

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: P239994

Luminaire Tested: **UTLD-AF24-40-D-U-T2U-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239994
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-AF24-40-D-U-T2U-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 500mA 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: 3767 lumens
Efficiency: N/A
Efficacy: 94.2 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): 40
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



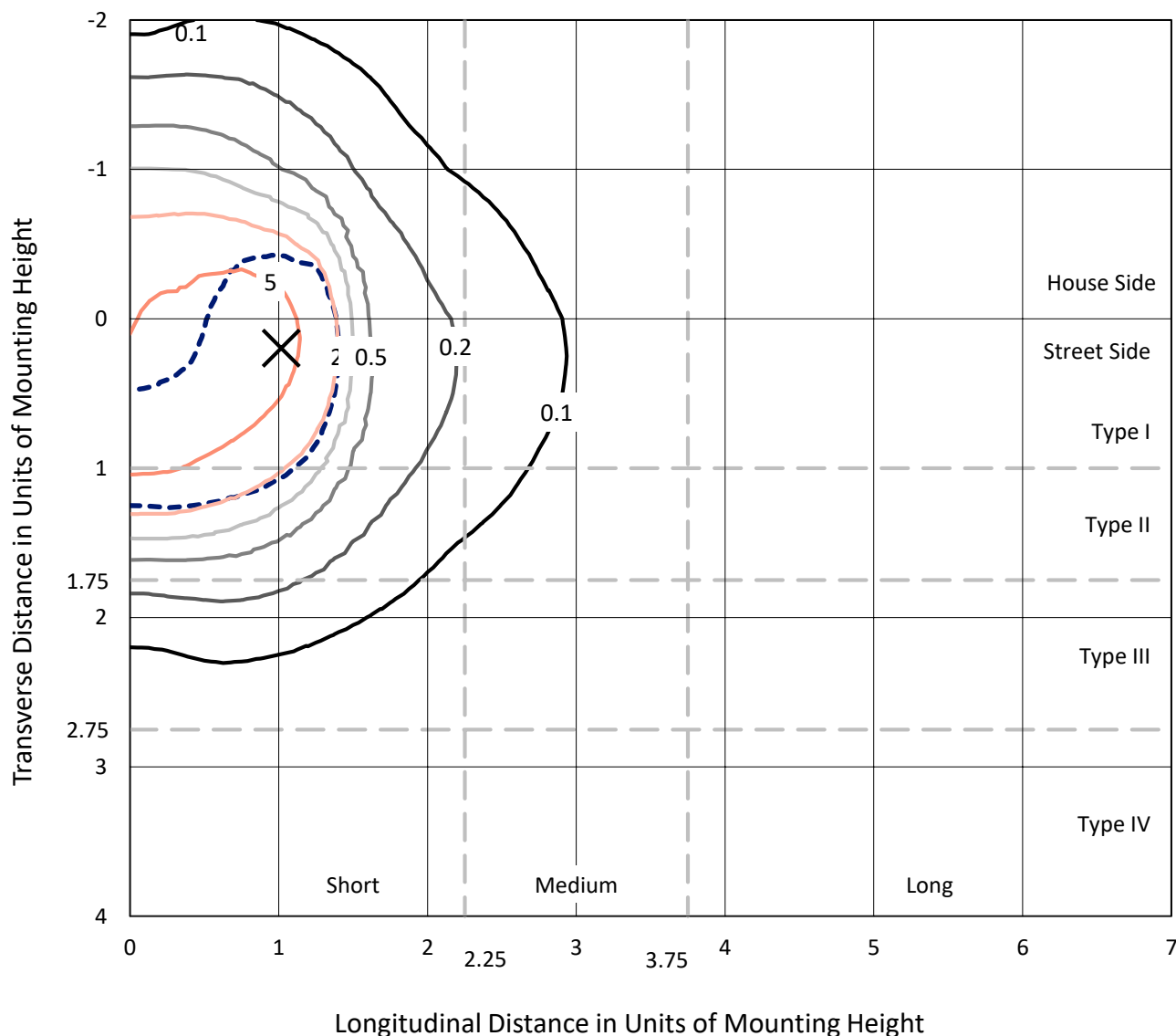
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

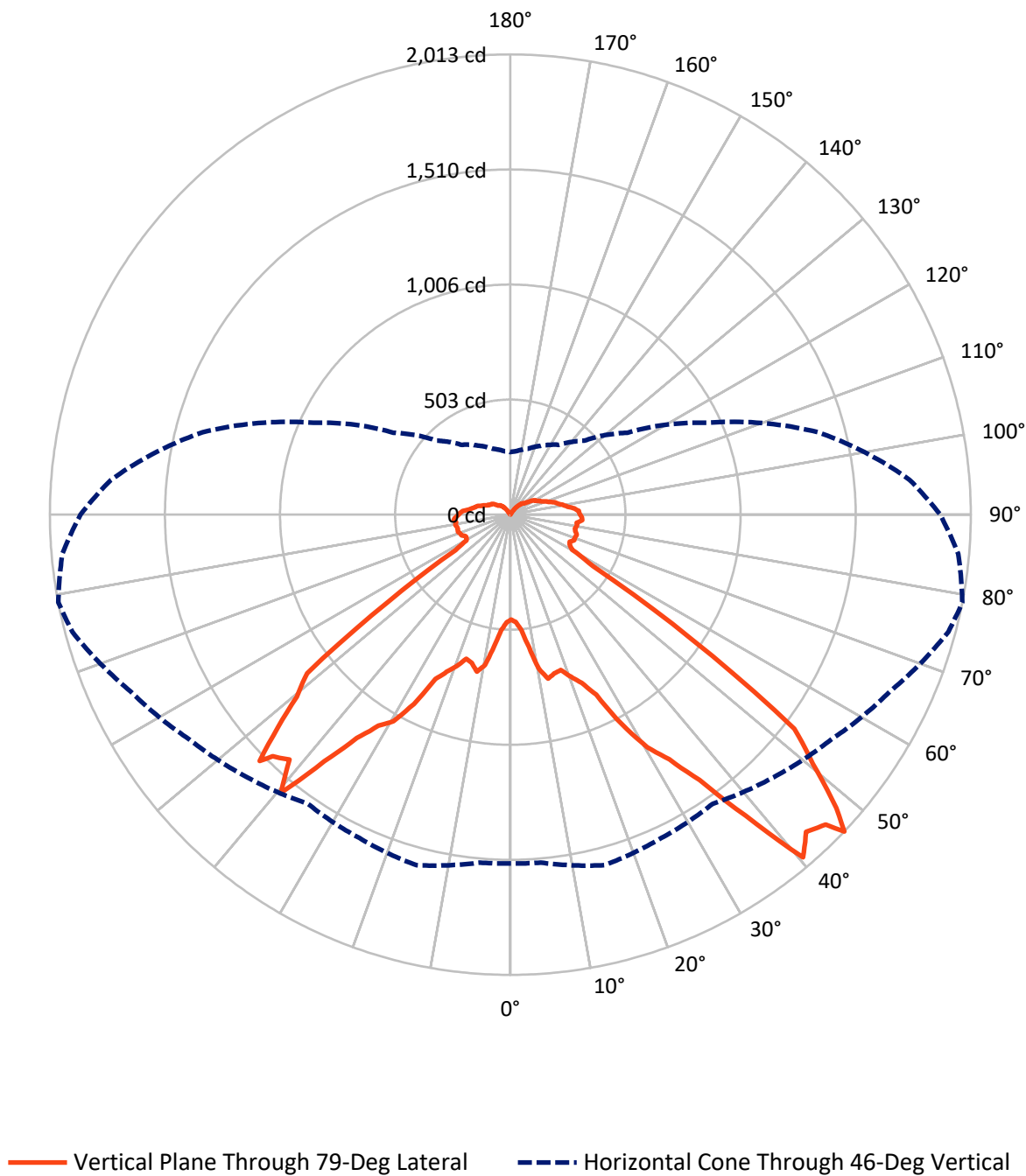


Based on 10 foot mounting height. Maximum calculated value = 8.2 fc
 Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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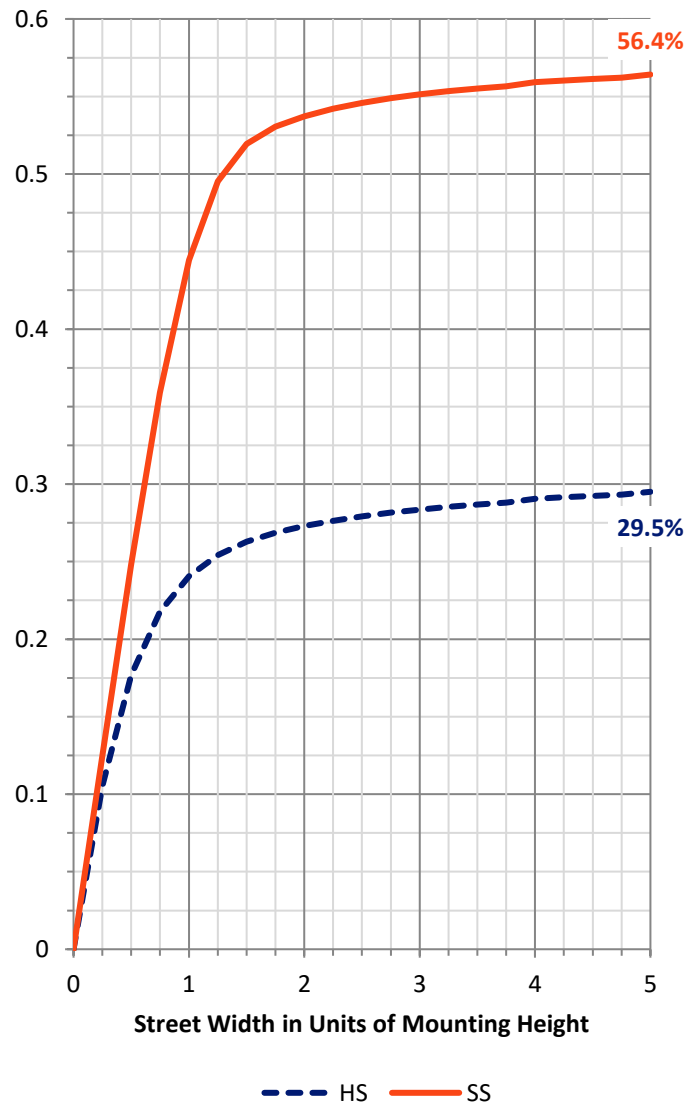
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1148.3	142.8	1291.1
	% Fixture	30.5	3.8	34.3
Street Side	Lumens	2166.1	309.8	2475.9
	% Fixture	57.5	8.2	65.7
Total	Lumens	3314.4	452.6	3767.0
	% Fixture	88.0	12.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.5	1.3
10°-20°	179.0	4.8
20°-30°	361.6	9.6
30°-40°	661.9	17.6
40°-50°	914.7	24.3
50°-60°	583.8	15.5
60°-70°	209.1	5.6
70°-80°	187.8	5.0
80°-90°	167.0	4.4
90°-100°	153.2	4.1
100°-110°	119.1	3.2
110°-120°	82.7	2.2
120°-130°	55.3	1.5
130°-140°	33.2	0.9
140°-150°	8.8	0.2
150°-160°	0.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3314.4	88.0
0°-180°	3767.0	100.0

Coefficient of Utilization



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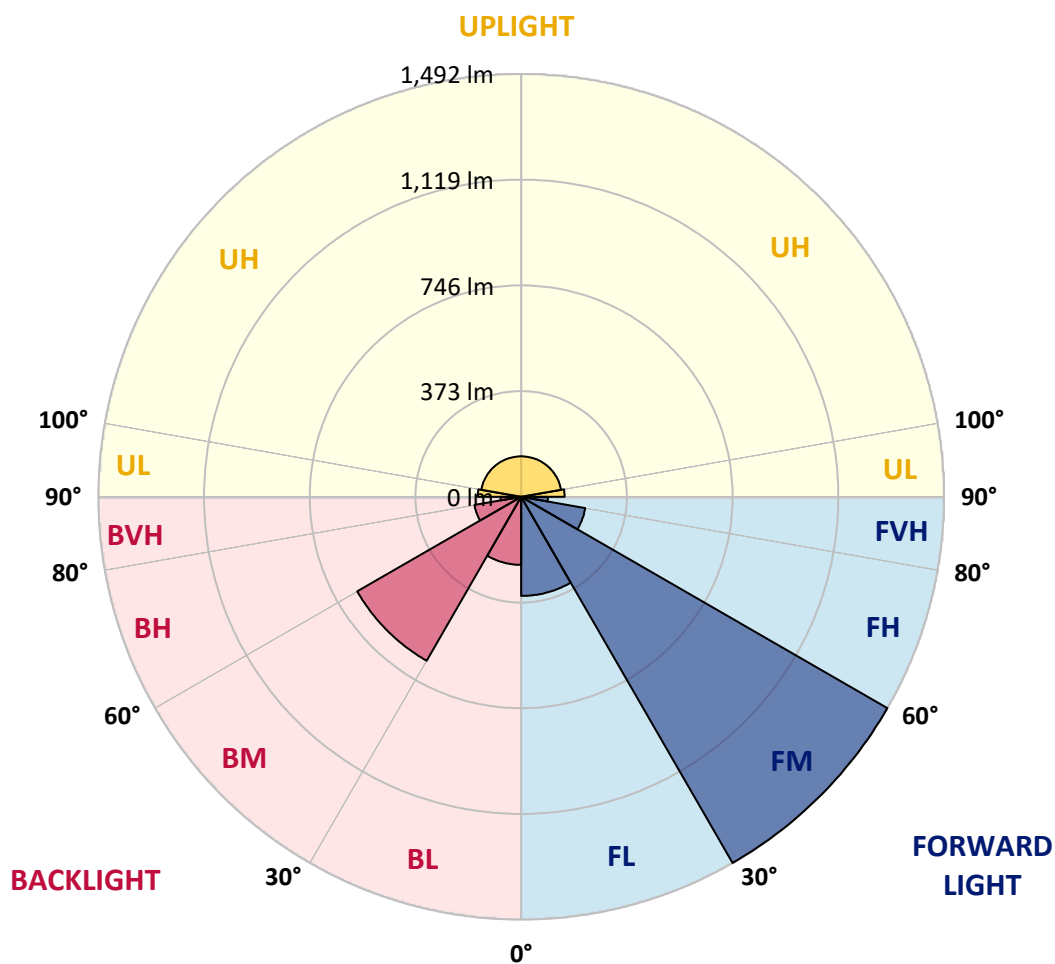
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	349.9	9.3			
FM	(30°-60°)	1492.3	39.6			
FH	(60°-80°)	229.5	6.1			G0/660
FVH	(80°-90°)	94.3	2.5			G1/100
BL	(0°-30°)	240.1	6.4	B1/500		
BM	(30°-60°)	668.1	17.7	B1/1000		
BH	(60°-80°)	167.4	4.4	B1/500		G1/500
BVH	(80°-90°)	72.7	1.9			G1/100
UL	(90°-100°)	153.2	4.1		U3/500	
UH	(100°-180°)	142.8	3.8		U3/500	

BUG Rating: B1-U3-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
0°	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1
2.5°	466.7	468.2	467.7	466.7	468.7	469.7	469.7	469.2	469.7	470.7	472.8
5°	489.0	488.4	490.0	494.0	499.6	501.1	505.6	504.6	507.2	507.2	510.2
7.5°	527.9	528.4	533.4	537.5	543.6	556.7	569.3	586.0	585.5	584.5	588.6
10°	568.3	568.3	578.5	593.1	617.9	645.7	657.8	672.5	687.7	685.1	681.1
12.5°	581.0	583.0	600.7	637.1	690.7	738.2	762.5	759.5	744.3	735.7	722.1
15°	604.2	606.8	626.0	681.6	745.3	787.8	796.9	759.5	726.6	720.5	708.9
17.5°	691.7	691.7	711.4	762.5	810.5	800.9	765.0	747.3	726.1	714.5	697.8
20°	752.4	755.9	787.3	823.2	849.5	818.1	818.6	785.8	764.0	756.9	741.3
22.5°	811.0	816.1	825.2	881.3	888.9	895.0	876.8	846.9	810.5	798.9	782.7
25°	935.4	936.9	946.6	973.4	953.1	943.0	916.7	892.5	878.3	872.2	855.0
27.5°	1083.1	1078.5	1082.6	1084.6	1053.8	1025.9	987.5	1013.3	1033.5	1039.1	1023.9
30°	1113.4	1105.8	1136.7	1169.5	1154.4	1121.0	1118.5	1149.3	1187.2	1180.2	1158.9
32.5°	1235.8	1224.2	1238.3	1241.8	1239.3	1229.7	1225.7	1264.6	1291.9	1276.2	1245.4
35°	1334.4	1333.9	1283.8	1295.4	1302.5	1324.8	1347.0	1400.1	1424.4	1425.4	1399.6
37.5°	1545.2	1530.1	1511.4	1437.5	1398.6	1408.7	1485.6	1579.6	1634.2	1670.1	1629.2
40°	1617.5	1624.1	1608.4	1600.3	1543.7	1520.0	1608.4	1770.2	1918.4	1971.0	1965.9
42.5°	1498.7	1513.9	1504.8	1560.9	1605.9	1636.2	1742.9	1881.5	1909.8	1896.1	1823.8
45°	1597.8	1597.8	1573.5	1538.7	1554.3	1652.9	1737.4	1830.9	1919.4	1933.6	1893.6
46°	1526.0	1527.5	1587.2	1560.9	1543.2	1625.1	1713.1	1830.9	1982.1	2012.9	1965.9
47.5°	1393.5	1391.0	1500.7	1509.3	1521.5	1588.7	1685.3	1830.4	1915.9	1917.9	1859.2
50°	1104.3	1108.9	1259.5	1339.4	1419.3	1485.6	1616.0	1697.9	1717.1	1713.6	1649.9
52.5°	896.5	908.6	988.5	1089.1	1185.7	1313.1	1464.8	1541.2	1583.2	1555.3	1496.7
55°	621.4	647.7	748.3	838.9	980.4	1102.8	1233.8	1240.8	1049.2	961.7	853.0
57.5°	384.3	389.3	478.3	606.3	712.4	808.5	810.0	629.5	490.0	425.7	353.9
60°	213.4	217.9	296.8	391.4	495.0	506.7	452.5	364.1	326.6	310.0	284.7
62.5°	158.8	162.3	213.9	272.0	313.5	330.2	303.9	297.8	298.3	290.7	274.1
65°	143.1	145.1	187.6	216.9	241.2	244.7	254.3	275.6	287.2	285.7	278.6
67.5°	129.9	132.5	170.9	192.1	206.8	224.0	232.1	265.0	296.3	301.4	294.8
70°	115.8	119.8	154.2	176.5	193.2	209.8	226.0	267.0	292.3	299.3	296.3
72.5°	100.1	105.2	134.0	157.3	176.0	194.2	222.0	256.9	291.2	303.9	305.9
75°	88.0	94.6	118.3	139.1	158.8	180.5	209.8	253.3	285.7	293.8	297.8
77.5°	79.4	86.5	104.7	123.9	142.6	166.4	200.2	252.3	280.1	289.2	296.3
80°	72.8	79.9	95.1	110.2	125.9	152.7	190.1	250.8	285.7	295.3	299.3
82.5°	67.8	74.3	87.5	101.1	113.8	138.0	183.0	248.3	284.2	292.3	294.3
85°	68.3	73.3	85.5	98.1	109.7	130.5	179.5	249.3	302.9	315.5	317.5
87.5°	71.8	75.3	88.0	102.6	115.8	137.0	186.1	247.3	300.9	312.5	317.5
90°	77.9	80.9	96.1	113.3	128.9	148.7	184.6	241.7	292.3	302.9	305.9
92.5°	96.6	99.1	115.8	134.5	148.2	154.7	178.5	250.3	293.8	299.8	299.8
95°	124.9	127.9	144.1	158.3	160.8	157.3	175.5	222.5	268.0	281.1	288.7
97.5°	156.2	157.3	166.4	168.9	161.3	153.2	171.4	207.8	243.2	252.3	254.3
100°	166.4	166.4	172.4	170.4	155.7	144.6	155.2	189.1	223.5	233.6	236.6
102.5°	168.4	169.4	175.5	168.9	149.2	131.0	138.0	170.4	202.3	213.4	219.4
105°	178.5	179.0	175.5	159.3	135.0	118.8	124.9	157.3	191.1	201.7	208.3
107.5°	166.9	165.3	155.7	140.6	124.4	112.8	119.8	143.6	169.4	178.0	182.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	79°	85°
110°	138.0	137.0	133.5	127.9	117.8	109.2	113.8	135.5	160.3	166.9	170.9
112.5°	133.0	132.0	128.4	121.9	110.2	103.7	111.2	129.9	145.1	148.2	148.7
115°	127.9	126.9	118.8	111.2	102.1	99.1	104.2	121.4	135.5	139.1	142.1
117.5°	110.2	109.2	103.2	98.6	95.1	96.6	105.2	114.8	124.9	127.9	129.9
120°	98.1	97.6	94.6	91.5	89.5	90.5	99.6	110.2	120.3	123.4	124.9
122.5°	92.5	92.0	88.5	83.9	83.9	83.9	91.0	99.1	110.2	112.8	116.3
125°	81.4	81.4	77.9	74.3	79.4	81.4	82.9	83.4	92.0	96.1	97.6
127.5°	72.3	72.8	69.8	67.2	76.4	80.9	79.9	73.3	78.4	81.4	83.4
130°	71.3	71.3	67.8	64.7	69.3	78.4	75.3	68.8	74.8	76.9	77.9
132.5°	69.3	69.3	65.7	61.2	62.2	72.3	65.7	64.2	69.8	71.8	72.3
135°	63.7	63.7	61.2	55.1	51.1	61.2	53.1	56.1	61.7	63.2	63.7
137.5°	56.6	56.6	54.1	49.0	40.5	46.0	41.0	47.5	53.1	54.6	55.1
140°	46.5	46.0	44.5	38.4	29.3	25.8	27.8	37.9	43.5	44.5	46.0
142.5°	34.4	34.9	32.4	27.3	17.7	9.6	16.2	24.3	30.3	31.9	32.9
145°	25.3	24.8	22.2	17.7	9.6	1.5	7.6	15.2	19.2	20.7	21.7
147.5°	16.7	16.7	14.7	10.6	3.0	0.5	2.0	7.6	12.1	13.1	13.7
150°	11.1	11.1	8.1	3.0	0.5	0.5	0.5	1.5	5.1	6.1	7.1
152.5°	3.5	3.5	1.5	1.0	0.5	0.0	0.0	0.5	1.0	1.0	1.5
155°	1.0	1.0	1.0	0.5	0.0	0.0	0.0	0.0	0.5	0.5	0.5
157.5°	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.5	0.5	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°	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1	459.1
2.5°	473.3	472.8	471.3	469.7	465.7	460.6	455.6	452.0	450.0	448.5	448.0
5°	509.2	510.2	503.1	491.5	480.4	470.2	460.6	451.5	446.5	442.4	440.9
7.5°	585.5	587.0	572.9	554.7	526.4	492.0	462.7	442.9	428.8	420.2	418.7
10°	680.1	676.0	659.4	620.4	568.8	515.8	460.6	418.2	395.4	384.8	384.3
12.5°	718.5	713.0	694.2	661.9	607.8	538.5	470.2	414.1	380.2	366.6	366.1
15°	700.8	691.2	656.8	627.0	605.8	567.3	506.1	441.9	395.4	378.2	373.7
17.5°	685.6	676.0	647.2	604.2	564.3	547.6	517.8	464.7	416.1	391.9	386.8
20°	730.1	724.1	688.2	631.0	587.0	520.3	496.0	459.6	423.2	408.1	404.0
22.5°	771.1	768.1	723.1	663.4	604.2	557.7	509.2	482.4	447.0	436.4	431.8
25°	847.5	833.3	759.5	679.1	628.0	582.5	520.3	478.3	435.4	421.7	419.2
27.5°	1027.0	994.1	886.4	765.5	662.9	590.6	519.3	457.6	410.6	393.4	392.4
30°	1141.2	1111.4	990.0	857.1	717.5	609.8	512.7	438.4	403.0	386.3	386.8
32.5°	1210.5	1170.6	1034.0	865.7	730.1	619.4	516.8	431.8	384.3	363.0	362.5
35°	1360.7	1305.1	1106.8	934.9	754.9	605.2	499.6	418.2	374.2	358.5	356.5
37.5°	1574.6	1511.9	1243.4	991.1	765.0	586.5	477.3	402.5	349.9	328.2	326.6
40°	1883.5	1791.5	1432.5	1058.8	756.9	572.4	453.1	378.7	335.2	321.1	316.5
42.5°	1730.3	1626.1	1319.7	1045.7	736.7	533.4	429.8	367.1	326.6	315.5	309.5
45°	1825.9	1704.5	1333.4	972.3	659.4	475.8	390.4	343.8	303.4	287.7	286.2
46°	1879.0	1752.0	1392.5	950.1	624.0	457.6	372.7	333.2	298.3	278.1	273.6
47.5°	1763.7	1622.6	1280.3	906.6	595.6	416.6	349.4	316.5	292.8	274.1	271.0
50°	1546.7	1408.7	1107.3	773.1	512.7	367.6	311.5	291.8	268.0	247.8	244.2
52.5°	1411.7	1296.0	1013.8	701.3	435.4	310.0	278.1	260.9	236.6	212.9	209.8
55°	776.2	696.3	626.5	526.9	361.0	261.9	242.2	232.1	207.3	184.1	182.5
57.5°	319.6	287.2	284.7	268.5	248.3	220.5	209.3	203.3	178.5	150.2	149.2
60°	269.0	239.7	211.4	186.1	184.6	184.1	180.5	169.9	142.6	113.3	112.3
62.5°	261.9	233.1	205.3	174.4	161.3	165.3	158.8	145.6	124.9	96.6	95.6
65°	267.0	237.1	204.3	169.4	155.2	156.7	149.7	139.6	125.4	105.2	104.2
67.5°	284.2	253.3	216.4	167.4	150.2	153.2	148.2	140.6	132.5	119.8	117.3
70°	286.7	259.4	216.9	168.4	144.6	148.2	146.6	140.1	134.5	123.4	121.9
72.5°	294.3	269.5	221.5	164.8	138.5	140.1	142.1	140.1	136.5	129.9	127.4
75°	287.2	265.5	219.4	161.8	132.5	131.5	136.5	139.1	140.1	137.5	134.5
77.5°	285.7	267.5	220.0	159.8	126.9	122.9	126.9	131.0	133.0	130.5	127.9
80°	287.7	272.0	226.5	160.3	120.8	110.7	112.8	117.3	117.8	113.3	109.7
82.5°	283.2	268.0	219.4	154.7	111.2	98.6	99.1	103.7	104.2	98.6	94.6
85°	303.4	285.2	224.5	147.6	101.1	90.0	90.5	92.5	89.5	83.4	79.4
87.5°	302.9	281.1	214.4	136.5	94.6	84.9	84.4	83.9	78.9	71.8	68.3
90°	292.3	269.5	200.7	120.3	83.4	77.9	76.4	73.3	66.2	58.1	55.6
92.5°	285.2	260.9	191.6	113.8	73.3	68.3	67.2	64.2	57.1	48.5	47.0
95°	277.6	253.8	176.5	99.6	64.7	59.7	58.1	55.1	49.6	42.5	41.5
97.5°	244.7	221.5	155.7	90.5	57.6	52.1	51.1	48.5	44.0	38.9	38.4
100°	226.0	205.3	144.6	82.9	51.6	45.5	45.0	43.5	40.5	36.9	36.4
102.5°	211.4	191.1	134.0	76.9	46.0	40.5	39.9	39.4	37.9	35.4	35.4
105°	200.2	181.0	128.4	71.8	41.5	36.9	36.4	36.4	34.9	33.4	33.4
107.5°	174.4	158.3	111.7	63.7	37.9	33.9	33.9	33.9	32.9	31.9	32.4



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CATALOG NUMBER: UTLD-AF24-40-D-U-T2U-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	164.3	149.2	106.2	59.7	36.4	31.3	30.8	30.8	30.3	30.8	30.8
112.5°	141.6	128.4	93.5	57.1	35.4	29.8	28.3	27.3	26.3	27.3	27.8
115°	136.0	123.9	90.5	55.1	34.4	28.8	26.8	25.3	23.3	24.8	24.8
117.5°	124.9	113.8	83.9	53.6	34.4	27.3	25.3	23.8	21.7	22.8	22.8
120°	119.8	110.2	84.4	55.1	34.9	25.8	23.8	21.2	19.7	21.2	21.2
122.5°	112.8	104.2	79.4	52.1	33.4	25.3	23.3	18.2	17.2	18.7	18.7
125°	94.6	87.5	68.3	46.0	31.9	25.3	22.8	16.2	16.2	17.2	17.7
127.5°	80.4	74.8	59.2	43.0	32.4	26.8	21.7	14.2	15.2	16.7	16.7
130°	75.8	71.3	58.7	44.0	33.9	28.3	17.7	13.1	14.2	15.7	15.7
132.5°	70.8	66.7	56.6	45.0	34.4	26.8	14.7	12.1	13.1	14.2	14.2
135°	62.2	59.2	51.1	41.0	30.8	21.2	11.6	10.6	12.1	13.1	13.7
137.5°	54.6	52.1	45.0	36.9	27.8	18.2	8.1	9.6	10.6	11.1	11.6
140°	45.0	43.5	37.9	30.3	20.7	10.1	6.1	7.6	8.6	9.6	9.6
142.5°	32.9	31.9	26.8	19.7	12.6	4.0	4.0	5.6	6.6	7.6	7.6
145°	21.7	20.7	17.2	12.6	5.6	1.0	2.5	4.0	5.6	6.1	6.1
147.5°	13.7	13.1	10.6	6.6	2.0	1.0	1.0	3.0	4.0	4.6	4.6
150°	7.1	6.6	4.6	2.0	1.0	0.5	0.5	1.0	2.5	3.0	3.0
152.5°	1.5	1.5	1.0	0.5	0.5	0.5	0.5	0.5	0.5	1.0	1.0
155°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
157.5°	0.5	0.5	0.5	0.5	0.5	0.5	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)