

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: P962621

Luminaire Tested: **NAV-SB2C-830-U-T3R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962621
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2C-830-U-T3R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3000K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11484.1 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium
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

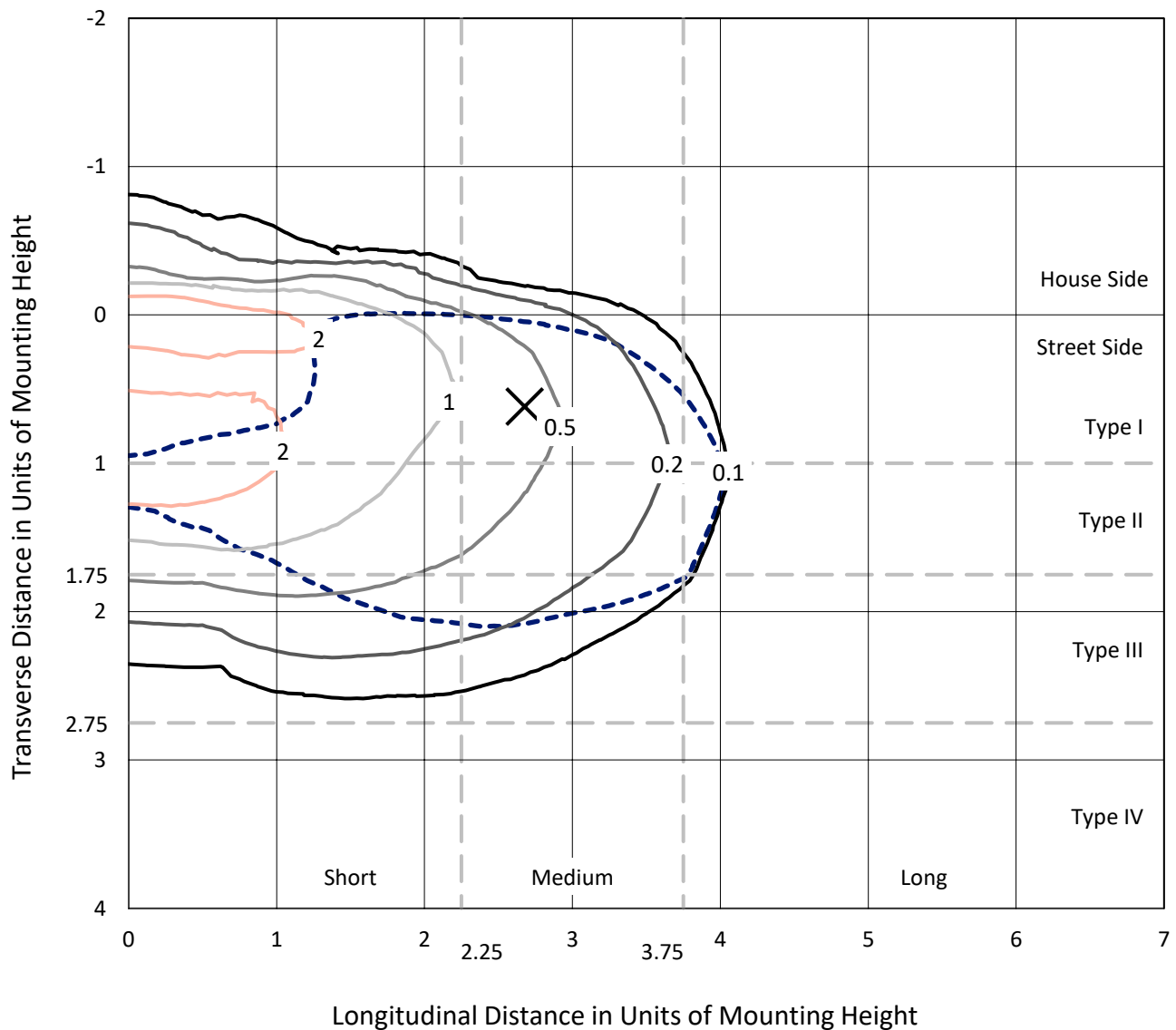


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Iso-Footcandle Lines of Horizontal Illumination

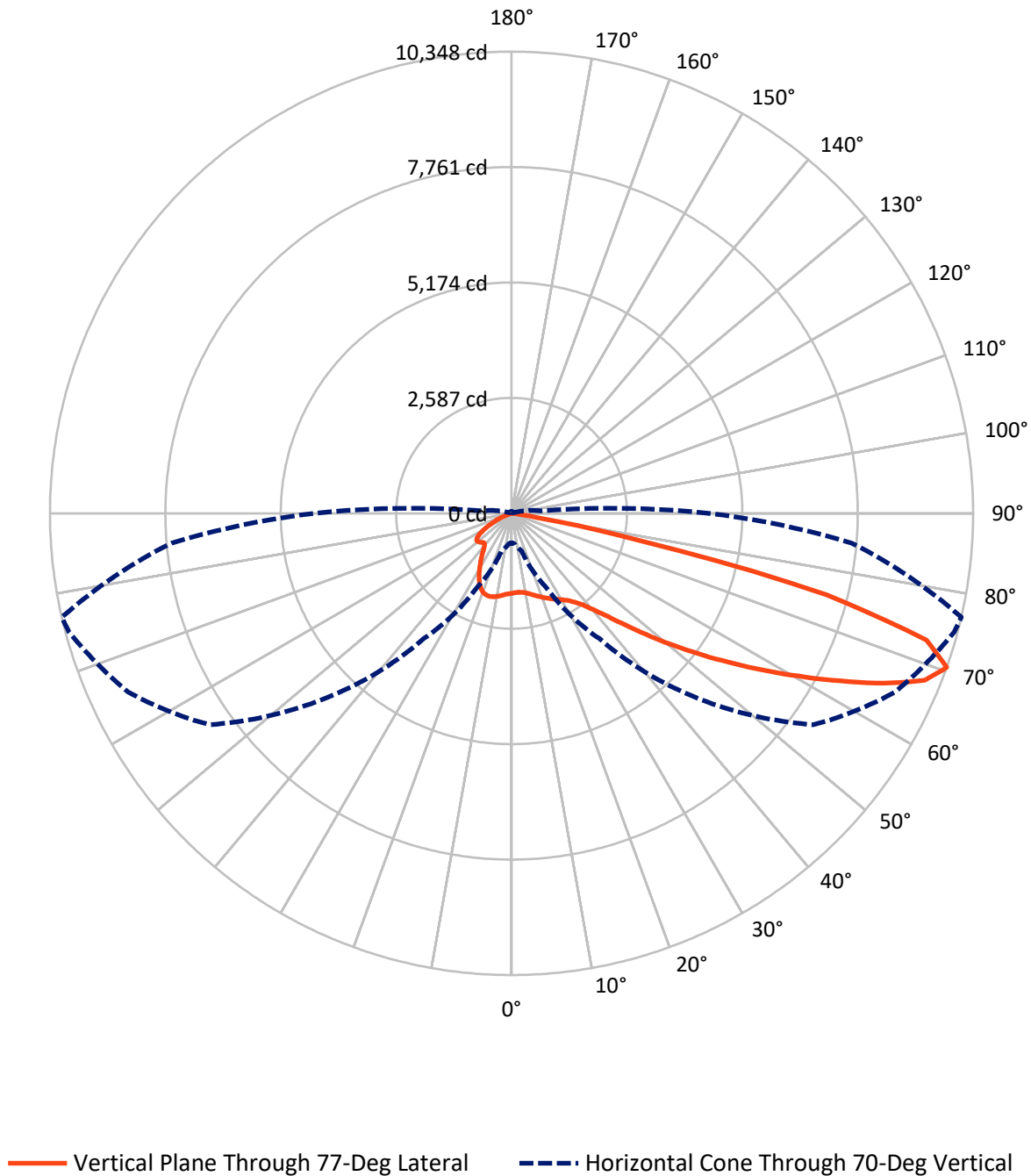
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
Type III - Medium - N/A

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Luminous Intensity Polar Plot



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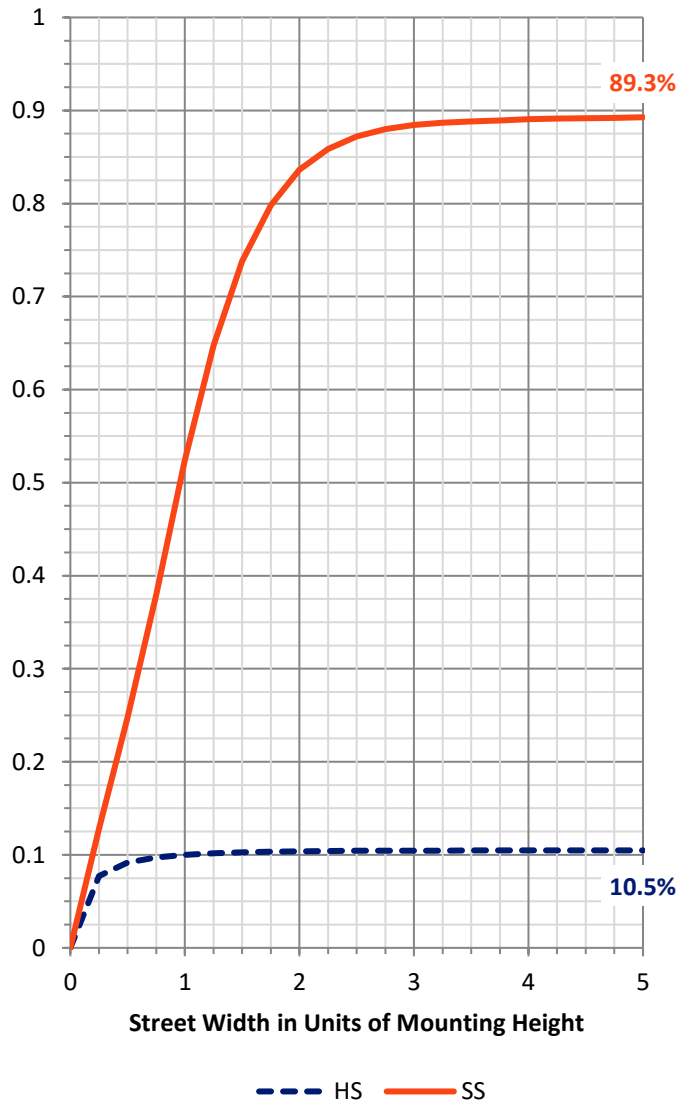
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1210.6	0.0	1210.6
	% Fixture	10.5	0.0	10.5
Street Side	Lumens	10273.5	0.0	10273.5
	% Fixture	89.5	0.0	89.5
Total	Lumens	11484.1	0.0	11484.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.4	1.3
10°-20°	366.5	3.2
20°-30°	566.9	4.9
30°-40°	1028.6	9.0
40°-50°	1941.6	16.9
50°-60°	2805.4	24.4
60°-70°	2986.3	26.0
70°-80°	1582.5	13.8
80°-90°	52.0	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°	11484.1	100.0
0°-180°	11484.1	100.0

Coefficient of Utilization



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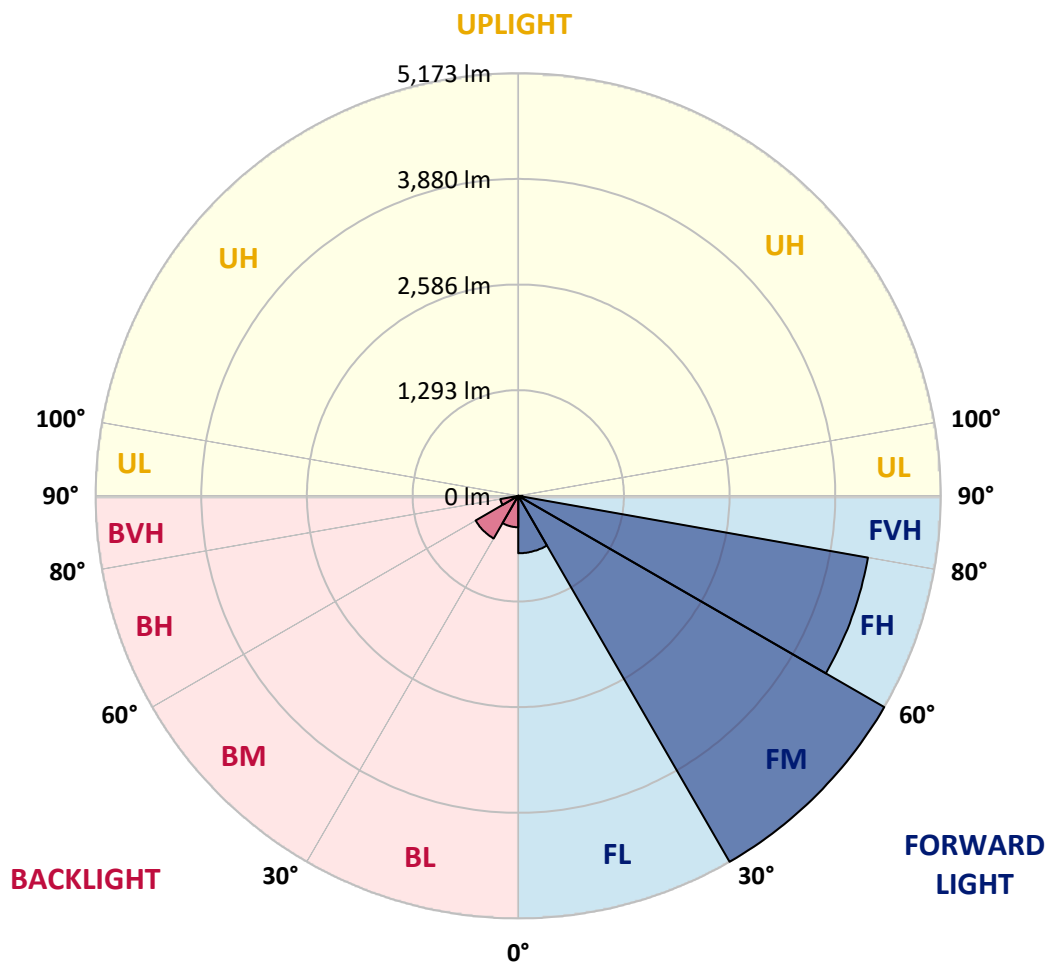
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	703.1	6.1			
FM	(30°-60°)	5173.0	45.0			
FH	(60°-80°)	4346.9	37.9			G2/5000
FVH	(80°-90°)	50.6	0.4			G1/100
BL	(0°-30°)	384.6	3.3	B1/500		
BM	(30°-60°)	602.6	5.2	B1/1000		
BH	(60°-80°)	221.9	1.9	B1/500		G1/500
BVH	(80°-90°)	1.4	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 III Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3
2.5°	1681.8	1697.0	1694.8	1705.0	1708.7	1723.1	1737.7	1757.3	1779.0	1778.3	1792.7
5°	1586.8	1602.1	1605.7	1619.4	1636.8	1659.3	1689.1	1728.3	1768.8	1775.4	1804.4
7.5°	1474.4	1490.4	1499.8	1527.4	1559.2	1605.7	1654.2	1711.5	1779.0	1788.4	1844.3
10°	1362.0	1376.5	1388.8	1427.9	1478.8	1547.6	1626.7	1709.4	1800.0	1813.8	1892.9
12.5°	1292.3	1306.2	1319.9	1354.0	1417.1	1501.2	1608.5	1719.5	1834.9	1854.4	1958.9
15°	1267.7	1280.0	1290.9	1321.3	1380.1	1475.8	1604.9	1740.6	1879.0	1905.2	2038.6
17.5°	1271.3	1277.9	1285.1	1308.3	1365.6	1464.2	1611.5	1776.8	1931.3	1954.5	2118.4
20°	1292.3	1296.0	1296.7	1312.6	1363.5	1462.8	1624.5	1811.6	1980.6	2011.8	2197.4
22.5°	1319.2	1320.6	1319.2	1330.0	1377.2	1473.6	1641.9	1853.7	2035.8	2064.8	2277.2
25°	1444.6	1417.1	1382.3	1361.3	1400.5	1494.7	1668.0	1910.3	2095.9	2124.2	2354.8
27.5°	1834.1	1755.0	1630.3	1490.4	1448.3	1525.2	1704.3	1967.6	2156.8	2182.2	2438.2
30°	2466.5	2362.8	2151.1	1835.6	1602.1	1589.0	1751.4	2024.8	2221.4	2249.0	2527.4
32.5°	3100.3	3075.0	2830.5	2394.0	1948.0	1731.1	1829.7	2102.5	2307.0	2328.7	2647.8
35°	3741.5	3690.0	3489.8	3058.3	2481.0	2020.5	1960.3	2204.0	2419.4	2444.0	2823.3
37.5°	4232.4	4201.3	4077.2	3721.9	3113.4	2467.2	2183.7	2361.3	2582.5	2610.1	3048.1
40°	4666.1	4651.7	4609.5	4375.3	3820.5	3051.7	2531.0	2605.0	2808.8	2841.4	3323.8
42.5°	5007.0	5041.1	5065.0	4999.7	4549.4	3719.0	2998.1	2947.3	3124.3	3157.6	3674.7
45°	5355.8	5367.4	5463.9	5558.2	5273.1	4416.6	3524.6	3348.4	3516.7	3558.0	4095.4
47.5°	5579.9	5626.3	5796.1	5962.1	5881.6	5108.5	4090.3	3821.9	3971.4	4049.0	4566.8
50°	5596.6	5684.3	5917.8	6207.2	6324.7	5767.1	4705.3	4361.5	4520.4	4605.9	5070.1
52.5°	5318.8	5455.2	5817.1	6240.6	6564.0	6324.7	5341.3	4901.0	5104.9	5216.5	5592.2
55°	4078.0	4256.3	5437.7	6059.3	6573.4	6747.5	5960.7	5463.1	5756.1	5882.3	6156.5
57.5°	3552.9	3642.8	4275.2	5744.5	6398.7	6917.9	6520.5	5998.4	6464.7	6621.3	6689.5
60°	2956.0	3074.3	3585.6	5229.7	6161.6	6934.6	7015.1	6688.7	7232.7	7408.9	7178.3
62.5°	2008.9	2137.2	2645.6	4344.9	5837.4	6926.6	7420.5	7399.5	8086.3	8275.5	7592.4
65°	1244.5	1325.0	1660.1	3547.8	5384.1	6935.4	7844.8	8262.5	8987.0	9179.2	7913.0
67.5°	983.4	1020.4	1195.1	2723.9	4603.1	6739.6	8268.4	9074.0	9834.8	9987.1	8010.9
70°	660.7	683.2	869.5	1826.1	3424.5	5835.9	8260.4	9481.7	10271.4	10347.6	7654.1
72.5°	348.1	365.5	508.4	845.6	2068.3	4148.3	6962.9	8994.3	9837.0	9722.4	6542.3
75°	174.0	203.1	342.3	429.4	883.3	2313.4	4323.8	7091.3	7742.5	7298.7	4197.6
77.5°	132.0	159.6	282.8	282.8	307.5	778.9	1831.2	3867.6	3567.4	2970.6	1232.2
80°	84.2	108.8	247.3	213.9	128.3	198.0	477.2	1083.5	757.9	576.6	224.1
82.5°	49.3	71.0	205.9	141.4	71.8	73.3	134.9	230.6	196.5	153.0	68.9
85°	19.6	46.4	141.4	55.9	28.3	18.1	40.6	49.3	40.6	30.4	17.4
87.5°	0.0	10.9	24.7	0.0	2.2	1.4	2.9	3.6	3.6	2.9	5.8
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°	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3	1791.3
2.5°	1799.3	1800.7	1805.1	1805.8	1795.7	1782.6	1777.6	1775.4	1766.7	1766.0	1767.4
5°	1821.0	1827.6	1821.0	1802.2	1757.3	1694.1	1646.3	1607.1	1571.5	1560.7	1554.2
7.5°	1864.6	1871.1	1851.5	1777.6	1664.4	1538.9	1425.8	1346.0	1274.2	1247.4	1236.6
10°	1926.9	1935.6	1874.0	1724.6	1524.4	1322.9	1131.4	996.5	891.3	848.5	830.4
12.5°	2005.2	2008.9	1886.3	1644.1	1342.4	1054.5	783.2	638.9	545.4	510.6	499.7
15°	2091.5	2086.5	1887.7	1534.6	1094.4	745.6	511.3	419.9	382.2	370.6	370.6
17.5°	2182.2	2161.2	1858.7	1376.5	822.4	509.8	379.2	357.5	351.0	348.1	347.4
20°	2271.4	2224.2	1805.8	1169.8	590.3	380.8	344.5	337.9	334.4	332.9	331.4
22.5°	2352.7	2272.1	1715.1	929.8	428.7	336.5	325.6	319.8	313.3	310.4	309.7
25°	2431.7	2299.7	1587.5	705.6	343.1	314.8	306.1	295.2	286.5	282.8	281.4
27.5°	2508.6	2317.1	1427.9	522.1	306.1	294.5	278.5	263.2	256.8	255.3	253.8
30°	2590.5	2322.9	1246.7	389.4	283.5	269.1	245.9	228.5	224.8	225.5	225.5
32.5°	2690.6	2331.6	1063.9	319.1	264.8	238.6	211.0	192.9	190.0	192.9	192.2
35°	2810.2	2349.0	887.6	293.8	248.0	207.5	177.6	162.5	159.6	161.7	161.0
37.5°	2972.7	2377.3	723.0	288.6	234.2	181.3	149.4	137.0	137.0	137.8	137.0
40°	3188.8	2452.7	575.8	285.1	227.0	161.7	126.2	121.2	123.3	124.7	124.7
42.5°	3452.1	2613.0	476.5	280.6	219.0	153.0	114.6	112.4	116.0	117.5	117.5
45°	3747.3	2816.1	441.7	273.4	211.8	158.9	109.5	106.6	111.0	111.7	112.4
47.5°	4052.5	3014.7	437.3	265.5	204.5	167.5	108.0	101.6	106.6	107.3	108.0
50°	4361.5	3144.6	441.7	253.1	192.9	167.5	108.8	96.5	100.8	103.0	103.7
52.5°	4672.7	3204.0	438.8	226.3	172.6	157.3	108.8	92.1	96.5	97.9	97.9
55°	4974.3	3192.5	394.5	186.3	146.5	139.2	105.9	88.5	91.3	92.1	92.1
57.5°	5212.9	3030.7	312.5	145.0	118.9	116.0	96.5	84.2	86.3	85.6	85.6
60°	5337.7	2675.4	223.3	111.7	93.6	91.3	84.9	78.3	79.7	76.2	75.4
62.5°	5339.1	2205.4	149.4	88.5	74.7	72.6	72.6	70.3	68.9	61.6	59.4
65°	5225.2	1684.0	99.3	70.3	60.2	56.6	60.9	60.2	55.1	45.0	43.6
67.5°	4967.0	1103.8	75.4	55.1	46.4	44.3	48.6	50.7	47.2	37.7	37.0
70°	4436.2	642.6	62.3	42.7	34.8	32.6	39.2	43.6	39.2	30.4	29.0
72.5°	3684.9	346.7	50.7	31.9	23.9	21.7	31.2	35.6	31.2	22.4	21.7
75°	2391.1	185.6	39.2	21.0	12.3	13.7	23.2	26.1	21.7	14.6	13.0
77.5°	802.8	82.0	24.7	10.1	5.8	5.8	13.7	16.0	10.1	5.1	4.3
80°	179.2	34.1	10.1	4.3	2.2	2.2	2.9	2.9	1.4	0.0	0.0
82.5°	58.7	13.7	4.3	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	22.4	5.1	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.7	0.7	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)