

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: P968246

Luminaire Tested: **NAV-SB5B-735-U-SL2**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968246
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-735-U-SL2
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 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: 28979.8 lumens
Efficiency: N/A
Efficacy: 158.6 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



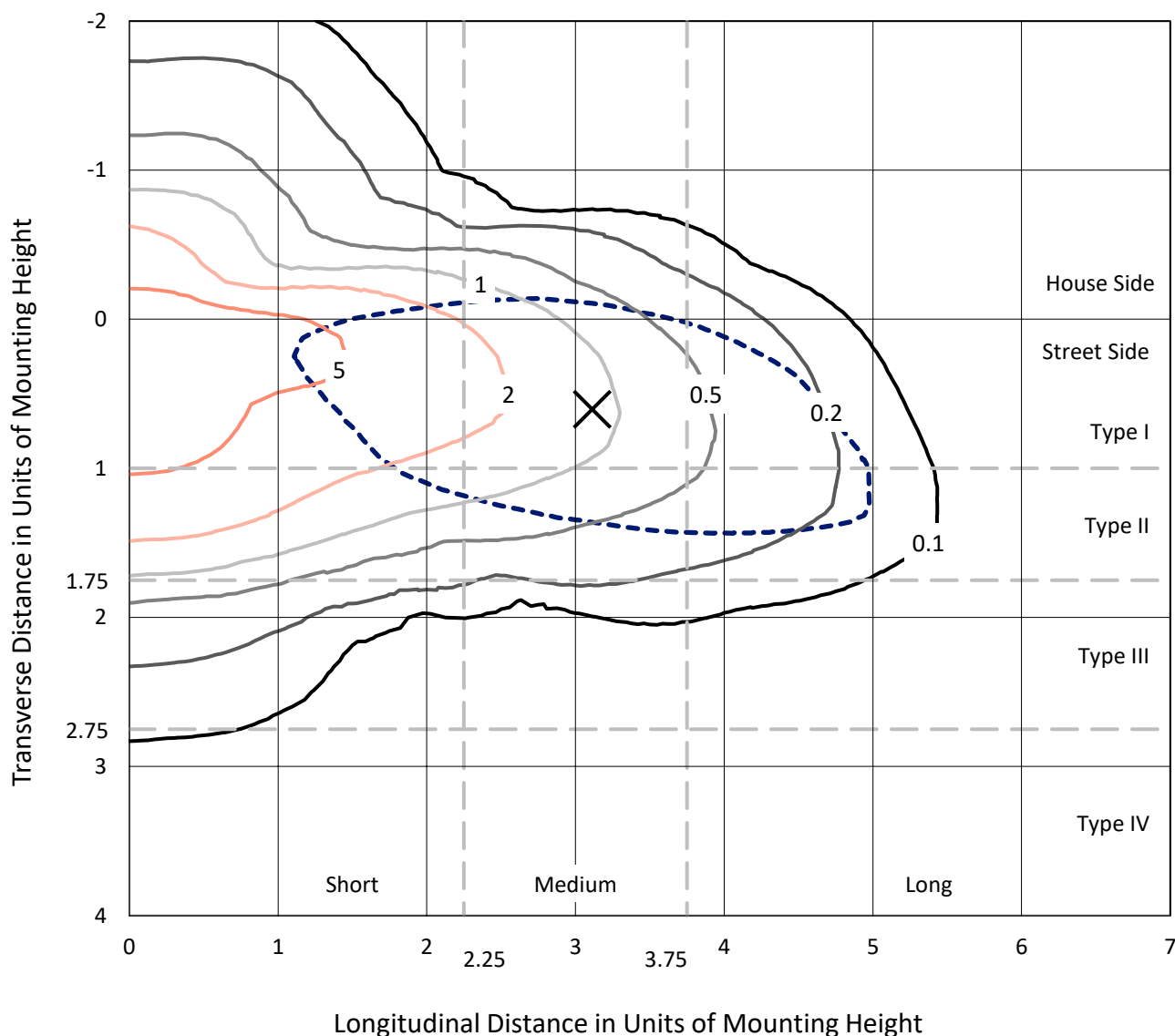
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

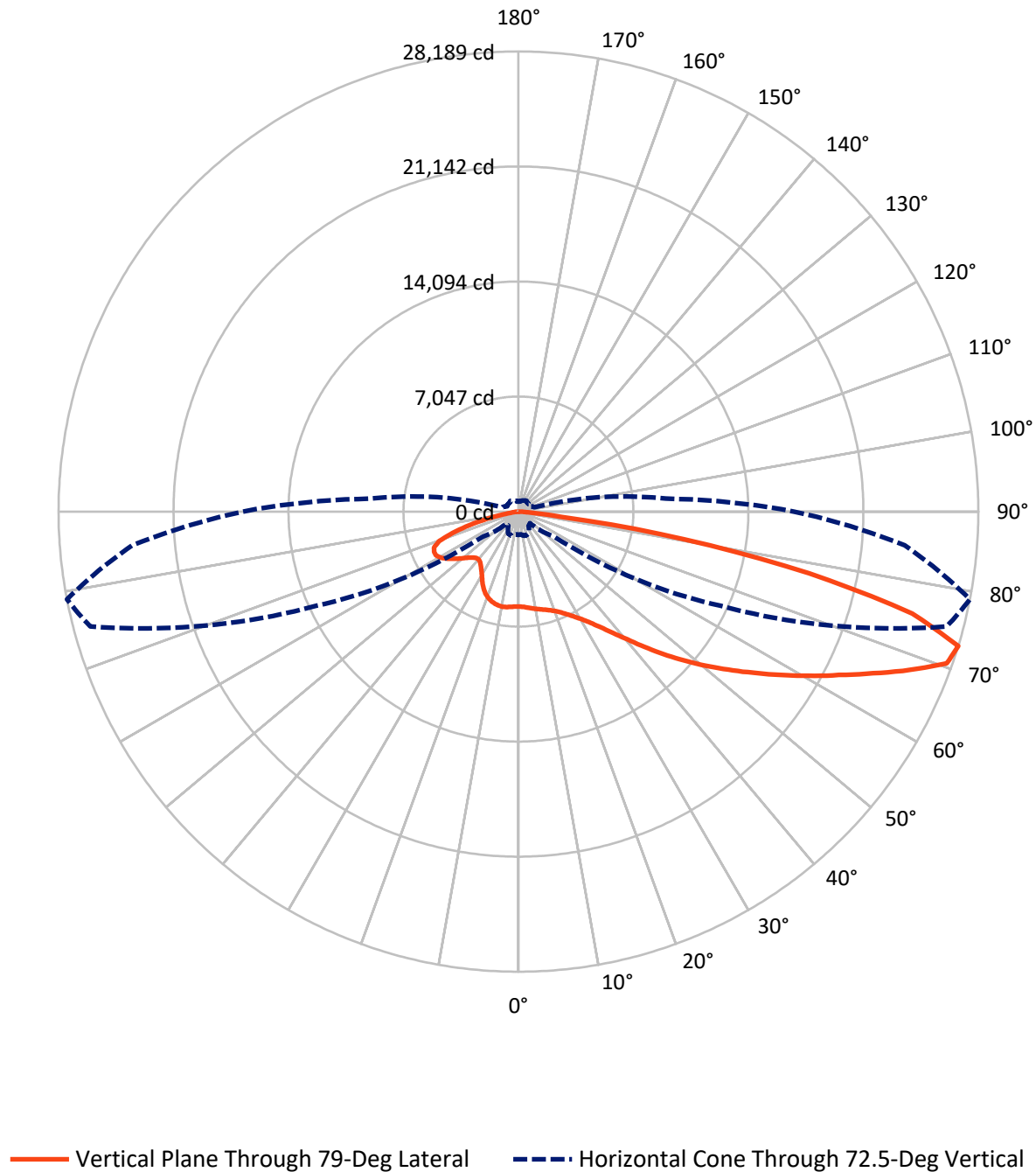
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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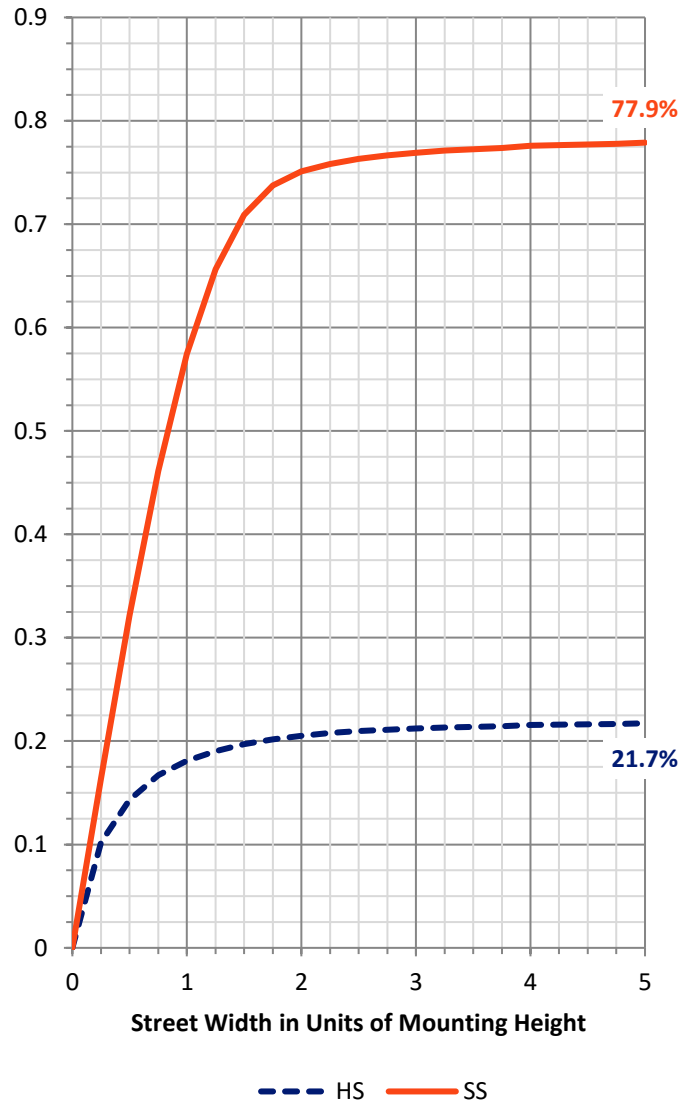
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6377.2	0.0	6377.2
	% Fixture	22.0	0.0	22.0
Street Side	Lumens	22602.7	0.0	22602.7
	% Fixture	78.0	0.0	78.0
Total	Lumens	28979.8	0.0	28979.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	528.1	1.8
10°-20°	1380.6	4.8
20°-30°	2227.7	7.7
30°-40°	3343.5	11.5
40°-50°	4742.9	16.4
50°-60°	5989.7	20.7
60°-70°	6083.3	21.0
70°-80°	4146.1	14.3
80°-90°	537.9	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°	28979.8	100.0
0°-180°	28979.8	100.0

Coefficient of Utilization



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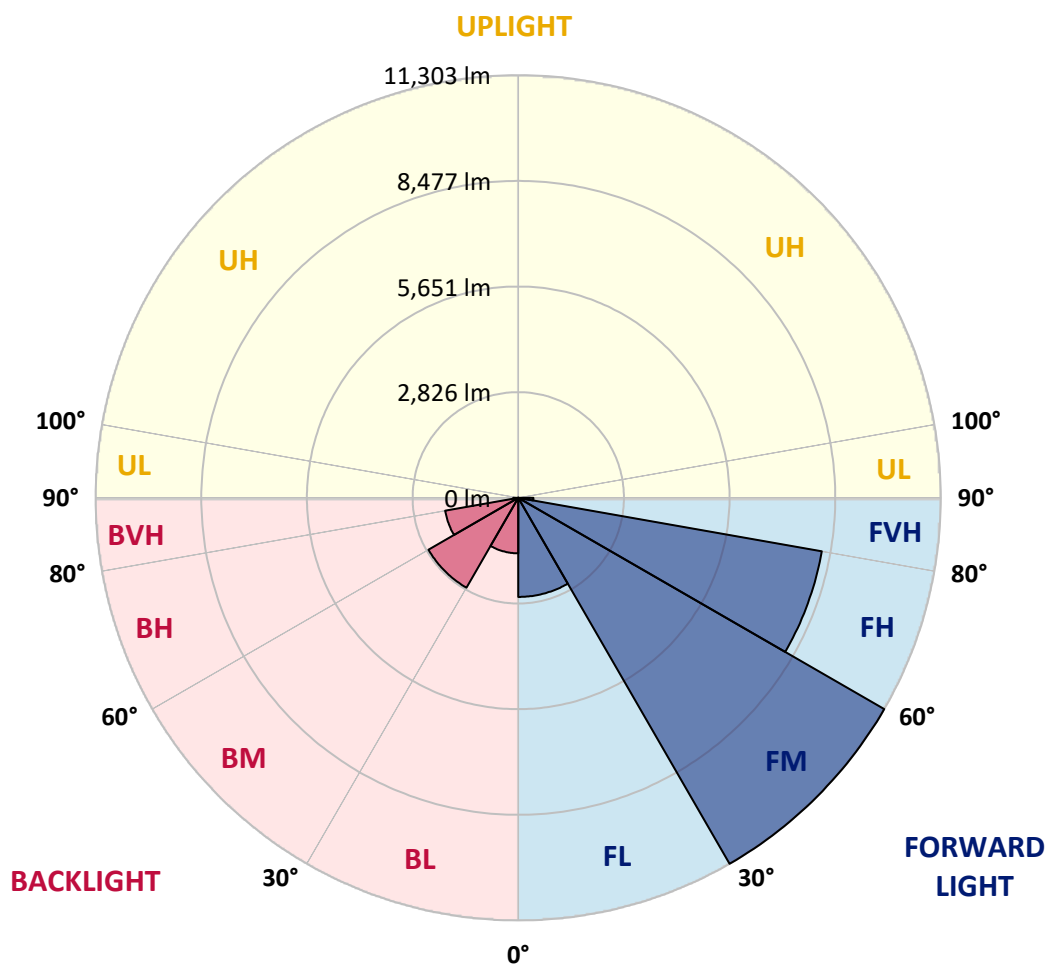
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2651.0	9.1			
FM	(30°-60°)	11302.7	39.0			
FH	(60°-80°)	8243.8	28.4			G4/12000
FVH	(80°-90°)	405.2	1.4			G3/500
BL	(0°-30°)	1485.4	5.1	B3/2500		
BM	(30°-60°)	2773.4	9.6	B3/5000		
BH	(60°-80°)	1985.6	6.9	B3/2500		G3/2500
BVH	(80°-90°)	132.7	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°	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4
2.5°	5820.5	5792.9	5809.8	5803.7	5811.3	5820.5	5823.5	5828.2	5843.5	5842.0	5840.4
5°	5808.3	5780.6	5803.7	5796.0	5815.8	5837.4	5855.7	5872.6	5897.1	5907.9	5892.5
7.5°	5782.1	5763.8	5786.7	5809.8	5846.6	5878.8	5904.8	5943.2	5978.4	5984.5	5995.2
10°	5630.4	5616.6	5670.3	5730.1	5831.2	5918.6	5975.3	6019.7	6058.1	6064.2	6079.6
12.5°	5472.5	5455.7	5515.4	5596.7	5760.7	5918.6	6038.2	6096.4	6130.1	6150.1	6173.1
15°	5446.4	5432.7	5466.4	5536.9	5673.4	5877.2	6081.1	6188.4	6217.5	6240.5	6249.7
17.5°	5572.2	5546.1	5559.9	5584.4	5664.2	5838.9	6114.8	6292.7	6337.1	6361.6	6361.6
20°	5863.4	5826.6	5805.2	5756.1	5742.4	5845.1	6111.8	6418.3	6476.6	6507.2	6514.9
22.5°	6251.3	6226.7	6180.7	6056.5	5921.6	5920.1	6170.0	6579.3	6688.1	6717.2	6698.9
25°	6720.3	6683.5	6625.3	6456.7	6197.6	6068.8	6268.1	6784.7	6967.1	6974.8	6921.1
27.5°	7259.9	7204.7	7125.0	6902.8	6553.2	6301.8	6418.3	7020.7	7287.4	7284.5	7174.1
30°	7828.6	7773.4	7689.1	7419.4	6979.3	6616.1	6626.8	7275.2	7667.6	7650.8	7462.2
32.5°	8244.1	8202.7	8185.8	7977.3	7469.9	6987.0	6866.0	7557.3	8136.8	8121.4	7857.8
35°	8562.8	8509.2	8529.1	8423.3	8004.9	7402.4	7158.7	7893.0	8707.0	8705.4	8377.4
37.5°	8878.7	8831.1	8848.0	8777.5	8500.0	7929.8	7515.9	8303.8	9413.6	9447.4	9005.9
40°	9166.9	9116.2	9183.7	9117.8	8884.8	8490.8	7922.1	8768.3	10232.3	10296.6	9766.2
42.5°	9340.1	9300.2	9412.2	9413.6	9219.0	8964.5	8368.2	9280.2	11179.6	11323.7	10701.3
45°	9399.9	9386.0	9554.6	9589.9	9514.9	9238.9	8769.8	9838.3	12200.5	12458.1	11766.7
47.5°	9335.5	9309.5	9542.4	9672.7	9732.5	9367.7	9102.5	10442.2	13242.9	13620.0	12928.6
50°	9010.5	8959.9	9306.4	9580.8	9793.8	9451.9	9438.2	11139.7	14427.8	14840.2	14096.7
52.5°	8426.4	8388.1	8782.1	9258.8	9658.9	9493.3	9815.3	11901.6	15552.9	16086.5	15293.9
55°	7679.9	7629.4	8063.2	8685.5	9323.2	9479.6	10192.4	12753.9	16880.5	17421.6	16531.0
57.5°	6496.6	6395.4	6944.2	7679.9	8775.9	9462.7	10584.8	13601.5	18229.4	18877.9	17850.8
60°	4770.5	4620.2	5293.2	6165.4	7705.9	9298.7	11070.7	14552.0	19848.2	20432.2	19291.7
62.5°	2777.6	2690.3	3130.2	3944.2	5808.3	8332.9	11343.6	15657.2	21439.4	22052.6	20708.2
65°	2156.8	2132.3	2170.6	2233.5	3233.0	6239.0	10502.0	16734.9	23462.9	23892.0	22184.4
67.5°	1972.8	1954.5	1971.4	1853.3	1640.2	3475.2	8308.4	17007.7	25630.4	25891.0	23476.6
70°	1753.7	1732.1	1787.4	1686.2	1290.7	1580.4	5368.2	16017.5	27354.9	27843.9	24459.3
72.5°	1428.6	1404.1	1532.9	1487.0	1086.8	1014.7	2696.4	13664.5	27174.1	28188.8	23755.6
75°	1097.6	1083.7	1237.1	1275.4	886.0	798.7	1293.8	10157.1	23913.6	24936.0	20473.7
77.5°	852.3	841.5	919.7	1059.2	714.3	619.3	795.6	6442.8	18020.9	18200.3	14109.0
80°	639.2	608.5	680.6	820.1	556.5	452.2	539.6	3757.1	11391.1	10325.7	6140.9
82.5°	400.1	384.8	444.5	547.2	392.5	311.2	351.1	2075.5	4565.0	2688.8	1184.9
85°	228.4	222.3	242.2	312.7	213.1	179.4	200.8	916.7	833.9	573.3	357.2
87.5°	91.9	88.9	110.4	139.5	78.2	65.9	70.5	220.8	184.0	170.1	118.1
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°	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4	5817.4
2.5°	5834.3	5834.3	5812.8	5779.1	5740.8	5716.2	5676.3	5665.7	5624.3	5612.0	5632.0
5°	5904.8	5892.5	5826.6	5731.6	5601.3	5481.7	5349.9	5267.1	5150.6	5109.2	5139.9
7.5°	5993.7	5960.0	5846.6	5638.1	5365.3	5096.9	4818.0	4606.5	4404.1	4332.1	4341.2
10°	6075.0	6027.4	5834.3	5469.5	4997.3	4532.9	4088.3	3777.1	3541.1	3444.5	3465.9
12.5°	6156.2	6068.8	5753.0	5189.0	4474.6	3844.6	3370.9	3128.7	2983.1	2866.5	2904.8
15°	6232.8	6110.2	5627.4	4813.4	3901.3	3262.1	2912.5	2719.4	2602.9	2526.2	2540.1
17.5°	6321.8	6145.5	5438.8	4336.7	3355.5	2858.9	2573.8	2457.2	2434.3	2425.0	2431.2
20°	6445.9	6177.7	5190.5	3803.2	2953.9	2537.0	2389.8	2379.1	2377.6	2373.0	2388.2
22.5°	6579.3	6216.0	4862.4	3318.7	2612.1	2336.2	2310.1	2288.6	2274.9	2273.3	2290.2
25°	6737.2	6228.2	4451.6	2921.8	2320.8	2241.2	2210.5	2178.2	2169.1	2169.1	2178.2
27.5°	6890.5	6186.9	3973.3	2576.8	2156.8	2153.7	2113.9	2103.2	2101.7	2106.3	2118.5
30°	7043.8	6108.7	3498.1	2258.0	2061.8	2061.8	2048.0	2055.6	2061.8	2077.1	2087.8
32.5°	7250.7	6025.9	3101.1	2021.9	1979.0	1963.7	1977.4	1992.8	1999.0	2018.8	2035.8
35°	7554.2	5967.7	2785.3	1893.2	1893.2	1873.2	1880.9	1877.8	1864.1	1854.8	1876.3
37.5°	7955.8	5964.6	2524.7	1833.4	1821.1	1818.0	1819.6	1799.7	1746.0	1681.6	1683.2
40°	8438.7	6047.4	2323.9	1792.0	1782.8	1801.1	1792.0	1738.3	1591.2	1479.3	1476.2
42.5°	9087.1	6283.5	2195.1	1741.4	1768.9	1792.0	1755.2	1569.7	1470.1	1394.9	1391.8
45°	9850.6	6666.7	2129.2	1687.8	1742.9	1770.5	1592.7	1511.5	1431.7	1341.3	1335.2
47.5°	10715.1	7149.6	2113.9	1637.1	1684.7	1701.5	1523.8	1487.0	1396.5	1298.4	1290.7
50°	11656.3	7721.3	2155.3	1577.4	1600.3	1542.1	1500.7	1467.0	1373.5	1276.9	1266.2
52.5°	12629.7	8351.3	2238.1	1496.1	1516.1	1451.7	1491.6	1462.4	1359.7	1229.4	1220.2
55°	13586.3	8986.0	2317.7	1401.1	1430.2	1370.4	1465.4	1444.0	1296.8	1149.6	1142.1
57.5°	14558.1	9617.6	2395.9	1316.8	1347.5	1292.2	1424.0	1394.9	1226.3	1076.1	1073.1
60°	15568.3	10230.7	2432.7	1235.5	1257.0	1220.2	1361.2	1310.7	1146.7	1001.0	996.4
62.5°	16514.1	10741.2	2373.0	1154.3	1168.1	1152.7	1278.5	1211.0	1066.9	916.7	915.1
65°	17463.0	11044.7	2189.0	1074.6	1077.7	1070.0	1161.9	1103.7	973.4	843.1	833.9
67.5°	18323.0	11214.8	1896.2	988.7	981.0	978.0	1053.1	987.2	882.9	769.6	760.3
70°	18505.4	10782.6	1448.6	887.5	887.5	879.9	933.6	866.1	783.3	691.4	688.3
72.5°	16901.9	9070.3	1028.6	772.5	784.8	769.6	814.0	757.3	682.1	620.8	602.4
75°	13629.2	6651.3	748.0	654.6	676.0	650.0	691.4	651.5	587.1	585.6	527.4
77.5°	9364.6	4112.8	542.6	539.6	554.9	521.2	568.7	547.2	489.0	463.0	433.8
80°	3996.3	1640.2	395.4	417.0	417.0	386.3	441.5	447.6	397.0	384.8	384.8
82.5°	795.6	466.0	277.5	286.7	269.8	260.6	312.7	346.4	478.3	531.9	533.4
85°	239.1	171.7	167.1	156.3	138.0	139.5	184.0	348.0	429.2	245.3	211.6
87.5°	65.9	42.9	44.5	35.3	29.1	38.3	62.8	263.6	144.1	61.3	52.1
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)