

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: P240320

Luminaire Tested: **UTLD-AF24-60-D-U-T2U-FP**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P240320
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-AF24-60-D-U-T2U-FP
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 800mA 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: 5739.8 lumens
Efficiency: N/A
Efficacy: 89.7 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 - U3 - G3

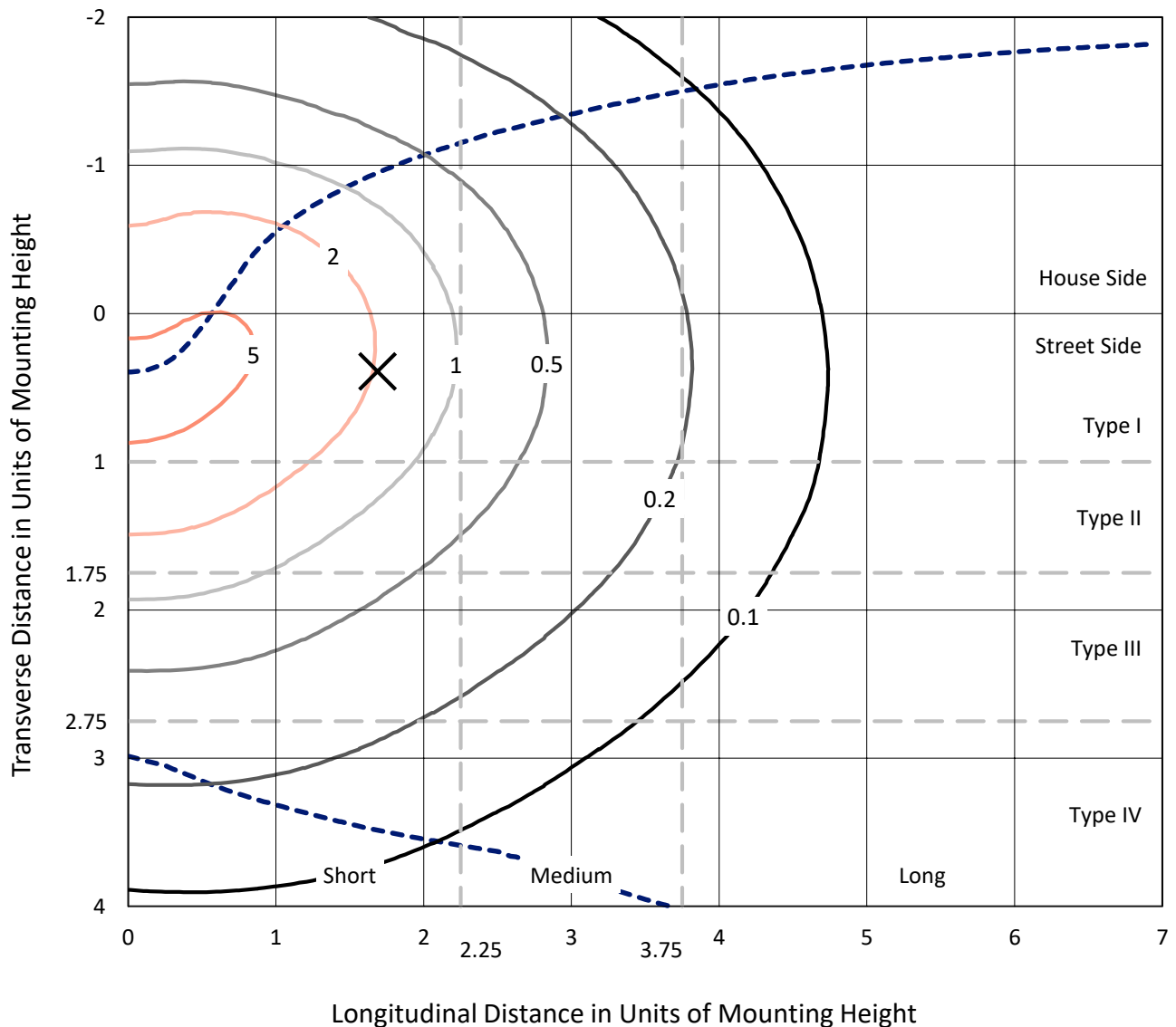
Input Watts (W): 64
Input Voltage (V): NR
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P240320
 CATALOG NUMBER: UTLD-AF24-60-D-U-T2U-FP

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

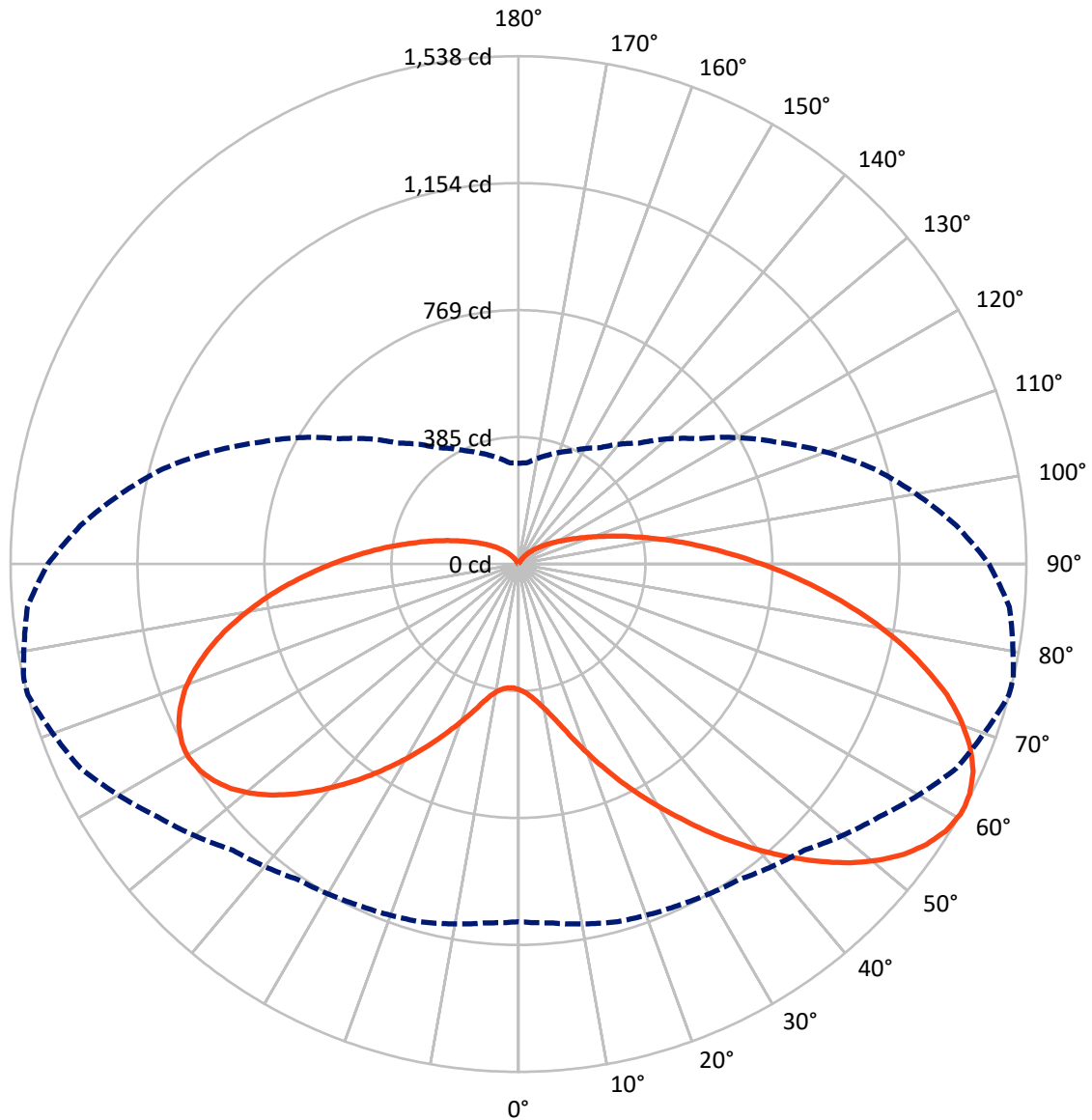


Based on 10 foot mounting height. Maximum calculated value = 6.3 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P240320

CATALOG NUMBER: UTLD-AF24-60-D-U-T2U-FP

Luminous Intensity Polar Plot



— Vertical Plane Through 77-Deg Lateral - - - Horizontal Cone Through 60-Deg Vertical

REPORT NUMBER: P240320

CATALOG NUMBER: UTLD-AF24-60-D-U-T2U-FP

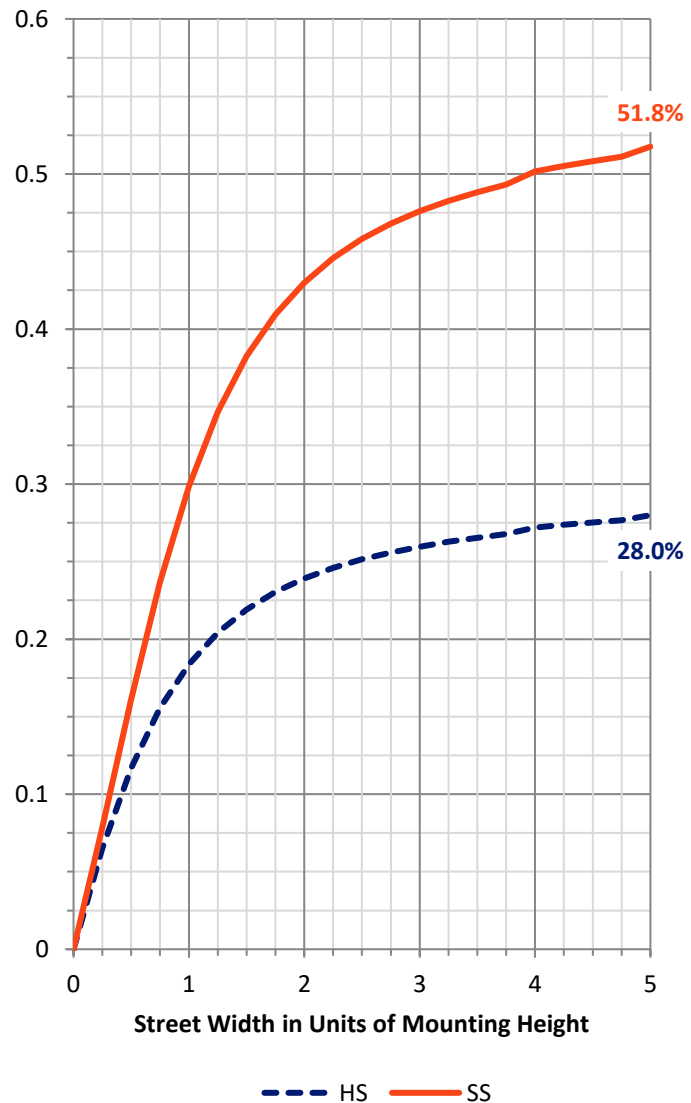
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1706.9	366.6	2073.5
	% Fixture	29.7	6.4	36.1
Street Side	Lumens	3148.8	517.4	3666.2
	% Fixture	54.9	9.0	63.9
Total	Lumens	4855.8	884.0	5739.8
	% Fixture	84.6	15.4	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.9	0.7
10°-20°	133.7	2.3
20°-30°	286.4	5.0
30°-40°	493.7	8.6
40°-50°	716.8	12.5
50°-60°	882.2	15.4
60°-70°	914.1	15.9
70°-80°	796.9	13.9
80°-90°	594.0	10.3
90°-100°	392.7	6.8
100°-110°	239.7	4.2
110°-120°	137.3	2.4
120°-130°	72.6	1.3
130°-140°	32.1	0.6
140°-150°	9.0	0.2
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4855.8	84.6
0°-180°	5739.8	100.0



REPORT NUMBER: P240320

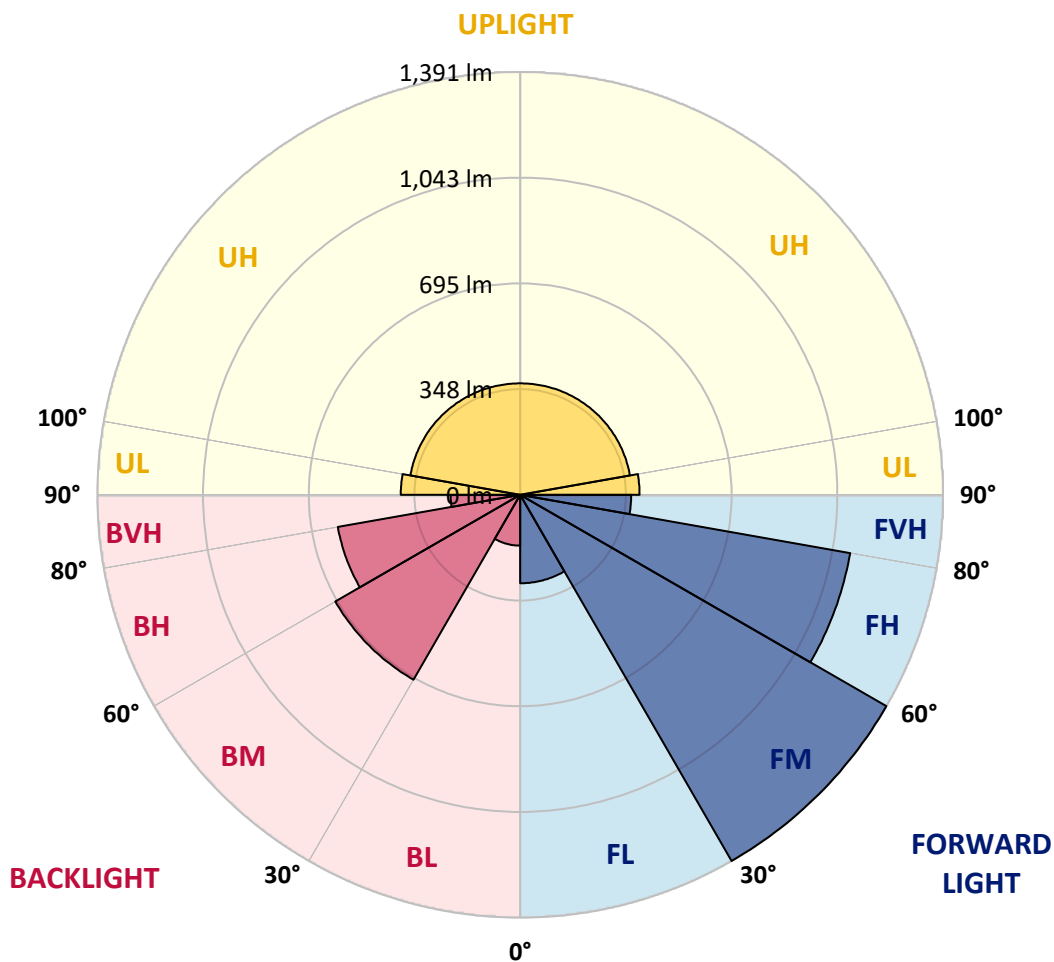
CATALOG NUMBER: UTLD-AF24-60-D-U-T2U-FP

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	290.8	5.1			
FM	(30°-60°)	1390.6	24.2			
FH	(60°-80°)	1102.2	19.2			G1/1800
FVH	(80°-90°)	365.1	6.4			G3/500
BL	(0°-30°)	167.2	2.9	B1/500		
BM	(30°-60°)	702.1	12.2	B1/1000		
BH	(60°-80°)	608.8	10.6	B2/1000		G2/1000
BVH	(80°-90°)	228.9	4.0			G3/500
UL	(90°-100°)	392.7	6.8		U3/500	
UH	(100°-180°)	366.6	6.4		U3/500	

BUG Rating: B2-U3-G3

Type IV Short





REPORT NUMBER: P240320

CATALOG NUMBER: UTLD-AF24-60-D-U-T2U-FP

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	380.9	380.9	380.9	380.9	380.9	380.9	380.9	380.9	380.9	380.9	380.9
2.5°	413.8	413.8	412.2	411.5	408.6	404.8	401.1	395.9	390.7	389.1	386.2
5°	449.6	449.6	448.1	444.4	439.2	432.4	424.2	416.0	405.6	403.3	395.2
7.5°	489.8	488.4	484.6	480.9	473.4	463.7	452.6	439.9	425.8	422.7	410.8
10°	530.1	530.1	526.3	520.4	511.5	498.8	485.4	469.7	451.0	447.3	431.7
12.5°	576.3	574.8	568.9	564.4	553.9	539.8	524.9	505.4	483.1	479.4	459.2
15°	625.5	624.7	619.5	609.9	597.9	584.5	568.9	548.0	524.2	518.1	495.8
17.5°	680.7	676.2	673.2	662.8	650.1	633.0	621.0	599.4	573.4	566.6	539.0
20°	731.4	732.1	725.4	716.5	704.5	692.6	675.5	656.1	627.8	618.8	587.5
22.5°	788.8	788.8	782.0	773.1	761.2	755.2	735.8	715.8	681.4	674.7	639.7
25°	848.4	846.2	839.4	831.2	825.3	817.8	799.9	776.1	741.0	734.4	694.9
27.5°	903.6	904.4	896.1	889.5	888.6	879.0	864.1	838.7	805.2	795.4	753.0
30°	960.2	961.0	955.0	946.8	947.6	941.6	928.9	902.9	870.8	859.6	814.2
32.5°	1016.9	1015.4	1007.2	1006.5	1004.2	999.7	990.1	973.6	938.7	926.7	879.7
35°	1067.7	1067.7	1059.4	1062.4	1057.9	1057.2	1054.2	1041.6	1010.2	998.3	947.6
37.5°	1114.6	1113.8	1109.4	1110.1	1107.1	1106.4	1111.6	1110.1	1081.1	1071.3	1019.2
40°	1157.8	1153.4	1149.6	1152.6	1149.6	1154.1	1166.8	1175.7	1151.1	1143.7	1090.8
42.5°	1187.6	1186.1	1184.7	1189.9	1185.4	1195.8	1216.0	1237.6	1222.7	1215.3	1162.3
45°	1211.5	1208.5	1211.5	1216.7	1213.7	1227.1	1262.9	1295.8	1295.8	1285.3	1230.9
47.5°	1221.2	1220.5	1228.0	1232.3	1230.9	1252.5	1300.2	1350.2	1360.6	1352.4	1297.2
50°	1218.9	1218.9	1230.9	1237.6	1239.1	1267.4	1327.8	1393.5	1417.3	1410.5	1356.1
52.5°	1204.8	1204.8	1222.7	1230.9	1236.8	1272.7	1346.4	1430.0	1465.0	1461.3	1406.9
55°	1177.9	1177.2	1200.3	1210.8	1223.4	1267.4	1353.9	1453.8	1502.3	1499.2	1450.0
57.5°	1136.2	1137.7	1166.1	1182.4	1198.8	1251.0	1350.2	1465.7	1527.6	1526.1	1477.7
60°	1083.3	1090.8	1122.8	1141.4	1166.1	1224.9	1334.5	1463.5	1537.3	1538.0	1492.6
61°	1060.9	1068.4	1101.2	1123.5	1149.6	1212.2	1325.5	1459.0	1536.6	1538.0	1494.0
62.5°	1025.1	1029.6	1068.4	1095.2	1123.5	1189.2	1307.6	1447.1	1531.4	1533.6	1491.9
65°	958.0	966.2	1005.8	1039.3	1072.9	1144.4	1268.9	1416.5	1509.7	1513.5	1474.7
67.5°	884.2	893.9	939.4	978.1	1016.9	1092.9	1221.2	1372.5	1470.9	1475.4	1441.8
70°	811.1	823.1	870.8	909.6	957.3	1035.5	1163.0	1315.9	1418.0	1422.5	1393.5
72.5°	736.6	750.0	799.2	843.9	892.4	972.2	1098.1	1248.8	1351.6	1357.7	1330.8
75°	662.1	679.1	725.4	776.8	825.3	907.4	1031.0	1177.2	1270.4	1276.3	1255.5
77.5°	594.9	609.9	655.3	709.0	761.9	840.3	958.0	1092.2	1189.2	1192.1	1173.5
80°	527.1	542.8	592.0	642.6	698.6	773.9	882.7	1006.5	1090.8	1099.0	1079.5
82.5°	466.7	482.3	528.6	583.8	637.4	709.7	805.9	918.5	993.1	1002.0	988.6
85°	416.0	427.2	472.7	525.6	577.8	646.4	738.9	836.5	903.6	905.1	891.7
87.5°	365.3	377.3	420.5	471.9	524.9	587.5	666.6	750.7	805.2	810.4	797.0
90°	323.6	331.0	372.0	422.7	474.1	531.5	600.2	674.7	718.7	718.7	708.3
92.5°	287.0	290.7	331.7	380.2	429.4	478.6	539.0	596.5	634.4	633.7	621.7
95°	253.5	258.0	292.3	339.2	387.0	432.4	481.6	527.1	555.5	556.9	542.8
97.5°	223.6	226.7	258.7	304.9	347.4	389.9	431.0	467.5	486.1	486.8	476.4
100°	199.8	199.8	230.4	271.4	312.4	350.4	385.4	413.1	421.3	420.5	411.5
102.5°	178.9	177.5	203.6	243.1	281.1	313.8	342.2	360.1	366.8	364.6	358.6
105°	158.8	160.3	180.4	217.7	252.0	281.1	302.7	317.6	317.6	316.1	310.2
107.5°	143.9	143.1	158.8	193.1	225.9	251.2	268.4	275.9	273.6	271.4	267.6



REPORT NUMBER: P240320

CATALOG NUMBER: UTLD-AF24-60-D-U-T2U-FP

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
110°	129.0	129.0	140.9	173.0	201.3	224.4	236.3	240.8	234.1	233.3	232.6
112.5°	116.3	116.3	126.0	152.8	179.6	199.1	208.8	209.5	202.0	201.3	202.0
115°	106.6	106.6	111.8	135.6	160.3	177.5	185.7	181.9	174.4	173.7	175.9
117.5°	96.9	96.9	101.4	118.6	141.7	157.3	162.5	157.3	150.6	150.6	153.5
120°	88.7	88.7	90.2	103.6	124.5	137.9	141.7	135.6	130.4	130.4	133.5
122.5°	81.2	80.5	81.2	90.2	107.3	120.0	121.5	116.3	112.6	113.3	117.8
125°	73.9	73.9	73.0	78.3	92.5	102.9	104.3	98.4	98.4	98.4	102.1
127.5°	67.1	67.1	65.6	67.8	78.3	87.3	87.3	82.8	84.3	85.7	88.7
130°	61.2	61.2	59.6	59.6	64.9	72.3	72.3	69.4	73.0	73.9	76.8
132.5°	55.1	54.4	52.9	50.7	52.9	57.4	57.4	56.7	62.6	63.3	65.6
135°	49.2	48.5	47.0	43.3	42.5	44.0	44.0	46.2	52.2	52.9	56.0
137.5°	42.5	42.5	40.3	36.5	32.0	32.0	32.0	36.5	42.5	44.0	45.5
140°	36.5	36.5	34.3	29.9	23.8	21.6	22.4	28.3	34.3	35.1	36.5
142.5°	29.9	29.9	27.6	23.1	17.2	12.7	14.1	20.2	25.4	26.8	28.3
145°	23.1	23.1	20.9	16.4	10.4	6.8	8.2	14.1	17.9	18.6	20.2
147.5°	17.2	17.2	14.9	11.2	5.9	2.3	4.5	8.2	12.0	12.7	14.1
150°	11.2	11.2	9.7	5.9	3.0	0.0	1.5	4.5	6.8	7.5	8.2
152.5°	5.9	5.9	4.5	3.0	0.7	0.0	0.0	1.5	3.0	3.0	3.7
155°	3.0	2.3	1.5	0.7	0.0	0.0	0.0	0.0	0.7	0.7	1.5
157.5°	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7
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°	0.7	0.7	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: P240320

CATALOG NUMBER: UTLD-AF24-60-D-U-T2U-FP

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	380.9	380.9	380.9	380.9	380.9	380.9	380.9	380.9	380.9	380.9	380.9
2.5°	383.2	380.2	374.3	369.8	364.6	360.1	356.4	353.4	352.6	350.4	351.2
5°	389.9	384.7	373.5	363.9	353.4	344.4	337.0	331.7	328.1	326.5	325.1
7.5°	402.6	393.6	377.3	361.6	346.7	333.3	321.3	313.8	307.9	304.9	304.9
10°	420.5	409.3	386.2	365.3	344.4	326.5	311.6	299.7	292.3	288.6	289.3
12.5°	445.1	430.2	401.8	373.5	348.2	325.1	304.9	292.3	283.3	278.9	278.9
15°	480.2	463.7	425.8	389.1	354.9	326.5	304.9	290.7	284.1	281.1	280.3
17.5°	522.6	501.0	457.8	413.8	370.5	335.5	313.8	300.4	290.7	287.0	286.3
20°	565.9	541.2	490.6	441.4	392.9	354.9	328.8	310.9	298.2	293.0	292.3
22.5°	615.1	586.8	527.1	468.9	416.8	380.2	343.7	320.6	305.7	299.0	298.2
25°	665.7	634.4	567.3	501.8	448.8	404.8	362.3	330.3	312.4	304.2	303.4
27.5°	719.4	685.9	609.1	534.6	479.4	427.9	379.5	339.2	318.3	309.4	308.6
30°	779.1	738.9	654.6	572.5	509.9	449.6	395.9	349.6	324.3	313.8	312.4
32.5°	841.0	796.3	700.8	612.8	538.3	468.9	409.3	360.8	330.3	318.3	317.6
35°	905.8	855.9	748.5	652.3	563.6	486.1	421.3	370.5	334.7	322.0	320.6
37.5°	973.6	918.5	798.5	689.7	588.2	501.0	431.0	378.7	339.2	324.3	322.8
40°	1041.6	978.1	847.7	727.6	610.6	513.7	439.2	384.7	342.2	326.5	325.1
42.5°	1107.1	1042.3	897.6	762.7	629.9	523.3	445.1	389.9	345.1	328.1	325.8
45°	1171.3	1103.4	945.3	792.5	646.4	530.8	448.8	392.9	348.9	328.1	325.8
47.5°	1235.3	1160.8	992.4	818.6	658.3	536.0	450.3	394.3	351.2	327.2	325.1
50°	1293.5	1212.2	1032.6	841.7	667.3	537.6	449.6	393.6	351.9	325.8	322.8
52.5°	1341.2	1257.7	1066.1	858.2	672.5	536.7	447.3	392.2	351.2	322.8	320.6
55°	1382.2	1292.8	1090.8	868.6	672.5	533.1	443.6	389.1	348.2	319.1	316.1
57.5°	1409.1	1318.9	1107.1	873.0	669.5	526.3	436.9	383.9	345.1	313.8	310.9
60°	1424.8	1331.6	1113.8	870.0	661.3	517.4	429.4	378.0	340.7	307.9	304.9
61°	1426.2	1333.0	1113.8	867.1	657.6	513.7	426.5	375.7	338.5	305.7	302.0
62.5°	1424.8	1331.6	1110.1	860.4	650.1	507.0	420.5	370.5	334.0	300.4	298.2
65°	1409.8	1317.4	1095.2	843.2	633.7	493.6	410.0	362.3	326.5	293.0	289.3
67.5°	1377.7	1289.0	1068.4	819.4	614.3	477.9	398.1	352.6	318.3	284.1	279.6
70°	1331.6	1247.3	1034.8	791.8	592.7	460.7	384.7	341.5	307.9	275.1	269.1
72.5°	1274.1	1196.5	987.9	756.7	567.3	442.8	370.5	329.5	296.8	264.6	257.2
75°	1202.6	1131.7	935.7	717.9	539.0	422.0	355.6	316.1	284.1	253.5	245.3
77.5°	1123.5	1060.2	879.0	675.5	510.7	401.8	339.2	301.2	270.7	240.8	232.6
80°	1037.1	981.8	814.9	630.8	480.9	380.9	322.8	287.0	257.2	228.1	218.4
82.5°	948.4	899.1	750.7	585.2	448.8	359.4	304.9	271.4	242.3	214.7	204.3
85°	858.2	815.6	685.9	538.3	416.8	337.8	288.6	255.7	226.7	200.6	191.6
87.5°	768.6	732.1	619.5	493.6	387.7	316.8	271.4	240.1	211.8	186.4	177.5
90°	685.2	653.9	558.4	451.8	358.6	295.2	254.2	224.4	196.8	171.4	165.5
92.5°	606.1	579.3	499.5	407.9	329.5	274.4	237.1	208.0	180.4	157.3	153.5
95°	534.6	509.2	445.8	369.1	302.7	255.7	220.7	193.1	165.5	143.9	140.9
97.5°	464.5	448.8	395.9	331.7	276.6	235.6	204.3	178.2	151.3	131.2	129.7
100°	406.3	389.9	347.4	297.5	252.8	217.7	188.6	163.3	137.9	119.3	118.6
102.5°	353.4	342.2	306.4	268.4	229.7	198.4	173.0	149.1	124.5	108.1	108.1
105°	308.6	298.2	271.4	238.6	207.2	181.9	157.3	134.2	111.1	96.9	97.7
107.5°	266.2	259.4	237.1	211.0	186.4	164.8	142.4	120.0	97.7	86.4	87.3



REPORT NUMBER: P240320

CATALOG NUMBER: UTLD-AF24-60-D-U-T2U-FP

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	231.9	225.2	208.0	188.6	167.8	149.1	128.3	106.6	85.0	78.3	78.3
112.5°	201.3	196.8	182.7	167.0	150.6	134.2	115.6	93.9	74.6	69.4	70.1
115°	175.9	172.3	160.3	148.3	134.9	120.8	102.9	82.0	64.9	62.6	62.6
117.5°	152.8	150.6	140.9	130.4	120.0	107.3	90.9	70.8	56.0	56.0	56.0
120°	133.5	131.2	123.8	114.8	105.9	94.7	78.3	60.4	49.2	49.2	49.9
122.5°	117.0	115.6	108.1	101.4	93.2	82.0	67.1	50.7	43.3	44.0	44.0
125°	102.1	100.7	95.4	88.0	80.5	70.1	56.7	41.7	37.2	38.8	38.8
127.5°	88.7	88.0	82.8	76.0	68.6	59.6	46.2	35.1	32.8	34.3	34.3
130°	77.5	76.8	71.6	64.9	58.1	48.5	37.2	29.1	28.3	29.9	29.9
132.5°	66.4	65.6	61.2	54.4	47.7	38.8	29.1	23.1	24.7	26.1	26.1
135°	56.0	55.1	52.2	44.7	38.8	30.6	22.4	19.3	20.9	22.4	22.4
137.5°	46.2	45.5	42.5	35.8	29.1	22.4	16.4	15.7	17.2	18.6	18.6
140°	37.2	36.5	33.6	27.6	20.9	15.7	11.2	12.7	14.1	15.7	15.7
142.5°	28.3	28.3	26.1	20.9	14.1	9.7	7.5	9.7	11.2	12.7	12.7
145°	20.9	20.9	17.9	14.1	8.2	5.2	4.5	6.8	8.9	9.7	9.7
147.5°	14.1	14.1	12.0	8.9	4.5	2.3	3.0	4.5	5.9	6.8	7.5
150°	8.2	8.2	6.8	4.5	2.3	0.7	0.7	3.0	3.7	4.5	4.5
152.5°	3.7	3.7	3.0	1.5	0.7	0.7	0.7	0.7	2.3	2.3	2.3
155°	1.5	1.5	1.5	0.7	0.7	0.7	0.7	0.0	0.7	0.7	0.7
157.5°	0.0	0.7	0.7	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.7	0.7	0.7	0.7	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.7	0.7	0.7	0.7	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)