

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: P197120

Luminaire Tested: **NVN-AF-02-LED-U-SL4-8030-800-HSS**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P197120  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24285)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: NVN-AF-02-LED-U-SL4-8030-800-HSS  
Description: NAVION ROADWAY AND AREA LUMINAIRE  
(2) 80 CRI, 3000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV SPILL  
LIGHT ELIMINATOR OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6542 lumens  
Efficiency: N/A  
Efficacy: 77.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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

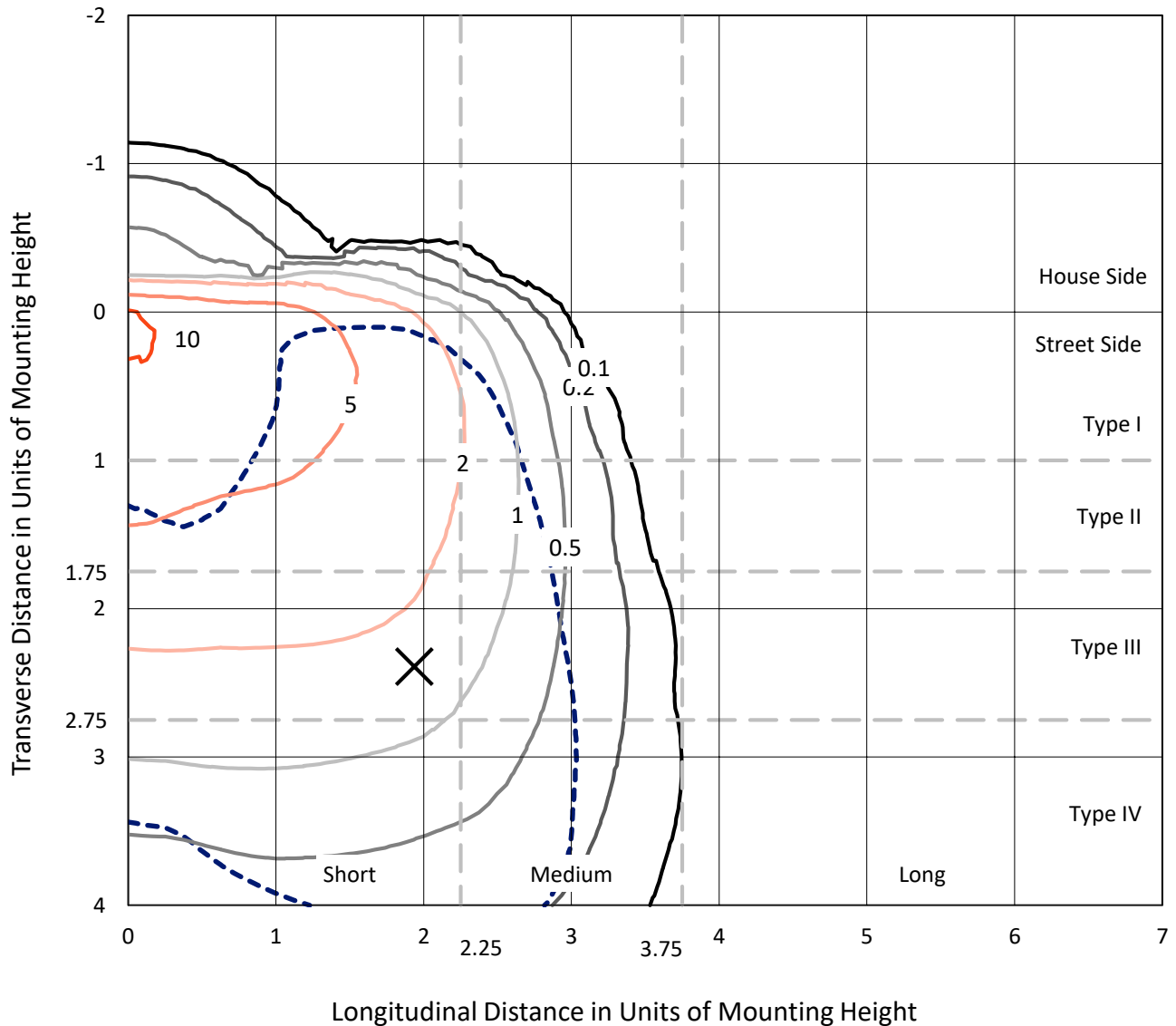


REPORT NUMBER: P197120

CATALOG NUMBER: NVN-AF-02-LED-U-SL4-8030-800-HSS

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

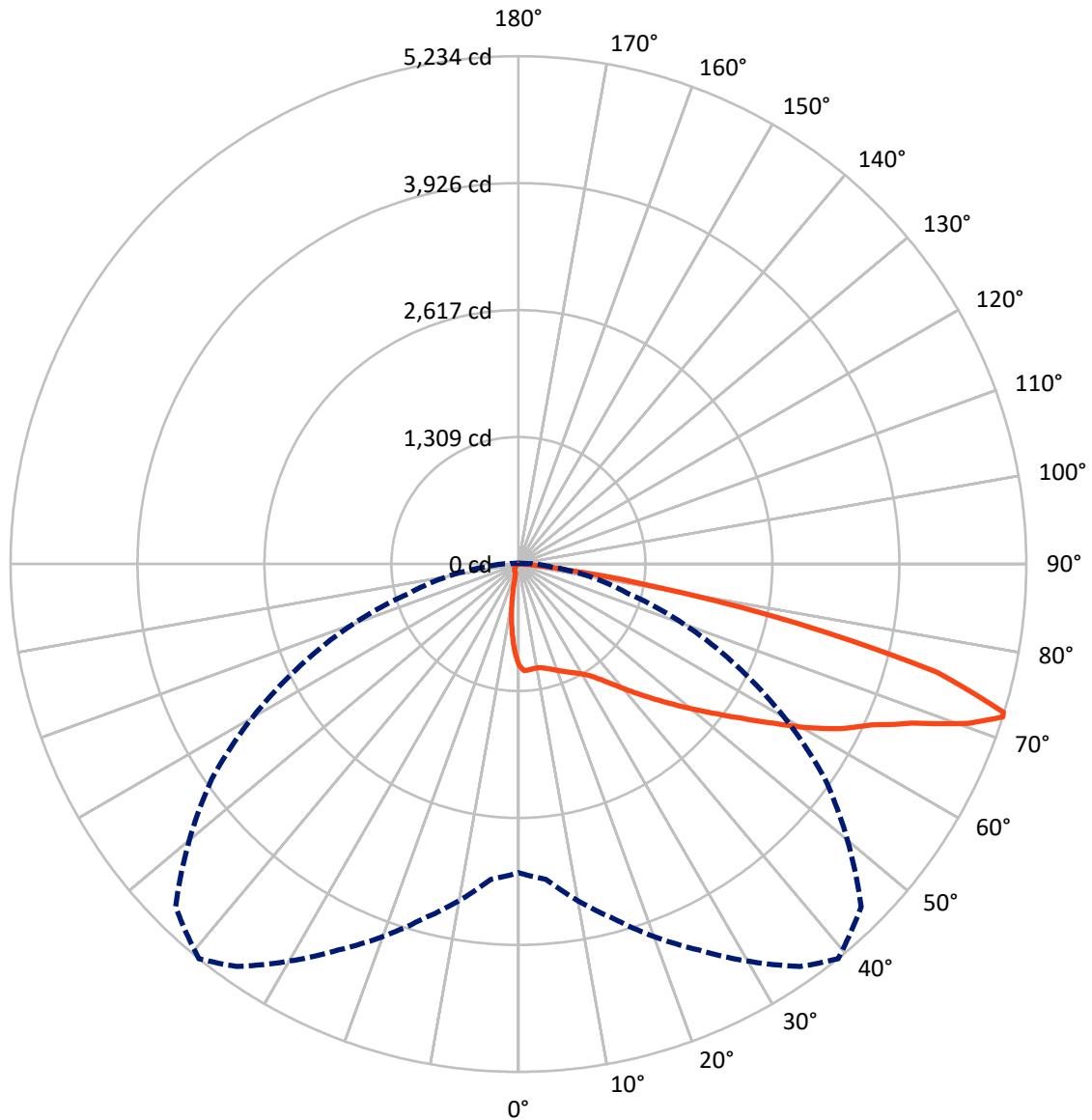


Based on 10 foot mounting height. Maximum calculated value = 11 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P197120

CATALOG NUMBER: NVN-AF-02-LED-U-SL4-8030-800-HSS

### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral    - - - Horizontal Cone Through 72-Deg Vertical

REPORT NUMBER: P197120

CATALOG NUMBER: NVN-AF-02-LED-U-SL4-8030-800-HSS

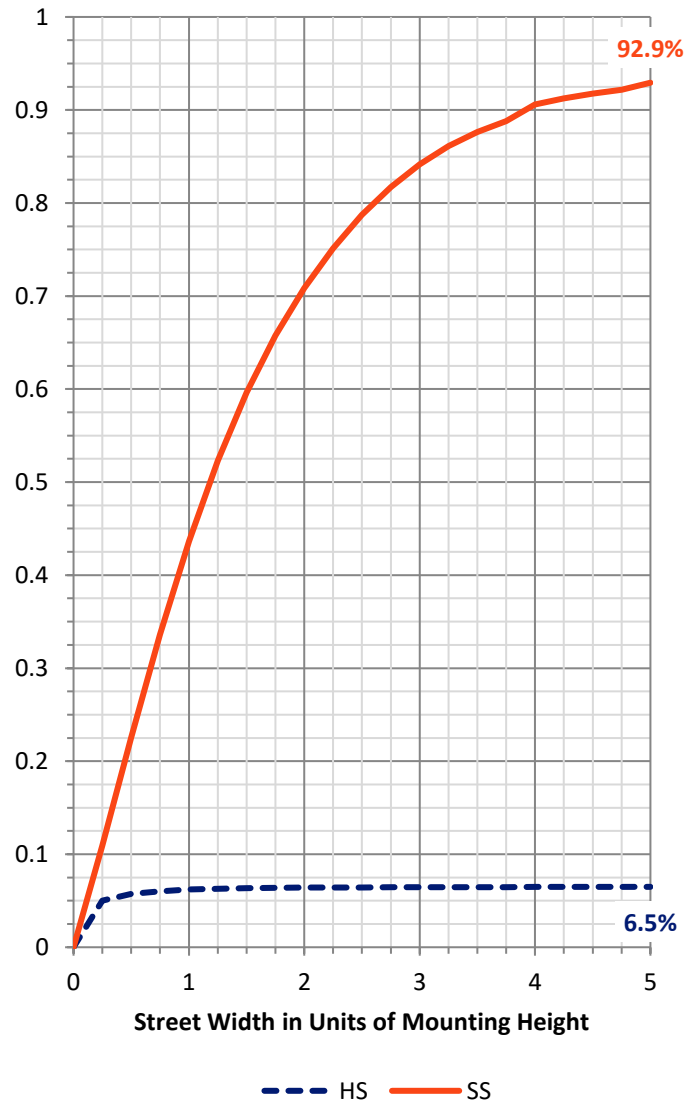
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	428.7	0.0	428.7
	% Fixture	6.6	0.0	6.6
<b>Street Side</b>	Lumens	6113.2	0.0	6113.2
	% Fixture	93.4	0.0	93.4
<b>Total</b>	Lumens	6542.0	0.0	6542.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.2	1.3
10°-20°	206.2	3.2
20°-30°	342.4	5.2
30°-40°	545.8	8.3
40°-50°	900.9	13.8
50°-60°	1360.5	20.8
60°-70°	1772.3	27.1
70°-80°	1197.5	18.3
80°-90°	131.2	2.0
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°	6542.0	100.0
0°-180°	6542.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P197120

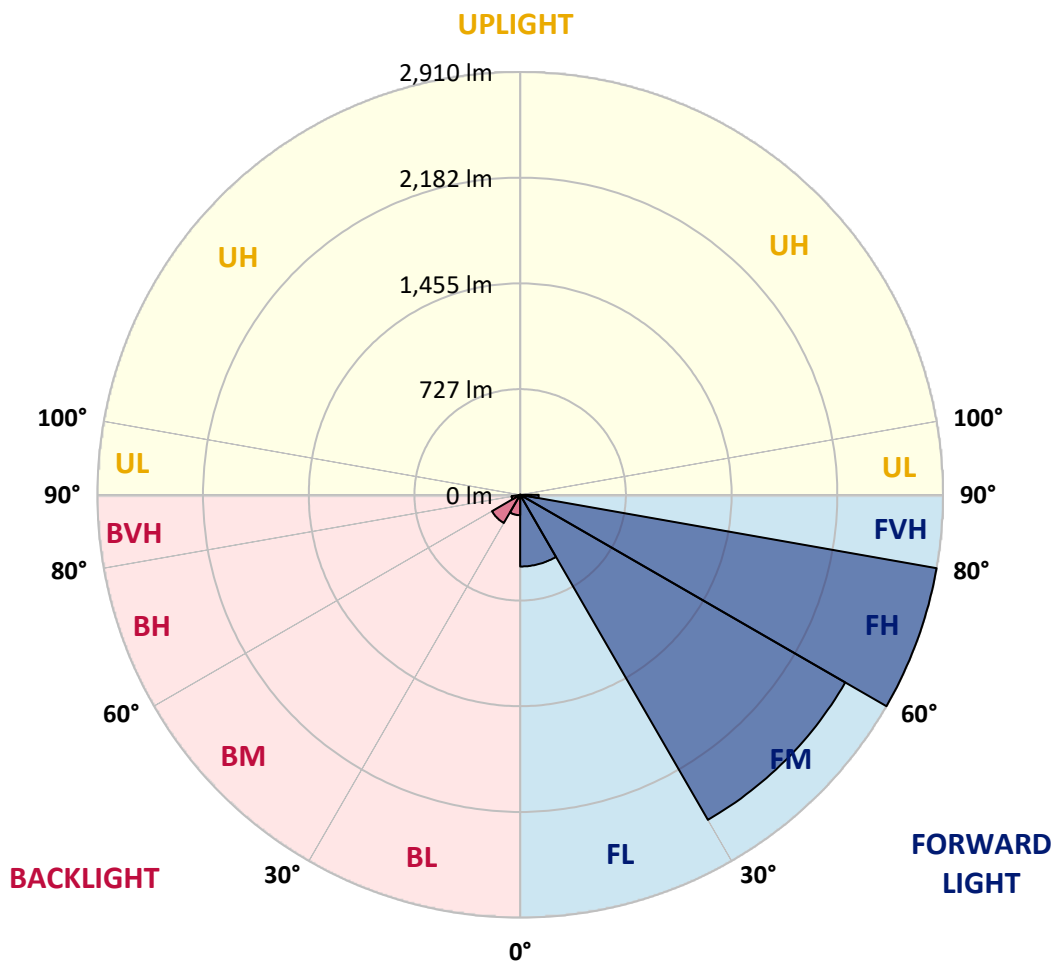
CATALOG NUMBER: NVN-AF-02-LED-U-SL4-8030-800-HSS

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	493.4	7.5			
FM	(30°-60°)	2582.9	39.5			
FH	(60°-80°)	2909.6	44.5			G2/5000
FVH	(80°-90°)	127.4	1.9			G2/225
BL	(0°-30°)	140.4	2.1	B1/500		
BM	(30°-60°)	224.3	3.4	B1/1000		
BH	(60°-80°)	60.3	0.9	B0/110		G0/110
BVH	(80°-90°)	3.8	0.1			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





REPORT NUMBER: P197120

CATALOG NUMBER: NVN-AF-02-LED-U-SL4-8030-800-HSS

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1
2.5°	1115.0	1117.0	1114.5	1109.8	1103.1	1099.0	1093.4	1081.0	1065.6	1052.2	1036.8
5°	1123.7	1124.7	1121.7	1112.9	1102.6	1097.0	1089.8	1076.4	1060.5	1041.9	1014.2
7.5°	1126.3	1125.8	1122.2	1111.4	1095.4	1088.2	1075.9	1059.4	1043.0	1026.0	994.6
10°	1125.3	1125.3	1122.7	1112.4	1094.4	1087.7	1073.8	1056.3	1035.8	1018.8	985.4
12.5°	1121.7	1123.7	1122.2	1116.5	1103.1	1098.0	1085.7	1068.2	1048.6	1031.1	995.7
15°	1126.3	1129.4	1132.5	1130.4	1122.7	1118.1	1106.7	1088.7	1072.8	1054.3	1016.2
17.5°	1144.8	1151.5	1158.7	1159.2	1151.0	1142.7	1129.9	1111.4	1095.9	1079.0	1037.8
20°	1179.8	1184.9	1198.3	1200.9	1184.4	1172.6	1154.6	1133.0	1117.5	1103.1	1057.9
22.5°	1231.7	1237.4	1248.2	1244.6	1216.8	1202.9	1180.3	1155.6	1139.7	1131.4	1081.0
25°	1310.4	1311.9	1314.5	1298.6	1252.8	1237.4	1209.6	1181.8	1169.0	1167.9	1113.9
27.5°	1403.0	1405.0	1393.7	1358.2	1292.9	1272.9	1241.5	1216.3	1210.1	1217.8	1155.6
30°	1508.9	1509.4	1478.1	1420.5	1339.2	1317.1	1284.7	1256.9	1262.6	1281.6	1209.1
32.5°	1617.4	1612.3	1569.1	1494.0	1402.5	1375.7	1347.9	1320.2	1336.6	1375.2	1287.3
35°	1716.7	1714.6	1663.7	1576.3	1484.7	1461.1	1441.0	1411.7	1438.5	1501.2	1393.7
37.5°	1815.9	1814.4	1756.3	1665.3	1586.1	1569.1	1554.2	1531.5	1575.3	1667.3	1536.2
40°	1925.5	1922.9	1851.4	1764.0	1703.8	1694.6	1685.8	1676.1	1750.6	1878.7	1713.6
42.5°	2060.8	2049.4	1952.2	1871.5	1833.4	1836.0	1836.5	1846.3	1963.0	2130.2	1922.9
45°	2216.1	2190.9	2053.6	1986.7	1975.9	1991.3	2006.7	2047.4	2210.4	2419.7	2154.4
47.5°	2366.8	2326.1	2170.3	2110.6	2132.8	2164.6	2201.7	2280.9	2488.1	2722.6	2364.2
50°	2496.4	2454.7	2286.0	2236.6	2307.1	2354.4	2420.2	2540.1	2781.3	2978.8	2496.4
52.5°	2598.2	2565.3	2408.4	2375.5	2500.5	2565.3	2668.6	2826.0	3058.0	3147.4	2588.9
55°	2673.3	2656.8	2525.7	2530.3	2715.4	2809.0	2937.6	3115.6	3291.4	3278.6	2658.4
57.5°	2758.1	2745.3	2648.6	2712.9	2974.1	3095.0	3243.6	3386.6	3461.2	3384.0	2726.2
60°	2845.0	2849.2	2797.7	2934.0	3294.0	3427.7	3557.3	3592.8	3606.7	3491.0	2797.7
62.5°	2910.9	2928.4	2933.0	3172.6	3622.1	3736.3	3792.4	3767.2	3764.1	3634.5	2792.1
65°	2986.5	3032.2	3108.4	3434.4	3920.4	3995.5	4035.6	4072.1	3995.0	3677.2	2517.4
67.5°	3117.1	3189.1	3360.4	3755.3	4265.0	4376.1	4489.7	4451.2	4029.4	3243.6	1917.8
70°	3293.0	3380.9	3683.3	4174.5	4732.5	4918.6	5013.8	4420.8	3421.0	2241.3	1011.6
72°	3181.9	3261.6	3783.1	4388.4	5063.7	5234.4	4996.3	3856.1	2479.9	1161.8	338.9
72.5°	3073.9	3156.2	3751.2	4385.8	5096.6	5227.2	4882.6	3633.4	2194.5	904.1	233.5
75°	2132.8	2236.6	3215.8	3942.5	4602.4	4458.9	3735.8	2200.1	795.1	155.3	77.1
77.5°	1102.6	1182.9	1950.7	2785.9	3207.6	2937.6	2207.8	954.5	220.1	82.3	50.9
80°	683.5	723.1	912.3	1372.6	1666.3	1457.5	974.1	385.7	140.9	48.9	40.6
82.5°	353.8	384.2	574.5	553.9	615.6	511.7	359.5	323.0	86.9	30.3	41.7
85°	116.2	123.4	352.8	368.2	263.3	176.9	159.4	308.1	25.2	19.5	35.5
87.5°	15.4	18.0	123.9	210.9	129.6	80.2	95.7	108.5	8.7	10.8	9.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P197120

CATALOG NUMBER: NVN-AF-02-LED-U-SL4-8030-800-HSS

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1	1047.1
2.5°	1026.5	1019.8	998.7	977.7	953.5	931.4	913.9	902.6	907.7	890.7	893.3
5°	997.2	980.2	933.9	884.1	830.1	779.7	739.5	709.7	704.1	678.3	679.4
7.5°	968.9	941.1	866.1	783.8	694.3	621.8	555.9	498.3	477.8	456.7	444.3
10°	953.5	915.4	809.0	689.1	563.1	456.7	364.1	291.6	261.3	239.1	228.3
12.5°	958.1	907.7	766.3	603.3	437.7	302.4	205.7	152.7	134.2	123.9	120.3
15°	973.5	909.3	727.7	519.4	318.3	183.1	120.9	103.4	101.8	101.3	100.8
17.5°	987.9	910.8	687.1	432.0	212.9	116.7	97.2	95.7	95.7	95.7	95.7
20°	1002.9	911.3	642.3	340.5	139.9	95.7	91.5	90.5	91.5	91.5	91.5
22.5°	1020.3	914.9	599.1	251.5	103.4	90.0	87.4	86.9	87.4	87.4	86.9
25°	1041.9	922.6	552.3	180.0	93.6	86.4	83.8	83.3	83.8	83.3	83.3
27.5°	1070.7	932.9	497.8	129.1	89.5	82.8	80.2	80.2	80.2	79.7	79.7
30°	1107.8	945.3	424.8	101.8	85.4	79.2	77.1	77.1	76.6	76.1	76.1
32.5°	1160.7	965.3	345.1	92.1	80.7	74.6	72.5	73.0	72.5	72.0	71.5
35°	1235.8	996.7	266.4	86.9	76.1	69.9	67.9	67.9	67.9	66.9	66.9
37.5°	1342.3	1044.5	199.5	81.8	71.5	65.3	62.7	62.7	62.2	61.2	61.7
40°	1473.9	1104.7	144.5	77.1	66.9	60.2	58.1	57.1	56.1	55.0	55.0
42.5°	1632.3	1163.3	108.5	72.5	62.2	56.1	53.5	52.5	50.4	49.4	48.9
45°	1809.8	1225.5	90.0	66.9	57.1	51.4	49.4	47.3	44.7	43.2	42.7
47.5°	1959.4	1263.6	80.2	61.2	51.9	46.8	44.7	41.7	38.6	37.5	37.5
50°	2049.4	1247.7	72.0	55.5	46.8	42.2	39.6	35.5	33.4	32.4	31.9
52.5°	2099.8	1200.3	65.3	50.9	42.2	37.0	33.4	29.8	28.8	27.8	27.8
55°	2134.3	1131.9	58.1	46.3	38.1	32.4	28.3	25.7	24.7	24.2	23.7
57.5°	2167.2	1048.6	51.4	42.2	33.9	28.8	24.2	23.1	21.1	20.6	20.6
60°	2177.0	933.9	45.3	37.5	30.3	25.2	21.1	19.5	17.5	17.0	17.0
62.5°	2052.5	743.1	40.1	31.9	26.7	21.6	18.5	16.5	14.4	14.4	14.4
65°	1715.1	504.5	34.5	27.8	23.7	18.5	15.9	13.4	12.3	12.3	12.3
67.5°	1194.7	281.3	29.3	23.7	20.1	15.4	13.4	11.3	10.8	11.3	11.3
70°	538.5	111.6	24.7	19.5	16.5	12.9	11.3	9.8	10.8	10.8	10.8
72°	161.5	59.7	20.6	15.9	13.4	11.3	9.8	9.3	10.3	10.8	10.8
72.5°	119.8	53.5	19.5	15.4	13.4	10.8	9.3	9.3	10.3	10.8	10.8
75°	61.7	36.5	14.9	11.3	9.8	8.7	7.7	8.7	10.3	10.3	10.3
77.5°	48.3	29.8	12.3	8.7	8.2	7.7	7.2	8.2	9.3	9.3	9.3
80°	45.3	19.5	9.8	8.2	7.2	6.7	6.7	7.2	8.2	8.7	8.7
82.5°	45.8	15.9	8.7	7.7	6.7	6.2	6.2	6.7	7.7	8.2	8.2
85°	29.3	10.8	7.7	6.7	6.2	5.7	5.7	6.2	7.2	7.7	7.7
87.5°	9.8	8.2	6.7	6.2	5.1	5.1	5.1	5.1	6.2	6.7	7.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)