

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: P199247

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P199247
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
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 80 CRI, 3000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10312 lumens
Efficiency: N/A
Efficacy: 92.9 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

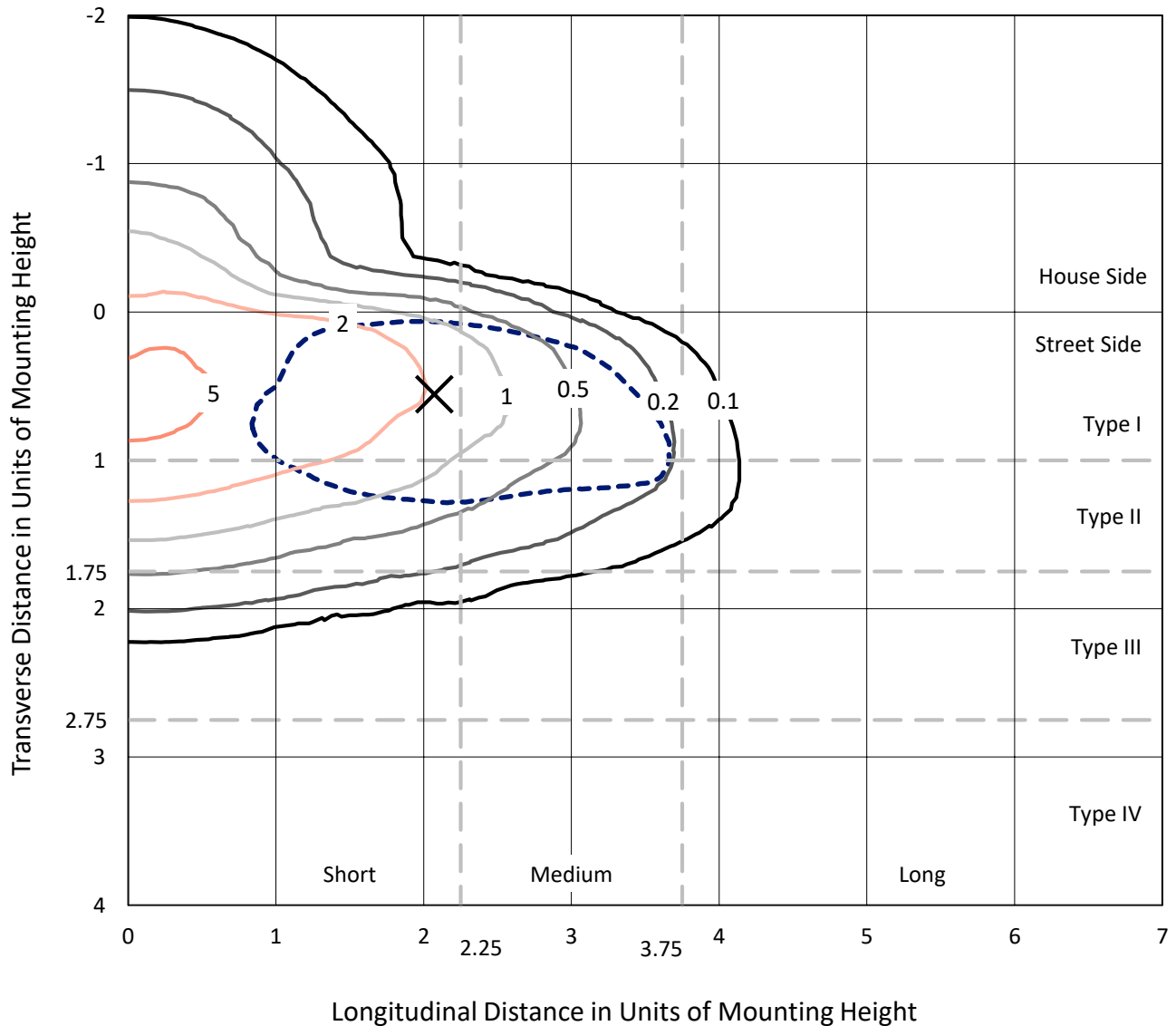
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

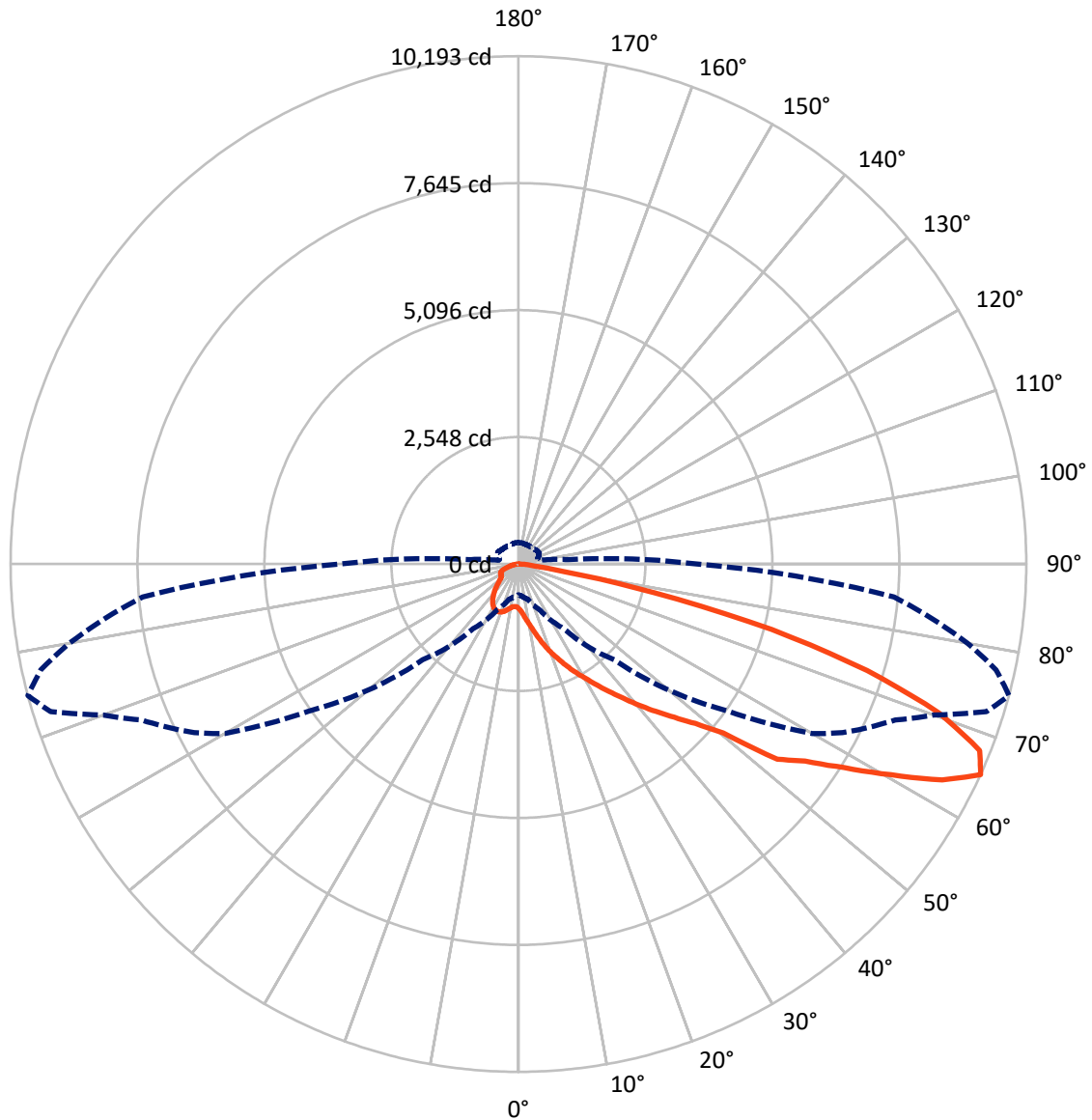
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.4 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	1549.5	0.0	1549.5
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	8762.5	0.0	8762.5
	% Fixture	85.0	0.0	85.0
Total	Lumens	10312.0	0.0	10312.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.5	1.0
10°-20°	402.9	3.9
20°-30°	813.1	7.9
30°-40°	1380.8	13.4
40°-50°	1925.9	18.7
50°-60°	2360.4	22.9
60°-70°	2220.8	21.5
70°-80°	973.8	9.4
80°-90°	128.9	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°	10312.0	100.0
0°-180°	10312.0	100.0



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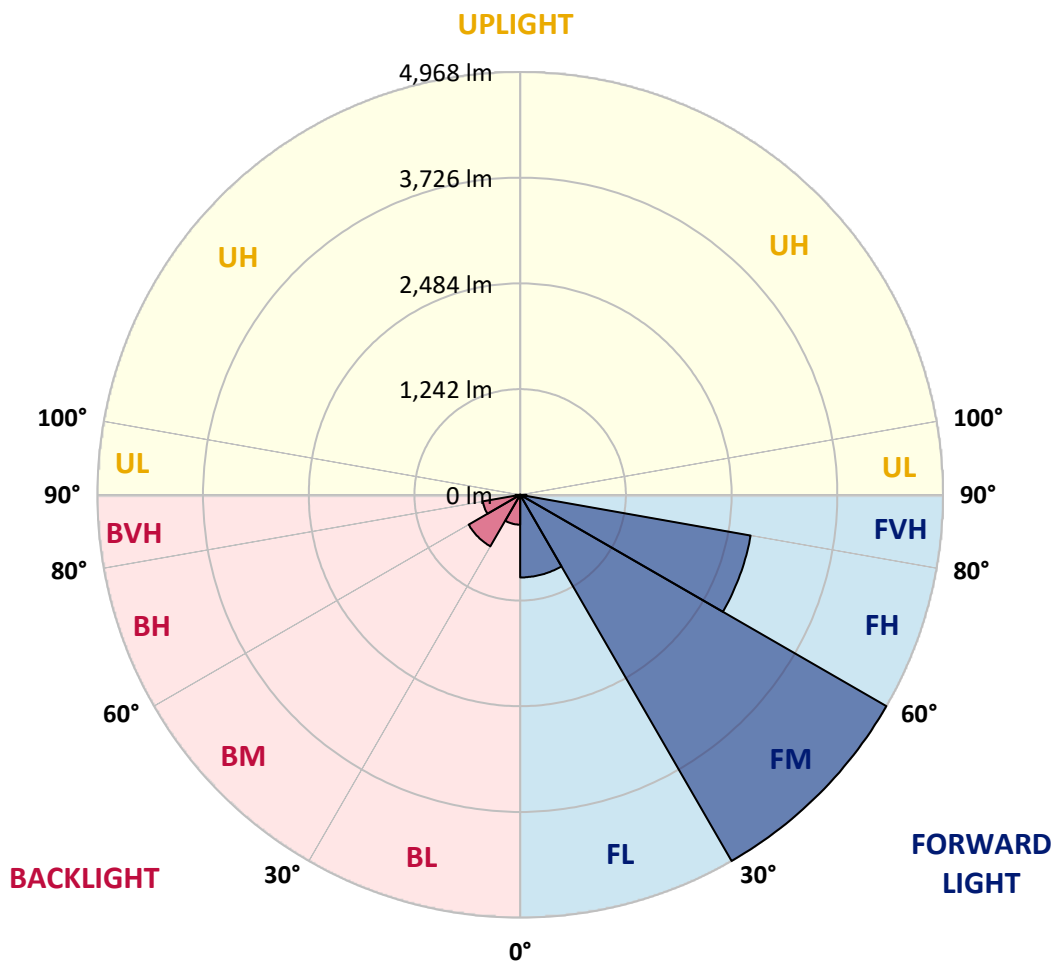
CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-8030

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	970.6	9.4			
FM	(30°-60°)	4967.9	48.2			
FH	(60°-80°)	2749.3	26.7			G2/5000
FVH	(80°-90°)	74.7	0.7			G1/100
BL	(0°-30°)	350.8	3.4	B1/500		
BM	(30°-60°)	699.2	6.8	B1/1000		
BH	(60°-80°)	445.4	4.3	B1/500		G1/500
BVH	(80°-90°)	54.2	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°	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5
2.5°	1125.0	1111.9	1113.2	1094.9	1068.0	1038.4	1014.2	1001.1	989.9	986.6	968.3
5°	1471.4	1455.0	1449.1	1407.1	1344.1	1269.4	1195.2	1166.4	1142.8	1128.3	1092.9
7.5°	1754.8	1746.3	1738.4	1699.7	1637.4	1541.6	1422.2	1379.6	1340.2	1296.9	1254.3
10°	1947.7	1944.4	1941.1	1914.2	1862.4	1779.1	1650.5	1603.9	1554.7	1499.6	1443.9
12.5°	2093.3	2093.3	2095.9	2073.6	2042.1	1977.8	1861.1	1817.8	1767.9	1710.2	1646.6
15°	2191.0	2193.7	2207.4	2214.0	2197.6	2156.3	2053.9	2015.9	1968.7	1911.6	1848.6
17.5°	2256.0	2261.2	2281.6	2303.2	2324.2	2309.8	2233.7	2198.3	2155.6	2103.1	2044.1
20°	2406.9	2400.3	2401.0	2394.4	2425.2	2436.4	2394.4	2364.9	2330.8	2282.9	2229.1
22.5°	2723.7	2711.2	2679.1	2597.1	2559.7	2555.8	2530.8	2515.1	2488.9	2458.7	2404.9
25°	3137.0	3122.6	3058.9	2923.8	2812.3	2709.3	2663.4	2653.5	2636.5	2616.1	2577.4
27.5°	3564.0	3548.3	3466.3	3295.7	3150.1	2942.2	2799.2	2786.0	2770.3	2761.8	2743.4
30°	3939.9	3922.9	3842.2	3669.0	3493.2	3245.2	2982.2	2936.3	2909.4	2912.0	2901.5
32.5°	4269.9	4254.8	4164.3	3987.8	3809.4	3568.6	3219.6	3148.1	3087.8	3065.5	3073.4
35°	4546.7	4533.0	4433.9	4256.1	4076.4	3876.3	3525.3	3417.8	3319.4	3257.7	3250.5
37.5°	4709.4	4701.6	4632.0	4481.1	4302.7	4155.8	3867.8	3748.4	3603.4	3513.5	3474.2
40°	4700.2	4708.8	4697.0	4628.7	4490.3	4383.4	4224.6	4106.6	3964.9	3831.0	3751.0
42.5°	4566.4	4578.2	4631.4	4666.8	4629.4	4564.4	4536.2	4448.3	4321.1	4179.4	4068.5
45°	4382.7	4393.2	4462.1	4590.0	4697.0	4715.3	4809.1	4765.2	4657.6	4536.9	4414.9
47.5°	4101.3	4121.6	4201.7	4405.0	4659.6	4836.7	5038.1	5058.4	4996.1	4896.4	4782.2
50°	3693.9	3720.8	3833.0	4122.3	4517.9	4961.3	5378.5	5456.0	5431.0	5330.0	5214.5
52.5°	3276.7	3303.6	3453.2	3760.8	4289.6	5012.5	5713.8	5911.9	6054.9	6159.2	6179.5
55°	2842.4	2872.6	3036.6	3390.9	3985.2	4947.6	5953.2	6178.2	6323.2	6432.1	6476.0
57.5°	2352.4	2386.5	2545.3	2903.5	3554.9	4686.5	6219.5	6538.3	6754.2	6922.1	7016.6
60°	1790.2	1832.9	1997.5	2358.3	2989.4	4186.6	6338.3	6809.9	7153.0	7404.9	7554.5
62.5°	1134.9	1178.2	1349.4	1724.0	2345.9	3503.7	6002.4	6690.5	7275.7	7648.3	7922.5
65°	619.3	638.3	733.4	1015.5	1581.6	2718.5	5150.9	5962.4	6805.3	7333.4	7754.6
67.5°	464.4	467.1	476.9	545.8	842.3	1835.5	4027.2	4770.4	5706.5	6386.2	6889.3
70°	406.7	406.7	408.0	408.7	457.2	994.5	2728.3	3412.5	4270.6	4958.0	5583.2
72.5°	364.7	360.8	359.5	351.6	358.2	509.7	1485.2	2099.9	2823.4	3594.9	4178.1
75°	314.9	314.2	314.2	306.4	310.3	358.8	644.2	1007.6	1568.5	2286.8	2860.8
77.5°	272.2	267.6	268.3	263.7	276.2	274.9	305.7	415.2	682.9	1201.1	1677.4
80°	224.4	221.1	223.0	220.4	240.1	203.4	206.0	253.9	339.2	526.8	742.6
82.5°	166.0	167.3	179.7	178.4	202.0	137.1	150.9	189.6	228.3	262.4	285.4
85°	97.1	99.1	129.2	135.8	148.3	72.2	92.5	112.8	127.3	141.0	146.9
87.5°	10.5	13.8	72.2	74.1	66.3	21.6	37.4	47.2	50.5	53.8	47.2
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°	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5
2.5°	962.4	953.8	944.6	939.4	930.2	922.3	907.9	896.1	883.0	873.8	869.9
5°	1075.2	1054.8	1033.2	1017.5	997.8	980.7	947.9	908.6	896.1	869.9	863.3
7.5°	1222.1	1185.4	1148.7	1118.5	1084.4	1056.2	1001.1	930.2	921.0	879.0	869.9
10°	1394.7	1340.9	1286.4	1239.8	1190.0	1146.7	1065.3	965.6	955.8	902.0	892.8
12.5°	1587.5	1521.9	1451.7	1382.2	1323.2	1262.1	1151.3	1020.7	1005.0	941.4	928.9
15°	1786.3	1715.4	1634.1	1550.1	1477.3	1396.6	1256.9	1092.9	1064.0	989.2	972.2
17.5°	1982.4	1905.7	1820.4	1726.6	1641.3	1544.9	1371.0	1173.6	1123.7	1036.5	1014.8
20°	2172.0	2094.0	2004.1	1912.2	1806.0	1695.8	1487.8	1253.0	1176.9	1075.8	1047.6
22.5°	2344.5	2277.6	2187.8	2082.1	1974.6	1850.6	1606.5	1332.3	1223.4	1106.0	1069.9
25°	2526.3	2465.2	2376.0	2274.4	2149.1	2011.3	1729.2	1407.8	1260.8	1122.4	1077.8
27.5°	2709.9	2657.5	2573.5	2466.6	2332.1	2179.2	1853.9	1477.3	1291.0	1127.7	1073.9
30°	2906.1	2865.4	2788.0	2668.6	2532.8	2363.6	1989.6	1545.5	1310.0	1120.4	1056.2
32.5°	3091.7	3090.4	3021.5	2897.6	2751.3	2565.0	2132.7	1614.4	1319.9	1100.1	1025.3
35°	3284.6	3311.5	3259.7	3141.6	2987.4	2780.8	2290.8	1687.9	1320.5	1064.0	985.3
37.5°	3503.7	3551.6	3528.6	3416.4	3254.4	3026.8	2476.4	1770.5	1316.6	1014.2	926.9
40°	3753.0	3818.6	3817.9	3723.5	3550.3	3302.3	2692.2	1863.0	1307.4	951.9	858.0
42.5°	4038.3	4116.4	4138.0	4044.9	3869.7	3603.4	2939.5	1964.7	1293.0	890.2	785.2
45°	4365.0	4433.9	4474.6	4388.0	4212.2	3931.4	3223.6	2080.2	1275.3	810.8	701.9
47.5°	4714.7	4794.7	4855.7	4781.6	4594.0	4305.3	3560.1	2229.1	1268.7	720.3	612.0
50°	5148.3	5230.9	5362.8	5329.3	5226.4	4994.1	4271.9	2580.7	1271.3	634.4	536.6
52.5°	6224.1	6413.7	6580.3	6506.2	6261.5	5863.3	4850.5	2776.2	1216.2	564.2	484.1
55°	6548.8	6764.0	7010.0	6979.2	6744.3	6342.9	5307.7	2939.5	1163.1	513.0	450.0
57.5°	7116.9	7370.8	7714.6	7708.0	7420.0	6968.0	5896.1	3135.0	1140.1	483.5	433.0
60°	7718.5	8041.9	8516.8	8591.0	8278.1	7807.7	6591.5	3375.1	1143.4	467.1	423.1
62.5°	8158.0	8632.3	9323.1	9544.8	9176.1	8657.9	7313.1	3615.2	1123.7	448.0	411.3
65°	8184.9	8867.8	9847.9	10192.9	9819.7	9153.8	7567.6	3568.0	1005.6	422.5	392.3
67.5°	7528.9	8418.4	9609.1	9987.6	9605.8	8848.1	7121.5	3119.3	817.4	377.9	359.5
70°	6270.7	7303.2	8539.1	8961.0	8645.4	7878.6	6197.9	2491.5	610.7	318.8	310.3
72.5°	4845.9	5808.9	6931.3	7321.6	7080.2	6405.8	4888.5	1815.8	436.2	258.5	251.9
75°	3464.3	4284.3	5099.1	5248.0	5009.9	4390.6	3171.8	1134.2	305.7	211.9	202.7
77.5°	2145.1	2678.4	2971.0	2779.5	2475.7	2057.9	1291.0	560.2	203.4	172.5	163.3
80°	951.9	1117.2	1043.0	929.6	734.1	603.5	394.3	248.6	131.2	133.2	127.9
82.5°	320.1	338.5	329.3	327.3	295.2	258.5	167.3	107.6	73.5	85.3	83.3
85°	156.1	163.3	164.0	169.9	147.6	114.8	45.3	42.6	31.5	45.9	47.9
87.5°	47.2	47.9	43.3	47.2	38.0	26.2	8.5	11.8	5.9	11.2	11.2
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):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5	893.5
2.5°	862.6	860.0	855.4	850.2	848.9	842.3	840.3	837.1	835.1	831.8	829.2
5°	854.8	850.2	844.9	839.0	839.0	829.8	825.9	822.0	822.0	816.1	813.4
7.5°	862.6	856.7	850.8	845.6	847.6	837.1	833.1	829.2	828.5	822.6	820.0
10°	884.9	879.0	871.8	866.6	864.6	856.1	851.5	845.6	841.6	837.7	833.8
12.5°	919.1	911.2	902.0	890.8	886.3	879.0	871.8	864.0	854.8	850.8	844.9
15°	959.7	946.6	934.1	920.4	907.9	900.7	890.8	878.4	865.9	860.7	852.8
17.5°	993.2	979.4	961.7	945.3	923.0	917.1	903.3	888.2	867.9	865.9	854.1
20°	1021.4	1000.4	978.8	959.1	925.0	921.7	904.6	886.9	858.0	858.0	843.6
22.5°	1037.1	1008.3	982.7	956.4	913.8	911.2	891.5	870.5	835.1	836.4	818.7
25°	1039.8	1005.0	972.8	941.4	892.2	887.6	862.6	839.7	801.0	798.4	780.0
27.5°	1029.3	988.6	951.2	913.2	860.0	850.2	822.6	795.1	757.0	750.5	730.8
30°	1005.0	957.1	915.1	871.2	815.4	799.7	770.8	742.6	703.9	695.4	677.0
32.5°	966.3	911.8	865.3	821.3	759.6	740.0	711.1	682.9	645.5	638.9	621.9
35°	915.1	854.1	804.9	758.3	696.7	676.3	648.8	623.9	589.7	587.1	575.3
37.5°	850.8	787.2	734.7	690.1	631.7	621.2	593.0	574.7	546.4	549.1	543.2
40°	778.0	713.1	663.2	623.9	573.3	564.2	547.1	533.3	509.1	516.3	516.9
42.5°	704.5	639.6	594.3	558.9	515.6	509.7	497.9	490.0	471.7	486.1	492.0
45°	621.2	560.9	522.2	495.3	463.1	463.1	457.2	456.6	444.1	464.4	470.4
47.5°	540.5	493.3	466.4	450.0	427.7	438.2	436.2	441.5	432.3	453.3	458.5
50°	479.5	446.7	430.3	422.5	406.7	423.1	427.1	434.3	426.4	444.8	448.7
52.5°	440.8	419.2	410.0	408.0	396.9	417.2	423.8	430.3	421.2	438.2	437.6
55°	419.2	404.8	401.5	405.4	396.9	416.6	423.1	427.7	419.8	431.6	431.0
57.5°	411.3	403.4	405.4	411.3	405.4	421.8	425.1	430.3	422.5	427.7	430.3
60°	410.7	410.7	418.5	426.4	422.5	434.3	436.2	435.6	428.4	429.0	430.3
62.5°	406.7	416.6	429.7	442.1	440.8	455.3	456.6	448.0	442.1	435.6	433.6
65°	394.3	410.7	429.7	446.7	449.4	471.7	474.3	465.8	461.8	450.7	442.1
67.5°	366.7	387.7	410.0	431.0	435.6	465.8	471.7	474.9	476.9	469.7	458.5
70°	320.1	341.8	364.7	389.0	395.6	429.0	441.5	456.6	468.4	478.9	474.9
72.5°	260.4	280.1	299.8	322.1	331.9	366.7	383.1	409.3	427.7	454.6	465.8
75°	206.6	218.4	230.3	244.0	251.9	286.0	306.4	337.8	362.8	400.2	425.1
77.5°	162.7	168.6	174.5	180.4	183.7	202.7	219.1	250.6	279.5	326.7	363.4
80°	125.3	128.6	129.2	131.2	129.9	139.1	145.0	164.0	188.9	235.5	278.8
82.5°	80.7	83.3	84.6	87.9	81.3	93.2	97.1	99.1	112.2	146.3	177.1
85°	45.3	45.9	46.6	47.9	38.7	50.5	51.2	47.9	46.6	60.4	68.2
87.5°	11.2	10.5	11.2	11.2	4.6	10.5	10.5	7.2	5.2	9.8	7.9
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

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	893.5	893.5	893.5	893.5	893.5	893.5
2.5°	823.3	822.0	822.6	819.3	818.0	818.7
5°	810.2	807.5	807.5	805.6	802.9	802.9
7.5°	816.1	810.8	808.8	804.9	801.0	801.6
10°	825.2	816.1	809.5	803.6	799.0	799.0
12.5°	831.2	814.8	804.9	797.0	791.8	791.8
15°	832.5	807.5	793.1	784.6	779.3	779.3
17.5°	824.6	793.1	774.7	763.6	757.7	759.0
20°	804.9	766.2	744.6	732.8	726.8	727.5
22.5°	774.1	729.5	704.5	690.8	684.9	684.9
25°	732.1	683.6	656.7	645.5	640.3	640.3
27.5°	684.2	634.4	610.7	602.2	598.9	598.9
30°	630.4	589.1	572.0	566.1	560.9	560.9
32.5°	585.2	555.6	549.7	541.9	528.1	527.4
35°	549.1	545.8	541.2	517.6	497.9	495.3
37.5°	529.4	549.1	520.2	479.5	463.8	463.1
40°	518.9	537.3	487.4	467.7	465.8	465.8
42.5°	494.0	507.1	485.4	474.3	474.3	474.9
45°	467.7	478.9	490.0	480.2	483.5	484.1
47.5°	449.4	471.7	490.0	481.5	488.1	492.0
50°	432.3	465.1	480.2	480.2	487.4	488.1
52.5°	428.4	455.9	471.0	478.2	478.9	475.6
55°	429.0	448.7	463.8	473.0	469.0	469.0
57.5°	428.4	444.8	457.9	461.2	463.1	463.1
60°	429.0	439.5	450.0	448.7	455.3	455.3
62.5°	431.0	432.3	437.6	436.2	446.1	446.1
65°	435.6	423.1	419.8	421.2	433.0	432.3
67.5°	444.1	410.7	400.2	400.8	417.9	415.2
70°	456.6	393.6	377.9	373.9	402.8	398.2
72.5°	460.5	373.9	349.0	345.1	362.1	349.0
75°	442.1	358.2	318.2	305.0	297.8	293.9
77.5°	394.3	348.3	286.0	258.5	247.3	244.7
80°	326.7	328.0	244.0	211.2	245.3	244.7
82.5°	246.7	283.4	195.5	183.0	177.8	148.3
85°	119.4	213.2	150.2	126.0	75.4	71.5
87.5°	10.5	89.2	86.6	56.4	25.6	24.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)