

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: P236216

Luminaire Tested: **2SWLED-28HL-LN-UNV-L850-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236216
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-28HL-LN-UNV-L850-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
2FT FIXTURE WITH 2 ROW LED, NARROW LENS
Light Source: (112) 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

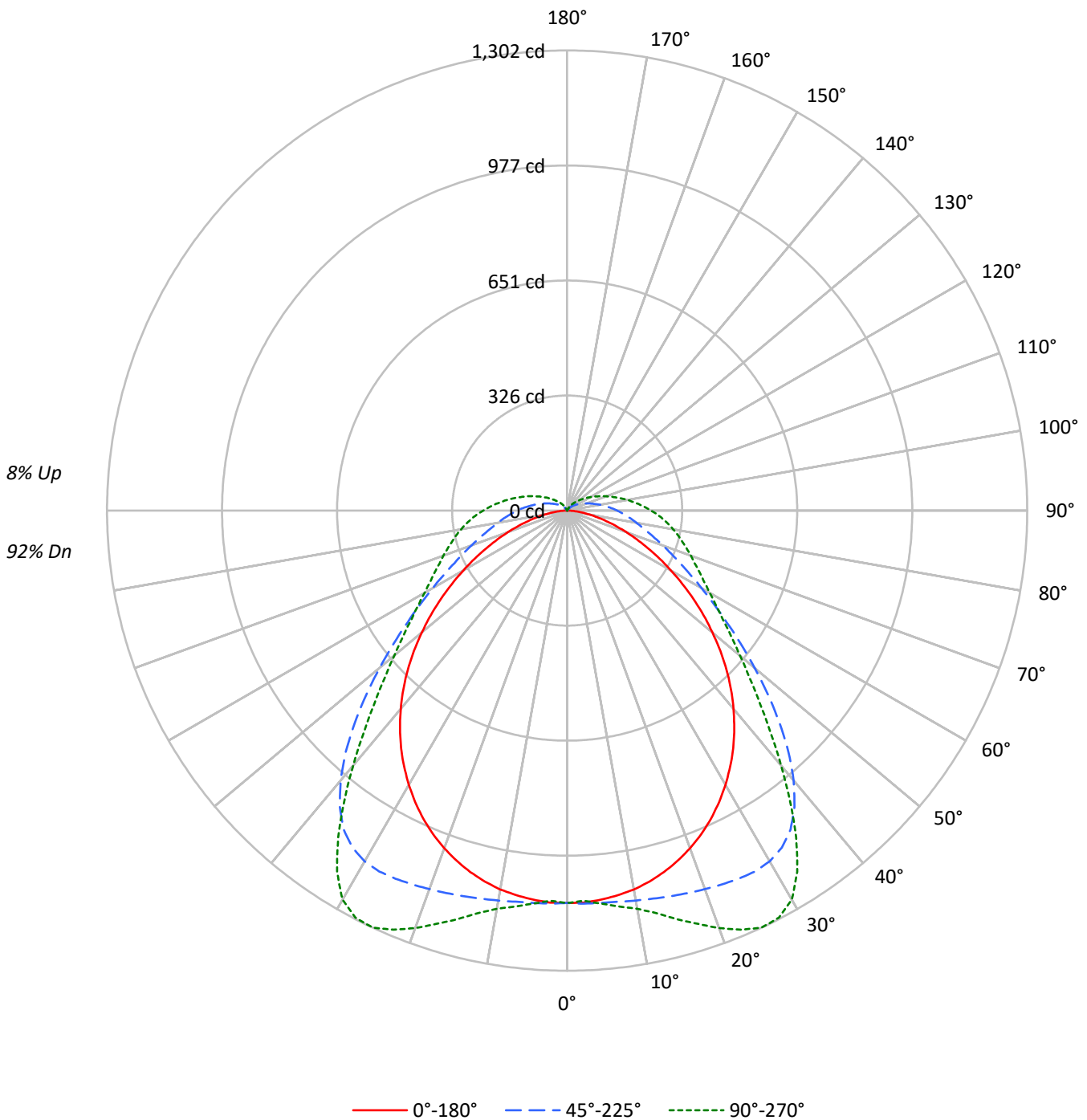
Lumens per Lamp: N/A
Luminaire Lumens: 3728.0 lumens
Efficiency: N/A
Efficacy: 133.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.48 / 1.45
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 2' x H: 0.15')
CIE Type: Direct

Input Watts (W): 27.9
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°	15932	15932	15932
5°	15819	15606	15552
10°	15662	15439	15602
15°	15430	15433	16097
20°	15127	15559	16815
25°	14739	15792	17452
30°	14244	15979	17204
35°	13664	15713	15555
40°	12932	14664	13304
45°	12071	12998	11260
50°	11023	11130	9735
55°	9881	9401	8665
60°	8655	8051	7989
65°	7383	7028	7657
70°	6205	6377	7555
75°	4965	5923	7612
80°	3719	5767	7856
85°	2398	5856	8223



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.4	2.9
10°-20°	320.2	8.6
20°-30°	525.1	14.1
30°-40°	642.7	17.2
40°-50°	599.7	16.1
50°-60°	473.1	12.7
60°-70°	346.9	9.3
70°-80°	248.9	6.7
80°-90°	176.0	4.7
90°-100°	120.4	3.2
100°-110°	77.9	2.1
110°-120°	46.7	1.3
120°-130°	25.8	0.7
130°-140°	12.5	0.3
140°-150°	4.7	0.1
150°-160°	0.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	951.7	25.5
0°-40°	1594.4	42.8
0°-60°	2667.3	71.5
0°-90°	3439.1	92.3
90°-120°	245.0	6.6
90°-150°	288.0	7.7
90°-180°	289.0	7.8
0°-180°	3728.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1110	1110	1110	1110	1110	
5°	1105	1110	1114	1116	1116	105
15°	1059	1082	1130	1176	1196	298
25°	962	1020	1149	1261	1302	443
35°	820	923	1102	1140	1130	511
45°	638	764	850	790	770	491
55°	436	530	551	534	539	390
65°	251	314	352	391	414	252
75°	114	163	237	309	336	123
85°	27	80	168	243	272	30
90°	0	56	142	212	237	2
95°	0	40	116	181	204	0
105°	0	20	75	125	144	0
115°	0	11	46	81	95	0
125°	0	5	28	50	60	0
135°	0	1	15	30	35	0
145°	1	0	6	14	17	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°	1110.1	1110.1	1110.1	1110.1	1110.1
2.5°	1110.1	1114.2	1113.2	1109.1	1105.0
5°	1105.0	1110.1	1114.2	1116.2	1116.2
7.5°	1097.8	1106.0	1116.2	1126.5	1129.6
10°	1088.5	1100.9	1120.4	1137.8	1144.0
12.5°	1075.2	1092.7	1124.5	1153.2	1166.5
15°	1058.8	1082.4	1129.6	1175.8	1196.3
17.5°	1039.3	1070.1	1134.7	1198.3	1226.0
20°	1016.7	1055.7	1139.8	1221.9	1256.8
22.5°	991.1	1039.3	1145.0	1243.5	1283.5
25°	962.4	1019.8	1149.1	1260.9	1301.9
27.5°	930.5	999.3	1151.1	1266.0	1297.8
30°	895.7	976.7	1146.0	1248.6	1271.2
32.5°	858.7	952.1	1130.6	1206.5	1211.7
35°	819.7	923.4	1101.9	1139.8	1129.6
37.5°	776.7	891.6	1056.7	1056.7	1036.2
40°	732.5	855.7	997.2	967.5	941.8
42.5°	686.4	812.6	927.5	877.2	851.6
45°	638.1	764.3	849.5	790.0	770.5
47.5°	587.9	711.0	770.5	713.0	699.7
50°	536.6	652.5	692.5	644.3	638.1
52.5°	486.3	592.0	618.7	584.8	584.8
55°	436.0	530.4	550.9	533.5	538.6
57.5°	386.8	471.9	491.4	489.4	499.6
60°	339.6	414.5	439.1	451.4	465.8
62.5°	295.5	361.1	392.9	418.6	437.1
65°	251.4	313.9	351.9	390.9	413.5
67.5°	213.4	269.8	318.0	366.3	390.9
70°	177.5	227.8	288.3	345.7	372.4
72.5°	143.6	192.9	260.6	327.3	354.0
75°	113.9	163.1	237.0	308.8	336.5
77.5°	87.2	137.5	216.5	292.4	321.1
80°	63.6	114.9	199.0	277.0	304.7
82.5°	44.1	96.4	183.6	259.6	288.3
85°	26.7	80.0	168.3	243.2	271.9
87.5°	12.3	67.7	153.9	227.8	255.5
90°	0.0	56.4	141.6	212.4	237.0
92.5°	0.0	47.2	129.3	196.0	220.6
95°	0.0	40.0	115.9	180.6	204.2
97.5°	0.0	33.9	104.6	166.2	187.8
100°	0.0	27.7	94.4	151.8	173.4
102.5°	0.0	23.6	84.1	137.5	158.0
105°	0.0	20.5	74.9	125.2	143.6
107.5°	0.0	17.4	66.7	112.9	130.3
110°	0.0	15.4	58.5	101.6	118.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	13.3	52.3	91.3	106.7
115°	0.0	11.3	46.2	81.1	95.4
117.5°	0.0	9.2	41.0	71.8	85.2
120°	0.0	8.2	35.9	63.6	75.9
122.5°	0.0	6.2	31.8	57.5	67.7
125°	0.0	5.1	27.7	50.3	59.5
127.5°	0.0	4.1	24.6	44.1	52.3
130°	0.0	3.1	21.5	39.0	46.2
132.5°	0.0	2.1	18.5	33.9	40.0
135°	0.0	1.0	15.4	29.8	34.9
137.5°	0.0	0.0	12.3	24.6	29.8
140°	0.0	0.0	10.3	20.5	25.6
142.5°	0.0	0.0	8.2	17.4	21.5
145°	1.0	0.0	6.2	14.4	17.4
147.5°	1.0	0.0	4.1	11.3	13.3
150°	1.0	0.0	2.1	8.2	10.3
152.5°	1.0	0.0	0.0	5.1	7.2
155°	1.0	1.0	0.0	3.1	4.1
157.5°	1.0	1.0	0.0	0.0	2.1
160°	1.0	1.0	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)