

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: P566916

Luminaire Tested: **4SNX-87HL-LC-UNV-L940-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P566916  
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-L940-CD  
Description: 4FT 8700 LUMEN, SNX FIXTURE WITH 4000K, 90CRI LEDS AND LC LENS  
Light Source: -  
Ballast/Driver: -

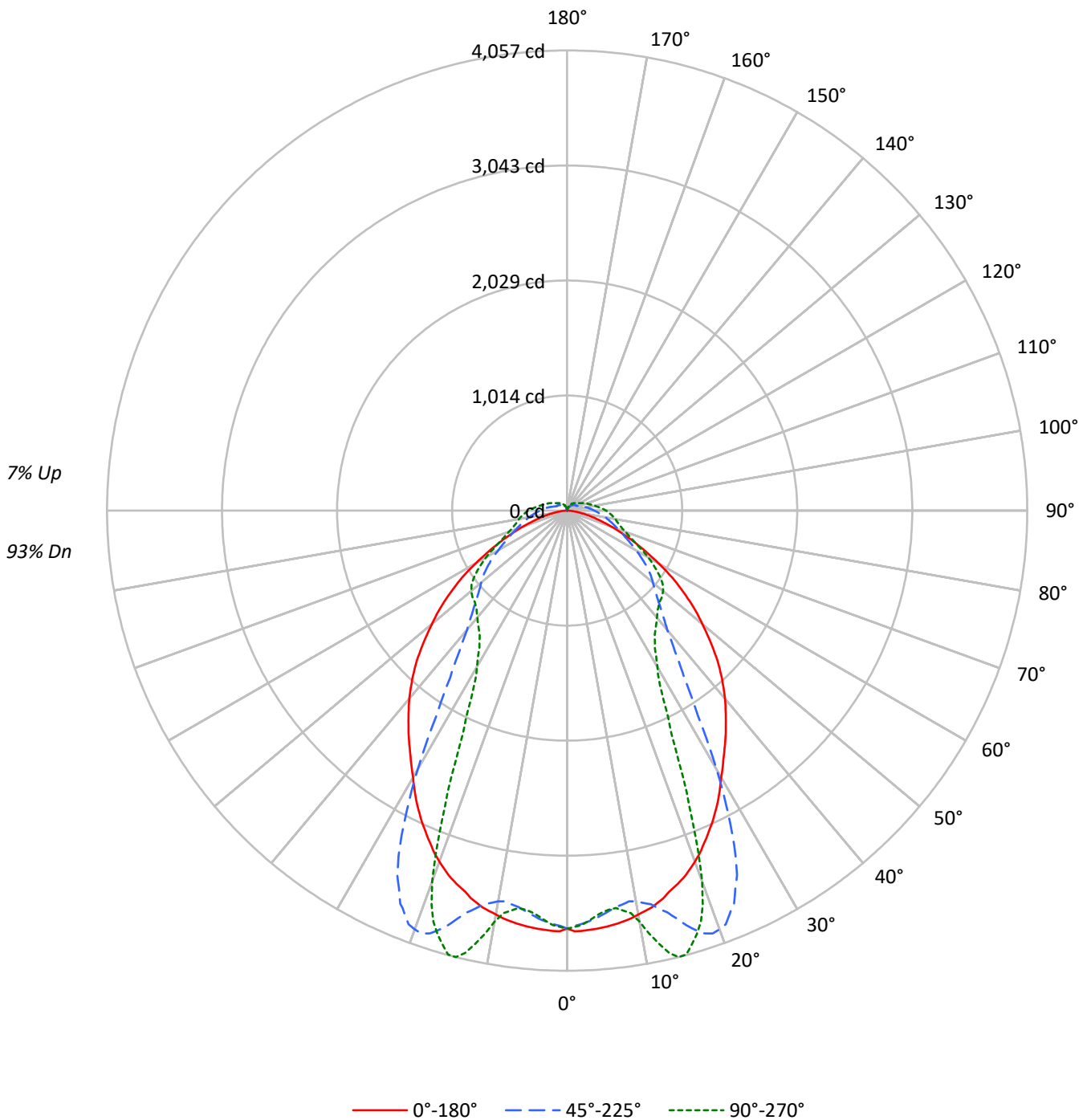
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8189.1 lumens  
Efficiency: N/A  
Efficacy: 131.7 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

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### Luminous Intensity Polar Plot





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**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°	39661	39661	39661
5°	39709	37016	36304
10°	39233	35146	36000
15°	38320	36558	38325
20°	37160	38073	32075
25°	35295	34127	19722
30°	32975	25398	14273
35°	31081	17515	12041
40°	29384	13582	11097
45°	27408	11552	10494
50°	24833	10357	10302
55°	22124	9356	9532
60°	18653	8085	8245
65°	15055	7031	6881
70°	11688	6310	6058
75°	8912	5853	5650
80°	6082	5530	5593
85°	3137	5258	5553



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	342.9	4.2
10°-20°	1047.7	12.8
20°-30°	1410.7	17.2
30°-40°	1335.1	16.3
40°-50°	1178.4	14.4
50°-60°	957.1	11.7
60°-70°	651.0	7.9
70°-80°	418.9	5.1
80°-90°	278.5	3.4
90°-100°	191.4	2.3
100°-110°	128.5	1.6
110°-120°	90.6	1.1
120°-130°	64.8	0.8
130°-140°	45.7	0.6
140°-150°	28.4	0.3
150°-160°	13.8	0.2
160°-170°	4.8	0.1
170°-180°	0.8	0.0
0°-30°	2801.2	34.2
0°-40°	4136.3	50.5
0°-60°	6271.9	76.6
0°-90°	7620.2	93.1
90°-120°	410.5	5.0
90°-150°	549.3	6.7
90°-180°	569.0	6.9
0°-180°	8189.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3685	3685	3685	3685	3685	
5°	3688	3655	3576	3573	3556	350
15°	3477	3455	3721	4050	4054	980
25°	3030	3592	3545	2574	2177	1390
35°	2434	3416	1800	1387	1344	1523
45°	1876	2298	1139	1125	1149	1440
55°	1249	1359	855	955	992	1116
65°	644	733	573	636	656	646
75°	248	346	404	453	474	269
85°	38	148	286	363	388	49
90°	1	102	239	321	343	2
95°	1	79	201	273	291	1
105°	2	55	132	186	209	2
115°	2	48	98	139	156	3
125°	4	40	84	105	112	4
135°	5	31	69	88	92	4
145°	5	22	49	68	74	3
155°	6	14	30	45	51	3
165°	6	9	16	22	28	2
175°	8	8	8	8	6	1
180°	6	6	6	6	6	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3684.6	3684.6	3684.6	3684.6	3684.6
1°	3709.7	3698.4	3660.9	3680.9	3670.9
2°	3708.4	3689.6	3647.1	3669.6	3657.1
3°	3702.2	3682.1	3627.1	3640.9	3622.1
4°	3695.9	3672.1	3605.9	3605.9	3584.6
5°	3688.4	3654.6	3575.9	3573.4	3555.9
6°	3679.6	3640.9	3549.6	3547.1	3537.1
7°	3667.1	3617.1	3520.9	3538.4	3530.9
8°	3652.1	3594.6	3505.9	3549.6	3560.9
9°	3638.4	3567.1	3488.3	3584.6	3593.4
10°	3615.9	3542.1	3499.6	3654.6	3680.9
11°	3597.1	3520.9	3524.6	3723.4	3802.2
12°	3578.4	3498.4	3548.4	3809.7	3906.0
13°	3547.1	3480.8	3600.9	3903.4	4002.2
14°	3519.6	3467.1	3652.1	3998.5	4057.2
15°	3477.1	3454.6	3720.9	4049.7	4053.5
16°	3448.3	3445.8	3800.9	4053.5	3983.5
17°	3415.8	3442.1	3865.9	3988.5	3906.0
18°	3379.6	3449.6	3919.7	3907.2	3812.2
19°	3338.3	3457.1	3942.2	3794.7	3672.1
20°	3293.3	3468.3	3929.7	3677.1	3479.6
21°	3248.3	3483.3	3906.0	3553.4	3227.0
22.5°	3164.5	3519.6	3793.4	3205.8	2809.4
23°	3140.8	3527.1	3767.2	3097.0	2700.7
24°	3082.0	3558.4	3647.1	2843.2	2413.1
25°	3029.5	3592.1	3544.6	2574.4	2176.8
26°	2970.7	3617.1	3389.6	2326.8	2031.7
27°	2913.2	3632.1	3213.3	2134.3	1869.2
28°	2846.9	3648.4	3022.0	1968.0	1746.7
29°	2784.4	3650.9	2833.2	1835.4	1650.4
30°	2716.9	3638.4	2634.4	1729.2	1590.4
32.5°	2569.4	3569.6	2148.0	1526.6	1440.4
35°	2434.3	3415.8	1800.4	1386.6	1344.1
37.5°	2298.1	3173.3	1556.6	1299.1	1285.3
40°	2164.3	2885.7	1372.8	1229.0	1231.5
42.5°	2023.0	2589.4	1246.6	1171.5	1182.8
45°	1875.5	2298.1	1139.0	1125.3	1149.0
47.5°	1711.7	2031.7	1054.0	1095.3	1131.5
50°	1556.6	1767.9	987.7	1066.5	1104.0
52.5°	1409.1	1551.6	927.7	1017.7	1061.5
55°	1249.1	1359.1	855.2	955.2	991.5
57.5°	1096.5	1185.3	778.9	877.7	910.2
60°	929.0	1014.0	701.4	793.9	825.2
62.5°	777.7	867.7	635.2	710.2	735.2
65°	643.9	732.7	572.6	636.4	656.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
67.5°	525.1	620.2	521.4	575.1	593.9
70°	413.9	513.9	476.4	525.1	545.1
72.5°	323.8	425.1	438.9	483.9	503.9
75°	247.6	346.3	403.8	452.6	473.9
77.5°	183.8	282.6	371.3	427.6	450.1
80°	121.3	225.1	342.6	405.1	431.4
82.5°	76.3	181.3	313.8	382.6	410.1
85°	37.5	147.5	286.3	362.6	387.6
87.5°	12.5	122.5	261.3	342.6	363.8
90°	1.3	102.5	238.8	321.3	342.6
92.5°	1.3	88.8	220.1	296.3	317.6
95°	1.3	78.8	201.3	272.6	291.3
97.5°	1.3	71.3	183.8	247.6	267.6
100°	1.3	63.8	165.0	223.8	245.1
102.5°	2.5	58.8	148.8	203.8	226.3
105°	2.5	55.0	132.5	186.3	208.8
107.5°	2.5	52.5	118.8	172.5	193.8
110°	2.5	50.0	108.8	160.0	182.5
112.5°	2.5	48.8	102.5	148.8	170.0
115°	2.5	47.5	97.5	138.8	156.3
117.5°	3.8	46.3	93.8	128.8	142.5
120°	3.8	43.8	91.3	120.0	131.3
122.5°	3.8	41.3	87.5	112.5	121.3
125°	3.8	40.0	83.8	105.0	112.5
127.5°	3.8	37.5	80.0	98.8	106.3
130°	5.0	35.0	76.3	93.8	100.0
132.5°	5.0	32.5	72.5	91.3	96.3
135°	5.0	31.3	68.8	87.5	92.5
137.5°	5.0	28.8	65.0	83.8	88.8
140°	5.0	26.3	60.0	78.8	83.8
142.5°	5.0	25.0	55.0	73.8	78.8
145°	5.0	22.5	48.8	67.5	73.8
147.5°	6.3	21.3	43.8	62.5	67.5
150°	6.3	18.8	38.8	57.5	62.5
152.5°	6.3	16.3	33.8	51.3	56.3
155°	6.3	13.8	30.0	45.0	51.3
157.5°	6.3	12.5	26.3	37.5	45.0
160°	6.3	11.3	22.5	32.5	38.8
162.5°	6.3	10.0	20.0	27.5	33.8
165°	6.3	8.8	16.3	22.5	27.5
167.5°	7.5	8.8	13.8	17.5	22.5
170°	7.5	8.8	11.3	13.8	17.5
172.5°	7.5	7.5	8.8	10.0	11.3
175°	7.5	7.5	7.5	7.5	6.3
177.5°	7.5	7.5	7.5	6.3	6.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
180°	6.3	6.3	6.3	6.3	6.3

(END OF REPORT)