

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: McGRAW-EDISON

Report Number: P579658

Luminaire Tested: **CTN-CA8-480-727-U-T5-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579658
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-480-727-U-T5-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 2700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44242 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G5

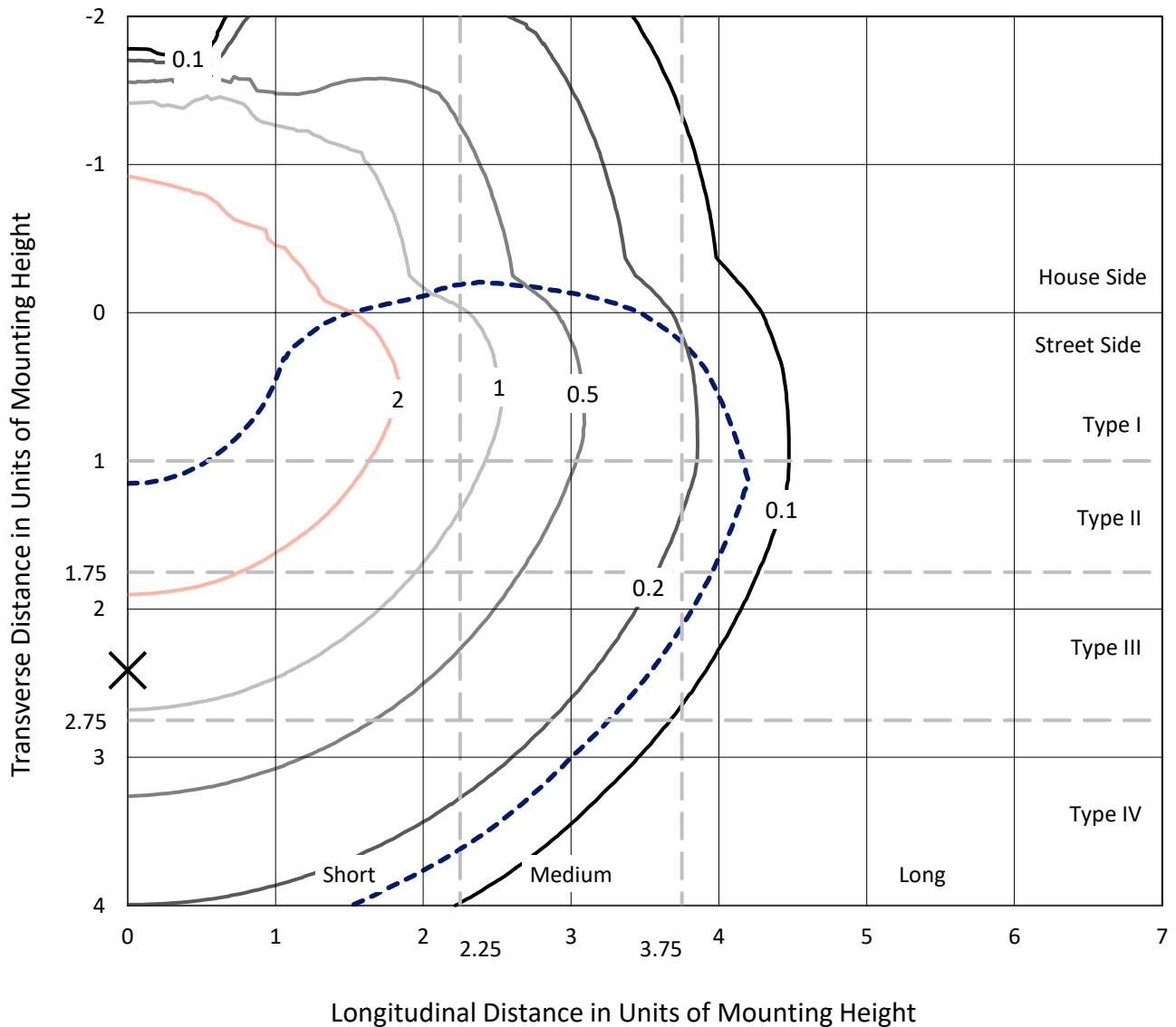
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

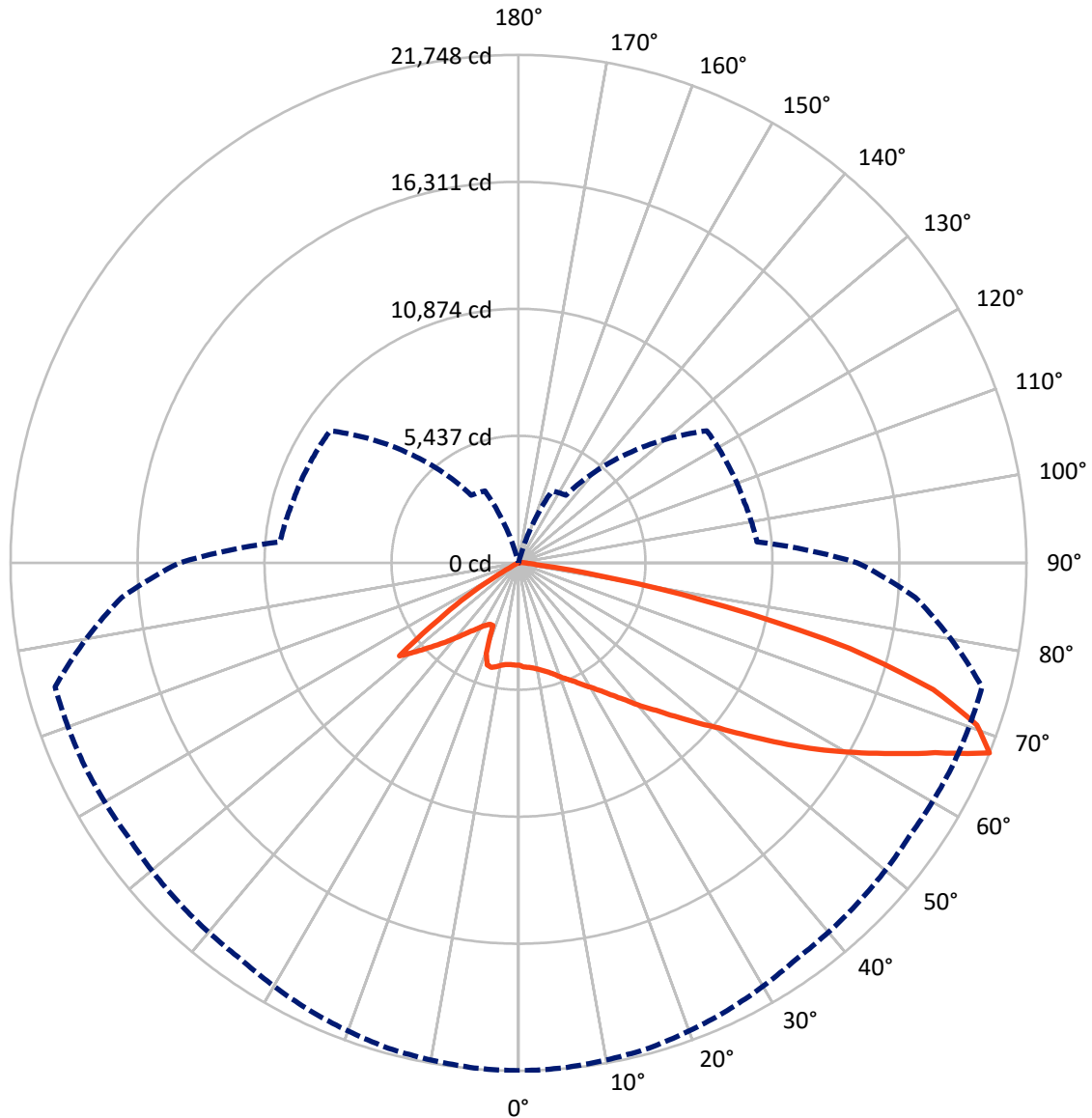
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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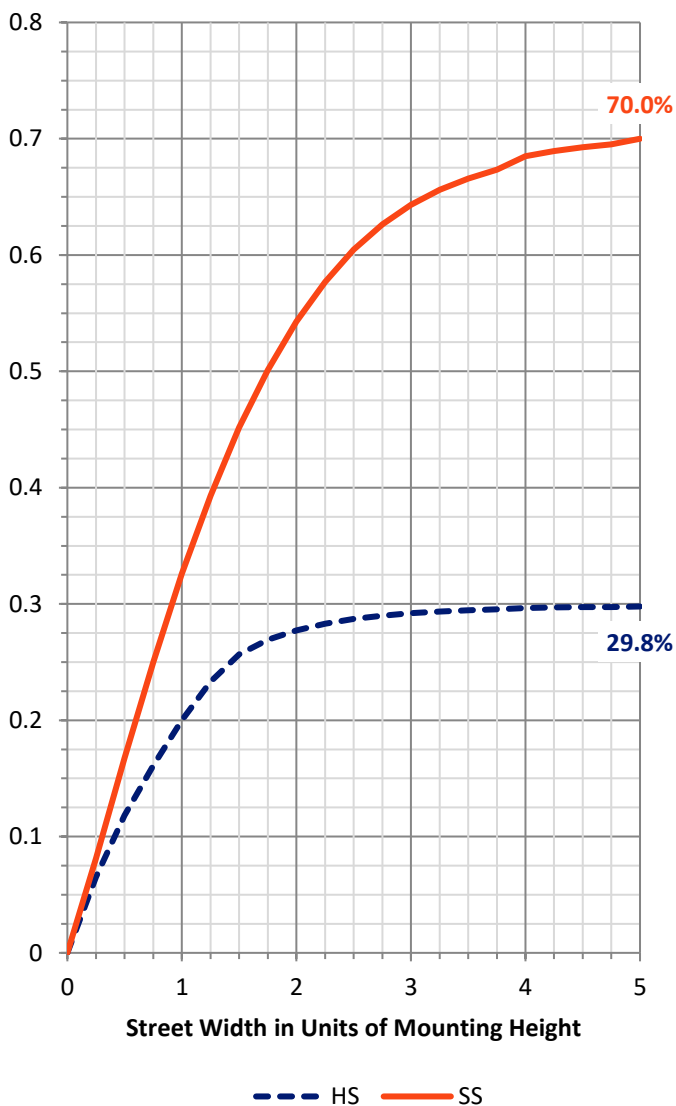
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	13206.5	4.4	13210.9
	% Fixture	29.9	0.0	29.9
Street Side	Lumens	30981.3	49.8	31031.1
	% Fixture	70.0	0.1	70.1
Total	Lumens	44187.8	54.2	44242.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	422.6	1.0
10°-20°	1308.4	3.0
20°-30°	2195.8	5.0
30°-40°	3560.6	8.0
40°-50°	5818.4	13.2
50°-60°	9118.4	20.6
60°-70°	12212.4	27.6
70°-80°	8901.2	20.1
80°-90°	650.0	1.5
90°-100°	41.6	0.1
100°-110°	11.8	0.0
110°-120°	0.8	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°	44187.8	99.9
0°-180°	44242.0	100.0

Coefficient of Utilization

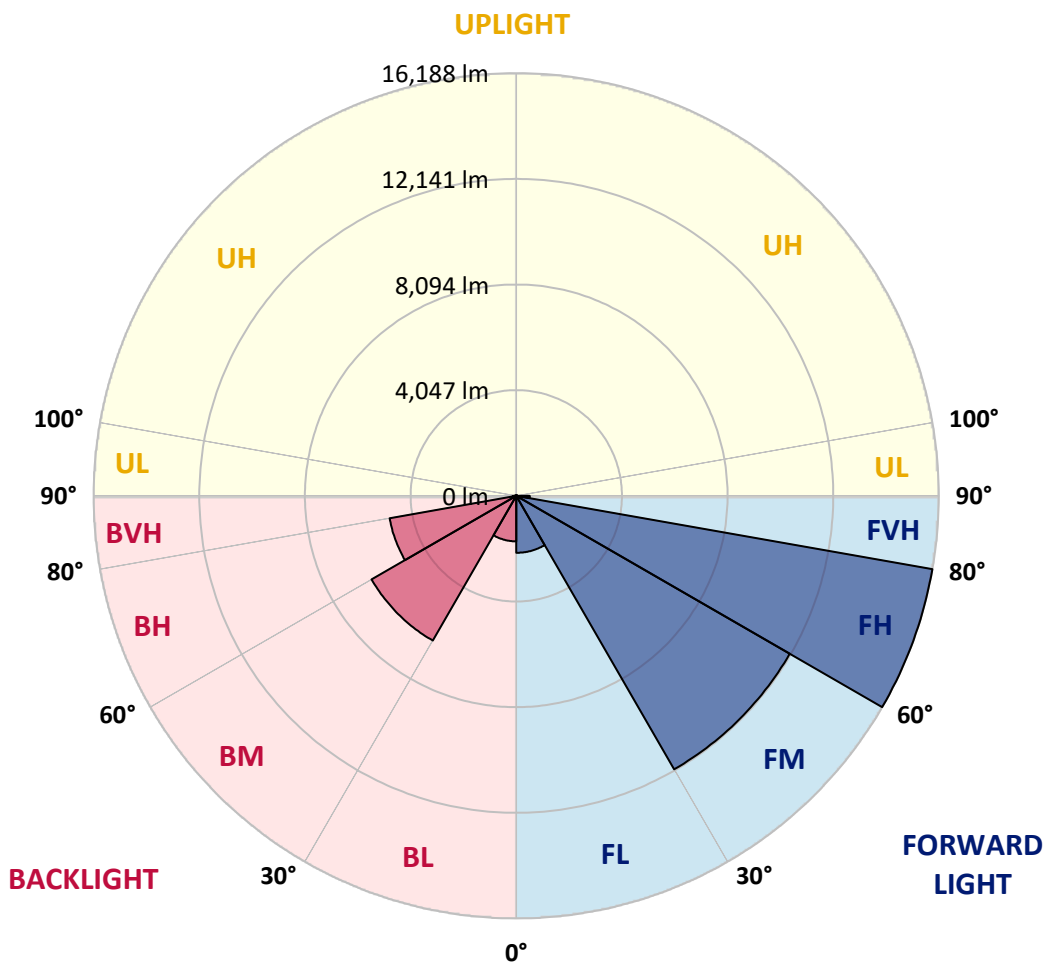


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2182.2	4.9			
FM (30°-60°)	12096.6	27.3			
FH (60°-80°)	16188.4	36.6			G5
FVH (80°-90°)	514.0	1.2			G4/750
BL (0°-30°)	1744.6	3.9	B3/2500		
BM (30°-60°)	6400.8	14.5	B4/8500		
BH (60°-80°)	4925.1	11.1	B4/5000		G4/5000
BVH (80°-90°)	136.0	0.3			G2/225
UL (90°-100°)	41.6	0.1		U2/50	
UH (100°-180°)	12.7	0.0		U2/50	

BUG Rating: B4-U2-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9
2.5°	4467.6	4441.5	4443.4	4467.6	4395.0	4419.2	4387.6	4411.8	4395.0	4400.6	4411.8
5°	4495.5	4467.6	4469.4	4499.2	4434.1	4454.6	4411.8	4424.8	4409.9	4417.4	4417.4
7.5°	4551.3	4519.7	4517.8	4536.4	4469.4	4476.9	4437.8	4439.7	4417.4	4432.2	4424.8
10°	4635.0	4608.9	4590.3	4601.5	4542.0	4538.3	4488.0	4489.9	4462.0	4478.7	4465.7
12.5°	4737.3	4701.9	4698.2	4701.9	4636.8	4621.9	4569.9	4573.6	4523.4	4549.4	4534.5
15°	4867.5	4811.7	4811.7	4832.1	4748.4	4737.3	4674.0	4677.7	4625.7	4646.1	4631.2
17.5°	5027.4	4973.5	4964.2	4979.1	4906.5	4891.6	4826.5	4822.8	4765.2	4770.7	4757.7
20°	5233.9	5179.9	5157.6	5194.8	5103.7	5092.5	5014.4	5007.0	4945.6	4928.8	4921.4
22.5°	5425.4	5382.7	5371.5	5412.4	5317.6	5308.3	5233.9	5224.6	5166.9	5142.7	4995.8
25°	5641.2	5631.9	5628.2	5641.2	5551.9	5533.3	5475.7	5462.6	5414.3	5384.5	5206.0
27.5°	5920.2	5916.5	5905.3	5907.2	5825.3	5808.6	5754.7	5745.4	5695.1	5661.7	5432.9
30°	6212.2	6212.2	6188.0	6201.0	6160.1	6134.1	6091.3	6057.8	6026.2	5990.9	5702.6
32.5°	6548.8	6547.0	6524.7	6563.7	6534.0	6534.0	6507.9	6472.6	6416.8	6400.1	6050.4
35°	6982.2	6954.3	6945.0	7008.3	6999.0	7015.7	7006.4	6969.2	6922.7	6883.6	6459.6
37.5°	7462.1	7454.6	7482.5	7521.6	7542.1	7586.7	7558.8	7556.9	7549.5	7450.9	6349.8
40°	8053.5	8021.9	8061.0	8081.4	8066.6	8139.1	8114.9	8135.4	8191.2	7398.8	6342.4
42.5°	8643.1	8615.2	8643.1	8743.6	8721.3	8808.7	8797.5	8877.5	8909.1	7508.6	6857.6
45°	9368.5	9336.9	9359.2	9478.3	9489.4	9595.4	9653.1	9729.3	9744.2	8219.1	7478.8
47.5°	10201.8	10149.7	10192.5	10248.3	10417.5	10518.0	10573.8	10666.8	10761.6	9074.6	8185.6
50°	11120.6	11116.9	11163.4	11260.1	11453.5	11553.9	11650.7	11747.4	11903.6	10028.8	8977.9
52.5°	12288.6	12264.4	12344.4	12435.6	12606.7	12761.0	12876.4	12976.8	13144.2	10994.1	9835.4
55°	13624.1	13540.4	13692.9	13847.2	13919.8	14102.1	14182.0	14265.7	14425.7	12009.6	10335.7
57.5°	15065.5	15045.0	15151.1	15206.9	15363.1	15476.6	15519.3	15610.5	15608.6	13066.1	11187.5
60°	16484.6	16462.3	16586.9	16620.4	16745.0	16847.3	16832.5	16914.3	16944.0	14057.4	12022.6
62.5°	17978.2	17941.0	18056.3	18063.7	17989.3	18154.9	18138.1	18206.9	18180.9	15026.5	12844.7
65°	19611.2	19639.1	19676.3	19523.8	19345.2	19488.4	19484.7	19614.9	19707.9	16380.5	13945.8
67.5°	21748.3	21712.9	21521.4	21153.1	20719.7	20574.6	20420.3	20515.1	20541.2	17053.8	14509.4
70°	20825.7	20747.6	20662.1	20286.4	19763.7	19395.4	19155.5	19256.0	19362.0	16116.4	13627.8
72.5°	18577.1	18383.6	17985.6	17654.5	17353.2	16994.3	16702.3	16877.1	17109.6	14295.5	12067.3
75°	14656.3	14475.9	14185.8	13960.7	13798.9	13795.2	13782.2	13917.9	13884.4	11607.9	9811.2
77.5°	9076.5	9454.1	9721.9	9530.3	9597.3	9459.7	9762.8	9941.4	10103.2	8321.4	6989.7
80°	4190.4	4287.2	4761.4	4638.7	4540.1	4512.2	4530.8	4841.4	4932.6	3734.8	3128.4
82.5°	956.0	917.0	950.4	881.6	877.9	837.0	842.6	842.6	812.8	688.2	576.6
85°	483.6	494.7	498.5	478.0	422.2	379.4	351.5	297.6	256.7	219.5	186.0
87.5°	323.6	332.9	338.5	310.6	279.0	243.7	221.3	180.4	143.2	89.3	68.8
90°	221.3	219.5	213.9	199.0	178.6	152.5	122.8	85.6	50.2	18.6	13.0
92.5°	158.1	154.4	152.5	139.5	124.6	104.2	80.0	53.9	27.9	13.0	7.4
95°	104.2	102.3	102.3	94.9	83.7	68.8	53.9	35.3	20.5	11.2	7.4
97.5°	72.5	70.7	70.7	67.0	59.5	50.2	37.2	24.2	16.7	11.2	7.4
100°	50.2	50.2	50.2	46.5	42.8	35.3	27.9	18.6	14.9	11.2	7.4
102.5°	33.5	33.5	35.3	33.5	29.8	24.2	18.6	14.9	13.0	9.3	7.4
105°	22.3	22.3	22.3	22.3	20.5	16.7	14.9	13.0	11.2	9.3	7.4
107.5°	14.9	14.9	14.9	14.9	13.0	11.2	11.2	11.2	9.3	9.3	7.4
110°	9.3	9.3	9.3	11.2	9.3	9.3	9.3	9.3	9.3	7.4	7.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
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°	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9	4383.9
2.5°	4402.5	4376.4	4389.5	4363.4	4352.3	4328.1	4374.6	4378.3	4374.6	4382.0
5°	4408.1	4378.3	4393.2	4363.4	4357.8	4329.9	4376.4	4376.4	4365.3	4370.9
7.5°	4421.1	4389.5	4400.6	4365.3	4365.3	4331.8	4387.6	4383.9	4374.6	4387.6
10°	4465.7	4428.5	4428.5	4395.0	4398.8	4363.4	4432.2	4432.2	4424.8	4447.1
12.5°	4534.5	4488.0	4489.9	4443.4	4450.8	4422.9	4506.6	4510.4	4510.4	4547.6
15°	4623.8	4553.1	4560.6	4510.4	4525.2	4491.8	4566.2	4562.4	4571.7	4625.7
17.5°	4733.5	4655.4	4590.3	4426.7	4329.9	4333.7	4555.0	4657.3	4538.3	4573.6
20°	4780.0	4400.6	4194.2	4134.6	4121.6	3915.2	3493.0	3558.1	3956.1	4129.1
22.5°	4467.6	4346.7	4326.2	4250.0	3686.4	3530.2	3556.2	3519.0	3128.4	2907.1
25°	4620.1	4540.1	4493.6	3822.2	3695.7	3667.8	3649.2	3295.8	2871.7	2892.2
27.5°	4835.8	4731.7	4173.7	3838.9	3863.1	3820.3	3712.4	2964.7	2951.7	2985.2
30°	5090.7	4828.4	4067.7	4036.1	4064.0	4008.2	3121.0	3091.2	3091.2	3124.7
32.5°	5403.1	4380.2	4316.9	4320.6	4302.0	3669.7	3284.7	3277.2	3299.5	3327.4
35°	5315.7	4672.2	4677.7	4709.4	4666.6	3589.7	3541.3	3513.4	3532.0	3543.2
37.5°	5144.6	5111.1	5111.1	5075.8	3984.0	3870.5	3818.5	3814.7	3812.9	3812.9
40°	5576.1	5544.5	5505.4	5444.0	4168.1	4197.9	4119.8	4110.5	4116.0	4136.5
42.5°	6067.1	6054.1	6050.4	4672.2	4551.3	4573.6	4489.9	4465.7	4465.7	4512.2
45°	6645.6	6628.8	6217.8	4993.9	4973.5	4999.5	4906.5	4848.9	4880.5	4914.0
47.5°	7309.6	7309.6	5505.4	5475.7	5475.7	5490.5	5397.5	5319.4	5351.0	5362.2
50°	8036.8	6900.4	6057.8	6029.9	6056.0	6048.5	5951.8	5226.4	5897.9	5903.4
52.5°	8239.5	6710.7	6664.2	6632.5	6664.2	6658.6	6558.1	4359.7	6379.6	6470.7
55°	7304.0	7309.6	7300.3	7253.8	7287.2	7274.2	7175.6	4759.6	4703.8	4192.3
57.5°	7897.3	7904.7	7901.0	7893.6	7923.3	5756.5	7432.3	4300.2	2626.2	2628.1
60°	8542.7	8505.5	8494.3	8477.6	7184.9	4080.7	3096.8	299.5	1026.7	1011.8
62.5°	9128.6	9115.6	9076.5	9067.2	6096.9	3214.0	3139.6	68.8	53.9	52.1
65°	9943.2	9827.9	9796.3	9697.7	6498.6	3422.3	3351.6	20.5	1.9	0.0
67.5°	10246.4	10012.1	9898.6	9846.5	6612.1	3530.2	3394.4	20.5	1.9	0.0
70°	9673.5	9383.4	9240.2	9182.5	6178.7	3299.5	3165.6	20.5	1.9	0.0
72.5°	8578.0	8364.1	8306.5	8122.4	5447.8	2895.9	2778.7	20.5	0.0	0.0
75°	7036.2	6958.0	6887.4	6692.1	4428.5	2300.7	2196.6	18.6	0.0	0.0
77.5°	5120.4	5005.1	4874.9	4662.9	2988.9	1502.8	1448.9	16.7	0.0	0.0
80°	2308.2	2213.3	2181.7	1850.6	1060.2	489.2	431.5	14.9	0.0	0.0
82.5°	448.2	403.6	383.1	368.3	238.1	132.1	115.3	11.2	0.0	0.0
85°	152.5	169.3	197.2	217.6	133.9	80.0	67.0	7.4	0.0	0.0
87.5°	59.5	80.0	96.7	100.4	50.2	33.5	18.6	3.7	0.0	0.0
90°	11.2	14.9	13.0	9.3	5.6	1.9	0.0	0.0	0.0	0.0
92.5°	5.6	7.4	5.6	5.6	3.7	1.9	0.0	0.0	0.0	0.0
95°	7.4	7.4	7.4	5.6	3.7	1.9	0.0	0.0	0.0	0.0
97.5°	7.4	7.4	7.4	5.6	3.7	1.9	0.0	0.0	0.0	0.0
100°	7.4	7.4	7.4	5.6	3.7	1.9	0.0	0.0	0.0	0.0
102.5°	7.4	7.4	7.4	5.6	3.7	1.9	0.0	0.0	0.0	0.0
105°	7.4	9.3	7.4	5.6	3.7	1.9	0.0	0.0	0.0	0.0
107.5°	7.4	9.3	7.4	5.6	3.7	1.9	0.0	0.0	0.0	0.0
110°	7.4	9.3	7.4	5.6	3.7	1.9	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°
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)