

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: P968242

Luminaire Tested: **NAV-SB5B-735-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968242
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-735-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 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: 24859.3 lumens
Efficiency: N/A
Efficacy: 136.1 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

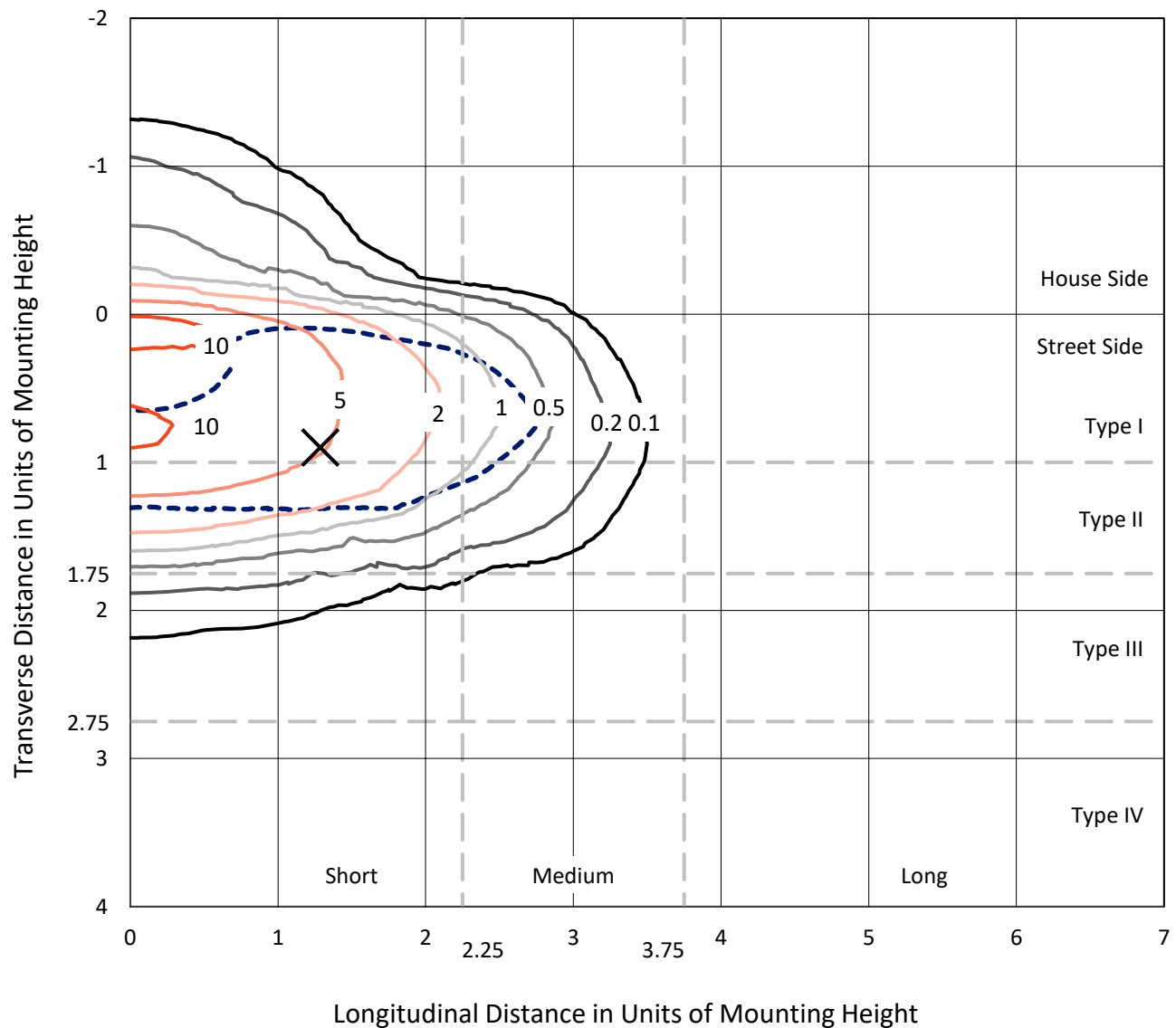


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

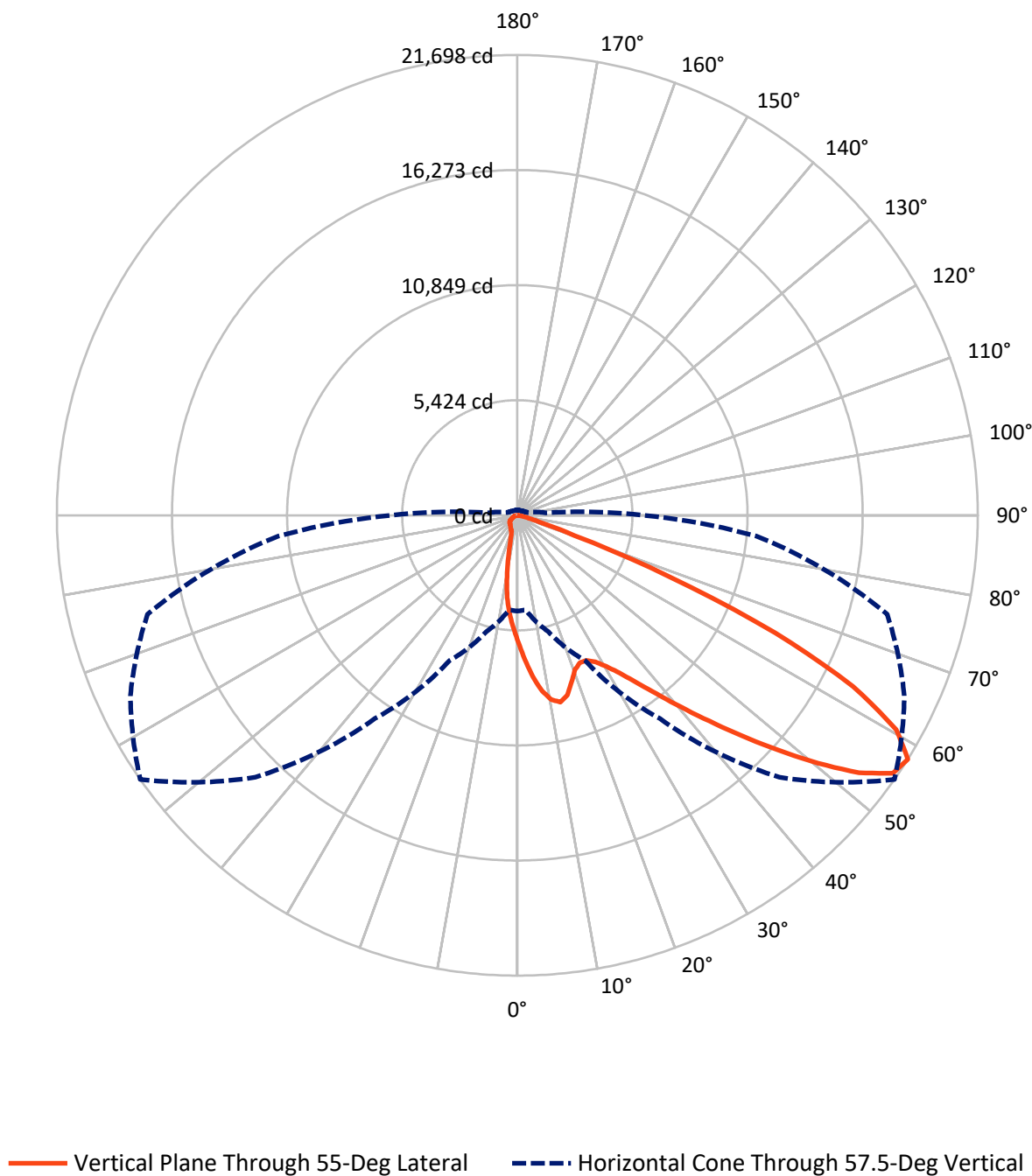


Based on 25 foot mounting height. Maximum calculated value = 13.7 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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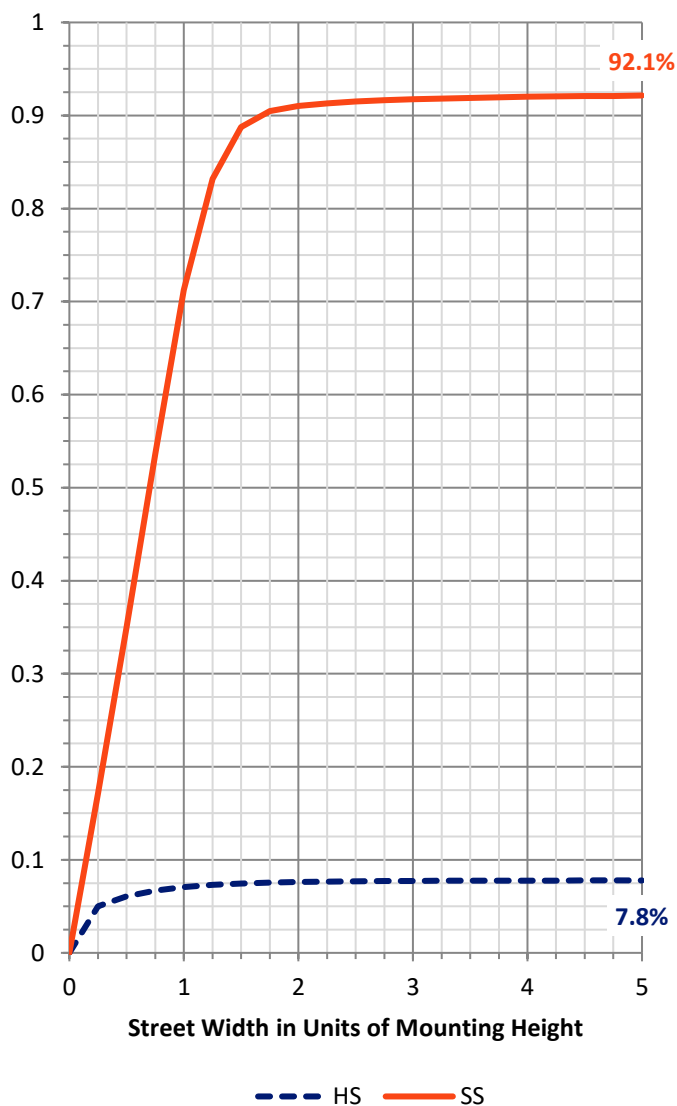
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1941.4	0.0	1941.4
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	22917.9	0.0	22917.9
	% Fixture	92.2	0.0	92.2
Total	Lumens	24859.3	0.0	24859.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	557.4	2.2
10°-20°	1346.4	5.4
20°-30°	2154.2	8.7
30°-40°	3646.0	14.7
40°-50°	5986.0	24.1
50°-60°	6579.1	26.5
60°-70°	3773.7	15.2
70°-80°	771.1	3.1
80°-90°	45.5	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°	24859.3	100.0
0°-180°	24859.3	100.0

Coefficient of Utilization



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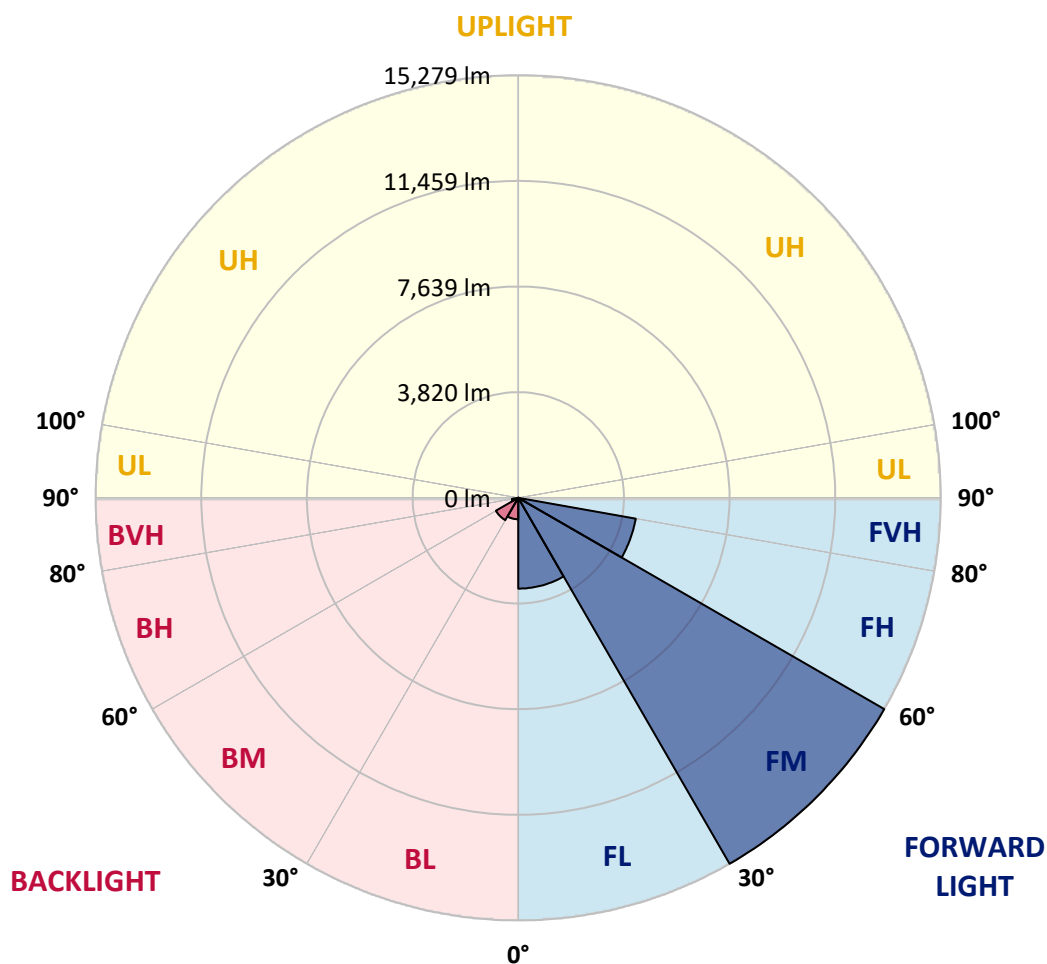
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3282.8	13.2			
FM	(30°-60°)	15278.7	61.5			
FH	(60°-80°)	4313.9	17.4			G2/5000
FVH	(80°-90°)	42.4	0.2			G1/100
BL	(0°-30°)	775.1	3.1	B2/1000		
BM	(30°-60°)	932.4	3.8	B1/1000		
BH	(60°-80°)	230.9	0.9	B1/500		G1/500
BVH	(80°-90°)	3.1	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°	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5
2.5°	7432.9	7339.4	7325.6	7307.2	7129.4	6996.0	6802.9	6591.4	6353.8	6111.6	6004.2
5°	8587.1	8513.6	8499.8	8413.9	8211.6	7984.7	7641.4	7207.6	6764.6	6243.4	6019.6
7.5°	8811.0	8797.2	8860.0	8856.9	8829.3	8650.1	8360.3	7843.7	7178.5	6405.9	6059.5
10°	7813.1	7848.3	8035.4	8199.4	8642.4	8899.9	8837.0	8410.9	7604.6	6591.4	6103.9
12.5°	6904.1	6862.7	6996.0	7181.6	7696.6	8463.0	9034.8	8884.6	8092.1	6801.4	6169.8
15°	6333.9	6317.0	6392.1	6477.9	6870.4	7642.9	8804.9	9269.3	8561.1	7049.7	6269.5
17.5°	6151.4	6137.6	6160.7	6182.1	6436.6	7034.4	8257.6	9505.3	9010.3	7333.3	6379.8
20°	6300.2	6281.7	6278.6	6261.8	6367.6	6775.4	7762.5	9522.2	9413.4	7590.8	6474.9
22.5°	6733.9	6712.5	6637.4	6569.9	6579.1	6810.6	7541.7	9353.6	9716.9	7831.5	6534.7
25°	7520.3	7485.1	7328.6	7101.8	6957.7	7055.8	7575.5	9131.3	10006.7	8020.0	6505.6
27.5°	8504.4	8458.4	8257.6	7920.4	7590.8	7471.2	7819.2	8978.1	10247.3	8164.1	6442.6
30°	9468.5	9408.8	9211.1	8949.0	8467.6	8090.5	8259.1	9045.5	10533.9	8314.3	6359.9
32.5°	10509.4	10452.6	10190.6	9865.6	9467.0	8959.6	8861.5	9375.1	10885.0	8524.3	6301.7
35°	11826.1	11737.3	11364.8	10921.8	10498.7	9985.1	9677.0	9943.7	11352.5	8844.7	6333.9
37.5°	13325.3	13205.7	12804.1	12192.5	11640.7	11065.8	10670.4	10725.5	12037.7	9273.9	6433.5
40°	14738.6	14629.8	14258.8	13682.4	12989.6	12292.1	11870.6	11747.9	12983.5	9796.6	6608.3
42.5°	15586.3	15488.2	15331.8	15088.1	14504.1	13792.8	13260.9	12995.8	14102.5	10422.0	6821.3
45°	15633.8	15548.0	15757.9	16041.6	15926.6	15452.9	14804.5	14318.6	15226.1	11009.1	7042.1
47.5°	14873.5	14815.2	15452.9	16443.2	16936.8	17136.1	16538.2	15531.1	16153.5	11430.7	7132.5
50°	12801.0	12779.6	14091.7	15909.7	17321.5	18610.6	18367.0	16659.3	16872.4	11648.3	7046.7
52.5°	11099.5	11021.4	11786.3	14202.1	16762.0	19386.3	20154.3	17766.0	17375.2	11689.7	6845.9
55°	8418.5	8349.5	9309.2	11344.8	14957.8	19110.4	21461.9	18908.1	17735.4	11583.9	6485.6
57.5°	4515.8	4472.9	5685.5	7551.0	11692.8	17454.8	21697.9	20115.9	18038.9	11303.4	5981.3
60°	1758.2	1750.5	2204.3	3663.6	7106.4	14200.6	20506.9	20841.0	18229.0	10958.6	5559.7
62.5°	1063.8	1086.8	1160.4	1644.8	3139.4	8821.7	17761.4	20016.3	18356.2	10642.8	5211.8
65°	879.9	881.4	890.6	1129.8	1503.8	3691.1	13371.3	17303.1	18041.9	10080.2	4718.2
67.5°	754.2	767.9	803.2	896.8	1060.8	1618.7	7698.2	13403.5	16130.4	8771.1	3948.7
70°	594.8	613.2	657.6	737.3	818.6	1013.2	2845.0	8918.3	12322.8	6611.2	2986.0
72.5°	501.2	499.7	522.8	599.3	650.0	712.8	1094.5	4997.2	7161.6	3156.2	1477.7
75°	387.9	403.1	432.2	501.2	531.9	516.6	593.3	1825.6	2566.1	956.5	502.8
77.5°	303.5	315.8	341.8	409.3	439.9	366.3	341.8	653.0	824.7	343.4	226.8
80°	136.4	147.2	233.0	302.0	358.6	253.0	185.5	334.2	366.3	156.3	115.0
82.5°	24.5	41.4	136.4	159.4	184.0	164.0	96.6	173.2	179.4	62.8	39.9
85°	1.5	3.1	47.6	58.2	73.6	53.6	29.1	69.0	59.8	21.4	15.4
87.5°	0.0	0.0	0.0	1.5	1.5	7.7	9.2	12.3	9.2	7.7	6.1
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°	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5	5990.5
2.5°	5894.0	5676.2	5464.7	5291.5	5190.3	5018.6	4905.2	4886.8	4839.3	4880.6
5°	5780.5	5391.1	4997.2	4644.6	4354.9	3980.9	3701.9	3583.9	3481.2	3516.5
7.5°	5726.9	5112.2	4499.0	3896.5	3277.3	2679.5	2234.9	2049.5	1908.4	1928.3
10°	5654.8	4822.4	3861.3	2941.5	2112.3	1522.1	1215.5	1102.2	1039.2	1040.8
12.5°	5599.6	4476.0	3120.9	1994.2	1286.1	971.8	876.8	849.2	830.9	832.4
15°	5572.0	4068.2	2389.8	1329.0	919.7	823.2	800.1	787.9	775.6	774.1
17.5°	5526.0	3614.6	1749.1	970.3	804.7	771.0	751.1	737.3	722.0	718.9
20°	5457.0	3099.5	1278.4	820.1	754.2	728.2	700.5	682.1	663.7	660.7
22.5°	5329.8	2555.3	982.6	758.8	717.4	688.3	654.6	633.0	614.7	611.6
25°	5093.7	2044.9	827.8	720.5	685.2	650.0	613.2	584.0	567.1	564.1
27.5°	4794.8	1606.5	751.1	685.2	643.8	611.6	570.2	542.6	527.3	524.3
30°	4442.2	1237.1	706.6	645.3	594.8	567.1	530.3	507.4	498.2	498.2
32.5°	4062.1	988.7	688.3	605.5	551.9	521.2	492.1	482.9	479.8	478.3
35°	3705.0	858.4	679.1	573.3	513.5	484.4	472.1	473.7	479.8	479.8
37.5°	3387.6	817.0	674.4	550.3	479.8	453.8	461.4	475.2	469.0	469.0
40°	3101.0	821.6	671.4	533.4	452.2	436.9	452.2	441.5	426.1	424.7
42.5°	2881.8	860.0	665.2	519.7	435.3	424.7	418.5	401.6	400.1	403.1
45°	2722.4	893.7	663.7	513.5	417.0	397.0	389.4	372.5	403.1	410.8
47.5°	2533.8	893.7	663.7	492.1	386.3	378.6	366.3	348.0	378.6	386.3
50°	2290.2	836.9	637.7	467.5	361.7	357.1	335.7	312.7	306.6	311.2
52.5°	1982.0	734.2	571.7	433.8	337.2	328.0	302.0	285.2	280.5	280.5
55°	1631.0	614.7	482.9	384.8	311.2	294.3	275.9	268.2	263.6	260.6
57.5°	1325.9	504.3	387.9	341.8	286.7	265.2	259.0	249.9	242.2	237.6
60°	1088.3	397.0	320.4	303.5	262.1	242.2	240.7	228.4	208.5	205.4
62.5°	840.0	291.2	269.8	263.6	237.6	220.8	217.7	193.1	162.5	156.3
65°	593.3	226.8	217.7	231.4	211.6	196.2	188.5	151.8	119.5	115.0
67.5°	417.0	190.0	171.7	202.3	184.0	164.0	159.4	128.7	99.6	96.6
70°	297.4	154.8	141.0	173.2	147.2	144.1	134.9	107.3	81.3	78.2
72.5°	210.0	118.1	108.9	150.3	101.2	124.1	110.4	82.8	61.3	58.2
75°	154.8	84.4	76.7	87.3	73.6	93.5	78.2	55.1	38.3	36.8
77.5°	113.5	53.6	46.0	42.9	42.9	58.2	42.9	23.0	16.9	15.4
80°	79.7	24.5	21.4	18.3	16.9	13.8	6.1	3.1	1.5	1.5
82.5°	47.6	10.8	10.8	7.7	4.6	0.0	0.0	0.0	0.0	0.0
85°	10.8	4.6	4.6	1.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.5	1.5	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

(END OF REPORT)