

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: P240322

Luminaire Tested: **UTLD-AF24-80-D-U-T2U-FP**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P240322
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-28)
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-T2U-FP
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
AND FROSTED LENS PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7027.7 lumens
Efficiency: N/A
Efficacy: 84.7 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 - G3

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

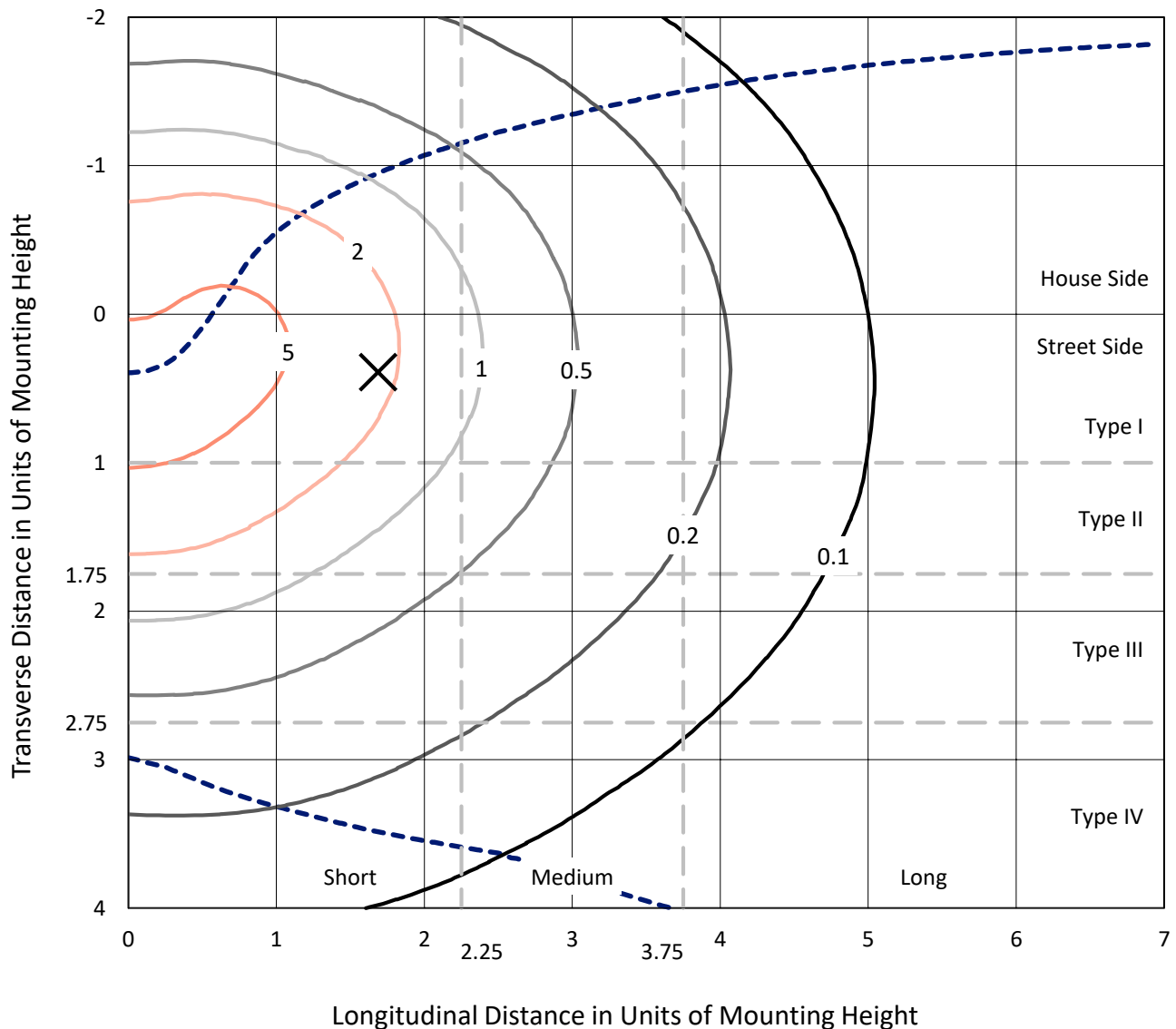


REPORT NUMBER: P240322

CATALOG NUMBER: UTLD-AF24-80-D-U-T2U-FP

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

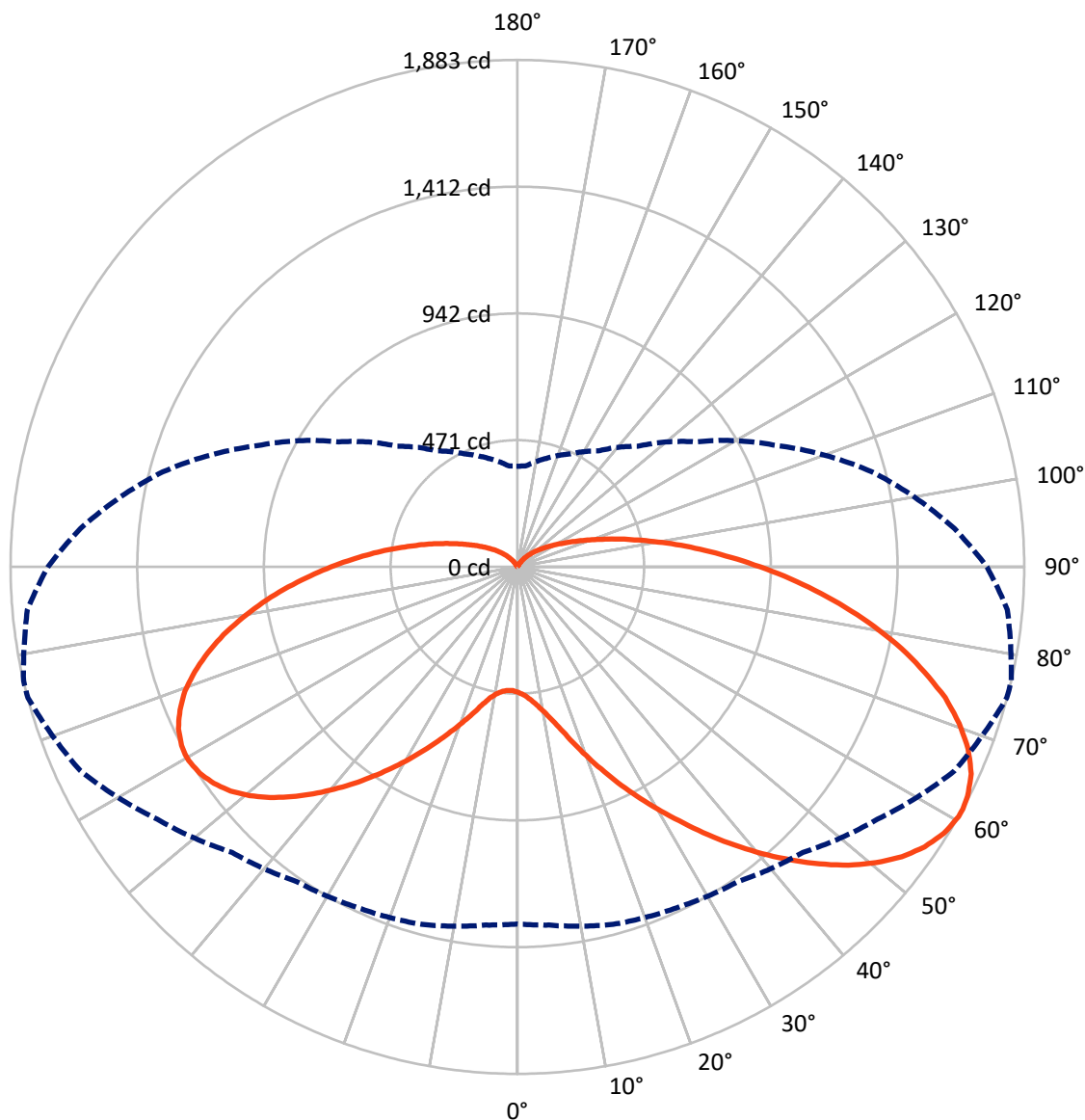


Based on 10 foot mounting height. Maximum calculated value = 7.7 fc
Type IV - Short - Non-Cutoff

REPORT NUMBER: P240322

CATALOG NUMBER: UTLD-AF24-80-D-U-T2U-FP

Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral

- - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P240322

CATALOG NUMBER: UTLD-AF24-80-D-U-T2U-FP

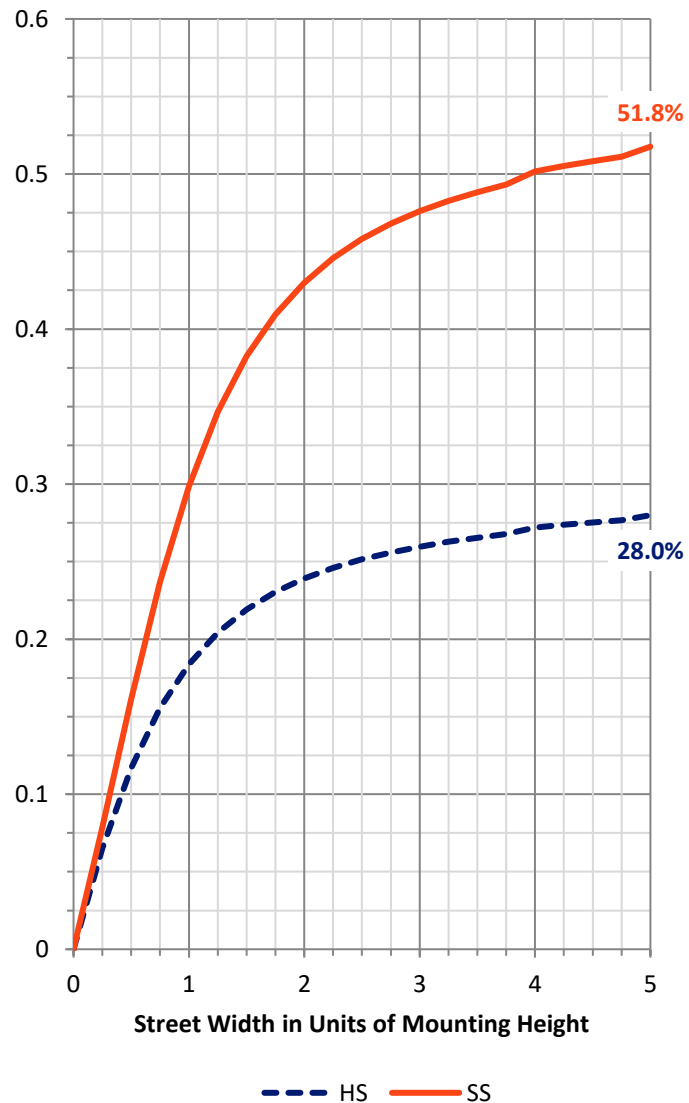
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2090.0	448.9	2538.8
	% Fixture	29.7	6.4	36.1
Street Side	Lumens	3855.4	633.5	4488.9
	% Fixture	54.9	9.0	63.9
Total	Lumens	5945.3	1082.4	7027.7
	% Fixture	84.6	15.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	46.4	0.7
10°-20°	163.7	2.3
20°-30°	350.7	5.0
30°-40°	604.5	8.6
40°-50°	877.7	12.5
50°-60°	1080.1	15.4
60°-70°	1119.2	15.9
70°-80°	975.8	13.9
80°-90°	727.3	10.3
90°-100°	480.8	6.8
100°-110°	293.4	4.2
110°-120°	168.1	2.4
120°-130°	88.9	1.3
130°-140°	39.3	0.6
140°-150°	11.0	0.2
150°-160°	0.9	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5945.3	84.6
0°-180°	7027.7	100.0

Coefficient of Utilization



REPORT NUMBER: P240322

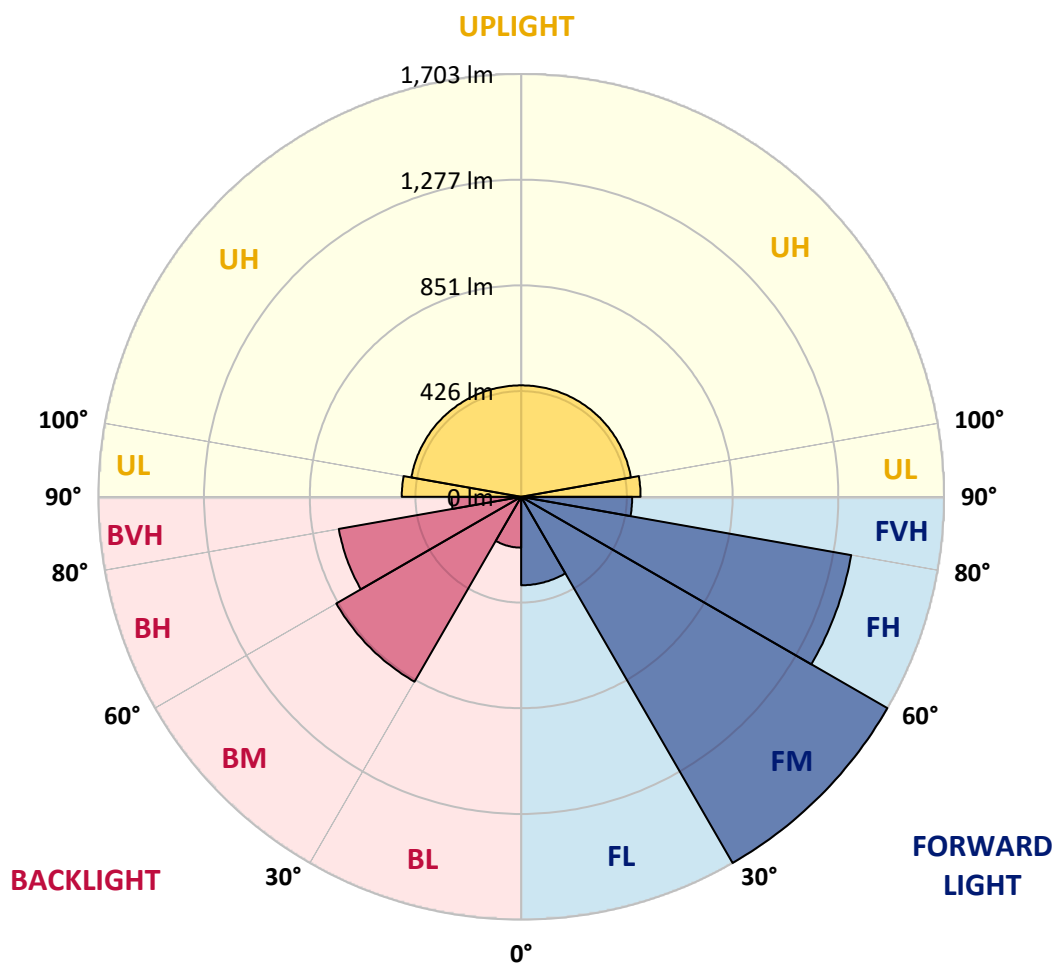
CATALOG NUMBER: UTLD-AF24-80-D-U-T2U-FP

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	356.1	5.1			
FM	(30°-60°)	1702.7	24.2			
FH	(60°-80°)	1349.5	19.2			G1/1800
FVH	(80°-90°)	447.1	6.4			G3/500
BL	(0°-30°)	204.7	2.9	B1/500		
BM	(30°-60°)	859.6	12.2	B1/1000		
BH	(60°-80°)	745.4	10.6	B2/1000		G2/1000
BVH	(80°-90°)	280.2	4.0			G3/500
UL	(90°-100°)	480.8	6.8		U3/500	
UH	(100°-180°)	448.9	6.4		U3/500	

BUG Rating: B2-U4-G3

Type IV Short





REPORT NUMBER: P240322

CATALOG NUMBER: UTLD-AF24-80-D-U-T2U-FP

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5
2.5°	506.7	506.7	504.8	503.9	500.2	495.6	491.1	484.7	478.3	476.5	472.8
5°	550.4	550.4	548.6	544.0	537.7	529.5	519.4	509.3	496.5	493.9	483.8
7.5°	599.8	597.9	593.3	588.8	579.6	567.7	554.1	538.6	521.2	517.6	503.0
10°	649.1	649.1	644.5	637.2	626.1	610.7	594.2	575.1	552.3	547.7	528.6
12.5°	705.6	703.8	696.5	691.0	678.2	660.9	642.6	618.9	591.5	587.0	562.3
15°	765.9	765.0	758.5	746.7	732.1	715.7	696.5	671.0	641.7	634.4	607.0
17.5°	833.4	828.0	824.3	811.5	796.0	775.0	760.4	733.9	701.9	693.8	660.0
20°	895.5	896.4	888.2	877.2	862.7	848.0	827.1	803.3	768.6	757.6	719.3
22.5°	965.8	965.8	957.6	946.6	932.0	924.6	900.9	876.4	834.3	826.1	783.2
25°	1038.8	1036.0	1027.9	1017.8	1010.5	1001.4	979.5	950.2	907.4	899.2	850.8
27.5°	1106.3	1107.2	1097.2	1089.0	1088.1	1076.2	1057.9	1026.9	985.8	974.0	922.0
30°	1175.7	1176.6	1169.3	1159.3	1160.2	1152.9	1137.4	1105.4	1066.2	1052.5	996.8
32.5°	1245.1	1243.3	1233.3	1232.3	1229.6	1224.1	1212.2	1192.1	1149.3	1134.7	1077.2
35°	1307.1	1307.1	1297.1	1300.8	1295.3	1294.3	1290.8	1275.2	1236.8	1222.2	1160.2
37.5°	1364.7	1363.8	1358.3	1359.2	1355.5	1354.6	1361.0	1359.2	1323.6	1311.7	1247.8
40°	1417.6	1412.2	1407.6	1411.3	1407.6	1413.0	1428.6	1439.5	1409.4	1400.3	1335.5
42.5°	1454.1	1452.3	1450.4	1456.9	1451.4	1464.1	1488.8	1515.3	1497.0	1487.9	1423.1
45°	1483.4	1479.7	1483.4	1489.7	1486.0	1502.5	1546.3	1586.5	1586.5	1573.7	1507.1
47.5°	1495.2	1494.3	1503.4	1508.9	1507.1	1533.5	1591.9	1653.1	1665.9	1655.9	1588.3
50°	1492.5	1492.5	1507.1	1515.3	1517.1	1551.8	1625.8	1706.1	1735.2	1727.0	1660.5
52.5°	1475.1	1475.1	1497.0	1507.1	1514.4	1558.2	1648.6	1750.8	1793.7	1789.1	1722.5
55°	1442.3	1441.3	1469.7	1482.5	1497.9	1551.8	1657.7	1780.0	1839.4	1835.7	1775.4
57.5°	1391.1	1393.0	1427.6	1447.8	1467.8	1531.8	1653.1	1794.6	1870.4	1868.5	1809.2
60°	1326.4	1335.5	1374.7	1397.6	1427.6	1499.7	1634.0	1791.9	1882.2	1883.2	1827.5
61°	1298.9	1308.0	1348.2	1375.7	1407.6	1484.3	1623.0	1786.4	1881.3	1883.2	1829.3
62.5°	1255.2	1260.6	1308.0	1341.0	1375.7	1456.0	1601.1	1771.8	1875.0	1877.7	1826.6
65°	1173.0	1183.0	1231.4	1272.4	1313.6	1401.1	1553.7	1734.4	1848.5	1853.1	1805.6
67.5°	1082.6	1094.5	1150.2	1197.7	1245.1	1338.2	1495.2	1680.5	1801.0	1806.4	1765.4
70°	993.2	1007.7	1066.2	1113.7	1172.1	1267.9	1424.0	1611.1	1736.2	1741.7	1706.1
72.5°	901.8	918.3	978.6	1033.3	1092.6	1190.3	1344.6	1529.0	1654.9	1662.3	1629.4
75°	810.6	831.6	888.2	951.1	1010.5	1110.9	1262.4	1441.3	1555.5	1562.8	1537.2
77.5°	728.4	746.7	802.4	868.1	932.9	1028.8	1173.0	1337.3	1456.0	1459.6	1436.8
80°	645.4	664.5	724.8	786.9	855.3	947.6	1080.7	1232.3	1335.5	1345.5	1321.8
82.5°	571.4	590.5	647.2	714.7	780.5	869.0	986.7	1124.6	1215.9	1226.8	1210.4
85°	509.3	523.0	578.7	643.5	707.5	791.5	904.6	1024.2	1106.3	1108.2	1091.7
87.5°	447.2	461.9	514.9	577.9	642.6	719.3	816.1	919.2	985.8	992.3	975.8
90°	396.2	405.3	455.5	517.6	580.5	650.8	734.8	826.1	879.9	879.9	867.2
92.5°	351.5	356.0	406.2	465.5	525.8	586.0	660.0	730.3	776.8	775.9	761.3
95°	310.4	315.9	357.8	415.3	473.7	529.5	589.7	645.4	680.1	681.9	664.5
97.5°	273.8	277.5	316.7	373.4	425.3	477.4	527.6	572.3	595.2	596.1	583.3
100°	244.6	244.6	282.0	332.3	382.5	429.0	471.9	505.7	515.8	514.9	503.9
102.5°	219.1	217.3	249.2	297.6	344.1	384.3	419.0	440.9	449.1	446.4	439.1
105°	194.5	196.3	220.9	266.6	308.5	344.1	370.6	388.8	388.8	387.1	379.7
107.5°	176.2	175.2	194.5	236.4	276.6	307.6	328.6	337.8	335.0	332.3	327.8



REPORT NUMBER: P240322

CATALOG NUMBER: UTLD-AF24-80-D-U-T2U-FP

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
110°	157.9	157.9	172.6	211.8	246.4	274.8	289.4	294.8	286.6	285.7	284.8
112.5°	142.4	142.4	154.3	187.1	220.0	243.8	255.6	256.5	247.3	246.4	247.3
115°	130.5	130.5	137.0	166.1	196.3	217.3	227.3	222.7	213.6	212.7	215.4
117.5°	118.7	118.7	124.2	145.2	173.4	192.6	199.0	192.6	184.4	184.4	188.0
120°	108.6	108.6	110.5	126.8	152.4	168.9	173.4	166.1	159.8	159.8	163.4
122.5°	99.5	98.6	99.5	110.5	131.4	147.0	148.8	142.4	137.8	138.7	144.2
125°	90.3	90.3	89.4	95.9	113.2	125.9	127.8	120.5	120.5	120.5	125.1
127.5°	82.1	82.1	80.3	83.1	95.9	106.8	106.8	101.4	103.1	105.0	108.6
130°	74.9	74.9	73.0	73.0	79.4	88.6	88.6	84.9	89.4	90.3	94.0
132.5°	67.5	66.6	64.9	62.1	64.9	70.3	70.3	69.4	76.7	77.5	80.3
135°	60.3	59.3	57.5	53.0	52.1	53.8	53.8	56.6	63.9	64.9	68.4
137.5°	52.1	52.1	49.3	44.7	39.3	39.3	39.3	44.7	52.1	53.8	55.6
140°	44.7	44.7	41.9	36.5	29.3	26.5	27.4	34.7	41.9	42.9	44.7
142.5°	36.5	36.5	33.8	28.3	21.0	15.5	17.4	24.7	31.0	32.8	34.7
145°	28.3	28.3	25.6	20.0	12.8	8.2	10.0	17.4	21.9	22.8	24.7
147.5°	21.0	21.0	18.2	13.7	7.3	2.8	5.5	10.0	14.6	15.5	17.4
150°	13.7	13.7	11.9	7.3	3.7	0.0	1.8	5.5	8.2	9.1	10.0
152.5°	7.3	7.3	5.5	3.7	0.9	0.0	0.0	1.8	3.7	3.7	4.6
155°	3.7	2.8	1.8	0.9	0.0	0.0	0.0	0.0	0.9	0.9	1.8
157.5°	0.9	0.9	0.9	0.0	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°	0.9	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

REPORT NUMBER: P240322

CATALOG NUMBER: UTLD-AF24-80-D-U-T2U-FP

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5	466.5
2.5°	469.2	465.5	458.3	452.8	446.4	440.9	436.3	432.7	431.8	429.0	429.9
5°	477.4	471.0	457.4	445.5	432.7	421.8	412.6	406.2	401.6	399.8	398.0
7.5°	493.0	482.0	461.9	442.7	424.4	408.1	393.4	384.3	377.0	373.4	373.4
10°	514.9	501.1	472.8	447.2	421.8	399.8	381.6	366.9	357.8	353.2	354.1
12.5°	544.9	526.7	492.0	457.4	426.3	398.0	373.4	357.8	346.9	341.4	341.4
15°	587.9	567.7	521.2	476.5	434.5	399.8	373.4	356.0	347.8	344.1	343.2
17.5°	639.9	613.5	560.5	506.7	453.7	410.8	384.3	367.9	356.0	351.5	350.6
20°	692.8	662.7	600.7	540.4	481.1	434.5	402.5	380.6	365.1	358.7	357.8
22.5°	753.1	718.4	645.4	574.2	510.2	465.5	420.8	392.5	374.3	366.0	365.1
25°	815.2	776.8	694.7	614.3	549.5	495.6	443.7	404.4	382.5	372.5	371.5
27.5°	880.9	839.8	745.7	654.5	587.0	524.0	464.6	415.3	389.7	378.8	377.9
30°	953.9	904.6	801.5	701.0	624.4	550.4	484.7	428.1	397.1	384.3	382.5
32.5°	1029.7	974.9	858.1	750.3	659.1	574.2	501.1	441.8	404.4	389.7	388.8
35°	1109.1	1047.9	916.5	798.7	690.1	595.2	515.8	453.7	409.9	394.3	392.5
37.5°	1192.1	1124.6	977.6	844.3	720.3	613.5	527.6	463.7	415.3	397.1	395.3
40°	1275.2	1197.7	1037.9	890.9	747.6	628.9	537.7	471.0	419.0	399.8	398.0
42.5°	1355.5	1276.1	1099.1	933.9	771.3	640.8	544.9	477.4	422.7	401.6	399.0
45°	1434.1	1351.0	1157.5	970.4	791.5	649.9	549.5	481.1	427.2	401.6	399.0
47.5°	1512.5	1421.3	1215.0	1002.3	806.0	656.3	551.4	482.9	429.9	400.7	398.0
50°	1583.7	1484.3	1264.3	1030.6	816.9	658.2	550.4	482.0	430.9	399.0	395.3
52.5°	1642.1	1540.0	1305.4	1050.7	823.4	657.2	547.7	480.2	429.9	395.3	392.5
55°	1692.4	1582.8	1335.5	1063.5	823.4	652.6	543.1	476.5	426.3	390.7	387.1
57.5°	1725.2	1614.8	1355.5	1068.9	819.7	644.5	534.9	470.1	422.7	384.3	380.6
60°	1744.4	1630.3	1363.8	1065.3	809.7	633.5	525.8	462.8	417.2	377.0	373.4
61°	1746.3	1632.1	1363.8	1061.6	805.1	628.9	522.1	460.0	414.4	374.3	369.7
62.5°	1744.4	1630.3	1359.2	1053.4	796.0	620.7	514.9	453.7	409.0	367.9	365.1
65°	1726.1	1613.0	1341.0	1032.4	775.9	604.3	502.1	443.7	399.8	358.7	354.1
67.5°	1686.9	1578.3	1308.0	1003.2	752.2	585.1	487.4	431.8	389.7	347.8	342.3
70°	1630.3	1527.2	1267.0	969.5	725.7	564.2	471.0	418.1	377.0	336.9	329.5
72.5°	1560.0	1465.1	1209.5	926.5	694.7	542.3	453.7	403.5	363.4	324.1	315.0
75°	1472.4	1385.7	1145.6	879.0	660.0	516.7	435.4	387.1	347.8	310.4	300.3
77.5°	1375.7	1298.0	1076.2	827.1	625.3	492.0	415.3	368.8	331.3	294.8	284.8
80°	1269.8	1202.2	997.7	772.2	588.8	466.5	395.3	351.5	315.0	279.4	267.5
82.5°	1161.2	1100.9	919.2	716.6	549.5	440.0	373.4	332.3	296.7	262.9	250.1
85°	1050.7	998.6	839.8	659.1	510.2	413.5	353.2	313.1	277.5	245.5	234.6
87.5°	941.1	896.4	758.5	604.3	474.6	387.9	332.3	293.9	259.2	228.2	217.3
90°	838.9	800.6	683.7	553.2	439.1	361.5	311.3	274.8	241.0	209.9	202.6
92.5°	742.2	709.3	611.6	499.3	403.5	335.9	290.3	254.7	220.9	192.6	188.0
95°	654.5	623.5	545.8	451.8	370.6	313.1	270.2	236.4	202.6	176.2	172.6
97.5°	568.7	549.5	484.7	406.2	338.7	288.5	250.1	218.2	185.3	160.7	158.9
100°	497.5	477.4	425.3	364.2	309.4	266.6	231.0	199.9	168.9	146.1	145.2
102.5°	432.7	419.0	375.2	328.6	281.1	242.8	211.8	182.6	152.4	132.4	132.4
105°	377.9	365.1	332.3	292.2	253.8	222.7	192.6	164.3	136.1	118.7	119.6
107.5°	325.9	317.6	290.3	258.3	228.2	201.7	174.3	147.0	119.6	105.9	106.8



REPORT NUMBER: P240322

CATALOG NUMBER: UTLD-AF24-80-D-U-T2U-FP

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	283.9	275.7	254.7	231.0	205.4	182.6	157.0	130.5	104.0	95.9	95.9
112.5°	246.4	241.0	223.6	204.5	184.4	164.3	141.5	115.0	91.2	84.9	85.8
115°	215.4	210.8	196.3	181.7	165.2	147.9	125.9	100.5	79.4	76.7	76.7
117.5°	187.1	184.4	172.6	159.8	147.0	131.4	111.4	86.7	68.4	68.4	68.4
120°	163.4	160.7	151.5	140.6	129.6	115.9	95.9	74.0	60.3	60.3	61.2
122.5°	143.3	141.5	132.4	124.2	114.1	100.5	82.1	62.1	53.0	53.8	53.8
125°	125.1	123.3	116.8	107.7	98.6	85.8	69.4	51.1	45.6	47.5	47.5
127.5°	108.6	107.7	101.4	93.1	84.0	73.0	56.6	42.9	40.2	41.9	41.9
130°	94.9	94.0	87.7	79.4	71.2	59.3	45.6	35.6	34.7	36.5	36.5
132.5°	81.2	80.3	74.9	66.6	58.4	47.5	35.6	28.3	30.1	31.9	31.9
135°	68.4	67.5	63.9	54.7	47.5	37.4	27.4	23.7	25.6	27.4	27.4
137.5°	56.6	55.6	52.1	43.8	35.6	27.4	20.0	19.1	21.0	22.8	22.8
140°	45.6	44.7	41.1	33.8	25.6	19.1	13.7	15.5	17.4	19.1	19.1
142.5°	34.7	34.7	31.9	25.6	17.4	11.9	9.1	11.9	13.7	15.5	15.5
145°	25.6	25.6	21.9	17.4	10.0	6.3	5.5	8.2	10.9	11.9	11.9
147.5°	17.4	17.4	14.6	10.9	5.5	2.8	3.7	5.5	7.3	8.2	9.1
150°	10.0	10.0	8.2	5.5	2.8	0.9	0.9	3.7	4.6	5.5	5.5
152.5°	4.6	4.6	3.7	1.8	0.9	0.9	0.9	0.9	2.8	2.8	2.8
155°	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.0	0.9	0.9	0.9
157.5°	0.0	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.9	0.9	0.9	0.9	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)