

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: P579453

Luminaire Tested: **CST-CA6-230-730-U-T5N-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579453
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-4)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA6-230-730-U-T5N-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (6) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27893 lumens
Efficiency: N/A
Efficacy: 122.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G3

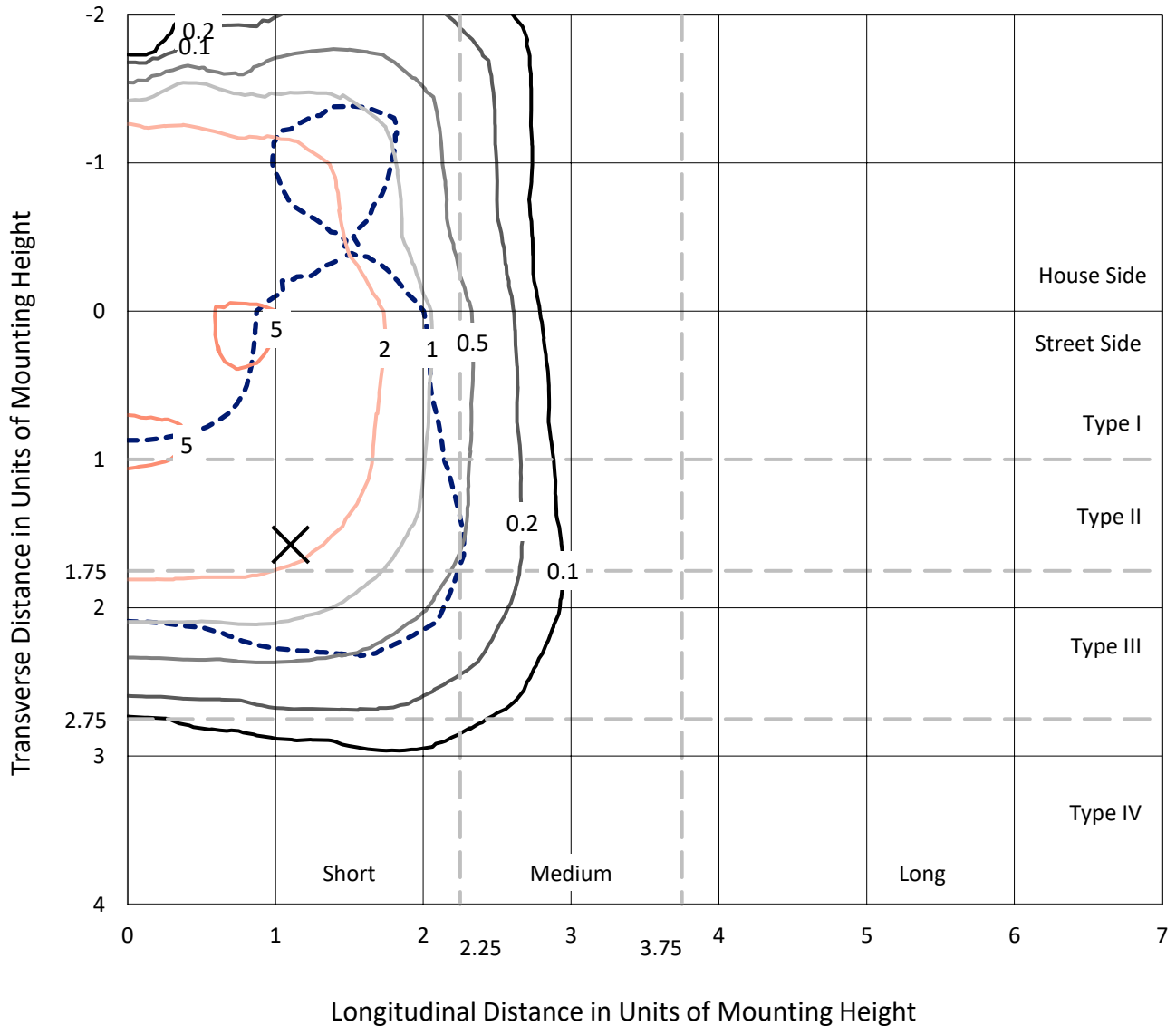
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

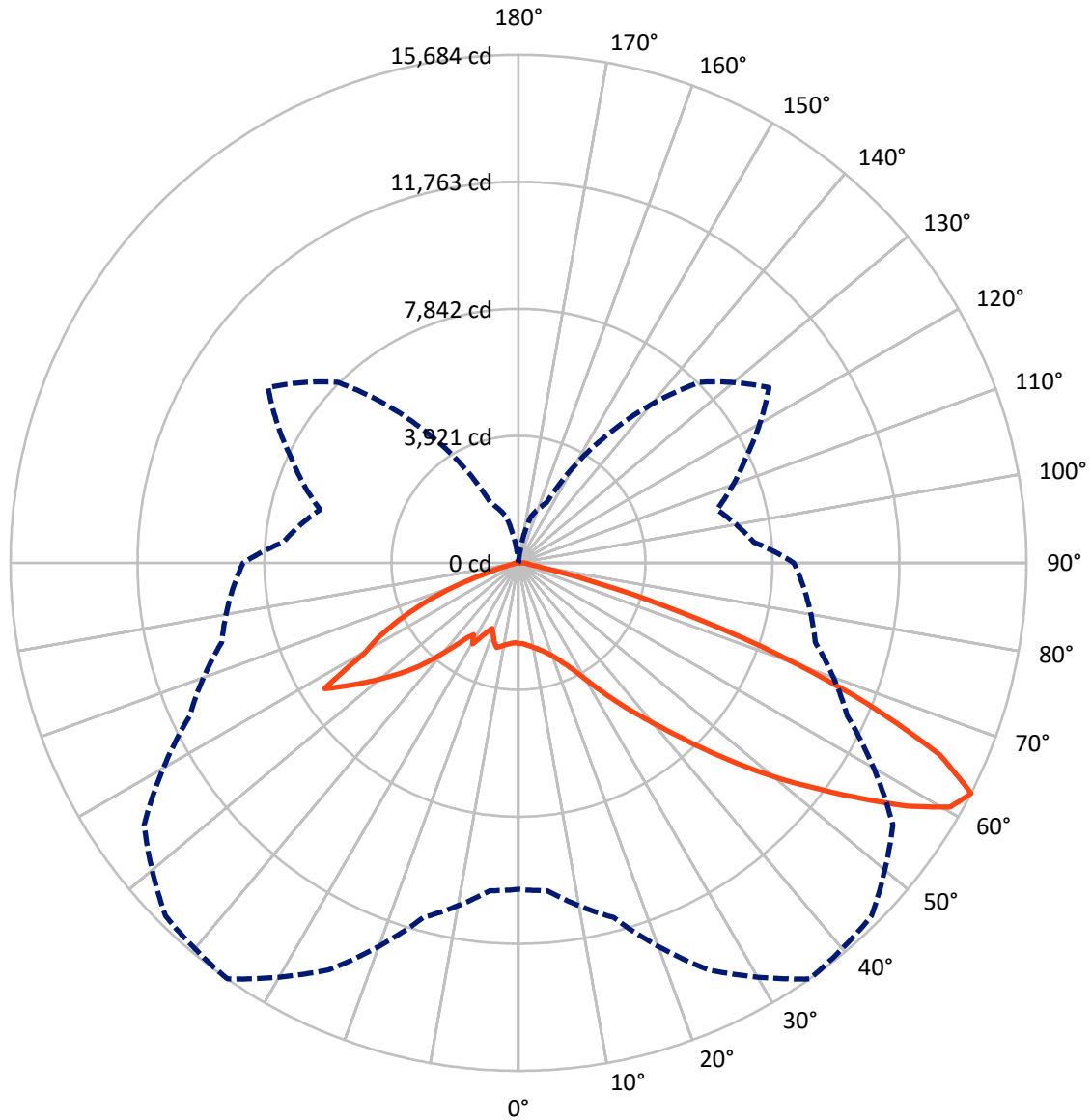
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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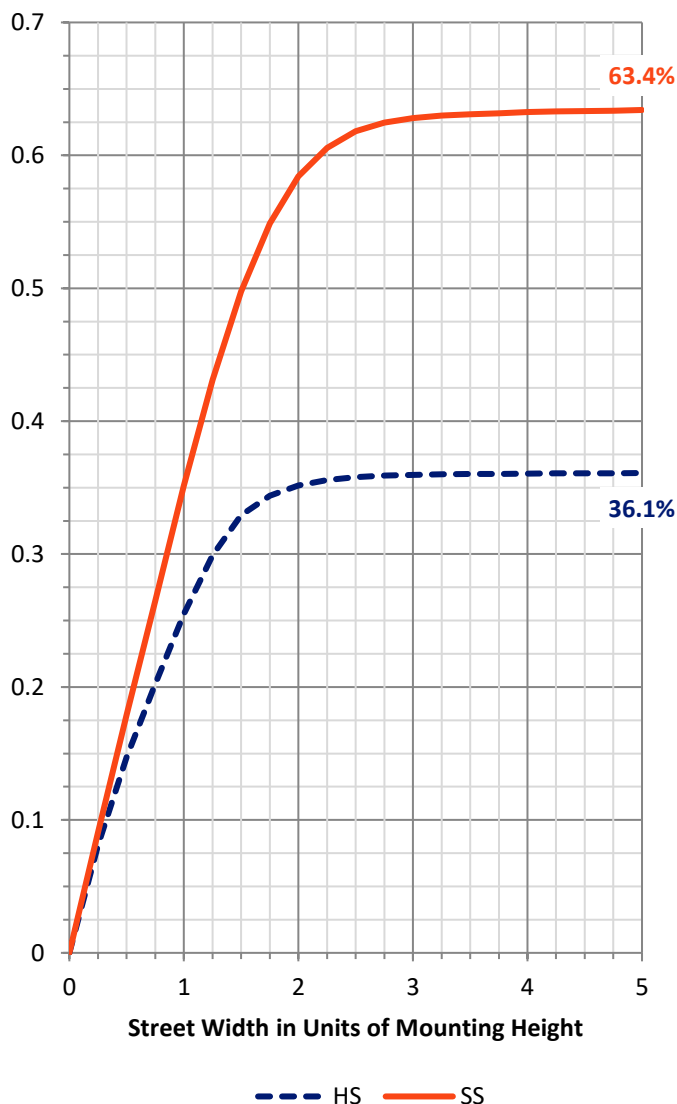
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10124.5	0.0	10124.5
	% Fixture	36.3	0.0	36.3
Street Side	Lumens	17755.3	13.2	17768.5
	% Fixture	63.7	0.0	63.7
Total	Lumens	27879.8	13.2	27893.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.4	0.9
10°-20°	793.0	2.8
20°-30°	1525.6	5.5
30°-40°	3043.5	10.9
40°-50°	5557.3	19.9
50°-60°	8304.5	29.8
60°-70°	6958.4	24.9
70°-80°	1302.2	4.7
80°-90°	149.9	0.5
90°-100°	11.9	0.0
100°-110°	1.3	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°	27879.8	100.0
0°-180°	27893.0	100.0

Coefficient of Utilization



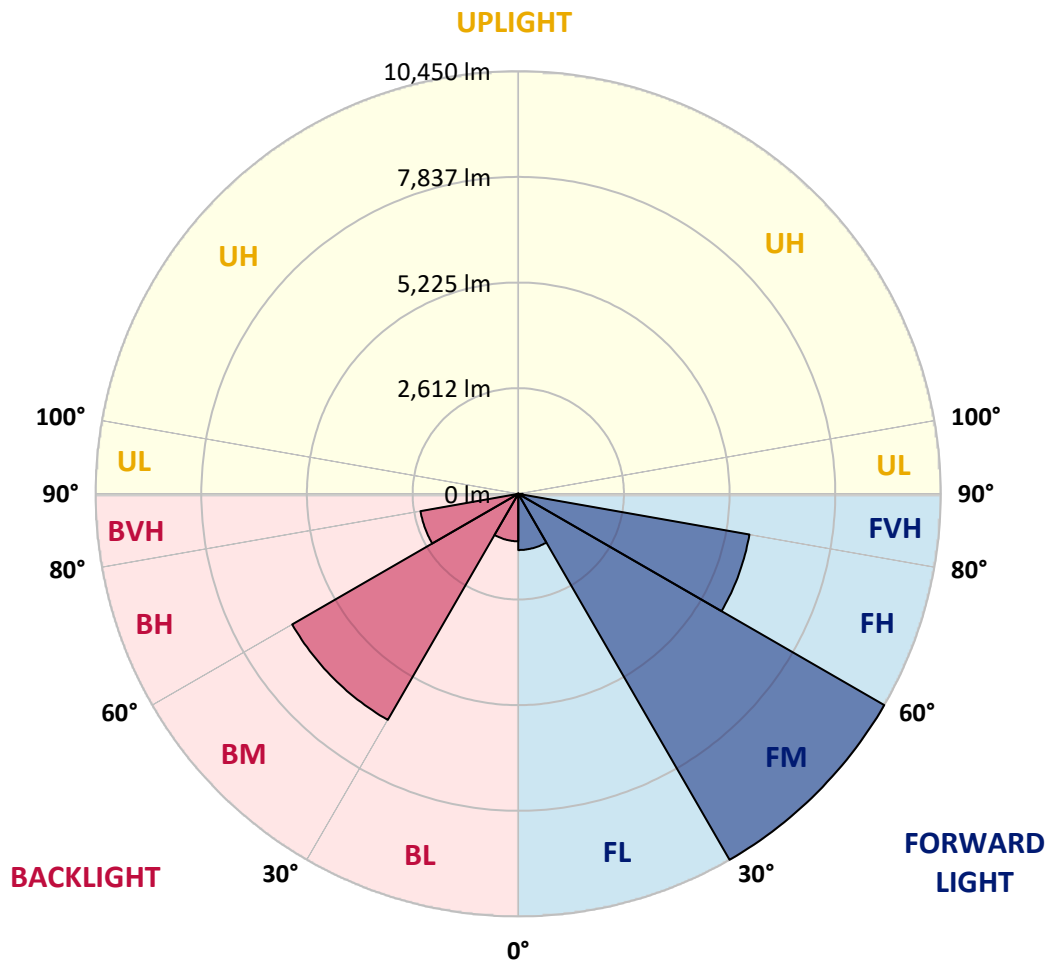
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1390.8	5.0			
FM (30°-60°)	10450.0	37.5			
FH (60°-80°)	5805.3	20.8			G3/7500
FVH (80°-90°)	109.2	0.4			G2/225
BL (0°-30°)	1173.2	4.2	B3/2500		
BM (30°-60°)	6455.3	23.1	B4/8500		
BH (60°-80°)	2455.3	8.8	B3/2500		G3/2500
BVH (80°-90°)	40.7	0.1			G1/100
UL (90°-100°)	11.9	0.0		U2/50	
UH (100°-180°)	1.3	0.0		U1/10	

BUG Rating: B4-U2-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8
2.5°	2549.1	2528.2	2531.3	2546.0	2500.0	2518.8	2498.9	2517.7	2511.5	2519.8	2526.1
5°	2585.7	2559.5	2561.6	2578.4	2542.8	2558.5	2538.6	2551.2	2540.7	2552.2	2553.3
7.5°	2635.9	2613.9	2610.8	2627.5	2597.2	2610.8	2590.9	2597.2	2586.7	2600.3	2596.1
10°	2702.8	2682.9	2677.7	2689.2	2665.2	2672.5	2651.6	2659.9	2644.2	2659.9	2652.6
12.5°	2777.0	2750.9	2751.9	2764.5	2740.4	2745.7	2728.9	2738.3	2719.5	2736.2	2731.0
15°	2864.9	2827.2	2834.5	2848.1	2825.1	2840.8	2820.9	2834.5	2816.8	2834.5	2828.3
17.5°	2978.8	2936.0	2941.2	2963.1	2944.3	2969.4	2946.4	2963.1	2954.8	2966.3	2964.2
20°	3123.1	3094.9	3089.7	3116.8	3089.7	3121.0	3108.5	3137.7	3139.8	3151.3	3156.6
22.5°	3315.5	3296.7	3284.1	3302.9	3278.9	3300.9	3318.6	3368.8	3387.6	3418.0	3420.0
25°	3571.7	3570.6	3542.4	3543.4	3513.1	3542.4	3592.6	3671.0	3721.2	3759.9	3745.2
27.5°	3917.7	3924.0	3881.1	3864.4	3828.9	3872.8	3976.3	4073.5	4164.5	4218.9	4218.9
30°	4369.4	4375.7	4313.0	4279.5	4247.1	4323.4	4446.8	4573.3	4703.0	4781.4	4763.6
32.5°	4967.5	4947.6	4857.7	4797.1	4741.6	4829.5	4971.7	5114.9	5291.6	5404.5	5390.9
35°	5693.1	5621.0	5531.0	5418.1	5298.9	5367.9	5501.8	5681.6	5927.3	6096.7	6053.8
37.5°	6535.8	6464.7	6311.0	6116.6	5908.5	5916.9	6022.5	6334.0	6641.4	6779.5	6750.2
40°	7411.0	7355.6	7214.4	6964.5	6588.1	6501.3	6674.9	7050.3	7344.1	7517.6	7468.5
42.5°	8302.8	8246.4	8139.7	7888.8	7390.1	7181.0	7361.8	7770.7	8084.3	8254.8	8198.3
45°	9192.6	9127.8	9043.1	8821.4	8345.7	8039.4	8140.8	8516.1	8802.6	8996.1	8880.0
47.5°	9974.7	9931.8	9874.3	9784.4	9368.3	9029.5	9022.2	9270.0	9467.6	9595.2	9453.0
50°	10655.4	10625.1	10657.5	10638.6	10487.0	10178.6	9989.3	9972.6	10036.4	10129.5	9926.6
52.5°	11266.0	11212.7	11332.9	11482.4	11594.3	11531.6	10918.9	10574.9	10504.8	10536.2	10306.2
55°	11765.8	11740.7	11942.5	12317.8	12835.4	12973.4	11873.5	11160.4	10902.1	10885.4	10624.0
57.5°	12071.1	12106.6	12510.2	13225.4	14174.8	14218.7	13045.5	11786.7	11289.0	11109.1	10808.0
60°	11584.9	11721.9	12410.9	13886.2	15311.3	15338.5	13906.0	11901.7	10805.9	10403.4	10030.1
62.5°	10081.4	10162.9	11335.0	13864.2	15683.5	15417.9	14111.0	11207.4	9487.5	8845.5	8500.5
65°	7101.5	7254.1	8509.9	12473.6	14291.9	14325.3	12945.2	9690.3	7576.2	6866.2	6643.5
67.5°	4288.9	4435.3	5772.6	9004.4	11618.3	11993.7	10798.6	7336.7	5432.8	4535.7	4310.9
70°	1392.7	1551.6	2630.6	5307.3	8546.5	9446.7	8126.1	4775.1	2845.0	1992.9	1751.3
72.5°	529.1	577.2	856.3	2318.0	5323.0	6306.9	5026.0	2395.4	881.4	524.9	461.1
75°	344.0	351.3	400.5	812.4	2566.9	3472.3	2422.6	701.6	353.4	313.7	290.7
77.5°	295.9	301.1	322.0	404.6	817.6	1327.9	695.3	358.6	294.8	261.4	245.7
80°	279.2	281.3	294.8	342.9	382.7	443.3	334.6	300.1	257.2	245.7	234.2
82.5°	264.5	271.8	279.2	311.6	310.5	318.9	268.7	235.3	218.5	230.0	225.8
85°	246.8	250.9	256.2	278.1	253.0	214.3	207.0	162.1	157.9	168.3	157.9
87.5°	173.6	184.0	177.7	187.2	175.7	137.0	116.1	92.0	73.2	60.6	58.6
90°	71.1	72.1	68.0	62.7	55.4	46.0	36.6	23.0	10.5	5.2	2.1
92.5°	55.4	55.4	53.3	48.1	41.8	34.5	26.1	14.6	7.3	3.1	1.0
95°	34.5	35.5	33.5	30.3	26.1	20.9	15.7	8.4	5.2	2.1	1.0
97.5°	22.0	22.0	19.9	17.8	14.6	10.5	7.3	6.3	4.2	2.1	0.0
100°	12.5	12.5	11.5	9.4	7.3	5.2	5.2	4.2	3.1	1.0	0.0
102.5°	7.3	7.3	5.2	4.2	3.1	3.1	3.1	3.1	2.1	1.0	0.0
105°	3.1	3.1	2.1	2.1	1.0	1.0	2.1	2.1	2.1	1.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.1	2.1	1.0	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	2.1	1.0	1.0



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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°	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8	2495.8
2.5°	2521.9	2503.1	2506.2	2488.4	2485.3	2467.5	2503.1	2507.3	2496.8	2506.2
5°	2551.2	2528.2	2535.5	2515.6	2512.5	2488.4	2519.8	2517.7	2509.4	2518.8
7.5°	2595.1	2571.0	2575.2	2553.3	2549.1	2523.0	2552.2	2542.8	2534.5	2546.0
10°	2656.8	2629.6	2631.7	2603.5	2606.6	2572.1	2607.6	2590.9	2580.5	2596.1
12.5°	2731.0	2700.7	2701.7	2672.5	2671.4	2638.0	2669.3	2659.9	2644.2	2668.3
15°	2827.2	2792.7	2789.6	2750.9	2740.4	2702.8	2732.1	2714.3	2703.8	2738.3
17.5°	2962.1	2923.4	2911.9	2864.9	2669.3	2556.4	2713.2	2766.6	2701.7	2691.3
20°	3141.9	3109.5	3083.4	3012.3	2684.0	2331.6	2071.3	2073.4	2347.3	2473.8
22.5°	3385.5	3346.9	3297.7	3196.3	2462.3	2184.2	2185.2	2182.1	1872.6	1741.9
25°	3719.1	3672.0	3571.7	2998.7	2613.9	2356.7	2350.4	2044.1	1873.7	1883.1
27.5°	4169.7	4073.5	3485.9	3248.6	2883.7	2580.5	2429.9	2057.7	2078.6	2093.2
30°	4742.7	4355.8	3767.2	3626.0	3207.8	2877.4	2246.9	2298.2	2340.0	2349.4
32.5°	5330.3	4368.4	4216.8	4067.3	3607.2	2618.1	2532.4	2629.6	2673.5	2678.7
35°	5325.1	4903.7	4708.2	4539.9	3977.3	2801.1	2855.4	3005.0	3116.8	3111.6
37.5°	5635.6	5494.5	5261.3	5048.0	3580.0	3155.5	3252.8	3422.1	3558.1	3553.9
40°	6284.9	6121.8	5875.0	5427.5	3963.7	3561.2	3697.1	3879.1	3975.2	3980.5
42.5°	6898.7	6763.8	6511.8	5071.0	4443.7	4049.5	4172.9	4295.2	4354.8	4373.6
45°	7509.3	7413.1	6574.5	5604.2	5023.9	4540.9	4622.5	4645.5	4708.2	4700.9
47.5°	8004.9	7898.2	6321.5	6273.4	5727.6	5007.2	5000.9	4970.6	4993.6	4998.9
50°	8457.6	7172.6	6829.6	6989.6	6465.8	5483.0	5363.8	5302.1	5270.7	5257.1
52.5°	8815.2	7174.7	7304.3	7729.9	7299.1	5999.5	5743.3	5569.7	4876.5	5419.2
55°	9119.4	7470.6	7753.9	8521.4	8017.4	6540.0	6086.2	5776.8	3254.9	2609.7
57.5°	9294.0	7695.4	8199.3	9262.7	8644.7	7141.2	5603.2	4845.2	1840.2	1838.1
60°	8619.7	7291.8	8186.8	9651.6	8463.9	5539.4	2281.4	1909.2	348.2	357.6
62.5°	7297.0	6343.5	7764.4	9438.3	7882.5	4873.4	2046.2	1470.1	11.5	9.4
65°	5653.4	5060.5	6537.9	8301.8	7171.5	4066.2	1525.5	1059.2	3.1	0.0
67.5°	3698.2	3566.4	4824.2	6884.0	5848.9	3150.3	1023.6	507.1	2.1	0.0
70°	1576.7	1826.6	3056.2	4991.5	4477.1	2167.5	493.5	183.0	1.0	0.0
72.5°	441.2	584.5	1360.3	2924.5	2815.7	1139.7	192.4	77.4	1.0	0.0
75°	261.4	224.8	390.0	1166.9	1370.7	400.5	88.9	59.6	1.0	0.0
77.5°	217.5	175.7	223.8	298.0	415.1	144.3	75.3	53.3	0.0	0.0
80°	203.9	155.8	193.4	208.1	204.9	120.2	74.2	53.3	0.0	0.0
82.5°	193.4	135.9	160.0	160.0	171.5	110.8	70.1	52.3	0.0	0.0
85°	145.3	95.1	106.6	138.0	123.4	78.4	51.2	41.8	0.0	0.0
87.5°	55.4	34.5	41.8	43.9	35.5	17.8	4.2	4.2	0.0	0.0
90°	1.0	0.0	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)