

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: P239943

Luminaire Tested: **UTLD-AF24-70-D-U-T4W-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239943
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-AF24-70-D-U-T4W-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 930mA 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: 6099 lumens
Efficiency: N/A
Efficacy: 82.4 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 - U4 - G3

Input Watts (W): 74
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



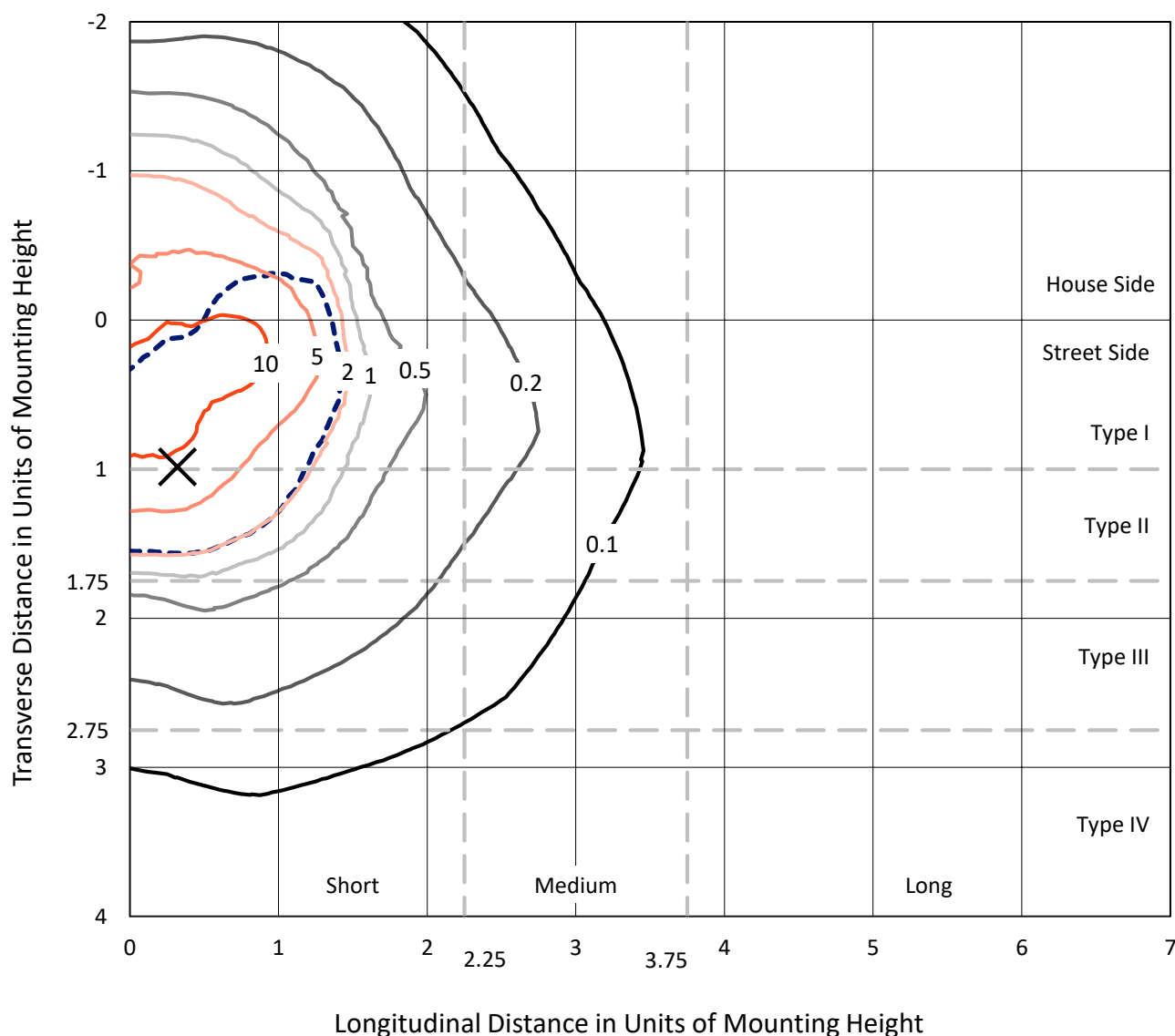
REPORT NUMBER: P239943

CATALOG NUMBER: UTLD-AF24-70-D-U-T4W-A

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

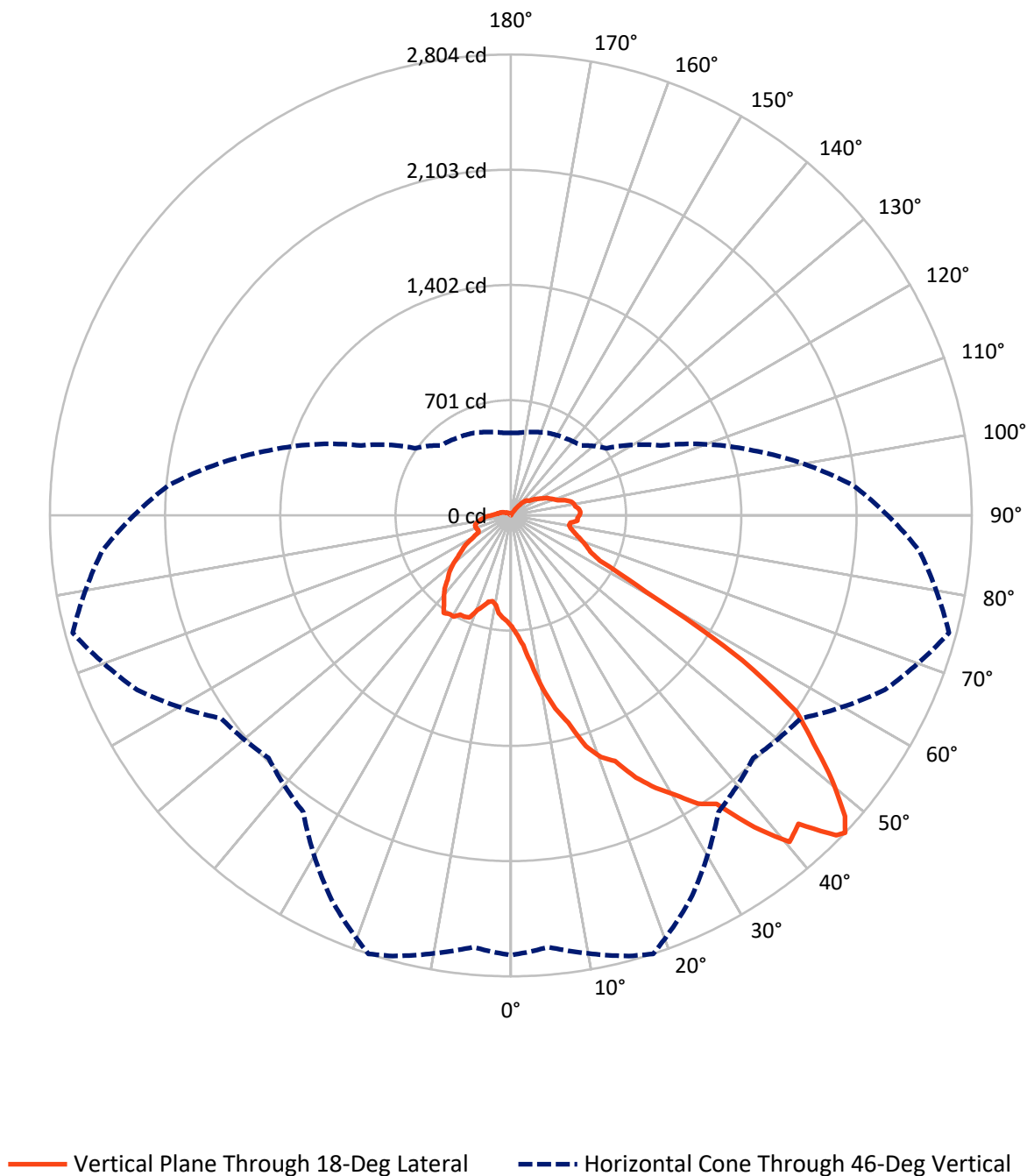


Based on 10 foot mounting height. Maximum calculated value = 14.9 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P239943

CATALOG NUMBER: UTLD-AF24-70-D-U-T4W-A

Luminous Intensity Polar Plot



REPORT NUMBER: P239943

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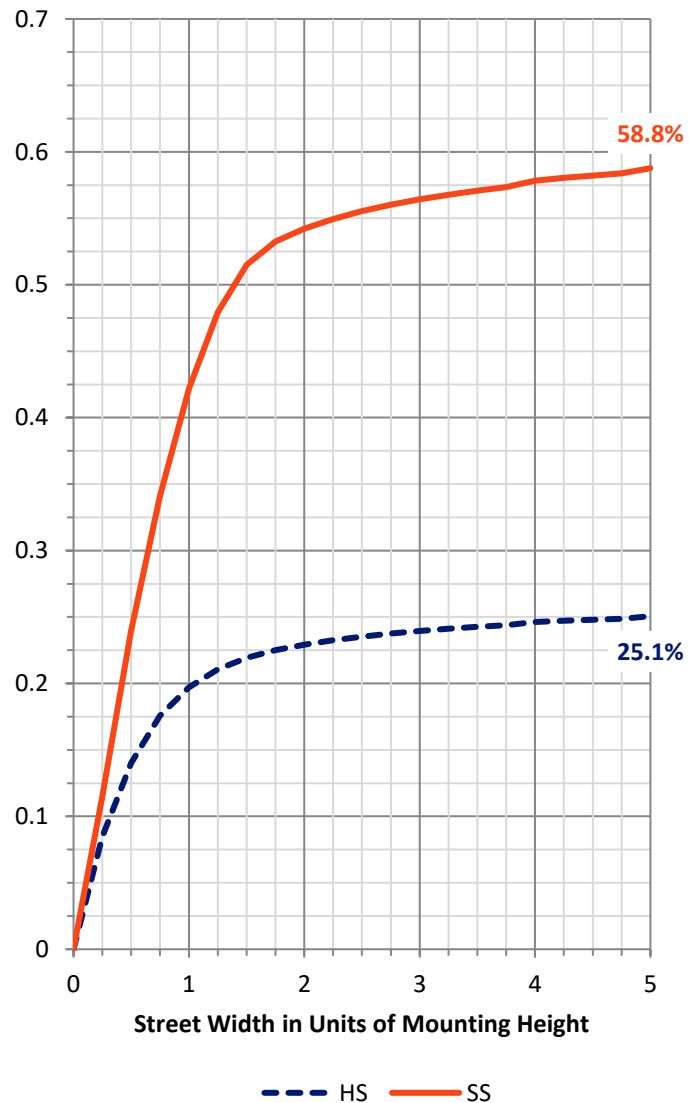
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1586.5	197.5	1784.0
	% Fixture	26.0	3.2	29.3
Street Side	Lumens	3722.9	592.1	4315.0
	% Fixture	61.0	9.7	70.7
Total	Lumens	5309.4	789.6	6099.0
	% Fixture	87.1	12.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.4	1.2
10°-20°	295.2	4.8
20°-30°	600.5	9.8
30°-40°	983.1	16.1
40°-50°	1279.5	21.0
50°-60°	957.4	15.7
60°-70°	398.8	6.5
70°-80°	362.8	5.9
80°-90°	359.7	5.9
90°-100°	289.2	4.7
100°-110°	205.6	3.4
110°-120°	139.0	2.3
120°-130°	89.4	1.5
130°-140°	53.0	0.9
140°-150°	12.8	0.2
150°-160°	0.6	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5309.4	87.1
0°-180°	6099.0	100.0

Coefficient of Utilization



REPORT NUMBER: P239943

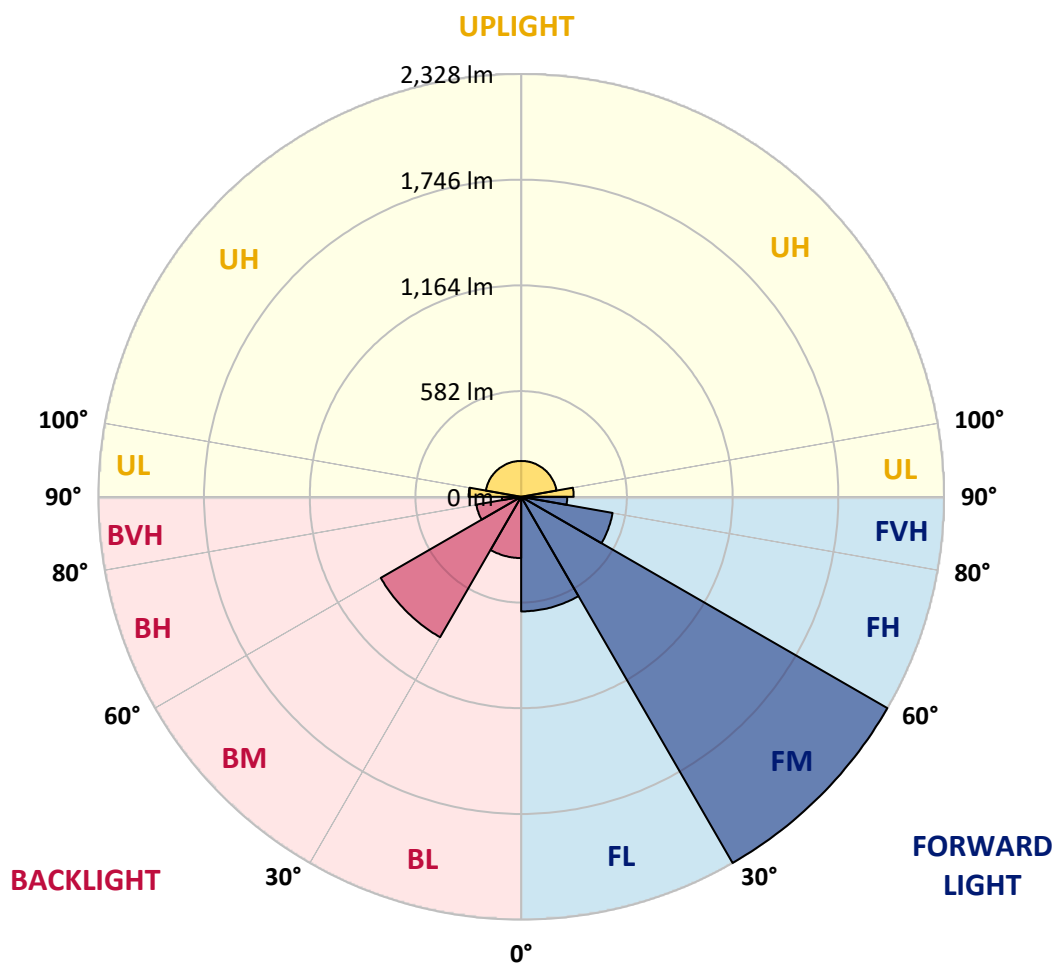
CATALOG NUMBER: UTLD-AF24-70-D-U-T4W-A

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	630.9	10.3			
FM	(30°-60°)	2327.6	38.2			
FH	(60°-80°)	510.8	8.4			G0/660
FVH	(80°-90°)	253.6	4.2			G3/500
BL	(0°-30°)	337.2	5.5	B1/500		
BM	(30°-60°)	892.4	14.6	B1/1000		
BH	(60°-80°)	250.8	4.1	B1/500		G1/500
BVH	(80°-90°)	106.1	1.7			G2/225
UL	(90°-100°)	289.2	4.7		U3/500	
UH	(100°-180°)	197.5	3.2		U3/500	

BUG Rating: B1-U4-G3

Type II Short





REPORT NUMBER: P239943

CATALOG NUMBER: UTLD-AF24-70-D-U-T4W-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
0°	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5
2.5°	726.1	722.7	724.4	724.4	720.2	718.5	714.3	709.2	702.5	694.9	688.2
5°	797.8	795.3	794.4	793.6	792.7	781.8	769.1	758.2	746.4	733.7	716.0
7.5°	930.2	929.4	924.3	918.4	910.0	891.4	868.6	857.7	841.7	822.3	795.3
10°	1095.5	1083.7	1072.7	1072.7	1055.9	1049.1	1042.4	1026.3	1016.2	989.2	950.4
12.5°	1190.0	1184.0	1206.8	1205.1	1227.1	1266.7	1280.2	1293.7	1232.1	1153.7	1081.2
15°	1278.5	1278.5	1307.2	1308.0	1373.0	1460.7	1527.3	1462.3	1349.3	1222.8	1125.9
17.5°	1399.9	1407.5	1448.9	1476.7	1564.4	1715.4	1669.8	1550.1	1381.4	1230.4	1121.6
20°	1453.1	1469.9	1533.2	1569.5	1705.2	1847.8	1803.9	1663.1	1467.4	1295.4	1185.7
22.5°	1486.0	1497.8	1572.0	1623.4	1797.2	1917.8	1911.0	1768.5	1583.8	1368.7	1242.2
25°	1620.9	1628.5	1712.8	1766.0	1949.8	1988.6	1911.8	1813.2	1631.9	1408.4	1297.1
27.5°	1666.4	1667.3	1797.2	1877.3	2028.2	2014.7	1915.2	1873.9	1782.0	1605.7	1530.7
30°	1728.0	1726.3	1886.5	1972.6	2064.5	2007.1	1927.0	1963.3	1969.2	1825.8	1689.2
32.5°	1803.9	1797.2	1988.6	2091.5	2121.0	2005.5	1946.4	2008.0	2097.4	1949.0	1802.2
35°	1873.9	1879.8	2085.6	2155.6	2183.4	2015.6	1956.5	2091.5	2272.8	2158.1	1911.8
37.5°	2324.2	2317.5	2382.4	2406.9	2336.9	2050.2	1995.3	2195.2	2460.9	2411.1	2147.1
40°	2426.3	2403.5	2597.5	2611.8	2488.7	2172.4	2101.6	2257.6	2609.3	2697.8	2487.8
42.5°	2340.3	2334.4	2546.0	2565.4	2476.9	2255.1	2171.6	2308.2	2626.2	2698.7	2349.5
45°	2718.9	2687.7	2798.2	2775.4	2530.0	2219.7	2128.6	2251.7	2568.0	2771.2	2494.6
46°	2675.9	2636.3	2775.4	2804.1	2580.6	2202.0	2085.6	2152.2	2509.8	2759.4	2496.3
47.5°	2544.4	2547.7	2733.3	2734.9	2529.2	2204.5	2014.7	2092.3	2379.9	2608.4	2257.6
50°	2221.4	2183.4	2522.4	2533.4	2336.9	2109.2	1942.2	1977.6	2251.7	2391.7	2035.0
52.5°	2138.7	2109.2	2309.1	2307.4	2130.3	1964.1	1809.8	1846.9	2156.4	2315.8	2061.1
55°	1965.0	1954.9	2122.7	2108.3	1984.4	1785.3	1674.9	1697.6	1788.7	1726.3	1027.2
57.5°	1305.5	1344.3	1634.4	1662.2	1663.1	1569.5	1431.1	1221.2	1056.7	899.0	502.6
60°	533.0	577.7	900.7	942.9	1004.4	1176.5	1037.3	816.4	682.3	709.2	434.3
62.5°	402.3	419.1	601.3	608.9	632.5	716.0	707.6	592.0	582.7	641.8	415.8
65°	374.4	389.6	533.0	530.5	519.5	542.3	540.6	513.6	523.7	597.9	414.1
67.5°	354.2	369.4	495.0	495.9	486.6	490.8	494.2	480.7	504.3	581.1	425.0
70°	334.0	350.0	455.4	457.9	464.7	479.9	485.8	475.6	496.7	560.0	424.2
72.5°	309.5	327.2	418.3	422.5	436.0	470.6	490.8	488.3	490.8	528.8	422.5
75°	301.1	318.8	387.1	394.7	414.1	466.4	518.7	501.8	484.9	508.5	412.4
77.5°	264.0	284.2	354.2	371.1	414.1	479.9	537.2	531.3	500.1	495.0	401.4
80°	253.8	273.2	340.7	359.3	405.6	491.7	555.8	556.6	540.6	513.6	412.4
82.5°	255.5	274.1	344.1	365.2	418.3	500.1	540.6	561.7	563.4	529.6	425.0
85°	300.2	317.9	384.6	406.5	452.9	497.6	528.8	544.0	559.1	559.1	466.4
87.5°	320.5	336.5	387.1	406.5	451.2	503.5	498.4	523.7	538.9	558.3	480.7
90°	339.0	349.1	401.4	420.0	443.6	485.8	472.3	464.7	477.3	497.6	450.3
92.5°	352.5	361.8	408.2	424.2	444.4	453.7	433.5	411.5	442.8	458.8	419.1
95°	377.0	385.4	409.9	415.8	413.2	421.7	390.5	382.0	395.5	413.2	387.9
97.5°	360.1	366.0	389.6	396.4	394.7	382.0	350.8	345.8	357.6	371.1	343.2
100°	360.1	367.7	385.4	389.6	379.5	347.5	315.4	313.7	321.3	328.1	301.9
102.5°	367.7	371.1	374.4	377.0	358.4	323.0	299.4	293.5	296.0	299.4	275.8
105°	348.3	349.1	350.8	343.2	328.1	301.1	277.5	267.3	275.8	285.9	266.5
107.5°	301.1	300.2	301.1	298.5	296.9	280.8	264.0	251.3	251.3	254.7	236.1



REPORT NUMBER: P239943

CATALOG NUMBER: UTLD-AF24-70-D-U-T4W-A

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
110°	280.8	281.7	280.8	280.8	273.2	262.3	246.3	232.8	226.0	227.7	210.8
112.5°	257.2	257.2	258.1	258.9	254.7	244.6	228.5	215.1	206.6	204.9	188.9
115°	257.2	254.7	247.1	246.3	237.8	223.5	211.7	194.8	188.9	188.9	178.8
117.5°	229.4	227.7	221.8	220.1	215.1	203.2	196.5	183.0	178.8	176.3	167.0
120°	203.2	203.2	200.7	199.9	194.8	188.1	173.7	168.7	165.3	168.7	162.8
122.5°	188.9	188.9	184.7	183.0	177.1	172.0	159.4	150.1	144.2	151.0	147.6
125°	173.7	172.9	167.0	166.1	156.0	156.0	149.3	137.5	121.4	128.2	126.5
127.5°	152.6	151.8	144.2	143.4	137.5	144.2	142.5	127.3	105.4	109.6	109.6
130°	146.7	145.1	138.3	136.6	130.7	129.0	135.8	111.3	98.7	102.9	102.0
132.5°	146.7	145.1	136.6	134.1	124.8	115.5	122.3	97.0	94.5	99.5	98.7
135°	132.4	132.4	124.8	119.8	110.5	93.6	95.3	75.1	82.6	90.2	90.2
137.5°	112.2	112.2	104.6	102.9	91.9	75.1	67.5	57.3	70.0	78.4	79.3
140°	87.7	87.7	81.8	78.4	70.8	49.8	31.2	35.4	53.1	60.7	63.3
142.5°	63.3	62.4	57.3	53.1	45.5	27.0	10.1	20.2	31.2	41.3	44.7
145°	43.9	43.0	37.1	34.6	27.8	12.7	2.5	8.4	18.6	24.5	28.7
147.5°	26.1	26.1	21.9	21.1	14.3	3.4	1.7	2.5	9.3	15.2	17.7
150°	15.2	15.2	11.0	8.4	3.4	0.8	0.8	0.8	2.5	6.7	8.4
152.5°	3.4	3.4	2.5	1.7	1.7	0.8	0.0	0.8	0.8	0.8	1.7
155°	1.7	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
157.5°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.8	0.8	0.8	0.8
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	0.8
162.5°	0.8	0.8	0.0	0.0	0.8	0.0	0.8	0.0	0.8	0.8	0.8
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



REPORT NUMBER: P239943

CATALOG NUMBER: UTLD-AF24-70-D-U-T4W-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5	675.5
2.5°	684.8	681.4	673.8	664.6	657.8	651.9	647.7	645.2	643.5	639.3	640.9
5°	710.1	703.3	685.6	671.3	656.1	642.6	632.5	625.8	623.2	619.9	619.9
7.5°	782.6	766.6	739.6	705.9	674.7	647.7	622.4	608.0	595.4	588.7	587.0
10°	925.1	904.1	845.9	776.7	708.4	647.7	598.8	563.4	546.5	540.6	540.6
12.5°	1043.2	1010.3	934.4	856.8	765.8	670.5	597.9	549.9	527.1	519.5	519.5
15°	1078.6	1035.6	946.2	870.3	788.5	708.4	640.9	571.8	530.5	517.8	513.6
17.5°	1067.7	1025.5	944.5	852.6	760.7	700.8	640.9	603.8	565.9	544.0	540.6
20°	1137.7	1098.9	1014.5	911.6	798.6	664.6	626.6	618.2	608.9	594.6	594.6
22.5°	1195.9	1159.6	1075.3	964.8	829.0	741.3	684.8	676.4	666.2	663.7	662.0
25°	1240.6	1201.8	1086.2	958.9	860.2	796.1	723.6	694.9	670.5	662.9	660.3
27.5°	1479.2	1419.3	1233.8	1053.3	911.6	814.7	731.2	694.1	671.3	662.0	667.9
30°	1619.2	1554.3	1351.0	1114.1	973.2	855.1	746.4	702.5	708.4	716.0	721.9
32.5°	1726.3	1641.1	1402.5	1121.6	963.1	862.7	770.8	718.5	701.7	711.8	713.5
35°	1831.7	1728.0	1469.1	1169.7	976.6	834.9	753.9	723.6	718.5	732.0	729.5
37.5°	2045.9	1910.2	1551.7	1183.2	963.9	802.0	725.3	693.2	667.1	663.7	667.9
40°	2325.9	2143.8	1634.4	1177.3	904.9	762.4	689.0	652.7	632.5	619.9	612.3
42.5°	2185.9	2002.9	1528.1	1130.1	833.2	691.5	651.9	619.9	593.7	577.7	573.5
45°	2339.4	2160.6	1555.1	1034.8	751.4	628.3	596.2	574.3	538.1	522.9	520.3
46°	2293.0	2090.6	1524.8	1005.3	711.8	601.3	574.3	551.5	524.6	503.5	501.8
47.5°	2124.4	1888.2	1435.4	926.0	684.8	556.6	538.1	524.6	510.2	485.8	482.4
50°	1895.8	1715.4	1274.3	823.1	576.8	496.7	480.7	476.5	460.5	430.9	433.5
52.5°	1878.1	1703.5	1186.6	757.3	511.9	435.2	430.1	417.5	404.0	377.8	377.0
55°	905.7	770.0	658.6	592.9	428.4	385.4	382.9	377.0	360.1	336.5	340.7
57.5°	429.3	373.6	323.0	342.4	336.5	338.2	339.9	339.0	319.6	287.6	294.3
60°	376.1	326.4	279.1	264.8	278.3	299.4	299.4	286.7	259.7	221.8	218.4
62.5°	362.6	312.9	269.9	250.5	257.2	269.9	263.1	242.9	215.9	181.3	179.6
65°	364.3	311.2	269.0	244.6	250.5	255.5	242.9	226.9	212.5	188.1	188.1
67.5°	371.9	317.9	272.4	242.0	246.3	249.6	237.8	226.0	217.6	199.0	200.7
70°	373.6	322.2	275.8	242.9	242.0	245.4	237.0	226.0	221.8	209.1	208.3
72.5°	373.6	325.5	272.4	237.0	235.3	237.0	231.9	226.0	225.2	217.6	215.9
75°	360.9	317.9	260.6	225.2	223.5	225.2	223.5	222.6	226.0	222.6	219.3
77.5°	348.3	310.3	252.2	215.9	213.4	212.5	211.7	212.5	217.6	215.1	210.0
80°	354.2	313.7	250.5	208.3	200.7	197.3	197.3	198.2	198.2	190.6	183.0
82.5°	364.3	319.6	242.0	194.0	181.3	175.4	177.1	183.0	185.5	179.6	173.7
85°	401.4	346.6	243.7	183.8	165.3	158.5	161.1	168.7	163.6	155.2	148.4
87.5°	417.5	355.9	238.7	168.7	153.5	151.0	151.0	155.2	151.8	138.3	132.4
90°	398.9	340.7	215.9	143.4	133.2	135.8	136.6	132.4	118.1	102.9	97.8
92.5°	373.6	318.8	199.9	131.6	118.1	117.2	116.4	113.9	102.9	86.0	82.6
95°	352.5	300.2	184.7	120.6	107.9	105.4	104.6	101.2	91.1	78.4	76.7
97.5°	307.0	262.3	167.8	111.3	97.0	95.3	94.5	90.2	81.0	71.7	70.8
100°	275.8	233.6	150.1	100.4	87.7	85.2	84.3	81.8	74.2	67.5	66.6
102.5°	250.5	214.2	139.2	91.9	78.4	75.1	75.1	73.4	69.2	64.9	64.9
105°	243.7	210.0	134.9	84.3	70.0	68.3	67.5	67.5	64.1	61.6	61.6
107.5°	214.2	183.8	116.4	75.1	63.3	61.6	61.6	61.6	60.7	59.9	60.7



REPORT NUMBER: P239943

CATALOG NUMBER: UTLD-AF24-70-D-U-T4W-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	193.1	166.1	107.1	70.0	59.0	56.5	56.5	56.5	56.5	58.2	58.2
112.5°	172.0	149.3	98.7	66.6	54.8	52.3	50.6	49.8	48.9	52.3	53.1
115°	162.8	142.5	94.5	63.3	52.3	49.8	46.4	44.7	42.2	44.7	45.5
117.5°	153.5	134.9	92.8	62.4	50.6	46.4	43.0	41.3	38.0	40.5	40.5
120°	151.0	134.1	94.5	63.3	48.9	43.0	40.5	36.3	34.6	36.3	37.1
122.5°	139.2	124.0	88.6	59.0	46.4	41.3	38.0	31.2	30.4	32.9	32.9
125°	118.1	106.3	76.7	53.1	43.9	40.5	37.1	27.8	28.7	30.4	31.2
127.5°	103.7	93.6	70.0	51.4	43.9	41.3	34.6	24.5	27.0	29.5	30.4
130°	97.0	89.4	70.0	53.1	45.5	42.2	28.7	22.8	25.3	27.8	27.8
132.5°	94.5	88.6	71.7	56.5	47.2	40.5	23.6	21.1	23.6	25.3	25.3
135°	86.9	81.8	68.3	54.8	43.0	32.0	18.6	18.6	21.9	23.6	23.6
137.5°	76.7	72.5	61.6	50.6	38.0	24.5	13.5	16.0	18.6	20.2	20.2
140°	61.6	59.0	50.6	39.6	27.0	13.5	10.1	12.7	15.2	16.9	16.9
142.5°	43.9	42.2	35.4	25.3	16.0	5.9	6.7	9.3	11.8	13.5	13.5
145°	28.7	27.0	21.9	16.0	6.7	1.7	4.2	6.7	9.3	10.1	10.1
147.5°	17.7	16.9	13.5	7.6	2.5	1.7	1.7	5.1	6.7	7.6	7.6
150°	9.3	8.4	5.9	2.5	0.8	0.8	0.8	1.7	4.2	5.1	5.9
152.5°	2.5	1.7	1.7	0.8	0.8	0.8	0.8	0.8	0.8	1.7	2.5
155°	0.8	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0
157.5°	0.8	0.8	0.8	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.8	0.0	0.8	0.8	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)