

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: P566902

Luminaire Tested: **4SNX-87HL-FDL-UNV-L830-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P566902  
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-L830-CD  
Description: 4FT 8700 LUMEN, SNX FIXTURE WITH 3000K, 80CRI LEDS AND FDL LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

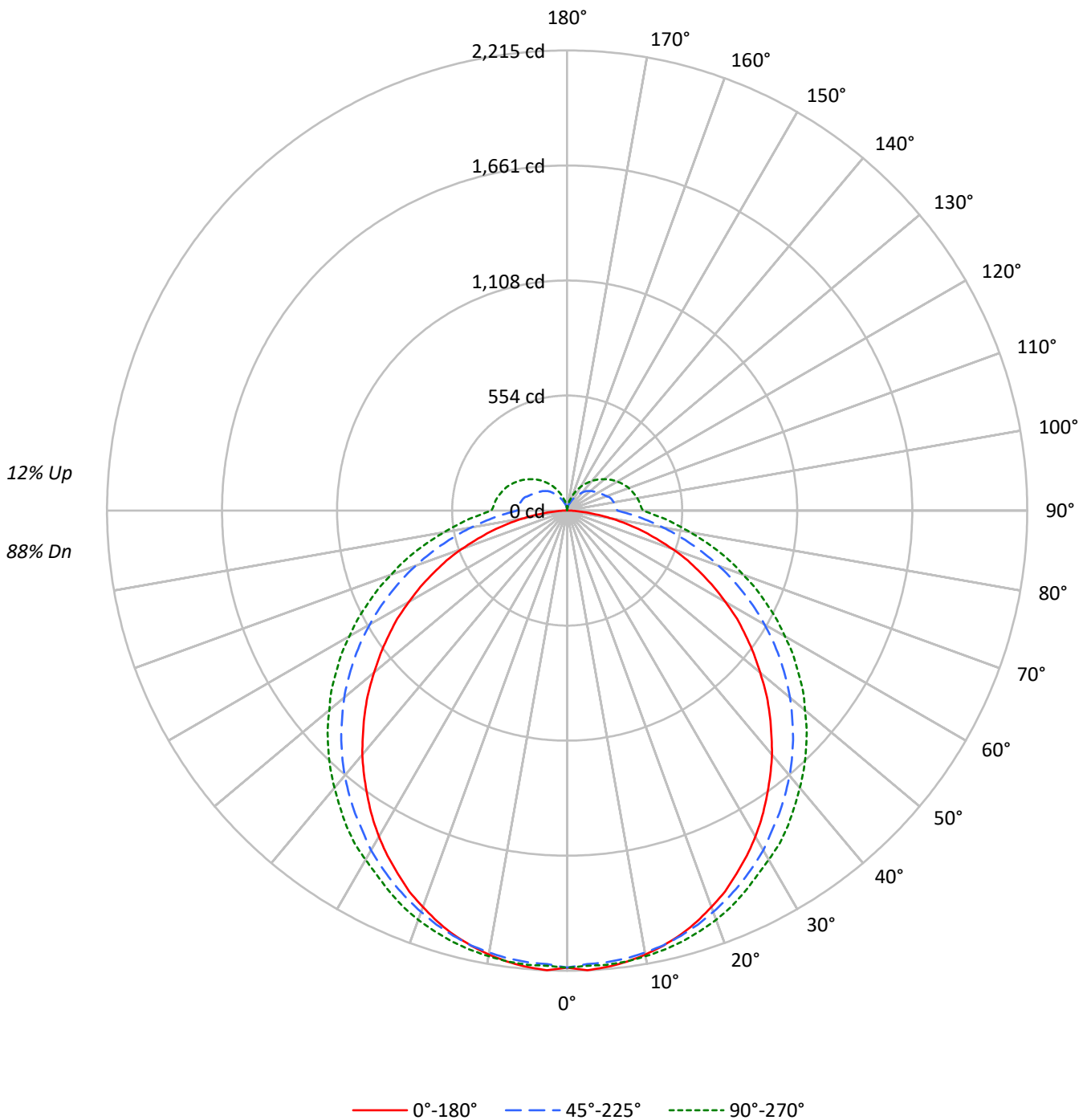
Lumens per Lamp: N/A  
Luminaire Lumens: 7920.0 lumens  
Efficiency: N/A  
Efficacy: 127.3 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.04')  
CIE Type: Semi-Direct

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

TEST NUMBER: P566902

CATALOG NUMBER: 4SNX-87HL-FDL-UNV-L830-CD

### Luminous Intensity Polar Plot





TEST NUMBER: P566902

CATALOG NUMBER: 4SNX-87HL-FDL-UNV-L830-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	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°	23680	23680	23680
5°	23807	23323	23370
10°	23675	23104	23128
15°	23482	22841	22903
20°	23169	22525	22645
25°	22795	22205	22300
30°	22387	21883	22005
35°	21868	21497	21801
40°	21367	21177	21484
45°	20760	20807	21218
50°	20055	20414	20881
55°	19386	19928	20579
60°	18613	19411	20210
65°	17671	18817	19850
70°	16473	18166	19441
75°	14768	17451	19299
80°	12385	17011	19145
85°	8983	17363	20181



TEST NUMBER: P566902

CATALOG NUMBER: 4SNX-87HL-FDL-UNV-L830-CD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	208.8	2.6
10°-20°	600.8	7.6
20°-30°	913.9	11.5
30°-40°	1111.2	14.0
40°-50°	1175.7	14.8
50°-60°	1102.0	13.9
60°-70°	906.6	11.4
70°-80°	627.3	7.9
80°-90°	348.8	4.4
90°-100°	229.8	2.9
100°-110°	206.1	2.6
110°-120°	170.6	2.2
120°-130°	131.9	1.7
130°-140°	93.3	1.2
140°-150°	56.3	0.7
150°-160°	27.0	0.3
160°-170°	8.9	0.1
170°-180°	1.1	0.0
0°-30°	1723.5	21.8
0°-40°	2834.7	35.8
0°-60°	5112.4	64.6
0°-90°	6995.1	88.3
90°-120°	606.4	7.7
90°-150°	887.9	11.2
90°-180°	925.0	11.7
0°-180°	7920.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2200	2200	2200	2200	2200	
5°	2205	2201	2182	2200	2194	209
15°	2113	2120	2118	2147	2147	596
25°	1929	1956	1979	2022	2024	889
35°	1676	1721	1779	1836	1853	1049
45°	1378	1450	1538	1607	1626	1062
55°	1048	1142	1252	1330	1358	939
65°	709	811	937	1029	1058	703
75°	369	476	616	713	753	391
85°	81	202	342	437	475	94
90°	1	114	241	332	365	5
95°	1	108	235	321	353	1
105°	1	94	220	302	330	1
115°	3	81	186	268	298	2
125°	3	69	159	229	258	2
135°	3	54	133	188	212	2
145°	3	39	92	142	160	2
155°	4	27	57	91	106	2
165°	4	18	31	42	54	1
175°	4	7	10	10	5	0
180°	3	3	3	3	3	



TEST NUMBER: P566902

CATALOG NUMBER: 4SNX-87HL-FDL-UNV-L830-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2199.9	2199.9	2199.9	2199.9	2199.9
2.5°	2214.8	2208.0	2185.0	2199.9	2193.1
5°	2205.3	2201.2	2182.2	2199.9	2194.4
7.5°	2190.4	2189.0	2174.1	2194.4	2189.0
10°	2170.0	2172.7	2160.5	2182.2	2178.2
12.5°	2144.3	2148.3	2142.9	2167.3	2164.6
15°	2113.1	2119.8	2118.5	2147.0	2147.0
17.5°	2075.1	2084.6	2090.0	2122.6	2122.6
20°	2030.3	2045.3	2056.1	2091.4	2096.8
22.5°	1985.6	2003.2	2019.5	2056.1	2064.2
25°	1928.6	1955.7	1978.8	2022.2	2023.6
27.5°	1873.0	1902.8	1934.0	1976.1	1980.2
30°	1812.0	1850.0	1887.9	1928.6	1940.8
32.5°	1746.9	1788.9	1831.0	1885.2	1901.5
35°	1676.3	1721.1	1779.4	1836.4	1852.7
37.5°	1605.8	1656.0	1723.8	1782.1	1797.1
40°	1533.9	1589.5	1665.5	1725.2	1742.8
42.5°	1453.9	1521.7	1603.1	1666.9	1687.2
45°	1378.0	1449.9	1538.0	1607.2	1626.2
47.5°	1298.0	1373.9	1468.8	1542.1	1563.8
50°	1212.5	1299.3	1401.0	1474.3	1494.6
52.5°	1132.5	1220.6	1327.8	1403.7	1432.2
55°	1048.4	1142.0	1251.8	1330.5	1357.6
57.5°	969.7	1059.2	1177.2	1255.9	1289.8
60°	880.2	979.2	1097.2	1182.7	1209.8
62.5°	796.1	896.5	1018.6	1106.7	1137.9
65°	709.3	811.0	937.2	1029.4	1057.9
67.5°	628.0	728.3	857.2	948.0	984.7
70°	538.4	644.2	775.8	869.4	900.6
72.5°	450.3	560.1	694.4	794.8	830.0
75°	368.9	476.1	615.7	713.4	752.7
77.5°	290.2	398.7	539.8	640.2	674.1
80°	211.6	325.5	469.3	568.3	600.8
82.5°	139.7	259.0	401.5	500.5	535.7
85°	81.4	202.1	341.8	436.7	474.7
87.5°	35.3	153.3	286.2	379.8	410.9
90°	1.4	113.9	241.4	332.3	364.8
92.5°	1.4	111.2	236.0	325.5	356.7
95°	1.4	108.5	234.6	321.4	352.6
97.5°	1.4	107.1	231.9	318.7	348.6
100°	1.4	103.1	227.9	313.3	343.1
102.5°	1.4	97.7	223.8	307.9	336.4
105°	1.4	93.6	219.7	302.4	329.6
107.5°	1.4	89.5	212.9	295.7	322.8
110°	1.4	85.4	202.1	288.9	316.0



TEST NUMBER: P566902

CATALOG NUMBER: 4SNX-87HL-FDL-UNV-L830-CD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.4	84.1	193.9	279.4	307.9
115°	2.7	81.4	185.8	268.5	298.4
117.5°	2.7	80.0	179.0	257.7	288.9
120°	2.7	76.0	172.2	248.2	278.0
122.5°	2.7	71.9	165.5	238.7	268.5
125°	2.7	69.2	158.7	229.2	257.7
127.5°	2.7	65.1	153.3	219.7	245.5
130°	2.7	62.4	146.5	208.9	234.6
132.5°	2.7	58.3	139.7	198.0	222.4
135°	2.7	54.3	132.9	188.5	211.6
137.5°	2.7	48.8	124.8	177.7	199.4
140°	2.7	44.8	113.9	166.8	187.2
142.5°	2.7	42.0	103.1	154.6	173.6
145°	2.7	39.3	92.2	142.4	160.0
147.5°	2.7	36.6	82.7	130.2	146.5
150°	2.7	32.6	73.2	119.4	132.9
152.5°	4.1	29.8	65.1	105.8	119.4
155°	4.1	27.1	57.0	90.9	105.8
157.5°	4.1	24.4	48.8	76.0	92.2
160°	4.1	21.7	42.0	62.4	78.7
162.5°	4.1	20.3	36.6	51.5	66.5
165°	4.1	17.6	31.2	42.0	54.3
167.5°	4.1	13.6	25.8	32.6	44.8
170°	4.1	10.9	20.3	23.1	33.9
172.5°	4.1	8.1	14.9	16.3	17.6
175°	4.1	6.8	9.5	9.5	5.4
177.5°	4.1	5.4	5.4	5.4	2.7
180°	2.7	2.7	2.7	2.7	2.7

(END OF REPORT)