

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: P968397

Luminaire Tested: **NAV-SB5B-830-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968397
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-SB5B-830-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

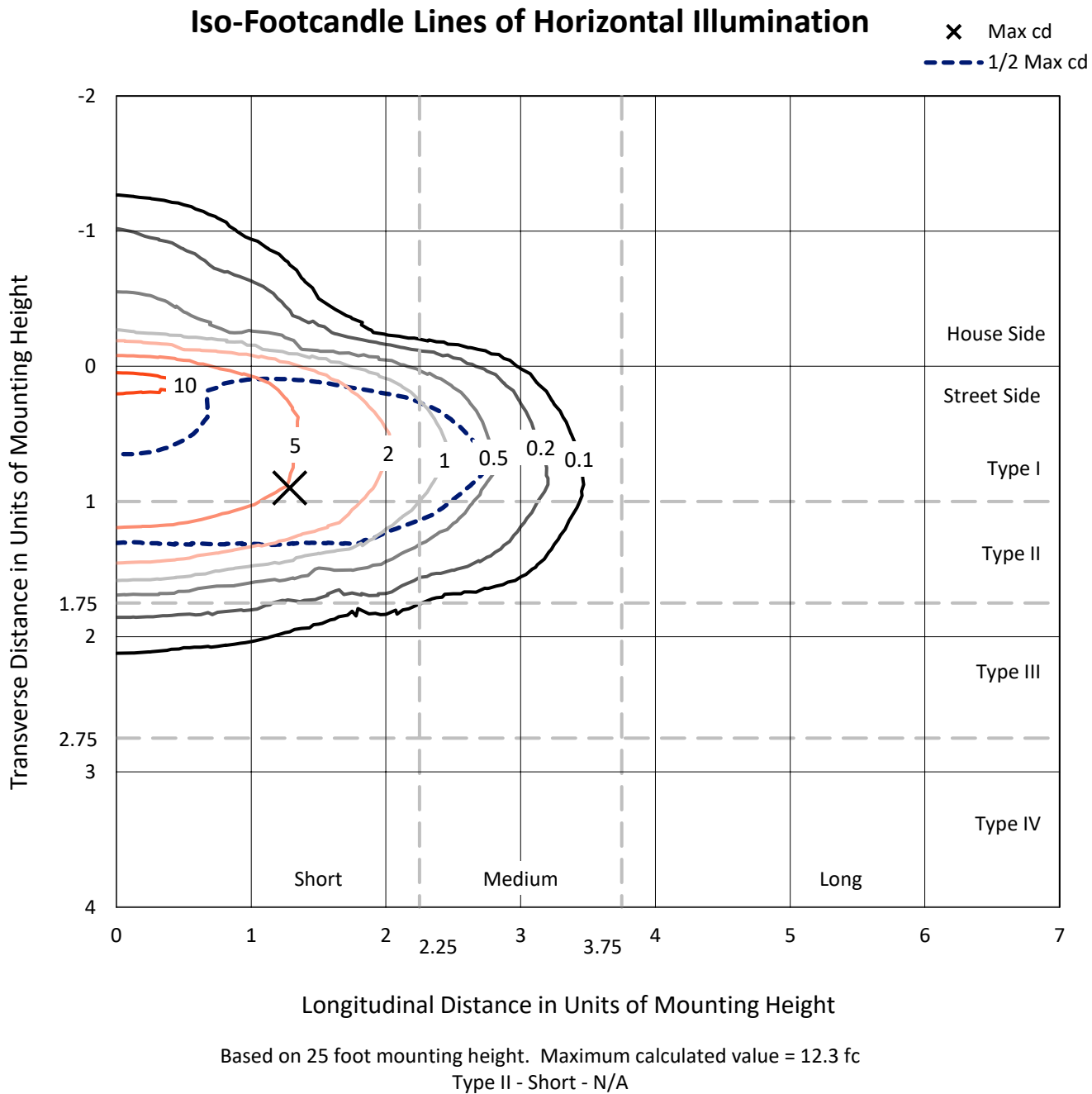
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22336.8 lumens
Efficiency: N/A
Efficacy: 122.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

Input Watts (W): 182.7
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

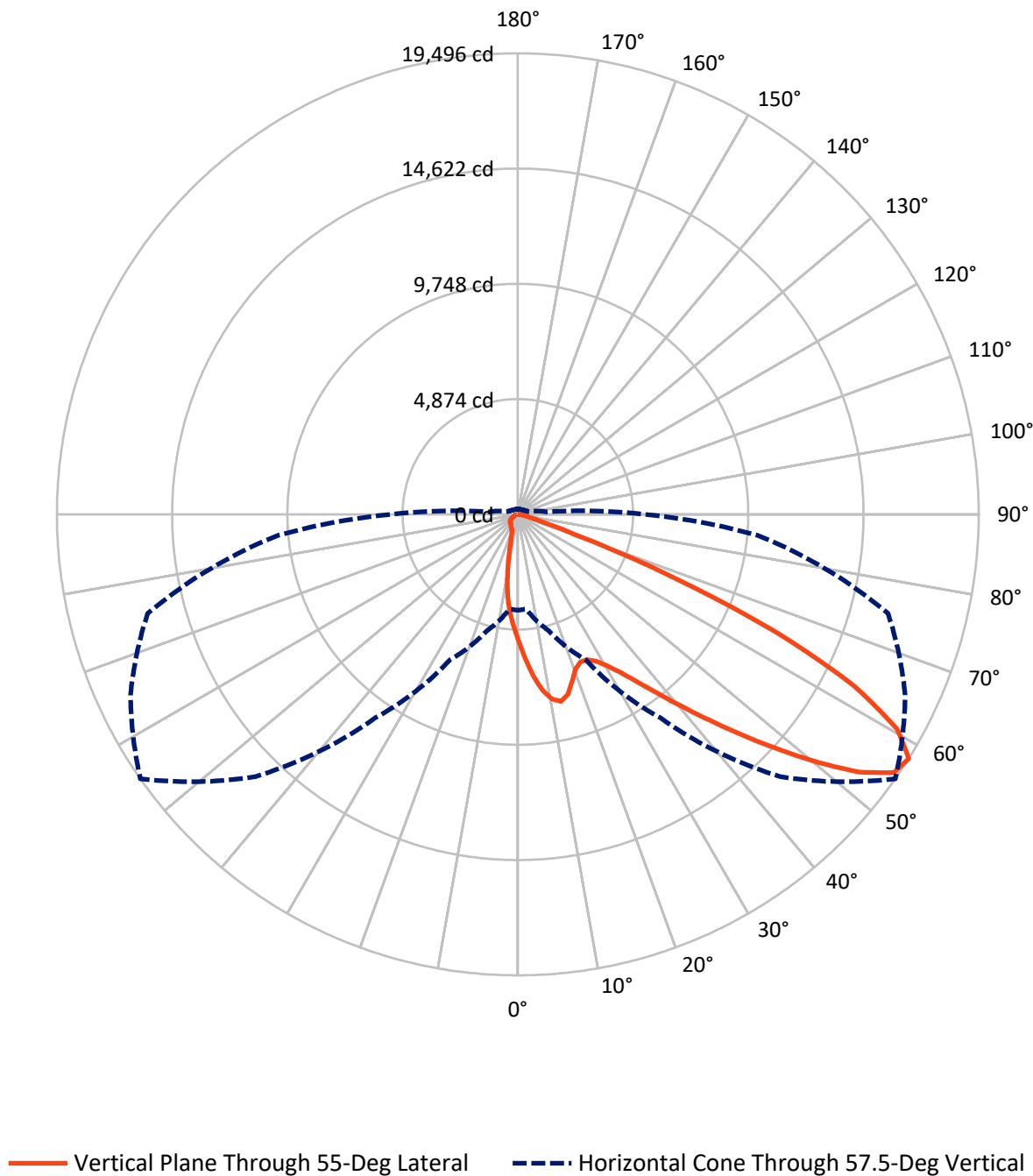


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Luminous Intensity Polar Plot



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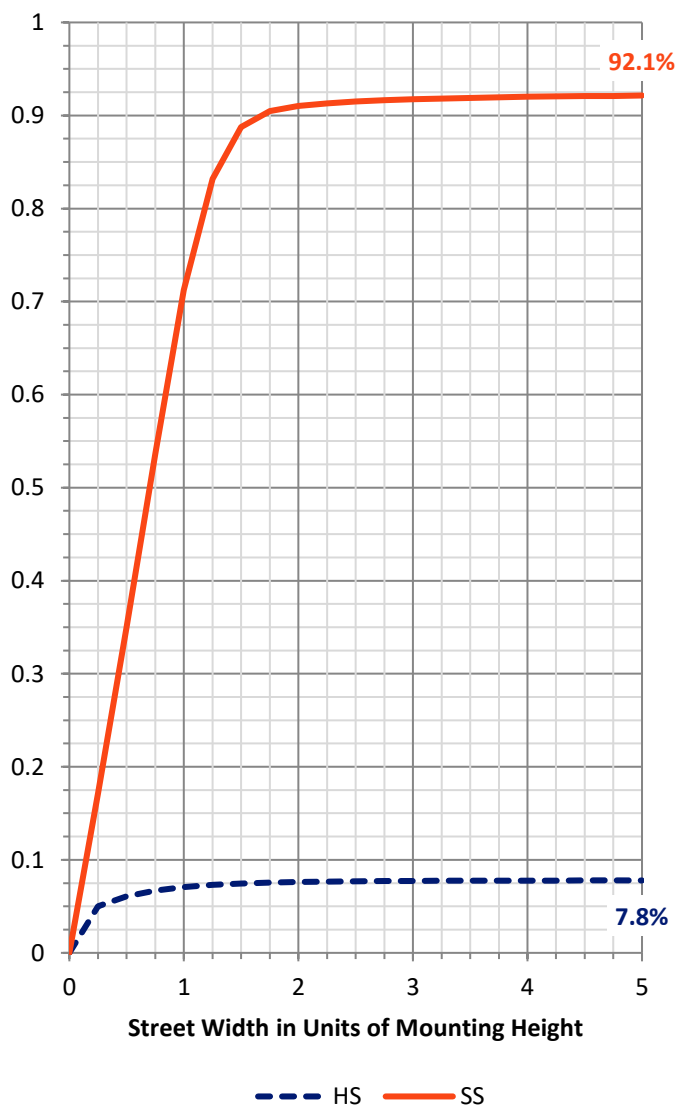
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1744.4	0.0	1744.4
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	20592.4	0.0	20592.4
	% Fixture	92.2	0.0	92.2
Total	Lumens	22336.8	0.0	22336.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	500.8	2.2
10°-20°	1209.7	5.4
20°-30°	1935.6	8.7
30°-40°	3276.1	14.7
40°-50°	5378.6	24.1
50°-60°	5911.5	26.5
60°-70°	3390.8	15.2
70°-80°	692.8	3.1
80°-90°	40.9	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°	22336.8	100.0
0°-180°	22336.8	100.0

Coefficient of Utilization



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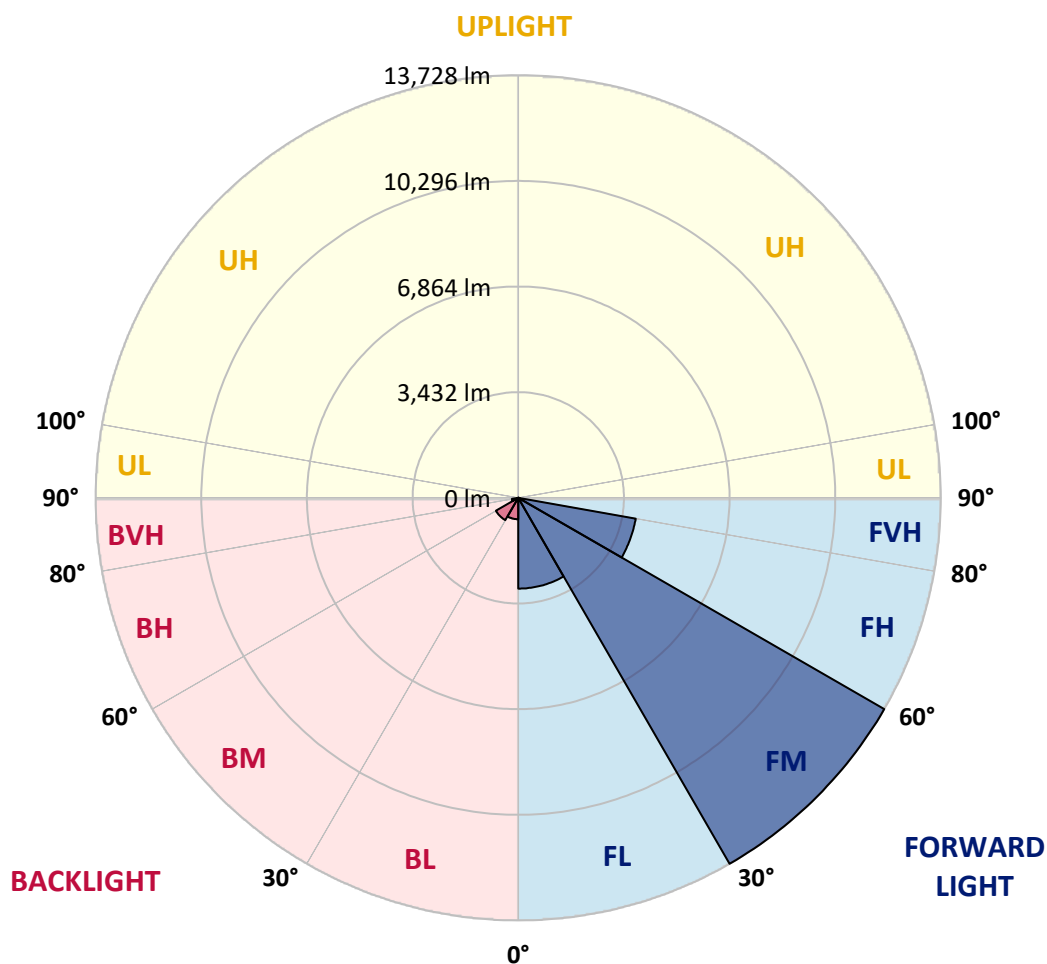
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2949.7	13.2			
FM	(30°-60°)	13728.4	61.5			
FH	(60°-80°)	3876.2	17.4			G2/5000
FVH	(80°-90°)	38.1	0.2			G1/100
BL	(0°-30°)	696.4	3.1	B2/1000		
BM	(30°-60°)	837.8	3.8	B1/1000		
BH	(60°-80°)	207.5	0.9	B1/500		G1/500
BVH	(80°-90°)	2.7	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°	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6
2.5°	6678.7	6594.6	6582.2	6565.7	6405.9	6286.1	6112.6	5922.6	5709.0	5491.4	5395.0
5°	7715.8	7649.7	7637.3	7560.2	7378.4	7174.5	6866.0	6476.3	6078.1	5609.9	5408.8
7.5°	7916.9	7904.5	7961.0	7958.2	7933.4	7772.3	7512.0	7047.8	6450.0	5755.9	5444.6
10°	7020.2	7051.9	7220.0	7367.4	7765.4	7996.8	7940.4	7557.4	6833.0	5922.6	5484.6
12.5°	6203.5	6166.3	6286.1	6452.8	6915.6	7604.3	8118.0	7983.0	7270.9	6111.3	5543.8
15°	5691.1	5676.0	5743.5	5820.6	6173.2	6867.4	7911.4	8328.7	7692.4	6334.4	5633.3
17.5°	5527.2	5514.8	5535.5	5554.8	5783.5	6320.6	7419.7	8540.8	8096.0	6589.2	5732.4
20°	5660.9	5644.3	5641.6	5626.4	5721.4	6087.8	6974.8	8556.0	8458.2	6820.6	5817.9
22.5°	6050.6	6031.3	5963.9	5903.3	5911.5	6119.5	6776.5	8404.5	8730.9	7036.8	5871.6
25°	6757.2	6725.5	6585.0	6381.1	6251.7	6339.8	6806.8	8204.8	8991.2	7206.2	5845.4
27.5°	7641.5	7600.2	7419.7	7116.7	6820.6	6713.1	7025.8	8067.1	9207.5	7335.7	5788.9
30°	8507.8	8454.1	8276.4	8040.9	7608.4	7269.6	7421.1	8127.6	9465.1	7470.6	5714.6
32.5°	9443.0	9392.1	9156.5	8864.5	8506.4	8050.6	7962.4	8423.8	9780.4	7659.3	5662.2
35°	10626.2	10546.2	10211.6	9813.5	9433.4	8971.9	8695.1	8934.7	10200.5	7947.2	5691.1
37.5°	11973.1	11865.7	11504.9	10955.3	10459.5	9943.0	9587.6	9637.2	10816.2	8332.8	5780.7
40°	13243.1	13145.3	12812.0	12294.1	11671.6	11044.8	10666.0	10555.9	11666.0	8802.5	5937.7
42.5°	14004.7	13916.5	13776.1	13557.1	13032.4	12393.3	11915.3	11677.0	12671.5	9364.5	6129.1
45°	14047.4	13970.3	14158.9	14413.8	14310.5	13884.9	13302.2	12865.7	13681.1	9892.0	6327.4
47.5°	13364.3	13311.9	13884.9	14774.7	15218.2	15397.2	14860.0	13955.2	14514.3	10270.8	6408.7
50°	11502.1	11482.9	12661.8	14295.4	15563.9	16722.2	16503.2	14968.9	15160.3	10466.4	6331.6
52.5°	9973.2	9903.0	10590.3	12760.9	15061.1	17419.2	18109.2	15963.2	15612.1	10503.6	6151.1
55°	7564.3	7502.4	8364.5	10193.6	13440.0	17171.2	19284.0	16989.4	15935.8	10408.5	5827.5
57.5°	4057.7	4019.0	5108.5	6784.8	10506.2	15683.7	19496.1	18074.7	16208.4	10156.4	5374.4
60°	1579.8	1573.0	1980.6	3291.8	6385.3	12759.6	18426.0	18726.2	16379.3	9846.6	4995.5
62.5°	955.9	976.5	1042.6	1477.8	2820.8	7926.5	15959.1	17985.3	16493.6	9562.8	4682.9
65°	790.6	792.0	800.2	1015.1	1351.2	3316.6	12014.4	15547.3	16211.2	9057.3	4239.4
67.5°	677.6	690.0	721.7	805.8	953.1	1454.5	6917.0	12043.4	14493.7	7881.1	3548.0
70°	534.4	550.9	590.9	662.5	735.5	910.4	2556.4	8013.3	11072.4	5940.4	2683.0
72.5°	450.4	449.1	469.7	538.5	583.9	640.4	983.4	4490.1	6435.0	2836.0	1327.8
75°	348.5	362.2	388.4	450.4	478.0	464.1	533.0	1640.4	2305.6	859.5	451.7
77.5°	272.8	283.7	307.2	367.8	395.3	329.2	307.2	586.7	741.0	308.5	203.9
80°	122.6	132.2	209.3	271.3	322.3	227.2	166.7	300.2	329.2	140.5	103.3
82.5°	22.0	37.2	122.6	143.2	165.2	147.4	86.8	155.6	161.1	56.5	35.8
85°	1.3	2.8	42.7	52.4	66.1	48.2	26.1	62.0	53.7	19.3	13.7
87.5°	0.0	0.0	0.0	1.3	1.3	6.9	8.3	11.0	8.3	6.9	5.5
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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6	5382.6
2.5°	5295.9	5100.3	4910.2	4754.6	4663.6	4509.4	4407.5	4390.9	4348.3	4385.5
5°	5193.9	4844.0	4490.1	4173.3	3913.0	3576.9	3326.2	3220.2	3127.9	3159.6
7.5°	5145.7	4593.4	4042.5	3501.2	2944.7	2407.6	2008.2	1841.5	1714.8	1732.7
10°	5081.0	4333.1	3469.5	2643.1	1898.0	1367.7	1092.2	990.3	933.9	935.2
12.5°	5031.4	4021.8	2804.3	1791.9	1155.6	873.2	787.8	763.0	746.5	747.9
15°	5006.6	3655.5	2147.3	1194.1	826.4	739.6	718.9	708.0	696.9	695.6
17.5°	4965.3	3247.7	1571.5	871.9	723.1	692.8	674.9	662.5	648.7	646.0
20°	4903.3	2784.9	1148.7	736.9	677.6	654.3	629.5	612.9	596.3	593.7
22.5°	4789.0	2296.0	882.8	681.8	644.6	618.4	588.1	568.9	552.3	549.6
25°	4576.8	1837.3	743.7	647.4	615.7	583.9	550.9	524.8	509.6	506.9
27.5°	4308.3	1443.4	674.9	615.7	578.5	549.6	512.4	487.6	473.8	471.1
30°	3991.6	1111.5	635.0	579.8	534.4	509.6	476.5	455.9	447.6	447.6
32.5°	3649.9	888.4	618.4	544.1	495.8	468.3	442.1	433.9	431.1	429.7
35°	3329.0	771.3	610.2	515.2	461.5	435.2	424.2	425.6	431.1	431.1
37.5°	3043.9	734.1	606.0	494.5	431.1	407.6	414.6	427.0	421.5	421.5
40°	2786.4	738.2	603.3	479.3	406.3	392.6	406.3	396.7	382.9	381.5
42.5°	2589.4	772.6	597.8	466.9	391.1	381.5	376.0	360.9	359.5	362.2
45°	2446.2	803.0	596.3	461.5	374.6	356.7	349.8	334.7	362.2	369.1
47.5°	2276.7	803.0	596.3	442.1	347.1	340.2	329.2	312.6	340.2	347.1
50°	2057.7	752.0	573.0	420.0	325.0	320.9	301.7	281.0	275.4	279.6
52.5°	1780.9	659.8	513.7	389.8	303.0	294.8	271.3	256.1	252.0	252.0
55°	1465.4	552.3	433.9	345.7	279.6	264.4	247.9	241.1	236.9	234.1
57.5°	1191.4	453.2	348.5	307.2	257.6	238.3	232.8	224.5	217.6	213.5
60°	978.0	356.7	287.8	272.8	235.5	217.6	216.3	205.2	187.3	184.6
62.5°	754.8	261.7	242.4	236.9	213.5	198.3	195.6	173.5	146.0	140.5
65°	533.0	203.9	195.6	208.0	190.0	176.3	169.4	136.3	107.4	103.3
67.5°	374.6	170.8	154.3	181.8	165.2	147.4	143.2	115.7	89.5	86.8
70°	267.2	139.1	126.7	155.6	132.2	129.5	121.2	96.5	73.0	70.2
72.5°	188.7	106.1	97.8	135.0	90.9	111.5	99.1	74.4	55.0	52.4
75°	139.1	75.7	68.9	78.5	66.1	84.0	70.2	49.6	34.4	33.0
77.5°	101.9	48.2	41.3	38.5	38.5	52.4	38.5	20.7	15.2	13.7
80°	71.6	22.0	19.3	16.5	15.2	12.4	5.5	2.8	1.3	1.3
82.5°	42.7	9.6	9.6	6.9	4.1	0.0	0.0	0.0	0.0	0.0
85°	9.6	4.1	4.1	1.3	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.3	1.3	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)