

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: P239944

Luminaire Tested: **UTLD-AF24-80-D-U-T4W-A**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P239944
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-AF24-80-D-U-T4W-A
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(1) 70 CRI, 4000K, 1050mA 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: 6673 lumens
Efficiency: N/A
Efficacy: 80.4 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): 83
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

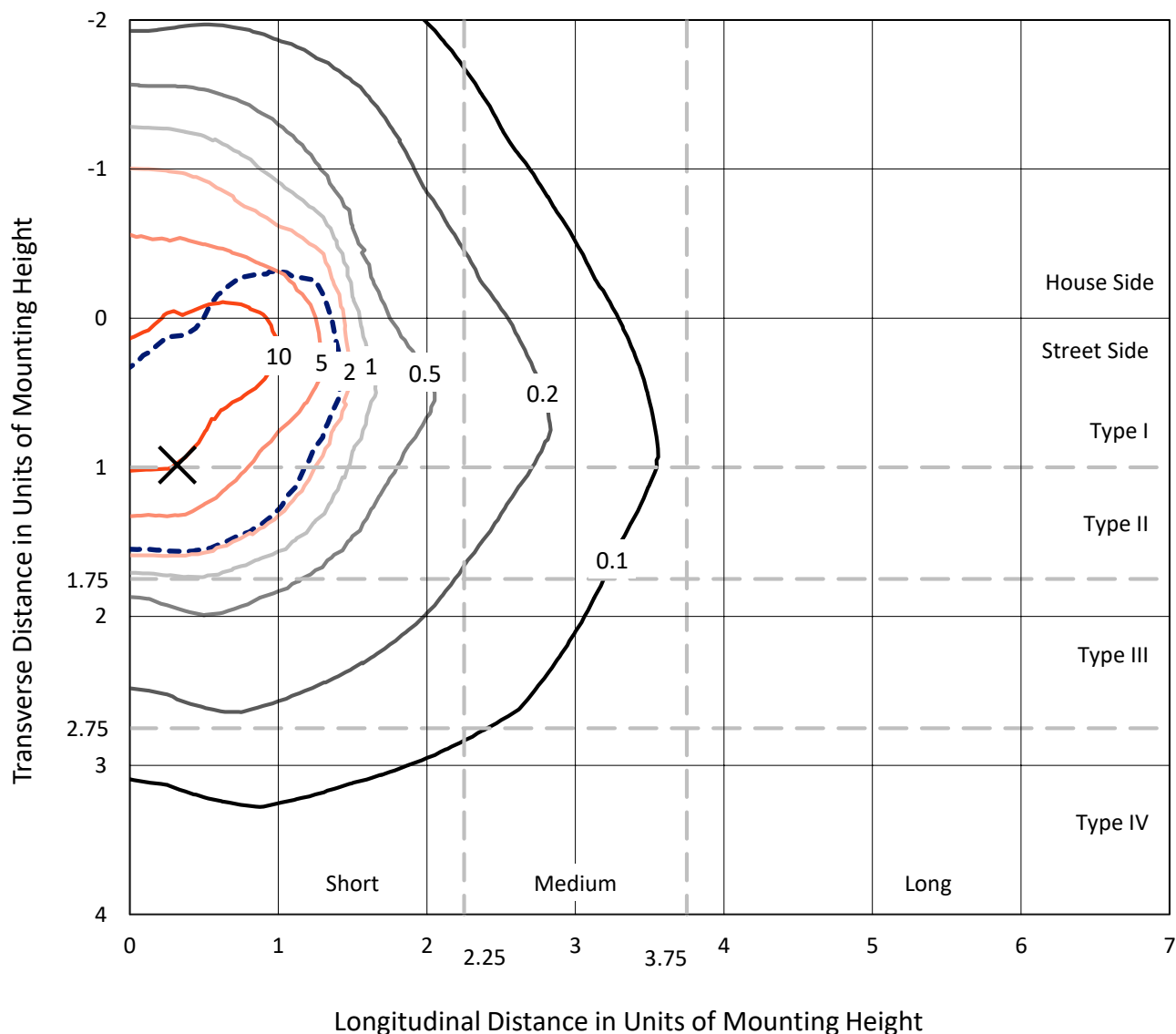


REPORT NUMBER: P239944

CATALOG NUMBER: UTLD-AF24-80-D-U-T4W-A

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

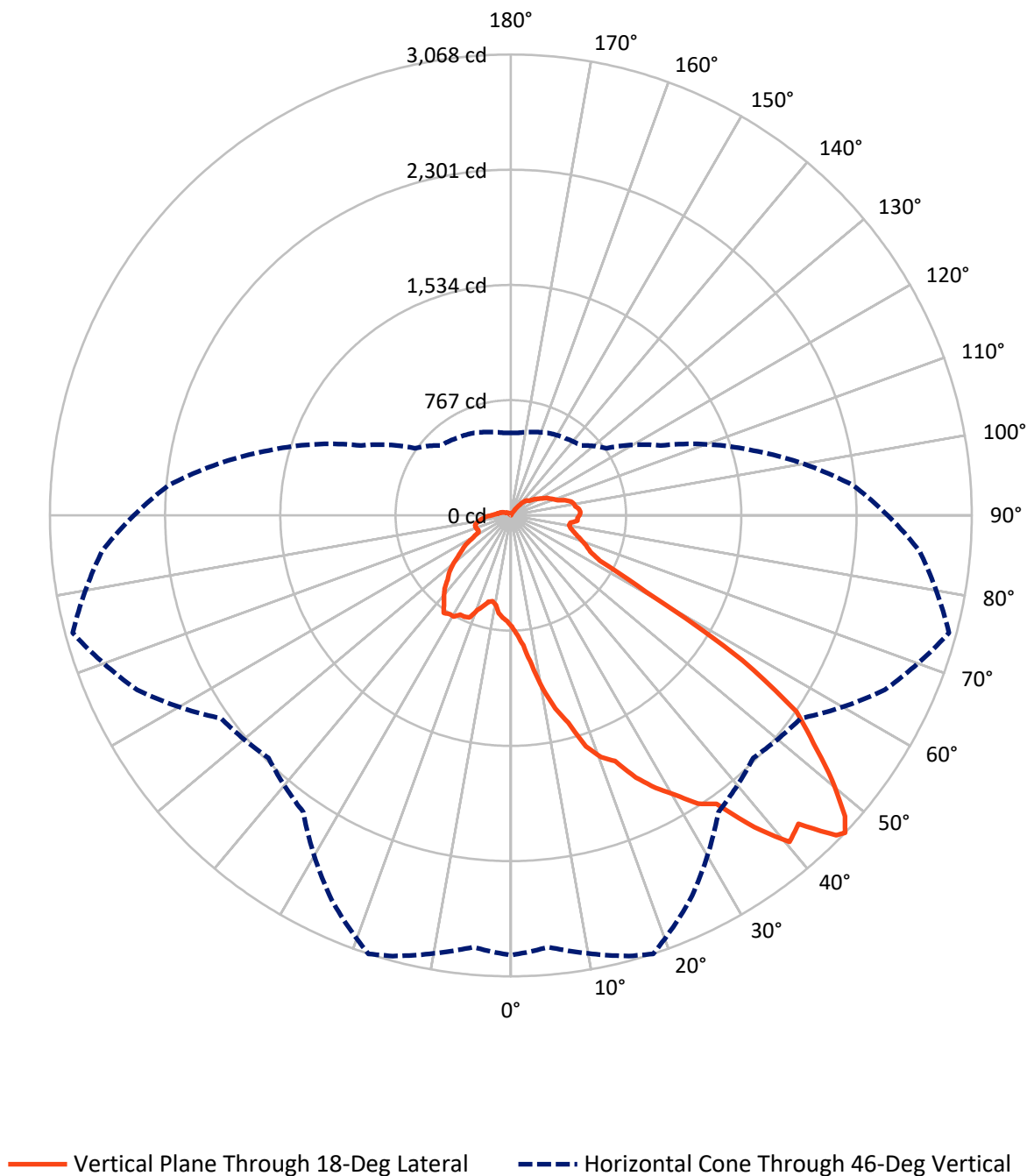


Based on 10 foot mounting height. Maximum calculated value = 16.3 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P239944

CATALOG NUMBER: UTLD-AF24-80-D-U-T4W-A

Luminous Intensity Polar Plot



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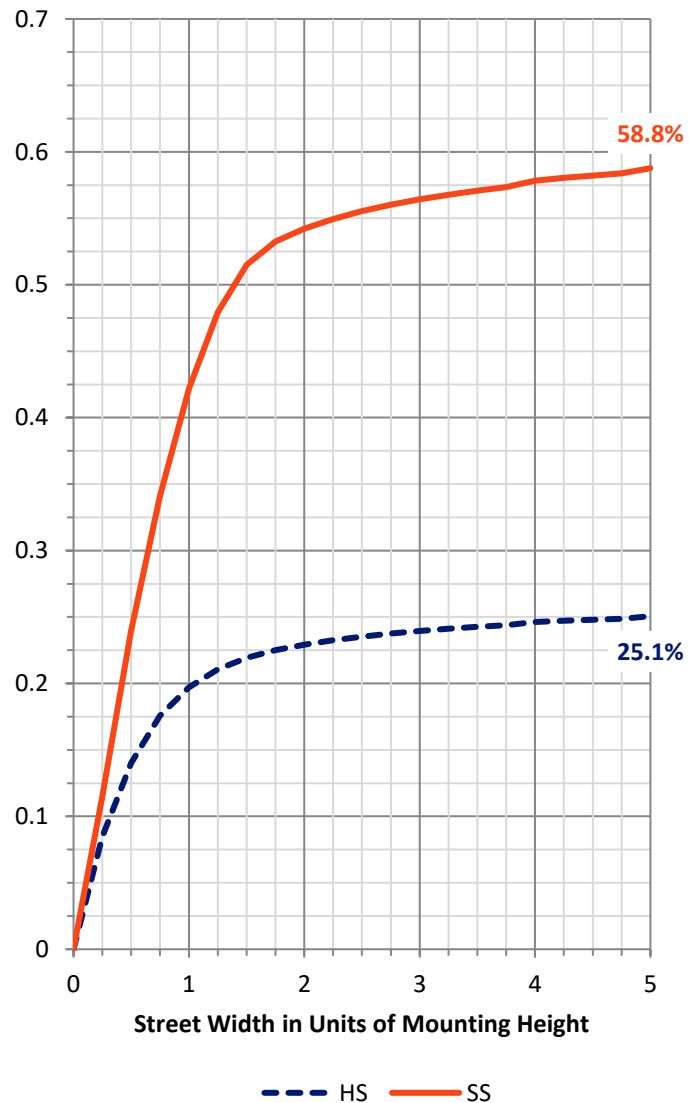
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1735.8	216.1	1951.9
	% Fixture	26.0	3.2	29.3
Street Side	Lumens	4073.3	647.8	4721.1
	% Fixture	61.0	9.7	70.7
Total	Lumens	5809.1	863.9	6673.0
	% Fixture	87.1	12.9	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.2	1.2
10°-20°	323.0	4.8
20°-30°	657.0	9.8
30°-40°	1075.6	16.1
40°-50°	1399.9	21.0
50°-60°	1047.5	15.7
60°-70°	436.3	6.5
70°-80°	396.9	5.9
80°-90°	393.5	5.9
90°-100°	316.4	4.7
100°-110°	224.9	3.4
110°-120°	152.0	2.3
120°-130°	97.8	1.5
130°-140°	57.9	0.9
140°-150°	14.1	0.2
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	5809.1	87.1
0°-180°	6673.0	100.0

Coefficient of Utilization



REPORT NUMBER: P239944

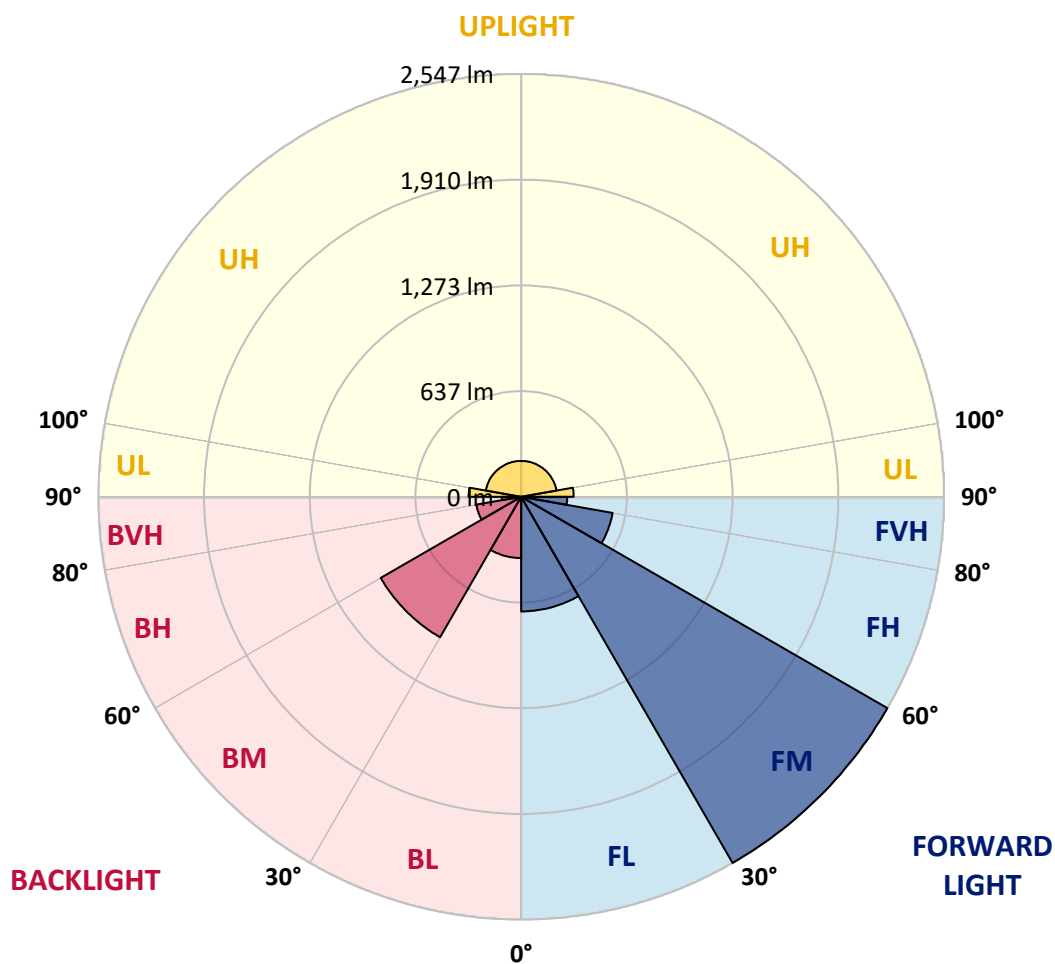
CATALOG NUMBER: UTLD-AF24-80-D-U-T4W-A

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	690.2	10.3			
FM	(30°-60°)	2546.7	38.2			
FH	(60°-80°)	558.9	8.4			G0/660
FVH	(80°-90°)	277.5	4.2			G3/500
BL	(0°-30°)	369.0	5.5	B1/500		
BM	(30°-60°)	976.4	14.6	B1/1000		
BH	(60°-80°)	274.4	4.1	B1/500		G1/500
BVH	(80°-90°)	116.0	1.7			G2/225
UL	(90°-100°)	316.4	4.7		U3/500	
UH	(100°-180°)	216.1	3.2		U3/500	

BUG Rating: B1-U4-G3

Type II Short





REPORT NUMBER: P239944

CATALOG NUMBER: UTLD-AF24-80-D-U-T4W-A

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
0°	739.1	739.1	739.1	739.1	739.1	739.1	739.1	739.1	739.1	739.1	739.1
2.5°	794.5	790.8	792.6	792.6	788.0	786.1	781.5	776.0	768.6	760.3	752.9
5°	872.9	870.1	869.2	868.3	867.3	855.4	841.5	829.5	816.6	802.8	783.4
7.5°	1017.7	1016.8	1011.3	1004.8	995.6	975.3	950.4	938.4	920.9	899.6	870.1
10°	1198.6	1185.7	1173.7	1173.7	1155.2	1147.8	1140.5	1122.9	1111.9	1082.3	1039.9
12.5°	1301.9	1295.5	1320.4	1318.6	1342.5	1385.9	1400.7	1415.4	1348.1	1262.3	1182.9
15°	1398.8	1398.8	1430.2	1431.1	1502.2	1598.1	1671.0	1600.0	1476.3	1337.9	1231.8
17.5°	1531.7	1540.0	1585.2	1615.7	1711.6	1876.8	1827.0	1695.9	1511.4	1346.2	1227.2
20°	1589.8	1608.3	1677.5	1717.2	1865.7	2021.7	1973.7	1819.6	1605.5	1417.3	1297.3
22.5°	1625.8	1638.7	1719.9	1776.2	1966.3	2098.2	2090.9	1934.9	1732.8	1497.6	1359.1
25°	1773.4	1781.8	1874.0	1932.2	2133.3	2175.7	2091.8	1983.8	1785.4	1540.9	1419.1
27.5°	1823.3	1824.2	1966.3	2053.9	2219.1	2204.4	2095.5	2050.3	1949.7	1756.8	1674.7
30°	1890.6	1888.8	2064.1	2158.2	2258.8	2196.0	2108.4	2148.1	2154.5	1997.7	1848.2
32.5°	1973.7	1966.3	2175.7	2288.3	2320.6	2194.2	2129.6	2197.0	2294.8	2132.4	1971.8
35°	2050.3	2056.7	2281.9	2358.4	2388.9	2205.3	2140.7	2288.3	2486.7	2361.2	2091.8
37.5°	2543.0	2535.6	2606.7	2633.4	2556.8	2243.1	2183.1	2401.8	2692.5	2638.0	2349.2
40°	2654.6	2629.7	2841.9	2857.6	2722.9	2376.9	2299.4	2470.1	2854.9	2951.7	2722.0
42.5°	2560.5	2554.1	2785.7	2806.9	2710.0	2467.3	2376.0	2525.5	2873.3	2952.7	2570.7
45°	2974.8	2940.7	3061.5	3036.6	2768.1	2428.6	2328.9	2463.6	2809.6	3032.0	2729.4
46°	2927.8	2884.4	3036.6	3068.0	2823.5	2409.2	2281.9	2354.8	2746.0	3019.1	2731.2
47.5°	2783.8	2787.5	2990.5	2992.3	2767.2	2412.0	2204.4	2289.2	2603.9	2853.9	2470.1
50°	2430.4	2388.9	2759.8	2771.8	2556.8	2307.7	2125.0	2163.8	2463.6	2616.8	2226.5
52.5°	2340.0	2307.7	2526.4	2524.5	2330.8	2149.0	1980.1	2020.7	2359.4	2533.8	2255.1
55°	2149.9	2138.8	2322.5	2306.8	2171.1	1953.4	1832.5	1857.4	1957.1	1888.8	1123.9
57.5°	1428.4	1470.8	1788.2	1818.7	1819.6	1717.2	1565.8	1336.1	1156.2	983.6	549.9
60°	583.2	632.1	985.5	1031.6	1098.9	1287.2	1134.9	893.2	746.5	776.0	475.2
62.5°	440.1	458.6	657.9	666.2	692.0	783.4	774.2	647.7	637.6	702.2	454.9
65°	409.7	426.3	583.2	580.4	568.4	593.3	591.5	561.9	573.0	654.2	453.0
67.5°	387.5	404.1	541.6	542.6	532.4	537.0	540.7	525.9	551.8	635.7	465.0
70°	365.4	382.9	498.3	501.0	508.4	525.0	531.5	520.4	543.5	612.7	464.1
72.5°	338.6	358.0	457.7	462.3	477.0	514.9	537.0	534.2	537.0	578.5	462.3
75°	329.4	348.8	423.5	431.8	453.0	510.3	567.5	549.0	530.6	556.4	451.2
77.5°	288.8	311.0	387.5	406.0	453.0	525.0	587.8	581.3	547.2	541.6	439.2
80°	277.7	299.0	372.8	393.1	443.8	537.9	608.1	609.0	591.5	561.9	451.2
82.5°	279.6	299.9	376.5	399.5	457.7	547.2	591.5	614.5	616.4	579.5	465.0
85°	328.5	347.9	420.8	444.7	495.5	544.4	578.5	595.1	611.8	611.8	510.3
87.5°	350.6	368.2	423.5	444.7	493.6	550.9	545.3	573.0	589.6	610.8	525.9
90°	370.9	382.0	439.2	459.5	485.3	531.5	516.7	508.4	522.3	544.4	492.7
92.5°	385.7	395.8	446.6	464.1	486.3	496.4	474.3	450.3	484.4	502.0	458.6
95°	412.5	421.7	448.4	454.9	452.1	461.4	427.2	418.0	432.8	452.1	424.4
97.5°	394.0	400.5	426.3	433.7	431.8	418.0	383.8	378.3	391.2	406.0	375.5
100°	394.0	402.3	421.7	426.3	415.2	380.2	345.1	343.2	351.6	358.9	330.3
102.5°	402.3	406.0	409.7	412.5	392.2	353.4	327.6	321.1	323.9	327.6	301.7
105°	381.1	382.0	383.8	375.5	358.9	329.4	303.6	292.5	301.7	312.8	291.6
107.5°	329.4	328.5	329.4	326.6	324.8	307.3	288.8	275.0	275.0	278.7	258.4



REPORT NUMBER: P239944

CATALOG NUMBER: UTLD-AF24-80-D-U-T4W-A

CANDELA DISTRIBUTION (continued):

	0°	5°	15°	18°	25°	35°	45°	55°	65°	75°	85°
110°	307.3	308.2	307.3	307.3	299.0	287.0	269.4	254.7	247.3	249.1	230.7
112.5°	281.4	281.4	282.3	283.3	278.7	267.6	250.1	235.3	226.1	224.2	206.7
115°	281.4	278.7	270.4	269.4	260.2	244.5	231.6	213.1	206.7	206.7	195.6
117.5°	251.0	249.1	242.7	240.8	235.3	222.4	215.0	200.2	195.6	192.8	182.7
120°	222.4	222.4	219.6	218.7	213.1	205.8	190.1	184.5	180.9	184.5	178.1
122.5°	206.7	206.7	202.1	200.2	193.8	188.2	174.4	164.2	157.8	165.2	161.5
125°	190.1	189.2	182.7	181.8	170.7	170.7	163.3	150.4	132.9	140.3	138.4
127.5°	167.0	166.1	157.8	156.9	150.4	157.8	155.9	139.3	115.3	120.0	120.0
130°	160.6	158.7	151.3	149.5	143.0	141.2	148.6	121.8	108.0	112.6	111.6
132.5°	160.6	158.7	149.5	146.7	136.6	126.4	133.8	106.1	103.3	108.9	108.0
135°	144.9	144.9	136.6	131.0	120.9	102.4	104.3	82.1	90.4	98.7	98.7
137.5°	122.7	122.7	114.4	112.6	100.6	82.1	73.8	62.7	76.6	85.8	86.7
140°	96.0	96.0	89.5	85.8	77.5	54.4	34.1	38.8	58.1	66.4	69.2
142.5°	69.2	68.3	62.7	58.1	49.8	29.5	11.1	22.1	34.1	45.2	48.9
145°	48.0	47.1	40.6	37.8	30.4	13.8	2.8	9.2	20.3	26.8	31.4
147.5°	28.6	28.6	24.0	23.1	15.7	3.7	1.8	2.8	10.1	16.6	19.4
150°	16.6	16.6	12.0	9.2	3.7	0.9	0.9	0.9	2.8	7.4	9.2
152.5°	3.7	3.7	2.8	1.8	1.8	0.9	0.0	0.9	0.9	0.9	1.8
155°	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
157.5°	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.9	0.9	0.9	0.9
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	0.9
162.5°	0.9	0.9	0.0	0.0	0.9	0.0	0.9	0.0	0.9	0.9	0.9
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: P239944

CATALOG NUMBER: UTLD-AF24-80-D-U-T4W-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	739.1	739.1	739.1	739.1	739.1	739.1	739.1	739.1	739.1	739.1	739.1
2.5°	749.2	745.5	737.2	727.1	719.7	713.3	708.6	705.9	704.0	699.4	701.3
5°	776.9	769.5	750.2	734.5	717.9	703.1	692.0	684.6	681.9	678.2	678.2
7.5°	856.3	838.7	809.2	772.3	738.2	708.6	681.0	665.3	651.4	644.1	642.2
10°	1012.2	989.1	925.5	849.8	775.1	708.6	655.1	616.4	597.9	591.5	591.5
12.5°	1141.4	1105.4	1022.4	937.5	837.8	733.6	654.2	601.6	576.7	568.4	568.4
15°	1180.1	1133.1	1035.3	952.2	862.7	775.1	701.3	625.6	580.4	566.5	561.9
17.5°	1168.1	1122.0	1033.4	932.9	832.3	766.8	701.3	660.7	619.1	595.1	591.5
20°	1244.7	1202.3	1110.0	997.4	873.8	727.1	685.6	676.3	666.2	650.5	650.5
22.5°	1308.4	1268.7	1176.5	1055.6	907.0	811.1	749.2	740.0	728.9	726.2	724.3
25°	1357.3	1314.9	1188.4	1049.1	941.2	871.0	791.7	760.3	733.6	725.2	722.5
27.5°	1618.4	1552.9	1349.9	1152.5	997.4	891.3	800.0	759.4	734.5	724.3	730.8
30°	1771.6	1700.6	1478.2	1218.9	1064.8	935.6	816.6	768.6	775.1	783.4	789.8
32.5°	1888.8	1795.6	1534.5	1227.2	1053.7	943.9	843.4	786.1	767.7	778.8	780.6
35°	2004.1	1890.6	1607.4	1279.8	1068.5	913.5	824.9	791.7	786.1	800.9	798.1
37.5°	2238.5	2089.9	1697.8	1294.6	1054.7	877.5	793.5	758.5	729.9	726.2	730.8
40°	2544.8	2345.5	1788.2	1288.1	990.1	834.1	753.9	714.2	692.0	678.2	669.9
42.5°	2391.7	2191.4	1671.9	1236.4	911.6	756.6	713.3	678.2	649.6	632.1	627.4
45°	2559.6	2364.0	1701.5	1132.2	822.1	687.4	652.4	628.4	588.7	572.1	569.3
46°	2508.8	2287.4	1668.3	1099.9	778.8	657.9	628.4	603.5	573.9	550.9	549.0
47.5°	2324.3	2065.9	1570.5	1013.1	749.2	609.0	588.7	573.9	558.2	531.5	527.8
50°	2074.2	1876.8	1394.2	900.6	631.1	543.5	525.9	521.3	503.8	471.5	474.3
52.5°	2054.9	1863.9	1298.3	828.6	560.1	476.1	470.6	456.7	442.0	413.4	412.5
55°	991.0	842.4	720.6	648.7	468.7	421.7	418.9	412.5	394.0	368.2	372.8
57.5°	469.7	408.8	353.4	374.6	368.2	370.0	371.9	370.9	349.7	314.6	322.0
60°	411.5	357.1	305.4	289.7	304.5	327.6	327.6	313.7	284.2	242.7	239.0
62.5°	396.8	342.3	295.3	274.0	281.4	295.3	287.9	265.7	236.2	198.4	196.5
65°	398.6	340.5	294.3	267.6	274.0	279.6	265.7	248.2	232.5	205.8	205.8
67.5°	406.9	347.9	298.0	264.8	269.4	273.1	260.2	247.3	238.1	217.8	219.6
70°	408.8	352.5	301.7	265.7	264.8	268.5	259.3	247.3	242.7	228.8	227.9
72.5°	408.8	356.2	298.0	259.3	257.4	259.3	253.7	247.3	246.4	238.1	236.2
75°	394.9	347.9	285.1	246.4	244.5	246.4	244.5	243.6	247.3	243.6	239.9
77.5°	381.1	339.6	275.9	236.2	233.4	232.5	231.6	232.5	238.1	235.3	229.8
80°	387.5	343.2	274.0	227.9	219.6	215.9	215.9	216.8	216.8	208.5	200.2
82.5°	398.6	349.7	264.8	212.2	198.4	191.9	193.8	200.2	203.0	196.5	190.1
85°	439.2	379.2	266.7	201.2	180.9	173.5	176.2	184.5	179.0	169.8	162.4
87.5°	456.7	389.4	261.1	184.5	167.9	165.2	165.2	169.8	166.1	151.3	144.9
90°	436.4	372.8	236.2	156.9	145.8	148.6	149.5	144.9	129.2	112.6	107.0
92.5°	408.8	348.8	218.7	143.9	129.2	128.3	127.3	124.6	112.6	94.1	90.4
95°	385.7	328.5	202.1	131.9	118.1	115.3	114.4	110.7	99.7	85.8	84.0
97.5°	335.9	287.0	183.6	121.8	106.1	104.3	103.3	98.7	88.6	78.4	77.5
100°	301.7	255.6	164.2	109.8	96.0	93.2	92.3	89.5	81.2	73.8	72.9
102.5°	274.0	234.4	152.2	100.6	85.8	82.1	82.1	80.3	75.7	71.0	71.0
105°	266.7	229.8	147.6	92.3	76.6	74.7	73.8	73.8	70.1	67.4	67.4
107.5°	234.4	201.2	127.3	82.1	69.2	67.4	67.4	67.4	66.4	65.5	66.4



REPORT NUMBER: P239944

CATALOG NUMBER: UTLD-AF24-80-D-U-T4W-A

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
110°	211.3	181.8	117.2	76.6	64.6	61.8	61.8	61.8	61.8	63.7	63.7
112.5°	188.2	163.3	108.0	72.9	60.0	57.2	55.4	54.4	53.5	57.2	58.1
115°	178.1	155.9	103.3	69.2	57.2	54.4	50.7	48.9	46.1	48.9	49.8
117.5°	167.9	147.6	101.5	68.3	55.4	50.7	47.1	45.2	41.5	44.3	44.3
120°	165.2	146.7	103.3	69.2	53.5	47.1	44.3	39.7	37.8	39.7	40.6
122.5°	152.2	135.6	96.9	64.6	50.7	45.2	41.5	34.1	33.2	36.0	36.0
125°	129.2	116.3	84.0	58.1	48.0	44.3	40.6	30.4	31.4	33.2	34.1
127.5°	113.5	102.4	76.6	56.3	48.0	45.2	37.8	26.8	29.5	32.3	33.2
130°	106.1	97.8	76.6	58.1	49.8	46.1	31.4	24.9	27.7	30.4	30.4
132.5°	103.3	96.9	78.4	61.8	51.7	44.3	25.8	23.1	25.8	27.7	27.7
135°	95.0	89.5	74.7	60.0	47.1	35.1	20.3	20.3	24.0	25.8	25.8
137.5°	84.0	79.4	67.4	55.4	41.5	26.8	14.8	17.5	20.3	22.1	22.1
140°	67.4	64.6	55.4	43.4	29.5	14.8	11.1	13.8	16.6	18.5	18.5
142.5°	48.0	46.1	38.8	27.7	17.5	6.5	7.4	10.1	12.9	14.8	14.8
145°	31.4	29.5	24.0	17.5	7.4	1.8	4.6	7.4	10.1	11.1	11.1
147.5°	19.4	18.5	14.8	8.3	2.8	1.8	1.8	5.5	7.4	8.3	8.3
150°	10.1	9.2	6.5	2.8	0.9	0.9	0.9	1.8	4.6	5.5	6.5
152.5°	2.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	0.9	1.8	2.8
155°	0.9	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0
157.5°	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.9	0.0	0.9	0.9	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)