

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: P968300

Luminaire Tested: **NAV-SB5B-740-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968300
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-1)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-740-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 4000K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30785.9 lumens
Efficiency: N/A
Efficacy: 168.5 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

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



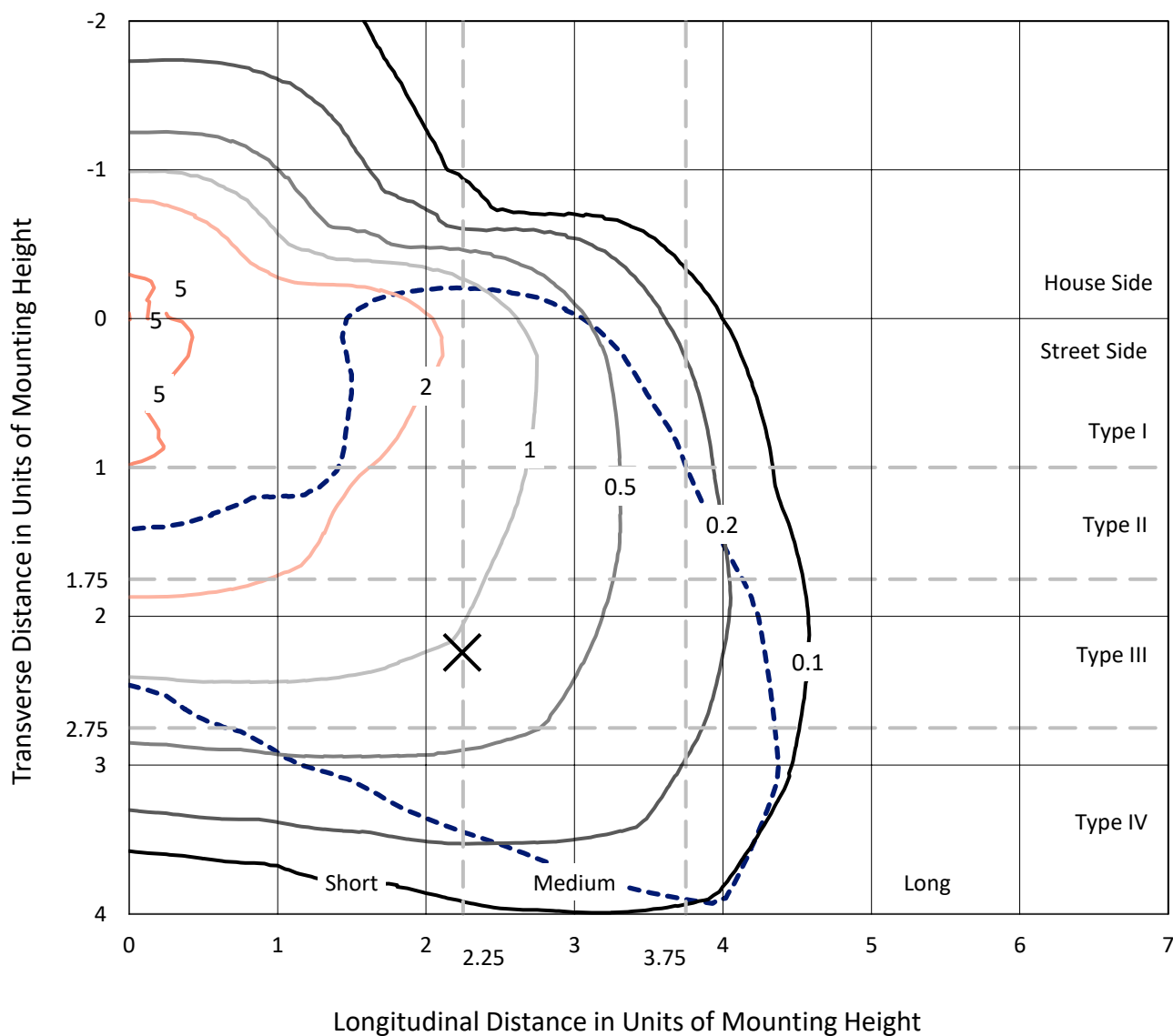
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

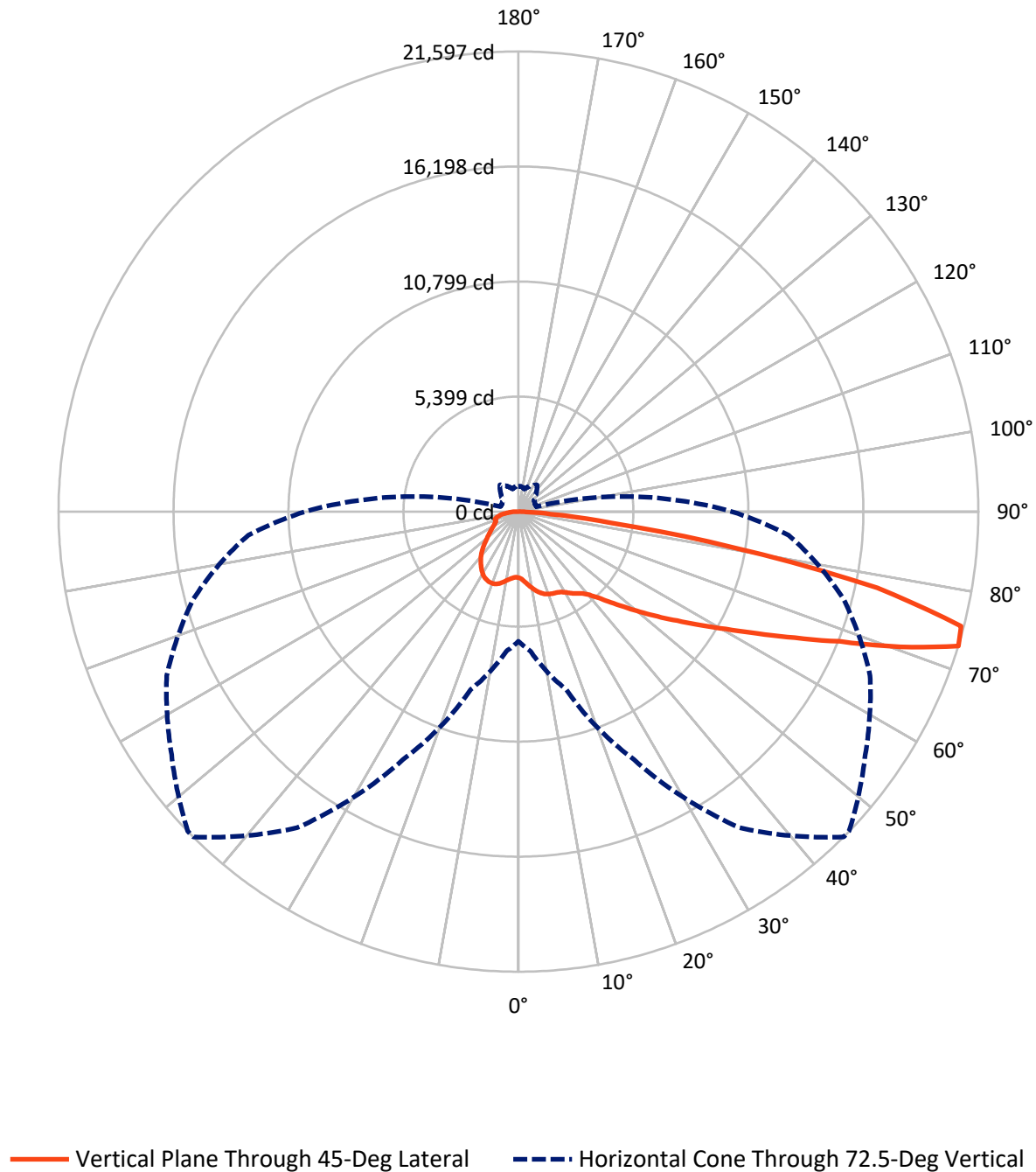


Based on 25 foot mounting height. Maximum calculated value = 6.2 fc

Type IV - Short - N/A

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Luminous Intensity Polar Plot



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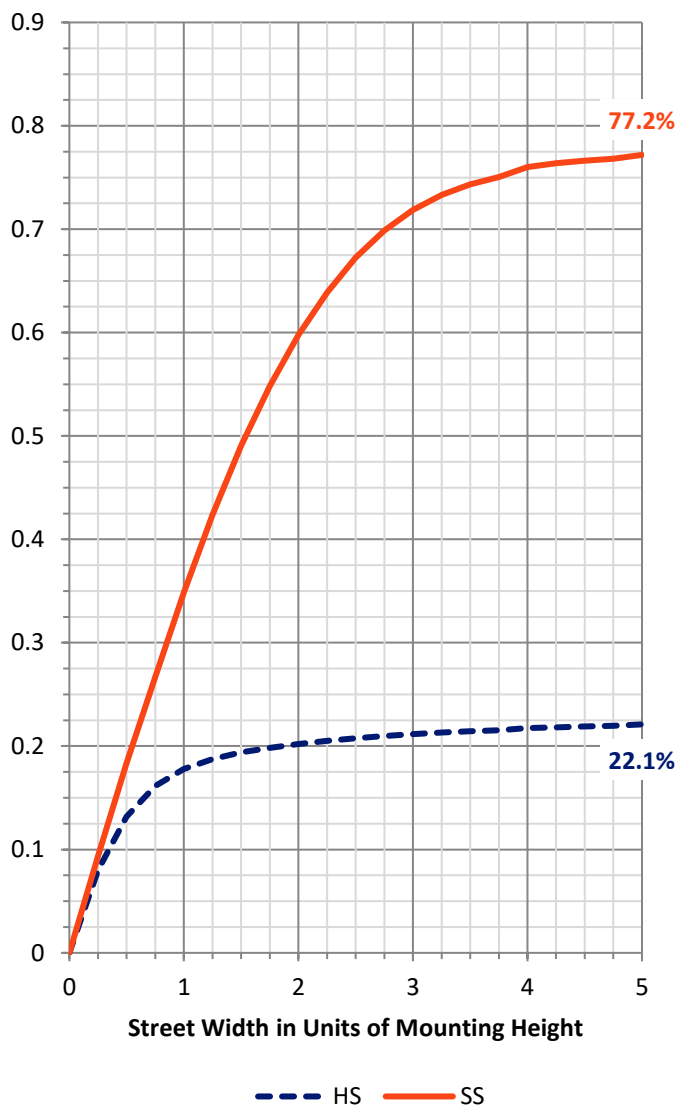
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6959.6	0.0	6959.6
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	23826.2	0.0	23826.2
	% Fixture	77.4	0.0	77.4
Total	Lumens	30785.9	0.0	30785.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	316.1	1.0
10°-20°	1053.9	3.4
20°-30°	1833.3	6.0
30°-40°	2628.2	8.5
40°-50°	3700.6	12.0
50°-60°	5668.3	18.4
60°-70°	8211.4	26.7
70°-80°	6557.3	21.3
80°-90°	816.7	2.7
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°	30785.9	100.0
0°-180°	30785.9	100.0

Coefficient of Utilization



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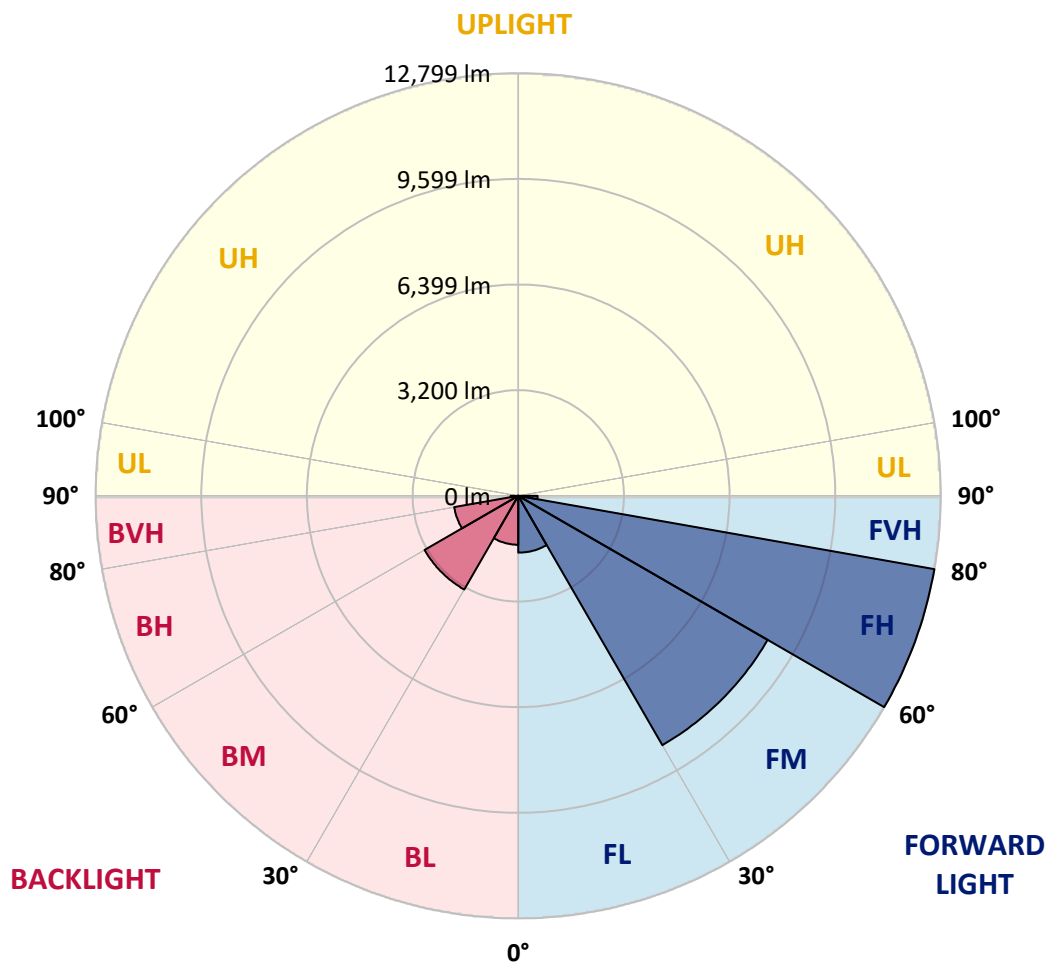
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1721.6	5.6			
FM	(30°-60°)	8720.2	28.3			
FH	(60°-80°)	12798.6	41.6			G5
FVH	(80°-90°)	585.9	1.9			G4/750
BL	(0°-30°)	1481.8	4.8	B3/2500		
BM	(30°-60°)	3277.0	10.6	B3/5000		
BH	(60°-80°)	1970.1	6.4	B3/2500		G3/2500
BVH	(80°-90°)	230.8	0.7			G3/500
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6
2.5°	3227.3	3248.4	3229.0	3211.1	3203.0	3181.9	3180.3	3167.4	3159.3	3136.5	3130.0
5°	3452.7	3480.3	3447.9	3412.2	3379.7	3327.9	3321.4	3284.1	3242.0	3193.3	3165.7
7.5°	3707.3	3731.7	3694.4	3640.9	3584.1	3498.1	3496.6	3428.4	3361.9	3279.2	3232.2
10°	3929.5	3962.0	3911.7	3838.7	3767.4	3670.1	3658.7	3580.8	3496.6	3389.5	3318.1
12.5°	4125.8	4148.5	4099.8	4010.6	3927.9	3830.6	3816.1	3730.1	3636.0	3514.4	3423.6
15°	4281.5	4310.6	4245.8	4150.1	4062.6	3966.9	3953.8	3876.0	3781.9	3653.8	3537.1
17.5°	4383.6	4408.0	4341.5	4234.5	4150.1	4070.7	4060.9	3996.1	3913.3	3783.6	3658.7
20°	4422.6	4448.5	4378.8	4270.2	4192.2	4130.6	4125.8	4078.8	4022.0	3903.6	3777.1
22.5°	4461.5	4485.8	4395.0	4281.5	4213.4	4174.4	4172.8	4142.0	4119.3	4022.0	3898.8
25°	4618.9	4625.3	4503.6	4339.8	4242.6	4208.5	4206.9	4205.3	4215.0	4138.7	4030.1
27.5°	4755.1	4753.4	4649.6	4495.5	4344.8	4273.3	4271.8	4288.0	4318.7	4255.5	4166.3
30°	4954.5	4936.7	4813.4	4652.9	4515.0	4404.7	4395.0	4380.4	4404.7	4354.5	4302.5
32.5°	5377.8	5321.1	5121.5	4836.2	4656.1	4571.8	4558.8	4468.0	4477.7	4446.9	4420.9
35°	5984.4	5909.7	5643.8	5183.2	4831.2	4711.2	4704.8	4589.6	4570.2	4542.6	4552.3
37.5°	6706.1	6613.6	6303.9	5686.0	5132.9	4873.5	4863.7	4759.9	4680.5	4651.2	4706.4
40°	7430.9	7314.2	7057.9	6298.9	5577.2	5144.3	5113.4	4956.2	4865.4	4816.7	4933.4
42.5°	8134.8	8037.5	7818.6	6986.6	6125.4	5540.0	5471.9	5202.7	5134.5	5089.1	5300.0
45°	8757.6	8670.0	8509.4	7721.2	6767.7	6078.5	6011.9	5572.4	5551.3	5551.3	5856.2
47.5°	9263.5	9244.1	9073.8	8470.5	7525.0	6691.4	6576.3	6086.6	6143.2	6230.9	6646.0
50°	9824.7	9771.2	9589.6	9208.4	8415.4	7393.6	7299.6	6717.3	6929.8	7169.9	7787.7
52.5°	10340.4	10369.6	10166.9	9977.1	9420.9	8176.9	8011.6	7461.8	7920.8	8318.1	9125.7
55°	10870.7	10872.4	10815.6	10789.7	10475.0	9043.0	8861.3	8357.0	9086.8	9579.9	10685.8
57.5°	11368.6	11371.9	11456.2	11684.9	11697.8	10042.0	9836.1	9456.5	10382.6	10885.3	12294.7
60°	11813.0	11835.7	12066.0	12601.1	12773.0	11187.0	10992.4	10755.6	11722.2	12228.1	13986.1
62.5°	11962.2	12044.9	12557.4	13318.0	13835.3	12591.4	12400.0	12259.0	13129.8	13600.2	15400.3
65°	11709.2	11898.9	12889.9	13910.0	14928.4	14260.2	14070.5	13916.4	14592.7	15035.4	16561.5
67.5°	11088.0	11332.9	12870.4	14531.1	16255.1	16268.0	16091.3	15729.5	16161.0	16331.2	16939.5
70°	9451.7	9818.2	11736.8	14763.0	17777.9	19013.6	18843.4	17912.5	17725.9	16902.1	15875.5
72.5°	6089.7	6582.8	8642.4	12854.2	18116.9	21597.2	21587.4	19882.9	18220.6	15792.8	12732.6
75°	2221.8	2523.4	4015.5	8068.3	15207.4	21465.8	21529.0	19545.6	16632.9	12198.9	7932.1
77.5°	809.2	885.5	1310.4	3100.8	9352.7	17223.3	17354.6	15625.8	11839.0	6122.2	3143.0
80°	424.9	467.1	671.4	1203.4	4007.4	10228.5	10434.5	9286.3	5564.3	1844.0	942.3
82.5°	235.1	254.6	376.3	653.5	1805.0	4373.9	4497.2	3668.5	1957.4	781.7	389.2
85°	126.5	134.6	176.8	356.8	882.2	1516.4	1550.4	1096.3	780.0	459.0	188.1
87.5°	37.3	45.4	58.4	113.6	345.4	340.6	348.7	217.3	308.1	232.0	61.6
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°	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6	3105.6
2.5°	3120.3	3115.4	3097.5	3089.5	3079.7	3078.1	3086.3	3087.8	3089.5	3091.1	3097.5
5°	3149.5	3133.2	3117.0	3107.3	3110.6	3112.2	3128.4	3139.8	3147.9	3154.3	3157.6
7.5°	3206.2	3193.3	3165.7	3164.1	3169.0	3183.5	3204.7	3230.6	3245.1	3256.5	3259.8
10°	3290.6	3266.3	3233.8	3238.7	3248.4	3269.5	3313.3	3334.3	3358.7	3379.7	3374.9
12.5°	3376.6	3355.4	3318.1	3321.4	3337.6	3374.9	3417.0	3443.0	3459.3	3475.5	3481.9
15°	3488.5	3451.2	3410.6	3410.6	3439.8	3480.3	3499.8	3520.9	3530.6	3548.4	3554.9
17.5°	3603.6	3554.9	3501.4	3498.1	3533.9	3553.3	3564.6	3567.9	3571.1	3590.6	3597.1
20°	3718.7	3665.2	3588.9	3582.5	3590.6	3587.4	3585.8	3582.5	3587.4	3611.7	3621.4
22.5°	3832.3	3770.7	3665.2	3636.0	3613.3	3582.5	3580.8	3579.3	3582.5	3606.9	3623.1
25°	3965.2	3890.6	3749.6	3661.9	3585.8	3543.5	3548.4	3550.1	3553.3	3572.7	3598.7
27.5°	4109.5	4026.8	3827.3	3653.8	3516.0	3486.8	3478.7	3483.6	3494.9	3525.7	3556.5
30°	4254.0	4156.6	3898.8	3621.4	3428.4	3387.9	3361.9	3373.3	3408.9	3439.8	3473.8
32.5°	4385.3	4288.0	3955.5	3550.1	3316.5	3253.2	3219.2	3233.8	3269.5	3280.8	3321.4
35°	4539.3	4429.0	3979.9	3436.5	3194.9	3097.5	3052.1	3031.1	3049.0	3037.6	3073.3
37.5°	4711.2	4596.1	3976.6	3287.4	3052.1	2940.3	2877.1	2797.5	2760.2	2721.4	2745.7
40°	4965.9	4800.5	3937.6	3107.3	2875.4	2773.2	2659.7	2525.1	2440.7	2364.6	2369.4
42.5°	5312.9	5084.3	3866.3	2909.5	2676.0	2580.2	2426.2	2268.8	2135.9	2009.4	1998.0
45°	5830.3	5455.7	3777.1	2698.6	2460.2	2366.2	2199.1	2022.3	1871.5	1709.4	1689.9
47.5°	6576.3	5955.1	3692.8	2458.6	2233.2	2147.3	1996.4	1832.6	1654.2	1496.9	1479.1
50°	7601.3	6671.9	3615.0	2225.1	2009.4	1944.5	1824.5	1657.4	1477.4	1350.9	1342.9
52.5°	8905.2	7646.7	3582.5	1999.7	1800.2	1775.8	1680.2	1524.5	1354.2	1247.1	1239.0
55°	10402.0	8812.7	3582.5	1783.9	1616.9	1625.0	1558.5	1414.2	1266.6	1171.0	1161.2
57.5°	11929.8	9993.3	3517.6	1584.4	1461.2	1495.3	1453.1	1326.7	1193.6	1094.7	1078.5
60°	13337.5	10982.7	3254.9	1402.8	1323.4	1376.9	1349.3	1240.7	1078.5	995.8	982.8
62.5°	14419.2	11540.6	2748.9	1258.5	1209.8	1271.5	1256.9	1127.1	1057.4	1023.4	1012.0
65°	14960.9	11449.8	2101.9	1130.4	1114.2	1209.8	1179.1	1174.1	1119.0	1080.1	1067.1
67.5°	14628.4	10668.0	1524.5	1036.3	1059.0	1153.1	1271.5	1290.9	1188.8	1112.5	1099.5
70°	13170.4	9253.8	1135.3	947.1	989.3	1154.7	1449.9	1350.9	1166.0	1076.9	1062.3
72.5°	10019.3	6900.6	880.6	853.0	898.4	1162.9	1529.3	1323.4	1101.2	1190.3	1180.7
75°	5729.7	3788.5	707.0	737.9	784.9	1086.6	1488.8	1252.0	1050.9	1093.1	1093.1
77.5°	2184.5	1456.3	583.8	624.4	630.9	948.7	1423.9	1247.1	1000.6	976.3	890.3
80°	757.4	569.3	483.3	496.3	488.1	843.4	1365.5	1085.0	819.0	733.1	708.7
82.5°	309.8	283.8	382.7	366.5	347.1	655.2	1102.8	887.1	669.8	591.9	585.5
85°	134.6	180.0	253.0	222.2	201.1	454.1	883.9	750.9	566.0	488.1	486.6
87.5°	27.6	68.2	107.0	100.6	103.8	303.3	627.6	533.5	400.6	300.0	235.1
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)