

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: P198745

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198745
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-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 11951.1 lumens
Efficiency: N/A
Efficacy: 93.4 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

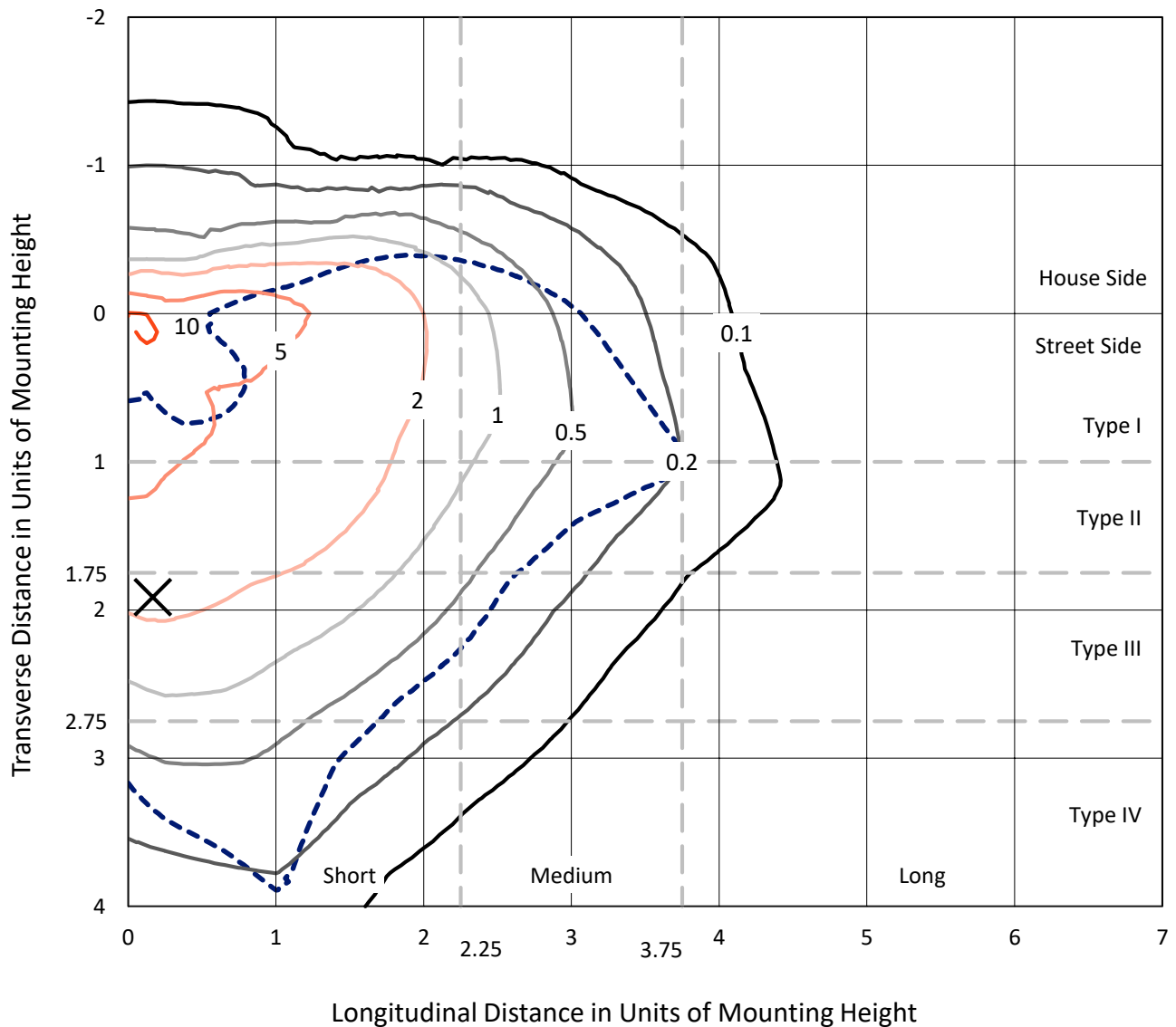
Input Watts (W): 128
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

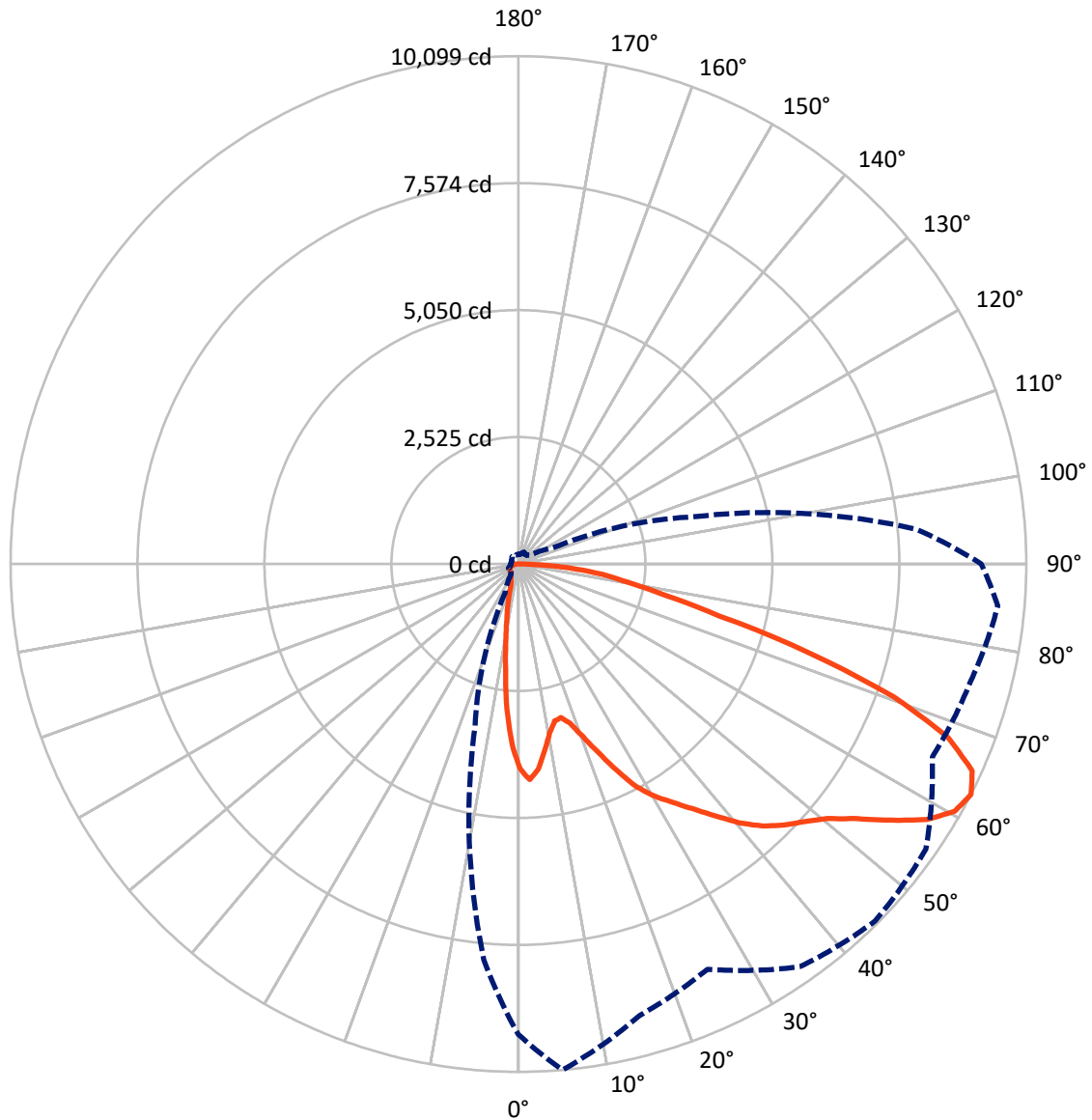
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 11.7 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
House Side	Lumens	2117.2	0.0	2117.2
	% Fixture	17.7	0.0	17.7
Street Side	Lumens	9834.0	0.0	9834.0
	% Fixture	82.3	0.0	82.3
Total	Lumens	11951.1	0.0	11951.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	296.3	2.5
10°-20°	541.2	4.5
20°-30°	778.4	6.5
30°-40°	1192.2	10.0
40°-50°	1743.0	14.6
50°-60°	2536.1	21.2
60°-70°	2938.4	24.6
70°-80°	1531.7	12.8
80°-90°	393.7	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°	11951.1	100.0
0°-180°	11951.1	100.0



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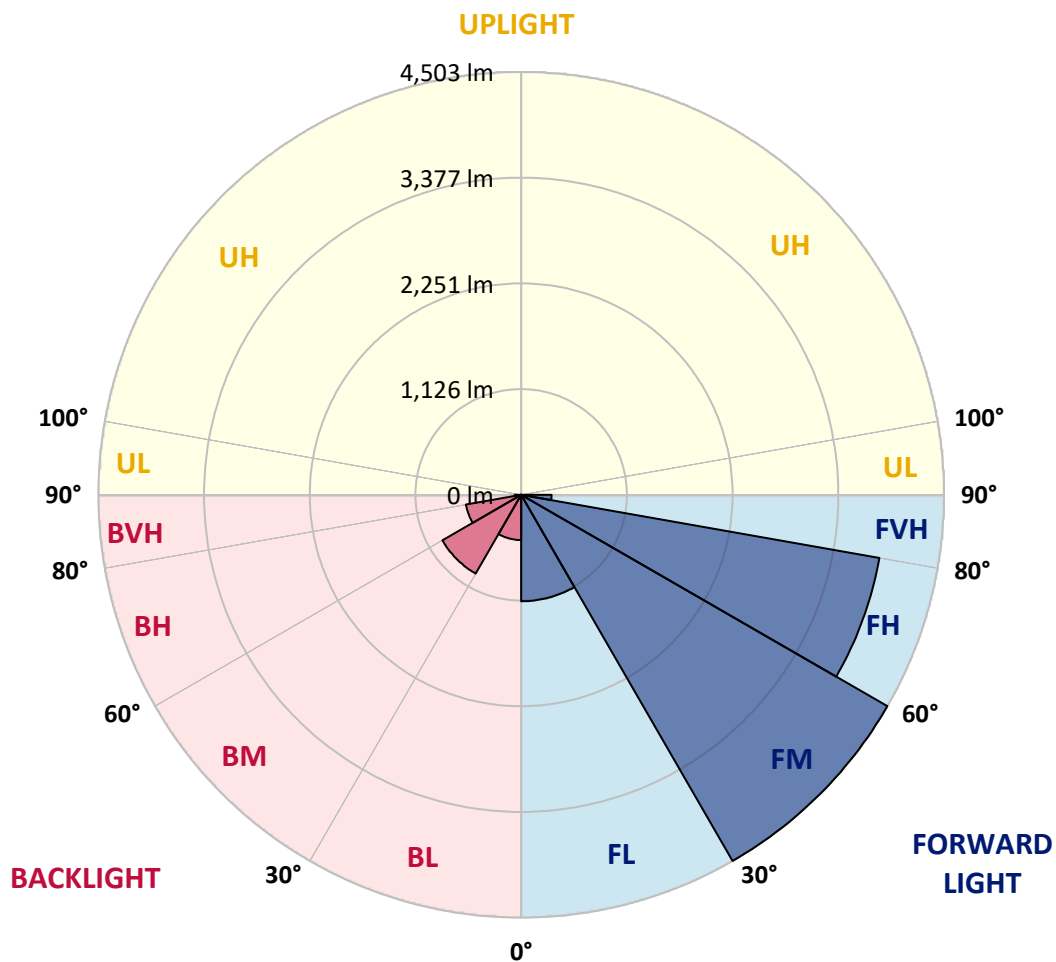
CATALOG NUMBER: XNV2-AF-02-LED-U-SLL-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1134.2	9.5			
FM	(30°-60°)	4502.6	37.7			
FH	(60°-80°)	3873.2	32.4			G2/5000
FVH	(80°-90°)	323.9	2.7			G3/500
BL	(0°-30°)	481.7	4.0	B1/500		
BM	(30°-60°)	968.7	8.1	B1/1000		
BH	(60°-80°)	597.0	5.0	B2/1000		G2/1000
BVH	(80°-90°)	69.8	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°	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4
2.5°	4206.1	4295.4	4397.6	4531.1	4622.0	4658.4	4688.7	4637.6	4588.2	4495.5	4462.6
5°	3928.8	4100.4	4382.0	4649.7	4885.4	5020.6	5062.2	4967.8	4799.7	4557.0	4428.8
7.5°	3517.2	3743.4	4139.4	4533.6	4871.6	5096.9	5113.3	4926.1	4595.2	4197.5	3989.5
10°	3157.6	3413.2	3871.7	4312.7	4670.6	4901.1	4855.9	4593.5	4194.0	3741.6	3506.8
12.5°	2948.8	3204.4	3671.5	4119.4	4456.5	4544.0	4452.2	4231.2	3852.5	3399.4	3162.8
15°	2904.6	3168.0	3600.4	3978.2	4187.0	4130.7	4039.7	3927.9	3658.5	3287.6	3058.8
17.5°	3038.1	3332.7	3694.8	3901.9	3893.2	3758.1	3681.8	3703.5	3657.6	3408.9	3169.7
20°	3312.7	3661.0	3934.9	3881.2	3659.3	3469.5	3425.4	3595.2	3807.5	3713.0	3450.5
22.5°	3674.0	4070.9	4262.4	3940.9	3537.2	3332.7	3324.0	3589.1	4080.4	4173.1	3853.5
25°	4082.2	4544.9	4592.5	4046.7	3524.2	3320.5	3312.7	3682.7	4408.8	4629.0	4304.9
27.5°	4581.3	5023.2	4868.1	4187.9	3581.4	3356.0	3361.2	3842.2	4751.1	5079.6	4813.5
30°	4957.3	5362.9	5037.9	4326.6	3673.2	3418.4	3431.4	4014.6	4935.7	5392.4	5219.9
32.5°	5309.2	5653.1	5200.9	4463.4	3807.5	3511.2	3556.2	4229.5	5157.5	5661.0	5603.8
35°	5698.2	5978.1	5381.9	4609.9	3999.8	3674.0	3739.0	4434.0	5377.7	5929.6	5984.2
37.5°	6139.3	6349.9	5578.7	4817.0	4277.2	3975.6	4012.0	4642.9	5531.0	6226.8	6392.3
40°	6598.5	6766.6	5793.6	5093.4	4680.1	4382.8	4400.2	4910.6	5651.5	6534.4	6788.3
42.5°	6992.8	7123.6	6009.3	5436.6	5142.8	4797.9	4812.7	5199.1	5766.7	6799.6	7105.5
45°	7308.3	7404.4	6213.0	5797.9	5636.8	5316.1	5312.6	5492.8	5920.9	7023.2	7349.0
47.5°	7602.0	7653.1	6440.0	6149.7	6148.9	5983.3	5859.5	5839.5	6126.4	7211.2	7561.2
50°	7938.2	7957.2	6739.8	6504.9	6774.5	6748.5	6519.7	6279.7	6392.3	7422.6	7783.9
52.5°	8406.1	8407.0	7111.6	6851.6	7465.1	7547.4	7281.4	6778.0	6785.7	7834.2	8168.7
55°	8956.3	8994.5	7595.9	7266.6	8187.8	8328.1	8077.7	7369.7	7350.7	8498.0	8792.6
57.5°	9381.8	9583.7	8160.0	7785.7	8862.7	9045.6	8843.7	7983.2	8044.8	9182.5	9307.3
60°	9501.4	9973.7	8722.4	8367.9	9433.9	9708.5	9503.1	8646.2	8724.1	9627.1	9455.4
62.5°	9358.5	10099.3	9295.1	8889.6	9772.7	10036.1	9888.8	9080.2	9277.9	9569.8	9205.0
65°	8934.7	9917.3	9792.5	9111.4	9577.7	9671.3	9632.2	9102.8	9578.5	9029.2	8512.7
67.5°	7945.2	9215.5	9570.7	8637.5	8667.0	8566.4	8515.2	8484.1	9240.6	8156.6	7420.9
70°	6461.7	7918.3	8512.7	7228.5	7010.2	6913.1	6745.0	7161.0	8305.6	6949.5	6107.2
72.5°	4977.3	6057.8	6982.5	5479.8	5025.9	5058.7	4868.1	5475.5	6880.2	5372.4	4662.7
75°	3534.5	4130.7	5573.4	3937.4	3336.1	3334.4	3319.7	3940.9	5428.8	3856.0	3411.5
77.5°	2547.6	2973.9	4366.4	2635.1	2367.3	2397.7	2349.1	2678.4	4232.0	2773.7	2527.6
80°	2032.0	2201.8	2822.2	1757.3	1762.5	1833.5	1823.2	1831.8	2784.2	2008.6	1889.9
82.5°	1460.1	1671.5	2157.6	1346.6	1165.4	1240.8	1255.6	1358.7	1964.4	1420.3	1246.1
85°	748.7	1019.1	1985.2	1166.4	728.8	604.0	695.0	1071.8	1706.2	850.9	607.4
87.5°	145.6	282.4	1454.8	648.1	327.5	165.5	272.9	454.1	992.2	154.3	75.4
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°	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4
2.5°	4406.3	4295.4	4191.3	4083.9	4000.8	3899.4	3799.6	3713.0	3629.0	3573.6	3590.9
5°	4298.8	4028.5	3785.8	3560.5	3428.8	3270.3	3129.0	3010.3	2918.5	2859.6	2895.1
7.5°	3809.3	3443.6	3123.8	2826.6	2639.4	2434.0	2269.4	2153.3	2082.2	2042.4	2100.4
10°	3308.3	2897.6	2538.9	2229.5	2045.0	1870.8	1721.7	1598.8	1503.4	1458.3	1481.7
12.5°	2949.7	2492.9	2116.9	1908.9	1750.4	1594.4	1440.1	1296.3	1175.0	1119.5	1108.3
15°	2815.4	2275.5	1891.6	1659.4	1501.7	1331.9	1165.4	1011.2	896.0	848.3	837.9
17.5°	2874.3	2228.7	1758.1	1483.5	1254.8	1048.5	861.3	715.8	630.9	604.0	606.6
20°	3081.3	2246.0	1650.7	1302.4	1019.9	775.5	588.4	487.8	451.4	445.4	452.3
22.5°	3365.6	2317.1	1572.7	1146.4	812.8	564.1	437.6	389.9	380.4	379.5	386.5
25°	3740.7	2455.7	1520.7	1007.8	642.1	447.1	381.3	354.5	346.6	348.3	355.3
27.5°	4182.7	2631.6	1487.0	888.2	527.7	398.6	356.1	332.8	325.0	326.6	331.8
30°	4586.5	2785.9	1436.7	798.1	474.0	381.3	342.3	318.9	308.5	308.5	311.9
32.5°	4947.8	2919.3	1377.8	730.5	424.6	342.3	310.3	292.1	284.2	286.8	288.6
35°	5268.4	2989.5	1331.9	690.6	384.7	315.4	283.4	264.3	253.9	255.6	258.2
37.5°	5583.9	3016.4	1301.5	668.9	356.1	298.9	269.4	253.9	242.6	240.9	240.0
40°	5883.7	3010.3	1273.0	662.9	337.1	286.8	260.9	246.9	235.7	233.1	232.2
42.5°	6142.7	2990.4	1246.1	646.4	324.1	278.1	253.9	241.7	230.5	227.0	225.3
45°	6379.3	2978.2	1216.6	616.1	331.0	274.7	250.4	237.4	227.0	222.7	221.0
47.5°	6641.9	3021.6	1183.7	583.2	329.3	275.6	250.4	235.7	225.3	221.0	219.2
50°	6954.7	3168.0	1142.9	538.1	313.6	294.6	249.6	233.1	223.5	221.0	217.5
52.5°	7396.7	3405.4	1086.6	480.1	301.6	314.6	248.7	228.7	221.0	216.7	212.3
55°	8002.3	3642.8	1013.8	418.5	282.4	300.6	250.4	223.5	214.9	210.5	205.4
57.5°	8498.9	3823.1	922.0	367.4	265.1	284.2	247.9	217.5	208.0	203.7	199.3
60°	8466.8	3840.5	834.4	334.5	254.7	255.6	253.9	213.2	201.9	198.5	195.0
62.5°	7942.5	3626.4	753.0	318.0	246.9	233.1	259.1	208.0	195.8	192.4	189.8
65°	7069.9	3128.2	709.7	318.0	240.0	221.0	226.2	201.0	189.8	186.3	184.5
67.5°	5963.4	2513.8	668.9	325.0	230.5	212.3	205.4	194.1	183.7	180.2	178.5
70°	4779.7	1978.3	640.4	321.5	221.9	202.7	194.1	184.5	174.2	173.3	171.5
72.5°	3749.4	1589.2	627.4	321.5	208.8	191.5	182.8	175.9	165.5	164.6	162.0
75°	3004.2	1193.2	573.7	315.4	195.8	176.8	169.0	163.0	152.5	153.3	151.6
77.5°	2326.6	844.0	479.2	284.2	179.3	160.3	154.3	149.9	137.8	138.6	138.6
80°	1819.7	549.3	371.7	235.7	160.3	141.3	136.9	133.5	120.4	122.1	122.1
82.5°	1246.9	326.6	269.4	189.8	137.8	120.4	119.6	114.4	100.6	101.4	103.1
85°	681.1	214.9	179.3	140.3	108.3	97.9	96.2	93.6	80.6	80.6	81.4
87.5°	125.6	115.3	105.7	92.7	72.8	70.2	67.6	70.2	60.7	58.9	58.9
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°	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4
2.5°	3550.2	3490.3	3448.8	3412.4	3324.8	3330.9	3343.0	3360.4	3305.8	3334.4	3369.9
5°	2859.6	2810.1	2772.9	2714.8	2592.7	2549.3	2521.6	2509.4	2428.0	2445.4	2483.4
7.5°	2108.2	2107.4	2094.4	2029.4	1882.1	1792.8	1733.9	1715.7	1665.5	1684.5	1742.6
10°	1484.3	1500.0	1493.9	1435.8	1304.2	1240.0	1227.0	1263.3	1264.3	1301.5	1401.1
12.5°	1072.8	1064.1	1056.3	1008.6	909.8	899.5	928.9	979.2	991.3	1031.1	1135.2
15°	800.7	779.9	775.5	738.3	673.3	682.8	704.5	730.5	731.3	759.0	844.9
17.5°	600.5	600.5	607.4	583.2	536.3	532.0	520.8	513.8	503.5	514.7	561.5
20°	466.2	487.8	505.1	491.3	448.9	428.1	406.4	392.5	384.7	385.7	399.5
22.5°	399.5	416.8	439.4	432.4	396.9	370.0	356.1	346.6	340.5	340.5	348.3
25°	365.7	377.0	397.7	394.2	364.0	342.3	331.0	321.5	314.6	313.6	321.5
27.5°	338.8	345.8	359.6	357.8	326.6	312.8	305.9	299.8	295.5	294.6	302.4
30°	314.6	318.0	325.0	322.3	298.9	285.1	282.4	279.9	277.3	278.1	289.4
32.5°	292.9	295.5	299.8	296.3	273.8	261.7	257.4	253.9	251.3	253.9	266.9
35°	268.6	276.4	281.6	279.9	255.6	240.9	231.4	222.7	219.2	221.9	236.6
37.5°	247.9	260.9	267.7	266.1	240.9	223.5	211.4	209.7	209.7	213.2	227.9
40°	240.0	249.6	255.6	253.0	227.9	210.5	203.7	201.0	201.9	205.4	221.0
42.5°	233.1	241.7	243.5	238.2	213.2	201.9	197.5	194.1	195.8	200.2	215.7
45°	227.0	233.9	233.1	225.3	201.0	193.2	193.2	190.7	191.5	195.0	211.4
47.5°	222.7	226.2	224.4	216.7	192.4	186.3	188.9	188.9	190.7	193.2	209.7
50°	215.7	218.4	216.7	209.7	185.5	180.2	182.8	186.3	188.0	190.7	205.4
52.5°	208.8	210.5	209.7	202.7	178.5	175.0	175.0	178.5	182.0	185.5	198.5
55°	201.9	203.7	204.5	199.3	173.3	169.8	169.0	169.0	172.5	177.7	191.5
57.5°	196.7	196.7	198.5	195.0	168.1	163.8	159.5	160.3	164.6	169.0	182.8
60°	190.7	191.5	194.1	190.7	161.2	154.3	150.8	155.1	156.8	161.2	175.9
62.5°	185.5	185.5	187.2	184.5	155.1	148.2	145.6	149.9	149.9	154.3	169.0
65°	181.1	180.2	180.2	179.3	149.0	142.1	140.3	142.1	143.0	147.3	162.0
67.5°	177.7	173.3	173.3	175.0	143.0	136.1	135.1	135.1	136.1	141.3	154.3
70°	169.8	166.3	165.5	171.5	136.9	128.3	128.3	126.5	128.3	130.8	144.7
72.5°	161.2	158.6	157.7	166.3	130.8	119.6	117.8	117.0	117.8	120.4	133.5
75°	149.9	148.2	149.9	163.0	124.8	110.1	107.4	106.6	106.6	107.4	121.3
77.5°	136.9	135.1	148.2	151.6	121.3	98.8	96.2	94.4	92.7	92.7	108.3
80°	121.3	120.4	143.0	128.3	116.1	86.6	82.3	79.7	77.9	77.1	92.7
82.5°	105.7	103.9	122.1	100.6	96.2	71.1	65.0	59.7	57.2	57.2	71.1
85°	86.6	85.8	96.2	73.7	66.7	52.0	43.4	39.0	35.5	35.5	45.9
87.5°	63.2	61.5	59.7	44.2	33.8	23.4	16.5	15.5	13.9	13.0	19.0
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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CATALOG NUMBER: XNV2-AF-02-LED-U-SLL-1200

CANDELA DISTRIBUTION (continued):

	295°	305°	315°	325°	335°	345°	355°	360°
0°	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4	4074.4
2.5°	3422.8	3494.7	3630.8	3742.5	3891.5	4011.1	4147.1	4206.1
5°	2553.6	2667.1	2875.1	3052.8	3298.8	3526.7	3786.7	3928.8
7.5°	1831.8	2000.0	2157.6	2379.5	2687.1	2992.9	3329.2	3517.2
10°	1515.5	1669.8	1805.0	1962.6	2200.1	2544.1	2945.3	3157.6
12.5°	1255.6	1422.0	1564.9	1733.9	1933.2	2244.3	2701.8	2948.8
15°	962.7	1143.8	1315.4	1519.0	1763.4	2118.6	2629.0	2904.6
17.5°	659.4	853.6	1065.0	1313.7	1608.3	2065.7	2698.3	3038.1
20°	448.0	590.1	819.7	1114.3	1468.8	2040.7	2850.9	3312.7
22.5°	368.3	432.4	604.9	927.2	1354.4	2068.4	3098.7	3674.0
25°	338.0	372.6	470.6	762.5	1266.8	2142.1	3434.0	4082.2
27.5°	318.9	348.3	412.5	644.7	1186.3	2242.5	3842.2	4581.3
30°	307.6	335.3	389.0	584.0	1112.6	2329.2	4193.1	4957.3
32.5°	282.4	303.3	347.5	549.3	1059.8	2399.4	4502.4	5309.2
35°	252.2	277.3	313.6	526.8	1058.0	2432.4	4793.5	5698.2
37.5°	240.9	265.1	292.1	514.7	1068.4	2460.1	5149.7	6139.3
40°	233.9	255.6	277.3	513.0	1077.1	2481.7	5498.1	6598.5
42.5°	227.9	249.6	274.7	500.8	1073.6	2511.1	5806.6	6992.8
45°	226.2	247.9	280.8	482.6	1072.8	2557.1	6051.8	7308.3
47.5°	224.4	257.4	279.1	462.7	1069.3	2654.1	6328.2	7602.0
50°	222.7	274.7	266.9	435.0	1043.3	2819.7	6699.9	7938.2
52.5°	221.9	277.3	253.9	396.9	996.5	3064.9	7244.1	8406.1
55°	218.4	263.4	231.4	346.6	928.9	3329.2	7827.3	8956.3
57.5°	210.5	234.9	218.4	297.2	831.9	3513.7	8258.0	9381.8
60°	229.7	201.9	209.7	272.1	715.8	3546.7	8277.0	9501.4
62.5°	219.2	183.7	201.0	263.4	634.3	3331.8	7898.3	9358.5
65°	175.0	174.2	193.2	272.1	622.2	2850.9	7258.9	8934.7
67.5°	159.5	167.3	185.5	282.4	629.9	2246.0	6317.8	7945.2
70°	149.0	158.6	175.0	292.1	643.8	1769.4	5086.5	6461.7
72.5°	138.6	146.5	164.6	301.6	634.3	1395.9	4070.9	4977.3
75°	125.6	132.6	149.9	276.4	544.2	1025.9	3234.7	3534.5
77.5°	110.9	117.0	131.8	218.4	409.0	714.0	2422.8	2547.6
80°	95.3	97.9	109.1	159.5	266.9	427.2	1844.0	2032.0
82.5°	75.4	76.2	83.2	117.0	166.3	272.9	1279.0	1460.1
85°	48.5	50.2	53.7	82.3	111.8	175.0	653.4	748.7
87.5°	16.5	19.0	19.0	39.9	54.6	97.1	200.2	145.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)