

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: P165460

Luminaire Tested: **VST-F02-LED-E-U-SL4-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165460
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33728)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F02-LED-E-U-SL4-HSS-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (14) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2801.6 lumens
Efficiency: N/A
Efficacy: 50.9 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 55
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

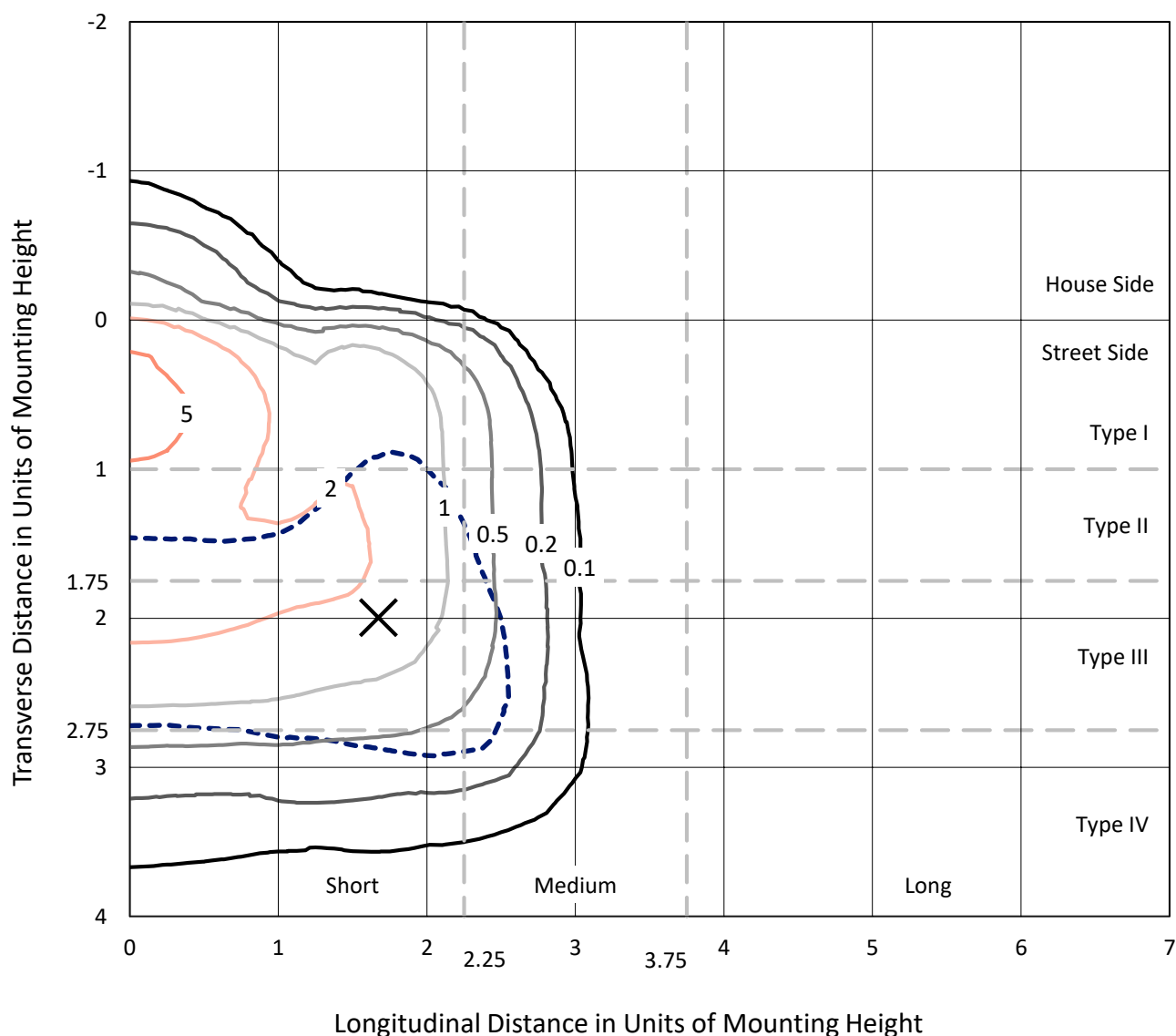


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

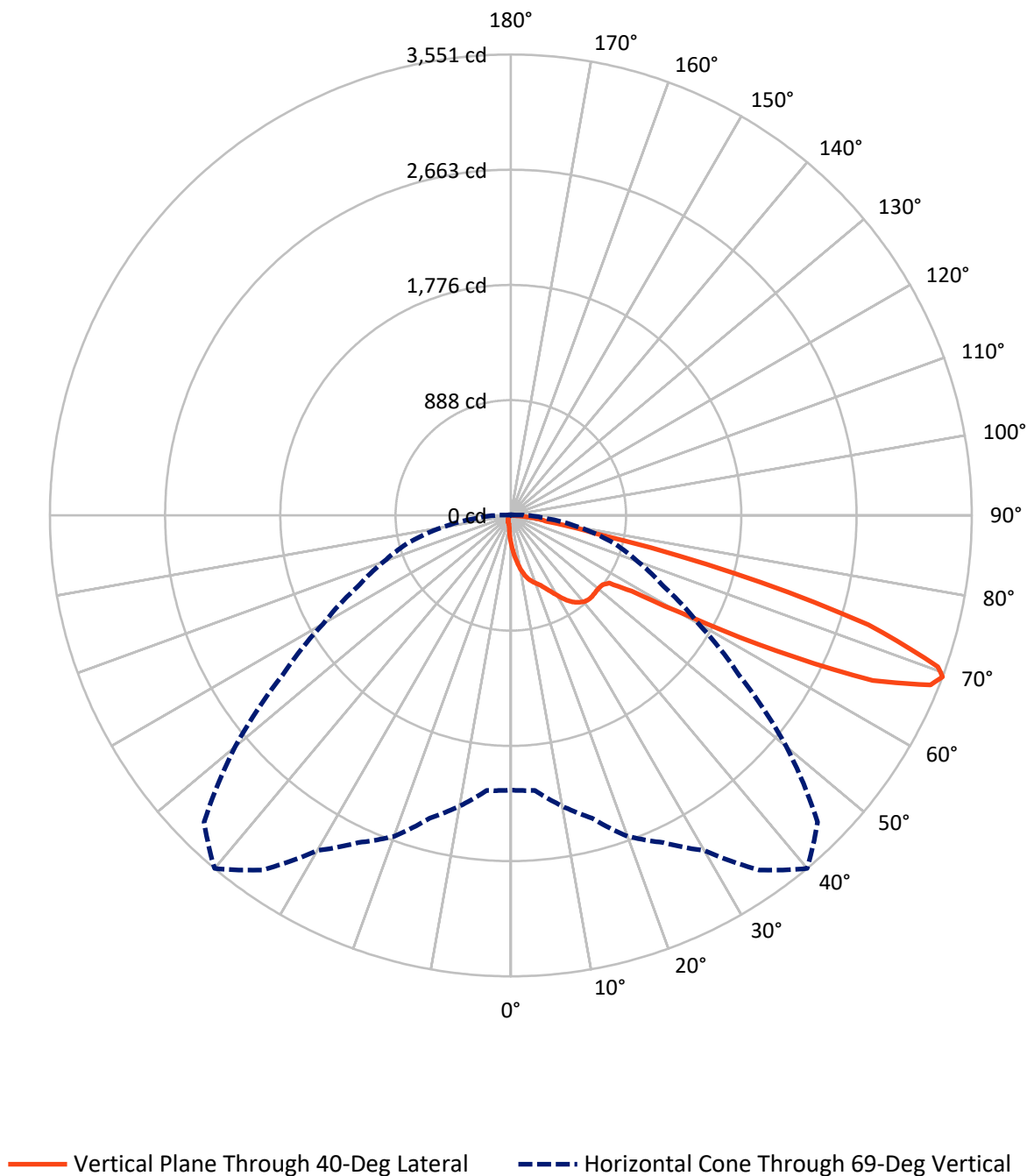


Based on 10 foot mounting height. Maximum calculated value = 6.3 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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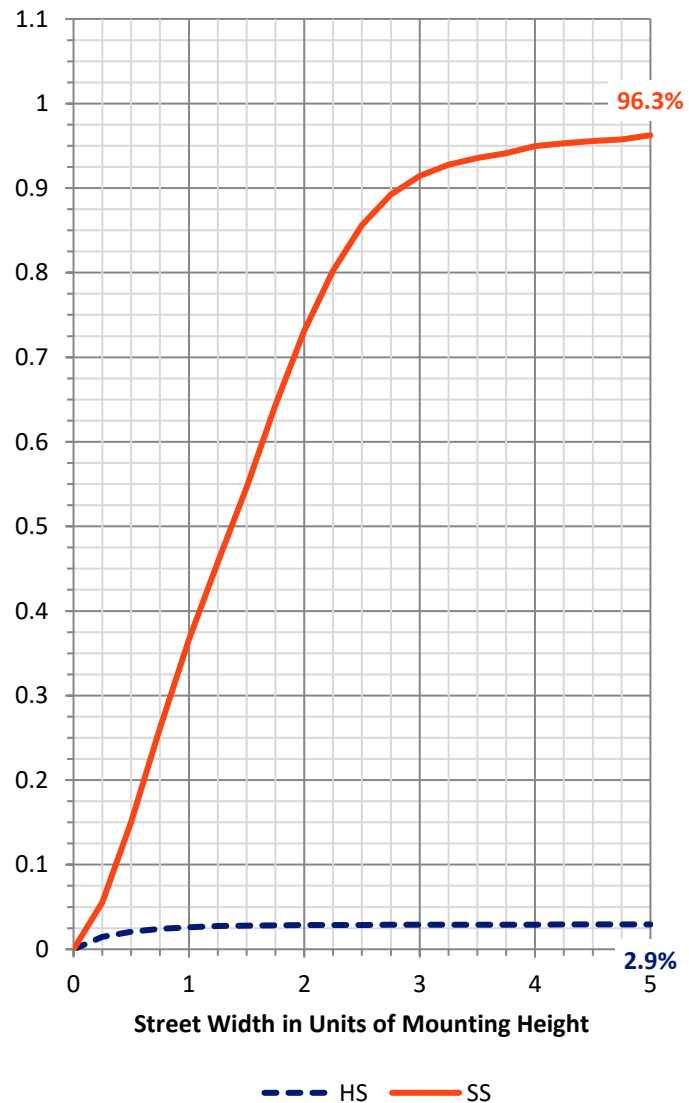
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	83.4	0.0	83.4
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	2718.1	0.0	2718.1
	% Fixture	97.0	0.0	97.0
Total	Lumens	2801.6	0.0	2801.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	21.7	0.8
10°-20°	75.0	2.7
20°-30°	143.5	5.1
30°-40°	238.6	8.5
40°-50°	322.9	11.5
50°-60°	505.0	18.0
60°-70°	1038.3	37.1
70°-80°	417.8	14.9
80°-90°	38.7	1.4
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°	2801.6	100.0
0°-180°	2801.6	100.0

Coefficient of Utilization



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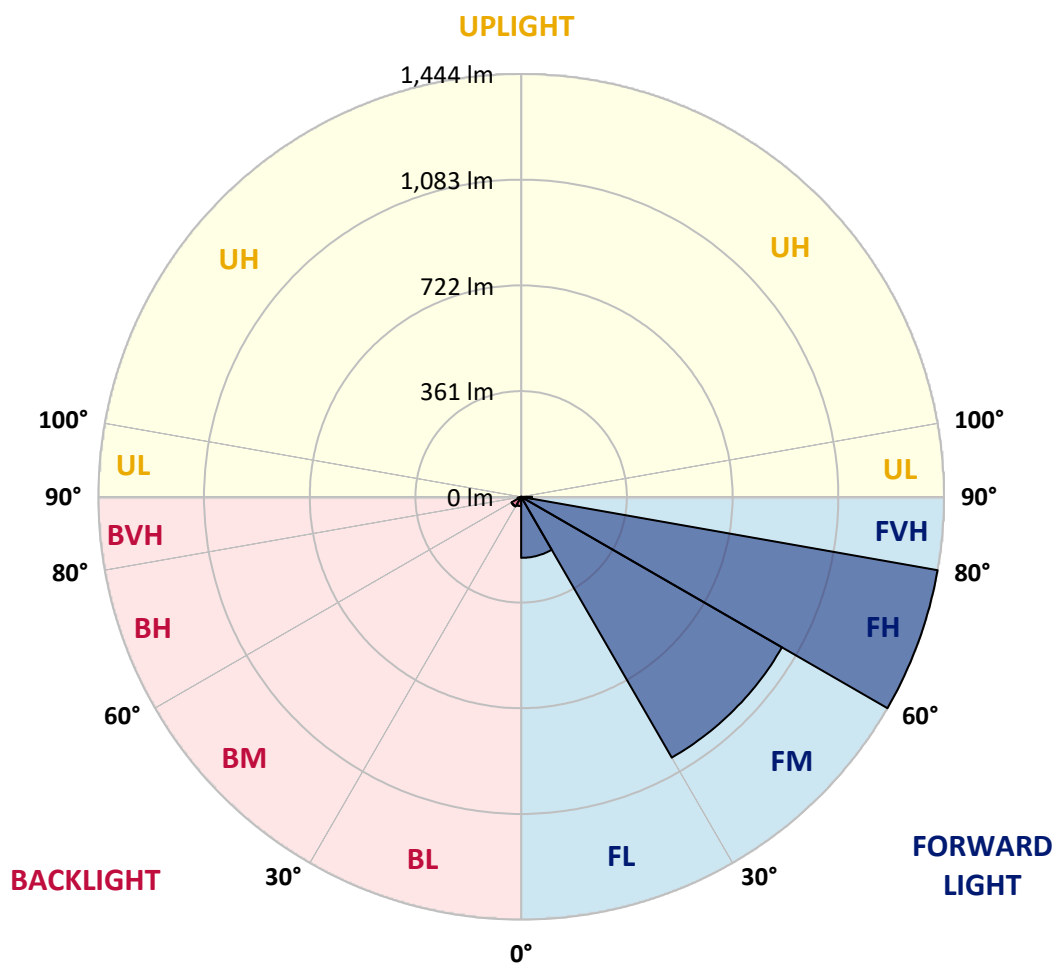
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	208.5	7.4			
FM	(30°-60°)	1028.5	36.7			
FH	(60°-80°)	1443.9	51.5			G1/1800
FVH	(80°-90°)	37.2	1.3			G1/100
BL	(0°-30°)	31.7	1.1	B0/110		
BM	(30°-60°)	38.1	1.4	B0/220		
BH	(60°-80°)	12.2	0.4	B0/110		G0/110
BVH	(80°-90°)	1.4	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6
2.5°	282.2	279.0	275.3	275.3	270.8	270.8	268.0	260.7	259.8	255.6	251.5
5°	360.2	357.5	352.9	348.8	345.1	338.7	334.1	325.4	315.8	306.5	298.3
7.5°	436.4	435.1	426.8	425.4	419.5	408.9	399.7	386.9	370.4	357.5	342.4
10°	507.1	503.9	502.1	494.3	485.6	474.1	459.8	444.2	425.0	404.8	383.2
12.5°	563.1	561.3	553.0	549.8	540.7	529.1	511.3	491.0	471.8	445.6	420.4
15°	604.9	601.7	596.2	591.1	580.1	570.0	553.5	531.4	508.1	479.6	449.3
17.5°	639.8	633.8	632.4	624.6	613.1	601.2	582.8	562.7	535.1	506.6	473.6
20°	686.6	678.3	675.5	664.1	650.8	634.3	613.1	587.9	559.0	527.8	493.8
22.5°	741.7	735.7	729.7	719.6	702.7	679.3	648.5	620.9	584.2	549.8	513.1
25°	819.7	814.6	805.0	791.2	770.1	742.1	704.9	664.6	621.4	577.3	534.2
27.5°	895.4	890.8	883.9	873.4	849.5	818.8	772.9	721.4	666.8	613.6	565.9
30°	966.5	962.4	955.5	944.9	923.8	893.5	841.7	786.6	718.7	656.8	599.4
32.5°	1043.2	1041.8	1034.0	1018.9	1000.5	959.6	903.2	844.0	775.1	703.6	636.5
35°	1129.9	1119.4	1112.0	1096.9	1065.7	1022.0	956.0	891.2	818.8	745.3	670.5
37.5°	1203.4	1193.3	1184.0	1164.8	1126.7	1071.2	996.4	925.2	850.4	775.6	699.4
40°	1257.0	1252.0	1241.0	1215.7	1173.1	1107.0	1026.2	948.6	873.4	798.1	722.8
42.5°	1297.0	1289.2	1276.8	1250.6	1200.1	1124.9	1038.1	958.3	883.9	811.9	738.0
45°	1311.7	1305.2	1293.8	1265.3	1210.7	1129.9	1037.6	955.5	884.4	816.0	748.1
47.5°	1302.9	1296.5	1286.4	1259.8	1206.1	1123.9	1029.4	947.7	879.8	817.4	757.3
50°	1274.0	1270.3	1262.5	1240.0	1191.8	1112.5	1022.0	943.6	878.9	824.3	770.1
52.5°	1271.3	1269.0	1259.3	1236.8	1187.8	1108.8	1021.1	945.9	886.7	833.0	779.3
55°	1553.5	1520.9	1448.0	1386.0	1284.1	1163.0	1067.5	983.0	919.7	867.4	829.7
57.5°	2207.9	2159.3	2063.4	1945.4	1711.4	1481.5	1297.4	1164.3	1098.7	1074.8	1089.1
60°	2514.5	2505.8	2490.7	2434.7	2314.9	2117.1	1896.8	1658.6	1563.1	1554.9	1583.8
62.5°	2660.0	2654.5	2659.1	2652.2	2615.0	2557.2	2493.8	2391.1	2296.5	2235.5	2106.1
65°	2727.0	2730.7	2756.8	2777.5	2782.1	2797.2	2843.6	2971.6	3065.2	2907.8	2548.5
67.5°	2556.7	2578.3	2638.4	2713.7	2801.8	2887.2	3024.8	3294.7	3487.0	3302.1	2791.7
69°	2116.6	2127.2	2274.1	2415.8	2631.1	2781.7	2981.3	3335.1	3551.3	3342.5	2772.5
70°	1666.4	1676.0	1833.5	2026.2	2390.2	2583.8	2845.0	3266.8	3491.2	3288.8	2673.3
72.5°	751.7	738.0	793.5	896.8	1292.3	1599.9	2056.5	2646.7	2880.3	2634.8	2000.0
75°	525.1	519.1	525.1	525.5	587.0	757.3	955.5	1434.7	1774.3	1531.0	955.5
77.5°	406.6	402.5	398.3	393.8	401.1	449.3	468.5	509.0	660.8	625.1	364.4
80°	321.7	318.1	328.1	324.9	324.9	330.4	326.8	311.6	283.1	262.5	235.0
82.5°	149.6	150.5	150.5	163.4	196.9	229.9	240.5	225.4	200.1	170.3	137.2
85°	14.2	16.1	27.1	41.8	83.1	93.6	94.1	78.0	78.0	61.5	49.6
87.5°	0.0	0.4	0.4	0.4	4.1	11.5	9.7	2.8	1.4	1.4	2.3
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6
2.5°	244.1	242.8	237.3	231.8	226.7	221.2	216.2	211.1	205.6	201.5	196.4
5°	285.5	275.3	263.9	252.9	241.9	230.4	218.5	207.9	196.9	186.8	177.1
7.5°	327.2	307.5	291.9	272.2	254.3	236.3	219.8	202.9	187.3	172.6	158.8
10°	362.6	338.7	314.3	289.1	263.4	239.6	216.6	196.4	175.8	157.9	140.9
12.5°	391.5	361.2	331.4	299.7	270.8	240.5	212.0	187.7	163.4	143.2	125.8
15°	417.6	382.7	346.9	310.3	273.5	239.1	207.4	177.1	152.3	129.4	109.7
17.5°	438.7	398.8	358.4	317.1	277.7	237.3	201.5	169.8	140.9	117.0	97.7
20°	457.1	415.3	371.8	325.4	280.4	236.8	196.4	160.6	130.8	105.5	86.7
22.5°	474.1	432.3	385.5	335.9	284.5	236.3	191.8	153.8	122.0	96.8	78.0
25°	493.4	449.3	400.2	346.9	291.9	238.2	189.1	148.3	114.2	88.6	71.1
27.5°	514.9	468.5	417.6	360.7	301.5	241.9	188.2	142.3	107.4	80.8	65.6
30°	545.2	491.5	435.1	374.5	310.3	246.0	187.3	138.6	100.5	74.8	60.1
32.5°	571.9	514.0	454.4	388.7	319.9	250.1	186.8	133.6	94.1	68.8	56.0
35°	599.8	534.7	470.9	402.5	328.1	254.7	186.4	129.9	88.1	62.9	51.8
37.5°	624.2	552.1	483.7	414.4	337.3	258.8	186.8	126.7	82.6	57.8	48.2
40°	644.8	570.0	497.9	425.4	346.9	265.3	187.3	123.5	77.1	53.2	45.0
42.5°	663.2	587.0	513.1	437.8	358.0	272.6	190.0	120.7	72.5	49.1	41.8
45°	677.4	602.6	529.6	455.3	375.9	284.5	195.1	118.9	67.9	45.4	39.0
47.5°	692.1	625.5	557.6	482.8	402.1	303.4	203.8	118.4	64.3	42.7	36.7
50°	712.3	648.5	582.4	510.8	425.9	322.6	214.3	118.9	59.6	40.0	34.4
52.5°	727.0	671.9	614.5	559.4	482.8	381.4	255.2	127.1	57.4	37.6	31.7
55°	813.7	804.1	805.4	814.6	755.4	649.0	426.8	183.6	67.5	42.7	31.2
57.5°	1147.4	1181.3	1201.0	1200.6	1102.8	914.7	573.2	235.9	75.3	49.6	37.2
60°	1586.1	1560.4	1524.2	1434.7	1304.8	1044.1	641.2	253.8	65.2	39.5	34.0
62.5°	1973.9	1823.3	1689.8	1544.8	1374.5	1089.1	654.9	252.4	56.9	29.8	23.9
65°	2215.7	1945.0	1729.3	1547.5	1347.0	1051.4	619.6	231.8	48.2	24.4	19.7
67.5°	2273.6	1879.3	1574.2	1342.4	1125.3	818.3	454.8	174.4	37.6	20.2	17.5
69°	2147.3	1670.5	1304.3	1041.4	818.8	542.9	281.3	110.2	28.9	18.4	16.1
70°	1975.3	1453.0	1062.4	835.7	606.3	381.4	196.9	77.6	23.4	17.0	14.7
72.5°	1270.8	763.2	522.3	363.5	250.1	151.9	77.1	34.9	17.9	14.2	11.9
75°	492.9	282.2	204.7	155.6	121.6	84.4	46.8	22.5	15.1	11.9	9.2
77.5°	242.8	185.9	151.9	104.2	60.6	37.6	25.3	17.5	12.4	8.7	5.9
80°	191.8	127.6	76.2	47.3	35.8	27.1	19.3	14.2	9.2	5.5	4.1
82.5°	98.2	53.7	39.5	32.2	26.6	21.1	15.6	10.1	5.9	3.7	3.2
85°	30.7	22.5	20.2	19.7	18.4	15.1	11.0	6.4	3.7	2.3	2.3
87.5°	2.3	3.2	4.1	3.2	3.7	3.2	4.1	2.8	1.9	1.9	1.4
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6	211.6
2.5°	192.7	187.3	182.2	179.0	173.0	170.7	168.4	167.5	163.4	164.3	160.6
5°	168.4	158.8	151.4	144.1	137.2	132.2	128.0	123.0	118.9	117.0	113.3
7.5°	146.4	134.0	124.4	116.6	108.3	101.9	96.4	92.7	89.0	85.4	83.5
10°	127.1	113.8	102.8	95.0	87.2	81.7	77.6	74.8	72.5	71.1	70.7
12.5°	109.2	96.4	86.3	79.4	73.4	70.7	68.8	67.5	67.0	66.5	66.5
15°	95.5	82.6	74.8	69.8	67.0	65.6	65.2	64.3	63.4	62.9	62.9
17.5°	82.6	73.0	67.5	64.7	63.4	62.4	61.5	60.6	59.6	59.2	59.2
20°	73.9	66.1	63.4	61.5	60.1	59.2	57.8	56.9	56.5	56.0	55.6
22.5°	67.0	62.0	60.1	58.7	56.9	55.6	54.6	53.7	52.8	52.3	51.8
25°	62.0	58.7	57.4	55.6	53.7	52.3	50.9	49.6	48.7	48.2	47.3
27.5°	58.3	56.0	54.2	51.8	50.0	48.7	47.3	45.9	45.0	44.0	43.6
30°	55.1	52.8	50.5	48.7	46.3	45.0	43.1	41.8	41.3	40.4	39.5
32.5°	51.8	49.6	47.3	45.0	42.7	40.9	40.0	38.1	37.2	36.7	35.8
35°	48.2	45.9	43.1	41.3	39.0	37.2	35.8	34.4	33.5	32.6	32.2
37.5°	45.0	42.2	39.5	37.2	35.3	33.5	32.2	30.7	29.8	28.9	28.4
40°	41.3	38.5	35.8	33.5	31.7	30.3	28.9	27.5	26.6	26.2	26.2
42.5°	38.1	34.9	32.2	30.3	28.9	27.1	25.7	24.4	23.9	23.4	23.9
45°	34.9	31.7	29.4	27.5	26.2	24.4	22.9	22.0	21.6	22.0	22.5
47.5°	32.2	28.9	26.6	25.3	23.9	22.5	21.1	20.2	20.2	21.1	22.0
50°	29.4	26.2	24.4	23.4	22.0	20.6	18.8	18.4	18.8	19.7	20.6
52.5°	26.6	22.9	21.6	21.1	19.7	18.4	17.0	16.5	17.0	17.9	17.5
55°	23.9	20.2	19.7	19.3	17.9	16.1	14.7	14.7	14.7	14.2	13.3
57.5°	22.9	17.9	17.5	17.0	15.6	13.7	12.8	11.9	11.5	10.1	9.7
60°	23.9	16.1	16.1	15.1	13.7	11.9	10.6	9.2	8.2	7.3	7.3
62.5°	19.3	14.7	14.2	13.3	11.5	9.7	8.2	6.9	6.4	5.9	5.9
65°	15.6	13.3	12.4	11.0	9.7	7.8	6.4	5.5	5.0	5.0	5.5
67.5°	14.2	11.9	10.6	9.2	7.8	5.9	5.0	4.6	4.6	5.0	5.0
69°	13.3	11.0	9.7	8.2	6.9	5.5	4.6	4.6	4.6	4.6	5.0
70°	12.4	10.6	9.2	7.8	5.9	4.6	4.1	4.1	4.6	4.6	5.0
72.5°	9.7	8.2	7.8	6.4	4.6	4.1	3.7	4.1	4.1	4.6	4.6
75°	7.3	5.9	5.9	5.0	3.7	3.2	3.2	3.7	3.7	4.1	4.1
77.5°	5.0	4.1	4.1	3.7	3.2	2.8	2.8	3.2	3.7	3.7	4.1
80°	3.7	3.2	2.8	3.2	2.8	2.3	2.8	3.2	3.2	3.7	3.7
82.5°	2.8	2.8	2.8	2.8	2.3	2.3	2.8	2.8	3.2	3.7	3.7
85°	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.8	2.8	3.2	3.2
87.5°	1.4	1.4	1.4	1.9	1.9	2.3	2.3	2.3	2.3	2.8	2.8
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):

	165°	170°	175°	180°
0°	211.6	211.6	211.6	211.6
2.5°	159.7	159.2	157.4	157.9
5°	112.0	109.2	111.1	110.6
7.5°	82.1	81.7	81.2	82.1
10°	70.3	70.3	69.8	70.3
12.5°	66.1	66.1	66.1	66.1
15°	62.9	62.9	62.4	62.4
17.5°	59.2	59.2	59.2	58.7
20°	55.6	55.1	55.1	55.1
22.5°	51.4	50.9	50.9	50.9
25°	47.3	46.8	46.8	46.8
27.5°	43.1	42.7	42.2	42.2
30°	39.0	38.5	38.1	38.1
32.5°	34.9	34.4	34.0	34.0
35°	31.2	31.2	30.7	30.3
37.5°	28.0	28.0	28.0	28.0
40°	25.7	26.2	26.2	26.2
42.5°	24.4	24.8	25.3	25.7
45°	23.4	24.4	24.8	24.8
47.5°	22.9	23.4	23.9	23.9
50°	21.1	20.6	20.6	20.6
52.5°	17.0	16.1	15.6	15.1
55°	12.4	11.9	11.0	11.0
57.5°	8.7	8.7	8.2	8.2
60°	6.9	6.9	6.4	6.9
62.5°	5.9	5.9	5.9	5.9
65°	5.5	5.5	5.5	5.5
67.5°	5.5	5.5	5.5	5.5
69°	5.0	5.0	5.0	5.0
70°	5.0	5.0	5.0	5.0
72.5°	4.6	4.6	4.6	4.6
75°	4.1	4.6	4.6	4.6
77.5°	4.1	4.1	4.1	4.1
80°	3.7	3.7	4.1	4.1
82.5°	3.7	3.7	3.7	3.7
85°	3.2	3.2	3.7	3.7
87.5°	2.8	2.8	3.2	3.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)