

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: P579660

Luminaire Tested: **CTN-CA8-480-727-U-T5-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579660
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-1)
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-EX90
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: 48584 lumens
Efficiency: N/A
Efficacy: 101.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

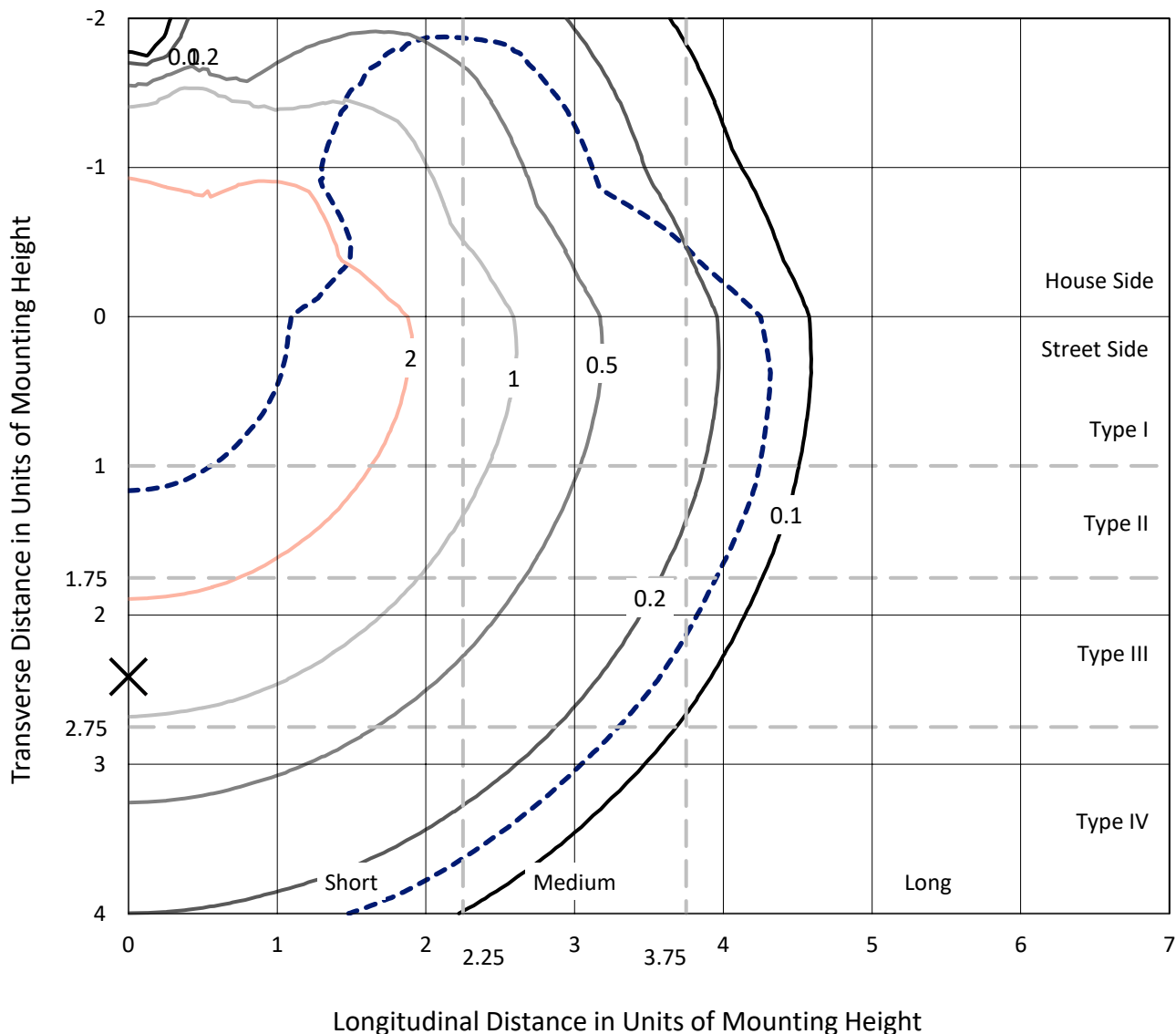
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

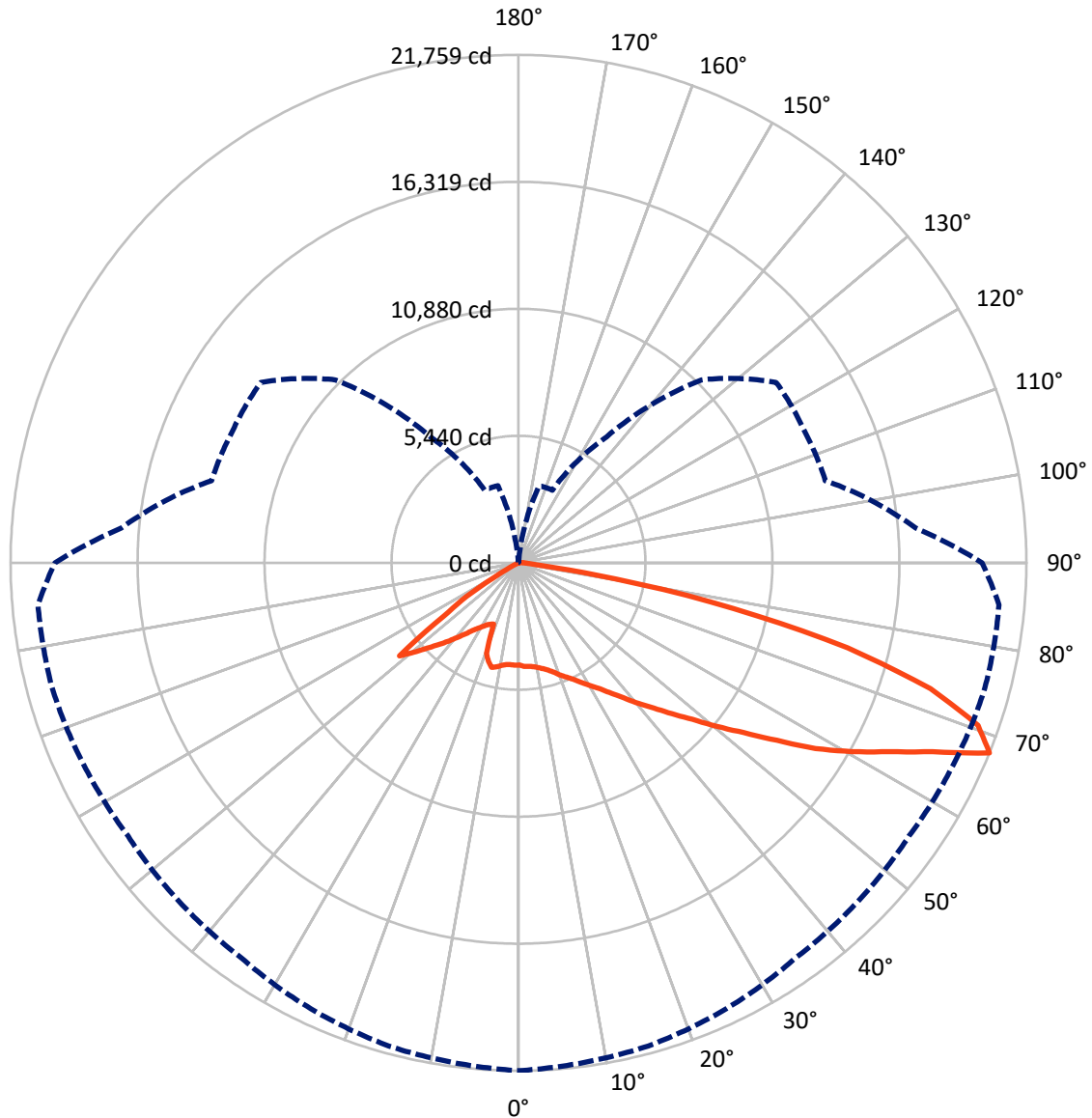
✕ Max cd
 - - - 1/2 Max cd



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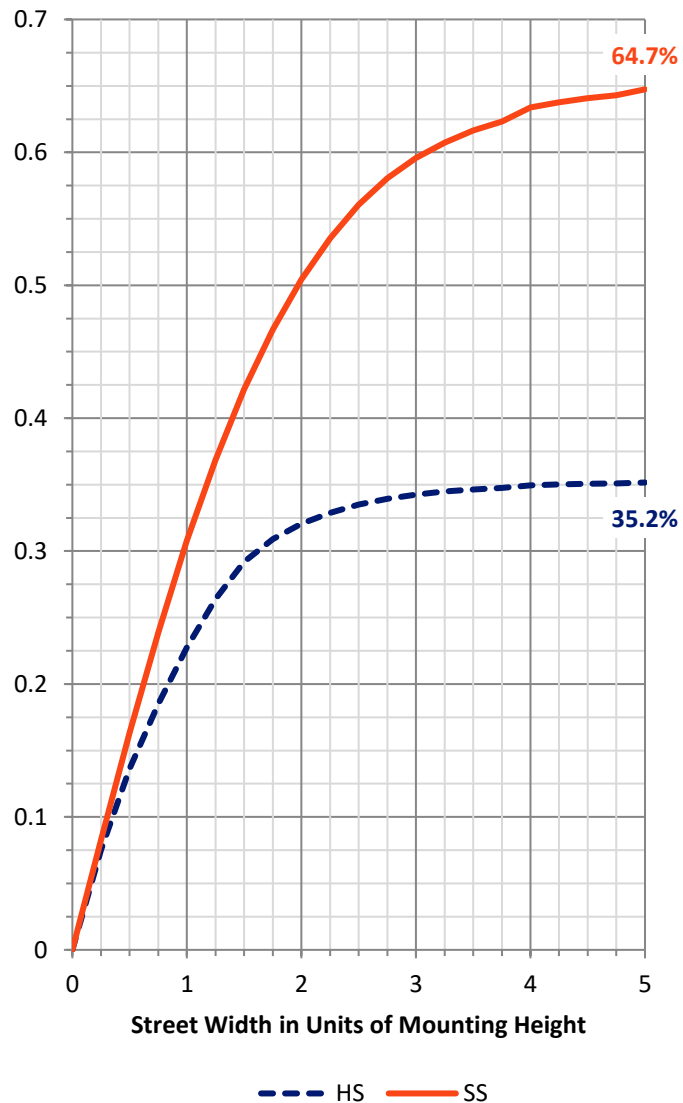
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	17101.5	1.0	17102.5
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	31447.2	34.3	31481.5
	% Fixture	64.7	0.1	64.8
Total	Lumens	48548.7	35.3	48584.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.2	0.9
10°-20°	1308.5	2.7
20°-30°	2268.6	4.7
30°-40°	3722.4	7.7
40°-50°	6209.0	12.8
50°-60°	10048.5	20.7
60°-70°	13870.2	28.5
70°-80°	10006.8	20.6
80°-90°	693.6	1.4
90°-100°	30.1	0.1
100°-110°	5.0	0.0
110°-120°	0.2	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°	48548.7	99.9
0°-180°	48584.0	100.0

Coefficient of Utilization

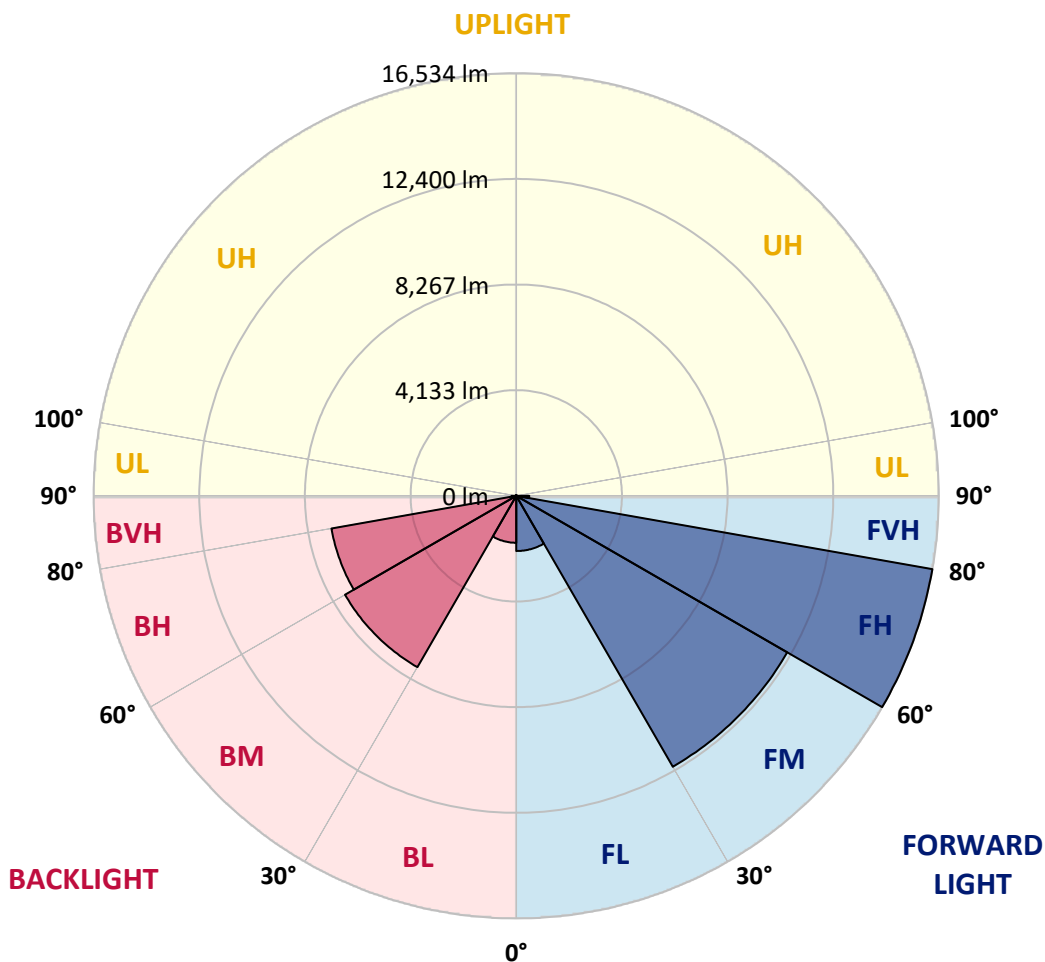


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2160.5	4.4			
FM (30°-60°)	12241.9	25.2			
FH (60°-80°)	16533.8	34.0			G5
FVH (80°-90°)	511.1	1.1			G4/750
BL (0°-30°)	1837.8	3.8	B3/2500		
BM (30°-60°)	7738.0	15.9	B4/8500		
BH (60°-80°)	7343.2	15.1	B5		G5
BVH (80°-90°)	182.5	0.4			G2/225
UL (90°-100°)	30.1	0.1		U2/50	
UH (100°-180°)	5.2	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°	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3
2.5°	4445.2	4419.2	4421.0	4447.1	4376.4	4402.4	4372.7	4398.7	4385.7	4395.0	4406.2
5°	4458.2	4426.6	4430.3	4462.0	4406.2	4426.6	4391.3	4406.2	4395.0	4406.2	4408.0
7.5°	4491.7	4460.1	4462.0	4486.1	4428.5	4443.4	4409.9	4417.3	4398.7	4419.2	4413.6
10°	4562.4	4532.6	4521.5	4541.9	4491.7	4493.6	4454.5	4462.0	4434.1	4462.0	4450.8
12.5°	4657.3	4616.3	4620.1	4631.2	4569.8	4573.6	4527.1	4538.2	4491.7	4530.8	4517.8
15°	4772.6	4722.4	4727.9	4746.5	4687.0	4681.4	4638.7	4638.7	4597.7	4627.5	4614.5
17.5°	4932.5	4876.7	4873.0	4886.0	4837.7	4837.7	4789.3	4783.7	4742.8	4767.0	4763.3
20°	5140.8	5077.6	5066.4	5090.6	5029.2	5036.7	4975.3	4969.7	4925.1	4940.0	4941.8
22.5°	5328.7	5278.5	5276.6	5313.8	5241.3	5250.6	5194.8	5179.9	5142.7	5163.2	5168.7
25°	5544.4	5537.0	5531.4	5544.4	5471.9	5471.9	5432.8	5419.8	5395.6	5410.5	5425.4
27.5°	5816.0	5812.3	5797.4	5799.3	5737.9	5747.2	5704.4	5697.0	5685.8	5683.9	5676.5
30°	6115.4	6098.7	6078.2	6091.3	6063.4	6072.7	6035.5	6011.3	6007.6	6009.4	5998.3
32.5°	6448.4	6426.0	6413.0	6435.3	6446.5	6472.5	6470.7	6403.7	6403.7	6431.6	6381.4
35°	6861.3	6825.9	6837.1	6866.9	6889.2	6956.1	6945.0	6898.5	6913.3	6926.4	6866.9
37.5°	7346.7	7322.5	7372.8	7428.5	7430.4	7525.3	7502.9	7514.1	7512.2	7495.5	7456.4
40°	7928.9	7889.8	7941.9	7984.7	7958.6	8072.1	8068.4	8118.6	8152.1	8209.7	8187.4
42.5°	8507.3	8477.5	8527.8	8620.8	8605.9	8736.1	8754.7	8832.8	8879.3	8968.6	8916.5
45°	9219.7	9202.9	9249.4	9322.0	9372.2	9545.1	9614.0	9647.4	9764.6	9872.5	9751.6
47.5°	10017.6	10039.9	10032.4	10164.5	10276.1	10486.3	10514.2	10622.0	10724.3	10843.4	10726.2
50°	11010.8	10973.6	11007.0	11133.5	11315.8	11468.3	11611.5	11765.9	11866.3	11989.1	11773.3
52.5°	12080.2	12111.8	12186.2	12381.5	12515.4	12695.9	12826.1	13010.2	13108.8	13214.8	12933.9
55°	13428.7	13454.7	13536.5	13737.4	13832.3	14036.9	14126.1	14310.3	14405.1	14451.6	14092.7
57.5°	15009.6	14922.2	14989.2	15093.3	15240.2	15461.6	15485.8	15658.7	15658.7	15718.2	15260.7
60°	16421.3	16361.8	16432.5	16581.2	16638.9	16839.8	16819.3	16960.7	16997.9	16953.2	16406.4
62.5°	17812.5	17823.7	17914.8	17963.2	17940.9	18059.9	18108.2	18257.0	18195.7	18210.5	17580.0
65°	19501.3	19527.4	19518.1	19428.8	19227.9	19462.3	19449.3	19685.5	19700.3	19834.3	19101.5
67.5°	21759.3	21644.0	21433.8	21074.8	20676.8	20539.2	20418.3	20535.5	20686.1	20661.9	19858.4
70°	20881.4	20693.5	20583.8	20271.3	19739.4	19464.1	19213.0	19233.5	19453.0	19473.4	18651.3
72.5°	18459.8	18364.9	17942.7	17669.3	17304.8	17092.7	16789.6	16858.4	17144.8	17193.2	16538.5
75°	14561.4	14474.0	14092.7	14003.4	13823.0	13927.1	13852.7	13880.6	14111.3	13899.2	13506.8
77.5°	9424.3	9444.7	9385.2	9587.9	9580.5	9586.1	9857.6	9885.5	10110.6	9980.4	9600.9
80°	4225.8	4287.1	4432.2	4726.1	4547.5	4644.2	4748.4	4716.8	4943.7	4430.3	4614.5
82.5°	855.6	885.3	835.1	872.3	814.6	844.4	887.2	822.1	814.6	755.1	701.2
85°	440.8	446.4	444.5	435.2	383.1	353.4	340.4	286.4	258.5	253.0	234.4
87.5°	286.4	290.1	280.8	279.0	245.5	225.1	200.9	169.3	141.4	98.6	81.8
90°	174.8	174.8	165.5	156.2	139.5	124.6	100.4	72.5	42.8	16.7	9.3
92.5°	117.2	117.2	113.5	107.9	96.7	83.7	65.1	42.8	20.5	7.4	3.7
95°	74.4	74.4	72.5	70.7	63.2	53.9	40.9	26.0	13.0	5.6	1.9
97.5°	48.4	48.4	48.4	46.5	42.8	37.2	27.9	16.7	9.3	3.7	1.9
100°	29.8	31.6	29.8	29.8	27.9	24.2	18.6	11.2	7.4	3.7	1.9
102.5°	16.7	16.7	18.6	18.6	16.7	14.9	11.2	9.3	5.6	3.7	1.9
105°	7.4	7.4	9.3	9.3	9.3	7.4	7.4	5.6	3.7	3.7	1.9
107.5°	1.9	1.9	1.9	3.7	5.6	5.6	5.6	5.6	3.7	1.9	1.9
110°	0.0	0.0	0.0	1.9	1.9	3.7	3.7	3.7	3.7	1.9	1.9



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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°	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3	4378.3
2.5°	4395.0	4372.7	4389.4	4361.5	4354.1	4329.9	4376.4	4383.8	4380.1	4387.6
5°	4398.7	4370.8	4391.3	4363.4	4361.5	4335.5	4383.8	4385.7	4372.7	4378.3
7.5°	4409.9	4383.8	4398.7	4367.1	4370.8	4339.2	4395.0	4393.1	4385.7	4398.7
10°	4450.8	4421.0	4426.6	4393.1	4402.4	4369.0	4437.8	4441.5	4434.1	4458.2
12.5°	4521.5	4480.6	4493.6	4454.5	4462.0	4428.5	4512.2	4517.8	4517.8	4556.8
15°	4618.2	4575.4	4603.3	4553.1	4555.0	4504.7	4568.0	4568.0	4575.4	4629.4
17.5°	4759.6	4707.5	4744.7	4698.2	4408.0	4298.3	4514.0	4646.1	4426.6	4408.0
20°	4934.4	4910.2	4930.7	4854.4	4383.8	3881.7	3491.1	3470.6	3904.0	4119.7
22.5°	5148.3	5124.1	5133.4	5036.7	3913.3	3559.9	3554.3	3517.1	2975.9	2827.1
25°	5399.4	5386.3	5365.9	4555.0	4045.3	3706.8	3662.2	3176.8	2866.1	2894.0
27.5°	5669.1	5630.0	4940.0	4731.7	4248.1	3853.8	3600.8	2966.6	2955.4	2981.5
30°	5970.4	5763.9	5057.1	4986.5	4484.3	4036.0	3134.0	3096.8	3096.8	3137.7
32.5°	6353.5	5382.6	5382.6	5345.4	4776.3	3543.2	3299.5	3277.2	3303.2	3320.0
35°	6295.9	5790.0	5849.5	5832.7	5172.5	3608.3	3565.5	3528.3	3533.9	3533.9
37.5°	6314.5	6334.9	6405.6	6333.1	4512.2	3891.0	3822.1	3814.7	3820.3	3833.3
40°	6898.5	6909.6	6935.7	6775.7	4848.8	4220.2	4125.3	4106.7	4125.3	4153.2
42.5°	7527.1	7558.7	7588.5	6161.9	5319.4	4594.0	4499.2	4463.8	4497.3	4527.1
45°	8271.1	8319.5	7863.8	6706.9	5851.3	5019.9	4919.5	4876.7	4897.2	4923.2
47.5°	9108.1	9184.3	7415.5	7400.6	6476.3	5524.0	5408.7	5326.8	5358.4	5356.6
50°	10052.9	8777.0	8193.0	8183.7	7173.7	6085.7	5966.6	5892.2	5916.4	5897.8
52.5°	11074.0	9016.9	9035.5	9033.7	7902.8	6690.2	6580.4	6487.4	6295.9	6472.5
55°	12119.3	9846.5	9917.1	9906.0	8667.3	7315.1	7197.9	7110.5	4646.1	3924.4
57.5°	13159.0	10713.2	10735.5	10761.5	9459.6	7917.7	7402.5	6799.9	2650.4	2637.4
60°	14185.7	11539.0	11583.6	11598.5	9887.4	6554.4	3026.1	3081.9	801.6	957.9
62.5°	15249.5	12353.6	12394.6	12381.5	10313.3	6095.0	3178.6	3115.4	74.4	68.8
65°	16607.3	13374.7	13317.1	13274.3	10984.7	6504.2	3414.8	3398.1	24.2	16.7
67.5°	17083.4	13607.2	13490.1	13475.2	11081.4	6591.6	3433.4	3420.4	24.2	16.7
70°	16004.7	12723.8	12522.9	12528.5	10311.4	6165.7	3202.8	3184.2	22.3	16.7
72.5°	14016.4	11237.7	11154.0	10711.3	8929.5	5423.5	2840.1	2769.4	22.3	14.9
75°	11507.4	9078.3	8892.3	8395.7	7106.8	4311.3	2230.1	2138.9	20.5	13.0
77.5°	7988.4	6366.5	6011.3	5505.4	4754.0	2858.7	1499.1	1381.9	18.6	13.0
80°	3621.3	2613.2	2626.2	2012.4	1612.6	969.0	476.1	431.5	16.7	11.2
82.5°	630.5	465.0	437.1	422.2	351.5	238.1	145.1	124.6	14.9	7.4
85°	219.5	176.7	195.3	230.6	204.6	143.2	89.3	85.6	9.3	3.7
87.5°	74.4	78.1	91.1	109.7	96.7	55.8	33.5	24.2	1.9	0.0
90°	7.4	9.3	9.3	9.3	5.6	0.0	0.0	0.0	0.0	0.0
92.5°	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.9	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.9	1.9	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	1.9	1.9	1.9	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°
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)