

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: P239983

Luminaire Tested: **UTLD-AF24-20-D-U-T2U-A-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239983
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-18)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-20-D-U-T2U-A-7030
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 3000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1833 lumens
Efficiency: N/A
Efficacy: 87.3 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 - G1

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



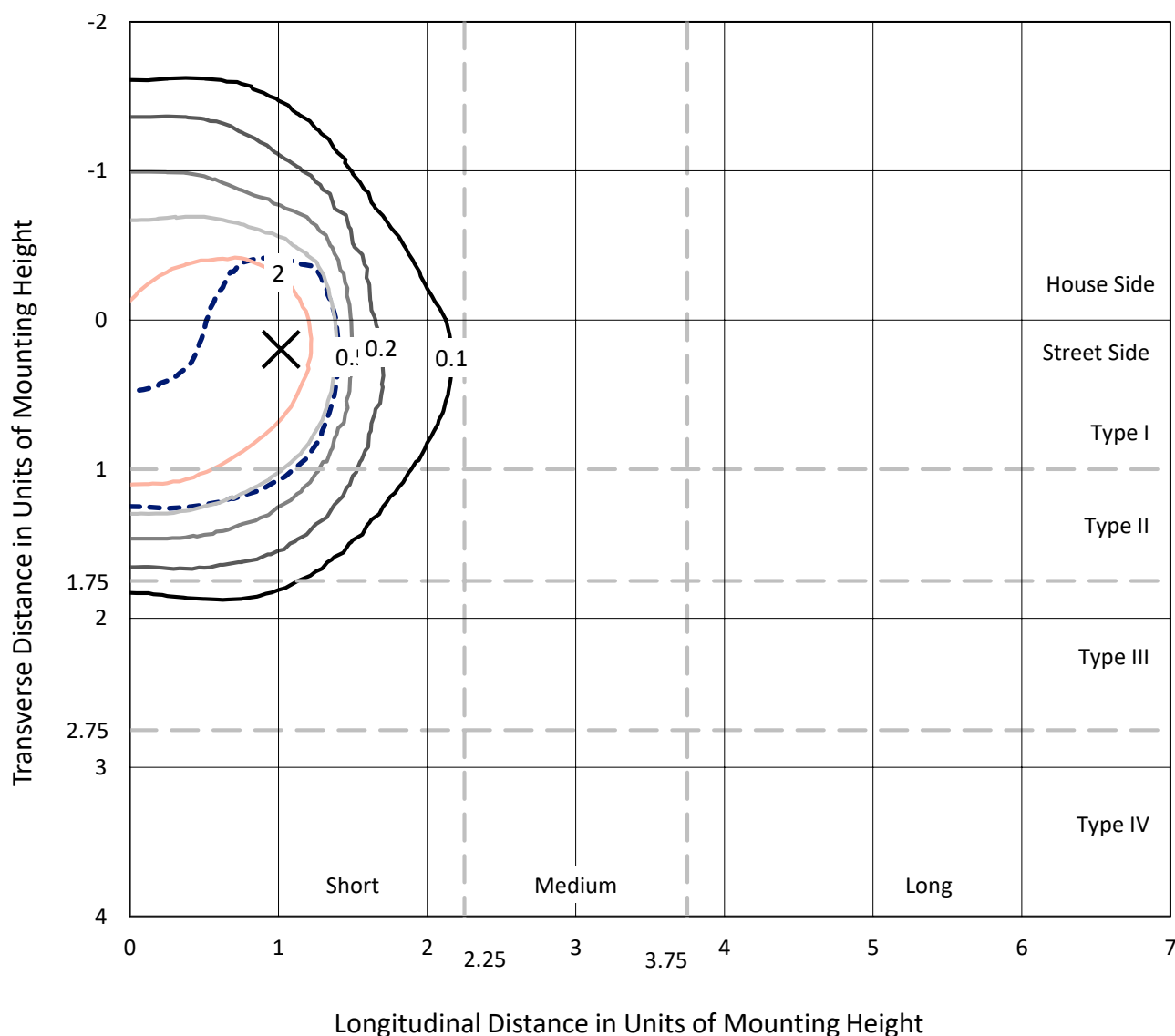
REPORT NUMBER: P239983

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-A-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

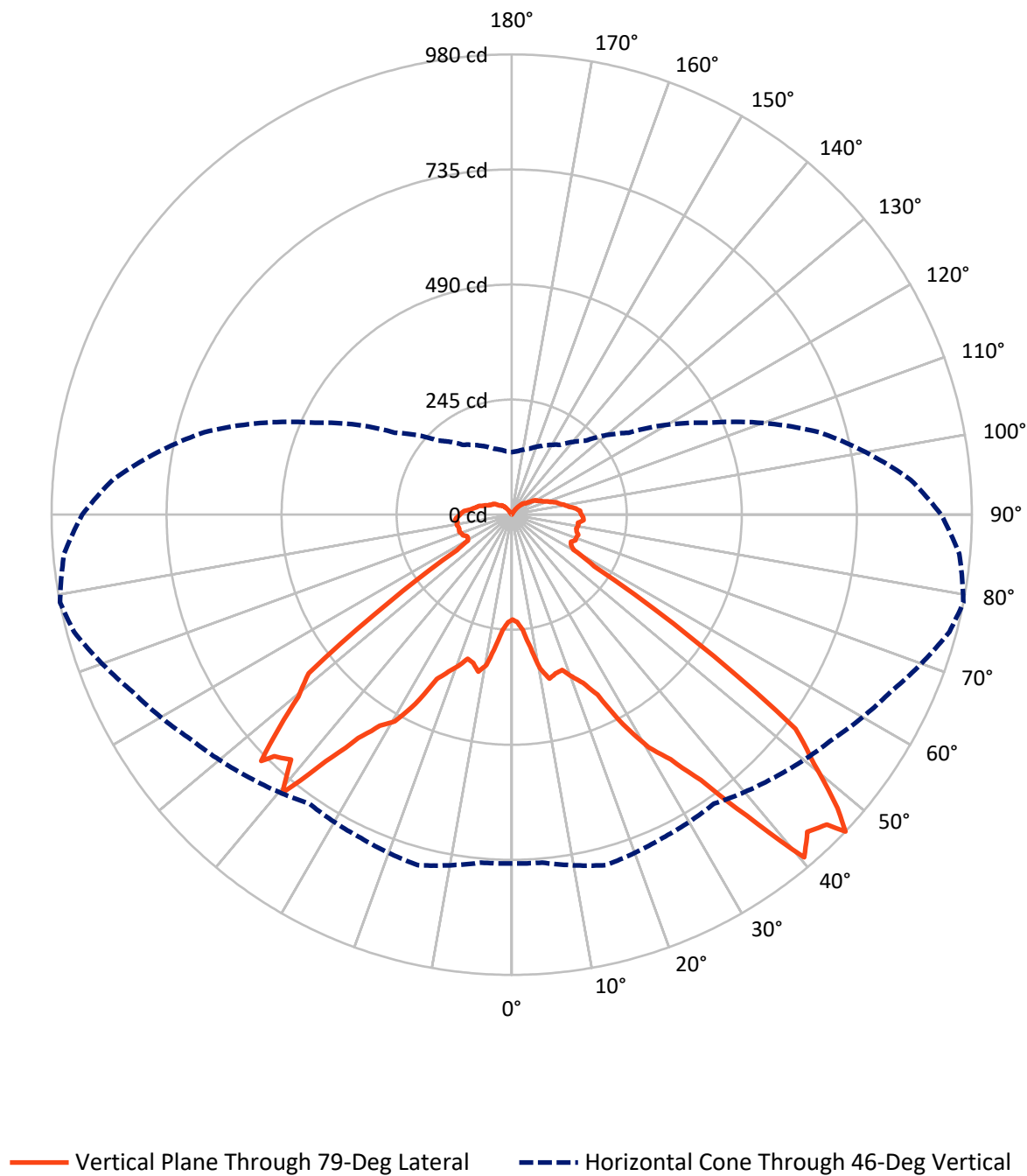


Based on 10 foot mounting height. Maximum calculated value = 4 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P239983

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-A-7030

Luminous Intensity Polar Plot



REPORT NUMBER: P239983

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-A-7030

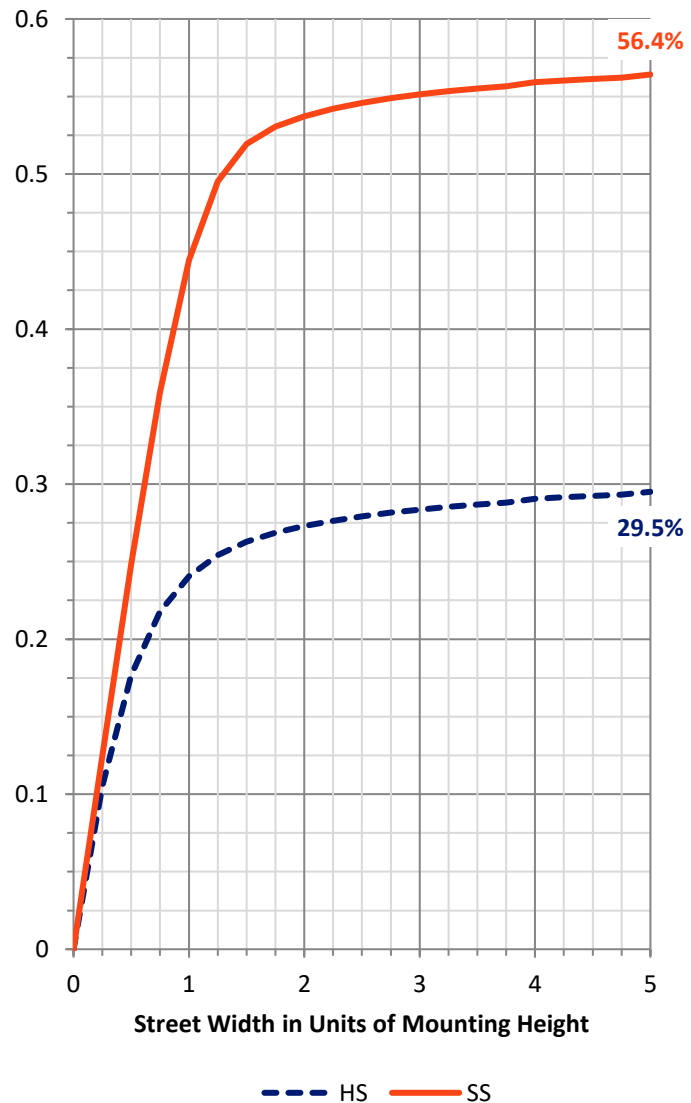
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	558.7	69.5	628.2
	% Fixture	30.5	3.8	34.3
Street Side	Lumens	1054.0	150.8	1204.8
	% Fixture	57.5	8.2	65.7
Total	Lumens	1612.8	220.2	1833.0
	% Fixture	88.0	12.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.1	1.3
10°-20°	87.1	4.8
20°-30°	175.9	9.6
30°-40°	322.1	17.6
40°-50°	445.1	24.3
50°-60°	284.1	15.5
60°-70°	101.8	5.6
70°-80°	91.4	5.0
80°-90°	81.2	4.4
90°-100°	74.5	4.1
100°-110°	57.9	3.2
110°-120°	40.2	2.2
120°-130°	26.9	1.5
130°-140°	16.1	0.9
140°-150°	4.3	0.2
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	1612.8	88.0
0°-180°	1833.0	100.0

Coefficient of Utilization



REPORT NUMBER: P239983

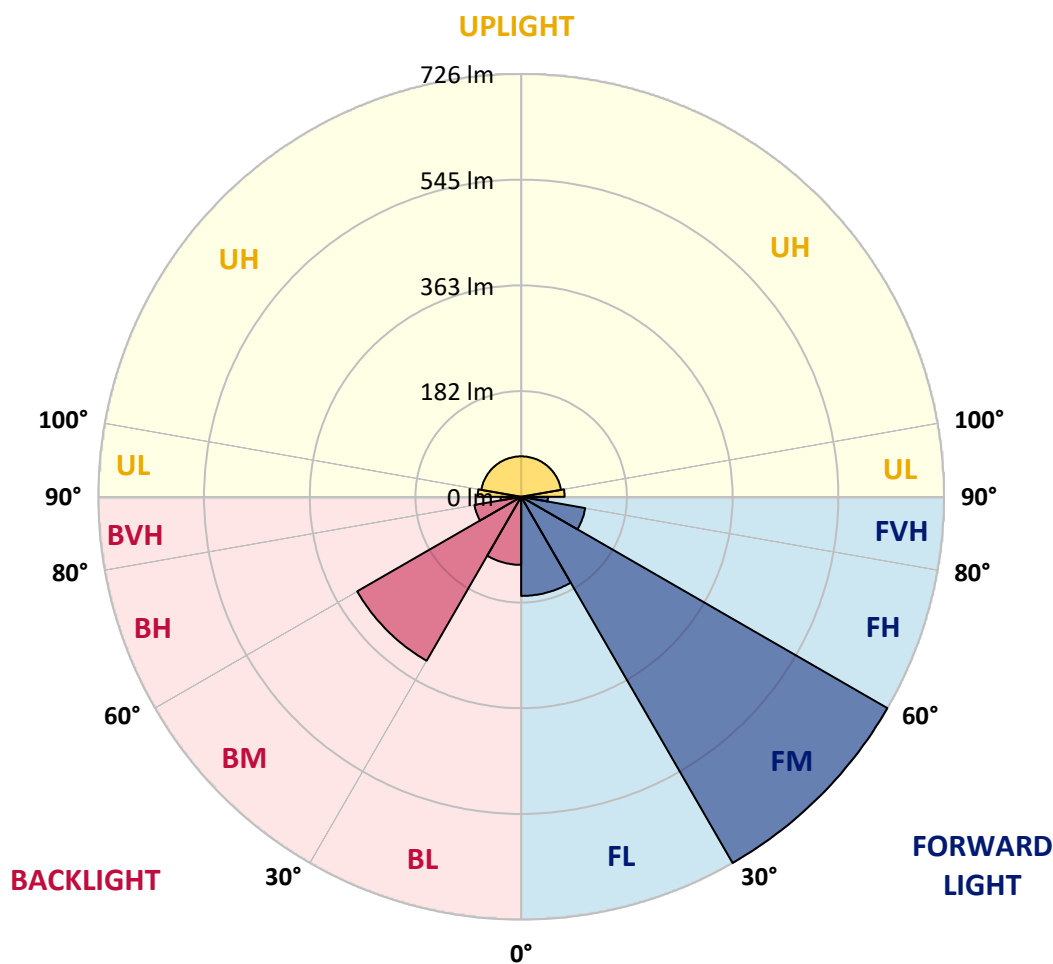
CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-A-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	170.2	9.3			
FM	(30°-60°)	726.2	39.6			
FH	(60°-80°)	111.7	6.1			G0/660
FVH	(80°-90°)	45.9	2.5			G1/100
BL	(0°-30°)	116.9	6.4	B1/500		
BM	(30°-60°)	325.1	17.7	B1/1000		
BH	(60°-80°)	81.5	4.4	B0/110		G0/110
BVH	(80°-90°)	35.4	1.9			G1/100
UL	(90°-100°)	74.5	4.1		U3/500	
UH	(100°-180°)	69.5	3.8		U3/500	

BUG Rating: B1-U3-G1

Type II Short



REPORT NUMBER: P239983

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-A-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	223.4	223.4	223.4	223.4	223.4	223.4	223.4	223.4	223.4	223.4	223.4
2.5°	227.1	227.8	227.6	227.1	228.1	228.6	228.6	228.3	228.6	229.1	230.0
5°	237.9	237.7	238.4	240.4	243.1	243.8	246.0	245.5	246.8	246.8	248.3
7.5°	256.9	257.1	259.6	261.5	264.5	270.9	277.0	285.2	284.9	284.4	286.4
10°	276.5	276.5	281.5	288.6	300.7	314.2	320.1	327.2	334.6	333.4	331.4
12.5°	282.7	283.7	292.3	310.0	336.1	359.2	371.0	369.6	362.2	358.0	351.3
15°	294.0	295.2	304.6	331.7	362.7	383.3	387.8	369.6	353.6	350.6	344.9
17.5°	336.6	336.6	346.2	371.0	394.4	389.7	372.3	363.6	353.3	347.7	339.5
20°	366.1	367.8	383.1	400.6	413.3	398.1	398.3	382.3	371.8	368.3	360.7
22.5°	394.6	397.1	401.5	428.8	432.5	435.5	426.6	412.1	394.4	388.7	380.9
25°	455.2	455.9	460.6	473.6	463.8	458.9	446.1	434.3	427.4	424.4	416.1
27.5°	527.0	524.8	526.8	527.8	512.7	499.2	480.5	493.1	502.9	505.6	498.2
30°	541.8	538.1	553.1	569.1	561.7	545.5	544.2	559.3	577.7	574.3	563.9
32.5°	601.3	595.7	602.6	604.3	603.0	598.4	596.4	615.3	628.6	621.0	606.0
35°	649.3	649.1	624.7	630.4	633.8	644.6	655.5	681.3	693.1	693.6	681.0
37.5°	751.9	744.5	735.4	699.5	680.5	685.5	722.9	768.6	795.2	812.7	792.7
40°	787.1	790.3	782.7	778.7	751.2	739.6	782.7	861.4	933.5	959.1	956.6
42.5°	729.3	736.6	732.2	759.5	781.4	796.2	848.1	915.5	929.3	922.7	887.5
45°	777.5	777.5	765.7	748.7	756.3	804.3	845.4	890.9	934.0	940.9	921.4
46°	742.6	743.3	772.3	759.5	750.9	790.8	833.6	890.9	964.5	979.5	956.6
47.5°	678.1	676.9	730.2	734.4	740.3	773.1	820.1	890.7	932.2	933.2	904.7
50°	537.4	539.6	612.9	651.8	690.6	722.9	786.3	826.2	835.6	833.8	802.8
52.5°	436.2	442.1	481.0	530.0	577.0	639.0	712.8	749.9	770.4	756.8	728.3
55°	302.4	315.2	364.1	408.2	477.1	536.6	600.3	603.8	510.5	468.0	415.1
57.5°	187.0	189.5	232.8	295.0	346.7	393.4	394.2	306.3	238.4	207.2	172.2
60°	103.8	106.0	144.4	190.4	240.9	246.5	220.2	177.1	158.9	150.8	138.5
62.5°	77.3	79.0	104.1	132.4	152.5	160.7	147.9	144.9	145.2	141.5	133.4
65°	69.6	70.6	91.3	105.6	117.4	119.1	123.8	134.1	139.8	139.0	135.6
67.5°	63.2	64.5	83.2	93.5	100.6	109.0	112.9	128.9	144.2	146.6	143.4
70°	56.3	58.3	75.0	85.9	94.0	102.1	110.0	129.9	142.2	145.7	144.2
72.5°	48.7	51.2	65.2	76.5	85.6	94.5	108.0	125.0	141.7	147.9	148.9
75°	42.8	46.0	57.6	67.7	77.3	87.8	102.1	123.3	139.0	142.9	144.9
77.5°	38.6	42.1	50.9	60.3	69.4	80.9	97.4	122.8	136.3	140.7	144.2
80°	35.4	38.9	46.3	53.6	61.3	74.3	92.5	122.0	139.0	143.7	145.7
82.5°	33.0	36.2	42.6	49.2	55.4	67.2	89.1	120.8	138.3	142.2	143.2
85°	33.2	35.7	41.6	47.7	53.4	63.5	87.3	121.3	147.4	153.5	154.5
87.5°	34.9	36.7	42.8	49.9	56.3	66.7	90.5	120.3	146.4	152.1	154.5
90°	37.9	39.4	46.7	55.1	62.7	72.3	89.8	117.6	142.2	147.4	148.9
92.5°	47.0	48.2	56.3	65.4	72.1	75.3	86.9	121.8	142.9	145.9	145.9
95°	60.8	62.2	70.1	77.0	78.2	76.5	85.4	108.3	130.4	136.8	140.5
97.5°	76.0	76.5	80.9	82.2	78.5	74.6	83.4	101.1	118.3	122.8	123.8
100°	80.9	80.9	83.9	82.9	75.8	70.4	75.5	92.0	108.8	113.7	115.1
102.5°	81.9	82.4	85.4	82.2	72.6	63.7	67.2	82.9	98.4	103.8	106.8
105°	86.9	87.1	85.4	77.5	65.7	57.8	60.8	76.5	93.0	98.2	101.4
107.5°	81.2	80.5	75.8	68.4	60.5	54.9	58.3	69.9	82.4	86.6	88.8



REPORT NUMBER: P239983

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-A-7030

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	67.2	66.7	65.0	62.2	57.3	53.1	55.4	65.9	78.0	81.2	83.2
112.5°	64.7	64.2	62.5	59.3	53.6	50.4	54.1	63.2	70.6	72.1	72.3
115°	62.2	61.8	57.8	54.1	49.7	48.2	50.7	59.0	65.9	67.7	69.1
117.5°	53.6	53.1	50.2	48.0	46.3	47.0	51.2	55.9	60.8	62.2	63.2
120°	47.7	47.5	46.0	44.5	43.5	44.0	48.5	53.6	58.6	60.0	60.8
122.5°	45.0	44.8	43.1	40.8	40.8	40.8	44.3	48.2	53.6	54.9	56.6
125°	39.6	39.6	37.9	36.2	38.6	39.6	40.4	40.6	44.8	46.7	47.5
127.5°	35.2	35.4	34.0	32.7	37.2	39.4	38.9	35.7	38.1	39.6	40.6
130°	34.7	34.7	33.0	31.5	33.7	38.1	36.7	33.5	36.4	37.4	37.9
132.5°	33.7	33.7	32.0	29.8	30.3	35.2	32.0	31.2	34.0	34.9	35.2
135°	31.0	31.0	29.8	26.8	24.9	29.8	25.8	27.3	30.0	30.8	31.0
137.5°	27.6	27.6	26.3	23.9	19.7	22.4	19.9	23.1	25.8	26.6	26.8
140°	22.6	22.4	21.7	18.7	14.3	12.5	13.5	18.5	21.2	21.7	22.4
142.5°	16.7	17.0	15.7	13.3	8.6	4.7	7.9	11.8	14.8	15.5	16.0
145°	12.3	12.1	10.8	8.6	4.7	0.7	3.7	7.4	9.3	10.1	10.6
147.5°	8.1	8.1	7.1	5.2	1.5	0.2	1.0	3.7	5.9	6.4	6.6
150°	5.4	5.4	3.9	1.5	0.2	0.2	0.2	0.7	2.5	3.0	3.4
152.5°	1.7	1.7	0.7	0.5	0.2	0.0	0.0	0.2	0.5	0.5	0.7
155°	0.5	0.5	0.5	0.2	0.0	0.0	0.0	0.0	0.2	0.2	0.2
157.5°	0.2	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.2	0.2	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: P239983

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-A-7030

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	223.4	223.4	223.4	223.4	223.4	223.4	223.4	223.4	223.4	223.4	223.4
2.5°	230.3	230.0	229.3	228.6	226.6	224.1	221.7	220.0	219.0	218.2	218.0
5°	247.8	248.3	244.8	239.2	233.7	228.8	224.1	219.7	217.3	215.3	214.5
7.5°	284.9	285.7	278.8	269.9	256.1	239.4	225.1	215.5	208.6	204.5	203.7
10°	330.9	329.0	320.8	301.9	276.8	251.0	224.1	203.5	192.4	187.2	187.0
12.5°	349.6	346.9	337.8	322.1	295.7	262.0	228.8	201.5	185.0	178.4	178.1
15°	341.0	336.3	319.6	305.1	294.8	276.1	246.3	215.0	192.4	184.0	181.8
17.5°	333.6	329.0	314.9	294.0	274.6	266.5	251.9	226.1	202.5	190.7	188.2
20°	355.3	352.3	334.9	307.1	285.7	253.2	241.4	223.7	205.9	198.6	196.6
22.5°	375.2	373.7	351.8	322.8	294.0	271.4	247.8	234.7	217.5	212.3	210.1
25°	412.4	405.5	369.6	330.4	305.6	283.4	253.2	232.8	211.8	205.2	204.0
27.5°	499.7	483.7	431.3	372.5	322.6	287.4	252.7	222.7	199.8	191.4	190.9
30°	555.3	540.8	481.7	417.0	349.1	296.7	249.5	213.3	196.1	188.0	188.2
32.5°	589.0	569.6	503.2	421.2	355.3	301.4	251.5	210.1	187.0	176.7	176.4
35°	662.1	635.0	538.6	454.9	367.3	294.5	243.1	203.5	182.1	174.4	173.5
37.5°	766.2	735.7	605.0	482.2	372.3	285.4	232.3	195.8	170.3	159.7	158.9
40°	916.5	871.7	697.0	515.2	368.3	278.5	220.5	184.3	163.1	156.2	154.0
42.5°	842.0	791.3	642.2	508.8	358.5	259.6	209.1	178.6	158.9	153.5	150.6
45°	888.5	829.4	648.8	473.1	320.8	231.5	189.9	167.3	147.6	140.0	139.3
46°	914.3	852.5	677.6	462.3	303.6	222.7	181.3	162.1	145.2	135.3	133.1
47.5°	858.2	789.5	623.0	441.2	289.8	202.7	170.0	154.0	142.5	133.4	131.9
50°	752.6	685.5	538.8	376.2	249.5	178.9	151.6	142.0	130.4	120.6	118.8
52.5°	686.9	630.6	493.3	341.3	211.8	150.8	135.3	127.0	115.1	103.6	102.1
55°	377.7	338.8	304.8	256.4	175.7	127.4	117.9	112.9	100.9	89.6	88.8
57.5°	155.5	139.8	138.5	130.6	120.8	107.3	101.9	98.9	86.9	73.1	72.6
60°	130.9	116.6	102.8	90.5	89.8	89.6	87.8	82.7	69.4	55.1	54.6
62.5°	127.4	113.4	99.9	84.9	78.5	80.5	77.3	70.9	60.8	47.0	46.5
65°	129.9	115.4	99.4	82.4	75.5	76.3	72.8	67.9	61.0	51.2	50.7
67.5°	138.3	123.3	105.3	81.4	73.1	74.6	72.1	68.4	64.5	58.3	57.1
70°	139.5	126.2	105.6	81.9	70.4	72.1	71.4	68.2	65.4	60.0	59.3
72.5°	143.2	131.1	107.8	80.2	67.4	68.2	69.1	68.2	66.4	63.2	62.0
75°	139.8	129.2	106.8	78.7	64.5	64.0	66.4	67.7	68.2	66.9	65.4
77.5°	139.0	130.2	107.0	77.7	61.8	59.8	61.8	63.7	64.7	63.5	62.2
80°	140.0	132.4	110.2	78.0	58.8	53.9	54.9	57.1	57.3	55.1	53.4
82.5°	137.8	130.4	106.8	75.3	54.1	48.0	48.2	50.4	50.7	48.0	46.0
85°	147.6	138.8	109.2	71.8	49.2	43.8	44.0	45.0	43.5	40.6	38.6
87.5°	147.4	136.8	104.3	66.4	46.0	41.3	41.1	40.8	38.4	34.9	33.2
90°	142.2	131.1	97.7	58.6	40.6	37.9	37.2	35.7	32.2	28.3	27.1
92.5°	138.8	127.0	93.2	55.4	35.7	33.2	32.7	31.2	27.8	23.6	22.9
95°	135.1	123.5	85.9	48.5	31.5	29.0	28.3	26.8	24.1	20.7	20.2
97.5°	119.1	107.8	75.8	44.0	28.0	25.3	24.9	23.6	21.4	18.9	18.7
100°	110.0	99.9	70.4	40.4	25.1	22.1	21.9	21.2	19.7	18.0	17.7
102.5°	102.8	93.0	65.2	37.4	22.4	19.7	19.4	19.2	18.5	17.2	17.2
105°	97.4	88.1	62.5	34.9	20.2	18.0	17.7	17.7	17.0	16.2	16.2
107.5°	84.9	77.0	54.4	31.0	18.5	16.5	16.5	16.5	16.0	15.5	15.7



REPORT NUMBER: P239983

CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-A-7030

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	80.0	72.6	51.7	29.0	17.7	15.3	15.0	15.0	14.8	15.0	15.0
112.5°	68.9	62.5	45.5	27.8	17.2	14.5	13.8	13.3	12.8	13.3	13.5
115°	66.2	60.3	44.0	26.8	16.7	14.0	13.0	12.3	11.3	12.1	12.1
117.5°	60.8	55.4	40.8	26.1	16.7	13.3	12.3	11.6	10.6	11.1	11.1
120°	58.3	53.6	41.1	26.8	17.0	12.5	11.6	10.3	9.6	10.3	10.3
122.5°	54.9	50.7	38.6	25.3	16.2	12.3	11.3	8.9	8.4	9.1	9.1
125°	46.0	42.6	33.2	22.4	15.5	12.3	11.1	7.9	7.9	8.4	8.6
127.5°	39.1	36.4	28.8	20.9	15.7	13.0	10.6	6.9	7.4	8.1	8.1
130°	36.9	34.7	28.5	21.4	16.5	13.8	8.6	6.4	6.9	7.6	7.6
132.5°	34.4	32.5	27.6	21.9	16.7	13.0	7.1	5.9	6.4	6.9	6.9
135°	30.3	28.8	24.9	19.9	15.0	10.3	5.7	5.2	5.9	6.4	6.6
137.5°	26.6	25.3	21.9	18.0	13.5	8.9	3.9	4.7	5.2	5.4	5.7
140°	21.9	21.2	18.5	14.8	10.1	4.9	3.0	3.7	4.2	4.7	4.7
142.5°	16.0	15.5	13.0	9.6	6.2	2.0	2.0	2.7	3.2	3.7	3.7
145°	10.6	10.1	8.4	6.2	2.7	0.5	1.2	2.0	2.7	3.0	3.0
147.5°	6.6	6.4	5.2	3.2	1.0	0.5	0.5	1.5	2.0	2.2	2.2
150°	3.4	3.2	2.2	1.0	0.5	0.2	0.2	0.5	1.2	1.5	1.5
152.5°	0.7	0.7	0.5	0.2	0.2	0.2	0.2	0.2	0.2	0.5	0.5
155°	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
157.5°	0.2	0.2	0.2	0.2	0.2	0.2	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)