

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: P271335

Luminaire Tested: **XNV2-AF-02-LED-U-SLR-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271335  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24264)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: XNV2-AF-02-LED-U-SLR-7027-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR RIGHT OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 7475.9 lumens  
Efficiency: N/A  
Efficacy: 88.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 85  
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

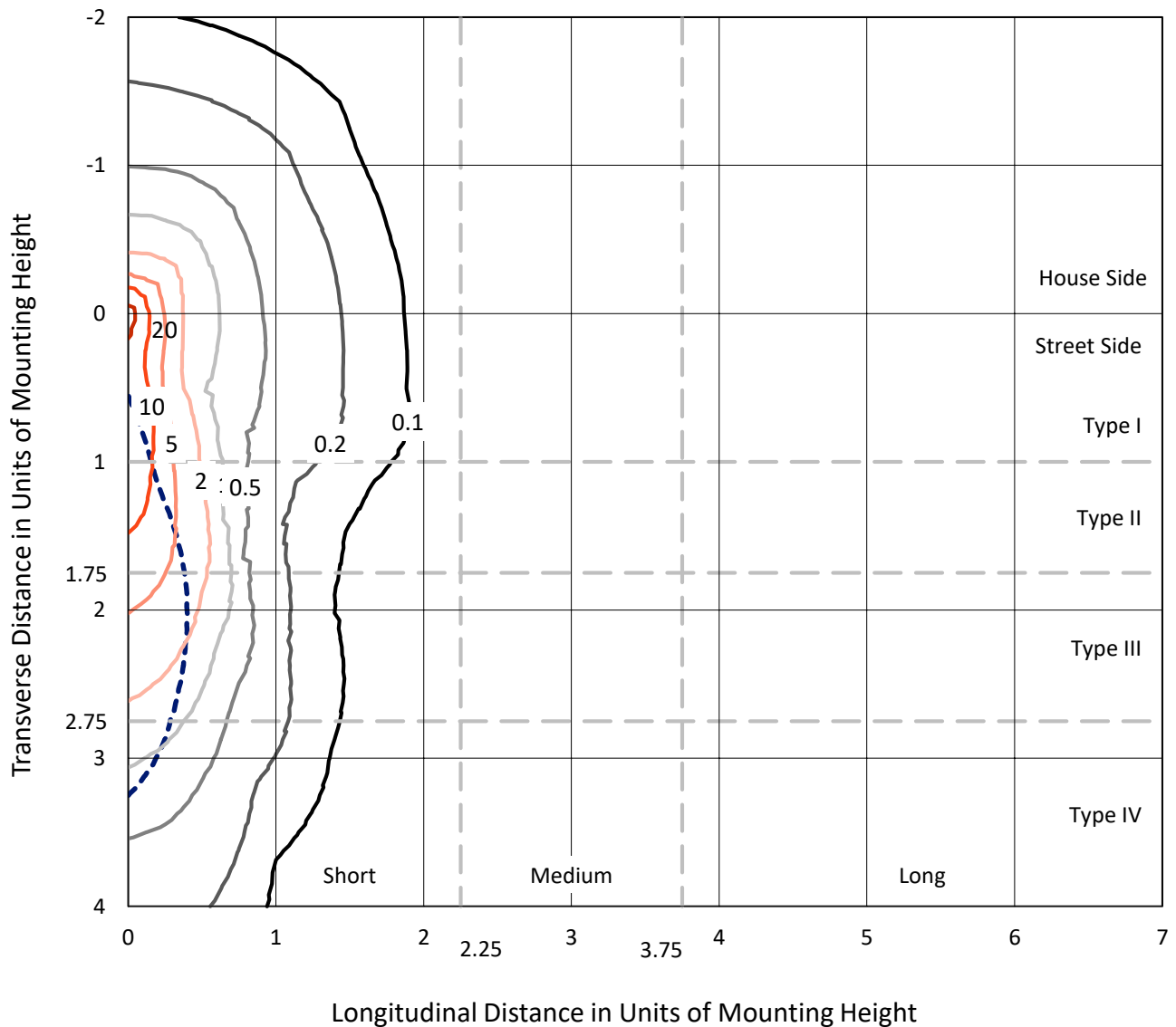


REPORT NUMBER: P271335

CATALOG NUMBER: XNV2-AF-02-LED-U-SLR-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

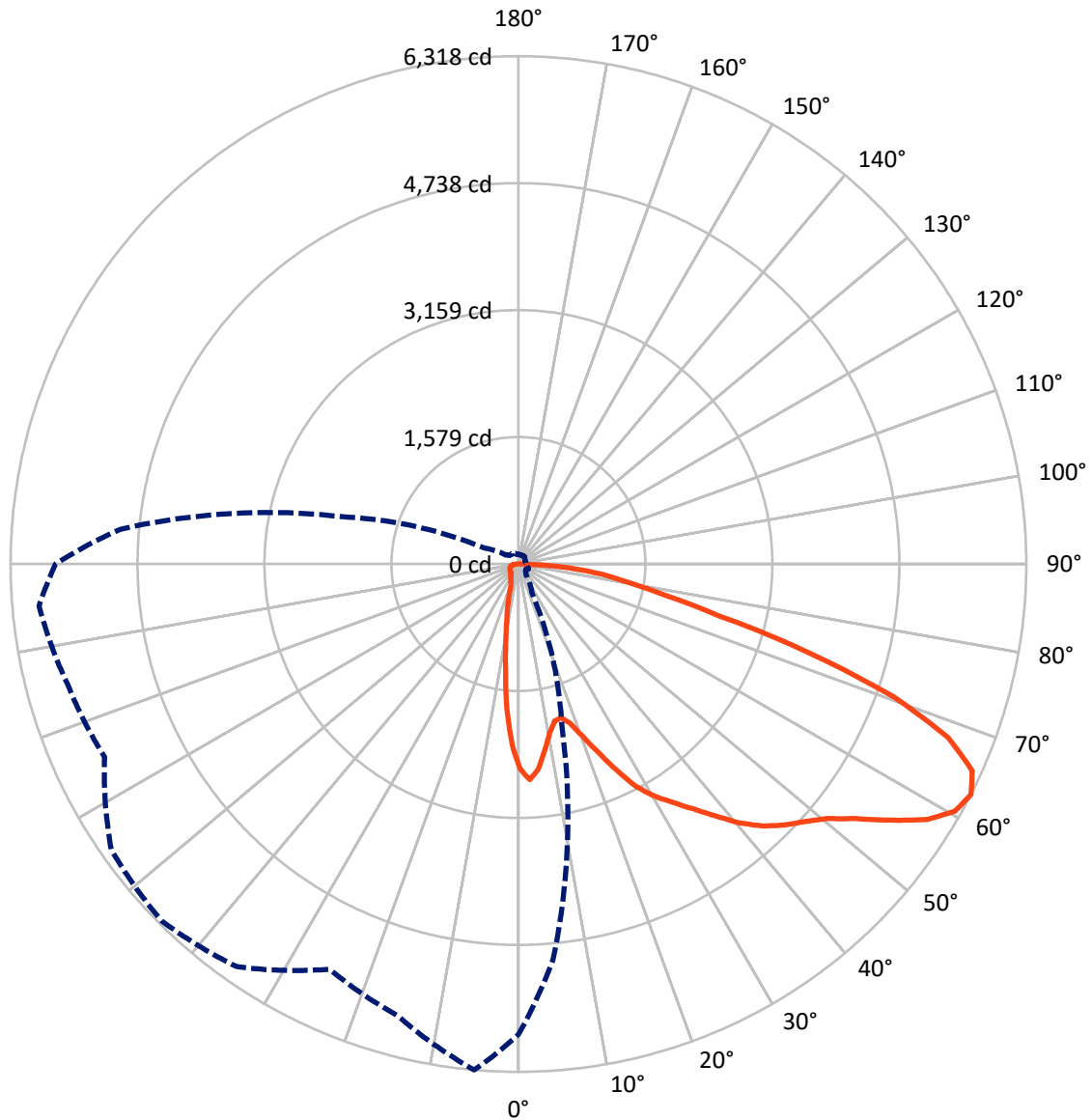


Based on 10 foot mounting height. Maximum calculated value = 25.5 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P271335

CATALOG NUMBER: XNV2-AF-02-LED-U-SLR-7027-800

### Luminous Intensity Polar Plot



— Vertical Plane Through 355-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P271335

CATALOG NUMBER: XNV2-AF-02-LED-U-SLR-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1324.4	0.0	1324.4
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	6151.6	0.0	6151.6
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	7475.9	0.0	7475.9
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.4	2.5
10°-20°	338.5	4.5
20°-30°	486.9	6.5
30°-40°	745.8	10.0
40°-50°	1090.3	14.6
50°-60°	1586.4	21.2
60°-70°	1838.1	24.6
70°-80°	958.2	12.8
80°-90°	246.3	3.3
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°	7475.9	100.0
0°-180°	7475.9	100.0

**Coefficient of Utilization**



REPORT NUMBER: P271335

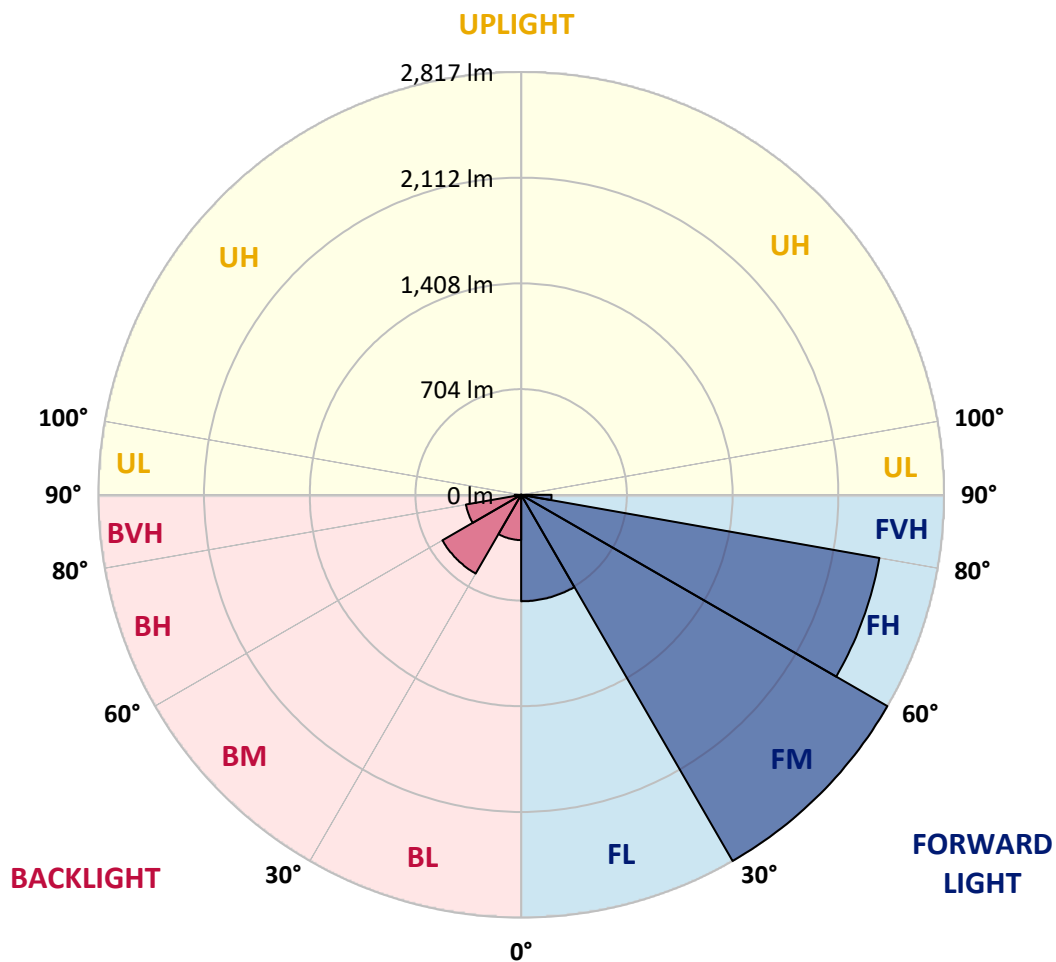
CATALOG NUMBER: XNV2-AF-02-LED-U-SLR-7027-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	709.5	9.5			
FM	(30°-60°)	2816.6	37.7			
FH	(60°-80°)	2422.8	32.4			G2/5000
FVH	(80°-90°)	202.6	2.7			G2/225
BL	(0°-30°)	301.3	4.0	B1/500		
BM	(30°-60°)	606.0	8.1	B1/1000		
BH	(60°-80°)	373.4	5.0	B1/500		G1/500
BVH	(80°-90°)	43.7	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





REPORT NUMBER: P271335

CATALOG NUMBER: XNV2-AF-02-LED-U-SLR-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8
2.5°	2631.0	2594.2	2509.1	2434.3	2341.2	2271.2	2186.0	2141.1	2108.1	2085.8	2067.9
5°	2457.7	2368.7	2206.1	2063.5	1909.6	1798.4	1668.4	1597.4	1553.4	1529.6	1518.9
7.5°	2200.2	2082.5	1872.2	1680.9	1488.4	1349.8	1251.0	1145.9	1090.1	1053.7	1041.9
10°	1975.3	1842.5	1591.4	1376.3	1227.8	1129.1	1044.5	948.0	876.4	814.1	790.9
12.5°	1844.6	1690.2	1404.0	1209.3	1084.7	979.0	889.5	785.4	710.1	645.1	620.1
15°	1816.9	1644.5	1325.3	1103.1	950.1	822.8	715.5	602.3	528.6	474.8	457.4
17.5°	1900.5	1687.9	1292.2	1006.0	821.7	666.2	534.0	412.5	351.2	322.0	314.9
20°	2072.2	1783.3	1276.5	918.7	697.1	512.8	369.2	280.2	249.9	241.3	240.7
22.5°	2298.3	1938.4	1293.9	847.2	579.9	378.4	270.5	230.3	217.8	213.0	213.0
25°	2553.6	2148.1	1339.9	792.5	477.0	294.4	233.1	211.5	201.1	196.2	196.8
27.5°	2865.9	2403.4	1402.9	742.1	403.2	258.1	217.8	199.5	189.2	184.3	184.8
30°	3101.0	2623.0	1457.1	695.9	365.3	243.4	209.8	192.4	181.1	174.0	173.5
32.5°	3321.2	2816.5	1500.9	662.9	343.6	217.4	189.7	176.6	166.9	158.8	157.3
35°	3564.5	2998.6	1521.5	661.8	329.6	196.2	173.5	157.7	148.0	138.8	137.1
37.5°	3840.4	3221.4	1538.8	668.3	322.0	182.6	165.8	150.6	142.6	133.4	131.2
40°	4127.7	3439.3	1552.5	673.8	320.9	173.5	159.9	146.3	138.2	128.5	126.3
42.5°	4374.2	3632.2	1570.9	671.7	313.2	171.8	156.1	142.6	134.9	125.3	122.4
45°	4571.7	3785.6	1599.6	671.0	301.9	175.6	155.0	141.5	132.3	122.0	119.8
47.5°	4755.4	3958.6	1660.2	668.9	289.4	174.5	160.9	140.3	131.2	120.9	119.3
50°	4965.7	4191.1	1763.8	652.6	272.0	166.9	171.8	139.2	128.5	119.3	117.6
52.5°	5258.4	4531.5	1917.3	623.3	248.2	158.8	173.5	138.8	124.1	116.1	113.8
55°	5602.5	4896.3	2082.5	581.1	216.9	144.7	164.7	136.6	119.8	111.1	107.8
57.5°	5868.7	5165.8	2198.1	520.4	185.9	136.6	147.0	131.7	114.4	105.7	102.9
60°	5943.5	5177.7	2218.6	447.7	170.1	131.2	126.3	143.6	110.0	100.8	98.2
62.5°	5854.1	4940.8	2084.2	396.8	164.7	125.8	115.0	137.1	105.7	96.5	93.8
65°	5589.1	4540.8	1783.3	389.1	170.1	120.9	109.0	109.6	101.4	92.2	89.4
67.5°	4970.1	3952.1	1404.9	394.0	176.6	116.1	104.7	99.7	96.5	88.4	85.1
70°	4042.1	3181.7	1106.8	402.7	182.6	109.6	99.3	93.2	90.5	81.8	80.2
72.5°	3113.5	2546.5	873.2	396.8	188.6	102.9	91.5	86.7	83.5	75.4	73.8
75°	2211.0	2023.4	641.7	340.4	173.0	93.8	83.0	78.6	75.8	67.3	66.7
77.5°	1593.7	1515.6	446.6	255.8	136.6	82.4	73.2	69.3	67.7	58.0	58.0
80°	1271.1	1153.5	267.2	166.9	99.7	68.4	61.3	59.6	58.0	48.2	48.8
82.5°	913.3	800.1	170.8	104.1	73.2	52.0	47.7	47.2	44.5	35.8	35.8
85°	468.3	408.6	109.6	69.9	51.6	33.5	31.4	30.4	28.7	22.2	22.2
87.5°	91.1	125.3	60.7	34.1	25.0	11.9	11.9	10.3	11.9	8.2	8.7
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: P271335

CATALOG NUMBER: XNV2-AF-02-LED-U-SLR-7027-800

**CANDELA DISTRIBUTION (continued):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8
2.5°	2102.0	2091.3	2083.6	2079.8	2134.6	2157.3	2183.4	2220.8	2246.2	2235.4	2270.0
5°	1569.8	1577.3	1594.8	1621.8	1698.2	1734.5	1757.9	1788.7	1811.0	1788.7	1825.6
7.5°	1073.3	1084.7	1121.5	1177.3	1269.5	1310.1	1318.3	1318.8	1314.0	1277.6	1302.5
10°	790.2	767.5	775.6	815.8	898.1	934.4	938.3	928.5	927.0	912.3	940.4
12.5°	612.6	581.1	562.7	569.2	630.9	660.8	665.6	671.0	693.3	700.3	735.1
15°	457.0	440.7	427.1	421.1	461.8	485.2	487.8	500.9	524.2	530.7	560.5
17.5°	321.5	325.7	332.8	335.5	364.8	380.0	375.6	375.6	379.4	377.7	394.6
20°	245.5	254.2	267.8	280.8	307.3	316.1	305.2	291.6	283.0	278.7	282.3
22.5°	216.9	222.8	231.5	248.2	270.5	274.8	260.7	249.9	241.7	237.4	238.0
25°	201.1	207.1	214.1	227.7	246.7	248.8	235.7	228.8	222.2	217.8	216.9
27.5°	187.6	191.3	195.7	204.4	223.9	224.9	216.3	211.9	207.6	204.4	203.2
30°	175.1	176.6	178.4	186.9	201.6	203.2	199.0	196.8	195.1	193.0	193.0
32.5°	158.8	160.9	163.8	171.2	185.4	187.6	184.8	183.3	180.5	179.4	177.8
35°	139.2	144.7	150.6	159.9	175.1	176.2	173.0	168.1	161.5	159.9	158.8
37.5°	131.2	132.3	139.9	150.6	166.4	167.5	163.1	155.0	150.1	150.6	151.8
40°	125.8	127.4	131.7	142.6	158.3	159.9	156.1	150.1	145.3	145.9	147.4
42.5°	121.5	123.5	126.3	133.4	149.1	152.4	151.3	145.9	140.9	142.0	144.2
45°	119.3	120.9	120.9	125.8	140.9	145.9	146.3	142.0	138.2	139.2	142.0
47.5°	118.1	118.1	116.5	120.4	135.6	140.3	141.5	139.2	137.1	138.2	140.9
50°	116.5	114.4	112.7	116.1	131.2	135.6	136.6	134.9	136.1	138.2	139.9
52.5°	111.7	109.6	109.6	111.7	126.8	131.2	131.7	130.7	132.8	135.6	138.2
55°	105.7	105.7	106.2	108.4	124.7	127.9	127.4	126.3	128.5	131.7	134.4
57.5°	100.3	99.7	102.4	105.1	122.0	124.1	123.1	123.1	124.7	127.4	130.1
60°	97.0	94.3	96.5	100.8	119.3	121.5	119.8	119.3	122.0	124.1	126.3
62.5°	93.8	91.1	92.6	97.0	115.4	117.0	116.1	116.1	118.7	120.4	122.4
65°	88.9	87.9	88.9	93.2	112.2	112.7	112.7	113.2	115.4	116.5	118.7
67.5°	84.6	84.6	85.1	89.4	109.6	108.4	108.4	111.1	111.7	112.7	115.0
70°	79.1	80.2	80.2	85.7	107.3	103.6	104.1	106.2	107.3	108.4	109.0
72.5°	73.2	73.8	74.7	81.8	104.1	98.6	99.3	100.8	101.4	102.9	103.6
75°	66.7	67.3	68.8	78.1	101.9	93.8	92.6	93.8	94.9	95.9	95.4
77.5°	59.1	60.1	61.9	75.8	94.9	92.6	84.6	85.7	86.7	86.7	86.1
80°	49.9	51.6	54.2	72.7	80.2	89.4	75.4	75.8	76.4	76.4	75.4
82.5°	37.4	40.7	44.5	60.1	62.9	76.4	65.0	66.1	64.5	63.4	62.9
85°	24.4	27.0	32.5	41.7	46.1	60.1	53.7	54.2	50.9	50.5	50.5
87.5°	9.7	10.3	14.6	21.1	27.7	37.4	38.4	39.5	36.9	36.9	38.0
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: P271335

CATALOG NUMBER: XNV2-AF-02-LED-U-SLR-7027-800

**CANDELA DISTRIBUTION (continued):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8
2.5°	2322.7	2376.8	2439.2	2502.6	2554.7	2621.9	2686.9	2756.3	2791.6	2812.1	2870.2
5°	1883.0	1957.3	2045.7	2144.9	2227.3	2368.2	2519.9	2689.0	2770.5	2850.6	3002.3
7.5°	1347.0	1419.6	1522.5	1651.1	1768.1	1954.1	2154.0	2382.8	2495.6	2625.7	2874.4
10°	1000.1	1077.1	1170.3	1279.2	1394.7	1588.3	1812.6	2069.5	2193.7	2340.5	2623.5
12.5°	810.9	900.9	997.4	1094.9	1194.1	1324.2	1559.5	1845.1	1978.4	2126.5	2410.0
15°	632.5	729.1	833.1	939.4	1038.0	1183.2	1423.5	1761.0	1913.4	2056.5	2288.5
17.5°	447.7	538.9	655.9	784.8	927.9	1099.9	1394.1	1798.0	1982.7	2132.3	2288.0
20°	305.2	368.0	485.2	637.9	814.8	1032.6	1404.9	1927.6	2158.4	2322.7	2381.8
22.5°	243.9	273.8	352.9	508.4	717.1	983.9	1449.4	2105.3	2410.5	2610.5	2552.5
25°	221.7	238.5	279.7	401.6	630.4	951.2	1536.1	2340.1	2692.8	2895.5	2757.9
27.5°	208.1	222.8	249.3	330.0	555.6	930.1	1646.2	2616.5	3011.1	3177.5	2972.0
30°	199.5	214.1	238.5	296.5	499.2	898.8	1742.7	2869.0	3265.2	3373.1	3087.5
32.5°	182.6	194.0	214.1	265.5	457.0	861.8	1826.2	3095.1	3505.4	3541.2	3226.3
35°	165.3	177.2	197.3	240.7	432.1	833.1	1870.0	3295.6	3743.3	3709.2	3364.0
37.5°	158.8	168.6	186.9	222.8	418.5	814.1	1886.9	3492.9	3998.6	3895.1	3459.9
40°	154.5	163.1	179.4	210.8	414.7	796.3	1883.0	3680.4	4246.4	4087.6	3535.2
42.5°	151.3	158.8	174.0	202.7	404.3	779.5	1870.6	3842.6	4444.8	4253.5	3607.4
45°	148.5	156.7	171.8	207.1	385.5	761.0	1863.1	3990.5	4597.0	4393.3	3703.8
47.5°	147.4	156.7	172.4	206.0	364.8	740.5	1890.2	4154.8	4729.8	4510.8	3832.3
50°	145.9	156.1	184.3	196.2	336.7	715.0	1981.8	4350.4	4869.3	4643.2	3998.6
52.5°	143.1	155.5	196.8	188.6	300.4	679.7	2130.2	4626.9	5109.9	4900.7	4244.8
55°	139.9	156.7	188.0	176.6	261.8	634.3	2278.8	5005.7	5500.1	5315.8	4598.2
57.5°	136.1	155.0	177.8	165.8	229.8	576.7	2391.5	5316.3	5822.2	5744.0	5032.3
60°	133.4	158.8	159.9	159.4	209.2	521.9	2402.3	5296.3	5914.8	6022.1	5457.4
62.5°	130.1	162.1	145.9	154.5	199.0	471.0	2268.5	4968.3	5758.1	5986.3	5803.7
65°	125.8	141.5	138.2	150.1	199.0	443.9	1956.8	4422.5	5325.1	5648.2	5991.8
67.5°	121.5	128.5	132.8	144.2	203.2	418.5	1572.5	3730.3	4642.1	5102.3	5780.4
70°	115.4	121.5	126.8	138.8	201.1	400.6	1237.4	2989.9	3820.3	4347.2	5195.4
72.5°	110.0	114.4	119.8	130.7	201.1	392.4	994.2	2345.5	2916.7	3360.6	4303.8
75°	101.9	105.7	110.6	122.4	197.3	358.9	746.4	1879.3	2134.1	2412.0	3396.0
77.5°	93.8	96.5	100.3	112.2	177.8	299.8	527.9	1455.4	1581.1	1735.0	2647.3
80°	83.5	85.7	88.4	100.3	147.4	232.5	343.6	1138.3	1182.2	1256.5	1741.6
82.5°	71.5	74.7	75.4	86.1	118.7	168.6	204.4	780.0	779.5	888.5	1228.8
85°	58.5	60.1	61.3	67.7	87.9	112.2	134.4	426.1	380.0	532.2	1067.2
87.5°	43.8	42.3	43.8	45.5	58.0	66.1	72.1	78.6	47.2	96.5	620.6
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: P271335

CATALOG NUMBER: XNV2-AF-02-LED-U-SLR-7027-800

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8	2548.8
2.5°	2901.0	2933.0	2914.0	2891.3	2834.3	2750.9	2686.9	2631.0
5°	3107.5	3166.6	3140.7	3056.0	2908.6	2741.1	2565.0	2457.7
7.5°	3081.5	3198.7	3188.4	3047.4	2835.9	2589.4	2341.6	2200.2
10°	2873.4	3037.6	3065.8	2921.6	2697.8	2421.9	2135.1	1975.3
12.5°	2646.8	2785.0	2842.4	2787.7	2576.9	2296.6	2004.5	1844.6
15°	2457.1	2527.0	2584.0	2619.2	2488.6	2252.2	1981.8	1816.9
17.5°	2316.6	2303.2	2350.9	2435.5	2440.9	2311.2	2084.6	1900.5
20°	2248.9	2142.6	2170.3	2289.1	2427.8	2461.4	2290.1	2072.2
22.5°	2245.1	2079.2	2084.6	2212.6	2465.2	2666.3	2546.5	2298.3
25°	2303.8	2072.2	2077.2	2204.5	2531.3	2872.8	2843.0	2553.6
27.5°	2403.4	2102.7	2099.3	2240.3	2619.6	3045.3	3142.2	2865.9
30°	2511.3	2146.5	2138.3	2297.8	2706.5	3151.4	3354.7	3101.0
32.5°	2645.7	2224.6	2196.4	2381.8	2792.1	3253.3	3536.3	3321.2
35°	2773.6	2338.9	2298.3	2502.0	2883.6	3366.7	3739.6	3564.5
37.5°	2904.3	2509.7	2486.9	2675.5	3013.3	3489.6	3972.1	3840.4
40°	3071.8	2752.4	2741.6	2927.5	3186.2	3624.1	4232.9	4127.7
42.5°	3252.3	3010.5	3001.2	3217.0	3400.9	3759.0	4456.1	4374.2
45°	3436.0	3323.3	3325.4	3525.9	3626.8	3886.4	4631.8	4571.7
47.5°	3652.9	3665.4	3742.8	3846.4	3846.9	4028.4	4787.3	4755.4
50°	3928.2	4078.3	4221.4	4237.8	4069.1	4216.0	4977.6	4965.7
52.5°	4239.9	4554.8	4721.2	4669.7	4286.0	4448.5	5258.9	5258.4
55°	4610.1	5053.0	5209.6	5121.7	4545.7	4751.6	5626.4	5602.5
57.5°	4993.9	5532.1	5658.5	5544.0	4870.3	5104.4	5995.0	5868.7
60°	5408.5	5944.7	6073.1	5901.2	5234.6	5456.2	6239.0	5943.5
62.5°	5680.2	6185.8	6278.0	6113.1	5560.9	5814.5	6317.5	5854.1
65°	5694.1	6025.4	6049.7	5991.2	5699.6	6125.6	6203.8	5589.1
67.5°	5307.1	5326.7	5358.7	5421.5	5403.1	5986.9	5764.7	4970.1
70°	4479.5	4219.2	4324.4	4385.2	4521.8	5325.1	4953.3	4042.1
72.5°	3425.1	3045.3	3164.5	3143.9	3427.9	4367.7	3789.4	3113.5
75°	2465.2	2076.6	2085.8	2086.9	2463.1	3486.4	2584.0	2211.0
77.5°	1675.5	1469.4	1499.8	1480.9	1648.4	2731.3	1860.3	1593.7
80°	1145.9	1140.5	1147.0	1102.5	1099.3	1765.4	1377.3	1271.1
82.5°	849.9	785.4	776.2	729.1	842.3	1349.8	1045.5	913.3
85°	670.6	434.7	377.7	455.9	729.7	1241.8	637.4	468.3
87.5°	284.0	170.8	103.6	205.0	405.5	910.2	176.6	91.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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