

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: P566808

Luminaire Tested: **4SNX-81HL-FDL-UNV-L840-CD**

Issue Date: 9/15/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P566808  
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-L840-CD  
Description: 4FT 8100 LUMEN, SNX FIXTURE WITH 4000K, 80CRI LEDS AND FDL LENS  
Light Source: -  
Ballast/Driver: -

**Summary**

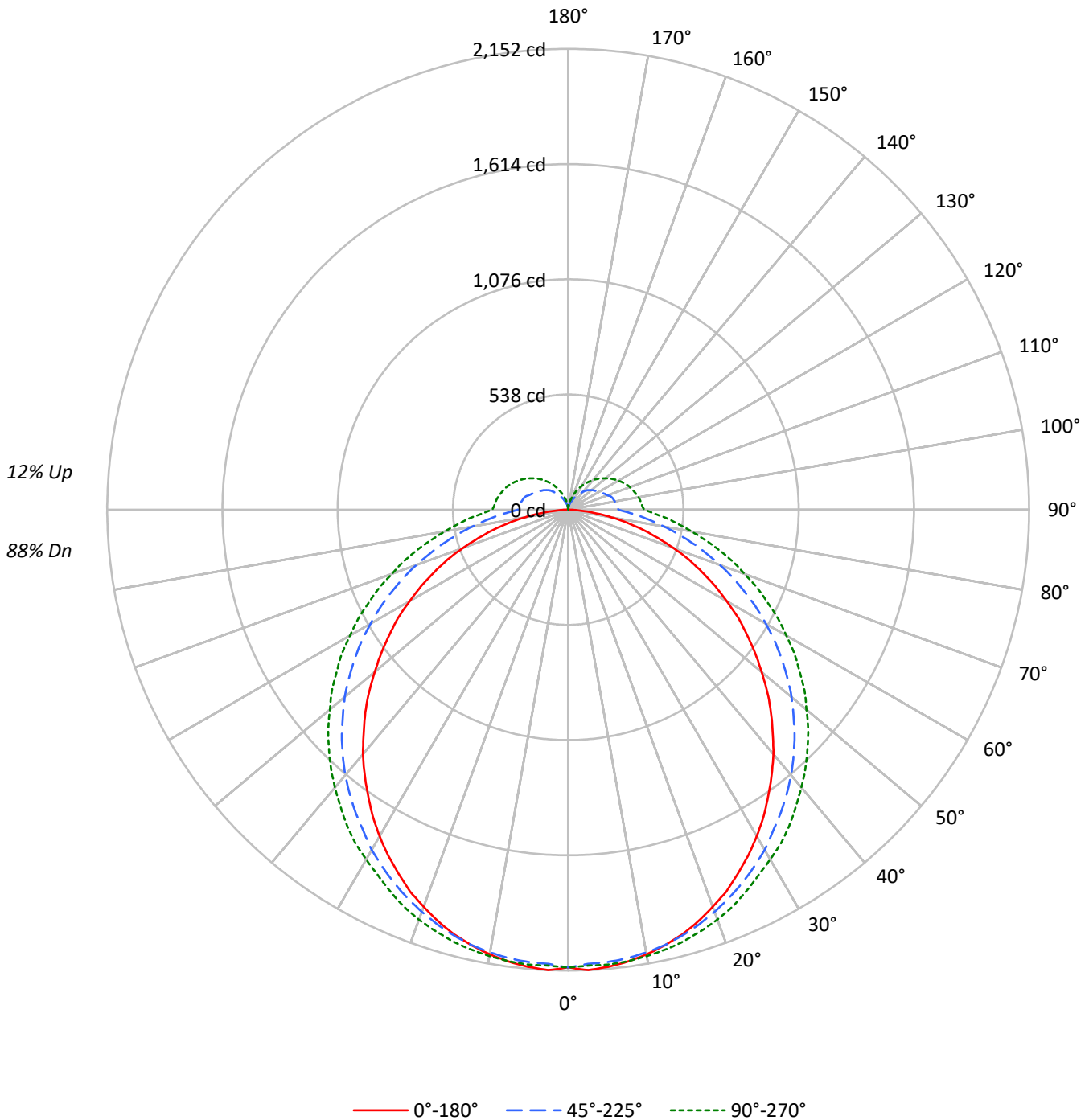
Lumens per Lamp: N/A  
Luminaire Lumens: 7696.0 lumens  
Efficiency: N/A  
Efficacy: 139.7 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.31 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.25' x L: 4' x H: 0.04')  
CIE Type: Semi-Direct

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

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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	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°	23010	23010	23010
5°	23133	22664	22710
10°	23006	22451	22474
15°	22818	22196	22255
20°	22514	21889	22004
25°	22150	21577	21669
30°	21753	21264	21382
35°	21249	20889	21184
40°	20763	20578	20876
45°	20173	20218	20618
50°	19488	19837	20290
55°	18837	19364	19997
60°	18086	18862	19639
65°	17173	18285	19289
70°	16008	17651	18891
75°	14352	16958	18753
80°	12034	16528	18604
85°	8730	16870	19611



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	202.9	2.6
10°-20°	583.8	7.6
20°-30°	888.1	11.5
30°-40°	1079.8	14.0
40°-50°	1142.4	14.8
50°-60°	1070.8	13.9
60°-70°	880.9	11.4
70°-80°	609.5	7.9
80°-90°	338.9	4.4
90°-100°	223.3	2.9
100°-110°	200.2	2.6
110°-120°	165.7	2.2
120°-130°	128.1	1.7
130°-140°	90.7	1.2
140°-150°	54.7	0.7
150°-160°	26.3	0.3
160°-170°	8.6	0.1
170°-180°	1.0	0.0
0°-30°	1674.8	21.8
0°-40°	2754.6	35.8
0°-60°	4967.8	64.6
0°-90°	6797.3	88.3
90°-120°	589.3	7.7
90°-150°	862.8	11.2
90°-180°	899.0	11.7
0°-180°	7696.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2138	2138	2138	2138	2138	
5°	2143	2139	2120	2138	2132	203
15°	2053	2060	2059	2086	2086	579
25°	1874	1900	1923	1965	1966	864
35°	1629	1672	1729	1784	1800	1019
45°	1339	1409	1494	1562	1580	1032
55°	1019	1110	1216	1293	1319	912
65°	689	788	911	1000	1028	683
75°	358	463	598	693	731	380
85°	79	196	332	424	461	91
90°	1	111	235	323	354	5
95°	1	105	228	312	343	1
105°	1	91	214	294	320	1
115°	3	79	181	261	290	2
125°	3	67	154	223	250	2
135°	3	53	129	183	206	2
145°	3	38	90	138	156	2
155°	4	26	55	88	103	2
165°	4	17	30	41	53	1
175°	4	7	9	9	5	0
180°	3	3	3	3	3	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2137.7	2137.7	2137.7	2137.7	2137.7
2.5°	2152.1	2145.6	2123.2	2137.7	2131.1
5°	2142.9	2139.0	2120.5	2137.7	2132.4
7.5°	2128.4	2127.1	2112.6	2132.4	2127.1
10°	2108.7	2111.3	2099.4	2120.5	2116.6
12.5°	2083.6	2087.6	2082.3	2106.0	2103.4
15°	2053.3	2059.9	2058.6	2086.3	2086.3
17.5°	2016.4	2025.6	2030.9	2062.5	2062.5
20°	1972.9	1987.4	1998.0	2032.2	2037.5
22.5°	1929.4	1946.6	1962.4	1998.0	2005.9
25°	1874.1	1900.4	1922.8	1965.0	1966.3
27.5°	1820.0	1849.0	1879.3	1920.2	1924.1
30°	1760.7	1797.6	1834.5	1874.1	1885.9
32.5°	1697.5	1738.3	1779.2	1831.9	1847.7
35°	1628.9	1672.4	1729.1	1784.5	1800.3
37.5°	1560.4	1609.2	1675.1	1731.7	1746.2
40°	1490.6	1544.6	1618.4	1676.4	1693.5
42.5°	1412.8	1478.7	1557.8	1619.7	1639.5
45°	1339.0	1408.8	1494.5	1561.7	1580.2
47.5°	1261.2	1335.0	1427.3	1498.5	1519.6
50°	1178.2	1262.6	1361.4	1432.6	1452.3
52.5°	1100.5	1186.1	1290.2	1364.0	1391.7
55°	1018.7	1109.7	1216.4	1292.9	1319.2
57.5°	942.3	1029.3	1143.9	1220.4	1253.3
60°	855.3	951.5	1066.2	1149.2	1175.6
62.5°	773.6	871.1	989.8	1075.4	1105.7
65°	689.3	788.1	910.7	1000.3	1028.0
67.5°	610.2	707.7	832.9	921.2	956.8
70°	523.2	626.0	753.8	844.8	875.1
72.5°	437.5	544.3	674.8	772.3	806.6
75°	358.5	462.6	598.3	693.2	731.4
77.5°	282.0	387.5	524.5	622.1	655.0
80°	205.6	316.3	456.0	552.2	583.8
82.5°	135.7	251.7	390.1	486.3	520.6
85°	79.1	196.4	332.1	424.4	461.3
87.5°	34.3	148.9	278.1	369.0	399.3
90°	1.3	110.7	234.6	322.9	354.5
92.5°	1.3	108.1	229.3	316.3	346.6
95°	1.3	105.4	228.0	312.3	342.7
97.5°	1.3	104.1	225.4	309.7	338.7
100°	1.3	100.2	221.4	304.4	333.4
102.5°	1.3	94.9	217.5	299.2	326.8
105°	1.3	90.9	213.5	293.9	320.3
107.5°	1.3	87.0	206.9	287.3	313.7
110°	1.3	83.0	196.4	280.7	307.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.3	81.7	188.5	271.5	299.2
115°	2.6	79.1	180.6	260.9	289.9
117.5°	2.6	77.8	174.0	250.4	280.7
120°	2.6	73.8	167.4	241.2	270.2
122.5°	2.6	69.8	160.8	232.0	260.9
125°	2.6	67.2	154.2	222.7	250.4
127.5°	2.6	63.3	148.9	213.5	238.5
130°	2.6	60.6	142.3	203.0	228.0
132.5°	2.6	56.7	135.7	192.4	216.1
135°	2.6	52.7	129.2	183.2	205.6
137.5°	2.6	47.4	121.2	172.6	193.7
140°	2.6	43.5	110.7	162.1	181.9
142.5°	2.6	40.9	100.2	150.2	168.7
145°	2.6	38.2	89.6	138.4	155.5
147.5°	2.6	35.6	80.4	126.5	142.3
150°	2.6	31.6	71.2	116.0	129.2
152.5°	4.0	29.0	63.3	102.8	116.0
155°	4.0	26.4	55.4	88.3	102.8
157.5°	4.0	23.7	47.4	73.8	89.6
160°	4.0	21.1	40.9	60.6	76.4
162.5°	4.0	19.8	35.6	50.1	64.6
165°	4.0	17.1	30.3	40.9	52.7
167.5°	4.0	13.2	25.0	31.6	43.5
170°	4.0	10.5	19.8	22.4	32.9
172.5°	4.0	7.9	14.5	15.8	17.1
175°	4.0	6.6	9.2	9.2	5.3
177.5°	4.0	5.3	5.3	5.3	2.6
180°	2.6	2.6	2.6	2.6	2.6

(END OF REPORT)