

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: P566806

Luminaire Tested: **4SNX-81HL-FDL-UNV-L830-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P566806  
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-81HL-FDL-UNV-L830-CD  
Description: 4FT 8100 LUMEN, SNX FIXTURE WITH 3000K, 80CRI LEDS AND FDL LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

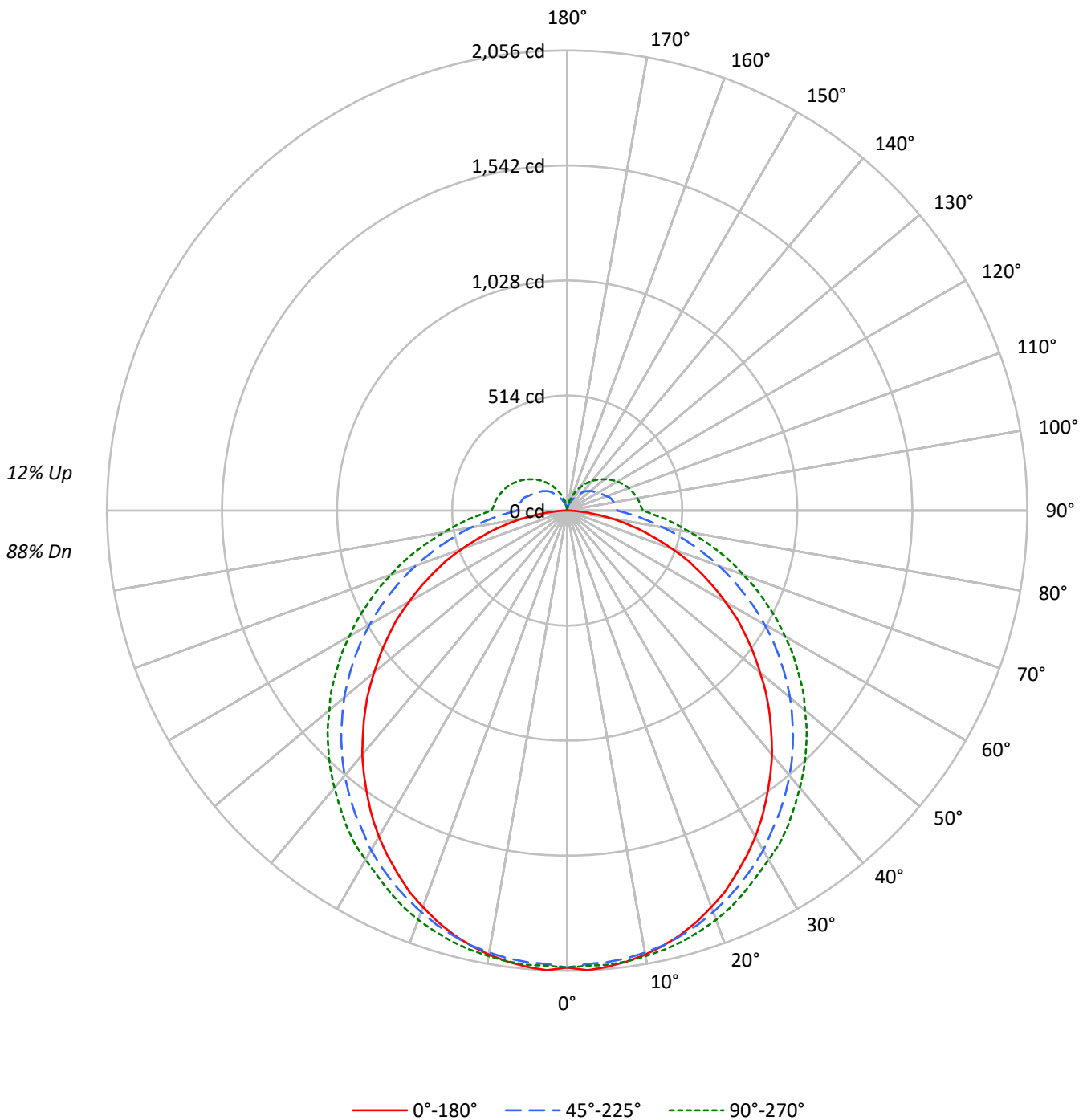
Lumens per Lamp: N/A  
Luminaire Lumens: 7351.0 lumens  
Efficiency: N/A  
Efficacy: 133.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.04')  
CIE Type: Semi-Direct

Input Watts (W): 55.1  
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: P566806

CATALOG NUMBER: 4SNX-81HL-FDL-UNV-L830-CD

### Luminous Intensity Polar Plot





TEST NUMBER: P566806

CATALOG NUMBER: 4SNX-81HL-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°	21978	21978	21978
5°	22097	21648	21691
10°	21974	21444	21466
15°	21795	21200	21257
20°	21505	20907	21018
25°	21158	20609	20698
30°	20778	20311	20424
35°	20297	19953	20235
40°	19831	19655	19941
45°	19269	19312	19693
50°	18615	18948	19380
55°	17994	18497	19101
60°	17277	18016	18758
65°	16403	17466	18424
70°	15292	16862	18044
75°	13707	16198	17915
80°	11495	15789	17772
85°	8332	16113	18731



TEST NUMBER: P566806

CATALOG NUMBER: 4SNX-81HL-FDL-UNV-L830-CD

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	193.8	2.6
10°-20°	557.6	7.6
20°-30°	848.3	11.5
30°-40°	1031.4	14.0
40°-50°	1091.2	14.8
50°-60°	1022.8	13.9
60°-70°	841.5	11.4
70°-80°	582.2	7.9
80°-90°	323.7	4.4
90°-100°	213.3	2.9
100°-110°	191.3	2.6
110°-120°	158.3	2.2
120°-130°	122.4	1.7
130°-140°	86.6	1.2
140°-150°	52.3	0.7
150°-160°	25.1	0.3
160°-170°	8.2	0.1
170°-180°	1.0	0.0
0°-30°	1599.7	21.8
0°-40°	2631.1	35.8
0°-60°	4745.1	64.6
0°-90°	6492.5	88.3
90°-120°	562.9	7.7
90°-150°	824.1	11.2
90°-180°	858.0	11.7
0°-180°	7351.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2042	2042	2042	2042	2042	
5°	2047	2043	2026	2042	2037	194
15°	1961	1968	1966	1993	1993	553
25°	1790	1815	1837	1877	1878	825
35°	1556	1598	1652	1704	1720	974
45°	1279	1346	1428	1492	1509	986
55°	973	1060	1162	1235	1260	871
65°	658	753	870	956	982	653
75°	342	442	572	662	699	363
85°	76	188	317	405	441	87
90°	1	106	224	308	339	5
95°	1	101	218	298	327	1
105°	1	87	204	281	306	1
115°	2	76	172	249	277	2
125°	2	64	147	213	239	2
135°	2	50	123	175	196	2
145°	2	36	86	132	148	2
155°	4	25	53	84	98	2
165°	4	16	29	39	50	1
175°	4	6	9	9	5	0
180°	2	2	2	2	2	



TEST NUMBER: P566806

CATALOG NUMBER: 4SNX-81HL-FDL-UNV-L830-CD

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2041.8	2041.8	2041.8	2041.8	2041.8
2.5°	2055.7	2049.4	2028.0	2041.8	2035.5
5°	2046.9	2043.1	2025.5	2041.8	2036.8
7.5°	2033.0	2031.8	2017.9	2036.8	2031.8
10°	2014.1	2016.6	2005.3	2025.5	2021.7
12.5°	1990.2	1994.0	1989.0	2011.6	2009.1
15°	1961.3	1967.6	1966.3	1992.7	1992.7
17.5°	1926.0	1934.8	1939.9	1970.1	1970.1
20°	1884.5	1898.3	1908.4	1941.1	1946.2
22.5°	1842.9	1859.3	1874.4	1908.4	1915.9
25°	1790.1	1815.2	1836.6	1876.9	1878.2
27.5°	1738.4	1766.1	1795.1	1834.1	1837.9
30°	1681.8	1717.0	1752.3	1790.1	1801.4
32.5°	1621.4	1660.4	1699.4	1749.8	1764.9
35°	1555.9	1597.5	1651.6	1704.5	1719.6
37.5°	1490.5	1537.0	1600.0	1654.1	1668.0
40°	1423.7	1475.3	1545.8	1601.2	1617.6
42.5°	1349.5	1412.4	1487.9	1547.1	1566.0
45°	1279.0	1345.7	1427.5	1491.7	1509.3
47.5°	1204.7	1275.2	1363.3	1431.3	1451.4
50°	1125.4	1206.0	1300.4	1368.3	1387.2
52.5°	1051.1	1132.9	1232.4	1302.9	1329.3
55°	973.1	1059.9	1161.9	1234.9	1260.1
57.5°	900.1	983.1	1092.7	1165.7	1197.1
60°	817.0	908.9	1018.4	1097.7	1122.9
62.5°	738.9	832.1	945.4	1027.2	1056.2
65°	658.4	752.8	869.9	955.5	981.9
67.5°	582.8	676.0	795.6	879.9	913.9
70°	499.8	597.9	720.1	806.9	835.9
72.5°	417.9	519.9	644.5	737.7	770.4
75°	342.4	441.8	571.5	662.1	698.7
77.5°	269.4	370.1	501.0	594.2	625.6
80°	196.4	302.1	435.6	527.5	557.7
82.5°	129.7	240.4	372.6	464.5	497.2
85°	75.5	187.6	317.2	405.3	440.6
87.5°	32.7	142.2	265.6	352.5	381.4
90°	1.3	105.7	224.1	308.4	338.6
92.5°	1.3	103.2	219.0	302.1	331.1
95°	1.3	100.7	217.8	298.3	327.3
97.5°	1.3	99.4	215.3	295.8	323.5
100°	1.3	95.7	211.5	290.8	318.5
102.5°	1.3	90.6	207.7	285.8	312.2
105°	1.3	86.9	203.9	280.7	305.9
107.5°	1.3	83.1	197.6	274.4	299.6
110°	1.3	79.3	187.6	268.1	293.3



TEST NUMBER: P566806

CATALOG NUMBER: 4SNX-81HL-FDL-UNV-L830-CD

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.3	78.0	180.0	259.3	285.8
115°	2.5	75.5	172.5	249.2	276.9
117.5°	2.5	74.3	166.2	239.2	268.1
120°	2.5	70.5	159.9	230.4	258.1
122.5°	2.5	66.7	153.6	221.6	249.2
125°	2.5	64.2	147.3	212.7	239.2
127.5°	2.5	60.4	142.2	203.9	227.8
130°	2.5	57.9	136.0	193.9	217.8
132.5°	2.5	54.1	129.7	183.8	206.4
135°	2.5	50.4	123.4	175.0	196.4
137.5°	2.5	45.3	115.8	164.9	185.0
140°	2.5	41.5	105.7	154.8	173.7
142.5°	2.5	39.0	95.7	143.5	161.1
145°	2.5	36.5	85.6	132.2	148.5
147.5°	2.5	34.0	76.8	120.8	136.0
150°	2.5	30.2	68.0	110.8	123.4
152.5°	3.8	27.7	60.4	98.2	110.8
155°	3.8	25.2	52.9	84.3	98.2
157.5°	3.8	22.7	45.3	70.5	85.6
160°	3.8	20.1	39.0	57.9	73.0
162.5°	3.8	18.9	34.0	47.8	61.7
165°	3.8	16.4	29.0	39.0	50.4
167.5°	3.8	12.6	23.9	30.2	41.5
170°	3.8	10.1	18.9	21.4	31.5
172.5°	3.8	7.6	13.8	15.1	16.4
175°	3.8	6.3	8.8	8.8	5.0
177.5°	3.8	5.0	5.0	5.0	2.5
180°	2.5	2.5	2.5	2.5	2.5

(END OF REPORT)