

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: P159803

Luminaire Tested: **VST-F08-LED-E-U-T4-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159803
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33707)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F08-LED-E-U-T4-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(8) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT
Light Source: (56) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16589.9 lumens
Efficiency: N/A
Efficacy: 81.2 lumens/watt
Luminous Opening: Rectangular (W 1.33' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B2 - U0 - G3

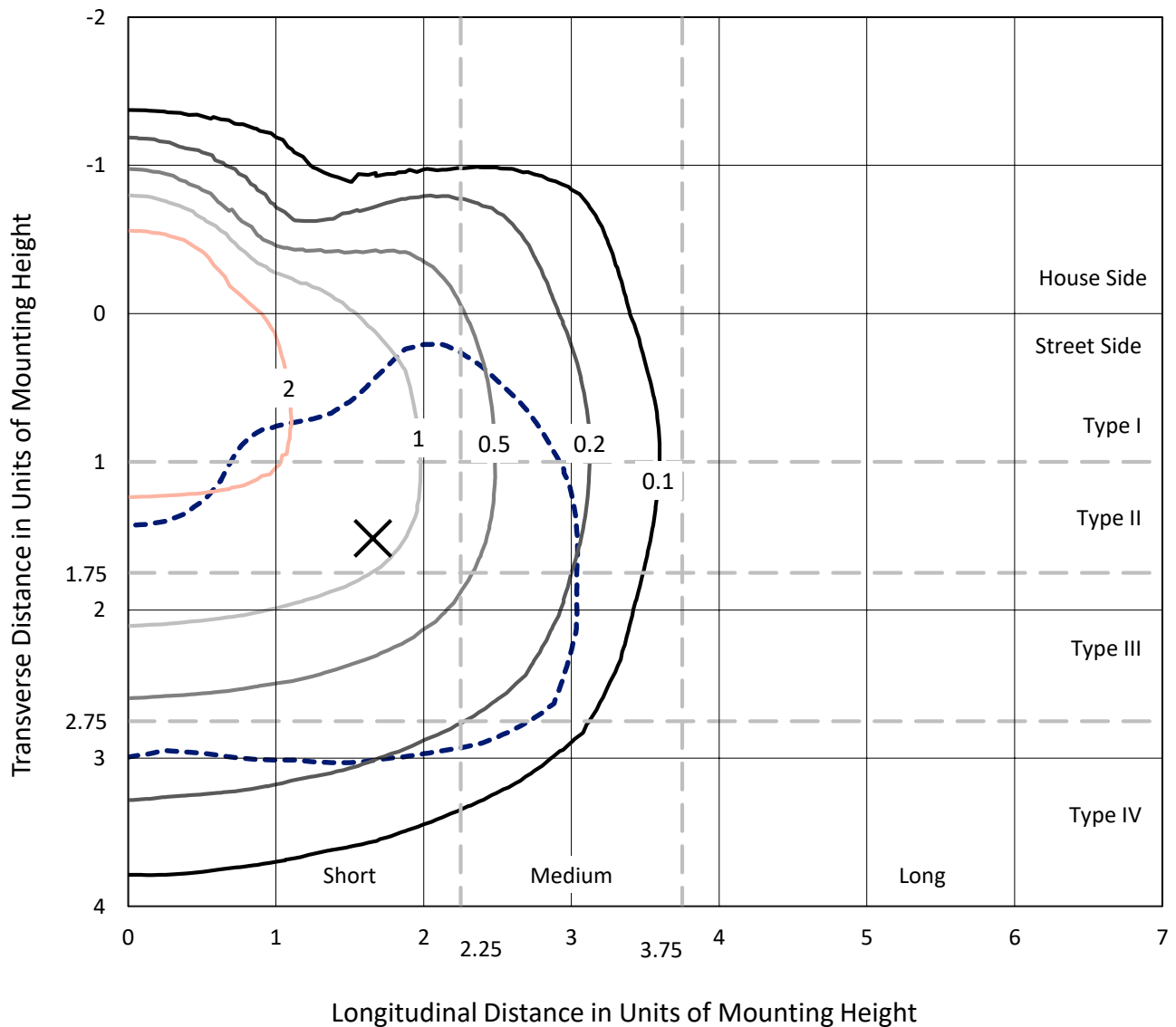
Input Watts (W): 204.4
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

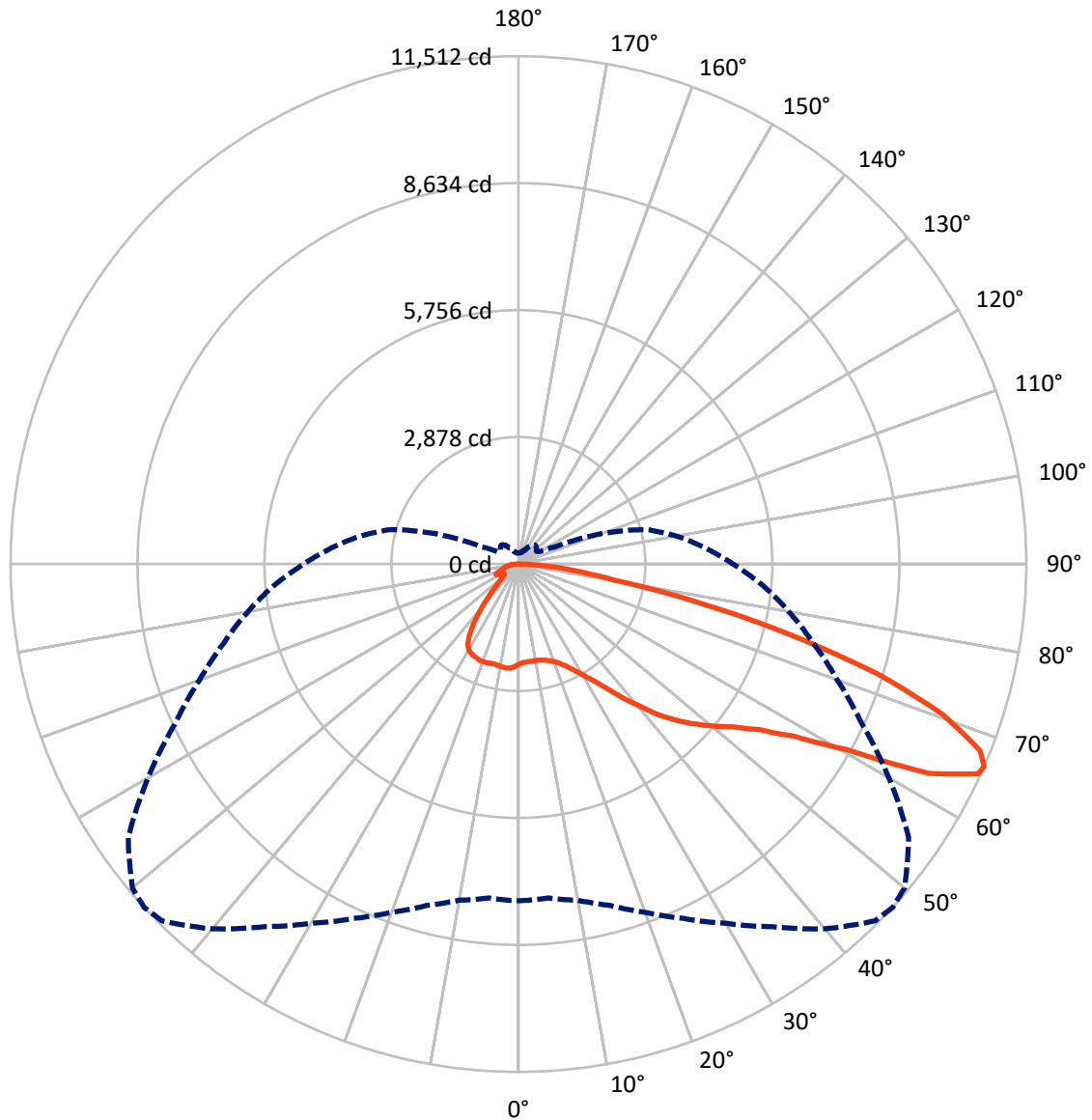
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.7 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 66-Deg Vertical

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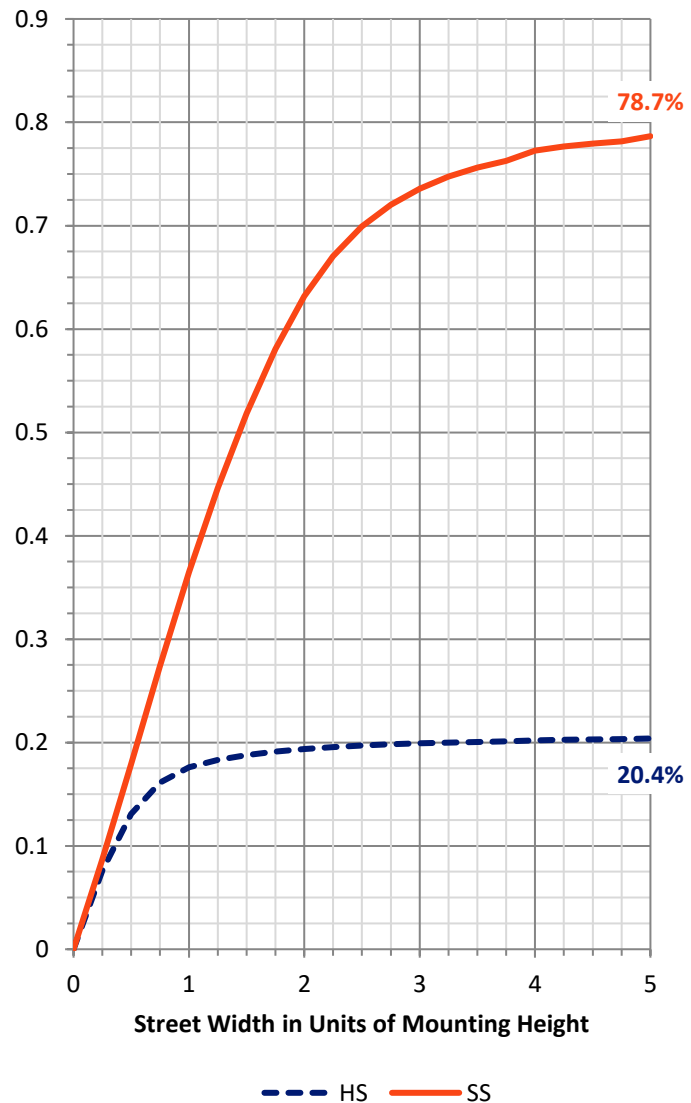
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3434.8	0.0	3434.8
	% Fixture	20.7	0.0	20.7
Street Side	Lumens	13155.0	0.0	13155.0
	% Fixture	79.3	0.0	79.3
Total	Lumens	16589.9	0.0	16589.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.8	1.3
10°-20°	656.0	4.0
20°-30°	1119.3	6.7
30°-40°	1689.4	10.2
40°-50°	2195.9	13.2
50°-60°	3012.5	18.2
60°-70°	4634.2	27.9
70°-80°	2678.9	16.1
80°-90°	384.8	2.3
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°	16589.9	100.0
0°-180°	16589.9	100.0



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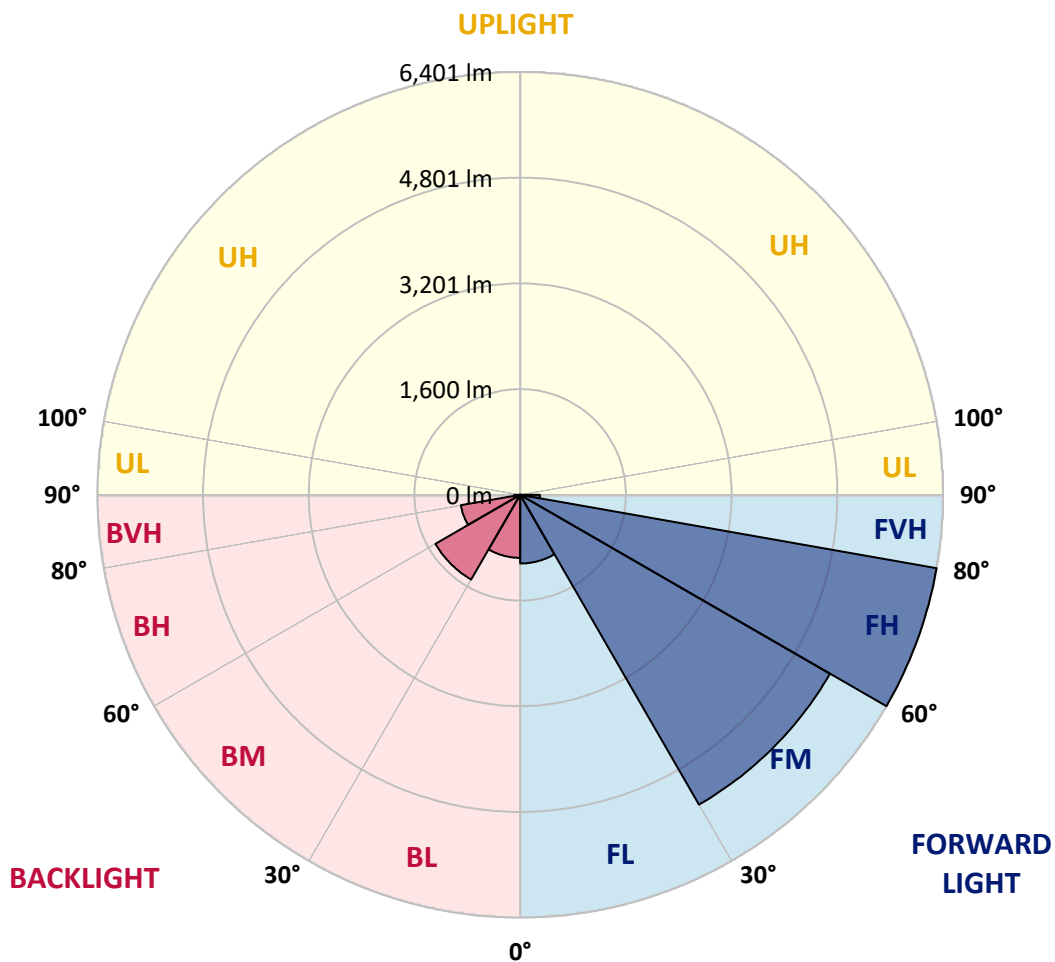
CATALOG NUMBER: VST-F08-LED-E-U-T4-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1039.9	6.3			
FM	(30°-60°)	5415.9	32.6			
FH	(60°-80°)	6401.5	38.6			G3/7500
FVH	(80°-90°)	297.8	1.8			G3/500
BL	(0°-30°)	954.2	5.8	B2/1000		
BM	(30°-60°)	1482.0	8.9	B2/2500		
BH	(60°-80°)	911.6	5.5	B2/1000		G2/1000
BVH	(80°-90°)	87.0	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G3

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7
2.5°	2211.7	2212.8	2213.9	2213.9	2217.3	2217.3	2222.9	2226.2	2227.3	2234.0	2238.5
5°	2170.5	2169.4	2170.5	2172.7	2178.3	2182.7	2193.9	2201.7	2208.4	2219.5	2225.1
7.5°	2152.6	2154.9	2157.1	2158.2	2162.7	2173.8	2183.8	2191.7	2205.0	2218.4	2224.0
10°	2176.0	2179.4	2176.0	2178.3	2178.3	2188.3	2192.8	2198.3	2208.4	2220.6	2224.0
12.5°	2230.7	2237.4	2230.7	2225.1	2220.6	2229.6	2227.3	2222.9	2228.4	2231.8	2231.8
15°	2321.0	2321.0	2316.5	2308.7	2297.6	2298.7	2288.6	2278.6	2274.1	2266.3	2260.8
17.5°	2409.0	2406.8	2396.8	2386.7	2378.9	2375.6	2361.1	2347.7	2332.1	2319.9	2306.5
20°	2494.9	2503.8	2491.5	2477.0	2464.8	2457.0	2445.8	2419.1	2400.1	2380.0	2366.7
22.5°	2643.1	2635.3	2622.0	2600.8	2588.5	2575.1	2551.7	2522.7	2493.8	2469.2	2452.5
25°	2795.9	2788.1	2769.1	2753.5	2735.7	2724.5	2698.9	2663.2	2635.3	2597.4	2575.1
27.5°	2959.7	2953.0	2930.7	2918.5	2906.2	2892.8	2870.6	2833.8	2808.1	2764.6	2741.2
30°	3144.8	3143.7	3113.6	3111.3	3093.5	3079.0	3063.4	3032.2	3006.6	2963.1	2935.2
32.5°	3342.1	3337.6	3316.5	3309.8	3322.0	3312.0	3289.7	3257.4	3223.9	3198.3	3167.1
35°	3623.0	3615.2	3603.0	3608.5	3616.3	3644.2	3609.6	3581.8	3541.6	3508.2	3464.7
37.5°	3828.1	3817.0	3831.5	3862.7	3907.3	3928.5	3958.6	3959.7	3940.7	3896.1	3858.2
40°	4016.5	4012.1	4045.5	4089.0	4171.5	4231.7	4288.5	4316.4	4323.1	4294.1	4237.3
42.5°	4176.0	4189.3	4233.9	4300.8	4416.7	4508.2	4614.1	4679.8	4721.1	4705.5	4679.8
45°	4365.5	4372.2	4426.8	4511.5	4621.9	4773.5	4912.8	5024.3	5096.8	5095.6	5066.7
47.5°	4602.9	4604.0	4650.8	4750.1	4868.2	5022.1	5198.2	5346.5	5442.3	5446.8	5424.5
50°	4885.0	4882.7	4934.0	5027.6	5153.6	5301.9	5489.2	5674.2	5808.0	5808.0	5775.7
52.5°	5248.4	5243.9	5271.8	5354.3	5475.8	5631.9	5818.0	6032.1	6177.0	6208.2	6138.0
55°	5733.3	5740.0	5746.7	5819.1	5922.8	6046.5	6260.6	6457.9	6651.9	6669.7	6628.5
57.5°	6294.0	6271.7	6319.7	6437.8	6556.0	6711.0	6862.6	7095.6	7325.2	7364.2	7358.6
60°	7170.2	7141.3	7190.3	7340.8	7471.2	7715.4	7975.1	8276.1	8548.1	8628.4	8531.4
62.5°	7976.2	8011.9	8078.8	8253.8	8443.3	8768.8	9159.0	9675.1	10191.3	10472.2	10452.1
65°	7903.8	7870.3	7998.5	8237.1	8580.4	8995.1	9480.1	10102.1	10845.7	11409.7	11459.9
66°	7635.1	7600.5	7738.8	8011.9	8404.3	8865.8	9404.3	10037.5	10797.7	11435.4	11512.3
67.5°	7191.4	7156.9	7312.9	7561.5	7966.2	8547.0	9128.9	9821.2	10611.6	11222.5	11284.9
70°	6335.3	6288.5	6410.0	6690.9	7018.6	7580.5	8134.5	8868.1	9679.6	10167.9	10191.3
72.5°	5366.5	5257.3	5386.6	5602.9	5837.0	6301.8	6784.5	7286.2	7932.8	8384.2	8513.6
75°	3893.9	3950.8	3988.7	4131.4	4286.3	4670.9	4954.1	5374.3	5874.9	6201.5	6305.2
77.5°	2065.7	2151.5	2205.0	2347.7	2604.1	2897.3	3203.9	3463.6	3792.5	3975.3	4102.4
80°	1159.4	1219.6	1306.5	1419.1	1544.0	1769.2	1950.9	2084.6	2131.5	2163.8	2192.8
82.5°	637.7	790.4	919.7	997.7	1071.3	1161.6	1269.7	1381.2	1416.9	1363.4	1335.5
85°	99.2	146.0	444.8	542.9	590.8	659.9	738.0	820.5	821.6	706.8	771.4
87.5°	27.9	31.2	63.5	95.9	93.6	75.8	93.6	170.6	100.3	50.2	58.0
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°
0°	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7
2.5°	2240.7	2242.9	2248.5	2254.1	2259.7	2265.2	2268.6	2274.1	2278.6	2285.3	2293.1
5°	2231.8	2237.4	2247.4	2259.7	2270.8	2280.8	2288.6	2299.8	2309.8	2318.7	2332.1
7.5°	2231.8	2242.9	2259.7	2273.0	2283.1	2295.3	2307.6	2318.7	2329.9	2338.8	2347.7
10°	2232.9	2244.0	2260.8	2276.4	2287.5	2300.9	2310.9	2321.0	2333.2	2338.8	2349.9
12.5°	2237.4	2241.8	2254.1	2269.7	2283.1	2296.4	2306.5	2316.5	2329.9	2332.1	2339.9
15°	2259.7	2253.0	2256.3	2267.5	2281.9	2293.1	2304.2	2312.0	2321.0	2318.7	2325.4
17.5°	2300.9	2284.2	2277.5	2278.6	2285.3	2293.1	2297.6	2298.7	2299.8	2289.8	2290.9
20°	2356.6	2333.2	2317.6	2309.8	2300.9	2293.1	2280.8	2266.3	2253.0	2232.9	2230.7
22.5°	2440.2	2405.7	2389.0	2367.8	2341.0	2307.6	2277.5	2241.8	2212.8	2182.7	2171.6
25°	2561.8	2526.1	2508.2	2474.8	2426.9	2378.9	2335.5	2287.5	2245.2	2209.5	2192.8
27.5°	2724.5	2688.8	2669.9	2635.3	2576.2	2528.3	2468.1	2416.8	2365.6	2313.2	2292.0
30°	2921.8	2890.6	2869.4	2841.6	2790.3	2737.9	2667.7	2588.5	2507.1	2423.5	2382.3
32.5°	3154.8	3120.3	3104.7	3072.3	3018.8	2964.2	2886.2	2784.7	2648.7	2517.2	2434.7
35°	3445.8	3406.8	3388.9	3346.6	3284.1	3203.9	3120.3	2984.3	2800.3	2617.5	2482.6
37.5°	3834.8	3747.9	3688.8	3591.8	3491.5	3378.9	3259.6	3120.3	2902.9	2676.6	2489.3
40°	4179.3	4091.2	3977.5	3838.2	3682.1	3527.2	3391.2	3232.9	2996.5	2718.9	2468.1
42.5°	4607.4	4451.3	4269.6	4081.2	3873.8	3683.2	3521.6	3335.4	3060.1	2730.1	2409.0
45°	4998.7	4812.5	4569.5	4318.6	4061.1	3821.5	3639.7	3432.4	3114.7	2730.1	2337.7
47.5°	5355.4	5132.4	4841.5	4529.3	4229.5	3967.5	3761.3	3531.6	3191.6	2764.6	2316.5
50°	5685.4	5429.0	5097.9	4735.6	4398.9	4119.1	3897.3	3658.7	3308.7	2853.8	2367.8
52.5°	6033.2	5761.2	5357.6	4973.0	4601.8	4301.9	4065.6	3815.9	3460.3	2994.3	2458.1
55°	6489.1	6170.3	5712.1	5288.5	4880.5	4549.4	4280.7	4004.3	3626.4	3152.6	2568.4
57.5°	7208.1	6745.5	6287.3	5736.6	5352.0	4916.2	4621.9	4304.2	3896.1	3358.8	2734.5
60°	8466.7	7898.2	7347.5	6714.3	6239.4	5783.5	5338.7	4924.0	4432.4	3824.8	3099.1
62.5°	10263.8	9686.3	8821.2	8046.5	7329.7	6725.4	6145.8	5618.5	4987.5	4323.1	3548.3
65°	11337.3	10676.2	9645.0	8603.8	7733.2	6984.1	6320.8	5675.3	4994.2	4346.5	3684.3
66°	11423.1	10797.7	9696.3	8596.0	7692.0	6915.0	6224.9	5557.2	4859.3	4239.5	3639.7
67.5°	11263.7	10725.3	9591.5	8444.4	7520.3	6680.9	5971.9	5271.8	4570.6	3996.5	3491.5
70°	10138.9	9749.8	8777.8	7703.1	6781.2	6041.0	5293.0	4619.6	3955.2	3472.5	3098.0
72.5°	8311.8	7819.0	7139.0	6416.7	5690.9	5034.3	4354.3	3781.3	3223.9	2872.8	2607.5
75°	6105.6	5662.0	4912.8	4462.5	3983.1	3570.6	3112.5	2569.6	2173.8	1997.7	1933.0
77.5°	3870.5	3388.9	2756.8	2259.7	1943.1	1669.9	1316.6	1046.8	838.3	872.9	966.5
80°	1955.3	1684.4	1260.8	995.5	860.6	715.7	566.3	429.2	313.3	357.8	404.7
82.5°	1255.2	1047.9	835.0	657.7	555.2	489.4	391.3	284.3	211.8	238.6	292.1
85°	755.8	638.8	509.5	416.9	362.3	302.1	221.8	157.2	156.1	167.2	206.2
87.5°	114.8	163.9	94.8	101.4	107.0	114.8	101.4	85.8	74.7	97.0	122.6
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°	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7	2269.7
2.5°	2300.9	2303.1	2307.6	2313.2	2312.0	2319.9	2324.3	2319.9	2329.9	2329.9	2335.5
5°	2343.3	2346.6	2354.4	2360.0	2362.2	2368.9	2371.1	2370.0	2372.2	2373.4	2375.6
7.5°	2355.5	2364.4	2367.8	2371.1	2372.2	2374.5	2374.5	2372.2	2372.2	2371.1	2373.4
10°	2352.2	2355.5	2357.8	2356.6	2356.6	2354.4	2353.3	2352.2	2352.2	2349.9	2353.3
12.5°	2341.0	2341.0	2341.0	2338.8	2338.8	2337.7	2337.7	2337.7	2339.9	2341.0	2346.6
15°	2318.7	2318.7	2321.0	2319.9	2323.2	2328.8	2335.5	2339.9	2345.5	2346.6	2349.9
17.5°	2284.2	2285.3	2292.0	2306.5	2321.0	2337.7	2349.9	2353.3	2348.8	2337.7	2329.9
20°	2224.0	2238.5	2265.2	2299.8	2332.1	2353.3	2358.9	2345.5	2324.3	2295.3	2279.7
22.5°	2170.5	2199.5	2247.4	2304.2	2344.4	2358.9	2342.1	2310.9	2273.0	2239.6	2216.2
25°	2191.7	2225.1	2275.3	2324.3	2349.9	2342.1	2308.7	2264.1	2224.0	2185.0	2147.1
27.5°	2280.8	2314.3	2349.9	2364.4	2355.5	2326.5	2279.7	2231.8	2178.3	2122.5	2075.7
30°	2365.6	2384.5	2386.7	2372.2	2339.9	2293.1	2238.5	2182.7	2114.7	2047.8	1988.8
32.5°	2392.3	2370.0	2329.9	2288.6	2244.0	2196.1	2132.6	2059.0	1986.5	1910.7	1845.0
35°	2384.5	2294.2	2195.0	2106.9	2053.4	1998.8	1940.8	1842.7	1761.3	1696.7	1654.3
37.5°	2314.3	2149.3	1996.6	1868.4	1784.8	1720.1	1634.3	1552.9	1482.7	1453.7	1419.1
40°	2216.2	1964.2	1752.4	1573.0	1486.0	1403.5	1307.6	1245.2	1225.1	1198.4	1199.5
42.5°	2075.7	1748.0	1474.8	1268.6	1173.9	1083.6	1015.6	978.8	979.9	957.6	962.1
45°	1927.4	1530.6	1187.2	982.1	888.5	811.6	773.7	762.5	763.6	764.7	758.0
47.5°	1837.2	1361.1	952.0	744.7	662.2	618.7	598.6	593.1	594.2	595.3	587.5
50°	1823.8	1273.1	794.8	569.7	516.1	491.6	481.6	476.0	476.0	471.6	464.9
52.5°	1861.7	1250.8	717.9	493.8	442.6	420.3	412.5	408.0	401.3	392.4	380.1
55°	1921.9	1270.8	694.5	468.2	418.0	395.7	385.7	383.5	372.3	355.6	335.5
57.5°	2033.4	1343.3	710.1	474.9	422.5	402.4	395.7	393.5	377.9	352.3	326.6
60°	2353.3	1554.0	788.1	512.8	454.8	438.1	438.1	434.8	413.6	376.8	340.0
62.5°	2794.7	1862.8	894.1	565.2	499.4	497.2	516.1	517.3	479.4	420.3	362.3
65°	3007.7	2007.7	930.8	576.3	511.7	537.3	575.2	575.2	521.7	440.3	365.6
66°	3008.8	2004.4	919.7	563.0	498.3	531.7	570.8	570.8	515.0	434.8	360.1
67.5°	2931.9	1941.9	882.9	538.4	468.2	499.4	534.0	532.9	482.7	412.5	344.5
70°	2629.8	1717.9	778.1	498.3	432.5	433.6	445.9	438.1	404.7	356.7	313.3
72.5°	2267.5	1436.9	674.4	472.7	404.7	383.5	373.5	366.8	345.6	316.6	289.8
75°	1739.1	1115.9	587.5	449.3	380.1	343.4	330.0	324.4	309.9	293.2	272.0
77.5°	1065.7	764.7	498.3	411.4	352.3	318.8	304.3	293.2	278.7	263.1	248.6
80°	459.3	461.5	399.1	348.9	306.6	267.5	248.6	235.2	227.4	221.8	214.0
82.5°	321.1	331.1	304.3	270.9	234.1	206.2	189.5	186.2	187.3	187.3	185.1
85°	240.8	236.3	212.9	194.0	177.2	159.4	146.0	144.9	149.4	149.4	146.0
87.5°	139.3	140.5	120.4	112.6	117.1	100.3	91.4	92.5	103.7	102.6	100.3
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°	2269.7	2269.7	2269.7	2269.7	2269.7
2.5°	2335.5	2338.8	2337.7	2341.0	2337.7
5°	2378.9	2377.8	2376.7	2381.2	2375.6
7.5°	2372.2	2373.4	2373.4	2373.4	2372.2
10°	2355.5	2360.0	2362.2	2366.7	2365.6
12.5°	2349.9	2356.6	2363.3	2370.0	2371.1
15°	2351.1	2355.5	2358.9	2362.2	2363.3
17.5°	2322.1	2321.0	2317.6	2315.4	2313.2
20°	2263.0	2257.4	2251.8	2242.9	2247.4
22.5°	2189.4	2173.8	2156.0	2141.5	2140.4
25°	2103.6	2074.6	2045.6	2026.7	2020.0
27.5°	2027.8	1993.2	1963.1	1946.4	1941.9
30°	1937.5	1906.3	1879.5	1865.0	1856.1
32.5°	1803.7	1779.2	1745.7	1734.6	1733.5
35°	1617.5	1598.6	1575.2	1570.7	1565.1
37.5°	1406.8	1400.2	1389.0	1375.6	1373.4
40°	1181.7	1186.1	1182.8	1175.0	1162.7
42.5°	964.3	972.1	973.2	978.8	984.3
45°	768.1	774.8	774.8	780.3	787.0
47.5°	589.7	585.3	588.6	594.2	597.5
50°	445.9	442.6	437.0	432.5	428.1
52.5°	359.0	352.3	336.7	332.2	327.7
55°	316.6	304.3	293.2	288.7	288.7
57.5°	304.3	288.7	276.5	270.9	268.7
60°	306.6	284.3	268.7	259.7	256.4
62.5°	316.6	285.4	264.2	254.2	250.8
65°	315.5	283.2	263.1	251.9	248.6
66°	309.9	279.8	260.9	250.8	248.6
67.5°	301.0	275.3	258.6	249.7	246.4
70°	283.2	266.4	254.2	246.4	243.0
72.5°	268.7	257.5	246.4	237.4	235.2
75°	255.3	244.1	234.1	229.6	226.3
77.5°	235.2	225.2	219.6	215.2	212.9
80°	208.5	201.8	195.1	190.6	187.3
82.5°	181.7	172.8	166.1	162.8	160.5
85°	148.3	142.7	132.7	126.0	124.9
87.5°	99.2	93.6	90.3	84.7	79.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)