

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: P579625

Luminaire Tested: **CTN-CA10-310-727-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579625
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-310-727-U-T5N-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (10) 2700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32229 lumens
Efficiency: N/A
Efficacy: 103.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U2 - G3

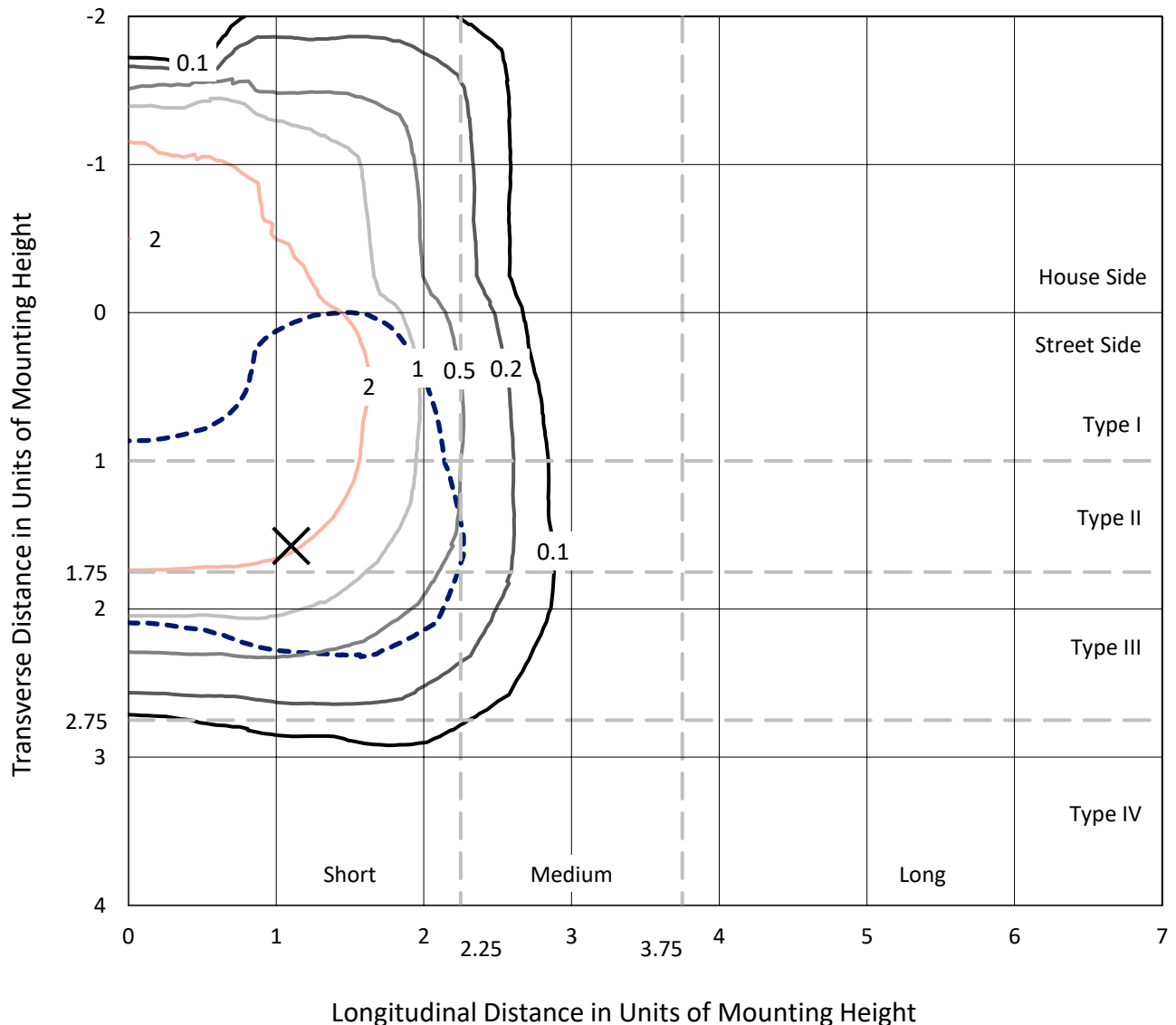
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

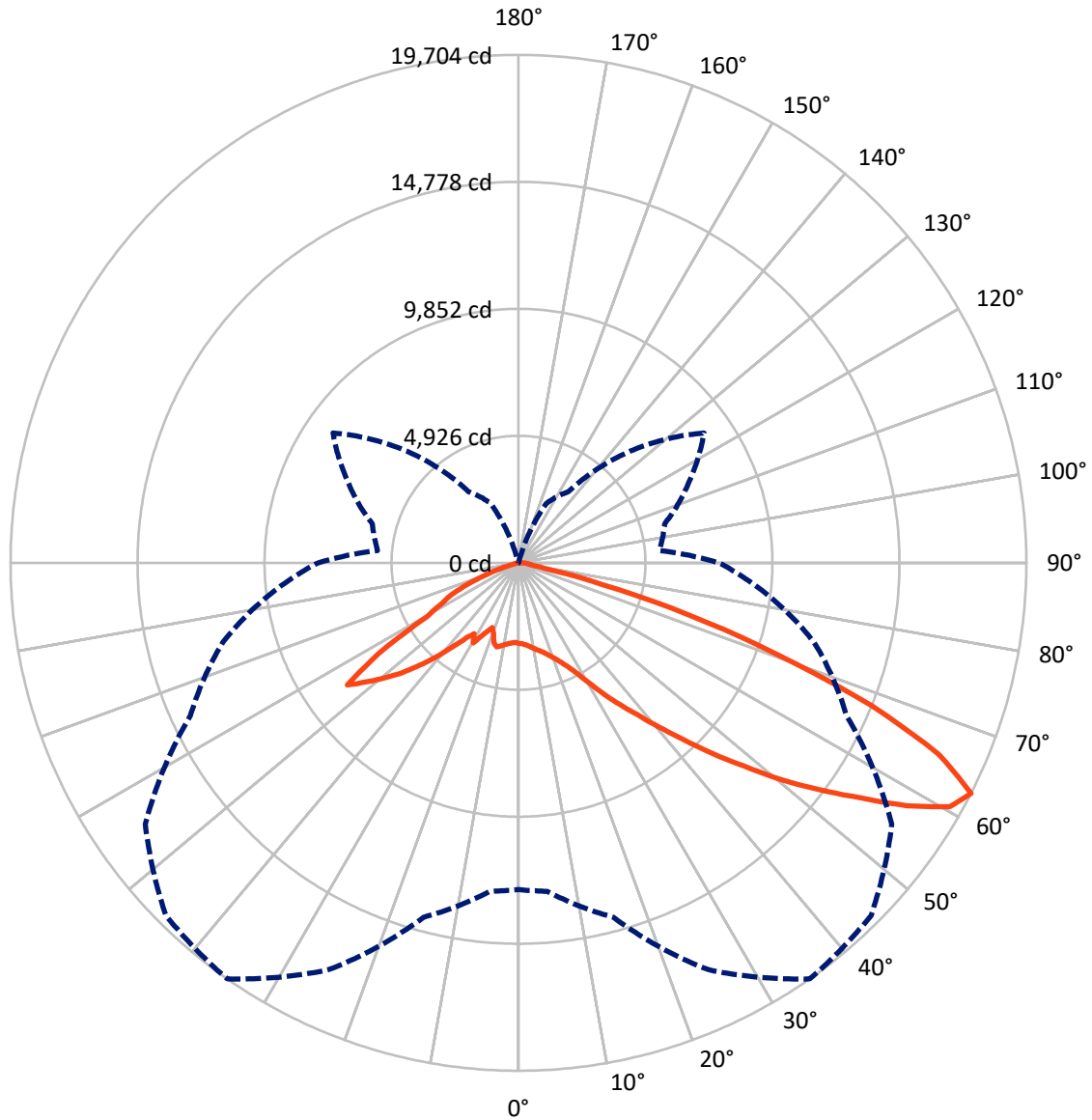
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.7 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 35-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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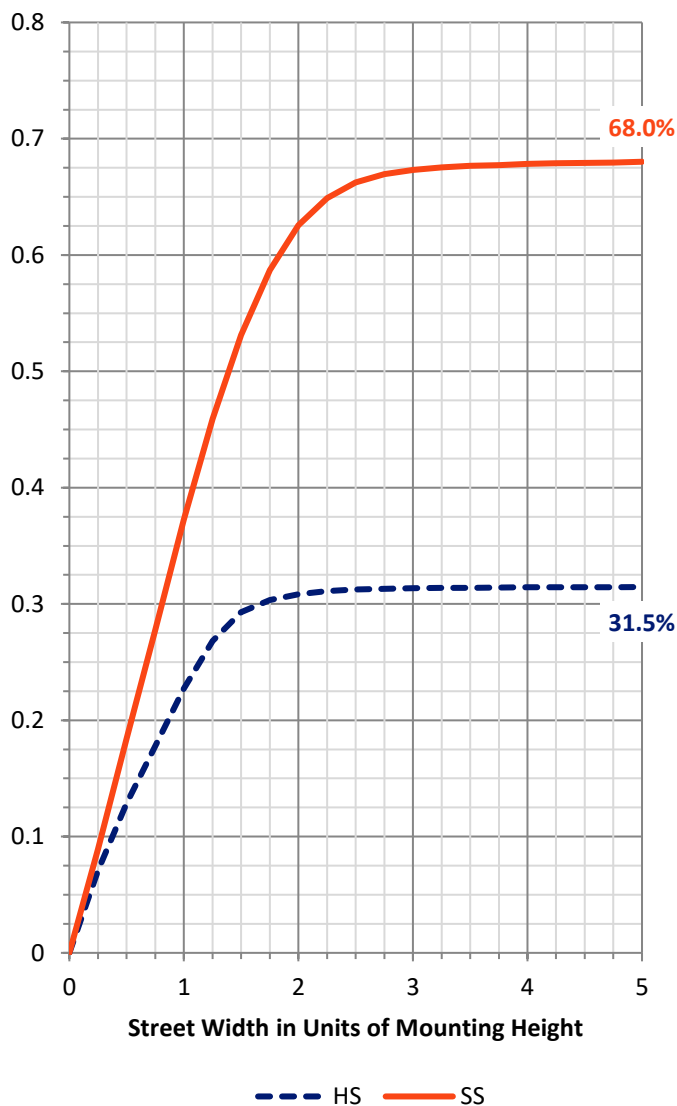
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10195.9	0.0	10195.9
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	22014.7	18.4	22033.1
	% Fixture	68.3	0.1	68.4
Total	Lumens	32210.6	18.4	32229.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	308.5	1.0
10°-20°	991.8	3.1
20°-30°	1841.7	5.7
30°-40°	3631.1	11.3
40°-50°	6518.2	20.2
50°-60°	9475.0	29.4
60°-70°	7786.9	24.2
70°-80°	1480.2	4.6
80°-90°	177.2	0.5
90°-100°	16.8	0.1
100°-110°	1.6	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°	32210.6	99.9
0°-180°	32229.0	100.0

Coefficient of Utilization

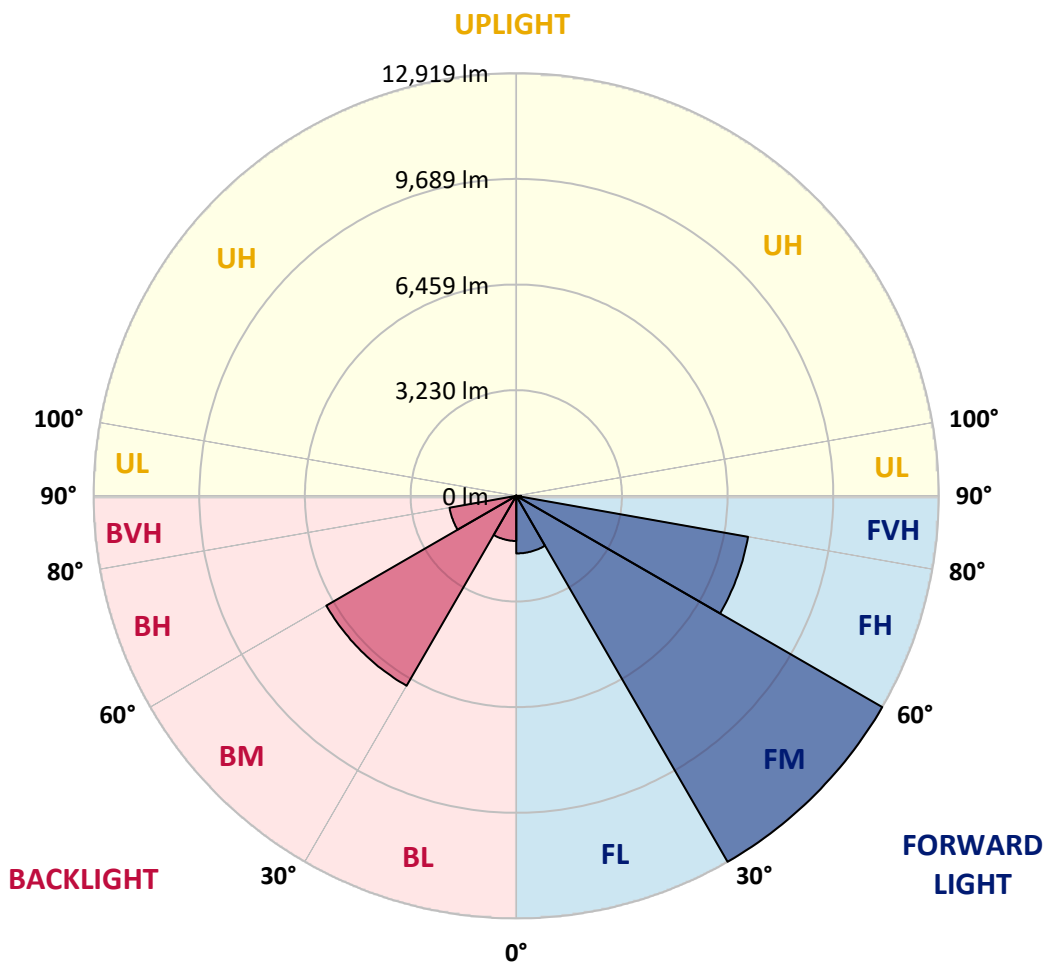


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1761.5	5.5			
FM (30°-60°)	12918.9	40.1			
FH (60°-80°)	7194.2	22.3			G3/7500
FVH (80°-90°)	140.1	0.4			G2/225
BL (0°-30°)	1380.6	4.3	B3/2500		
BM (30°-60°)	6705.4	20.8	B4/8500		
BH (60°-80°)	2072.8	6.4	B3/2500		G3/2500
BVH (80°-90°)	37.1	0.1			G1/100
UL (90°-100°)	16.8	0.1		U2/50	
UH (100°-180°)	1.6	0.0		U1/10	

BUG Rating: B4-U2-G3
 Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3
2.5°	3208.2	3182.0	3184.7	3204.3	3145.4	3165.0	3137.5	3161.1	3150.6	3161.1	3167.6
5°	3272.4	3239.7	3238.4	3258.0	3210.9	3222.6	3191.2	3206.9	3192.5	3205.6	3205.6
7.5°	3351.0	3323.5	3317.0	3332.7	3290.8	3296.0	3264.6	3271.1	3254.1	3271.1	3258.0
10°	3449.3	3424.4	3413.9	3421.8	3383.8	3386.4	3352.3	3355.0	3330.1	3344.5	3334.0
12.5°	3552.8	3518.7	3513.5	3526.6	3487.3	3482.0	3453.2	3455.8	3428.3	3441.4	3433.6
15°	3660.2	3624.8	3626.1	3639.2	3599.9	3602.5	3572.4	3577.7	3550.1	3563.2	3552.8
17.5°	3803.0	3767.6	3765.0	3788.6	3755.8	3766.3	3734.9	3741.4	3721.8	3724.4	3712.6
20°	4007.3	3961.5	3952.3	3986.4	3943.2	3956.3	3939.2	3961.5	3953.6	3947.1	3937.9
22.5°	4251.0	4215.6	4197.3	4223.5	4172.4	4197.3	4206.5	4252.3	4264.1	4256.2	4112.1
25°	4577.2	4558.9	4540.5	4528.7	4467.2	4506.5	4553.6	4629.6	4679.4	4699.0	4498.6
27.5°	5017.4	5026.5	4946.6	4933.5	4864.1	4925.7	5010.8	5134.0	5234.8	5271.5	5001.6
30°	5583.3	5595.1	5486.4	5454.9	5413.0	5465.4	5623.9	5758.8	5908.2	5969.8	5609.5
32.5°	6335.2	6324.8	6164.9	6104.7	6066.7	6087.7	6254.0	6438.7	6606.4	6745.3	6302.5
35°	7253.6	7220.8	7050.5	6884.1	6733.5	6797.7	6919.5	7143.5	7397.7	7602.0	6986.3
37.5°	8319.9	8288.5	8029.1	7757.9	7460.6	7488.1	7596.8	7962.3	8289.8	8343.5	6869.7
40°	9421.6	9408.5	9163.6	8819.0	8356.6	8226.9	8371.0	8816.4	9162.3	8225.6	7140.9
42.5°	10522.1	10459.2	10321.6	9977.1	9361.4	9075.8	9269.7	9715.1	10087.1	8623.8	7769.7
45°	11631.6	11567.5	11450.9	11198.0	10557.4	10142.2	10198.5	10692.4	11029.0	9370.6	8424.7
47.5°	12616.8	12569.6	12485.8	12344.3	11773.1	11397.2	11288.4	11634.3	11863.5	9977.1	8927.8
50°	13465.7	13425.1	13457.8	13410.7	13243.0	12848.7	12489.7	12467.4	12577.5	10516.8	9390.2
52.5°	14212.4	14157.4	14297.5	14463.9	14618.5	14530.7	13662.2	13257.4	13157.8	10921.6	9700.7
55°	14829.4	14809.8	15050.8	15500.1	16088.3	16318.9	14915.9	13987.1	13676.6	11264.8	9729.5
57.5°	15198.8	15246.0	15755.6	16625.4	17775.6	17884.4	16383.1	14762.6	14133.8	11473.1	9867.1
60°	14567.4	14727.2	15644.2	17469.1	19211.4	19258.6	17437.6	14917.2	13535.1	10723.8	9132.1
62.5°	12675.7	12791.0	14233.3	17415.4	19704.0	19345.0	17673.4	14044.7	11862.2	9096.8	7767.1
65°	8956.6	9090.2	10828.6	15704.5	17926.3	17939.4	16189.2	12145.2	9481.9	7042.7	5997.3
67.5°	5402.5	5618.7	7265.4	11401.1	14760.0	15028.5	13506.3	9195.0	6785.9	4598.2	3881.6
70°	1772.5	1970.3	3317.0	6747.9	10640.0	11790.2	10143.5	5975.0	3543.6	1944.1	1565.5
72.5°	702.2	792.6	1168.5	2984.2	6856.6	7871.9	6250.1	2887.3	1189.5	516.1	449.3
75°	469.0	478.2	539.7	1016.6	3355.0	4304.7	3013.0	839.7	441.5	322.3	283.0
77.5°	408.7	410.0	437.5	535.8	1092.6	1650.6	867.2	450.6	365.5	264.6	234.5
80°	374.7	379.9	396.9	457.2	500.4	560.7	428.4	376.0	317.0	243.7	221.4
82.5°	358.9	362.9	373.4	414.0	404.8	420.5	345.8	298.7	267.2	224.0	212.2
85°	327.5	334.1	340.6	365.5	332.7	288.2	267.2	200.4	191.3	169.0	155.9
87.5°	247.6	246.3	239.7	243.7	222.7	182.1	150.7	112.7	91.7	76.0	62.9
90°	103.5	104.8	100.9	95.6	83.8	69.4	52.4	31.4	15.7	5.2	2.6
92.5°	78.6	79.9	77.3	69.4	60.3	48.5	35.4	18.3	10.5	3.9	1.3
95°	48.5	49.8	47.2	41.9	36.7	27.5	18.3	11.8	6.6	2.6	0.0
97.5°	28.8	30.1	27.5	24.9	19.7	13.1	10.5	7.9	5.2	2.6	0.0
100°	17.0	17.0	15.7	13.1	9.2	7.9	6.6	5.2	3.9	1.3	0.0
102.5°	7.9	7.9	7.9	5.2	3.9	3.9	3.9	3.9	3.9	1.3	0.0
105°	2.6	2.6	1.3	1.3	1.3	2.6	2.6	2.6	2.6	1.3	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.3	2.6	2.6	1.3	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	1.3	0.0



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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°	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3	3128.3
2.5°	3161.1	3136.2	3140.1	3117.8	3112.6	3089.0	3130.9	3134.9	3123.1	3134.9
5°	3200.4	3170.2	3178.1	3153.2	3146.7	3113.9	3148.0	3145.4	3136.2	3148.0
7.5°	3258.0	3224.0	3227.9	3199.1	3192.5	3155.8	3187.3	3178.1	3167.6	3182.0
10°	3331.4	3298.6	3299.9	3260.6	3256.7	3214.8	3255.4	3238.4	3222.6	3243.6
12.5°	3433.6	3387.7	3383.8	3340.5	3339.2	3296.0	3337.9	3323.5	3302.6	3335.3
15°	3551.5	3489.9	3474.2	3419.1	3417.8	3372.0	3413.9	3391.6	3381.2	3420.5
17.5°	3704.7	3627.4	3508.2	3320.9	3235.7	3250.2	3398.2	3451.9	3311.7	3332.7
20°	3797.7	3423.1	3248.8	3171.6	3130.9	2897.8	2582.0	2608.2	2918.7	3066.8
22.5°	3640.5	3529.2	3465.0	3356.3	2790.3	2710.4	2728.8	2723.5	2322.7	2203.4
25°	3968.0	3863.2	3746.7	3075.9	2959.3	2925.3	2934.4	2558.5	2339.7	2348.9
27.5°	4439.7	4304.7	3565.9	3275.0	3251.5	3201.7	3020.9	2568.9	2596.5	2614.8
30°	5035.7	4556.2	3797.7	3670.7	3623.5	3569.8	2803.4	2870.2	2921.3	2977.7
32.5°	5612.1	4431.8	4241.8	4109.5	4036.2	3241.0	3162.4	3285.5	3336.6	3385.1
35°	5559.7	4965.0	4718.7	4551.0	4413.4	3497.7	3567.2	3754.5	3889.4	3888.1
37.5°	5703.8	5545.3	5261.0	5048.8	3830.5	3918.3	4063.7	4277.2	4441.0	4439.7
40°	6305.1	6133.5	5866.3	5410.4	4244.5	4448.8	4647.9	4848.4	4966.3	4975.4
42.5°	6902.5	6770.2	6529.1	4778.9	4751.4	5034.4	5242.7	5369.8	5441.8	5466.7
45°	7497.2	7372.8	6415.2	5285.9	5369.8	5650.1	5777.2	5802.1	5879.4	5876.7
47.5°	7970.1	7864.0	5901.6	5888.5	6096.8	6290.7	6250.1	6218.7	6238.3	6248.8
50°	8406.4	6846.2	6362.8	6554.0	6871.0	6894.6	6725.6	5327.8	6595.9	6573.7
52.5°	7809.0	6681.1	6792.4	7240.5	7780.2	7506.4	7176.3	4670.2	6185.9	6774.1
55°	6833.1	6945.7	7197.2	7949.2	8482.4	8157.5	7606.0	4809.1	4105.6	3341.9
57.5°	6969.3	7147.5	7625.6	8664.5	9129.5	6461.0	7099.0	3390.3	2295.2	2293.8
60°	6489.8	6759.7	7616.4	8985.4	7389.8	4139.7	2844.0	77.3	445.4	441.5
62.5°	5486.4	5870.2	7266.7	8782.4	6121.7	3364.1	2533.6	6.6	2.6	2.6
65°	4243.1	4695.1	6058.8	7604.7	5423.5	2897.8	1881.2	0.0	0.0	0.0
67.5°	2782.5	3201.7	4549.7	6316.9	4502.5	2190.3	1264.2	0.0	0.0	0.0
70°	1159.4	1676.8	2827.0	4565.4	3311.7	1434.5	600.0	0.0	0.0	0.0
72.5°	335.4	510.9	1273.3	2726.1	2055.4	750.6	222.7	0.0	0.0	0.0
75°	221.4	233.2	385.1	1096.5	999.5	275.1	90.4	0.0	0.0	0.0
77.5°	186.0	191.3	245.0	306.5	321.0	108.7	73.4	0.0	0.0	0.0
80°	171.6	172.9	220.1	227.9	171.6	90.4	72.1	0.0	0.0	0.0
82.5°	159.8	155.9	187.3	180.8	142.8	78.6	66.8	0.0	0.0	0.0
85°	110.0	112.7	127.1	161.1	86.5	39.3	47.2	0.0	0.0	0.0
87.5°	34.1	39.3	49.8	51.1	15.7	5.2	0.0	0.0	0.0	0.0
90°	1.3	0.0	0.0	0.0	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
110°	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°
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)