

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: P522243

Luminaire Tested: **CST-CA8-480-740-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522243
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-CA8-480-740-U-T5R-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 54750 lumens
Efficiency: N/A
Efficacy: 113.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

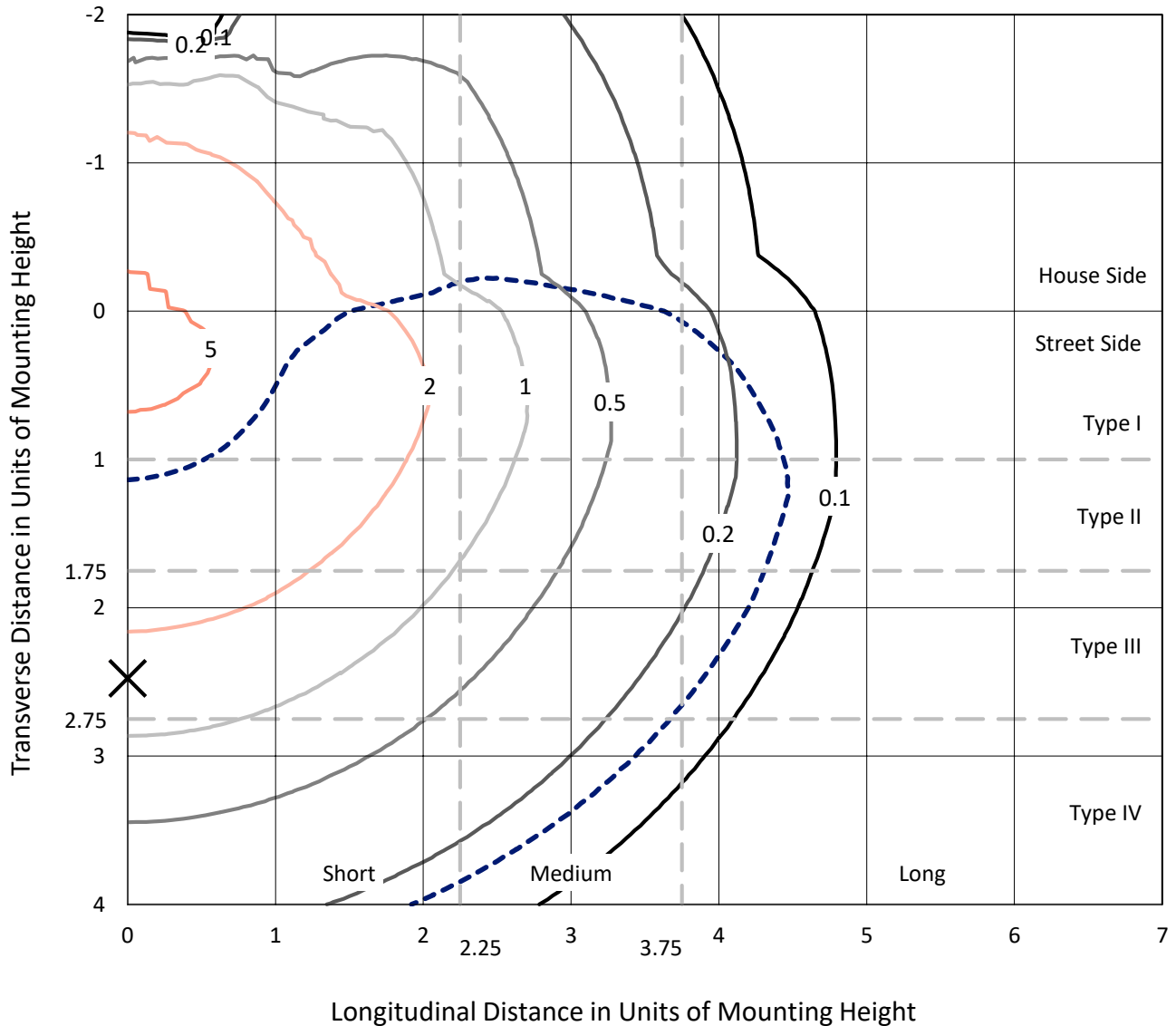
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

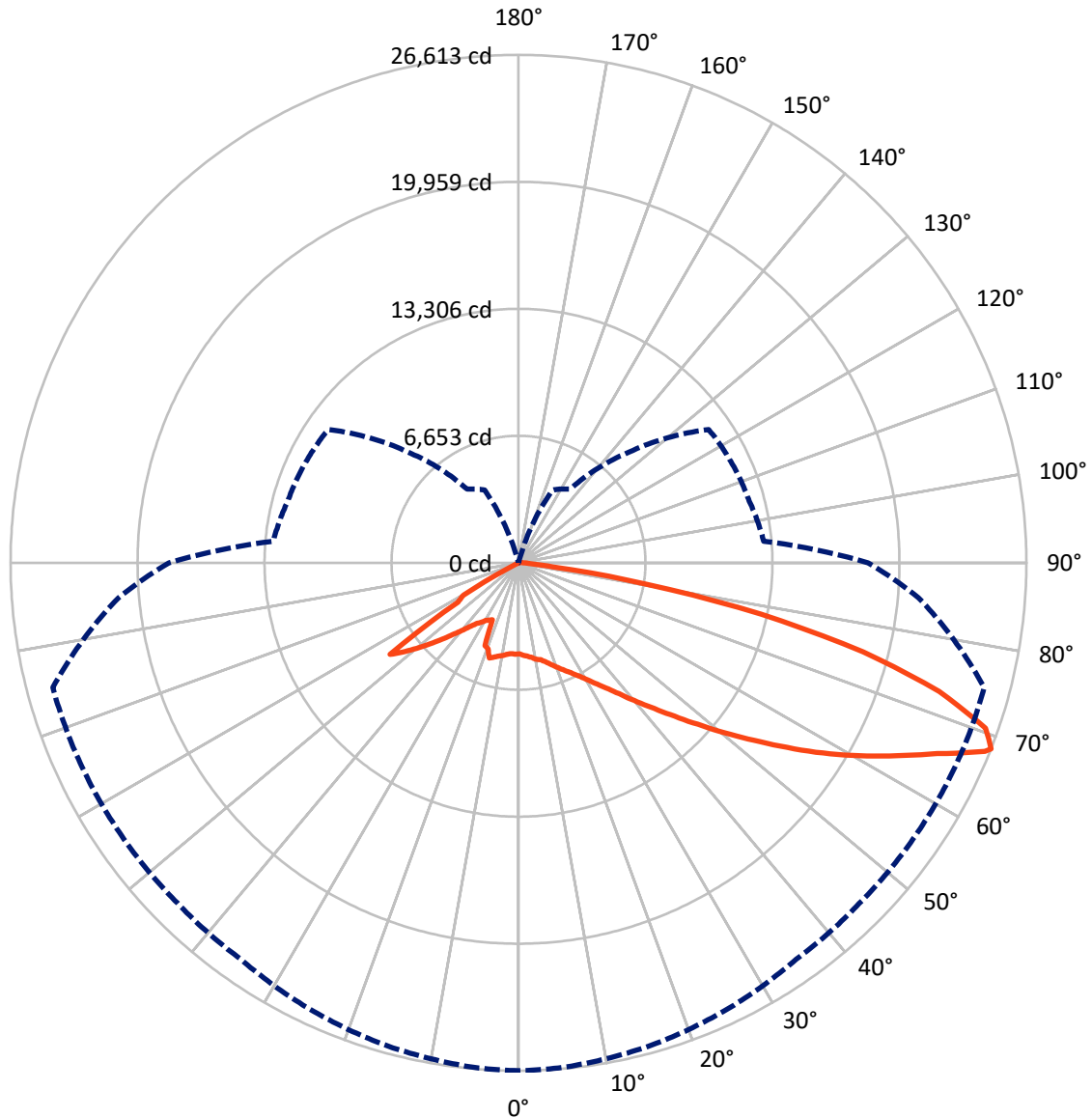
× Max cd
 - - - 1/2 Max cd



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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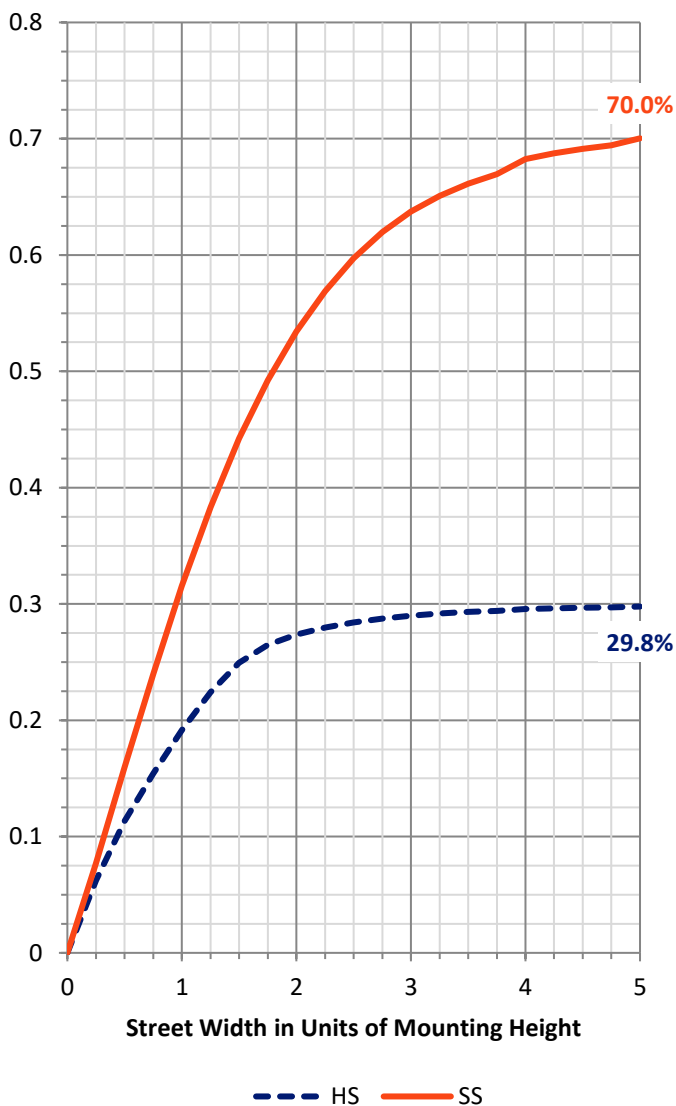
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16320.4	2.6	16322.9
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	38404.7	22.4	38427.1
	% Fixture	70.1	0.0	70.2
Total	Lumens	54725.0	25.0	54750.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	463.3	0.8
10°-20°	1474.4	2.7
20°-30°	2525.5	4.6
30°-40°	4097.0	7.5
40°-50°	6909.4	12.6
50°-60°	11262.5	20.6
60°-70°	15104.9	27.6
70°-80°	11732.6	21.4
80°-90°	1155.5	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°	54725.0	100.0
0°-180°	54750.0	100.0

Coefficient of Utilization

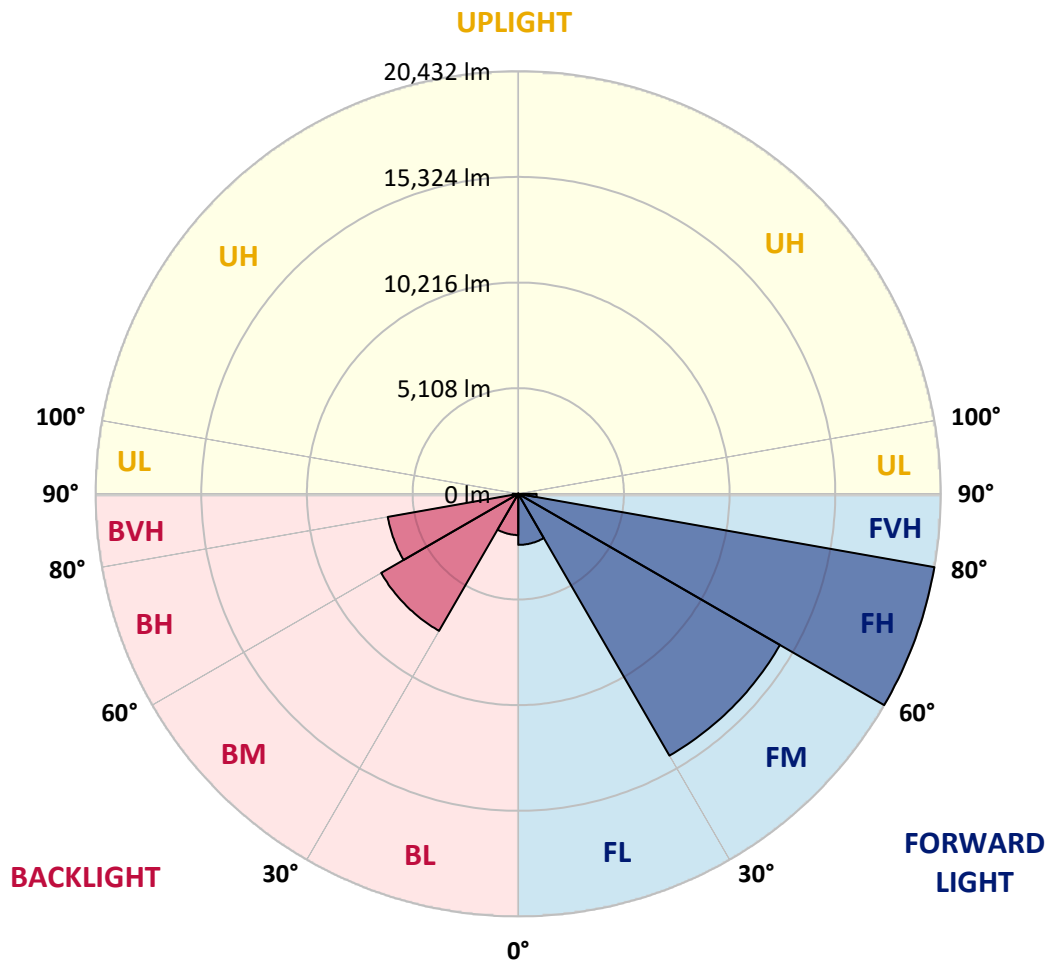


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2469.5	4.5			
FM (30°-60°)	14614.7	26.7			
FH (60°-80°)	20432.1	37.3			G5
FVH (80°-90°)	888.4	1.6			G5
BL (0°-30°)	1993.7	3.6	B3/2500		
BM (30°-60°)	7654.2	14.0	B4/8500		
BH (60°-80°)	6405.4	11.7	B5		G5
BVH (80°-90°)	267.1	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°	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2
2.5°	4852.4	4838.9	4836.6	4863.8	4777.7	4820.7	4782.2	4813.9	4793.6	4809.4	4811.7
5°	4918.1	4893.2	4877.3	4909.0	4854.7	4875.1	4832.1	4845.6	4789.0	4820.7	4825.3
7.5°	5013.2	4972.4	4967.9	4977.0	4929.4	4945.3	4875.1	4890.9	4850.2	4832.1	4847.9
10°	5142.3	5103.8	5074.3	5094.7	5031.3	5040.4	4965.7	4967.9	4938.5	4904.5	4931.7
12.5°	5214.7	5219.3	5205.7	5221.5	5169.4	5140.0	5087.9	5069.8	5040.4	4999.6	4986.0
15°	5395.9	5386.8	5359.6	5384.6	5377.8	5350.6	5287.2	5246.4	5183.0	5160.4	5137.7
17.5°	5617.8	5588.3	5565.7	5597.4	5631.4	5574.8	5513.6	5457.0	5373.2	5327.9	5300.8
20°	5851.0	5830.6	5808.0	5857.8	5869.1	5826.1	5780.8	5697.0	5599.7	5540.8	5484.2
22.5°	6111.4	6070.6	6077.4	6143.1	6122.7	6102.3	6043.5	5975.5	5857.8	5783.1	5620.0
25°	6380.9	6358.2	6389.9	6419.3	6403.5	6360.5	6331.0	6281.2	6149.9	6059.3	5821.6
27.5°	6716.0	6679.7	6720.5	6731.8	6718.2	6706.9	6666.2	6627.7	6485.0	6383.1	6086.5
30°	7110.0	7066.9	7132.6	7116.8	7103.2	7112.2	7087.3	7003.5	6876.7	6738.6	6442.0
32.5°	7578.7	7522.1	7596.8	7562.8	7531.1	7594.5	7535.7	7456.4	7307.0	7146.2	6856.4
35°	8122.1	8124.4	8162.9	8106.3	8094.9	8162.9	8124.4	8027.0	7888.9	7721.3	7309.2
37.5°	8781.0	8762.9	8860.3	8833.1	8792.4	8882.9	8894.3	8772.0	8522.9	8357.6	7870.8
40°	9582.6	9578.1	9609.8	9614.3	9603.0	9646.0	9666.4	9503.4	9342.6	9093.5	7427.0
42.5°	10438.5	10456.6	10513.2	10472.5	10526.8	10583.4	10590.2	10454.4	10223.4	8724.4	7888.9
45°	11466.5	11523.1	11561.6	11552.6	11577.5	11659.0	11665.8	11593.3	11366.9	9451.3	8726.7
47.5°	12646.2	12700.6	12711.9	12784.4	12761.7	12877.2	12861.3	12863.6	12621.3	10463.4	9639.2
50°	14002.6	14027.5	14120.3	14161.1	14104.5	14260.7	14219.9	14269.7	13970.9	11622.8	10619.7
52.5°	15442.7	15485.7	15524.2	15678.2	15605.7	15741.6	15687.2	15802.7	15456.3	12802.5	11708.8
55°	17079.8	17086.6	17152.2	17308.5	17213.4	17376.4	17297.1	17340.2	17063.9	14106.7	12843.2
57.5°	18814.2	18791.6	18816.5	18941.0	18855.0	18977.3	18945.6	18986.3	18728.2	15478.9	13672.0
60°	20530.6	20496.6	20532.9	20616.6	20498.9	20709.5	20596.3	20634.8	20356.2	16880.5	14853.9
62.5°	22256.0	22231.1	22190.3	22274.1	22102.0	22210.7	22258.3	22194.9	21950.3	18148.5	15881.9
65°	24108.2	24083.3	23933.9	23985.9	23678.0	23625.9	23644.0	23664.4	23501.4	19405.2	17009.6
67.5°	26359.0	26322.7	26042.0	25688.7	25244.9	25147.5	25156.6	25210.9	25233.6	21022.0	18329.7
68°	26612.6	26546.9	26234.4	25824.6	25360.4	25247.2	25235.9	25247.2	25258.5	21035.5	18316.1
70°	25965.0	25940.1	25702.3	25206.4	24730.9	24459.2	24223.7	24214.6	24106.0	19960.0	17303.9
72.5°	23041.7	23010.0	22727.0	22376.0	22081.7	21656.0	21350.3	21368.4	21189.5	17641.3	15146.0
75°	18646.7	18644.4	18304.8	18010.4	18014.9	17983.2	17881.3	18060.2	17874.5	14962.6	12917.9
77.5°	12994.9	13040.2	13017.6	12845.5	13087.8	13422.9	13787.4	14131.6	14025.2	11819.8	10300.4
80°	6788.4	6915.2	7363.6	7383.9	7553.8	7879.8	8128.9	8359.9	8375.7	6706.9	5950.6
82.5°	1804.7	1843.2	1994.9	1951.8	1938.3	2003.9	2058.3	2065.1	2069.6	1748.1	1632.6
85°	561.6	577.4	559.3	534.4	495.9	452.9	441.5	360.0	285.3	235.5	206.1
87.5°	398.5	425.7	384.9	362.3	321.5	305.7	274.0	215.1	167.6	117.7	79.3
90°	206.1	210.6	187.9	160.8	149.4	140.4	120.0	86.0	43.0	22.6	20.4
92.5°	104.2	106.4	92.8	79.3	67.9	58.9	45.3	24.9	13.6	6.8	2.3
95°	40.8	43.0	38.5	34.0	27.2	20.4	18.1	13.6	9.1	4.5	2.3
97.5°	13.6	13.6	13.6	11.3	11.3	11.3	11.3	9.1	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°	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2	4773.2
2.5°	4800.4	4786.8	4793.6	4737.0	4750.5	4714.3	4791.3	4770.9	4761.9	4793.6
5°	4811.7	4761.9	4802.6	4764.1	4770.9	4718.8	4782.2	4757.3	4755.1	4773.2
7.5°	4816.2	4791.3	4829.8	4766.4	4786.8	4766.4	4813.9	4789.0	4811.7	4827.5
10°	4879.6	4866.0	4861.5	4838.9	4854.7	4809.4	4868.3	4868.3	4879.6	4922.6
12.5°	4972.4	4954.3	4943.0	4902.3	4918.1	4904.5	4952.1	4961.1	4981.5	4999.6
15°	5099.3	5067.5	5056.2	5020.0	5031.3	5029.1	5063.0	5065.3	5110.6	5108.3
17.5°	5262.3	5217.0	5230.6	5203.4	5205.7	5187.6	5169.4	5169.4	5210.2	5219.3
20°	5457.0	5198.9	4859.2	4669.0	4635.1	4660.0	4757.3	4918.1	4716.6	4773.2
22.5°	5106.0	4872.8	4857.0	4813.9	4786.8	4179.9	4023.7	3973.9	4234.3	4682.6
25°	5151.3	5051.7	5022.3	4967.9	4166.4	4159.6	4114.3	4039.5	3301.4	3285.5
27.5°	5391.3	5294.0	5246.4	4352.0	4333.9	4331.6	4263.7	3514.2	3344.4	3367.0
30°	5672.1	5558.9	4707.5	4571.7	4555.8	4519.6	4130.1	3471.2	3468.9	3471.2
32.5°	5995.9	5620.0	4843.4	4836.6	4845.6	4734.7	3659.1	3645.6	3643.3	3665.9
35°	6439.7	5214.7	5183.0	5217.0	5169.4	4093.9	3878.8	3872.0	3874.3	3862.9
37.5°	6145.4	5622.3	5615.5	5615.5	5504.6	4189.0	4146.0	4177.7	4173.1	4157.3
40°	6269.9	6115.9	6075.2	6061.6	4653.2	4519.6	4494.7	4535.4	4542.2	4553.5
42.5°	6874.5	6734.1	6713.7	6552.9	5063.0	5020.0	4943.0	4986.0	4981.5	4995.1
45°	7617.2	7522.1	7433.8	5681.2	5615.5	5561.2	5481.9	5531.7	5545.3	5536.3
47.5°	8482.1	8378.0	7739.4	6247.3	6245.0	6202.0	6113.7	6154.4	6147.6	6147.6
50°	9351.6	9238.4	7030.7	6967.3	6944.7	6876.7	6804.3	6811.1	6813.3	6836.0
52.5°	10323.0	8251.2	7782.5	7655.7	7673.8	7628.5	7558.3	5721.9	7524.3	7544.7
55°	9648.3	8636.1	8608.9	8441.4	8484.4	8425.5	8380.3	5645.0	7483.6	8269.3
57.5°	9539.6	9467.1	9444.5	9272.4	9326.7	8767.4	9186.3	6177.1	5176.2	3781.4
60°	10370.6	10293.6	10280.0	10128.3	10123.8	6967.3	8350.8	4236.5	3310.4	3333.1
62.5°	11176.7	11052.1	11086.1	10907.2	7689.6	4245.6	3742.9	95.1	151.7	160.8
65°	12075.6	11867.3	11901.3	11736.0	7931.9	4476.6	4046.3	49.8	43.0	40.8
67.5°	12940.6	12576.0	12401.7	12227.3	8237.6	4714.3	4216.2	13.6	0.0	0.0
68°	12897.6	12512.6	12333.8	12168.5	8205.9	4707.5	4207.1	13.6	0.0	0.0
70°	12170.7	11824.3	11654.5	11527.7	7834.5	4546.8	4037.3	13.6	0.0	0.0
72.5°	10640.0	10447.6	10338.9	10227.9	6960.5	4066.7	3620.6	13.6	0.0	0.0
75°	9041.4	8987.1	8919.2	8674.6	5801.2	3328.6	2975.3	13.6	0.0	0.0
77.5°	7164.3	7162.0	6996.8	6709.2	4367.9	2443.2	2194.1	11.3	0.0	0.0
80°	3874.3	4223.0	4096.2	3949.0	2477.2	1329.2	1265.8	9.1	0.0	0.0
82.5°	1089.1	1030.3	989.5	926.1	520.8	289.8	283.0	9.1	0.0	0.0
85°	151.7	167.6	185.7	210.6	120.0	77.0	67.9	4.5	0.0	0.0
87.5°	86.0	97.4	120.0	124.5	45.3	36.2	11.3	0.0	0.0	0.0
90°	18.1	20.4	22.6	22.6	9.1	9.1	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)