

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: P968277

Luminaire Tested: **NAV-SB5B-740-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968277
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-10)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-740-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II SPILL
LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30659.8 lumens
Efficiency: N/A
Efficacy: 167.8 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 182.7
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

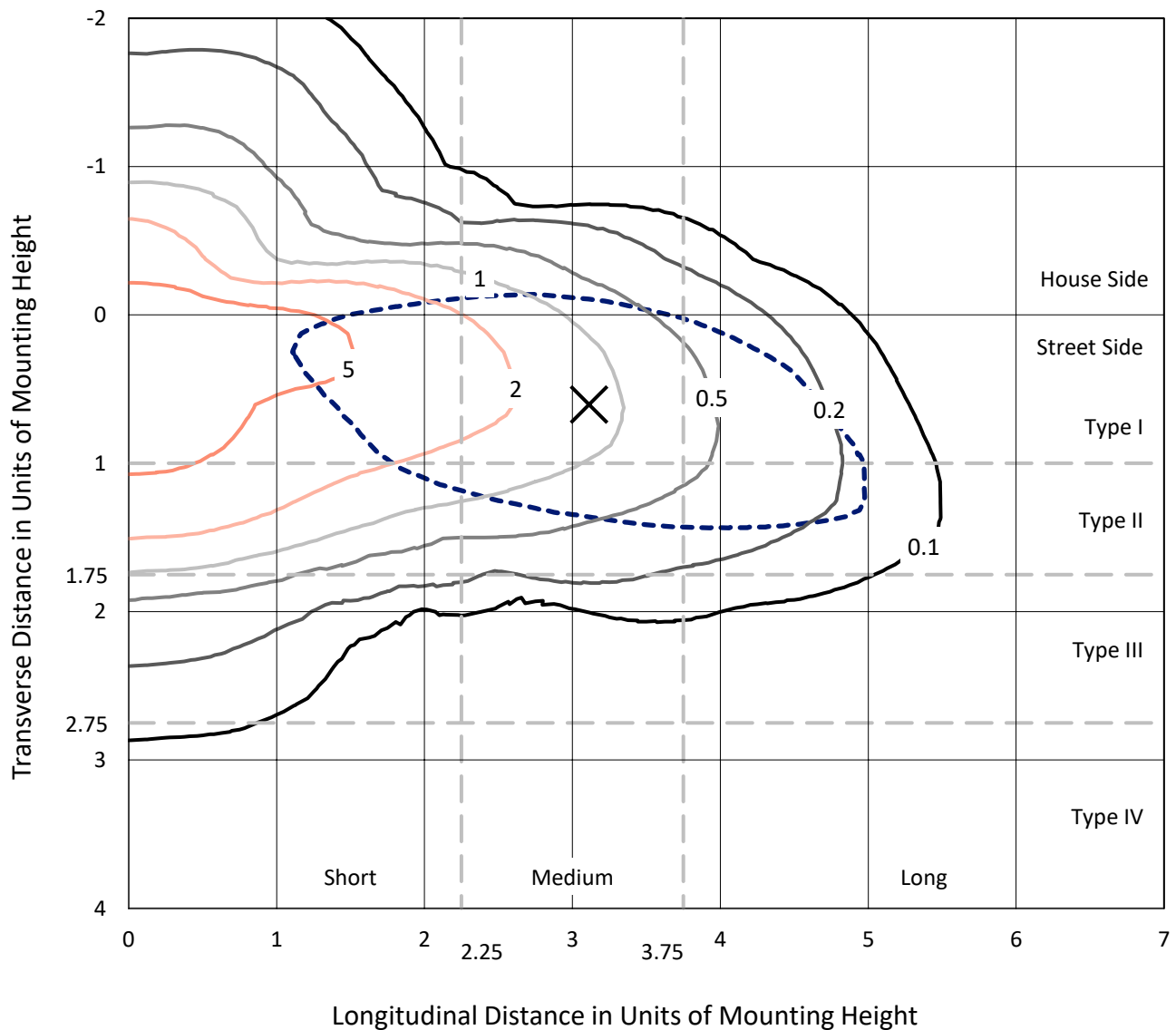


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Iso-Footcandle Lines of Horizontal Illumination

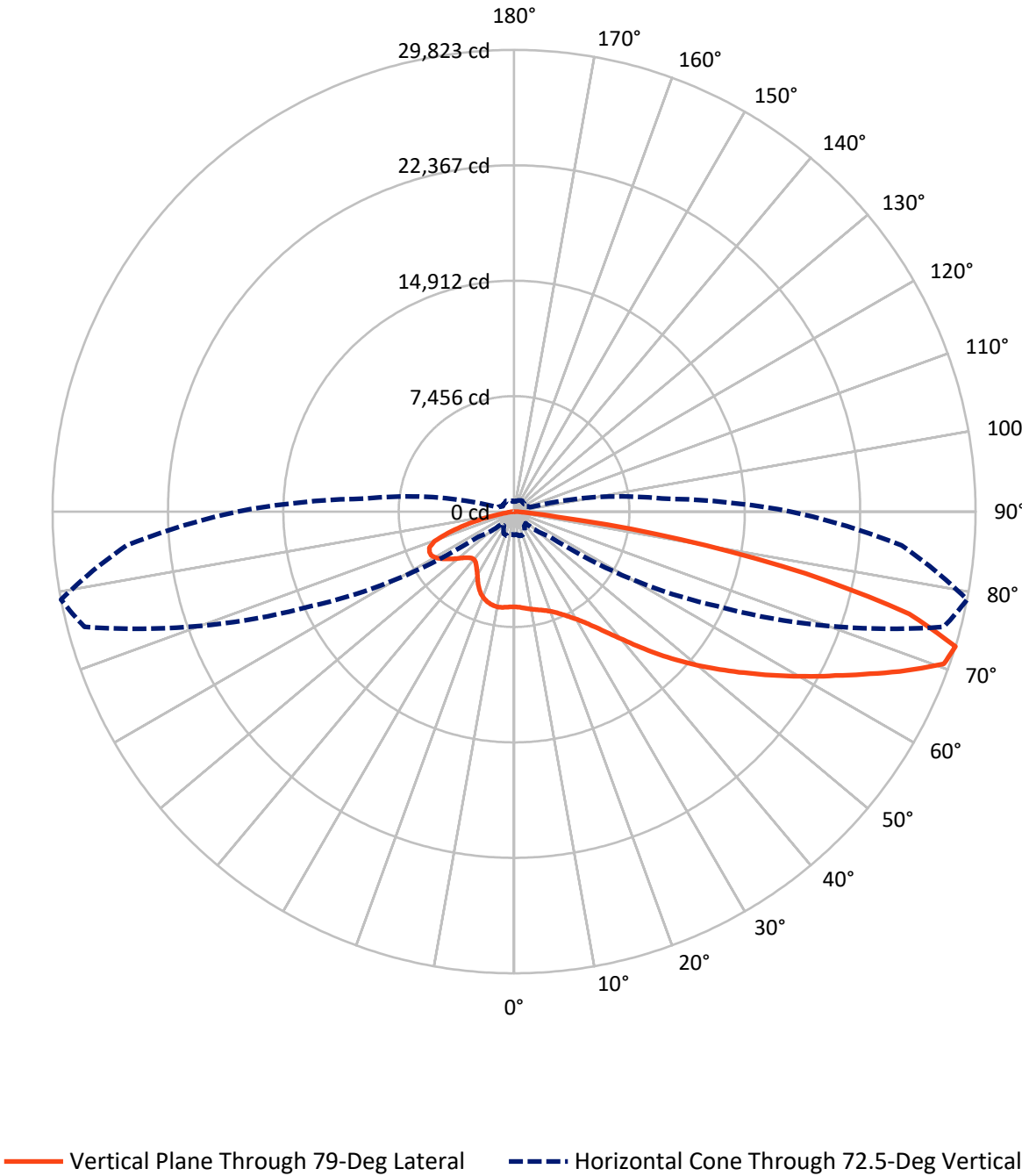
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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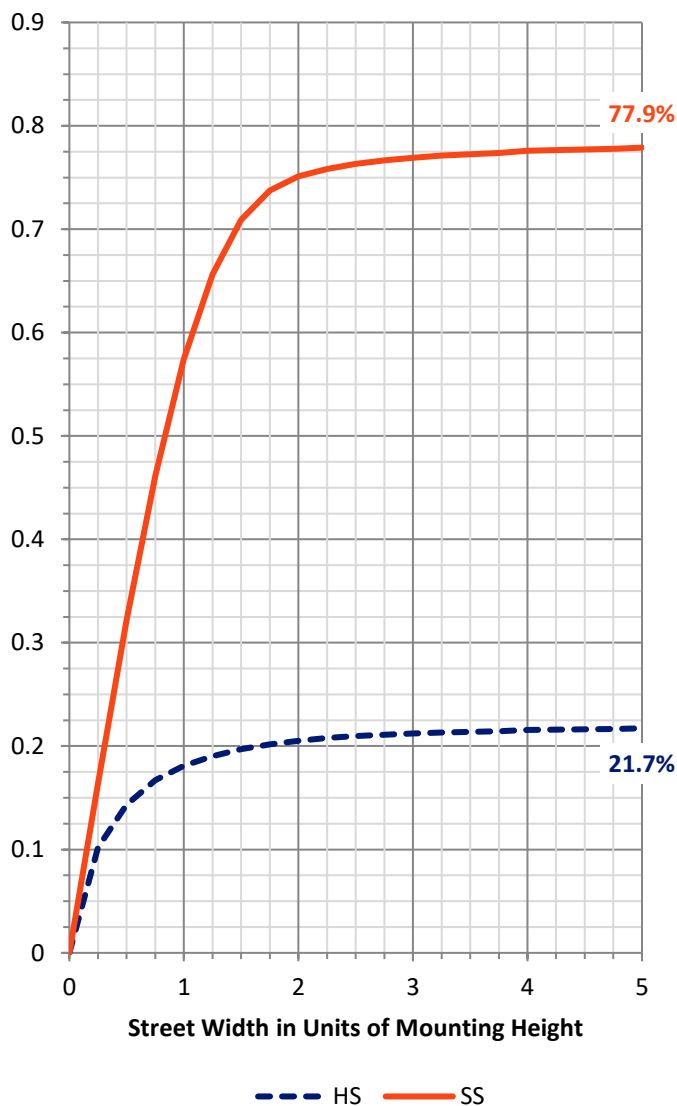
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6746.8	0.0	6746.8
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	23913.0	0.0	23913.0
	% Fixture	78.0	0.0	78.0
Total	Lumens	30659.8	0.0	30659.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	558.7	1.8
10°-20°	1460.6	4.8
20°-30°	2356.9	7.7
30°-40°	3537.3	11.5
40°-50°	5017.9	16.4
50°-60°	6336.9	20.7
60°-70°	6436.0	21.0
70°-80°	4386.4	14.3
80°-90°	569.1	1.9
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°	30659.8	100.0
0°-180°	30659.8	100.0

Coefficient of Utilization



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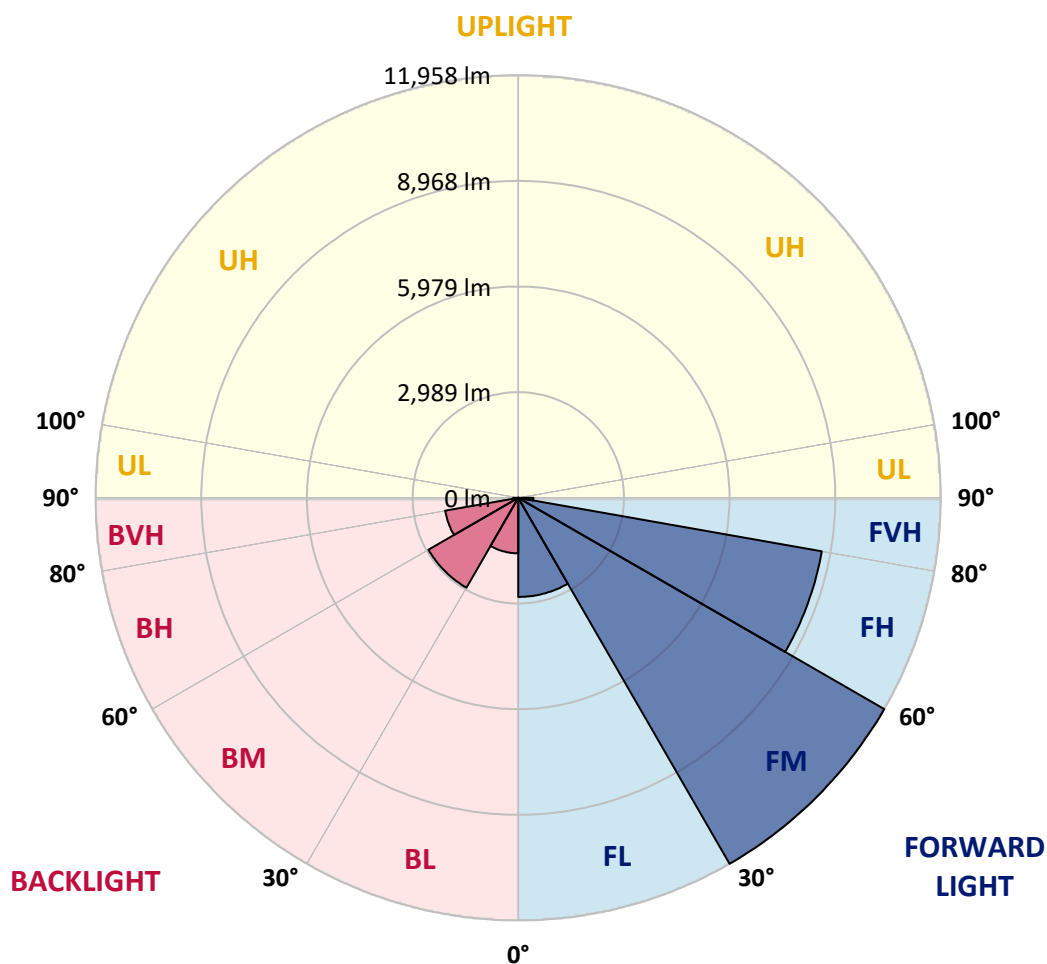
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2804.6	9.1			
FM	(30°-60°)	11957.9	39.0			
FH	(60°-80°)	8721.7	28.4			G4/12000
FVH	(80°-90°)	428.7	1.4			G3/500
BL	(0°-30°)	1571.5	5.1	B3/2500		
BM	(30°-60°)	2934.2	9.6	B3/5000		
BH	(60°-80°)	2100.7	6.9	B3/2500		G3/2500
BVH	(80°-90°)	140.4	0.5			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6
2.5°	6157.9	6128.7	6146.5	6140.1	6148.2	6157.9	6161.2	6166.0	6182.2	6180.6	6179.0
5°	6145.0	6115.8	6140.1	6132.0	6153.1	6175.7	6195.2	6213.0	6239.0	6250.3	6234.2
7.5°	6117.4	6097.9	6122.2	6146.5	6185.5	6219.5	6247.1	6287.7	6325.0	6331.4	6342.8
10°	5956.8	5942.2	5999.0	6062.3	6169.3	6261.7	6321.7	6368.7	6409.3	6415.8	6432.0
12.5°	5789.7	5771.9	5835.2	5921.1	6094.6	6261.7	6388.2	6449.8	6485.5	6506.6	6530.9
15°	5762.2	5747.6	5783.3	5857.9	6002.2	6218.0	6433.6	6547.1	6577.9	6602.2	6612.0
17.5°	5895.2	5867.6	5882.2	5908.2	5992.5	6177.4	6469.3	6657.4	6704.4	6730.4	6730.4
20°	6203.3	6164.3	6141.7	6089.8	6075.2	6183.8	6466.0	6790.4	6852.0	6884.5	6892.6
22.5°	6613.6	6587.7	6539.0	6407.7	6264.9	6263.4	6527.7	6960.7	7075.9	7106.6	7087.2
25°	7109.9	7071.0	7009.4	6830.9	6556.8	6420.6	6631.4	7178.0	7371.0	7379.1	7322.4
27.5°	7680.7	7622.4	7538.1	7302.9	6933.1	6667.1	6790.4	7427.8	7709.9	7706.7	7589.9
30°	8282.4	8224.1	8134.8	7849.4	7384.0	6999.6	7011.0	7696.9	8112.2	8094.3	7894.9
32.5°	8721.9	8678.2	8660.3	8439.7	7903.0	7392.1	7264.0	7995.4	8608.5	8592.2	8313.3
35°	9059.3	9002.5	9023.6	8911.7	8469.0	7831.6	7573.7	8350.6	9211.7	9210.1	8863.1
37.5°	9393.4	9343.1	9360.9	9286.3	8992.7	8389.5	7951.6	8785.2	9959.4	9995.1	9528.0
40°	9698.2	9644.7	9716.1	9646.4	9399.9	8983.1	8381.3	9276.6	10825.4	10893.5	10332.4
42.5°	9881.5	9839.4	9957.8	9959.4	9753.4	9484.2	8853.3	9818.3	11827.7	11980.1	11321.6
45°	9944.8	9930.2	10108.6	10145.9	10066.4	9774.5	9278.2	10408.6	12907.7	13180.3	12448.8
47.5°	9876.7	9849.1	10095.6	10233.4	10296.7	9910.7	9630.2	11047.6	14010.6	14409.6	13678.1
50°	9532.8	9479.3	9845.8	10136.1	10361.5	9999.9	9985.3	11785.4	15264.2	15700.4	14914.0
52.5°	8914.9	8874.3	9291.2	9795.5	10218.8	10043.7	10384.3	12591.5	16454.6	17019.0	16180.5
55°	8125.2	8071.6	8530.6	9189.0	9863.7	10029.1	10783.2	13493.2	17859.1	18431.6	17489.3
57.5°	6873.1	6766.0	7346.7	8125.2	9284.7	10011.3	11198.4	14390.1	19286.2	19972.2	18885.6
60°	5047.0	4888.0	5600.0	6522.8	8152.7	9837.7	11712.5	15395.6	20998.9	21616.7	20410.1
62.5°	2938.7	2846.2	3311.7	4172.9	6145.0	8816.0	12001.2	16564.9	22682.2	23330.9	21908.7
65°	2281.9	2255.9	2296.4	2362.9	3420.3	6600.7	11110.8	17705.0	24823.0	25277.1	23470.4
67.5°	2087.2	2067.7	2085.6	1960.7	1735.3	3676.6	8790.1	17993.7	27116.2	27391.9	24837.6
70°	1855.4	1832.6	1891.0	1783.9	1365.5	1672.1	5679.5	16946.0	28940.7	29458.1	25877.1
72.5°	1511.5	1485.5	1621.8	1573.2	1149.8	1073.6	2852.7	14456.6	28749.3	29823.0	25132.8
75°	1161.2	1146.6	1308.8	1349.3	937.4	844.9	1368.8	10745.9	25299.8	26381.6	21660.5
77.5°	901.7	890.3	973.0	1120.6	755.7	655.2	841.7	6816.4	19065.7	19255.4	14926.9
80°	676.3	643.8	720.1	867.7	588.7	478.5	570.8	3975.0	12051.4	10924.3	6496.9
82.5°	423.3	407.0	470.3	579.0	415.1	329.2	371.4	2195.9	4829.7	2844.6	1253.7
85°	241.7	235.1	256.2	330.9	225.4	189.7	212.5	969.9	882.2	606.6	377.9
87.5°	97.3	94.1	116.7	147.6	82.7	69.7	74.6	233.5	194.6	180.0	124.8
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°	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6	6154.6
2.5°	6172.5	6172.5	6149.8	6114.1	6073.5	6047.6	6005.5	5994.1	5950.3	5937.3	5958.4
5°	6247.1	6234.2	6164.3	6063.8	5926.0	5799.4	5660.0	5572.4	5449.2	5405.4	5437.8
7.5°	6341.2	6305.5	6185.5	5964.9	5676.2	5392.4	5097.2	4873.5	4659.3	4583.2	4592.9
10°	6427.2	6376.8	6172.5	5786.5	5287.1	4795.6	4325.3	3996.1	3746.3	3644.2	3666.8
12.5°	6513.1	6420.6	6086.6	5489.7	4734.0	4067.4	3566.3	3310.0	3156.0	3032.8	3073.3
15°	6594.1	6464.5	5953.6	5092.4	4127.5	3451.2	3081.4	2877.1	2753.8	2672.7	2687.2
17.5°	6688.2	6501.7	5754.0	4588.0	3550.1	3024.7	2723.0	2599.7	2575.4	2565.7	2572.1
20°	6819.6	6535.8	5491.3	4023.6	3125.2	2684.1	2528.4	2517.0	2515.4	2510.5	2526.7
22.5°	6960.7	6576.3	5144.3	3511.1	2763.5	2471.6	2444.0	2421.4	2406.7	2405.1	2422.9
25°	7127.7	6589.3	4709.7	3091.1	2455.4	2371.0	2338.6	2304.5	2294.9	2294.9	2304.5
27.5°	7289.9	6545.5	4203.6	2726.2	2281.9	2278.6	2236.4	2225.1	2223.4	2228.4	2241.3
30°	7452.1	6462.8	3700.9	2388.9	2181.3	2181.3	2166.7	2174.8	2181.3	2197.5	2208.9
32.5°	7671.0	6375.2	3280.8	2139.2	2093.8	2077.5	2092.1	2108.3	2114.8	2135.9	2153.7
35°	7992.1	6313.6	2946.8	2002.8	2002.8	1981.8	1989.9	1986.7	1972.1	1962.4	1985.0
37.5°	8417.1	6310.3	2671.0	1939.6	1926.7	1923.4	1925.1	1903.9	1847.3	1779.1	1780.7
40°	8928.0	6397.9	2458.7	1895.8	1886.1	1905.6	1895.8	1839.1	1683.5	1565.0	1561.8
42.5°	9613.9	6647.6	2322.3	1842.3	1871.5	1895.8	1856.9	1660.7	1555.3	1475.8	1472.6
45°	10421.6	7053.1	2252.6	1785.6	1844.0	1873.2	1685.0	1599.1	1514.7	1419.0	1412.6
47.5°	11336.3	7564.0	2236.4	1732.0	1782.4	1800.2	1612.0	1573.2	1477.4	1373.6	1365.5
50°	12332.1	8168.9	2280.2	1668.8	1693.1	1631.5	1587.7	1552.1	1453.1	1350.9	1339.6
52.5°	13361.9	8835.5	2367.9	1582.9	1603.9	1535.9	1578.0	1547.1	1438.5	1300.6	1291.0
55°	14373.9	9506.9	2452.1	1482.4	1513.1	1449.9	1550.4	1527.8	1372.1	1216.4	1208.3
57.5°	15402.1	10175.1	2534.8	1393.1	1425.6	1367.1	1506.6	1475.8	1297.4	1138.5	1135.3
60°	16470.8	10823.8	2573.8	1307.2	1329.8	1291.0	1440.1	1386.6	1213.1	1059.0	1054.1
62.5°	17471.4	11363.9	2510.5	1221.2	1235.8	1219.5	1352.6	1281.2	1128.7	969.9	968.2
65°	18475.3	11684.9	2315.9	1136.8	1140.1	1132.0	1229.3	1167.7	1029.8	892.0	882.2
67.5°	19385.2	11865.0	2006.1	1046.0	1037.9	1034.7	1114.2	1044.5	934.2	814.2	804.4
70°	19578.1	11407.6	1532.6	939.0	939.0	930.9	987.7	916.4	828.7	731.4	728.2
72.5°	17881.7	9596.0	1088.2	817.3	830.4	814.2	861.2	801.1	721.7	656.8	637.3
75°	14419.3	7036.9	791.4	692.5	715.2	687.7	731.4	689.2	621.2	619.5	557.9
77.5°	9907.4	4351.2	574.1	570.8	587.1	551.4	601.7	579.0	517.3	489.7	459.0
80°	4228.0	1735.3	418.4	441.2	441.2	408.7	467.1	473.6	420.0	407.0	407.0
82.5°	841.7	493.0	293.6	303.3	285.5	275.7	330.9	366.5	506.0	562.7	564.4
85°	253.0	181.6	176.8	165.4	146.0	147.6	194.6	368.2	454.1	259.5	223.8
87.5°	69.7	45.4	47.0	37.3	30.9	40.6	66.5	278.9	152.4	64.9	55.1
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)