

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: P239993

Luminaire Tested: **UTLD-AF24-30-D-U-T2U-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239993
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-AF24-30-D-U-T2U-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 375mA 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: 2898 lumens
Efficiency: N/A
Efficacy: 93.5 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): 31
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



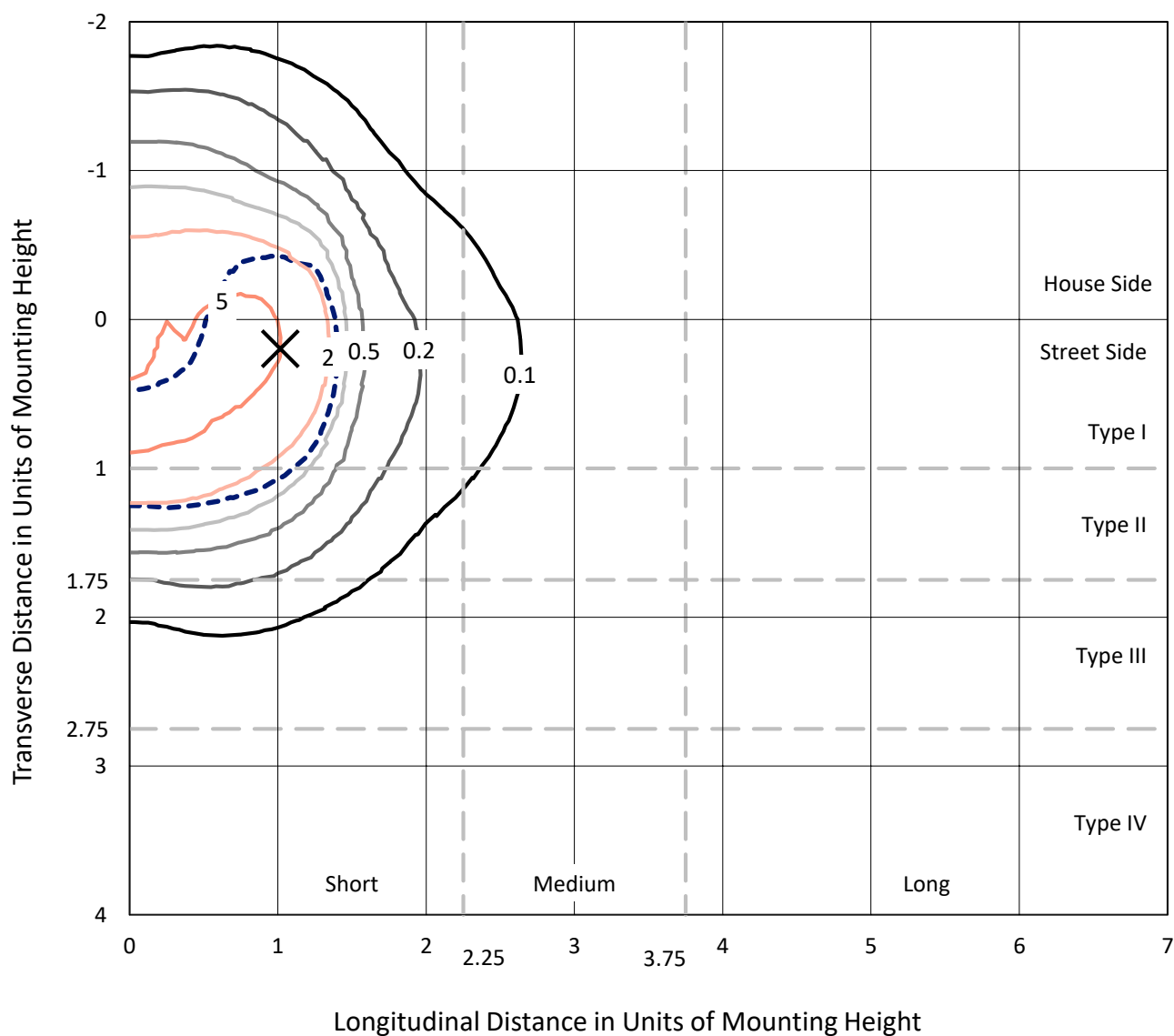
REPORT NUMBER: P239993

CATALOG NUMBER: UTLD-AF24-30-D-U-T2U-A

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

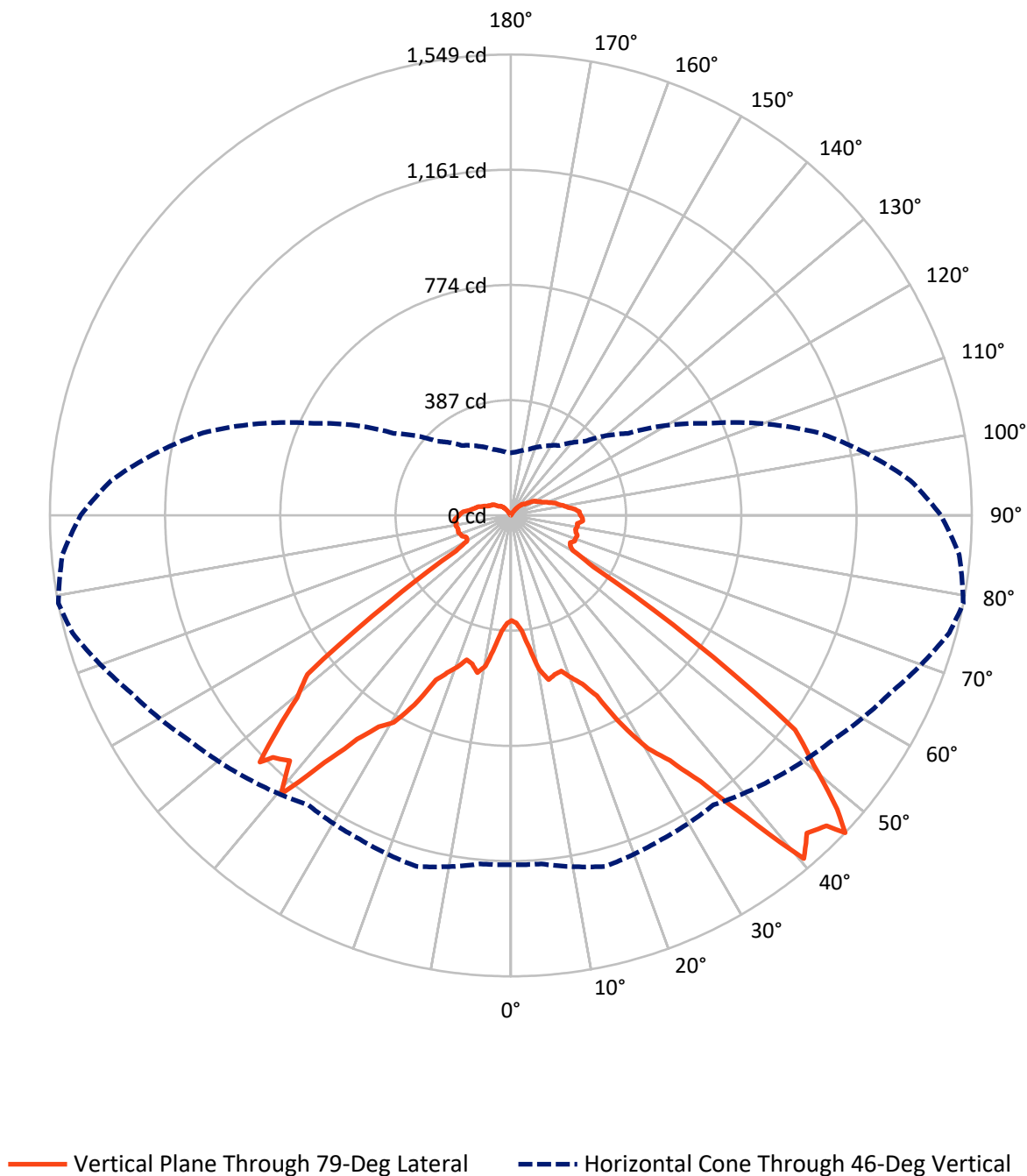


Based on 10 foot mounting height. Maximum calculated value = 6.3 fc
Type II - Short - Non-Cutoff

REPORT NUMBER: P239993

CATALOG NUMBER: UTLD-AF24-30-D-U-T2U-A

Luminous Intensity Polar Plot



REPORT NUMBER: P239993

CATALOG NUMBER: UTLD-AF24-30-D-U-T2U-A

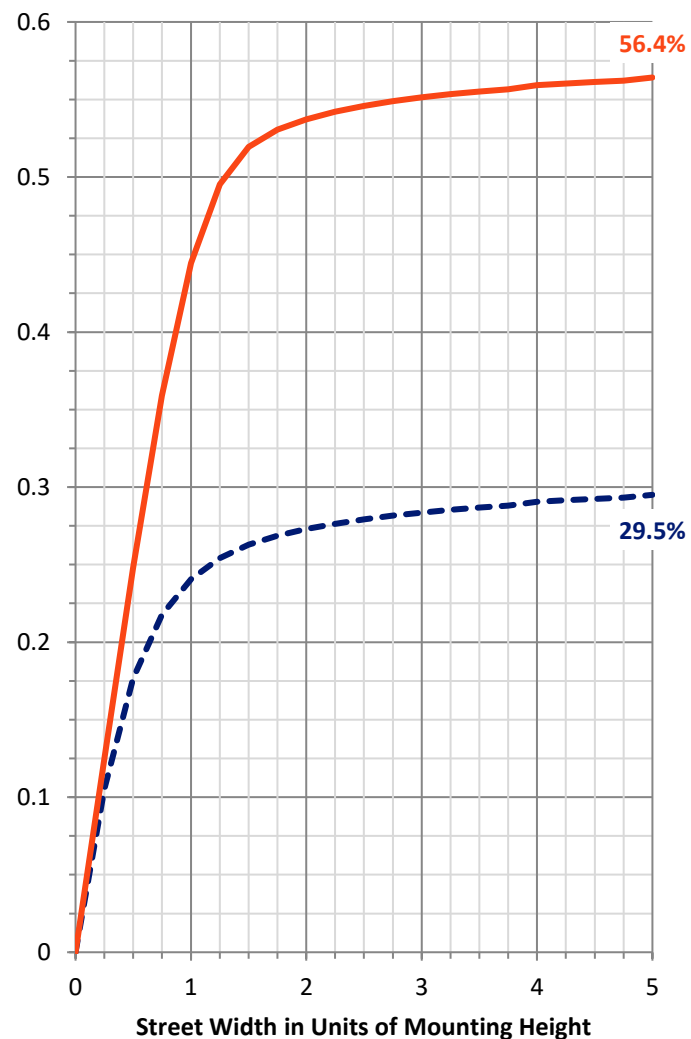
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	883.4	109.9	993.2
	% Fixture	30.5	3.8	34.3
Street Side	Lumens	1666.4	238.4	1904.8
	% Fixture	57.5	8.2	65.7
Total	Lumens	2549.8	348.2	2898.0
	% Fixture	88.0	12.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.1	1.3
10°-20°	137.7	4.8
20°-30°	278.2	9.6
30°-40°	509.2	17.6
40°-50°	703.7	24.3
50°-60°	449.1	15.5
60°-70°	160.9	5.6
70°-80°	144.5	5.0
80°-90°	128.5	4.4
90°-100°	117.9	4.1
100°-110°	91.6	3.2
110°-120°	63.6	2.2
120°-130°	42.6	1.5
130°-140°	25.5	0.9
140°-150°	6.8	0.2
150°-160°	0.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2549.8	88.0
0°-180°	2898.0	100.0

Coefficient of Utilization



REPORT NUMBER: P239993

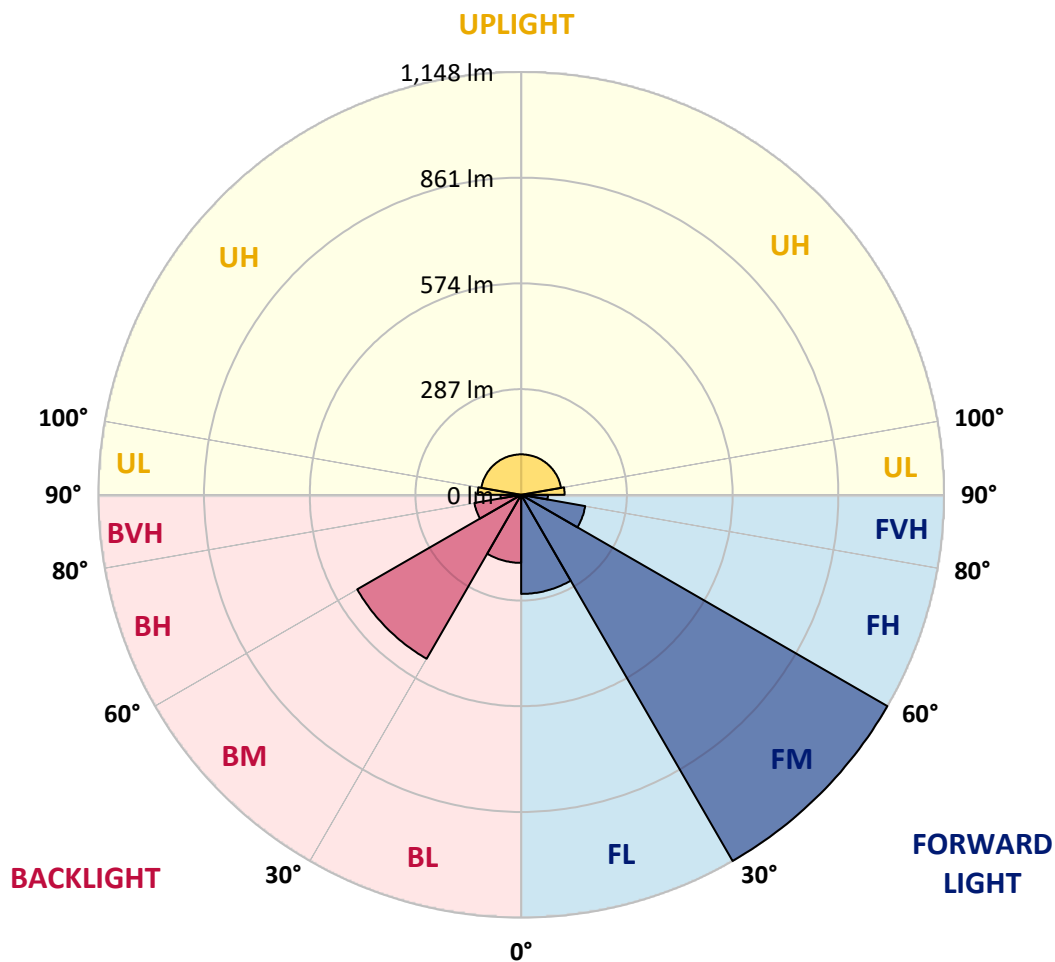
CATALOG NUMBER: UTLD-AF24-30-D-U-T2U-A

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	269.2	9.3			
FM	(30°-60°)	1148.1	39.6			
FH	(60°-80°)	176.6	6.1			G0/660
FVH	(80°-90°)	72.6	2.5			G1/100
BL	(0°-30°)	184.7	6.4	B1/500		
BM	(30°-60°)	513.9	17.7	B1/1000		
BH	(60°-80°)	128.8	4.4	B1/500		G1/500
BVH	(80°-90°)	55.9	1.9			G1/100
UL	(90°-100°)	117.9	4.1		U3/500	
UH	(100°-180°)	109.9	3.8		U3/500	

BUG Rating: B1-U3-G1

Type II Short



REPORT NUMBER: P239993

CATALOG NUMBER: UTLD-AF24-30-D-U-T2U-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	353.2	353.2	353.2	353.2	353.2	353.2	353.2	353.2	353.2	353.2	353.2
2.5°	359.0	360.2	359.8	359.0	360.6	361.4	361.4	361.0	361.4	362.2	363.7
5°	376.2	375.8	376.9	380.0	384.3	385.5	389.0	388.2	390.2	390.2	392.5
7.5°	406.1	406.5	410.4	413.5	418.2	428.3	438.0	450.8	450.5	449.7	452.8
10°	437.2	437.2	445.0	456.3	475.4	496.7	506.1	517.4	529.0	527.1	524.0
12.5°	447.0	448.5	462.1	490.1	531.4	567.9	586.6	584.3	572.6	566.0	555.5
15°	464.8	466.8	481.6	524.4	573.4	606.1	613.1	584.3	559.0	554.3	545.4
17.5°	532.1	532.1	547.3	586.6	623.6	616.2	588.5	574.9	558.6	549.6	536.8
20°	578.8	581.5	605.7	633.3	653.5	629.4	629.8	604.5	587.8	582.3	570.3
22.5°	623.9	627.8	634.8	678.0	683.9	688.5	674.5	651.6	623.6	614.6	602.2
25°	719.6	720.8	728.2	748.8	733.3	725.5	705.2	686.6	675.7	671.0	657.8
27.5°	833.2	829.7	832.8	834.4	810.7	789.3	759.7	779.5	795.1	799.4	787.7
30°	856.6	850.7	874.5	899.7	888.1	862.4	860.5	884.2	913.4	907.9	891.6
32.5°	950.7	941.8	952.6	955.4	953.4	946.0	942.9	972.9	993.9	981.8	958.1
35°	1026.6	1026.2	987.7	996.6	1002.0	1019.2	1036.3	1077.1	1095.8	1096.6	1076.7
37.5°	1188.8	1177.1	1162.7	1105.9	1076.0	1083.7	1142.9	1215.2	1257.2	1284.8	1253.3
40°	1244.4	1249.4	1237.4	1231.2	1187.6	1169.3	1237.4	1361.9	1475.8	1516.3	1512.4
42.5°	1153.0	1164.6	1157.6	1200.8	1235.4	1258.8	1340.9	1447.4	1469.2	1458.7	1403.1
45°	1229.2	1229.2	1210.6	1183.7	1195.8	1271.6	1336.6	1408.5	1476.6	1487.5	1456.8
46°	1174.0	1175.2	1221.1	1200.8	1187.2	1250.2	1317.9	1408.5	1524.9	1548.6	1512.4
47.5°	1072.1	1070.1	1154.5	1161.1	1170.5	1222.2	1296.5	1408.2	1473.9	1475.5	1430.3
50°	849.6	853.1	969.0	1030.4	1091.9	1142.9	1243.2	1306.2	1321.0	1318.3	1269.3
52.5°	689.7	699.0	760.5	837.9	912.2	1010.2	1126.9	1185.7	1217.9	1196.5	1151.4
55°	478.1	498.3	575.7	645.3	754.3	848.4	949.1	954.6	807.2	739.9	656.2
57.5°	295.6	299.5	368.0	466.4	548.1	622.0	623.2	484.3	376.9	327.5	272.3
60°	164.2	167.7	228.3	301.1	380.8	389.8	348.1	280.1	251.3	238.5	219.0
62.5°	122.1	124.9	164.5	209.3	241.2	254.0	233.8	229.1	229.5	223.7	210.8
65°	110.1	111.6	144.3	166.9	185.6	188.3	195.7	212.0	220.9	219.8	214.3
67.5°	100.0	101.9	131.5	147.8	159.1	172.3	178.5	203.8	228.0	231.8	226.8
70°	89.1	92.2	118.6	135.8	148.6	161.4	173.9	205.4	224.8	230.3	228.0
72.5°	77.0	80.9	103.1	121.0	135.4	149.4	170.8	197.6	224.1	233.8	235.3
75°	67.7	72.7	91.0	107.0	122.1	138.9	161.4	194.9	219.8	226.0	229.1
77.5°	61.1	66.5	80.5	95.3	109.7	128.0	154.0	194.1	215.5	222.5	228.0
80°	56.0	61.5	73.1	84.8	96.9	117.5	146.3	192.9	219.8	227.2	230.3
82.5°	52.1	57.2	67.3	77.8	87.5	106.2	140.8	191.0	218.6	224.8	226.4
85°	52.5	56.4	65.7	75.5	84.4	100.4	138.1	191.8	233.0	242.7	244.3
87.5°	55.2	58.0	67.7	79.0	89.1	105.4	143.1	190.2	231.5	240.4	244.3
90°	59.9	62.2	73.9	87.1	99.2	114.4	142.0	185.9	224.8	233.0	235.3
92.5°	74.3	76.2	89.1	103.5	114.0	119.0	137.3	192.6	226.0	230.7	230.7
95°	96.1	98.4	110.9	121.8	123.7	121.0	135.0	171.2	206.2	216.3	222.1
97.5°	120.2	121.0	128.0	129.9	124.1	117.9	131.9	159.9	187.1	194.1	195.7
100°	128.0	128.0	132.6	131.1	119.8	111.3	119.4	145.5	171.9	179.7	182.0
102.5°	129.5	130.3	135.0	129.9	114.8	100.7	106.2	131.1	155.6	164.2	168.8
105°	137.3	137.7	135.0	122.5	103.9	91.4	96.1	121.0	147.0	155.2	160.3
107.5°	128.4	127.2	119.8	108.1	95.7	86.7	92.2	110.5	130.3	136.9	140.4



REPORT NUMBER: P239993

CATALOG NUMBER: UTLD-AF24-30-D-U-T2U-A

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	106.2	105.4	102.7	98.4	90.6	84.0	87.5	104.3	123.3	128.4	131.5
112.5°	102.3	101.5	98.8	93.7	84.8	79.7	85.6	100.0	111.6	114.0	114.4
115°	98.4	97.6	91.4	85.6	78.6	76.2	80.1	93.4	104.3	107.0	109.3
117.5°	84.8	84.0	79.4	75.9	73.1	74.3	80.9	88.3	96.1	98.4	100.0
120°	75.5	75.1	72.7	70.4	68.9	69.6	76.6	84.8	92.6	94.9	96.1
122.5°	71.2	70.8	68.1	64.6	64.6	64.6	70.0	76.2	84.8	86.7	89.5
125°	62.6	62.6	59.9	57.2	61.1	62.6	63.8	64.2	70.8	73.9	75.1
127.5°	55.6	56.0	53.7	51.7	58.7	62.2	61.5	56.4	60.3	62.6	64.2
130°	54.8	54.8	52.1	49.8	53.3	60.3	58.0	52.9	57.6	59.1	59.9
132.5°	53.3	53.3	50.6	47.1	47.8	55.6	50.6	49.4	53.7	55.2	55.6
135°	49.0	49.0	47.1	42.4	39.3	47.1	40.8	43.2	47.5	48.6	49.0
137.5°	43.6	43.6	41.6	37.7	31.1	35.4	31.5	36.6	40.8	42.0	42.4
140°	35.8	35.4	34.2	29.6	22.6	19.8	21.4	29.2	33.5	34.2	35.4
142.5°	26.5	26.8	24.9	21.0	13.6	7.4	12.4	18.7	23.3	24.5	25.3
145°	19.4	19.1	17.1	13.6	7.4	1.2	5.8	11.7	14.8	15.9	16.7
147.5°	12.8	12.8	11.3	8.2	2.3	0.4	1.6	5.8	9.3	10.1	10.5
150°	8.6	8.6	6.2	2.3	0.4	0.4	0.4	1.2	3.9	4.7	5.4
152.5°	2.7	2.7	1.2	0.8	0.4	0.0	0.0	0.4	0.8	0.8	1.2
155°	0.8	0.8	0.8	0.4	0.0	0.0	0.0	0.0	0.4	0.4	0.4
157.5°	0.4	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.4	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.4	0.4	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: P239993

CATALOG NUMBER: UTLD-AF24-30-D-U-T2U-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	353.2	353.2	353.2	353.2	353.2	353.2	353.2	353.2	353.2	353.2	353.2
2.5°	364.1	363.7	362.5	361.4	358.3	354.4	350.5	347.8	346.2	345.0	344.6
5°	391.7	392.5	387.0	378.1	369.5	361.8	354.4	347.4	343.5	340.4	339.2
7.5°	450.5	451.6	440.7	426.7	404.9	378.5	355.9	340.8	329.9	323.3	322.1
10°	523.2	520.1	507.2	477.3	437.6	396.8	354.4	321.7	304.2	296.0	295.6
12.5°	552.8	548.5	534.1	509.2	467.6	414.3	361.8	318.6	292.5	282.0	281.6
15°	539.1	531.8	505.3	482.4	466.0	436.5	389.4	340.0	304.2	291.0	287.5
17.5°	527.5	520.1	497.9	464.8	434.1	421.3	398.3	357.5	320.1	301.5	297.6
20°	561.7	557.0	529.4	485.5	451.6	400.3	381.6	353.6	325.6	313.9	310.8
22.5°	593.2	590.9	556.3	510.4	464.8	429.1	391.7	371.1	343.9	335.7	332.2
25°	652.0	641.1	584.3	522.4	483.1	448.1	400.3	368.0	334.9	324.4	322.5
27.5°	790.0	764.8	681.9	588.9	510.0	454.3	399.5	352.0	315.9	302.6	301.9
30°	878.0	855.0	761.7	659.3	552.0	469.1	394.4	337.3	310.0	297.2	297.6
32.5°	931.3	900.5	795.5	666.0	561.7	476.5	397.6	332.2	295.6	279.3	278.9
35°	1046.8	1004.0	851.5	719.3	580.8	465.6	384.3	321.7	287.9	275.8	274.2
37.5°	1211.3	1163.1	956.5	762.4	588.5	451.2	367.2	309.6	269.2	252.5	251.3
40°	1449.0	1378.2	1102.0	814.6	582.3	440.3	348.5	291.4	257.9	247.0	243.5
42.5°	1331.1	1251.0	1015.3	804.4	566.8	410.4	330.6	282.4	251.3	242.7	238.1
45°	1404.7	1311.3	1025.8	748.0	507.2	366.0	300.3	264.5	233.4	221.3	220.2
46°	1445.5	1347.9	1071.3	730.9	480.0	352.0	286.7	256.3	229.5	213.9	210.4
47.5°	1356.8	1248.3	984.9	697.5	458.2	320.5	268.8	243.5	225.2	210.8	208.5
50°	1189.9	1083.7	851.9	594.8	394.4	282.8	239.6	224.4	206.2	190.6	187.9
52.5°	1086.1	997.0	779.9	539.5	334.9	238.5	213.9	200.7	182.0	163.8	161.4
55°	597.1	535.6	482.0	405.3	277.7	201.5	186.3	178.5	159.5	141.6	140.4
57.5°	245.8	220.9	219.0	206.6	191.0	169.6	161.0	156.4	137.3	115.5	114.8
60°	206.9	184.4	162.6	143.1	142.0	141.6	138.9	130.7	109.7	87.1	86.4
62.5°	201.5	179.3	157.9	134.2	124.1	127.2	122.1	112.0	96.1	74.3	73.5
65°	205.4	182.4	157.2	130.3	119.4	120.6	115.1	107.4	96.5	80.9	80.1
67.5°	218.6	194.9	166.5	128.8	115.5	117.9	114.0	108.1	101.9	92.2	90.2
70°	220.6	199.6	166.9	129.5	111.3	114.0	112.8	107.8	103.5	94.9	93.7
72.5°	226.4	207.3	170.4	126.8	106.6	107.8	109.3	107.8	105.0	100.0	98.0
75°	220.9	204.2	168.8	124.5	101.9	101.1	105.0	107.0	107.8	105.8	103.5
77.5°	219.8	205.8	169.2	122.9	97.6	94.5	97.6	100.7	102.3	100.4	98.4
80°	221.3	209.3	174.3	123.3	93.0	85.2	86.7	90.2	90.6	87.1	84.4
82.5°	217.8	206.2	168.8	119.0	85.6	75.9	76.2	79.7	80.1	75.9	72.7
85°	233.4	219.4	172.7	113.6	77.8	69.2	69.6	71.2	68.9	64.2	61.1
87.5°	233.0	216.3	164.9	105.0	72.7	65.4	65.0	64.6	60.7	55.2	52.5
90°	224.8	207.3	154.4	92.6	64.2	59.9	58.7	56.4	51.0	44.7	42.8
92.5°	219.4	200.7	147.4	87.5	56.4	52.5	51.7	49.4	44.0	37.3	36.2
95°	213.6	195.3	135.8	76.6	49.8	45.9	44.7	42.4	38.1	32.7	31.9
97.5°	188.3	170.4	119.8	69.6	44.3	40.1	39.3	37.3	33.8	30.0	29.6
100°	173.9	157.9	111.3	63.8	39.7	35.0	34.6	33.5	31.1	28.4	28.0
102.5°	162.6	147.0	103.1	59.1	35.4	31.1	30.7	30.3	29.2	27.2	27.2
105°	154.0	139.3	98.8	55.2	31.9	28.4	28.0	28.0	26.8	25.7	25.7
107.5°	134.2	121.8	86.0	49.0	29.2	26.1	26.1	26.1	25.3	24.5	24.9



REPORT NUMBER: P239993

CATALOG NUMBER: UTLD-AF24-30-D-U-T2U-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	126.4	114.8	81.7	45.9	28.0	24.1	23.7	23.7	23.3	23.7	23.7
112.5°	108.9	98.8	72.0	44.0	27.2	23.0	21.8	21.0	20.2	21.0	21.4
115°	104.6	95.3	69.6	42.4	26.5	22.2	20.6	19.4	17.9	19.1	19.1
117.5°	96.1	87.5	64.6	41.2	26.5	21.0	19.4	18.3	16.7	17.5	17.5
120°	92.2	84.8	65.0	42.4	26.8	19.8	18.3	16.3	15.2	16.3	16.3
122.5°	86.7	80.1	61.1	40.1	25.7	19.4	17.9	14.0	13.2	14.4	14.4
125°	72.7	67.3	52.5	35.4	24.5	19.4	17.5	12.4	12.4	13.2	13.6
127.5°	61.9	57.6	45.5	33.1	24.9	20.6	16.7	10.9	11.7	12.8	12.8
130°	58.3	54.8	45.1	33.8	26.1	21.8	13.6	10.1	10.9	12.1	12.1
132.5°	54.5	51.3	43.6	34.6	26.5	20.6	11.3	9.3	10.1	10.9	10.9
135°	47.8	45.5	39.3	31.5	23.7	16.3	8.9	8.2	9.3	10.1	10.5
137.5°	42.0	40.1	34.6	28.4	21.4	14.0	6.2	7.4	8.2	8.6	8.9
140°	34.6	33.5	29.2	23.3	15.9	7.8	4.7	5.8	6.6	7.4	7.4
142.5°	25.3	24.5	20.6	15.2	9.7	3.1	3.1	4.3	5.1	5.8	5.8
145°	16.7	15.9	13.2	9.7	4.3	0.8	1.9	3.1	4.3	4.7	4.7
147.5°	10.5	10.1	8.2	5.1	1.6	0.8	0.8	2.3	3.1	3.5	3.5
150°	5.4	5.1	3.5	1.6	0.8	0.4	0.4	0.8	1.9	2.3	2.3
152.5°	1.2	1.2	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.8	0.8
155°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
157.5°	0.4	0.4	0.4	0.4	0.4	0.4	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)