

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: P165480

Luminaire Tested: **VST-F04-LED-E-U-SL4-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165480
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-8030
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, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5603.1 lumens
Efficiency: N/A
Efficacy: 54.8 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

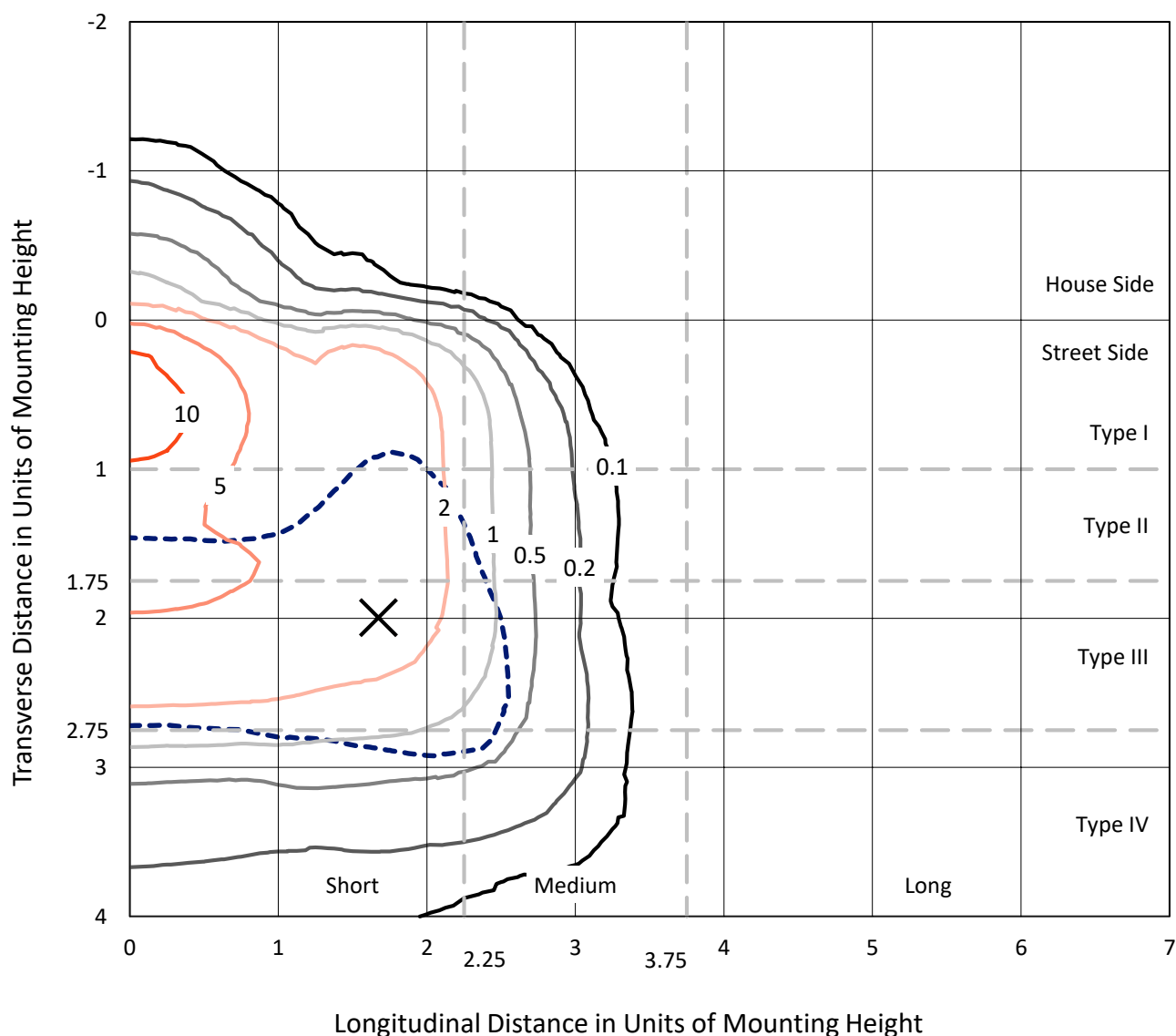


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 --- 1/2 Max cd

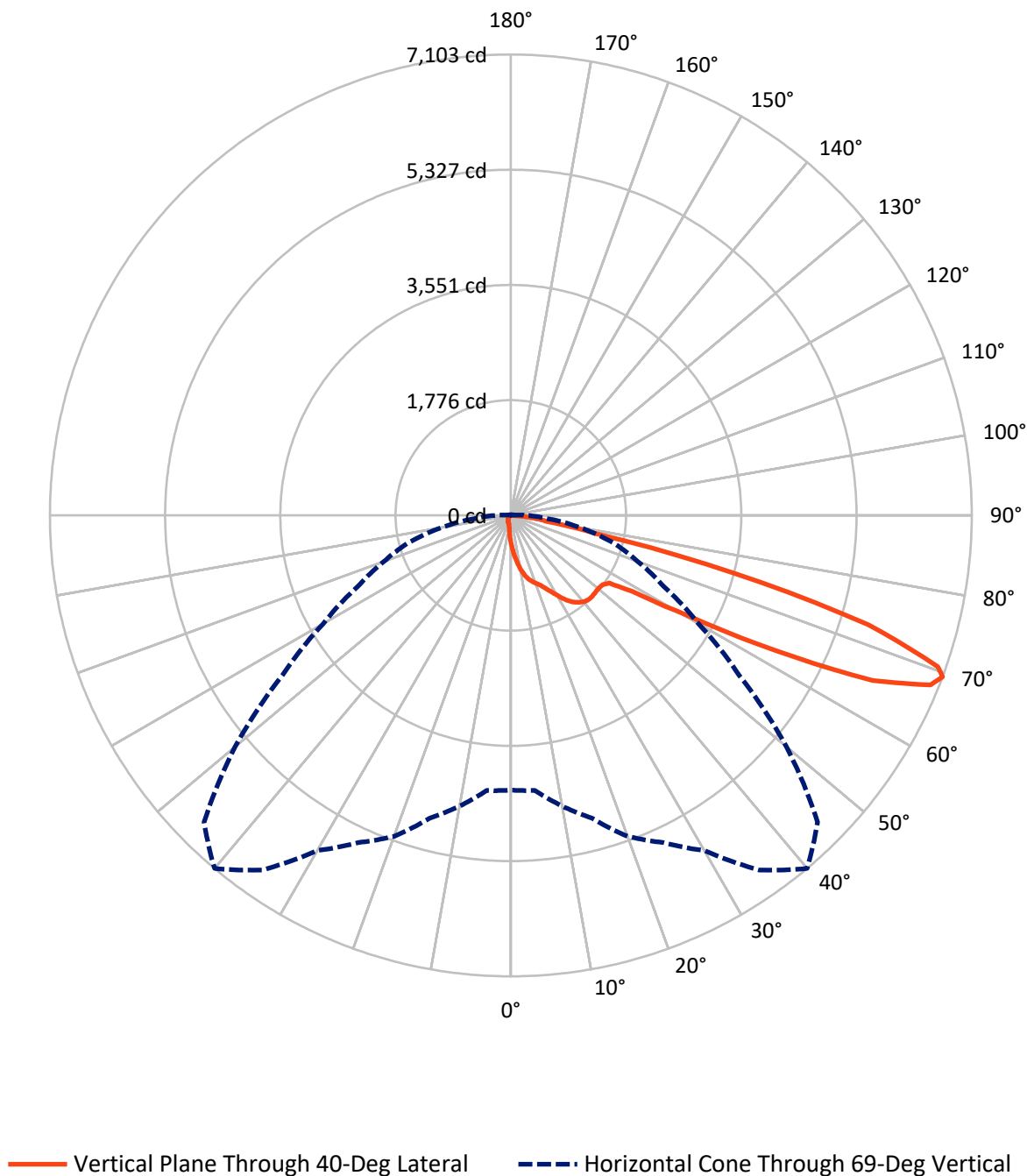


Based on 10 foot mounting height. Maximum calculated value = 12.5 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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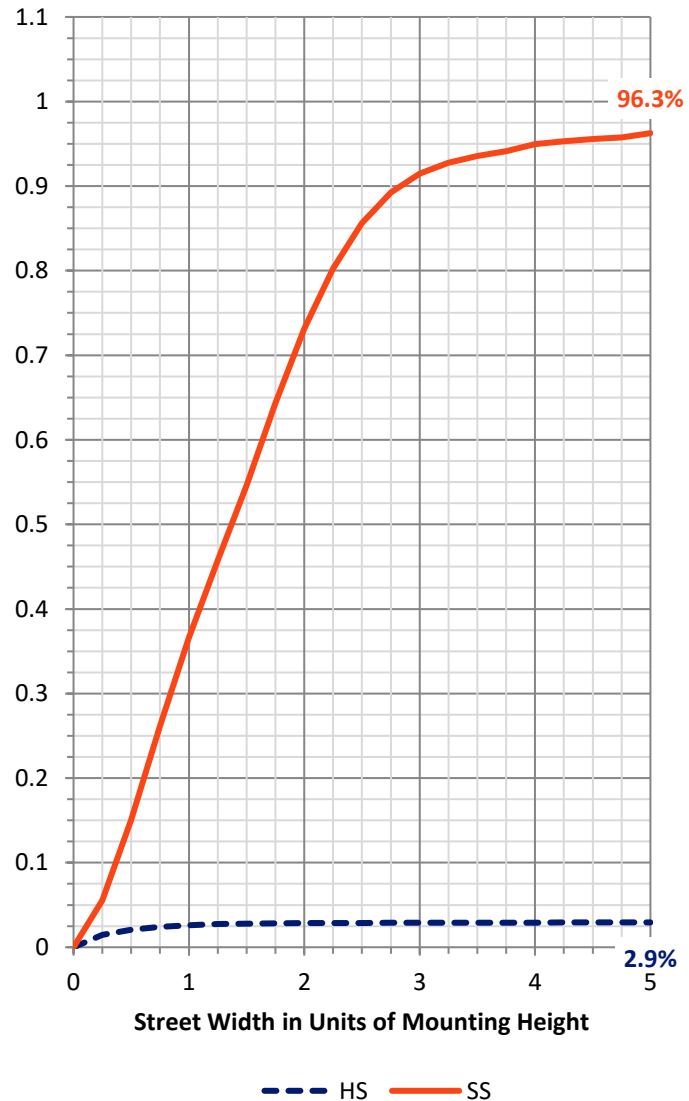
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	166.9	0.0	166.9
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	5436.3	0.0	5436.3
	% Fixture	97.0	0.0	97.0
Total	Lumens	5603.1	0.0	5603.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.5	0.8
10°-20°	150.0	2.7
20°-30°	287.0	5.1
30°-40°	477.3	8.5
40°-50°	645.8	11.5
50°-60°	1010.0	18.0
60°-70°	2076.6	37.1
70°-80°	835.6	14.9
80°-90°	77.3	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°	5603.1	100.0
0°-180°	5603.1	100.0

Coefficient of Utilization



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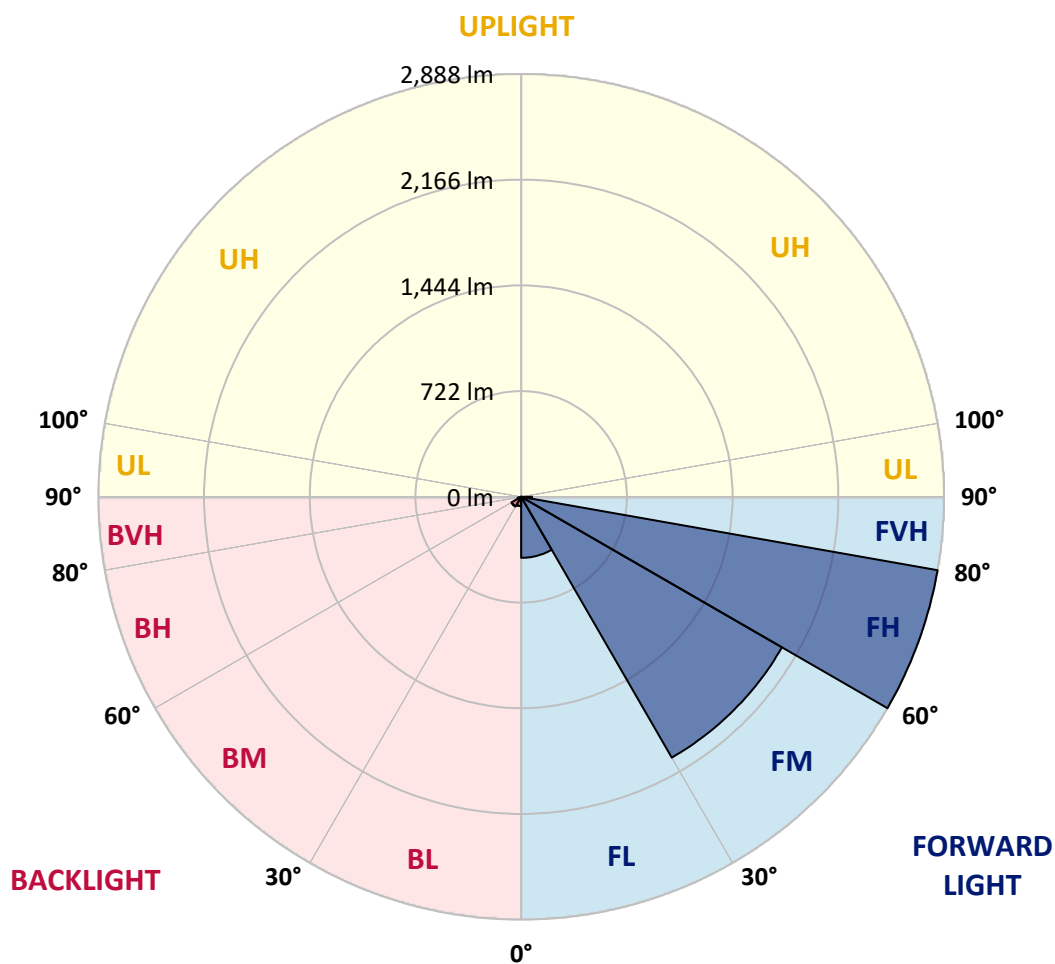
CATALOG NUMBER: VST-F04-LED-E-U-SL4-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	417.0	7.4			
FM	(30°-60°)	2057.0	36.7			
FH	(60°-80°)	2887.9	51.5			G2/5000
FVH	(80°-90°)	74.4	1.3			G1/100
BL	(0°-30°)	63.5	1.1	B0/110		
BM	(30°-60°)	76.2	1.4	B0/220		
BH	(60°-80°)	24.3	0.4	B0/110		G0/110
BVH	(80°-90°)	2.9	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°	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2
2.5°	564.5	558.1	550.7	550.7	541.6	541.6	536.0	521.4	519.5	511.2	503.0
5°	720.5	715.0	705.9	697.6	690.3	677.4	668.2	650.8	631.5	613.1	596.6
7.5°	872.9	870.1	853.6	850.9	838.9	817.9	799.5	773.8	740.7	715.0	684.8
10°	1014.3	1007.8	1004.1	988.5	971.1	948.2	919.7	888.5	850.0	809.6	766.4
12.5°	1126.3	1122.6	1106.0	1099.6	1081.3	1058.3	1022.5	982.1	943.6	891.3	840.8
15°	1209.8	1203.3	1192.3	1182.2	1160.2	1140.0	1107.0	1062.9	1016.1	959.2	898.6
17.5°	1279.5	1267.6	1264.8	1249.2	1226.3	1202.4	1165.7	1125.3	1070.2	1013.3	947.2
20°	1373.1	1356.6	1351.1	1328.1	1301.6	1268.5	1226.3	1175.8	1118.0	1055.6	987.6
22.5°	1483.3	1471.3	1459.4	1439.2	1405.3	1358.5	1297.0	1241.9	1168.5	1099.6	1026.2
25°	1639.3	1629.2	1610.0	1582.4	1540.2	1484.2	1409.9	1329.1	1242.8	1154.7	1068.4
27.5°	1790.8	1781.6	1767.8	1746.7	1699.0	1637.5	1545.7	1442.9	1333.7	1227.2	1131.7
30°	1933.1	1924.8	1911.0	1889.9	1847.7	1787.1	1683.4	1573.2	1437.4	1313.5	1198.8
32.5°	2086.4	2083.6	2068.0	2037.7	2001.0	1919.3	1806.4	1688.0	1550.3	1407.1	1273.1
35°	2259.8	2238.7	2224.0	2193.7	2131.3	2044.1	1912.0	1782.5	1637.5	1490.6	1341.0
37.5°	2406.7	2386.5	2368.1	2329.6	2253.4	2142.3	1992.7	1850.4	1700.8	1551.2	1398.8
40°	2514.0	2504.0	2481.9	2431.4	2346.1	2213.9	2052.4	1897.2	1746.7	1596.2	1445.6
42.5°	2593.9	2578.3	2553.6	2501.2	2400.3	2249.7	2076.2	1916.5	1767.8	1623.7	1476.0
45°	2623.3	2610.5	2587.5	2530.6	2421.4	2259.8	2075.3	1911.0	1768.8	1632.0	1496.1
47.5°	2605.8	2593.0	2572.8	2519.6	2412.2	2247.9	2058.8	1895.4	1759.6	1634.8	1514.5
50°	2548.0	2540.7	2525.1	2480.1	2383.7	2224.9	2044.1	1887.2	1757.7	1648.5	1540.2
52.5°	2542.5	2538.0	2518.7	2473.7	2375.5	2217.6	2042.3	1891.8	1773.3	1666.0	1558.6
55°	3107.0	3041.8	2895.9	2772.0	2568.2	2325.9	2135.0	1966.1	1839.4	1734.8	1659.5
57.5°	4415.9	4318.6	4126.8	3890.9	3422.8	2962.9	2594.9	2328.7	2197.4	2149.7	2178.1
60°	5029.0	5011.6	4981.3	4869.3	4629.8	4234.2	3793.6	3317.2	3126.3	3109.8	3167.6
62.5°	5320.0	5309.0	5318.2	5304.4	5230.1	5114.4	4987.7	4782.2	4593.0	4471.0	4212.1
65°	5454.0	5461.4	5513.7	5555.0	5564.2	5594.5	5687.2	5943.3	6130.5	5815.7	5097.0
67.5°	5113.5	5156.6	5276.9	5427.4	5603.6	5774.4	6049.7	6589.4	6974.0	6604.2	5583.5
69°	4233.3	4254.4	4548.1	4831.7	5262.2	5563.3	5962.6	6670.2	7102.6	6684.9	5544.9
70°	3332.8	3352.1	3666.9	4052.4	4780.3	5167.7	5689.9	6533.5	6982.3	6577.5	5346.6
72.5°	1503.5	1476.0	1587.0	1793.5	2584.7	3199.7	4113.0	5293.4	5760.6	5269.6	4000.1
75°	1050.1	1038.1	1050.1	1051.0	1174.0	1514.5	1911.0	2869.3	3548.5	3062.1	1911.0
77.5°	813.2	805.0	796.7	787.5	802.2	898.6	937.1	1017.9	1321.7	1250.2	728.8
80°	643.4	636.1	656.3	649.9	649.9	660.9	653.5	623.2	566.3	525.0	469.9
82.5°	299.2	301.0	301.0	326.7	393.8	459.8	481.0	450.7	400.2	340.5	274.5
85°	28.4	32.1	54.2	83.6	166.2	187.2	188.2	156.0	156.0	123.0	99.1
87.5°	0.0	0.9	0.9	0.9	8.2	23.0	19.3	5.5	2.7	2.7	4.6
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):

	55°	60°	65°	70°	75°	80°	85°	90°	95°	100°	105°
0°	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2
2.5°	488.3	485.5	474.6	463.5	453.4	442.4	432.3	422.2	411.2	402.9	392.8
5°	570.9	550.7	527.8	505.8	483.7	460.8	436.9	415.8	393.8	373.6	354.3
7.5°	654.4	615.0	583.8	544.3	508.5	472.7	439.7	405.7	374.5	345.1	317.6
10°	725.1	677.4	628.7	578.3	526.8	479.1	433.3	392.8	351.5	315.8	281.8
12.5°	783.0	722.4	662.7	599.4	541.6	481.0	424.1	375.4	326.7	286.4	251.5
15°	835.2	765.5	693.9	620.5	547.1	478.2	414.9	354.3	304.7	258.9	219.4
17.5°	877.5	797.6	716.9	634.3	555.3	474.6	402.9	339.6	281.8	234.0	195.5
20°	914.2	830.7	743.5	650.8	560.8	473.6	392.8	321.3	261.6	211.1	173.5
22.5°	948.2	864.6	771.0	671.9	569.1	472.7	383.7	307.5	244.1	193.7	156.0
25°	986.7	898.6	800.4	693.9	583.8	476.4	378.2	296.5	228.5	177.1	142.2
27.5°	1029.9	937.1	835.2	721.4	603.0	483.7	376.3	284.5	214.8	161.5	131.3
30°	1090.4	983.1	870.1	749.0	620.5	492.0	374.5	277.2	201.0	149.6	120.2
32.5°	1143.7	1028.0	908.7	777.4	639.8	500.3	373.6	267.1	188.2	137.7	112.0
35°	1199.7	1069.3	941.8	805.0	656.3	509.4	372.7	259.7	176.2	125.7	103.7
37.5°	1248.3	1104.2	967.5	828.8	674.7	517.7	373.6	253.3	165.2	115.7	96.4
40°	1289.6	1140.0	995.9	850.9	693.9	530.5	374.5	246.9	154.2	106.5	90.0
42.5°	1326.4	1174.0	1026.2	875.7	716.0	545.2	380.0	241.4	145.0	98.2	83.6
45°	1354.8	1205.2	1059.2	910.5	751.7	569.1	390.1	237.7	135.8	90.9	78.0
47.5°	1384.2	1251.1	1115.2	965.6	804.1	606.7	407.6	236.8	128.5	85.3	73.4
50°	1424.6	1297.0	1164.8	1021.6	851.8	645.3	428.6	237.7	119.3	79.9	68.8
52.5°	1453.9	1343.8	1229.0	1118.9	965.6	762.7	510.3	254.2	114.7	75.2	63.3
55°	1627.4	1608.1	1610.9	1629.2	1510.9	1297.9	853.6	367.2	134.9	85.3	62.4
57.5°	2294.7	2362.6	2402.1	2401.2	2205.6	1829.3	1146.4	471.8	150.6	99.1	74.4
60°	3172.2	3120.8	3048.3	2869.3	2609.5	2088.2	1282.3	507.6	130.3	78.9	67.9
62.5°	3947.8	3646.7	3379.6	3089.6	2749.0	2178.1	1309.8	504.8	113.8	59.6	47.7
65°	4431.5	3890.0	3458.6	3095.1	2694.0	2102.9	1239.1	463.5	96.4	48.7	39.5
67.5°	4547.2	3758.7	3148.4	2684.8	2250.6	1636.6	909.6	348.8	75.2	40.4	34.9
69°	4294.7	3341.1	2608.6	2082.7	1637.5	1085.8	562.7	220.3	57.8	36.7	32.1
70°	3950.5	2906.0	2124.9	1671.4	1212.5	762.7	393.8	155.1	46.8	33.9	29.4
72.5°	2541.6	1526.4	1044.5	726.9	500.3	303.8	154.2	69.8	35.8	28.4	23.9
75°	985.8	564.5	409.4	311.1	243.2	168.9	93.6	45.0	30.3	23.9	18.3
77.5°	485.5	371.7	303.8	208.4	121.2	75.2	50.5	34.9	24.8	17.4	11.9
80°	383.7	255.2	152.4	94.5	71.6	54.2	38.6	28.4	18.3	11.0	8.2
82.5°	196.4	107.4	78.9	64.3	53.2	42.3	31.2	20.2	11.9	7.4	6.4
85°	61.5	45.0	40.4	39.5	36.7	30.3	22.0	12.9	7.4	4.6	4.6
87.5°	4.6	6.4	8.2	6.4	7.4	6.4	8.2	5.5	3.7	3.7	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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2	423.2
2.5°	385.5	374.5	364.4	358.0	346.0	341.5	336.9	335.0	326.7	328.6	321.3
5°	336.9	317.6	302.9	288.2	274.5	264.4	256.1	246.0	237.7	234.0	226.7
7.5°	292.8	268.0	248.8	233.2	216.6	203.8	192.7	185.4	178.1	170.7	167.0
10°	254.2	227.6	205.6	190.0	174.4	163.4	155.1	149.6	145.0	142.2	141.4
12.5°	218.4	192.7	172.6	158.8	146.9	141.4	137.7	134.9	134.0	133.1	133.1
15°	190.9	165.2	149.6	139.5	134.0	131.3	130.3	128.5	126.7	125.7	125.7
17.5°	165.2	145.9	134.9	129.4	126.7	124.9	123.0	121.2	119.3	118.4	118.4
20°	147.8	132.2	126.7	123.0	120.2	118.4	115.7	113.8	112.9	112.0	111.1
22.5°	134.0	123.9	120.2	117.5	113.8	111.1	109.2	107.4	105.6	104.6	103.7
25°	123.9	117.5	114.7	111.1	107.4	104.6	101.9	99.1	97.3	96.4	94.5
27.5°	116.5	112.0	108.3	103.7	100.1	97.3	94.5	91.8	90.0	88.1	87.2
30°	110.1	105.6	100.9	97.3	92.7	90.0	86.3	83.6	82.6	80.8	78.9
32.5°	103.7	99.1	94.5	90.0	85.3	81.7	79.9	76.2	74.4	73.4	71.6
35°	96.4	91.8	86.3	82.6	78.0	74.4	71.6	68.8	67.0	65.2	64.3
37.5°	90.0	84.4	78.9	74.4	70.7	67.0	64.3	61.5	59.6	57.8	56.9
40°	82.6	77.1	71.6	67.0	63.3	60.6	57.8	55.1	53.2	52.3	52.3
42.5°	76.2	69.8	64.3	60.6	57.8	54.2	51.4	48.7	47.7	46.8	47.7
45°	69.8	63.3	58.7	55.1	52.3	48.7	45.9	44.0	43.1	44.0	45.0
47.5°	64.3	57.8	53.2	50.5	47.7	45.0	42.3	40.4	40.4	42.3	44.0
50°	58.7	52.3	48.7	46.8	44.0	41.3	37.6	36.7	37.6	39.5	41.3
52.5°	53.2	45.9	43.1	42.3	39.5	36.7	33.9	33.1	33.9	35.8	34.9
55°	47.7	40.4	39.5	38.6	35.8	32.1	29.4	29.4	29.4	28.4	26.6
57.5°	45.9	35.8	34.9	33.9	31.2	27.5	25.7	23.9	23.0	20.2	19.3
60°	47.7	32.1	32.1	30.3	27.5	23.9	21.1	18.3	16.5	14.7	14.7
62.5°	38.6	29.4	28.4	26.6	23.0	19.3	16.5	13.8	12.9	11.9	11.9
65°	31.2	26.6	24.8	22.0	19.3	15.6	12.9	11.0	10.1	10.1	11.0
67.5°	28.4	23.9	21.1	18.3	15.6	11.9	10.1	9.2	9.2	10.1	10.1
69°	26.6	22.0	19.3	16.5	13.8	11.0	9.2	9.2	9.2	9.2	10.1
70°	24.8	21.1	18.3	15.6	11.9	9.2	8.2	8.2	9.2	9.2	10.1
72.5°	19.3	16.5	15.6	12.9	9.2	8.2	7.4	8.2	8.2	9.2	9.2
75°	14.7	11.9	11.9	10.1	7.4	6.4	6.4	7.4	7.4	8.2	8.2
77.5°	10.1	8.2	8.2	7.4	6.4	5.5	5.5	6.4	7.4	7.4	8.2
80°	7.4	6.4	5.5	6.4	5.5	4.6	5.5	6.4	6.4	7.4	7.4
82.5°	5.5	5.5	5.5	5.5	4.6	4.6	5.5	5.5	6.4	7.4	7.4
85°	4.6	4.6	4.6	4.6	4.6	4.6	4.6	5.5	5.5	6.4	6.4
87.5°	2.7	2.7	2.7	3.7	3.7	4.6	4.6	4.6	4.6	5.5	5.5
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):

	165°	170°	175°	180°
0°	423.2	423.2	423.2	423.2
2.5°	319.4	318.5	314.8	315.8
5°	224.0	218.4	222.1	221.2
7.5°	164.3	163.4	162.5	164.3
10°	140.5	140.5	139.5	140.5
12.5°	132.2	132.2	132.2	132.2
15°	125.7	125.7	124.9	124.9
17.5°	118.4	118.4	118.4	117.5
20°	111.1	110.1	110.1	110.1
22.5°	102.8	101.9	101.9	101.9
25°	94.5	93.6	93.6	93.6
27.5°	86.3	85.3	84.4	84.4
30°	78.0	77.1	76.2	76.2
32.5°	69.8	68.8	67.9	67.9
35°	62.4	62.4	61.5	60.6
37.5°	56.0	56.0	56.0	56.0
40°	51.4	52.3	52.3	52.3
42.5°	48.7	49.6	50.5	51.4
45°	46.8	48.7	49.6	49.6
47.5°	45.9	46.8	47.7	47.7
50°	42.3	41.3	41.3	41.3
52.5°	33.9	32.1	31.2	30.3
55°	24.8	23.9	22.0	22.0
57.5°	17.4	17.4	16.5	16.5
60°	13.8	13.8	12.9	13.8
62.5°	11.9	11.9	11.9	11.9
65°	11.0	11.0	11.0	11.0
67.5°	11.0	11.0	11.0	11.0
69°	10.1	10.1	10.1	10.1
70°	10.1	10.1	10.1	10.1
72.5°	9.2	9.2	9.2	9.2
75°	8.2	9.2	9.2	9.2
77.5°	8.2	8.2	8.2	8.2
80°	7.4	7.4	8.2	8.2
82.5°	7.4	7.4	7.4	7.4
85°	6.4	6.4	7.4	7.4
87.5°	5.5	5.5	6.4	6.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)