

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: P579468

Luminaire Tested: **CTN-CA8-480-730-U-T5-HSS-HM-EX90**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579468
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-CA8-480-730-U-T5-HSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (8) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56335 lumens
Efficiency: N/A
Efficacy: 117.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B5 - U2 - G5

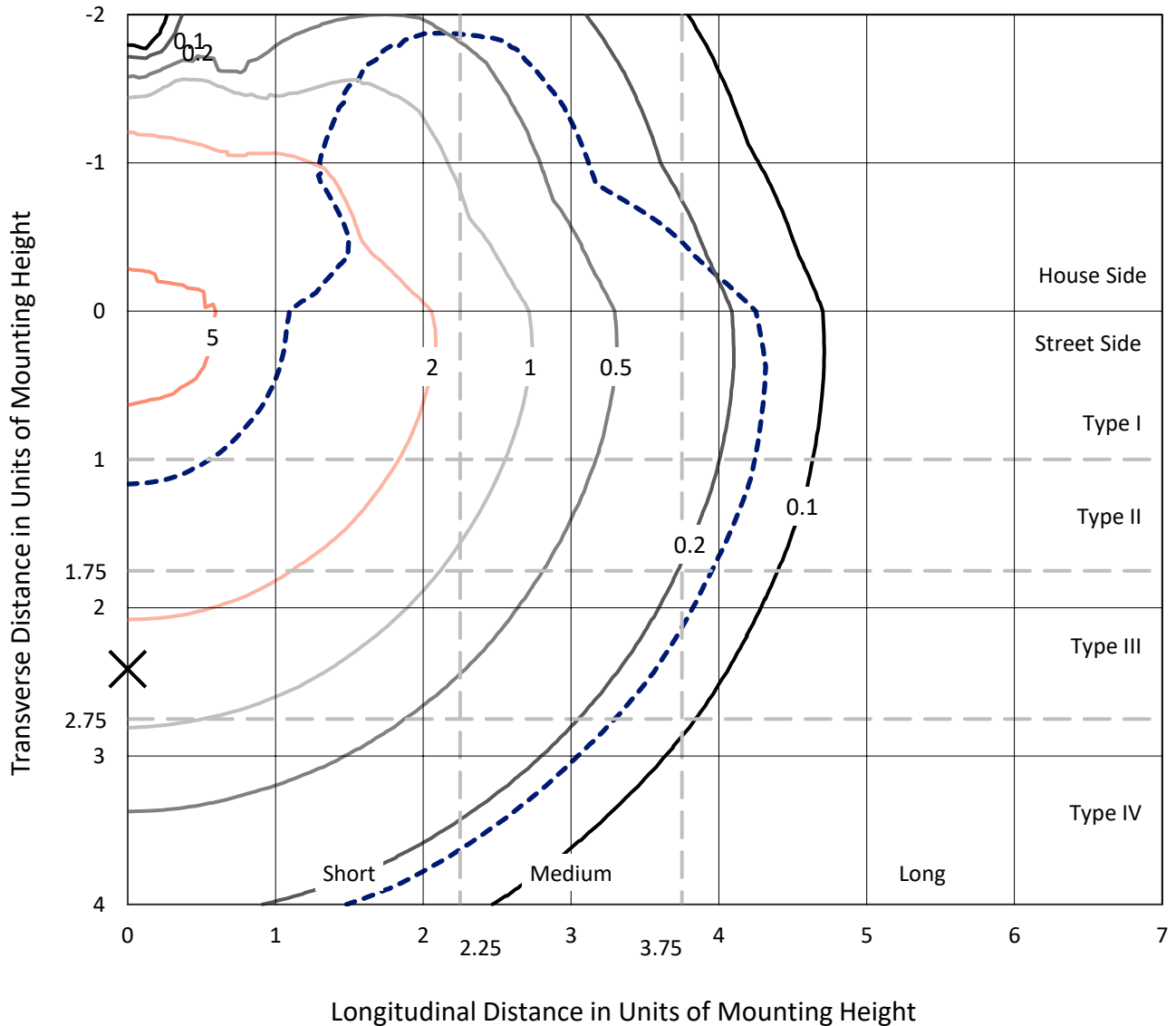
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

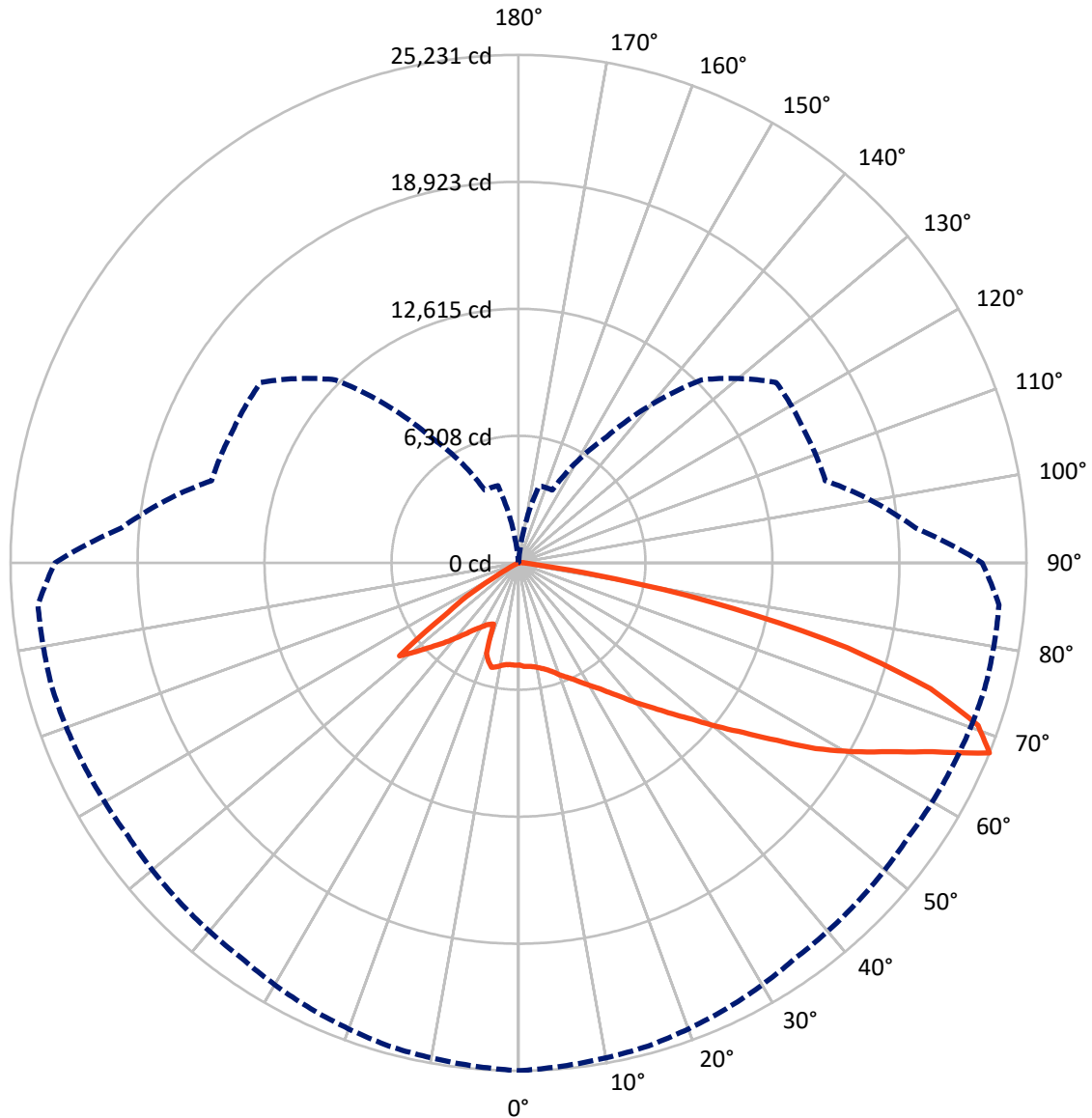
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 5.6 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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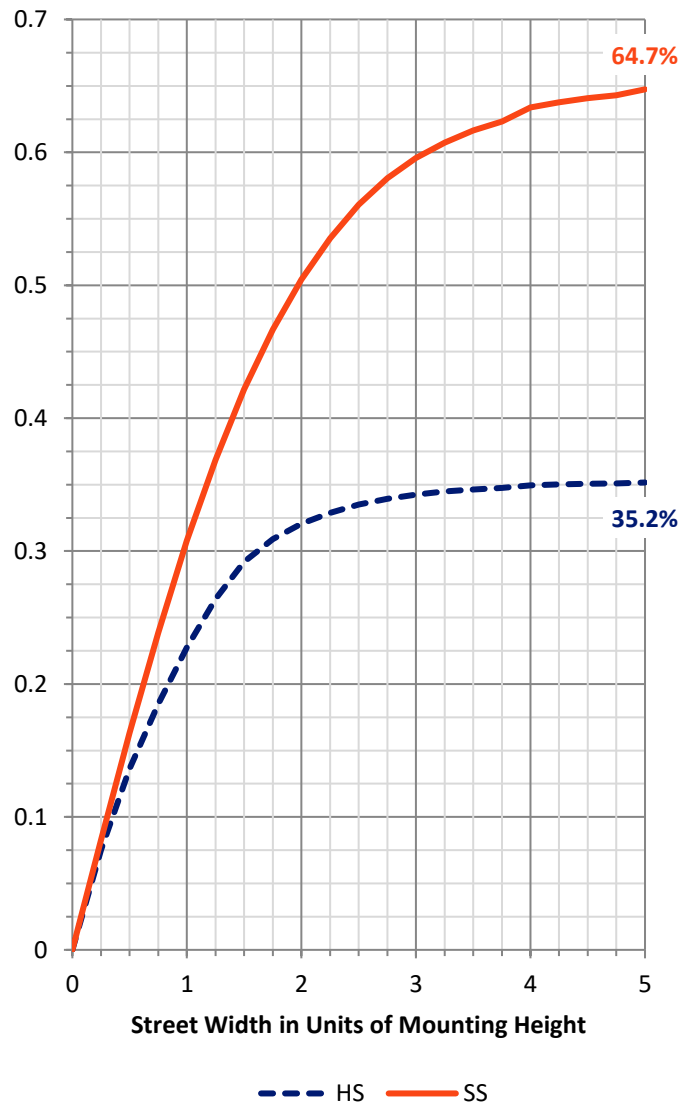
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	19829.8	1.2	19831.0
	% Fixture	35.2	0.0	35.2
Street Side	Lumens	36464.3	39.7	36504.0
	% Fixture	64.7	0.1	64.8
Total	Lumens	56294.1	40.9	56335.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	488.4	0.9
10°-20°	1517.2	2.7
20°-30°	2630.5	4.7
30°-40°	4316.3	7.7
40°-50°	7199.6	12.8
50°-60°	11651.6	20.7
60°-70°	16083.0	28.5
70°-80°	11603.2	20.6
80°-90°	804.2	1.4
90°-100°	34.9	0.1
100°-110°	5.8	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°	56294.1	99.9
0°-180°	56335.0	100.0

Coefficient of Utilization

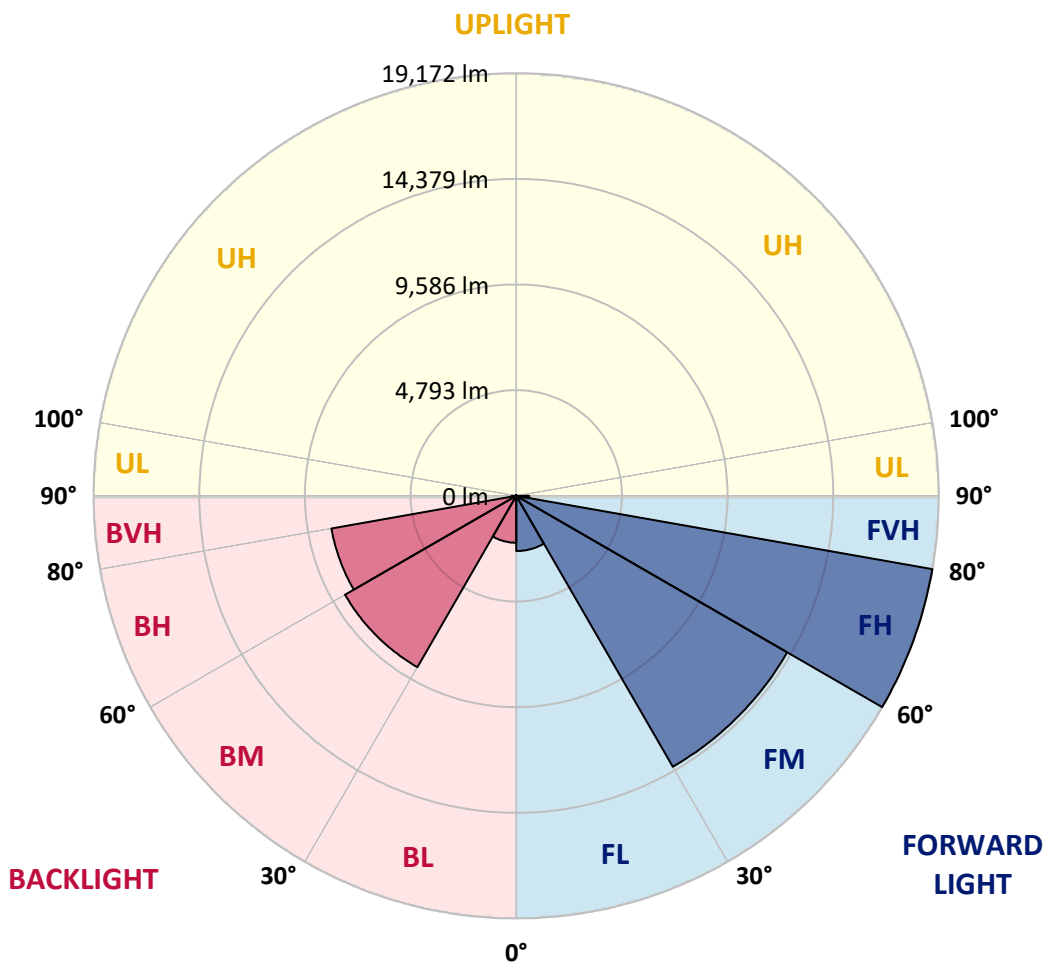


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2505.1	4.4			
FM (30°-60°)	14195.0	25.2			
FH (60°-80°)	19171.5	34.0			G5
FVH (80°-90°)	592.6	1.1			G4/750
BL (0°-30°)	2131.0	3.8	B3/2500		
BM (30°-60°)	8972.5	15.9	B5		
BH (60°-80°)	8514.7	15.1	B5		G5
BVH (80°-90°)	211.7	0.4			G2/225
UL (90°-100°)	34.9	0.1		U2/50	
UH (100°-180°)	6.1	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°	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8
2.5°	5154.4	5124.2	5126.4	5156.6	5074.6	5104.8	5070.3	5100.5	5085.4	5096.2	5109.1
5°	5169.5	5132.8	5137.2	5173.8	5109.1	5132.8	5091.9	5109.1	5096.2	5109.1	5111.3
7.5°	5208.3	5171.7	5173.8	5201.9	5135.0	5152.3	5113.4	5122.1	5100.5	5124.2	5117.7
10°	5290.3	5255.8	5242.8	5266.6	5208.3	5210.5	5165.2	5173.8	5141.5	5173.8	5160.9
12.5°	5400.3	5352.8	5357.1	5370.1	5298.9	5303.2	5249.3	5262.2	5208.3	5253.6	5238.5
15°	5534.0	5475.8	5482.2	5503.8	5434.8	5428.3	5378.7	5378.7	5331.3	5365.8	5350.7
17.5°	5719.5	5654.8	5650.4	5665.5	5609.5	5609.5	5553.4	5546.9	5499.5	5527.5	5523.2
20°	5961.0	5887.7	5874.7	5902.8	5831.6	5840.2	5769.1	5762.6	5710.8	5728.1	5730.2
22.5°	6178.8	6120.6	6118.4	6161.6	6077.5	6088.2	6023.5	6006.3	5963.2	5986.9	5993.3
25°	6429.0	6420.4	6413.9	6429.0	6344.9	6344.9	6299.6	6284.5	6256.5	6273.7	6291.0
27.5°	6743.9	6739.6	6722.3	6724.5	6653.3	6664.1	6614.5	6605.8	6592.9	6590.7	6582.1
30°	7091.1	7071.7	7048.0	7063.0	7030.7	7041.5	6998.3	6970.3	6966.0	6968.2	6955.2
32.5°	7477.1	7451.2	7436.2	7462.0	7475.0	7505.2	7503.0	7425.4	7425.4	7457.7	7399.5
35°	7955.9	7914.9	7927.9	7962.4	7988.3	8065.9	8053.0	7999.0	8016.3	8031.4	7962.4
37.5°	8518.8	8490.8	8549.0	8613.7	8615.8	8725.8	8700.0	8712.9	8710.7	8691.3	8646.0
40°	9193.8	9148.5	9208.9	9258.5	9228.3	9359.9	9355.6	9413.8	9452.6	9519.5	9493.6
42.5°	9864.5	9830.0	9888.3	9996.1	9978.8	10129.8	10151.4	10242.0	10295.9	10399.4	10339.0
45°	10690.5	10671.1	10725.1	10809.2	10867.4	11068.0	11147.8	11186.6	11322.4	11447.5	11307.3
47.5°	11615.8	11641.6	11633.0	11786.1	11915.5	12159.2	12191.6	12316.7	12435.3	12573.3	12437.4
50°	12767.4	12724.3	12763.1	12909.7	13121.1	13297.9	13464.0	13643.0	13759.5	13901.8	13651.6
52.5°	14007.5	14044.1	14130.4	14356.9	14512.1	14721.3	14872.3	15085.8	15200.1	15323.0	14997.4
55°	15571.1	15601.3	15696.1	15929.1	16039.1	16276.3	16379.8	16593.3	16703.3	16757.2	16341.0
57.5°	17404.2	17302.9	17380.5	17501.3	17671.6	17928.3	17956.3	18156.9	18156.9	18225.9	17695.4
60°	19041.1	18972.1	19054.1	19226.6	19293.4	19526.4	19502.6	19666.5	19709.7	19657.9	19023.9
62.5°	20654.3	20667.2	20772.9	20829.0	20803.1	20941.1	20997.2	21169.7	21098.6	21115.8	20384.7
65°	22612.5	22642.7	22632.0	22528.4	22295.5	22567.3	22552.2	22826.0	22843.3	22998.6	22148.9
67.5°	25230.7	25097.0	24853.3	24437.1	23975.5	23816.0	23675.8	23811.6	23986.3	23958.3	23026.6
70°	24212.8	23995.0	23867.7	23505.4	22888.6	22569.4	22278.3	22302.0	22556.5	22580.2	21626.9
72.5°	21404.8	21294.8	20805.3	20488.2	20065.5	19819.7	19468.1	19547.9	19880.1	19936.1	19177.0
75°	16884.5	16783.1	16341.0	16237.5	16028.3	16149.0	16062.8	16095.1	16362.6	16116.7	15661.6
77.5°	10927.8	10951.5	10882.5	11117.6	11108.9	11115.4	11430.3	11462.6	11723.6	11572.6	11132.7
80°	4899.9	4971.1	5139.3	5480.1	5273.0	5385.2	5505.9	5469.3	5732.4	5137.2	5350.7
82.5°	992.1	1026.6	968.3	1011.5	944.6	979.1	1028.7	953.2	944.6	875.6	813.1
85°	511.1	517.6	515.4	504.7	444.3	409.8	394.7	332.1	299.8	293.3	271.7
87.5°	332.1	336.4	325.7	323.5	284.7	261.0	232.9	196.3	163.9	114.3	94.9
90°	202.7	202.7	191.9	181.2	161.7	144.5	116.5	84.1	49.6	19.4	10.8
92.5°	135.9	135.9	131.6	125.1	112.1	97.0	75.5	49.6	23.7	8.6	4.3
95°	86.3	86.3	84.1	82.0	73.3	62.5	47.4	30.2	15.1	6.5	2.2
97.5°	56.1	56.1	56.1	53.9	49.6	43.1	32.3	19.4	10.8	4.3	2.2
100°	34.5	36.7	34.5	34.5	32.3	28.0	21.6	12.9	8.6	4.3	2.2
102.5°	19.4	19.4	21.6	21.6	19.4	17.3	12.9	10.8	6.5	4.3	2.2
105°	8.6	8.6	10.8	10.8	10.8	8.6	8.6	6.5	4.3	4.3	2.2
107.5°	2.2	2.2	2.2	4.3	6.5	6.5	6.5	6.5	4.3	2.2	2.2
110°	0.0	0.0	0.0	2.2	2.2	4.3	4.3	4.3	4.3	2.2	2.2



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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°	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8	5076.8
2.5°	5096.2	5070.3	5089.7	5057.4	5048.7	5020.7	5074.6	5083.2	5078.9	5087.6
5°	5100.5	5068.1	5091.9	5059.5	5057.4	5027.2	5083.2	5085.4	5070.3	5076.8
7.5°	5113.4	5083.2	5100.5	5063.8	5068.1	5031.5	5096.2	5094.0	5085.4	5100.5
10°	5160.9	5126.4	5132.8	5094.0	5104.8	5066.0	5145.8	5150.1	5141.5	5169.5
12.5°	5242.8	5195.4	5210.5	5165.2	5173.8	5135.0	5232.0	5238.5	5238.5	5283.8
15°	5355.0	5305.4	5337.7	5279.5	5281.7	5223.4	5296.7	5296.7	5305.4	5367.9
17.5°	5518.9	5458.5	5501.6	5447.7	5111.3	4984.0	5234.2	5387.3	5132.8	5111.3
20°	5721.6	5693.6	5717.3	5628.9	5083.2	4500.9	4048.0	4024.3	4526.8	4777.0
22.5°	5969.6	5941.6	5952.4	5840.2	4537.6	4127.8	4121.4	4078.2	3450.6	3278.1
25°	6260.8	6245.7	6222.0	5281.7	4690.7	4298.2	4246.5	3683.6	3323.4	3355.8
27.5°	6573.5	6528.2	5728.1	5486.5	4925.8	4468.6	4175.3	3439.9	3426.9	3457.1
30°	6922.9	6683.5	5863.9	5782.0	5199.7	4679.9	3634.0	3590.8	3590.8	3638.3
32.5°	7367.1	6241.4	6241.4	6198.2	5538.3	4108.4	3825.9	3800.0	3830.2	3849.6
35°	7300.3	6713.7	6782.7	6763.3	5997.7	4183.9	4134.3	4091.2	4097.6	4097.6
37.5°	7321.8	7345.6	7427.5	7343.4	5232.0	4511.7	4431.9	4423.3	4429.8	4444.9
40°	7999.0	8012.0	8042.2	7856.7	5622.4	4893.5	4783.5	4761.9	4783.5	4815.8
42.5°	8728.0	8764.7	8799.2	7145.0	6168.0	5326.9	5217.0	5176.0	5214.8	5249.3
45°	9590.7	9646.7	9118.3	7776.9	6784.8	5820.8	5704.4	5654.8	5678.5	5708.7
47.5°	10561.1	10649.6	8598.6	8581.3	7509.5	6405.3	6271.6	6176.7	6213.3	6211.2
50°	11656.7	10177.3	9500.1	9489.3	8318.2	7056.6	6918.6	6832.3	6860.3	6838.8
52.5°	12840.7	10455.5	10477.0	10474.9	9163.6	7757.5	7630.2	7522.4	7300.3	7505.2
55°	14052.8	11417.3	11499.3	11486.4	10050.0	8482.1	8346.3	8244.9	5387.3	4550.5
57.5°	15258.3	12422.3	12448.2	12478.4	10968.8	9180.9	8583.5	7884.7	3073.2	3058.1
60°	16448.8	13379.9	13431.7	13448.9	11464.8	7600.1	3508.9	3573.6	929.5	1110.7
62.5°	17682.4	14324.5	14372.0	14356.9	11958.7	7067.4	3685.7	3612.4	86.3	79.8
65°	19256.8	15508.5	15441.7	15392.1	12737.2	7541.8	3959.6	3940.2	28.0	19.4
67.5°	19808.9	15778.1	15642.2	15625.0	12849.4	7643.2	3981.2	3966.1	28.0	19.4
70°	18558.0	14753.7	14520.8	14527.2	11956.5	7149.3	3713.8	3692.2	25.9	19.4
72.5°	16252.6	13030.5	12933.5	12420.2	10354.1	6288.8	3293.2	3211.3	25.9	17.3
75°	13343.2	10526.6	10311.0	9735.1	8240.6	4999.1	2585.8	2480.2	23.7	15.1
77.5°	9262.8	7382.2	6970.3	6383.7	5512.4	3314.8	1738.3	1602.4	21.6	15.1
80°	4199.0	3030.1	3045.2	2333.5	1869.8	1123.6	552.1	500.3	19.4	12.9
82.5°	731.1	539.2	506.8	489.6	407.6	276.1	168.2	144.5	17.3	8.6
85°	254.5	204.9	226.4	267.4	237.2	166.1	103.5	99.2	10.8	4.3
87.5°	86.3	90.6	105.7	127.2	112.1	64.7	38.8	28.0	2.2	0.0
90°	8.6	10.8	10.8	10.8	6.5	0.0	0.0	0.0	0.0	0.0
92.5°	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	2.2	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	2.2	2.2	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110°	2.2	2.2	2.2	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)