

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: P198928

Luminaire Tested: **XNV-AF-01-LED-U-T2R-7050-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198928  
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-7050-1200  
Description: XNV ROADWAY AND AREA LUMINAIRE  
(1) 70 CRI, 5000K, 1200mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II  
ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6953 lumens  
Efficiency: N/A  
Efficacy: 105.3 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 - G2

Input Watts (W): 66  
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

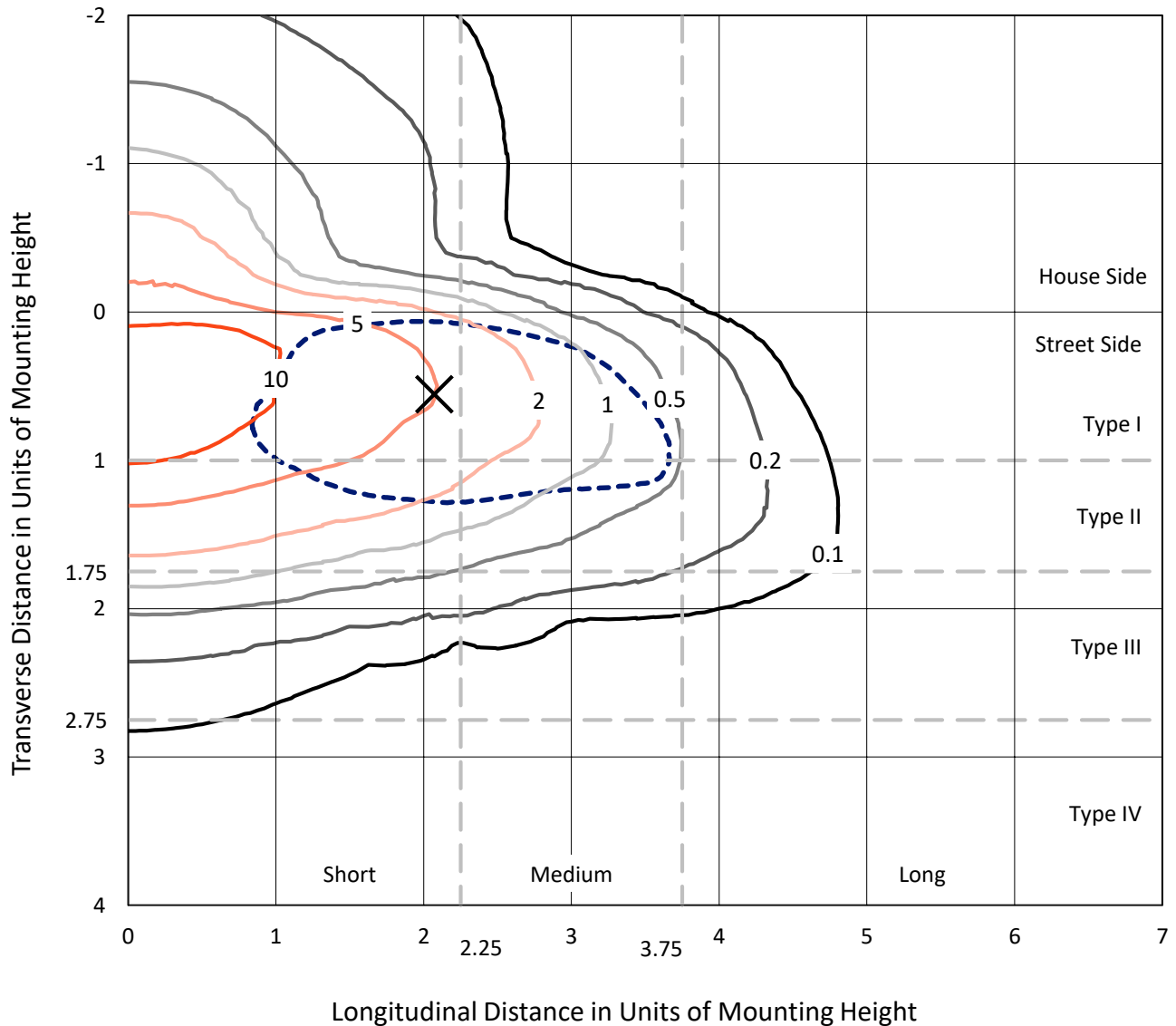


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### Iso-Footcandle Lines of Horizontal Illumination

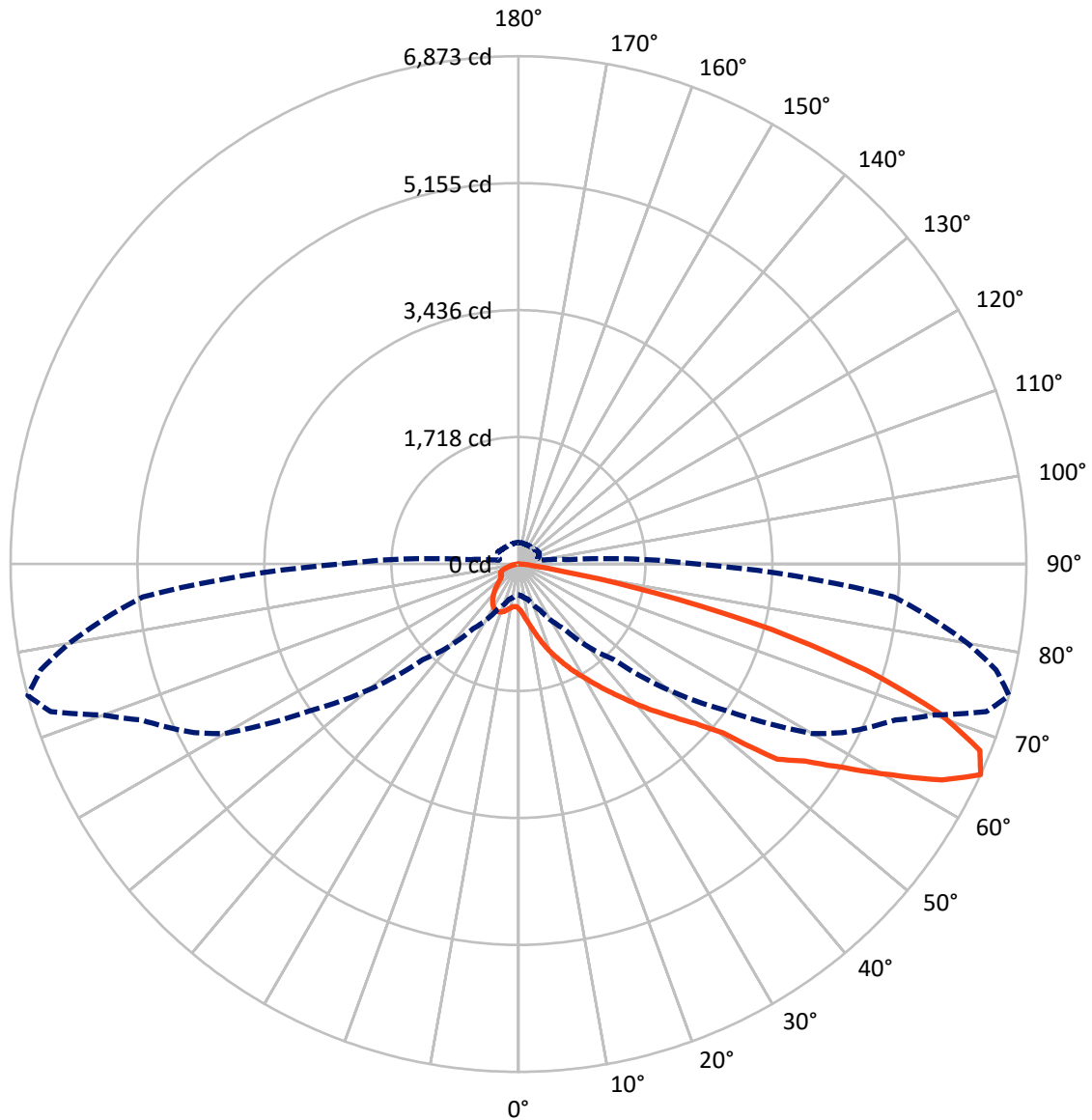
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 17.3 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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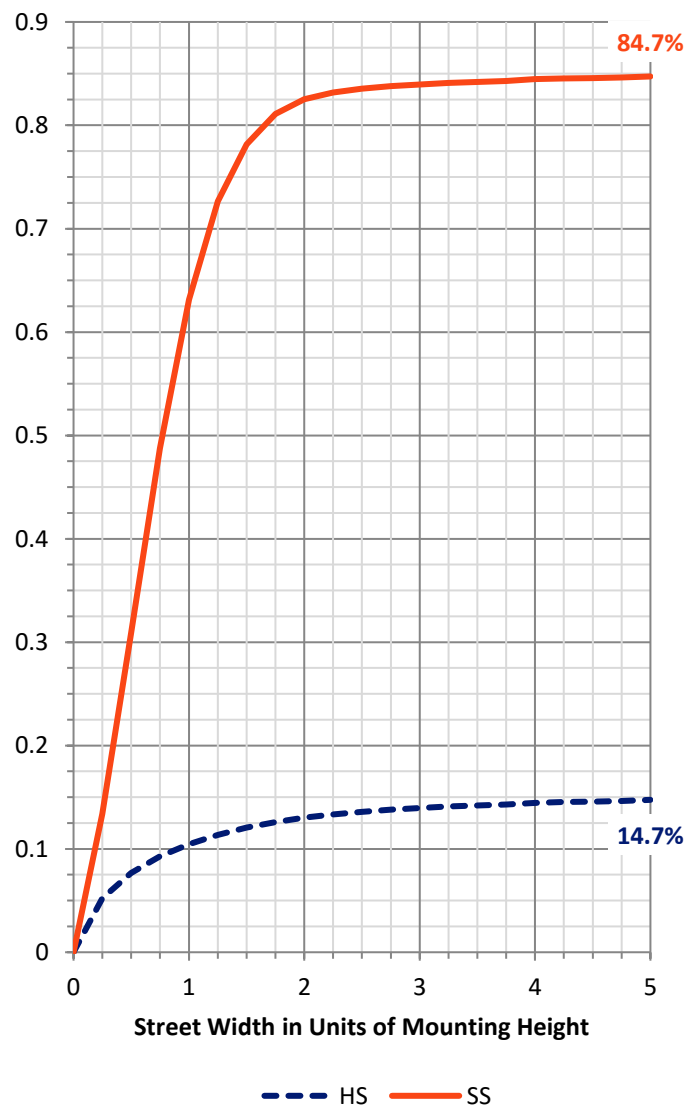
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1044.8	0.0	1044.8
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	5908.2	0.0	5908.2
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	6953.0	0.0	6953.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.1	1.0
10°-20°	271.7	3.9
20°-30°	548.2	7.9
30°-40°	931.0	13.4
40°-50°	1298.6	18.7
50°-60°	1591.5	22.9
60°-70°	1497.4	21.5
70°-80°	656.6	9.4
80°-90°	86.9	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°	6953.0	100.0
0°-180°	6953.0	100.0

**Coefficient of Utilization**



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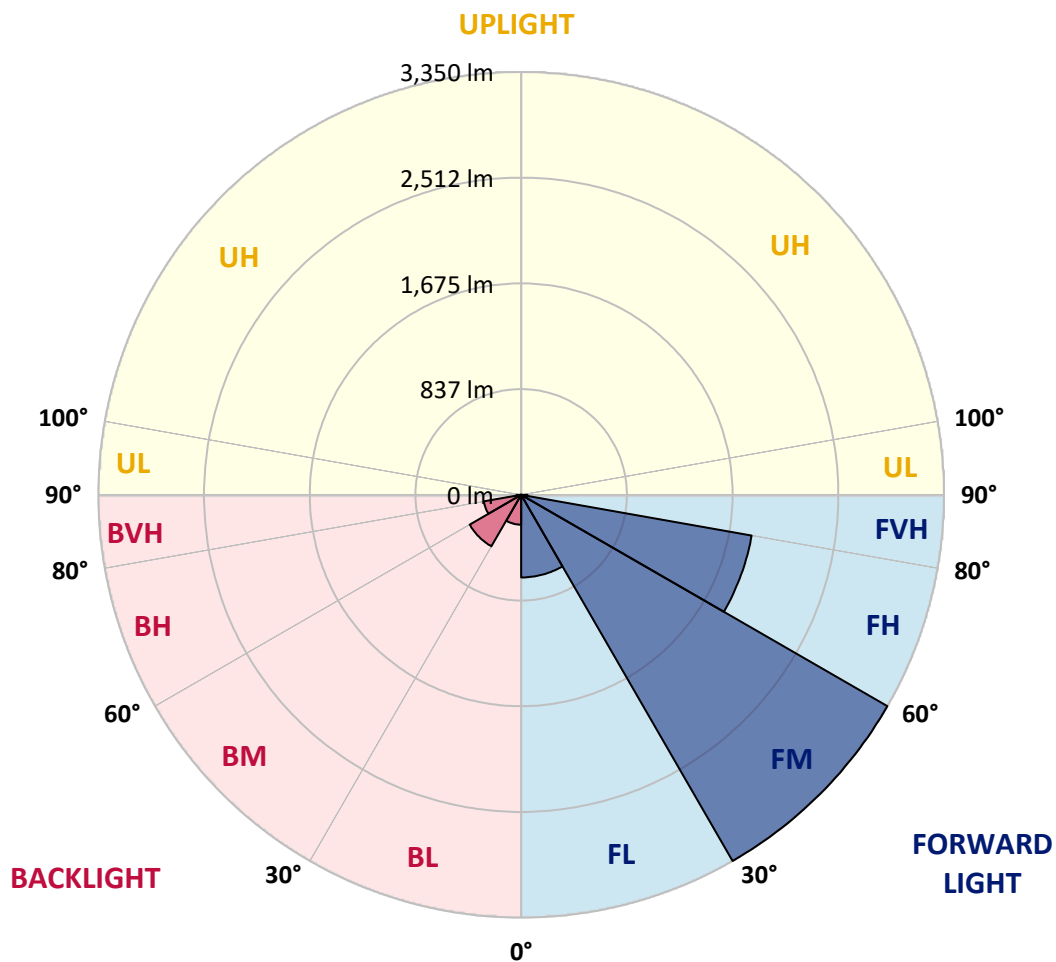
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7050-1200

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	654.5	9.4			
FM (30°-60°)	3349.6	48.2			
FH (60°-80°)	1853.7	26.7			G2/5000
FVH (80°-90°)	50.4	0.7			G1/100
BL (0°-30°)	236.5	3.4	B1/500		
BM (30°-60°)	471.5	6.8	B1/1000		
BH (60°-80°)	300.3	4.3	B1/500		G1/500
BVH (80°-90°)	36.5	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-G2**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4
2.5°	758.6	749.7	750.6	738.2	720.1	700.2	683.8	675.0	667.5	665.2	652.9
5°	992.1	981.1	977.1	948.8	906.3	855.9	805.9	786.4	770.5	760.8	736.9
7.5°	1183.2	1177.4	1172.1	1146.0	1104.0	1039.4	958.9	930.2	903.7	874.5	845.7
10°	1313.2	1311.0	1308.8	1290.7	1255.7	1199.6	1112.9	1081.5	1048.3	1011.1	973.5
12.5°	1411.4	1411.4	1413.2	1398.2	1376.9	1333.6	1254.9	1225.7	1192.0	1153.1	1110.2
15°	1477.3	1479.1	1488.4	1492.8	1481.8	1453.9	1384.9	1359.2	1327.4	1288.9	1246.4
17.5°	1521.1	1524.7	1538.4	1553.0	1567.1	1557.4	1506.1	1482.2	1453.5	1418.1	1378.3
20°	1622.9	1618.4	1618.9	1614.5	1635.2	1642.8	1614.5	1594.6	1571.6	1539.3	1503.0
22.5°	1836.5	1828.1	1806.4	1751.1	1725.9	1723.3	1706.5	1695.8	1678.1	1657.8	1621.5
25°	2115.2	2105.4	2062.5	1971.4	1896.2	1826.8	1795.8	1789.2	1777.7	1764.0	1737.9
27.5°	2403.1	2392.5	2337.2	2222.2	2124.0	1983.8	1887.4	1878.5	1867.9	1862.2	1849.8
30°	2656.6	2645.1	2590.6	2473.9	2355.3	2188.1	2010.8	1979.8	1961.7	1963.4	1956.4
32.5°	2879.0	2868.9	2807.8	2688.8	2568.5	2406.2	2170.9	2122.7	2082.0	2066.9	2072.3
35°	3065.7	3056.4	2989.6	2869.7	2748.6	2613.6	2377.0	2304.5	2238.1	2196.5	2191.7
37.5°	3175.4	3170.1	3123.2	3021.5	2901.2	2802.1	2607.9	2527.4	2429.6	2369.0	2342.5
40°	3169.2	3174.9	3167.0	3121.0	3027.7	2955.6	2848.5	2768.9	2673.4	2583.1	2529.2
42.5°	3079.0	3086.9	3122.8	3146.6	3121.4	3077.6	3058.6	2999.3	2913.5	2818.0	2743.2
45°	2955.1	2962.2	3008.6	3094.9	3167.0	3179.4	3242.6	3213.0	3140.4	3059.1	2976.8
47.5°	2765.4	2779.1	2833.0	2970.2	3141.8	3261.2	3397.0	3410.7	3368.7	3301.4	3224.5
50°	2490.7	2508.8	2584.5	2779.5	3046.2	3345.2	3626.6	3678.7	3661.9	3593.8	3516.0
52.5°	2209.4	2227.5	2328.4	2535.8	2892.3	3379.7	3852.6	3986.2	4082.6	4152.9	4166.6
55°	1916.6	1936.9	2047.5	2286.3	2687.1	3336.0	4014.0	4165.7	4263.5	4336.9	4366.5
57.5°	1586.1	1609.1	1716.2	1957.7	2396.9	3159.9	4193.6	4408.6	4554.1	4667.3	4731.0
60°	1207.1	1235.8	1346.9	1590.1	2015.6	2822.9	4273.7	4591.7	4823.0	4992.9	5093.7
62.5°	765.2	794.4	909.8	1162.4	1581.7	2362.4	4047.2	4511.2	4905.7	5157.0	5341.9
65°	417.5	430.4	494.5	684.7	1066.4	1833.0	3473.1	4020.2	4588.6	4944.7	5228.6
67.5°	313.2	314.9	321.6	368.0	567.9	1237.6	2715.4	3216.5	3847.7	4305.9	4645.2
70°	274.2	274.2	275.1	275.6	308.3	670.6	1839.6	2300.9	2879.5	3343.0	3764.6
72.5°	245.9	243.3	242.4	237.1	241.5	343.7	1001.4	1415.9	1903.7	2423.9	2817.1
75°	212.3	211.9	211.9	206.6	209.2	241.9	434.4	679.4	1057.6	1541.9	1928.9
77.5°	183.6	180.5	180.9	177.8	186.2	185.3	206.1	280.0	460.5	809.9	1131.0
80°	151.3	149.1	150.4	148.6	161.9	137.1	138.9	171.2	228.7	355.2	500.7
82.5°	111.9	112.8	121.2	120.3	136.2	92.4	101.7	127.8	153.9	176.9	192.4
85°	65.5	66.8	87.1	91.6	100.0	48.7	62.4	76.1	85.8	95.1	99.1
87.5°	7.1	9.3	48.7	50.0	44.7	14.6	25.2	31.8	34.1	36.3	31.8
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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**CANDELA DISTRIBUTION (continued):**

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4
2.5°	648.9	643.1	636.9	633.4	627.2	621.9	612.2	604.2	595.4	589.2	586.5
5°	725.0	711.2	696.6	686.0	672.8	661.3	639.1	612.6	604.2	586.5	582.1
7.5°	824.0	799.3	774.5	754.1	731.1	712.1	675.0	627.2	621.0	592.7	586.5
10°	940.4	904.1	867.4	836.0	802.4	773.2	718.3	651.1	644.5	608.2	602.0
12.5°	1070.4	1026.2	978.8	932.0	892.2	851.0	776.3	688.2	677.6	634.7	626.3
15°	1204.4	1156.7	1101.8	1045.2	996.1	941.7	847.5	736.9	717.4	667.0	655.5
17.5°	1336.7	1284.9	1227.4	1164.2	1106.7	1041.7	924.4	791.3	757.7	698.9	684.3
20°	1464.5	1411.9	1351.3	1289.4	1217.7	1143.4	1003.2	844.8	793.5	725.4	706.4
22.5°	1580.8	1535.7	1475.1	1403.9	1331.4	1247.8	1083.2	898.3	824.9	745.7	721.4
25°	1703.4	1662.2	1602.1	1533.5	1449.0	1356.1	1165.9	949.2	850.1	756.8	726.7
27.5°	1827.2	1791.8	1735.2	1663.1	1572.4	1469.4	1250.0	996.1	870.5	760.3	724.1
30°	1959.5	1932.0	1879.8	1799.3	1707.8	1593.7	1341.5	1042.1	883.3	755.5	712.1
32.5°	2084.6	2083.8	2037.3	1953.7	1855.1	1729.5	1438.0	1088.5	889.9	741.8	691.3
35°	2214.7	2232.8	2197.9	2118.3	2014.3	1875.0	1544.6	1138.1	890.4	717.4	664.4
37.5°	2362.4	2394.7	2379.2	2303.6	2194.3	2040.8	1669.7	1193.8	887.7	683.8	625.0
40°	2530.5	2574.7	2574.3	2510.6	2393.8	2226.6	1815.3	1256.2	881.5	641.8	578.5
42.5°	2722.9	2775.5	2790.1	2727.3	2609.2	2429.6	1982.0	1324.7	871.8	600.2	529.5
45°	2943.2	2989.6	3017.0	2958.7	2840.1	2650.8	2173.5	1402.6	859.9	546.7	473.3
47.5°	3178.9	3232.9	3274.0	3224.0	3097.5	2902.9	2400.5	1503.0	855.4	485.7	412.7
50°	3471.3	3527.0	3615.9	3593.4	3523.9	3367.4	2880.4	1740.1	857.2	427.7	361.8
52.5°	4196.7	4324.5	4436.9	4386.9	4221.9	3953.4	3270.5	1871.9	820.1	380.4	326.4
55°	4415.6	4560.7	4726.6	4705.8	4547.5	4276.8	3578.8	1982.0	784.2	345.9	303.4
57.5°	4798.7	4969.9	5201.6	5197.2	5003.0	4698.3	3975.5	2113.8	768.7	326.0	291.9
60°	5204.3	5422.4	5742.6	5792.6	5581.6	5264.4	4444.4	2275.7	771.0	314.9	285.3
62.5°	5500.6	5820.4	6286.2	6435.7	6187.1	5837.7	4930.9	2437.6	757.7	302.1	277.3
65°	5518.8	5979.2	6640.1	6872.7	6621.0	6172.1	5102.6	2405.8	678.1	284.9	264.5
67.5°	5076.5	5676.2	6479.1	6734.3	6476.8	5966.0	4801.8	2103.2	551.1	254.8	242.4
70°	4228.1	4924.3	5757.6	6042.0	5829.3	5312.2	4179.0	1679.9	411.8	215.0	209.2
72.5°	3267.4	3916.7	4673.5	4936.7	4773.9	4319.2	3296.1	1224.3	294.1	174.3	169.8
75°	2335.9	2888.8	3438.1	3538.5	3378.0	2960.4	2138.6	764.8	206.1	142.9	136.7
77.5°	1446.4	1806.0	2003.3	1874.1	1669.3	1387.5	870.5	377.7	137.1	116.3	110.1
80°	641.8	753.3	703.3	626.8	495.0	406.9	265.8	167.6	88.5	89.8	86.3
82.5°	215.9	228.2	222.0	220.7	199.0	174.3	112.8	72.5	49.5	57.5	56.2
85°	105.3	110.1	110.6	114.6	99.5	77.4	30.5	28.8	21.2	31.0	32.3
87.5°	31.8	32.3	29.2	31.8	25.7	17.7	5.8	8.0	4.0	7.5	7.5
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°	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4	602.4
2.5°	581.6	579.9	576.8	573.2	572.4	567.9	566.6	564.4	563.1	560.9	559.1
5°	576.3	573.2	569.7	565.7	565.7	559.5	556.9	554.2	554.2	550.2	548.5
7.5°	581.6	577.7	573.7	570.1	571.5	564.4	561.7	559.1	558.6	554.7	552.9
10°	596.7	592.7	587.8	584.3	583.0	577.2	574.1	570.1	567.5	564.8	562.2
12.5°	619.7	614.4	608.2	600.7	597.6	592.7	587.8	582.5	576.3	573.7	569.7
15°	647.1	638.3	629.9	620.6	612.2	607.3	600.7	592.3	583.9	580.3	575.0
17.5°	669.7	660.4	648.4	637.4	622.3	618.4	609.1	598.9	585.2	583.9	575.9
20°	688.7	674.5	659.9	646.7	623.7	621.5	610.0	598.0	578.5	578.5	568.8
22.5°	699.3	679.8	662.6	644.9	616.1	614.4	601.1	587.0	563.1	564.0	552.0
25°	701.1	677.6	656.0	634.7	601.6	598.5	581.6	566.2	540.1	538.3	525.9
27.5°	694.0	666.6	641.4	615.7	579.9	573.2	554.7	536.1	510.4	506.0	492.7
30°	677.6	645.3	617.0	587.4	549.8	539.2	519.7	500.7	474.6	468.9	456.5
32.5°	651.5	614.8	583.4	553.8	512.2	498.9	479.5	460.5	435.2	430.8	419.3
35°	617.0	575.9	542.7	511.3	469.7	456.0	437.5	420.6	397.6	395.9	387.9
37.5°	573.7	530.8	495.4	465.3	426.0	418.9	399.9	387.5	368.4	370.2	366.2
40°	524.6	480.8	447.2	420.6	386.6	380.4	368.9	359.6	343.2	348.1	348.5
42.5°	475.0	431.3	400.7	376.9	347.7	343.7	335.7	330.4	318.0	327.8	331.7
45°	418.9	378.2	352.1	333.9	312.3	312.3	308.3	307.9	299.4	313.2	317.1
47.5°	364.5	332.6	314.5	303.4	288.4	295.5	294.1	297.7	291.5	305.6	309.2
50°	323.3	301.2	290.2	284.9	274.2	285.3	287.9	292.8	287.5	299.9	302.5
52.5°	297.2	282.6	276.4	275.1	267.6	281.3	285.7	290.2	284.0	295.5	295.0
55°	282.6	272.9	270.7	273.4	267.6	280.9	285.3	288.4	283.1	291.0	290.6
57.5°	277.3	272.0	273.4	277.3	273.4	284.4	286.6	290.2	284.9	288.4	290.2
60°	276.9	276.9	282.2	287.5	284.9	292.8	294.1	293.7	288.8	289.3	290.2
62.5°	274.2	280.9	289.7	298.1	297.2	307.0	307.9	302.1	298.1	293.7	292.4
65°	265.8	276.9	289.7	301.2	303.0	318.0	319.8	314.0	311.4	303.9	298.1
67.5°	247.3	261.4	276.4	290.6	293.7	314.0	318.0	320.2	321.6	316.7	309.2
70°	215.9	230.4	245.9	262.3	266.7	289.3	297.7	307.9	315.8	322.9	320.2
72.5°	175.6	188.9	202.1	217.2	223.8	247.3	258.3	276.0	288.4	306.5	314.0
75°	139.3	147.3	155.3	164.5	169.8	192.8	206.6	227.8	244.6	269.8	286.6
77.5°	109.7	113.7	117.7	121.6	123.8	136.7	147.7	169.0	188.4	220.3	245.0
80°	84.5	86.7	87.1	88.5	87.6	93.8	97.8	110.6	127.4	158.8	188.0
82.5°	54.4	56.2	57.1	59.3	54.8	62.8	65.5	66.8	75.6	98.6	119.4
85°	30.5	31.0	31.4	32.3	26.1	34.1	34.5	32.3	31.4	40.7	46.0
87.5°	7.5	7.1	7.5	7.5	3.1	7.1	7.1	4.9	3.5	6.6	5.3
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: P198928

CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7050-1200

**CANDELA DISTRIBUTION (continued):**

	135°	145°	155°	165°	175°	180°
0°	602.4	602.4	602.4	602.4	602.4	602.4
2.5°	555.1	554.2	554.7	552.5	551.6	552.0
5°	546.3	544.5	544.5	543.2	541.4	541.4
7.5°	550.2	546.7	545.4	542.7	540.1	540.5
10°	556.4	550.2	545.8	541.8	538.7	538.7
12.5°	560.4	549.4	542.7	537.4	533.9	533.9
15°	561.3	544.5	534.8	529.0	525.5	525.5
17.5°	556.0	534.8	522.4	514.9	510.9	511.8
20°	542.7	516.6	502.0	494.1	490.1	490.5
22.5°	521.9	491.9	475.0	465.8	461.8	461.8
25°	493.6	460.9	442.8	435.2	431.7	431.7
27.5°	461.3	427.7	411.8	406.0	403.8	403.8
30°	425.1	397.2	385.7	381.7	378.2	378.2
32.5°	394.5	374.6	370.7	365.4	356.1	355.6
35°	370.2	368.0	364.9	349.0	335.7	333.9
37.5°	356.9	370.2	350.8	323.3	312.7	312.3
40°	349.9	362.3	328.6	315.4	314.0	314.0
42.5°	333.1	341.9	327.3	319.8	319.8	320.2
45°	315.4	322.9	330.4	323.8	326.0	326.4
47.5°	303.0	318.0	330.4	324.7	329.1	331.7
50°	291.5	313.6	323.8	323.8	328.6	329.1
52.5°	288.8	307.4	317.6	322.4	322.9	320.7
55°	289.3	302.5	312.7	318.9	316.3	316.3
57.5°	288.8	299.9	308.7	310.9	312.3	312.3
60°	289.3	296.4	303.4	302.5	307.0	307.0
62.5°	290.6	291.5	295.0	294.1	300.8	300.8
65°	293.7	285.3	283.1	284.0	291.9	291.5
67.5°	299.4	276.9	269.8	270.3	281.8	280.0
70°	307.9	265.4	254.8	252.1	271.6	268.5
72.5°	310.5	252.1	235.3	232.7	244.2	235.3
75°	298.1	241.5	214.5	205.7	200.8	198.2
77.5°	265.8	234.9	192.8	174.3	166.8	165.0
80°	220.3	221.2	164.5	142.4	165.4	165.0
82.5°	166.3	191.1	131.8	123.4	119.9	100.0
85°	80.5	143.8	101.3	84.9	50.9	48.2
87.5°	7.1	60.2	58.4	38.0	17.3	16.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)