

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: P266375

Luminaire Tested: **UTLD-AF24-50-D-U-T2U-FP-7027**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P266375
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-AF24-50-D-U-T2U-FP-7027
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 2700K, 670mA 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: 4193.9 lumens
Efficiency: N/A
Efficacy: 77.7 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: B1 - U3 - G3

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

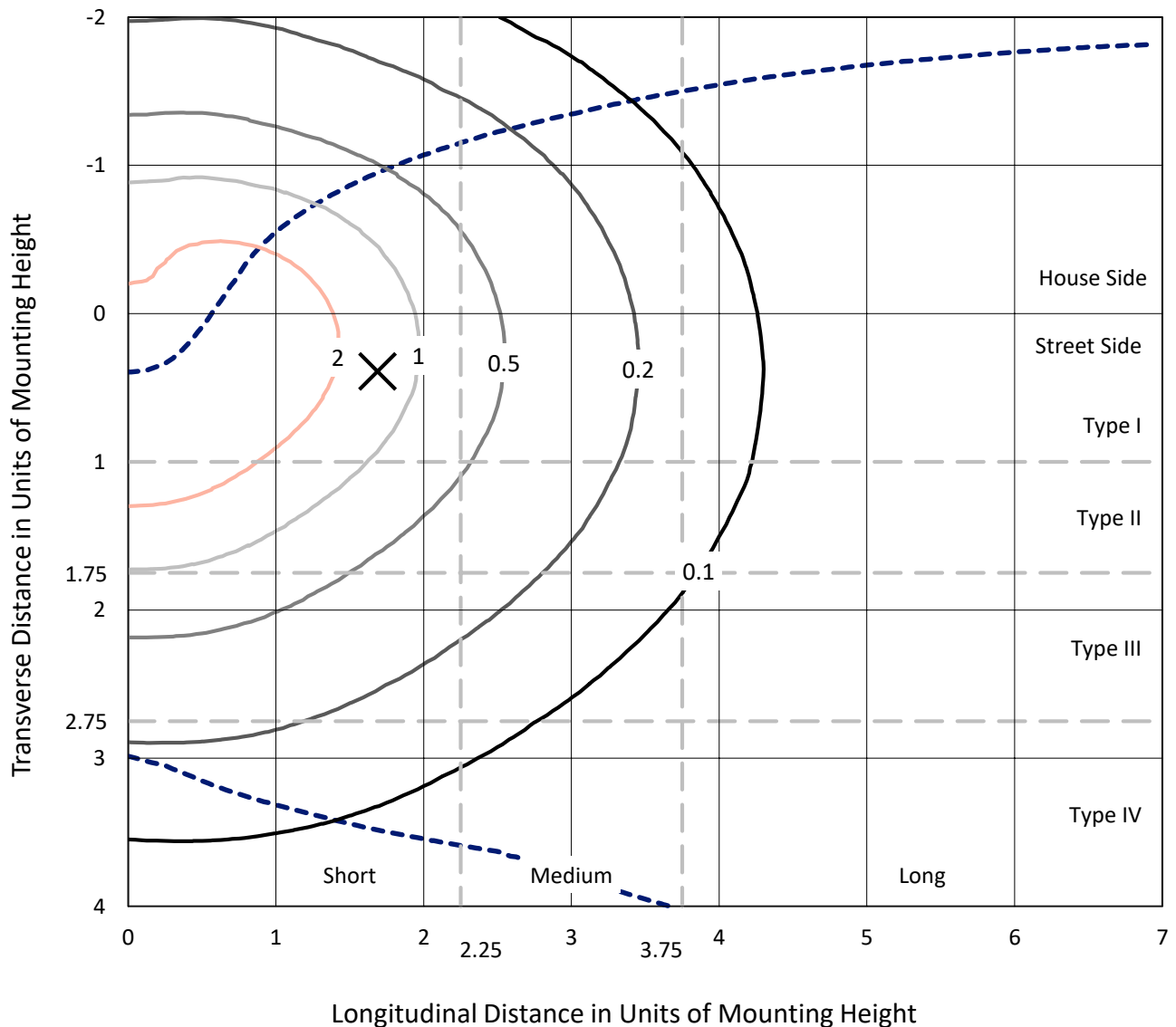


REPORT NUMBER: P266375

CATALOG NUMBER: UTLD-AF24-50-D-U-T2U-FP-7027

Iso-Footcandle Lines of Horizontal Illumination

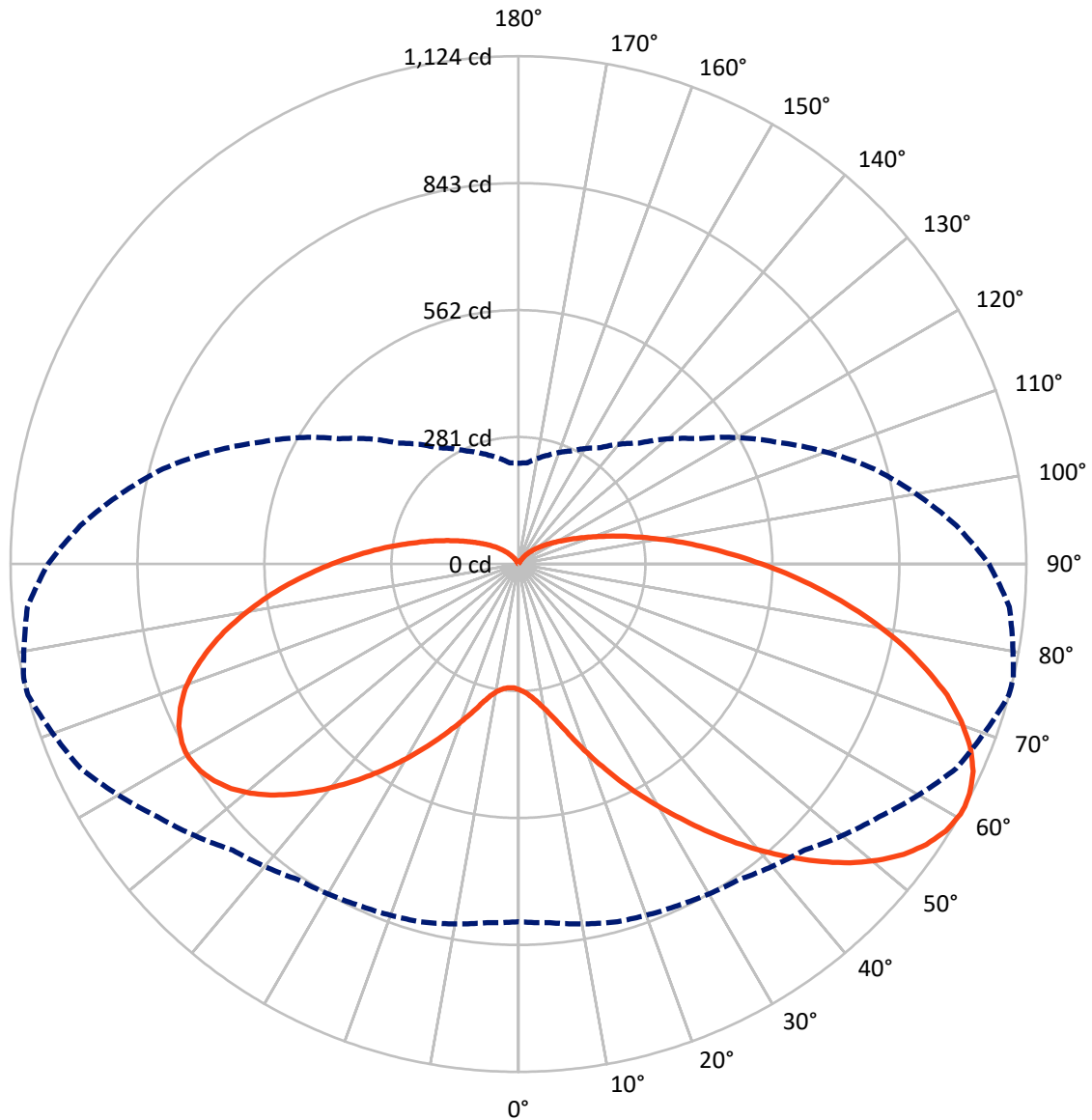
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 4.6 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P266375
CATALOG NUMBER: UTLD-AF24-50-D-U-T2U-FP-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P266375

CATALOG NUMBER: UTLD-AF24-50-D-U-T2U-FP-7027

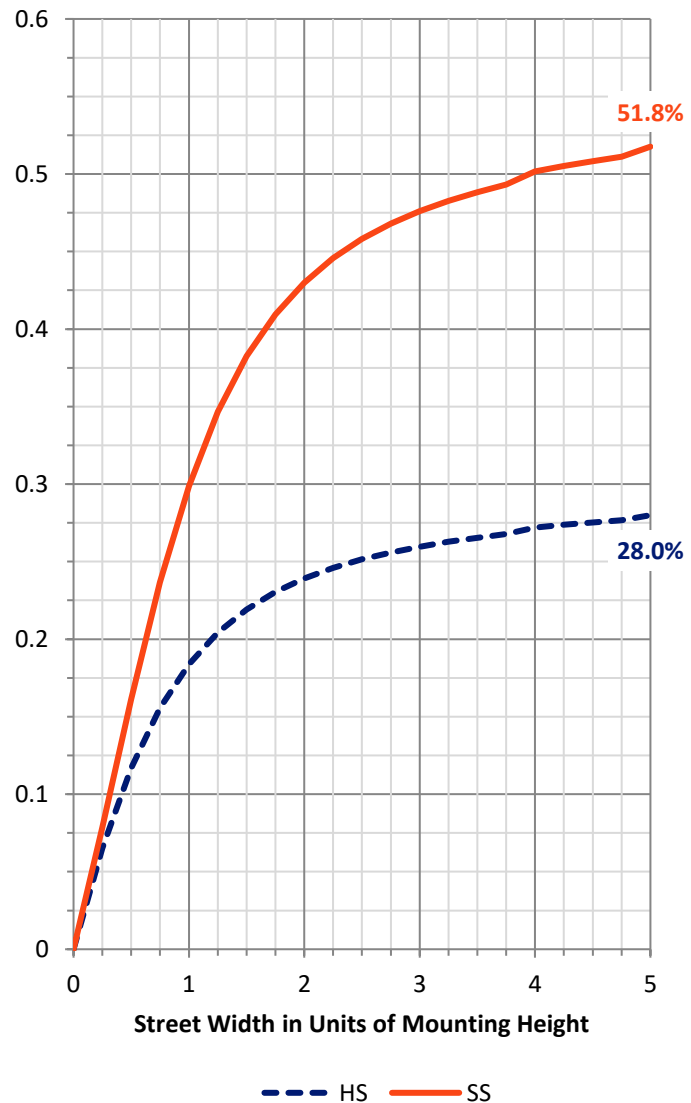
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1247.2	267.9	1515.1
	% Fixture	29.7	6.4	36.1
Street Side	Lumens	2300.7	378.1	2678.8
	% Fixture	54.9	9.0	63.9
Total	Lumens	3547.9	645.9	4193.9
	% Fixture	84.6	15.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	27.7	0.7
10°-20°	97.7	2.3
20°-30°	209.3	5.0
30°-40°	360.8	8.6
40°-50°	523.8	12.5
50°-60°	644.6	15.4
60°-70°	667.9	15.9
70°-80°	582.3	13.9
80°-90°	434.0	10.3
90°-100°	287.0	6.8
100°-110°	175.1	4.2
110°-120°	100.3	2.4
120°-130°	53.0	1.3
130°-140°	23.4	0.6
140°-150°	6.5	0.2
150°-160°	0.5	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3547.9	84.6
0°-180°	4193.9	100.0

Coefficient of Utilization



REPORT NUMBER: P266375

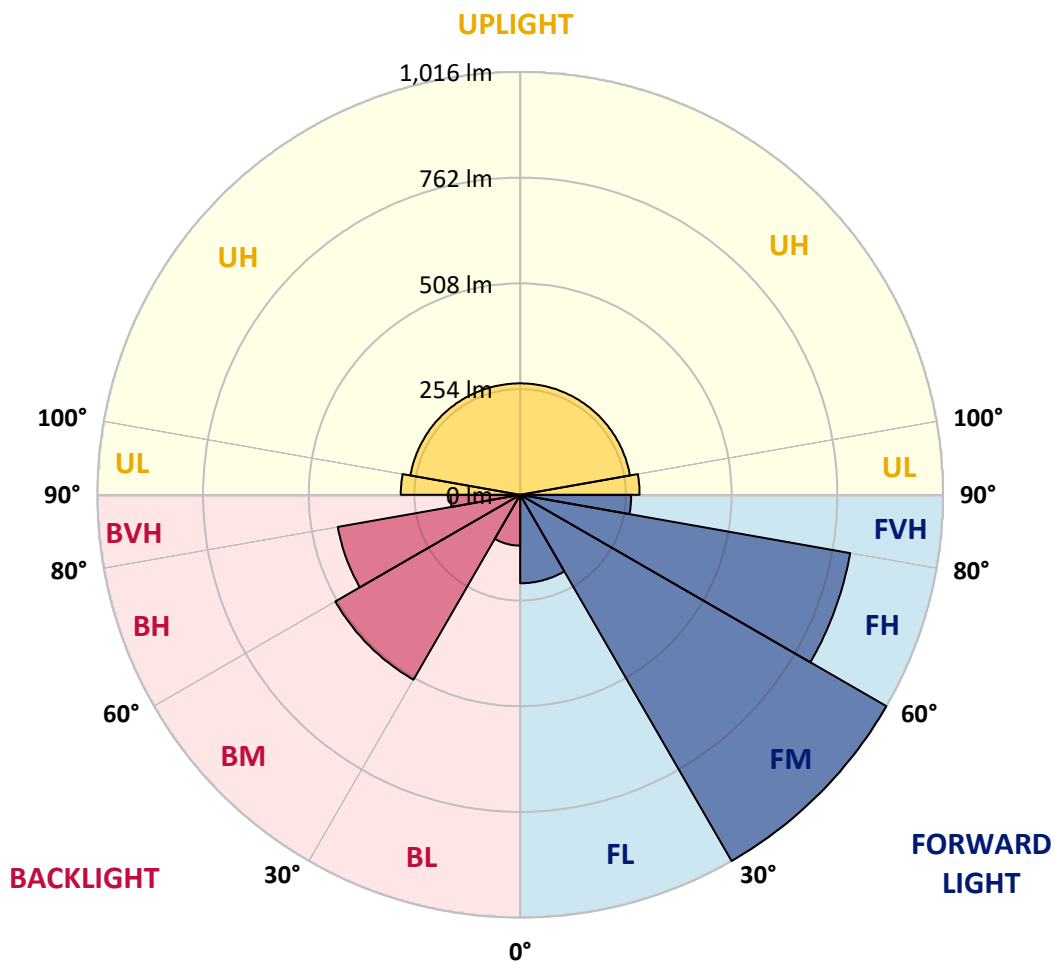
CATALOG NUMBER: UTLD-AF24-50-D-U-T2U-FP-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	212.5	5.1			
FM	(30°-60°)	1016.1	24.2			
FH	(60°-80°)	805.3	19.2			G1/1800
FVH	(80°-90°)	266.8	6.4			G3/500
BL	(0°-30°)	122.1	2.9	B1/500		
BM	(30°-60°)	513.0	12.2	B1/1000		
BH	(60°-80°)	444.8	10.6	B1/500		G1/500
BVH	(80°-90°)	167.2	4.0			G2/225
UL	(90°-100°)	287.0	6.8		U3/500	
UH	(100°-180°)	267.9	6.4		U3/500	

BUG Rating: B1-U3-G3

Type IV Short





REPORT NUMBER: P266375
 CATALOG NUMBER: UTLD-AF24-50-D-U-T2U-FP-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4
2.5°	302.3	302.3	301.2	300.8	298.5	295.8	293.0	289.3	285.4	284.4	282.2
5°	328.5	328.5	327.4	324.6	320.9	315.9	309.9	303.9	296.4	294.7	288.7
7.5°	357.9	356.7	354.1	351.3	345.8	338.8	330.7	321.5	311.1	308.8	300.2
10°	387.3	387.3	384.6	380.3	373.6	364.4	354.7	343.2	329.6	326.9	315.5
12.5°	421.0	420.0	415.6	412.4	404.7	394.4	383.4	369.4	353.0	350.2	335.5
15°	457.1	456.5	452.7	445.6	436.8	427.1	415.6	400.4	382.9	378.5	362.2
17.5°	497.3	494.1	491.9	484.2	475.1	462.4	453.7	438.0	418.9	413.9	393.8
20°	534.4	534.9	530.0	523.5	514.8	506.0	493.4	479.3	458.7	452.1	429.3
22.5°	576.4	576.4	571.4	564.9	556.2	551.7	537.6	523.0	497.9	493.0	467.4
25°	619.9	618.3	613.5	607.3	603.0	597.6	584.4	567.1	541.5	536.6	507.7
27.5°	660.3	660.8	654.8	649.8	649.4	642.3	631.4	612.9	588.3	581.3	550.2
30°	701.7	702.1	697.9	691.9	692.4	688.0	678.8	659.6	636.3	628.0	594.9
32.5°	743.0	741.9	735.9	735.4	733.7	730.5	723.5	711.5	685.9	677.1	642.7
35°	780.1	780.1	774.1	776.2	773.0	772.5	770.2	761.0	738.1	729.5	692.4
37.5°	814.5	813.9	810.6	811.1	809.0	808.4	812.2	811.1	789.9	782.9	744.7
40°	845.9	842.7	839.9	842.3	839.9	843.2	852.5	859.0	841.2	835.7	796.9
42.5°	867.8	866.7	865.5	869.4	866.1	873.8	888.5	904.2	893.4	888.0	849.3
45°	885.2	883.0	885.2	889.1	886.8	896.7	922.7	946.8	946.8	939.2	899.4
47.5°	892.2	891.7	897.1	900.5	899.4	915.2	950.0	986.5	994.2	988.1	947.8
50°	890.7	890.7	899.4	904.2	905.3	926.1	970.2	1018.0	1035.6	1030.6	990.9
52.5°	880.2	880.2	893.4	899.4	903.8	929.8	983.9	1044.8	1070.4	1067.6	1027.9
55°	860.7	860.1	877.0	884.7	894.0	926.1	989.3	1062.2	1097.6	1095.5	1059.6
57.5°	830.3	831.3	852.0	864.0	875.9	914.0	986.5	1071.0	1116.1	1115.1	1079.7
60°	791.4	796.9	820.4	833.9	852.0	895.0	975.1	1069.3	1123.3	1123.8	1090.6
61°	775.1	780.5	804.6	821.0	839.9	885.8	968.6	1066.1	1122.7	1123.8	1091.7
62.5°	749.0	752.3	780.5	800.2	821.0	868.9	955.4	1057.3	1118.8	1120.5	1090.1
65°	700.0	706.0	734.9	759.3	784.0	836.2	927.1	1034.9	1103.1	1105.9	1077.4
67.5°	646.2	653.2	686.3	714.7	743.0	798.7	892.2	1002.9	1074.8	1078.1	1053.5
70°	592.7	601.3	636.3	664.6	699.4	756.6	849.7	961.5	1036.0	1039.3	1018.0
72.5°	538.3	548.1	584.0	616.6	652.1	710.3	802.4	912.5	987.6	992.0	972.3
75°	483.7	496.3	530.0	567.5	603.0	662.9	753.4	860.1	928.3	932.6	917.3
77.5°	434.7	445.6	478.8	518.1	556.7	613.9	700.0	798.1	868.9	871.0	857.4
80°	385.2	396.6	432.5	469.5	510.4	565.5	645.0	735.4	796.9	802.9	788.8
82.5°	340.9	352.4	386.2	426.5	465.7	518.6	588.8	671.2	725.7	732.1	722.3
85°	303.9	312.2	345.4	384.0	422.2	472.2	539.8	611.1	660.3	661.3	651.5
87.5°	266.9	275.6	307.2	344.8	383.4	429.3	487.1	548.5	588.3	592.2	582.3
90°	236.4	241.9	271.8	308.8	346.4	388.3	438.6	493.0	525.1	525.1	517.6
92.5°	209.8	212.4	242.5	277.8	313.8	349.7	393.8	435.8	463.5	463.0	454.4
95°	185.2	188.5	213.5	247.8	282.7	315.9	351.9	385.2	405.9	406.9	396.6
97.5°	163.4	165.6	189.1	222.8	253.9	284.9	314.9	341.5	355.2	355.6	348.2
100°	146.0	146.0	168.3	198.3	228.3	256.0	281.6	301.8	307.8	307.2	300.8
102.5°	130.8	129.6	148.7	177.5	205.4	229.3	250.1	263.2	268.1	266.3	262.0
105°	116.1	117.0	131.8	159.1	184.2	205.4	221.2	232.0	232.0	231.0	226.6
107.5°	105.1	104.7	116.1	141.2	165.1	183.6	196.1	201.6	200.0	198.3	195.7



REPORT NUMBER: P266375

CATALOG NUMBER: UTLD-AF24-50-D-U-T2U-FP-7027

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
110°	94.2	94.2	102.9	126.4	147.1	164.0	172.7	176.0	171.0	170.5	170.0
112.5°	85.0	85.0	92.0	111.7	131.3	145.4	152.5	153.2	147.6	147.1	147.6
115°	78.0	78.0	81.7	99.2	117.0	129.6	135.6	132.9	127.5	126.9	128.5
117.5°	70.8	70.8	74.1	86.5	103.6	115.0	118.8	115.0	110.0	110.0	112.2
120°	64.8	64.8	65.9	75.6	91.0	100.8	103.6	99.2	95.3	95.3	97.5
122.5°	59.4	58.7	59.4	65.9	78.4	87.8	88.8	85.0	82.3	82.9	86.1
125°	53.9	53.9	53.4	57.2	67.6	75.2	76.3	72.0	72.0	72.0	74.6
127.5°	49.0	49.0	47.9	49.5	57.2	63.7	63.7	60.5	61.5	62.6	64.8
130°	44.6	44.6	43.6	43.6	47.4	52.8	52.8	50.7	53.4	53.9	56.1
132.5°	40.3	39.7	38.6	37.0	38.6	42.0	42.0	41.4	45.8	46.4	47.9
135°	35.9	35.5	34.3	31.6	31.0	32.1	32.1	33.7	38.2	38.6	40.9
137.5°	31.0	31.0	29.5	26.7	23.4	23.4	23.4	26.7	31.0	32.1	33.2
140°	26.7	26.7	25.1	21.7	17.4	15.8	16.3	20.8	25.1	25.6	26.7
142.5°	21.7	21.7	20.1	16.9	12.5	9.3	10.3	14.7	18.5	19.7	20.8
145°	16.9	16.9	15.2	11.9	7.6	4.9	6.0	10.3	13.0	13.7	14.7
147.5°	12.5	12.5	10.9	8.2	4.3	1.6	3.2	6.0	8.8	9.3	10.3
150°	8.2	8.2	7.0	4.3	2.2	0.0	1.1	3.2	4.9	5.5	6.0
152.5°	4.3	4.3	3.2	2.2	0.5	0.0	0.0	1.1	2.2	2.2	2.8
155°	2.2	1.6	1.1	0.5	0.0	0.0	0.0	0.0	0.5	0.5	1.1
157.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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°	0.5	0.5	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: P266375

CATALOG NUMBER: UTLD-AF24-50-D-U-T2U-FP-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4	278.4
2.5°	280.0	277.8	273.4	270.2	266.3	263.2	260.4	258.3	257.6	256.0	256.6
5°	284.9	281.1	272.9	265.8	258.3	251.6	246.2	242.5	239.7	238.6	237.5
7.5°	294.1	287.6	275.6	264.2	253.3	243.5	234.7	229.3	224.9	222.8	222.8
10°	307.2	299.0	282.2	266.9	251.6	238.6	227.7	218.9	213.5	210.8	211.3
12.5°	325.1	314.2	293.7	272.9	254.4	237.5	222.8	213.5	207.0	203.7	203.7
15°	350.8	338.8	311.1	284.4	259.3	238.6	222.8	212.4	207.6	205.4	204.9
17.5°	381.9	366.1	334.4	302.3	270.7	245.1	229.3	219.5	212.4	209.8	209.1
20°	413.5	395.4	358.5	322.5	287.1	259.3	240.2	227.1	217.8	214.1	213.5
22.5°	449.4	428.8	385.2	342.7	304.5	277.8	251.2	234.3	223.4	218.5	217.8
25°	486.4	463.5	414.6	366.6	327.9	295.8	264.7	241.4	228.3	222.2	221.7
27.5°	525.7	501.2	445.1	390.6	350.2	312.7	277.2	247.8	232.7	226.1	225.6
30°	569.3	539.8	478.3	418.4	372.5	328.5	289.3	255.5	237.0	229.3	228.3
32.5°	614.5	581.8	512.0	447.7	393.3	342.7	299.0	263.7	241.4	232.7	232.0
35°	661.8	625.4	546.9	476.6	411.9	355.2	307.8	270.7	244.6	235.4	234.3
37.5°	711.5	671.2	583.4	503.9	429.7	366.1	314.9	276.8	247.8	237.0	235.9
40°	761.0	714.7	619.4	531.6	446.2	375.3	320.9	281.1	250.1	238.6	237.5
42.5°	809.0	761.6	655.9	557.3	460.3	382.4	325.1	284.9	252.2	239.7	238.1
45°	855.7	806.1	690.7	579.0	472.2	387.9	327.9	287.1	254.8	239.7	238.1
47.5°	902.6	848.2	725.0	598.1	481.0	391.8	329.0	288.1	256.6	239.2	237.5
50°	945.1	885.8	754.4	615.0	487.5	392.7	328.5	287.6	257.2	238.1	235.9
52.5°	980.1	919.0	779.0	626.9	491.4	392.2	326.9	286.5	256.6	235.9	234.3
55°	1010.0	944.6	796.9	634.7	491.4	389.4	324.1	284.4	254.4	233.1	231.0
57.5°	1029.5	963.6	809.0	637.8	489.1	384.6	319.2	280.5	252.2	229.3	227.1
60°	1041.0	973.0	813.9	635.7	483.2	378.0	313.8	276.1	248.9	224.9	222.8
61°	1042.2	974.0	813.9	633.6	480.5	375.3	311.6	274.5	247.4	223.4	220.7
62.5°	1041.0	973.0	811.1	628.6	475.1	370.5	307.2	270.7	244.0	219.5	217.8
65°	1030.0	962.5	800.2	616.1	463.0	360.6	299.7	264.7	238.6	214.1	211.3
67.5°	1006.7	941.9	780.5	598.7	448.9	349.3	291.0	257.6	232.7	207.6	204.3
70°	973.0	911.3	756.2	578.5	433.1	336.7	281.1	249.5	224.9	201.0	196.6
72.5°	931.0	874.3	721.8	552.8	414.6	323.6	270.7	240.7	216.9	193.3	187.9
75°	878.6	826.9	683.7	524.6	393.8	308.3	259.8	231.0	207.6	185.2	179.2
77.5°	821.0	774.6	642.3	493.4	373.2	293.7	247.8	220.1	197.7	176.0	170.0
80°	757.7	717.4	595.3	460.8	351.3	278.4	235.9	209.8	187.9	166.6	159.5
82.5°	693.0	657.0	548.5	427.7	327.9	262.6	222.8	198.3	177.1	156.8	149.3
85°	626.9	595.9	501.2	393.3	304.5	246.8	210.8	186.8	165.6	146.6	140.0
87.5°	561.6	534.9	452.7	360.6	283.2	231.6	198.3	175.3	154.7	136.3	129.6
90°	500.6	477.8	408.0	330.0	262.0	215.8	185.8	164.0	143.8	125.4	120.9
92.5°	442.9	423.3	365.0	298.0	240.7	200.4	173.3	152.1	131.8	115.0	112.2
95°	390.6	372.1	325.7	269.6	221.2	186.8	161.2	141.2	120.9	105.1	102.9
97.5°	339.4	327.9	289.3	242.5	202.1	172.1	149.3	130.2	110.6	95.8	94.9
100°	296.9	284.9	253.9	217.4	184.7	159.1	137.8	119.3	100.8	87.1	86.5
102.5°	258.3	250.1	223.9	196.1	167.8	144.8	126.4	109.0	91.0	79.1	79.1
105°	225.6	217.8	198.3	174.4	151.5	132.9	115.0	98.1	81.1	70.8	71.3
107.5°	194.5	189.5	173.3	154.1	136.3	120.5	104.1	87.8	71.3	63.2	63.7



REPORT NUMBER: P266375

CATALOG NUMBER: UTLD-AF24-50-D-U-T2U-FP-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	169.4	164.5	152.1	137.8	122.6	109.0	93.8	78.0	62.2	57.2	57.2
112.5°	147.1	143.8	133.5	122.0	110.0	98.1	84.4	68.6	54.4	50.7	51.3
115°	128.5	125.9	117.0	108.3	98.6	88.3	75.2	59.9	47.4	45.8	45.8
117.5°	111.7	110.0	102.9	95.3	87.8	78.4	66.5	51.7	40.9	40.9	40.9
120°	97.5	95.8	90.4	83.9	77.3	69.2	57.2	44.1	35.9	35.9	36.6
122.5°	85.5	84.4	79.1	74.1	68.1	59.9	49.0	37.0	31.6	32.1	32.1
125°	74.6	73.5	69.7	64.3	58.7	51.3	41.4	30.5	27.3	28.3	28.3
127.5°	64.8	64.3	60.5	55.5	50.1	43.6	33.7	25.6	24.0	25.1	25.1
130°	56.7	56.1	52.3	47.4	42.5	35.5	27.3	21.2	20.8	21.7	21.7
132.5°	48.5	47.9	44.6	39.7	34.9	28.3	21.2	16.9	18.0	19.0	19.0
135°	40.9	40.3	38.2	32.7	28.3	22.4	16.3	14.2	15.2	16.3	16.3
137.5°	33.7	33.2	31.0	26.1	21.2	16.3	11.9	11.5	12.5	13.7	13.7
140°	27.3	26.7	24.6	20.1	15.2	11.5	8.2	9.3	10.3	11.5	11.5
142.5°	20.8	20.8	19.0	15.2	10.3	7.0	5.5	7.0	8.2	9.3	9.3
145°	15.2	15.2	13.0	10.3	6.0	3.9	3.2	4.9	6.6	7.0	7.0
147.5°	10.3	10.3	8.8	6.6	3.2	1.6	2.2	3.2	4.3	4.9	5.5
150°	6.0	6.0	4.9	3.2	1.6	0.5	0.5	2.2	2.8	3.2	3.2
152.5°	2.8	2.8	2.2	1.1	0.5	0.5	0.5	0.5	1.6	1.6	1.6
155°	1.1	1.1	1.1	0.5	0.5	0.5	0.5	0.0	0.5	0.5	0.5
157.5°	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.5	0.5	0.5	0.5	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)