

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: P271332

Luminaire Tested: **XNV2-AF-02-LED-U-SLL-7027-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271332  
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-SLL-7027-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND SPILL LIGHT  
ELIMINATOR LEFT OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10150.5 lumens  
Efficiency: N/A  
Efficacy: 79.3 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G3

Input Watts (W): 128  
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

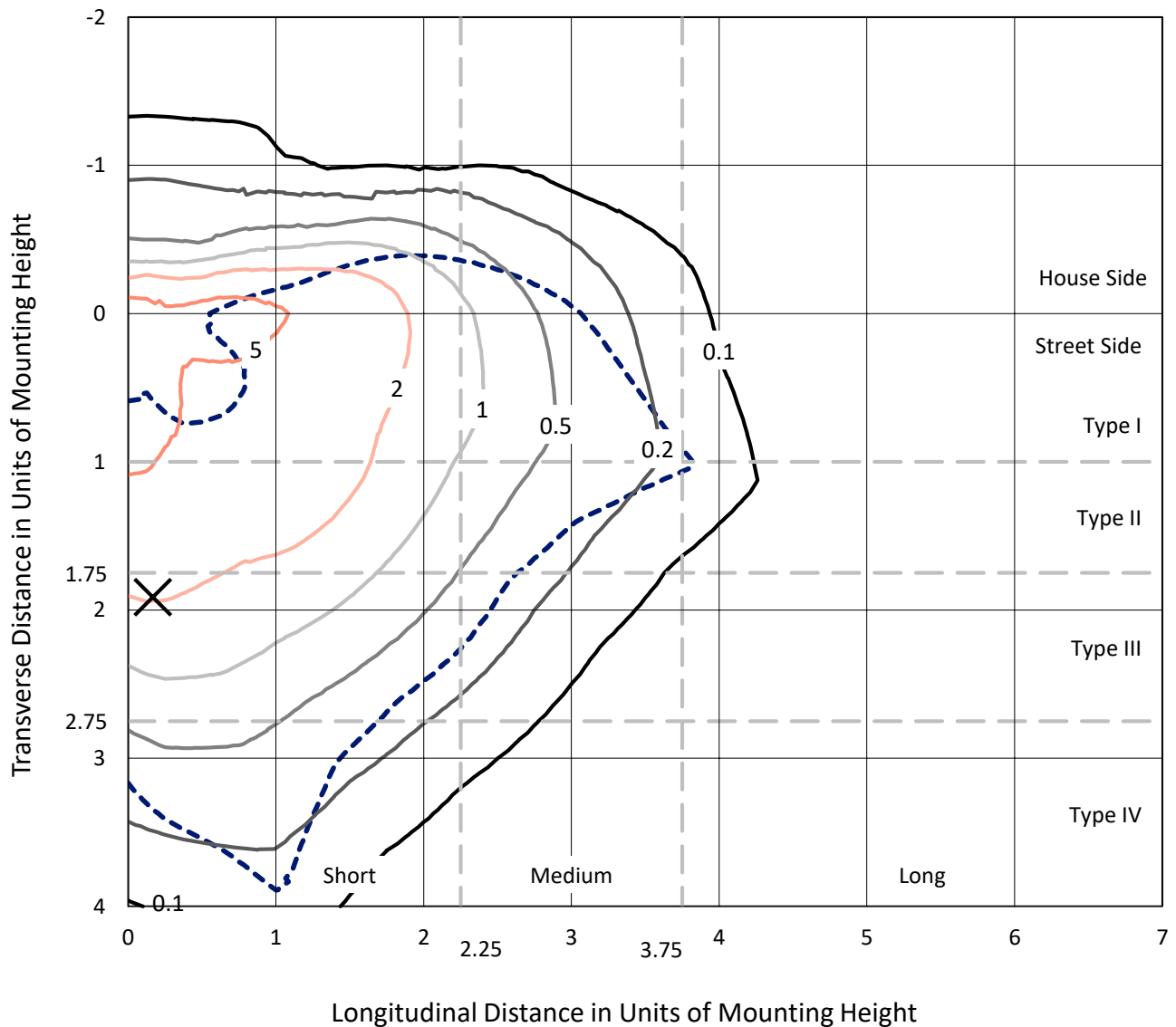


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### Iso-Footcandle Lines of Horizontal Illumination

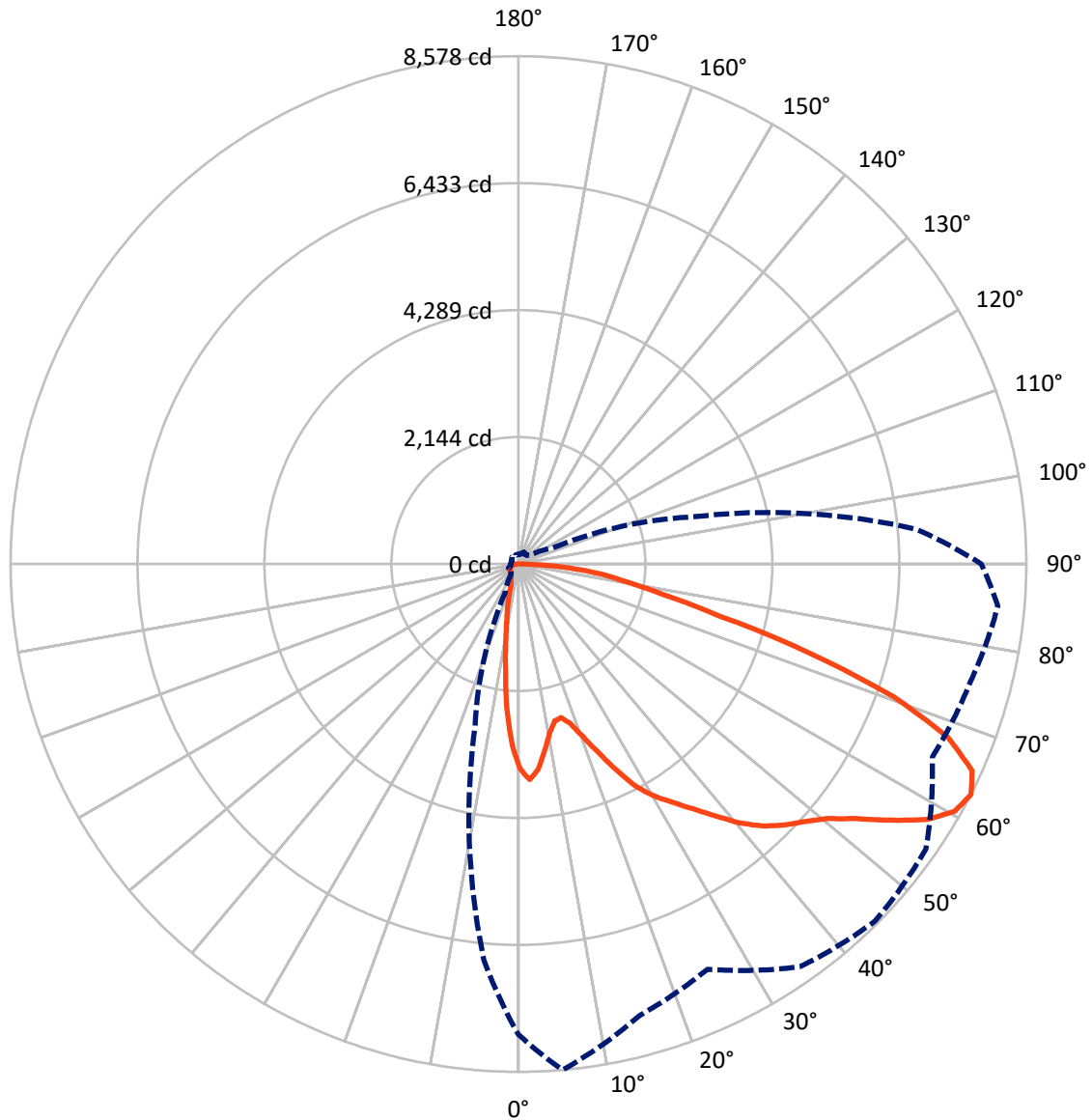
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 9.9 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 5-Deg Lateral      - - - Horizontal Cone Through 62.5-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1798.2	0.0	1798.2
	% Fixture	17.7	0.0	17.7
<b>Street Side</b>	Lumens	8352.3	0.0	8352.3
	% Fixture	82.3	0.0	82.3
<b>Total</b>	Lumens	10150.5	0.0	10150.5
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	251.7	2.5
10°-20°	459.7	4.5
20°-30°	661.1	6.5
30°-40°	1012.6	10.0
40°-50°	1480.4	14.6
50°-60°	2154.0	21.2
60°-70°	2495.7	24.6
70°-80°	1301.0	12.8
80°-90°	334.4	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°	10150.5	100.0
0°-180°	10150.5	100.0

**Coefficient of Utilization**



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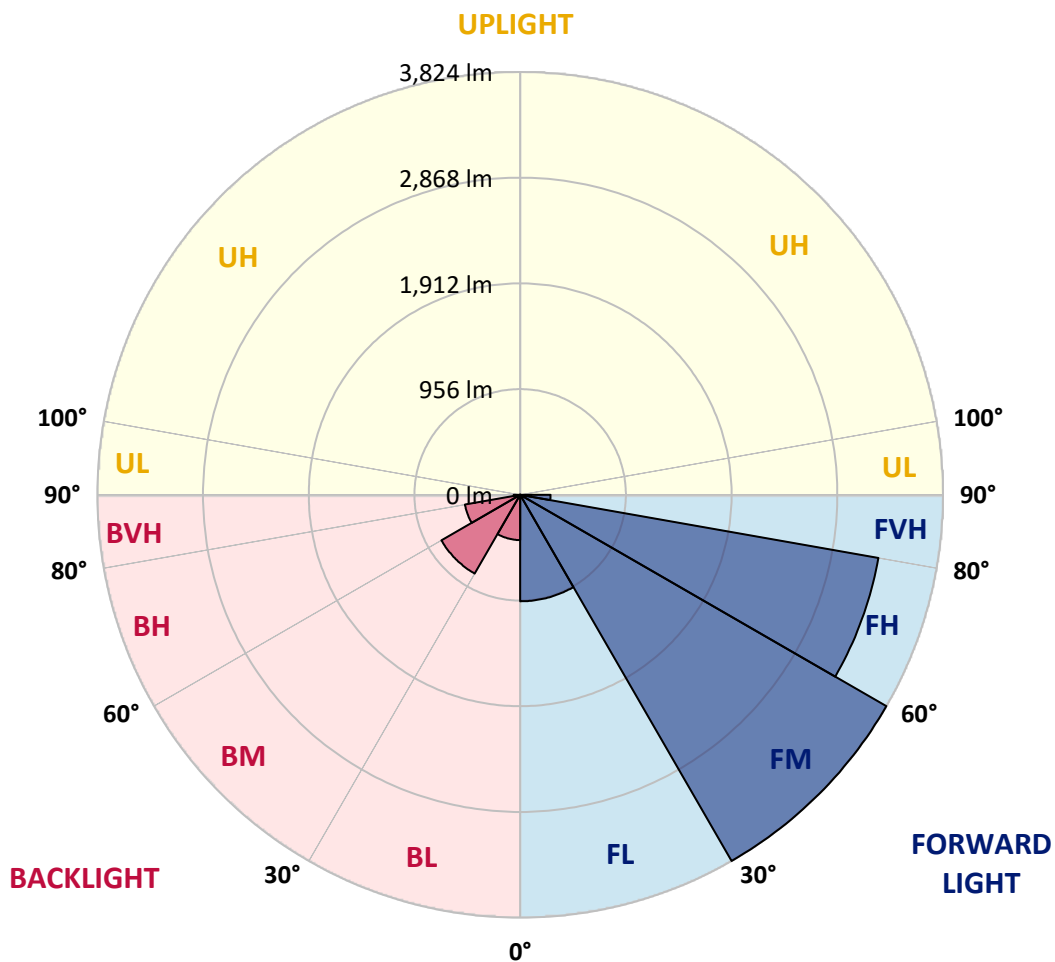
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	963.3	9.5			
FM	(30°-60°)	3824.2	37.7			
FH	(60°-80°)	3289.6	32.4			G2/5000
FVH	(80°-90°)	275.1	2.7			G3/500
BL	(0°-30°)	409.1	4.0	B1/500		
BM	(30°-60°)	822.7	8.1	B1/1000		
BH	(60°-80°)	507.0	5.0	B2/1000		G2/1000
BVH	(80°-90°)	59.3	0.6			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5
2.5°	3572.4	3648.1	3735.1	3848.3	3925.7	3956.6	3982.2	3938.9	3896.9	3818.2	3790.2
5°	3336.8	3482.5	3721.8	3949.2	4149.5	4264.2	4299.5	4219.2	4076.5	3870.4	3761.6
7.5°	2987.3	3179.5	3515.6	3850.6	4137.7	4328.9	4342.9	4183.9	3902.9	3565.1	3388.3
10°	2681.9	2899.0	3288.2	3662.8	3966.8	4162.7	4124.4	3901.3	3562.0	3177.9	2978.4
12.5°	2504.5	2721.5	3118.2	3498.8	3785.1	3859.4	3781.3	3593.7	3272.0	2887.2	2686.3
15°	2466.9	2690.8	3057.9	3378.9	3556.2	3508.3	3431.0	3336.1	3107.2	2792.2	2598.0
17.5°	2580.3	2830.5	3138.1	3314.0	3306.8	3191.9	3127.1	3145.5	3106.5	2895.2	2692.2
20°	2813.6	3109.5	3342.1	3296.4	3108.0	2946.8	2909.3	3053.5	3233.8	3153.6	2930.6
22.5°	3120.5	3457.5	3620.2	3347.2	3004.2	2830.5	2823.2	3048.4	3465.7	3544.4	3272.9
25°	3467.1	3860.1	3900.6	3436.9	2993.2	2820.1	2813.6	3127.9	3744.6	3931.5	3656.3
27.5°	3891.1	4266.4	4134.7	3556.8	3041.8	2850.4	2854.9	3263.3	4035.2	4314.2	4088.2
30°	4210.4	4554.9	4278.8	3674.6	3119.8	2903.4	2914.5	3409.7	4192.0	4579.9	4433.4
32.5°	4509.2	4801.4	4417.2	3790.9	3233.8	2982.2	3020.5	3592.2	4380.4	4808.1	4759.5
35°	4839.7	5077.4	4571.0	3915.4	3397.2	3120.5	3175.7	3766.0	4567.4	5036.2	5082.6
37.5°	5214.3	5393.2	4738.1	4091.2	3632.7	3376.5	3407.5	3943.3	4697.6	5288.6	5429.1
40°	5604.3	5747.1	4920.6	4326.0	3974.9	3722.4	3737.2	4170.7	4800.0	5549.9	5765.5
42.5°	5939.2	6050.4	5103.9	4617.5	4368.0	4075.0	4087.6	4415.8	4897.9	5775.2	6035.0
45°	6207.1	6288.9	5276.9	4924.2	4787.4	4515.2	4512.1	4665.3	5028.8	5964.9	6241.8
47.5°	6456.6	6500.0	5469.7	5223.1	5222.3	5081.8	4976.6	4959.6	5203.3	6124.7	6422.1
50°	6742.1	6758.4	5724.3	5524.8	5753.7	5731.6	5537.4	5333.5	5429.1	6304.2	6611.2
52.5°	7139.5	7140.3	6040.1	5819.3	6340.3	6410.2	6184.3	5756.7	5763.3	6653.8	6937.9
55°	7606.8	7639.2	6451.4	6171.7	6954.0	7073.3	6860.6	6259.4	6243.2	7217.6	7467.8
57.5°	7968.2	8139.7	6930.6	6612.7	7527.4	7682.8	7511.3	6780.4	6832.7	7799.1	7904.9
60°	8069.8	8470.9	7408.2	7107.2	8012.4	8245.7	8071.4	7343.5	7409.7	8176.6	8030.8
62.5°	7948.5	8577.6	7894.7	7550.3	8300.2	8523.9	8398.9	7712.2	7879.9	8128.0	7818.2
65°	7588.5	8423.0	8317.1	7738.7	8134.6	8214.1	8181.0	7731.4	8135.3	7668.7	7230.1
67.5°	6748.1	7827.0	8128.8	7336.1	7361.2	7275.7	7232.3	7205.8	7848.3	6927.5	6302.8
70°	5488.0	6725.3	7230.1	6139.3	5954.0	5871.5	5728.8	6082.1	7054.2	5902.5	5187.1
72.5°	4227.3	5145.1	5930.4	4654.3	4268.6	4296.6	4134.7	4650.5	5843.6	4563.0	3960.2
75°	3002.0	3508.3	4733.7	3344.2	2833.4	2831.9	2819.5	3347.2	4610.8	3275.0	2897.6
77.5°	2163.7	2525.9	3708.6	2238.0	2010.6	2036.4	1995.1	2274.9	3594.5	2355.8	2146.8
80°	1725.9	1870.1	2397.0	1492.5	1496.9	1557.3	1548.5	1555.9	2364.7	1706.1	1605.1
82.5°	1240.1	1419.7	1832.5	1143.7	989.8	1053.9	1066.4	1154.1	1668.4	1206.2	1058.4
85°	635.9	865.4	1686.1	990.7	618.9	512.9	590.2	910.4	1449.1	722.7	515.8
87.5°	123.6	239.9	1235.7	550.5	278.1	140.6	231.9	385.6	842.7	131.1	64.0
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):**

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°	185°
0°	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5
2.5°	3742.3	3648.1	3559.9	3468.5	3398.0	3311.8	3227.3	3153.6	3082.3	3035.2	3049.8
5°	3651.2	3421.6	3215.5	3024.1	2912.2	2777.5	2657.5	2556.8	2478.8	2428.7	2458.8
7.5°	3235.2	2924.7	2653.1	2400.7	2241.7	2067.3	1927.6	1828.9	1768.6	1734.6	1783.9
10°	2809.9	2461.0	2156.4	1893.6	1736.9	1588.9	1462.4	1357.9	1276.9	1238.7	1258.4
12.5°	2505.3	2117.3	1798.0	1621.4	1486.7	1354.1	1223.2	1101.1	997.9	950.9	941.3
15°	2391.2	1932.7	1606.6	1409.4	1275.5	1131.1	989.8	858.9	761.0	720.5	711.6
17.5°	2441.2	1892.9	1493.3	1260.0	1065.7	890.5	731.6	608.0	535.7	512.9	515.2
20°	2617.1	1907.6	1402.1	1106.2	866.2	658.6	499.6	414.4	383.4	378.2	384.1
22.5°	2858.4	1967.9	1335.8	973.8	690.3	479.2	371.7	331.1	323.1	322.3	328.2
25°	3177.1	2085.8	1291.7	855.9	545.4	379.8	323.7	301.0	294.4	295.8	301.7
27.5°	3552.4	2235.2	1262.8	754.3	448.3	338.5	302.5	282.5	276.0	277.4	281.9
30°	3895.5	2366.1	1220.3	677.9	402.6	323.7	290.7	270.7	261.9	261.9	264.9
32.5°	4202.4	2479.4	1170.2	620.4	360.6	290.7	263.5	248.0	241.5	243.6	245.1
35°	4474.6	2539.1	1131.1	586.6	326.8	267.9	240.7	224.4	215.7	217.1	219.4
37.5°	4742.5	2561.8	1105.5	568.2	302.5	254.0	228.9	215.7	206.2	204.6	203.8
40°	4997.2	2556.8	1081.1	563.0	286.3	243.6	221.5	209.8	200.2	197.9	197.3
42.5°	5217.3	2539.8	1058.4	549.0	275.2	236.3	215.7	205.4	195.8	192.9	191.3
45°	5418.1	2529.4	1033.3	523.3	281.1	233.3	212.7	201.7	192.9	189.2	187.7
47.5°	5641.1	2566.3	1005.4	495.2	279.6	234.1	212.7	200.2	191.3	187.7	186.2
50°	5906.9	2690.8	970.8	457.1	266.3	250.2	212.0	197.9	189.9	187.7	184.7
52.5°	6282.1	2892.4	922.9	407.7	256.0	267.2	211.2	194.4	187.7	184.1	180.3
55°	6796.7	3094.0	861.0	355.5	239.9	255.4	212.7	189.9	182.5	178.9	174.5
57.5°	7218.3	3247.1	783.1	312.0	225.2	241.5	210.6	184.7	176.6	173.0	169.3
60°	7191.1	3261.7	708.8	284.0	216.4	217.1	215.7	181.1	171.4	168.5	165.6
62.5°	6745.8	3080.0	639.6	270.1	209.8	197.9	220.1	176.6	166.4	163.4	161.2
65°	6004.7	2656.8	602.8	270.1	203.8	187.7	192.1	170.8	161.2	158.2	156.8
67.5°	5065.0	2135.0	568.2	276.0	195.8	180.3	174.5	164.8	156.0	153.2	151.6
70°	4059.6	1680.2	543.8	273.1	188.5	172.2	164.8	156.8	148.0	147.2	145.7
72.5°	3184.5	1349.8	532.9	273.1	177.3	162.7	155.2	149.4	140.6	139.9	137.6
75°	2551.5	1013.4	487.2	267.9	166.4	150.1	143.5	138.3	129.5	130.3	128.7
77.5°	1976.0	716.8	407.0	241.5	152.4	136.2	131.1	127.3	117.0	117.8	117.8
80°	1545.5	466.6	315.8	200.2	136.2	120.0	116.3	113.4	102.2	103.8	103.8
82.5°	1059.0	277.4	228.9	161.2	117.0	102.2	101.6	97.1	85.3	86.1	87.6
85°	578.5	182.5	152.4	119.3	91.9	83.2	81.7	79.5	68.5	68.5	69.2
87.5°	106.7	97.8	89.8	78.7	61.9	59.6	57.4	59.6	51.6	50.0	50.0
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):**

	195°	205°	215°	225°	235°	245°	255°	265°	270°	275°	285°
0°	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5
2.5°	3015.3	2964.4	2929.2	2898.2	2823.9	2829.0	2839.4	2854.1	2807.7	2831.9	2862.2
5°	2428.7	2386.7	2355.0	2305.8	2202.0	2165.3	2141.6	2131.4	2062.1	2076.9	2109.3
7.5°	1790.6	1789.9	1778.9	1723.6	1598.5	1522.6	1472.6	1457.2	1414.6	1430.7	1480.0
10°	1260.7	1273.9	1268.8	1219.4	1107.6	1053.2	1042.2	1073.0	1073.7	1105.5	1190.1
12.5°	911.2	903.8	897.1	856.7	772.7	763.9	788.9	831.7	841.9	875.8	964.2
15°	680.0	662.4	658.6	627.0	571.9	579.9	598.4	620.4	621.2	644.8	717.6
17.5°	510.0	510.0	515.8	495.2	455.6	451.8	442.3	436.4	427.7	437.1	476.9
20°	396.0	414.4	429.1	417.4	381.2	363.5	345.2	333.5	326.8	327.5	339.3
22.5°	339.3	354.0	373.2	367.2	337.0	314.2	302.5	294.4	289.3	289.3	295.8
25°	310.5	320.2	337.9	334.9	309.0	290.7	281.1	273.1	267.2	266.3	273.1
27.5°	287.7	293.7	305.5	303.9	277.4	265.7	259.8	254.6	250.9	250.2	256.8
30°	267.2	270.1	276.0	273.8	254.0	242.2	239.9	237.7	235.5	236.3	245.7
32.5°	248.7	250.9	254.6	251.6	232.7	222.3	218.6	215.7	213.4	215.7	226.7
35°	228.2	234.7	239.2	237.7	217.1	204.6	196.5	189.2	186.2	188.5	201.0
37.5°	210.6	221.5	227.5	226.0	204.6	189.9	179.7	178.1	178.1	181.1	193.6
40°	203.8	212.0	217.1	215.0	193.6	178.9	173.0	170.8	171.4	174.5	187.7
42.5°	197.9	205.4	206.8	202.4	181.1	171.4	167.9	164.8	166.4	170.0	183.3
45°	192.9	198.7	197.9	191.3	170.8	164.1	164.1	162.0	162.7	165.6	179.7
47.5°	189.2	192.1	190.6	184.1	163.4	158.2	160.4	160.4	162.0	164.1	178.1
50°	183.3	185.5	184.1	178.1	157.6	153.2	155.2	158.2	159.7	162.0	174.5
52.5°	177.3	178.9	178.1	172.2	151.6	148.7	148.7	151.6	154.6	157.6	168.5
55°	171.4	173.0	173.7	169.3	147.2	144.3	143.5	143.5	146.5	150.8	162.7
57.5°	167.1	167.1	168.5	165.6	142.8	139.1	135.5	136.2	139.9	143.5	155.2
60°	162.0	162.7	164.8	162.0	136.9	131.1	128.1	131.7	133.2	136.9	149.4
62.5°	157.6	157.6	159.0	156.8	131.7	125.9	123.6	127.3	127.3	131.1	143.5
65°	153.8	153.2	153.2	152.4	126.7	120.7	119.3	120.7	121.5	125.1	137.6
67.5°	150.8	147.2	147.2	148.7	121.5	115.5	114.9	114.9	115.5	120.0	131.1
70°	144.3	141.4	140.6	145.7	116.3	109.0	109.0	107.4	109.0	111.1	122.9
72.5°	136.9	134.7	133.9	141.4	111.1	101.6	100.2	99.4	100.2	102.2	113.4
75°	127.3	125.9	127.3	138.3	106.0	93.5	91.3	90.5	90.5	91.3	103.0
77.5°	116.3	114.9	125.9	128.7	103.0	83.9	81.7	80.2	78.7	78.7	91.9
80°	103.0	102.2	121.5	109.0	98.6	73.7	69.9	67.7	66.3	65.4	78.7
82.5°	89.8	88.4	103.8	85.3	81.7	60.4	55.2	50.8	48.6	48.6	60.4
85°	73.7	72.9	81.7	62.5	56.7	44.1	36.8	33.1	30.2	30.2	38.9
87.5°	53.7	52.2	50.8	37.5	28.7	19.9	14.0	13.2	11.8	11.0	16.2
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: P271332

CATALOG NUMBER: XNV2-AF-02-LED-U-SLL-7027-1200

**CANDELA DISTRIBUTION (continued):**

	295°	305°	315°	325°	335°	345°	355°	360°
0°	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5	3460.5
2.5°	2907.1	2968.1	3083.7	3178.7	3305.3	3406.8	3522.3	3572.4
5°	2168.9	2265.3	2442.0	2592.8	2801.9	2995.4	3216.1	3336.8
7.5°	1555.9	1698.7	1832.5	2020.9	2282.2	2542.1	2827.5	2987.3
10°	1287.2	1418.2	1533.0	1667.0	1868.7	2160.9	2501.5	2681.9
12.5°	1066.4	1207.7	1329.1	1472.6	1641.9	1906.2	2294.7	2504.5
15°	817.6	971.4	1117.2	1290.1	1497.7	1799.5	2232.8	2466.9
17.5°	560.1	724.9	904.6	1115.8	1366.0	1754.5	2291.8	2580.3
20°	380.5	501.2	696.2	946.5	1247.4	1733.2	2421.3	2813.6
22.5°	312.8	367.2	513.7	787.5	1150.3	1756.7	2631.9	3120.5
25°	287.0	316.5	399.7	647.7	1076.0	1819.2	2916.6	3467.1
27.5°	270.7	295.8	350.2	547.5	1007.4	1904.6	3263.3	3891.1
30°	261.2	284.9	330.4	496.0	944.9	1978.2	3561.3	4210.4
32.5°	239.9	257.5	295.2	466.6	900.1	2037.8	3824.1	4509.2
35°	214.2	235.5	266.3	447.4	898.7	2065.8	4071.4	4839.7
37.5°	204.6	225.2	248.0	437.1	907.5	2089.4	4373.8	5214.3
40°	198.7	217.1	235.5	435.7	914.8	2107.9	4669.7	5604.3
42.5°	193.6	212.0	233.3	425.3	911.9	2132.8	4931.6	5939.2
45°	192.1	210.6	238.5	409.9	911.2	2171.8	5140.0	6207.1
47.5°	190.6	218.6	237.1	393.0	908.1	2254.2	5374.7	6456.6
50°	189.2	233.3	226.7	369.5	886.1	2394.8	5690.5	6742.1
52.5°	188.5	235.5	215.7	337.0	846.4	2603.1	6152.6	7139.5
55°	185.5	223.8	196.5	294.4	788.9	2827.5	6647.9	7606.8
57.5°	178.9	199.5	185.5	252.5	706.5	2984.3	7013.7	7968.2
60°	195.0	171.4	178.1	231.1	608.0	3012.2	7030.0	8069.8
62.5°	186.2	156.0	170.8	223.8	538.8	2829.8	6708.4	7948.5
65°	148.7	148.0	164.1	231.1	528.5	2421.3	6165.2	7588.5
67.5°	135.5	142.0	157.6	239.9	535.0	1907.6	5365.9	6748.1
70°	126.7	134.7	148.7	248.0	546.8	1502.9	4320.0	5488.0
72.5°	117.8	124.3	139.9	256.0	538.8	1185.7	3457.5	4227.3
75°	106.7	112.6	127.3	234.7	462.2	871.4	2747.3	3002.0
77.5°	94.2	99.4	111.8	185.5	347.4	606.4	2057.7	2163.7
80°	80.9	83.2	92.7	135.5	226.7	362.8	1566.1	1725.9
82.5°	64.0	64.8	70.6	99.4	141.4	231.9	1086.3	1240.1
85°	41.2	42.7	45.6	69.9	95.0	148.7	555.0	635.9
87.5°	14.0	16.2	16.2	33.9	46.4	82.5	170.0	123.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)