

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: P266389

Luminaire Tested: **UTLD-AF24-50-D-U-T4W-FP-7027**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P266389
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-26)
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-T4W-FP-7027
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 2700K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS AND FROSTED LENS PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4115.3 lumens
Efficiency: N/A
Efficacy: 76.2 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

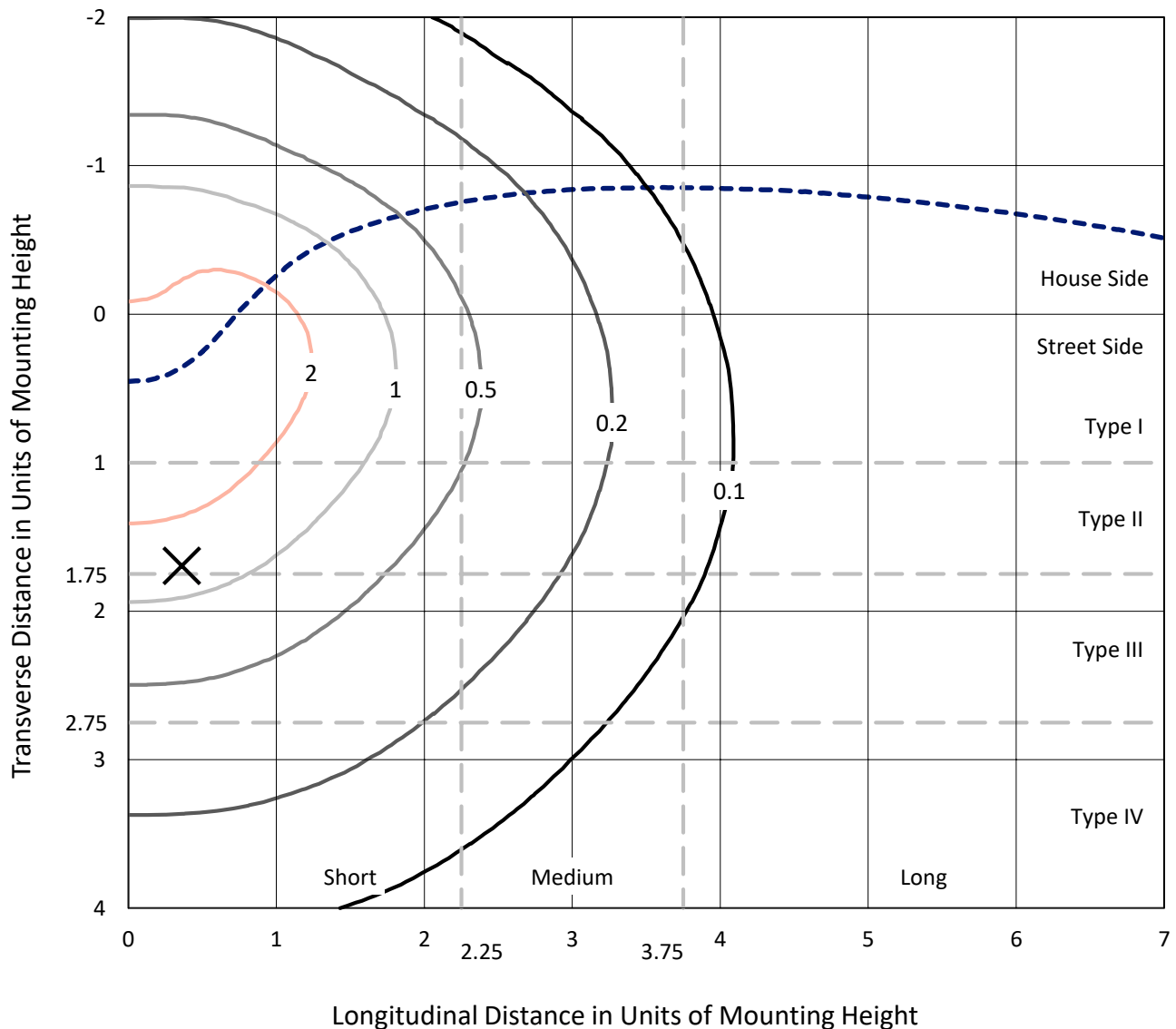


REPORT NUMBER: P266389

CATALOG NUMBER: UTLD-AF24-50-D-U-T4W-FP-7027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

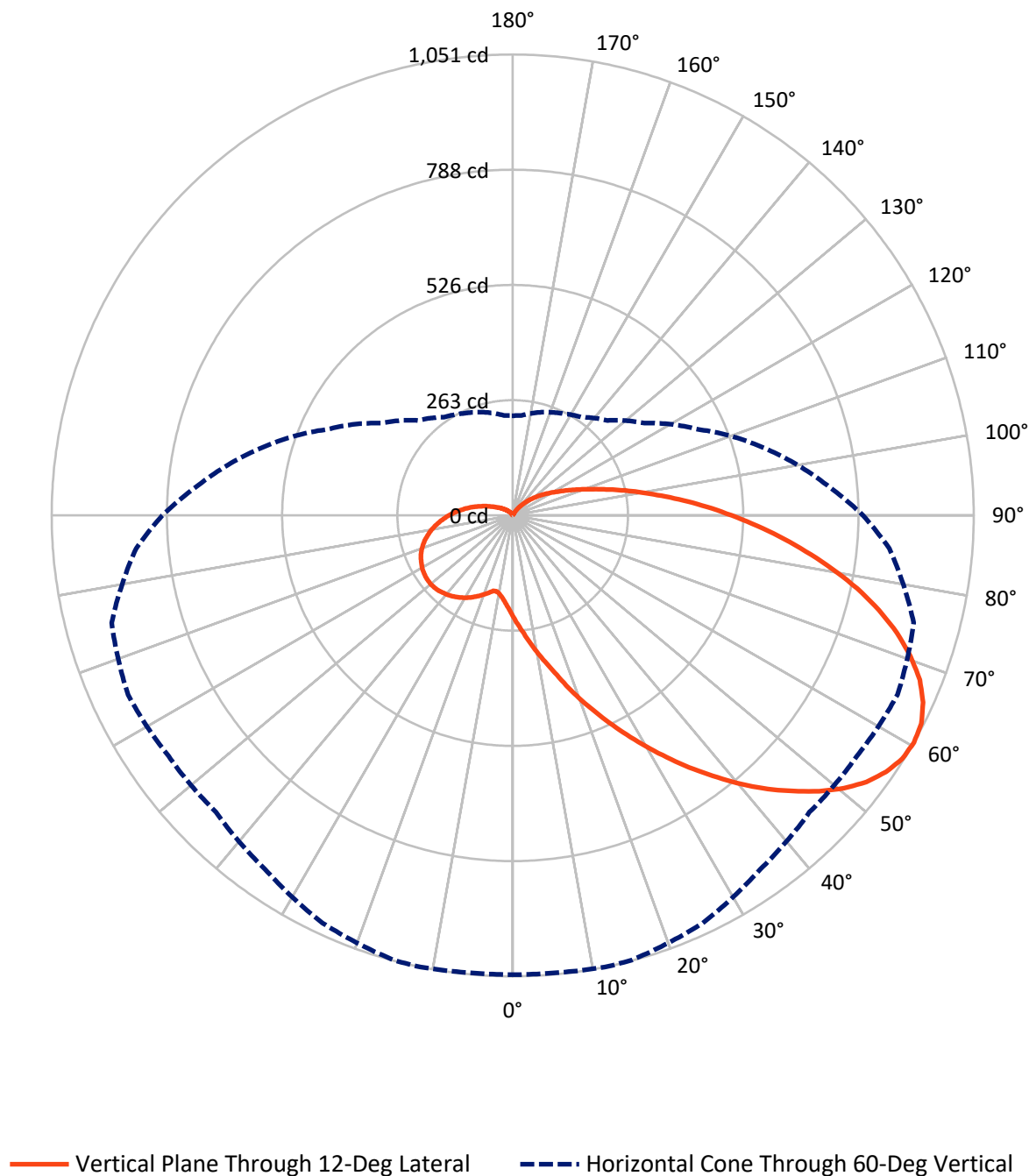


Based on 10 foot mounting height. Maximum calculated value = 4 fc
Type IV - Short - Non-Cutoff

REPORT NUMBER: P266389

CATALOG NUMBER: UTLD-AF24-50-D-U-T4W-FP-7027

Luminous Intensity Polar Plot



REPORT NUMBER: P266389

CATALOG NUMBER: UTLD-AF24-50-D-U-T4W-FP-7027

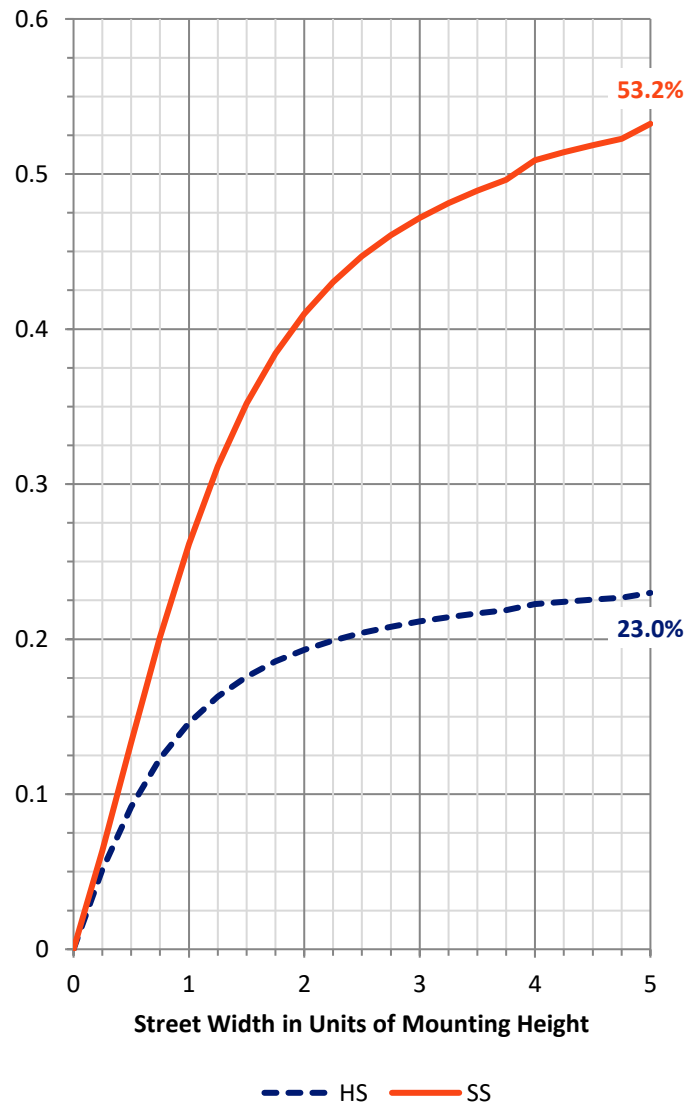
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1011.8	233.0	1244.8
	% Fixture	24.6	5.7	30.2
Street Side	Lumens	2387.7	482.8	2870.5
	% Fixture	58.0	11.7	69.8
Total	Lumens	3399.5	715.8	4115.3
	% Fixture	82.6	17.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.0	0.6
10°-20°	80.7	2.0
20°-30°	173.1	4.2
30°-40°	303.0	7.4
40°-50°	456.4	11.1
50°-60°	595.8	14.5
60°-70°	663.5	16.1
70°-80°	619.4	15.1
80°-90°	484.6	11.8
90°-100°	327.5	8.0
100°-110°	197.9	4.8
110°-120°	109.0	2.6
120°-130°	54.2	1.3
130°-140°	21.7	0.5
140°-150°	5.2	0.1
150°-160°	0.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3399.5	82.6
0°-180°	4115.3	100.0

Coefficient of Utilization



REPORT NUMBER: P266389

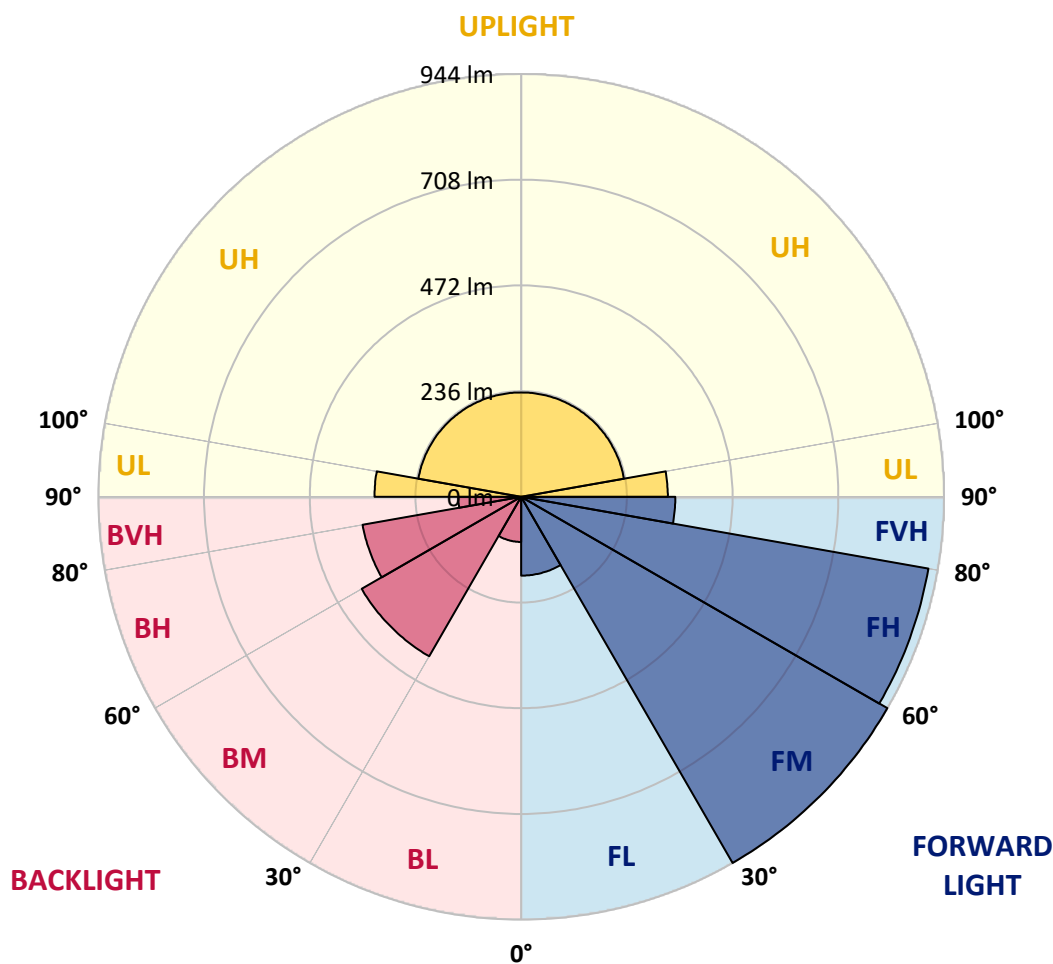
CATALOG NUMBER: UTLD-AF24-50-D-U-T4W-FP-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	176.0	4.3			
FM	(30°-60°)	944.2	22.9			
FH	(60°-80°)	923.4	22.4			G1/1800
FVH	(80°-90°)	344.1	8.4			G3/500
BL	(0°-30°)	100.8	2.4	B0/110		
BM	(30°-60°)	411.0	10.0	B1/1000		
BH	(60°-80°)	359.5	8.7	B1/500		G1/500
BVH	(80°-90°)	140.5	3.4			G2/225
UL	(90°-100°)	327.5	8.0		U3/500	
UH	(100°-180°)	233.0	5.7		U3/500	

BUG Rating: B1-U3-G3

Type IV Short



REPORT NUMBER: P266389

CATALOG NUMBER: UTLD-AF24-50-D-U-T4W-FP-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	12°	15°	25°	35°	45°	55°	65°	75°	85°
0°	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0
2.5°	252.2	251.0	251.0	250.0	250.0	247.8	246.1	243.4	240.7	237.4	234.7
5°	272.4	272.4	271.2	271.2	269.0	265.2	261.4	256.6	251.6	246.1	239.7
7.5°	296.4	295.7	295.7	294.1	291.4	285.9	280.5	273.4	265.8	256.6	247.8
10°	320.8	320.2	320.2	318.5	315.3	308.7	300.7	292.5	282.6	270.7	258.7
12.5°	350.2	348.1	346.9	346.3	340.9	335.0	324.6	314.8	301.7	288.0	273.4
15°	381.2	380.7	377.5	375.9	370.3	361.1	351.2	339.3	326.3	311.1	292.9
17.5°	416.2	416.2	413.8	411.8	405.8	393.2	380.7	369.3	356.2	337.7	317.6
20°	453.6	453.6	450.9	447.6	440.1	429.2	416.6	403.0	387.2	367.0	342.6
22.5°	493.4	492.4	488.6	486.3	477.1	465.1	455.4	439.5	420.9	398.0	369.8
25°	535.4	533.8	529.9	527.8	516.9	507.6	496.1	477.7	456.3	430.3	398.7
27.5°	579.4	575.2	572.4	569.2	558.7	549.6	533.8	516.3	491.8	464.6	429.7
30°	621.9	620.3	617.0	612.7	603.4	592.5	575.2	556.1	532.2	502.2	463.4
32.5°	670.5	668.8	663.4	658.9	647.0	635.6	617.7	597.5	572.0	540.3	498.3
35°	719.0	716.8	710.7	705.9	696.0	679.2	657.9	638.9	613.3	581.2	535.8
37.5°	768.9	764.6	758.1	754.8	742.9	722.1	699.9	679.2	655.8	623.1	574.0
40°	816.4	814.3	806.6	802.7	789.7	764.1	739.7	721.1	699.9	665.6	613.8
42.5°	864.9	861.0	853.4	849.6	834.3	805.1	779.4	761.9	743.9	710.2	654.1
45°	907.8	906.3	897.0	894.8	876.3	844.8	815.3	800.1	784.3	752.2	691.2
47.5°	949.9	946.0	940.0	937.3	915.6	879.6	850.8	837.7	824.6	795.2	731.0
50°	984.2	983.6	978.2	974.9	949.9	910.6	881.2	870.8	863.8	835.5	766.9
52.5°	1013.6	1013.0	1009.8	1006.6	979.8	939.0	908.5	900.8	898.7	872.6	798.5
55°	1034.3	1033.7	1032.6	1029.4	1003.2	961.2	931.4	925.3	928.0	903.5	826.8
57.5°	1046.3	1045.6	1047.3	1044.5	1017.9	976.5	947.2	945.5	952.1	929.7	848.0
60°	1047.3	1047.3	1051.1	1049.5	1025.5	984.7	957.0	957.5	967.8	946.5	861.7
62.5°	1037.5	1037.5	1045.6	1044.1	1023.3	984.2	958.5	963.0	976.0	955.8	866.5
65°	1016.3	1018.9	1028.3	1028.3	1011.9	976.5	953.1	959.7	975.5	955.3	863.2
67.5°	982.6	988.0	1001.0	1002.1	990.7	959.7	939.0	948.3	965.7	944.4	849.6
70°	940.5	948.3	961.8	965.7	960.7	935.1	917.7	928.6	945.5	924.3	827.2
72.5°	891.6	898.7	916.1	920.5	922.1	901.9	888.3	901.4	915.1	892.0	796.3
75°	837.1	843.1	862.7	867.0	874.1	862.7	854.0	864.3	879.6	851.2	756.6
77.5°	771.3	781.5	803.4	808.2	821.9	816.4	809.9	822.4	833.8	804.0	710.2
80°	707.4	720.6	738.5	748.4	764.6	764.1	765.3	773.4	783.2	750.5	660.2
82.5°	642.6	651.9	673.2	682.4	707.4	713.4	713.4	724.4	727.6	691.2	606.1
85°	577.3	588.2	609.4	618.8	645.9	658.9	662.8	668.2	668.8	630.7	550.7
87.5°	519.6	526.0	546.3	557.7	587.1	602.4	607.3	613.8	609.4	572.0	493.4
90°	461.9	467.8	487.4	496.8	528.8	546.8	557.7	560.5	551.6	511.9	441.2
92.5°	407.9	413.8	432.4	443.4	474.9	494.0	504.3	506.6	496.8	456.3	390.6
95°	360.6	360.6	380.7	388.8	424.3	445.5	455.4	455.4	441.6	401.9	342.1
97.5°	315.8	317.0	332.8	343.2	375.9	398.0	408.5	409.0	390.0	352.3	301.2
100°	275.6	277.2	291.9	301.2	332.8	356.2	365.4	363.9	344.2	305.6	260.2
102.5°	242.4	242.4	254.8	262.6	292.5	315.8	324.6	321.4	301.2	264.1	227.1
105°	212.4	213.4	221.6	229.2	257.6	279.5	288.0	283.2	262.6	226.6	198.3
107.5°	188.5	187.8	193.3	198.7	225.5	246.1	253.9	247.8	226.1	193.9	172.1
110°	164.5	165.0	169.4	173.3	197.6	217.3	222.8	217.8	193.3	165.0	149.2



REPORT NUMBER: P266389

CATALOG NUMBER: UTLD-AF24-50-D-U-T4W-FP-7027

CANDELA DISTRIBUTION (continued):

	0°	5°	12°	15°	25°	35°	45°	55°	65°	75°	85°
112.5°	145.4	145.4	148.7	152.0	169.4	188.5	195.0	187.8	164.5	140.0	130.2
115°	129.0	129.6	130.8	132.3	147.1	164.5	169.9	161.2	138.2	119.8	113.2
117.5°	115.0	115.0	115.4	117.0	126.3	142.1	146.0	136.7	117.0	102.3	99.6
120°	102.9	102.3	101.9	102.3	109.0	120.4	124.1	115.0	97.5	88.8	86.5
122.5°	91.4	91.4	90.4	91.0	92.5	101.2	104.1	95.3	82.3	76.7	76.3
125°	80.6	80.6	79.5	79.1	78.4	82.7	83.9	77.3	68.1	66.5	65.8
127.5°	70.2	70.7	69.2	68.6	66.5	67.1	67.6	61.5	56.1	56.7	57.2
130°	61.5	61.5	59.8	58.7	55.5	52.8	51.7	47.9	45.8	47.9	49.5
132.5°	53.4	52.3	51.3	50.1	45.3	41.4	39.3	35.9	37.0	40.3	42.0
135°	44.6	44.0	42.5	42.0	37.0	31.0	27.2	26.1	29.5	33.1	34.3
137.5°	36.6	36.6	34.9	33.7	28.3	22.4	18.5	18.5	22.4	26.1	28.3
140°	28.8	28.8	27.2	26.1	21.2	15.2	11.5	11.9	16.3	20.1	21.7
142.5°	21.7	21.7	20.1	19.7	15.2	9.8	6.6	7.6	11.5	14.7	16.3
145°	15.8	15.2	14.2	13.7	9.8	6.0	3.2	4.3	7.0	9.8	11.5
147.5°	10.3	10.3	9.3	8.8	6.0	3.2	1.1	2.2	4.3	6.0	7.6
150°	6.0	6.0	5.4	4.9	3.2	1.1	0.0	1.1	2.2	3.2	4.3
152.5°	3.2	3.2	2.8	2.8	1.1	0.5	0.0	0.0	0.5	1.6	1.6
155°	1.1	1.1	1.1	1.1	0.5	0.0	0.0	0.0	0.0	0.5	0.5
157.5°	0.5	0.5	0.5	0.5	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°	0.0	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: P266389

CATALOG NUMBER: UTLD-AF24-50-D-U-T4W-FP-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0	232.0
2.5°	233.1	231.5	228.2	225.5	222.8	219.5	217.8	216.2	215.1	214.1	214.1
5°	236.3	233.1	227.1	221.2	215.7	210.8	206.4	203.1	201.5	200.4	200.0
7.5°	243.4	238.6	228.8	219.5	211.3	203.6	197.6	192.7	190.1	188.5	187.8
10°	252.8	245.6	233.1	220.5	209.7	200.0	191.7	185.7	181.8	180.3	179.2
12.5°	265.2	256.6	240.1	224.3	210.3	198.3	187.8	181.4	177.5	175.3	175.3
15°	284.4	272.8	252.8	231.5	214.1	199.3	187.8	180.7	178.1	177.0	176.4
17.5°	306.1	292.9	268.6	244.0	221.6	203.1	192.7	188.5	184.6	183.1	183.1
20°	330.0	314.2	285.9	258.2	233.1	214.1	202.6	195.6	191.2	189.5	189.1
22.5°	354.0	337.7	304.4	272.8	245.1	228.2	211.9	203.1	197.6	195.6	195.0
25°	381.2	363.3	324.1	288.6	261.9	242.9	223.9	211.3	204.3	201.5	201.0
27.5°	410.6	389.4	345.8	305.6	278.4	255.9	234.7	217.8	210.8	207.5	207.0
30°	441.2	417.7	367.6	323.0	294.1	267.4	245.1	226.1	216.9	213.0	212.4
32.5°	473.2	445.5	391.0	343.7	308.7	277.8	253.9	233.6	222.2	217.8	217.8
35°	509.2	477.1	413.8	362.7	322.4	288.0	261.4	240.7	227.1	222.8	222.8
37.5°	543.6	508.7	438.5	383.4	335.0	296.4	267.4	247.3	232.0	226.6	226.6
40°	580.0	540.3	461.9	400.4	345.8	302.8	272.8	252.2	235.9	231.0	229.8
42.5°	615.5	572.0	486.9	417.7	355.1	308.3	277.2	256.6	239.0	233.1	232.5
45°	652.4	603.4	510.9	431.8	362.7	312.2	279.5	259.3	242.9	235.3	234.2
47.5°	684.6	633.5	534.3	444.4	368.8	314.2	281.0	261.4	245.1	236.3	235.3
50°	716.8	660.2	553.9	454.8	372.0	315.3	281.6	261.9	246.8	236.3	235.3
52.5°	745.7	685.1	570.8	461.9	373.6	314.8	281.0	261.9	247.3	235.3	234.2
55°	769.6	705.3	582.8	466.2	373.6	313.1	279.5	260.9	246.8	234.2	232.5
57.5°	787.5	719.0	590.9	467.3	370.9	309.8	276.7	259.3	245.1	232.0	229.8
60°	798.5	726.5	593.7	464.6	366.6	306.1	273.4	257.1	243.4	228.8	227.1
62.5°	801.6	727.6	590.9	459.2	360.6	300.7	268.6	253.2	240.1	224.9	223.3
65°	796.3	721.7	583.3	450.4	352.3	294.1	263.7	248.9	236.3	220.5	218.9
67.5°	781.5	708.6	569.6	438.5	343.2	286.5	258.2	244.0	232.0	215.7	212.4
70°	759.7	689.0	552.3	423.7	332.3	278.4	251.6	238.1	226.1	210.3	207.0
72.5°	728.2	662.3	529.5	405.8	319.6	269.6	243.4	231.0	219.5	203.6	199.3
75°	690.1	627.9	502.2	387.2	306.6	259.3	235.3	223.3	211.9	196.1	192.2
77.5°	647.6	592.1	472.8	366.0	291.4	248.9	226.6	215.1	203.1	187.8	182.4
80°	601.2	550.1	440.6	344.2	277.2	237.4	216.9	205.9	193.9	179.2	173.3
82.5°	551.2	506.6	408.5	322.4	261.4	226.1	207.0	196.1	183.6	169.4	163.4
85°	502.2	461.9	374.8	299.0	246.1	214.1	196.1	185.2	173.7	159.0	153.6
87.5°	451.5	416.6	341.4	276.0	231.0	202.6	185.7	174.4	162.4	148.7	144.4
90°	407.4	374.1	310.5	254.3	215.1	190.1	174.8	162.9	151.5	138.2	134.6
92.5°	360.6	333.4	279.9	233.6	200.4	178.1	163.9	152.5	140.0	127.4	124.8
95°	320.2	297.9	252.2	213.0	184.6	166.6	153.0	141.0	128.5	116.6	115.0
97.5°	281.6	263.1	224.9	193.9	170.9	154.7	141.7	130.2	117.0	106.2	105.1
100°	247.3	231.0	200.4	176.4	156.3	143.2	131.2	119.3	106.2	95.8	95.8
102.5°	215.7	203.1	178.7	158.6	143.2	130.8	119.8	107.8	94.9	86.1	86.5
105°	190.1	178.1	157.9	142.7	130.2	118.8	108.3	96.4	83.9	76.7	77.3
107.5°	165.6	156.3	140.0	126.9	117.0	107.8	96.9	85.5	73.0	68.6	69.2
110°	144.4	137.3	124.1	113.2	105.7	96.9	87.1	75.2	63.7	61.1	61.1



REPORT NUMBER: P266389

CATALOG NUMBER: UTLD-AF24-50-D-U-T4W-FP-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	125.9	119.8	110.0	101.2	93.7	86.5	76.3	65.3	54.4	53.4	53.4
115°	110.0	105.7	96.4	89.3	83.9	76.7	67.6	56.1	47.4	46.8	47.4
117.5°	96.4	92.5	85.0	79.1	74.1	67.6	58.7	47.9	40.3	40.9	41.4
120°	84.4	81.7	75.2	70.2	65.3	59.4	50.1	40.3	35.5	35.9	35.9
122.5°	74.6	71.9	66.5	61.5	57.2	51.3	42.9	33.7	30.5	31.6	31.6
125°	64.8	63.2	57.8	53.4	49.0	42.9	35.5	27.8	26.1	27.2	27.2
127.5°	56.1	54.9	50.7	45.8	41.4	35.9	28.8	22.8	22.4	23.4	23.4
130°	48.5	47.4	43.6	39.3	34.3	29.5	22.4	18.5	19.0	20.1	20.8
132.5°	41.4	40.9	37.0	32.1	27.8	22.8	17.4	15.2	16.3	17.4	17.4
135°	34.3	33.7	31.0	26.7	21.7	17.4	13.0	11.9	13.7	14.7	14.7
137.5°	28.3	27.2	25.1	20.8	16.3	12.5	9.3	9.8	10.9	11.9	11.9
140°	22.4	21.7	19.7	15.8	11.5	8.2	6.6	7.6	9.3	9.8	9.8
142.5°	16.3	16.3	14.2	10.9	7.0	4.9	4.3	5.4	7.0	7.6	7.6
145°	11.5	11.5	9.8	7.0	4.3	2.2	2.2	3.9	4.9	5.4	6.0
147.5°	7.6	7.0	6.0	4.3	2.2	0.5	1.1	2.8	3.2	3.9	3.9
150°	4.3	4.3	3.2	2.2	1.1	0.0	0.5	1.1	1.6	2.2	2.8
152.5°	1.6	1.6	1.1	0.5	0.5	0.0	0.0	0.0	0.5	1.1	1.1
155°	0.5	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.5	0.0	0.5	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)