

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: P165463

Luminaire Tested: **VST-F02-LED-E-U-SL4-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165463
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-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (14) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3406.1 lumens
Efficiency: N/A
Efficacy: 61.9 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

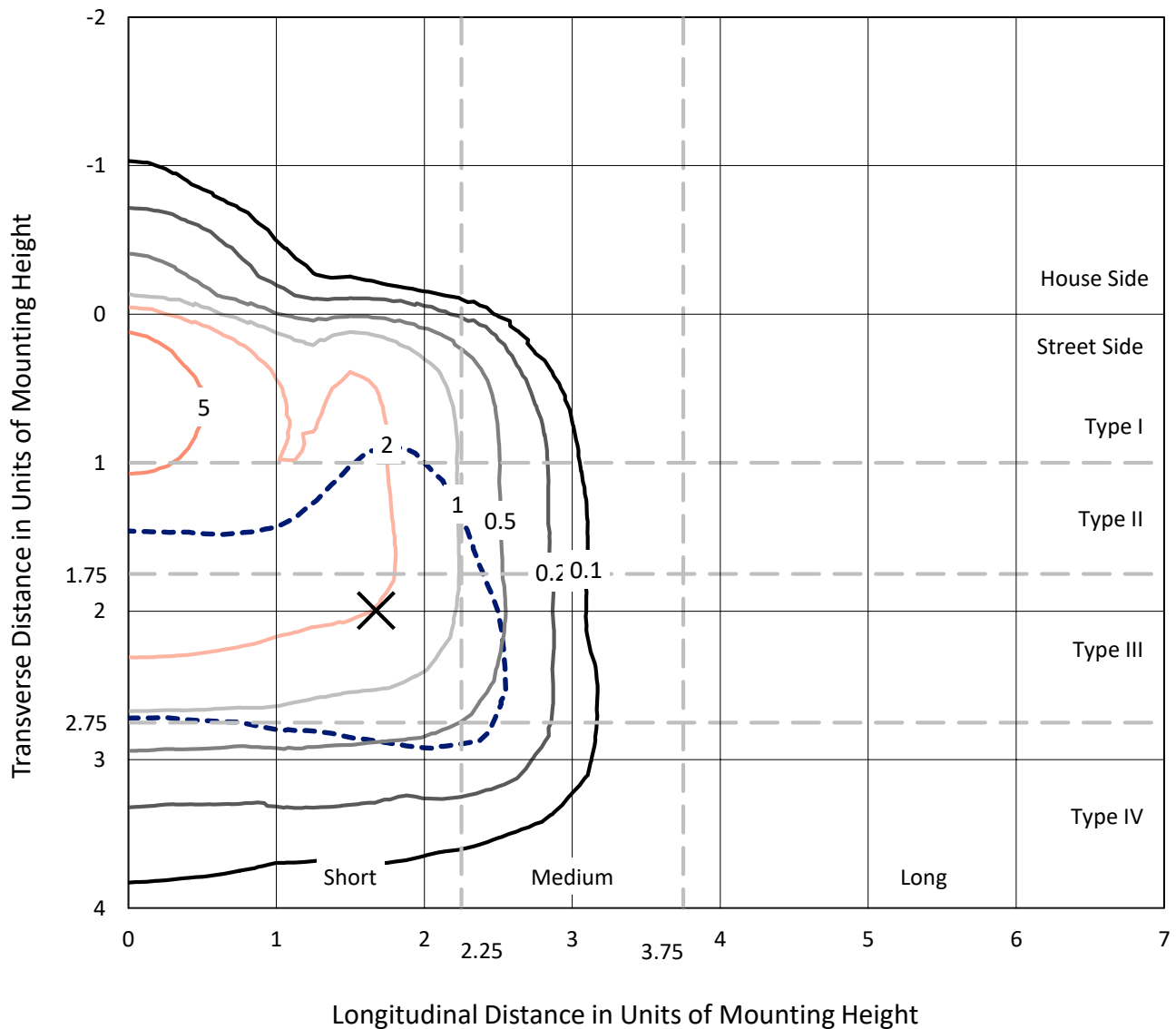


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

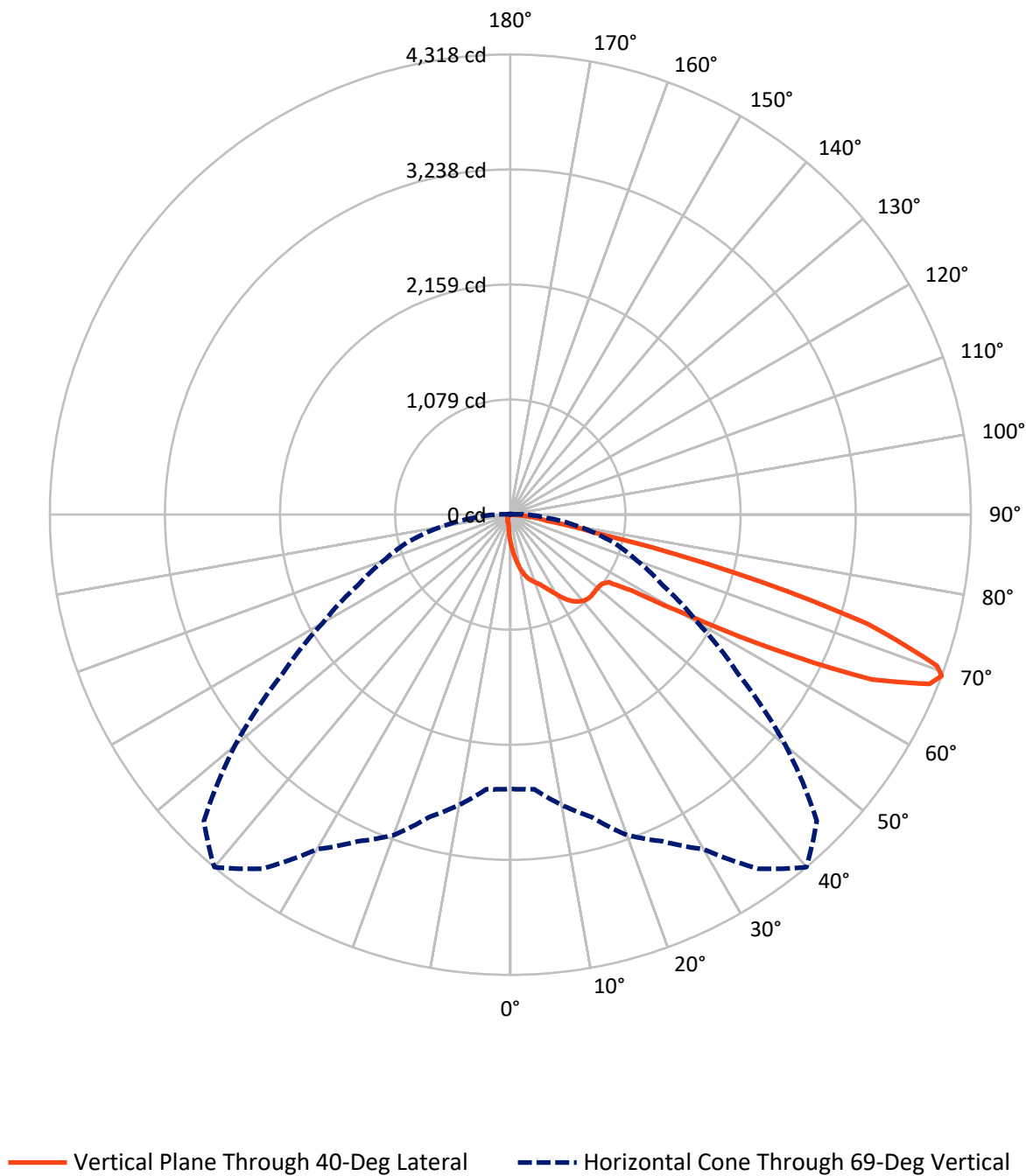


Based on 10 foot mounting height. Maximum calculated value = 7.6 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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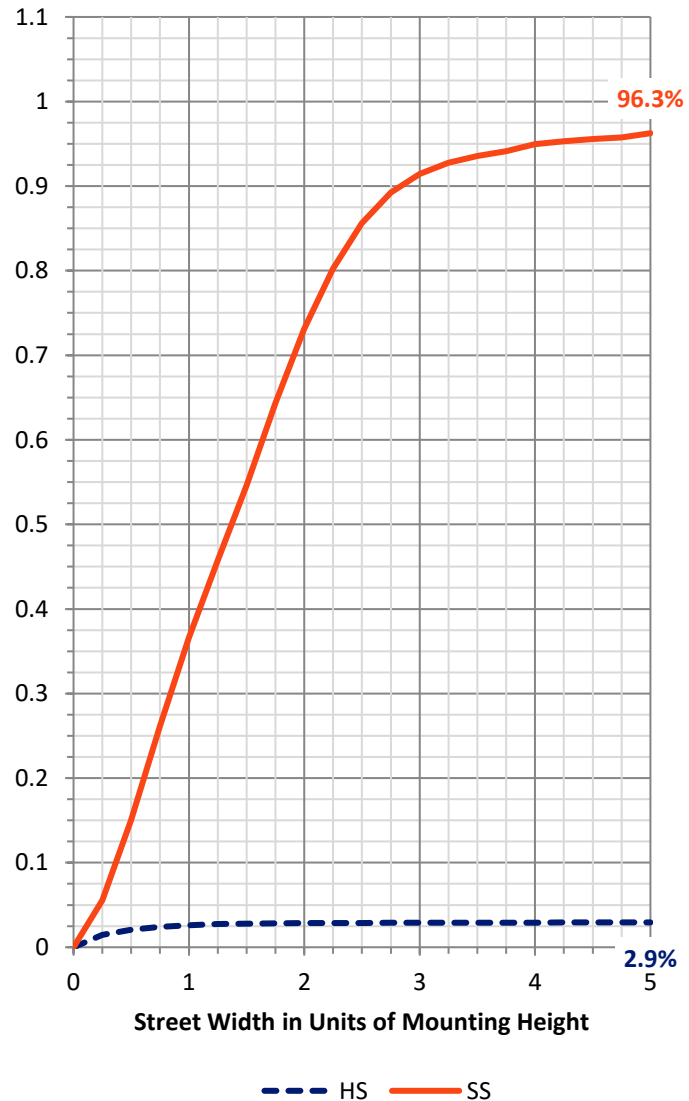
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	101.4	0.0	101.4
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	3304.6	0.0	3304.6
	% Fixture	97.0	0.0	97.0
Total	Lumens	3406.1	0.0	3406.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.4	0.8
10°-20°	91.2	2.7
20°-30°	174.5	5.1
30°-40°	290.1	8.5
40°-50°	392.6	11.5
50°-60°	614.0	18.0
60°-70°	1262.3	37.1
70°-80°	508.0	14.9
80°-90°	47.0	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°	3406.1	100.0
0°-180°	3406.1	100.0

Coefficient of Utilization



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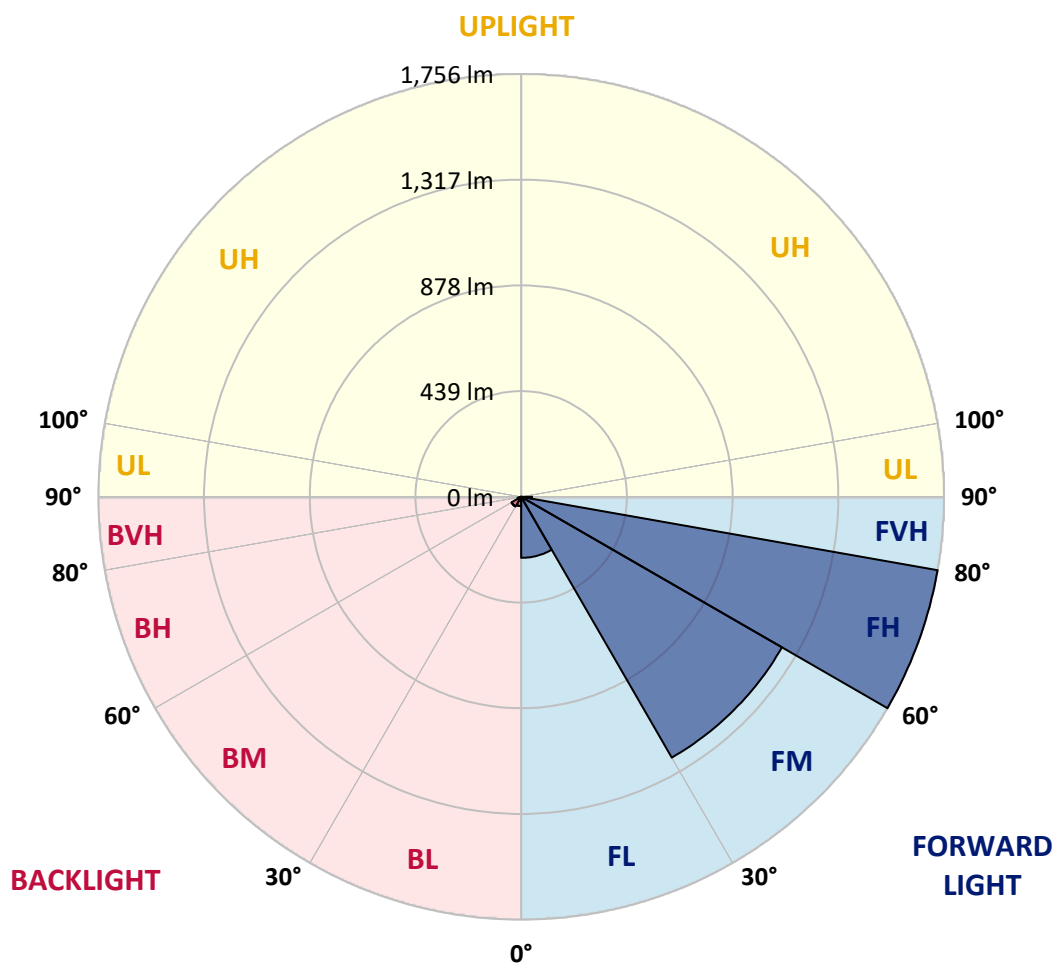
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	253.5	7.4			
FM	(30°-60°)	1250.4	36.7			
FH	(60°-80°)	1755.5	51.5			G1/1800
FVH	(80°-90°)	45.2	1.3			G1/100
BL	(0°-30°)	38.6	1.1	B0/110		
BM	(30°-60°)	46.3	1.4	B0/220		
BH	(60°-80°)	14.8	0.4	B0/110		G0/110
BVH	(80°-90°)	1.8	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°	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2
2.5°	343.1	339.2	334.7	334.7	329.2	329.2	325.9	316.9	315.8	310.8	305.8
5°	438.0	434.6	429.1	424.0	419.6	411.8	406.2	395.6	383.9	372.7	362.7
7.5°	530.6	529.0	518.9	517.2	510.0	497.2	486.0	470.3	450.3	434.6	416.3
10°	616.6	612.7	610.4	600.9	590.3	576.4	559.1	540.1	516.7	492.1	465.9
12.5°	684.7	682.4	672.4	668.5	657.3	643.3	621.6	597.0	573.6	541.8	511.1
15°	735.4	731.5	724.8	718.7	705.3	693.0	672.9	646.1	617.7	583.1	546.2
17.5°	777.8	770.6	768.9	759.4	745.4	730.9	708.6	684.1	650.6	616.0	575.8
20°	834.7	824.7	821.3	807.4	791.2	771.1	745.4	714.8	679.6	641.7	600.4
22.5°	901.7	894.4	887.2	874.9	854.3	825.8	788.4	754.9	710.3	668.5	623.8
25°	996.5	990.4	978.7	961.9	936.2	902.2	857.0	808.0	755.5	701.9	649.4
27.5°	1088.6	1083.0	1074.7	1061.8	1032.8	995.4	939.6	877.1	810.7	746.0	688.0
30°	1175.1	1170.1	1161.7	1148.9	1123.2	1086.4	1023.3	956.3	873.8	798.5	728.7
32.5°	1268.3	1266.6	1257.1	1238.7	1216.4	1166.7	1098.1	1026.1	942.4	855.4	773.9
35°	1373.7	1360.9	1352.0	1333.6	1295.6	1242.6	1162.3	1083.6	995.4	906.1	815.2
37.5°	1463.0	1450.7	1439.6	1416.1	1369.8	1302.3	1211.3	1124.8	1033.9	943.0	850.3
40°	1528.3	1522.1	1508.8	1478.0	1426.2	1345.9	1247.6	1153.3	1061.8	970.3	878.8
42.5°	1576.8	1567.3	1552.3	1520.5	1459.1	1367.6	1262.1	1165.0	1074.7	987.1	897.2
45°	1594.7	1586.9	1572.9	1538.3	1471.9	1373.7	1261.6	1161.7	1075.2	992.0	909.5
47.5°	1584.1	1576.3	1564.0	1531.6	1466.3	1366.4	1251.5	1152.2	1069.6	993.8	920.6
50°	1548.9	1544.5	1535.0	1507.6	1449.1	1352.5	1242.6	1147.2	1068.5	1002.1	936.2
52.5°	1545.6	1542.8	1531.1	1503.7	1444.0	1348.0	1241.5	1150.0	1078.0	1012.7	947.5
55°	1888.7	1849.1	1760.4	1685.1	1561.2	1413.9	1297.8	1195.1	1118.2	1054.6	1008.8
57.5°	2684.4	2625.2	2508.7	2365.3	2080.7	1801.1	1577.4	1415.6	1335.8	1306.7	1324.0
60°	3057.1	3046.5	3028.1	2960.0	2814.4	2573.9	2306.1	2016.5	1900.4	1890.4	1925.5
62.5°	3234.0	3227.3	3232.9	3224.5	3179.3	3109.0	3032.0	2907.0	2792.0	2717.9	2560.5
65°	3315.5	3319.9	3351.7	3376.8	3382.4	3400.8	3457.2	3612.8	3726.7	3535.3	3098.4
67.5°	3108.4	3134.6	3207.8	3299.3	3406.4	3510.2	3677.6	4005.7	4239.4	4014.6	3394.1
69°	2573.3	2586.2	2764.7	2937.1	3198.8	3381.8	3624.5	4054.7	4317.6	4063.7	3370.7
70°	2026.0	2037.7	2229.1	2463.4	2905.9	3141.4	3458.8	3971.6	4244.5	3998.4	3250.1
72.5°	914.0	897.2	964.7	1090.3	1571.2	1945.1	2500.3	3217.8	3501.8	3203.3	2431.6
75°	638.3	631.1	638.3	638.9	713.6	920.6	1161.7	1744.2	2157.1	1861.4	1161.7
77.5°	494.3	489.4	484.3	478.7	487.7	546.2	569.7	618.8	803.5	760.0	443.0
80°	391.1	386.7	398.9	395.0	395.0	401.8	397.3	378.8	344.3	319.1	285.7
82.5°	181.9	183.0	183.0	198.6	239.4	279.5	292.4	274.0	243.3	207.0	166.9
85°	17.3	19.5	32.9	50.8	101.0	113.8	114.4	94.9	94.9	74.8	60.2
87.5°	0.0	0.5	0.5	0.5	5.0	14.0	11.7	3.4	1.7	1.7	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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2
2.5°	296.8	295.1	288.5	281.8	275.6	268.9	262.8	256.7	250.0	244.9	238.8
5°	347.0	334.7	320.8	307.4	294.1	280.1	265.6	252.8	239.4	227.1	215.3
7.5°	397.8	373.9	354.8	330.8	309.1	287.3	267.2	246.7	227.6	209.8	193.1
10°	440.8	411.8	382.2	351.5	320.3	291.2	263.4	238.8	213.7	191.9	171.3
12.5°	476.0	439.1	402.8	364.3	329.2	292.4	257.8	228.2	198.6	174.1	152.9
15°	507.7	465.4	421.8	377.2	332.6	290.7	252.2	215.3	185.2	157.4	133.4
17.5°	533.4	484.9	435.8	385.6	337.6	288.5	244.9	206.5	171.3	142.3	118.9
20°	555.7	505.0	452.0	395.6	340.9	287.9	238.8	195.3	159.0	128.3	105.4
22.5°	576.4	525.6	468.7	408.4	346.0	287.3	233.2	187.0	148.4	117.7	94.9
25°	599.8	546.2	486.5	421.8	354.8	289.6	229.9	180.2	138.9	107.7	86.5
27.5°	626.0	569.7	507.7	438.5	366.6	294.1	228.8	173.0	130.6	98.2	79.8
30°	662.9	597.6	529.0	455.3	377.2	299.1	227.6	168.5	122.2	91.0	73.1
32.5°	695.2	625.0	552.4	472.6	388.9	304.1	227.1	162.4	114.4	83.7	68.1
35°	729.2	650.0	572.5	489.4	398.9	309.7	226.6	157.9	107.2	76.4	63.1
37.5°	758.8	671.2	588.1	503.8	410.1	314.7	227.1	154.0	100.4	70.3	58.6
40°	784.0	693.0	605.4	517.2	421.8	322.5	227.6	150.1	93.8	64.7	54.7
42.5°	806.3	713.6	623.8	532.3	435.2	331.4	231.0	146.8	88.1	59.7	50.8
45°	823.6	732.6	643.9	553.5	457.0	346.0	237.1	144.5	82.6	55.2	47.5
47.5°	841.4	760.5	677.9	587.0	488.8	368.8	247.7	143.9	78.1	51.9	44.6
50°	866.0	788.4	708.1	621.0	517.8	392.3	260.6	144.5	72.5	48.5	41.8
52.5°	883.9	816.8	747.1	680.2	587.0	463.7	310.3	154.6	69.7	45.7	38.5
55°	989.3	977.6	979.2	990.4	918.4	788.9	518.9	223.2	82.0	51.9	37.9
57.5°	1394.9	1436.2	1460.2	1459.6	1340.8	1112.0	696.9	286.8	91.5	60.2	45.2
60°	1928.3	1897.1	1853.0	1744.2	1586.3	1269.4	779.5	308.6	79.2	48.0	41.3
62.5°	2399.8	2216.8	2054.4	1878.1	1671.1	1324.0	796.2	306.9	69.2	36.2	29.0
65°	2693.9	2364.7	2102.5	1881.5	1637.6	1278.3	753.2	281.8	58.6	29.6	24.0
67.5°	2764.2	2284.9	1913.8	1632.1	1368.1	994.9	553.0	212.0	45.7	24.5	21.2
69°	2610.7	2031.0	1585.7	1266.1	995.4	660.1	342.1	133.9	35.2	22.3	19.5
70°	2401.5	1766.5	1291.7	1016.0	737.1	463.7	239.4	94.3	28.4	20.6	17.9
72.5°	1545.1	927.9	635.0	441.9	304.1	184.7	93.8	42.4	21.8	17.3	14.5
75°	599.3	343.1	248.9	189.1	147.8	102.7	56.9	27.4	18.4	14.5	11.2
77.5°	295.1	226.0	184.7	126.7	73.7	45.7	30.7	21.2	15.1	10.6	7.3
80°	233.2	155.1	92.6	57.5	43.5	32.9	23.5	17.3	11.2	6.7	5.0
82.5°	119.4	65.3	48.0	39.1	32.3	25.7	19.0	12.2	7.3	4.5	3.9
85°	37.4	27.4	24.5	24.0	22.3	18.4	13.4	7.8	4.5	2.8	2.8
87.5°	2.8	3.9	5.0	3.9	4.5	3.9	5.0	3.4	2.2	2.2	1.7
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2	257.2
2.5°	234.4	227.6	221.5	217.6	210.4	207.5	204.8	203.7	198.6	199.7	195.3
5°	204.8	193.1	184.1	175.2	166.9	160.7	155.6	149.5	144.5	142.3	137.8
7.5°	178.0	163.0	151.2	141.7	131.6	123.9	117.2	112.7	108.2	103.8	101.5
10°	154.6	138.4	125.0	115.5	106.0	99.3	94.3	91.0	88.1	86.5	85.9
12.5°	132.8	117.2	104.9	96.5	89.3	85.9	83.7	82.0	81.5	80.9	80.9
15°	116.0	100.4	91.0	84.8	81.5	79.8	79.2	78.1	77.0	76.4	76.4
17.5°	100.4	88.7	82.0	78.7	77.0	75.9	74.8	73.7	72.5	71.9	71.9
20°	89.8	80.3	77.0	74.8	73.1	71.9	70.3	69.2	68.6	68.1	67.5
22.5°	81.5	75.3	73.1	71.4	69.2	67.5	66.4	65.3	64.2	63.6	63.1
25°	75.3	71.4	69.7	67.5	65.3	63.6	61.9	60.2	59.2	58.6	57.5
27.5°	70.9	68.1	65.8	63.1	60.8	59.2	57.5	55.8	54.7	53.6	53.0
30°	67.0	64.2	61.4	59.2	56.3	54.7	52.4	50.8	50.2	49.1	48.0
32.5°	63.1	60.2	57.5	54.7	51.9	49.7	48.5	46.3	45.2	44.6	43.5
35°	58.6	55.8	52.4	50.2	47.5	45.2	43.5	41.8	40.7	39.6	39.1
37.5°	54.7	51.4	48.0	45.2	43.0	40.7	39.1	37.4	36.2	35.2	34.6
40°	50.2	46.9	43.5	40.7	38.5	36.8	35.2	33.5	32.3	31.8	31.8
42.5°	46.3	42.4	39.1	36.8	35.2	32.9	31.3	29.6	29.0	28.4	29.0
45°	42.4	38.5	35.7	33.5	31.8	29.6	27.9	26.8	26.2	26.8	27.4
47.5°	39.1	35.2	32.3	30.7	29.0	27.4	25.7	24.5	24.5	25.7	26.8
50°	35.7	31.8	29.6	28.4	26.8	25.1	22.9	22.3	22.9	24.0	25.1
52.5°	32.3	27.9	26.2	25.7	24.0	22.3	20.6	20.1	20.6	21.8	21.2
55°	29.0	24.5	24.0	23.5	21.8	19.5	17.9	17.9	17.9	17.3	16.2
57.5°	27.9	21.8	21.2	20.6	19.0	16.7	15.6	14.5	14.0	12.2	11.7
60°	29.0	19.5	19.5	18.4	16.7	14.5	12.8	11.2	10.0	8.9	8.9
62.5°	23.5	17.9	17.3	16.2	14.0	11.7	10.0	8.3	7.8	7.3	7.3
65°	19.0	16.2	15.1	13.4	11.7	9.5	7.8	6.7	6.1	6.1	6.7
67.5°	17.3	14.5	12.8	11.2	9.5	7.3	6.1	5.6	5.6	6.1	6.1
69°	16.2	13.4	11.7	10.0	8.3	6.7	5.6	5.6	5.6	5.6	6.1
70°	15.1	12.8	11.2	9.5	7.3	5.6	5.0	5.0	5.6	5.6	6.1
72.5°	11.7	10.0	9.5	7.8	5.6	5.0	4.5	5.0	5.0	5.6	5.6
75°	8.9	7.3	7.3	6.1	4.5	3.9	3.9	4.5	4.5	5.0	5.0
77.5°	6.1	5.0	5.0	4.5	3.9	3.4	3.4	3.9	4.5	4.5	5.0
80°	4.5	3.9	3.4	3.9	3.4	2.8	3.4	3.9	3.9	4.5	4.5
82.5°	3.4	3.4	3.4	3.4	2.8	2.8	3.4	3.4	3.9	4.5	4.5
85°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	3.4	3.4	3.9	3.9
87.5°	1.7	1.7	1.7	2.2	2.2	2.8	2.8	2.8	2.8	3.4	3.4
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):

	165°	170°	175°	180°
0°	257.2	257.2	257.2	257.2
2.5°	194.2	193.6	191.4	191.9
5°	136.1	132.8	135.0	134.5
7.5°	99.9	99.3	98.8	99.9
10°	85.4	85.4	84.8	85.4
12.5°	80.3	80.3	80.3	80.3
15°	76.4	76.4	75.9	75.9
17.5°	71.9	71.9	71.9	71.4
20°	67.5	67.0	67.0	67.0
22.5°	62.5	61.9	61.9	61.9
25°	57.5	56.9	56.9	56.9
27.5°	52.4	51.9	51.4	51.4
30°	47.5	46.9	46.3	46.3
32.5°	42.4	41.8	41.3	41.3
35°	37.9	37.9	37.4	36.8
37.5°	34.1	34.1	34.1	34.1
40°	31.3	31.8	31.8	31.8
42.5°	29.6	30.1	30.7	31.3
45°	28.4	29.6	30.1	30.1
47.5°	27.9	28.4	29.0	29.0
50°	25.7	25.1	25.1	25.1
52.5°	20.6	19.5	19.0	18.4
55°	15.1	14.5	13.4	13.4
57.5°	10.6	10.6	10.0	10.0
60°	8.3	8.3	7.8	8.3
62.5°	7.3	7.3	7.3	7.3
65°	6.7	6.7	6.7	6.7
67.5°	6.7	6.7	6.7	6.7
69°	6.1	6.1	6.1	6.1
70°	6.1	6.1	6.1	6.1
72.5°	5.6	5.6	5.6	5.6
75°	5.0	5.6	5.6	5.6
77.5°	5.0	5.0	5.0	5.0
80°	4.5	4.5	5.0	5.0
82.5°	4.5	4.5	4.5	4.5
85°	3.9	3.9	4.5	4.5
87.5°	3.4	3.4	3.9	3.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)