

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: P962600

Luminaire Tested: **NAV-SB2C-830-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962600
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-SB2C-830-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 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: 11760.8 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G2

Input Watts (W): 100.9
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



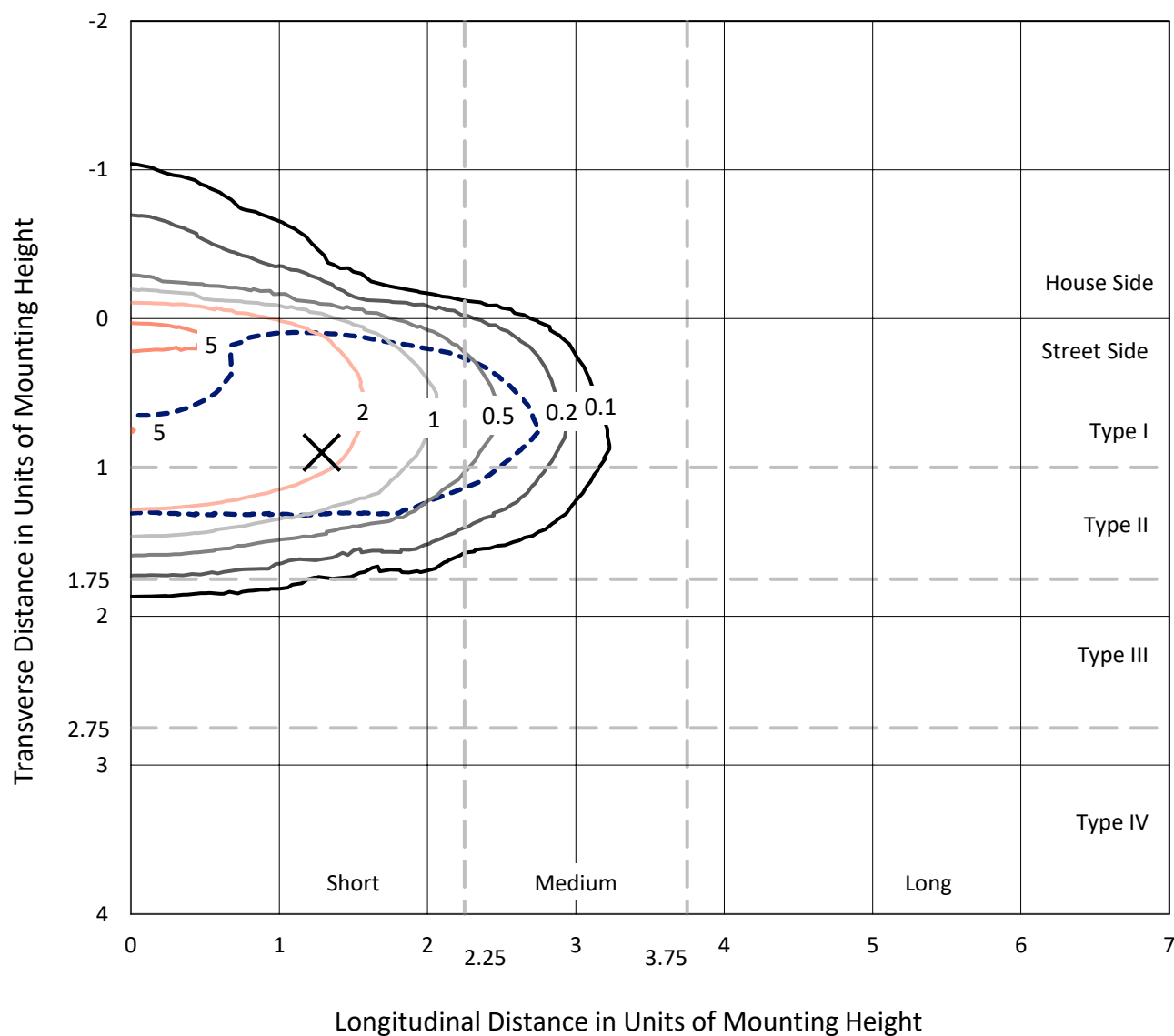
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

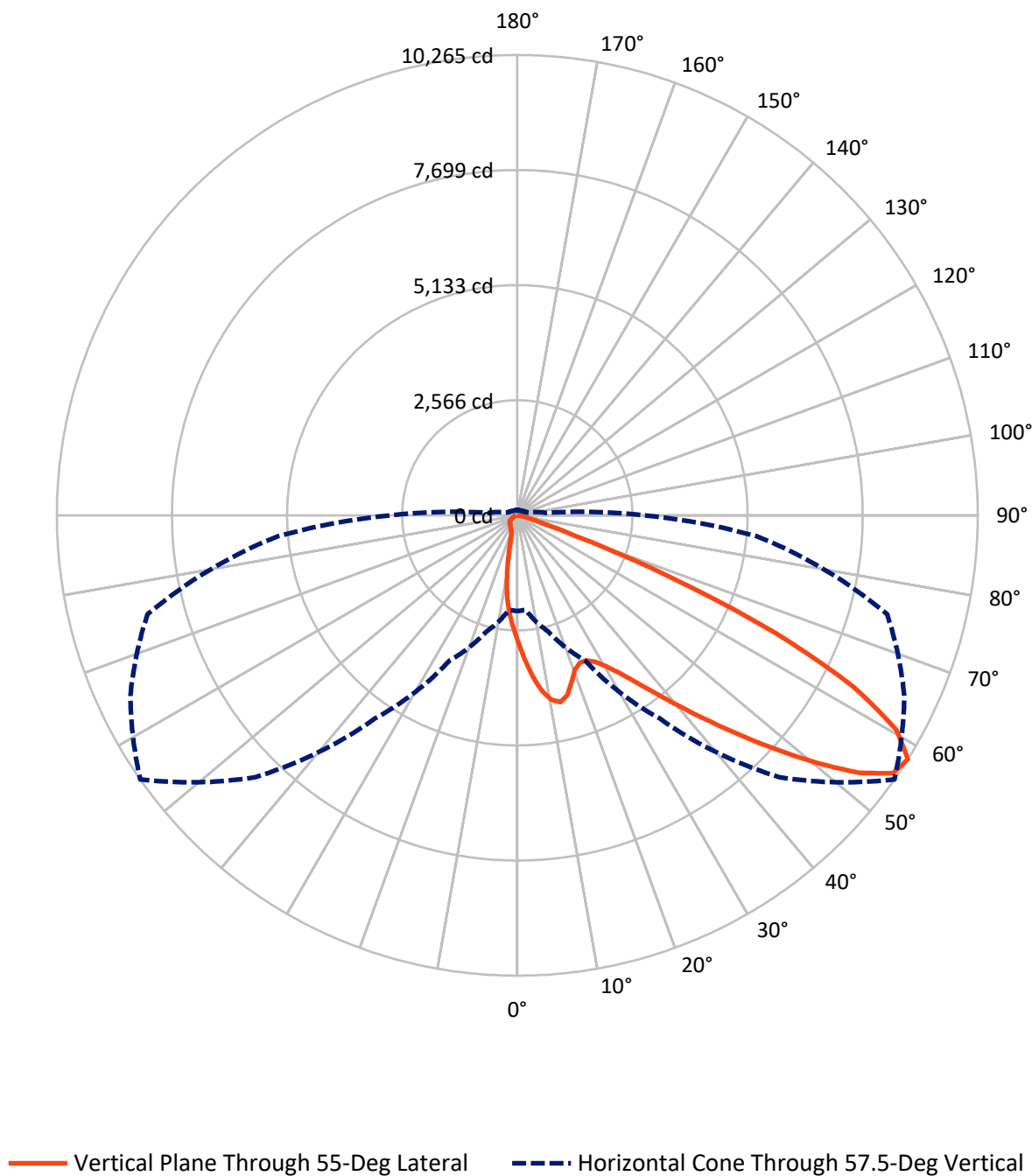


Based on 25 foot mounting height. Maximum calculated value = 6.5 fc

Type II - Short - N/A

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Luminous Intensity Polar Plot



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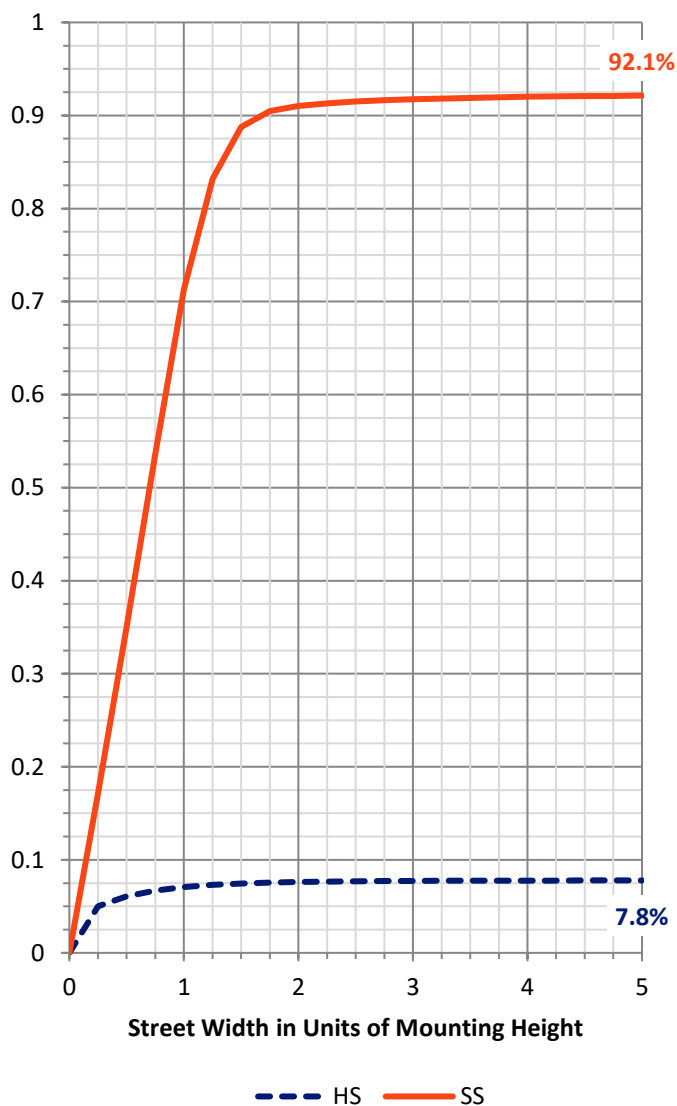
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	918.5	0.0	918.5
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	10842.4	0.0	10842.4
	% Fixture	92.2	0.0	92.2
Total	Lumens	11760.8	0.0	11760.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	263.7	2.2
10°-20°	637.0	5.4
20°-30°	1019.1	8.7
30°-40°	1724.9	14.7
40°-50°	2832.0	24.1
50°-60°	3112.5	26.5
60°-70°	1785.3	15.2
70°-80°	364.8	3.1
80°-90°	21.5	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°	11760.8	100.0
0°-180°	11760.8	100.0

Coefficient of Utilization



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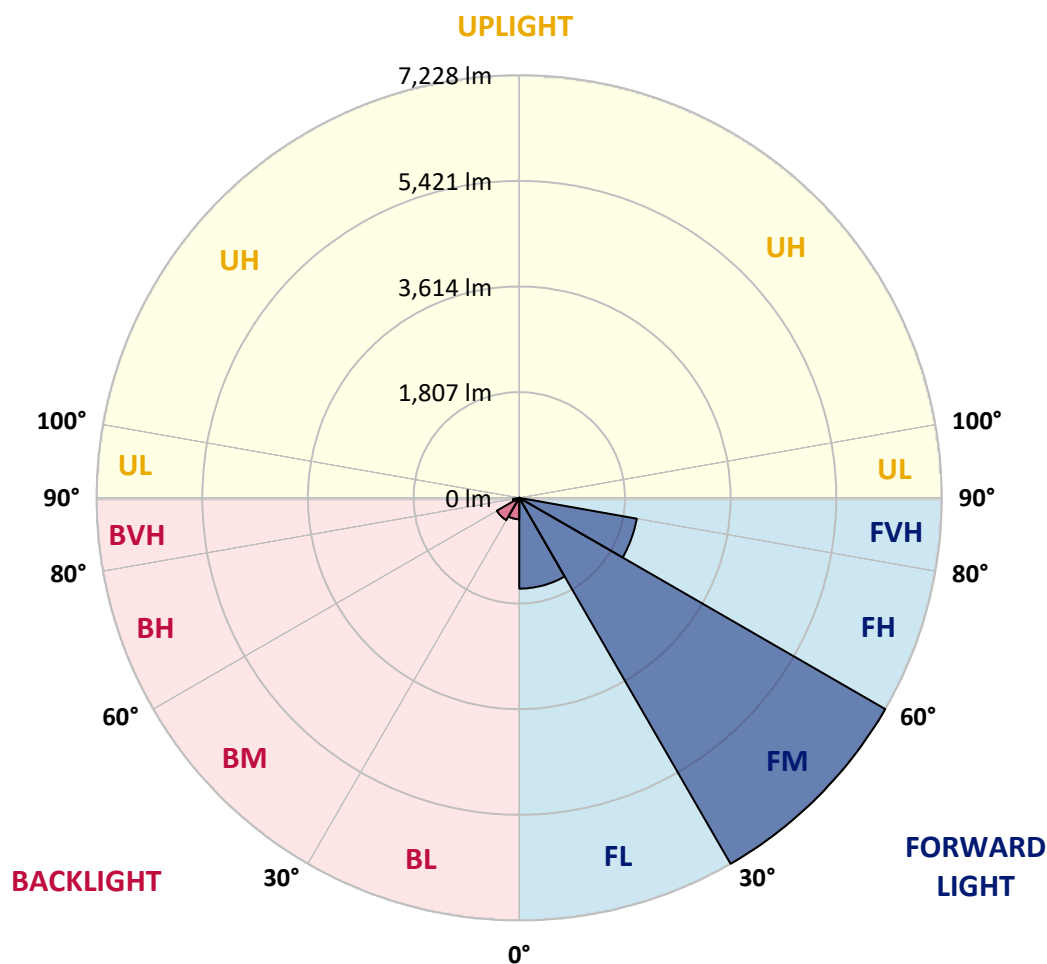
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1553.1	13.2			
FM	(30°-60°)	7228.3	61.5			
FH	(60°-80°)	2040.9	17.4			G2/5000
FVH	(80°-90°)	20.1	0.2			G1/100
BL	(0°-30°)	366.7	3.1	B1/500		
BM	(30°-60°)	441.1	3.8	B1/1000		
BH	(60°-80°)	109.2	0.9	B0/110		G0/110
BVH	(80°-90°)	1.5	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°	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1
2.5°	3516.5	3472.3	3465.7	3457.0	3372.9	3309.8	3218.4	3118.4	3005.9	2891.3	2840.6
5°	4062.6	4027.7	4021.2	3980.6	3884.9	3777.5	3615.1	3409.9	3200.3	2953.7	2847.9
7.5°	4168.5	4161.9	4191.6	4190.2	4177.2	4092.3	3955.3	3710.8	3396.1	3030.6	2866.7
10°	3696.4	3713.1	3801.5	3879.1	4088.6	4210.5	4180.8	3979.2	3597.7	3118.4	2887.7
12.5°	3266.3	3246.7	3309.8	3397.6	3641.2	4003.9	4274.4	4203.2	3828.3	3217.7	2918.9
15°	2996.5	2988.6	3024.1	3064.6	3250.4	3615.8	4165.5	4385.3	4050.2	3335.1	2966.0
17.5°	2910.2	2903.7	2914.6	2924.7	3045.1	3328.0	3906.7	4497.0	4262.7	3469.3	3018.3
20°	2980.6	2971.9	2970.4	2962.5	3012.5	3205.4	3672.4	4505.0	4453.4	3591.2	3063.2
22.5°	3185.8	3175.7	3140.1	3108.2	3112.5	3222.1	3568.0	4425.1	4597.0	3705.1	3091.5
25°	3557.8	3541.2	3467.2	3359.8	3291.7	3338.1	3583.9	4320.0	4734.1	3794.2	3077.8
27.5°	4023.4	4001.6	3906.7	3747.1	3591.2	3534.6	3699.2	4247.5	4847.9	3862.4	3048.0
30°	4479.6	4451.3	4357.7	4233.7	4006.0	3827.6	3907.4	4279.4	4983.5	3933.4	3008.9
32.5°	4972.0	4945.1	4821.1	4667.3	4478.8	4238.8	4192.4	4435.3	5149.6	4032.9	2981.3
35°	5594.9	5552.8	5376.6	5167.0	4966.8	4723.9	4578.2	4704.3	5370.8	4184.4	2996.5
37.5°	6304.2	6247.6	6057.5	5768.2	5507.1	5235.2	5048.1	5074.3	5695.0	4387.4	3043.6
40°	6972.8	6921.3	6745.8	6473.1	6145.3	5815.3	5616.0	5558.0	6142.4	4634.7	3126.4
42.5°	7373.8	7327.4	7253.4	7138.1	6861.9	6525.4	6273.7	6148.3	6671.8	4930.7	3227.1
45°	7396.3	7355.7	7455.0	7589.2	7534.8	7310.7	7003.9	6774.1	7203.4	5208.3	3331.6
47.5°	7036.6	7009.1	7310.7	7779.2	8012.7	8107.0	7824.1	7347.7	7642.1	5407.8	3374.3
50°	6056.1	6046.0	6666.7	7526.9	8194.8	8804.6	8689.3	7881.4	7982.3	5510.8	3333.7
52.5°	5251.2	5214.2	5576.0	6719.0	7930.0	9171.6	9534.9	8405.0	8220.1	5530.4	3238.7
55°	3982.7	3950.1	4404.1	5367.2	7076.5	9041.0	10153.5	8945.3	8390.5	5480.4	3068.3
57.5°	2136.4	2116.1	2689.8	3572.3	5531.8	8257.8	10265.2	9516.8	8534.2	5347.6	2829.7
60°	831.8	828.2	1042.8	1733.3	3362.0	6718.3	9701.7	9859.8	8624.0	5184.4	2630.3
62.5°	503.3	514.1	549.0	778.2	1485.2	4173.5	8402.8	9469.7	8684.2	5035.0	2465.6
65°	416.3	417.0	421.4	534.4	711.5	1746.3	6325.9	8186.1	8535.6	4768.9	2232.1
67.5°	356.8	363.4	380.0	424.2	501.8	765.8	3641.9	6341.2	7631.2	4149.6	1868.1
70°	281.4	290.1	311.1	348.8	387.2	479.4	1345.9	4219.2	5829.9	3127.8	1412.7
72.5°	237.2	236.4	247.3	283.5	307.5	337.2	517.8	2364.2	3388.1	1493.2	699.0
75°	183.5	190.8	204.5	237.2	251.6	244.4	280.6	863.7	1214.0	452.5	237.9
77.5°	143.6	149.3	161.7	193.6	208.2	173.3	161.7	308.9	390.1	162.5	107.3
80°	64.6	69.6	110.2	142.9	169.7	119.6	87.7	158.1	173.3	74.0	54.4
82.5°	11.6	19.6	64.6	75.4	87.0	77.6	45.7	81.9	84.9	29.7	18.9
85°	0.7	1.4	22.4	27.6	34.8	25.4	13.7	32.6	28.3	10.1	7.3
87.5°	0.0	0.0	0.0	0.7	0.7	3.6	4.3	5.8	4.3	3.6	2.9
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°	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1	2834.1
2.5°	2788.4	2685.4	2585.4	2503.4	2455.5	2374.3	2320.6	2311.9	2289.4	2309.0
5°	2734.7	2550.5	2364.2	2197.4	2060.2	1883.3	1751.3	1695.6	1647.0	1663.6
7.5°	2709.4	2418.5	2128.4	1843.5	1550.5	1267.6	1057.4	969.5	902.9	912.2
10°	2675.2	2281.4	1826.8	1391.6	999.3	720.2	575.1	521.4	491.7	492.4
12.5°	2649.1	2117.5	1476.5	943.5	608.4	459.8	414.8	401.8	393.1	393.8
15°	2636.1	1924.6	1130.6	628.7	435.1	389.4	378.5	372.8	367.0	366.2
17.5°	2614.4	1710.0	827.5	459.1	380.7	364.8	355.4	348.8	341.5	340.1
20°	2581.7	1466.4	604.9	388.0	356.8	344.5	331.4	322.7	314.1	312.5
22.5°	2521.5	1208.9	464.8	359.0	339.4	325.6	309.7	299.5	290.8	289.4
25°	2409.9	967.4	391.7	340.8	324.2	307.5	290.1	276.3	268.3	266.9
27.5°	2268.4	760.0	355.4	324.2	304.6	289.4	269.8	256.8	249.5	248.0
30°	2101.7	585.3	334.4	305.3	281.4	268.3	250.9	240.1	235.6	235.6
32.5°	1921.8	467.7	325.6	286.5	261.1	246.6	232.8	228.5	227.0	226.2
35°	1752.9	406.1	321.2	271.2	242.9	229.2	223.3	224.1	227.0	227.0
37.5°	1602.7	386.5	319.1	260.3	227.0	214.6	218.3	224.8	221.9	221.9
40°	1467.1	388.7	317.6	252.4	213.9	206.6	213.9	208.9	201.6	200.9
42.5°	1363.4	406.8	314.8	245.8	205.9	200.9	198.0	190.0	189.3	190.8
45°	1287.9	422.8	314.1	242.9	197.2	187.8	184.2	176.2	190.8	194.3
47.5°	1198.7	422.8	314.1	232.8	182.8	179.2	173.3	164.6	179.2	182.8
50°	1083.4	396.0	301.7	221.2	171.2	168.9	158.8	147.9	145.0	147.2
52.5°	937.7	347.4	270.5	205.2	159.6	155.2	142.9	134.9	132.7	132.7
55°	771.6	290.8	228.5	182.0	147.2	139.2	130.6	126.9	124.7	123.3
57.5°	627.3	238.6	183.5	161.7	135.6	125.5	122.6	118.2	114.6	112.4
60°	514.9	187.8	151.6	143.6	124.0	114.6	113.9	108.0	98.6	97.2
62.5°	397.4	137.8	127.6	124.7	112.4	104.4	103.0	91.3	76.9	74.0
65°	280.6	107.3	103.0	109.5	100.0	92.9	89.2	71.8	56.6	54.4
67.5°	197.2	89.9	81.2	95.7	87.0	77.6	75.4	60.9	47.2	45.7
70°	140.7	73.3	66.7	81.9	69.6	68.2	63.9	50.7	38.4	37.0
72.5°	99.3	55.9	51.5	71.0	47.9	58.7	52.2	39.2	29.0	27.6
75°	73.3	39.9	36.3	41.3	34.8	44.3	37.0	26.1	18.1	17.4
77.5°	53.7	25.4	21.7	20.3	20.3	27.6	20.3	10.9	8.0	7.3
80°	37.7	11.6	10.1	8.7	8.0	6.6	2.9	1.4	0.7	0.7
82.5°	22.4	5.1	5.1	3.6	2.2	0.0	0.0	0.0	0.0	0.0
85°	5.1	2.2	2.2	0.7	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.7	0.7	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)