

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: P522249

Luminaire Tested: **CST-CA8-480-760-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522249
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
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-EX120
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: 54571.1 lumens
Efficiency: N/A
Efficacy: 113.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

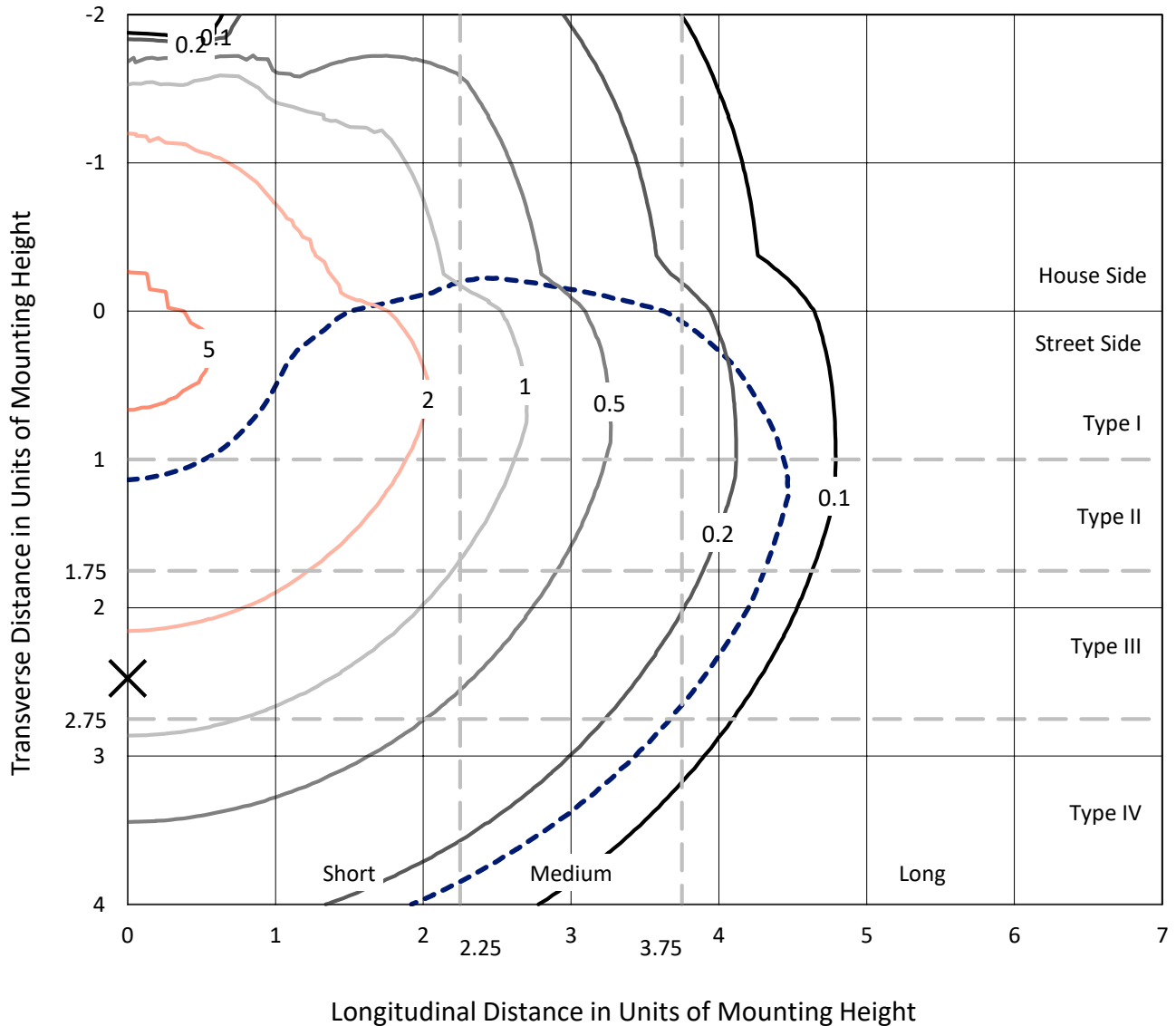
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

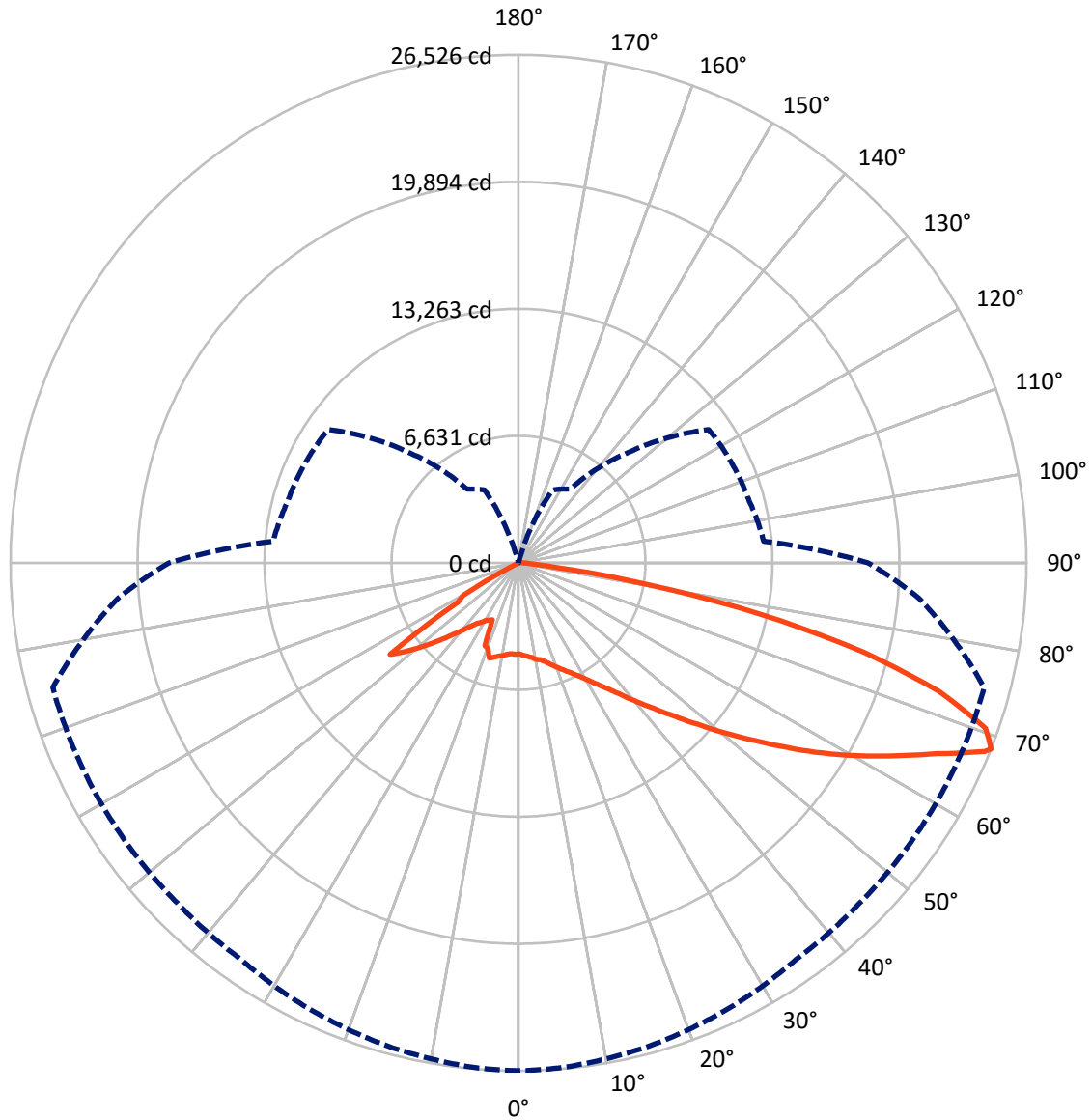
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.4 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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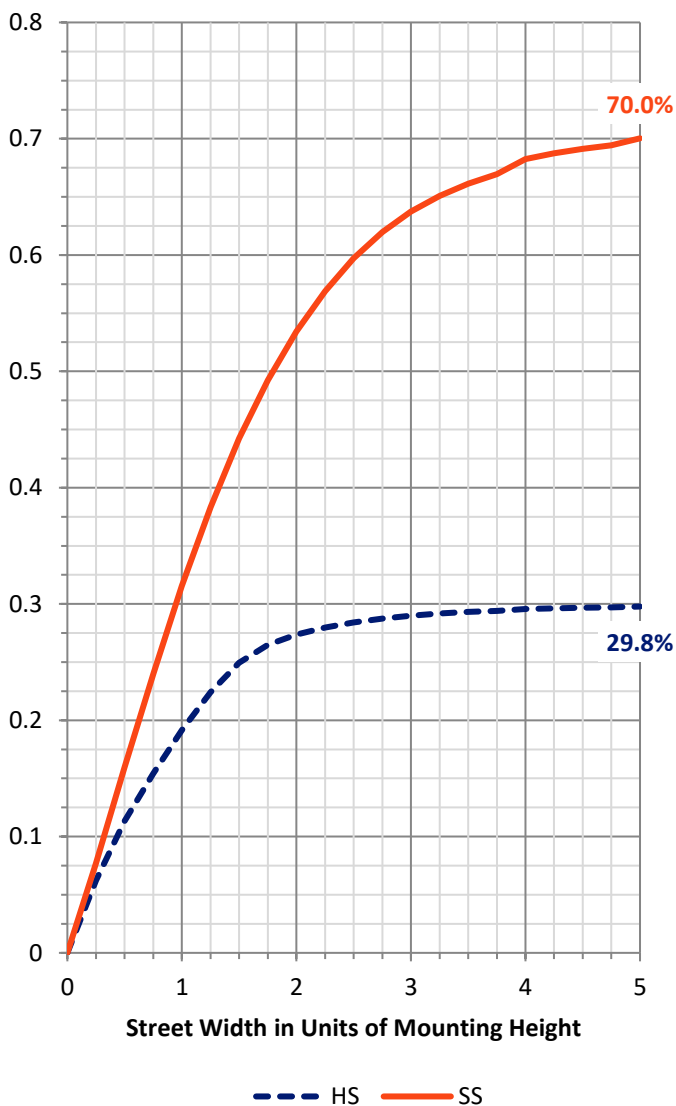
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16267.0	2.6	16269.6
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	38279.1	22.4	38301.5
	% Fixture	70.1	0.0	70.2
Total	Lumens	54546.1	24.9	54571.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	461.8	0.8
10°-20°	1469.6	2.7
20°-30°	2517.3	4.6
30°-40°	4083.6	7.5
40°-50°	6886.8	12.6
50°-60°	11225.7	20.6
60°-70°	15055.5	27.6
70°-80°	11694.2	21.4
80°-90°	1151.7	2.1
90°-100°	21.9	0.0
100°-110°	1.3	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°	54546.1	100.0
0°-180°	54571.1	100.0

Coefficient of Utilization

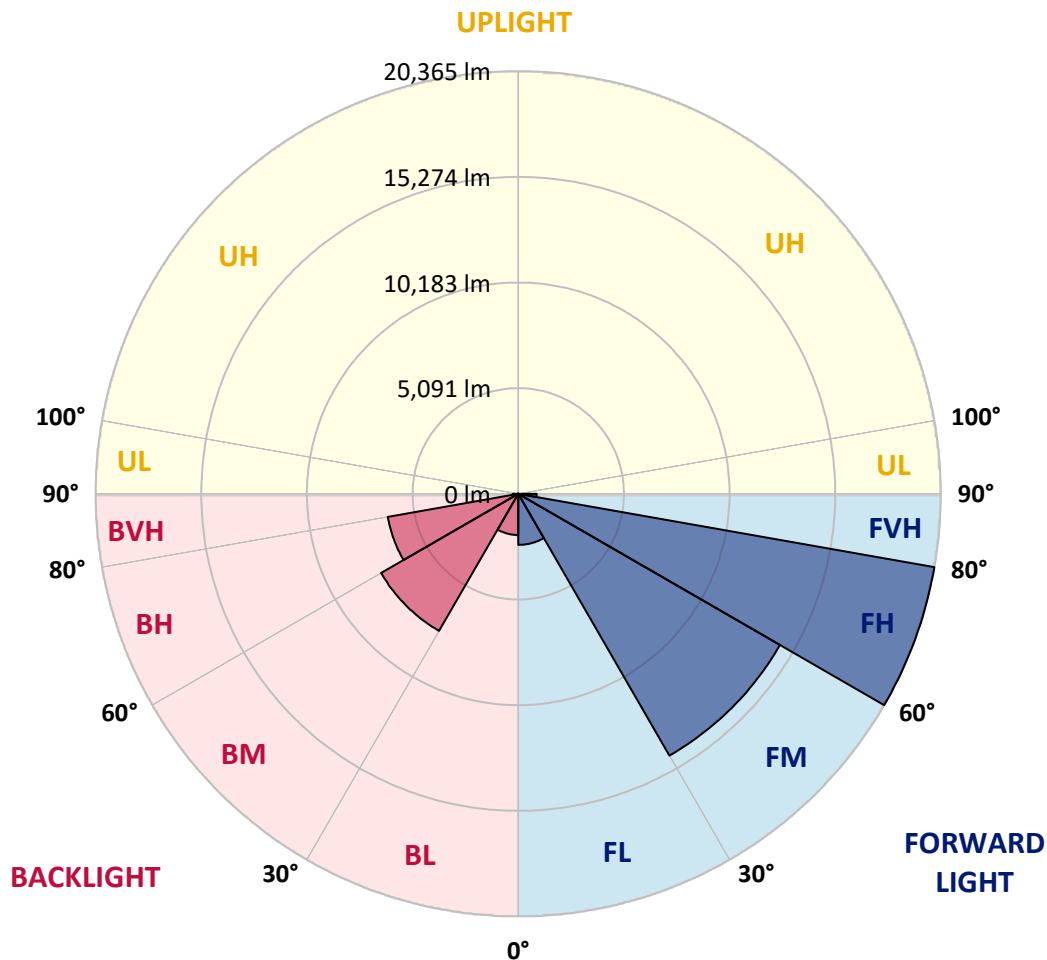


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2461.5	4.5			
FM (30°-60°)	14566.9	26.7			
FH (60°-80°)	20365.3	37.3			G5
FVH (80°-90°)	885.5	1.6			G5
BL (0°-30°)	1987.2	3.6	B3/2500		
BM (30°-60°)	7629.2	14.0	B4/8500		
BH (60°-80°)	6384.4	11.7	B5		G5
BVH (80°-90°)	266.2	0.5			G3/500
UL (90°-100°)	21.9	0.0		U2/50	
UH (100°-180°)	3.0	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°	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6
2.5°	4836.6	4823.0	4820.8	4847.9	4762.1	4805.0	4766.6	4798.2	4777.9	4793.7	4796.0
5°	4902.0	4877.2	4861.4	4893.0	4838.8	4859.1	4816.3	4829.8	4773.4	4805.0	4809.5
7.5°	4996.8	4956.2	4951.7	4960.7	4913.3	4929.1	4859.1	4874.9	4834.3	4816.3	4832.1
10°	5125.5	5087.1	5057.8	5078.1	5014.9	5023.9	4949.4	4951.7	4922.3	4888.5	4915.6
12.5°	5197.7	5202.2	5188.7	5204.5	5152.5	5123.2	5071.3	5053.2	5023.9	4983.3	4969.7
15°	5378.2	5369.2	5342.1	5367.0	5360.2	5333.1	5269.9	5229.3	5166.1	5143.5	5120.9
17.5°	5599.4	5570.1	5547.5	5579.1	5613.0	5556.5	5495.6	5439.2	5355.7	5310.5	5283.4
20°	5831.9	5811.6	5789.0	5838.6	5849.9	5807.0	5761.9	5678.4	5581.4	5522.7	5466.3
22.5°	6091.4	6050.8	6057.6	6123.0	6102.7	6082.4	6023.7	5956.0	5838.6	5764.2	5601.7
25°	6360.0	6337.4	6369.0	6398.4	6382.6	6339.7	6310.3	6260.7	6129.8	6039.5	5802.5
27.5°	6694.0	6657.9	6698.5	6709.8	6696.3	6685.0	6644.4	6606.0	6463.8	6362.3	6066.6
30°	7086.7	7043.8	7109.3	7093.5	7080.0	7089.0	7064.2	6980.6	6854.3	6716.6	6420.9
32.5°	7553.9	7497.5	7572.0	7538.1	7506.5	7569.7	7511.0	7432.0	7283.1	7122.8	6833.9
35°	8095.6	8097.8	8136.2	8079.8	8068.5	8136.2	8097.8	8000.8	7863.1	7696.1	7285.3
37.5°	8752.3	8734.3	8831.3	8804.2	8763.6	8853.9	8865.2	8743.3	8495.0	8330.3	7845.0
40°	9551.3	9546.8	9578.4	9582.9	9571.6	9614.5	9634.8	9472.3	9312.0	9063.8	7402.7
42.5°	10404.4	10422.4	10478.9	10438.2	10492.4	10548.8	10555.6	10420.2	10190.0	8695.9	7863.1
45°	11429.0	11485.5	11523.8	11514.8	11539.6	11620.9	11627.6	11555.4	11329.7	9420.4	8698.2
47.5°	12604.9	12659.1	12670.3	12742.6	12720.0	12835.1	12819.3	12821.5	12580.1	10429.2	9607.7
50°	13956.8	13981.6	14074.1	14114.8	14058.3	14214.1	14173.4	14223.1	13925.2	11584.8	10584.9
52.5°	15392.2	15435.1	15473.4	15626.9	15554.7	15690.1	15635.9	15751.0	15405.7	12760.6	11670.5
55°	17023.9	17030.7	17096.2	17251.9	17157.1	17319.6	17240.6	17283.5	17008.1	14060.6	12801.2
57.5°	18752.7	18730.2	18755.0	18879.1	18793.4	18915.2	18883.6	18924.3	18667.0	15428.3	13627.3
60°	20463.5	20429.6	20465.7	20549.2	20431.9	20641.8	20528.9	20567.3	20289.7	16825.3	14805.4
62.5°	22183.2	22158.4	22117.8	22201.3	22029.8	22138.1	22185.5	22122.3	21878.6	18089.2	15830.0
65°	24029.4	24004.6	23855.6	23907.5	23600.6	23548.7	23566.7	23587.0	23424.5	19341.8	16954.0
67.5°	26272.8	26236.7	25956.8	25604.7	25162.4	25065.3	25074.4	25128.5	25151.1	20953.2	18269.7
68°	26525.6	26460.1	26148.6	25740.1	25277.5	25164.6	25153.3	25164.6	25175.9	20966.8	18256.2
70°	25880.1	25855.2	25618.3	25124.0	24650.1	24379.2	24144.5	24135.5	24027.1	19894.7	17247.4
72.5°	22966.4	22934.8	22652.7	22302.9	22009.5	21585.2	21280.5	21298.5	21120.2	17583.6	15096.5
75°	18585.7	18583.5	18244.9	17951.5	17956.0	17924.4	17822.9	18001.2	17816.1	14913.7	12875.7
77.5°	12952.5	12997.6	12975.0	12803.5	13045.0	13379.0	13742.4	14085.4	13979.3	11781.1	10266.7
80°	6766.2	6892.6	7339.5	7359.8	7529.1	7854.1	8102.3	8332.5	8348.3	6685.0	5931.2
82.5°	1798.8	1837.1	1988.3	1945.5	1931.9	1997.4	2051.5	2058.3	2062.8	1742.3	1627.2
85°	559.7	575.5	557.5	532.6	494.3	451.4	440.1	358.8	284.4	234.7	205.4
87.5°	397.2	424.3	383.7	361.1	320.5	304.7	273.1	214.4	167.0	117.4	79.0
90°	205.4	209.9	187.3	160.2	149.0	139.9	119.6	85.8	42.9	22.6	20.3
92.5°	103.8	106.1	92.5	79.0	67.7	58.7	45.1	24.8	13.5	6.8	2.3
95°	40.6	42.9	38.4	33.9	27.1	20.3	18.1	13.5	9.0	4.5	2.3
97.5°	13.5	13.5	13.5	11.3	11.3	11.3	11.3	9.0	6.8	4.5	2.3
100°	0.0	0.0	0.0	2.3	4.5	6.8	6.8	6.8	4.5	2.3	2.3
102.5°	0.0	0.0	0.0	0.0	0.0	2.3	4.5	4.5	4.5	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	0.0	2.3	2.3	2.3
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
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	2.3
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	2.3	2.3	2.3
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	2.3	2.3	2.3	2.3
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
165°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
170°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
175°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	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°	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6	4757.6
2.5°	4784.7	4771.1	4777.9	4721.5	4735.0	4698.9	4775.6	4755.3	4746.3	4777.9
5°	4796.0	4746.3	4786.9	4748.6	4755.3	4703.4	4766.6	4741.8	4739.5	4757.6
7.5°	4800.5	4775.6	4814.0	4750.8	4771.1	4750.8	4798.2	4773.4	4796.0	4811.7
10°	4863.7	4850.1	4845.6	4823.0	4838.8	4793.7	4852.4	4852.4	4863.7	4906.5
12.5°	4956.2	4938.1	4926.9	4886.2	4902.0	4888.5	4935.9	4944.9	4965.2	4983.3
15°	5082.6	5051.0	5039.7	5003.6	5014.9	5012.6	5046.5	5048.7	5093.9	5091.6
17.5°	5245.1	5199.9	5213.5	5186.4	5188.7	5170.6	5152.5	5152.5	5193.2	5202.2
20°	5439.2	5181.9	4843.3	4653.8	4619.9	4644.7	4741.8	4902.0	4701.2	4757.6
22.5°	5089.3	4856.9	4841.1	4798.2	4771.1	4166.3	4010.5	3960.9	4220.4	4667.3
25°	5134.5	5035.2	5005.8	4951.7	4152.7	4146.0	4100.8	4026.3	3290.6	3274.8
27.5°	5373.7	5276.7	5229.3	4337.8	4319.7	4317.5	4249.8	3502.7	3333.5	3356.0
30°	5653.6	5540.7	4692.1	4556.7	4540.9	4504.8	4116.6	3459.9	3457.6	3459.9
32.5°	5976.3	5601.7	4827.5	4820.8	4829.8	4719.2	3647.2	3633.6	3631.4	3653.9
35°	6418.7	5197.7	5166.1	5199.9	5152.5	4080.5	3866.1	3859.3	3861.6	3850.3
37.5°	6125.3	5603.9	5597.2	5597.2	5486.6	4175.3	4132.4	4164.0	4159.5	4143.7
40°	6249.4	6095.9	6055.3	6041.8	4638.0	4504.8	4480.0	4520.6	4527.4	4538.7
42.5°	6852.0	6712.1	6691.8	6531.5	5046.5	5003.6	4926.9	4969.7	4965.2	4978.8
45°	7592.3	7497.5	7409.5	5662.6	5597.2	5543.0	5464.0	5513.7	5527.2	5518.2
47.5°	8454.4	8350.6	7714.1	6226.8	6224.6	6181.7	6093.7	6134.3	6127.5	6127.5
50°	9321.1	9208.2	7007.7	6944.5	6922.0	6854.3	6782.0	6788.8	6791.1	6813.6
52.5°	10289.3	8224.2	7757.0	7630.6	7648.7	7603.6	7533.6	5703.2	7499.7	7520.0
55°	9616.7	8607.9	8580.8	8413.8	8456.7	8398.0	8352.9	5626.5	7459.1	8242.3
57.5°	9508.4	9436.2	9413.6	9242.1	9296.2	8738.8	9156.3	6156.9	5159.3	3769.1
60°	10336.7	10259.9	10246.4	10095.2	10090.7	6944.5	8323.5	4222.7	3299.6	3322.2
62.5°	11140.1	11016.0	11049.9	10871.6	7664.5	4231.7	3730.7	94.8	151.2	160.2
65°	12036.1	11828.5	11862.4	11697.6	7906.0	4461.9	4033.1	49.7	42.9	40.6
67.5°	12898.3	12534.9	12361.1	12187.4	8210.7	4698.9	4202.4	13.5	0.0	0.0
68°	12855.4	12471.7	12293.4	12128.7	8179.1	4692.1	4193.4	13.5	0.0	0.0
70°	12130.9	11785.6	11616.4	11490.0	7808.9	4531.9	4024.1	13.5	0.0	0.0
72.5°	10605.3	10413.4	10305.1	10194.5	6937.8	4053.4	3608.8	13.5	0.0	0.0
75°	9011.9	8957.7	8890.0	8646.3	5782.2	3317.7	2965.6	13.5	0.0	0.0
77.5°	7140.9	7138.6	6973.9	6687.2	4353.6	2435.2	2187.0	11.3	0.0	0.0
80°	3861.6	4209.2	4082.8	3936.1	2469.1	1324.8	1261.6	9.0	0.0	0.0
82.5°	1085.6	1026.9	986.3	923.1	519.1	288.9	282.1	9.0	0.0	0.0
85°	151.2	167.0	185.1	209.9	119.6	76.7	67.7	4.5	0.0	0.0
87.5°	85.8	97.0	119.6	124.1	45.1	36.1	11.3	0.0	0.0	0.0
90°	18.1	20.3	22.6	22.6	9.0	9.0	0.0	0.0	0.0	0.0
92.5°	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.3	2.3	2.3	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°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.3	2.3	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)