

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: P960988

Luminaire Tested: **NAV-SB1D-827-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P960988
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-SB1D-827-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 2700K, 900mA LIGHTSQUARE WITH 26 LEDS AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

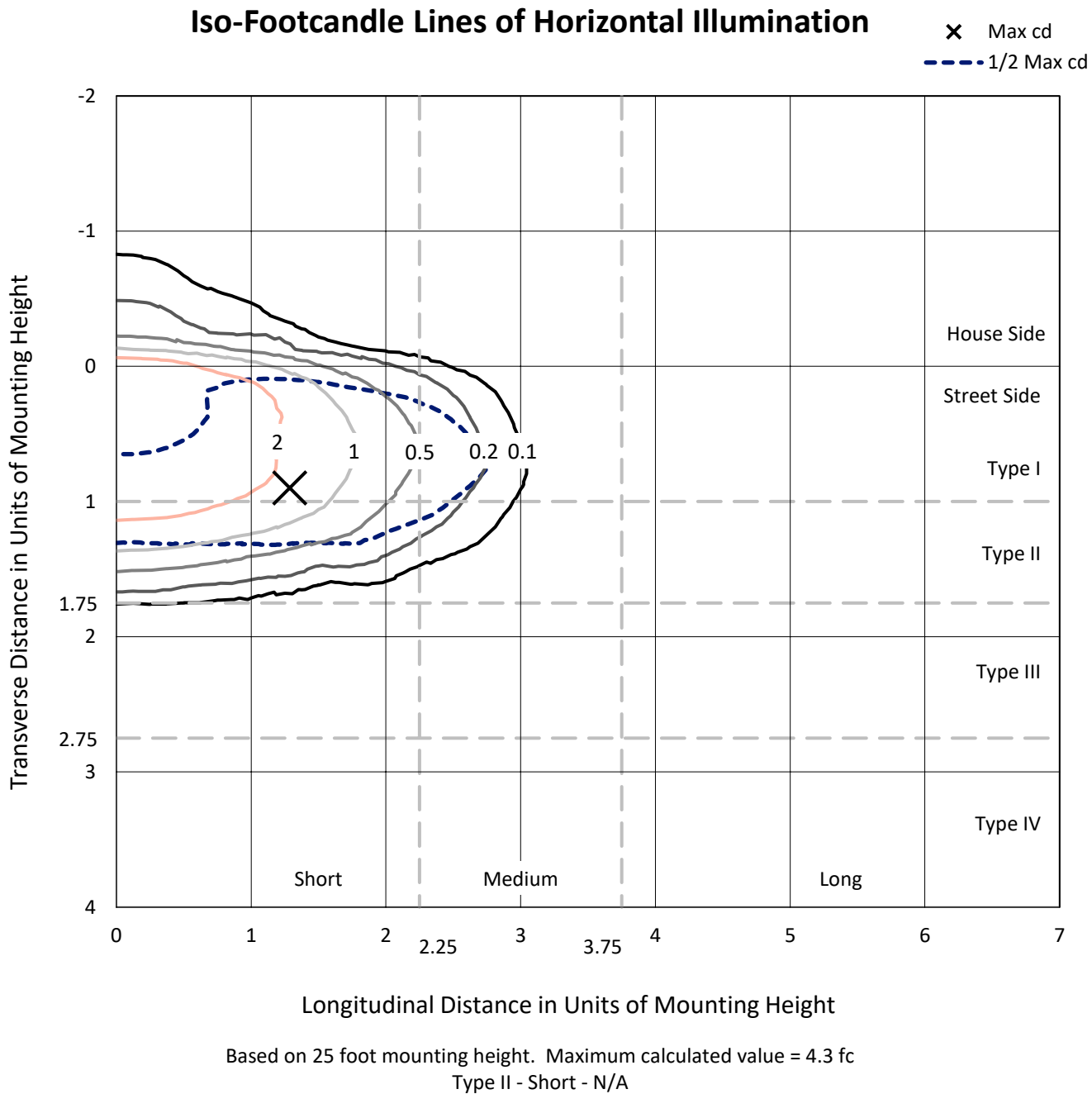
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7735.7 lumens
Efficiency: N/A
Efficacy: 97.2 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short
BUG Rating: B1 - U0 - G1

Input Watts (W): 79.6
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

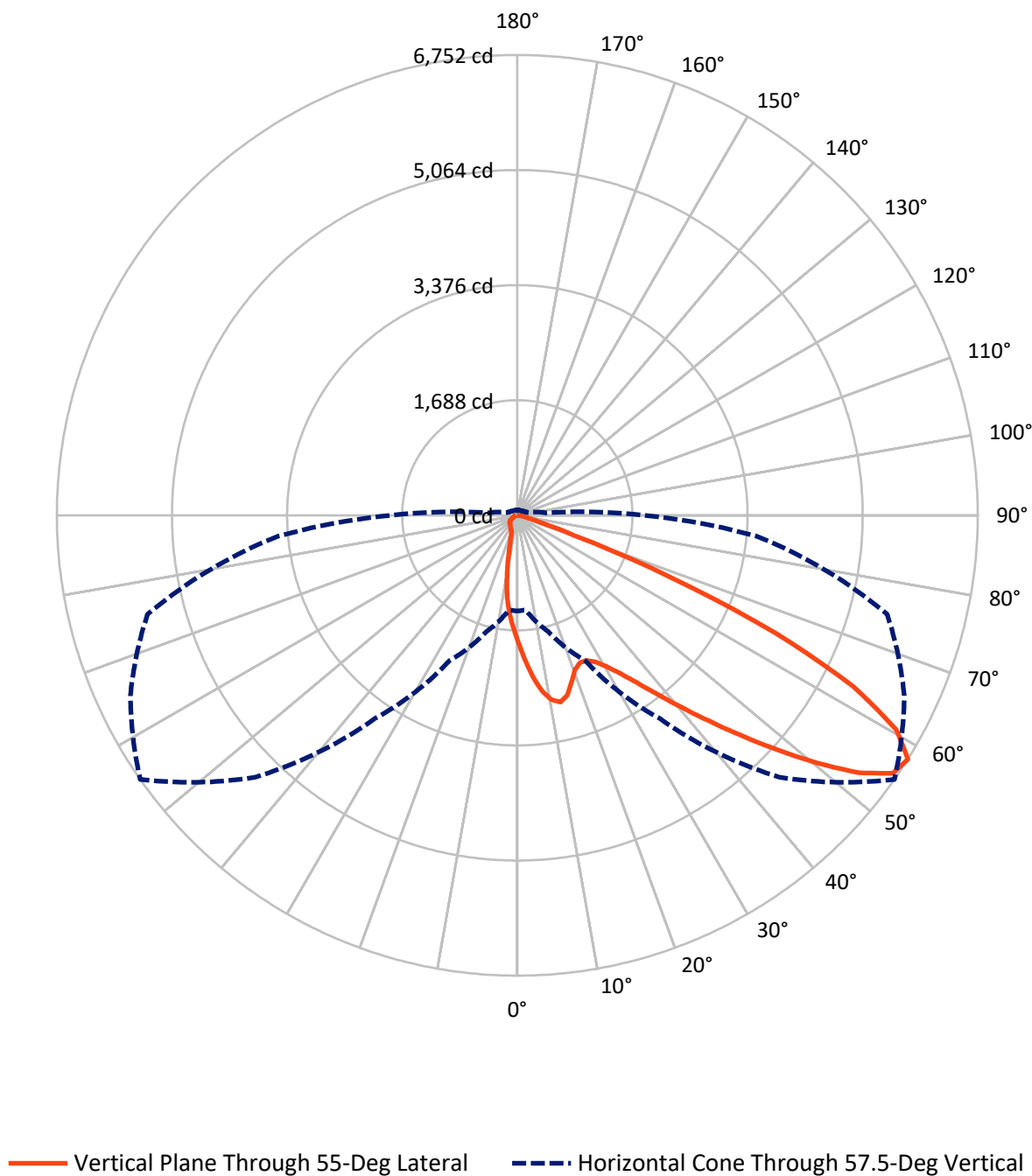


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Luminous Intensity Polar Plot



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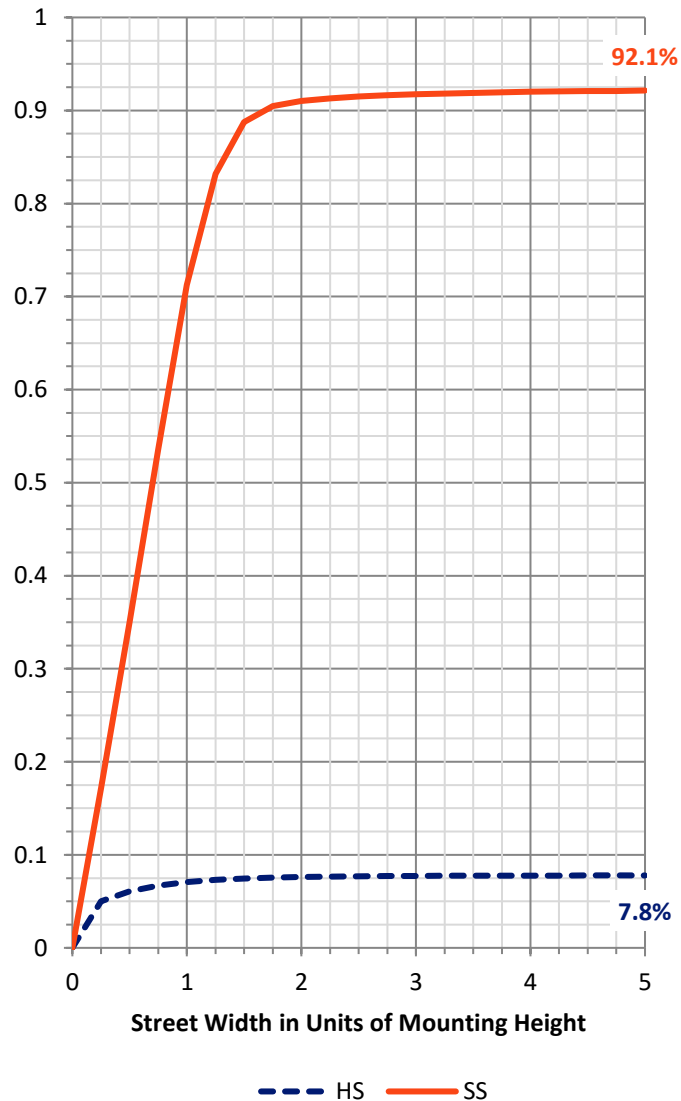
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	604.1	0.0	604.1
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	7131.6	0.0	7131.6
	% Fixture	92.2	0.0	92.2
Total	Lumens	7735.7	0.0	7735.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	173.4	2.2
10°-20°	419.0	5.4
20°-30°	670.3	8.7
30°-40°	1134.6	14.7
40°-50°	1862.7	24.1
50°-60°	2047.3	26.5
60°-70°	1174.3	15.2
70°-80°	239.9	3.1
80°-90°	14.2	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°	7735.7	100.0
0°-180°	7735.7	100.0

Coefficient of Utilization



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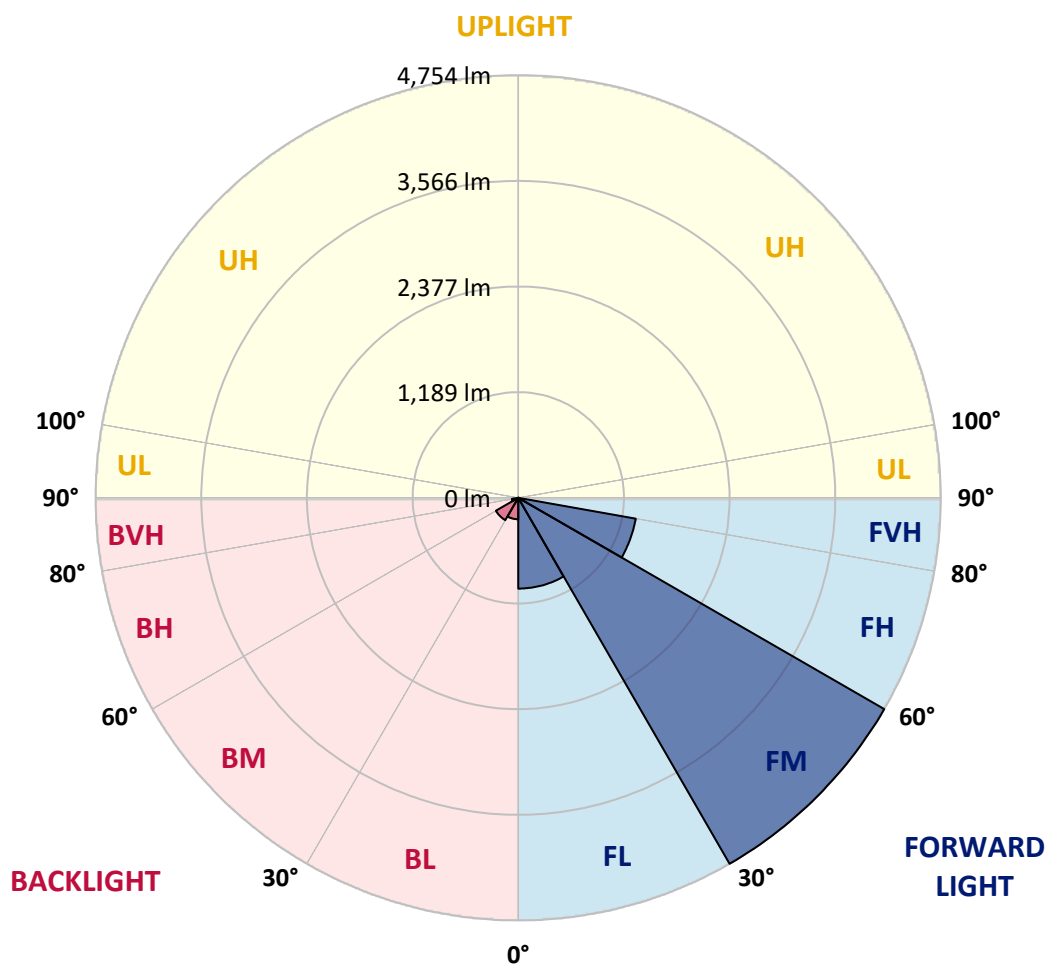
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1021.5	13.2			
FM	(30°-60°)	4754.4	61.5			
FH	(60°-80°)	1342.4	17.4			G1/1800
FVH	(80°-90°)	13.2	0.2			G1/100
BL	(0°-30°)	241.2	3.1	B1/500		
BM	(30°-60°)	290.1	3.8	B1/1000		
BH	(60°-80°)	71.8	0.9	B0/110		G0/110
BVH	(80°-90°)	1.0	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-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1
2.5°	2312.9	2283.9	2279.6	2273.9	2218.5	2177.0	2116.9	2051.1	1977.1	1901.8	1868.4
5°	2672.2	2649.2	2644.9	2618.3	2555.3	2484.7	2377.8	2242.8	2104.9	1942.8	1873.2
7.5°	2741.8	2737.5	2757.0	2756.1	2747.5	2691.6	2601.6	2440.8	2233.8	1993.4	1885.6
10°	2431.3	2442.3	2500.4	2551.4	2689.3	2769.4	2749.9	2617.3	2366.4	2051.1	1899.4
12.5°	2148.4	2135.5	2177.0	2234.7	2395.0	2633.5	2811.5	2764.6	2518.1	2116.4	1919.9
15°	1971.0	1965.7	1989.1	2015.8	2137.9	2378.3	2739.8	2884.5	2664.1	2193.7	1950.9
17.5°	1914.2	1909.9	1917.1	1923.7	2003.0	2189.0	2569.6	2957.8	2803.8	2282.0	1985.2
20°	1960.4	1954.8	1953.8	1948.5	1981.4	2108.3	2415.5	2963.1	2929.2	2362.1	2014.8
22.5°	2095.4	2088.7	2065.4	2044.4	2047.2	2119.3	2346.8	2910.6	3023.6	2436.9	2033.4
25°	2340.2	2329.2	2280.5	2209.9	2165.1	2195.7	2357.3	2841.5	3113.8	2495.7	2024.4
27.5°	2646.3	2632.1	2569.6	2464.6	2362.1	2324.9	2433.1	2793.7	3188.8	2540.5	2004.8
30°	2946.5	2927.8	2866.3	2784.7	2635.0	2517.6	2570.1	2814.8	3278.0	2587.2	1979.1
32.5°	3270.3	3252.6	3171.0	3070.0	2946.0	2788.1	2757.6	2917.4	3387.1	2652.6	1960.9
35°	3680.1	3652.4	3536.5	3398.6	3267.0	3107.2	3011.2	3094.3	3532.7	2752.2	1971.0
37.5°	4146.5	4109.3	3984.4	3794.0	3622.4	3443.5	3320.4	3337.5	3745.9	2885.8	2001.9
40°	4586.4	4552.4	4437.0	4257.6	4042.1	3825.1	3693.9	3655.7	4040.1	3048.5	2056.4
42.5°	4850.1	4819.5	4771.0	4695.1	4513.4	4292.0	4126.5	4044.0	4388.3	3243.1	2122.7
45°	4864.9	4838.2	4903.5	4991.8	4956.0	4808.6	4606.9	4455.7	4738.1	3425.8	2191.3
47.5°	4628.3	4610.1	4808.6	5116.8	5270.3	5332.4	5146.3	4833.0	5026.6	3557.0	2219.4
50°	3983.5	3976.7	4385.1	4950.8	5390.1	5791.2	5715.4	5184.0	5250.4	3624.7	2192.8
52.5°	3453.9	3429.6	3667.7	4419.4	5216.0	6032.6	6271.6	5528.4	5406.8	3637.6	2130.3
55°	2619.7	2598.2	2896.9	3530.3	4654.5	5946.7	6678.5	5883.8	5518.9	3604.7	2018.2
57.5°	1405.3	1391.8	1769.2	2349.7	3638.5	5431.6	6751.9	6259.7	5613.3	3517.4	1861.2
60°	547.1	544.7	685.9	1140.0	2211.3	4418.9	6381.2	6485.3	5672.5	3410.1	1730.1
62.5°	331.1	338.1	361.1	511.8	976.9	2745.2	5527.0	6228.6	5712.0	3311.8	1621.8
65°	273.8	274.3	277.2	351.6	467.9	1148.6	4160.9	5384.3	5614.2	3136.7	1468.2
67.5°	234.7	238.9	250.0	279.0	330.0	503.7	2395.5	4170.8	5019.4	2729.4	1228.8
70°	185.1	190.8	204.6	229.4	254.7	315.3	885.3	2775.2	3834.6	2057.3	929.2
72.5°	156.0	155.5	162.7	186.5	202.2	221.8	340.6	1555.0	2228.6	982.2	459.8
75°	120.6	125.5	134.5	156.0	165.5	160.7	184.6	568.1	798.5	297.7	156.4
77.5°	94.4	98.3	106.4	127.4	136.9	114.0	106.4	203.2	256.7	106.8	70.6
80°	42.4	45.8	72.5	94.0	111.6	78.7	57.7	103.9	114.0	48.7	35.8
82.5°	7.6	12.9	42.4	49.6	57.2	51.0	30.0	53.9	55.8	19.6	12.4
85°	0.5	0.9	14.8	18.1	22.9	16.7	9.0	21.4	18.6	6.7	4.8
87.5°	0.0	0.0	0.0	0.5	0.5	2.4	2.9	3.8	2.9	2.4	1.9
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°	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1	1864.1
2.5°	1834.0	1766.3	1700.5	1646.6	1615.1	1561.7	1526.4	1520.7	1505.9	1518.7
5°	1798.8	1677.6	1555.0	1445.4	1355.2	1238.7	1152.0	1115.2	1083.2	1094.2
7.5°	1782.1	1590.8	1399.9	1212.6	1019.8	833.8	695.5	637.8	593.9	600.0
10°	1759.6	1500.6	1201.6	915.3	657.3	473.7	378.2	343.0	323.4	323.9
12.5°	1742.5	1392.9	971.2	620.5	400.2	302.4	272.9	264.2	258.5	259.0
15°	1733.9	1266.0	743.6	413.6	286.2	256.1	249.0	245.2	241.4	240.9
17.5°	1719.5	1124.7	544.3	302.0	250.4	240.0	233.7	229.4	224.7	223.8
20°	1698.1	964.5	397.8	255.2	234.7	226.5	218.0	212.3	206.5	205.6
22.5°	1658.6	795.2	305.8	236.2	223.2	214.1	203.7	197.0	191.3	190.3
25°	1585.1	636.3	257.6	224.2	213.2	202.2	190.8	181.7	176.5	175.6
27.5°	1492.1	499.9	233.7	213.2	200.4	190.3	177.4	168.8	164.1	163.2
30°	1382.3	384.9	219.9	200.8	185.1	176.5	165.0	157.8	155.0	155.0
32.5°	1264.0	307.7	214.1	188.4	171.7	162.2	153.1	150.3	149.3	148.8
35°	1152.9	267.1	211.4	178.4	159.8	150.8	146.9	147.4	149.3	149.3
37.5°	1054.2	254.2	209.9	171.3	149.3	141.1	143.6	147.9	146.0	146.0
40°	964.9	255.6	208.9	165.9	140.7	135.9	140.7	137.4	132.6	132.1
42.5°	896.8	267.6	207.0	161.7	135.5	132.1	130.2	124.9	124.5	125.5
45°	847.2	278.1	206.5	159.8	129.8	123.5	121.2	115.9	125.5	127.8
47.5°	788.4	278.1	206.5	153.1	120.2	117.8	114.0	108.2	117.8	120.2
50°	712.7	260.5	198.4	145.4	112.5	111.1	104.4	97.3	95.4	96.9
52.5°	616.7	228.5	177.9	135.0	105.0	102.1	94.0	88.8	87.3	87.3
55°	507.5	191.3	150.3	119.7	96.9	91.5	85.9	83.4	82.0	81.1
57.5°	412.6	156.9	120.6	106.4	89.2	82.5	80.6	77.8	75.3	73.9
60°	338.7	123.5	99.7	94.4	81.6	75.3	74.9	71.0	64.9	64.0
62.5°	261.4	90.6	83.9	82.0	73.9	68.7	67.8	60.1	50.5	48.7
65°	184.6	70.6	67.8	72.1	65.8	61.1	58.6	47.3	37.2	35.8
67.5°	129.8	59.1	53.4	62.9	57.2	51.0	49.6	40.1	31.0	30.0
70°	92.6	48.2	43.9	53.9	45.8	44.8	42.0	33.4	25.3	24.3
72.5°	65.4	36.7	33.8	46.7	31.5	38.6	34.3	25.7	19.1	18.1
75°	48.2	26.2	23.9	27.2	22.9	29.1	24.3	17.2	11.9	11.5
77.5°	35.3	16.7	14.3	13.3	13.3	18.1	13.3	7.2	5.2	4.8
80°	24.8	7.6	6.7	5.7	5.2	4.3	1.9	0.9	0.5	0.5
82.5°	14.8	3.4	3.4	2.4	1.4	0.0	0.0	0.0	0.0	0.0
85°	3.4	1.4	1.4	0.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.5	0.5	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)