

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: P236353

Luminaire Tested: **4SWLED-64HL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236353
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-27)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-64HL-LW-UNV-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, WIDE LENS
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

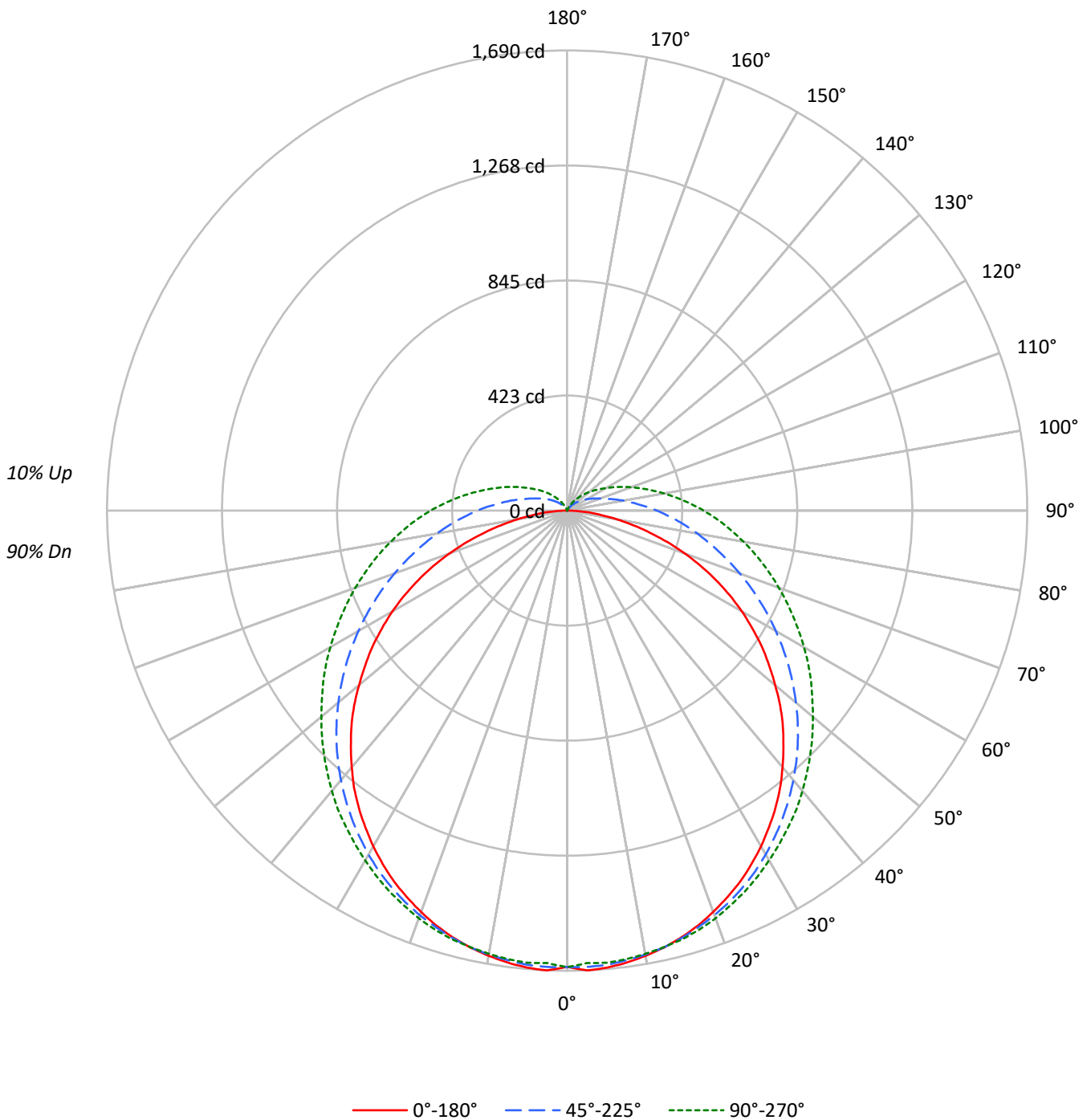
Lumens per Lamp: N/A
Luminaire Lumens: 6369.0 lumens
Efficiency: N/A
Efficacy: 102.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 62
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	113	113	113	113	106	106	106	99	99	99	93	93	93	90
1	104	98	93	88	100	95	90	86	89	85	82	83	80	77	78	75	73	70
2	94	84	77	70	90	82	75	69	76	71	66	72	67	63	67	63	60	57
3	85	73	65	57	82	71	63	56	67	60	54	62	57	52	59	54	50	47
4	78	65	55	48	74	63	54	47	59	51	45	55	49	44	52	47	42	40
5	71	58	48	41	68	56	47	40	52	45	39	49	43	38	47	41	36	34
6	65	52	42	36	63	50	41	35	47	40	34	45	38	33	42	36	32	29
7	61	47	38	31	58	45	37	31	43	35	30	41	34	29	38	32	28	26
8	56	42	34	28	54	41	33	27	39	32	27	37	31	26	35	29	25	23
9	53	39	30	25	51	38	30	24	36	29	24	34	28	23	32	27	22	21
10	49	36	28	22	47	35	27	22	33	26	21	32	25	21	30	24	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12028	12028	12028
5°	12098	11753	11611
10°	12021	11456	11273
15°	11936	11176	10969
20°	11822	10884	10663
25°	11708	10602	10350
30°	11557	10299	10037
35°	11395	9985	9756
40°	11184	9665	9494
45°	10972	9347	9233
50°	10670	9014	8988
55°	10384	8687	8797
60°	10007	8352	8613
65°	9484	8035	8465
70°	8742	7744	8393
75°	7714	7515	8384
80°	6359	7410	8476
85°	4684	7477	8735



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	158.9	2.5
10°-20°	458.0	7.2
20°-30°	701.0	11.0
30°-40°	859.4	13.5
40°-50°	919.8	14.4
50°-60°	882.2	13.9
60°-70°	760.9	11.9
70°-80°	586.2	9.2
80°-90°	406.4	6.4
90°-100°	264.6	4.2
100°-110°	168.2	2.6
110°-120°	102.6	1.6
120°-130°	58.7	0.9
130°-140°	29.0	0.5
140°-150°	10.9	0.2
150°-160°	2.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1318.0	20.7
0°-40°	2177.4	34.2
0°-60°	3979.4	62.5
0°-90°	5732.9	90.0
90°-120°	535.4	8.4
90°-150°	634.0	10.0
90°-180°	636.0	10.0
0°-180°	6369.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1676	1676	1676	1676	1676	
5°	1685	1669	1675	1667	1667	160
15°	1622	1611	1626	1627	1630	458
25°	1504	1498	1527	1534	1544	693
35°	1334	1336	1380	1400	1417	834
45°	1121	1137	1198	1239	1264	863
55°	873	910	993	1060	1094	780
65°	602	661	778	872	914	595
75°	316	415	575	695	741	336
85°	81	220	403	530	578	87
90°	2	149	330	455	501	6
95°	0	100	263	384	428	0
105°	0	50	164	265	302	0
115°	0	28	104	175	205	0
125°	1	13	65	114	134	1
135°	1	3	35	68	81	1
145°	1	1	13	32	40	1
155°	1	1	1	8	12	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°	1676.2	1676.2	1676.2	1676.2	1676.2
2.5°	1690.4	1673.8	1677.7	1671.4	1663.5
5°	1684.8	1669.0	1674.6	1666.7	1666.7
7.5°	1674.6	1660.3	1665.9	1661.1	1661.9
10°	1660.3	1646.1	1655.6	1651.7	1653.2
12.5°	1643.8	1629.5	1643.0	1639.8	1642.2
15°	1622.4	1611.4	1625.6	1627.2	1630.3
17.5°	1597.9	1588.4	1604.2	1609.0	1613.7
20°	1568.7	1561.6	1581.3	1586.1	1594.0
22.5°	1537.1	1530.7	1556.0	1560.0	1568.7
25°	1503.9	1497.6	1526.8	1533.9	1544.2
27.5°	1465.2	1462.8	1494.4	1504.7	1514.9
30°	1424.1	1422.5	1458.8	1470.7	1483.3
32.5°	1379.0	1380.6	1420.1	1435.9	1450.9
35°	1334.0	1335.5	1379.8	1400.4	1416.9
37.5°	1285.0	1289.7	1337.1	1361.6	1383.0
40°	1230.4	1241.5	1292.1	1322.1	1344.2
42.5°	1175.9	1190.9	1246.2	1281.0	1303.9
45°	1120.6	1137.2	1198.0	1239.1	1263.6
47.5°	1061.3	1082.7	1148.3	1194.9	1221.8
50°	997.3	1026.6	1096.9	1151.4	1178.3
52.5°	935.7	968.9	1044.7	1106.4	1134.8
55°	873.2	910.4	992.6	1059.7	1093.7
57.5°	807.7	848.0	938.8	1012.3	1049.5
60°	741.3	787.1	885.1	966.5	1004.4
62.5°	672.5	724.7	831.4	919.1	959.4
65°	602.2	660.7	778.4	872.5	914.3
67.5°	531.1	597.4	726.3	828.2	870.9
70°	458.4	535.0	674.1	783.2	827.4
72.5°	387.2	474.2	623.5	737.3	783.9
75°	316.1	414.9	575.3	694.6	741.3
77.5°	248.1	358.8	527.9	652.8	699.4
80°	185.7	307.4	485.2	610.9	657.5
82.5°	128.0	261.6	443.3	570.6	616.4
85°	80.6	219.7	403.0	530.3	577.7
87.5°	38.7	182.6	364.3	492.3	539.0
90°	1.6	149.4	329.5	455.2	501.0
92.5°	0.0	122.5	295.6	418.8	463.9
95°	0.0	100.4	263.2	384.1	427.5
97.5°	0.0	83.0	234.7	351.7	393.6
100°	0.0	68.0	209.4	320.8	361.2
102.5°	0.0	57.7	185.7	291.6	330.3
105°	0.0	49.8	163.6	264.7	301.9
107.5°	0.0	42.7	146.2	240.2	275.0
110°	0.0	36.4	130.4	216.5	250.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	31.6	116.2	196.0	226.8
115°	0.0	27.7	104.3	174.6	204.7
117.5°	0.0	22.9	93.3	157.3	184.1
120°	0.0	19.8	83.0	141.5	165.2
122.5°	0.8	16.6	73.5	127.2	148.6
125°	0.8	13.4	64.8	113.8	133.6
127.5°	0.8	10.3	56.9	101.2	119.3
130°	0.8	7.9	49.0	89.3	105.1
132.5°	0.8	5.5	41.9	78.2	93.3
135°	0.8	3.2	34.8	68.0	80.6
137.5°	0.8	1.6	28.4	57.7	69.5
140°	0.8	0.8	22.9	49.0	59.3
142.5°	0.8	0.0	17.4	41.1	49.0
145°	0.8	0.8	13.4	32.4	40.3
147.5°	0.8	0.8	9.5	25.3	32.4
150°	0.8	0.8	5.5	18.2	24.5
152.5°	0.8	0.8	2.4	12.6	18.2
155°	0.8	0.8	0.8	7.9	11.9
157.5°	0.8	0.8	0.0	3.2	6.3
160°	1.6	0.8	0.0	0.0	1.6
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)