

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: P239938

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239938
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-16)
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-T4W-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2010 lumens
Efficiency: N/A
Efficacy: 95.7 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

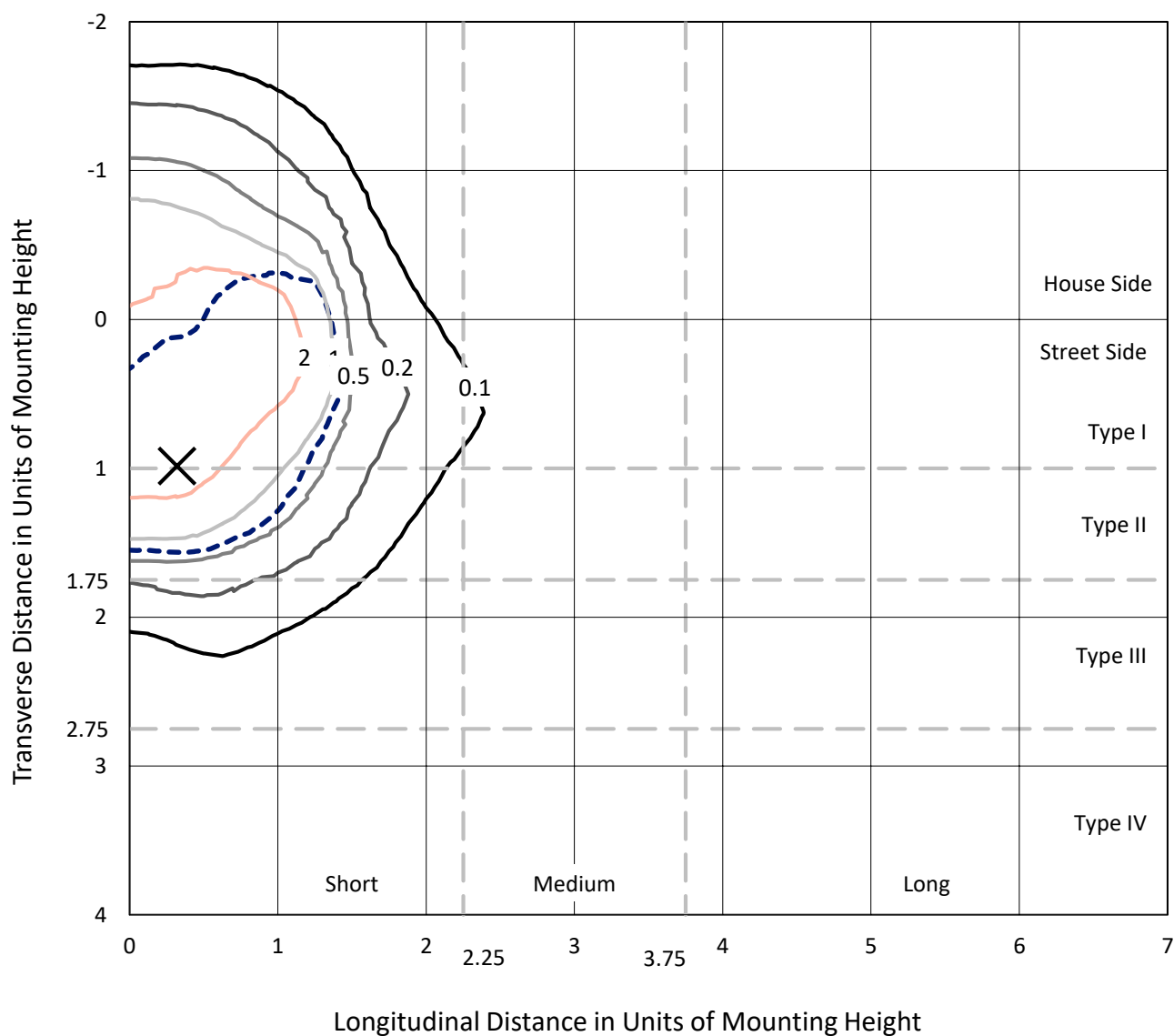


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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
- - - 1/2 Max cd

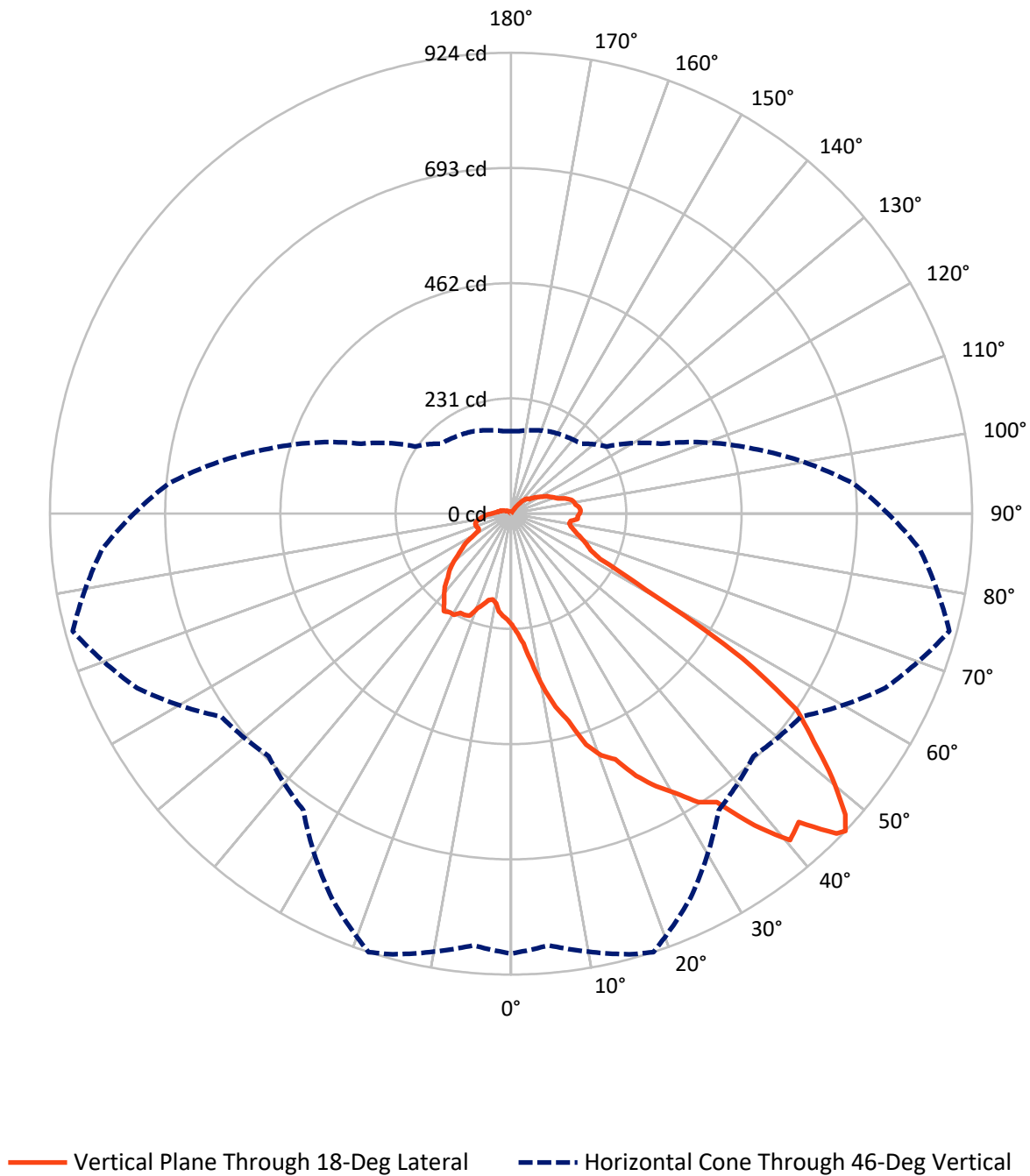


Based on 10 foot mounting height. Maximum calculated value = 4.9 fc
Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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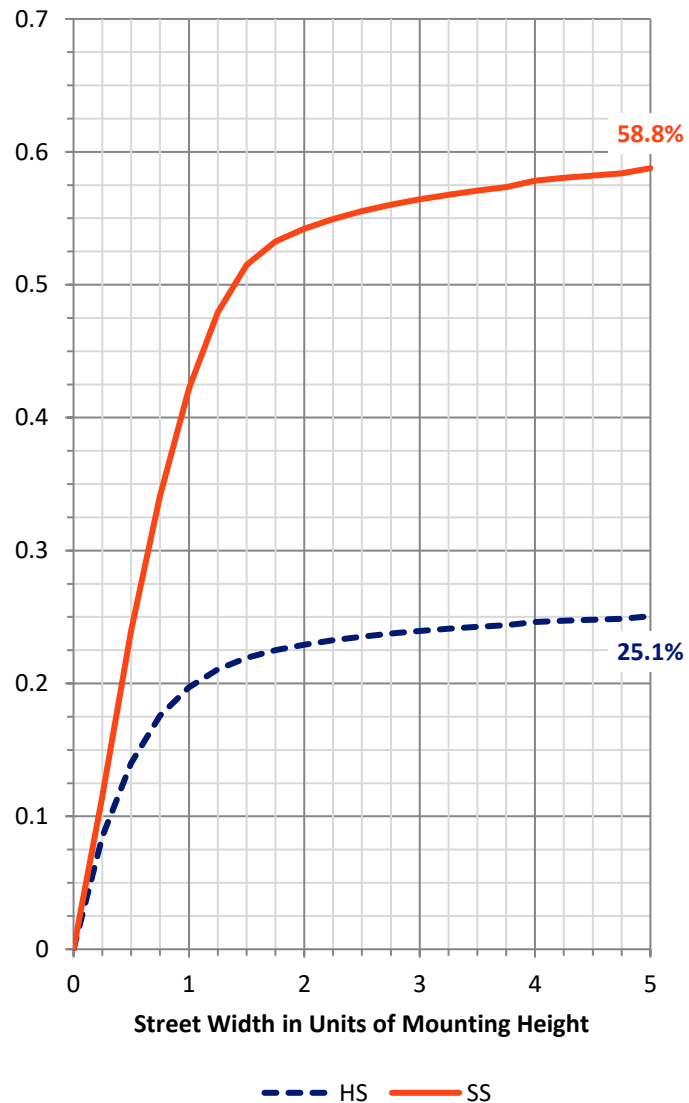
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	522.8	65.1	587.9
	% Fixture	26.0	3.2	29.3
Street Side	Lumens	1226.9	195.1	1422.1
	% Fixture	61.0	9.7	70.7
Total	Lumens	1749.8	260.2	2010.0
	% Fixture	87.1	12.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	23.9	1.2
10°-20°	97.3	4.8
20°-30°	197.9	9.8
30°-40°	324.0	16.1
40°-50°	421.7	21.0
50°-60°	315.5	15.7
60°-70°	131.4	6.5
70°-80°	119.6	5.9
80°-90°	118.5	5.9
90°-100°	95.3	4.7
100°-110°	67.7	3.4
110°-120°	45.8	2.3
120°-130°	29.5	1.5
130°-140°	17.5	0.9
140°-150°	4.2	0.2
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	1749.8	87.1
0°-180°	2010.0	100.0

Coefficient of Utilization



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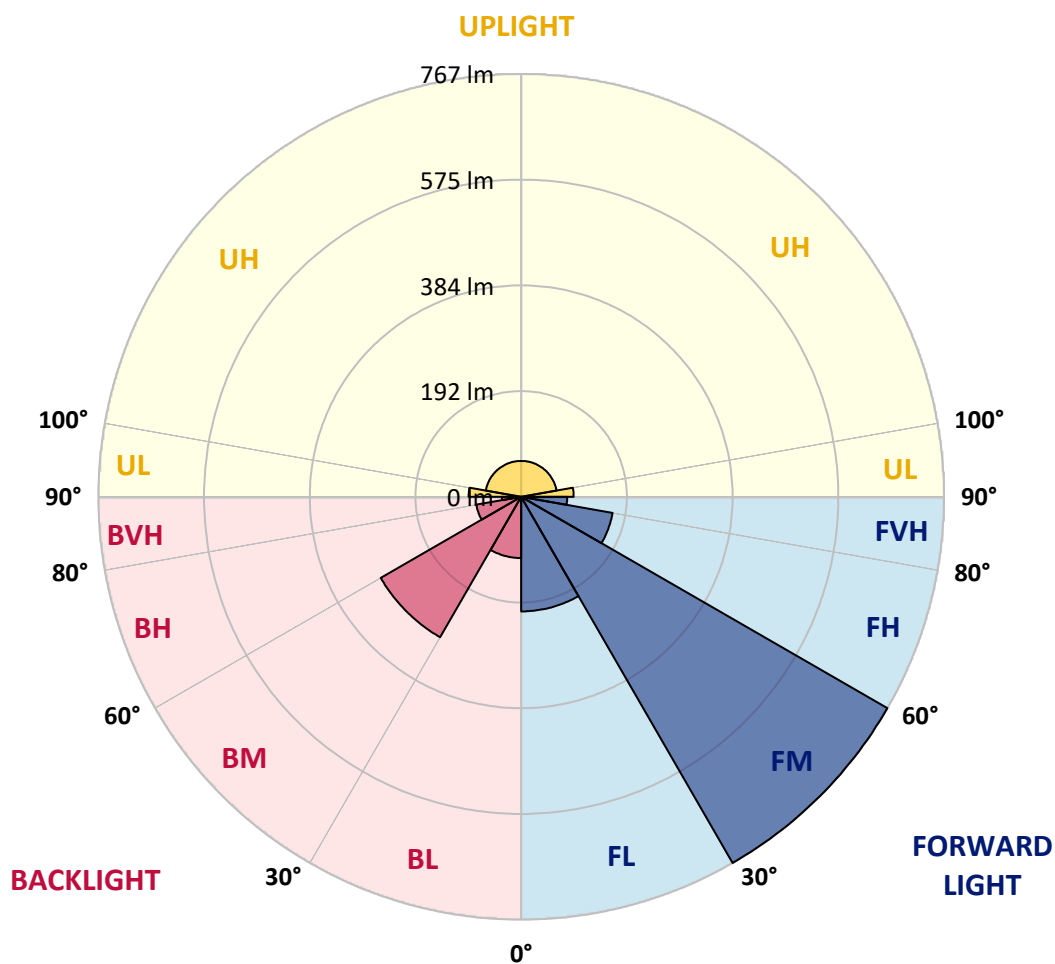
CATALOG NUMBER: UTLD-AF24-20-D-U-T4W-A

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	207.9	10.3			
FM	(30°-60°)	767.1	38.2			
FH	(60°-80°)	168.3	8.4			G0/660
FVH	(80°-90°)	83.6	4.2			G1/100
BL	(0°-30°)	111.1	5.5	B1/500		
BM	(30°-60°)	294.1	14.6	B1/1000		
BH	(60°-80°)	82.7	4.1	B0/110		G0/110
BVH	(80°-90°)	35.0	1.7			G1/100
UL	(90°-100°)	95.3	4.7		U3/500	
UH	(100°-180°)	65.1	3.2		U3/500	

BUG Rating: B1-U3-G1

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
0°	222.6	222.6	222.6	222.6	222.6	222.6	222.6	222.6	222.6	222.6	222.6
2.5°	239.3	238.2	238.7	238.7	237.4	236.8	235.4	233.7	231.5	229.0	226.8
5°	262.9	262.1	261.8	261.5	261.3	257.6	253.5	249.9	246.0	241.8	236.0
7.5°	306.6	306.3	304.6	302.7	299.9	293.8	286.3	282.7	277.4	271.0	262.1
10°	361.0	357.1	353.5	353.5	348.0	345.7	343.5	338.2	334.9	326.0	313.2
12.5°	392.2	390.2	397.7	397.2	404.4	417.5	421.9	426.3	406.1	380.2	356.3
15°	421.3	421.3	430.8	431.1	452.5	481.4	503.3	481.9	444.7	403.0	371.0
17.5°	461.4	463.9	477.5	486.7	515.6	565.3	550.3	510.8	455.3	405.5	369.7
20°	478.9	484.4	505.3	517.2	562.0	609.0	594.5	548.1	483.6	426.9	390.8
22.5°	489.7	493.6	518.1	535.0	592.3	632.0	629.8	582.8	522.0	451.1	409.4
25°	534.2	536.7	564.5	582.0	642.6	655.4	630.1	597.6	537.8	464.1	427.5
27.5°	549.2	549.5	592.3	618.7	668.4	664.0	631.2	617.6	587.3	529.2	504.4
30°	569.5	568.9	621.7	650.1	680.4	661.5	635.1	647.0	649.0	601.7	556.7
32.5°	594.5	592.3	655.4	689.3	699.0	660.9	641.5	661.8	691.2	642.3	593.9
35°	617.6	619.5	687.3	710.4	719.6	664.3	644.8	689.3	749.0	711.2	630.1
37.5°	766.0	763.8	785.2	793.2	770.2	675.7	657.6	723.5	811.0	794.6	707.6
40°	799.6	792.1	856.0	860.8	820.2	716.0	692.6	744.0	859.9	889.1	819.9
42.5°	771.3	769.3	839.1	845.5	816.3	743.2	715.7	760.7	865.5	889.4	774.3
45°	896.1	885.8	922.2	914.7	833.8	731.5	701.5	742.1	846.3	913.3	822.1
46°	881.9	868.8	914.7	924.1	850.5	725.7	687.3	709.3	827.1	909.4	822.7
47.5°	838.5	839.6	900.8	901.3	833.5	726.5	664.0	689.6	784.3	859.6	744.0
50°	732.1	719.6	831.3	834.9	770.2	695.1	640.1	651.8	742.1	788.2	670.7
52.5°	704.8	695.1	761.0	760.4	702.1	647.3	596.4	608.7	710.7	763.2	679.3
55°	647.6	644.2	699.6	694.8	654.0	588.4	552.0	559.5	589.5	568.9	338.5
57.5°	430.2	443.0	538.6	547.8	548.1	517.2	471.7	402.4	348.2	296.3	165.6
60°	175.7	190.4	296.8	310.7	331.0	387.7	341.9	269.0	224.8	233.7	143.1
62.5°	132.6	138.1	198.2	200.7	208.4	236.0	233.2	195.1	192.1	211.5	137.0
65°	123.4	128.4	175.7	174.8	171.2	178.7	178.2	169.3	172.6	197.1	136.5
67.5°	116.7	121.7	163.1	163.4	160.4	161.8	162.9	158.4	166.2	191.5	140.1
70°	110.1	115.3	150.1	150.9	153.1	158.1	160.1	156.8	163.7	184.5	139.8
72.5°	102.0	107.8	137.9	139.2	143.7	155.1	161.8	160.9	161.8	174.3	139.2
75°	99.2	105.1	127.6	130.1	136.5	153.7	170.9	165.4	159.8	167.6	135.9
77.5°	87.0	93.7	116.7	122.3	136.5	158.1	177.0	175.1	164.8	163.1	132.3
80°	83.7	90.1	112.3	118.4	133.7	162.0	183.2	183.4	178.2	169.3	135.9
82.5°	84.2	90.3	113.4	120.3	137.9	164.8	178.2	185.1	185.7	174.5	140.1
85°	98.9	104.8	126.7	134.0	149.2	164.0	174.3	179.3	184.3	184.3	153.7
87.5°	105.6	110.9	127.6	134.0	148.7	165.9	164.3	172.6	177.6	184.0	158.4
90°	111.7	115.1	132.3	138.4	146.2	160.1	155.6	153.1	157.3	164.0	148.4
92.5°	116.2	119.2	134.5	139.8	146.5	149.5	142.9	135.6	145.9	151.2	138.1
95°	124.2	127.0	135.1	137.0	136.2	139.0	128.7	125.9	130.4	136.2	127.8
97.5°	118.7	120.6	128.4	130.6	130.1	125.9	115.6	114.0	117.8	122.3	113.1
100°	118.7	121.2	127.0	128.4	125.1	114.5	103.9	103.4	105.9	108.1	99.5
102.5°	121.2	122.3	123.4	124.2	118.1	106.4	98.7	96.7	97.6	98.7	90.9
105°	114.8	115.1	115.6	113.1	108.1	99.2	91.4	88.1	90.9	94.2	87.8
107.5°	99.2	98.9	99.2	98.4	97.8	92.6	87.0	82.8	82.8	83.9	77.8



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
110°	92.6	92.8	92.6	92.6	90.1	86.4	81.2	76.7	74.5	75.0	69.5
112.5°	84.8	84.8	85.0	85.3	83.9	80.6	75.3	70.9	68.1	67.5	62.3
115°	84.8	83.9	81.4	81.2	78.4	73.7	69.8	64.2	62.3	62.3	58.9
117.5°	75.6	75.0	73.1	72.5	70.9	67.0	64.8	60.3	58.9	58.1	55.0
120°	67.0	67.0	66.1	65.9	64.2	62.0	57.3	55.6	54.5	55.6	53.6
122.5°	62.3	62.3	60.9	60.3	58.4	56.7	52.5	49.5	47.5	49.7	48.6
125°	57.3	57.0	55.0	54.8	51.4	51.4	49.2	45.3	40.0	42.2	41.7
127.5°	50.3	50.0	47.5	47.2	45.3	47.5	47.0	42.0	34.7	36.1	36.1
130°	48.4	47.8	45.6	45.0	43.1	42.5	44.7	36.7	32.5	33.9	33.6
132.5°	48.4	47.8	45.0	44.2	41.1	38.1	40.3	32.0	31.1	32.8	32.5
135°	43.6	43.6	41.1	39.5	36.4	30.9	31.4	24.7	27.2	29.7	29.7
137.5°	37.0	37.0	34.5	33.9	30.3	24.7	22.2	18.9	23.1	25.8	26.1
140°	28.9	28.9	27.0	25.8	23.3	16.4	10.3	11.7	17.5	20.0	20.8
142.5°	20.8	20.6	18.9	17.5	15.0	8.9	3.3	6.7	10.3	13.6	14.7
145°	14.5	14.2	12.2	11.4	9.2	4.2	0.8	2.8	6.1	8.1	9.4
147.5°	8.6	8.6	7.2	6.9	4.7	1.1	0.6	0.8	3.1	5.0	5.8
150°	5.0	5.0	3.6	2.8	1.1	0.3	0.3	0.3	0.8	2.2	2.8
152.5°	1.1	1.1	0.8	0.6	0.6	0.3	0.0	0.3	0.3	0.3	0.6
155°	0.6	0.6	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
157.5°	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.3	0.3	0.3	0.3
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.3
162.5°	0.3	0.3	0.0	0.0	0.3	0.0	0.3	0.0	0.3	0.3	0.3
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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	222.6	222.6	222.6	222.6	222.6	222.6	222.6	222.6	222.6	222.6	222.6
2.5°	225.7	224.6	222.1	219.0	216.8	214.8	213.5	212.6	212.1	210.7	211.2
5°	234.0	231.8	226.0	221.2	216.2	211.8	208.4	206.2	205.4	204.3	204.3
7.5°	257.9	252.6	243.7	232.6	222.3	213.5	205.1	200.4	196.2	194.0	193.4
10°	304.9	297.9	278.8	256.0	233.5	213.5	197.3	185.7	180.1	178.2	178.2
12.5°	343.8	333.0	307.9	282.4	252.4	221.0	197.1	181.2	173.7	171.2	171.2
15°	355.5	341.3	311.8	286.8	259.9	233.5	211.2	188.4	174.8	170.7	169.3
17.5°	351.9	338.0	311.3	281.0	250.7	231.0	211.2	199.0	186.5	179.3	178.2
20°	374.9	362.1	334.4	300.4	263.2	219.0	206.5	203.7	200.7	195.9	195.9
22.5°	394.1	382.2	354.4	318.0	273.2	244.3	225.7	222.9	219.6	218.7	218.2
25°	408.8	396.1	358.0	316.0	283.5	262.4	238.5	229.0	221.0	218.5	217.6
27.5°	487.5	467.8	406.6	347.1	300.4	268.5	241.0	228.7	221.2	218.2	220.1
30°	533.6	512.2	445.2	367.1	320.7	281.8	246.0	231.5	233.5	236.0	237.9
32.5°	568.9	540.9	462.2	369.7	317.4	284.3	254.0	236.8	231.2	234.6	235.1
35°	603.7	569.5	484.2	385.5	321.8	275.2	248.5	238.5	236.8	241.2	240.4
37.5°	674.3	629.5	511.4	389.9	317.7	264.3	239.0	228.5	219.8	218.7	220.1
40°	766.5	706.5	538.6	388.0	298.2	251.3	227.1	215.1	208.4	204.3	201.8
42.5°	720.4	660.1	503.6	372.4	274.6	227.9	214.8	204.3	195.7	190.4	189.0
45°	771.0	712.1	512.5	341.0	247.6	207.1	196.5	189.3	177.3	172.3	171.5
46°	755.7	689.0	502.5	331.3	234.6	198.2	189.3	181.8	172.9	165.9	165.4
47.5°	700.1	622.3	473.0	305.2	225.7	183.4	177.3	172.9	168.1	160.1	159.0
50°	624.8	565.3	420.0	271.3	190.1	163.7	158.4	157.0	151.8	142.0	142.9
52.5°	619.0	561.4	391.1	249.6	168.7	143.4	141.7	137.6	133.1	124.5	124.2
55°	298.5	253.8	217.1	195.4	141.2	127.0	126.2	124.2	118.7	110.9	112.3
57.5°	141.5	123.1	106.4	112.8	110.9	111.5	112.0	111.7	105.3	94.8	97.0
60°	124.0	107.6	92.0	87.3	91.7	98.7	98.7	94.5	85.6	73.1	72.0
62.5°	119.5	103.1	88.9	82.5	84.8	88.9	86.7	80.0	71.2	59.8	59.2
65°	120.1	102.6	88.7	80.6	82.5	84.2	80.0	74.8	70.0	62.0	62.0
67.5°	122.6	104.8	89.8	79.8	81.2	82.3	78.4	74.5	71.7	65.6	66.1
70°	123.1	106.2	90.9	80.0	79.8	80.9	78.1	74.5	73.1	68.9	68.6
72.5°	123.1	107.3	89.8	78.1	77.5	78.1	76.4	74.5	74.2	71.7	71.2
75°	119.0	104.8	85.9	74.2	73.7	74.2	73.7	73.4	74.5	73.4	72.3
77.5°	114.8	102.3	83.1	71.2	70.3	70.0	69.8	70.0	71.7	70.9	69.2
80°	116.7	103.4	82.5	68.6	66.1	65.0	65.0	65.3	65.3	62.8	60.3
82.5°	120.1	105.3	79.8	63.9	59.8	57.8	58.4	60.3	61.1	59.2	57.3
85°	132.3	114.2	80.3	60.6	54.5	52.3	53.1	55.6	53.9	51.1	48.9
87.5°	137.6	117.3	78.7	55.6	50.6	49.7	49.7	51.1	50.0	45.6	43.6
90°	131.5	112.3	71.2	47.2	43.9	44.7	45.0	43.6	38.9	33.9	32.2
92.5°	123.1	105.1	65.9	43.4	38.9	38.6	38.4	37.5	33.9	28.3	27.2
95°	116.2	98.9	60.9	39.7	35.6	34.7	34.5	33.4	30.0	25.8	25.3
97.5°	101.2	86.4	55.3	36.7	32.0	31.4	31.1	29.7	26.7	23.6	23.3
100°	90.9	77.0	49.5	33.1	28.9	28.1	27.8	27.0	24.5	22.2	22.0
102.5°	82.5	70.6	45.9	30.3	25.8	24.7	24.7	24.2	22.8	21.4	21.4
105°	80.3	69.2	44.5	27.8	23.1	22.5	22.2	22.2	21.1	20.3	20.3
107.5°	70.6	60.6	38.4	24.7	20.8	20.3	20.3	20.3	20.0	19.7	20.0



REPORT NUMBER: P239938

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

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	63.6	54.8	35.3	23.1	19.5	18.6	18.6	18.6	18.6	19.2	19.2
112.5°	56.7	49.2	32.5	22.0	18.1	17.2	16.7	16.4	16.1	17.2	17.5
115°	53.6	47.0	31.1	20.8	17.2	16.4	15.3	14.7	13.9	14.7	15.0
117.5°	50.6	44.5	30.6	20.6	16.7	15.3	14.2	13.6	12.5	13.3	13.3
120°	49.7	44.2	31.1	20.8	16.1	14.2	13.3	12.0	11.4	12.0	12.2
122.5°	45.9	40.9	29.2	19.5	15.3	13.6	12.5	10.3	10.0	10.8	10.8
125°	38.9	35.0	25.3	17.5	14.5	13.3	12.2	9.2	9.4	10.0	10.3
127.5°	34.2	30.9	23.1	17.0	14.5	13.6	11.4	8.1	8.9	9.7	10.0
130°	32.0	29.5	23.1	17.5	15.0	13.9	9.4	7.5	8.3	9.2	9.2
132.5°	31.1	29.2	23.6	18.6	15.6	13.3	7.8	6.9	7.8	8.3	8.3
135°	28.6	27.0	22.5	18.1	14.2	10.6	6.1	6.1	7.2	7.8	7.8
137.5°	25.3	23.9	20.3	16.7	12.5	8.1	4.4	5.3	6.1	6.7	6.7
140°	20.3	19.5	16.7	13.1	8.9	4.4	3.3	4.2	5.0	5.6	5.6
142.5°	14.5	13.9	11.7	8.3	5.3	1.9	2.2	3.1	3.9	4.4	4.4
145°	9.4	8.9	7.2	5.3	2.2	0.6	1.4	2.2	3.1	3.3	3.3
147.5°	5.8	5.6	4.4	2.5	0.8	0.6	0.6	1.7	2.2	2.5	2.5
150°	3.1	2.8	1.9	0.8	0.3	0.3	0.3	0.6	1.4	1.7	1.9
152.5°	0.8	0.6	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.6	0.8
155°	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0
157.5°	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.3	0.0	0.3	0.3	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)