

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: P961065

Luminaire Tested: **NAV-SB1D-835-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P961065
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB1D-835-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(1) 80 CRI, 3500K, 900mA LIGHTSQUARE WITH 26 LEDS AND TYPE II ROADWAY
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8193.9 lumens
Efficiency: N/A
Efficacy: 102.9 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B1 - U0 - G2

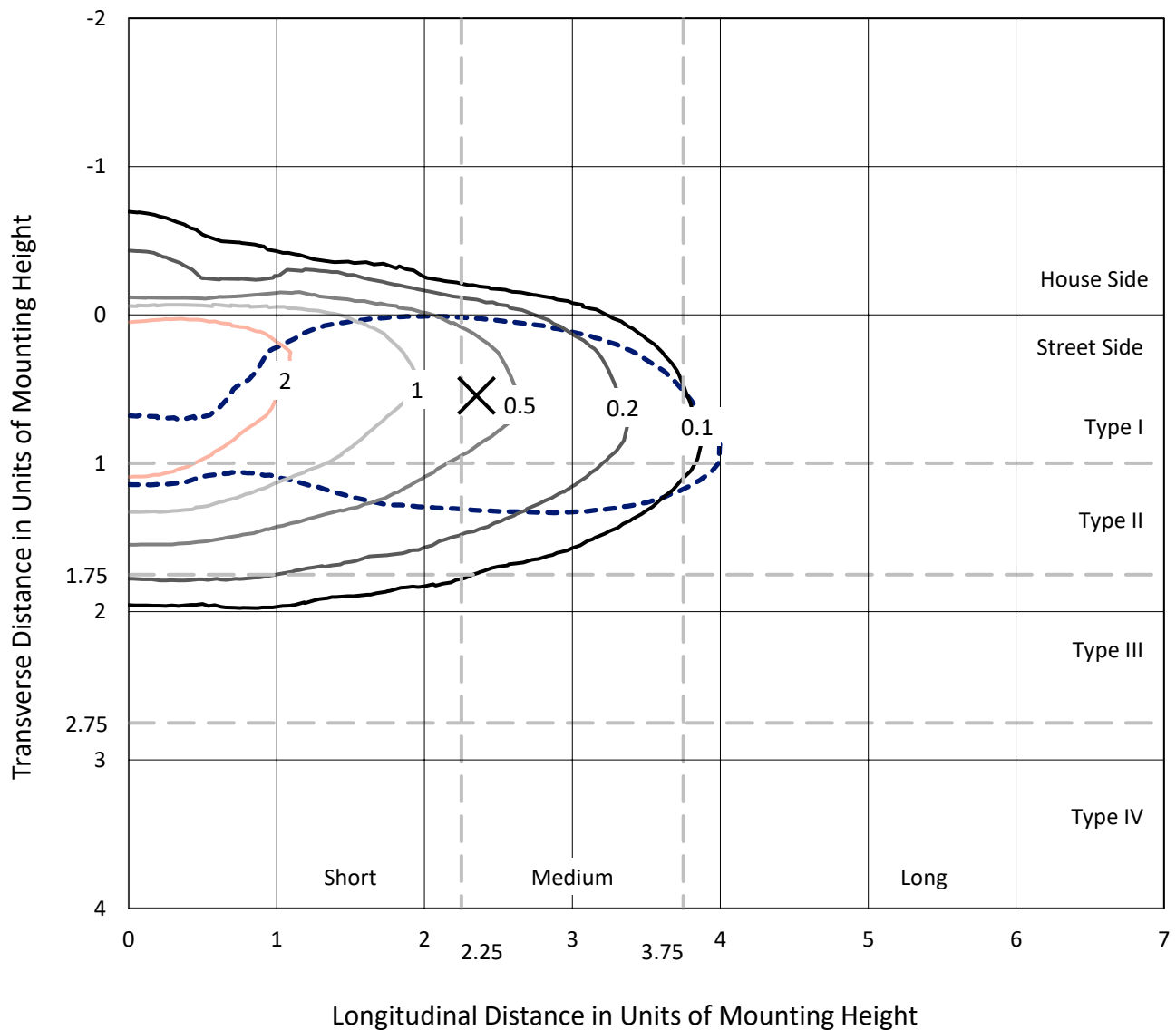
Input Watts (W): 79.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

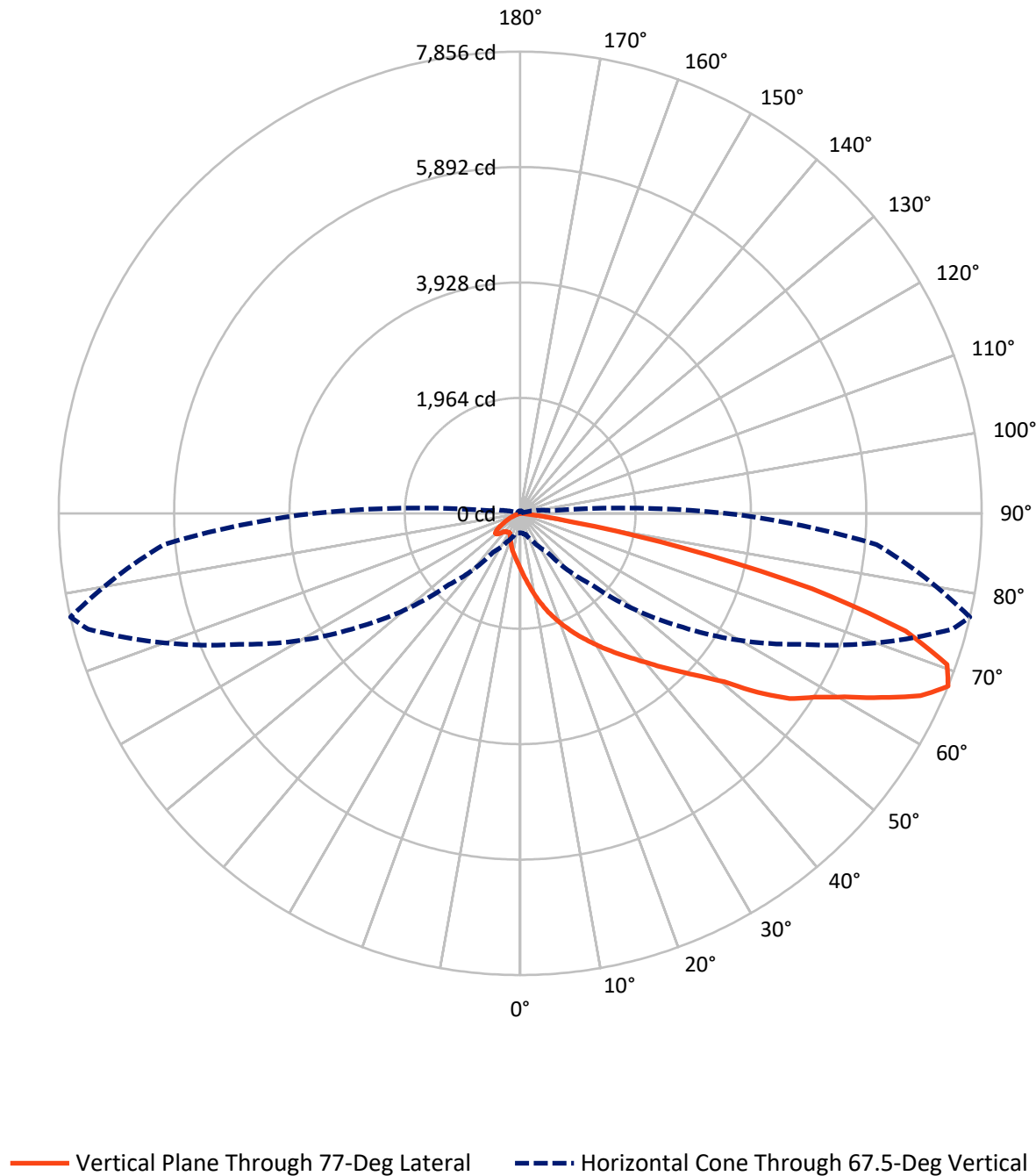
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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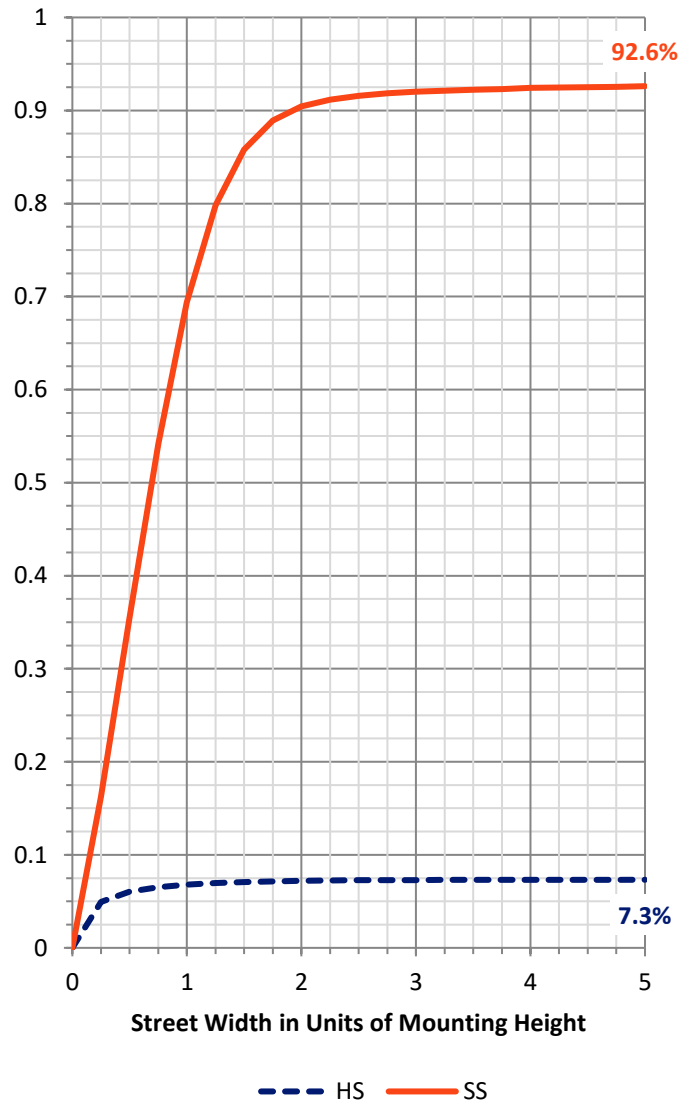
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	602.8	0.0	602.8
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	7591.0	0.0	7591.0
	% Fixture	92.6	0.0	92.6
Total	Lumens	8193.9	0.0	8193.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.4	1.2
10°-20°	337.7	4.1
20°-30°	651.7	8.0
30°-40°	1131.4	13.8
40°-50°	1642.7	20.0
50°-60°	1886.5	23.0
60°-70°	1637.8	20.0
70°-80°	771.4	9.4
80°-90°	38.2	0.5
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°	8193.9	100.0
0°-180°	8193.9	100.0

Coefficient of Utilization



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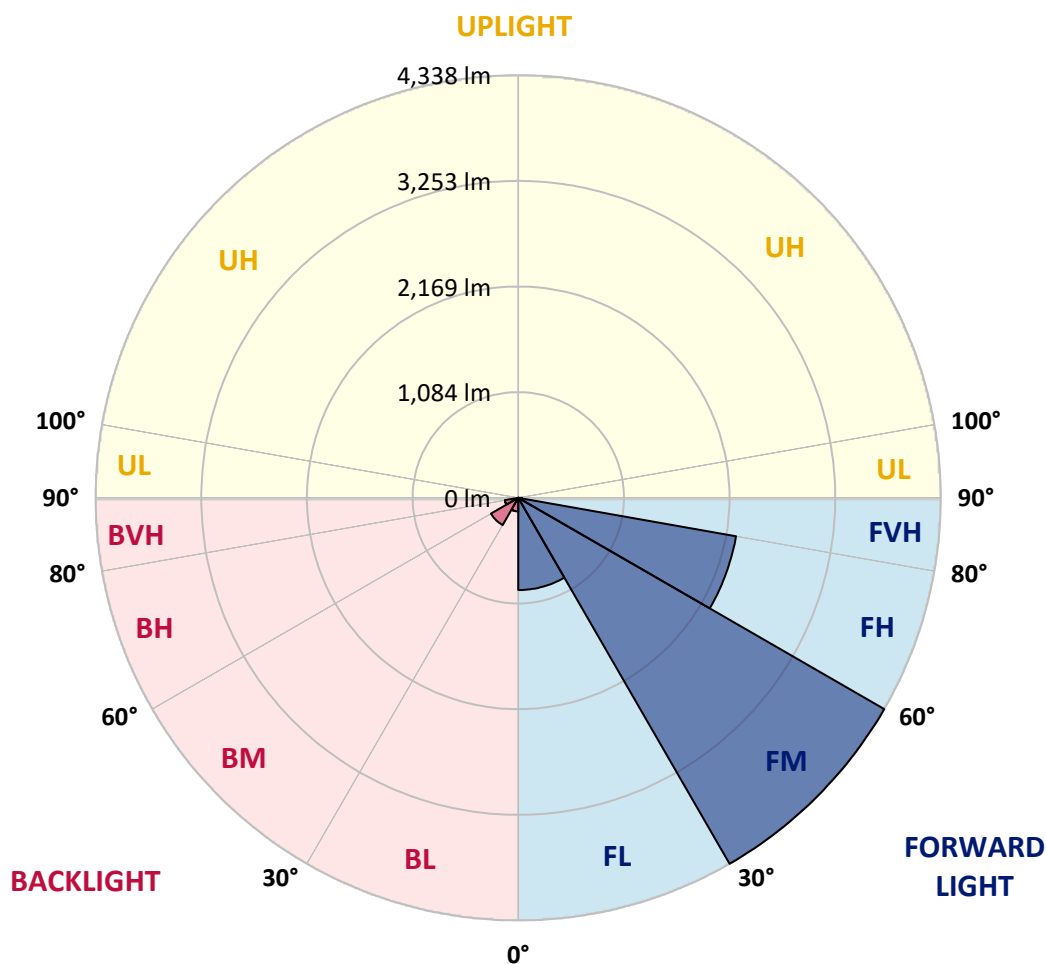
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	946.3	11.5			
FM	(30°-60°)	4337.6	52.9			
FH	(60°-80°)	2269.7	27.7			G2/5000
FVH	(80°-90°)	37.4	0.5			G1/100
BL	(0°-30°)	139.6	1.7	B1/500		
BM	(30°-60°)	323.0	3.9	B1/1000		
BH	(60°-80°)	139.6	1.7	B1/500		G1/500
BVH	(80°-90°)	0.7	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G2

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	944.8	944.8	944.8	944.8	944.8	944.8	944.8	944.8	944.8	944.8	944.8
2.5°	1308.2	1316.3	1304.6	1282.2	1248.7	1226.7	1173.3	1123.0	1067.0	1049.2	993.2
5°	1594.6	1601.8	1588.5	1564.1	1519.4	1476.6	1406.4	1301.0	1191.7	1156.5	1057.3
7.5°	1806.8	1810.9	1805.7	1783.4	1740.7	1692.3	1614.0	1489.3	1327.0	1288.3	1136.2
10°	1959.5	1972.7	1971.2	1962.5	1934.0	1894.8	1811.4	1669.4	1478.7	1428.7	1225.2
12.5°	2060.7	2075.4	2084.1	2103.4	2102.0	2077.0	2003.7	1853.6	1629.7	1571.2	1325.4
15°	2090.2	2106.0	2139.1	2183.9	2223.5	2236.2	2184.9	2034.2	1796.1	1721.3	1428.2
17.5°	2073.5	2097.9	2137.5	2208.3	2295.3	2352.8	2347.1	2208.8	1947.2	1861.7	1529.0
20°	2110.6	2133.9	2165.0	2224.6	2325.8	2430.1	2471.8	2375.6	2097.4	2007.8	1634.9
22.5°	2316.1	2312.1	2315.1	2324.8	2385.4	2488.6	2574.6	2527.2	2245.9	2154.3	1746.8
25°	2641.7	2623.5	2592.4	2540.1	2524.8	2574.6	2664.2	2661.6	2402.6	2304.4	1861.3
27.5°	3015.2	3012.2	2939.4	2813.2	2742.0	2722.7	2765.4	2792.4	2557.8	2453.0	1976.2
30°	3373.0	3381.1	3282.9	3142.4	3011.7	2935.9	2897.2	2916.5	2715.5	2613.2	2094.8
32.5°	3684.4	3693.0	3586.2	3421.8	3260.0	3168.4	3087.0	3039.1	2887.5	2776.1	2225.1
35°	3947.4	3956.1	3833.4	3651.8	3479.3	3396.3	3304.3	3173.5	3060.5	2956.7	2370.1
37.5°	4182.5	4180.0	4015.5	3832.4	3662.9	3597.3	3549.0	3338.8	3238.6	3138.3	2530.8
40°	4321.4	4332.1	4191.6	3989.6	3825.3	3777.4	3774.4	3543.9	3444.2	3347.0	2706.9
42.5°	4362.1	4381.0	4279.2	4113.2	3964.2	3912.3	3992.2	3765.7	3683.3	3588.7	2905.9
45°	4288.8	4307.2	4260.8	4145.8	4058.8	4025.3	4179.4	3995.8	3938.8	3845.1	3130.2
47.5°	4075.1	4098.1	4109.2	4084.7	4083.8	4117.8	4347.3	4238.0	4242.0	4146.3	3390.3
50°	3661.4	3700.1	3802.9	3889.4	4023.2	4191.1	4510.6	4500.5	4583.9	4501.5	3729.2
52.5°	2909.4	2964.4	3318.5	3555.1	3855.8	4177.4	4690.3	4921.7	5183.8	5063.2	4206.9
55°	2338.0	2338.0	2626.0	3068.6	3529.2	4086.8	4768.6	5195.5	5592.4	5563.9	4543.2
57.5°	1906.0	1928.9	2112.6	2503.9	3056.4	3871.1	4817.0	5367.5	5921.6	5900.7	4871.9
60°	1176.4	1225.7	1572.8	1959.0	2518.6	3486.9	4786.4	5541.6	6321.1	6337.8	5267.8
62.5°	662.5	680.8	835.5	1409.4	1958.5	2970.4	4552.8	5638.7	6831.8	6903.1	5675.8
65°	457.5	466.6	526.1	877.2	1357.5	2365.0	4096.5	5578.2	7343.7	7487.7	6021.9
67.5°	332.3	336.8	374.0	535.8	805.4	1714.7	3381.1	5272.9	7614.9	7855.6	6088.0
70°	255.4	258.5	285.5	352.1	475.7	1058.3	2455.6	4665.8	7418.5	7706.1	5749.1
72.5°	207.6	210.6	231.5	260.6	315.5	625.9	1488.3	3789.1	6551.5	6861.9	4894.3
75°	175.1	179.1	197.9	216.8	247.3	402.0	698.1	2638.8	4926.9	5130.4	3403.5
77.5°	97.2	89.6	160.8	179.6	208.6	254.4	326.7	1552.9	2759.3	2815.8	1510.1
80°	60.6	62.6	127.7	144.5	160.3	128.2	149.5	597.9	956.5	908.8	292.5
82.5°	3.6	8.1	98.2	104.3	109.9	54.9	56.5	203.1	230.5	211.7	51.9
85°	0.0	0.0	44.8	36.1	38.1	15.8	16.3	47.4	31.1	33.6	10.1
87.5°	0.0	0.0	0.0	1.0	0.0	1.5	3.1	4.1	1.5	2.0	3.6
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):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	944.8	944.8	944.8	944.8	944.8	944.8	944.8	944.8	944.8	944.8	944.8
2.5°	957.6	922.0	849.7	779.0	721.5	668.1	630.0	593.8	575.4	574.4	573.4
5°	986.6	911.8	767.3	639.6	536.8	454.4	401.0	362.7	343.5	336.8	335.8
7.5°	1027.3	914.8	695.1	517.4	396.4	325.6	295.1	282.9	278.8	274.3	273.3
10°	1078.7	922.0	630.4	416.8	312.4	276.8	264.6	259.5	256.5	253.4	252.4
12.5°	1136.2	928.5	566.3	346.0	274.8	256.5	247.7	241.7	237.6	234.0	233.1
15°	1192.2	932.6	499.7	296.6	255.4	240.7	231.5	224.9	219.4	215.2	214.7
17.5°	1247.6	938.3	437.1	267.1	239.6	224.9	215.8	207.6	203.1	198.4	197.9
20°	1309.2	937.3	378.0	246.3	223.9	209.1	199.5	191.8	187.3	182.1	181.6
22.5°	1366.1	932.1	326.2	228.5	207.6	193.3	182.7	175.1	170.5	166.4	165.8
25°	1431.8	928.0	282.9	212.2	192.3	178.0	166.4	159.3	154.2	150.6	150.1
27.5°	1494.9	922.0	251.3	197.4	177.5	163.8	152.6	144.5	139.9	137.4	137.4
30°	1557.0	920.4	239.6	183.2	164.3	150.6	139.4	131.8	128.2	127.2	126.7
32.5°	1631.8	924.6	244.8	178.0	152.1	138.4	127.7	122.1	118.6	118.6	118.6
35°	1711.6	923.5	252.4	182.7	144.0	126.2	118.1	114.5	110.9	110.9	110.9
37.5°	1811.9	925.1	258.5	190.3	140.9	116.0	111.4	106.8	104.9	104.9	104.9
40°	1961.4	975.4	255.4	196.9	139.9	108.9	99.7	98.2	96.7	96.7	96.7
42.5°	2144.7	1084.8	259.5	197.4	139.4	103.8	91.6	94.6	91.1	90.6	90.1
45°	2345.1	1204.4	285.5	186.8	138.9	101.3	87.5	91.1	85.5	85.5	85.5
47.5°	2544.0	1323.0	311.9	171.5	137.4	100.8	83.9	81.9	80.4	80.9	80.9
50°	2818.3	1419.6	322.1	150.6	133.9	99.7	77.4	77.9	76.9	77.9	77.9
52.5°	3117.0	1439.9	309.9	127.2	123.6	96.7	72.8	74.8	74.3	75.3	75.3
55°	3303.3	1418.1	255.9	105.9	107.8	84.5	68.2	72.3	72.3	72.3	72.3
57.5°	3495.6	1324.9	181.6	86.0	89.6	69.2	64.1	69.7	69.2	68.7	68.7
60°	3633.9	1174.3	119.6	70.7	71.2	57.0	59.6	65.6	65.1	62.6	62.6
62.5°	3737.3	1008.0	76.9	60.1	54.4	51.4	54.4	59.6	57.5	51.9	50.8
65°	3725.6	777.5	59.0	51.4	44.8	44.8	47.4	51.9	45.8	36.6	35.6
67.5°	3508.3	526.1	48.9	43.3	37.6	37.1	39.2	43.3	39.2	31.1	30.0
70°	3120.1	344.0	39.2	33.6	30.0	27.5	31.6	37.1	33.1	24.9	23.9
72.5°	2532.4	209.6	29.5	24.4	21.8	17.8	24.9	30.5	26.4	18.3	17.3
75°	1638.4	106.8	20.4	15.8	11.7	10.7	18.3	22.9	18.3	11.2	9.6
77.5°	626.9	44.8	11.2	7.1	6.1	5.1	10.1	13.7	7.6	2.6	2.0
80°	120.5	18.9	5.6	3.6	3.1	2.0	1.5	1.0	0.0	0.0	0.0
82.5°	20.9	6.1	2.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	7.1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	2.6	0.0	0.0	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	0.0

(END OF REPORT)