

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: P157074

Luminaire Tested: **UTLD-F02-LED-E-U-SL3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157074
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33669)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-F02-LED-E-U-SL3-7030
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (14) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3964.1 lumens
Efficiency: N/A
Efficacy: 72.1 lumens/watt
Luminous Opening: Rectangular (W 0.33' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - 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



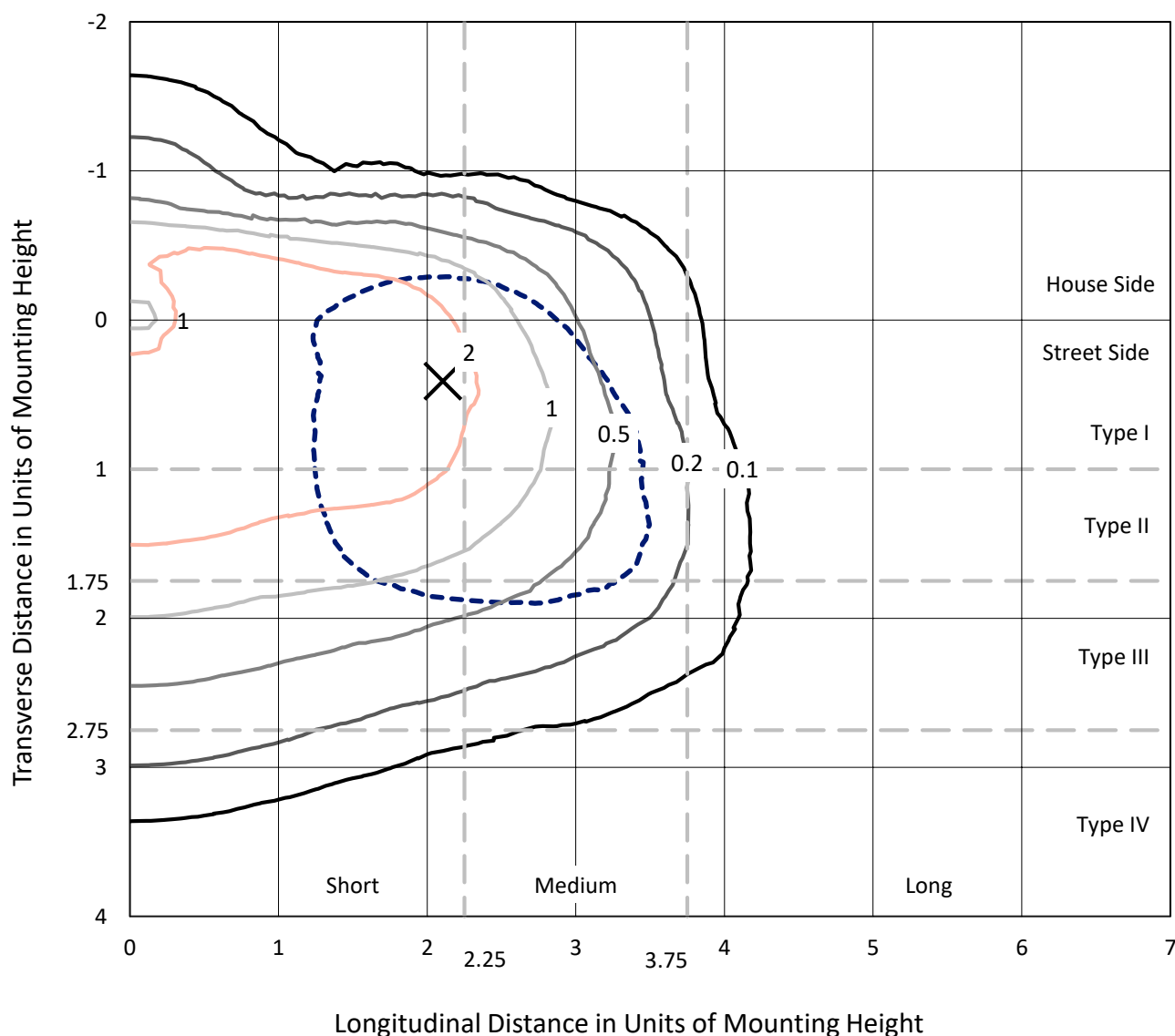
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

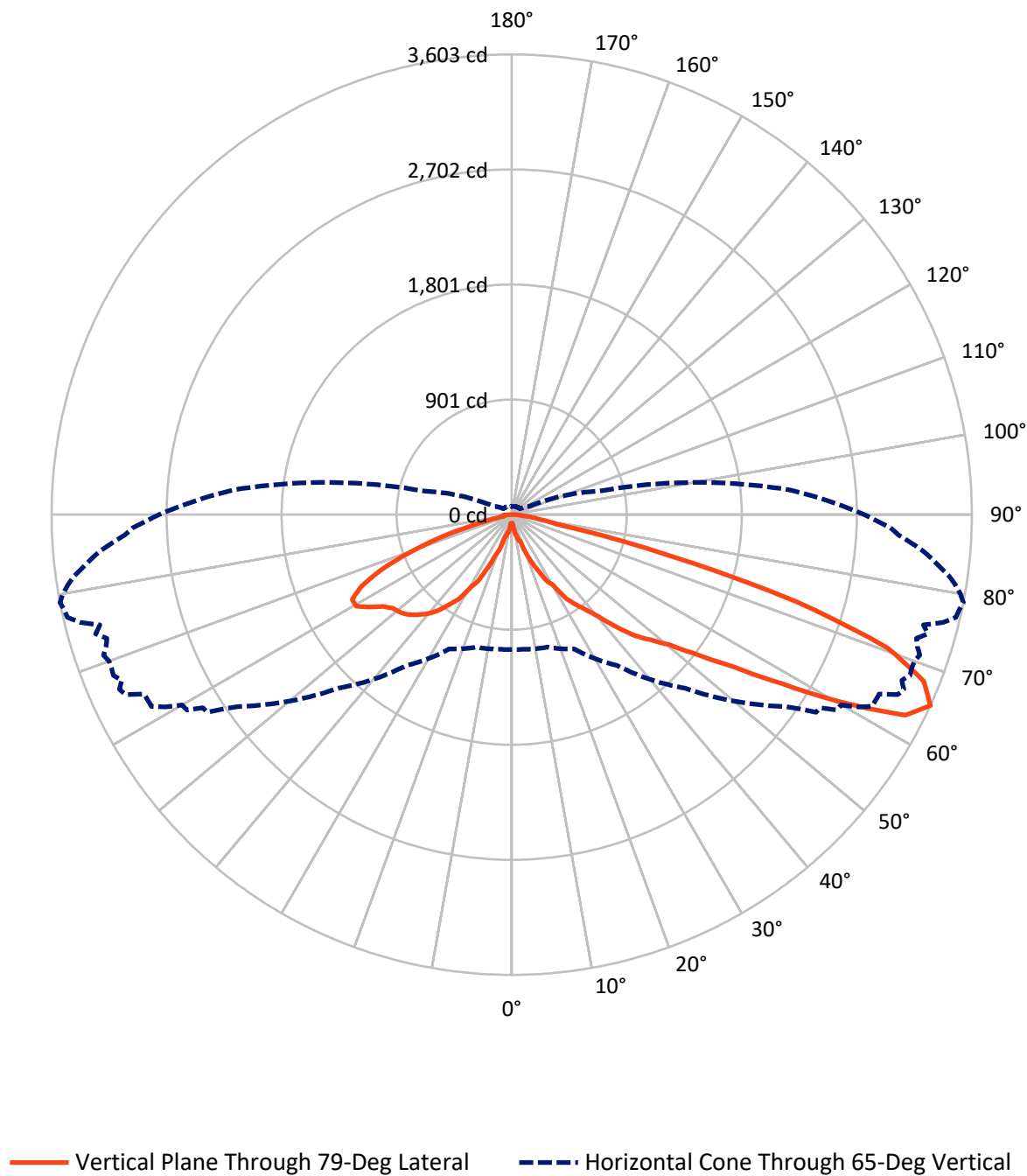


Based on 10 foot mounting height. Maximum calculated value = 5 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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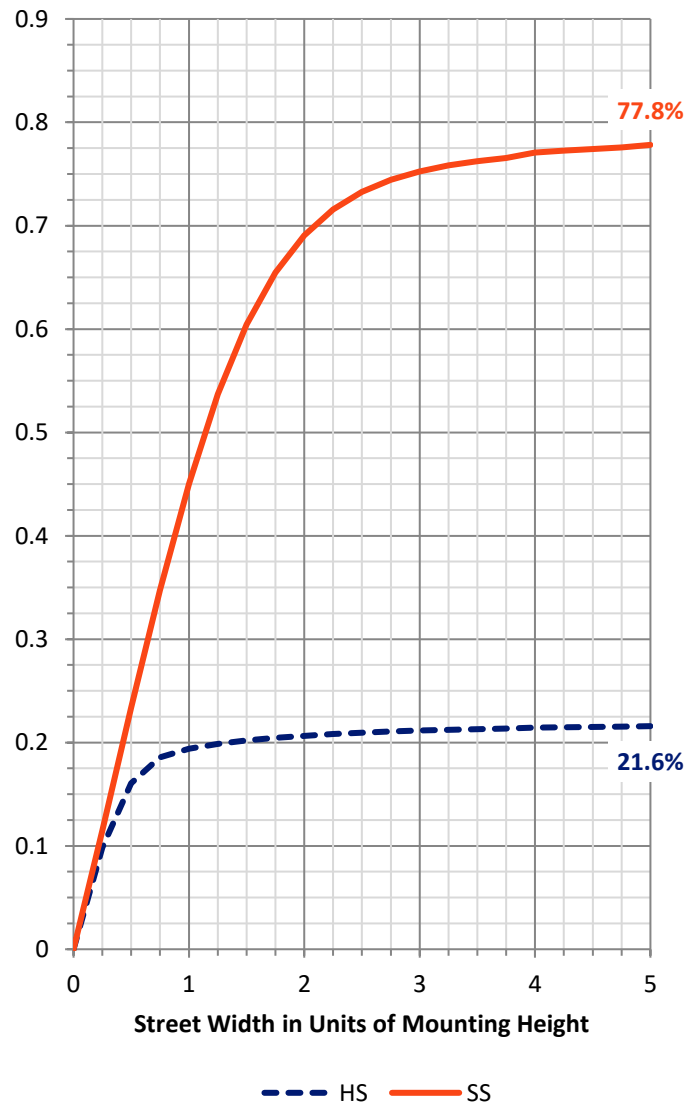
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	867.2	0.0	867.2
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	3096.9	0.0	3096.9
	% Fixture	78.1	0.0	78.1
Total	Lumens	3964.1	0.0	3964.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.5	0.2
10°-20°	60.7	1.5
20°-30°	187.2	4.7
30°-40°	360.3	9.1
40°-50°	595.5	15.0
50°-60°	895.7	22.6
60°-70°	1199.7	30.3
70°-80°	563.9	14.2
80°-90°	91.6	2.3
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°	3964.1	100.0
0°-180°	3964.1	100.0

Coefficient of Utilization



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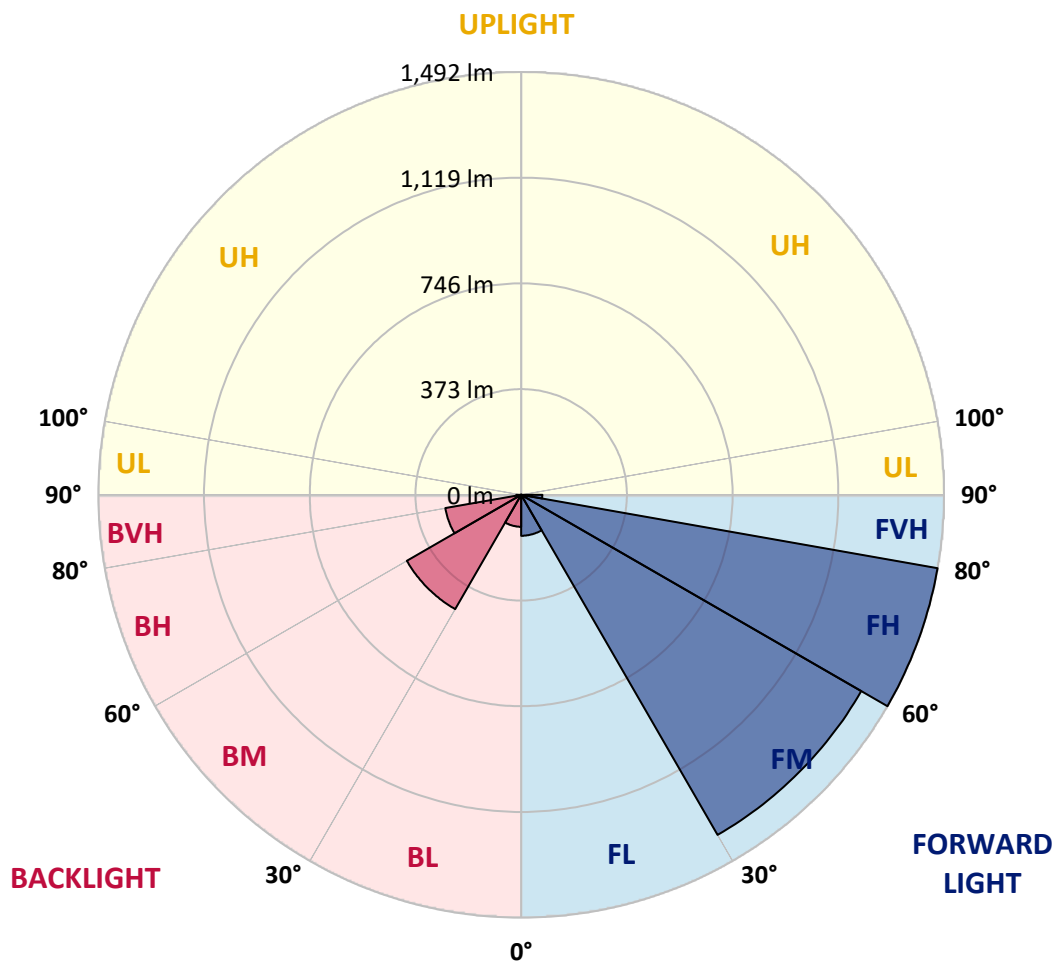
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	144.6	3.6			
FM	(30°-60°)	1385.6	35.0			
FH	(60°-80°)	1491.9	37.6			G1/1800
FVH	(80°-90°)	74.8	1.9			G1/100
BL	(0°-30°)	112.8	2.8	B1/500		
BM	(30°-60°)	465.9	11.8	B1/1000		
BH	(60°-80°)	271.7	6.9	B1/500		G1/500
BVH	(80°-90°)	16.8	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	56°	57°	58°	59°
0°	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
2.5°	113.1	112.3	112.3	113.1	111.6	110.8	96.5	93.5	90.5	88.2	86.0
5°	93.5	94.2	93.5	93.5	95.8	92.7	101.8	103.3	107.1	108.6	111.6
7.5°	150.0	150.8	149.3	147.8	121.4	97.3	94.2	94.2	94.2	97.3	96.5
10°	159.1	159.1	157.6	156.1	151.6	144.8	105.6	106.3	124.4	110.8	131.2
12.5°	222.4	223.9	220.9	210.4	162.1	201.3	202.8	200.6	199.1	193.8	189.3
15°	239.8	245.0	236.0	224.7	261.6	222.4	213.4	211.1	209.6	209.6	221.7
17.5°	331.0	332.5	325.7	304.6	276.7	265.4	262.4	260.9	260.1	260.1	261.6
20°	395.1	399.6	349.1	364.2	337.0	306.9	296.3	296.3	297.1	291.0	282.7
22.5°	435.1	433.5	410.2	419.2	371.7	343.1	369.5	376.2	383.8	386.8	391.3
25°	516.5	515.7	457.7	418.5	407.2	385.3	390.6	397.4	402.6	414.7	437.3
27.5°	525.5	524.8	483.3	466.0	404.1	440.3	494.6	505.9	512.7	514.2	512.7
30°	592.6	591.1	559.5	486.3	461.4	479.5	531.6	542.9	548.9	553.4	553.4
32.5°	662.0	662.0	602.4	511.2	496.9	548.2	625.1	628.8	633.4	634.1	635.6
35°	713.3	697.4	628.8	573.8	551.9	606.2	702.7	705.0	718.6	754.0	764.5
37.5°	740.4	741.9	716.3	649.9	652.2	713.3	863.3	866.3	868.6	877.6	890.5
40°	784.2	791.7	773.6	732.9	751.0	847.5	1002.8	1012.6	1020.9	1022.4	1047.3
42.5°	828.6	834.7	835.4	847.5	863.3	987.7	1137.8	1147.6	1146.1	1157.4	1195.1
45°	903.3	912.3	927.4	941.7	977.2	1117.4	1272.0	1287.1	1275.0	1303.7	1327.8
47.5°	999.0	1005.8	1031.5	1069.2	1083.5	1231.3	1412.2	1416.0	1426.6	1456.7	1465.8
50°	1083.5	1091.8	1124.2	1174.0	1191.3	1330.8	1519.3	1520.8	1538.1	1581.1	1563.8
52.5°	1147.6	1156.6	1184.5	1262.2	1289.3	1441.6	1602.2	1603.0	1633.1	1673.1	1637.7
55°	1183.0	1192.8	1211.7	1299.9	1352.7	1523.8	1700.3	1704.8	1747.8	1769.6	1742.5
57.5°	1184.5	1193.6	1215.4	1292.3	1379.8	1609.0	1836.0	1858.6	1903.8	1931.0	1931.0
60°	1171.0	1182.3	1203.4	1269.7	1405.4	1704.0	2044.8	2091.6	2164.0	2190.4	2249.9
62.5°	1135.5	1140.8	1153.6	1229.8	1443.1	1817.9	2345.7	2423.3	2530.4	2547.0	2668.4
65°	1054.8	1057.9	1073.7	1160.4	1441.6	1921.9	2618.6	2720.4	2840.3	2851.6	2967.7
67.5°	949.3	956.1	968.1	1051.1	1305.2	1882.0	2642.0	2774.7	2868.2	2872.0	2969.2
70°	785.7	782.6	797.0	855.8	1051.8	1578.1	2388.7	2513.1	2576.4	2602.8	2669.1
72.5°	515.0	516.5	505.9	542.1	708.8	1111.4	1924.2	2062.9	2091.6	2155.7	2188.8
75°	289.5	283.5	294.8	325.0	399.6	668.8	1309.7	1432.6	1492.2	1544.9	1573.6
77.5°	171.9	169.6	188.5	230.7	322.7	448.6	755.5	816.6	865.6	906.3	958.3
80°	79.9	85.2	83.7	95.0	175.7	383.8	524.8	548.9	570.0	593.4	625.1
82.5°	39.2	43.0	49.8	52.0	61.8	193.8	468.2	492.4	512.7	536.1	567.8
85°	25.6	26.4	36.9	37.7	38.5	58.8	229.2	265.4	279.7	318.9	373.2
87.5°	9.0	12.8	27.1	24.1	24.1	28.7	77.7	85.2	89.0	97.3	108.6
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):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
2.5°	85.2	85.2	82.2	79.2	77.7	77.7	75.4	75.4	74.6	73.9	72.4
5°	110.8	112.3	112.3	112.3	111.6	110.8	110.1	108.6	107.1	104.1	101.8
7.5°	94.2	92.7	91.2	88.2	89.0	91.2	93.5	96.5	101.0	103.3	104.1
10°	132.7	136.5	135.7	136.5	135.7	137.2	137.2	138.7	138.0	138.7	140.2
12.5°	181.7	166.6	152.3	149.3	148.5	147.8	149.3	148.5	152.3	154.6	154.6
15°	228.5	244.3	245.0	253.3	251.8	239.8	227.0	223.2	220.2	220.2	212.6
17.5°	262.4	267.7	268.4	266.2	269.2	268.4	264.7	260.1	254.8	245.0	230.7
20°	312.9	320.4	325.0	329.5	338.5	331.8	330.2	360.4	364.2	367.2	364.2
22.5°	397.4	396.6	394.3	382.3	376.2	375.5	377.8	383.8	383.0	385.3	387.6
25°	447.9	447.1	453.2	475.0	481.0	502.9	496.9	496.9	500.7	504.4	498.4
27.5°	508.9	515.7	524.0	523.3	533.8	530.8	530.1	536.1	536.1	528.5	533.1
30°	557.2	578.3	607.0	616.0	610.0	610.0	618.3	626.6	624.3	623.6	625.1
32.5°	644.7	665.8	647.7	668.0	656.0	675.6	706.5	727.6	735.1	734.4	745.7
35°	785.7	789.4	778.1	786.4	800.7	804.5	807.5	807.5	798.5	813.6	820.3
37.5°	905.5	886.7	903.3	893.5	904.0	916.1	914.6	900.3	895.7	920.6	918.4
40°	1057.9	1027.7	1048.8	1043.5	1049.6	1053.3	1036.7	1026.9	1039.0	1046.5	1045.0
42.5°	1170.2	1186.0	1186.8	1184.5	1189.8	1190.6	1160.4	1164.9	1179.2	1177.0	1169.4
45°	1291.6	1318.0	1303.7	1325.5	1327.8	1298.4	1291.6	1311.2	1315.7	1308.2	1299.1
47.5°	1439.4	1456.7	1432.6	1465.8	1466.5	1433.3	1448.4	1462.0	1465.0	1449.9	1463.5
50°	1566.8	1568.3	1563.0	1588.7	1573.6	1557.0	1590.2	1597.7	1590.9	1570.6	1591.7
52.5°	1671.6	1651.2	1672.4	1707.8	1667.1	1669.3	1719.1	1713.1	1692.0	1711.6	1697.2
55°	1785.5	1767.4	1817.9	1834.5	1796.8	1831.5	1866.1	1857.8	1833.7	1873.7	1845.8
57.5°	1956.6	1961.1	2005.6	2018.4	2002.6	2079.5	2096.1	2093.8	2094.6	2121.0	2108.9
60°	2265.0	2309.5	2360.8	2400.0	2425.6	2516.8	2518.3	2519.8	2549.3	2562.1	2605.0
62.5°	2660.1	2777.7	2806.4	2853.9	2948.9	3036.3	3017.5	3019.7	3057.4	3027.3	3083.1
65°	2979.0	3104.2	3194.7	3201.5	3334.2	3360.5	3317.6	3362.8	3355.3	3355.3	3379.4
67.5°	3009.2	3138.1	3219.6	3255.0	3408.8	3402.0	3360.5	3428.4	3388.4	3422.4	3412.6
70°	2739.3	2835.8	2920.2	2995.6	3134.4	3126.8	3129.1	3222.6	3217.3	3243.7	3216.5
72.5°	2267.3	2352.5	2399.2	2536.4	2572.6	2567.3	2623.9	2631.4	2673.7	2731.0	2695.5
75°	1698.0	1753.8	1757.6	1848.8	1834.5	1817.1	1825.4	1855.6	1777.2	1727.4	1687.4
77.5°	1036.7	1049.6	1037.5	1026.2	989.2	953.0	972.7	956.1	905.5	873.1	834.7
80°	653.0	668.8	674.8	711.0	701.2	732.1	755.5	778.9	785.7	757.8	730.6
82.5°	604.7	610.0	628.1	665.0	671.8	711.8	717.0	731.4	706.5	690.7	641.6
85°	389.1	401.1	438.1	414.7	446.4	447.1	430.5	429.0	380.8	355.9	299.3
87.5°	119.1	122.1	136.5	137.2	155.3	158.3	163.6	158.3	141.8	119.1	98.8
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):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
2.5°	71.6	70.9	70.1	70.1	70.1	69.4	69.4	69.4	69.4	68.6	68.6
5°	97.3	93.5	89.0	82.9	76.9	74.6	74.6	73.1	72.4	71.6	70.9
7.5°	104.1	103.3	103.3	103.3	101.8	100.3	98.8	92.0	78.4	72.4	71.6
10°	140.2	144.8	152.3	159.8	161.4	161.4	159.8	156.8	153.8	150.0	138.0
12.5°	153.8	153.8	151.6	149.3	152.3	159.1	165.9	168.9	168.1	166.6	165.9
15°	210.4	210.4	209.6	208.1	208.1	207.3	208.1	211.9	216.4	220.9	220.9
17.5°	230.7	229.2	230.0	232.2	223.2	220.9	220.2	216.4	215.6	218.7	220.9
20°	360.4	355.1	340.1	338.5	335.5	334.0	333.3	328.7	326.5	332.5	333.3
22.5°	384.5	391.3	386.8	409.4	372.5	374.0	398.1	411.7	411.7	409.4	405.6
25°	505.2	500.7	505.9	507.4	499.9	505.9	494.6	488.6	480.3	479.5	481.0
27.5°	534.6	547.4	549.7	570.8	583.6	577.6	600.9	591.1	582.8	576.1	582.1
30°	634.9	631.1	637.1	639.4	647.7	643.2	634.9	639.4	646.2	656.7	648.4
32.5°	755.5	761.5	766.8	768.3	772.8	766.8	767.6	782.6	792.4	781.1	763.8
35°	827.9	827.9	837.7	836.2	827.9	830.9	856.5	862.6	852.0	844.5	856.5
37.5°	920.6	919.1	919.9	922.1	916.9	945.5	959.1	944.0	932.7	956.1	946.3
40°	1034.5	1045.0	1036.0	1037.5	1060.1	1076.7	1062.4	1051.1	1079.0	1061.6	1047.3
42.5°	1176.2	1166.4	1153.6	1180.0	1201.1	1189.8	1173.2	1201.9	1193.6	1169.4	1210.9
45°	1316.5	1303.7	1305.9	1329.3	1337.6	1314.2	1329.3	1349.6	1311.9	1351.2	1366.2
47.5°	1440.1	1446.2	1472.5	1494.4	1465.8	1472.5	1495.2	1464.3	1492.9	1522.3	1519.3
50°	1570.6	1597.0	1615.1	1611.3	1591.7	1634.7	1614.3	1603.0	1664.1	1672.4	1681.4
52.5°	1693.5	1733.4	1737.2	1713.8	1744.0	1768.1	1740.2	1818.6	1844.3	1850.3	1875.9
55°	1867.6	1903.8	1888.8	1883.5	1958.9	1941.5	1998.1	2095.3	2107.4	2131.5	2136.1
57.5°	2157.2	2184.3	2168.5	2229.6	2290.6	2280.1	2449.0	2498.7	2567.3	2580.9	2593.7
60°	2657.8	2636.7	2636.7	2767.9	2752.1	2860.7	2982.8	2996.4	3070.3	3075.5	3090.6
62.5°	3090.6	3081.6	3152.4	3190.9	3183.4	3380.9	3412.6	3457.1	3448.8	3463.8	3372.6
65°	3339.4	3313.8	3388.4	3337.9	3481.9	3570.2	3581.5	3602.6	3567.1	3516.6	3459.3
67.5°	3342.5	3347.0	3354.5	3320.6	3485.0	3491.0	3509.8	3478.9	3448.8	3318.3	3259.5
70°	3157.0	3186.4	3122.3	3183.4	3249.0	3213.5	3201.5	3120.8	3041.6	2905.1	2789.0
72.5°	2642.0	2602.8	2564.3	2610.3	2578.7	2513.8	2436.2	2335.9	2188.8	2085.5	1974.0
75°	1595.5	1522.3	1560.8	1493.7	1398.7	1372.3	1284.1	1256.2	1138.5	988.5	931.9
77.5°	796.2	720.1	729.9	672.6	600.2	540.6	449.4	367.9	293.3	227.0	185.5
80°	666.5	629.6	592.6	532.3	471.2	391.3	309.9	219.4	149.3	109.3	93.5
82.5°	573.8	563.2	490.8	432.8	364.9	297.1	209.6	144.8	93.5	72.4	67.1
85°	265.4	239.0	207.3	198.3	156.1	127.4	95.0	70.1	54.3	48.3	44.5
87.5°	95.8	82.2	76.2	65.6	57.3	52.0	49.0	47.5	47.5	47.5	45.2
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):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9	67.9
2.5°	68.6	68.6	67.9	67.9	67.9	67.9	67.9	67.1	67.1	67.1	68.6
5°	70.9	70.1	70.1	69.4	69.4	69.4	68.6	68.6	67.9	70.1	94.2
7.5°	71.6	72.4	72.4	72.4	72.4	72.4	71.6	71.6	71.6	79.9	92.7
10°	122.9	118.4	117.6	116.1	114.6	113.9	112.3	110.1	113.1	153.8	107.1
12.5°	161.4	144.0	130.4	128.2	126.7	124.4	124.4	118.4	123.7	147.0	114.6
15°	219.4	214.1	199.1	184.7	186.2	186.2	184.7	184.0	170.4	171.9	174.2
17.5°	226.2	237.5	245.8	227.0	209.6	198.3	201.3	217.2	195.3	187.0	223.2
20°	332.5	336.3	337.8	327.2	303.9	303.9	307.6	311.4	294.1	291.0	290.3
22.5°	398.9	403.4	400.4	404.9	398.9	395.1	387.6	379.3	370.2	334.0	357.4
25°	482.6	493.9	499.9	490.1	475.8	458.4	453.2	453.9	469.0	466.7	494.6
27.5°	589.6	583.6	576.1	582.8	588.9	570.0	563.2	556.4	552.7	610.0	542.9
30°	628.1	623.6	633.4	623.6	622.0	630.3	637.9	625.8	625.1	671.1	615.3
32.5°	772.1	769.1	746.5	755.5	765.3	766.8	766.1	778.9	771.3	781.1	646.2
35°	841.5	825.6	847.5	850.5	839.9	853.5	853.5	850.5	870.9	830.9	671.8
37.5°	935.0	946.3	960.6	965.1	976.4	951.5	971.9	975.7	1007.3	879.9	653.0
40°	1084.2	1092.5	1101.6	1100.1	1088.8	1115.9	1089.5	1100.1	1135.5	908.6	631.8
42.5°	1223.0	1230.5	1244.1	1243.3	1247.9	1234.3	1255.4	1247.9	1252.4	916.1	605.5
45°	1370.0	1388.9	1376.0	1403.9	1396.4	1391.1	1403.9	1399.4	1353.4	930.4	561.0
47.5°	1536.6	1532.1	1544.9	1544.9	1550.2	1559.3	1545.7	1549.5	1440.9	940.2	512.7
50°	1682.2	1688.9	1701.8	1700.3	1711.6	1701.0	1713.8	1671.6	1513.3	934.2	450.9
52.5°	1871.4	1898.6	1884.2	1891.8	1879.7	1898.6	1859.3	1839.7	1612.0	905.5	387.6
55°	2185.8	2143.6	2170.7	2140.6	2142.8	2137.6	2087.8	2074.2	1756.1	890.5	315.2
57.5°	2579.4	2574.9	2554.5	2516.8	2507.8	2475.4	2433.9	2385.6	1986.0	885.9	255.6
60°	3056.7	3038.6	2975.3	2939.8	2875.0	2809.4	2773.2	2714.4	2231.1	866.3	211.1
62.5°	3365.1	3288.2	3242.2	3157.7	3097.4	3021.3	2962.4	2853.1	2300.4	822.6	187.0
65°	3380.2	3308.5	3230.1	3130.6	3033.3	2967.0	2860.7	2758.9	2196.4	711.0	156.1
67.5°	3162.2	3084.6	2929.3	2855.4	2760.4	2682.0	2553.8	2464.8	1931.0	570.8	123.7
70°	2724.2	2593.0	2449.7	2350.2	2269.5	2177.5	2056.9	1959.6	1541.2	420.0	95.8
72.5°	1886.5	1811.1	1679.1	1628.6	1549.5	1505.0	1440.9	1402.4	1090.3	288.8	79.2
75°	917.6	861.1	781.9	798.5	742.7	754.7	763.0	718.6	602.4	163.6	68.6
77.5°	171.2	179.5	159.8	159.8	162.1	154.6	156.1	169.6	168.9	82.9	58.1
80°	87.5	86.0	82.9	81.4	77.7	75.4	72.4	70.9	68.6	59.6	50.5
82.5°	63.3	59.6	55.8	53.5	51.3	48.3	46.0	46.7	51.3	58.8	54.3
85°	40.7	39.2	36.2	35.4	34.7	33.9	34.7	36.2	49.0	70.1	53.5
87.5°	43.7	40.0	36.2	34.7	33.9	32.4	31.7	33.9	52.0	76.2	46.0
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):

	125°	135°	145°	155°	165°	175°	180°
0°	67.9	67.9	67.9	67.9	67.9	67.9	67.9
2.5°	70.1	75.4	92.7	106.3	107.8	107.8	107.1
5°	105.6	73.1	67.9	69.4	66.4	67.1	66.4
7.5°	67.1	67.1	68.6	95.0	107.1	111.6	108.6
10°	79.9	106.3	107.8	112.3	113.1	112.3	111.6
12.5°	155.3	153.1	116.9	124.4	162.1	164.4	163.6
15°	167.4	165.9	202.1	167.4	173.4	174.9	173.4
17.5°	218.7	218.7	217.9	200.6	225.4	225.4	224.7
20°	258.6	269.2	261.6	251.1	220.9	221.7	221.7
22.5°	366.4	299.3	285.8	273.7	248.1	248.1	247.3
25°	377.8	336.3	300.1	262.4	240.5	263.1	260.9
27.5°	487.1	351.4	282.0	266.9	239.0	232.2	232.2
30°	479.5	371.0	315.2	243.5	230.7	220.9	216.4
32.5°	507.4	367.2	278.2	221.7	187.7	184.0	179.5
35°	491.6	348.3	238.3	176.4	144.0	137.2	137.2
37.5°	475.0	297.1	192.3	131.2	114.6	109.3	110.1
40°	418.5	239.0	133.5	101.0	101.0	101.8	101.8
42.5°	357.4	165.9	98.0	86.7	91.2	94.2	93.5
45°	281.2	111.6	79.2	79.9	86.0	88.2	88.2
47.5°	200.6	82.9	72.4	74.6	81.4	84.4	83.7
50°	136.5	70.9	67.9	71.6	78.4	79.9	79.9
52.5°	98.8	67.1	64.8	68.6	75.4	76.9	76.9
55°	82.2	65.6	63.3	66.4	72.4	73.9	74.6
57.5°	77.7	65.6	62.6	65.6	70.1	71.6	71.6
60°	77.7	66.4	64.1	65.6	67.9	69.4	70.1
62.5°	79.2	70.1	67.1	67.1	67.1	67.9	67.9
65°	82.2	76.9	72.4	70.1	67.1	64.8	65.6
67.5°	86.0	83.7	79.9	73.9	65.6	61.1	61.1
70°	89.0	90.5	89.0	76.9	64.1	56.5	55.8
72.5°	88.2	95.8	90.5	77.7	62.6	52.8	52.0
75°	82.9	89.0	78.4	70.1	58.8	49.8	48.3
77.5°	72.4	65.6	54.3	54.3	49.0	44.5	43.0
80°	58.1	43.7	36.2	38.5	36.9	27.9	24.1
82.5°	46.0	28.7	27.1	28.7	27.9	20.4	17.3
85°	37.7	19.6	19.6	21.9	19.6	15.1	11.3
87.5°	29.4	11.3	12.8	12.1	12.1	9.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)