

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: P236212

Luminaire Tested: **2SWLED-24HL-LN-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236212
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-9)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 2SWLED-24HL-LN-UNV-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
2FT FIXTURE WITH 2 ROW LED, NARROW LENS
Light Source: (112) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

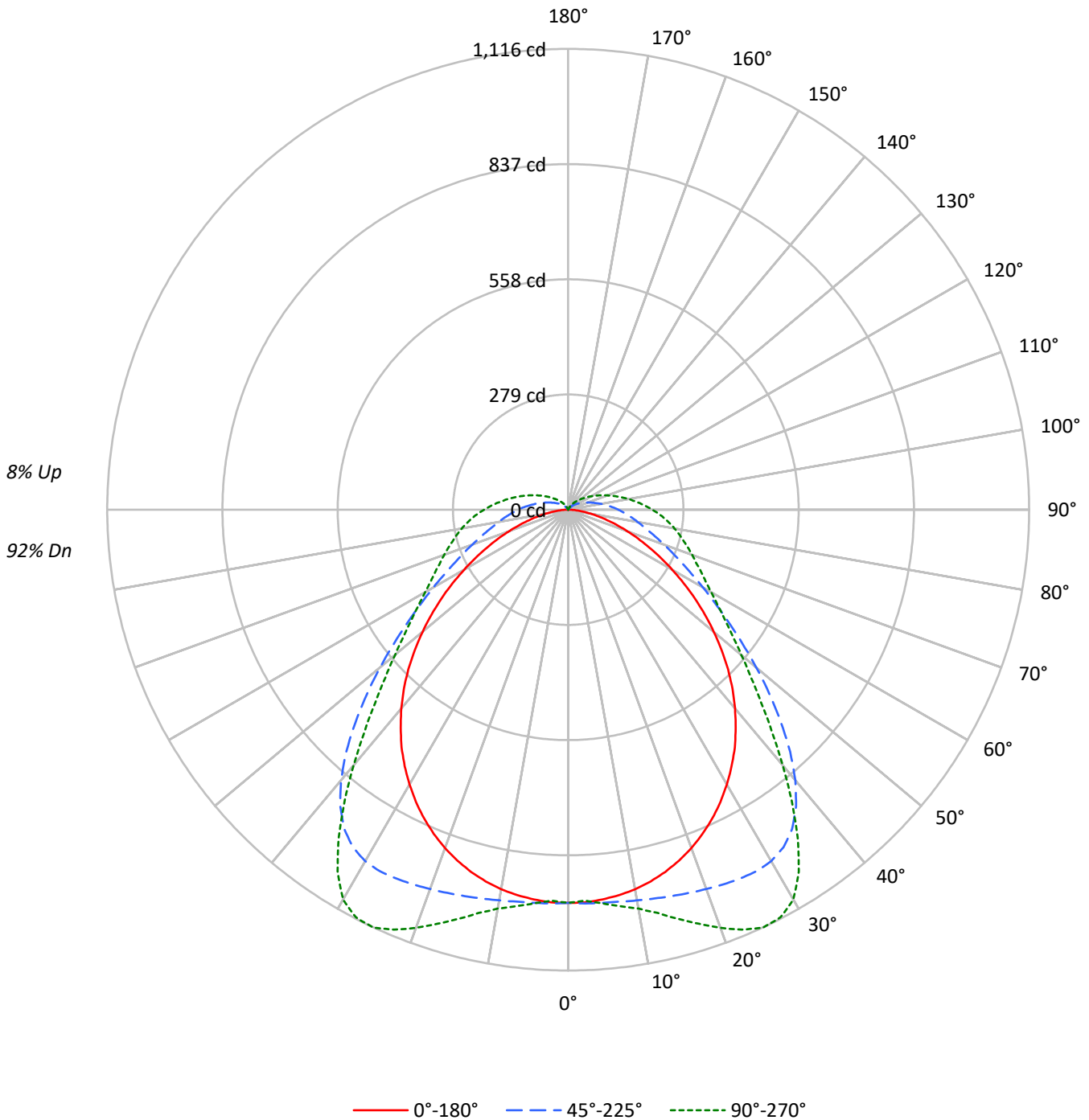
Lumens per Lamp: N/A
Luminaire Lumens: 3197.0 lumens
Efficiency: N/A
Efficacy: 133.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.48 / 1.45
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')
CIE Type: Direct

Input Watts (W): 24
Input Voltage (V): 120
Input Current (Ain): 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	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	92
1	106	101	96	92	103	98	94	90	92	89	86	87	84	82	82	80	78	75
2	97	88	81	75	93	85	79	74	81	75	71	76	72	68	72	69	65	63
3	88	77	69	63	85	75	68	62	71	65	60	67	62	58	64	59	56	53
4	81	69	60	53	78	67	59	53	63	57	51	60	54	49	57	52	48	46
5	74	62	53	46	72	60	52	45	57	50	44	54	48	43	52	46	42	40
6	69	56	47	40	66	54	46	40	52	44	39	49	43	38	47	41	37	35
7	64	50	42	36	62	49	41	35	47	40	34	45	38	34	43	37	33	31
8	59	46	38	32	57	45	37	31	43	36	31	41	35	30	39	34	30	28
9	55	42	34	29	54	41	34	28	40	33	28	38	32	27	36	31	27	25
10	52	39	31	26	50	38	31	26	37	30	25	35	29	25	34	28	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13663	13663	13663
5°	13565	13383	13338
10°	13431	13240	13379
15°	13233	13235	13805
20°	12972	13343	14420
25°	12639	13542	14966
30°	12215	13704	14753
35°	11719	13474	13340
40°	11091	12576	11409
45°	10353	11146	9657
50°	9454	9546	8350
55°	8473	8063	7431
60°	7421	6905	6850
65°	6332	6028	6566
70°	5321	5468	6480
75°	4259	5079	6528
80°	3187	4947	6737
85°	2057	5021	7052



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.3	2.9
10°-20°	274.6	8.6
20°-30°	450.3	14.1
30°-40°	551.1	17.2
40°-50°	514.3	16.1
50°-60°	405.8	12.7
60°-70°	297.5	9.3
70°-80°	213.5	6.7
80°-90°	150.9	4.7
90°-100°	103.2	3.2
100°-110°	66.8	2.1
110°-120°	40.1	1.3
120°-130°	22.1	0.7
130°-140°	10.7	0.3
140°-150°	4.1	0.1
150°-160°	0.7	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	816.2	25.5
0°-40°	1367.3	42.8
0°-60°	2287.4	71.5
0°-90°	2949.3	92.3
90°-120°	210.1	6.6
90°-150°	247.0	7.7
90°-180°	248.0	7.8
0°-180°	3197.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	952	952	952	952	952	
5°	948	952	956	957	957	90
15°	908	928	969	1008	1026	256
25°	825	875	985	1081	1116	380
35°	703	792	945	978	969	439
45°	547	656	728	678	661	421
55°	374	455	472	458	462	335
65°	216	269	302	335	355	216
75°	98	140	203	265	289	105
85°	23	69	144	208	233	25
90°	0	48	121	182	203	1
95°	0	34	99	155	175	0
105°	0	18	64	107	123	0
115°	0	10	40	70	82	0
125°	0	4	24	43	51	0
135°	0	1	13	26	30	0
145°	1	0	5	12	15	0
155°	1	1	0	3	4	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	952.0	952.0	952.0	952.0	952.0
2.5°	952.0	955.5	954.6	951.1	947.6
5°	947.6	952.0	955.5	957.3	957.3
7.5°	941.4	948.5	957.3	966.1	968.7
10°	933.5	944.1	960.8	975.7	981.0
12.5°	922.1	937.0	964.3	988.9	1000.4
15°	908.0	928.2	968.7	1008.3	1025.9
17.5°	891.3	917.7	973.1	1027.6	1051.4
20°	871.9	905.3	977.5	1047.9	1077.8
22.5°	849.9	891.3	981.9	1066.4	1100.7
25°	825.3	874.6	985.4	1081.3	1116.5
27.5°	798.0	857.0	987.2	1085.7	1113.0
30°	768.1	837.6	982.8	1070.8	1090.1
32.5°	736.4	816.5	969.6	1034.7	1039.1
35°	703.0	791.8	944.9	977.5	968.7
37.5°	666.0	764.6	906.2	906.2	888.6
40°	628.2	733.8	855.2	829.7	807.7
42.5°	588.6	696.8	795.4	752.3	730.3
45°	547.3	655.5	728.5	677.5	660.8
47.5°	504.1	609.7	660.8	611.5	600.0
50°	460.2	559.6	593.9	552.5	547.3
52.5°	417.0	507.7	530.5	501.5	501.5
55°	373.9	454.9	472.5	457.5	461.9
57.5°	331.7	404.7	421.4	419.7	428.5
60°	291.2	355.5	376.6	387.1	399.4
62.5°	253.4	309.7	337.0	359.0	374.8
65°	215.6	269.2	301.8	335.2	354.6
67.5°	183.0	231.4	272.7	314.1	335.2
70°	152.2	195.3	247.2	296.5	319.4
72.5°	123.2	165.4	223.5	280.7	303.5
75°	97.7	139.9	203.2	264.8	288.6
77.5°	74.8	117.9	185.6	250.8	275.4
80°	54.5	98.5	170.7	237.6	261.3
82.5°	37.8	82.7	157.5	222.6	247.2
85°	22.9	68.6	144.3	208.5	233.2
87.5°	10.6	58.1	132.0	195.3	219.1
90°	0.0	48.4	121.4	182.1	203.2
92.5°	0.0	40.5	110.9	168.0	189.2
95°	0.0	34.3	99.4	154.9	175.1
97.5°	0.0	29.0	89.7	142.5	161.0
100°	0.0	23.8	80.9	130.2	148.7
102.5°	0.0	20.2	72.1	117.9	135.5
105°	0.0	17.6	64.2	107.3	123.2
107.5°	0.0	15.0	57.2	96.8	111.7
110°	0.0	13.2	50.2	87.1	101.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	11.4	44.9	78.3	91.5
115°	0.0	9.7	39.6	69.5	81.8
117.5°	0.0	7.9	35.2	61.6	73.0
120°	0.0	7.0	30.8	54.5	65.1
122.5°	0.0	5.3	27.3	49.3	58.1
125°	0.0	4.4	23.8	43.1	51.0
127.5°	0.0	3.5	21.1	37.8	44.9
130°	0.0	2.6	18.5	33.4	39.6
132.5°	0.0	1.8	15.8	29.0	34.3
135°	0.0	0.9	13.2	25.5	29.9
137.5°	0.0	0.0	10.6	21.1	25.5
140°	0.0	0.0	8.8	17.6	22.0
142.5°	0.0	0.0	7.0	15.0	18.5
145°	0.9	0.0	5.3	12.3	15.0
147.5°	0.9	0.0	3.5	9.7	11.4
150°	0.9	0.0	1.8	7.0	8.8
152.5°	0.9	0.0	0.0	4.4	6.2
155°	0.9	0.9	0.0	2.6	3.5
157.5°	0.9	0.9	0.0	0.0	1.8
160°	0.9	0.9	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)