

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: P968273

Luminaire Tested: **NAV-SB5B-740-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968273
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-740-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 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: 26300.5 lumens
Efficiency: N/A
Efficacy: 144.0 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

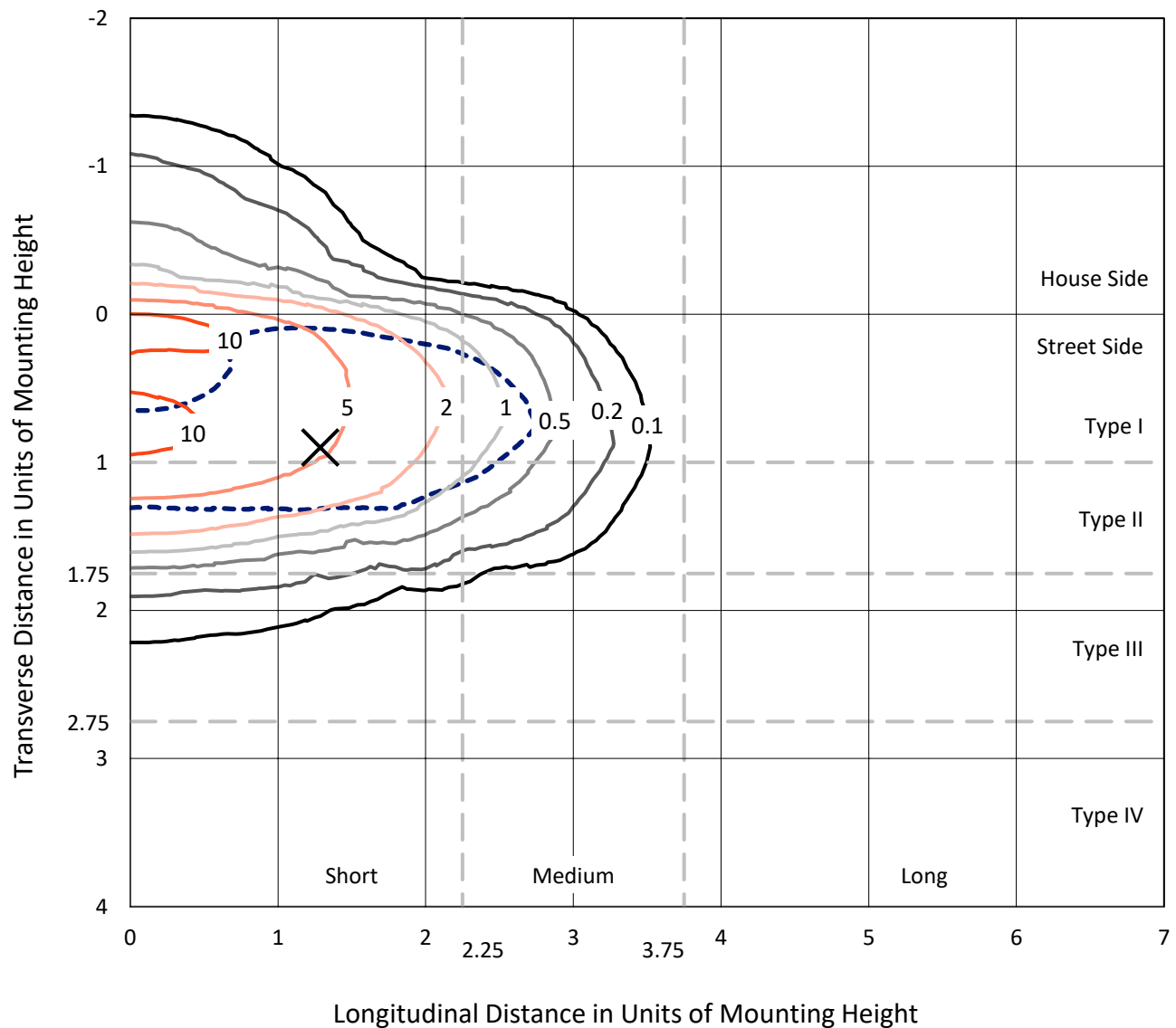


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Iso-Footcandle Lines of Horizontal Illumination

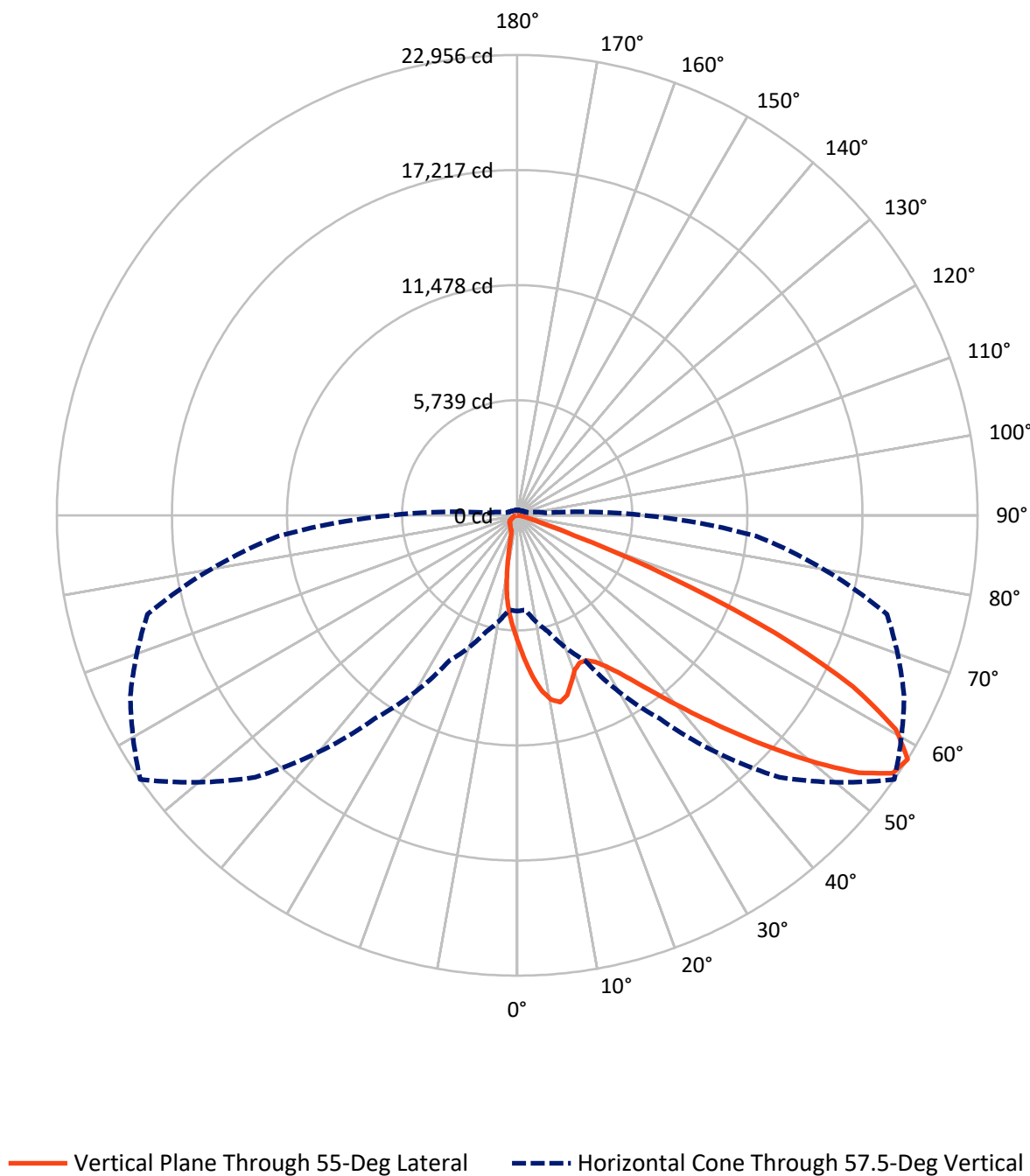
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.5 fc
Type II - Short - N/A

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Luminous Intensity Polar Plot



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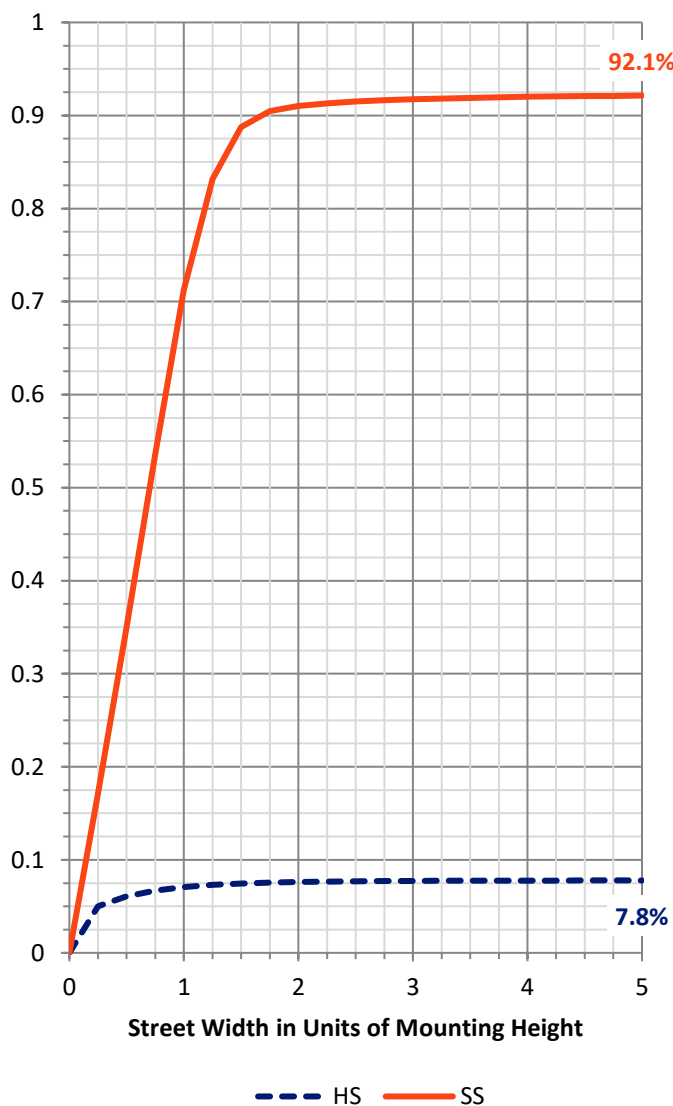
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2054.0	0.0	2054.0
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	24246.5	0.0	24246.5
	% Fixture	92.2	0.0	92.2
Total	Lumens	26300.5	0.0	26300.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	589.7	2.2
10°-20°	1424.4	5.4
20°-30°	2279.0	8.7
30°-40°	3857.4	14.7
40°-50°	6333.0	24.1
50°-60°	6960.5	26.5
60°-70°	3992.5	15.2
70°-80°	815.8	3.1
80°-90°	48.1	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°	26300.5	100.0
0°-180°	26300.5	100.0

Coefficient of Utilization



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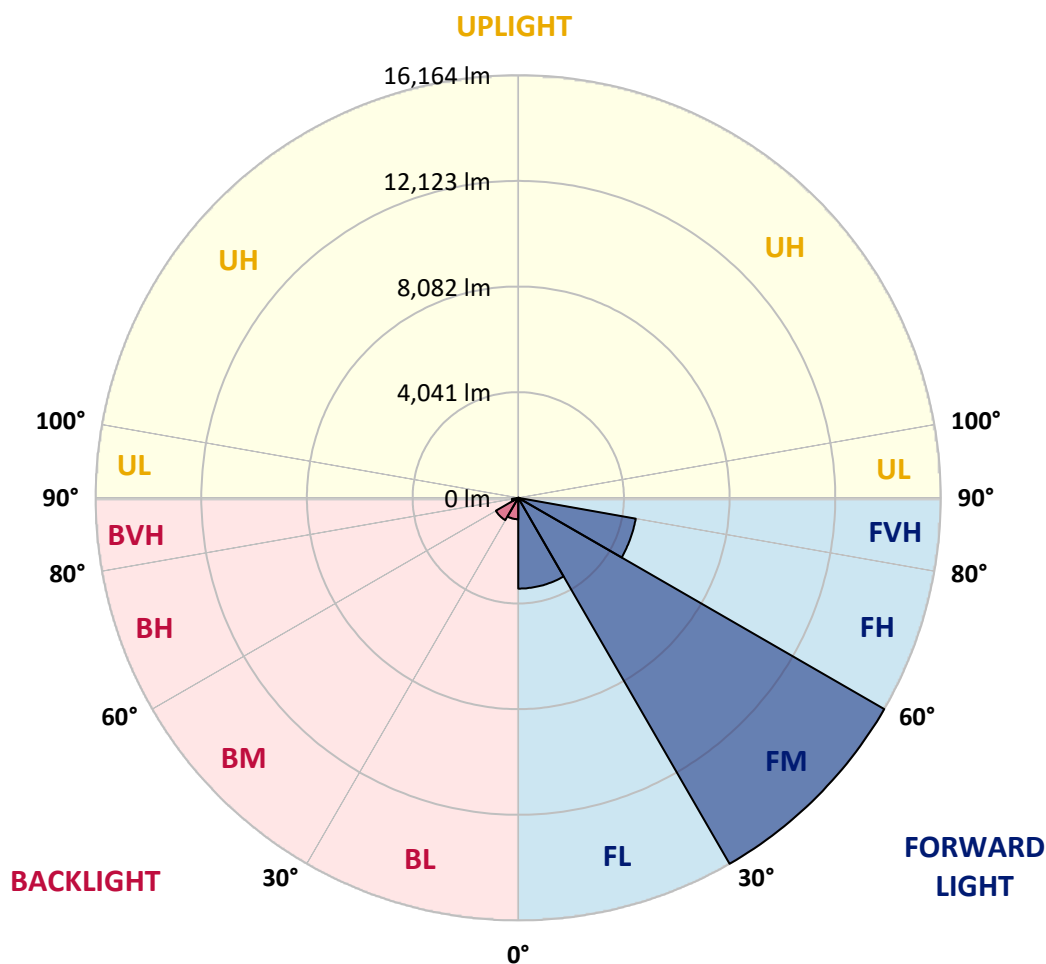
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3473.1	13.2			
FM	(30°-60°)	16164.5	61.5			
FH	(60°-80°)	4564.0	17.4			G2/5000
FVH	(80°-90°)	44.9	0.2			G1/100
BL	(0°-30°)	820.0	3.1	B2/1000		
BM	(30°-60°)	986.4	3.8	B1/1000		
BH	(60°-80°)	244.3	0.9	B1/500		G1/500
BVH	(80°-90°)	3.2	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°	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8
2.5°	7863.8	7764.9	7750.3	7730.9	7542.8	7401.6	7197.2	6973.5	6722.2	6465.9	6352.3
5°	9085.0	9007.2	8992.5	8901.7	8687.7	8447.6	8084.4	7625.4	7156.8	6605.3	6368.5
7.5°	9321.8	9307.2	9373.6	9370.4	9341.2	9151.5	8844.9	8298.5	7594.6	6777.3	6410.8
10°	8266.0	8303.3	8501.1	8674.7	9143.4	9415.9	9349.3	8898.5	8045.4	6973.5	6457.8
12.5°	7304.4	7260.6	7401.6	7597.8	8142.8	8953.7	9558.5	9399.7	8561.2	7195.7	6527.5
15°	6701.0	6683.2	6762.6	6853.5	7268.7	8086.0	9315.3	9806.7	9057.4	7458.4	6632.9
17.5°	6508.0	6493.5	6517.8	6540.5	6809.7	7442.2	8736.3	10056.4	9532.6	7758.4	6749.7
20°	6665.4	6645.9	6642.6	6624.8	6736.7	7168.1	8212.5	10074.2	9959.1	8030.9	6850.3
22.5°	7124.3	7101.6	7022.2	6950.8	6960.5	7205.4	7979.0	9895.9	10280.2	8285.5	6913.5
25°	7956.3	7918.9	7753.5	7513.6	7361.0	7464.9	8014.7	9660.7	10586.7	8484.9	6882.7
27.5°	8997.4	8948.8	8736.3	8379.6	8030.9	7904.4	8272.5	9498.6	10841.3	8637.4	6816.1
30°	10017.5	9954.3	9745.1	9467.7	8958.5	8559.6	8737.9	9569.9	11144.6	8796.3	6728.6
32.5°	11118.7	11058.6	10781.4	10437.6	10015.9	9479.1	9375.3	9918.6	11516.0	9018.5	6667.0
35°	12511.8	12417.7	12023.6	11554.9	11107.3	10564.1	10238.0	10520.2	12010.6	9357.4	6701.0
37.5°	14097.8	13971.3	13546.4	12899.3	12315.5	11707.3	11288.9	11347.4	12735.5	9811.5	6806.4
40°	15593.0	15477.9	15085.4	14475.7	13742.7	13004.8	12558.8	12429.0	13736.1	10364.6	6991.3
42.5°	16489.9	16386.1	16220.6	15962.8	15345.0	14592.4	14029.7	13749.1	14920.0	11026.2	7216.7
45°	16540.1	16449.3	16671.5	16971.5	16849.9	16348.7	15662.8	15148.7	16108.8	11647.4	7450.3
47.5°	15735.8	15674.1	16348.7	17396.4	17918.6	18129.5	17497.0	16431.5	17089.9	12093.4	7545.9
50°	13543.1	13520.5	14908.6	16832.0	18325.7	19689.5	19431.7	17625.1	17850.5	12323.6	7455.1
52.5°	11743.0	11660.3	12469.5	15025.5	17733.7	20510.1	21322.7	18795.9	18382.5	12367.4	7242.6
55°	8906.6	8833.7	9848.8	12002.5	15825.0	20218.2	22706.0	20004.2	18763.5	12255.5	6861.6
57.5°	4777.6	4732.2	6015.0	7988.7	12370.6	18466.8	22955.8	21282.1	19084.7	11958.7	6328.0
60°	1860.2	1852.1	2332.1	3875.9	7518.4	15023.8	21695.7	22049.2	19285.8	11593.9	5882.1
62.5°	1125.4	1149.8	1227.6	1740.1	3321.3	9333.1	18791.1	21176.7	19420.4	11259.7	5513.9
65°	930.9	932.5	942.3	1195.3	1590.9	3905.1	14146.4	18306.2	19087.9	10664.6	4991.8
67.5°	797.9	812.5	849.8	948.7	1122.3	1712.6	8144.3	14180.5	17065.6	9279.6	4177.6
70°	629.2	648.7	695.8	780.0	866.0	1071.9	3009.9	9435.3	13037.2	6994.6	3159.2
72.5°	530.3	528.7	553.0	634.1	687.6	754.1	1157.9	5286.8	7576.8	3339.1	1563.3
75°	410.3	426.5	457.4	530.3	562.7	546.5	627.6	1931.5	2714.8	1012.0	532.0
77.5°	321.1	334.0	361.6	433.0	465.5	387.6	361.6	690.8	872.5	363.3	240.1
80°	144.3	155.7	246.5	319.5	379.5	267.6	196.2	353.5	387.6	165.4	121.7
82.5°	25.9	43.8	144.3	168.6	194.6	173.5	102.2	183.3	189.7	66.5	42.1
85°	1.6	3.3	50.2	61.6	77.8	56.8	30.9	73.0	63.2	22.8	16.2
87.5°	0.0	0.0	0.0	1.6	1.6	8.1	9.7	13.0	9.7	8.1	6.5
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°	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8	6337.8
2.5°	6235.6	6005.3	5781.5	5598.2	5491.2	5309.6	5189.6	5170.1	5119.9	5163.6
5°	6115.6	5703.7	5286.8	4913.8	4607.4	4211.6	3916.5	3791.7	3682.9	3720.2
7.5°	6058.9	5408.5	4759.8	4122.4	3467.3	2834.8	2364.5	2168.3	2019.0	2040.2
10°	5982.6	5102.0	4085.1	3112.1	2234.8	1610.4	1286.1	1166.0	1099.5	1101.2
12.5°	5924.2	4735.5	3301.8	2109.9	1360.7	1028.2	927.6	898.4	878.9	880.6
15°	5895.0	4304.1	2528.3	1406.1	973.0	870.8	846.5	833.5	820.6	819.0
17.5°	5846.4	3824.1	1850.4	1026.5	851.4	815.7	794.7	780.0	763.8	760.6
20°	5773.4	3279.2	1352.5	867.7	797.9	770.3	741.2	721.7	702.2	698.9
22.5°	5638.8	2703.4	1039.6	802.8	759.0	728.2	692.5	669.7	650.4	647.1
25°	5389.0	2163.4	875.8	762.2	724.9	687.6	648.7	617.9	600.0	596.8
27.5°	5072.8	1699.6	794.7	724.9	681.1	647.1	603.3	574.1	557.9	554.6
30°	4699.8	1308.7	747.6	682.8	629.2	600.0	561.1	536.8	527.1	527.1
32.5°	4297.6	1046.0	728.2	640.6	583.8	551.3	520.6	510.9	507.6	505.9
35°	3919.7	908.2	718.4	606.5	543.2	512.5	499.5	501.1	507.6	507.6
37.5°	3584.0	864.4	713.6	582.2	507.6	480.0	488.1	502.8	496.2	496.2
40°	3280.8	869.3	710.3	564.4	478.4	462.2	478.4	467.1	450.8	449.3
42.5°	3048.9	909.8	703.9	549.8	460.5	449.3	442.7	424.9	423.3	426.5
45°	2880.2	945.5	702.2	543.2	441.2	420.0	411.9	394.1	426.5	434.6
47.5°	2680.8	945.5	702.2	520.6	408.7	400.6	387.6	368.2	400.6	408.7
50°	2422.9	885.5	674.7	494.7	382.7	377.8	355.2	330.9	324.3	329.2
52.5°	2096.9	776.8	605.0	459.0	356.8	347.1	319.5	301.7	296.7	296.7
55°	1725.5	650.4	510.9	407.0	329.2	311.4	291.9	283.8	278.9	275.7
57.5°	1402.8	533.5	410.3	361.6	303.3	280.5	274.1	264.3	256.2	251.3
60°	1151.5	420.0	339.0	321.1	277.4	256.2	254.6	241.6	220.6	217.3
62.5°	888.7	308.1	285.5	278.9	251.3	233.5	230.3	204.4	171.9	165.4
65°	627.6	240.1	230.3	244.9	223.8	207.6	199.5	160.5	126.5	121.7
67.5°	441.2	201.1	181.6	214.0	194.6	173.5	168.6	136.2	105.4	102.2
70°	314.6	163.8	149.2	183.3	155.7	152.4	142.7	113.6	86.0	82.7
72.5°	222.2	124.8	115.1	159.0	107.0	131.4	116.7	87.5	64.9	61.6
75°	163.8	89.2	81.1	92.5	77.8	98.9	82.7	58.4	40.6	38.9
77.5°	120.0	56.8	48.7	45.4	45.4	61.6	45.4	24.3	17.8	16.2
80°	84.4	25.9	22.8	19.5	17.8	14.6	6.5	3.3	1.6	1.6
82.5°	50.2	11.4	11.4	8.1	4.8	0.0	0.0	0.0	0.0	0.0
85°	11.4	4.8	4.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	1.6	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)