

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: P240208

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

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P240208
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-26)
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-FP
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE IV WIDE OPTICS AND FROSTED LENS PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2077.6 lumens
Efficiency: N/A
Efficacy: 98.9 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



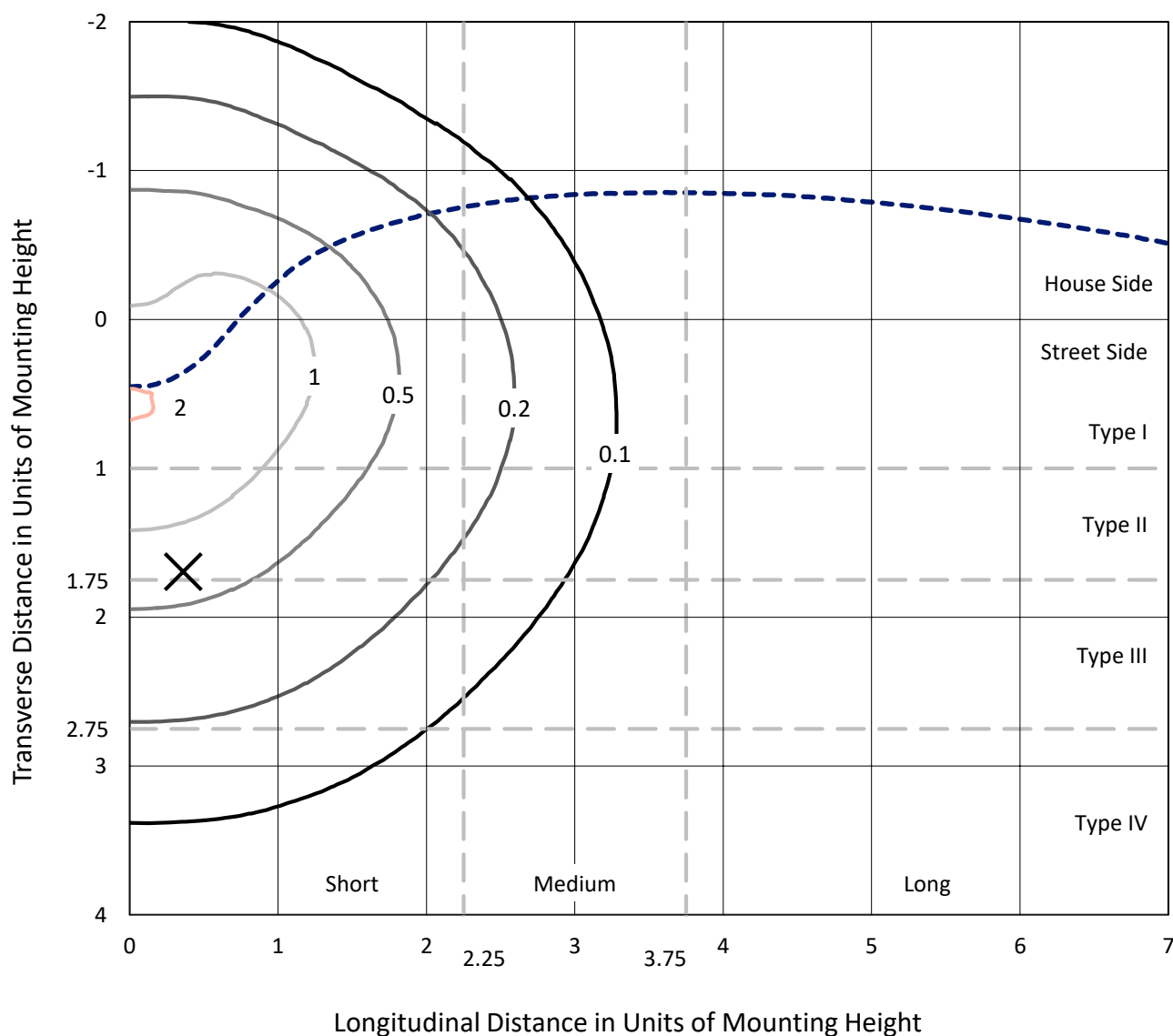
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

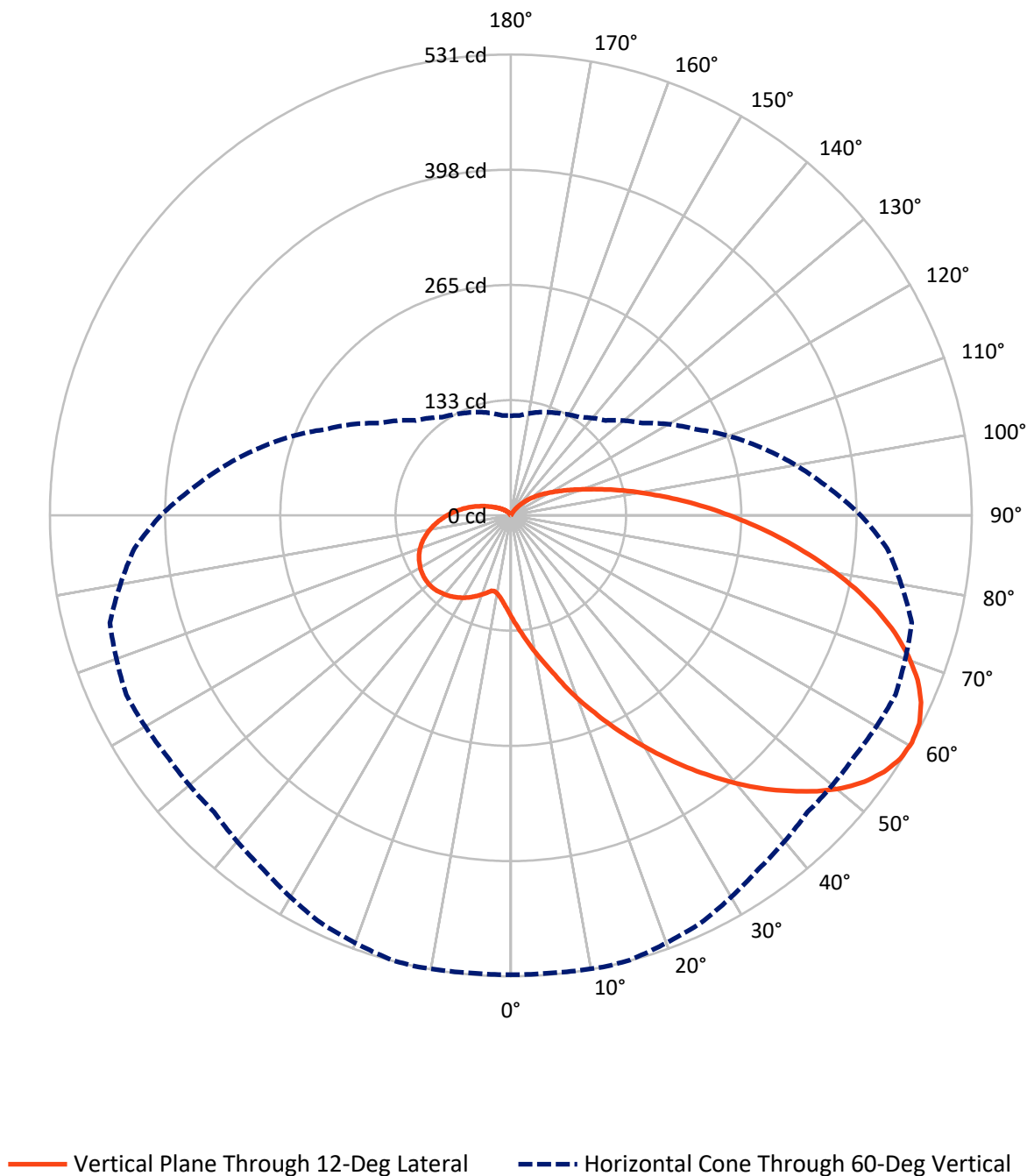


Based on 10 foot mounting height. Maximum calculated value = 2 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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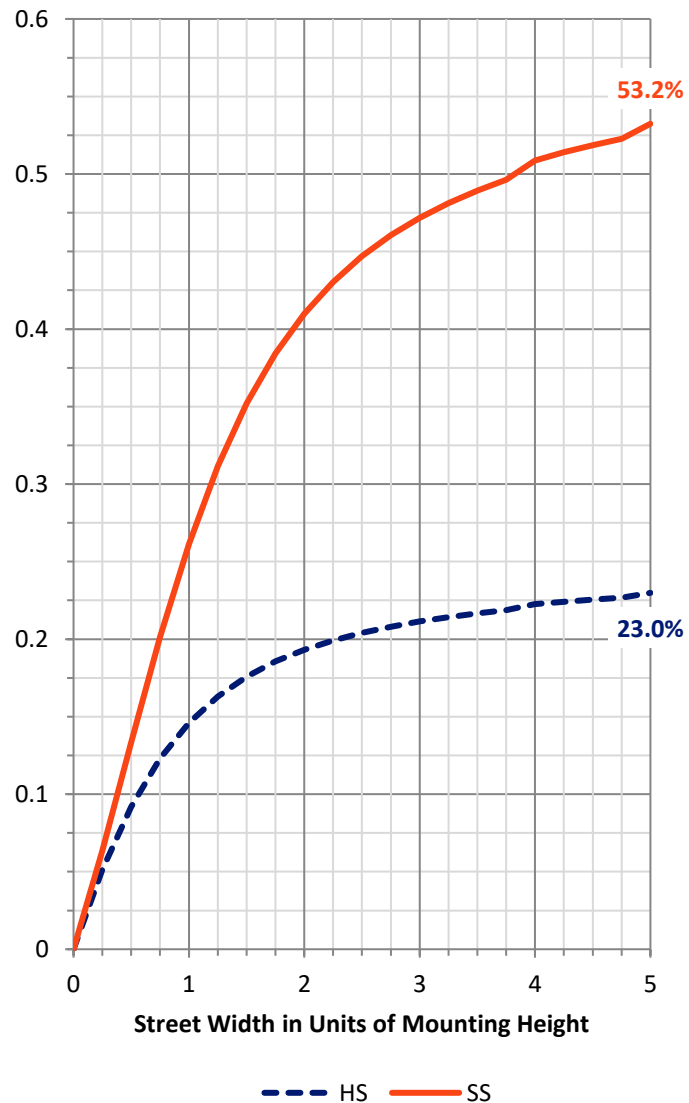
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	510.8	117.6	628.4
	% Fixture	24.6	5.7	30.2
Street Side	Lumens	1205.4	243.8	1449.2
	% Fixture	58.0	11.7	69.8
Total	Lumens	1716.2	361.4	2077.6
	% Fixture	82.6	17.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.6	0.6
10°-20°	40.7	2.0
20°-30°	87.4	4.2
30°-40°	153.0	7.4
40°-50°	230.4	11.1
50°-60°	300.8	14.5
60°-70°	335.0	16.1
70°-80°	312.7	15.1
80°-90°	244.6	11.8
90°-100°	165.3	8.0
100°-110°	99.9	4.8
110°-120°	55.0	2.6
120°-130°	27.4	1.3
130°-140°	11.0	0.5
140°-150°	2.6	0.1
150°-160°	0.2	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	1716.2	82.6
0°-180°	2077.6	100.0

Coefficient of Utilization



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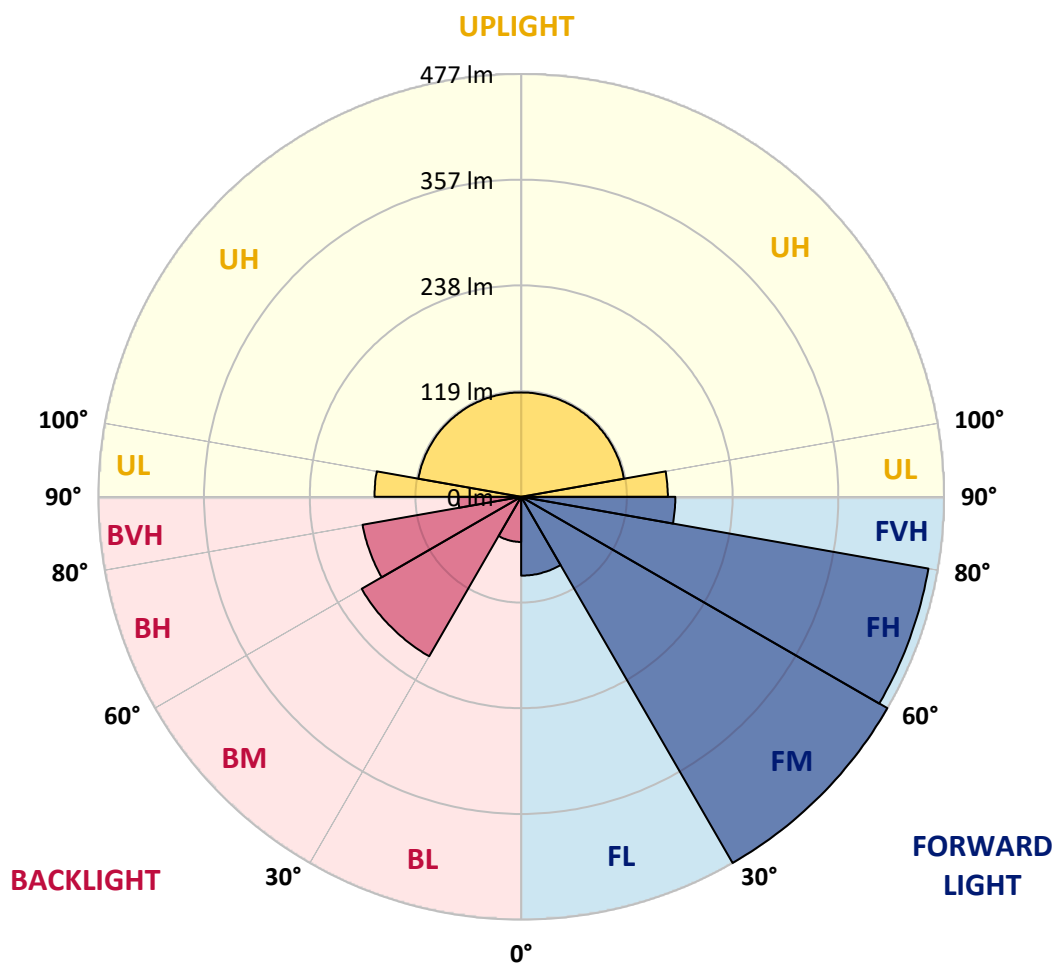
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	88.9	4.3			
FM	(30°-60°)	476.6	22.9			
FH	(60°-80°)	466.2	22.4			G0/660
FVH	(80°-90°)	173.7	8.4			G2/225
BL	(0°-30°)	50.9	2.4	B0/110		
BM	(30°-60°)	207.5	10.0	B0/220		
BH	(60°-80°)	181.5	8.7	B1/500		G1/500
BVH	(80°-90°)	70.9	3.4			G1/100
UL	(90°-100°)	165.3	8.0		U3/500	
UH	(100°-180°)	117.6	5.7		U3/500	

BUG Rating: B1-U3-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	12°	15°	25°	35°	45°	55°	65°	75°	85°
0°	117.1	117.1	117.1	117.1	117.1	117.1	117.1	117.1	117.1	117.1	117.1
2.5°	127.3	126.7	126.7	126.2	126.2	125.1	124.3	122.9	121.5	119.9	118.5
5°	137.5	137.5	137.0	137.0	135.8	133.9	132.0	129.5	127.1	124.3	121.0
7.5°	149.6	149.4	149.4	148.4	147.1	144.3	141.6	138.0	134.2	129.5	125.1
10°	161.9	161.6	161.6	160.8	159.2	155.9	151.8	147.6	142.7	136.7	130.6
12.5°	176.8	175.7	175.1	174.8	172.2	169.1	163.9	159.0	152.3	145.5	138.0
15°	192.5	192.2	190.6	189.8	187.0	182.3	177.4	171.3	164.7	157.0	147.9
17.5°	210.1	210.1	209.0	207.9	204.8	198.6	192.2	186.4	179.8	170.4	160.3
20°	229.0	229.0	227.7	226.0	222.2	216.7	210.3	203.5	195.5	185.4	173.0
22.5°	249.1	248.6	246.6	245.5	240.9	234.8	229.9	221.9	212.6	201.0	186.7
25°	270.3	269.4	267.5	266.5	261.0	256.2	250.5	241.1	230.4	217.2	201.3
27.5°	292.6	290.3	289.0	287.3	282.1	277.4	269.4	260.6	248.3	234.6	217.0
30°	314.0	313.1	311.5	309.3	304.6	299.1	290.3	280.7	268.6	253.5	233.9
32.5°	338.5	337.7	334.9	332.7	326.6	320.9	311.8	301.7	288.7	272.7	251.5
35°	362.9	361.8	358.9	356.3	351.4	342.9	332.2	322.5	309.6	293.4	270.6
37.5°	388.2	386.1	382.8	381.0	375.0	364.6	353.3	342.9	331.0	314.6	289.8
40°	412.1	411.0	407.2	405.3	398.6	385.8	373.4	364.1	353.3	336.0	309.9
42.5°	436.6	434.8	430.9	428.9	421.3	406.4	393.4	384.6	375.6	358.5	330.2
45°	458.4	457.6	452.9	451.7	442.4	426.5	411.6	403.9	396.0	379.7	348.9
47.5°	479.6	477.6	474.5	473.2	462.2	444.1	429.4	422.9	416.2	401.4	369.0
50°	496.8	496.5	493.8	492.1	479.6	459.7	444.9	439.7	436.1	421.8	387.2
52.5°	511.7	511.4	509.7	508.1	494.7	474.0	458.6	454.8	453.7	440.5	403.0
55°	522.1	521.9	521.3	519.7	506.5	485.3	470.1	467.2	468.5	456.1	417.4
57.5°	528.1	527.9	528.8	527.3	513.9	493.0	478.1	477.3	480.6	469.3	428.1
60°	528.8	528.8	530.7	529.9	517.7	497.2	483.1	483.3	488.6	477.9	435.0
62.5°	523.8	523.8	527.9	527.1	516.7	496.8	484.0	486.1	492.8	482.5	437.4
65°	513.1	514.4	519.1	519.1	510.9	493.0	481.2	484.5	492.4	482.3	435.8
67.5°	496.0	498.8	505.3	506.0	500.1	484.5	474.0	478.7	487.5	476.8	428.9
70°	474.9	478.7	485.6	487.5	485.0	472.1	463.3	468.8	477.3	466.6	417.7
72.5°	450.1	453.7	462.5	464.7	465.5	455.3	448.5	455.0	462.0	450.4	402.0
75°	422.6	425.6	435.6	437.7	441.3	435.6	431.2	436.4	444.1	429.7	381.9
77.5°	389.3	394.6	405.6	408.1	414.9	412.1	408.9	415.2	420.9	405.8	358.5
80°	357.2	363.8	372.9	377.8	386.1	385.8	386.3	390.5	395.4	378.9	333.3
82.5°	324.5	329.1	339.8	344.5	357.2	360.2	360.2	365.7	367.3	348.9	306.1
85°	291.4	297.0	307.7	312.3	326.1	332.7	334.6	337.4	337.7	318.4	277.9
87.5°	262.3	265.6	275.8	281.5	296.5	304.1	306.6	309.9	307.7	288.7	249.1
90°	233.1	236.2	246.1	250.7	267.0	276.1	281.5	282.9	278.5	258.5	222.7
92.5°	205.9	209.0	218.3	223.8	239.8	249.4	254.6	255.7	250.7	230.4	197.1
95°	182.0	182.0	192.2	196.3	214.2	224.9	229.9	229.9	223.0	203.0	172.7
97.5°	159.5	160.0	168.0	173.2	189.8	201.0	206.2	206.5	196.9	177.9	152.0
100°	139.1	139.9	147.4	152.0	168.0	179.8	184.5	183.7	173.8	154.3	131.4
102.5°	122.3	122.3	128.7	132.6	147.6	159.5	163.9	162.2	152.0	133.4	114.7
105°	107.2	107.8	111.9	115.8	130.0	141.1	145.5	143.0	132.6	114.4	100.0
107.5°	95.1	94.8	97.6	100.4	113.9	124.3	128.2	125.1	114.1	97.9	86.8
110°	83.1	83.3	85.5	87.5	99.8	109.7	112.4	110.0	97.6	83.3	75.3



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CANDELA DISTRIBUTION (continued):

	0°	5°	12°	15°	25°	35°	45°	55°	65°	75°	85°
112.5°	73.4	73.4	75.1	76.7	85.5	95.1	98.4	94.8	83.1	70.7	65.7
115°	65.2	65.5	66.0	66.8	74.3	83.1	85.8	81.4	69.9	60.5	57.2
117.5°	58.0	58.0	58.3	59.1	63.8	71.8	73.7	69.0	59.1	51.7	50.3
120°	52.0	51.7	51.5	51.7	55.0	60.8	62.7	58.0	49.2	44.8	43.7
122.5°	46.2	46.2	45.6	45.9	46.7	51.1	52.5	48.1	41.5	38.8	38.5
125°	40.7	40.7	40.1	39.9	39.6	41.8	42.4	39.1	34.4	33.6	33.2
127.5°	35.5	35.7	34.9	34.7	33.6	33.9	34.1	31.1	28.3	28.6	28.8
130°	31.1	31.1	30.3	29.7	28.0	26.7	26.1	24.2	23.1	24.2	25.1
132.5°	26.9	26.4	25.9	25.3	22.8	20.9	19.8	18.1	18.7	20.4	21.2
135°	22.5	22.3	21.5	21.2	18.7	15.7	13.7	13.2	14.8	16.8	17.3
137.5°	18.4	18.4	17.6	17.1	14.3	11.3	9.3	9.3	11.3	13.2	14.3
140°	14.5	14.5	13.7	13.2	10.7	7.7	5.7	6.0	8.3	10.1	11.0
142.5°	11.0	11.0	10.1	9.9	7.7	4.9	3.3	3.9	5.7	7.5	8.3
145°	8.0	7.7	7.2	6.9	4.9	3.1	1.6	2.3	3.6	4.9	5.7
147.5°	5.2	5.2	4.7	4.4	3.1	1.6	0.5	1.1	2.3	3.1	3.9
150°	3.1	3.1	2.8	2.5	1.6	0.5	0.0	0.5	1.1	1.6	2.3
152.5°	1.6	1.6	1.3	1.3	0.5	0.3	0.0	0.0	0.3	0.8	0.8
155°	0.5	0.5	0.5	0.5	0.3	0.0	0.0	0.0	0.0	0.3	0.3
157.5°	0.3	0.3	0.3	0.3	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



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	117.1	117.1	117.1	117.1	117.1	117.1	117.1	117.1	117.1	117.1	117.1
2.5°	117.6	116.8	115.2	113.9	112.4	110.8	110.0	109.1	108.6	108.0	108.0
5°	119.4	117.6	114.7	111.6	108.8	106.4	104.2	102.6	101.8	101.2	100.9
7.5°	122.9	120.4	115.5	110.8	106.7	102.8	99.8	97.4	96.0	95.1	94.8
10°	127.6	124.0	117.6	111.4	105.9	100.9	96.8	93.8	91.9	91.0	90.4
12.5°	133.9	129.5	121.2	113.2	106.2	100.0	94.8	91.6	89.6	88.5	88.5
15°	143.5	137.8	127.6	116.8	108.0	100.7	94.8	91.2	89.9	89.4	89.1
17.5°	154.6	147.9	135.5	123.2	111.9	102.6	97.4	95.1	93.2	92.4	92.4
20°	166.6	158.7	144.3	130.3	117.6	108.0	102.3	98.7	96.5	95.6	95.4
22.5°	178.7	170.4	153.7	137.8	123.8	115.2	107.0	102.6	99.8	98.7	98.4
25°	192.5	183.4	163.6	145.8	132.3	122.7	113.0	106.7	103.1	101.8	101.5
27.5°	207.4	196.6	174.6	154.3	140.6	129.2	118.5	110.0	106.4	104.8	104.4
30°	222.7	210.9	185.6	163.1	148.4	135.0	123.8	114.1	109.5	107.5	107.2
32.5°	239.0	224.9	197.4	173.5	155.9	140.2	128.2	117.9	112.2	110.0	110.0
35°	257.1	240.9	209.0	183.1	162.8	145.5	132.0	121.5	114.7	112.4	112.4
37.5°	274.5	256.8	221.4	193.5	169.1	149.6	135.0	124.8	117.1	114.4	114.4
40°	292.9	272.7	233.1	202.1	174.6	152.8	137.8	127.3	119.1	116.6	116.0
42.5°	310.7	288.7	245.8	210.9	179.2	155.6	139.9	129.5	120.7	117.6	117.4
45°	329.4	304.6	257.9	218.0	183.1	157.5	141.1	130.8	122.7	118.8	118.3
47.5°	345.7	319.8	269.8	224.3	186.2	158.7	141.9	132.0	123.8	119.4	118.8
50°	361.8	333.3	279.7	229.6	187.8	159.2	142.2	132.3	124.6	119.4	118.8
52.5°	376.4	345.9	288.2	233.1	188.6	159.0	141.9	132.3	124.8	118.8	118.3
55°	388.5	356.1	294.2	235.4	188.6	158.1	141.1	131.7	124.6	118.3	117.4
57.5°	397.6	362.9	298.3	235.9	187.2	156.4	139.6	130.8	123.8	117.1	116.0
60°	403.0	366.8	299.7	234.6	185.1	154.6	138.0	129.8	122.9	115.5	114.7
62.5°	404.8	367.3	298.3	231.8	182.0	151.8	135.5	127.9	121.2	113.5	112.7
65°	402.0	364.3	294.5	227.4	177.9	148.4	133.1	125.6	119.4	111.4	110.6
67.5°	394.6	357.7	287.7	221.4	173.2	144.6	130.3	123.2	117.1	108.8	107.2
70°	383.6	347.8	278.9	213.9	167.8	140.6	127.1	120.2	114.1	106.2	104.4
72.5°	367.6	334.3	267.3	204.8	161.4	136.2	122.9	116.6	110.8	102.8	100.7
75°	348.4	317.0	253.5	195.5	154.8	130.8	118.8	112.7	107.0	99.0	97.1
77.5°	326.9	298.9	238.7	184.7	147.1	125.6	114.4	108.6	102.6	94.8	92.1
80°	303.5	277.7	222.4	173.8	139.9	119.9	109.5	103.9	97.9	90.4	87.5
82.5°	278.2	255.7	206.2	162.8	132.0	114.1	104.4	99.0	92.7	85.5	82.4
85°	253.5	233.1	189.1	151.0	124.3	108.0	99.0	93.5	87.7	80.3	77.5
87.5°	227.9	210.3	172.4	139.4	116.6	102.3	93.8	88.0	81.9	75.1	72.8
90°	205.7	188.9	156.7	128.4	108.6	96.0	88.3	82.2	76.4	69.9	67.9
92.5°	182.0	168.3	141.4	117.9	101.2	89.9	82.8	77.0	70.7	64.3	63.0
95°	161.6	150.4	127.3	107.5	93.2	84.1	77.2	71.2	64.9	58.8	58.0
97.5°	142.2	132.8	113.5	97.9	86.3	78.1	71.5	65.7	59.1	53.6	53.1
100°	124.8	116.6	101.2	89.1	78.9	72.3	66.3	60.3	53.6	48.4	48.4
102.5°	108.8	102.6	90.2	80.0	72.3	66.0	60.5	54.4	47.9	43.5	43.7
105°	96.0	89.9	79.7	72.0	65.7	59.9	54.7	48.7	42.4	38.8	39.1
107.5°	83.6	78.9	70.7	64.0	59.1	54.4	48.9	43.2	36.8	34.7	34.9
110°	72.8	69.3	62.7	57.2	53.3	48.9	44.0	38.0	32.1	30.8	30.8



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

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	63.5	60.5	55.5	51.1	47.3	43.7	38.5	33.0	27.5	26.9	26.9
115°	55.5	53.3	48.7	45.1	42.4	38.8	34.1	28.3	23.9	23.6	23.9
117.5°	48.7	46.7	42.9	39.9	37.4	34.1	29.7	24.2	20.4	20.7	20.9
120°	42.7	41.2	38.0	35.5	33.0	30.0	25.3	20.4	17.9	18.1	18.1
122.5°	37.6	36.3	33.6	31.1	28.8	25.9	21.7	17.1	15.4	16.0	16.0
125°	32.7	31.9	29.2	26.9	24.8	21.7	17.9	14.0	13.2	13.7	13.7
127.5°	28.3	27.7	25.6	23.1	20.9	18.1	14.5	11.6	11.3	11.9	11.9
130°	24.4	23.9	22.0	19.8	17.3	14.8	11.3	9.3	9.6	10.1	10.4
132.5°	20.9	20.7	18.7	16.3	14.0	11.6	8.8	7.7	8.3	8.8	8.8
135°	17.3	17.1	15.7	13.5	11.0	8.8	6.6	6.0	6.9	7.5	7.5
137.5°	14.3	13.7	12.7	10.4	8.3	6.3	4.7	4.9	5.5	6.0	6.0
140°	11.3	11.0	9.9	8.0	5.7	4.1	3.3	3.9	4.7	4.9	4.9
142.5°	8.3	8.3	7.2	5.5	3.6	2.5	2.3	2.8	3.6	3.9	3.9
145°	5.7	5.7	4.9	3.6	2.3	1.1	1.1	1.9	2.5	2.8	3.1
147.5°	3.9	3.6	3.1	2.3	1.1	0.3	0.5	1.3	1.6	1.9	1.9
150°	2.3	2.3	1.6	1.1	0.5	0.0	0.3	0.5	0.8	1.1	1.3
152.5°	0.8	0.8	0.5	0.3	0.3	0.0	0.0	0.0	0.3	0.5	0.5
155°	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.3	0.0	0.3	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)