

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: P968288

Luminaire Tested: **NAV-SB5B-740-U-T2R-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968288
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-740-U-T2R-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II
ROADWAY OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26117 lumens
Efficiency: N/A
Efficacy: 143.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B2 - 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

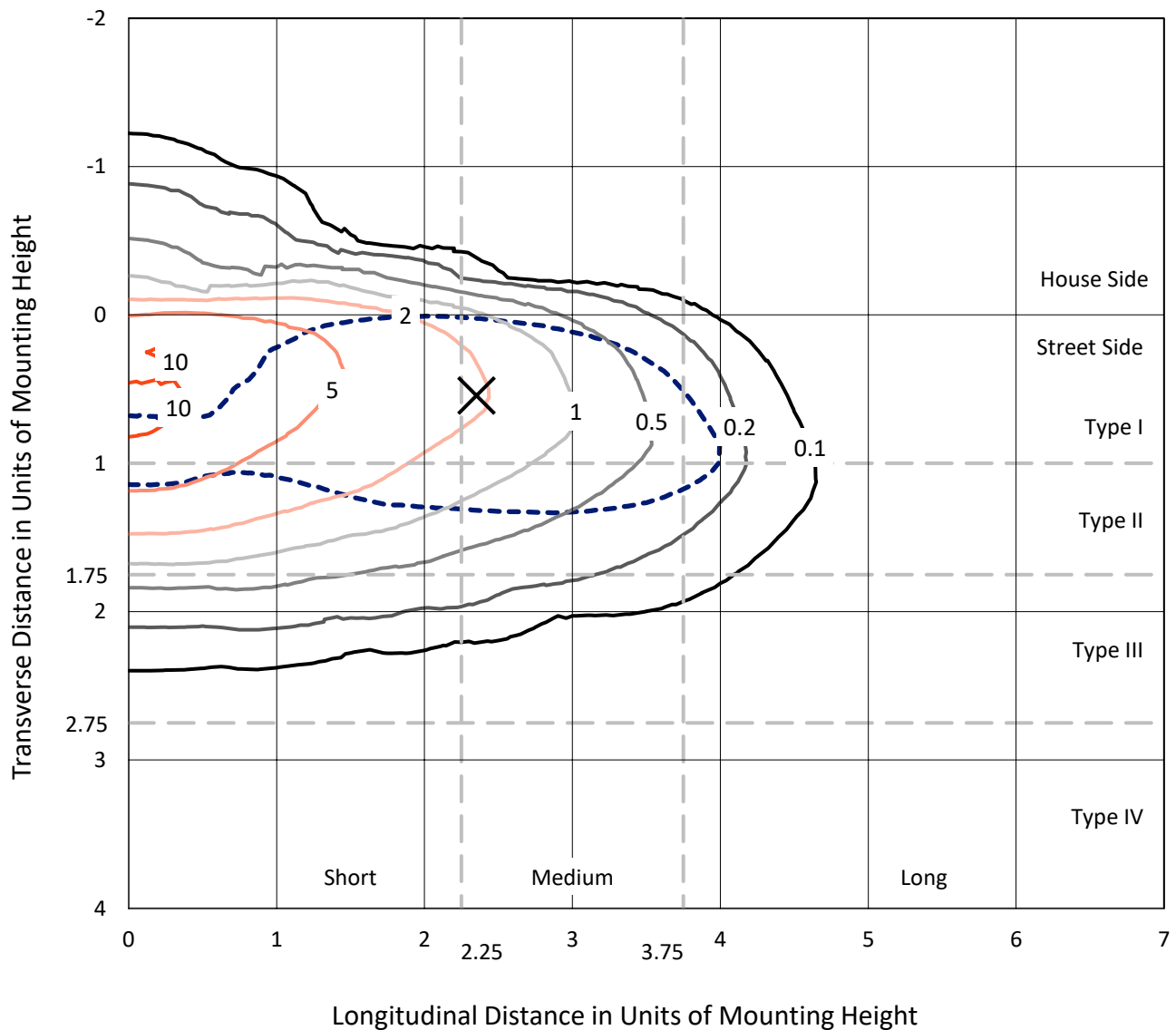


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Iso-Footcandle Lines of Horizontal Illumination

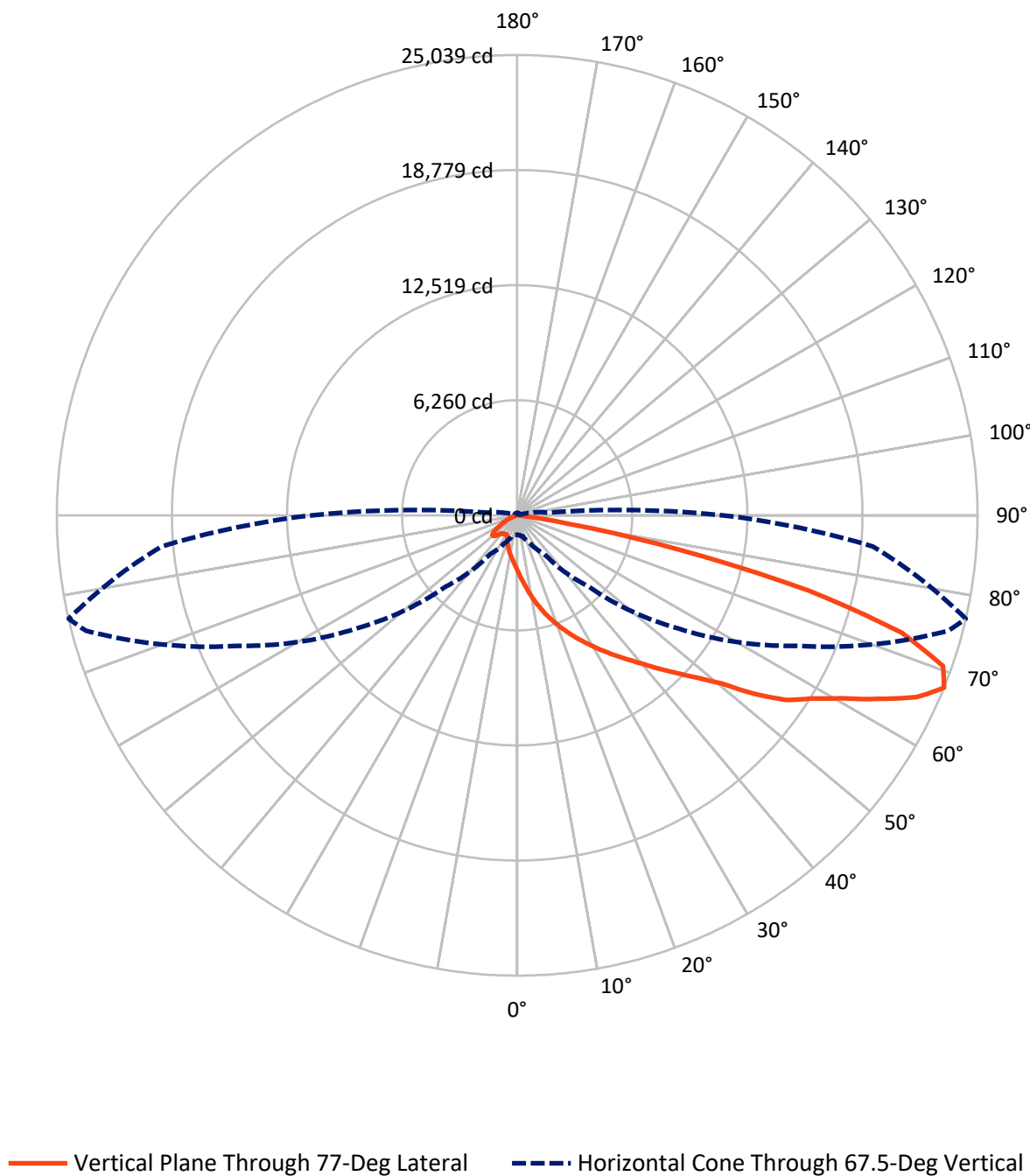
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 11.3 fc
Type II - Medium - N/A

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Luminous Intensity Polar Plot



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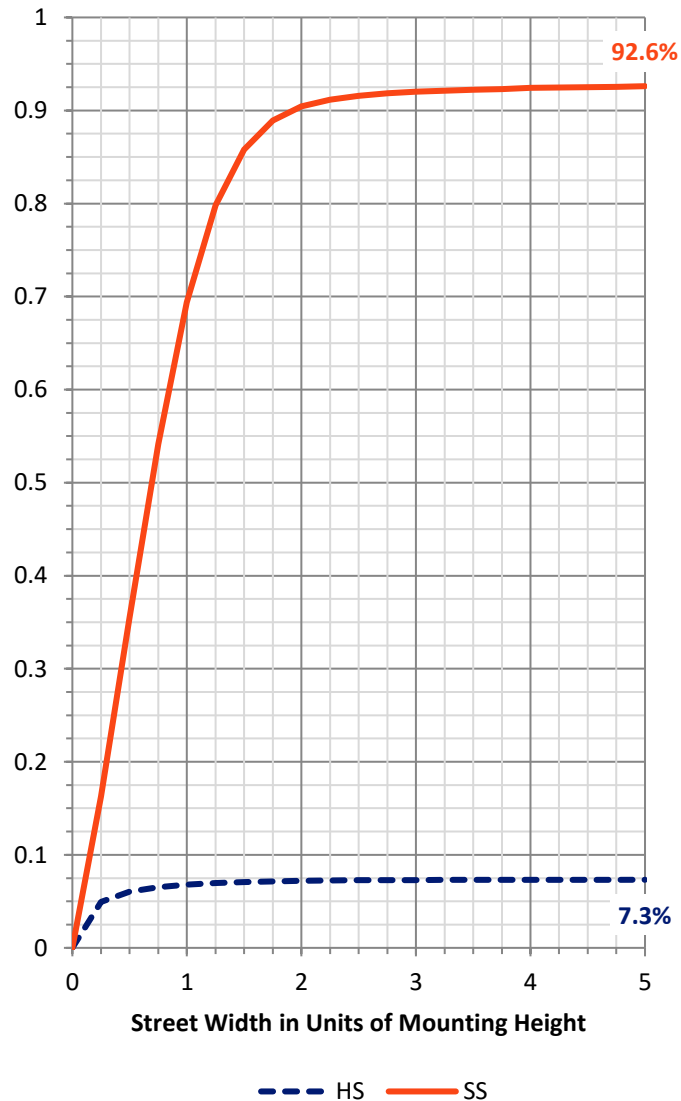
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1921.4	0.0	1921.4
	% Fixture	7.4	0.0	7.4
Street Side	Lumens	24195.6	0.0	24195.6
	% Fixture	92.6	0.0	92.6
Total	Lumens	26117.0	0.0	26117.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	307.4	1.2
10°-20°	1076.4	4.1
20°-30°	2077.2	8.0
30°-40°	3606.2	13.8
40°-50°	5236.0	20.0
50°-60°	6012.9	23.0
60°-70°	5220.3	20.0
70°-80°	2458.8	9.4
80°-90°	121.6	0.5
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°	26117.0	100.0
0°-180°	26117.0	100.0

Coefficient of Utilization



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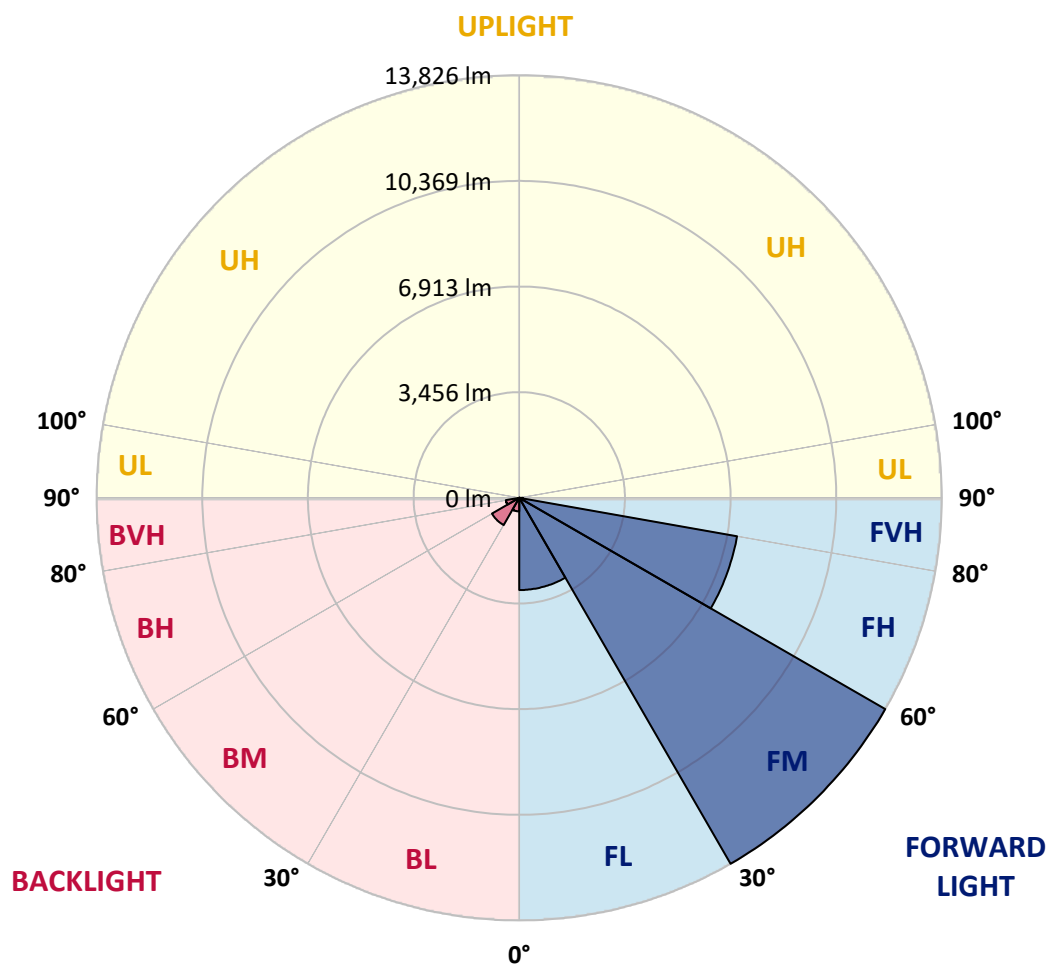
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3016.2	11.5			
FM	(30°-60°)	13825.6	52.9			
FH	(60°-80°)	7234.3	27.7			G3/7500
FVH	(80°-90°)	119.4	0.5			G2/225
BL	(0°-30°)	444.8	1.7	B1/500		
BM	(30°-60°)	1029.5	3.9	B2/2500		
BH	(60°-80°)	444.8	1.7	B1/500		G1/500
BVH	(80°-90°)	2.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type II Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7
2.5°	4169.6	4195.6	4158.3	4086.9	3979.9	3910.2	3739.8	3579.3	3401.0	3344.2	3165.7
5°	5082.7	5105.4	5063.3	4985.4	4842.7	4706.5	4482.6	4146.9	3798.2	3686.3	3370.1
7.5°	5759.0	5772.0	5755.8	5684.3	5548.1	5394.1	5144.4	4747.0	4229.7	4106.4	3621.4
10°	6245.5	6287.7	6282.8	6255.3	6164.5	6039.6	5773.6	5321.1	4713.0	4554.0	3905.2
12.5°	6568.3	6615.4	6642.9	6704.5	6699.6	6620.2	6386.7	5908.2	5194.6	5008.2	4224.7
15°	6662.3	6712.6	6818.0	6960.8	7087.3	7127.7	6964.0	6483.9	5724.9	5486.5	4552.3
17.5°	6608.8	6686.7	6813.2	7038.6	7315.9	7499.2	7481.4	7040.2	6206.6	5934.1	4873.5
20°	6727.2	6801.8	6900.7	7090.5	7413.2	7745.7	7878.7	7572.2	6685.0	6399.6	5210.8
22.5°	7382.5	7369.4	7379.2	7410.0	7602.9	7932.2	8206.3	8055.5	7158.6	6866.7	5567.6
25°	8420.4	8361.9	8263.0	8096.0	8047.4	8206.3	8491.7	8483.6	7658.1	7345.2	5932.5
27.5°	9610.8	9601.1	9369.1	8966.9	8739.9	8678.3	8814.5	8900.4	8152.7	7818.7	6299.0
30°	10750.9	10776.8	10463.8	10016.2	9599.4	9357.7	9234.5	9296.1	8655.5	8329.6	6677.0
32.5°	11743.4	11771.0	11430.4	10906.6	10390.8	10098.9	9839.4	9687.0	9203.7	8848.5	7092.1
35°	12581.9	12609.4	12218.6	11639.6	11089.9	10825.4	10532.0	10115.1	9755.1	9424.3	7554.4
37.5°	13331.2	13323.1	12799.2	12215.3	11675.3	11466.1	11312.0	10642.3	10322.8	10003.3	8066.9
40°	13774.0	13808.0	13360.4	12716.5	12192.7	12040.2	12030.5	11295.8	10978.0	10668.2	8627.9
42.5°	13903.6	13963.7	13639.3	13110.6	12635.4	12469.9	12724.7	12003.0	11740.1	11438.5	9262.1
45°	13670.1	13728.5	13580.9	13214.4	12937.0	12830.0	13321.4	12735.9	12554.3	12255.9	9977.2
47.5°	12989.0	13062.0	13097.7	13019.8	13016.6	13125.2	13856.7	13508.0	13520.9	13216.0	10806.1
50°	11670.4	11793.6	12121.3	12397.0	12823.6	13358.7	14377.3	14344.8	14610.8	14348.1	11886.1
52.5°	9273.4	9448.6	10577.4	11331.5	12290.0	13315.0	14949.7	15687.6	16522.9	16138.5	13409.0
55°	7452.2	7452.2	8370.0	9781.1	11248.8	13026.2	15199.4	16560.1	17825.2	17734.3	14481.0
57.5°	6075.3	6148.3	6733.7	7980.9	9742.1	12338.6	15353.6	17108.3	18874.5	18807.9	15528.6
60°	3749.6	3906.9	5013.0	6243.9	8027.9	11114.2	15256.2	17663.0	20147.6	20201.1	16790.4
62.5°	2111.6	2169.9	2663.0	4492.4	6242.2	9468.0	14511.8	17972.8	21775.8	22002.9	18091.1
65°	1458.0	1487.2	1676.9	2796.0	4326.9	7538.1	13057.1	17779.8	23407.4	23866.3	19193.9
67.5°	1059.0	1073.6	1192.0	1707.8	2567.3	5465.4	10776.8	16806.6	24271.8	25038.9	19404.8
70°	814.2	823.9	909.8	1122.3	1516.4	3373.4	7826.8	14871.8	23645.8	24562.1	18324.6
72.5°	661.7	671.4	737.9	830.4	1005.5	1994.9	4743.8	12077.5	20882.2	21871.6	15600.1
75°	557.9	570.8	630.9	690.8	788.2	1281.2	2225.1	8410.6	15703.8	16352.5	10848.2
77.5°	309.8	285.5	512.5	572.5	664.9	810.9	1041.2	4949.7	8795.0	8975.0	4813.5
80°	193.0	199.5	407.0	460.6	510.9	408.7	476.8	1905.6	3049.0	2896.5	932.5
82.5°	11.4	25.9	313.0	332.5	350.3	175.2	180.0	647.1	734.7	674.7	165.4
85°	0.0	0.0	142.7	115.1	121.7	50.2	51.9	150.8	98.9	107.0	32.4
87.5°	0.0	0.0	0.0	3.3	0.0	4.8	9.7	13.0	4.8	6.5	11.4
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°	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7	3011.7
2.5°	3052.2	2938.7	2708.4	2483.0	2299.7	2129.4	2007.8	1892.7	1834.2	1831.0	1827.8
5°	3144.7	2906.3	2445.6	2038.6	1711.0	1448.2	1278.0	1156.3	1094.7	1073.6	1070.4
7.5°	3274.4	2916.0	2215.3	1649.3	1263.4	1037.9	940.6	901.7	888.8	874.1	870.9
10°	3438.2	2938.7	2009.4	1328.3	995.8	882.2	843.4	827.1	817.3	807.7	804.4
12.5°	3621.4	2959.8	1805.0	1102.8	875.8	817.3	789.9	770.4	757.4	746.0	742.8
15°	3799.9	2972.7	1592.6	945.5	814.2	767.1	737.9	716.8	698.9	686.0	684.4
17.5°	3976.7	2990.5	1393.1	851.5	763.8	716.8	687.7	661.7	647.1	632.5	630.9
20°	4172.9	2987.4	1205.0	784.9	713.6	666.6	635.7	611.4	596.9	580.6	579.0
22.5°	4354.5	2971.2	1039.6	728.2	661.7	616.3	582.2	557.9	543.4	530.3	528.7
25°	4563.7	2958.1	901.7	676.3	613.1	567.6	530.3	507.6	491.4	480.0	478.5
27.5°	4764.8	2938.7	801.1	629.2	566.0	522.2	486.6	460.6	446.0	437.9	437.9
30°	4962.7	2933.9	763.8	583.8	523.9	480.0	444.3	420.0	408.7	405.5	403.8
32.5°	5201.1	2946.8	780.1	567.6	484.9	441.2	407.0	389.2	377.9	377.9	377.9
35°	5455.8	2943.6	804.4	582.2	459.0	402.2	376.3	364.9	353.5	353.5	353.5
37.5°	5775.3	2948.4	823.9	606.6	449.3	369.8	355.2	340.6	334.0	334.0	334.0
40°	6252.0	3109.0	814.2	627.6	446.0	347.1	317.9	313.0	308.1	308.1	308.1
42.5°	6835.8	3457.6	827.1	629.2	444.3	330.9	291.9	301.7	290.3	288.6	287.1
45°	7474.8	3838.8	909.8	595.2	442.8	322.8	278.9	290.3	272.4	272.4	272.4
47.5°	8109.0	4216.6	994.1	546.5	437.9	321.1	267.6	261.1	256.2	257.9	257.9
50°	8983.1	4524.8	1026.6	480.0	426.5	317.9	246.5	248.2	244.9	248.2	248.2
52.5°	9935.1	4589.6	987.7	405.5	394.1	308.1	232.0	238.4	236.8	240.1	240.1
55°	10528.7	4519.9	815.8	337.3	343.8	269.3	217.3	230.3	230.3	230.3	230.3
57.5°	11141.7	4223.2	579.0	274.1	285.5	220.6	204.4	222.2	220.6	218.9	218.9
60°	11582.9	3743.1	381.1	225.4	227.0	181.6	189.7	209.2	207.6	199.5	199.5
62.5°	11912.0	3212.8	244.9	191.4	173.5	163.8	173.5	189.7	183.3	165.4	162.2
65°	11874.8	2478.1	188.1	163.8	142.7	142.7	150.8	165.4	146.0	116.7	113.6
67.5°	11182.2	1676.9	155.7	137.9	120.0	118.4	124.8	137.9	124.8	98.9	95.7
70°	9944.9	1096.3	124.8	107.0	95.7	87.5	100.6	118.4	105.4	79.4	76.3
72.5°	8071.7	668.2	94.1	77.8	69.7	56.8	79.4	97.3	84.4	58.4	55.1
75°	5222.2	340.6	64.9	50.2	37.3	34.0	58.4	73.0	58.4	35.7	30.9
77.5°	1998.0	142.7	35.7	22.8	19.5	16.2	32.4	43.8	24.3	8.1	6.5
80°	384.4	60.0	17.8	11.4	9.7	6.5	4.8	3.3	0.0	0.0	0.0
82.5°	66.5	19.5	6.5	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	22.8	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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)