

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: P199244

Luminaire Tested: **XNV-AF-01-LED-U-T2R-8030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199244  
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-8030-800  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 80 CRI, 3000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4178 lumens  
Efficiency: N/A  
Efficacy: 95.0 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

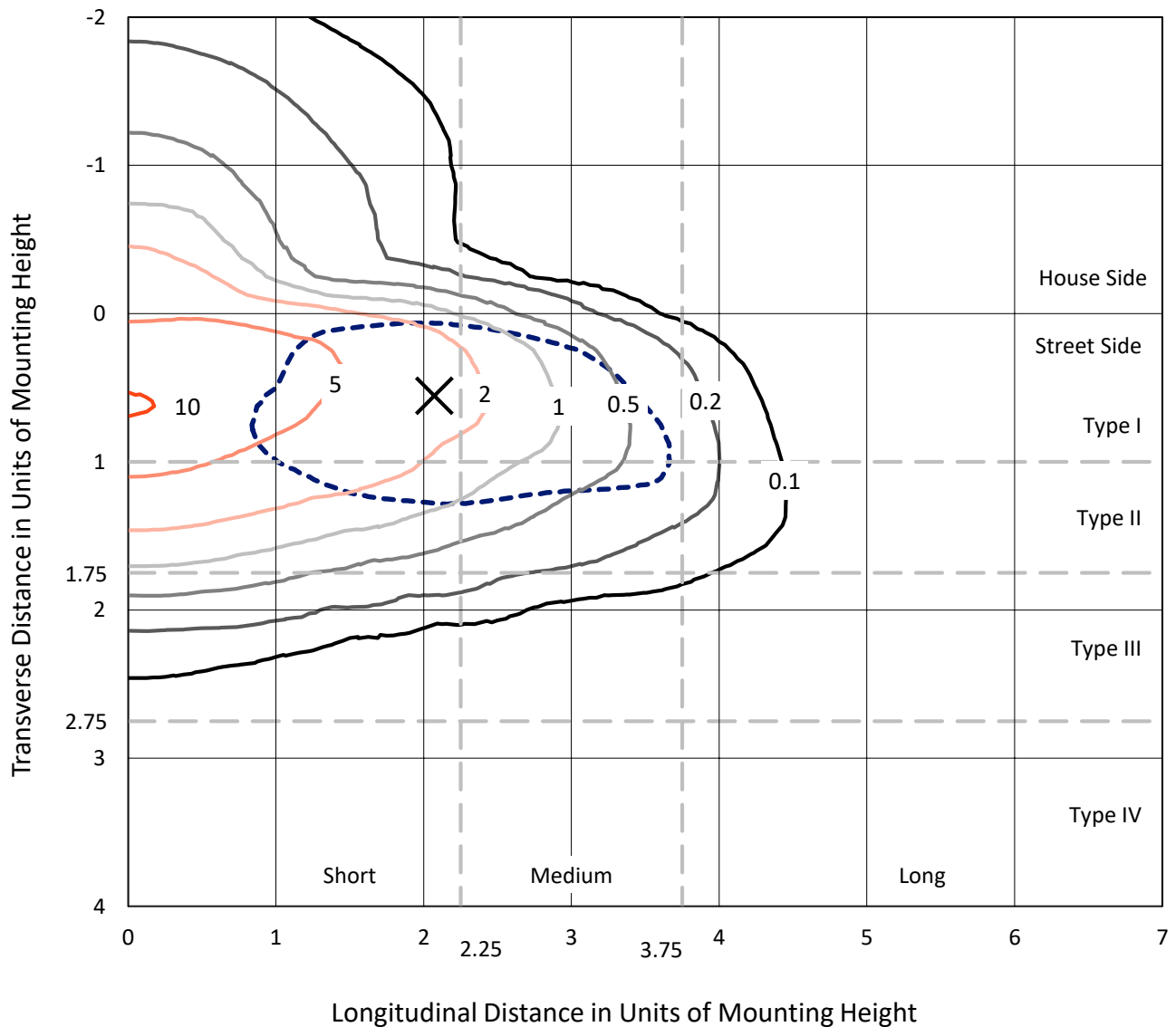
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P199244  
 CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-800

### Iso-Footcandle Lines of Horizontal Illumination

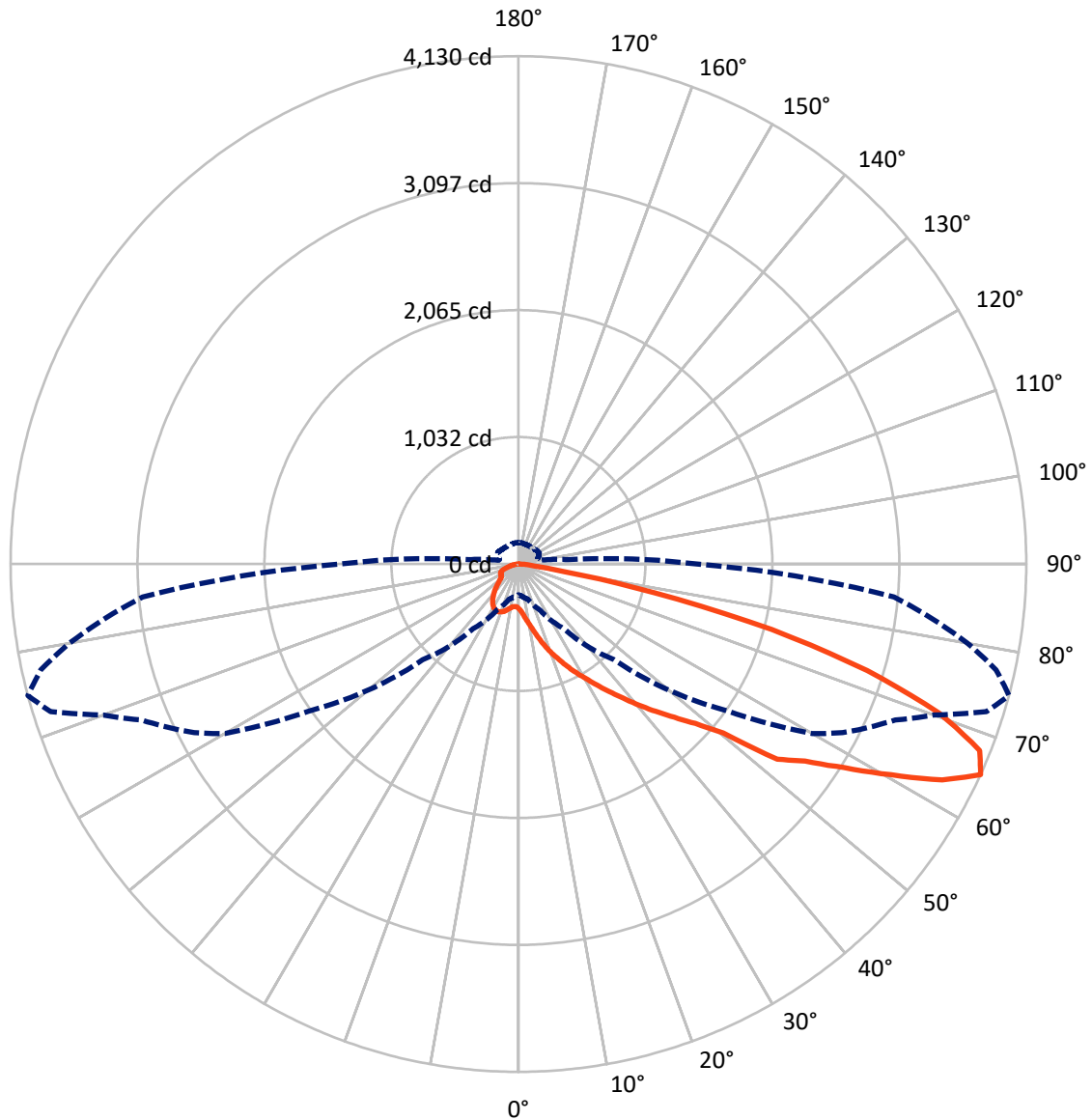
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 10.4 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P199244  
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-800

### Luminous Intensity Polar Plot



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



REPORT NUMBER: P199244

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	627.8	0.0	627.8
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	3550.2	0.0	3550.2
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	4178.0	0.0	4178.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.7	1.0
10°-20°	163.2	3.9
20°-30°	329.4	7.9
30°-40°	559.4	13.4
40°-50°	780.3	18.7
50°-60°	956.3	22.9
60°-70°	899.8	21.5
70°-80°	394.5	9.4
80°-90°	52.2	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°	4178.0	100.0
0°-180°	4178.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P199244

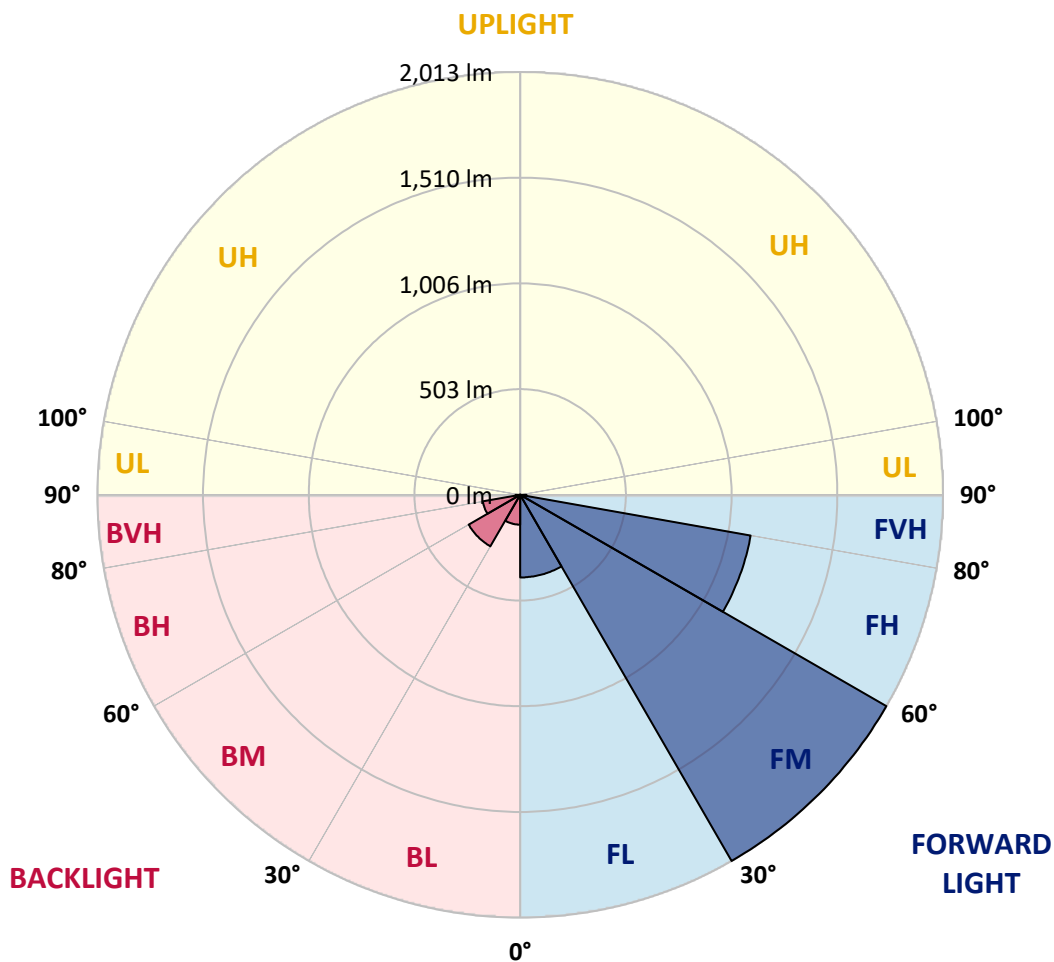
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	393.3	9.4			
FM	(30°-60°)	2012.8	48.2			
FH	(60°-80°)	1113.9	26.7			G1/1800
FVH	(80°-90°)	30.3	0.7			G1/100
BL	(0°-30°)	142.1	3.4	B1/500		
BM	(30°-60°)	283.3	6.8	B1/1000		
BH	(60°-80°)	180.4	4.3	B1/500		G1/500
BVH	(80°-90°)	21.9	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: P199244

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0
2.5°	455.8	450.5	451.0	443.6	432.7	420.7	410.9	405.6	401.1	399.7	392.3
5°	596.2	589.5	587.1	570.1	544.6	514.3	484.3	472.6	463.0	457.1	442.8
7.5°	711.0	707.5	704.3	688.6	663.4	624.6	576.2	558.9	543.0	525.5	508.2
10°	789.1	787.8	786.5	775.6	754.6	720.8	668.7	649.8	629.9	607.6	585.0
12.5°	848.1	848.1	849.2	840.1	827.4	801.3	754.0	736.5	716.3	692.9	667.1
15°	887.7	888.8	894.4	897.0	890.4	873.6	832.2	816.8	797.6	774.5	749.0
17.5°	914.0	916.2	924.4	933.2	941.7	935.8	905.0	890.6	873.4	852.1	828.2
20°	975.2	972.5	972.8	970.1	982.6	987.1	970.1	958.2	944.3	924.9	903.1
22.5°	1103.5	1098.5	1085.5	1052.2	1037.1	1035.5	1025.4	1019.0	1008.4	996.2	974.4
25°	1271.0	1265.1	1239.4	1184.6	1139.4	1097.7	1079.1	1075.1	1068.2	1059.9	1044.3
27.5°	1444.0	1437.6	1404.4	1335.3	1276.3	1192.0	1134.1	1128.8	1122.4	1119.0	1111.5
30°	1596.3	1589.4	1556.7	1486.5	1415.3	1314.8	1208.3	1189.7	1178.8	1179.8	1175.6
32.5°	1730.0	1723.9	1687.2	1615.7	1543.4	1445.9	1304.5	1275.5	1251.0	1242.0	1245.2
35°	1842.2	1836.6	1796.4	1724.4	1651.6	1570.5	1428.3	1384.7	1344.9	1319.9	1317.0
37.5°	1908.1	1904.9	1876.7	1815.6	1743.3	1683.7	1567.1	1518.7	1460.0	1423.5	1407.6
40°	1904.3	1907.8	1903.0	1875.4	1819.3	1776.0	1711.7	1663.8	1606.4	1552.2	1519.8
42.5°	1850.1	1854.9	1876.4	1890.8	1875.6	1849.3	1837.9	1802.3	1750.7	1693.3	1648.4
45°	1775.7	1780.0	1807.9	1859.7	1903.0	1910.5	1948.5	1930.7	1887.1	1838.2	1788.7
47.5°	1661.7	1669.9	1702.3	1784.7	1887.9	1959.6	2041.2	2049.5	2024.2	1983.8	1937.6
50°	1496.6	1507.5	1553.0	1670.2	1830.5	2010.1	2179.2	2210.5	2200.4	2159.5	2112.7
52.5°	1327.6	1338.5	1399.1	1523.7	1738.0	2030.9	2315.0	2395.2	2453.2	2495.4	2503.7
55°	1151.6	1163.9	1230.3	1373.8	1614.6	2004.5	2412.0	2503.2	2561.9	2606.0	2623.8
57.5°	953.1	966.9	1031.2	1176.4	1440.3	1898.8	2519.9	2649.1	2736.5	2804.6	2842.8
60°	725.3	742.6	809.3	955.5	1211.2	1696.2	2568.0	2759.1	2898.1	3000.2	3060.8
62.5°	459.8	477.3	546.7	698.5	950.4	1419.6	2431.9	2710.7	2947.8	3098.8	3209.9
65°	250.9	258.6	297.1	411.4	640.8	1101.4	2086.9	2415.7	2757.2	2971.2	3141.8
67.5°	188.2	189.2	193.2	221.1	341.3	743.7	1631.6	1932.8	2312.1	2587.4	2791.3
70°	164.8	164.8	165.3	165.6	185.3	402.9	1105.4	1382.6	1730.3	2008.8	2262.1
72.5°	147.8	146.2	145.6	142.5	145.1	206.5	601.7	850.8	1143.9	1456.5	1692.8
75°	127.6	127.3	127.3	124.1	125.7	145.4	261.0	408.2	635.5	926.5	1159.1
77.5°	110.3	108.4	108.7	106.8	111.9	111.4	123.9	168.2	276.7	486.7	679.6
80°	90.9	89.6	90.4	89.3	97.3	82.4	83.5	102.9	137.4	213.4	300.9
82.5°	67.2	67.8	72.8	72.3	81.9	55.5	61.1	76.8	92.5	106.3	115.6
85°	39.3	40.1	52.4	55.0	60.1	29.2	37.5	45.7	51.6	57.1	59.5
87.5°	4.3	5.6	29.2	30.0	26.8	8.8	15.1	19.1	20.5	21.8	19.1
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: P199244

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-800

**CANDELA DISTRIBUTION (continued):**

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0
2.5°	389.9	386.5	382.7	380.6	376.9	373.7	367.8	363.1	357.7	354.0	352.4
5°	435.6	427.4	418.6	412.2	404.3	397.3	384.1	368.1	363.1	352.4	349.8
7.5°	495.2	480.3	465.4	453.2	439.3	427.9	405.6	376.9	373.2	356.2	352.4
10°	565.1	543.3	521.2	502.3	482.1	464.6	431.6	391.2	387.2	365.5	361.7
12.5°	643.2	616.6	588.2	560.0	536.1	511.4	466.5	413.6	407.2	381.4	376.4
15°	723.7	695.0	662.1	628.0	598.5	565.9	509.2	442.8	431.1	400.8	393.9
17.5°	803.2	772.1	737.6	699.5	665.0	625.9	555.5	475.5	455.3	419.9	411.2
20°	880.0	848.4	812.0	774.8	731.7	687.1	602.8	507.6	476.8	435.9	424.5
22.5°	949.9	922.8	886.4	843.6	800.0	749.8	650.9	539.8	495.7	448.1	433.5
25°	1023.5	998.8	962.7	921.5	870.7	814.9	700.6	570.4	510.8	454.8	436.7
27.5°	1098.0	1076.7	1042.7	999.3	944.9	882.9	751.1	598.5	523.1	456.9	435.1
30°	1177.4	1160.9	1129.6	1081.2	1026.2	957.6	806.1	626.2	530.8	454.0	427.9
32.5°	1252.6	1252.1	1224.2	1174.0	1114.7	1039.2	864.1	654.1	534.8	445.7	415.4
35°	1330.8	1341.7	1320.7	1272.8	1210.4	1126.7	928.1	683.9	535.0	431.1	399.2
37.5°	1419.6	1439.0	1429.7	1384.2	1318.6	1226.3	1003.3	717.4	533.4	410.9	375.6
40°	1520.6	1547.1	1546.9	1508.6	1438.4	1338.0	1090.8	754.8	529.7	385.7	347.6
42.5°	1636.2	1667.8	1676.6	1638.8	1567.9	1460.0	1191.0	796.0	523.9	360.7	318.1
45°	1768.5	1796.4	1812.9	1777.8	1706.6	1592.8	1306.1	842.8	516.7	328.5	284.4
47.5°	1910.2	1942.6	1967.3	1937.3	1861.3	1744.3	1442.4	903.1	514.0	291.8	248.0
50°	2085.9	2119.4	2172.8	2159.2	2117.5	2023.4	1730.8	1045.6	515.1	257.0	217.4
52.5°	2521.8	2598.6	2666.1	2636.0	2536.9	2375.6	1965.2	1124.8	492.8	228.6	196.1
55°	2653.3	2740.5	2840.2	2827.7	2732.5	2569.9	2150.5	1191.0	471.2	207.8	182.3
57.5°	2883.5	2986.4	3125.6	3123.0	3006.3	2823.2	2388.9	1270.2	461.9	195.9	175.4
60°	3127.2	3258.2	3450.7	3480.7	3353.9	3163.4	2670.6	1367.5	463.3	189.2	171.4
62.5°	3305.3	3497.5	3777.3	3867.2	3717.8	3507.8	2963.0	1464.7	455.3	181.5	166.6
65°	3316.2	3592.9	3990.0	4129.8	3978.5	3708.8	3066.1	1445.6	407.4	171.2	158.9
67.5°	3050.4	3410.8	3893.2	4046.6	3891.9	3584.9	2885.4	1263.8	331.2	153.1	145.6
70°	2540.6	2959.0	3459.7	3630.6	3502.8	3192.1	2511.1	1009.4	247.4	129.2	125.7
72.5°	1963.3	2353.5	2808.3	2966.4	2868.6	2595.4	1980.6	735.7	176.7	104.7	102.1
75°	1403.6	1735.8	2065.9	2126.3	2029.8	1778.9	1285.1	459.5	123.9	85.8	82.1
77.5°	869.1	1085.2	1203.7	1126.1	1003.1	833.8	523.1	227.0	82.4	69.9	66.2
80°	385.7	452.6	422.6	376.6	297.4	244.5	159.7	100.7	53.2	54.0	51.8
82.5°	129.7	137.1	133.4	132.6	119.6	104.7	67.8	43.6	29.8	34.6	33.8
85°	63.3	66.2	66.4	68.8	59.8	46.5	18.3	17.3	12.8	18.6	19.4
87.5°	19.1	19.4	17.5	19.1	15.4	10.6	3.5	4.8	2.4	4.5	4.5
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: P199244

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-800

**CANDELA DISTRIBUTION (continued):**

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0	362.0
2.5°	349.5	348.4	346.6	344.5	343.9	341.3	340.5	339.1	338.3	337.0	336.0
5°	346.3	344.5	342.3	339.9	339.9	336.2	334.6	333.0	333.0	330.6	329.6
7.5°	349.5	347.1	344.7	342.6	343.4	339.1	337.5	336.0	335.7	333.3	332.2
10°	358.5	356.2	353.2	351.1	350.3	346.8	345.0	342.6	341.0	339.4	337.8
12.5°	372.4	369.2	365.5	360.9	359.1	356.2	353.2	350.0	346.3	344.7	342.3
15°	388.8	383.5	378.5	372.9	367.8	364.9	360.9	355.9	350.8	348.7	345.5
17.5°	402.4	396.8	389.6	383.0	374.0	371.6	366.0	359.9	351.6	350.8	346.1
20°	413.8	405.3	396.6	388.6	374.8	373.4	366.5	359.3	347.6	347.6	341.8
22.5°	420.2	408.5	398.1	387.5	370.2	369.2	361.2	352.7	338.3	338.9	331.7
25°	421.3	407.2	394.2	381.4	361.5	359.6	349.5	340.2	324.5	323.5	316.0
27.5°	417.0	400.5	385.4	370.0	348.4	344.5	333.3	322.1	306.7	304.1	296.1
30°	407.2	387.8	370.8	353.0	330.4	324.0	312.3	300.9	285.2	281.7	274.3
32.5°	391.5	369.4	350.6	332.8	307.8	299.8	288.1	276.7	261.5	258.9	252.0
35°	370.8	346.1	326.1	307.2	282.3	274.0	262.9	252.8	238.9	237.9	233.1
37.5°	344.7	318.9	297.7	279.6	256.0	251.7	240.3	232.8	221.4	222.5	220.1
40°	315.2	288.9	268.7	252.8	232.3	228.6	221.7	216.1	206.2	209.2	209.4
42.5°	285.5	259.1	240.8	226.4	208.9	206.5	201.7	198.5	191.1	196.9	199.3
45°	251.7	227.2	211.6	200.7	187.6	187.6	185.3	185.0	179.9	188.2	190.6
47.5°	219.0	199.9	189.0	182.3	173.3	177.5	176.7	178.9	175.2	183.7	185.8
50°	194.3	181.0	174.4	171.2	164.8	171.4	173.0	175.9	172.8	180.2	181.8
52.5°	178.6	169.8	166.1	165.3	160.8	169.0	171.7	174.4	170.6	177.5	177.3
55°	169.8	164.0	162.7	164.3	160.8	168.8	171.4	173.3	170.1	174.9	174.6
57.5°	166.6	163.5	164.3	166.6	164.3	170.9	172.2	174.4	171.2	173.3	174.4
60°	166.4	166.4	169.6	172.8	171.2	175.9	176.7	176.5	173.6	173.8	174.4
62.5°	164.8	168.8	174.1	179.1	178.6	184.5	185.0	181.5	179.1	176.5	175.7
65°	159.7	166.4	174.1	181.0	182.1	191.1	192.2	188.7	187.1	182.6	179.1
67.5°	148.6	157.1	166.1	174.6	176.5	188.7	191.1	192.4	193.2	190.3	185.8
70°	129.7	138.5	147.8	157.6	160.3	173.8	178.9	185.0	189.8	194.0	192.4
72.5°	105.5	113.5	121.5	130.5	134.5	148.6	155.2	165.8	173.3	184.2	188.7
75°	83.7	88.5	93.3	98.9	102.1	115.9	124.1	136.9	147.0	162.1	172.2
77.5°	65.9	68.3	70.7	73.1	74.4	82.1	88.8	101.5	113.2	132.4	147.2
80°	50.8	52.1	52.4	53.2	52.6	56.3	58.7	66.4	76.5	95.4	113.0
82.5°	32.7	33.8	34.3	35.6	33.0	37.7	39.3	40.1	45.4	59.3	71.8
85°	18.3	18.6	18.9	19.4	15.7	20.5	20.7	19.4	18.9	24.5	27.6
87.5°	4.5	4.3	4.5	4.5	1.9	4.3	4.3	2.9	2.1	4.0	3.2
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: P199244

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-800

**CANDELA DISTRIBUTION (continued):**

	135°	145°	155°	165°	175°	180°
0°	362.0	362.0	362.0	362.0	362.0	362.0
2.5°	333.6	333.0	333.3	332.0	331.4	331.7
5°	328.2	327.2	327.2	326.4	325.3	325.3
7.5°	330.6	328.5	327.7	326.1	324.5	324.8
10°	334.4	330.6	328.0	325.6	323.7	323.7
12.5°	336.7	330.1	326.1	322.9	320.8	320.8
15°	337.3	327.2	321.3	317.9	315.8	315.8
17.5°	334.1	321.3	313.9	309.4	307.0	307.5
20°	326.1	310.4	301.7	296.9	294.5	294.8
22.5°	313.6	295.6	285.5	279.9	277.5	277.5
25°	296.6	276.9	266.1	261.5	259.4	259.4
27.5°	277.2	257.0	247.4	244.0	242.7	242.7
30°	255.4	238.7	231.8	229.4	227.2	227.2
32.5°	237.1	225.1	222.7	219.5	214.0	213.7
35°	222.5	221.1	219.3	209.7	201.7	200.7
37.5°	214.5	222.5	210.8	194.3	187.9	187.6
40°	210.2	217.7	197.5	189.5	188.7	188.7
42.5°	200.1	205.5	196.7	192.2	192.2	192.4
45°	189.5	194.0	198.5	194.6	195.9	196.1
47.5°	182.1	191.1	198.5	195.1	197.7	199.3
50°	175.2	188.4	194.6	194.6	197.5	197.7
52.5°	173.6	184.7	190.8	193.8	194.0	192.7
55°	173.8	181.8	187.9	191.6	190.0	190.0
57.5°	173.6	180.2	185.5	186.8	187.6	187.6
60°	173.8	178.1	182.3	181.8	184.5	184.5
62.5°	174.6	175.2	177.3	176.7	180.7	180.7
65°	176.5	171.4	170.1	170.6	175.4	175.2
67.5°	179.9	166.4	162.1	162.4	169.3	168.2
70°	185.0	159.5	153.1	151.5	163.2	161.3
72.5°	186.6	151.5	141.4	139.8	146.7	141.4
75°	179.1	145.1	128.9	123.6	120.7	119.1
77.5°	159.7	141.1	115.9	104.7	100.2	99.1
80°	132.4	132.9	98.9	85.6	99.4	99.1
82.5°	99.9	114.8	79.2	74.2	72.0	60.1
85°	48.4	86.4	60.9	51.0	30.6	29.0
87.5°	4.3	36.1	35.1	22.9	10.4	9.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

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