

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: P239990

Luminaire Tested: **UTLD-AF24-90-D-U-T2U-A-7030**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P239990  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-18)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: UTLD-AF24-90-D-U-T2U-A-7030  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 3000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS  
AND REFRACTOR PANELS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6581 lumens  
Efficiency: N/A  
Efficacy: 70.0 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')  
IES Classification: Type II - Short - Non-Cutoff  
BUG Rating: B2 - U4 - G2

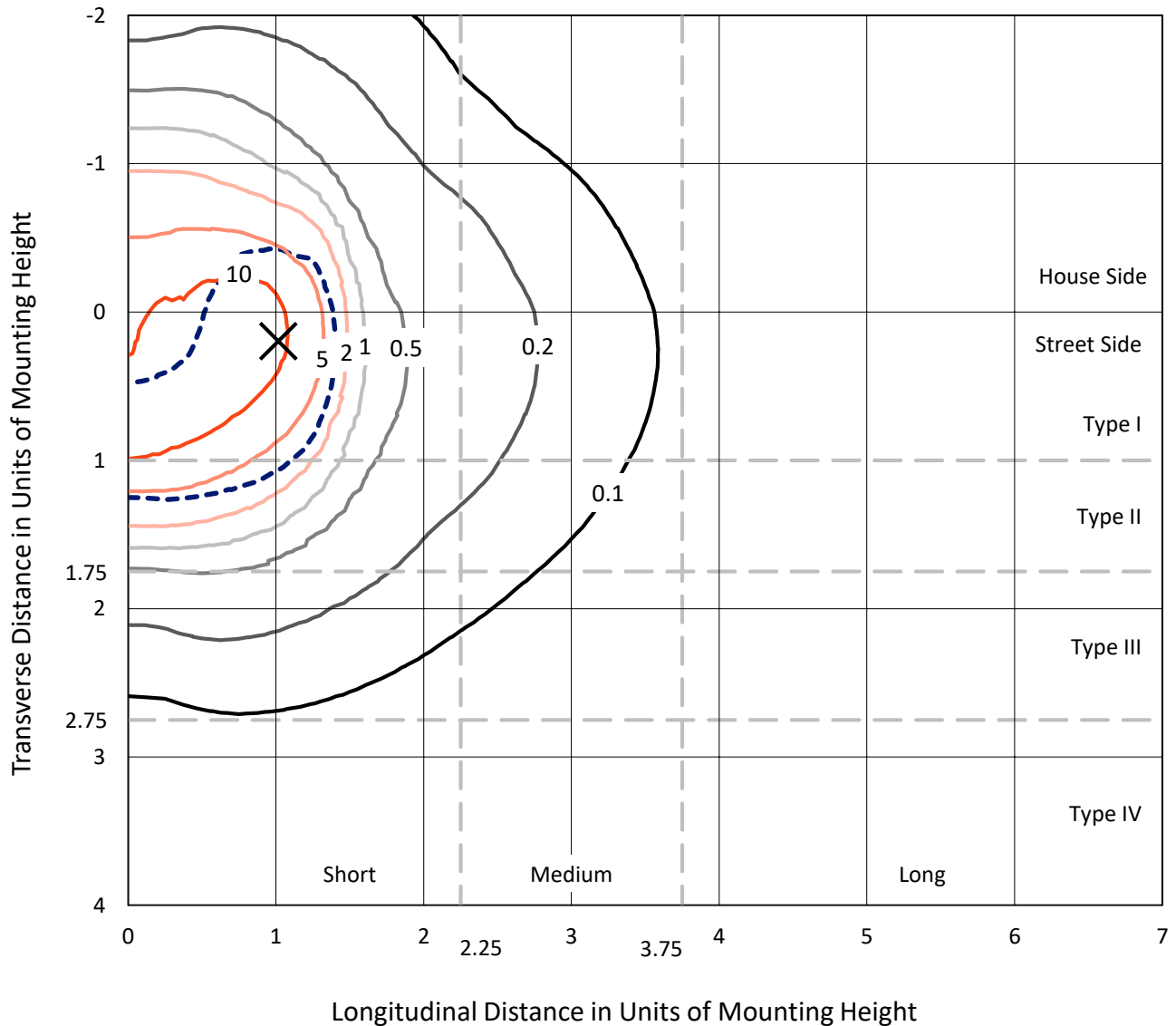
Input Watts (W): 94  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

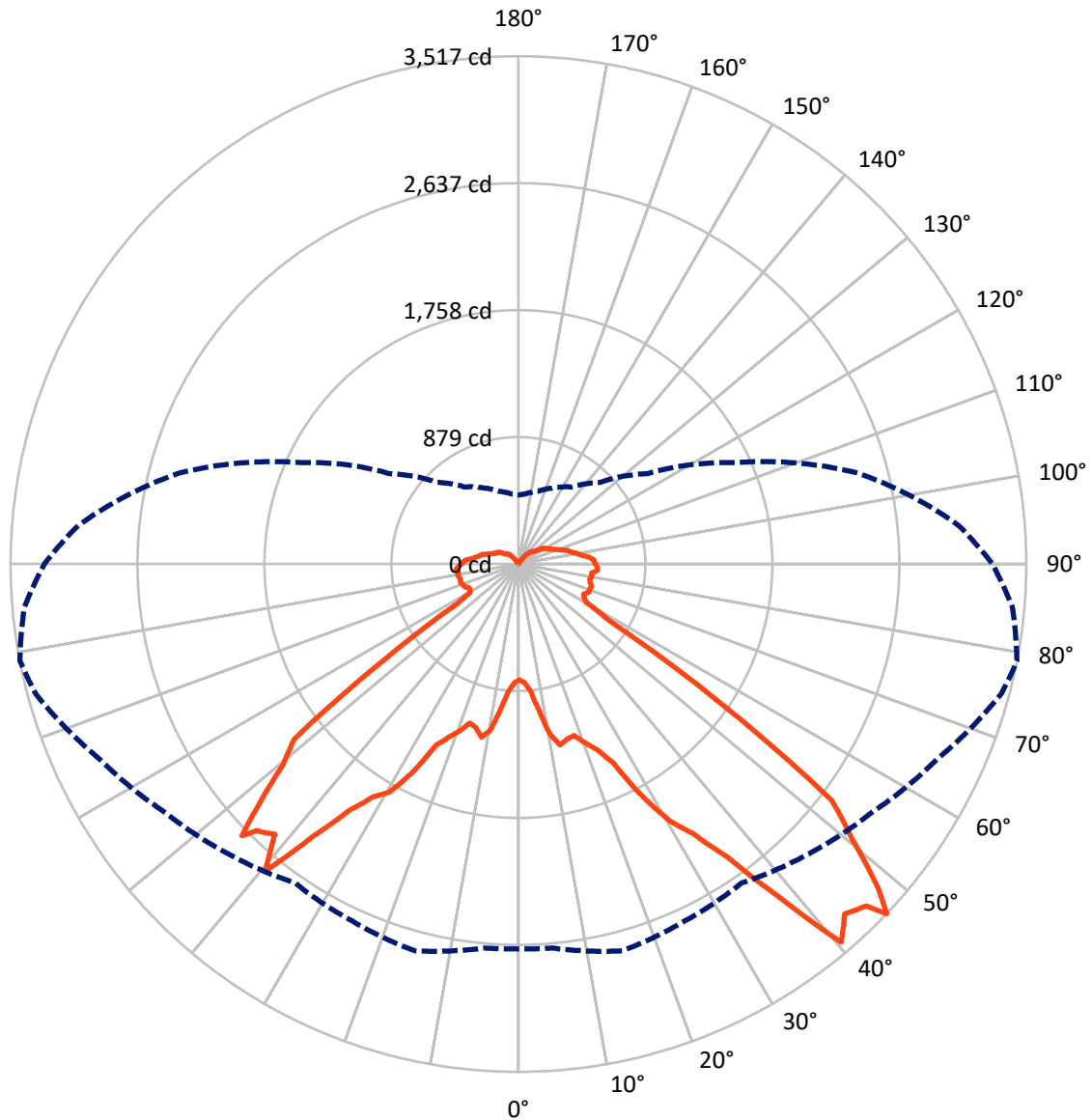
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 14.4 fc  
 Type II - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 79-Deg Lateral      - - - Horizontal Cone Through 46-Deg Vertical

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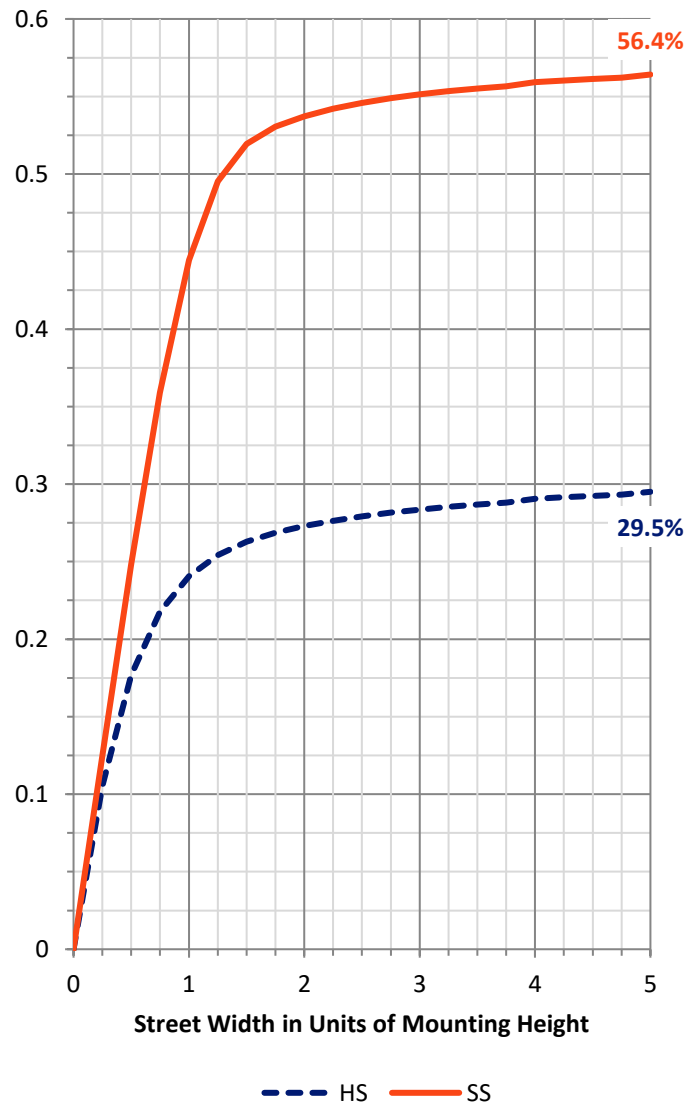
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2006.1	249.5	2255.6
	% Fixture	30.5	3.8	34.3
<b>Street Side</b>	Lumens	3784.2	541.3	4325.5
	% Fixture	57.5	8.2	65.7
<b>Total</b>	Lumens	5790.2	790.8	6581.0
	% Fixture	88.0	12.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.5	1.3
10°-20°	312.6	4.8
20°-30°	631.7	9.6
30°-40°	1156.4	17.6
40°-50°	1597.9	24.3
50°-60°	1020.0	15.5
60°-70°	365.4	5.6
70°-80°	328.1	5.0
80°-90°	291.7	4.4
90°-100°	267.6	4.1
100°-110°	208.0	3.2
110°-120°	144.4	2.2
120°-130°	96.7	1.5
130°-140°	57.9	0.9
140°-150°	15.4	0.2
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5790.2	88.0
0°-180°	6581.0	100.0



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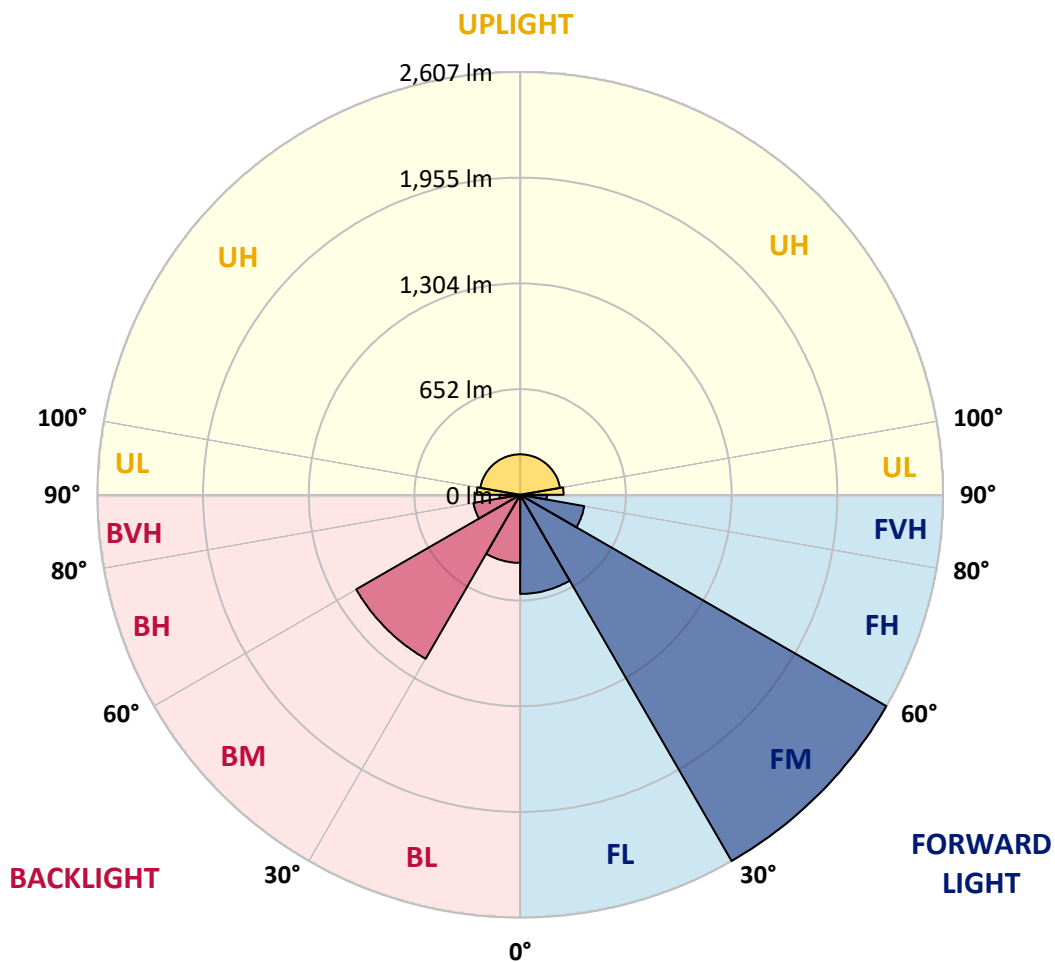
CATALOG NUMBER: UTLD-AF24-90-D-U-T2U-A-7030

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	611.2	9.3			
FM (30°-60°)	2607.2	39.6			
FH (60°-80°)	401.0	6.1			G0/660
FVH (80°-90°)	164.8	2.5			G2/225
BL (0°-30°)	419.5	6.4	B1/500		
BM (30°-60°)	1167.1	17.7	B2/2500		
BH (60°-80°)	292.5	4.4	B1/500		G1/500
BVH (80°-90°)	126.9	1.9			G2/225
UL (90°-100°)	267.6	4.1		U3/500	
UH (100°-180°)	249.5	3.8		U3/500	

**BUG Rating: B2-U4-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1
2.5°	815.3	818.0	817.1	815.3	818.9	820.6	820.6	819.8	820.6	822.4	825.9
5°	854.2	853.3	856.0	863.0	872.8	875.4	883.4	881.6	886.0	886.0	891.3
7.5°	922.2	923.1	931.9	939.0	949.6	972.6	994.7	1023.8	1022.9	1021.2	1028.2
10°	992.9	992.9	1010.6	1036.2	1079.5	1128.0	1149.2	1174.9	1201.4	1197.0	1189.9
12.5°	1015.0	1018.5	1049.4	1113.0	1206.7	1289.7	1332.1	1326.8	1300.3	1285.3	1261.4
15°	1055.6	1060.0	1093.6	1190.8	1302.1	1376.3	1392.2	1326.8	1269.4	1258.8	1238.5
17.5°	1208.4	1208.4	1242.9	1332.1	1416.0	1399.2	1336.5	1305.6	1268.5	1248.2	1219.0
20°	1314.4	1320.6	1375.4	1438.1	1484.0	1429.3	1430.2	1372.7	1334.8	1322.4	1295.0
22.5°	1416.9	1425.7	1441.6	1539.7	1552.9	1563.5	1531.7	1479.6	1416.0	1395.7	1367.4
25°	1634.2	1636.9	1653.6	1700.5	1665.1	1647.5	1601.5	1559.1	1534.4	1523.8	1493.8
27.5°	1892.2	1884.2	1891.3	1894.8	1840.9	1792.3	1725.2	1770.2	1805.6	1815.3	1788.8
30°	1945.2	1931.9	1985.8	2043.2	2016.7	1958.4	1954.0	2007.9	2074.1	2061.8	2024.7
32.5°	2158.9	2138.6	2163.3	2169.5	2165.1	2148.3	2141.3	2209.3	2257.0	2229.6	2175.7
35°	2331.2	2330.3	2242.8	2263.2	2275.5	2314.4	2353.3	2446.0	2488.4	2490.2	2445.1
37.5°	2699.5	2673.0	2640.4	2511.4	2443.4	2461.0	2595.3	2759.6	2855.0	2917.7	2846.2
40°	2825.9	2837.3	2810.0	2795.8	2696.9	2655.4	2810.0	3092.6	3351.5	3443.3	3434.5
42.5°	2618.3	2644.8	2628.9	2726.9	2805.5	2858.5	3044.9	3287.0	3336.4	3312.6	3186.3
45°	2791.4	2791.4	2749.0	2688.1	2715.4	2887.7	3035.2	3198.6	3353.2	3378.0	3308.2
46°	2666.0	2668.6	2772.9	2726.9	2696.0	2839.1	2992.8	3198.6	3462.8	3516.6	3434.5
47.5°	2434.5	2430.1	2621.8	2636.8	2658.0	2775.5	2944.2	3197.8	3347.0	3350.6	3248.1
50°	1929.3	1937.2	2200.4	2340.0	2479.6	2595.3	2823.2	2966.3	2999.9	2993.7	2882.4
52.5°	1566.2	1587.4	1727.0	1902.8	2071.5	2294.1	2559.1	2692.5	2765.8	2717.2	2614.7
55°	1085.6	1131.6	1307.4	1465.5	1712.8	1926.6	2155.4	2167.8	1833.0	1680.1	1490.2
57.5°	671.4	680.2	835.7	1059.1	1244.7	1412.5	1415.1	1099.8	856.0	743.8	618.4
60°	372.8	380.7	518.5	683.7	864.8	885.1	790.6	636.0	570.6	541.5	497.3
62.5°	277.4	283.6	373.7	475.2	547.7	576.8	530.9	520.3	521.2	507.9	478.8
65°	250.0	253.5	327.7	379.0	421.4	427.5	444.3	481.4	501.7	499.1	486.7
67.5°	227.0	231.4	298.6	335.7	361.3	391.3	405.5	462.9	517.6	526.5	515.0
70°	202.3	209.4	269.4	308.3	337.4	366.6	394.9	466.4	510.6	522.9	517.6
72.5°	174.9	183.7	234.1	274.7	307.4	339.2	387.8	448.7	508.8	530.9	534.4
75°	153.7	165.2	206.7	242.9	277.4	315.4	366.6	442.6	499.1	513.2	520.3
77.5°	138.7	151.1	182.9	216.4	249.1	290.6	349.8	440.8	489.4	505.3	517.6
80°	127.2	139.6	166.1	192.6	220.0	266.8	332.1	438.1	499.1	515.9	522.9
82.5°	118.4	129.9	152.8	176.7	198.8	241.2	319.8	433.7	496.4	510.6	514.1
85°	119.3	128.1	149.3	171.4	191.7	227.9	313.6	435.5	529.1	551.2	554.7
87.5°	125.4	131.6	153.7	179.3	202.3	239.4	325.1	432.0	525.6	545.9	554.7
90°	136.0	141.3	167.8	197.9	225.3	259.7	322.4	422.2	510.6	529.1	534.4
92.5°	168.7	173.1	202.3	235.0	258.8	270.3	311.8	437.3	513.2	523.8	523.8
95°	218.2	223.5	251.8	276.5	280.9	274.7	306.5	388.7	468.2	491.1	504.4
97.5°	273.0	274.7	290.6	295.0	281.8	267.7	299.5	363.1	424.9	440.8	444.3
100°	290.6	290.6	301.2	297.7	272.1	252.6	271.2	330.4	390.4	408.1	413.4
102.5°	294.2	295.9	306.5	295.0	260.6	228.8	241.2	297.7	353.3	372.8	383.4
105°	311.8	312.7	306.5	278.3	235.9	207.6	218.2	274.7	333.9	352.5	363.9
107.5°	291.5	288.9	272.1	245.6	217.3	197.0	209.4	250.9	295.9	310.9	318.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	241.2	239.4	233.2	223.5	205.8	190.8	198.8	236.7	280.0	291.5	298.6
112.5°	232.3	230.6	224.4	212.9	192.6	181.1	194.3	227.0	253.5	258.8	259.7
115°	223.5	221.7	207.6	194.3	178.4	173.1	182.0	212.0	236.7	242.9	248.2
117.5°	192.6	190.8	180.2	172.3	166.1	168.7	183.7	200.5	218.2	223.5	227.0
120°	171.4	170.5	165.2	159.9	156.4	158.1	174.0	192.6	210.2	215.5	218.2
122.5°	161.7	160.8	154.6	146.6	146.6	146.6	159.0	173.1	192.6	197.0	203.2
125°	142.2	142.2	136.0	129.9	138.7	142.2	144.9	145.8	160.8	167.8	170.5
127.5°	126.3	127.2	121.9	117.5	133.4	141.3	139.6	128.1	136.9	142.2	145.8
130°	124.6	124.6	118.4	113.1	121.0	136.9	131.6	120.1	130.7	134.3	136.0
132.5°	121.0	121.0	114.8	106.9	108.7	126.3	114.8	112.2	121.9	125.4	126.3
135°	111.3	111.3	106.9	96.3	89.2	106.9	92.8	98.1	107.8	110.4	111.3
137.5°	98.9	98.9	94.5	85.7	70.7	80.4	71.6	83.0	92.8	95.4	96.3
140°	81.3	80.4	77.7	67.1	51.2	45.1	48.6	66.3	76.0	77.7	80.4
142.5°	60.1	61.0	56.5	47.7	30.9	16.8	28.3	42.4	53.0	55.7	57.4
145°	44.2	43.3	38.9	30.9	16.8	2.7	13.3	26.5	33.6	36.2	38.0
147.5°	29.2	29.2	25.6	18.6	5.3	0.9	3.5	13.3	21.2	23.0	23.9
150°	19.4	19.4	14.1	5.3	0.9	0.9	0.9	2.7	8.8	10.6	12.4
152.5°	6.2	6.2	2.7	1.8	0.9	0.0	0.0	0.9	1.8	1.8	2.7
155°	1.8	1.8	1.8	0.9	0.0	0.0	0.0	0.0	0.9	0.9	0.9
157.5°	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	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):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1	802.1
2.5°	826.8	825.9	823.3	820.6	813.6	804.7	795.9	789.7	786.2	783.5	782.7
5°	889.5	891.3	878.9	858.6	839.2	821.5	804.7	788.8	780.0	772.9	770.3
7.5°	1022.9	1025.6	1000.8	969.0	919.6	859.5	808.3	773.8	749.1	734.1	731.4
10°	1188.1	1181.0	1151.9	1083.9	993.8	901.0	804.7	730.5	690.8	672.2	671.4
12.5°	1255.3	1245.5	1212.9	1156.3	1061.8	940.8	821.5	723.5	664.3	640.4	639.6
15°	1224.3	1207.6	1147.5	1095.4	1058.3	991.1	884.2	772.1	690.8	660.8	652.8
17.5°	1197.8	1181.0	1130.7	1055.6	985.8	956.7	904.6	811.8	727.0	684.6	675.8
20°	1275.6	1265.0	1202.3	1102.4	1025.6	909.0	866.6	803.0	739.4	712.9	705.8
22.5°	1347.1	1341.8	1263.2	1159.0	1055.6	974.3	889.5	842.7	780.9	762.3	754.4
25°	1480.5	1455.8	1326.8	1186.3	1097.1	1017.6	909.0	835.7	760.6	736.7	732.3
27.5°	1794.1	1736.7	1548.5	1337.4	1158.1	1031.8	907.2	799.4	717.3	687.3	685.5
30°	1993.7	1941.6	1729.6	1497.3	1253.5	1065.3	895.7	765.9	704.0	674.9	675.8
32.5°	2114.8	2045.0	1806.5	1512.3	1275.6	1082.1	902.8	754.4	671.4	634.3	633.4
35°	2377.1	2279.9	1933.7	1633.3	1318.9	1057.4	872.8	730.5	653.7	626.3	622.8
37.5°	2750.8	2641.2	2172.2	1731.4	1336.5	1024.7	833.9	703.2	611.3	573.3	570.6
40°	3290.5	3129.7	2502.6	1849.8	1322.4	1000.0	791.5	661.6	585.7	560.9	553.0
42.5°	3022.9	2840.9	2305.6	1826.8	1287.1	931.9	750.9	641.3	570.6	551.2	540.6
45°	3189.8	2977.8	2329.4	1698.7	1151.9	831.2	682.0	600.7	530.0	502.6	500.0
46°	3282.6	3060.8	2432.8	1659.8	1090.1	799.4	651.0	582.1	521.2	485.8	477.9
47.5°	3081.2	2834.7	2236.7	1583.9	1040.6	727.9	610.4	553.0	511.5	478.8	473.5
50°	2702.2	2461.0	1934.6	1350.7	895.7	642.2	544.1	509.7	468.2	432.8	426.7
52.5°	2466.3	2264.0	1771.1	1225.2	760.6	541.5	485.8	455.8	413.4	371.9	366.6
55°	1356.0	1216.4	1094.5	920.5	630.7	457.6	423.1	405.5	362.2	321.5	318.9
57.5°	558.3	501.7	497.3	469.1	433.7	385.1	365.7	355.1	311.8	262.4	260.6
60°	469.9	418.7	369.2	325.1	322.4	321.5	315.4	296.8	249.1	197.9	196.1
62.5°	457.6	407.2	358.6	304.8	281.8	288.9	277.4	254.4	218.2	168.7	167.0
65°	466.4	414.3	356.9	295.9	271.2	273.8	261.5	243.8	219.1	183.7	182.0
67.5°	496.4	442.6	378.1	292.4	262.4	267.7	258.8	245.6	231.4	209.4	204.9
70°	500.9	453.2	379.0	294.2	252.6	258.8	256.2	244.7	235.0	215.5	212.9
72.5°	514.1	470.8	386.9	288.0	242.0	244.7	248.2	244.7	238.5	227.0	222.6
75°	501.7	463.8	383.4	282.7	231.4	229.7	238.5	242.9	244.7	240.3	235.0
77.5°	499.1	467.3	384.3	279.1	221.7	214.7	221.7	228.8	232.3	227.9	223.5
80°	502.6	475.2	395.7	280.0	211.1	193.5	197.0	204.9	205.8	197.9	191.7
82.5°	494.7	468.2	383.4	270.3	194.3	172.3	173.1	181.1	182.0	172.3	165.2
85°	530.0	498.2	392.2	257.9	176.7	157.2	158.1	161.7	156.4	145.8	138.7
87.5°	529.1	491.1	374.5	238.5	165.2	148.4	147.5	146.6	137.8	125.4	119.3
90°	510.6	470.8	350.7	210.2	145.8	136.0	133.4	128.1	115.7	101.6	97.2
92.5°	498.2	455.8	334.8	198.8	128.1	119.3	117.5	112.2	99.8	84.8	82.2
95°	485.0	443.4	308.3	174.0	113.1	104.2	101.6	96.3	86.6	74.2	72.4
97.5°	427.5	386.9	272.1	158.1	100.7	91.0	89.2	84.8	76.9	68.0	67.1
100°	394.9	358.6	252.6	144.9	90.1	79.5	78.6	76.0	70.7	64.5	63.6
102.5°	369.2	333.9	234.1	134.3	80.4	70.7	69.8	68.9	66.3	61.8	61.8
105°	349.8	316.2	224.4	125.4	72.4	64.5	63.6	63.6	61.0	58.3	58.3
107.5°	304.8	276.5	195.2	111.3	66.3	59.2	59.2	59.2	57.4	55.7	56.5



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	287.1	260.6	185.5	104.2	63.6	54.8	53.9	53.9	53.0	53.9	53.9
112.5°	247.3	224.4	163.4	99.8	61.8	52.1	49.5	47.7	45.9	47.7	48.6
115°	237.6	216.4	158.1	96.3	60.1	50.4	46.8	44.2	40.6	43.3	43.3
117.5°	218.2	198.8	146.6	93.6	60.1	47.7	44.2	41.5	38.0	39.8	39.8
120°	209.4	192.6	147.5	96.3	61.0	45.1	41.5	37.1	34.5	37.1	37.1
122.5°	197.0	182.0	138.7	91.0	58.3	44.2	40.6	31.8	30.0	32.7	32.7
125°	165.2	152.8	119.3	80.4	55.7	44.2	39.8	28.3	28.3	30.0	30.9
127.5°	140.5	130.7	103.4	75.1	56.5	46.8	38.0	24.7	26.5	29.2	29.2
130°	132.5	124.6	102.5	76.9	59.2	49.5	30.9	23.0	24.7	27.4	27.4
132.5°	123.7	116.6	98.9	78.6	60.1	46.8	25.6	21.2	23.0	24.7	24.7
135°	108.7	103.4	89.2	71.6	53.9	37.1	20.3	18.6	21.2	23.0	23.9
137.5°	95.4	91.0	78.6	64.5	48.6	31.8	14.1	16.8	18.6	19.4	20.3
140°	78.6	76.0	66.3	53.0	36.2	17.7	10.6	13.3	15.0	16.8	16.8
142.5°	57.4	55.7	46.8	34.5	22.1	7.1	7.1	9.7	11.5	13.3	13.3
145°	38.0	36.2	30.0	22.1	9.7	1.8	4.4	7.1	9.7	10.6	10.6
147.5°	23.9	23.0	18.6	11.5	3.5	1.8	1.8	5.3	7.1	8.0	8.0
150°	12.4	11.5	8.0	3.5	1.8	0.9	0.9	1.8	4.4	5.3	5.3
152.5°	2.7	2.7	1.8	0.9	0.9	0.9	0.9	0.9	0.9	1.8	1.8
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
157.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)