7684.3	7487.9	7155.9	6676.6	7389.7	8623.5	8677.9	8230.9
42.5°	7871.7	7838.1	7932.4	7933.7	7769.6	7555.2	7052.6	7821.3	9421.9	9543.4	9018.9
45°	7922.0	7910.4	8052.5	8082.2	8018.9	7786.4	7391.1	8291.5	10282.4	10499.4	9916.8
47.5°	7867.8	7845.9	8042.2	8152.0	8202.4	7894.9	7671.4	8800.5	11160.9	11478.7	10896.1
50°	7593.9	7551.3	7843.2	8074.4	8254.0	7966.0	7954.3	9388.4	12159.6	12507.0	11880.5
52.5°	7101.7	7069.3	7401.4	7803.2	8140.3	8000.8	8272.2	10030.4	13107.8	13557.4	12889.5
55°	6472.5	6429.8	6795.4	7320.0	7857.4	7989.3	8589.9	10748.8	14226.6	14682.6	13932.0
57.5°	5475.1	5389.9	5852.3	6472.5	7396.2	7975.0	8920.7	11463.2	15363.5	15909.9	15044.3
60°	4020.5	3893.9	4461.0	5196.1	6494.5	7836.7	9330.3	12264.1	16727.7	17220.0	16258.8
62.5°	2341.0	2267.3	2638.1	3324.1	4895.1	7022.9	9560.2	13195.6	18068.8	18585.5	17452.5
65°	1817.7	1797.0	1829.3	1882.3	2724.7	5258.1	8850.9	14103.9	19774.1	20135.8	18696.6
67.5°	1662.7	1647.2	1661.4	1561.9	1382.3	2928.7	7002.2	14333.8	21600.8	21820.5	19785.7
70°	1477.9	1459.9	1506.3	1421.1	1087.8	1332.0	4524.2	13499.2	23054.3	23466.4	20613.9
72.5°	1204.1	1183.4	1291.9	1253.2	915.9	855.3	2272.5	11516.2	22901.8	23757.0	20020.8
75°	925.1	913.4	1042.5	1074.9	746.7	673.1	1090.4	8560.3	20153.9	21015.6	17254.8
77.5°	718.3	709.3	775.1	892.7	602.0	521.9	670.6	5429.9	15187.7	15338.9	11890.8
80°	538.7	512.9	573.6	691.2	468.9	381.1	454.8	3166.5	9600.3	8702.4	5175.4
82.5°	337.2	324.3	374.6	461.2	330.8	262.3	295.8	1749.3	3847.3	2266.1	998.7
85°	192.5	187.4	204.1	263.5	179.6	151.2	169.2	772.5	702.8	483.2	301.0
87.5°	77.5	74.9	93.0	117.6	65.9	55.6	59.4	186.0	155.0	143.4	99.5
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°	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8	4902.8
2.5°	4917.0	4917.0	4899.0	4870.5	4838.2	4817.6	4784.0	4775.0	4740.0	4729.7	4746.5
5°	4976.5	4966.1	4910.6	4830.5	4720.6	4619.9	4508.8	4439.1	4340.9	4305.9	4331.8
7.5°	5051.4	5023.0	4927.4	4751.7	4521.7	4295.7	4060.5	3882.2	3711.6	3650.9	3658.7
10°	5119.9	5079.8	4917.0	4609.5	4211.6	3820.2	3445.5	3183.2	2984.3	2902.9	2921.0
12.5°	5188.3	5114.8	4848.6	4373.2	3771.1	3240.1	2840.9	2636.8	2514.1	2415.9	2448.2
15°	5252.9	5149.6	4742.7	4056.6	3287.9	2749.2	2454.7	2291.9	2193.7	2129.1	2140.7
17.5°	5327.8	5179.3	4583.7	3654.8	2828.0	2409.5	2169.1	2070.9	2051.5	2043.8	2049.0
20°	5432.5	5206.4	4374.4	3205.3	2489.5	2138.1	2014.1	2005.1	2003.8	1999.9	2012.8
22.5°	5544.9	5238.8	4098.0	2797.0	2201.4	1968.9	1946.9	1928.8	1917.2	1915.9	1930.1
25°	5678.0	5249.0	3751.7	2462.4	1956.0	1888.8	1862.9	1835.8	1828.1	1828.1	1835.8
27.5°	5807.1	5214.2	3348.7	2171.7	1817.7	1815.2	1781.6	1772.5	1771.2	1775.1	1785.4
30°	5936.4	5148.3	2948.1	1903.0	1737.6	1737.6	1726.0	1732.5	1737.6	1750.6	1759.6
32.5°	6110.7	5078.6	2613.5	1704.1	1667.9	1655.0	1666.5	1679.5	1684.7	1701.5	1715.6
35°	6366.6	5029.5	2347.5	1595.5	1595.5	1578.7	1585.2	1582.6	1571.0	1563.2	1581.3
37.5°	6705.0	5026.8	2127.8	1545.1	1534.8	1532.2	1533.5	1516.7	1471.5	1417.3	1418.5
40°	7112.0	5096.6	1958.6	1510.2	1502.5	1518.0	1510.2	1465.0	1341.0	1246.7	1244.1
42.5°	7658.5	5295.6	1850.0	1467.6	1490.9	1510.2	1479.3	1323.0	1238.9	1175.7	1173.0
45°	8301.9	5618.5	1794.5	1422.4	1468.9	1492.2	1342.3	1273.9	1206.6	1130.5	1125.2
47.5°	9030.5	6025.5	1781.6	1379.8	1419.8	1434.1	1284.1	1253.2	1176.9	1094.3	1087.8
50°	9823.7	6507.4	1816.4	1329.4	1348.8	1299.7	1264.7	1236.4	1157.5	1076.1	1067.1
52.5°	10644.1	7038.4	1886.2	1261.0	1277.7	1223.4	1257.1	1232.5	1145.9	1036.1	1028.4
55°	11450.3	7573.2	1953.3	1180.8	1205.4	1155.0	1235.0	1217.0	1093.0	968.9	962.5
57.5°	12269.4	8105.5	2019.2	1109.8	1135.6	1089.1	1200.2	1175.7	1033.5	906.9	904.4
60°	13120.7	8622.3	2050.3	1041.3	1059.3	1028.4	1147.2	1104.5	966.4	843.6	839.8
62.5°	13917.9	9052.5	1999.9	972.8	984.4	971.5	1077.5	1020.6	899.1	772.5	771.3
65°	14717.6	9308.2	1844.9	905.6	908.3	901.8	979.3	930.2	820.4	710.5	702.8
67.5°	15442.2	9451.6	1598.1	833.3	826.9	824.2	887.5	832.0	744.2	648.5	640.8
70°	15596.0	9087.3	1220.9	748.0	748.0	741.6	786.8	729.9	660.2	582.6	580.0
72.5°	14244.6	7644.2	866.8	651.1	661.4	648.5	686.0	638.2	574.9	523.3	507.7
75°	11486.5	5605.6	630.5	551.7	569.7	547.8	582.6	549.1	494.8	493.5	444.4
77.5°	7892.3	3466.2	457.4	454.8	467.7	439.2	479.3	461.2	412.2	390.1	365.6
80°	3368.0	1382.3	333.3	351.4	351.4	325.5	372.1	377.2	334.6	324.3	324.3
82.5°	670.6	392.8	233.8	241.6	227.3	219.7	263.5	292.0	403.0	448.3	449.6
85°	201.5	144.7	140.8	131.8	116.2	117.6	155.0	293.3	361.7	206.7	178.2
87.5°	55.6	36.2	37.5	29.7	24.5	32.3	53.0	222.2	121.5	51.7	44.0
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)