

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: P198609

Luminaire Tested: **XNV2-AF-02-LED-U-T2R-7030-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198609  
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: XNV2-AF-02-LED-U-T2R-7030-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 3000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12272 lumens  
Efficiency: N/A  
Efficacy: 95.9 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type II - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

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

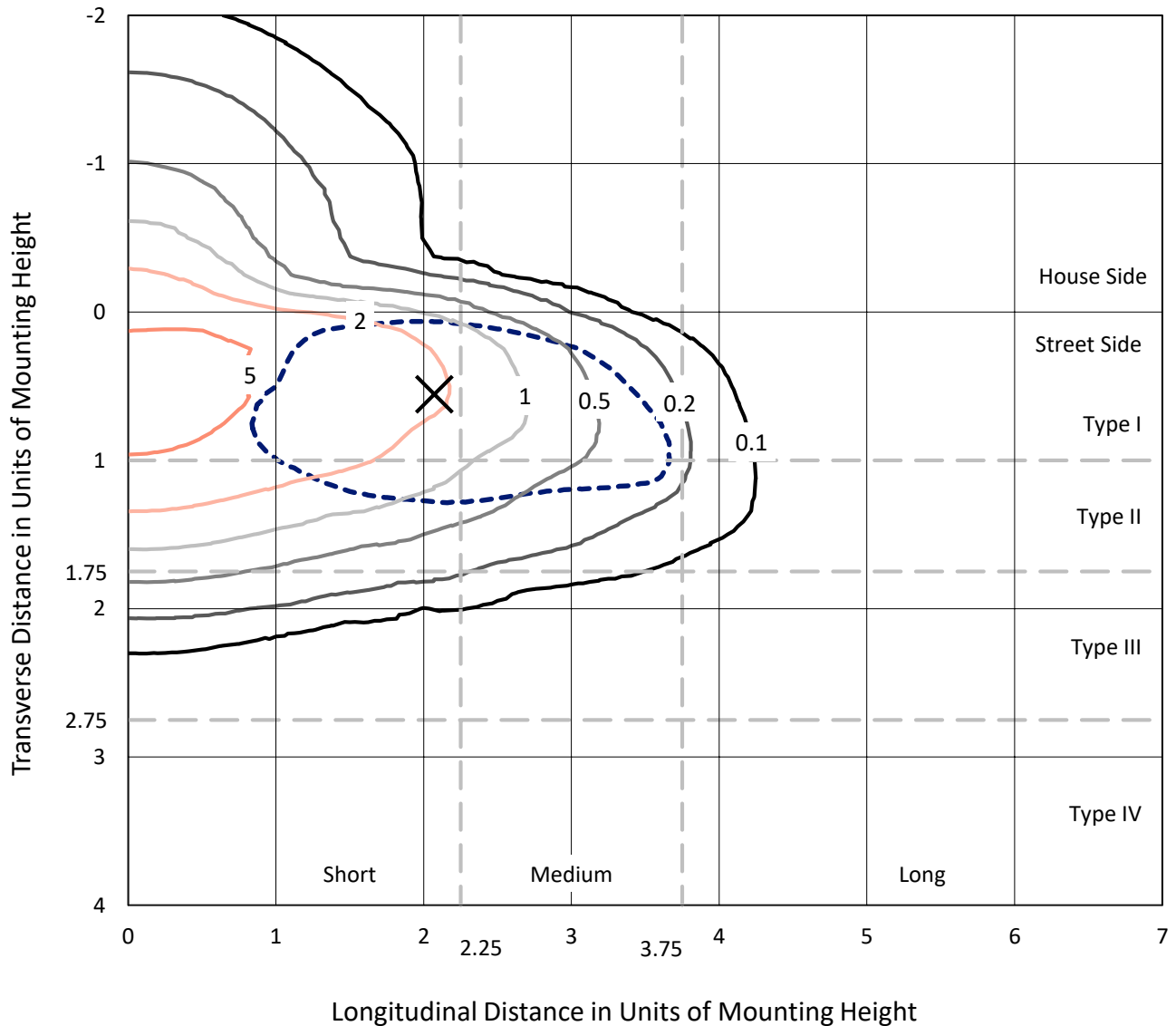


REPORT NUMBER: P198609

CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7030-1200

### Iso-Footcandle Lines of Horizontal Illumination

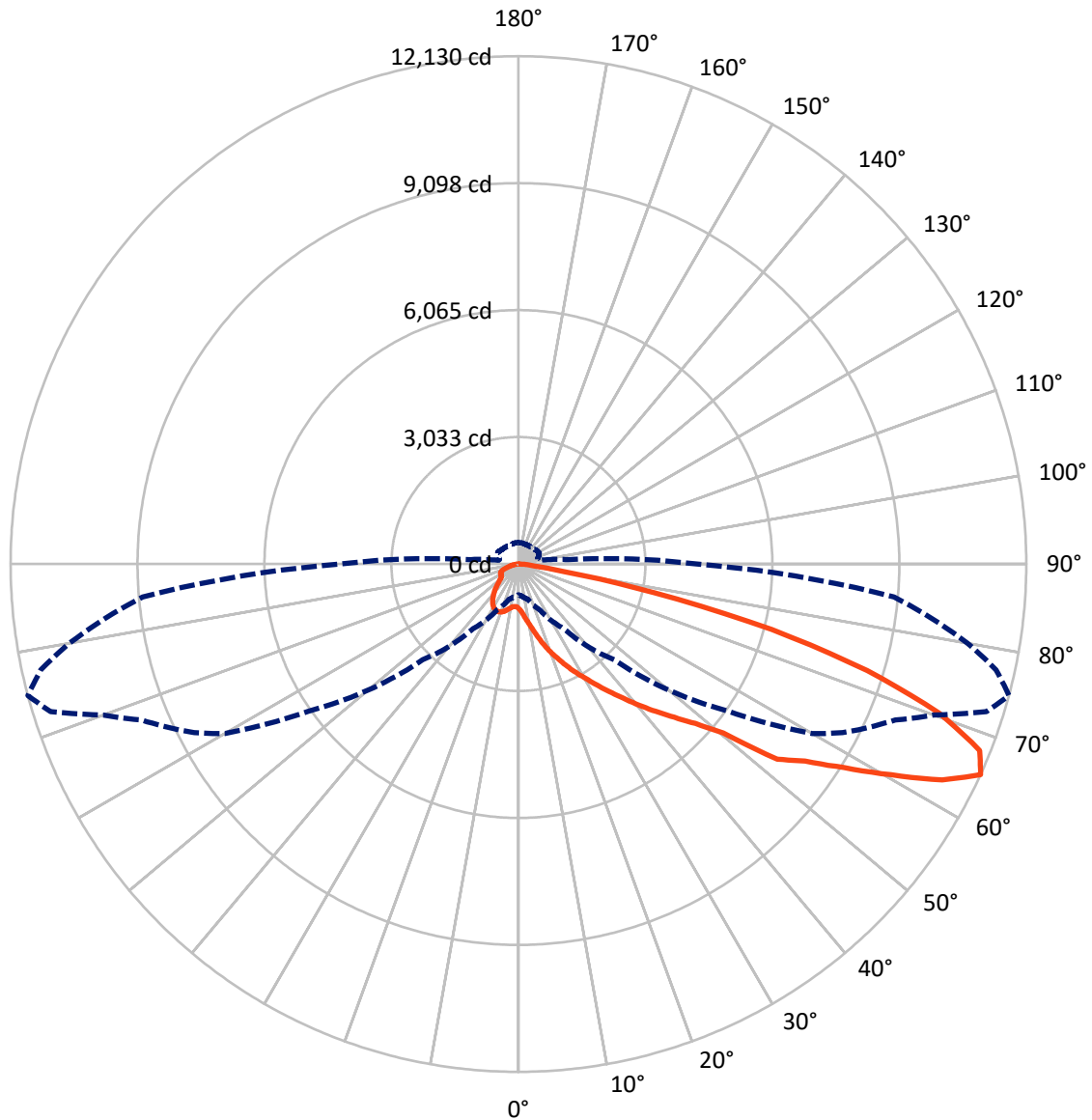
× Max cd  
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 7.6 fc  
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P198609  
CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7030-1200

### Luminous Intensity Polar Plot



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



REPORT NUMBER: P198609

CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7030-1200

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1844.1	0.0	1844.1
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	10427.9	0.0	10427.9
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	12272.0	0.0	12272.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.5	1.0
10°-20°	479.5	3.9
20°-30°	967.6	7.9
30°-40°	1643.2	13.4
40°-50°	2291.9	18.7
50°-60°	2809.1	22.9
60°-70°	2642.9	21.5
70°-80°	1158.9	9.4
80°-90°	153.3	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°	12272.0	100.0
0°-180°	12272.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P198609

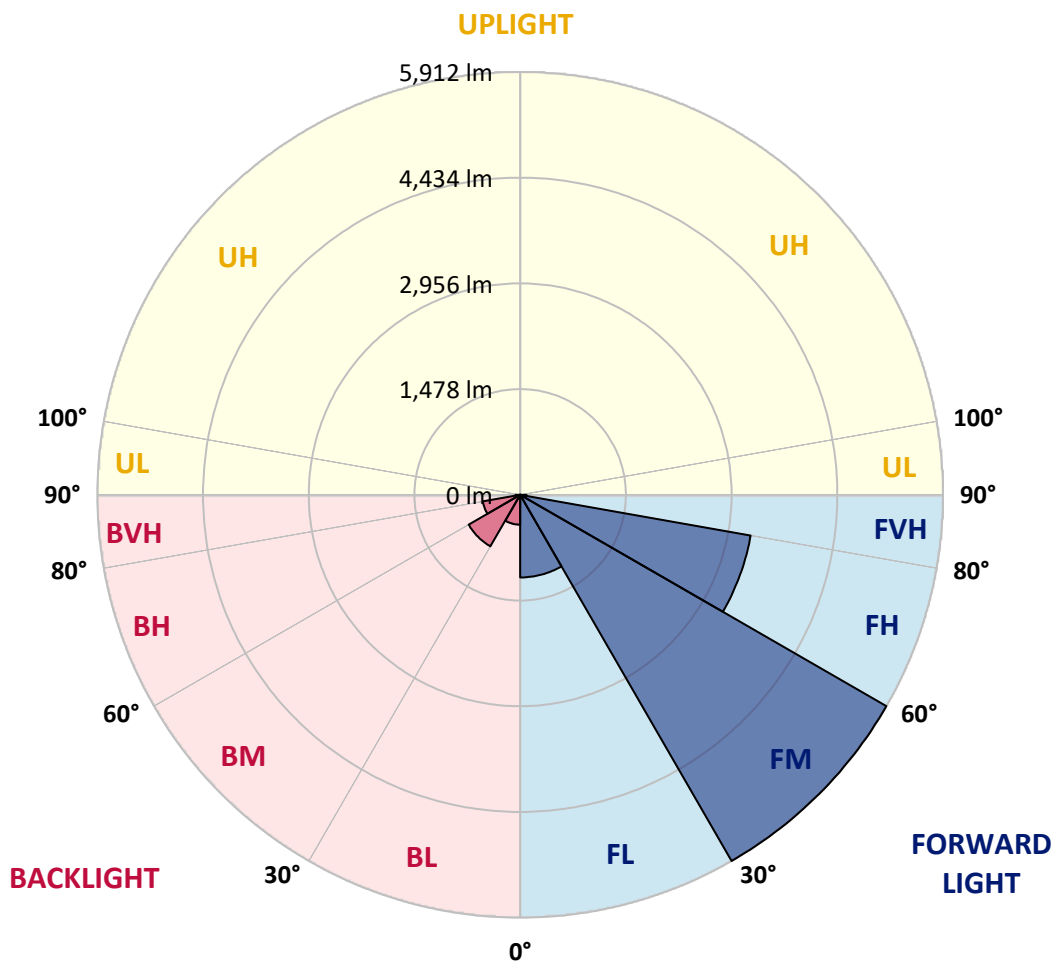
CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7030-1200

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1155.1	9.4			
FM	(30°-60°)	5912.1	48.2			
FH	(60°-80°)	3271.8	26.7			G2/5000
FVH	(80°-90°)	88.9	0.7			G1/100
BL	(0°-30°)	417.5	3.4	B1/500		
BM	(30°-60°)	832.1	6.8	B1/1000		
BH	(60°-80°)	530.0	4.3	B2/1000		G2/1000
BVH	(80°-90°)	64.4	0.5			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B2-U0-G2**

Type II Short





REPORT NUMBER: P198609

CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7030-1200

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3
2.5°	1338.9	1323.3	1324.8	1303.0	1271.0	1235.8	1206.9	1191.3	1178.1	1174.2	1152.3
5°	1751.1	1731.6	1724.5	1674.6	1599.6	1510.6	1422.4	1388.1	1360.0	1342.8	1300.6
7.5°	2088.3	2078.2	2068.8	2022.8	1948.6	1834.6	1692.5	1641.8	1594.9	1543.4	1492.7
10°	2317.9	2314.0	2310.0	2278.0	2216.4	2117.2	1964.2	1908.8	1850.2	1784.6	1718.3
12.5°	2491.2	2491.2	2494.3	2467.7	2430.3	2353.8	2214.8	2163.3	2103.9	2035.2	1959.5
15°	2607.5	2610.6	2627.0	2634.8	2615.3	2566.1	2444.3	2399.0	2342.8	2274.9	2200.0
17.5°	2684.8	2691.0	2715.2	2741.0	2766.0	2748.8	2658.2	2616.1	2565.3	2502.9	2432.6
20°	2864.3	2856.5	2857.3	2849.5	2886.2	2899.5	2849.5	2814.4	2773.8	2716.8	2652.8
22.5°	3241.4	3226.6	3188.3	3090.7	3046.2	3041.6	3011.9	2993.1	2961.9	2926.0	2862.0
25°	3733.2	3716.1	3640.3	3479.5	3346.8	3224.2	3169.6	3157.9	3137.6	3113.4	3067.3
27.5°	4241.5	4222.7	4125.1	3922.2	3748.9	3501.4	3331.2	3315.6	3296.8	3286.7	3264.8
30°	4688.8	4668.5	4572.5	4366.4	4157.2	3862.1	3549.0	3494.3	3462.3	3465.5	3453.0
32.5°	5081.5	5063.5	4955.8	4745.8	4533.4	4246.9	3831.6	3746.5	3674.7	3648.1	3657.5
35°	5410.9	5394.5	5276.7	5065.1	4851.2	4613.1	4195.4	4067.4	3950.3	3876.9	3868.3
37.5°	5604.5	5595.2	5512.4	5332.9	5120.5	4945.6	4602.9	4460.8	4288.3	4181.4	4134.5
40°	5593.6	5603.8	5589.7	5508.5	5343.8	5216.5	5027.6	4887.1	4718.5	4559.2	4464.0
42.5°	5434.4	5448.4	5511.6	5553.8	5509.3	5432.0	5398.4	5293.8	5142.4	4973.7	4841.8
45°	5215.8	5228.3	5310.2	5462.5	5589.7	5611.6	5723.2	5670.9	5542.9	5399.2	5254.0
47.5°	4880.8	4905.0	5000.3	5242.3	5545.2	5756.0	5995.7	6019.9	5945.7	5827.0	5691.2
50°	4396.0	4428.0	4561.5	4905.8	5376.6	5904.3	6400.8	6493.0	6463.3	6343.1	6205.7
52.5°	3899.5	3931.5	4109.5	4475.7	5104.9	5965.2	6799.8	7035.5	7205.7	7329.9	7354.1
55°	3382.7	3418.6	3613.8	4035.4	4742.7	5887.9	7084.7	7352.5	7525.0	7654.6	7706.9
57.5°	2799.5	2840.1	3029.1	3455.3	4230.5	5577.2	7401.7	7781.1	8037.9	8237.8	8350.2
60°	2130.5	2181.2	2377.2	2806.6	3557.6	4982.3	7543.0	8104.3	8512.6	8812.4	8990.4
62.5°	1350.6	1402.1	1605.9	2051.6	2791.7	4169.6	7143.3	7962.2	8658.6	9102.0	9428.3
65°	737.0	759.6	872.8	1208.5	1882.2	3235.2	6129.9	7095.7	8098.8	8727.3	9228.5
67.5°	552.7	555.8	567.6	649.5	1002.4	2184.4	4792.6	5677.1	6791.2	7600.0	8198.8
70°	484.0	484.0	485.6	486.4	544.1	1183.5	3246.9	4061.1	5082.3	5900.4	6644.4
72.5°	434.1	429.4	427.8	418.4	426.3	606.6	1767.5	2499.0	3360.1	4278.2	4972.2
75°	374.7	373.9	373.9	364.6	369.3	427.0	766.6	1199.1	1866.6	2721.5	3404.6
77.5°	324.0	318.5	319.3	313.8	328.7	327.1	363.8	494.2	812.7	1429.4	1996.2
80°	267.0	263.1	265.4	262.3	285.7	242.0	245.1	302.1	403.6	626.9	883.7
82.5°	197.5	199.1	213.9	212.3	240.5	163.2	179.6	225.6	271.7	312.3	339.6
85°	115.5	117.9	153.8	161.6	176.4	85.9	110.1	134.3	151.5	167.8	174.9
87.5°	12.5	16.4	85.9	88.2	78.8	25.8	44.5	56.2	60.1	64.0	56.2
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: P198609

CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7030-1200

**CANDELA DISTRIBUTION (continued):**

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3
2.5°	1145.3	1135.1	1124.2	1117.9	1107.0	1097.6	1080.5	1066.4	1050.8	1039.9	1035.2
5°	1279.5	1255.3	1229.6	1210.8	1187.4	1167.1	1128.1	1081.2	1066.4	1035.2	1027.4
7.5°	1454.4	1410.7	1367.0	1331.1	1290.5	1256.9	1191.3	1107.0	1096.1	1046.1	1035.2
10°	1659.7	1595.7	1530.9	1475.5	1416.2	1364.6	1267.8	1149.2	1137.5	1073.4	1062.5
12.5°	1889.3	1811.2	1727.7	1644.9	1574.6	1502.0	1370.1	1214.7	1196.0	1120.3	1105.5
15°	2125.8	2041.5	1944.7	1844.8	1758.1	1662.1	1495.8	1300.6	1266.3	1177.3	1157.0
17.5°	2359.2	2267.9	2166.4	2054.8	1953.3	1838.5	1631.6	1396.6	1337.3	1233.5	1207.7
20°	2584.8	2491.9	2385.0	2275.7	2149.2	2018.1	1770.6	1491.1	1400.5	1280.3	1246.8
22.5°	2790.2	2710.5	2603.6	2477.9	2349.9	2202.3	1911.9	1585.6	1456.0	1316.2	1273.3
25°	3006.4	2933.8	2827.6	2706.6	2557.5	2393.6	2057.9	1675.4	1500.5	1335.8	1282.7
27.5°	3225.0	3162.6	3062.6	2935.4	2775.3	2593.4	2206.2	1758.1	1536.4	1342.0	1278.0
30°	3458.4	3410.0	3317.9	3175.8	3014.2	2812.8	2367.8	1839.3	1559.0	1333.4	1256.9
32.5°	3679.4	3677.8	3595.8	3448.3	3274.2	3052.5	2538.0	1921.3	1570.7	1309.2	1220.2
35°	3908.9	3940.9	3879.2	3738.7	3555.2	3309.3	2726.2	2008.7	1571.5	1266.3	1172.6
37.5°	4169.6	4226.6	4199.3	4065.8	3873.0	3602.1	2947.1	2107.1	1566.8	1206.9	1103.1
40°	4466.3	4544.4	4543.6	4431.2	4225.1	3930.0	3203.9	2217.1	1555.9	1132.8	1021.1
42.5°	4805.9	4898.8	4924.6	4813.7	4605.3	4288.3	3498.3	2338.2	1538.7	1059.4	934.5
45°	5194.7	5276.7	5325.1	5222.0	5012.8	4678.6	3836.3	2475.6	1517.7	964.9	835.3
47.5°	5610.8	5706.0	5778.6	5690.4	5467.1	5123.6	4236.8	2652.8	1509.8	857.2	728.4
50°	6126.8	6225.2	6382.1	6342.3	6219.7	5943.4	5083.8	3071.2	1513.0	754.9	638.6
52.5°	7407.1	7632.8	7831.1	7742.8	7451.6	6977.8	5772.4	3303.9	1447.4	671.4	576.1
55°	7793.6	8049.6	8342.4	8305.7	8026.2	7548.4	6316.5	3498.3	1384.2	610.5	535.6
57.5°	8469.7	8771.8	9180.9	9173.1	8830.3	8292.4	7016.8	3730.9	1356.8	575.4	515.3
60°	9185.5	9570.4	10135.6	10223.9	9851.5	9291.7	7844.3	4016.6	1360.7	555.8	503.5
62.5°	9708.6	10273.0	11095.1	11359.0	10920.2	10303.5	8703.1	4302.4	1337.3	533.2	489.5
65°	9740.6	10553.3	11719.7	12130.3	11686.1	10893.7	9006.0	4246.1	1196.8	502.8	466.8
67.5°	8959.9	10018.5	11435.5	11885.9	11431.6	10529.9	8475.1	3712.2	972.7	449.7	427.8
70°	7462.6	8691.4	10162.2	10664.2	10288.7	9376.0	7375.9	2965.0	726.8	379.4	369.3
72.5°	5766.9	6913.0	8248.7	8713.2	8425.9	7623.4	5817.7	2160.9	519.2	307.6	299.8
75°	4122.8	5098.7	6068.3	6245.5	5962.1	5225.1	3774.6	1349.8	363.8	252.2	241.2
77.5°	2552.8	3187.5	3535.7	3307.8	2946.3	2449.0	1536.4	666.7	242.0	205.3	194.4
80°	1132.8	1329.5	1241.3	1106.2	873.6	718.2	469.2	295.9	156.1	158.5	152.2
82.5°	381.0	402.8	391.9	389.6	351.3	307.6	199.1	128.0	87.4	101.5	99.1
85°	185.8	194.4	195.2	202.2	175.7	136.6	53.9	50.7	37.5	54.6	57.0
87.5°	56.2	57.0	51.5	56.2	45.3	31.2	10.1	14.1	7.0	13.3	13.3
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: P198609

CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7030-1200

**CANDELA DISTRIBUTION (continued):**

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3
2.5°	1026.6	1023.5	1018.0	1011.8	1010.2	1002.4	1000.1	996.2	993.8	989.9	986.8
5°	1017.2	1011.8	1005.5	998.5	998.5	987.6	982.9	978.2	978.2	971.2	968.1
7.5°	1026.6	1019.6	1012.5	1006.3	1008.6	996.2	991.5	986.8	986.0	979.0	975.9
10°	1053.1	1046.1	1037.5	1031.3	1028.9	1018.8	1013.3	1006.3	1001.6	996.9	992.3
12.5°	1093.7	1084.4	1073.4	1060.2	1054.7	1046.1	1037.5	1028.2	1017.2	1012.5	1005.5
15°	1142.1	1126.5	1111.7	1095.3	1080.5	1071.9	1060.2	1045.3	1030.5	1024.3	1014.9
17.5°	1182.0	1165.6	1144.5	1125.0	1098.4	1091.4	1075.0	1057.0	1032.8	1030.5	1016.5
20°	1215.5	1190.5	1164.8	1141.4	1100.8	1096.9	1076.6	1055.5	1021.1	1021.1	1004.0
22.5°	1234.3	1199.9	1169.5	1138.2	1087.5	1084.4	1061.0	1036.0	993.8	995.4	974.3
25°	1237.4	1196.0	1157.8	1120.3	1061.7	1056.3	1026.6	999.3	953.2	950.1	928.2
27.5°	1224.9	1176.5	1132.0	1086.7	1023.5	1011.8	979.0	946.2	900.9	893.1	869.7
30°	1196.0	1139.0	1089.1	1036.8	970.4	951.7	917.3	883.7	837.7	827.5	805.7
32.5°	1149.9	1085.2	1029.7	977.4	904.0	880.6	846.3	812.7	768.2	760.4	740.1
35°	1089.1	1016.5	957.9	902.5	829.1	804.9	772.1	742.4	701.8	698.7	684.7
37.5°	1012.5	936.8	874.4	821.3	751.8	739.3	705.7	683.9	650.3	653.4	646.4
40°	925.9	848.6	789.3	742.4	682.3	671.4	651.1	634.7	605.8	614.4	615.2
42.5°	838.5	761.2	707.3	665.1	613.6	606.6	592.5	583.2	561.3	578.5	585.5
45°	739.3	667.5	621.4	589.4	551.2	551.2	544.1	543.4	528.5	552.7	559.8
47.5°	643.3	587.1	555.1	535.6	509.0	521.5	519.2	525.4	514.5	539.5	545.7
50°	570.7	531.6	512.1	502.8	484.0	503.5	508.2	516.8	507.4	529.3	534.0
52.5°	524.6	498.9	487.9	485.6	472.3	496.5	504.3	512.1	501.2	521.5	520.7
55°	498.9	481.7	477.8	482.5	472.3	495.7	503.5	509.0	499.6	513.7	512.9
57.5°	489.5	480.1	482.5	489.5	482.5	502.0	505.9	512.1	502.8	509.0	512.1
60°	488.7	488.7	498.1	507.4	502.8	516.8	519.2	518.4	509.8	510.6	512.1
62.5°	484.0	495.7	511.3	526.2	524.6	541.8	543.4	533.2	526.2	518.4	516.0
65°	469.2	488.7	511.3	531.6	534.8	561.3	564.4	554.3	549.6	536.3	526.2
67.5°	436.4	461.4	487.9	512.9	518.4	554.3	561.3	565.2	567.6	559.0	545.7
70°	381.0	406.7	434.1	462.9	470.8	510.6	525.4	543.4	557.4	569.9	565.2
72.5°	309.9	333.4	356.8	383.3	395.0	436.4	455.9	487.1	509.0	541.0	554.3
75°	245.9	260.0	274.0	290.4	299.8	340.4	364.6	402.1	431.7	476.2	505.9
77.5°	193.6	200.6	207.7	214.7	218.6	241.2	260.7	298.2	332.6	388.8	432.5
80°	149.1	153.0	153.8	156.1	154.6	165.5	172.5	195.2	224.8	280.3	331.8
82.5°	96.0	99.1	100.7	104.6	96.8	110.9	115.5	117.9	133.5	174.1	210.8
85°	53.9	54.6	55.4	57.0	46.1	60.1	60.9	57.0	55.4	71.8	81.2
87.5°	13.3	12.5	13.3	13.3	5.5	12.5	12.5	8.6	6.2	11.7	9.4
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: P198609

CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7030-1200

**CANDELA DISTRIBUTION (continued):**

	135°	145°	155°	165°	175°	180°
0°	1063.3	1063.3	1063.3	1063.3	1063.3	1063.3
2.5°	979.8	978.2	979.0	975.1	973.5	974.3
5°	964.1	961.0	961.0	958.7	955.6	955.6
7.5°	971.2	964.9	962.6	957.9	953.2	954.0
10°	982.1	971.2	963.4	956.3	950.9	950.9
12.5°	989.1	969.6	957.9	948.5	942.3	942.3
15°	990.7	961.0	943.8	933.7	927.5	927.5
17.5°	981.3	943.8	922.0	908.7	901.7	903.3
20°	957.9	911.8	886.1	872.0	865.0	865.8
22.5°	921.2	868.1	838.5	822.1	815.0	815.0
25°	871.2	813.5	781.5	768.2	761.9	761.9
27.5°	814.3	754.9	726.8	716.7	712.8	712.8
30°	750.2	701.1	680.8	673.7	667.5	667.5
32.5°	696.4	661.2	654.2	644.8	628.5	627.7
35°	653.4	649.5	644.1	616.0	592.5	589.4
37.5°	630.0	653.4	619.1	570.7	551.9	551.2
40°	617.5	639.4	580.0	556.6	554.3	554.3
42.5°	587.9	603.5	577.7	564.4	564.4	565.2
45°	556.6	569.9	583.2	571.5	575.4	576.1
47.5°	534.8	561.3	583.2	573.0	580.8	585.5
50°	514.5	553.5	571.5	571.5	580.0	580.8
52.5°	509.8	542.6	560.5	569.1	569.9	566.0
55°	510.6	534.0	551.9	562.9	558.2	558.2
57.5°	509.8	529.3	544.9	548.8	551.2	551.2
60°	510.6	523.1	535.6	534.0	541.8	541.8
62.5°	512.9	514.5	520.7	519.2	530.9	530.9
65°	518.4	503.5	499.6	501.2	515.3	514.5
67.5°	528.5	488.7	476.2	477.0	497.3	494.2
70°	543.4	468.4	449.7	445.0	479.3	473.9
72.5°	548.0	445.0	415.3	410.6	430.9	415.3
75°	526.2	426.3	378.6	363.0	354.4	349.7
77.5°	469.2	414.5	340.4	307.6	294.3	291.2
80°	388.8	390.3	290.4	251.4	292.0	291.2
82.5°	293.5	337.3	232.6	217.8	211.6	176.4
85°	142.1	253.7	178.8	149.9	89.8	85.1
87.5°	12.5	106.2	103.1	67.1	30.4	28.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)