

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: P964057

Luminaire Tested: **NAV-SB3B-740-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964057
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-SB3B-740-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 70 CRI, 4000K, 450mA 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: 15621 lumens
Efficiency: N/A
Efficacy: 143.0 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 109.2
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

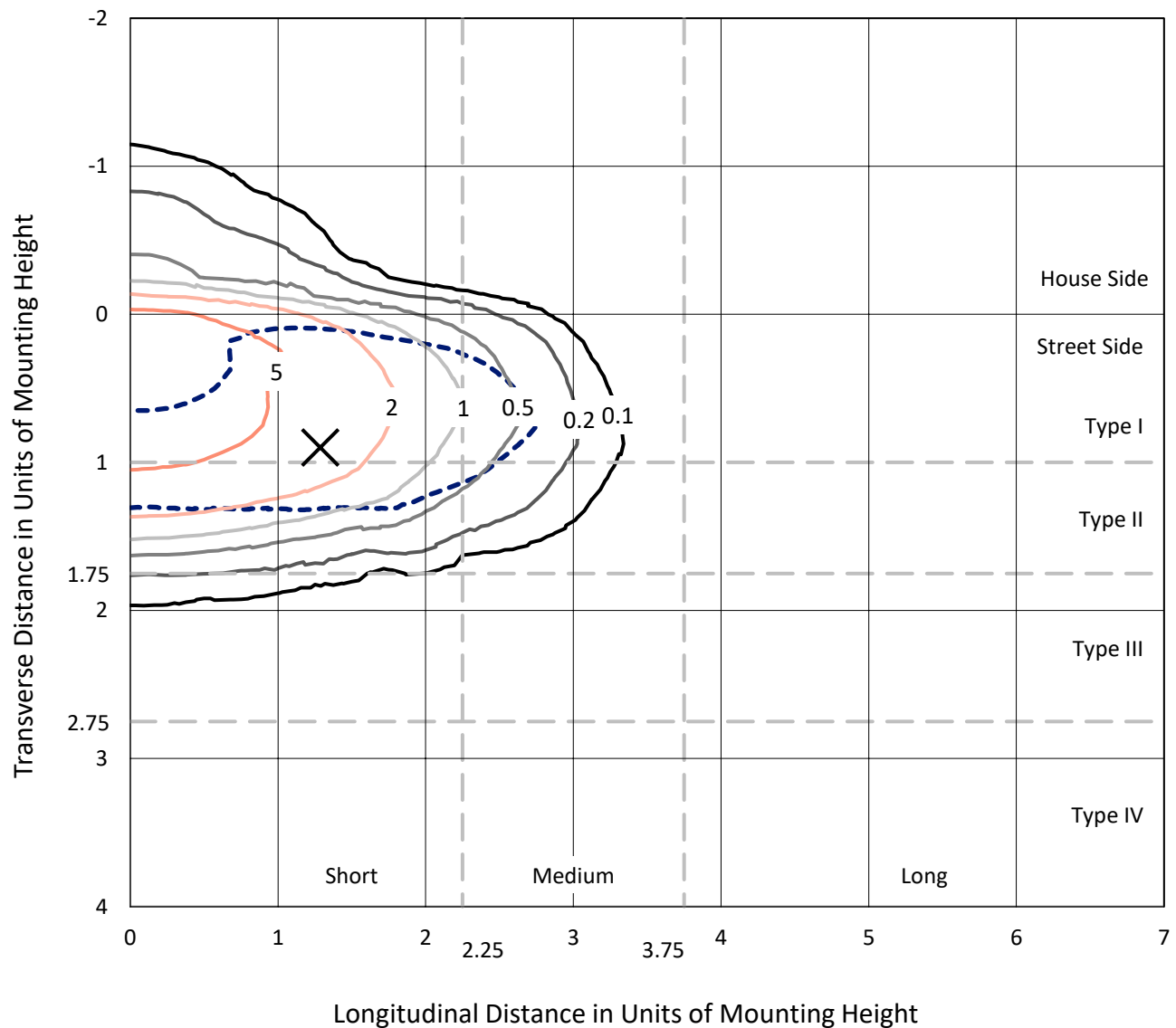


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd



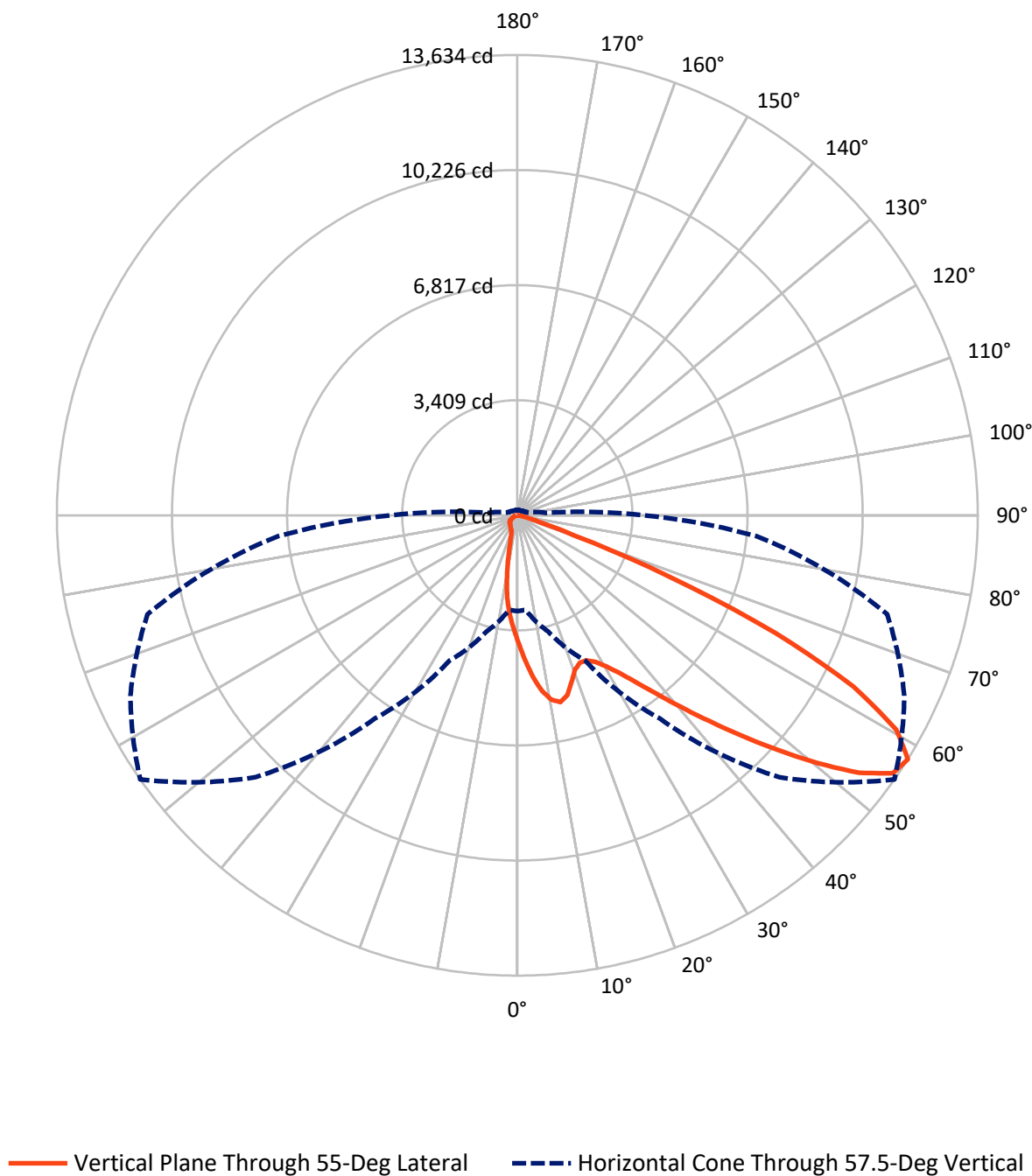
Based on 25 foot mounting height. Maximum calculated value = 8.6 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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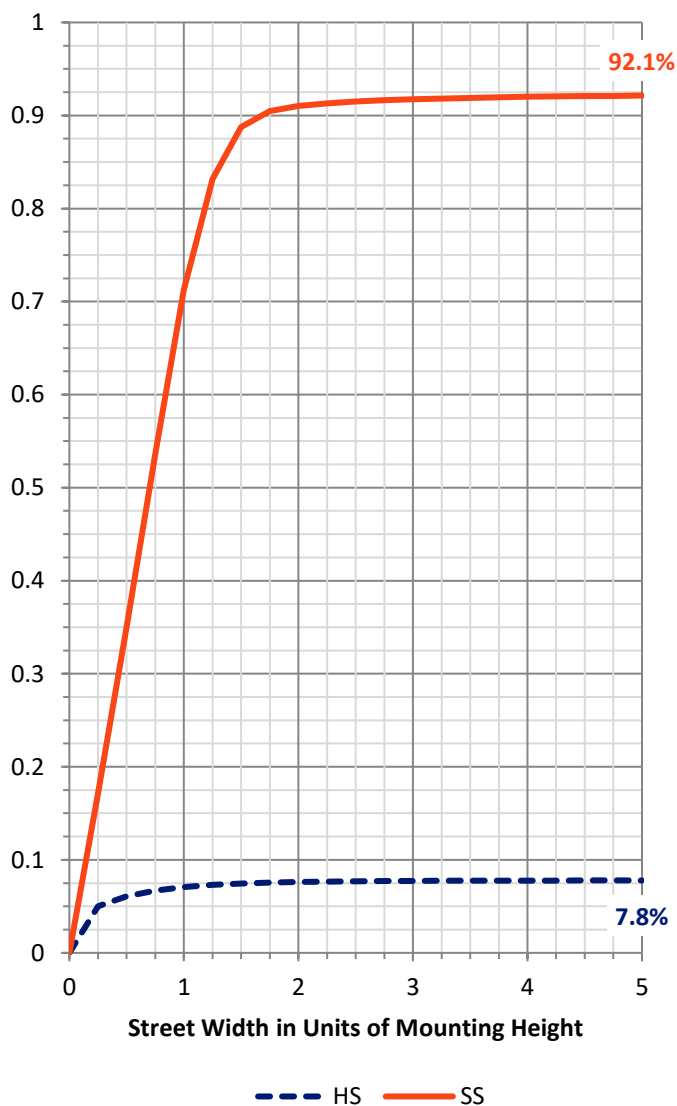
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1219.9	0.0	1219.9
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	14401.1	0.0	14401.1
	% Fixture	92.2	0.0	92.2
Total	Lumens	15621.0	0.0	15621.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	350.2	2.2
10°-20°	846.0	5.4
20°-30°	1353.6	8.7
30°-40°	2291.1	14.7
40°-50°	3761.5	24.1
50°-60°	4134.1	26.5
60°-70°	2371.3	15.2
70°-80°	484.5	3.1
80°-90°	28.6	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°	15621.0	100.0
0°-180°	15621.0	100.0

Coefficient of Utilization



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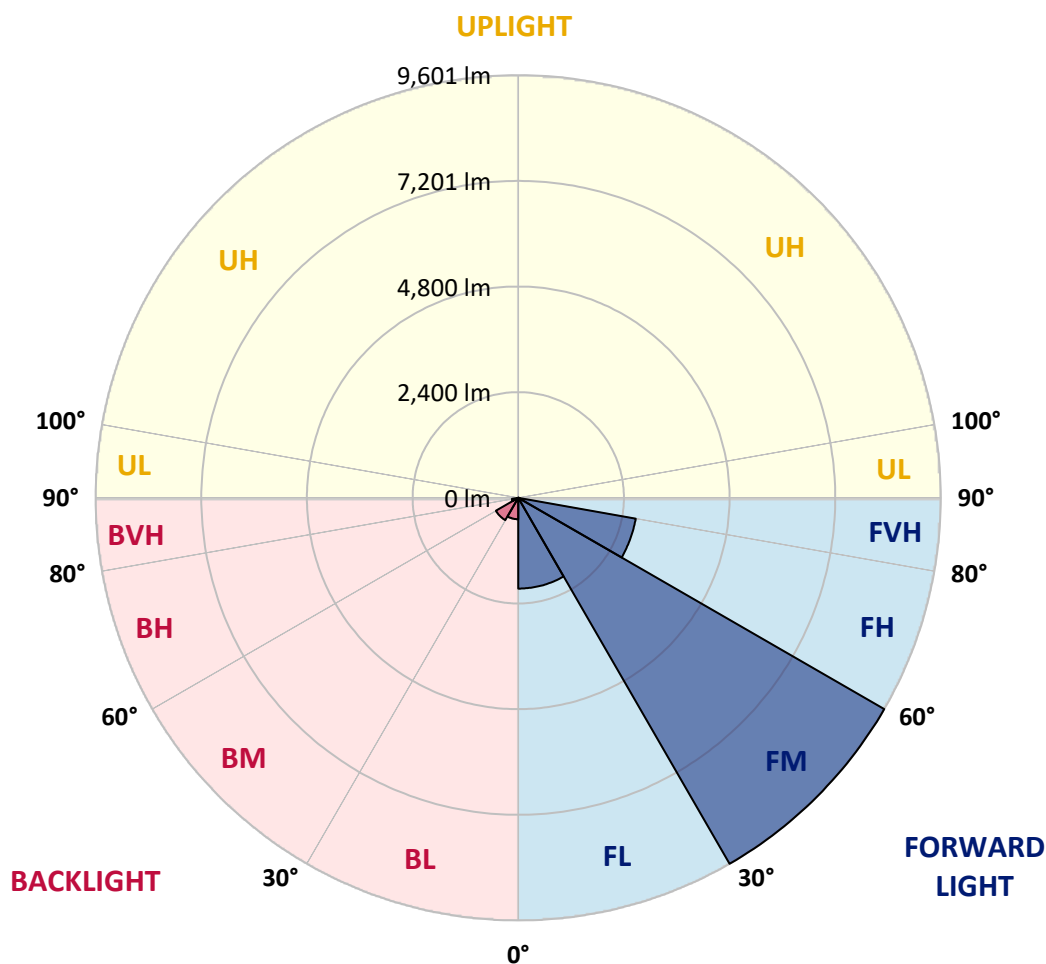
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2062.8	13.2			
FM	(30°-60°)	9600.8	61.5			
FH	(60°-80°)	2710.8	17.4			G2/5000
FVH	(80°-90°)	26.6	0.2			G1/100
BL	(0°-30°)	487.0	3.1	B1/500		
BM	(30°-60°)	585.9	3.8	B1/1000		
BH	(60°-80°)	145.1	0.9	B1/500		G1/500
BVH	(80°-90°)	1.9	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°	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3
2.5°	4670.7	4611.9	4603.3	4591.7	4480.0	4396.1	4274.8	4141.8	3992.6	3840.4	3772.9
5°	5396.0	5349.8	5341.1	5287.2	5160.0	5017.5	4801.7	4529.1	4250.7	3923.2	3782.6
7.5°	5536.6	5527.9	5567.4	5565.5	5548.1	5435.5	5253.4	4928.8	4510.8	4025.3	3807.7
10°	4909.5	4931.7	5049.3	5152.3	5430.7	5592.5	5552.9	5285.2	4778.5	4141.8	3835.6
12.5°	4338.3	4312.4	4396.1	4512.7	4836.4	5317.9	5677.3	5582.9	5084.8	4273.8	3877.0
15°	3980.1	3969.4	4016.7	4070.6	4317.2	4802.6	5532.7	5824.6	5379.6	4429.8	3939.6
17.5°	3865.4	3856.8	3871.2	3884.6	4044.5	4420.2	5188.9	5973.0	5661.8	4608.1	4009.0
20°	3958.9	3947.3	3945.3	3934.8	4001.2	4257.4	4877.8	5983.5	5915.2	4769.8	4068.6
22.5°	4231.4	4218.0	4170.7	4128.4	4134.1	4279.6	4739.1	5877.6	6105.8	4921.1	4106.3
25°	4725.6	4703.4	4605.1	4462.6	4372.0	4433.7	4760.2	5738.0	6288.0	5039.6	4087.9
27.5°	5343.9	5315.0	5188.9	4977.0	4769.8	4694.7	4913.4	5641.6	6439.2	5130.1	4048.4
30°	5949.8	5912.3	5788.0	5623.3	5320.9	5083.9	5189.9	5683.9	6619.2	5224.5	3996.4
32.5°	6603.9	6568.2	6403.5	6199.3	5948.9	5630.0	5568.4	5891.1	6839.8	5356.4	3959.8
35°	7431.2	7375.4	7141.4	6863.0	6597.1	6274.4	6080.8	6248.4	7133.6	5557.8	3980.1
37.5°	8373.3	8298.2	8045.8	7661.5	7314.7	6953.5	6705.0	6739.7	7564.2	5827.5	4042.6
40°	9261.4	9193.0	8959.9	8597.7	8162.4	7724.1	7459.2	7382.2	8158.5	6155.9	4152.5
42.5°	9794.1	9732.4	9634.2	9481.0	9114.0	8667.1	8332.8	8166.2	8861.6	6548.9	4286.3
45°	9823.9	9770.0	9901.9	10080.2	10007.9	9710.2	9302.8	8997.4	9567.7	6917.8	4425.0
47.5°	9346.2	9309.6	9710.2	10332.5	10642.7	10767.8	10392.2	9759.3	10150.5	7182.8	4481.9
50°	8043.9	8030.4	8854.9	9997.3	10884.4	11694.5	11541.3	10468.3	10602.2	7319.5	4427.9
52.5°	6974.7	6925.6	7406.2	8924.3	10532.8	12181.9	12664.5	11163.8	10918.1	7345.6	4301.7
55°	5290.0	5246.7	5849.7	7128.8	9399.1	12008.5	13486.1	11881.4	11144.5	7279.0	4075.4
57.5°	2837.6	2810.7	3572.6	4744.8	7347.5	10968.2	13634.4	12640.4	11335.2	7102.8	3758.5
60°	1104.8	1100.0	1385.1	2302.1	4465.5	8923.3	12886.0	13096.0	11454.7	6886.1	3493.6
62.5°	668.5	683.0	729.2	1033.5	1972.7	5543.3	11160.9	12577.8	11534.6	6687.6	3275.0
65°	552.9	553.8	559.6	709.9	944.9	2319.5	8402.2	10872.9	11337.1	6334.2	2964.8
67.5°	473.9	482.6	504.7	563.4	666.6	1017.2	4837.3	8422.4	10136.0	5511.5	2481.2
70°	373.7	385.3	413.2	463.3	514.3	636.7	1787.7	5604.0	7743.4	4154.4	1876.4
72.5°	315.0	314.1	328.4	376.6	408.4	447.9	687.8	3140.1	4500.2	1983.3	928.5
75°	243.7	253.3	271.6	315.0	334.3	324.6	372.8	1147.2	1612.4	601.1	315.9
77.5°	190.8	198.4	214.8	257.2	276.4	230.2	214.8	410.3	518.2	215.8	142.6
80°	85.7	92.5	146.4	189.7	225.4	159.0	116.5	210.0	230.2	98.3	72.3
82.5°	15.4	26.0	85.7	100.1	115.6	103.1	60.7	108.9	112.6	39.5	25.0
85°	0.9	1.9	29.8	36.6	46.2	33.7	18.3	43.4	37.5	13.5	9.6
87.5°	0.0	0.0	0.0	0.9	0.9	4.8	5.7	7.7	5.7	4.8	3.9
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°	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3	3764.3
2.5°	3703.6	3566.8	3433.9	3325.0	3261.4	3153.6	3082.3	3070.8	3040.9	3066.9
5°	3632.3	3387.6	3140.1	2918.6	2736.5	2501.5	2326.1	2252.0	2187.5	2209.6
7.5°	3598.6	3212.4	2827.1	2448.5	2059.3	1683.7	1404.4	1287.8	1199.2	1211.8
10°	3553.4	3030.3	2426.4	1848.4	1327.3	956.5	763.8	692.6	653.0	654.1
12.5°	3518.6	2812.6	1961.1	1253.2	808.1	610.7	550.9	533.6	522.0	523.1
15°	3501.3	2556.4	1501.6	835.1	577.9	517.2	502.8	495.1	487.4	486.5
17.5°	3472.4	2271.3	1099.0	609.7	505.7	484.5	472.0	463.3	453.7	451.7
20°	3429.0	1947.6	803.3	515.4	473.9	457.6	440.2	428.7	417.1	415.1
22.5°	3349.1	1605.7	617.5	476.8	450.8	432.4	411.3	397.8	386.2	384.4
25°	3200.8	1284.9	520.2	452.7	430.6	408.4	385.3	367.0	356.4	354.4
27.5°	3013.0	1009.4	472.0	430.6	404.6	384.4	358.3	341.0	331.4	329.4
30°	2791.4	777.4	444.0	405.5	373.7	356.4	333.2	318.9	313.0	313.0
32.5°	2552.6	621.3	432.4	380.5	346.8	327.5	309.2	303.4	301.5	300.5
35°	2328.1	539.4	426.7	360.3	322.7	304.4	296.6	297.7	301.5	301.5
37.5°	2128.7	513.4	423.8	345.8	301.5	285.2	290.0	298.6	294.8	294.8
40°	1948.6	516.3	421.9	335.2	284.1	274.5	284.1	277.4	267.7	266.8
42.5°	1810.9	540.4	418.0	326.6	273.6	266.8	262.9	252.4	251.4	253.3
45°	1710.7	561.6	417.1	322.7	262.0	249.5	244.7	234.1	253.3	258.1
47.5°	1592.2	561.6	417.1	309.2	242.7	237.9	230.2	218.6	237.9	242.7
50°	1439.1	525.9	400.7	293.8	227.3	224.5	210.9	196.5	192.6	195.6
52.5°	1245.5	461.4	359.3	272.5	211.9	206.1	189.7	179.2	176.3	176.3
55°	1024.9	386.2	303.4	241.8	195.6	184.9	173.4	168.6	165.6	163.8
57.5°	833.2	316.9	243.7	214.8	180.1	166.7	162.8	157.0	152.2	149.3
60°	683.9	249.5	201.3	190.8	164.7	152.2	151.2	143.5	131.0	129.0
62.5°	527.9	183.0	169.5	165.6	149.3	138.7	136.7	121.4	102.1	98.3
65°	372.8	142.6	136.7	145.4	132.9	123.3	118.5	95.3	75.1	72.3
67.5°	262.0	119.4	107.8	127.1	115.6	103.1	100.1	80.9	62.6	60.7
70°	186.9	97.3	88.7	108.9	92.5	90.5	84.8	67.4	51.0	49.1
72.5°	131.9	74.2	68.4	94.4	63.6	78.0	69.4	52.0	38.5	36.6
75°	97.3	53.0	48.2	54.9	46.2	58.7	49.1	34.6	24.1	23.2
77.5°	71.2	33.7	28.9	27.0	27.0	36.6	27.0	14.5	10.6	9.6
80°	50.1	15.4	13.5	11.6	10.6	8.7	3.9	1.9	0.9	0.9
82.5°	29.8	6.8	6.8	4.8	2.9	0.0	0.0	0.0	0.0	0.0
85°	6.8	2.9	2.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.9	0.9	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)