

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: P969316

Luminaire Tested: **NAV-SB5D-735-U-T3-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969316
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5D-735-U-T3-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 41321.8 lumens
Efficiency: N/A
Efficacy: 113.2 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type III - Short
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



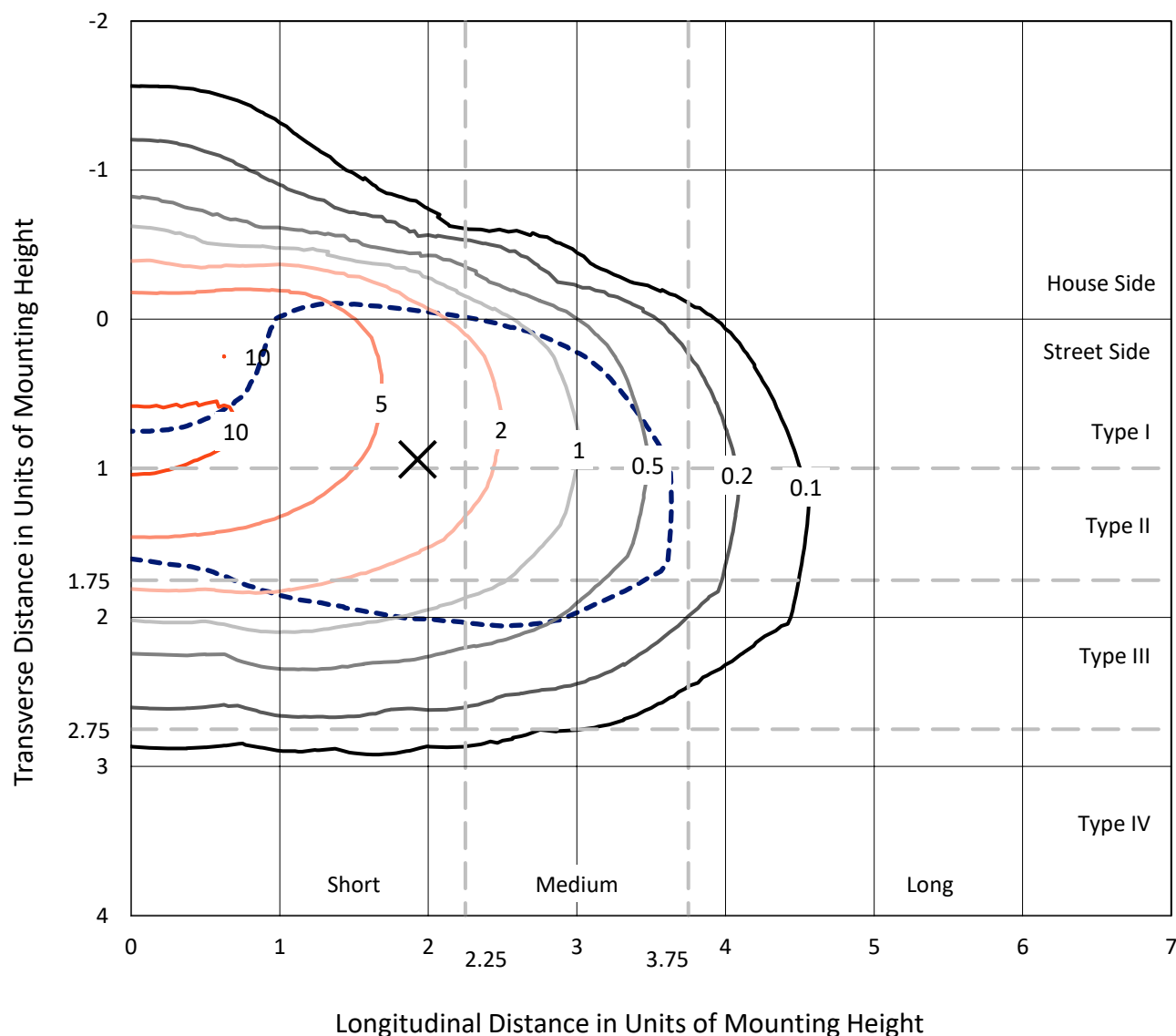
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

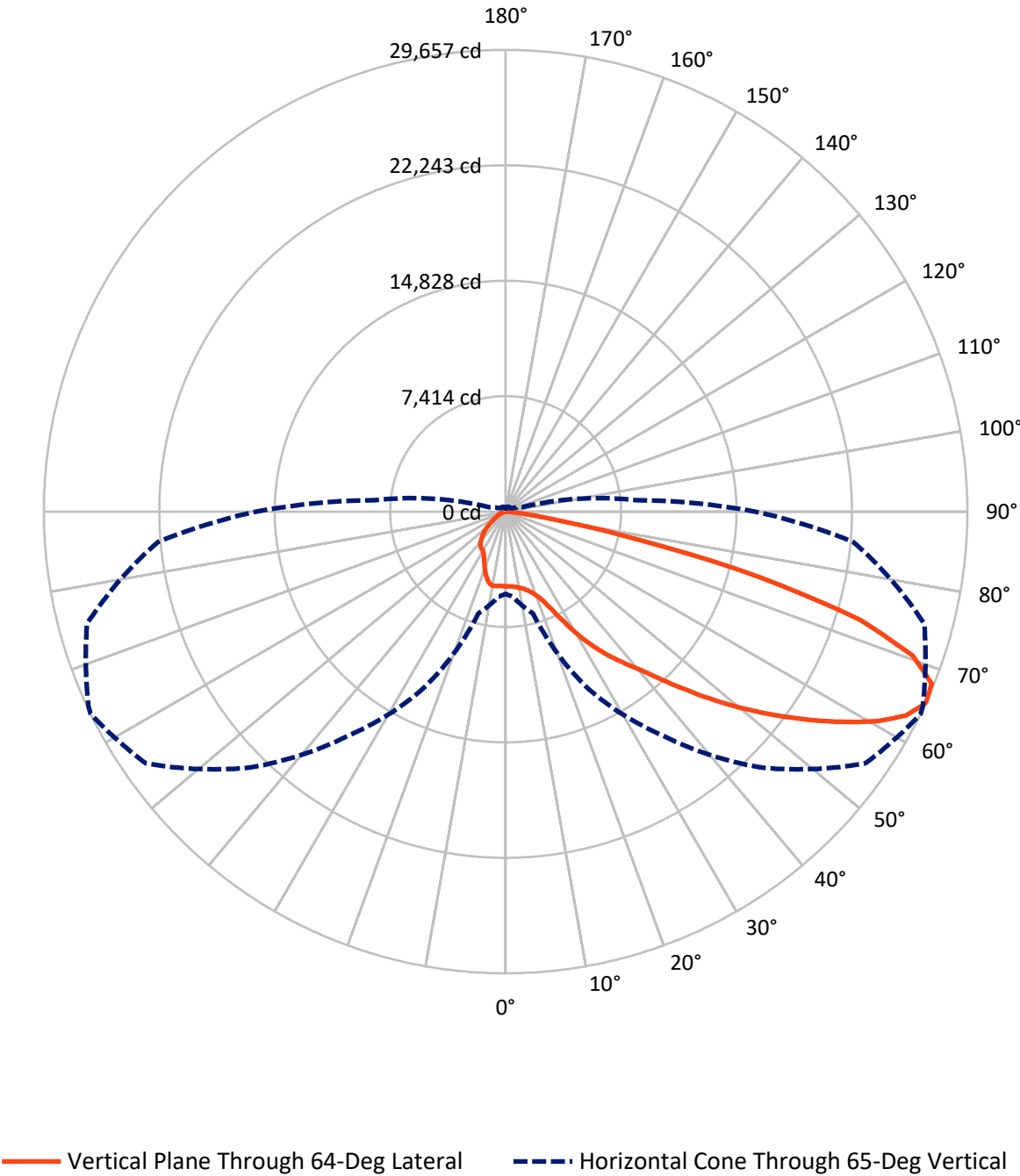


Based on 25 foot mounting height. Maximum calculated value = 12.1 fc

Type III - Short - N/A

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Luminous Intensity Polar Plot



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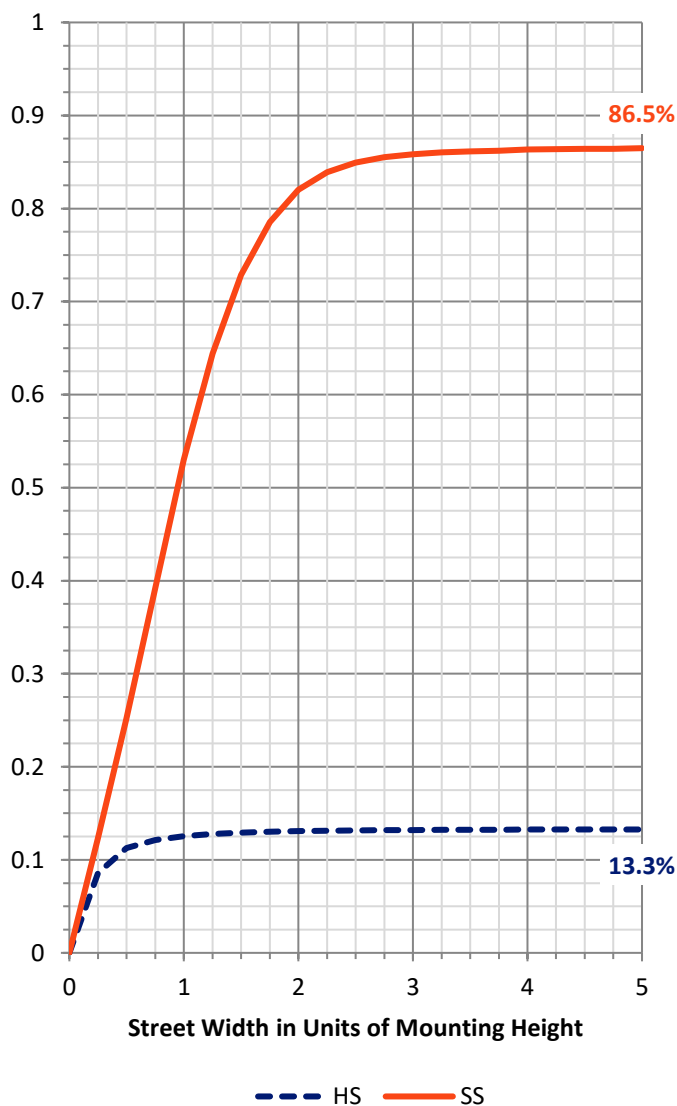
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5526.0	0.0	5526.0
	% Fixture	13.4	0.0	13.4
Street Side	Lumens	35795.8	0.0	35795.8
	% Fixture	86.6	0.0	86.6
Total	Lumens	41321.8	0.0	41321.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	443.4	1.1
10°-20°	1202.7	2.9
20°-30°	2279.0	5.5
30°-40°	4611.5	11.2
40°-50°	7855.8	19.0
50°-60°	10683.3	25.9
60°-70°	10032.1	24.3
70°-80°	4019.3	9.7
80°-90°	194.7	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°	41321.8	100.0
0°-180°	41321.8	100.0

Coefficient of Utilization



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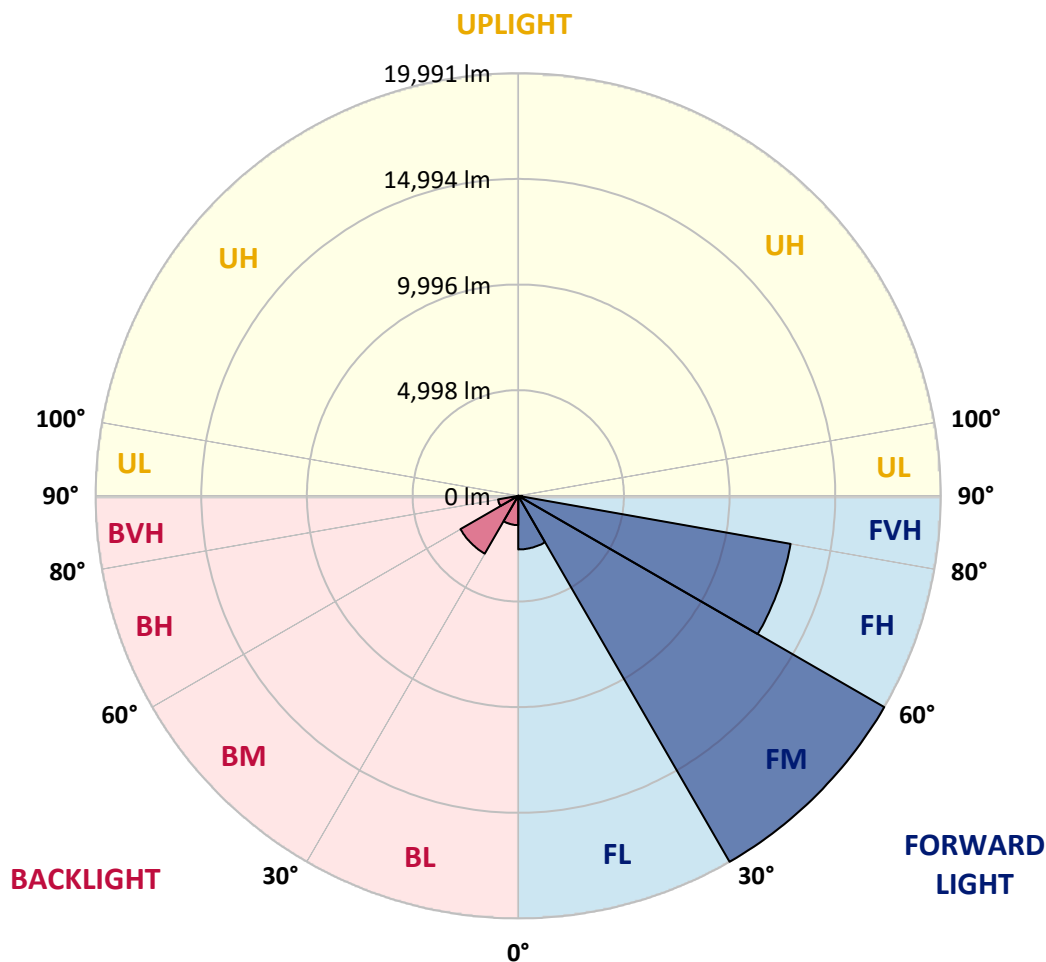
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2537.6	6.1			
FM	(30°-60°)	19991.5	48.4			
FH	(60°-80°)	13081.5	31.7			G5
FVH	(80°-90°)	185.2	0.4			G2/225
BL	(0°-30°)	1387.4	3.4	B3/2500		
BM	(30°-60°)	3159.2	7.6	B3/5000		
BH	(60°-80°)	969.9	2.3	B2/1000		G2/1000
BVH	(80°-90°)	9.5	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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	64°	65°	75°	85°
0°	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1
2.5°	4789.5	4822.8	4814.4	4806.1	4803.4	4808.9	4811.7	4808.9	4808.9	4808.9	4811.7
5°	4698.1	4725.9	4725.9	4745.2	4772.9	4806.1	4831.1	4836.7	4842.2	4850.5	4847.7
7.5°	4523.6	4545.8	4562.4	4626.1	4695.3	4784.0	4858.8	4897.6	4903.1	4933.6	4944.7
10°	4404.5	4432.2	4459.9	4526.4	4626.1	4759.1	4886.5	4980.7	4994.5	5066.6	5099.8
12.5°	4399.0	4426.7	4462.6	4534.7	4651.0	4792.3	4947.5	5083.2	5108.1	5213.4	5282.6
15°	4457.1	4490.3	4523.6	4612.3	4736.9	4908.6	5074.9	5243.8	5268.8	5418.4	5493.2
17.5°	4576.2	4620.6	4645.5	4734.2	4867.1	5058.3	5277.1	5471.0	5493.2	5667.6	5761.8
20°	4811.7	4864.3	4872.6	4944.7	5074.9	5279.9	5540.2	5781.2	5809.0	6008.3	6113.6
22.5°	5299.2	5374.1	5307.6	5343.5	5459.9	5664.9	5947.5	6252.2	6290.9	6518.1	6612.3
25°	6158.0	6263.3	6091.5	6030.6	6080.4	6293.7	6648.3	7033.3	7077.6	7260.5	7307.5
27.5°	7844.9	7709.2	7448.9	7194.0	7044.4	7166.3	7565.2	8041.6	8097.1	8274.3	8219.0
30°	9698.2	9579.0	9227.3	8662.2	8307.6	8288.3	8656.6	9188.5	9252.2	9421.2	9252.2
32.5°	11554.2	11440.6	11058.3	10363.1	9748.1	9443.3	9698.2	10288.2	10321.4	10429.5	10180.2
35°	13379.7	13263.3	12881.1	12169.1	11412.9	10720.4	10670.6	11335.4	11346.4	11460.0	11088.8
37.5°	15216.2	15119.4	14712.1	14014.0	13268.8	12313.2	11850.5	12327.1	12340.9	12451.7	12066.6
40°	16526.6	16568.1	16288.3	15748.1	15108.2	14063.9	13174.7	13382.5	13299.4	13484.9	13255.0
42.5°	17651.2	17734.3	17490.5	17219.1	16847.9	15928.2	14814.6	14778.6	14645.6	14745.3	14507.1
45°	18623.5	18692.8	18474.0	18410.2	18401.9	17756.5	16606.8	16390.8	16205.2	16185.8	15900.5
47.5°	18980.8	19113.8	19208.0	19421.3	19836.8	19565.4	18460.0	18124.9	17917.1	17764.8	17313.3
50°	19116.6	19257.9	19579.2	20199.7	21183.2	21299.5	20304.9	19928.3	19673.4	19396.4	18731.6
52.5°	18933.8	19185.8	19618.0	20662.4	22089.0	22690.0	22075.1	21745.5	21454.6	21003.1	20016.9
55°	17856.2	18108.3	18991.9	20656.8	22540.5	23665.1	23748.2	23601.4	23274.6	22562.6	21055.7
57.5°	15584.7	15958.6	17357.6	19953.2	22532.2	24504.5	25388.1	25493.4	25127.8	24108.4	21872.9
60°	12437.9	12944.7	14651.1	18393.6	21836.9	24958.7	26825.9	27352.2	26964.4	25632.0	22534.9
62.5°	8678.8	9266.1	10881.0	15950.3	20246.8	24631.9	27875.7	28848.0	28554.4	26994.8	22789.7
65°	5293.7	5482.1	6784.1	12551.4	17543.2	23263.5	28199.8	29656.9	29560.0	27828.6	22413.1
67.5°	3526.4	3684.3	4058.2	8606.7	13617.9	20529.4	27424.2	29515.6	29543.4	27692.9	21033.5
70°	2124.7	2260.4	2504.2	5005.6	8825.6	16249.5	25022.5	27715.1	27875.7	25878.5	18418.5
72.5°	875.4	966.8	1188.4	2268.7	4570.7	10313.1	19925.5	23795.4	24169.3	21759.3	14135.9
75°	495.9	542.9	698.0	1138.6	1983.4	4806.1	12069.4	16892.2	17443.4	14997.4	8504.3
77.5°	329.6	351.8	451.5	736.9	1116.3	1639.9	5158.0	8800.6	9853.3	8191.3	3681.5
80°	221.6	241.0	310.3	493.1	725.8	703.6	1642.7	3260.4	4011.1	2814.4	897.5
82.5°	149.5	152.3	221.6	324.1	459.8	340.7	484.7	1013.8	1274.3	814.5	340.7
85°	85.9	83.1	163.5	188.4	205.0	141.2	146.8	304.7	398.9	343.5	193.9
87.5°	11.1	16.6	63.8	49.8	27.7	30.4	30.4	52.6	77.6	83.1	41.5
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°	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1	4806.1
2.5°	4811.7	4808.9	4800.6	4792.3	4772.9	4761.8	4767.4	4761.8	4759.1	4761.8	4772.9
5°	4847.7	4839.4	4817.2	4789.5	4750.8	4703.6	4673.2	4628.9	4587.3	4562.4	4567.9
7.5°	4944.7	4936.4	4905.9	4828.4	4703.6	4507.0	4326.9	4169.0	4049.9	3980.7	3983.5
10°	5099.8	5085.9	5038.9	4867.1	4540.2	4110.9	3753.6	3457.1	3263.2	3171.8	3163.5
12.5°	5282.6	5266.0	5182.9	4831.1	4230.0	3559.6	3066.5	2736.9	2556.9	2476.5	2468.2
15°	5498.7	5476.6	5313.1	4659.3	3778.5	2950.2	2498.6	2252.1	2135.8	2063.7	2066.5
17.5°	5767.4	5728.6	5410.1	4401.8	3288.1	2484.8	2149.6	1964.0	1861.5	1792.3	1786.7
20°	6116.4	6052.7	5487.6	4094.3	2836.6	2191.1	1914.2	1759.0	1681.5	1620.5	1609.5
22.5°	6604.0	6512.5	5581.8	3761.9	2518.0	1988.9	1739.6	1626.1	1562.3	1493.1	1482.0
25°	7207.9	7099.9	5698.2	3454.4	2299.2	1814.5	1612.2	1518.0	1443.2	1362.9	1354.6
27.5°	8052.7	7858.9	5836.7	3202.3	2110.8	1664.8	1495.9	1390.6	1304.7	1238.2	1224.4
30°	8994.6	8676.0	5958.5	3049.9	1939.1	1526.3	1343.5	1238.2	1157.9	1110.8	1102.5
32.5°	9886.5	9454.4	6038.9	2983.5	1783.9	1368.5	1177.3	1063.7	1002.8	988.9	997.2
35°	10728.7	10158.1	6030.6	2919.7	1645.4	1210.5	1013.8	897.5	850.4	858.7	858.7
37.5°	11698.2	10908.8	5972.4	2820.0	1531.9	1066.5	872.6	770.1	728.6	731.3	742.4
40°	12825.6	11775.8	5936.4	2631.6	1407.2	933.6	756.2	673.1	642.7	631.6	628.8
42.5°	14027.8	12615.1	5941.9	2418.3	1252.1	814.5	675.9	606.7	578.9	570.6	567.8
45°	15235.7	13415.7	5950.2	2196.7	1088.7	723.0	617.8	559.5	542.9	531.9	531.9
47.5°	16371.4	14097.1	5795.0	1958.5	928.0	653.7	570.6	531.9	518.0	504.2	504.2
50°	17429.6	14551.4	5421.1	1681.5	800.5	598.4	534.6	507.0	493.1	479.2	479.2
52.5°	18252.3	14623.5	4803.4	1396.2	712.0	556.8	512.5	487.6	470.9	457.0	454.3
55°	18618.0	14172.0	3925.2	1130.2	642.7	520.8	490.4	465.4	446.0	432.1	429.4
57.5°	18523.8	13221.8	3061.0	908.6	576.2	484.7	462.6	446.0	423.8	401.7	398.9
60°	18061.2	11950.3	2307.5	756.2	515.3	446.0	432.1	418.3	387.9	354.5	349.0
62.5°	17260.6	10352.0	1645.4	626.1	448.7	401.7	396.2	385.1	340.7	279.8	274.3
65°	16036.2	8410.1	1108.0	520.8	385.1	351.8	354.5	335.2	277.1	207.8	202.2
67.5°	14246.8	6149.7	709.2	426.6	321.3	293.7	296.4	285.4	235.4	177.3	169.0
70°	11966.9	4072.1	462.6	324.1	257.6	227.1	243.7	246.5	199.5	144.0	138.5
72.5°	8773.0	2404.4	324.1	241.0	188.4	157.8	199.5	205.0	160.6	108.0	102.5
75°	5000.1	1141.3	243.7	174.6	116.3	110.8	155.1	155.1	110.8	72.1	66.5
77.5°	2099.7	476.4	171.8	113.6	66.5	63.8	105.3	97.0	55.5	33.2	33.2
80°	606.7	213.3	91.4	55.5	27.7	24.9	41.5	30.4	13.8	5.5	5.5
82.5°	238.2	94.2	36.0	22.1	11.1	11.1	5.5	0.0	0.0	0.0	0.0
85°	141.2	38.7	16.6	8.3	2.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	36.0	8.3	5.5	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)