

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: P971560

Luminaire Tested: **NAV-SB6D-830-U-AFL**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P971560
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-14)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB6D-830-U-AFL
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(6) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 57801.8 lumens
Efficiency: N/A
Efficacy: 131.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G4

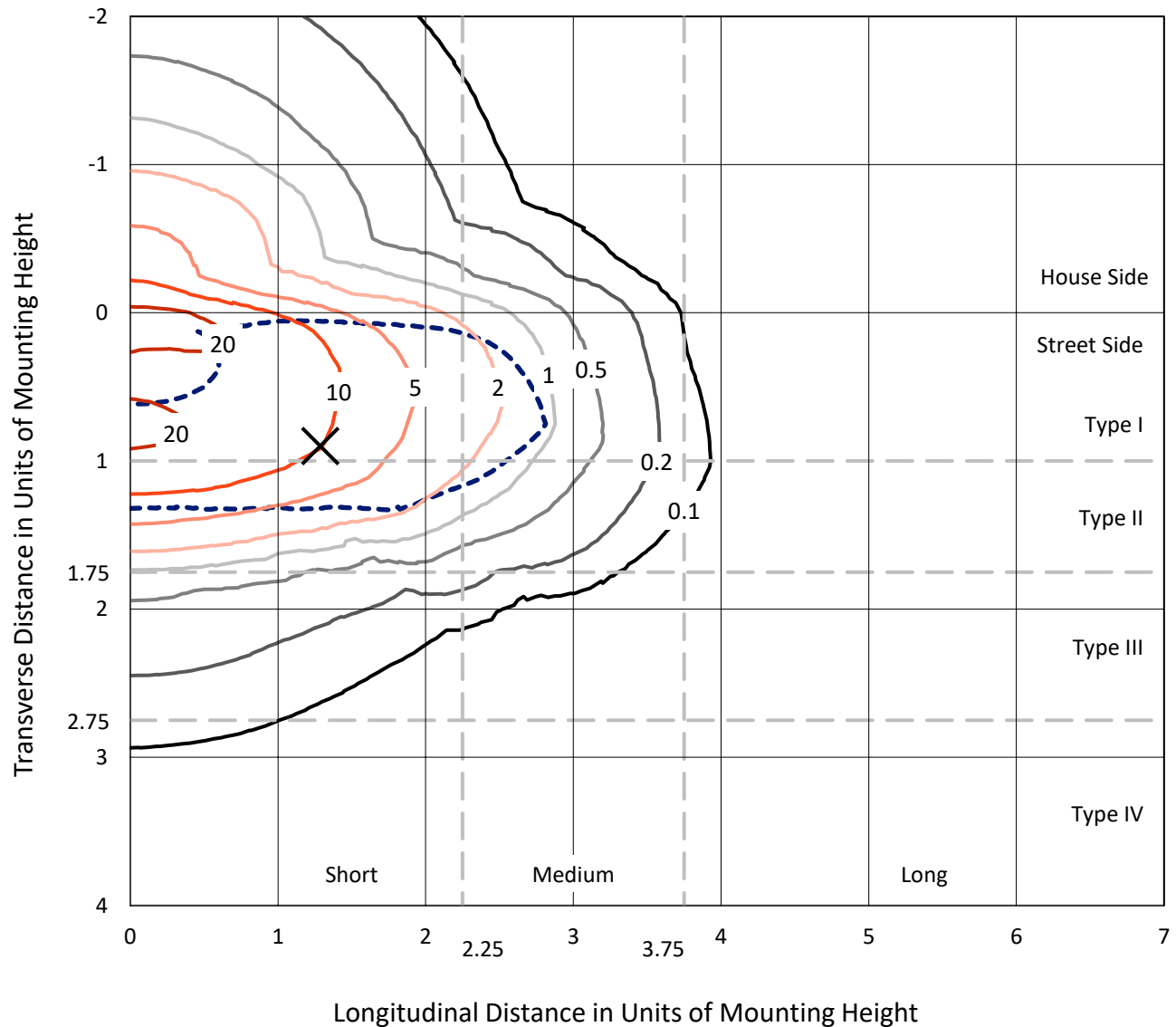
Input Watts (W): 440.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

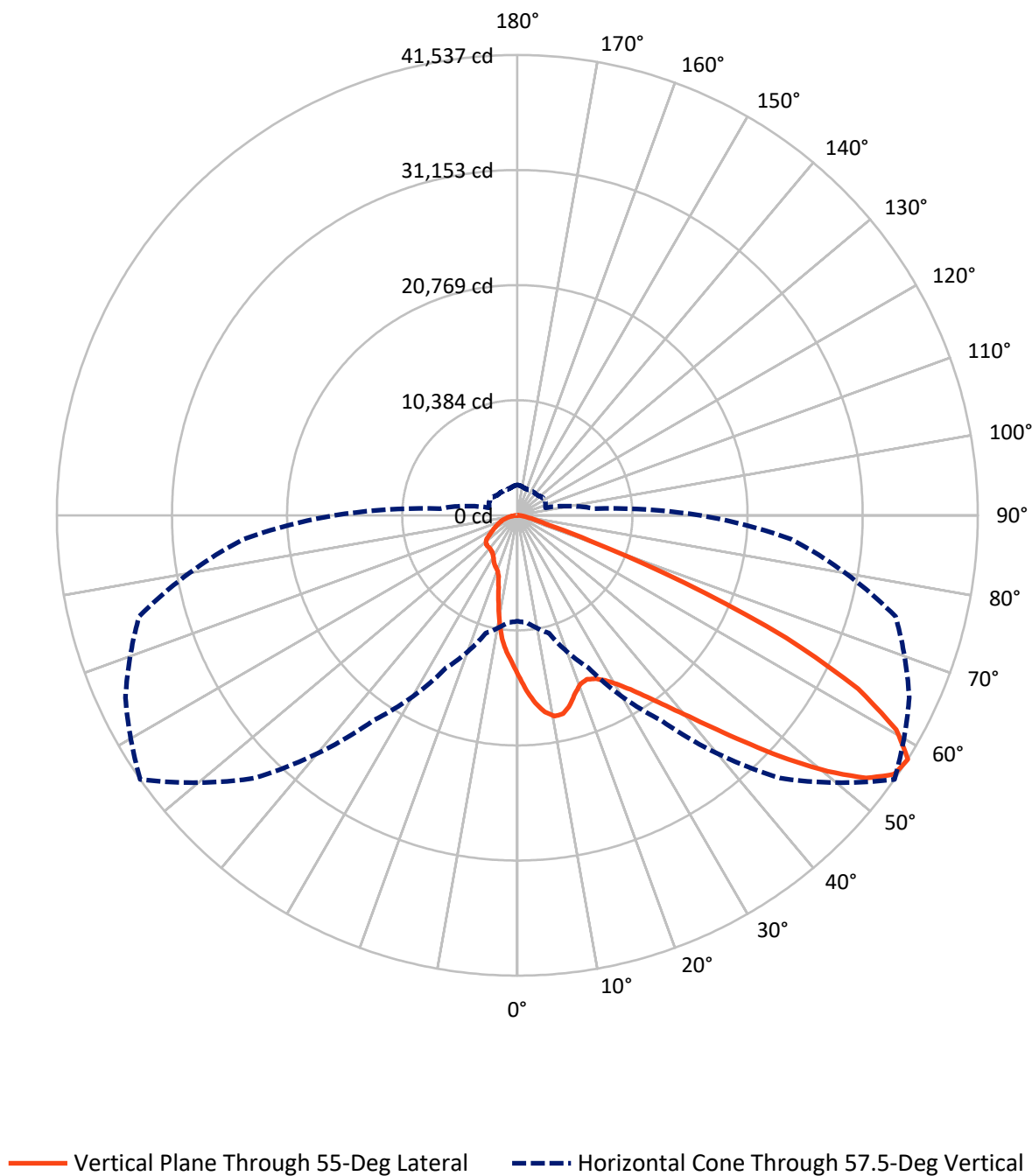
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 28 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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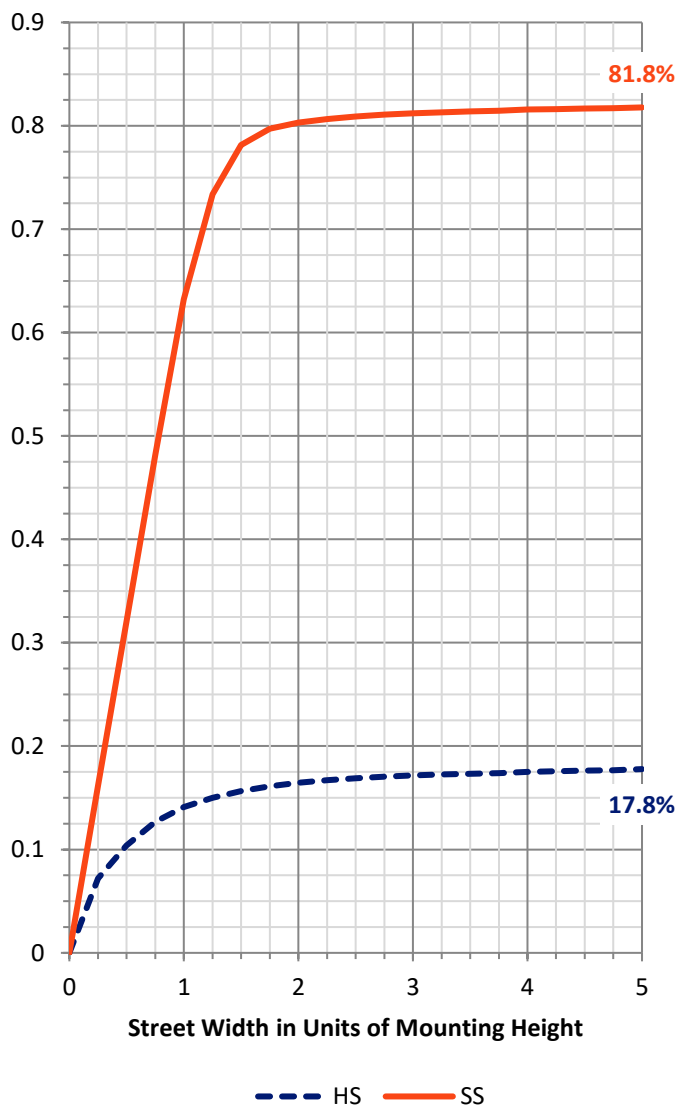
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10458.9	0.0	10458.9
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	47342.8	0.0	47342.8
	% Fixture	81.9	0.0	81.9
Total	Lumens	57801.8	0.0	57801.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1343.9	2.3
10°-20°	3392.2	5.9
20°-30°	5413.0	9.4
30°-40°	8570.1	14.8
40°-50°	13117.5	22.7
50°-60°	14050.0	24.3
60°-70°	8838.9	15.3
70°-80°	2613.8	4.5
80°-90°	462.2	0.8
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°	57801.8	100.0
0°-180°	57801.8	100.0

Coefficient of Utilization



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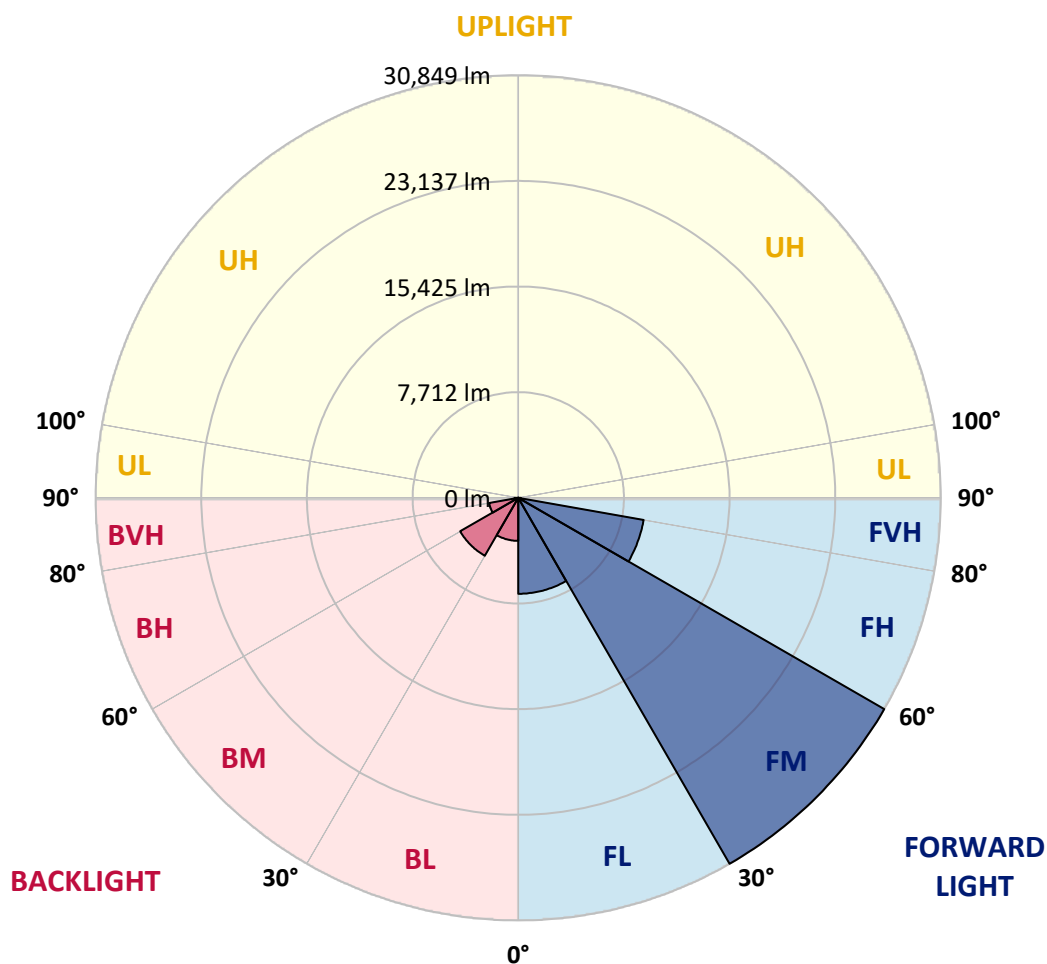
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	7005.6	12.1			
FM	(30°-60°)	30849.2	53.4			
FH	(60°-80°)	9292.8	16.1			G4/12000
FVH	(80°-90°)	195.3	0.3			G2/225
BL	(0°-30°)	3143.6	5.4	B4/5000		
BM	(30°-60°)	4888.4	8.5	B3/5000		
BH	(60°-80°)	2160.0	3.7	B3/2500		G3/2500
BVH	(80°-90°)	266.9	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2
2.5°	16616.8	16604.8	16670.5	16446.4	16294.0	16087.9	15816.0	15469.3	15095.8	14701.4	14531.0
5°	18113.8	18009.1	18077.9	17910.5	17743.3	17432.5	17029.1	16464.4	15774.1	14988.3	14569.9
7.5°	17877.7	17806.0	17982.3	18131.7	18257.2	18218.4	17922.5	17330.9	16440.5	15299.0	14692.5
10°	15974.3	15893.6	16141.6	16658.6	17417.5	18077.9	18436.5	18069.0	17121.7	15639.7	14812.0
12.5°	14295.0	14256.1	14420.5	14838.8	15681.5	16948.4	18370.8	18714.3	17829.9	16043.0	14973.3
15°	13577.9	13530.1	13634.7	13846.8	14384.6	15564.9	17773.1	19156.6	18526.2	16509.2	15230.3
17.5°	13419.5	13365.7	13410.5	13521.1	13867.7	14767.1	16870.8	19374.8	19252.3	17029.1	15445.4
20°	13712.3	13667.6	13673.5	13667.6	13909.6	14623.7	16243.3	19291.1	19885.7	17507.2	15654.6
22.5°	14420.5	14345.8	14348.8	14190.4	14321.9	14874.7	16078.9	19066.9	20450.5	17925.5	15813.0
25°	15574.0	15439.5	15466.3	15063.0	15027.1	15436.5	16335.8	18893.6	21012.2	18260.2	15842.8
27.5°	17151.6	16999.2	16918.5	16317.9	16031.1	16234.3	16858.8	18953.5	21544.1	18550.0	15768.1
30°	19123.7	18938.5	18774.1	17922.5	17402.7	17327.9	17671.5	19347.9	22171.6	18854.9	15639.7
32.5°	21541.1	21325.9	21027.2	19897.7	19165.6	18774.1	18723.4	20050.0	22906.7	19243.2	15574.0
35°	24418.7	24137.7	23713.5	22252.2	21325.9	20525.2	20109.8	21063.0	23913.7	19828.9	15648.6
37.5°	27382.9	27066.0	26677.7	24938.6	23800.1	22619.8	21801.0	22437.6	25255.3	20623.8	15845.8
40°	30117.0	29761.4	29399.8	27851.9	26629.8	25207.5	23871.8	24176.6	26895.8	21574.0	16180.4
42.5°	31730.5	31467.5	31330.0	30493.4	29549.2	28105.9	26447.6	26238.4	28739.5	22667.7	16563.0
45°	31658.8	31551.2	31975.5	32322.1	32098.0	31297.2	29465.5	28518.3	30589.1	23614.9	16915.6
47.5°	29967.5	30039.3	30986.5	32934.7	33792.3	34210.6	32901.8	30756.4	32196.6	24323.0	17073.9
50°	25365.9	25425.6	27618.9	31820.1	34228.5	36586.1	36311.2	32940.6	33442.7	24756.3	17038.1
52.5°	21723.3	21762.2	22703.4	28515.3	32788.3	37781.4	39383.0	34999.4	34354.0	24875.8	16837.9
55°	16362.8	16497.3	17552.0	22371.8	29041.2	36834.1	41253.5	37121.0	34930.8	24887.8	16628.7
57.5°	9558.8	9705.3	11008.1	15185.5	22572.0	33532.3	41537.4	39003.5	35322.2	24792.2	16503.2
60°	4682.3	4745.0	5312.8	7981.2	13918.5	27170.7	39254.5	39914.8	35540.3	24741.3	16497.3
62.5°	3155.5	3146.4	3170.3	3938.3	6857.7	17456.4	34497.5	38319.2	35423.8	24547.1	16437.4
65°	2713.2	2680.3	2590.7	2764.0	3552.9	7984.1	26653.7	33556.2	34536.4	24060.0	16028.1
67.5°	2345.6	2348.7	2351.7	2297.8	2536.9	3684.3	16288.1	26432.6	31351.0	21753.3	14450.3
70°	1942.3	1969.1	1981.1	1981.1	2067.7	2417.4	6953.3	18116.8	24729.4	17056.0	11638.6
72.5°	1768.9	1712.2	1718.1	1688.3	1688.3	1840.7	2799.8	10270.1	15579.9	9594.7	7102.6
75°	1443.2	1479.1	1485.1	1464.2	1395.4	1404.4	1661.4	4308.8	6666.4	3980.2	3511.0
77.5°	1246.0	1246.0	1258.0	1243.0	1189.3	1051.9	1108.5	1670.3	2267.9	1631.5	1754.0
80°	1001.0	998.0	1048.8	1078.7	995.1	776.9	708.2	923.3	1007.0	717.1	911.3
82.5°	487.1	516.9	720.2	821.7	755.9	561.8	433.3	573.7	537.8	316.7	409.4
85°	283.8	269.0	322.7	457.2	433.3	310.8	209.2	298.8	280.8	161.3	164.3
87.5°	89.7	83.6	65.7	155.4	125.5	86.6	56.8	86.6	77.7	35.9	35.9
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2	14483.2
2.5°	14318.9	13966.3	13616.7	13297.0	13102.8	12977.2	12851.8	12711.3	12657.5	12576.9
5°	14175.4	13494.2	12887.6	12364.7	11889.6	11516.1	11139.6	10834.8	10697.3	10790.0
7.5°	14091.8	13105.8	12170.4	11211.3	10288.0	9549.9	8907.5	8456.2	8253.1	8303.9
10°	14017.1	12666.5	11241.2	9726.2	8399.5	7485.2	6827.7	6484.2	6355.6	6382.6
12.5°	13948.4	12173.5	10120.6	8127.6	6717.2	6113.6	5925.4	5928.4	5952.3	5970.2
15°	13936.4	11578.8	8868.6	6729.1	5808.9	5770.0	5973.2	6101.7	6170.4	6191.3
17.5°	13918.5	10867.7	7592.7	5776.0	5587.7	5850.7	6038.9	6122.6	6176.3	6179.3
20°	13846.8	9965.3	6415.4	5321.8	5539.9	5767.0	5883.5	5949.3	5994.1	6009.1
22.5°	13625.6	8961.3	5498.1	5118.5	5348.7	5530.9	5668.4	5743.1	5770.0	5788.0
25°	13228.2	7837.8	4864.6	4924.4	5082.8	5312.8	5423.4	5438.3	5429.3	5456.3
27.5°	12708.4	6633.6	4470.1	4661.4	4864.6	5061.9	5121.6	5112.6	5094.7	5124.6
30°	12080.9	5551.9	4219.2	4365.6	4643.5	4822.7	4876.5	4855.6	4819.8	4852.7
32.5°	11417.5	4667.4	4013.0	4159.4	4461.2	4637.5	4691.3	4670.4	4643.5	4670.4
35°	10799.0	4048.9	3821.7	4022.0	4317.8	4491.1	4559.8	4562.8	4562.8	4595.7
37.5°	10231.2	3687.3	3663.4	3935.3	4219.2	4374.6	4473.2	4479.1	4350.6	4359.6
40°	9705.3	3534.9	3591.7	3878.5	4123.6	4272.9	4279.0	3944.3	3708.2	3702.2
42.5°	9275.0	3505.0	3612.6	3872.6	4054.8	4060.8	3639.5	3379.5	3313.8	3316.8
45°	8871.6	3496.1	3660.4	3872.6	3953.2	3508.1	3224.1	3155.5	3161.4	3185.3
47.5°	8420.5	3460.2	3669.4	3818.7	3660.4	3119.6	3035.8	3006.0	2994.0	3000.1
50°	7927.4	3331.8	3555.8	3711.2	3158.4	2952.2	2847.7	2838.6	2853.6	2862.6
52.5°	7407.5	3122.6	3361.6	3517.0	2928.3	2805.8	2689.3	2710.2	2775.9	2796.8
55°	7066.9	2877.5	3104.6	3128.5	2767.0	2668.4	2569.8	2617.5	2740.0	2778.9
57.5°	6977.2	2617.5	2811.8	2784.9	2560.8	2548.9	2489.1	2530.9	2686.3	2743.1
60°	6950.3	2384.5	2524.9	2504.0	2360.6	2417.4	2402.4	2423.3	2477.1	2495.1
62.5°	6741.1	2199.2	2267.9	2238.1	2181.3	2279.9	2315.8	2271.0	2312.8	2333.7
65°	6209.2	2049.8	2017.0	1996.1	2020.0	2109.6	2181.3	2091.6	2130.5	2190.2
67.5°	5330.7	1846.6	1757.0	1780.9	1855.6	1903.4	1996.1	1894.4	1927.3	2028.9
70°	4311.8	1589.7	1509.0	1577.7	1649.4	1748.0	1763.0	1694.2	1771.9	1885.5
72.5°	3050.8	1329.7	1272.9	1413.4	1437.3	1565.8	1532.9	1500.0	1607.6	1646.5
75°	2115.6	1072.8	1039.9	1147.4	1234.1	1344.6	1320.7	1359.6	1586.7	1604.6
77.5°	1338.6	833.6	812.7	881.5	1001.0	1123.5	1162.4	1604.6	2710.2	2817.7
80°	776.9	621.6	597.6	651.4	755.9	869.5	1120.5	1969.1	1786.9	1766.0
82.5°	433.3	427.3	397.4	412.4	505.0	627.5	1583.7	1386.5	1126.5	1162.4
85°	203.2	251.0	215.1	206.1	283.8	735.0	1057.8	791.8	525.9	513.9
87.5°	53.8	47.8	47.8	53.8	119.5	633.4	421.3	337.6	200.2	194.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)