

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: P266273

Luminaire Tested: **UTLD-AF24-20-D-U-T2U-FP-7027**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P266273
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-AF24-20-D-U-T2U-FP-7027
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 2700K, 260mA 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: 1798.1 lumens
Efficiency: N/A
Efficacy: 85.6 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 - G2

Input Watts (W): 21
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



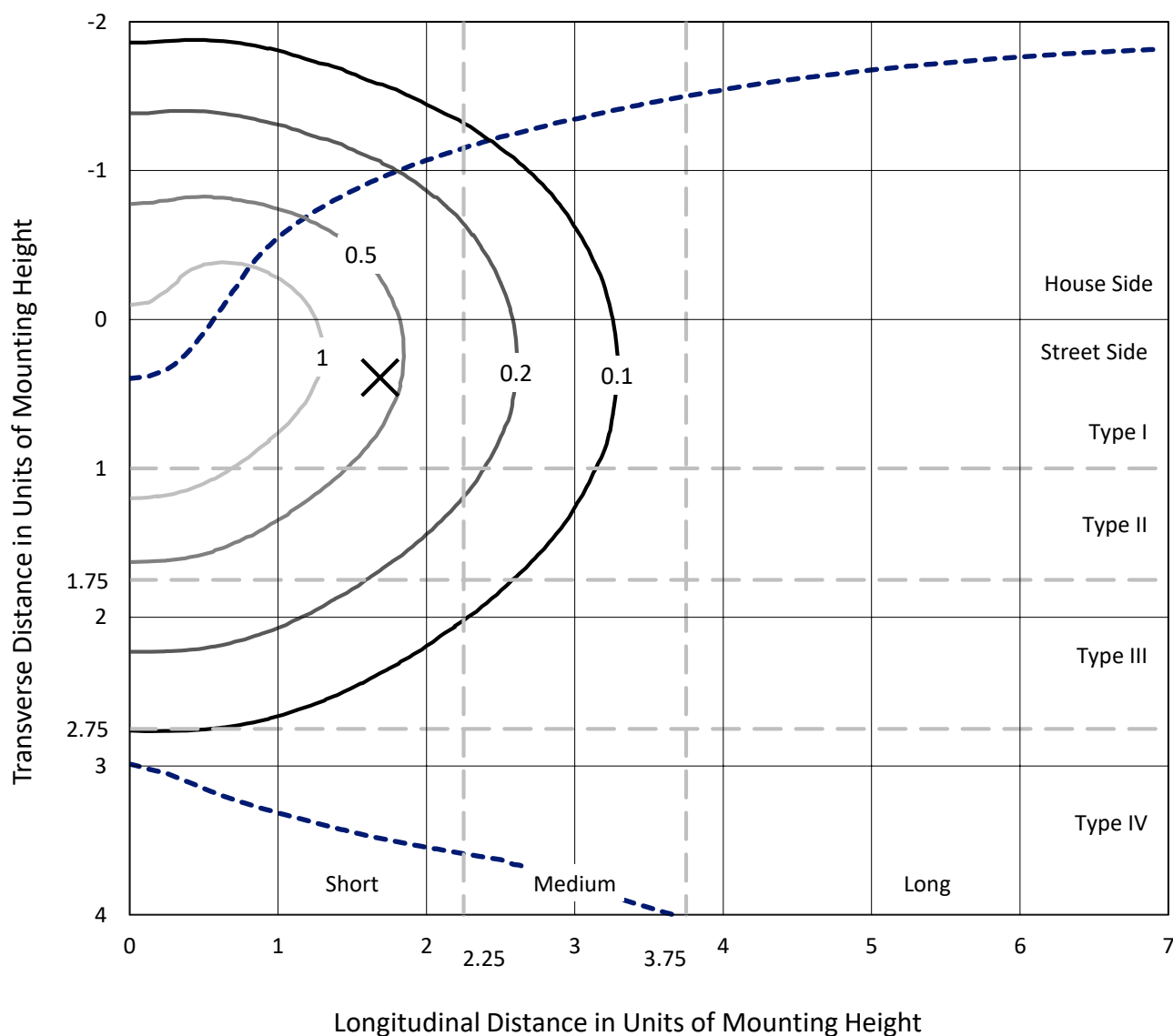
REPORT NUMBER: P266273

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-FP-7027

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

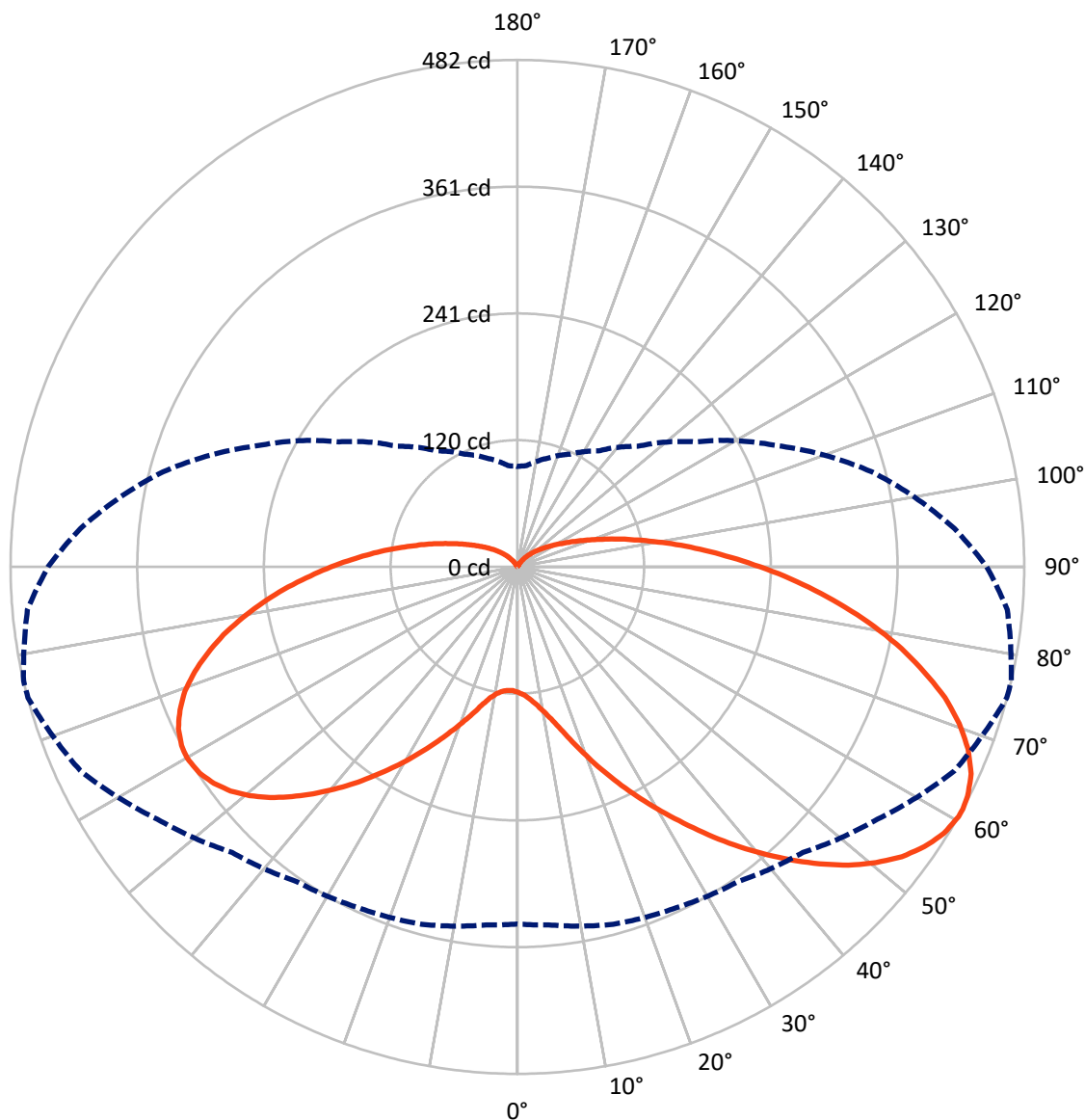


Based on 10 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P266273

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-FP-7027

Luminous Intensity Polar Plot



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

REPORT NUMBER: P266273

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-FP-7027

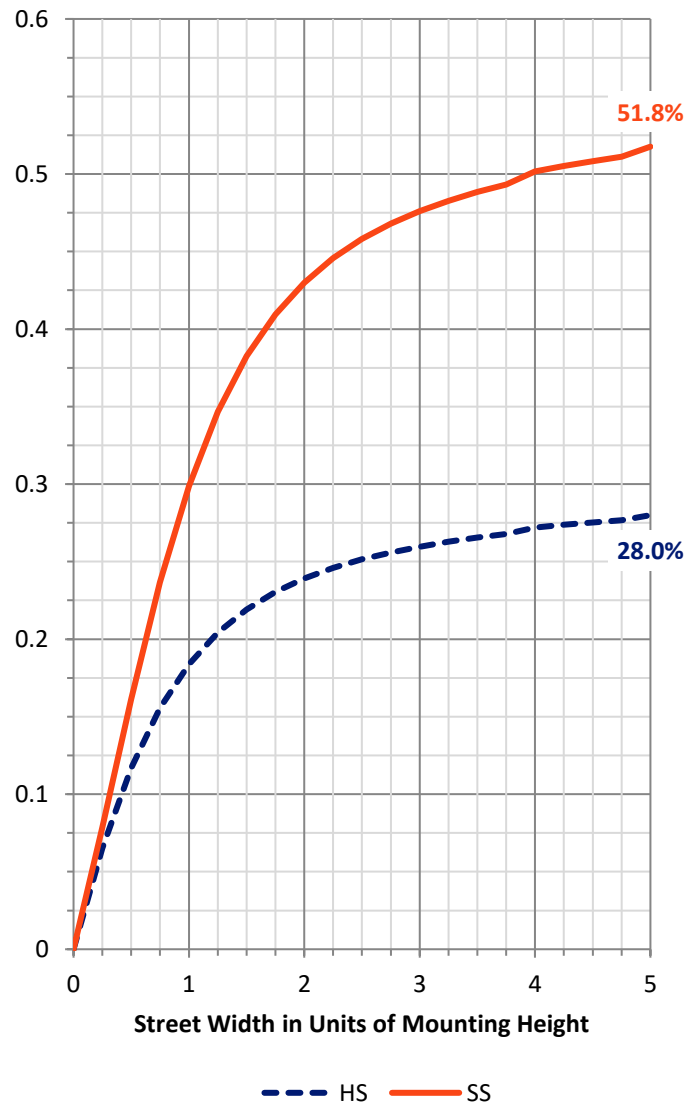
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	534.7	114.8	649.6
	% Fixture	29.7	6.4	36.1
Street Side	Lumens	986.4	162.1	1148.5
	% Fixture	54.9	9.0	63.9
Total	Lumens	1521.1	276.9	1798.1
	% Fixture	84.6	15.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.9	0.7
10°-20°	41.9	2.3
20°-30°	89.7	5.0
30°-40°	154.7	8.6
40°-50°	224.6	12.5
50°-60°	276.3	15.4
60°-70°	286.3	15.9
70°-80°	249.7	13.9
80°-90°	186.1	10.3
90°-100°	123.0	6.8
100°-110°	75.1	4.2
110°-120°	43.0	2.4
120°-130°	22.7	1.3
130°-140°	10.1	0.6
140°-150°	2.8	0.2
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	1521.1	84.6
0°-180°	1798.1	100.0

Coefficient of Utilization



REPORT NUMBER: P266273

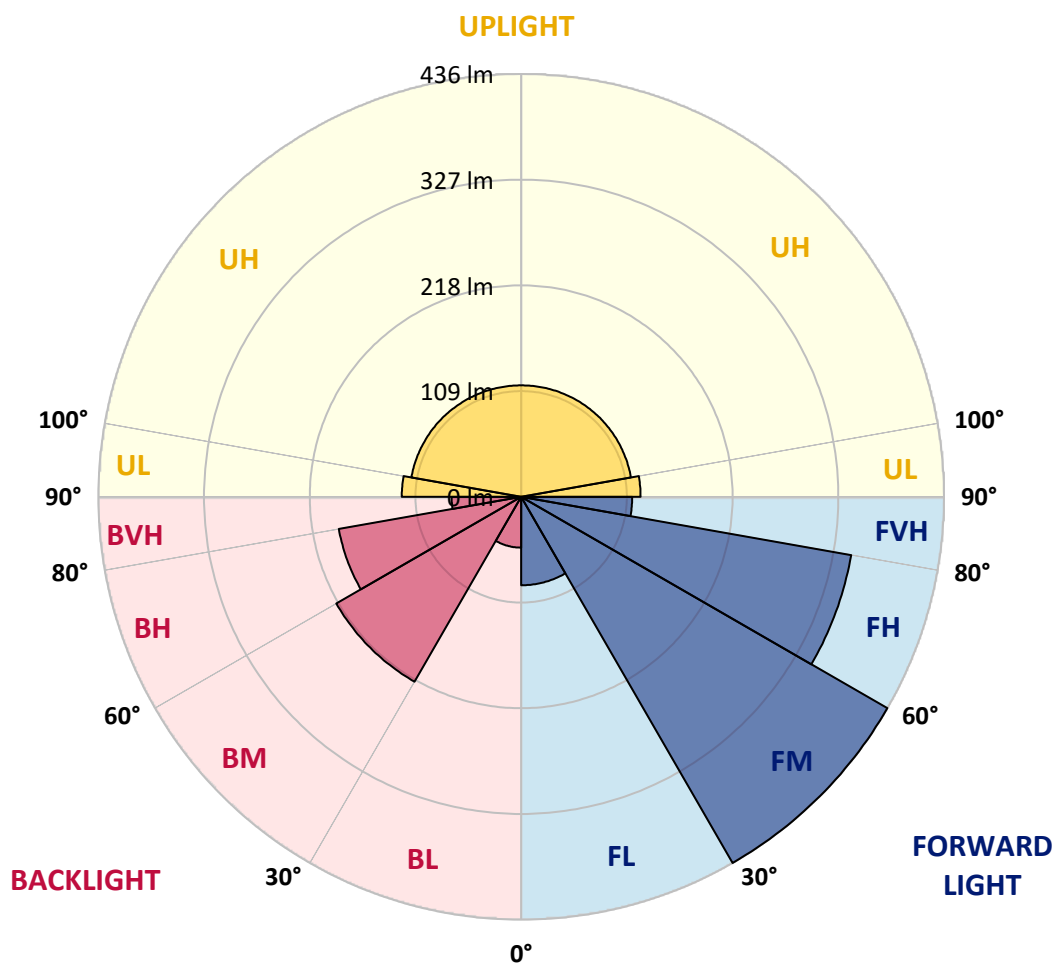
CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-FP-7027

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	91.1	5.1			
FM	(30°-60°)	435.6	24.2			
FH	(60°-80°)	345.3	19.2			G0/660
FVH	(80°-90°)	114.4	6.4			G2/225
BL	(0°-30°)	52.4	2.9	B0/110		
BM	(30°-60°)	219.9	12.2	B0/220		
BH	(60°-80°)	190.7	10.6	B1/500		G1/500
BVH	(80°-90°)	71.7	4.0			G1/100
UL	(90°-100°)	123.0	6.8		U3/500	
UH	(100°-180°)	114.8	6.4		U3/500	

BUG Rating: B1-U3-G2

Type IV Short



REPORT NUMBER: P266273

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-FP-7027

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4
2.5°	129.6	129.6	129.1	128.9	128.0	126.8	125.7	124.1	122.3	121.9	121.0
5°	140.9	140.9	140.3	139.1	137.6	135.5	132.9	130.3	127.0	126.3	123.7
7.5°	153.4	153.0	151.9	150.6	148.3	145.3	141.8	137.8	133.4	132.4	128.6
10°	166.0	166.0	164.8	163.0	160.2	156.2	152.1	147.1	141.4	140.1	135.3
12.5°	180.5	180.1	178.3	176.7	173.6	169.2	164.4	158.3	151.4	150.1	143.9
15°	195.9	195.7	194.0	191.1	187.2	183.2	178.3	171.7	164.2	162.4	155.2
17.5°	213.3	211.8	210.9	207.6	203.6	198.3	194.6	187.7	179.7	177.4	168.8
20°	229.1	229.3	227.2	224.4	220.8	217.0	211.6	205.5	196.6	193.9	184.1
22.5°	247.2	247.2	245.0	242.3	238.5	236.7	230.5	224.1	213.4	211.5	200.4
25°	265.8	265.1	262.9	260.4	258.5	256.1	250.5	243.1	232.1	230.1	217.7
27.5°	283.1	283.2	280.7	278.7	278.4	275.4	270.7	262.8	252.2	249.2	235.9
30°	300.8	301.0	299.1	296.6	296.8	295.0	291.1	282.8	272.7	269.3	255.1
32.5°	318.5	318.1	315.6	315.2	314.5	313.1	310.2	305.1	294.0	290.3	275.6
35°	334.4	334.4	331.8	332.8	331.5	331.1	330.2	326.3	316.5	312.7	296.8
37.5°	349.1	348.9	347.6	347.7	346.8	346.6	348.3	347.7	338.7	335.5	319.3
40°	362.6	361.3	360.1	361.1	360.1	361.6	365.5	368.3	360.6	358.2	341.6
42.5°	372.1	371.5	371.1	372.7	371.4	374.7	380.9	387.7	383.0	380.7	364.2
45°	379.5	378.5	379.5	381.2	380.3	384.5	395.7	405.9	405.9	402.6	385.6
47.5°	382.6	382.3	384.7	386.0	385.6	392.4	407.3	422.9	426.2	423.7	406.4
50°	381.9	381.9	385.6	387.7	388.2	397.1	415.9	436.4	444.0	441.8	424.8
52.5°	377.4	377.4	383.0	385.6	387.4	398.7	421.8	448.0	458.9	457.7	440.7
55°	369.1	368.8	376.0	379.3	383.2	397.1	424.1	455.4	470.6	469.6	454.3
57.5°	355.9	356.4	365.3	370.5	375.5	391.9	422.9	459.2	478.5	478.1	462.8
60°	339.4	341.6	351.7	357.5	365.3	383.8	418.0	458.5	481.6	481.9	467.6
61°	332.4	334.7	344.9	352.0	360.1	379.8	415.2	457.1	481.3	481.9	468.0
62.5°	321.1	322.5	334.7	343.2	352.0	372.4	409.6	453.4	479.8	480.5	467.4
65°	300.2	302.6	315.0	325.5	336.1	358.6	397.5	443.8	473.0	474.1	462.0
67.5°	276.9	280.0	294.3	306.4	318.5	342.3	382.6	430.0	460.8	462.2	451.7
70°	254.1	257.9	272.7	284.9	299.9	324.4	364.4	412.2	444.2	445.6	436.4
72.5°	230.8	234.9	250.4	264.5	279.6	304.5	344.1	391.2	423.5	425.3	417.0
75°	207.4	212.8	227.2	243.4	258.5	284.3	323.0	368.8	397.9	399.8	393.3
77.5°	186.4	191.1	205.4	222.2	238.7	263.3	300.2	342.2	372.4	373.4	367.5
80°	165.1	170.0	185.4	201.3	218.8	242.5	276.5	315.2	341.6	344.3	338.2
82.5°	146.2	151.2	165.6	182.8	199.8	222.3	252.5	287.7	311.2	313.9	309.6
85°	130.3	133.8	148.1	164.7	181.0	202.5	231.5	262.0	283.1	283.5	279.4
87.5°	114.4	118.1	131.7	147.9	164.4	184.1	208.8	235.1	252.2	254.0	249.6
90°	101.4	103.8	116.5	132.4	148.5	166.5	188.0	211.5	225.1	225.1	221.9
92.5°	89.9	91.1	103.9	119.1	134.6	149.9	168.8	186.8	198.7	198.5	194.8
95°	79.4	80.8	91.5	106.3	121.2	135.5	150.8	165.1	174.0	174.5	170.0
97.5°	70.1	71.0	81.0	95.5	108.9	122.2	134.9	146.5	152.3	152.5	149.3
100°	62.6	62.6	72.1	85.0	97.8	109.8	120.7	129.4	132.0	131.7	128.9
102.5°	56.1	55.5	63.8	76.1	88.0	98.4	107.2	112.7	115.0	114.3	112.4
105°	49.8	50.2	56.6	68.2	79.0	88.0	94.9	99.5	99.5	99.1	97.1
107.5°	45.0	44.8	49.8	60.5	70.7	78.7	84.1	86.3	85.7	85.0	83.8



REPORT NUMBER: P266273

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-FP-7027

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
110°	40.5	40.5	44.1	54.2	63.1	70.2	74.0	75.5	73.3	73.1	72.9
112.5°	36.4	36.4	39.4	47.9	56.2	62.3	65.3	65.7	63.3	63.1	63.3
115°	33.3	33.3	35.0	42.5	50.2	55.5	58.2	57.0	54.6	54.3	55.2
117.5°	30.4	30.4	31.8	37.1	44.3	49.2	50.9	49.2	47.3	47.3	48.1
120°	27.8	27.8	28.2	32.5	38.9	43.2	44.3	42.5	40.9	40.9	41.9
122.5°	25.4	25.2	25.4	28.2	33.6	37.5	38.1	36.4	35.3	35.6	36.9
125°	23.1	23.1	22.8	24.6	28.9	32.2	32.7	30.8	30.8	30.8	32.0
127.5°	21.0	21.0	20.5	21.3	24.6	27.3	27.3	26.0	26.4	26.9	27.8
130°	19.1	19.1	18.7	18.7	20.3	22.6	22.6	21.6	22.8	23.1	24.1
132.5°	17.2	17.1	16.6	15.9	16.6	18.0	18.0	17.7	19.7	19.9	20.5
135°	15.5	15.2	14.7	13.6	13.4	13.7	13.7	14.6	16.3	16.6	17.4
137.5°	13.4	13.4	12.5	11.5	10.1	10.1	10.1	11.5	13.4	13.7	14.3
140°	11.5	11.5	10.7	9.3	7.5	6.7	6.9	8.9	10.7	11.0	11.5
142.5°	9.3	9.3	8.7	7.2	5.4	4.0	4.4	6.3	7.9	8.4	8.9
145°	7.2	7.2	6.6	5.1	3.2	2.1	2.5	4.4	5.6	5.7	6.3
147.5°	5.4	5.4	4.8	3.6	1.8	0.7	1.3	2.5	3.8	4.0	4.4
150°	3.6	3.6	3.1	1.8	1.0	0.0	0.4	1.3	2.1	2.3	2.5
152.5°	1.8	1.8	1.3	1.0	0.2	0.0	0.0	0.4	1.0	1.0	1.2
155°	1.0	0.7	0.4	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.4
157.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
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°	0.2	0.2	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: P266273

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-FP-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4	119.4
2.5°	120.1	119.1	117.3	115.8	114.3	112.7	111.6	110.8	110.5	109.8	110.0
5°	122.2	120.6	117.0	113.9	110.8	107.8	105.6	103.9	102.8	102.2	101.8
7.5°	126.1	123.2	118.1	113.2	108.7	104.5	100.7	98.4	96.5	95.5	95.5
10°	131.7	128.2	121.0	114.4	107.8	102.2	97.6	94.0	91.5	90.4	90.5
12.5°	139.4	134.7	125.9	117.0	109.1	101.8	95.5	91.5	88.8	87.3	87.3
15°	150.3	145.3	133.4	121.9	111.2	102.2	95.5	91.1	89.0	88.0	87.9
17.5°	163.8	156.9	143.4	129.6	116.2	105.1	98.4	94.1	91.1	89.9	89.7
20°	177.2	169.6	153.7	138.2	123.1	111.2	102.9	97.3	93.5	91.7	91.5
22.5°	192.6	183.9	165.1	147.0	130.6	119.1	107.6	100.4	95.8	93.7	93.5
25°	208.5	198.7	177.8	157.2	140.7	126.8	113.5	103.5	97.8	95.3	95.0
27.5°	225.4	214.9	190.8	167.4	150.1	134.0	118.8	106.3	99.7	96.9	96.7
30°	244.1	231.5	205.1	179.4	159.8	140.9	124.1	109.6	101.6	98.4	97.8
32.5°	263.5	249.4	219.5	192.0	168.6	147.0	128.2	113.0	103.5	99.7	99.5
35°	283.8	268.1	234.5	204.4	176.5	152.3	132.0	116.2	104.8	100.9	100.4
37.5°	305.1	287.7	250.2	216.0	184.2	156.9	134.9	118.7	106.3	101.6	101.1
40°	326.3	306.4	265.5	227.9	191.2	160.9	137.6	120.6	107.2	102.2	101.8
42.5°	346.8	326.5	281.2	238.9	197.4	163.9	139.4	122.2	108.2	102.8	102.0
45°	366.9	345.7	296.1	248.2	202.5	166.2	140.7	123.1	109.4	102.8	102.0
47.5°	387.0	363.6	310.9	256.5	206.3	168.0	141.0	123.5	110.0	102.5	101.8
50°	405.2	379.8	323.5	263.7	209.0	168.4	140.9	123.2	110.2	102.0	101.1
52.5°	420.1	393.9	334.0	268.9	210.7	168.2	140.1	122.9	110.0	101.1	100.4
55°	433.1	405.0	341.6	272.0	210.7	166.9	139.0	121.9	109.1	99.9	99.1
57.5°	441.3	413.1	346.8	273.4	209.8	164.8	136.8	120.3	108.2	98.4	97.3
60°	446.3	417.2	348.9	272.5	207.1	162.1	134.6	118.3	106.7	96.5	95.5
61°	446.7	417.6	348.9	271.6	206.0	160.9	133.6	117.7	106.0	95.8	94.6
62.5°	446.3	417.2	347.7	269.5	203.6	158.8	131.7	116.2	104.7	94.1	93.5
65°	441.6	412.7	343.2	264.1	198.5	154.6	128.5	113.5	102.2	91.7	90.5
67.5°	431.5	403.8	334.7	256.6	192.4	149.7	124.8	110.5	99.7	89.0	87.6
70°	417.2	390.8	324.2	248.0	185.7	144.4	120.6	107.0	96.5	86.1	84.4
72.5°	399.1	374.9	309.5	237.1	177.8	138.7	116.2	103.2	93.0	83.0	80.6
75°	376.7	354.6	293.0	224.9	168.8	132.2	111.4	99.1	89.0	79.4	76.8
77.5°	352.0	332.2	275.4	211.6	160.0	125.9	106.3	94.3	84.8	75.5	72.9
80°	324.8	307.6	255.3	197.5	150.6	119.4	101.1	89.9	80.6	71.4	68.5
82.5°	297.1	281.7	235.1	183.3	140.7	112.6	95.5	85.0	75.8	67.3	64.0
85°	268.9	255.5	214.9	168.6	130.6	105.8	90.4	80.0	71.0	62.8	60.0
87.5°	240.7	229.3	194.0	154.6	121.5	99.3	85.0	75.2	66.4	58.4	55.5
90°	214.7	204.9	174.9	141.6	112.4	92.4	79.6	70.2	61.7	53.7	51.8
92.5°	189.9	181.5	156.5	127.7	103.2	86.0	74.3	65.1	56.6	49.2	48.1
95°	167.4	159.4	139.6	115.6	94.9	80.0	69.1	60.5	51.8	45.0	44.1
97.5°	145.4	140.7	124.1	103.9	86.6	73.8	64.0	55.9	47.4	41.1	40.7
100°	127.3	122.2	108.9	93.2	79.2	68.2	59.1	51.2	43.2	37.4	37.1
102.5°	110.8	107.2	95.9	84.1	72.0	62.2	54.2	46.7	38.9	33.9	33.9
105°	96.7	93.5	85.0	74.6	64.9	57.0	49.2	42.0	34.9	30.4	30.6
107.5°	83.5	81.2	74.3	66.0	58.4	51.7	44.6	37.5	30.6	27.0	27.3



REPORT NUMBER: P266273

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-FP-7027

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	72.7	70.5	65.1	59.1	52.6	46.7	40.2	33.3	26.6	24.6	24.6
112.5°	63.1	61.7	57.2	52.3	47.3	42.0	36.2	29.5	23.4	21.6	22.0
115°	55.2	54.0	50.2	46.5	42.3	37.8	32.2	25.7	20.3	19.7	19.7
117.5°	47.9	47.3	44.1	40.9	37.5	33.6	28.4	22.2	17.4	17.4	17.4
120°	41.9	41.1	38.7	35.9	33.1	29.6	24.6	19.0	15.5	15.5	15.6
122.5°	36.7	36.2	33.9	31.8	29.1	25.7	21.0	15.9	13.6	13.7	13.7
125°	32.0	31.5	30.0	27.6	25.2	22.0	17.7	13.0	11.7	12.1	12.1
127.5°	27.8	27.6	26.0	23.9	21.5	18.7	14.6	11.0	10.3	10.7	10.7
130°	24.3	24.1	22.4	20.3	18.2	15.2	11.7	9.2	8.9	9.3	9.3
132.5°	20.8	20.5	19.1	17.1	14.9	12.1	9.2	7.2	7.7	8.2	8.2
135°	17.4	17.2	16.3	14.1	12.1	9.6	6.9	6.1	6.6	6.9	6.9
137.5°	14.6	14.3	13.4	11.1	9.2	6.9	5.1	4.9	5.4	5.7	5.7
140°	11.7	11.5	10.5	8.7	6.6	4.9	3.6	4.0	4.4	4.9	4.9
142.5°	8.9	8.9	8.2	6.6	4.4	3.1	2.3	3.1	3.6	4.0	4.0
145°	6.6	6.6	5.6	4.4	2.5	1.6	1.3	2.1	2.9	3.1	3.1
147.5°	4.4	4.4	3.8	2.9	1.3	0.7	1.0	1.3	1.8	2.1	2.3
150°	2.5	2.5	2.1	1.3	0.7	0.2	0.2	1.0	1.2	1.3	1.3
152.5°	1.2	1.2	1.0	0.4	0.2	0.2	0.2	0.2	0.7	0.7	0.7
155°	0.4	0.4	0.4	0.2	0.2	0.2	0.2	0.0	0.2	0.2	0.2
157.5°	0.0	0.2	0.2	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.2	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.2	0.2	0.2	0.2	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)