

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: P198603

Luminaire Tested: **XNV2-AF-02-LED-U-T2R-7030-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198603
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-7030-600
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 3000K, 615mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7370 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' 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 (A_{in}): 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

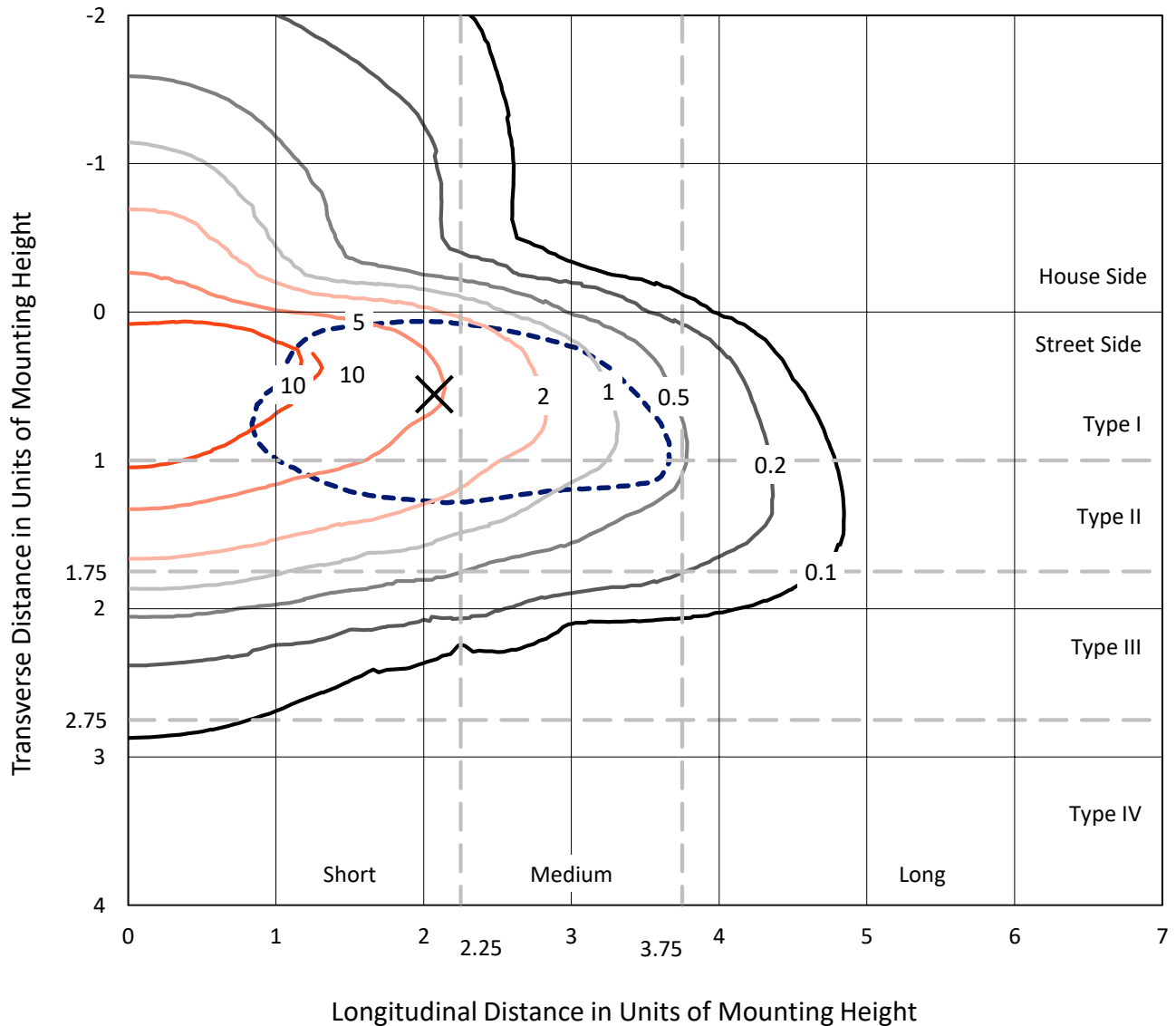


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Iso-Footcandle Lines of Horizontal Illumination

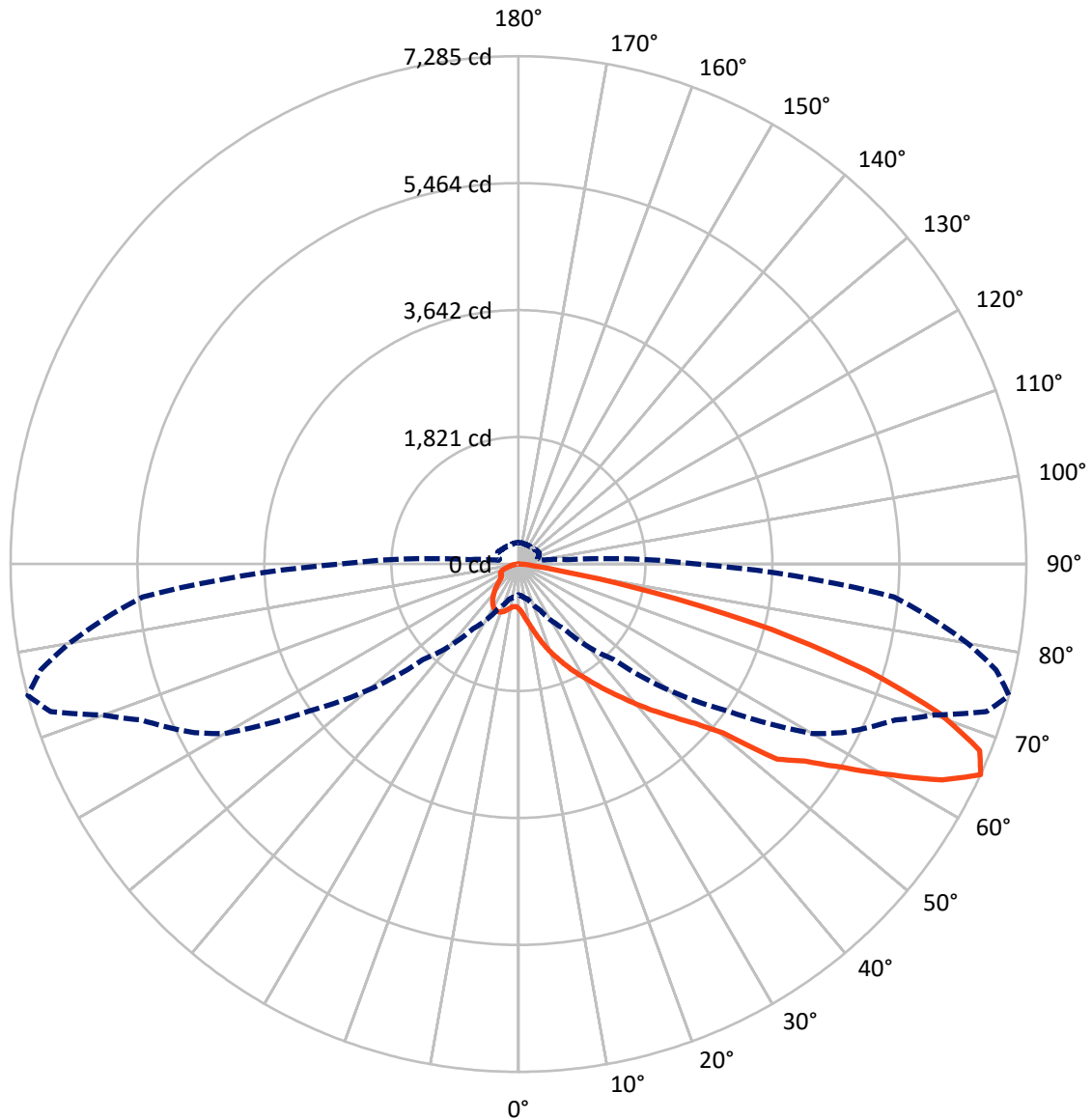
× Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 18.3 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
House Side	Lumens	1107.5	0.0	1107.5
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	6262.6	0.0	6262.6
	% Fixture	85.0	0.0	85.0
Total	Lumens	7370.0	0.0	7370.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.4	1.0
10°-20°	287.9	3.9
20°-30°	581.1	7.9
30°-40°	986.9	13.4
40°-50°	1376.4	18.7
50°-60°	1687.0	22.9
60°-70°	1587.2	21.5
70°-80°	696.0	9.4
80°-90°	92.1	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°	7370.0	100.0
0°-180°	7370.0	100.0

Coefficient of Utilization



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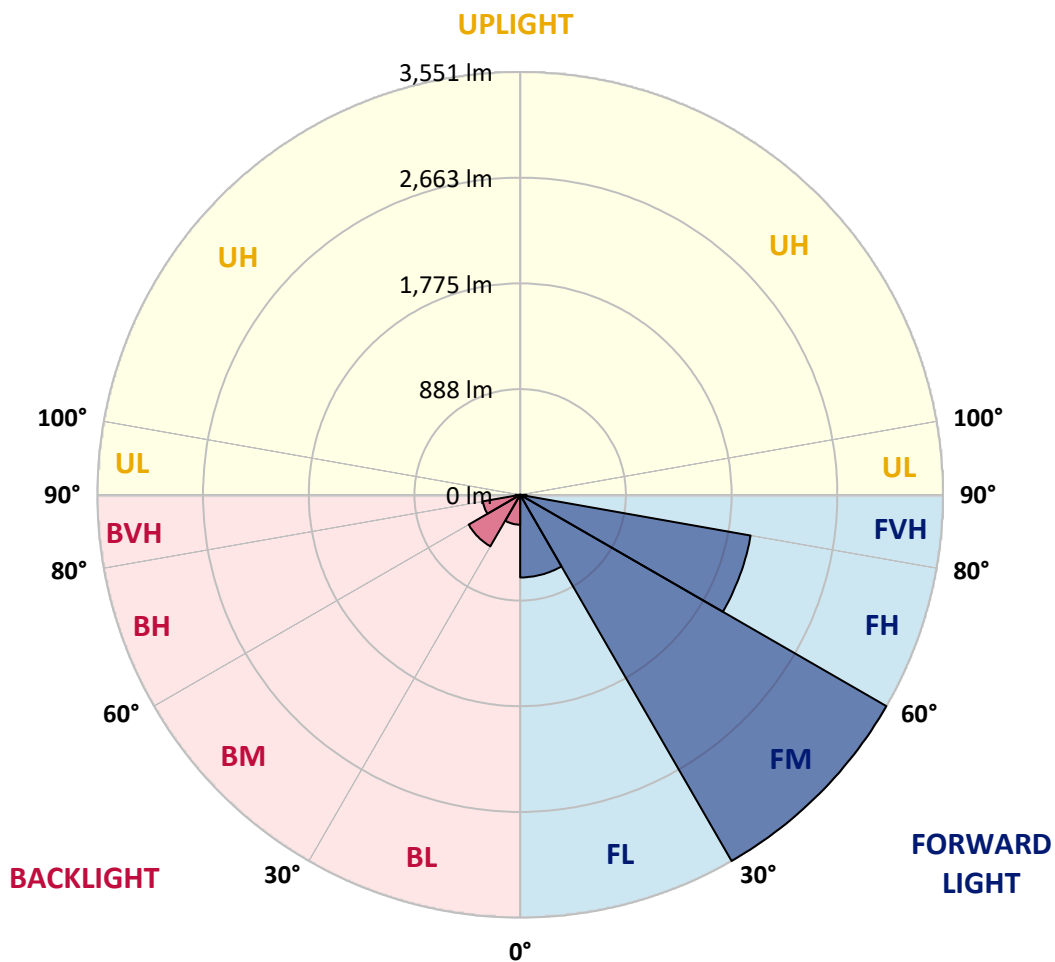
CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7030-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	693.7	9.4			
FM	(30°-60°)	3550.5	48.2			
FH	(60°-80°)	1964.9	26.7			G2/5000
FVH	(80°-90°)	53.4	0.7			G1/100
BL	(0°-30°)	250.7	3.4	B1/500		
BM	(30°-60°)	499.7	6.8	B1/1000		
BH	(60°-80°)	318.3	4.3	B1/500		G1/500
BVH	(80°-90°)	38.7	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°	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6
2.5°	804.1	794.7	795.6	782.5	763.3	742.2	724.8	715.5	707.5	705.1	692.0
5°	1051.6	1039.9	1035.7	1005.7	960.7	907.2	854.2	833.6	816.7	806.4	781.1
7.5°	1254.2	1248.1	1242.4	1214.8	1170.2	1101.8	1016.5	986.0	957.8	926.9	896.4
10°	1392.0	1389.7	1387.3	1368.1	1331.0	1271.5	1179.6	1146.3	1111.2	1071.8	1031.9
12.5°	1496.1	1496.1	1498.0	1482.0	1459.5	1413.6	1330.1	1299.2	1263.5	1222.3	1176.8
15°	1565.9	1567.8	1577.7	1582.3	1570.6	1541.1	1468.0	1440.8	1407.0	1366.2	1321.2
17.5°	1612.4	1616.1	1630.6	1646.1	1661.1	1650.8	1596.4	1571.1	1540.6	1503.1	1460.9
20°	1720.2	1715.5	1716.0	1711.3	1733.3	1741.3	1711.3	1690.2	1665.8	1631.6	1593.1
22.5°	1946.6	1937.7	1914.8	1856.2	1829.4	1826.6	1808.8	1797.5	1778.8	1757.2	1718.8
25°	2242.0	2231.7	2186.2	2089.6	2009.9	1936.3	1903.5	1896.5	1884.3	1869.7	1842.1
27.5°	2547.2	2536.0	2477.4	2355.5	2251.4	2102.8	2000.6	1991.2	1979.9	1973.8	1960.7
30°	2815.9	2803.7	2746.0	2622.2	2496.6	2319.4	2131.4	2098.5	2079.3	2081.2	2073.7
32.5°	3051.7	3040.9	2976.2	2850.1	2722.6	2550.5	2301.1	2250.0	2206.8	2190.9	2196.5
35°	3249.6	3239.7	3168.9	3041.9	2913.4	2770.4	2519.6	2442.7	2372.4	2328.3	2323.1
37.5°	3365.8	3360.2	3310.5	3202.7	3075.1	2970.1	2764.3	2679.0	2575.4	2511.1	2483.0
40°	3359.3	3365.4	3356.9	3308.2	3209.2	3132.8	3019.4	2935.0	2833.7	2738.0	2680.8
42.5°	3263.6	3272.1	3310.0	3335.4	3308.6	3262.2	3242.1	3179.2	3088.3	2987.0	2907.8
45°	3132.3	3139.8	3189.1	3280.5	3356.9	3370.1	3437.1	3405.7	3328.8	3242.5	3155.3
47.5°	2931.2	2945.7	3002.9	3148.3	3330.2	3456.8	3600.7	3615.3	3570.7	3499.5	3417.9
50°	2640.1	2659.3	2739.5	2946.2	3228.9	3545.9	3844.1	3899.4	3881.6	3809.4	3726.8
52.5°	2341.9	2361.1	2468.0	2687.9	3065.8	3582.4	4083.6	4225.2	4327.4	4402.0	4416.5
55°	2031.5	2053.1	2170.3	2423.5	2848.2	3536.0	4254.8	4415.6	4519.2	4597.0	4628.4
57.5°	1681.3	1705.7	1819.1	2075.1	2540.7	3349.4	4445.1	4673.0	4827.2	4947.2	5014.8
60°	1279.5	1309.9	1427.6	1685.5	2136.5	2992.2	4530.0	4867.1	5112.3	5292.3	5399.2
62.5°	811.1	842.0	964.4	1232.1	1676.6	2504.1	4289.9	4781.7	5199.9	5466.3	5662.2
65°	442.6	456.2	524.2	725.8	1130.4	1942.9	3681.4	4261.3	4863.8	5241.2	5542.2
67.5°	331.9	333.8	340.8	390.1	602.0	1311.8	2878.2	3409.4	4078.5	4564.2	4923.8
70°	290.7	290.7	291.6	292.1	326.8	710.8	1949.9	2438.9	3052.2	3543.5	3990.3
72.5°	260.7	257.9	256.9	251.3	256.0	364.3	1061.5	1500.8	2017.9	2569.3	2986.1
75°	225.0	224.6	224.6	219.0	221.8	256.5	460.4	720.1	1121.0	1634.4	2044.6
77.5°	194.6	191.3	191.8	188.5	197.4	196.4	218.5	296.8	488.1	858.5	1198.8
80°	160.3	158.0	159.4	157.5	171.6	145.3	147.2	181.4	242.4	376.5	530.7
82.5°	118.6	119.6	128.5	127.5	144.4	98.0	107.8	135.5	163.2	187.5	203.9
85°	69.4	70.8	92.4	97.1	106.0	51.6	66.1	80.6	91.0	100.8	105.0
87.5°	7.5	9.8	51.6	53.0	47.4	15.5	26.7	33.8	36.1	38.4	33.8
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°	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6
2.5°	687.8	681.7	675.1	671.4	664.8	659.2	648.9	640.4	631.1	624.5	621.7
5°	768.4	753.9	738.4	727.2	713.1	700.9	677.5	649.3	640.4	621.7	617.0
7.5°	873.5	847.2	820.9	799.4	775.0	754.8	715.5	664.8	658.3	628.3	621.7
10°	996.8	958.3	919.4	886.1	850.5	819.5	761.4	690.1	683.1	644.7	638.1
12.5°	1134.6	1087.7	1037.6	987.9	945.7	902.1	822.8	729.5	718.3	672.8	663.9
15°	1276.7	1226.0	1167.9	1107.9	1055.8	998.2	898.3	781.1	760.5	707.0	694.8
17.5°	1416.8	1362.0	1301.0	1234.0	1173.0	1104.1	979.9	838.8	803.1	740.8	725.3
20°	1552.3	1496.5	1432.3	1366.7	1290.7	1212.0	1063.3	895.5	841.1	768.9	748.7
22.5°	1675.6	1627.8	1563.6	1488.1	1411.2	1322.6	1148.2	952.2	874.4	790.5	764.7
25°	1805.5	1761.9	1698.2	1625.5	1535.9	1437.5	1235.9	1006.1	901.1	802.2	770.3
27.5°	1936.8	1899.3	1839.3	1762.9	1666.7	1557.5	1325.0	1055.8	922.7	805.9	767.5
30°	2077.0	2047.9	1992.6	1907.3	1810.2	1689.2	1422.0	1104.6	936.3	800.8	754.8
32.5°	2209.7	2208.7	2159.5	2070.9	1966.3	1833.2	1524.2	1153.8	943.3	786.3	732.8
35°	2347.5	2366.7	2329.7	2245.3	2135.1	1987.4	1637.2	1206.3	943.8	760.5	704.2
37.5°	2504.1	2538.3	2521.9	2441.7	2325.9	2163.2	1769.9	1265.4	941.0	724.8	662.5
40°	2682.3	2729.1	2728.7	2661.2	2537.4	2360.2	1924.1	1331.5	934.4	680.3	613.2
42.5°	2886.2	2942.0	2957.5	2890.9	2765.7	2575.4	2100.9	1404.2	924.1	636.2	561.2
45°	3119.7	3168.9	3198.0	3136.1	3010.4	2809.8	2303.9	1486.7	911.4	579.5	501.7
47.5°	3369.6	3426.8	3470.4	3417.4	3283.3	3077.0	2544.4	1593.1	906.7	514.8	437.4
50°	3679.5	3738.6	3832.8	3808.9	3735.3	3569.3	3053.1	1844.4	908.6	453.4	383.5
52.5°	4448.4	4583.9	4703.0	4650.0	4475.1	4190.5	3466.6	1984.1	869.2	403.2	346.0
55°	4680.5	4834.2	5010.1	4988.0	4820.2	4533.3	3793.4	2100.9	831.3	366.6	321.6
57.5°	5086.5	5267.9	5513.6	5508.9	5303.1	4980.1	4214.0	2240.6	814.9	345.5	309.4
60°	5516.4	5747.6	6087.0	6140.0	5916.3	5580.2	4710.9	2412.2	817.2	333.8	302.4
62.5°	5830.5	6169.5	6663.2	6821.7	6558.2	6187.8	5226.7	2583.8	803.1	320.2	294.0
65°	5849.8	6337.8	7038.3	7284.9	7018.1	6542.2	5408.6	2550.0	718.7	301.9	280.4
67.5°	5380.9	6016.7	6867.6	7138.1	6865.3	6323.8	5089.8	2229.4	584.2	270.1	256.9
70°	4481.7	5219.6	6102.9	6404.4	6178.9	5630.8	4429.6	1780.7	436.5	227.9	221.8
72.5°	3463.4	4151.6	4953.8	5232.8	5060.2	4578.3	3493.8	1297.8	311.8	184.7	180.0
75°	2476.0	3062.0	3644.3	3750.8	3580.6	3138.0	2266.9	810.6	218.5	151.4	144.9
77.5°	1533.1	1914.3	2123.4	1986.5	1769.4	1470.8	922.7	400.4	145.3	123.3	116.7
80°	680.3	798.4	745.5	664.4	524.6	431.3	281.8	177.7	93.8	95.2	91.4
82.5°	228.8	241.9	235.4	234.0	211.0	184.7	119.6	76.9	52.5	60.9	59.5
85°	111.6	116.7	117.2	121.4	105.5	82.0	32.4	30.5	22.5	32.8	34.2
87.5°	33.8	34.2	30.9	33.8	27.2	18.8	6.1	8.4	4.2	8.0	8.0
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):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6	638.6
2.5°	616.5	614.7	611.4	607.6	606.7	602.0	600.6	598.2	596.8	594.5	592.6
5°	610.9	607.6	603.9	599.7	599.7	593.1	590.3	587.5	587.5	583.2	581.4
7.5°	616.5	612.3	608.1	604.3	605.7	598.2	595.4	592.6	592.1	587.9	586.1
10°	632.5	628.3	623.1	619.3	617.9	611.8	608.6	604.3	601.5	598.7	595.9
12.5°	656.9	651.2	644.7	636.7	633.4	628.3	623.1	617.5	610.9	608.1	603.9
15°	685.9	676.5	667.6	657.8	648.9	643.7	636.7	627.8	618.9	615.1	609.5
17.5°	709.8	700.0	687.3	675.6	659.7	655.4	645.6	634.8	620.3	618.9	610.4
20°	730.0	715.0	699.5	685.4	661.1	658.7	646.5	633.9	613.2	613.2	602.9
22.5°	741.2	720.6	702.3	683.6	653.1	651.2	637.2	622.2	596.8	597.8	585.1
25°	743.1	718.3	695.3	672.8	637.6	634.3	616.5	600.1	572.5	570.6	557.5
27.5°	735.6	706.5	679.8	652.6	614.7	607.6	587.9	568.2	541.0	536.4	522.3
30°	718.3	684.0	654.0	622.6	582.8	571.5	550.9	530.7	503.1	497.0	483.8
32.5°	690.6	651.7	618.4	587.0	542.9	528.9	508.2	488.1	461.3	456.7	444.5
35°	654.0	610.4	575.3	542.0	497.9	483.4	463.7	445.9	421.5	419.6	411.2
37.5°	608.1	562.6	525.1	493.2	451.5	444.0	423.8	410.7	390.5	392.4	388.2
40°	556.0	509.6	474.0	445.9	409.8	403.2	391.0	381.2	363.8	369.0	369.4
42.5°	503.5	457.1	424.8	399.5	368.5	364.3	355.9	350.2	337.1	347.4	351.6
45°	444.0	400.9	373.2	354.0	331.0	331.0	326.8	326.3	317.4	331.9	336.2
47.5°	386.3	352.6	333.3	321.6	305.7	313.2	311.8	315.5	309.0	324.0	327.7
50°	342.7	319.3	307.6	301.9	290.7	302.4	305.2	310.4	304.7	317.9	320.7
52.5°	315.1	299.6	293.0	291.6	283.7	298.2	302.9	307.6	301.0	313.2	312.7
55°	299.6	289.3	286.9	289.7	283.7	297.7	302.4	305.7	300.1	308.5	308.0
57.5°	294.0	288.3	289.7	294.0	289.7	301.5	303.8	307.6	301.9	305.7	307.6
60°	293.5	293.5	299.1	304.7	301.9	310.4	311.8	311.3	306.2	306.6	307.6
62.5°	290.7	297.7	307.1	316.0	315.1	325.4	326.3	320.2	316.0	311.3	309.9
65°	281.8	293.5	307.1	319.3	321.2	337.1	339.0	332.9	330.1	322.1	316.0
67.5°	262.1	277.1	293.0	308.0	311.3	332.9	337.1	339.4	340.8	335.7	327.7
70°	228.8	244.3	260.7	278.0	282.7	306.6	315.5	326.3	334.8	342.3	339.4
72.5°	186.1	200.2	214.3	230.2	237.2	262.1	273.8	292.6	305.7	324.9	332.9
75°	147.7	156.1	164.6	174.4	180.0	204.4	219.0	241.5	259.3	286.0	303.8
77.5°	116.3	120.5	124.7	128.9	131.3	144.9	156.6	179.1	199.7	233.5	259.7
80°	89.5	91.9	92.4	93.8	92.8	99.4	103.6	117.2	135.0	168.3	199.3
82.5°	57.7	59.5	60.5	62.8	58.1	66.6	69.4	70.8	80.2	104.6	126.6
85°	32.4	32.8	33.3	34.2	27.7	36.1	36.6	34.2	33.3	43.1	48.8
87.5°	8.0	7.5	8.0	8.0	3.3	7.5	7.5	5.2	3.8	7.0	5.6
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-T2R-7030-600

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	638.6	638.6	638.6	638.6	638.6	638.6
2.5°	588.4	587.5	587.9	585.6	584.6	585.1
5°	579.0	577.1	577.1	575.7	573.9	573.9
7.5°	583.2	579.5	578.1	575.3	572.5	572.9
10°	589.8	583.2	578.6	574.3	571.1	571.1
12.5°	594.0	582.3	575.3	569.6	565.9	565.9
15°	595.0	577.1	566.8	560.7	557.0	557.0
17.5°	589.3	566.8	553.7	545.7	541.5	542.5
20°	575.3	547.6	532.1	523.7	519.5	519.9
22.5°	553.2	521.4	503.5	493.7	489.5	489.5
25°	523.2	488.5	469.3	461.3	457.6	457.6
27.5°	489.0	453.4	436.5	430.4	428.1	428.1
30°	450.6	421.0	408.8	404.6	400.9	400.9
32.5°	418.2	397.1	392.9	387.3	377.4	377.0
35°	392.4	390.1	386.8	369.9	355.9	354.0
37.5°	378.4	392.4	371.8	342.7	331.5	331.0
40°	370.9	384.0	348.4	334.3	332.9	332.9
42.5°	353.0	362.4	346.9	339.0	339.0	339.4
45°	334.3	342.3	350.2	343.2	345.5	346.0
47.5°	321.2	337.1	350.2	344.1	348.8	351.6
50°	309.0	332.4	343.2	343.2	348.4	348.8
52.5°	306.2	325.8	336.6	341.8	342.3	339.9
55°	306.6	320.7	331.5	338.0	335.2	335.2
57.5°	306.2	317.9	327.3	329.6	331.0	331.0
60°	306.6	314.1	321.6	320.7	325.4	325.4
62.5°	308.0	309.0	312.7	311.8	318.8	318.8
65°	311.3	302.4	300.1	301.0	309.4	309.0
67.5°	317.4	293.5	286.0	286.5	298.7	296.8
70°	326.3	281.3	270.1	267.2	287.9	284.6
72.5°	329.1	267.2	249.4	246.6	258.8	249.4
75°	316.0	256.0	227.4	218.0	212.9	210.0
77.5°	281.8	249.0	204.4	184.7	176.8	174.9
80°	233.5	234.4	174.4	151.0	175.3	174.9
82.5°	176.3	202.5	139.7	130.8	127.1	106.0
85°	85.3	152.4	107.4	90.0	53.9	51.1
87.5°	7.5	63.8	61.9	40.3	18.3	17.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

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