

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: P579404

Luminaire Tested: **CTN-CA6-230-722-U-T5N-HSS-HM-EX180**

Issue Date: 11/18/2021

Test Information

Test Method: LM-79-08
Report Number: P579404
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2110-429-6)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 11/18/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-722-U-T5N-HSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (6) 2200K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19020 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U2 - G2

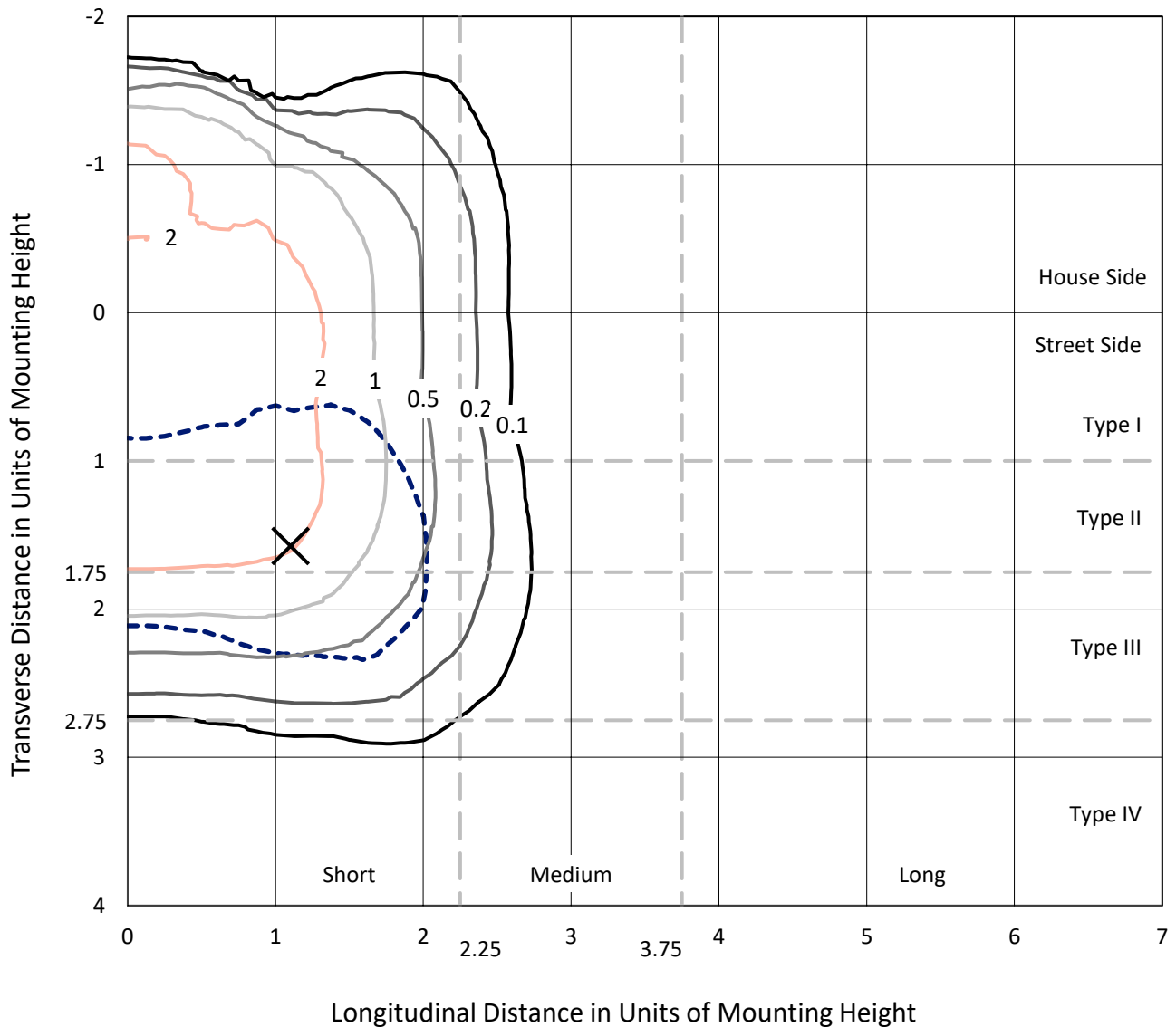
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

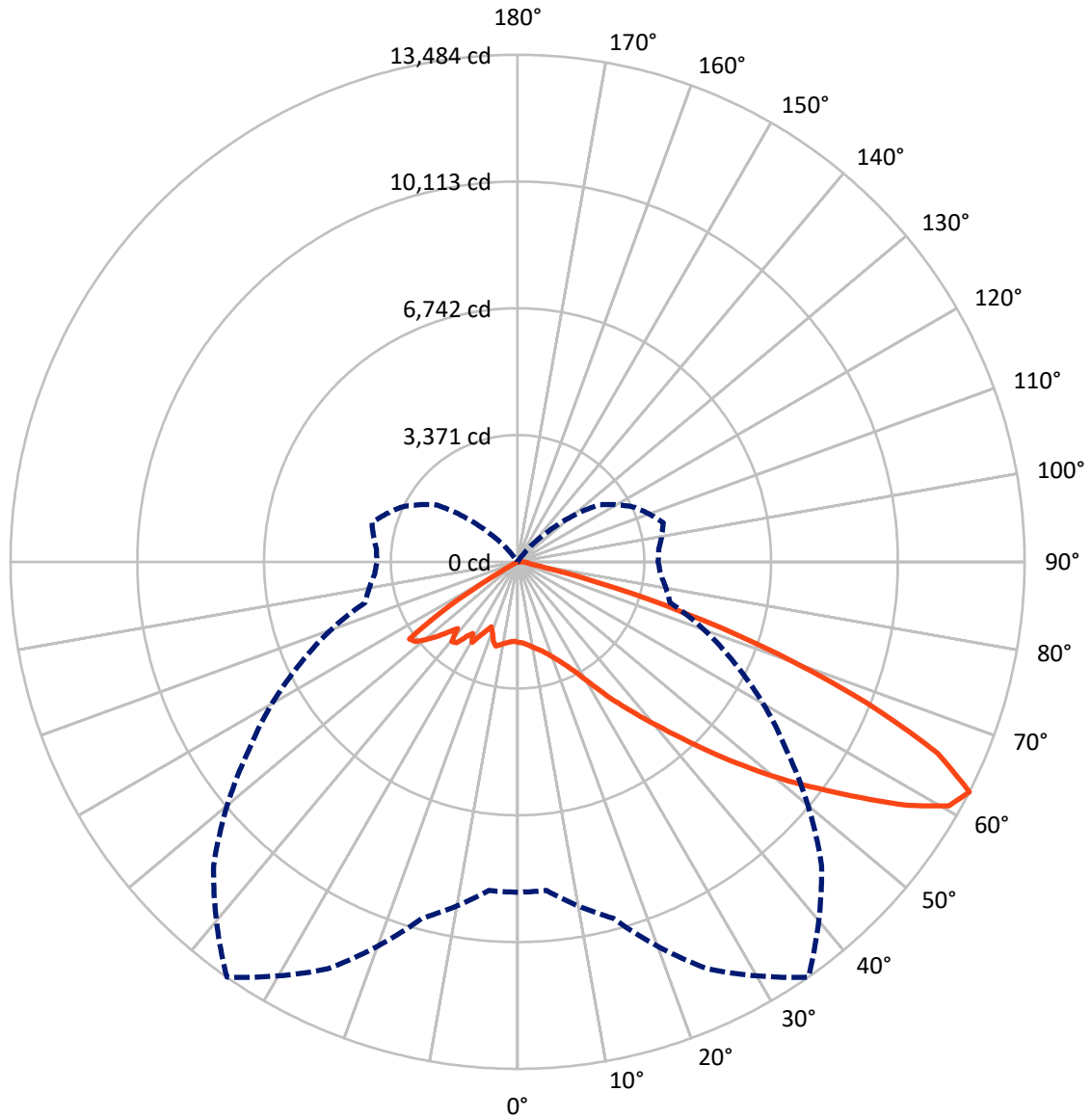
✕ Max cd
 - - - 1/2 Max cd



Based on 25 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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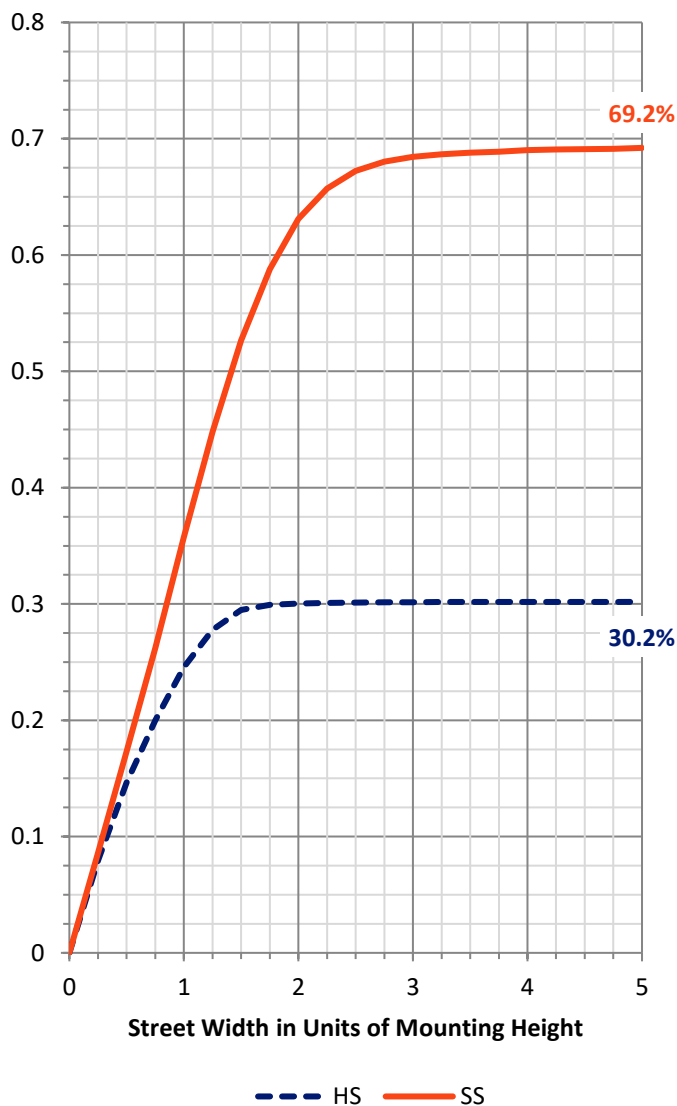
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5772.6	0.0	5772.6
	% Fixture	30.4	0.0	30.4
Street Side	Lumens	13230.8	16.5	13247.4
	% Fixture	69.6	0.1	69.6
Total	Lumens	19003.5	16.5	19020.0
	% Fixture	99.9	0.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	211.3	1.1
10°-20°	678.3	3.6
20°-30°	1239.7	6.5
30°-40°	2362.4	12.4
40°-50°	4054.9	21.3
50°-60°	5439.7	28.6
60°-70°	4135.3	21.7
70°-80°	783.0	4.1
80°-90°	98.9	0.5
90°-100°	14.5	0.1
100°-110°	2.0	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°	19003.5	99.9
0°-180°	19020.0	100.0

Coefficient of Utilization



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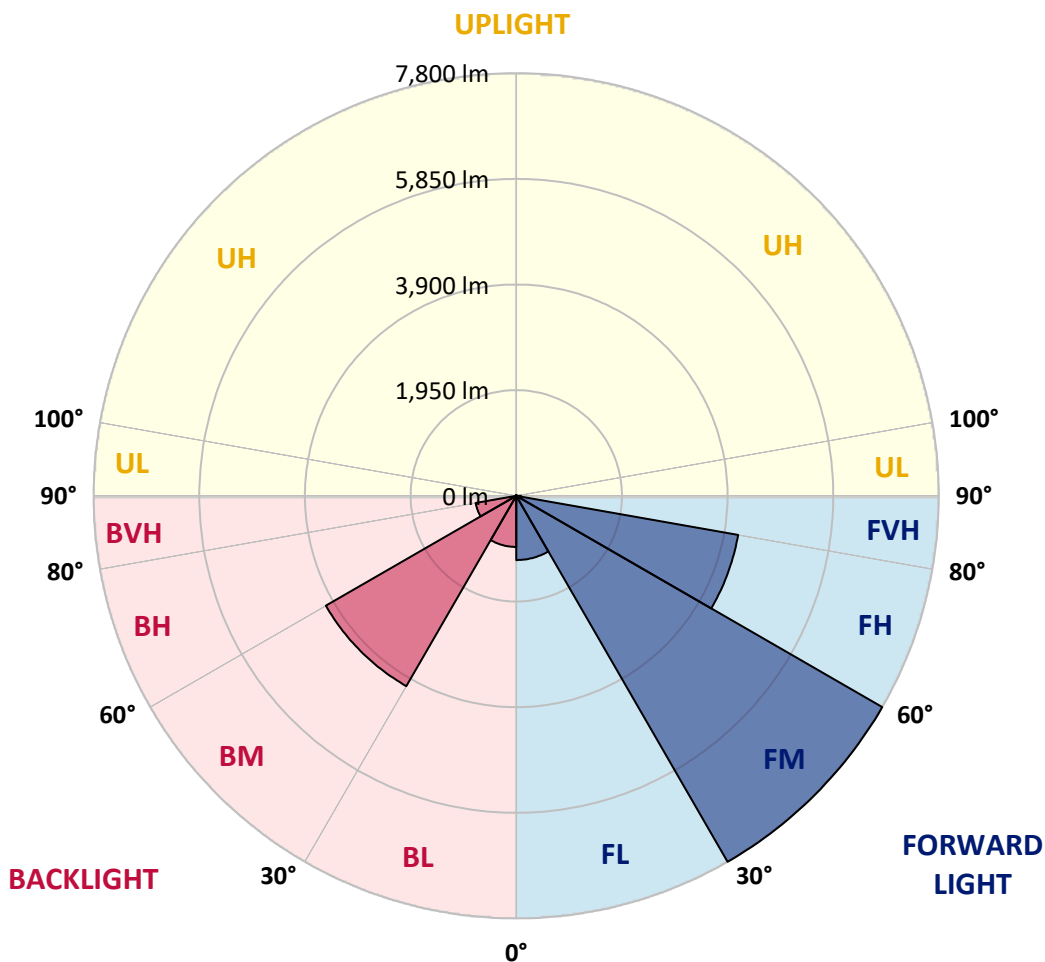
CATALOG NUMBER: CTN-CA6-230-722-U-T5N-HSS-HM-EX180

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1185.7	6.2			
FM (30°-60°)	7799.8	41.0			
FH (60°-80°)	4158.1	21.9			G2/5000
FVH (80°-90°)	87.3	0.5			G1/100
BL (0°-30°)	943.6	5.0	B2/1000		
BM (30°-60°)	4057.3	21.3	B3/5000		
BH (60°-80°)	760.2	4.0	B2/1000		G2/1000
BVH (80°-90°)	11.6	0.1			G1/100
UL (90°-100°)	14.5	0.1		U2/50	
UH (100°-180°)	2.0	0.0		U1/10	

BUG Rating: B3-U2-G2

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9
2.5°	2194.8	2178.6	2179.5	2193.9	2152.6	2167.9	2150.0	2167.9	2158.0	2165.2	2168.8
5°	2233.3	2217.2	2215.4	2230.6	2195.7	2206.4	2188.5	2201.1	2187.6	2196.6	2196.6
7.5°	2291.6	2275.5	2270.1	2281.7	2249.5	2257.5	2238.7	2245.9	2230.6	2242.3	2236.0
10°	2360.6	2342.7	2336.4	2342.7	2314.9	2319.4	2297.0	2305.1	2282.6	2296.1	2287.1
12.5°	2434.2	2410.9	2410.9	2416.2	2386.6	2387.5	2366.9	2371.4	2349.0	2363.3	2352.6
15°	2514.0	2488.0	2491.5	2496.9	2465.5	2470.9	2449.4	2456.6	2433.3	2447.6	2436.9
17.5°	2619.8	2592.0	2588.4	2604.5	2574.9	2584.8	2560.6	2569.5	2548.9	2553.4	2548.0
20°	2765.9	2730.9	2722.9	2744.4	2711.2	2718.4	2700.4	2718.4	2696.9	2664.6	2574.0
22.5°	2940.7	2910.2	2896.8	2911.1	2871.7	2884.2	2883.3	2912.0	2852.9	2649.3	2558.8
25°	3171.1	3150.5	3124.5	3126.3	3078.8	3097.6	3131.7	3154.1	2902.2	2723.8	2725.5
27.5°	3478.7	3458.0	3422.2	3408.7	3339.7	3385.4	3438.3	3219.6	3021.4	3067.1	3042.0
30°	3871.4	3867.8	3795.1	3771.8	3696.5	3753.9	3708.2	3333.4	3401.6	3465.2	3426.7
32.5°	4394.0	4368.9	4264.0	4221.9	4143.0	4176.2	3772.7	3718.9	3820.2	3906.3	3866.0
35°	5026.1	4949.9	4843.2	4759.8	4622.7	4438.0	4018.4	4123.3	4274.8	4393.2	4197.7
37.5°	5760.4	5677.9	5511.2	5361.4	5145.4	4569.8	4388.7	4598.5	4788.5	4660.3	4209.4
40°	6516.2	6442.7	6285.8	6093.0	5728.1	4978.6	4837.8	5088.9	5305.0	4570.7	4346.5
42.5°	7266.6	7203.9	7077.5	6887.4	6417.6	5465.4	5330.1	5599.9	5396.4	4745.5	4738.3
45°	8023.3	7991.9	7848.5	7686.2	7234.4	6088.5	5881.4	6092.1	5192.9	5164.2	5147.2
47.5°	8636.6	8642.0	8591.7	8507.5	8105.8	6772.6	6502.8	5877.9	5440.3	5471.7	5479.8
50°	9268.7	9228.3	9225.6	9231.0	9063.3	7653.9	6925.9	5781.0	5764.0	5761.3	5754.1
52.5°	9775.2	9724.1	9829.9	9914.2	10013.7	8637.5	6862.3	6109.2	6011.4	5977.4	5768.5
55°	10187.6	10167.9	10340.0	10625.1	11068.1	9679.3	7425.3	6429.2	6233.8	5437.6	4905.1
57.5°	10437.8	10466.5	10821.5	11381.8	12211.2	10542.7	8080.7	6753.8	5337.2	4789.4	4755.4
60°	9959.0	10110.5	10714.8	11944.9	13177.7	11355.0	8568.4	6819.2	4802.9	4509.7	4441.6
62.5°	8787.2	8772.9	9811.1	11944.9	13484.3	11435.6	8722.6	6355.7	4195.9	3814.0	3737.8
65°	6219.4	6257.1	7366.1	10764.1	12283.8	10636.8	8045.7	5403.6	3346.9	2996.3	2893.2
67.5°	3848.9	3846.2	4932.0	7927.4	9999.3	8905.5	6773.5	4142.1	2323.0	1992.2	1880.1
70°	1329.6	1367.3	2218.1	4638.8	7360.8	6977.0	5069.2	2615.3	1224.7	873.3	737.0
72.5°	529.0	541.5	796.1	2068.4	4598.5	4661.2	3080.6	1270.4	366.7	233.1	218.8
75°	346.1	347.9	381.9	746.8	2231.5	2507.7	1430.9	364.9	170.3	156.0	152.4
77.5°	298.6	299.5	317.4	378.3	727.1	975.5	407.0	216.1	142.6	128.2	124.6
80°	277.0	277.9	286.9	325.5	350.6	332.6	217.0	173.9	120.1	113.9	113.0
82.5°	261.8	265.4	269.9	293.2	283.3	250.1	180.2	140.8	92.3	98.6	101.3
85°	241.2	244.8	247.5	260.9	236.7	182.9	139.9	105.8	59.2	64.6	63.7
87.5°	181.1	182.9	179.3	177.5	165.0	128.2	92.3	67.2	23.3	21.5	19.7
90°	87.0	86.1	82.5	76.2	66.3	52.0	38.6	21.5	9.9	4.5	1.8
92.5°	69.0	68.1	66.3	60.1	52.0	38.6	27.8	15.2	9.0	3.6	0.9
95°	46.6	44.8	43.0	38.6	32.3	23.3	16.1	10.8	7.2	2.7	0.9
97.5°	30.5	29.6	26.9	23.3	17.9	12.6	9.9	8.1	6.3	2.7	0.9
100°	18.8	18.8	17.0	13.4	9.0	7.2	6.3	6.3	4.5	1.8	0.0
102.5°	11.7	10.8	9.9	6.3	4.5	4.5	4.5	4.5	3.6	1.8	0.0
105°	6.3	6.3	4.5	3.6	2.7	1.8	2.7	3.6	2.7	0.9	0.0
107.5°	1.8	1.8	1.8	0.9	0.9	0.0	0.9	1.8	1.8	0.9	0.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	1.8	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°	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9	2141.9
2.5°	2164.3	2147.3	2151.7	2134.7	2132.0	2114.1	2144.6	2146.4	2138.3	2147.3
5°	2192.1	2171.5	2179.5	2158.9	2155.3	2132.0	2156.2	2153.5	2147.3	2154.4
7.5°	2231.5	2210.9	2215.4	2191.2	2186.7	2160.7	2184.0	2175.1	2167.0	2176.9
10°	2286.2	2262.9	2266.5	2237.8	2234.2	2203.7	2230.6	2217.2	2205.5	2219.0
12.5°	2353.5	2323.0	2319.4	2288.9	2286.2	2257.5	2285.3	2271.9	2260.2	2281.7
15°	2430.6	2390.2	2384.9	2346.3	2341.8	2312.2	2339.1	2319.4	2310.4	2338.2
17.5°	2533.7	2391.1	2311.3	2254.9	2222.6	2206.4	2254.9	2320.3	2300.6	2301.5
20°	2491.5	2338.2	2231.5	2183.1	2148.2	1992.2	1777.0	1838.8	1964.4	2026.2
22.5°	2479.0	2425.2	2381.3	2299.7	1952.7	1864.8	1877.4	1863.1	1626.4	1535.8
25°	2719.3	2657.4	2562.4	2134.7	2034.3	2014.6	2021.7	1774.3	1595.9	1621.9
27.5°	3026.8	2963.1	2494.2	2254.9	2235.1	2209.1	2067.5	1758.2	1782.4	1807.5
30°	3414.1	3079.7	2600.9	2527.4	2490.6	2463.8	1938.4	1963.5	2003.8	2035.2
32.5°	3791.6	3069.8	2906.7	2815.2	2769.5	2247.7	2190.3	2248.6	2289.8	2314.0
35°	3796.0	3421.3	3249.1	3131.7	2841.2	2416.2	2469.1	2566.9	2668.2	2687.0
37.5°	3899.1	3819.4	3622.1	3474.2	2113.2	2696.9	2813.4	2925.5	3026.8	3033.1
40°	4309.8	4223.7	4039.0	3713.6	2333.7	2750.7	3192.7	3319.1	3404.2	3399.8
42.5°	4719.5	4660.3	4468.5	3300.2	2629.6	2383.1	3590.7	3674.1	3727.9	3765.6
45°	5131.9	5072.7	4424.5	3623.9	2982.0	2609.9	3493.9	3966.4	4025.6	4044.4
47.5°	5453.8	5307.6	4054.3	4053.4	3422.2	2900.4	2885.1	4230.0	4282.0	4268.5
50°	5751.4	4738.3	4382.4	4194.1	3877.6	3173.8	3068.0	3559.3	4514.2	4494.5
52.5°	5233.2	4598.5	4663.9	3814.9	4243.4	3445.5	3274.2	3191.8	4101.8	4629.8
55°	4680.1	4769.7	4951.7	4191.4	3078.8	3533.3	3449.1	3285.0	2767.7	2329.3
57.5°	4776.0	4909.6	4918.5	4540.2	3186.4	2207.3	2826.9	2474.5	1563.6	1567.2
60°	4455.9	4629.8	3595.2	3026.8	1713.3	459.9	44.8	39.4	272.6	331.7
62.5°	3767.4	4009.4	3432.0	2636.8	1099.2	17.0	4.5	0.9	0.0	0.0
65°	2917.4	3208.8	2900.4	2275.5	975.5	5.4	0.0	0.0	0.0	0.0
67.5°	1924.0	2186.7	2203.7	1903.4	813.2	2.7	0.0	0.0	0.0	0.0
70°	806.0	1135.0	1371.7	1414.8	639.2	0.9	0.0	0.0	0.0	0.0
72.5°	233.1	360.4	659.9	849.9	406.1	0.0	0.0	0.0	0.0	0.0
75°	155.1	165.9	191.0	382.8	202.6	0.0	0.0	0.0	0.0	0.0
77.5°	128.2	130.9	109.4	104.9	58.3	0.0	0.0	0.0	0.0	0.0
80°	116.6	114.8	87.9	61.9	21.5	0.0	0.0	0.0	0.0	0.0
82.5°	107.6	102.2	63.7	32.3	14.3	0.0	0.0	0.0	0.0	0.0
85°	72.6	71.7	28.7	19.7	2.7	0.0	0.0	0.0	0.0	0.0
87.5°	19.7	25.1	6.3	2.7	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	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)