

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: P241018

Luminaire Tested: **UTLD-AF24-20-D-U-T4W-CL**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P241018
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-47)
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-T4W-CL
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS AND CLEAR LENS PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2310.8 lumens
Efficiency: N/A
Efficacy: 110.0 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 - U2 - 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

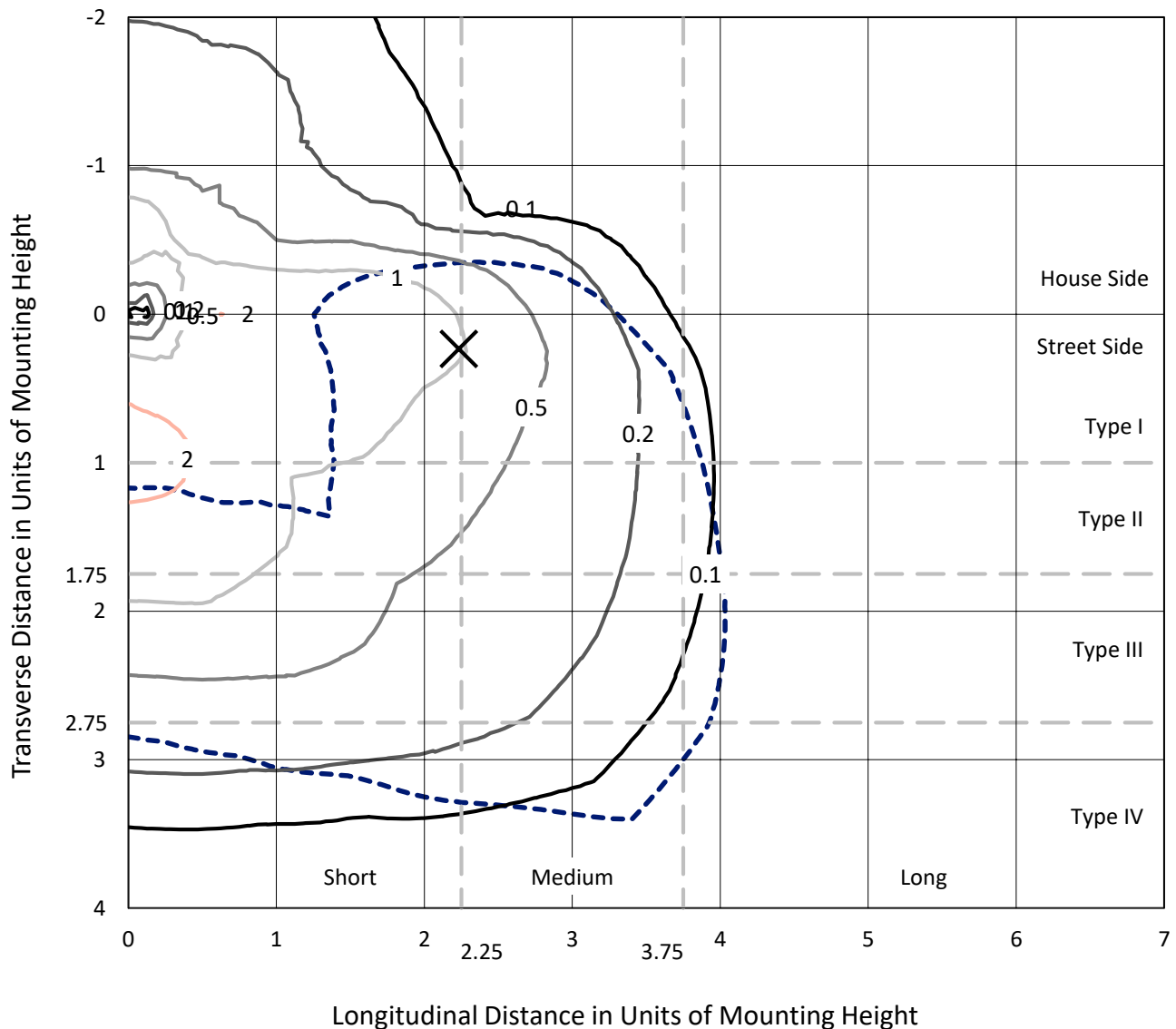


REPORT NUMBER: P241018

CATALOG NUMBER: UTLD-AF24-20-D-U-T4W-CL

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

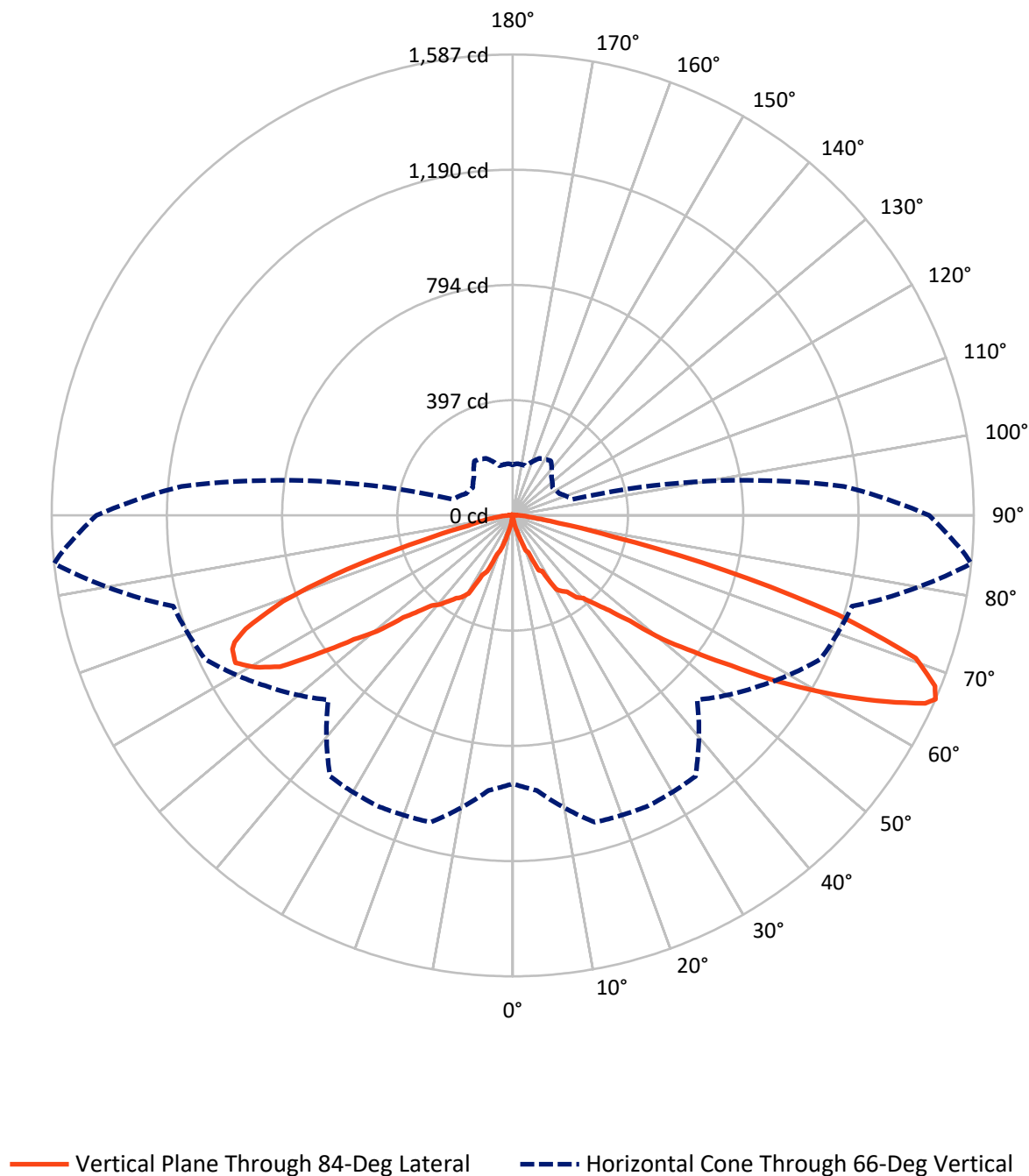


Based on 10 foot mounting height. Maximum calculated value = 2.6 fc
Type IV - Short - Non-Cutoff

REPORT NUMBER: P241018

CATALOG NUMBER: UTLD-AF24-20-D-U-T4W-CL

Luminous Intensity Polar Plot



REPORT NUMBER: P241018

CATALOG NUMBER: UTLD-AF24-20-D-U-T4W-CL

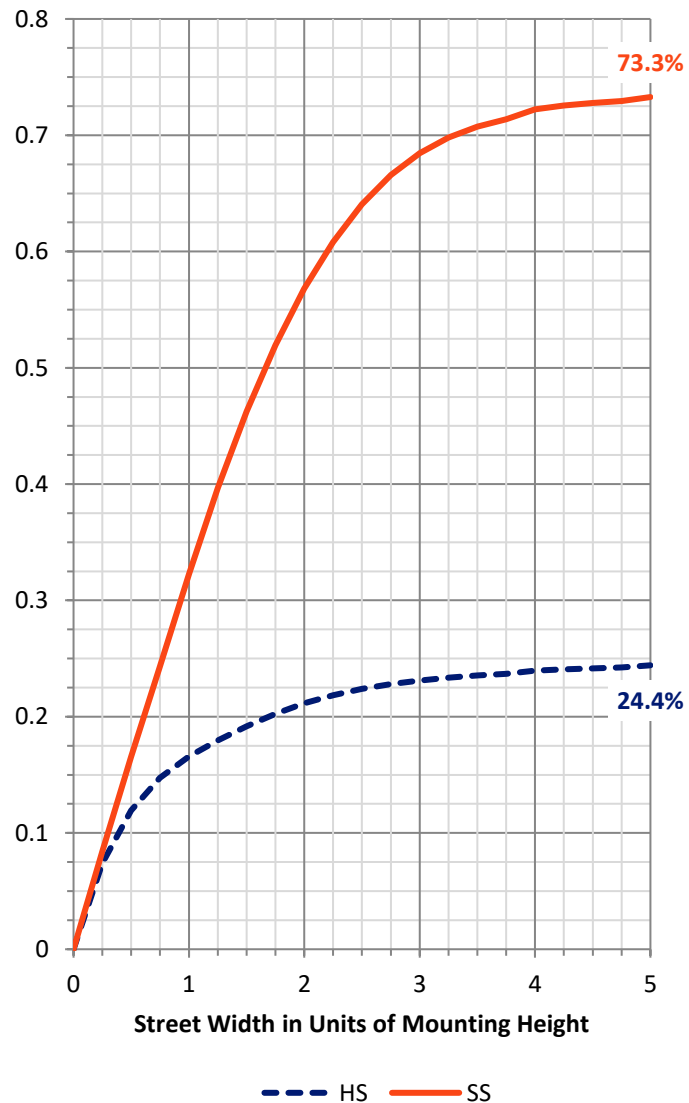
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	578.3	14.1	592.3
	% Fixture	25.0	0.6	25.6
Street Side	Lumens	1705.3	13.2	1718.5
	% Fixture	73.8	0.6	74.4
Total	Lumens	2283.6	27.3	2310.8
	% Fixture	98.8	1.2	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1.7	0.1
10°-20°	21.5	0.9
20°-30°	79.3	3.4
30°-40°	163.0	7.1
40°-50°	270.4	11.7
50°-60°	471.5	20.4
60°-70°	694.6	30.1
70°-80°	506.9	21.9
80°-90°	74.8	3.2
90°-100°	13.9	0.6
100°-110°	6.4	0.3
110°-120°	3.0	0.1
120°-130°	2.1	0.1
130°-140°	1.2	0.1
140°-150°	0.6	0.0
150°-160°	0.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	2283.6	98.8
0°-180°	2310.8	100.0

Coefficient of Utilization



REPORT NUMBER: P241018

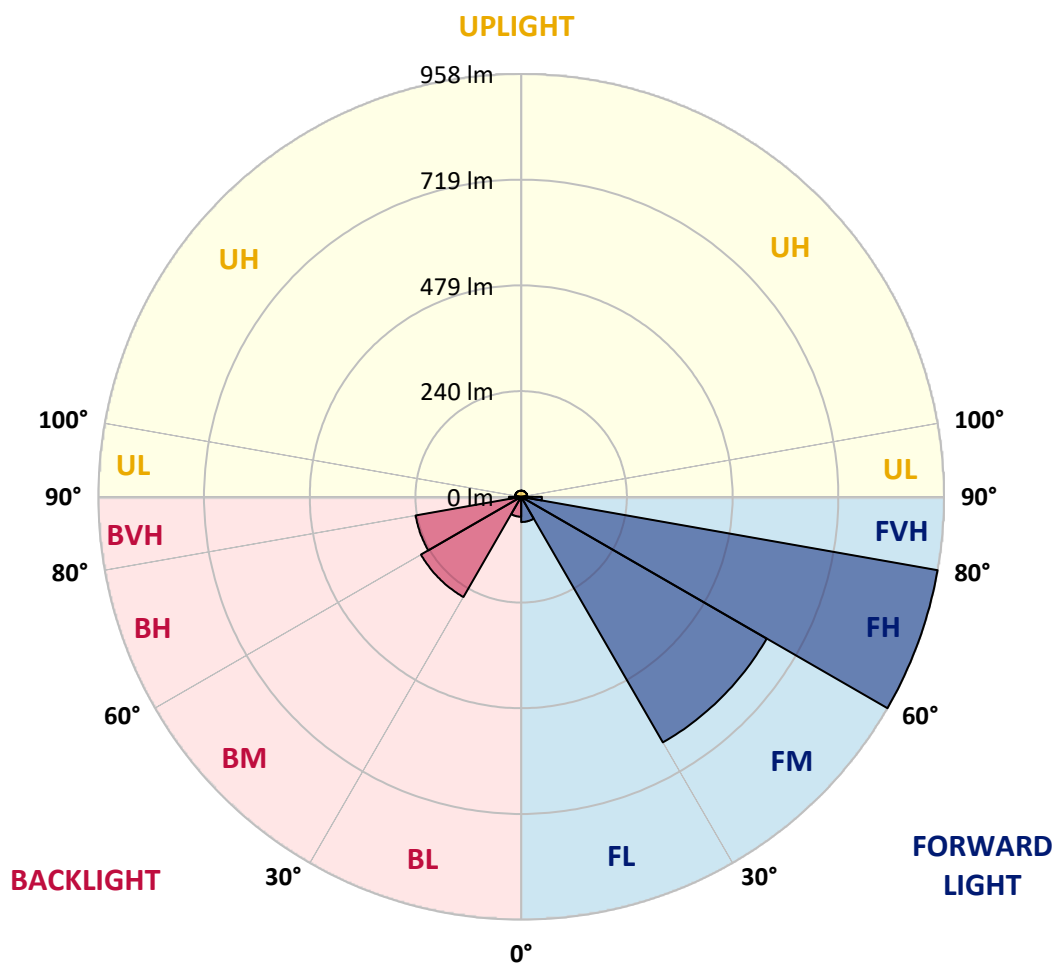
CATALOG NUMBER: UTLD-AF24-20-D-U-T4W-CL

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	57.2	2.5			
FM	(30°-60°)	642.7	27.8			
FH	(60°-80°)	958.4	41.5			G1/1800
FVH	(80°-90°)	47.0	2.0			G1/100
BL	(0°-30°)	45.2	2.0	B0/110		
BM	(30°-60°)	262.2	11.3	B1/1000		
BH	(60°-80°)	243.1	10.5	B1/500		G1/500
BVH	(80°-90°)	27.8	1.2			G1/100
UL	(90°-100°)	13.9	0.6		U2/50	
UH	(100°-180°)	14.1	0.6		U2/50	

BUG Rating: B1-U2-G1

Type IV Short



REPORT NUMBER: P241018

CATALOG NUMBER: UTLD-AF24-20-D-U-T4W-CL

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
0°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
2.5°	13.6	12.2	12.2	11.7	10.5	9.4	7.4	6.2	5.4	5.4	5.1
5°	26.2	27.6	31.8	29.3	24.1	31.5	14.2	9.4	5.9	5.1	5.1
7.5°	41.5	43.8	33.6	29.9	29.9	31.8	25.9	15.7	8.0	5.9	5.7
10°	87.0	82.1	57.2	58.0	49.2	34.4	23.6	20.8	12.2	9.6	8.8
12.5°	84.4	83.3	85.0	74.2	74.8	54.3	30.2	48.3	43.8	41.7	46.0
15°	108.8	107.7	86.4	88.1	79.9	83.0	70.0	69.7	67.4	56.6	54.3
17.5°	151.2	150.1	169.1	112.5	80.2	103.7	90.1	77.6	80.4	85.0	88.4
20°	151.0	149.2	157.2	135.0	136.8	107.2	96.1	141.3	129.1	129.6	122.2
22.5°	222.9	212.7	186.8	141.0	154.1	125.3	142.4	139.5	130.2	137.9	135.6
25°	216.4	220.3	211.5	208.7	156.9	179.6	156.6	161.2	199.0	209.2	209.5
27.5°	251.0	243.4	236.5	214.3	210.9	174.8	161.2	214.6	208.4	217.8	217.5
30°	299.3	296.8	295.0	238.2	228.2	192.7	217.2	219.2	253.0	295.6	304.4
32.5°	346.0	333.7	306.2	275.8	229.1	227.7	215.7	272.3	290.2	310.5	313.5
35°	419.8	419.6	373.0	294.8	256.5	241.9	279.5	293.4	293.1	323.5	342.0
37.5°	482.9	486.1	437.2	355.9	265.3	244.5	291.6	316.4	317.5	358.7	351.6
40°	579.1	570.8	527.0	424.9	303.0	260.6	319.8	323.5	346.8	374.4	384.6
42.5°	647.3	644.2	629.9	505.7	346.8	290.5	353.0	337.2	367.2	417.3	428.1
45°	689.9	674.5	688.4	564.9	417.1	354.5	360.5	381.8	413.9	466.8	497.2
47.5°	732.8	744.5	711.8	609.5	480.2	384.0	396.6	463.9	494.9	542.4	561.7
50°	807.3	794.8	783.5	676.6	577.4	431.3	496.0	486.9	574.0	670.9	674.3
52.5°	852.8	852.8	834.3	735.1	644.5	500.8	529.3	561.7	691.3	779.2	811.0
55°	917.4	930.7	927.3	804.2	723.4	595.6	616.3	684.6	798.8	911.7	990.4
57.5°	963.1	981.6	1021.6	878.1	800.3	634.2	743.4	819.3	943.2	1080.5	1175.8
60°	1031.0	1031.3	1072.6	943.5	897.1	707.8	792.6	944.4	1022.5	1242.8	1293.1
62.5°	1037.9	1049.5	1135.9	1045.3	993.8	784.6	953.4	1008.8	1111.7	1405.9	1450.0
65°	955.4	986.7	1131.4	1093.0	1082.2	855.4	1000.7	1136.5	1184.3	1560.6	1548.1
66°	923.8	950.3	1093.8	1103.6	1096.7	897.7	1028.2	1169.7	1209.5	1587.3	1565.4
67.5°	912.8	932.1	1048.9	1114.9	1145.9	974.5	1095.6	1186.0	1255.9	1568.0	1559.2
70°	835.8	859.9	969.7	1189.9	1250.8	1115.2	1182.2	1225.2	1288.6	1472.2	1434.2
72.5°	637.3	662.1	743.1	981.8	1259.6	1323.3	1316.7	1274.7	1182.2	1169.7	1108.7
75°	316.1	342.6	399.7	572.2	980.2	1300.0	1309.1	1149.3	955.4	754.4	707.6
77.5°	163.5	184.2	154.4	219.2	504.0	922.2	926.4	757.9	553.7	352.5	329.2
80°	111.4	116.0	105.2	108.0	207.6	471.3	439.5	403.3	222.9	161.7	168.9
82.5°	81.8	75.6	72.5	78.8	112.0	147.2	158.0	174.5	119.1	82.1	86.7
85°	38.7	42.7	41.7	48.1	68.2	50.3	77.3	104.9	79.3	52.9	52.1
87.5°	24.1	23.8	25.6	29.6	41.2	33.2	42.4	52.1	47.8	32.9	32.4
90°	16.0	14.2	13.4	16.0	23.0	16.5	22.7	29.6	27.0	17.9	16.8
92.5°	10.8	10.8	11.7	13.4	19.9	17.6	16.2	16.8	16.8	13.9	13.4
95°	8.0	8.5	9.6	9.9	12.0	10.2	13.1	14.5	14.8	11.4	11.0
97.5°	6.9	7.4	8.0	8.3	9.9	8.3	10.8	12.8	12.5	9.1	9.4
100°	6.2	6.9	6.9	7.1	8.0	6.2	8.8	12.0	11.4	8.0	7.7
102.5°	5.9	5.9	5.7	5.7	6.2	4.8	7.4	10.5	8.5	6.5	5.9
105°	5.7	5.7	4.8	4.5	4.8	4.0	5.9	8.0	5.9	5.4	5.4
107.5°	5.4	5.1	4.3	3.7	4.0	3.2	4.8	5.1	4.3	4.8	5.1



REPORT NUMBER: P241018

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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	84°	85°
110°	4.8	4.8	3.7	3.2	3.2	2.6	3.4	3.7	3.7	4.8	5.1
112.5°	4.5	4.3	3.2	2.6	2.6	2.3	2.6	2.9	3.2	4.5	4.8
115°	4.3	4.0	2.9	2.3	1.9	1.7	1.9	2.3	2.9	4.5	4.5
117.5°	4.0	3.7	2.6	1.9	1.7	1.4	1.7	1.9	2.9	4.5	4.5
120°	4.0	3.7	2.6	1.7	1.4	1.4	1.4	1.7	3.2	4.5	4.8
122.5°	3.7	3.7	2.6	1.7	1.4	1.1	1.1	1.7	2.9	4.3	4.3
125°	3.7	3.7	2.3	1.4	1.1	1.1	1.1	1.4	2.9	4.0	4.3
127.5°	3.4	3.4	2.3	1.4	1.1	0.8	0.8	1.4	2.6	4.0	4.0
130°	3.4	3.4	2.3	1.1	0.8	0.8	0.8	1.1	2.6	3.7	3.7
132.5°	2.9	2.9	1.9	1.1	0.8	0.6	0.8	1.1	2.3	3.2	3.4
135°	2.9	2.9	1.9	1.1	0.8	0.6	0.6	1.1	1.9	2.9	2.9
137.5°	2.6	2.6	1.7	1.1	0.8	0.6	0.6	0.8	1.7	2.6	2.6
140°	2.3	2.3	1.9	1.1	0.8	0.6	0.6	0.6	1.4	1.9	1.9
142.5°	2.3	2.3	1.7	1.1	0.6	0.3	0.3	0.6	1.1	1.4	1.4
145°	1.9	1.9	1.7	1.1	0.6	0.3	0.3	0.6	0.8	1.1	1.1
147.5°	1.9	1.9	1.7	0.8	0.3	0.3	0.3	0.6	0.8	1.1	1.1
150°	1.7	1.7	1.1	0.6	0.0	0.0	0.3	0.3	0.6	0.8	0.8
152.5°	1.1	1.1	0.8	0.3	0.0	0.0	0.0	0.3	0.6	0.6	0.6
155°	0.6	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3
157.5°	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
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: P241018

CATALOG NUMBER: UTLD-AF24-20-D-U-T4W-CL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.4
2.5°	5.1	5.1	5.1	5.1	5.1	5.1	4.8	4.8	4.8	4.8	4.8
5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	5.1	5.4	5.4	5.4
7.5°	5.4	5.4	5.1	4.8	5.1	5.7	8.5	19.6	28.7	35.3	35.0
10°	8.8	8.8	8.3	7.1	8.8	19.3	38.1	38.4	31.8	29.3	30.4
12.5°	46.6	41.5	35.3	28.9	28.4	34.4	32.4	45.2	50.6	54.3	53.7
15°	53.4	56.6	51.8	58.0	59.4	35.3	55.1	74.0	79.6	81.8	84.4
17.5°	88.1	97.5	69.7	66.0	66.2	70.5	74.5	78.2	79.9	79.1	79.3
20°	132.8	126.5	135.8	116.0	88.7	94.4	86.4	85.3	112.5	136.8	133.6
22.5°	135.6	146.4	133.9	122.5	135.6	96.1	119.1	126.5	130.2	133.3	137.3
25°	219.4	214.3	187.6	140.8	133.9	128.2	129.3	132.2	139.3	150.1	156.6
27.5°	233.1	232.0	207.6	189.7	142.7	160.3	132.8	159.8	172.6	183.9	186.2
30°	313.5	316.7	238.8	182.2	165.4	137.3	154.1	164.6	174.5	190.5	190.8
32.5°	333.2	339.7	264.1	201.5	173.4	142.1	154.9	162.9	200.7	215.4	216.0
35°	338.3	355.1	272.3	194.5	167.5	141.6	143.0	170.3	189.0	219.2	230.0
37.5°	392.0	379.8	289.4	197.0	156.6	136.2	154.4	163.5	193.0	212.4	216.0
40°	414.7	408.0	300.4	202.1	154.7	151.5	143.0	152.3	166.3	180.2	180.2
42.5°	457.1	430.4	306.7	198.5	150.4	162.6	130.5	141.0	154.1	145.9	149.2
45°	513.4	477.6	328.1	178.8	142.4	138.2	125.3	141.6	133.3	133.3	131.7
47.5°	586.2	537.3	320.9	172.0	160.3	130.7	165.4	133.1	122.8	127.4	127.7
50°	701.3	643.3	342.8	167.5	152.1	128.2	141.6	128.5	128.5	131.7	130.5
52.5°	845.7	731.4	352.2	167.2	143.8	149.2	140.5	153.7	133.1	144.1	142.7
55°	1002.1	864.2	361.9	164.9	142.4	134.7	171.7	147.2	138.2	158.4	158.9
57.5°	1200.2	1017.9	401.7	160.3	143.0	135.0	162.0	164.9	168.3	181.7	183.6
60°	1323.6	1103.3	366.4	168.9	141.6	154.1	188.4	184.2	173.7	223.1	230.6
62.5°	1417.6	1167.8	301.9	175.9	167.5	155.2	194.8	214.9	205.2	225.2	230.8
65°	1434.7	1162.1	230.8	175.9	165.2	180.8	233.6	214.3	182.8	184.7	182.5
66°	1433.6	1144.8	212.7	177.4	167.5	188.4	229.4	216.9	176.8	178.8	174.5
67.5°	1386.6	1089.9	184.7	175.4	183.3	193.5	225.5	202.4	170.0	170.5	166.3
70°	1206.2	919.3	157.2	180.2	190.2	194.2	246.4	188.4	156.1	152.1	151.2
72.5°	887.2	652.1	147.2	179.3	193.0	188.2	207.8	154.9	134.7	126.7	125.9
75°	498.9	333.2	146.7	172.0	170.8	161.4	157.2	119.4	111.4	102.1	100.4
77.5°	230.0	160.6	124.2	138.4	129.1	127.7	117.1	99.5	94.9	88.7	86.1
80°	133.1	113.4	88.4	91.9	92.7	90.1	94.6	89.5	84.7	80.2	75.9
82.5°	77.6	71.9	64.5	60.6	60.6	64.9	77.8	74.5	70.8	66.8	57.4
85°	48.6	46.6	44.1	42.4	42.4	39.0	56.0	62.3	58.8	50.3	44.9
87.5°	31.8	33.2	29.6	29.9	28.9	25.9	37.8	41.7	35.8	28.7	23.8
90°	14.5	16.0	17.4	17.1	18.5	14.2	20.8	21.3	19.0	13.1	9.4
92.5°	11.0	13.1	14.5	14.5	16.0	9.6	15.0	16.8	15.7	12.2	8.8
95°	9.4	11.7	13.9	13.6	13.6	7.7	13.9	15.7	14.8	10.5	7.7
97.5°	7.7	9.4	11.4	11.4	12.5	6.5	12.8	15.0	14.2	10.5	7.4
100°	7.1	8.5	9.9	10.2	11.4	5.1	11.7	14.2	12.8	8.8	7.1
102.5°	6.5	7.1	8.3	8.3	8.5	4.5	9.4	11.7	10.2	6.9	6.9
105°	5.9	5.9	5.9	5.4	5.4	3.7	5.7	8.0	6.2	5.4	5.9
107.5°	5.7	5.4	4.5	4.3	4.0	3.2	4.0	4.8	3.7	4.8	5.4



REPORT NUMBER: P241018

CATALOG NUMBER: UTLD-AF24-20-D-U-T4W-CL

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	5.4	5.4	4.3	3.7	3.4	2.9	3.4	3.2	3.2	4.8	5.1
112.5°	5.4	5.1	3.7	3.2	2.9	2.6	2.9	2.3	2.9	4.8	5.1
115°	5.1	5.1	3.4	2.9	2.9	2.3	2.3	1.9	2.6	4.5	5.1
117.5°	5.1	5.1	3.4	2.6	2.3	1.9	1.9	1.9	2.6	4.5	5.1
120°	5.1	4.8	3.4	2.6	1.9	1.7	1.7	1.7	2.6	4.5	4.8
122.5°	4.8	4.5	3.2	2.3	1.9	1.7	1.4	1.7	2.6	4.3	4.5
125°	4.5	4.5	3.2	1.9	1.7	1.4	1.1	1.4	2.6	4.3	4.5
127.5°	4.5	4.3	2.9	1.7	1.4	1.4	1.1	1.4	2.6	4.0	4.3
130°	4.0	4.0	2.6	1.7	1.1	1.1	0.8	1.1	2.6	4.0	4.0
132.5°	3.7	3.4	2.3	1.4	1.1	0.8	0.8	0.8	2.3	3.4	3.7
135°	3.2	2.9	1.9	1.1	0.8	0.8	0.6	0.8	1.9	3.2	3.2
137.5°	2.6	2.6	1.9	1.1	0.8	0.6	0.6	0.8	1.9	2.9	3.2
140°	2.3	1.9	1.4	0.8	0.6	0.6	0.6	0.8	1.7	2.3	2.6
142.5°	1.7	1.7	1.1	0.8	0.6	0.6	0.3	0.6	1.4	1.9	1.9
145°	1.4	1.4	1.1	0.6	0.6	0.3	0.3	0.3	1.1	1.4	1.7
147.5°	1.1	1.1	0.8	0.6	0.3	0.3	0.0	0.3	0.8	1.1	1.1
150°	0.8	0.8	0.8	0.6	0.3	0.0	0.0	0.0	0.3	0.6	0.6
152.5°	0.6	0.6	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
155°	0.6	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.3	0.3	0.0	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)