

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: STREETWORKS

Report Number: P579653

Luminaire Tested: **CST-CA8-330-727-U-T5-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579653
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-330-727-U-T5-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 2700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25561 lumens
Efficiency: N/A
Efficacy: 77.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U2 - G4

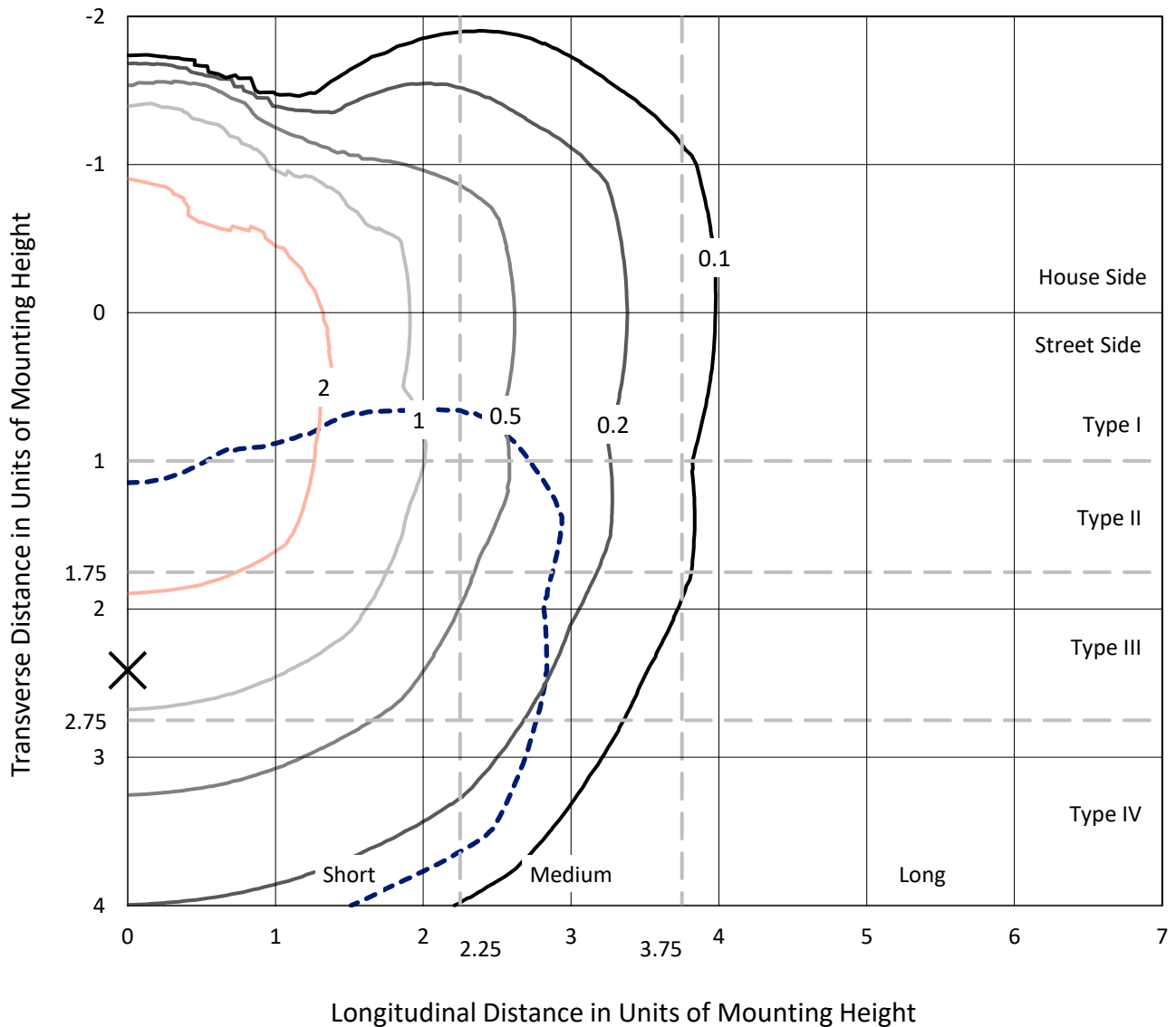
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

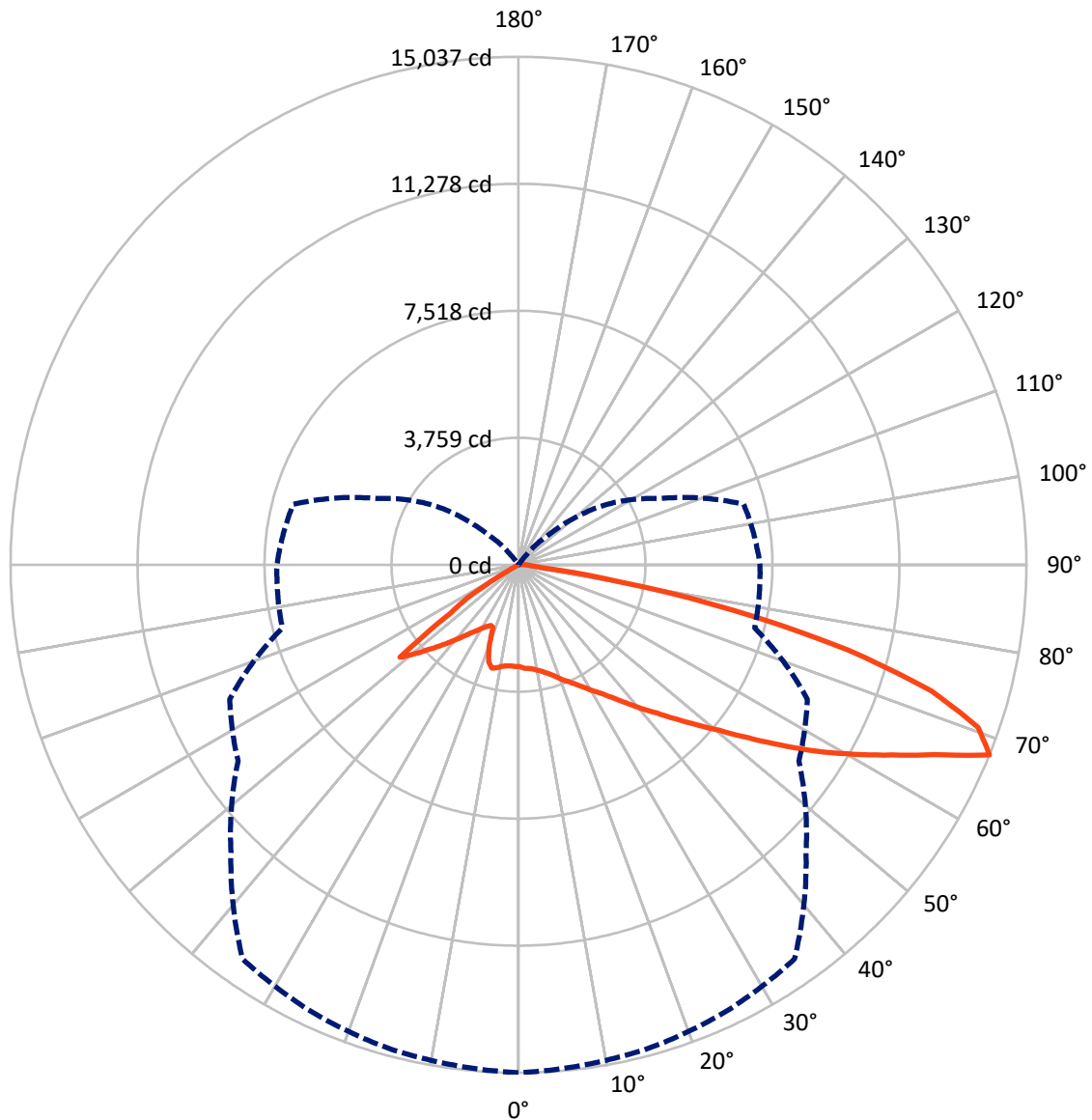
× Max cd
 - - - 1/2 Max cd



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



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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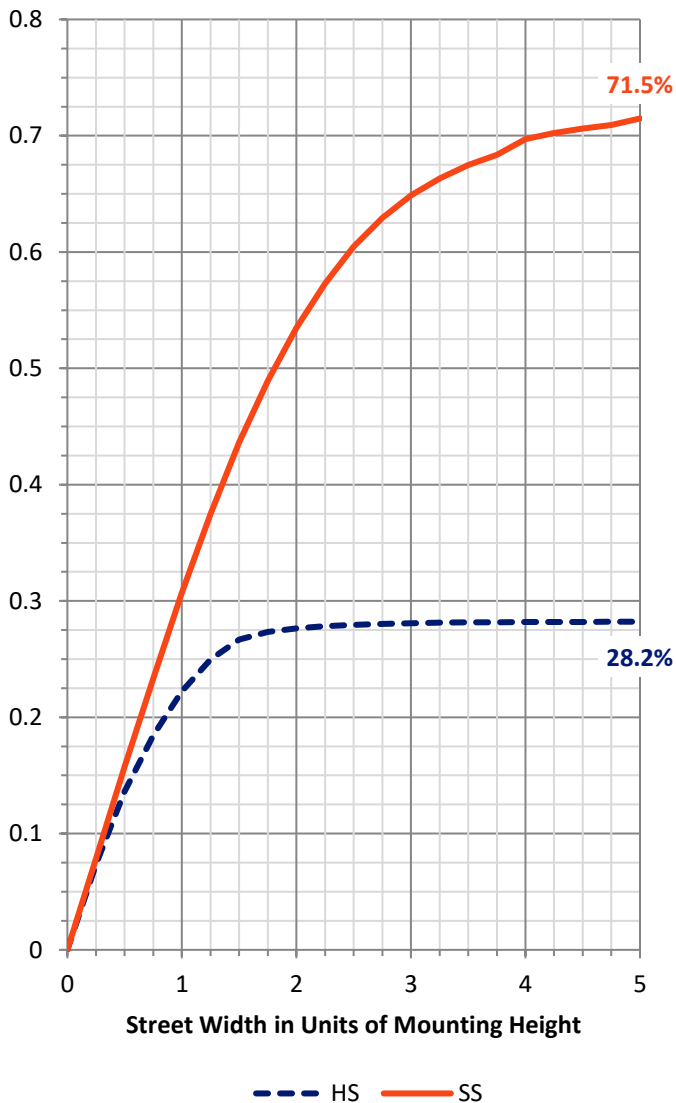
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7244.5	0.1	7244.6
	% Fixture	28.3	0.0	28.3
Street Side	Lumens	18283.9	32.5	18316.4
	% Fixture	71.5	0.1	71.7
Total	Lumens	25528.3	32.7	25561.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.3	1.1
10°-20°	893.7	3.5
20°-30°	1479.9	5.8
30°-40°	2329.6	9.1
40°-50°	3645.8	14.3
50°-60°	5264.0	20.6
60°-70°	6521.1	25.5
70°-80°	4749.2	18.6
80°-90°	354.8	1.4
90°-100°	27.9	0.1
100°-110°	4.7	0.0
110°-120°	0.1	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°	25528.3	99.9
0°-180°	25561.0	100.0

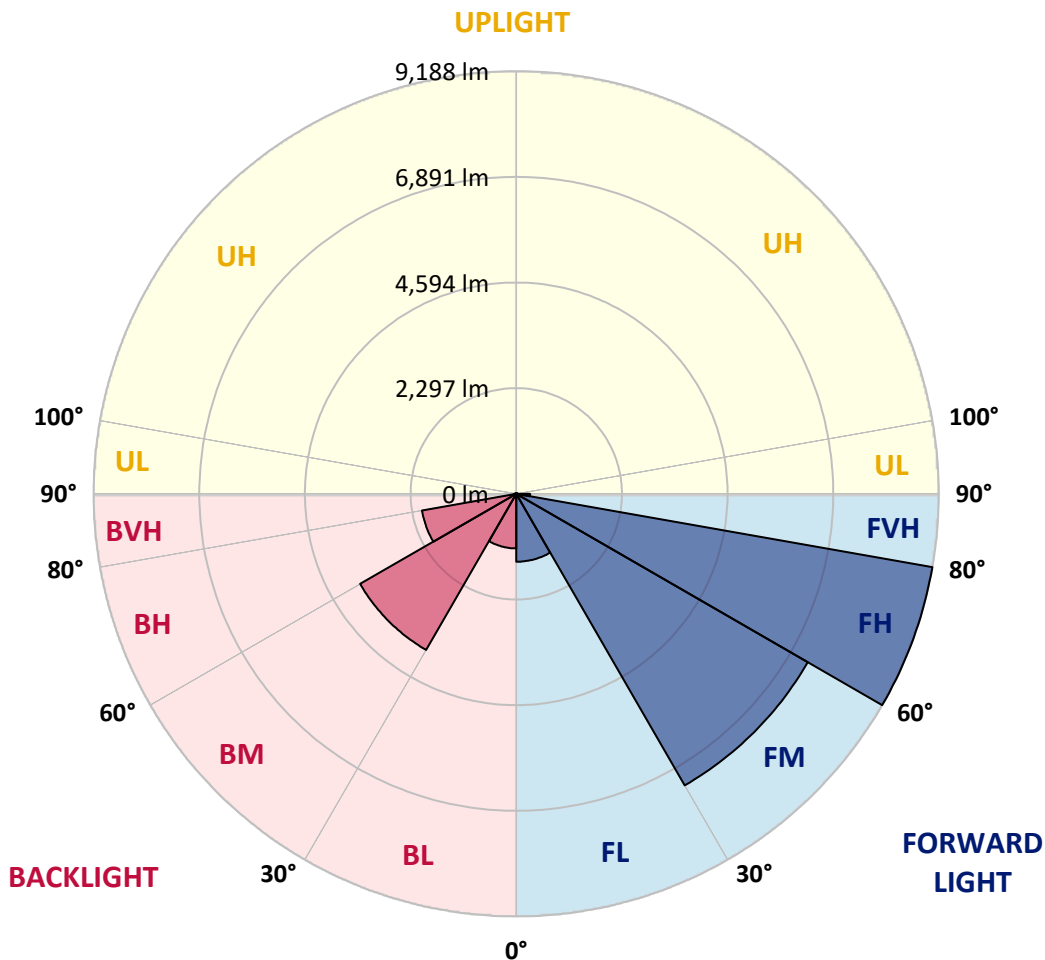


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1476.3	5.8			
FM (30°-60°)	7319.9	28.6			
FH (60°-80°)	9188.3	35.9			G4/12000
FVH (80°-90°)	299.3	1.2			G3/500
BL (0°-30°)	1187.6	4.6	B3/2500		
BM (30°-60°)	3919.4	15.3	B3/5000		
BH (60°-80°)	2082.0	8.1	B3/2500		G3/2500
BVH (80°-90°)	55.5	0.2			G1/100
UL (90°-100°)	27.9	0.1		U2/50	
UH (100°-180°)	4.8	0.0		U1/10	

BUG Rating: B3-U2-G4
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4
2.5°	3065.5	3048.9	3048.9	3066.8	3016.8	3032.2	3011.7	3029.6	3019.4	3024.5	3030.9
5°	3083.4	3064.2	3065.5	3087.3	3042.5	3055.3	3030.9	3039.9	3030.9	3034.8	3034.8
7.5°	3116.8	3100.1	3100.1	3112.9	3068.1	3071.9	3050.1	3050.1	3038.6	3047.6	3039.9
10°	3179.5	3161.6	3152.6	3159.0	3119.3	3114.2	3084.7	3084.7	3066.8	3080.9	3069.4
12.5°	3255.1	3229.5	3226.9	3228.2	3183.4	3174.4	3141.1	3142.4	3109.1	3128.3	3114.2
15°	3346.1	3314.0	3311.5	3316.6	3269.2	3252.5	3215.4	3215.4	3178.2	3188.5	3169.3
17.5°	3462.6	3425.5	3419.1	3428.0	3380.6	3365.3	3321.7	3314.0	3273.0	3265.4	3248.7
20°	3616.4	3574.1	3561.3	3580.5	3520.3	3506.2	3453.7	3437.0	3381.9	3291.0	3171.8
22.5°	3754.7	3721.4	3713.7	3726.5	3671.4	3657.3	3606.1	3571.5	3438.3	3255.1	3144.9
25°	3912.3	3899.5	3895.6	3887.9	3838.0	3813.6	3765.0	3716.3	3414.0	3162.9	3160.3
27.5°	4107.0	4100.6	4082.7	4076.2	4021.2	4005.8	3941.7	3627.9	3326.8	3308.9	3298.7
30°	4319.6	4306.8	4288.9	4290.2	4253.0	4224.8	4072.4	3549.7	3494.7	3494.7	3467.8
32.5°	4555.4	4541.3	4523.3	4527.2	4511.8	4487.5	4028.8	3756.0	3713.7	3725.2	3691.9
35°	4847.4	4824.4	4818.0	4833.3	4834.6	4677.1	4105.7	4036.5	4003.2	3995.5	3870.0
37.5°	5188.2	5169.0	5192.0	5227.9	5186.9	4725.7	4411.9	4390.1	4356.8	4171.0	3873.8
40°	5596.8	5562.2	5590.4	5613.5	5586.6	5015.2	4733.4	4741.1	4711.6	4160.8	3831.6
42.5°	6001.6	5968.3	5992.7	6050.3	6040.1	5373.9	5125.4	5142.1	4844.9	4185.1	4159.5
45°	6502.5	6491.0	6483.3	6530.7	6570.4	5803.1	5590.4	5589.1	4750.1	4572.0	4548.9
47.5°	7070.0	7054.6	7058.5	7118.7	7178.9	6315.5	6140.0	5625.0	4994.7	5012.7	4992.2
50°	7702.9	7686.2	7736.2	7823.3	7854.0	6890.7	6675.5	5527.7	5504.6	5523.8	5489.2
52.5°	8506.1	8468.9	8545.8	8639.3	8679.0	7570.9	6704.9	6102.8	6064.4	6068.3	5958.1
55°	9419.4	9390.0	9459.1	9564.2	9623.1	8330.6	7317.3	6662.7	6639.6	5986.3	5390.6
57.5°	10412.2	10378.9	10471.2	10501.9	10517.3	9115.8	7933.4	7269.9	6202.8	5466.2	5432.9
60°	11385.8	11350.0	11466.5	11471.7	11516.5	9899.8	8518.9	7855.3	5976.0	5878.7	5850.5
62.5°	12408.1	12363.3	12465.7	12461.9	12373.5	10617.2	9099.2	8417.7	6380.8	6304.0	6260.4
65°	13543.1	13509.8	13581.5	13466.2	13290.7	11358.9	9701.3	9030.0	6852.2	6838.2	6827.9
67.5°	15036.8	14971.4	14826.7	14580.7	14245.1	12039.1	10131.7	9433.5	7235.3	7169.9	7149.4
70°	14436.0	14359.1	14248.9	13978.6	13636.6	11399.9	9439.9	8823.8	6765.1	6767.7	6719.0
72.5°	12782.1	12648.9	12545.2	12166.0	11977.7	9956.2	8225.5	7658.0	5851.8	5960.6	5937.6
75°	10083.0	9947.2	9776.8	9628.2	9607.7	8075.6	6631.9	6223.3	4665.5	4744.9	4802.6
77.5°	6535.8	6485.9	6701.1	6560.2	6687.0	5561.0	4737.3	4386.3	3215.4	3416.5	3389.6
80°	2991.2	2933.6	3279.4	3182.1	3229.5	2731.2	2314.8	2223.9	1455.3	1465.5	1496.2
82.5°	676.4	653.3	677.7	622.6	607.2	513.7	452.2	409.9	257.5	272.9	287.0
85°	370.2	370.2	365.1	339.5	290.8	239.6	189.6	146.0	79.4	87.1	85.8
87.5°	260.0	253.6	252.4	225.5	193.4	164.0	130.7	93.5	44.8	30.7	28.2
90°	178.1	175.5	166.5	149.9	129.4	106.3	79.4	46.1	19.2	9.0	6.4
92.5°	129.4	126.8	120.4	106.3	88.4	71.7	52.5	30.7	15.4	6.4	1.3
95°	85.8	84.5	80.7	69.2	57.6	46.1	33.3	19.2	12.8	5.1	1.3
97.5°	58.9	57.6	53.8	46.1	37.1	29.5	20.5	14.1	10.2	3.8	1.3
100°	39.7	38.4	35.9	29.5	23.1	17.9	12.8	10.2	7.7	3.8	1.3
102.5°	25.6	24.3	21.8	17.9	12.8	10.2	9.0	7.7	5.1	2.6	1.3
105°	15.4	14.1	11.5	9.0	7.7	6.4	6.4	5.1	3.8	1.3	1.3
107.5°	7.7	6.4	5.1	5.1	5.1	3.8	3.8	3.8	2.6	1.3	0.0
110°	1.3	1.3	2.6	2.6	2.6	2.6	2.6	2.6	2.6	1.3	0.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4	3010.4
2.5°	3024.5	3004.0	3015.6	2997.6	2993.8	2974.6	3005.3	3009.1	3006.6	3011.7
5°	3028.4	3006.6	3019.4	2997.6	2997.6	2977.1	3006.6	3006.6	2998.9	3001.5
7.5°	3038.6	3016.8	3025.8	3001.5	3002.7	2978.4	3014.3	3010.4	3004.0	3013.0
10°	3068.1	3043.7	3042.5	3019.4	3024.5	2998.9	3043.7	3043.7	3037.3	3054.0
12.5°	3115.5	3079.6	3073.2	3045.0	3055.3	3033.5	3088.6	3091.1	3092.4	3119.3
15°	3165.4	3121.9	3128.3	3095.0	3091.1	3079.6	3129.6	3127.0	3125.7	3162.9
17.5°	3235.9	3030.9	2997.6	2974.6	2969.4	2941.3	2987.4	3075.8	3029.6	3004.0
20°	3124.4	3016.8	2884.9	2840.1	2831.1	2586.4	2393.0	2480.1	2597.9	2608.2
22.5°	3023.2	2984.8	2974.6	2904.1	2513.4	2431.4	2439.1	2407.1	2127.8	2006.1
25°	3148.8	3115.5	3071.9	2641.5	2549.3	2519.8	2510.8	2182.9	1962.5	1976.6
27.5°	3288.4	3251.3	2872.1	2647.9	2668.4	2627.4	2425.0	2036.8	2024.0	2048.4
30°	3462.6	3165.4	2802.9	2790.1	2809.3	2756.8	2154.7	2126.5	2122.7	2148.3
32.5°	3661.2	3052.7	2987.4	2987.4	2978.4	2410.9	2270.0	2250.8	2261.0	2287.9
35°	3586.9	3229.5	3221.8	3253.8	3038.6	2473.7	2454.5	2421.2	2428.8	2437.8
37.5°	3504.9	3520.3	3524.1	3507.5	2216.2	2653.0	2637.6	2631.2	2623.6	2626.1
40°	3809.8	3820.0	3816.2	3663.8	2391.7	2687.6	2845.2	2833.6	2832.4	2847.7
42.5°	4165.9	4194.1	4172.3	3232.0	2626.1	2259.7	3084.7	3078.3	3075.8	3107.8
45°	4566.9	4593.8	4136.5	3461.4	2875.9	2339.2	3101.4	3339.7	3358.9	3387.1
47.5°	5001.2	4996.0	3817.5	3813.6	3169.3	2559.5	2578.7	3652.2	3684.3	3694.5
50°	5500.8	4679.6	4180.0	4039.1	3501.1	2806.7	2733.7	3351.2	4058.3	4068.6
52.5°	5394.4	4629.7	4596.3	3543.3	3798.3	3079.6	3007.9	2988.7	4206.9	4454.2
55°	5028.1	5066.5	5019.1	3887.9	2785.0	3323.0	3278.2	3258.9	3129.6	2477.5
57.5°	5435.4	5447.0	5406.0	4204.4	2832.4	2071.4	3226.9	2768.3	1798.6	1789.6
60°	5858.2	5877.4	4026.3	3088.6	1815.2	693.0	165.3	174.2	497.0	436.8
62.5°	6261.7	6280.9	4262.0	2822.1	1146.5	51.2	33.3	23.1	25.6	25.6
65°	6788.2	6795.9	4561.8	2987.4	1191.4	12.8	3.8	0.0	0.0	0.0
67.5°	7061.1	6903.5	4637.3	3063.0	1223.4	7.7	2.6	0.0	0.0	0.0
70°	6648.6	6479.5	4317.1	2870.8	1140.1	6.4	1.3	0.0	0.0	0.0
72.5°	5858.2	5776.2	3875.1	2545.4	1009.5	3.8	1.3	0.0	0.0	0.0
75°	4855.1	4746.2	3212.8	2121.4	835.2	2.6	0.0	0.0	0.0	0.0
77.5°	3453.7	3466.5	2239.2	1546.2	568.8	2.6	0.0	0.0	0.0	0.0
80°	1511.6	1546.2	981.3	709.7	201.1	1.3	0.0	0.0	0.0	0.0
82.5°	288.2	265.2	128.1	101.2	25.6	0.0	0.0	0.0	0.0	0.0
85°	94.8	103.8	47.4	38.4	11.5	0.0	0.0	0.0	0.0	0.0
87.5°	33.3	42.3	14.1	11.5	2.6	0.0	0.0	0.0	0.0	0.0
90°	5.1	5.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	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):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)