

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: P199245

Luminaire Tested: **XNV2-AF-02-LED-U-T2R-8030-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P199245  
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-8030-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8331 lumens  
Efficiency: N/A  
Efficacy: 98.0 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): 85  
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

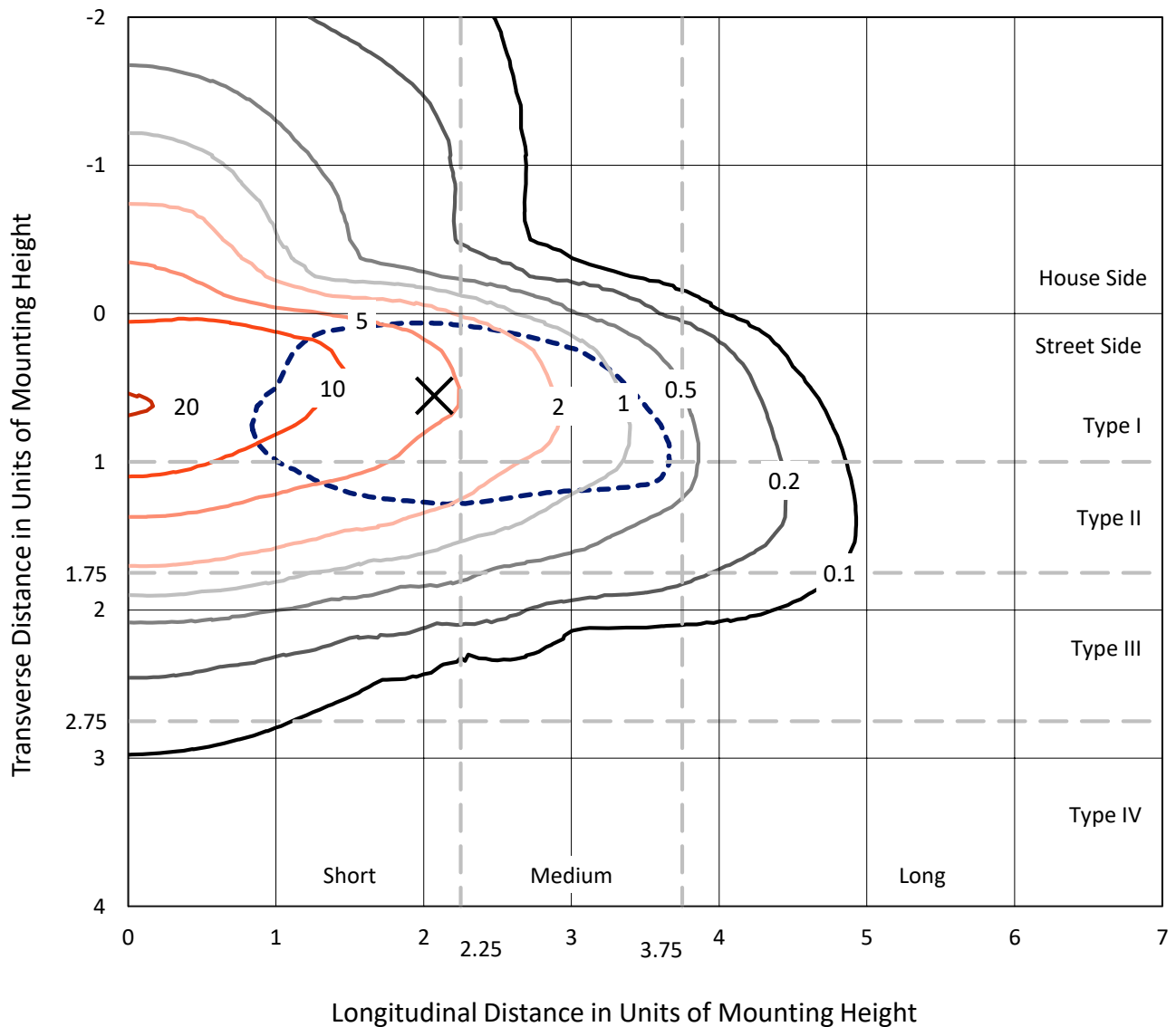


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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

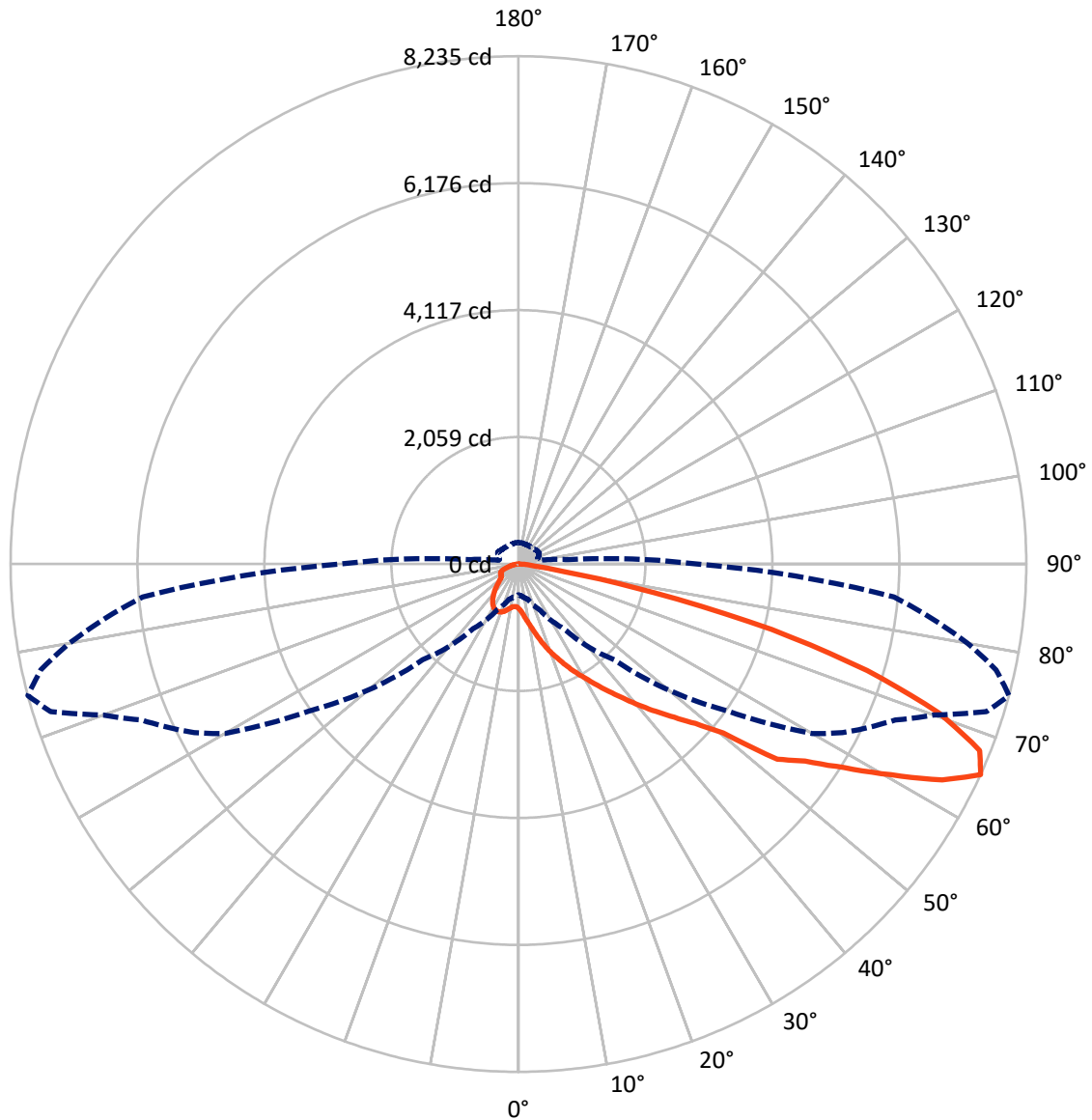


Based on 10 foot mounting height. Maximum calculated value = 20.7 fc  
 Type II - Short - Semi-Cutoff

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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	1251.9	0.0	1251.9
	% Fixture	15.0	0.0	15.0
<b>Street Side</b>	Lumens	7079.1	0.0	7079.1
	% Fixture	85.0	0.0	85.0
<b>Total</b>	Lumens	8331.0	0.0	8331.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.2	1.0
10°-20°	325.5	3.9
20°-30°	656.9	7.9
30°-40°	1115.5	13.4
40°-50°	1555.9	18.7
50°-60°	1907.0	22.9
60°-70°	1794.2	21.5
70°-80°	786.7	9.4
80°-90°	104.1	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°	8331.0	100.0
0°-180°	8331.0	100.0

**Coefficient of Utilization**



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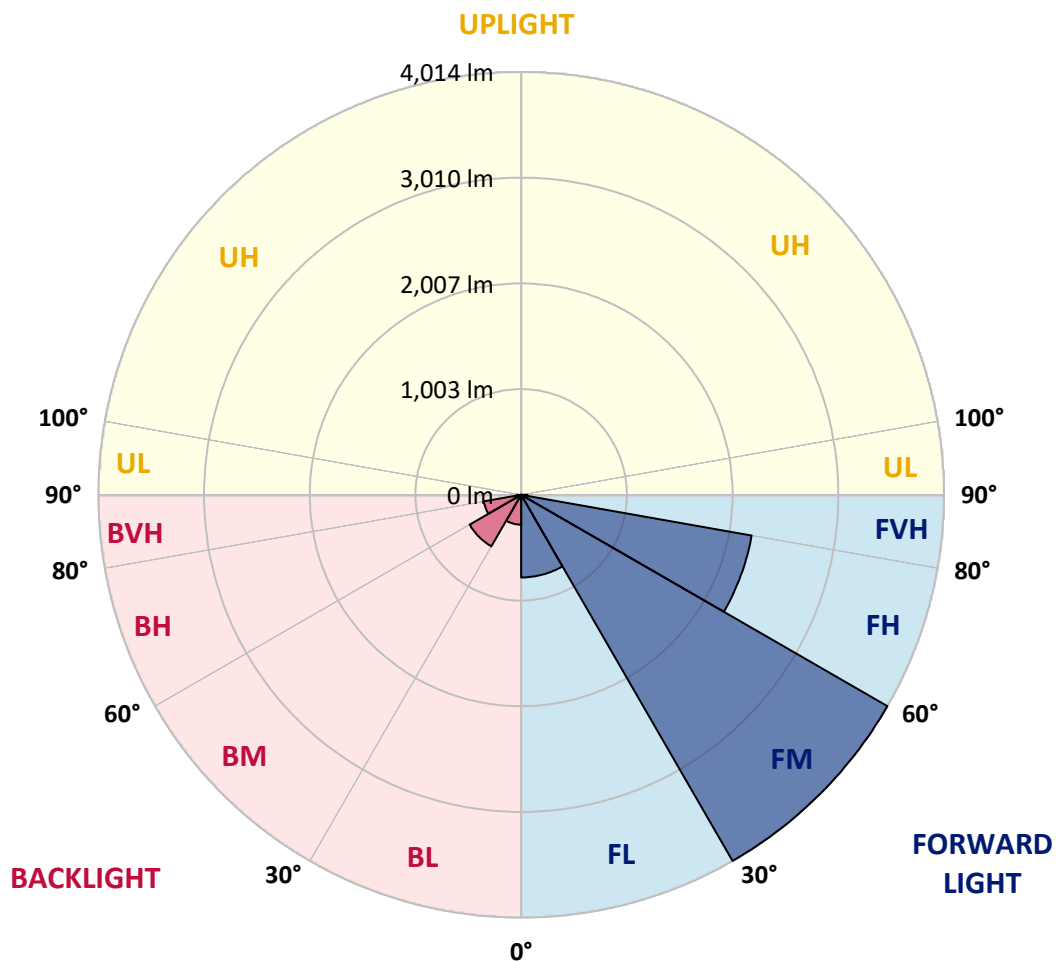
CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-8030-800

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	784.2	9.4			
FM	(30°-60°)	4013.5	48.2			
FH	(60°-80°)	2221.1	26.7			G2/5000
FVH	(80°-90°)	60.3	0.7			G1/100
BL	(0°-30°)	283.4	3.4	B1/500		
BM	(30°-60°)	564.9	6.8	B1/1000		
BH	(60°-80°)	359.8	4.3	B1/500		G1/500
BVH	(80°-90°)	43.8	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°	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8
2.5°	908.9	898.3	899.4	884.5	862.8	839.0	819.3	808.7	799.7	797.1	782.2
5°	1188.7	1175.5	1170.7	1136.8	1085.9	1025.5	965.6	942.3	923.2	911.6	882.9
7.5°	1417.7	1410.8	1404.4	1373.2	1322.8	1245.4	1149.0	1114.5	1082.7	1047.8	1013.3
10°	1573.5	1570.9	1568.2	1546.5	1504.6	1437.3	1333.4	1295.8	1256.0	1211.5	1166.5
12.5°	1691.2	1691.2	1693.3	1675.3	1649.8	1597.9	1503.5	1468.6	1428.3	1381.7	1330.2
15°	1770.1	1772.2	1783.4	1788.7	1775.4	1742.0	1659.4	1628.6	1590.5	1544.4	1493.5
17.5°	1822.6	1826.8	1843.3	1860.8	1877.7	1866.1	1804.6	1776.0	1741.5	1699.1	1651.4
20°	1944.5	1939.2	1939.7	1934.4	1959.3	1968.3	1934.4	1910.6	1883.0	1844.3	1800.9
22.5°	2200.5	2190.4	2164.4	2098.2	2068.0	2064.8	2044.7	2031.9	2010.7	1986.4	1942.9
25°	2534.4	2522.7	2471.3	2362.1	2272.0	2188.8	2151.7	2143.8	2130.0	2113.6	2082.3
27.5°	2879.4	2866.7	2800.4	2662.6	2545.0	2377.0	2261.4	2250.8	2238.1	2231.2	2216.4
30°	3183.0	3169.3	3104.1	2964.2	2822.1	2621.8	2409.3	2372.2	2350.5	2352.6	2344.1
32.5°	3449.6	3437.4	3364.3	3221.7	3077.6	2883.1	2601.1	2543.4	2494.6	2476.6	2482.9
35°	3673.3	3662.1	3582.1	3438.5	3293.3	3131.6	2848.1	2761.2	2681.7	2631.9	2626.0
37.5°	3804.7	3798.4	3742.2	3620.3	3476.1	3357.4	3124.8	3028.3	2911.2	2838.6	2806.8
40°	3797.3	3804.2	3794.6	3739.5	3627.7	3541.3	3413.1	3317.7	3203.2	3095.1	3030.4
42.5°	3689.2	3698.7	3741.6	3770.3	3740.1	3687.6	3664.8	3593.8	3491.0	3376.5	3286.9
45°	3540.8	3549.3	3604.9	3708.3	3794.6	3809.5	3885.3	3849.8	3762.8	3665.3	3566.8
47.5°	3313.4	3329.9	3394.5	3558.8	3764.4	3907.5	4070.2	4086.7	4036.3	3955.8	3863.5
50°	2984.3	3006.0	3096.7	3330.4	3650.0	4008.2	4345.3	4407.8	4387.7	4306.1	4212.8
52.5°	2647.2	2669.0	2789.8	3038.4	3465.5	4049.6	4616.1	4776.2	4891.7	4976.0	4992.4
55°	2296.4	2320.8	2453.3	2739.5	3219.6	3997.1	4809.6	4991.3	5108.5	5196.4	5231.9
57.5°	1900.5	1928.1	2056.3	2345.7	2872.0	3786.2	5024.7	5282.3	5456.7	5592.3	5668.6
60°	1446.3	1480.8	1613.8	1905.3	2415.1	3382.3	5120.6	5501.7	5778.9	5982.4	6103.2
62.5°	916.9	951.8	1090.2	1392.8	1895.2	2830.6	4849.3	5405.2	5878.0	6179.0	6400.5
65°	500.3	515.7	592.5	820.4	1277.8	2196.2	4161.4	4817.0	5498.0	5924.6	6264.9
67.5°	375.2	377.3	385.3	440.9	680.5	1482.9	3253.5	3854.0	4610.3	5159.3	5565.8
70°	328.6	328.6	329.6	330.2	369.4	803.4	2204.2	2756.9	3450.2	4005.6	4510.6
72.5°	294.7	291.5	290.4	284.1	289.4	411.8	1199.9	1696.5	2281.0	2904.3	3375.4
75°	254.4	253.9	253.9	247.5	250.7	289.9	520.4	814.0	1267.2	1847.5	2311.2
77.5°	219.9	216.2	216.8	213.1	223.1	222.1	247.0	335.5	551.7	970.4	1355.2
80°	181.3	178.6	180.2	178.1	194.0	164.3	166.4	205.1	274.0	425.6	599.9
82.5°	134.1	135.1	145.2	144.2	163.2	110.8	121.9	153.2	184.4	212.0	230.5
85°	78.4	80.0	104.4	109.7	119.8	58.3	74.7	91.2	102.8	113.9	118.7
87.5°	8.5	11.1	58.3	59.9	53.5	17.5	30.2	38.2	40.8	43.5	38.2
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°	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8
2.5°	777.5	770.6	763.2	758.9	751.5	745.1	733.5	724.0	713.4	705.9	702.8
5°	868.6	852.2	834.7	822.0	806.1	792.3	765.8	734.0	724.0	702.8	697.5
7.5°	987.3	957.7	928.0	903.6	876.1	853.3	808.7	751.5	744.1	710.2	702.8
10°	1126.7	1083.3	1039.3	1001.7	961.4	926.4	860.7	780.1	772.2	728.7	721.3
12.5°	1282.5	1229.5	1172.8	1116.7	1069.0	1019.7	930.1	824.6	811.9	760.5	750.4
15°	1443.1	1385.9	1320.2	1252.3	1193.5	1128.3	1015.4	882.9	859.6	799.2	785.4
17.5°	1601.6	1539.6	1470.7	1394.9	1326.0	1248.1	1107.7	948.1	907.9	837.4	819.9
20°	1754.8	1691.7	1619.1	1544.9	1459.0	1370.0	1202.0	1012.3	950.8	869.2	846.4
22.5°	1894.1	1840.1	1767.5	1682.2	1595.2	1495.1	1297.9	1076.4	988.4	893.5	864.4
25°	2040.9	1991.7	1919.6	1837.4	1736.2	1624.9	1397.0	1137.3	1018.6	906.8	870.8
27.5°	2189.3	2146.9	2079.1	1992.7	1884.1	1760.6	1497.7	1193.5	1043.0	911.0	867.6
30°	2347.8	2314.9	2252.4	2156.0	2046.2	1909.5	1607.4	1248.6	1058.4	905.2	853.3
32.5°	2497.8	2496.7	2441.1	2340.9	2222.7	2072.2	1723.0	1304.3	1066.3	888.8	828.4
35°	2653.6	2675.3	2633.5	2538.1	2413.5	2246.6	1850.7	1363.6	1066.8	859.6	796.0
37.5°	2830.6	2869.3	2850.8	2760.1	2629.2	2445.3	2000.7	1430.4	1063.7	819.3	748.9
40°	3032.0	3085.0	3084.5	3008.2	2868.2	2667.9	2175.0	1505.1	1056.2	769.0	693.2
42.5°	3262.5	3325.6	3343.1	3267.8	3126.3	2911.2	2374.8	1587.3	1044.6	719.2	634.4
45°	3526.5	3582.1	3615.0	3545.0	3403.0	3176.2	2604.3	1680.6	1030.3	655.1	567.1
47.5°	3809.0	3873.6	3922.9	3863.0	3711.4	3478.2	2876.2	1800.9	1025.0	581.9	494.5
50°	4159.3	4226.0	4332.6	4305.5	4222.3	4034.7	3451.2	2084.9	1027.1	512.5	433.5
52.5°	5028.4	5181.6	5316.2	5256.3	5058.6	4736.9	3918.7	2242.9	982.6	455.8	391.1
55°	5290.8	5464.6	5663.3	5638.4	5448.7	5124.4	4288.1	2374.8	939.7	414.4	363.6
57.5°	5749.7	5954.8	6232.5	6227.2	5994.6	5629.4	4763.4	2532.8	921.1	390.6	349.8
60°	6235.7	6497.0	6880.7	6940.6	6687.8	6307.8	5325.2	2726.7	923.8	377.3	341.8
62.5°	6590.8	6974.0	7532.0	7711.2	7413.3	6994.7	5908.2	2920.7	907.9	362.0	332.3
65°	6612.5	7164.2	7956.0	8234.8	7933.2	7395.3	6113.8	2882.6	812.5	341.3	316.9
67.5°	6082.6	6801.2	7763.1	8068.9	7760.5	7148.3	5753.4	2520.0	660.4	305.3	290.4
70°	5066.1	5900.2	6898.7	7239.5	6984.6	6365.0	5007.2	2012.9	493.4	257.6	250.7
72.5°	3914.9	4693.0	5599.7	5915.1	5720.1	5175.2	3949.4	1467.0	352.4	208.8	203.5
75°	2798.8	3461.3	4119.5	4239.8	4047.4	3547.1	2562.4	916.3	247.0	171.2	163.8
77.5°	1733.0	2163.9	2400.3	2245.5	2000.1	1662.5	1043.0	452.6	164.3	139.4	132.0
80°	769.0	902.6	842.7	751.0	593.0	487.6	318.5	200.9	106.0	107.6	103.3
82.5°	258.6	273.5	266.0	264.5	238.5	208.8	135.1	86.9	59.4	68.9	67.3
85°	126.1	132.0	132.5	137.3	119.2	92.7	36.6	34.4	25.4	37.1	38.7
87.5°	38.2	38.7	35.0	38.2	30.7	21.2	6.9	9.5	4.8	9.0	9.0
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°	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8	721.8
2.5°	696.9	694.8	691.1	686.9	685.8	680.5	678.9	676.3	674.7	672.0	669.9
5°	690.6	686.9	682.6	677.8	677.8	670.4	667.2	664.1	664.1	659.3	657.2
7.5°	696.9	692.2	687.4	683.1	684.7	676.3	673.1	669.9	669.4	664.6	662.5
10°	714.9	710.2	704.3	700.1	698.5	691.6	687.9	683.1	680.0	676.8	673.6
12.5°	742.5	736.1	728.7	719.7	716.0	710.2	704.3	698.0	690.6	687.4	682.6
15°	775.4	764.8	754.7	743.6	733.5	727.7	719.7	709.6	699.6	695.3	689.0
17.5°	802.4	791.3	776.9	763.7	745.7	740.9	729.8	717.6	701.2	699.6	690.0
20°	825.2	808.2	790.7	774.8	747.3	744.6	730.8	716.5	693.2	693.2	681.6
22.5°	837.9	814.6	793.9	772.7	738.3	736.1	720.2	703.3	674.7	675.7	661.4
25°	840.0	811.9	786.0	760.5	720.8	717.1	696.9	678.4	647.1	645.0	630.1
27.5°	831.5	798.7	768.5	737.7	694.8	686.9	664.6	642.3	611.6	606.3	590.4
30°	811.9	773.2	739.3	703.8	658.8	646.0	622.7	599.9	568.7	561.8	546.9
32.5°	780.7	736.7	699.0	663.5	613.7	597.8	574.5	551.7	521.5	516.2	502.4
35°	739.3	690.0	650.3	612.7	562.8	546.4	524.1	504.0	476.5	474.3	464.8
37.5°	687.4	636.0	593.6	557.5	510.4	501.9	479.1	464.3	441.5	443.6	438.8
40°	628.6	576.1	535.8	504.0	463.2	455.8	442.0	430.9	411.3	417.1	417.6
42.5°	569.2	516.7	480.2	451.5	416.6	411.8	402.3	395.9	381.1	392.7	397.5
45°	501.9	453.1	421.9	400.1	374.2	374.2	369.4	368.9	358.8	375.2	380.0
47.5°	436.7	398.5	376.8	363.6	345.5	354.0	352.4	356.7	349.3	366.2	370.5
50°	387.4	360.9	347.7	341.3	328.6	341.8	345.0	350.8	344.5	359.3	362.5
52.5°	356.1	338.7	331.2	329.6	320.6	337.1	342.4	347.7	340.2	354.0	353.5
55°	338.7	327.0	324.3	327.5	320.6	336.5	341.8	345.5	339.2	348.7	348.2
57.5°	332.3	325.9	327.5	332.3	327.5	340.8	343.4	347.7	341.3	345.5	347.7
60°	331.8	331.8	338.1	344.5	341.3	350.8	352.4	351.9	346.1	346.6	347.7
62.5°	328.6	336.5	347.1	357.2	356.1	367.8	368.9	362.0	357.2	351.9	350.3
65°	318.5	331.8	347.1	360.9	363.0	381.1	383.2	376.3	373.1	364.1	357.2
67.5°	296.3	313.2	331.2	348.2	351.9	376.3	381.1	383.7	385.3	379.5	370.5
70°	258.6	276.1	294.7	314.3	319.6	346.6	356.7	368.9	378.4	386.9	383.7
72.5°	210.4	226.3	242.2	260.2	268.2	296.3	309.5	330.7	345.5	367.3	376.3
75°	166.9	176.5	186.0	197.2	203.5	231.1	247.5	272.9	293.1	323.3	343.4
77.5°	131.4	136.2	141.0	145.7	148.4	163.8	177.0	202.5	225.8	263.9	293.6
80°	101.2	103.9	104.4	106.0	104.9	112.4	117.1	132.5	152.6	190.3	225.2
82.5°	65.2	67.3	68.4	71.0	65.7	75.3	78.4	80.0	90.6	118.2	143.1
85°	36.6	37.1	37.6	38.7	31.3	40.8	41.3	38.7	37.6	48.8	55.1
87.5°	9.0	8.5	9.0	9.0	3.7	8.5	8.5	5.8	4.2	7.9	6.4
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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CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-8030-800

**CANDELA DISTRIBUTION (continued):**

	135°	145°	155°	165°	175°	180°
0°	721.8	721.8	721.8	721.8	721.8	721.8
2.5°	665.1	664.1	664.6	661.9	660.9	661.4
5°	654.5	652.4	652.4	650.8	648.7	648.7
7.5°	659.3	655.1	653.5	650.3	647.1	647.6
10°	666.7	659.3	654.0	649.2	645.5	645.5
12.5°	671.5	658.2	650.3	643.9	639.7	639.7
15°	672.5	652.4	640.7	633.9	629.6	629.6
17.5°	666.2	640.7	625.9	616.9	612.1	613.2
20°	650.3	619.0	601.5	592.0	587.2	587.7
22.5°	625.4	589.3	569.2	558.1	553.3	553.3
25°	591.5	552.2	530.5	521.5	517.3	517.3
27.5°	552.8	512.5	493.4	486.5	483.9	483.9
30°	509.3	475.9	462.1	457.4	453.1	453.1
32.5°	472.7	448.9	444.1	437.8	426.6	426.1
35°	443.6	440.9	437.2	418.2	402.3	400.1
37.5°	427.7	443.6	420.3	387.4	374.7	374.2
40°	419.2	434.1	393.8	377.9	376.3	376.3
42.5°	399.1	409.7	392.2	383.2	383.2	383.7
45°	377.9	386.9	395.9	387.9	390.6	391.1
47.5°	363.0	381.1	395.9	389.0	394.3	397.5
50°	349.3	375.8	387.9	387.9	393.8	394.3
52.5°	346.1	368.3	380.5	386.4	386.9	384.2
55°	346.6	362.5	374.7	382.1	378.9	378.9
57.5°	346.1	359.3	369.9	372.6	374.2	374.2
60°	346.6	355.1	363.6	362.5	367.8	367.8
62.5°	348.2	349.3	353.5	352.4	360.4	360.4
65°	351.9	341.8	339.2	340.2	349.8	349.3
67.5°	358.8	331.8	323.3	323.8	337.6	335.5
70°	368.9	318.0	305.3	302.1	325.4	321.7
72.5°	372.0	302.1	281.9	278.8	292.5	281.9
75°	357.2	289.4	257.0	246.4	240.6	237.4
77.5°	318.5	281.4	231.1	208.8	199.8	197.7
80°	263.9	265.0	197.2	170.7	198.2	197.7
82.5°	199.3	229.0	157.9	147.9	143.6	119.8
85°	96.5	172.2	121.4	101.8	60.9	57.8
87.5°	8.5	72.1	70.0	45.6	20.7	19.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)