

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: P240049

Luminaire Tested: **UTLD-AF24-50-D-U-SL3-A**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P240049
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-17)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 5/28/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-50-D-U-SL3-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE III SPILL
LIGHT ELIMINATOR OPTICS AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4657.5 lumens
Efficiency: N/A
Efficacy: 86.2 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B1 - U3 - G2

Input Watts (W): 54
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



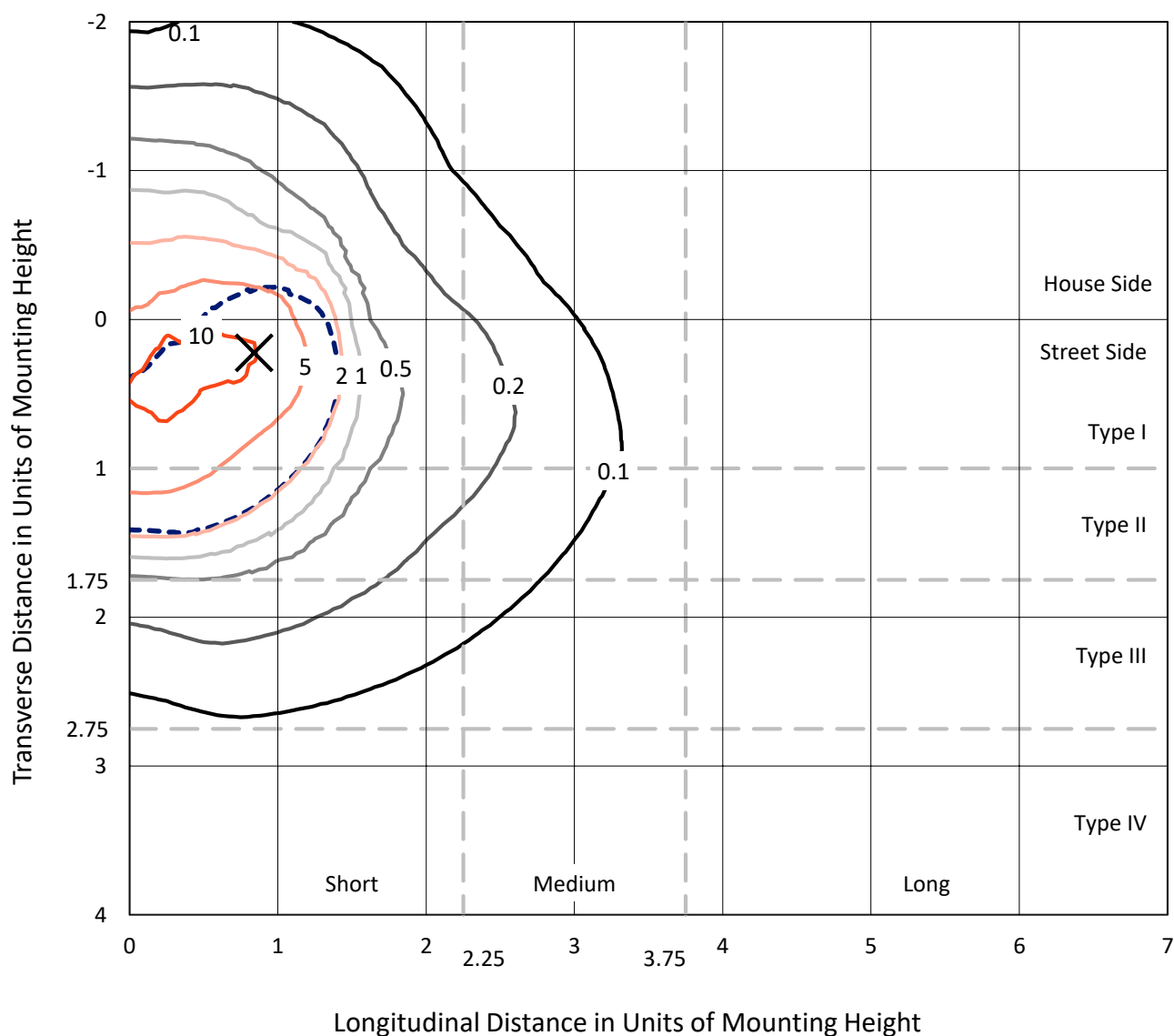
REPORT NUMBER: P240049

CATALOG NUMBER: UTLD-AF24-50-D-U-SL3-A

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

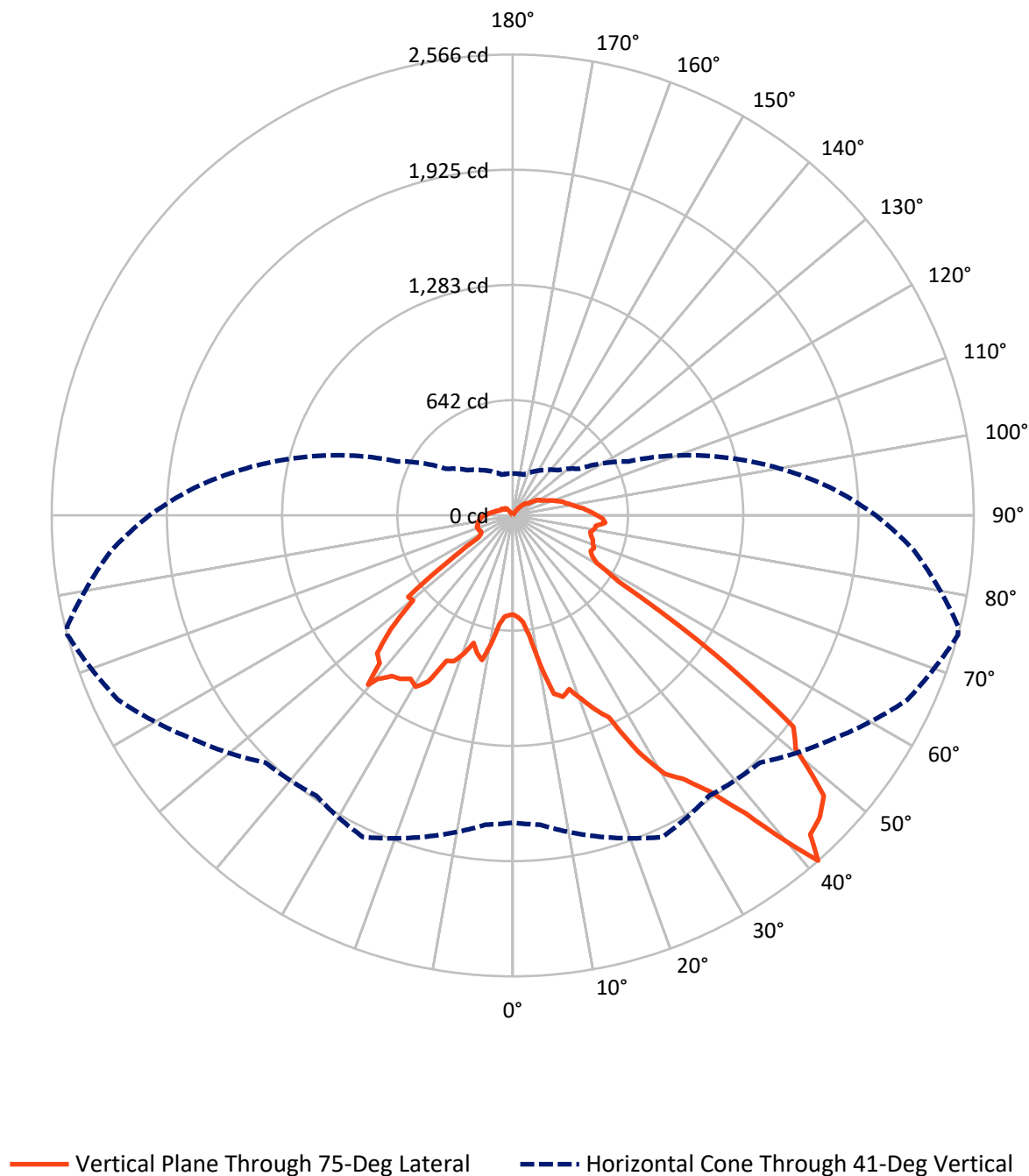


Based on 10 foot mounting height. Maximum calculated value = 12.2 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P240049

CATALOG NUMBER: UTLD-AF24-50-D-U-SL3-A

Luminous Intensity Polar Plot



REPORT NUMBER: P240049

CATALOG NUMBER: UTLD-AF24-50-D-U-SL3-A

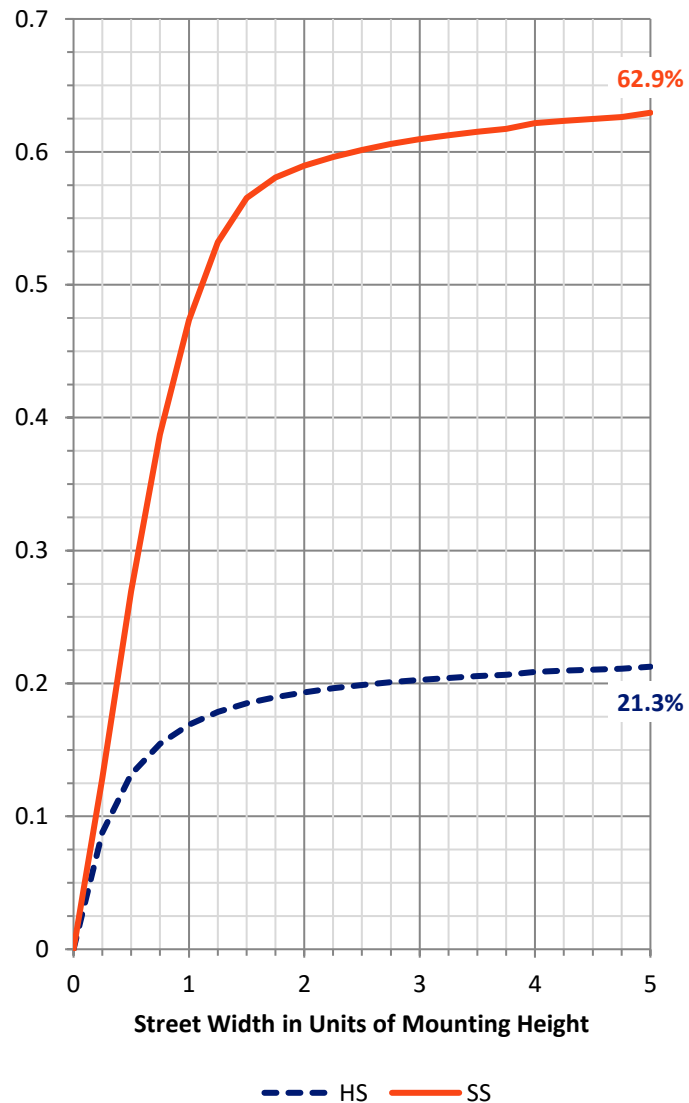
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1027.4	131.0	1158.4
	% Fixture	22.1	2.8	24.9
Street Side	Lumens	3021.6	477.5	3499.1
	% Fixture	64.9	10.3	75.1
Total	Lumens	4049.0	608.5	4657.5
	% Fixture	86.9	13.1	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.1	1.2
10°-20°	230.5	4.9
20°-30°	473.5	10.2
30°-40°	770.9	16.6
40°-50°	1001.3	21.5
50°-60°	709.9	15.2
60°-70°	288.6	6.2
70°-80°	261.1	5.6
80°-90°	255.1	5.5
90°-100°	218.8	4.7
100°-110°	158.4	3.4
110°-120°	108.1	2.3
120°-130°	70.2	1.5
130°-140°	41.9	0.9
140°-150°	10.6	0.2
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4049.0	86.9
0°-180°	4657.5	100.0

Coefficient of Utilization



REPORT NUMBER: P240049

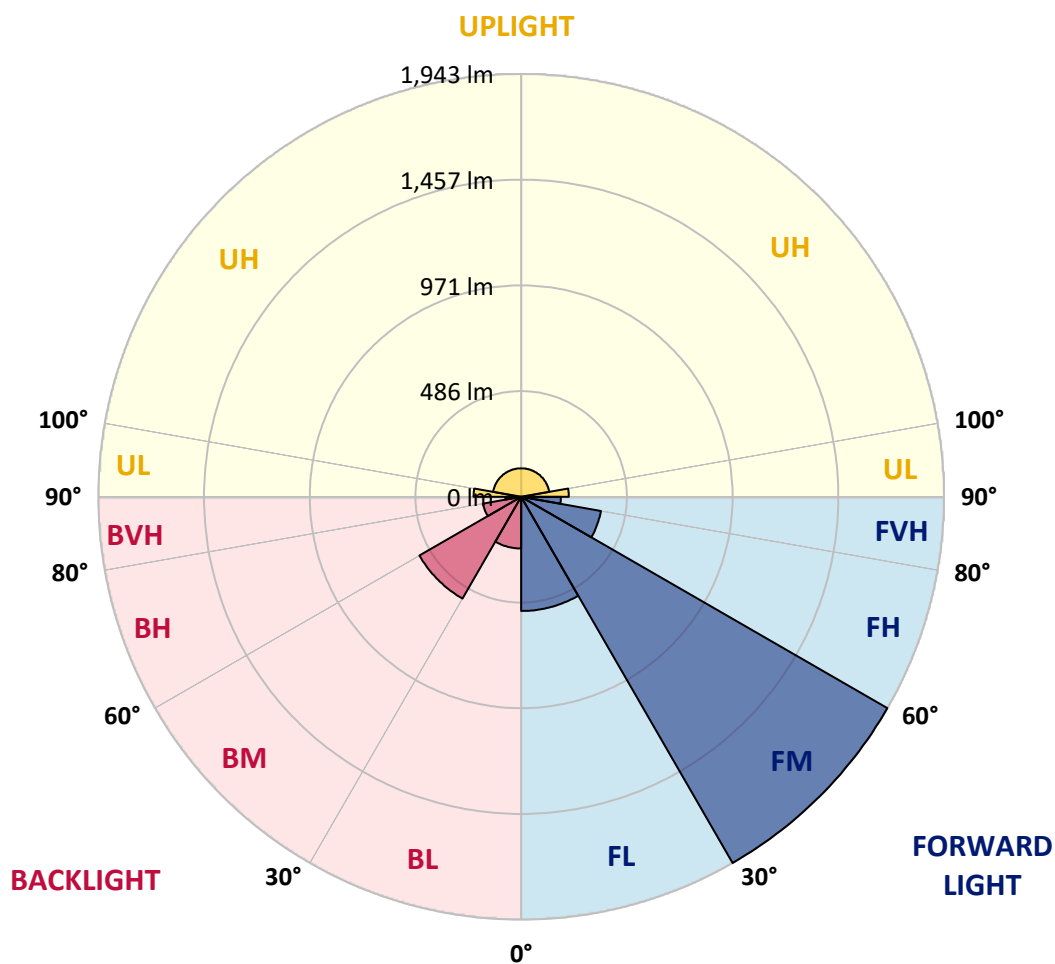
CATALOG NUMBER: UTLD-AF24-50-D-U-SL3-A

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	524.5	11.3			
FM	(30°-60°)	1942.5	41.7			
FH	(60°-80°)	371.9	8.0			G0/660
FVH	(80°-90°)	182.7	3.9			G2/225
BL	(0°-30°)	237.7	5.1	B1/500		
BM	(30°-60°)	539.6	11.6	B1/1000		
BH	(60°-80°)	177.7	3.8	B1/500		G1/500
BVH	(80°-90°)	72.4	1.6			G1/100
UL	(90°-100°)	218.8	4.7		U3/500	
UH	(100°-180°)	131.0	2.8		U3/500	

BUG Rating: B1-U3-G2

Type II Short





REPORT NUMBER: P240049

CATALOG NUMBER: UTLD-AF24-50-D-U-SL3-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5
2.5°	591.0	592.3	589.6	587.7	586.4	582.4	579.0	574.4	567.7	567.1	564.5
5°	644.7	644.7	644.7	640.1	634.7	626.1	618.8	608.2	595.6	594.9	585.0
7.5°	731.6	731.6	727.6	721.0	709.0	695.7	694.4	693.2	675.9	673.8	655.9
10°	825.1	822.5	824.4	829.7	835.8	853.7	864.9	866.2	847.6	843.0	817.1
12.5°	861.5	864.2	887.4	929.9	1001.5	1073.2	1110.3	1079.8	1018.1	1010.2	949.1
15°	917.3	920.6	959.1	1030.0	1149.4	1252.9	1221.1	1144.8	1047.3	1040.0	945.8
17.5°	1066.5	1081.8	1118.9	1231.6	1353.1	1311.2	1203.8	1105.6	1017.4	1008.8	929.9
20°	1171.3	1180.0	1251.6	1359.7	1445.2	1381.6	1307.9	1209.1	1090.4	1090.4	1028.7
22.5°	1258.2	1255.6	1313.9	1477.0	1526.9	1485.7	1400.1	1299.4	1173.3	1167.3	1087.1
25°	1394.8	1403.5	1504.2	1684.7	1638.9	1534.1	1421.4	1329.1	1246.3	1239.0	1158.7
27.5°	1474.4	1497.0	1613.0	1769.6	1740.3	1599.1	1500.3	1486.3	1492.3	1486.3	1398.8
30°	1494.3	1504.2	1647.6	1802.7	1782.8	1678.0	1678.0	1701.3	1670.8	1662.1	1544.8
32.5°	1544.0	1568.0	1705.3	1826.0	1777.5	1757.6	1768.3	1763.6	1750.4	1738.4	1601.7
35°	1625.0	1645.5	1774.2	1865.0	1776.9	1784.1	1879.7	1934.7	1886.9	1876.4	1672.7
37.5°	1837.8	1857.8	1973.9	1968.6	1823.9	1837.8	2011.0	2111.8	2103.2	2101.9	1900.2
40°	1795.5	1861.1	2001.7	2023.6	1894.3	1909.5	2116.5	2335.3	2436.2	2433.5	2183.5
41°	1710.6	1728.5	1851.1	1975.2	1905.6	1946.0	2171.5	2425.5	2566.2	2556.1	2243.1
42.5°	1741.1	1772.9	1845.8	1886.9	1892.3	1973.2	2214.6	2436.8	2429.5	2424.9	2168.9
45°	2001.0	2014.3	2044.8	1965.9	1832.6	1933.4	2190.8	2397.0	2396.4	2375.1	2259.7
47.5°	1875.7	1913.5	2043.4	1973.2	1826.6	1825.3	1994.4	2273.6	2329.4	2298.9	2011.6
50°	1774.2	1801.4	1877.0	1802.0	1737.7	1736.4	1895.6	2105.8	2042.1	2033.5	1638.9
52.5°	1573.9	1600.4	1654.1	1635.6	1599.1	1595.1	1716.5	1936.8	1956.6	1949.9	1654.1
55°	1196.5	1215.1	1417.4	1422.7	1395.5	1408.7	1506.9	1596.4	1373.6	1337.8	929.9
57.5°	703.1	750.8	947.2	1069.8	1126.2	1136.8	1102.9	944.5	697.0	671.9	429.1
60°	346.9	371.4	508.1	638.0	784.0	789.3	681.8	603.5	535.2	520.0	375.4
62.5°	247.3	262.0	351.5	420.5	502.1	515.4	477.5	510.0	495.4	486.2	365.5
65°	224.2	236.8	311.7	348.2	382.1	402.6	411.8	466.3	477.5	471.6	362.8
67.5°	204.9	217.6	284.6	312.4	337.6	370.7	390.7	444.4	487.5	483.5	384.7
70°	181.1	195.7	256.7	290.5	321.7	359.5	386.7	443.0	474.2	468.9	372.8
72.5°	158.6	171.8	221.6	261.4	307.1	350.2	390.7	431.8	466.3	461.7	377.4
75°	138.0	151.2	194.4	235.5	287.9	352.8	393.3	428.5	450.3	443.8	370.7
77.5°	124.0	137.3	174.4	214.9	273.2	356.8	429.7	443.0	442.4	435.8	362.8
80°	112.7	126.0	161.2	200.3	260.0	365.5	459.6	472.9	460.9	452.3	364.8
82.5°	109.5	122.0	154.6	197.6	262.7	370.7	468.3	501.5	467.6	457.0	362.8
85°	121.4	129.3	163.2	211.5	279.9	380.0	464.9	517.3	516.7	505.4	396.0
87.5°	144.5	151.2	184.3	233.4	298.5	385.3	506.1	527.3	499.4	494.1	400.0
90°	179.1	183.7	218.2	263.3	317.7	382.7	417.2	444.4	463.0	459.0	379.4
92.5°	212.9	218.9	250.0	283.3	307.7	329.0	362.8	425.9	428.5	425.1	364.8
95°	252.7	256.7	274.6	291.1	296.5	303.8	337.6	365.5	396.0	392.0	351.5
97.5°	274.6	276.6	284.6	282.5	270.0	271.3	309.0	338.9	357.5	352.8	307.7
100°	269.2	271.3	272.6	260.6	243.5	248.7	279.9	315.7	330.3	328.3	285.2
102.5°	252.1	255.3	256.0	244.1	228.1	229.4	260.0	287.1	302.5	299.8	266.0
105°	247.3	248.7	242.7	226.8	208.3	210.9	240.1	269.2	287.1	285.8	251.3
107.5°	222.9	224.2	215.5	200.3	193.6	201.0	227.5	246.0	258.0	258.0	224.2



REPORT NUMBER: P240049

CATALOG NUMBER: UTLD-AF24-50-D-U-SL3-A

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
110°	187.0	187.0	185.1	181.8	183.1	193.6	215.5	227.5	237.4	236.8	204.9
112.5°	181.1	179.7	177.8	175.1	171.1	179.7	194.4	208.9	210.9	210.2	183.1
115°	178.4	176.5	169.8	162.5	157.8	164.5	175.7	189.0	194.4	193.6	174.4
117.5°	157.8	157.8	152.5	147.2	145.3	153.9	167.8	176.5	177.1	178.4	159.9
120°	141.3	141.3	138.0	135.3	136.7	140.7	155.9	163.2	169.8	169.1	153.2
122.5°	128.7	129.3	126.6	121.4	126.0	130.0	138.6	145.9	153.2	152.5	141.3
125°	116.1	115.4	112.7	106.8	117.4	122.7	123.4	122.7	130.0	130.0	120.1
127.5°	102.8	102.1	99.5	96.2	110.1	117.4	116.1	105.5	110.1	109.5	104.8
130°	101.5	100.9	96.2	92.2	98.8	111.4	105.5	98.2	102.1	102.8	98.2
132.5°	100.9	100.1	95.5	88.9	86.8	100.1	89.5	90.8	95.5	95.5	91.6
135°	94.2	93.5	89.5	80.3	71.0	82.9	71.0	78.3	84.2	84.2	80.9
137.5°	82.9	82.2	78.3	70.3	57.1	59.0	53.7	65.7	72.3	72.9	70.3
140°	65.7	66.3	62.3	54.4	41.1	31.2	35.2	51.0	57.7	57.7	57.1
142.5°	49.1	49.1	45.1	37.1	23.8	11.3	19.9	31.2	39.2	39.8	41.1
145°	34.5	34.5	30.5	23.8	12.0	1.9	9.3	18.6	24.6	24.6	26.5
147.5°	22.5	22.5	19.2	13.3	3.3	0.6	2.7	9.3	14.6	14.6	16.0
150°	13.9	13.9	10.6	4.0	0.6	0.0	0.6	1.9	6.6	6.6	8.6
152.5°	4.6	4.0	1.9	1.3	0.6	0.0	0.0	0.6	0.6	0.6	1.9
155°	1.3	1.3	1.3	0.6	0.0	0.0	0.0	0.0	0.6	0.6	0.6
157.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
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: P240049

CATALOG NUMBER: UTLD-AF24-50-D-U-SL3-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5	552.5
2.5°	561.1	559.8	555.2	549.2	541.9	532.5	526.6	524.0	520.7	518.0	519.4
5°	579.7	575.0	564.5	545.2	527.3	514.0	503.4	494.1	489.5	485.5	485.5
7.5°	647.3	639.3	609.6	577.0	536.5	500.1	474.2	460.9	445.7	441.7	441.1
10°	794.6	784.6	721.6	643.3	567.1	495.4	430.5	395.3	378.7	370.1	372.0
12.5°	916.7	894.1	822.5	733.6	628.1	512.7	422.5	359.5	331.6	321.0	317.0
15°	906.6	868.9	791.3	707.1	624.8	540.5	450.3	379.4	321.7	302.5	298.5
17.5°	884.8	845.0	742.2	634.0	537.9	486.2	435.8	384.0	340.2	311.1	305.8
20°	996.3	951.1	817.1	709.7	574.4	443.8	386.1	356.8	329.0	314.4	311.1
22.5°	1043.9	998.2	874.8	738.9	604.9	492.1	397.9	344.2	322.3	319.7	315.7
25°	1115.6	1057.9	890.1	718.9	589.6	497.5	398.6	345.6	313.0	313.0	311.1
27.5°	1347.1	1262.8	1039.3	798.5	612.2	478.2	388.6	330.3	291.1	275.9	272.6
30°	1450.5	1370.2	1096.4	819.1	622.2	482.8	370.1	303.1	277.2	266.0	264.6
32.5°	1525.5	1420.7	1072.5	769.4	571.7	451.0	354.1	293.2	267.3	257.4	254.7
35°	1562.7	1424.7	1104.3	751.5	541.2	413.9	335.6	281.9	266.0	258.0	258.0
37.5°	1743.7	1572.6	1120.2	746.9	518.0	378.1	319.1	282.5	248.7	237.4	238.1
40°	1993.7	1750.4	1180.0	712.4	472.9	365.5	308.4	270.0	238.8	231.5	228.8
41°	2021.6	1776.1	1239.6	711.7	451.6	356.2	307.7	268.6	234.8	233.4	232.8
42.5°	1947.3	1693.3	1105.6	646.7	423.8	340.9	306.4	267.3	230.8	234.2	233.4
45°	2032.2	1780.1	1075.8	592.3	375.4	315.7	290.5	260.0	228.1	222.2	222.9
47.5°	1765.6	1509.0	925.9	515.4	332.3	288.5	268.6	243.5	221.6	218.2	218.2
50°	1406.1	1183.2	728.2	453.0	292.5	266.0	247.3	230.8	208.3	199.7	202.3
52.5°	1432.6	1198.5	738.2	421.9	266.0	242.7	230.8	210.2	183.7	167.8	170.4
55°	788.0	683.1	431.8	323.7	246.7	225.5	211.5	190.4	161.2	143.2	145.3
57.5°	357.5	297.2	229.4	222.9	213.6	207.6	192.3	173.1	145.3	125.3	125.3
60°	319.7	262.0	204.9	186.4	191.0	191.7	175.7	157.2	130.0	106.8	107.4
62.5°	312.4	255.3	199.0	177.8	181.8	181.8	166.4	147.9	123.4	99.5	99.5
65°	311.1	252.7	199.7	175.1	177.8	178.4	163.2	147.9	131.3	114.1	115.4
67.5°	329.6	267.3	206.2	173.1	175.7	175.7	163.2	151.9	142.0	131.3	132.7
70°	319.7	262.7	204.9	173.1	171.8	171.8	162.5	152.5	147.2	138.0	138.6
72.5°	323.7	270.6	208.9	171.8	166.4	165.1	159.2	153.2	148.5	143.9	144.5
75°	317.7	267.9	202.3	165.1	158.6	155.9	151.9	150.6	151.2	149.2	147.9
77.5°	308.4	263.3	197.6	158.6	151.2	145.3	142.6	143.2	145.9	143.9	142.0
80°	307.1	264.0	195.7	154.6	142.0	132.0	128.7	130.0	130.6	126.6	122.7
82.5°	303.1	258.7	186.4	143.9	128.0	115.4	112.7	114.8	115.4	111.4	107.4
85°	326.3	272.6	183.7	134.0	116.1	102.8	98.2	98.8	94.2	88.2	84.2
87.5°	335.6	275.3	173.1	118.8	104.1	92.9	86.8	82.9	75.6	65.7	63.0
90°	319.1	261.4	155.9	102.1	91.6	82.9	75.6	70.3	61.1	51.0	47.8
92.5°	309.0	250.7	143.2	91.6	80.3	72.9	66.3	58.4	49.1	37.8	35.8
95°	303.1	246.7	135.3	81.6	71.6	64.3	57.7	50.4	41.1	32.5	31.2
97.5°	264.0	213.6	119.4	72.9	63.0	56.4	50.4	43.1	34.5	27.8	26.5
100°	245.4	199.0	110.8	65.7	55.8	49.7	44.4	38.5	31.2	26.5	25.9
102.5°	229.4	185.1	100.9	59.0	49.7	43.8	39.2	33.9	28.5	24.6	25.2
105°	217.6	176.5	96.9	54.4	44.4	39.8	34.5	30.5	25.2	22.5	22.5
107.5°	193.0	156.5	85.5	49.1	40.5	35.8	31.8	27.8	23.8	21.9	22.5



REPORT NUMBER: P240049

CATALOG NUMBER: UTLD-AF24-50-D-U-SL3-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	178.4	145.3	81.6	47.1	38.5	33.1	29.2	25.2	21.2	21.2	21.2
112.5°	158.6	130.6	75.6	44.4	35.8	31.2	27.2	22.5	18.6	19.2	19.9
115°	151.9	126.0	72.9	42.5	34.5	29.9	25.2	21.2	16.6	17.9	18.6
117.5°	139.9	116.7	71.0	42.5	33.1	27.8	23.8	19.9	16.0	17.3	17.3
120°	136.0	114.8	71.0	41.7	31.8	26.5	22.5	17.3	14.6	16.0	16.0
122.5°	126.6	107.4	67.6	41.1	30.5	25.2	21.9	14.6	12.6	13.9	13.9
125°	108.7	93.5	61.1	38.5	29.2	25.2	21.2	12.0	12.0	13.3	13.3
127.5°	94.8	82.2	55.8	37.8	29.9	26.5	19.9	9.9	10.6	12.0	12.0
130°	90.2	80.3	57.7	41.1	32.5	27.8	14.6	9.3	9.9	11.3	12.0
132.5°	85.5	77.6	59.0	44.4	34.5	27.2	12.0	8.6	9.3	10.6	10.6
135°	76.3	70.3	55.0	42.5	32.5	21.9	8.6	7.3	8.6	9.9	9.9
137.5°	67.0	62.3	50.4	39.2	29.9	17.3	5.9	6.6	7.3	8.0	8.0
140°	55.0	51.0	41.7	31.8	21.9	9.3	4.0	5.3	5.9	6.6	6.6
142.5°	39.8	37.1	29.9	21.2	12.6	3.3	2.7	4.0	4.6	5.3	5.3
145°	26.5	24.6	19.2	13.3	4.6	1.9	1.3	2.7	4.0	4.0	4.6
147.5°	16.0	15.2	11.3	5.9	1.9	1.3	1.3	1.9	2.7	3.3	3.3
150°	8.0	8.0	5.3	1.9	1.3	0.6	0.6	0.6	1.3	1.9	1.9
152.5°	1.9	1.3	1.3	1.3	0.6	0.6	0.6	0.6	0.6	0.6	0.6
155°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0
157.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.6	0.6	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)