

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: P966791

Luminaire Tested: **NAV-SB4C-827-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966791
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-SB4C-827-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 80 CRI, 2700K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE III
SPILL LIGHT ELIMINATOR OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26145.7 lumens
Efficiency: N/A
Efficacy: 130.3 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

Input Watts (W): 200.7
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



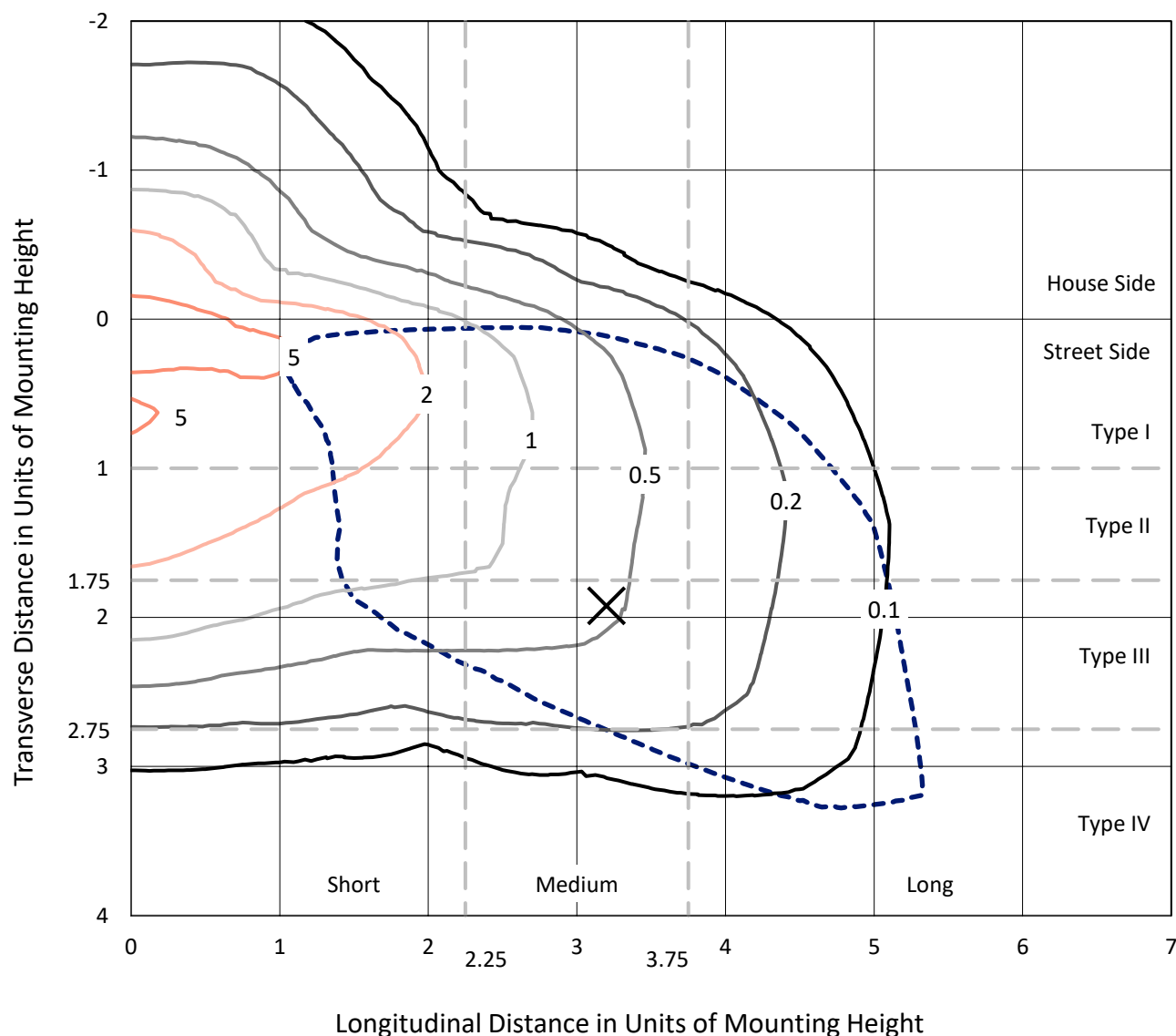
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

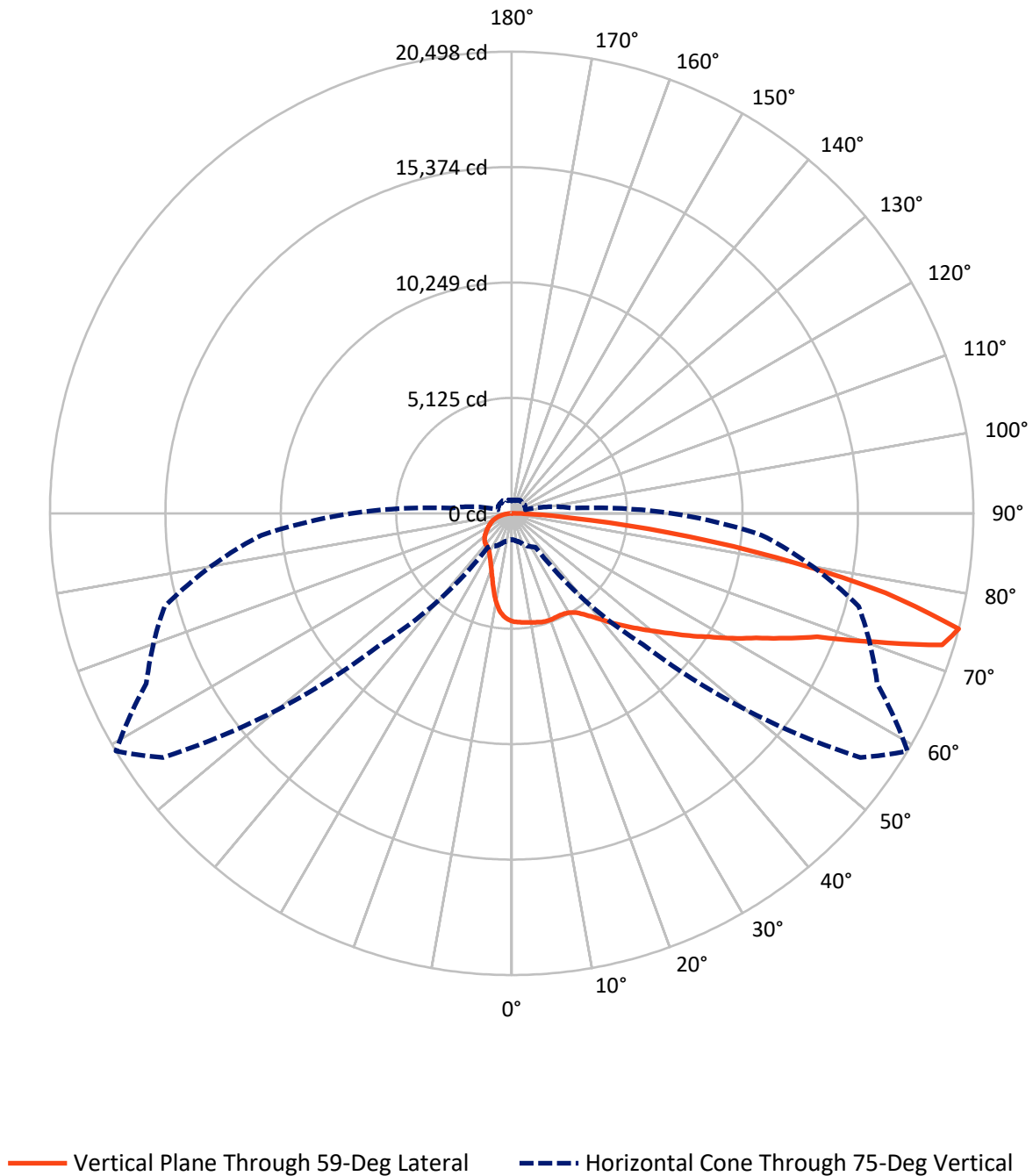
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 fc
Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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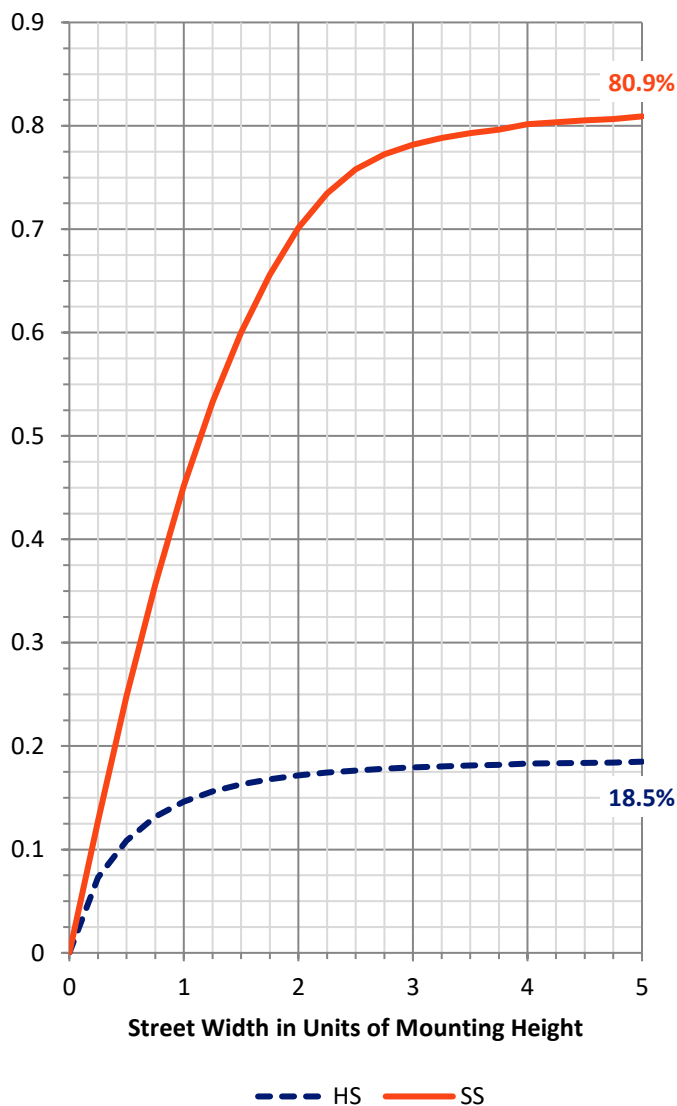
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4903.8	0.0	4903.8
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	21241.9	0.0	21241.9
	% Fixture	81.2	0.0	81.2
Total	Lumens	26145.7	0.0	26145.7
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	430.3	1.6
10°-20°	1099.9	4.2
20°-30°	1670.7	6.4
30°-40°	2483.4	9.5
40°-50°	3693.2	14.1
50°-60°	5013.1	19.2
60°-70°	6120.2	23.4
70°-80°	4803.0	18.4
80°-90°	832.0	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°	26145.7	100.0
0°-180°	26145.7	100.0

Coefficient of Utilization



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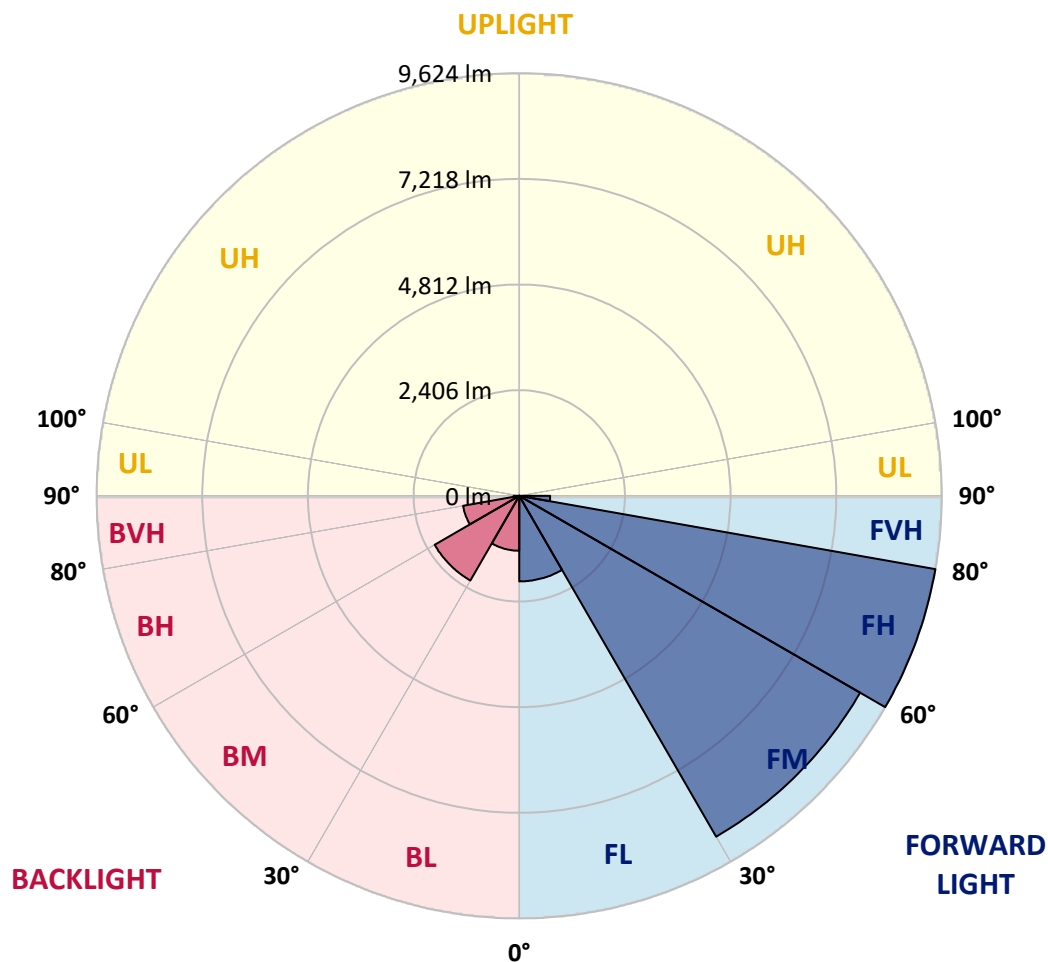
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1949.4	7.5			
FM	(30°-60°)	8963.8	34.3			
FH	(60°-80°)	9624.0	36.8			G4/12000
FVH	(80°-90°)	704.6	2.7			G4/750
BL	(0°-30°)	1251.4	4.8	B3/2500		
BM	(30°-60°)	2225.8	8.5	B2/2500		
BH	(60°-80°)	1299.2	5.0	B3/2500		G3/2500
BVH	(80°-90°)	127.4	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 IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9
2.5°	4839.7	4822.9	4839.7	4832.8	4829.9	4824.3	4825.7	4835.5	4829.9	4837.0	4813.1
5°	4807.5	4797.6	4814.4	4810.2	4828.6	4831.3	4849.6	4860.9	4867.9	4869.3	4851.0
7.5°	4754.0	4744.1	4768.0	4787.8	4827.1	4838.4	4876.3	4894.6	4904.5	4921.3	4894.6
10°	4558.5	4554.3	4613.3	4687.8	4780.7	4838.4	4896.0	4927.0	4942.4	4987.4	4956.5
12.5°	4212.4	4218.1	4295.5	4439.0	4624.6	4810.2	4918.6	4963.6	4987.4	5043.7	5029.7
15°	3882.0	3880.5	3964.9	4118.2	4378.4	4686.5	4929.8	5007.1	5047.9	5130.9	5119.7
17.5°	3690.6	3685.1	3744.1	3860.9	4102.8	4496.6	4901.7	5031.0	5118.2	5222.4	5212.5
20°	3655.5	3644.3	3675.2	3732.8	3904.4	4288.4	4828.6	5031.0	5174.5	5309.5	5304.0
22.5°	3783.5	3765.2	3752.5	3745.6	3821.5	4116.8	4745.5	5014.2	5257.5	5434.8	5424.9
25°	4040.9	4012.8	3948.1	3884.7	3862.3	4039.5	4672.4	5010.0	5381.2	5603.5	5567.0
27.5°	4457.2	4422.1	4291.3	4139.4	4002.9	4078.9	4640.1	5035.3	5517.7	5782.1	5708.9
30°	4973.4	4935.4	4770.9	4537.4	4292.6	4225.2	4680.9	5109.8	5692.1	6019.8	5876.3
32.5°	5436.1	5394.0	5253.3	5015.6	4685.1	4478.3	4810.2	5251.9	5966.4	6350.4	6128.2
35°	5846.8	5797.6	5671.0	5451.6	5166.1	4834.1	5043.7	5503.6	6356.0	6887.6	6469.9
37.5°	6249.1	6191.4	6053.5	5821.5	5621.8	5308.2	5365.8	5827.1	6873.5	7540.2	6922.8
40°	6699.2	6616.2	6448.8	6219.6	6025.5	5863.7	5789.2	6223.8	7399.6	8268.8	7488.2
42.5°	7135.2	7056.4	6856.7	6661.2	6417.8	6371.5	6280.1	6687.9	7974.9	9069.1	8062.0
45°	7605.0	7510.7	7268.8	7021.2	6867.9	6709.0	6755.5	7152.0	8538.9	9884.9	8664.0
47.5°	8045.2	7939.8	7654.2	7378.5	7294.1	6993.2	7191.4	7662.6	9125.4	10712.0	9260.4
50°	8282.9	8178.8	7941.1	7692.1	7626.1	7343.3	7664.0	8223.8	9740.1	11536.2	9832.8
52.5°	8481.2	8368.7	8057.8	7920.0	7900.3	7724.5	8246.3	8865.2	10354.7	12264.7	10385.6
55°	8692.2	8567.1	8170.4	8046.6	8136.7	8152.1	8936.9	9592.4	11004.5	12975.0	10907.4
57.5°	8935.5	8776.6	8278.7	8153.5	8367.3	8652.8	9730.2	10346.2	11643.0	13633.2	11371.6
60°	9164.7	9004.4	8486.8	8323.7	8616.3	9233.7	10640.2	11259.0	12366.0	14219.7	11810.4
62.5°	9209.7	9077.6	8652.8	8651.4	8953.8	9911.6	11717.6	12180.3	12997.5	14799.3	12204.3
65°	8430.5	8347.6	8095.9	8638.7	9437.6	10887.8	12917.4	13358.9	13800.6	15305.5	12550.2
67.5°	6416.5	6427.7	6409.4	7457.3	9046.6	12290.1	14654.3	14620.6	14792.2	15873.8	12948.2
70°	2934.0	3000.1	3430.5	5147.8	7247.7	12451.8	17526.4	17089.0	16036.9	16609.4	13292.8
72.5°	1585.2	1635.8	1811.6	2493.7	4357.4	11070.6	19672.7	19983.6	17692.4	17104.5	12914.5
75°	1163.2	1191.4	1313.6	1585.2	1829.8	8228.1	18903.4	20498.4	17899.2	15949.7	11152.2
77.5°	870.6	883.2	983.2	1256.0	936.7	4337.7	15104.4	16976.5	15322.4	13104.4	8237.9
80°	631.5	645.5	720.2	942.4	656.8	1586.5	10371.6	11915.9	10493.9	8353.2	4105.5
82.5°	436.0	441.7	474.0	641.3	458.5	616.0	5884.8	6987.5	5858.1	2931.2	1108.3
85°	263.0	270.1	284.1	374.1	260.2	292.5	2540.2	2627.4	1751.1	700.5	344.6
87.5°	108.3	115.3	126.6	157.5	102.7	81.6	419.1	526.0	327.7	205.3	106.9
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°	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9	4798.9
2.5°	4806.0	4796.2	4769.4	4732.8	4699.1	4656.9	4638.6	4623.2	4609.1	4582.4	4569.8
5°	4835.5	4808.8	4737.1	4644.3	4538.8	4423.5	4310.9	4233.6	4167.4	4118.2	4077.4
7.5°	4880.5	4829.9	4699.1	4509.3	4267.3	4019.7	3796.2	3637.2	3517.7	3474.0	3398.1
10°	4927.0	4866.5	4638.6	4303.9	3886.2	3505.0	3208.2	3045.1	2949.4	2918.5	2870.7
12.5°	4981.8	4893.2	4544.4	4018.4	3460.0	3042.3	2783.5	2687.9	2638.6	2621.7	2625.9
15°	5062.0	4915.7	4402.4	3661.1	3053.5	2704.7	2537.3	2471.3	2446.0	2444.5	2450.2
17.5°	5122.4	4919.9	4181.5	3278.6	2741.3	2500.8	2362.9	2337.6	2354.5	2379.8	2389.7
20°	5190.0	4882.0	3891.8	2929.8	2521.8	2322.1	2264.4	2281.3	2322.1	2358.7	2371.3
22.5°	5237.9	4813.1	3541.6	2658.3	2332.0	2219.4	2216.7	2251.8	2274.3	2292.6	2302.5
25°	5280.0	4696.3	3170.2	2430.5	2175.9	2157.6	2188.5	2177.3	2161.8	2177.3	2187.1
27.5°	5310.9	4512.0	2838.3	2230.7	2066.2	2115.4	2097.0	2071.7	2070.4	2078.8	2092.8
30°	5301.1	4265.9	2565.5	2040.9	1988.8	2036.6	1993.0	1988.8	1984.6	1988.8	2004.3
32.5°	5301.1	3986.0	2355.9	1910.0	1939.6	1921.3	1917.1	1907.2	1890.3	1889.0	1907.2
35°	5330.6	3706.1	2175.9	1839.7	1898.8	1855.1	1858.0	1834.0	1798.9	1782.1	1798.9
37.5°	5391.1	3481.1	1997.2	1805.9	1827.1	1825.6	1814.4	1773.6	1711.7	1658.2	1676.6
40°	5537.4	3415.0	1874.8	1790.5	1793.3	1810.2	1780.6	1701.9	1561.2	1474.1	1485.2
42.5°	5766.6	3526.1	1848.2	1752.5	1770.8	1787.7	1730.0	1547.1	1447.3	1395.2	1395.2
45°	6057.9	3720.2	1905.8	1697.6	1717.4	1746.9	1575.3	1488.1	1443.1	1444.4	1451.5
47.5°	6426.3	3924.1	2012.7	1649.8	1640.0	1656.8	1472.6	1419.1	1357.3	1372.8	1412.1
50°	6852.4	4130.9	2114.0	1585.2	1554.2	1499.4	1406.5	1355.9	1277.1	1240.6	1250.4
52.5°	7313.8	4330.6	2154.8	1506.3	1461.3	1398.1	1361.5	1299.6	1204.0	1143.5	1142.1
55°	7751.3	4512.0	2109.8	1412.1	1368.5	1319.3	1313.6	1275.7	1173.0	1088.7	1088.7
57.5°	8164.7	4664.0	1997.2	1316.5	1274.3	1244.8	1282.7	1264.4	1135.1	1026.7	1021.1
60°	8515.0	4768.0	1834.0	1219.4	1189.9	1174.4	1232.0	1226.5	1081.6	960.6	956.4
62.5°	8793.5	4808.8	1654.0	1126.6	1119.6	1091.4	1161.7	1161.7	1014.1	896.0	891.7
65°	9011.5	4769.4	1471.2	1035.1	1049.3	1007.1	1075.9	1067.5	942.4	838.2	832.6
67.5°	9204.2	4640.1	1268.6	945.2	977.5	924.0	985.9	966.3	863.6	780.6	775.0
70°	9290.0	4339.0	1038.0	855.2	894.5	842.4	896.0	859.4	775.0	718.7	707.5
72.5°	8600.8	3606.3	817.1	761.0	794.7	752.5	798.9	756.7	679.4	654.1	632.9
75°	7115.4	2706.1	628.7	658.3	683.6	651.2	682.1	651.2	580.9	599.2	547.1
77.5°	5167.5	1827.1	481.0	549.9	561.2	544.3	571.0	535.9	472.6	468.3	447.3
80°	2569.7	1070.3	376.9	434.6	430.4	419.1	450.1	433.2	379.8	402.2	398.0
82.5°	744.0	458.5	274.3	305.2	296.7	299.6	322.1	330.6	495.1	490.9	502.1
85°	233.5	180.0	164.5	170.1	161.7	165.9	189.8	376.9	348.8	204.0	220.8
87.5°	60.5	61.9	40.8	43.6	45.0	53.4	60.5	229.3	109.7	71.8	76.0
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)