

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: P198764

Luminaire Tested: **XNV-AF-01-LED-U-T2R-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198764
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: XNV-AF-01-LED-U-T2R-800
Description: XNV ROADWAY AND AREA LUMINAIRE
(1) 70 CRI, 4000K, 800mA LIGHTSQUARE WITH 16 LEDS EACH AND TYPE II ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5237.5 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 0.5' x H: 0')
IES Classification: Type II - Short - Semi-Cutoff
BUG Rating: B1 - U0 - G1

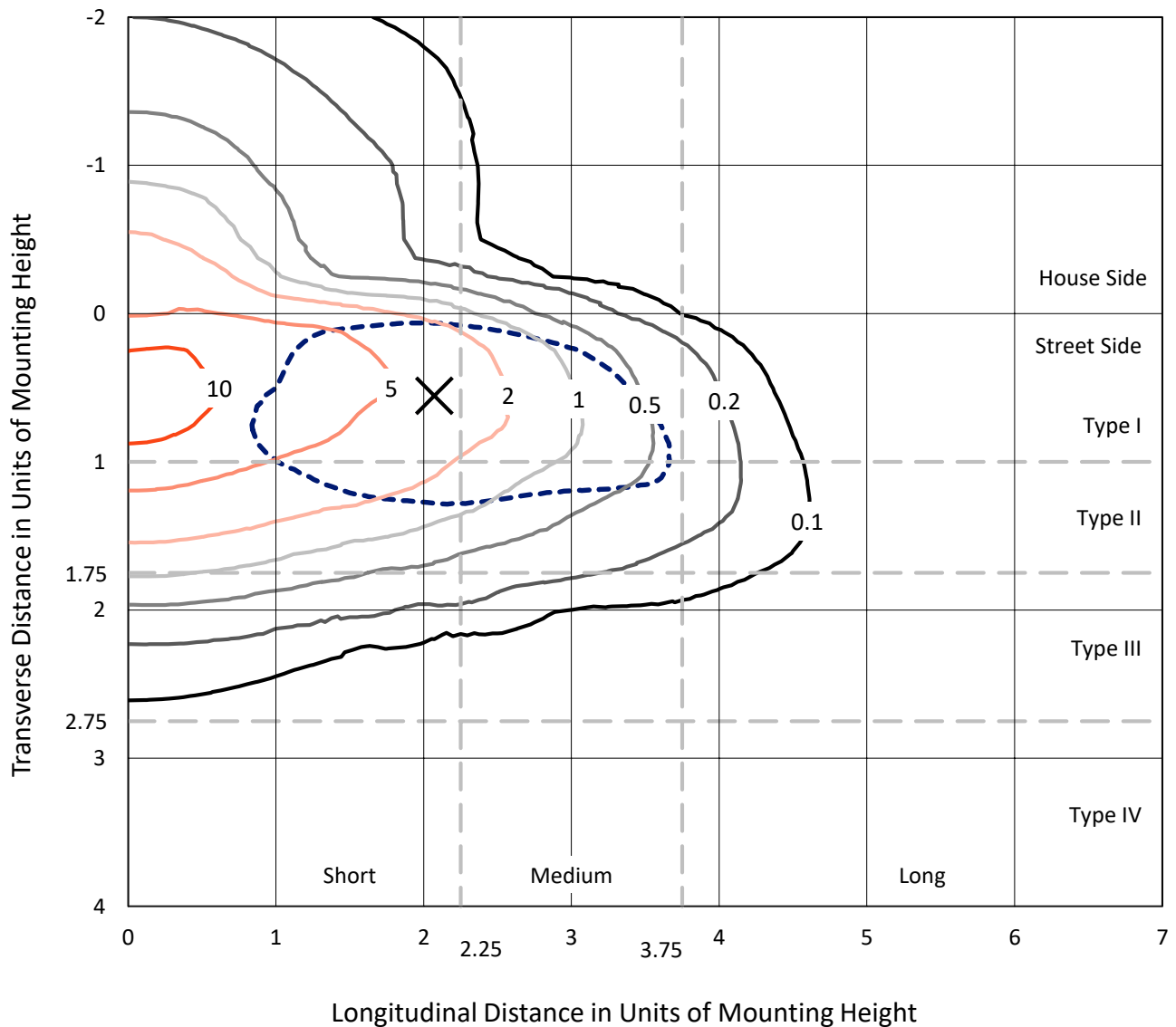
Input Watts (W): 44
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

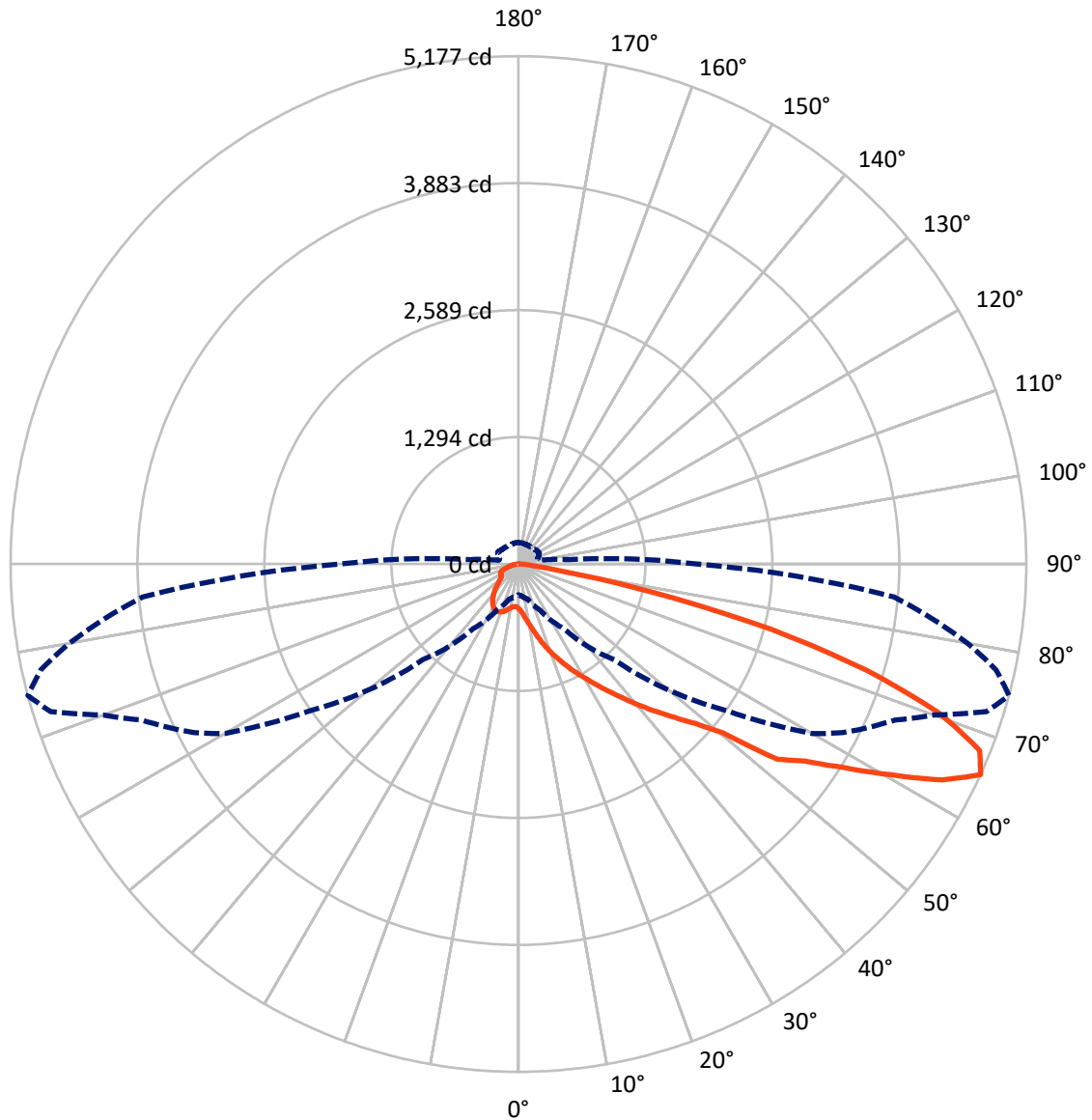
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13 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	787.0	0.0	787.0
	% Fixture	15.0	0.0	15.0
Street Side	Lumens	4450.5	0.0	4450.5
	% Fixture	85.0	0.0	85.0
Total	Lumens	5237.5	0.0	5237.5
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.6	1.0
10°-20°	204.6	3.9
20°-30°	413.0	7.9
30°-40°	701.3	13.4
40°-50°	978.2	18.7
50°-60°	1198.9	22.9
60°-70°	1128.0	21.5
70°-80°	494.6	9.4
80°-90°	65.4	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°	5237.5	100.0
0°-180°	5237.5	100.0

Coefficient of Utilization



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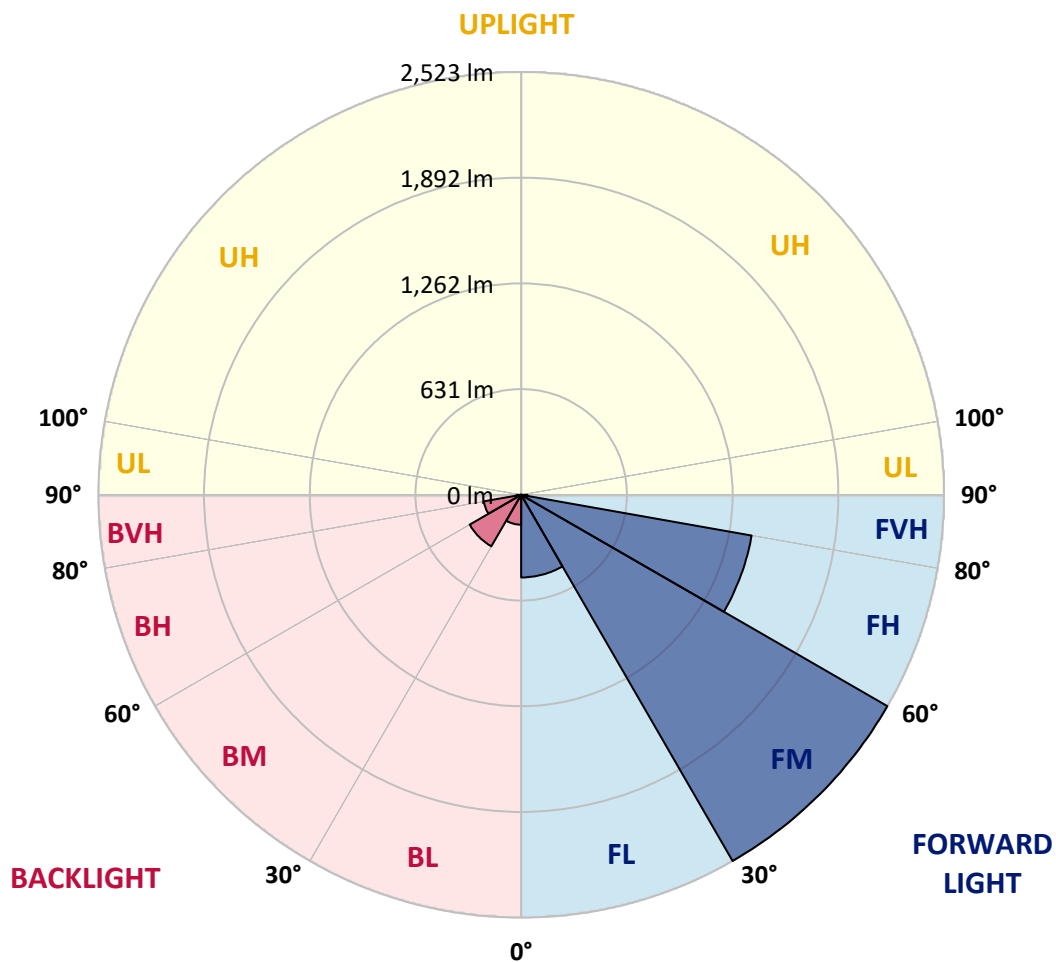
CATALOG NUMBER: XNV-AF-01-LED-U-T2R-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	493.0	9.4			
FM (30°-60°)	2523.2	48.2			
FH (60°-80°)	1396.4	26.7			G1/1800
FVH (80°-90°)	37.9	0.7			G1/100
BL (0°-30°)	178.2	3.4	B1/500		
BM (30°-60°)	355.1	6.8	B1/1000		
BH (60°-80°)	226.2	4.3	B1/500		G1/500
BVH (80°-90°)	27.5	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-G1

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	57.5°	60°	62.5°	65°
0°	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8
2.5°	571.4	564.8	565.4	556.1	542.5	527.4	515.1	508.4	502.8	501.1	491.7
5°	747.4	739.0	736.0	714.6	682.7	644.7	607.0	592.4	580.4	573.1	555.1
7.5°	891.3	886.9	882.9	863.3	831.7	783.0	722.3	700.7	680.7	658.7	637.1
10°	989.2	987.6	985.9	972.2	945.9	903.6	838.3	814.7	789.6	761.7	733.4
12.5°	1063.2	1063.2	1064.5	1053.2	1037.2	1004.5	945.2	923.2	897.9	868.6	836.3
15°	1112.9	1114.2	1121.2	1124.5	1116.1	1095.2	1043.2	1023.9	999.9	970.9	939.0
17.5°	1145.8	1148.5	1158.8	1169.8	1180.5	1173.1	1134.5	1116.6	1094.9	1068.2	1038.2
20°	1222.4	1219.2	1219.5	1216.1	1231.7	1237.5	1216.1	1201.1	1183.8	1159.5	1132.2
22.5°	1383.3	1377.1	1360.7	1319.1	1300.1	1298.1	1285.4	1277.5	1264.1	1248.8	1221.5
25°	1593.2	1586.0	1553.7	1485.0	1428.3	1376.1	1352.8	1347.7	1339.0	1328.7	1309.1
27.5°	1810.2	1802.2	1760.6	1674.0	1600.0	1494.3	1421.7	1415.0	1407.1	1402.7	1393.4
30°	2001.1	1992.4	1951.5	1863.5	1774.2	1648.3	1514.7	1491.4	1477.7	1479.0	1473.7
32.5°	2168.7	2161.1	2115.1	2025.4	1934.8	1812.6	1635.3	1599.0	1568.3	1556.9	1561.0
35°	2309.3	2302.4	2252.0	2161.7	2070.5	1968.8	1790.6	1735.8	1685.9	1654.6	1650.9
37.5°	2392.0	2388.0	2352.6	2276.0	2185.3	2110.8	1964.5	1903.8	1830.2	1784.5	1764.6
40°	2387.3	2391.6	2385.6	2350.9	2280.7	2226.4	2145.7	2085.7	2013.8	1945.8	1905.1
42.5°	2319.3	2325.3	2352.3	2370.3	2351.3	2318.3	2304.0	2259.3	2194.7	2122.7	2066.5
45°	2226.0	2231.4	2266.3	2331.3	2385.6	2394.9	2442.6	2420.3	2365.6	2304.3	2242.3
47.5°	2083.0	2093.4	2134.1	2237.3	2366.6	2456.6	2558.9	2569.1	2537.5	2486.9	2428.9
50°	1876.2	1889.8	1946.8	2093.8	2294.7	2519.8	2731.8	2771.1	2758.5	2707.1	2648.5
52.5°	1664.2	1677.9	1753.8	1910.2	2178.7	2545.8	2902.0	3002.7	3075.3	3128.3	3138.6
55°	1443.7	1459.0	1542.3	1722.2	2024.1	2512.9	3023.6	3137.9	3211.6	3266.9	3289.2
57.5°	1194.8	1212.1	1292.8	1474.7	1805.5	2380.3	3159.0	3320.8	3430.5	3515.8	3563.8
60°	909.3	930.9	1014.6	1197.8	1518.4	2126.4	3219.2	3458.8	3633.0	3761.0	3837.0
62.5°	576.4	598.4	685.4	875.6	1191.4	1779.5	3048.6	3398.1	3695.3	3884.6	4023.9
65°	314.6	324.2	372.5	515.8	803.3	1380.7	2616.2	3028.3	3456.4	3724.7	3938.6
67.5°	235.9	237.2	242.2	277.2	427.8	932.2	2045.4	2423.0	2898.3	3243.6	3499.1
70°	206.5	206.5	207.2	207.6	232.2	505.1	1385.7	1733.2	2169.1	2518.2	2835.7
72.5°	185.3	183.2	182.6	178.6	181.9	258.9	754.3	1066.5	1434.1	1825.9	2122.0
75°	159.9	159.6	159.6	155.6	157.6	182.3	327.1	511.8	796.7	1161.5	1453.0
77.5°	138.3	136.0	136.3	133.9	140.2	139.6	155.3	210.9	346.9	610.1	851.9
80°	114.0	112.3	113.2	111.9	121.9	103.3	104.6	128.9	172.3	267.5	377.2
82.5°	84.3	85.0	91.2	90.6	102.6	69.7	76.6	96.3	115.9	133.3	145.0
85°	49.3	50.3	65.7	68.9	75.3	36.6	47.0	57.3	64.7	71.6	74.7
87.5°	5.3	7.0	36.6	37.6	33.7	10.9	19.0	24.0	25.7	27.3	24.0
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):

	67.5°	70°	72.5°	75°	77.5°	80°	85°	90°	95°	100°	102.5°
0°	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8
2.5°	488.8	484.5	479.8	477.1	472.5	468.4	461.1	455.1	448.5	443.8	441.8
5°	546.1	535.7	524.8	516.8	506.8	498.1	481.5	461.5	455.1	441.8	438.4
7.5°	620.7	602.1	583.4	568.0	550.8	536.4	508.4	472.5	467.8	446.5	441.8
10°	708.4	681.1	653.4	629.7	604.4	582.4	541.1	490.4	485.5	458.2	453.5
12.5°	806.3	772.9	737.3	702.1	672.1	641.1	584.7	518.4	510.5	478.1	471.8
15°	907.3	871.2	829.9	787.4	750.3	709.3	638.4	555.1	540.4	502.5	493.8
17.5°	1006.9	967.9	924.5	877.0	833.6	784.6	696.3	596.1	570.7	526.4	515.5
20°	1103.2	1063.6	1017.8	971.2	917.3	861.3	755.7	636.4	597.7	546.5	532.1
22.5°	1190.8	1156.9	1111.1	1057.5	1002.9	939.9	816.0	676.7	621.3	561.7	543.4
25°	1283.1	1252.1	1206.8	1155.1	1091.5	1021.5	878.3	715.0	640.4	570.1	547.4
27.5°	1376.4	1349.8	1307.1	1252.8	1184.5	1106.8	941.6	750.3	655.7	572.8	545.4
30°	1476.0	1455.4	1416.1	1355.4	1286.5	1200.4	1010.6	785.0	665.3	569.1	536.4
32.5°	1570.3	1569.6	1534.6	1471.7	1397.4	1302.7	1083.2	820.0	670.3	558.7	520.8
35°	1668.2	1681.9	1655.6	1595.6	1517.3	1412.4	1163.5	857.3	670.7	540.4	500.4
37.5°	1779.5	1803.9	1792.2	1735.2	1652.9	1537.3	1257.8	899.3	668.7	515.1	470.8
40°	1906.2	1939.5	1939.1	1891.1	1803.2	1677.2	1367.4	946.2	664.0	483.4	435.8
42.5°	2051.1	2090.7	2101.8	2054.4	1965.5	1830.2	1493.0	997.9	656.7	452.1	398.8
45°	2217.0	2252.0	2272.7	2228.7	2139.4	1996.8	1637.2	1056.5	647.7	411.8	356.5
47.5°	2394.6	2435.2	2466.2	2428.6	2333.2	2186.7	1808.2	1132.2	644.4	365.8	310.9
50°	2614.9	2656.8	2723.8	2706.8	2654.5	2536.5	2169.7	1310.7	645.7	322.2	272.5
52.5°	3161.2	3257.6	3342.2	3304.5	3180.3	2978.0	2463.6	1410.0	617.8	286.5	245.9
55°	3326.2	3435.5	3560.4	3544.7	3425.5	3221.6	2695.8	1493.0	590.8	260.5	228.5
57.5°	3614.7	3743.7	3918.2	3914.9	3768.7	3539.1	2994.7	1592.3	579.1	245.5	219.9
60°	3920.3	4084.5	4325.8	4363.4	4204.4	3965.6	3347.8	1714.3	580.7	237.2	214.9
62.5°	4143.5	4384.4	4735.2	4847.9	4660.6	4397.4	3714.3	1836.2	570.7	227.6	208.9
65°	4157.2	4504.0	5001.8	5177.1	4987.4	4649.3	3843.6	1812.2	510.8	214.6	199.3
67.5°	3824.0	4275.7	4880.5	5072.7	4878.9	4494.0	3617.1	1584.2	415.1	191.9	182.6
70°	3185.0	3709.3	4337.1	4551.3	4391.0	4001.6	3147.9	1265.4	310.2	161.9	157.6
72.5°	2461.2	2950.4	3520.4	3718.6	3596.1	3253.6	2482.9	922.3	221.6	131.2	128.0
75°	1759.6	2176.0	2589.8	2665.5	2544.5	2230.0	1610.9	576.1	155.3	107.6	102.9
77.5°	1089.5	1360.4	1509.0	1411.7	1257.4	1045.3	655.7	284.6	103.3	87.7	83.0
80°	483.4	567.4	529.8	472.1	372.9	306.6	200.3	126.2	66.6	67.6	65.0
82.5°	162.5	172.0	167.3	166.2	150.0	131.2	85.0	54.6	37.3	43.3	42.4
85°	79.3	83.0	83.3	86.3	75.0	58.3	23.0	21.7	16.0	23.3	24.3
87.5°	24.0	24.3	22.0	24.0	19.3	13.3	4.3	6.0	3.0	5.6	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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CANDELA DISTRIBUTION (continued):

	105°	107.5°	110°	112.5°	115°	117.5°	120°	122.5°	125°	127.5°	130°
0°	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8	453.8
2.5°	438.1	436.8	434.4	431.8	431.2	427.8	426.8	425.1	424.1	422.5	421.1
5°	434.1	431.8	429.1	426.2	426.2	421.5	419.5	417.5	417.5	414.5	413.2
7.5°	438.1	435.2	432.1	429.4	430.5	425.1	423.2	421.1	420.8	417.8	416.4
10°	449.5	446.5	442.8	440.2	439.2	434.9	432.5	429.4	427.5	425.4	423.5
12.5°	466.8	462.8	458.2	452.5	450.1	446.5	442.8	438.8	434.1	432.1	429.1
15°	487.4	480.8	474.4	467.5	461.1	457.5	452.5	446.1	439.8	437.1	433.1
17.5°	504.4	497.5	488.5	480.1	468.8	465.7	458.8	451.1	440.8	439.8	433.8
20°	518.7	508.1	497.2	487.1	469.8	468.1	459.5	450.5	435.8	435.8	428.5
22.5°	526.7	512.1	499.1	485.8	464.1	462.8	452.8	442.1	424.1	424.8	415.8
25°	528.0	510.5	494.1	478.1	453.2	450.8	438.1	426.5	406.8	405.5	396.2
27.5°	522.7	502.1	483.1	463.8	436.8	431.8	417.8	403.9	384.5	381.2	371.1
30°	510.5	486.1	464.8	442.4	414.2	406.1	391.5	377.2	357.5	353.2	343.8
32.5°	490.8	463.1	439.5	417.2	385.9	375.8	361.2	346.9	327.9	324.5	315.9
35°	464.8	433.8	408.8	385.1	353.8	343.5	329.5	316.8	299.5	298.2	292.2
37.5°	432.1	399.9	373.2	350.5	320.9	315.5	301.2	291.8	277.5	278.9	275.9
40°	395.2	362.1	336.9	316.8	291.2	286.5	277.8	270.9	258.6	262.2	262.6
42.5°	357.8	324.9	301.9	283.9	261.9	258.9	252.9	248.9	239.6	246.9	249.9
45°	315.5	284.9	265.3	251.5	235.3	235.3	232.2	231.9	225.6	235.9	238.9
47.5°	274.6	250.5	236.9	228.5	217.3	222.6	221.6	224.2	219.5	230.3	232.9
50°	243.6	226.9	218.6	214.6	206.5	214.9	216.9	220.5	216.6	225.9	227.9
52.5°	223.9	212.9	208.3	207.2	201.6	212.0	215.2	218.6	213.9	222.6	222.2
55°	212.9	205.6	203.9	205.9	201.6	211.5	214.9	217.3	213.3	219.2	218.9
57.5°	208.9	204.9	205.9	208.9	205.9	214.2	215.9	218.6	214.6	217.3	218.6
60°	208.6	208.6	212.6	216.6	214.6	220.5	221.6	221.3	217.6	217.9	218.6
62.5°	206.5	211.5	218.2	224.5	223.9	231.2	231.9	227.6	224.5	221.3	220.2
65°	200.3	208.6	218.2	226.9	228.2	239.6	240.9	236.6	234.6	228.9	224.5
67.5°	186.3	196.9	208.3	218.9	221.3	236.6	239.6	241.2	242.2	238.6	232.9
70°	162.5	173.6	185.3	197.5	200.9	217.9	224.2	231.9	237.9	243.3	241.2
72.5°	132.3	142.3	152.2	163.6	168.6	186.3	194.6	207.9	217.3	230.9	236.6
75°	105.0	111.0	116.9	124.0	128.0	145.3	155.6	171.5	184.2	203.3	215.9
77.5°	82.7	85.6	88.6	91.7	93.3	102.9	111.3	127.3	142.0	165.9	184.5
80°	63.6	65.3	65.7	66.6	66.0	70.7	73.7	83.3	96.0	119.6	141.6
82.5°	41.0	42.4	43.0	44.6	41.3	47.4	49.3	50.3	57.0	74.3	89.9
85°	23.0	23.3	23.6	24.3	19.6	25.7	26.0	24.3	23.6	30.7	34.7
87.5°	5.6	5.3	5.6	5.6	2.4	5.3	5.3	3.7	2.7	5.0	4.0
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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CATALOG NUMBER: XNV-AF-01-LED-U-T2R-800

CANDELA DISTRIBUTION (continued):

	135°	145°	155°	165°	175°	180°
0°	453.8	453.8	453.8	453.8	453.8	453.8
2.5°	418.2	417.5	417.8	416.1	415.5	415.8
5°	411.5	410.1	410.1	409.2	407.9	407.9
7.5°	414.5	411.8	410.8	408.8	406.8	407.1
10°	419.1	414.5	411.1	408.2	405.8	405.8
12.5°	422.2	413.8	408.8	404.8	402.1	402.1
15°	422.8	410.1	402.8	398.4	395.8	395.8
17.5°	418.8	402.8	393.5	387.8	384.8	385.4
20°	408.8	389.1	378.2	372.1	369.2	369.5
22.5°	393.1	370.5	357.8	350.9	347.8	347.8
25°	371.8	347.2	333.5	327.9	325.2	325.2
27.5°	347.5	322.2	310.2	305.9	304.2	304.2
30°	320.2	299.2	290.5	287.6	284.9	284.9
32.5°	297.2	282.2	279.2	275.2	268.2	267.9
35°	278.9	277.2	274.9	262.9	252.9	251.5
37.5°	268.8	278.9	264.2	243.6	235.6	235.3
40°	263.5	272.9	247.6	237.5	236.6	236.6
42.5°	250.9	257.6	246.5	240.9	240.9	241.2
45°	237.5	243.3	248.9	243.9	245.5	245.9
47.5°	228.2	239.6	248.9	244.6	247.9	249.9
50°	219.5	236.2	243.9	243.9	247.6	247.9
52.5°	217.6	231.6	239.3	242.8	243.3	241.5
55°	217.9	227.9	235.6	240.2	238.2	238.2
57.5°	217.6	225.9	232.5	234.3	235.3	235.3
60°	217.9	223.2	228.5	227.9	231.2	231.2
62.5°	218.9	219.5	222.2	221.6	226.6	226.6
65°	221.3	214.9	213.3	213.9	219.9	219.5
67.5°	225.6	208.6	203.3	203.6	212.3	210.9
70°	231.9	199.9	191.9	190.0	204.6	202.2
72.5°	233.8	190.0	177.3	175.2	183.9	177.3
75°	224.5	181.9	161.6	155.0	151.3	149.2
77.5°	200.3	177.0	145.3	131.2	125.6	124.3
80°	165.9	166.6	124.0	107.3	124.6	124.3
82.5°	125.3	143.9	99.3	93.0	90.3	75.3
85°	60.7	108.3	76.3	63.9	38.4	36.3
87.5°	5.3	45.3	44.0	28.6	13.0	12.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

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