

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: P179253

Luminaire Tested: **UTLD-F03-LED-E-U-SL2-HSS-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P179253
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P34324)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: UTLD-F03-LED-E-U-SL2-HSS-8030
Description: TRADITIONAIRE LED DOWNLIGHT LUMINAIRE
(3) LIGHTBARS WITH AccuLED OPTICS - TYPE 2 W/ SPILL LIGHT CONTROL AND
HOUSE SIDE SHIELD
Light Source: (21) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3394.6 lumens
Efficiency: N/A
Efficacy: 43.4 lumens/watt
Luminous Opening: Rectangular w/ Sides (W: 0.5' x L: 1' x H: 0.1')
IES Classification: Type II - Short - Non-Cutoff
BUG Rating: B0 - U0 - G1

Input Watts (W): 78.3
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



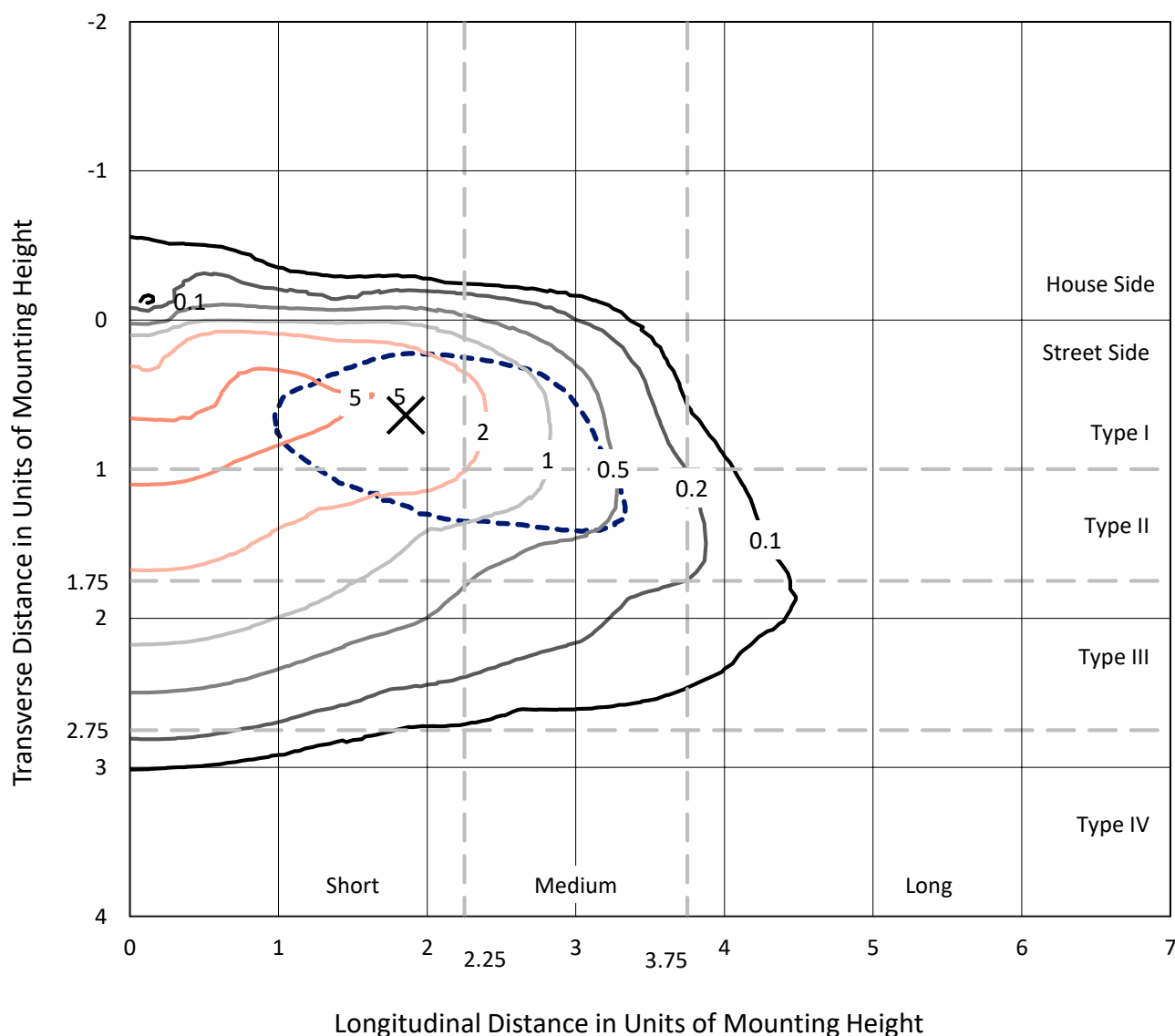
REPORT NUMBER: P179253

CATALOG NUMBER: UTLD-F03-LED-E-U-SL2-HSS-8030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

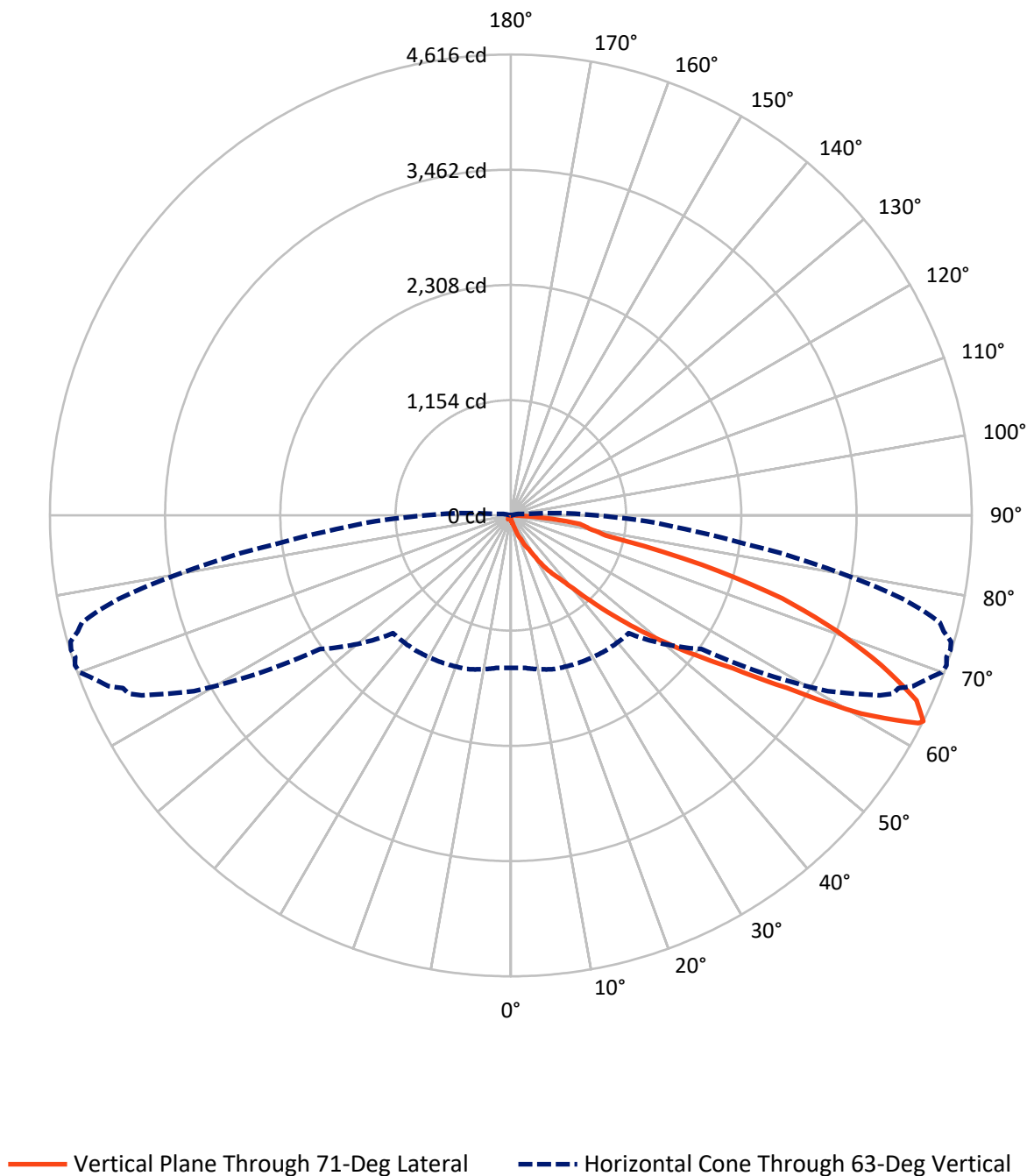


Based on 10 foot mounting height. Maximum calculated value = 6.7 fc
 Type II - Short - Non-Cutoff

REPORT NUMBER: P179253

CATALOG NUMBER: UTLD-F03-LED-E-U-SL2-HSS-8030

Luminous Intensity Polar Plot



REPORT NUMBER: P179253

CATALOG NUMBER: UTLD-F03-LED-E-U-SL2-HSS-8030

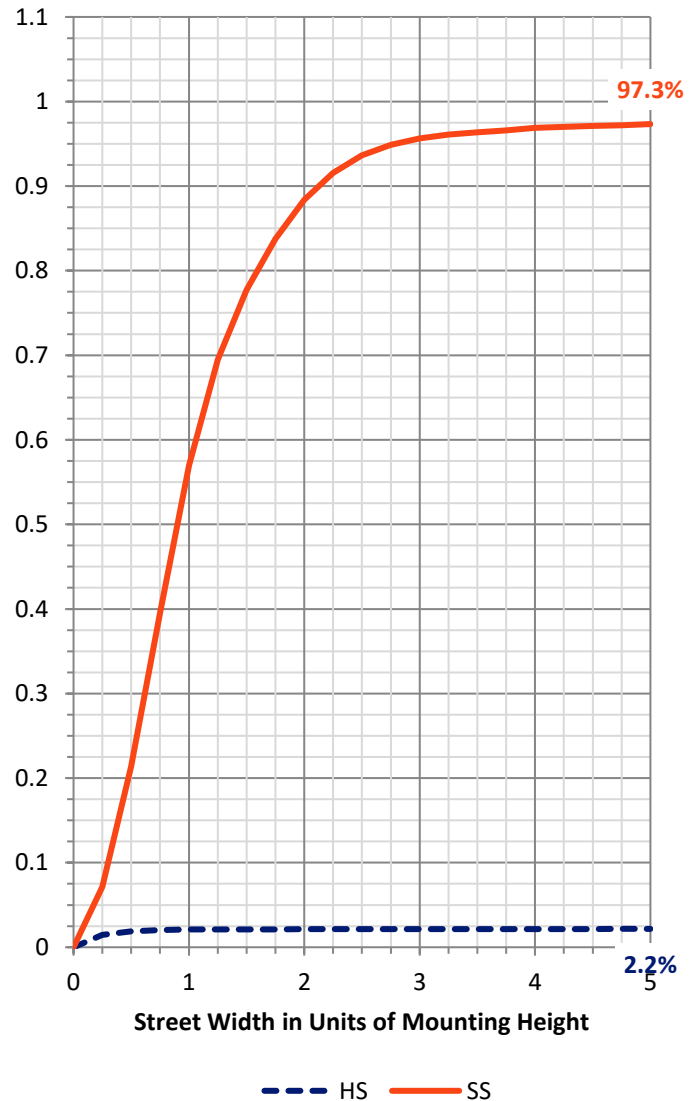
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	75.2	0.0	75.2
	% Fixture	2.2	0.0	2.2
Street Side	Lumens	3319.4	0.0	3319.4
	% Fixture	97.8	0.0	97.8
Total	Lumens	3394.6	0.0	3394.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.8	0.1
10°-20°	26.9	0.8
20°-30°	82.4	2.4
30°-40°	253.9	7.5
40°-50°	603.2	17.8
50°-60°	871.6	25.7
60°-70°	1078.5	31.8
70°-80°	409.5	12.1
80°-90°	63.9	1.9
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	3394.6	100.0
0°-180°	3394.6	100.0

Coefficient of Utilization



REPORT NUMBER: P179253

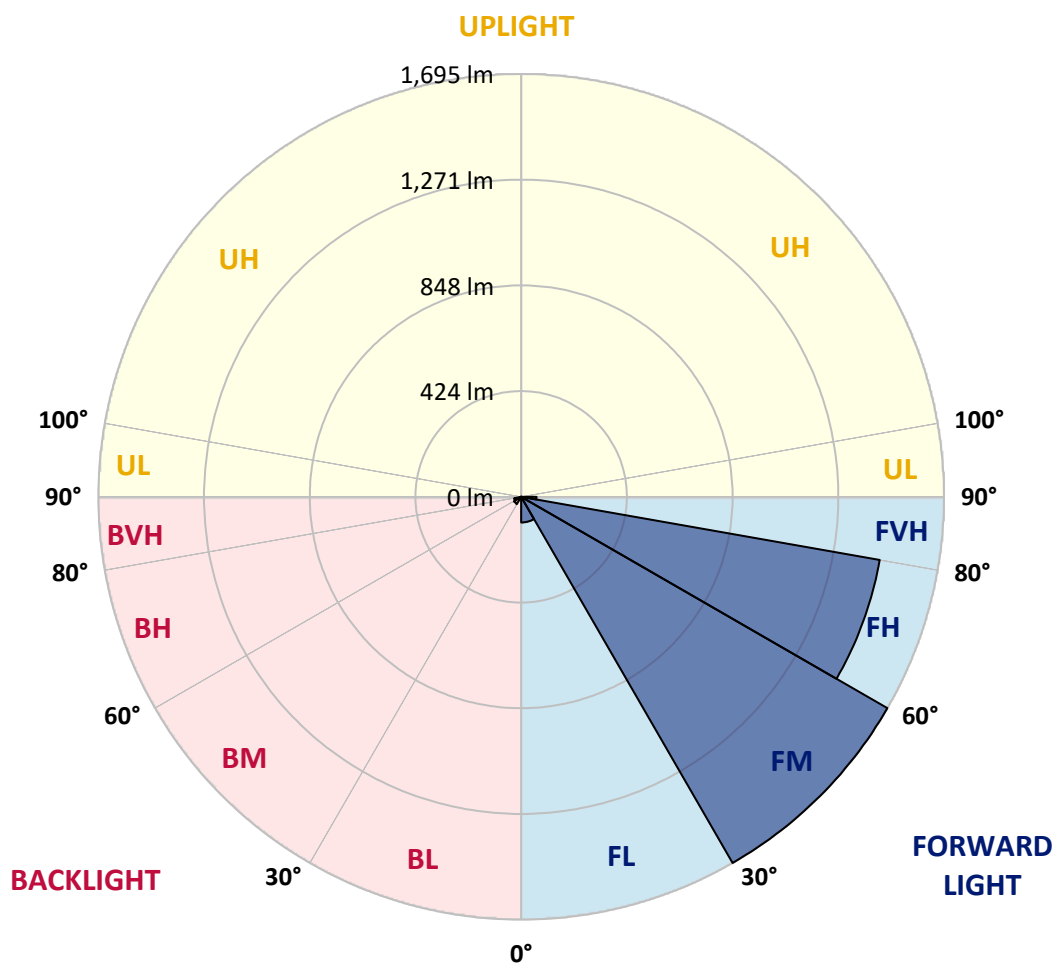
CATALOG NUMBER: UTLD-F03-LED-E-U-SL2-HSS-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	102.9	3.0			
FM	(30°-60°)	1695.2	49.9			
FH	(60°-80°)	1459.7	43.0			G1/1800
FVH	(80°-90°)	61.6	1.8			G1/100
BL	(0°-30°)	11.2	0.3	B0/110		
BM	(30°-60°)	33.4	1.0	B0/220		
BH	(60°-80°)	28.3	0.8	B0/110		G0/110
BVH	(80°-90°)	2.3	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B0-U0-G1

Type II Short





REPORT NUMBER: P179253

CATALOG NUMBER: UTLD-F03-LED-E-U-SL2-HSS-8030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
2.5°	64.8	63.8	61.7	61.7	60.6	60.6	59.6	58.5	58.5	58.5	57.5
5°	76.3	75.2	72.1	69.0	69.0	66.9	62.7	61.7	60.6	59.6	59.6
7.5°	124.4	123.3	121.2	118.1	112.9	77.3	69.0	67.9	66.9	65.8	64.8
10°	139.0	139.0	138.0	133.8	128.5	120.2	109.7	79.4	77.3	78.4	81.5
12.5°	187.1	181.8	185.0	179.8	151.5	142.1	145.3	134.8	132.7	131.7	102.4
15°	199.6	194.4	185.0	186.0	190.2	201.7	164.1	154.7	149.4	146.3	146.3
17.5°	219.5	219.5	220.5	220.5	212.2	216.3	213.2	189.2	188.1	183.9	182.9
20°	269.6	267.5	238.3	224.7	247.7	252.9	254.0	218.4	211.1	210.1	216.3
22.5°	285.3	283.2	278.0	283.2	254.0	285.3	328.2	327.1	318.8	314.6	288.4
25°	363.7	360.6	341.7	292.6	312.5	313.5	355.3	358.5	356.4	363.7	385.6
27.5°	420.1	424.3	381.5	350.1	329.2	374.1	452.5	461.9	461.9	451.5	452.5
30°	535.1	533.0	486.0	406.5	397.1	402.4	498.5	530.9	558.1	541.4	560.2
32.5°	769.2	758.7	686.6	541.4	475.5	497.5	597.8	636.5	630.2	620.8	637.5
35°	1107.8	1100.5	952.1	813.1	683.5	632.3	706.5	771.3	757.7	788.0	799.5
37.5°	1346.1	1327.3	1263.5	1123.5	997.0	912.4	943.7	918.6	915.5	936.4	934.3
40°	1521.7	1522.7	1500.8	1386.9	1294.9	1247.9	1252.0	1159.0	1152.7	1160.1	1145.4
42.5°	1607.4	1614.7	1632.5	1576.0	1538.4	1543.6	1585.4	1507.0	1503.9	1485.1	1428.7
45°	1659.6	1669.0	1723.4	1742.2	1730.7	1782.9	1896.9	1833.1	1838.3	1855.1	1774.6
47.5°	1665.9	1679.5	1750.5	1807.0	1853.0	1958.5	2133.1	2147.7	2163.4	2177.0	2117.4
50°	1604.2	1609.5	1699.3	1780.9	1848.8	2047.4	2312.8	2403.7	2432.0	2432.0	2381.8
52.5°	1492.4	1499.7	1585.4	1674.3	1739.1	2043.2	2428.8	2593.9	2656.7	2658.7	2586.6
55°	1444.3	1452.7	1517.5	1595.9	1628.3	1941.8	2499.9	2766.4	2832.2	2843.7	2800.9
57.5°	1444.3	1453.7	1506.0	1552.0	1568.7	1823.7	2542.7	2968.1	3042.3	3113.4	3111.3
60°	1509.1	1519.6	1561.4	1558.2	1542.6	1740.1	2523.9	3214.7	3334.9	3454.1	3591.0
62.5°	1546.8	1552.0	1609.5	1626.2	1623.0	1678.4	2376.6	3398.7	3584.7	3758.2	4055.0
63°	1525.9	1532.1	1595.9	1626.2	1653.4	1669.0	2335.8	3418.5	3628.6	3782.2	4111.4
65°	1413.0	1414.0	1482.0	1519.6	1703.5	1668.0	2117.4	3379.9	3637.0	3789.5	4156.4
67.5°	1119.3	1125.6	1172.6	1236.4	1406.7	1693.1	1819.5	2936.7	3197.0	3319.2	3727.9
70°	589.4	615.6	654.2	738.9	971.9	1438.1	1522.7	2163.4	2415.2	2597.1	3066.3
72.5°	178.7	166.2	216.3	316.7	494.3	994.9	1335.6	1527.9	1673.2	1854.0	2353.6
75°	80.5	82.6	94.1	134.8	216.3	534.0	1167.4	1255.2	1275.0	1336.7	1639.8
77.5°	46.0	47.0	55.4	76.3	112.9	266.5	884.2	1125.6	1109.9	1131.8	1187.2
80°	30.3	31.4	39.7	54.3	62.7	130.6	501.6	877.9	929.1	985.5	1026.3
82.5°	16.7	16.7	25.1	43.9	40.8	62.7	197.5	574.8	666.8	725.3	847.6
85°	7.3	8.4	14.6	29.3	25.1	29.3	95.1	195.4	223.7	235.1	292.6
87.5°	2.1	2.1	4.2	10.5	10.5	13.6	28.2	87.8	93.0	100.3	122.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P179253

CATALOG NUMBER: UTLD-F03-LED-E-U-SL2-HSS-8030

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
2.5°	57.5	57.5	55.4	54.3	51.2	51.2	49.1	50.2	47.0	46.0	43.9
5°	58.5	58.5	58.5	58.5	57.5	57.5	57.5	57.5	57.5	57.5	56.4
7.5°	63.8	63.8	63.8	63.8	62.7	61.7	59.6	59.6	58.5	58.5	58.5
10°	81.5	80.5	78.4	77.3	76.3	75.2	73.2	74.2	72.1	73.2	71.1
12.5°	97.2	95.1	92.0	88.8	87.8	86.7	84.7	83.6	82.6	84.7	83.6
15°	151.5	150.5	151.5	146.3	119.1	118.1	119.1	117.1	115.0	111.8	107.6
17.5°	180.8	177.7	167.2	163.0	164.1	160.9	152.6	135.9	126.5	122.3	120.2
20°	232.0	233.1	235.1	235.1	231.0	225.7	220.5	219.5	213.2	191.3	182.9
22.5°	278.0	278.0	272.8	267.5	261.3	262.3	255.0	238.3	233.1	226.8	223.7
25°	399.2	393.0	378.3	373.1	367.9	354.3	336.5	327.1	324.0	319.8	306.2
27.5°	451.5	443.1	440.0	433.7	414.9	393.0	385.6	380.4	385.6	360.6	342.8
30°	546.6	545.5	542.4	528.8	505.8	488.1	489.1	483.9	449.4	423.3	406.5
32.5°	643.8	636.5	661.6	636.5	615.6	622.9	613.5	581.1	557.0	529.9	526.7
35°	796.4	796.4	775.5	748.3	751.4	756.7	711.7	678.3	662.6	651.1	628.1
37.5°	936.4	930.1	891.5	876.8	893.6	864.3	814.1	792.2	787.0	767.1	730.5
40°	1126.6	1089.0	1059.7	1056.6	1054.5	986.6	958.4	960.4	933.3	893.6	851.8
42.5°	1387.9	1327.3	1305.3	1307.4	1232.2	1177.8	1167.4	1141.3	1105.7	1060.8	1023.2
45°	1688.9	1630.4	1631.4	1565.6	1470.5	1423.4	1413.0	1372.2	1328.3	1276.1	1221.7
47.5°	2016.0	1974.2	1995.1	1863.4	1779.8	1752.6	1685.8	1622.0	1570.8	1507.0	1439.1
50°	2310.7	2332.7	2286.7	2171.7	2111.1	2074.5	1996.1	1916.7	1850.9	1753.7	1661.7
52.5°	2586.6	2628.4	2556.3	2450.8	2459.1	2389.1	2328.5	2248.0	2160.2	2045.3	1948.1
55°	2862.5	2871.9	2812.4	2777.9	2775.8	2730.9	2703.7	2646.2	2528.1	2412.1	2368.2
57.5°	3210.6	3199.1	3157.3	3211.6	3215.8	3230.4	3259.7	3200.1	3164.6	3079.9	3012.0
60°	3713.3	3703.8	3722.7	3882.6	3915.0	4012.2	4033.1	4035.1	4004.8	4032.0	3866.9
62.5°	4157.4	4195.0	4317.3	4391.5	4467.8	4561.9	4582.8	4544.1	4564.0	4566.1	4437.5
63°	4222.2	4251.5	4377.9	4441.7	4514.8	4593.2	4616.2	4587.0	4604.7	4587.0	4489.8
65°	4250.4	4264.0	4412.4	4395.7	4488.7	4523.2	4464.7	4453.2	4519.0	4425.0	4407.2
67.5°	3833.4	3916.0	4015.3	4015.3	4087.4	4080.1	4001.7	4018.4	4019.5	3982.9	3973.5
70°	3205.3	3372.5	3393.5	3468.7	3518.9	3475.0	3458.2	3469.7	3382.0	3401.8	3314.0
72.5°	2550.1	2729.8	2763.3	2903.3	2917.9	2818.6	2842.7	2773.7	2677.6	2618.0	2496.8
75°	1856.1	1970.0	2069.3	2109.0	2110.1	2016.0	1975.2	1816.4	1675.3	1506.0	1461.1
77.5°	1295.9	1283.4	1321.0	1299.1	1151.7	1104.7	971.9	894.6	822.5	697.1	628.1
80°	1047.2	1035.7	1053.5	1006.4	942.7	889.4	794.3	723.2	642.7	588.4	504.8
82.5°	893.6	940.6	952.1	885.2	852.8	807.9	698.1	620.8	542.4	472.4	406.5
85°	340.7	406.5	401.3	418.0	419.1	396.1	349.1	277.0	219.5	177.7	144.2
87.5°	131.7	147.4	138.0	136.9	138.0	126.5	107.6	95.1	80.5	64.8	54.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P179253

CATALOG NUMBER: UTLD-F03-LED-E-U-SL2-HSS-8030

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
2.5°	42.8	40.8	40.8	38.7	38.7	37.6	37.6	36.6	36.6	35.5	35.5
5°	56.4	56.4	55.4	53.3	48.1	46.0	41.8	38.7	37.6	36.6	35.5
7.5°	58.5	58.5	57.5	57.5	56.4	55.4	54.3	51.2	46.0	41.8	38.7
10°	71.1	69.0	70.0	72.1	71.1	71.1	70.0	69.0	66.9	64.8	52.3
12.5°	82.6	81.5	79.4	75.2	73.2	72.1	72.1	71.1	70.0	69.0	66.9
15°	104.5	101.4	100.3	97.2	95.1	92.0	93.0	92.0	89.9	85.7	76.3
17.5°	116.0	113.9	110.8	111.8	109.7	103.5	93.0	89.9	86.7	83.6	80.5
20°	179.8	176.6	170.4	159.9	147.4	141.1	135.9	130.6	131.7	130.6	122.3
22.5°	210.1	191.3	179.8	171.4	168.3	168.3	164.1	166.2	152.6	148.4	130.6
25°	282.2	268.6	254.0	245.6	241.4	232.0	214.2	201.7	188.1	183.9	170.4
27.5°	337.6	325.0	325.0	311.4	288.4	270.7	252.9	242.5	225.7	214.2	199.6
30°	406.5	390.9	371.0	345.9	324.0	307.3	294.7	269.6	254.0	238.3	209.0
32.5°	507.9	478.7	453.6	430.6	410.7	377.3	357.4	336.5	304.1	270.7	256.1
35°	602.0	565.4	537.2	513.1	472.4	449.4	419.1	372.1	337.6	320.8	287.4
37.5°	693.9	659.5	632.3	585.3	548.7	510.0	459.8	425.4	395.0	353.2	307.3
40°	814.1	775.5	720.1	679.3	631.2	566.4	528.8	487.0	435.8	384.6	345.9
42.5°	971.9	910.3	865.3	814.1	726.3	684.5	633.3	559.1	494.3	448.3	384.6
45°	1162.2	1098.4	1050.3	950.0	886.2	822.5	745.2	658.4	593.6	521.5	467.2
47.5°	1363.9	1320.0	1217.5	1117.2	1054.5	959.4	870.6	780.7	690.8	627.1	528.8
50°	1615.7	1504.9	1392.1	1320.0	1218.6	1112.0	1007.5	893.6	815.2	716.9	621.8
52.5°	1867.6	1715.0	1633.5	1526.9	1388.9	1266.7	1145.4	1034.7	923.9	818.3	705.4
55°	2207.3	2054.7	1932.4	1778.8	1622.0	1482.0	1356.5	1219.6	1098.4	962.5	839.2
57.5°	2828.0	2659.8	2484.2	2254.3	2063.0	1893.7	1724.4	1562.4	1381.6	1235.3	1085.9
60°	3756.1	3579.5	3338.1	3069.5	2773.7	2510.3	2268.9	2026.5	1802.8	1623.0	1392.1
62.5°	4366.4	4184.6	3960.9	3642.2	3329.7	2980.6	2679.6	2343.1	2093.3	1835.2	1622.0
63°	4427.1	4233.7	4009.0	3707.0	3376.7	3049.6	2744.4	2377.6	2121.6	1862.4	1641.9
65°	4334.0	4213.9	4004.8	3751.9	3495.9	3177.1	2843.7	2483.2	2193.7	1930.3	1672.2
67.5°	3873.2	3817.8	3681.9	3543.9	3315.1	3093.5	2788.3	2470.6	2163.4	1913.6	1675.3
70°	3280.6	3204.3	3097.7	3042.3	2884.5	2696.4	2486.3	2237.6	2016.0	1770.4	1554.1
72.5°	2451.8	2301.3	2215.6	2122.6	2022.3	1890.6	1768.3	1628.3	1448.5	1317.9	1100.5
75°	1283.4	1116.2	1002.3	868.5	760.8	651.1	592.6	552.9	492.2	425.4	376.2
77.5°	520.5	434.8	351.2	298.9	224.7	179.8	153.6	135.9	125.4	111.8	103.5
80°	436.9	349.1	281.1	213.2	156.8	113.9	84.7	65.8	56.4	49.1	44.9
82.5°	353.2	303.1	251.9	198.6	152.6	123.3	90.9	64.8	47.0	37.6	32.4
85°	112.9	99.3	77.3	64.8	53.3	44.9	37.6	30.3	27.2	25.1	23.0
87.5°	47.0	36.6	33.4	30.3	29.3	28.2	28.2	26.1	24.0	20.9	18.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P179253

CATALOG NUMBER: UTLD-F03-LED-E-U-SL2-HSS-8030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5	34.5
2.5°	34.5	34.5	33.4	34.5	32.4	30.3	29.3	28.2	27.2	27.2	27.2
5°	35.5	34.5	33.4	32.4	29.3	27.2	25.1	23.0	26.1	23.0	15.7
7.5°	36.6	35.5	33.4	32.4	29.3	26.1	24.0	14.6	9.4	9.4	10.5
10°	49.1	46.0	44.9	41.8	38.7	28.2	17.8	9.4	8.4	12.5	14.6
12.5°	53.3	50.2	47.0	43.9	36.6	30.3	14.6	12.5	15.7	12.5	13.6
15°	72.1	61.7	58.5	55.4	49.1	35.5	16.7	16.7	15.7	13.6	15.7
17.5°	79.4	67.9	64.8	62.7	48.1	23.0	18.8	19.9	15.7	17.8	14.6
20°	115.0	102.4	93.0	88.8	64.8	33.4	26.1	18.8	19.9	15.7	17.8
22.5°	131.7	122.3	112.9	110.8	73.2	36.6	30.3	26.1	18.8	18.8	16.7
25°	163.0	150.5	134.8	121.2	77.3	46.0	36.6	26.1	21.9	17.8	16.7
27.5°	185.0	164.1	150.5	142.1	83.6	48.1	35.5	29.3	21.9	16.7	14.6
30°	193.3	181.8	163.0	142.1	84.7	50.2	37.6	28.2	21.9	16.7	15.7
32.5°	236.2	210.1	182.9	167.2	90.9	53.3	36.6	28.2	20.9	15.7	14.6
35°	252.9	227.8	198.6	176.6	95.1	51.2	35.5	25.1	18.8	14.6	11.5
37.5°	280.1	243.5	215.3	188.1	96.1	48.1	32.4	24.0	16.7	12.5	10.5
40°	299.9	269.6	227.8	197.5	96.1	44.9	30.3	20.9	14.6	10.5	8.4
42.5°	347.0	293.7	251.9	216.3	98.2	40.8	27.2	17.8	12.5	7.3	6.3
45°	397.1	345.9	290.5	247.7	100.3	37.6	24.0	15.7	9.4	5.2	3.1
47.5°	468.2	401.3	338.6	284.3	101.4	34.5	21.9	13.6	7.3	3.1	2.1
50°	536.1	464.0	387.7	332.3	103.5	31.4	18.8	11.5	5.2	2.1	1.0
52.5°	615.6	526.7	449.4	371.0	104.5	29.3	16.7	9.4	3.1	1.0	0.0
55°	728.4	634.4	525.7	443.1	106.6	26.1	13.6	7.3	2.1	1.0	0.0
57.5°	953.1	825.6	691.9	572.7	117.1	23.0	11.5	5.2	1.0	1.0	0.0
60°	1227.0	1084.8	908.2	735.8	138.0	19.9	9.4	3.1	1.0	0.0	0.0
62.5°	1425.5	1242.6	1032.6	846.5	152.6	16.7	8.4	2.1	1.0	1.0	0.0
63°	1457.9	1260.4	1042.0	853.8	153.6	16.7	7.3	2.1	1.0	0.0	0.0
65°	1482.0	1277.1	1054.5	865.3	156.8	14.6	6.3	2.1	1.0	1.0	0.0
67.5°	1462.1	1240.5	1024.2	843.4	158.9	12.5	5.2	2.1	1.0	1.0	1.0
70°	1326.2	1128.7	939.5	770.2	147.4	10.5	4.2	2.1	1.0	1.0	1.0
72.5°	953.1	849.7	676.2	556.0	112.9	9.4	4.2	3.1	1.0	2.1	2.1
75°	320.8	287.4	239.3	212.2	65.8	6.3	3.1	3.1	1.0	2.1	2.1
77.5°	92.0	85.7	74.2	67.9	33.4	5.2	3.1	3.1	1.0	3.1	3.1
80°	39.7	36.6	32.4	28.2	14.6	4.2	3.1	4.2	1.0	4.2	3.1
82.5°	29.3	26.1	23.0	18.8	8.4	4.2	4.2	5.2	1.0	4.2	4.2
85°	20.9	18.8	15.7	13.6	6.3	4.2	4.2	5.2	2.1	5.2	5.2
87.5°	16.7	14.6	12.5	9.4	6.3	4.2	4.2	6.3	2.1	6.3	5.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P179253

CATALOG NUMBER: UTLD-F03-LED-E-U-SL2-HSS-8030

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	34.5	34.5	34.5
2.5°	27.2	28.2	28.2
5°	13.6	14.6	14.6
7.5°	11.5	12.5	12.5
10°	15.7	15.7	15.7
12.5°	14.6	15.7	15.7
15°	16.7	17.8	17.8
17.5°	14.6	18.8	19.9
20°	16.7	16.7	16.7
22.5°	16.7	17.8	17.8
25°	15.7	15.7	15.7
27.5°	15.7	15.7	15.7
30°	13.6	15.7	15.7
32.5°	13.6	13.6	13.6
35°	12.5	12.5	12.5
37.5°	10.5	11.5	11.5
40°	8.4	8.4	8.4
42.5°	5.2	5.2	5.2
45°	3.1	3.1	3.1
47.5°	2.1	2.1	2.1
50°	1.0	1.0	1.0
52.5°	1.0	1.0	1.0
55°	0.0	1.0	1.0
57.5°	0.0	0.0	1.0
60°	0.0	0.0	1.0
62.5°	0.0	0.0	1.0
63°	0.0	0.0	1.0
65°	1.0	0.0	1.0
67.5°	1.0	1.0	1.0
70°	1.0	1.0	1.0
72.5°	2.1	1.0	2.1
75°	2.1	2.1	2.1
77.5°	3.1	2.1	2.1
80°	3.1	3.1	2.1
82.5°	4.2	3.1	1.0
85°	4.2	4.2	2.1
87.5°	5.2	5.2	2.1
90°	0.0	0.0	0.0

(END OF REPORT)