

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: P165483

Luminaire Tested: **VST-F04-LED-E-U-SL4-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165483
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-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(4) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (28) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6812.1 lumens
Efficiency: N/A
Efficacy: 66.7 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

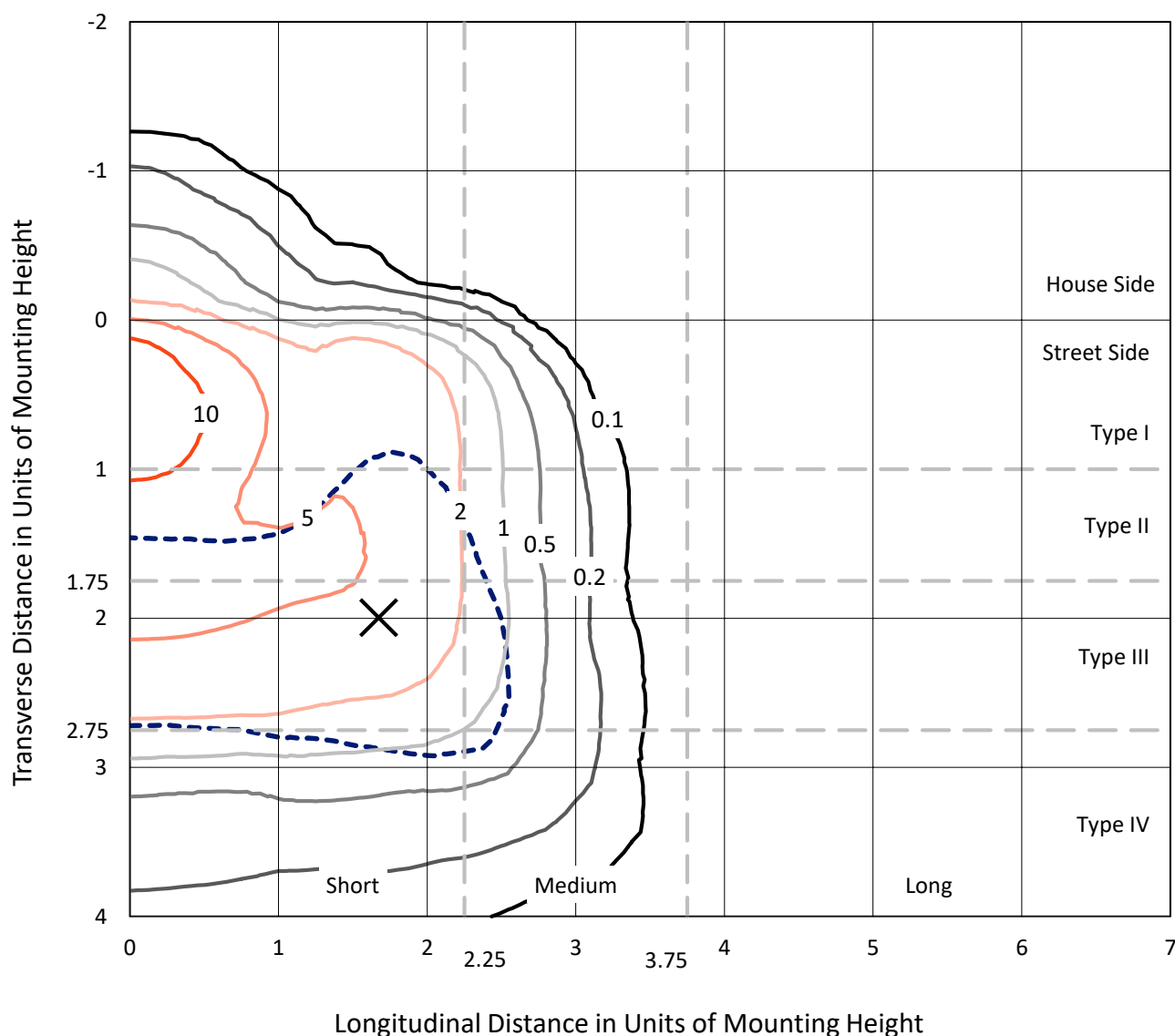


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

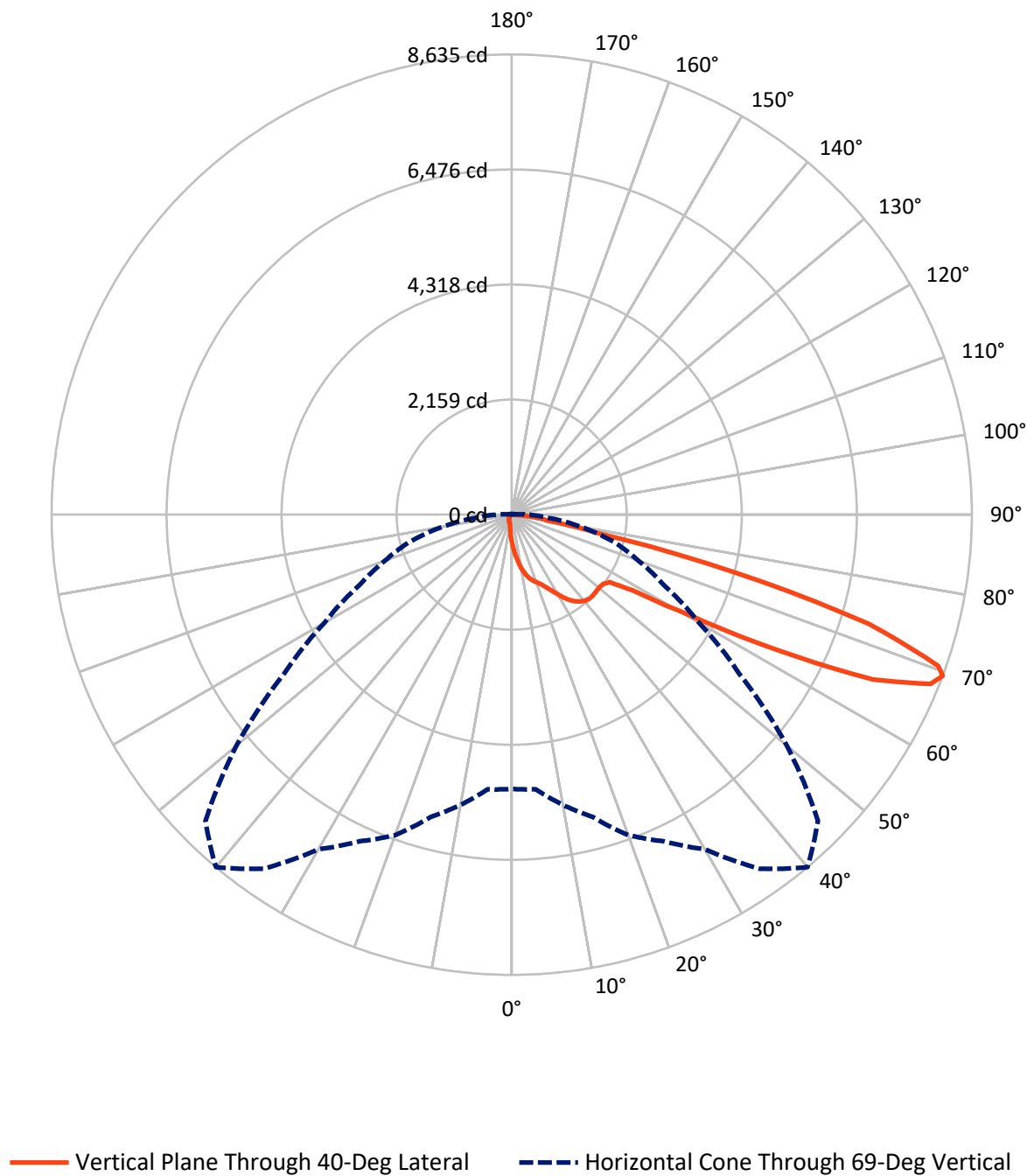


Based on 10 foot mounting height. Maximum calculated value = 15.2 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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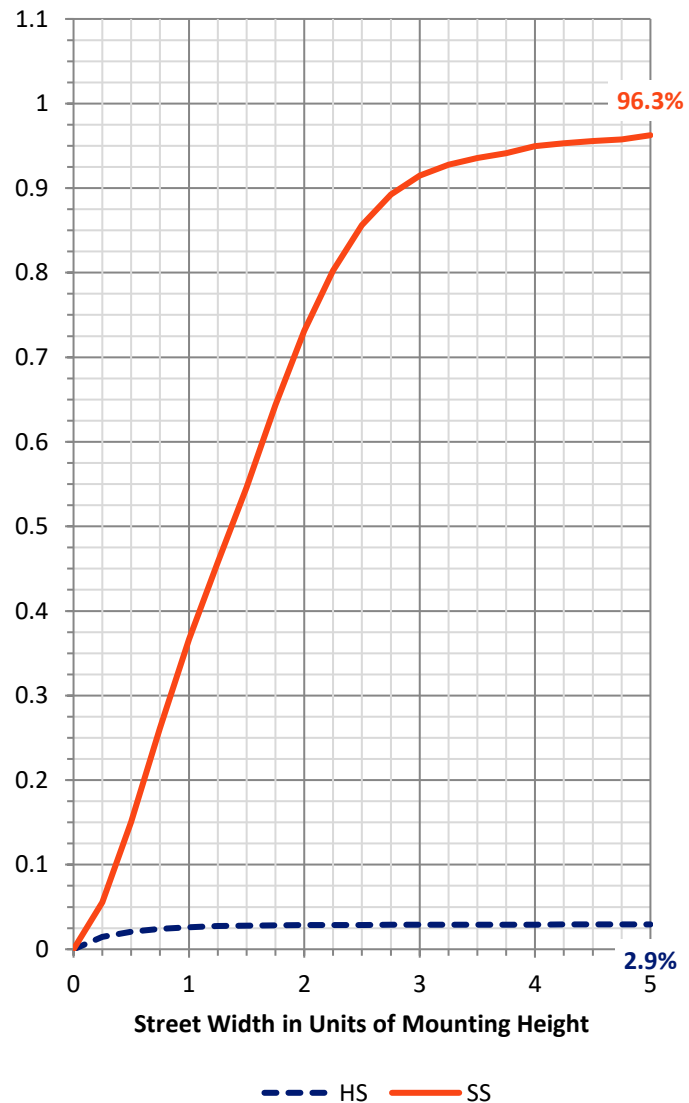
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	202.9	0.0	202.9
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	6609.3	0.0	6609.3
	% Fixture	97.0	0.0	97.0
Total	Lumens	6812.1	0.0	6812.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	52.9	0.8
10°-20°	182.3	2.7
20°-30°	348.9	5.1
30°-40°	580.3	8.5
40°-50°	785.2	11.5
50°-60°	1228.0	18.0
60°-70°	2524.7	37.1
70°-80°	1015.9	14.9
80°-90°	94.0	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°	6812.1	100.0
0°-180°	6812.1	100.0

Coefficient of Utilization



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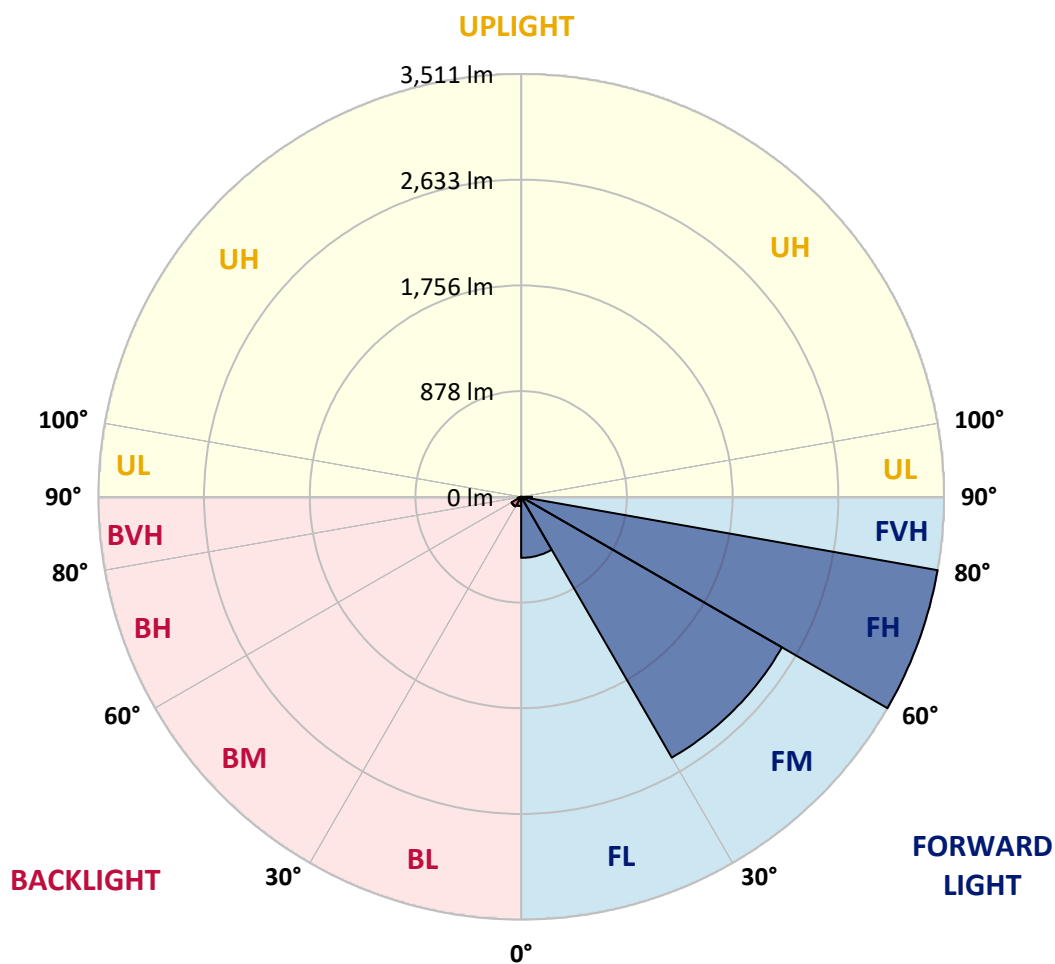
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	507.0	7.4			
FM	(30°-60°)	2500.8	36.7			
FH	(60°-80°)	3511.0	51.5			G2/5000
FVH	(80°-90°)	90.5	1.3			G1/100
BL	(0°-30°)	77.2	1.1	B0/110		
BM	(30°-60°)	92.6	1.4	B0/220		
BH	(60°-80°)	29.6	0.4	B0/110		G0/110
BVH	(80°-90°)	3.5	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°	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5
2.5°	686.3	678.5	669.5	669.5	658.4	658.4	651.7	633.9	631.6	621.6	611.5
5°	876.0	869.3	858.2	848.1	839.2	823.6	812.4	791.2	767.8	745.4	725.4
7.5°	1061.3	1057.9	1037.8	1034.4	1019.9	994.3	972.0	940.7	900.5	869.3	832.5
10°	1233.1	1225.3	1220.8	1201.8	1180.7	1152.8	1118.1	1080.3	1033.4	984.2	931.8
12.5°	1369.3	1364.8	1344.7	1336.9	1314.6	1286.7	1243.2	1194.0	1147.2	1083.6	1022.2
15°	1470.8	1463.0	1449.6	1437.3	1410.6	1386.0	1345.8	1292.2	1235.4	1166.2	1092.5
17.5°	1555.6	1541.1	1537.7	1518.8	1490.9	1461.8	1417.3	1368.1	1301.2	1232.0	1151.6
20°	1669.4	1649.4	1642.6	1614.7	1582.4	1542.2	1490.9	1429.5	1359.2	1283.4	1200.7
22.5°	1803.3	1788.8	1774.3	1749.8	1708.5	1651.6	1576.8	1509.9	1420.6	1336.9	1247.6
25°	1993.1	1980.8	1957.4	1923.9	1872.5	1804.5	1714.1	1615.9	1511.0	1403.8	1298.9
27.5°	2177.2	2166.0	2149.3	2123.7	2065.6	1990.8	1879.2	1754.3	1621.4	1492.0	1375.9
30°	2350.2	2340.1	2323.4	2297.7	2246.4	2172.7	2046.6	1912.7	1747.6	1596.9	1457.4
32.5°	2536.6	2533.2	2514.2	2477.4	2432.7	2333.5	2196.2	2052.2	1884.8	1710.8	1547.8
35°	2747.4	2721.8	2703.9	2667.1	2591.2	2485.2	2324.5	2167.2	1990.8	1812.3	1630.4
37.5°	2926.0	2901.5	2879.1	2832.3	2739.6	2604.6	2422.7	2249.7	2067.8	1885.9	1700.7
40°	3056.5	3044.3	3017.5	2956.1	2852.3	2691.7	2495.2	2306.6	2123.7	1940.6	1757.6
42.5°	3153.6	3134.7	3104.6	3040.9	2918.2	2735.2	2524.2	2330.1	2149.3	1974.1	1794.4
45°	3189.3	3173.8	3145.8	3076.6	2943.8	2747.4	2523.1	2323.4	2150.4	1984.1	1819.0
47.5°	3168.1	3152.5	3127.9	3063.2	2932.7	2732.9	2503.1	2304.4	2139.2	1987.5	1841.3
50°	3097.9	3088.9	3069.9	3015.3	2898.1	2705.0	2485.2	2294.4	2137.0	2004.2	1872.5
52.5°	3091.1	3085.6	3062.1	3007.5	2888.1	2696.1	2482.9	2300.0	2156.0	2025.5	1894.9
55°	3777.4	3698.2	3520.8	3370.1	3122.4	2827.8	2595.6	2390.3	2236.3	2109.2	2017.6
57.5°	5368.8	5250.5	5017.3	4730.5	4161.3	3602.2	3154.8	2831.1	2671.5	2613.5	2648.1
60°	6114.2	6093.0	6056.2	5920.0	5628.8	5147.8	4612.2	4033.0	3800.9	3780.8	3851.1
62.5°	6468.0	6454.6	6465.8	6449.0	6358.6	6218.0	6064.0	5814.1	5584.1	5435.7	5121.0
65°	6630.9	6639.9	6703.4	6753.6	6764.8	6801.6	6914.4	7225.7	7453.3	7070.6	6196.8
67.5°	6216.9	6269.3	6415.5	6598.5	6812.8	7020.4	7355.1	8011.3	8478.9	8029.2	6788.3
69°	5146.7	5172.4	5529.4	5874.3	6397.7	6763.7	7249.1	8109.5	8635.2	8127.4	6741.4
70°	4051.9	4075.4	4458.2	4926.9	5811.8	6282.7	6917.7	7943.3	8488.9	7996.8	6500.3
72.5°	1827.9	1794.4	1929.4	2180.5	3142.4	3890.2	5000.5	6435.6	7003.6	6406.6	4863.2
75°	1276.6	1262.1	1276.6	1277.7	1427.3	1841.3	2323.4	3488.4	4314.2	3722.8	2323.4
77.5°	988.7	978.7	968.6	957.5	975.4	1092.5	1139.4	1237.5	1606.9	1519.9	886.0
80°	782.3	773.3	797.9	790.1	790.1	803.5	794.6	757.7	688.5	638.3	571.3
82.5°	363.8	366.0	366.0	397.2	478.8	559.1	584.8	548.0	486.6	414.0	333.7
85°	34.6	39.0	65.9	101.6	202.0	227.6	228.8	189.7	189.7	149.6	120.5
87.5°	0.0	1.1	1.1	1.1	10.0	27.9	23.4	6.7	3.3	3.3	5.6
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°	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5
2.5°	593.7	590.3	577.0	563.5	551.3	537.9	525.6	513.3	499.9	489.9	477.6
5°	694.1	669.5	641.7	614.9	588.1	560.2	531.2	505.5	478.8	454.2	430.7
7.5°	795.6	747.7	709.7	661.7	618.2	574.7	534.5	493.3	455.3	419.6	386.1
10°	881.6	823.6	764.4	703.1	640.5	582.5	526.7	477.6	427.4	383.9	342.6
12.5°	951.9	878.2	805.7	728.7	658.4	584.8	515.6	456.4	397.2	348.2	305.8
15°	1015.5	930.7	843.6	754.4	665.1	581.4	504.4	430.7	370.5	314.7	266.7
17.5°	1066.8	969.7	871.5	771.1	675.2	577.0	489.9	412.9	342.6	284.5	237.7
20°	1111.5	1009.9	903.9	791.2	681.9	575.8	477.6	390.6	318.0	256.7	210.9
22.5°	1152.8	1051.2	937.4	816.9	691.9	574.7	466.4	373.9	296.8	235.5	189.7
25°	1199.7	1092.5	973.1	843.6	709.7	579.2	459.8	360.4	277.8	215.4	172.9
27.5°	1252.1	1139.4	1015.5	877.1	733.2	588.1	457.6	345.9	261.1	196.4	159.6
30°	1325.7	1195.2	1057.9	910.6	754.4	598.2	455.3	337.0	244.4	181.9	146.2
32.5°	1390.5	1249.9	1104.8	945.2	777.8	608.2	454.2	324.7	228.8	167.4	136.1
35°	1458.5	1300.1	1145.0	978.7	797.9	619.3	453.1	315.8	214.3	152.9	126.1
37.5°	1517.7	1342.4	1176.2	1007.7	820.2	629.4	454.2	308.0	200.9	140.6	117.2
40°	1567.9	1386.0	1210.8	1034.4	843.6	645.0	455.3	300.2	187.5	129.4	109.4
42.5°	1612.6	1427.3	1247.6	1064.6	870.5	662.9	462.0	293.5	176.3	119.4	101.6
45°	1647.1	1465.2	1287.8	1107.0	914.0	691.9	474.3	289.0	165.1	110.5	94.9
47.5°	1682.8	1521.0	1355.9	1174.0	977.6	737.6	495.5	287.9	156.2	103.7	89.2
50°	1732.0	1576.8	1416.1	1242.0	1035.6	784.5	521.1	289.0	145.1	97.1	83.7
52.5°	1767.7	1633.7	1494.2	1360.3	1174.0	927.3	620.5	309.1	139.5	91.5	77.0
55°	1978.6	1955.1	1958.4	1980.8	1836.9	1577.9	1037.8	446.4	164.1	103.7	75.9
57.5°	2789.9	2872.4	2920.4	2919.3	2681.6	2224.1	1393.8	573.6	183.0	120.5	90.4
60°	3856.7	3794.2	3706.1	3488.4	3172.6	2538.8	1559.0	617.1	158.4	96.0	82.6
62.5°	4799.7	4433.6	4108.9	3756.3	3342.2	2648.1	1592.4	613.8	138.4	72.5	58.0
65°	5387.7	4729.3	4204.9	3762.9	3275.3	2556.6	1506.5	563.5	117.2	59.2	48.0
67.5°	5528.4	4569.7	3827.7	3264.1	2736.3	1989.7	1105.9	424.1	91.5	49.1	42.4
69°	5221.4	4062.0	3171.5	2532.1	1990.8	1320.2	684.1	267.8	70.3	44.7	39.0
70°	4803.0	3533.1	2583.4	2032.1	1474.2	927.3	478.8	188.6	56.9	41.3	35.7
72.5°	3090.1	1855.8	1269.9	883.8	608.2	369.4	187.5	84.8	43.5	34.6	29.0
75°	1198.5	686.3	497.7	378.3	295.7	205.3	113.8	54.7	36.8	29.0	22.3
77.5°	590.3	451.9	369.4	253.3	147.3	91.5	61.4	42.4	30.2	21.2	14.5
80°	466.4	310.2	185.3	114.9	87.0	65.9	46.9	34.6	22.3	13.4	10.0
82.5°	238.8	130.6	96.0	78.1	64.7	51.4	37.9	24.5	14.5	8.9	7.8
85°	74.7	54.7	49.1	48.0	44.7	36.8	26.8	15.7	8.9	5.6	5.6
87.5°	5.6	7.8	10.0	7.8	8.9	7.8	10.0	6.7	4.5	4.5	3.3
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°	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5	514.5
2.5°	468.7	455.3	443.1	435.2	420.7	415.1	409.6	407.3	397.2	399.5	390.6
5°	409.6	386.1	368.2	350.4	333.7	321.4	311.3	299.1	289.0	284.5	275.6
7.5°	356.0	325.9	302.4	283.5	263.3	247.8	234.3	225.4	216.5	207.6	203.1
10°	309.1	276.8	250.0	231.0	212.0	198.6	188.6	181.9	176.3	172.9	171.9
12.5°	265.6	234.3	209.8	193.1	178.6	171.9	167.4	164.1	162.9	161.8	161.8
15°	232.1	200.9	181.9	169.6	162.9	159.6	158.4	156.2	154.0	152.9	152.9
17.5°	200.9	177.4	164.1	157.4	154.0	151.8	149.6	147.3	145.1	143.9	143.9
20°	179.6	160.7	154.0	149.6	146.2	143.9	140.6	138.4	137.3	136.1	135.1
22.5°	162.9	150.6	146.2	142.9	138.4	135.1	132.8	130.6	128.3	127.2	126.1
25°	150.6	142.9	139.5	135.1	130.6	127.2	123.9	120.5	118.3	117.2	114.9
27.5°	141.7	136.1	131.7	126.1	121.6	118.3	114.9	111.6	109.4	107.1	106.0
30°	133.9	128.3	122.7	118.3	112.7	109.4	104.9	101.6	100.4	98.2	96.0
32.5°	126.1	120.5	114.9	109.4	103.7	99.3	97.1	92.6	90.4	89.2	87.0
35°	117.2	111.6	104.9	100.4	94.9	90.4	87.0	83.7	81.5	79.2	78.1
37.5°	109.4	102.7	96.0	90.4	85.9	81.5	78.1	74.7	72.5	70.3	69.2
40°	100.4	93.7	87.0	81.5	77.0	73.7	70.3	67.0	64.7	63.6	63.6
42.5°	92.6	84.8	78.1	73.7	70.3	65.9	62.5	59.2	58.0	56.9	58.0
45°	84.8	77.0	71.4	67.0	63.6	59.2	55.8	53.5	52.5	53.5	54.7
47.5°	78.1	70.3	64.7	61.4	58.0	54.7	51.4	49.1	49.1	51.4	53.5
50°	71.4	63.6	59.2	56.9	53.5	50.2	45.7	44.7	45.7	48.0	50.2
52.5°	64.7	55.8	52.5	51.4	48.0	44.7	41.3	40.2	41.3	43.5	42.4
55°	58.0	49.1	48.0	46.9	43.5	39.0	35.7	35.7	35.7	34.6	32.4
57.5°	55.8	43.5	42.4	41.3	37.9	33.5	31.2	29.0	27.9	24.5	23.4
60°	58.0	39.0	39.0	36.8	33.5	29.0	25.7	22.3	20.1	17.8	17.8
62.5°	46.9	35.7	34.6	32.4	27.9	23.4	20.1	16.7	15.7	14.5	14.5
65°	37.9	32.4	30.2	26.8	23.4	19.0	15.7	13.4	12.3	12.3	13.4
67.5°	34.6	29.0	25.7	22.3	19.0	14.5	12.3	11.2	11.2	12.3	12.3
69°	32.4	26.8	23.4	20.1	16.7	13.4	11.2	11.2	11.2	11.2	12.3
70°	30.2	25.7	22.3	19.0	14.5	11.2	10.0	10.0	11.2	11.2	12.3
72.5°	23.4	20.1	19.0	15.7	11.2	10.0	8.9	10.0	10.0	11.2	11.2
75°	17.8	14.5	14.5	12.3	8.9	7.8	7.8	8.9	8.9	10.0	10.0
77.5°	12.3	10.0	10.0	8.9	7.8	6.7	6.7	7.8	8.9	8.9	10.0
80°	8.9	7.8	6.7	7.8	6.7	5.6	6.7	7.8	7.8	8.9	8.9
82.5°	6.7	6.7	6.7	6.7	5.6	5.6	6.7	6.7	7.8	8.9	8.9
85°	5.6	5.6	5.6	5.6	5.6	5.6	5.6	6.7	6.7	7.8	7.8
87.5°	3.3	3.3	3.3	4.5	4.5	5.6	5.6	5.6	5.6	6.7	6.7
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):

	165°	170°	175°	180°
0°	514.5	514.5	514.5	514.5
2.5°	388.4	387.2	382.7	383.9
5°	272.3	265.6	270.0	269.0
7.5°	199.8	198.6	197.5	199.8
10°	170.8	170.8	169.6	170.8
12.5°	160.7	160.7	160.7	160.7
15°	152.9	152.9	151.8	151.8
17.5°	143.9	143.9	143.9	142.9
20°	135.1	133.9	133.9	133.9
22.5°	125.0	123.9	123.9	123.9
25°	114.9	113.8	113.8	113.8
27.5°	104.9	103.7	102.7	102.7
30°	94.9	93.7	92.6	92.6
32.5°	84.8	83.7	82.6	82.6
35°	75.9	75.9	74.7	73.7
37.5°	68.1	68.1	68.1	68.1
40°	62.5	63.6	63.6	63.6
42.5°	59.2	60.2	61.4	62.5
45°	56.9	59.2	60.2	60.2
47.5°	55.8	56.9	58.0	58.0
50°	51.4	50.2	50.2	50.2
52.5°	41.3	39.0	37.9	36.8
55°	30.2	29.0	26.8	26.8
57.5°	21.2	21.2	20.1	20.1
60°	16.7	16.7	15.7	16.7
62.5°	14.5	14.5	14.5	14.5
65°	13.4	13.4	13.4	13.4
67.5°	13.4	13.4	13.4	13.4
69°	12.3	12.3	12.3	12.3
70°	12.3	12.3	12.3	12.3
72.5°	11.2	11.2	11.2	11.2
75°	10.0	11.2	11.2	11.2
77.5°	10.0	10.0	10.0	10.0
80°	8.9	8.9	10.0	10.0
82.5°	8.9	8.9	8.9	8.9
85°	7.8	7.8	8.9	8.9
87.5°	6.7	6.7	7.8	7.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)