

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: P157077

Luminaire Tested: **UTLD-F02-LED-E-U-SL3-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157077
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-SL3-7060
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (14) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4453.5 lumens
Efficiency: N/A
Efficacy: 81.0 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



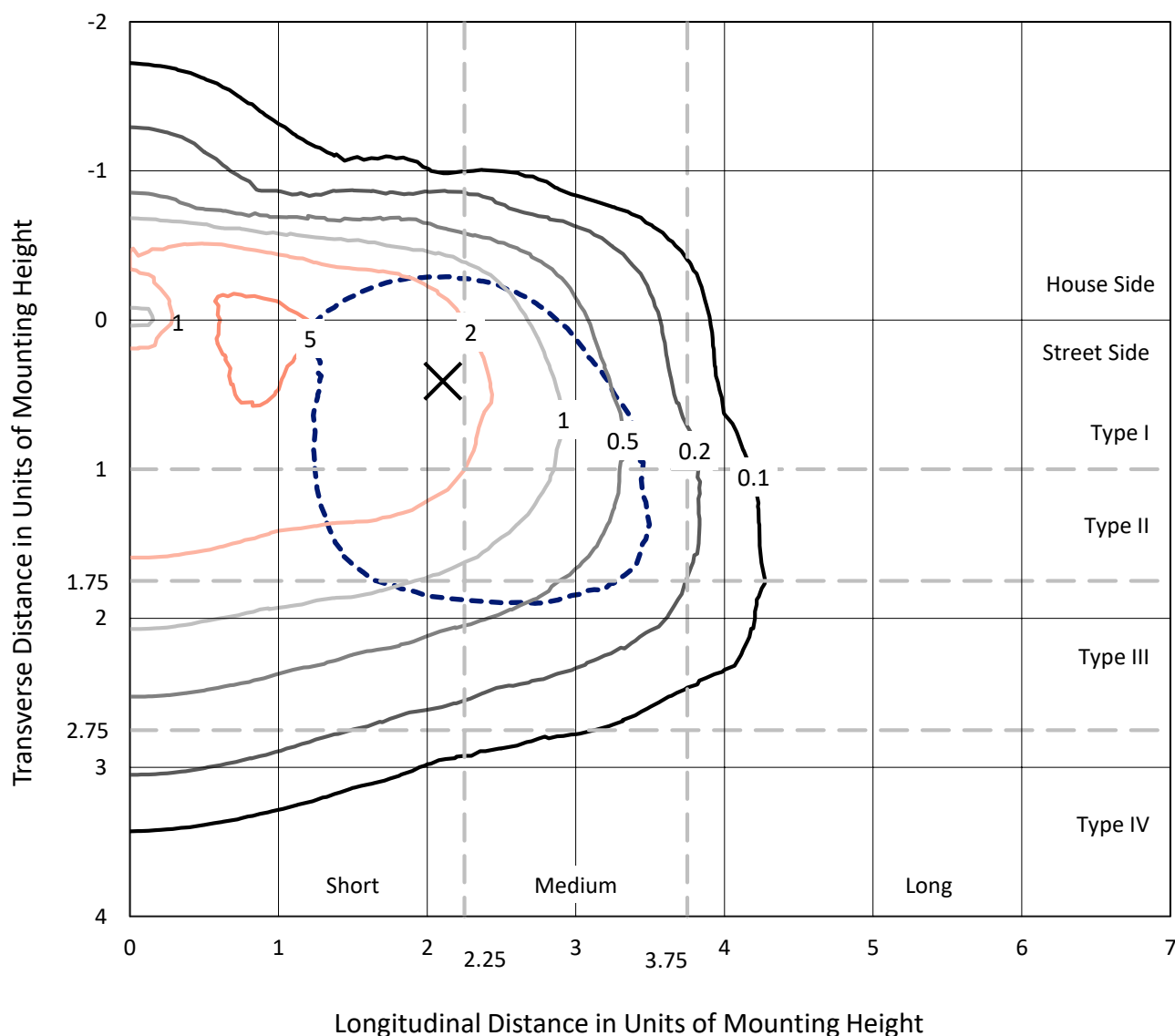
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

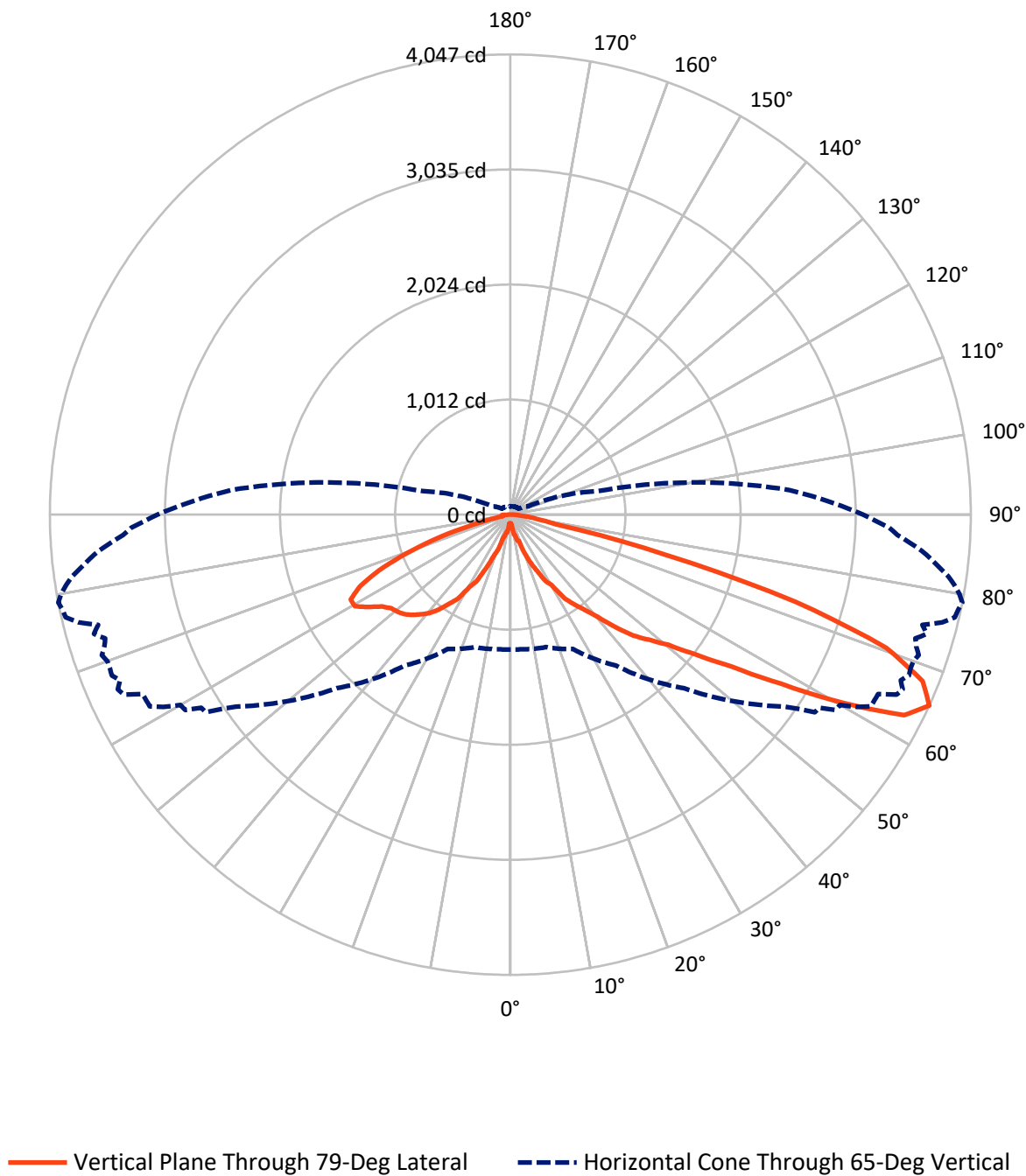


Based on 10 foot mounting height. Maximum calculated value = 5.6 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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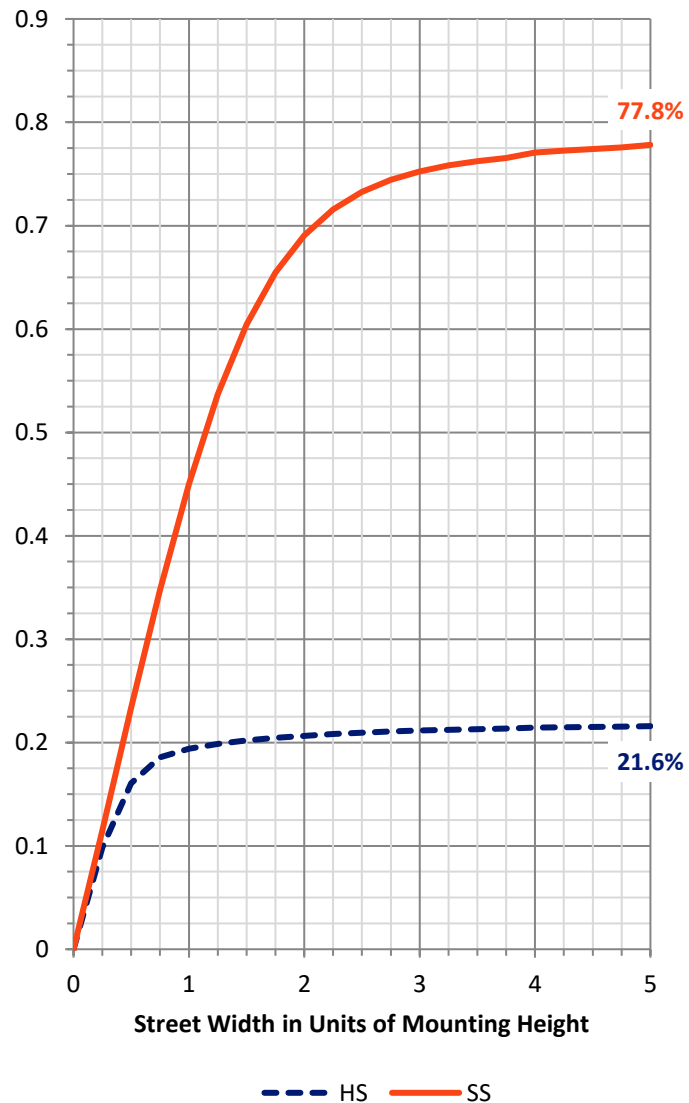
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	974.3	0.0	974.3
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	3479.2	0.0	3479.2
	% Fixture	78.1	0.0	78.1
Total	Lumens	4453.5	0.0	4453.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.7	0.2
10°-20°	68.2	1.5
20°-30°	210.3	4.7
30°-40°	404.8	9.1
40°-50°	669.0	15.0
50°-60°	1006.2	22.6
60°-70°	1347.8	30.3
70°-80°	633.5	14.2
80°-90°	102.9	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°	4453.5	100.0
0°-180°	4453.5	100.0

Coefficient of Utilization



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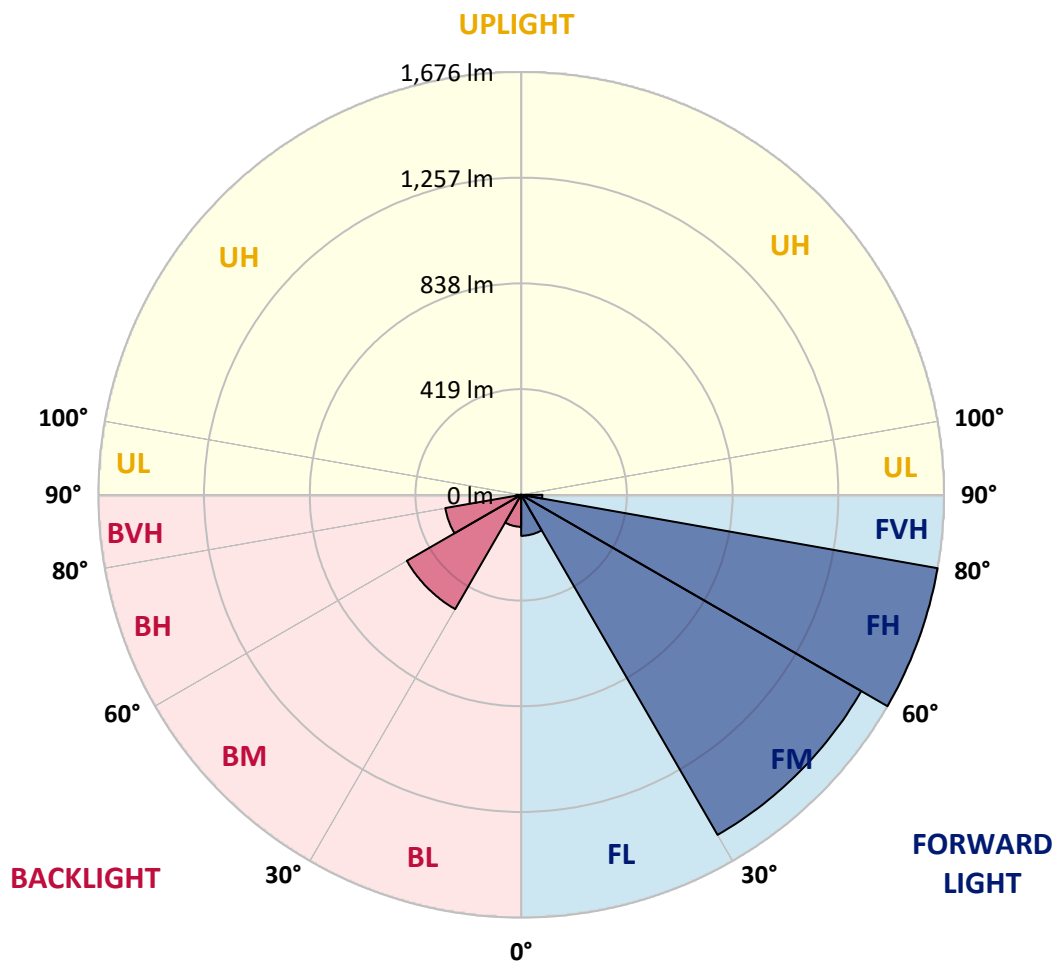
CATALOG NUMBER: UTLD-F02-LED-E-U-SL3-7060

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	162.4	3.6			
FM	(30°-60°)	1556.7	35.0			
FH	(60°-80°)	1676.1	37.6			G1/1800
FVH	(80°-90°)	84.0	1.9			G1/100
BL	(0°-30°)	126.8	2.8	B1/500		
BM	(30°-60°)	523.4	11.8	B1/1000		
BH	(60°-80°)	305.2	6.9	B1/500		G1/500
BVH	(80°-90°)	18.8	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°	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
2.5°	127.1	126.2	126.2	127.1	125.4	124.5	108.4	105.0	101.6	99.1	96.6
5°	105.0	105.9	105.0	105.0	107.6	104.2	114.4	116.0	120.3	122.0	125.4
7.5°	168.6	169.4	167.7	166.0	136.4	109.3	105.9	105.9	105.9	109.3	108.4
10°	178.7	178.7	177.0	175.3	170.3	162.6	118.6	119.4	139.8	124.5	147.4
12.5°	249.9	251.6	248.2	236.3	182.1	226.2	227.9	225.3	223.6	217.7	212.6
15°	269.4	275.3	265.1	252.4	293.9	249.9	239.7	237.2	235.5	235.5	249.0
17.5°	371.9	373.6	365.9	342.2	310.9	298.2	294.8	293.1	292.2	292.2	293.9
20°	443.9	449.0	392.2	409.1	378.6	344.8	332.9	332.9	333.7	327.0	317.7
22.5°	488.8	487.1	460.8	471.0	417.6	385.4	415.1	422.7	431.2	434.5	439.6
25°	580.2	579.4	514.2	470.1	457.4	432.9	438.8	446.4	452.3	465.9	491.3
27.5°	590.4	589.6	543.0	523.5	454.0	494.7	555.7	568.4	576.0	577.7	576.0
30°	665.8	664.1	628.5	546.4	518.4	538.7	597.2	609.9	616.7	621.8	621.8
32.5°	743.7	743.7	676.8	574.3	558.2	615.8	702.2	706.5	711.5	712.4	714.1
35°	801.3	783.5	706.5	644.6	620.1	681.0	789.5	792.0	807.3	847.1	858.9
37.5°	831.8	833.5	804.7	730.2	732.7	801.3	969.9	973.3	975.8	986.0	1000.4
40°	881.0	889.4	869.1	823.4	843.7	952.1	1126.6	1137.6	1146.9	1148.6	1176.6
42.5°	930.9	937.7	938.6	952.1	969.9	1109.7	1278.2	1289.2	1287.6	1300.3	1342.6
45°	1014.8	1025.0	1041.9	1058.0	1097.8	1255.4	1429.0	1446.0	1432.4	1464.6	1491.7
47.5°	1122.4	1130.0	1158.8	1201.2	1217.2	1383.3	1586.6	1590.8	1602.7	1636.6	1646.7
50°	1217.2	1226.6	1263.0	1318.9	1338.4	1495.1	1706.9	1708.6	1728.0	1776.3	1756.8
52.5°	1289.2	1299.4	1330.8	1418.0	1448.5	1619.6	1800.0	1800.9	1834.8	1879.7	1839.8
55°	1329.1	1340.1	1361.3	1460.4	1519.7	1711.9	1910.2	1915.2	1963.5	1988.1	1957.6
57.5°	1330.8	1340.9	1365.5	1451.9	1550.1	1807.7	2062.6	2088.0	2138.9	2169.4	2169.4
60°	1315.5	1328.2	1351.9	1426.5	1578.9	1914.4	2297.3	2349.8	2431.1	2460.8	2527.7
62.5°	1275.7	1281.6	1296.0	1381.6	1621.3	2042.3	2635.3	2722.5	2842.8	2861.4	2997.8
65°	1185.1	1188.4	1206.2	1303.6	1619.6	2159.2	2941.9	3056.2	3190.9	3203.6	3334.1
67.5°	1066.5	1074.1	1087.6	1180.8	1466.3	2114.3	2968.2	3117.2	3222.3	3226.5	3335.8
70°	882.7	879.3	895.4	961.4	1181.7	1772.9	2683.5	2823.3	2894.5	2924.1	2998.6
72.5°	578.6	580.2	568.4	609.0	796.3	1248.6	2161.7	2317.6	2349.8	2421.8	2459.1
75°	325.3	318.5	331.2	365.1	449.0	751.4	1471.4	1609.4	1676.4	1735.7	1767.8
77.5°	193.1	190.6	211.8	259.2	362.5	504.0	848.8	917.4	972.4	1018.2	1076.6
80°	89.8	95.7	94.0	106.7	197.4	431.2	589.6	616.7	640.4	666.6	702.2
82.5°	44.0	48.3	55.9	58.4	69.5	217.7	526.0	553.1	576.0	602.3	637.8
85°	28.8	29.6	41.5	42.4	43.2	66.1	257.5	298.2	314.3	358.3	419.3
87.5°	10.2	14.4	30.5	27.1	27.1	32.2	87.2	95.7	100.0	109.3	122.0
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):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
2.5°	95.7	95.7	92.3	88.9	87.2	87.2	84.7	84.7	83.9	83.0	81.3
5°	124.5	126.2	126.2	126.2	125.4	124.5	123.7	122.0	120.3	116.9	114.4
7.5°	105.9	104.2	102.5	99.1	100.0	102.5	105.0	108.4	113.5	116.0	116.9
10°	149.1	153.3	152.5	153.3	152.5	154.2	154.2	155.9	155.0	155.9	157.6
12.5°	204.1	187.2	171.1	167.7	166.9	166.0	167.7	166.9	171.1	173.7	173.7
15°	256.7	274.5	275.3	284.6	282.9	269.4	255.0	250.7	247.3	247.3	238.9
17.5°	294.8	300.7	301.6	299.0	302.4	301.6	297.3	292.2	286.3	275.3	259.2
20°	351.5	360.0	365.1	370.2	380.3	372.7	371.0	404.9	409.1	412.5	409.1
22.5°	446.4	445.6	443.0	429.5	422.7	421.8	424.4	431.2	430.3	432.9	435.4
25°	503.2	502.3	509.1	533.7	540.4	565.0	558.2	558.2	562.5	566.7	559.9
27.5°	571.8	579.4	588.7	587.9	599.7	596.3	595.5	602.3	602.3	593.8	598.9
30°	626.0	649.7	681.9	692.1	685.3	685.3	694.6	703.9	701.4	700.5	702.2
32.5°	724.2	748.0	727.6	750.5	737.0	759.0	793.7	817.4	825.9	825.1	837.8
35°	882.7	886.9	874.2	883.5	899.6	903.8	907.2	907.2	897.1	914.0	921.6
37.5°	1017.3	996.2	1014.8	1003.8	1015.6	1029.2	1027.5	1011.4	1006.3	1034.3	1031.7
40°	1188.4	1154.6	1178.3	1172.4	1179.1	1183.4	1164.7	1153.7	1167.3	1175.7	1174.0
42.5°	1314.7	1332.4	1333.3	1330.8	1336.7	1337.5	1303.6	1308.7	1324.8	1322.3	1313.8
45°	1451.0	1480.7	1464.6	1489.2	1491.7	1458.7	1451.0	1473.1	1478.1	1469.7	1459.5
47.5°	1617.1	1636.6	1609.4	1646.7	1647.6	1610.3	1627.2	1642.5	1645.9	1628.9	1644.2
50°	1760.2	1761.9	1756.0	1784.8	1767.8	1749.2	1786.5	1795.0	1787.3	1764.5	1788.2
52.5°	1878.0	1855.1	1878.8	1918.6	1872.9	1875.4	1931.3	1924.6	1900.8	1922.9	1906.8
55°	2005.9	1985.5	2042.3	2060.9	2018.6	2057.5	2096.5	2087.2	2060.1	2105.0	2073.6
57.5°	2198.2	2203.2	2253.2	2267.6	2249.8	2336.2	2354.9	2352.3	2353.2	2382.8	2369.3
60°	2544.6	2594.6	2652.2	2696.2	2725.0	2827.5	2829.2	2830.9	2864.0	2878.4	2926.6
62.5°	2988.5	3120.6	3152.8	3206.2	3312.9	3411.2	3390.0	3392.5	3434.9	3401.0	3463.7
65°	3346.8	3487.4	3589.1	3596.7	3745.8	3775.4	3727.1	3778.0	3769.5	3769.5	3796.6
67.5°	3380.7	3525.5	3617.0	3656.8	3829.6	3822.0	3775.4	3851.7	3806.8	3844.9	3833.9
70°	3077.4	3185.9	3280.7	3365.4	3521.3	3512.8	3515.4	3620.4	3614.5	3644.1	3613.6
72.5°	2547.2	2642.9	2695.4	2849.6	2890.2	2884.3	2947.8	2956.3	3003.7	3068.1	3028.3
75°	1907.6	1970.3	1974.5	2077.0	2060.9	2041.5	2050.8	2084.7	1996.6	1940.7	1895.8
77.5°	1164.7	1179.1	1165.6	1152.9	1111.4	1070.7	1092.7	1074.1	1017.3	980.9	937.7
80°	733.6	751.4	758.1	798.8	787.8	822.5	848.8	875.0	882.7	851.3	820.8
82.5°	679.4	685.3	705.6	747.1	754.7	799.6	805.6	821.7	793.7	775.9	720.9
85°	437.1	450.6	492.2	465.9	501.5	502.3	483.7	482.0	427.8	399.8	336.3
87.5°	133.8	137.2	153.3	154.2	174.5	177.9	183.8	177.9	159.3	133.8	111.0
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):

	72°	73°	74°	75°	76°	77°	78°	79°	80°	81°	82°
0°	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
2.5°	80.5	79.6	78.8	78.8	78.8	77.9	77.9	77.9	77.9	77.1	77.1
5°	109.3	105.0	100.0	93.2	86.4	83.9	83.9	82.2	81.3	80.5	79.6
7.5°	116.9	116.0	116.0	116.0	114.4	112.7	111.0	103.3	88.1	81.3	80.5
10°	157.6	162.6	171.1	179.6	181.3	181.3	179.6	176.2	172.8	168.6	155.0
12.5°	172.8	172.8	170.3	167.7	171.1	178.7	186.4	189.7	188.9	187.2	186.4
15°	236.3	236.3	235.5	233.8	233.8	232.9	233.8	238.0	243.1	248.2	248.2
17.5°	259.2	257.5	258.4	260.9	250.7	248.2	247.3	243.1	242.3	245.7	248.2
20°	404.9	399.0	382.0	380.3	376.9	375.3	374.4	369.3	366.8	373.6	374.4
22.5°	432.0	439.6	434.5	460.0	418.5	420.1	447.3	462.5	462.5	460.0	455.7
25°	567.5	562.5	568.4	570.1	561.6	568.4	555.7	548.9	539.6	538.7	540.4
27.5°	600.6	615.0	617.5	641.2	655.6	648.9	675.1	664.1	654.8	647.2	653.9
30°	713.2	709.0	715.8	718.3	727.6	722.6	713.2	718.3	725.9	737.8	728.5
32.5°	848.8	855.5	861.5	863.2	868.3	861.5	862.3	879.3	890.3	877.6	858.1
35°	930.1	930.1	941.1	939.4	930.1	933.5	962.3	969.1	957.2	948.7	962.3
37.5°	1034.3	1032.6	1033.4	1036.0	1030.0	1062.2	1077.5	1060.5	1047.8	1074.1	1063.1
40°	1162.2	1174.0	1163.9	1165.6	1191.0	1209.6	1193.5	1180.8	1212.2	1192.7	1176.6
42.5°	1321.4	1310.4	1296.0	1325.7	1349.4	1336.7	1318.0	1350.2	1340.9	1313.8	1360.4
45°	1479.0	1464.6	1467.1	1493.4	1502.7	1476.5	1493.4	1516.3	1473.9	1518.0	1534.9
47.5°	1617.9	1624.7	1654.3	1678.9	1646.7	1654.3	1679.8	1645.0	1677.2	1710.2	1706.9
50°	1764.5	1794.1	1814.4	1810.2	1788.2	1836.5	1813.6	1800.9	1869.5	1878.8	1889.0
52.5°	1902.5	1947.4	1951.7	1925.4	1959.3	1986.4	1955.1	2043.1	2071.9	2078.7	2107.5
55°	2098.2	2138.9	2121.9	2116.0	2200.7	2181.2	2244.8	2354.0	2367.6	2394.7	2399.8
57.5°	2423.5	2454.0	2436.2	2504.8	2573.4	2561.6	2751.3	2807.2	2884.3	2899.5	2913.9
60°	2985.9	2962.2	2962.2	3109.6	3091.8	3213.8	3351.0	3366.3	3449.3	3455.2	3472.2
62.5°	3472.2	3462.0	3541.6	3584.8	3576.4	3798.3	3833.9	3883.8	3874.5	3891.5	3789.0
65°	3751.7	3722.9	3806.8	3750.0	3911.8	4010.9	4023.6	4047.3	4007.5	3950.8	3886.4
67.5°	3755.1	3760.2	3768.6	3730.5	3915.2	3922.0	3943.1	3908.4	3874.5	3728.0	3661.9
70°	3546.7	3579.7	3507.7	3576.4	3650.0	3610.2	3596.7	3506.0	3417.1	3263.8	3133.3
72.5°	2968.2	2924.1	2880.9	2932.6	2897.0	2824.2	2736.9	2624.2	2459.1	2343.0	2217.6
75°	1792.4	1710.2	1753.4	1678.1	1571.3	1541.7	1442.6	1411.2	1279.1	1110.5	1047.0
77.5°	894.5	809.0	820.0	755.6	674.3	607.4	504.9	413.4	329.5	255.0	208.4
80°	748.8	707.3	665.8	598.0	529.4	439.6	348.1	246.5	167.7	122.8	105.0
82.5°	644.6	632.8	551.4	486.2	410.0	333.7	235.5	162.6	105.0	81.3	75.4
85°	298.2	268.5	232.9	222.8	175.3	143.2	106.7	78.8	61.0	54.2	50.0
87.5°	107.6	92.3	85.6	73.7	64.4	58.4	55.1	53.4	53.4	53.4	50.8
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):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2	76.2
2.5°	77.1	77.1	76.2	76.2	76.2	76.2	76.2	75.4	75.4	75.4	77.1
5°	79.6	78.8	78.8	77.9	77.9	77.9	77.1	77.1	76.2	78.8	105.9
7.5°	80.5	81.3	81.3	81.3	81.3	81.3	80.5	80.5	80.5	89.8	104.2
10°	138.1	133.0	132.1	130.4	128.8	127.9	126.2	123.7	127.1	172.8	120.3
12.5°	181.3	161.8	146.5	144.0	142.3	139.8	139.8	133.0	138.9	165.2	128.8
15°	246.5	240.6	223.6	207.5	209.2	209.2	207.5	206.7	191.4	193.1	195.7
17.5°	254.1	266.8	276.1	255.0	235.5	222.8	226.2	244.0	219.4	210.1	250.7
20°	373.6	377.8	379.5	367.6	341.4	341.4	345.6	349.8	330.4	327.0	326.1
22.5°	448.1	453.2	449.8	454.9	448.1	443.9	435.4	426.1	415.9	375.3	401.5
25°	542.1	554.8	561.6	550.6	534.5	515.0	509.1	509.9	526.9	524.3	555.7
27.5°	662.4	655.6	647.2	654.8	661.6	640.4	632.8	625.1	620.9	685.3	609.9
30°	705.6	700.5	711.5	700.5	698.8	708.2	716.6	703.1	702.2	753.9	691.2
32.5°	867.4	864.0	838.6	848.8	859.8	861.5	860.6	875.0	866.6	877.6	725.9
35°	945.3	927.5	952.1	955.5	943.6	958.9	958.9	955.5	978.4	933.5	754.7
37.5°	1050.4	1063.1	1079.2	1084.3	1097.0	1069.0	1091.9	1096.1	1131.7	988.5	733.6
40°	1218.1	1227.4	1237.6	1235.9	1223.2	1253.7	1224.0	1235.9	1275.7	1020.7	709.8
42.5°	1374.0	1382.4	1397.7	1396.8	1401.9	1386.7	1410.4	1401.9	1407.0	1029.2	680.2
45°	1539.1	1560.3	1545.9	1577.3	1568.8	1562.9	1577.3	1572.2	1520.5	1045.3	630.2
47.5°	1726.3	1721.3	1735.7	1735.7	1741.6	1751.8	1736.5	1740.7	1618.8	1056.3	576.0
50°	1889.8	1897.4	1911.8	1910.2	1922.9	1911.0	1925.4	1878.0	1700.1	1049.5	506.6
52.5°	2102.4	2132.9	2116.8	2125.3	2111.8	2132.9	2088.9	2066.9	1811.0	1017.3	435.4
55°	2455.7	2408.2	2438.7	2404.8	2407.4	2401.5	2345.6	2330.3	1972.8	1000.4	354.1
57.5°	2897.8	2892.8	2869.9	2827.5	2817.4	2780.9	2734.4	2680.1	2231.2	995.3	287.2
60°	3434.0	3413.7	3342.6	3302.7	3229.9	3156.2	3115.5	3049.5	2506.5	973.3	237.2
62.5°	3780.5	3694.1	3642.4	3547.6	3479.8	3394.2	3328.2	3205.3	2584.4	924.2	210.1
65°	3797.4	3717.0	3628.9	3517.1	3407.8	3333.2	3213.8	3099.4	2467.5	798.8	175.3
67.5°	3552.6	3465.4	3290.9	3207.9	3101.1	3013.0	2869.0	2769.1	2169.4	641.2	138.9
70°	3060.5	2913.1	2752.1	2640.3	2549.7	2446.4	2310.8	2201.5	1731.4	471.8	107.6
72.5°	2119.4	2034.7	1886.4	1829.7	1740.7	1690.8	1618.8	1575.6	1224.9	324.4	88.9
75°	1030.9	967.4	878.4	897.1	834.4	847.9	857.2	807.3	676.8	183.8	77.1
77.5°	192.3	201.6	179.6	179.6	182.1	173.7	175.3	190.6	189.7	93.2	65.2
80°	98.3	96.6	93.2	91.5	87.2	84.7	81.3	79.6	77.1	66.9	56.8
82.5°	71.2	66.9	62.7	60.1	57.6	54.2	51.7	52.5	57.6	66.1	61.0
85°	45.7	44.0	40.7	39.8	39.0	38.1	39.0	40.7	55.1	78.8	60.1
87.5°	49.1	44.9	40.7	39.0	38.1	36.4	35.6	38.1	58.4	85.6	51.7
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):

	125°	135°	145°	155°	165°	175°	180°
0°	76.2	76.2	76.2	76.2	76.2	76.2	76.2
2.5°	78.8	84.7	104.2	119.4	121.1	121.1	120.3
5°	118.6	82.2	76.2	77.9	74.5	75.4	74.5
7.5°	75.4	75.4	77.1	106.7	120.3	125.4	122.0
10°	89.8	119.4	121.1	126.2	127.1	126.2	125.4
12.5°	174.5	172.0	131.3	139.8	182.1	184.7	183.8
15°	188.1	186.4	227.0	188.1	194.8	196.5	194.8
17.5°	245.7	245.7	244.8	225.3	253.3	253.3	252.4
20°	290.5	302.4	293.9	282.1	248.2	249.0	249.0
22.5°	411.7	336.3	321.0	307.5	278.7	278.7	277.8
25°	424.4	377.8	337.1	294.8	270.2	295.6	293.1
27.5°	547.2	394.7	316.8	299.9	268.5	260.9	260.9
30°	538.7	416.8	354.1	273.6	259.2	248.2	243.1
32.5°	570.1	412.5	312.6	249.0	210.9	206.7	201.6
35°	552.3	391.3	267.7	198.2	161.8	154.2	154.2
37.5°	533.7	333.7	216.0	147.4	128.8	122.8	123.7
40°	470.1	268.5	149.9	113.5	113.5	114.4	114.4
42.5°	401.5	186.4	110.1	97.4	102.5	105.9	105.0
45°	316.0	125.4	88.9	89.8	96.6	99.1	99.1
47.5°	225.3	93.2	81.3	83.9	91.5	94.9	94.0
50°	153.3	79.6	76.2	80.5	88.1	89.8	89.8
52.5°	111.0	75.4	72.8	77.1	84.7	86.4	86.4
55°	92.3	73.7	71.2	74.5	81.3	83.0	83.9
57.5°	87.2	73.7	70.3	73.7	78.8	80.5	80.5
60°	87.2	74.5	72.0	73.7	76.2	77.9	78.8
62.5°	88.9	78.8	75.4	75.4	75.4	76.2	76.2
65°	92.3	86.4	81.3	78.8	75.4	72.8	73.7
67.5°	96.6	94.0	89.8	83.0	73.7	68.6	68.6
70°	100.0	101.6	100.0	86.4	72.0	63.5	62.7
72.5°	99.1	107.6	101.6	87.2	70.3	59.3	58.4
75°	93.2	100.0	88.1	78.8	66.1	55.9	54.2
77.5°	81.3	73.7	61.0	61.0	55.1	50.0	48.3
80°	65.2	49.1	40.7	43.2	41.5	31.3	27.1
82.5°	51.7	32.2	30.5	32.2	31.3	22.9	19.5
85°	42.4	22.0	22.0	24.6	22.0	16.9	12.7
87.5°	33.0	12.7	14.4	13.6	13.6	10.2	3.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)