

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: P256725

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256725
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-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
(8) 70 CRI, 4000K 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: 48593 lumens
Efficiency: N/A
Efficacy: 101.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B5 - U2 - G5

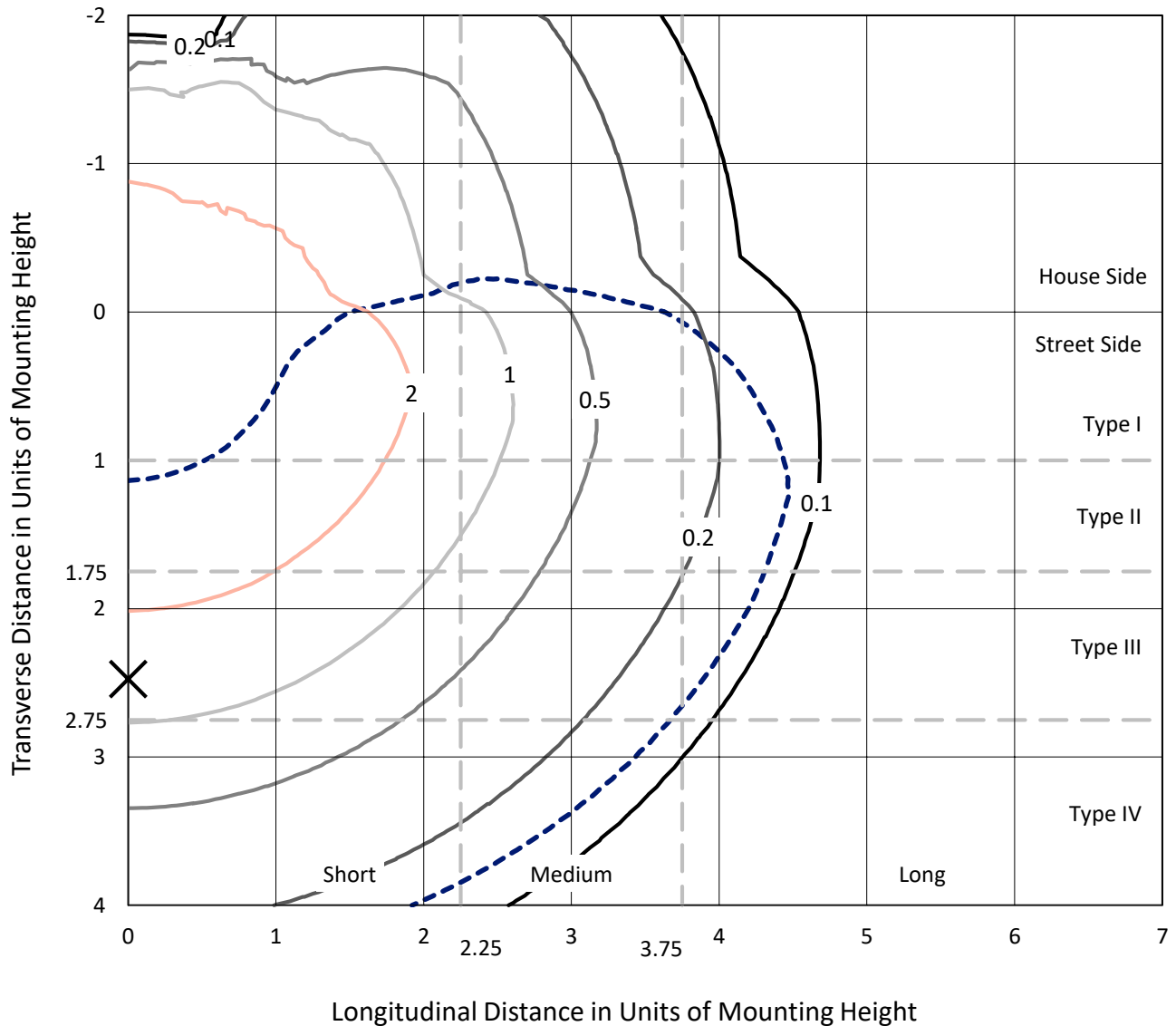
Input Watts (W): 477
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

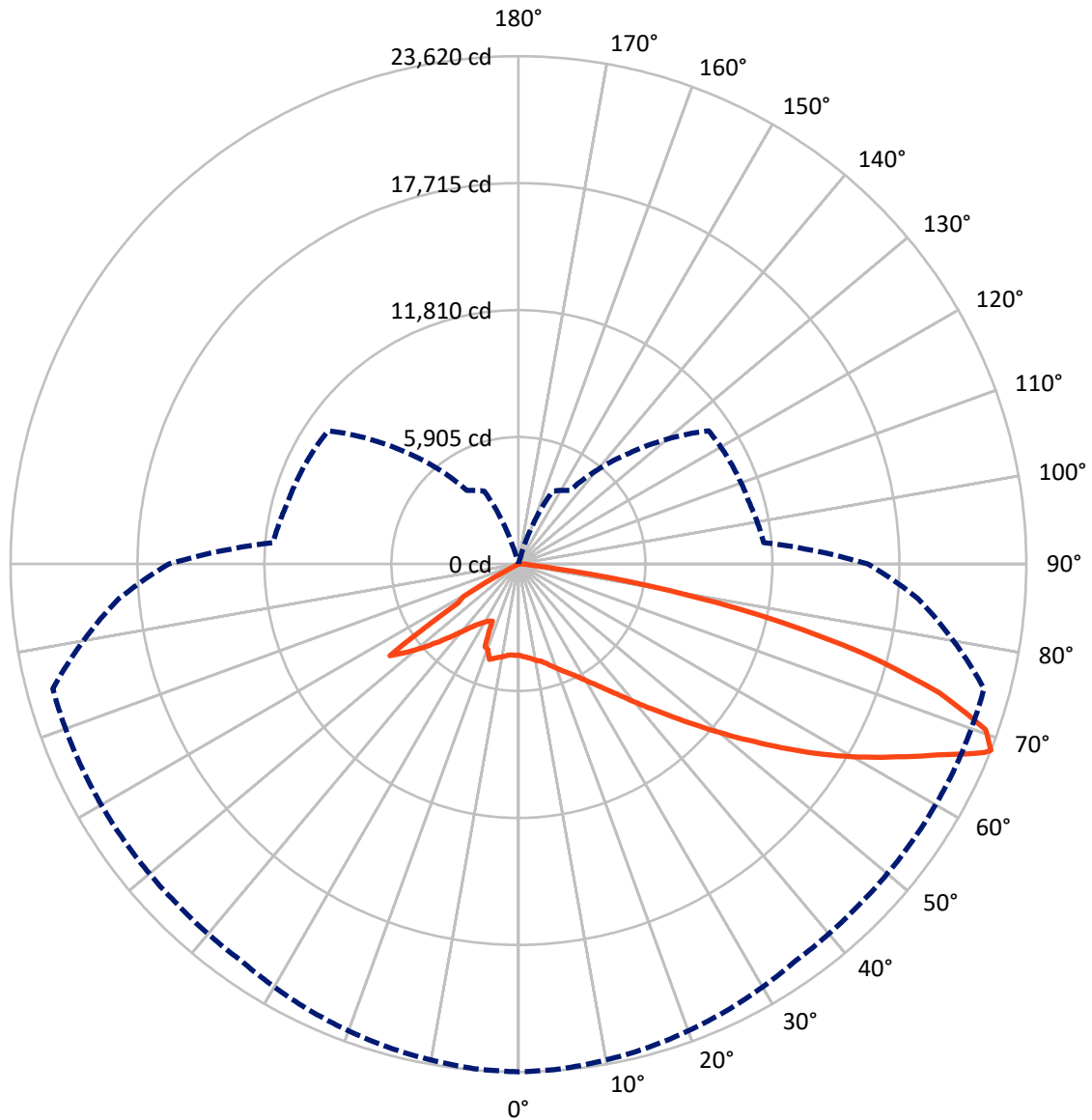


Based on 30 foot mounting height. Maximum calculated value = 4.8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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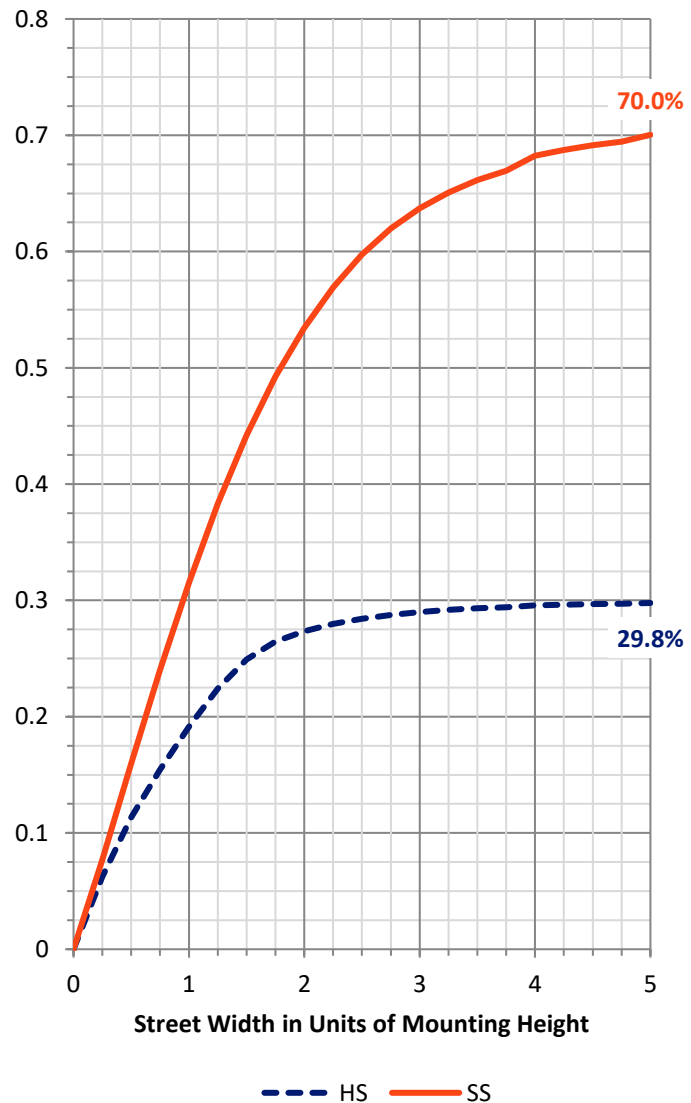
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14485.0	2.2	14487.3
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	34085.8	19.9	34105.7
	% Fixture	70.1	0.0	70.2
Total	Lumens	48570.8	22.1	48593.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	411.2	0.8
10°-20°	1308.6	2.7
20°-30°	2241.5	4.6
30°-40°	3636.3	7.5
40°-50°	6132.4	12.6
50°-60°	9996.0	20.6
60°-70°	13406.2	27.6
70°-80°	10413.2	21.4
80°-90°	1025.5	2.1
90°-100°	19.5	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°	48570.8	100.0
0°-180°	48593.0	100.0



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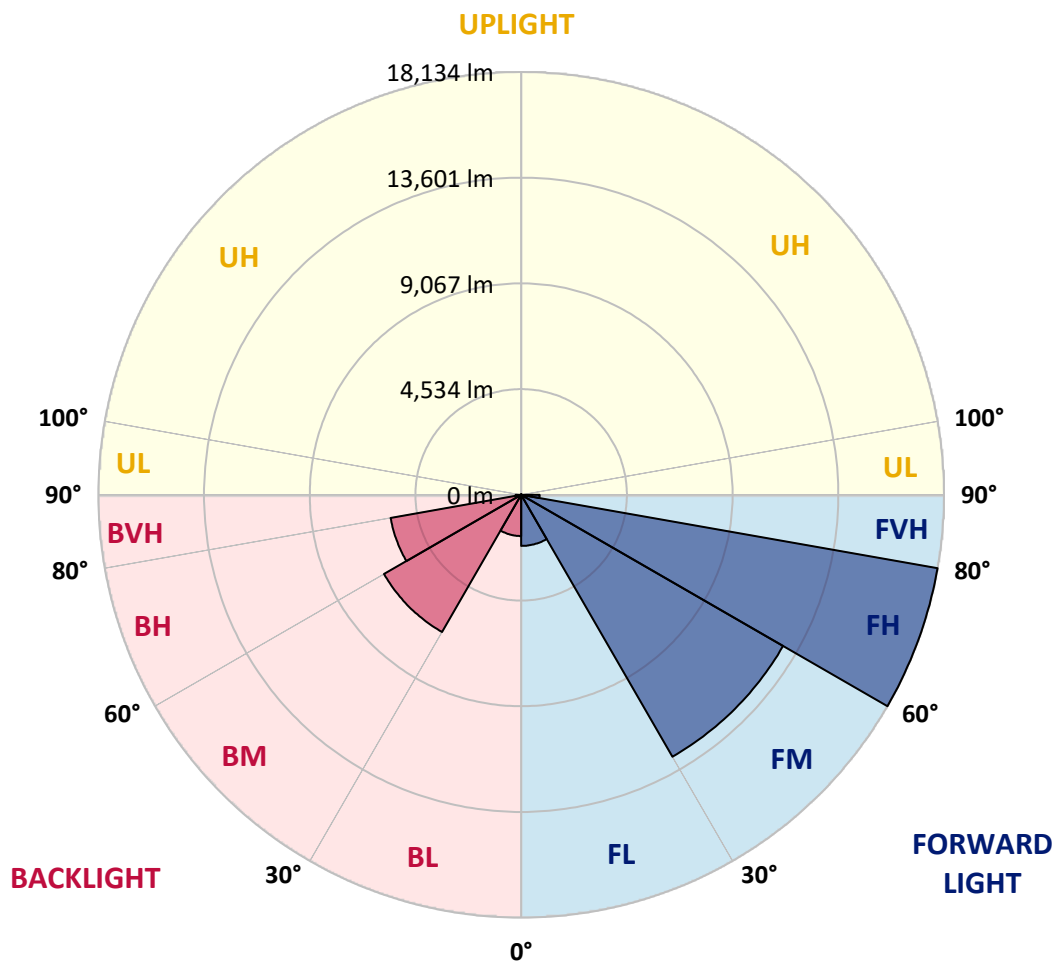
CATALOG NUMBER: CST-8-6-D-U-T5R-HSS-HM-EX120

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2191.8	4.5			
FM	(30°-60°)	12971.2	26.7			
FH	(60°-80°)	18134.3	37.3			G5
FVH	(80°-90°)	788.5	1.6			G5
BL	(0°-30°)	1769.5	3.6	B3/2500		
BM	(30°-60°)	6793.4	14.0	B4/8500		
BH	(60°-80°)	5685.0	11.7	B5		G5
BVH	(80°-90°)	237.0	0.5			G3/500
UL	(90°-100°)	19.5	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°	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4
2.5°	4306.8	4294.7	4292.7	4316.8	4240.4	4278.6	4244.5	4272.6	4254.5	4268.6	4270.6
5°	4365.0	4342.9	4328.9	4357.0	4308.8	4326.8	4288.7	4300.7	4250.5	4278.6	4282.6
7.5°	4449.4	4413.3	4409.2	4417.3	4375.1	4389.1	4326.8	4340.9	4304.7	4288.7	4302.7
10°	4564.0	4529.8	4503.7	4521.8	4465.5	4473.6	4407.2	4409.2	4383.1	4353.0	4377.1
12.5°	4628.3	4632.3	4620.3	4634.3	4588.1	4562.0	4515.8	4499.7	4473.6	4437.4	4425.3
15°	4789.1	4781.0	4756.9	4779.0	4773.0	4748.9	4692.6	4656.4	4600.2	4580.1	4560.0
17.5°	4986.0	4959.9	4939.8	4967.9	4998.1	4947.8	4893.6	4843.3	4769.0	4728.8	4704.7
20°	5193.0	5174.9	5154.8	5199.0	5209.1	5170.9	5130.7	5056.4	4969.9	4917.7	4867.5
22.5°	5424.1	5388.0	5394.0	5452.3	5434.2	5416.1	5363.8	5303.6	5199.0	5132.7	4988.0
25°	5663.3	5643.2	5671.3	5697.5	5683.4	5645.2	5619.1	5574.9	5458.3	5377.9	5166.9
27.5°	5960.7	5928.6	5964.7	5974.8	5962.7	5952.7	5916.5	5882.3	5755.7	5665.3	5402.0
30°	6310.4	6272.2	6330.5	6316.4	6304.4	6312.4	6290.3	6215.9	6103.4	5980.8	5717.5
32.5°	6726.4	6676.2	6742.5	6712.3	6684.2	6740.5	6688.2	6617.9	6485.2	6342.6	6085.3
35°	7208.7	7210.7	7244.9	7194.7	7184.6	7244.9	7210.7	7124.3	7001.7	6853.0	6487.3
37.5°	7793.6	7777.5	7863.9	7839.8	7803.6	7884.0	7894.0	7785.5	7564.4	7417.7	6985.7
40°	8505.0	8501.0	8529.1	8533.1	8523.1	8561.2	8579.3	8434.6	8292.0	8070.9	6591.8
42.5°	9264.6	9280.7	9331.0	9294.8	9343.0	9393.3	9399.3	9278.7	9073.7	7743.3	7001.7
45°	10177.0	10227.3	10261.4	10253.4	10275.5	10347.9	10353.9	10289.6	10088.6	8388.4	7745.3
47.5°	11224.1	11272.3	11282.4	11346.7	11326.6	11429.1	11415.0	11417.0	11202.0	9286.7	8555.2
50°	12427.9	12450.0	12532.4	12568.6	12518.3	12657.0	12620.8	12665.0	12399.7	10315.7	9425.4
52.5°	13706.0	13744.2	13778.4	13915.0	13850.7	13971.3	13923.1	14025.6	13718.1	11362.7	10392.1
55°	15159.0	15165.1	15223.3	15362.0	15277.6	15422.3	15352.0	15390.2	15145.0	12520.3	11398.9
57.5°	16698.5	16678.4	16700.5	16811.0	16734.6	16843.2	16815.0	16851.2	16622.1	13738.2	12134.5
60°	18221.8	18191.6	18223.8	18298.2	18193.7	18380.6	18280.1	18314.2	18067.0	14982.2	13183.5
62.5°	19753.2	19731.1	19694.9	19769.3	19616.5	19713.0	19755.2	19698.9	19481.9	16107.6	14095.9
65°	21397.1	21375.0	21242.3	21288.6	21015.3	20969.0	20985.1	21003.2	20858.5	17223.0	15096.7
67.5°	23394.7	23362.6	23113.4	22799.9	22406.0	22319.5	22327.6	22375.8	22395.9	18657.9	16268.4
68°	23619.8	23561.5	23284.2	22920.4	22508.4	22408.0	22397.9	22408.0	22418.0	18670.0	16256.3
70°	23045.0	23022.9	22811.9	22371.8	21949.8	21708.6	21499.6	21491.5	21395.1	17715.4	15358.0
72.5°	20450.5	20422.4	20171.2	19859.7	19598.4	19220.6	18949.3	18965.4	18806.6	15657.4	13442.8
75°	16549.7	16547.7	16246.3	15985.0	15989.0	15960.9	15870.5	16029.2	15864.4	13280.0	11465.2
77.5°	11533.6	11573.8	11553.7	11400.9	11616.0	11913.4	12237.0	12542.4	12448.0	10490.5	9142.0
80°	6025.0	6137.6	6535.5	6553.6	6704.3	6993.7	7214.8	7419.7	7433.8	5952.7	5281.4
82.5°	1601.7	1635.9	1770.5	1732.3	1720.3	1778.6	1826.8	1832.8	1836.9	1551.5	1449.0
85°	498.4	512.5	496.4	474.3	440.1	401.9	391.9	319.5	253.2	209.0	182.9
87.5°	353.7	377.8	341.6	321.5	285.4	271.3	243.2	190.9	148.7	104.5	70.3
90°	182.9	186.9	166.8	142.7	132.6	124.6	106.5	76.4	38.2	20.1	18.1
92.5°	92.4	94.5	82.4	70.3	60.3	52.3	40.2	22.1	12.1	6.0	2.0
95°	36.2	38.2	34.2	30.1	24.1	18.1	16.1	12.1	8.0	4.0	2.0
97.5°	12.1	12.1	12.1	10.0	10.0	10.0	10.0	8.0	6.0	4.0	2.0
100°	0.0	0.0	0.0	2.0	4.0	6.0	6.0	6.0	4.0	2.0	2.0
102.5°	0.0	0.0	0.0	0.0	0.0	2.0	4.0	4.0	4.0	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°	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4	4236.4
2.5°	4260.5	4248.5	4254.5	4204.3	4216.3	4184.2	4252.5	4234.4	4226.4	4254.5
5°	4270.6	4226.4	4262.5	4228.4	4234.4	4188.2	4244.5	4222.3	4220.3	4236.4
7.5°	4274.6	4252.5	4286.7	4230.4	4248.5	4230.4	4272.6	4250.5	4270.6	4284.6
10°	4330.9	4318.8	4314.8	4294.7	4308.8	4268.6	4320.8	4320.8	4330.9	4369.1
12.5°	4413.3	4397.2	4387.1	4351.0	4365.0	4353.0	4395.2	4403.2	4421.3	4437.4
15°	4525.8	4497.7	4487.6	4455.5	4465.5	4463.5	4493.7	4495.7	4535.9	4533.8
17.5°	4670.5	4630.3	4642.4	4618.3	4620.3	4604.2	4588.1	4588.1	4624.3	4632.3
20°	4843.3	4614.2	4312.8	4144.0	4113.8	4135.9	4222.3	4365.0	4186.2	4236.4
22.5°	4531.8	4324.8	4310.8	4272.6	4248.5	3709.9	3571.2	3527.0	3758.1	4156.0
25°	4572.0	4483.6	4457.5	4409.2	3697.8	3691.8	3651.6	3585.3	2930.1	2916.0
27.5°	4785.1	4698.6	4656.4	3862.6	3846.5	3844.5	3784.2	3119.0	2968.3	2988.4
30°	5034.3	4933.8	4178.1	4057.5	4043.5	4011.3	3665.7	3080.8	3078.8	3080.8
32.5°	5321.6	4988.0	4298.7	4292.7	4300.7	4202.2	3247.6	3235.6	3233.6	3253.7
35°	5715.5	4628.3	4600.2	4630.3	4588.1	3633.5	3442.6	3436.6	3438.6	3428.5
37.5°	5454.3	4990.0	4984.0	4984.0	4885.5	3717.9	3679.7	3707.9	3703.8	3689.8
40°	5564.8	5428.2	5392.0	5379.9	4129.9	4011.3	3989.2	4025.4	4031.4	4041.5
42.5°	6101.4	5976.8	5958.7	5816.0	4493.7	4455.5	4387.1	4425.3	4421.3	4433.4
45°	6760.6	6676.2	6597.8	5042.3	4984.0	4935.8	4865.4	4909.7	4921.7	4913.7
47.5°	7528.3	7435.8	6869.1	5544.7	5542.7	5504.5	5426.1	5462.3	5456.3	5456.3
50°	8300.0	8199.5	6240.1	6183.8	6163.7	6103.4	6039.1	6045.1	6047.1	6067.2
52.5°	9162.1	7323.3	6907.3	6794.7	6810.8	6770.6	6708.3	5078.5	6678.2	6696.3
55°	8563.3	7664.9	7640.8	7492.1	7530.3	7478.0	7437.8	5010.1	6642.0	7339.4
57.5°	8466.8	8402.5	8382.4	8229.7	8277.9	7781.5	8153.3	5482.4	4594.1	3356.2
60°	9204.3	9136.0	9124.0	8989.3	8985.3	6183.8	7411.7	3760.1	2938.2	2958.3
62.5°	9919.8	9809.3	9839.4	9680.6	6824.9	3768.2	3322.0	84.4	134.6	142.7
65°	10717.6	10532.7	10562.9	10416.2	7039.9	3973.1	3591.3	44.2	38.2	36.2
67.5°	11485.3	11161.8	11007.0	10852.3	7311.2	4184.2	3742.0	12.1	0.0	0.0
68°	11447.2	11105.5	10946.7	10800.0	7283.1	4178.1	3734.0	12.1	0.0	0.0
70°	10802.0	10494.6	10343.8	10231.3	6953.5	4035.4	3583.3	12.1	0.0	0.0
72.5°	9443.5	9272.7	9176.2	9077.7	6177.8	3609.4	3213.5	12.1	0.0	0.0
75°	8024.7	7976.4	7916.1	7699.1	5148.8	2954.2	2640.7	12.1	0.0	0.0
77.5°	6358.6	6356.6	6209.9	5954.7	3876.7	2168.4	1947.4	10.0	0.0	0.0
80°	3438.6	3748.1	3635.5	3504.9	2198.6	1179.7	1123.4	8.0	0.0	0.0
82.5°	966.7	914.4	878.2	822.0	462.2	257.2	251.2	8.0	0.0	0.0
85°	134.6	148.7	164.8	186.9	106.5	68.3	60.3	4.0	0.0	0.0
87.5°	76.4	86.4	106.5	110.5	40.2	32.2	10.0	0.0	0.0	0.0
90°	16.1	18.1	20.1	20.1	8.0	8.0	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)