

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: P967804

Luminaire Tested: **NAV-SB5A-750-U-T4W**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P967804
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-SB5A-750-U-T4W
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 5000K, 350mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE IV WIDE OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24524.1 lumens
Efficiency: N/A
Efficacy: 173.1 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G4

Input Watts (W): 141.7
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

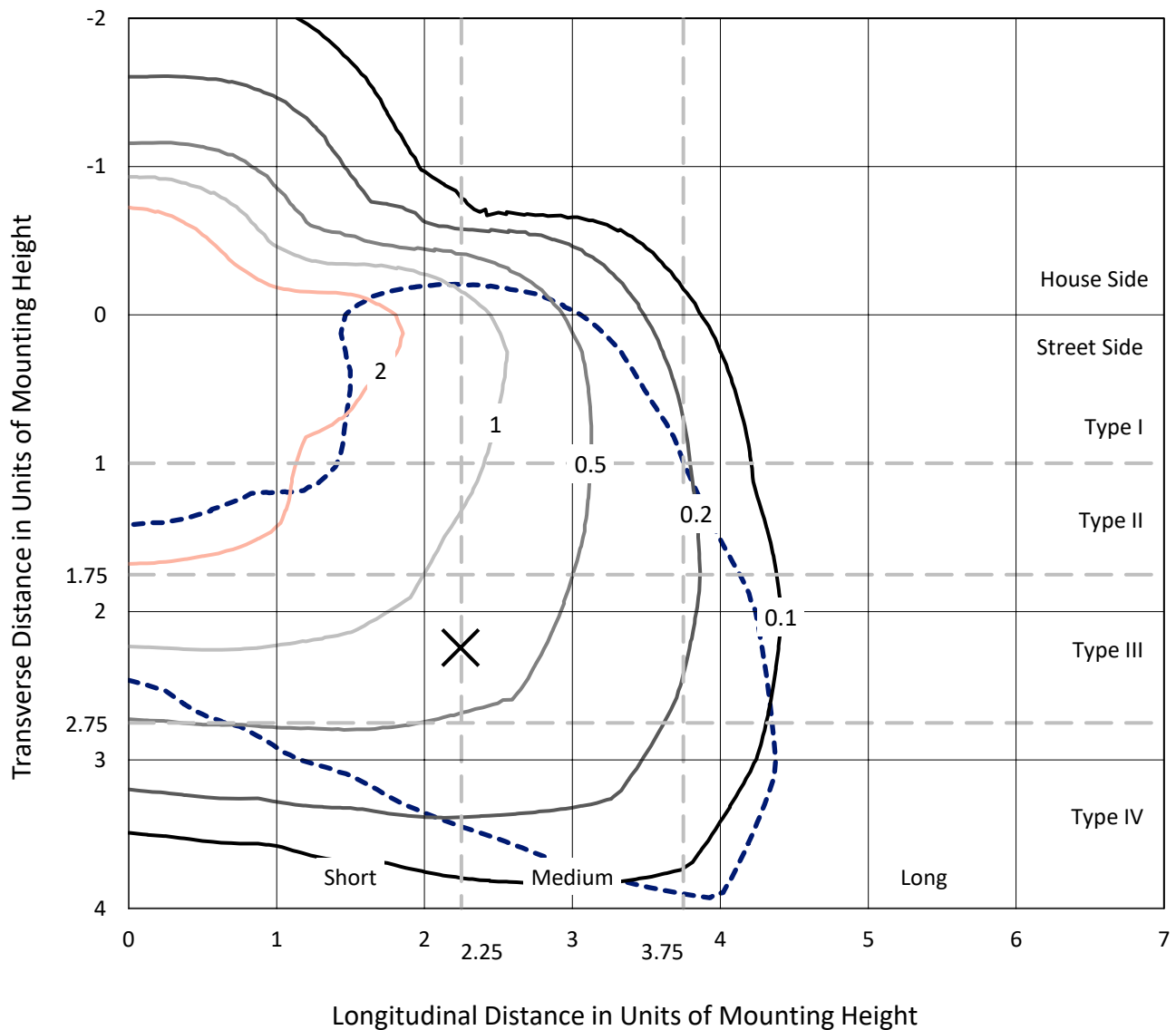


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Iso-Footcandle Lines of Horizontal Illumination

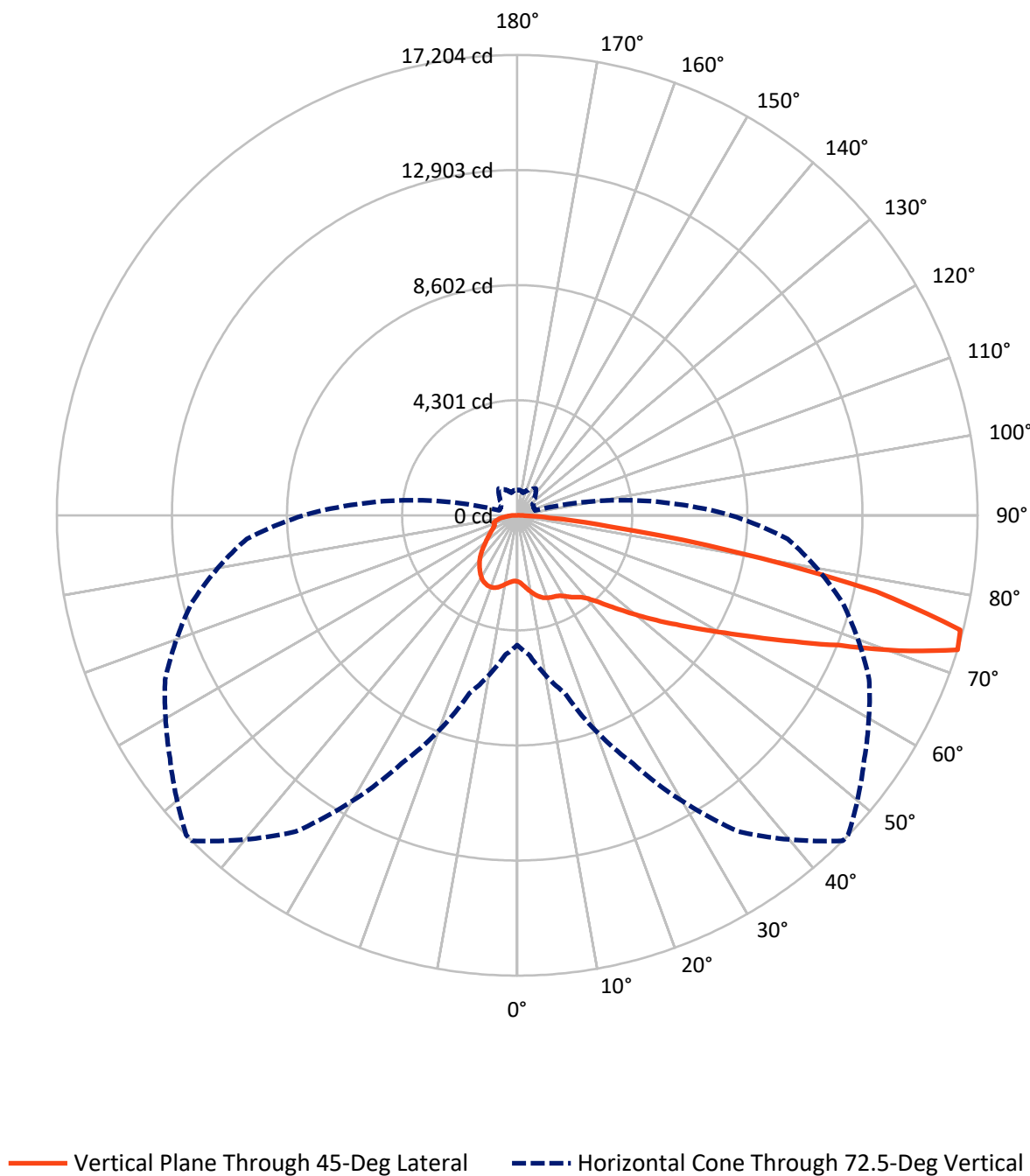
× Max cd
- - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
Type IV - Short - N/A

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Luminous Intensity Polar Plot



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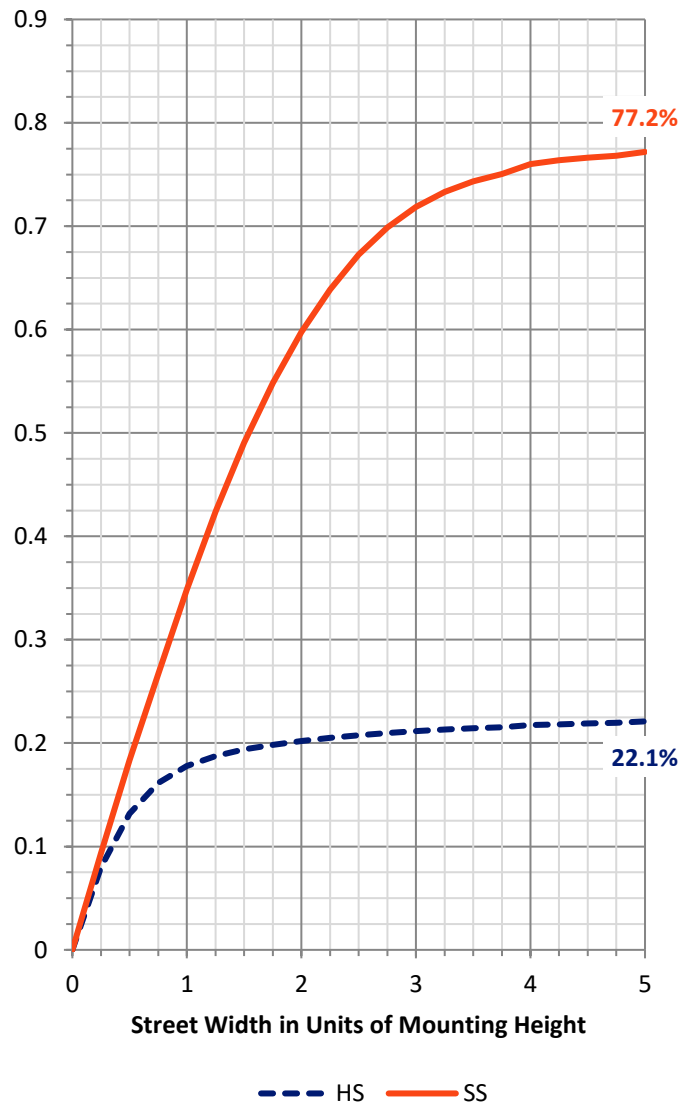
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5544.1	0.0	5544.1
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	18980.1	0.0	18980.1
	% Fixture	77.4	0.0	77.4
Total	Lumens	24524.1	0.0	24524.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	251.8	1.0
10°-20°	839.6	3.4
20°-30°	1460.4	6.0
30°-40°	2093.6	8.5
40°-50°	2948.0	12.0
50°-60°	4515.4	18.4
60°-70°	6541.2	26.7
70°-80°	5223.6	21.3
80°-90°	650.6	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°	24524.1	100.0
0°-180°	24524.1	100.0

Coefficient of Utilization



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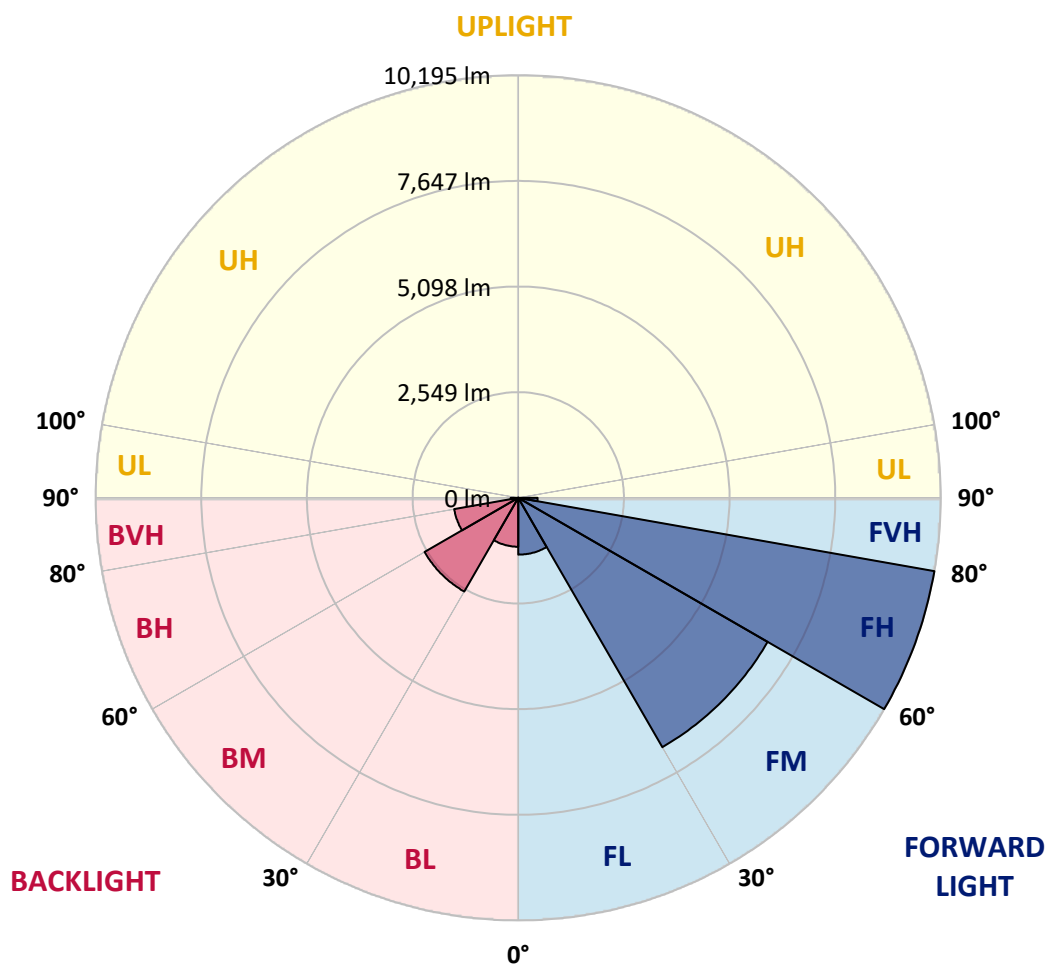
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1371.4	5.6			
FM	(30°-60°)	6946.5	28.3			
FH	(60°-80°)	10195.4	41.6			G4/12000
FVH	(80°-90°)	466.7	1.9			G3/500
BL	(0°-30°)	1180.4	4.8	B3/2500		
BM	(30°-60°)	2610.5	10.6	B3/5000		
BH	(60°-80°)	1569.4	6.4	B3/2500		G3/2500
BVH	(80°-90°)	183.8	0.7			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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	46°	55°	65°	75°	85°
0°	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0
2.5°	2570.9	2587.7	2572.2	2558.0	2551.5	2534.7	2533.4	2523.1	2516.7	2498.5	2493.4
5°	2750.5	2772.4	2746.6	2718.2	2692.4	2651.0	2645.8	2616.1	2582.5	2543.7	2521.8
7.5°	2953.3	2972.7	2943.0	2900.3	2855.1	2786.7	2785.3	2731.1	2678.1	2612.2	2574.8
10°	3130.4	3156.2	3116.1	3058.0	3001.1	2923.6	2914.6	2852.6	2785.3	2700.1	2643.3
12.5°	3286.7	3304.7	3266.0	3194.9	3129.0	3051.5	3039.8	2971.4	2896.4	2799.6	2727.2
15°	3410.7	3433.9	3382.2	3306.0	3236.2	3160.0	3149.7	3087.7	3012.8	2910.7	2817.6
17.5°	3492.1	3511.4	3458.5	3373.2	3306.0	3242.7	3234.9	3183.2	3117.3	3014.0	2914.6
20°	3523.0	3543.7	3488.2	3401.6	3339.6	3290.5	3286.7	3249.1	3203.9	3109.6	3008.9
22.5°	3554.1	3573.5	3501.1	3410.7	3356.4	3325.4	3324.1	3299.6	3281.4	3203.9	3105.7
25°	3679.3	3684.6	3587.6	3457.1	3379.6	3352.5	3351.2	3349.9	3357.7	3296.9	3210.4
27.5°	3787.9	3786.6	3703.9	3581.1	3461.0	3404.2	3402.9	3415.8	3440.3	3390.0	3319.0
30°	3946.8	3932.6	3834.4	3706.5	3596.7	3508.8	3501.1	3489.4	3508.8	3468.8	3427.4
32.5°	4284.0	4238.8	4079.8	3852.5	3709.1	3641.9	3631.6	3559.2	3567.0	3542.4	3521.8
35°	4767.2	4707.7	4495.9	4128.9	3848.6	3753.0	3747.8	3656.1	3640.6	3618.7	3626.3
37.5°	5342.1	5268.4	5021.7	4529.5	4088.9	3882.2	3874.4	3791.8	3728.4	3705.2	3749.1
40°	5919.6	5826.5	5622.4	5017.8	4442.9	4098.0	4073.3	3948.1	3875.7	3837.0	3930.0
42.5°	6480.3	6402.7	6228.3	5565.5	4879.5	4413.1	4358.9	4144.5	4090.2	4054.0	4222.0
45°	6976.4	6906.6	6778.6	6150.8	5391.2	4842.1	4789.1	4439.0	4422.3	4422.3	4665.1
47.5°	7379.4	7363.9	7228.2	6747.7	5994.5	5330.4	5238.7	4848.6	4893.8	4963.6	5294.2
50°	7826.4	7783.7	7639.1	7335.5	6703.7	5889.9	5814.9	5351.1	5520.3	5711.5	6203.7
52.5°	8237.2	8260.5	8099.0	7947.8	7504.7	6513.8	6382.1	5944.1	6309.7	6626.2	7269.6
55°	8659.7	8660.9	8615.7	8595.0	8344.4	7203.7	7059.0	6657.2	7238.6	7631.3	8512.4
57.5°	9056.3	9058.8	9126.1	9308.2	9318.6	7999.5	7835.4	7533.1	8270.8	8671.3	9794.0
60°	9410.3	9428.4	9611.8	10038.1	10175.1	8911.6	8756.6	8568.0	9338.0	9741.0	11141.4
62.5°	9529.1	9595.0	10003.3	10609.2	11021.3	10030.4	9877.9	9765.6	10459.3	10833.9	12268.0
65°	9327.6	9478.8	10268.1	11080.8	11892.0	11359.8	11208.6	11085.9	11624.6	11977.3	13193.0
67.5°	8832.8	9027.9	10252.6	11575.5	12948.8	12959.2	12818.3	12530.2	12873.9	13009.5	13494.0
70°	7529.2	7821.3	9349.5	11760.2	14161.9	15146.3	15010.7	14269.1	14120.6	13464.3	12646.6
72.5°	4851.1	5243.9	6884.6	10239.6	14431.9	17204.4	17196.6	15838.8	14514.6	12580.6	10142.8
75°	1769.9	2010.2	3198.8	6427.3	12114.3	17099.8	17150.1	15570.2	13249.9	9717.7	6318.7
77.5°	644.6	705.4	1043.9	2470.1	7450.4	13720.1	13824.7	12447.6	9430.9	4877.0	2503.8
80°	338.5	372.1	534.8	958.6	3192.4	8148.0	8312.1	7397.5	4432.5	1468.9	750.6
82.5°	187.4	202.8	299.7	520.6	1437.9	3484.3	3582.5	2922.3	1559.3	622.7	310.1
85°	100.8	107.2	140.8	284.2	702.8	1208.0	1235.0	873.3	621.5	365.6	149.9
87.5°	29.7	36.2	46.5	90.4	275.2	271.3	277.8	173.1	245.5	184.7	49.1
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°	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0	2474.0
2.5°	2485.6	2481.7	2467.6	2461.1	2453.3	2452.0	2458.5	2459.8	2461.1	2462.4	2467.6
5°	2508.9	2496.0	2483.1	2475.3	2477.8	2479.2	2492.1	2501.1	2507.6	2512.8	2515.4
7.5°	2554.1	2543.7	2521.8	2520.5	2524.4	2536.1	2552.9	2573.5	2585.2	2594.2	2596.7
10°	2621.3	2601.9	2576.0	2579.9	2587.7	2604.5	2639.4	2656.2	2675.6	2692.4	2688.5
12.5°	2689.8	2673.0	2643.3	2645.8	2658.7	2688.5	2722.1	2742.7	2755.6	2768.5	2773.8
15°	2778.9	2749.2	2716.9	2716.9	2740.1	2772.4	2787.9	2804.7	2812.5	2826.7	2831.9
17.5°	2870.6	2831.9	2789.2	2786.7	2815.1	2830.5	2839.7	2842.2	2844.8	2860.3	2865.5
20°	2962.4	2919.7	2859.0	2853.8	2860.3	2857.7	2856.4	2853.8	2857.7	2877.1	2884.9
22.5°	3052.8	3003.7	2919.7	2896.4	2878.4	2853.8	2852.6	2851.2	2853.8	2873.2	2886.1
25°	3158.7	3099.3	2986.8	2917.1	2856.4	2822.8	2826.7	2828.0	2830.5	2846.1	2866.7
27.5°	3273.7	3207.8	3048.9	2910.7	2800.8	2777.6	2771.2	2775.0	2784.1	2808.6	2833.2
30°	3388.6	3311.2	3105.7	2884.9	2731.1	2698.8	2678.1	2687.1	2715.6	2740.1	2767.3
32.5°	3493.3	3415.8	3151.0	2828.0	2641.9	2591.6	2564.4	2576.0	2604.5	2613.5	2645.8
35°	3616.1	3528.3	3170.3	2737.6	2545.1	2467.6	2431.4	2414.6	2428.8	2419.7	2448.2
37.5°	3753.0	3661.3	3167.8	2618.7	2431.4	2342.2	2291.9	2228.6	2198.8	2167.9	2187.2
40°	3955.8	3824.1	3136.8	2475.3	2290.6	2209.2	2118.8	2011.5	1944.3	1883.6	1887.4
42.5°	4232.3	4050.2	3079.9	2317.7	2131.7	2055.4	1932.7	1807.4	1701.4	1600.6	1591.6
45°	4644.4	4346.0	3008.9	2149.7	1959.8	1884.9	1751.8	1611.0	1490.9	1361.7	1346.1
47.5°	5238.7	4743.9	2941.6	1958.6	1779.0	1710.5	1590.4	1459.9	1317.7	1192.5	1178.2
50°	6055.2	5314.9	2879.6	1772.5	1600.6	1549.0	1453.4	1320.3	1176.9	1076.1	1069.7
52.5°	7093.9	6091.4	2853.8	1593.0	1434.0	1414.6	1338.4	1214.4	1078.7	993.4	987.0
55°	8286.3	7020.2	2853.8	1421.1	1288.0	1294.5	1241.5	1126.6	1009.0	932.7	925.0
57.5°	9503.3	7960.8	2802.1	1262.2	1164.0	1191.2	1157.5	1056.8	950.9	872.1	859.2
60°	10624.6	8748.8	2592.8	1117.5	1054.2	1096.9	1074.9	988.3	859.2	793.2	782.9
62.5°	11486.4	9193.2	2189.8	1002.6	963.8	1012.9	1001.2	897.9	842.3	815.2	806.2
65°	11917.9	9120.9	1674.3	900.5	887.5	963.8	939.2	935.3	891.4	860.4	850.0
67.5°	11653.0	8498.2	1214.4	825.5	843.6	918.5	1012.9	1028.4	947.0	886.2	876.0
70°	10491.6	7371.6	904.4	754.5	788.0	919.8	1155.0	1076.1	928.9	857.8	846.2
72.5°	7981.5	5497.1	701.5	679.6	715.8	926.3	1218.3	1054.2	877.2	948.2	940.5
75°	4564.3	3017.9	563.2	587.8	625.2	865.6	1185.9	997.3	837.1	870.7	870.7
77.5°	1740.2	1160.1	465.0	497.4	502.6	755.7	1134.3	993.4	797.1	777.8	709.3
80°	603.3	453.5	385.0	395.3	388.9	671.8	1087.8	864.3	652.4	583.9	564.6
82.5°	246.7	226.1	304.9	292.0	276.4	521.9	878.5	706.6	533.5	471.5	466.4
85°	107.2	143.4	201.5	177.0	160.2	361.7	704.1	598.2	450.9	388.9	387.6
87.5°	21.9	54.2	85.3	80.1	82.7	241.6	500.0	425.1	319.1	239.0	187.4
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)