

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: P198606

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198606
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24459)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV-AF-01-LED-U-T2R-7030
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 3000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5610 lumens
Efficiency: N/A
Efficacy: 96.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

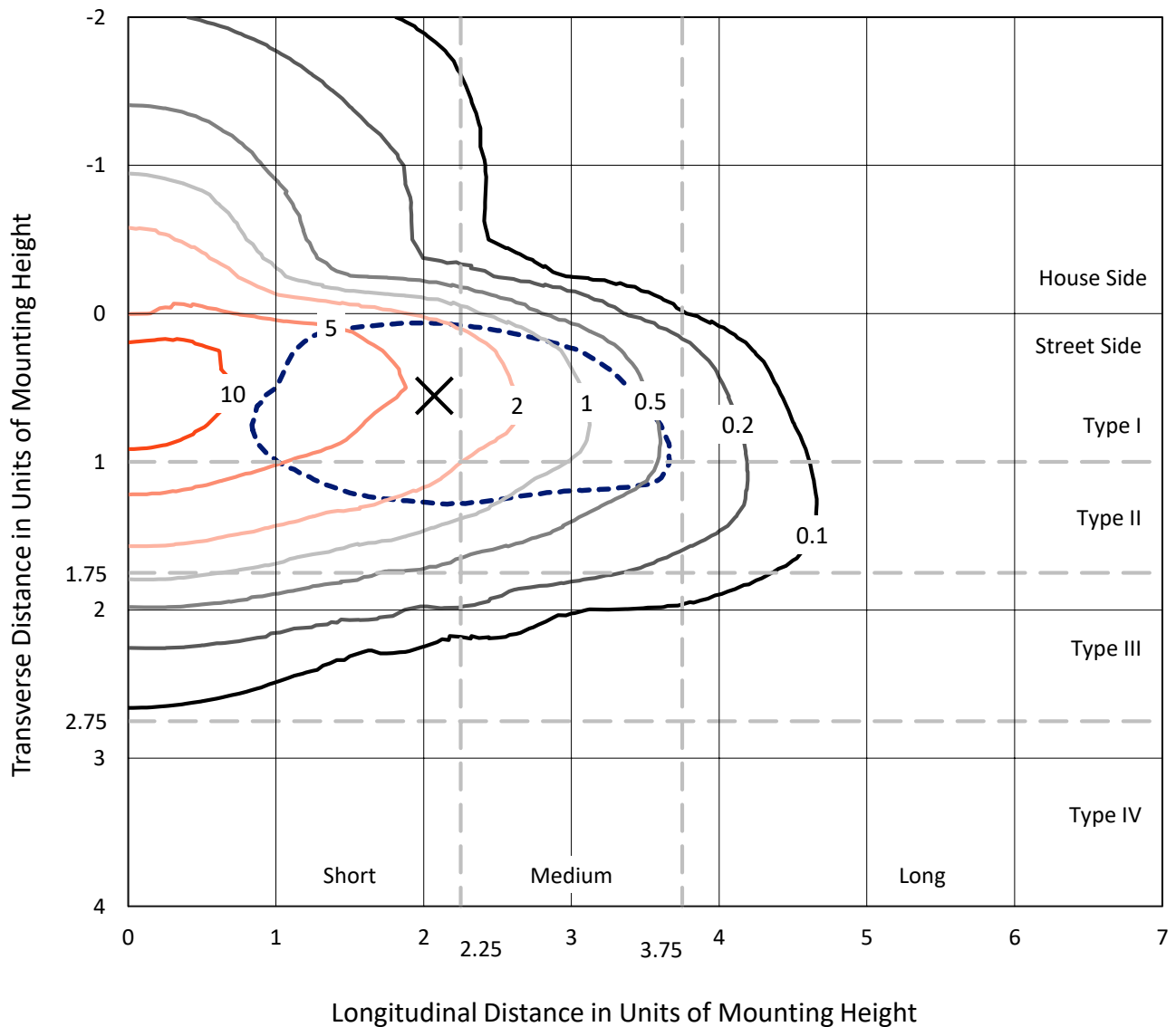
Input Watts (W): 58
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P198606
 CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7030

Iso-Footcandle Lines of Horizontal Illumination

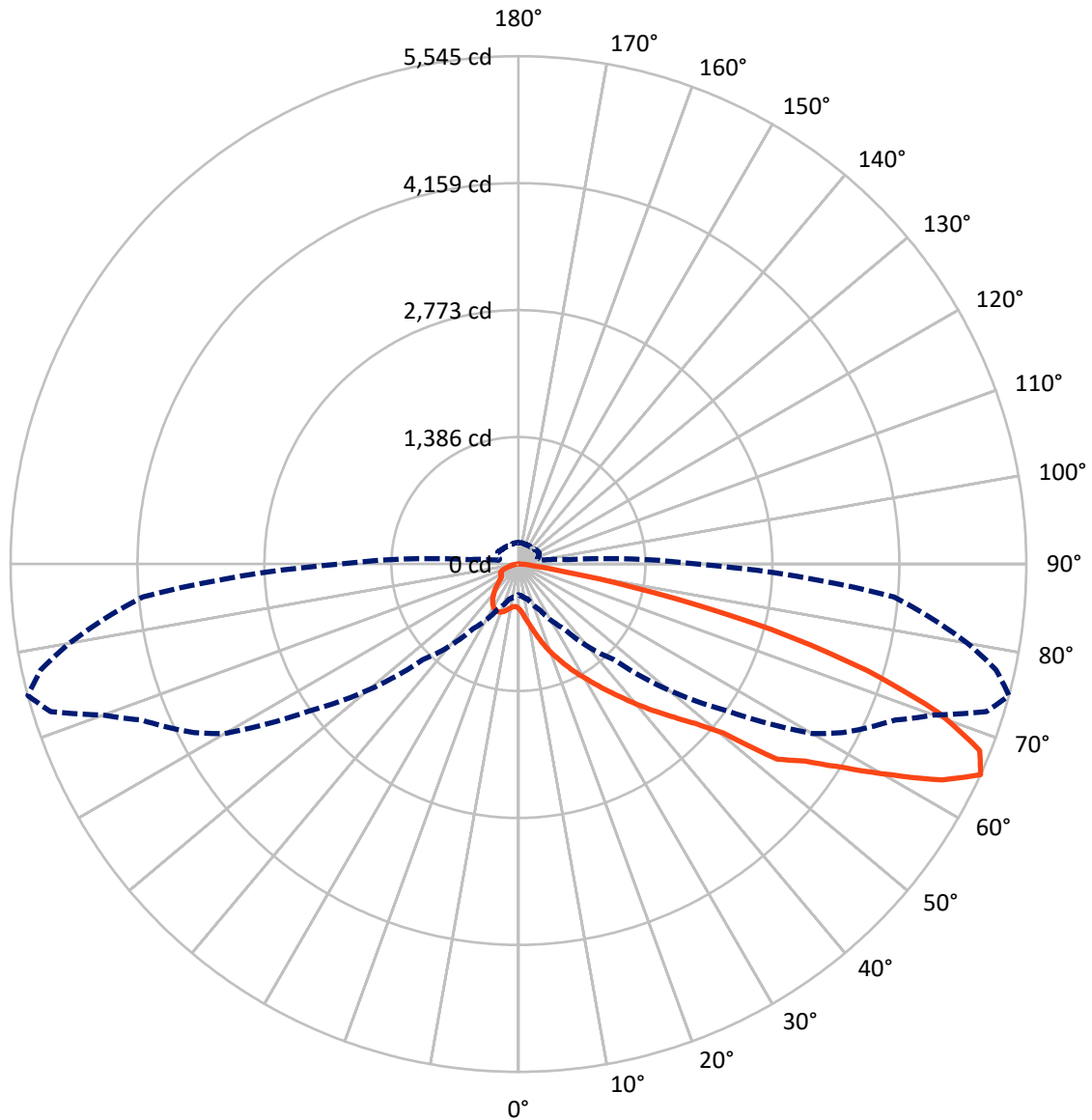
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.9 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P198606
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7030

Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

REPORT NUMBER: P198606

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7030

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	843.0	0.0	843.0
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	4767.0	0.0	4767.0
	% Fixture	85.0	0.0	85.0
Total	Lumens	5610.0	0.0	5610.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.4	1.0
10°-20°	219.2	3.9
20°-30°	442.3	7.9
30°-40°	751.2	13.4
40°-50°	1047.7	18.7
50°-60°	1284.1	22.9
60°-70°	1208.2	21.5
70°-80°	529.8	9.4
80°-90°	70.1	1.2
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°	5610.0	100.0
0°-180°	5610.0	100.0

Coefficient of Utilization



REPORT NUMBER: P198606

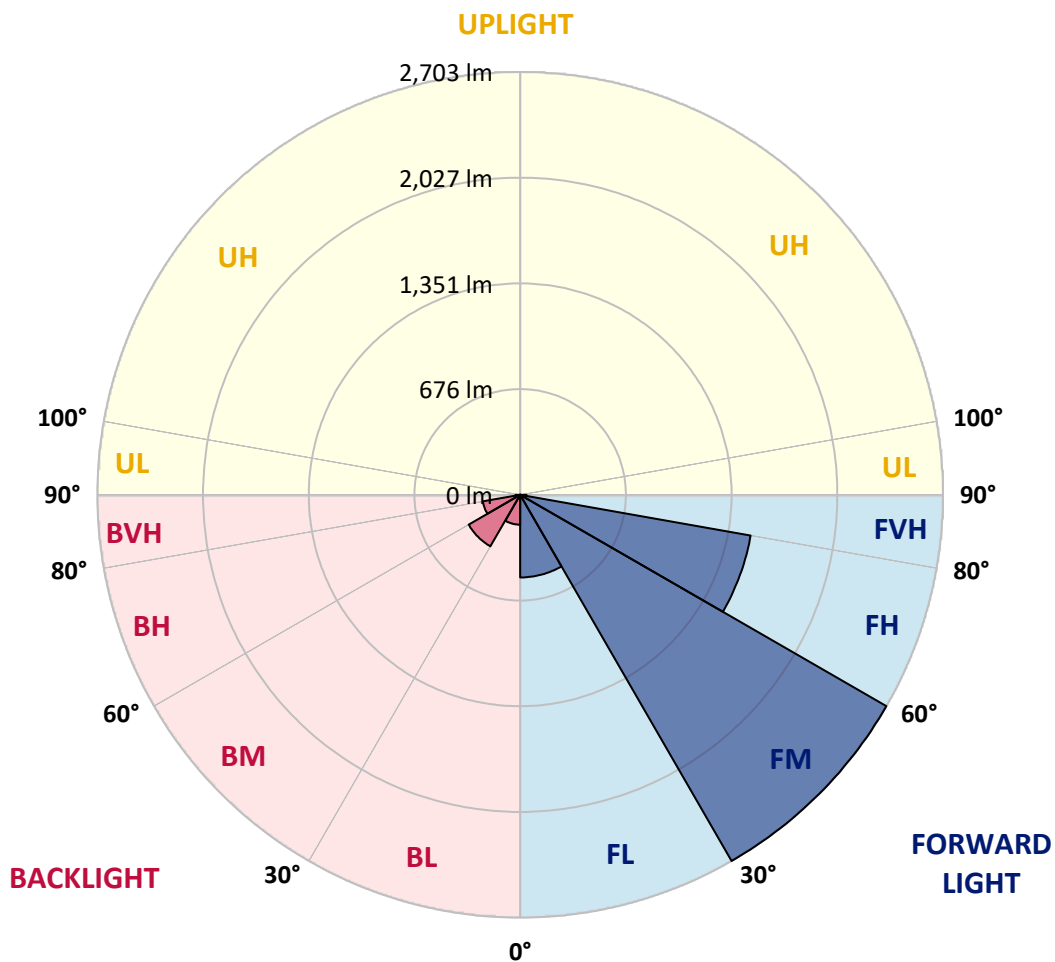
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	528.1	9.4			
FM	(30°-60°)	2702.6	48.2			
FH	(60°-80°)	1495.7	26.7			G1/1800
FVH	(80°-90°)	40.6	0.7			G1/100
BL	(0°-30°)	190.8	3.4	B1/500		
BM	(30°-60°)	380.4	6.8	B1/1000		
BH	(60°-80°)	242.3	4.3	B1/500		G1/500
BVH	(80°-90°)	29.5	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





REPORT NUMBER: P198606

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7030

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1
2.5°	612.1	604.9	605.6	595.6	581.0	564.9	551.7	544.6	538.5	536.7	526.8
5°	800.5	791.6	788.4	765.5	731.2	690.6	650.2	634.5	621.7	613.8	594.6
7.5°	954.7	950.0	945.7	924.7	890.8	838.7	773.7	750.5	729.1	705.6	682.4
10°	1059.6	1057.8	1056.0	1041.4	1013.2	967.9	897.9	872.6	845.8	815.8	785.5
12.5°	1138.8	1138.8	1140.2	1128.1	1111.0	1076.0	1012.5	988.9	961.8	930.4	895.8
15°	1192.0	1193.4	1200.9	1204.5	1195.6	1173.1	1117.4	1096.7	1071.0	1040.0	1005.7
17.5°	1227.3	1230.2	1241.2	1253.0	1264.4	1256.6	1215.2	1195.9	1172.7	1144.2	1112.0
20°	1309.4	1305.8	1306.2	1302.6	1319.4	1325.5	1302.6	1286.6	1268.0	1241.9	1212.7
22.5°	1481.8	1475.0	1457.5	1412.9	1392.6	1390.4	1376.8	1368.3	1354.0	1337.6	1308.3
25°	1706.6	1698.8	1664.1	1590.6	1529.9	1473.9	1448.9	1443.6	1434.3	1423.2	1402.2
27.5°	1938.9	1930.4	1885.8	1793.0	1713.7	1600.6	1522.8	1515.7	1507.1	1502.5	1492.5
30°	2143.4	2134.1	2090.3	1996.0	1900.4	1765.5	1622.4	1597.4	1582.8	1584.2	1578.5
32.5°	2322.9	2314.7	2265.5	2169.5	2072.4	1941.4	1751.6	1712.7	1679.8	1667.7	1672.0
35°	2473.5	2466.0	2412.2	2315.4	2217.7	2108.8	1917.9	1859.4	1805.8	1772.3	1768.3
37.5°	2562.1	2557.8	2519.9	2437.9	2340.8	2260.8	2104.2	2039.2	1960.3	1911.5	1890.0
40°	2557.1	2561.7	2555.3	2518.2	2442.9	2384.7	2298.3	2234.1	2157.0	2084.2	2040.6
42.5°	2484.2	2490.7	2519.6	2538.9	2518.5	2483.2	2467.8	2420.0	2350.8	2273.7	2213.4
45°	2384.3	2390.0	2427.5	2497.1	2555.3	2565.3	2616.3	2592.4	2533.9	2468.2	2401.8
47.5°	2231.2	2242.3	2285.8	2396.5	2534.9	2631.3	2740.8	2751.9	2718.0	2663.8	2601.7
50°	2009.6	2024.2	2085.3	2242.6	2457.8	2699.1	2926.1	2968.2	2954.6	2899.7	2836.8
52.5°	1782.6	1797.3	1878.6	2046.0	2333.6	2726.9	3108.4	3216.2	3294.0	3350.8	3361.8
55°	1546.4	1562.8	1652.0	1844.7	2168.1	2691.6	3238.7	3361.1	3440.0	3499.2	3523.1
57.5°	1279.8	1298.3	1384.7	1579.6	1933.9	2549.6	3383.6	3557.0	3674.4	3765.8	3817.2
60°	973.9	997.1	1086.7	1283.0	1626.3	2277.6	3448.2	3704.8	3891.4	4028.5	4109.8
62.5°	617.4	641.0	734.1	937.9	1276.2	1906.1	3265.5	3639.8	3958.2	4160.9	4310.1
65°	336.9	347.2	399.0	552.5	860.4	1478.9	2802.2	3243.7	3702.3	3989.6	4218.7
67.5°	252.7	254.1	259.5	296.9	458.2	998.6	2190.9	2595.2	3104.5	3474.2	3748.0
70°	221.3	221.3	222.0	222.3	248.7	541.0	1484.3	1856.5	2323.3	2697.3	3037.4
72.5°	198.4	196.3	195.6	191.3	194.9	277.3	808.0	1142.4	1536.0	1955.7	2273.0
75°	171.3	170.9	170.9	166.7	168.8	195.2	350.5	548.2	853.3	1244.1	1556.4
77.5°	148.1	145.6	146.0	143.5	150.2	149.5	166.3	225.9	371.5	653.4	912.5
80°	122.1	120.3	121.3	119.9	130.6	110.6	112.1	138.1	184.5	286.6	404.0
82.5°	90.3	91.0	97.8	97.1	109.9	74.6	82.1	103.1	124.2	142.8	155.2
85°	52.8	53.9	70.3	73.9	80.7	39.3	50.3	61.4	69.2	76.7	79.9
87.5°	5.7	7.5	39.3	40.3	36.0	11.8	20.3	25.7	27.5	29.3	25.7
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: P198606

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7030

CANDELA DISTRIBUTION (continued):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1
2.5°	523.5	518.9	513.9	511.1	506.1	501.8	493.9	487.5	480.4	475.4	473.2
5°	584.9	573.9	562.1	553.5	542.8	533.5	515.7	494.3	487.5	473.2	469.7
7.5°	664.9	644.9	624.9	608.5	589.9	574.6	544.6	506.1	501.1	478.2	473.2
10°	758.7	729.5	699.8	674.5	647.4	623.8	579.6	525.3	520.0	490.7	485.7
12.5°	863.7	828.0	789.8	751.9	719.8	686.6	626.3	555.3	546.7	512.1	505.3
15°	971.8	933.2	889.0	843.3	803.7	759.8	683.8	594.6	578.9	538.2	528.9
17.5°	1078.5	1036.7	990.3	939.3	892.9	840.5	745.9	638.5	611.3	563.9	552.1
20°	1181.6	1139.2	1090.3	1040.3	982.5	922.5	809.4	681.6	640.2	585.3	569.9
22.5°	1275.5	1239.1	1190.2	1132.7	1074.2	1006.8	874.0	724.8	665.6	601.7	582.1
25°	1374.3	1341.2	1292.6	1237.3	1169.1	1094.2	940.7	765.9	685.9	610.6	586.4
27.5°	1474.3	1445.7	1400.0	1341.9	1268.7	1185.6	1008.5	803.7	702.3	613.5	584.2
30°	1581.0	1558.9	1516.7	1451.8	1377.9	1285.8	1082.4	840.8	712.7	609.6	574.6
32.5°	1682.0	1681.3	1643.8	1576.3	1496.8	1395.4	1160.2	878.3	718.0	598.5	557.8
35°	1786.9	1801.5	1773.3	1709.1	1625.2	1512.8	1246.2	918.3	718.4	578.9	536.0
37.5°	1906.1	1932.2	1919.7	1858.6	1770.5	1646.6	1347.2	963.2	716.3	551.7	504.3
40°	2041.7	2077.4	2077.0	2025.7	1931.4	1796.5	1464.6	1013.5	711.3	517.8	466.8
42.5°	2197.0	2239.4	2251.2	2200.5	2105.2	1960.3	1599.2	1068.9	703.4	484.3	427.2
45°	2374.7	2412.2	2434.3	2387.2	2291.5	2138.8	1753.7	1131.7	693.8	441.1	381.9
47.5°	2564.9	2608.4	2641.6	2601.3	2499.2	2342.2	1936.8	1212.7	690.2	391.9	333.0
50°	2800.8	2845.8	2917.5	2899.3	2843.3	2716.9	2324.0	1404.0	691.6	345.1	291.9
52.5°	3386.1	3489.2	3579.9	3539.5	3406.4	3189.8	2638.8	1510.3	661.7	306.9	263.4
55°	3562.7	3679.8	3813.6	3796.9	3669.1	3450.7	2887.5	1599.2	632.8	279.1	244.8
57.5°	3871.8	4009.9	4196.9	4193.4	4036.7	3790.8	3207.6	1705.5	620.3	263.0	235.5
60°	4199.1	4375.0	4633.4	4673.7	4503.5	4247.6	3585.9	1836.2	622.0	254.1	230.2
62.5°	4438.2	4696.2	5072.0	5192.6	4992.1	4710.1	3978.5	1966.8	611.3	243.7	223.8
65°	4452.8	4824.3	5357.5	5545.2	5342.2	4979.9	4117.0	1941.1	547.1	229.8	213.4
67.5°	4095.9	4579.9	5227.6	5433.5	5225.8	4813.6	3874.3	1697.0	444.7	205.6	195.6
70°	3411.4	3973.2	4645.5	4875.0	4703.3	4286.1	3371.8	1355.4	332.3	173.4	168.8
72.5°	2636.3	3160.2	3770.8	3983.2	3851.8	3484.9	2659.5	987.8	237.3	140.6	137.0
75°	1884.7	2330.8	2774.0	2855.0	2725.5	2388.6	1725.5	617.0	166.3	115.3	110.3
77.5°	1167.0	1457.1	1616.3	1512.1	1346.9	1119.5	702.3	304.8	110.6	93.9	88.9
80°	517.8	607.8	567.4	505.7	399.4	328.3	214.5	135.3	71.4	72.4	69.6
82.5°	174.2	184.2	179.2	178.1	160.6	140.6	91.0	58.5	40.0	46.4	45.3
85°	84.9	88.9	89.2	92.4	80.3	62.5	24.6	23.2	17.1	25.0	26.1
87.5°	25.7	26.1	23.6	25.7	20.7	14.3	4.6	6.4	3.2	6.1	6.1
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: P198606

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7030

CANDELA DISTRIBUTION (continued):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1	486.1
2.5°	469.3	467.9	465.4	462.5	461.8	458.2	457.2	455.4	454.3	452.5	451.1
5°	465.0	462.5	459.7	456.5	456.5	451.5	449.3	447.2	447.2	444.0	442.5
7.5°	469.3	466.1	462.9	460.0	461.1	455.4	453.2	451.1	450.7	447.5	446.1
10°	481.4	478.2	474.3	471.4	470.4	465.7	463.2	460.0	457.9	455.7	453.6
12.5°	500.0	495.7	490.7	484.6	482.1	478.2	474.3	470.0	465.0	462.9	459.7
15°	522.1	515.0	508.2	500.7	493.9	490.0	484.6	477.9	471.1	468.2	463.9
17.5°	540.3	532.8	523.2	514.3	502.1	498.9	491.4	483.2	472.2	471.1	464.7
20°	555.7	544.2	532.5	521.8	503.2	501.4	492.1	482.5	466.8	466.8	458.9
22.5°	564.2	548.5	534.6	520.3	497.1	495.7	485.0	473.6	454.3	455.0	445.4
25°	565.7	546.7	529.3	512.1	485.4	482.9	469.3	456.8	435.8	434.3	424.3
27.5°	559.9	537.8	517.5	496.8	467.9	462.5	447.5	432.5	411.8	408.3	397.6
30°	546.7	520.7	497.8	473.9	443.6	435.0	419.3	404.0	382.9	378.3	368.3
32.5°	525.7	496.1	470.7	446.8	413.3	402.6	386.9	371.5	351.2	347.6	338.3
35°	497.8	464.7	437.9	412.6	379.0	367.9	353.0	339.4	320.8	319.4	313.0
37.5°	462.9	428.3	399.7	375.4	343.7	338.0	322.6	312.6	297.3	298.7	295.5
40°	423.3	387.9	360.8	339.4	311.9	306.9	297.6	290.1	276.9	280.9	281.2
42.5°	383.3	348.0	323.3	304.1	280.5	277.3	270.9	266.6	256.6	264.4	267.7
45°	338.0	305.1	284.1	269.4	252.0	252.0	248.7	248.4	241.6	252.7	255.9
47.5°	294.1	268.4	253.7	244.8	232.7	238.4	237.3	240.2	235.2	246.6	249.5
50°	260.9	243.0	234.1	229.8	221.3	230.2	232.3	236.3	232.0	242.0	244.1
52.5°	239.8	228.0	223.1	222.0	215.9	227.0	230.5	234.1	229.1	238.4	238.0
55°	228.0	220.2	218.4	220.6	215.9	226.6	230.2	232.7	228.4	234.8	234.5
57.5°	223.8	219.5	220.6	223.8	220.6	229.5	231.3	234.1	229.8	232.7	234.1
60°	223.4	223.4	227.7	232.0	229.8	236.3	237.3	237.0	233.0	233.4	234.1
62.5°	221.3	226.6	233.8	240.5	239.8	247.7	248.4	243.7	240.5	237.0	235.9
65°	214.5	223.4	233.8	243.0	244.5	256.6	258.0	253.4	251.2	245.2	240.5
67.5°	199.5	210.9	223.1	234.5	237.0	253.4	256.6	258.4	259.5	255.5	249.5
70°	174.2	185.9	198.4	211.6	215.2	233.4	240.2	248.4	254.8	260.5	258.4
72.5°	141.7	152.4	163.1	175.2	180.6	199.5	208.4	222.7	232.7	247.3	253.4
75°	112.4	118.8	125.3	132.8	137.0	155.6	166.7	183.8	197.4	217.7	231.3
77.5°	88.5	91.7	94.9	98.1	99.9	110.3	119.2	136.3	152.0	177.7	197.7
80°	68.2	69.9	70.3	71.4	70.7	75.7	78.9	89.2	102.8	128.1	151.7
82.5°	43.9	45.3	46.0	47.8	44.3	50.7	52.8	53.9	61.0	79.6	96.4
85°	24.6	25.0	25.3	26.1	21.1	27.5	27.8	26.1	25.3	32.8	37.1
87.5°	6.1	5.7	6.1	6.1	2.5	5.7	5.7	3.9	2.9	5.4	4.3
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: P198606

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7030

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	486.1	486.1	486.1	486.1	486.1	486.1
2.5°	447.9	447.2	447.5	445.7	445.0	445.4
5°	440.7	439.3	439.3	438.3	436.8	436.8
7.5°	444.0	441.1	440.0	437.9	435.8	436.1
10°	449.0	444.0	440.4	437.2	434.7	434.7
12.5°	452.2	443.2	437.9	433.6	430.8	430.8
15°	452.9	439.3	431.5	426.8	424.0	424.0
17.5°	448.6	431.5	421.5	415.4	412.2	412.9
20°	437.9	416.8	405.1	398.6	395.4	395.8
22.5°	421.1	396.9	383.3	375.8	372.6	372.6
25°	398.3	371.9	357.2	351.2	348.3	348.3
27.5°	372.2	345.1	332.3	327.6	325.8	325.8
30°	343.0	320.5	311.2	308.0	305.1	305.1
32.5°	318.3	302.3	299.1	294.8	287.3	286.9
35°	298.7	296.9	294.4	281.6	270.9	269.4
37.5°	288.0	298.7	283.0	260.9	252.3	252.0
40°	282.3	292.3	265.2	254.5	253.4	253.4
42.5°	268.7	275.9	264.1	258.0	258.0	258.4
45°	254.5	260.5	266.6	261.2	263.0	263.4
47.5°	244.5	256.6	266.6	262.0	265.5	267.7
50°	235.2	253.0	261.2	261.2	265.2	265.5
52.5°	233.0	248.0	256.2	260.2	260.5	258.7
55°	233.4	244.1	252.3	257.3	255.2	255.2
57.5°	233.0	242.0	249.1	250.9	252.0	252.0
60°	233.4	239.1	244.8	244.1	247.7	247.7
62.5°	234.5	235.2	238.0	237.3	242.7	242.7
65°	237.0	230.2	228.4	229.1	235.5	235.2
67.5°	241.6	223.4	217.7	218.1	227.3	225.9
70°	248.4	214.1	205.6	203.4	219.1	216.6
72.5°	250.5	203.4	189.9	187.7	197.0	189.9
75°	240.5	194.9	173.1	165.9	162.0	159.9
77.5°	214.5	189.5	155.6	140.6	134.5	133.1
80°	177.7	178.4	132.8	114.9	133.5	133.1
82.5°	134.2	154.2	106.4	99.6	96.7	80.7
85°	65.0	116.0	81.7	68.5	41.0	38.9
87.5°	5.7	48.5	47.1	30.7	13.9	13.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

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