

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: P967905

Luminaire Tested: **NAV-SB5A-835-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967905
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-835-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3500K, 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: 21412.2 lumens
Efficiency: N/A
Efficacy: 151.1 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



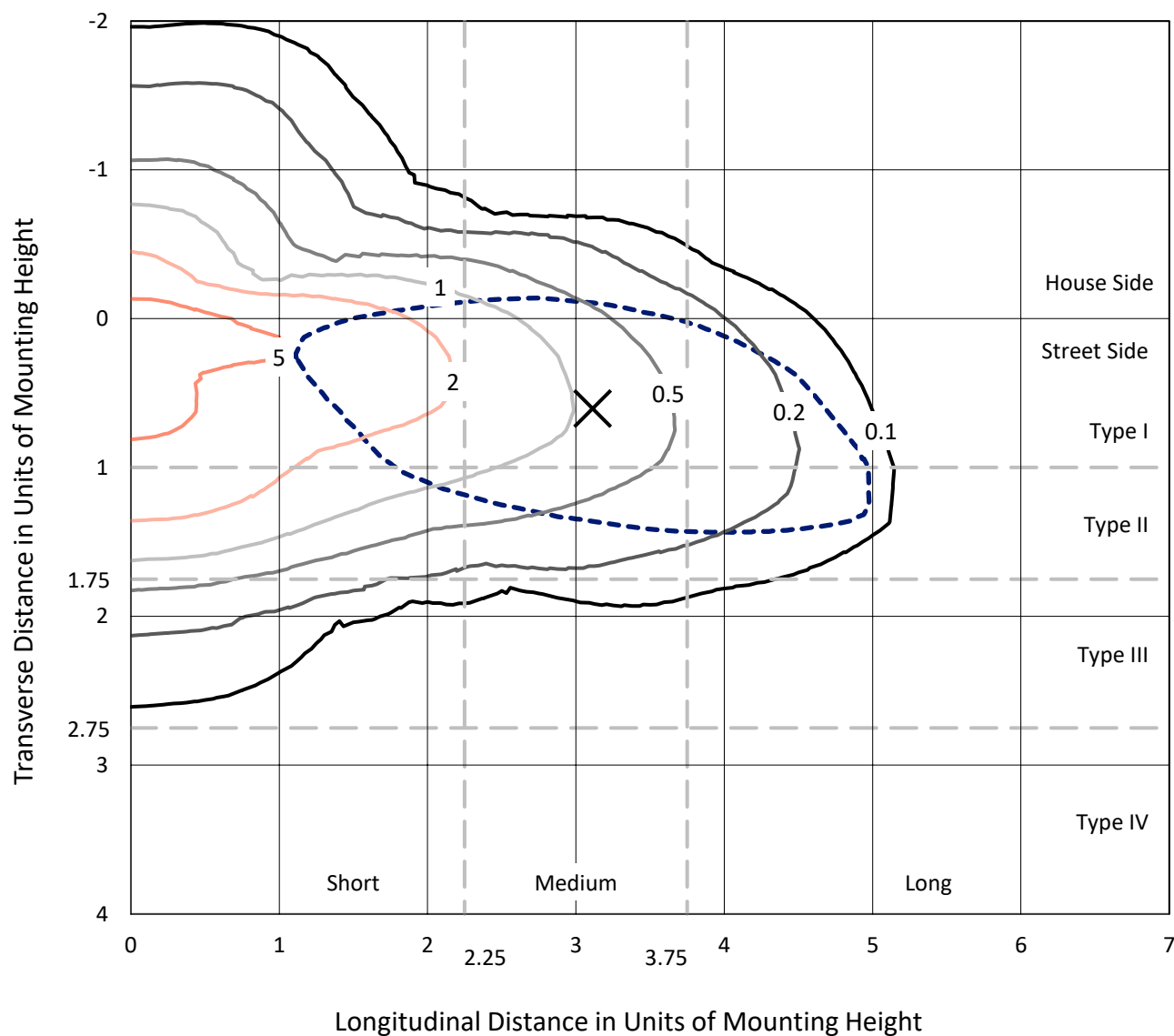
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

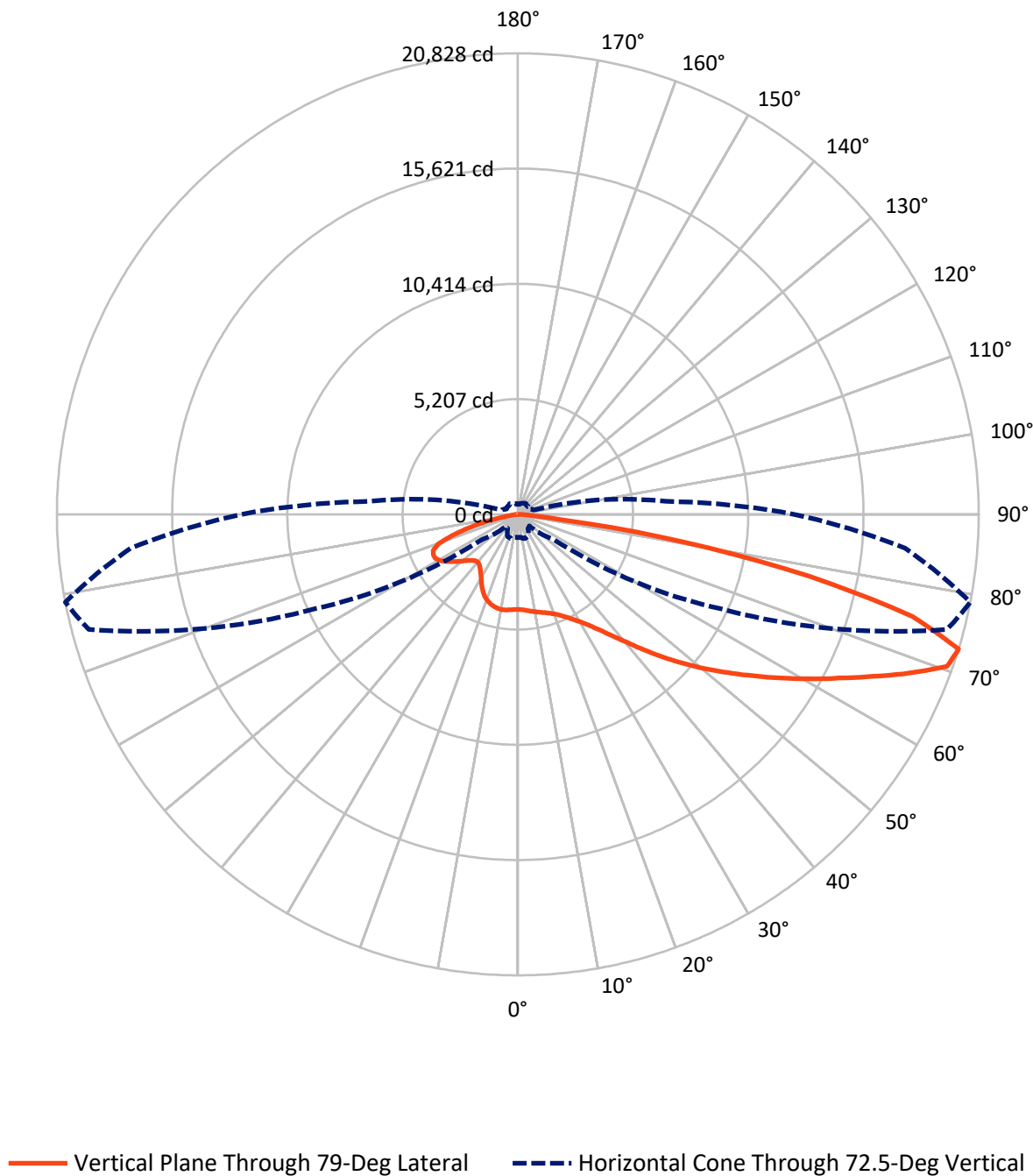
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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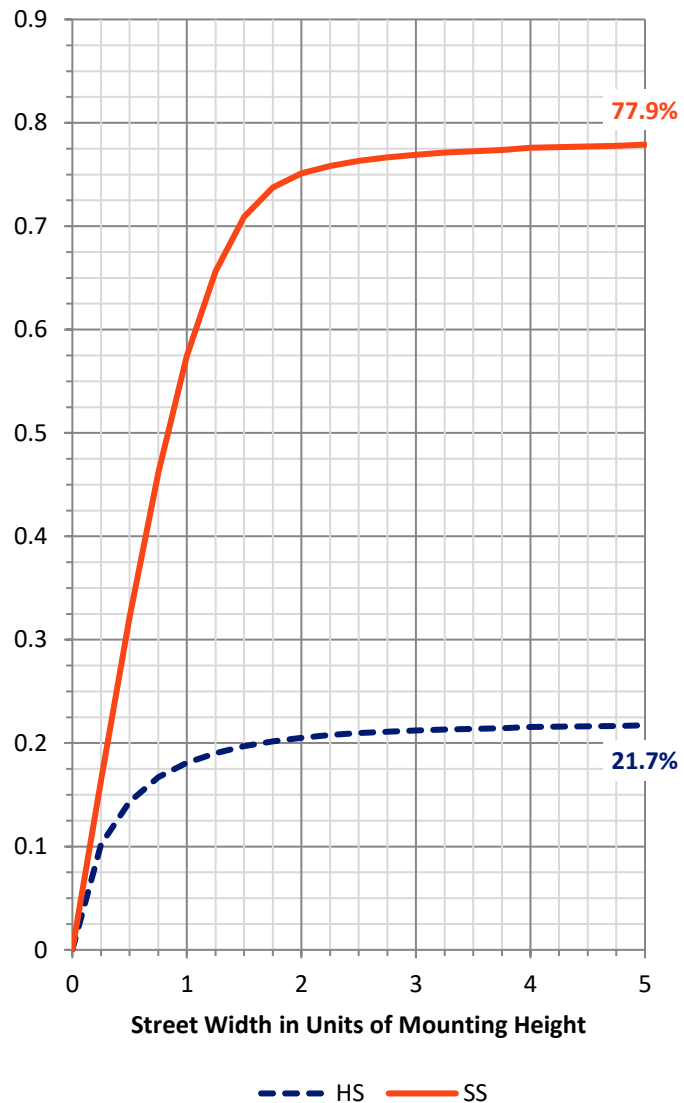
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4711.9	0.0	4711.9
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	16700.4	0.0	16700.4
	% Fixture	78.0	0.0	78.0
Total	Lumens	21412.2	0.0	21412.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	390.2	1.8
10°-20°	1020.1	4.8
20°-30°	1646.0	7.7
30°-40°	2470.4	11.5
40°-50°	3504.4	16.4
50°-60°	4425.6	20.7
60°-70°	4494.8	21.0
70°-80°	3063.4	14.3
80°-90°	397.5	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°	21412.2	100.0
0°-180°	21412.2	100.0

Coefficient of Utilization



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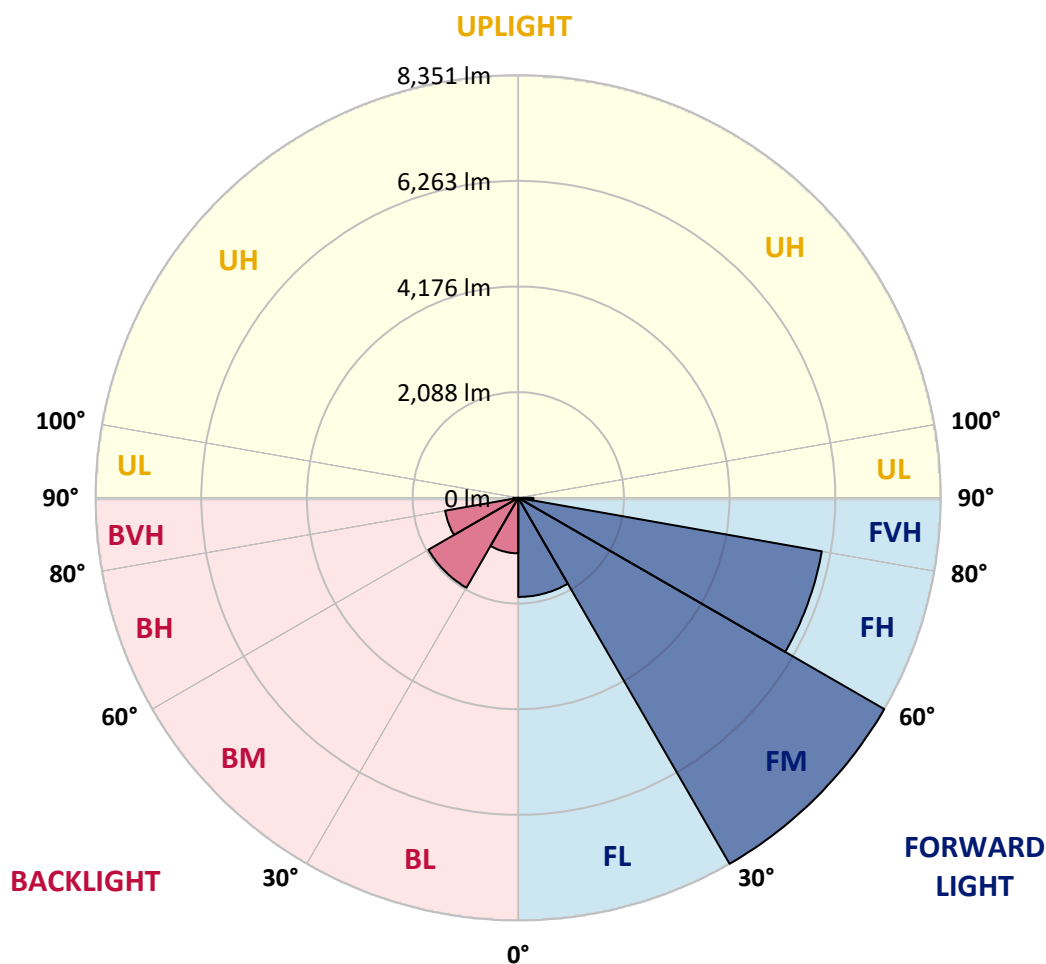
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1958.7	9.1			
FM	(30°-60°)	8351.2	39.0			
FH	(60°-80°)	6091.1	28.4			G3/7500
FVH	(80°-90°)	299.4	1.4			G3/500
BL	(0°-30°)	1097.5	5.1	B3/2500		
BM	(30°-60°)	2049.2	9.6	B2/2500		
BH	(60°-80°)	1467.1	6.9	B3/2500		G3/2500
BVH	(80°-90°)	98.0	0.5			G1/100
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°	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3
2.5°	4300.6	4280.2	4292.6	4288.1	4293.7	4300.6	4302.8	4306.2	4317.6	4316.4	4315.2
5°	4291.5	4271.1	4288.1	4282.4	4297.2	4313.0	4326.6	4339.0	4357.2	4365.2	4353.8
7.5°	4272.3	4258.7	4275.7	4292.6	4319.9	4343.6	4362.9	4391.2	4417.2	4421.7	4429.6
10°	4160.2	4149.9	4189.6	4233.8	4308.5	4373.1	4415.0	4447.8	4476.2	4480.7	4492.0
12.5°	4043.4	4031.0	4075.2	4135.2	4256.4	4373.1	4461.4	4504.5	4529.4	4544.1	4561.0
15°	4024.3	4014.0	4038.9	4091.1	4191.8	4342.5	4493.1	4572.4	4593.9	4610.9	4617.7
17.5°	4117.1	4097.8	4108.0	4126.1	4185.1	4314.1	4518.0	4649.4	4682.3	4700.3	4700.3
20°	4332.3	4305.1	4289.2	4253.0	4242.8	4318.7	4515.7	4742.3	4785.3	4808.0	4813.6
22.5°	4618.9	4600.7	4566.8	4474.9	4375.3	4374.2	4558.8	4861.3	4941.6	4963.2	4949.5
25°	4965.4	4938.2	4895.2	4770.7	4579.2	4484.1	4631.3	5013.0	5147.8	5153.4	5113.8
27.5°	5364.1	5323.3	5264.4	5100.2	4842.0	4656.2	4742.3	5187.4	5384.5	5382.3	5300.7
30°	5784.3	5743.5	5681.3	5481.9	5156.9	4888.4	4896.3	5375.4	5665.4	5652.9	5513.6
32.5°	6091.3	6060.6	6048.2	5894.2	5519.3	5162.5	5073.0	5583.8	6011.9	6000.7	5805.8
35°	6326.8	6287.1	6301.9	6223.8	5914.6	5469.4	5289.3	5831.8	6433.3	6432.2	6189.8
37.5°	6560.2	6525.0	6537.6	6485.4	6280.4	5859.1	5553.2	6135.4	6955.4	6980.4	6654.2
40°	6773.1	6735.7	6785.5	6736.8	6564.7	6273.6	5853.4	6478.6	7560.3	7607.9	7215.9
42.5°	6901.1	6871.6	6954.3	6955.4	6811.6	6623.6	6183.0	6856.9	8260.3	8366.7	7906.8
45°	6945.3	6935.0	7059.7	7085.7	7030.2	6826.3	6479.7	7269.2	9014.6	9204.8	8694.0
47.5°	6897.6	6878.5	7050.6	7146.8	7191.0	6921.4	6725.5	7715.4	9784.8	10063.3	9552.6
50°	6657.6	6620.2	6876.1	7078.9	7236.3	6983.7	6973.6	8230.8	10660.2	10964.9	10415.6
52.5°	6226.1	6197.8	6488.8	6841.1	7136.7	7014.4	7252.2	8793.7	11491.6	11885.8	11300.2
55°	5674.4	5637.1	5957.6	6417.4	6888.6	7004.1	7530.8	9423.4	12472.4	12872.3	12214.2
57.5°	4800.1	4725.4	5130.7	5674.4	6484.3	6991.7	7820.7	10049.8	13469.1	13948.3	13189.4
60°	3524.8	3413.8	3911.0	4555.4	5693.7	6870.5	8179.8	10751.9	14665.2	15096.7	14254.1
62.5°	2052.4	1987.8	2312.8	2914.3	4291.5	6157.0	8381.4	11568.7	15840.9	16293.9	15300.6
65°	1593.6	1575.5	1603.8	1650.2	2388.7	4609.7	7759.6	12364.9	17335.9	17653.1	16391.3
67.5°	1457.7	1444.1	1456.5	1369.3	1211.9	2567.6	6138.8	12566.5	18937.5	19130.0	17346.2
70°	1295.7	1279.8	1320.6	1245.9	953.7	1167.8	3966.4	11834.8	20211.7	20573.0	18072.2
72.5°	1055.6	1037.5	1132.6	1098.6	803.0	749.8	1992.3	10096.2	20078.0	20827.8	17552.3
75°	811.0	800.7	914.0	942.4	654.7	590.1	955.9	7504.7	17668.9	18424.4	15127.4
77.5°	629.8	621.8	679.6	782.7	527.8	457.6	587.8	4760.4	13315.2	13447.6	10424.7
80°	472.3	449.7	502.9	606.0	411.1	334.2	398.7	2776.1	8416.5	7629.4	4537.3
82.5°	295.6	284.3	328.4	404.4	290.0	229.9	259.3	1533.6	3373.0	1986.7	875.6
85°	168.7	164.2	179.0	231.0	157.4	132.5	148.4	677.3	616.1	423.6	263.9
87.5°	68.0	65.7	81.6	103.1	57.8	48.7	52.1	163.1	135.9	125.8	87.2
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°	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3	4298.3
2.5°	4310.7	4310.7	4295.0	4269.9	4241.7	4223.5	4194.1	4186.2	4155.6	4146.5	4161.3
5°	4362.9	4353.8	4305.1	4234.9	4138.6	4050.3	3952.8	3891.7	3805.6	3775.1	3797.7
7.5°	4428.5	4403.6	4319.9	4165.8	3964.2	3766.0	3559.8	3403.5	3254.1	3200.8	3207.6
10°	4488.6	4453.5	4310.7	4041.2	3692.4	3349.2	3020.7	2790.8	2616.3	2545.0	2560.9
12.5°	4548.6	4484.1	4250.8	3833.9	3306.1	2840.6	2490.6	2311.7	2204.1	2118.0	2146.4
15°	4605.2	4514.6	4157.8	3556.4	2882.5	2410.2	2152.0	2009.3	1923.2	1866.5	1876.8
17.5°	4670.9	4540.6	4018.5	3204.1	2479.3	2112.3	1901.7	1815.6	1798.6	1791.8	1796.3
20°	4762.7	4564.4	3835.0	2810.0	2182.5	1874.5	1765.8	1757.9	1756.7	1753.3	1764.6
22.5°	4861.3	4592.8	3592.7	2452.1	1930.0	1726.1	1706.8	1691.0	1680.8	1679.7	1692.2
25°	4977.9	4601.8	3289.1	2158.8	1714.8	1655.9	1633.2	1609.5	1602.7	1602.7	1609.5
27.5°	5091.2	4571.3	2935.8	1903.9	1593.6	1591.3	1561.9	1554.0	1552.9	1556.3	1565.3
30°	5204.4	4513.5	2584.6	1668.4	1523.4	1523.4	1513.2	1518.8	1523.4	1534.7	1542.6
32.5°	5357.3	4452.3	2291.3	1493.9	1462.3	1450.9	1461.0	1472.4	1476.9	1491.7	1504.1
35°	5581.5	4409.3	2058.0	1398.8	1398.8	1384.1	1389.7	1387.4	1377.3	1370.4	1386.3
37.5°	5878.3	4407.0	1865.4	1354.6	1345.5	1343.3	1344.4	1329.7	1290.1	1242.5	1243.6
40°	6235.1	4468.2	1717.1	1324.0	1317.2	1330.9	1324.0	1284.4	1175.7	1093.0	1090.7
42.5°	6714.2	4642.6	1622.0	1286.7	1307.1	1324.0	1296.8	1159.8	1086.2	1030.6	1028.4
45°	7278.2	4925.7	1573.2	1247.0	1287.8	1308.2	1176.8	1116.7	1057.9	991.1	986.6
47.5°	7917.0	5282.5	1561.9	1209.6	1244.8	1257.2	1125.9	1098.6	1031.9	959.3	953.7
50°	8612.5	5705.0	1592.4	1165.4	1182.4	1139.4	1108.8	1083.9	1014.9	943.5	935.5
52.5°	9331.7	6170.5	1653.6	1105.5	1120.1	1072.6	1102.1	1080.6	1004.6	908.4	901.6
55°	10038.4	6639.4	1712.6	1035.2	1056.8	1012.6	1082.8	1066.9	958.2	849.4	843.8
57.5°	10756.6	7106.1	1770.3	972.9	995.6	954.8	1052.2	1030.6	906.1	795.1	792.8
60°	11503.0	7559.2	1797.4	912.9	928.8	901.6	1005.7	968.4	847.2	739.6	736.2
62.5°	12201.7	7936.3	1753.3	852.9	863.0	851.8	944.6	894.7	788.3	677.3	676.2
65°	12902.8	8160.5	1617.3	794.0	796.2	790.6	858.5	815.5	719.2	622.9	616.1
67.5°	13538.2	8286.3	1401.1	730.5	724.9	722.6	778.1	729.4	652.4	568.6	561.8
70°	13673.0	7966.9	1070.3	655.8	655.8	650.2	689.7	639.9	578.8	510.9	508.5
72.5°	12488.3	6701.8	760.0	570.8	579.9	568.6	601.5	559.5	504.0	458.7	445.2
75°	10070.1	4914.5	552.7	483.6	499.5	480.2	510.9	481.3	433.8	432.7	389.6
77.5°	6919.2	3038.8	401.0	398.7	410.0	385.1	420.2	404.4	361.3	342.0	320.5
80°	2952.7	1211.9	292.2	308.1	308.1	285.5	326.2	330.8	293.4	284.3	284.3
82.5°	587.8	344.3	205.0	211.8	199.4	192.5	231.0	255.9	353.4	393.0	394.1
85°	176.7	126.9	123.4	115.5	101.9	103.1	135.9	257.1	317.1	181.2	156.3
87.5°	48.7	31.7	32.8	26.0	21.5	28.3	46.4	194.9	106.5	45.3	38.5
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)