

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: P198926

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198926
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
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 5000K, 1050mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6338 lumens
Efficiency: N/A
Efficacy: 109.3 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 - G1

Input Watts (W): 58
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

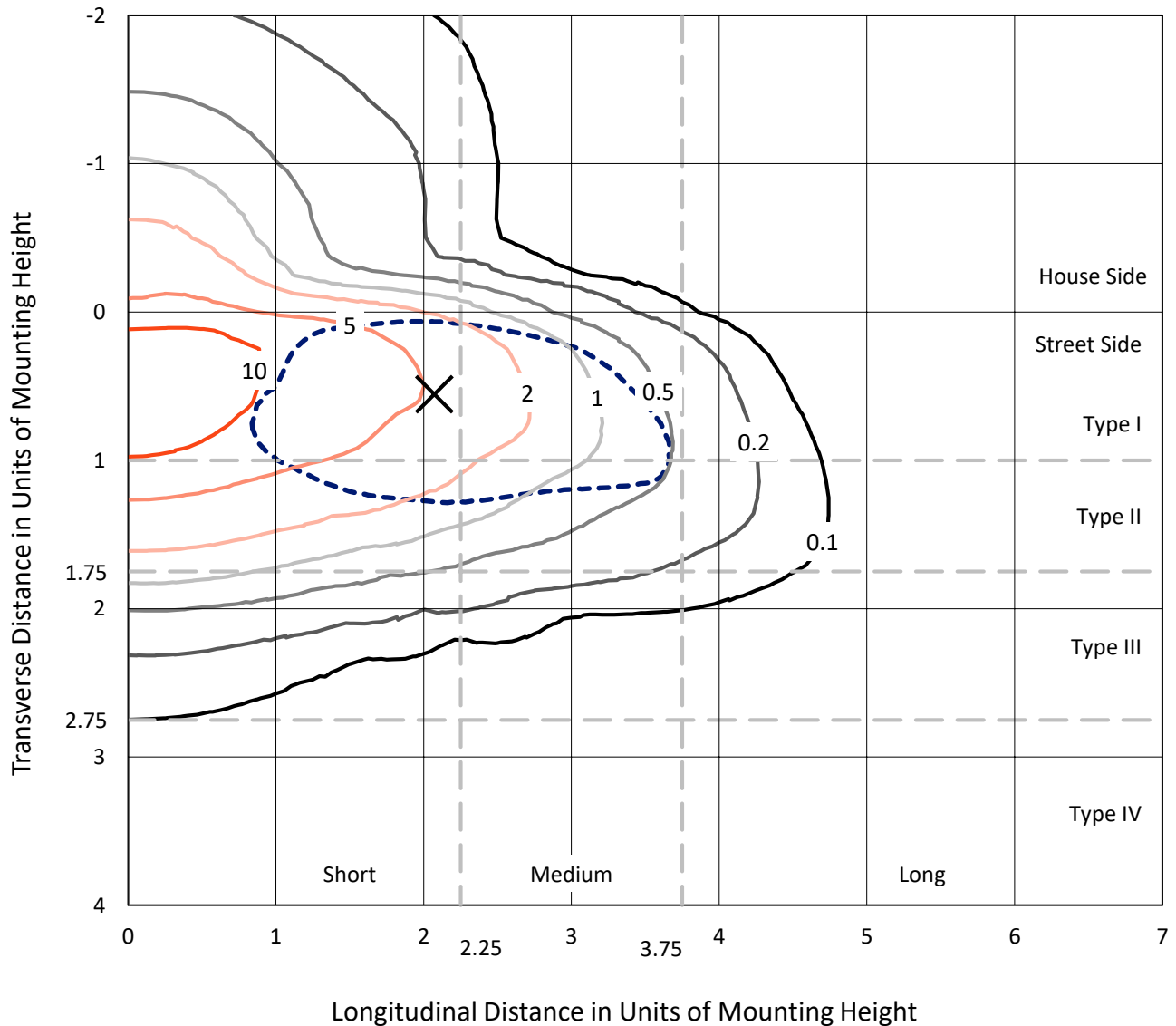


REPORT NUMBER: P198926

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

Iso-Footcandle Lines of Horizontal Illumination

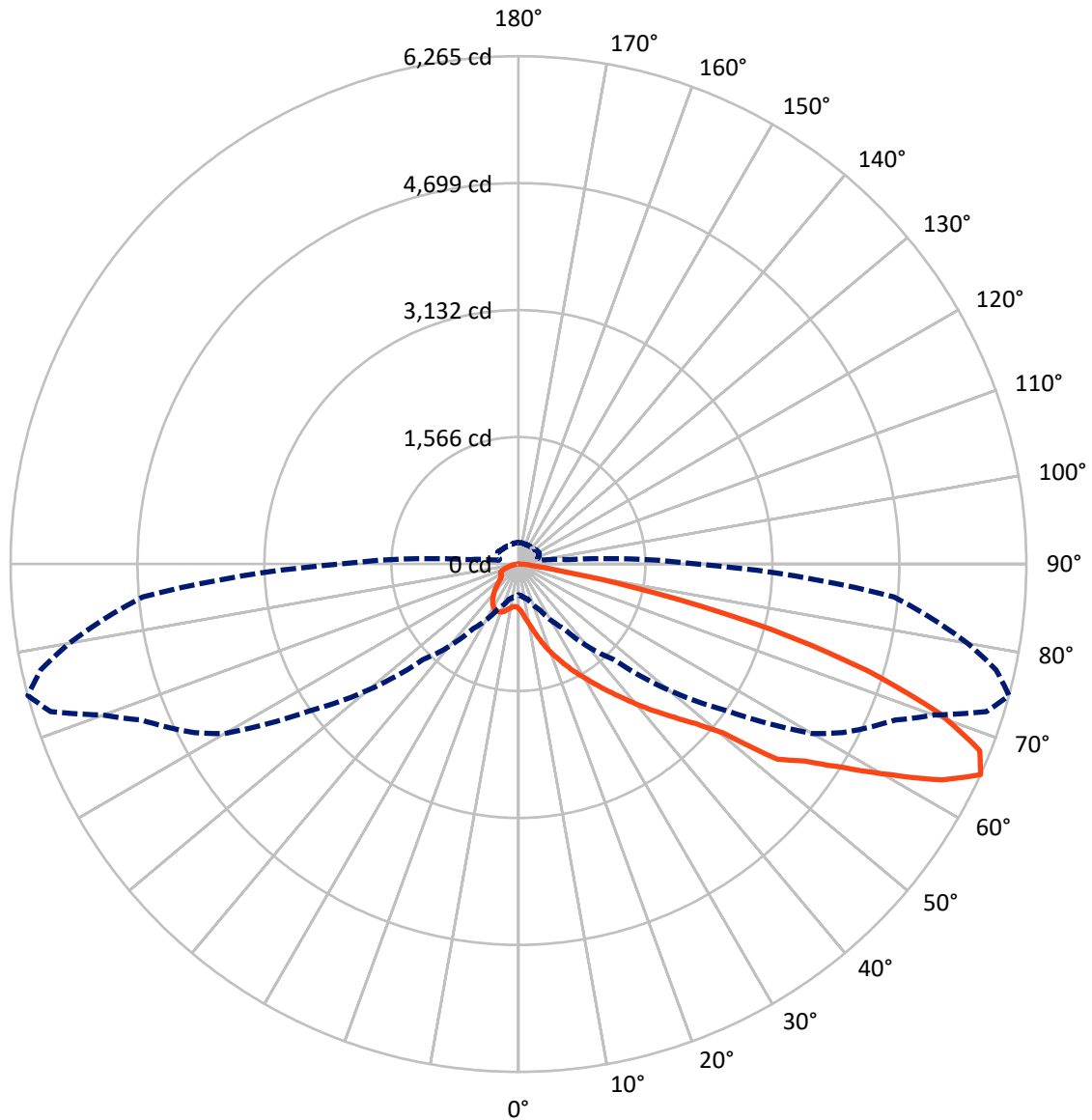
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.8 fc
 Type II - Short - Semi-Cutoff

REPORT NUMBER: P198926
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7050

Luminous Intensity Polar Plot



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

REPORT NUMBER: P198926

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

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	952.4	0.0	952.4
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	5385.6	0.0	5385.6
	% Fixture	85.0	0.0	85.0
Total	Lumens	6338.0	0.0	6338.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	64.8	1.0
10°-20°	247.6	3.9
20°-30°	499.7	7.9
30°-40°	848.7	13.4
40°-50°	1183.7	18.7
50°-60°	1450.8	22.9
60°-70°	1365.0	21.5
70°-80°	598.5	9.4
80°-90°	79.2	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°	6338.0	100.0
0°-180°	6338.0	100.0

Coefficient of Utilization



REPORT NUMBER: P198926

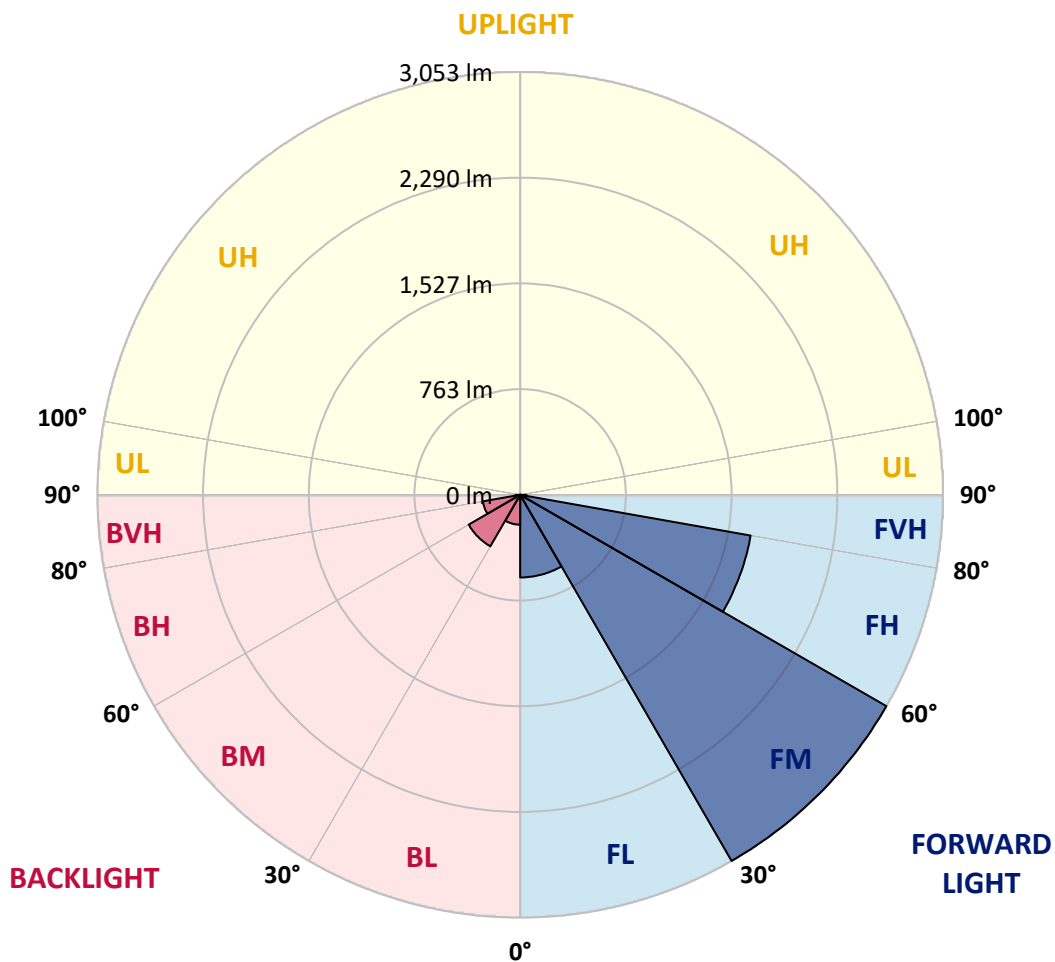
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-7050

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	596.6	9.4			
FM (30°-60°)	3053.4	48.2			
FH (60°-80°)	1689.8	26.7			G1/1800
FVH (80°-90°)	45.9	0.7			G1/100
BL (0°-30°)	215.6	3.4	B1/500		
BM (30°-60°)	429.8	6.8	B1/1000		
BH (60°-80°)	273.7	4.3	B1/500		G1/500
BVH (80°-90°)	33.3	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-G1

Type II Short





REPORT NUMBER: P198926

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

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1
2.5°	691.5	683.4	684.2	672.9	656.4	638.3	623.3	615.3	608.4	606.4	595.1
5°	904.4	894.3	890.7	864.8	826.1	780.2	734.6	716.9	702.4	693.5	671.7
7.5°	1078.5	1073.3	1068.5	1044.7	1006.4	947.5	874.1	847.9	823.7	797.1	770.9
10°	1197.1	1195.1	1193.0	1176.5	1144.7	1093.5	1014.4	985.8	955.6	921.7	887.4
12.5°	1286.6	1286.6	1288.2	1274.5	1255.1	1215.6	1143.9	1117.2	1086.6	1051.1	1012.0
15°	1346.7	1348.3	1356.7	1360.8	1350.7	1325.3	1262.4	1239.0	1210.0	1174.9	1136.2
17.5°	1386.6	1389.8	1402.3	1415.6	1428.5	1419.6	1372.9	1351.1	1324.9	1292.6	1256.3
20°	1479.3	1475.3	1475.7	1471.7	1490.6	1497.5	1471.7	1453.5	1432.5	1403.1	1370.0
22.5°	1674.1	1666.4	1646.6	1596.2	1573.3	1570.8	1555.5	1545.8	1529.7	1511.2	1478.1
25°	1928.1	1919.2	1880.1	1797.0	1728.5	1665.2	1637.0	1630.9	1620.4	1607.9	1584.1
27.5°	2190.5	2180.9	2130.5	2025.6	1936.1	1808.3	1720.4	1712.4	1702.7	1697.4	1686.2
30°	2421.6	2411.1	2361.5	2255.1	2147.0	1994.6	1832.9	1804.7	1788.2	1789.8	1783.3
32.5°	2624.4	2615.1	2559.5	2451.0	2341.3	2193.4	1978.9	1934.9	1897.8	1884.1	1889.0
35°	2794.5	2786.1	2725.2	2615.9	2505.4	2382.5	2166.8	2100.6	2040.2	2002.3	1997.8
37.5°	2894.5	2889.7	2846.9	2754.2	2644.5	2554.2	2377.2	2303.8	2214.7	2159.5	2135.3
40°	2888.9	2894.1	2886.9	2844.9	2759.9	2694.1	2596.6	2524.0	2436.9	2354.6	2305.5
42.5°	2806.6	2813.9	2846.5	2868.3	2845.3	2805.4	2788.1	2734.1	2655.8	2568.7	2500.6
45°	2693.7	2700.2	2742.5	2821.1	2886.9	2898.2	2955.8	2928.8	2862.7	2788.5	2713.5
47.5°	2520.8	2533.3	2582.5	2707.4	2863.9	2972.7	3096.5	3109.0	3070.7	3009.4	2939.3
50°	2270.4	2286.9	2355.9	2533.7	2776.8	3049.3	3305.8	3353.4	3338.0	3275.9	3205.0
52.5°	2013.9	2030.5	2122.4	2311.5	2636.5	3080.8	3511.8	3633.6	3721.5	3785.6	3798.1
55°	1747.0	1765.6	1866.4	2084.1	2449.4	3040.9	3659.0	3797.3	3886.4	3953.3	3980.3
57.5°	1445.9	1466.8	1564.4	1784.5	2184.9	2880.4	3822.7	4018.6	4151.3	4254.5	4312.6
60°	1100.3	1126.5	1227.7	1449.5	1837.4	2573.2	3895.7	4185.5	4396.4	4551.2	4643.2
62.5°	697.5	724.1	829.4	1059.6	1441.8	2153.5	3689.2	4112.2	4471.8	4700.8	4869.4
65°	380.6	392.3	450.8	624.1	972.1	1670.8	3165.9	3664.6	4182.7	4507.3	4766.1
67.5°	285.5	287.1	293.1	335.5	517.7	1128.1	2475.2	2932.0	3507.4	3925.1	4234.3
70°	250.0	250.0	250.8	251.2	281.0	611.2	1676.9	2097.4	2624.8	3047.3	3431.6
72.5°	224.2	221.8	220.9	216.1	220.1	313.3	912.8	1290.6	1735.3	2209.5	2567.9
75°	193.5	193.1	193.1	188.3	190.7	220.5	395.9	619.3	964.0	1405.5	1758.3
77.5°	167.3	164.5	164.9	162.1	169.7	168.9	187.9	255.2	419.7	738.2	1031.0
80°	137.9	135.9	137.1	135.5	147.6	125.0	126.6	156.0	208.5	323.8	456.4
82.5°	102.0	102.8	110.5	109.7	124.2	84.3	92.7	116.5	140.3	161.3	175.4
85°	59.7	60.9	79.4	83.5	91.1	44.4	56.9	69.3	78.2	86.7	90.3
87.5°	6.5	8.5	44.4	45.6	40.7	13.3	23.0	29.0	31.0	33.1	29.0
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: P198926

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

CANDELA DISTRIBUTION (continued):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1
2.5°	591.5	586.2	580.6	577.4	571.7	566.9	558.0	550.8	542.7	537.1	534.6
5°	660.8	648.3	635.0	625.4	613.3	602.8	582.6	558.4	550.8	534.6	530.6
7.5°	751.1	728.6	706.0	687.4	666.5	649.1	615.3	571.7	566.1	540.3	534.6
10°	857.2	824.1	790.7	762.0	731.4	704.8	654.8	593.5	587.5	554.4	548.7
12.5°	975.7	935.4	892.3	849.5	813.2	775.7	707.6	627.4	617.7	578.6	570.9
15°	1097.9	1054.3	1004.4	952.7	908.0	858.4	772.5	671.7	654.0	608.0	597.5
17.5°	1218.4	1171.3	1118.9	1061.2	1008.8	949.5	842.7	721.3	690.7	637.0	623.7
20°	1335.0	1287.0	1231.8	1175.3	1110.0	1042.3	914.4	770.1	723.3	661.2	643.9
22.5°	1441.0	1399.9	1344.6	1279.7	1213.6	1137.4	987.4	818.9	752.0	679.8	657.6
25°	1552.7	1515.2	1460.4	1397.9	1320.9	1236.2	1062.8	865.3	774.9	689.9	662.4
27.5°	1665.6	1633.3	1581.7	1516.0	1433.4	1339.4	1139.4	908.0	793.5	693.1	660.0
30°	1786.1	1761.1	1713.6	1640.2	1556.7	1452.7	1222.9	949.9	805.2	688.7	649.1
32.5°	1900.2	1899.4	1857.1	1780.9	1691.0	1576.5	1310.8	992.3	811.2	676.2	630.2
35°	2018.8	2035.3	2003.5	1930.9	1836.1	1709.1	1408.0	1037.4	811.6	654.0	605.6
37.5°	2153.5	2182.9	2168.8	2099.8	2000.2	1860.3	1522.1	1088.2	809.2	623.3	569.7
40°	2306.7	2347.0	2346.6	2288.5	2182.1	2029.7	1654.7	1145.1	803.6	585.0	527.4
42.5°	2482.1	2530.0	2543.3	2486.1	2378.4	2214.7	1806.7	1207.6	794.7	547.1	482.6
45°	2682.8	2725.2	2750.2	2697.0	2588.9	2416.3	1981.3	1278.5	783.8	498.3	431.4
47.5°	2897.7	2946.9	2984.4	2938.9	2823.6	2646.2	2188.1	1370.0	779.8	442.7	376.2
50°	3164.3	3215.1	3296.1	3275.5	3212.2	3069.5	2625.6	1586.2	781.4	389.9	329.8
52.5°	3825.5	3942.0	4044.4	3998.9	3848.5	3603.7	2981.2	1706.3	747.5	346.7	297.6
55°	4025.1	4157.3	4308.5	4289.6	4145.2	3898.5	3262.2	1806.7	714.9	315.3	276.6
57.5°	4374.2	4530.3	4741.6	4737.5	4560.5	4282.7	3623.9	1926.9	700.7	297.2	266.1
60°	4744.0	4942.7	5234.7	5280.2	5087.9	4798.8	4051.3	2074.4	702.8	287.1	260.1
62.5°	5014.1	5305.6	5730.2	5866.5	5639.9	5321.3	4494.8	2222.0	690.7	275.4	252.8
65°	5030.6	5450.4	6052.7	6264.8	6035.4	5626.2	4651.2	2193.0	618.1	259.7	241.1
67.5°	4627.4	5174.2	5906.0	6138.6	5904.0	5438.3	4377.1	1917.2	502.4	232.2	220.9
70°	3854.1	4488.7	5248.4	5507.6	5313.7	4842.3	3809.4	1531.3	375.4	196.0	190.7
72.5°	2978.4	3570.3	4260.1	4500.0	4351.7	3937.2	3004.6	1116.0	268.1	158.9	154.8
75°	2129.3	2633.3	3134.0	3225.5	3079.2	2698.6	1949.4	697.1	187.9	130.2	124.6
77.5°	1318.4	1646.2	1826.1	1708.3	1521.7	1264.8	793.5	344.3	125.0	106.0	100.4
80°	585.0	686.6	641.1	571.3	451.2	370.9	242.3	152.8	80.6	81.8	78.6
82.5°	196.8	208.0	202.4	201.2	181.4	158.9	102.8	66.1	45.2	52.4	51.2
85°	96.0	100.4	100.8	104.4	90.7	70.6	27.8	26.2	19.4	28.2	29.4
87.5°	29.0	29.4	26.6	29.0	23.4	16.1	5.2	7.3	3.6	6.9	6.9
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: P198926

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

CANDELA DISTRIBUTION (continued):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1	549.1
2.5°	530.2	528.6	525.8	522.5	521.7	517.7	516.5	514.5	513.3	511.2	509.6
5°	525.4	522.5	519.3	515.7	515.7	510.0	507.6	505.2	505.2	501.6	500.0
7.5°	530.2	526.6	522.9	519.7	520.9	514.5	512.1	509.6	509.2	505.6	504.0
10°	543.9	540.3	535.8	532.6	531.4	526.2	523.3	519.7	517.3	514.9	512.5
12.5°	564.9	560.0	554.4	547.5	544.7	540.3	535.8	531.0	525.4	522.9	519.3
15°	589.9	581.8	574.1	565.7	558.0	553.6	547.5	539.9	532.2	529.0	524.2
17.5°	610.4	602.0	591.1	581.0	567.3	563.7	555.2	545.9	533.4	532.2	525.0
20°	627.8	614.9	601.6	589.5	568.5	566.5	556.0	545.1	527.4	527.4	518.5
22.5°	637.4	619.7	604.0	587.9	561.6	560.0	547.9	535.0	513.3	514.1	503.2
25°	639.1	617.7	597.9	578.6	548.3	545.5	530.2	516.1	492.3	490.7	479.4
27.5°	632.6	607.6	584.6	561.2	528.6	522.5	505.6	488.7	465.3	461.3	449.2
30°	617.7	588.3	562.5	535.4	501.2	491.5	473.8	456.4	432.6	427.4	416.1
32.5°	593.9	560.4	531.8	504.8	466.9	454.8	437.1	419.7	396.7	392.7	382.2
35°	562.5	525.0	494.7	466.1	428.2	415.7	398.8	383.4	362.5	360.9	353.6
37.5°	522.9	483.8	451.6	424.2	388.3	381.8	364.5	353.2	335.9	337.5	333.8
40°	478.2	438.3	407.6	383.4	352.4	346.7	336.3	327.8	312.9	317.3	317.7
42.5°	433.0	393.1	365.3	343.5	316.9	313.3	306.0	301.2	289.9	298.8	302.4
45°	381.8	344.7	320.9	304.4	284.7	284.7	281.0	280.6	273.0	285.5	289.1
47.5°	332.2	303.2	286.7	276.6	262.9	269.3	268.1	271.3	265.7	278.6	281.8
50°	294.7	274.6	264.5	259.7	250.0	260.1	262.5	266.9	262.1	273.4	275.8
52.5°	270.9	257.6	252.0	250.8	243.9	256.4	260.5	264.5	258.8	269.3	268.9
55°	257.6	248.8	246.8	249.2	243.9	256.0	260.1	262.9	258.0	265.3	264.9
57.5°	252.8	248.0	249.2	252.8	249.2	259.3	261.3	264.5	259.7	262.9	264.5
60°	252.4	252.4	257.2	262.1	259.7	266.9	268.1	267.7	263.3	263.7	264.5
62.5°	250.0	256.0	264.1	271.8	270.9	279.8	280.6	275.4	271.8	267.7	266.5
65°	242.3	252.4	264.1	274.6	276.2	289.9	291.5	286.3	283.8	277.0	271.8
67.5°	225.4	238.3	252.0	264.9	267.7	286.3	289.9	291.9	293.1	288.7	281.8
70°	196.8	210.1	224.2	239.1	243.1	263.7	271.3	280.6	287.9	294.3	291.9
72.5°	160.1	172.2	184.3	198.0	204.0	225.4	235.5	251.6	262.9	279.4	286.3
75°	127.0	134.3	141.5	150.0	154.8	175.8	188.3	207.6	223.0	245.9	261.3
77.5°	100.0	103.6	107.2	110.9	112.9	124.6	134.7	154.0	171.8	200.8	223.4
80°	77.0	79.0	79.4	80.6	79.8	85.5	89.1	100.8	116.1	144.7	171.4
82.5°	49.6	51.2	52.0	54.0	50.0	57.3	59.7	60.9	68.9	89.9	108.9
85°	27.8	28.2	28.6	29.4	23.8	31.0	31.4	29.4	28.6	37.1	41.9
87.5°	6.9	6.5	6.9	6.9	2.8	6.5	6.5	4.4	3.2	6.0	4.8
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: P198926

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

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	549.1	549.1	549.1	549.1	549.1	549.1
2.5°	506.0	505.2	505.6	503.6	502.8	503.2
5°	497.9	496.3	496.3	495.1	493.5	493.5
7.5°	501.6	498.3	497.1	494.7	492.3	492.7
10°	507.2	501.6	497.5	493.9	491.1	491.1
12.5°	510.8	500.8	494.7	489.9	486.7	486.7
15°	511.7	496.3	487.5	482.2	479.0	479.0
17.5°	506.8	487.5	476.2	469.3	465.7	466.5
20°	494.7	470.9	457.6	450.4	446.7	447.1
22.5°	475.8	448.4	433.0	424.6	420.9	420.9
25°	450.0	420.1	403.6	396.7	393.5	393.5
27.5°	420.5	389.9	375.4	370.1	368.1	368.1
30°	387.5	362.1	351.6	348.0	344.7	344.7
32.5°	359.6	341.5	337.9	333.0	324.6	324.2
35°	337.5	335.5	332.6	318.1	306.0	304.4
37.5°	325.4	337.5	319.7	294.7	285.1	284.7
40°	318.9	330.2	299.6	287.5	286.3	286.3
42.5°	303.6	311.7	298.4	291.5	291.5	291.9
45°	287.5	294.3	301.2	295.1	297.2	297.6
47.5°	276.2	289.9	301.2	295.9	300.0	302.4
50°	265.7	285.9	295.1	295.1	299.6	300.0
52.5°	263.3	280.2	289.5	293.9	294.3	292.3
55°	263.7	275.8	285.1	290.7	288.3	288.3
57.5°	263.3	273.4	281.4	283.4	284.7	284.7
60°	263.7	270.1	276.6	275.8	279.8	279.8
62.5°	264.9	265.7	268.9	268.1	274.2	274.2
65°	267.7	260.1	258.0	258.8	266.1	265.7
67.5°	273.0	252.4	245.9	246.4	256.8	255.2
70°	280.6	241.9	232.2	229.8	247.6	244.7
72.5°	283.0	229.8	214.5	212.1	222.6	214.5
75°	271.8	220.1	195.5	187.5	183.0	180.6
77.5°	242.3	214.1	175.8	158.9	152.0	150.4
80°	200.8	201.6	150.0	129.8	150.8	150.4
82.5°	151.6	174.2	120.2	112.5	109.3	91.1
85°	73.4	131.0	92.3	77.4	46.4	43.9
87.5°	6.5	54.8	53.2	34.7	15.7	14.9
90°	0.0	0.0	0.0	0.0	0.0	0.0

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