

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: P256717

Luminaire Tested: **CST-8-6-D-U-T5R-7030-HSS-HM-EX120**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256717
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-8-6-D-U-T5R-7030-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 3000K LEDS AND TYPE V ROUND WITH EXTERNAL FIELD INSTALLED 120
DEGREE SHIELD - BLACK
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47287.1 lumens
Efficiency: N/A
Efficacy: 99.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B5 - U2 - G5

Input Watts (W): 477
Input Voltage (V): NR
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: 28.75 FT

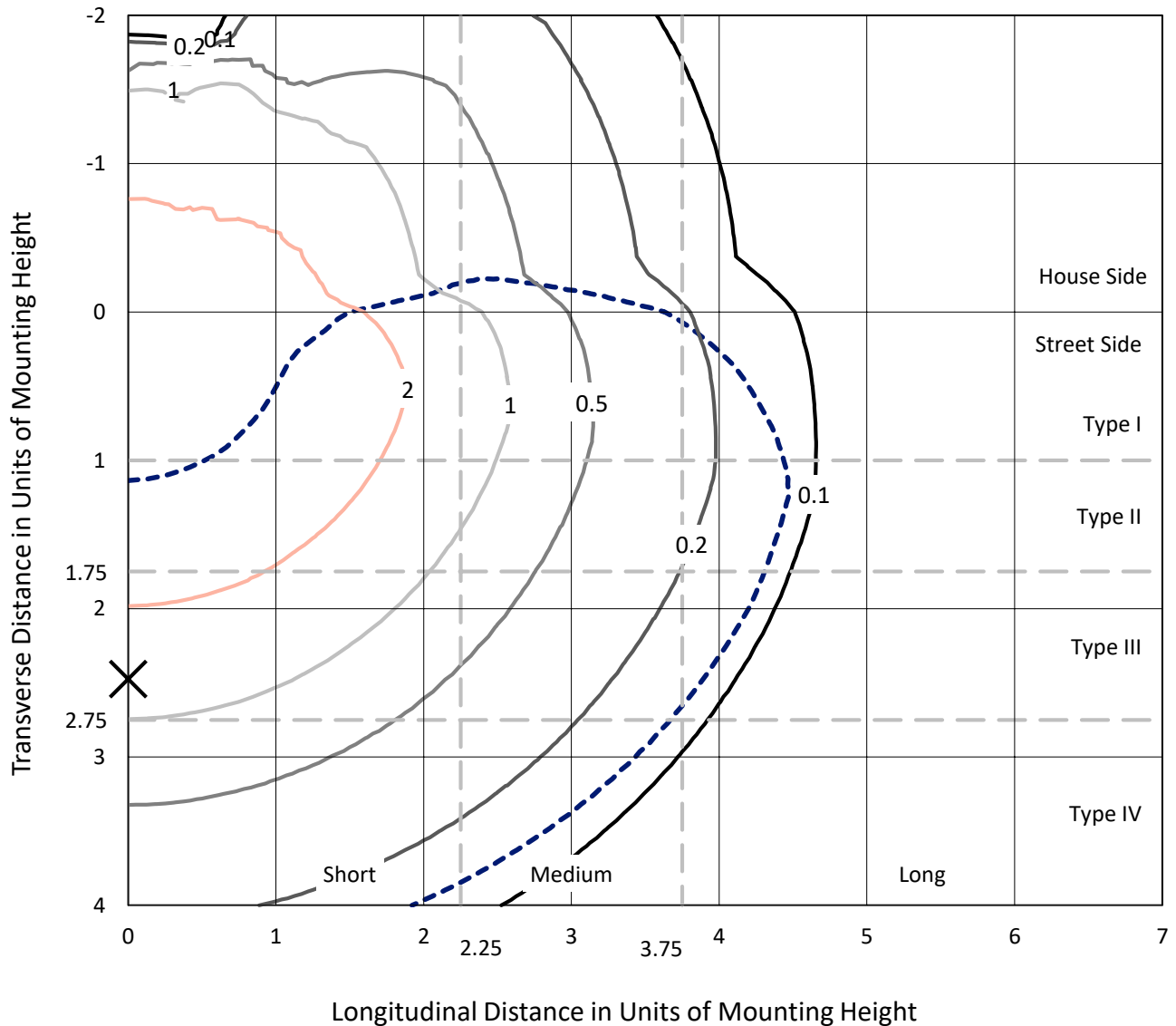


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

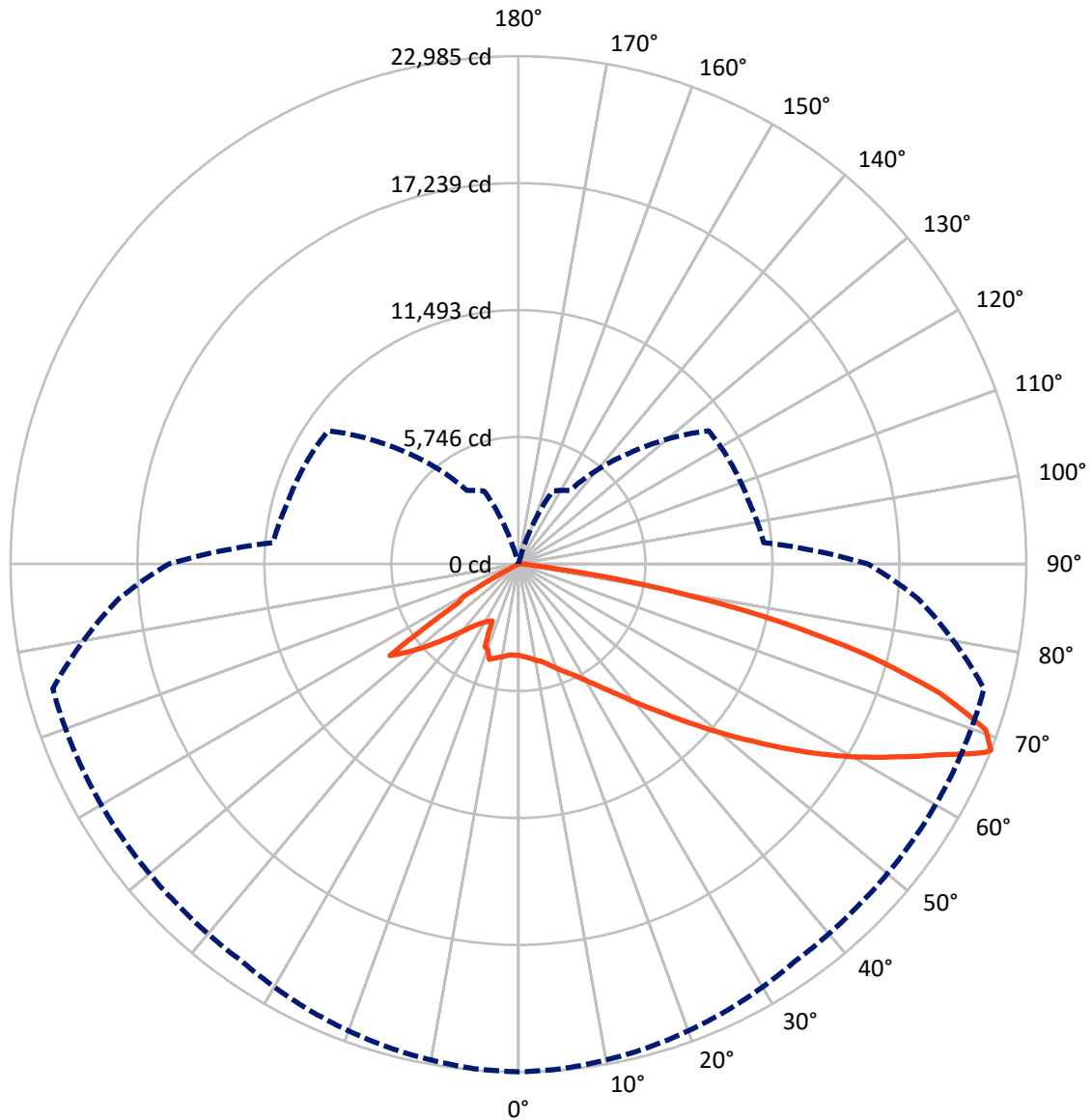


Based on 30 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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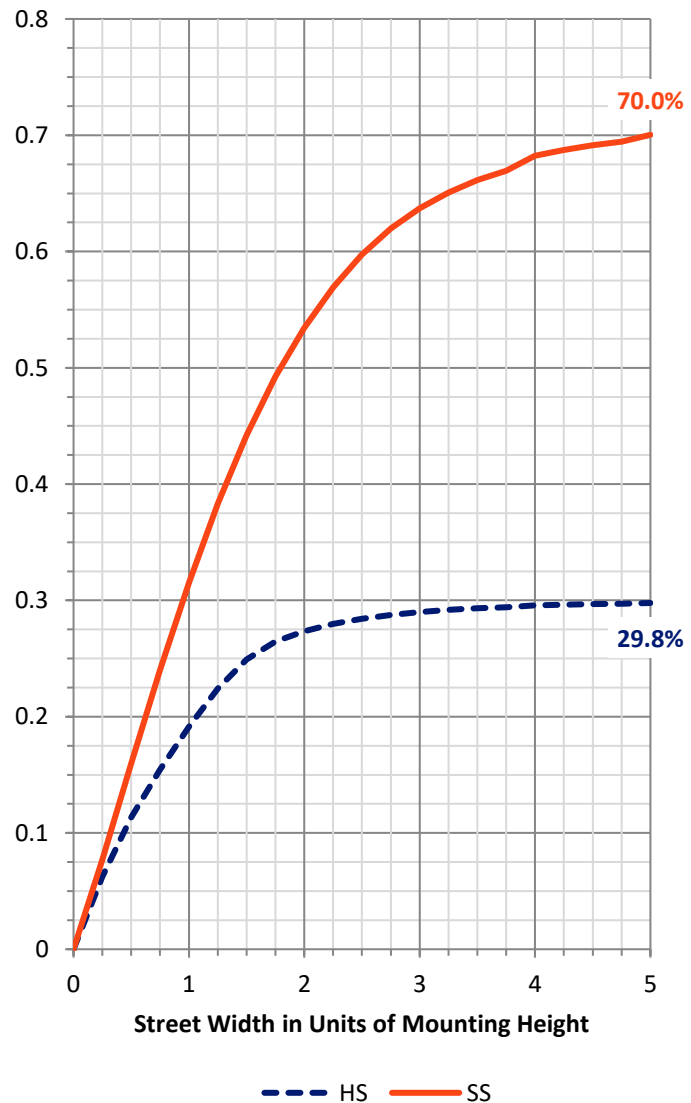
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14095.7	2.2	14098.0
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	33169.7	19.4	33189.1
	% Fixture	70.1	0.0	70.2
Total	Lumens	47265.5	21.6	47287.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	400.1	0.8
10°-20°	1273.5	2.7
20°-30°	2181.3	4.6
30°-40°	3538.5	7.5
40°-50°	5967.6	12.6
50°-60°	9727.3	20.6
60°-70°	13045.9	27.6
70°-80°	10133.3	21.4
80°-90°	998.0	2.1
90°-100°	19.0	0.0
100°-110°	1.1	0.0
110°-120°	0.3	0.0
120°-130°	0.2	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°	47265.5	100.0
0°-180°	47287.1	100.0



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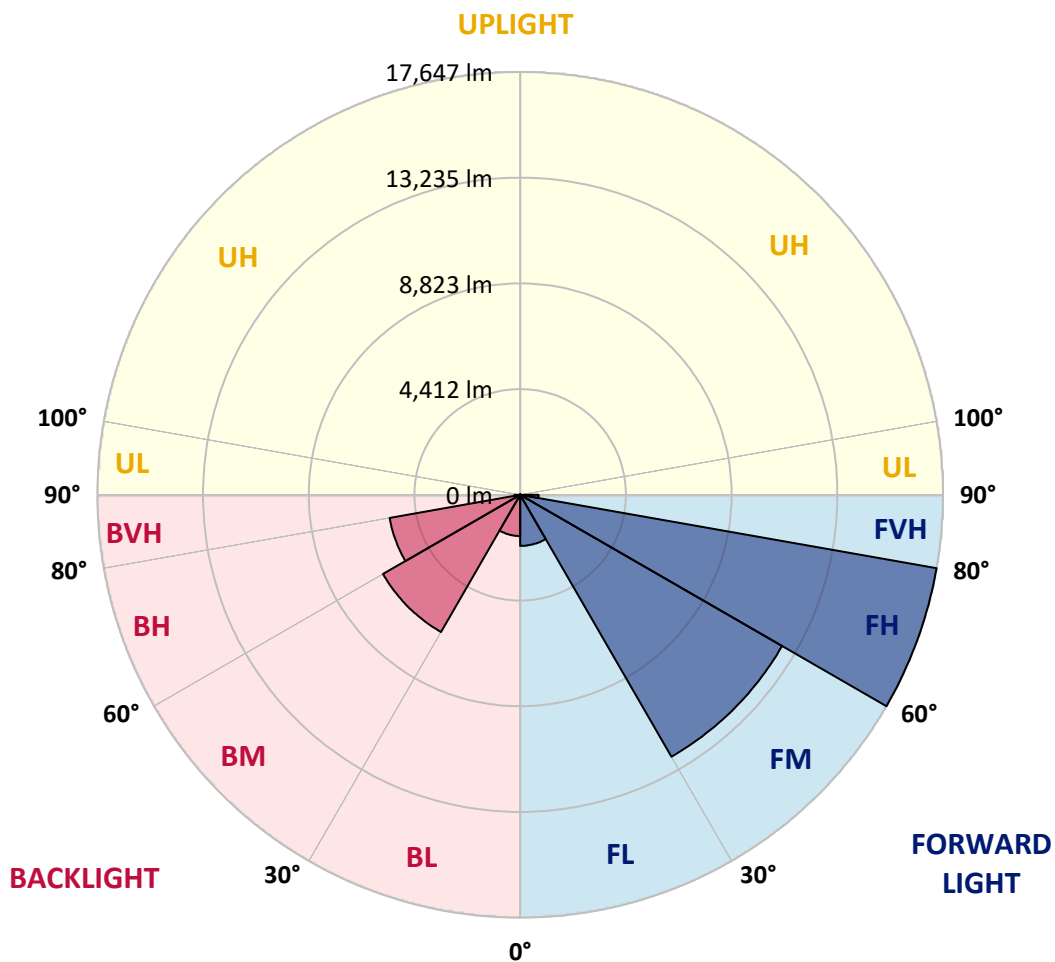
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2132.9	4.5			
FM	(30°-60°)	12622.6	26.7			
FH	(60°-80°)	17647.0	37.3			G5
FVH	(80°-90°)	767.3	1.6			G5
BL	(0°-30°)	1722.0	3.6	B3/2500		
BM	(30°-60°)	6610.9	14.0	B4/8500		
BH	(60°-80°)	5532.2	11.7	B5		G5
BVH	(80°-90°)	230.7	0.5			G3/500
UL	(90°-100°)	19.0	0.0		U2/50	
UH	(100°-180°)	2.2	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°	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6
2.5°	4191.0	4179.3	4177.3	4200.8	4126.5	4163.6	4130.4	4157.8	4140.2	4153.8	4155.8
5°	4247.7	4226.2	4212.5	4239.9	4193.0	4210.6	4173.4	4185.1	4136.2	4163.6	4167.5
7.5°	4329.9	4294.7	4290.7	4298.6	4257.5	4271.2	4210.6	4224.2	4189.0	4173.4	4187.1
10°	4441.3	4408.1	4382.7	4400.3	4345.5	4353.3	4288.8	4290.7	4265.3	4236.0	4259.4
12.5°	4503.9	4507.8	4496.1	4509.8	4464.8	4439.4	4394.4	4378.7	4353.3	4318.1	4306.4
15°	4660.4	4652.5	4629.1	4650.6	4644.7	4621.2	4566.5	4531.3	4476.5	4457.0	4437.4
17.5°	4852.0	4826.6	4807.0	4834.4	4863.8	4814.9	4762.1	4713.2	4640.8	4601.7	4578.2
20°	5053.5	5035.9	5016.3	5059.3	5069.1	5031.9	4992.8	4920.5	4836.4	4785.5	4736.6
22.5°	5278.4	5243.2	5249.0	5305.7	5288.1	5270.5	5219.7	5161.0	5059.3	4994.8	4854.0
25°	5511.1	5491.5	5518.9	5544.3	5530.6	5493.5	5468.1	5425.0	5311.6	5233.4	5028.0
27.5°	5800.5	5769.2	5804.4	5814.2	5802.5	5792.7	5757.5	5724.2	5601.0	5513.0	5256.8
30°	6140.8	6103.6	6160.4	6146.7	6134.9	6142.8	6121.2	6048.9	5939.4	5820.1	5563.9
32.5°	6545.6	6496.7	6561.3	6531.9	6504.6	6559.3	6508.5	6440.0	6310.9	6172.1	5921.8
35°	7015.0	7016.9	7050.2	7001.3	6991.5	7050.2	7016.9	6932.9	6813.6	6668.8	6312.9
37.5°	7584.1	7568.4	7652.5	7629.1	7593.9	7672.1	7681.9	7576.3	7361.1	7218.4	6797.9
40°	8276.4	8272.5	8299.9	8303.8	8294.0	8331.2	8348.8	8207.9	8069.1	7854.0	6414.6
42.5°	9015.6	9031.3	9080.2	9045.0	9091.9	9140.8	9146.7	9029.3	8829.9	7535.2	6813.6
45°	9903.5	9952.4	9985.7	9977.8	9999.3	10069.7	10075.6	10013.0	9817.5	8163.0	7537.2
47.5°	10922.4	10969.4	10979.1	11041.7	11022.2	11121.9	11108.2	11110.2	10900.9	9037.2	8325.3
50°	12093.9	12115.4	12195.6	12230.8	12181.9	12316.8	12281.6	12324.6	12066.5	10038.5	9172.1
52.5°	13337.7	13374.8	13408.1	13541.1	13478.5	13595.8	13548.9	13648.6	13349.4	11057.4	10112.8
55°	14751.6	14757.5	14814.2	14949.1	14867.0	15007.8	14939.4	14976.5	14737.9	12183.8	11092.6
57.5°	16249.7	16230.1	16251.6	16359.2	16284.9	16390.5	16363.1	16398.3	16175.3	13369.0	11808.3
60°	17732.1	17702.7	17734.0	17806.4	17704.7	17886.6	17788.8	17822.0	17581.5	14579.5	12829.2
62.5°	19222.3	19200.8	19165.6	19237.9	19089.3	19183.2	19224.2	19169.5	18958.3	15674.7	13717.1
65°	20822.0	20800.5	20671.4	20716.4	20450.4	20405.5	20421.1	20438.7	20297.9	16760.1	14691.0
67.5°	22766.0	22734.7	22492.2	22187.1	21803.8	21719.7	21727.5	21774.4	21794.0	18156.4	15831.1
68°	22985.0	22928.3	22658.4	22304.4	21903.5	21805.7	21795.9	21805.7	21815.5	18168.2	15819.4
70°	22425.7	22404.2	22198.8	21770.5	21359.8	21125.1	20921.8	20913.9	20820.1	17239.2	14945.2
72.5°	19900.9	19873.5	19629.1	19325.9	19071.7	18704.0	18440.0	18455.7	18301.2	15236.6	13081.5
75°	16104.9	16103.0	15809.6	15555.4	15559.3	15531.9	15443.9	15598.4	15438.1	12923.1	11157.1
77.5°	11223.6	11262.7	11243.1	11094.5	11303.8	11593.2	11908.1	12205.3	12113.4	10208.6	8896.3
80°	5863.1	5972.6	6359.8	6377.4	6524.1	6805.7	7020.9	7220.3	7234.0	5792.7	5139.5
82.5°	1558.7	1591.9	1722.9	1685.8	1674.1	1730.8	1777.7	1783.6	1787.5	1509.8	1410.0
85°	485.0	498.7	483.1	461.5	428.3	391.1	381.4	311.0	246.4	203.4	178.0
87.5°	344.2	367.7	332.5	312.9	277.7	264.0	236.6	185.8	144.7	101.7	68.4
90°	178.0	181.9	162.3	138.9	129.1	121.3	103.7	74.3	37.2	19.6	17.6
92.5°	90.0	91.9	80.2	68.4	58.7	50.8	39.1	21.5	11.7	5.9	2.0
95°	35.2	37.2	33.2	29.3	23.5	17.6	15.6	11.7	7.8	3.9	2.0
97.5°	11.7	11.7	11.7	9.8	9.8	9.8	9.8	7.8	5.9	3.9	2.0
100°	0.0	0.0	0.0	2.0	3.9	5.9	5.9	5.9	3.9	2.0	2.0
102.5°	0.0	0.0	0.0	0.0	0.0	2.0	3.9	3.9	3.9	2.0	2.0
105°	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0	2.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0



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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	2.0	2.0	2.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
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	2.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	2.0	2.0	2.0
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°	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6	4122.6
2.5°	4146.0	4134.3	4140.2	4091.3	4103.0	4071.7	4138.2	4120.6	4112.8	4140.2
5°	4155.8	4112.8	4148.0	4114.7	4120.6	4075.6	4130.4	4108.9	4106.9	4122.6
7.5°	4159.7	4138.2	4171.4	4116.7	4134.3	4116.7	4157.8	4136.2	4155.8	4169.5
10°	4214.5	4202.7	4198.8	4179.3	4193.0	4153.8	4204.7	4204.7	4214.5	4251.6
12.5°	4294.7	4279.0	4269.2	4234.0	4247.7	4236.0	4277.1	4284.9	4302.5	4318.1
15°	4404.2	4376.8	4367.0	4335.7	4345.5	4343.5	4372.9	4374.8	4413.9	4412.0
17.5°	4545.0	4505.9	4517.6	4494.1	4496.1	4480.4	4464.8	4464.8	4500.0	4507.8
20°	4713.2	4490.2	4196.9	4032.6	4003.3	4024.8	4108.9	4247.7	4073.7	4122.6
22.5°	4410.0	4208.6	4194.9	4157.8	4134.3	3610.2	3475.2	3432.2	3657.1	4044.3
25°	4449.1	4363.1	4337.7	4290.7	3598.4	3592.6	3553.5	3488.9	2851.4	2837.7
27.5°	4656.5	4572.4	4531.3	3758.8	3743.2	3741.2	3682.5	3035.2	2888.5	2908.1
30°	4899.0	4801.2	4065.8	3948.5	3934.8	3903.5	3567.1	2998.0	2996.1	2998.0
32.5°	5178.6	4854.0	4183.2	4177.3	4185.1	4089.3	3160.4	3148.6	3146.7	3166.2
35°	5561.9	4503.9	4476.5	4505.9	4464.8	3535.9	3350.1	3344.2	3346.2	3336.4
37.5°	5307.7	4855.9	4850.1	4850.1	4754.2	3618.0	3580.8	3608.2	3604.3	3590.6
40°	5415.3	5282.3	5247.1	5235.3	4018.9	3903.5	3882.0	3917.2	3923.1	3932.9
42.5°	5937.4	5816.2	5798.6	5659.7	4372.9	4335.7	4269.2	4306.4	4302.5	4314.2
45°	6578.9	6496.7	6420.5	4906.8	4850.1	4803.1	4734.7	4777.7	4789.4	4781.6
47.5°	7325.9	7236.0	6684.5	5395.7	5393.7	5356.6	5280.3	5315.5	5309.6	5309.6
50°	8076.9	7979.1	6072.4	6017.6	5998.0	5939.4	5876.8	5882.7	5884.6	5904.2
52.5°	8915.9	7126.5	6721.6	6612.1	6627.8	6588.7	6528.0	4942.0	6498.7	6516.3
55°	8333.1	7458.9	7435.5	7290.7	7327.9	7277.0	7237.9	4875.5	6463.5	7142.1
57.5°	8239.2	8176.7	8157.1	8008.5	8055.4	7572.4	7934.2	5335.1	4470.7	3266.0
60°	8957.0	8890.5	8878.7	8747.7	8743.8	6017.6	7212.5	3659.1	2859.2	2878.7
62.5°	9653.2	9545.6	9575.0	9420.5	6641.5	3666.9	3232.7	82.1	131.0	138.9
65°	10429.6	10249.7	10279.0	10136.2	6850.7	3866.4	3494.8	43.0	37.2	35.2
67.5°	11176.7	10861.8	10711.2	10560.6	7114.7	4071.7	3641.5	11.7	0.0	0.0
68°	11139.5	10807.0	10652.5	10509.8	7087.3	4065.8	3633.6	11.7	0.0	0.0
70°	10511.7	10212.5	10065.8	9956.3	6766.6	3927.0	3487.0	11.7	0.0	0.0
72.5°	9189.7	9023.5	8929.6	8833.8	6011.7	3512.4	3127.1	11.7	0.0	0.0
75°	7809.0	7762.1	7703.4	7492.2	5010.4	2874.8	2569.8	11.7	0.0	0.0
77.5°	6187.7	6185.8	6043.0	5794.7	3772.5	2110.2	1895.0	9.8	0.0	0.0
80°	3346.2	3647.3	3537.8	3410.7	2139.5	1148.0	1093.2	7.8	0.0	0.0
82.5°	940.7	889.8	854.6	799.9	449.8	250.3	244.5	7.8	0.0	0.0
85°	131.0	144.7	160.4	181.9	103.7	66.5	58.7	3.9	0.0	0.0
87.5°	74.3	84.1	103.7	107.6	39.1	31.3	9.8	0.0	0.0	0.0
90°	15.6	17.6	19.6	19.6	7.8	7.8	0.0	0.0	0.0	0.0
92.5°	0.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.0	2.0	2.0	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°
110°	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.0	2.0	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)