

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: P522143

Luminaire Tested: **CST-CA10-310-760-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522143
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-310-760-U-T5R-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40892.9 lumens
Efficiency: N/A
Efficacy: 130.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

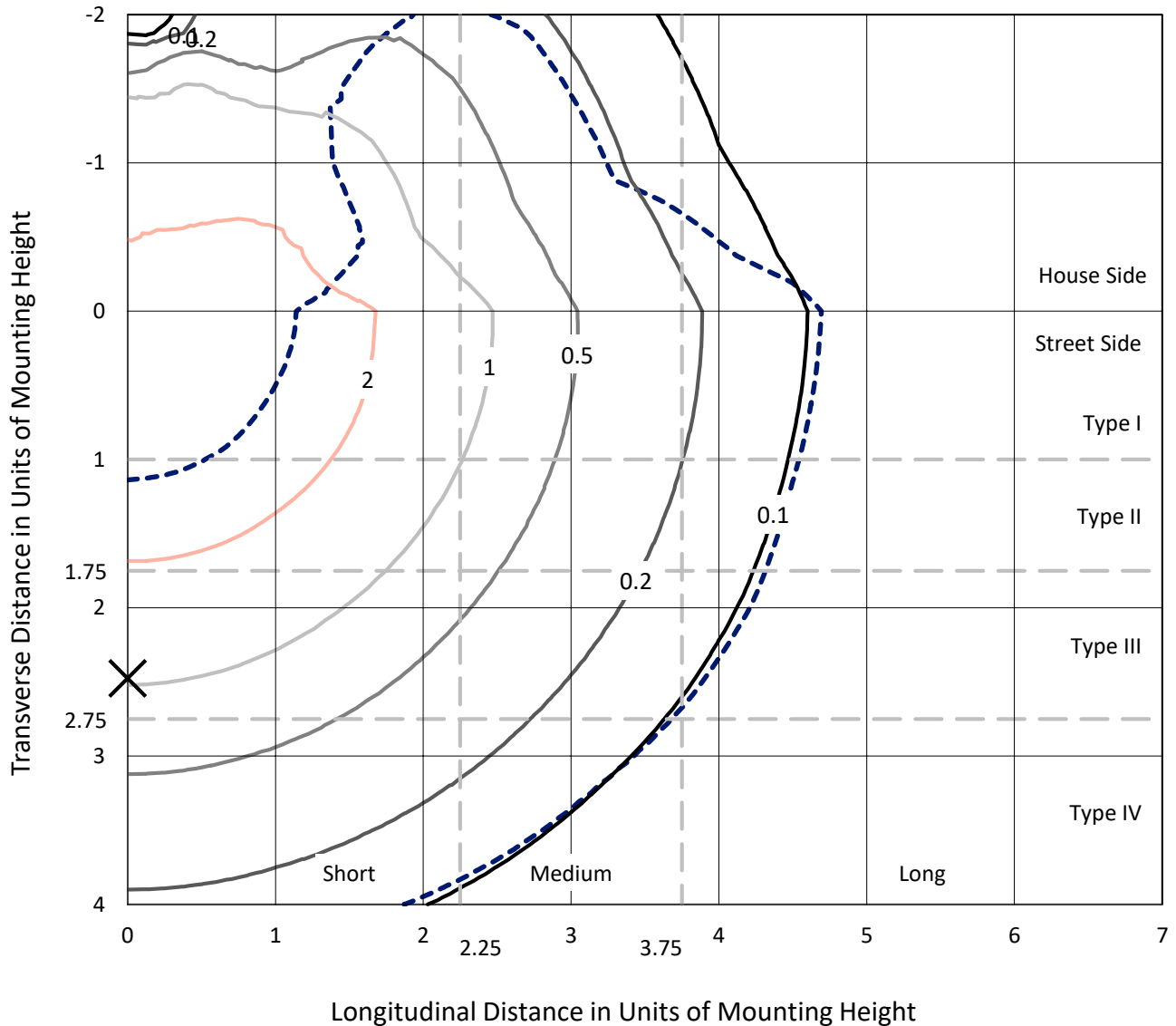
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

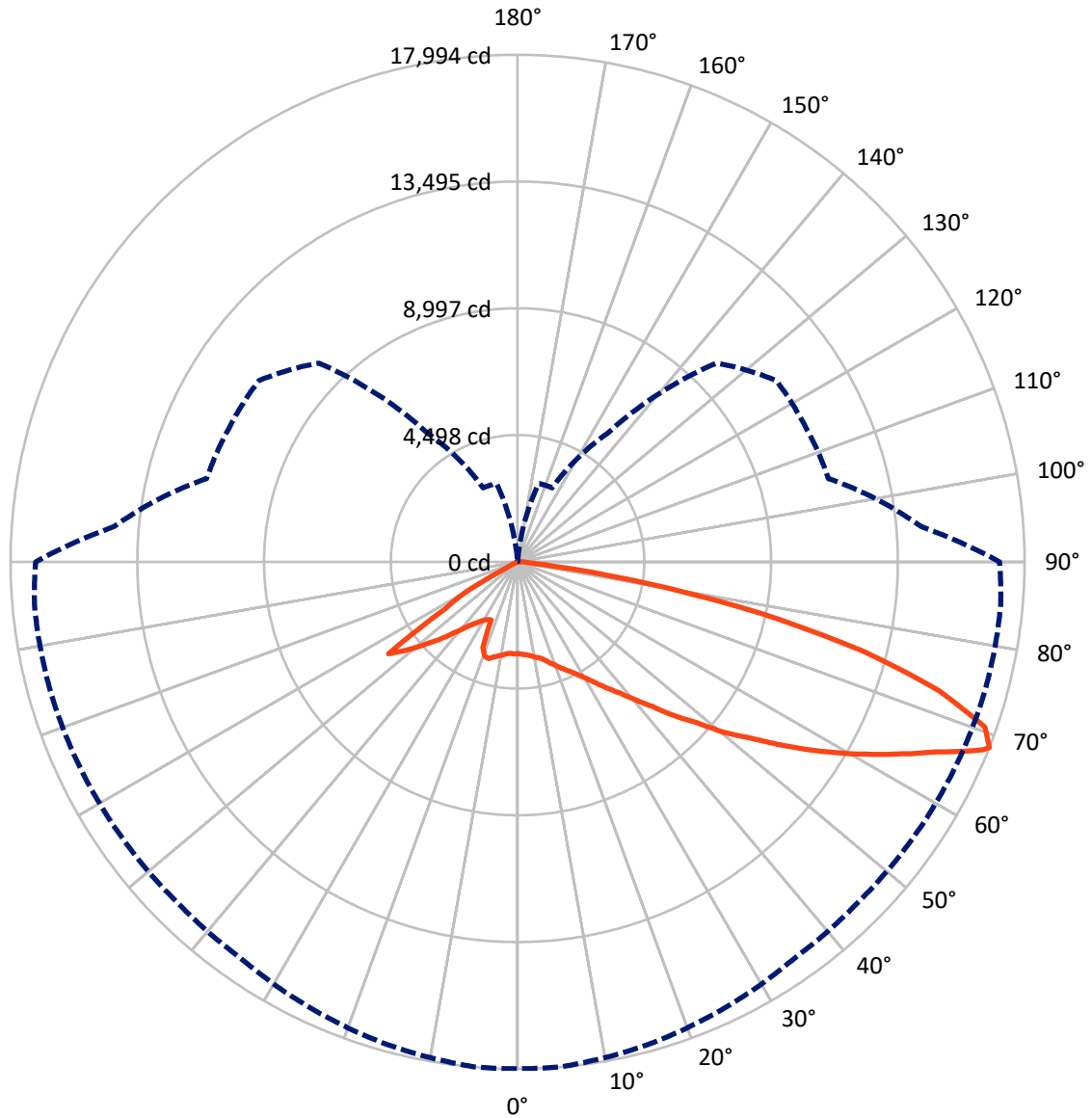
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.6 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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

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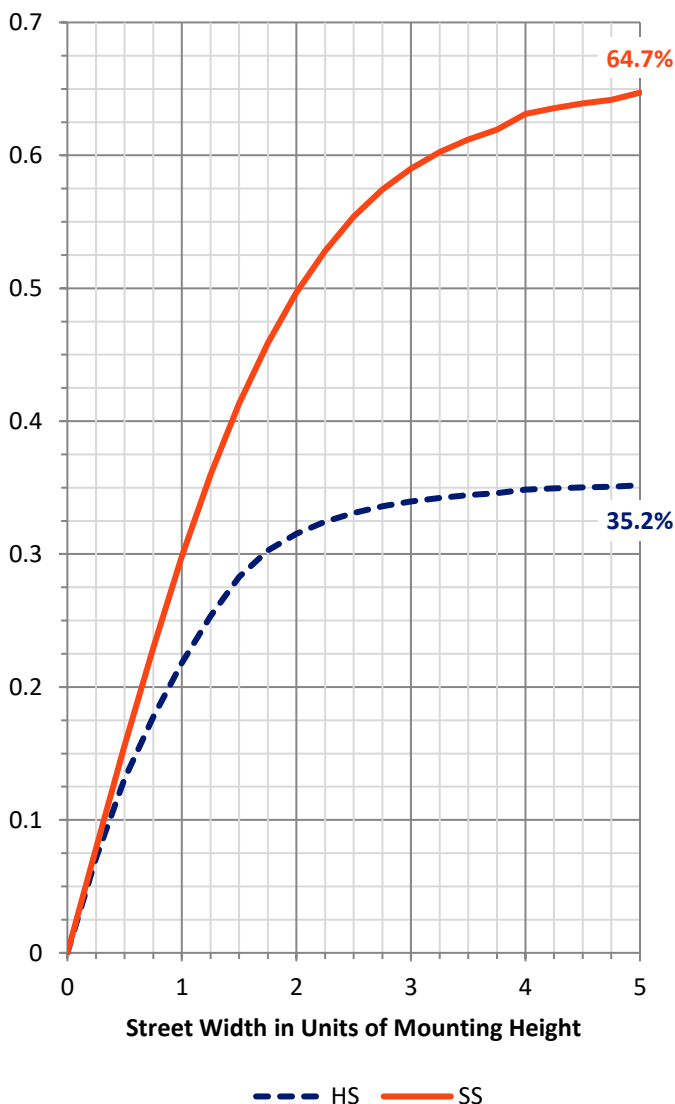
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14391.5	2.4	14394.0
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	26488.2	10.7	26498.9
	% Fixture	64.8	0.0	64.8
Total	Lumens	40879.7	13.2	40892.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.8	0.8
10°-20°	1008.7	2.5
20°-30°	1800.7	4.4
30°-40°	2929.4	7.2
40°-50°	5002.6	12.2
50°-60°	8347.1	20.4
60°-70°	11612.4	28.4
70°-80°	9001.4	22.0
80°-90°	862.6	2.1
90°-100°	10.4	0.0
100°-110°	0.9	0.0
110°-120°	0.4	0.0
120°-130°	0.3	0.0
130°-140°	0.3	0.0
140°-150°	0.3	0.0
150°-160°	0.3	0.0
160°-170°	0.2	0.0
170°-180°	0.1	0.0
0°-90°	40879.7	100.0
0°-180°	40892.9	100.0

Coefficient of Utilization

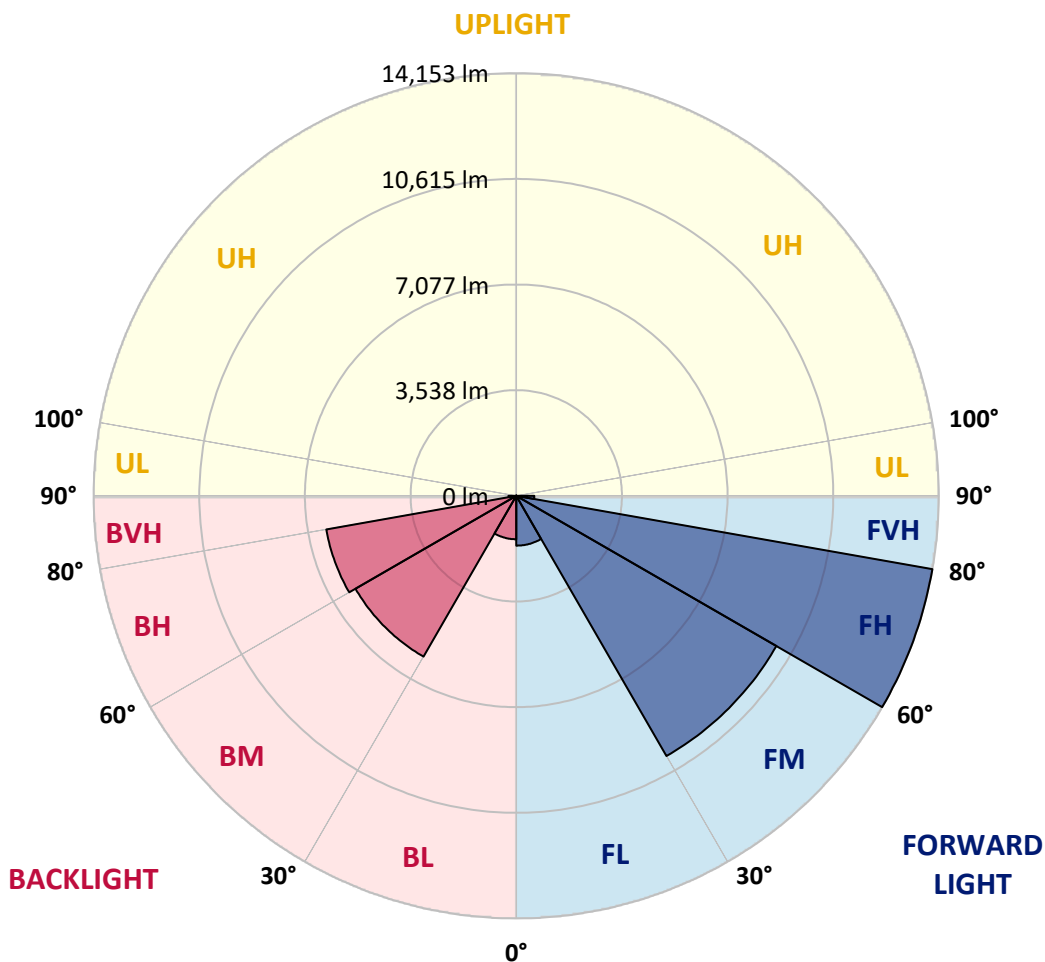


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1669.0	4.1			
FM (30°-60°)	10062.5	24.6			
FH (60°-80°)	14153.2	34.6			G5
FVH (80°-90°)	603.4	1.5			G4/750
BL (0°-30°)	1455.3	3.6	B3/2500		
BM (30°-60°)	6216.5	15.2	B4/8500		
BH (60°-80°)	6460.6	15.8	B5		G5
BVH (80°-90°)	259.1	0.6			G3/500
UL (90°-100°)	10.4	0.0		U2/50	
UH (100°-180°)	2.8	0.0		U1/10	

BUG Rating: B5-U2-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4
2.5°	3291.3	3286.7	3283.6	3303.6	3246.7	3269.8	3254.4	3274.4	3269.8	3279.0	3280.6
5°	3314.4	3306.7	3295.9	3317.5	3283.6	3299.0	3282.1	3291.3	3262.1	3286.7	3289.8
7.5°	3366.7	3345.2	3343.6	3349.8	3326.7	3337.5	3308.2	3319.0	3303.6	3294.4	3303.6
10°	3445.2	3426.7	3406.7	3419.0	3380.6	3394.4	3363.6	3372.9	3365.2	3345.2	3363.6
12.5°	3499.1	3505.2	3491.4	3500.6	3466.7	3454.4	3443.7	3442.1	3437.5	3408.3	3403.7
15°	3619.1	3622.1	3597.5	3603.7	3596.0	3589.8	3574.4	3562.1	3537.5	3519.1	3506.7
17.5°	3776.0	3759.1	3736.0	3742.2	3763.7	3736.0	3726.8	3703.7	3668.3	3637.5	3631.4
20°	3940.7	3929.9	3908.4	3920.7	3919.1	3900.7	3905.3	3866.8	3816.0	3789.9	3769.9
22.5°	4123.8	4108.4	4093.0	4116.1	4097.6	4085.3	4080.7	4054.5	3991.4	3962.2	3957.6
25°	4306.9	4299.2	4310.0	4302.3	4276.1	4266.9	4273.0	4263.8	4189.9	4154.5	4133.0
27.5°	4536.1	4517.7	4534.6	4525.4	4497.7	4499.2	4500.8	4502.3	4419.2	4373.0	4342.3
30°	4797.7	4791.6	4813.1	4783.9	4757.7	4774.7	4788.5	4757.7	4685.4	4617.7	4606.9
32.5°	5137.8	5099.3	5123.9	5087.0	5047.0	5087.0	5111.6	5050.1	4991.6	4905.4	4920.8
35°	5514.8	5502.5	5502.5	5454.8	5433.2	5496.3	5520.9	5460.9	5370.1	5294.7	5276.3
37.5°	5914.8	5927.2	5965.6	5945.6	5925.6	5964.1	6019.5	5939.5	5822.5	5742.5	5721.0
40°	6445.7	6476.5	6502.6	6476.5	6453.4	6478.0	6541.1	6436.5	6354.9	6311.8	6265.7
42.5°	7016.6	7068.9	7052.0	7055.0	7075.0	7110.4	7173.5	7078.1	6984.3	6982.7	6915.0
45°	7789.0	7789.0	7753.6	7787.5	7784.4	7872.1	7899.8	7847.5	7769.0	7745.9	7687.4
47.5°	8510.7	8586.1	8572.2	8621.5	8583.0	8656.8	8750.7	8706.1	8615.3	8533.7	8521.4
50°	9517.0	9498.5	9480.1	9553.9	9547.8	9598.5	9684.7	9657.0	9530.8	9438.5	9421.6
52.5°	10401.8	10498.7	10475.6	10586.4	10524.8	10597.2	10700.3	10695.6	10541.8	10451.0	10424.8
55°	11518.9	11583.5	11578.9	11692.7	11608.1	11703.5	11789.7	11798.9	11631.2	11501.9	11541.9
57.5°	12682.1	12736.0	12705.2	12799.1	12716.0	12846.8	12899.1	12865.2	12766.8	12603.7	12663.7
60°	13846.9	13893.1	13928.5	13936.2	13888.5	13965.4	14014.7	14043.9	13888.5	13702.3	13774.6
62.5°	15030.2	15082.5	15051.8	15064.1	14931.7	15036.4	15097.9	15105.6	14927.1	14762.5	14813.3
65°	16276.6	16348.9	16238.1	16164.3	16001.2	15999.6	16081.2	16095.0	15968.8	15851.9	15831.9
67.5°	17819.9	17852.2	17615.3	17367.5	17092.1	17032.1	17089.0	17121.3	17193.7	17190.6	17099.8
68°	17993.8	17987.6	17747.6	17452.2	17156.7	17087.5	17115.2	17156.7	17204.4	17213.7	17104.4
70°	17598.3	17523.0	17386.0	17013.6	16721.3	16539.7	16442.8	16519.7	16390.5	16392.0	16187.3
72.5°	15631.9	15622.6	15370.3	15185.6	14925.6	14624.0	14485.5	14484.0	14496.3	14407.0	14196.2
75°	12662.1	12674.4	12380.5	12252.8	12172.8	12115.9	12145.1	12235.9	12245.1	12243.6	12169.7
77.5°	8830.7	8881.5	8803.0	8595.3	8818.4	9009.2	9377.0	9564.7	9504.7	9684.7	9798.6
80°	4628.5	4730.0	4733.1	4879.3	5059.3	5233.2	5550.2	5834.8	5625.6	5533.2	5437.8
82.5°	1217.1	1254.1	1309.5	1224.8	1251.0	1277.1	1523.3	1500.3	1384.8	1446.4	1538.7
85°	347.8	358.5	343.1	310.8	284.7	261.6	267.7	226.2	197.0	195.4	189.3
87.5°	244.7	263.1	232.3	200.0	180.0	167.7	161.6	136.9	110.8	96.9	76.9
90°	113.9	112.3	96.9	75.4	66.2	63.1	63.1	49.2	27.7	16.9	15.4
92.5°	47.7	49.2	40.0	32.3	27.7	21.5	16.9	10.8	6.2	3.1	1.5
95°	16.9	18.5	15.4	12.3	10.8	9.2	7.7	6.2	3.1	1.5	1.5
97.5°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	3.1	3.1	1.5	1.5
100°	0.0	0.0	0.0	1.5	3.1	3.1	3.1	3.1	1.5	1.5	1.5
102.5°	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
105°	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5



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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	1.5	1.5	1.5	1.5
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
145°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
150°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
160°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
165°	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5
167.5°	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5
170°	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
172.5°	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
175°	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
177.5°	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5	1.5
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°	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4	3254.4
2.5°	3277.5	3269.8	3266.7	3228.2	3239.0	3215.9	3269.8	3254.4	3251.3	3272.9
5°	3285.2	3249.8	3271.3	3246.7	3252.9	3219.0	3262.1	3243.6	3245.2	3255.9
7.5°	3289.8	3269.8	3291.3	3248.2	3265.2	3252.9	3283.6	3265.2	3283.6	3292.9
10°	3335.9	3326.7	3311.3	3299.0	3311.3	3282.1	3320.6	3317.5	3328.3	3355.9
12.5°	3399.0	3388.3	3372.9	3351.3	3360.6	3349.8	3379.0	3382.1	3402.1	3416.0
15°	3492.9	3479.0	3471.4	3449.8	3452.9	3445.2	3462.1	3465.2	3505.2	3500.6
17.5°	3625.2	3609.8	3616.0	3596.0	3588.3	3569.8	3539.1	3528.3	3576.0	3589.8
20°	3769.9	3752.9	3760.6	3743.7	3600.6	3309.8	3505.2	3639.1	3537.5	3529.8
22.5°	3934.5	3916.0	3922.2	3896.0	3719.1	3174.4	2762.0	2728.2	3115.9	3272.9
25°	4116.1	4091.5	4088.4	4054.5	3472.9	2874.3	2828.2	2768.2	2485.0	2260.4
27.5°	4340.7	4303.8	4285.3	3774.5	3448.3	2986.7	2917.4	2703.5	2292.7	2306.5
30°	4583.8	4530.0	4183.8	3846.8	3628.3	3119.0	3026.7	2369.6	2372.7	2366.6
32.5°	4860.8	4740.8	4099.2	4068.4	3843.7	3260.5	2512.7	2485.0	2488.1	2497.3
35°	5224.0	4400.7	4383.8	4385.4	4106.8	3154.4	2662.0	2635.8	2638.9	2645.1
37.5°	5300.9	4743.9	4747.0	4711.6	4386.9	2882.0	2843.6	2842.0	2835.9	2829.7
40°	5362.4	5176.3	5131.6	5074.7	4066.8	3103.6	3091.3	3082.1	3086.7	3099.0
42.5°	5844.1	5704.0	5661.0	5593.2	4171.5	3439.0	3399.0	3388.3	3400.6	3394.4
45°	6484.2	6367.2	6282.6	5171.6	4608.5	3803.7	3771.4	3757.6	3762.2	3800.6
47.5°	7161.2	7092.0	6833.5	5587.1	5117.8	4234.6	4202.2	4180.7	4188.4	4179.2
50°	7898.3	7835.2	6325.7	6213.4	5681.0	4699.3	4651.6	4643.9	4646.9	4645.4
52.5°	8698.4	7379.7	7010.4	6893.5	6274.9	5185.5	5168.6	5127.0	5136.2	5127.0
55°	9637.0	7773.6	7764.4	7627.4	6942.7	5750.2	5730.2	5671.7	5304.0	5625.6
57.5°	10527.9	8526.1	8526.1	8393.7	7625.9	6311.8	6279.5	6236.4	3769.9	3040.5
60°	11503.5	9280.0	9258.5	9149.2	8284.5	6847.3	5565.6	5553.2	2277.3	2285.0
62.5°	12346.7	9952.4	9990.9	9889.4	8918.4	5127.0	2578.9	2526.6	224.7	346.2
65°	13291.5	10695.6	10741.8	10637.2	9604.7	5437.8	2798.9	2772.8	50.8	46.2
67.5°	14362.4	11437.3	11332.7	11217.3	10006.3	5599.4	2908.2	2885.1	13.8	9.2
68°	14371.7	11421.9	11286.5	11208.0	9967.8	5568.6	2898.9	2877.4	13.8	9.2
70°	13633.1	10846.4	10711.0	10731.0	9490.8	5325.5	2778.9	2738.9	13.8	9.2
72.5°	11960.5	9652.4	9500.1	9392.4	8416.8	4734.6	2491.2	2415.8	13.8	9.2
75°	10234.0	8179.8	7927.5	7690.5	6771.9	3874.5	2043.4	1958.8	13.8	9.2
77.5°	8066.0	6234.9	5876.4	5721.0	5088.5	2862.0	1518.7	1426.4	13.8	7.7
80°	4457.7	3577.5	3272.9	3177.5	2909.7	1681.8	870.9	815.5	12.3	7.7
82.5°	1152.5	864.8	754.0	727.8	683.2	398.5	212.3	201.6	10.8	6.2
85°	164.6	121.6	133.9	158.5	152.3	103.1	73.9	63.1	9.2	4.6
87.5°	86.2	72.3	84.6	95.4	96.9	60.0	30.8	16.9	4.6	0.0
90°	13.8	13.8	15.4	16.9	16.9	7.7	6.2	0.0	0.0	0.0
92.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.5	3.1	1.5	1.5	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°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.5	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.5	1.5	1.5	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)