

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: P969472

Luminaire Tested: **NAV-SB5D-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969472
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 39415.3 lumens
Efficiency: N/A
Efficacy: 108.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G5

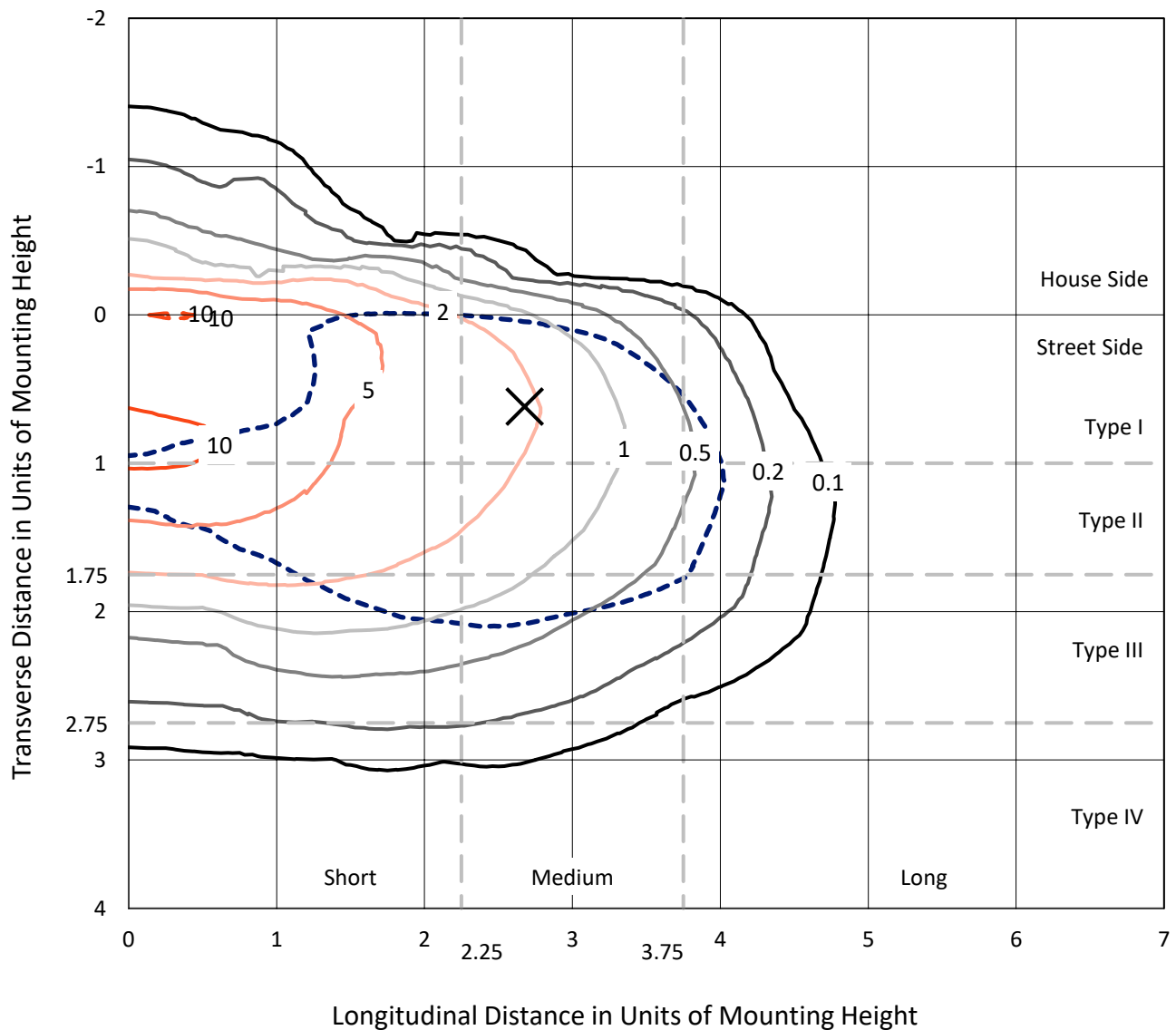
Input Watts (W): 364.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

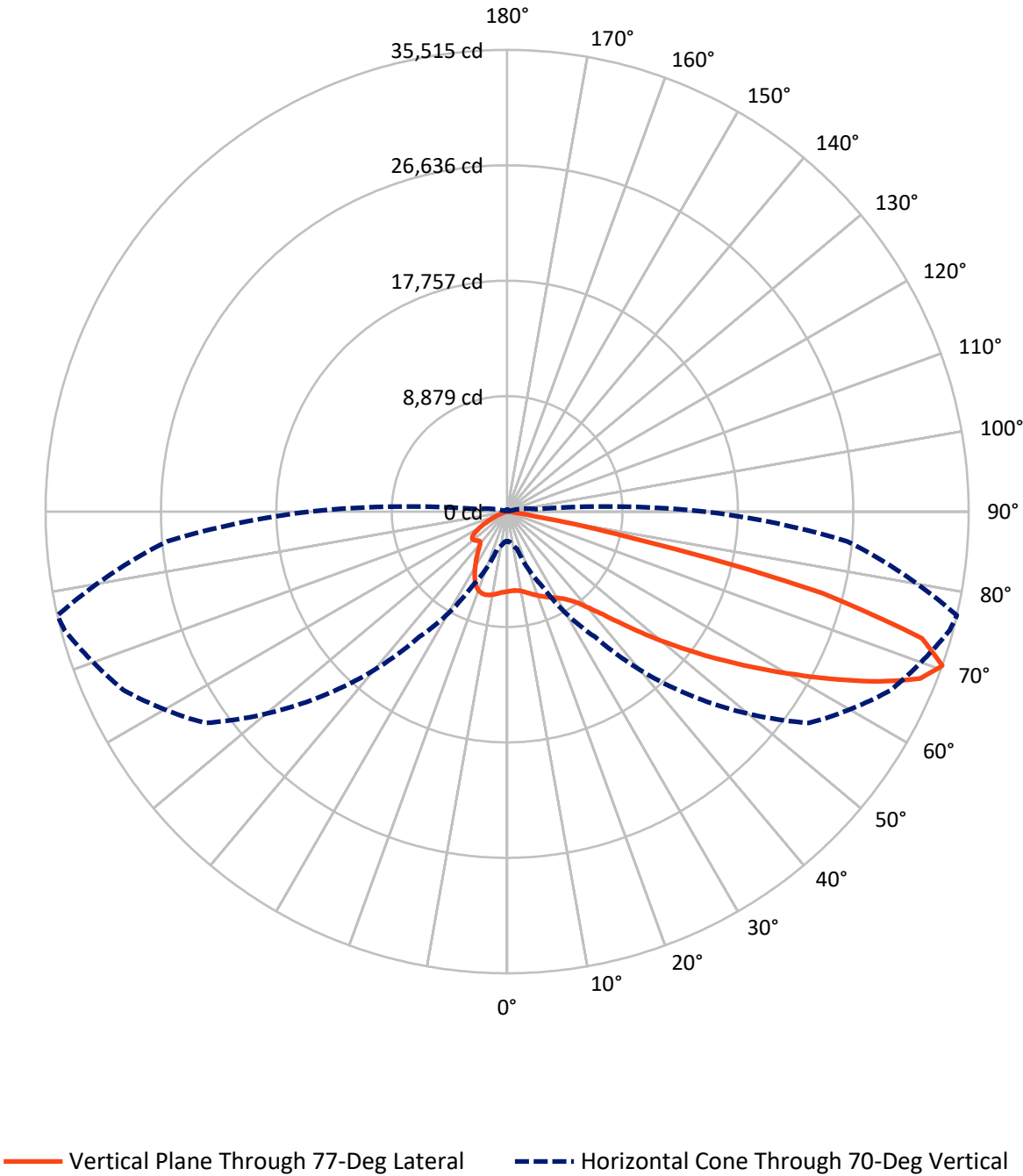
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.6 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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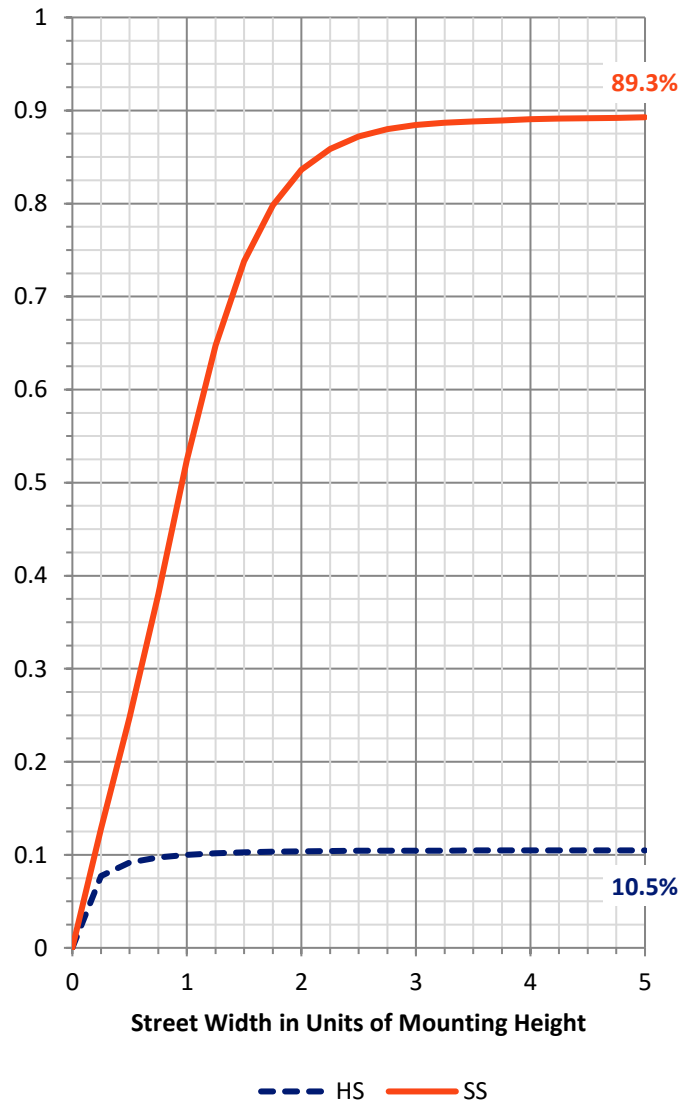
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4154.9	0.0	4154.9
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	35260.4	0.0	35260.4
	% Fixture	89.5	0.0	89.5
Total	Lumens	39415.3	0.0	39415.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	529.9	1.3
10°-20°	1257.8	3.2
20°-30°	1945.5	4.9
30°-40°	3530.3	9.0
40°-50°	6663.8	16.9
50°-60°	9628.7	24.4
60°-70°	10249.5	26.0
70°-80°	5431.5	13.8
80°-90°	178.3	0.5
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°	39415.3	100.0
0°-180°	39415.3	100.0

Coefficient of Utilization



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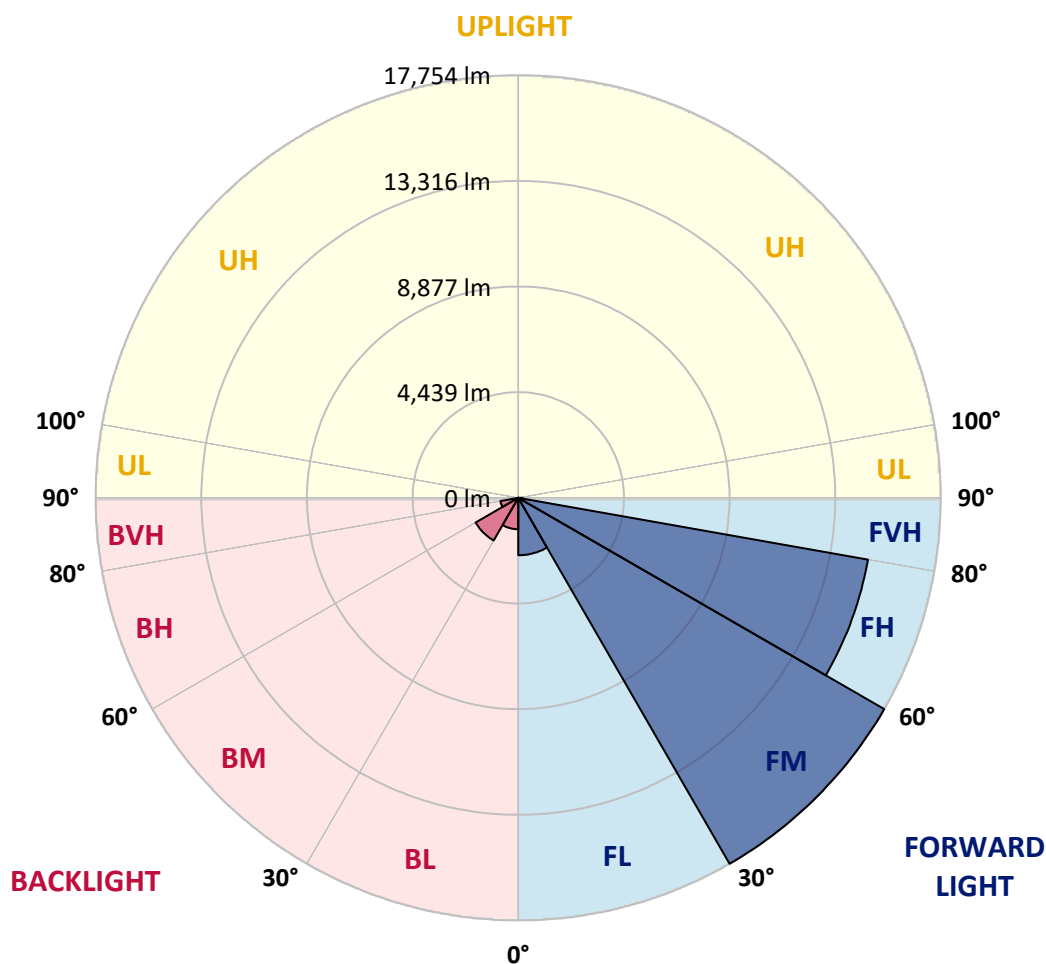
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2413.1	6.1			
FM	(30°-60°)	17754.4	45.0			
FH	(60°-80°)	14919.3	37.9			G5
FVH	(80°-90°)	173.5	0.4			G2/225
BL	(0°-30°)	1320.1	3.3	B3/2500		
BM	(30°-60°)	2068.3	5.2	B2/2500		
BH	(60°-80°)	761.7	1.9	B2/1000		G2/1000
BVH	(80°-90°)	4.8	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1
2.5°	5772.2	5824.5	5817.1	5851.9	5864.3	5914.1	5963.9	6031.1	6105.7	6103.3	6153.1
5°	5446.1	5498.4	5510.9	5558.2	5617.9	5695.1	5797.1	5931.6	6070.9	6093.3	6192.8
7.5°	5060.3	5115.1	5147.4	5242.1	5351.5	5510.9	5677.7	5874.3	6105.7	6138.1	6329.8
10°	4674.5	4724.3	4766.7	4901.0	5075.3	5311.8	5583.1	5866.8	6178.0	6225.2	6496.6
12.5°	4435.6	4482.8	4530.2	4647.1	4863.7	5152.5	5520.9	5901.6	6297.4	6364.6	6723.1
15°	4350.9	4393.3	4430.6	4535.1	4736.7	5065.3	5508.3	5973.8	6449.3	6538.9	6996.9
17.5°	4363.4	4385.8	4410.7	4490.3	4687.0	5025.5	5530.8	6098.3	6628.5	6708.1	7270.6
20°	4435.6	4448.0	4450.5	4505.3	4679.5	5020.6	5575.6	6217.8	6797.7	6904.8	7541.9
22.5°	4527.6	4532.7	4527.6	4565.0	4726.8	5057.9	5635.3	6362.2	6986.9	7086.4	7815.8
25°	4958.3	4863.7	4744.2	4672.1	4806.4	5130.0	5724.9	6556.3	7193.6	7290.6	8082.1
27.5°	6294.9	6023.6	5595.5	5115.1	4970.7	5234.6	5849.4	6752.9	7402.6	7489.7	8368.4
30°	8465.5	8109.5	7382.7	6300.0	5498.4	5453.6	6011.2	6949.6	7624.2	7718.7	8674.5
32.5°	10640.9	10553.8	9714.9	8216.5	6685.8	5941.5	6280.0	7215.9	7917.8	7992.5	9087.8
35°	12841.3	12664.6	11977.5	10496.5	8515.2	6934.6	6728.0	7564.4	8303.6	8388.3	9690.0
37.5°	14526.4	14419.4	13993.7	12774.1	10685.7	8467.9	7494.7	8104.5	8863.7	8958.3	10461.7
40°	16014.9	15965.1	15820.8	15016.8	13112.6	10474.2	8687.0	8940.9	9640.3	9752.3	11407.5
42.5°	17184.7	17301.8	17383.9	17159.8	15614.1	12764.1	10290.0	10115.7	10723.0	10837.5	12612.3
45°	18382.0	18421.8	18752.9	19076.5	18098.2	15158.6	12097.0	11492.2	12069.7	12211.5	14055.9
47.5°	19151.2	19310.5	19892.9	20462.9	20186.7	17533.2	14038.5	13117.5	13630.3	13896.6	15673.9
50°	19208.4	19509.5	20311.1	21304.2	21707.4	19793.4	16149.3	14969.5	15514.6	15808.3	17401.3
52.5°	18255.0	18723.1	19965.1	21418.7	22528.9	21707.4	18332.2	16821.4	17520.8	17904.1	19193.4
55°	13996.3	14608.5	18663.3	20796.4	22561.2	23158.6	20458.0	18750.4	19756.1	20189.1	21130.0
57.5°	12194.1	12502.7	14673.3	19716.2	21961.3	23743.5	22379.5	20587.3	22187.9	22725.5	22959.5
60°	10145.6	10551.3	12306.2	17948.9	21147.4	23800.8	24077.0	22957.0	24823.9	25428.7	24637.1
62.5°	6894.8	7335.4	9080.3	14912.2	20034.8	23773.4	25468.5	25396.3	27753.5	28403.2	26058.4
65°	4271.3	4547.6	5697.6	12176.7	18479.1	23803.3	26924.6	28358.4	30844.9	31504.6	27158.6
67.5°	3375.2	3502.1	4102.0	9349.0	15798.3	23131.3	28378.3	31143.6	33754.7	34277.4	27494.6
70°	2267.6	2344.7	2984.4	6267.6	11753.6	20029.8	28350.9	32542.5	35253.1	35514.5	26270.0
72.5°	1194.7	1254.5	1744.9	2902.3	7098.9	14237.7	23897.9	30869.8	33762.2	33368.9	22454.2
75°	597.4	696.9	1174.9	1473.5	3031.7	7940.3	14840.1	24338.4	26573.6	25050.3	14406.9
77.5°	453.0	547.6	970.8	970.8	1055.3	2673.3	6285.0	13274.4	12243.9	10195.4	4228.9
80°	288.7	373.4	848.8	734.3	440.5	679.6	1637.8	3718.7	2601.1	1978.9	769.2
82.5°	169.2	244.0	706.9	485.3	246.4	251.4	463.0	791.5	674.6	525.2	236.5
85°	67.2	159.3	485.3	191.7	97.1	62.2	139.4	169.2	139.4	104.6	59.8
87.5°	0.0	37.3	84.7	0.0	7.5	5.0	9.9	12.4	12.4	9.9	19.9
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1	6148.1
2.5°	6175.4	6180.4	6195.4	6197.9	6163.0	6118.2	6100.8	6093.3	6063.5	6060.9	6066.0
5°	6250.1	6272.5	6250.1	6185.5	6031.1	5814.5	5650.3	5515.8	5393.9	5356.5	5334.1
7.5°	6399.5	6421.9	6354.7	6100.8	5712.5	5281.8	4893.6	4619.8	4373.4	4281.2	4243.9
10°	6613.5	6643.4	6431.9	5919.1	5232.1	4540.1	3883.0	3420.0	3059.1	2912.2	2850.0
12.5°	6882.4	6894.8	6474.1	5642.8	4607.4	3619.2	2688.3	2192.9	1871.9	1752.3	1715.0
15°	7178.6	7161.2	6479.1	5267.0	3756.0	2558.8	1754.8	1441.1	1311.8	1271.9	1271.9
17.5°	7489.7	7417.5	6379.6	4724.3	2822.6	1749.9	1301.8	1227.1	1204.7	1194.7	1192.3
20°	7795.8	7634.1	6197.9	4014.9	2026.1	1306.8	1182.3	1159.9	1147.5	1142.5	1137.5
22.5°	8074.6	7798.4	5886.7	3191.0	1471.1	1155.0	1117.6	1097.7	1075.3	1065.4	1062.8
25°	8346.0	7892.9	5448.7	2421.9	1177.3	1080.2	1050.4	1013.1	983.2	970.8	965.8
27.5°	8609.8	7952.7	4901.0	1792.1	1050.4	1010.5	955.8	903.5	881.2	876.2	871.1
30°	8891.1	7972.6	4278.8	1336.6	973.2	923.4	843.8	784.0	771.6	774.1	774.1
32.5°	9234.5	8002.5	3651.6	1095.2	908.6	818.9	724.4	662.2	652.1	662.2	659.6
35°	9645.2	8062.2	3046.7	1008.1	851.3	711.9	609.9	557.6	547.6	555.0	552.6
37.5°	10202.8	8159.3	2481.6	990.7	804.0	622.3	512.7	470.5	470.5	472.9	470.5
40°	10944.5	8418.1	1976.3	978.3	779.1	555.0	433.1	415.6	423.1	428.1	428.1
42.5°	11848.1	8968.2	1635.4	963.3	751.7	525.2	393.3	385.8	398.2	403.2	403.2
45°	12861.2	9665.1	1515.9	938.4	726.8	545.1	375.9	365.9	380.8	383.3	385.8
47.5°	13909.1	10347.2	1500.9	911.0	701.9	575.0	370.8	348.5	365.9	368.4	370.8
50°	14969.5	10792.7	1515.9	868.7	662.2	575.0	373.4	331.1	345.9	353.4	356.0
52.5°	16037.3	10996.8	1505.9	776.6	592.4	540.2	373.4	316.1	331.1	336.0	336.0
55°	17072.7	10957.0	1354.0	639.7	502.8	478.0	363.4	303.7	313.6	316.1	316.1
57.5°	17891.7	10402.0	1072.8	497.8	408.3	398.2	331.1	288.7	296.2	293.8	293.8
60°	18319.8	9182.3	766.6	383.3	321.1	313.6	291.2	268.9	273.8	261.4	258.9
62.5°	18324.7	7569.3	512.7	303.7	256.4	248.9	248.9	241.5	236.5	211.6	204.1
65°	17934.0	5779.7	341.0	241.5	206.6	194.1	209.1	206.6	189.2	154.4	149.3
67.5°	17047.9	3788.4	258.9	189.2	159.3	151.8	166.8	174.2	161.7	129.5	126.9
70°	15225.9	2205.4	214.0	146.9	119.5	112.0	134.4	149.3	134.4	104.6	99.5
72.5°	12647.2	1189.8	174.2	109.5	82.1	74.7	107.0	122.0	107.0	77.2	74.7
75°	8206.6	637.2	134.4	72.2	42.3	47.3	79.6	89.6	74.7	49.8	44.8
77.5°	2755.4	281.3	84.7	34.8	19.9	19.9	47.3	54.7	34.8	17.4	15.0
80°	614.8	117.0	34.8	15.0	7.5	7.5	9.9	9.9	5.0	0.0	0.0
82.5°	201.6	47.3	15.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	77.2	17.4	5.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	29.8	2.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)