

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: P968248

Luminaire Tested: **NAV-SB5B-735-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968248
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-SB5B-735-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 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: 28495 lumens
Efficiency: N/A
Efficacy: 156.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G5

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



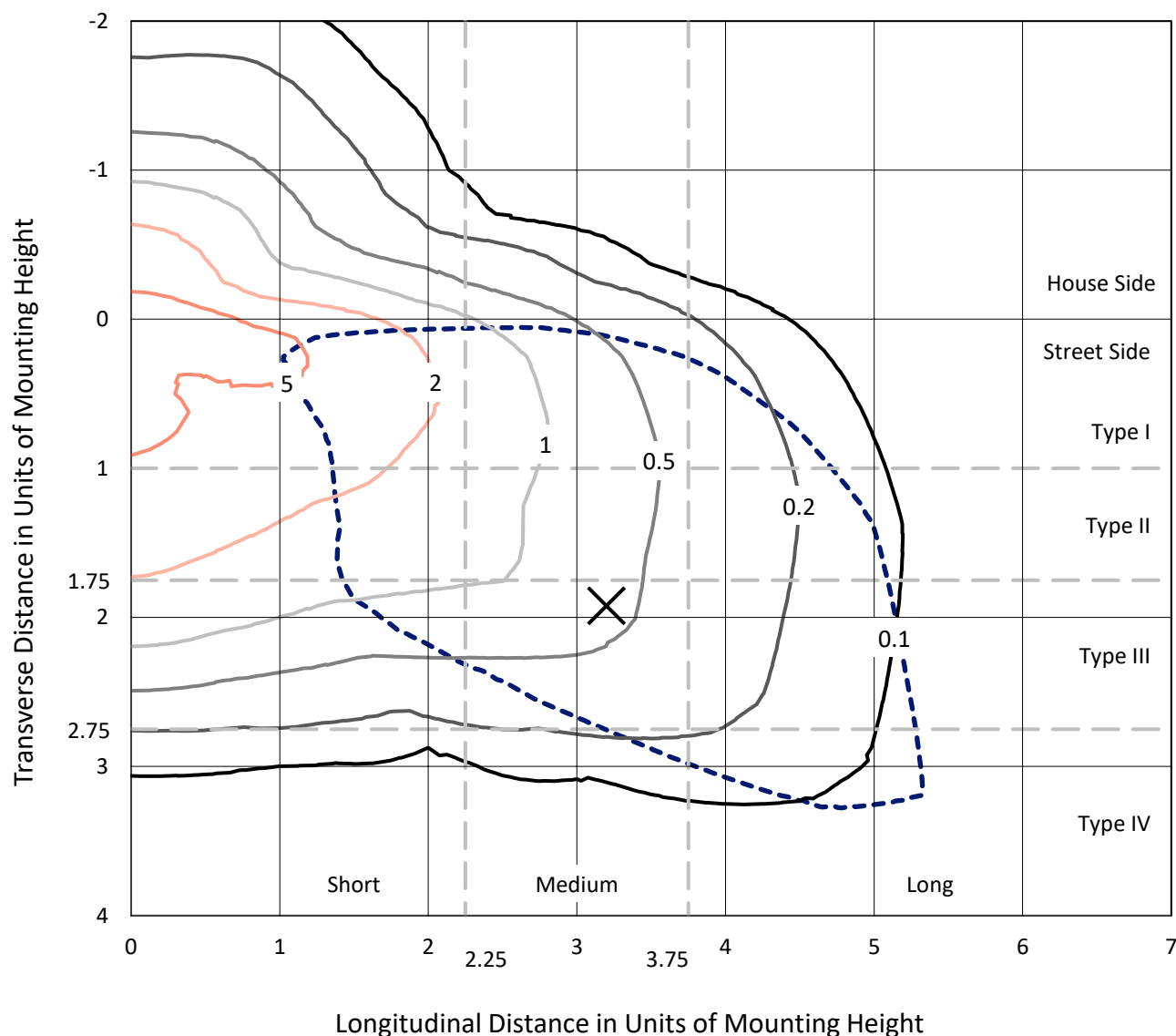
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

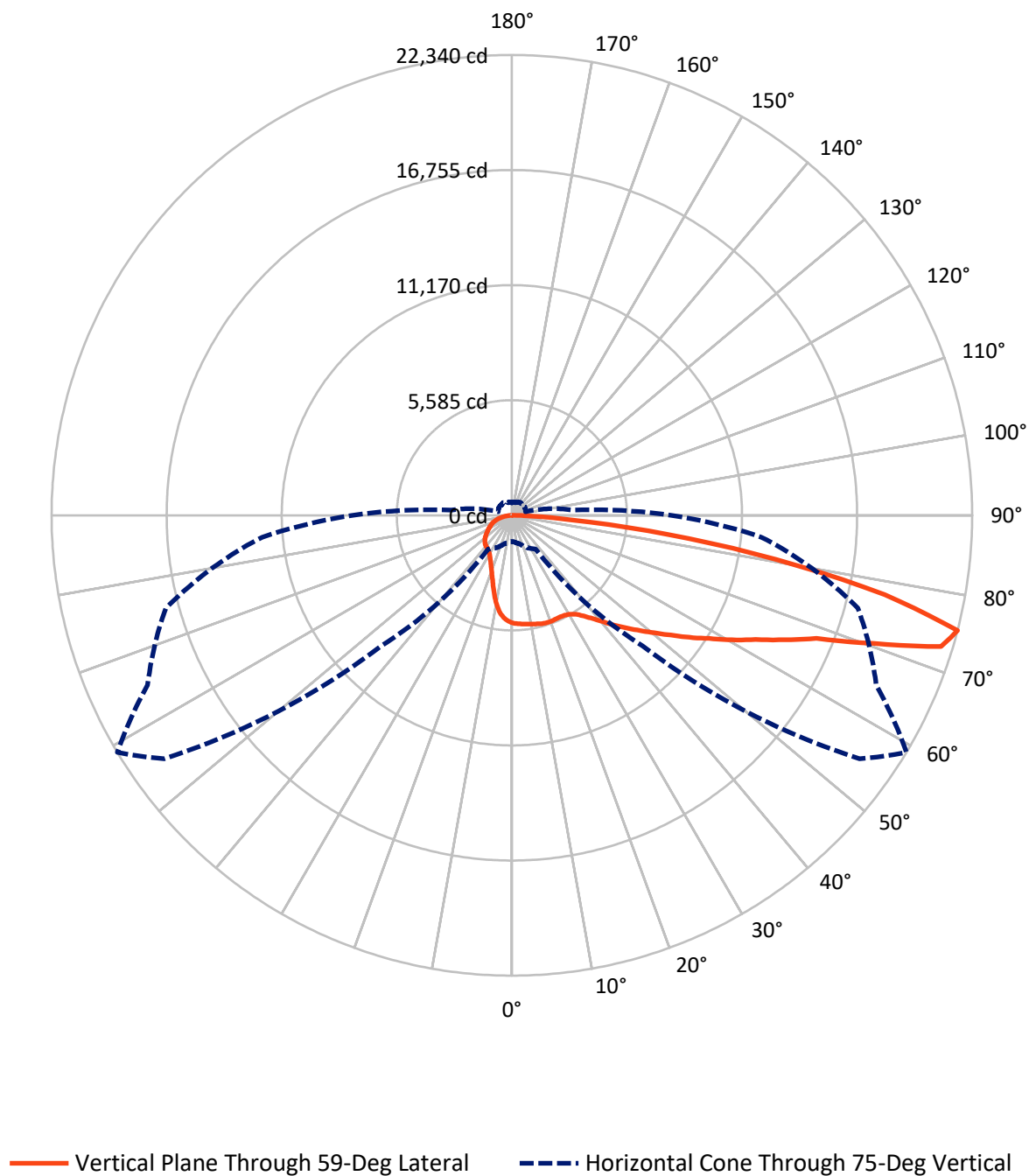
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.4 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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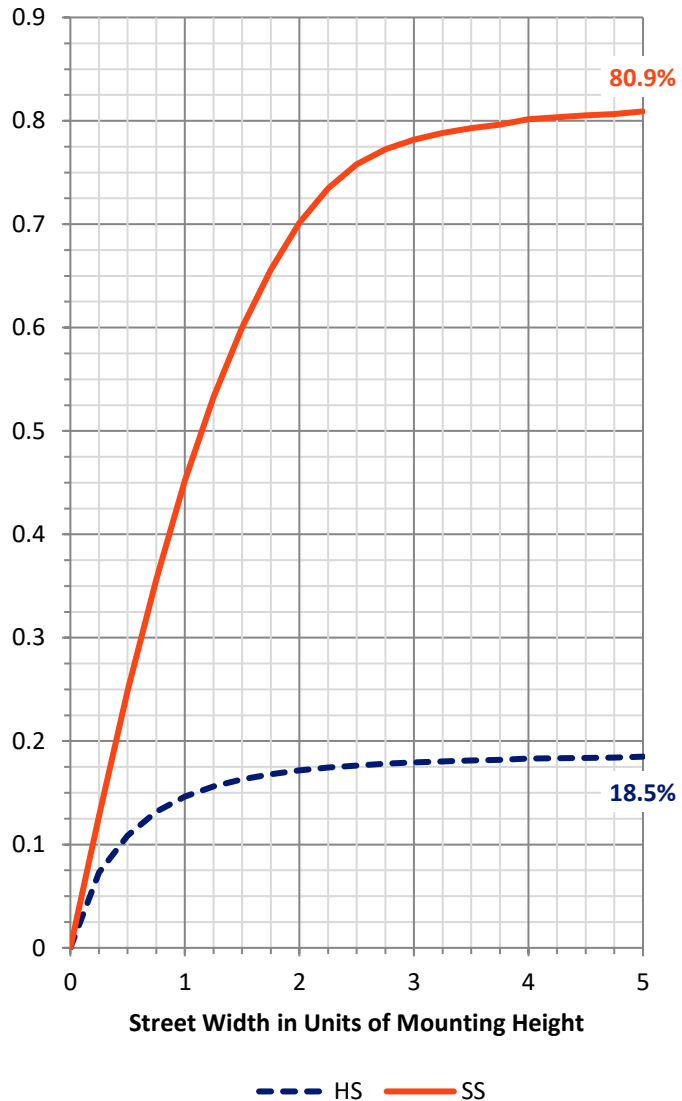
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5344.4	0.0	5344.4
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	23150.6	0.0	23150.6
	% Fixture	81.2	0.0	81.2
Total	Lumens	28495.0	0.0	28495.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	469.0	1.6
10°-20°	1198.7	4.2
20°-30°	1820.8	6.4
30°-40°	2706.5	9.5
40°-50°	4025.1	14.1
50°-60°	5463.5	19.2
60°-70°	6670.1	23.4
70°-80°	5234.6	18.4
80°-90°	906.8	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°	28495.0	100.0
0°-180°	28495.0	100.0

Coefficient of Utilization



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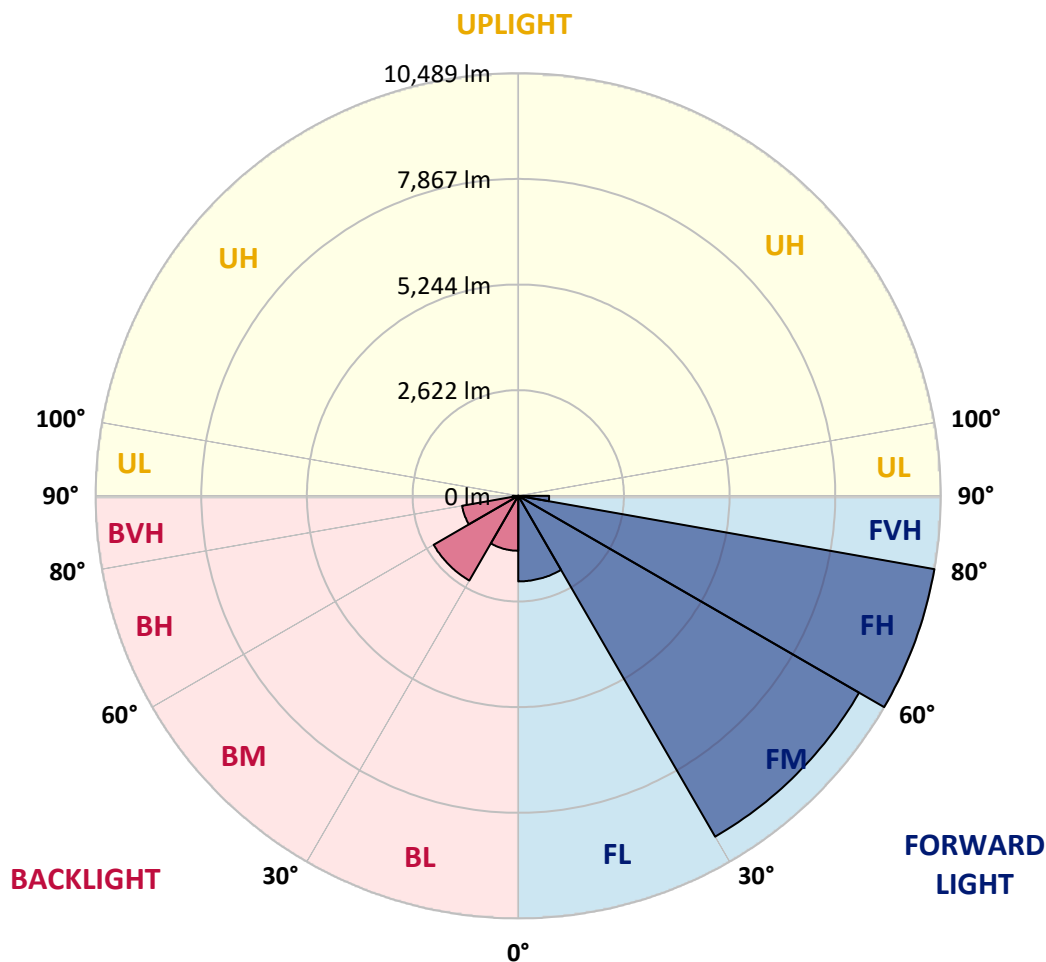
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2124.6	7.5			
FM	(30°-60°)	9769.3	34.3			
FH	(60°-80°)	10488.7	36.8			G4/12000
FVH	(80°-90°)	768.0	2.7			G5
BL	(0°-30°)	1363.8	4.8	B3/2500		
BM	(30°-60°)	2425.8	8.5	B2/2500		
BH	(60°-80°)	1415.9	5.0	B3/2500		G3/2500
BVH	(80°-90°)	138.8	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-G5

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2
2.5°	5274.6	5256.3	5274.6	5267.0	5263.9	5257.7	5259.3	5270.0	5263.9	5271.6	5245.5
5°	5239.4	5228.6	5247.1	5242.5	5262.3	5265.4	5285.4	5297.6	5305.3	5306.8	5287.0
7.5°	5181.2	5170.4	5196.4	5218.0	5260.8	5273.1	5314.5	5334.4	5345.2	5363.5	5334.4
10°	4968.1	4963.5	5027.8	5109.1	5210.3	5273.1	5335.9	5369.7	5386.6	5435.6	5401.9
12.5°	4591.0	4597.1	4681.4	4837.8	5040.1	5242.5	5360.4	5409.5	5435.6	5496.9	5481.6
15°	4230.8	4229.3	4321.2	4488.3	4771.9	5107.6	5372.7	5457.1	5501.5	5592.0	5579.7
17.5°	4022.3	4016.2	4080.5	4207.7	4471.5	4900.6	5342.1	5483.1	5578.2	5691.6	5680.9
20°	3984.0	3971.7	4005.4	4068.2	4255.3	4673.8	5262.3	5483.1	5639.4	5786.6	5780.5
22.5°	4123.5	4103.5	4089.7	4082.1	4164.9	4486.7	5171.9	5464.7	5730.0	5923.1	5912.3
25°	4404.0	4373.3	4302.8	4233.9	4209.3	4402.5	5092.2	5460.2	5864.8	6107.1	6067.2
27.5°	4857.7	4819.3	4676.9	4511.2	4362.6	4445.3	5056.9	5487.7	6013.5	6301.7	6222.0
30°	5420.3	5378.9	5199.5	4945.1	4678.3	4604.8	5101.4	5568.9	6203.6	6560.7	6404.4
32.5°	5924.6	5878.6	5725.3	5466.2	5106.0	4880.7	5242.5	5723.8	6502.5	6921.0	6678.8
35°	6372.2	6318.5	6180.5	5941.4	5630.3	5268.5	5496.9	5998.2	6927.1	7506.5	7051.3
37.5°	6810.6	6747.8	6597.5	6344.6	6126.9	5785.1	5847.9	6350.7	7491.2	8217.7	7544.8
40°	7301.1	7210.7	7028.2	6778.4	6566.9	6390.6	6309.4	6783.0	8064.5	9011.8	8161.0
42.5°	7776.3	7690.5	7472.8	7259.8	6994.5	6944.0	6844.3	7288.9	8691.5	9884.1	8786.5
45°	8288.3	8185.5	7921.9	7652.1	7485.1	7311.8	7362.5	7794.7	9306.1	10773.1	9442.5
47.5°	8768.1	8653.2	8342.0	8041.5	7949.5	7621.5	7837.7	8351.2	9945.4	11674.4	10092.5
50°	9027.2	8913.7	8654.7	8383.4	8311.3	8003.2	8352.7	8962.8	10615.2	12572.6	10716.4
52.5°	9243.2	9120.7	8781.9	8631.6	8610.2	8418.6	8987.3	9661.8	11285.0	13366.7	11318.8
55°	9473.3	9336.8	8904.5	8769.6	8867.7	8884.6	9740.0	10454.3	11993.3	14140.8	11887.5
57.5°	9738.4	9565.2	9022.6	8886.1	9119.1	9430.3	10604.4	11275.9	12689.2	14858.2	12393.4
60°	9988.2	9813.6	9249.4	9071.6	9390.4	10063.3	11596.2	12270.7	13477.1	15497.5	12871.6
62.5°	10037.3	9893.2	9430.3	9428.8	9758.3	10802.3	12770.5	13274.8	14165.4	16129.0	13300.8
65°	9188.1	9097.7	8823.3	9414.9	10285.7	11866.0	14078.0	14559.3	15040.6	16680.8	13677.9
67.5°	6993.0	7005.3	6985.4	8127.3	9859.5	13394.3	15971.1	15934.3	16121.3	17300.2	14111.7
70°	3197.6	3269.6	3738.7	5610.3	7899.0	13570.6	19101.3	18624.6	17477.9	18101.8	14487.2
72.5°	1727.5	1782.8	1974.4	2717.8	4748.8	12065.3	21440.4	21779.2	19282.1	18641.4	14074.9
75°	1267.7	1298.4	1431.7	1727.5	1994.2	8967.3	20601.9	22340.2	19507.5	17382.9	12154.2
77.5°	948.8	962.7	1071.5	1368.9	1020.9	4727.4	16461.6	18501.9	16699.2	14281.8	8978.1
80°	688.3	703.6	784.8	1027.0	715.9	1729.1	11303.5	12986.5	11436.8	9103.7	4474.4
82.5°	475.2	481.3	516.6	698.9	499.7	671.4	6413.5	7615.3	6384.4	3194.5	1207.9
85°	286.7	294.3	309.7	407.7	283.6	318.9	2768.4	2863.4	1908.4	763.4	375.6
87.5°	118.1	125.7	138.0	171.7	111.9	88.9	456.8	573.3	357.2	223.8	116.5
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°	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2	5230.2
2.5°	5237.9	5227.1	5198.0	5158.1	5121.3	5075.4	5055.4	5038.6	5023.2	4994.1	4980.4
5°	5270.0	5240.9	5162.7	5061.6	4946.6	4820.9	4698.3	4613.9	4542.0	4488.3	4443.8
7.5°	5319.1	5263.9	5121.3	4914.5	4650.7	4381.0	4137.2	3964.0	3833.7	3786.2	3703.4
10°	5369.7	5303.8	5055.4	4690.6	4235.4	3820.0	3496.5	3318.6	3214.5	3180.8	3128.6
12.5°	5429.4	5332.9	4952.7	4379.4	3770.9	3315.7	3033.6	2929.3	2875.6	2857.3	2861.9
15°	5516.9	5357.5	4797.9	3990.1	3327.9	2947.7	2765.3	2693.3	2665.7	2664.2	2670.3
17.5°	5582.8	5362.0	4557.3	3573.2	2987.6	2725.5	2575.2	2547.6	2566.1	2593.7	2604.3
20°	5656.4	5320.7	4241.4	3193.0	2748.4	2530.8	2467.9	2486.3	2530.8	2570.6	2584.4
22.5°	5708.4	5245.5	3859.8	2897.2	2541.5	2418.9	2415.8	2454.2	2478.7	2498.6	2509.3
25°	5754.5	5118.3	3455.1	2648.8	2371.3	2351.5	2385.2	2372.9	2356.1	2372.9	2383.6
27.5°	5788.2	4917.4	3093.3	2431.2	2251.8	2305.4	2285.5	2258.0	2256.4	2265.6	2280.9
30°	5777.4	4649.2	2796.0	2224.2	2167.5	2219.6	2172.1	2167.5	2162.9	2167.5	2184.4
32.5°	5777.4	4344.2	2567.6	2081.7	2113.9	2093.9	2089.4	2078.6	2060.1	2058.6	2078.6
35°	5809.6	4039.1	2371.3	2005.0	2069.4	2021.9	2024.9	1998.9	1960.5	1942.2	1960.5
37.5°	5875.5	3793.8	2176.7	1968.2	1991.2	1989.7	1977.4	1932.9	1865.5	1807.3	1827.2
40°	6035.0	3721.9	2043.3	1951.4	1954.5	1972.8	1940.6	1854.7	1701.5	1606.5	1618.7
42.5°	6284.8	3842.9	2014.2	1910.0	1929.9	1948.3	1885.5	1686.1	1577.4	1520.6	1520.6
45°	6602.1	4054.5	2077.1	1850.2	1871.6	1903.8	1716.9	1621.8	1572.8	1574.3	1582.0
47.5°	7003.7	4276.7	2193.6	1798.1	1787.3	1805.7	1604.9	1546.7	1479.3	1496.1	1539.0
50°	7468.3	4502.1	2303.9	1727.5	1693.8	1634.1	1532.9	1477.7	1391.8	1352.0	1362.7
52.5°	7971.0	4719.7	2348.4	1641.7	1592.6	1523.7	1483.8	1416.3	1312.1	1246.2	1244.7
55°	8447.7	4917.4	2299.3	1539.0	1491.5	1437.9	1431.7	1390.3	1278.4	1186.4	1186.4
57.5°	8898.3	5083.1	2176.7	1434.8	1388.8	1356.6	1398.0	1378.0	1237.1	1119.0	1112.8
60°	9280.0	5196.4	1998.9	1329.0	1296.8	1279.9	1342.9	1336.7	1178.8	1046.9	1042.3
62.5°	9583.5	5240.9	1802.7	1227.8	1220.2	1189.5	1266.2	1266.2	1105.3	976.4	971.8
65°	9821.1	5198.0	1603.4	1128.2	1143.5	1097.6	1172.7	1163.5	1027.0	913.6	907.4
67.5°	10031.2	5056.9	1382.6	1030.1	1065.4	1007.1	1074.5	1053.1	941.2	850.7	844.6
70°	10124.6	4728.9	1131.3	932.0	974.9	918.2	976.4	936.5	844.6	783.3	771.0
72.5°	9373.6	3930.3	890.6	829.3	866.1	820.1	870.6	824.7	740.4	712.8	689.8
75°	7754.8	2949.2	685.2	717.4	745.0	709.7	743.4	709.7	633.0	653.0	596.2
77.5°	5631.8	1991.2	524.3	599.3	611.6	593.3	622.4	584.0	515.1	510.4	487.5
80°	2800.6	1166.6	410.8	473.7	469.0	456.8	490.6	472.1	413.9	438.4	433.8
82.5°	810.9	499.7	298.9	332.6	323.4	326.5	351.1	360.2	539.6	534.9	547.2
85°	254.5	196.2	179.4	185.5	176.3	180.9	206.9	410.8	380.2	222.2	240.7
87.5°	65.9	67.4	44.5	47.6	49.1	58.2	65.9	249.9	119.5	78.2	82.8
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)