

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: P271263

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271263  
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-7027-800  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 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: 4448.1 lumens  
Efficiency: N/A  
Efficacy: 101.1 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

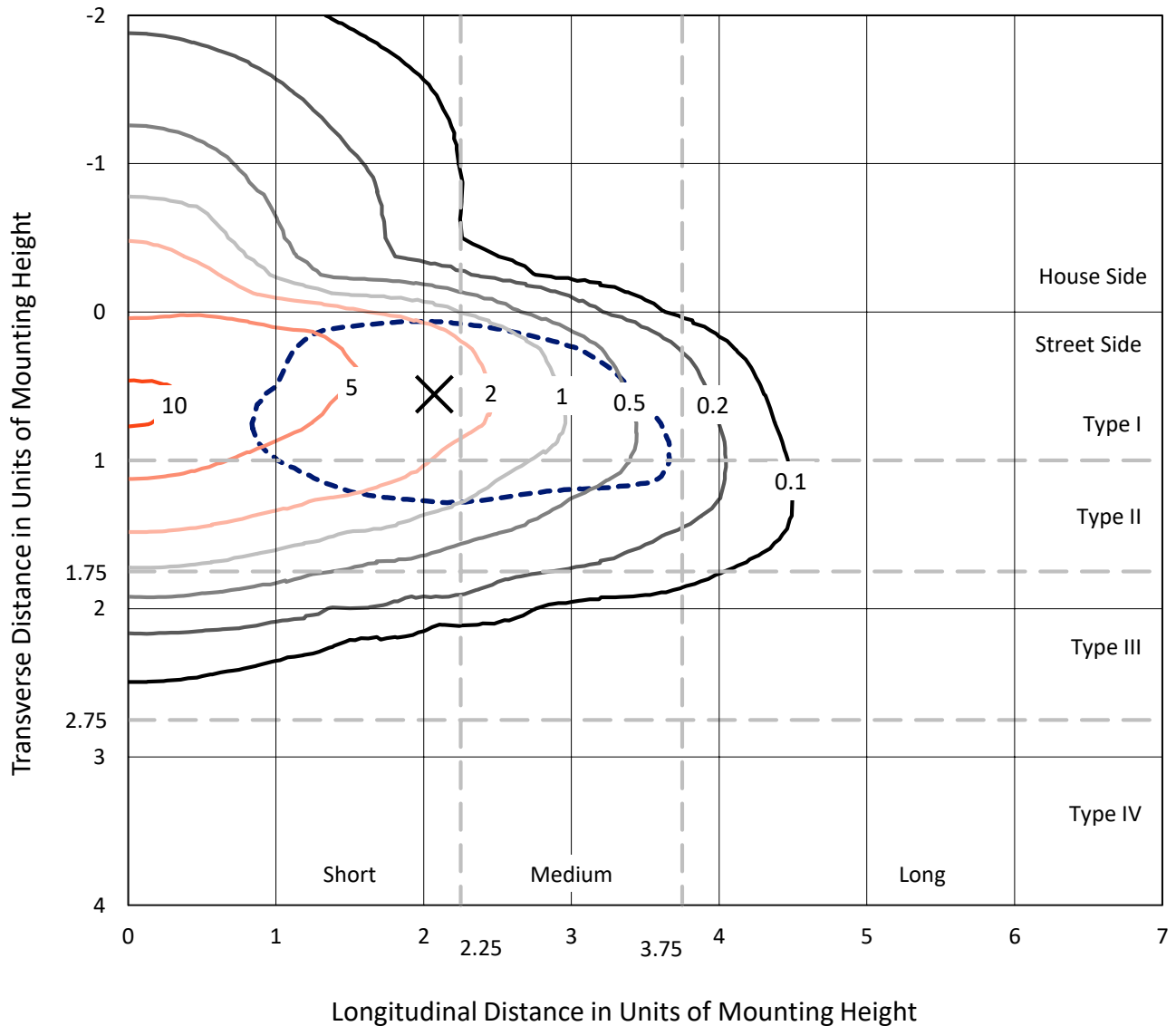
Input Watts (W): 44  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P271263  
 CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

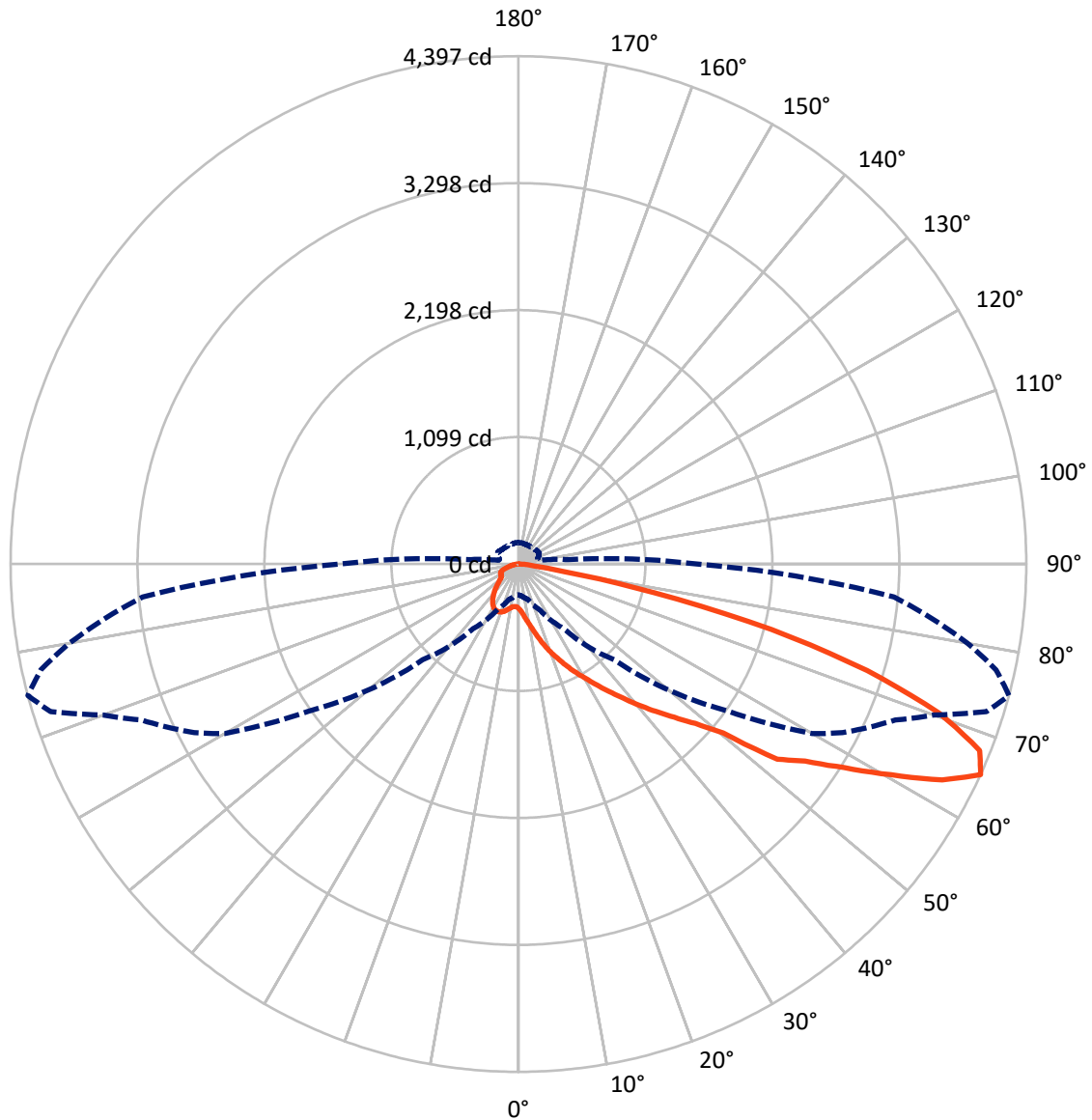
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 11.1 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P271263  
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P271263

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027-800

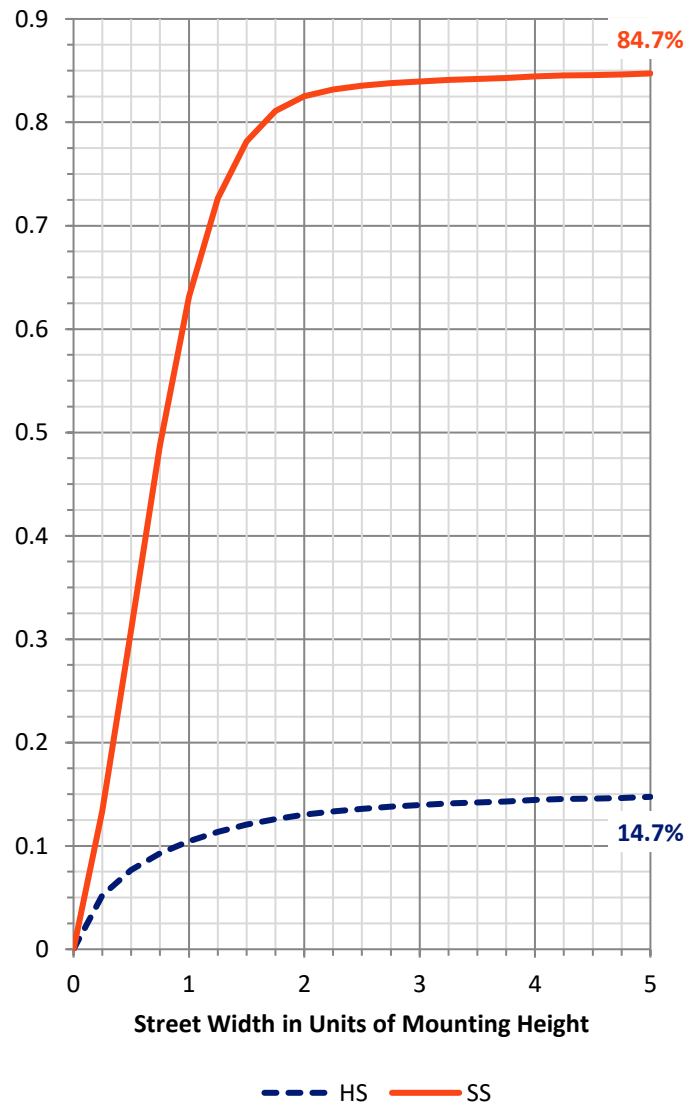
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	668.4	0.0	668.4
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	3779.7	0.0	3779.7
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	4448.1	0.0	4448.1
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	45.5	1.0
10°-20°	173.8	3.9
20°-30°	350.7	7.9
30°-40°	595.6	13.4
40°-50°	830.7	18.7
50°-60°	1018.2	22.9
60°-70°	958.0	21.5
70°-80°	420.0	9.4
80°-90°	55.6	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°	4448.1	100.0
0°-180°	4448.1	100.0

**Coefficient of Utilization**



REPORT NUMBER: P271263

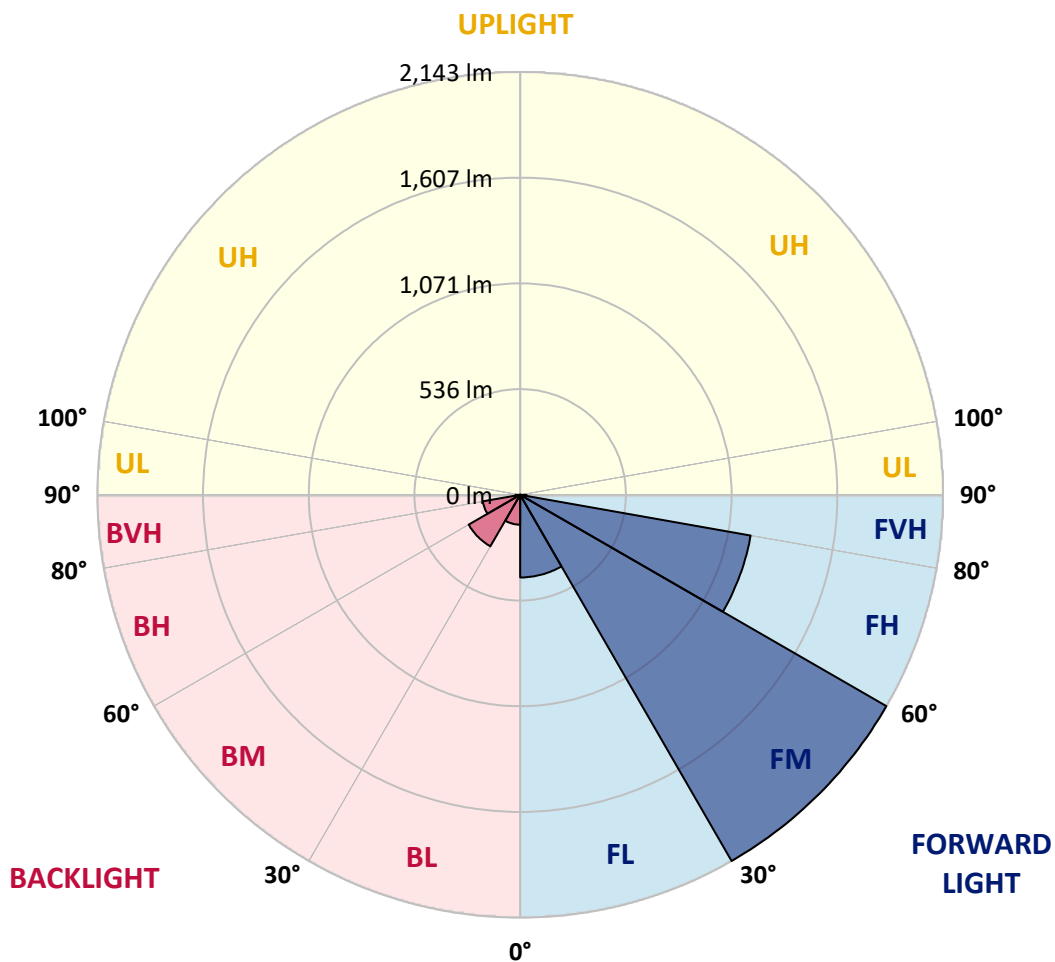
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	418.7	9.4			
FM	(30°-60°)	2142.9	48.2			
FH	(60°-80°)	1185.9	26.7			G1/1800
FVH	(80°-90°)	32.2	0.7			G1/100
BL	(0°-30°)	151.3	3.4	B1/500		
BM	(30°-60°)	301.6	6.8	B1/1000		
BH	(60°-80°)	192.1	4.3	B1/500		G1/500
BVH	(80°-90°)	23.4	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: P271263  
 CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5
2.5°	485.3	479.6	480.2	472.2	460.7	448.0	437.5	431.8	427.1	425.5	417.6
5°	634.7	627.6	625.1	607.0	579.8	547.5	515.5	503.1	492.9	486.7	471.4
7.5°	756.9	753.3	749.8	733.1	706.2	664.9	613.5	595.0	578.1	559.5	541.0
10°	840.2	838.7	837.3	825.7	803.4	767.4	711.9	691.9	670.7	646.9	622.9
12.5°	902.9	902.9	904.1	894.4	880.9	853.1	802.7	784.1	762.7	737.7	710.2
15°	945.0	946.3	952.2	955.0	947.9	930.1	886.0	869.6	849.2	824.6	797.3
17.5°	973.1	975.4	984.2	993.4	1002.6	996.3	963.5	948.3	929.8	907.2	881.7
20°	1038.3	1035.3	1035.7	1032.8	1046.2	1050.9	1032.8	1020.0	1005.4	984.7	961.5
22.5°	1174.9	1169.6	1155.6	1120.2	1104.1	1102.4	1091.7	1085.0	1073.6	1060.5	1037.4
25°	1353.1	1346.9	1319.5	1261.2	1213.2	1168.7	1148.8	1144.6	1137.3	1128.5	1111.7
27.5°	1537.4	1530.5	1495.1	1421.6	1358.7	1269.0	1207.4	1201.8	1194.9	1191.3	1183.3
30°	1699.6	1692.1	1657.4	1582.6	1506.7	1399.7	1286.4	1266.5	1254.9	1256.1	1251.6
32.5°	1841.9	1835.2	1796.3	1720.2	1643.2	1539.3	1388.8	1358.0	1331.8	1322.2	1325.7
35°	1961.2	1955.3	1912.5	1835.9	1758.3	1672.0	1520.7	1474.3	1431.8	1405.2	1402.1
37.5°	2031.3	2028.1	1998.0	1933.0	1856.0	1792.6	1668.3	1616.9	1554.3	1515.6	1498.6
40°	2027.5	2031.1	2026.0	1996.7	1936.8	1890.8	1822.3	1771.4	1710.3	1652.5	1617.9
42.5°	1969.8	1974.8	1997.7	2013.0	1996.9	1968.8	1956.7	1918.8	1864.0	1802.8	1755.0
45°	1890.6	1895.1	1924.7	1980.0	2026.0	2033.9	2074.5	2055.4	2009.1	1957.0	1904.3
47.5°	1769.1	1777.8	1812.4	1900.2	2009.9	2086.4	2173.2	2182.0	2155.0	2112.1	2062.8
50°	1593.4	1605.0	1653.4	1778.1	1948.8	2140.0	2320.1	2353.4	2342.7	2299.1	2249.3
52.5°	1413.5	1425.0	1489.5	1622.2	1850.2	2162.1	2464.6	2550.1	2611.7	2656.7	2665.5
55°	1226.0	1239.1	1309.9	1462.6	1718.9	2134.2	2568.0	2664.9	2727.6	2774.4	2793.4
57.5°	1014.7	1029.5	1097.9	1252.3	1533.3	2021.5	2682.8	2820.3	2913.5	2985.8	3026.6
60°	772.3	790.6	861.7	1017.3	1289.4	1806.0	2734.0	2937.5	3085.5	3194.2	3258.6
62.5°	489.5	508.3	582.0	743.6	1011.9	1511.3	2589.2	2886.0	3138.4	3299.0	3417.3
65°	267.2	275.3	316.4	438.1	682.3	1172.6	2221.9	2571.8	2935.5	3163.3	3344.8
67.5°	200.3	201.5	205.7	235.4	363.4	791.8	1737.1	2057.7	2461.5	2754.7	2971.8
70°	175.3	175.3	176.0	176.2	197.2	429.0	1176.9	1472.1	1842.2	2138.7	2408.4
72.5°	157.4	155.6	155.0	151.6	154.5	219.8	640.6	905.9	1217.9	1550.7	1802.2
75°	135.9	135.6	135.6	132.1	133.8	154.8	277.8	434.6	676.6	986.3	1234.0
77.5°	117.4	115.4	115.7	113.7	119.1	118.5	131.8	179.1	294.6	518.1	723.6
80°	96.7	95.4	96.2	95.1	103.6	87.8	88.8	109.6	146.3	227.2	320.3
82.5°	71.5	72.1	77.6	77.0	87.1	59.2	65.0	81.7	98.5	113.1	123.1
85°	42.0	42.7	55.8	58.6	64.0	31.1	40.0	48.7	54.8	60.8	63.4
87.5°	4.5	6.0	31.1	32.0	28.6	9.3	16.1	20.4	21.7	23.1	20.4
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: P271263

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027-800

**CANDELA DISTRIBUTION (continued):**

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5
2.5°	415.0	411.5	407.6	405.2	401.3	397.9	391.7	386.5	380.9	376.8	375.2
5°	463.7	455.0	445.6	438.9	430.4	423.0	408.9	391.9	386.5	375.2	372.3
7.5°	527.1	511.3	495.4	482.5	467.7	455.6	431.8	401.3	397.3	379.2	375.2
10°	601.5	578.4	555.0	534.9	513.3	494.6	459.6	416.5	412.3	389.1	385.2
12.5°	684.8	656.5	626.2	596.3	570.8	544.5	496.7	440.3	433.5	406.0	400.6
15°	770.6	739.9	704.9	668.7	637.3	602.5	542.1	471.4	458.9	426.8	419.4
17.5°	855.1	821.9	785.2	744.8	708.0	666.5	591.4	506.3	484.7	447.0	437.7
20°	936.9	903.2	864.4	824.9	779.0	731.5	641.7	540.5	507.6	464.1	451.8
22.5°	1011.3	982.4	943.7	898.1	851.8	798.2	693.0	574.6	527.8	477.1	461.5
25°	1089.7	1063.4	1024.8	981.0	927.1	867.6	746.0	607.3	543.8	484.1	465.0
27.5°	1169.0	1146.2	1110.0	1064.0	1005.9	939.9	799.6	637.3	556.9	486.4	463.3
30°	1253.6	1236.0	1202.7	1151.1	1092.5	1019.5	858.2	666.6	565.0	483.3	455.6
32.5°	1333.7	1333.1	1303.4	1249.8	1186.8	1106.4	920.0	696.4	569.3	474.6	442.2
35°	1416.7	1428.5	1406.0	1355.2	1288.6	1199.4	988.1	728.0	569.6	458.9	425.0
37.5°	1511.3	1532.0	1522.1	1473.7	1403.8	1305.5	1068.2	763.6	567.9	437.5	399.8
40°	1618.8	1647.1	1646.9	1606.1	1531.4	1424.4	1161.2	803.7	564.0	410.5	370.1
42.5°	1742.0	1775.6	1784.9	1744.8	1669.2	1554.3	1268.0	847.6	557.7	383.9	338.8
45°	1882.8	1912.5	1930.1	1892.8	1816.9	1695.8	1390.4	897.2	550.1	349.7	302.8
47.5°	2033.7	2068.2	2094.5	2062.5	1981.7	1857.1	1535.7	961.5	547.2	310.8	264.0
50°	2220.7	2256.4	2313.2	2298.9	2254.3	2154.2	1842.7	1113.2	548.3	273.7	231.5
52.5°	2684.8	2766.5	2838.5	2806.5	2700.9	2529.2	2092.2	1197.5	524.6	243.4	208.9
55°	2824.8	2917.7	3023.8	3010.5	2909.3	2736.0	2289.5	1268.0	501.8	221.3	194.2
57.5°	3069.9	3179.5	3327.7	3324.8	3200.7	3005.6	2543.3	1352.3	491.8	208.5	186.8
60°	3329.4	3468.9	3673.8	3705.7	3570.8	3367.8	2843.2	1455.9	493.2	201.5	182.5
62.5°	3518.9	3723.6	4021.5	4117.1	3958.1	3734.6	3154.5	1559.4	484.7	193.2	177.4
65°	3530.6	3825.2	4247.8	4396.8	4235.7	3948.5	3264.4	1539.1	433.8	182.3	169.2
67.5°	3247.6	3631.3	4144.9	4308.1	4143.4	3816.5	3071.8	1345.5	352.6	163.0	155.0
70°	2704.8	3150.3	3683.4	3865.2	3729.3	3398.4	2673.4	1074.7	263.5	137.5	133.8
72.5°	2090.3	2505.6	2989.7	3158.3	3054.1	2763.1	2108.6	783.2	188.1	111.5	108.7
75°	1494.3	1848.1	2199.5	2263.6	2161.1	1893.8	1368.1	489.2	131.8	91.4	87.5
77.5°	925.3	1155.3	1281.5	1198.9	1067.9	887.6	556.9	241.6	87.8	74.4	70.4
80°	410.5	481.9	450.0	401.0	316.7	260.2	170.0	107.3	56.7	57.4	55.2
82.5°	138.1	146.1	142.0	141.3	127.3	111.5	72.1	46.4	31.7	36.8	35.9
85°	67.4	70.4	70.7	73.3	63.7	49.5	19.6	18.3	13.6	19.9	20.7
87.5°	20.4	20.7	18.7	20.4	16.3	11.3	3.7	5.1	2.5	4.9	4.9
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: P271263

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027-800

**CANDELA DISTRIBUTION (continued):**

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5	385.5
2.5°	372.1	371.0	368.9	366.7	366.1	363.4	362.5	361.1	360.2	358.9	357.6
5°	368.8	366.7	364.4	361.8	361.8	358.0	356.3	354.6	354.6	352.0	350.9
7.5°	372.1	369.6	367.0	364.7	365.6	361.1	359.3	357.6	357.3	354.8	353.8
10°	381.7	379.2	376.1	373.8	372.9	369.3	367.2	364.7	363.1	361.4	359.6
12.5°	396.4	393.1	389.1	384.2	382.3	379.2	376.1	372.6	368.8	367.0	364.4
15°	413.9	408.3	402.9	397.1	391.7	388.4	384.2	378.8	373.5	371.3	367.9
17.5°	428.4	422.5	414.8	407.7	398.0	395.6	389.7	383.1	374.4	373.5	368.5
20°	440.6	431.5	422.2	413.7	398.9	397.6	390.3	382.6	370.1	370.1	364.0
22.5°	447.4	434.9	423.9	412.5	394.1	393.1	384.6	375.5	360.2	360.8	353.2
25°	448.6	433.5	419.7	406.0	384.8	382.9	372.1	362.1	345.5	344.4	336.4
27.5°	443.9	426.4	410.3	393.8	371.0	366.7	354.8	343.0	326.5	323.7	315.2
30°	433.5	412.9	394.7	375.9	351.7	344.9	332.6	320.3	303.6	299.9	291.9
32.5°	416.9	393.3	373.2	354.3	327.7	319.2	306.7	294.6	278.5	275.6	268.2
35°	394.7	368.5	347.1	327.2	300.6	291.7	279.8	269.1	254.4	253.2	248.1
37.5°	367.0	339.6	316.9	297.7	272.5	268.0	255.7	247.9	235.7	236.9	234.3
40°	335.5	307.6	286.1	269.1	247.4	243.4	236.0	230.1	219.5	222.7	223.0
42.5°	303.8	275.9	256.3	241.0	222.4	219.8	214.8	211.5	203.5	209.7	212.2
45°	268.0	242.0	225.2	213.6	199.8	199.8	197.2	197.0	191.6	200.3	202.8
47.5°	233.2	212.8	201.2	194.2	184.5	189.1	188.1	190.4	186.5	195.6	197.7
50°	206.9	192.6	185.6	182.3	175.3	182.5	184.2	187.3	184.0	191.9	193.6
52.5°	190.1	180.7	176.8	176.0	171.1	180.0	182.7	185.6	181.6	189.1	188.7
55°	180.7	174.6	173.2	174.9	171.1	179.8	182.5	184.5	181.1	186.2	185.9
57.5°	177.4	174.0	174.9	177.4	174.9	181.9	183.3	185.6	182.3	184.5	185.6
60°	177.1	177.1	180.5	184.0	182.3	187.3	188.1	187.8	184.8	185.1	185.6
62.5°	175.3	179.8	185.3	190.7	190.1	196.4	197.0	193.2	190.7	187.8	187.0
65°	170.0	177.1	185.3	192.6	193.9	203.5	204.5	201.0	199.2	194.5	190.7
67.5°	158.2	167.3	176.8	185.9	187.8	201.0	203.5	204.9	205.7	202.6	197.7
70°	138.1	147.4	157.4	167.9	170.6	185.1	190.4	197.0	201.9	206.6	204.9
72.5°	112.4	120.8	129.4	139.0	143.2	158.2	165.3	176.5	184.5	196.1	201.0
75°	89.1	94.2	99.4	105.2	108.7	123.3	132.1	145.7	156.5	172.7	183.3
77.5°	70.2	72.8	75.3	77.9	79.2	87.5	94.5	108.1	120.6	140.9	156.8
80°	54.1	55.4	55.8	56.7	56.1	59.9	62.5	70.7	81.4	101.6	120.3
82.5°	34.9	35.9	36.6	37.9	35.0	40.2	42.0	42.7	48.4	63.2	76.4
85°	19.6	19.9	20.1	20.7	16.7	21.7	22.1	20.7	20.1	26.1	29.5
87.5°	4.9	4.5	4.9	4.9	1.9	4.5	4.5	3.1	2.2	4.2	3.5
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: P271263

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027-800

**CANDELA DISTRIBUTION (continued):**

	135°	145°	155°	165°	175°	180°
0°	385.5	385.5	385.5	385.5	385.5	385.5
2.5°	355.1	354.6	354.8	353.5	352.9	353.2
5°	349.5	348.4	348.4	347.5	346.3	346.3
7.5°	352.0	349.7	348.9	347.1	345.5	345.8
10°	356.0	352.0	349.3	346.7	344.7	344.7
12.5°	358.6	351.4	347.1	343.8	341.5	341.5
15°	359.1	348.4	342.2	338.4	336.1	336.1
17.5°	355.6	342.2	334.2	329.4	326.9	327.4
20°	347.1	330.4	321.1	316.1	313.5	313.8
22.5°	333.9	314.6	303.8	298.0	295.5	295.5
25°	315.8	294.9	283.2	278.5	276.1	276.1
27.5°	295.2	273.7	263.5	259.8	258.4	258.4
30°	271.9	254.1	246.8	244.2	242.0	242.0
32.5°	252.5	239.7	237.2	233.6	227.8	227.5
35°	236.9	235.4	233.5	223.3	214.8	213.6
37.5°	228.3	236.9	224.3	206.9	200.1	199.8
40°	223.8	231.8	210.3	201.8	201.0	201.0
42.5°	213.1	218.7	209.3	204.5	204.5	204.9
45°	201.8	206.6	211.5	207.1	208.5	208.9
47.5°	193.9	203.5	211.5	207.7	210.6	212.2
50°	186.5	200.6	207.1	207.1	210.3	210.6
52.5°	184.8	196.6	203.1	206.3	206.6	205.2
55°	185.1	193.6	200.1	204.1	202.3	202.3
57.5°	184.8	191.9	197.4	199.0	199.8	199.8
60°	185.1	189.6	194.2	193.6	196.4	196.4
62.5°	185.9	186.5	188.7	188.1	192.3	192.3
65°	187.8	182.5	181.1	181.6	186.8	186.5
67.5°	191.6	177.1	172.7	173.0	180.2	179.1
70°	197.0	169.8	163.0	161.2	173.7	171.8
72.5°	198.6	161.2	150.6	148.8	156.1	150.6
75°	190.7	154.5	137.3	131.6	128.5	126.8
77.5°	170.0	150.2	123.3	111.5	106.7	105.6
80°	140.9	141.6	105.2	91.1	105.8	105.6
82.5°	106.4	122.2	84.4	79.0	76.6	64.0
85°	51.6	91.9	64.8	54.3	32.6	30.8
87.5°	4.5	38.4	37.4	24.3	11.0	10.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

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