

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: P159569

Luminaire Tested: **VST-E07-LED-E-U-T3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159569
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33706)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-E07-LED-E-U-T3-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 AREA
Light Source: (147) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19553.5 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 1' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

Input Watts (W): 172.5
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

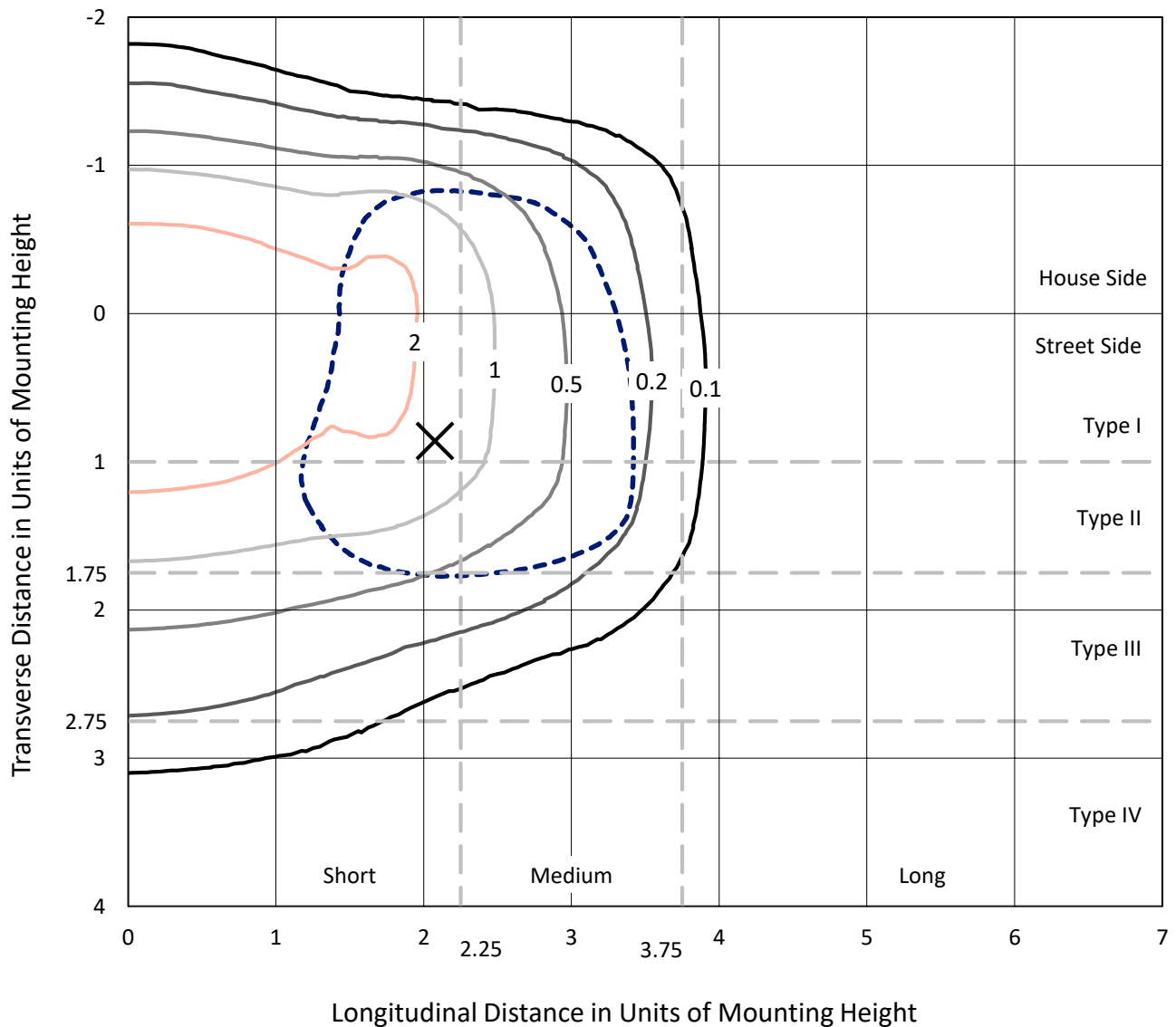


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

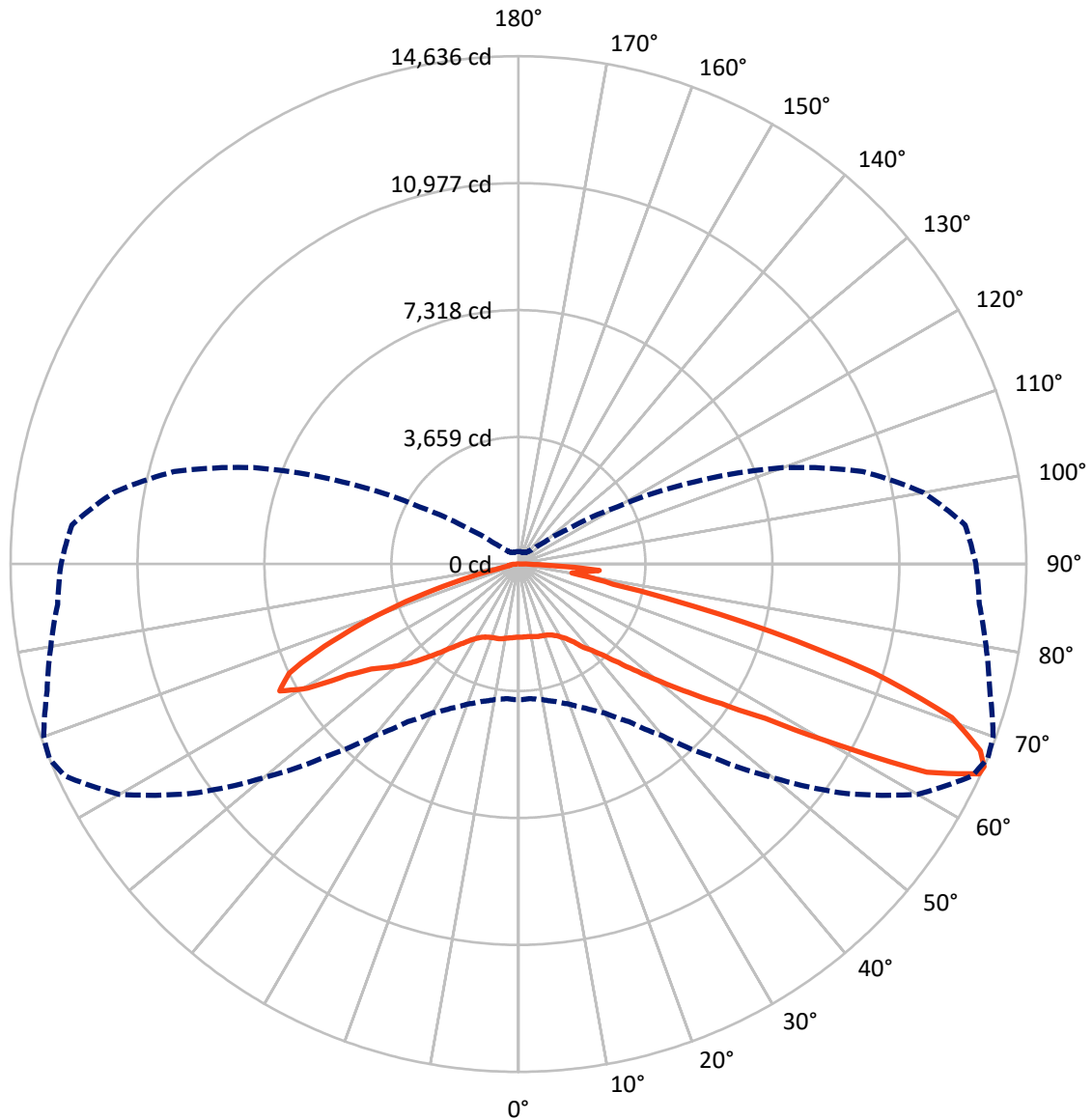


Based on 25 foot mounting height. Maximum calculated value = 3.4 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 67.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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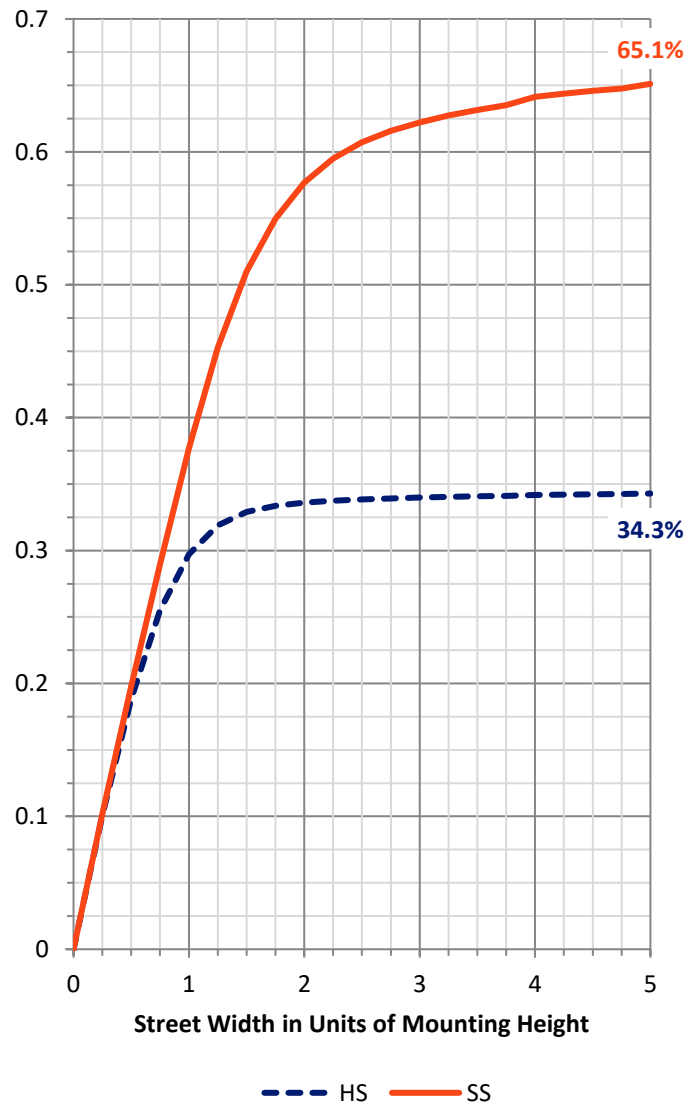
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6766.4	0.0	6766.4
	% Fixture	34.6	0.0	34.6
Street Side	Lumens	12787.1	0.0	12787.1
	% Fixture	65.4	0.0	65.4
Total	Lumens	19553.5	0.0	19553.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.5	1.0
10°-20°	599.5	3.1
20°-30°	1030.6	5.3
30°-40°	1665.6	8.5
40°-50°	2760.3	14.1
50°-60°	4332.0	22.2
60°-70°	5922.7	30.3
70°-80°	2604.5	13.3
80°-90°	436.0	2.2
90°-100°	0.0	0.0
100°-110°	0.0	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°	19553.5	100.0
0°-180°	19553.5	100.0

Coefficient of Utilization



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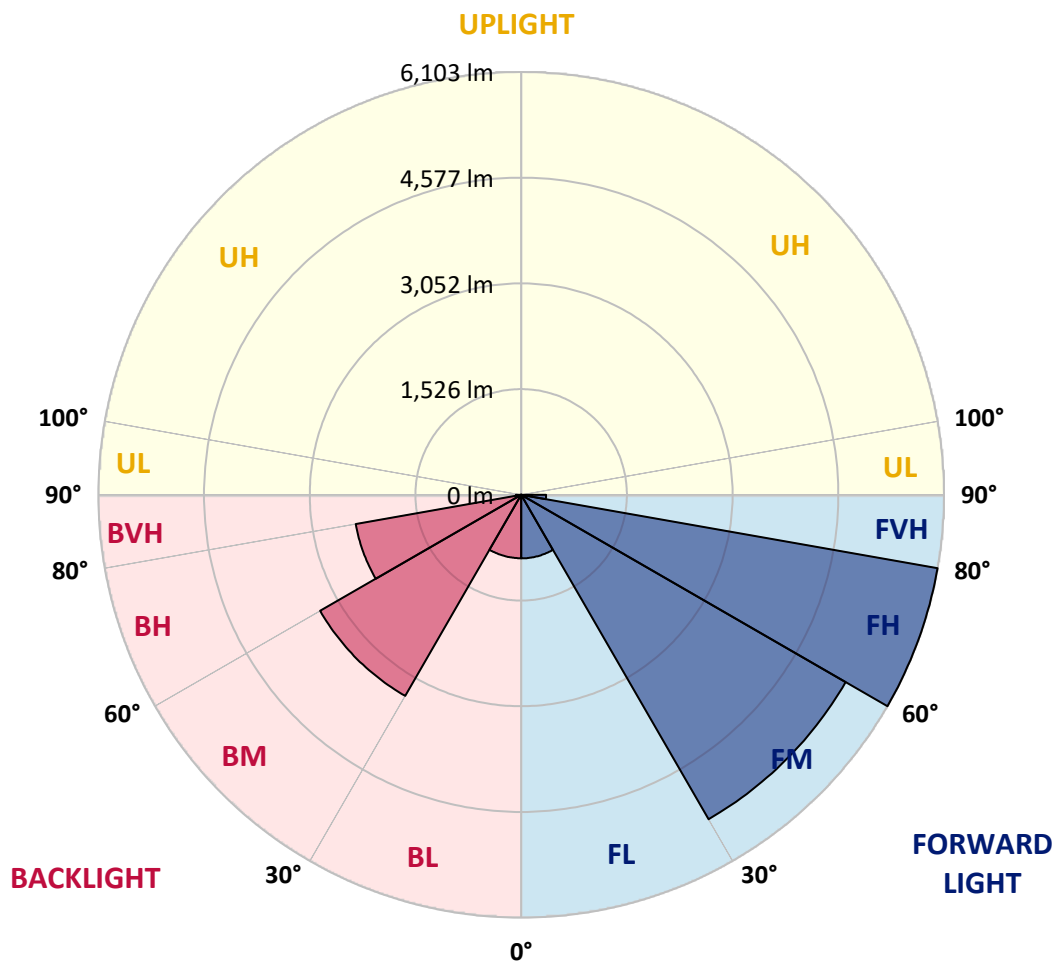
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	917.2	4.7			
FM (30°-60°)	5407.1	27.7			
FH (60°-80°)	6103.1	31.2			G3/7500
FVH (80°-90°)	359.7	1.8			G3/500
BL (0°-30°)	915.3	4.7	B2/1000		
BM (30°-60°)	3350.7	17.1	B3/5000		
BH (60°-80°)	2424.1	12.4	B3/2500		G3/2500
BVH (80°-90°)	76.3	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8
2.5°	2106.0	2106.0	2107.3	2106.0	2106.0	2104.7	2109.8	2109.8	2109.8	2108.6	2112.4
5°	2100.9	2100.9	2102.2	2102.2	2103.4	2102.2	2106.0	2107.3	2107.3	2107.3	2111.1
7.5°	2088.1	2091.9	2089.4	2090.7	2091.9	2095.8	2100.9	2103.4	2106.0	2109.8	2111.1
10°	2061.2	2067.6	2066.4	2070.2	2071.5	2083.0	2086.8	2091.9	2100.9	2106.0	2109.8
12.5°	2024.2	2028.0	2029.3	2034.4	2039.5	2053.6	2063.8	2072.8	2085.5	2098.3	2111.1
15°	1994.8	1997.3	1997.3	2002.4	2010.1	2022.9	2035.7	2051.0	2070.2	2091.9	2112.4
17.5°	2003.7	2010.1	2005.0	2003.7	2006.3	2013.9	2025.4	2038.2	2061.2	2085.5	2109.8
20°	2062.5	2063.8	2061.2	2054.9	2049.7	2051.0	2051.0	2053.6	2067.6	2086.8	2106.0
22.5°	2111.1	2116.2	2115.0	2116.2	2115.0	2120.1	2117.5	2112.4	2107.3	2108.6	2117.5
25°	2153.3	2158.4	2158.4	2162.3	2168.7	2178.9	2186.6	2185.3	2177.6	2167.4	2163.5
27.5°	2222.4	2222.4	2222.4	2226.2	2235.2	2247.9	2260.7	2268.4	2274.8	2264.6	2242.8
30°	2331.1	2332.3	2328.5	2329.8	2336.2	2352.8	2368.1	2379.6	2392.4	2391.2	2363.0
32.5°	2450.0	2455.1	2453.8	2458.9	2467.9	2483.2	2499.8	2517.7	2534.4	2544.6	2526.7
35°	2603.4	2608.5	2609.8	2617.5	2627.7	2650.7	2673.7	2696.8	2714.7	2722.3	2718.5
37.5°	2855.3	2856.6	2851.5	2840.0	2843.8	2861.7	2888.6	2925.6	2937.2	2944.8	2962.7
40°	3232.5	3228.7	3208.2	3198.0	3191.6	3199.3	3194.2	3223.6	3250.4	3251.7	3250.4
42.5°	3690.3	3678.8	3659.6	3657.1	3654.5	3651.9	3637.9	3639.2	3663.4	3669.8	3662.2
45°	4145.5	4131.4	4117.4	4130.2	4114.8	4154.5	4166.0	4196.7	4200.5	4213.3	4194.1
47.5°	4518.9	4520.2	4520.2	4538.1	4568.8	4644.2	4712.0	4770.8	4792.5	4823.2	4827.1
50°	4801.5	4809.2	4833.4	4891.0	4956.2	5082.8	5196.6	5302.7	5398.6	5434.4	5529.1
52.5°	4966.4	4986.9	5038.0	5133.9	5250.3	5414.0	5593.0	5773.3	5939.5	6080.2	6192.7
55°	4937.0	4952.4	5041.9	5191.5	5373.1	5593.0	5843.6	6104.5	6364.0	6601.9	6786.0
57.5°	4747.8	4758.0	4847.5	5016.3	5242.6	5538.0	5892.2	6279.6	6644.1	7027.7	7342.2
60°	4499.7	4515.1	4598.2	4731.2	4967.7	5282.3	5692.7	6218.3	6800.1	7403.6	7991.8
62.5°	4341.2	4337.3	4410.2	4529.1	4706.9	4992.0	5387.1	6009.8	6815.4	7835.8	8998.1
65°	4077.7	4066.2	4141.7	4277.2	4470.3	4746.5	5121.2	5719.6	6654.3	7999.5	9647.7
66°	3914.1	3891.1	3966.5	4103.3	4296.4	4590.5	4949.8	5540.6	6458.7	7839.7	9578.7
67.5°	3627.6	3616.1	3651.9	3759.4	3902.6	4178.8	4553.4	5148.0	5995.8	7358.9	9072.3
70°	2948.7	2923.1	2951.2	2999.8	3054.8	3122.6	3352.7	3824.6	4541.9	5862.8	7309.0
72.5°	2008.8	1996.0	2048.5	2122.6	2269.7	2338.7	2429.5	2506.2	2759.4	3695.4	5098.1
75°	1528.0	1535.7	1602.2	1725.0	1914.2	2118.8	2318.3	2391.2	2306.8	2233.9	2893.7
77.5°	856.7	901.5	982.0	1138.0	1338.8	1627.8	1975.6	2359.2	2551.0	2503.7	2341.3
80°	352.9	346.5	386.2	471.8	540.9	777.4	1189.2	1670.0	2209.6	2551.0	2497.3
82.5°	98.5	101.0	130.4	167.5	216.1	274.9	429.6	690.5	1125.2	1750.5	2291.4
85°	30.7	30.7	42.2	62.7	74.2	85.7	108.7	179.0	305.6	609.9	1236.5
87.5°	6.4	6.4	9.0	17.9	19.2	19.2	24.3	33.2	29.4	26.9	120.2
90°	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):

	55°	60°	65°	67.5°	70°	75°	80°	85°	90°	95°	100°
0°	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8
2.5°	2108.6	2106.0	2107.3	2108.6	2107.3	2107.3	2106.0	2104.7	2106.0	2106.0	2109.8
5°	2107.3	2106.0	2107.3	2107.3	2107.3	2108.6	2108.6	2108.6	2112.4	2112.4	2118.8
7.5°	2109.8	2109.8	2112.4	2112.4	2112.4	2112.4	2113.7	2116.2	2122.6	2121.3	2132.9
10°	2115.0	2117.5	2123.9	2125.2	2125.2	2129.0	2131.6	2136.7	2143.1	2145.6	2155.9
12.5°	2121.3	2134.1	2145.6	2148.2	2152.0	2158.4	2162.3	2164.8	2176.3	2180.2	2193.0
15°	2129.0	2146.9	2161.0	2166.1	2171.2	2178.9	2184.0	2187.8	2198.1	2203.2	2218.5
17.5°	2130.3	2150.8	2167.4	2175.1	2181.4	2190.4	2198.1	2205.7	2217.2	2224.9	2240.3
20°	2129.0	2155.9	2181.4	2191.7	2198.1	2214.7	2226.2	2236.4	2250.5	2258.2	2273.5
22.5°	2143.1	2173.8	2208.3	2221.1	2231.3	2254.3	2269.7	2286.3	2304.2	2309.3	2320.8
25°	2176.3	2208.3	2251.8	2269.7	2287.6	2318.3	2340.0	2364.3	2382.2	2384.8	2388.6
27.5°	2232.6	2262.0	2314.4	2341.3	2370.7	2414.2	2446.1	2470.4	2496.0	2496.0	2493.4
30°	2346.4	2352.8	2407.8	2442.3	2485.8	2549.7	2597.0	2623.9	2643.1	2643.1	2621.3
32.5°	2493.4	2485.8	2535.6	2572.7	2632.8	2722.3	2786.3	2806.7	2827.2	2820.8	2783.7
35°	2705.7	2684.0	2712.1	2768.4	2836.1	2958.9	3025.4	3071.4	3084.2	3066.3	3007.5
37.5°	2973.0	2970.4	2984.5	3047.1	3122.6	3281.1	3348.9	3378.3	3368.1	3336.1	3232.5
40°	3255.5	3247.9	3238.9	3281.1	3365.5	3556.0	3676.2	3691.6	3677.5	3630.2	3499.8
42.5°	3632.8	3632.8	3590.6	3602.1	3672.4	3885.9	4027.9	4076.5	4077.7	4008.7	3834.8
45°	4151.9	4146.8	4072.6	4054.7	4108.4	4318.1	4501.0	4527.8	4527.8	4437.1	4246.5
47.5°	4775.9	4769.5	4696.6	4634.0	4644.2	4870.5	5022.7	5063.6	5027.8	4960.0	4733.7
50°	5479.2	5467.7	5393.5	5334.7	5309.1	5538.0	5667.2	5686.3	5633.9	5553.4	5307.8
52.5°	6192.7	6227.2	6183.7	6151.8	6160.7	6309.1	6442.0	6351.3	6324.4	6237.5	5990.7
55°	6935.6	7041.7	7137.7	7109.5	7142.8	7287.3	7312.8	7192.6	7144.0	7081.4	6806.5
57.5°	7683.7	7993.1	8307.7	8395.9	8477.7	8684.9	8655.5	8458.5	8495.6	8589.0	8279.5
60°	8728.3	9622.1	10420.0	10567.1	10821.6	10998.0	11037.7	10999.3	11171.9	11123.3	10849.7
62.5°	10333.1	11822.8	12932.7	13208.9	13464.6	13455.7	13321.4	13183.3	13353.4	13353.4	12638.6
65°	11478.8	13169.2	14357.1	14586.0	14575.8	14267.6	13950.5	13674.3	13650.0	13460.8	12416.1
66°	11532.5	13272.8	14436.4	14635.9	14559.2	14063.0	13683.3	13332.9	13183.3	12919.9	11849.6
67.5°	11049.2	12980.0	14178.1	14352.0	14150.0	13439.0	12916.1	12446.8	12229.4	11785.7	10778.1
70°	9063.4	11155.3	12898.2	13253.6	13024.7	12124.5	11408.5	10774.2	10358.7	9718.0	8991.8
72.5°	6615.9	8236.0	10123.4	10701.4	10665.6	9837.0	9260.3	8679.8	8133.8	7550.7	7020.0
75°	4300.2	5357.7	6410.1	6747.6	6585.3	6105.7	5692.7	5353.9	4836.0	4430.7	4332.2
77.5°	2455.1	2999.8	2837.4	2795.2	2591.9	2091.9	1391.2	975.6	881.0	1099.7	1205.8
80°	2336.2	2117.5	1733.9	1563.8	1437.2	979.5	514.0	361.9	317.1	324.8	349.1
82.5°	2634.1	2745.3	2245.4	1875.8	1632.9	1191.7	650.9	303.0	221.2	262.1	294.1
85°	1974.3	2779.9	2755.6	2334.9	1915.5	1373.3	769.8	231.4	133.0	184.1	240.4
87.5°	400.2	658.5	634.2	557.5	474.4	331.2	129.1	72.9	66.5	90.8	138.1
90°	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):

	105°	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°
0°	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8	2109.8
2.5°	2112.4	2112.4	2115.0	2118.8	2120.1	2120.1	2122.6	2120.1	2125.2	2126.5	2127.7
5°	2123.9	2127.7	2130.3	2136.7	2140.5	2143.1	2146.9	2144.4	2149.5	2150.8	2153.3
7.5°	2136.7	2143.1	2148.2	2150.8	2155.9	2155.9	2157.2	2154.6	2153.3	2149.5	2148.2
10°	2159.7	2163.5	2169.9	2167.4	2164.8	2155.9	2148.2	2136.7	2130.3	2118.8	2112.4
12.5°	2196.8	2199.3	2199.3	2187.8	2171.2	2150.8	2131.6	2112.4	2097.1	2084.3	2076.6
15°	2222.4	2227.5	2221.1	2204.5	2180.2	2152.0	2126.5	2100.9	2080.4	2063.8	2053.6
17.5°	2241.5	2240.3	2228.8	2205.7	2182.7	2158.4	2135.4	2108.6	2083.0	2058.7	2043.3
20°	2271.0	2258.2	2237.7	2213.4	2189.1	2168.7	2150.8	2125.2	2098.3	2065.1	2042.1
22.5°	2310.6	2287.6	2258.2	2232.6	2209.6	2190.4	2169.9	2148.2	2120.1	2083.0	2051.0
25°	2366.9	2327.2	2294.0	2268.4	2247.9	2226.2	2203.2	2175.1	2146.9	2108.6	2070.2
27.5°	2452.5	2393.7	2351.5	2328.5	2309.3	2279.9	2250.5	2217.2	2181.4	2141.8	2098.3
30°	2556.1	2485.8	2437.2	2416.7	2393.7	2360.5	2328.5	2282.5	2232.6	2185.3	2131.6
32.5°	2677.6	2606.0	2557.4	2542.0	2505.0	2466.6	2421.8	2360.5	2295.2	2224.9	2161.0
35°	2861.7	2770.9	2726.2	2690.4	2639.2	2593.2	2517.7	2437.2	2343.8	2250.5	2171.2
37.5°	3051.0	2958.9	2912.9	2863.0	2796.5	2712.1	2611.1	2496.0	2372.0	2256.9	2159.7
40°	3304.1	3204.4	3145.6	3068.9	2961.4	2829.7	2680.1	2522.9	2372.0	2228.8	2111.1
42.5°	3599.5	3507.4	3416.7	3290.1	3117.4	2925.6	2715.9	2513.9	2331.1	2166.1	2042.1
45°	4008.7	3851.4	3706.9	3503.6	3251.7	2981.9	2719.8	2471.7	2260.7	2077.9	1939.8
47.5°	4469.0	4265.7	4010.0	3691.6	3347.6	3003.6	2682.7	2392.4	2149.5	1951.3	1800.4
50°	4999.7	4687.7	4295.1	3841.2	3396.2	2974.2	2594.5	2259.4	1996.0	1768.4	1607.3
52.5°	5607.1	5131.4	4553.4	3947.3	3388.5	2884.7	2448.7	2084.3	1790.2	1548.5	1389.9
55°	6280.9	5614.7	4800.2	4015.1	3319.5	2710.8	2219.8	1837.5	1534.4	1296.6	1157.2
57.5°	7468.8	6462.5	5270.8	4105.9	3175.0	2447.4	1929.5	1525.5	1251.8	1049.8	916.8
60°	9675.9	7944.5	6162.0	4319.4	2957.6	2117.5	1563.8	1196.9	968.0	820.9	722.5
62.5°	11041.5	8987.9	6596.8	4288.7	2604.7	1666.1	1161.1	887.4	707.1	609.9	548.6
65°	10718.0	8578.7	6066.1	3683.9	2026.7	1181.5	768.5	580.5	485.9	436.0	406.6
66°	10278.1	8121.0	5617.3	3299.0	1765.9	987.1	634.2	487.2	418.1	381.0	365.7
67.5°	9356.2	7284.7	4845.0	2641.8	1323.4	735.2	468.0	382.3	340.1	321.0	310.7
70°	7830.7	5869.2	3426.9	1560.0	717.3	399.0	299.2	266.0	255.7	249.3	245.5
72.5°	6054.6	4249.1	2002.4	767.2	361.9	258.3	227.6	213.5	209.7	209.7	211.0
75°	3814.3	2442.3	896.4	369.5	245.5	208.4	194.4	188.0	189.2	190.5	189.2
77.5°	1267.2	842.7	373.4	262.1	213.5	189.2	177.7	175.2	177.7	179.0	179.0
80°	364.4	318.4	269.8	231.4	195.6	176.5	166.2	165.0	171.3	172.6	170.1
82.5°	280.0	262.1	244.2	223.8	188.0	166.2	162.4	163.7	167.5	165.0	153.4
85°	257.0	254.5	182.9	181.6	163.7	158.6	154.7	156.0	152.2	138.1	125.3
87.5°	144.5	134.3	103.6	104.9	121.5	125.3	103.6	110.0	102.3	89.5	81.8
90°	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):

	160°	165°	170°	175°	180°
0°	2109.8	2109.8	2109.8	2109.8	2109.8
2.5°	2130.3	2129.0	2129.0	2132.9	2127.7
5°	2154.6	2153.3	2153.3	2157.2	2153.3
7.5°	2143.1	2139.2	2136.7	2135.4	2135.4
10°	2104.7	2100.9	2093.2	2090.7	2088.1
12.5°	2065.1	2061.2	2052.3	2052.3	2049.7
15°	2040.8	2035.7	2029.3	2025.4	2022.9
17.5°	2028.0	2020.3	2012.7	2008.8	2006.3
20°	2022.9	2012.7	2003.7	1997.3	1997.3
22.5°	2024.2	2011.4	2001.2	1993.5	1990.9
25°	2037.0	2017.8	2005.0	1997.3	1994.8
27.5°	2054.9	2031.8	2015.2	2005.0	2001.2
30°	2079.2	2047.2	2024.2	2011.4	2006.3
32.5°	2095.8	2051.0	2021.6	2003.7	1997.3
35°	2094.5	2037.0	2001.2	1978.1	1970.5
37.5°	2071.5	2003.7	1956.4	1928.3	1915.5
40°	2020.3	1942.3	1892.5	1865.6	1850.3
42.5°	1946.2	1861.8	1817.0	1787.6	1771.0
45°	1829.8	1746.7	1691.7	1668.7	1647.0
47.5°	1668.7	1584.3	1537.0	1503.7	1489.7
50°	1479.4	1395.1	1345.2	1318.3	1305.5
52.5°	1272.3	1191.7	1155.9	1130.4	1112.5
55°	1057.5	983.3	968.0	939.8	923.2
57.5°	855.4	812.0	797.9	769.8	755.7
60°	668.8	654.7	639.3	621.4	613.8
62.5°	517.9	505.1	501.2	489.7	488.5
65°	395.1	396.4	393.8	391.3	388.7
66°	359.3	358.0	359.3	356.8	355.5
67.5°	305.6	310.7	314.6	313.3	313.3
70°	248.1	251.9	257.0	255.7	255.7
72.5°	212.3	218.7	221.2	219.9	219.9
75°	191.8	198.2	198.2	195.6	194.4
77.5°	179.0	181.6	179.0	176.5	173.9
80°	166.2	163.7	159.8	156.0	153.4
82.5°	144.5	138.1	134.3	127.9	127.9
85°	116.4	111.2	102.3	95.9	89.5
87.5°	75.4	72.9	66.5	49.9	39.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)