

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: P165461

Luminaire Tested: **VST-F02-LED-E-U-SL4-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165461
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-7030
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, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3031.8 lumens
Efficiency: N/A
Efficacy: 55.1 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

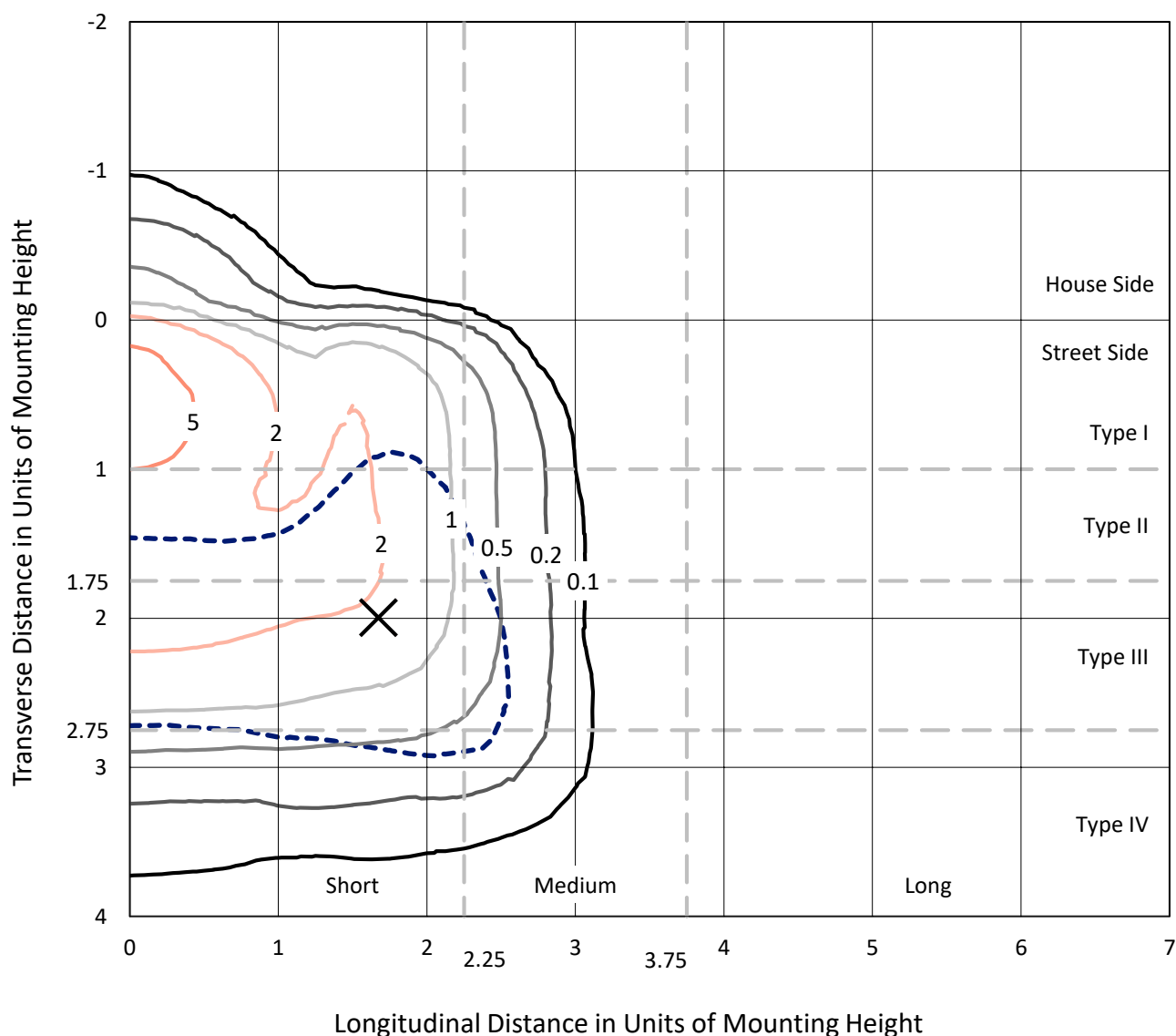


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

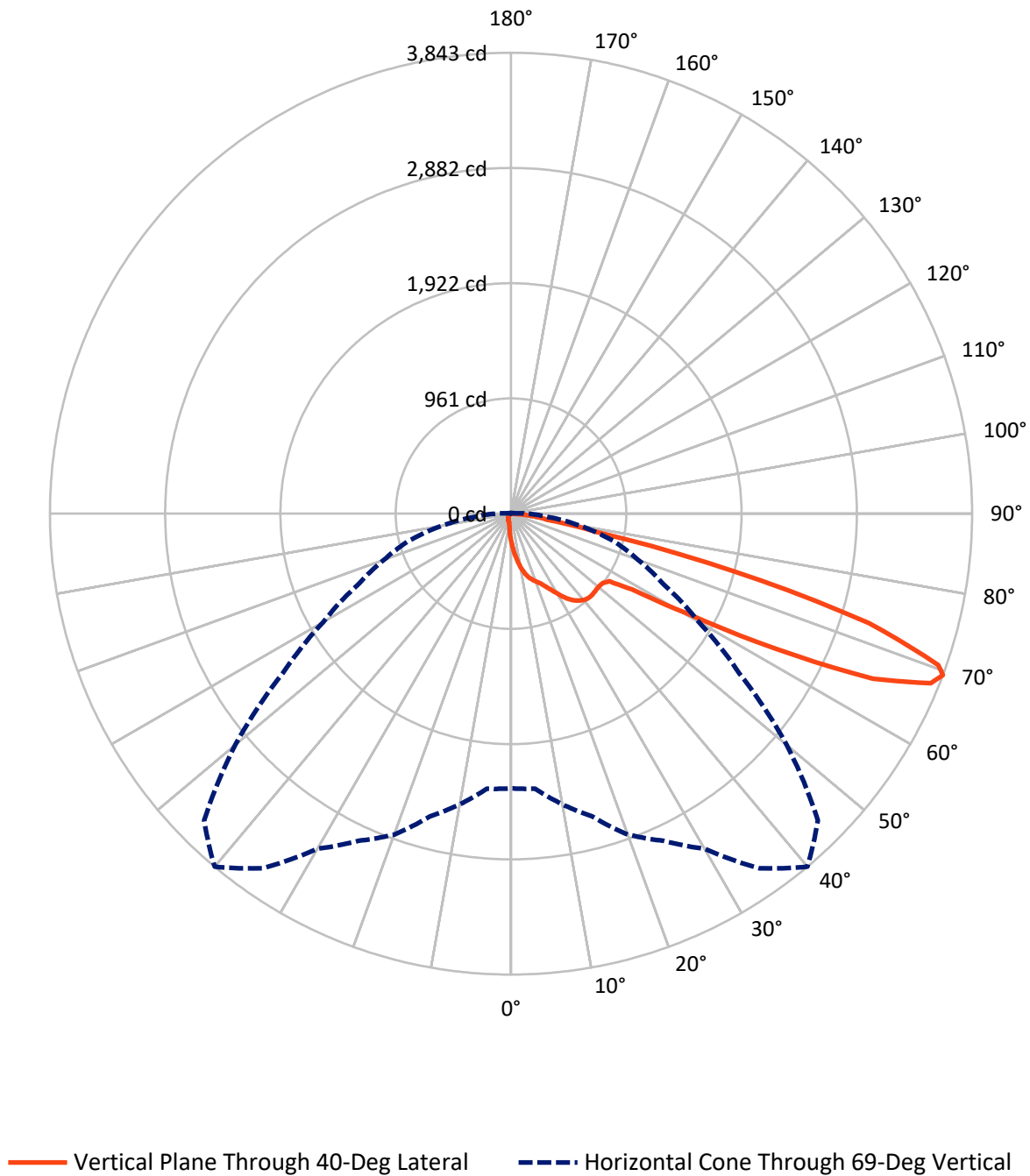


Based on 10 foot mounting height. Maximum calculated value = 6.8 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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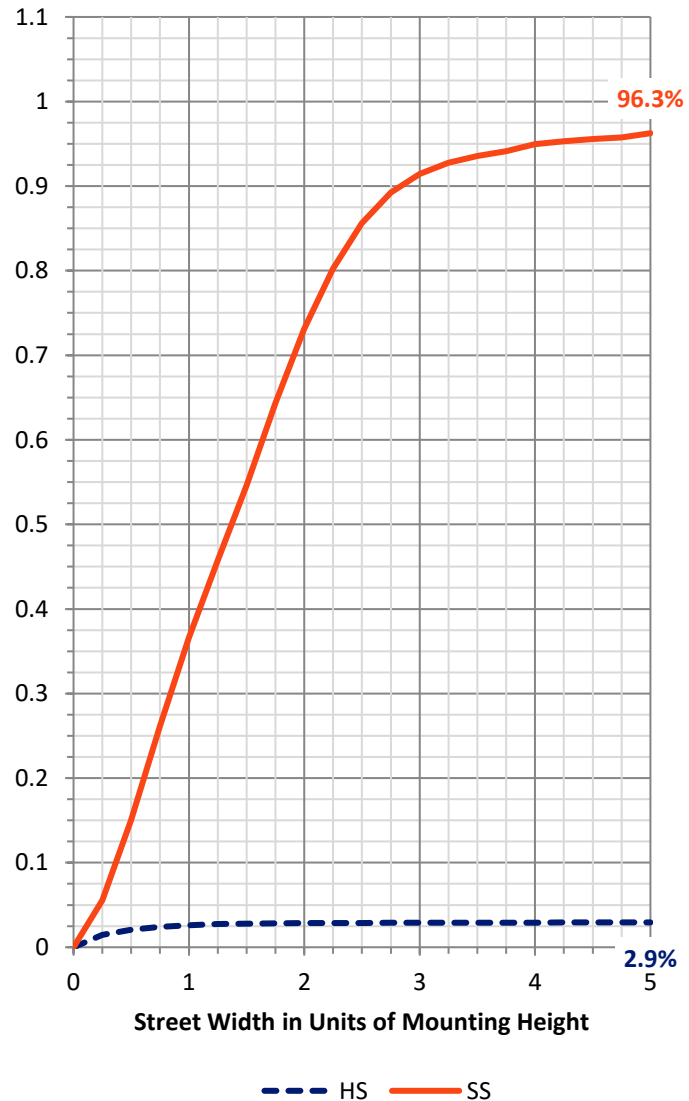
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	90.3	0.0	90.3
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	2941.5	0.0	2941.5
	% Fixture	97.0	0.0	97.0
Total	Lumens	3031.8	0.0	3031.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.5	0.8
10°-20°	81.1	2.7
20°-30°	155.3	5.1
30°-40°	258.3	8.5
40°-50°	349.5	11.5
50°-60°	546.5	18.0
60°-70°	1123.6	37.1
70°-80°	452.1	14.9
80°-90°	41.8	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°	3031.8	100.0
0°-180°	3031.8	100.0

Coefficient of Utilization



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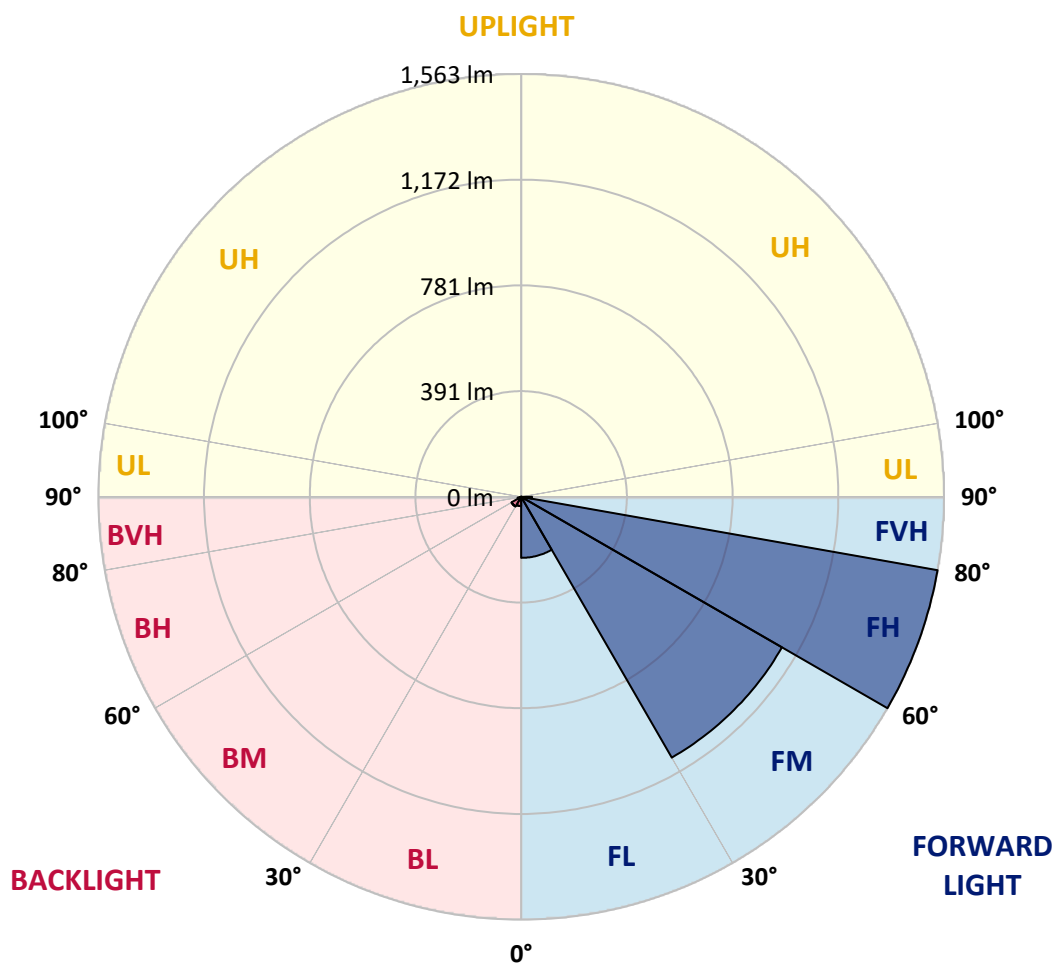
CATALOG NUMBER: VST-F02-LED-E-U-SL4-HSS-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	225.6	7.4			
FM	(30°-60°)	1113.0	36.7			
FH	(60°-80°)	1562.6	51.5			G1/1800
FVH	(80°-90°)	40.3	1.3			G1/100
BL	(0°-30°)	34.3	1.1	B0/110		
BM	(30°-60°)	41.2	1.4	B0/220		
BH	(60°-80°)	13.2	0.4	B0/110		G0/110
BVH	(80°-90°)	1.6	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°	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0
2.5°	305.5	302.0	298.0	298.0	293.0	293.0	290.0	282.1	281.1	276.6	272.2
5°	389.9	386.9	382.0	377.5	373.5	366.5	361.6	352.1	341.7	331.7	322.8
7.5°	472.3	470.8	461.9	460.4	454.0	442.6	432.6	418.7	400.8	386.9	370.5
10°	548.8	545.3	543.3	534.9	525.5	513.1	497.6	480.8	459.9	438.1	414.7
12.5°	609.4	607.4	598.4	595.0	585.1	572.6	553.3	531.4	510.6	482.3	454.9
15°	654.6	651.1	645.1	639.7	627.8	616.9	599.0	575.1	549.8	519.0	486.2
17.5°	692.3	685.9	684.4	676.0	663.5	650.6	630.8	608.9	579.1	548.3	512.5
20°	743.0	734.0	731.1	718.6	704.3	686.4	663.5	636.2	604.9	571.1	534.4
22.5°	802.6	796.1	789.7	778.7	760.4	735.1	701.8	672.0	632.2	595.0	555.3
25°	887.0	881.6	871.1	856.3	833.4	803.1	762.8	719.2	672.5	624.8	578.1
27.5°	969.0	964.0	956.5	945.1	919.3	886.0	836.3	780.7	721.6	664.0	612.4
30°	1046.0	1041.5	1034.0	1022.6	999.8	967.0	910.9	851.3	777.8	710.7	648.7
32.5°	1128.9	1127.4	1118.9	1102.6	1082.7	1038.5	977.4	913.4	838.9	761.4	688.9
35°	1222.7	1211.3	1203.4	1187.0	1153.3	1106.0	1034.5	964.5	886.0	806.6	725.6
37.5°	1302.2	1291.3	1281.4	1260.5	1219.3	1159.2	1078.3	1001.2	920.3	839.3	756.9
40°	1360.3	1354.9	1343.0	1315.6	1269.5	1198.0	1110.5	1026.6	945.1	863.7	782.2
42.5°	1403.5	1395.1	1381.7	1353.4	1298.8	1217.3	1123.4	1037.0	956.5	878.6	798.6
45°	1419.4	1412.5	1400.1	1369.3	1310.2	1222.7	1123.0	1034.0	957.1	883.0	809.5
47.5°	1410.0	1403.0	1392.1	1363.3	1305.2	1216.3	1114.0	1025.6	952.1	884.6	819.5
50°	1378.7	1374.7	1366.3	1342.0	1289.8	1203.9	1106.0	1021.1	951.1	892.0	833.4
52.5°	1375.7	1373.3	1362.8	1338.5	1285.3	1199.9	1105.1	1023.6	959.5	901.4	843.3
55°	1681.1	1645.9	1567.0	1499.9	1389.7	1258.6	1155.2	1063.8	995.3	938.7	898.0
57.5°	2389.4	2336.8	2233.0	2105.3	1852.0	1603.2	1404.1	1260.0	1189.0	1163.2	1178.6
60°	2721.2	2711.8	2695.3	2634.8	2505.1	2291.1	2052.7	1794.9	1691.6	1682.7	1714.0
62.5°	2878.6	2872.7	2877.7	2870.2	2830.0	2767.4	2698.8	2587.6	2485.3	2419.2	2279.2
65°	2951.2	2955.1	2983.4	3005.8	3010.7	3027.1	3077.3	3215.8	3317.2	3146.8	2757.9
67.5°	2766.8	2790.2	2855.3	2936.7	3032.1	3124.4	3273.4	3565.5	3773.6	3573.4	3021.2
69°	2290.6	2302.0	2460.9	2614.4	2847.3	3010.3	3226.3	3609.2	3843.1	3617.2	3000.3
70°	1803.4	1813.8	1984.1	2192.8	2586.6	2796.2	3078.8	3535.2	3778.1	3559.0	2893.0
72.5°	813.5	798.6	858.7	970.4	1398.5	1731.4	2225.5	2864.2	3117.0	2851.3	2164.4
75°	568.2	561.7	568.2	568.7	635.2	819.5	1034.0	1552.6	1920.1	1656.8	1034.0
77.5°	440.0	435.5	431.1	426.1	434.1	486.2	507.1	550.8	715.2	676.4	394.3
80°	348.2	344.2	355.1	351.7	351.7	357.6	353.6	337.2	306.4	284.1	254.3
82.5°	161.9	162.9	162.9	176.8	213.1	248.8	260.2	243.9	216.5	184.3	148.5
85°	15.4	17.4	29.3	45.2	89.9	101.3	101.8	84.4	84.4	66.5	53.6
87.5°	0.0	0.5	0.5	0.5	4.4	12.4	10.4	3.0	1.5	1.5	2.5
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°	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0
2.5°	264.2	262.7	256.8	250.8	245.3	239.4	233.9	228.5	222.5	218.0	212.6
5°	308.9	298.0	285.6	273.7	261.7	249.4	236.4	225.0	213.1	202.1	191.7
7.5°	354.1	332.8	315.8	294.5	275.2	255.8	237.9	219.5	202.6	186.7	171.8
10°	392.3	366.5	340.2	312.9	285.1	259.3	234.4	212.6	190.2	170.9	152.5
12.5°	423.7	390.9	358.6	324.3	293.0	260.2	229.4	203.1	176.8	155.0	136.1
15°	451.9	414.2	375.5	335.8	296.0	258.8	224.5	191.7	164.9	140.0	118.7
17.5°	474.8	431.6	387.9	343.2	300.5	256.8	218.0	183.8	152.5	126.7	105.8
20°	494.7	449.5	402.3	352.1	303.5	256.3	212.6	173.8	141.5	114.2	93.8
22.5°	513.1	467.8	417.2	363.5	307.9	255.8	207.6	166.4	132.1	104.8	84.4
25°	533.9	486.2	433.1	375.5	315.8	257.8	204.7	160.4	123.7	95.8	77.0
27.5°	557.3	507.1	451.9	390.4	326.3	261.7	203.6	154.0	116.2	87.4	71.0
30°	590.0	531.9	470.8	405.2	335.8	266.2	202.6	150.0	108.8	80.9	65.0
32.5°	618.8	556.3	491.7	420.7	346.2	270.7	202.1	144.5	101.8	74.5	60.6
35°	649.1	578.6	509.6	435.5	355.1	275.6	201.7	140.5	95.3	68.0	56.1
37.5°	675.5	597.5	523.5	448.5	365.0	280.1	202.1	137.1	89.4	62.6	52.1
40°	697.8	616.9	538.9	460.4	375.5	287.0	202.6	133.6	83.5	57.6	48.7
42.5°	717.7	635.2	555.3	473.8	387.4	295.0	205.6	130.6	78.5	53.2	45.2
45°	733.1	652.1	573.1	492.7	406.7	307.9	211.1	128.6	73.5	49.1	42.2
47.5°	749.0	676.9	603.4	522.5	435.1	328.3	220.5	128.2	69.5	46.2	39.7
50°	770.8	701.8	630.2	552.8	460.9	349.1	231.9	128.6	64.6	43.2	37.3
52.5°	786.7	727.1	665.0	605.4	522.5	412.7	276.1	137.6	62.0	40.7	34.3
55°	880.6	870.1	871.6	881.6	817.5	702.2	461.9	198.7	73.0	46.2	33.8
57.5°	1241.6	1278.4	1299.7	1299.2	1193.5	989.8	620.3	255.3	81.5	53.6	40.3
60°	1716.5	1688.6	1649.4	1552.6	1412.0	1129.9	693.8	274.7	70.5	42.7	36.8
62.5°	2136.1	1973.2	1828.7	1671.8	1487.5	1178.6	708.7	273.2	61.6	32.3	25.8
65°	2397.8	2104.8	1871.4	1674.7	1457.7	1137.8	670.5	250.8	52.1	26.3	21.4
67.5°	2460.4	2033.8	1703.5	1452.7	1217.8	885.5	492.2	188.8	40.7	21.8	18.9
69°	2323.9	1807.9	1411.5	1126.9	886.0	587.5	304.4	119.2	31.3	19.9	17.4
70°	2137.6	1572.4	1149.7	904.4	656.1	412.7	213.1	83.9	25.3	18.4	15.9
72.5°	1375.3	825.9	565.2	393.4	270.7	164.4	83.5	37.7	19.4	15.4	12.9
75°	533.4	305.5	221.5	168.4	131.6	91.4	50.6	24.4	16.4	12.9	9.9
77.5°	262.7	201.1	164.4	112.7	65.6	40.7	27.3	18.9	13.4	9.4	6.5
80°	207.6	138.1	82.4	51.2	38.7	29.3	20.9	15.4	9.9	6.0	4.4
82.5°	106.3	58.1	42.7	34.8	28.8	22.9	16.9	10.9	6.5	4.0	3.5
85°	33.2	24.4	21.8	21.4	19.9	16.4	11.9	7.0	4.0	2.5	2.5
87.5°	2.5	3.5	4.4	3.5	4.0	3.5	4.4	3.0	2.0	2.0	1.5
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°	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0	229.0
2.5°	208.6	202.6	197.2	193.7	187.3	184.7	182.3	181.3	176.8	177.8	173.8
5°	182.3	171.8	163.9	155.9	148.5	143.0	138.5	133.1	128.6	126.7	122.6
7.5°	158.4	145.0	134.6	126.2	117.2	110.3	104.3	100.3	96.4	92.4	90.4
10°	137.6	123.2	111.2	102.8	94.4	88.4	83.9	80.9	78.5	77.0	76.5
12.5°	118.2	104.3	93.4	85.9	79.5	76.5	74.5	73.0	72.5	72.0	72.0
15°	103.3	89.4	80.9	75.5	72.5	71.0	70.5	69.5	68.6	68.0	68.0
17.5°	89.4	79.0	73.0	70.0	68.6	67.6	66.5	65.6	64.6	64.1	64.1
20°	80.0	71.5	68.6	66.5	65.0	64.1	62.6	61.6	61.1	60.6	60.1
22.5°	72.5	67.0	65.0	63.6	61.6	60.1	59.1	58.1	57.1	56.6	56.1
25°	67.0	63.6	62.0	60.1	58.1	56.6	55.1	53.6	52.7	52.1	51.2
27.5°	63.1	60.6	58.6	56.1	54.1	52.7	51.2	49.7	48.7	47.7	47.2
30°	59.6	57.1	54.6	52.7	50.2	48.7	46.7	45.2	44.7	43.7	42.7
32.5°	56.1	53.6	51.2	48.7	46.2	44.2	43.2	41.2	40.3	39.7	38.7
35°	52.1	49.7	46.7	44.7	42.2	40.3	38.7	37.3	36.2	35.3	34.8
37.5°	48.7	45.7	42.7	40.3	38.2	36.2	34.8	33.2	32.3	31.3	30.8
40°	44.7	41.7	38.7	36.2	34.3	32.8	31.3	29.8	28.8	28.3	28.3
42.5°	41.2	37.7	34.8	32.8	31.3	29.3	27.8	26.3	25.8	25.3	25.8
45°	37.7	34.3	31.8	29.8	28.3	26.3	24.8	23.8	23.3	23.8	24.4
47.5°	34.8	31.3	28.8	27.3	25.8	24.4	22.9	21.8	21.8	22.9	23.8
50°	31.8	28.3	26.3	25.3	23.8	22.3	20.3	19.9	20.3	21.4	22.3
52.5°	28.8	24.8	23.3	22.9	21.4	19.9	18.4	17.9	18.4	19.4	18.9
55°	25.8	21.8	21.4	20.9	19.4	17.4	15.9	15.9	15.9	15.4	14.4
57.5°	24.8	19.4	18.9	18.4	16.9	14.9	13.9	12.9	12.4	10.9	10.4
60°	25.8	17.4	17.4	16.4	14.9	12.9	11.5	9.9	8.9	7.9	7.9
62.5°	20.9	15.9	15.4	14.4	12.4	10.4	8.9	7.4	7.0	6.5	6.5
65°	16.9	14.4	13.4	11.9	10.4	8.5	7.0	6.0	5.5	5.5	6.0
67.5°	15.4	12.9	11.5	9.9	8.5	6.5	5.5	5.0	5.0	5.5	5.5
69°	14.4	11.9	10.4	8.9	7.4	6.0	5.0	5.0	5.0	5.0	5.5
70°	13.4	11.5	9.9	8.5	6.5	5.0	4.4	4.4	5.0	5.0	5.5
72.5°	10.4	8.9	8.5	7.0	5.0	4.4	4.0	4.4	4.4	5.0	5.0
75°	7.9	6.5	6.5	5.5	4.0	3.5	3.5	4.0	4.0	4.4	4.4
77.5°	5.5	4.4	4.4	4.0	3.5	3.0	3.0	3.5	4.0	4.0	4.4
80°	4.0	3.5	3.0	3.5	3.0	2.5	3.0	3.5	3.5	4.0	4.0
82.5°	3.0	3.0	3.0	3.0	2.5	2.5	3.0	3.0	3.5	4.0	4.0
85°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.0	3.0	3.5	3.5
87.5°	1.5	1.5	1.5	2.0	2.0	2.5	2.5	2.5	2.5	3.0	3.0
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):

	165°	170°	175°	180°
0°	229.0	229.0	229.0	229.0
2.5°	172.9	172.3	170.3	170.9
5°	121.2	118.2	120.2	119.7
7.5°	88.9	88.4	87.9	88.9
10°	76.0	76.0	75.5	76.0
12.5°	71.5	71.5	71.5	71.5
15°	68.0	68.0	67.6	67.6
17.5°	64.1	64.1	64.1	63.6
20°	60.1	59.6	59.6	59.6
22.5°	55.6	55.1	55.1	55.1
25°	51.2	50.6	50.6	50.6
27.5°	46.7	46.2	45.7	45.7
30°	42.2	41.7	41.2	41.2
32.5°	37.7	37.3	36.8	36.8
35°	33.8	33.8	33.2	32.8
37.5°	30.3	30.3	30.3	30.3
40°	27.8	28.3	28.3	28.3
42.5°	26.3	26.8	27.3	27.8
45°	25.3	26.3	26.8	26.8
47.5°	24.8	25.3	25.8	25.8
50°	22.9	22.3	22.3	22.3
52.5°	18.4	17.4	16.9	16.4
55°	13.4	12.9	11.9	11.9
57.5°	9.4	9.4	8.9	8.9
60°	7.4	7.4	7.0	7.4
62.5°	6.5	6.5	6.5	6.5
65°	6.0	6.0	6.0	6.0
67.5°	6.0	6.0	6.0	6.0
69°	5.5	5.5	5.5	5.5
70°	5.5	5.5	5.5	5.5
72.5°	5.0	5.0	5.0	5.0
75°	4.4	5.0	5.0	5.0
77.5°	4.4	4.4	4.4	4.4
80°	4.0	4.0	4.4	4.4
82.5°	4.0	4.0	4.0	4.0
85°	3.5	3.5	4.0	4.0
87.5°	3.0	3.0	3.5	3.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)