

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: P165343

Luminaire Tested: **VST-F12-LED-E-U-SL3-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165343
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33727)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F12-LED-E-U-SL3-HSS-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (84) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 17413.5 lumens
Efficiency: N/A
Efficacy: 56.8 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 2' x L: 1' x H: 0.1')
IES Classification: Type III - Short - Non-Cutoff
BUG Rating: B1 - U0 - G4

Input Watts (W): 306.6
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



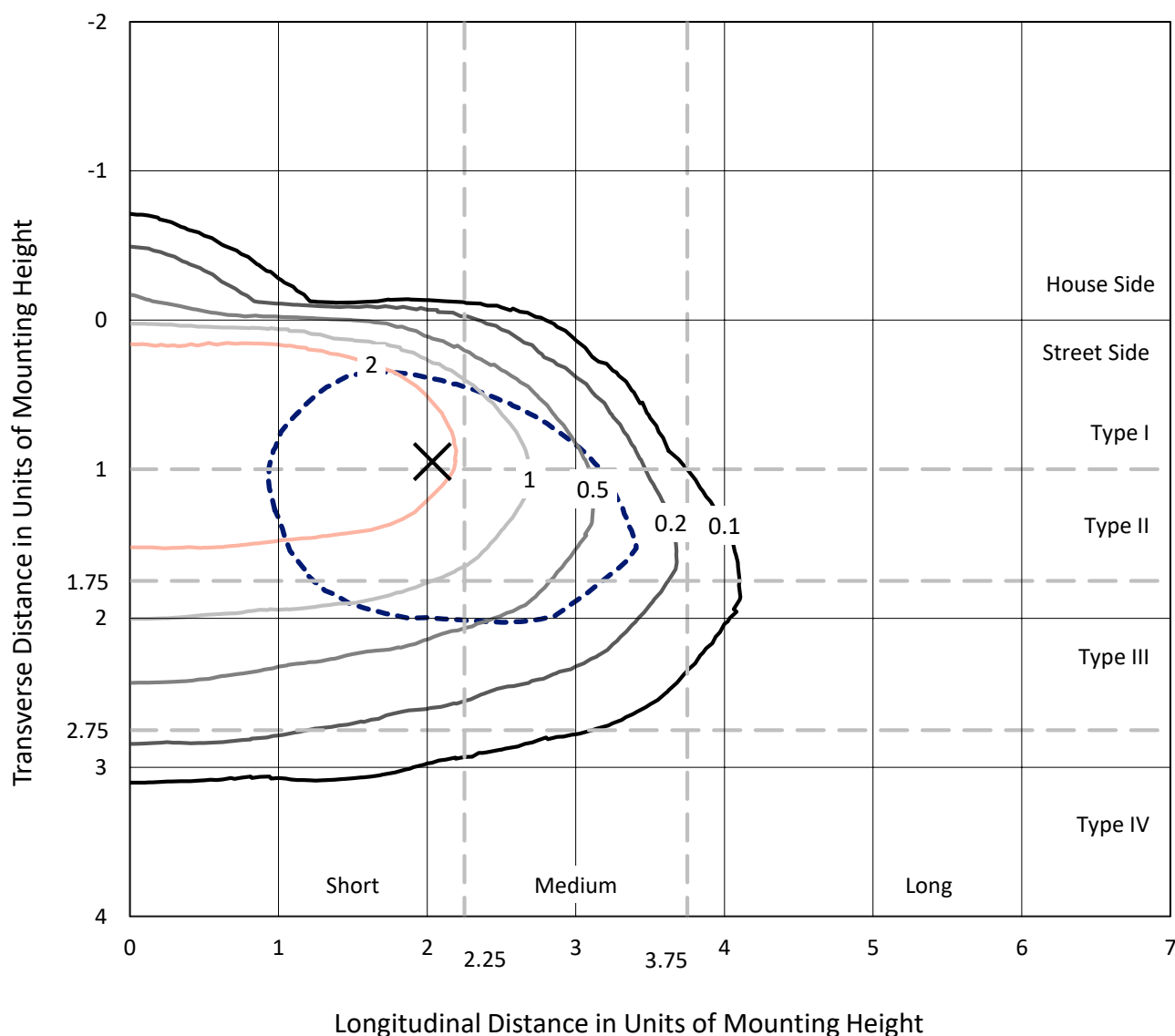
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

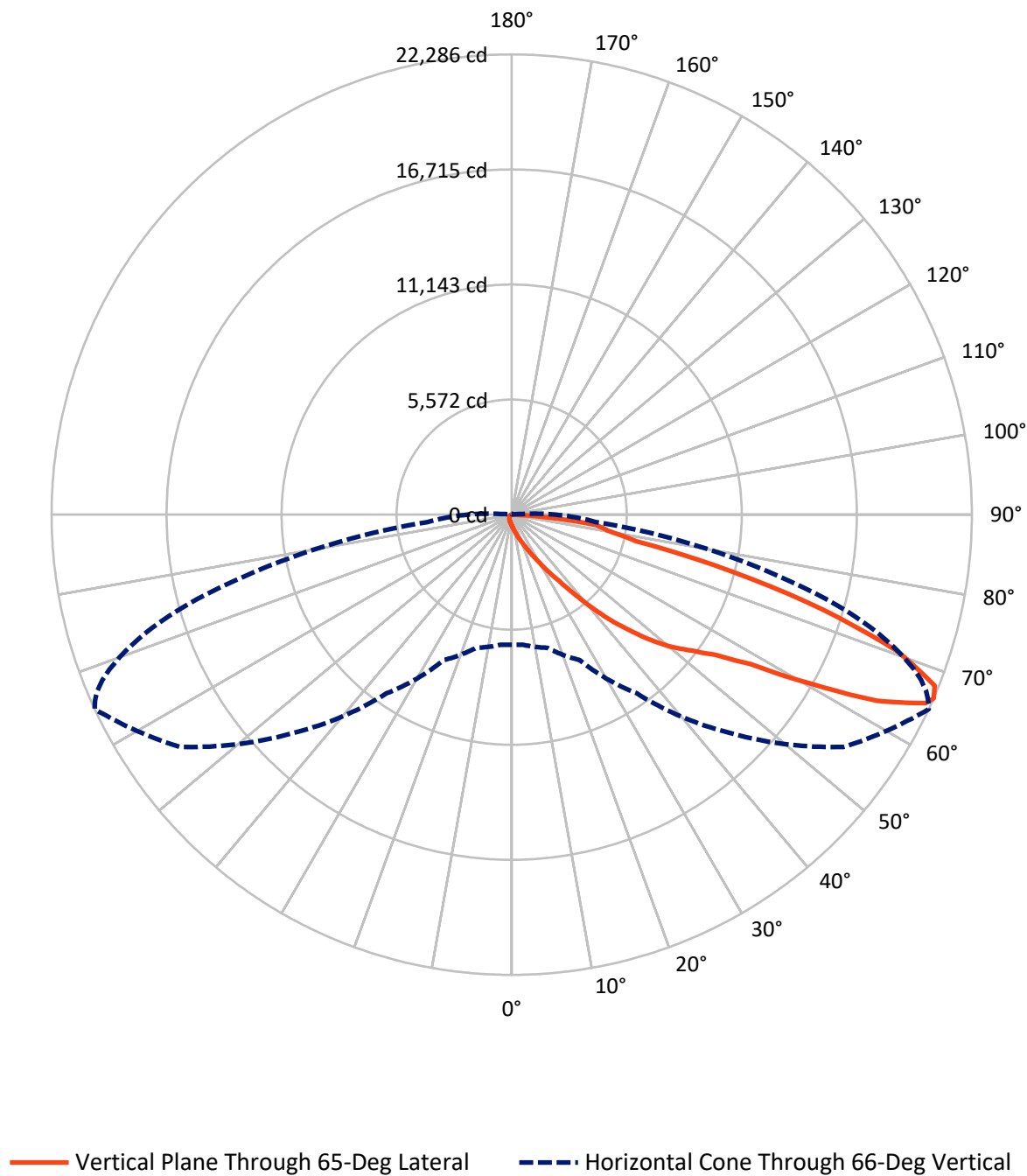


Based on 25 foot mounting height. Maximum calculated value = 4.6 fc
 Type III - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	377.4	0.0	377.4
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	17036.1	0.0	17036.1
	% Fixture	97.8	0.0	97.8
Total	Lumens	17413.5	0.0	17413.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.8	0.3
10°-20°	249.5	1.4
20°-30°	538.1	3.1
30°-40°	1149.1	6.6
40°-50°	2541.3	14.6
50°-60°	4306.7	24.7
60°-70°	5746.9	33.0
70°-80°	2531.4	14.5
80°-90°	291.6	1.7
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°	17413.5	100.0
0°-180°	17413.5	100.0

Coefficient of Utilization



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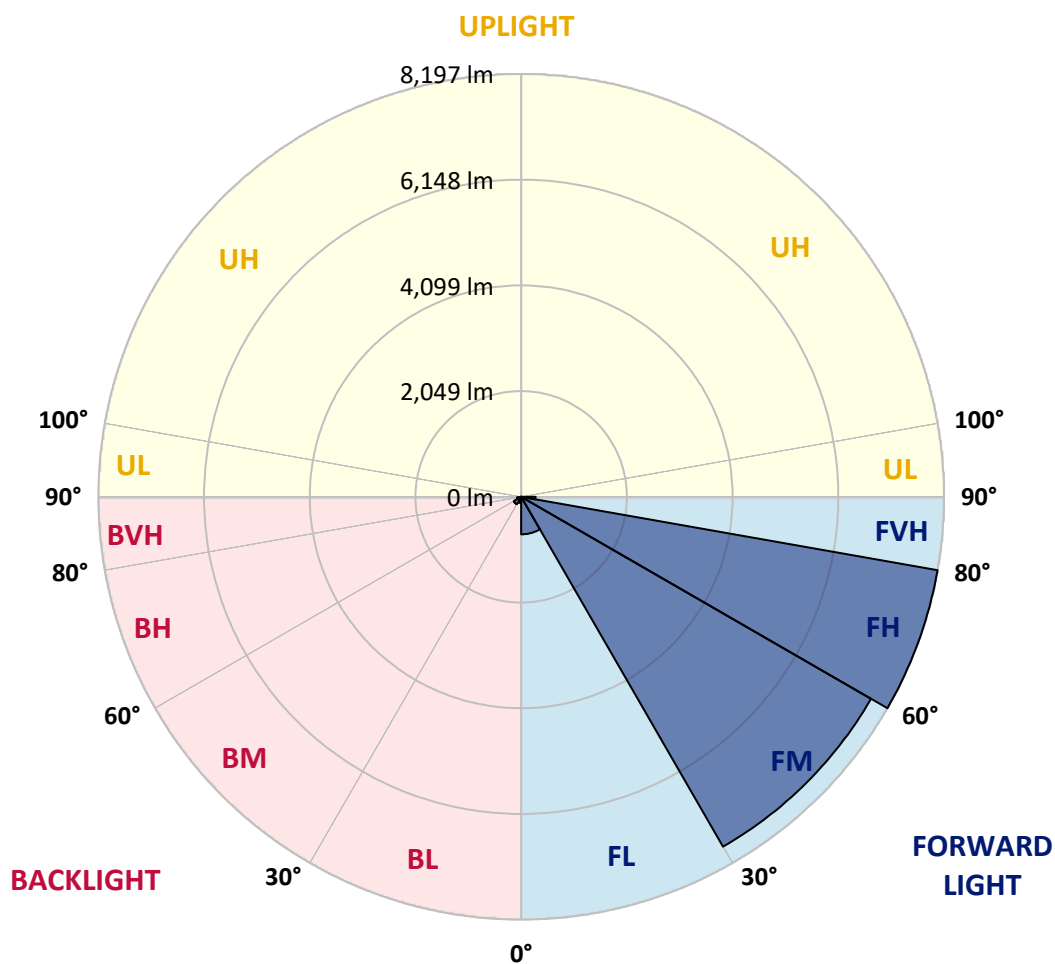
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	727.4	4.2			
FM	(30°-60°)	7831.4	45.0			
FH	(60°-80°)	8197.4	47.1			G4/12000
FVH	(80°-90°)	280.0	1.6			G3/500
BL	(0°-30°)	119.1	0.7	B1/500		
BM	(30°-60°)	165.7	1.0	B0/220		
BH	(60°-80°)	81.0	0.5	B0/110		G0/110
BVH	(80°-90°)	11.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	67°	68°
0°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5
2.5°	663.0	659.5	646.1	646.1	626.0	612.7	595.9	579.2	579.2	575.7	572.5
5°	877.0	857.1	853.6	816.9	786.8	743.3	703.0	649.5	642.8	636.1	632.7
7.5°	1114.9	1111.4	1081.3	1037.8	977.7	897.2	816.9	729.8	716.4	709.7	696.3
10°	1422.9	1406.0	1366.0	1292.2	1201.9	1094.8	964.2	826.8	810.1	796.7	790.0
12.5°	1717.5	1687.4	1663.8	1570.1	1456.2	1298.9	1141.5	944.1	930.7	914.0	887.2
15°	1991.9	1965.1	1925.0	1844.7	1717.5	1519.9	1335.9	1094.8	1061.2	1037.8	1017.7
17.5°	2206.2	2189.5	2142.6	2052.3	1914.9	1740.8	1519.9	1248.7	1222.0	1191.7	1154.9
20°	2410.5	2386.9	2313.3	2189.5	2042.1	1908.2	1737.6	1449.5	1412.7	1375.9	1335.9
22.5°	2604.7	2581.1	2460.7	2256.4	2099.1	2042.1	1982.0	1677.2	1620.3	1590.2	1549.9
25°	2875.9	2825.6	2638.0	2313.3	2102.5	2146.0	2249.7	1971.8	1918.3	1874.8	1811.2
27.5°	3240.8	3173.7	2879.1	2397.1	2115.7	2259.9	2557.7	2330.0	2273.1	2222.9	2152.7
30°	3652.5	3608.9	3257.4	2597.9	2212.9	2427.2	2902.5	2785.4	2718.5	2658.1	2574.6
32.5°	4067.6	4007.4	3659.2	2979.5	2473.9	2751.8	3334.5	3314.4	3227.4	3170.4	3080.0
35°	4432.5	4402.4	4144.6	3605.5	3070.0	3321.1	3910.2	3933.6	3856.8	3796.4	3696.0
37.5°	4680.3	4680.3	4630.1	4278.4	4017.4	4204.8	4757.2	4760.6	4683.6	4546.4	4496.1
40°	4807.4	4844.2	5025.1	5092.0	5078.6	5319.7	5868.8	5808.4	5744.8	5674.5	5507.1
42.5°	5068.6	5102.0	5487.0	5949.1	6250.4	6568.4	6946.7	6926.6	6849.7	6722.5	6568.4
45°	5510.6	5554.1	6012.7	6745.8	7365.1	7817.2	8058.1	7964.4	7887.4	7767.0	7686.5
47.5°	6072.9	6156.7	6675.5	7582.8	8329.3	9075.8	9326.9	9079.3	9012.4	8918.5	8788.0
50°	6672.2	6752.5	7304.9	8342.7	9186.4	10076.9	10495.5	10076.9	9979.9	9949.6	9802.4
52.5°	7191.1	7258.2	7790.4	8928.7	9842.5	10887.0	11496.3	10943.9	10873.6	10773.2	10666.0
55°	7499.1	7552.7	8051.4	9209.8	10287.9	11616.9	12464.0	11978.5	11874.6	11834.6	11680.5
57.5°	7602.9	7656.4	8105.1	9246.6	10528.8	12283.1	13639.1	13655.7	13531.9	13388.0	13341.0
60°	7602.9	7663.1	8041.5	9156.3	10763.2	12992.8	15205.7	16601.7	16334.0	16307.2	16136.4
62.5°	7288.2	7345.2	7726.8	8878.4	11077.9	13950.3	17388.5	19852.5	19775.6	19601.4	19320.2
65°	6605.2	6638.7	7013.6	8168.7	10957.4	14830.8	19280.0	22015.2	21891.3	21549.8	21188.3
66°	6297.2	6324.0	6675.5	7763.5	10562.4	14951.4	19614.8	22286.4	22082.2	21794.2	21385.7
67.5°	5851.9	5898.9	6146.5	7010.3	9615.0	14532.8	19404.0	22095.7	21918.2	21569.9	21161.5
70°	3907.0	3873.4	4747.2	5379.9	7325.0	11841.3	17408.6	19839.1	19842.5	19678.4	19514.4
72.5°	1854.7	1874.8	2129.1	3310.9	4794.0	7910.9	13856.6	15835.1	16062.8	15768.2	15563.9
75°	1332.4	1362.5	1516.6	2025.5	2859.0	4747.2	8982.1	11074.5	11081.2	10558.9	10093.8
77.5°	388.3	405.2	569.0	1248.7	2142.6	3203.8	5158.9	6156.7	6012.7	5637.7	5286.2
80°	160.6	160.6	167.3	398.5	860.4	2176.1	3608.9	4740.5	4723.8	4579.9	4372.3
82.5°	60.2	63.6	80.3	164.1	204.3	535.7	2407.1	4114.6	4104.4	3900.3	3752.9
85°	6.7	6.7	20.1	70.3	77.0	100.4	482.0	1814.4	1804.5	1814.4	1590.2
87.5°	0.0	0.0	3.3	6.7	10.0	13.4	20.1	70.3	77.0	73.6	66.9
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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CATALOG NUMBER: VST-F12-LED-E-U-SL3-HSS-7050

CANDELA DISTRIBUTION (continued):

	69°	70°	71°	72°	73°	74°	75°	76°	77°	78°	79°
0°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5
2.5°	572.5	565.8	565.8	562.5	562.5	562.5	559.1	555.8	555.8	552.4	549.1
5°	626.0	619.2	616.0	609.3	606.0	602.6	595.9	592.6	585.9	582.4	579.2
7.5°	689.6	676.2	672.9	663.0	652.8	646.1	639.4	629.4	622.7	609.3	606.0
10°	770.1	753.2	739.8	726.4	716.4	699.8	689.6	676.2	663.0	652.8	642.8
12.5°	873.8	850.4	830.3	816.9	793.5	773.3	753.2	743.3	716.4	703.0	686.3
15°	987.6	960.8	937.4	910.6	893.9	860.4	833.5	803.4	790.0	766.6	739.8
17.5°	1134.8	1091.3	1054.5	1027.9	994.3	960.8	930.7	900.6	860.4	833.5	800.2
20°	1292.2	1255.4	1205.2	1158.4	1118.1	1078.1	1034.4	994.3	957.5	914.0	873.8
22.5°	1493.2	1439.6	1379.4	1332.4	1278.9	1235.4	1175.1	1121.6	1061.2	1004.3	957.5
25°	1747.6	1677.2	1620.3	1553.4	1489.8	1422.9	1349.1	1282.2	1205.2	1151.7	1071.4
27.5°	2062.3	1995.4	1918.3	1831.3	1767.7	1667.2	1570.1	1486.5	1396.0	1312.3	1222.0
30°	2464.0	2367.0	2286.5	2202.9	2075.7	1978.5	1864.7	1751.0	1627.0	1543.4	1406.0
32.5°	2946.0	2842.3	2721.8	2601.2	2484.1	2346.9	2206.2	2065.5	1928.3	1774.4	1633.7
35°	3535.4	3411.3	3274.1	3143.6	2962.9	2815.5	2638.0	2443.8	2290.0	2112.5	1935.0
37.5°	4315.4	4111.1	3990.5	3853.3	3608.9	3408.1	3210.5	3016.3	2745.1	2557.7	2306.6
40°	5292.9	5172.3	4974.9	4753.9	4532.9	4268.4	4000.7	3742.9	3428.2	3167.0	2875.9
42.5°	6441.1	6263.8	6063.0	5744.8	5520.6	5209.1	4904.6	4563.0	4178.0	3843.4	3501.8
45°	7519.2	7308.4	7154.3	6836.3	6601.9	6233.5	5865.4	5503.9	5058.5	4626.7	4231.7
47.5°	8684.3	8510.1	8255.7	7998.0	7760.3	7345.2	6946.7	6508.2	6039.4	5527.3	5015.0
50°	9708.7	9571.5	9397.3	9086.0	8821.5	8473.3	8004.7	7525.9	6933.3	6424.4	5842.0
52.5°	10579.0	10471.9	10227.5	10006.5	9768.9	9440.8	9022.4	8563.7	7924.4	7365.1	6702.3
55°	11606.9	11529.9	11315.6	11178.3	10967.5	10652.8	10261.1	9836.0	9159.6	8550.3	7800.3
57.5°	13290.8	13230.6	13043.0	12986.1	12778.5	12504.1	12022.0	11566.6	10776.6	10020.0	9163.1
60°	16079.5	15959.1	15684.5	15544.0	15105.3	14737.1	14111.1	13485.0	12530.9	11566.6	10535.5
62.5°	19065.7	18727.6	18205.3	17756.9	17134.2	16494.6	15657.6	14700.3	13582.1	12437.2	11251.9
65°	20676.0	20100.3	19440.8	18727.6	17920.9	16980.1	15925.6	14777.3	13575.4	12366.8	11114.7
66°	20860.2	20210.7	19511.1	18717.7	17820.5	16819.5	15748.1	14542.9	13294.1	12115.8	10863.6
67.5°	20629.3	19949.6	19209.8	18329.4	17358.4	16320.6	15195.7	13943.6	12741.7	11546.5	10328.0
70°	19012.2	18335.9	17676.4	16749.1	15714.5	14670.2	13605.5	12206.2	11068.0	9969.7	8885.1
72.5°	15182.3	14723.7	14070.9	13277.4	12269.7	11044.4	10157.2	8905.3	7917.6	6853.0	6012.7
75°	9487.7	8841.6	8034.7	7023.7	6253.7	5259.3	4740.5	3789.7	3227.4	2735.2	2259.9
77.5°	4850.9	4365.6	3799.8	3230.6	2685.0	2142.6	1657.1	1171.8	790.0	549.1	408.4
80°	4007.4	3578.9	3110.1	2591.2	2109.2	1637.2	1178.5	803.4	512.3	334.8	261.0
82.5°	3310.9	2949.4	2530.9	2048.8	1630.5	1285.7	893.9	582.4	361.5	234.4	184.2
85°	1409.5	1278.9	987.6	783.3	589.2	435.3	304.7	204.3	143.9	117.1	107.1
87.5°	60.2	66.9	63.6	50.2	36.8	36.8	33.5	26.8	26.8	26.8	26.8
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):

	80°	81°	82°	83°	84°	85°	95°	105°	115°	125°	135°
0°	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5	525.5
2.5°	549.1	545.7	542.4	542.4	538.9	535.7	515.6	498.9	478.8	465.3	451.9
5°	572.5	569.0	562.5	559.1	552.4	549.1	505.6	468.6	438.5	415.1	398.5
7.5°	595.9	592.6	582.4	572.5	569.0	562.5	492.2	445.2	405.2	378.3	361.5
10°	626.0	616.0	606.0	592.6	582.4	572.5	478.8	418.4	374.9	351.5	334.8
12.5°	669.5	652.8	636.1	619.2	606.0	589.2	472.1	395.0	351.5	324.7	308.0
15°	719.9	696.3	676.2	656.2	632.7	616.0	458.6	374.9	331.4	304.7	284.6
17.5°	766.6	739.8	709.7	679.6	656.2	632.7	445.2	355.0	311.2	284.6	264.5
20°	833.5	793.5	756.7	719.9	686.3	656.2	425.1	334.8	294.6	264.5	244.4
22.5°	907.3	860.4	813.6	763.4	719.9	679.6	408.4	318.0	277.9	247.8	224.2
25°	1001.0	944.1	880.5	816.9	766.6	713.2	391.8	301.3	261.0	230.9	207.6
27.5°	1131.6	1051.3	980.9	900.6	823.6	763.4	378.3	287.9	244.4	214.3	190.9
30°	1309.0	1191.7	1081.3	994.3	903.9	816.9	364.9	271.2	230.9	197.6	170.8
32.5°	1506.4	1369.2	1241.9	1111.4	997.6	897.2	351.5	257.8	214.3	180.7	157.4
35°	1751.0	1576.8	1406.0	1255.4	1118.1	984.2	338.1	244.4	200.9	164.1	140.7
37.5°	2102.5	1884.8	1660.5	1466.4	1288.9	1111.4	328.1	230.9	184.2	147.4	123.8
40°	2584.5	2303.4	2028.7	1764.2	1533.3	1312.3	314.7	217.5	170.8	134.0	110.4
42.5°	3106.8	2765.3	2403.8	2105.8	1787.8	1509.9	301.3	204.3	157.4	120.6	97.2
45°	3756.3	3331.0	2892.5	2487.4	2099.1	1740.8	287.9	190.9	140.7	107.1	83.8
47.5°	4466.1	3923.7	3428.2	2919.4	2457.3	2028.7	271.2	180.7	127.3	93.7	73.6
50°	5195.9	4623.4	3997.2	3418.1	2869.1	2316.8	254.5	164.1	113.8	83.8	60.2
52.5°	5982.5	5306.3	4666.9	3947.0	3307.7	2694.9	237.7	150.6	103.7	73.6	50.2
55°	6983.5	6227.0	5477.1	4670.2	3900.3	3133.6	221.0	134.0	90.5	63.6	40.3
57.5°	8242.3	7345.2	6424.4	5513.9	4579.9	3709.4	207.6	117.1	77.0	53.5	33.5
60°	9430.8	8383.0	7268.1	6220.3	5165.6	4151.3	187.4	103.7	66.9	43.5	33.5
62.5°	10046.8	8851.6	7649.7	6494.8	5369.9	4308.7	167.3	87.0	56.9	36.8	30.1
65°	9896.1	8677.6	7512.5	6347.4	5246.1	4208.3	147.4	77.0	50.2	33.5	30.1
66°	9678.6	8473.3	7301.7	6193.5	5142.2	4101.1	137.2	73.6	47.0	33.5	26.8
67.5°	9203.1	8038.0	6919.9	5888.7	4857.6	3896.8	123.8	66.9	43.5	30.1	26.8
70°	7860.7	6802.8	5908.9	4991.6	4151.3	3284.3	100.4	56.9	36.8	26.8	26.8
72.5°	5202.4	4482.7	3886.9	3344.5	2795.3	2169.4	83.8	47.0	30.1	26.8	23.4
75°	1961.8	1774.4	1523.3	1369.2	1195.2	1047.8	66.9	30.1	23.4	23.4	23.4
77.5°	348.2	321.4	284.6	261.0	241.1	221.0	53.5	20.1	20.1	23.4	23.4
80°	234.4	217.5	197.6	180.7	167.3	150.6	36.8	16.7	20.1	20.1	23.4
82.5°	167.3	157.4	147.4	134.0	123.8	110.4	23.4	16.7	20.1	20.1	20.1
85°	100.4	93.7	87.0	80.3	70.3	66.9	16.7	16.7	16.7	20.1	20.1
87.5°	26.8	23.4	26.8	26.8	20.1	23.4	13.4	13.4	13.4	16.7	16.7
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):

	145°	155°	165°	175°	180°
0°	525.5	525.5	525.5	525.5	525.5
2.5°	445.2	445.2	438.5	448.7	448.7
5°	385.0	385.0	381.6	385.0	385.0
7.5°	351.5	348.2	348.2	348.2	351.5
10°	321.4	318.0	318.0	318.0	318.0
12.5°	294.6	291.3	287.9	291.3	291.3
15°	271.2	264.5	264.5	264.5	264.5
17.5°	251.1	244.4	241.1	241.1	241.1
20°	230.9	221.0	221.0	221.0	221.0
22.5°	210.8	200.9	200.9	200.9	200.9
25°	190.9	180.7	180.7	180.7	180.7
27.5°	174.0	164.1	164.1	164.1	164.1
30°	154.1	147.4	147.4	150.6	147.4
32.5°	140.7	130.5	130.5	134.0	134.0
35°	123.8	117.1	117.1	117.1	117.1
37.5°	107.1	100.4	100.4	100.4	100.4
40°	93.7	87.0	83.8	87.0	87.0
42.5°	80.3	73.6	70.3	70.3	70.3
45°	70.3	60.2	56.9	60.2	60.2
47.5°	56.9	50.2	50.2	53.5	53.5
50°	43.5	43.5	47.0	53.5	53.5
52.5°	40.3	40.3	47.0	53.5	53.5
55°	36.8	40.3	47.0	50.2	53.5
57.5°	33.5	40.3	47.0	50.2	50.2
60°	33.5	36.8	43.5	50.2	50.2
62.5°	30.1	33.5	40.3	47.0	47.0
65°	30.1	33.5	40.3	47.0	47.0
66°	30.1	33.5	40.3	47.0	47.0
67.5°	30.1	33.5	40.3	47.0	47.0
70°	30.1	33.5	40.3	43.5	43.5
72.5°	26.8	30.1	36.8	43.5	43.5
75°	26.8	30.1	36.8	43.5	43.5
77.5°	26.8	30.1	36.8	43.5	43.5
80°	26.8	30.1	36.8	40.3	43.5
82.5°	23.4	30.1	33.5	40.3	40.3
85°	23.4	26.8	33.5	36.8	40.3
87.5°	20.1	23.4	26.8	33.5	33.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)