

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: P962445

Luminaire Tested: **NAV-SB2C-735-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962445
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-735-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13089.2 lumens
Efficiency: N/A
Efficacy: 129.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 100.9
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

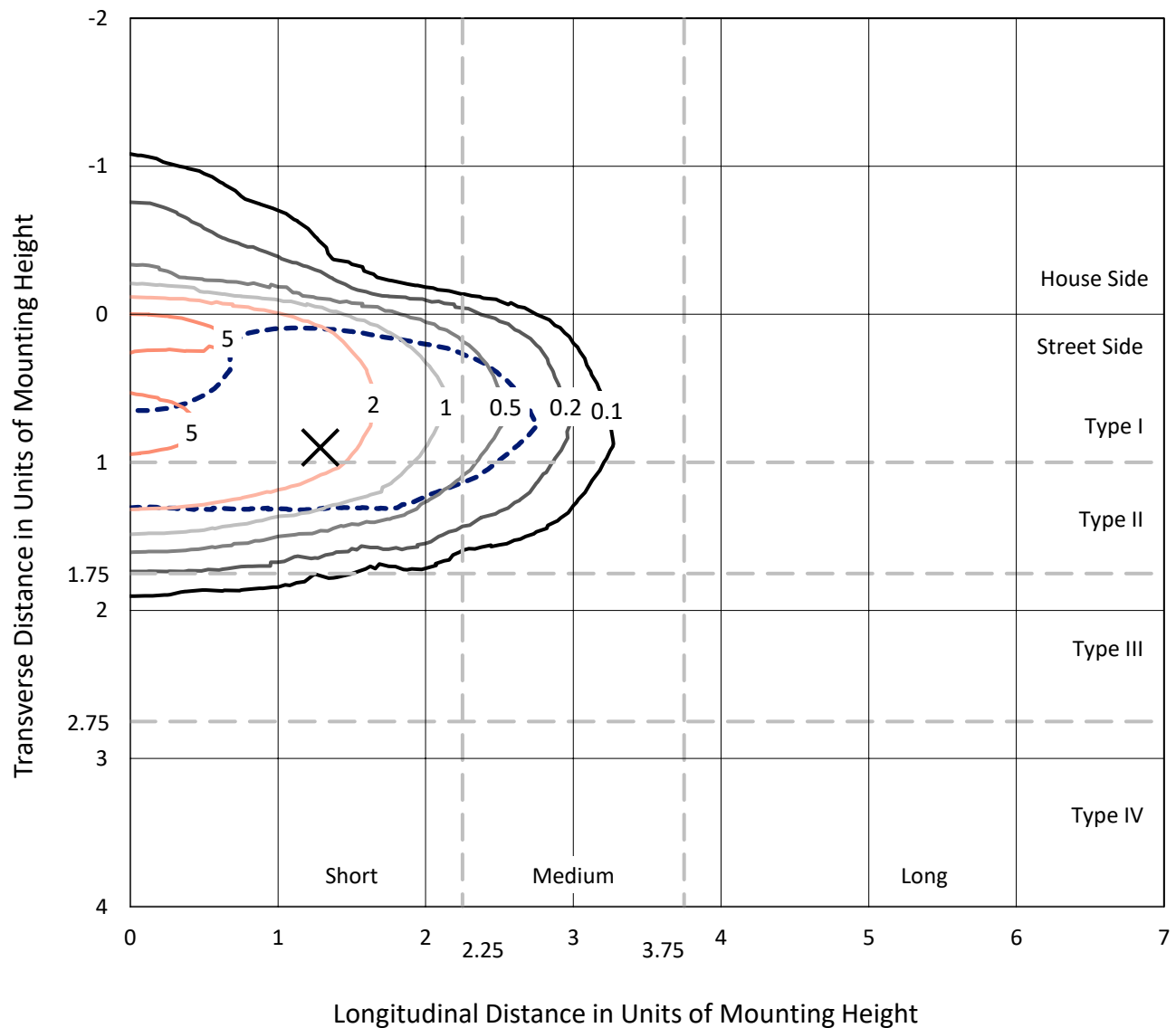


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Iso-Footcandle Lines of Horizontal Illumination

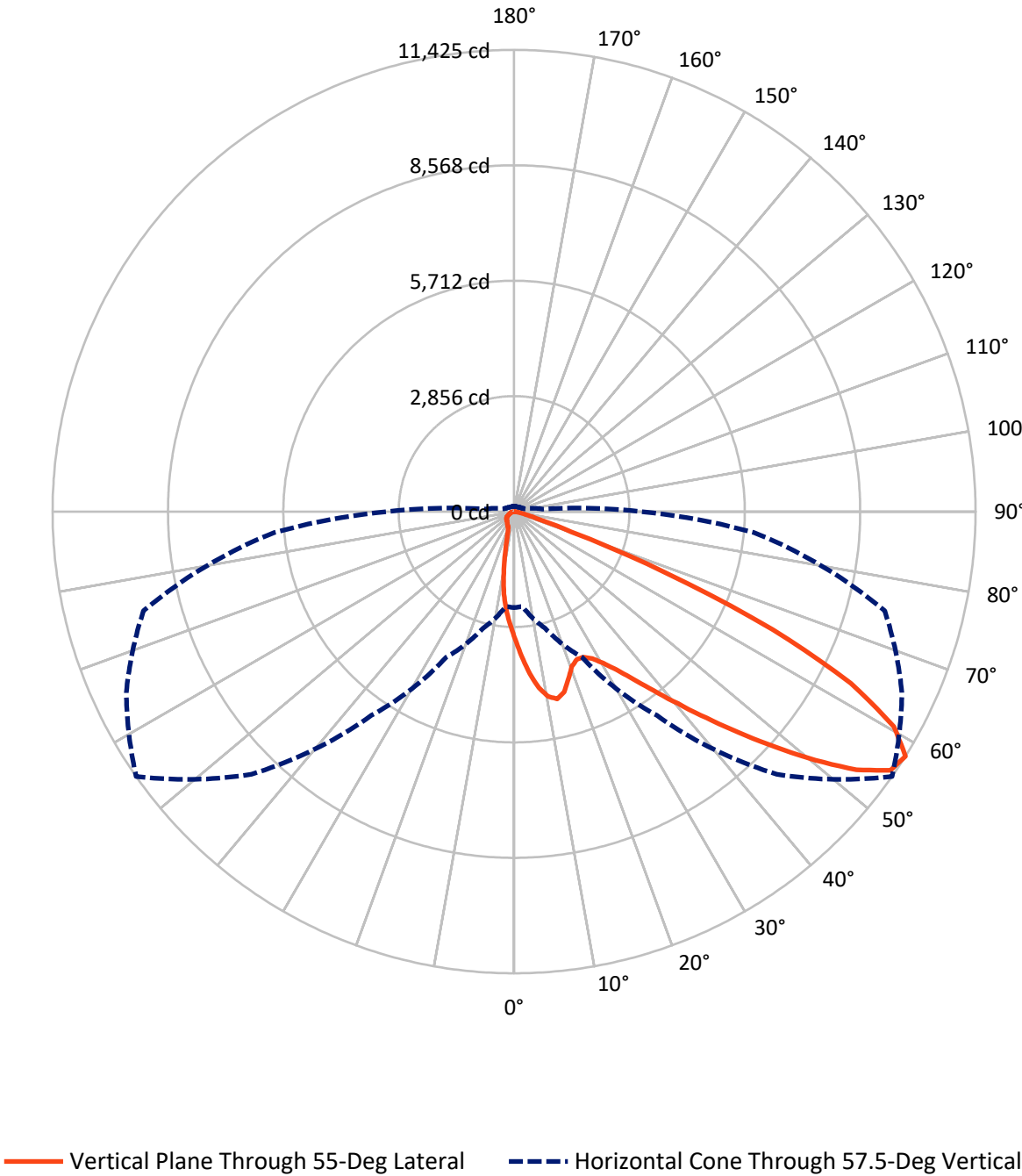
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.2 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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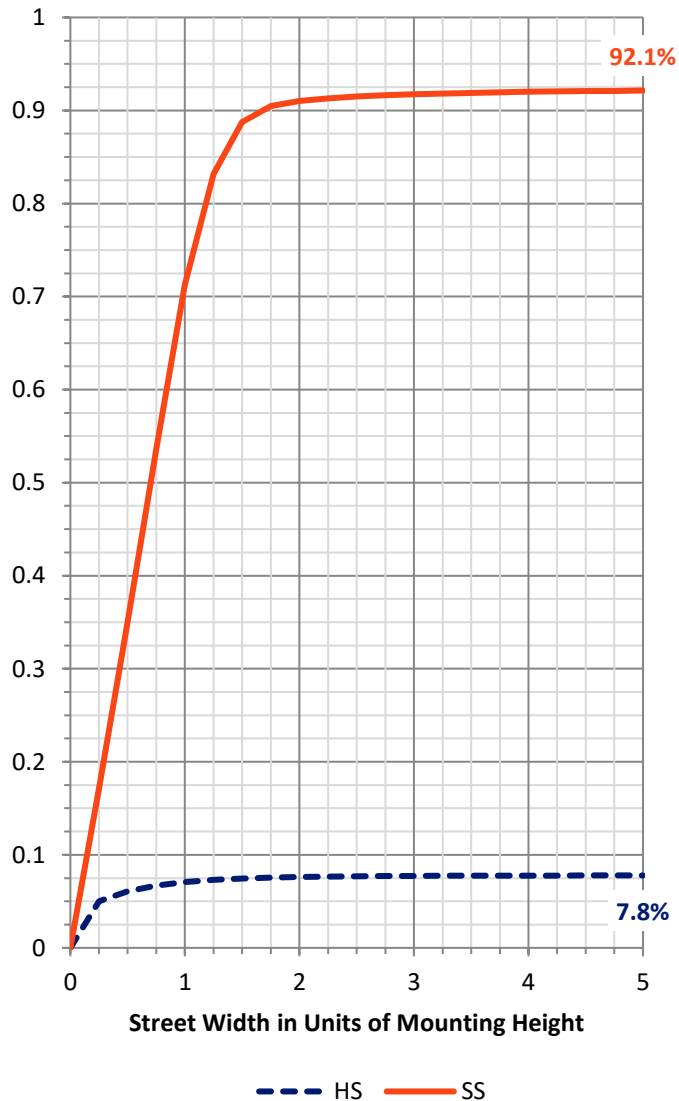
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1022.2	0.0	1022.2
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	12067.0	0.0	12067.0
	% Fixture	92.2	0.0	92.2
Total	Lumens	13089.2	0.0	13089.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.5	2.2
10°-20°	708.9	5.4
20°-30°	1134.2	8.7
30°-40°	1919.8	14.7
40°-50°	3151.8	24.1
50°-60°	3464.1	26.5
60°-70°	1987.0	15.2
70°-80°	406.0	3.1
80°-90°	23.9	0.2
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°	13089.2	100.0
0°-180°	13089.2	100.0

Coefficient of Utilization



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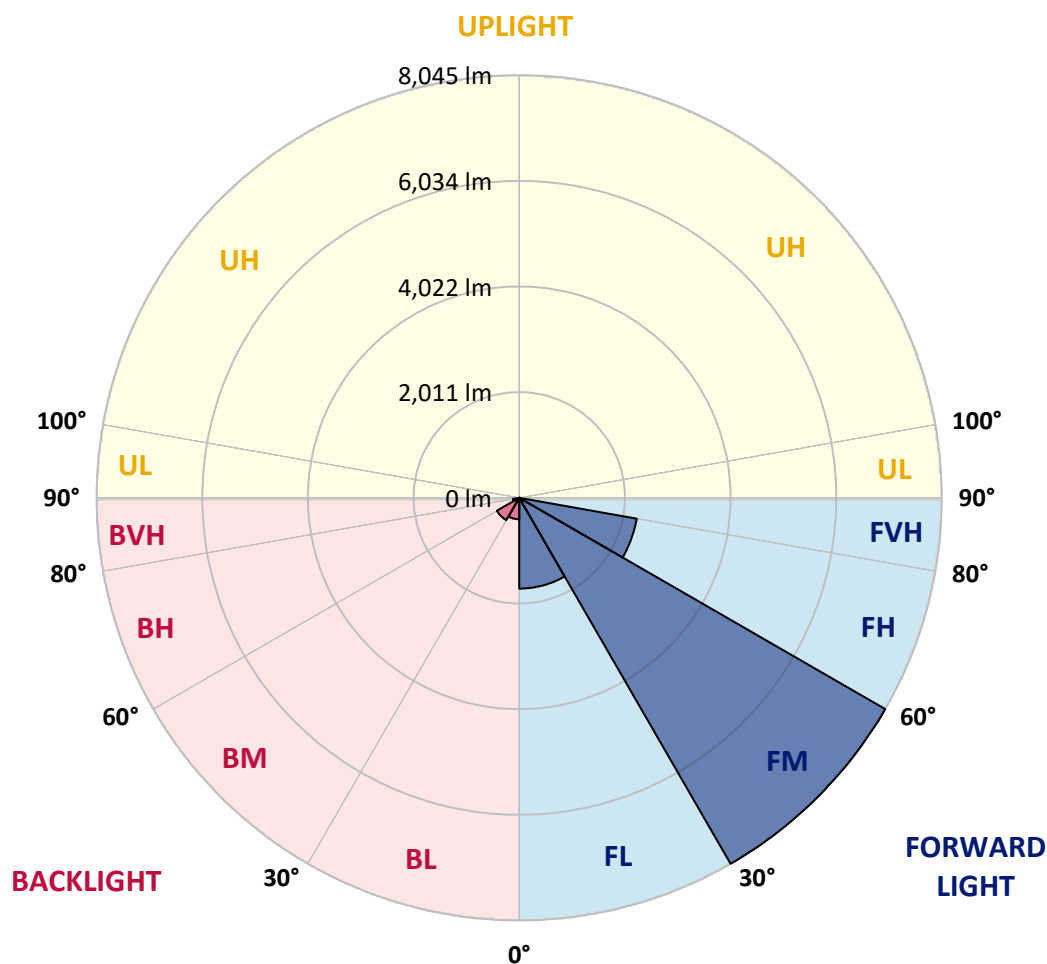
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1728.5	13.2			
FM	(30°-60°)	8044.7	61.5			
FH	(60°-80°)	2271.4	17.4			G2/5000
FVH	(80°-90°)	22.3	0.2			G1/100
BL	(0°-30°)	408.1	3.1	B1/500		
BM	(30°-60°)	490.9	3.8	B1/1000		
BH	(60°-80°)	121.6	0.9	B1/500		G1/500
BVH	(80°-90°)	1.6	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2
2.5°	3913.7	3864.5	3857.2	3847.5	3753.9	3683.6	3582.0	3470.5	3345.5	3218.0	3161.4
5°	4521.5	4482.7	4475.5	4430.3	4323.7	4204.2	4023.4	3795.1	3561.8	3287.4	3169.5
7.5°	4639.3	4632.0	4665.1	4663.4	4649.0	4554.5	4402.0	4130.0	3779.7	3372.9	3190.5
10°	4113.8	4132.4	4230.9	4317.2	4550.5	4686.1	4653.0	4428.6	4004.1	3470.5	3213.9
12.5°	3635.3	3613.4	3683.6	3781.3	4052.5	4456.1	4757.1	4678.0	4260.7	3581.1	3248.6
15°	3334.9	3326.1	3365.7	3410.9	3617.4	4024.3	4636.1	4880.6	4507.7	3711.9	3301.1
17.5°	3238.9	3231.6	3243.8	3255.1	3389.1	3703.8	4347.9	5004.9	4744.2	3861.2	3359.2
20°	3317.2	3307.6	3305.9	3297.0	3352.8	3567.4	4087.2	5013.8	4956.5	3996.8	3409.3
22.5°	3545.7	3534.3	3494.7	3459.3	3464.1	3586.0	3971.0	4925.0	5116.3	4123.6	3440.7
25°	3959.7	3941.1	3858.8	3739.3	3663.5	3715.1	3988.8	4808.0	5268.8	4222.8	3425.3
27.5°	4477.8	4453.6	4347.9	4170.3	3996.8	3933.8	4117.1	4727.2	5395.5	4298.6	3392.2
30°	4985.5	4954.0	4849.9	4711.9	4458.4	4259.9	4348.7	4762.8	5546.5	4377.8	3348.7
32.5°	5533.6	5503.6	5365.7	5194.6	4984.7	4717.6	4665.9	4936.3	5731.3	4488.4	3318.0
35°	6226.9	6180.0	5984.0	5750.7	5527.9	5257.5	5095.3	5235.7	5977.5	4657.0	3334.9
37.5°	7016.2	6953.3	6741.8	6419.8	6129.2	5826.5	5618.3	5647.3	6338.2	4883.0	3387.4
40°	7760.4	7703.1	7507.7	7204.3	6839.4	6472.3	6250.2	6185.7	6836.2	5158.2	3479.5
42.5°	8206.7	8155.0	8072.7	7944.4	7636.9	7262.3	6982.3	6842.7	7425.4	5487.5	3591.6
45°	8231.7	8186.5	8297.1	8446.4	8385.8	8136.4	7795.0	7539.2	8017.0	5796.7	3707.8
47.5°	7831.4	7800.8	8136.4	8657.9	8917.8	9022.7	8707.9	8177.7	8505.3	6018.6	3755.5
50°	6740.2	6728.9	7419.8	8377.0	9120.3	9799.1	9670.8	8771.6	8883.9	6133.2	3710.3
52.5°	5844.2	5803.1	6205.9	7477.9	8825.8	10207.6	10611.9	9354.5	9148.6	6155.0	3604.5
55°	4432.6	4396.3	4901.5	5973.4	7875.8	10062.2	11300.3	9955.7	9338.3	6099.4	3414.9
57.5°	2377.8	2355.1	2993.6	3975.9	6156.7	9190.6	11424.6	10591.7	9498.1	5951.7	3149.3
60°	925.8	921.7	1160.6	1928.9	3741.8	7477.1	10797.6	10973.4	9598.2	5770.0	2927.4
62.5°	560.2	572.3	611.0	866.0	1652.9	4644.9	9352.0	10539.3	9665.1	5603.8	2744.1
65°	463.3	464.1	468.9	594.8	791.8	1943.5	7040.4	9110.6	9499.7	5307.6	2484.3
67.5°	397.1	404.4	422.9	472.1	558.5	852.3	4053.3	7057.3	8493.3	4618.2	2079.1
70°	313.1	322.9	346.2	388.3	431.0	533.5	1498.0	4695.7	6488.4	3481.1	1572.2
72.5°	263.9	263.1	275.2	315.6	342.2	375.4	576.3	2631.2	3770.8	1661.8	778.1
75°	204.2	212.3	227.7	263.9	280.0	272.0	312.3	961.2	1351.1	503.7	264.8
77.5°	159.8	166.3	180.0	215.5	231.6	192.9	180.0	343.8	434.2	180.8	119.4
80°	71.9	77.5	122.7	159.0	188.9	133.1	97.7	176.0	192.9	82.3	60.6
82.5°	12.9	21.8	71.9	83.9	96.9	86.4	50.8	91.2	94.4	33.1	21.0
85°	0.8	1.6	25.0	30.6	38.7	28.3	15.4	36.3	31.5	11.3	8.1
87.5°	0.0	0.0	0.0	0.8	0.8	4.0	4.8	6.5	4.8	4.0	3.2
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°	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2	3154.2
2.5°	3103.3	2988.7	2877.4	2786.2	2732.9	2642.4	2582.8	2573.1	2548.0	2569.9
5°	3043.6	2838.6	2631.2	2445.5	2293.0	2096.0	1949.1	1887.0	1832.9	1851.6
7.5°	3015.3	2691.8	2368.9	2051.6	1725.6	1410.8	1176.8	1079.1	1004.8	1015.4
10°	2977.4	2539.1	2033.1	1548.9	1112.2	801.4	640.0	580.4	547.2	548.1
12.5°	2948.4	2356.8	1643.3	1050.0	677.1	511.7	461.7	447.1	437.5	438.3
15°	2933.9	2142.0	1258.3	699.8	484.3	433.4	421.3	414.8	408.4	407.5
17.5°	2909.7	1903.1	921.0	510.9	423.7	406.0	395.4	388.3	380.2	378.5
20°	2873.3	1632.0	673.1	431.8	397.1	383.3	368.9	359.2	349.5	347.9
22.5°	2806.3	1345.4	517.3	399.5	377.7	362.4	344.6	333.3	323.7	322.1
25°	2682.0	1076.7	435.8	379.4	360.8	342.2	322.9	307.5	298.6	297.0
27.5°	2524.7	845.8	395.4	360.8	339.0	322.1	300.2	285.7	277.7	276.0
30°	2339.0	651.4	372.1	339.8	313.1	298.6	279.2	267.1	262.3	262.3
32.5°	2138.9	520.6	362.4	318.8	290.6	274.4	259.1	254.2	252.7	251.8
35°	1950.8	452.0	357.5	301.9	270.4	255.0	248.6	249.4	252.7	252.7
37.5°	1783.7	430.2	355.2	289.8	252.7	238.9	242.9	250.2	247.0	247.0
40°	1632.8	432.7	353.5	280.8	238.1	230.0	238.1	232.5	224.4	223.6
42.5°	1517.4	452.7	350.2	273.6	229.2	223.6	220.4	211.5	210.6	212.3
45°	1433.5	470.6	349.5	270.4	219.6	209.0	205.0	196.1	212.3	216.3
47.5°	1334.1	470.6	349.5	259.1	203.4	199.4	192.9	183.2	199.4	203.4
50°	1205.8	440.6	335.8	246.2	190.4	188.1	176.7	164.6	161.4	163.8
52.5°	1043.6	386.6	301.0	228.4	177.5	172.7	159.0	150.2	147.7	147.7
55°	858.7	323.7	254.2	202.5	163.8	155.0	145.2	141.2	138.8	137.2
57.5°	698.1	265.6	204.2	180.0	150.9	139.6	136.4	131.6	127.5	125.2
60°	573.1	209.0	168.7	159.8	138.0	127.5	126.7	120.2	109.8	108.1
62.5°	442.3	153.3	142.1	138.8	125.2	116.2	114.6	101.7	85.6	82.3
65°	312.3	119.4	114.6	121.9	111.4	103.3	99.3	79.9	62.9	60.6
67.5°	219.6	100.0	90.4	106.5	96.9	86.4	83.9	67.8	52.5	50.8
70°	156.6	81.5	74.2	91.2	77.5	75.8	71.0	56.5	42.7	41.2
72.5°	110.6	62.1	57.3	79.1	53.3	65.4	58.1	43.6	32.3	30.6
75°	81.5	44.4	40.4	46.0	38.7	49.2	41.2	29.0	20.2	19.4
77.5°	59.8	28.3	24.2	22.5	22.5	30.6	22.5	12.1	8.9	8.1
80°	41.9	12.9	11.3	9.6	8.9	7.3	3.2	1.6	0.8	0.8
82.5°	25.0	5.6	5.6	4.0	2.5	0.0	0.0	0.0	0.0	0.0
85°	5.6	2.5	2.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.8	0.8	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

(END OF REPORT)