

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: P522160

Luminaire Tested: **CST-CA10-630-760-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522160
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-630-760-U-T5R-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 60827 lumens
Efficiency: N/A
Efficacy: 96.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

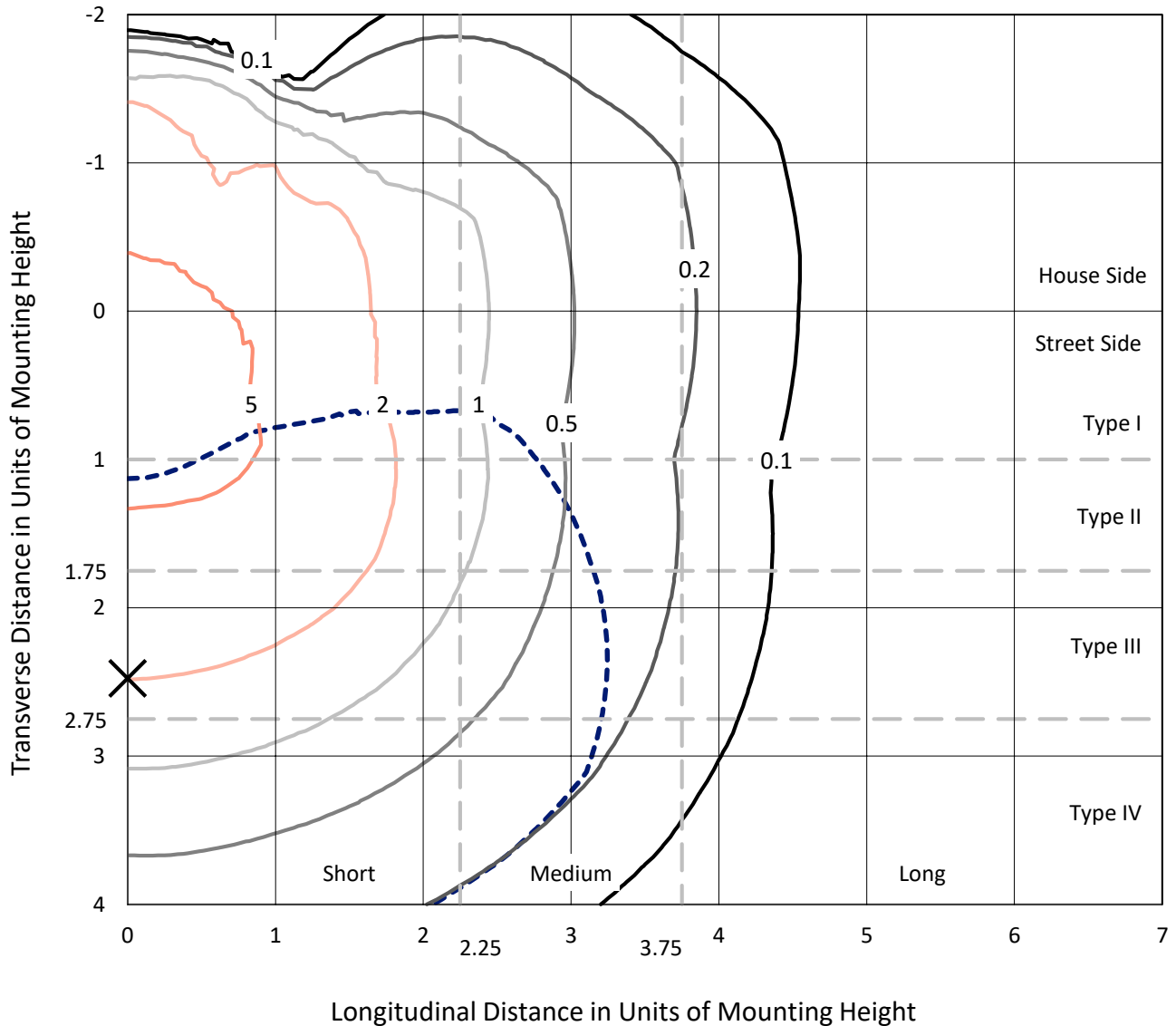
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

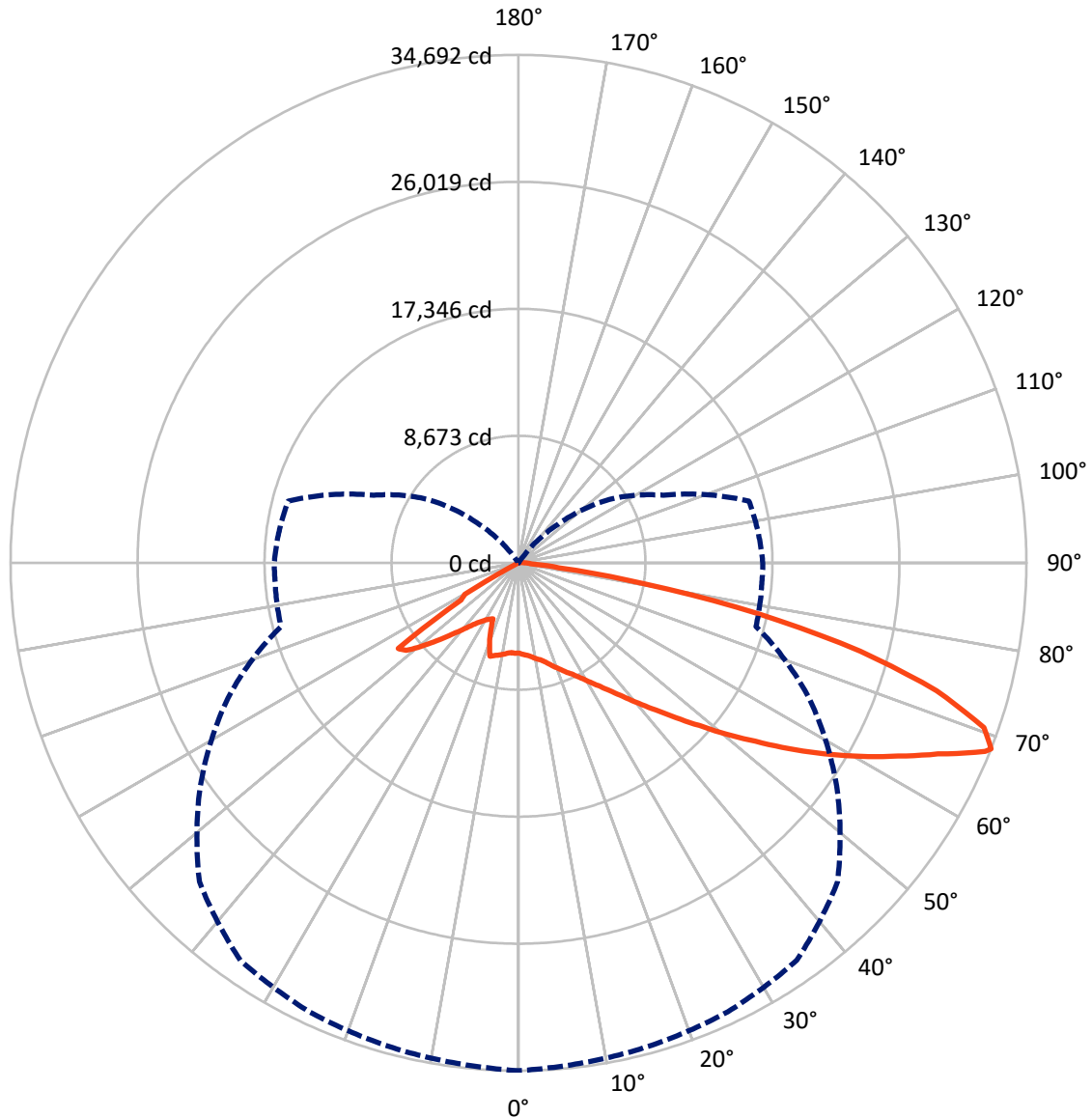
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 7.1 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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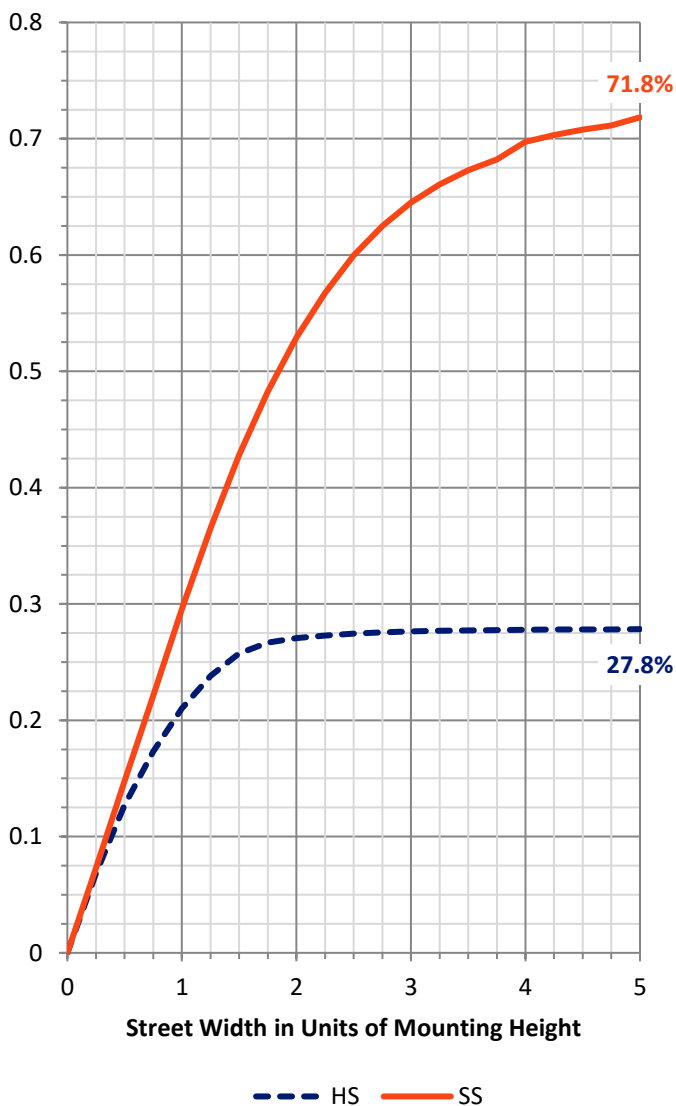
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16989.1	0.4	16989.4
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	43802.7	34.8	43837.6
	% Fixture	72.0	0.1	72.1
Total	Lumens	60791.8	35.2	60827.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	598.1	1.0
10°-20°	1895.2	3.1
20°-30°	3208.6	5.3
30°-40°	5083.1	8.4
40°-50°	8310.6	13.7
50°-60°	12729.7	20.9
60°-70°	15652.1	25.7
70°-80°	12094.2	19.9
80°-90°	1220.3	2.0
90°-100°	34.7	0.1
100°-110°	0.6	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°	60791.8	99.9
0°-180°	60827.0	100.0

Coefficient of Utilization

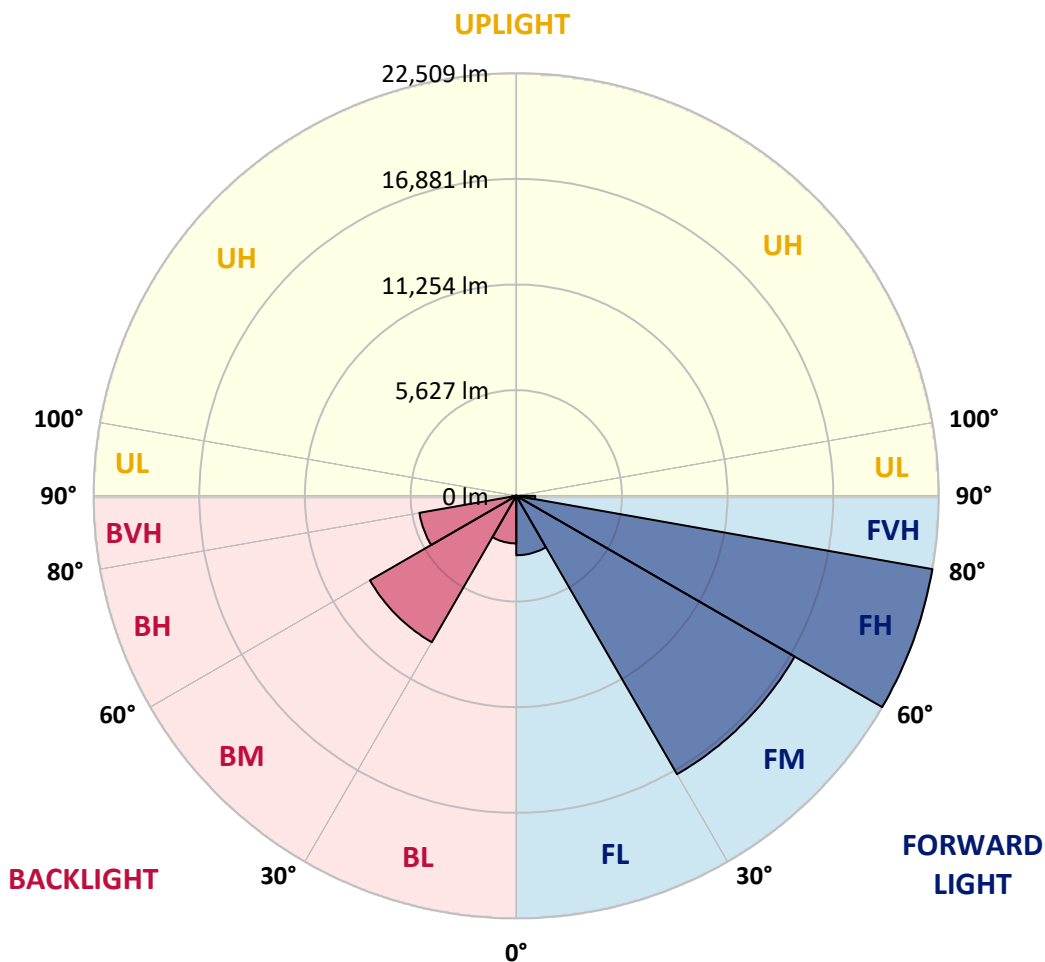


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3166.1	5.2			
FM	(30°-60°)	17121.8	28.1			
FH	(60°-80°)	22508.5	37.0			G5
FVH	(80°-90°)	1006.4	1.7			G5
BL	(0°-30°)	2535.8	4.2	B4/5000		
BM	(30°-60°)	9001.6	14.8	B5		
BH	(60°-80°)	5237.8	8.6	B5		G5
BVH	(80°-90°)	213.9	0.4			G2/225
UL	(90°-100°)	34.7	0.1		U2/50	
UH	(100°-180°)	0.6	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°	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4
2.5°	6273.8	6262.1	6250.3	6276.7	6174.1	6218.1	6182.9	6215.2	6191.7	6218.1	6209.3
5°	6355.8	6344.1	6308.9	6338.2	6270.8	6288.4	6244.5	6256.2	6177.1	6224.0	6221.0
7.5°	6490.6	6458.4	6434.9	6434.9	6376.3	6373.4	6303.1	6306.0	6244.5	6238.6	6250.3
10°	6672.3	6648.9	6584.4	6590.2	6508.2	6496.5	6408.6	6405.6	6355.8	6326.5	6352.9
12.5°	6807.1	6830.5	6771.9	6771.9	6689.9	6631.3	6569.7	6528.7	6490.6	6446.7	6426.2
15°	7053.2	7076.7	6997.6	6994.6	6962.4	6892.1	6824.7	6736.8	6669.4	6648.9	6616.6
17.5°	7372.6	7358.0	7290.6	7293.5	7299.4	7185.1	7117.7	7003.4	6906.7	6836.4	6818.8
20°	7697.9	7697.9	7624.6	7648.1	7618.8	7513.3	7469.3	7311.1	7176.3	7100.1	7038.6
22.5°	8061.3	8046.6	7996.8	8046.6	7988.0	7882.5	7809.3	7651.0	7478.1	7047.4	6871.6
25°	8407.0	8398.2	8418.8	8433.4	8360.1	8228.3	8178.5	8011.4	7530.9	6965.3	6610.8
27.5°	8843.6	8814.3	8861.2	8890.5	8817.3	8703.0	8597.5	8410.0	7393.2	6947.7	6909.7
30°	9403.3	9338.9	9406.3	9420.9	9344.7	9274.4	9116.2	8178.5	7440.0	7311.1	7299.4
32.5°	10001.1	9924.9	10012.8	10024.6	9924.9	9866.3	9467.8	8058.3	7900.1	7750.6	7765.3
35°	10710.3	10710.3	10754.2	10760.1	10686.8	10587.2	9069.3	8644.4	8503.7	8366.0	8363.1
37.5°	11574.7	11548.3	11665.5	11735.9	11656.7	11372.5	9649.5	9450.2	9233.4	9057.6	8694.2
40°	12617.9	12664.8	12697.0	12767.3	12691.1	12052.3	10496.3	10270.7	10100.7	9511.8	8594.6
42.5°	13743.1	13754.8	13825.2	13913.1	13913.1	13239.1	11486.8	11293.4	11073.6	9300.8	8887.6
45°	15088.1	15061.7	15196.5	15337.2	15299.1	14601.7	12638.4	12494.8	11466.3	9913.2	9916.1
47.5°	16614.8	16582.6	16776.0	16960.6	16770.1	16113.7	13904.3	13792.9	11067.7	10950.5	10927.1
50°	18378.8	18299.7	18522.4	18768.6	18613.3	17801.6	15442.7	13303.6	12178.3	12084.6	12069.9
52.5°	20263.0	20201.5	20336.3	20755.3	20550.2	19568.6	16899.0	13725.5	13464.7	13359.2	13332.9
55°	22390.4	22270.3	22560.4	22879.8	22642.4	21523.1	18334.9	15126.2	14856.6	14674.9	14411.2
57.5°	24626.3	24453.4	24602.8	25004.3	24775.7	23524.5	20186.8	16567.9	16248.5	13447.2	12377.6
60°	26853.3	26774.2	26832.8	27187.3	26906.0	25470.2	21921.6	18012.6	13751.9	13300.6	13353.4
62.5°	29092.0	28919.1	28971.9	29335.2	28974.8	27322.1	23565.5	19325.3	14472.8	14314.5	14370.2
65°	31491.9	31286.8	31333.7	31439.2	30993.8	28983.6	25018.9	20564.9	15557.0	15389.9	15451.5
67.5°	34384.2	34196.6	33941.7	33628.1	33012.8	30747.7	26463.6	21868.8	16776.0	16682.2	16702.7
68°	34691.8	34510.2	34202.5	33830.3	33138.8	30820.9	26525.1	21906.9	16793.6	16676.3	16682.2
70°	33733.6	33842.0	33493.3	32869.2	32291.9	29748.4	25520.0	21063.0	16046.3	15873.4	15829.5
72.5°	29874.4	30111.8	29631.2	29525.7	28816.6	26501.6	22331.8	18276.3	13957.0	14012.7	13854.5
75°	24119.3	24468.0	23884.9	23917.1	23512.7	22106.2	18715.8	15217.1	11460.4	11715.3	11762.2
77.5°	16773.0	17274.1	17019.2	17274.1	17074.9	16567.9	14484.5	11718.3	8744.0	9037.0	9151.3
80°	8746.9	9341.8	9678.8	9784.3	9848.7	9828.2	8820.2	7032.7	5054.8	5163.2	5157.3
82.5°	2766.2	2622.6	2707.6	2684.2	2610.9	2640.2	2379.4	1860.7	1289.3	1421.2	1359.7
85°	835.1	841.0	817.6	811.7	750.2	659.3	539.2	310.6	152.4	178.7	167.0
87.5°	615.4	621.2	574.3	545.0	509.9	442.5	342.8	193.4	73.3	70.3	55.7
90°	339.9	328.2	304.8	281.3	266.7	228.6	172.9	73.3	26.4	20.5	17.6
92.5°	184.6	175.8	164.1	155.3	134.8	108.4	70.3	23.4	11.7	2.9	0.0
95°	85.0	79.1	76.2	67.4	58.6	41.0	23.4	14.7	8.8	2.9	0.0
97.5°	38.1	35.2	32.2	26.4	20.5	11.7	11.7	8.8	5.9	2.9	0.0
100°	8.8	8.8	5.9	5.9	5.9	5.9	5.9	5.9	5.9	2.9	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	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°	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4	6162.4
2.5°	6200.5	6182.9	6174.1	6118.5	6136.1	6086.2	6182.9	6159.5	6144.8	6185.9
5°	6206.4	6144.8	6182.9	6150.7	6162.4	6092.1	6168.3	6136.1	6133.1	6150.7
7.5°	6221.0	6180.0	6218.1	6153.6	6182.9	6153.6	6209.3	6177.1	6203.4	6221.0
10°	6300.1	6276.7	6259.1	6244.5	6265.0	6206.4	6276.7	6279.6	6288.4	6341.2
12.5°	6411.5	6388.1	6358.8	6320.7	6341.2	6317.7	6370.5	6385.1	6417.4	6443.7
15°	6566.8	6522.9	6511.1	6476.0	6496.5	6484.8	6496.5	6487.7	6549.2	6540.4
17.5°	6780.7	6730.9	6563.9	6393.9	6285.5	6317.7	6452.5	6628.3	6672.3	6678.2
20°	6859.8	6508.2	6490.6	6297.2	6209.3	6203.4	5925.1	5509.0	5635.0	5930.9
22.5°	6766.1	6285.5	6235.7	6197.6	5822.5	5207.1	5148.5	5087.0	5072.4	5116.3
25°	6555.1	6499.4	6455.5	5957.3	5365.4	5368.3	5283.3	4879.0	4248.9	4196.2
27.5°	6877.4	6801.2	6376.3	5608.6	5596.9	5591.0	5465.0	4427.7	4292.9	4325.1
30°	7243.7	7117.7	6007.1	5907.5	5904.6	5851.8	4899.5	4465.8	4465.8	4471.6
32.5°	7665.7	6883.3	6218.1	6265.0	6262.1	6013.0	4732.4	4703.1	4691.4	4720.7
35°	7988.0	6695.7	6672.3	6757.3	6698.7	5101.7	5028.4	5002.0	4990.3	4975.7
37.5°	7888.4	7234.9	7234.9	7287.7	6815.9	5432.8	5397.6	5397.6	5374.2	5362.5
40°	8040.7	7906.0	7838.6	7859.1	4952.2	5834.2	5860.6	5854.7	5851.8	5872.3
42.5°	8843.6	8723.5	8662.0	7935.3	5544.1	5799.1	6443.7	6440.8	6449.6	6440.8
45°	9866.3	9755.0	9593.8	7425.4	6294.3	5084.1	7103.1	7135.3	7138.2	7135.3
47.5°	10938.8	10868.5	9218.7	8219.5	7108.9	5456.2	6789.5	7929.4	7914.7	7932.3
50°	12072.8	11756.4	9171.8	9160.1	7976.3	6071.6	6074.5	8623.9	8773.3	8820.2
52.5°	13335.8	10657.5	10165.2	9274.4	8855.4	6704.5	6640.1	7642.2	9681.7	9728.6
55°	12386.4	11258.2	11249.4	8254.7	9212.9	7314.0	7322.8	7252.5	8878.8	10092.0
57.5°	12324.8	12351.2	12330.7	9209.9	6722.1	6856.9	7979.2	7917.7	5749.3	4659.2
60°	13388.5	13426.6	11979.1	9945.4	7267.1	4216.7	4914.1	4175.7	4231.4	4275.3
62.5°	14405.4	14417.1	9743.3	6519.9	3601.3	170.0	82.0	67.4	64.5	64.5
65°	15530.6	15530.6	10443.6	7111.8	3478.3	64.5	11.7	8.8	32.2	32.2
67.5°	16617.7	16377.5	10956.4	7551.4	3539.8	8.8	0.0	0.0	0.0	0.0
68°	16556.2	16292.5	10909.5	7539.7	3531.0	5.9	0.0	0.0	0.0	0.0
70°	15636.1	15381.2	10349.8	7196.8	3399.1	5.9	0.0	0.0	0.0	0.0
72.5°	13801.7	13567.3	9166.0	6344.1	3065.1	2.9	0.0	0.0	0.0	0.0
75°	11683.1	11650.9	7917.7	5353.7	2628.5	2.9	0.0	0.0	0.0	0.0
77.5°	9400.4	9253.9	6188.8	4196.2	2118.6	0.0	0.0	0.0	0.0	0.0
80°	5236.4	5453.3	3621.9	2467.3	1333.3	0.0	0.0	0.0	0.0	0.0
82.5°	1415.3	1324.5	791.2	536.2	254.9	0.0	0.0	0.0	0.0	0.0
85°	181.7	199.3	90.8	73.3	17.6	0.0	0.0	0.0	0.0	0.0
87.5°	93.8	111.4	29.3	23.4	5.9	0.0	0.0	0.0	0.0	0.0
90°	17.6	20.5	8.8	2.9	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)