

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: P198923

Luminaire Tested: **XNV2-AF-02-LED-U-T2R-7050-600**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198923
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-7050-600
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 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: 8326 lumens
Efficiency: N/A
Efficacy: 126.2 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 (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

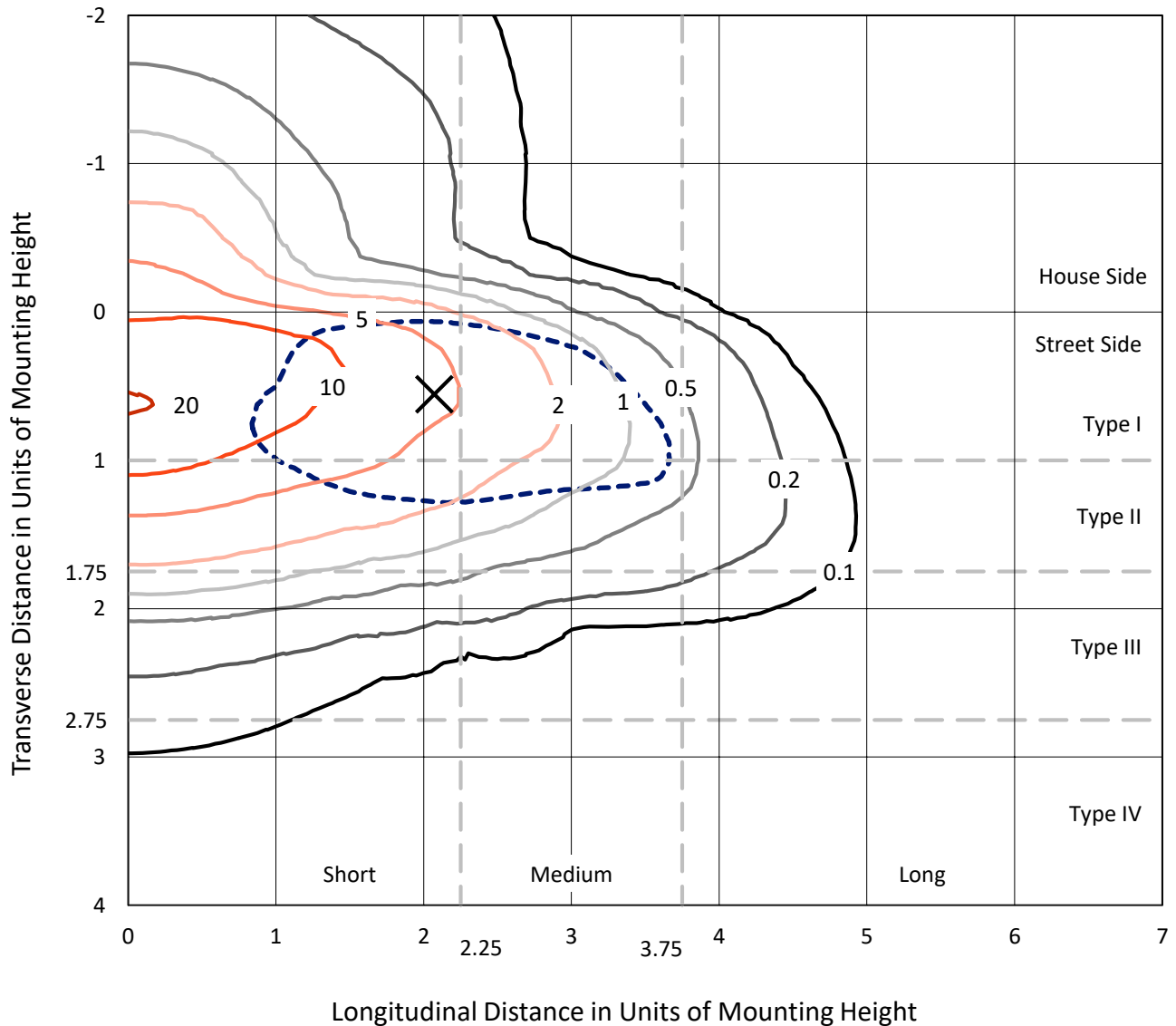


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Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

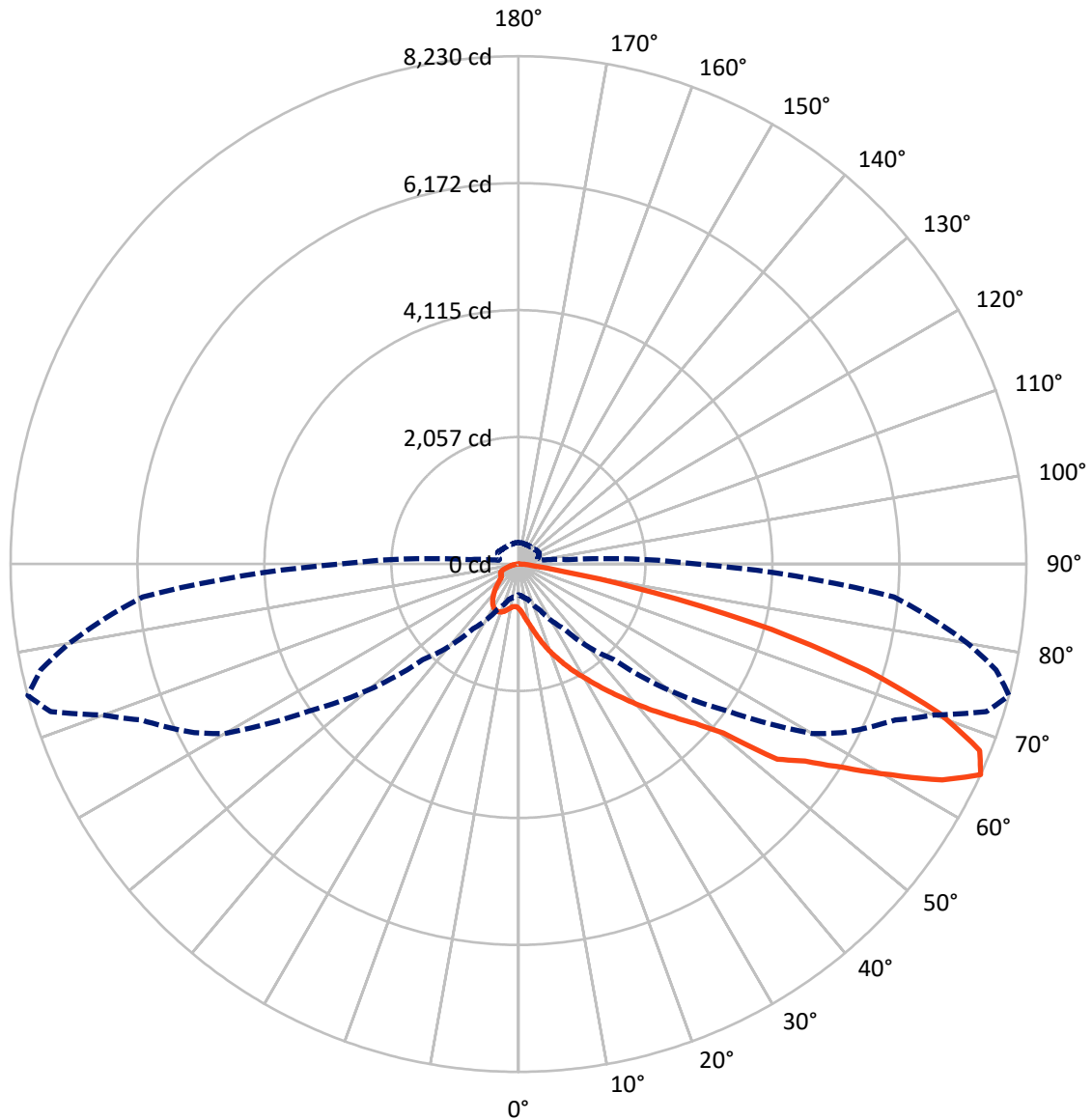


Based on 10 foot mounting height. Maximum calculated value = 20.7 fc
 Type II - Short - Semi-Cutoff

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Luminous Intensity Polar Plot



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



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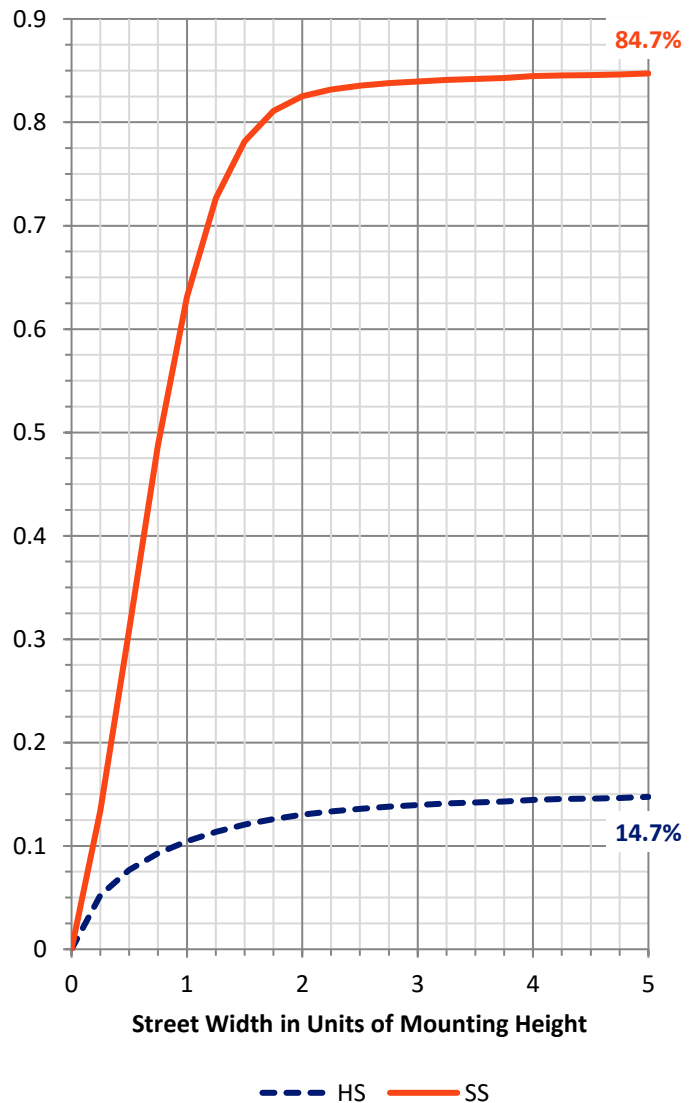
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1251.1	0.0	1251.1
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	7074.9	0.0	7074.9
	% Fixture	85.0	0.0	85.0
Total	Lumens	8326.0	0.0	8326.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.2	1.0
10°-20°	325.3	3.9
20°-30°	656.5	7.9
30°-40°	1114.9	13.4
40°-50°	1555.0	18.7
50°-60°	1905.8	22.9
60°-70°	1793.1	21.5
70°-80°	786.3	9.4
80°-90°	104.0	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°	8326.0	100.0
0°-180°	8326.0	100.0

Coefficient of Utilization



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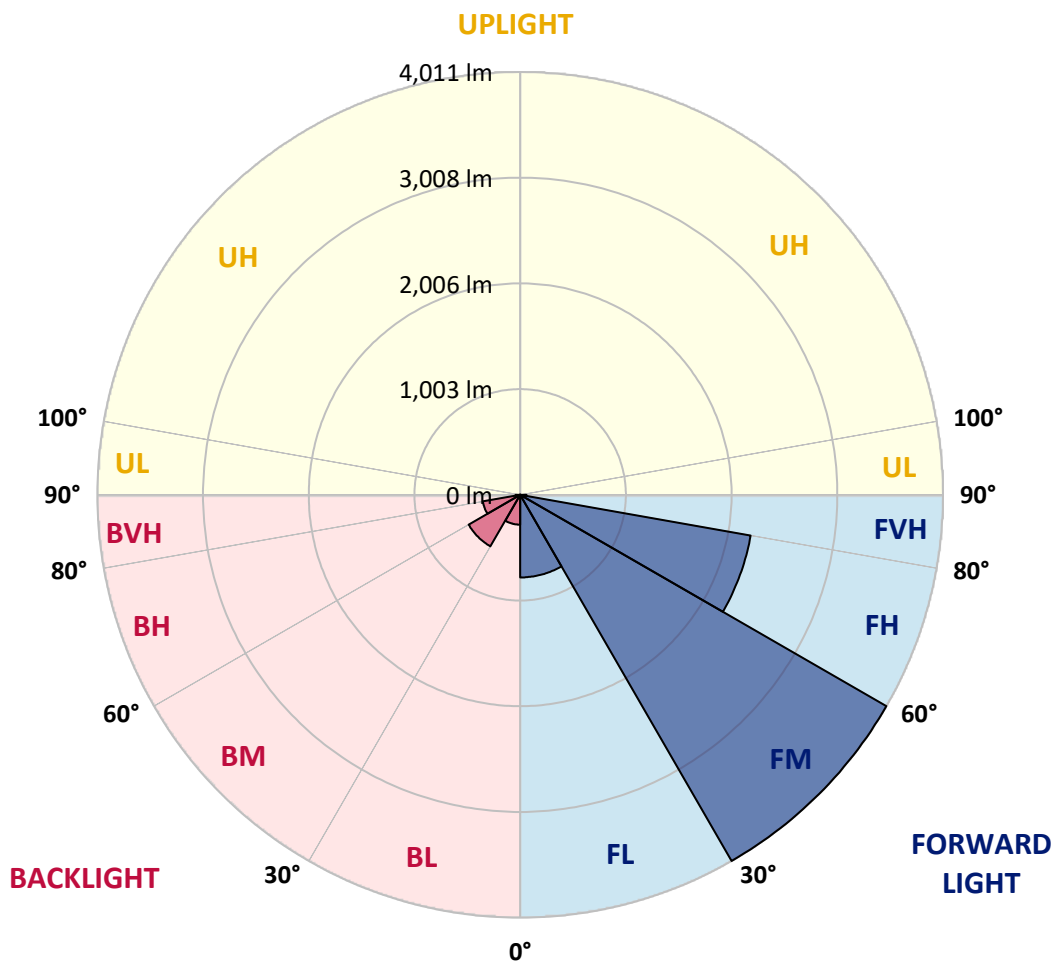
CATALOG NUMBER: XNV2-AF-02-LED-U-T2R-7050-600

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	783.7	9.4			
FM (30°-60°)	4011.1	48.2			
FH (60°-80°)	2219.8	26.7			G2/5000
FVH (80°-90°)	60.3	0.7			G1/100
BL (0°-30°)	283.2	3.4	B1/500		
BM (30°-60°)	564.6	6.8	B1/1000		
BH (60°-80°)	359.6	4.3	B1/500		G1/500
BVH (80°-90°)	43.7	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°	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4
2.5°	908.4	897.8	898.8	884.0	862.3	838.5	818.9	808.3	799.3	796.6	781.8
5°	1188.0	1174.8	1170.0	1136.1	1085.3	1024.9	965.0	941.7	922.7	911.0	882.4
7.5°	1416.8	1410.0	1403.6	1372.3	1322.0	1244.7	1148.3	1113.9	1082.1	1047.1	1012.7
10°	1572.6	1569.9	1567.3	1545.5	1503.7	1436.4	1332.6	1295.0	1255.3	1210.8	1165.8
12.5°	1690.1	1690.1	1692.3	1674.3	1648.8	1596.9	1502.6	1467.7	1427.4	1380.8	1329.4
15°	1769.1	1771.2	1782.3	1787.6	1774.4	1741.0	1658.4	1627.6	1589.5	1543.4	1492.6
17.5°	1821.5	1825.7	1842.2	1859.6	1876.6	1864.9	1803.5	1774.9	1740.5	1698.1	1650.4
20°	1943.3	1938.0	1938.6	1933.3	1958.2	1967.2	1933.3	1909.4	1881.9	1843.2	1799.8
22.5°	2199.1	2189.1	2163.1	2096.9	2066.7	2063.6	2043.4	2030.7	2009.5	1985.2	1941.7
25°	2532.8	2521.2	2469.8	2360.7	2270.7	2187.5	2150.4	2142.5	2128.7	2112.3	2081.0
27.5°	2877.6	2864.9	2798.7	2661.0	2543.4	2375.5	2260.1	2249.5	2236.8	2229.9	2215.0
30°	3181.1	3167.4	3102.2	2962.4	2820.4	2620.2	2407.8	2370.8	2349.0	2351.2	2342.7
32.5°	3447.6	3435.4	3362.3	3219.8	3075.7	2881.4	2599.6	2541.8	2493.1	2475.1	2481.5
35°	3671.1	3660.0	3580.0	3436.4	3291.3	3129.8	2846.4	2759.5	2680.1	2630.3	2624.5
37.5°	3802.4	3796.1	3739.9	3618.1	3474.0	3355.4	3122.9	3026.5	2909.4	2836.9	2805.1
40°	3795.0	3801.9	3792.4	3737.3	3625.5	3539.2	3411.0	3315.7	3201.3	3093.2	3028.6
42.5°	3687.0	3696.5	3739.4	3768.0	3737.8	3685.4	3662.6	3591.6	3488.9	3374.5	3285.0
45°	3538.7	3547.1	3602.7	3706.0	3792.4	3807.2	3882.9	3847.5	3760.6	3663.1	3564.6
47.5°	3311.4	3327.9	3392.5	3556.7	3762.2	3905.2	4067.8	4084.2	4033.9	3953.4	3861.2
50°	2982.5	3004.2	3094.8	3328.4	3647.8	4005.8	4342.7	4405.2	4385.1	4303.5	4210.3
52.5°	2645.7	2667.4	2788.1	3036.5	3463.4	4047.1	4613.3	4773.3	4888.8	4973.0	4989.4
55°	2295.0	2319.4	2451.8	2737.8	3217.7	3994.7	4806.7	4988.3	5105.4	5193.3	5228.8
57.5°	1899.4	1926.9	2055.1	2344.3	2870.2	3783.9	5021.7	5279.1	5453.4	5589.0	5665.2
60°	1445.4	1479.9	1612.8	1904.1	2413.7	3380.3	5117.6	5498.4	5775.4	5978.8	6099.6
62.5°	916.3	951.3	1089.5	1391.9	1894.1	2828.9	4846.4	5402.0	5874.5	6175.3	6396.7
65°	500.0	515.4	592.2	819.9	1277.0	2194.9	4158.9	4814.1	5494.7	5921.1	6261.1
67.5°	375.0	377.1	385.1	440.7	680.1	1482.0	3251.6	3851.7	4607.5	5156.2	5562.5
70°	328.4	328.4	329.4	330.0	369.2	803.0	2202.9	2755.3	3448.1	4003.2	4507.9
72.5°	294.5	291.3	290.3	283.9	289.2	411.5	1199.2	1695.4	2279.7	2902.5	3373.4
75°	254.2	253.7	253.7	247.4	250.5	289.7	520.1	813.6	1266.4	1846.4	2309.8
77.5°	219.8	216.1	216.6	212.9	223.0	221.9	246.8	335.3	551.4	969.8	1354.3
80°	181.1	178.5	180.1	178.0	193.9	164.2	166.3	205.0	273.8	425.3	599.6
82.5°	134.0	135.1	145.1	144.1	163.1	110.7	121.8	153.1	184.3	211.9	230.4
85°	78.4	80.0	104.3	109.6	119.7	58.3	74.7	91.1	102.8	113.9	118.6
87.5°	8.5	11.1	58.3	59.9	53.5	17.5	30.2	38.1	40.8	43.4	38.1
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°	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4
2.5°	777.0	770.1	762.7	758.5	751.1	744.7	733.0	723.5	712.9	705.5	702.3
5°	868.1	851.7	834.2	821.5	805.6	791.8	765.4	733.6	723.5	702.3	697.0
7.5°	986.8	957.1	927.4	903.1	875.5	852.8	808.3	751.1	743.6	709.7	702.3
10°	1126.1	1082.6	1038.7	1001.1	960.8	925.8	860.2	779.7	771.7	728.3	720.9
12.5°	1281.8	1228.8	1172.1	1116.0	1068.3	1019.1	929.6	824.2	811.4	760.1	750.0
15°	1442.3	1385.1	1319.4	1251.6	1192.8	1127.6	1014.8	882.4	859.1	798.7	785.0
17.5°	1600.6	1538.7	1469.8	1394.1	1325.2	1247.3	1107.0	947.6	907.3	836.9	819.4
20°	1753.7	1690.7	1618.1	1544.0	1458.2	1369.2	1201.3	1011.7	950.2	868.6	845.9
22.5°	1893.0	1839.0	1766.4	1681.1	1594.3	1494.2	1297.1	1075.7	987.8	893.0	863.9
25°	2039.7	1990.5	1918.4	1836.3	1735.2	1623.9	1396.2	1136.7	1018.0	906.2	870.2
27.5°	2188.0	2145.7	2077.9	1991.5	1882.9	1759.5	1496.8	1192.8	1042.4	910.5	867.1
30°	2346.4	2313.6	2251.1	2154.7	2045.0	1908.4	1606.5	1247.9	1057.7	904.7	852.8
32.5°	2496.3	2495.2	2439.6	2339.5	2221.4	2071.0	1721.9	1303.5	1065.7	888.2	827.9
35°	2652.0	2673.7	2631.9	2536.5	2412.1	2245.2	1849.6	1362.8	1066.2	859.1	795.5
37.5°	2828.9	2867.6	2849.0	2758.5	2627.6	2443.9	1999.5	1429.6	1063.0	818.9	748.4
40°	3030.2	3083.2	3082.6	3006.4	2866.5	2666.3	2173.7	1504.2	1055.6	768.5	692.8
42.5°	3260.6	3323.6	3341.1	3265.9	3124.5	2909.4	2373.4	1586.3	1044.0	718.7	634.0
45°	3524.4	3580.0	3612.8	3542.9	3400.9	3174.3	2602.7	1679.6	1029.7	654.7	566.7
47.5°	3806.7	3871.3	3920.5	3860.7	3709.2	3476.2	2874.5	1799.8	1024.4	581.6	494.2
50°	4156.8	4223.5	4330.0	4303.0	4219.8	4032.3	3449.1	2083.7	1026.5	512.2	433.3
52.5°	5025.4	5178.5	5313.0	5253.2	5055.6	4734.1	3916.3	2241.5	982.0	455.5	390.9
55°	5287.6	5461.3	5659.9	5635.1	5445.4	5121.3	4285.5	2373.4	939.1	414.2	363.3
57.5°	5746.3	5951.3	6228.8	6223.5	5991.0	5626.0	4760.6	2531.2	920.5	390.4	349.6
60°	6232.0	6493.1	6876.6	6936.4	6683.8	6304.0	5322.0	2725.1	923.2	377.1	341.6
62.5°	6586.9	6969.8	7527.5	7706.6	7408.9	6990.5	5904.7	2919.0	907.3	361.8	332.1
65°	6608.6	7159.9	7951.3	8229.9	7928.5	7390.9	6110.2	2880.8	812.0	341.1	316.7
67.5°	6078.9	6797.1	7758.5	8064.1	7755.8	7144.1	5750.0	2518.5	660.0	305.1	290.3
70°	5063.0	5896.7	6894.6	7235.2	6980.4	6361.2	5004.2	2011.6	493.1	257.4	250.5
72.5°	3912.6	4690.1	5596.4	5911.5	5716.6	5172.1	3947.0	1466.1	352.2	208.7	203.4
75°	2797.1	3459.2	4117.0	4237.3	4045.0	3545.0	2560.9	915.8	246.8	171.1	163.7
77.5°	1732.0	2162.6	2398.8	2244.2	1998.9	1661.5	1042.4	452.3	164.2	139.3	131.9
80°	768.5	902.0	842.2	750.5	592.7	487.3	318.3	200.7	105.9	107.5	103.3
82.5°	258.5	273.3	265.9	264.3	238.3	208.7	135.1	86.9	59.3	68.9	67.3
85°	126.1	131.9	132.4	137.2	119.2	92.7	36.5	34.4	25.4	37.1	38.7
87.5°	38.1	38.7	35.0	38.1	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°	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4	721.4
2.5°	696.5	694.4	690.7	686.4	685.4	680.1	678.5	675.8	674.3	671.6	669.5
5°	690.1	686.4	682.2	677.4	677.4	670.0	666.8	663.7	663.7	658.9	656.8
7.5°	696.5	691.7	687.0	682.7	684.3	675.8	672.7	669.5	669.0	664.2	662.1
10°	714.5	709.7	703.9	699.7	698.1	691.2	687.5	682.7	679.6	676.4	673.2
12.5°	742.1	735.7	728.3	719.3	715.6	709.7	703.9	697.6	690.1	687.0	682.2
15°	774.9	764.3	754.2	743.1	733.0	727.2	719.3	709.2	699.2	694.9	688.6
17.5°	801.9	790.8	776.5	763.2	745.2	740.5	729.3	717.2	700.7	699.2	689.6
20°	824.7	807.7	790.3	774.4	746.8	744.2	730.4	716.1	692.8	692.8	681.1
22.5°	837.4	814.1	793.4	772.2	737.8	735.7	719.8	702.9	674.3	675.3	661.0
25°	839.5	811.4	785.5	760.1	720.3	716.6	696.5	678.0	646.7	644.6	629.8
27.5°	831.0	798.2	768.0	737.3	694.4	686.4	664.2	641.9	611.2	605.9	590.0
30°	811.4	772.8	738.9	703.4	658.4	645.7	622.4	599.6	568.3	561.4	546.6
32.5°	780.2	736.2	698.6	663.1	613.3	597.5	574.2	551.4	521.2	515.9	502.1
35°	738.9	689.6	649.9	612.3	562.5	546.1	523.8	503.7	476.2	474.0	464.5
37.5°	687.0	635.6	593.2	557.2	510.1	501.6	478.8	464.0	441.2	443.3	438.6
40°	628.2	575.7	535.5	503.7	462.9	455.5	441.7	430.6	411.0	416.8	417.4
42.5°	568.9	516.4	479.9	451.3	416.3	411.5	402.0	395.7	380.8	392.5	397.2
45°	501.6	452.9	421.6	399.9	373.9	373.9	369.2	368.6	358.6	375.0	379.8
47.5°	436.4	398.3	376.6	363.3	345.3	353.8	352.2	356.5	349.0	366.0	370.2
50°	387.2	360.7	347.5	341.1	328.4	341.6	344.8	350.6	344.3	359.1	362.3
52.5°	355.9	338.5	331.0	329.4	320.4	336.9	342.2	347.5	340.0	353.8	353.3
55°	338.5	326.8	324.2	327.3	320.4	336.3	341.6	345.3	339.0	348.5	348.0
57.5°	332.1	325.7	327.3	332.1	327.3	340.6	343.2	347.5	341.1	345.3	347.5
60°	331.6	331.6	337.9	344.3	341.1	350.6	352.2	351.7	345.9	346.4	347.5
62.5°	328.4	336.3	346.9	357.0	355.9	367.6	368.6	361.8	357.0	351.7	350.1
65°	318.3	331.6	346.9	360.7	362.8	380.8	382.9	376.1	372.9	363.9	357.0
67.5°	296.1	313.0	331.0	348.0	351.7	376.1	380.8	383.5	385.1	379.2	370.2
70°	258.5	276.0	294.5	314.1	319.4	346.4	356.5	368.6	378.2	386.7	383.5
72.5°	210.3	226.2	242.1	260.1	268.0	296.1	309.3	330.5	345.3	367.1	376.1
75°	166.8	176.4	185.9	197.0	203.4	230.9	247.4	272.8	292.9	323.1	343.2
77.5°	131.4	136.1	140.9	145.7	148.3	163.7	176.9	202.3	225.6	263.8	293.4
80°	101.2	103.8	104.3	105.9	104.9	112.3	117.1	132.4	152.5	190.1	225.1
82.5°	65.1	67.3	68.3	71.0	65.7	75.2	78.4	80.0	90.6	118.1	143.0
85°	36.5	37.1	37.6	38.7	31.2	40.8	41.3	38.7	37.6	48.7	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-7050-600

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	721.4	721.4	721.4	721.4	721.4	721.4
2.5°	664.7	663.7	664.2	661.5	660.5	661.0
5°	654.1	652.0	652.0	650.4	648.3	648.3
7.5°	658.9	654.7	653.1	649.9	646.7	647.2
10°	666.3	658.9	653.6	648.8	645.1	645.1
12.5°	671.1	657.8	649.9	643.5	639.3	639.3
15°	672.1	652.0	640.4	633.5	629.2	629.2
17.5°	665.8	640.4	625.5	616.5	611.8	612.8
20°	649.9	618.6	601.2	591.6	586.9	587.4
22.5°	625.0	589.0	568.9	557.7	553.0	553.0
25°	591.1	551.9	530.2	521.2	516.9	516.9
27.5°	552.4	512.2	493.1	486.2	483.6	483.6
30°	509.0	475.6	461.9	457.1	452.9	452.9
32.5°	472.5	448.6	443.9	437.5	426.4	425.8
35°	443.3	440.7	437.0	417.9	402.0	399.9
37.5°	427.4	443.3	420.0	387.2	374.5	373.9
40°	419.0	433.8	393.5	377.6	376.1	376.1
42.5°	398.8	409.4	391.9	382.9	382.9	383.5
45°	377.6	386.7	395.7	387.7	390.4	390.9
47.5°	362.8	380.8	395.7	388.8	394.1	397.2
50°	349.0	375.5	387.7	387.7	393.5	394.1
52.5°	345.9	368.1	380.3	386.1	386.7	384.0
55°	346.4	362.3	374.5	381.9	378.7	378.7
57.5°	345.9	359.1	369.7	372.4	373.9	373.9
60°	346.4	354.9	363.3	362.3	367.6	367.6
62.5°	348.0	349.0	353.3	352.2	360.2	360.2
65°	351.7	341.6	339.0	340.0	349.6	349.0
67.5°	358.6	331.6	323.1	323.6	337.4	335.3
70°	368.6	317.8	305.1	301.9	325.2	321.5
72.5°	371.8	301.9	281.8	278.6	292.4	281.8
75°	357.0	289.2	256.9	246.3	240.5	237.3
77.5°	318.3	281.2	230.9	208.7	199.7	197.6
80°	263.8	264.8	197.0	170.6	198.1	197.6
82.5°	199.2	228.8	157.8	147.8	143.5	119.7
85°	96.4	172.1	121.3	101.7	60.9	57.7
87.5°	8.5	72.0	69.9	45.6	20.7	19.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)