

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: P198762

Luminaire Tested: **XNV-AF-01-LED-U-T2R-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198762
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-600
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 615mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4271.8 lumens
Efficiency: N/A
Efficacy: 125.6 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): 34
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

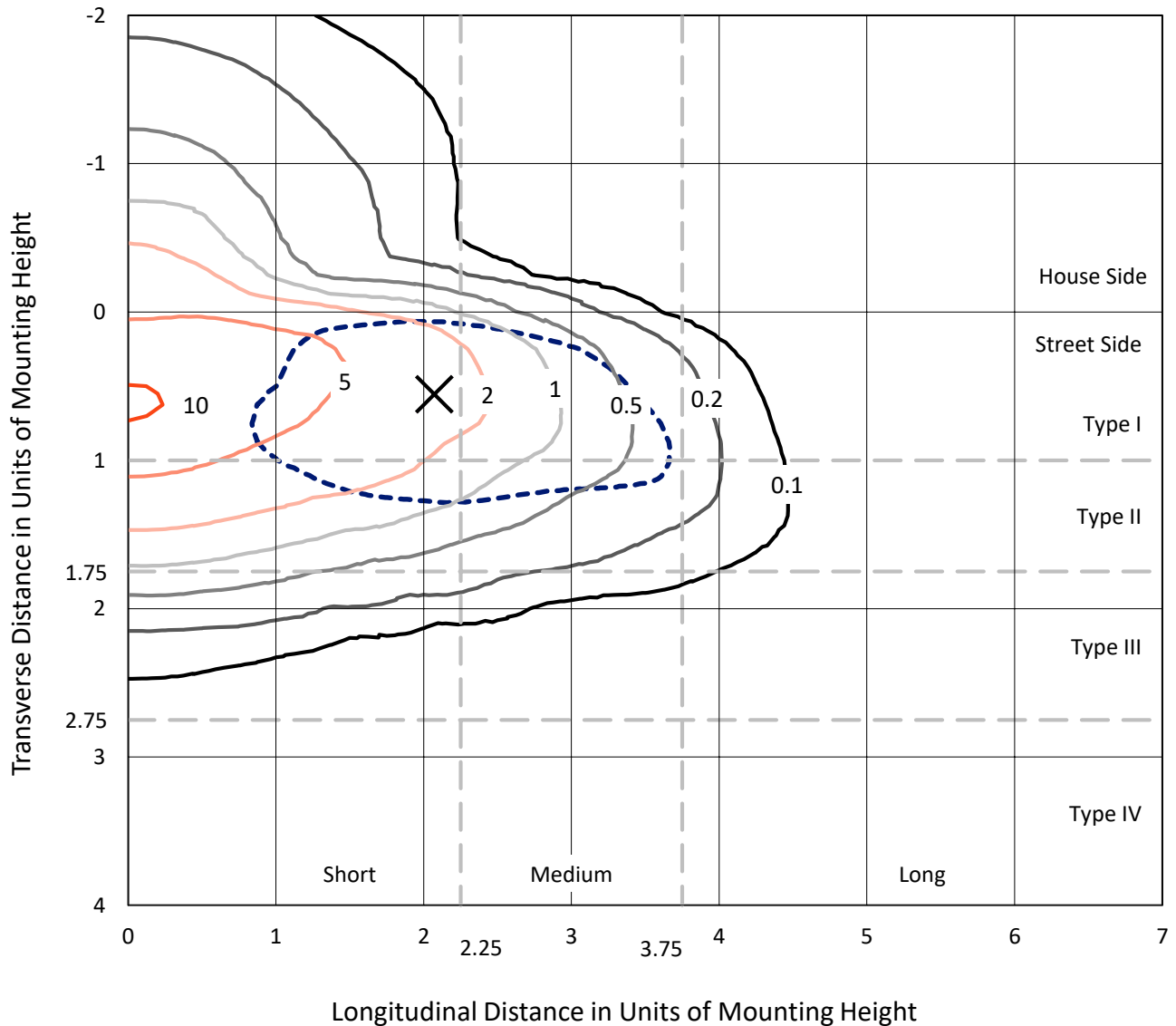


REPORT NUMBER: P198762

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-600

Iso-Footcandle Lines of Horizontal Illumination

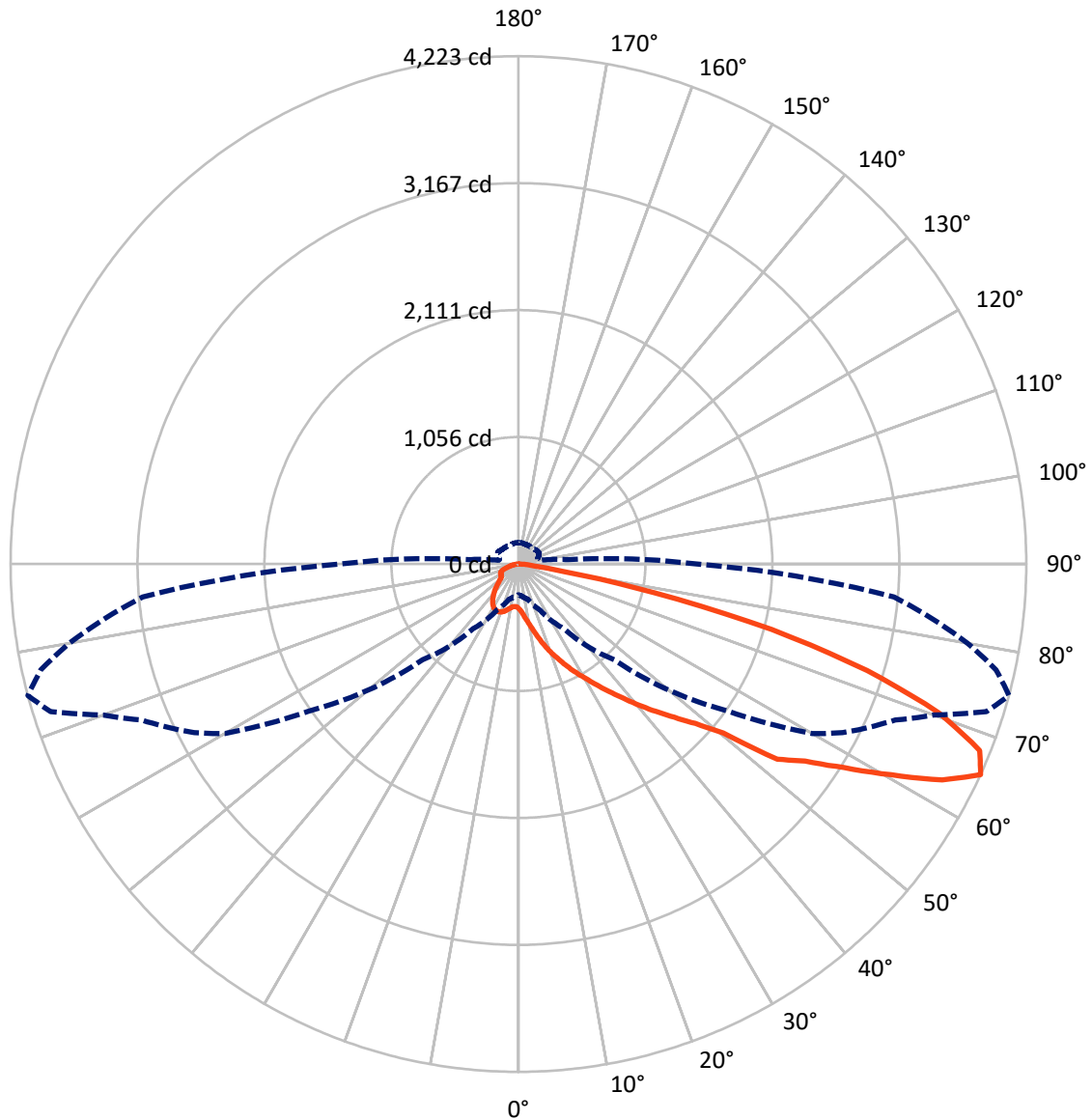
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.6 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P198762
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-600

Luminous Intensity Polar Plot



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

REPORT NUMBER: P198762

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-600

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	641.9	0.0	641.9
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	3629.9	0.0	3629.9
	% Fixture	85.0	0.0	85.0
Total	Lumens	4271.8	0.0	4271.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.7	1.0
10°-20°	166.9	3.9
20°-30°	336.8	7.9
30°-40°	572.0	13.4
40°-50°	797.8	18.7
50°-60°	977.8	22.9
60°-70°	920.0	21.5
70°-80°	403.4	9.4
80°-90°	53.4	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°	4271.8	100.0
0°-180°	4271.8	100.0

Coefficient of Utilization



REPORT NUMBER: P198762

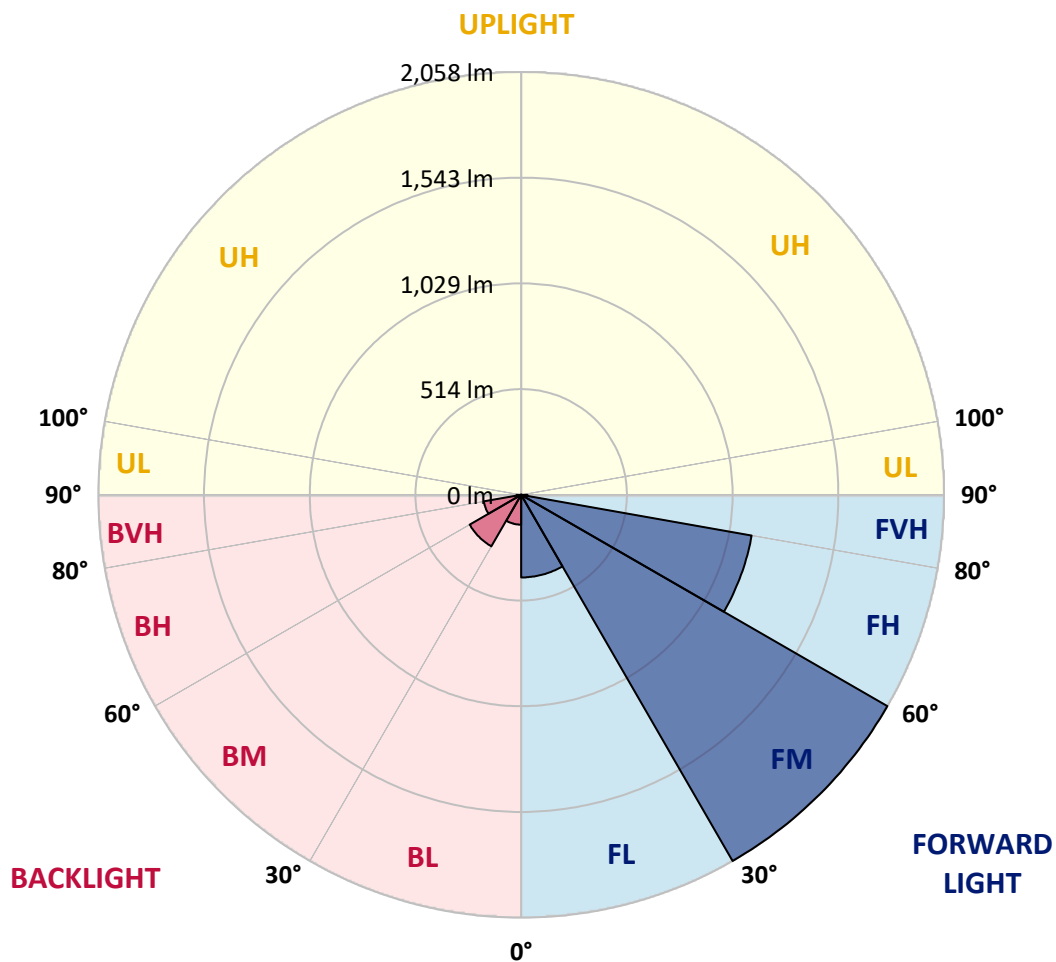
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	402.1	9.4			
FM (30°-60°)	2058.0	48.2			
FH (60°-80°)	1138.9	26.7			G1/1800
FVH (80°-90°)	30.9	0.7			G1/100
BL (0°-30°)	145.3	3.4	B1/500		
BM (30°-60°)	289.7	6.8	B1/1000		
BH (60°-80°)	184.5	4.3	B1/500		G1/500
BVH (80°-90°)	22.4	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: P198762

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-600

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1
2.5°	466.1	460.6	461.1	453.6	442.4	430.2	420.1	414.7	410.1	408.7	401.1
5°	609.6	602.7	600.3	582.9	556.8	525.8	495.1	483.1	473.4	467.4	452.8
7.5°	726.9	723.4	720.2	704.1	678.3	638.6	589.1	571.5	555.2	537.3	519.6
10°	806.8	805.5	804.1	793.0	771.5	737.0	683.7	664.4	644.0	621.2	598.1
12.5°	867.2	867.2	868.3	859.0	846.0	819.4	771.0	753.0	732.3	708.5	682.1
15°	907.7	908.8	914.4	917.2	910.4	893.2	850.9	835.1	815.5	791.9	765.8
17.5°	934.6	936.7	945.2	954.1	962.8	956.9	925.4	910.6	892.9	871.2	846.8
20°	997.1	994.3	994.6	991.9	1004.6	1009.3	991.9	979.7	965.6	945.7	923.4
22.5°	1128.3	1123.2	1109.8	1075.8	1060.4	1058.8	1048.4	1041.9	1031.0	1018.6	996.3
25°	1299.6	1293.5	1267.2	1211.2	1165.0	1122.4	1103.4	1099.3	1092.2	1083.7	1067.8
27.5°	1476.4	1469.9	1435.9	1365.3	1305.0	1218.8	1159.6	1154.1	1147.6	1144.1	1136.5
30°	1632.1	1625.1	1591.7	1519.9	1447.1	1344.4	1235.4	1216.4	1205.2	1206.4	1202.0
32.5°	1768.9	1762.6	1725.1	1652.0	1578.1	1478.4	1333.7	1304.2	1279.1	1269.9	1273.2
35°	1883.6	1877.8	1836.8	1763.2	1688.7	1605.8	1460.4	1415.9	1375.1	1349.6	1346.5
37.5°	1951.0	1947.7	1918.9	1856.3	1782.4	1721.5	1602.2	1552.8	1492.8	1455.6	1439.2
40°	1947.1	1950.7	1945.8	1917.5	1860.1	1815.8	1750.1	1701.2	1642.4	1587.0	1553.9
42.5°	1891.6	1896.6	1918.5	1933.3	1917.7	1890.8	1879.2	1842.7	1790.1	1731.3	1685.4
45°	1815.6	1819.9	1848.5	1901.5	1945.8	1953.3	1992.2	1974.0	1929.5	1879.5	1828.9
47.5°	1699.0	1707.4	1740.6	1824.8	1930.3	2003.7	2087.0	2095.5	2069.6	2028.4	1981.0
50°	1530.2	1541.4	1587.8	1707.7	1871.6	2055.3	2228.1	2260.2	2249.9	2208.0	2160.2
52.5°	1357.5	1368.5	1430.5	1558.0	1777.0	2076.5	2367.0	2449.0	2508.3	2551.5	2559.9
55°	1177.5	1190.0	1257.9	1404.7	1650.9	2049.6	2466.1	2559.4	2619.5	2664.6	2682.8
57.5°	974.5	988.7	1054.4	1202.8	1472.6	1941.5	2576.5	2708.6	2798.0	2867.5	2906.7
60°	741.6	759.2	827.5	976.9	1238.4	1734.3	2625.7	2821.1	2963.2	3067.5	3129.5
62.5°	470.1	488.0	559.0	714.1	971.8	1451.5	2486.6	2771.6	3014.0	3168.4	3281.9
65°	256.6	264.4	303.8	420.6	655.2	1126.2	2133.8	2470.0	2819.2	3038.0	3212.4
67.5°	192.4	193.4	197.5	226.1	348.9	760.4	1668.3	1976.2	2364.0	2645.6	2853.9
70°	168.5	168.5	169.0	169.3	189.5	411.9	1130.3	1413.6	1769.1	2053.9	2312.9
72.5°	151.1	149.5	148.9	145.7	148.3	211.1	615.2	869.9	1169.6	1489.2	1730.8
75°	130.4	130.1	130.1	126.9	128.6	148.6	266.9	417.4	649.8	947.4	1185.1
77.5°	112.7	110.9	111.2	109.3	114.4	113.9	126.6	172.1	282.8	497.6	694.9
80°	93.0	91.6	92.4	91.3	99.4	84.3	85.3	105.2	140.5	218.2	307.6
82.5°	68.7	69.3	74.5	74.0	83.7	56.8	62.5	78.6	94.5	108.7	118.3
85°	40.2	41.0	53.5	56.3	61.4	29.9	38.4	46.7	52.7	58.4	60.9
87.5°	4.4	5.7	29.9	30.7	27.4	9.0	15.4	19.5	21.0	22.3	19.5
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: P198762

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-600

CANDELA DISTRIBUTION (continued):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1
2.5°	398.6	395.2	391.3	389.1	385.3	382.1	376.1	371.2	365.8	362.0	360.4
5°	445.4	437.0	428.0	421.5	413.4	406.3	392.7	376.3	371.2	360.4	357.6
7.5°	506.3	491.0	475.9	463.3	449.2	437.5	414.7	385.3	381.6	364.2	360.4
10°	577.8	555.5	533.0	513.6	493.0	475.1	441.3	400.0	396.0	373.7	369.9
12.5°	657.7	630.4	601.4	572.5	548.1	522.8	476.9	422.9	416.3	389.9	384.8
15°	740.0	710.6	677.0	642.1	612.0	578.6	520.7	452.8	440.8	409.8	402.7
17.5°	821.2	789.4	754.1	715.2	680.0	640.0	567.9	486.2	465.5	429.3	420.4
20°	899.8	867.5	830.2	792.2	748.2	702.5	616.3	519.0	487.5	445.7	434.0
22.5°	971.3	943.6	906.3	862.6	818.0	766.6	665.5	551.9	506.9	458.2	443.2
25°	1046.5	1021.2	984.3	942.1	890.3	833.2	716.4	583.2	522.3	464.9	446.5
27.5°	1122.6	1100.9	1066.1	1021.8	966.1	902.8	767.9	612.0	534.8	467.2	444.9
30°	1203.9	1187.0	1154.9	1105.5	1049.2	979.2	824.2	640.3	542.7	464.1	437.5
32.5°	1280.7	1280.2	1251.7	1200.3	1139.8	1062.5	883.5	668.8	546.8	455.7	424.7
35°	1360.6	1371.8	1350.3	1301.4	1237.6	1151.9	949.0	699.2	547.1	440.8	408.2
37.5°	1451.5	1471.3	1461.8	1415.3	1348.1	1253.8	1025.9	733.5	545.4	420.1	384.0
40°	1554.7	1581.9	1581.6	1542.5	1470.7	1368.0	1115.3	771.8	541.7	394.3	355.5
42.5°	1672.9	1705.3	1714.3	1675.6	1603.1	1492.8	1217.7	813.9	535.6	368.8	325.3
45°	1808.3	1836.8	1853.6	1817.8	1744.9	1628.6	1335.4	861.7	528.3	335.9	290.8
47.5°	1953.1	1986.3	2011.5	1980.8	1903.1	1783.5	1474.8	923.4	525.6	298.4	253.6
50°	2132.8	2166.9	2221.5	2207.7	2165.1	2068.8	1769.7	1069.1	526.6	262.8	222.3
52.5°	2578.4	2656.9	2726.0	2695.3	2593.9	2428.9	2009.4	1150.1	503.8	233.7	200.6
55°	2713.0	2802.1	2904.0	2891.2	2793.9	2627.6	2198.7	1217.7	481.8	212.5	186.4
57.5°	2948.2	3053.4	3195.8	3193.1	3073.8	2886.6	2442.5	1298.7	472.3	200.3	179.3
60°	3197.4	3331.4	3528.2	3558.8	3429.2	3234.4	2730.6	1398.2	473.6	193.4	175.2
62.5°	3379.5	3576.0	3862.2	3954.0	3801.3	3586.6	3029.5	1497.6	465.5	185.6	170.4
65°	3390.7	3673.6	4079.5	4222.5	4067.9	3792.1	3134.9	1478.1	416.6	175.0	162.5
67.5°	3118.9	3487.4	3980.6	4137.4	3979.3	3665.4	2950.2	1292.2	338.6	156.5	148.9
70°	2597.7	3025.5	3537.5	3712.2	3581.5	3263.7	2567.5	1032.2	253.0	132.1	128.6
72.5°	2007.4	2406.4	2871.3	3033.0	2933.0	2653.6	2025.1	752.2	180.8	107.1	104.3
75°	1435.1	1774.8	2112.4	2174.1	2075.4	1818.8	1314.0	469.8	126.6	87.8	84.0
77.5°	888.6	1109.6	1230.8	1151.4	1025.6	852.5	534.8	232.1	84.3	71.5	67.6
80°	394.3	462.8	432.1	385.0	304.1	250.0	163.4	103.0	54.3	55.1	53.0
82.5°	132.6	140.2	136.5	135.6	122.2	107.1	69.3	44.6	30.5	35.3	34.5
85°	64.7	67.6	67.9	70.4	61.2	47.6	18.7	17.7	13.1	19.0	19.8
87.5°	19.5	19.8	17.9	19.5	15.8	10.8	3.6	4.9	2.5	4.6	4.6
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: P198762

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-600

CANDELA DISTRIBUTION (continued):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1	370.1
2.5°	357.3	356.3	354.4	352.2	351.7	348.9	348.1	346.8	346.0	344.6	343.5
5°	354.1	352.2	350.1	347.6	347.6	343.8	342.2	340.5	340.5	338.1	337.0
7.5°	357.3	354.9	352.5	350.3	351.1	346.8	345.1	343.5	343.2	340.7	339.7
10°	366.6	364.2	361.2	359.0	358.1	354.7	352.7	350.3	348.6	347.0	345.5
12.5°	380.7	377.5	373.7	369.1	367.1	364.2	361.2	357.9	354.1	352.5	350.1
15°	397.6	392.1	387.0	381.3	376.1	373.1	369.1	363.9	358.7	356.5	353.3
17.5°	411.4	405.7	398.4	391.6	382.4	379.9	374.2	368.0	359.6	358.7	353.8
20°	423.1	414.4	405.5	397.3	383.2	381.8	374.7	367.4	355.5	355.5	349.4
22.5°	429.6	417.7	407.1	396.2	378.6	377.5	369.3	360.6	346.0	346.5	339.1
25°	430.8	416.3	403.0	389.9	369.6	367.6	357.3	347.8	331.8	330.7	323.2
27.5°	426.4	409.5	394.0	378.3	356.3	352.2	340.7	329.4	313.6	310.9	302.7
30°	416.3	396.5	379.1	360.9	337.8	331.2	319.3	307.6	291.5	288.1	280.5
32.5°	400.3	377.8	358.4	340.2	314.7	306.6	294.6	282.8	267.4	264.6	257.6
35°	379.1	353.8	333.5	314.1	288.6	280.2	268.7	258.4	244.3	243.3	238.3
37.5°	352.5	326.1	304.3	285.9	261.7	257.4	245.7	238.0	226.4	227.5	225.0
40°	322.3	295.4	274.8	258.4	237.5	233.7	226.7	221.0	210.8	213.9	214.1
42.5°	291.8	264.9	246.2	231.5	213.6	211.1	206.2	203.0	195.4	201.4	203.8
45°	257.4	232.3	216.4	205.2	191.9	191.9	189.5	189.1	183.9	192.4	194.9
47.5°	223.9	204.4	193.2	186.4	177.2	181.6	180.8	182.9	179.1	187.8	190.0
50°	198.7	185.1	178.3	175.0	168.5	175.2	176.9	179.9	176.7	184.2	185.9
52.5°	182.6	173.7	169.8	169.0	164.4	172.9	175.5	178.3	174.5	181.6	181.3
55°	173.7	167.7	166.3	168.0	164.4	172.6	175.2	177.2	173.9	178.8	178.5
57.5°	170.4	167.2	168.0	170.4	168.0	174.7	176.0	178.3	175.0	177.2	178.3
60°	170.1	170.1	173.4	176.7	175.0	179.9	180.8	180.4	177.5	177.7	178.3
62.5°	168.5	172.6	178.0	183.2	182.6	188.6	189.1	185.6	183.2	180.4	179.6
65°	163.4	170.1	178.0	185.1	186.2	195.4	196.5	192.9	191.3	186.7	183.2
67.5°	151.9	160.6	169.8	178.5	180.4	192.9	195.4	196.7	197.5	194.6	190.0
70°	132.6	141.6	151.1	161.1	163.9	177.7	182.9	189.1	194.1	198.4	196.7
72.5°	107.9	116.0	124.2	133.4	137.5	151.9	158.7	169.6	177.2	188.3	192.9
75°	85.6	90.5	95.3	101.1	104.3	118.5	126.9	139.9	150.3	165.8	176.0
77.5°	67.4	69.9	72.3	74.8	76.1	84.0	90.7	103.8	115.8	135.3	150.6
80°	51.9	53.3	53.5	54.3	53.8	57.6	60.0	67.9	78.3	97.6	115.5
82.5°	33.5	34.5	35.1	36.4	33.7	38.6	40.2	41.0	46.4	60.6	73.3
85°	18.7	19.0	19.3	19.8	16.1	21.0	21.2	19.8	19.3	25.0	28.2
87.5°	4.6	4.4	4.6	4.6	1.9	4.4	4.4	3.0	2.1	4.1	3.3
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: P198762

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-600

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	370.1	370.1	370.1	370.1	370.1	370.1
2.5°	341.1	340.5	340.7	339.4	338.9	339.1
5°	335.6	334.5	334.5	333.7	332.7	332.7
7.5°	338.1	335.9	335.1	333.5	331.8	332.0
10°	341.9	338.1	335.3	332.9	331.0	331.0
12.5°	344.3	337.5	333.5	330.2	328.0	328.0
15°	344.8	334.5	328.6	325.0	322.8	322.8
17.5°	341.6	328.6	320.9	316.3	313.8	314.5
20°	333.5	317.4	308.4	303.5	301.1	301.4
22.5°	320.7	302.2	291.8	286.1	283.7	283.7
25°	303.3	283.2	272.0	267.4	265.3	265.3
27.5°	283.5	262.8	253.0	249.5	248.1	248.1
30°	261.2	244.1	237.0	234.6	232.3	232.3
32.5°	242.4	230.2	227.7	224.4	218.8	218.5
35°	227.5	226.1	224.2	214.4	206.2	205.2
37.5°	219.3	227.5	215.5	198.7	192.1	191.9
40°	214.9	222.6	201.9	193.7	192.9	192.9
42.5°	204.6	210.1	201.1	196.5	196.5	196.7
45°	193.7	198.4	203.0	199.0	200.3	200.6
47.5°	186.2	195.4	203.0	199.5	202.1	203.8
50°	179.1	192.7	199.0	199.0	201.9	202.1
52.5°	177.5	188.8	195.1	198.1	198.4	197.0
55°	177.7	185.9	192.1	195.9	194.3	194.3
57.5°	177.5	184.2	189.7	191.1	191.9	191.9
60°	177.7	182.1	186.4	185.9	188.6	188.6
62.5°	178.5	179.1	181.3	180.8	184.7	184.7
65°	180.4	175.2	173.9	174.5	179.3	179.1
67.5°	183.9	170.1	165.8	166.0	173.1	172.1
70°	189.1	163.1	156.5	154.9	166.8	165.0
72.5°	190.8	154.9	144.5	142.9	150.0	144.5
75°	183.2	148.3	131.8	126.3	123.4	121.7
77.5°	163.4	144.3	118.5	107.1	102.5	101.4
80°	135.3	135.8	101.1	87.5	101.7	101.4
82.5°	102.2	117.4	81.0	75.8	73.7	61.4
85°	49.4	88.3	62.2	52.2	31.3	29.7
87.5°	4.4	36.9	35.9	23.3	10.6	10.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)