

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: P962110

Luminaire Tested: **NAV-SB2B-835-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962110
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-12)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB2B-835-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10463.2 lumens
Efficiency: N/A
Efficacy: 141.6 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B2 - U0 - G3

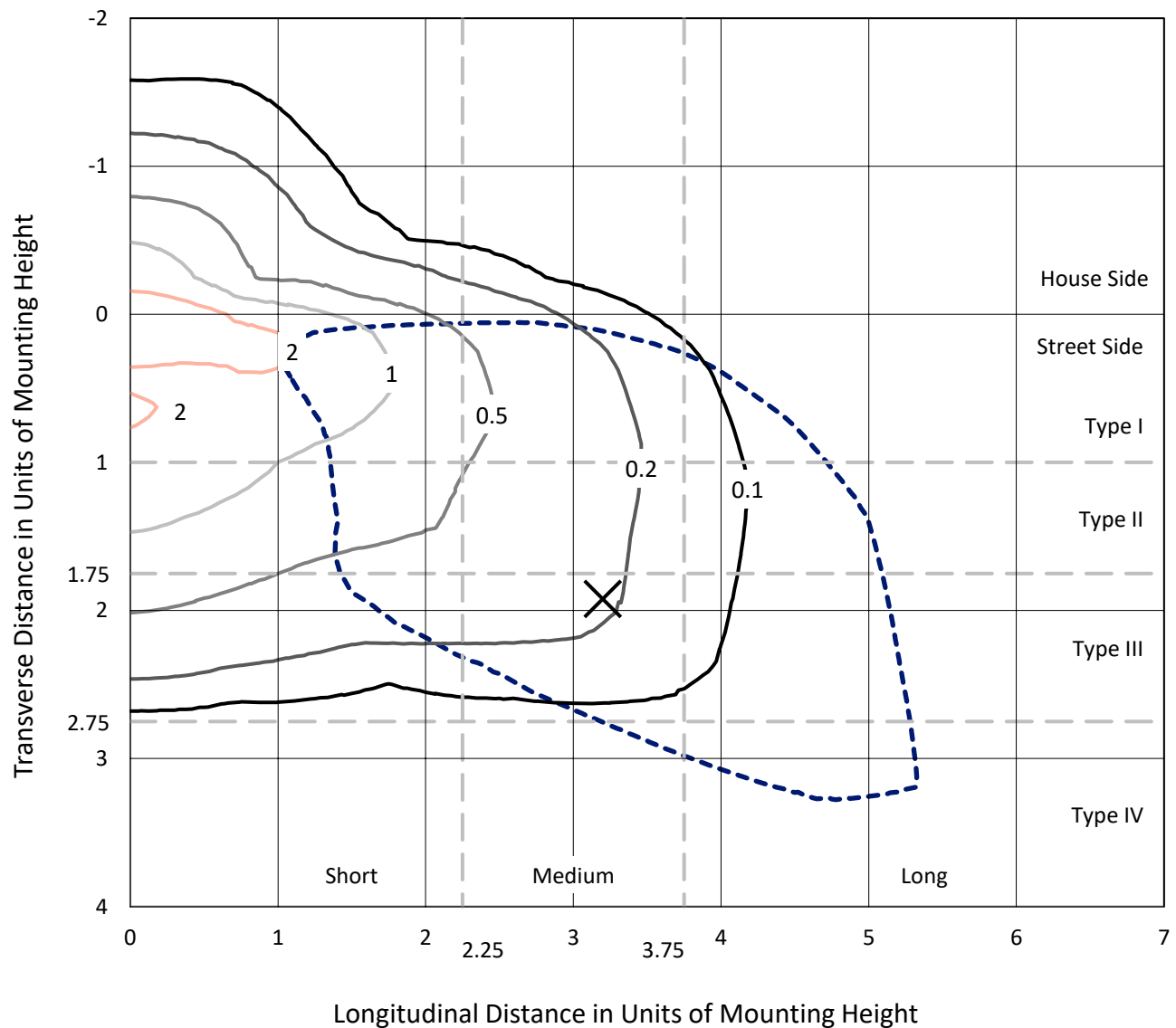
Input Watts (W): 73.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

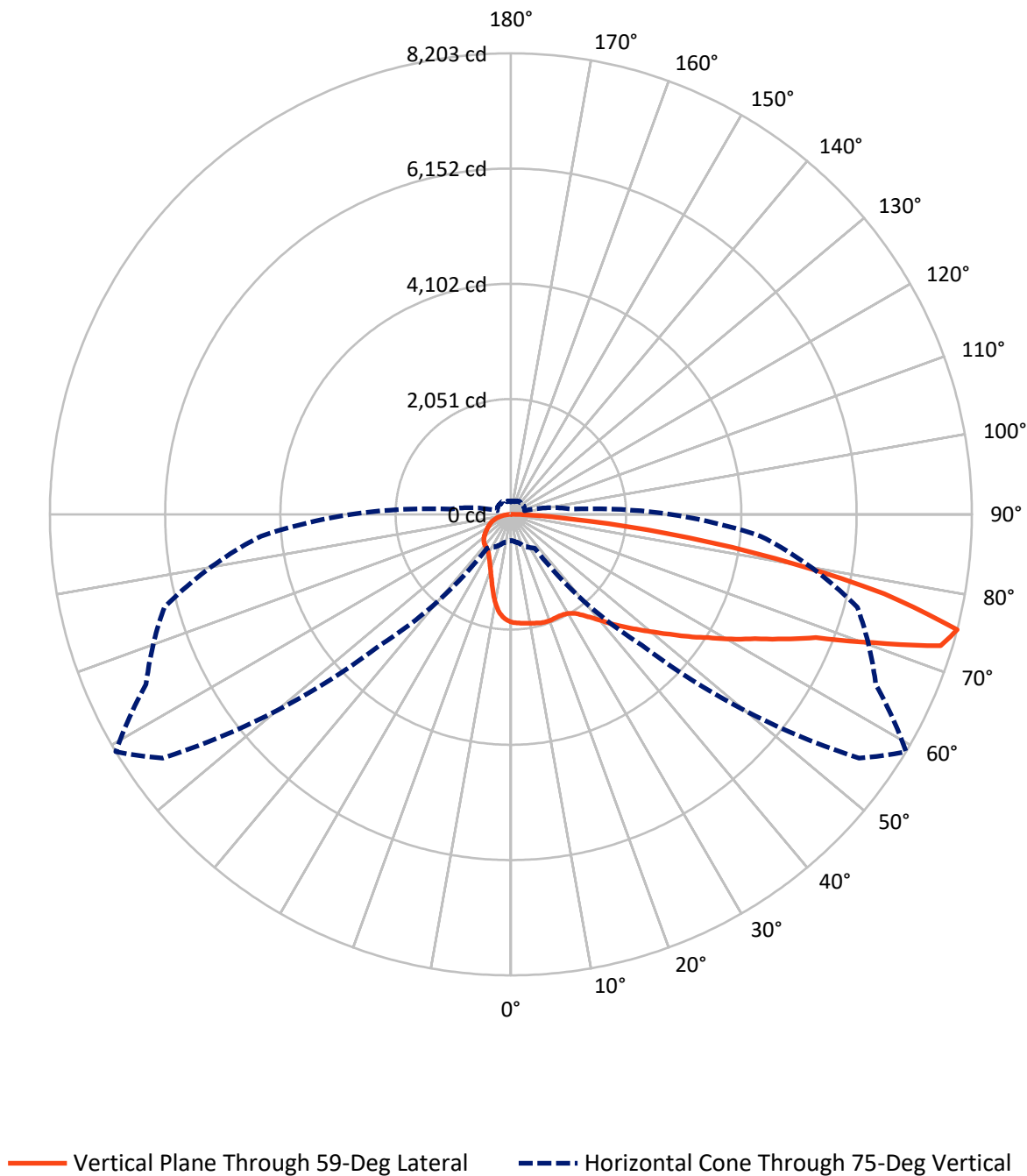
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.1 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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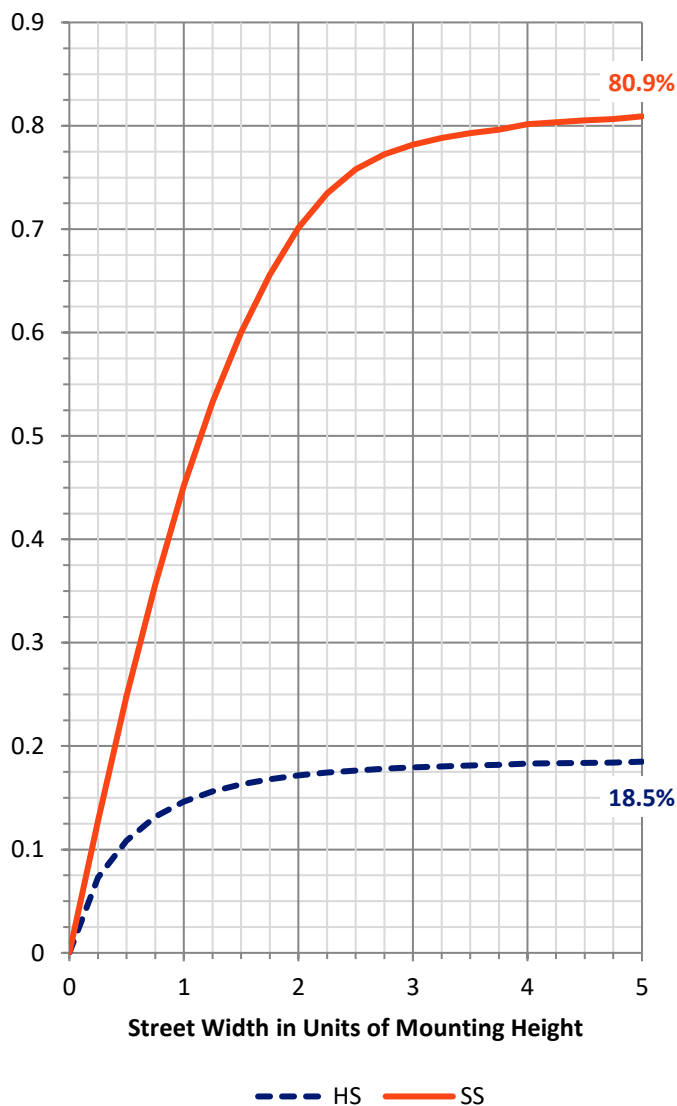
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1962.4	0.0	1962.4
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	8500.7	0.0	8500.7
	% Fixture	81.2	0.0	81.2
Total	Lumens	10463.2	0.0	10463.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	172.2	1.6
10°-20°	440.2	4.2
20°-30°	668.6	6.4
30°-40°	993.8	9.5
40°-50°	1478.0	14.1
50°-60°	2006.2	19.2
60°-70°	2449.2	23.4
70°-80°	1922.1	18.4
80°-90°	333.0	3.2
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°	10463.2	100.0
0°-180°	10463.2	100.0

Coefficient of Utilization



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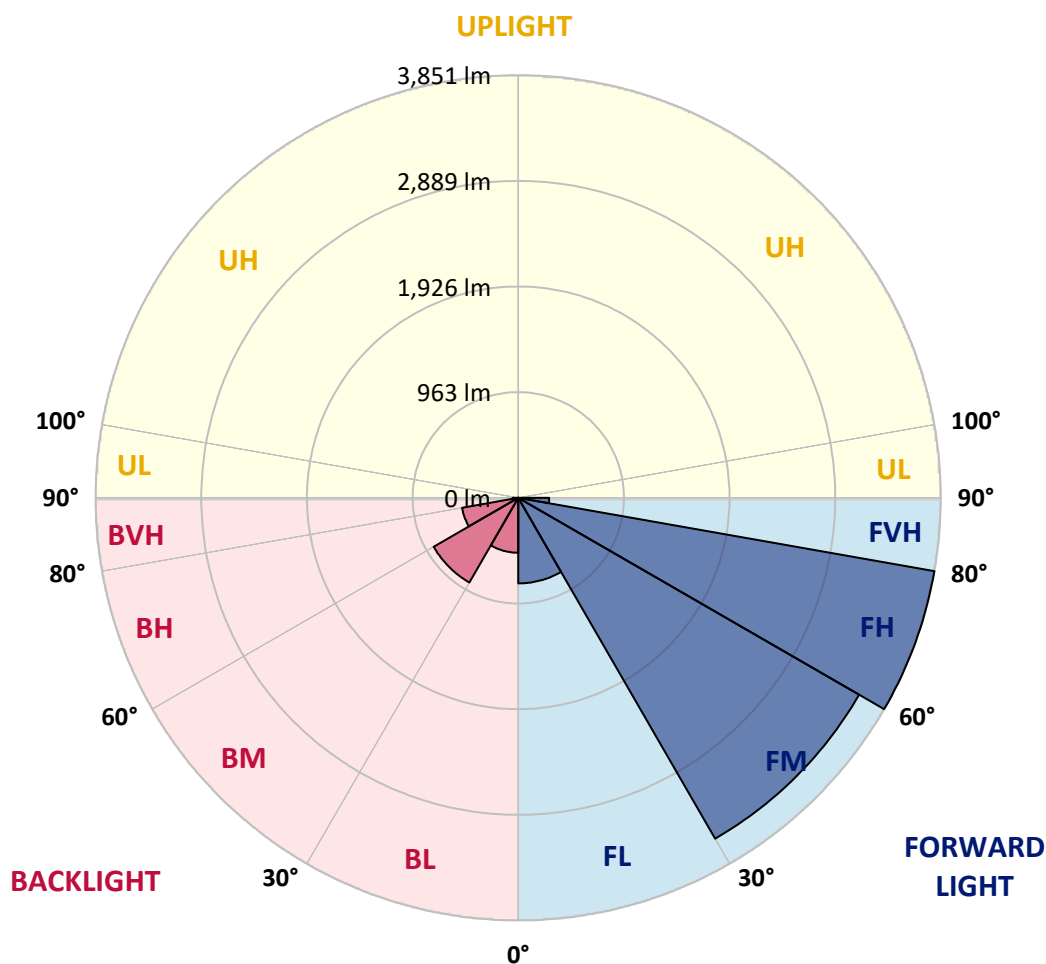
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	780.1	7.5			
FM	(30°-60°)	3587.2	34.3			
FH	(60°-80°)	3851.4	36.8			G2/5000
FVH	(80°-90°)	282.0	2.7			G3/500
BL	(0°-30°)	500.8	4.8	B2/1000		
BM	(30°-60°)	890.8	8.5	B1/1000		
BH	(60°-80°)	519.9	5.0	B2/1000		G2/1000
BVH	(80°-90°)	51.0	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5
2.5°	1936.8	1930.1	1936.8	1934.0	1932.8	1930.6	1931.2	1935.1	1932.8	1935.7	1926.1
5°	1923.9	1919.9	1926.7	1925.0	1932.3	1933.5	1940.7	1945.2	1948.1	1948.6	1941.4
7.5°	1902.5	1898.5	1908.1	1916.0	1931.7	1936.2	1951.5	1958.8	1962.7	1969.4	1958.8
10°	1824.3	1822.6	1846.2	1876.1	1913.2	1936.2	1959.3	1971.7	1977.9	1995.9	1983.6
12.5°	1685.8	1688.1	1719.0	1776.4	1850.7	1925.0	1968.3	1986.3	1995.9	2018.4	2012.8
15°	1553.5	1553.0	1586.7	1648.1	1752.2	1875.4	1972.8	2003.8	2020.2	2053.4	2048.9
17.5°	1476.9	1474.7	1498.3	1545.1	1641.8	1799.5	1961.5	2013.4	2048.3	2089.9	2086.0
20°	1462.9	1458.4	1470.8	1493.8	1562.5	1716.2	1932.3	2013.4	2070.8	2124.8	2122.6
22.5°	1514.1	1506.7	1501.7	1499.0	1529.3	1647.5	1899.1	2006.6	2104.0	2174.9	2171.0
25°	1617.1	1605.9	1579.9	1554.6	1545.6	1616.5	1869.8	2004.9	2153.5	2242.5	2227.8
27.5°	1783.7	1769.7	1717.3	1656.5	1601.9	1632.3	1856.9	2015.0	2208.2	2313.9	2284.6
30°	1990.2	1975.1	1909.3	1815.8	1717.9	1690.8	1873.2	2044.9	2278.0	2409.1	2351.7
32.5°	2175.5	2158.5	2102.3	2007.2	1874.9	1792.2	1925.0	2101.8	2387.6	2541.4	2452.4
35°	2339.9	2320.1	2269.5	2181.7	2067.4	1934.6	2018.4	2202.5	2543.6	2756.3	2589.1
37.5°	2500.8	2477.7	2422.6	2329.7	2249.8	2124.2	2147.4	2332.0	2750.7	3017.5	2770.5
40°	2680.9	2647.7	2580.7	2489.0	2411.3	2346.6	2316.7	2490.6	2961.2	3309.1	2996.7
42.5°	2855.4	2823.9	2743.9	2665.7	2568.3	2549.8	2513.2	2676.4	3191.4	3629.3	3226.4
45°	3043.4	3005.7	2908.8	2809.8	2748.4	2684.9	2703.4	2862.2	3417.1	3955.8	3467.3
47.5°	3219.6	3177.4	3063.1	2952.8	2919.0	2798.6	2877.9	3066.5	3651.9	4286.8	3705.9
50°	3314.7	3273.0	3177.9	3078.3	3051.8	2938.7	3067.0	3291.1	3897.9	4616.6	3935.0
52.5°	3394.1	3349.1	3224.6	3169.5	3161.6	3091.3	3300.1	3547.7	4143.8	4908.2	4156.2
55°	3478.5	3428.4	3269.6	3220.1	3256.2	3262.4	3576.4	3838.7	4403.8	5192.4	4365.1
57.5°	3575.9	3512.3	3313.0	3262.9	3348.5	3462.8	3893.9	4140.5	4659.4	5455.9	4550.8
60°	3667.7	3603.5	3396.3	3331.0	3448.1	3695.2	4258.1	4505.7	4948.7	5690.6	4726.4
62.5°	3685.6	3632.7	3462.8	3462.1	3583.2	3966.5	4689.3	4874.4	5201.5	5922.4	4884.0
65°	3373.8	3340.6	3239.8	3457.1	3776.8	4357.2	5169.4	5346.1	5522.8	6125.1	5022.4
67.5°	2567.8	2572.3	2565.0	2984.3	3620.3	4918.4	5864.5	5851.0	5919.7	6352.5	5181.8
70°	1174.1	1200.6	1372.8	2060.0	2900.4	4983.0	7013.9	6838.8	6417.8	6646.9	5319.6
72.5°	634.4	654.6	725.0	997.9	1743.7	4430.4	7872.8	7997.2	7080.3	6845.1	5168.3
75°	465.5	476.7	525.7	634.4	732.3	3292.8	7564.9	8203.2	7163.0	6382.9	4463.0
77.5°	348.4	353.5	393.4	502.7	374.8	1735.8	6044.6	6793.8	6131.9	5244.2	3296.7
80°	252.8	258.4	288.2	377.1	262.8	634.9	4150.5	4768.6	4199.5	3342.8	1643.0
82.5°	174.5	176.7	189.7	256.7	183.5	246.5	2355.0	2796.3	2344.4	1173.0	443.5
85°	105.3	108.0	113.7	149.8	104.1	117.1	1016.5	1051.4	700.8	280.3	137.9
87.5°	43.4	46.1	50.6	63.0	41.1	32.6	167.7	210.5	131.1	82.2	42.7
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°	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5	1920.5
2.5°	1923.3	1919.4	1908.7	1894.0	1880.6	1863.7	1856.4	1850.1	1844.5	1833.8	1828.7
5°	1935.1	1924.4	1895.7	1858.6	1816.4	1770.2	1725.2	1694.2	1667.8	1648.1	1631.7
7.5°	1953.1	1932.8	1880.6	1804.5	1707.8	1608.6	1519.2	1455.6	1407.7	1390.3	1359.9
10°	1971.7	1947.5	1856.4	1722.4	1555.2	1402.6	1283.9	1218.6	1180.3	1168.0	1148.8
12.5°	1993.6	1958.2	1818.7	1608.1	1384.7	1217.5	1113.9	1075.6	1056.0	1049.2	1050.8
15°	2025.7	1967.2	1761.8	1465.1	1222.0	1082.4	1015.4	988.9	978.8	978.3	980.5
17.5°	2050.0	1968.9	1673.4	1312.0	1097.1	1000.8	945.7	935.5	942.3	952.3	956.3
20°	2077.0	1953.8	1557.5	1172.5	1009.2	929.3	906.2	913.0	929.3	943.9	948.9
22.5°	2096.1	1926.1	1417.3	1063.8	933.3	888.2	887.0	901.2	910.2	917.5	921.4
25°	2113.0	1879.4	1268.7	972.6	870.7	863.5	875.9	871.4	865.1	871.4	875.2
27.5°	2125.3	1805.6	1135.9	892.7	826.9	846.5	839.3	829.1	828.5	831.9	837.5
30°	2121.4	1707.1	1026.6	816.7	795.9	815.1	797.6	795.9	794.2	795.9	802.1
32.5°	2121.4	1595.2	942.8	764.3	776.2	768.9	767.2	763.2	756.4	755.9	763.2
35°	2133.2	1483.2	870.7	736.3	759.8	742.4	743.5	734.0	719.9	713.2	719.9
37.5°	2157.4	1393.1	799.3	722.7	731.1	730.6	726.1	709.8	685.0	663.6	671.0
40°	2216.0	1366.6	750.3	716.6	717.6	724.4	712.6	681.1	624.7	589.9	594.4
42.5°	2307.8	1411.1	739.6	701.3	708.7	715.4	692.3	619.2	579.2	558.3	558.3
45°	2424.2	1488.8	762.7	679.4	687.3	699.0	630.4	595.5	577.5	578.1	580.9
47.5°	2571.7	1570.4	805.4	660.2	656.3	663.1	589.3	568.0	543.1	549.4	565.1
50°	2742.3	1653.1	846.0	634.4	622.0	600.0	562.8	542.6	511.1	496.4	500.4
52.5°	2926.9	1733.1	862.3	602.8	584.9	559.4	544.9	520.1	481.9	457.6	457.0
55°	3102.0	1805.6	844.3	565.1	547.7	528.0	525.7	510.6	469.4	435.6	435.6
57.5°	3267.4	1866.4	799.3	526.8	509.9	498.2	513.3	506.0	454.3	410.9	408.7
60°	3407.6	1908.1	734.0	488.0	476.2	470.0	493.0	490.8	432.9	384.5	382.7
62.5°	3519.0	1924.4	661.9	450.9	448.0	436.8	464.9	464.9	405.8	358.5	356.9
65°	3606.3	1908.7	588.8	414.3	419.9	403.0	430.6	427.2	377.1	335.5	333.2
67.5°	3683.4	1856.9	507.7	378.2	391.2	369.8	394.5	386.7	345.6	312.4	310.2
70°	3717.8	1736.5	415.4	342.2	358.0	337.1	358.5	343.9	310.2	287.6	283.1
72.5°	3442.0	1443.2	327.0	304.5	318.1	301.1	319.7	302.8	271.8	261.7	253.3
75°	2847.6	1082.9	251.6	263.4	273.6	260.7	273.0	260.7	232.5	239.7	218.9
77.5°	2067.9	731.1	192.5	220.1	224.6	217.8	228.5	214.4	189.1	187.5	179.0
80°	1028.4	428.3	150.9	173.9	172.2	167.7	180.1	173.3	152.0	161.0	159.3
82.5°	297.8	183.5	109.8	122.2	118.8	119.9	128.9	132.2	198.1	196.4	200.9
85°	93.5	72.1	65.8	68.1	64.8	66.4	76.0	150.9	139.6	81.6	88.4
87.5°	24.2	24.8	16.3	17.4	18.0	21.4	24.2	91.7	43.9	28.7	30.4
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)