

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: P522222

Luminaire Tested: **CTN-CA8-330-730-U-T5R-HSS-HM-EX120**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522222
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-330-730-U-T5R-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 37027 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G5

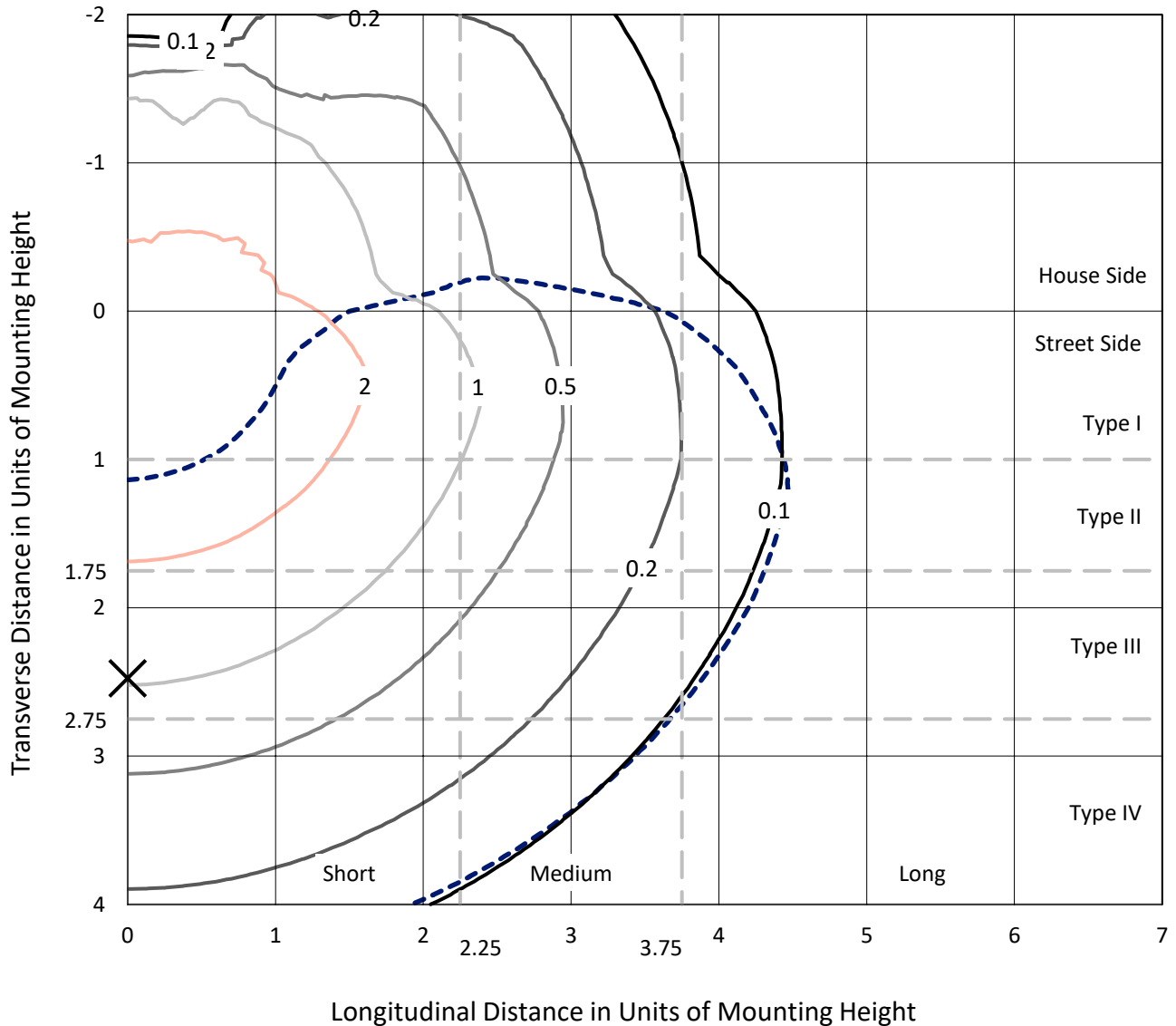
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

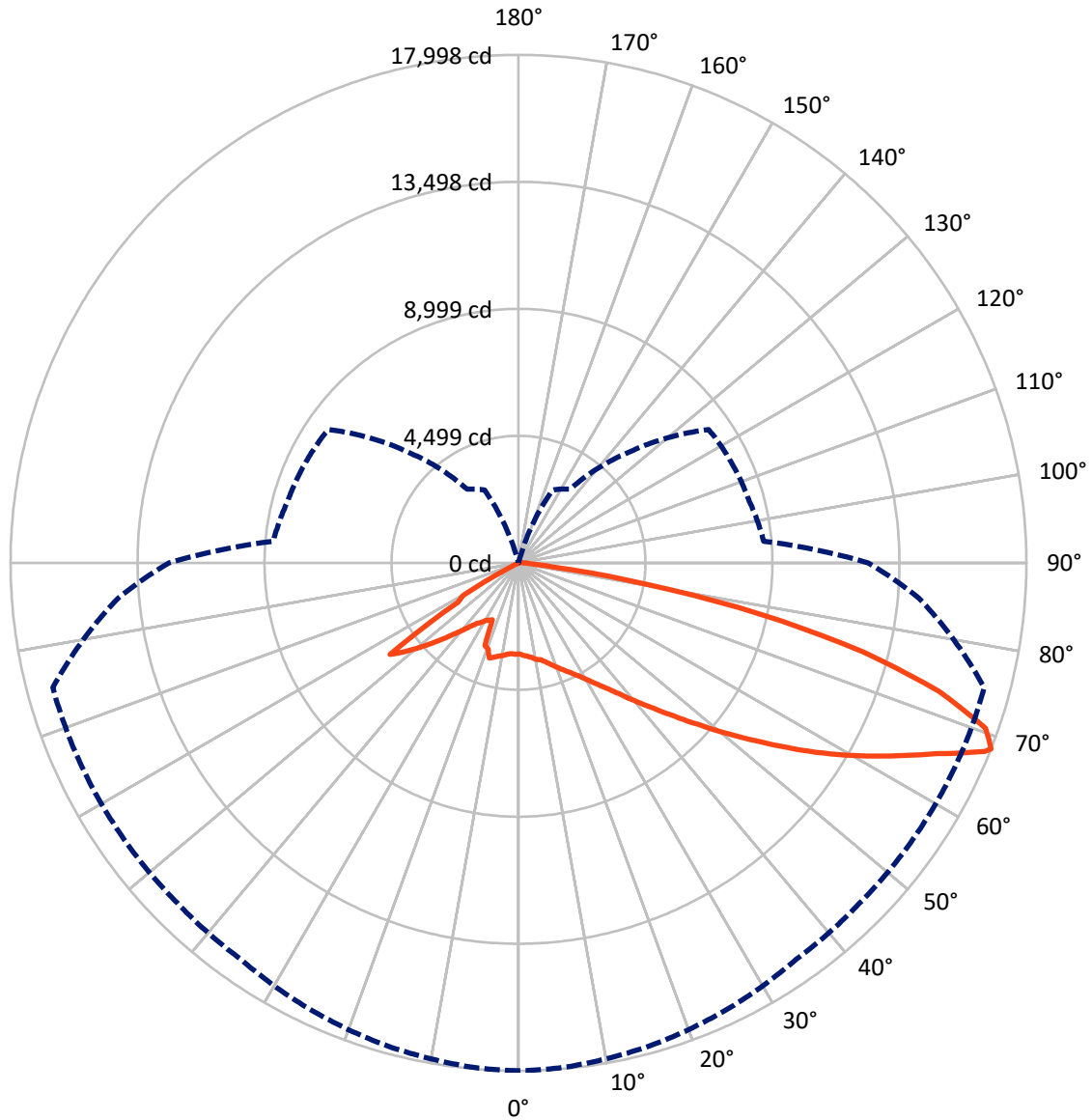
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.7 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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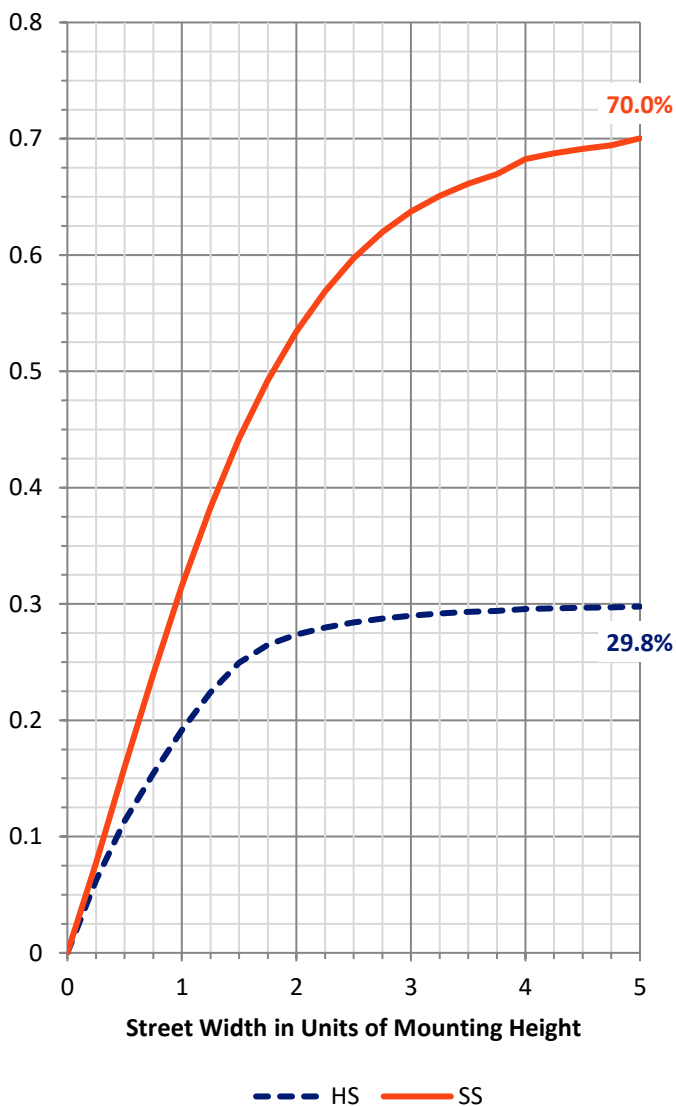
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11037.3	1.7	11039.0
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	25972.8	15.1	25987.9
	% Fixture	70.1	0.0	70.2
Total	Lumens	37010.1	16.8	37027.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	313.3	0.8
10°-20°	997.2	2.7
20°-30°	1708.0	4.6
30°-40°	2770.8	7.5
40°-50°	4672.8	12.6
50°-60°	7616.7	20.6
60°-70°	10215.3	27.6
70°-80°	7934.7	21.4
80°-90°	781.4	2.1
90°-100°	14.8	0.0
100°-110°	0.8	0.0
110°-120°	0.2	0.0
120°-130°	0.2	0.0
130°-140°	0.2	0.0
140°-150°	0.2	0.0
150°-160°	0.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	37010.1	100.0
0°-180°	37027.0	100.0

Coefficient of Utilization

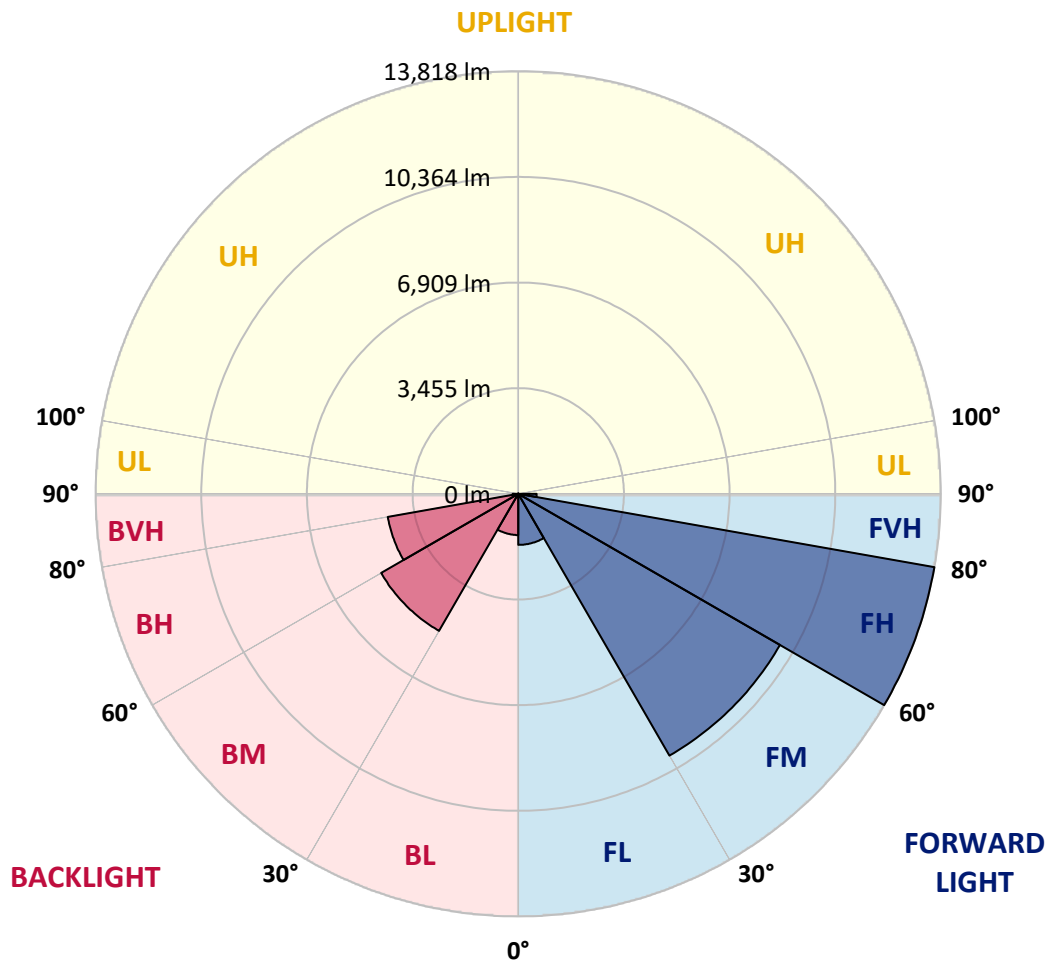


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1670.1	4.5			
FM (30°-60°)	9883.8	26.7			
FH (60°-80°)	13818.0	37.3			G5
FVH (80°-90°)	600.8	1.6			G4/750
BL (0°-30°)	1348.3	3.6	B3/2500		
BM (30°-60°)	5176.5	14.0	B4/8500		
BH (60°-80°)	4331.9	11.7	B4/5000		G4/5000
BVH (80°-90°)	180.6	0.5			G2/225
UL (90°-100°)	14.8	0.0		U2/50	
UH (100°-180°)	2.0	0.0		U1/10	

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°	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1
2.5°	3281.7	3272.5	3270.9	3289.3	3231.1	3260.2	3234.2	3255.6	3241.9	3252.6	3254.1
5°	3326.1	3309.2	3298.5	3320.0	3283.2	3297.0	3267.9	3277.1	3238.8	3260.2	3263.3
7.5°	3390.4	3362.8	3359.8	3365.9	3333.7	3344.5	3297.0	3307.7	3280.1	3267.9	3278.6
10°	3477.7	3451.6	3431.7	3445.5	3402.6	3408.8	3358.2	3359.8	3339.9	3316.9	3335.3
12.5°	3526.7	3529.7	3520.6	3531.3	3496.1	3476.1	3440.9	3428.7	3408.8	3381.2	3372.0
15°	3649.2	3643.1	3624.7	3641.5	3636.9	3618.6	3575.7	3548.1	3505.2	3489.9	3474.6
17.5°	3799.3	3779.4	3764.0	3785.5	3808.4	3770.2	3728.8	3690.5	3633.9	3603.2	3584.9
20°	3957.0	3943.2	3927.9	3961.6	3969.2	3940.1	3909.5	3852.9	3787.0	3747.2	3708.9
22.5°	4133.1	4105.5	4110.1	4154.5	4140.8	4127.0	4087.2	4041.2	3961.6	3911.0	3800.8
25°	4315.3	4300.0	4321.4	4341.4	4330.6	4301.5	4281.6	4247.9	4159.1	4097.9	3937.1
27.5°	4542.0	4517.5	4545.0	4552.7	4543.5	4535.8	4508.3	4482.2	4385.8	4316.9	4116.2
30°	4808.4	4779.3	4823.7	4813.0	4803.8	4809.9	4793.1	4736.4	4650.7	4557.3	4356.7
32.5°	5125.4	5087.1	5137.7	5114.7	5093.2	5136.1	5096.3	5042.7	4941.6	4832.9	4636.9
35°	5492.9	5494.5	5520.5	5482.2	5474.5	5520.5	5494.5	5428.6	5335.2	5221.9	4943.2
37.5°	5938.5	5926.3	5992.1	5973.8	5946.2	6007.5	6015.1	5932.4	5764.0	5652.2	5322.9
40°	6480.6	6477.6	6499.0	6502.1	6494.4	6523.5	6537.3	6427.0	6318.3	6149.9	5022.8
42.5°	7059.5	7071.7	7110.0	7082.5	7119.2	7157.5	7162.1	7070.2	6914.0	5900.3	5335.2
45°	7754.7	7793.0	7819.0	7812.9	7829.8	7884.9	7889.5	7840.5	7687.3	6391.8	5901.8
47.5°	8552.5	8589.3	8597.0	8646.0	8630.6	8708.7	8698.0	8699.6	8535.7	7076.3	6518.9
50°	9469.8	9486.7	9549.5	9577.0	9538.7	9644.4	9616.8	9650.5	9448.4	7860.4	7182.0
52.5°	10443.8	10472.9	10498.9	10603.0	10554.0	10645.9	10609.1	10687.2	10452.9	8658.2	7918.6
55°	11550.9	11555.5	11599.9	11705.6	11641.3	11751.5	11697.9	11727.0	11540.2	9540.3	8685.8
57.5°	12723.9	12708.6	12725.5	12809.7	12751.5	12834.2	12812.7	12840.3	12665.7	10468.3	9246.2
60°	13884.7	13861.7	13886.2	13942.9	13863.2	14005.7	13929.1	13955.1	13766.8	11416.2	10045.6
62.5°	15051.6	15034.7	15007.2	15063.8	14947.4	15020.9	15053.1	15010.2	14844.8	12273.7	10740.8
65°	16304.2	16287.4	16186.3	16221.5	16013.2	15978.0	15990.3	16004.1	15893.8	13123.6	11503.4
67.5°	17826.4	17801.9	17612.0	17373.1	17072.9	17007.1	17013.2	17050.0	17065.3	14217.0	12396.2
68°	17997.9	17953.5	17742.1	17465.0	17151.0	17074.5	17066.8	17074.5	17082.1	14226.2	12387.0
70°	17559.9	17543.1	17382.3	17046.9	16725.3	16541.6	16382.3	16376.2	16302.7	13498.8	11702.5
72.5°	15582.9	15561.5	15370.1	15132.7	14933.7	14645.8	14439.0	14451.3	14330.3	11930.7	10243.2
75°	12610.6	12609.1	12379.4	12180.3	12183.4	12161.9	12093.0	12214.0	12088.4	10119.1	8736.3
77.5°	8788.4	8819.0	8803.7	8687.3	8851.2	9077.8	9324.3	9557.1	9485.1	7993.6	6966.1
80°	4591.0	4676.7	4979.9	4993.7	5108.6	5329.1	5497.5	5653.7	5664.4	4535.8	4024.4
82.5°	1220.5	1246.5	1349.1	1320.0	1310.8	1355.2	1392.0	1396.6	1399.6	1182.2	1104.1
85°	379.8	390.5	378.2	361.4	335.4	306.3	298.6	243.5	192.9	159.3	139.4
87.5°	269.5	287.9	260.3	245.0	217.5	206.7	185.3	145.5	113.3	79.6	53.6
90°	139.4	142.4	127.1	108.7	101.1	94.9	81.2	58.2	29.1	15.3	13.8
92.5°	70.4	72.0	62.8	53.6	45.9	39.8	30.6	16.8	9.2	4.6	1.5
95°	27.6	29.1	26.0	23.0	18.4	13.8	12.3	9.2	6.1	3.1	1.5
97.5°	9.2	9.2	9.2	7.7	7.7	7.7	7.7	6.1	4.6	3.1	1.5
100°	0.0	0.0	0.0	1.5	3.1	4.6	4.6	4.6	3.1	1.5	1.5
102.5°	0.0	0.0	0.0	0.0	0.0	1.5	3.1	3.1	3.1	1.5	1.5
105°	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5	1.5
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5



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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	0.0	1.5	1.5	1.5
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
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	1.5
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5
165°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
170°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
175°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	1.5	1.5	1.5
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°	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1	3228.1
2.5°	3246.4	3237.3	3241.9	3203.6	3212.8	3188.3	3240.3	3226.5	3220.4	3241.9
5°	3254.1	3220.4	3248.0	3221.9	3226.5	3191.3	3234.2	3217.4	3215.8	3228.1
7.5°	3257.2	3240.3	3266.4	3223.5	3237.3	3223.5	3255.6	3238.8	3254.1	3264.8
10°	3300.0	3290.9	3287.8	3272.5	3283.2	3252.6	3292.4	3292.4	3300.0	3329.1
12.5°	3362.8	3350.6	3342.9	3315.4	3326.1	3316.9	3349.0	3355.2	3369.0	3381.2
15°	3448.6	3427.1	3419.5	3395.0	3402.6	3401.1	3424.1	3425.6	3456.2	3454.7
17.5°	3558.8	3528.2	3537.4	3519.0	3520.6	3508.3	3496.1	3496.1	3523.6	3529.7
20°	3690.5	3516.0	3286.3	3157.6	3134.7	3151.5	3217.4	3326.1	3189.8	3228.1
22.5°	3453.2	3295.4	3284.7	3255.6	3237.3	2826.9	2721.2	2687.5	2863.6	3166.8
25°	3483.8	3416.4	3396.5	3359.8	2817.7	2813.1	2782.4	2731.9	2232.7	2222.0
27.5°	3646.1	3580.3	3548.1	2943.2	2931.0	2929.5	2883.5	2376.6	2261.8	2277.1
30°	3836.0	3759.4	3183.7	3091.8	3081.1	3056.6	2793.2	2347.5	2346.0	2347.5
32.5°	4055.0	3800.8	3275.5	3270.9	3277.1	3202.0	2474.6	2465.5	2463.9	2479.2
35°	4355.1	3526.7	3505.2	3528.2	3496.1	2768.7	2623.2	2618.6	2620.1	2612.5
37.5°	4156.1	3802.3	3797.7	3797.7	3722.7	2833.0	2803.9	2825.3	2822.3	2811.5
40°	4240.3	4136.2	4108.6	4099.4	3146.9	3056.6	3039.7	3067.3	3071.9	3079.5
42.5°	4649.2	4554.2	4540.4	4431.7	3424.1	3395.0	3342.9	3372.0	3369.0	3378.1
45°	5151.4	5087.1	5027.4	3842.1	3797.7	3761.0	3707.4	3741.1	3750.3	3744.1
47.5°	5736.4	5666.0	5234.1	4225.0	4223.4	4194.3	4134.6	4162.2	4157.6	4157.6
50°	6324.4	6247.9	4754.8	4711.9	4696.6	4650.7	4601.7	4606.3	4607.8	4623.1
52.5°	6981.4	5580.2	5263.2	5177.5	5189.7	5159.1	5111.6	3869.7	5088.7	5102.4
55°	6525.1	5840.5	5822.2	5708.8	5737.9	5698.1	5667.5	3817.6	5061.1	5592.5
57.5°	6451.5	6402.5	6387.2	6270.8	6307.6	5929.4	6212.7	4177.5	3500.6	2557.3
60°	7013.5	6961.5	6952.3	6849.7	6846.6	4711.9	5647.6	2865.1	2238.8	2254.1
62.5°	7558.7	7474.5	7497.5	7376.5	5200.4	2871.3	2531.3	64.3	102.6	108.7
65°	8166.6	8025.8	8048.7	7936.9	5364.3	3027.5	2736.5	33.7	29.1	27.6
67.5°	8751.6	8505.1	8387.2	8269.2	5571.0	3188.3	2851.4	9.2	0.0	0.0
68°	8722.5	8462.2	8341.2	8229.4	5549.6	3183.7	2845.2	9.2	0.0	0.0
70°	8231.0	7996.7	7881.8	7796.1	5298.4	3074.9	2730.4	9.2	0.0	0.0
72.5°	7195.8	7065.6	6992.1	6917.1	4707.3	2750.3	2448.6	9.2	0.0	0.0
75°	6114.7	6077.9	6032.0	5866.6	3923.3	2251.1	2012.2	9.2	0.0	0.0
77.5°	4845.2	4843.6	4731.8	4537.4	2954.0	1652.3	1483.9	7.7	0.0	0.0
80°	2620.1	2856.0	2770.2	2670.7	1675.3	898.9	856.0	6.1	0.0	0.0
82.5°	736.6	696.8	669.2	626.3	352.2	196.0	191.4	6.1	0.0	0.0
85°	102.6	113.3	125.6	142.4	81.2	52.1	45.9	3.1	0.0	0.0
87.5°	58.2	65.8	81.2	84.2	30.6	24.5	7.7	0.0	0.0	0.0
90°	12.3	13.8	15.3	15.3	6.1	6.1	0.0	0.0	0.0	0.0
92.5°	0.0	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.5	1.5	1.5	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°
110°	1.5	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.5	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.5	1.5	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)