

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: P240214

Luminaire Tested: **UTLD-AF24-80-D-U-T4W-FP**

Issue Date: 5/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P240214  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-26)  
Test Lab: INNOVATION CENTER(G1)  
Issue Date: 5/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: UTLD-AF24-80-D-U-T4W-FP  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 4000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS AND FROSTED LENS PANELS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6896.7 lumens  
Efficiency: N/A  
Efficacy: 83.1 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U4 - G4

Input Watts (W): 83  
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

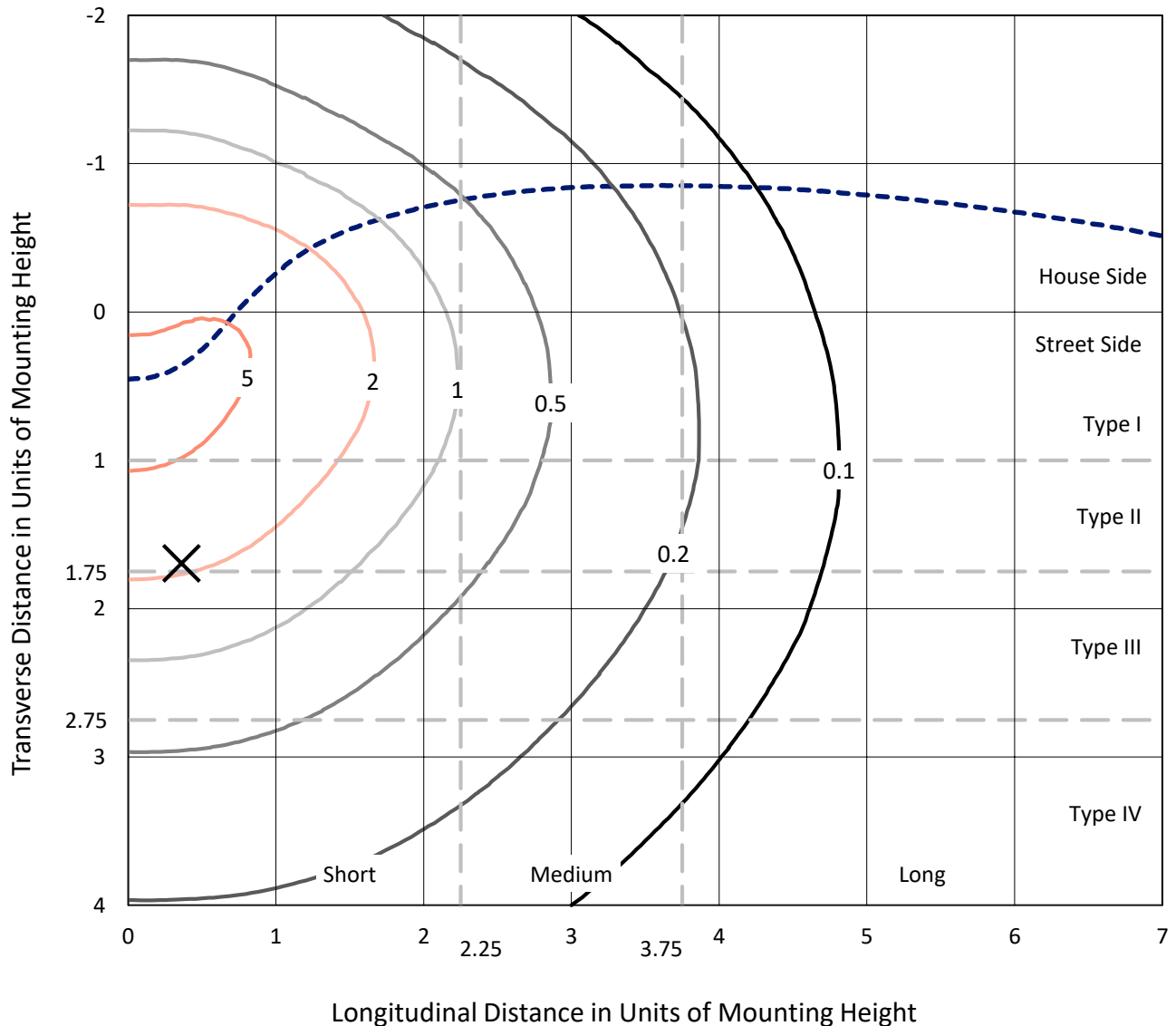


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### Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd  
 - - - 1/2 Max cd

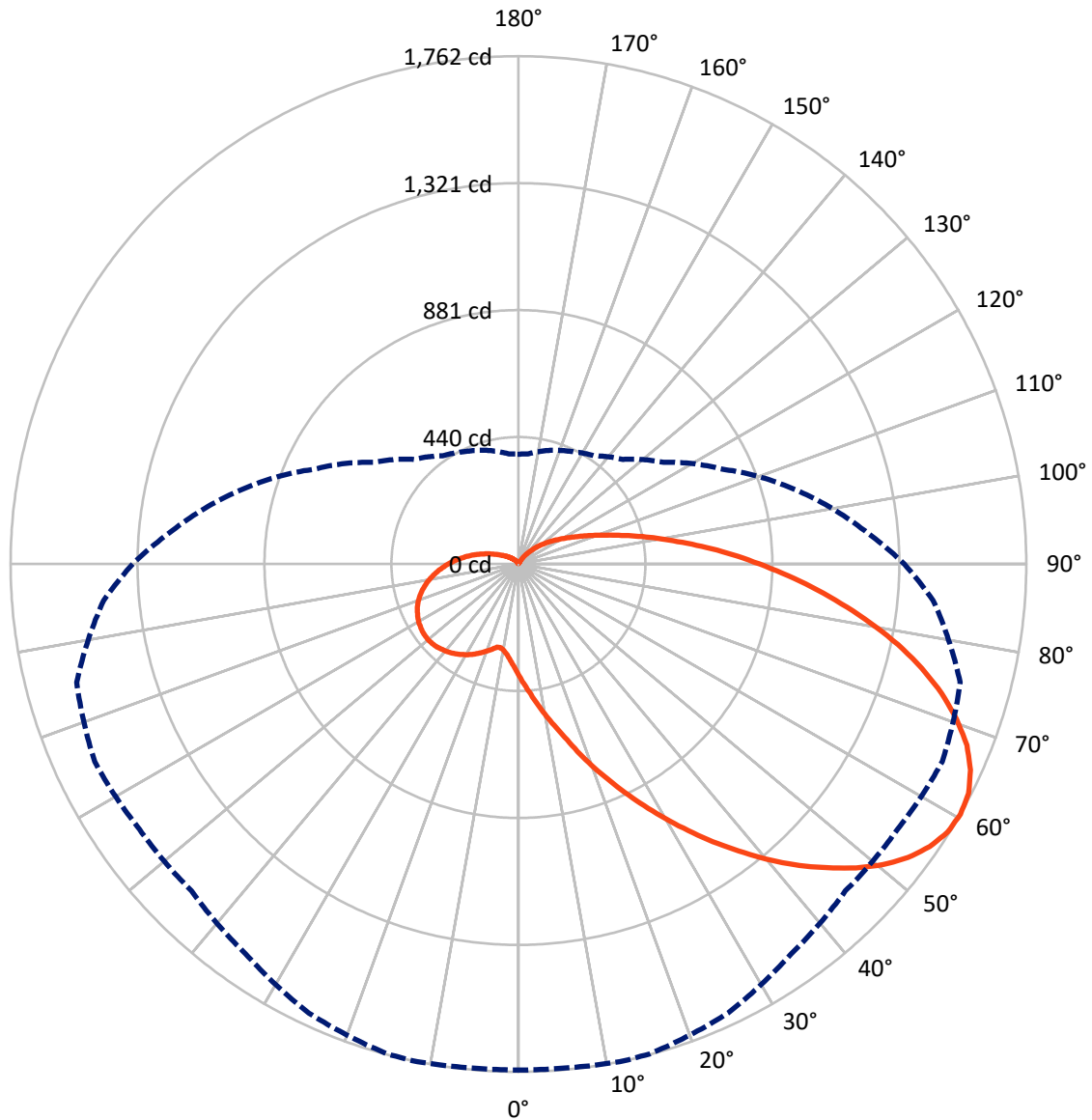


Based on 10 foot mounting height. Maximum calculated value = 6.8 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 12-Deg Lateral      - - - Horizontal Cone Through 60-Deg Vertical

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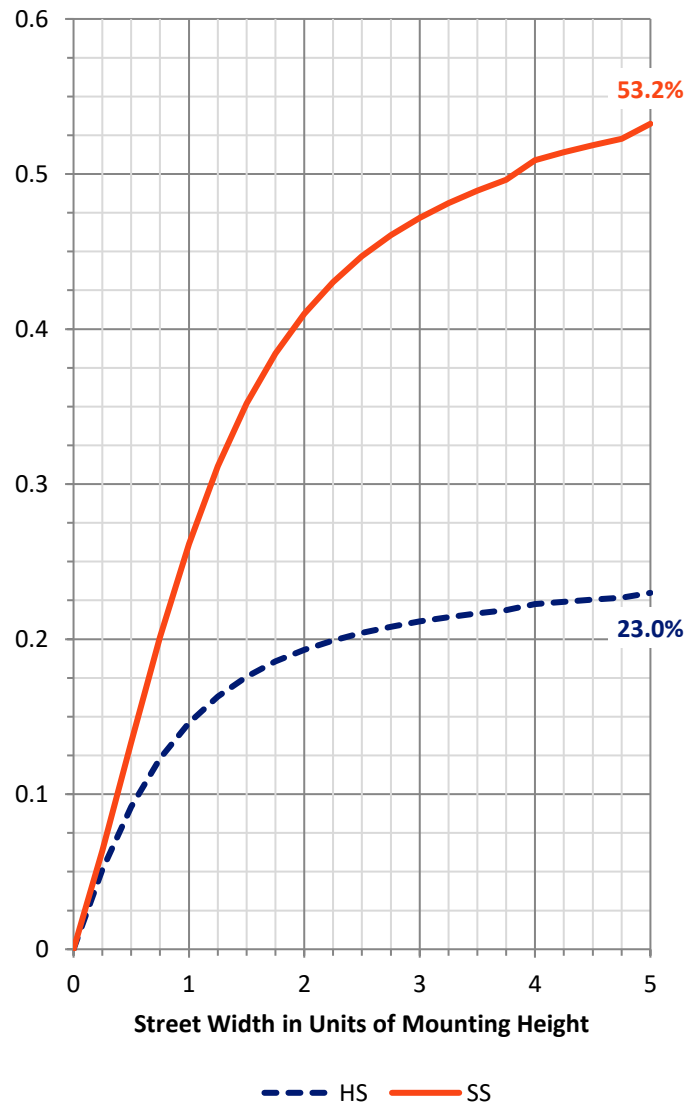
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1695.6	390.5	2086.1
	% Fixture	24.6	5.7	30.2
<b>Street Side</b>	Lumens	4001.4	809.2	4810.6
	% Fixture	58.0	11.7	69.8
<b>Total</b>	Lumens	5697.0	1199.7	6896.7
	% Fixture	82.6	17.4	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.6	0.6
10°-20°	135.3	2.0
20°-30°	290.1	4.2
30°-40°	507.8	7.4
40°-50°	764.8	11.1
50°-60°	998.4	14.5
60°-70°	1111.9	16.1
70°-80°	1038.0	15.1
80°-90°	812.1	11.8
90°-100°	548.8	8.0
100°-110°	331.7	4.8
110°-120°	182.7	2.6
120°-130°	90.9	1.3
130°-140°	36.4	0.5
140°-150°	8.7	0.1
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5697.0	82.6
0°-180°	6896.7	100.0



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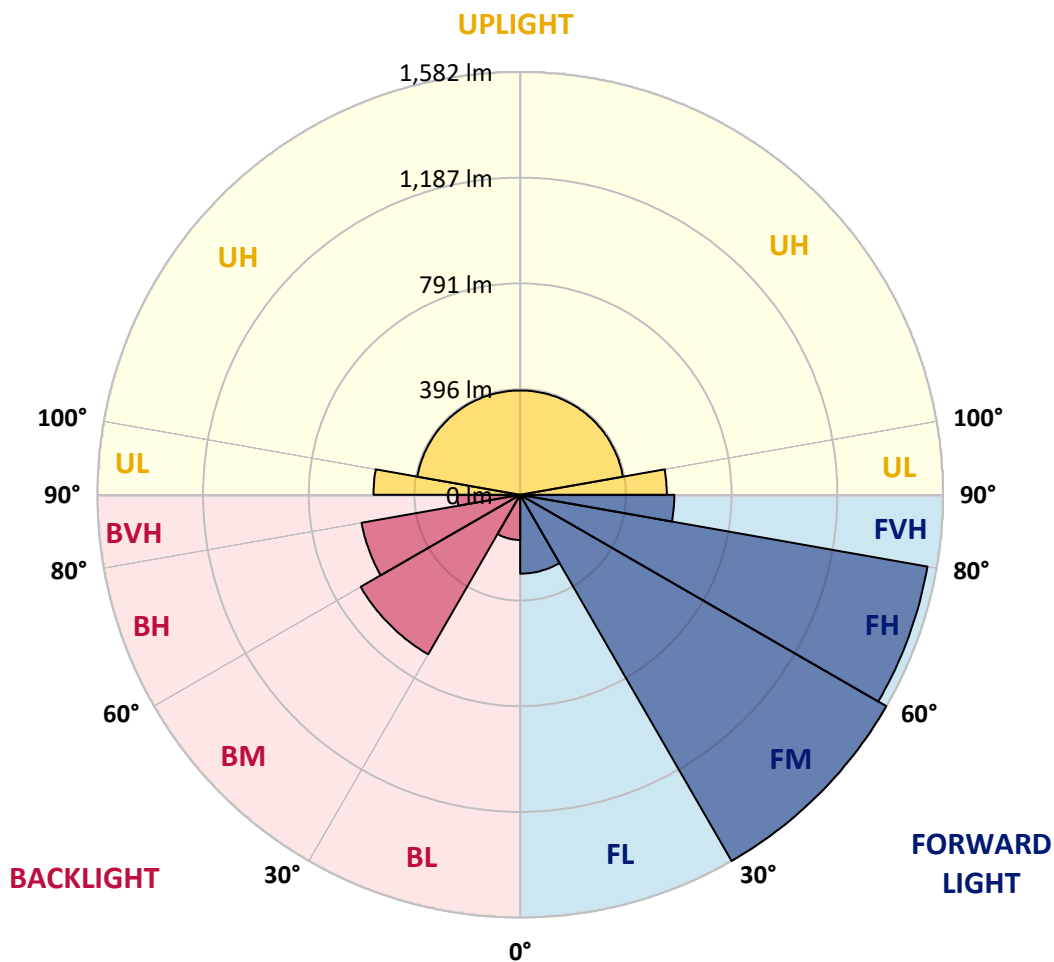
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	295.0	4.3			
FM	(30°-60°)	1582.2	22.9			
FH	(60°-80°)	1547.5	22.4			G1/1800
FVH	(80°-90°)	576.7	8.4			G4/750
BL	(0°-30°)	169.0	2.4	B1/500		
BM	(30°-60°)	688.8	10.0	B1/1000		
BH	(60°-80°)	602.4	8.7	B2/1000		G2/1000
BVH	(80°-90°)	235.4	3.4			G3/500
UL	(90°-100°)	548.8	8.0		U4/1000	
UH	(100°-180°)	390.5	5.7		U3/500	

**BUG Rating: B2-U4-G4**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	12°	15°	25°	35°	45°	55°	65°	75°	85°
0°	388.8	388.8	388.8	388.8	388.8	388.8	388.8	388.8	388.8	388.8	388.8
2.5°	422.6	420.7	420.7	418.9	418.9	415.3	412.6	408.0	403.5	397.9	393.4
5°	456.3	456.3	454.5	454.5	450.9	444.5	438.1	429.9	421.7	412.6	401.6
7.5°	496.5	495.6	495.6	492.9	488.4	479.2	470.0	458.2	445.4	429.9	415.3
10°	537.6	536.6	536.6	534.0	528.5	517.5	503.8	490.1	473.7	453.7	433.5
12.5°	586.9	583.3	581.4	580.5	571.4	561.3	544.0	527.5	505.6	482.8	458.2
15°	638.9	638.0	632.5	629.8	620.6	605.2	588.7	568.7	546.8	521.2	491.0
17.5°	697.3	697.3	693.7	690.0	680.0	659.0	638.0	618.8	596.9	565.9	532.1
20°	760.3	760.3	755.8	750.2	737.4	719.2	698.3	675.5	649.0	615.2	574.1
22.5°	827.0	825.1	818.8	815.1	799.5	779.5	763.0	736.6	705.5	667.2	619.7
25°	897.2	894.5	888.1	884.4	866.2	850.7	831.5	800.5	764.9	721.1	668.1
27.5°	971.2	963.8	959.3	953.8	936.5	921.0	894.5	865.3	824.2	778.6	720.2
30°	1042.4	1039.6	1034.1	1026.8	1011.3	993.1	963.8	931.9	891.7	841.6	776.7
32.5°	1123.6	1120.8	1111.7	1104.4	1084.3	1065.2	1035.0	1001.3	958.4	905.4	835.1
35°	1204.8	1201.1	1191.1	1182.9	1166.5	1138.1	1102.5	1070.6	1027.8	973.8	898.2
37.5°	1288.8	1281.5	1270.5	1265.1	1244.9	1210.3	1172.8	1138.1	1099.0	1044.1	962.0
40°	1368.2	1364.5	1351.7	1345.4	1323.5	1280.5	1239.5	1208.4	1172.8	1115.3	1028.7
42.5°	1449.4	1443.1	1430.3	1423.8	1398.3	1349.1	1306.1	1276.9	1246.8	1190.2	1096.2
45°	1521.5	1518.8	1503.2	1499.6	1468.5	1415.7	1366.4	1340.8	1314.3	1260.5	1158.3
47.5°	1591.8	1585.4	1575.3	1570.8	1534.3	1474.1	1425.7	1403.8	1381.9	1332.6	1224.9
50°	1649.3	1648.4	1639.3	1633.8	1591.8	1526.1	1476.8	1459.4	1447.6	1400.1	1285.1
52.5°	1698.6	1697.7	1692.2	1686.7	1642.0	1573.5	1522.5	1509.7	1506.0	1462.2	1338.0
55°	1733.3	1732.4	1730.5	1725.1	1681.2	1610.9	1560.8	1550.7	1555.3	1514.3	1385.5
57.5°	1753.3	1752.4	1755.2	1750.6	1705.9	1636.5	1587.2	1584.6	1595.5	1558.1	1421.1
60°	1755.2	1755.2	1761.6	1758.9	1718.7	1650.2	1603.7	1604.6	1621.9	1586.3	1443.9
62.5°	1738.7	1738.7	1752.4	1749.8	1715.0	1649.3	1606.4	1613.7	1635.6	1601.8	1452.2
65°	1703.1	1707.7	1723.3	1723.3	1695.8	1636.5	1597.2	1608.3	1634.7	1600.9	1446.7
67.5°	1646.5	1655.7	1677.6	1679.4	1660.2	1608.3	1573.5	1589.1	1618.3	1582.7	1423.8
70°	1576.3	1589.1	1611.9	1618.3	1610.0	1567.2	1538.0	1556.2	1584.6	1549.0	1386.4
72.5°	1494.1	1506.0	1535.2	1542.5	1545.3	1511.5	1488.7	1510.6	1533.4	1495.0	1334.4
75°	1402.9	1412.9	1445.7	1453.1	1465.0	1445.7	1431.2	1448.5	1474.1	1426.6	1267.7
77.5°	1292.4	1309.8	1346.3	1354.5	1377.3	1368.2	1357.3	1378.2	1397.4	1347.2	1190.2
80°	1185.6	1207.6	1237.7	1254.1	1281.5	1280.5	1282.4	1296.1	1312.5	1257.7	1106.2
82.5°	1077.1	1092.5	1128.1	1143.7	1185.6	1195.7	1195.7	1213.9	1219.5	1158.3	1015.9
85°	967.5	985.7	1021.3	1036.9	1082.5	1104.4	1110.8	1119.9	1120.8	1056.9	922.8
87.5°	870.7	881.7	915.4	934.7	984.0	1009.4	1017.7	1028.7	1021.3	958.4	827.0
90°	774.0	784.0	816.9	832.4	886.3	916.4	934.7	939.2	924.6	857.9	739.3
92.5°	683.6	693.7	724.8	743.0	795.9	827.9	845.2	848.8	832.4	764.9	654.4
95°	604.3	604.3	638.0	651.7	711.1	746.7	763.0	763.0	740.2	673.6	573.2
97.5°	529.4	531.2	557.7	575.0	629.8	667.2	684.6	685.5	653.6	590.5	504.7
100°	461.9	464.6	489.2	504.7	557.7	596.9	612.4	609.7	576.8	512.1	436.3
102.5°	406.2	406.2	427.2	440.0	490.1	529.4	544.0	538.5	504.7	442.6	380.6
105°	356.0	357.8	371.4	384.2	431.7	468.2	482.8	474.6	440.0	379.7	332.3
107.5°	315.8	314.9	324.1	333.2	377.9	412.6	425.3	415.3	378.8	324.9	288.5
110°	275.7	276.6	283.9	290.2	331.3	364.2	373.3	365.1	324.1	276.6	250.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	12°	15°	25°	35°	45°	55°	65°	75°	85°
112.5°	243.7	243.7	249.2	254.6	283.9	315.8	326.7	314.9	275.7	234.6	218.1
115°	216.4	217.3	219.0	221.8	246.4	275.7	284.8	270.2	231.8	200.8	189.9
117.5°	192.6	192.6	193.5	196.2	211.8	238.2	244.6	229.1	196.2	171.5	167.0
120°	172.5	171.5	170.7	171.5	182.6	201.7	208.1	192.6	163.4	148.7	145.2
122.5°	153.3	153.3	151.5	152.4	155.2	169.8	174.3	159.7	137.8	128.7	127.8
125°	135.1	135.1	133.3	132.4	131.4	138.7	140.6	129.6	114.1	111.4	110.5
127.5°	117.7	118.7	115.9	115.0	111.4	112.2	113.1	103.1	94.0	94.9	95.9
130°	103.1	103.1	100.4	98.6	93.1	88.5	86.7	80.3	76.6	80.3	83.1
132.5°	89.4	87.7	85.8	84.0	75.8	69.4	65.7	60.3	62.1	67.5	70.3
135°	74.9	74.0	71.2	70.3	62.1	52.1	45.6	43.8	49.3	55.6	57.5
137.5°	61.2	61.2	58.4	56.6	47.5	37.4	31.0	31.0	37.4	43.8	47.5
140°	48.4	48.4	45.6	43.8	35.6	25.6	19.1	20.0	27.4	33.8	36.5
142.5°	36.5	36.5	33.8	32.8	25.6	16.5	10.9	12.8	19.1	24.7	27.4
145°	26.5	25.6	23.7	22.8	16.5	10.0	5.5	7.3	11.9	16.5	19.1
147.5°	17.4	17.4	15.5	14.6	10.0	5.5	1.8	3.7	7.3	10.0	12.8
150°	10.0	10.0	9.1	8.2	5.5	1.8	0.0	1.8	3.7	5.5	7.3
152.5°	5.5	5.5	4.6	4.6	1.8	0.9	0.0	0.0	0.9	2.8	2.8
155°	1.8	1.8	1.8	1.8	0.9	0.0	0.0	0.0	0.0	0.9	0.9
157.5°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.9
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





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	388.8	388.8	388.8	388.8	388.8	388.8	388.8	388.8	388.8	388.8	388.8
2.5°	390.7	387.9	382.5	377.9	373.3	367.9	365.1	362.3	360.5	358.7	358.7
5°	396.1	390.7	380.6	370.6	361.4	353.2	346.0	340.4	337.7	335.8	335.0
7.5°	408.0	399.8	383.3	367.9	354.1	341.4	331.3	323.2	318.5	315.8	314.9
10°	423.5	411.6	390.7	369.7	351.4	335.0	321.3	311.3	304.8	302.1	300.3
12.5°	444.5	429.9	402.5	376.0	352.3	332.3	314.9	303.9	297.6	293.9	293.9
15°	476.5	457.3	423.5	387.9	358.7	334.1	314.9	303.0	298.5	296.7	295.7
17.5°	512.9	491.0	450.0	408.9	371.4	340.4	323.2	315.8	309.4	306.7	306.7
20°	553.1	526.6	479.2	432.6	390.7	358.7	339.5	327.7	320.4	317.6	316.7
22.5°	593.3	565.9	510.2	457.3	410.7	382.5	355.1	340.4	331.3	327.7	326.7
25°	638.9	608.8	543.1	483.8	439.1	407.0	375.1	354.1	342.3	337.7	336.8
27.5°	688.2	652.6	579.6	512.1	466.4	429.0	393.4	365.1	353.2	347.7	346.9
30°	739.3	700.1	616.1	541.2	492.9	448.2	410.7	378.8	363.2	356.9	356.0
32.5°	793.2	746.7	655.3	575.9	517.5	465.5	425.3	391.6	372.4	365.1	365.1
35°	853.4	799.5	693.7	607.8	540.3	482.8	438.1	403.5	380.6	373.3	373.3
37.5°	910.9	852.5	734.8	642.5	561.3	496.5	448.2	414.4	388.8	379.7	379.7
40°	972.1	905.4	774.0	670.9	579.6	507.5	457.3	422.6	395.2	387.0	385.1
42.5°	1031.3	958.4	816.0	700.1	595.2	516.6	464.6	429.9	400.7	390.7	389.7
45°	1093.4	1011.3	856.1	723.8	607.8	523.0	468.2	434.4	407.0	394.3	392.5
47.5°	1147.3	1061.5	895.4	744.8	618.0	526.6	471.0	438.1	410.7	396.1	394.3
50°	1201.1	1106.2	928.2	762.1	623.4	528.5	471.9	439.1	413.5	396.1	394.3
52.5°	1249.5	1148.3	956.6	774.0	626.1	527.5	471.0	439.1	414.4	394.3	392.5
55°	1289.7	1182.0	976.6	781.3	626.1	524.8	468.2	437.2	413.5	392.5	389.7
57.5°	1319.8	1204.8	990.3	783.2	621.5	519.4	463.7	434.4	410.7	388.8	385.1
60°	1338.0	1217.6	994.9	778.6	614.3	512.9	458.2	430.8	408.0	383.3	380.6
62.5°	1343.5	1219.5	990.3	769.5	604.3	503.8	450.0	424.4	402.5	377.0	374.2
65°	1334.4	1209.3	977.5	754.8	590.5	492.9	441.8	417.2	396.1	369.7	366.9
67.5°	1309.8	1187.4	954.7	734.8	575.0	480.1	432.6	408.9	388.8	361.4	356.0
70°	1273.3	1154.6	925.5	710.1	556.8	466.4	421.7	398.8	378.8	352.3	346.9
72.5°	1220.3	1109.9	887.2	680.0	535.8	451.8	408.0	387.0	367.9	341.4	334.1
75°	1156.4	1052.4	841.6	649.0	513.8	434.4	394.3	374.2	355.1	328.6	322.2
77.5°	1085.2	992.2	792.3	613.4	488.4	417.2	379.7	360.5	340.4	314.9	305.8
80°	1007.6	921.9	738.4	576.8	464.6	397.9	363.2	345.0	324.9	300.3	290.2
82.5°	923.7	848.8	684.6	540.3	438.1	378.8	346.9	328.6	307.6	283.9	273.8
85°	841.6	774.0	628.0	501.0	412.6	358.7	328.6	310.4	291.1	266.5	257.4
87.5°	756.7	698.3	572.2	462.8	387.0	339.5	311.3	292.1	272.0	249.2	241.8
90°	682.7	627.1	520.3	426.3	360.5	318.5	293.0	272.9	253.7	231.8	225.5
92.5°	604.3	558.6	469.1	391.6	335.8	298.5	274.8	255.5	234.6	213.6	209.0
95°	536.6	499.3	422.6	356.9	309.4	279.3	256.5	236.4	215.4	195.3	192.6
97.5°	471.9	440.9	377.0	324.9	286.6	259.2	237.3	218.1	196.2	178.0	176.2
100°	414.4	387.0	335.8	295.7	262.0	240.1	219.9	199.9	178.0	160.6	160.6
102.5°	361.4	340.4	299.4	265.6	240.1	219.0	200.8	180.8	158.9	144.2	145.2
105°	318.5	298.5	264.7	239.2	218.1	199.0	181.7	161.5	140.6	128.7	129.6
107.5°	277.4	262.0	234.6	212.7	196.2	180.8	162.4	143.3	122.3	115.0	115.9
110°	241.8	230.0	208.1	189.9	177.1	162.4	146.1	125.9	106.8	102.2	102.2



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	210.8	200.8	184.3	169.8	157.0	145.2	127.8	109.6	91.2	89.4	89.4
115°	184.3	177.1	161.5	149.7	140.6	128.7	113.1	94.0	79.4	78.5	79.4
117.5°	161.5	155.2	142.4	132.4	124.1	113.1	98.6	80.3	67.5	68.4	69.4
120°	141.5	136.9	125.9	117.7	109.6	99.5	84.0	67.5	59.3	60.3	60.3
122.5°	125.0	120.5	111.4	103.1	95.9	85.8	72.1	56.6	51.1	53.0	53.0
125°	108.6	105.9	96.8	89.4	82.1	72.1	59.3	46.5	43.8	45.6	45.6
127.5°	94.0	92.2	84.9	76.6	69.4	60.3	48.4	38.4	37.4	39.3	39.3
130°	81.2	79.4	73.0	65.7	57.5	49.3	37.4	31.0	31.9	33.8	34.7
132.5°	69.4	68.4	62.1	53.8	46.5	38.4	29.3	25.6	27.4	29.3	29.3
135°	57.5	56.6	52.1	44.7	36.5	29.3	21.9	20.0	22.8	24.7	24.7
137.5°	47.5	45.6	41.9	34.7	27.4	21.0	15.5	16.5	18.2	20.0	20.0
140°	37.4	36.5	32.8	26.5	19.1	13.7	10.9	12.8	15.5	16.5	16.5
142.5°	27.4	27.4	23.7	18.2	11.9	8.2	7.3	9.1	11.9	12.8	12.8
145°	19.1	19.1	16.5	11.9	7.3	3.7	3.7	6.3	8.2	9.1	10.0
147.5°	12.8	11.9	10.0	7.3	3.7	0.9	1.8	4.6	5.5	6.3	6.3
150°	7.3	7.3	5.5	3.7	1.8	0.0	0.9	1.8	2.8	3.7	4.6
152.5°	2.8	2.8	1.8	0.9	0.9	0.0	0.0	0.0	0.9	1.8	1.8
155°	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.9	0.0	0.9	0.0	0.0	0.0	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)