

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: P256728

Luminaire Tested: **CST-6-3-D-U-T5R-7050-HSS-HM-EX120**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P256728
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1808-894-6)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-6-3-D-U-T5R-7050-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE
(6) 70 CRI, 5000K LEDS AND TYPE V ROUND WITH EXTERNAL FIELD INSTALLED 120
DEGREE SHIELD - BLACK
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24425 lumens
Efficiency: N/A
Efficacy: 104.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B4 - U1 - G4

Input Watts (W): 234
Input Voltage (V): NR
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: 28.75 FT

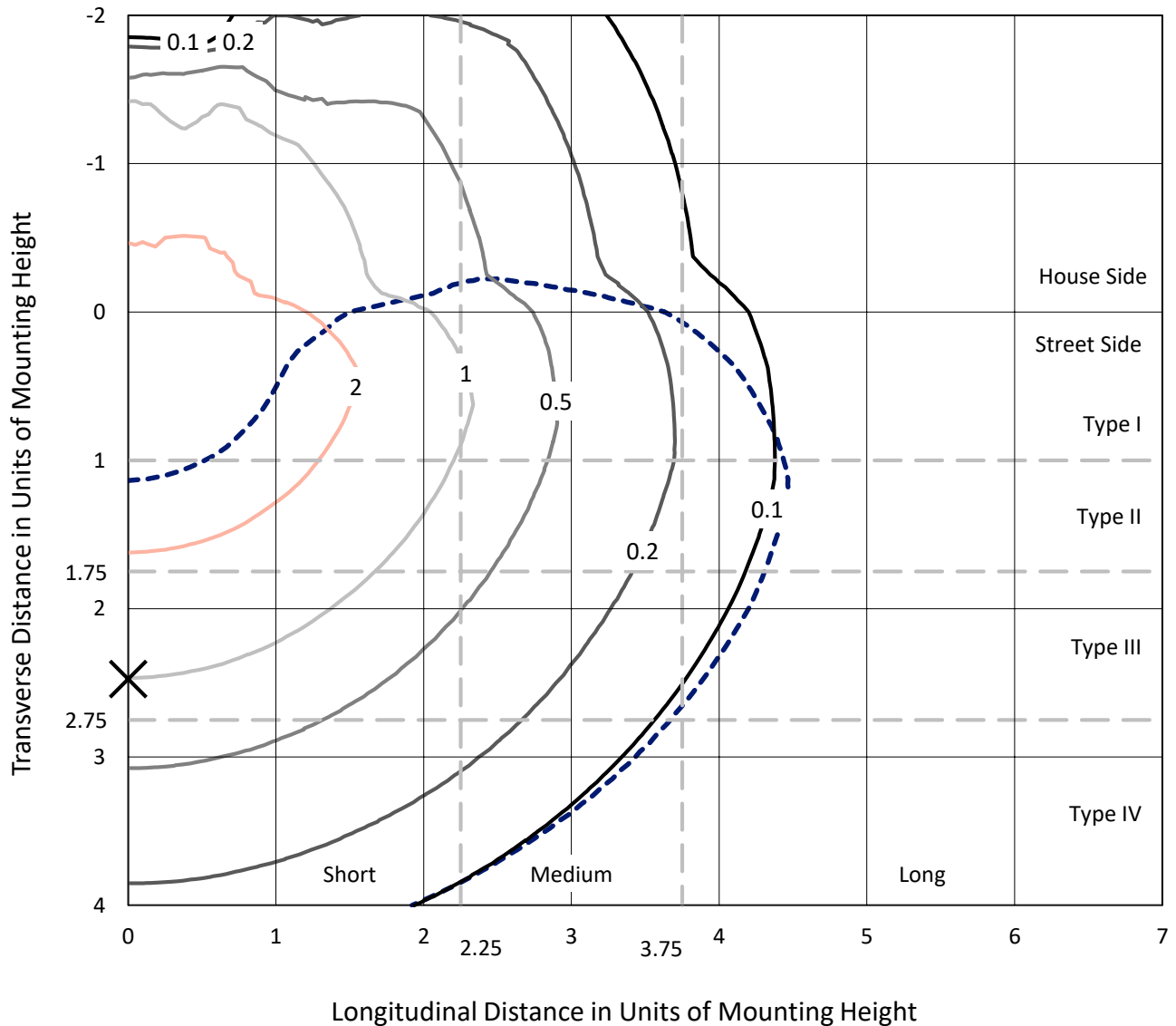


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

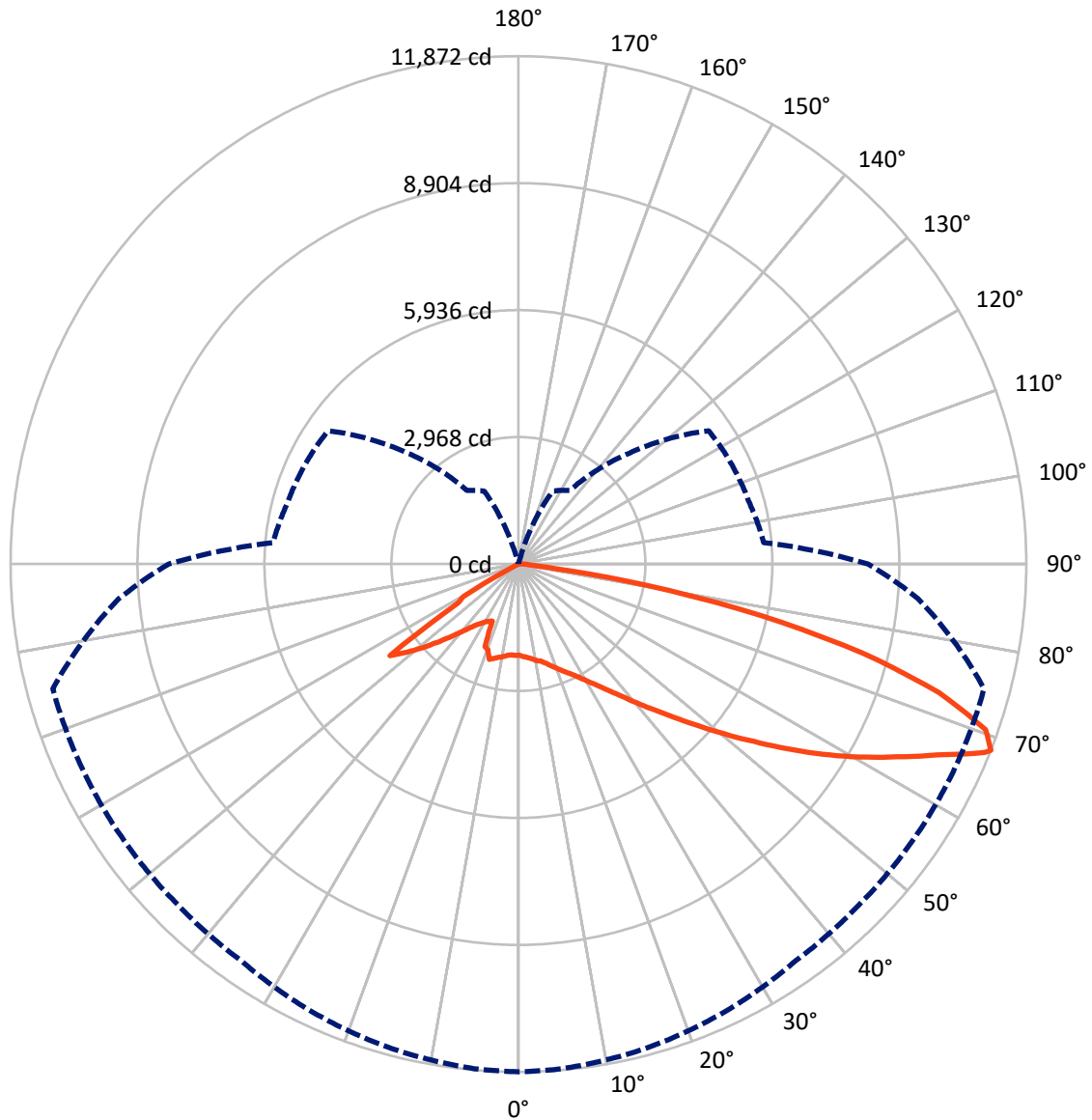


Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 0-Deg Lateral - - - Horizontal Cone Through 68-Deg Vertical

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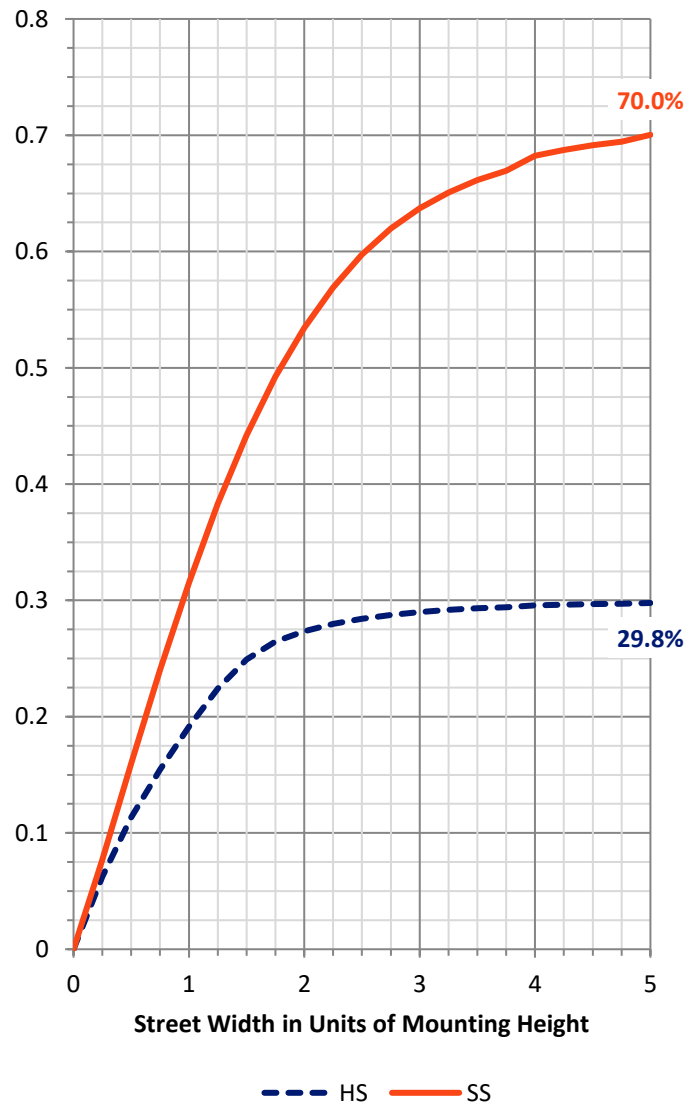
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7280.8	1.1	7281.9
	% Fixture	29.8	0.0	29.8
Street Side	Lumens	17133.0	10.0	17143.0
	% Fixture	70.1	0.0	70.2
Total	Lumens	24413.9	11.1	24425.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.7	0.8
10°-20°	657.8	2.7
20°-30°	1126.7	4.6
30°-40°	1827.7	7.5
40°-50°	3082.4	12.6
50°-60°	5024.4	20.6
60°-70°	6738.6	27.6
70°-80°	5234.1	21.4
80°-90°	515.5	2.1
90°-100°	9.8	0.0
100°-110°	0.6	0.0
110°-120°	0.1	0.0
120°-130°	0.1	0.0
130°-140°	0.1	0.0
140°-150°	0.1	0.0
150°-160°	0.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	24413.9	100.0
0°-180°	24425.0	100.0



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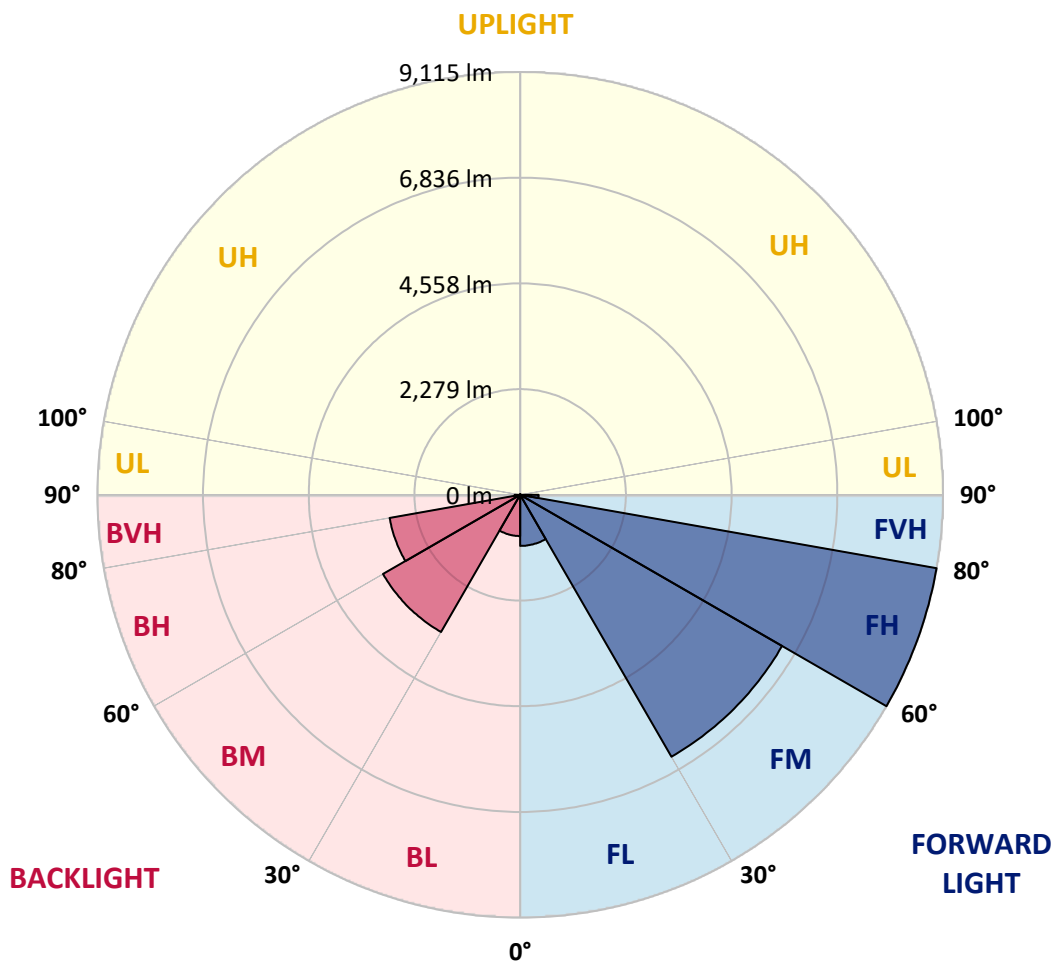
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1101.7	4.5			
FM	(30°-60°)	6519.9	26.7			
FH	(60°-80°)	9115.1	37.3			G4/12000
FVH	(80°-90°)	396.3	1.6			G3/500
BL	(0°-30°)	889.4	3.6	B2/1000		
BM	(30°-60°)	3414.7	14.0	B3/5000		
BH	(60°-80°)	2857.6	11.7	B4/5000		G4/5000
BVH	(80°-90°)	119.1	0.5			G2/225
UL	(90°-100°)	9.8	0.0		U1/10	
UH	(100°-180°)	1.1	0.0		U1/10	

BUG Rating: B4-U1-G4

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4
2.5°	2164.8	2158.7	2157.7	2169.8	2131.4	2150.6	2133.4	2147.6	2138.5	2145.6	2146.6
5°	2194.1	2182.9	2175.9	2190.0	2165.8	2174.9	2155.7	2161.7	2136.5	2150.6	2152.6
7.5°	2236.5	2218.3	2216.3	2220.3	2199.1	2206.2	2174.9	2181.9	2163.8	2155.7	2162.7
10°	2294.1	2276.9	2263.8	2272.9	2244.6	2248.6	2215.3	2216.3	2203.1	2188.0	2200.1
12.5°	2326.4	2328.4	2322.3	2329.4	2306.2	2293.1	2269.8	2261.7	2248.6	2230.4	2224.4
15°	2407.2	2403.2	2391.0	2402.2	2399.1	2387.0	2358.7	2340.5	2312.2	2302.1	2292.0
17.5°	2506.2	2493.1	2483.0	2497.1	2512.3	2487.0	2459.7	2434.5	2397.1	2376.9	2364.8
20°	2610.2	2601.2	2591.0	2613.3	2618.3	2599.1	2578.9	2541.6	2498.1	2471.9	2446.6
22.5°	2726.4	2708.2	2711.3	2740.6	2731.5	2722.4	2696.1	2665.8	2613.3	2579.9	2507.2
25°	2846.6	2836.5	2850.7	2863.8	2856.7	2837.5	2824.4	2802.2	2743.6	2703.2	2597.1
27.5°	2996.1	2980.0	2998.1	3003.2	2997.1	2992.1	2973.9	2956.7	2893.1	2847.6	2715.3
30°	3171.9	3152.7	3182.0	3174.9	3168.9	3172.9	3161.8	3124.4	3067.8	3006.2	2873.9
32.5°	3381.0	3355.7	3389.1	3373.9	3359.8	3388.1	3361.8	3326.4	3259.8	3188.1	3058.8
35°	3623.4	3624.4	3641.6	3616.4	3611.3	3641.6	3624.4	3581.0	3519.4	3444.6	3260.8
37.5°	3917.4	3909.3	3952.7	3940.6	3922.4	3962.8	3967.9	3913.3	3802.2	3728.5	3511.3
40°	4275.0	4273.0	4287.1	4289.1	4284.1	4303.3	4312.4	4239.6	4167.9	4056.8	3313.3
42.5°	4656.8	4664.9	4690.2	4672.0	4696.2	4721.5	4724.5	4663.9	4560.9	3892.1	3519.4
45°	5115.4	5140.7	5157.9	5153.8	5164.9	5201.3	5204.3	5172.0	5071.0	4216.4	3893.1
47.5°	5641.7	5666.0	5671.0	5703.3	5693.2	5744.8	5737.7	5738.7	5630.6	4667.9	4300.2
50°	6246.8	6257.9	6299.3	6317.5	6292.3	6362.0	6343.8	6366.0	6232.7	5185.1	4737.6
52.5°	6889.3	6908.5	6925.6	6994.3	6962.0	7022.6	6998.4	7049.9	6895.3	5711.4	5223.5
55°	7619.6	7622.6	7651.9	7721.6	7679.2	7751.9	7716.6	7735.8	7612.5	6293.3	5729.6
57.5°	8393.4	8383.3	8394.4	8450.0	8411.6	8466.1	8452.0	8470.2	8355.0	6905.4	6099.3
60°	9159.1	9143.9	9160.1	9197.5	9144.9	9238.9	9188.4	9205.6	9081.3	7530.7	6626.6
62.5°	9928.8	9917.7	9899.5	9936.9	9860.1	9908.6	9929.8	9901.5	9792.5	8096.4	7085.2
65°	10755.1	10744.0	10677.3	10700.6	10563.2	10540.0	10548.0	10557.1	10484.4	8657.0	7588.3
67.5°	11759.2	11743.1	11617.8	11460.2	11262.2	11218.8	11222.8	11247.1	11257.2	9378.3	8177.2
68°	11872.4	11843.1	11703.7	11520.8	11313.7	11263.2	11258.2	11263.2	11268.3	9384.3	8171.2
70°	11583.5	11572.3	11466.3	11245.1	11032.9	10911.7	10806.6	10802.6	10754.1	8904.5	7719.6
72.5°	10279.3	10265.2	10138.9	9982.4	9851.0	9661.1	9524.8	9532.8	9453.0	7870.1	6756.9
75°	8318.6	8317.6	8166.1	8034.8	8036.8	8022.7	7977.2	8057.0	7974.2	6675.1	5762.9
77.5°	5797.3	5817.5	5807.4	5730.6	5838.7	5988.2	6150.8	6304.4	6256.9	5273.0	4595.2
80°	3028.4	3085.0	3285.0	3294.1	3369.9	3515.3	3626.5	3729.5	3736.6	2992.1	2654.7
82.5°	805.1	822.3	889.9	870.8	864.7	894.0	918.2	921.3	923.3	779.8	728.3
85°	250.5	257.6	249.5	238.4	221.2	202.0	197.0	160.6	127.3	105.1	91.9
87.5°	177.8	189.9	171.7	161.6	143.4	136.4	122.2	96.0	74.8	52.5	35.4
90°	91.9	93.9	83.8	71.7	66.7	62.6	53.5	38.4	19.2	10.1	9.1
92.5°	46.5	47.5	41.4	35.4	30.3	26.3	20.2	11.1	6.1	3.0	1.0
95°	18.2	19.2	17.2	15.2	12.1	9.1	8.1	6.1	4.0	2.0	1.0
97.5°	6.1	6.1	6.1	5.1	5.1	5.1	5.1	4.0	3.0	2.0	1.0
100°	0.0	0.0	0.0	1.0	2.0	3.0	3.0	3.0	2.0	1.0	1.0
102.5°	0.0	0.0	0.0	0.0	0.0	1.0	2.0	2.0	2.0	1.0	1.0
105°	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0
107.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0



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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	1.0	1.0	1.0
112.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
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	1.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
132.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
137.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
142.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
147.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
152.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
157.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.0	1.0
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°	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4	2129.4
2.5°	2141.5	2135.5	2138.5	2113.2	2119.3	2103.1	2137.5	2128.4	2124.4	2138.5
5°	2146.6	2124.4	2142.5	2125.4	2128.4	2105.2	2133.4	2122.3	2121.3	2129.4
7.5°	2148.6	2137.5	2154.7	2126.4	2135.5	2126.4	2147.6	2136.5	2146.6	2153.7
10°	2176.9	2170.8	2168.8	2158.7	2165.8	2145.6	2171.8	2171.8	2176.9	2196.1
12.5°	2218.3	2210.2	2205.2	2187.0	2194.1	2188.0	2209.2	2213.3	2222.3	2230.4
15°	2274.9	2260.7	2255.7	2239.5	2244.6	2243.6	2258.7	2259.7	2279.9	2278.9
17.5°	2347.6	2327.4	2333.5	2321.3	2322.3	2314.3	2306.2	2306.2	2324.4	2328.4
20°	2434.5	2319.3	2167.8	2082.9	2067.8	2078.9	2122.3	2194.1	2104.2	2129.4
22.5°	2277.9	2173.9	2166.8	2147.6	2135.5	1864.7	1795.0	1772.8	1889.0	2089.0
25°	2298.1	2253.7	2240.5	2216.3	1858.7	1855.7	1835.5	1802.1	1472.8	1465.7
27.5°	2405.2	2361.7	2340.5	1941.5	1933.4	1932.4	1902.1	1567.8	1492.0	1502.1
30°	2530.4	2479.9	2100.1	2039.5	2032.4	2016.3	1842.5	1548.6	1547.6	1548.6
32.5°	2674.9	2507.2	2160.7	2157.7	2161.7	2112.2	1632.4	1626.4	1625.3	1635.4
35°	2872.9	2326.4	2312.2	2327.4	2306.2	1826.4	1730.4	1727.4	1728.4	1723.3
37.5°	2741.6	2508.2	2505.2	2505.2	2455.7	1868.8	1849.6	1863.7	1861.7	1854.6
40°	2797.1	2728.4	2710.2	2704.2	2075.9	2016.3	2005.2	2023.3	2026.4	2031.4
42.5°	3066.8	3004.2	2995.1	2923.4	2258.7	2239.5	2205.2	2224.4	2222.3	2228.4
45°	3398.2	3355.7	3316.3	2534.5	2505.2	2480.9	2445.6	2467.8	2473.9	2469.8
47.5°	3784.0	3737.6	3452.7	2787.0	2786.0	2766.8	2727.4	2745.6	2742.6	2742.6
50°	4171.9	4121.4	3136.5	3108.2	3098.1	3067.8	3035.5	3038.5	3039.6	3049.7
52.5°	4605.3	3681.0	3471.9	3415.3	3423.4	3403.2	3371.9	2552.7	3356.7	3365.8
55°	4304.3	3852.7	3840.6	3765.9	3785.1	3758.8	3738.6	2518.3	3338.6	3689.1
57.5°	4255.8	4223.5	4213.4	4136.6	4160.8	3911.3	4098.2	2755.7	2309.2	1687.0
60°	4626.5	4592.2	4586.1	4518.4	4516.4	3108.2	3725.5	1890.0	1476.8	1486.9
62.5°	4986.1	4930.6	4945.7	4865.9	3430.5	1894.0	1669.8	42.4	67.7	71.7
65°	5387.2	5294.2	5309.4	5235.6	3538.6	1997.1	1805.1	22.2	19.2	18.2
67.5°	5773.0	5610.4	5532.6	5454.8	3674.9	2103.1	1880.9	6.1	0.0	0.0
68°	5753.8	5582.1	5502.3	5428.6	3660.8	2100.1	1876.9	6.1	0.0	0.0
70°	5429.6	5275.0	5199.3	5142.7	3495.1	2028.4	1801.1	6.1	0.0	0.0
72.5°	4746.7	4660.9	4612.4	4562.9	3105.2	1814.2	1615.2	6.1	0.0	0.0
75°	4033.6	4009.3	3979.0	3869.9	2588.0	1484.9	1327.3	6.1	0.0	0.0
77.5°	3196.1	3195.1	3121.4	2993.1	1948.6	1090.0	978.8	5.1	0.0	0.0
80°	1728.4	1883.9	1827.4	1761.7	1105.1	593.0	564.7	4.0	0.0	0.0
82.5°	485.9	459.6	441.4	413.2	232.3	129.3	126.3	4.0	0.0	0.0
85°	67.7	74.8	82.8	93.9	53.5	34.3	30.3	2.0	0.0	0.0
87.5°	38.4	43.4	53.5	55.6	20.2	16.2	5.1	0.0	0.0	0.0
90°	8.1	9.1	10.1	10.1	4.0	4.0	0.0	0.0	0.0	0.0
92.5°	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
97.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.5°	1.0	1.0	1.0	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°	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
150°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
152.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	1.0	1.0	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)