

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: P969333

Luminaire Tested: **NAV-SB5D-740-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P969333
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-SB5D-740-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 900mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54479.8 lumens
Efficiency: N/A
Efficacy: 149.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B4 - U0 - G5

Input Watts (W): 364.9
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

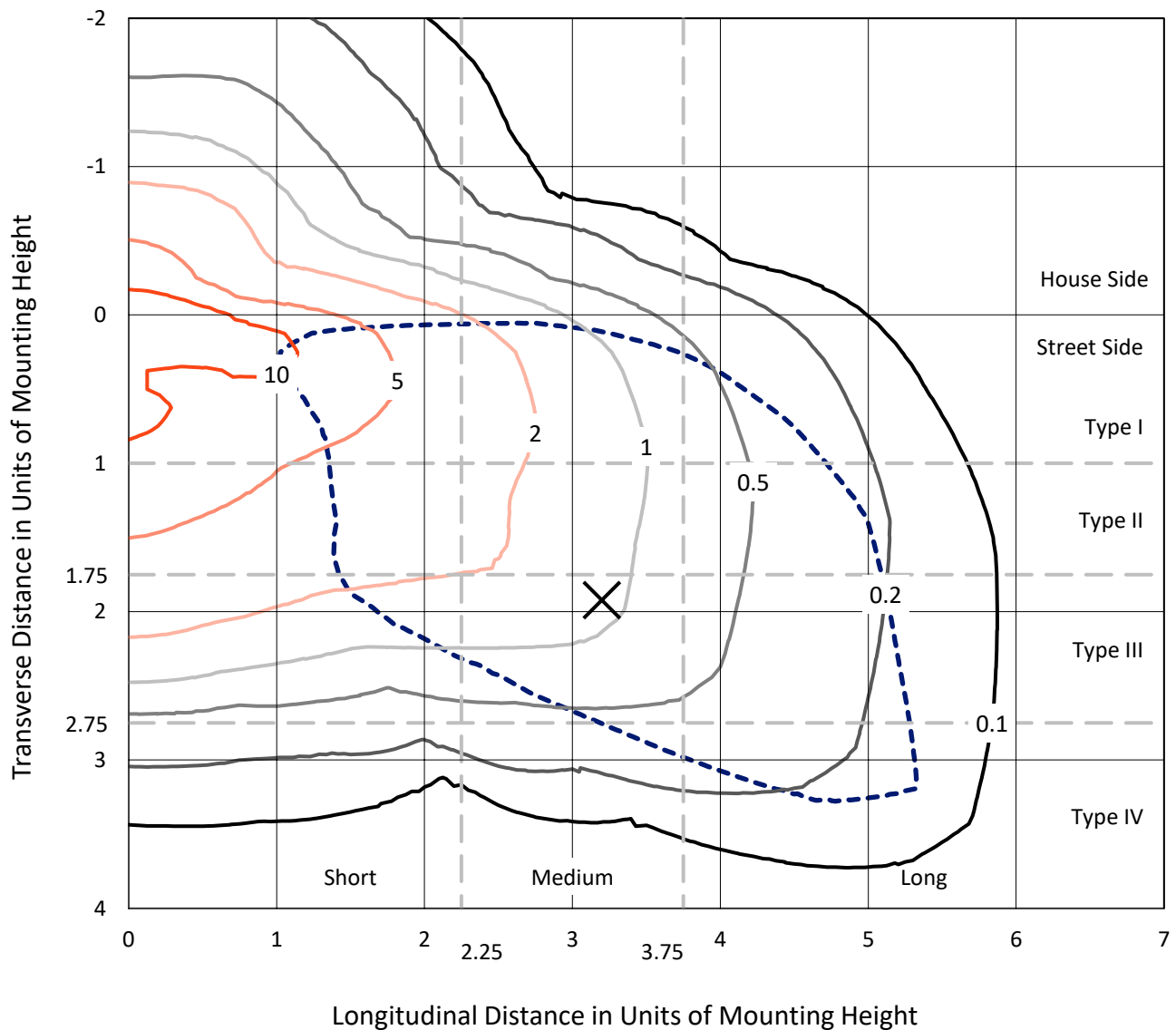


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Iso-Footcandle Lines of Horizontal Illumination

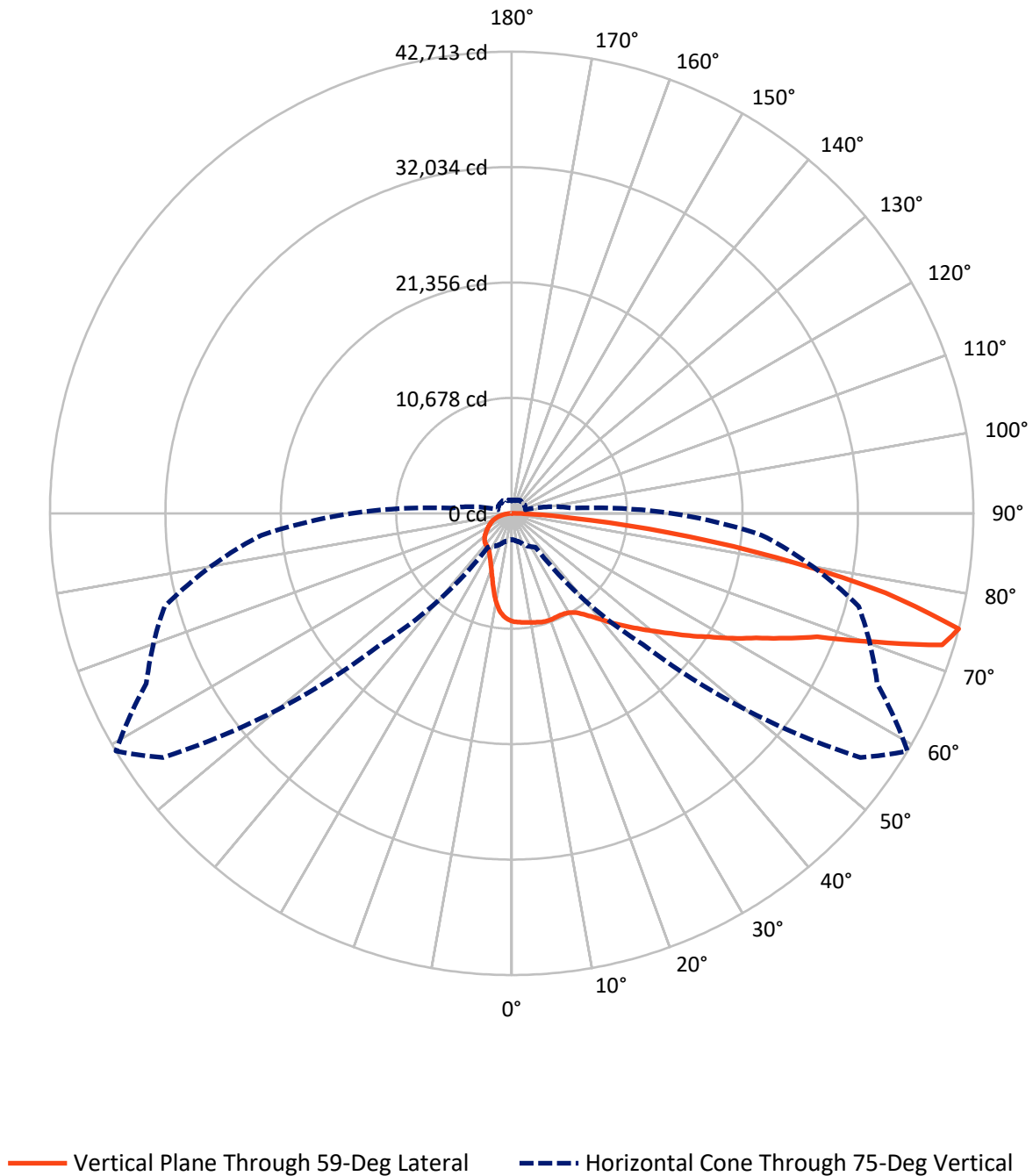
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 16 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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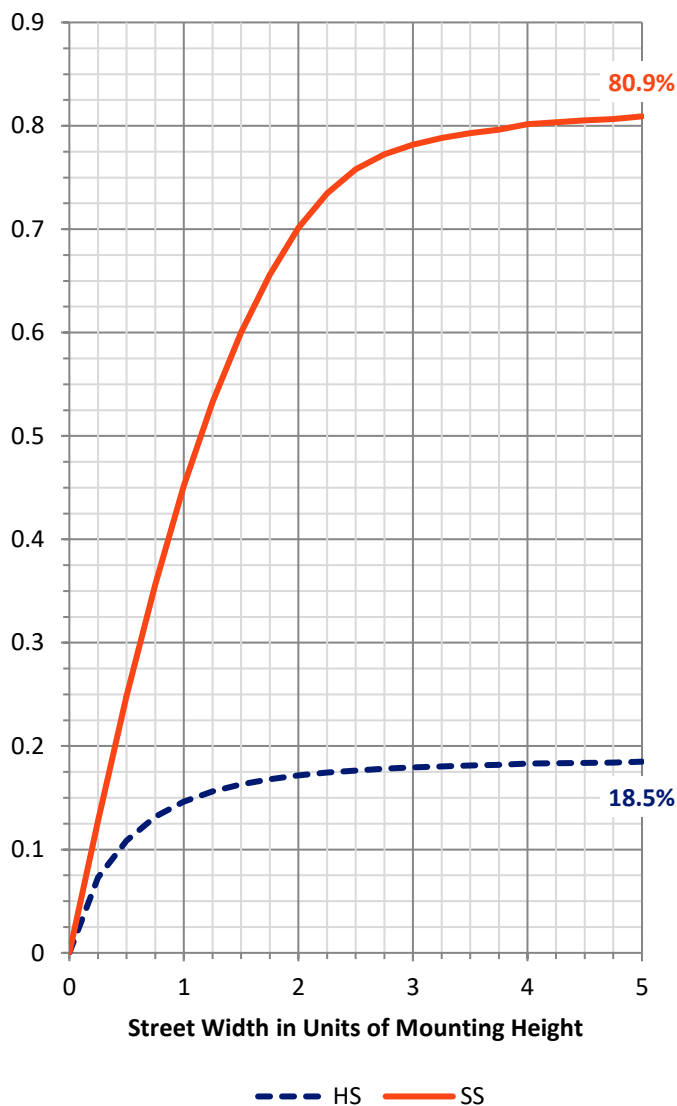
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10218.1	0.0	10218.1
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	44261.7	0.0	44261.7
	% Fixture	81.2	0.0	81.2
Total	Lumens	54479.8	0.0	54479.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	896.6	1.6
10°-20°	2291.8	4.2
20°-30°	3481.1	6.4
30°-40°	5174.6	9.5
40°-50°	7695.5	14.1
50°-60°	10445.8	19.2
60°-70°	12752.6	23.4
70°-80°	10008.1	18.4
80°-90°	1733.6	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°	54479.8	100.0
0°-180°	54479.8	100.0

Coefficient of Utilization



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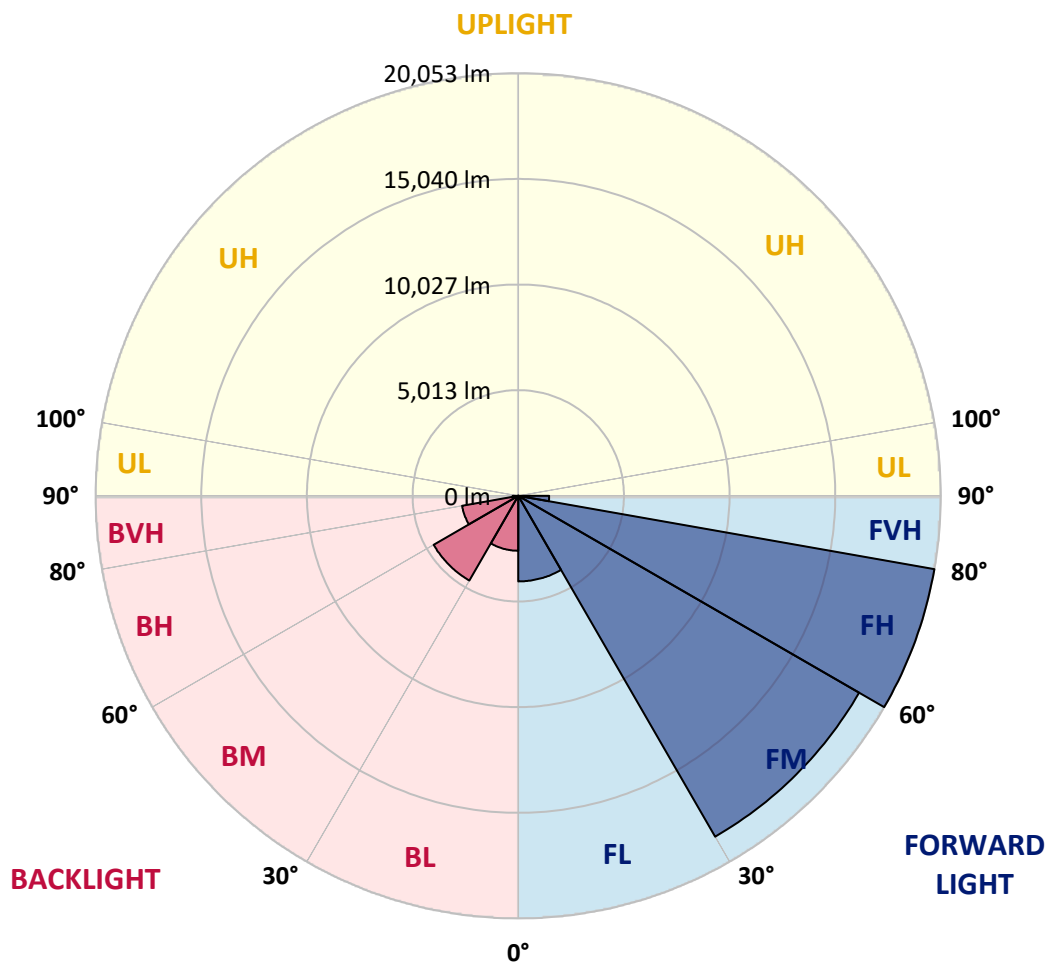
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4062.1	7.5			
FM	(30°-60°)	18677.9	34.3			
FH	(60°-80°)	20053.5	36.8			G5
FVH	(80°-90°)	1468.3	2.7			G5
BL	(0°-30°)	2607.5	4.8	B4/5000		
BM	(30°-60°)	4638.0	8.5	B3/5000		
BH	(60°-80°)	2707.2	5.0	B4/5000		G4/5000
BVH	(80°-90°)	265.4	0.5			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5

Type IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6
2.5°	10084.7	10049.5	10084.7	10070.0	10064.2	10052.4	10055.4	10075.9	10064.2	10078.7	10028.9
5°	10017.2	9996.7	10031.9	10023.1	10061.2	10067.0	10105.2	10128.6	10143.3	10146.2	10108.0
7.5°	9905.9	9885.3	9935.1	9976.2	10058.2	10081.7	10160.8	10199.0	10219.5	10254.6	10199.0
10°	9498.5	9489.7	9612.8	9768.1	9961.6	10081.7	10201.8	10266.3	10298.6	10392.4	10327.9
12.5°	8777.5	8789.3	8950.4	9249.4	9636.2	10023.1	10248.8	10342.6	10392.4	10509.6	10480.3
15°	8088.8	8085.9	8261.7	8581.2	9123.3	9765.2	10272.2	10433.4	10518.3	10691.3	10667.9
17.5°	7690.3	7678.5	7801.6	8044.8	8548.9	9369.5	10213.6	10483.2	10664.9	10881.8	10861.3
20°	7617.0	7593.5	7658.0	7778.1	8135.7	8935.7	10061.2	10483.2	10782.2	11063.5	11051.8
22.5°	7883.7	7845.6	7819.2	7804.6	7962.8	8578.2	9888.3	10448.0	10955.1	11324.3	11303.8
25°	8420.0	8361.3	8226.5	8094.6	8047.8	8417.1	9735.9	10439.2	11213.0	11676.0	11599.8
27.5°	9287.5	9214.2	8941.7	8625.2	8340.8	8499.1	9668.5	10492.0	11497.2	12048.3	11895.8
30°	10363.1	10283.9	9941.1	9454.5	8944.6	8803.9	9753.5	10647.3	11860.7	12543.5	12244.5
32.5°	11327.3	11239.3	10946.3	10451.0	9762.2	9331.4	10023.1	10943.3	12432.1	13232.2	12769.1
35°	12183.0	12080.4	11816.7	11359.5	10764.6	10072.9	10509.6	11467.9	13243.9	14351.7	13481.3
37.5°	13021.2	12901.1	12613.9	12130.3	11714.1	11060.6	11180.7	12142.0	14322.4	15711.6	14425.0
40°	13959.1	13786.1	13437.3	12959.7	12555.2	12218.2	12062.9	12968.5	15418.6	17229.7	15603.2
42.5°	14867.6	14703.4	14287.3	13879.9	13372.9	13276.2	13085.7	13935.6	16617.2	18897.3	16798.9
45°	15846.4	15650.1	15146.0	14630.2	14310.7	13979.6	14076.3	14902.8	17792.5	20597.2	18053.3
47.5°	16763.8	16543.9	15949.0	15374.6	15198.8	14571.6	14984.8	15966.6	19014.6	22320.4	19295.9
50°	17259.1	17042.2	16546.9	16028.1	15890.4	15301.3	15969.5	17135.9	20295.3	24037.8	20488.7
52.5°	17672.3	17437.8	16790.1	16502.9	16461.9	16095.6	17182.9	18472.3	21576.0	25555.9	21640.5
55°	18111.9	17851.1	17024.6	16766.6	16954.2	16986.5	18621.8	19987.6	22930.0	27035.9	22727.8
57.5°	18618.9	18287.7	17250.2	16989.4	17434.9	18029.9	20274.8	21558.4	24260.5	28407.6	23694.9
60°	19096.6	18762.5	17684.0	17344.0	17953.6	19240.3	22171.0	23460.5	25767.0	29629.7	24609.3
62.5°	19190.4	18914.9	18029.9	18026.9	18657.0	20652.8	24415.9	25380.1	27082.9	30837.1	25429.9
65°	17566.8	17393.8	16869.2	18000.5	19665.1	22686.7	26915.8	27836.0	28756.3	31892.2	26150.9
67.5°	13370.0	13393.5	13355.3	15538.7	18850.5	25608.7	30535.3	30464.9	30822.5	33076.2	26980.3
70°	6113.5	6251.3	7148.0	10726.4	15102.0	25945.7	36519.8	35608.3	33416.1	34608.9	27698.3
72.5°	3303.0	3408.4	3774.8	5196.1	9079.3	23067.7	40992.1	41639.8	36865.7	35640.6	26909.9
75°	2423.7	2482.3	2737.3	3303.0	3812.9	17144.8	39389.0	42712.5	37296.5	33234.5	23237.8
77.5°	1814.1	1840.5	2048.6	2617.1	1951.9	9038.3	31473.0	35373.9	31927.3	27305.6	17165.3
80°	1315.9	1345.2	1500.5	1963.6	1368.7	3305.8	21611.2	24829.1	21866.1	17405.6	8554.8
82.5°	908.6	920.2	987.7	1336.4	955.4	1283.6	12262.2	14559.8	12206.5	6107.7	2309.4
85°	548.1	562.7	592.0	779.6	542.2	609.6	5292.9	5474.6	3648.8	1459.5	718.0
87.5°	225.7	240.4	263.7	328.2	213.9	169.9	873.4	1096.1	682.9	427.8	222.7
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°	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6	9999.6
2.5°	10014.2	9993.8	9938.1	9861.9	9791.5	9703.7	9665.5	9633.3	9603.9	9548.3	9521.9
5°	10075.9	10020.2	9870.6	9677.2	9457.5	9217.1	8982.7	8821.5	8683.7	8581.2	8496.2
7.5°	10169.6	10064.2	9791.5	9395.9	8891.9	8376.0	7910.0	7578.8	7329.8	7238.9	7080.6
10°	10266.3	10140.3	9665.5	8968.0	8097.6	7303.3	6684.9	6345.1	6145.7	6081.2	5981.6
12.5°	10380.6	10196.0	9469.2	8373.1	7209.5	6339.1	5799.9	5600.6	5498.0	5462.8	5471.7
15°	10547.7	10242.9	9173.1	7628.7	6362.6	5635.8	5287.1	5149.3	5096.5	5093.6	5105.3
17.5°	10673.7	10251.6	8713.0	6831.5	5712.0	5210.8	4923.6	4870.9	4906.1	4958.7	4979.3
20°	10814.4	10172.5	8109.3	6104.7	5254.8	4838.6	4718.5	4753.6	4838.6	4914.9	4941.2
22.5°	10914.0	10028.9	7379.6	5539.1	4859.1	4624.7	4618.9	4692.1	4739.0	4777.1	4797.6
25°	11001.9	9785.7	6605.8	5064.3	4533.9	4495.8	4560.2	4536.8	4504.6	4536.8	4557.3
27.5°	11066.4	9401.8	5914.2	4648.2	4305.2	4407.8	4369.7	4317.0	4314.0	4331.6	4361.0
30°	11045.9	8888.9	5345.7	4252.5	4144.1	4243.7	4152.9	4144.1	4135.3	4144.1	4176.3
32.5°	11045.9	8305.7	4908.9	3980.0	4041.5	4003.3	3994.6	3974.0	3938.9	3936.0	3974.0
35°	11107.4	7722.5	4533.9	3833.4	3956.5	3865.6	3871.5	3821.7	3748.4	3713.3	3748.4
37.5°	11233.5	7253.5	4161.6	3763.1	3807.1	3804.1	3780.6	3695.6	3566.7	3455.4	3493.4
40°	11538.3	7115.8	3906.7	3730.8	3736.6	3771.8	3710.3	3546.2	3253.1	3071.4	3094.9
42.5°	12016.0	7347.3	3850.9	3651.7	3689.8	3725.0	3604.8	3223.8	3015.8	2907.3	2907.3
45°	12622.7	7751.8	3971.2	3537.4	3578.4	3640.0	3282.5	3100.7	3006.9	3009.8	3024.5
47.5°	13390.5	8176.7	4193.9	3437.7	3417.2	3452.4	3068.4	2957.1	2828.2	2860.4	2942.5
50°	14278.5	8607.5	4404.8	3303.0	3238.5	3124.2	2930.7	2825.2	2661.1	2584.9	2605.4
52.5°	15239.8	9023.7	4489.9	3138.9	3045.1	2913.2	2837.0	2707.9	2508.7	2382.7	2379.7
55°	16151.2	9401.8	4396.1	2942.5	2851.5	2749.0	2737.3	2658.1	2444.2	2268.4	2268.4
57.5°	17012.8	9718.3	4161.6	2743.2	2655.3	2593.7	2672.8	2634.8	2365.1	2139.4	2127.7
60°	17742.6	9935.1	3821.7	2541.0	2479.4	2447.2	2567.3	2555.6	2253.8	2001.7	1992.9
62.5°	18322.9	10020.2	3446.6	2347.6	2332.9	2274.3	2420.7	2420.7	2113.0	1866.8	1858.1
65°	18777.2	9938.1	3065.6	2157.0	2186.3	2098.4	2242.0	2224.5	1963.6	1746.7	1735.0
67.5°	19178.7	9668.5	2643.5	1969.4	2036.9	1925.5	2054.4	2013.4	1799.5	1626.6	1614.8
70°	19357.4	9041.3	2162.9	1781.9	1864.0	1755.5	1866.8	1790.7	1614.8	1497.6	1474.2
72.5°	17921.4	7514.4	1702.7	1585.6	1655.9	1567.9	1664.7	1576.8	1415.5	1362.7	1318.9
75°	14826.5	5638.7	1310.1	1371.6	1424.3	1356.9	1421.4	1356.9	1210.4	1248.4	1140.0
77.5°	10767.5	3807.1	1002.3	1145.9	1169.3	1134.2	1189.9	1116.6	984.7	975.9	931.9
80°	5354.4	2230.3	785.5	905.6	896.8	873.4	937.9	902.6	791.3	838.1	829.4
82.5°	1550.3	955.4	571.5	636.0	618.4	624.2	671.2	688.7	1031.7	1022.8	1046.3
85°	486.5	375.2	342.9	354.6	337.0	345.8	395.6	785.5	726.8	425.0	460.1
87.5°	126.0	128.9	85.0	90.8	93.8	111.4	126.0	477.8	228.6	149.4	158.3
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)