

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: P968318

Luminaire Tested: **NAV-SB5B-750-U-T2-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968318
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2405-108-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-750-U-T2-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 5000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22524.4 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

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



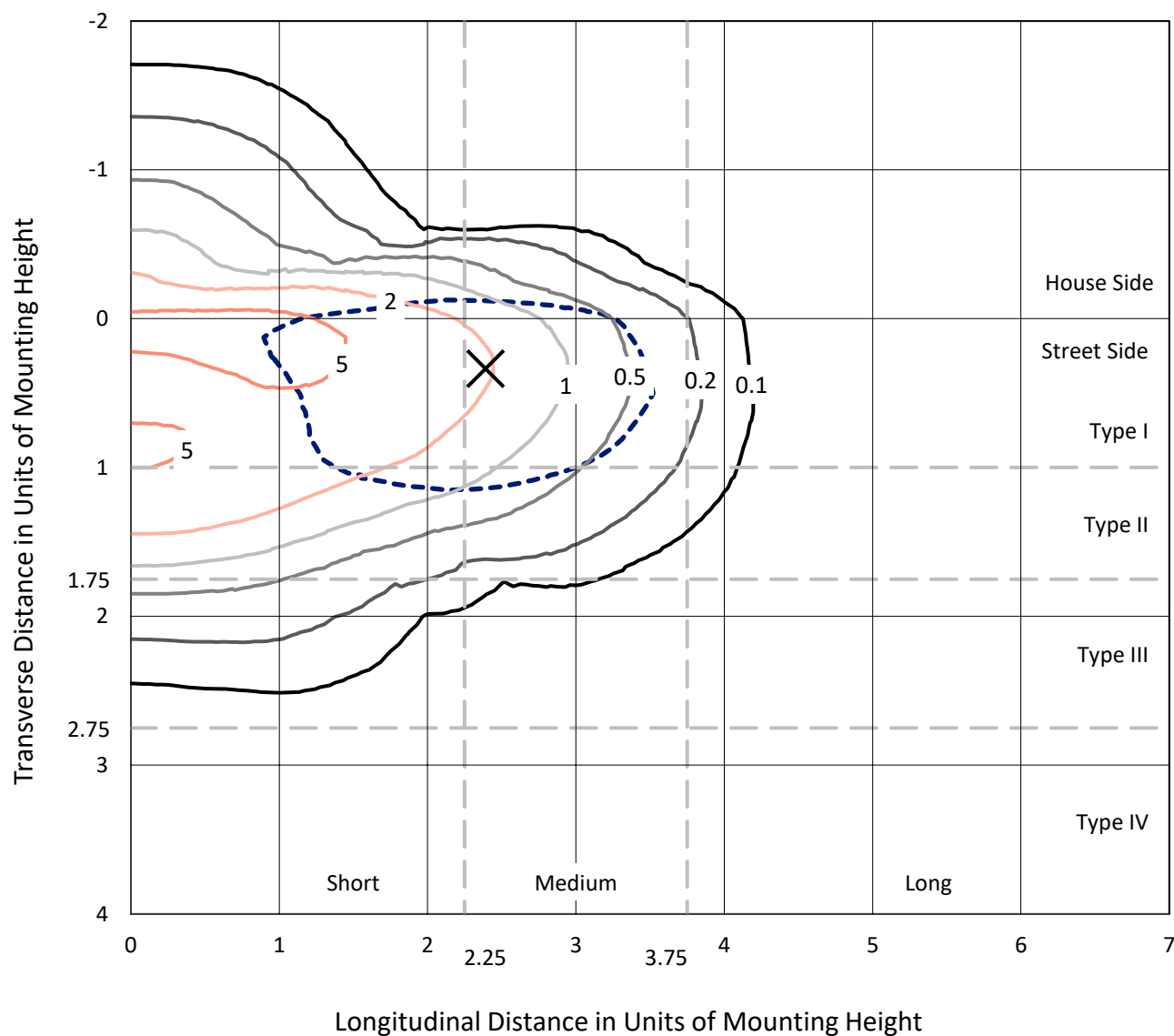
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

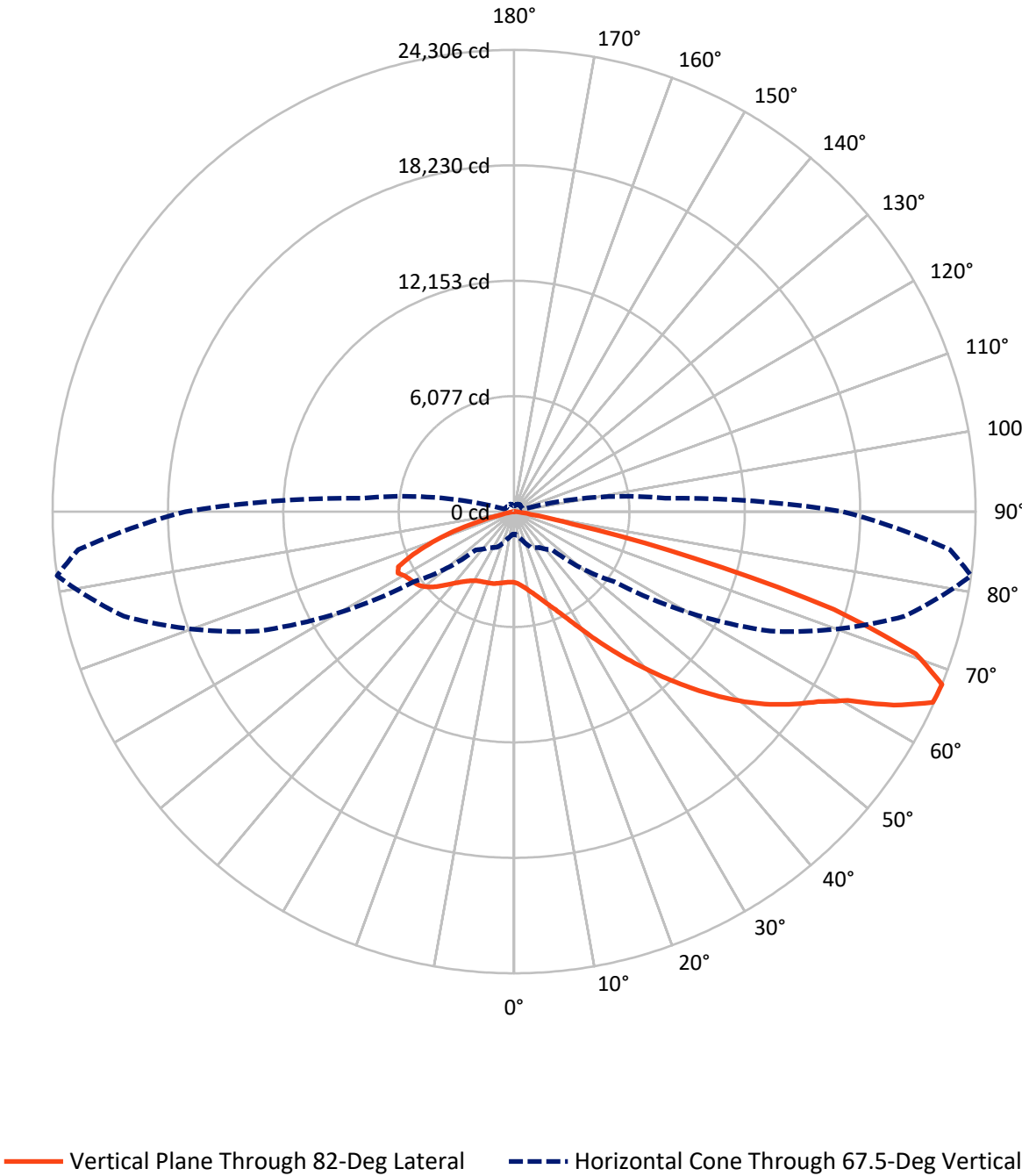
--- 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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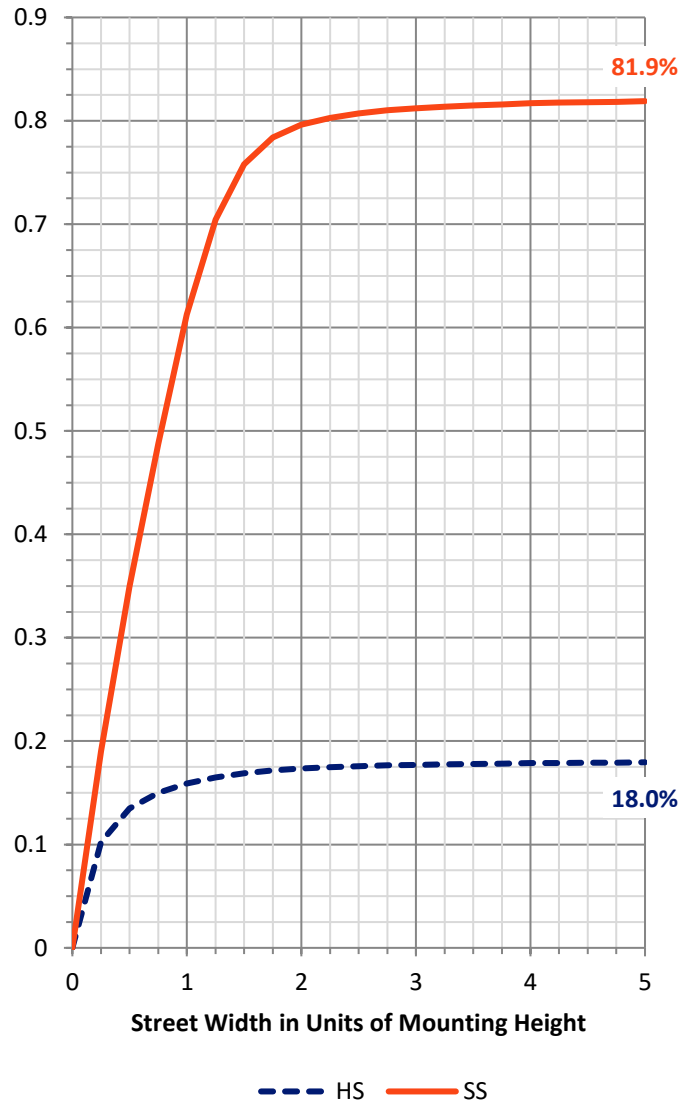
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4080.1	0.0	4080.1
	% Fixture	18.1	0.0	18.1
Street Side	Lumens	18444.3	0.0	18444.3
	% Fixture	81.9	0.0	81.9
Total	Lumens	22524.4	0.0	22524.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	332.5	1.5
10°-20°	863.9	3.8
20°-30°	1383.7	6.1
30°-40°	2446.8	10.9
40°-50°	4287.0	19.0
50°-60°	5717.7	25.4
60°-70°	5322.9	23.6
70°-80°	2042.9	9.1
80°-90°	126.9	0.6
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°	22524.4	100.0
0°-180°	22524.4	100.0

Coefficient of Utilization



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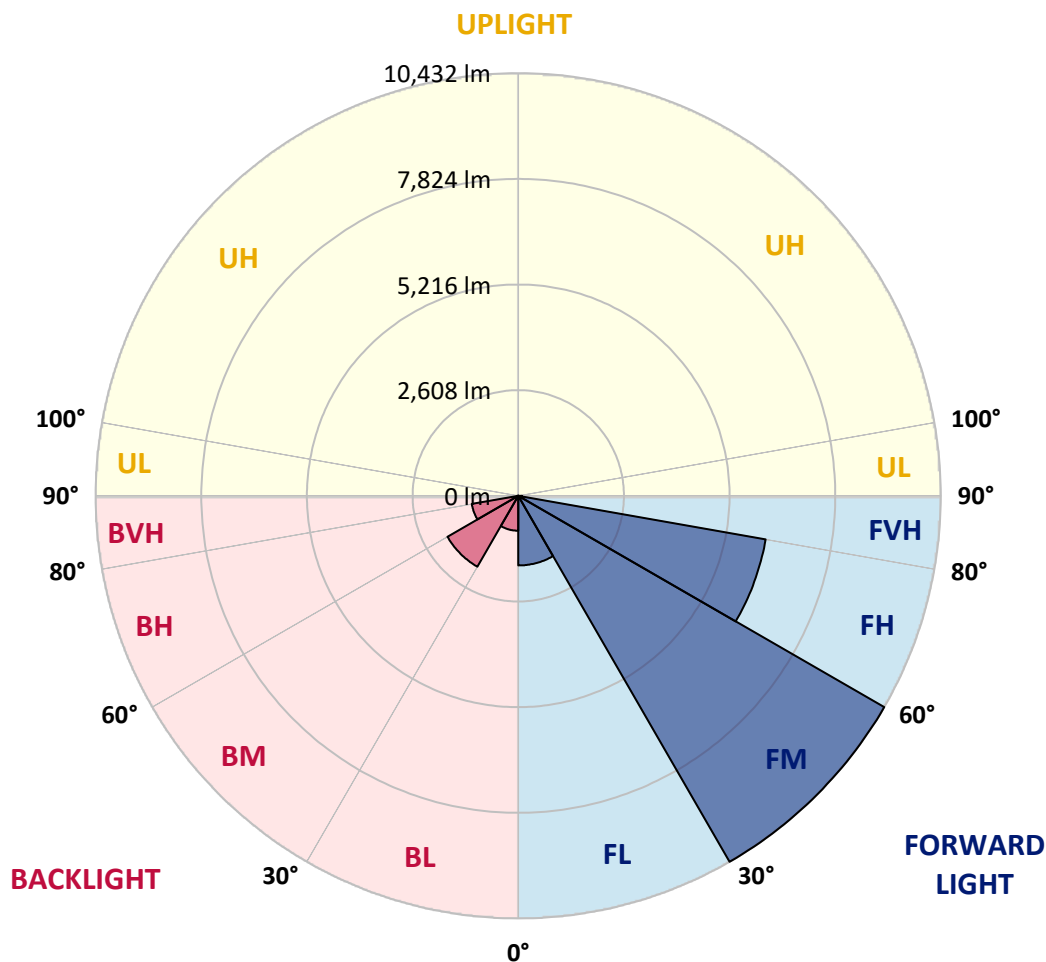
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1718.4	7.6			
FM	(30°-60°)	10432.4	46.3			
FH	(60°-80°)	6201.3	27.5			G3/7500
FVH	(80°-90°)	92.3	0.4			G1/100
BL	(0°-30°)	861.7	3.8	B2/1000		
BM	(30°-60°)	2019.2	9.0	B2/2500		
BH	(60°-80°)	1164.5	5.2	B3/2500		G3/2500
BVH	(80°-90°)	34.6	0.2			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5
2.5°	3944.0	3966.6	3953.7	3947.2	3935.9	3919.6	3906.7	3866.1	3824.0	3796.4	3786.7
5°	4023.4	4046.1	4044.5	4051.0	4059.1	4064.0	4060.7	4015.3	3955.3	3908.3	3880.8
7.5°	3955.3	3981.3	4002.3	4034.8	4091.5	4151.6	4180.8	4171.0	4109.4	4044.5	4010.4
10°	3762.4	3789.9	3840.2	3916.4	4036.4	4166.1	4274.8	4325.1	4286.1	4214.8	4167.8
12.5°	3408.8	3436.4	3535.3	3700.8	3901.8	4127.3	4334.8	4469.4	4479.1	4407.8	4352.7
15°	3011.4	3039.0	3144.5	3352.1	3658.5	4020.2	4367.2	4621.8	4707.8	4646.1	4579.7
17.5°	2765.0	2789.3	2868.8	3035.8	3355.3	3806.1	4355.8	4784.0	4980.3	4931.6	4852.1
20°	2690.4	2711.4	2748.7	2865.5	3131.5	3583.9	4281.3	4936.4	5273.7	5246.2	5157.0
22.5°	2769.9	2789.3	2800.7	2852.6	3019.6	3438.0	4187.2	5092.1	5614.3	5617.5	5508.9
25°	2953.1	2972.6	2959.6	2992.1	3065.1	3392.5	4151.6	5275.4	6042.5	6078.1	5954.8
27.5°	3254.8	3256.3	3225.6	3223.9	3235.3	3460.7	4188.9	5471.7	6582.4	6649.0	6496.6
30°	3859.6	3835.3	3717.0	3588.8	3530.4	3665.0	4292.6	5703.5	7219.8	7338.2	7146.8
32.5°	4792.1	4756.4	4539.1	4232.6	3924.5	3994.2	4479.1	5967.9	7913.9	8127.9	7894.4
35°	5804.1	5794.3	5567.3	5111.6	4573.1	4463.0	4782.3	6314.9	8671.2	9011.8	8734.4
37.5°	6744.6	6739.8	6610.0	6073.2	5418.0	5116.5	5268.9	6769.0	9482.1	9975.1	9647.5
40°	7604.2	7618.7	7489.0	7009.0	6349.0	5954.8	5930.5	7330.1	10383.8	11024.3	10635.1
42.5°	8346.9	8363.1	8231.8	7876.6	7268.5	6882.5	6743.1	8017.7	11264.3	12151.4	11690.8
45°	8851.2	8951.7	8932.4	8648.5	8212.3	7811.7	7719.3	8880.4	12268.1	13346.5	12806.6
47.5°	8994.0	9086.4	9232.3	9271.2	9005.2	8611.2	8721.5	9919.9	13283.3	14543.4	13928.7
50°	8642.0	8728.0	9031.3	9435.0	9619.9	9498.3	9696.1	11034.0	14322.8	15736.9	15029.9
52.5°	7948.0	8035.5	8418.2	9057.2	9811.3	10194.0	10674.0	12131.9	15329.9	16867.3	16072.6
55°	6944.1	7036.5	7527.9	8251.1	9446.4	10481.0	11489.7	13228.2	16252.6	17884.1	17013.3
57.5°	5578.7	5646.7	6157.6	7169.6	8528.5	10195.6	12091.4	14425.0	17121.9	18883.1	17945.7
60°	3635.9	3695.8	4289.4	5418.0	7007.3	9242.0	12211.3	15759.7	18276.6	20182.0	19202.6
62.5°	2418.0	2458.5	2810.4	3639.1	4934.9	7411.2	11509.2	16825.1	19969.6	22442.7	21357.7
65°	1659.0	1699.6	2051.4	2628.8	3188.3	4902.4	9490.2	16684.0	21503.7	24237.9	22955.2
67.5°	1183.9	1217.9	1516.3	2061.2	2307.7	2847.7	6433.3	14880.7	21283.2	24306.0	23041.1
70°	848.2	867.6	1114.1	1605.5	1834.1	1710.9	3577.5	11381.1	18634.9	22444.3	21286.4
72.5°	593.6	600.0	773.6	1222.7	1477.3	1248.8	1702.8	7588.0	14094.2	17616.5	16502.4
75°	402.2	410.3	520.6	896.8	1185.4	953.6	901.7	4068.8	8273.9	9751.2	8741.0
77.5°	246.5	249.8	335.7	613.1	887.0	726.5	580.6	1723.8	3201.3	3142.9	2679.0
80°	139.5	139.5	214.0	381.1	604.9	468.6	407.0	733.0	1013.5	890.3	784.9
82.5°	77.8	79.4	155.7	236.8	400.6	277.3	223.8	339.0	437.9	387.6	337.3
85°	32.4	35.7	95.6	111.9	191.4	137.9	90.8	142.7	162.2	144.3	105.4
87.5°	3.3	4.8	29.2	21.1	22.8	27.6	13.0	27.6	22.8	22.8	16.2
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°	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5	3731.5
2.5°	3755.8	3731.5	3669.9	3598.6	3504.5	3459.1	3397.5	3355.3	3319.6	3322.8	3290.5
5°	3828.8	3767.2	3629.3	3457.4	3243.4	3091.0	2928.8	2816.9	2726.1	2706.6	2662.8
7.5°	3929.3	3832.1	3590.5	3280.7	2919.1	2645.0	2400.1	2242.8	2130.9	2095.2	2059.5
10°	4059.1	3918.1	3540.1	3058.5	2538.0	2189.3	1926.6	1803.3	1727.1	1701.2	1681.7
12.5°	4209.9	4017.0	3473.7	2787.7	2145.5	1809.8	1642.8	1581.2	1556.9	1548.7	1543.9
15°	4399.7	4140.2	3373.2	2466.6	1813.0	1577.9	1506.5	1498.4	1501.7	1498.4	1496.8
17.5°	4625.1	4274.8	3209.4	2135.8	1589.3	1459.5	1433.6	1440.0	1448.2	1446.6	1443.3
20°	4871.6	4407.8	3000.2	1842.2	1436.8	1375.2	1360.6	1367.0	1373.6	1370.3	1368.7
22.5°	5152.2	4550.5	2768.2	1613.6	1334.7	1297.3	1281.1	1282.8	1282.8	1276.2	1273.0
25°	5487.8	4707.8	2525.0	1451.4	1256.9	1227.6	1208.2	1201.7	1192.0	1172.5	1169.2
27.5°	5888.4	4874.8	2291.5	1337.9	1195.1	1167.6	1144.9	1128.7	1104.3	1071.9	1068.7
30°	6339.2	5077.5	2093.6	1266.6	1146.6	1119.0	1093.1	1068.7	1033.0	992.5	989.2
32.5°	6869.6	5294.8	1949.2	1219.5	1102.8	1073.6	1042.7	1013.5	974.7	934.1	935.7
35°	7502.0	5557.5	1865.0	1187.1	1068.7	1029.8	995.7	963.3	934.1	898.4	895.1
37.5°	8187.9	5836.5	1839.1	1170.9	1046.0	985.9	947.1	924.3	921.2	900.1	898.4
40°	8938.8	6167.3	1858.4	1161.1	1021.7	943.8	901.7	896.8	904.9	867.6	869.2
42.5°	9733.4	6559.8	1890.9	1149.7	987.6	901.7	861.1	861.1	854.6	802.8	802.8
45°	10593.0	7012.2	1923.3	1122.2	947.1	859.5	828.7	817.3	789.8	739.5	737.9
47.5°	11458.9	7472.8	1947.7	1071.9	898.4	823.8	796.2	770.3	729.8	684.4	682.8
50°	12281.1	7886.4	1921.7	997.3	843.3	789.8	760.6	724.9	681.1	650.3	645.4
52.5°	13015.8	8244.7	1811.5	909.8	784.9	754.1	728.2	690.8	655.2	622.7	619.5
55°	13654.7	8535.0	1616.8	827.1	733.0	723.2	697.3	650.3	601.7	574.1	570.8
57.5°	14267.7	8755.6	1373.6	758.9	685.9	689.2	650.3	608.1	562.7	533.5	530.3
60°	15083.4	9050.6	1127.1	695.7	635.7	645.4	603.3	572.5	515.7	478.4	473.6
62.5°	16387.3	9509.6	895.1	617.9	577.3	580.6	562.7	525.4	457.4	413.5	410.3
65°	17421.9	9341.0	705.4	533.5	510.9	515.7	515.7	475.2	402.2	351.9	347.1
67.5°	17305.2	7998.2	562.7	450.8	447.6	450.8	462.2	428.1	356.8	316.2	309.8
70°	15941.3	6362.0	450.8	374.6	389.2	381.1	413.5	390.8	321.1	280.5	275.7
72.5°	13007.7	4582.9	343.8	309.8	298.4	311.4	373.0	351.9	267.6	222.2	217.3
75°	7600.9	2445.5	256.2	244.9	215.7	259.4	330.9	300.0	204.4	163.8	159.0
77.5°	2474.8	853.0	188.1	180.0	160.5	209.2	282.2	253.0	167.1	129.8	124.8
80°	663.3	257.9	128.1	118.4	103.8	155.7	223.8	201.1	120.0	84.4	82.7
82.5°	266.0	108.6	74.6	66.5	56.8	107.0	176.8	162.2	89.2	53.5	53.5
85°	86.0	35.7	27.6	21.1	25.9	66.5	105.4	110.3	63.2	27.6	21.1
87.5°	11.4	4.8	4.8	6.5	4.8	11.4	32.4	30.9	17.8	3.3	0.0
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)