

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: P159797

Luminaire Tested: **VST-F07-LED-E-U-T4-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P159797
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-F07-LED-E-U-T4-7060
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(7) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 SHORT
Light Source: (49) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17648.4 lumens
Efficiency: N/A
Efficacy: 97.8 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 1' x H: 0')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B3 - U0 - G3

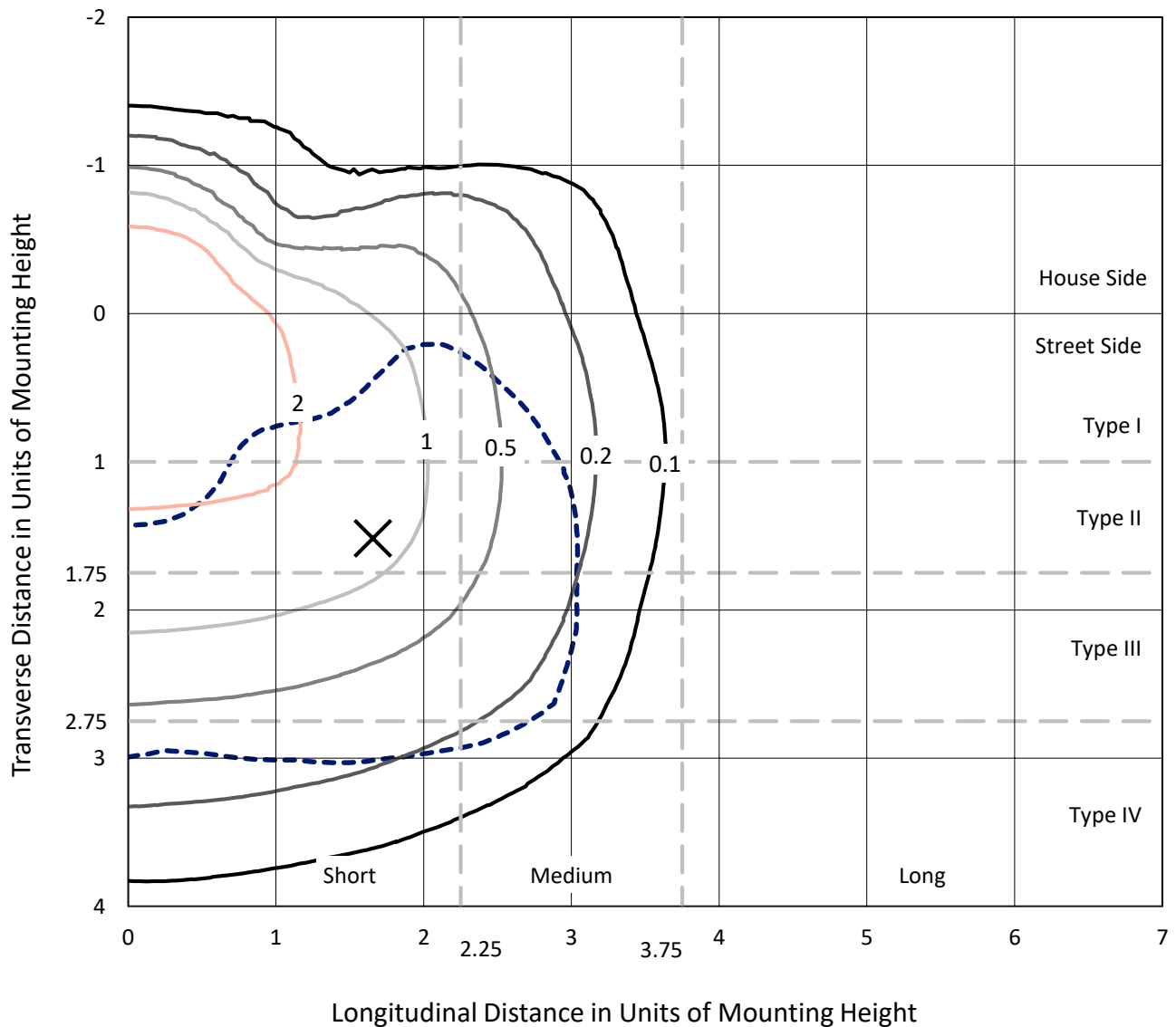
Input Watts (W): 180.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

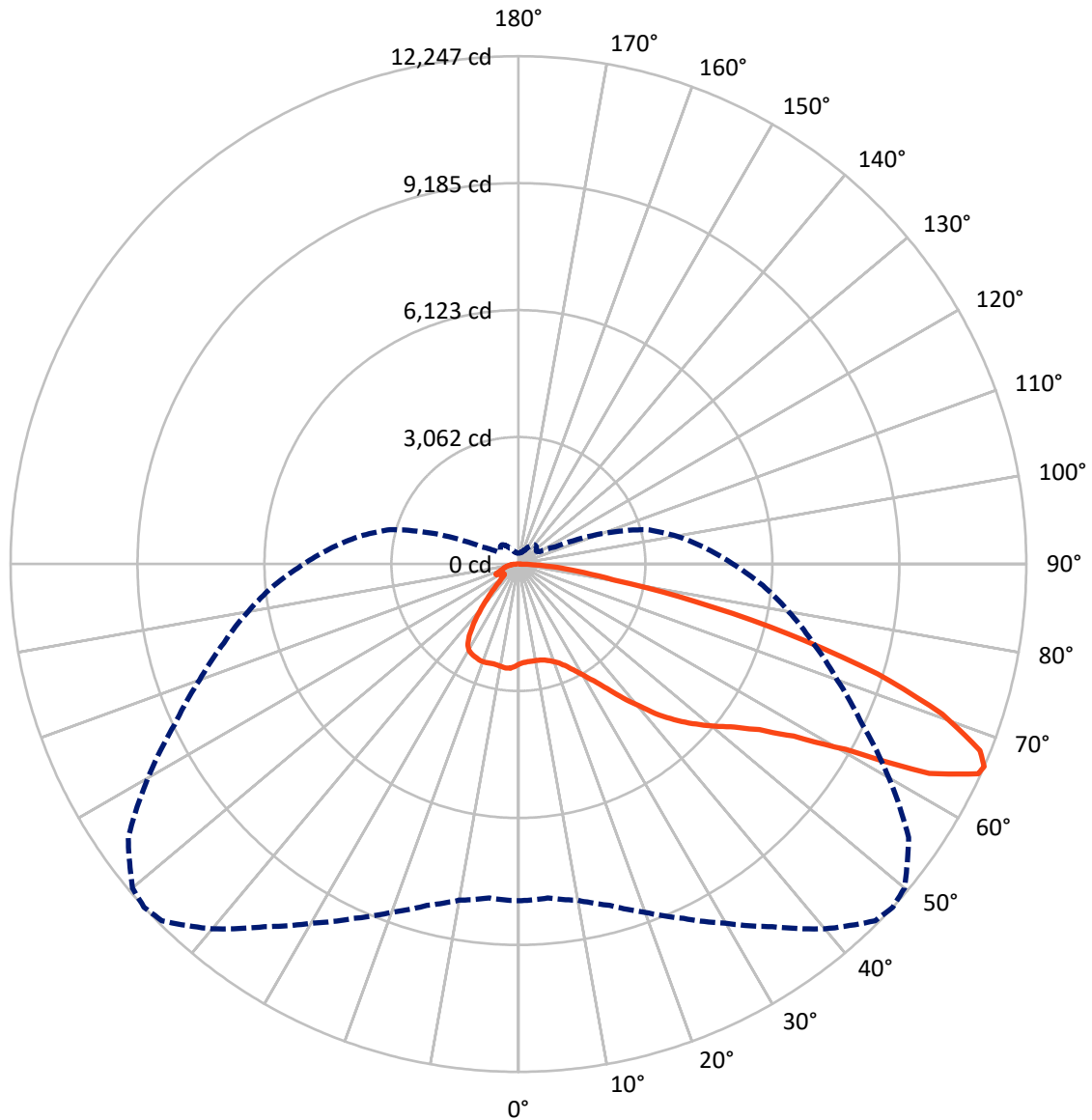
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 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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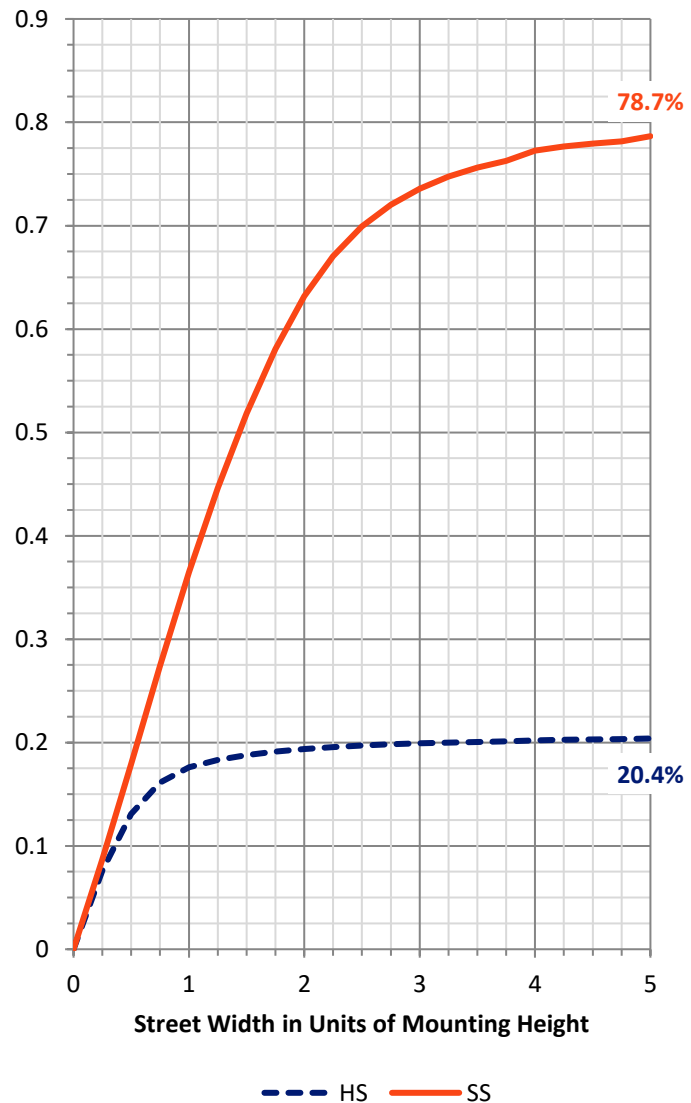
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3654.0	0.0	3654.0
	% Fixture	20.7	0.0	20.7
Street Side	Lumens	13994.4	0.0	13994.4
	% Fixture	79.3	0.0	79.3
Total	Lumens	17648.4	0.0	17648.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.7	1.3
10°-20°	697.9	4.0
20°-30°	1190.7	6.7
30°-40°	1797.2	10.2
40°-50°	2336.0	13.2
50°-60°	3204.8	18.2
60°-70°	4929.9	27.9
70°-80°	2849.8	16.1
80°-90°	409.4	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°	17648.4	100.0
0°-180°	17648.4	100.0

Coefficient of Utilization



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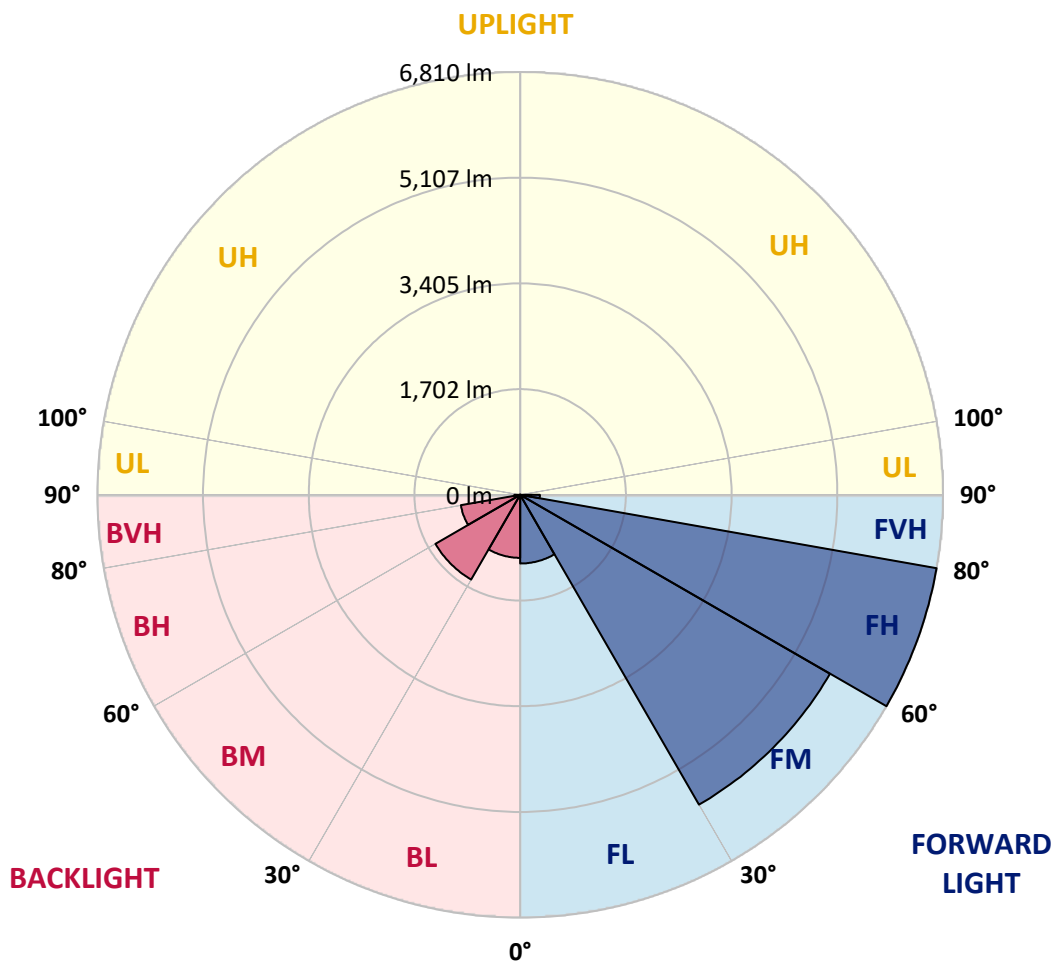
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1106.2	6.3			
FM	(30°-60°)	5761.4	32.6			
FH	(60°-80°)	6809.9	38.6			G3/7500
FVH	(80°-90°)	316.8	1.8			G3/500
BL	(0°-30°)	1015.1	5.8	B3/2500		
BM	(30°-60°)	1576.5	8.9	B2/2500		
BH	(60°-80°)	969.8	5.5	B2/1000		G2/1000
BVH	(80°-90°)	92.6	0.5			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 IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5
2.5°	2352.8	2354.0	2355.2	2355.2	2358.8	2358.8	2364.7	2368.3	2369.4	2376.6	2381.3
5°	2309.0	2307.8	2309.0	2311.3	2317.3	2322.0	2333.9	2342.2	2349.3	2361.1	2367.1
7.5°	2290.0	2292.4	2294.7	2295.9	2300.7	2312.5	2323.2	2331.5	2345.7	2360.0	2365.9
10°	2314.9	2318.4	2314.9	2317.3	2317.3	2327.9	2332.7	2338.6	2349.3	2362.3	2365.9
12.5°	2373.0	2380.1	2373.0	2367.1	2362.3	2371.8	2369.4	2364.7	2370.6	2374.2	2374.2
15°	2469.1	2469.1	2464.3	2456.0	2444.2	2445.3	2434.7	2424.0	2419.2	2410.9	2405.0
17.5°	2562.7	2560.4	2549.7	2539.0	2530.7	2527.2	2511.7	2497.5	2480.9	2467.9	2453.6
20°	2654.1	2663.5	2650.5	2635.1	2622.0	2613.7	2601.9	2573.4	2553.3	2531.9	2517.7
22.5°	2811.8	2803.5	2789.3	2766.7	2753.7	2739.4	2714.5	2683.7	2652.9	2626.8	2609.0
25°	2974.3	2966.0	2945.8	2929.2	2910.2	2898.4	2871.1	2833.1	2803.5	2763.2	2739.4
27.5°	3148.6	3141.5	3117.7	3104.7	3091.7	3077.4	3053.7	3014.6	2987.3	2941.0	2916.1
30°	3345.4	3344.3	3312.2	3309.9	3290.9	3275.5	3258.9	3225.7	3198.4	3152.1	3122.5
32.5°	3555.3	3550.6	3528.1	3521.0	3534.0	3523.3	3499.6	3465.2	3429.6	3402.4	3369.2
35°	3854.2	3845.9	3832.8	3838.8	3847.1	3876.7	3840.0	3810.3	3767.6	3732.0	3685.8
37.5°	4072.4	4060.5	4076.0	4109.2	4156.6	4179.1	4211.2	4212.3	4192.2	4144.7	4104.4
40°	4272.8	4268.1	4303.7	4349.9	4437.7	4501.7	4562.2	4591.8	4598.9	4568.1	4507.6
42.5°	4442.4	4456.6	4504.1	4575.2	4698.6	4795.8	4908.5	4978.4	5022.3	5005.7	4978.4
45°	4644.0	4651.1	4709.2	4799.4	4916.8	5078.0	5226.3	5344.9	5422.0	5420.8	5389.9
47.5°	4896.6	4897.8	4947.6	5053.1	5178.9	5342.5	5529.9	5687.6	5789.6	5794.3	5770.6
50°	5196.6	5194.3	5248.8	5348.4	5482.4	5640.2	5839.4	6036.3	6178.6	6178.6	6144.2
52.5°	5583.2	5578.5	5608.1	5695.9	5825.2	5991.2	6189.2	6416.9	6571.1	6604.3	6529.6
55°	6099.1	6106.2	6113.3	6190.4	6300.7	6432.4	6660.0	6870.0	7076.3	7095.3	7051.4
57.5°	6695.6	6671.9	6722.9	6848.6	6974.3	7139.2	7300.4	7548.3	7792.6	7834.1	7828.2
60°	7627.7	7596.9	7649.1	7809.2	7947.9	8207.7	8484.0	8804.2	9093.5	9178.9	9075.7
62.5°	8485.2	8523.1	8594.3	8780.4	8982.1	9328.3	9743.4	10292.5	10841.6	11140.4	11119.1
65°	8408.1	8372.5	8508.9	8762.7	9127.9	9569.1	10084.9	10746.7	11537.7	12137.7	12191.1
66°	8122.3	8085.5	8232.6	8523.1	8940.5	9431.5	10004.3	10677.9	11486.7	12165.0	12246.8
67.5°	7650.3	7613.5	7779.5	8044.0	8474.5	9092.3	9711.4	10447.8	11288.6	11938.5	12004.9
70°	6739.5	6689.7	6819.0	7117.8	7466.5	8064.2	8653.6	9433.9	10297.2	10816.6	10841.6
72.5°	5709.0	5592.7	5730.3	5960.4	6209.4	6703.9	7217.4	7751.1	8438.9	8919.2	9056.8
75°	4142.4	4202.9	4243.2	4395.0	4559.8	4968.9	5270.2	5717.3	6249.7	6597.2	6707.5
77.5°	2197.5	2288.8	2345.7	2497.5	2770.3	3082.2	3408.3	3684.6	4034.5	4228.9	4364.1
80°	1233.3	1297.4	1389.9	1509.7	1642.5	1882.0	2075.3	2217.6	2267.5	2301.8	2332.7
82.5°	678.3	840.8	978.4	1061.4	1139.7	1235.7	1350.7	1469.3	1507.3	1450.4	1420.7
85°	105.5	155.4	473.2	577.5	628.5	702.1	785.1	872.8	874.0	751.9	820.6
87.5°	29.6	33.2	67.6	102.0	99.6	80.6	99.6	181.4	106.7	53.4	61.7
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°	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5
2.5°	2383.7	2386.0	2392.0	2397.9	2403.8	2409.8	2413.3	2419.2	2424.0	2431.1	2439.4
5°	2374.2	2380.1	2390.8	2403.8	2415.7	2426.4	2434.7	2446.5	2457.2	2466.7	2480.9
7.5°	2374.2	2386.0	2403.8	2418.1	2428.7	2441.8	2454.8	2466.7	2478.5	2488.0	2497.5
10°	2375.4	2387.2	2405.0	2421.6	2433.5	2447.7	2458.4	2469.1	2482.1	2488.0	2499.9
12.5°	2380.1	2384.9	2397.9	2414.5	2428.7	2443.0	2453.6	2464.3	2478.5	2480.9	2489.2
15°	2403.8	2396.7	2400.3	2412.1	2427.5	2439.4	2451.3	2459.6	2469.1	2466.7	2473.8
17.5°	2447.7	2429.9	2422.8	2424.0	2431.1	2439.4	2444.2	2445.3	2446.5	2435.9	2437.0
20°	2507.0	2482.1	2465.5	2457.2	2447.7	2439.4	2426.4	2410.9	2396.7	2375.4	2373.0
22.5°	2595.9	2559.2	2541.4	2518.9	2490.4	2454.8	2422.8	2384.9	2354.0	2322.0	2310.1
25°	2725.2	2687.3	2668.3	2632.7	2581.7	2530.7	2484.5	2433.5	2388.4	2350.5	2332.7
27.5°	2898.4	2860.4	2840.2	2803.5	2740.6	2689.6	2625.6	2571.0	2516.5	2460.8	2438.2
30°	3108.3	3075.1	3052.5	3022.9	2968.3	2912.6	2837.9	2753.7	2667.1	2578.2	2534.3
32.5°	3356.1	3319.4	3302.7	3268.4	3211.4	3153.3	3070.3	2962.4	2817.7	2677.8	2590.0
35°	3665.6	3624.1	3605.2	3560.1	3493.7	3408.3	3319.4	3174.7	2979.0	2784.5	2641.0
37.5°	4079.5	3987.0	3924.2	3821.0	3714.3	3594.5	3467.6	3319.4	3088.1	2847.4	2648.1
40°	4446.0	4352.3	4231.3	4083.1	3917.0	3752.2	3607.5	3439.1	3187.7	2892.4	2625.6
42.5°	4901.3	4735.3	4542.0	4341.6	4121.0	3918.2	3746.3	3548.2	3255.3	2904.3	2562.7
45°	5317.6	5119.6	4861.0	4594.2	4320.3	4065.3	3872.0	3651.4	3313.4	2904.3	2486.8
47.5°	5697.1	5459.9	5150.4	4818.3	4499.3	4220.6	4001.2	3756.9	3395.2	2941.0	2464.3
50°	6048.1	5775.4	5423.1	5037.7	4679.6	4381.9	4145.9	3892.1	3519.8	3035.9	2518.9
52.5°	6418.1	6128.8	5699.5	5290.3	4895.4	4576.4	4325.0	4059.4	3681.1	3185.3	2614.9
55°	6903.2	6564.0	6076.6	5625.9	5191.9	4839.7	4553.9	4259.8	3857.8	3353.7	2732.3
57.5°	7668.1	7175.9	6688.5	6102.7	5693.5	5229.8	4916.8	4578.8	4144.7	3573.1	2909.0
60°	9007.0	8402.1	7816.3	7142.7	6637.5	6152.5	5679.3	5238.1	4715.2	4068.8	3296.8
62.5°	10918.6	10304.3	9384.1	8559.9	7797.3	7154.6	6537.9	5977.0	5305.7	4598.9	3774.7
65°	12060.7	11357.4	10260.5	9152.8	8226.6	7429.7	6724.1	6037.4	5312.9	4623.8	3919.4
66°	12152.0	11486.7	10315.0	9144.5	8182.8	7356.2	6622.1	5911.7	5169.4	4510.0	3872.0
67.5°	11982.4	11409.6	10203.5	8983.2	8000.1	7107.1	6352.9	5608.1	4862.2	4251.5	3714.3
70°	10785.8	10371.9	9337.8	8194.6	7213.9	6426.4	5630.7	4914.4	4207.6	3694.1	3295.6
72.5°	8842.1	8317.9	7594.5	6826.1	6054.0	5355.6	4632.1	4022.6	3429.6	3056.1	2773.8
75°	6495.2	6023.2	5226.3	4747.2	4237.2	3798.5	3311.0	2733.5	2312.5	2125.1	2056.4
77.5°	4117.5	3605.2	2932.7	2403.8	2067.0	1776.5	1400.6	1113.6	891.8	928.6	1028.2
80°	2080.1	1791.9	1341.3	1059.0	915.5	761.4	602.4	456.6	333.2	380.7	430.5
82.5°	1335.3	1114.8	888.2	699.7	590.6	520.6	416.3	302.4	225.3	253.8	310.7
85°	804.0	679.5	542.0	443.5	385.4	321.4	236.0	167.2	166.0	177.9	219.4
87.5°	122.1	174.3	100.8	107.9	113.8	122.1	107.9	91.3	79.5	103.2	130.4
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°	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5	2414.5
2.5°	2447.7	2450.1	2454.8	2460.8	2459.6	2467.9	2472.6	2467.9	2478.5	2478.5	2484.5
5°	2492.8	2496.3	2504.6	2510.6	2512.9	2520.0	2522.4	2521.2	2523.6	2524.8	2527.2
7.5°	2505.8	2515.3	2518.9	2522.4	2523.6	2526.0	2526.0	2523.6	2523.6	2522.4	2524.8
10°	2502.3	2505.8	2508.2	2507.0	2507.0	2504.6	2503.4	2502.3	2502.3	2499.9	2503.4
12.5°	2490.4	2490.4	2490.4	2488.0	2488.0	2486.8	2486.8	2486.8	2489.2	2490.4	2496.3
15°	2466.7	2466.7	2469.1	2467.9	2471.4	2477.4	2484.5	2489.2	2495.1	2496.3	2499.9
17.5°	2429.9	2431.1	2438.2	2453.6	2469.1	2486.8	2499.9	2503.4	2498.7	2486.8	2478.5
20°	2365.9	2381.3	2409.8	2446.5	2480.9	2503.4	2509.4	2495.1	2472.6	2441.8	2425.2
22.5°	2309.0	2339.8	2390.8	2451.3	2494.0	2509.4	2491.6	2458.4	2418.1	2382.5	2357.6
25°	2331.5	2367.1	2420.4	2472.6	2499.9	2491.6	2456.0	2408.6	2365.9	2324.4	2284.1
27.5°	2426.4	2461.9	2499.9	2515.3	2505.8	2475.0	2425.2	2374.2	2317.3	2258.0	2208.2
30°	2516.5	2536.7	2539.0	2523.6	2489.2	2439.4	2381.3	2322.0	2249.7	2178.5	2115.7
32.5°	2545.0	2521.2	2478.5	2434.7	2387.2	2336.2	2268.6	2190.4	2113.3	2032.6	1962.7
35°	2536.7	2440.6	2335.0	2241.4	2184.4	2126.3	2064.7	1960.3	1873.7	1804.9	1759.9
37.5°	2461.9	2286.4	2124.0	1987.6	1898.6	1829.9	1738.5	1652.0	1577.3	1546.4	1509.7
40°	2357.6	2089.6	1864.2	1673.3	1580.8	1493.1	1391.1	1324.7	1303.3	1274.8	1276.0
42.5°	2208.2	1859.5	1569.0	1349.6	1248.8	1152.7	1080.4	1041.2	1042.4	1018.7	1023.4
45°	2050.4	1628.2	1263.0	1044.8	945.2	863.3	823.0	811.2	812.3	813.5	806.4
47.5°	1954.4	1448.0	1012.8	792.2	704.4	658.2	636.8	630.9	632.1	633.3	625.0
50°	1940.1	1354.3	845.6	606.0	549.1	523.0	512.3	506.4	506.4	501.6	494.5
52.5°	1980.5	1330.6	763.7	525.4	470.8	447.1	438.8	434.0	426.9	417.4	404.4
55°	2044.5	1351.9	738.8	498.1	444.7	421.0	410.3	408.0	396.1	378.3	357.0
57.5°	2163.1	1429.0	755.4	505.2	449.5	428.1	421.0	418.6	402.0	374.7	347.5
60°	2503.4	1653.2	838.4	545.5	483.8	466.1	466.1	462.5	440.0	400.8	361.7
62.5°	2973.1	1981.6	951.1	601.3	531.3	528.9	549.1	550.3	509.9	447.1	385.4
65°	3199.6	2135.8	990.2	613.1	544.3	571.6	611.9	611.9	555.0	468.4	389.0
66°	3200.8	2132.3	978.4	598.9	530.1	565.7	607.2	607.2	547.9	462.5	383.0
67.5°	3118.9	2065.8	939.2	572.8	498.1	531.3	568.0	566.9	513.5	438.8	366.4
70°	2797.6	1827.5	827.8	530.1	460.1	461.3	474.4	466.1	430.5	379.5	333.2
72.5°	2412.1	1528.6	717.5	502.8	430.5	408.0	397.3	390.2	367.6	336.8	308.3
75°	1850.0	1187.1	625.0	477.9	404.4	365.3	351.0	345.1	329.7	311.9	289.4
77.5°	1133.7	813.5	530.1	437.6	374.7	339.2	323.8	311.9	296.5	279.9	264.5
80°	488.6	491.0	424.6	371.2	326.1	284.6	264.5	250.2	241.9	236.0	227.7
82.5°	341.5	352.2	323.8	288.2	249.0	219.4	201.6	198.0	199.2	199.2	196.9
85°	256.2	251.4	226.5	206.3	188.6	169.6	155.4	154.2	158.9	158.9	155.4
87.5°	148.2	149.4	128.1	119.8	124.5	106.7	97.2	98.4	110.3	109.1	106.7
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°	2414.5	2414.5	2414.5	2414.5	2414.5
2.5°	2484.5	2488.0	2486.8	2490.4	2486.8
5°	2530.7	2529.5	2528.4	2533.1	2527.2
7.5°	2523.6	2524.8	2524.8	2524.8	2523.6
10°	2505.8	2510.6	2512.9	2517.7	2516.5
12.5°	2499.9	2507.0	2514.1	2521.2	2522.4
15°	2501.1	2505.8	2509.4	2512.9	2514.1
17.5°	2470.2	2469.1	2465.5	2463.1	2460.8
20°	2407.4	2401.5	2395.5	2386.0	2390.8
22.5°	2329.1	2312.5	2293.5	2278.1	2276.9
25°	2237.8	2207.0	2176.1	2156.0	2148.9
27.5°	2157.2	2120.4	2088.4	2070.6	2065.8
30°	2061.1	2027.9	1999.4	1984.0	1974.5
32.5°	1918.8	1892.7	1857.1	1845.3	1844.1
35°	1720.7	1700.6	1675.7	1670.9	1665.0
37.5°	1496.6	1489.5	1477.6	1463.4	1461.0
40°	1257.1	1261.8	1258.2	1249.9	1236.9
42.5°	1025.8	1034.1	1035.3	1041.2	1047.2
45°	817.1	824.2	824.2	830.1	837.2
47.5°	627.3	622.6	626.2	632.1	635.6
50°	474.4	470.8	464.9	460.1	455.4
52.5°	381.9	374.7	358.1	353.4	348.7
55°	336.8	323.8	311.9	307.1	307.1
57.5°	323.8	307.1	294.1	288.2	285.8
60°	326.1	302.4	285.8	276.3	272.8
62.5°	336.8	303.6	281.1	270.4	266.8
65°	335.6	301.2	279.9	268.0	264.5
66°	329.7	297.7	277.5	266.8	264.5
67.5°	320.2	292.9	275.1	265.6	262.1
70°	301.2	283.4	270.4	262.1	258.5
72.5°	285.8	273.9	262.1	252.6	250.2
75°	271.6	259.7	249.0	244.3	240.7
77.5°	250.2	239.6	233.6	228.9	226.5
80°	221.8	214.6	207.5	202.8	199.2
82.5°	193.3	183.8	176.7	173.1	170.8
85°	157.7	151.8	141.1	134.0	132.8
87.5°	105.5	99.6	96.1	90.1	84.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)