

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: P198925

Luminaire Tested: **XNV2-AF-02-LED-U-T2R-7050-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198925
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-7050-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 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: 10210 lumens
Efficiency: N/A
Efficacy: 120.1 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

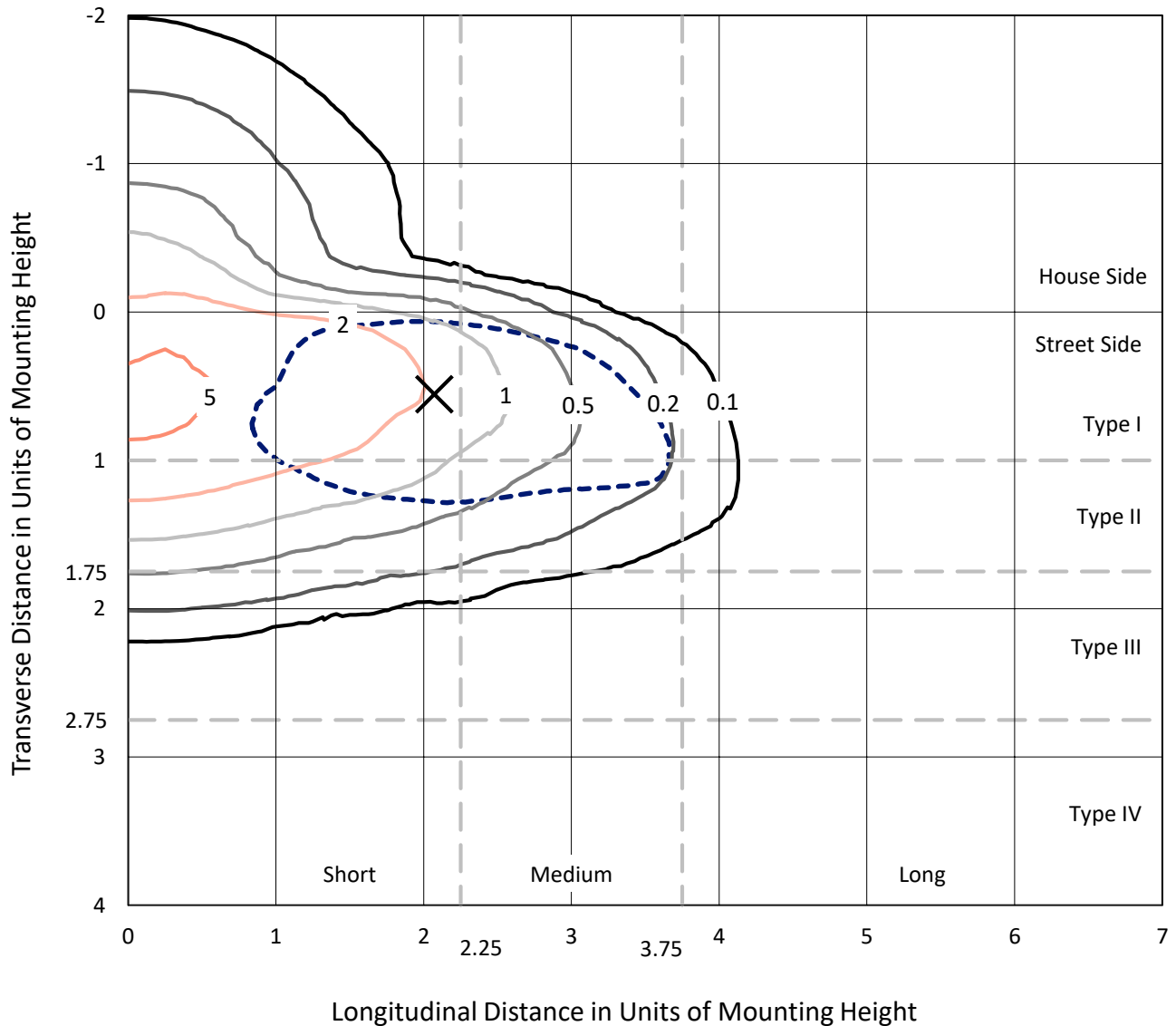


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Iso-Footcandle Lines of Horizontal Illumination

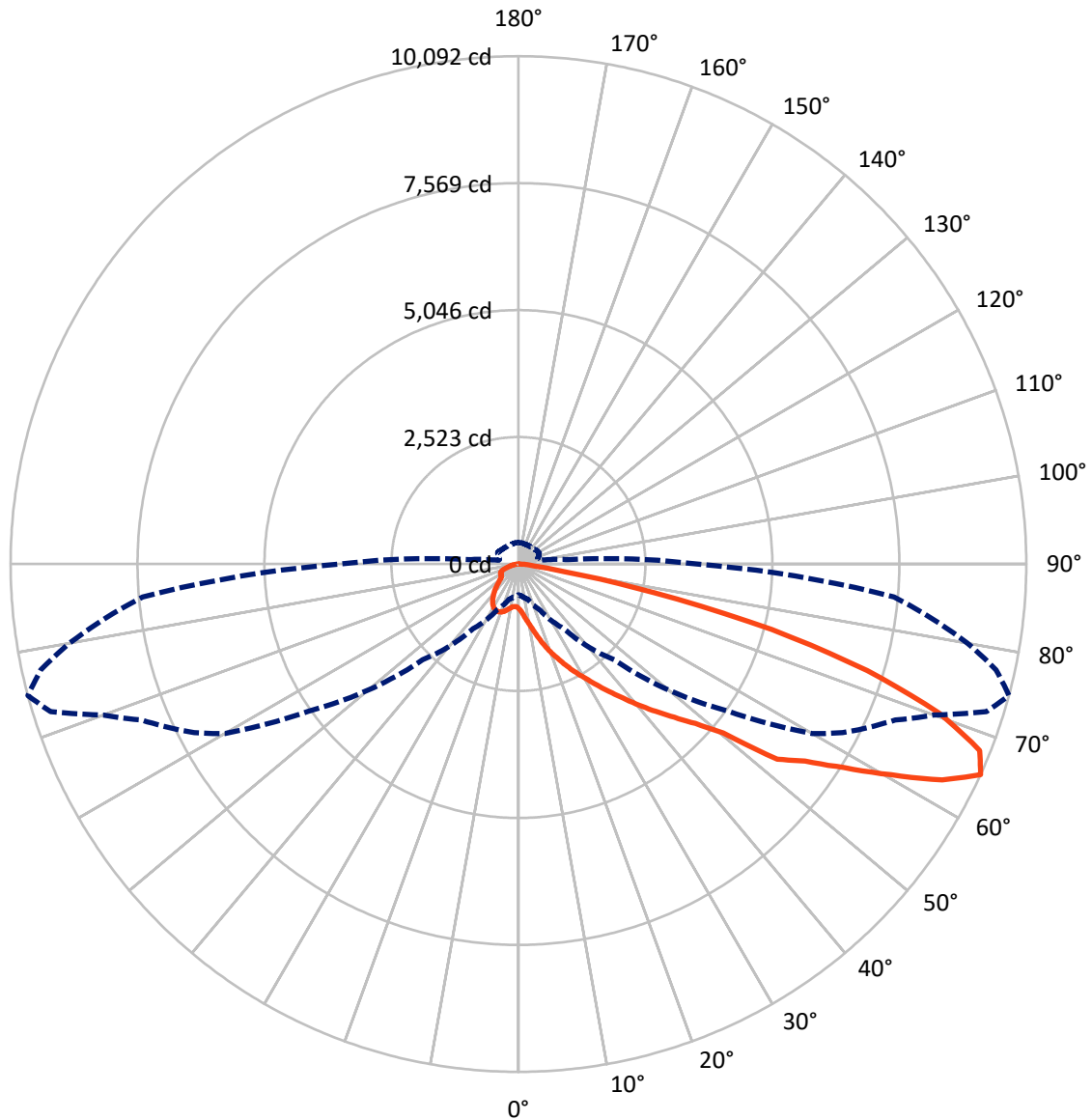
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.3 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	1534.2	0.0	1534.2
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	8675.8	0.0	8675.8
	% Fixture	85.0	0.0	85.0
Total	Lumens	10210.0	0.0	10210.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	104.4	1.0
10°-20°	398.9	3.9
20°-30°	805.0	7.9
30°-40°	1367.1	13.4
40°-50°	1906.8	18.7
50°-60°	2337.1	22.9
60°-70°	2198.9	21.5
70°-80°	964.2	9.4
80°-90°	127.6	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°	10210.0	100.0
0°-180°	10210.0	100.0

Coefficient of Utilization



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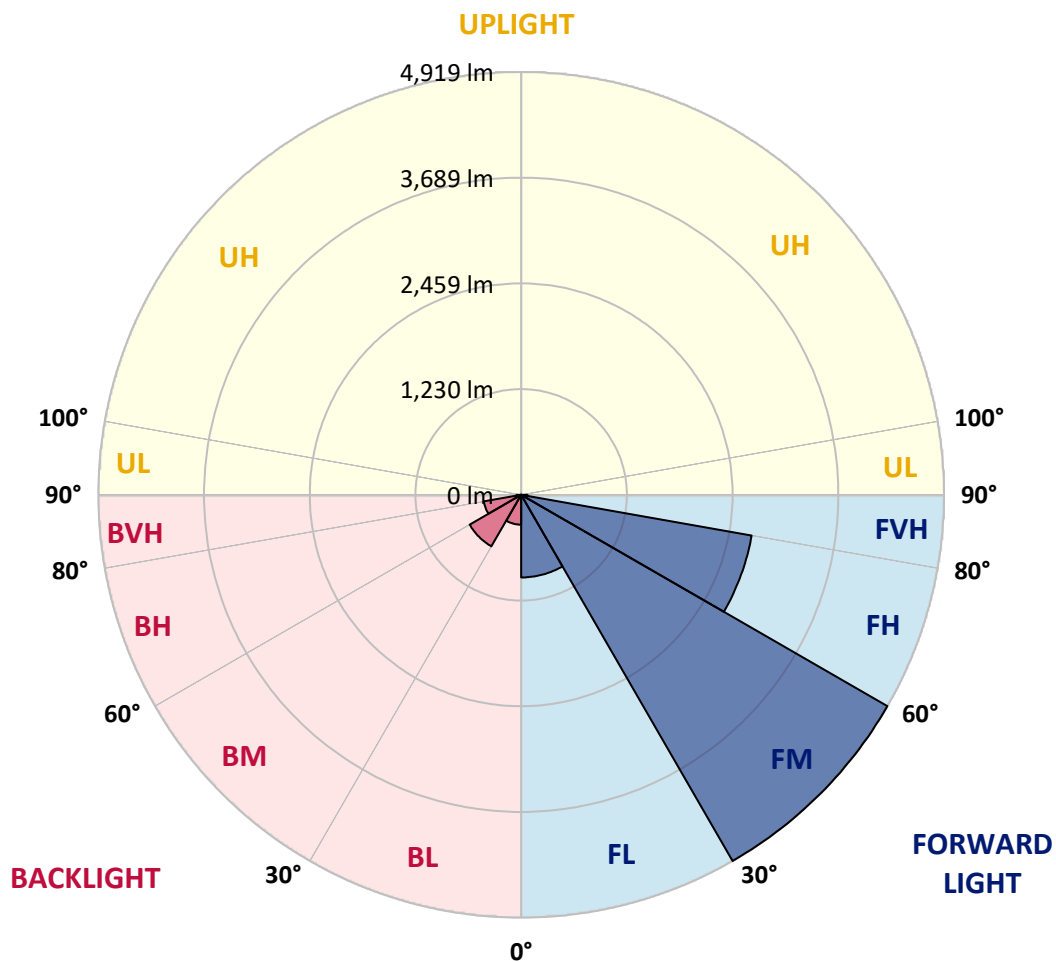
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	961.0	9.4			
FM (30°-60°)	4918.7	48.2			
FH (60°-80°)	2722.1	26.7			G2/5000
FVH (80°-90°)	74.0	0.7			G1/100
BL (0°-30°)	347.3	3.4	B1/500		
BM (30°-60°)	692.3	6.8	B1/1000		
BH (60°-80°)	441.0	4.3	B1/500		G1/500
BVH (80°-90°)	53.6	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°	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6
2.5°	1113.9	1100.9	1102.2	1084.0	1057.4	1028.2	1004.1	991.2	980.1	976.9	958.7
5°	1456.9	1440.6	1434.8	1393.2	1330.8	1256.8	1183.4	1154.8	1131.4	1117.2	1082.1
7.5°	1737.4	1729.0	1721.2	1682.9	1621.2	1526.4	1408.1	1365.9	1327.0	1284.1	1241.9
10°	1928.4	1925.2	1921.9	1895.3	1844.0	1761.5	1634.2	1588.1	1539.3	1484.8	1429.6
12.5°	2072.6	2072.6	2075.2	2053.1	2021.9	1958.3	1842.7	1799.8	1750.4	1693.3	1630.3
15°	2169.4	2172.0	2185.6	2192.1	2175.9	2134.9	2033.6	1995.9	1949.2	1892.7	1830.3
17.5°	2233.7	2238.9	2259.0	2280.4	2301.2	2286.9	2211.6	2176.5	2134.3	2082.3	2023.9
20°	2383.1	2376.6	2377.2	2370.7	2401.2	2412.3	2370.7	2341.5	2307.7	2260.3	2207.0
22.5°	2696.8	2684.4	2652.6	2571.4	2534.4	2530.5	2505.8	2490.2	2464.2	2434.4	2381.1
25°	3106.0	3091.7	3028.7	2894.9	2784.5	2682.5	2637.0	2627.3	2610.4	2590.3	2551.9
27.5°	3528.8	3513.2	3432.0	3263.1	3119.0	2913.1	2771.5	2758.5	2742.9	2734.4	2716.3
30°	3901.0	3884.1	3804.2	3632.7	3458.6	3213.1	2952.7	2907.2	2880.6	2883.2	2872.8
32.5°	4227.7	4212.7	4123.1	3948.4	3771.7	3533.3	3187.8	3117.0	3057.2	3035.2	3043.0
35°	4501.8	4488.1	4390.0	4214.0	4036.1	3838.0	3490.5	3384.0	3286.5	3225.5	3218.3
37.5°	4662.8	4655.0	4586.2	4436.8	4260.1	4114.7	3829.5	3711.3	3567.8	3478.8	3439.8
40°	4653.7	4662.2	4650.5	4582.9	4445.9	4340.0	4182.9	4065.9	3925.6	3793.1	3713.9
42.5°	4521.2	4532.9	4585.5	4620.6	4583.6	4519.3	4491.4	4404.3	4278.3	4138.0	4028.3
45°	4339.4	4349.8	4418.0	4544.6	4650.5	4668.7	4761.6	4718.0	4611.5	4492.0	4371.2
47.5°	4060.7	4080.9	4160.1	4361.5	4613.5	4788.8	4988.2	5008.4	4946.7	4848.0	4734.9
50°	3657.4	3684.0	3795.1	4081.5	4473.2	4912.3	5325.3	5402.0	5377.3	5277.3	5163.0
52.5°	3244.3	3270.9	3419.0	3723.6	4247.2	4962.9	5657.2	5853.4	5995.0	6098.3	6118.4
55°	2814.3	2844.2	3006.6	3357.3	3945.8	4898.6	5894.3	6117.1	6260.6	6368.5	6412.0
57.5°	2329.1	2362.9	2520.1	2874.7	3519.7	4640.1	6158.0	6473.7	6687.4	6853.6	6947.2
60°	1772.5	1814.7	1977.8	2335.0	2959.8	4145.2	6275.6	6742.6	7082.3	7331.7	7479.8
62.5°	1123.7	1166.5	1336.0	1706.9	2322.7	3469.0	5943.0	6624.4	7203.7	7572.6	7844.1
65°	613.1	632.0	726.2	1005.4	1566.0	2691.6	5100.0	5903.4	6738.0	7260.9	7677.9
67.5°	459.9	462.5	472.2	540.4	834.0	1817.3	3987.3	4723.2	5650.1	6323.0	6821.2
70°	402.7	402.7	404.0	404.6	452.7	984.7	2701.3	3378.8	4228.3	4909.0	5528.0
72.5°	361.1	357.2	355.9	348.1	354.6	504.7	1470.5	2079.1	2795.5	3559.3	4136.7
75°	311.8	311.1	311.1	303.3	307.2	355.3	637.8	997.6	1553.0	2264.2	2832.5
77.5°	269.5	265.0	265.7	261.1	273.4	272.1	302.7	411.1	676.1	1189.3	1660.8
80°	222.1	218.9	220.8	218.2	237.7	201.3	203.9	251.4	335.8	521.6	735.2
82.5°	164.3	165.6	178.0	176.7	200.0	135.7	149.4	187.7	226.0	259.8	282.5
85°	96.1	98.1	128.0	134.4	146.8	71.4	91.6	111.7	126.0	139.6	145.5
87.5°	10.4	13.6	71.4	73.4	65.6	21.4	37.0	46.8	50.0	53.3	46.8
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°	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6
2.5°	952.8	944.4	935.3	930.1	921.0	913.2	898.9	887.2	874.2	865.1	861.3
5°	1064.5	1044.4	1023.0	1007.4	987.9	971.0	938.5	899.6	887.2	861.3	854.8
7.5°	1210.0	1173.7	1137.3	1107.4	1073.6	1045.7	991.2	921.0	911.9	870.3	861.3
10°	1380.9	1327.6	1273.7	1227.6	1178.2	1135.3	1054.8	956.1	946.3	893.1	884.0
12.5°	1571.8	1506.9	1437.4	1368.5	1310.1	1249.7	1139.9	1010.6	995.1	932.0	919.7
15°	1768.6	1698.5	1617.9	1534.8	1462.7	1382.8	1244.5	1082.1	1053.5	979.5	962.6
17.5°	1962.8	1886.8	1802.4	1709.5	1625.1	1529.6	1357.5	1162.0	1112.6	1026.2	1004.8
20°	2150.5	2073.2	1984.3	1893.3	1788.1	1679.0	1473.1	1240.6	1165.2	1065.2	1037.3
22.5°	2321.4	2255.1	2166.1	2061.5	1955.0	1832.3	1590.7	1319.2	1211.3	1095.1	1059.4
25°	2501.3	2440.9	2352.5	2251.9	2127.8	1991.4	1712.1	1393.9	1248.4	1111.3	1067.1
27.5°	2683.1	2631.2	2548.0	2442.2	2309.0	2157.7	1835.5	1462.7	1278.2	1116.5	1063.2
30°	2877.3	2837.1	2760.4	2642.2	2507.8	2340.2	1970.0	1530.2	1297.1	1109.4	1045.7
32.5°	3061.1	3059.8	2991.6	2868.9	2724.0	2539.6	2111.6	1598.4	1306.8	1089.2	1015.2
35°	3252.1	3278.7	3227.4	3110.5	2957.9	2753.3	2268.1	1671.2	1307.5	1053.5	975.6
37.5°	3469.0	3516.5	3493.7	3382.7	3222.2	2996.8	2451.9	1753.0	1303.6	1004.1	917.8
40°	3715.9	3780.8	3780.2	3686.6	3515.2	3269.6	2665.6	1844.6	1294.5	942.4	849.6
42.5°	3998.4	4075.7	4097.1	4004.9	3831.5	3567.8	2910.5	1945.3	1280.2	881.4	777.5
45°	4321.8	4390.0	4430.3	4344.6	4170.5	3892.5	3191.7	2059.6	1262.6	802.8	695.0
47.5°	4668.0	4747.3	4807.7	4734.3	4548.5	4262.7	3524.9	2207.0	1256.2	713.2	606.0
50°	5097.4	5179.2	5309.8	5276.6	5174.7	4944.7	4229.6	2555.2	1258.8	628.1	531.3
52.5°	6162.6	6350.3	6515.2	6441.9	6199.6	5805.3	4802.5	2748.7	1204.2	558.6	479.3
55°	6484.1	6697.1	6940.7	6910.1	6677.6	6280.1	5255.2	2910.5	1151.6	507.9	445.6
57.5°	7046.5	7297.9	7638.2	7631.8	7346.6	6899.1	5837.8	3104.0	1128.9	478.7	428.7
60°	7642.1	7962.4	8432.6	8506.0	8196.2	7730.5	6526.3	3341.7	1132.1	462.5	418.9
62.5°	8077.3	8546.9	9230.9	9450.4	9085.4	8572.2	7240.7	3579.5	1112.6	443.6	407.2
65°	8103.9	8780.1	9750.5	10092.1	9722.5	9063.3	7492.8	3532.7	995.7	418.3	388.4
67.5°	7454.4	8335.2	9514.0	9888.8	9510.8	8760.6	7051.1	3088.4	809.3	374.1	355.9
70°	6208.7	7231.0	8454.7	8872.3	8559.9	7800.6	6136.6	2466.8	604.7	315.7	307.2
72.5°	4797.9	5751.4	6862.7	7249.2	7010.2	6342.5	4840.2	1797.8	431.9	255.9	249.4
75°	3430.1	4242.0	5048.6	5196.1	4960.3	4347.2	3140.4	1123.0	302.7	209.8	200.7
77.5°	2123.9	2652.0	2941.6	2752.0	2451.3	2037.5	1278.2	554.7	201.3	170.8	161.7
80°	942.4	1106.1	1032.7	920.4	726.8	597.6	390.4	246.2	129.9	131.9	126.7
82.5°	317.0	335.1	326.1	324.1	292.3	255.9	165.6	106.5	72.7	84.4	82.5
85°	154.6	161.7	162.4	168.2	146.1	113.7	44.8	42.2	31.2	45.5	47.4
87.5°	46.8	47.4	42.9	46.8	37.7	26.0	8.4	11.7	5.8	11.0	11.0
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°	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6	884.6
2.5°	854.1	851.5	847.0	841.8	840.5	834.0	832.0	828.8	826.8	823.6	821.0
5°	846.3	841.8	836.6	830.7	830.7	821.6	817.7	813.8	813.8	808.0	805.4
7.5°	854.1	848.3	842.4	837.2	839.2	828.8	824.9	821.0	820.3	814.5	811.9
10°	876.2	870.3	863.2	858.0	856.1	847.6	843.1	837.2	833.3	829.4	825.5
12.5°	910.0	902.2	893.1	882.0	877.5	870.3	863.2	855.4	846.3	842.4	836.6
15°	950.2	937.2	924.9	911.3	898.9	891.8	882.0	869.7	857.4	852.2	844.4
17.5°	983.4	969.7	952.2	935.9	913.9	908.0	894.4	879.4	859.3	857.4	845.7
20°	1011.3	990.5	969.1	949.6	915.8	912.6	895.7	878.1	849.6	849.6	835.3
22.5°	1026.9	998.3	973.0	947.0	904.8	902.2	882.7	861.9	826.8	828.1	810.6
25°	1029.5	995.1	963.2	932.0	883.3	878.8	854.1	831.4	793.1	790.5	772.3
27.5°	1019.1	978.8	941.8	904.1	851.5	841.8	814.5	787.2	749.5	743.0	723.6
30°	995.1	947.6	906.1	862.6	807.3	791.8	763.2	735.2	696.9	688.5	670.3
32.5°	956.7	902.8	856.7	813.2	752.1	732.6	704.1	676.1	639.1	632.6	615.7
35°	906.1	845.7	797.0	750.8	689.8	669.6	642.4	617.7	583.9	581.3	569.6
37.5°	842.4	779.4	727.5	683.3	625.5	615.1	587.2	569.0	541.0	543.6	537.8
40°	770.3	706.0	656.7	617.7	567.7	558.6	541.7	528.1	504.0	511.2	511.8
42.5°	697.6	633.3	588.5	553.4	510.5	504.7	493.0	485.2	467.0	481.3	487.1
45°	615.1	555.3	517.0	490.4	458.6	458.6	452.7	452.1	439.7	459.9	465.7
47.5°	535.2	488.4	461.8	445.6	423.5	433.9	431.9	437.1	428.0	448.8	454.0
50°	474.8	442.3	426.1	418.3	402.7	418.9	422.8	430.0	422.2	440.4	444.3
52.5°	436.5	415.0	405.9	404.0	393.0	413.1	419.6	426.1	417.0	433.9	433.2
55°	415.0	400.7	397.5	401.4	393.0	412.4	418.9	423.5	415.7	427.4	426.7
57.5°	407.2	399.4	401.4	407.2	401.4	417.6	420.9	426.1	418.3	423.5	426.1
60°	406.6	406.6	414.4	422.2	418.3	430.0	431.9	431.3	424.1	424.8	426.1
62.5°	402.7	412.4	425.4	437.8	436.5	450.8	452.1	443.6	437.8	431.3	429.3
65°	390.4	406.6	425.4	442.3	444.9	467.0	469.6	461.2	457.3	446.2	437.8
67.5°	363.1	383.9	405.9	426.7	431.3	461.2	467.0	470.2	472.2	465.0	454.0
70°	317.0	338.4	361.1	385.2	391.7	424.8	437.1	452.1	463.8	474.1	470.2
72.5°	257.9	277.3	296.8	318.9	328.7	363.1	379.3	405.3	423.5	450.1	461.2
75°	204.6	216.3	228.0	241.6	249.4	283.2	303.3	334.5	359.2	396.2	420.9
77.5°	161.1	166.9	172.8	178.6	181.9	200.7	216.9	248.1	276.7	323.5	359.8
80°	124.1	127.3	128.0	129.9	128.6	137.7	143.5	162.4	187.1	233.2	276.0
82.5°	79.9	82.5	83.8	87.0	80.5	92.2	96.1	98.1	111.1	144.8	175.4
85°	44.8	45.5	46.1	47.4	38.3	50.0	50.7	47.4	46.1	59.8	67.5
87.5°	11.0	10.4	11.0	11.0	4.5	10.4	10.4	7.1	5.2	9.7	7.8
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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CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7050-800

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	884.6	884.6	884.6	884.6	884.6	884.6
2.5°	815.1	813.8	814.5	811.2	809.9	810.6
5°	802.1	799.5	799.5	797.6	795.0	795.0
7.5°	808.0	802.8	800.8	797.0	793.1	793.7
10°	817.1	808.0	801.5	795.7	791.1	791.1
12.5°	822.9	806.7	797.0	789.2	784.0	784.0
15°	824.2	799.5	785.3	776.8	771.6	771.6
17.5°	816.4	785.3	767.1	756.0	750.2	751.5
20°	797.0	758.6	737.2	725.5	719.7	720.3
22.5°	766.4	722.3	697.6	683.9	678.1	678.1
25°	724.9	676.8	650.2	639.1	633.9	633.9
27.5°	677.4	628.1	604.7	596.3	593.0	593.0
30°	624.2	583.3	566.4	560.5	555.3	555.3
32.5°	579.4	550.1	544.3	536.5	522.9	522.2
35°	543.6	540.4	535.8	512.5	493.0	490.4
37.5°	524.2	543.6	515.1	474.8	459.2	458.6
40°	513.8	531.9	482.6	463.1	461.2	461.2
42.5°	489.1	502.1	480.6	469.6	469.6	470.2
45°	463.1	474.1	485.2	475.4	478.7	479.3
47.5°	444.9	467.0	485.2	476.7	483.2	487.1
50°	428.0	460.5	475.4	475.4	482.6	483.2
52.5°	424.1	451.4	466.3	473.5	474.1	470.9
55°	424.8	444.3	459.2	468.3	464.4	464.4
57.5°	424.1	440.4	453.4	456.6	458.6	458.6
60°	424.8	435.2	445.6	444.3	450.8	450.8
62.5°	426.7	428.0	433.2	431.9	441.7	441.7
65°	431.3	418.9	415.7	417.0	428.7	428.0
67.5°	439.7	406.6	396.2	396.9	413.7	411.1
70°	452.1	389.7	374.1	370.2	398.8	394.3
72.5°	456.0	370.2	345.5	341.6	358.5	345.5
75°	437.8	354.6	315.0	302.0	294.9	291.0
77.5°	390.4	344.9	283.2	255.9	244.9	242.3
80°	323.5	324.8	241.6	209.1	242.9	242.3
82.5°	244.2	280.6	193.6	181.2	176.0	146.8
85°	118.2	211.1	148.7	124.7	74.7	70.8
87.5°	10.4	88.3	85.7	55.9	25.3	24.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)