

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: P968295

Luminaire Tested: **NAV-SB5B-740-U-T3R**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968295
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-740-U-T3R
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31666.3 lumens
Efficiency: N/A
Efficacy: 173.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

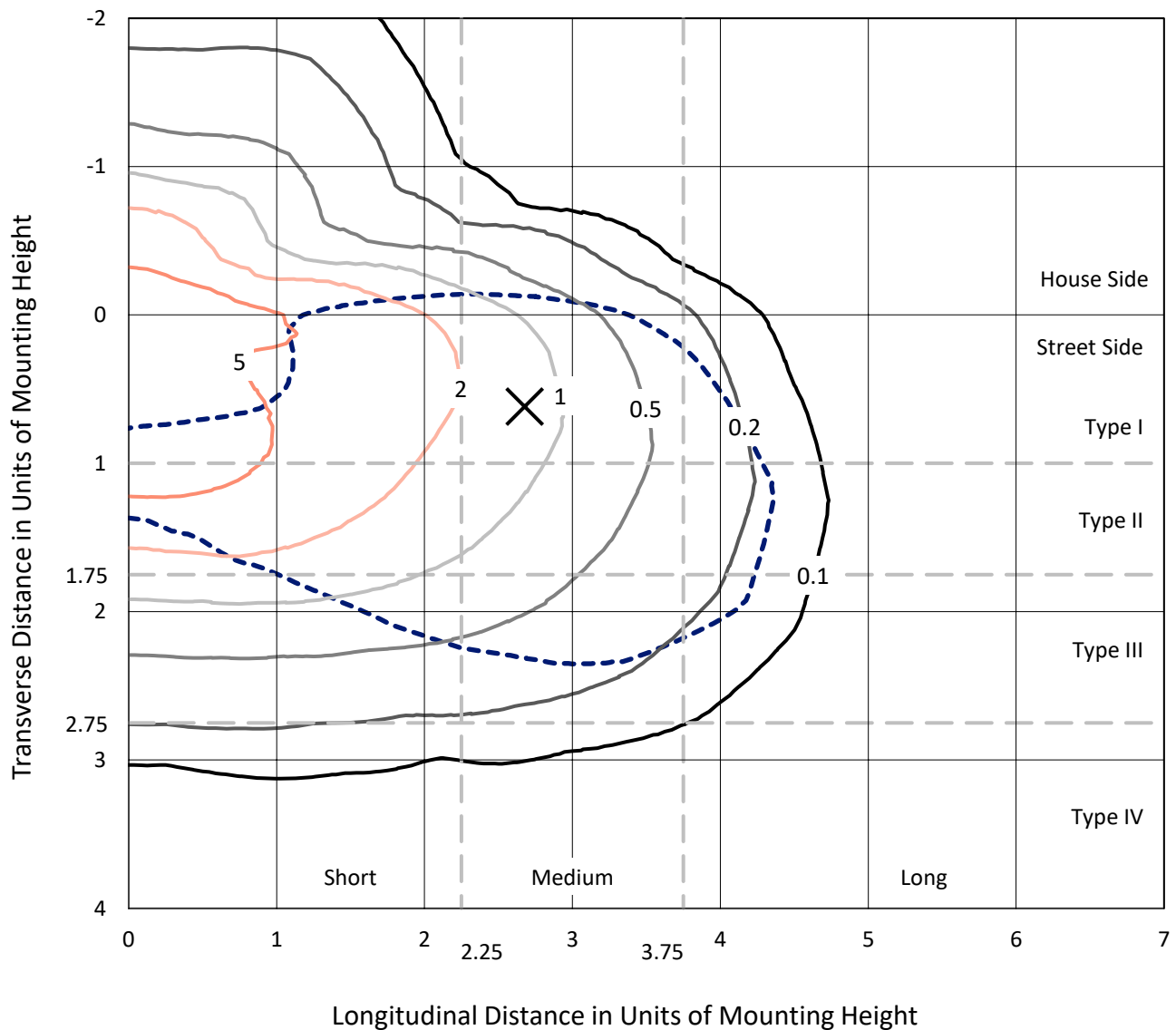
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

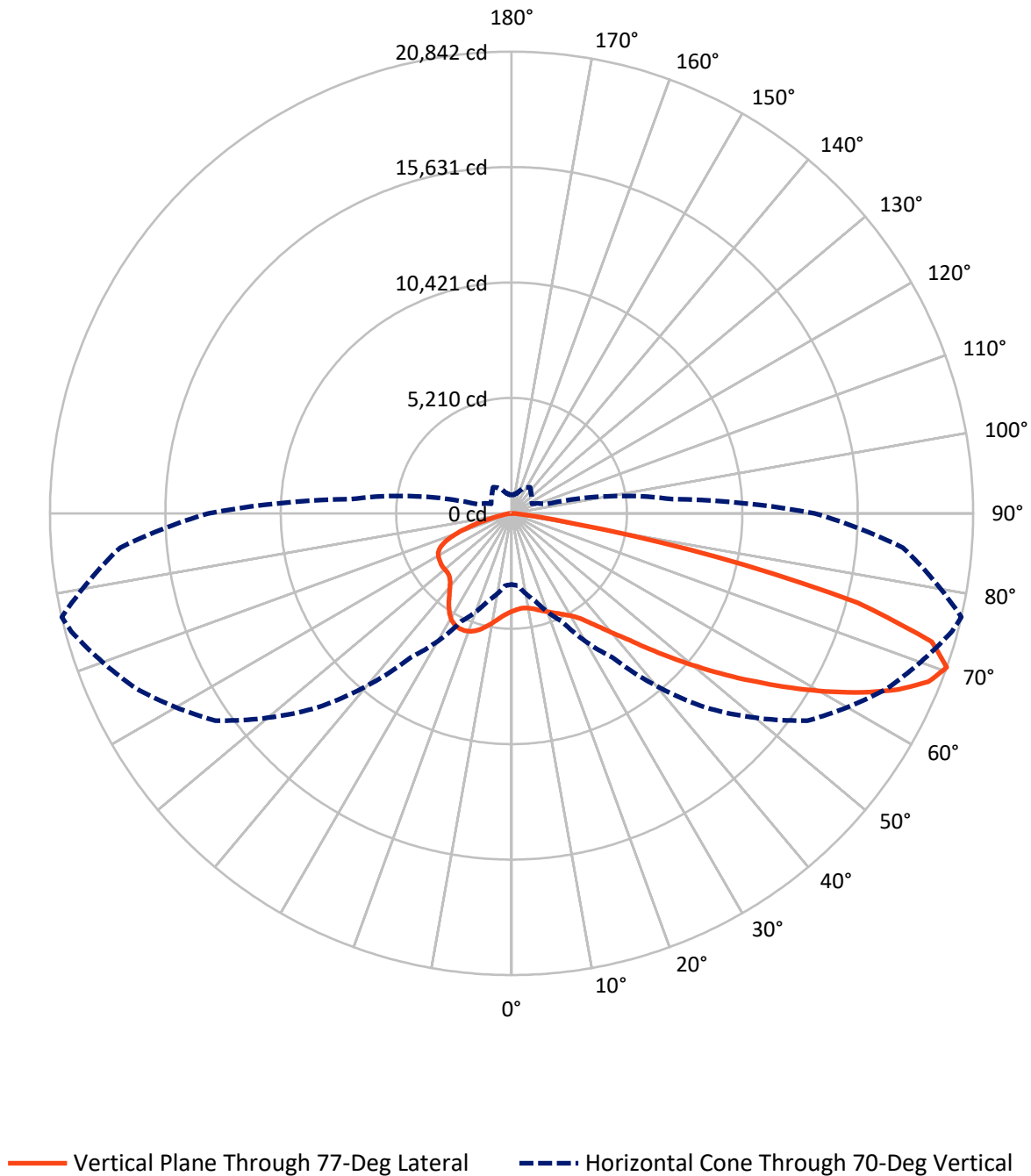
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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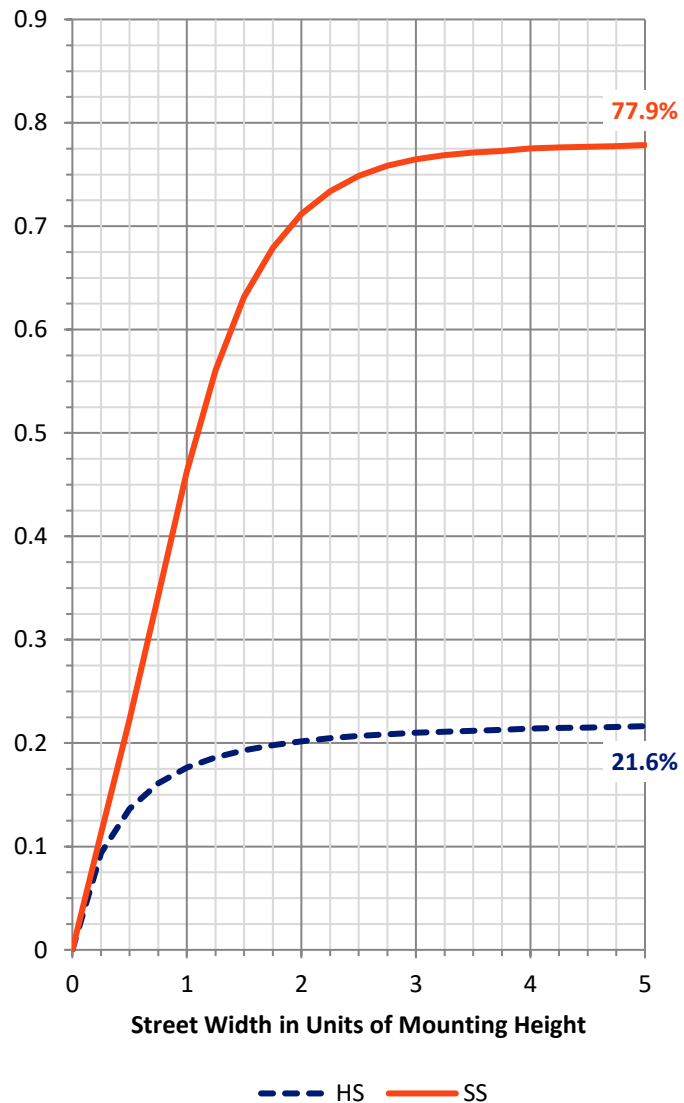
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6934.4	0.0	6934.4
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	24731.9	0.0	24731.9
	% Fixture	78.1	0.0	78.1
Total	Lumens	31666.3	0.0	31666.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.3	1.3
10°-20°	1216.0	3.8
20°-30°	2079.6	6.6
30°-40°	3344.1	10.6
40°-50°	5221.1	16.5
50°-60°	6974.1	22.0
60°-70°	7433.3	23.5
70°-80°	4575.9	14.5
80°-90°	401.0	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°	31666.3	100.0
0°-180°	31666.3	100.0

Coefficient of Utilization



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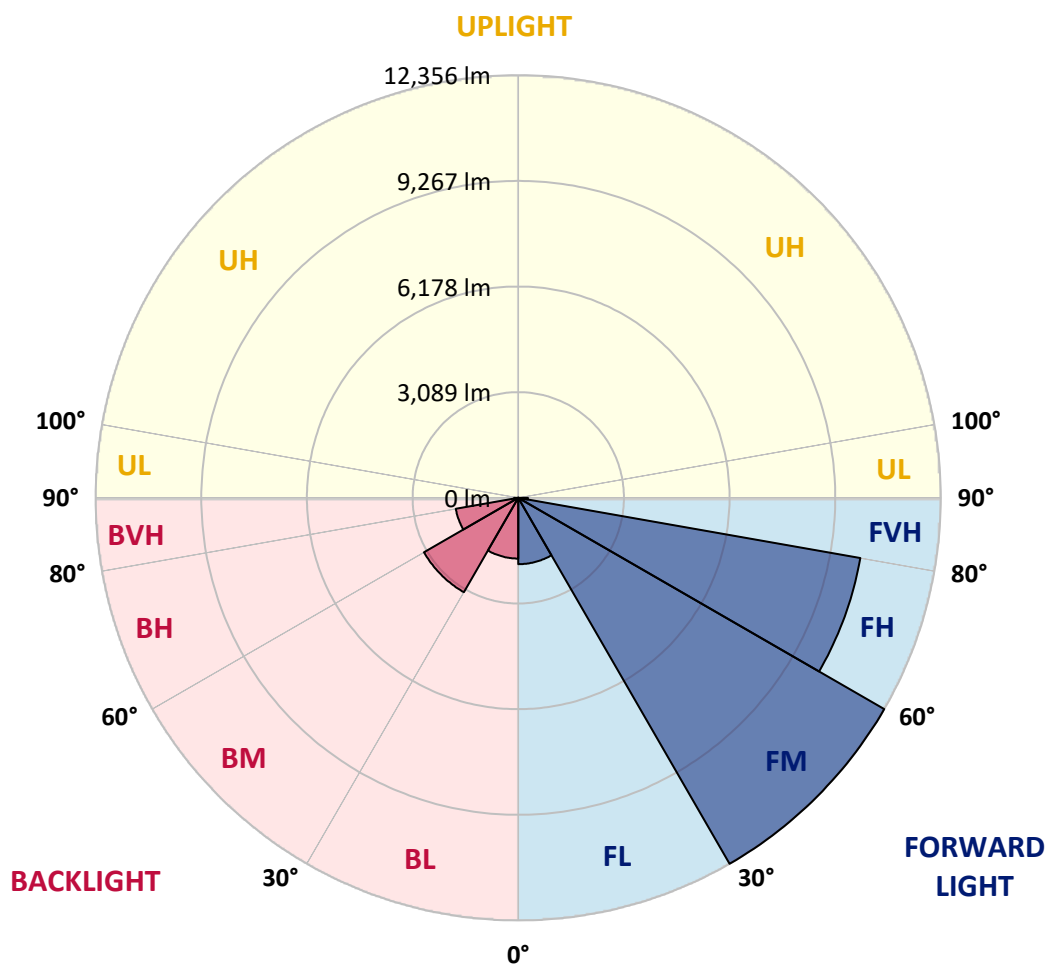
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1940.1	6.1			
FM	(30°-60°)	12355.5	39.0			
FH	(60°-80°)	10155.9	32.1			G4/12000
FVH	(80°-90°)	280.4	0.9			G3/500
BL	(0°-30°)	1776.8	5.6	B3/2500		
BM	(30°-60°)	3183.8	10.1	B3/5000		
BH	(60°-80°)	1853.3	5.9	B3/2500		G3/2500
BVH	(80°-90°)	120.6	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°	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8
2.5°	4072.3	4070.7	4091.8	4098.3	4137.2	4164.8	4216.6	4271.8	4343.1	4351.2	4395.0
5°	3837.2	3837.2	3861.5	3887.4	3937.7	3992.9	4072.3	4168.0	4291.3	4310.7	4419.4
7.5°	3637.6	3650.6	3671.8	3722.0	3780.4	3859.8	3981.5	4117.7	4279.9	4310.7	4485.8
10°	3477.1	3491.7	3517.7	3558.2	3645.8	3756.0	3915.0	4090.2	4307.5	4356.1	4583.2
12.5°	3426.9	3441.4	3456.0	3486.8	3567.9	3697.7	3887.4	4103.1	4374.0	4422.6	4716.1
15°	3543.6	3561.5	3550.1	3542.0	3584.1	3702.5	3900.4	4150.1	4456.7	4526.4	4879.9
17.5°	3812.8	3819.4	3793.3	3717.2	3710.6	3773.8	3962.0	4215.0	4560.4	4636.7	5045.4
20°	4247.5	4236.1	4182.6	4031.7	3945.8	3932.8	4067.4	4312.3	4667.5	4748.6	5223.8
22.5°	4837.8	4824.8	4717.8	4479.4	4288.0	4161.5	4219.9	4438.9	4787.5	4878.3	5397.3
25°	5574.1	5556.2	5398.9	5074.6	4777.7	4464.8	4427.5	4605.8	4935.1	5019.4	5579.0
27.5°	6433.6	6419.1	6248.7	5820.6	5392.4	4879.9	4685.4	4802.1	5089.1	5184.9	5783.3
30°	7358.1	7400.2	7098.5	6638.0	6096.3	5421.6	5032.4	5043.7	5288.7	5374.6	6031.4
32.5°	8444.7	8517.6	8154.4	7570.5	6831.0	6010.3	5470.3	5381.0	5579.0	5650.3	6344.4
35°	9521.5	9604.2	9302.6	8657.0	7805.7	6704.4	5927.7	5768.7	5964.9	6042.8	6759.6
37.5°	10452.4	10562.7	10407.0	9845.8	8848.4	7541.3	6524.4	6224.4	6440.1	6537.4	7317.5
40°	11187.1	11355.8	11344.4	10994.0	10077.8	8556.5	7281.8	6787.1	7030.5	7135.8	7993.8
42.5°	11783.9	11929.9	12056.4	12038.5	11360.6	9709.6	8172.2	7518.6	7703.5	7825.2	8754.4
45°	12195.9	12351.6	12624.0	12917.6	12594.8	10943.8	9192.3	8386.2	8555.0	8738.2	9660.9
47.5°	12563.9	12740.7	13094.3	13559.7	13642.4	12182.8	10309.7	9396.6	9550.7	9740.5	10570.8
50°	12596.4	12748.8	13297.0	13957.1	14386.9	13373.3	11509.8	10530.2	10674.6	10877.3	11545.5
52.5°	11813.1	12053.1	13009.9	13945.7	14729.0	14369.1	12701.8	11709.3	11871.4	12114.8	12554.2
55°	9169.5	9521.5	12168.3	13511.1	14607.4	15012.9	13835.4	12963.0	13170.5	13425.1	13569.5
57.5°	7898.1	8052.2	9659.4	12719.6	14052.7	15179.9	14792.3	14229.6	14563.6	14842.6	14643.2
60°	7098.5	7226.7	8177.0	11488.7	13323.0	14915.6	15531.8	15410.3	15987.5	16320.0	15741.0
62.5°	6242.2	6363.9	7228.3	9592.9	12388.9	14476.1	15998.9	16500.0	17447.1	17810.5	16775.8
65°	5392.4	5496.3	6325.0	8060.3	11201.7	14036.6	16240.6	17442.3	18798.1	19174.4	17635.3
67.5°	4445.3	4531.3	5314.6	6800.2	9758.3	13434.9	16360.5	18183.5	19973.9	20296.6	18060.2
70°	3207.9	3274.4	4083.7	5377.9	7946.7	12400.1	16312.0	18708.9	20583.7	20841.5	17739.1
72.5°	1516.4	1576.3	2526.7	3491.7	5613.0	10385.9	15327.5	18292.1	19964.2	19836.1	15773.5
75°	809.2	861.2	1451.5	1915.3	2964.6	7119.6	12542.9	15757.2	16764.4	16141.6	11657.4
77.5°	548.2	588.7	898.5	1149.8	1354.2	3379.8	8061.9	10909.8	10496.2	9468.0	5838.4
80°	434.6	476.8	736.3	778.5	655.2	1221.2	3331.1	5050.3	3627.9	2901.4	1660.7
82.5°	334.0	381.1	619.5	564.4	356.8	501.1	969.9	1597.5	929.3	707.1	402.2
85°	204.4	254.6	486.6	360.1	201.1	228.7	329.2	444.3	283.8	236.8	144.3
87.5°	103.8	146.0	246.5	131.4	90.8	53.5	87.5	87.5	74.6	64.9	37.3
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°	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8	4417.8
2.5°	4433.9	4466.4	4521.6	4573.4	4613.9	4652.9	4691.8	4713.0	4719.4	4745.3	4759.9
5°	4485.8	4545.9	4652.9	4753.4	4816.7	4855.6	4883.2	4899.4	4902.7	4910.8	4923.8
7.5°	4581.5	4677.3	4826.4	4927.0	4974.0	4970.7	4959.5	4918.9	4902.7	4888.0	4891.3
10°	4716.1	4842.6	5025.9	5095.7	5066.5	4988.6	4888.0	4769.6	4714.5	4661.0	4644.8
12.5°	4883.2	5043.7	5223.8	5220.5	5076.2	4876.7	4643.1	4461.5	4346.4	4263.7	4244.2
15°	5085.9	5270.8	5408.6	5298.3	4982.1	4623.7	4281.5	4044.8	3940.9	3850.1	3840.4
17.5°	5295.2	5493.0	5556.2	5274.0	4745.3	4249.0	3861.5	3674.9	3572.8	3524.2	3538.7
20°	5499.4	5695.7	5643.9	5134.5	4385.4	3824.2	3478.7	3376.6	3355.4	3366.8	3362.0
22.5°	5715.2	5890.4	5661.7	4865.4	3926.4	3389.6	3199.7	3203.0	3250.1	3284.1	3292.2
25°	5935.8	6054.2	5614.6	4476.2	3433.3	3070.1	3023.0	3074.9	3167.4	3233.9	3251.7
27.5°	6148.2	6200.1	5512.4	3994.4	3010.0	2841.4	2849.5	2956.5	3096.0	3188.5	3211.1
30°	6388.2	6329.8	5316.3	3452.8	2716.5	2645.1	2713.3	2838.1	2977.6	3060.3	3079.8
32.5°	6659.0	6441.7	5004.9	2951.7	2508.9	2487.8	2599.7	2680.8	2742.5	2766.8	2779.7
35°	6996.3	6599.1	4605.8	2599.7	2322.4	2372.7	2479.7	2439.2	2414.8	2401.9	2414.8
37.5°	7434.2	6811.5	4138.8	2371.0	2171.6	2290.0	2333.7	2207.2	2111.6	2064.6	2075.9
40°	7961.4	7122.9	3689.6	2194.3	2075.9	2218.6	2142.4	1989.9	1868.3	1801.8	1806.7
42.5°	8546.9	7448.9	3311.7	2061.3	2022.3	2160.2	2001.3	1819.7	1623.4	1602.3	1623.4
45°	9161.4	7784.6	3053.8	1959.1	1996.4	2110.0	1920.2	1626.7	1487.2	1573.2	1618.6
47.5°	9776.1	8092.7	2898.1	1882.9	1983.5	2053.2	1848.8	1519.6	1420.6	1545.6	1603.9
50°	10460.5	8368.4	2828.4	1827.8	1968.8	2030.5	1741.8	1492.1	1350.9	1433.7	1495.3
52.5°	11140.0	8582.5	2776.5	1772.6	1947.8	2012.6	1689.9	1459.6	1266.6	1271.5	1305.5
55°	11817.9	8721.9	2719.7	1699.7	1900.8	1973.7	1685.0	1423.9	1203.4	1180.7	1196.9
57.5°	12541.3	8801.5	2650.0	1618.6	1819.7	1874.8	1680.2	1396.4	1183.9	1146.6	1151.5
60°	13277.5	8918.2	2559.2	1519.6	1711.0	1756.4	1668.8	1386.6	1172.6	1109.3	1114.2
62.5°	13937.6	8958.7	2450.5	1425.6	1571.5	1639.6	1644.5	1378.5	1141.7	1033.1	1033.1
65°	14370.6	8783.6	2260.7	1318.6	1420.6	1519.6	1597.5	1350.9	1086.6	978.0	978.0
67.5°	14352.8	8284.0	1964.0	1180.7	1274.7	1386.6	1529.3	1303.9	1020.1	909.8	914.7
70°	13684.7	7298.0	1587.7	1020.1	1114.2	1243.9	1441.8	1234.2	940.6	835.2	844.9
72.5°	11736.9	5711.9	1153.1	832.0	927.6	1096.3	1328.2	1149.8	859.6	768.7	763.8
75°	8384.6	3615.0	781.7	639.0	721.7	929.3	1187.2	1050.9	784.9	771.9	728.2
77.5°	4283.2	1727.2	517.3	467.1	502.8	733.1	997.4	939.0	796.3	637.3	567.6
80°	1393.1	637.3	326.0	317.9	334.0	488.2	771.9	770.4	603.3	433.1	382.7
82.5°	444.3	274.1	212.5	204.4	196.2	306.5	538.4	609.8	407.0	274.1	272.4
85°	176.8	163.8	124.8	115.1	82.7	144.3	282.2	405.5	303.3	197.8	202.7
87.5°	64.9	64.9	34.0	24.3	17.8	48.7	76.3	121.7	173.5	102.2	100.6
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)