

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: P240216

Luminaire Tested: **UTLD-AF24-100-D-U-T4W-FP**

Issue Date: 5/28/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P240216  
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-AF24-100-D-U-T4W-FP  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 4000K, 1200mA 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: 7474.7 lumens  
Efficiency: N/A  
Efficacy: 77.9 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

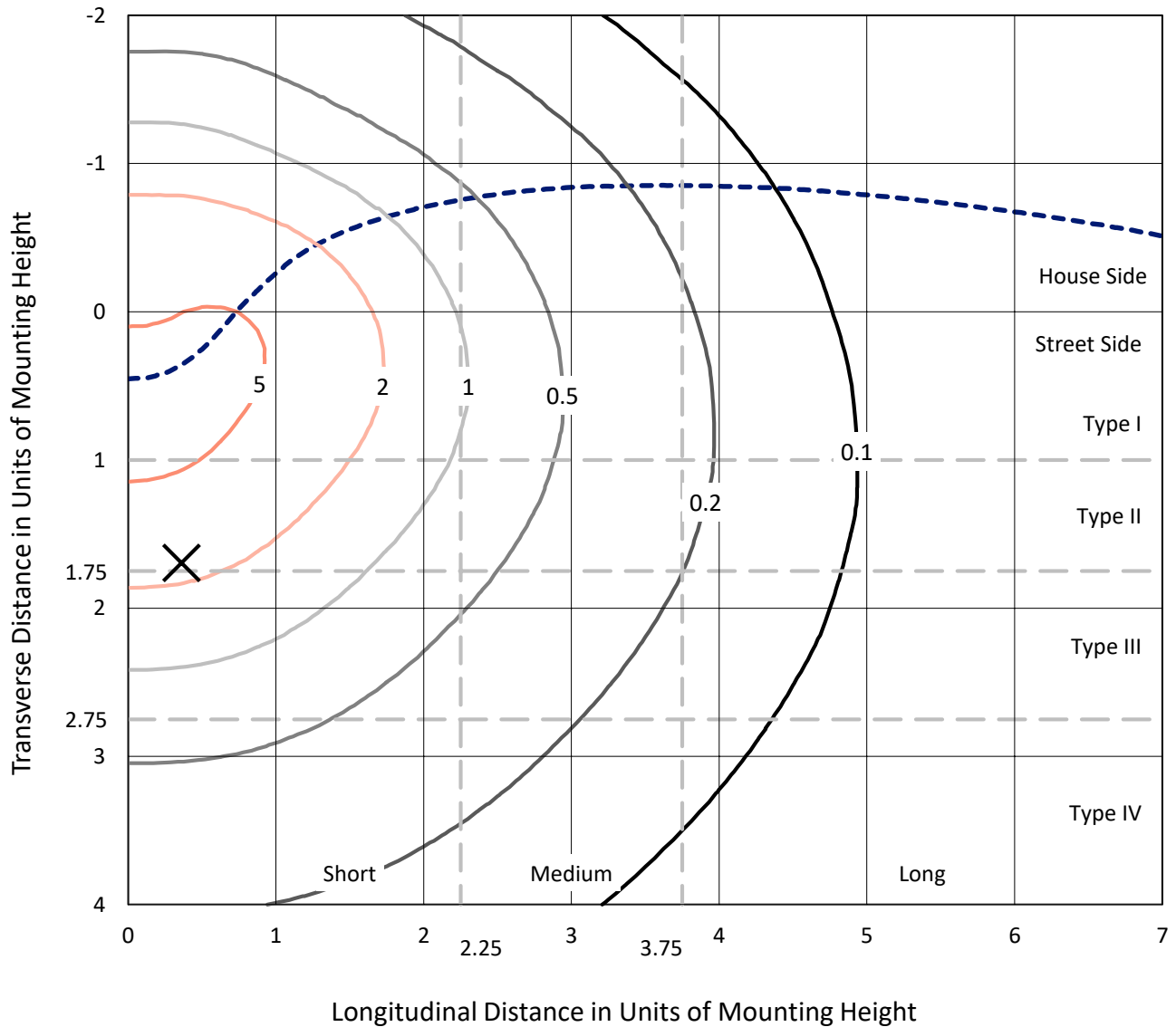
Input Watts (W): 96  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

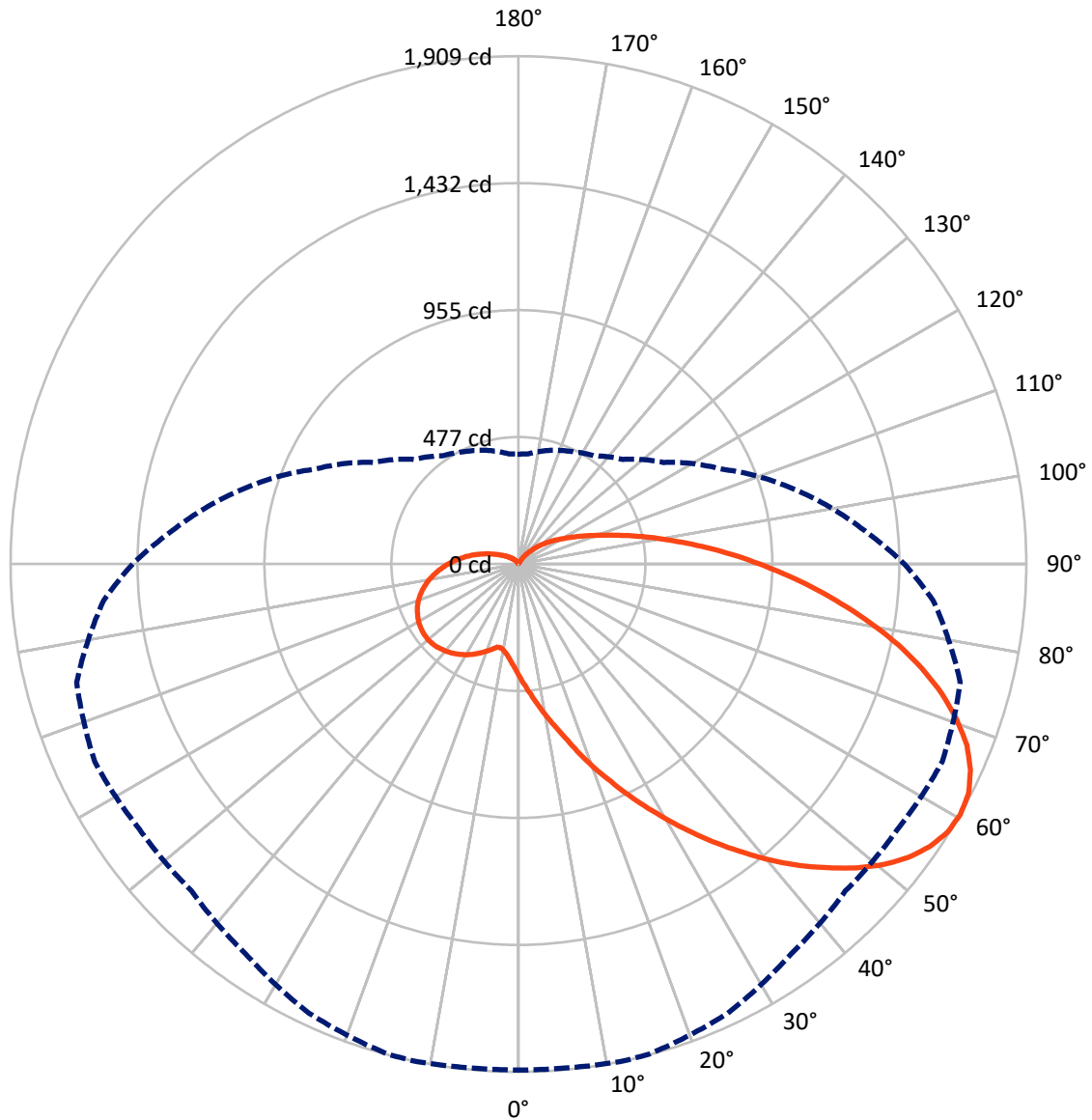
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 7.3 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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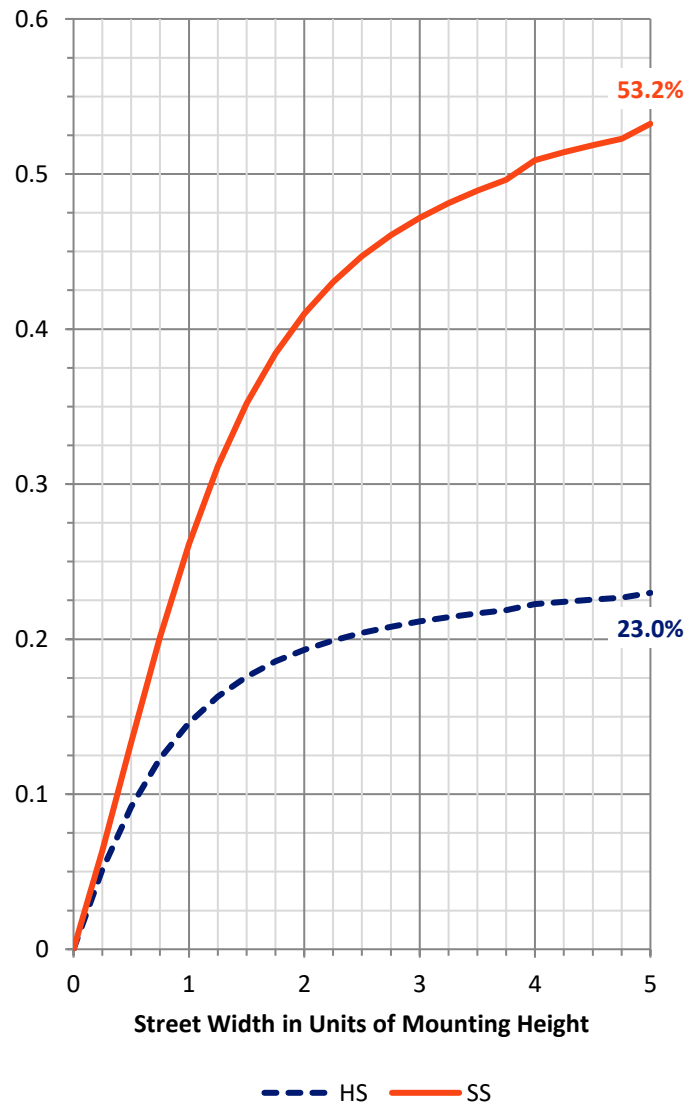
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1837.7	423.2	2260.9
	% Fixture	24.6	5.7	30.2
<b>Street Side</b>	Lumens	4336.8	877.0	5213.8
	% Fixture	58.0	11.7	69.8
<b>Total</b>	Lumens	6174.5	1300.2	7474.7
	% Fixture	82.6	17.4	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	41.8	0.6
10°-20°	146.6	2.0
20°-30°	314.4	4.2
30°-40°	550.4	7.4
40°-50°	828.9	11.1
50°-60°	1082.1	14.5
60°-70°	1205.1	16.1
70°-80°	1125.0	15.1
80°-90°	880.2	11.8
90°-100°	594.8	8.0
100°-110°	359.5	4.8
110°-120°	198.0	2.6
120°-130°	98.5	1.3
130°-140°	39.4	0.5
140°-150°	9.4	0.1
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6174.5	82.6
0°-180°	7474.7	100.0

**Coefficient of Utilization**



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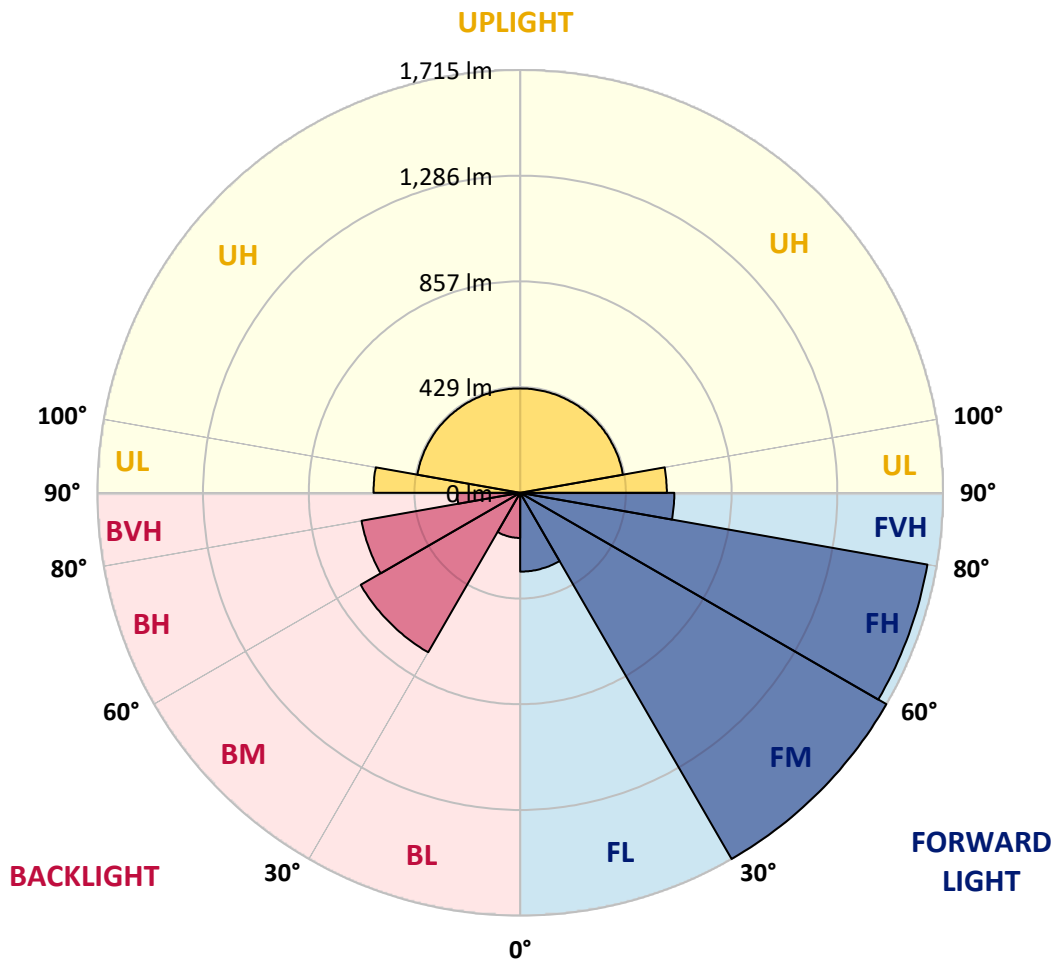
CATALOG NUMBER: UTLD-AF24-100-D-U-T4W-FP

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	319.7	4.3			
FM	(30°-60°)	1714.9	22.9			
FH	(60°-80°)	1677.2	22.4			G1/1800
FVH	(80°-90°)	625.0	8.4			G4/750
BL	(0°-30°)	183.1	2.4	B1/500		
BM	(30°-60°)	746.5	10.0	B1/1000		
BH	(60°-80°)	652.9	8.7	B2/1000		G2/1000
BVH	(80°-90°)	255.1	3.4			G3/500
UL	(90°-100°)	594.8	8.0		U4/1000	
UH	(100°-180°)	423.2	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°	421.5	421.5	421.5	421.5	421.5	421.5	421.5	421.5	421.5	421.5	421.5
2.5°	458.0	456.0	456.0	454.1	454.1	450.1	447.1	442.2	437.2	431.3	426.4
5°	494.6	494.6	492.7	492.7	488.7	481.7	474.9	466.0	457.1	447.1	435.3
7.5°	538.2	537.2	537.2	534.2	529.3	519.4	509.4	496.5	482.7	466.0	450.1
10°	582.7	581.6	581.6	578.7	572.8	560.9	546.1	531.2	513.4	491.6	469.8
12.5°	636.1	632.1	630.1	629.1	619.3	608.3	589.5	571.7	548.0	523.3	496.5
15°	692.4	691.5	685.6	682.6	672.7	655.8	638.0	616.3	592.6	564.9	532.2
17.5°	755.8	755.8	751.8	747.9	736.9	714.2	691.5	670.6	646.9	613.4	576.7
20°	824.0	824.0	819.1	813.1	799.3	779.5	756.8	732.0	703.4	666.8	622.3
22.5°	896.2	894.3	887.3	883.4	866.5	844.8	827.0	798.3	764.7	723.1	671.7
25°	972.4	969.5	962.5	958.6	938.8	922.0	901.2	867.6	829.0	781.5	724.1
27.5°	1052.5	1044.6	1039.6	1033.7	1015.0	998.1	969.5	937.7	893.2	843.8	780.5
30°	1129.6	1126.7	1120.7	1112.9	1096.1	1076.2	1044.6	1010.0	966.5	912.1	841.8
32.5°	1217.7	1214.8	1204.8	1197.0	1175.2	1154.4	1121.8	1085.1	1038.7	981.3	905.1
35°	1305.8	1301.8	1291.0	1282.1	1264.3	1233.6	1195.0	1160.3	1113.9	1055.5	973.4
37.5°	1396.7	1388.9	1377.0	1371.1	1349.3	1311.7	1271.1	1233.6	1191.0	1131.7	1042.6
40°	1482.9	1478.9	1465.1	1458.1	1434.4	1387.8	1343.3	1309.7	1271.1	1208.8	1114.8
42.5°	1570.8	1564.0	1550.1	1543.2	1515.5	1462.1	1415.6	1384.0	1351.3	1289.9	1188.1
45°	1649.0	1646.0	1629.3	1625.3	1591.6	1534.3	1480.8	1453.2	1424.5	1366.2	1255.4
47.5°	1725.2	1718.3	1707.4	1702.5	1662.9	1597.6	1545.2	1521.4	1497.7	1444.3	1327.6
50°	1787.5	1786.6	1776.7	1770.7	1725.2	1654.0	1600.6	1581.8	1568.9	1517.4	1392.8
52.5°	1840.9	1840.0	1834.0	1828.1	1779.6	1705.5	1650.0	1636.2	1632.2	1584.8	1450.2
55°	1878.5	1877.5	1875.6	1869.6	1822.2	1746.0	1691.6	1680.7	1685.6	1641.1	1501.7
57.5°	1900.3	1899.3	1902.3	1897.4	1848.9	1773.7	1720.3	1717.3	1729.2	1688.6	1540.3
60°	1902.3	1902.3	1909.2	1906.3	1862.7	1788.5	1738.1	1739.0	1757.8	1719.3	1564.9
62.5°	1884.5	1884.5	1899.3	1896.3	1858.7	1787.5	1741.1	1748.9	1772.7	1736.0	1573.8
65°	1845.9	1850.8	1867.7	1867.7	1837.9	1773.7	1731.1	1743.0	1771.6	1735.1	1567.9
67.5°	1784.5	1794.5	1818.2	1820.1	1799.4	1743.0	1705.5	1722.2	1753.8	1715.3	1543.2
70°	1708.4	1722.2	1747.0	1753.8	1744.9	1698.5	1666.8	1686.6	1717.3	1678.7	1502.6
72.5°	1619.3	1632.2	1663.8	1671.8	1674.8	1638.2	1613.4	1637.1	1661.9	1620.4	1446.2
75°	1520.4	1531.4	1567.0	1574.8	1587.7	1567.0	1551.1	1569.9	1597.6	1546.2	1374.0
77.5°	1400.7	1419.5	1459.1	1468.0	1492.7	1482.9	1471.0	1493.7	1514.5	1460.1	1289.9
80°	1285.0	1308.8	1341.4	1359.2	1388.9	1387.8	1389.9	1404.7	1422.5	1363.2	1198.9
82.5°	1167.3	1184.1	1222.6	1239.5	1285.0	1295.9	1295.9	1315.6	1321.7	1255.4	1101.0
85°	1048.6	1068.4	1106.9	1123.7	1173.2	1197.0	1203.9	1213.7	1214.8	1145.5	1000.1
87.5°	943.7	955.6	992.2	1012.9	1066.4	1094.0	1102.9	1114.8	1106.9	1038.7	896.2
90°	838.8	849.8	885.4	902.1	960.6	993.2	1012.9	1017.9	1002.1	929.9	801.3
92.5°	740.9	751.8	785.4	805.3	862.6	897.2	916.1	919.9	902.1	829.0	709.3
95°	654.9	654.9	691.5	706.3	770.6	809.2	827.0	827.0	802.3	730.1	621.2
97.5°	573.8	575.7	604.5	623.2	682.6	723.1	741.9	742.9	708.3	640.1	547.1
100°	500.5	503.5	530.2	547.1	604.5	646.9	663.8	660.8	625.2	555.0	472.8
102.5°	440.2	440.2	463.0	476.8	531.2	573.8	589.5	583.6	547.1	479.8	412.6
105°	385.8	387.8	402.6	416.4	467.9	507.5	523.3	514.4	476.8	411.5	360.1
107.5°	342.3	341.3	351.2	361.1	409.6	447.1	460.9	450.1	410.5	352.2	312.6
110°	298.7	299.7	307.6	314.6	359.1	394.7	404.6	395.7	351.2	299.7	271.1



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	12°	15°	25°	35°	45°	55°	65°	75°	85°
112.5°	264.1	264.1	270.1	276.0	307.6	342.3	354.1	341.3	298.7	254.2	236.4
115°	234.5	235.5	237.4	240.4	267.1	298.7	308.6	292.8	251.2	217.6	205.7
117.5°	208.7	208.7	209.7	212.7	229.6	258.2	265.1	248.3	212.7	186.0	181.1
120°	187.0	186.0	184.9	186.0	197.8	218.6	225.6	208.7	177.1	161.2	157.3
122.5°	166.2	166.2	164.2	165.2	168.2	184.0	188.9	173.1	149.4	139.5	138.5
125°	146.4	146.4	144.4	143.4	142.5	150.4	152.3	140.5	123.7	120.7	119.7
127.5°	127.6	128.6	125.6	124.6	120.7	121.6	122.7	111.8	101.9	102.9	103.8
130°	111.8	111.8	108.8	106.8	100.9	96.0	94.0	87.1	83.1	87.1	90.0
132.5°	97.0	94.9	93.0	91.0	82.1	75.2	71.2	65.3	67.3	73.2	76.2
135°	81.1	80.1	77.1	76.2	67.3	56.4	49.5	47.5	53.4	60.4	62.3
137.5°	66.3	66.3	63.3	61.4	51.5	40.5	33.7	33.7	40.5	47.5	51.5
140°	52.5	52.5	49.5	47.5	38.6	27.7	20.8	21.8	29.7	36.6	39.6
142.5°	39.6	39.6	36.6	35.6	27.7	17.8	11.9	13.8	20.8	26.7	29.7
145°	28.6	27.7	25.7	24.8	17.8	10.8	5.9	7.9	12.9	17.8	20.8
147.5°	18.8	18.8	16.8	15.9	10.8	5.9	1.9	4.0	7.9	10.8	13.8
150°	10.8	10.8	9.9	8.9	5.9	1.9	0.0	1.9	4.0	5.9	7.9
152.5°	5.9	5.9	4.9	4.9	1.9	1.0	0.0	0.0	1.0	3.0	3.0
155°	1.9	1.9	1.9	1.9	1.0	0.0	0.0	0.0	0.0	1.0	1.0
157.5°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
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





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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	421.5	421.5	421.5	421.5	421.5	421.5	421.5	421.5	421.5	421.5	421.5
2.5°	423.4	420.4	414.5	409.6	404.6	398.6	395.7	392.7	390.8	388.7	388.7
5°	429.3	423.4	412.6	401.6	391.7	382.8	374.9	369.0	366.0	364.1	363.0
7.5°	442.2	433.3	415.5	398.6	383.8	370.0	359.1	350.2	345.2	342.3	341.3
10°	459.0	446.1	423.4	400.6	380.8	363.0	348.2	337.4	330.4	327.4	325.5
12.5°	481.7	466.0	436.3	407.5	381.9	360.1	341.3	329.4	322.5	318.5	318.5
15°	516.4	495.6	459.0	420.4	388.7	362.0	341.3	328.5	323.5	321.5	320.5
17.5°	556.0	532.2	487.6	443.1	402.6	369.0	350.2	342.3	335.3	332.4	332.4
20°	599.4	570.8	519.4	468.9	423.4	388.7	368.0	355.2	347.2	344.2	343.3
22.5°	643.0	613.4	553.0	495.6	445.2	414.5	384.8	369.0	359.1	355.2	354.1
25°	692.4	659.8	588.6	524.3	475.8	441.2	406.5	383.8	370.9	366.0	365.0
27.5°	745.8	707.3	628.2	555.0	505.5	464.9	426.4	395.7	382.8	376.9	375.9
30°	801.3	758.7	667.7	586.6	534.2	485.7	445.2	410.5	393.7	386.8	385.8
32.5°	859.6	809.2	710.2	624.2	560.9	504.5	460.9	424.4	403.6	395.7	395.7
35°	925.0	866.5	751.8	658.8	585.6	523.3	474.9	437.2	412.6	404.6	404.6
37.5°	987.2	923.9	796.4	696.4	608.3	538.2	485.7	449.1	421.5	411.5	411.5
40°	1053.5	981.3	838.8	727.1	628.2	550.0	495.6	458.0	428.3	419.4	417.5
42.5°	1117.8	1038.7	884.3	758.7	645.0	559.9	503.5	466.0	434.2	423.4	422.4
45°	1185.1	1096.1	927.9	784.5	658.8	566.8	507.5	470.9	441.2	427.4	425.3
47.5°	1243.5	1150.5	970.5	807.2	669.7	570.8	510.5	474.9	445.2	429.3	427.4
50°	1301.8	1198.9	1006.1	826.0	675.7	572.8	511.5	475.8	448.2	429.3	427.4
52.5°	1354.3	1244.4	1036.7	838.8	678.6	571.7	510.5	475.8	449.1	427.4	425.3
55°	1397.8	1281.0	1058.4	846.8	678.6	568.8	507.5	473.8	448.2	425.3	422.4
57.5°	1430.4	1305.8	1073.3	848.7	673.6	562.8	502.6	470.9	445.2	421.5	417.5
60°	1450.2	1319.6	1078.3	843.8	665.7	556.0	496.5	466.9	442.2	415.5	412.6
62.5°	1456.2	1321.7	1073.3	833.9	654.9	546.1	487.6	460.0	436.3	408.6	405.6
65°	1446.2	1310.7	1059.5	818.1	640.1	534.2	478.7	452.0	429.3	400.6	397.6
67.5°	1419.5	1287.0	1034.7	796.4	623.2	520.4	468.9	443.1	421.5	391.7	385.8
70°	1380.0	1251.4	1003.1	769.6	603.4	505.5	457.1	432.3	410.5	381.9	375.9
72.5°	1322.6	1202.9	961.6	736.9	580.6	489.7	442.2	419.4	398.6	370.0	362.0
75°	1253.3	1140.6	912.1	703.4	556.9	470.9	427.4	405.6	384.8	356.1	349.2
77.5°	1176.2	1075.3	858.7	664.7	529.3	452.0	411.5	390.8	369.0	341.3	331.4
80°	1092.1	999.1	800.3	625.2	503.5	431.3	393.7	373.9	352.2	325.5	314.6
82.5°	1001.1	919.9	741.9	585.6	474.9	410.5	375.9	356.1	333.4	307.6	296.8
85°	912.1	838.8	680.6	543.1	447.1	388.7	356.1	336.3	315.6	288.9	279.0
87.5°	820.1	756.8	620.2	501.6	419.4	368.0	337.4	316.5	294.8	270.1	262.2
90°	739.9	679.5	563.9	462.0	390.8	345.2	317.5	295.7	275.0	251.2	244.4
92.5°	654.9	605.4	508.5	424.4	364.1	323.5	297.8	277.0	254.2	231.5	226.5
95°	581.6	541.1	458.0	386.8	335.3	302.7	277.9	256.2	233.4	211.6	208.7
97.5°	511.5	477.8	408.6	352.2	310.6	280.9	257.2	236.4	212.7	192.9	190.9
100°	449.1	419.4	364.1	320.5	283.9	260.1	238.4	216.7	192.9	174.1	174.1
102.5°	391.7	369.0	324.5	287.9	260.1	237.4	217.6	195.9	172.2	156.3	157.3
105°	345.2	323.5	286.8	259.2	236.4	215.6	196.8	175.1	152.3	139.5	140.5
107.5°	300.7	283.9	254.2	230.5	212.7	195.9	176.0	155.3	132.6	124.6	125.6
110°	262.2	249.3	225.6	205.7	191.9	176.0	158.3	136.6	115.7	110.8	110.8



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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	228.5	217.6	199.8	184.0	170.1	157.3	138.5	118.7	98.9	97.0	97.0
115°	199.8	191.9	175.1	162.2	152.3	139.5	122.7	101.9	86.0	85.1	86.0
117.5°	175.1	168.2	154.4	143.4	134.5	122.7	106.8	87.1	73.2	74.2	75.2
120°	153.3	148.4	136.6	127.6	118.7	107.8	91.0	73.2	64.3	65.3	65.3
122.5°	135.5	130.5	120.7	111.8	103.8	93.0	78.2	61.4	55.4	57.4	57.4
125°	117.7	114.8	104.9	97.0	89.0	78.2	64.3	50.4	47.5	49.5	49.5
127.5°	101.9	99.9	92.0	83.1	75.2	65.3	52.5	41.5	40.5	42.6	42.6
130°	88.1	86.0	79.2	71.2	62.3	53.4	40.5	33.7	34.6	36.6	37.5
132.5°	75.2	74.2	67.3	58.4	50.4	41.5	31.6	27.7	29.7	31.6	31.6
135°	62.3	61.4	56.4	48.5	39.6	31.6	23.7	21.8	24.8	26.7	26.7
137.5°	51.5	49.5	45.5	37.5	29.7	22.7	16.8	17.8	19.7	21.8	21.8
140°	40.5	39.6	35.6	28.6	20.8	14.8	11.9	13.8	16.8	17.8	17.8
142.5°	29.7	29.7	25.7	19.7	12.9	8.9	7.9	9.9	12.9	13.8	13.8
145°	20.8	20.8	17.8	12.9	7.9	4.0	4.0	7.0	8.9	9.9	10.8
147.5°	13.8	12.9	10.8	7.9	4.0	1.0	1.9	4.9	5.9	7.0	7.0
150°	7.9	7.9	5.9	4.0	1.9	0.0	1.0	1.9	3.0	4.0	4.9
152.5°	3.0	3.0	1.9	1.0	1.0	0.0	0.0	0.0	1.0	1.9	1.9
155°	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	1.0	0.0	1.0	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)