

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: METALUX

Report Number: P566913

Luminaire Tested: **4SNX-87HL-LC-UNV-L850-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P566913  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2205-663-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNX-87HL-LC-UNV-L850-CD  
Description: 4FT 8700 LUMEN, SNX FIXTURE WITH 5000K, 80CRI LEDS AND LC LENS  
Light Source: -  
Ballast/Driver: -

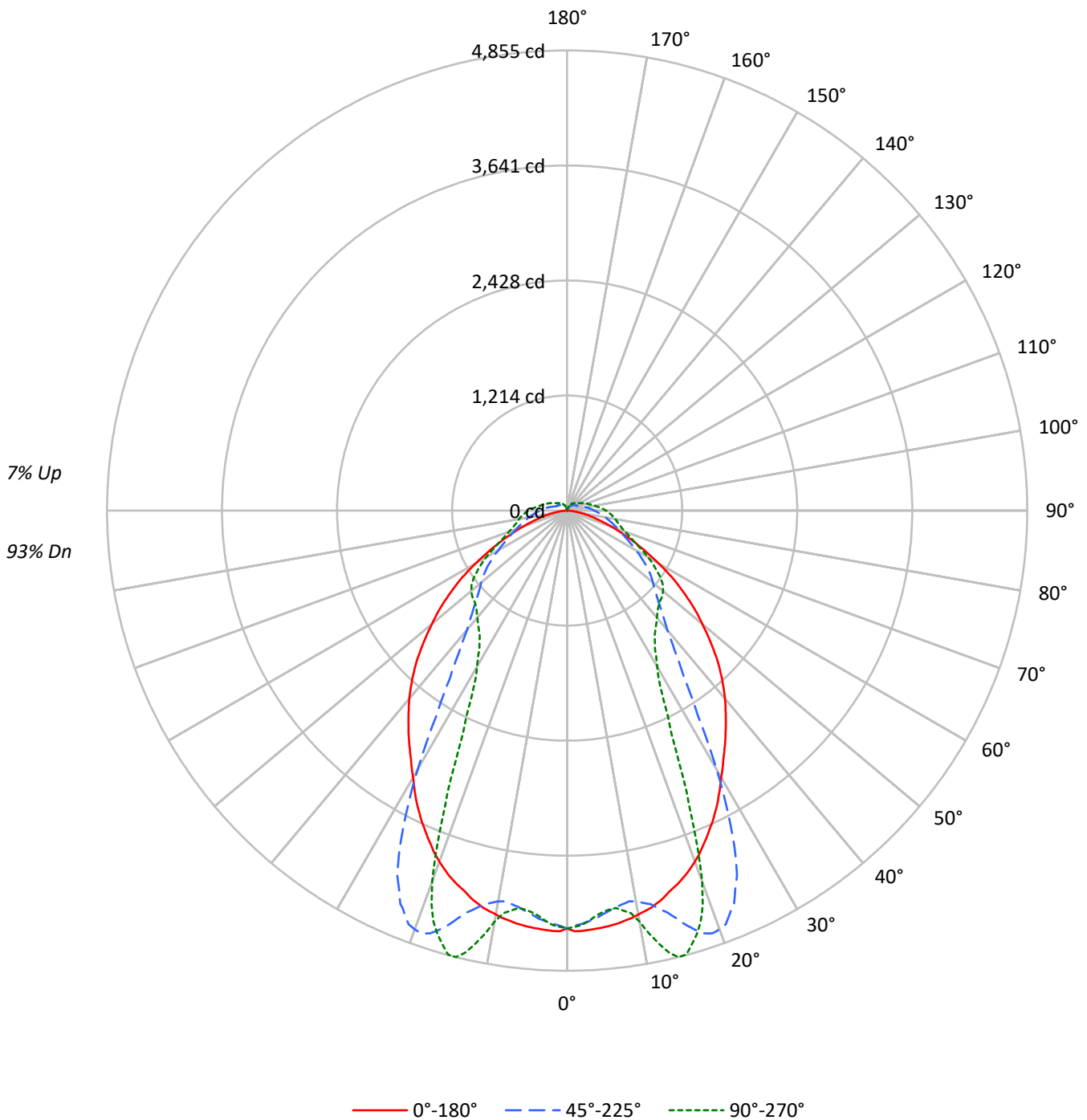
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9799.0 lumens  
Efficiency: N/A  
Efficacy: 157.5 lumens/watt  
Spacing Criteria (0/90/45): 1.12 / 0.89 / 1.01  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.17')  
CIE Type: Direct

Input Watts (W): 62.2  
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: 25 FT

TEST NUMBER: P566913  
CATALOG NUMBER: 4SNX-87HL-LC-UNV-L850-CD

### Luminous Intensity Polar Plot





TEST NUMBER: P566913

CATALOG NUMBER: 4SNX-87HL-LC-UNV-L850-CD

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20	
RC	80					70					50					30					10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0	
RCR																						
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	96	96	96	93				
1	107	103	99	95	104	100	96	93	94	91	89	89	87	85	85	83	81	78				
2	99	91	84	79	95	88	83	78	84	79	75	80	76	72	76	72	69	67				
3	91	81	73	67	88	79	72	66	75	69	64	71	66	62	68	64	60	58				
4	84	73	64	58	81	71	63	57	68	61	56	64	59	54	62	57	53	51				
5	78	66	57	51	75	64	56	51	61	55	49	59	53	48	56	51	47	45				
6	72	60	51	45	70	58	51	45	56	49	44	54	48	43	52	46	42	40				
7	67	55	46	41	65	54	46	40	51	45	40	49	43	39	48	42	38	36				
8	63	50	42	37	61	49	42	36	47	41	36	46	40	35	44	39	35	33				
9	59	46	39	34	57	46	38	33	44	37	33	42	36	32	41	36	32	30				
10	56	43	36	31	54	42	35	30	41	34	30	40	34	30	38	33	29	27				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	47459	47459	47459
5°	47516	44293	43442
10°	46947	42056	43078
15°	45853	43746	45859
20°	44466	45558	38381
25°	42234	40837	23599
30°	39459	30392	17080
35°	37191	20959	14408
40°	35161	16252	13279
45°	32796	13824	12558
50°	29717	12394	12328
55°	26473	11195	11405
60°	22320	9675	9865
65°	18015	8414	8234
70°	13984	7550	7250
75°	10661	7004	6760
80°	7275	6616	6693
85°	3756	6292	6645



TEST NUMBER: P566913

CATALOG NUMBER: 4SNX-87HL-LC-UNV-L850-CD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	410.3	4.2
10°-20°	1253.7	12.8
20°-30°	1688.1	17.2
30°-40°	1597.6	16.3
40°-50°	1410.1	14.4
50°-60°	1145.3	11.7
60°-70°	778.9	7.9
70°-80°	501.2	5.1
80°-90°	333.3	3.4
90°-100°	229.0	2.3
100°-110°	153.7	1.6
110°-120°	108.4	1.1
120°-130°	77.5	0.8
130°-140°	54.7	0.6
140°-150°	33.9	0.3
150°-160°	16.6	0.2
160°-170°	5.8	0.1
170°-180°	1.0	0.0
0°-30°	3352.0	34.2
0°-40°	4949.6	50.5
0°-60°	7504.9	76.6
0°-90°	9118.3	93.1
90°-120°	491.2	5.0
90°-150°	657.3	6.7
90°-180°	681.0	6.9
0°-180°	9799.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4409	4409	4409	4409	4409	
5°	4414	4373	4279	4276	4255	419
15°	4161	4134	4452	4846	4850	1173
25°	3625	4298	4242	3080	2605	1664
35°	2913	4087	2154	1659	1608	1823
45°	2244	2750	1363	1346	1375	1723
55°	1495	1626	1023	1143	1186	1335
65°	770	877	685	762	786	774
75°	296	414	483	542	567	322
85°	45	176	343	434	464	59
90°	2	123	286	384	410	3
95°	2	94	241	326	349	1
105°	3	66	159	223	250	3
115°	3	57	117	166	187	4
125°	4	48	100	126	135	4
135°	6	37	82	105	111	5
145°	6	27	58	81	88	4
155°	8	16	36	54	61	3
165°	8	10	19	27	33	2
175°	9	9	9	9	8	1
180°	8	8	8	8	8	



TEST NUMBER: P566913

CATALOG NUMBER: 4SNX-87HL-LC-UNV-L850-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4409.1	4409.1	4409.1	4409.1	4409.1
1°	4439.0	4425.5	4380.6	4404.6	4392.6
2°	4437.5	4415.1	4364.2	4391.1	4376.2
3°	4430.0	4406.1	4340.2	4356.7	4334.3
4°	4422.5	4394.1	4314.8	4314.8	4289.4
5°	4413.6	4373.2	4278.9	4275.9	4255.0
6°	4403.1	4356.7	4247.5	4244.5	4232.5
7°	4388.1	4328.3	4213.1	4234.0	4225.0
8°	4370.2	4301.3	4195.1	4247.5	4261.0
9°	4353.7	4268.4	4174.2	4289.4	4299.9
10°	4326.8	4238.5	4187.6	4373.2	4404.6
11°	4304.3	4213.1	4217.6	4455.4	4549.7
12°	4281.9	4186.1	4246.0	4558.7	4673.9
13°	4244.5	4165.2	4308.8	4670.9	4789.1
14°	4211.6	4148.7	4370.2	4784.6	4854.9
15°	4160.7	4133.8	4452.5	4845.9	4850.4
16°	4126.3	4123.3	4548.2	4850.4	4766.6
17°	4087.4	4118.8	4626.0	4772.6	4673.9
18°	4044.0	4127.8	4690.3	4675.4	4561.7
19°	3994.6	4136.8	4717.3	4540.7	4394.1
20°	3940.8	4150.2	4702.3	4400.1	4163.7
21°	3886.9	4168.2	4673.9	4252.0	3861.5
22.5°	3786.7	4211.6	4539.2	3836.1	3361.8
23°	3758.3	4220.6	4507.8	3705.9	3231.6
24°	3687.9	4258.0	4364.2	3402.2	2887.5
25°	3625.1	4298.4	4241.5	3080.5	2604.7
26°	3554.8	4328.3	4056.0	2784.3	2431.2
27°	3486.0	4346.2	3845.0	2553.9	2236.7
28°	3406.7	4365.7	3616.1	2354.9	2090.1
29°	3331.9	4368.7	3390.2	2196.3	1974.9
30°	3251.1	4353.7	3152.3	2069.1	1903.1
32.5°	3074.5	4271.4	2570.3	1826.8	1723.5
35°	2912.9	4087.4	2154.4	1659.2	1608.3
37.5°	2749.9	3797.2	1862.7	1554.5	1538.0
40°	2589.8	3453.0	1642.7	1470.7	1473.7
42.5°	2420.7	3098.5	1491.6	1401.9	1415.3
45°	2244.2	2749.9	1363.0	1346.5	1374.9
47.5°	2048.2	2431.2	1261.2	1310.6	1354.0
50°	1862.7	2115.5	1181.9	1276.2	1321.1
52.5°	1686.1	1856.7	1110.1	1217.8	1270.2
55°	1494.6	1626.3	1023.3	1143.0	1186.4
57.5°	1312.1	1418.3	932.1	1050.3	1089.2
60°	1111.6	1213.4	839.3	950.0	987.4
62.5°	930.6	1038.3	760.0	849.8	879.7
65°	770.5	876.7	685.2	761.5	785.5



TEST NUMBER: P566913

CATALOG NUMBER: 4SNX-87HL-LC-UNV-L850-CD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	628.4	742.1	623.9	688.2	710.7
70°	495.2	614.9	570.0	628.4	652.3
72.5°	387.5	508.7	525.1	579.0	602.9
75°	296.2	414.4	483.2	541.6	567.0
77.5°	219.9	338.1	444.3	511.7	538.6
80°	145.1	269.3	409.9	484.7	516.2
82.5°	91.3	216.9	375.5	457.8	490.7
85°	44.9	176.5	342.6	433.9	463.8
87.5°	15.0	146.6	312.7	409.9	435.4
90°	1.5	122.7	285.8	384.5	409.9
92.5°	1.5	106.2	263.3	354.6	380.0
95°	1.5	94.3	240.9	326.2	348.6
97.5°	1.5	85.3	219.9	296.2	320.2
100°	1.5	76.3	197.5	267.8	293.2
102.5°	3.0	70.3	178.0	243.9	270.8
105°	3.0	65.8	158.6	222.9	249.9
107.5°	3.0	62.8	142.1	206.5	231.9
110°	3.0	59.8	130.2	191.5	218.4
112.5°	3.0	58.3	122.7	178.0	203.5
115°	3.0	56.9	116.7	166.1	187.0
117.5°	4.5	55.4	112.2	154.1	170.6
120°	4.5	52.4	109.2	143.6	157.1
122.5°	4.5	49.4	104.7	134.7	145.1
125°	4.5	47.9	100.2	125.7	134.7
127.5°	4.5	44.9	95.8	118.2	127.2
130°	6.0	41.9	91.3	112.2	119.7
132.5°	6.0	38.9	86.8	109.2	115.2
135°	6.0	37.4	82.3	104.7	110.7
137.5°	6.0	34.4	77.8	100.2	106.2
140°	6.0	31.4	71.8	94.3	100.2
142.5°	6.0	29.9	65.8	88.3	94.3
145°	6.0	26.9	58.3	80.8	88.3
147.5°	7.5	25.4	52.4	74.8	80.8
150°	7.5	22.4	46.4	68.8	74.8
152.5°	7.5	19.4	40.4	61.3	67.3
155°	7.5	16.5	35.9	53.9	61.3
157.5°	7.5	15.0	31.4	44.9	53.9
160°	7.5	13.5	26.9	38.9	46.4
162.5°	7.5	12.0	23.9	32.9	40.4
165°	7.5	10.5	19.4	26.9	32.9
167.5°	9.0	10.5	16.5	20.9	26.9
170°	9.0	10.5	13.5	16.5	20.9
172.5°	9.0	9.0	10.5	12.0	13.5
175°	9.0	9.0	9.0	9.0	7.5
177.5°	9.0	9.0	9.0	7.5	7.5



TEST NUMBER: P566913

CATALOG NUMBER: 4SNX-87HL-LC-UNV-L850-CD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
180°	7.5	7.5	7.5	7.5	7.5

(END OF REPORT)