

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: P239887

Luminaire Tested: **UTLD-AF24-50-D-U-T3-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239887
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-15)
Test Lab: INNOVATION CENTER(G1)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-AF24-50-D-U-T3-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 670mA LIGHT ENGINE WITH 24 LEDS AND TYPE III OPTICS
AND REFRACTOR PANELS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4761 lumens
Efficiency: N/A
Efficacy: 88.2 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 - G2

Input Watts (W): 54
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



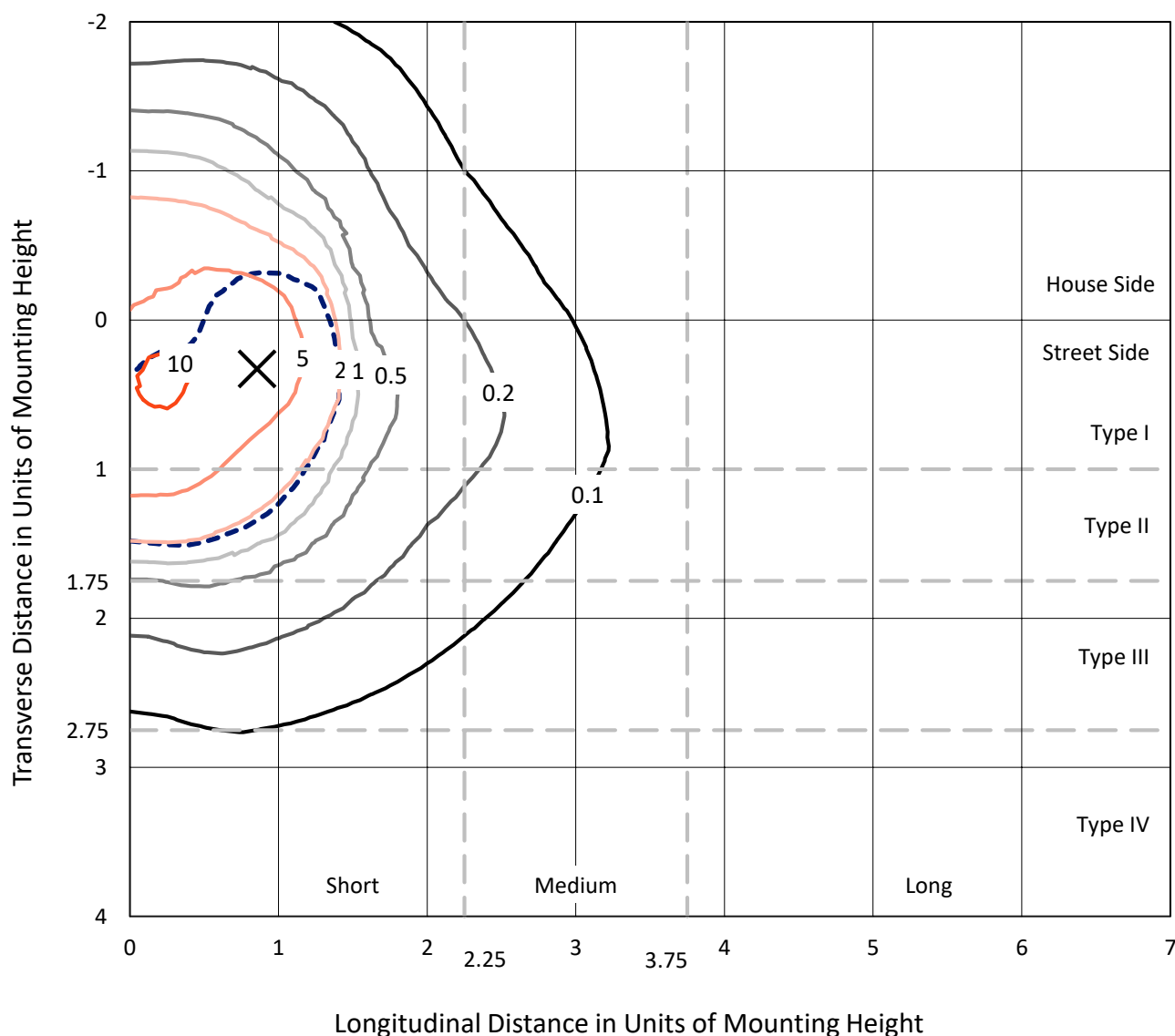
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

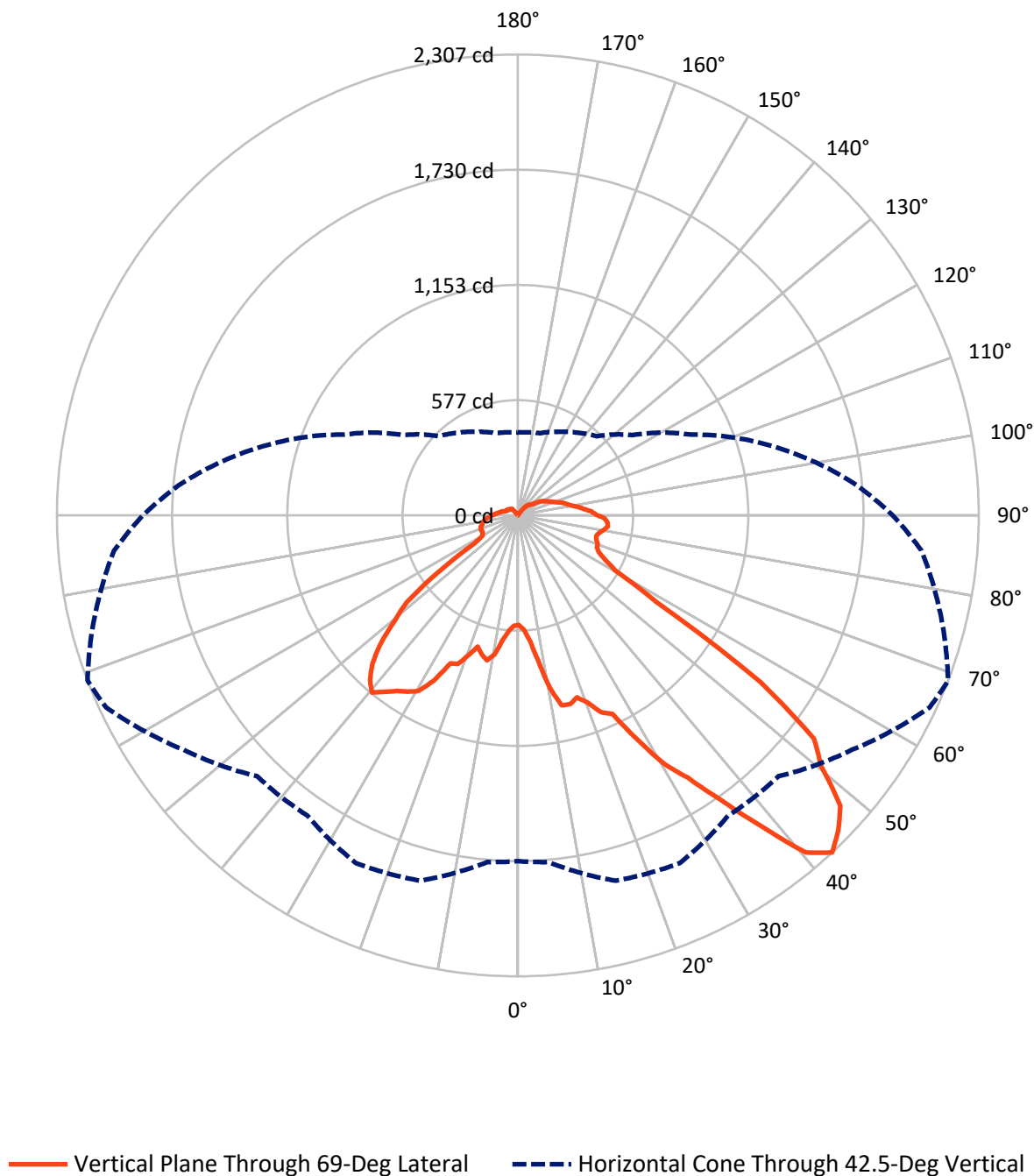


Based on 10 foot mounting height. Maximum calculated value = 11.5 fc
Type II - Short - Non-Cutoff

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Luminous Intensity Polar Plot



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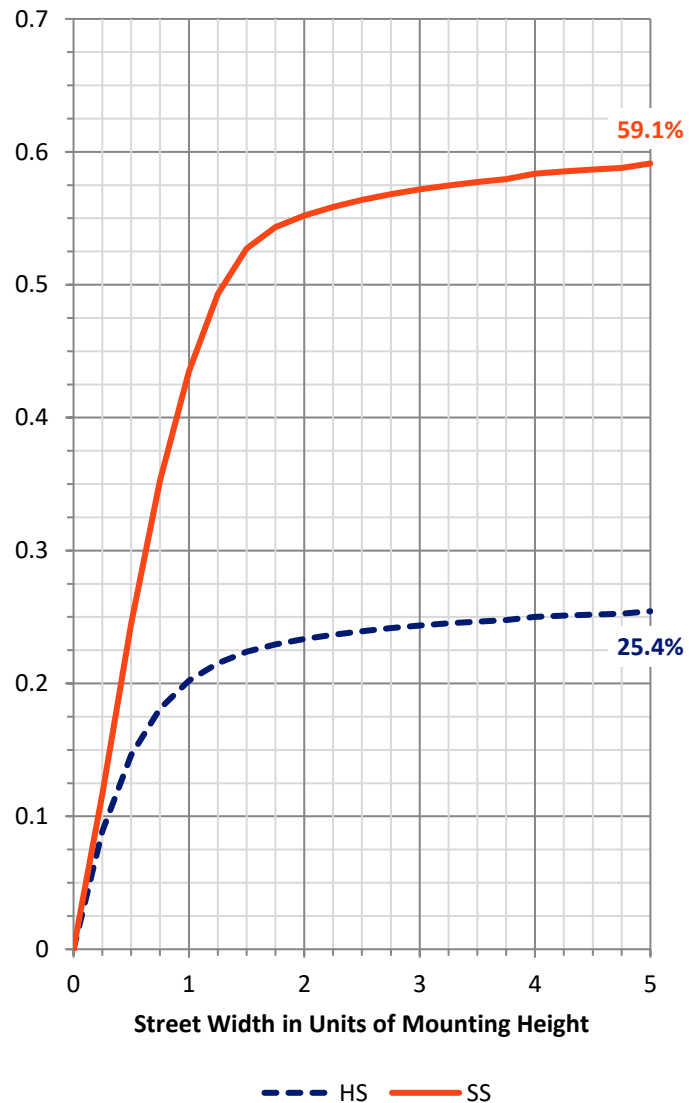
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1254.4	151.2	1405.6
	% Fixture	26.3	3.2	29.5
Street Side	Lumens	2906.9	448.5	3355.4
	% Fixture	61.1	9.4	70.5
Total	Lumens	4161.3	599.7	4761.0
	% Fixture	87.4	12.6	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	1.3
10°-20°	229.0	4.8
20°-30°	468.4	9.8
30°-40°	787.9	16.5
40°-50°	1043.0	21.9
50°-60°	752.1	15.8
60°-70°	295.4	6.2
70°-80°	266.2	5.6
80°-90°	259.5	5.4
90°-100°	218.8	4.6
100°-110°	155.6	3.3
110°-120°	104.9	2.2
120°-130°	68.6	1.4
130°-140°	41.0	0.9
140°-150°	10.4	0.2
150°-160°	0.4	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	4161.3	87.4
0°-180°	4761.0	100.0

Coefficient of Utilization



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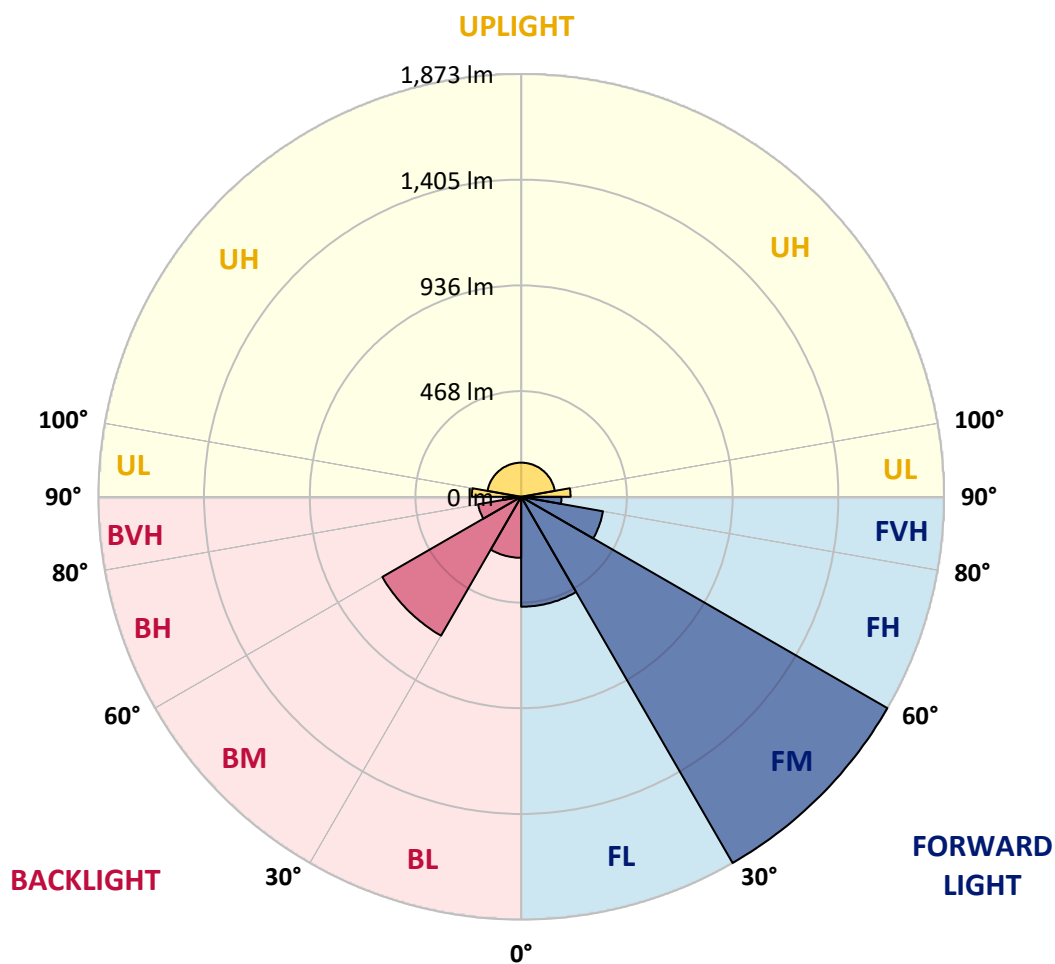
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	486.9	10.2			
FM	(30°-60°)	1873.0	39.3			
FH	(60°-80°)	368.2	7.7			G0/660
FVH	(80°-90°)	178.8	3.8			G2/225
BL	(0°-30°)	270.2	5.7	B1/500		
BM	(30°-60°)	710.1	14.9	B1/1000		
BH	(60°-80°)	193.5	4.1	B1/500		G1/500
BVH	(80°-90°)	80.7	1.7			G1/100
UL	(90°-100°)	218.8	4.6		U3/500	
UH	(100°-180°)	151.2	3.2		U3/500	

BUG Rating: B1-U3-G2

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	69°	75°	85°
0°	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8
2.5°	583.5	580.2	578.9	578.9	577.0	576.4	577.6	575.7	572.5	571.8	567.9
5°	624.3	623.0	622.4	627.6	632.1	633.4	632.1	632.1	628.2	628.2	615.9
7.5°	689.8	687.9	693.0	706.0	710.6	724.2	740.4	730.7	733.2	726.1	702.8
10°	765.7	762.4	786.4	803.9	844.1	861.0	881.7	879.8	875.9	863.6	824.7
12.5°	834.4	832.4	863.6	927.1	980.9	1035.4	1039.9	995.2	975.1	931.0	882.4
15°	920.0	921.9	969.2	1059.3	1139.1	1161.1	1106.0	1017.9	980.3	934.9	862.9
17.5°	1058.0	1064.5	1144.9	1247.4	1300.5	1211.7	1093.7	992.6	956.9	907.6	838.3
20°	1138.4	1142.3	1252.5	1391.3	1406.8	1262.9	1140.4	1031.5	1000.3	961.5	904.4
22.5°	1186.4	1200.7	1327.1	1497.0	1487.9	1382.2	1212.3	1109.3	1070.4	1017.2	970.5
25°	1263.6	1273.9	1395.2	1559.2	1519.0	1421.1	1276.5	1139.1	1100.8	1061.9	1015.3
27.5°	1367.9	1377.7	1513.8	1608.5	1566.3	1473.0	1372.5	1284.3	1264.2	1257.7	1237.6
30°	1423.7	1430.2	1583.2	1662.9	1591.0	1547.5	1519.6	1449.0	1443.1	1430.2	1384.2
32.5°	1455.5	1480.1	1657.7	1703.8	1609.8	1604.6	1621.4	1578.0	1566.3	1544.3	1491.1
35°	1484.0	1496.3	1663.6	1733.6	1640.2	1637.6	1753.7	1773.8	1747.9	1702.5	1575.4
37.5°	1703.8	1709.6	1824.4	1799.7	1680.4	1694.7	1885.9	1990.3	1967.0	1910.6	1823.1
40°	1823.1	1833.4	1939.8	1888.5	1765.4	1781.6	1981.2	2197.8	2218.5	2216.6	2140.1
42.5°	1730.4	1741.4	1892.4	1919.7	1834.7	1845.8	2043.5	2273.6	2306.7	2204.9	2028.6
45°	2032.5	2040.9	2125.8	1926.8	1787.4	1829.5	1994.9	2218.5	2248.4	2218.5	2067.5
47.5°	2031.8	2021.4	2092.1	1946.9	1784.2	1755.6	1889.2	2112.9	2171.9	2103.8	1939.8
50°	1786.1	1785.5	1959.9	1876.2	1749.2	1683.0	1773.1	1950.1	1964.4	1884.7	1664.9
52.5°	1559.8	1558.5	1760.2	1717.4	1634.4	1569.6	1625.3	1801.7	1856.1	1786.1	1602.6
55°	1359.5	1415.3	1592.3	1500.8	1466.5	1402.3	1458.1	1501.5	1473.6	1279.1	862.9
57.5°	823.4	884.9	1115.7	1181.9	1189.7	1143.6	1017.2	868.7	815.6	651.6	389.0
60°	383.8	398.7	585.4	712.5	869.4	794.8	643.1	560.1	560.1	492.1	337.8
62.5°	270.3	280.7	384.5	459.7	520.6	513.5	456.4	468.1	491.4	461.0	325.5
65°	254.1	260.6	342.3	365.0	388.3	392.9	385.1	420.8	445.4	441.5	330.0
67.5°	236.0	244.4	312.5	327.4	345.6	354.0	359.8	401.3	427.2	441.5	343.0
70°	214.6	224.3	288.5	309.2	326.8	346.2	353.3	398.1	424.6	438.9	347.5
72.5°	194.5	202.9	256.7	282.7	313.8	336.5	365.0	392.2	410.4	425.3	350.1
75°	175.0	184.8	230.2	260.0	296.3	339.1	373.4	393.5	405.8	417.5	346.8
77.5°	162.1	172.5	208.1	242.5	285.9	344.9	383.8	409.7	416.9	418.8	343.0
80°	150.4	162.1	199.7	236.0	283.3	347.5	396.1	427.2	437.0	441.5	365.0
82.5°	158.8	169.2	201.6	245.7	291.7	346.8	392.9	442.2	453.2	450.6	372.1
85°	179.6	188.0	227.6	269.1	304.7	341.0	381.2	435.0	450.6	464.2	394.2
87.5°	218.5	222.4	250.9	289.1	318.3	330.0	370.2	420.8	435.0	439.6	383.8
90°	239.2	243.1	276.8	308.6	317.7	321.6	330.0	380.6	390.9	409.1	366.9
92.5°	263.2	263.2	298.2	317.0	317.0	300.8	306.7	352.0	369.5	379.9	341.0
95°	286.6	285.3	304.7	315.7	298.9	276.2	285.9	321.6	332.6	343.6	317.0
97.5°	293.7	293.0	304.7	298.2	270.3	249.0	261.3	291.7	303.4	315.1	287.9
100°	285.9	282.7	285.9	271.6	245.7	229.5	236.6	261.9	274.2	284.0	259.3
102.5°	269.1	267.1	268.4	254.1	226.9	207.5	217.2	243.8	252.8	260.6	238.6
105°	261.3	258.0	252.2	231.4	204.9	191.3	199.7	226.3	234.7	250.2	232.1
107.5°	222.4	219.8	215.2	204.2	190.6	180.2	187.4	206.2	211.4	219.1	202.3
110°	191.9	190.6	189.3	186.7	178.3	171.2	175.0	185.4	191.9	197.7	180.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	15°	25°	35°	45°	55°	65°	69°	75°	85°
112.5°	185.4	183.5	182.2	177.6	166.6	158.8	161.4	173.1	177.0	178.9	160.8
115°	177.0	175.0	167.9	161.4	153.7	149.8	150.4	160.1	162.7	164.0	153.0
117.5°	156.9	154.9	150.4	147.8	143.3	141.3	144.6	149.8	150.4	151.1	141.3
120°	145.2	144.6	142.0	137.4	134.2	129.7	134.8	140.0	142.0	143.9	137.4
122.5°	132.3	131.0	128.4	122.5	122.5	119.9	119.3	122.5	123.2	128.4	125.1
125°	116.7	115.4	112.8	107.6	114.1	114.1	109.6	102.4	104.4	108.9	106.3
127.5°	104.4	103.1	100.5	97.9	107.0	110.2	102.4	89.5	90.8	92.1	90.1
130°	102.4	101.1	97.9	93.4	96.0	105.7	92.1	81.7	83.6	84.9	83.6
132.5°	100.5	99.8	95.3	89.5	86.2	95.3	79.7	77.1	79.1	81.0	79.7
135°	94.0	93.4	89.5	81.0	72.0	76.5	63.5	67.4	70.7	73.3	72.0
137.5°	83.6	83.0	79.7	71.3	59.0	55.1	48.6	57.7	60.3	63.5	63.5
140°	67.4	66.8	63.5	55.1	41.5	29.2	31.1	44.1	46.7	50.6	51.2
142.5°	49.3	48.0	44.7	37.0	23.3	9.7	17.5	26.6	29.8	33.7	36.3
145°	33.7	33.1	28.5	22.0	11.0	1.3	7.8	16.2	18.2	20.7	23.3
147.5°	21.4	21.4	18.2	12.3	3.2	1.3	1.9	8.4	10.4	13.0	14.9
150°	13.0	13.0	9.7	3.9	0.6	0.6	0.6	1.3	3.2	5.8	7.8
152.5°	3.2	3.2	1.9	1.3	0.6	0.0	0.6	0.6	0.6	0.6	1.3
155°	1.3	1.3	1.3	0.6	0.0	0.0	0.0	0.6	0.6	0.6	0.6
157.5°	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.6	0.6	0.6	0.0	0.6	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°	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8	547.8
2.5°	566.0	562.1	556.9	549.8	542.6	535.5	528.4	524.5	522.5	521.2	520.6
5°	612.7	604.2	590.6	571.8	548.5	534.9	525.1	513.5	505.7	503.1	501.1
7.5°	695.0	681.4	654.1	614.0	585.4	545.2	510.9	488.8	472.6	463.5	463.5
10°	805.2	785.8	738.4	683.3	610.1	539.4	486.2	446.0	427.2	419.5	417.5
12.5°	853.8	835.0	779.3	715.1	637.3	555.0	487.5	439.6	416.9	407.8	409.1
15°	829.2	803.3	755.3	695.0	634.1	582.2	525.8	466.1	427.2	416.9	420.1
17.5°	804.6	778.0	726.8	660.0	600.3	566.0	526.4	486.2	449.3	434.4	431.8
20°	876.5	857.1	787.7	711.8	622.4	535.5	507.6	489.5	477.2	477.8	472.0
22.5°	945.2	918.7	855.1	766.3	669.7	593.9	548.5	524.5	510.9	516.7	517.4
25°	991.3	971.2	877.2	770.8	690.5	634.1	568.6	534.9	512.2	512.2	509.6
27.5°	1225.3	1175.4	1026.3	863.6	743.6	650.3	571.2	532.3	503.7	495.3	496.6
30°	1347.8	1298.6	1128.1	930.3	804.6	689.2	578.3	518.0	510.9	505.0	507.0
32.5°	1452.9	1380.3	1178.6	947.8	793.5	695.0	593.9	521.2	486.9	481.0	483.6
35°	1504.7	1423.7	1218.8	963.4	798.7	670.4	575.1	507.6	485.6	479.8	481.7
37.5°	1744.0	1622.7	1282.4	986.7	797.4	637.9	549.8	495.3	454.5	437.0	437.0
40°	2018.9	1840.6	1393.2	985.4	748.2	610.1	521.9	471.3	438.9	425.3	424.6
42.5°	1876.2	1706.4	1328.4	956.3	700.2	559.5	506.3	461.0	425.9	416.9	414.9
45°	1935.9	1754.3	1281.7	874.6	628.2	519.3	469.4	437.6	397.4	376.7	376.0
47.5°	1746.6	1600.7	1186.4	770.8	566.0	456.4	425.3	404.5	379.3	361.8	359.8
50°	1515.1	1367.9	998.4	683.3	482.3	404.5	383.2	372.8	347.5	327.4	328.7
52.5°	1447.7	1269.4	870.0	596.4	414.9	352.7	342.3	330.6	305.4	282.0	284.6
55°	717.7	594.5	529.0	463.5	348.1	306.7	302.1	295.0	269.7	249.6	250.2
57.5°	334.5	288.5	252.8	269.1	262.6	266.5	264.5	260.0	236.0	207.5	205.5
60°	299.5	256.7	214.6	203.6	215.9	232.7	231.4	217.2	186.7	153.0	149.1
62.5°	289.1	245.7	208.1	191.9	197.1	208.1	200.3	182.2	157.5	126.4	125.8
65°	294.3	248.3	207.5	187.4	191.3	195.8	184.8	171.8	156.9	135.5	135.5
67.5°	305.4	258.0	212.0	185.4	187.4	191.9	181.5	172.5	164.7	150.4	150.4
70°	308.6	262.6	214.6	186.1	184.1	188.0	180.9	172.5	167.9	156.2	155.6
72.5°	309.9	265.2	213.3	182.8	178.3	181.5	176.3	172.5	170.5	161.4	160.1
75°	304.1	262.6	206.8	175.7	171.2	172.5	171.2	170.5	173.1	167.3	165.3
77.5°	296.9	258.7	201.6	167.9	162.7	163.4	162.1	164.0	166.6	162.7	159.5
80°	311.8	269.7	202.3	162.1	152.4	149.1	149.8	151.7	154.9	146.5	142.0
82.5°	317.0	270.3	193.2	149.1	136.8	132.3	133.6	138.7	141.3	133.6	129.0
85°	336.5	282.7	186.7	137.4	123.2	118.6	119.9	123.2	121.9	112.8	108.9
87.5°	328.7	274.2	175.0	123.8	112.2	108.3	108.9	110.2	105.7	94.0	90.8
90°	317.7	264.5	162.1	108.9	99.2	97.9	96.6	94.7	86.9	74.6	71.3
92.5°	297.6	247.0	150.4	98.5	88.2	87.5	85.6	81.7	74.6	62.2	59.0
95°	280.7	231.4	139.4	90.1	79.1	76.5	76.5	72.6	64.8	54.5	53.2
97.5°	252.8	210.7	128.4	83.0	70.7	68.1	67.4	64.8	59.0	51.2	50.6
100°	228.9	190.6	116.7	75.2	63.5	60.9	59.6	58.3	53.8	49.3	49.3
102.5°	212.0	176.3	108.9	68.7	57.1	54.5	54.5	53.2	50.6	47.3	47.3
105°	207.5	173.1	105.7	62.9	50.6	49.3	49.9	49.9	48.0	46.0	46.0
107.5°	180.2	149.1	90.8	55.8	46.0	44.7	45.4	46.0	45.4	44.7	44.7
110°	160.8	135.5	84.3	52.5	43.4	41.5	41.5	41.5	41.5	42.1	42.8



REPORT NUMBER: P239887

CATALOG NUMBER: UTLD-AF24-50-D-U-T3-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
112.5°	143.9	120.6	77.1	49.9	40.8	38.9	38.3	37.6	37.0	39.5	39.5
115°	137.4	117.3	75.2	48.6	38.9	37.0	35.0	33.7	32.4	34.4	35.0
117.5°	127.7	110.2	73.3	48.6	38.3	35.0	33.1	31.1	29.2	31.1	31.1
120°	125.1	109.6	74.6	49.3	37.0	32.4	30.5	27.9	26.6	28.5	29.2
122.5°	115.4	102.4	70.7	46.7	35.7	31.1	29.2	24.0	24.0	25.3	25.9
125°	97.9	86.9	60.9	42.1	33.7	31.1	28.5	21.4	22.0	23.3	23.3
127.5°	83.6	75.2	55.8	40.8	34.4	31.8	26.6	20.1	21.4	23.3	23.3
130°	79.1	72.0	56.4	42.8	35.7	32.4	22.0	17.5	20.7	22.7	22.7
132.5°	75.9	70.0	56.4	44.7	37.0	29.8	17.5	15.6	17.5	18.8	18.8
135°	68.7	64.8	53.8	42.8	33.7	23.3	14.3	13.6	16.2	17.5	17.5
137.5°	61.6	57.7	49.3	39.5	29.8	18.8	10.4	12.3	13.6	14.9	14.9
140°	50.6	48.0	40.8	32.4	22.0	10.4	7.8	9.7	11.7	13.0	13.0
142.5°	35.7	34.4	28.5	20.7	12.3	3.9	5.2	7.1	8.4	9.7	9.7
145°	23.3	22.0	18.2	13.0	5.2	1.3	3.2	4.5	6.5	7.1	7.1
147.5°	14.9	14.3	11.0	6.5	1.9	1.3	1.3	3.2	5.2	5.8	5.8
150°	7.1	6.5	4.5	1.9	1.3	0.6	0.6	1.3	3.2	3.9	3.9
152.5°	1.3	1.3	1.3	0.6	0.6	0.0	0.0	0.6	0.6	1.3	1.3
155°	0.6	0.6	0.6	0.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.6	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	0.6	0.6	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)