

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: P199248

Luminaire Tested: **XNV-AF-01-LED-U-T2R-8030-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199248
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-8030-1200
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 80 CRI, 3000K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5674 lumens
Efficiency: N/A
Efficacy: 86.0 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): 66
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

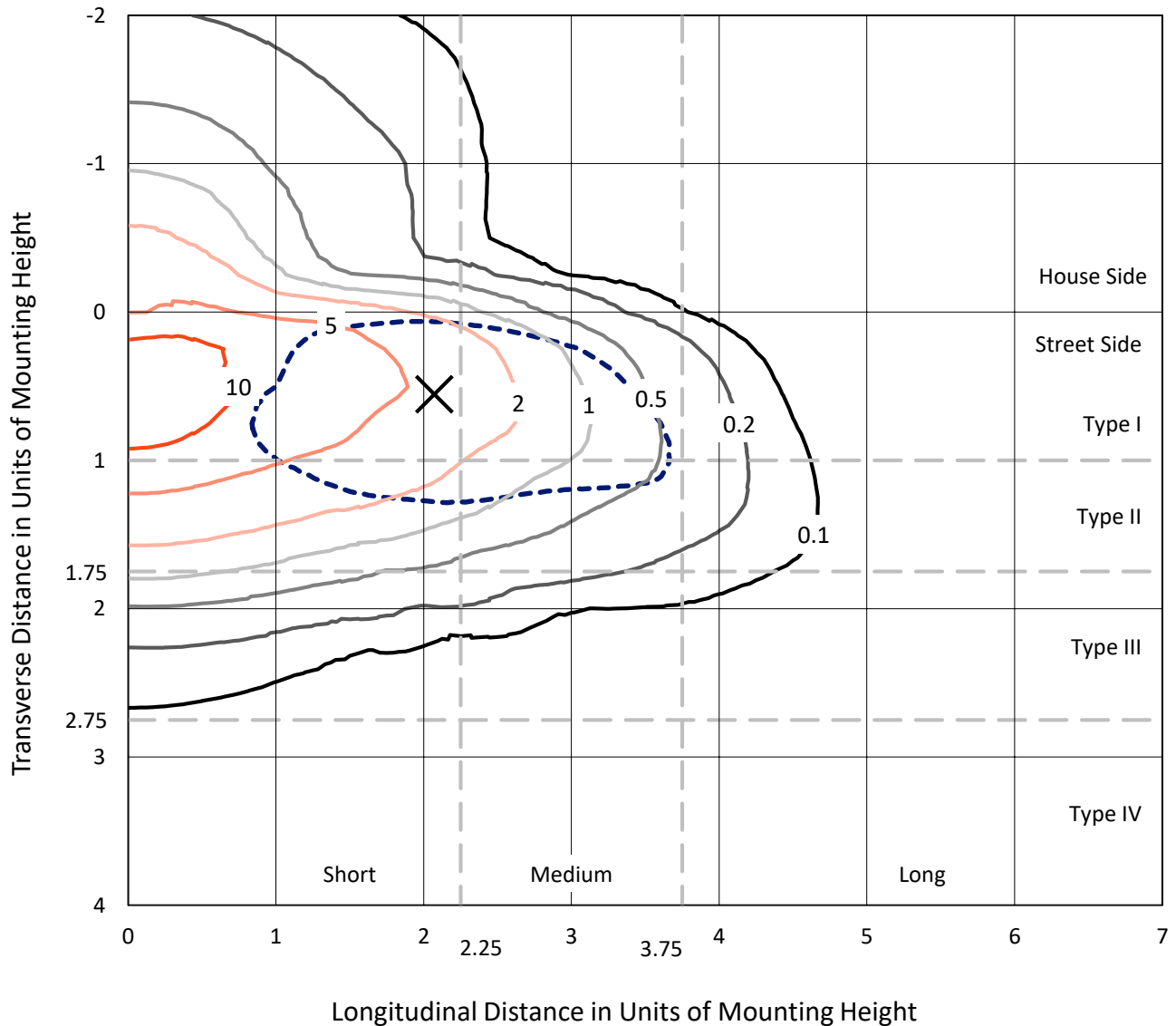


REPORT NUMBER: P199248

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-1200

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

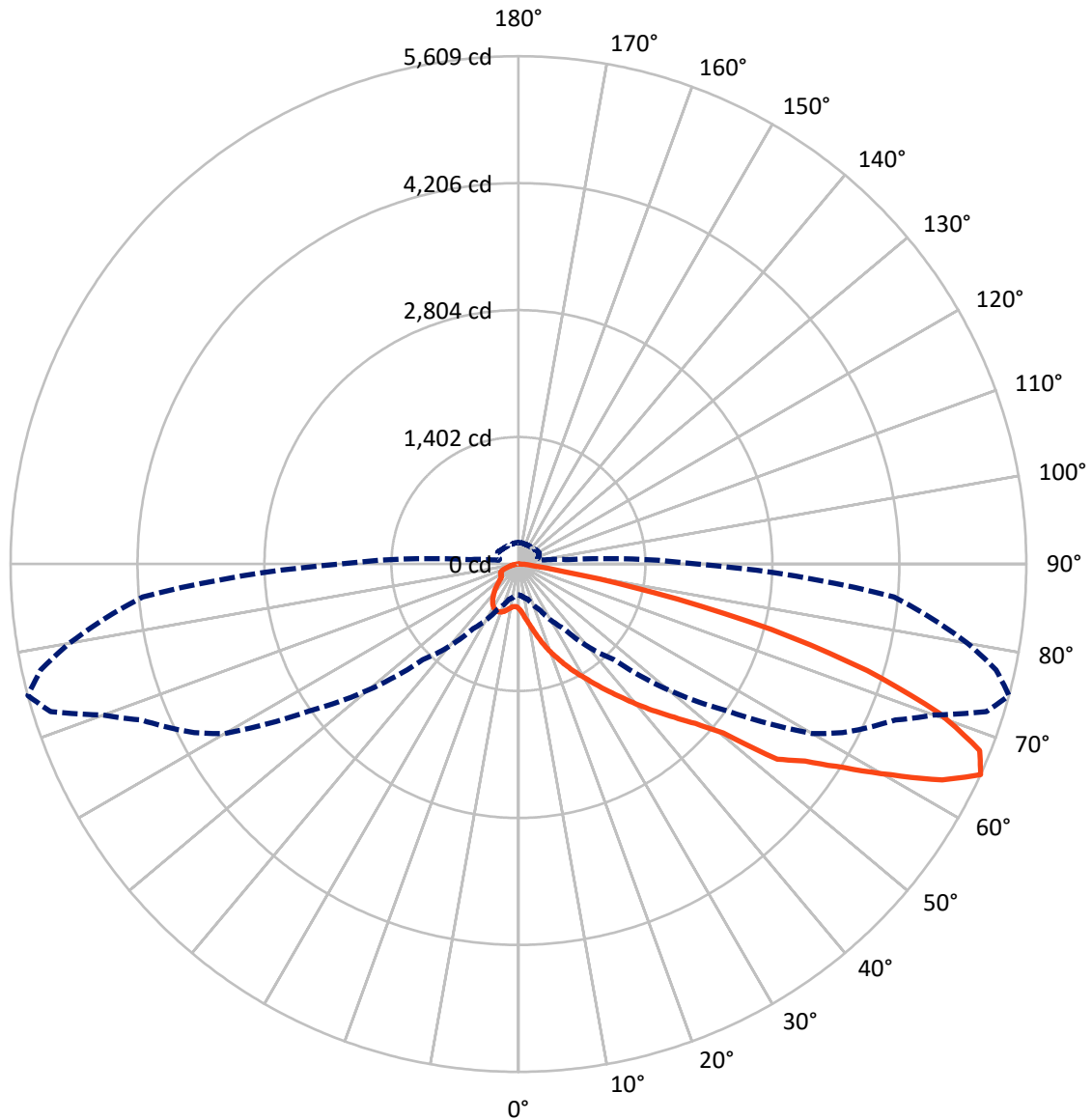


Based on 10 foot mounting height. Maximum calculated value = 14.1 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P199248

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-1200

Luminous Intensity Polar Plot



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



REPORT NUMBER: P199248

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-1200

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	852.6	0.0	852.6
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	4821.4	0.0	4821.4
	% Fixture	85.0	0.0	85.0
Total	Lumens	5674.0	0.0	5674.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.0	1.0
10°-20°	221.7	3.9
20°-30°	447.4	7.9
30°-40°	759.8	13.4
40°-50°	1059.7	18.7
50°-60°	1298.8	22.9
60°-70°	1222.0	21.5
70°-80°	535.8	9.4
80°-90°	70.9	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°	5674.0	100.0
0°-180°	5674.0	100.0

Coefficient of Utilization



REPORT NUMBER: P199248

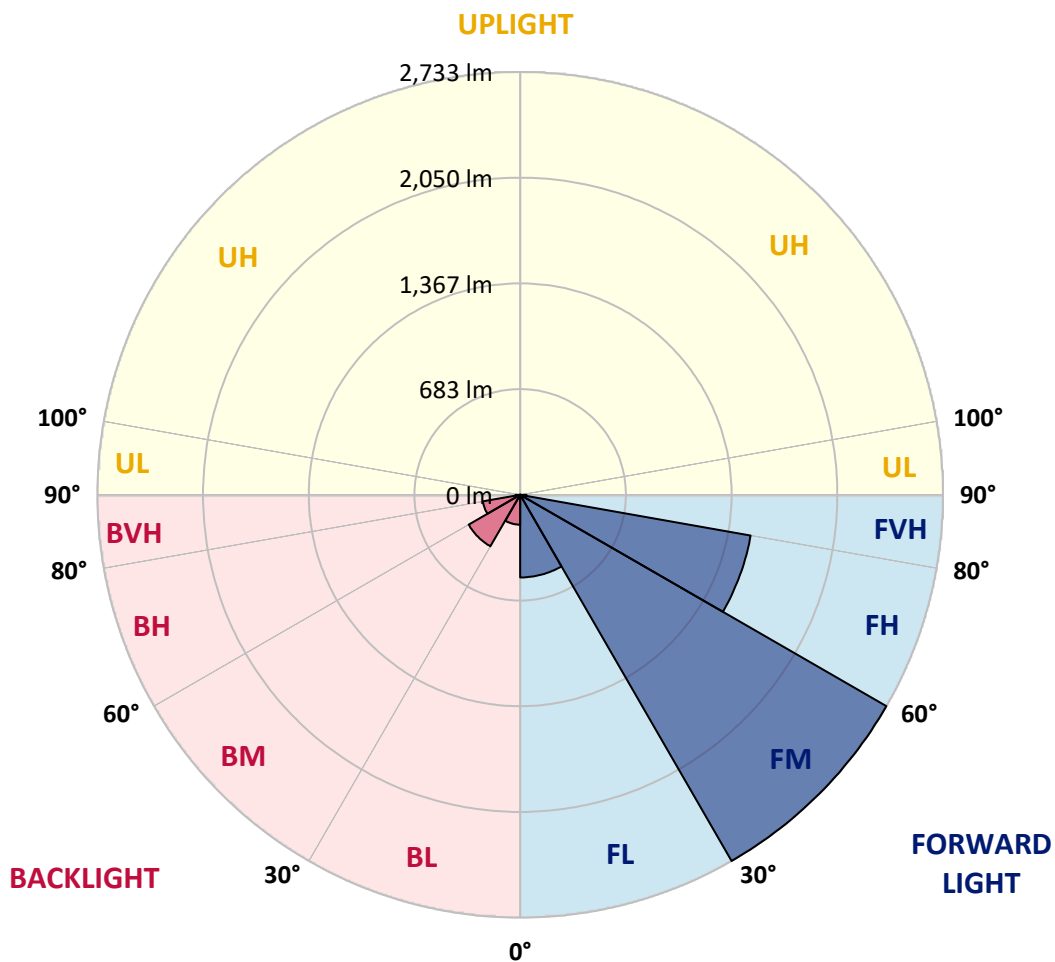
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	534.1	9.4			
FM	(30°-60°)	2733.5	48.2			
FH	(60°-80°)	1512.7	26.7			G1/1800
FVH	(80°-90°)	41.1	0.7			G1/100
BL	(0°-30°)	193.0	3.4	B1/500		
BM	(30°-60°)	384.7	6.8	B1/1000		
BH	(60°-80°)	245.0	4.3	B1/500		G1/500
BVH	(80°-90°)	29.8	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: P199248

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-1200

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6
2.5°	619.0	611.8	612.5	602.4	587.6	571.4	558.0	550.8	544.7	542.9	532.8
5°	809.6	800.6	797.3	774.2	739.6	698.4	657.7	641.8	628.8	620.8	601.3
7.5°	965.5	960.9	956.5	935.2	900.9	848.2	782.5	759.1	737.4	713.6	690.1
10°	1071.7	1069.9	1068.1	1053.3	1024.7	978.9	908.2	882.5	855.5	825.1	794.5
12.5°	1151.8	1151.8	1153.2	1141.0	1123.6	1088.3	1024.0	1000.2	972.8	941.0	906.0
15°	1205.6	1207.0	1214.6	1218.2	1209.2	1186.5	1130.1	1109.2	1083.2	1051.8	1017.2
17.5°	1241.3	1244.2	1255.4	1267.3	1278.9	1270.9	1229.0	1209.6	1186.1	1157.2	1124.7
20°	1324.3	1320.7	1321.1	1317.5	1334.4	1340.6	1317.5	1301.2	1282.5	1256.1	1226.5
22.5°	1498.7	1491.8	1474.1	1429.0	1408.4	1406.3	1392.6	1383.9	1369.5	1352.9	1323.3
25°	1726.1	1718.1	1683.1	1608.8	1547.4	1490.7	1465.5	1460.1	1450.7	1439.5	1418.2
27.5°	1961.1	1952.4	1907.3	1813.4	1733.3	1618.9	1540.2	1533.0	1524.3	1519.6	1509.5
30°	2167.9	2158.5	2114.1	2018.8	1922.1	1785.6	1640.9	1615.6	1600.8	1602.3	1596.5
32.5°	2349.4	2341.1	2291.3	2194.2	2096.1	1963.6	1771.6	1732.2	1699.0	1686.7	1691.1
35°	2501.8	2494.2	2439.7	2341.9	2243.0	2132.9	1939.8	1880.6	1826.4	1792.5	1788.5
37.5°	2591.3	2586.9	2548.7	2465.7	2367.5	2286.6	2128.2	2062.5	1982.7	1933.3	1911.6
40°	2586.2	2590.9	2584.4	2546.9	2470.7	2411.9	2324.5	2259.6	2181.6	2108.0	2063.9
42.5°	2512.6	2519.1	2548.3	2567.8	2547.2	2511.5	2496.0	2447.6	2377.6	2299.6	2238.6
45°	2411.5	2417.3	2455.2	2525.6	2584.4	2594.5	2646.1	2622.0	2562.8	2496.3	2429.2
47.5°	2256.7	2267.9	2311.9	2423.8	2563.8	2661.3	2772.1	2783.3	2749.0	2694.1	2631.3
50°	2032.5	2047.3	2109.0	2268.2	2485.9	2729.9	2959.5	3002.0	2988.3	2932.7	2869.2
52.5°	1803.0	1817.8	1900.1	2069.3	2360.3	2758.0	3143.9	3252.9	3331.6	3389.0	3400.2
55°	1564.0	1580.6	1670.8	1865.8	2192.8	2722.3	3275.6	3399.5	3479.2	3539.1	3563.3
57.5°	1294.4	1313.1	1400.5	1597.6	1956.0	2578.6	3422.2	3597.6	3716.4	3808.8	3860.7
60°	985.0	1008.5	1099.1	1297.6	1644.9	2303.6	3487.5	3747.0	3935.8	4074.4	4156.7
62.5°	624.4	648.3	742.5	948.6	1290.8	1927.8	3302.7	3681.4	4003.3	4208.3	4359.2
65°	340.7	351.2	403.5	558.8	870.3	1495.8	2834.2	3280.7	3744.5	4035.1	4266.8
67.5°	255.6	257.0	262.4	300.3	463.5	1009.9	2215.9	2624.8	3139.9	3513.9	3790.7
70°	223.8	223.8	224.5	224.9	251.6	547.2	1501.2	1877.7	2349.8	2728.1	3072.1
72.5°	200.7	198.5	197.8	193.5	197.1	280.5	817.2	1155.4	1553.5	1978.0	2298.9
75°	173.3	172.9	172.9	168.6	170.7	197.4	354.5	554.4	863.0	1258.3	1574.1
77.5°	149.8	147.3	147.6	145.1	152.0	151.2	168.2	228.5	375.8	660.9	923.0
80°	123.4	121.6	122.7	121.3	132.1	111.9	113.3	139.7	186.6	289.8	408.6
82.5°	91.3	92.0	98.9	98.2	111.2	75.4	83.0	104.3	125.6	144.4	157.0
85°	53.4	54.5	71.1	74.7	81.6	39.7	50.9	62.1	70.0	77.6	80.9
87.5°	5.8	7.6	39.7	40.8	36.5	11.9	20.6	26.0	27.8	29.6	26.0
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: P199248

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-1200

CANDELA DISTRIBUTION (continued):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6
2.5°	529.5	524.8	519.8	516.9	511.8	507.5	499.6	493.1	485.8	480.8	478.6
5°	591.6	580.4	568.5	559.8	549.0	539.6	521.6	499.9	493.1	478.6	475.0
7.5°	672.5	652.2	632.0	615.4	596.7	581.1	550.8	511.8	506.8	483.7	478.6
10°	767.4	737.8	707.8	682.2	654.8	630.9	586.2	531.3	525.9	496.3	491.3
12.5°	873.5	837.4	798.8	760.5	728.0	694.5	633.5	561.6	553.0	518.0	511.1
15°	982.9	943.9	899.1	852.9	812.9	768.5	691.6	601.3	585.5	544.3	534.9
17.5°	1090.8	1048.6	1001.6	950.0	903.1	850.0	754.4	645.7	618.3	570.3	558.4
20°	1195.1	1152.2	1102.7	1052.2	993.7	933.1	818.6	689.4	647.5	592.0	576.4
22.5°	1290.0	1253.2	1203.8	1145.7	1086.5	1018.2	884.0	733.1	673.2	608.6	588.7
25°	1390.0	1356.5	1307.4	1251.4	1182.5	1106.7	951.5	774.6	693.8	617.6	593.0
27.5°	1491.1	1462.2	1416.0	1357.2	1283.2	1199.1	1020.1	812.9	710.4	620.5	590.9
30°	1599.0	1576.6	1534.0	1468.4	1393.6	1300.5	1094.8	850.4	720.8	616.5	581.1
32.5°	1701.2	1700.4	1662.5	1594.3	1513.8	1411.3	1173.5	888.3	726.2	605.3	564.2
35°	1807.3	1822.1	1793.6	1728.6	1643.8	1530.1	1260.4	928.7	726.6	585.5	542.2
37.5°	1927.8	1954.2	1941.6	1879.8	1790.7	1665.4	1362.6	974.2	724.4	558.0	510.0
40°	2065.0	2101.1	2100.7	2048.8	1953.5	1817.0	1481.3	1025.1	719.4	523.7	472.1
42.5°	2222.0	2265.0	2276.9	2225.6	2129.3	1982.7	1617.4	1081.1	711.4	489.8	432.1
45°	2401.8	2439.7	2462.1	2414.4	2317.7	2163.2	1773.7	1144.6	701.7	446.1	386.2
47.5°	2594.2	2638.2	2671.8	2631.0	2527.8	2368.9	1958.9	1226.5	698.1	396.3	336.8
50°	2832.8	2878.2	2950.8	2932.4	2875.7	2747.9	2350.5	1420.0	699.5	349.0	295.3
52.5°	3424.7	3529.0	3620.7	3579.9	3445.3	3226.2	2668.9	1527.6	669.2	310.4	266.4
55°	3603.4	3721.8	3857.1	3840.2	3711.0	3490.1	2920.5	1617.4	640.0	282.3	247.6
57.5°	3916.0	4055.7	4244.8	4241.2	4082.7	3834.0	3244.2	1725.0	627.3	266.0	238.2
60°	4247.0	4424.9	4686.2	4727.0	4554.9	4296.1	3626.9	1857.1	629.1	257.0	232.8
62.5°	4488.8	4749.8	5129.9	5251.9	5049.0	4763.9	4023.9	1989.2	618.3	246.5	226.3
65°	4503.6	4879.4	5418.6	5608.5	5403.1	5036.7	4163.9	1963.2	553.3	232.5	215.8
67.5°	4142.7	4632.1	5287.2	5495.5	5285.4	4868.5	3918.5	1716.3	449.7	207.9	197.8
70°	3450.3	4018.5	4698.5	4930.6	4757.0	4335.0	3410.3	1370.9	336.0	175.4	170.7
72.5°	2666.4	3196.2	3813.8	4028.6	3895.8	3524.7	2689.8	999.1	240.0	142.2	138.6
75°	1906.2	2357.4	2805.7	2887.6	2756.6	2415.9	1745.2	624.1	168.2	116.6	111.5
77.5°	1180.3	1473.8	1634.8	1529.4	1362.2	1132.3	710.4	308.3	111.9	94.9	89.9
80°	523.7	614.7	573.9	511.5	403.9	332.1	216.9	136.8	72.2	73.3	70.4
82.5°	176.1	186.3	181.2	180.1	162.4	142.2	92.0	59.2	40.4	46.9	45.8
85°	85.9	89.9	90.2	93.5	81.2	63.2	24.9	23.5	17.3	25.3	26.3
87.5°	26.0	26.3	23.8	26.0	20.9	14.4	4.7	6.5	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: P199248

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-1200

CANDELA DISTRIBUTION (continued):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6	491.6
2.5°	474.7	473.2	470.7	467.8	467.1	463.5	462.4	460.6	459.5	457.7	456.2
5°	470.3	467.8	464.9	461.7	461.7	456.6	454.4	452.3	452.3	449.0	447.6
7.5°	474.7	471.4	468.2	465.3	466.4	460.6	458.4	456.2	455.9	452.6	451.2
10°	486.9	483.7	479.7	476.8	475.7	471.0	468.5	465.3	463.1	460.9	458.8
12.5°	505.7	501.4	496.3	490.2	487.6	483.7	479.7	475.4	470.3	468.2	464.9
15°	528.1	520.9	514.0	506.4	499.6	495.6	490.2	483.3	476.5	473.6	469.2
17.5°	546.5	538.9	529.2	520.1	507.9	504.6	497.0	488.7	477.5	476.5	470.0
20°	562.0	550.5	538.5	527.7	508.9	507.1	497.8	488.0	472.1	472.1	464.2
22.5°	570.7	554.8	540.7	526.3	502.8	501.4	490.5	479.0	459.5	460.2	450.5
25°	572.1	553.0	535.3	518.0	490.9	488.4	474.7	462.0	440.7	439.3	429.2
27.5°	566.3	544.0	523.4	502.4	473.2	467.8	452.6	437.5	416.5	412.9	402.1
30°	553.0	526.6	503.5	479.3	448.7	440.0	424.1	408.6	387.3	382.6	372.5
32.5°	531.7	501.7	476.1	451.9	418.0	407.2	391.3	375.8	355.2	351.6	342.2
35°	503.5	470.0	442.9	417.3	383.3	372.1	357.0	343.3	324.5	323.1	316.6
37.5°	468.2	433.1	404.3	379.7	347.6	341.8	326.3	316.2	300.7	302.1	298.9
40°	428.1	392.4	364.9	343.3	315.5	310.4	301.0	293.5	280.1	284.1	284.4
42.5°	387.7	351.9	327.0	307.5	283.7	280.5	274.0	269.6	259.5	267.5	270.7
45°	341.8	308.6	287.3	272.5	254.8	254.8	251.6	251.2	244.4	255.6	258.8
47.5°	297.4	271.4	256.6	247.6	235.3	241.1	240.0	242.9	237.9	249.4	252.3
50°	263.9	245.8	236.8	232.5	223.8	232.8	235.0	239.0	234.6	244.7	246.9
52.5°	242.6	230.6	225.6	224.5	218.4	229.6	233.2	236.8	231.7	241.1	240.8
55°	230.6	222.7	220.9	223.1	218.4	229.2	232.8	235.3	231.0	237.5	237.1
57.5°	226.3	222.0	223.1	226.3	223.1	232.1	233.9	236.8	232.5	235.3	236.8
60°	226.0	226.0	230.3	234.6	232.5	239.0	240.0	239.7	235.7	236.1	236.8
62.5°	223.8	229.2	236.4	243.3	242.6	250.5	251.2	246.5	243.3	239.7	238.6
65°	216.9	226.0	236.4	245.8	247.3	259.5	261.0	256.3	254.1	248.0	243.3
67.5°	201.8	213.3	225.6	237.1	239.7	256.3	259.5	261.3	262.4	258.4	252.3
70°	176.1	188.1	200.7	214.0	217.7	236.1	242.9	251.2	257.7	263.5	261.3
72.5°	143.3	154.1	165.0	177.2	182.6	201.8	210.8	225.2	235.3	250.1	256.3
75°	113.7	120.2	126.7	134.3	138.6	157.4	168.6	185.9	199.6	220.2	233.9
77.5°	89.5	92.8	96.0	99.3	101.1	111.5	120.6	137.9	153.8	179.8	200.0
80°	68.9	70.7	71.1	72.2	71.5	76.5	79.8	90.2	104.0	129.6	153.4
82.5°	44.4	45.8	46.6	48.4	44.8	51.3	53.4	54.5	61.7	80.5	97.5
85°	24.9	25.3	25.6	26.3	21.3	27.8	28.2	26.3	25.6	33.2	37.5
87.5°	6.1	5.8	6.1	6.1	2.5	5.8	5.8	4.0	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: P199248

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-8030-1200

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	491.6	491.6	491.6	491.6	491.6	491.6
2.5°	453.0	452.3	452.6	450.8	450.1	450.5
5°	445.8	444.3	444.3	443.2	441.8	441.8
7.5°	449.0	446.1	445.1	442.9	440.7	441.1
10°	454.1	449.0	445.4	442.2	439.6	439.6
12.5°	457.3	448.3	442.9	438.6	435.7	435.7
15°	458.0	444.3	436.4	431.7	428.8	428.8
17.5°	453.7	436.4	426.3	420.1	416.9	417.6
20°	442.9	421.6	409.7	403.2	399.9	400.3
22.5°	425.9	401.4	387.7	380.1	376.8	376.8
25°	402.8	376.1	361.3	355.2	352.3	352.3
27.5°	376.5	349.0	336.0	331.4	329.5	329.5
30°	346.9	324.1	314.8	311.5	308.6	308.6
32.5°	322.0	305.7	302.5	298.1	290.6	290.2
35°	302.1	300.3	297.8	284.8	274.0	272.5
37.5°	291.3	302.1	286.2	263.9	255.2	254.8
40°	285.5	295.6	268.2	257.4	256.3	256.3
42.5°	271.8	279.0	267.1	261.0	261.0	261.3
45°	257.4	263.5	269.6	264.2	266.0	266.4
47.5°	247.3	259.5	269.6	264.9	268.5	270.7
50°	237.9	255.9	264.2	264.2	268.2	268.5
52.5°	235.7	250.9	259.2	263.1	263.5	261.7
55°	236.1	246.9	255.2	260.2	258.1	258.1
57.5°	235.7	244.7	251.9	253.7	254.8	254.8
60°	236.1	241.8	247.6	246.9	250.5	250.5
62.5°	237.1	237.9	240.8	240.0	245.4	245.4
65°	239.7	232.8	231.0	231.7	238.2	237.9
67.5°	244.4	226.0	220.2	220.5	229.9	228.5
70°	251.2	216.6	207.9	205.7	221.6	219.1
72.5°	253.4	205.7	192.0	189.9	199.2	192.0
75°	243.3	197.1	175.1	167.8	163.9	161.7
77.5°	216.9	191.7	157.4	142.2	136.1	134.6
80°	179.8	180.5	134.3	116.2	135.0	134.6
82.5°	135.7	155.9	107.6	100.7	97.8	81.6
85°	65.7	117.3	82.7	69.3	41.5	39.3
87.5°	5.8	49.1	47.6	31.0	14.1	13.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)