

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: P240316

Luminaire Tested: **UTLD-AF24-20-D-U-T2U-FP**

Issue Date: 5/28/2020

Test Information

Test Method: LM-79-08
Report Number: P240316
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-28)
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-T2U-FP
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 260mA LIGHT ENGINE WITH 24 LEDS AND TYPE II U OPTICS
AND FROSTED LENS PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2116.5 lumens
Efficiency: N/A
Efficacy: 100.8 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



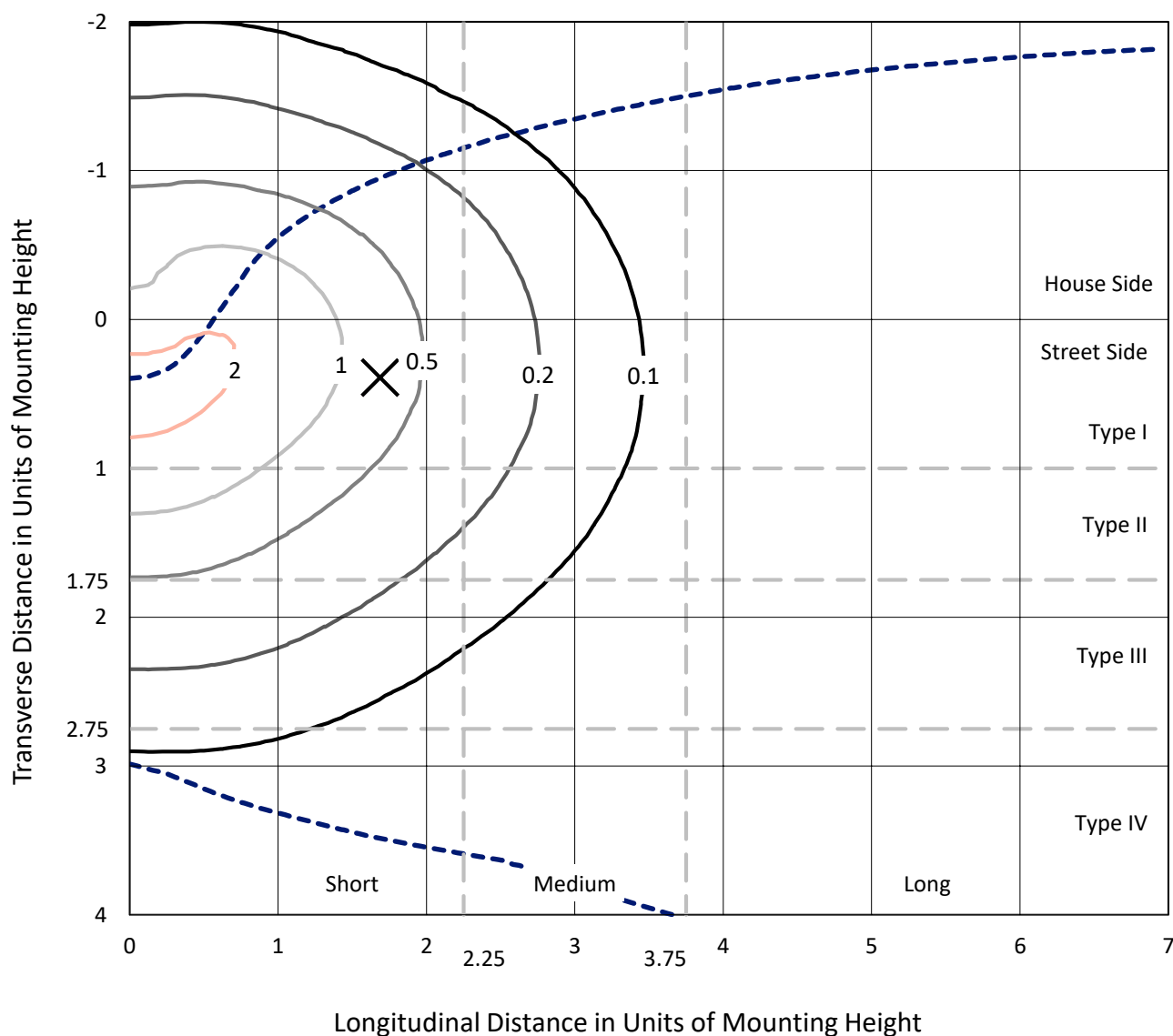
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

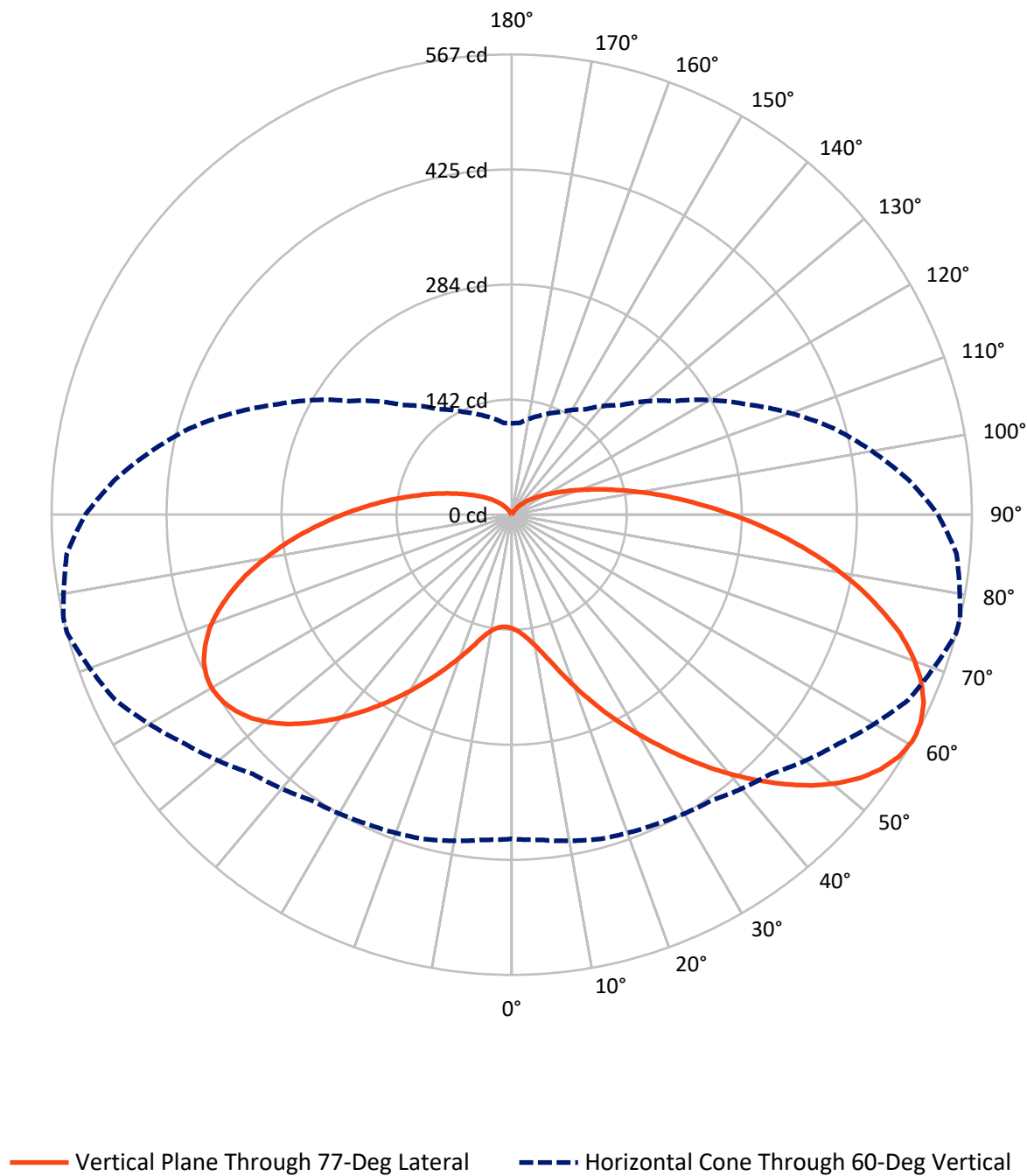


Based on 10 foot mounting height. Maximum calculated value = 2.3 fc
 Type IV - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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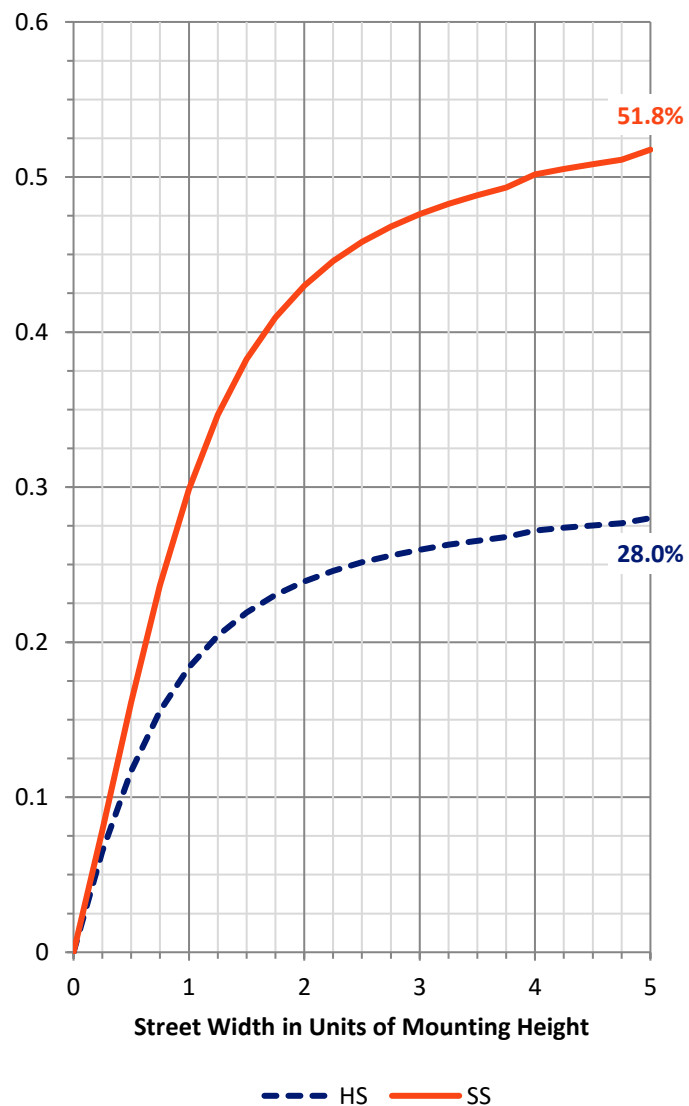
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	629.4	135.2	764.6
	% Fixture	29.7	6.4	36.1
Street Side	Lumens	1161.1	190.8	1351.9
	% Fixture	54.9	9.0	63.9
Total	Lumens	1790.5	326.0	2116.5
	% Fixture	84.6	15.4	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.0	0.7
10°-20°	49.3	2.3
20°-30°	105.6	5.0
30°-40°	182.1	8.6
40°-50°	264.3	12.5
50°-60°	325.3	15.4
60°-70°	337.0	15.9
70°-80°	293.9	13.9
80°-90°	219.0	10.3
90°-100°	144.8	6.8
100°-110°	88.4	4.2
110°-120°	50.6	2.4
120°-130°	26.8	1.3
130°-140°	11.8	0.6
140°-150°	3.3	0.2
150°-160°	0.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	1790.5	84.6
0°-180°	2116.5	100.0

Coefficient of Utilization



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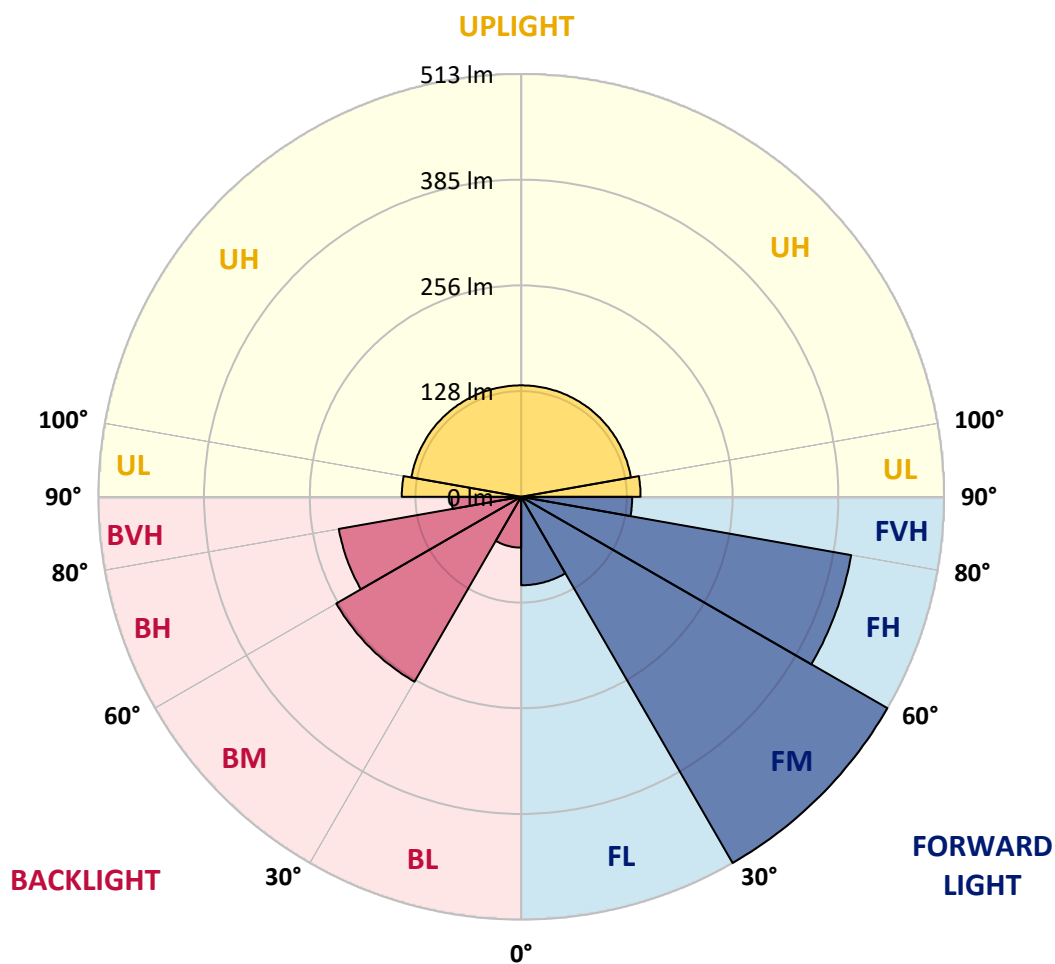
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	107.2	5.1			
FM	(30°-60°)	512.8	24.2			
FH	(60°-80°)	406.4	19.2			G0/660
FVH	(80°-90°)	134.6	6.4			G2/225
BL	(0°-30°)	61.6	2.9	B0/110		
BM	(30°-60°)	258.9	12.2	B1/1000		
BH	(60°-80°)	224.5	10.6	B1/500		G1/500
BVH	(80°-90°)	84.4	4.0			G1/100
UL	(90°-100°)	144.8	6.8		U3/500	
UH	(100°-180°)	135.2	6.4		U3/500	

BUG Rating: B1-U3-G2

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
0°	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5
2.5°	152.6	152.6	152.0	151.7	150.7	149.2	147.9	146.0	144.0	143.5	142.4
5°	165.8	165.8	165.2	163.9	161.9	159.5	156.4	153.4	149.6	148.7	145.7
7.5°	180.7	180.0	178.7	177.3	174.6	171.0	166.8	162.2	157.0	155.9	151.5
10°	195.5	195.5	194.1	191.9	188.6	183.9	179.0	173.2	166.3	164.9	159.2
12.5°	212.5	212.0	209.8	208.1	204.3	199.1	193.5	186.4	178.1	176.8	169.3
15°	230.7	230.4	228.4	224.8	220.4	215.5	209.8	202.0	193.2	191.1	182.8
17.5°	251.0	249.3	248.3	244.4	239.7	233.4	229.0	221.1	211.4	208.9	198.8
20°	269.6	270.0	267.5	264.2	259.8	255.4	249.1	241.9	231.5	228.2	216.7
22.5°	290.8	290.8	288.4	285.1	280.7	278.4	271.3	263.9	251.2	248.8	235.9
25°	312.8	312.0	309.5	306.5	304.3	301.6	295.0	286.2	273.2	270.8	256.2
27.5°	333.2	333.5	330.4	328.0	327.7	324.1	318.6	309.2	296.9	293.3	277.6
30°	354.0	354.4	352.2	349.1	349.4	347.2	342.6	332.9	321.1	317.0	300.2
32.5°	375.0	374.4	371.4	371.1	370.3	368.7	365.1	359.1	346.1	341.7	324.4
35°	393.6	393.6	390.7	391.8	390.1	389.8	388.7	384.0	372.5	368.1	349.4
37.5°	411.0	410.7	409.1	409.4	408.3	408.0	409.9	409.4	398.6	395.1	375.8
40°	427.0	425.2	423.9	425.0	423.9	425.5	430.3	433.5	424.4	421.8	402.2
42.5°	437.9	437.4	436.8	438.7	437.1	441.0	448.4	456.3	450.8	448.2	428.6
45°	446.7	445.6	446.7	448.7	447.5	452.6	465.6	477.8	477.8	473.9	453.9
47.5°	450.3	450.0	452.8	454.4	453.9	461.9	479.5	497.9	501.8	498.7	478.3
50°	449.5	449.5	453.9	456.3	457.0	467.4	489.6	513.8	522.6	520.2	500.0
52.5°	444.3	444.3	450.8	453.9	456.0	469.2	496.4	527.2	540.2	538.8	518.7
55°	434.3	434.0	442.6	446.4	451.1	467.4	499.2	536.0	553.9	552.8	534.7
57.5°	419.0	419.5	429.9	436.0	442.0	461.2	497.9	540.4	563.3	562.7	544.8
60°	399.5	402.2	414.0	420.8	429.9	451.6	492.0	539.6	566.8	567.1	550.3
61°	391.2	393.9	406.0	414.3	423.9	447.0	488.8	538.0	566.6	567.1	551.0
62.5°	378.0	379.6	393.9	403.9	414.3	438.4	482.2	533.6	564.7	565.5	550.1
65°	353.2	356.3	370.8	383.2	395.6	422.0	467.9	522.3	556.7	558.0	543.8
67.5°	326.0	329.6	346.4	360.7	375.0	403.0	450.3	506.2	542.4	544.0	531.6
70°	299.1	303.5	321.1	335.4	353.0	381.9	428.8	485.2	522.8	524.6	513.8
72.5°	271.6	276.6	294.7	311.2	329.1	358.4	405.0	460.4	498.4	500.6	490.7
75°	244.1	250.4	267.5	286.4	304.3	334.6	380.2	434.0	468.4	470.7	463.0
77.5°	219.4	224.8	241.6	261.5	281.0	309.9	353.2	402.7	438.4	439.6	432.7
80°	194.4	200.1	218.3	237.0	257.6	285.4	325.5	371.1	402.2	405.2	398.0
82.5°	172.1	177.9	194.9	215.2	235.1	261.7	297.2	338.7	366.2	369.5	364.6
85°	153.4	157.5	174.3	193.8	213.1	238.3	272.4	308.4	333.2	333.8	328.8
87.5°	134.7	139.1	155.1	174.0	193.5	216.7	245.8	276.8	296.9	298.8	293.9
90°	119.3	122.0	137.2	155.9	174.8	196.0	221.3	248.8	265.0	265.0	261.2
92.5°	105.9	107.2	122.3	140.2	158.4	176.5	198.8	219.9	233.9	233.6	229.2
95°	93.5	95.1	107.7	125.1	142.7	159.5	177.6	194.4	204.8	205.4	200.1
97.5°	82.4	83.6	95.4	112.4	128.1	143.8	158.9	172.4	179.2	179.5	175.6
100°	73.7	73.7	84.9	100.0	115.2	129.2	142.1	152.3	155.3	155.1	151.7
102.5°	66.0	65.5	75.1	89.6	103.6	115.7	126.2	132.8	135.2	134.4	132.3
105°	58.5	59.1	66.5	80.3	92.9	103.6	111.6	117.1	117.1	116.5	114.4
107.5°	53.1	52.8	58.5	71.2	83.3	92.7	98.9	101.7	100.9	100.0	98.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77°	85°
110°	47.6	47.6	52.0	63.7	74.3	82.8	87.2	88.8	86.3	86.0	85.7
112.5°	42.9	42.9	46.4	56.4	66.3	73.4	76.9	77.2	74.5	74.3	74.5
115°	39.3	39.3	41.2	50.0	59.1	65.5	68.4	67.1	64.3	64.0	64.9
117.5°	35.7	35.7	37.3	43.7	52.3	58.0	59.9	58.0	55.5	55.5	56.7
120°	32.7	32.7	33.2	38.3	45.9	50.8	52.3	50.0	48.1	48.1	49.2
122.5°	30.0	29.7	30.0	33.2	39.6	44.3	44.8	42.9	41.5	41.7	43.5
125°	27.2	27.2	26.9	28.8	34.1	38.0	38.5	36.3	36.3	36.3	37.6
127.5°	24.8	24.8	24.1	25.1	28.8	32.1	32.1	30.5	31.1	31.6	32.7
130°	22.5	22.5	22.0	22.0	23.9	26.7	26.7	25.6	26.9	27.2	28.3
132.5°	20.4	20.0	19.5	18.7	19.5	21.2	21.2	20.9	23.1	23.3	24.1
135°	18.1	17.9	17.3	16.0	15.7	16.3	16.3	17.1	19.2	19.5	20.7
137.5°	15.7	15.7	14.8	13.5	11.9	11.9	11.9	13.5	15.7	16.3	16.8
140°	13.5	13.5	12.7	10.9	8.8	8.0	8.3	10.4	12.7	12.9	13.5
142.5°	10.9	10.9	10.1	8.5	6.3	4.7	5.2	7.5	9.3	9.9	10.4
145°	8.5	8.5	7.7	6.0	3.9	2.5	3.1	5.2	6.5	6.9	7.5
147.5°	6.3	6.3	5.5	4.1	2.1	0.8	1.6	3.1	4.4	4.7	5.2
150°	4.1	4.1	3.6	2.1	1.1	0.0	0.5	1.6	2.5	2.8	3.1
152.5°	2.1	2.1	1.6	1.1	0.3	0.0	0.0	0.5	1.1	1.1	1.3
155°	1.1	0.8	0.5	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.5
157.5°	0.3	0.3	0.3	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°	0.3	0.3	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°	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5	140.5
2.5°	141.3	140.2	138.0	136.4	134.4	132.8	131.4	130.3	130.0	129.2	129.5
5°	143.8	141.9	137.7	134.1	130.3	127.1	124.3	122.3	120.9	120.4	119.9
7.5°	148.4	145.2	139.1	133.3	127.9	122.9	118.5	115.7	113.5	112.4	112.4
10°	155.1	150.9	142.4	134.7	127.1	120.4	114.9	110.5	107.7	106.4	106.7
12.5°	164.1	158.7	148.2	137.7	128.4	119.9	112.4	107.7	104.4	102.8	102.8
15°	177.1	171.0	157.0	143.5	130.8	120.4	112.4	107.2	104.8	103.6	103.3
17.5°	192.7	184.7	168.8	152.6	136.7	123.7	115.7	110.8	107.2	105.9	105.6
20°	208.7	199.6	180.9	162.8	144.8	130.8	121.2	114.7	110.0	108.0	107.7
22.5°	226.8	216.4	194.4	172.9	153.6	140.2	126.7	118.3	112.7	110.3	110.0
25°	245.5	233.9	209.2	185.1	165.5	149.2	133.6	121.8	115.2	112.1	111.9
27.5°	265.3	252.9	224.6	197.1	176.8	157.8	139.9	125.1	117.4	114.1	113.9
30°	287.2	272.4	241.4	211.1	188.0	165.8	146.0	128.9	119.6	115.7	115.2
32.5°	310.1	293.6	258.4	226.0	198.5	172.9	150.9	133.1	121.8	117.4	117.1
35°	334.0	315.6	276.0	240.5	207.9	179.2	155.3	136.7	123.5	118.8	118.3
37.5°	359.1	338.7	294.4	254.3	216.9	184.7	158.9	139.6	125.1	119.6	119.1
40°	384.0	360.7	312.6	268.3	225.2	189.5	161.9	141.9	126.2	120.4	119.9
42.5°	408.3	384.3	331.0	281.2	232.3	193.0	164.1	143.8	127.3	120.9	120.1
45°	431.9	406.8	348.6	292.3	238.3	195.7	165.5	144.8	128.7	120.9	120.1
47.5°	455.5	428.0	365.9	301.9	242.7	197.6	166.0	145.5	129.5	120.7	119.9
50°	477.0	447.0	380.7	310.4	246.0	198.2	165.8	145.2	129.7	120.1	119.1
52.5°	494.6	463.8	393.1	316.4	248.0	197.9	164.9	144.6	129.5	119.1	118.3
55°	509.6	476.7	402.2	320.3	248.0	196.6	163.6	143.5	128.4	117.6	116.5
57.5°	519.6	486.3	408.3	321.9	246.8	194.1	161.1	141.6	127.3	115.7	114.7
60°	525.4	491.0	410.7	320.8	243.9	190.8	158.4	139.4	125.6	113.5	112.4
61°	525.9	491.5	410.7	319.7	242.4	189.5	157.2	138.5	124.8	112.7	111.3
62.5°	525.4	491.0	409.4	317.2	239.7	186.9	155.1	136.7	123.2	110.8	110.0
65°	519.9	485.8	403.9	310.9	233.6	182.0	151.2	133.6	120.4	108.0	106.7
67.5°	508.0	475.4	393.9	302.1	226.5	176.3	146.8	130.0	117.4	104.8	103.1
70°	491.0	459.9	381.6	292.0	218.6	169.9	141.9	125.9	113.5	101.5	99.2
72.5°	469.8	441.2	364.3	279.1	209.2	163.3	136.7	121.5	109.5	97.6	94.8
75°	443.4	417.4	345.0	264.7	198.8	155.6	131.1	116.5	104.8	93.5	90.4
77.5°	414.3	391.0	324.1	249.1	188.3	148.2	125.1	111.1	99.8	88.8	85.7
80°	382.4	362.0	300.4	232.6	177.3	140.5	119.1	105.9	94.8	84.1	80.5
82.5°	349.6	331.5	276.8	215.8	165.5	132.5	112.4	100.0	89.3	79.2	75.3
85°	316.4	300.7	252.9	198.5	153.6	124.5	106.4	94.3	83.6	74.0	70.7
87.5°	283.5	270.0	228.4	182.0	142.9	116.8	100.0	88.5	78.1	68.7	65.5
90°	252.7	241.1	205.9	166.6	132.3	108.8	93.7	82.8	72.5	63.2	61.1
92.5°	223.5	213.6	184.2	150.4	121.5	101.2	87.5	76.7	66.5	58.0	56.7
95°	197.1	187.8	164.4	136.1	111.6	94.3	81.3	71.2	61.1	53.1	52.0
97.5°	171.2	165.5	146.0	122.3	102.0	86.8	75.3	65.7	55.9	48.4	47.9
100°	149.9	143.8	128.1	109.7	93.2	80.3	69.6	60.3	50.8	44.0	43.7
102.5°	130.3	126.2	113.0	98.9	84.7	73.1	63.7	54.9	45.9	39.9	39.9
105°	113.9	110.0	100.0	88.0	76.4	67.1	58.0	49.5	40.9	35.7	36.0
107.5°	98.1	95.6	87.5	77.8	68.7	60.8	52.5	44.3	36.0	31.9	32.1



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CATALOG NUMBER: UTLD-AF24-20-D-U-T2U-FP

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	85.5	83.1	76.7	69.6	61.9	54.9	47.3	39.3	31.3	28.8	28.8
112.5°	74.3	72.5	67.3	61.6	55.5	49.5	42.7	34.7	27.5	25.6	25.9
115°	64.9	63.5	59.1	54.7	49.7	44.5	38.0	30.3	23.9	23.1	23.1
117.5°	56.4	55.5	52.0	48.1	44.3	39.6	33.6	26.1	20.7	20.7	20.7
120°	49.2	48.4	45.6	42.4	39.1	34.9	28.8	22.3	18.1	18.1	18.4
122.5°	43.2	42.7	39.9	37.3	34.4	30.3	24.8	18.7	16.0	16.3	16.3
125°	37.6	37.1	35.2	32.4	29.7	25.9	20.9	15.3	13.7	14.3	14.3
127.5°	32.7	32.4	30.5	28.0	25.3	22.0	17.1	12.9	12.1	12.7	12.7
130°	28.5	28.3	26.4	23.9	21.5	17.9	13.7	10.7	10.4	10.9	10.9
132.5°	24.4	24.1	22.5	20.0	17.6	14.3	10.7	8.5	9.1	9.6	9.6
135°	20.7	20.4	19.2	16.5	14.3	11.3	8.3	7.2	7.7	8.3	8.3
137.5°	17.1	16.8	15.7	13.2	10.7	8.3	6.0	5.7	6.3	6.9	6.9
140°	13.7	13.5	12.4	10.1	7.7	5.7	4.1	4.7	5.2	5.7	5.7
142.5°	10.4	10.4	9.6	7.7	5.2	3.6	2.8	3.6	4.1	4.7	4.7
145°	7.7	7.7	6.5	5.2	3.1	1.9	1.6	2.5	3.3	3.6	3.6
147.5°	5.2	5.2	4.4	3.3	1.6	0.8	1.1	1.6	2.1	2.5	2.8
150°	3.1	3.1	2.5	1.6	0.8	0.3	0.3	1.1	1.3	1.6	1.6
152.5°	1.3	1.3	1.1	0.5	0.3	0.3	0.3	0.3	0.8	0.8	0.8
155°	0.5	0.5	0.5	0.3	0.3	0.3	0.3	0.0	0.3	0.3	0.3
157.5°	0.0	0.3	0.3	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.3	0.3	0.3	0.3	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.3	0.3	0.3	0.3	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)