

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: P522232

Luminaire Tested: **CST-CA8-330-760-U-T5R-HSS-HM-EX180**

Issue Date: 5/10/2021

Test Information

Test Method: LM-79-08
Report Number: P522232
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 5/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-330-760-U-T5R-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32268 lumens
Efficiency: N/A
Efficacy: 97.3 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B4 - U2 - G4

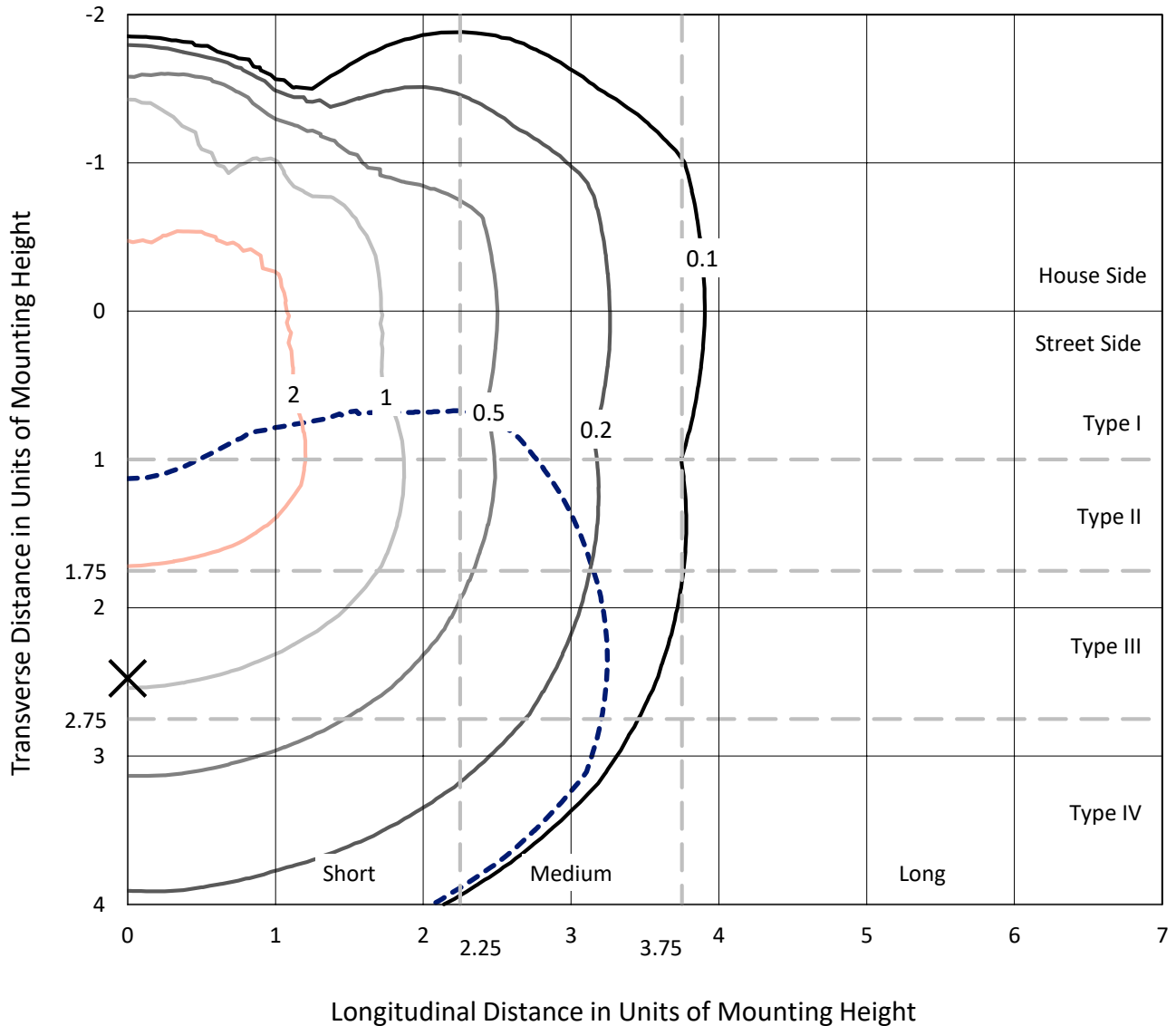
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

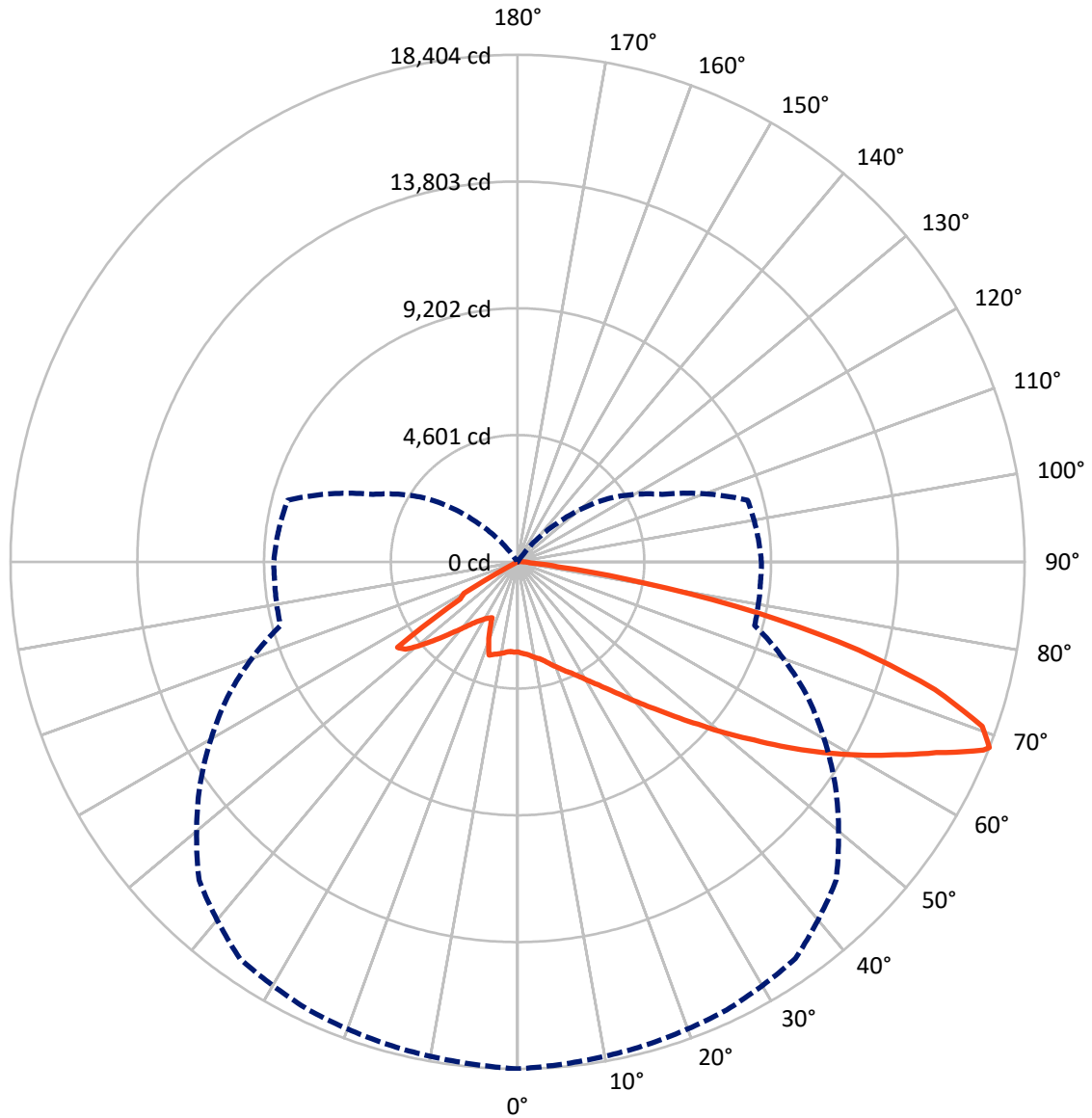
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 3.8 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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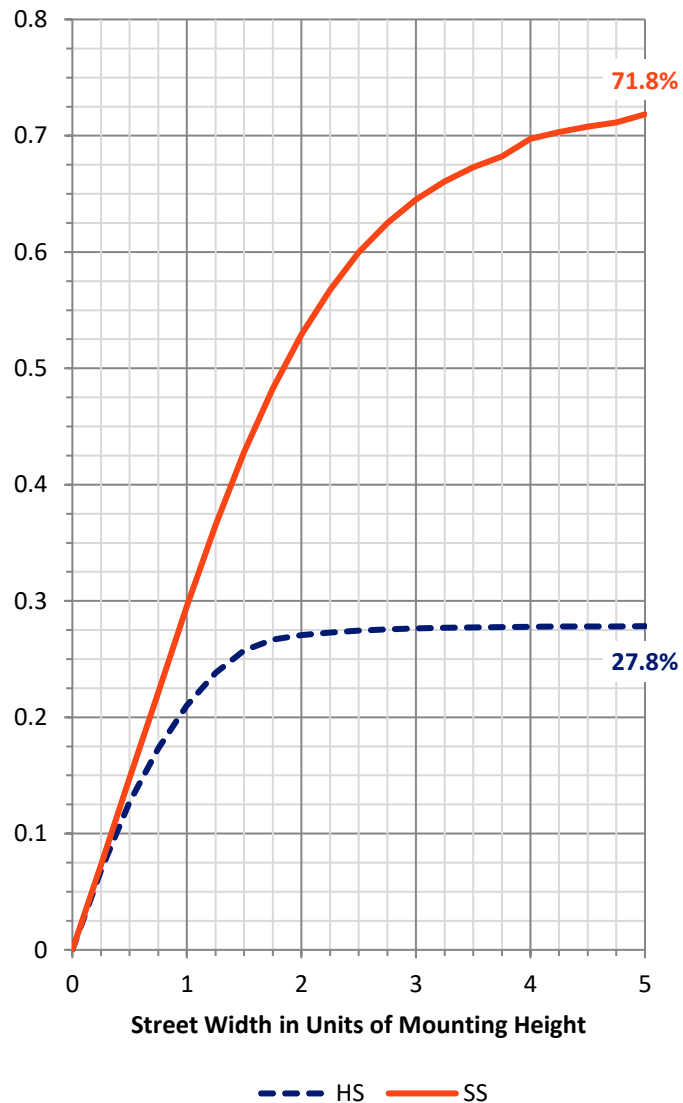
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	9012.5	0.2	9012.7
	% Fixture	27.9	0.0	27.9
Street Side	Lumens	23236.8	18.5	23255.3
	% Fixture	72.0	0.1	72.1
Total	Lumens	32249.3	18.7	32268.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	317.3	1.0
10°-20°	1005.4	3.1
20°-30°	1702.1	5.3
30°-40°	2696.5	8.4
40°-50°	4408.7	13.7
50°-60°	6752.9	20.9
60°-70°	8303.2	25.7
70°-80°	6415.8	19.9
80°-90°	647.3	2.0
90°-100°	18.4	0.1
100°-110°	0.3	0.0
110°-120°	0.0	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°	32249.3	99.9
0°-180°	32268.0	100.0

Coefficient of Utilization



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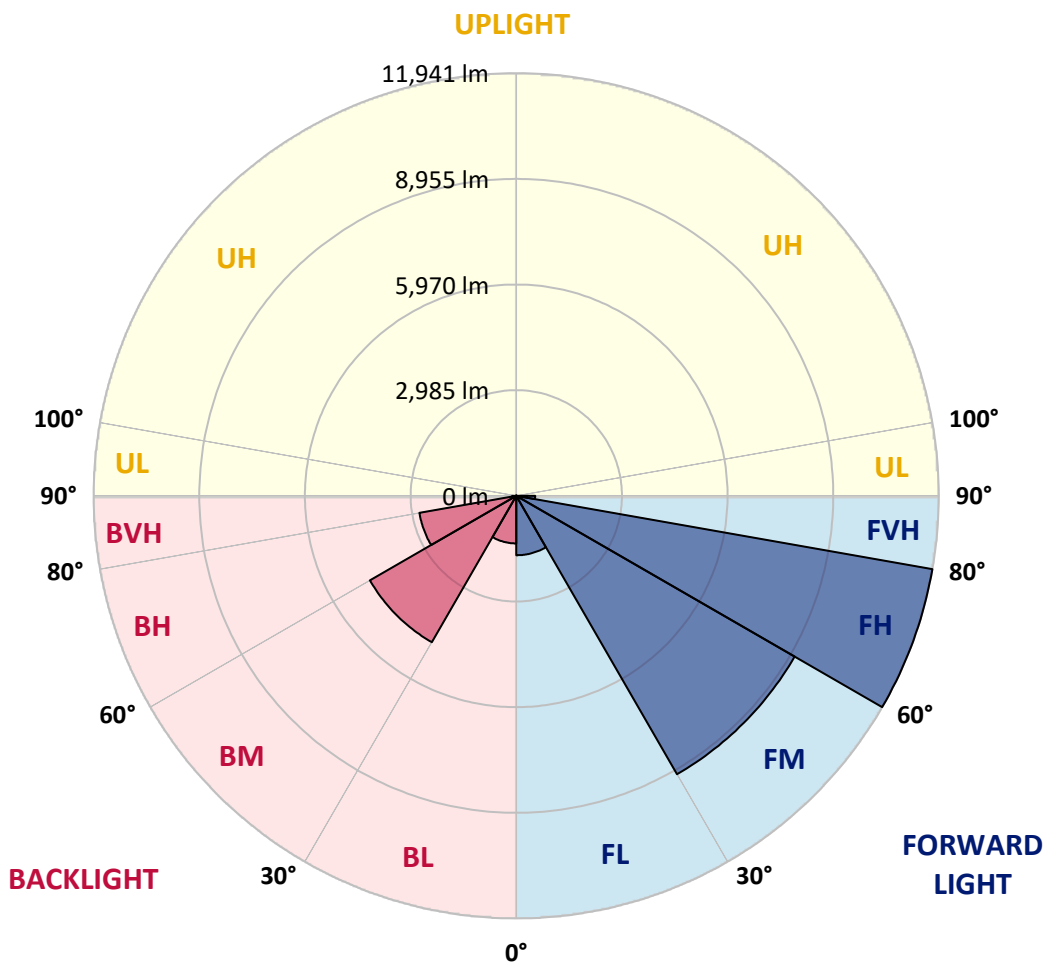
CATALOG NUMBER: CST-CA8-330-760-U-T5R-HSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1679.6	5.2			
FM (30°-60°)	9082.9	28.1			
FH (60°-80°)	11940.5	37.0			G4/12000
FVH (80°-90°)	533.9	1.7			G4/750
BL (0°-30°)	1345.2	4.2	B3/2500		
BM (30°-60°)	4775.2	14.8	B3/5000		
BH (60°-80°)	2778.6	8.6	B4/5000		G4/5000
BVH (80°-90°)	113.5	0.4			G2/225
UL (90°-100°)	18.4	0.1		U2/50	
UH (100°-180°)	0.3	0.0		U1/10	

BUG Rating: B4-U2-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1
2.5°	3328.2	3321.9	3315.7	3329.7	3275.3	3298.6	3280.0	3297.1	3284.6	3298.6	3294.0
5°	3371.7	3365.5	3346.8	3362.4	3326.6	3335.9	3312.6	3318.8	3276.9	3301.7	3300.2
7.5°	3443.2	3426.1	3413.7	3413.7	3382.6	3381.0	3343.7	3345.3	3312.6	3309.5	3315.7
10°	3539.6	3527.1	3492.9	3496.0	3452.5	3446.3	3399.7	3398.1	3371.7	3356.1	3370.1
12.5°	3611.1	3623.5	3592.4	3592.4	3548.9	3517.8	3485.2	3463.4	3443.2	3419.9	3409.0
15°	3741.7	3754.1	3712.1	3710.6	3693.5	3656.2	3620.4	3573.8	3538.0	3527.1	3510.0
17.5°	3911.1	3903.3	3867.6	3869.1	3872.2	3811.6	3775.9	3715.2	3663.9	3626.6	3617.3
20°	4083.6	4083.6	4044.8	4057.2	4041.7	3985.7	3962.4	3878.5	3806.9	3766.5	3733.9
22.5°	4276.4	4268.6	4242.2	4268.6	4237.5	4181.6	4142.7	4058.8	3967.1	3738.5	3645.3
25°	4459.8	4455.2	4466.0	4473.8	4435.0	4365.0	4338.6	4250.0	3995.0	3695.0	3506.9
27.5°	4691.5	4675.9	4700.8	4716.3	4677.5	4616.8	4560.9	4461.4	3922.0	3685.7	3665.5
30°	4988.4	4954.2	4989.9	4997.7	4957.3	4920.0	4836.0	4338.6	3946.8	3878.5	3872.2
32.5°	5305.5	5265.1	5311.7	5317.9	5265.1	5234.0	5022.6	4274.8	4190.9	4111.6	4119.4
35°	5681.7	5681.7	5705.0	5708.1	5669.2	5616.4	4811.1	4585.7	4511.1	4438.1	4436.5
37.5°	6140.2	6126.2	6188.4	6225.7	6183.8	6033.0	5118.9	5013.2	4898.2	4804.9	4612.2
40°	6693.6	6718.5	6735.6	6772.9	6732.5	6393.6	5568.2	5448.5	5358.3	5045.9	4559.3
42.5°	7290.6	7296.8	7334.1	7380.7	7380.7	7023.2	6093.6	5991.0	5874.4	4934.0	4714.8
45°	8004.1	7990.1	8061.6	8136.2	8116.0	7746.0	6704.5	6628.3	6082.7	5258.8	5260.4
47.5°	8814.0	8796.9	8899.5	8997.4	8896.3	8548.1	7376.1	7317.0	5871.3	5809.1	5796.7
50°	9749.8	9707.8	9825.9	9956.5	9874.1	9443.5	8192.2	7057.4	6460.5	6410.7	6402.9
52.5°	10749.3	10716.7	10788.2	11010.5	10901.6	10380.9	8964.7	7281.2	7142.9	7086.9	7072.9
55°	11877.9	11814.1	11968.0	12137.5	12011.5	11417.7	9726.4	8024.3	7881.3	7784.9	7645.0
57.5°	13063.9	12972.2	13051.5	13264.5	13143.2	12479.4	10708.9	8789.1	8619.6	7133.6	6566.2
60°	14245.3	14203.4	14234.5	14422.6	14273.3	13511.6	11629.1	9555.4	7295.2	7055.8	7083.8
62.5°	15433.0	15341.3	15369.2	15562.0	15370.8	14494.1	12501.2	10251.9	7677.6	7593.7	7623.2
65°	16706.1	16597.3	16622.2	16678.1	16441.8	15375.5	13272.2	10909.4	8252.8	8164.2	8196.8
67.5°	18240.4	18140.9	18005.7	17839.3	17512.9	16311.3	14038.6	11601.2	8899.5	8849.7	8860.6
68°	18403.6	18307.2	18144.0	17946.6	17579.7	16350.1	14071.2	11621.4	8908.8	8846.6	8849.7
70°	17895.3	17952.8	17767.8	17436.7	17130.5	15781.2	13538.1	11173.7	8512.4	8420.7	8397.4
72.5°	15848.0	15973.9	15719.0	15663.0	15286.9	14058.8	11846.8	9695.4	7404.0	7433.6	7349.6
75°	12795.0	12980.0	12670.6	12687.7	12473.2	11727.1	9928.5	8072.5	6079.6	6214.9	6239.7
77.5°	8897.9	9163.7	9028.5	9163.7	9058.0	8789.1	7683.8	6216.4	4638.6	4794.0	4854.7
80°	4640.2	4955.7	5134.5	5190.4	5224.6	5213.8	4679.0	3730.8	2681.5	2739.0	2735.9
82.5°	1467.4	1391.3	1436.3	1423.9	1385.1	1400.6	1262.2	987.1	684.0	753.9	721.3
85°	443.0	446.1	433.7	430.6	397.9	349.8	286.0	164.8	80.8	94.8	88.6
87.5°	326.4	329.6	304.7	289.1	270.5	234.7	181.9	102.6	38.9	37.3	29.5
90°	180.3	174.1	161.7	149.2	141.5	121.3	91.7	38.9	14.0	10.9	9.3
92.5°	97.9	93.3	87.1	82.4	71.5	57.5	37.3	12.4	6.2	1.6	0.0
95°	45.1	42.0	40.4	35.8	31.1	21.8	12.4	7.8	4.7	1.6	0.0
97.5°	20.2	18.7	17.1	14.0	10.9	6.2	6.2	4.7	3.1	1.6	0.0
100°	4.7	4.7	3.1	3.1	3.1	3.1	3.1	3.1	3.1	1.6	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0



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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	0.0	0.0	0.0
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°	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1	3269.1
2.5°	3289.3	3280.0	3275.3	3245.8	3255.1	3228.7	3280.0	3267.5	3259.8	3281.5
5°	3292.4	3259.8	3280.0	3262.9	3269.1	3231.8	3272.2	3255.1	3253.5	3262.9
7.5°	3300.2	3278.4	3298.6	3264.4	3280.0	3264.4	3294.0	3276.9	3290.9	3300.2
10°	3342.2	3329.7	3320.4	3312.6	3323.5	3292.4	3329.7	3331.3	3335.9	3363.9
12.5°	3401.2	3388.8	3373.2	3353.0	3363.9	3351.5	3379.5	3387.2	3404.3	3418.3
15°	3483.6	3460.3	3454.1	3435.4	3446.3	3440.1	3446.3	3441.6	3474.3	3469.6
17.5°	3597.1	3570.7	3482.1	3391.9	3334.4	3351.5	3423.0	3516.3	3539.6	3542.7
20°	3639.1	3452.5	3443.2	3340.6	3294.0	3290.9	3143.2	2922.4	2989.3	3146.3
22.5°	3589.3	3334.4	3308.0	3287.7	3088.8	2762.3	2731.2	2698.6	2690.8	2714.1
25°	3477.4	3447.9	3424.5	3160.3	2846.3	2847.8	2802.7	2588.2	2254.0	2226.0
27.5°	3648.4	3608.0	3382.6	2975.3	2969.1	2966.0	2899.1	2348.8	2277.3	2294.4
30°	3842.7	3775.9	3186.7	3133.9	3132.3	3104.3	2599.1	2369.0	2369.0	2372.2
32.5°	4066.5	3651.5	3298.6	3323.5	3321.9	3189.8	2510.5	2495.0	2488.7	2504.3
35°	4237.5	3552.0	3539.6	3584.7	3553.6	2706.4	2667.5	2653.5	2647.3	2639.5
37.5°	4184.7	3838.0	3838.0	3866.0	3615.7	2882.0	2863.4	2863.4	2850.9	2844.7
40°	4265.5	4194.0	4158.3	4169.1	2627.1	3095.0	3109.0	3105.9	3104.3	3115.2
42.5°	4691.5	4627.7	4595.1	4209.6	2941.1	3076.3	3418.3	3416.8	3421.4	3416.8
45°	5234.0	5174.9	5089.4	3939.1	3339.0	2697.0	3768.1	3785.2	3786.7	3785.2
47.5°	5802.9	5765.6	4890.4	4360.3	3771.2	2894.5	3601.8	4206.4	4198.7	4208.0
50°	6404.5	6236.6	4865.6	4859.3	4231.3	3220.9	3222.5	4574.9	4654.1	4679.0
52.5°	7074.5	5653.7	5392.5	4920.0	4697.7	3556.7	3522.5	4054.1	5136.0	5160.9
55°	6570.8	5972.4	5967.7	4379.0	4887.3	3880.0	3884.7	3847.4	4710.1	5353.7
57.5°	6538.2	6552.2	6541.3	4885.8	3566.0	3637.5	4232.9	4200.2	3049.9	2471.6
60°	7102.5	7122.7	6354.8	5275.9	3855.1	2236.9	2606.9	2215.1	2244.7	2268.0
62.5°	7641.9	7648.1	5168.7	3458.7	1910.5	90.2	43.5	35.8	34.2	34.2
65°	8238.8	8238.8	5540.2	3772.7	1845.2	34.2	6.2	4.7	17.1	17.1
67.5°	8815.5	8688.0	5812.2	4005.9	1877.8	4.7	0.0	0.0	0.0	0.0
68°	8782.9	8643.0	5787.4	3999.7	1873.2	3.1	0.0	0.0	0.0	0.0
70°	8294.8	8159.5	5490.5	3817.8	1803.2	3.1	0.0	0.0	0.0	0.0
72.5°	7321.6	7197.3	4862.4	3365.5	1626.0	1.6	0.0	0.0	0.0	0.0
75°	6197.8	6180.7	4200.2	2840.1	1394.4	1.6	0.0	0.0	0.0	0.0
77.5°	4986.8	4909.1	3283.1	2226.0	1123.9	0.0	0.0	0.0	0.0	0.0
80°	2777.9	2892.9	1921.3	1308.9	707.3	0.0	0.0	0.0	0.0	0.0
82.5°	750.8	702.6	419.7	284.5	135.2	0.0	0.0	0.0	0.0	0.0
85°	96.4	105.7	48.2	38.9	9.3	0.0	0.0	0.0	0.0	0.0
87.5°	49.7	59.1	15.5	12.4	3.1	0.0	0.0	0.0	0.0	0.0
90°	9.3	10.9	4.7	1.6	0.0	0.0	0.0	0.0	0.0	0.0
92.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	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°
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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)