

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: P579550

Luminaire Tested: **CST-CA8-230-750-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579550
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-230-750-U-T5-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26836 lumens
Efficiency: N/A
Efficacy: 117.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

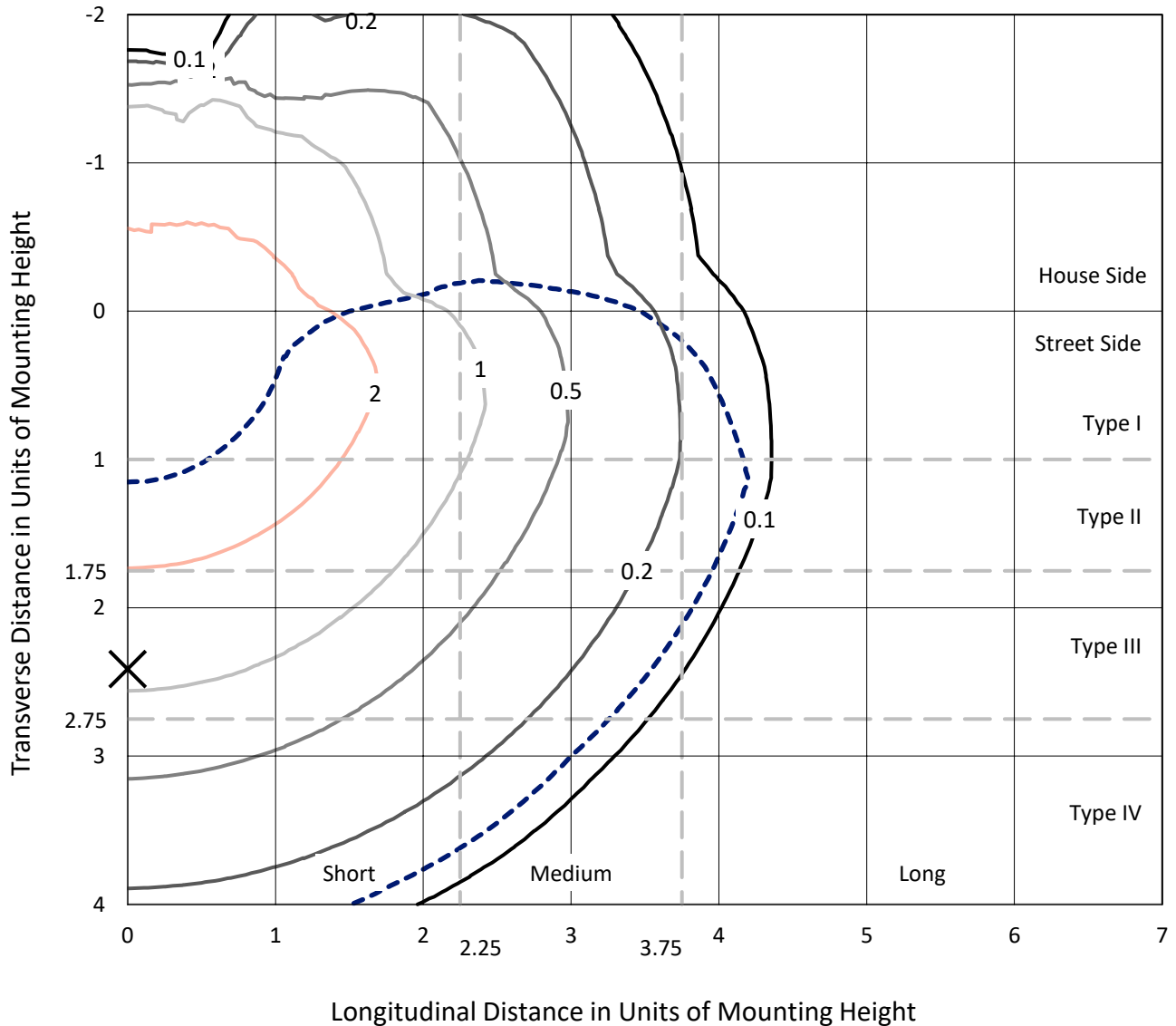
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

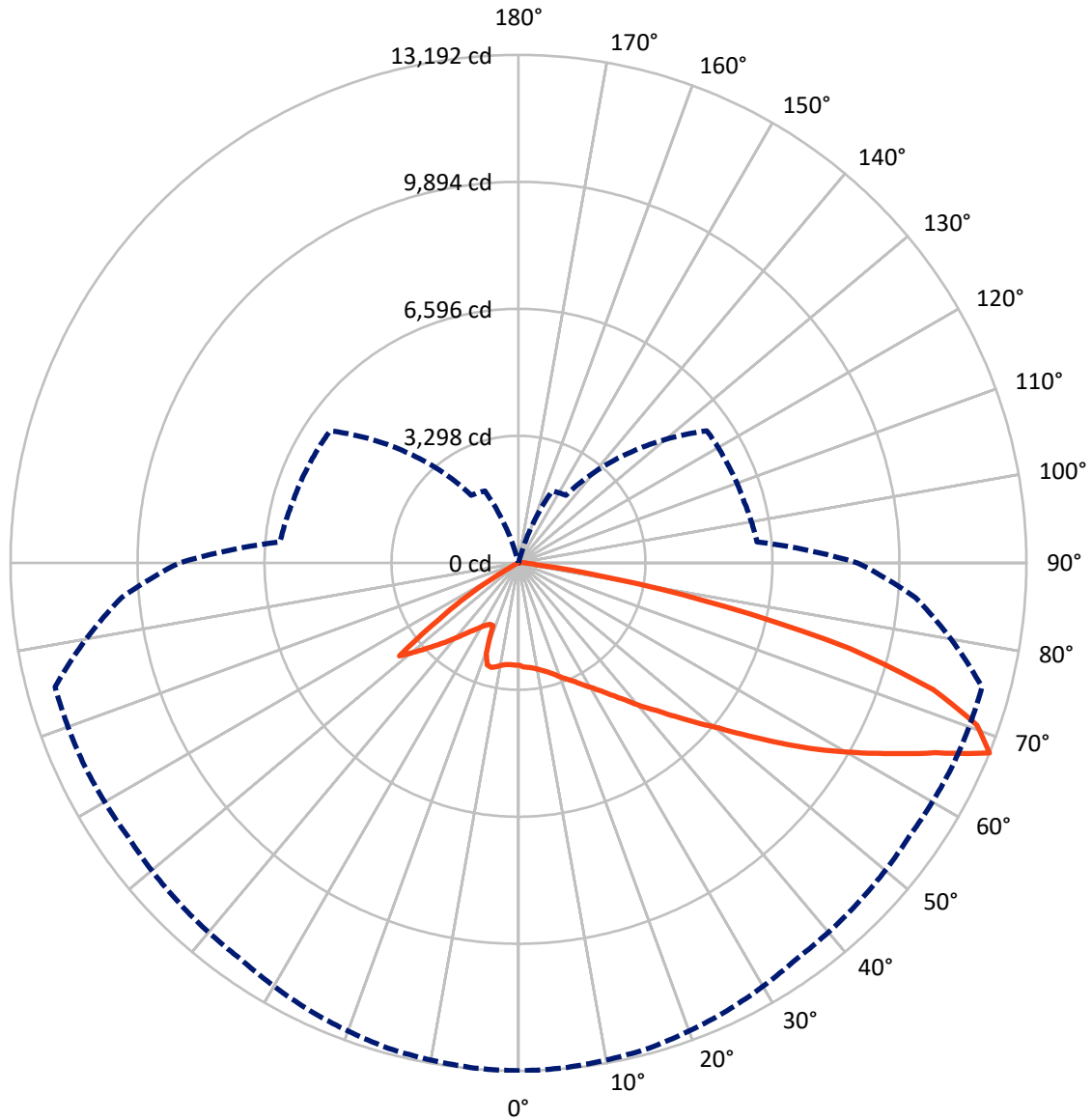
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.3 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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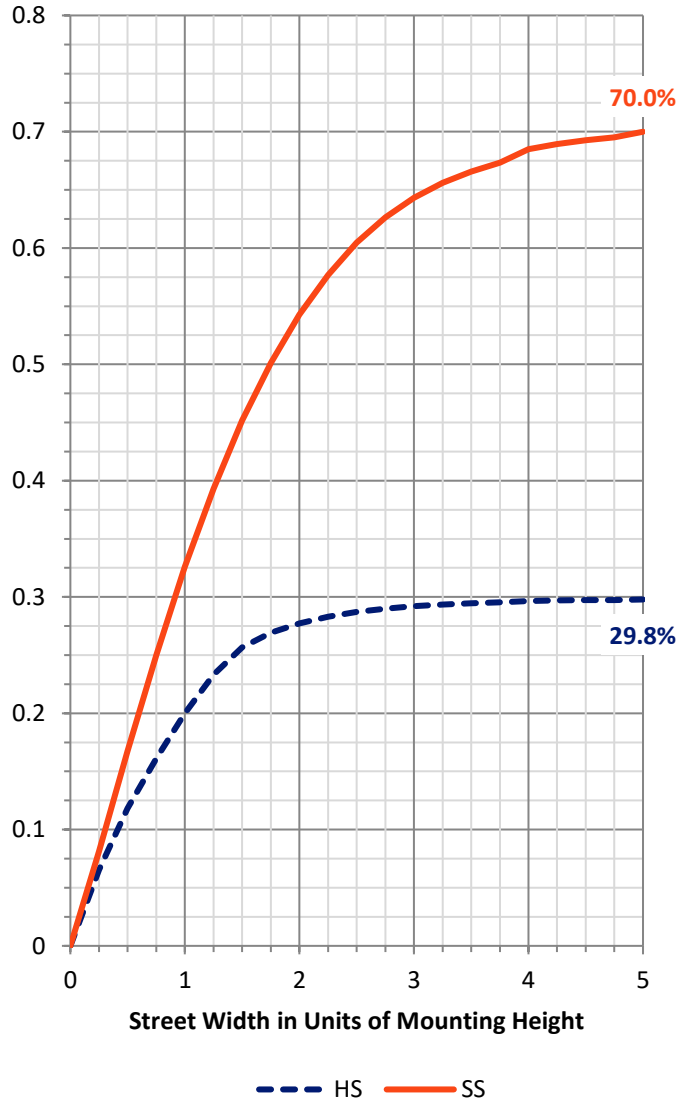
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8010.7	2.7	8013.4
	% Fixture	29.9	0.0	29.9
Street Side	Lumens	18792.4	30.2	18822.6
	% Fixture	70.0	0.1	70.1
Total	Lumens	26803.1	32.9	26836.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.4	1.0
10°-20°	793.7	3.0
20°-30°	1331.9	5.0
30°-40°	2159.8	8.0
40°-50°	3529.3	13.2
50°-60°	5531.0	20.6
60°-70°	7407.7	27.6
70°-80°	5399.2	20.1
80°-90°	394.3	1.5
90°-100°	25.2	0.1
100°-110°	7.2	0.0
110°-120°	0.5	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°	26803.1	99.9
0°-180°	26836.0	100.0

Coefficient of Utilization

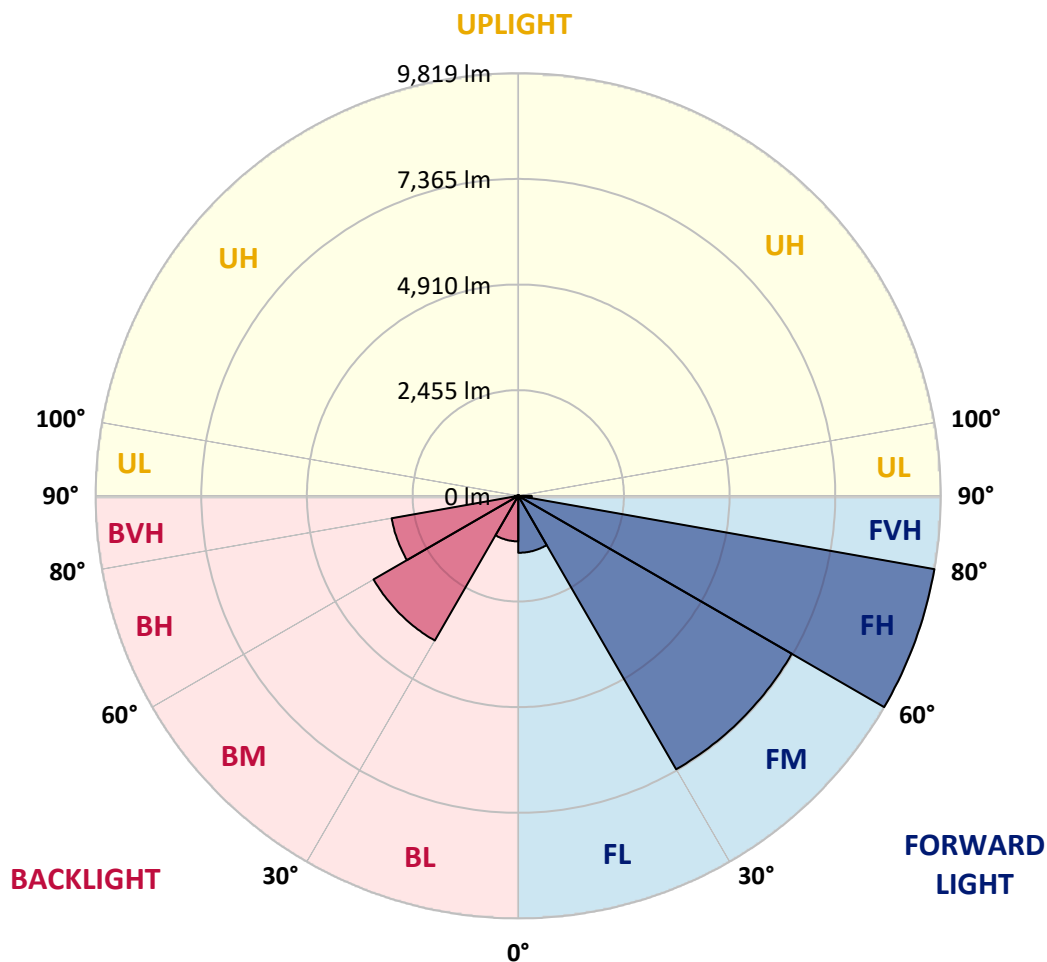


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1323.7	4.9			
FM (30°-60°)	7337.4	27.3			
FH (60°-80°)	9819.5	36.6			G4/12000
FVH (80°-90°)	311.8	1.2			G3/500
BL (0°-30°)	1058.2	3.9	B3/2500		
BM (30°-60°)	3882.6	14.5	B3/5000		
BH (60°-80°)	2987.4	11.1	B4/5000		G4/5000
BVH (80°-90°)	82.5	0.3			G1/100
UL (90°-100°)	25.2	0.1		U2/50	
UH (100°-180°)	7.7	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°	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1
2.5°	2709.9	2694.1	2695.2	2709.9	2665.9	2680.6	2661.4	2676.1	2665.9	2669.3	2676.1
5°	2726.8	2709.9	2711.0	2729.1	2689.6	2702.0	2676.1	2684.0	2674.9	2679.4	2679.4
7.5°	2760.7	2741.5	2740.4	2751.7	2711.0	2715.6	2691.9	2693.0	2679.4	2688.5	2684.0
10°	2811.4	2795.7	2784.4	2791.1	2755.0	2752.8	2722.3	2723.4	2706.5	2716.7	2708.8
12.5°	2873.5	2852.1	2849.8	2852.1	2812.6	2803.5	2772.0	2774.2	2743.8	2759.6	2750.5
15°	2952.5	2918.6	2918.6	2931.0	2880.3	2873.5	2835.1	2837.4	2805.8	2818.2	2809.2
17.5°	3049.5	3016.8	3011.1	3020.2	2976.2	2967.1	2927.7	2925.4	2890.4	2893.8	2885.9
20°	3174.7	3142.0	3128.5	3151.0	3095.8	3089.0	3041.6	3037.1	2999.9	2989.7	2985.2
22.5°	3290.9	3265.0	3258.2	3283.0	3225.5	3219.9	3174.7	3169.1	3134.1	3119.4	3030.3
25°	3421.8	3416.2	3413.9	3421.8	3367.6	3356.4	3321.4	3313.5	3284.2	3266.1	3157.8
27.5°	3591.0	3588.8	3582.0	3583.1	3533.5	3523.3	3490.6	3485.0	3454.5	3434.2	3295.4
30°	3768.2	3768.2	3753.5	3761.4	3736.6	3720.8	3694.8	3674.5	3655.3	3633.9	3459.0
32.5°	3972.4	3971.2	3957.7	3981.4	3963.3	3963.3	3947.5	3926.1	3892.3	3882.1	3670.0
35°	4235.2	4218.3	4212.7	4251.0	4245.4	4255.5	4249.9	4227.3	4199.1	4175.4	3918.2
37.5°	4526.3	4521.8	4538.7	4562.4	4574.8	4601.9	4585.0	4583.8	4579.3	4519.5	3851.6
40°	4885.1	4865.9	4889.6	4902.0	4893.0	4937.0	4922.3	4934.7	4968.5	4487.9	3847.1
42.5°	5242.7	5225.8	5242.7	5303.6	5290.1	5343.1	5336.3	5384.8	5404.0	4554.5	4159.6
45°	5682.7	5663.5	5677.0	5749.3	5756.0	5820.3	5855.3	5901.6	5910.6	4985.5	4536.4
47.5°	6188.1	6156.5	6182.5	6216.3	6319.0	6379.9	6413.8	6470.2	6527.7	5504.4	4965.2
50°	6745.4	6743.2	6771.4	6830.1	6947.4	7008.3	7067.0	7125.6	7220.4	6083.2	5445.8
52.5°	7453.9	7439.3	7487.8	7543.1	7646.9	7740.5	7810.5	7871.4	7972.9	6668.7	5965.9
55°	8264.0	8213.2	8305.7	8399.4	8443.4	8553.9	8602.4	8653.2	8750.2	7284.7	6269.3
57.5°	9138.3	9125.9	9190.2	9224.1	9318.8	9387.7	9413.6	9468.9	9467.8	7925.5	6786.1
60°	9999.1	9985.6	10061.2	10081.5	10157.1	10219.1	10210.1	10259.7	10277.8	8526.9	7292.6
62.5°	10905.1	10882.5	10952.5	10957.0	10911.8	11012.3	11002.1	11043.8	11028.0	9114.6	7791.3
65°	11895.6	11912.5	11935.1	11842.6	11734.3	11821.2	11818.9	11897.9	11954.3	9936.0	8459.2
67.5°	13191.9	13170.5	13054.3	12830.9	12568.0	12480.0	12386.4	12443.9	12459.7	10344.4	8801.0
70°	12632.3	12584.9	12533.1	12305.2	11988.1	11764.8	11619.2	11680.1	11744.4	9775.8	8266.2
72.5°	11268.4	11151.0	10909.6	10708.8	10526.0	10308.3	10131.1	10237.2	10378.2	8671.3	7319.7
75°	8890.1	8780.7	8604.7	8468.2	8370.0	8367.8	8359.9	8442.2	8421.9	7041.0	5951.2
77.5°	5505.6	5734.6	5897.0	5780.8	5821.5	5738.0	5921.9	6030.2	6128.3	5047.5	4239.7
80°	2541.8	2600.5	2888.2	2813.7	2753.9	2737.0	2748.3	2936.7	2992.0	2265.4	1897.6
82.5°	579.9	556.2	576.5	534.8	532.5	507.7	511.1	511.1	493.0	417.4	349.7
85°	293.3	300.1	302.4	289.9	256.1	230.2	213.2	180.5	155.7	133.1	112.8
87.5°	196.3	201.9	205.3	188.4	169.2	147.8	134.3	109.4	86.9	54.2	41.7
90°	134.3	133.1	129.7	120.7	108.3	92.5	74.5	51.9	30.5	11.3	7.9
92.5°	95.9	93.6	92.5	84.6	75.6	63.2	48.5	32.7	16.9	7.9	4.5
95°	63.2	62.1	62.1	57.5	50.8	41.7	32.7	21.4	12.4	6.8	4.5
97.5°	44.0	42.9	42.9	40.6	36.1	30.5	22.6	14.7	10.2	6.8	4.5
100°	30.5	30.5	30.5	28.2	25.9	21.4	16.9	11.3	9.0	6.8	4.5
102.5°	20.3	20.3	21.4	20.3	18.1	14.7	11.3	9.0	7.9	5.6	4.5
105°	13.5	13.5	13.5	13.5	12.4	10.2	9.0	7.9	6.8	5.6	4.5
107.5°	9.0	9.0	9.0	9.0	7.9	6.8	6.8	6.8	5.6	5.6	4.5
110°	5.6	5.6	5.6	6.8	5.6	5.6	5.6	5.6	5.6	4.5	4.5



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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°	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1	2659.1
2.5°	2670.4	2654.6	2662.5	2646.7	2640.0	2625.3	2653.5	2655.8	2653.5	2658.0
5°	2673.8	2655.8	2664.8	2646.7	2643.3	2626.4	2654.6	2654.6	2647.9	2651.2
7.5°	2681.7	2662.5	2669.3	2647.9	2647.9	2627.6	2661.4	2659.1	2653.5	2661.4
10°	2708.8	2686.2	2686.2	2665.9	2668.2	2646.7	2688.5	2688.5	2684.0	2697.5
12.5°	2750.5	2722.3	2723.4	2695.2	2699.8	2682.8	2733.6	2735.9	2735.9	2758.4
15°	2804.7	2761.8	2766.3	2735.9	2744.9	2724.6	2769.7	2767.4	2773.1	2805.8
17.5°	2871.2	2823.9	2784.4	2685.1	2626.4	2628.7	2762.9	2825.0	2752.8	2774.2
20°	2899.4	2669.3	2544.1	2508.0	2500.1	2374.8	2118.7	2158.2	2399.7	2504.6
22.5°	2709.9	2636.6	2624.2	2577.9	2236.1	2141.3	2157.1	2134.5	1897.6	1763.4
25°	2802.4	2753.9	2725.7	2318.4	2241.7	2224.8	2213.5	1999.2	1741.9	1754.3
27.5°	2933.3	2870.1	2531.7	2328.6	2343.2	2317.3	2251.9	1798.3	1790.4	1810.7
30°	3087.9	2928.8	2467.3	2448.2	2465.1	2431.2	1893.1	1875.0	1875.0	1895.4
32.5°	3277.4	2656.9	2618.5	2620.8	2609.5	2225.9	1992.4	1987.9	2001.4	2018.3
35°	3224.4	2834.0	2837.4	2856.6	2830.6	2177.4	2148.1	2131.1	2142.4	2149.2
37.5°	3120.6	3100.3	3100.3	3078.8	2416.6	2347.8	2316.2	2313.9	2312.8	2312.8
40°	3382.3	3363.1	3339.4	3302.2	2528.3	2546.3	2498.9	2493.3	2496.7	2509.1
42.5°	3680.2	3672.3	3670.0	2834.0	2760.7	2774.2	2723.4	2708.8	2708.8	2737.0
45°	4031.0	4020.9	3771.5	3029.2	3016.8	3032.6	2976.2	2941.2	2960.4	2980.7
47.5°	4433.8	4433.8	3339.4	3321.4	3321.4	3330.4	3274.0	3226.6	3245.8	3252.6
50°	4874.9	4185.6	3674.5	3657.6	3673.4	3668.9	3610.2	3170.2	3577.5	3580.9
52.5°	4997.9	4070.5	4042.3	4023.1	4042.3	4038.9	3978.0	2644.5	3869.7	3925.0
55°	4430.4	4433.8	4428.1	4399.9	4420.2	4412.3	4352.6	2887.0	2853.2	2542.9
57.5°	4790.3	4794.8	4792.5	4788.0	4806.1	3491.7	4508.2	2608.4	1593.0	1594.1
60°	5181.8	5159.2	5152.4	5142.3	4358.2	2475.2	1878.4	181.6	622.8	613.7
62.5°	5537.2	5529.3	5505.6	5499.9	3698.2	1949.5	1904.4	41.7	32.7	31.6
65°	6031.3	5961.4	5942.2	5882.4	3941.9	2075.9	2033.0	12.4	1.1	0.0
67.5°	6215.2	6073.0	6004.2	5972.6	4010.7	2141.3	2058.9	12.4	1.1	0.0
70°	5867.7	5691.7	5604.8	5569.9	3747.8	2001.4	1920.2	12.4	1.1	0.0
72.5°	5203.2	5073.5	5038.5	4926.8	3304.5	1756.6	1685.5	12.4	0.0	0.0
75°	4267.9	4220.6	4177.7	4059.2	2686.2	1395.6	1332.4	11.3	0.0	0.0
77.5°	3105.9	3036.0	2957.0	2828.4	1813.0	911.6	878.9	10.2	0.0	0.0
80°	1400.1	1342.5	1323.4	1122.5	643.1	296.7	261.7	9.0	0.0	0.0
82.5°	271.9	244.8	232.4	223.4	144.4	80.1	69.9	6.8	0.0	0.0
85°	92.5	102.7	119.6	132.0	81.2	48.5	40.6	4.5	0.0	0.0
87.5°	36.1	48.5	58.7	60.9	30.5	20.3	11.3	2.3	0.0	0.0
90°	6.8	9.0	7.9	5.6	3.4	1.1	0.0	0.0	0.0	0.0
92.5°	3.4	4.5	3.4	3.4	2.3	1.1	0.0	0.0	0.0	0.0
95°	4.5	4.5	4.5	3.4	2.3	1.1	0.0	0.0	0.0	0.0
97.5°	4.5	4.5	4.5	3.4	2.3	1.1	0.0	0.0	0.0	0.0
100°	4.5	4.5	4.5	3.4	2.3	1.1	0.0	0.0	0.0	0.0
102.5°	4.5	4.5	4.5	3.4	2.3	1.1	0.0	0.0	0.0	0.0
105°	4.5	5.6	4.5	3.4	2.3	1.1	0.0	0.0	0.0	0.0
107.5°	4.5	5.6	4.5	3.4	2.3	1.1	0.0	0.0	0.0	0.0
110°	4.5	5.6	4.5	3.4	2.3	1.1	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)