

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: P522251

Luminaire Tested: **CST-CA8-480-760-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522251
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-CA8-480-760-U-T5R-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 59980.1 lumens
Efficiency: N/A
Efficacy: 124.8 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

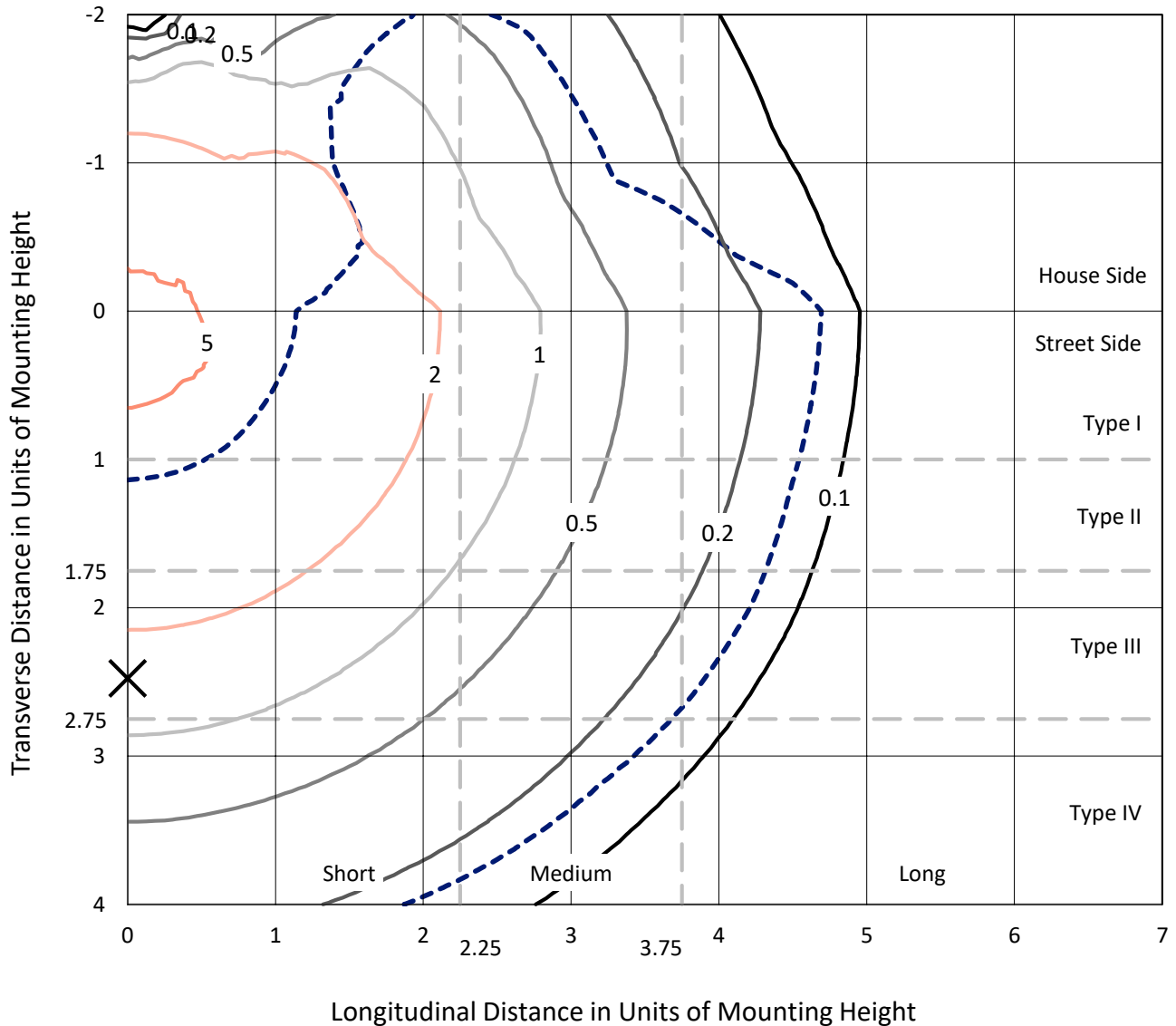
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

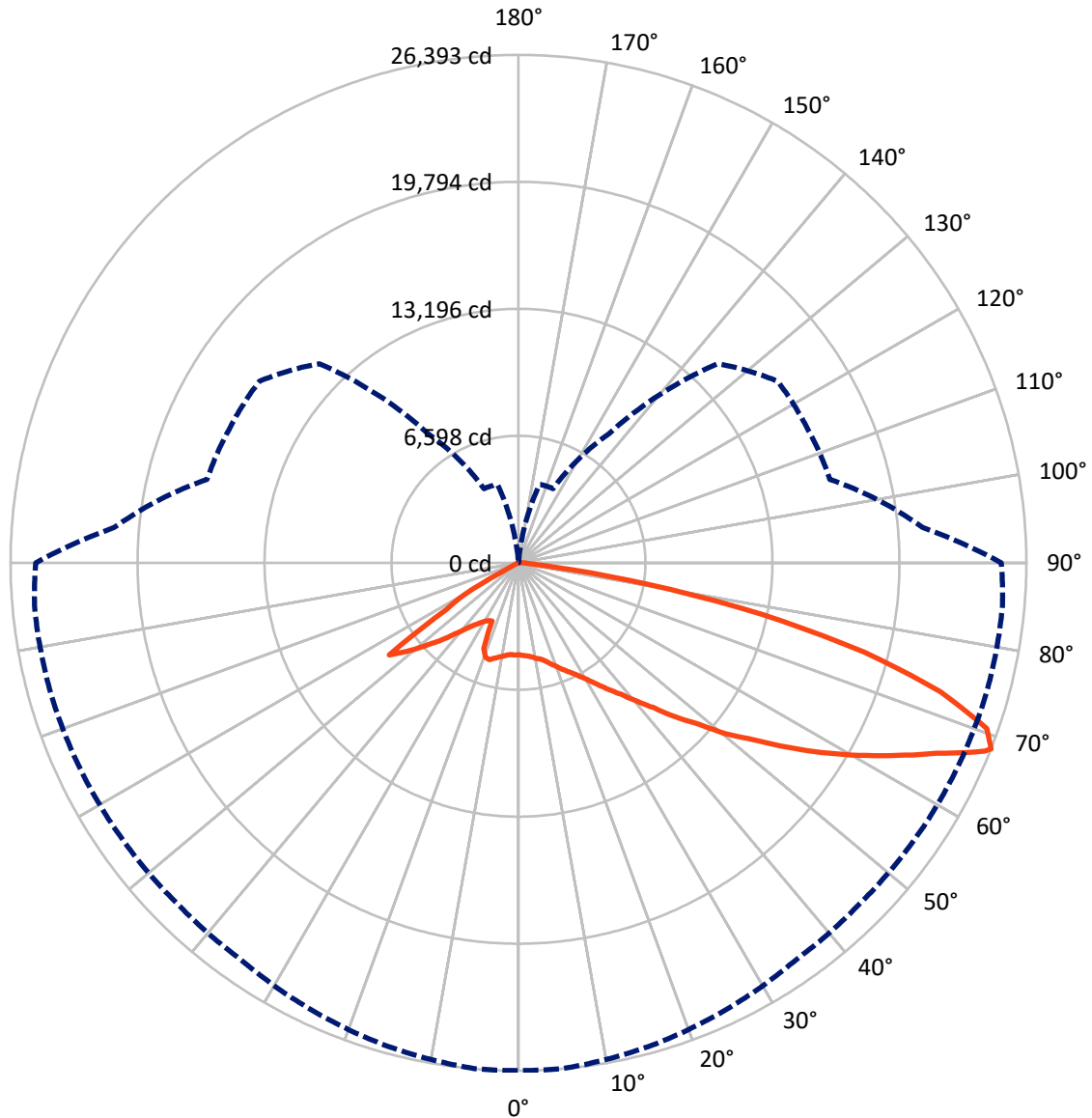
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.3 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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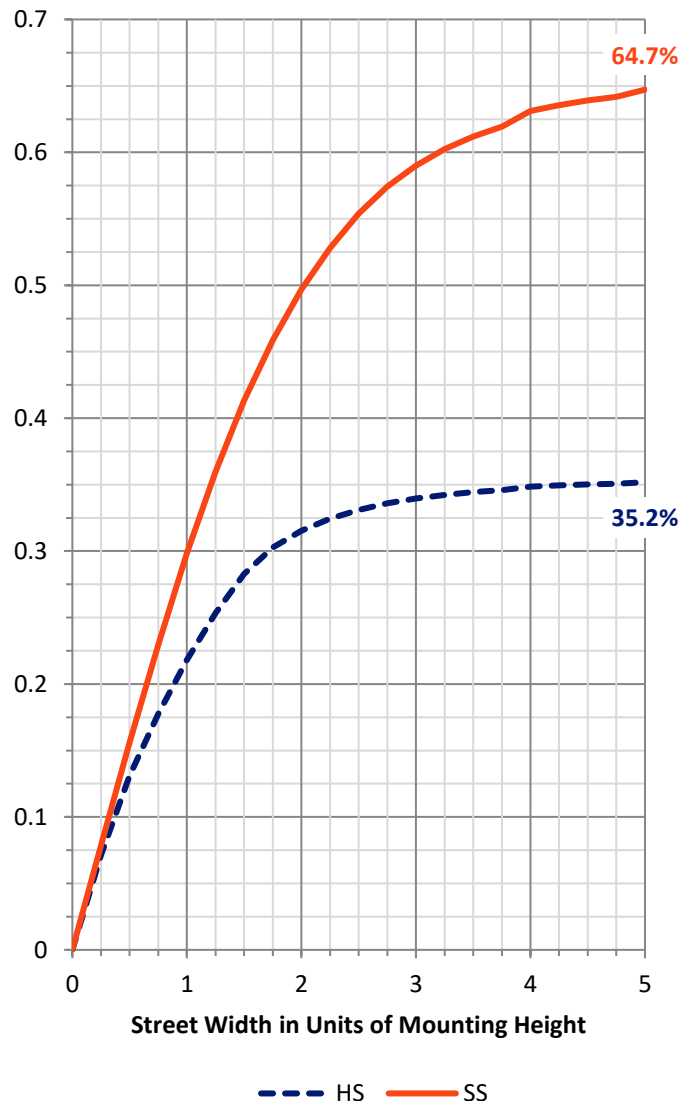
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21108.9	3.7	21112.5
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	38851.7	15.8	38867.5
	% Fixture	64.8	0.0	64.8
Total	Lumens	59960.6	19.5	59980.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	461.8	0.8
10°-20°	1479.5	2.5
20°-30°	2641.2	4.4
30°-40°	4296.7	7.2
40°-50°	7337.6	12.2
50°-60°	12243.1	20.4
60°-70°	17032.6	28.4
70°-80°	13202.9	22.0
80°-90°	1265.2	2.1
90°-100°	15.3	0.0
100°-110°	1.3	0.0
110°-120°	0.7	0.0
120°-130°	0.4	0.0
130°-140°	0.5	0.0
140°-150°	0.5	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-90°	59960.6	100.0
0°-180°	59980.1	100.0

Coefficient of Utilization

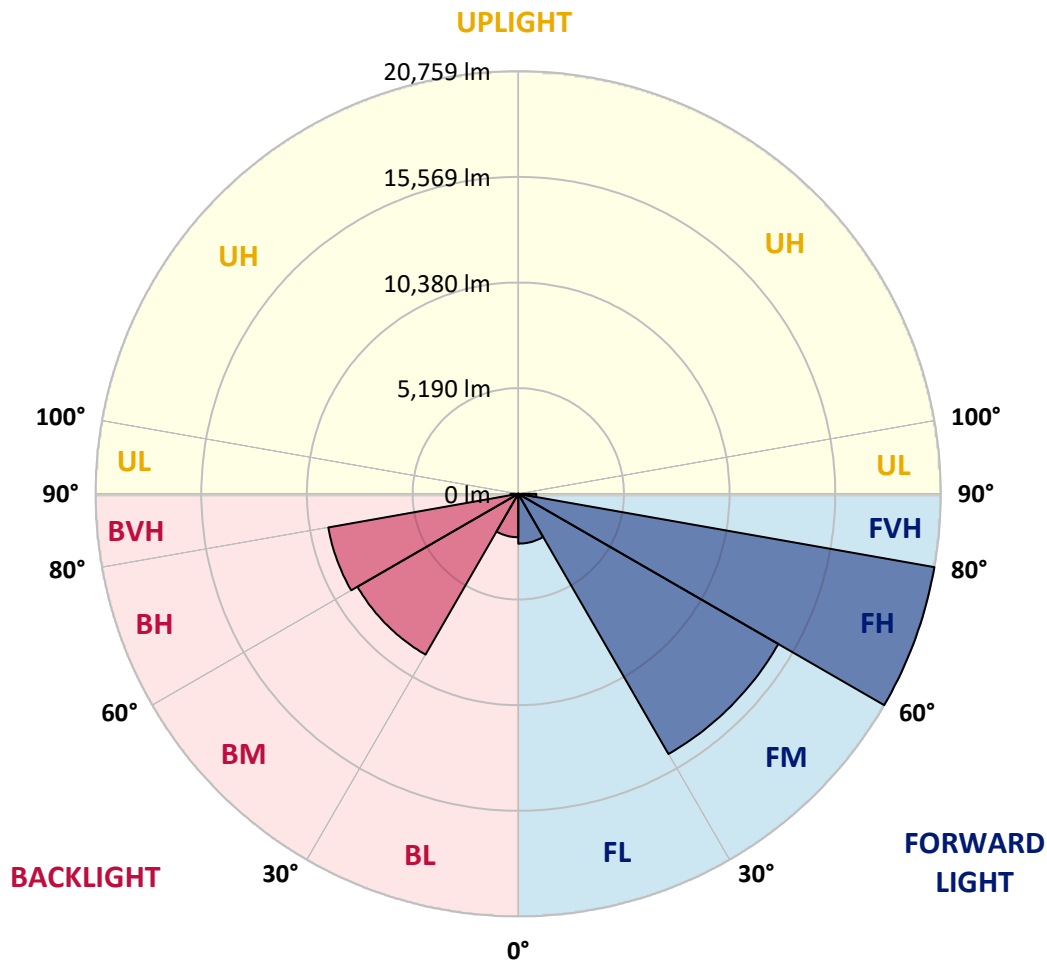


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2448.0	4.1			
FM (30°-60°)	14759.3	24.6			
FH (60°-80°)	20759.3	34.6			G5
FVH (80°-90°)	885.1	1.5			G5
BL (0°-30°)	2134.5	3.6	B3/2500		
BM (30°-60°)	9118.1	15.2	B5		
BH (60°-80°)	9476.2	15.8	B5		G5
BVH (80°-90°)	380.1	0.6			G3/500
UL (90°-100°)	15.3	0.0		U2/50	
UH (100°-180°)	4.2	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°	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4
2.5°	4827.6	4820.8	4816.3	4845.6	4762.1	4796.0	4773.4	4802.7	4796.0	4809.5	4811.8
5°	4861.4	4850.1	4834.3	4865.9	4816.3	4838.8	4814.0	4827.6	4784.7	4820.8	4825.3
7.5°	4938.2	4906.6	4904.3	4913.3	4879.5	4895.3	4852.4	4868.2	4845.6	4832.1	4845.6
10°	5053.3	5026.2	4996.8	5014.9	4958.5	4978.8	4933.6	4947.2	4935.9	4906.6	4933.6
12.5°	5132.2	5141.3	5121.0	5134.5	5084.9	5066.8	5051.0	5048.7	5042.0	4999.1	4992.3
15°	5308.3	5312.8	5276.7	5285.7	5274.4	5265.4	5242.8	5224.8	5188.7	5161.6	5143.5
17.5°	5538.5	5513.7	5479.8	5488.8	5520.4	5479.8	5466.3	5432.4	5380.5	5335.4	5326.3
20°	5780.0	5764.2	5732.6	5750.6	5748.4	5721.3	5728.1	5671.7	5597.2	5558.8	5529.5
22.5°	6048.6	6026.0	6003.4	6037.3	6010.2	5992.1	5985.4	5947.0	5854.5	5811.6	5804.8
25°	6317.1	6305.9	6321.6	6310.4	6272.0	6258.5	6267.5	6253.9	6145.6	6093.7	6062.1
27.5°	6653.4	6626.3	6651.2	6637.6	6597.0	6599.3	6601.5	6603.8	6481.9	6414.2	6369.0
30°	7037.1	7028.1	7059.7	7016.8	6978.4	7003.2	7023.6	6978.4	6872.3	6773.0	6757.2
32.5°	7535.9	7479.5	7515.6	7461.4	7402.7	7461.4	7497.5	7407.2	7321.5	7195.1	7217.6
35°	8088.8	8070.8	8070.8	8000.8	7969.2	8061.7	8097.8	8009.8	7876.7	7766.1	7739.0
37.5°	8675.6	8693.7	8750.1	8720.8	8691.4	8747.8	8829.1	8711.7	8540.2	8422.8	8391.2
40°	9454.3	9499.4	9537.8	9499.4	9465.5	9501.7	9594.2	9440.7	9321.1	9257.9	9190.2
42.5°	10291.6	10368.3	10343.5	10348.0	10377.3	10429.3	10521.8	10381.9	10244.2	10241.9	10142.6
45°	11424.6	11424.6	11372.6	11422.3	11417.8	11546.4	11587.1	11510.3	11395.2	11361.4	11275.6
47.5°	12483.1	12593.6	12573.3	12645.6	12589.1	12697.5	12835.1	12769.7	12636.5	12516.9	12498.9
50°	13959.1	13932.0	13904.9	14013.3	14004.2	14078.7	14205.1	14164.5	13979.4	13844.0	13819.2
52.5°	15256.8	15399.0	15365.2	15527.6	15437.4	15543.4	15694.7	15687.9	15462.2	15329.0	15290.7
55°	16895.3	16990.1	16983.4	17150.4	17026.2	17166.2	17292.6	17306.1	17060.1	16870.5	16929.2
57.5°	18601.6	18680.6	18635.4	18773.1	18651.2	18843.1	18919.8	18870.2	18725.7	18486.5	18574.5
60°	20310.1	20377.8	20429.7	20441.0	20371.0	20483.9	20556.1	20599.0	20371.0	20097.9	20204.0
62.5°	22045.7	22122.4	22077.2	22095.3	21901.2	22054.7	22145.0	22156.2	21894.4	21652.9	21727.4
65°	23873.8	23979.8	23817.3	23709.0	23469.8	23467.5	23587.1	23607.4	23422.4	23250.8	23221.5
67.5°	26137.5	26184.9	25837.3	25473.9	25069.9	24981.9	25065.4	25112.8	25218.9	25214.4	25081.2
68°	26392.5	26383.5	26031.4	25598.1	25164.7	25063.2	25103.8	25164.7	25234.7	25248.2	25088.0
70°	25812.5	25701.9	25501.0	24954.8	24526.0	24259.7	24117.5	24230.4	24040.8	24043.0	23742.9
72.5°	22928.1	22914.6	22544.4	22273.6	21892.2	21449.8	21246.7	21244.4	21262.5	21131.6	20822.4
75°	18572.2	18590.3	18159.2	17971.9	17854.5	17771.0	17813.9	17947.1	17960.6	17958.4	17850.0
77.5°	12952.5	13027.0	12911.9	12607.2	12934.4	13214.3	13753.7	14029.1	13941.0	14205.1	14372.1
80°	6788.8	6937.8	6942.3	7156.7	7420.8	7675.8	8140.7	8558.3	8251.3	8115.9	7976.0
82.5°	1785.2	1839.4	1920.6	1796.5	1834.9	1873.2	2234.4	2200.5	2031.2	2121.5	2256.9
85°	510.1	525.9	503.3	455.9	417.5	383.7	392.7	331.8	288.9	286.6	277.6
87.5°	358.9	385.9	340.8	293.4	264.1	246.0	237.0	200.9	162.5	142.2	112.8
90°	167.0	164.8	142.2	110.6	97.0	92.5	92.5	72.2	40.6	24.8	22.6
92.5°	70.0	72.2	58.7	47.4	40.6	31.6	24.8	15.8	9.0	4.5	2.3
95°	24.8	27.1	22.6	18.1	15.8	13.5	11.3	9.0	4.5	2.3	2.3
97.5°	6.8	6.8	6.8	6.8	6.8	6.8	6.8	4.5	4.5	2.3	2.3
100°	0.0	0.0	0.0	2.3	4.5	4.5	4.5	4.5	2.3	2.3	2.3
102.5°	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
105°	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3



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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	2.3	2.3	2.3	2.3
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
145°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
150°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
160°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
165°	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3
167.5°	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3
170°	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
172.5°	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
175°	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
177.5°	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
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°	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4	4773.4
2.5°	4807.3	4796.0	4791.5	4735.0	4750.8	4717.0	4796.0	4773.4	4768.9	4800.5
5°	4818.5	4766.6	4798.2	4762.1	4771.1	4721.5	4784.7	4757.6	4759.9	4775.7
7.5°	4825.3	4796.0	4827.6	4764.4	4789.2	4771.1	4816.3	4789.2	4816.3	4829.8
10°	4893.0	4879.5	4856.9	4838.8	4856.9	4814.0	4870.4	4865.9	4881.7	4922.4
12.5°	4985.5	4969.8	4947.2	4915.6	4929.1	4913.3	4956.2	4960.7	4990.1	5010.4
15°	5123.2	5102.9	5091.6	5060.0	5064.5	5053.3	5078.1	5082.6	5141.3	5134.5
17.5°	5317.3	5294.7	5303.8	5274.4	5263.2	5236.1	5190.9	5175.1	5245.1	5265.4
20°	5529.5	5504.6	5515.9	5491.1	5281.2	4854.6	5141.3	5337.6	5188.7	5177.4
22.5°	5771.0	5743.9	5752.9	5714.5	5455.0	4656.0	4051.2	4001.5	4570.3	4800.5
25°	6037.3	6001.2	5996.7	5947.0	5093.9	4215.9	4148.2	4060.2	3644.9	3315.4
27.5°	6366.8	6312.6	6285.5	5536.2	5057.8	4380.7	4279.1	3965.4	3362.8	3383.1
30°	6723.4	6644.4	6136.6	5642.3	5321.8	4574.8	4439.4	3475.7	3480.2	3471.2
32.5°	7129.6	6953.6	6012.5	5967.3	5637.8	4782.4	3685.6	3644.9	3649.4	3663.0
35°	7662.3	6454.8	6430.0	6432.2	6023.7	4626.7	3904.5	3866.1	3870.6	3879.7
37.5°	7775.1	6958.1	6962.6	6910.7	6434.5	4227.2	4170.8	4168.5	4159.5	4150.5
40°	7865.4	7592.3	7526.8	7443.3	5965.1	4552.2	4534.2	4520.6	4527.4	4545.4
42.5°	8571.8	8366.4	8303.2	8203.9	6118.5	5044.2	4985.5	4969.8	4987.8	4978.8
45°	9510.7	9339.2	9215.0	7585.5	6759.5	5579.1	5531.7	5511.4	5518.2	5574.6
47.5°	10503.7	10402.2	10023.0	8194.9	7506.5	6211.1	6163.7	6132.1	6143.4	6129.8
50°	11584.8	11492.3	9278.2	9113.5	8332.6	6892.7	6822.7	6811.4	6815.9	6813.7
52.5°	12758.4	10824.2	10282.6	10111.0	9203.7	7605.8	7581.0	7520.1	7533.6	7520.1
55°	14135.1	11402.0	11388.4	11187.6	10183.2	8434.1	8404.8	8319.0	7779.6	8251.3
57.5°	15441.9	12505.6	12505.6	12311.5	11185.3	9257.9	9210.5	9147.3	5529.5	4459.7
60°	16872.8	13611.5	13579.9	13419.7	12151.3	10043.3	8163.3	8145.2	3340.3	3351.5
62.5°	18109.6	14597.8	14654.2	14505.3	13081.1	7520.1	3782.6	3705.9	329.5	507.8
65°	19495.3	15687.9	15755.6	15602.1	14087.7	7976.0	4105.3	4067.0	74.5	67.7
67.5°	21066.1	16775.7	16622.3	16453.0	14676.8	8213.0	4265.6	4231.7	20.3	13.5
68°	21079.7	16753.2	16554.6	16439.4	14620.4	8167.8	4252.0	4220.5	20.3	13.5
70°	19996.4	15909.1	15710.5	15739.8	13920.7	7811.2	4076.0	4017.3	20.3	13.5
72.5°	17543.1	14157.7	13934.3	13776.3	12345.4	6944.6	3654.0	3543.4	20.3	13.5
75°	15010.8	11997.8	11627.7	11280.1	9932.7	5682.9	2997.2	2873.1	20.3	13.5
77.5°	11830.8	9145.1	8619.2	8391.2	7463.7	4197.9	2227.6	2092.2	20.3	11.3
80°	6538.3	5247.4	4800.5	4660.6	4267.8	2466.8	1277.4	1196.2	18.1	11.3
82.5°	1690.4	1268.4	1105.9	1067.5	1002.1	584.5	311.5	295.7	15.8	9.0
85°	241.5	178.3	196.4	232.5	223.4	151.2	108.3	92.5	13.5	6.8
87.5°	126.4	106.1	124.1	139.9	142.2	88.0	45.1	24.8	6.8	0.0
90°	20.3	20.3	22.6	24.8	24.8	11.3	9.0	0.0	0.0	0.0
92.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.3	4.5	2.3	2.3	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°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.3	2.3	2.3	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)