

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: P256741

Luminaire Tested: **CST-8-6-D-U-T5R-7030-HSS-HM-EX180**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256741
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)
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-EX180
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 3000K LEDS AND TYPE V ROUND WITH EXTERNAL FIELD INSTALLED 180
DEGREE SHIELD - BLACK
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 40597 lumens
Efficiency: N/A
Efficacy: 85.1 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B4 - 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

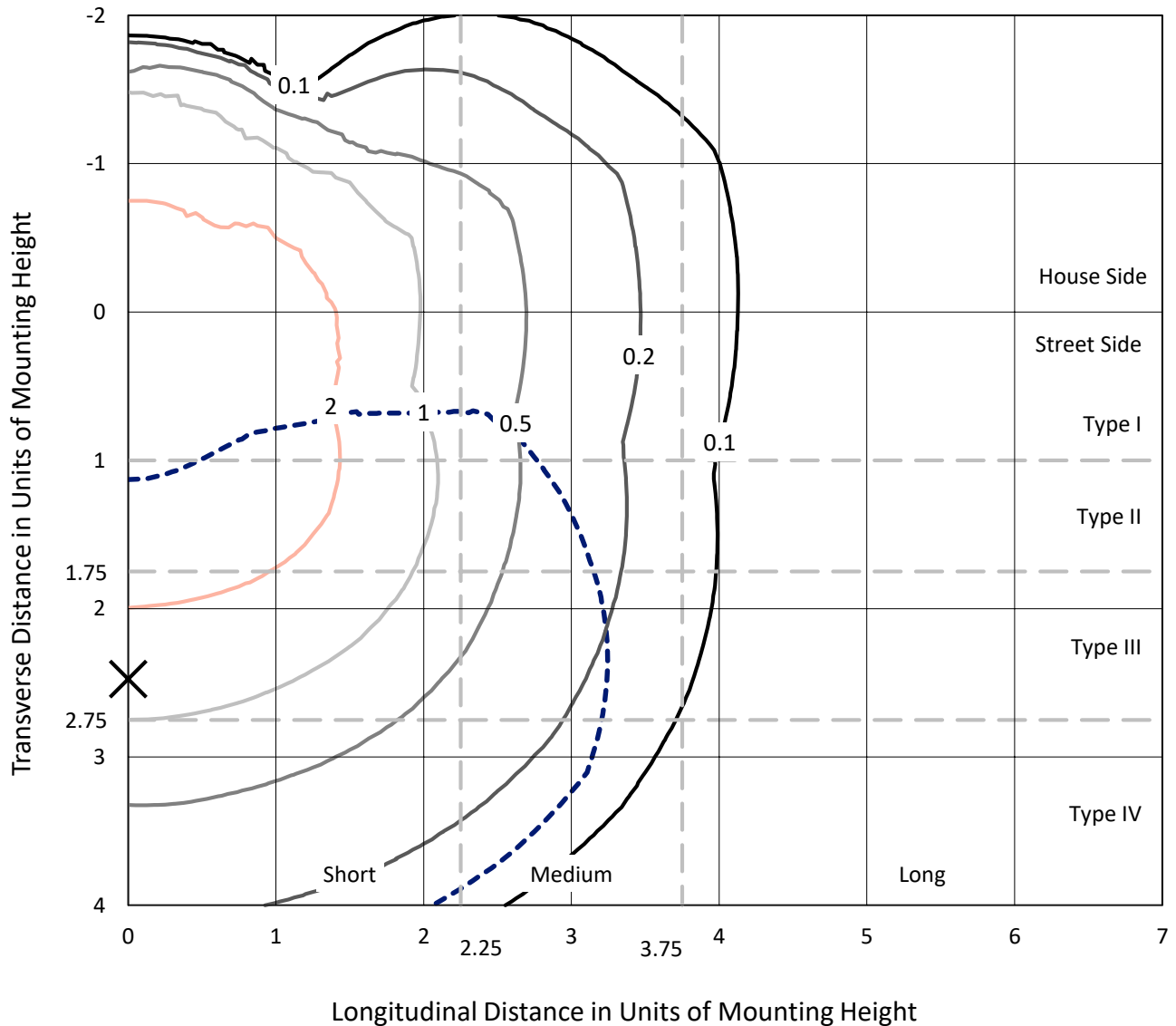


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

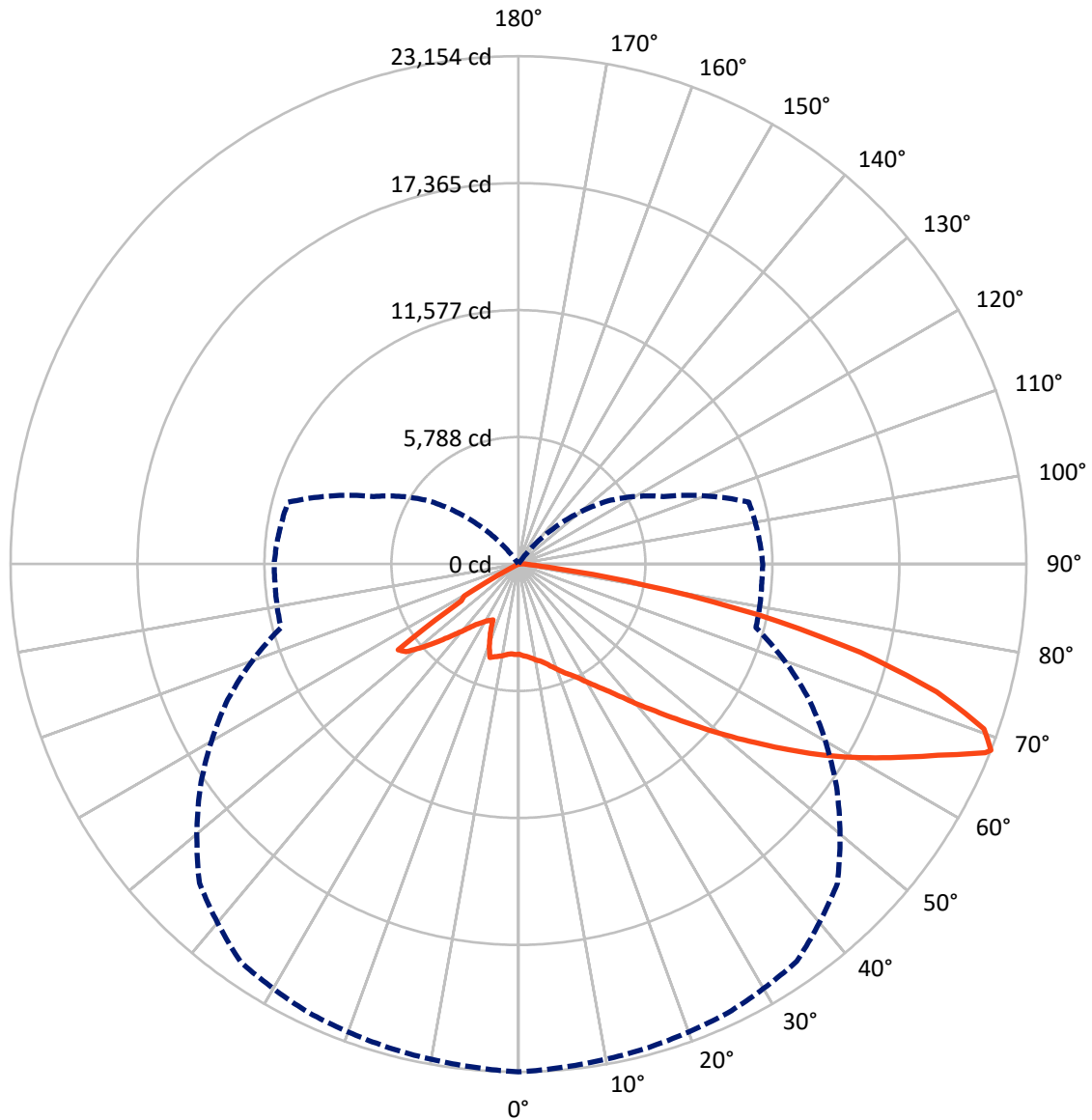


Based on 30 foot mounting height. Maximum calculated value = 4.7 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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

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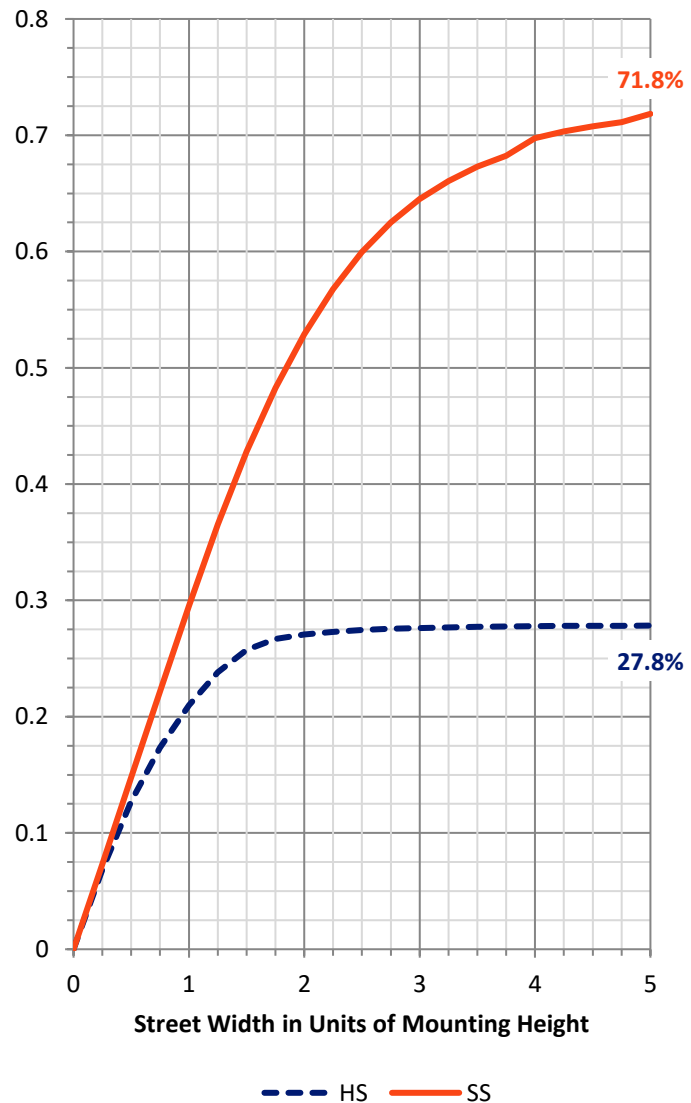
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11338.8	0.3	11339.0
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	29234.7	23.3	29258.0
	% Fixture	72.0	0.1	72.1
Total	Lumens	40573.5	23.5	40597.0
	% Fixture	99.9	0.1	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	399.2	1.0
10°-20°	1264.9	3.1
20°-30°	2141.5	5.3
30°-40°	3392.6	8.4
40°-50°	5546.6	13.7
50°-60°	8496.0	20.9
60°-70°	10446.5	25.7
70°-80°	8071.9	19.9
80°-90°	814.4	2.0
90°-100°	23.1	0.1
100°-110°	0.4	0.0
110°-120°	0.0	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°	40573.5	99.9
0°-180°	40597.0	100.0



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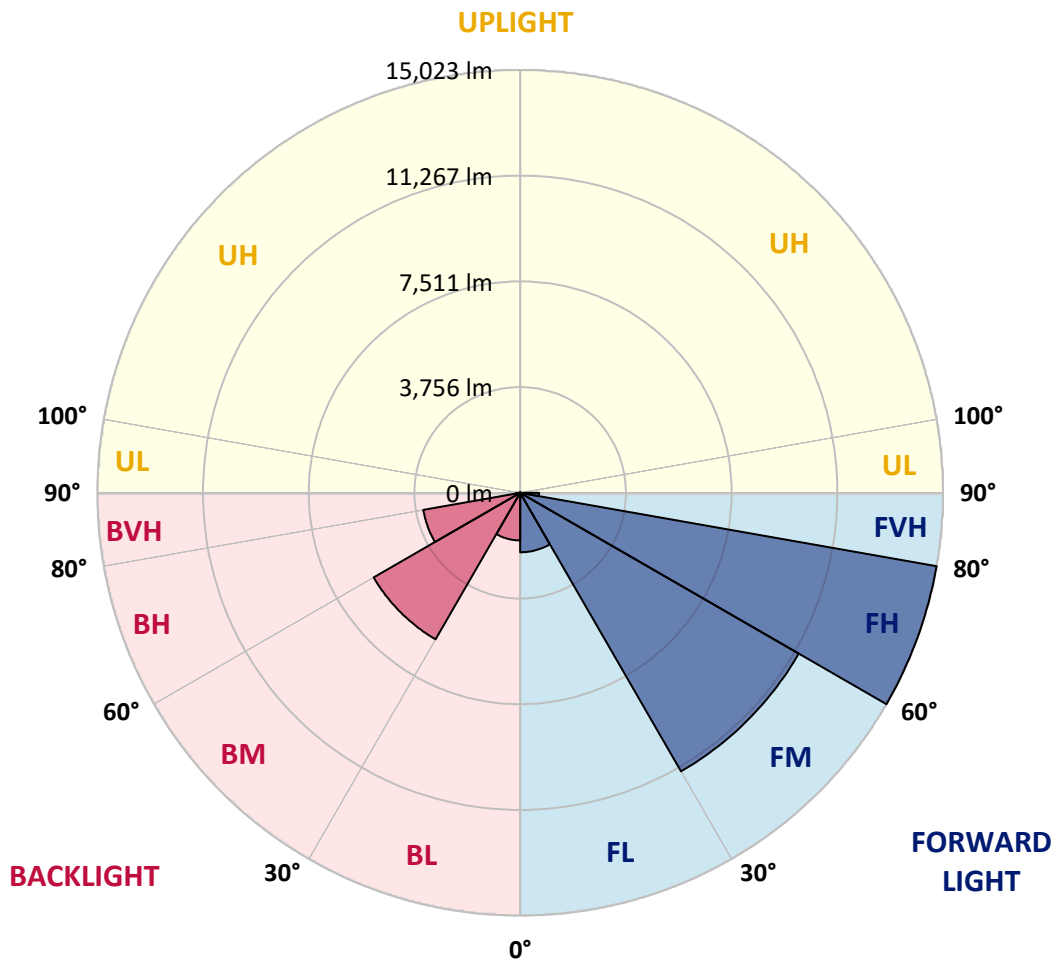
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2113.1	5.2			
FM	(30°-60°)	11427.4	28.1			
FH	(60°-80°)	15022.6	37.0			G5
FVH	(80°-90°)	671.7	1.7			G4/750
BL	(0°-30°)	1692.4	4.2	B3/2500		
BM	(30°-60°)	6007.8	14.8	B4/8500		
BH	(60°-80°)	3495.8	8.6	B4/5000		G4/5000
BVH	(80°-90°)	142.8	0.4			G2/225
UL	(90°-100°)	23.1	0.1		U2/50	
UH	(100°-180°)	0.3	0.0		U1/10	

BUG Rating: B4-U2-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9
2.5°	4187.2	4179.4	4171.6	4189.2	4120.7	4150.1	4126.6	4148.1	4132.5	4150.1	4144.2
5°	4242.0	4234.2	4210.7	4230.3	4185.3	4197.0	4167.7	4175.5	4122.7	4154.0	4152.0
7.5°	4332.0	4310.4	4294.8	4294.8	4255.7	4253.7	4206.8	4208.7	4167.7	4163.8	4171.6
10°	4453.2	4437.6	4394.5	4398.4	4343.7	4335.9	4277.2	4275.2	4242.0	4222.4	4240.0
12.5°	4543.2	4558.8	4519.7	4519.7	4464.9	4425.8	4384.8	4357.4	4332.0	4302.6	4288.9
15°	4707.5	4723.1	4670.3	4668.3	4646.8	4599.9	4554.9	4496.2	4451.3	4437.6	4416.0
17.5°	4920.6	4910.8	4865.9	4867.8	4871.7	4795.5	4750.5	4674.2	4609.7	4562.7	4551.0
20°	5137.7	5137.7	5088.8	5104.5	5084.9	5014.5	4985.2	4879.6	4789.6	4738.7	4697.7
22.5°	5380.2	5370.4	5337.2	5370.4	5331.3	5260.9	5212.0	5106.4	4991.0	4703.5	4586.2
25°	5611.0	5605.1	5618.8	5628.6	5579.7	5491.7	5458.5	5347.0	5026.2	4648.8	4412.1
27.5°	5902.4	5882.8	5914.1	5933.7	5884.8	5808.5	5738.1	5613.0	4934.3	4637.0	4611.6
30°	6276.0	6232.9	6277.9	6287.7	6236.8	6189.9	6084.3	5458.5	4965.6	4879.6	4871.7
32.5°	6674.9	6624.1	6682.7	6690.6	6624.1	6585.0	6319.0	5378.3	5272.7	5172.9	5182.7
35°	7148.2	7148.2	7177.5	7181.5	7132.6	7066.1	6053.0	5769.4	5675.5	5583.6	5581.7
37.5°	7725.1	7707.5	7785.8	7832.7	7779.9	7590.2	6440.2	6307.2	6162.5	6045.2	5802.7
40°	8421.4	8452.7	8474.2	8521.1	8470.3	8043.9	7005.4	6854.8	6741.4	6348.3	5736.2
42.5°	9172.4	9180.2	9227.2	9285.8	9285.8	8836.0	7666.5	7537.4	7390.7	6207.5	5931.7
45°	10070.1	10052.5	10142.4	10236.3	10210.9	9745.4	8435.1	8339.3	7652.8	6616.2	6618.2
47.5°	11089.0	11067.5	11196.6	11319.8	11192.7	10754.6	9280.0	9205.6	7386.8	7308.6	7292.9
50°	12266.4	12213.6	12362.2	12526.5	12422.8	11881.1	10306.7	8879.0	8128.0	8065.4	8055.7
52.5°	13523.9	13482.8	13572.8	13852.5	13715.6	13060.4	11278.7	9160.7	8986.6	8916.2	8898.6
55°	14943.8	14863.6	15057.2	15270.4	15112.0	14364.9	12237.0	10095.5	9915.6	9794.3	9618.3
57.5°	16436.0	16320.6	16420.3	16688.3	16535.7	15700.6	13473.1	11057.7	10844.5	8974.9	8261.0
60°	17922.3	17869.5	17908.7	18145.3	17957.6	16999.2	14630.8	12021.9	9178.3	8877.1	8912.3
62.5°	19416.5	19301.1	19336.3	19578.9	19338.3	18235.3	15728.0	12898.1	9659.4	9553.8	9590.9
65°	21018.3	20881.4	20912.7	20983.1	20685.8	19344.2	16698.1	13725.3	10383.0	10271.5	10312.6
67.5°	22948.6	22823.4	22653.3	22444.0	22033.3	20521.5	17662.2	14595.6	11196.6	11134.0	11147.7
68°	23153.9	23032.7	22827.3	22579.0	22117.4	20570.4	17703.3	14621.1	11208.3	11130.1	11134.0
70°	22514.4	22586.8	22354.0	21937.5	21552.2	19854.6	17032.5	14057.8	10709.6	10594.2	10564.9
72.5°	19938.7	20097.1	19776.4	19706.0	19232.7	17687.7	14904.6	12197.9	9315.2	9352.3	9246.7
75°	16097.6	16330.4	15941.2	15962.7	15692.8	14754.1	12491.3	10156.1	7648.9	7819.0	7850.3
77.5°	11194.6	11529.1	11358.9	11529.1	11396.1	11057.7	9667.2	7821.0	5835.9	6031.5	6107.8
80°	5837.9	6234.9	6459.8	6530.2	6573.2	6559.5	5886.8	4693.8	3373.6	3446.0	3442.1
82.5°	1846.2	1750.4	1807.1	1791.5	1742.6	1762.1	1588.1	1241.9	860.5	948.5	907.5
85°	557.4	561.3	545.6	541.7	500.7	440.0	359.9	207.3	101.7	119.3	111.5
87.5°	410.7	414.6	383.3	363.8	340.3	295.3	228.8	129.1	48.9	46.9	37.2
90°	226.9	219.0	203.4	187.8	178.0	152.5	115.4	48.9	17.6	13.7	11.7
92.5°	123.2	117.3	109.5	103.7	90.0	72.4	46.9	15.6	7.8	2.0	0.0
95°	56.7	52.8	50.8	45.0	39.1	27.4	15.6	9.8	5.9	2.0	0.0
97.5°	25.4	23.5	21.5	17.6	13.7	7.8	7.8	5.9	3.9	2.0	0.0
100°	5.9	5.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	2.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0



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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	0.0	0.0	0.0
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°	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9	4112.9
2.5°	4138.3	4126.6	4120.7	4083.6	4095.3	4062.1	4126.6	4111.0	4101.2	4128.6
5°	4142.2	4101.2	4126.6	4105.1	4112.9	4066.0	4116.8	4095.3	4093.4	4105.1
7.5°	4152.0	4124.6	4150.1	4107.0	4126.6	4107.0	4144.2	4122.7	4140.3	4152.0
10°	4204.8	4189.2	4177.4	4167.7	4181.4	4142.2	4189.2	4191.1	4197.0	4232.2
12.5°	4279.1	4263.5	4243.9	4218.5	4232.2	4216.6	4251.8	4261.5	4283.1	4300.7
15°	4382.8	4353.5	4345.6	4322.2	4335.9	4328.0	4335.9	4330.0	4371.1	4365.2
17.5°	4525.6	4492.3	4380.8	4267.4	4195.0	4216.6	4306.5	4423.9	4453.2	4457.1
20°	4578.4	4343.7	4332.0	4202.9	4144.2	4140.3	3954.5	3676.8	3760.9	3958.4
22.5°	4515.8	4195.0	4161.8	4136.4	3886.0	3475.3	3436.2	3395.2	3385.4	3414.7
25°	4375.0	4337.8	4308.5	3976.0	3580.9	3582.9	3526.2	3256.3	2835.8	2800.6
27.5°	4590.1	4539.3	4255.7	3743.3	3735.5	3731.5	3647.4	2955.1	2865.2	2886.7
30°	4834.6	4750.5	4009.3	3942.8	3940.8	3905.6	3270.0	2980.5	2980.5	2984.5
32.5°	5116.2	4594.0	4150.1	4181.4	4179.4	4013.2	3158.5	3139.0	3131.1	3150.7
35°	5331.3	4468.9	4453.2	4509.9	4470.8	3404.9	3356.0	3338.4	3330.6	3320.8
37.5°	5264.8	4828.7	4828.7	4863.9	4549.0	3625.9	3602.5	3602.5	3586.8	3579.0
40°	5366.5	5276.6	5231.6	5245.3	3305.2	3893.9	3911.5	3907.6	3905.6	3919.3
42.5°	5902.4	5822.2	5781.2	5296.1	3700.2	3870.4	4300.7	4298.7	4304.6	4298.7
45°	6585.0	6510.6	6403.1	4955.8	4200.9	3393.2	4740.7	4762.2	4764.2	4762.2
47.5°	7300.8	7253.8	6152.7	5485.8	4744.6	3641.6	4531.4	5292.2	5282.4	5294.2
50°	8057.6	7846.4	6121.4	6113.6	5323.5	4052.3	4054.2	5755.7	5855.5	5886.8
52.5°	8900.5	7113.0	6784.4	6189.9	5910.2	4474.7	4431.7	5100.6	6461.7	6493.0
55°	8266.9	7513.9	7508.1	5509.3	6148.8	4881.5	4887.4	4840.4	5925.9	6735.5
57.5°	8225.8	8243.4	8229.7	6146.9	4486.5	4576.4	5325.5	5284.4	3837.2	3109.6
60°	8935.7	8961.2	7995.0	6637.8	4850.2	2814.3	3279.8	2786.9	2824.1	2853.4
62.5°	9614.4	9622.2	6502.8	4351.5	2403.6	113.4	54.8	45.0	43.0	43.0
65°	10365.4	10365.4	6970.2	4746.6	2321.5	43.0	7.8	5.9	21.5	21.5
67.5°	11091.0	10930.6	7312.5	5039.9	2362.5	5.9	0.0	0.0	0.0	0.0
68°	11049.9	10873.9	7281.2	5032.1	2356.7	3.9	0.0	0.0	0.0	0.0
70°	10435.8	10265.6	6907.7	4803.3	2268.7	3.9	0.0	0.0	0.0	0.0
72.5°	9211.5	9055.0	6117.5	4234.2	2045.7	2.0	0.0	0.0	0.0	0.0
75°	7797.5	7776.0	5284.4	3573.1	1754.3	2.0	0.0	0.0	0.0	0.0
77.5°	6274.0	6176.2	4130.5	2800.6	1414.0	0.0	0.0	0.0	0.0	0.0
80°	3494.9	3639.6	2417.3	1646.7	889.9	0.0	0.0	0.0	0.0	0.0
82.5°	944.6	884.0	528.0	357.9	170.1	0.0	0.0	0.0	0.0	0.0
85°	121.3	133.0	60.6	48.9	11.7	0.0	0.0	0.0	0.0	0.0
87.5°	62.6	74.3	19.6	15.6	3.9	0.0	0.0	0.0	0.0	0.0
90°	11.7	13.7	5.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	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°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)