

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: P968403

Luminaire Tested: **NAV-SB5B-830-U-SL3**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968403
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-830-U-SL3
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 80 CRI, 3000K, 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: 25604.5 lumens
Efficiency: N/A
Efficacy: 140.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B3 - U0 - G4

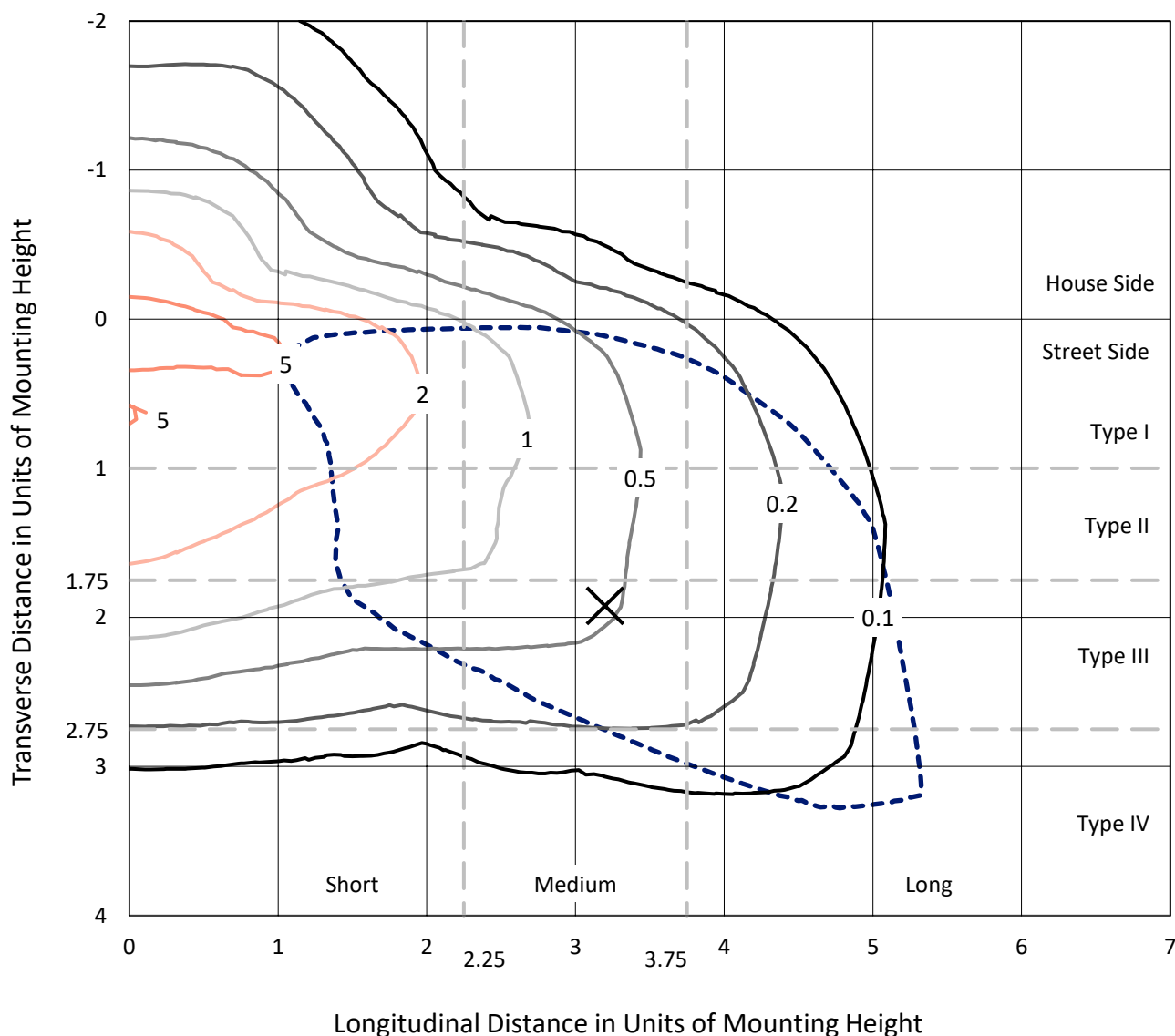
Input Watts (W): 182.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

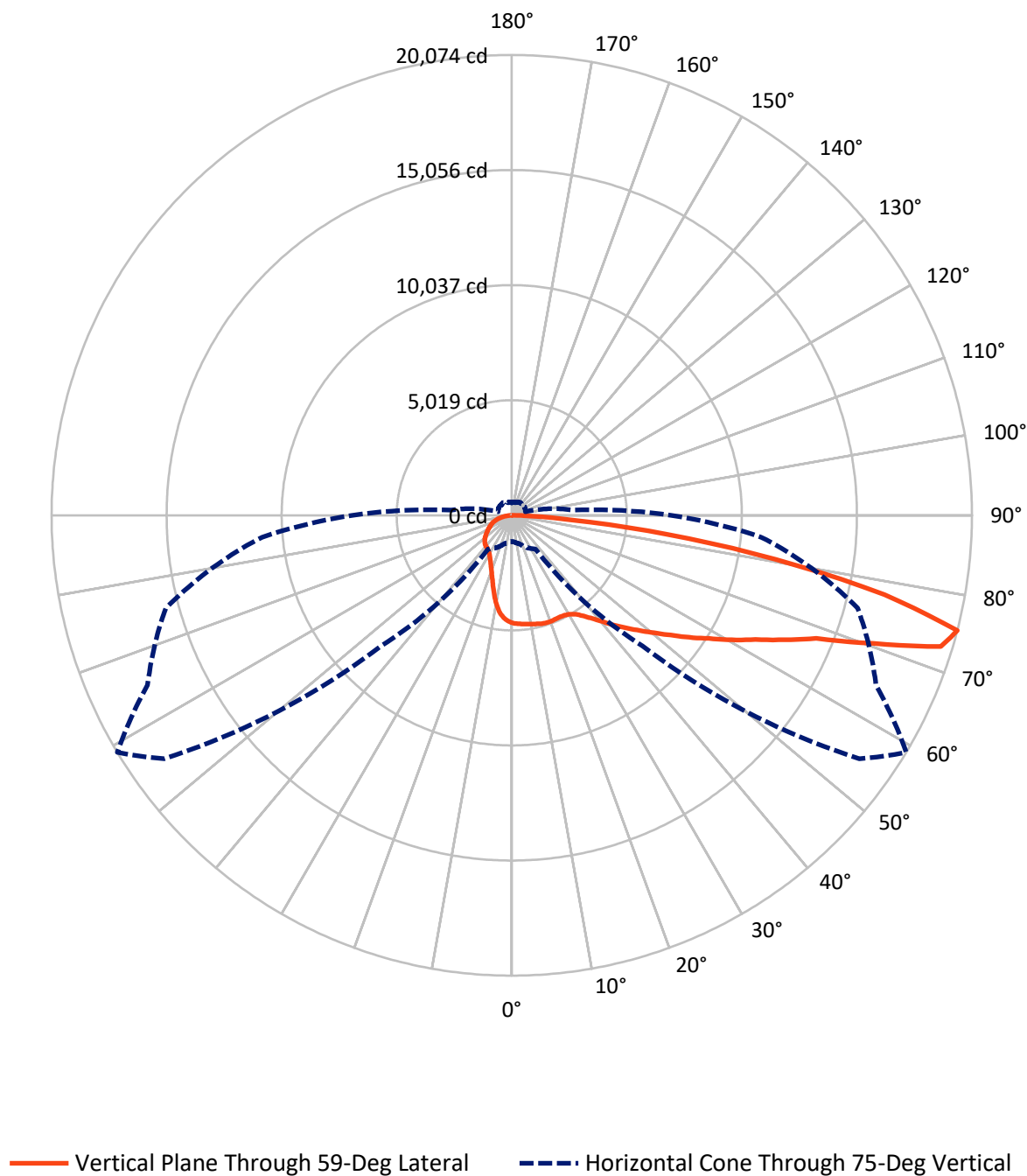
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type IV - Medium - N/A

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Luminous Intensity Polar Plot



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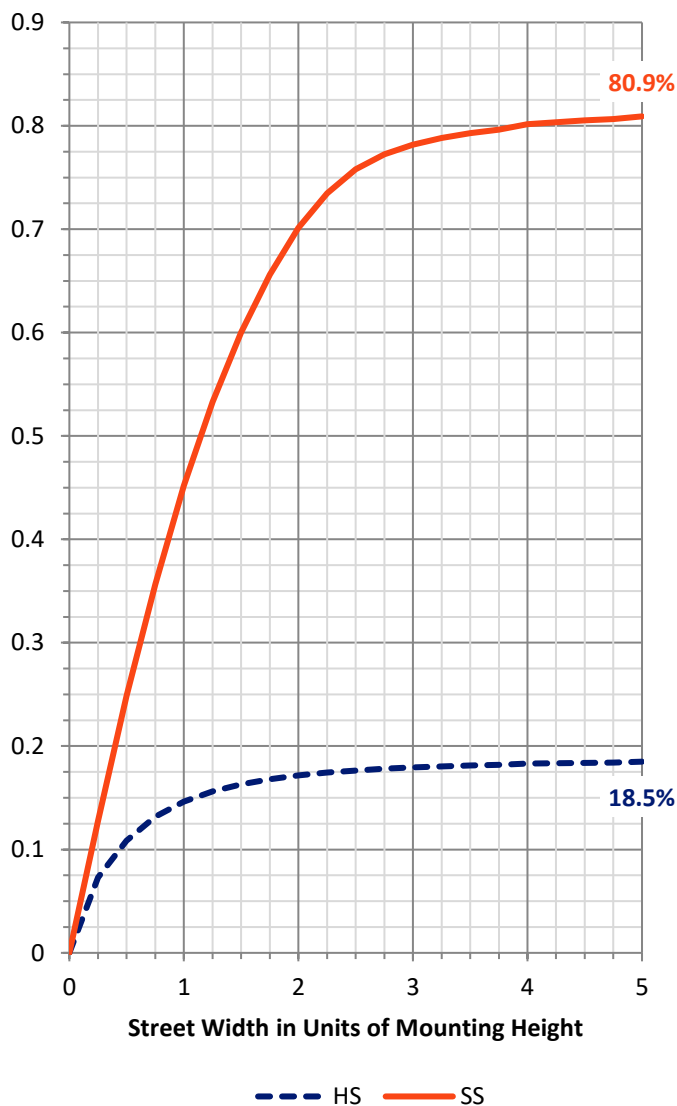
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4802.3	0.0	4802.3
	% Fixture	18.8	0.0	18.8
Street Side	Lumens	20802.2	0.0	20802.2
	% Fixture	81.2	0.0	81.2
Total	Lumens	25604.5	0.0	25604.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.4	1.6
10°-20°	1077.1	4.2
20°-30°	1636.1	6.4
30°-40°	2432.0	9.5
40°-50°	3616.8	14.1
50°-60°	4909.3	19.2
60°-70°	5993.5	23.4
70°-80°	4703.6	18.4
80°-90°	814.8	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°	25604.5	100.0
0°-180°	25604.5	100.0

Coefficient of Utilization



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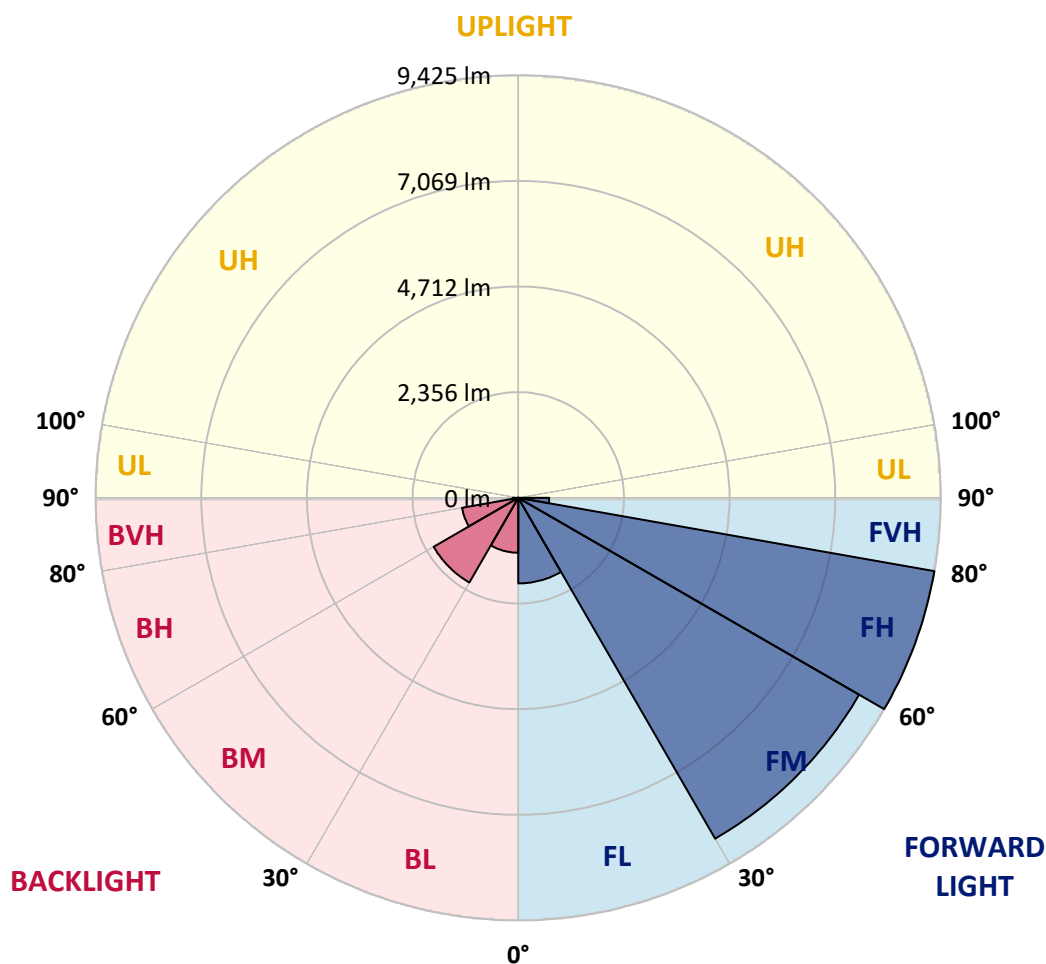
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1909.1	7.5			
FM	(30°-60°)	8778.3	34.3			
FH	(60°-80°)	9424.8	36.8			G4/12000
FVH	(80°-90°)	690.1	2.7			G4/750
BL	(0°-30°)	1225.5	4.8	B3/2500		
BM	(30°-60°)	2179.8	8.5	B2/2500		
BH	(60°-80°)	1272.3	5.0	B3/2500		G3/2500
BVH	(80°-90°)	124.7	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 IV Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	59°	65°	75°	85°
0°	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6
2.5°	4739.6	4723.1	4739.6	4732.7	4730.0	4724.4	4725.9	4735.5	4730.0	4736.8	4713.5
5°	4707.9	4698.3	4714.8	4710.7	4728.5	4731.3	4749.2	4760.3	4767.2	4768.5	4750.6
7.5°	4655.5	4645.9	4669.4	4688.7	4727.2	4738.2	4775.4	4793.3	4802.9	4819.4	4793.3
10°	4464.1	4460.0	4517.8	4590.9	4681.8	4738.2	4794.6	4825.0	4840.2	4884.2	4853.9
12.5°	4125.3	4130.8	4206.5	4347.0	4528.9	4710.7	4816.7	4860.8	4884.2	4939.3	4925.5
15°	3801.6	3800.2	3882.9	4033.0	4287.8	4589.4	4827.8	4903.5	4943.5	5024.8	5013.7
17.5°	3614.3	3608.7	3666.6	3780.9	4017.8	4403.5	4800.2	4926.9	5012.4	5114.2	5104.6
20°	3579.8	3568.8	3599.1	3655.6	3823.7	4199.6	4728.5	4926.9	5067.4	5199.6	5194.1
22.5°	3705.2	3687.2	3674.8	3668.0	3742.4	4031.6	4647.3	4910.4	5148.7	5322.2	5312.6
25°	3957.2	3929.6	3866.3	3804.4	3782.4	3955.9	4575.7	4906.3	5269.9	5487.5	5451.7
27.5°	4365.0	4330.5	4202.4	4053.7	3920.0	3994.4	4544.0	4931.1	5403.5	5662.4	5590.9
30°	4870.5	4833.3	4672.1	4443.5	4203.8	4137.7	4583.9	5004.0	5574.3	5895.2	5754.8
32.5°	5323.6	5282.2	5144.6	4911.8	4588.1	4385.6	4710.7	5143.1	5842.9	6218.9	6001.3
35°	5725.8	5677.6	5553.7	5338.7	5059.2	4734.1	4939.3	5389.8	6224.4	6745.1	6335.9
37.5°	6119.8	6063.3	5928.3	5701.0	5505.4	5198.3	5254.8	5706.5	6731.3	7384.2	6779.6
40°	6560.5	6479.2	6315.3	6090.9	5900.7	5742.4	5669.4	6095.0	7246.4	8097.7	7333.3
42.5°	6987.5	6910.3	6714.8	6523.3	6285.0	6239.6	6150.0	6549.4	7809.8	8881.4	7895.2
45°	7447.5	7355.3	7118.3	6875.9	6725.7	6570.1	6615.6	7004.0	8362.2	9680.3	8484.7
47.5°	7878.7	7775.3	7495.7	7225.7	7143.1	6848.3	7042.6	7504.0	8936.5	10490.2	9068.7
50°	8111.4	8009.6	7776.8	7532.9	7468.2	7191.3	7505.4	8053.6	9538.4	11297.3	9629.4
52.5°	8305.7	8195.5	7891.1	7756.1	7736.8	7564.6	8075.7	8681.6	10140.3	12010.8	10170.7
55°	8512.2	8389.6	8001.3	7880.0	7968.1	7983.3	8752.0	9393.8	10776.6	12706.4	10681.6
57.5°	8750.5	8594.9	8107.3	7984.7	8194.1	8473.7	9528.8	10132.0	11402.0	13351.0	11136.2
60°	8975.1	8818.1	8311.1	8151.4	8437.9	9042.6	10419.9	11026.0	12110.0	13925.4	11565.9
62.5°	9019.2	8889.6	8473.7	8472.3	8768.5	9706.4	11475.0	11928.2	12728.4	14492.9	11951.6
65°	8256.1	8174.8	7928.3	8459.9	9242.3	10662.4	12649.9	13082.5	13514.9	14988.8	12290.5
67.5°	6283.7	6294.6	6276.8	7302.9	8859.4	12035.7	14351.0	14317.9	14486.0	15545.3	12680.3
70°	2873.3	2938.0	3359.4	5041.3	7097.7	12194.0	17163.6	16735.3	15704.9	16265.6	13017.7
72.5°	1552.4	1601.9	1774.1	2442.1	4267.2	10841.4	19265.5	19569.9	17326.2	16750.4	12647.2
75°	1139.1	1166.7	1286.5	1552.4	1792.0	8057.7	18512.1	20074.0	17528.6	15619.6	10921.3
77.5°	852.6	865.0	962.8	1230.0	917.4	4247.9	14791.8	16625.1	15005.3	12833.1	8067.4
80°	618.5	632.2	705.2	922.8	643.3	1553.7	10156.8	11669.2	10276.6	8180.3	4020.6
82.5°	427.0	432.6	464.2	628.1	449.1	603.3	5763.0	6842.9	5736.8	2870.5	1085.4
85°	257.6	264.4	278.2	366.3	254.8	286.5	2487.6	2573.0	1714.8	685.9	337.4
87.5°	106.1	113.0	123.9	154.3	100.6	79.8	410.5	515.2	320.9	201.1	104.7
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°	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6	4699.6
2.5°	4706.5	4696.9	4670.7	4634.9	4601.8	4560.5	4542.6	4527.4	4513.7	4487.6	4475.2
5°	4735.5	4709.3	4639.0	4548.1	4444.8	4331.9	4221.7	4145.9	4081.2	4033.0	3993.1
7.5°	4779.6	4730.0	4601.8	4415.9	4179.0	3936.6	3717.6	3561.9	3444.8	3402.2	3327.8
10°	4825.0	4765.7	4542.6	4214.8	3805.7	3432.4	3141.8	2982.0	2888.3	2858.1	2811.3
12.5°	4878.7	4792.0	4450.3	3935.2	3388.3	2979.3	2725.9	2632.2	2584.0	2567.4	2571.6
15°	4957.2	4814.0	4311.3	3585.3	2990.3	2648.7	2484.8	2420.0	2395.3	2393.9	2399.4
17.5°	5016.5	4818.1	4095.0	3210.7	2684.6	2449.0	2314.0	2289.2	2305.7	2330.5	2340.2
20°	5082.6	4780.9	3811.3	2869.1	2469.6	2274.1	2217.6	2234.1	2274.1	2309.8	2322.2
22.5°	5129.4	4713.5	3468.3	2603.3	2283.7	2173.5	2170.7	2205.2	2227.2	2245.2	2254.8
25°	5170.7	4599.1	3104.6	2380.2	2130.8	2112.9	2143.2	2132.2	2117.0	2132.2	2141.8
27.5°	5201.1	4418.7	2779.6	2184.6	2023.4	2071.6	2053.7	2028.9	2027.6	2035.8	2049.6
30°	5191.4	4177.6	2512.4	1998.5	1947.6	1994.4	1951.8	1947.6	1943.5	1947.6	1962.8
32.5°	5191.4	3903.5	2307.2	1870.5	1899.4	1881.5	1877.4	1867.8	1851.3	1849.8	1867.8
35°	5220.3	3629.4	2130.8	1801.6	1859.5	1816.8	1819.6	1796.1	1761.7	1745.2	1761.7
37.5°	5279.6	3409.0	1955.9	1768.5	1789.2	1787.8	1776.8	1736.9	1676.3	1623.9	1641.8
40°	5422.8	3344.3	1836.1	1753.4	1756.1	1772.7	1743.7	1666.6	1528.9	1443.5	1454.5
42.5°	5647.3	3453.1	1809.8	1716.3	1734.1	1750.7	1694.2	1515.2	1417.4	1366.3	1366.3
45°	5932.4	3643.2	1866.3	1662.6	1681.8	1710.7	1542.6	1457.2	1413.2	1414.6	1421.5
47.5°	6293.3	3842.9	1971.1	1615.7	1606.1	1622.6	1442.2	1389.8	1329.2	1344.3	1382.9
50°	6710.7	4045.4	2070.2	1552.4	1522.0	1468.3	1377.4	1327.8	1250.7	1214.8	1224.5
52.5°	7162.4	4240.9	2110.2	1475.2	1431.1	1369.1	1333.3	1272.7	1179.1	1119.8	1118.5
55°	7590.7	4418.7	2066.1	1382.9	1340.2	1292.0	1286.5	1249.3	1148.7	1066.1	1066.1
57.5°	7995.7	4567.4	1955.9	1289.2	1247.9	1219.0	1256.1	1238.3	1111.5	1005.5	1000.0
60°	8338.7	4669.4	1796.1	1194.2	1165.2	1150.2	1206.6	1201.1	1059.2	940.7	936.6
62.5°	8611.4	4709.3	1619.8	1103.3	1096.4	1068.9	1137.8	1137.8	993.1	877.4	873.3
65°	8824.9	4670.7	1440.7	1013.7	1027.6	986.3	1053.7	1045.4	922.8	820.9	815.4
67.5°	9013.6	4544.0	1242.4	925.6	957.2	905.0	965.6	946.3	845.7	764.4	758.9
70°	9097.7	4249.2	1016.5	837.4	876.1	825.0	877.4	841.6	758.9	703.9	692.8
72.5°	8422.7	3531.6	800.2	745.2	778.2	736.9	782.4	741.1	665.3	640.5	619.8
75°	6968.3	2650.1	615.7	644.6	669.4	637.8	668.0	637.8	568.9	586.8	535.8
77.5°	5060.5	1789.2	471.1	538.5	549.6	533.0	559.2	524.8	462.8	458.7	438.0
80°	2516.5	1048.2	369.1	425.6	421.5	410.5	440.7	424.2	371.9	393.9	389.8
82.5°	728.7	449.1	268.5	298.9	290.6	293.4	315.4	323.7	484.8	480.7	491.7
85°	228.7	176.3	161.1	166.7	158.4	162.6	185.9	369.1	341.6	199.8	216.3
87.5°	59.2	60.6	40.0	42.7	44.1	52.4	59.2	224.5	107.4	70.2	74.4
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)