

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: P962588

Luminaire Tested: **NAV-SB2C-827-U-T2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P962588
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-SB2C-827-U-T2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(2) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13226.6 lumens
Efficiency: N/A
Efficacy: 131.1 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

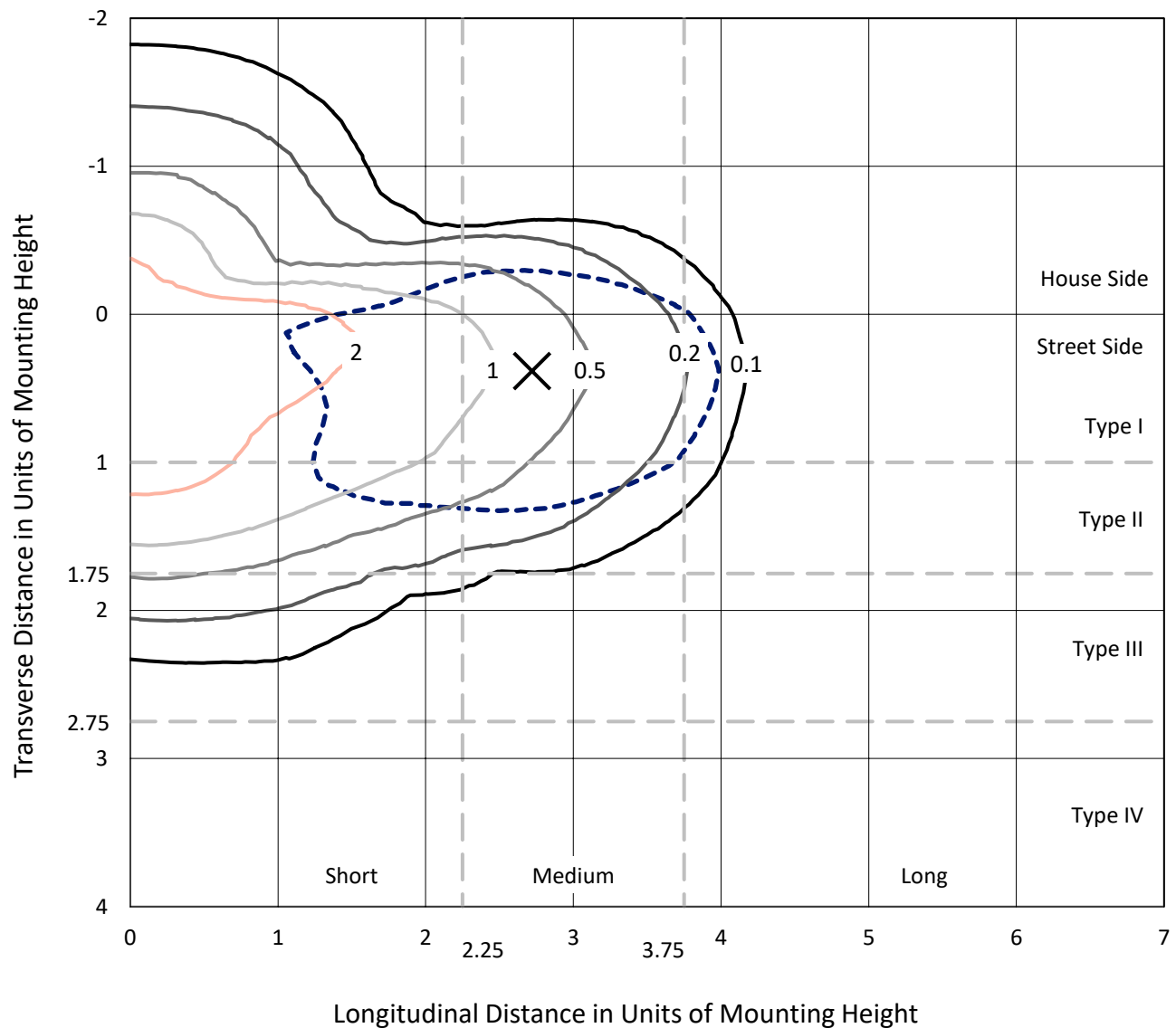
Input Watts (W): 100.9
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

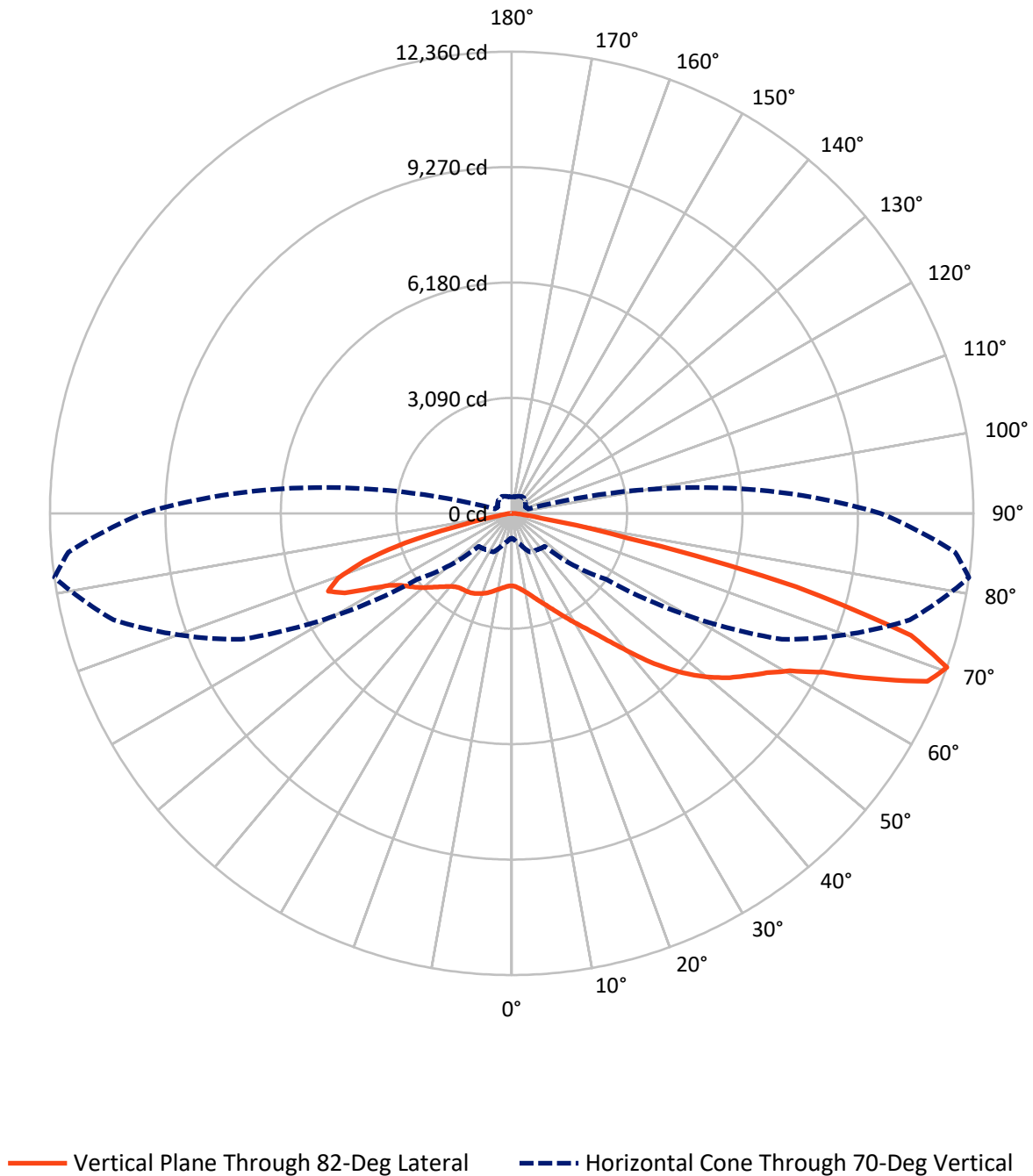
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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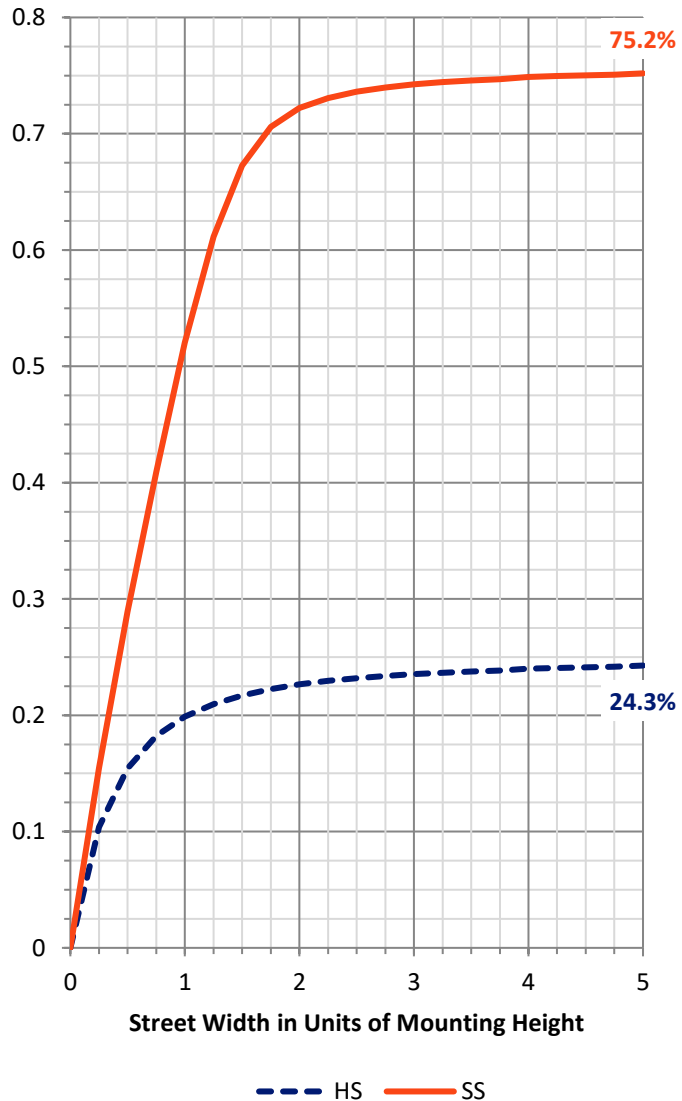
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3260.7	0.0	3260.7
	% Fixture	24.7	0.0	24.7
Street Side	Lumens	9965.9	0.0	9965.9
	% Fixture	75.3	0.0	75.3
Total	Lumens	13226.6	0.0	13226.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	183.1	1.4
10°-20°	526.0	4.0
20°-30°	880.0	6.7
30°-40°	1374.8	10.4
40°-50°	2189.5	16.6
50°-60°	3047.0	23.0
60°-70°	3187.3	24.1
70°-80°	1665.9	12.6
80°-90°	173.0	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°	13226.6	100.0
0°-180°	13226.6	100.0

Coefficient of Utilization



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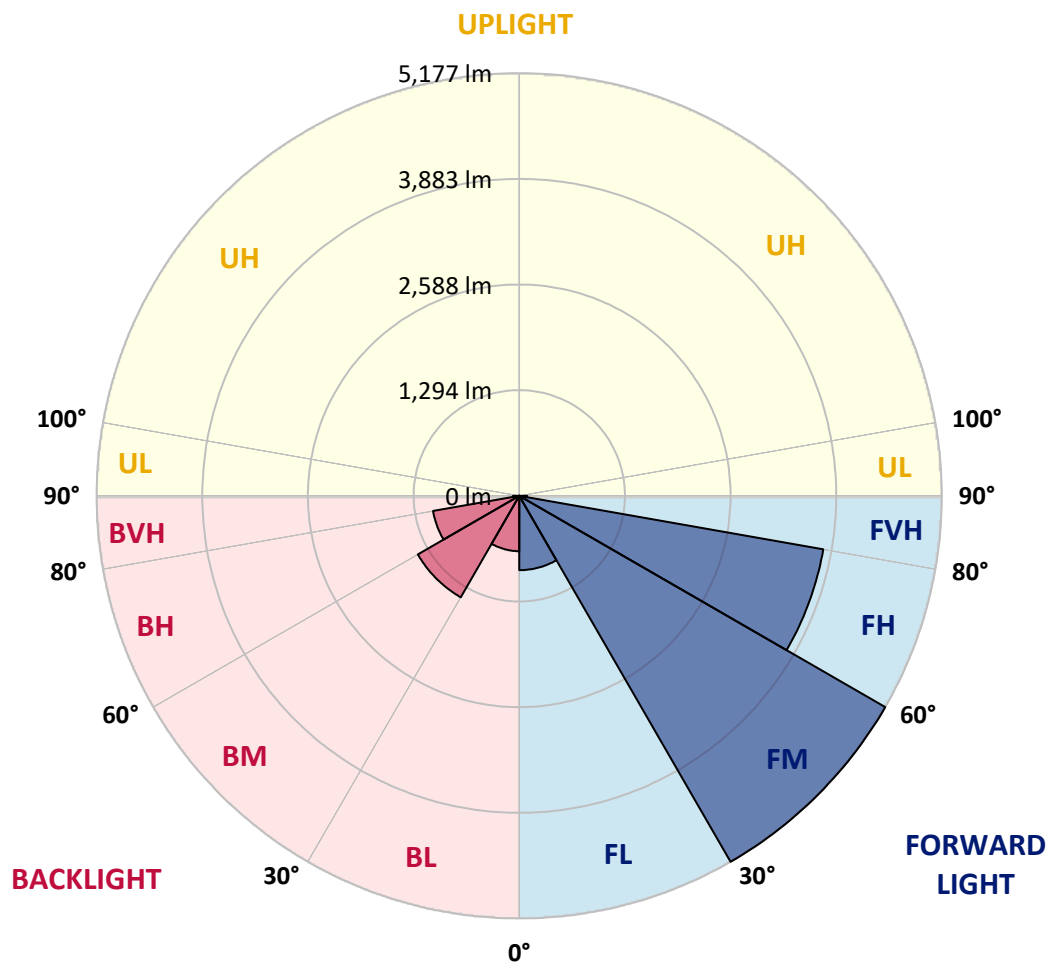
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	910.8	6.9			
FM	(30°-60°)	5176.8	39.1			
FH	(60°-80°)	3781.5	28.6			G2/5000
FVH	(80°-90°)	96.8	0.7			G1/100
BL	(0°-30°)	678.3	5.1	B2/1000		
BM	(30°-60°)	1434.6	10.8	B2/2500		
BH	(60°-80°)	1071.6	8.1	B3/2500		G3/2500
BVH	(80°-90°)	76.1	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°	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2
2.5°	1985.5	1996.7	1993.2	1989.7	1989.7	1984.8	1984.1	1977.1	1971.5	1962.4	1960.2
5°	2010.7	2022.7	2021.3	2024.1	2033.2	2035.3	2037.4	2033.2	2022.0	2010.7	2005.8
7.5°	1988.3	2001.6	2005.8	2022.7	2050.8	2076.0	2095.0	2102.7	2092.2	2076.0	2068.3
10°	1912.5	1927.2	1942.0	1982.0	2031.9	2091.5	2142.0	2172.2	2170.1	2154.7	2141.3
12.5°	1758.8	1774.3	1805.8	1883.7	1975.0	2080.2	2174.3	2237.5	2259.2	2248.0	2224.9
15°	1636.0	1649.3	1673.2	1753.2	1871.9	2031.9	2186.2	2309.0	2364.5	2358.2	2330.1
17.5°	1632.5	1638.1	1652.8	1690.7	1782.0	1956.0	2173.6	2379.2	2485.2	2484.5	2449.4
20°	1694.2	1696.4	1704.8	1712.5	1764.4	1898.5	2141.3	2437.4	2620.7	2620.7	2582.8
22.5°	1779.9	1778.5	1786.9	1779.9	1805.1	1893.6	2120.9	2488.7	2771.6	2782.8	2735.1
25°	1908.3	1901.3	1899.2	1883.0	1887.9	1939.2	2143.4	2547.0	2950.6	2973.7	2914.1
27.5°	2079.5	2068.3	2060.6	2023.5	2010.7	2033.2	2212.2	2617.1	3149.8	3189.9	3114.1
30°	2302.8	2282.4	2271.2	2206.6	2161.0	2164.5	2316.1	2710.5	3358.3	3422.9	3326.7
32.5°	2607.3	2575.7	2545.6	2439.6	2356.1	2328.7	2450.2	2839.7	3584.3	3687.4	3563.9
35°	2948.4	2923.2	2890.9	2727.3	2598.9	2535.7	2631.2	3020.1	3848.9	4012.5	3851.7
37.5°	3276.9	3255.1	3270.6	3050.2	2884.6	2792.6	2868.5	3262.2	4175.2	4416.7	4212.4
40°	3616.6	3599.7	3601.8	3391.3	3198.3	3095.1	3156.2	3566.1	4549.4	4897.4	4646.2
42.5°	3985.7	3973.1	3931.0	3744.3	3527.4	3431.3	3487.5	3916.9	4950.8	5444.9	5122.0
45°	4399.1	4391.4	4352.2	4138.0	3889.6	3781.5	3857.3	4304.4	5354.3	5960.1	5600.0
47.5°	4756.4	4762.7	4757.7	4577.4	4319.9	4161.2	4251.7	4708.6	5729.9	6444.3	6058.3
50°	4928.3	4961.3	5009.7	4953.6	4793.6	4632.2	4649.7	5098.9	6087.8	6898.4	6497.7
52.5°	4838.5	4900.9	5032.9	5122.7	5184.4	5150.8	5103.8	5486.3	6424.6	7308.2	6913.1
55°	4503.7	4591.5	4810.4	5027.3	5342.4	5587.4	5649.1	5915.8	6753.1	7669.0	7306.2
57.5°	3893.8	4036.2	4232.8	4671.4	5202.1	5798.6	6285.0	6511.7	7101.2	8054.3	7717.4
60°	2848.1	3038.9	3283.2	3935.9	4710.8	5685.6	6826.1	7426.8	7596.0	8553.3	8252.9
62.5°	1822.7	1940.6	2165.2	2780.0	3670.6	5106.5	6991.7	8570.8	8434.7	9371.7	9055.9
65°	1247.8	1323.7	1529.3	1874.6	2372.9	3801.2	6548.2	9428.6	9766.8	10668.7	10428.7
67.5°	906.8	964.3	1139.8	1442.3	1546.1	2249.4	5081.3	9389.2	11061.7	12005.0	11631.6
70°	661.1	701.8	849.2	1139.8	1189.6	1251.4	3078.3	7981.4	11033.6	12360.1	11913.1
72.5°	489.8	517.9	616.9	884.4	962.9	845.0	1523.7	5800.7	9481.1	11179.6	10820.9
75°	354.4	375.5	448.4	676.6	770.6	643.6	760.1	3389.9	6613.4	7864.1	7927.2
77.5°	270.9	287.1	334.8	495.5	616.9	482.9	471.6	1559.5	3135.8	3151.3	3328.2
80°	217.6	228.1	254.1	348.8	473.0	361.4	307.4	629.6	991.0	838.7	880.1
82.5°	160.0	177.5	214.7	245.0	338.2	249.2	187.4	318.0	376.9	324.2	327.1
85°	91.2	103.2	129.9	175.5	216.2	152.3	107.4	141.0	175.5	143.9	128.4
87.5°	32.3	42.1	45.6	68.8	94.1	63.1	41.4	40.7	57.5	42.8	35.8
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°	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2	1939.2
2.5°	1953.2	1949.8	1935.7	1916.7	1897.1	1878.1	1871.9	1858.4	1849.3	1844.5	1850.0
5°	1992.5	1981.3	1948.3	1906.2	1862.0	1814.2	1780.5	1749.7	1727.2	1706.2	1714.6
7.5°	2048.7	2029.0	1972.2	1898.5	1819.9	1740.6	1681.6	1636.7	1606.5	1586.9	1591.1
10°	2114.0	2083.7	1996.7	1886.5	1765.2	1651.5	1582.0	1543.3	1524.4	1513.8	1516.7
12.5°	2189.0	2146.2	2022.0	1859.1	1681.6	1551.7	1504.1	1492.8	1493.5	1494.2	1495.6
15°	2281.6	2222.0	2042.3	1799.5	1572.9	1475.3	1466.9	1485.1	1504.1	1513.2	1512.5
17.5°	2386.3	2302.0	2045.9	1701.3	1466.2	1426.2	1452.8	1492.1	1520.9	1533.5	1536.4
20°	2498.5	2383.4	2020.6	1562.3	1378.4	1386.1	1433.9	1484.4	1516.0	1532.1	1536.4
22.5°	2627.0	2470.5	1960.2	1416.3	1306.9	1342.6	1398.8	1447.9	1480.9	1497.0	1501.2
25°	2773.6	2568.0	1865.5	1293.4	1245.1	1293.4	1349.6	1390.3	1417.1	1431.7	1435.9
27.5°	2936.5	2669.8	1739.1	1196.0	1191.0	1242.9	1289.2	1320.8	1334.9	1346.1	1350.3
30°	3100.0	2762.5	1586.2	1122.3	1144.0	1193.1	1226.1	1240.1	1244.4	1246.5	1251.4
32.5°	3276.9	2842.4	1425.5	1061.2	1099.1	1144.7	1164.4	1170.7	1151.0	1137.6	1141.8
35°	3490.9	2928.1	1268.2	1012.8	1054.8	1094.2	1100.4	1094.9	1071.7	1044.4	1045.7
37.5°	3755.5	3034.7	1142.6	978.4	1013.4	1039.5	1031.7	1030.3	1032.4	1000.1	1002.2
40°	4079.8	3173.7	1050.6	951.7	979.8	985.4	963.6	975.6	986.0	937.0	938.4
42.5°	4439.9	3341.5	992.4	933.5	951.7	938.4	904.7	918.0	916.6	852.1	851.4
45°	4806.9	3524.0	972.0	920.1	925.7	899.0	861.8	865.4	835.9	777.7	779.7
47.5°	5171.8	3719.7	984.7	908.9	893.5	863.3	834.5	819.1	775.5	732.1	732.1
50°	5529.8	3925.4	1031.0	886.4	849.2	831.7	810.7	783.3	737.0	699.8	696.9
52.5°	5861.8	4132.4	1082.9	849.2	793.8	804.3	791.0	759.4	713.8	675.9	676.6
55°	6176.2	4339.4	1103.3	798.0	741.9	780.4	772.7	714.4	659.7	628.8	626.1
57.5°	6518.7	4588.6	1080.9	732.8	699.8	753.1	723.5	659.1	627.4	604.2	602.2
60°	6993.2	4979.6	1032.4	652.0	659.7	712.4	661.8	635.2	600.8	574.8	573.4
62.5°	7781.3	5708.7	954.5	571.9	612.7	652.0	632.3	605.7	570.6	545.3	545.3
65°	8946.4	6722.3	807.8	509.5	560.1	593.1	600.8	574.1	537.6	511.0	512.3
67.5°	9929.0	7358.1	611.3	457.6	506.0	545.3	567.1	541.1	502.6	476.5	477.2
70°	9874.8	6896.3	466.7	406.4	458.3	498.4	526.3	506.0	464.6	440.0	442.2
72.5°	8770.9	5769.1	377.6	354.4	409.9	449.2	482.9	467.4	425.3	401.5	401.5
75°	6443.6	4095.3	301.8	301.8	349.5	397.9	435.1	425.3	386.7	369.8	365.0
77.5°	2716.1	1718.1	236.6	250.5	290.6	341.8	388.2	391.7	357.9	379.0	343.9
80°	722.2	473.8	180.4	197.2	228.1	282.2	337.6	336.2	299.7	280.0	260.3
82.5°	275.1	186.7	128.4	139.0	164.9	216.2	267.4	275.8	239.3	207.0	207.0
85°	106.0	80.1	79.3	83.5	96.1	143.2	202.1	209.1	180.4	153.0	158.0
87.5°	27.4	23.9	29.5	28.1	44.2	76.5	115.8	120.0	110.2	63.9	91.2
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)