

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: P240161

Luminaire Tested: **UTLD-AF24-90-D-U-T3-FP**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P240161
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-25)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-90-D-U-T3-FP
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 1180mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
AND FROSTED LENS PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7509.5 lumens
Efficiency: N/A
Efficacy: 79.9 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): 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

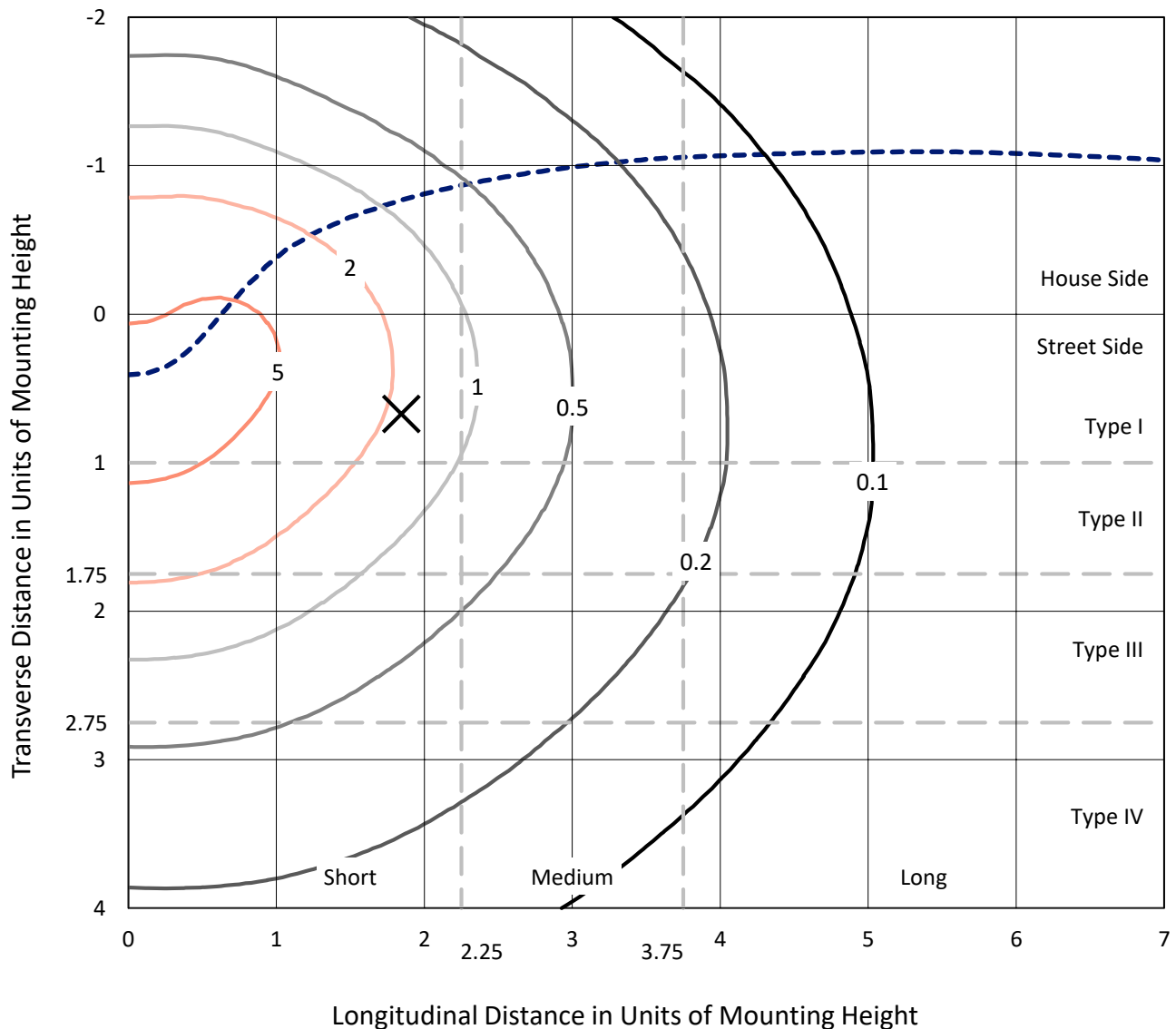


REPORT NUMBER: P240161

CATALOG NUMBER: UTLD-AF24-90-D-U-T3-FP

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

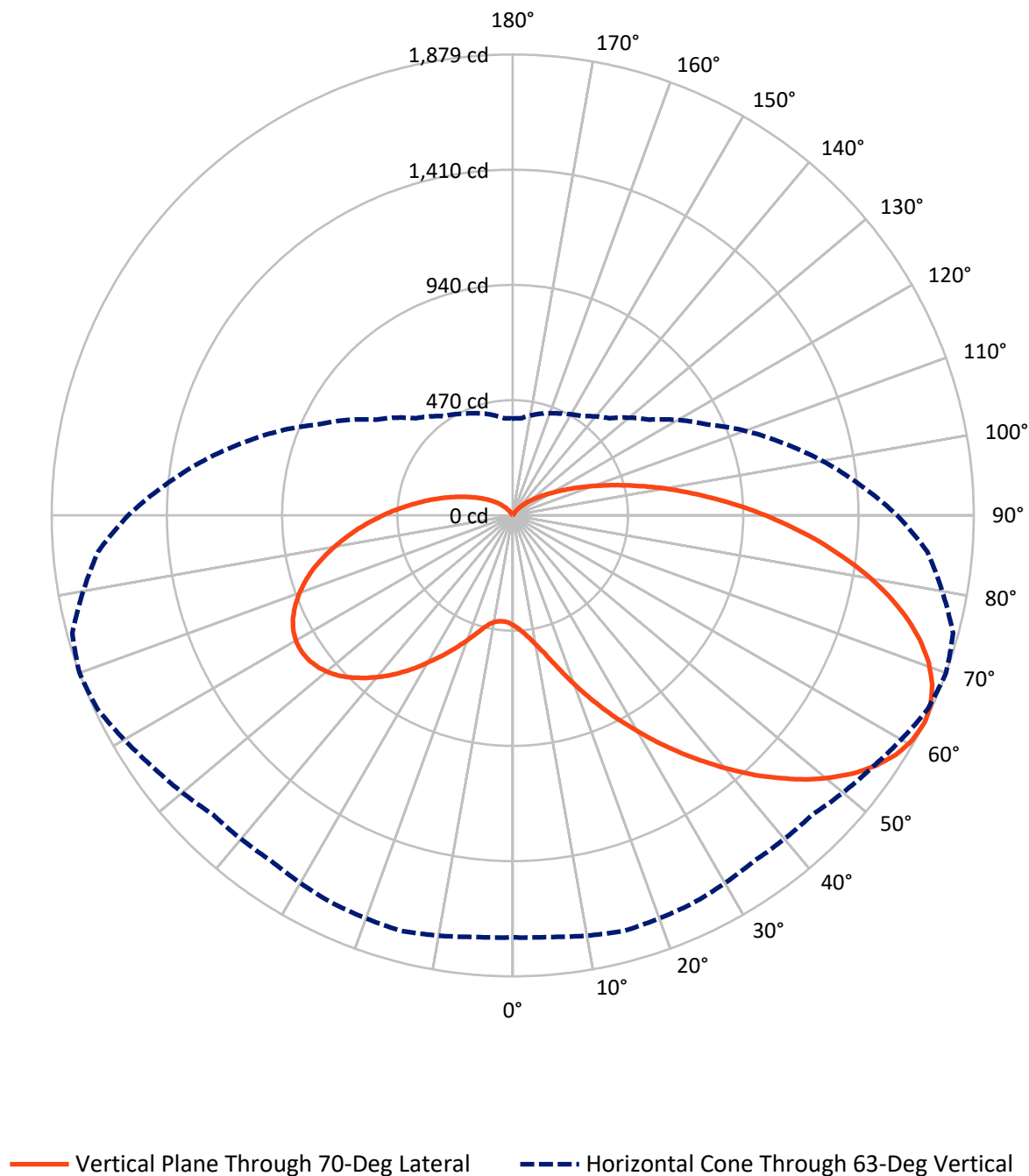


Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
Type IV - Short - Non-Cutoff

REPORT NUMBER: P240161

CATALOG NUMBER: UTLD-AF24-90-D-U-T3-FP

Luminous Intensity Polar Plot



REPORT NUMBER: P240161

CATALOG NUMBER: UTLD-AF24-90-D-U-T3-FP

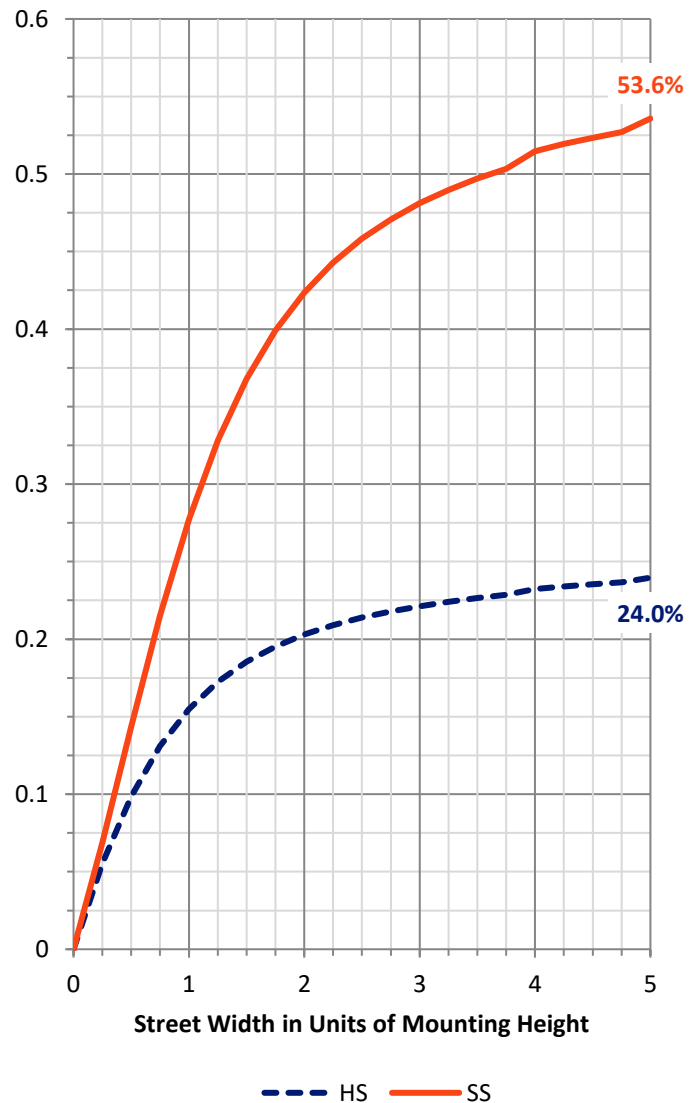
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1919.5	434.5	2354.0
	% Fixture	25.6	5.8	31.3
Street Side	Lumens	4339.2	816.4	5155.5
	% Fixture	57.8	10.9	68.7
Total	Lumens	6258.6	1250.9	7509.5
	% Fixture	83.3	16.7	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.5	0.6
10°-20°	156.7	2.1
20°-30°	336.6	4.5
30°-40°	586.5	7.8
40°-50°	871.5	11.6
50°-60°	1112.8	14.8
60°-70°	1206.4	16.1
70°-80°	1098.6	14.6
80°-90°	845.1	11.3
90°-100°	566.9	7.5
100°-110°	343.6	4.6
110°-120°	191.8	2.6
120°-130°	97.4	1.3
130°-140°	40.3	0.5
140°-150°	10.3	0.1
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	6258.6	83.3
0°-180°	7509.5	100.0

Coefficient of Utilization



REPORT NUMBER: P240161

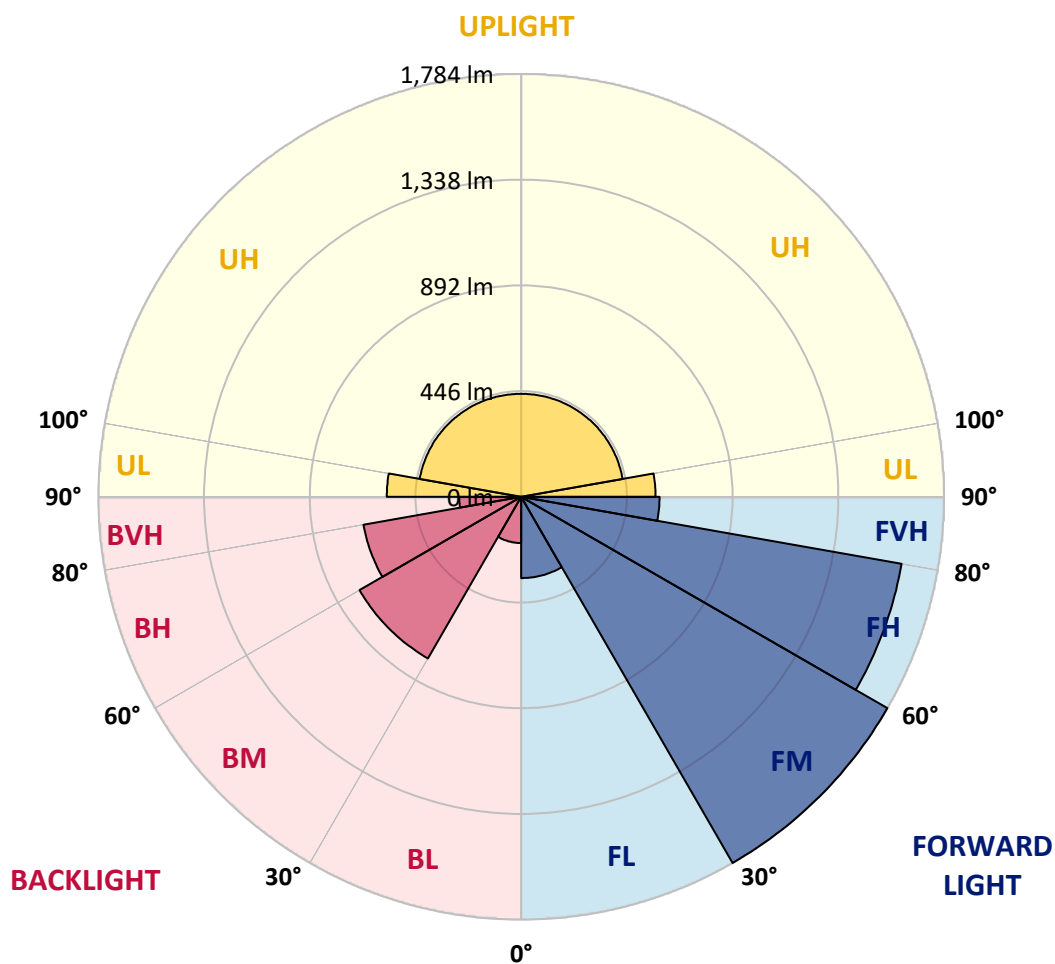
CATALOG NUMBER: UTLD-AF24-90-D-U-T3-FP

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	342.8	4.6			
FM	(30°-60°)	1783.5	23.8			
FH	(60°-80°)	1629.3	21.7			G1/1800
FVH	(80°-90°)	583.5	7.8			G4/750
BL	(0°-30°)	195.0	2.6	B1/500		
BM	(30°-60°)	787.2	10.5	B1/1000		
BH	(60°-80°)	675.7	9.0	B2/1000		G2/1000
BVH	(80°-90°)	261.6	3.5			G3/500
UL	(90°-100°)	566.9	7.5		U4/1000	
UH	(100°-180°)	434.5	5.8		U3/500	

BUG Rating: B2-U4-G4

Type IV Short





REPORT NUMBER: P240161

CATALOG NUMBER: UTLD-AF24-90-D-U-T3-FP

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	448.2	448.2	448.2	448.2	448.2	448.2	448.2	448.2	448.2	448.2	448.2
2.5°	484.7	484.7	483.7	482.6	479.7	475.8	469.8	465.9	462.0	459.0	453.1
5°	526.1	528.0	524.2	522.1	515.3	507.4	498.5	487.6	482.6	475.8	463.9
7.5°	570.5	572.4	568.6	563.6	554.7	542.9	529.1	515.3	506.4	497.5	479.7
10°	619.9	620.8	615.9	610.0	599.1	584.3	569.6	548.8	538.9	527.1	503.4
12.5°	675.1	673.2	669.2	659.4	646.5	630.8	611.0	590.2	576.4	562.6	533.0
15°	738.4	737.3	730.4	718.6	702.8	685.0	661.3	638.6	624.8	610.0	574.5
17.5°	804.4	802.5	795.5	781.7	765.0	742.3	724.5	697.9	681.1	665.2	624.8
20°	870.5	869.6	864.7	848.8	830.1	812.3	788.7	761.0	744.2	722.5	676.2
22.5°	946.5	943.7	935.7	921.9	906.1	888.3	863.7	829.1	810.4	789.6	734.4
25°	1022.5	1021.6	1011.7	997.0	984.1	964.3	940.7	900.2	881.5	852.8	793.6
27.5°	1101.5	1099.6	1089.7	1073.9	1064.1	1045.3	1015.7	976.2	953.5	925.9	859.7
30°	1183.5	1182.5	1170.7	1154.8	1144.0	1126.3	1095.6	1053.2	1030.5	999.9	925.9
32.5°	1265.4	1265.4	1253.5	1239.7	1226.9	1204.2	1175.6	1135.1	1110.4	1077.9	994.9
35°	1351.3	1346.3	1337.4	1324.6	1303.9	1281.1	1255.6	1219.1	1193.4	1157.8	1070.0
37.5°	1432.2	1432.2	1417.4	1406.6	1383.8	1358.2	1334.5	1303.9	1275.3	1240.7	1143.0
40°	1512.1	1513.1	1499.3	1485.5	1455.9	1432.2	1411.5	1386.8	1361.1	1325.6	1222.9
42.5°	1589.2	1587.2	1574.3	1558.6	1525.9	1499.3	1486.6	1465.8	1447.1	1409.5	1300.0
45°	1660.2	1655.2	1645.4	1626.7	1589.2	1562.5	1557.5	1547.7	1528.0	1494.4	1377.9
47.5°	1715.5	1712.5	1708.6	1683.9	1645.4	1619.7	1619.7	1623.7	1608.9	1574.3	1451.0
50°	1760.9	1759.9	1757.9	1730.3	1688.9	1669.1	1677.0	1690.8	1680.9	1650.3	1516.1
52.5°	1791.5	1790.5	1793.4	1764.9	1724.4	1706.6	1725.4	1753.0	1745.2	1717.4	1578.3
55°	1803.4	1803.4	1812.3	1785.6	1745.2	1731.2	1761.9	1800.4	1799.4	1774.7	1625.7
57.5°	1798.4	1799.4	1815.2	1790.5	1753.0	1745.2	1785.6	1837.9	1841.8	1817.2	1665.2
60°	1775.7	1776.7	1798.4	1779.6	1747.1	1745.2	1796.4	1860.6	1868.5	1846.7	1687.9
62.5°	1732.3	1736.3	1762.9	1751.0	1724.4	1731.2	1792.5	1867.5	1878.3	1857.7	1696.8
63°	1720.4	1725.4	1754.0	1743.1	1718.5	1726.3	1789.6	1867.5	1879.4	1858.6	1696.8
65°	1672.1	1677.9	1710.6	1705.7	1687.9	1702.7	1772.8	1856.7	1871.5	1852.7	1687.9
67.5°	1594.1	1605.9	1643.5	1647.4	1638.5	1661.2	1738.2	1829.0	1844.8	1827.0	1661.2
70°	1500.4	1514.2	1562.5	1574.3	1572.4	1605.9	1687.9	1782.6	1799.4	1781.7	1615.9
72.5°	1399.6	1418.4	1462.8	1488.5	1501.3	1537.8	1625.7	1719.5	1736.3	1717.4	1555.6
75°	1290.0	1309.8	1365.1	1396.6	1416.4	1461.8	1548.6	1642.4	1657.3	1642.4	1479.6
77.5°	1180.5	1200.2	1256.5	1297.0	1327.6	1381.9	1467.7	1553.7	1564.5	1548.6	1390.8
80°	1068.0	1090.7	1145.0	1192.4	1233.8	1288.1	1371.1	1449.0	1461.8	1441.1	1295.1
82.5°	956.5	976.2	1037.4	1092.7	1137.1	1191.3	1270.3	1343.3	1349.3	1328.6	1189.4
85°	855.8	872.6	932.7	992.0	1044.3	1097.6	1170.7	1228.9	1237.8	1211.1	1084.7
87.5°	761.0	773.9	837.0	895.3	948.6	1007.8	1073.0	1119.3	1119.3	1098.5	975.2
90°	673.2	682.1	739.3	803.4	860.7	913.0	974.3	1013.7	1008.7	983.1	872.6
92.5°	588.3	599.1	655.4	716.6	774.9	829.1	878.5	905.1	898.3	871.6	773.9
95°	518.2	523.1	578.4	641.6	694.9	744.2	787.7	806.4	795.5	769.0	676.2
97.5°	454.1	458.0	506.4	566.6	623.8	669.2	698.9	710.6	699.8	673.2	596.2
100°	401.7	402.7	446.1	504.4	557.7	597.2	623.8	623.8	614.0	587.3	517.2
102.5°	350.4	352.4	387.9	446.1	496.4	531.0	551.8	549.8	532.0	505.3	449.1
105°	308.9	310.9	338.6	394.9	440.2	471.8	488.6	476.8	459.9	436.3	388.9
107.5°	272.4	273.4	295.1	345.5	388.9	418.5	427.4	414.6	395.8	373.1	339.5



REPORT NUMBER: P240161

CATALOG NUMBER: UTLD-AF24-90-D-U-T3-FP

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
110°	243.8	242.8	259.6	303.0	344.5	369.2	374.1	358.3	339.5	320.8	293.2
112.5°	216.1	216.1	227.0	263.5	302.1	325.7	327.7	305.0	289.2	272.4	254.6
115°	193.4	192.5	200.4	229.0	264.5	284.3	282.3	261.6	246.7	232.9	221.1
117.5°	173.7	171.8	177.7	197.4	230.0	248.8	243.8	220.1	209.3	199.4	192.5
120°	156.0	155.0	157.9	171.8	197.4	212.3	207.2	186.6	176.7	171.8	167.8
122.5°	140.1	140.1	139.2	148.0	167.8	179.6	172.8	156.0	150.1	147.1	147.1
125°	126.3	126.3	124.4	127.4	140.1	150.1	144.1	130.3	126.3	126.3	127.4
127.5°	112.5	112.5	110.6	109.6	115.5	122.3	115.5	107.6	106.6	107.6	109.6
130°	99.7	98.7	96.8	92.8	93.8	96.8	91.8	87.9	88.8	91.8	93.8
132.5°	87.9	86.8	83.9	77.9	74.1	74.1	70.1	70.1	73.0	76.0	80.0
135°	76.0	75.0	72.0	65.2	58.2	54.3	51.4	55.2	59.2	62.2	66.1
137.5°	64.1	63.2	59.2	52.3	43.5	37.5	36.5	42.5	46.4	50.3	53.3
140°	52.3	51.4	47.4	40.5	30.6	23.7	23.7	31.6	35.5	38.5	42.5
142.5°	41.4	40.5	37.5	29.6	19.7	14.8	15.8	22.7	25.7	28.6	31.6
145°	30.6	30.6	27.6	20.8	11.9	7.0	8.9	14.8	17.8	19.7	22.7
147.5°	20.8	20.8	17.8	12.8	7.0	3.0	4.0	8.9	10.8	12.8	14.8
150°	12.8	12.8	10.8	7.0	3.0	0.0	1.9	4.0	5.9	7.0	8.9
152.5°	7.0	7.0	4.9	3.0	1.0	0.0	0.0	1.9	1.9	3.0	4.0
155°	3.0	1.9	1.9	1.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0
157.5°	1.0	0.0	0.0	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



REPORT NUMBER: P240161

CATALOG NUMBER: UTLD-AF24-90-D-U-T3-FP

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	448.2	448.2	448.2	448.2	448.2	448.2	448.2	448.2	448.2	448.2	448.2
2.5°	450.1	447.1	440.2	435.3	429.3	424.4	421.5	416.5	413.6	414.6	413.6
5°	458.0	452.0	439.3	428.4	416.5	406.6	398.7	391.9	387.9	384.9	386.0
7.5°	470.9	462.0	443.1	425.4	407.6	392.8	381.0	372.1	364.3	362.2	361.3
10°	490.6	478.7	452.0	428.4	405.7	384.9	369.2	356.3	348.4	344.5	344.5
12.5°	518.2	501.5	467.9	436.3	407.6	382.0	362.2	346.5	337.6	333.6	332.7
15°	556.7	535.9	494.5	452.0	415.5	384.9	361.3	345.5	338.6	336.6	335.6
17.5°	601.1	578.4	527.1	477.7	431.4	392.8	370.1	357.3	349.4	345.5	344.5
20°	651.4	621.9	563.6	506.4	454.1	413.6	387.9	370.1	360.3	355.4	354.4
22.5°	702.8	670.2	603.1	536.9	479.7	442.2	405.7	383.9	370.1	364.3	362.2
25°	758.0	721.5	643.5	569.6	511.3	468.8	427.4	395.8	380.0	373.1	373.1
27.5°	817.2	774.9	686.0	603.1	543.9	493.6	448.2	408.7	389.8	382.0	381.0
30°	879.4	832.1	729.5	639.7	574.5	516.2	465.9	422.5	399.8	390.9	389.8
32.5°	946.5	892.3	777.7	679.1	603.1	536.9	481.7	435.3	408.7	397.8	396.8
35°	1012.7	951.5	823.2	717.6	628.7	554.7	494.5	448.2	415.5	404.7	403.7
37.5°	1085.8	1014.7	871.6	755.1	652.4	568.6	505.3	458.0	422.5	410.6	408.7
40°	1155.8	1076.9	917.0	788.7	672.2	581.3	514.2	466.9	428.4	415.5	413.6
42.5°	1225.0	1140.1	962.4	820.2	689.0	589.2	520.2	472.8	434.3	419.5	416.5
45°	1294.0	1199.3	1008.7	845.9	701.7	596.2	524.2	477.7	439.3	421.5	419.5
47.5°	1358.2	1257.5	1051.2	868.6	710.6	599.1	526.1	479.7	443.1	422.5	419.5
50°	1419.3	1307.8	1086.8	885.4	716.6	599.1	526.1	480.7	445.2	422.5	420.5
52.5°	1472.6	1351.3	1115.3	896.2	717.6	596.2	523.1	479.7	445.2	420.5	417.6
55°	1513.1	1386.8	1136.1	901.2	714.6	591.3	518.2	476.8	444.2	417.6	414.6
57.5°	1545.7	1411.5	1149.0	900.2	707.7	583.4	512.3	472.8	441.2	412.6	409.6
60°	1565.4	1424.4	1150.9	893.2	697.9	573.5	504.4	466.9	437.3	407.6	403.7
62.5°	1568.4	1423.3	1144.0	879.4	683.0	561.6	494.5	459.0	430.4	399.8	395.8
63°	1567.5	1422.3	1140.1	876.5	680.1	559.7	493.6	458.0	429.3	397.8	394.9
65°	1556.6	1410.5	1125.2	860.7	666.2	547.8	484.7	450.1	423.4	391.9	386.9
67.5°	1528.0	1383.8	1097.6	834.0	645.5	532.0	471.8	440.2	413.6	382.0	377.1
70°	1484.5	1346.3	1060.1	804.4	623.8	515.3	458.0	427.4	402.7	371.1	365.2
72.5°	1426.3	1292.1	1016.7	769.9	598.1	496.4	442.2	413.6	388.9	359.3	350.4
75°	1356.2	1228.9	968.3	732.4	570.5	476.8	426.4	399.8	375.1	345.5	336.6
77.5°	1272.3	1156.9	908.1	692.9	543.9	456.0	408.7	383.0	359.3	329.7	320.8
80°	1182.5	1076.9	847.9	648.4	514.2	434.3	390.9	365.2	341.6	313.8	303.0
82.5°	1087.7	991.0	783.7	606.1	484.7	411.6	372.1	346.5	323.8	297.1	287.2
85°	992.0	905.1	721.5	563.6	454.1	389.8	352.4	328.7	304.0	278.3	268.5
87.5°	897.2	821.2	661.3	519.1	425.4	368.2	332.7	308.9	284.3	259.6	251.7
90°	806.4	740.3	598.1	477.7	395.8	344.5	312.9	289.2	265.6	240.8	232.9
92.5°	715.7	658.4	540.9	440.2	368.2	322.7	293.2	269.4	244.8	221.1	216.1
95°	634.6	585.3	486.6	399.8	341.6	302.1	273.4	250.7	225.0	202.3	199.4
97.5°	558.6	516.2	433.3	365.2	314.9	279.4	253.7	230.0	204.3	183.6	181.6
100°	490.6	456.0	387.9	329.7	288.3	258.6	234.9	211.2	185.6	167.8	165.8
102.5°	428.4	400.8	345.5	298.1	264.5	237.8	214.2	191.5	166.8	151.0	151.0
105°	375.1	350.4	306.0	268.5	239.9	216.1	194.5	171.8	147.1	134.2	134.2
107.5°	324.8	308.0	271.4	239.9	217.2	196.4	175.7	153.0	129.3	119.5	120.4



REPORT NUMBER: P240161

CATALOG NUMBER: UTLD-AF24-90-D-U-T3-FP

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	283.3	269.4	238.9	215.1	196.4	177.7	157.9	135.2	112.5	105.6	106.6
112.5°	246.7	235.9	210.2	191.5	175.7	159.9	140.1	117.4	97.7	93.8	94.7
115°	215.1	206.3	186.6	169.8	156.9	142.1	124.4	101.7	84.9	83.0	83.0
117.5°	187.5	180.7	163.9	151.0	139.2	126.3	108.5	87.9	73.0	73.0	73.0
120°	164.8	159.0	145.1	133.3	123.4	110.6	93.8	74.1	63.2	64.1	64.1
122.5°	143.1	139.2	126.3	117.4	107.6	96.8	80.0	61.2	54.3	56.3	57.3
125°	125.3	121.4	111.5	101.7	92.8	81.9	66.1	51.4	47.4	49.3	49.3
127.5°	107.6	105.6	96.8	87.9	80.0	69.0	54.3	42.5	41.4	43.5	43.5
130°	92.8	90.8	83.9	74.1	66.1	56.3	43.5	34.6	34.6	36.5	36.5
132.5°	79.0	77.9	71.1	62.2	54.3	44.4	34.6	27.6	29.6	31.6	31.6
135°	65.2	65.2	59.2	50.3	42.5	33.6	25.7	22.7	24.7	26.7	26.7
137.5°	53.3	52.3	47.4	39.5	31.6	24.7	18.7	17.8	20.8	22.7	22.7
140°	42.5	41.4	37.5	30.6	22.7	16.8	12.8	13.8	16.8	17.8	18.7
142.5°	31.6	31.6	27.6	22.7	14.8	9.8	7.9	10.8	12.8	13.8	14.8
145°	22.7	22.7	19.7	14.8	8.9	4.9	4.9	7.9	9.8	10.8	10.8
147.5°	14.8	14.8	12.8	8.9	4.9	1.9	3.0	4.9	7.0	7.9	7.9
150°	8.9	7.9	7.0	4.0	1.9	0.0	1.0	1.9	4.0	4.9	4.0
152.5°	4.0	4.0	3.0	1.9	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°	0.0	0.0	0.0	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)