

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: P157075

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157075
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
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(2) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (14) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4340.2 lumens
Efficiency: N/A
Efficacy: 78.9 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

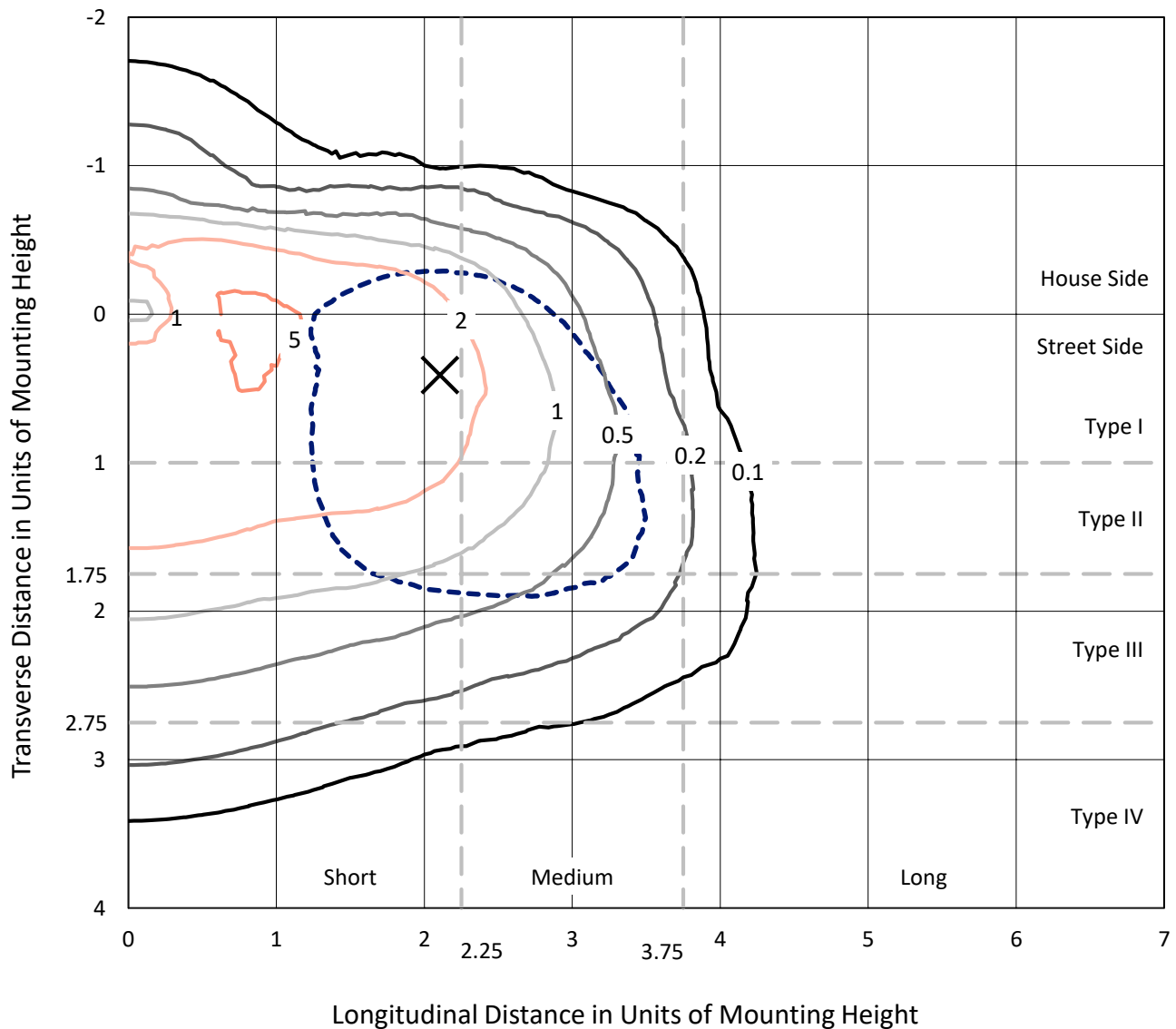


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

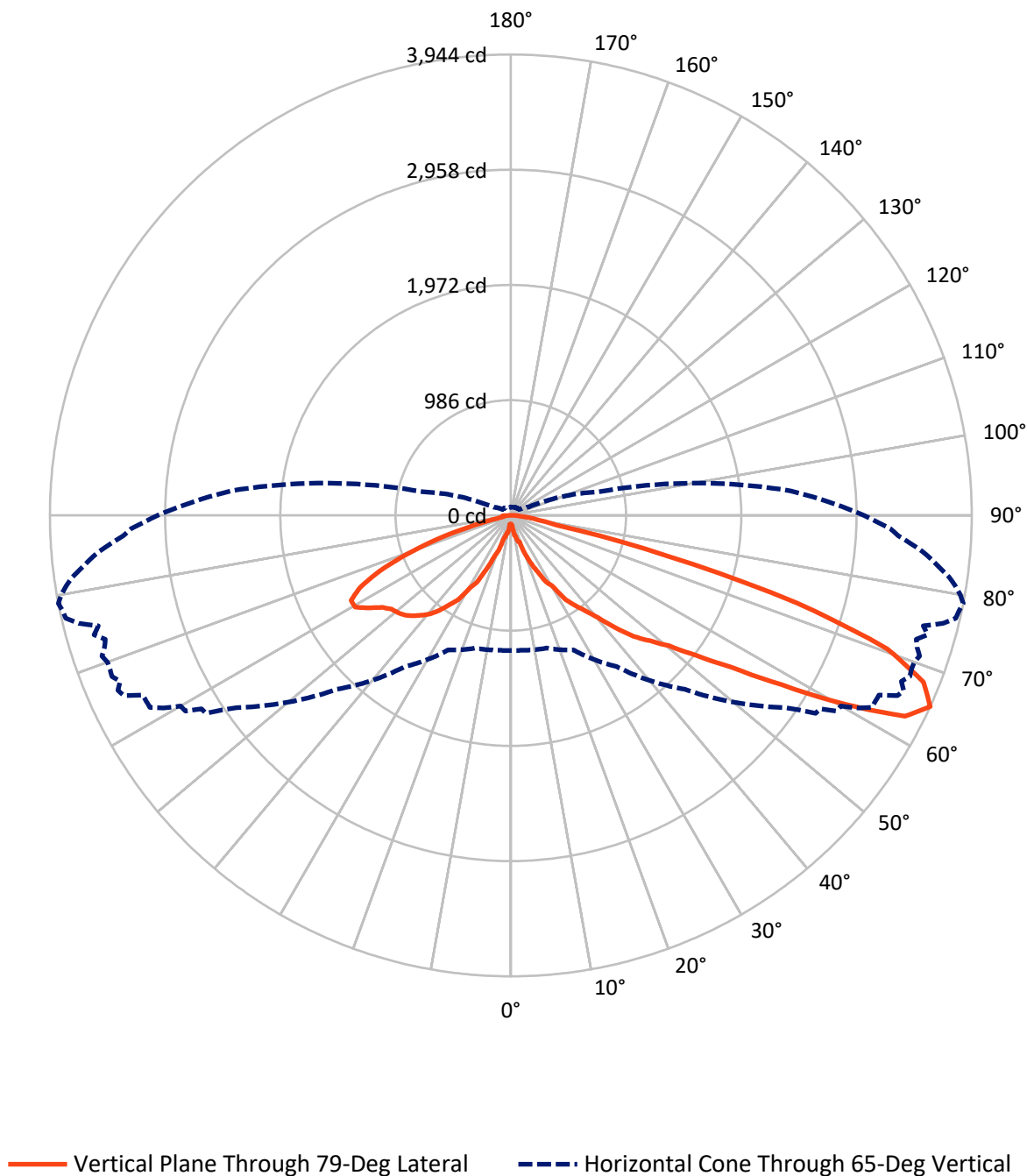


Based on 10 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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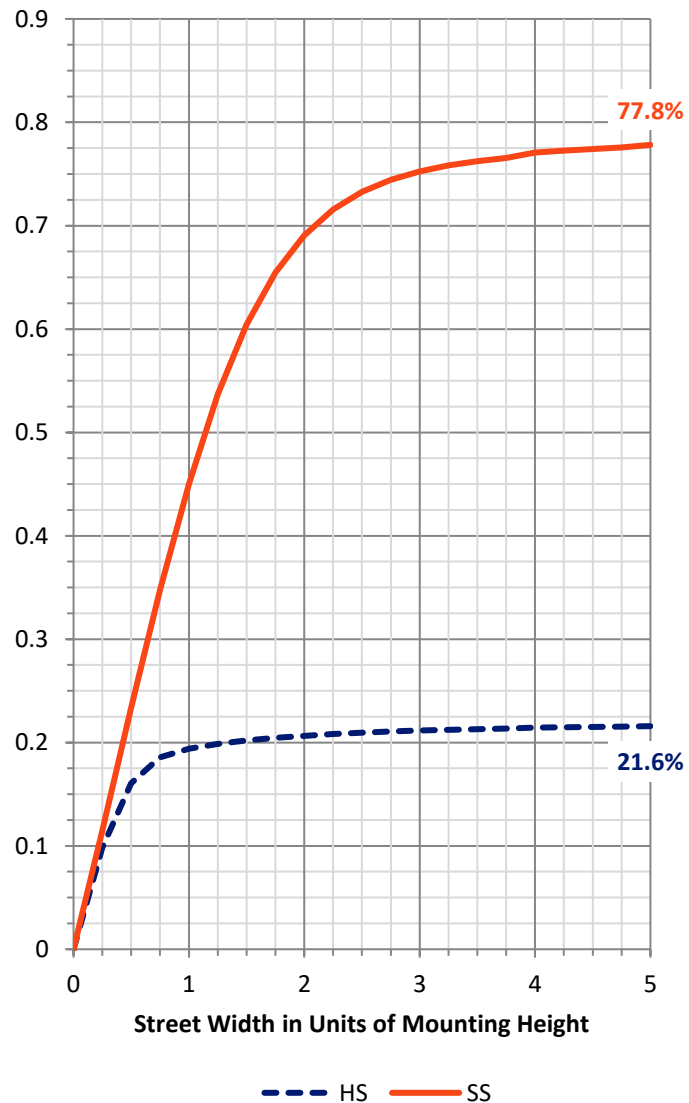
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	949.5	0.0	949.5
	% Fixture	21.9	0.0	21.9
Street Side	Lumens	3390.7	0.0	3390.7
	% Fixture	78.1	0.0	78.1
Total	Lumens	4340.2	0.0	4340.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.4	0.2
10°-20°	66.5	1.5
20°-30°	204.9	4.7
30°-40°	394.5	9.1
40°-50°	652.0	15.0
50°-60°	980.6	22.6
60°-70°	1313.6	30.3
70°-80°	617.4	14.2
80°-90°	100.3	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°	4340.2	100.0
0°-180°	4340.2	100.0

Coefficient of Utilization



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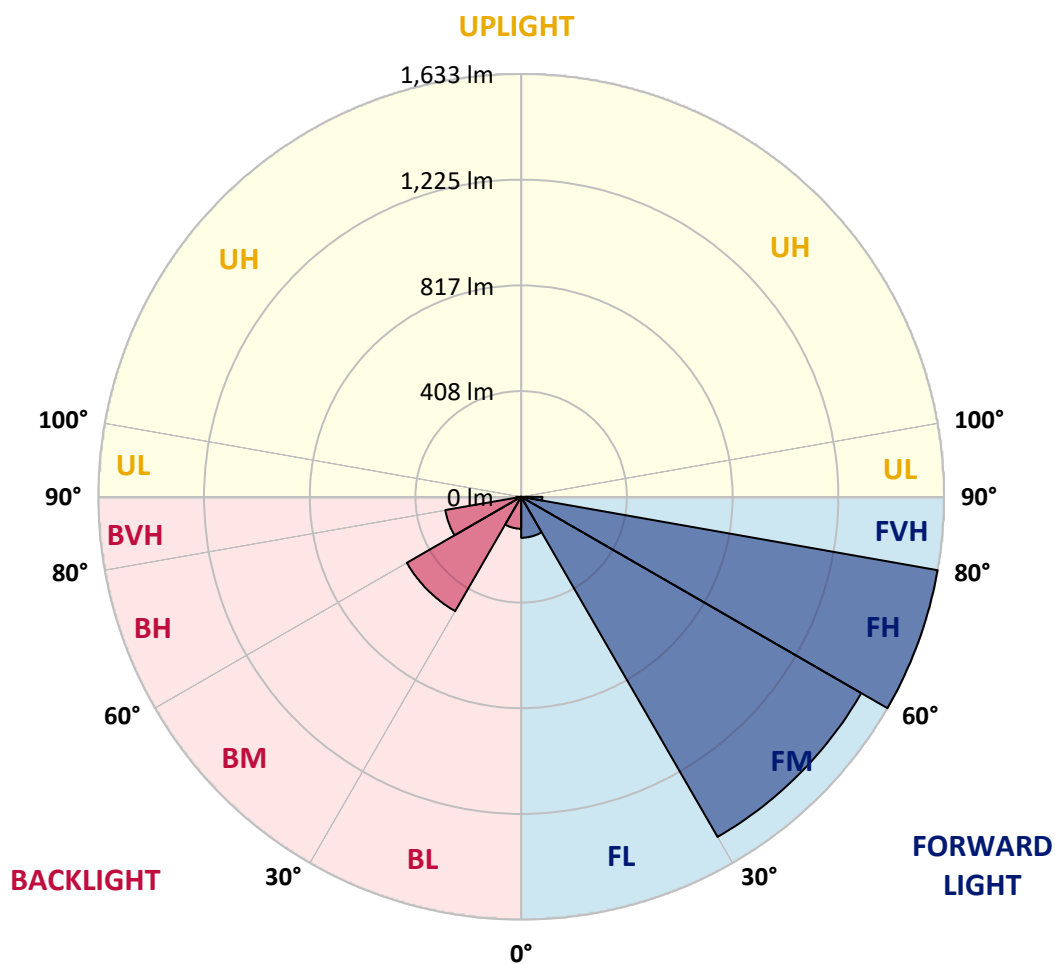
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	158.3	3.6			
FM	(30°-60°)	1517.0	35.0			
FH	(60°-80°)	1633.5	37.6			G1/1800
FVH	(80°-90°)	81.9	1.9			G1/100
BL	(0°-30°)	123.5	2.8	B1/500		
BM	(30°-60°)	510.1	11.8	B1/1000		
BH	(60°-80°)	297.5	6.9	B1/500		G1/500
BVH	(80°-90°)	18.4	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°	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
2.5°	123.8	123.0	123.0	123.8	122.2	121.4	105.7	102.4	99.1	96.6	94.1
5°	102.4	103.2	102.4	102.4	104.8	101.5	111.4	113.1	117.2	118.9	122.2
7.5°	164.3	165.1	163.5	161.8	132.9	106.5	103.2	103.2	103.2	106.5	105.7
10°	174.2	174.2	172.5	170.9	165.9	158.5	115.6	116.4	136.2	121.4	143.6
12.5°	243.5	245.2	241.9	230.3	177.5	220.4	222.1	219.6	217.9	212.2	207.2
15°	262.5	268.3	258.4	246.0	286.5	243.5	233.6	231.1	229.5	229.5	242.7
17.5°	362.4	364.1	356.6	333.5	303.0	290.6	287.3	285.6	284.8	284.8	286.5
20°	432.6	437.5	382.2	398.7	369.0	336.0	324.4	324.4	325.3	318.7	309.6
22.5°	476.3	474.7	449.1	459.0	407.0	375.6	404.5	411.9	420.2	423.5	428.4
25°	565.5	564.7	501.1	458.2	445.8	421.8	427.6	435.1	440.8	454.0	478.8
27.5°	575.4	574.6	529.2	510.2	442.5	482.1	541.5	553.9	561.4	563.0	561.4
30°	648.9	647.2	612.5	532.5	505.2	525.0	582.0	594.4	601.0	605.9	605.9
32.5°	724.8	724.8	659.6	559.7	544.0	600.2	684.4	688.5	693.4	694.3	695.9
35°	780.9	763.6	688.5	628.2	604.3	663.7	769.4	771.9	786.7	825.5	837.1
37.5°	810.7	812.3	784.2	711.6	714.1	780.9	945.2	948.5	951.0	960.9	974.9
40°	858.5	866.8	847.0	802.4	822.2	927.9	1097.9	1108.7	1117.8	1119.4	1146.7
42.5°	907.3	913.9	914.7	927.9	945.2	1081.4	1245.7	1256.4	1254.8	1267.2	1308.5
45°	989.0	998.9	1015.4	1031.1	1069.9	1223.4	1392.7	1409.2	1396.0	1427.3	1453.7
47.5°	1093.8	1101.3	1129.3	1170.6	1186.3	1348.1	1546.2	1550.3	1561.9	1594.9	1604.8
50°	1186.3	1195.4	1230.9	1285.3	1304.3	1457.1	1663.4	1665.1	1684.1	1731.1	1712.1
52.5°	1256.4	1266.4	1296.9	1381.9	1411.6	1578.4	1754.2	1755.1	1788.1	1831.8	1793.0
55°	1295.2	1306.0	1326.6	1423.2	1481.0	1668.4	1861.6	1866.5	1913.6	1937.5	1907.8
57.5°	1296.9	1306.8	1330.7	1414.9	1510.7	1761.7	2010.2	2034.9	2084.5	2114.2	2114.2
60°	1282.0	1294.4	1317.5	1390.2	1538.8	1865.7	2238.8	2290.0	2369.3	2398.1	2463.4
62.5°	1243.2	1249.0	1263.1	1346.4	1580.1	1990.3	2568.2	2653.2	2770.5	2788.6	2921.5
65°	1154.9	1158.2	1175.5	1270.5	1578.4	2104.3	2867.0	2978.5	3109.8	3122.1	3249.3
67.5°	1039.3	1046.8	1060.0	1150.8	1429.0	2060.5	2892.6	3037.9	3140.3	3144.4	3250.9
70°	860.2	856.9	872.6	937.0	1151.6	1727.8	2615.3	2751.5	2820.8	2849.7	2922.4
72.5°	563.8	565.5	553.9	593.6	776.0	1216.8	2106.7	2258.6	2290.0	2360.2	2396.5
75°	317.0	310.4	322.8	355.8	437.5	732.2	1433.9	1568.5	1633.7	1691.5	1722.9
77.5°	188.2	185.7	206.4	252.6	353.3	491.2	827.2	894.0	947.7	992.3	1049.2
80°	87.5	93.3	91.6	104.0	192.3	420.2	574.6	601.0	624.1	649.7	684.4
82.5°	42.9	47.1	54.5	57.0	67.7	212.2	512.7	539.1	561.4	586.9	621.6
85°	28.1	28.9	40.5	41.3	42.1	64.4	251.0	290.6	306.3	349.2	408.6
87.5°	9.9	14.0	29.7	26.4	26.4	31.4	85.0	93.3	97.4	106.5	118.9
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):

	60°	61°	62°	64°	65°	66°	67°	68°	69°	70°	71°
0°	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
2.5°	93.3	93.3	90.0	86.7	85.0	85.0	82.6	82.6	81.7	80.9	79.3
5°	121.4	123.0	123.0	123.0	122.2	121.4	120.5	118.9	117.2	113.9	111.4
7.5°	103.2	101.5	99.9	96.6	97.4	99.9	102.4	105.7	110.6	113.1	113.9
10°	145.3	149.4	148.6	149.4	148.6	150.2	150.2	151.9	151.1	151.9	153.5
12.5°	199.0	182.4	166.8	163.5	162.6	161.8	163.5	162.6	166.8	169.2	169.2
15°	250.1	267.5	268.3	277.4	275.7	262.5	248.5	244.4	241.1	241.1	232.8
17.5°	287.3	293.1	293.9	291.4	294.7	293.9	289.8	284.8	279.0	268.3	252.6
20°	342.6	350.8	355.8	360.8	370.7	363.2	361.6	394.6	398.7	402.0	398.7
22.5°	435.1	434.2	431.7	418.5	411.9	411.1	413.6	420.2	419.4	421.8	424.3
25°	490.4	489.5	496.1	520.1	526.7	550.6	544.0	544.0	548.1	552.3	545.7
27.5°	557.2	564.7	573.7	572.9	584.5	581.2	580.3	586.9	586.9	578.7	583.6
30°	610.1	633.2	664.5	674.5	667.8	667.8	676.9	686.0	683.5	682.7	684.4
32.5°	705.8	728.9	709.1	731.4	718.2	739.7	773.5	796.6	804.9	804.1	816.4
35°	860.2	864.3	851.9	861.0	876.7	880.8	884.1	884.1	874.2	890.7	898.2
37.5°	991.5	970.8	989.0	978.2	989.8	1003.0	1001.4	985.7	980.7	1008.0	1005.5
40°	1158.2	1125.2	1148.3	1142.5	1149.1	1153.3	1135.1	1124.4	1137.6	1145.8	1144.2
42.5°	1281.2	1298.6	1299.4	1296.9	1302.7	1303.5	1270.5	1275.4	1291.1	1288.6	1280.4
45°	1414.1	1443.0	1427.3	1451.3	1453.7	1421.6	1414.1	1435.6	1440.5	1432.3	1422.4
47.5°	1575.9	1594.9	1568.5	1604.8	1605.6	1569.3	1585.8	1600.7	1604.0	1587.5	1602.3
50°	1715.4	1717.1	1711.3	1739.4	1722.9	1704.7	1741.0	1749.3	1741.9	1719.6	1742.7
52.5°	1830.2	1807.9	1831.0	1869.8	1825.2	1827.7	1882.2	1875.6	1852.5	1873.9	1858.3
55°	1954.8	1935.0	1990.3	2008.5	1967.2	2005.2	2043.2	2034.1	2007.7	2051.4	2020.9
57.5°	2142.2	2147.2	2195.9	2209.9	2192.6	2276.8	2295.0	2292.5	2293.3	2322.2	2309.0
60°	2479.9	2528.6	2584.7	2627.6	2655.7	2755.6	2757.3	2758.9	2791.1	2805.1	2852.2
62.5°	2912.5	3041.2	3072.6	3124.6	3228.6	3324.4	3303.8	3306.2	3347.5	3314.5	3375.6
65°	3261.6	3398.7	3497.7	3505.2	3650.5	3679.4	3632.3	3681.8	3673.6	3673.6	3700.0
67.5°	3294.7	3435.8	3525.0	3563.8	3732.2	3724.8	3679.4	3753.7	3709.9	3747.1	3736.3
70°	2999.1	3104.8	3197.3	3279.8	3431.7	3423.5	3425.9	3528.3	3522.5	3551.4	3521.7
72.5°	2482.4	2575.6	2626.8	2777.1	2816.7	2810.9	2872.8	2881.1	2927.3	2990.1	2951.3
75°	1859.1	1920.2	1924.3	2024.2	2008.5	1989.5	1998.6	2031.6	1945.8	1891.3	1847.5
77.5°	1135.1	1149.1	1135.9	1123.5	1083.1	1043.5	1064.9	1046.8	991.5	956.0	913.9
80°	714.9	732.2	738.8	778.5	767.7	801.6	827.2	852.8	860.2	829.7	799.9
82.5°	662.1	667.8	687.7	728.1	735.5	779.3	785.1	800.8	773.5	756.2	702.5
85°	426.0	439.2	479.6	454.0	488.7	489.5	471.4	469.7	416.9	389.6	327.7
87.5°	130.4	133.7	149.4	150.2	170.1	173.4	179.1	173.4	155.2	130.4	108.1
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°	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
2.5°	78.4	77.6	76.8	76.8	76.8	75.9	75.9	75.9	75.9	75.1	75.1
5°	106.5	102.4	97.4	90.8	84.2	81.7	81.7	80.1	79.3	78.4	77.6
7.5°	113.9	113.1	113.1	113.1	111.4	109.8	108.1	100.7	85.9	79.3	78.4
10°	153.5	158.5	166.8	175.0	176.7	176.7	175.0	171.7	168.4	164.3	151.1
12.5°	168.4	168.4	165.9	163.5	166.8	174.2	181.6	184.9	184.1	182.4	181.6
15°	230.3	230.3	229.5	227.8	227.8	227.0	227.8	232.0	236.9	241.9	241.9
17.5°	252.6	251.0	251.8	254.3	244.4	241.9	241.1	236.9	236.1	239.4	241.9
20°	394.6	388.8	372.3	370.7	367.4	365.7	364.9	359.9	357.5	364.1	364.9
22.5°	421.0	428.4	423.5	448.3	407.8	409.5	435.9	450.7	450.7	448.3	444.1
25°	553.1	548.1	553.9	555.6	547.3	553.9	541.5	534.9	525.9	525.0	526.7
27.5°	585.3	599.3	601.8	624.9	639.0	632.4	657.9	647.2	638.1	630.7	637.3
30°	695.1	691.0	697.6	700.0	709.1	704.2	695.1	700.0	707.5	719.0	710.0
32.5°	827.2	833.8	839.6	841.2	846.2	839.6	840.4	856.9	867.6	855.2	836.3
35°	906.4	906.4	917.2	915.5	906.4	909.7	937.8	944.4	932.8	924.6	937.8
37.5°	1008.0	1006.3	1007.1	1009.6	1003.8	1035.2	1050.1	1033.6	1021.2	1046.8	1036.0
40°	1132.6	1144.2	1134.3	1135.9	1160.7	1178.8	1163.2	1150.8	1181.3	1162.3	1146.7
42.5°	1287.8	1277.1	1263.1	1291.9	1315.1	1302.7	1284.5	1315.9	1306.8	1280.4	1325.8
45°	1441.4	1427.3	1429.8	1455.4	1464.5	1438.9	1455.4	1477.7	1436.4	1479.3	1495.9
47.5°	1576.8	1583.4	1612.3	1636.2	1604.8	1612.3	1637.0	1603.2	1634.5	1666.7	1663.4
50°	1719.6	1748.5	1768.3	1764.1	1742.7	1789.7	1767.4	1755.1	1821.9	1831.0	1840.9
52.5°	1854.1	1897.9	1902.0	1876.4	1909.4	1935.9	1905.3	1991.2	2019.2	2025.8	2053.9
55°	2044.8	2084.5	2067.9	2062.2	2144.7	2125.7	2187.6	2294.1	2307.3	2333.8	2338.7
57.5°	2361.8	2391.5	2374.2	2441.1	2507.9	2496.4	2681.3	2735.8	2810.9	2825.8	2839.8
60°	2910.0	2886.9	2886.9	3030.5	3013.2	3132.0	3265.8	3280.6	3361.5	3367.3	3383.8
62.5°	3383.8	3373.9	3451.5	3493.6	3485.4	3701.7	3736.3	3785.0	3776.0	3792.5	3692.6
65°	3656.2	3628.2	3709.9	3654.6	3812.3	3908.9	3921.2	3944.4	3905.6	3850.2	3787.5
67.5°	3659.6	3664.5	3672.8	3635.6	3815.6	3822.2	3842.8	3809.0	3776.0	3633.1	3568.7
70°	3456.5	3488.7	3418.5	3485.4	3557.2	3518.4	3505.2	3416.8	3330.2	3180.7	3053.6
72.5°	2892.6	2849.7	2807.6	2858.0	2823.3	2752.3	2667.3	2557.5	2396.5	2283.4	2161.2
75°	1746.8	1666.7	1708.8	1635.4	1531.3	1502.5	1405.9	1375.3	1246.5	1082.3	1020.3
77.5°	871.8	788.4	799.1	736.4	657.1	591.9	492.0	402.9	321.1	248.5	203.1
80°	729.8	689.3	648.9	582.8	516.0	428.4	339.3	240.2	163.5	119.7	102.4
82.5°	628.2	616.7	537.4	473.9	399.6	325.3	229.5	158.5	102.4	79.3	73.5
85°	290.6	261.7	227.0	217.1	170.9	139.5	104.0	76.8	59.4	52.8	48.7
87.5°	104.8	90.0	83.4	71.8	62.7	57.0	53.7	52.0	52.0	52.0	49.5
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):

	83°	84°	85°	86°	87°	88°	89°	90°	95°	105°	115°
0°	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3	74.3
2.5°	75.1	75.1	74.3	74.3	74.3	74.3	74.3	73.5	73.5	73.5	75.1
5°	77.6	76.8	76.8	75.9	75.9	75.9	75.1	75.1	74.3	76.8	103.2
7.5°	78.4	79.3	79.3	79.3	79.3	79.3	78.4	78.4	78.4	87.5	101.5
10°	134.6	129.6	128.8	127.1	125.5	124.7	123.0	120.5	123.8	168.4	117.2
12.5°	176.7	157.7	142.8	140.3	138.7	136.2	136.2	129.6	135.4	161.0	125.5
15°	240.2	234.4	217.9	202.3	203.9	203.9	202.3	201.4	186.6	188.2	190.7
17.5°	247.7	260.0	269.1	248.5	229.5	217.1	220.4	237.8	213.8	204.7	244.4
20°	364.1	368.2	369.8	358.3	332.7	332.7	336.8	340.9	322.0	318.7	317.8
22.5°	436.7	441.7	438.4	443.3	436.7	432.6	424.3	415.2	405.3	365.7	391.3
25°	528.3	540.7	547.3	536.6	520.9	501.9	496.1	497.0	513.5	511.0	541.5
27.5°	645.6	639.0	630.7	638.1	644.7	624.1	616.7	609.2	605.1	667.8	594.4
30°	687.7	682.7	693.4	682.7	681.1	690.1	698.4	685.2	684.4	734.7	673.6
32.5°	845.3	842.0	817.3	827.2	837.9	839.6	838.7	852.8	844.5	855.2	707.5
35°	921.3	903.9	927.9	931.2	919.6	934.5	934.5	931.2	953.5	909.7	735.5
37.5°	1023.7	1036.0	1051.7	1056.7	1069.1	1041.8	1064.1	1068.2	1102.9	963.4	714.9
40°	1187.1	1196.2	1206.1	1204.4	1192.1	1221.8	1192.9	1204.4	1243.2	994.8	691.8
42.5°	1339.0	1347.3	1362.1	1361.3	1366.2	1351.4	1374.5	1366.2	1371.2	1003.0	662.9
45°	1500.0	1520.6	1506.6	1537.1	1528.9	1523.1	1537.1	1532.2	1481.8	1018.7	614.2
47.5°	1682.4	1677.5	1691.5	1691.5	1697.3	1707.2	1692.3	1696.5	1577.6	1029.4	561.4
50°	1841.7	1849.2	1863.2	1861.6	1873.9	1862.4	1876.4	1830.2	1656.8	1022.8	493.7
52.5°	2049.0	2078.7	2063.0	2071.2	2058.0	2078.7	2035.7	2014.3	1765.0	991.5	424.3
55°	2393.2	2347.0	2376.7	2343.7	2346.1	2340.4	2285.9	2271.0	1922.6	974.9	345.1
57.5°	2824.1	2819.2	2796.9	2755.6	2745.7	2710.2	2664.8	2612.0	2174.4	970.0	279.9
60°	3346.7	3326.9	3257.5	3218.7	3147.7	3075.9	3036.3	2971.9	2442.7	948.5	231.1
62.5°	3684.3	3600.1	3549.8	3457.3	3391.3	3307.9	3243.5	3123.8	2518.7	900.6	204.7
65°	3700.8	3622.4	3536.5	3427.6	3321.1	3248.4	3132.0	3020.6	2404.8	778.5	170.9
67.5°	3462.3	3377.2	3207.2	3126.3	3022.2	2936.4	2796.1	2698.6	2114.2	624.9	135.4
70°	2982.6	2839.0	2682.1	2573.2	2484.8	2384.1	2252.0	2145.5	1687.4	459.8	104.8
72.5°	2065.5	1982.9	1838.4	1783.1	1696.5	1647.7	1577.6	1535.5	1193.7	316.2	86.7
75°	1004.7	942.7	856.1	874.2	813.1	826.4	835.4	786.7	659.6	179.1	75.1
77.5°	187.4	196.5	175.0	175.0	177.5	169.2	170.9	185.7	184.9	90.8	63.6
80°	95.8	94.1	90.8	89.2	85.0	82.6	79.3	77.6	75.1	65.2	55.3
82.5°	69.3	65.2	61.1	58.6	56.1	52.8	50.4	51.2	56.1	64.4	59.4
85°	44.6	42.9	39.6	38.8	38.0	37.1	38.0	39.6	53.7	76.8	58.6
87.5°	47.9	43.8	39.6	38.0	37.1	35.5	34.7	37.1	57.0	83.4	50.4
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):

	125°	135°	145°	155°	165°	175°	180°
0°	74.3	74.3	74.3	74.3	74.3	74.3	74.3
2.5°	76.8	82.6	101.5	116.4	118.1	118.1	117.2
5°	115.6	80.1	74.3	75.9	72.6	73.5	72.6
7.5°	73.5	73.5	75.1	104.0	117.2	122.2	118.9
10°	87.5	116.4	118.1	123.0	123.8	123.0	122.2
12.5°	170.1	167.6	128.0	136.2	177.5	180.0	179.1
15°	183.3	181.6	221.2	183.3	189.9	191.5	189.9
17.5°	239.4	239.4	238.6	219.6	246.8	246.8	246.0
20°	283.2	294.7	286.5	274.9	241.9	242.7	242.7
22.5°	401.2	327.7	312.9	299.7	271.6	271.6	270.8
25°	413.6	368.2	328.6	287.3	263.3	288.1	285.6
27.5°	533.3	384.7	308.7	292.2	261.7	254.3	254.3
30°	525.0	406.2	345.1	266.6	252.6	241.9	236.9
32.5°	555.6	402.0	304.6	242.7	205.6	201.4	196.5
35°	538.2	381.4	260.9	193.2	157.7	150.2	150.2
37.5°	520.1	325.3	210.5	143.6	125.5	119.7	120.5
40°	458.2	261.7	146.1	110.6	110.6	111.4	111.4
42.5°	391.3	181.6	107.3	94.9	99.9	103.2	102.4
45°	307.9	122.2	86.7	87.5	94.1	96.6	96.6
47.5°	219.6	90.8	79.3	81.7	89.2	92.5	91.6
50°	149.4	77.6	74.3	78.4	85.9	87.5	87.5
52.5°	108.1	73.5	71.0	75.1	82.6	84.2	84.2
55°	90.0	71.8	69.3	72.6	79.3	80.9	81.7
57.5°	85.0	71.8	68.5	71.8	76.8	78.4	78.4
60°	85.0	72.6	70.2	71.8	74.3	75.9	76.8
62.5°	86.7	76.8	73.5	73.5	73.5	74.3	74.3
65°	90.0	84.2	79.3	76.8	73.5	71.0	71.8
67.5°	94.1	91.6	87.5	80.9	71.8	66.9	66.9
70°	97.4	99.1	97.4	84.2	70.2	61.9	61.1
72.5°	96.6	104.8	99.1	85.0	68.5	57.8	57.0
75°	90.8	97.4	85.9	76.8	64.4	54.5	52.8
77.5°	79.3	71.8	59.4	59.4	53.7	48.7	47.1
80°	63.6	47.9	39.6	42.1	40.5	30.5	26.4
82.5°	50.4	31.4	29.7	31.4	30.5	22.3	19.0
85°	41.3	21.5	21.5	23.9	21.5	16.5	12.4
87.5°	32.2	12.4	14.0	13.2	13.2	9.9	3.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)