

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: P165462

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165462
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
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3319.4 lumens
Efficiency: N/A
Efficacy: 60.4 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

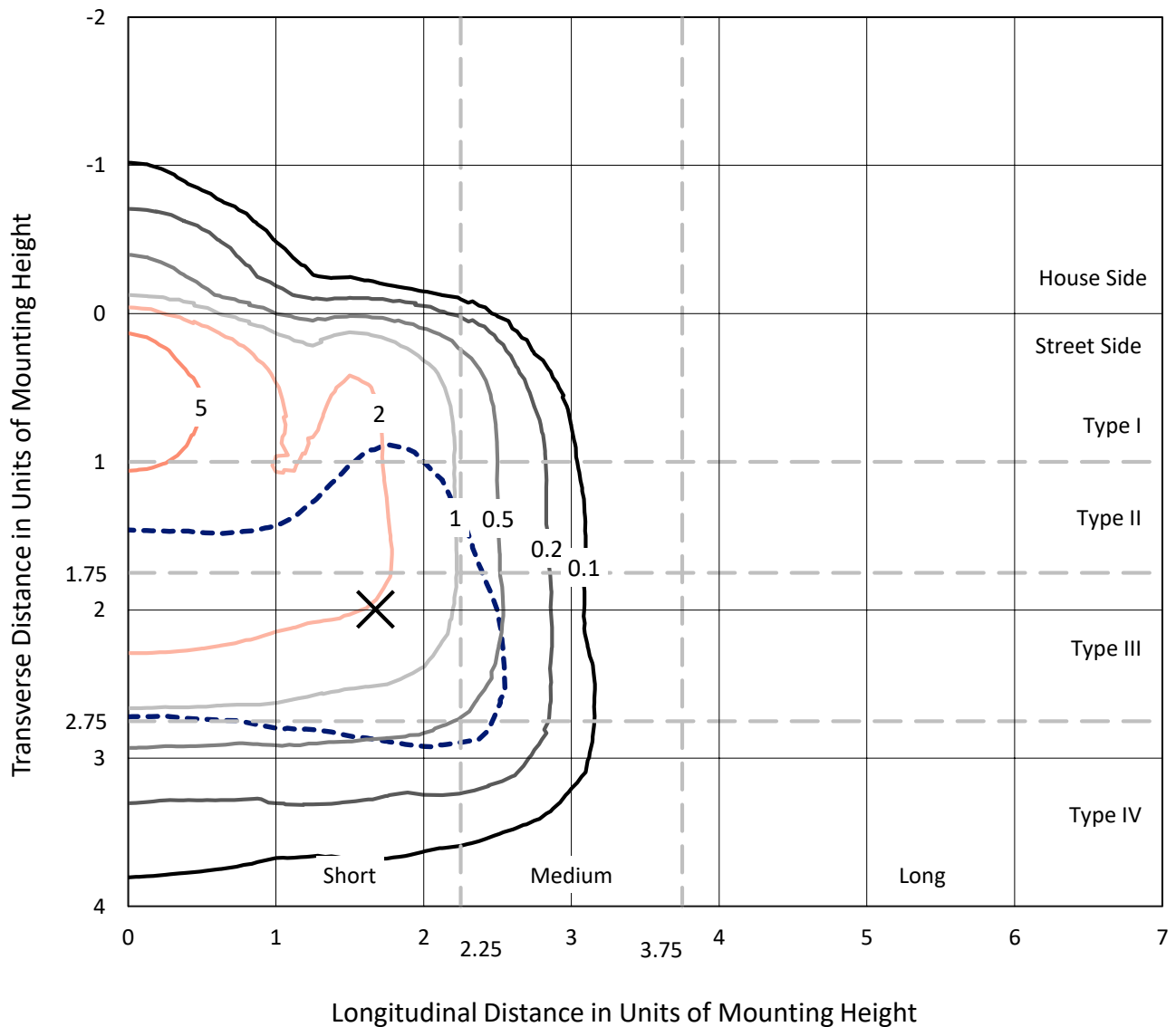


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

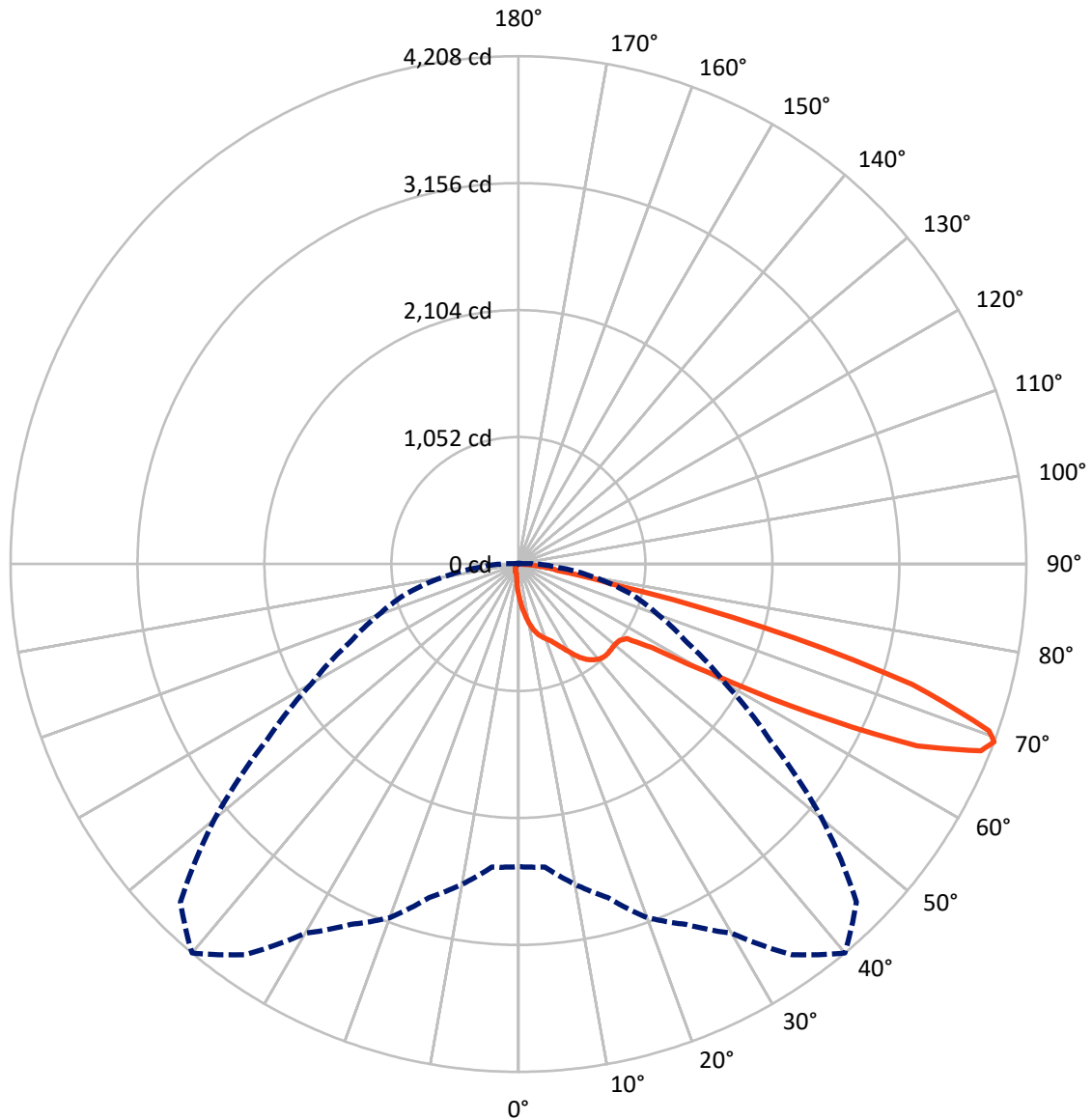


Based on 10 foot mounting height. Maximum calculated value = 7.4 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 40-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical



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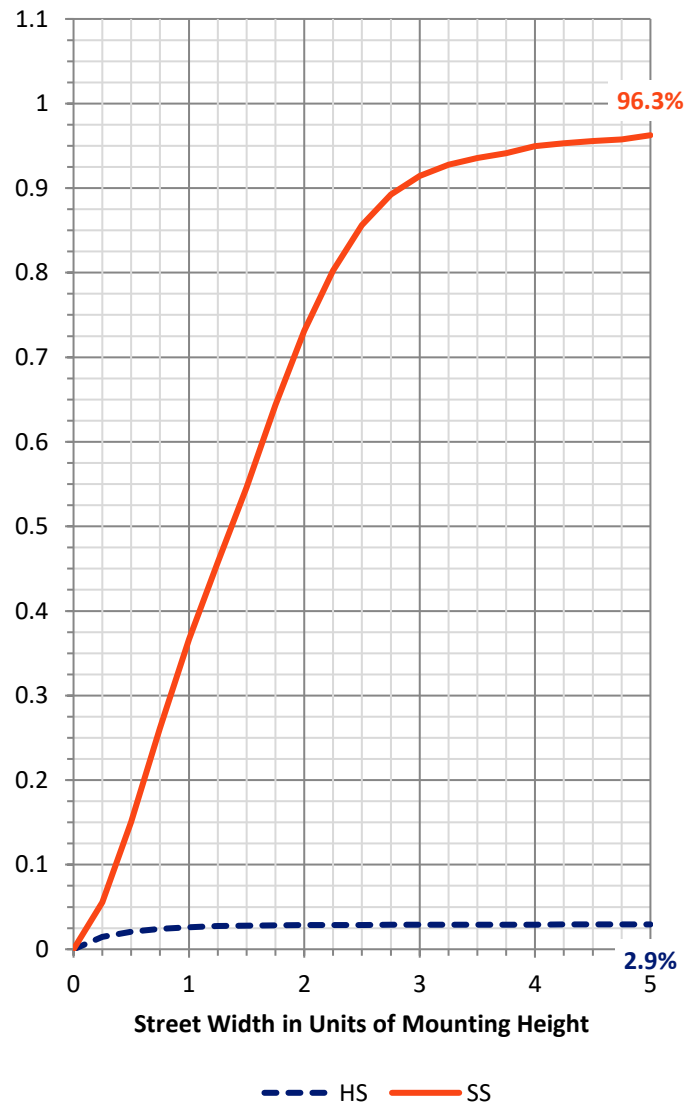
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	98.9	0.0	98.9
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	3220.6	0.0	3220.6
	% Fixture	97.0	0.0	97.0
Total	Lumens	3319.4	0.0	3319.4
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	25.8	0.8
10°-20°	88.8	2.7
20°-30°	170.0	5.1
30°-40°	282.8	8.5
40°-50°	382.6	11.5
50°-60°	598.4	18.0
60°-70°	1230.2	37.1
70°-80°	495.0	14.9
80°-90°	45.8	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°	3319.4	100.0
0°-180°	3319.4	100.0



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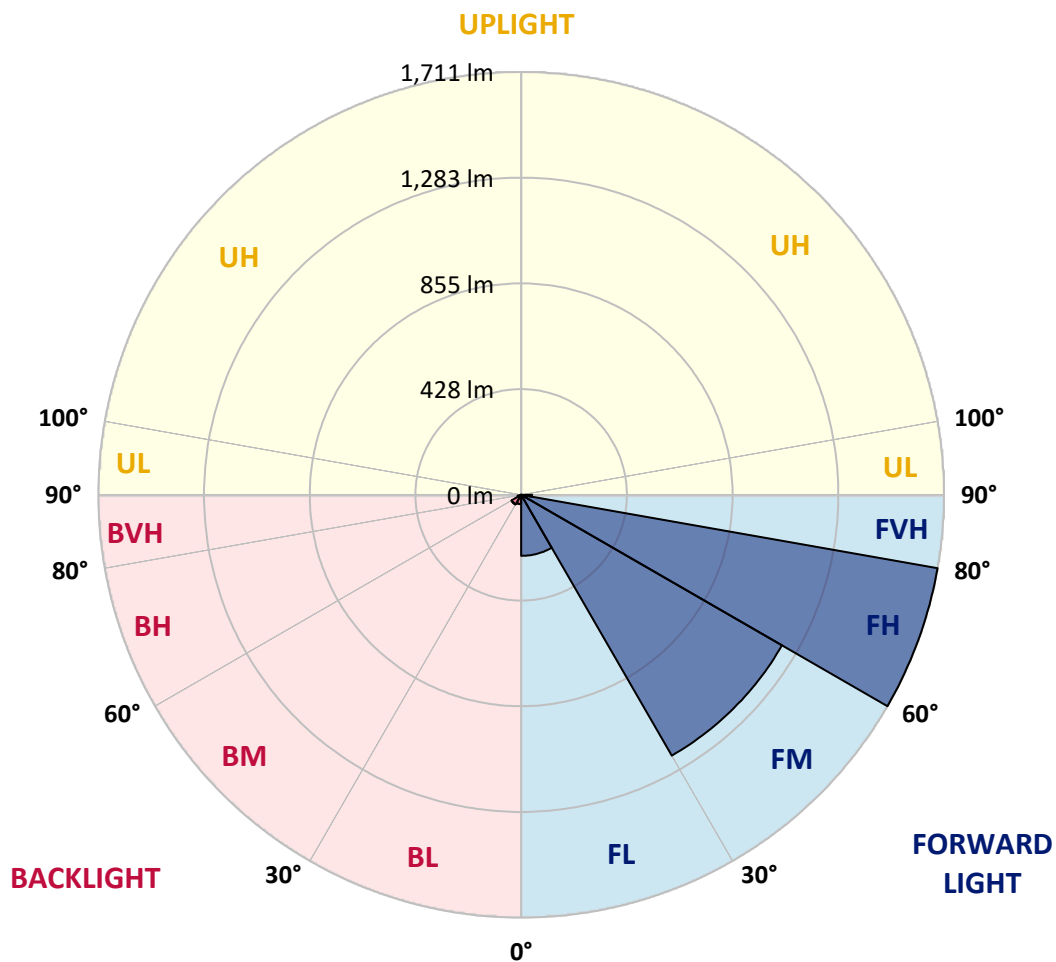
CATALOG NUMBER: VST-F02-LED-E-U-SL4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	247.0	7.4			
FM	(30°-60°)	1218.6	36.7			
FH	(60°-80°)	1710.8	51.5			G1/1800
FVH	(80°-90°)	44.1	1.3			G1/100
BL	(0°-30°)	37.6	1.1	B0/110		
BM	(30°-60°)	45.1	1.4	B0/220		
BH	(60°-80°)	14.4	0.4	B0/110		G0/110
BVH	(80°-90°)	1.7	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°	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7
2.5°	334.4	330.6	326.2	326.2	320.8	320.8	317.6	308.9	307.8	302.9	298.0
5°	426.8	423.6	418.2	413.3	409.0	401.3	395.9	385.5	374.1	363.2	353.5
7.5°	517.1	515.5	505.7	504.1	497.0	484.5	473.6	458.4	438.8	423.6	405.7
10°	600.9	597.1	594.9	585.6	575.3	561.7	544.9	526.4	503.5	479.6	454.0
12.5°	667.2	665.0	655.3	651.4	640.6	626.9	605.8	581.8	559.0	528.0	498.1
15°	716.7	712.9	706.4	700.4	687.4	675.4	655.8	629.7	602.0	568.3	532.4
17.5°	758.0	751.0	749.3	740.0	726.5	712.3	690.6	666.7	634.0	600.3	561.2
20°	813.5	803.7	800.4	786.8	771.1	751.5	726.5	696.6	662.3	625.4	585.1
22.5°	878.7	871.7	864.6	852.7	832.5	804.8	768.4	735.7	692.2	651.4	607.9
25°	971.2	965.2	953.8	937.4	912.4	879.3	835.3	787.4	736.3	684.1	632.9
27.5°	1060.9	1055.5	1047.3	1034.8	1006.5	970.1	915.7	854.8	790.1	727.0	670.4
30°	1145.2	1140.3	1132.1	1119.7	1094.6	1058.7	997.3	932.0	851.5	778.1	710.2
32.5°	1236.0	1234.4	1225.1	1207.2	1185.4	1137.1	1070.2	1000.0	918.4	833.6	754.2
35°	1338.8	1326.2	1317.6	1299.6	1262.6	1211.0	1132.7	1056.0	970.1	883.1	794.5
37.5°	1425.8	1413.8	1402.9	1380.1	1335.0	1269.2	1180.6	1096.3	1007.6	919.0	828.7
40°	1489.4	1483.4	1470.4	1440.4	1389.9	1311.6	1215.8	1124.0	1034.8	945.6	856.4
42.5°	1536.7	1527.5	1512.8	1481.8	1422.0	1332.8	1230.0	1135.4	1047.3	961.9	874.4
45°	1554.1	1546.5	1532.9	1499.2	1434.5	1338.8	1229.5	1132.1	1047.8	966.8	886.3
47.5°	1543.7	1536.2	1524.2	1492.6	1429.0	1331.7	1219.7	1122.9	1042.4	968.5	897.2
50°	1509.5	1505.2	1495.9	1469.3	1412.2	1318.1	1211.0	1118.0	1041.3	976.6	912.4
52.5°	1506.2	1503.5	1492.1	1465.5	1407.3	1313.8	1209.9	1120.7	1050.5	986.9	923.3
55°	1840.7	1802.0	1715.6	1642.2	1521.5	1378.0	1264.8	1164.7	1089.7	1027.7	983.2
57.5°	2616.1	2558.5	2444.8	2305.1	2027.7	1755.3	1537.3	1379.6	1301.8	1273.5	1290.4
60°	2979.3	2969.0	2951.0	2884.7	2742.8	2508.4	2247.4	1965.2	1852.1	1842.3	1876.6
62.5°	3151.7	3145.2	3150.7	3142.5	3098.4	3029.9	2954.9	2833.1	2721.0	2648.7	2495.3
65°	3231.1	3235.4	3266.5	3290.9	3296.3	3314.3	3369.2	3520.9	3631.9	3445.3	3019.6
67.5°	3029.3	3054.9	3126.2	3215.3	3319.7	3420.9	3584.0	3903.7	4131.6	3912.5	3307.8
69°	2507.9	2520.4	2694.4	2862.4	3117.4	3295.8	3532.4	3951.6	4207.7	3960.3	3284.9
70°	1974.4	1985.8	2172.4	2400.8	2832.0	3061.4	3370.9	3870.6	4136.5	3896.7	3167.5
72.5°	890.7	874.4	940.2	1062.5	1531.3	1895.6	2436.7	3136.0	3412.7	3121.8	2369.8
75°	622.1	615.0	622.1	622.6	695.5	897.2	1132.1	1699.8	2102.2	1814.0	1132.1
77.5°	481.8	476.9	472.0	466.6	475.3	532.4	555.2	603.0	783.0	740.6	431.8
80°	381.2	376.9	388.8	385.0	385.0	391.5	387.2	369.2	335.5	311.0	278.4
82.5°	177.2	178.3	178.3	193.6	233.3	272.4	284.9	267.0	237.1	201.7	162.6
85°	16.9	19.0	32.1	49.5	98.5	110.9	111.5	92.4	92.4	72.9	58.7
87.5°	0.0	0.5	0.5	0.5	4.9	13.6	11.4	3.2	1.6	1.6	2.7
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7
2.5°	289.3	287.6	281.2	274.6	268.6	262.1	256.1	250.1	243.6	238.7	232.7
5°	338.2	326.2	312.7	299.6	286.6	273.0	258.8	246.4	233.3	221.3	209.9
7.5°	387.7	364.3	345.8	322.4	301.3	280.1	260.5	240.4	221.9	204.5	188.2
10°	429.6	401.3	372.5	342.6	312.1	283.9	256.7	232.7	208.3	187.1	167.0
12.5°	463.9	428.0	392.6	355.1	320.8	284.9	251.2	222.4	193.6	169.7	149.0
15°	494.8	453.5	411.1	367.6	324.1	283.3	245.8	209.9	180.5	153.4	130.0
17.5°	519.8	472.6	424.7	375.7	329.0	281.2	238.7	201.2	167.0	138.7	115.9
20°	541.6	492.1	440.5	385.5	332.3	280.6	232.7	190.3	155.0	125.1	102.8
22.5°	561.7	512.2	456.8	398.0	337.1	280.1	227.3	182.2	144.7	114.7	92.4
25°	584.6	532.4	474.2	411.1	345.8	282.2	224.0	175.6	135.4	104.9	84.2
27.5°	610.1	555.2	494.8	427.4	357.2	286.6	223.0	168.6	127.2	95.7	77.8
30°	646.0	582.4	515.5	443.7	367.6	291.5	221.9	164.2	119.1	88.6	71.2
32.5°	677.6	609.1	538.3	460.6	379.0	296.3	221.3	158.2	111.5	81.5	66.4
35°	710.7	633.5	557.9	476.9	388.8	301.8	220.8	153.9	104.4	74.5	61.4
37.5°	739.6	654.1	573.1	491.0	399.7	306.7	221.3	150.1	97.9	68.5	57.1
40°	764.0	675.4	590.0	504.1	411.1	314.3	221.9	146.3	91.4	63.1	53.3
42.5°	785.8	695.5	607.9	518.8	424.1	323.0	225.1	143.0	85.9	58.2	49.5
45°	802.6	714.0	627.5	539.5	445.4	337.1	231.1	140.8	80.5	53.8	46.2
47.5°	820.0	741.2	660.7	572.0	476.3	359.5	241.4	140.3	76.1	50.6	43.5
50°	844.0	768.4	690.1	605.2	504.6	382.3	253.9	140.8	70.7	47.3	40.8
52.5°	861.4	796.1	728.1	662.9	572.0	451.9	302.3	150.6	68.0	44.6	37.5
55°	964.1	952.7	954.3	965.2	895.1	768.9	505.7	217.5	79.9	50.6	37.0
57.5°	1359.4	1399.7	1423.0	1422.5	1306.7	1083.7	679.2	279.5	89.2	58.7	44.0
60°	1879.3	1848.8	1805.9	1699.8	1546.0	1237.1	759.7	300.7	77.2	46.7	40.3
62.5°	2338.8	2160.4	2002.1	1830.4	1628.6	1290.4	776.0	299.1	67.4	35.3	28.3
65°	2625.4	2304.5	2048.9	1833.6	1596.0	1245.8	734.1	274.6	57.1	28.8	23.4
67.5°	2693.9	2226.7	1865.2	1590.5	1333.3	969.5	538.9	206.6	44.6	23.9	20.7
69°	2544.3	1979.3	1545.4	1233.8	970.1	643.3	333.4	130.5	34.3	21.8	19.0
70°	2340.4	1721.6	1258.8	990.2	718.3	451.9	233.3	91.9	27.7	20.1	17.4
72.5°	1505.7	904.3	618.8	430.7	296.3	180.0	91.4	41.3	21.2	16.9	14.2
75°	584.0	334.4	242.5	184.3	144.1	100.1	55.5	26.6	17.9	14.2	10.9
77.5°	287.6	220.2	180.0	123.4	71.8	44.6	29.9	20.7	14.7	10.3	7.1
80°	227.3	151.2	90.3	56.0	42.4	32.1	22.9	16.9	10.9	6.5	4.9
82.5°	116.3	63.7	46.7	38.1	31.6	25.0	18.5	11.9	7.1	4.4	3.8
85°	36.4	26.6	23.9	23.4	21.8	17.9	13.0	7.6	4.4	2.7	2.7
87.5°	2.7	3.8	4.9	3.8	4.4	3.8	4.9	3.2	2.2	2.2	1.6
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°	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7	250.7
2.5°	228.4	221.9	215.9	212.0	205.0	202.3	199.6	198.5	193.6	194.6	190.3
5°	199.6	188.2	179.5	170.8	162.6	156.6	151.7	145.7	140.8	138.7	134.3
7.5°	173.5	158.8	147.4	138.1	128.3	120.7	114.2	109.8	105.5	101.2	98.9
10°	150.6	134.9	121.8	112.6	103.3	96.8	91.9	88.6	85.9	84.2	83.8
12.5°	129.4	114.2	102.2	94.1	87.0	83.8	81.5	79.9	79.4	78.8	78.8
15°	113.1	97.9	88.6	82.7	79.4	77.8	77.2	76.1	75.1	74.5	74.5
17.5°	97.9	86.5	79.9	76.7	75.1	74.0	72.9	71.8	70.7	70.1	70.1
20°	87.5	78.3	75.1	72.9	71.2	70.1	68.5	67.4	66.9	66.4	65.8
22.5°	79.4	73.4	71.2	69.6	67.4	65.8	64.7	63.7	62.5	62.0	61.4
25°	73.4	69.6	68.0	65.8	63.7	62.0	60.4	58.7	57.7	57.1	56.0
27.5°	69.1	66.4	64.1	61.4	59.3	57.7	56.0	54.4	53.3	52.2	51.7
30°	65.2	62.5	59.8	57.7	54.9	53.3	51.1	49.5	49.0	47.8	46.7
32.5°	61.4	58.7	56.0	53.3	50.6	48.4	47.3	45.1	44.0	43.5	42.4
35°	57.1	54.4	51.1	49.0	46.2	44.0	42.4	40.8	39.7	38.6	38.1
37.5°	53.3	50.0	46.7	44.0	41.9	39.7	38.1	36.4	35.3	34.3	33.7
40°	49.0	45.7	42.4	39.7	37.5	35.9	34.3	32.6	31.6	31.0	31.0
42.5°	45.1	41.3	38.1	35.9	34.3	32.1	30.4	28.8	28.3	27.7	28.3
45°	41.3	37.5	34.8	32.6	31.0	28.8	27.2	26.1	25.6	26.1	26.6
47.5°	38.1	34.3	31.6	29.9	28.3	26.6	25.0	23.9	23.9	25.0	26.1
50°	34.8	31.0	28.8	27.7	26.1	24.5	22.3	21.8	22.3	23.4	24.5
52.5°	31.6	27.2	25.6	25.0	23.4	21.8	20.1	19.6	20.1	21.2	20.7
55°	28.3	23.9	23.4	22.9	21.2	19.0	17.4	17.4	17.4	16.9	15.8
57.5°	27.2	21.2	20.7	20.1	18.5	16.3	15.2	14.2	13.6	11.9	11.4
60°	28.3	19.0	19.0	17.9	16.3	14.2	12.5	10.9	9.8	8.7	8.7
62.5°	22.9	17.4	16.9	15.8	13.6	11.4	9.8	8.2	7.6	7.1	7.1
65°	18.5	15.8	14.7	13.0	11.4	9.2	7.6	6.5	6.0	6.0	6.5
67.5°	16.9	14.2	12.5	10.9	9.2	7.1	6.0	5.5	5.5	6.0	6.0
69°	15.8	13.0	11.4	9.8	8.2	6.5	5.5	5.5	5.5	5.5	6.0
70°	14.7	12.5	10.9	9.2	7.1	5.5	4.9	4.9	5.5	5.5	6.0
72.5°	11.4	9.8	9.2	7.6	5.5	4.9	4.4	4.9	4.9	5.5	5.5
75°	8.7	7.1	7.1	6.0	4.4	3.8	3.8	4.4	4.4	4.9	4.9
77.5°	6.0	4.9	4.9	4.4	3.8	3.2	3.2	3.8	4.4	4.4	4.9
80°	4.4	3.8	3.2	3.8	3.2	2.7	3.2	3.8	3.8	4.4	4.4
82.5°	3.2	3.2	3.2	3.2	2.7	2.7	3.2	3.2	3.8	4.4	4.4
85°	2.7	2.7	2.7	2.7	2.7	2.7	2.7	3.2	3.2	3.8	3.8
87.5°	1.6	1.6	1.6	2.2	2.2	2.7	2.7	2.7	2.7	3.2	3.2
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°	250.7	250.7	250.7	250.7
2.5°	189.2	188.7	186.5	187.1
5°	132.7	129.4	131.6	131.0
7.5°	97.3	96.8	96.2	97.3
10°	83.2	83.2	82.7	83.2
12.5°	78.3	78.3	78.3	78.3
15°	74.5	74.5	74.0	74.0
17.5°	70.1	70.1	70.1	69.6
20°	65.8	65.2	65.2	65.2
22.5°	60.9	60.4	60.4	60.4
25°	56.0	55.5	55.5	55.5
27.5°	51.1	50.6	50.0	50.0
30°	46.2	45.7	45.1	45.1
32.5°	41.3	40.8	40.3	40.3
35°	37.0	37.0	36.4	35.9
37.5°	33.2	33.2	33.2	33.2
40°	30.4	31.0	31.0	31.0
42.5°	28.8	29.3	29.9	30.4
45°	27.7	28.8	29.3	29.3
47.5°	27.2	27.7	28.3	28.3
50°	25.0	24.5	24.5	24.5
52.5°	20.1	19.0	18.5	17.9
55°	14.7	14.2	13.0	13.0
57.5°	10.3	10.3	9.8	9.8
60°	8.2	8.2	7.6	8.2
62.5°	7.1	7.1	7.1	7.1
65°	6.5	6.5	6.5	6.5
67.5°	6.5	6.5	6.5	6.5
69°	6.0	6.0	6.0	6.0
70°	6.0	6.0	6.0	6.0
72.5°	5.5	5.5	5.5	5.5
75°	4.9	5.5	5.5	5.5
77.5°	4.9	4.9	4.9	4.9
80°	4.4	4.4	4.9	4.9
82.5°	4.4	4.4	4.4	4.4
85°	3.8	3.8	4.4	4.4
87.5°	3.2	3.2	3.8	3.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)