

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: P968949

Luminaire Tested: **NAV-SB5C-830-U-T4FT**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968949
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-24)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5C-830-U-T4FT
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV
FORWARD THROW OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 34438 lumens
Efficiency: N/A
Efficacy: 138.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - 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



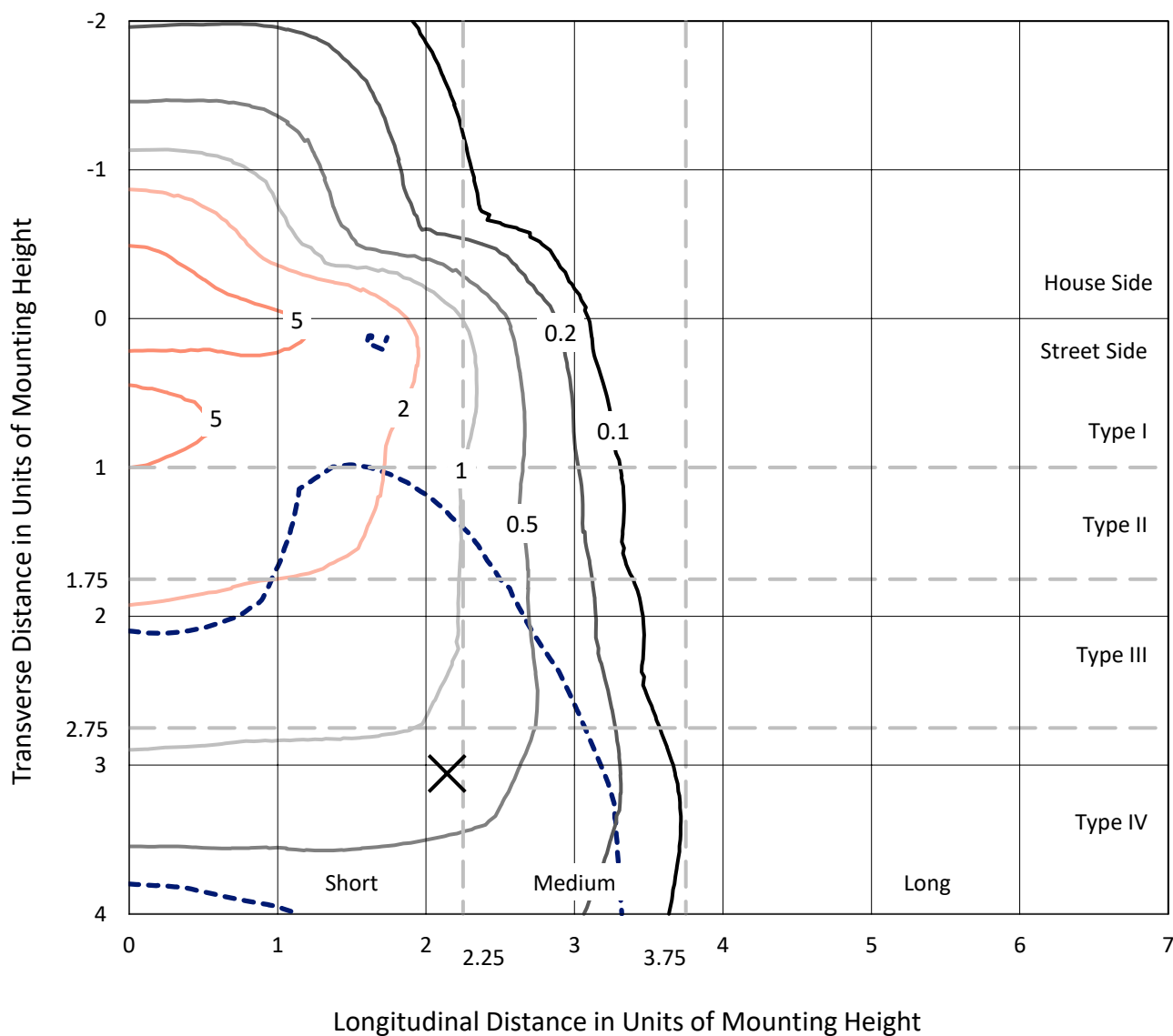
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

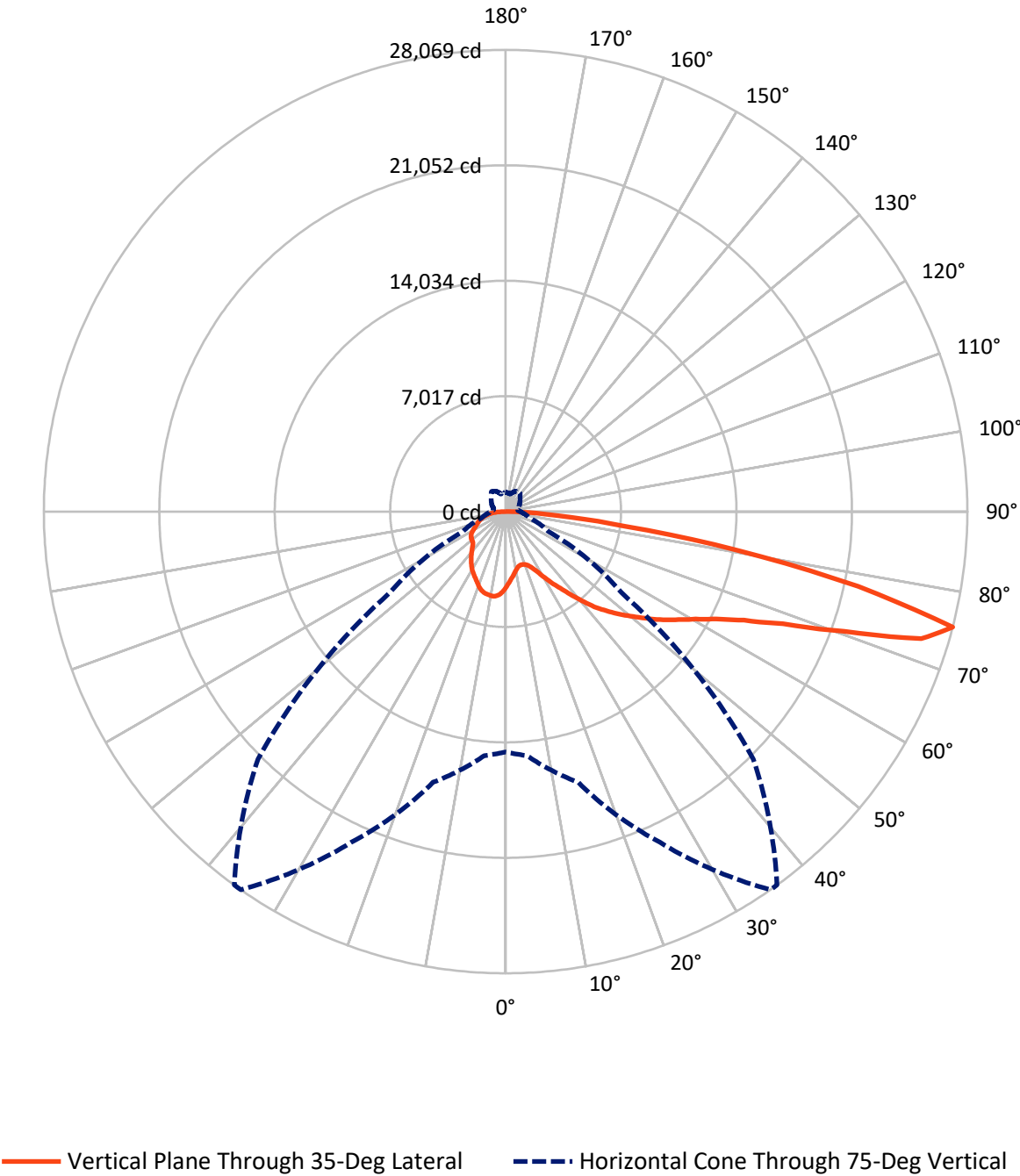


Based on 25 foot mounting height. Maximum calculated value = 8.1 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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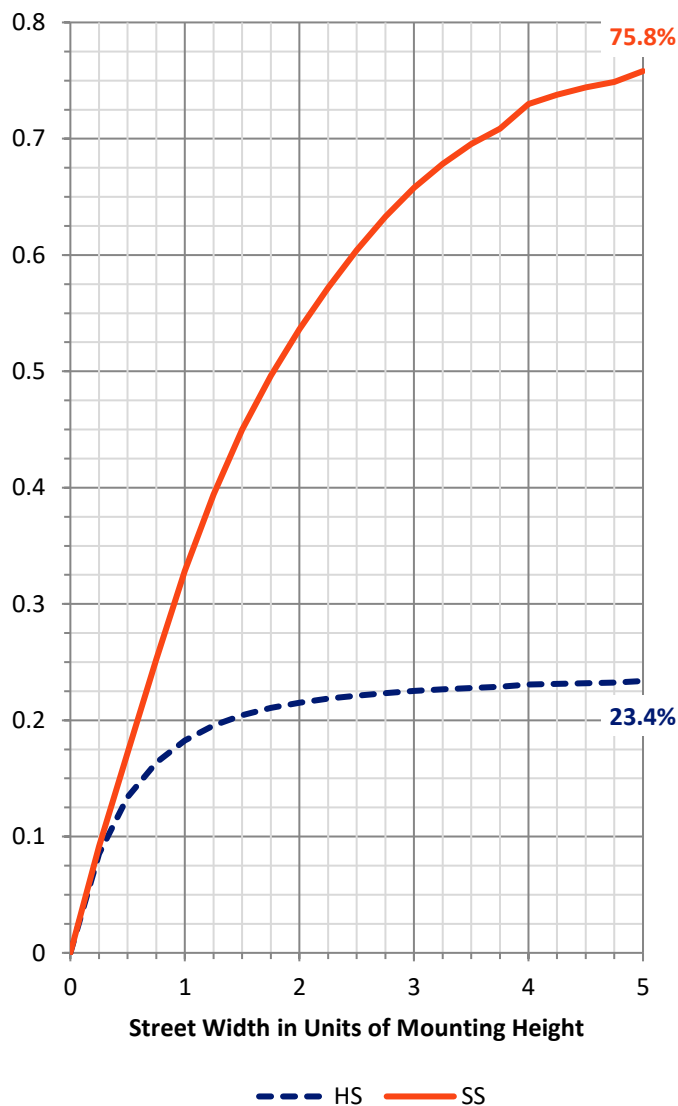
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8195.4	0.0	8195.4
	% Fixture	23.8	0.0	23.8
Street Side	Lumens	26242.6	0.0	26242.6
	% Fixture	76.2	0.0	76.2
Total	Lumens	34438.0	0.0	34438.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	434.5	1.3
10°-20°	1253.3	3.6
20°-30°	2104.6	6.1
30°-40°	3270.8	9.5
40°-50°	4854.7	14.1
50°-60°	6702.3	19.5
60°-70°	8131.4	23.6
70°-80°	6719.9	19.5
80°-90°	966.5	2.8
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°	34438.0	100.0
0°-180°	34438.0	100.0

Coefficient of Utilization



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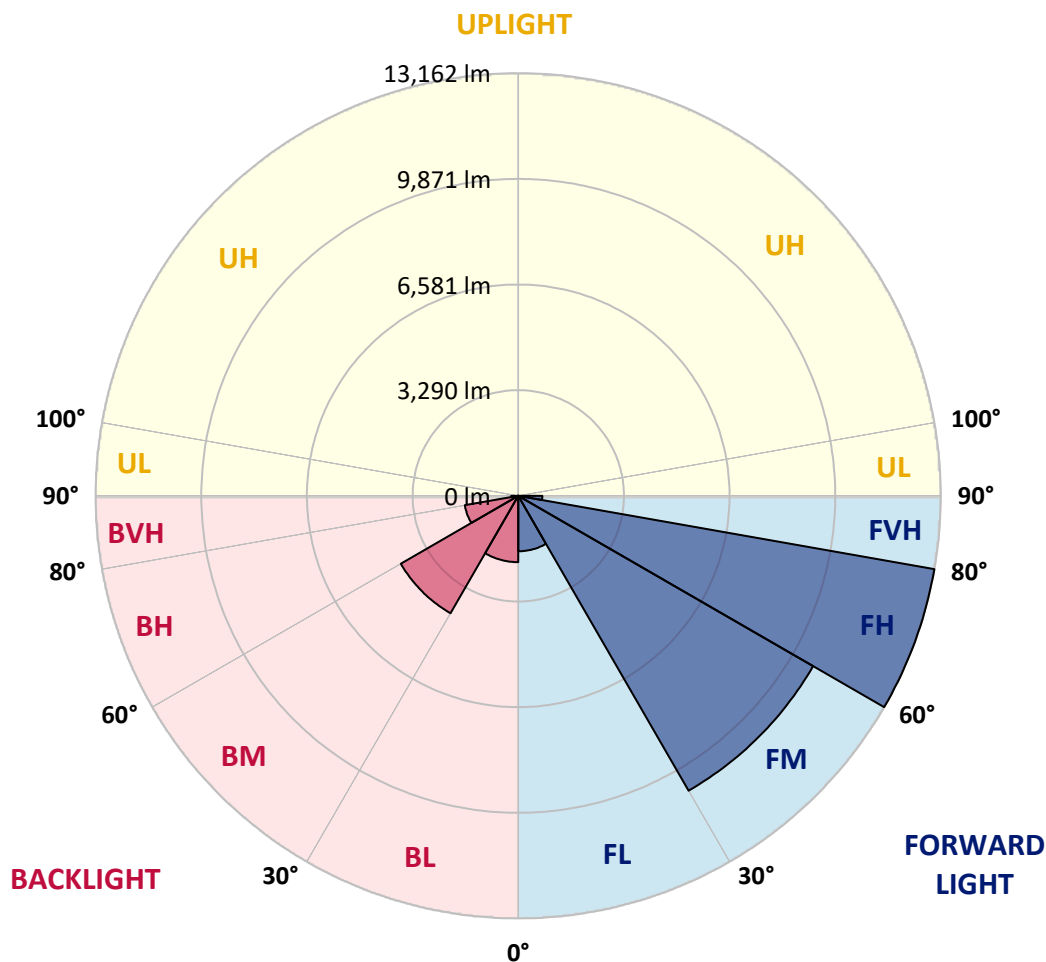
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1727.0	5.0			
FM	(30°-60°)	10605.0	30.8			
FH	(60°-80°)	13161.7	38.2			G5
FVH	(80°-90°)	748.9	2.2			G4/750
BL	(0°-30°)	2065.3	6.0	B3/2500		
BM	(30°-60°)	4222.8	12.3	B3/5000		
BH	(60°-80°)	1689.6	4.9	B3/2500		G3/2500
BVH	(80°-90°)	217.6	0.6			G2/225
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°	35°	36°	45°	55°	65°	75°	85°
0°	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1
2.5°	4231.6	4257.7	4268.9	4263.3	4291.3	4287.5	4326.6	4375.0	4442.0	4507.1	4602.1
5°	3905.9	3933.7	3957.9	3980.3	4034.3	4051.1	4112.5	4205.6	4328.5	4453.2	4609.5
7.5°	3602.4	3626.6	3663.9	3704.8	3796.0	3812.8	3915.2	4060.3	4231.6	4414.1	4630.0
10°	3354.8	3379.0	3418.1	3464.6	3578.2	3598.7	3729.0	3922.6	4146.0	4376.9	4652.4
12.5°	3248.6	3256.1	3278.5	3325.0	3423.7	3436.7	3580.0	3801.6	4062.3	4349.0	4685.9
15°	3243.1	3258.0	3259.8	3284.0	3366.0	3371.5	3503.8	3723.4	4010.1	4343.3	4736.1
17.5°	3299.0	3310.1	3293.3	3308.3	3377.2	3386.4	3490.6	3686.2	3993.3	4367.5	4821.8
20°	3447.9	3457.2	3406.9	3386.4	3436.7	3444.1	3546.5	3710.4	4010.1	4417.9	4939.1
22.5°	3764.3	3770.0	3647.1	3563.3	3567.0	3570.7	3660.1	3809.0	4075.3	4509.1	5088.0
25°	4257.7	4254.0	4058.5	3896.5	3803.5	3783.0	3842.5	3969.1	4185.1	4630.0	5279.8
27.5°	4834.8	4806.9	4611.5	4369.4	4166.5	4136.7	4123.7	4177.7	4341.5	4790.1	5514.4
30°	5486.4	5460.4	5249.9	4933.5	4652.4	4604.0	4481.1	4453.2	4574.2	5007.9	5840.1
32.5°	6201.4	6184.5	5933.2	5549.8	5173.7	5117.8	4911.2	4836.7	4931.7	5337.5	6294.4
35°	6800.8	6785.9	6577.4	6182.7	5722.9	5654.0	5443.6	5359.8	5408.2	5760.1	6888.3
37.5°	7342.6	7335.1	7156.3	6845.5	6370.8	6286.9	6050.6	6022.6	6013.3	6316.8	7608.8
40°	7845.2	7826.6	7640.5	7476.6	7124.8	7048.4	6839.9	6815.6	6744.9	7001.9	8424.2
42.5°	8401.8	8353.4	8083.5	8007.2	7912.2	7848.9	7724.2	7727.9	7571.6	7774.4	9288.0
45°	8856.1	8828.2	8550.8	8506.1	8608.5	8582.4	8690.5	8718.3	8414.8	8584.3	10185.3
47.5°	9343.9	9317.8	9083.2	9051.6	9328.9	9336.4	9718.0	9727.4	9237.7	9425.8	11084.6
50°	9945.2	9908.0	9675.3	9714.3	10025.2	10053.2	10751.3	10688.0	9995.5	10280.3	11976.3
52.5°	10341.7	10364.1	10313.9	10377.1	10801.6	10827.7	11767.8	11605.9	10745.7	11123.6	12851.3
55°	10634.1	10678.8	10835.1	10980.3	11620.7	11646.8	12726.6	12479.0	11367.6	11905.6	13674.2
57.5°	11010.1	10946.8	11239.1	11522.0	12398.9	12467.8	13659.3	13320.5	11918.6	12579.5	14238.3
60°	11550.0	11505.3	11732.5	12151.3	13270.2	13380.0	14646.0	14078.2	12322.6	13113.8	14348.2
62.5°	12644.7	12533.0	12568.3	12938.8	14368.6	14513.8	15759.3	14739.1	12523.7	13322.3	13759.8
65°	14281.1	14089.3	13910.6	14167.6	15915.7	16059.0	17015.9	15258.5	12449.1	12918.4	12197.8
67.5°	16342.0	16152.2	15932.4	16174.4	18194.4	18307.9	18566.7	15550.8	11862.7	11361.9	9437.0
70°	18041.7	17971.0	18233.5	19229.5	21834.0	21837.7	20555.0	15308.8	10256.2	8055.6	5460.4
72.5°	17816.4	17773.6	19156.8	22236.1	26421.2	26322.6	22437.2	13476.8	6908.8	3634.0	2046.0
75°	14616.2	14893.6	17036.4	22182.1	28068.8	28055.8	21284.8	8567.6	2857.7	1506.1	1057.5
77.5°	7837.8	8277.1	11060.4	16377.3	21912.2	22241.7	14964.4	2997.3	1226.8	964.3	731.6
80°	2556.1	2939.6	4408.5	8338.6	14238.3	14176.9	6413.5	1176.6	839.6	683.3	506.4
82.5°	1085.4	1130.1	1969.6	3937.5	7307.1	7193.7	2042.3	675.8	590.2	467.3	312.7
85°	424.5	474.8	869.4	1820.7	3164.9	3096.0	737.3	335.1	377.9	305.3	186.1
87.5°	139.6	169.4	310.9	623.7	984.8	949.5	180.6	115.4	163.8	139.6	67.0
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°	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1	4589.1
2.5°	4628.2	4658.0	4693.4	4745.4	4790.1	4827.3	4866.5	4890.7	4900.0	4927.9	4926.0
5°	4661.7	4726.9	4814.3	4900.0	4983.8	5034.1	5078.7	5101.0	5121.5	5136.5	5140.2
7.5°	4717.6	4801.3	4939.1	5050.8	5121.5	5162.5	5192.2	5184.9	5192.2	5196.0	5201.6
10°	4765.9	4883.2	5047.1	5153.2	5207.2	5209.0	5201.6	5175.5	5162.5	5164.4	5168.0
12.5°	4823.6	4954.0	5130.8	5220.2	5235.1	5194.2	5162.5	5117.8	5101.0	5093.6	5089.8
15°	4901.9	5050.8	5222.1	5255.6	5218.4	5166.2	5112.2	5039.6	5002.4	4972.6	4981.9
17.5°	4996.8	5160.7	5292.8	5268.6	5188.5	5103.0	5015.4	4905.5	4829.3	4797.6	4799.5
20°	5129.0	5276.1	5346.8	5240.7	5119.7	4989.4	4840.5	4706.4	4635.7	4604.0	4600.3
22.5°	5289.1	5430.6	5398.9	5192.2	5021.0	4812.5	4626.3	4527.6	4492.3	4469.9	4473.7
25°	5480.9	5601.8	5436.2	5121.5	4859.0	4578.0	4434.6	4402.9	4386.2	4369.4	4369.4
27.5°	5730.3	5795.5	5464.1	5017.3	4605.8	4328.5	4276.3	4281.9	4276.3	4248.4	4254.0
30°	6059.8	6046.8	5490.1	4847.8	4315.5	4103.2	4106.9	4131.2	4134.8	4116.2	4125.5
32.5°	6493.6	6361.5	5503.2	4628.2	4038.0	3905.9	3909.6	3935.6	3954.2	3922.6	3937.5
35°	7018.6	6728.2	5482.7	4352.7	3824.0	3717.8	3689.9	3697.4	3702.9	3673.1	3693.6
37.5°	7631.1	7139.6	5391.5	4047.3	3647.1	3533.5	3473.9	3423.7	3393.9	3366.0	3384.6
40°	8303.2	7588.3	5223.9	3749.4	3449.7	3338.0	3248.6	3153.7	3053.2	3016.0	3032.7
42.5°	9006.9	8049.9	5021.0	3464.6	3222.6	3131.4	3036.5	2898.7	2747.8	2671.6	2680.9
45°	9736.7	8522.9	4821.8	3183.5	2989.9	2950.8	2841.0	2675.2	2511.5	2414.6	2407.2
47.5°	10451.6	8969.7	4529.5	2900.5	2772.1	2814.9	2729.3	2576.5	2394.2	2241.5	2224.8
50°	11134.8	9388.6	4051.1	2613.9	2595.2	2774.0	2692.1	2472.3	2263.8	2068.3	2051.6
52.5°	11812.5	9727.4	3438.6	2353.2	2500.3	2762.8	2643.6	2401.6	2146.6	1941.8	1919.4
55°	12387.7	9902.4	2848.4	2129.7	2362.5	2667.8	2585.9	2317.8	1980.8	1763.0	1744.4
57.5°	12715.4	9760.9	2356.9	1910.1	2172.6	2511.5	2487.3	2139.1	1783.5	1615.9	1593.6
60°	12573.9	9187.5	1954.8	1718.3	1992.0	2342.0	2316.0	1962.3	1632.7	1474.5	1452.1
62.5°	11793.9	8094.6	1636.4	1550.8	1828.2	2168.9	2144.7	1826.3	1517.3	1364.6	1340.4
65°	10222.6	6584.8	1388.9	1411.1	1662.4	1960.4	1995.8	1712.8	1426.1	1277.1	1253.0
67.5°	7796.8	4769.6	1195.3	1290.2	1500.5	1755.6	1858.0	1630.9	1349.7	1208.3	1185.9
70°	4443.9	2708.8	1031.4	1172.9	1357.2	1565.7	1751.8	1565.7	1267.8	1150.6	1135.6
72.5°	1684.8	1243.6	891.7	1055.5	1219.4	1405.6	1634.6	1463.3	1172.9	1085.4	1070.5
75°	899.2	757.7	750.3	917.8	1061.2	1249.2	1487.5	1362.7	1102.1	1146.8	1184.1
77.5°	612.5	536.2	627.4	785.7	888.1	1076.0	1331.1	1210.1	955.1	951.3	876.9
80°	424.5	379.8	510.1	632.9	687.0	904.8	1161.7	1038.8	778.2	726.1	694.4
82.5°	255.0	247.6	381.6	472.8	486.0	698.1	962.5	871.2	636.7	554.8	558.5
85°	139.6	147.1	243.8	277.4	283.0	487.8	754.0	673.9	489.6	411.4	415.1
87.5°	39.1	50.2	89.4	109.9	135.9	253.2	448.6	400.3	245.8	171.3	171.3
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)