

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: P968264

Luminaire Tested: **NAV-SB5B-735-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968264
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-5)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-735-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29931 lumens
Efficiency: N/A
Efficacy: 163.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 182.7
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



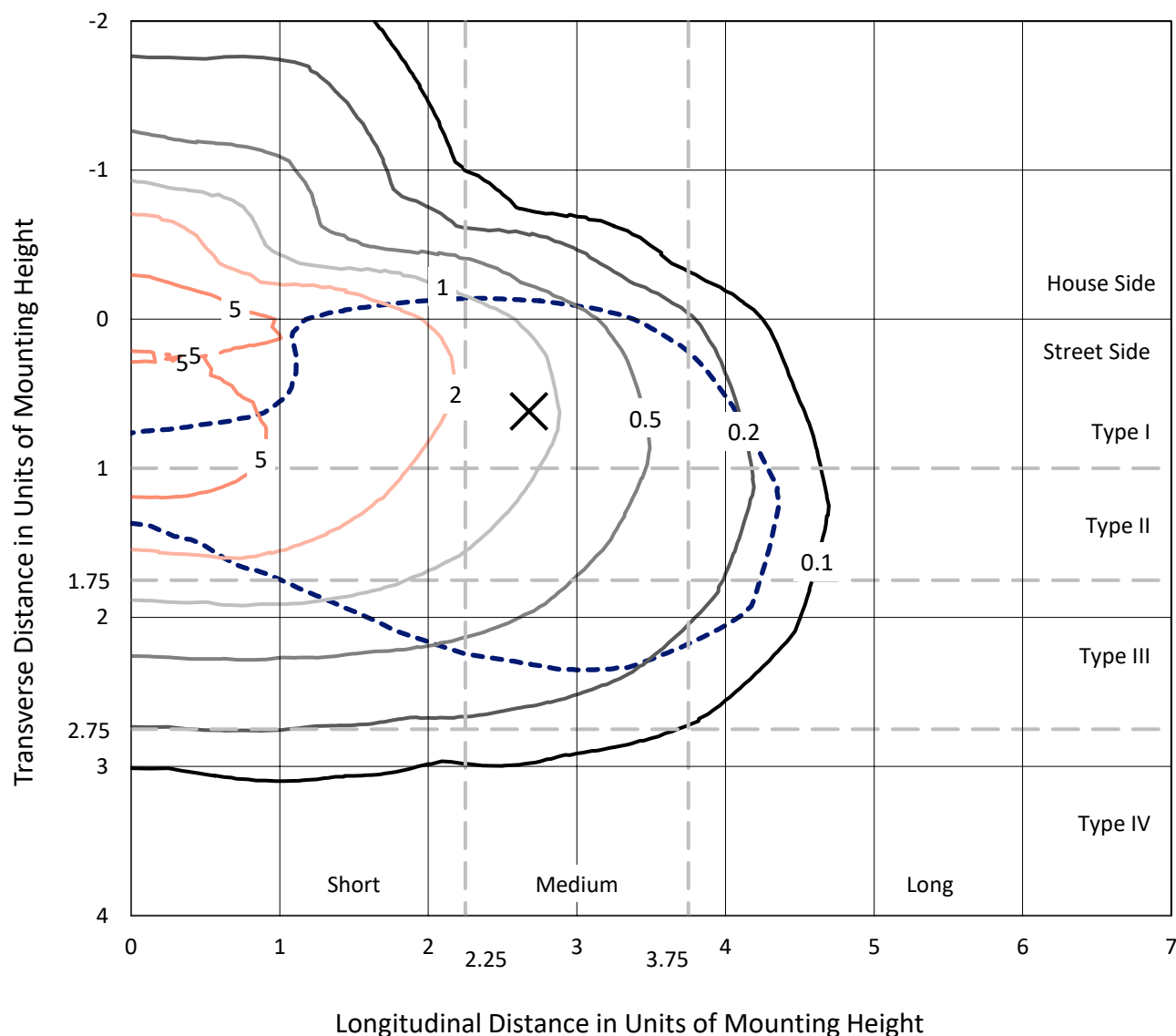
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

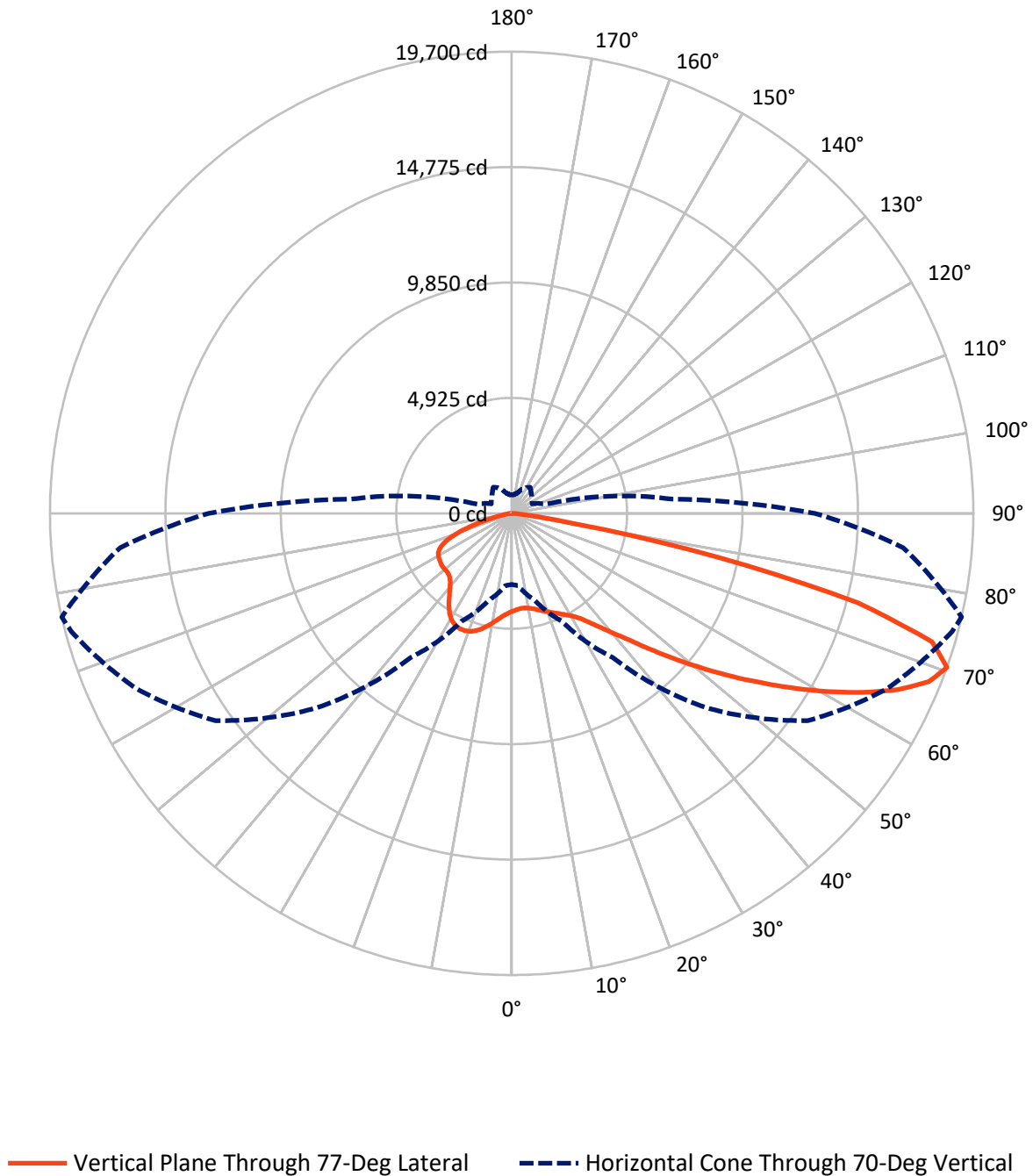
--- 1/2 Max cd



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

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Luminous Intensity Polar Plot



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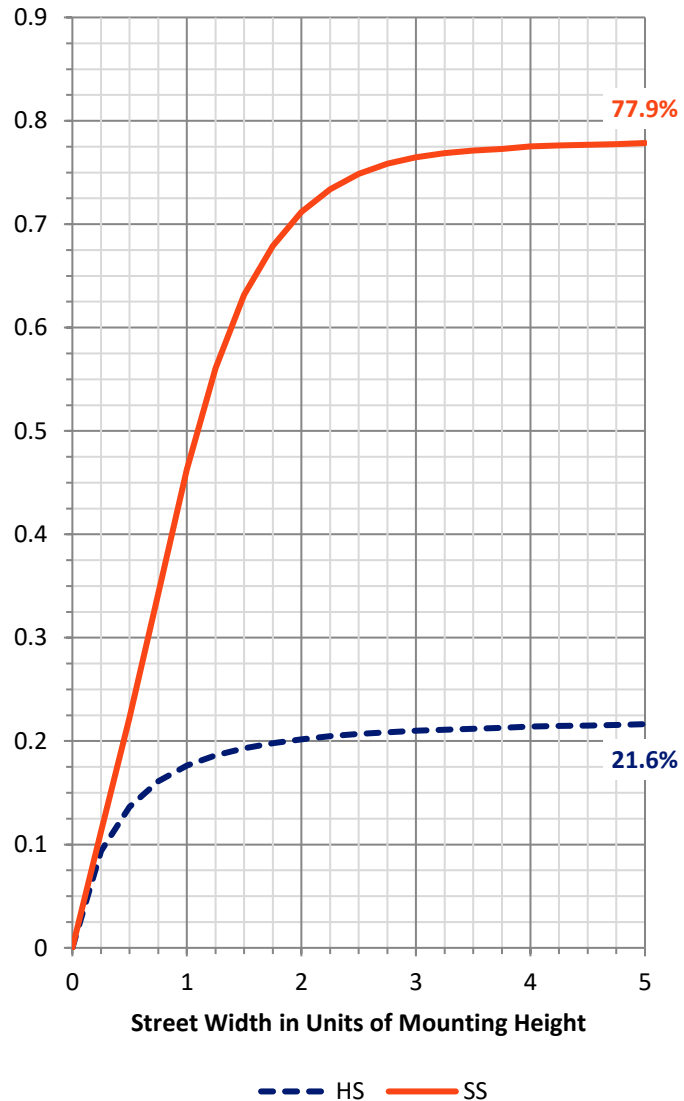
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6554.4	0.0	6554.4
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	23376.6	0.0	23376.6
	% Fixture	78.1	0.0	78.1
Total	Lumens	29931.0	0.0	29931.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	398.2	1.3
10°-20°	1149.4	3.8
20°-30°	1965.6	6.6
30°-40°	3160.9	10.6
40°-50°	4934.9	16.5
50°-60°	6591.9	22.0
60°-70°	7026.0	23.5
70°-80°	4325.1	14.5
80°-90°	379.0	1.3
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°	29931.0	100.0
0°-180°	29931.0	100.0

Coefficient of Utilization



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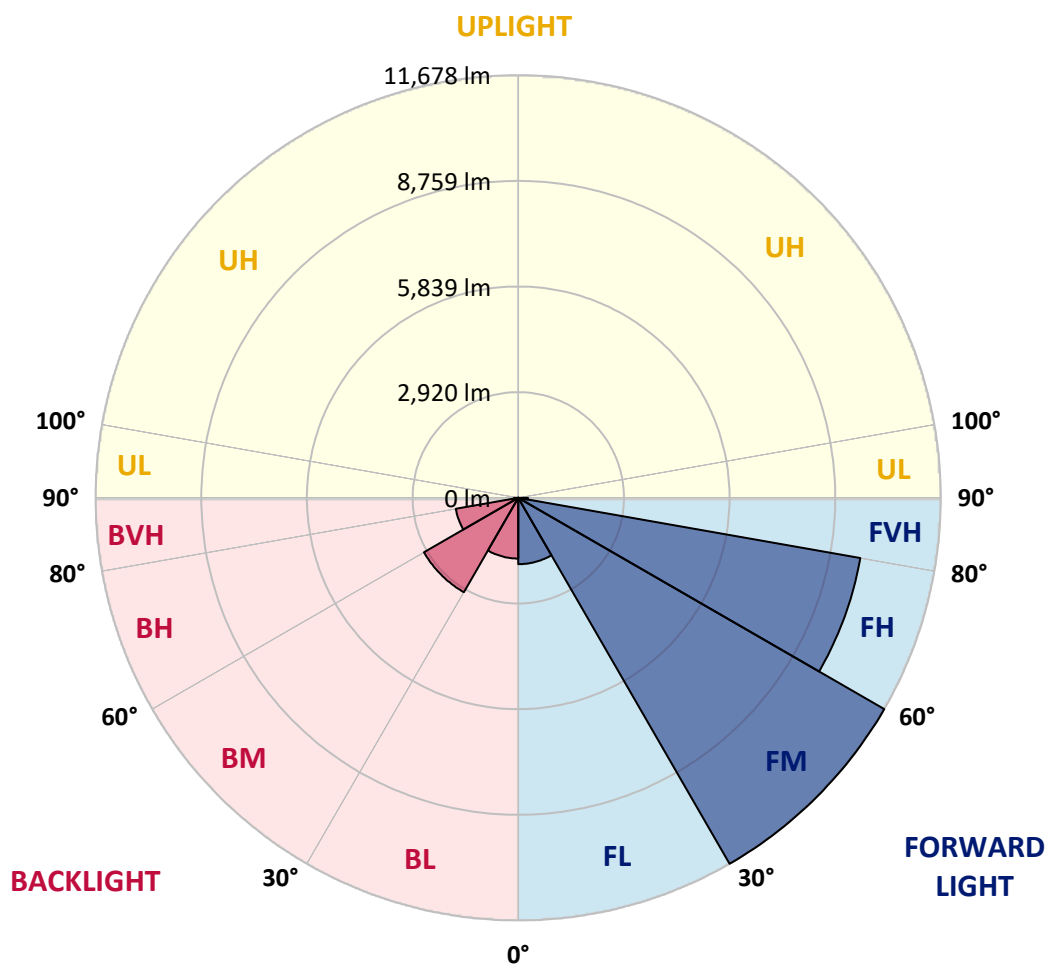
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1833.8	6.1			
FM	(30°-60°)	11678.4	39.0			
FH	(60°-80°)	9599.4	32.1			G4/12000
FVH	(80°-90°)	265.0	0.9			G3/500
BL	(0°-30°)	1679.5	5.6	B3/2500		
BM	(30°-60°)	3009.3	10.1	B3/5000		
BH	(60°-80°)	1751.7	5.9	B3/2500		G3/2500
BVH	(80°-90°)	114.0	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6
2.5°	3849.2	3847.6	3867.5	3873.7	3910.5	3936.5	3985.6	4037.7	4105.1	4112.8	4154.2
5°	3626.9	3626.9	3649.8	3674.4	3721.9	3774.0	3849.2	3939.6	4056.1	4074.5	4177.2
7.5°	3438.4	3450.6	3470.5	3518.0	3573.3	3648.3	3763.3	3892.0	4045.4	4074.5	4240.0
10°	3286.6	3300.4	3324.9	3363.2	3445.9	3550.2	3700.5	3866.0	4071.4	4117.4	4332.0
12.5°	3239.0	3252.8	3266.7	3295.8	3372.5	3495.0	3674.4	3878.3	4134.2	4180.3	4457.7
15°	3349.4	3366.3	3355.5	3347.9	3387.7	3499.7	3686.6	3922.7	4212.4	4278.3	4612.5
17.5°	3603.9	3610.0	3585.4	3513.4	3507.3	3567.1	3744.9	3984.1	4310.5	4382.6	4768.9
20°	4014.7	4004.0	3953.4	3810.8	3729.6	3717.3	3844.6	4076.0	4411.7	4488.4	4937.5
22.5°	4572.6	4560.4	4459.3	4233.9	4053.1	3933.4	3988.7	4195.5	4525.2	4611.0	5101.5
25°	5268.6	5251.8	5103.1	4796.5	4515.9	4220.1	4184.9	4353.5	4664.7	4744.3	5273.2
27.5°	6081.0	6067.3	5906.4	5501.6	5096.9	4612.5	4428.6	4538.9	4810.3	4900.7	5466.3
30°	6954.8	6994.7	6709.5	6274.2	5762.2	5124.5	4756.6	4767.4	4998.8	5080.1	5700.9
32.5°	7981.9	8050.9	7707.5	7155.6	6456.6	5681.0	5170.5	5086.2	5273.2	5340.7	5996.8
35°	8999.7	9077.9	8792.8	8182.7	7377.9	6337.1	5602.8	5452.6	5638.0	5711.6	6389.1
37.5°	9879.6	9983.8	9836.7	9306.3	8363.6	7128.1	6166.9	5883.3	6087.2	6179.2	6916.5
40°	10574.0	10733.5	10722.7	10391.7	9525.5	8087.7	6882.8	6415.3	6645.2	6744.8	7555.7
42.5°	11138.2	11276.1	11395.6	11378.8	10738.0	9177.5	7724.3	7106.5	7281.3	7396.3	8274.6
45°	11527.5	11674.6	11932.2	12209.6	11904.6	10344.1	8688.5	7926.7	8086.1	8259.3	9131.5
47.5°	11875.4	12042.5	12376.8	12816.7	12894.8	11515.3	9744.7	8881.7	9027.3	9206.7	9991.5
50°	11906.1	12050.2	12568.3	13192.3	13598.5	12640.4	10879.0	9953.2	10089.6	10281.3	10912.8
52.5°	11165.7	11392.6	12297.0	13181.5	13921.9	13581.6	12005.7	11067.6	11220.9	11450.9	11866.2
55°	8667.1	8999.7	11501.4	12770.7	13807.0	14190.2	13077.3	12252.5	12448.7	12689.4	12825.8
57.5°	7465.3	7610.9	9130.0	12022.6	13282.7	14348.1	13981.7	13449.7	13765.5	14029.2	13840.7
60°	6709.5	6830.7	7728.9	10859.2	12592.8	14098.2	14680.7	14565.8	15111.5	15425.7	14878.5
62.5°	5900.2	6015.1	6832.1	9067.2	11709.9	13682.7	15122.1	15595.9	16491.0	16834.4	15856.4
65°	5096.9	5195.0	5978.3	7618.6	10587.8	13267.4	15350.6	16486.5	17768.0	18123.6	16668.9
67.5°	4201.7	4283.0	5023.3	6427.5	9223.6	12698.6	15464.0	17187.0	18879.4	19184.4	17070.5
70°	3032.1	3095.0	3859.8	5083.2	7511.3	11720.7	15418.0	17683.7	19455.7	19699.5	16766.9
72.5°	1433.3	1489.9	2388.2	3300.4	5305.4	9816.7	14487.6	17289.7	18870.1	18749.0	14909.1
75°	765.0	814.0	1372.0	1810.4	2802.1	6729.4	11855.6	14893.8	15845.7	15257.0	11018.5
77.5°	518.1	556.5	849.2	1086.8	1280.0	3194.6	7620.1	10311.9	9921.0	8949.2	5518.5
80°	410.8	450.7	696.0	735.8	619.3	1154.3	3148.6	4773.5	3429.1	2742.4	1569.7
82.5°	315.8	360.2	585.6	533.4	337.2	473.7	916.7	1509.9	878.3	668.3	380.2
85°	193.1	240.7	459.9	340.3	190.0	216.2	311.2	420.0	268.2	223.8	136.4
87.5°	98.1	138.0	233.0	124.1	85.8	50.6	82.8	82.8	70.5	61.3	35.3
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°	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6	4175.6
2.5°	4191.0	4221.7	4273.7	4322.8	4361.2	4398.0	4434.7	4454.6	4460.8	4485.3	4499.1
5°	4240.0	4296.8	4398.0	4493.0	4552.7	4589.5	4615.6	4631.0	4634.0	4641.6	4653.9
7.5°	4330.5	4420.9	4562.0	4657.0	4701.5	4698.4	4687.6	4649.3	4634.0	4620.2	4623.3
10°	4457.7	4577.2	4750.5	4816.4	4788.8	4715.2	4620.2	4508.3	4456.2	4405.6	4390.3
12.5°	4615.6	4767.4	4937.5	4934.5	4798.0	4609.4	4388.7	4217.1	4108.2	4030.0	4011.6
15°	4807.2	4982.0	5112.3	5008.0	4709.1	4370.3	4046.9	3823.0	3725.0	3639.2	3629.9
17.5°	5005.0	5191.9	5251.8	4985.0	4485.3	4016.3	3649.8	3473.6	3377.0	3331.0	3344.8
20°	5198.1	5383.6	5334.5	4853.2	4145.0	3614.6	3288.1	3191.5	3171.6	3182.3	3177.7
22.5°	5402.0	5567.5	5351.4	4598.8	3711.2	3203.7	3024.5	3027.5	3071.9	3104.1	3111.8
25°	5610.4	5722.4	5306.9	4230.8	3245.1	2901.8	2857.4	2906.4	2993.8	3056.7	3073.5
27.5°	5811.2	5860.3	5210.4	3775.6	2845.1	2685.7	2693.3	2794.5	2926.4	3013.7	3035.1
30°	6038.2	5982.9	5024.9	3263.6	2567.6	2500.2	2564.5	2682.6	2814.4	2892.7	2911.0
32.5°	6294.1	6088.7	4730.6	2789.9	2371.4	2351.5	2457.2	2533.9	2592.1	2615.2	2627.4
35°	6613.0	6237.4	4353.5	2457.2	2195.1	2242.7	2343.9	2305.5	2282.5	2270.3	2282.5
37.5°	7026.9	6438.2	3912.0	2241.2	2052.6	2164.5	2205.9	2086.3	1995.9	1951.4	1962.2
40°	7525.0	6732.5	3487.4	2074.0	1962.2	2097.0	2025.0	1880.9	1765.9	1703.0	1707.6
42.5°	8078.4	7040.6	3130.2	1948.3	1911.5	2041.8	1891.6	1720.0	1534.4	1514.5	1534.4
45°	8659.4	7358.0	2886.5	1851.8	1887.0	1994.3	1815.0	1537.5	1405.7	1487.0	1529.8
47.5°	9240.4	7649.3	2739.3	1779.7	1874.7	1940.6	1747.5	1436.3	1342.9	1460.8	1516.1
50°	9887.3	7909.8	2673.4	1727.6	1861.0	1919.2	1646.4	1410.3	1276.9	1355.0	1413.4
52.5°	10529.6	8112.2	2624.3	1675.5	1841.0	1902.3	1597.3	1379.6	1197.2	1201.8	1234.0
55°	11170.3	8244.0	2570.7	1606.5	1796.6	1865.6	1592.6	1345.9	1137.4	1115.9	1131.3
57.5°	11854.0	8319.1	2504.8	1529.8	1720.0	1772.0	1588.1	1319.8	1119.0	1083.7	1088.3
60°	12550.0	8429.5	2418.9	1436.3	1617.2	1660.2	1577.4	1310.7	1108.3	1048.5	1053.1
62.5°	13173.8	8467.8	2316.2	1347.5	1485.4	1549.8	1554.4	1303.0	1079.1	976.4	976.4
65°	13583.1	8302.3	2136.9	1246.3	1342.9	1436.3	1509.9	1276.9	1027.0	924.3	924.3
67.5°	13566.3	7830.1	1856.4	1115.9	1204.9	1310.7	1445.6	1232.5	964.2	860.0	864.6
70°	12934.7	6898.1	1500.7	964.2	1053.1	1175.8	1362.7	1166.6	889.1	789.5	798.7
72.5°	11093.7	5398.9	1089.9	786.4	876.8	1036.3	1255.4	1086.8	812.4	726.6	722.0
75°	7925.2	3416.8	738.8	603.9	682.1	878.3	1122.1	993.3	741.9	729.7	688.3
77.5°	4048.4	1632.5	489.0	441.5	475.2	692.9	942.7	887.5	752.7	602.4	536.5
80°	1316.8	602.4	308.1	300.4	315.8	461.5	729.7	728.2	570.2	409.3	361.7
82.5°	420.0	259.0	200.8	193.1	185.5	289.8	508.9	576.4	384.8	259.0	257.5
85°	167.1	154.8	118.1	108.9	78.2	136.4	266.7	383.2	286.7	187.1	191.6
87.5°	61.3	61.3	32.2	23.0	16.9	46.0	72.1	115.0	164.0	96.6	95.0
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)