

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: P522161

Luminaire Tested: **CST-CA10-630-760-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522161
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-5)
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-EX90
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: 77874.9 lumens
Efficiency: N/A
Efficacy: 123.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

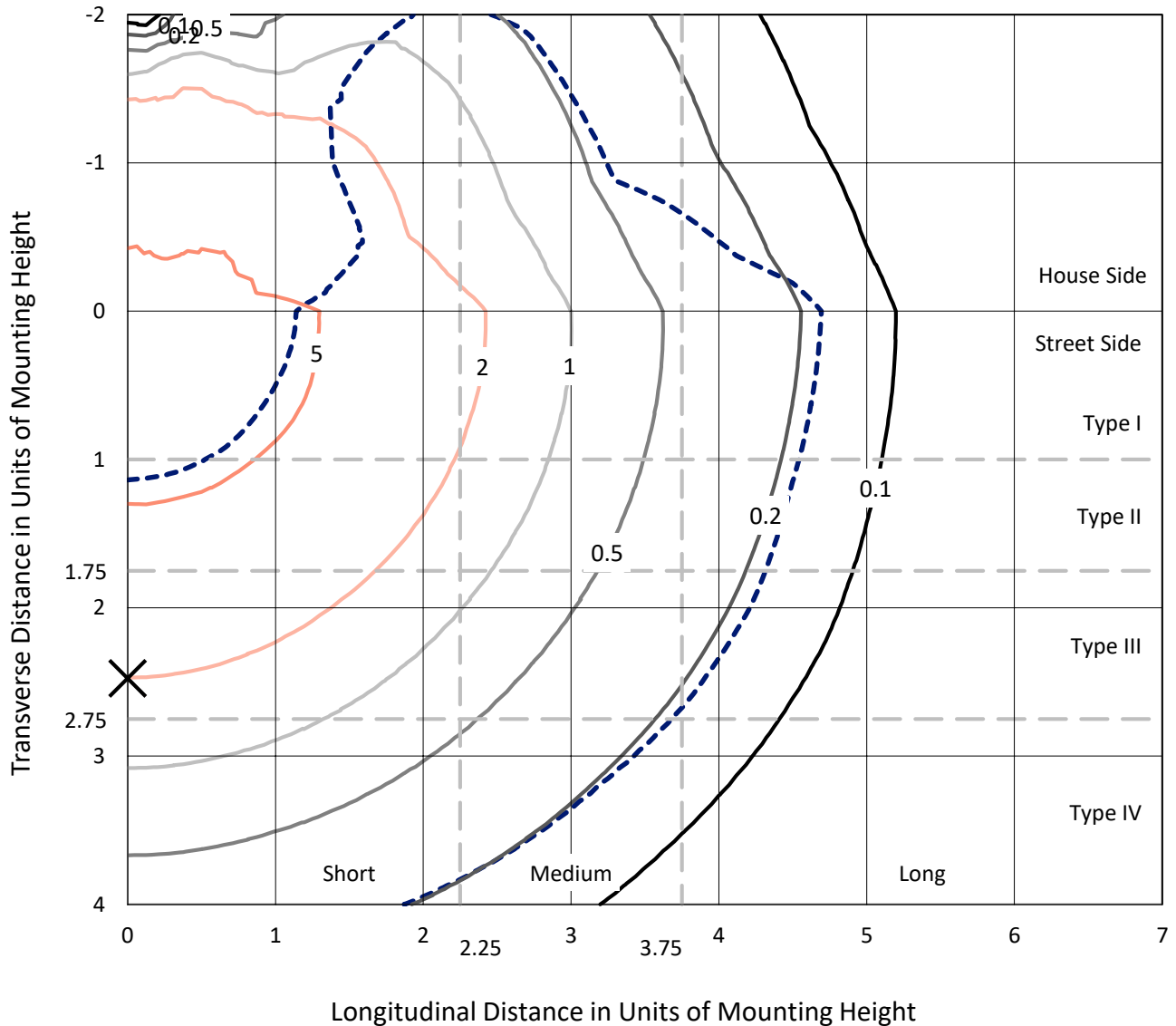
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

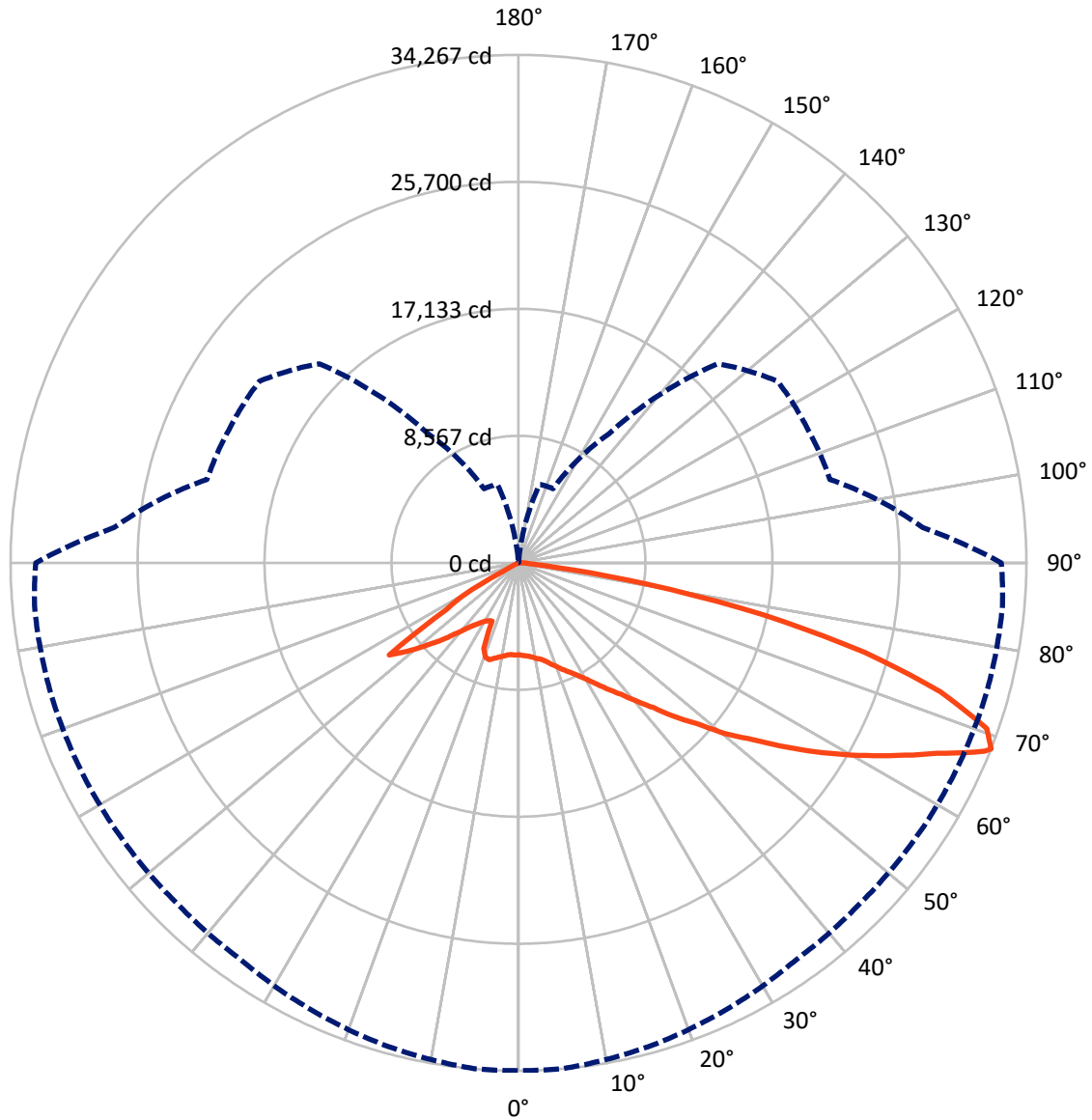
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 6.9 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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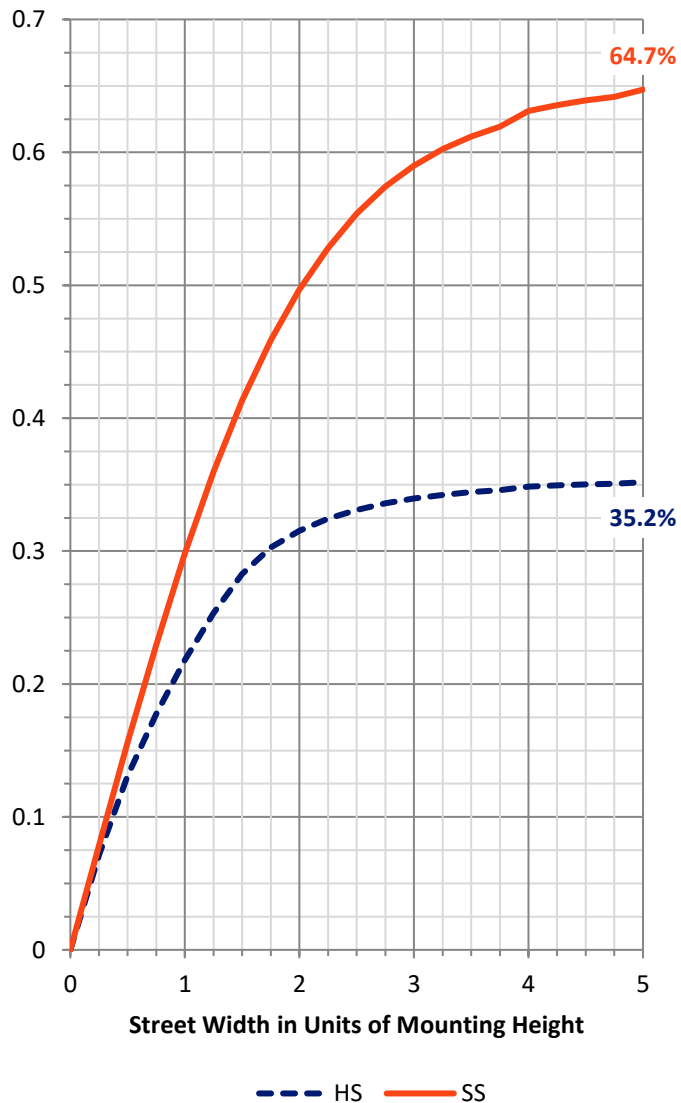
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	27406.7	4.7	27411.4
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	50443.1	20.5	50463.6
	% Fixture	64.8	0.0	64.8
Total	Lumens	77849.8	25.2	77874.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	599.6	0.8
10°-20°	1920.9	2.5
20°-30°	3429.3	4.4
30°-40°	5578.6	7.2
40°-50°	9526.7	12.2
50°-60°	15895.8	20.4
60°-70°	22114.3	28.4
70°-80°	17142.0	22.0
80°-90°	1642.6	2.1
90°-100°	19.9	0.0
100°-110°	1.7	0.0
110°-120°	0.8	0.0
120°-130°	0.6	0.0
130°-140°	0.6	0.0
140°-150°	0.7	0.0
150°-160°	0.5	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-90°	77849.8	100.0
0°-180°	77874.9	100.0

Coefficient of Utilization



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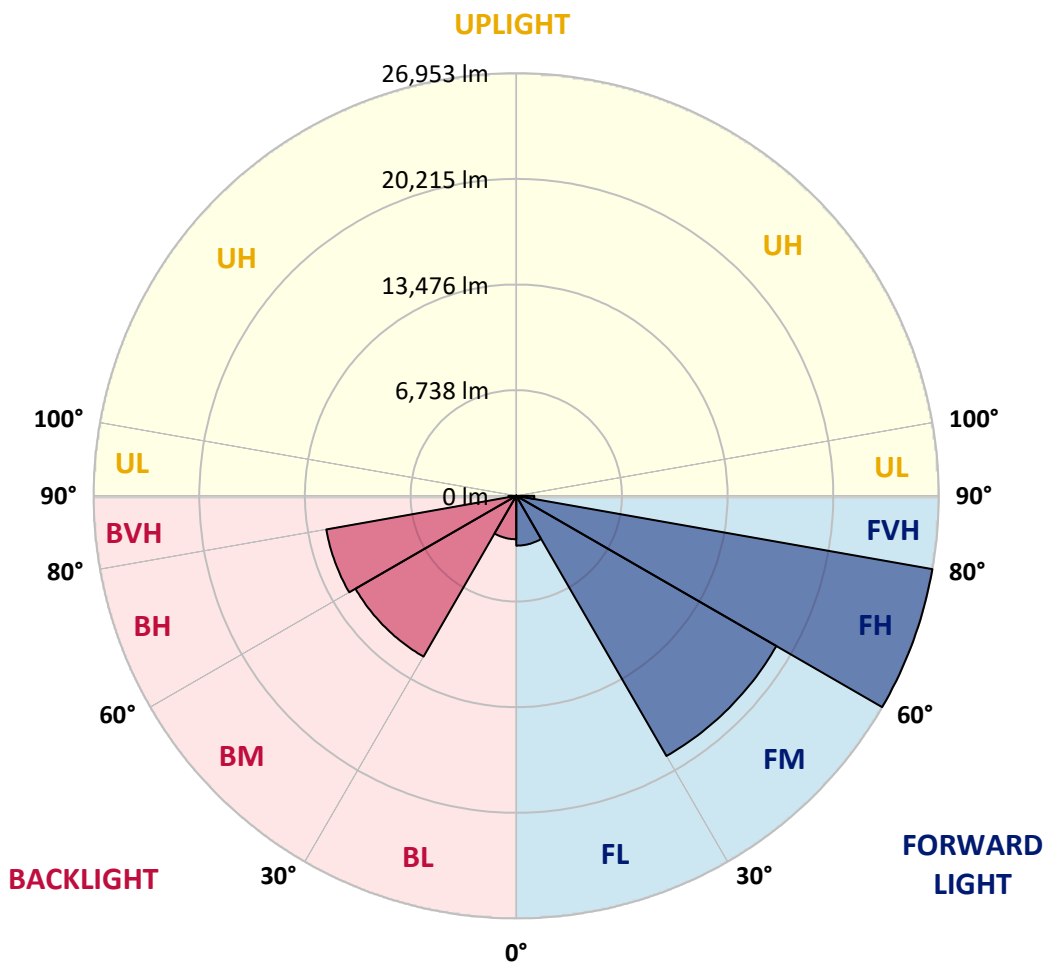
CATALOG NUMBER: CST-CA10-630-760-U-T5R-HSS-HM-EX90

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3178.4	4.1			
FM (30°-60°)	19162.7	24.6			
FH (60°-80°)	26952.8	34.6			G5
FVH (80°-90°)	1149.2	1.5			G5
BL (0°-30°)	2771.4	3.6	B4/5000		
BM (30°-60°)	11838.5	15.2	B5		
BH (60°-80°)	12303.4	15.8	B5		G5
BVH (80°-90°)	493.4	0.6			G3/500
UL (90°-100°)	19.9	0.0		U2/50	
UH (100°-180°)	5.3	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°	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5
2.5°	6267.9	6259.1	6253.2	6291.3	6182.9	6226.8	6197.5	6235.6	6226.8	6244.4	6247.4
5°	6311.8	6297.2	6276.7	6317.7	6253.2	6282.5	6250.3	6267.9	6212.2	6259.1	6264.9
7.5°	6411.4	6370.4	6367.5	6379.2	6335.3	6355.8	6300.1	6320.6	6291.3	6273.7	6291.3
10°	6560.9	6525.7	6487.6	6511.1	6437.8	6464.2	6405.6	6423.2	6408.5	6370.4	6405.6
12.5°	6663.5	6675.2	6648.8	6666.4	6601.9	6578.5	6558.0	6555.0	6546.2	6490.6	6481.8
15°	6892.0	6897.9	6851.0	6862.7	6848.1	6836.3	6807.0	6783.6	6736.7	6701.5	6678.1
17.5°	7190.9	7158.7	7114.7	7126.4	7167.5	7114.7	7097.1	7053.2	6985.8	6927.2	6915.5
20°	7504.4	7483.9	7442.9	7466.3	7463.4	7428.3	7437.0	7363.8	7267.1	7217.3	7179.2
22.5°	7853.1	7823.8	7794.5	7838.5	7803.3	7779.9	7771.1	7721.3	7601.1	7545.5	7536.7
25°	8201.8	8187.2	8207.7	8193.1	8143.2	8125.7	8137.4	8119.8	7979.1	7911.8	7870.7
27.5°	8638.5	8603.3	8635.5	8617.9	8565.2	8568.1	8571.1	8574.0	8415.8	8327.9	8269.2
30°	9136.6	9124.9	9165.9	9110.2	9060.4	9092.7	9119.0	9060.4	8922.7	8793.8	8773.3
32.5°	9784.2	9710.9	9757.8	9687.5	9611.3	9687.5	9734.4	9617.2	9505.8	9341.7	9371.0
35°	10502.1	10478.7	10478.7	10387.8	10346.8	10467.0	10513.8	10399.6	10226.7	10083.1	10047.9
37.5°	11264.0	11287.4	11360.7	11322.6	11284.5	11357.8	11463.2	11310.9	11088.2	10935.8	10894.8
40°	12274.9	12333.5	12383.4	12333.5	12289.6	12336.5	12456.6	12257.4	12102.0	12020.0	11932.1
42.5°	13362.1	13461.7	13429.5	13435.3	13473.4	13540.8	13661.0	13479.3	13300.5	13297.6	13168.7
45°	14833.1	14833.1	14765.7	14830.1	14824.3	14991.3	15044.0	14944.4	14795.0	14751.0	14639.7
47.5°	16207.4	16351.0	16324.6	16418.3	16345.1	16485.7	16664.5	16579.5	16406.6	16251.3	16227.9
50°	18123.8	18088.6	18053.4	18194.1	18182.4	18279.1	18443.2	18390.4	18150.1	17974.3	17942.1
52.5°	19808.7	19993.3	19949.3	20160.3	20043.1	20180.8	20377.2	20368.4	20075.3	19902.4	19852.6
55°	21936.1	22059.1	22050.3	22267.2	22106.0	22287.7	22451.8	22469.4	22150.0	21903.8	21980.0
57.5°	24151.4	24253.9	24195.3	24374.1	24215.8	24464.9	24564.5	24500.1	24312.5	24001.9	24116.2
60°	26369.6	26457.5	26524.9	26539.5	26448.7	26595.2	26689.0	26744.6	26448.7	26094.1	26231.9
62.5°	28623.0	28722.6	28664.0	28687.4	28435.4	28634.7	28751.9	28766.5	28426.6	28113.1	28209.8
65°	30996.5	31134.2	30923.2	30782.6	30472.0	30469.0	30624.3	30650.7	30410.4	30187.7	30149.6
67.5°	33935.6	33997.1	33545.8	33074.1	32549.5	32435.3	32543.7	32605.2	32742.9	32737.1	32564.2
68°	34266.7	34255.0	33797.8	33235.2	32672.6	32540.7	32593.5	32672.6	32763.4	32781.0	32573.0
70°	33513.6	33370.0	33109.2	32400.1	31843.3	31497.6	31313.0	31459.5	31213.3	31216.3	30826.5
72.5°	29768.7	29751.1	29270.5	28918.9	28423.7	27849.4	27585.6	27582.7	27606.2	27436.2	27034.7
75°	24113.3	24136.7	23577.0	23333.8	23181.4	23073.0	23128.7	23301.6	23319.2	23316.2	23175.6
77.5°	16816.9	16913.6	16764.1	16368.5	16793.4	17156.8	17857.1	18214.6	18100.3	18443.2	18660.0
80°	8814.3	9007.7	9013.5	9291.9	9634.8	9965.9	10569.5	11111.6	10713.1	10537.3	10355.6
82.5°	2317.9	2388.2	2493.7	2332.5	2382.3	2432.1	2901.0	2857.0	2637.3	2754.5	2930.3
85°	662.2	682.8	653.5	591.9	542.1	498.1	509.9	430.8	375.1	372.1	360.4
87.5°	465.9	501.1	442.5	380.9	342.8	319.4	307.7	260.8	211.0	184.6	146.5
90°	216.8	213.9	184.6	143.6	126.0	120.1	120.1	93.8	52.7	32.2	29.3
92.5°	90.8	93.8	76.2	61.5	52.7	41.0	32.2	20.5	11.7	5.9	2.9
95°	32.2	35.2	29.3	23.4	20.5	17.6	14.7	11.7	5.9	2.9	2.9
97.5°	8.8	8.8	8.8	8.8	8.8	8.8	8.8	5.9	5.9	2.9	2.9
100°	0.0	0.0	0.0	2.9	5.9	5.9	5.9	5.9	2.9	2.9	2.9
102.5°	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
105°	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9



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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	2.9	2.9	2.9	2.9
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
145°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
150°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
160°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9
165°	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9
167.5°	0.0	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9
170°	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
172.5°	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
175°	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
177.5°	0.0	0.0	0.0	0.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9
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°	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5	6197.5
2.5°	6241.5	6226.8	6221.0	6147.7	6168.2	6124.3	6226.8	6197.5	6191.7	6232.7
5°	6256.1	6188.7	6229.8	6182.9	6194.6	6130.1	6212.2	6177.0	6180.0	6200.5
7.5°	6264.9	6226.8	6267.9	6185.8	6218.1	6194.6	6253.2	6218.1	6253.2	6270.8
10°	6352.8	6335.3	6306.0	6282.5	6306.0	6250.3	6323.5	6317.7	6338.2	6390.9
12.5°	6473.0	6452.5	6423.2	6382.1	6399.7	6379.2	6434.9	6440.8	6478.8	6505.2
15°	6651.7	6625.4	6610.7	6569.7	6575.5	6560.9	6593.1	6599.0	6675.2	6666.4
17.5°	6903.7	6874.4	6886.2	6848.1	6833.4	6798.2	6739.6	6719.1	6810.0	6836.3
20°	7179.2	7146.9	7161.6	7129.4	6856.9	6303.0	6675.2	6930.1	6736.7	6722.1
22.5°	7492.7	7457.6	7469.3	7419.5	7082.5	6045.2	5259.8	5195.4	5933.8	6232.7
25°	7838.5	7791.6	7785.7	7721.3	6613.6	5473.8	5385.9	5271.6	4732.4	4304.6
27.5°	8266.3	8196.0	8160.8	7188.0	6566.8	5687.7	5555.8	5148.5	4366.1	4392.5
30°	8729.3	8626.7	7967.4	7325.7	6909.6	5939.7	5763.9	4512.6	4518.5	4506.8
32.5°	9256.7	9028.2	7806.3	7747.7	7319.8	6209.3	4785.1	4732.4	4738.3	4755.8
35°	9948.3	8380.6	8348.4	8351.3	7820.9	6007.1	5069.4	5019.6	5025.4	5037.1
37.5°	10094.8	9034.0	9039.9	8972.5	8354.2	5488.4	5415.2	5412.2	5400.5	5388.8
40°	10212.0	9857.5	9772.5	9664.1	7744.7	5910.4	5886.9	5869.3	5878.1	5901.6
42.5°	11129.2	10862.5	10780.5	10651.6	7944.0	6549.2	6473.0	6452.5	6475.9	6464.2
45°	12348.2	12125.5	11964.3	9848.7	8776.2	7243.6	7182.1	7155.7	7164.5	7237.8
47.5°	13637.5	13505.7	13013.4	10639.8	9746.1	8064.1	8002.6	7961.6	7976.2	7958.6
50°	15041.1	14921.0	12046.4	11832.5	10818.6	8949.1	8858.2	8843.6	8849.4	8846.5
52.5°	16564.9	14053.6	13350.3	13127.6	11949.7	9875.0	9842.8	9763.7	9781.3	9763.7
55°	18352.3	14803.8	14786.2	14525.4	13221.4	10950.4	10912.4	10801.0	10100.7	10713.1
57.5°	20049.0	16236.7	16236.7	15984.7	14522.5	12020.0	11958.5	11876.4	7179.2	5790.2
60°	21906.8	17672.5	17631.5	17423.4	15776.6	13039.7	10598.8	10575.4	4336.8	4351.5
62.5°	23512.6	18953.0	19026.3	18832.9	16983.9	9763.7	4911.1	4811.5	427.8	659.3
65°	25311.7	20368.4	20456.3	20257.0	18290.8	10355.6	5330.2	5280.4	96.7	87.9
67.5°	27351.2	21780.8	21581.5	21361.7	19055.6	10663.3	5538.2	5494.3	26.4	17.6
68°	27368.8	21751.5	21493.6	21344.1	18982.3	10604.7	5520.6	5479.6	26.4	17.6
70°	25962.3	20655.5	20397.7	20435.8	18074.0	10141.7	5292.1	5215.9	26.4	17.6
72.5°	22777.1	18381.6	18091.5	17886.4	16028.6	9016.5	4744.1	4600.5	26.4	17.6
75°	19489.3	15577.4	15096.8	14645.5	12896.2	7378.4	3891.4	3730.2	26.4	17.6
77.5°	15360.5	11873.5	11190.7	10894.8	9690.4	5450.3	2892.2	2716.4	26.4	14.7
80°	8489.0	6812.9	6232.7	6051.0	5541.2	3202.8	1658.5	1553.0	23.4	14.7
82.5°	2194.8	1646.8	1435.8	1386.0	1301.0	758.9	404.4	383.9	20.5	11.7
85°	313.5	231.5	254.9	301.8	290.1	196.3	140.7	120.1	17.6	8.8
87.5°	164.1	137.7	161.2	181.7	184.6	114.3	58.6	32.2	8.8	0.0
90°	26.4	26.4	29.3	32.2	32.2	14.7	11.7	0.0	0.0	0.0
92.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.9	5.9	2.9	2.9	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°	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.9	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.9	2.9	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.9	2.9	2.9	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)