

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: P579619

Luminaire Tested: **CTN-CA10-210-727-U-T5N-HSS-HM-EX120**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579619
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-CA10-210-727-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: 23216 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U2 - G3

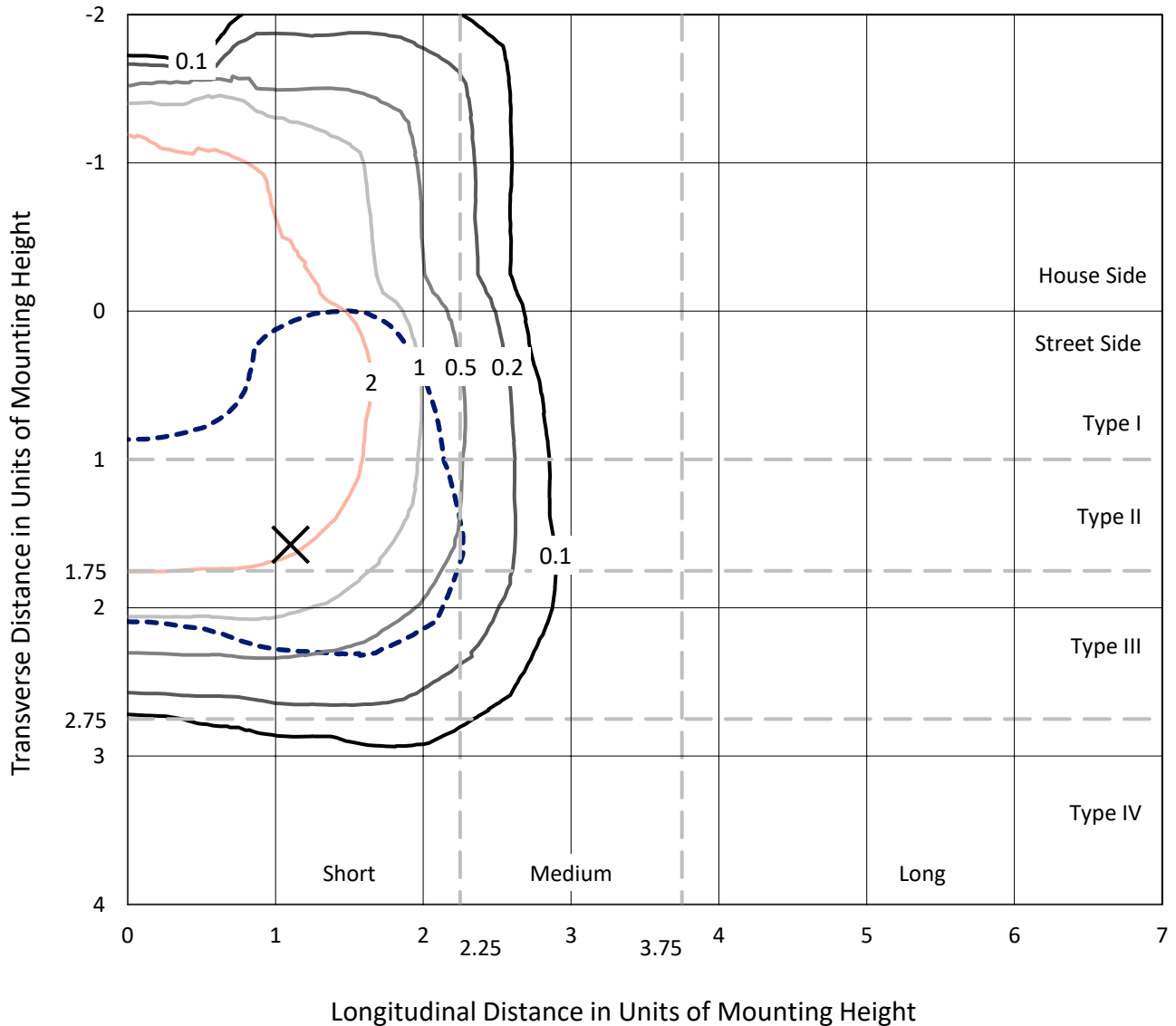
Input Watts (W): 212.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

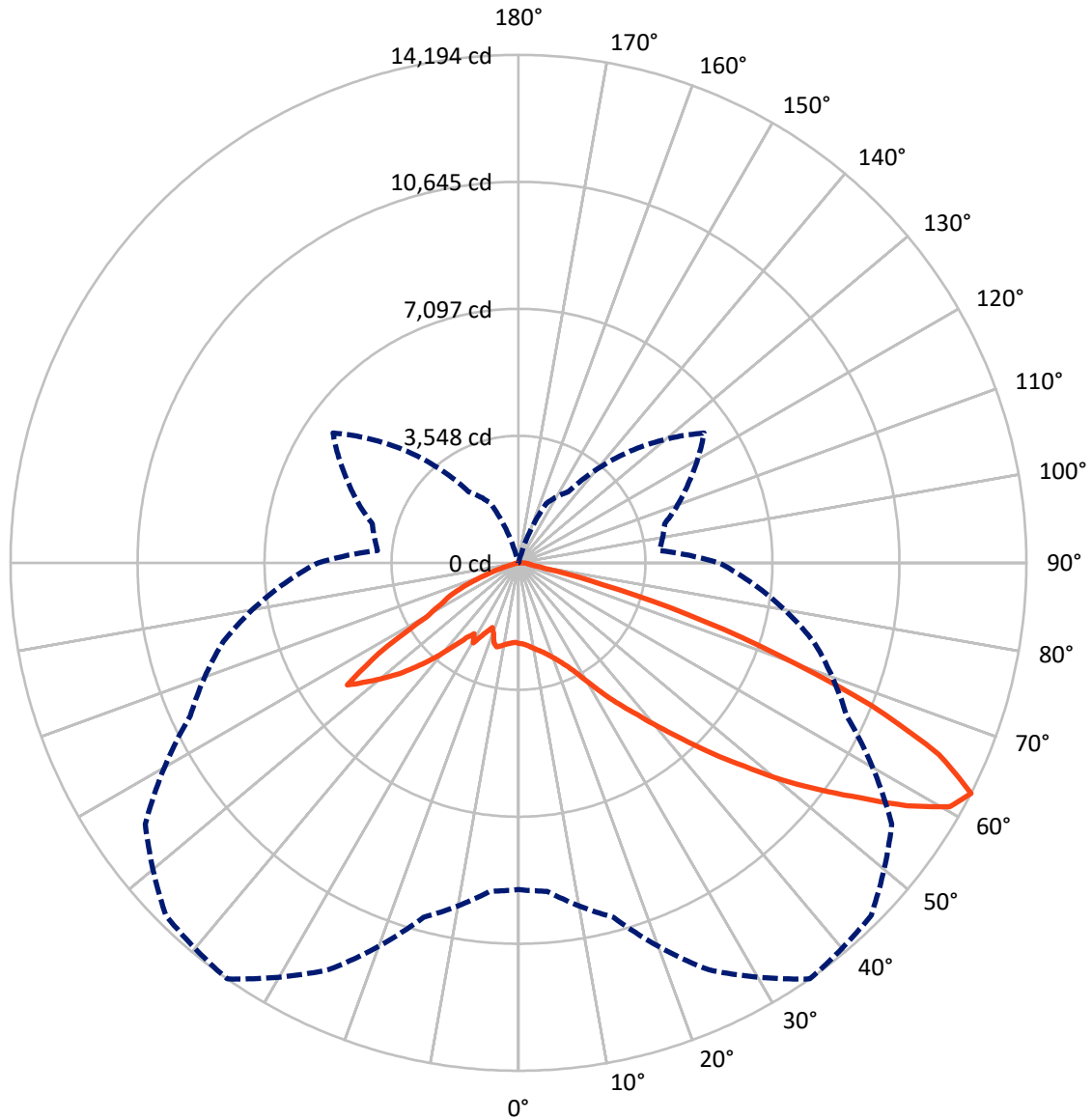
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 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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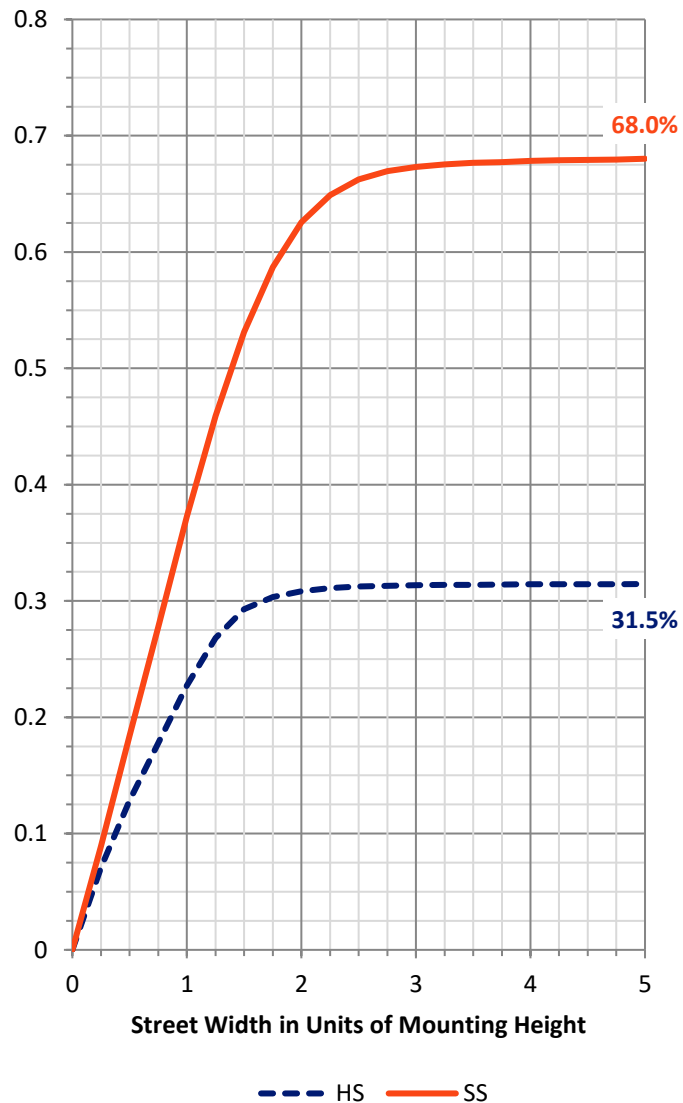
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7344.5	0.0	7344.6
	% Fixture	31.6	0.0	31.6
Street Side	Lumens	15858.2	13.2	15871.4
	% Fixture	68.3	0.1	68.4
Total	Lumens	23202.7	13.3	23216.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	222.2	1.0
10°-20°	714.5	3.1
20°-30°	1326.7	5.7
30°-40°	2615.6	11.3
40°-50°	4695.4	20.2
50°-60°	6825.2	29.4
60°-70°	5609.2	24.2
70°-80°	1066.2	4.6
80°-90°	127.6	0.5
90°-100°	12.1	0.1
100°-110°	1.2	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°	23202.7	99.9
0°-180°	23216.0	100.0

Coefficient of Utilization



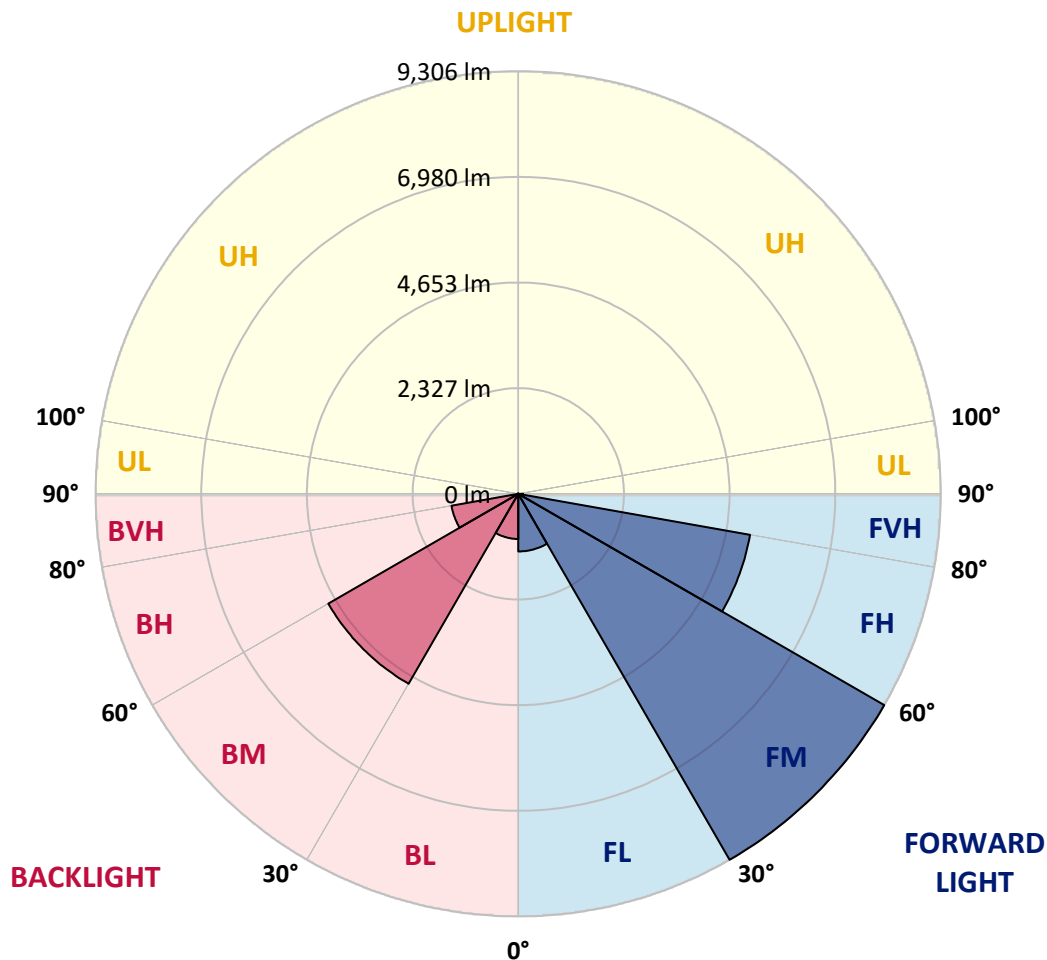
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1268.9	5.5			
FM	(30°-60°)	9306.0	40.1			
FH	(60°-80°)	5182.3	22.3			G3/7500
FVH	(80°-90°)	100.9	0.4			G2/225
BL	(0°-30°)	994.5	4.3	B2/1000		
BM	(30°-60°)	4830.2	20.8	B3/5000		
BH	(60°-80°)	1493.1	6.4	B3/2500		G3/2500
BVH	(80°-90°)	26.7	0.1			G1/100
UL	(90°-100°)	12.1	0.1		U2/50	
UH	(100°-180°)	1.2	0.0		U1/10	

BUG Rating: B3-U2-G3

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5
2.5°	2311.0	2292.2	2294.0	2308.2	2265.7	2279.9	2260.1	2277.1	2269.5	2277.1	2281.8
5°	2357.3	2333.7	2332.7	2346.9	2312.9	2321.4	2298.8	2310.1	2299.7	2309.1	2309.1
7.5°	2413.9	2394.1	2389.4	2400.7	2370.5	2374.3	2351.6	2356.3	2344.1	2356.3	2346.9
10°	2484.7	2466.7	2459.2	2464.9	2437.5	2439.4	2414.8	2416.7	2398.8	2409.2	2401.6
12.5°	2559.2	2534.7	2530.9	2540.3	2512.0	2508.3	2487.5	2489.4	2469.6	2479.0	2473.3
15°	2636.6	2611.1	2612.1	2621.5	2593.2	2595.1	2573.4	2577.1	2557.3	2566.8	2559.2
17.5°	2739.5	2714.0	2712.1	2729.1	2705.5	2713.0	2690.4	2695.1	2681.0	2682.8	2674.3
20°	2886.7	2853.6	2847.0	2871.6	2840.4	2849.9	2837.6	2853.6	2848.0	2843.3	2836.7
22.5°	3062.2	3036.7	3023.5	3042.4	3005.6	3023.5	3030.1	3063.1	3071.6	3066.0	2962.2
25°	3297.2	3284.0	3270.7	3262.2	3217.9	3246.2	3280.2	3334.9	3370.8	3384.9	3240.5
27.5°	3614.2	3620.8	3563.3	3553.8	3503.8	3548.2	3609.5	3698.2	3770.9	3797.3	3602.9
30°	4021.9	4030.4	3952.1	3929.4	3899.2	3937.0	4051.2	4148.4	4255.9	4300.3	4040.8
32.5°	4563.6	4556.0	4440.9	4397.5	4370.1	4385.2	4505.1	4638.1	4758.9	4858.9	4540.0
35°	5225.1	5201.5	5078.8	4959.0	4850.4	4896.7	4984.4	5145.8	5328.9	5476.1	5032.6
37.5°	5993.2	5970.6	5783.7	5588.4	5374.2	5394.0	5472.3	5735.6	5971.5	6010.2	4948.6
40°	6786.8	6777.4	6600.9	6352.8	6019.6	5926.2	6030.0	6350.9	6600.0	5925.3	5143.9
42.5°	7579.5	7534.2	7435.1	7187.0	6743.4	6537.7	6677.4	6998.2	7266.2	6212.1	5596.9
45°	8378.8	8332.6	8248.6	8066.4	7605.0	7305.9	7346.4	7702.2	7944.7	6750.0	6068.7
47.5°	9088.4	9054.5	8994.1	8892.2	8480.7	8209.9	8131.6	8380.7	8545.8	7187.0	6431.1
50°	9699.9	9670.7	9694.3	9660.3	9539.5	9255.5	8996.9	8980.9	9060.1	7575.7	6764.2
52.5°	10237.8	10198.2	10299.2	10419.0	10530.4	10467.1	9841.5	9549.9	9478.2	7867.3	6987.8
55°	10682.3	10668.1	10841.8	11165.4	11589.1	11755.2	10744.6	10075.5	9851.9	8114.6	7008.6
57.5°	10948.4	10982.4	11349.5	11976.0	12804.6	12882.9	11801.5	10634.2	10181.2	8264.6	7107.7
60°	10493.6	10608.7	11269.2	12583.8	13838.8	13872.8	12561.1	10745.5	9749.9	7724.8	6578.3
62.5°	9130.9	9213.9	10252.9	12545.1	14193.7	13935.1	12731.0	10117.0	8544.9	6552.8	5595.0
65°	6451.8	6548.1	7800.3	11312.7	12913.1	12922.5	11661.8	8748.7	6830.2	5073.1	4320.1
67.5°	3891.7	4047.4	5233.6	8212.7	10632.3	10825.7	9729.2	6623.6	4888.2	3312.3	2796.1
70°	1276.8	1419.3	2389.4	4860.8	7664.4	8493.0	7306.8	4304.1	2552.6	1400.4	1127.7
72.5°	505.8	570.9	841.7	2149.7	4939.1	5670.5	4502.2	2079.8	856.8	371.8	323.7
75°	337.8	344.4	388.8	732.3	2416.7	3100.9	2170.4	604.9	318.0	232.1	203.8
77.5°	294.4	295.4	315.2	386.0	787.0	1189.0	624.7	324.6	263.3	190.6	168.9
80°	269.9	273.7	285.9	329.3	360.5	403.9	308.6	270.8	228.4	175.5	159.5
82.5°	258.6	261.4	268.9	298.2	291.6	302.9	249.1	215.2	192.5	161.4	152.9
85°	235.9	240.6	245.4	263.3	239.7	207.6	192.5	144.4	137.8	121.7	112.3
87.5°	178.4	177.4	172.7	175.5	160.4	131.2	108.5	81.2	66.1	54.7	45.3
90°	74.5	75.5	72.7	68.9	60.4	50.0	37.7	22.6	11.3	3.8	1.9
92.5°	56.6	57.6	55.7	50.0	43.4	34.9	25.5	13.2	7.5	2.8	0.9
95°	34.9	35.9	34.0	30.2	26.4	19.8	13.2	8.5	4.7	1.9	0.0
97.5°	20.8	21.7	19.8	17.9	14.2	9.4	7.5	5.7	3.8	1.9	0.0
100°	12.3	12.3	11.3	9.4	6.6	5.7	4.7	3.8	2.8	0.9	0.0
102.5°	5.7	5.7	5.7	3.8	2.8	2.8	2.8	2.8	2.8	0.9	0.0
105°	1.9	1.9	0.9	0.9	0.9	1.9	1.9	1.9	1.9	0.9	0.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.9	1.9	0.9	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9	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°	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5	2253.5
2.5°	2277.1	2259.1	2262.0	2245.9	2242.1	2225.2	2255.4	2258.2	2249.7	2258.2
5°	2305.4	2283.7	2289.3	2271.4	2266.7	2243.1	2267.6	2265.7	2259.1	2267.6
7.5°	2346.9	2322.4	2325.2	2304.4	2299.7	2273.3	2295.9	2289.3	2281.8	2292.2
10°	2399.7	2376.1	2377.1	2348.8	2346.0	2315.8	2345.0	2332.7	2321.4	2336.5
12.5°	2473.3	2440.3	2437.5	2406.3	2405.4	2374.3	2404.5	2394.1	2379.0	2402.6
15°	2558.3	2513.9	2502.6	2463.0	2462.0	2429.0	2459.2	2443.1	2435.6	2463.9
17.5°	2668.7	2613.0	2527.1	2392.2	2330.9	2341.2	2447.9	2486.6	2385.6	2400.7
20°	2735.7	2465.8	2340.3	2284.6	2255.4	2087.4	1860.0	1878.8	2102.5	2209.1
22.5°	2622.4	2542.2	2496.0	2417.7	2010.0	1952.4	1965.7	1961.9	1673.1	1587.2
25°	2858.4	2782.9	2698.9	2215.7	2131.7	2107.2	2113.8	1843.0	1685.4	1692.0
27.5°	3198.1	3100.9	2568.7	2359.2	2342.2	2306.3	2176.1	1850.5	1870.3	1883.6
30°	3627.4	3282.1	2735.7	2644.1	2610.2	2571.5	2019.4	2067.6	2104.4	2145.0
32.5°	4042.7	3192.4	3055.6	2960.3	2907.4	2334.6	2278.0	2366.7	2403.5	2438.4
35°	4004.9	3576.5	3399.1	3278.3	3179.2	2519.6	2569.6	2704.5	2801.7	2800.8
37.5°	4108.7	3994.5	3789.8	3636.9	2759.3	2822.5	2927.2	3081.1	3199.0	3198.1
40°	4541.9	4418.2	4225.7	3897.3	3057.5	3204.7	3348.1	3492.5	3577.4	3584.0
42.5°	4972.2	4876.9	4703.2	3442.5	3422.7	3626.5	3776.5	3868.1	3920.0	3937.9
45°	5400.6	5310.9	4621.1	3807.7	3868.1	4070.0	4161.6	4179.5	4235.2	4233.3
47.5°	5741.3	5664.8	4251.2	4241.8	4391.8	4531.5	4502.2	4479.6	4493.7	4501.3
50°	6055.5	4931.6	4583.4	4721.2	4949.5	4966.5	4844.8	3837.9	4751.4	4735.3
52.5°	5625.2	4812.7	4892.9	5215.6	5604.4	5407.2	5169.4	3364.2	4456.0	4879.7
55°	4922.2	5003.3	5184.5	5726.2	6110.2	5876.2	5478.9	3464.2	2957.4	2407.3
57.5°	5020.3	5148.6	5493.1	6241.4	6576.4	4654.2	5113.7	2442.2	1653.3	1652.4
60°	4674.9	4869.3	5486.5	6472.6	5323.2	2982.0	2048.7	55.7	320.8	318.0
62.5°	3952.1	4228.6	5234.5	6326.3	4409.7	2423.3	1825.0	4.7	1.9	1.9
65°	3056.5	3382.1	4364.4	5478.0	3906.8	2087.4	1355.1	0.0	0.0	0.0
67.5°	2004.3	2306.3	3277.3	4550.4	3243.4	1577.8	910.6	0.0	0.0	0.0
70°	835.1	1207.9	2036.4	3288.7	2385.6	1033.3	432.2	0.0	0.0	0.0
72.5°	241.6	368.0	917.2	1963.8	1480.6	540.7	160.4	0.0	0.0	0.0
75°	159.5	168.0	277.4	789.8	720.0	198.2	65.1	0.0	0.0	0.0
77.5°	134.0	137.8	176.5	220.8	231.2	78.3	52.8	0.0	0.0	0.0
80°	123.6	124.6	158.5	164.2	123.6	65.1	51.9	0.0	0.0	0.0
82.5°	115.1	112.3	134.9	130.2	102.9	56.6	48.1	0.0	0.0	0.0
85°	79.3	81.2	91.5	116.1	62.3	28.3	34.0	0.0	0.0	0.0
87.5°	24.5	28.3	35.9	36.8	11.3	3.8	0.0	0.0	0.0	0.0
90°	0.9	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)