

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: P236229

Luminaire Tested: **4SWLED-28SL-LC-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236229
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-16)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-28SL-LC-UNV-L835-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 1 ROW LED, CLEAR LENS
Light Source: (112) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

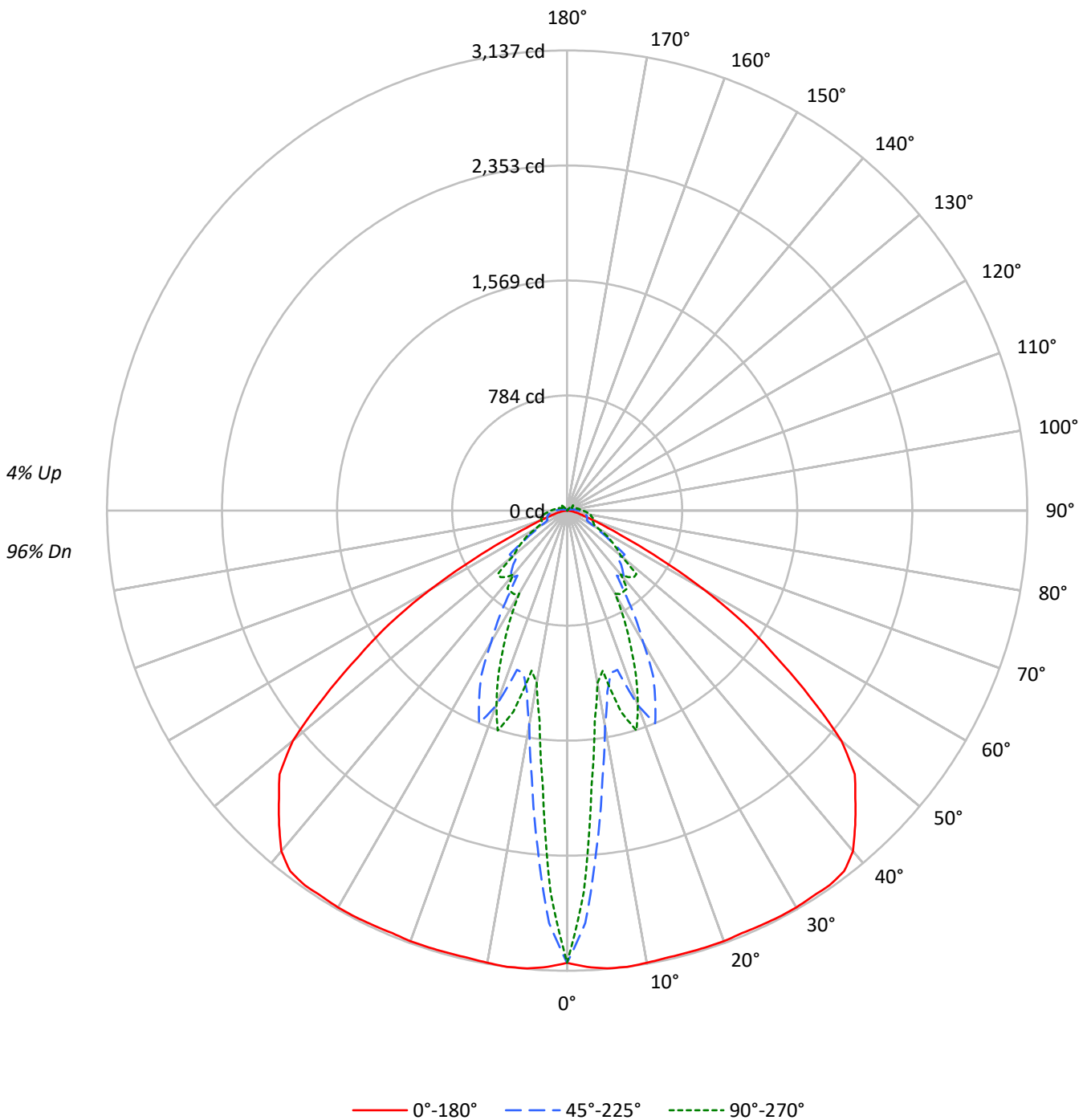
Lumens per Lamp: N/A
Luminaire Lumens: 3767.1 lumens
Efficiency: N/A
Efficacy: 151.9 lumens/watt
Spacing Criteria (0/90/45): 1.54 / 0.24 / 0.77
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 24.8
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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	96				
1	109	105	101	97	106	102	99	95	97	94	92	93	90	88	89	87	85	83				
2	100	93	87	82	98	91	85	81	87	82	78	83	79	76	80	77	74	72				
3	93	83	76	70	90	82	75	69	78	72	68	75	70	66	72	68	65	62				
4	86	75	67	61	83	73	66	61	71	64	59	68	63	58	65	61	57	55				
5	80	68	60	54	77	67	59	53	64	58	52	62	56	52	60	55	51	49				
6	74	62	54	48	72	61	53	47	59	52	47	57	51	46	55	50	45	44				
7	69	57	49	43	67	56	48	43	54	47	42	52	46	42	51	45	41	39				
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	41	37	36				
9	61	48	41	35	59	47	40	35	46	39	35	45	39	34	44	38	34	32				
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	30				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22122	22122	22122
5°	22494	16213	13188
10°	22661	10301	8127
15°	22971	7884	9549
20°	23542	9740	9425
25°	24292	9855	6890
30°	25355	7312	4422
35°	26635	4904	4628
40°	27554	4498	4022
45°	27209	4048	4694
50°	26117	4019	3636
55°	20656	3175	3002
60°	14562	1931	2112
65°	6795	1532	1856
70°	3414	1658	1879
75°	2082	1795	1993
80°	1353	1865	2110
85°	686	1931	2046



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	210.7	5.6
10°-20°	461.6	12.3
20°-30°	659.0	17.5
30°-40°	703.8	18.7
40°-50°	654.6	17.4
50°-60°	481.3	12.8
60°-70°	214.1	5.7
70°-80°	141.0	3.7
80°-90°	97.7	2.6
90°-100°	57.6	1.5
100°-110°	33.4	0.9
110°-120°	20.3	0.5
120°-130°	14.6	0.4
130°-140°	12.4	0.3
140°-150°	3.6	0.1
150°-160°	1.1	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1331.4	35.3
0°-40°	2035.2	54.0
0°-60°	3171.2	84.2
0°-90°	3624.0	96.2
90°-120°	111.3	3.0
90°-150°	141.9	3.8
90°-180°	143.0	3.8
0°-180°	3767.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3083	3083	3083	3083	3083	
5°	3133	2794	2310	2010	1893	299
15°	3122	1693	1147	1267	1419	885
25°	3120	1091	1419	1117	1028	1445
35°	3118	1314	678	688	672	1949
45°	2779	565	519	576	642	2140
55°	1737	336	363	367	373	1563
65°	432	130	148	188	200	502
75°	85	84	137	182	176	99
85°	12	49	104	130	135	16
90°	0	37	80	103	109	1
95°	0	26	59	77	90	0
105°	0	15	33	46	62	0
115°	1	8	21	31	40	0
125°	1	4	12	25	42	1
135°	1	1	11	34	42	1
145°	1	1	5	9	9	1
155°	1	1	2	4	3	1
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°	3082.8	3082.8	3082.8	3082.8	3082.8
2.5°	3114.0	2978.7	2813.6	2667.9	2605.5
5°	3132.7	2794.2	2310.0	2009.6	1893.1
7.5°	3136.9	2535.4	1841.7	1510.9	1442.2
10°	3129.9	2231.6	1488.7	1228.5	1191.8
12.5°	3123.0	1949.3	1263.9	1134.9	1117.5
15°	3122.3	1692.6	1146.7	1266.7	1419.3
17.5°	3123.7	1444.3	1138.3	1576.1	1572.6
20°	3123.7	1261.8	1415.1	1504.6	1408.9
22.5°	3117.4	1132.8	1569.1	1334.7	1229.2
25°	3120.2	1091.2	1419.3	1116.8	1028.0
27.5°	3123.7	1147.4	1269.5	934.4	847.0
30°	3124.4	1306.2	1035.7	756.1	653.5
32.5°	3116.7	1388.1	861.6	602.1	675.0
35°	3118.1	1314.5	677.7	688.1	672.2
37.5°	3100.8	1146.7	557.7	638.9	670.1
40°	3031.4	924.0	601.4	599.3	569.5
42.5°	2906.6	717.3	562.6	545.9	615.3
45°	2778.9	564.7	518.9	576.5	642.4
47.5°	2659.6	455.1	461.3	632.6	641.0
50°	2441.1	427.3	489.1	535.5	476.6
52.5°	2088.0	389.2	493.2	419.0	426.6
55°	1737.0	336.4	362.8	367.0	373.2
57.5°	1436.6	318.4	274.0	331.6	322.6
60°	1078.7	277.5	204.6	260.8	246.3
62.5°	713.1	174.8	157.5	201.9	203.9
65°	431.5	130.4	148.4	188.0	200.5
67.5°	271.9	115.2	146.4	190.1	187.3
70°	179.0	104.1	144.3	190.1	185.2
72.5°	120.7	94.3	141.5	188.0	188.7
75°	85.3	83.9	137.4	181.7	176.2
77.5°	59.7	74.9	131.8	170.0	165.1
80°	39.5	65.9	122.1	157.5	163.7
82.5°	23.6	56.9	113.8	144.3	150.5
85°	11.8	49.3	104.1	130.4	135.3
87.5°	4.9	43.0	92.3	115.8	120.0
90°	0.0	36.8	80.5	102.7	108.9
92.5°	0.0	31.2	69.4	89.5	99.2
95°	0.0	26.4	59.0	77.0	89.5
97.5°	0.0	22.9	50.6	67.3	81.2
100°	0.0	19.4	43.7	58.3	74.2
102.5°	0.0	17.3	37.5	51.3	68.0
105°	0.0	14.6	33.3	45.8	61.7
107.5°	0.0	12.5	29.1	40.9	55.5
110°	0.0	11.1	25.7	37.5	49.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	9.7	23.6	34.0	44.4
115°	0.7	8.3	20.8	31.2	40.2
117.5°	0.7	6.9	18.7	28.4	37.5
120°	0.7	5.5	16.6	26.4	36.8
122.5°	0.7	4.2	14.6	25.0	38.2
125°	0.7	3.5	12.5	25.0	41.6
127.5°	0.7	2.8	10.4	27.7	47.9
130°	0.7	2.1	10.4	33.3	54.1
132.5°	0.7	1.4	10.4	36.8	52.0
135°	0.7	1.4	11.1	34.0	41.6
137.5°	0.7	1.4	11.1	26.4	29.8
140°	0.7	1.4	9.0	18.7	20.8
142.5°	0.7	1.4	6.2	13.2	13.9
145°	1.4	1.4	4.9	9.0	9.0
147.5°	1.4	1.4	3.5	6.2	6.2
150°	1.4	1.4	2.8	4.9	4.9
152.5°	1.4	1.4	2.1	4.2	3.5
155°	1.4	1.4	2.1	3.5	2.8
157.5°	1.4	1.4	1.4	2.8	2.1
160°	1.4	2.1	2.1	2.8	2.1
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)