

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: P968259

Luminaire Tested: **NAV-SB5B-735-U-T2U-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P968259
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-17)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB5B-735-U-T2U-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(5) 70 CRI, 3500K, 450mA LIGHTSQUARES WITH 26 LEDS EACH AND TYPE II U
OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22282.5 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Luminous Opening: Rectangular (W 1.5' x L: 1' x H: 0')
IES Classification: Type II - Short
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

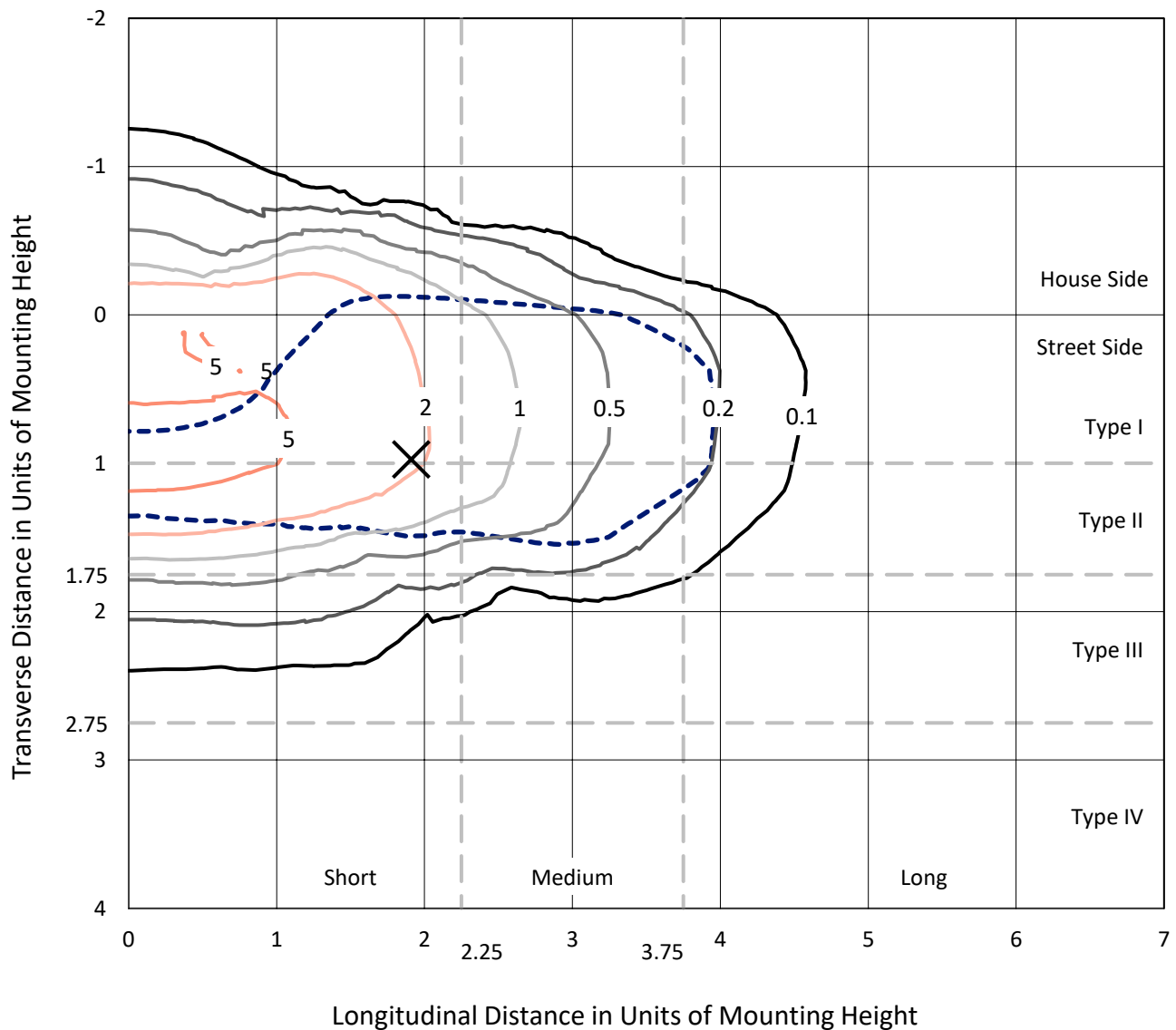


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Iso-Footcandle Lines of Horizontal Illumination

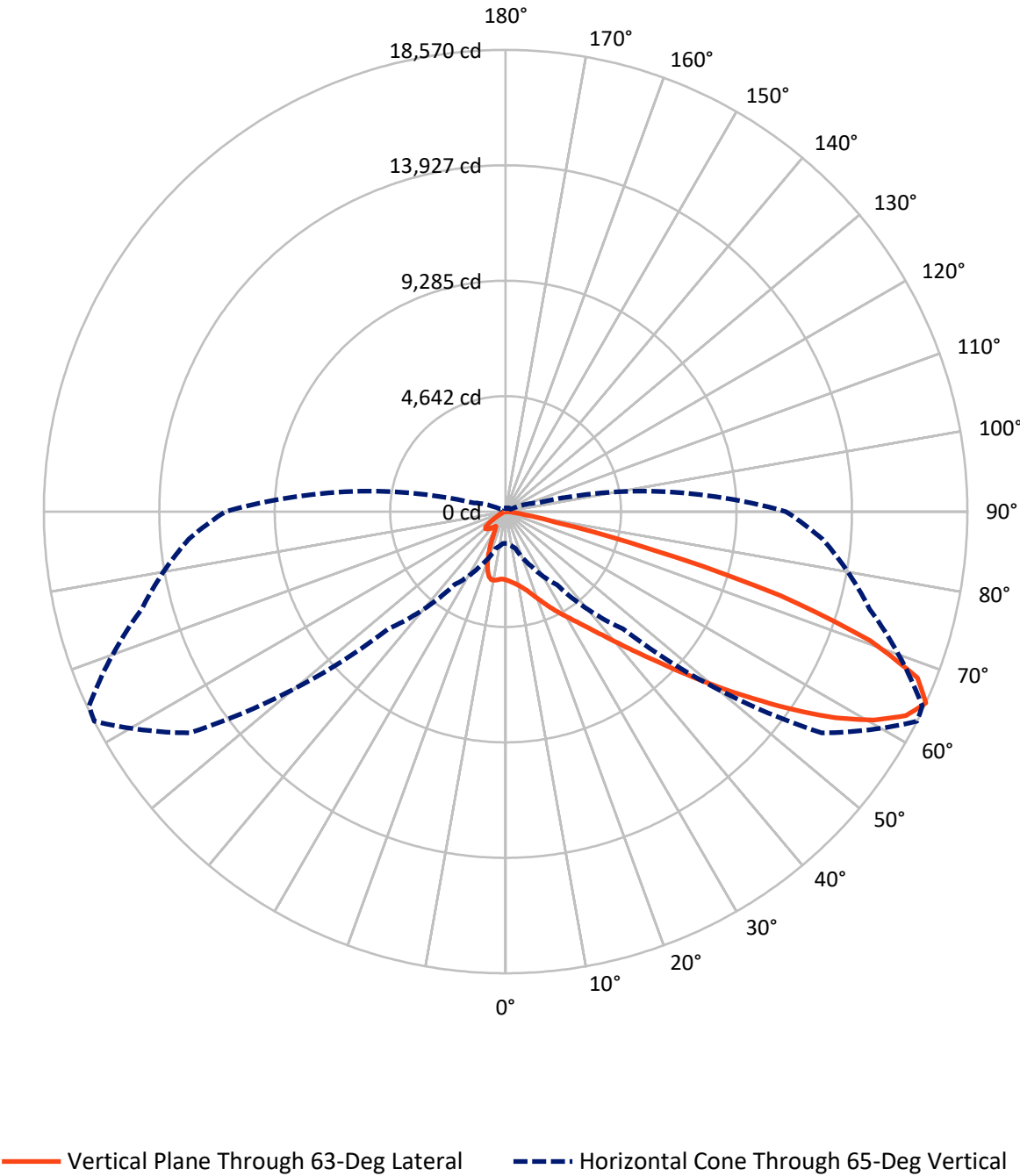
× Max cd
- - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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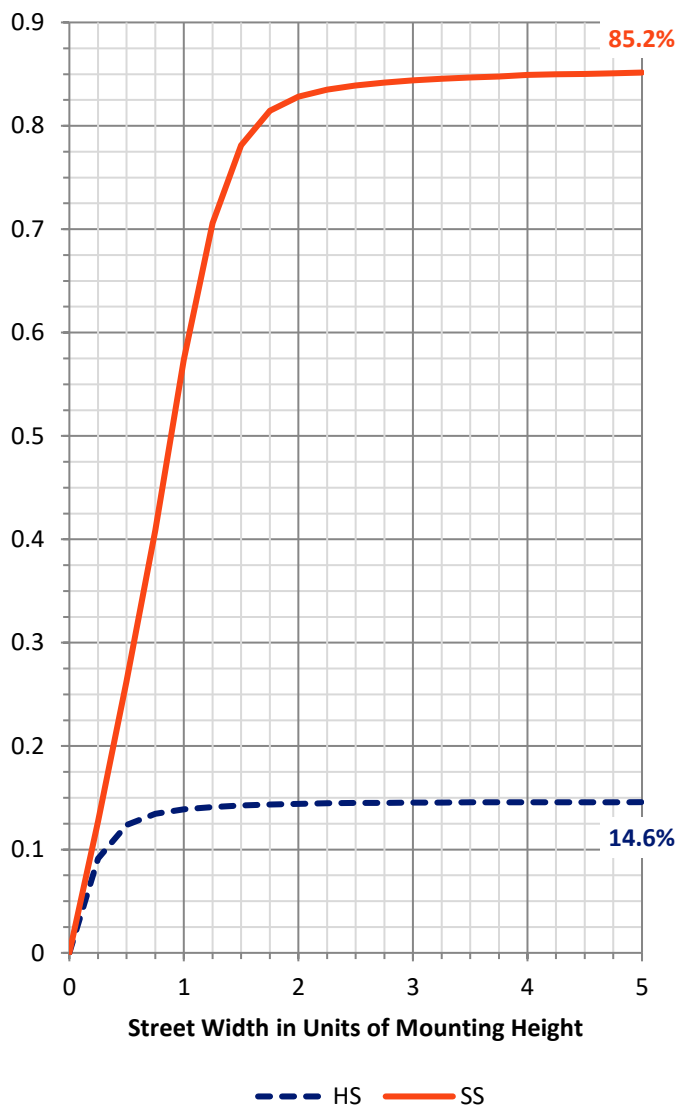
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3275.4	0.0	3275.4
	% Fixture	14.7	0.0	14.7
Street Side	Lumens	19007.1	0.0	19007.1
	% Fixture	85.3	0.0	85.3
Total	Lumens	22282.5	0.0	22282.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.1	1.2
10°-20°	718.9	3.2
20°-30°	1251.8	5.6
30°-40°	2256.3	10.1
40°-50°	4475.0	20.1
50°-60°	6095.7	27.4
60°-70°	4865.5	21.8
70°-80°	2201.8	9.9
80°-90°	158.3	0.7
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°	22282.5	100.0
0°-180°	22282.5	100.0

Coefficient of Utilization



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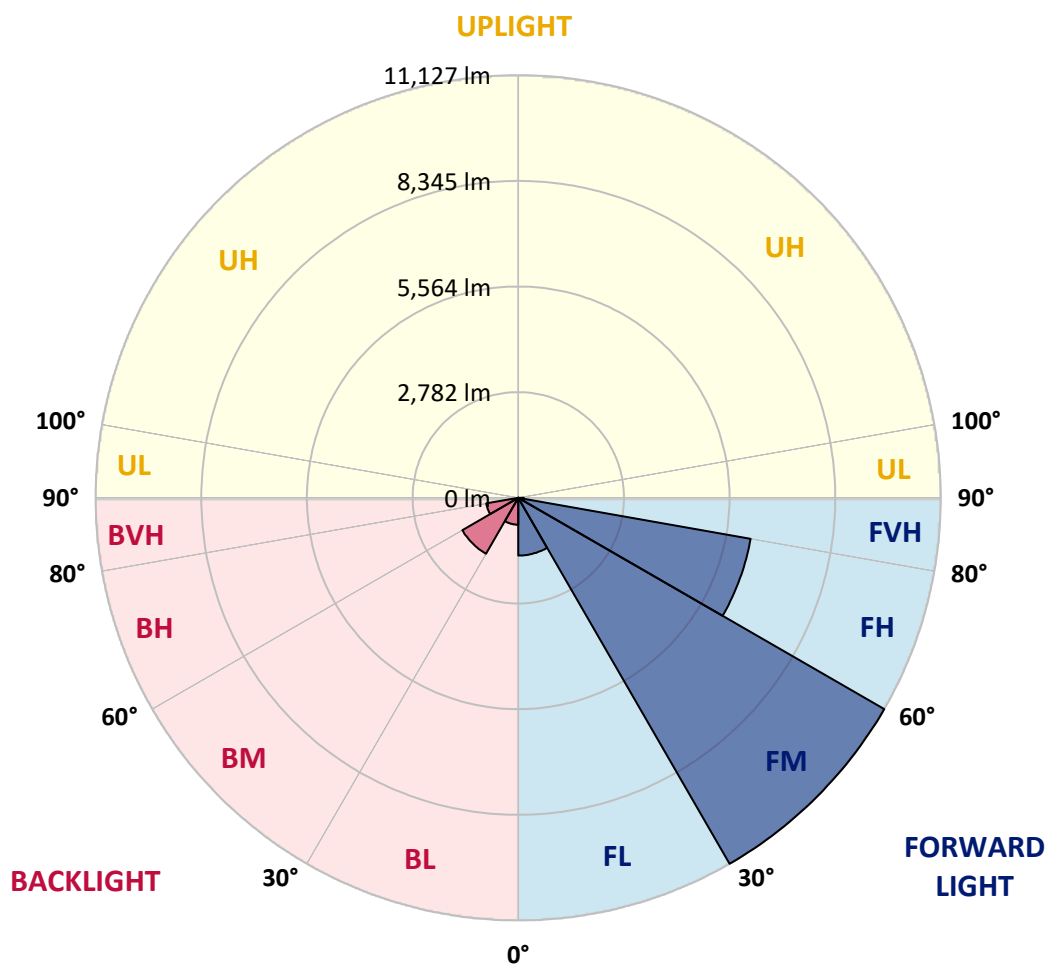
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1521.1	6.8			
FM	(30°-60°)	11127.3	49.9			
FH	(60°-80°)	6212.2	27.9			G3/7500
FVH	(80°-90°)	146.5	0.7			G2/225
BL	(0°-30°)	708.8	3.2	B2/1000		
BM	(30°-60°)	1699.7	7.6	B2/2500		
BH	(60°-80°)	855.1	3.8	B2/1000		G2/1000
BVH	(80°-90°)	11.7	0.1			G1/100
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 Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	63°	65°	75°	85°
0°	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1
2.5°	2814.4	2806.8	2817.5	2812.9	2809.8	2803.7	2800.7	2797.6	2791.5	2786.9	2768.4
5°	2822.1	2817.5	2828.3	2837.4	2846.6	2855.9	2860.5	2866.6	2860.5	2848.2	2829.8
7.5°	2757.8	2754.7	2777.6	2805.2	2846.6	2881.9	2920.2	2941.6	2943.2	2938.7	2918.7
10°	2753.1	2745.5	2768.4	2802.2	2855.9	2918.7	2986.1	3032.2	3038.3	3058.2	3036.8
12.5°	2825.2	2817.5	2849.7	2886.5	2941.6	3007.7	3090.4	3154.7	3164.0	3191.5	3176.3
15°	2946.3	2935.6	2972.4	3019.9	3090.4	3165.5	3252.8	3311.2	3318.7	3352.6	3324.9
17.5°	3087.3	3076.6	3119.5	3170.1	3246.8	3349.5	3450.7	3515.0	3524.3	3545.7	3495.0
20°	3268.2	3254.4	3288.1	3334.1	3415.4	3538.0	3659.1	3751.1	3749.6	3749.6	3666.7
22.5°	3478.2	3456.7	3485.9	3522.7	3599.3	3748.0	3908.9	4017.8	4017.8	3974.8	3838.4
25°	3703.5	3682.1	3714.3	3748.0	3815.5	3984.1	4172.7	4307.6	4313.7	4240.1	4022.4
27.5°	3985.6	3958.0	3982.5	4022.4	4062.3	4234.0	4457.7	4614.1	4617.2	4503.7	4197.2
30°	4528.2	4450.1	4373.5	4330.5	4349.0	4519.1	4758.3	4931.5	4946.8	4790.4	4387.2
32.5°	5521.6	5506.3	5236.5	4883.9	4699.9	4825.7	5093.9	5302.4	5311.7	5110.8	4634.0
35°	7065.3	7046.9	6613.1	5941.6	5342.3	5236.5	5501.7	5748.5	5742.4	5515.5	4954.4
37.5°	8907.9	8891.0	8319.2	7420.9	6450.5	5857.4	6027.5	6286.5	6324.9	6027.5	5368.3
40°	10482.2	10419.3	10057.6	9191.5	7922.2	6887.5	6775.6	6947.2	6987.1	6634.5	5894.2
42.5°	11674.9	11621.1	11437.2	10896.1	9703.5	8411.2	7657.0	7722.9	7767.3	7344.2	6498.1
45°	12292.6	12280.3	12353.9	12303.3	11518.4	10281.4	8917.1	8642.7	8659.5	8130.7	7183.3
47.5°	12379.9	12373.8	12709.5	13184.8	13079.0	12390.7	10534.3	9789.3	9729.5	9018.3	7928.3
50°	11864.9	11852.6	12496.5	13387.1	14121.3	14162.7	12370.7	11081.6	10949.8	9936.5	8705.5
52.5°	10220.1	10217.0	11274.7	12757.0	14487.8	15714.1	14185.8	12501.0	12280.3	10908.4	9527.2
55°	7863.9	7920.7	9133.2	10885.3	13819.4	16460.6	15815.2	14076.9	13738.2	11886.3	10284.4
57.5°	5570.7	5653.5	6852.2	8412.7	11746.8	16019.1	16917.4	15655.8	15291.0	12861.3	11052.5
60°	2992.3	3065.9	4266.2	6128.7	8739.3	14372.8	17498.4	17026.3	16681.4	13787.2	11745.3
62.5°	1782.8	1807.3	2304.0	3956.5	5911.0	10980.4	17251.6	18070.2	17786.6	14564.3	12347.8
65°	1280.0	1284.6	1534.4	2415.9	3588.6	6671.3	15521.0	18569.9	18482.6	15149.9	12793.8
67.5°	1077.7	1074.6	1178.9	1604.9	2445.0	3341.8	11895.5	17863.3	18234.2	15521.0	13046.8
70°	924.3	929.0	1051.5	1175.8	1838.0	1891.6	5914.0	15553.1	16344.1	15619.1	13031.4
72.5°	688.3	703.7	817.0	1071.5	1387.3	1301.4	2041.9	11532.3	12962.5	14716.1	12355.5
75°	486.0	493.6	574.8	901.4	1034.7	947.3	1042.4	5961.6	7794.9	11282.4	10112.8
77.5°	374.0	387.9	435.3	630.1	1019.4	665.3	637.7	2063.3	3170.1	6815.4	6933.4
80°	202.3	226.8	314.3	455.3	715.9	470.6	315.8	821.6	1074.6	3186.9	2673.4
82.5°	104.2	116.5	219.2	328.0	407.7	410.8	156.3	341.8	443.0	984.1	366.3
85°	41.4	50.6	147.2	180.9	210.0	202.3	70.5	138.0	159.4	272.9	111.9
87.5°	9.2	15.4	53.6	41.4	39.9	42.9	16.9	32.2	30.6	32.2	19.9
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°	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1	2750.1
2.5°	2767.0	2760.8	2743.9	2725.6	2704.1	2691.9	2684.2	2682.6	2671.9	2664.3	2671.9
5°	2812.9	2806.8	2774.6	2736.2	2694.9	2662.7	2632.0	2604.4	2564.5	2557.0	2553.9
7.5°	2905.0	2888.0	2836.0	2783.8	2705.6	2612.1	2498.6	2368.4	2251.9	2216.7	2199.8
10°	3018.3	2995.4	2929.4	2837.4	2664.3	2409.8	2135.4	1880.9	1678.5	1621.9	1600.3
12.5°	3147.1	3127.2	3039.8	2869.7	2491.1	2029.6	1609.6	1293.8	1097.6	1048.6	1034.7
15°	3300.4	3271.3	3150.1	2820.6	2181.4	1542.1	1105.3	918.2	847.7	838.6	829.3
17.5°	3462.9	3415.4	3248.3	2644.3	1764.4	1096.0	853.8	800.2	769.6	760.3	755.7
20°	3611.6	3550.3	3306.5	2377.6	1318.4	853.8	765.0	729.7	702.1	691.4	685.2
22.5°	3760.3	3672.9	3306.5	2014.2	988.7	757.3	702.1	669.9	637.7	623.9	616.2
25°	3915.1	3798.6	3248.3	1609.6	795.6	694.4	642.3	607.0	579.4	562.6	556.5
27.5°	4065.4	3904.3	3114.9	1226.3	708.2	639.2	587.1	553.4	527.4	515.1	515.1
30°	4207.9	4008.6	2927.9	930.5	651.5	585.6	536.5	507.4	481.3	469.0	470.6
32.5°	4401.0	4140.5	2728.7	763.4	602.4	534.9	490.6	463.0	439.9	430.7	430.7
35°	4669.3	4335.1	2557.0	749.6	561.1	493.6	449.2	423.1	400.1	392.5	392.5
37.5°	5049.5	4649.4	2466.5	841.6	527.4	456.8	415.4	387.9	366.3	360.3	358.7
40°	5518.6	5075.5	2515.6	933.6	504.3	424.7	384.8	357.2	338.8	331.1	329.5
42.5°	6075.0	5601.3	2786.9	1004.1	489.0	397.0	355.7	325.0	312.7	309.7	309.7
45°	6714.3	6179.2	3202.3	1079.2	464.4	370.9	326.6	303.5	294.3	292.7	291.3
47.5°	7440.9	6813.9	3683.6	1172.7	439.9	346.4	303.5	288.2	280.5	277.5	277.5
50°	8161.4	7453.1	4178.7	1224.8	420.0	323.5	285.2	272.9	266.7	265.2	265.2
52.5°	8915.6	8110.7	4578.9	1175.8	403.1	305.0	269.8	260.6	254.5	253.0	253.0
55°	9634.5	8642.7	4647.9	997.9	369.4	286.7	253.0	248.4	240.7	240.7	239.1
57.5°	10253.8	8909.4	4160.4	732.8	335.7	259.0	236.1	231.4	225.3	223.8	222.3
60°	10822.5	8832.7	3211.5	493.6	298.9	231.4	214.6	211.6	205.4	197.7	196.2
62.5°	11142.9	8495.5	2196.7	322.0	262.1	202.3	190.0	188.6	174.8	159.4	156.3
65°	11263.9	7802.6	1370.4	234.5	219.2	173.2	164.0	160.9	141.0	124.1	122.6
67.5°	11158.3	6662.1	691.4	185.5	173.2	144.1	134.9	134.9	121.1	105.8	104.2
70°	10735.1	4994.3	291.3	148.7	133.4	110.4	110.4	116.5	102.7	85.9	84.4
72.5°	9816.9	3360.2	154.8	113.5	99.6	78.2	90.4	95.0	81.3	64.4	64.4
75°	7804.1	2049.5	107.3	84.4	62.8	55.1	69.0	72.1	55.1	42.9	41.4
77.5°	5337.7	1177.3	72.1	53.6	39.9	32.2	47.6	44.5	29.1	19.9	21.4
80°	2343.9	490.6	41.4	24.5	15.4	12.3	16.9	12.3	9.2	6.1	6.1
82.5°	274.4	115.0	15.4	9.2	6.1	3.1	1.5	0.0	0.0	0.0	0.0
85°	56.7	13.8	7.7	3.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	10.8	3.1	1.5	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)