

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: P566904

Luminaire Tested: **4SNX-87HL-FDL-UNV-L840-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P566904  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2204-622-1)  
Test Lab: INNOVATION CENTER  
Issue Date: 9/15/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SNX-87HL-FDL-UNV-L840-CD  
Description: 4FT 8700 LUMEN, SNX FIXTURE WITH 4000K, 80CRI LEDS AND FDL LENS  
Light Source: -  
Ballast/Driver: -

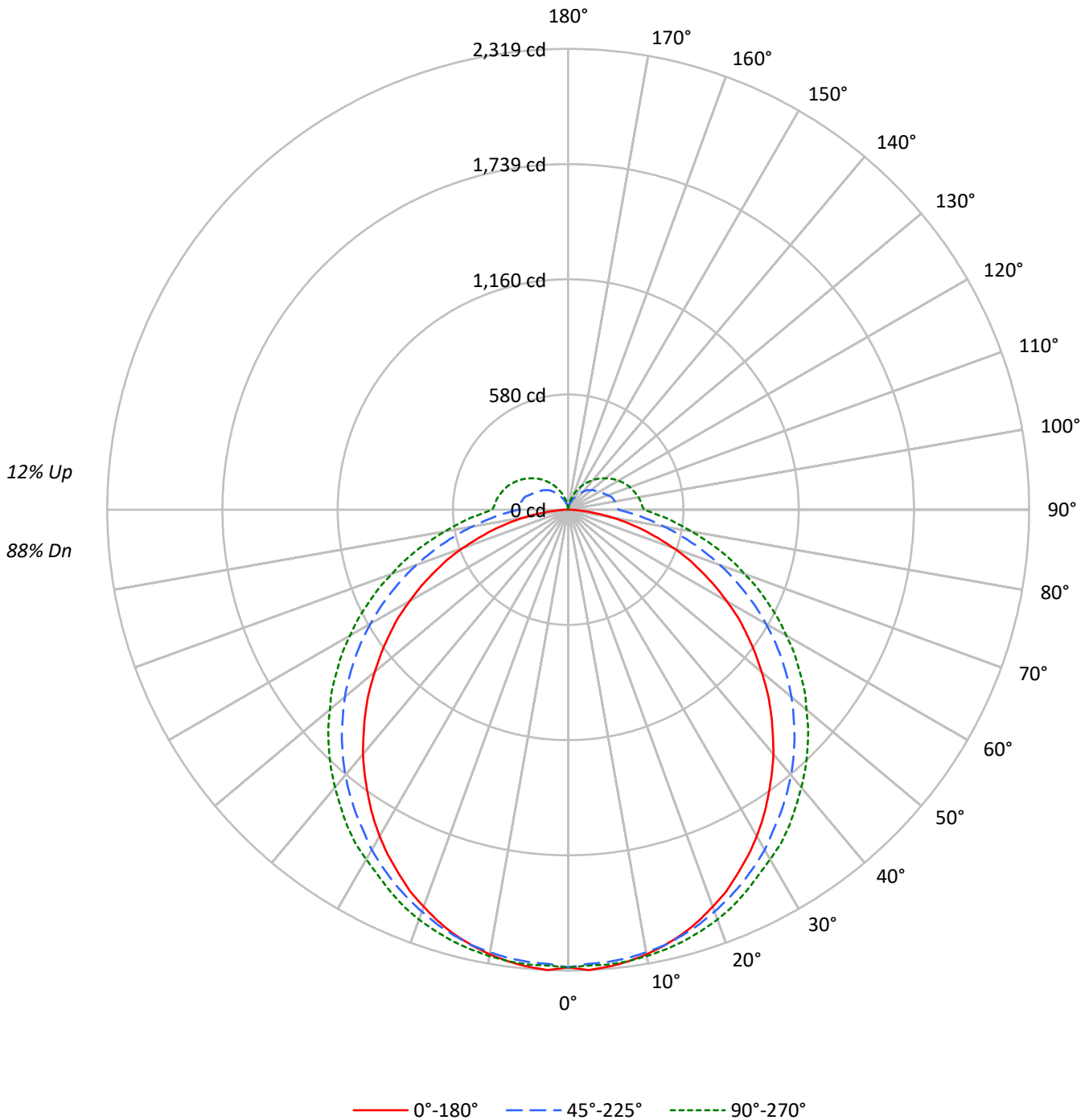
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8292.0 lumens  
Efficiency: N/A  
Efficacy: 133.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.04')  
CIE Type: Semi-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			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	0
RCR																		
0	116	116	116	116	112	112	112	112	105	105	105	98	98	98	91	91	91	88
1	105	99	95	90	101	96	92	88	89	86	83	84	81	78	78	76	74	71
2	95	86	79	72	91	83	76	71	77	72	67	72	68	64	68	64	61	58
3	86	75	66	60	82	72	65	58	68	61	56	63	58	53	59	55	51	48
4	78	66	57	50	75	64	56	49	60	53	47	56	50	45	53	48	43	41
5	72	59	50	43	69	57	48	42	54	46	41	50	44	39	47	42	38	35
6	66	53	44	37	64	51	43	37	48	41	35	45	39	34	43	37	33	31
7	61	48	39	33	59	46	38	32	44	36	31	41	35	30	39	33	29	27
8	57	43	35	29	55	42	34	29	40	33	28	38	31	27	36	30	26	24
9	53	40	32	26	51	39	31	26	37	30	25	35	29	24	33	27	23	21
10	50	37	29	23	48	36	28	23	34	27	22	32	26	22	31	25	21	19

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

	0°	45°	90°
0°	24791	24791	24791
5°	24925	24419	24468
10°	24787	24189	24214
15°	24584	23914	23978
20°	24257	23584	23708
25°	23865	23247	23347
30°	23438	22911	23039
35°	22896	22507	22825
40°	22371	22172	22494
45°	21735	21784	22214
50°	20998	21373	21861
55°	20296	20864	21546
60°	19488	20323	21159
65°	18500	19701	20782
70°	17247	19018	20354
75°	15460	18273	20207
80°	12964	17808	20044
85°	9403	18175	21129



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	218.7	2.6
10°-20°	629.0	7.6
20°-30°	956.8	11.5
30°-40°	1163.4	14.0
40°-50°	1230.9	14.8
50°-60°	1153.8	13.9
60°-70°	949.2	11.4
70°-80°	656.7	7.9
80°-90°	365.2	4.4
90°-100°	240.6	2.9
100°-110°	215.7	2.6
110°-120°	178.6	2.2
120°-130°	138.0	1.7
130°-140°	97.7	1.2
140°-150°	59.0	0.7
150°-160°	28.3	0.3
160°-170°	9.3	0.1
170°-180°	1.1	0.0
0°-30°	1804.5	21.8
0°-40°	2967.9	35.8
0°-60°	5352.5	64.6
0°-90°	7323.6	88.3
90°-120°	634.9	7.7
90°-150°	929.6	11.2
90°-180°	968.0	11.7
0°-180°	8292.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2303	2303	2303	2303	2303	
5°	2309	2305	2285	2303	2298	219
15°	2212	2219	2218	2248	2248	624
25°	2019	2048	2072	2117	2119	931
35°	1755	1802	1863	1923	1940	1098
45°	1443	1518	1610	1683	1702	1112
55°	1098	1196	1311	1393	1421	983
65°	743	849	981	1078	1108	736
75°	386	498	645	747	788	410
85°	85	212	358	457	497	98
90°	1	119	253	348	382	6
95°	1	114	246	336	369	1
105°	1	98	230	317	345	1
115°	3	85	194	281	312	2
125°	3	72	166	240	270	3
135°	3	57	139	197	222	2
145°	3	41	97	149	168	2
155°	4	28	60	95	111	2
165°	4	18	33	44	57	1
175°	4	7	10	10	6	0
180°	3	3	3	3	3	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2303.2	2303.2	2303.2	2303.2	2303.2
2.5°	2318.8	2311.7	2287.6	2303.2	2296.1
5°	2308.9	2304.6	2284.7	2303.2	2297.5
7.5°	2293.3	2291.8	2276.2	2297.5	2291.8
10°	2272.0	2274.8	2262.0	2284.7	2280.5
12.5°	2245.0	2249.2	2243.6	2269.1	2266.3
15°	2212.3	2219.4	2218.0	2247.8	2247.8
17.5°	2172.6	2182.5	2188.2	2222.3	2222.3
20°	2125.7	2141.3	2152.7	2189.6	2195.3
22.5°	2078.8	2097.3	2114.3	2152.7	2161.2
25°	2019.2	2047.6	2071.7	2117.2	2118.6
27.5°	1961.0	1992.2	2024.9	2068.9	2073.2
30°	1897.1	1936.8	1976.6	2019.2	2032.0
32.5°	1828.9	1872.9	1917.0	1973.8	1990.8
35°	1755.1	1801.9	1863.0	1922.6	1939.7
37.5°	1681.2	1733.8	1804.8	1865.8	1881.5
40°	1606.0	1664.2	1743.7	1806.2	1824.7
42.5°	1522.2	1593.2	1678.4	1745.1	1766.4
45°	1442.7	1518.0	1610.2	1682.7	1702.5
47.5°	1358.9	1438.4	1537.8	1614.5	1637.2
50°	1269.5	1360.3	1466.8	1543.5	1564.8
52.5°	1185.7	1278.0	1390.2	1469.7	1499.5
55°	1097.6	1195.6	1310.6	1393.0	1421.4
57.5°	1015.3	1109.0	1232.5	1314.9	1350.4
60°	921.6	1025.2	1148.8	1238.2	1266.6
62.5°	833.5	938.6	1066.4	1158.7	1191.4
65°	742.6	849.1	981.2	1077.8	1107.6
67.5°	657.4	762.5	897.4	992.6	1030.9
70°	563.7	674.5	812.2	910.2	942.9
72.5°	471.4	586.4	727.0	832.1	869.0
75°	386.2	498.4	644.7	746.9	788.1
77.5°	303.9	417.5	565.1	670.2	705.7
80°	221.5	340.8	491.3	595.0	629.0
82.5°	146.3	271.2	420.3	524.0	560.9
85°	85.2	211.6	357.8	457.2	497.0
87.5°	36.9	160.5	299.6	397.6	430.3
90°	1.4	119.3	252.8	347.9	382.0
92.5°	1.4	116.4	247.1	340.8	373.5
95°	1.4	113.6	245.7	336.5	369.2
97.5°	1.4	112.2	242.8	333.7	364.9
100°	1.4	107.9	238.6	328.0	359.3
102.5°	1.4	102.2	234.3	322.3	352.2
105°	1.4	98.0	230.0	316.7	345.1
107.5°	1.4	93.7	222.9	309.6	338.0
110°	1.4	89.5	211.6	302.5	330.9



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.4	88.0	203.1	292.5	322.3
115°	2.8	85.2	194.5	281.2	312.4
117.5°	2.8	83.8	187.4	269.8	302.5
120°	2.8	79.5	180.3	259.9	291.1
122.5°	2.8	75.3	173.2	249.9	281.2
125°	2.8	72.4	166.1	240.0	269.8
127.5°	2.8	68.2	160.5	230.0	257.0
130°	2.8	65.3	153.4	218.7	245.7
132.5°	2.8	61.1	146.3	207.3	232.9
135°	2.8	56.8	139.2	197.4	221.5
137.5°	2.8	51.1	130.6	186.0	208.7
140°	2.8	46.9	119.3	174.7	196.0
142.5°	2.8	44.0	107.9	161.9	181.8
145°	2.8	41.2	96.6	149.1	167.6
147.5°	2.8	38.3	86.6	136.3	153.4
150°	2.8	34.1	76.7	125.0	139.2
152.5°	4.3	31.2	68.2	110.8	125.0
155°	4.3	28.4	59.6	95.1	110.8
157.5°	4.3	25.6	51.1	79.5	96.6
160°	4.3	22.7	44.0	65.3	82.4
162.5°	4.3	21.3	38.3	54.0	69.6
165°	4.3	18.5	32.7	44.0	56.8
167.5°	4.3	14.2	27.0	34.1	46.9
170°	4.3	11.4	21.3	24.1	35.5
172.5°	4.3	8.5	15.6	17.0	18.5
175°	4.3	7.1	9.9	9.9	5.7
177.5°	4.3	5.7	5.7	5.7	2.8
180°	2.8	2.8	2.8	2.8	2.8

(END OF REPORT)