

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: P964677

Luminaire Tested: **NAV-SB3C-827-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P964677
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-SB3C-827-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 2700K, 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: 17076.5 lumens
Efficiency: N/A
Efficacy: 114.5 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 149.1
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



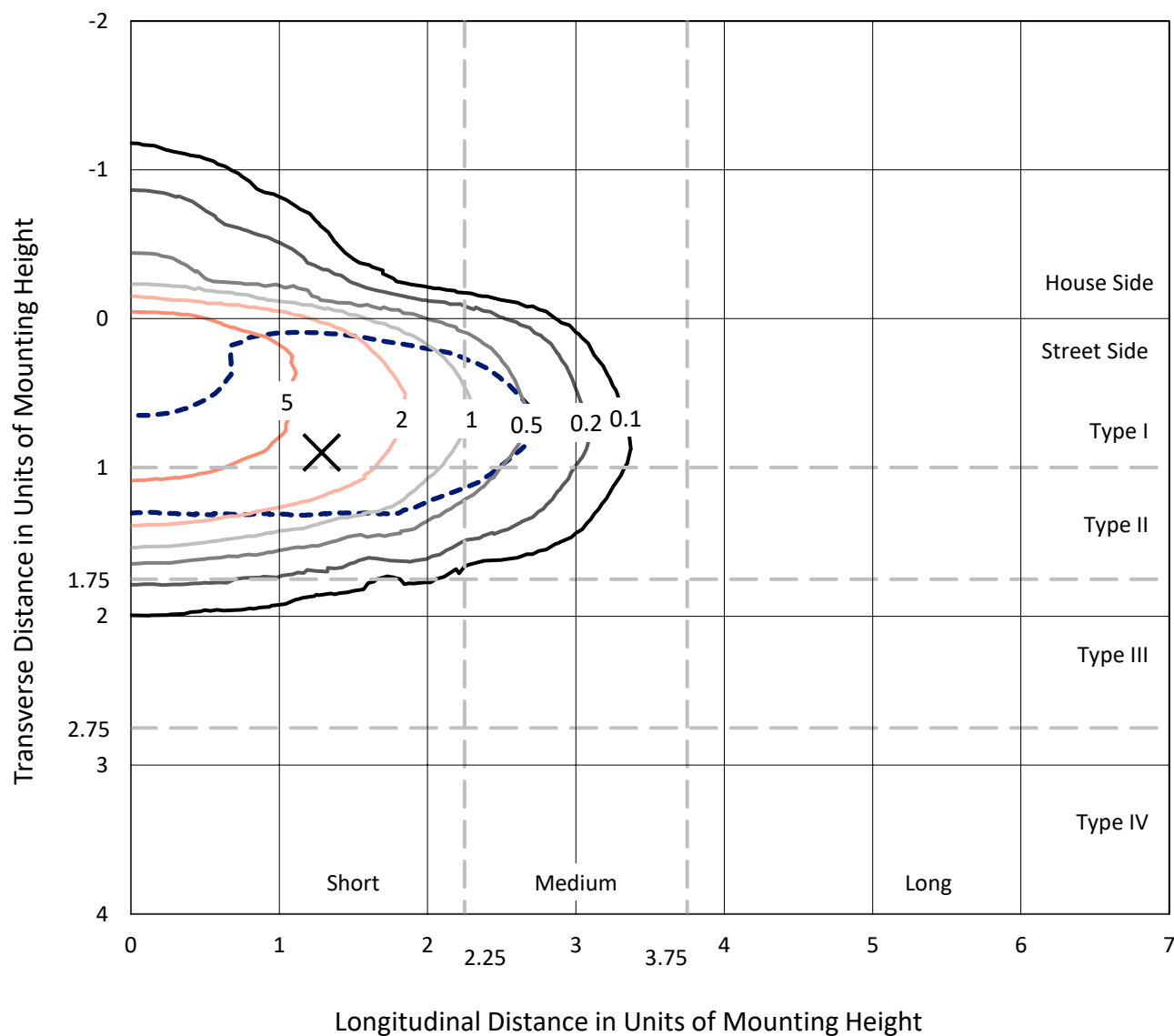
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd



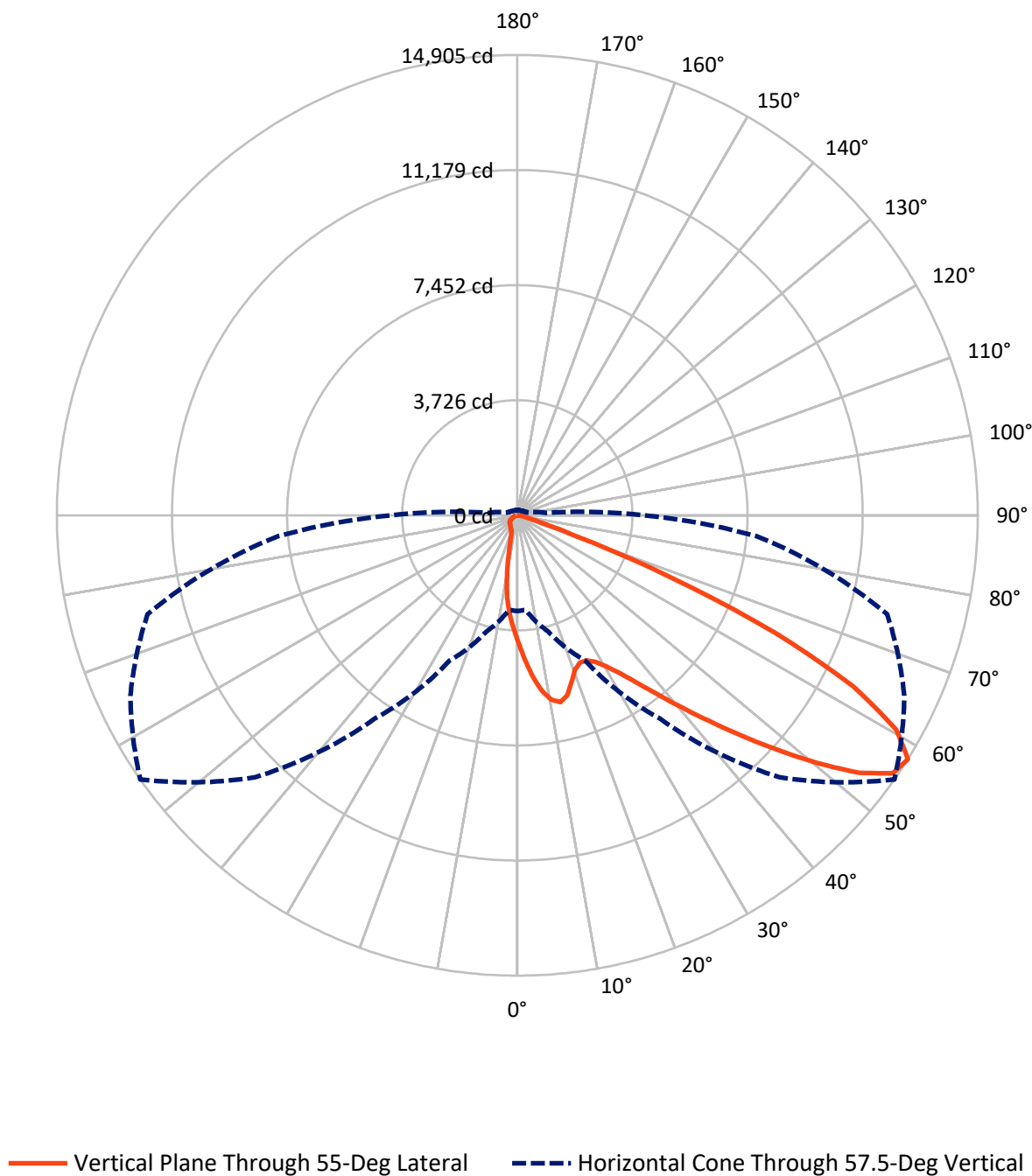
Based on 25 foot mounting height. Maximum calculated value = 9.4 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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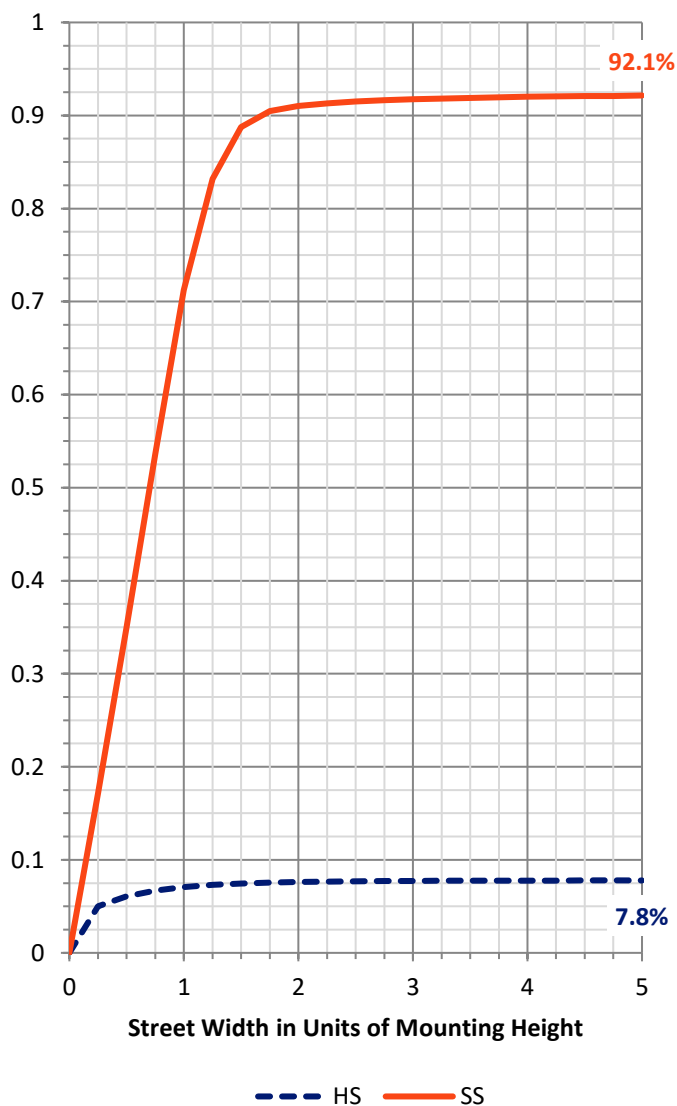
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1333.6	0.0	1333.6
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	15742.9	0.0	15742.9
	% Fixture	92.2	0.0	92.2
Total	Lumens	17076.5	0.0	17076.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	382.9	2.2
10°-20°	924.8	5.4
20°-30°	1479.7	8.7
30°-40°	2504.6	14.7
40°-50°	4111.9	24.1
50°-60°	4519.3	26.5
60°-70°	2592.3	15.2
70°-80°	529.7	3.1
80°-90°	31.2	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°	17076.5	100.0
0°-180°	17076.5	100.0

Coefficient of Utilization



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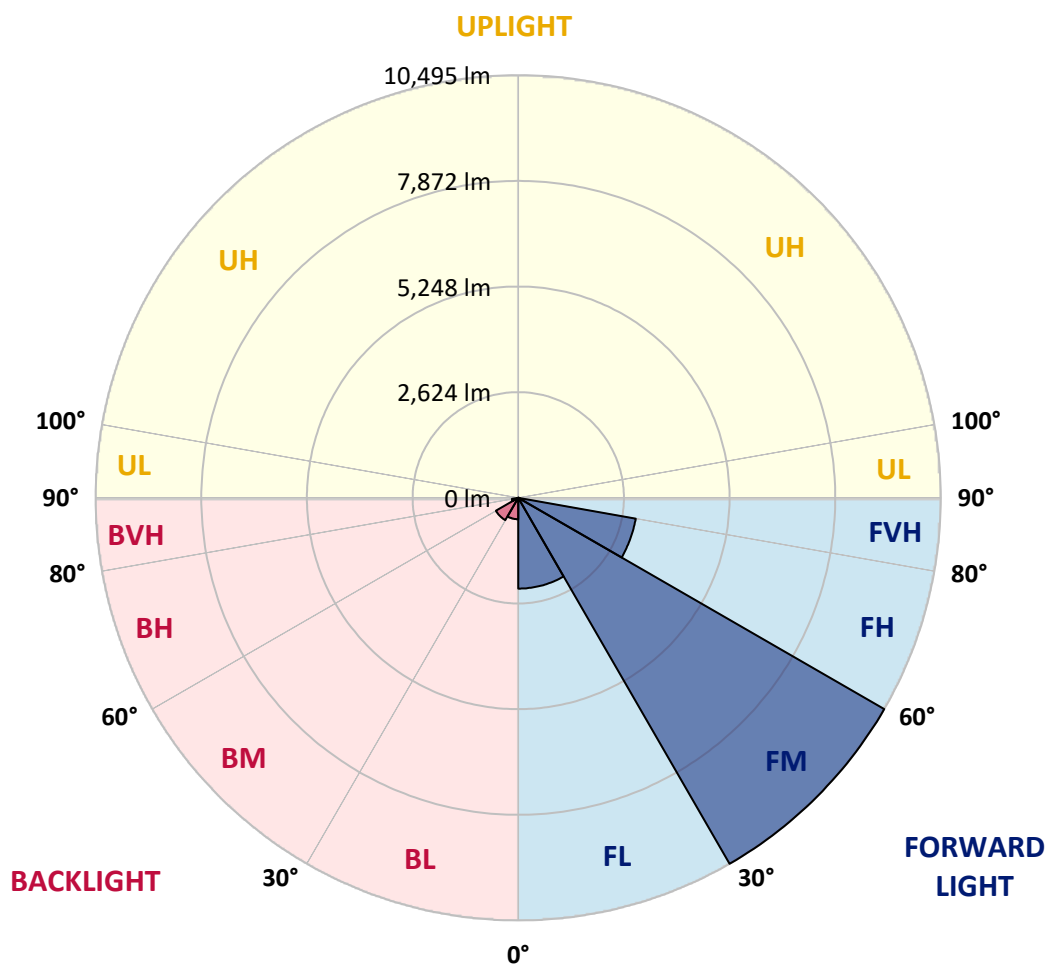
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2255.1	13.2			
FM	(30°-60°)	10495.3	61.5			
FH	(60°-80°)	2963.4	17.4			G2/5000
FVH	(80°-90°)	29.1	0.2			G1/100
BL	(0°-30°)	532.4	3.1	B2/1000		
BM	(30°-60°)	640.5	3.8	B1/1000		
BH	(60°-80°)	158.6	0.9	B1/500		G1/500
BVH	(80°-90°)	2.1	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0
2.5°	5105.8	5041.7	5032.1	5019.5	4897.3	4805.8	4673.1	4527.7	4364.6	4198.2	4124.5
5°	5898.8	5848.2	5838.7	5779.8	5640.8	5485.0	5249.0	4951.1	4646.7	4288.8	4135.1
7.5°	6052.5	6043.0	6086.1	6084.1	6065.1	5941.9	5742.9	5388.0	4931.1	4400.3	4162.4
10°	5367.0	5391.2	5519.7	5632.4	5936.7	6113.5	6070.4	5777.6	5223.8	4527.7	4193.0
12.5°	4742.6	4714.2	4805.8	4933.2	5287.0	5813.5	6206.2	6103.1	5558.7	4672.1	4238.2
15°	4350.9	4339.3	4390.9	4449.8	4719.4	5250.2	6048.3	6367.3	5880.8	4842.6	4306.6
17.5°	4225.6	4216.1	4231.9	4246.7	4421.4	4832.1	5672.3	6529.5	6189.4	5037.5	4382.5
20°	4327.8	4315.0	4313.0	4301.4	4374.1	4654.1	5332.3	6541.0	6466.3	5214.3	4447.8
22.5°	4625.7	4611.0	4559.4	4513.1	4519.3	4678.3	5180.7	6425.2	6674.8	5379.6	4488.8
25°	5165.9	5141.7	5034.3	4878.4	4779.5	4846.8	5203.8	6272.6	6873.8	5509.2	4468.8
27.5°	5841.9	5810.3	5672.3	5440.7	5214.3	5132.2	5371.2	6167.2	7039.1	5608.1	4425.6
30°	6504.2	6463.1	6327.3	6147.2	5816.7	5557.5	5673.4	6213.5	7236.0	5711.3	4368.8
32.5°	7219.2	7180.2	7000.1	6776.9	6503.1	6154.6	6087.3	6440.0	7477.2	5855.6	4328.8
35°	8123.6	8062.6	7806.7	7502.4	7211.8	6859.1	6647.4	6830.6	7798.3	6075.7	4350.9
37.5°	9153.5	9071.4	8795.5	8375.4	7996.2	7601.4	7329.8	7367.6	8269.0	6370.5	4419.3
40°	10124.3	10049.6	9794.8	9398.8	8922.9	8443.7	8154.2	8070.0	8918.6	6729.5	4539.3
42.5°	10706.6	10639.2	10531.9	10364.4	9963.2	9474.7	9109.3	8927.1	9687.4	7159.1	4685.7
45°	10739.2	10680.3	10824.5	11019.4	10940.3	10615.0	10169.6	9835.8	10459.2	7562.4	4837.4
47.5°	10217.0	10177.0	10615.0	11295.2	11634.3	11771.2	11360.5	10668.7	11096.2	7852.0	4899.5
50°	8793.4	8778.6	9680.0	10928.8	11898.6	12784.1	12616.7	11443.7	11590.1	8001.6	4840.6
52.5°	7624.6	7570.9	8096.3	9755.7	11514.2	13316.9	13844.5	12204.0	11935.4	8030.0	4702.6
55°	5782.9	5735.5	6394.7	7793.1	10274.9	13127.4	14742.7	12988.4	12182.8	7957.3	4455.2
57.5°	3102.1	3072.5	3905.5	5186.9	8032.1	11990.2	14904.8	13818.1	12391.3	7764.6	4108.7
60°	1207.8	1202.5	1514.1	2516.6	4881.6	9754.7	14086.7	14316.2	12521.9	7527.7	3819.2
62.5°	730.7	746.5	797.1	1129.9	2156.5	6059.9	12200.8	13749.8	12609.3	7310.8	3580.1
65°	604.4	605.5	611.8	776.0	1033.0	2535.5	9185.1	11885.9	12393.5	6924.4	3241.0
67.5°	518.0	527.6	551.8	616.0	728.7	1111.9	5288.1	9207.2	11080.5	6025.2	2712.5
70°	408.6	421.2	451.7	506.5	562.3	696.0	1954.4	6126.2	8464.9	4541.5	2051.2
72.5°	344.3	343.3	359.1	411.7	446.5	489.6	751.8	3432.7	4919.5	2168.1	1015.1
75°	266.4	277.0	296.9	344.3	365.4	354.9	407.5	1254.1	1762.7	657.0	345.4
77.5°	208.5	216.9	234.8	281.2	302.2	251.6	234.8	448.5	566.5	235.9	155.8
80°	93.7	101.1	160.0	207.5	246.4	173.7	127.4	229.5	251.6	107.4	78.9
82.5°	16.8	28.4	93.7	109.5	126.4	112.6	66.3	119.0	123.2	43.2	27.4
85°	1.0	2.2	32.6	40.0	50.5	36.9	20.0	47.4	41.1	14.8	10.6
87.5°	0.0	0.0	0.0	1.0	1.0	5.2	6.4	8.4	6.4	5.2	4.2
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°	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0	4115.0
2.5°	4048.6	3899.2	3753.9	3634.9	3565.4	3447.4	3369.5	3356.9	3324.3	3352.7
5°	3970.7	3703.3	3432.7	3190.5	2991.5	2734.6	2542.9	2461.8	2391.3	2415.5
7.5°	3934.0	3511.6	3090.5	2676.7	2251.2	1840.6	1535.2	1407.8	1311.0	1324.6
10°	3884.4	3312.7	2652.4	2020.7	1451.0	1045.6	835.0	757.1	713.9	714.9
12.5°	3846.5	3074.7	2143.9	1369.9	883.4	667.6	602.3	583.3	570.7	571.7
15°	3827.6	2794.6	1641.5	913.0	631.8	565.5	549.6	541.2	532.8	531.8
17.5°	3796.0	2482.9	1201.4	666.6	552.8	529.6	516.0	506.5	496.0	493.8
20°	3748.6	2129.1	878.2	563.3	518.0	500.2	481.2	468.5	455.9	453.9
22.5°	3661.2	1755.3	675.0	521.2	492.8	472.8	449.7	434.9	422.2	420.1
25°	3499.0	1404.7	568.6	494.9	470.7	446.5	421.2	401.2	389.6	387.4
27.5°	3293.7	1103.5	516.0	470.7	442.3	420.1	391.8	372.8	362.2	360.1
30°	3051.5	849.7	485.4	443.3	408.6	389.6	364.3	348.5	342.2	342.2
32.5°	2790.4	679.2	472.8	415.9	379.0	358.0	338.0	331.7	329.5	328.5
35°	2545.1	589.7	466.5	393.8	352.7	332.7	324.3	325.3	329.5	329.5
37.5°	2327.1	561.2	463.3	378.0	329.5	311.7	316.9	326.5	322.3	322.3
40°	2130.2	564.4	461.2	366.4	310.7	300.1	310.7	303.3	292.7	291.7
42.5°	1979.6	590.7	456.9	357.0	299.1	291.7	287.5	275.8	274.8	277.0
45°	1870.1	613.9	455.9	352.7	286.4	272.8	267.4	255.8	277.0	282.2
47.5°	1740.6	613.9	455.9	338.0	265.4	260.0	251.6	239.0	260.0	265.4
50°	1573.2	574.9	438.1	321.1	248.5	245.4	230.6	214.8	210.6	213.7
52.5°	1361.5	504.4	392.8	298.0	231.6	225.3	207.5	195.9	192.7	192.7
55°	1120.3	422.2	331.7	264.2	213.7	202.1	189.5	184.3	181.1	179.0
57.5°	910.8	346.4	266.4	234.8	196.9	182.1	177.9	171.6	166.4	163.2
60°	747.6	272.8	220.1	208.5	180.1	166.4	165.3	156.9	143.2	141.1
62.5°	577.1	200.1	185.3	181.1	163.2	151.6	149.5	132.6	111.6	107.4
65°	407.5	155.8	149.5	159.0	145.3	134.8	129.6	104.2	82.1	78.9
67.5°	286.4	130.6	118.0	139.0	126.4	112.6	109.5	88.5	68.5	66.3
70°	204.3	106.4	96.9	119.0	101.1	99.0	92.7	73.7	55.8	53.7
72.5°	144.2	81.1	74.7	103.2	69.5	85.3	75.8	56.9	42.1	40.0
75°	106.4	57.9	52.7	60.1	50.5	64.3	53.7	37.9	26.3	25.3
77.5°	77.9	36.9	31.6	29.5	29.5	40.0	29.5	15.8	11.6	10.6
80°	54.7	16.8	14.8	12.6	11.6	9.4	4.2	2.2	1.0	1.0
82.5°	32.6	7.4	7.4	5.2	3.2	0.0	0.0	0.0	0.0	0.0
85°	7.4	3.2	3.2	1.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.0	1.0	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

(END OF REPORT)