

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: P271262

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7027-600**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271262  
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-7027-600  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 2700K, 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: 3628.5 lumens  
Efficiency: N/A  
Efficacy: 106.7 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

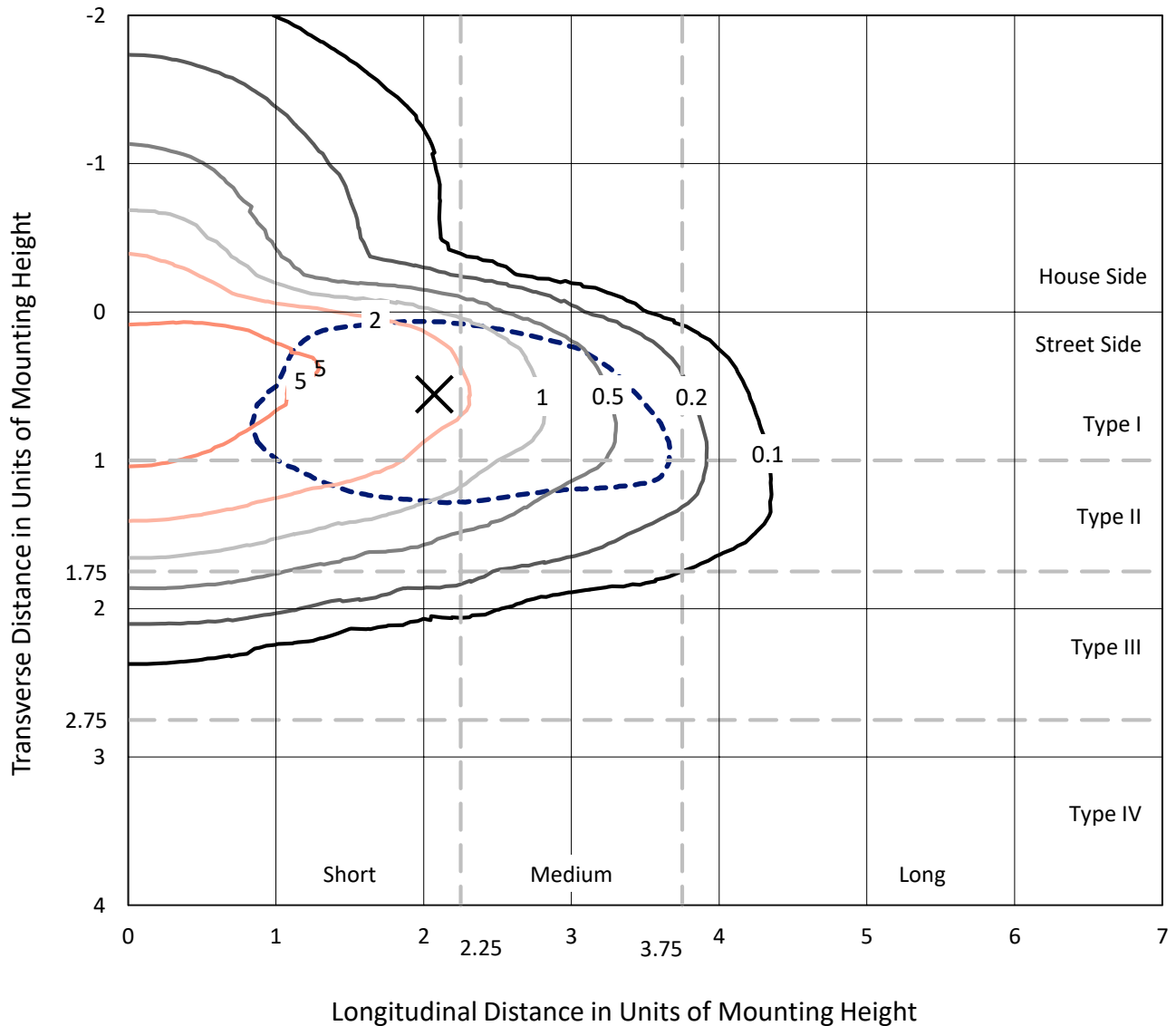
Input Watts (W): 34  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

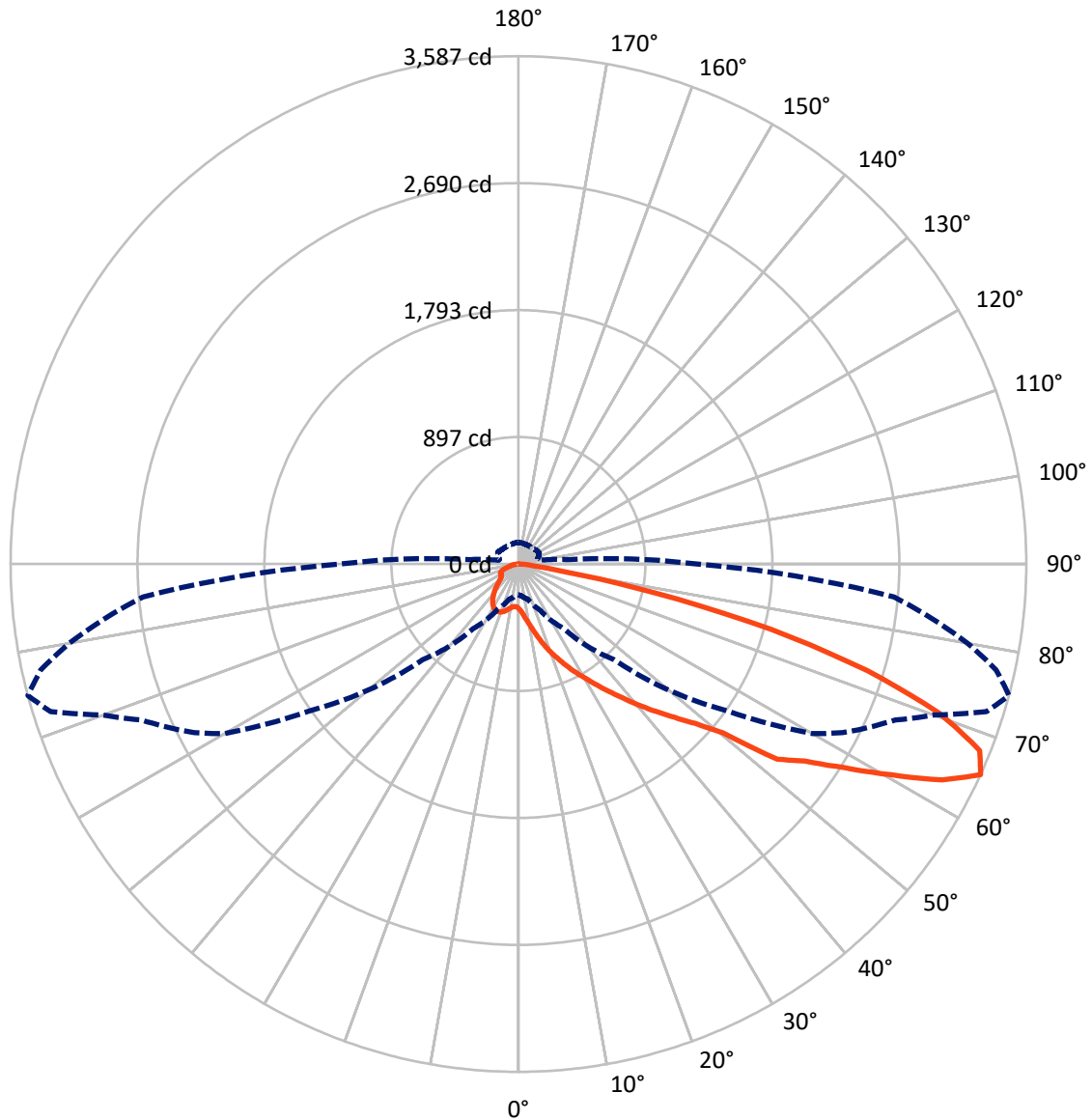
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 9 fc  
 Type II - Short - Semi-Cutoff

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### Luminous Intensity Polar Plot



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

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	545.2	0.0	545.2
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	3083.3	0.0	3083.3
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	3628.5	0.0	3628.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.1	1.0
10°-20°	141.8	3.9
20°-30°	286.1	7.9
30°-40°	485.9	13.4
40°-50°	677.7	18.7
50°-60°	830.6	22.9
60°-70°	781.4	21.5
70°-80°	342.7	9.4
80°-90°	45.3	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°	3628.5	100.0
0°-180°	3628.5	100.0

**Coefficient of Utilization**



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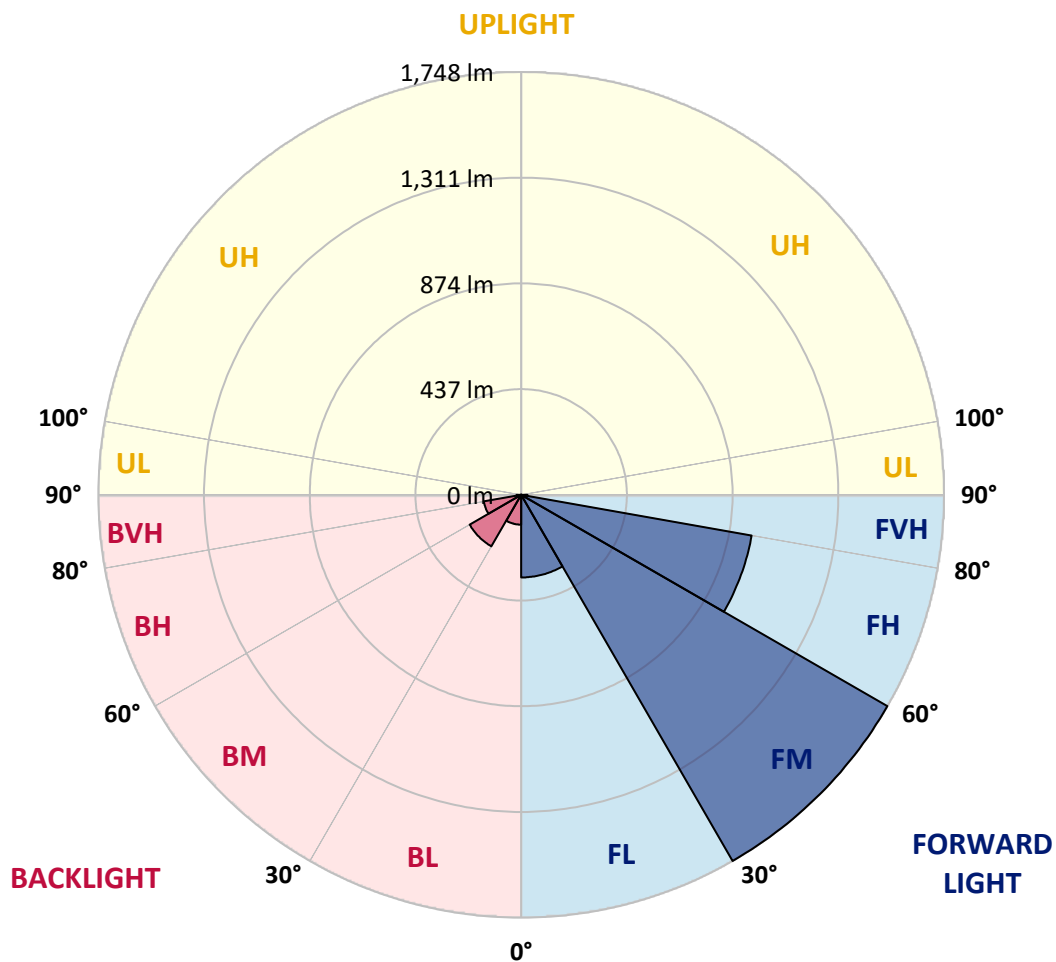
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027-600

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	341.5	9.4			
FM (30°-60°)	1748.1	48.2			
FH (60°-80°)	967.4	26.7			G1/1800
FVH (80°-90°)	26.3	0.7			G1/100
BL (0°-30°)	123.4	3.4	B1/500		
BM (30°-60°)	246.0	6.8	B1/1000		
BH (60°-80°)	156.7	4.3	B1/500		G1/500
BVH (80°-90°)	19.1	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3
2.5°	395.9	391.2	391.8	385.3	375.9	365.4	356.8	352.2	348.4	347.1	340.6
5°	517.8	511.9	509.9	495.1	473.0	446.6	420.5	410.4	402.1	397.1	384.6
7.5°	617.5	614.5	611.7	598.1	576.2	542.4	500.4	485.4	471.6	456.3	441.3
10°	685.3	684.1	683.0	673.5	655.4	625.9	580.8	564.3	547.1	527.7	508.0
12.5°	736.6	736.6	737.5	729.7	718.6	695.9	654.9	639.7	622.0	601.8	579.3
15°	770.9	772.0	776.8	779.1	773.4	758.8	722.7	709.3	692.8	672.7	650.6
17.5°	793.8	795.7	802.8	810.5	817.8	812.7	785.9	773.5	758.4	740.1	719.3
20°	846.9	844.5	844.9	842.5	853.4	857.3	842.5	832.1	820.2	803.3	784.4
22.5°	958.4	954.0	942.7	913.8	900.7	899.4	890.5	885.0	875.8	865.2	846.3
25°	1103.8	1098.7	1076.3	1028.7	989.6	953.3	937.2	933.7	927.7	920.6	906.8
27.5°	1254.2	1248.6	1219.7	1159.7	1108.5	1035.2	984.9	980.3	974.8	971.7	965.3
30°	1386.4	1380.3	1351.9	1291.0	1229.2	1141.9	1049.4	1033.2	1023.7	1024.6	1021.0
32.5°	1502.4	1497.1	1465.3	1403.2	1340.5	1255.7	1132.9	1107.8	1086.5	1078.7	1081.4
35°	1599.9	1595.0	1560.1	1497.7	1434.4	1363.9	1240.5	1202.7	1167.9	1146.2	1143.7
37.5°	1657.2	1654.4	1629.9	1576.9	1514.1	1462.4	1361.0	1318.9	1268.0	1236.3	1222.5
40°	1653.9	1657.0	1652.7	1628.7	1579.9	1542.4	1486.5	1445.1	1395.2	1348.0	1319.9
42.5°	1606.8	1611.0	1629.6	1642.1	1628.9	1606.1	1596.2	1565.2	1520.6	1470.6	1431.5
45°	1542.2	1545.9	1570.1	1615.2	1652.7	1659.2	1692.1	1676.7	1638.9	1596.4	1553.4
47.5°	1443.1	1450.4	1478.5	1550.0	1639.5	1701.8	1772.7	1779.9	1758.1	1722.9	1682.7
50°	1299.8	1309.3	1348.7	1450.6	1589.7	1745.8	1892.5	1919.8	1911.1	1875.5	1834.9
52.5°	1153.1	1162.4	1215.0	1323.4	1509.4	1763.8	2010.5	2080.3	2130.6	2167.3	2174.3
55°	1000.3	1010.9	1068.5	1193.2	1402.3	1740.9	2094.8	2174.0	2225.0	2263.3	2278.7
57.5°	827.8	839.7	895.6	1021.6	1250.9	1649.1	2188.5	2300.6	2376.6	2435.8	2468.9
60°	629.9	645.0	702.8	829.9	1051.8	1473.2	2230.3	2396.3	2517.1	2605.7	2658.3
62.5°	399.3	414.6	474.8	606.6	825.5	1232.8	2112.1	2354.3	2560.1	2691.2	2787.7
65°	217.8	224.5	258.1	357.3	556.5	956.5	1812.5	2098.0	2394.6	2580.4	2728.6
67.5°	163.4	164.4	167.9	192.1	296.4	645.8	1417.0	1678.7	2008.0	2247.1	2424.2
70°	143.1	143.1	143.5	143.8	160.8	349.9	960.0	1200.8	1502.8	1744.6	1964.7
72.5°	128.4	127.0	126.5	123.7	126.0	179.3	522.6	738.9	993.4	1265.0	1470.2
75°	110.9	110.6	110.6	107.7	109.1	126.2	226.7	354.6	551.9	804.7	1006.6
77.5°	95.8	94.2	94.4	92.7	97.1	96.7	107.5	146.2	240.2	422.7	590.2
80°	79.0	77.9	78.5	77.6	84.5	71.5	72.5	89.3	119.4	185.4	261.2
82.5°	58.4	58.8	63.2	62.8	71.1	48.2	53.1	66.7	80.3	92.3	100.4
85°	34.1	34.9	45.5	47.8	52.2	25.4	32.6	39.7	44.7	49.6	51.7
87.5°	3.8	4.9	25.4	26.1	23.4	7.6	13.1	16.6	17.7	19.0	16.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3
2.5°	338.7	335.6	332.5	330.5	327.3	324.6	319.4	315.3	310.8	307.5	306.1
5°	378.4	371.2	363.5	358.1	351.1	345.0	333.5	319.6	315.3	306.1	303.7
7.5°	430.1	417.2	404.1	393.5	381.6	371.5	352.2	327.3	324.1	309.2	306.1
10°	490.7	471.8	452.7	436.2	418.7	403.5	374.9	339.7	336.3	317.5	314.1
12.5°	558.6	535.5	510.9	486.3	465.6	444.1	405.1	359.1	353.7	331.3	326.9
15°	628.5	603.7	574.9	545.5	519.8	491.5	442.2	384.6	374.5	348.2	342.1
17.5°	697.5	670.6	640.5	607.6	577.5	543.7	482.4	413.0	395.4	364.7	357.0
20°	764.3	736.8	705.2	672.9	635.6	596.7	523.5	440.9	414.1	378.5	368.7
22.5°	825.1	801.5	769.8	732.7	694.7	651.2	565.4	468.8	430.5	389.1	376.5
25°	889.0	867.5	836.1	800.3	756.3	707.8	608.4	495.3	443.7	395.0	379.3
27.5°	953.6	935.0	905.5	867.9	820.6	766.9	652.3	519.8	454.3	396.8	377.8
30°	1022.6	1008.3	980.9	939.0	891.3	831.7	700.0	543.8	461.0	394.3	371.5
32.5°	1087.8	1087.5	1063.2	1019.5	968.2	902.5	750.4	568.1	464.5	387.1	360.8
35°	1155.8	1165.2	1147.0	1105.5	1051.1	978.6	806.0	593.9	464.7	374.5	346.7
37.5°	1232.8	1249.7	1241.6	1202.1	1145.2	1065.0	871.4	623.1	463.3	356.8	326.2
40°	1320.6	1343.7	1343.4	1310.2	1249.3	1162.0	947.4	655.6	460.0	335.0	301.9
42.5°	1420.9	1448.4	1456.1	1423.4	1361.7	1268.0	1034.4	691.3	455.0	313.1	276.3
45°	1535.9	1560.1	1574.5	1544.0	1482.2	1383.4	1134.3	731.9	448.8	285.3	246.9
47.5°	1659.0	1687.1	1708.5	1682.5	1616.5	1514.9	1252.7	784.4	446.4	253.4	215.4
50°	1811.5	1840.6	1887.0	1875.2	1839.0	1757.4	1503.1	908.0	447.4	223.1	188.9
52.5°	2190.1	2256.8	2315.4	2289.4	2203.3	2063.1	1706.8	976.8	428.0	198.5	170.4
55°	2304.4	2380.1	2466.7	2455.7	2373.1	2231.8	1867.7	1034.4	409.3	180.5	158.3
57.5°	2504.3	2593.5	2714.6	2712.3	2611.0	2451.8	2074.6	1103.2	401.3	170.0	152.4
60°	2715.9	2829.8	2996.8	3022.9	2912.8	2747.3	2319.3	1187.6	402.4	164.4	148.8
62.5°	2870.7	3037.4	3280.6	3358.6	3228.9	3046.5	2573.3	1272.1	395.4	157.7	144.7
65°	2880.1	3120.4	3465.2	3586.7	3455.3	3221.1	2662.8	1255.6	353.8	148.7	138.0
67.5°	2649.2	2962.3	3381.2	3514.3	3380.1	3113.4	2505.9	1097.5	287.5	132.9	126.5
70°	2206.4	2569.8	3004.7	3153.1	3042.1	2772.3	2180.8	876.7	215.0	112.2	109.1
72.5°	1705.2	2044.1	2439.0	2576.2	2491.4	2254.0	1720.2	639.0	153.5	91.0	88.7
75°	1219.0	1507.5	1794.3	1846.6	1762.8	1544.9	1116.1	399.0	107.5	74.6	71.3
77.5°	754.8	942.5	1045.4	978.1	871.1	724.2	454.3	197.1	71.5	60.7	57.5
80°	335.0	393.1	367.0	327.2	258.4	212.4	138.7	87.5	46.2	46.8	45.0
82.5°	112.6	119.1	115.9	115.3	103.8	91.0	58.8	37.9	25.8	30.1	29.4
85°	54.9	57.5	57.8	59.7	51.9	40.5	15.9	15.0	11.0	16.2	16.9
87.5°	16.6	16.9	15.2	16.6	13.4	9.3	3.1	4.1	2.1	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0





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**CANDELA DISTRIBUTION (continued):**

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3	314.3
2.5°	303.5	302.5	301.0	299.1	298.6	296.4	295.7	294.6	293.8	292.7	291.8
5°	300.8	299.1	297.2	295.3	295.3	291.9	290.6	289.3	289.3	287.2	286.2
7.5°	303.5	301.6	299.3	297.6	298.2	294.6	293.1	291.8	291.5	289.4	288.5
10°	311.4	309.2	306.9	305.0	304.3	301.2	299.7	297.6	296.1	294.7	293.3
12.5°	323.4	320.6	317.5	313.5	311.8	309.2	306.9	303.9	300.8	299.3	297.2
15°	337.8	333.1	328.7	323.8	319.4	316.9	313.5	309.0	304.6	302.9	300.0
17.5°	349.5	344.6	338.4	332.6	324.7	322.8	317.9	312.5	305.5	304.6	300.6
20°	359.4	352.0	344.4	337.5	325.5	324.3	318.3	312.2	301.9	301.9	296.8
22.5°	364.9	354.8	345.8	336.5	321.6	320.6	313.7	306.3	293.8	294.4	288.0
25°	365.9	353.7	342.3	331.3	314.0	312.3	303.5	295.5	281.9	280.9	274.4
27.5°	362.1	347.9	334.7	321.4	302.5	299.1	289.4	279.7	266.3	264.1	257.2
30°	353.7	336.8	322.0	306.5	286.9	281.3	271.2	261.2	247.8	244.7	238.2
32.5°	340.0	320.9	304.4	289.1	267.2	260.4	250.2	240.2	227.1	224.8	218.8
35°	322.0	300.6	283.2	266.8	245.1	238.1	228.3	219.5	207.5	206.6	202.5
37.5°	299.3	276.9	258.5	242.8	222.3	218.6	208.6	202.2	192.2	193.2	191.1
40°	273.8	250.8	233.4	219.5	201.8	198.5	192.4	187.7	179.1	181.6	181.8
42.5°	247.9	225.0	209.1	196.6	181.5	179.3	175.2	172.5	165.9	171.0	173.2
45°	218.6	197.4	183.8	174.4	163.0	163.0	160.8	160.6	156.2	163.4	165.5
47.5°	190.3	173.6	164.1	158.3	150.5	154.1	153.5	155.3	152.2	159.4	161.3
50°	168.7	157.3	151.5	148.7	143.1	148.8	150.2	152.8	150.0	156.6	157.9
52.5°	155.0	147.5	144.3	143.5	139.6	146.9	149.1	151.5	148.2	154.1	154.0
55°	147.5	142.4	141.3	142.7	139.6	146.6	148.8	150.5	147.7	152.0	151.6
57.5°	144.7	141.9	142.7	144.7	142.7	148.4	149.6	151.5	148.7	150.5	151.5
60°	144.4	144.4	147.2	150.0	148.7	152.8	153.5	153.3	150.7	150.9	151.5
62.5°	143.1	146.6	151.2	155.5	155.0	160.2	160.6	157.7	155.5	153.3	152.6
65°	138.7	144.4	151.2	157.3	158.1	165.9	166.8	163.9	162.6	158.6	155.5
67.5°	129.0	136.5	144.3	151.6	153.3	163.9	165.9	167.2	167.9	165.3	161.3
70°	112.6	120.3	128.4	136.9	139.1	150.9	155.3	160.6	164.7	168.5	167.2
72.5°	91.6	98.5	105.6	113.4	116.8	129.0	134.7	144.1	150.5	160.0	163.9
75°	72.8	76.8	81.0	85.9	88.7	100.6	107.7	118.8	127.6	140.9	149.6
77.5°	57.2	59.3	61.4	63.5	64.7	71.3	77.2	88.2	98.4	115.0	127.9
80°	44.0	45.3	45.5	46.2	45.8	49.0	51.1	57.8	66.5	82.9	98.2
82.5°	28.3	29.4	29.7	30.9	28.7	32.8	34.1	34.9	39.4	51.5	62.3
85°	15.9	16.2	16.3	16.9	13.7	17.7	18.0	16.9	16.3	21.2	24.1
87.5°	4.0	3.8	4.0	4.0	1.5	3.8	3.8	2.5	1.8	3.5	2.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7027-600

**CANDELA DISTRIBUTION (continued):**

	135°	145°	155°	165°	175°	180°
0°	314.3	314.3	314.3	314.3	314.3	314.3
2.5°	289.8	289.3	289.4	288.3	287.8	288.0
5°	285.1	284.1	284.1	283.4	282.5	282.5
7.5°	287.2	285.3	284.7	283.2	281.9	282.1
10°	290.4	287.2	284.9	282.7	281.2	281.2
12.5°	292.5	286.6	283.2	280.5	278.7	278.7
15°	292.9	284.1	279.1	276.0	274.3	274.3
17.5°	290.2	279.1	272.6	268.8	266.5	267.1
20°	283.2	269.6	261.9	257.9	255.7	255.9
22.5°	272.4	256.6	247.9	243.1	240.9	240.9
25°	257.6	240.6	231.0	227.1	225.2	225.2
27.5°	240.7	223.1	215.0	211.9	210.7	210.7
30°	221.8	207.2	201.3	199.2	197.4	197.4
32.5°	205.9	195.6	193.4	190.7	185.8	185.6
35°	193.2	192.1	190.4	182.1	175.2	174.4
37.5°	186.3	193.2	183.1	168.7	163.2	163.0
40°	182.5	189.1	171.4	164.6	163.9	163.9
42.5°	173.8	178.5	170.8	166.8	166.8	167.2
45°	164.6	168.5	172.5	169.1	170.0	170.4
47.5°	158.1	165.9	172.5	169.4	171.8	173.2
50°	152.2	163.6	169.1	169.1	171.4	171.8
52.5°	150.7	160.4	165.7	168.3	168.5	167.4
55°	150.9	157.9	163.2	166.5	165.1	165.1
57.5°	150.7	156.6	161.2	162.2	163.0	163.0
60°	150.9	154.7	158.3	157.9	160.2	160.2
62.5°	151.6	152.2	154.0	153.5	156.9	156.9
65°	153.3	148.8	147.7	148.2	152.4	152.2
67.5°	156.2	144.4	140.9	141.0	147.1	146.2
70°	160.6	138.5	132.9	131.6	141.8	140.1
72.5°	162.1	131.6	122.8	121.5	127.4	122.8
75°	155.5	126.0	112.0	107.3	104.8	103.5
77.5°	138.7	122.6	100.6	91.0	87.0	86.1
80°	115.0	115.4	85.9	74.3	86.3	86.1
82.5°	86.7	99.7	68.8	64.4	62.5	52.2
85°	42.0	75.0	52.9	44.3	26.5	25.2
87.5°	3.8	31.4	30.5	19.9	9.1	8.5
90°	0.0	0.0	0.0	0.0	0.0	0.0

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