

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: P239836

Luminaire Tested: **UTLD-AF24-80-D-U-5WQ-A**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P239836  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-1710-388-14)  
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-5WQ-A  
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE  
(1) 70 CRI, 4000K, 1050mA LIGHT ENGINE WITH 24 LEDS AND TYPE V WIDE OPTICS AND REFRACTOR PANELS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6930 lumens  
Efficiency: N/A  
Efficacy: 83.5 lumens/watt  
Luminous Opening: Rectangular w/ Sides (W: 1.21' x L: 1.21' x H: 0.96')  
IES Classification: Type V - Short - Non-Cutoff  
BUG Rating: B2 - 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

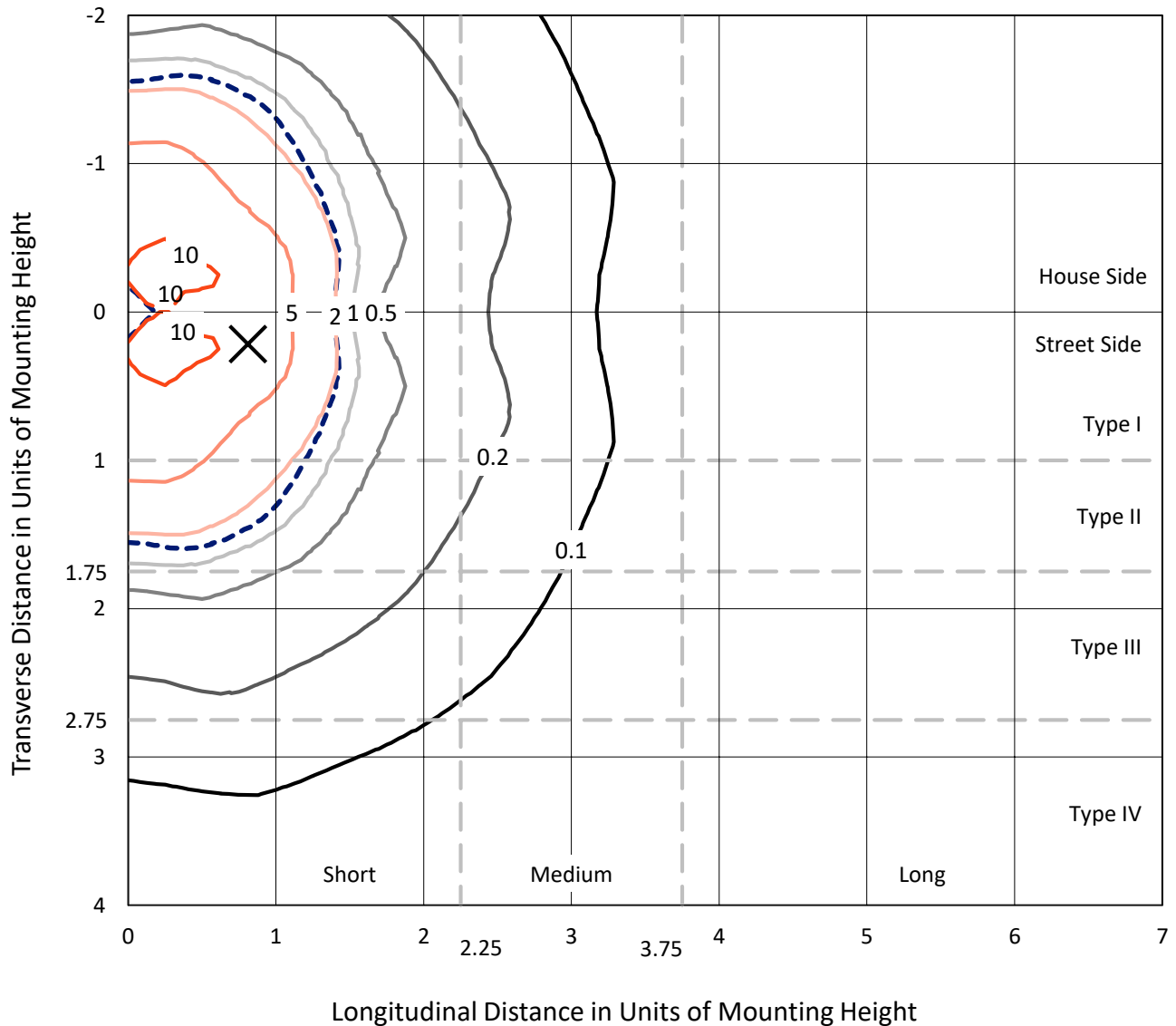


REPORT NUMBER: P239836

CATALOG NUMBER: UTLD-AF24-80-D-U-5WQ-A

### Iso-Footcandle Lines of Horizontal Illumination

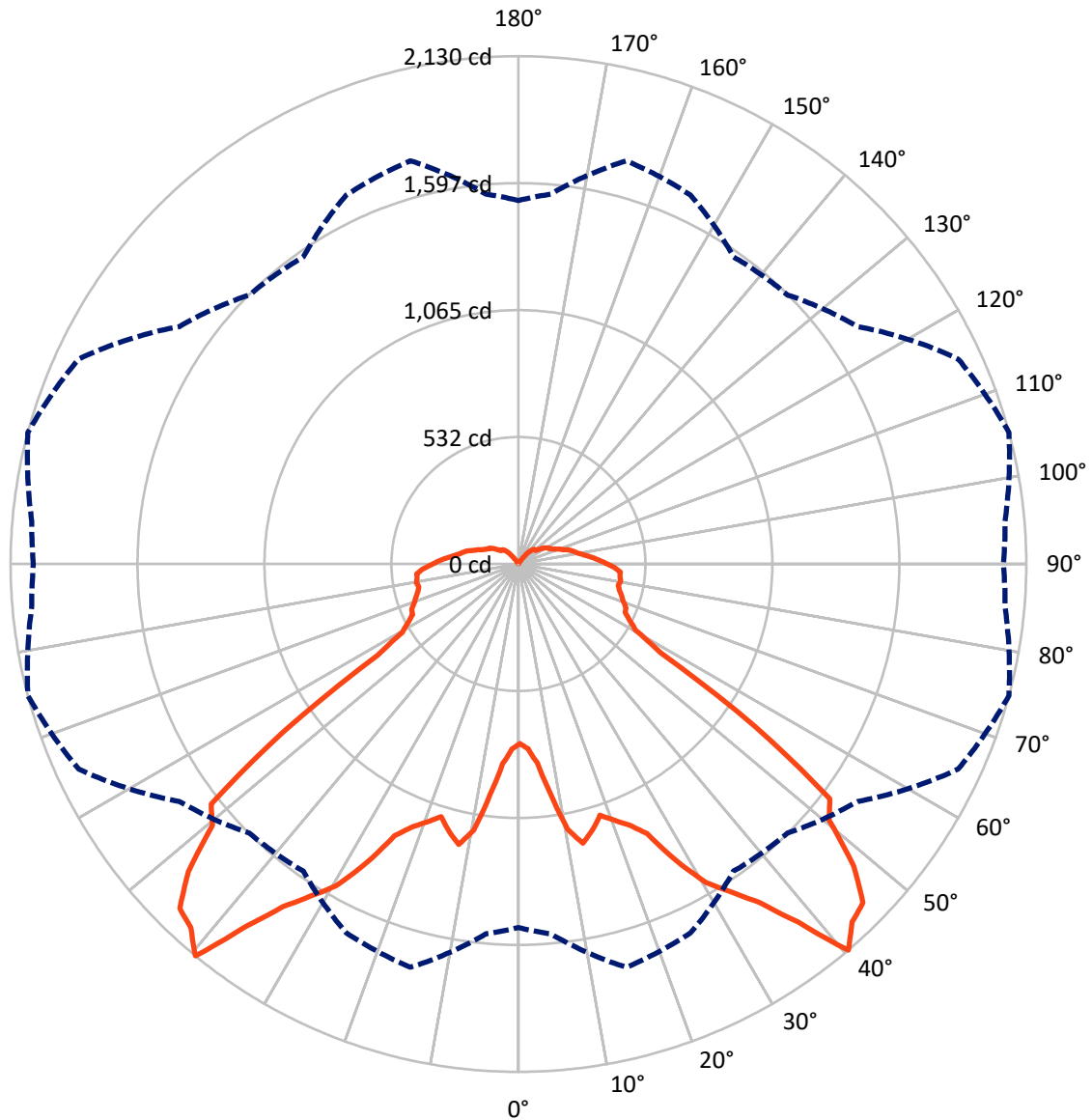
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.6 fc  
 Type V - Short - Non-Cutoff

REPORT NUMBER: P239836  
CATALOG NUMBER: UTLD-AF24-80-D-U-5WQ-A

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral      - - - Horizontal Cone Through 40-Deg Vertical

REPORT NUMBER: P239836

CATALOG NUMBER: UTLD-AF24-80-D-U-5WQ-A

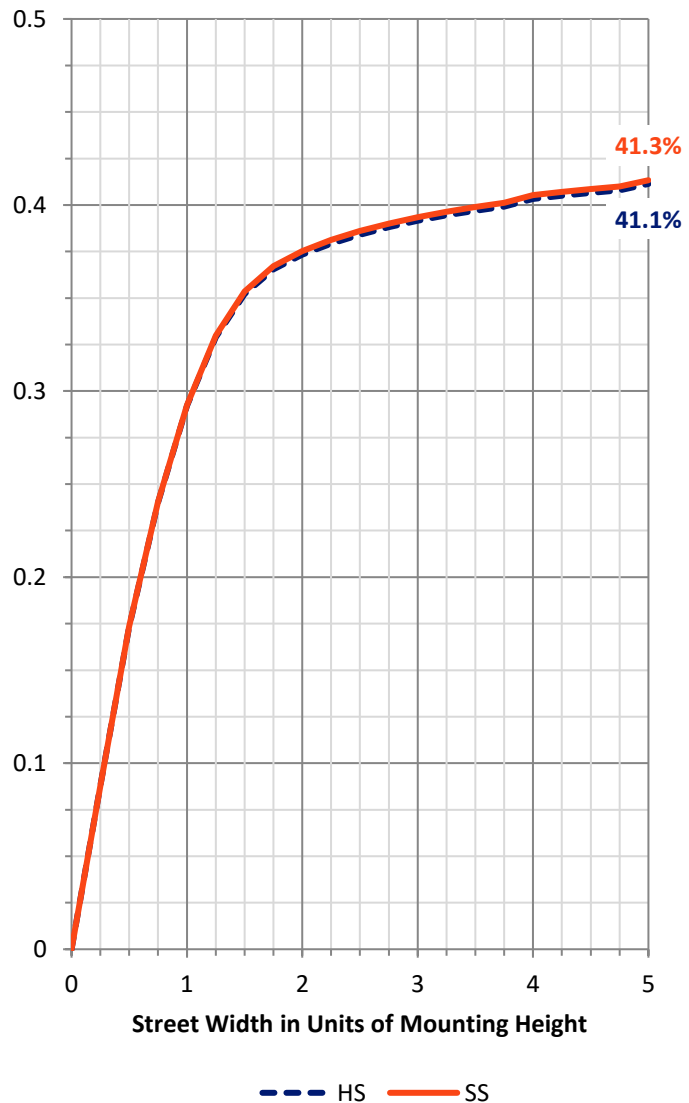
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2995.5	469.4	3465.0
	% Fixture	43.2	6.8	50.0
<b>Street Side</b>	Lumens	2995.5	469.4	3465.0
	% Fixture	43.2	6.8	50.0
<b>Total</b>	Lumens	5991.1	938.9	6930.0
	% Fixture	86.5	13.5	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	88.9	1.3
10°-20°	361.0	5.2
20°-30°	644.8	9.3
30°-40°	1020.7	14.7
40°-50°	1369.6	19.8
50°-60°	1090.2	15.7
60°-70°	500.3	7.2
70°-80°	456.1	6.6
80°-90°	459.5	6.6
90°-100°	353.3	5.1
100°-110°	246.7	3.6
110°-120°	162.9	2.4
120°-130°	101.9	1.5
130°-140°	59.6	0.9
140°-150°	13.5	0.2
150°-160°	0.8	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-90°	5991.1	86.5
0°-180°	6930.0	100.0



REPORT NUMBER: P239836

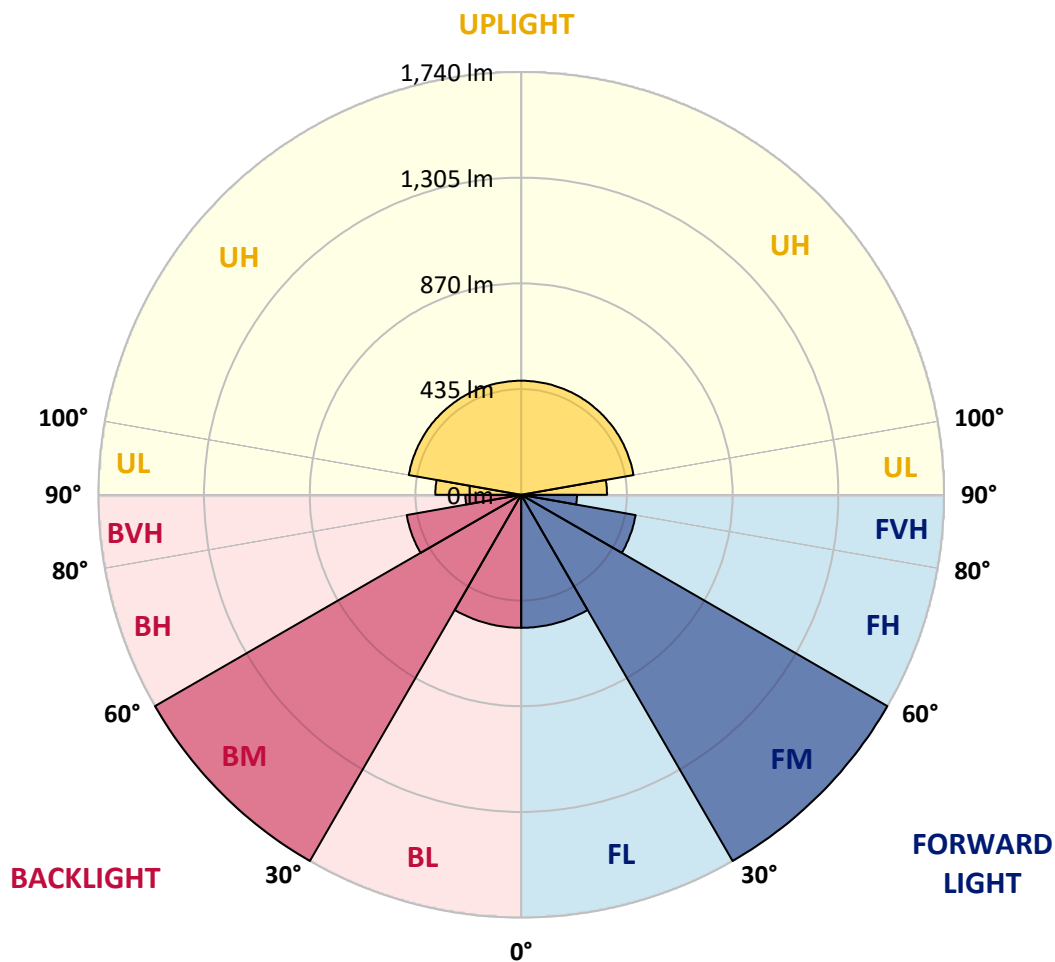
CATALOG NUMBER: UTLD-AF24-80-D-U-5WQ-A

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	547.3	7.9			
FM (30°-60°)	1740.3	25.1			
FH (60°-80°)	478.2	6.9			G0/660
FVH (80°-90°)	229.7	3.3			G3/500
BL (0°-30°)	547.3	7.9	B2/1000		
BM (30°-60°)	1740.3	25.1	B2/2500		
BH (60°-80°)	478.2	6.9	B1/500		G0/660
BVH (80°-90°)	229.7	3.3			G3/500
UL (90°-100°)	353.3	5.1		U3/500	
UH (100°-180°)	469.4	6.8		U3/500	

**BUG Rating: B2-U4-G3**

Type V Short





REPORT NUMBER: P239836

CATALOG NUMBER: UTLD-AF24-80-D-U-5WQ-A

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0	753.0
2.5°	773.3	773.3	773.3	771.5	773.3	775.2	777.0	777.0	776.1	773.3	771.5
5°	827.8	827.8	826.8	828.7	828.7	825.0	826.8	833.3	839.8	835.1	833.3
7.5°	959.7	957.0	950.5	945.0	938.5	938.5	952.3	960.6	975.4	977.3	972.6
10°	1092.6	1096.3	1100.0	1100.0	1115.7	1133.2	1145.2	1141.5	1130.4	1122.1	1116.6
12.5°	1131.4	1134.1	1166.4	1247.6	1307.6	1356.5	1315.0	1252.3	1202.4	1170.1	1166.4
15°	1160.9	1168.3	1208.9	1310.4	1460.8	1501.4	1415.6	1255.9	1159.0	1112.9	1102.8
17.5°	1190.4	1198.7	1267.0	1413.7	1532.8	1522.6	1419.3	1248.6	1107.4	1046.5	1039.1
20°	1164.6	1173.8	1269.8	1466.3	1553.1	1504.2	1468.2	1307.6	1147.1	1076.9	1068.6
22.5°	1174.7	1184.0	1280.9	1471.9	1525.4	1528.2	1472.8	1376.8	1188.6	1108.3	1095.4
25°	1193.2	1200.6	1320.5	1513.4	1514.3	1506.9	1479.3	1426.7	1251.3	1174.7	1163.7
27.5°	1193.2	1199.7	1334.4	1495.9	1506.0	1489.4	1524.5	1543.9	1409.1	1340.8	1343.6
30°	1246.7	1250.4	1389.7	1494.0	1471.0	1483.9	1582.6	1641.7	1549.4	1439.6	1438.7
32.5°	1351.0	1368.5	1515.3	1557.7	1467.3	1479.3	1597.4	1700.7	1640.8	1508.8	1494.0
35°	1484.8	1489.4	1624.1	1613.1	1494.0	1487.6	1632.4	1793.9	1743.2	1613.1	1608.5
37.5°	1528.2	1534.6	1695.2	1665.7	1526.3	1531.9	1690.6	1907.4	1905.6	1801.3	1768.1
40°	1524.5	1556.8	1750.6	1707.2	1572.5	1595.5	1735.8	2034.8	2129.8	2048.6	2033.9
42.5°	1799.5	1816.1	1929.6	1772.7	1614.9	1614.9	1754.3	2009.9	2052.3	1897.3	1866.8
45°	1828.1	1827.2	1951.7	1826.2	1626.0	1588.2	1688.7	1914.8	2025.6	1923.1	1877.9
47.5°	1769.0	1792.1	1947.1	1795.8	1605.7	1512.5	1576.2	1805.9	1891.8	1734.0	1698.0
50°	1705.4	1722.9	1841.0	1656.4	1505.1	1438.7	1486.6	1652.8	1686.9	1496.8	1469.1
52.5°	1530.9	1532.8	1673.1	1527.2	1417.4	1349.1	1387.9	1542.0	1635.2	1453.4	1434.0
55°	1297.5	1322.4	1500.5	1410.1	1314.1	1255.0	1262.4	1288.2	1206.1	933.9	870.2
57.5°	992.0	1024.3	1231.9	1236.6	1162.7	1068.6	965.3	817.6	704.1	452.2	434.6
60°	675.5	703.2	860.1	898.8	928.3	820.4	668.1	583.2	565.7	392.2	379.3
62.5°	418.0	441.1	587.8	601.7	666.3	598.9	529.7	503.9	524.2	374.7	365.4
65°	386.7	402.3	510.3	490.0	505.7	502.0	471.6	466.9	491.9	365.4	359.0
67.5°	373.7	386.7	472.5	457.7	464.2	469.7	448.5	452.2	486.3	372.8	365.4
70°	367.3	381.1	460.5	450.3	456.8	462.3	449.4	443.9	466.0	375.6	365.4
72.5°	362.7	377.4	442.0	435.6	453.1	467.9	454.9	442.9	452.2	377.4	367.3
75°	354.4	369.1	425.4	429.1	455.9	473.4	456.8	438.3	437.4	373.7	361.7
77.5°	352.5	369.1	407.9	431.0	456.8	479.9	466.9	440.2	428.2	375.6	360.8
80°	349.7	368.2	416.2	445.7	464.2	476.2	470.6	452.2	434.6	389.4	373.7
82.5°	365.4	382.0	423.6	456.8	462.3	460.5	460.5	448.5	429.1	390.3	375.6
85°	384.8	397.7	441.1	460.5	455.9	443.9	438.3	437.4	428.2	400.5	388.5
87.5°	381.1	390.3	419.9	438.3	440.2	416.2	417.1	411.6	401.4	373.7	363.6
90°	356.2	362.7	395.9	415.3	403.3	383.9	375.6	364.5	365.4	340.5	333.1
92.5°	339.6	347.0	371.0	382.0	380.2	347.9	342.4	341.4	335.9	314.7	310.1
95°	317.4	322.1	342.4	357.1	347.9	314.7	309.1	304.5	305.4	297.1	298.1
97.5°	311.9	315.6	330.4	327.6	311.9	283.3	279.6	277.8	276.8	272.2	271.3
100°	299.9	299.9	304.5	296.2	277.8	256.5	251.0	251.9	252.8	247.3	245.5
102.5°	279.6	280.5	282.4	275.0	257.5	235.3	229.8	234.4	236.2	234.4	233.5
105°	264.8	263.9	264.8	256.5	237.2	217.8	211.3	215.9	220.6	221.5	219.6
107.5°	242.7	241.8	241.8	233.5	218.7	203.0	197.5	194.7	194.7	194.7	194.7
110°	210.4	211.3	211.3	207.6	200.2	191.0	183.6	178.1	179.9	179.0	180.9



REPORT NUMBER: P239836

CATALOG NUMBER: UTLD-AF24-80-D-U-5WQ-A

**CANDELA DISTRIBUTION (continued):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
112.5°	195.6	195.6	193.8	191.0	183.6	174.4	166.1	162.4	160.6	159.6	160.6
115°	179.9	180.9	175.3	173.5	166.1	160.6	152.3	149.5	149.5	152.3	154.1
117.5°	166.1	166.1	162.4	157.8	151.3	146.7	143.0	141.2	141.2	144.9	144.9
120°	150.4	150.4	146.7	141.2	138.4	132.0	132.9	132.0	134.7	139.3	140.3
122.5°	132.9	132.9	129.2	124.6	126.4	121.8	120.0	116.3	121.8	127.3	128.3
125°	118.1	117.2	113.5	108.0	115.4	115.4	110.7	98.7	106.1	110.7	111.7
127.5°	108.0	107.0	102.4	96.9	106.1	111.7	101.5	89.5	93.2	97.8	99.7
130°	102.4	101.5	96.9	90.4	93.2	106.1	91.4	85.8	90.4	95.0	95.0
132.5°	98.7	97.8	94.1	87.7	83.1	96.9	82.1	84.0	90.4	95.0	95.0
135°	91.4	91.4	86.7	77.5	66.4	71.1	66.4	75.7	83.1	86.7	87.7
137.5°	78.4	78.4	74.7	66.4	53.5	50.8	52.6	64.6	72.9	76.6	76.6
140°	61.8	60.9	57.2	49.8	35.1	24.0	34.1	48.9	57.2	60.9	60.9
142.5°	43.4	42.4	37.8	30.5	18.5	8.3	18.5	29.5	37.8	41.5	42.4
145°	27.7	27.7	24.0	18.5	9.2	2.8	7.4	17.5	23.1	26.8	26.8
147.5°	17.5	17.5	14.8	10.2	2.8	1.8	2.8	8.3	13.8	16.6	17.5
150°	10.2	10.2	7.4	3.7	1.8	0.9	1.8	2.8	5.5	8.3	8.3
152.5°	3.7	2.8	1.8	1.8	0.9	0.9	0.9	1.8	1.8	2.8	2.8
155°	1.8	1.8	1.8	0.9	0.9	0.9	0.9	0.9	1.8	1.8	1.8
157.5°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
160°	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.0
162.5°	0.9	0.9	0.9	0.9	0.9	0.0	0.0	0.9	0.9	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)