

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: P165481

Luminaire Tested: **VST-F04-LED-E-U-SL4-HSS-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165481
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-F04-LED-E-U-SL4-HSS-7030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (28) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6063.6 lumens
Efficiency: N/A
Efficacy: 59.3 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 102.2
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

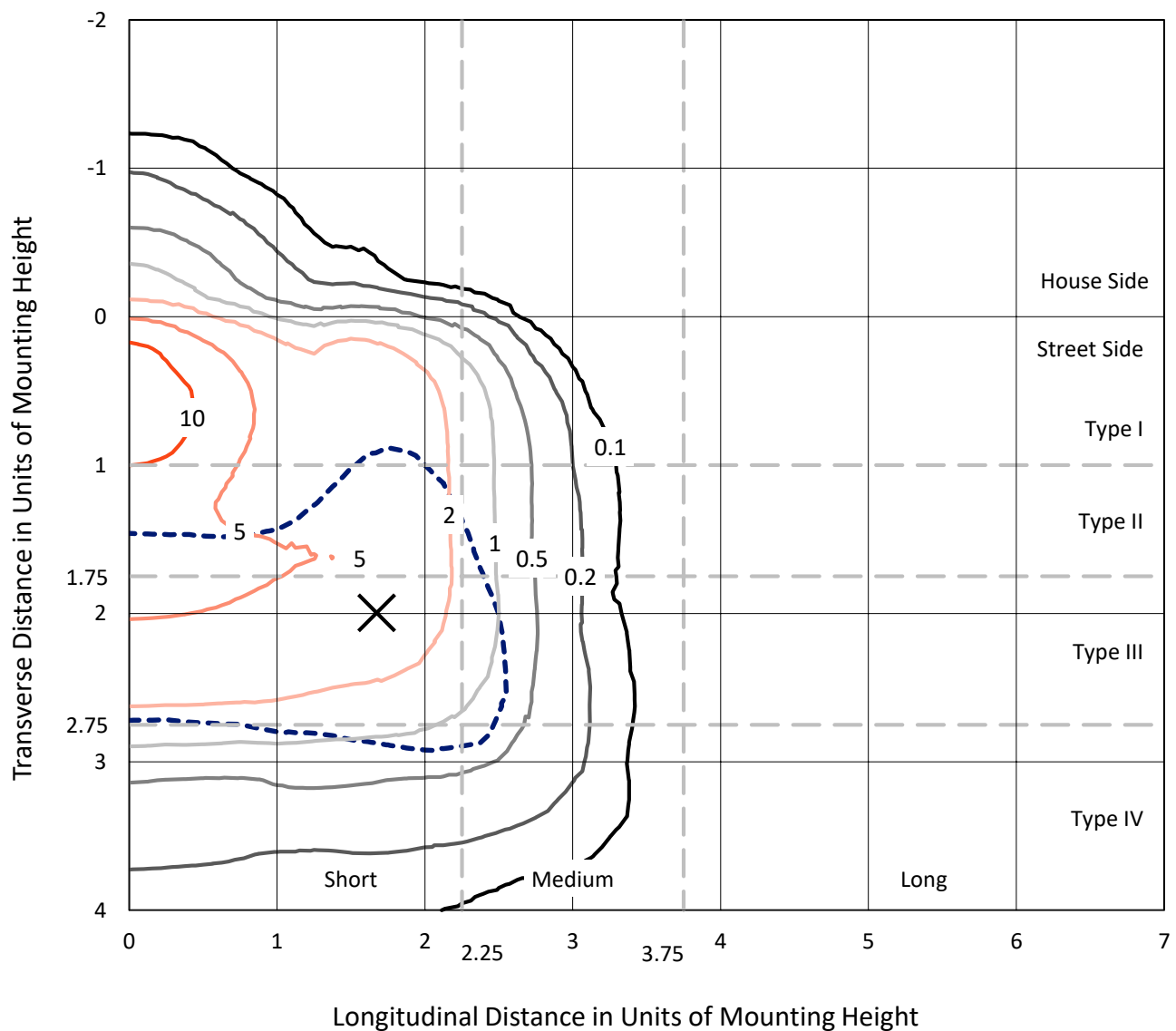


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

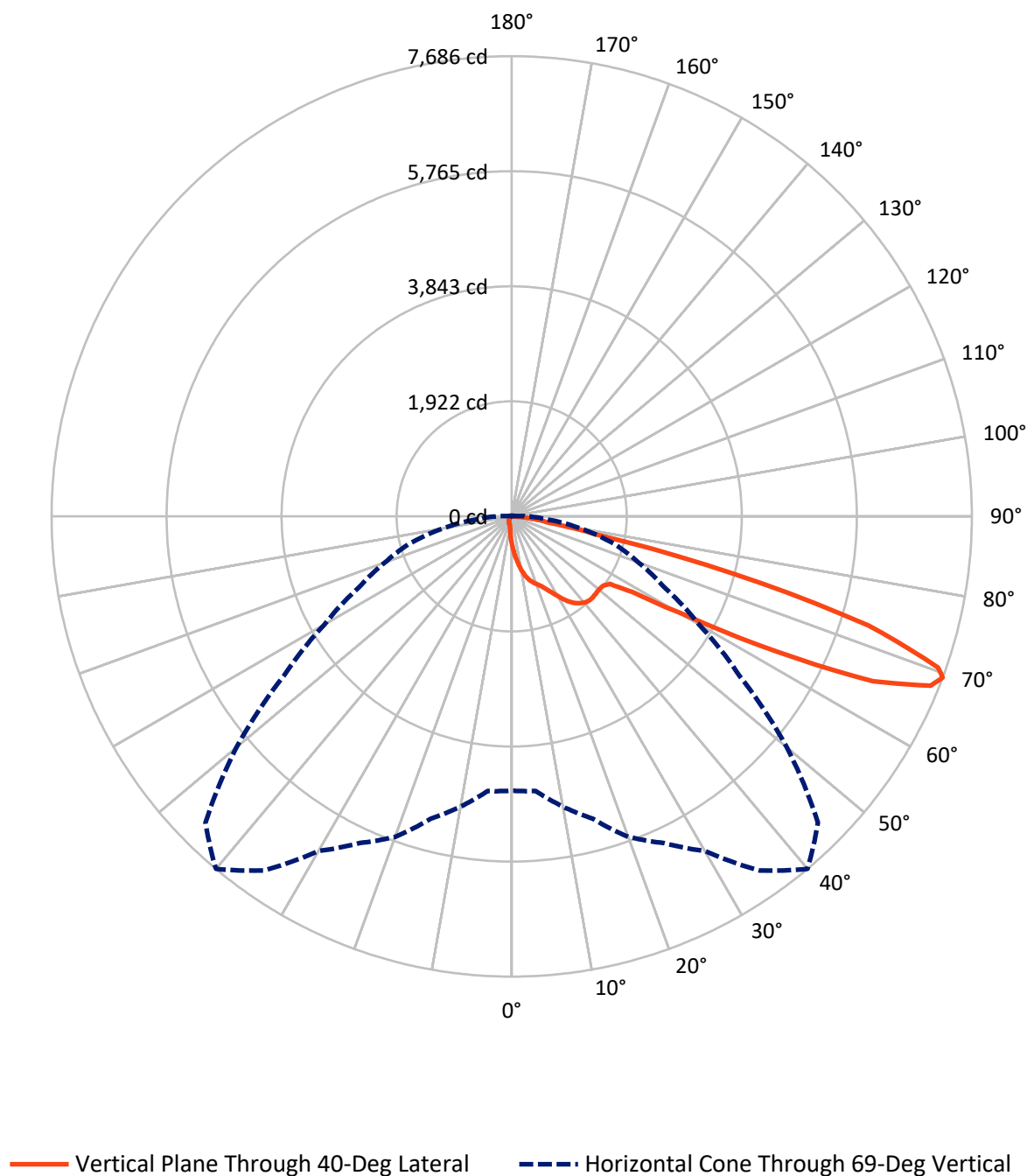


Based on 10 foot mounting height. Maximum calculated value = 13.6 fc
Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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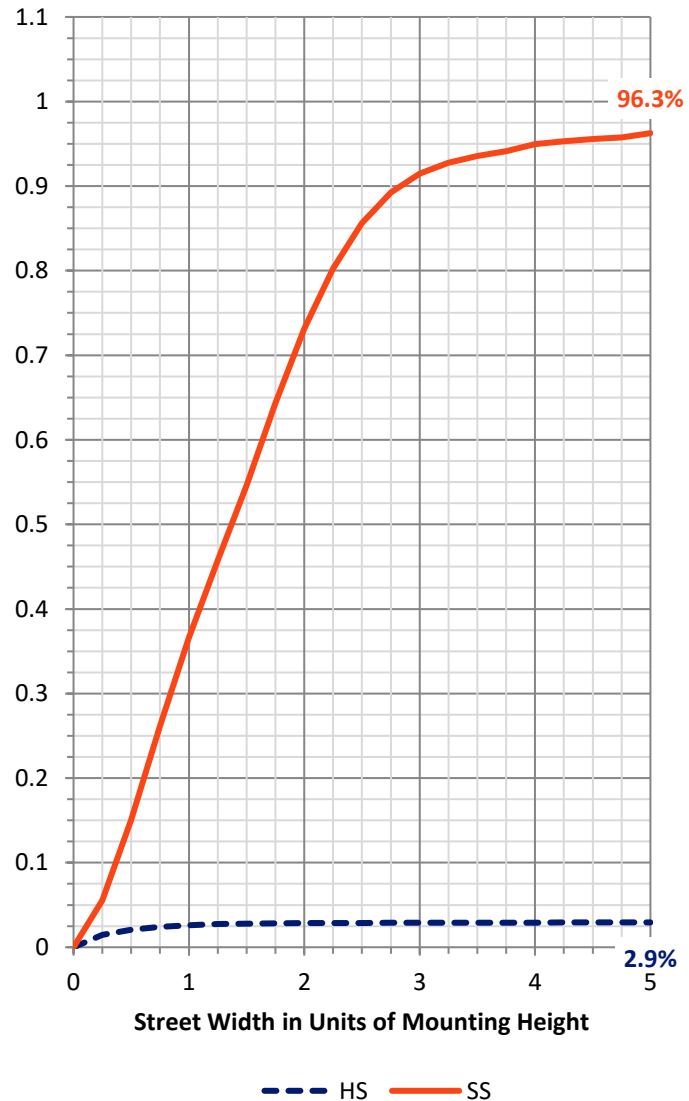
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	180.6	0.0	180.6
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	5883.0	0.0	5883.0
	% Fixture	97.0	0.0	97.0
Total	Lumens	6063.6	0.0	6063.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	47.1	0.8
10°-20°	162.3	2.7
20°-30°	310.6	5.1
30°-40°	516.5	8.5
40°-50°	698.9	11.5
50°-60°	1093.0	18.0
60°-70°	2247.3	37.1
70°-80°	904.3	14.9
80°-90°	83.6	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°	6063.6	100.0
0°-180°	6063.6	100.0

Coefficient of Utilization



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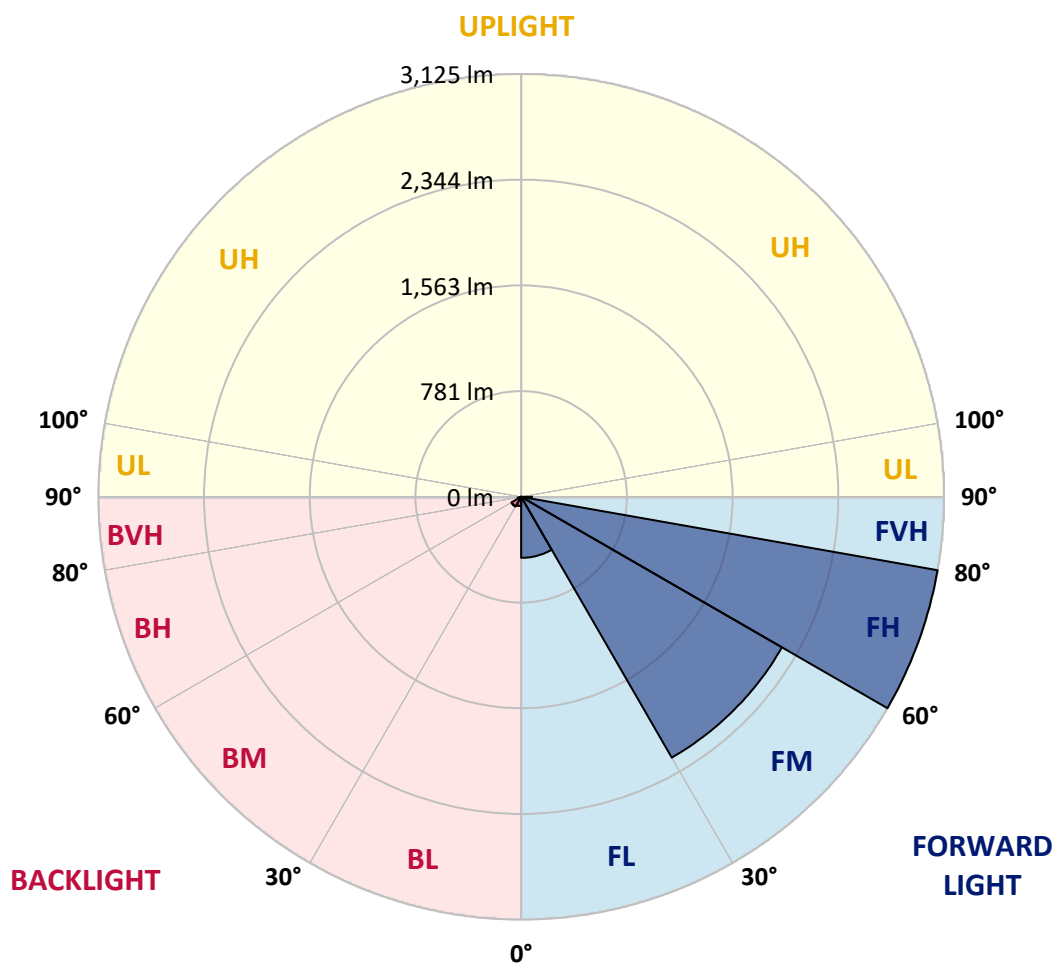
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	451.2	7.4			
FM	(30°-60°)	2226.0	36.7			
FH	(60°-80°)	3125.2	51.5			G2/5000
FVH	(80°-90°)	80.5	1.3			G1/100
BL	(0°-30°)	68.7	1.1	B0/110		
BM	(30°-60°)	82.4	1.4	B0/220		
BH	(60°-80°)	26.3	0.4	B0/110		G0/110
BVH	(80°-90°)	3.1	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-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	610.9	603.9	596.0	596.0	586.1	586.1	580.1	564.2	562.2	553.3	544.3
5°	779.7	773.8	763.9	754.9	747.0	733.1	723.1	704.2	683.4	663.5	645.7
7.5°	944.7	941.6	923.8	920.8	907.9	885.1	865.2	837.4	801.6	773.8	741.0
10°	1097.6	1090.6	1086.7	1069.8	1050.9	1026.1	995.3	961.6	919.8	876.1	829.4
12.5°	1218.8	1214.8	1196.9	1190.0	1170.1	1145.3	1106.6	1062.8	1021.1	964.5	909.9
15°	1309.2	1302.2	1290.3	1279.4	1255.5	1233.7	1197.9	1150.2	1099.6	1038.0	972.5
17.5°	1384.7	1371.8	1368.8	1351.9	1327.1	1301.2	1261.5	1217.8	1158.2	1096.6	1025.1
20°	1486.0	1468.1	1462.1	1437.3	1408.5	1372.8	1327.1	1272.4	1209.8	1142.3	1068.8
22.5°	1605.2	1592.3	1579.3	1557.5	1520.8	1470.1	1403.6	1344.0	1264.5	1190.0	1110.5
25°	1774.1	1763.1	1742.3	1712.5	1666.7	1606.2	1525.7	1438.3	1344.9	1249.6	1156.2
27.5°	1937.9	1928.0	1913.1	1890.3	1838.6	1772.1	1672.7	1561.5	1443.3	1328.1	1224.7
30°	2091.9	2083.0	2068.1	2045.3	1999.5	1934.0	1821.7	1702.5	1555.5	1421.4	1297.3
32.5°	2257.8	2254.8	2237.9	2205.2	2165.4	2077.0	1954.8	1826.7	1677.7	1522.8	1377.7
35°	2445.5	2422.7	2406.8	2374.0	2306.5	2212.1	2069.1	1929.0	1772.1	1613.1	1451.2
37.5°	2604.5	2582.6	2562.7	2521.1	2438.6	2318.4	2156.5	2002.5	1840.6	1678.7	1513.8
40°	2720.6	2709.7	2685.9	2631.3	2538.9	2395.9	2221.0	2053.2	1890.3	1727.4	1564.4
42.5°	2807.1	2790.2	2763.4	2706.8	2597.5	2434.6	2246.8	2074.0	1913.1	1757.2	1597.3
45°	2838.9	2825.0	2800.2	2738.6	2620.3	2445.5	2245.9	2068.1	1914.1	1766.1	1619.1
47.5°	2820.0	2806.1	2784.2	2726.6	2610.4	2432.6	2228.0	2051.2	1904.2	1769.1	1638.9
50°	2757.4	2749.5	2732.6	2683.9	2579.6	2407.8	2212.1	2042.2	1902.2	1784.0	1666.7
52.5°	2751.5	2746.5	2725.7	2677.0	2570.7	2399.8	2210.1	2047.2	1919.1	1802.9	1686.7
55°	3362.3	3291.8	3133.9	2999.8	2779.3	2517.1	2310.4	2127.6	1990.6	1877.4	1795.9
57.5°	4778.8	4673.6	4465.9	4210.7	3704.0	3206.4	2808.1	2520.0	2378.0	2326.3	2357.1
60°	5442.3	5423.5	5390.7	5269.5	5010.3	4582.2	4105.3	3589.9	3383.2	3365.3	3427.9
62.5°	5757.3	5745.3	5755.3	5740.4	5659.9	5534.7	5397.6	5175.2	4970.5	4838.4	4558.3
65°	5902.3	5910.2	5966.8	6011.5	6021.5	6054.2	6154.6	6431.7	6634.3	6293.6	5515.9
67.5°	5533.7	5580.4	5710.6	5873.4	6064.2	6248.9	6546.9	7131.0	7547.2	7146.9	6042.3
69°	4581.1	4604.0	4921.8	5228.8	5694.6	6020.5	6452.6	7218.4	7686.3	7234.3	6000.6
70°	3606.7	3627.6	3968.3	4385.5	5173.2	5592.3	6157.5	7070.4	7556.1	7118.1	5786.0
72.5°	1627.1	1597.3	1717.4	1940.9	2797.1	3462.7	4451.0	5728.4	6234.0	5702.6	4328.8
75°	1136.4	1123.5	1136.4	1137.3	1270.4	1638.9	2068.1	3105.1	3840.1	3313.7	2068.1
77.5°	880.1	871.1	862.2	852.3	868.2	972.5	1014.2	1101.6	1430.4	1352.9	788.7
80°	696.3	688.4	710.2	703.3	703.3	715.2	707.2	674.4	612.8	568.1	508.6
82.5°	323.8	325.8	325.8	353.6	426.2	497.6	520.5	487.7	433.1	368.5	297.0
85°	30.8	34.7	58.6	90.4	179.8	202.6	203.6	168.8	168.8	133.1	107.2
87.5°	0.0	1.0	1.0	1.0	8.9	24.9	20.9	6.0	3.0	3.0	4.9
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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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	528.5	525.4	513.6	501.6	490.7	478.8	467.8	456.9	445.0	436.0	425.1
5°	617.9	596.0	571.2	547.3	523.5	498.7	472.8	450.0	426.2	404.3	383.4
7.5°	708.2	665.5	631.7	589.0	550.3	511.6	475.8	439.1	405.3	373.5	343.7
10°	784.7	733.1	680.4	625.8	570.1	518.5	468.9	425.1	380.4	341.7	305.0
12.5°	847.3	781.7	717.2	648.6	586.1	520.5	458.9	406.3	353.6	309.9	272.2
15°	903.9	828.4	750.9	671.5	592.0	517.5	449.0	383.4	329.8	280.1	237.4
17.5°	949.6	863.2	775.8	686.4	601.0	513.6	436.0	367.5	305.0	253.3	211.6
20°	989.4	898.9	804.6	704.2	606.9	512.5	425.1	347.7	283.1	228.5	187.7
22.5°	1026.1	935.7	834.4	727.1	615.9	511.6	415.2	332.8	264.2	209.6	168.8
25°	1067.8	972.5	866.2	750.9	631.7	515.6	409.3	320.8	247.3	191.7	153.9
27.5°	1114.5	1014.2	903.9	780.7	652.6	523.5	407.3	307.9	232.4	174.8	142.1
30°	1180.0	1063.9	941.6	810.5	671.5	532.4	405.3	300.0	217.5	161.9	130.1
32.5°	1237.7	1112.5	983.4	841.3	692.3	541.4	404.3	289.1	203.6	149.0	121.2
35°	1298.3	1157.2	1019.2	871.1	710.2	551.3	403.3	281.1	190.7	136.1	112.3
37.5°	1350.9	1194.9	1047.0	897.0	730.1	560.2	404.3	274.2	178.8	125.2	104.3
40°	1395.6	1233.7	1077.7	920.8	750.9	574.1	405.3	267.2	166.9	115.2	97.4
42.5°	1435.4	1270.4	1110.5	947.6	774.8	590.0	411.3	261.2	157.0	106.3	90.4
45°	1466.1	1304.2	1146.3	985.4	813.5	615.9	422.2	257.3	147.0	98.3	84.4
47.5°	1497.9	1353.9	1206.9	1045.0	870.2	656.6	441.1	256.3	139.0	92.3	79.4
50°	1541.6	1403.6	1260.5	1105.5	921.8	698.3	463.9	257.3	129.1	86.4	74.5
52.5°	1573.4	1454.2	1330.0	1210.9	1045.0	825.4	552.3	275.1	124.1	81.4	68.5
55°	1761.1	1740.3	1743.2	1763.1	1635.0	1404.5	923.8	397.3	146.0	92.3	67.6
57.5°	2483.3	2556.8	2599.5	2598.5	2386.9	1979.7	1240.7	510.5	162.9	107.2	80.5
60°	3432.9	3377.3	3298.8	3105.1	2824.0	2259.8	1387.6	549.3	141.0	85.4	73.5
62.5°	4272.2	3946.4	3657.4	3343.5	2975.0	2357.1	1417.4	546.3	123.2	64.5	51.6
65°	4795.7	4209.6	3742.8	3349.4	2915.4	2275.7	1341.0	501.6	104.3	52.7	42.7
67.5°	4920.9	4067.6	3407.1	2905.4	2435.6	1771.1	984.4	377.5	81.4	43.7	37.8
69°	4647.7	3615.7	2823.0	2253.8	1772.1	1175.1	608.9	238.4	62.6	39.8	34.7
70°	4275.2	3144.8	2299.5	1808.8	1312.2	825.4	426.2	167.9	50.7	36.7	31.8
72.5°	2750.5	1651.8	1130.4	786.7	541.4	328.8	166.9	75.5	38.7	30.8	25.8
75°	1066.8	610.9	443.0	336.7	263.2	182.8	101.3	48.7	32.8	25.8	19.8
77.5°	525.4	402.3	328.8	225.5	131.1	81.4	54.6	37.8	26.8	18.9	12.9
80°	415.2	276.1	164.9	102.3	77.5	58.6	41.7	30.8	19.8	11.9	8.9
82.5°	212.6	116.2	85.4	69.5	57.6	45.7	33.8	21.8	12.9	8.0	6.9
85°	66.5	48.7	43.7	42.7	39.8	32.8	23.8	13.9	8.0	4.9	4.9
87.5°	4.9	6.9	8.9	6.9	8.0	6.9	8.9	6.0	4.0	4.0	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9	457.9
2.5°	417.2	405.3	394.4	387.4	374.5	369.5	364.6	362.6	353.6	355.6	347.7
5°	364.6	343.7	327.8	311.9	297.0	286.1	277.1	266.2	257.3	253.3	245.3
7.5°	316.9	290.1	269.2	252.3	234.4	220.5	208.6	200.6	192.7	184.8	180.8
10°	275.1	246.3	222.5	205.6	188.7	176.8	167.9	161.9	157.0	153.9	153.0
12.5°	236.4	208.6	186.7	171.9	158.9	153.0	149.0	146.0	145.0	144.0	144.0
15°	206.6	178.8	161.9	151.0	145.0	142.1	141.0	139.0	137.1	136.1	136.1
17.5°	178.8	157.9	146.0	140.1	137.1	135.1	133.1	131.1	129.1	128.1	128.1
20°	159.9	143.0	137.1	133.1	130.1	128.1	125.2	123.2	122.2	121.2	120.2
22.5°	145.0	134.1	130.1	127.2	123.2	120.2	118.2	116.2	114.2	113.2	112.3
25°	134.1	127.2	124.1	120.2	116.2	113.2	110.3	107.2	105.3	104.3	102.3
27.5°	126.1	121.2	117.2	112.3	108.3	105.3	102.3	99.3	97.4	95.4	94.3
30°	119.2	114.2	109.2	105.3	100.3	97.4	93.4	90.4	89.4	87.4	85.4
32.5°	112.3	107.2	102.3	97.4	92.3	88.4	86.4	82.5	80.5	79.4	77.5
35°	104.3	99.3	93.4	89.4	84.4	80.5	77.5	74.5	72.5	70.5	69.5
37.5°	97.4	91.4	85.4	80.5	76.5	72.5	69.5	66.5	64.5	62.6	61.6
40°	89.4	83.4	77.5	72.5	68.5	65.6	62.6	59.6	57.6	56.6	56.6
42.5°	82.5	75.5	69.5	65.6	62.6	58.6	55.6	52.7	51.6	50.7	51.6
45°	75.5	68.5	63.6	59.6	56.6	52.7	49.6	47.7	46.7	47.7	48.7
47.5°	69.5	62.6	57.6	54.6	51.6	48.7	45.7	43.7	43.7	45.7	47.7
50°	63.6	56.6	52.7	50.7	47.7	44.7	40.7	39.8	40.7	42.7	44.7
52.5°	57.6	49.6	46.7	45.7	42.7	39.8	36.7	35.8	36.7	38.7	37.8
55°	51.6	43.7	42.7	41.7	38.7	34.7	31.8	31.8	31.8	30.8	28.8
57.5°	49.6	38.7	37.8	36.7	33.8	29.8	27.8	25.8	24.9	21.8	20.9
60°	51.6	34.7	34.7	32.8	29.8	25.8	22.9	19.8	17.9	15.9	15.9
62.5°	41.7	31.8	30.8	28.8	24.9	20.9	17.9	14.9	13.9	12.9	12.9
65°	33.8	28.8	26.8	23.8	20.9	16.9	13.9	11.9	10.9	10.9	11.9
67.5°	30.8	25.8	22.9	19.8	16.9	12.9	10.9	10.0	10.0	10.9	10.9
69°	28.8	23.8	20.9	17.9	14.9	11.9	10.0	10.0	10.0	10.0	10.9
70°	26.8	22.9	19.8	16.9	12.9	10.0	8.9	8.9	10.0	10.0	10.9
72.5°	20.9	17.9	16.9	13.9	10.0	8.9	8.0	8.9	8.9	10.0	10.0
75°	15.9	12.9	12.9	10.9	8.0	6.9	6.9	8.0	8.0	8.9	8.9
77.5°	10.9	8.9	8.9	8.0	6.9	6.0	6.0	6.9	8.0	8.0	8.9
80°	8.0	6.9	6.0	6.9	6.0	4.9	6.0	6.9	6.9	8.0	8.0
82.5°	6.0	6.0	6.0	6.0	4.9	4.9	6.0	6.0	6.9	8.0	8.0
85°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	6.0	6.0	6.9	6.9
87.5°	3.0	3.0	3.0	4.0	4.0	4.9	4.9	4.9	4.9	6.0	6.0
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°	457.9	457.9	457.9	457.9
2.5°	345.7	344.7	340.7	341.7
5°	242.4	236.4	240.4	239.4
7.5°	177.8	176.8	175.8	177.8
10°	152.0	152.0	151.0	152.0
12.5°	143.0	143.0	143.0	143.0
15°	136.1	136.1	135.1	135.1
17.5°	128.1	128.1	128.1	127.2
20°	120.2	119.2	119.2	119.2
22.5°	111.2	110.3	110.3	110.3
25°	102.3	101.3	101.3	101.3
27.5°	93.4	92.3	91.4	91.4
30°	84.4	83.4	82.5	82.5
32.5°	75.5	74.5	73.5	73.5
35°	67.6	67.6	66.5	65.6
37.5°	60.6	60.6	60.6	60.6
40°	55.6	56.6	56.6	56.6
42.5°	52.7	53.6	54.6	55.6
45°	50.7	52.7	53.6	53.6
47.5°	49.6	50.7	51.6	51.6
50°	45.7	44.7	44.7	44.7
52.5°	36.7	34.7	33.8	32.8
55°	26.8	25.8	23.8	23.8
57.5°	18.9	18.9	17.9	17.9
60°	14.9	14.9	13.9	14.9
62.5°	12.9	12.9	12.9	12.9
65°	11.9	11.9	11.9	11.9
67.5°	11.9	11.9	11.9	11.9
69°	10.9	10.9	10.9	10.9
70°	10.9	10.9	10.9	10.9
72.5°	10.0	10.0	10.0	10.0
75°	8.9	10.0	10.0	10.0
77.5°	8.9	8.9	8.9	8.9
80°	8.0	8.0	8.9	8.9
82.5°	8.0	8.0	8.0	8.0
85°	6.9	6.9	8.0	8.0
87.5°	6.0	6.0	6.9	6.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)