

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: P963704

Luminaire Tested: **NAV-SB3A-835-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P963704
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-3)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB3A-835-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(3) 80 CRI, 3500K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12678.2 lumens
Efficiency: N/A
Efficacy: 149.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

Input Watts (W): 84.7
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

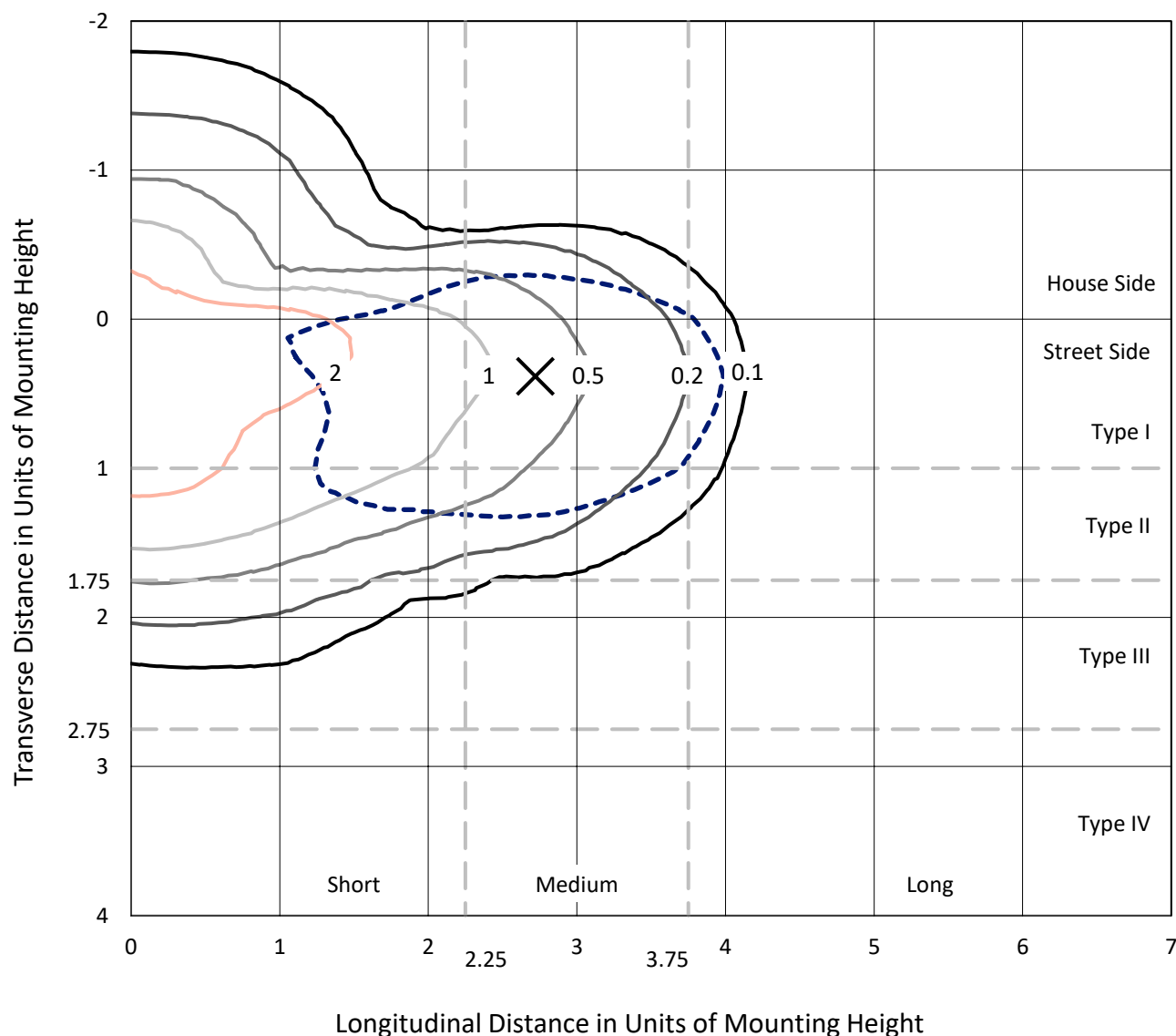


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Iso-Footcandle Lines of Horizontal Illumination

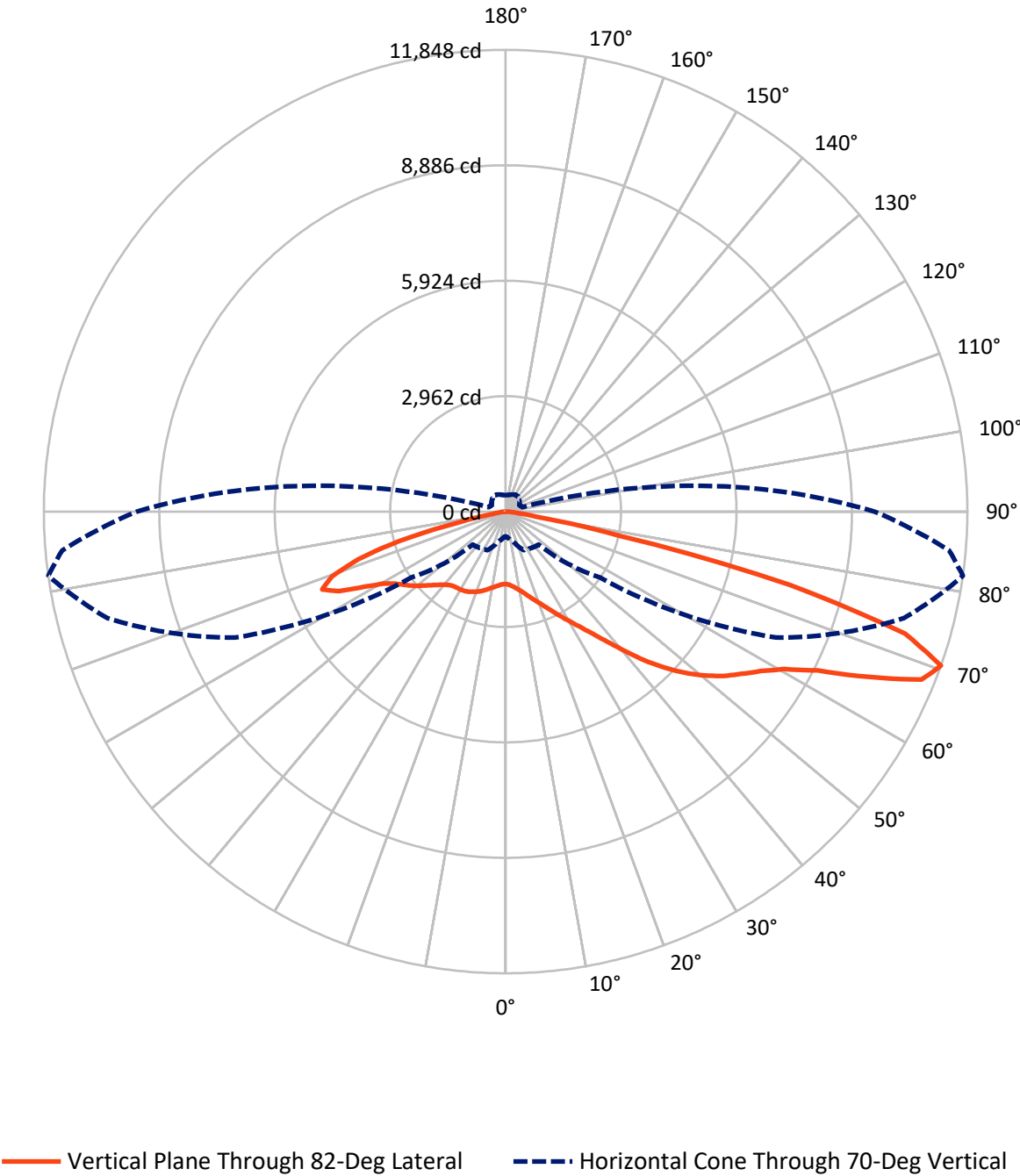
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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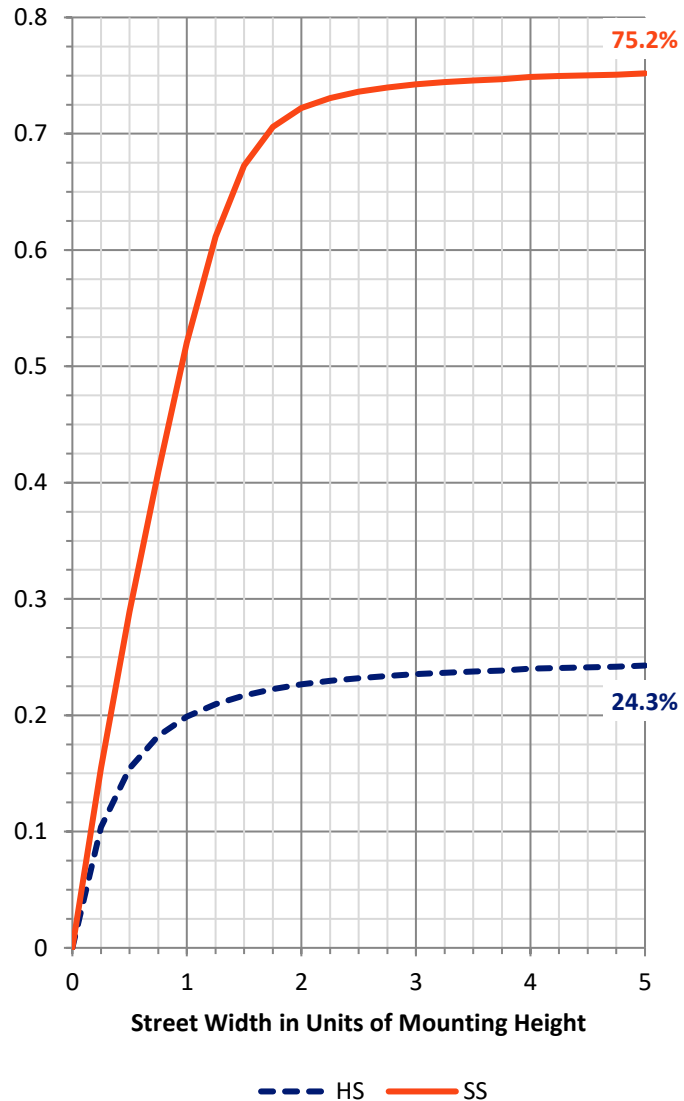
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3125.5	0.0	3125.5
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	9552.7	0.0	9552.7
	% Fixture	75.3	0.0	75.3
Total	Lumens	12678.2	0.0	12678.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	175.5	1.4
10°-20°	504.2	4.0
20°-30°	843.5	6.7
30°-40°	1317.8	10.4
40°-50°	2098.7	16.6
50°-60°	2920.7	23.0
60°-70°	3055.2	24.1
70°-80°	1596.8	12.6
80°-90°	165.8	1.3
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°	12678.2	100.0
0°-180°	12678.2	100.0

Coefficient of Utilization



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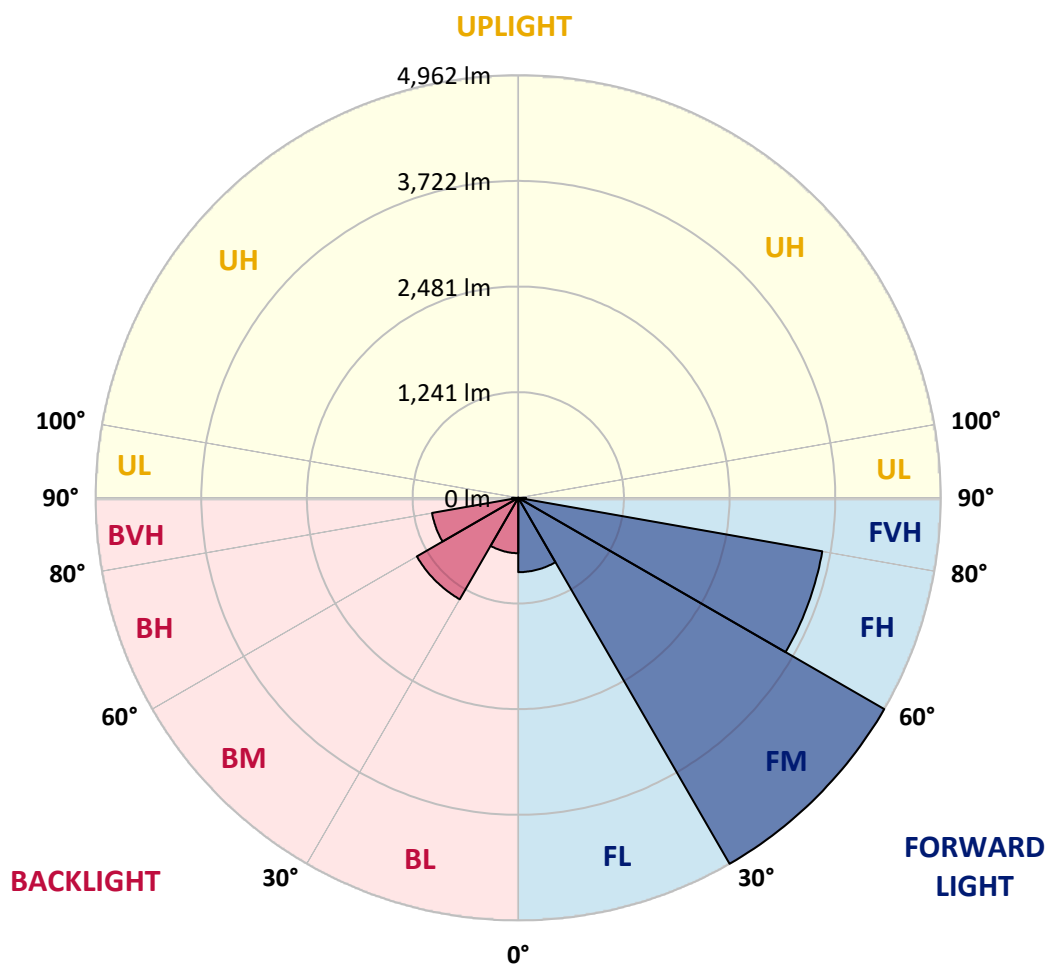
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	873.0	6.9			
FM	(30°-60°)	4962.1	39.1			
FH	(60°-80°)	3624.7	28.6			G2/5000
FVH	(80°-90°)	92.8	0.7			G1/100
BL	(0°-30°)	650.2	5.1	B2/1000		
BM	(30°-60°)	1375.1	10.8	B2/2500		
BH	(60°-80°)	1027.2	8.1	B3/2500		G3/2500
BVH	(80°-90°)	73.0	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8
2.5°	1903.2	1914.0	1910.6	1907.2	1907.2	1902.5	1901.9	1895.1	1889.7	1881.0	1878.9
5°	1927.4	1938.9	1937.5	1940.2	1948.9	1951.0	1952.9	1948.9	1938.2	1927.4	1922.7
7.5°	1905.9	1918.7	1922.7	1938.9	1965.7	1989.9	2008.2	2015.6	2005.4	1989.9	1982.6
10°	1833.2	1847.4	1861.5	1899.8	1947.6	2004.8	2053.2	2082.2	2080.1	2065.3	2052.6
12.5°	1685.9	1700.7	1730.9	1805.6	1893.1	1994.0	2084.1	2144.7	2165.5	2154.8	2132.6
15°	1568.1	1581.0	1603.8	1680.5	1794.2	1947.6	2095.6	2213.3	2266.5	2260.4	2233.5
17.5°	1564.8	1570.2	1584.3	1620.6	1708.1	1874.9	2083.5	2280.6	2382.2	2381.5	2347.9
20°	1624.0	1626.1	1634.1	1641.5	1691.2	1819.8	2052.6	2336.4	2512.1	2512.1	2475.7
22.5°	1706.1	1704.7	1712.8	1706.1	1730.3	1815.1	2033.0	2385.6	2656.7	2667.5	2621.6
25°	1829.2	1822.4	1820.4	1804.9	1809.6	1858.8	2054.5	2441.3	2828.2	2850.4	2793.2
27.5°	1993.3	1982.6	1975.2	1939.5	1927.4	1948.9	2120.5	2508.7	3019.2	3057.6	2985.0
30°	2207.2	2187.8	2177.0	2115.1	2071.4	2074.7	2220.0	2598.2	3219.1	3280.9	3188.8
32.5°	2499.3	2468.9	2440.0	2338.4	2258.4	2232.1	2348.6	2721.9	3435.7	3534.6	3416.2
35°	2826.2	2801.9	2771.0	2614.3	2491.2	2430.6	2522.1	2894.8	3689.3	3846.1	3692.0
37.5°	3141.0	3120.2	3135.0	2923.7	2764.9	2676.9	2749.5	3126.9	4002.1	4233.6	4037.8
40°	3466.7	3450.5	3452.5	3250.7	3065.7	2966.8	3025.3	3418.2	4360.8	4694.4	4453.5
42.5°	3820.5	3808.4	3768.0	3589.0	3381.2	3289.0	3342.8	3754.6	4745.5	5219.1	4909.6
45°	4216.7	4209.4	4171.6	3966.4	3728.3	3624.7	3697.4	4125.9	5132.4	5712.9	5367.8
47.5°	4559.2	4565.2	4560.5	4387.6	4140.7	3988.7	4075.5	4513.4	5492.3	6177.2	5807.1
50°	4724.0	4755.6	4802.0	4748.2	4594.9	4440.1	4456.9	4887.5	5835.3	6612.4	6228.2
52.5°	4637.9	4697.8	4824.3	4910.4	4969.5	4937.2	4892.2	5258.9	6158.3	7005.3	6626.5
55°	4317.0	4401.0	4611.0	4818.8	5120.9	5355.7	5414.9	5670.5	6473.1	7351.1	7003.2
57.5°	3732.3	3869.0	4057.3	4477.8	4986.3	5558.2	6024.4	6241.7	6806.8	7720.4	7397.4
60°	2730.0	2912.9	3147.1	3772.7	4515.4	5449.9	6543.1	7118.9	7281.1	8198.7	7910.7
62.5°	1747.1	1860.2	2075.4	2664.7	3518.4	4894.9	6701.9	8215.5	8085.0	8983.1	8680.4
65°	1196.2	1268.7	1466.0	1796.9	2274.6	3643.6	6276.7	9037.6	9361.8	10226.3	9996.3
67.5°	869.2	924.3	1092.5	1382.5	1482.0	2156.1	4870.7	8999.9	10603.1	11507.3	11149.3
70°	633.8	672.7	814.1	1092.5	1140.3	1199.5	2950.7	7650.4	10576.2	11847.7	11419.1
72.5°	469.6	496.5	591.3	847.7	923.0	810.0	1460.5	5560.2	9088.1	10716.1	10372.4
75°	339.7	359.9	429.9	648.5	738.7	616.9	728.6	3249.4	6339.2	7538.1	7598.6
77.5°	259.6	275.1	320.9	475.0	591.3	462.9	452.1	1494.9	3005.8	3020.6	3190.1
80°	208.6	218.6	243.5	334.4	453.5	346.4	294.7	603.4	949.9	803.9	843.6
82.5°	153.3	170.3	205.8	234.8	324.3	238.8	179.6	304.7	361.3	310.8	313.5
85°	87.4	98.9	124.4	168.2	207.3	146.0	102.9	135.2	168.2	137.9	123.1
87.5°	31.0	40.4	43.8	65.9	90.1	60.6	39.7	39.1	55.1	41.0	34.3
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°	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8	1858.8
2.5°	1872.3	1868.9	1855.5	1837.2	1818.5	1800.2	1794.2	1781.4	1772.6	1767.9	1773.4
5°	1909.9	1899.1	1867.5	1827.2	1784.8	1739.0	1706.7	1677.1	1655.6	1635.4	1643.5
7.5°	1963.7	1944.9	1890.4	1819.8	1744.4	1668.4	1611.9	1568.9	1539.9	1521.1	1525.1
10°	2026.3	1997.4	1914.0	1808.3	1692.0	1583.0	1516.4	1479.4	1461.2	1451.1	1453.8
12.5°	2098.3	2057.3	1938.2	1782.1	1611.9	1487.5	1441.7	1430.9	1431.6	1432.2	1433.6
15°	2187.0	2130.0	1957.6	1724.9	1507.6	1414.1	1406.0	1423.5	1441.7	1450.5	1449.8
17.5°	2287.3	2206.6	1961.0	1630.8	1405.4	1367.0	1392.6	1430.3	1457.9	1470.0	1472.6
20°	2394.9	2284.6	1936.8	1497.5	1321.2	1328.7	1374.4	1422.8	1453.1	1468.6	1472.6
22.5°	2518.1	2368.1	1878.9	1357.6	1252.7	1287.0	1340.8	1387.8	1419.5	1435.0	1439.0
25°	2658.6	2461.5	1788.1	1239.8	1193.4	1239.8	1293.7	1332.7	1358.2	1372.4	1376.5
27.5°	2814.8	2559.1	1667.1	1146.4	1141.6	1191.5	1235.8	1266.1	1279.5	1290.3	1294.4
30°	2971.5	2647.9	1520.4	1075.7	1096.5	1143.7	1175.3	1188.7	1192.8	1194.7	1199.5
32.5°	3141.0	2724.7	1366.3	1017.2	1053.5	1097.3	1116.1	1122.2	1103.3	1090.5	1094.6
35°	3346.2	2806.7	1215.6	970.8	1011.2	1048.8	1054.8	1049.5	1027.3	1001.0	1002.3
37.5°	3599.8	2909.0	1095.2	937.8	971.4	996.3	988.9	987.6	989.6	958.7	960.6
40°	3910.7	3042.1	1007.1	912.2	939.1	944.5	923.6	935.1	945.2	898.1	899.4
42.5°	4255.8	3202.9	951.3	894.7	912.2	899.4	867.2	880.0	878.6	816.7	816.0
45°	4607.6	3377.9	931.7	882.0	887.3	861.8	826.2	829.5	801.2	745.4	747.4
47.5°	4957.4	3565.6	943.8	871.2	856.4	827.5	799.9	785.0	743.3	701.7	701.7
50°	5300.6	3762.7	988.3	849.6	814.1	797.2	777.1	750.8	706.4	670.8	668.0
52.5°	5618.7	3961.1	1038.0	814.1	760.9	771.0	758.2	728.0	684.2	647.8	648.5
55°	5920.1	4159.6	1057.6	765.0	711.0	748.0	740.7	684.8	632.4	602.8	600.0
57.5°	6248.4	4398.4	1036.1	702.3	670.8	721.8	693.6	631.7	601.5	579.2	577.2
60°	6703.2	4773.1	989.6	624.9	632.4	682.9	634.4	608.8	575.8	550.9	549.6
62.5°	7458.7	5472.1	914.9	548.3	587.3	624.9	606.2	580.6	546.9	522.8	522.8
65°	8575.5	6443.6	774.3	488.4	536.9	568.5	575.8	550.3	515.4	489.7	491.1
67.5°	9517.3	7053.0	586.0	438.6	485.0	522.8	543.6	518.6	481.6	456.8	457.5
70°	9465.5	6610.3	447.4	389.5	439.3	477.6	504.6	485.0	445.4	421.8	423.8
72.5°	8407.3	5530.0	361.9	339.7	392.9	430.6	462.9	448.0	407.6	384.8	384.8
75°	6176.4	3925.4	289.3	289.3	335.1	381.4	417.1	407.6	370.6	354.5	349.8
77.5°	2603.5	1646.9	226.7	240.2	278.5	327.6	372.1	375.4	343.1	363.3	329.6
80°	692.3	454.1	172.9	189.0	218.6	270.4	323.6	322.3	287.3	268.4	249.6
82.5°	263.7	179.0	123.1	133.2	158.1	207.3	256.4	264.3	229.4	198.4	198.4
85°	101.6	76.7	76.1	80.1	92.1	137.2	193.7	200.5	172.9	146.7	151.4
87.5°	26.2	22.9	28.3	27.0	42.3	73.3	111.0	115.0	105.6	61.2	87.4
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)