

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: P165493

Luminaire Tested: **VST-F05-LED-E-U-SL4-HSS-7050**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P165493
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-F05-LED-E-U-SL4-HSS-7050
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(5) LIGHTBARS WITH AccuLED OPTICS - TYPE 4 W/ SPILL LIGHT CONTROL AND HOUSE SIDE SHIELD
Light Source: (35) 5000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8515.2 lumens
Efficiency: N/A
Efficacy: 63.9 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 1' x H: 0.1')
IES Classification: Type IV - Short - Semi-Cutoff
BUG Rating: B0 - U0 - G2

Input Watts (W): 133.3
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

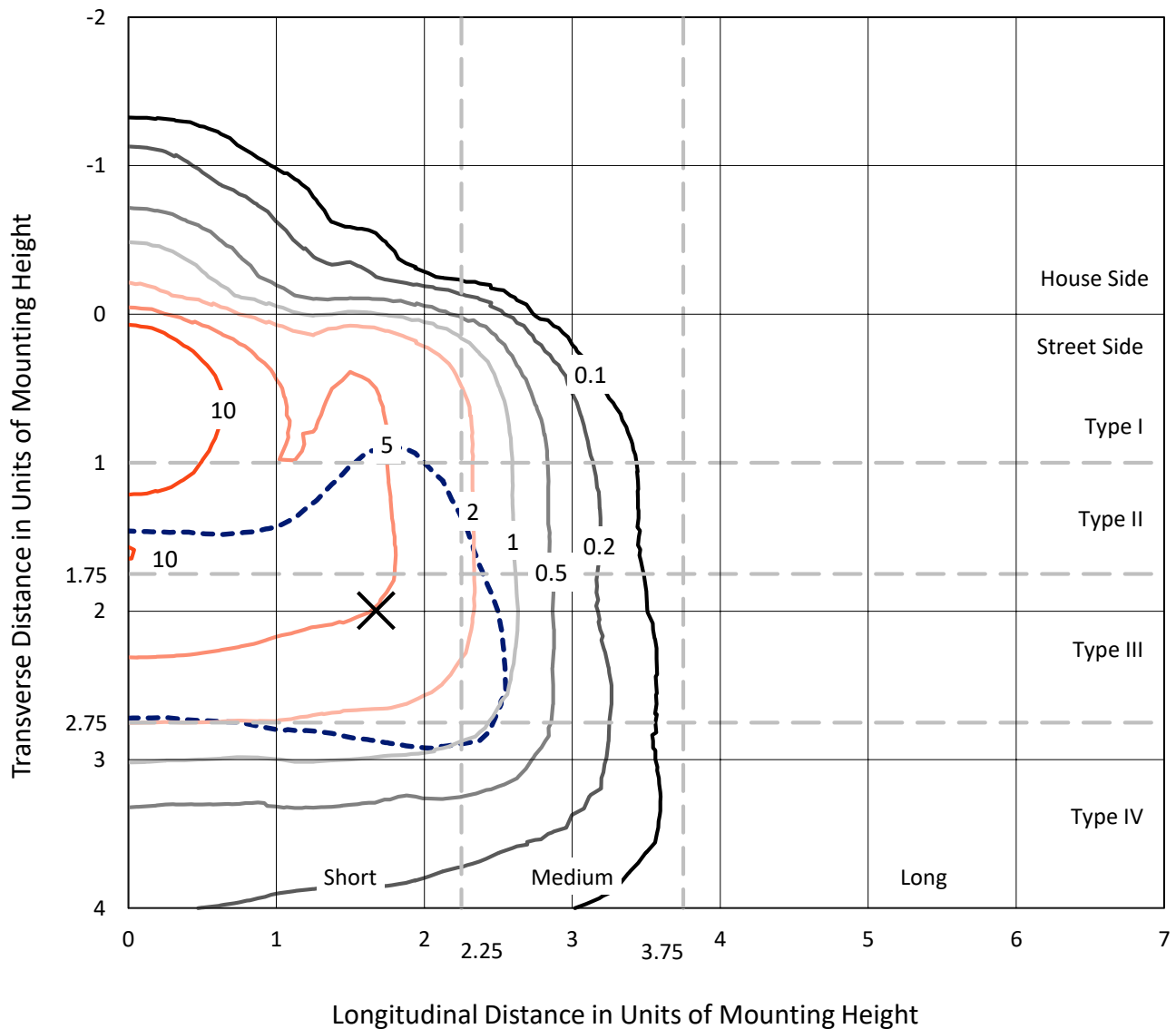


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

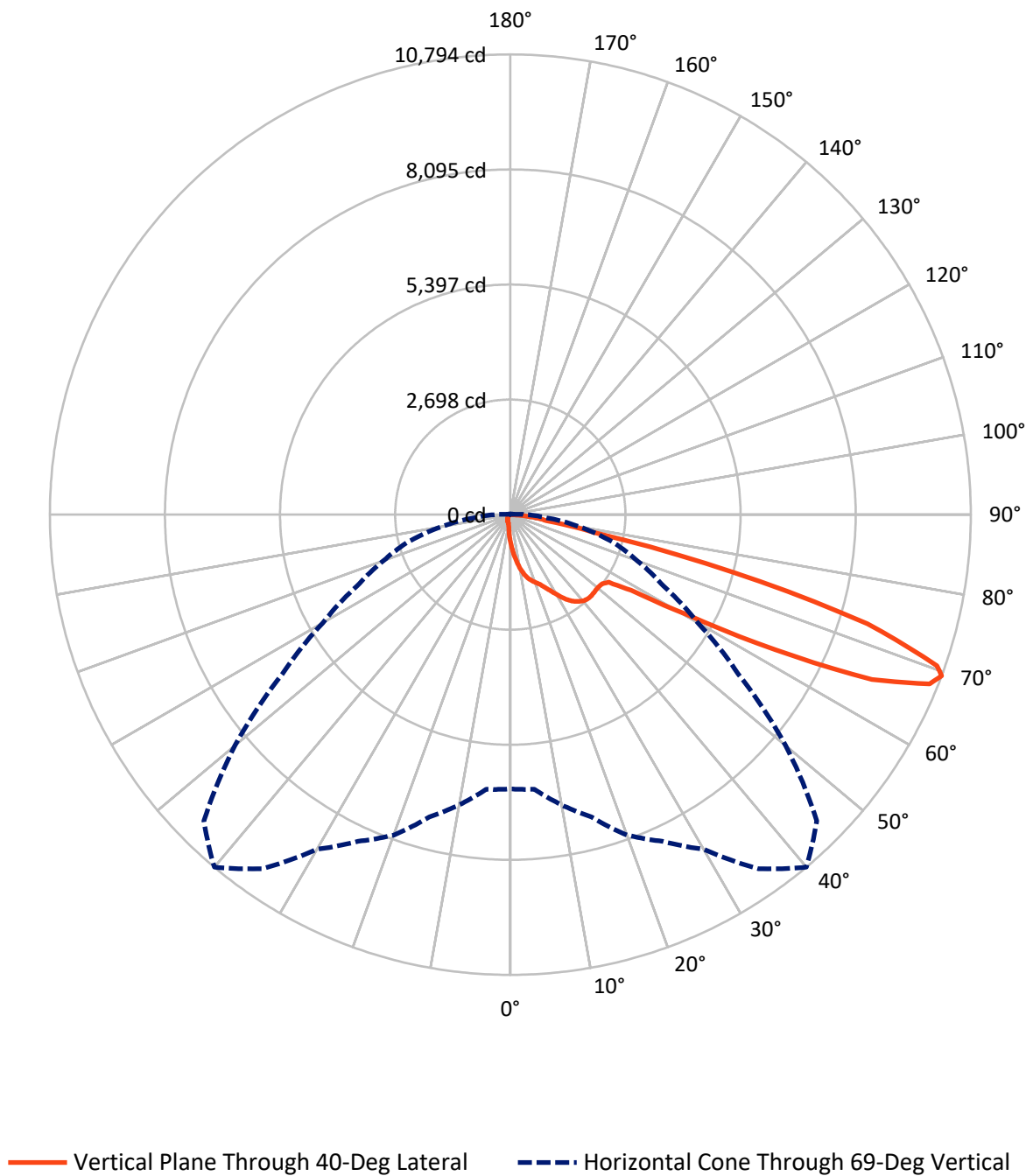


Based on 10 foot mounting height. Maximum calculated value = 19.1 fc
 Type IV - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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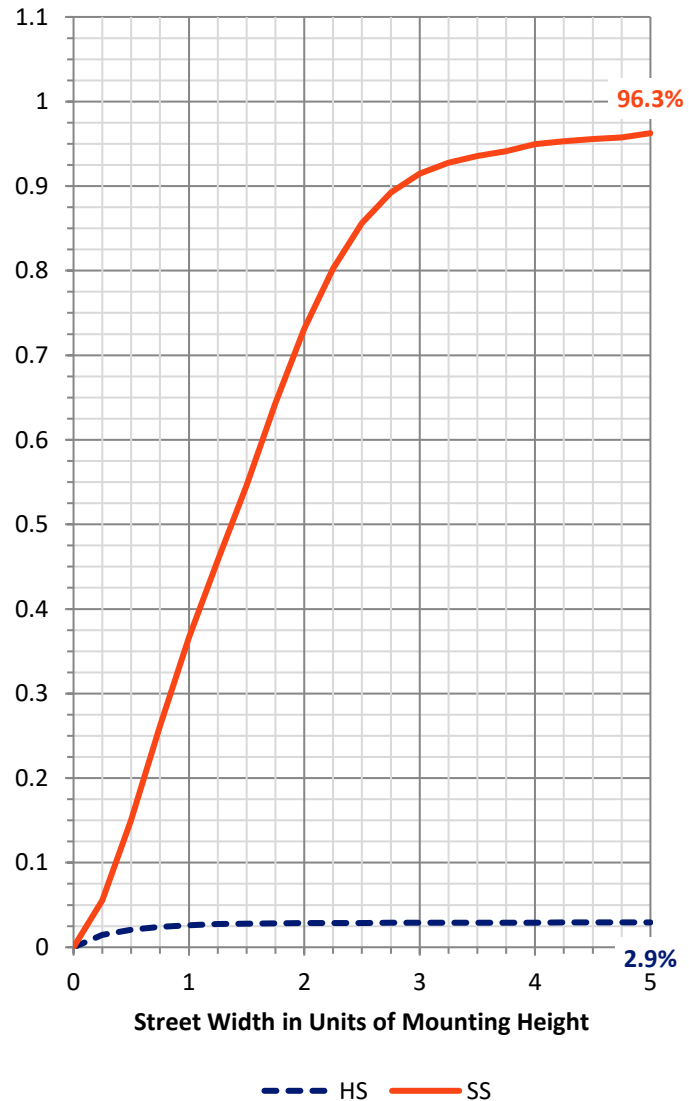
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	253.6	0.0	253.6
	% Fixture	3.0	0.0	3.0
Street Side	Lumens	8261.6	0.0	8261.6
	% Fixture	97.0	0.0	97.0
Total	Lumens	8515.2	0.0	8515.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.1	0.8
10°-20°	227.9	2.7
20°-30°	436.2	5.1
30°-40°	725.3	8.5
40°-50°	981.5	11.5
50°-60°	1535.0	18.0
60°-70°	3155.9	37.1
70°-80°	1269.9	14.9
80°-90°	117.5	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°	8515.2	100.0
0°-180°	8515.2	100.0

Coefficient of Utilization



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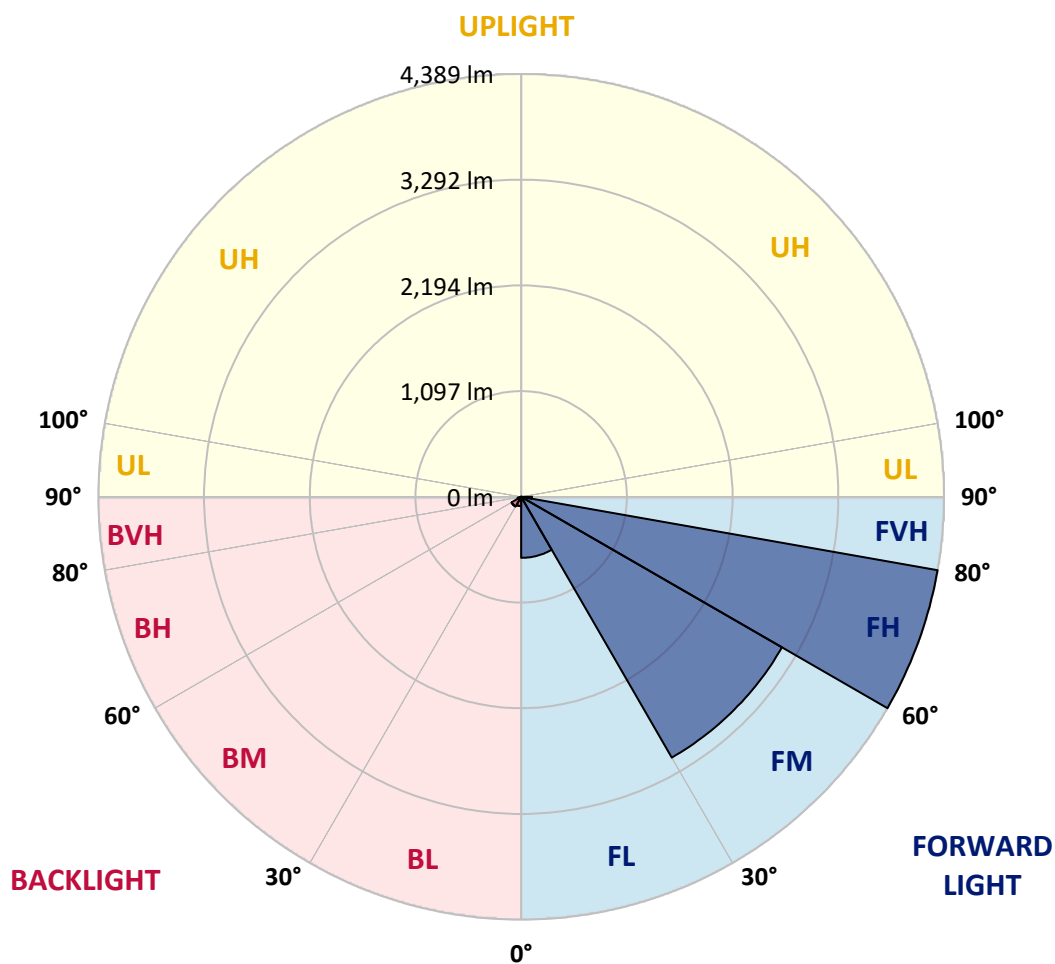
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	633.7	7.4			
FM	(30°-60°)	3126.1	36.7			
FH	(60°-80°)	4388.8	51.5			G2/5000
FVH	(80°-90°)	113.1	1.3			G2/225
BL	(0°-30°)	96.4	1.1	B0/110		
BM	(30°-60°)	115.8	1.4	B0/220		
BH	(60°-80°)	37.0	0.4	B0/110		G0/110
BVH	(80°-90°)	4.4	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°	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1
2.5°	857.9	848.1	836.9	836.9	823.0	823.0	814.6	792.4	789.6	776.9	764.4
5°	1095.0	1086.6	1072.7	1060.1	1049.0	1029.5	1015.5	989.0	959.7	931.8	906.7
7.5°	1326.6	1322.4	1297.3	1293.1	1274.9	1242.9	1215.0	1175.9	1125.7	1086.6	1040.6
10°	1541.4	1531.6	1526.0	1502.3	1475.9	1441.0	1397.7	1350.3	1291.7	1230.3	1164.7
12.5°	1711.6	1706.0	1680.9	1671.1	1643.2	1608.3	1554.0	1492.5	1434.0	1354.5	1277.7
15°	1838.5	1828.8	1812.0	1796.6	1763.2	1732.5	1682.3	1615.3	1544.2	1457.7	1365.7
17.5°	1944.5	1926.4	1922.2	1898.5	1863.7	1827.3	1771.6	1710.2	1626.5	1540.0	1439.5
20°	2086.8	2061.7	2053.3	2018.4	1978.0	1927.8	1863.7	1786.9	1699.0	1604.2	1500.9
22.5°	2254.2	2236.0	2217.9	2187.2	2135.6	2064.5	1971.1	1887.4	1775.7	1671.1	1559.6
25°	2491.3	2476.0	2446.7	2404.8	2340.6	2255.6	2142.6	2019.9	1888.7	1754.8	1623.7
27.5°	2721.5	2707.5	2686.6	2654.6	2582.0	2488.5	2349.0	2192.8	2026.8	1865.0	1719.9
30°	2937.7	2925.1	2904.2	2872.2	2808.0	2715.9	2558.3	2390.9	2184.4	1996.1	1821.8
32.5°	3170.7	3166.5	3142.7	3096.7	3040.9	2916.8	2745.2	2565.3	2356.1	2138.4	1934.7
35°	3434.3	3402.2	3379.9	3333.8	3239.0	3106.5	2905.6	2708.9	2488.5	2265.3	2038.0
37.5°	3657.5	3626.8	3598.9	3540.4	3424.6	3255.7	3028.4	2812.1	2584.8	2357.4	2125.8
40°	3820.6	3805.3	3771.9	3695.1	3565.4	3364.6	3119.0	2883.3	2654.6	2425.8	2197.0
42.5°	3942.0	3918.3	3880.7	3801.2	3647.8	3419.0	3155.3	2912.6	2686.6	2467.6	2243.1
45°	3986.7	3967.2	3932.3	3845.8	3679.8	3434.3	3153.9	2904.2	2688.0	2480.2	2273.7
47.5°	3960.2	3940.7	3909.9	3829.0	3665.9	3416.2	3128.8	2880.5	2674.0	2484.4	2301.6
50°	3872.3	3861.1	3837.4	3769.1	3622.6	3381.3	3106.5	2867.9	2671.3	2505.3	2340.6
52.5°	3863.9	3857.0	3827.7	3759.3	3610.1	3370.1	3103.7	2875.0	2695.0	2531.8	2368.6
55°	4721.8	4622.7	4401.0	4212.7	3903.0	3534.8	3244.6	2987.9	2795.4	2636.4	2522.0
57.5°	6711.0	6563.1	6271.6	5913.1	5201.6	4502.8	3943.5	3538.9	3339.4	3266.9	3310.1
60°	7642.7	7616.3	7570.2	7400.1	7036.0	6434.8	5765.2	5041.3	4751.1	4726.0	4813.8
62.5°	8085.0	8068.2	8082.2	8061.3	7948.3	7772.5	7580.0	7267.6	6980.2	6794.6	6401.3
65°	8288.6	8299.8	8379.3	8442.0	8456.0	8502.0	8643.0	9032.1	9316.6	8838.2	7746.0
67.5°	7771.1	7836.6	8019.4	8248.1	8516.0	8775.4	9193.9	10014.1	10598.6	10036.5	8485.3
69°	6433.4	6465.5	6911.8	7342.9	7997.1	8454.7	9061.4	10136.9	10793.9	10159.2	8426.7
70°	5064.9	5094.2	5572.7	6158.6	7264.8	7853.4	8647.1	9929.1	10611.1	9996.0	8125.4
72.5°	2284.9	2243.1	2411.8	2725.6	3928.1	4862.7	6250.7	8044.5	8754.5	8008.3	6079.0
75°	1595.8	1577.7	1595.8	1597.2	1784.1	2301.6	2904.2	4360.5	5392.7	4653.5	2904.2
77.5°	1235.9	1223.3	1210.8	1196.8	1219.2	1365.7	1424.2	1546.9	2008.7	1899.9	1107.6
80°	977.9	966.7	997.3	987.6	987.6	1004.4	993.2	947.1	860.6	797.9	714.2
82.5°	454.7	457.5	457.5	496.6	598.5	698.8	730.9	684.9	608.2	517.5	417.1
85°	43.2	48.8	82.3	127.0	252.5	284.5	286.0	237.1	237.1	186.9	150.6
87.5°	0.0	1.4	1.4	1.4	12.5	34.9	29.3	8.4	4.2	4.2	6.9
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°	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1
2.5°	742.1	737.9	721.2	704.4	689.1	672.3	657.0	641.7	624.9	612.4	597.0
5°	867.7	836.9	802.1	768.6	735.1	700.3	664.0	631.9	598.5	567.7	538.4
7.5°	994.6	934.6	887.1	827.2	772.8	718.4	668.2	616.6	569.2	524.5	482.7
10°	1102.0	1029.5	955.5	878.8	800.7	728.1	658.4	597.0	534.3	479.9	428.3
12.5°	1189.9	1097.8	1007.2	910.9	823.0	730.9	644.5	570.5	496.6	435.2	382.2
15°	1269.3	1163.4	1054.5	943.0	831.4	726.8	630.5	538.4	463.1	393.4	333.4
17.5°	1333.6	1212.2	1089.4	963.9	843.9	721.2	612.4	516.1	428.3	355.7	297.2
20°	1389.4	1262.4	1129.9	989.0	852.3	719.8	597.0	488.3	397.5	320.9	263.6
22.5°	1441.0	1314.0	1171.8	1021.1	864.9	718.4	583.0	467.3	371.0	294.4	237.1
25°	1499.6	1365.7	1216.4	1054.5	887.1	724.0	574.7	450.6	347.3	269.2	216.2
27.5°	1565.1	1424.2	1269.3	1096.4	916.5	735.1	571.9	432.4	326.4	245.5	199.5
30°	1657.1	1494.0	1322.4	1138.2	943.0	747.7	569.2	421.3	305.5	227.4	182.7
32.5°	1738.1	1562.3	1381.0	1181.5	972.3	760.3	567.7	405.9	286.0	209.2	170.2
35°	1823.2	1625.1	1431.2	1223.3	997.3	774.1	566.4	394.7	267.8	191.1	157.6
37.5°	1897.1	1678.1	1470.3	1259.6	1025.3	786.8	567.7	385.0	251.1	175.8	146.5
40°	1959.9	1732.5	1513.5	1293.1	1054.5	806.2	569.2	375.3	234.4	161.8	136.7
42.5°	2015.7	1784.1	1559.6	1330.8	1088.1	828.6	577.5	366.9	220.4	149.3	127.0
45°	2058.9	1831.5	1609.7	1383.8	1142.5	864.9	592.9	361.3	206.4	138.1	118.6
47.5°	2103.5	1901.3	1694.8	1467.5	1222.0	922.0	619.4	359.9	195.3	129.7	111.6
50°	2165.0	1971.1	1770.1	1552.5	1294.5	980.7	651.4	361.3	181.4	121.4	104.6
52.5°	2209.6	2042.1	1867.8	1700.4	1467.5	1159.1	775.6	386.4	174.3	114.4	96.2
55°	2473.2	2443.9	2448.0	2476.0	2296.1	1972.4	1297.3	558.0	205.1	129.7	94.9
57.5°	3487.3	3590.5	3650.5	3649.1	3352.0	2780.1	1742.3	717.0	228.8	150.6	113.0
60°	4820.9	4742.8	4632.6	4360.5	3965.8	3173.5	1948.7	771.4	198.0	119.9	103.3
62.5°	5999.6	5542.0	5136.1	4695.3	4177.8	3310.1	1990.5	767.2	173.0	90.6	72.5
65°	6734.7	5911.7	5256.1	4703.6	4094.1	3195.8	1883.1	704.4	146.5	73.9	60.0
67.5°	6910.4	5712.2	4784.6	4080.1	3420.3	2487.2	1382.3	530.1	114.4	61.4	53.0
69°	6526.8	5077.5	3964.4	3165.1	2488.5	1650.2	855.1	334.8	87.8	55.8	48.8
70°	6003.7	4416.3	3229.2	2540.1	1842.7	1159.1	598.5	235.7	71.2	51.6	44.6
72.5°	3862.6	2319.7	1587.4	1104.8	760.3	461.7	234.4	106.1	54.4	43.2	36.3
75°	1498.1	857.9	622.2	472.8	369.7	256.7	142.3	68.4	46.0	36.3	27.9
77.5°	737.9	564.9	461.7	316.6	184.2	114.4	76.7	53.0	37.7	26.5	18.1
80°	583.0	387.8	231.6	143.7	108.8	82.3	58.6	43.2	27.9	16.8	12.5
82.5°	298.5	163.2	119.9	97.7	80.9	64.2	47.4	30.7	18.1	11.2	9.7
85°	93.4	68.4	61.4	60.0	55.8	46.0	33.5	19.6	11.2	6.9	6.9
87.5°	6.9	9.7	12.5	9.7	11.2	9.7	12.5	8.4	5.6	5.6	4.2
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):

	110°	115°	120°	125°	130°	135°	140°	145°	150°	155°	160°
0°	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1	643.1
2.5°	585.8	569.2	553.8	544.0	525.9	518.9	512.0	509.2	496.6	499.4	488.3
5°	512.0	482.7	460.3	438.0	417.1	401.8	389.1	373.8	361.3	355.7	344.5
7.5°	445.0	407.4	378.0	354.3	329.2	309.7	292.9	281.7	270.6	259.5	253.9
10°	386.4	345.9	312.5	288.8	265.0	248.3	235.7	227.4	220.4	216.2	214.8
12.5°	332.0	292.9	262.3	241.3	223.2	214.8	209.2	205.1	203.6	202.3	202.3
15°	290.1	251.1	227.4	212.0	203.6	199.5	198.0	195.3	192.5	191.1	191.1
17.5°	251.1	221.8	205.1	196.7	192.5	189.7	186.9	184.2	181.4	179.9	179.9
20°	224.6	200.8	192.5	186.9	182.7	179.9	175.8	173.0	171.6	170.2	168.8
22.5°	203.6	188.3	182.7	178.6	173.0	168.8	166.0	163.2	160.4	159.0	157.6
25°	188.3	178.6	174.3	168.8	163.2	159.0	154.8	150.6	147.9	146.5	143.7
27.5°	177.1	170.2	164.6	157.6	152.1	147.9	143.7	139.5	136.7	133.9	132.5
30°	167.4	160.4	153.4	147.9	140.9	136.7	131.1	127.0	125.5	122.7	119.9
32.5°	157.6	150.6	143.7	136.7	129.7	124.2	121.4	115.8	113.0	111.6	108.8
35°	146.5	139.5	131.1	125.5	118.6	113.0	108.8	104.6	101.8	99.0	97.7
37.5°	136.7	128.3	119.9	113.0	107.4	101.8	97.7	93.4	90.6	87.8	86.5
40°	125.5	117.2	108.8	101.8	96.2	92.1	87.8	83.7	80.9	79.5	79.5
42.5°	115.8	106.1	97.7	92.1	87.8	82.3	78.1	73.9	72.5	71.2	72.5
45°	106.1	96.2	89.3	83.7	79.5	73.9	69.7	66.9	65.6	66.9	68.4
47.5°	97.7	87.8	80.9	76.7	72.5	68.4	64.2	61.4	61.4	64.2	66.9
50°	89.3	79.5	73.9	71.2	66.9	62.8	57.2	55.8	57.2	60.0	62.8
52.5°	80.9	69.7	65.6	64.2	60.0	55.8	51.6	50.2	51.6	54.4	53.0
55°	72.5	61.4	60.0	58.6	54.4	48.8	44.6	44.6	44.6	43.2	40.5
57.5°	69.7	54.4	53.0	51.6	47.4	41.8	39.1	36.3	34.9	30.7	29.3
60°	72.5	48.8	48.8	46.0	41.8	36.3	32.1	27.9	25.1	22.3	22.3
62.5°	58.6	44.6	43.2	40.5	34.9	29.3	25.1	20.9	19.6	18.1	18.1
65°	47.4	40.5	37.7	33.5	29.3	23.7	19.6	16.8	15.3	15.3	16.8
67.5°	43.2	36.3	32.1	27.9	23.7	18.1	15.3	14.0	14.0	15.3	15.3
69°	40.5	33.5	29.3	25.1	20.9	16.8	14.0	14.0	14.0	14.0	15.3
70°	37.7	32.1	27.9	23.7	18.1	14.0	12.5	12.5	14.0	14.0	15.3
72.5°	29.3	25.1	23.7	19.6	14.0	12.5	11.2	12.5	12.5	14.0	14.0
75°	22.3	18.1	18.1	15.3	11.2	9.7	9.7	11.2	11.2	12.5	12.5
77.5°	15.3	12.5	12.5	11.2	9.7	8.4	8.4	9.7	11.2	11.2	12.5
80°	11.2	9.7	8.4	9.7	8.4	6.9	8.4	9.7	9.7	11.2	11.2
82.5°	8.4	8.4	8.4	8.4	6.9	6.9	8.4	8.4	9.7	11.2	11.2
85°	6.9	6.9	6.9	6.9	6.9	6.9	6.9	8.4	8.4	9.7	9.7
87.5°	4.2	4.2	4.2	5.6	5.6	6.9	6.9	6.9	6.9	8.4	8.4
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°	643.1	643.1	643.1	643.1
2.5°	485.5	484.0	478.4	479.9
5°	340.4	332.0	337.6	336.2
7.5°	249.7	248.3	246.9	249.7
10°	213.5	213.5	212.0	213.5
12.5°	200.8	200.8	200.8	200.8
15°	191.1	191.1	189.7	189.7
17.5°	179.9	179.9	179.9	178.6
20°	168.8	167.4	167.4	167.4
22.5°	156.2	154.8	154.8	154.8
25°	143.7	142.3	142.3	142.3
27.5°	131.1	129.7	128.3	128.3
30°	118.6	117.2	115.8	115.8
32.5°	106.1	104.6	103.3	103.3
35°	94.9	94.9	93.4	92.1
37.5°	85.1	85.1	85.1	85.1
40°	78.1	79.5	79.5	79.5
42.5°	73.9	75.3	76.7	78.1
45°	71.2	73.9	75.3	75.3
47.5°	69.7	71.2	72.5	72.5
50°	64.2	62.8	62.8	62.8
52.5°	51.6	48.8	47.4	46.0
55°	37.7	36.3	33.5	33.5
57.5°	26.5	26.5	25.1	25.1
60°	20.9	20.9	19.6	20.9
62.5°	18.1	18.1	18.1	18.1
65°	16.8	16.8	16.8	16.8
67.5°	16.8	16.8	16.8	16.8
69°	15.3	15.3	15.3	15.3
70°	15.3	15.3	15.3	15.3
72.5°	14.0	14.0	14.0	14.0
75°	12.5	14.0	14.0	14.0
77.5°	12.5	12.5	12.5	12.5
80°	11.2	11.2	12.5	12.5
82.5°	11.2	11.2	11.2	11.2
85°	9.7	9.7	11.2	11.2
87.5°	8.4	8.4	9.7	9.7
90°	0.0	0.0	0.0	0.0

(END OF REPORT)