

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: P522210

Luminaire Tested: **CST-CA8-230-750-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522210
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-230-750-U-T5R-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

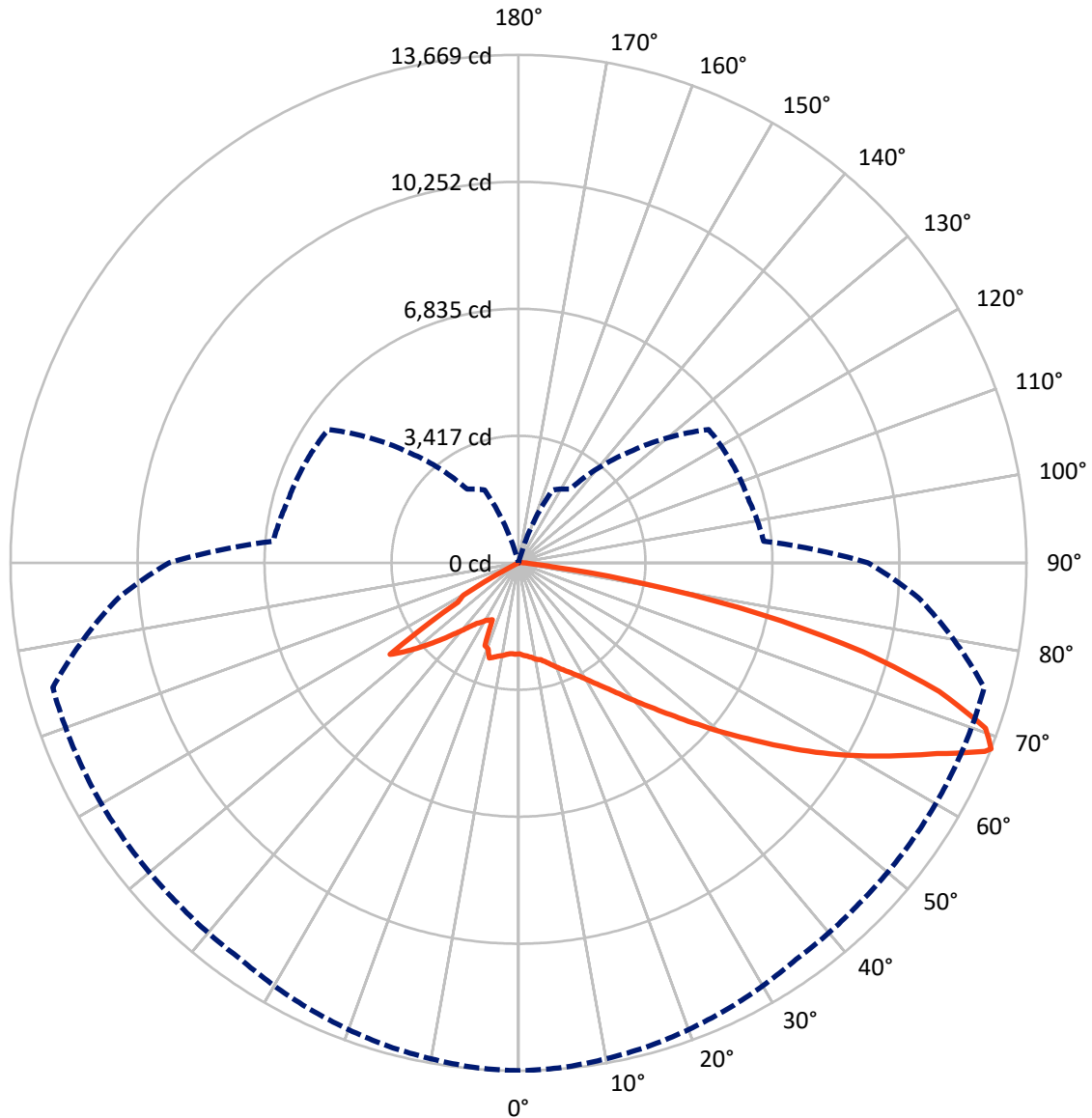
Lumens per Lamp: N/A
Luminaire Lumens: 28122.1 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

Input Watts (W): 228.4
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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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical



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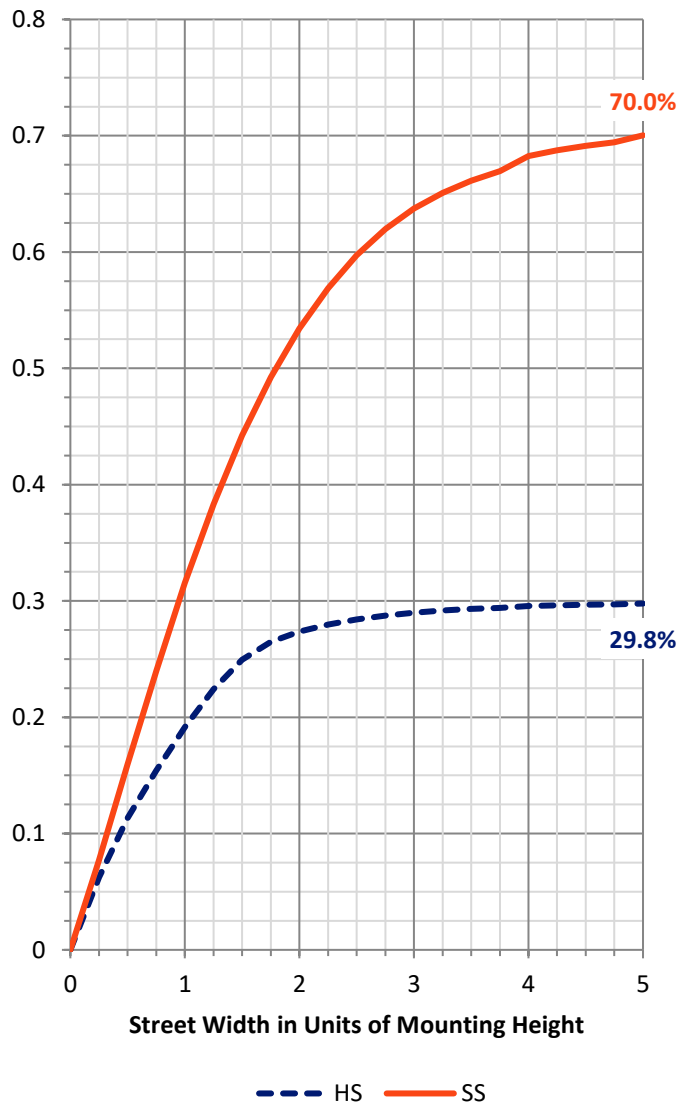
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8382.9	1.3	8384.2
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	19726.3	11.5	19737.9
	% Fixture	70.1	0.0	70.2
Total	Lumens	28109.2	12.9	28122.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	238.0	0.8
10°-20°	757.3	2.7
20°-30°	1297.2	4.6
30°-40°	2104.4	7.5
40°-50°	3549.0	12.6
50°-60°	5784.9	20.6
60°-70°	7758.5	27.6
70°-80°	6026.4	21.4
80°-90°	593.5	2.1
90°-100°	11.3	0.0
100°-110°	0.7	0.0
110°-120°	0.2	0.0
120°-130°	0.1	0.0
130°-140°	0.2	0.0
140°-150°	0.2	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	28109.2	100.0
0°-180°	28122.1	100.0

Coefficient of Utilization



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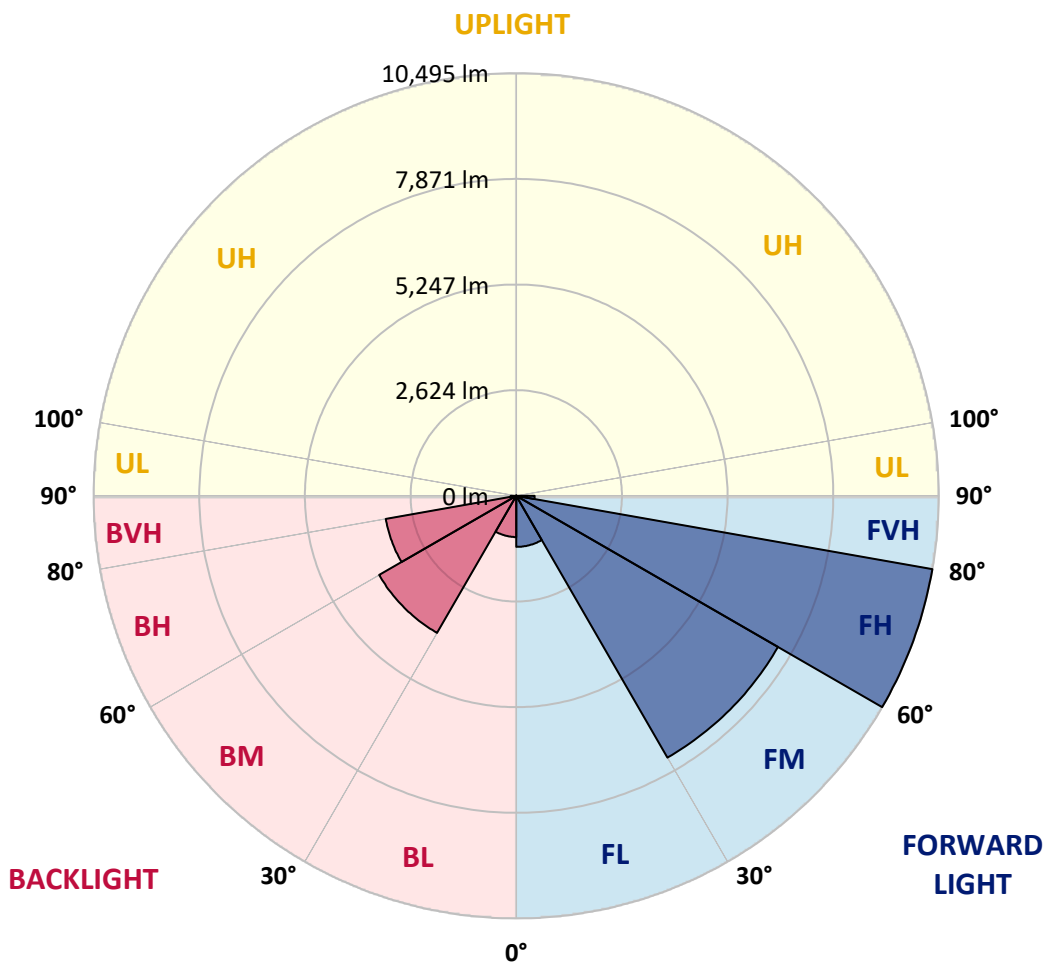
CATALOG NUMBER: CST-CA8-230-750-U-T5R-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1268.5	4.5			
FM (30°-60°)	7506.7	26.7			
FH (60°-80°)	10494.8	37.3			G4/12000
FVH (80°-90°)	456.3	1.6			G3/500
BL (0°-30°)	1024.1	3.6	B3/2500		
BM (30°-60°)	3931.5	14.0	B3/5000		
BH (60°-80°)	3290.1	11.7	B4/5000		G4/5000
BVH (80°-90°)	137.2	0.5			G2/225
UL (90°-100°)	11.3	0.0		U2/50	
UH (100°-180°)	1.6	0.0		U1/10	

BUG Rating: B4-U2-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7
2.5°	2492.4	2485.4	2484.3	2498.2	2454.0	2476.1	2456.4	2472.7	2462.2	2470.3	2471.5
5°	2526.2	2513.4	2505.2	2521.5	2493.6	2504.1	2482.0	2488.9	2459.9	2476.1	2478.5
7.5°	2575.0	2554.1	2551.7	2556.4	2532.0	2540.1	2504.1	2512.2	2491.3	2482.0	2490.1
10°	2641.3	2621.5	2606.4	2616.9	2584.3	2589.0	2550.6	2551.7	2536.6	2519.2	2533.1
12.5°	2678.5	2680.8	2673.9	2682.0	2655.3	2640.1	2613.4	2604.1	2589.0	2568.0	2561.0
15°	2771.6	2766.9	2752.9	2765.7	2762.3	2748.3	2715.7	2694.8	2662.2	2650.6	2639.0
17.5°	2885.5	2870.4	2858.8	2875.1	2892.5	2863.4	2832.0	2803.0	2759.9	2736.7	2722.7
20°	3005.3	2994.9	2983.2	3008.8	3014.6	2992.5	2969.3	2926.2	2876.2	2846.0	2816.9
22.5°	3139.1	3118.1	3121.6	3155.4	3144.9	3134.4	3104.2	3069.3	3008.8	2970.4	2886.7
25°	3277.5	3265.9	3282.1	3297.3	3289.1	3267.0	3251.9	3226.3	3158.9	3112.3	2990.2
27.5°	3449.6	3431.0	3451.9	3457.8	3450.8	3445.0	3424.0	3404.3	3331.0	3278.7	3126.3
30°	3652.0	3629.9	3663.6	3655.5	3648.5	3653.2	3640.4	3597.3	3532.2	3461.2	3308.9
32.5°	3892.7	3863.7	3902.0	3884.6	3868.3	3900.9	3870.6	3829.9	3753.2	3670.6	3521.7
35°	4171.9	4173.0	4192.8	4163.7	4157.9	4192.8	4173.0	4123.0	4052.1	3966.0	3754.3
37.5°	4510.3	4501.0	4551.0	4537.1	4516.1	4562.7	4568.5	4505.7	4377.7	4292.8	4042.8
40°	4922.0	4919.7	4936.0	4938.3	4932.5	4954.6	4965.1	4881.3	4798.8	4670.8	3814.8
42.5°	5361.7	5371.0	5400.1	5379.1	5407.0	5436.1	5439.6	5369.8	5251.2	4481.2	4052.1
45°	5889.7	5918.8	5938.6	5933.9	5946.7	5988.6	5992.1	5954.8	5838.5	4854.6	4482.4
47.5°	6495.7	6523.6	6529.4	6566.6	6555.0	6614.3	6606.1	6607.3	6482.9	5374.5	4951.1
50°	7192.3	7205.1	7252.8	7273.7	7244.7	7324.9	7304.0	7329.6	7176.0	5970.0	5454.7
52.5°	7932.0	7954.1	7973.9	8053.0	8015.8	8085.6	8057.6	8117.0	7939.0	6575.9	6014.2
55°	8772.9	8776.4	8810.1	8890.4	8841.5	8925.3	8884.6	8906.7	8764.8	7245.8	6596.8
57.5°	9663.8	9652.2	9665.0	9728.9	9684.8	9747.6	9731.3	9752.2	9619.6	7950.6	7022.5
60°	10545.4	10528.0	10546.6	10589.6	10529.1	10637.3	10579.1	10598.9	10455.9	8670.6	7629.6
62.5°	11431.7	11418.9	11397.9	11441.0	11352.6	11408.4	11432.8	11400.3	11274.6	9321.9	8157.7
65°	12383.0	12370.2	12293.5	12320.2	12162.1	12135.3	12144.6	12155.1	12071.3	9967.4	8736.9
67.5°	13539.1	13520.5	13376.3	13194.9	12966.9	12916.9	12921.5	12949.4	12961.1	10797.8	9414.9
68°	13669.4	13635.6	13475.1	13264.6	13026.2	12968.1	12962.2	12968.1	12973.9	10804.8	9407.9
70°	13336.7	13324.0	13201.8	12947.1	12702.9	12563.3	12442.4	12437.7	12381.9	10252.3	8888.1
72.5°	11835.2	11819.0	11673.6	11493.3	11342.1	11123.5	10966.4	10975.7	10883.9	9061.4	7779.7
75°	9577.8	9576.6	9402.1	9250.9	9253.3	9237.0	9184.6	9276.5	9181.2	7685.5	6635.2
77.5°	6674.8	6698.0	6686.4	6598.0	6722.5	6894.6	7081.8	7258.6	7204.0	6071.1	5290.7
80°	3486.8	3552.0	3782.3	3792.7	3879.9	4047.4	4175.4	4294.0	4302.1	3445.0	3056.5
82.5°	927.0	946.7	1024.7	1002.6	995.6	1029.3	1057.2	1060.7	1063.0	897.9	838.6
85°	288.4	296.6	287.3	274.5	254.7	232.6	226.8	184.9	146.5	121.0	105.8
87.5°	204.7	218.7	197.7	186.1	165.2	157.0	140.7	110.5	86.1	60.5	40.7
90°	105.8	108.2	96.5	82.6	76.8	72.1	61.6	44.2	22.1	11.6	10.5
92.5°	53.5	54.7	47.7	40.7	34.9	30.2	23.3	12.8	7.0	3.5	1.2
95°	20.9	22.1	19.8	17.4	14.0	10.5	9.3	7.0	4.7	2.3	1.2
97.5°	7.0	7.0	7.0	5.8	5.8	5.8	5.8	4.7	3.5	2.3	1.2
100°	0.0	0.0	0.0	1.2	2.3	3.5	3.5	3.5	2.3	1.2	1.2
102.5°	0.0	0.0	0.0	0.0	0.0	1.2	2.3	2.3	2.3	1.2	1.2
105°	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2	1.2
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
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	1.2
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2
165°	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2
170°	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2
175°	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	1.2	1.2	1.2
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°	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7	2451.7
2.5°	2465.7	2458.7	2462.2	2433.1	2440.1	2421.5	2461.0	2450.6	2445.9	2462.2
5°	2471.5	2445.9	2466.8	2447.1	2450.6	2423.8	2456.4	2443.6	2442.4	2451.7
7.5°	2473.8	2461.0	2480.8	2448.2	2458.7	2448.2	2472.7	2459.9	2471.5	2479.6
10°	2506.4	2499.4	2497.1	2485.4	2493.6	2470.3	2500.6	2500.6	2506.4	2528.5
12.5°	2554.1	2544.8	2538.9	2518.0	2526.2	2519.2	2543.6	2548.3	2558.7	2568.0
15°	2619.2	2602.9	2597.1	2578.5	2584.3	2583.1	2600.6	2601.8	2625.0	2623.9
17.5°	2702.9	2679.7	2686.7	2672.7	2673.9	2664.6	2655.3	2655.3	2676.2	2680.8
20°	2803.0	2670.4	2495.9	2398.2	2380.8	2393.6	2443.6	2526.2	2422.6	2451.7
22.5°	2622.7	2502.9	2494.8	2472.7	2458.7	2147.0	2066.7	2041.2	2174.9	2405.2
25°	2645.9	2594.8	2579.7	2551.7	2140.0	2136.5	2113.3	2074.9	1695.7	1687.6
27.5°	2769.2	2719.2	2694.8	2235.4	2226.1	2224.9	2190.0	1805.1	1717.8	1729.5
30°	2913.5	2855.3	2418.0	2348.2	2340.1	2321.5	2121.4	1783.0	1781.8	1783.0
32.5°	3079.8	2886.7	2487.8	2484.3	2488.9	2431.9	1879.5	1872.5	1871.4	1883.0
35°	3307.7	2678.5	2662.2	2679.7	2655.3	2102.8	1992.3	1988.8	1990.0	1984.2
37.5°	3156.5	2887.9	2884.4	2884.4	2827.4	2151.7	2129.6	2145.8	2143.5	2135.4
40°	3220.5	3141.4	3120.5	3113.5	2390.1	2321.5	2308.7	2329.6	2333.1	2338.9
42.5°	3531.0	3458.9	3448.5	3365.9	2600.6	2578.5	2538.9	2561.0	2558.7	2565.7
45°	3912.5	3863.7	3818.3	2918.1	2884.4	2856.5	2815.8	2841.3	2848.3	2843.7
47.5°	4356.8	4303.3	3975.3	3208.9	3207.7	3185.6	3140.2	3161.2	3157.7	3157.7
50°	4803.4	4745.3	3611.3	3578.7	3567.1	3532.2	3495.0	3498.5	3499.6	3511.3
52.5°	5302.4	4238.2	3997.4	3932.3	3941.6	3918.3	3882.3	2939.0	3864.8	3875.3
55°	4955.8	4435.9	4421.9	4335.9	4358.0	4327.7	4304.5	2899.5	3843.9	4247.5
57.5°	4899.9	4862.7	4851.1	4762.7	4790.6	4503.3	4718.5	3172.8	2658.7	1942.3
60°	5326.8	5287.2	5280.3	5202.3	5200.0	3578.7	4289.3	2176.1	1700.4	1712.0
62.5°	5740.8	5676.9	5694.3	5602.4	3949.7	2180.7	1922.5	48.8	77.9	82.6
65°	6202.6	6095.6	6113.0	6028.1	4074.2	2299.4	2078.4	25.6	22.1	20.9
67.5°	6646.9	6459.6	6370.0	6280.5	4231.2	2421.5	2165.6	7.0	0.0	0.0
68°	6624.8	6427.0	6335.2	6250.3	4214.9	2418.0	2161.0	7.0	0.0	0.0
70°	6251.4	6073.5	5986.2	5921.1	4024.2	2335.4	2073.7	7.0	0.0	0.0
72.5°	5465.2	5366.3	5310.5	5253.5	3575.2	2088.8	1859.7	7.0	0.0	0.0
75°	4644.1	4616.2	4581.3	4455.7	2979.7	1709.7	1528.3	7.0	0.0	0.0
77.5°	3679.9	3678.7	3593.8	3446.1	2243.5	1254.9	1127.0	5.8	0.0	0.0
80°	1990.0	2169.1	2104.0	2028.4	1272.4	682.7	650.1	4.7	0.0	0.0
82.5°	559.4	529.2	508.3	475.7	267.5	148.9	145.4	4.7	0.0	0.0
85°	77.9	86.1	95.4	108.2	61.6	39.5	34.9	2.3	0.0	0.0
87.5°	44.2	50.0	61.6	64.0	23.3	18.6	5.8	0.0	0.0	0.0
90°	9.3	10.5	11.6	11.6	4.7	4.7	0.0	0.0	0.0	0.0
92.5°	0.0	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.2	1.2	1.2	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°
110°	1.2	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.2	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.2	1.2	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)