

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: P522248

Luminaire Tested: **CST-CA8-480-750-U-T5R-HSS-HM-EX90**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522248
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-CA8-480-750-U-T5R-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 61279 lumens
Efficiency: N/A
Efficacy: 127.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

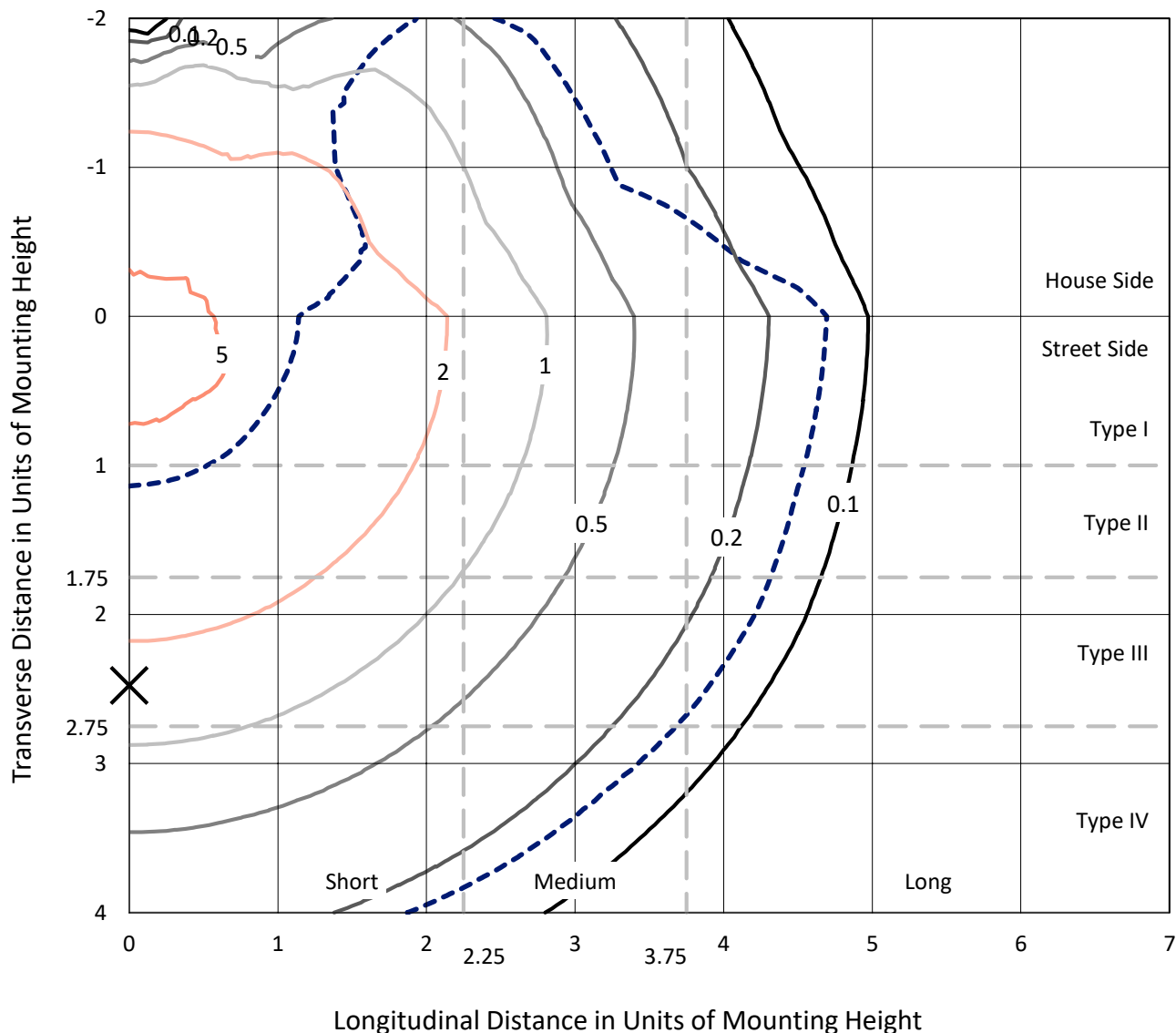
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

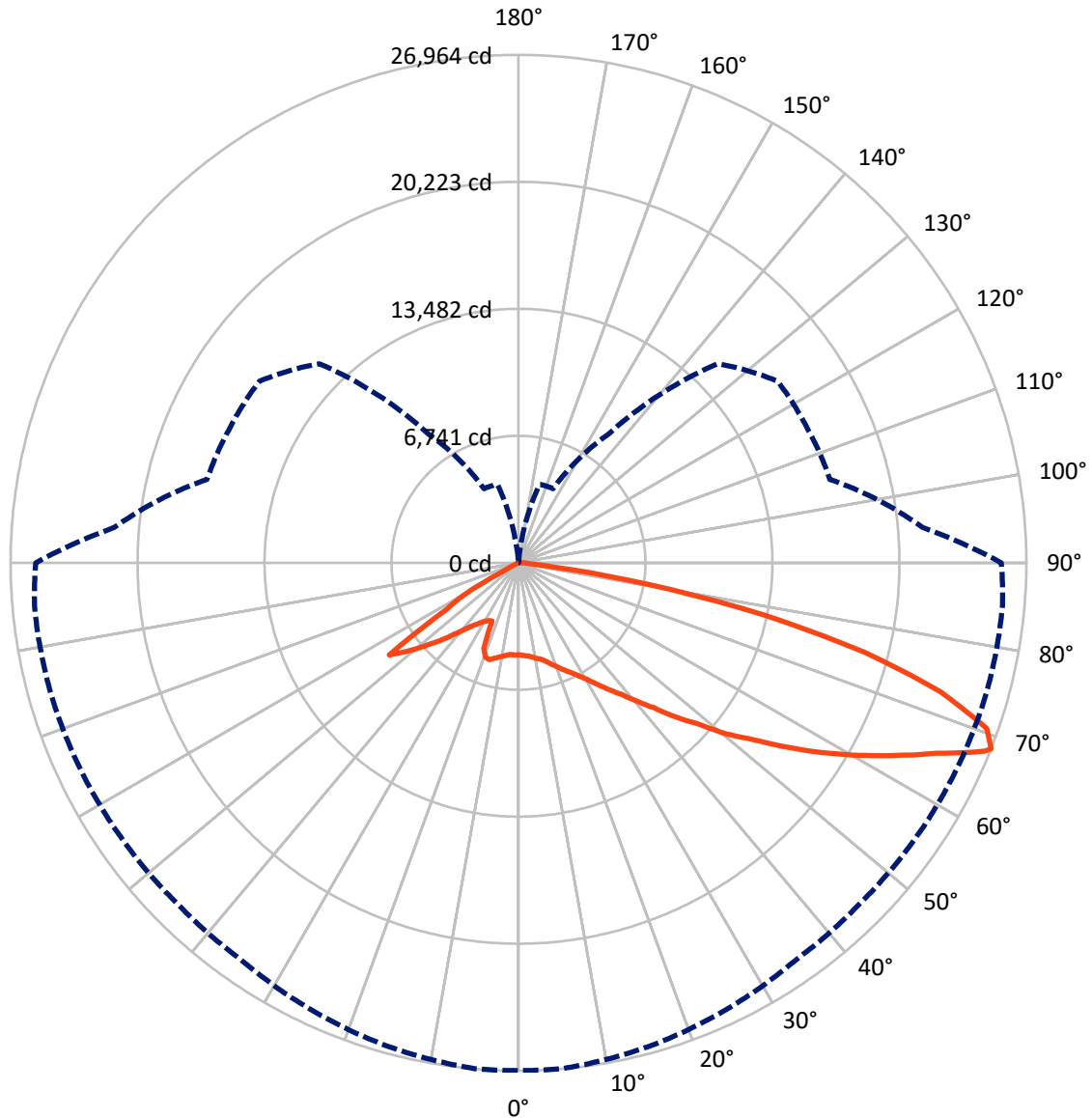
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.5 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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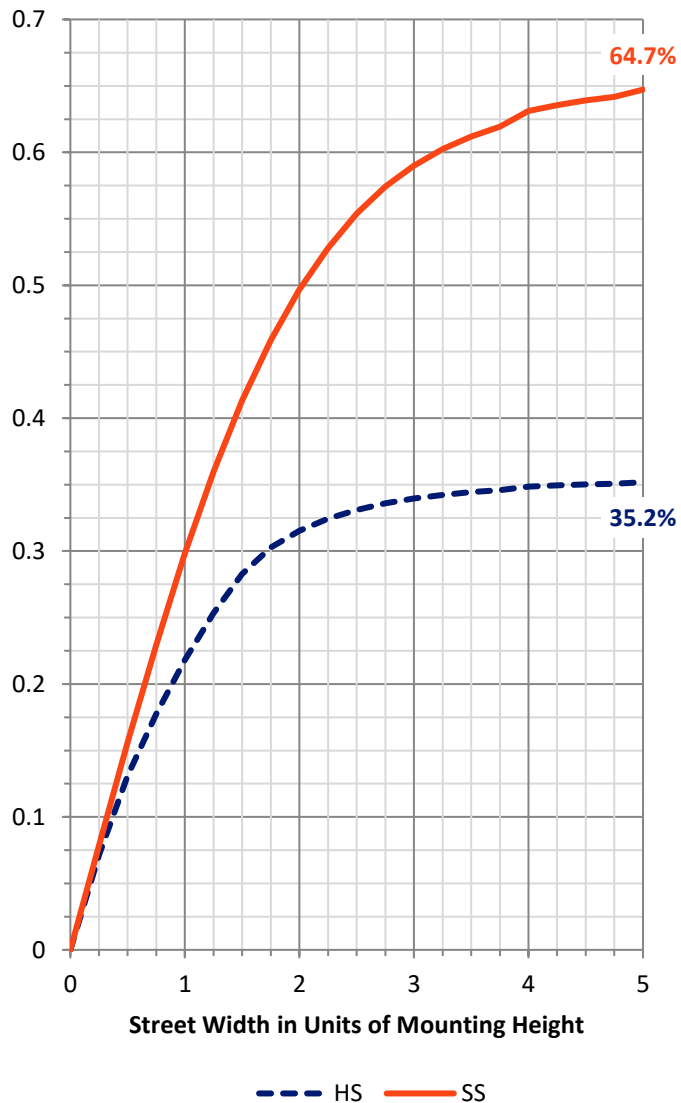
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	21566.0	3.7	21569.7
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	39693.1	16.1	39709.3
	% Fixture	64.8	0.0	64.8
Total	Lumens	61259.1	19.8	61279.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	471.8	0.8
10°-20°	1511.6	2.5
20°-30°	2698.4	4.4
30°-40°	4389.8	7.2
40°-50°	7496.5	12.2
50°-60°	12508.2	20.4
60°-70°	17401.5	28.4
70°-80°	13488.8	22.0
80°-90°	1292.6	2.1
90°-100°	15.6	0.0
100°-110°	1.3	0.0
110°-120°	0.7	0.0
120°-130°	0.4	0.0
130°-140°	0.5	0.0
140°-150°	0.5	0.0
150°-160°	0.4	0.0
160°-170°	0.3	0.0
170°-180°	0.1	0.0
0°-90°	61259.1	100.0
0°-180°	61279.0	100.0

Coefficient of Utilization

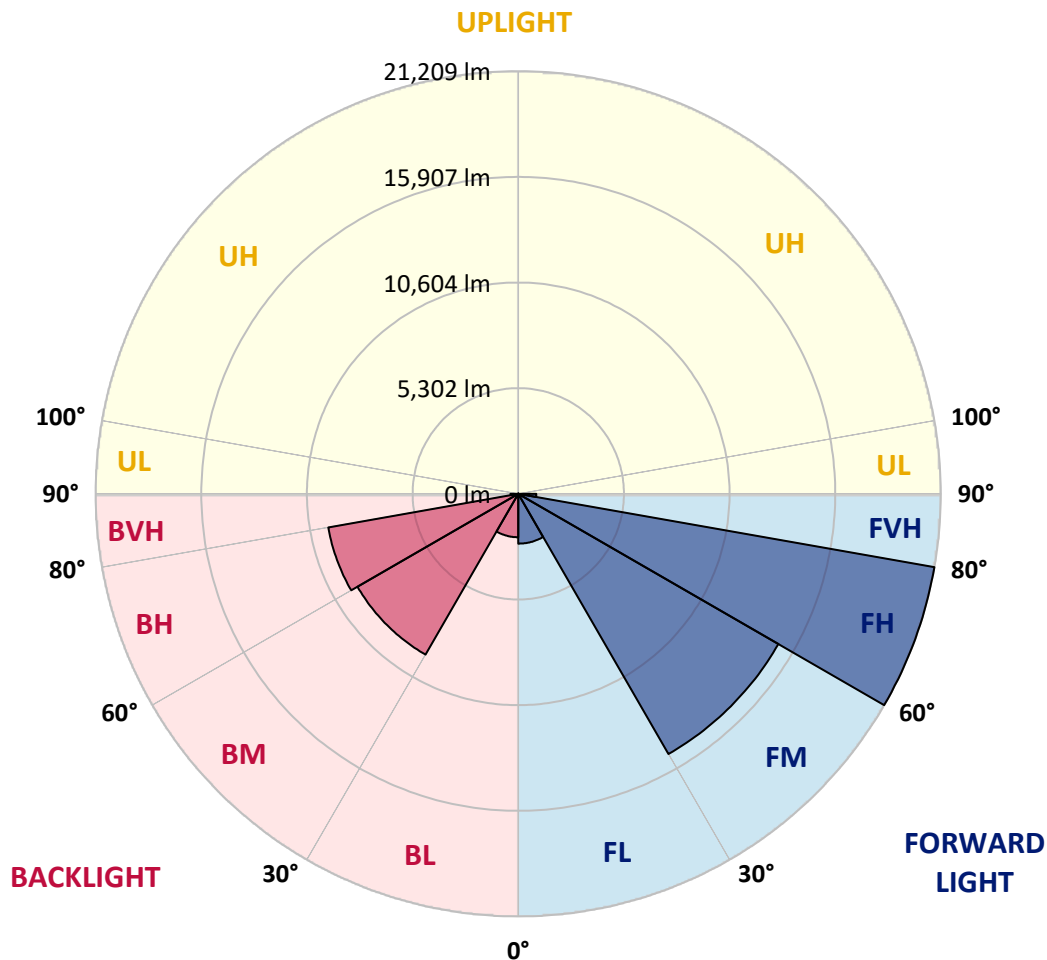


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2501.0	4.1			
FM (30°-60°)	15078.9	24.6			
FH (60°-80°)	21208.9	34.6			G5
FVH (80°-90°)	904.3	1.5			G5
BL (0°-30°)	2180.8	3.6	B3/2500		
BM (30°-60°)	9315.6	15.2	B5		
BH (60°-80°)	9681.4	15.8	B5		G5
BVH (80°-90°)	388.3	0.6			G3/500
UL (90°-100°)	15.6	0.0		U2/50	
UH (100°-180°)	4.2	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°	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8
2.5°	4932.1	4925.2	4920.6	4950.6	4865.2	4899.8	4876.8	4906.8	4899.8	4913.7	4916.0
5°	4966.7	4955.2	4939.0	4971.3	4920.6	4943.6	4918.3	4932.1	4888.3	4925.2	4929.8
7.5°	5045.1	5012.8	5010.5	5019.7	4985.1	5001.3	4957.5	4973.6	4950.6	4936.7	4950.6
10°	5162.7	5135.0	5105.1	5123.5	5065.9	5086.6	5040.5	5054.3	5042.8	5012.8	5040.5
12.5°	5243.4	5252.6	5231.9	5245.7	5195.0	5176.5	5160.4	5158.1	5151.2	5107.4	5100.4
15°	5423.3	5427.9	5391.0	5400.2	5388.7	5379.4	5356.4	5337.9	5301.0	5273.4	5254.9
17.5°	5658.4	5633.1	5598.5	5607.7	5640.0	5598.5	5584.7	5550.1	5497.0	5450.9	5441.7
20°	5905.2	5889.0	5856.7	5875.2	5872.9	5845.2	5852.1	5794.5	5718.4	5679.2	5649.2
22.5°	6179.6	6156.5	6133.4	6168.0	6140.4	6121.9	6115.0	6075.8	5981.3	5937.4	5930.5
25°	6453.9	6442.4	6458.6	6447.0	6407.8	6394.0	6403.2	6389.4	6278.7	6225.7	6193.4
27.5°	6797.5	6769.8	6795.2	6781.4	6739.9	6742.2	6744.5	6746.8	6622.3	6553.1	6507.0
30°	7189.5	7180.3	7212.6	7168.7	7129.5	7154.9	7175.7	7129.5	7021.2	6919.7	6903.6
32.5°	7699.1	7641.4	7678.3	7623.0	7563.0	7623.0	7659.9	7567.7	7480.0	7350.9	7374.0
35°	8264.0	8245.6	8245.6	8174.1	8141.8	8236.3	8273.2	8183.3	8047.3	7934.3	7906.6
37.5°	8863.5	8882.0	8939.6	8909.6	8879.7	8937.3	9020.3	8900.4	8725.2	8605.3	8573.0
40°	9659.0	9705.1	9744.3	9705.1	9670.5	9707.4	9802.0	9645.2	9523.0	9458.4	9389.2
42.5°	10514.5	10592.9	10567.5	10572.1	10602.1	10655.1	10749.7	10606.7	10466.0	10463.7	10362.3
45°	11672.0	11672.0	11618.9	11669.7	11665.1	11796.5	11838.0	11759.6	11642.0	11607.4	11519.8
47.5°	12753.4	12866.4	12845.6	12919.4	12861.8	12972.5	13113.1	13046.2	12910.2	12788.0	12769.5
50°	14261.4	14233.7	14206.1	14316.7	14307.5	14383.6	14512.7	14471.2	14282.2	14143.8	14118.4
52.5°	15587.2	15732.5	15697.9	15863.9	15771.7	15880.1	16034.6	16027.6	15797.1	15661.0	15621.8
55°	17261.3	17358.1	17351.2	17521.8	17395.0	17537.9	17667.1	17680.9	17429.6	17235.9	17295.8
57.5°	19004.4	19085.1	19039.0	19179.7	19055.2	19251.2	19329.6	19278.8	19131.3	18886.8	18976.8
60°	20749.9	20819.1	20872.1	20883.7	20812.2	20927.5	21001.3	21045.1	20812.2	20533.2	20641.6
62.5°	22523.1	22601.5	22555.4	22573.8	22375.5	22532.3	22624.6	22636.1	22368.6	22121.9	22198.0
65°	24390.8	24499.2	24333.2	24222.5	23978.1	23975.8	24098.0	24118.7	23929.6	23754.4	23724.4
67.5°	26703.5	26751.9	26396.8	26025.6	25612.9	25522.9	25608.3	25656.7	25765.1	25760.4	25624.4
68°	26964.1	26954.9	26595.1	26152.4	25709.7	25606.0	25647.5	25709.7	25781.2	25795.0	25631.3
70°	26371.5	26258.5	26053.3	25495.3	25057.2	24785.1	24639.8	24755.1	24561.4	24563.7	24257.1
72.5°	23424.7	23410.8	23032.7	22756.0	22366.3	21914.4	21706.8	21704.5	21723.0	21589.2	21273.4
75°	18974.5	18992.9	18552.5	18361.1	18241.2	18155.9	18199.7	18335.8	18349.6	18347.3	18236.6
77.5°	13233.0	13309.1	13191.5	12880.2	13214.6	13500.5	14051.6	14332.9	14243.0	14512.7	14683.4
80°	6935.9	7088.0	7092.7	7311.7	7581.5	7842.0	8317.0	8743.6	8430.0	8291.7	8148.7
82.5°	1823.9	1879.2	1962.2	1835.4	1874.6	1913.8	2282.7	2248.2	2075.2	2167.5	2305.8
85°	521.1	537.3	514.2	465.8	426.6	392.0	401.2	339.0	295.1	292.8	283.6
87.5°	366.6	394.3	348.2	299.8	269.8	251.3	242.1	205.2	166.0	145.3	115.3
90°	170.6	168.3	145.3	113.0	99.1	94.5	94.5	73.8	41.5	25.4	23.1
92.5°	71.5	73.8	60.0	48.4	41.5	32.3	25.4	16.1	9.2	4.6	2.3
95°	25.4	27.7	23.1	18.4	16.1	13.8	11.5	9.2	4.6	2.3	2.3
97.5°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	4.6	4.6	2.3	2.3
100°	0.0	0.0	0.0	2.3	4.6	4.6	4.6	4.6	2.3	2.3	2.3
102.5°	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	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	2.3	2.3	2.3	2.3
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3
117.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3
122.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3
127.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	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	0.0	2.3	2.3
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3
145°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
150°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	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	2.3	2.3	2.3	2.3	2.3
160°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3
165°	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3
167.5°	0.0	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3
170°	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
172.5°	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
175°	0.0	0.0	0.0	0.0	2.3	2.3	2.3	2.3	2.3	2.3	2.3
177.5°	0.0	0.0	0.0	0.0	2.3	2.3	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°	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8	4876.8
2.5°	4911.4	4899.8	4895.2	4837.6	4853.7	4819.1	4899.8	4876.8	4872.2	4904.4
5°	4922.9	4869.9	4902.1	4865.2	4874.5	4823.7	4888.3	4860.6	4862.9	4879.1
7.5°	4929.8	4899.8	4932.1	4867.6	4892.9	4874.5	4920.6	4892.9	4920.6	4934.4
10°	4999.0	4985.1	4962.1	4943.6	4962.1	4918.3	4975.9	4971.3	4987.5	5029.0
12.5°	5093.5	5077.4	5054.3	5022.0	5035.9	5019.7	5063.5	5068.2	5098.1	5118.9
15°	5234.2	5213.4	5201.9	5169.6	5174.2	5162.7	5188.1	5192.7	5252.6	5245.7
17.5°	5432.5	5409.4	5418.6	5388.7	5377.1	5349.5	5303.4	5287.2	5358.7	5379.4
20°	5649.2	5623.9	5635.4	5610.0	5395.6	4959.8	5252.6	5453.2	5301.0	5289.5
22.5°	5895.9	5868.3	5877.5	5838.3	5573.1	4756.9	4138.9	4088.2	4669.3	4904.4
25°	6168.0	6131.1	6126.5	6075.8	5204.2	4307.2	4238.1	4148.1	3723.9	3387.2
27.5°	6504.7	6449.3	6421.7	5656.1	5167.3	4475.6	4371.8	4051.3	3435.6	3456.4
30°	6869.0	6788.3	6269.5	5764.5	5437.1	4673.9	4535.5	3550.9	3555.6	3546.3
32.5°	7284.0	7104.2	6142.7	6096.5	5759.9	4886.0	3765.4	3723.9	3728.5	3742.3
35°	7828.2	6594.6	6569.2	6571.5	6154.2	4726.9	3989.0	3949.8	3954.5	3963.7
37.5°	7943.5	7108.8	7113.4	7060.4	6573.8	4318.8	4261.1	4258.8	4249.6	4240.4
40°	8035.7	7756.7	7689.9	7604.5	6094.2	4650.8	4632.4	4618.5	4625.4	4643.9
42.5°	8757.4	8547.6	8483.1	8381.6	6251.0	5153.5	5093.5	5077.4	5095.8	5086.6
45°	9716.7	9541.4	9414.6	7749.8	6905.9	5699.9	5651.5	5630.8	5637.7	5695.3
47.5°	10731.2	10627.5	10240.1	8372.4	7669.1	6345.6	6297.2	6264.9	6276.4	6262.6
50°	11835.7	11741.2	9479.2	9310.8	8513.0	7041.9	6970.4	6958.9	6963.5	6961.2
52.5°	13034.7	11058.6	10505.2	10330.0	9403.1	7770.6	7745.2	7682.9	7696.8	7682.9
55°	14441.3	11648.9	11635.1	11429.9	10403.8	8616.8	8586.8	8499.2	7948.1	8430.0
57.5°	15776.3	12776.5	12776.5	12578.2	11427.6	9458.4	9410.0	9345.4	5649.2	4556.3
60°	17238.2	13906.3	13874.0	13710.3	12414.5	10260.8	8340.1	8321.6	3412.6	3424.1
62.5°	18501.8	14913.9	14971.6	14819.4	13364.4	7682.9	3864.5	3786.1	336.6	518.8
65°	19917.5	16027.6	16096.8	15940.0	14392.8	8148.7	4194.3	4155.1	76.1	69.2
67.5°	21522.4	17139.0	16982.2	16809.3	14994.6	8390.8	4358.0	4323.4	20.8	13.8
68°	21536.2	17116.0	16913.1	16795.5	14937.0	8344.7	4344.1	4311.9	20.8	13.8
70°	20429.4	16253.6	16050.7	16080.7	14222.2	7980.4	4164.3	4104.3	20.8	13.8
72.5°	17923.0	14464.3	14236.0	14074.6	12612.8	7095.0	3733.1	3620.1	20.8	13.8
75°	15335.9	12257.7	11879.5	11524.4	10147.8	5806.0	3062.1	2935.3	20.8	13.8
77.5°	12087.0	9343.1	8805.9	8573.0	7625.3	4288.8	2275.8	2137.5	20.8	11.5
80°	6679.9	5361.0	4904.4	4761.5	4360.3	2520.2	1305.1	1222.1	18.4	11.5
82.5°	1727.0	1295.9	1129.8	1090.6	1023.8	597.2	318.2	302.1	16.1	9.2
85°	246.7	182.2	200.6	237.5	228.3	154.5	110.7	94.5	13.8	6.9
87.5°	129.1	108.4	126.8	143.0	145.3	89.9	46.1	25.4	6.9	0.0
90°	20.8	20.8	23.1	25.4	25.4	11.5	9.2	0.0	0.0	0.0
92.5°	2.3	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	2.3	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.3	4.6	2.3	2.3	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	2.3	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	2.3	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0
115°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	2.3	2.3	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	2.3	2.3	2.3	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)