

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: P151334

Luminaire Tested: **TMU-F01-LED-E-U-SL3-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P151334
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33679)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: TMU-F01-LED-E-U-SL3-7030
Description: TALON MEDIUM LED AREA LUMINAIRE
(1) LIGHTBARS WITH AccuLED OPTICS - TYPE 3 W/ SPILL LIGHT CONTROL
Light Source: (7) 3000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2289.2 lumens
Efficiency: N/A
Efficacy: 88.4 lumens/watt
Luminous Opening: Rectangular (W 0.17' x L: 1' x H: 0')
IES Classification: Type III - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

Input Watts (W): 25.9
Input Voltage (V): NR
Input Current (A_{in}): 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

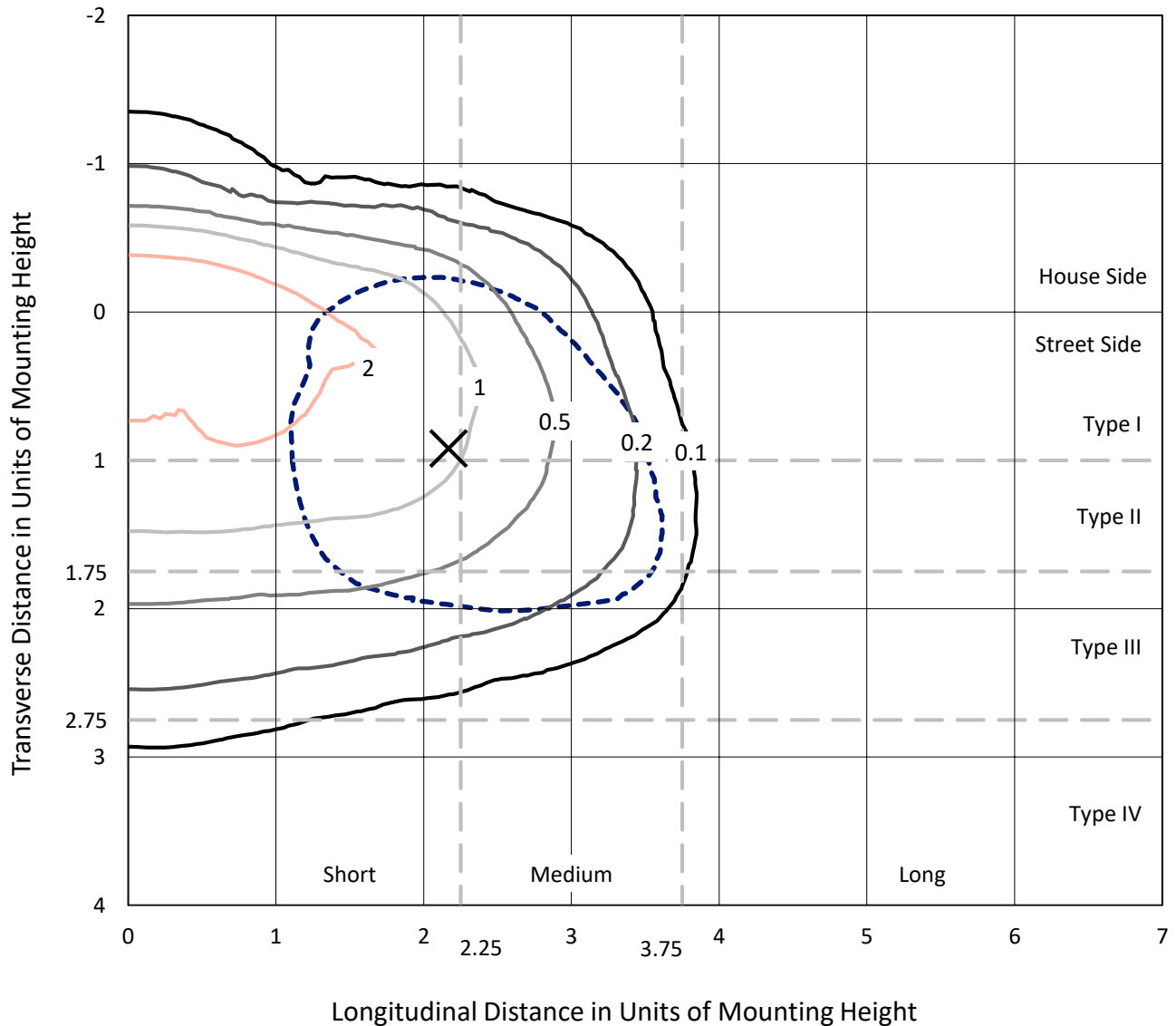


REPORT NUMBER: P151334

CATALOG NUMBER: TMU-F01-LED-E-U-SL3-7030

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

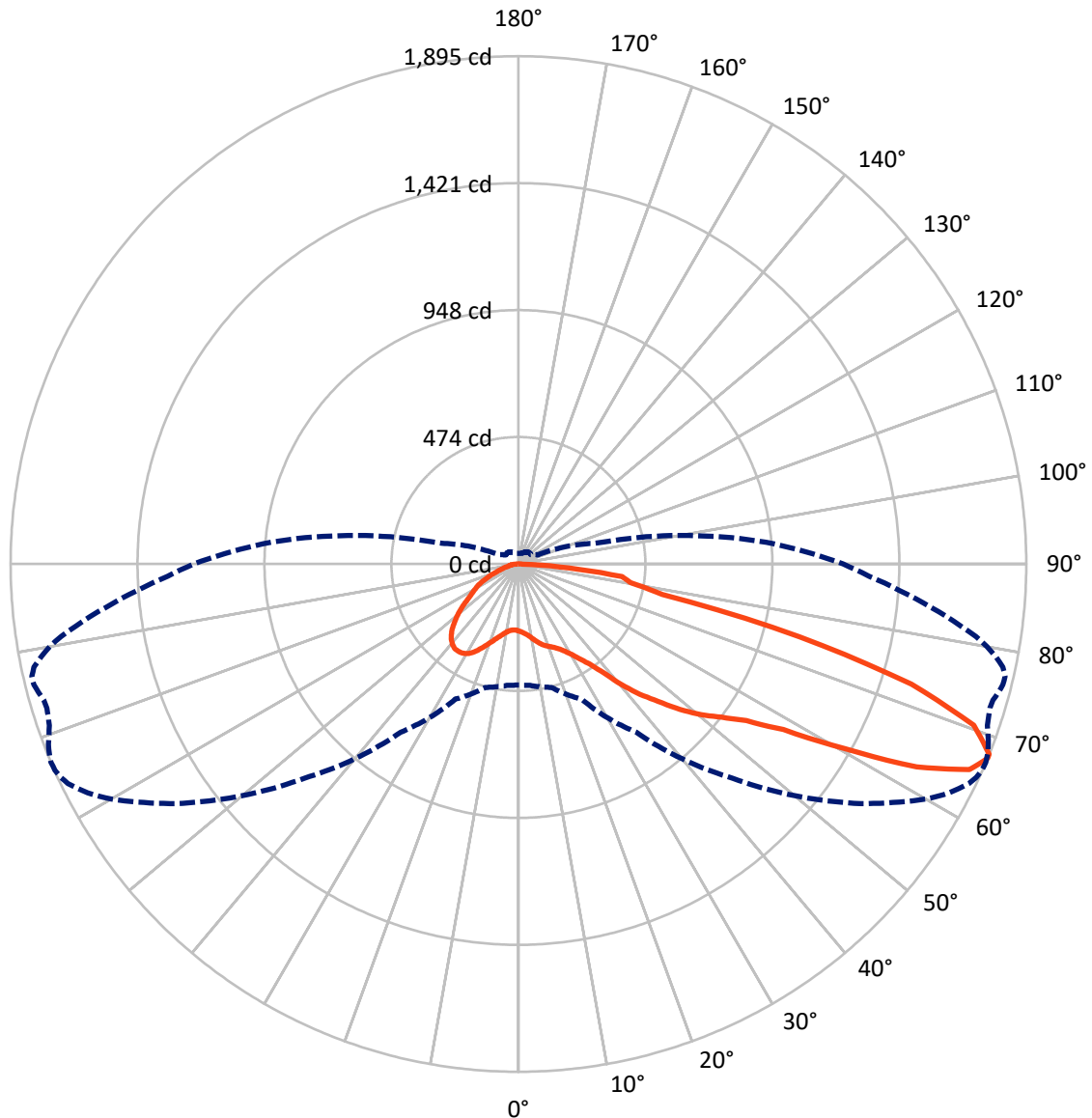


Based on 10 foot mounting height. Maximum calculated value = 3.2 fc
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P151334

CATALOG NUMBER: TMU-F01-LED-E-U-SL3-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical



REPORT NUMBER: P151334

CATALOG NUMBER: TMU-F01-LED-E-U-SL3-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	528.3	0.0	528.3
	% Fixture	23.1	0.0	23.1
Street Side	Lumens	1761.0	0.0	1761.0
	% Fixture	76.9	0.0	76.9
Total	Lumens	2289.2	0.0	2289.2
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	24.9	1.1
10°-20°	85.4	3.7
20°-30°	150.7	6.6
30°-40°	216.4	9.5
40°-50°	328.6	14.4
50°-60°	483.9	21.1
60°-70°	643.0	28.1
70°-80°	314.6	13.7
80°-90°	41.8	1.8
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°	2289.2	100.0
0°-180°	2289.2	100.0



REPORT NUMBER: P151334

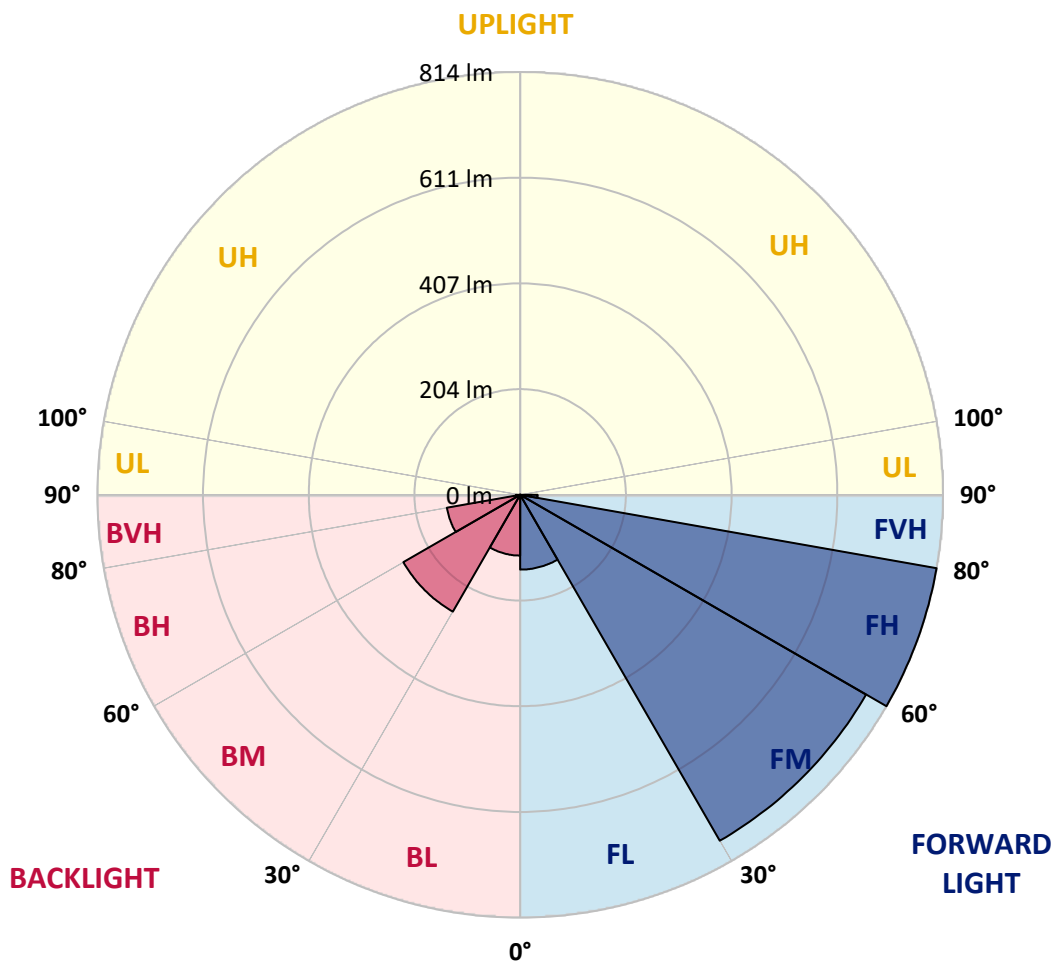
CATALOG NUMBER: TMU-F01-LED-E-U-SL3-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	144.0	6.3			
FM	(30°-60°)	769.1	33.6			
FH	(60°-80°)	814.3	35.6			G1/1800
FVH	(80°-90°)	33.6	1.5			G1/100
BL	(0°-30°)	117.0	5.1	B1/500		
BM	(30°-60°)	259.7	11.3	B1/1000		
BH	(60°-80°)	143.3	6.3	B1/500		G1/500
BVH	(80°-90°)	8.2	0.4			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type III Short





REPORT NUMBER: P151334

CATALOG NUMBER: TMU-F01-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	60°	61°	62°	64°
0°	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1
2.5°	261.9	262.1	261.6	261.4	259.9	258.4	257.4	256.1	256.1	256.1	255.6
5°	276.7	275.7	276.5	274.7	271.7	268.9	266.2	263.9	263.4	263.4	262.4
7.5°	294.6	293.3	292.8	290.3	285.8	281.7	276.2	274.0	272.7	272.2	271.7
10°	316.2	316.2	312.9	308.6	302.6	295.6	289.5	285.5	285.3	285.3	283.0
12.5°	338.3	338.8	334.5	330.2	320.4	311.1	304.1	299.6	299.3	298.3	297.1
15°	358.6	357.4	354.6	348.3	337.5	326.5	317.7	313.2	312.2	311.1	310.4
17.5°	375.5	374.2	370.7	362.7	351.4	338.3	327.5	322.7	322.2	321.7	320.7
20°	386.0	385.0	380.0	370.7	358.9	345.6	334.0	330.8	329.7	329.7	329.2
22.5°	392.1	390.6	383.3	371.0	359.4	349.6	340.1	338.0	337.3	337.5	337.5
25°	395.1	393.8	383.5	365.9	354.9	352.1	348.1	346.8	347.1	347.3	347.8
27.5°	395.6	393.8	381.8	359.4	349.1	356.9	359.7	361.7	361.7	362.7	364.4
30°	391.8	389.8	378.3	354.4	346.6	366.4	377.5	382.8	384.8	384.3	388.3
32.5°	385.3	384.0	374.7	354.4	353.6	385.3	404.9	412.4	413.4	413.9	418.5
35°	383.0	382.8	378.8	366.4	375.5	418.5	448.4	454.2	455.4	455.4	458.7
37.5°	382.5	383.8	388.3	389.1	413.9	467.7	506.9	515.7	515.7	518.2	518.2
40°	382.5	385.3	402.4	422.7	460.9	531.8	586.1	596.2	596.2	598.9	597.4
42.5°	397.4	401.4	429.5	468.2	520.3	597.9	660.2	671.6	672.3	671.6	673.8
45°	426.5	430.0	464.2	519.8	581.3	668.8	731.1	744.7	741.9	743.7	744.4
47.5°	465.2	470.7	509.7	576.1	640.9	734.4	810.5	822.9	821.9	822.6	819.3
50°	506.4	512.2	555.7	631.8	700.2	787.2	874.4	892.7	891.0	892.2	894.0
52.5°	542.9	546.4	588.4	673.8	745.2	836.4	923.4	946.3	950.3	950.8	952.0
55°	564.5	568.8	607.2	694.7	777.9	884.7	979.4	1014.1	1021.9	1023.9	1029.5
57.5°	572.0	576.6	611.5	697.7	795.7	929.9	1057.6	1118.7	1125.2	1136.0	1153.6
60°	571.8	576.6	607.0	690.9	813.8	986.0	1179.2	1281.5	1314.7	1325.8	1350.9
62.5°	548.4	553.9	584.8	670.3	836.9	1057.6	1360.2	1517.5	1560.3	1580.4	1607.5
65°	497.1	501.2	530.1	618.0	830.4	1128.2	1511.5	1707.8	1746.8	1776.2	1824.7
67°	451.6	454.2	476.8	556.2	766.6	1130.7	1559.3	1755.0	1789.0	1820.1	1870.2
67.5°	440.1	445.4	463.0	537.3	742.7	1116.4	1556.0	1747.8	1782.4	1814.9	1867.6
70°	358.1	365.7	374.5	424.5	583.8	939.2	1440.6	1621.6	1652.0	1682.2	1755.8
72.5°	220.9	234.5	236.3	267.9	380.0	649.2	1165.7	1367.5	1390.4	1412.0	1487.4
75°	130.2	132.2	138.5	164.1	222.9	388.1	782.1	1015.9	1037.0	1047.5	1106.6
77.5°	72.6	74.6	79.9	102.0	171.4	261.4	455.4	596.9	609.7	623.0	613.5
80°	30.2	32.9	35.4	41.2	80.2	206.3	313.2	379.5	387.8	395.6	405.4
82.5°	14.6	15.6	19.1	21.9	29.2	84.7	245.6	329.0	338.8	350.1	373.0
85°	6.8	7.5	10.6	12.6	14.1	21.4	82.2	160.1	173.7	176.2	180.7
87.5°	0.5	0.5	1.3	1.8	2.5	2.8	8.5	12.1	13.6	12.3	15.6
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: P151334

CATALOG NUMBER: TMU-F01-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (continued):

	65°	66°	67°	68°	69°	70°	71°	72°	73°	74°	75°
0°	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1
2.5°	255.4	255.1	254.6	254.6	254.3	254.3	254.3	253.8	253.8	253.8	253.6
5°	262.1	261.9	261.1	261.1	260.6	260.6	259.9	259.6	259.1	259.1	258.9
7.5°	270.9	270.7	269.7	269.7	268.9	268.7	268.2	267.4	267.4	266.9	266.4
10°	283.0	282.2	282.0	280.7	281.0	280.5	280.0	279.2	278.7	278.2	277.7
12.5°	296.6	296.6	295.3	294.6	295.1	294.6	293.6	293.3	292.5	292.5	291.8
15°	309.4	309.4	308.9	307.9	308.1	307.4	307.1	306.6	305.6	305.9	305.6
17.5°	320.4	320.4	319.7	319.2	319.2	318.4	318.7	318.2	317.7	317.4	316.7
20°	329.2	329.2	328.7	328.2	328.5	328.5	327.7	327.7	327.7	327.2	327.2
22.5°	337.8	338.0	338.0	338.0	338.3	338.5	338.3	338.8	338.5	339.0	339.0
25°	349.1	349.9	350.4	350.4	351.6	351.9	352.1	352.9	352.9	353.6	353.9
27.5°	365.9	366.4	368.5	369.0	369.2	371.2	371.5	372.5	373.5	373.7	374.0
30°	389.1	390.3	391.8	392.8	392.8	395.3	396.3	395.8	398.6	399.4	400.4
32.5°	420.0	421.0	422.5	423.5	424.5	425.8	426.0	427.3	429.5	431.5	430.3
35°	458.9	461.4	458.9	461.7	462.4	464.2	463.7	465.2	466.2	467.0	466.7
37.5°	515.5	514.2	513.7	512.7	511.0	517.0	514.0	513.7	512.2	516.5	513.7
40°	589.9	590.6	591.4	587.4	585.1	585.1	584.3	581.6	580.3	584.1	583.6
42.5°	667.5	668.3	664.8	662.3	656.5	655.7	652.2	651.5	650.2	652.2	650.2
45°	738.2	738.7	730.9	732.1	727.6	728.4	722.8	725.1	722.1	724.1	727.9
47.5°	817.1	818.1	811.3	814.1	809.5	806.8	806.5	808.0	804.8	806.8	807.8
50°	888.7	887.5	883.9	884.7	882.7	883.2	880.2	882.9	879.2	883.2	882.7
52.5°	952.3	950.8	950.0	952.5	950.8	950.8	949.0	950.3	950.8	956.8	958.1
55°	1029.5	1030.7	1032.0	1036.5	1038.5	1035.2	1038.5	1044.8	1045.0	1059.4	1067.2
57.5°	1153.4	1162.2	1166.7	1169.4	1181.3	1180.0	1187.5	1202.6	1204.1	1237.3	1256.7
60°	1369.5	1385.1	1399.9	1391.9	1415.7	1423.0	1427.6	1455.7	1464.5	1495.9	1512.8
62.5°	1642.4	1644.2	1667.3	1660.0	1673.6	1670.3	1675.9	1688.7	1700.3	1726.1	1742.0
65°	1833.0	1841.3	1850.3	1841.0	1840.7	1829.7	1822.7	1822.4	1829.4	1835.0	1852.6
67°	1884.7	1893.0	1895.3	1888.5	1878.7	1864.6	1851.6	1844.8	1840.2	1842.8	1853.8
67.5°	1884.2	1892.0	1894.8	1888.3	1874.7	1862.9	1849.0	1841.3	1835.2	1836.5	1845.8
70°	1777.2	1794.0	1803.0	1805.1	1803.3	1782.7	1770.9	1763.8	1758.8	1746.5	1745.7
72.5°	1505.7	1526.1	1533.1	1544.4	1549.5	1519.0	1506.2	1514.0	1496.4	1457.5	1459.2
75°	1105.6	1107.1	1083.5	1079.0	1062.1	993.3	972.7	953.8	923.6	876.6	832.4
77.5°	576.3	576.1	548.9	535.1	515.0	473.5	471.5	437.8	414.2	371.2	355.6
80°	409.4	416.0	425.0	429.5	422.5	406.4	384.3	360.4	333.0	306.1	274.0
82.5°	380.8	384.8	389.6	372.0	362.2	339.5	322.7	288.0	268.7	238.0	205.6
85°	185.2	197.5	188.0	176.9	173.2	135.5	130.9	109.3	99.3	81.7	76.2
87.5°	11.8	14.6	13.1	11.8	10.3	5.8	7.8	5.5	5.8	4.3	3.8
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: P151334

CATALOG NUMBER: TMU-F01-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (continued):

	76°	77°	78°	79°	80°	81°	82°	83°	84°	85°	86°
0°	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1
2.5°	253.6	253.3	253.1	252.8	252.6	252.6	252.3	252.1	251.8	251.3	251.3
5°	258.4	258.4	258.1	257.6	257.6	257.1	256.4	256.1	256.1	255.6	255.1
7.5°	266.2	265.9	265.4	265.2	264.7	264.1	263.6	263.1	262.9	262.1	261.9
10°	278.0	277.5	276.2	275.7	275.5	275.0	274.5	274.0	273.2	272.7	272.4
12.5°	291.3	291.0	290.0	290.5	289.3	288.8	288.3	287.0	287.5	286.5	286.0
15°	304.6	304.9	304.4	304.4	303.4	302.6	302.1	301.1	300.8	300.3	299.8
17.5°	316.4	316.9	316.2	315.7	315.2	314.7	313.7	312.7	312.7	311.7	311.1
20°	327.2	327.7	327.5	327.0	326.2	326.0	325.5	324.7	324.7	324.2	323.5
22.5°	339.5	339.8	339.8	339.5	338.8	339.0	338.5	337.8	338.0	337.0	337.0
25°	354.4	354.9	355.4	355.6	355.1	355.4	354.9	354.4	354.1	354.4	354.1
27.5°	374.7	375.2	376.7	375.5	376.7	377.0	376.2	375.2	376.0	377.2	376.5
30°	401.6	401.1	403.1	403.4	403.1	403.4	402.9	402.1	402.6	404.9	403.6
32.5°	431.8	432.8	433.3	433.8	434.6	435.6	434.8	434.0	435.3	434.6	436.3
35°	468.2	470.5	471.2	470.5	471.0	472.8	472.5	472.8	475.3	472.8	476.0
37.5°	514.2	516.5	518.2	517.2	518.5	518.5	520.5	526.0	522.5	527.0	530.6
40°	581.1	584.6	584.8	584.6	585.9	587.4	589.4	595.4	591.4	596.2	599.4
42.5°	649.9	654.2	655.7	653.2	656.0	659.2	659.5	664.8	665.0	665.8	667.5
45°	727.6	731.4	734.4	733.1	733.4	737.7	736.7	741.7	737.9	737.9	738.9
47.5°	810.3	813.8	815.8	817.8	815.3	819.1	820.8	819.8	815.3	814.3	808.3
50°	885.7	888.7	891.7	897.3	897.0	898.8	900.0	895.5	894.5	889.0	882.2
52.5°	965.6	973.4	980.2	991.8	993.5	999.5	997.3	989.7	988.5	979.4	970.4
55°	1077.0	1099.3	1109.1	1127.0	1139.0	1138.8	1133.8	1132.5	1122.9	1104.9	1094.0
57.5°	1270.7	1305.7	1322.5	1345.6	1349.4	1347.1	1340.6	1329.0	1312.5	1282.0	1262.4
60°	1550.5	1572.1	1591.7	1597.2	1600.0	1595.7	1572.8	1547.2	1514.8	1472.8	1437.9
62.5°	1761.8	1783.9	1798.5	1796.3	1778.9	1757.1	1723.6	1680.7	1635.2	1588.2	1535.9
65°	1869.4	1878.7	1876.4	1858.8	1829.2	1791.0	1742.2	1689.2	1635.7	1580.1	1525.8
67°	1863.6	1863.9	1848.5	1814.4	1776.4	1728.4	1668.8	1611.0	1548.2	1489.9	1425.3
67.5°	1853.3	1852.3	1830.9	1793.5	1752.5	1703.0	1641.2	1581.4	1516.3	1457.5	1390.6
70°	1736.7	1722.6	1674.4	1614.6	1557.5	1490.6	1425.8	1357.2	1283.8	1233.3	1156.4
72.5°	1427.1	1379.6	1296.4	1233.8	1172.7	1085.2	1044.8	959.6	908.1	875.9	817.8
75°	826.4	786.7	722.3	663.8	634.1	582.3	557.7	495.1	482.1	481.6	461.4
77.5°	315.4	275.2	233.7	188.2	160.1	127.2	112.1	100.3	91.2	97.5	88.5
80°	236.5	194.5	152.1	110.6	78.9	58.3	50.0	46.2	44.0	42.2	41.0
82.5°	176.2	139.0	107.8	70.4	49.3	37.2	32.2	30.2	29.2	27.4	25.9
85°	59.6	47.8	37.7	26.1	20.6	16.8	15.6	15.1	14.3	13.1	12.3
87.5°	3.3	3.0	3.3	2.5	3.0	2.5	2.8	2.8	2.8	2.5	2.5
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: P151334

CATALOG NUMBER: TMU-F01-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (continued):

	87°	88°	89°	90°	95°	105°	115°	125°	135°	145°	155°
0°	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1	250.1
2.5°	251.1	251.1	251.1	250.6	249.8	248.3	246.8	245.6	244.3	243.5	243.0
5°	254.8	254.3	254.1	253.8	252.1	249.1	246.3	243.8	241.3	239.3	238.5
7.5°	261.6	260.6	260.4	259.6	257.4	252.8	248.8	244.8	241.3	238.5	237.3
10°	271.9	271.9	270.4	269.4	266.9	260.9	255.1	249.8	245.0	242.0	241.3
12.5°	285.0	285.0	283.8	283.0	280.0	272.2	265.2	258.9	254.3	251.3	251.1
15°	298.6	298.3	297.3	296.3	293.1	284.8	277.7	272.2	268.4	264.9	263.9
17.5°	310.6	310.6	309.4	308.4	305.1	298.1	291.8	287.8	283.5	276.2	270.7
20°	322.7	323.0	322.0	320.9	318.2	312.2	309.4	305.4	295.8	280.0	266.9
22.5°	336.0	337.0	335.8	334.8	332.5	330.0	329.0	319.4	299.3	274.0	254.8
25°	353.1	354.9	353.4	352.9	351.6	352.4	349.4	327.2	294.3	260.9	237.0
27.5°	376.5	376.5	376.7	376.7	376.2	379.0	367.9	327.5	283.3	244.0	215.6
30°	403.9	405.4	404.9	404.9	406.9	408.7	378.3	322.0	269.2	223.2	189.5
32.5°	436.8	438.1	438.6	436.3	444.4	435.3	382.0	311.9	251.8	197.3	158.3
35°	476.5	478.3	479.5	479.8	485.1	458.4	380.0	297.1	227.0	164.9	124.2
37.5°	528.3	531.8	534.6	535.8	536.1	478.0	374.5	277.5	194.5	128.7	92.5
40°	597.2	600.9	600.2	602.7	588.4	489.6	361.9	249.1	154.3	94.5	71.4
42.5°	663.5	664.0	665.0	662.8	633.6	495.6	344.3	214.4	115.6	70.6	61.1
45°	737.7	733.4	728.6	725.1	675.3	497.9	320.2	172.2	81.7	59.3	56.5
47.5°	807.3	801.5	791.7	781.6	712.5	494.4	289.3	128.9	62.1	54.3	53.5
50°	875.6	864.8	851.0	839.4	748.2	489.1	255.1	93.0	54.3	51.8	51.0
52.5°	960.3	942.2	924.1	909.1	794.7	480.8	219.2	70.6	51.0	49.8	48.8
55°	1076.5	1051.3	1022.2	1001.1	857.8	468.2	181.5	59.8	49.5	48.5	47.0
57.5°	1237.3	1199.6	1166.7	1132.2	944.0	455.4	149.0	55.5	49.3	47.8	45.7
60°	1401.7	1356.4	1314.5	1265.2	1032.0	442.6	126.4	55.0	50.0	47.8	44.7
62.5°	1487.1	1440.4	1389.9	1339.8	1069.9	412.4	110.8	55.8	51.8	48.5	44.7
65°	1467.5	1410.5	1359.2	1308.2	1025.9	355.4	93.7	56.8	55.3	51.5	45.5
67°	1369.0	1309.4	1260.2	1211.4	927.9	297.6	80.4	57.8	59.1	55.0	47.0
67.5°	1334.3	1274.8	1226.2	1178.7	899.0	285.5	77.2	58.3	59.8	56.0	47.5
70°	1106.4	1062.6	1011.1	974.4	727.9	211.4	63.3	59.3	64.3	61.8	49.8
72.5°	796.2	754.5	715.8	695.4	536.1	147.8	53.3	58.3	67.1	65.1	50.8
75°	423.2	420.7	406.7	416.7	331.8	96.5	47.0	54.5	64.1	59.6	47.3
77.5°	85.5	88.0	103.3	101.8	107.1	53.8	40.2	46.7	49.5	43.7	38.5
80°	39.7	39.0	38.2	38.7	38.0	34.4	32.7	36.7	34.4	28.1	25.6
82.5°	24.6	24.1	23.4	23.1	25.6	27.4	28.7	28.9	22.9	19.6	18.8
85°	11.8	11.8	11.6	12.1	15.1	22.4	24.1	21.4	15.3	14.1	13.3
87.5°	2.3	2.3	2.5	2.3	3.0	5.3	6.0	7.0	5.8	6.0	6.8
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: P151334

CATALOG NUMBER: TMU-F01-LED-E-U-SL3-7030

CANDELA DISTRIBUTION (continued):

	165°	175°	180°
0°	250.1	250.1	250.1
2.5°	242.5	242.0	242.0
5°	237.5	237.3	237.3
7.5°	236.3	236.5	236.3
10°	241.0	240.8	241.8
12.5°	251.6	252.3	252.1
15°	262.6	263.1	263.1
17.5°	265.9	264.1	263.9
20°	257.4	254.1	253.3
22.5°	241.3	235.2	235.5
25°	220.9	213.6	214.1
27.5°	197.3	189.5	189.3
30°	168.9	160.3	156.1
32.5°	134.7	124.4	124.4
35°	101.3	93.0	90.0
37.5°	76.9	72.1	70.6
40°	64.1	61.8	61.3
42.5°	58.3	57.6	57.3
45°	55.3	54.8	54.5
47.5°	52.5	52.3	52.0
50°	50.5	50.3	50.0
52.5°	48.8	48.3	48.0
55°	46.2	46.2	46.2
57.5°	44.7	44.7	44.5
60°	43.2	43.0	43.0
62.5°	42.0	41.5	41.7
65°	41.2	40.5	40.5
67°	40.7	39.2	39.2
67.5°	40.7	38.7	38.7
70°	40.0	36.7	36.2
72.5°	39.2	34.4	33.7
75°	37.2	32.7	31.9
77.5°	31.9	29.2	28.7
80°	24.6	21.4	21.9
82.5°	17.8	15.3	15.1
85°	12.8	11.1	11.1
87.5°	6.8	5.8	6.0
90°	0.0	0.0	0.0

(END OF REPORT)