

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: P236265

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

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P236265  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-15)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4SWLED-28SL-LW-UNV-L835-CD1-U  
Description: METALUX SWLED LINEAR LUMINAIRE  
4FT FIXTURE WITH 1 ROW LED, WIDE LENS  
Light Source: (112) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

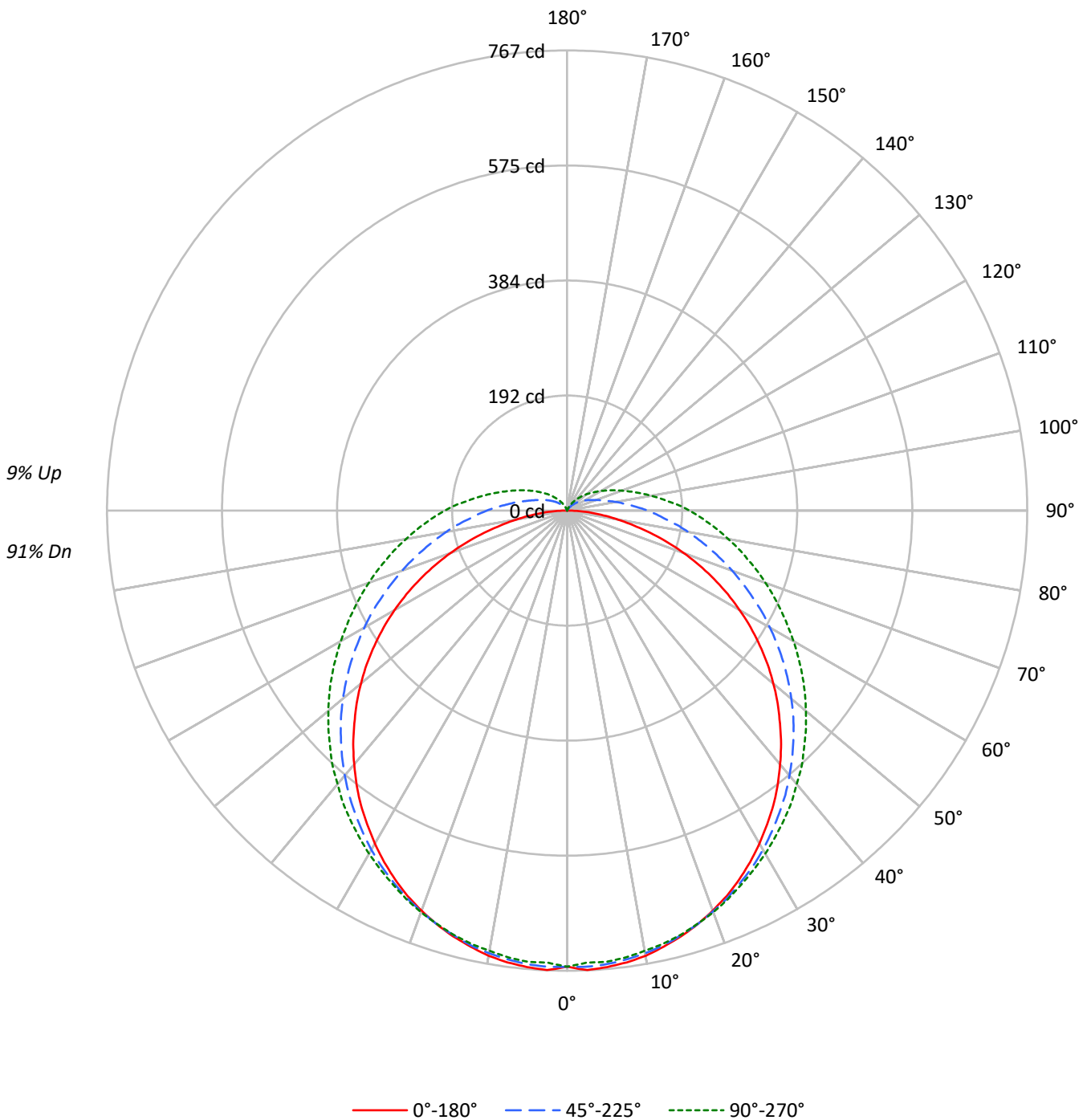
Lumens per Lamp: N/A  
Luminaire Lumens: 2785.0 lumens  
Efficiency: N/A  
Efficacy: 112.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.41  
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')  
CIE Type: Direct

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

TEST NUMBER: P236265

CATALOG NUMBER: 4SWLED-28SL-LW-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P236265

CATALOG NUMBER: 4SWLED-28SL-LW-UNV-L835-CD1-U

**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	100	100	100	94	94	94	91
1	104	99	94	89	101	96	91	87	90	86	82	84	81	78	79	76	74	71
2	94	85	77	71	91	82	75	69	77	71	66	72	68	63	68	64	61	58
3	85	74	65	58	82	72	63	57	67	60	55	63	57	53	60	55	51	48
4	78	65	56	49	75	63	55	48	59	52	46	56	50	45	53	47	43	40
5	71	58	49	42	69	56	47	41	53	45	40	50	43	38	47	42	37	35
6	66	52	43	36	63	51	42	35	48	40	34	45	39	33	43	37	32	30
7	61	47	38	32	59	46	37	31	43	36	30	41	34	29	39	33	29	26
8	57	43	34	28	55	42	33	28	40	32	27	38	31	26	36	30	26	23
9	53	39	31	25	51	38	30	25	36	29	24	35	28	24	33	27	23	21
10	50	36	28	23	48	35	28	22	34	27	22	32	26	21	31	25	21	19

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5456	5456	5456
5°	5484	5326	5258
10°	5455	5184	5081
15°	5405	5037	4924
20°	5349	4895	4766
25°	5282	4750	4608
30°	5202	4609	4469
35°	5120	4458	4337
40°	5019	4312	4204
45°	4911	4162	4081
50°	4802	4008	3964
55°	4662	3849	3850
60°	4486	3686	3736
65°	4251	3516	3641
70°	3942	3364	3567
75°	3487	3217	3515
80°	2945	3125	3514
85°	2296	3063	3578



TEST NUMBER: P236265

CATALOG NUMBER: 4SWLED-28SL-LW-UNV-L835-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	72.0	2.6
10°-20°	206.4	7.4
20°-30°	314.2	11.3
30°-40°	383.8	13.8
40°-50°	409.6	14.7
50°-60°	390.8	14.0
60°-70°	333.4	12.0
70°-80°	251.8	9.0
80°-90°	169.0	6.1
90°-100°	106.0	3.8
100°-110°	66.0	2.4
110°-120°	40.5	1.5
120°-130°	23.6	0.8
130°-140°	12.0	0.4
140°-150°	4.8	0.2
150°-160°	1.1	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	592.5	21.3
0°-40°	976.3	35.1
0°-60°	1776.7	63.8
0°-90°	2531.0	90.9
90°-120°	212.5	7.6
90°-150°	252.9	9.1
90°-180°	254.0	9.1
0°-180°	2785.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	760	760	760	760	760	
5°	764	756	759	756	755	73
15°	735	727	733	731	732	207
25°	678	674	684	685	688	313
35°	599	599	616	622	630	375
45°	502	510	534	549	558	387
55°	392	407	440	465	479	350
65°	270	295	341	377	393	267
75°	143	183	246	295	311	152
85°	40	92	165	218	237	42
90°	1	62	134	186	204	3
95°	0	40	105	153	170	0
105°	0	19	64	103	118	0
115°	0	11	42	69	80	0
125°	0	6	26	45	53	0
135°	0	2	15	28	33	0
145°	0	1	6	14	17	0
155°	1	0	1	4	6	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P236265

CATALOG NUMBER: 4SWLED-28SL-LW-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	760.3	760.3	760.3	760.3	760.3
2.5°	766.6	757.6	761.0	758.2	754.1
5°	763.8	755.5	758.9	755.5	754.8
7.5°	759.6	751.3	754.8	752.0	751.3
10°	753.4	744.4	749.2	745.8	745.1
12.5°	744.4	736.7	742.3	738.8	739.5
15°	734.7	727.0	732.6	731.2	731.9
17.5°	722.9	715.9	722.9	721.5	722.2
20°	709.7	703.4	711.1	710.4	712.5
22.5°	695.1	688.9	698.6	697.2	700.7
25°	678.5	673.6	684.0	684.7	687.5
27.5°	660.4	657.0	669.4	670.1	674.3
30°	641.0	638.2	652.8	655.6	660.4
32.5°	620.2	619.5	634.8	639.6	645.2
35°	599.4	598.7	616.0	622.3	629.9
37.5°	576.5	577.9	597.3	605.6	613.9
40°	552.2	554.3	576.5	586.9	595.2
42.5°	527.9	533.5	555.7	568.9	578.6
45°	501.6	509.9	533.5	548.7	558.5
47.5°	475.9	485.6	511.3	528.6	539.7
50°	448.8	459.9	487.7	507.8	519.6
52.5°	421.1	433.6	464.1	487.0	499.5
55°	392.0	407.2	439.8	464.8	478.7
57.5°	362.8	380.2	414.8	444.0	457.2
60°	332.3	351.7	390.6	421.1	435.7
62.5°	301.8	324.0	366.3	400.3	414.2
65°	269.9	294.8	340.6	377.4	393.3
67.5°	238.6	267.1	316.3	355.9	372.5
70°	206.7	237.9	292.8	335.1	351.7
72.5°	174.8	210.2	269.2	315.0	331.6
75°	142.9	183.1	246.3	294.8	310.8
77.5°	113.1	156.1	224.8	274.0	292.1
80°	86.0	132.5	204.6	255.3	272.6
82.5°	61.0	111.7	185.2	236.6	254.6
85°	39.5	92.3	165.1	218.5	236.6
87.5°	19.4	75.6	149.2	201.9	219.9
90°	0.7	62.4	133.9	185.9	204.0
92.5°	0.0	49.9	118.6	168.6	188.0
95°	0.0	40.2	104.8	152.6	170.0
97.5°	0.0	33.3	93.0	139.4	156.1
100°	0.0	27.1	82.6	126.3	142.2
102.5°	0.0	22.9	72.8	114.5	129.7
105°	0.0	19.4	64.5	103.4	117.9
107.5°	0.0	17.3	57.6	93.7	106.8
110°	0.0	15.3	51.3	84.6	97.1



TEST NUMBER: P236265

CATALOG NUMBER: 4SWLED-28SL-LW-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	13.2	45.8	76.3	88.1
115°	0.0	11.1	41.6	68.7	79.8
117.5°	0.0	9.7	37.5	61.7	72.1
120°	0.0	8.3	33.3	56.2	65.2
122.5°	0.0	6.9	29.8	50.6	59.0
125°	0.0	6.2	26.4	45.1	52.7
127.5°	0.0	4.9	23.6	40.2	47.9
130°	0.0	4.2	20.1	36.1	42.3
132.5°	0.0	2.8	17.3	31.9	37.5
135°	0.0	2.1	14.6	27.7	32.6
137.5°	0.0	1.4	12.5	24.3	28.4
140°	0.0	1.4	9.7	20.8	24.3
142.5°	0.0	0.7	7.6	17.3	20.8
145°	0.0	0.7	6.2	13.9	17.3
147.5°	0.7	0.0	4.2	11.1	13.9
150°	0.7	0.0	3.5	8.3	11.1
152.5°	0.7	0.0	2.1	6.2	8.3
155°	0.7	0.0	1.4	4.2	5.5
157.5°	0.7	0.7	0.7	2.1	3.5
160°	0.7	0.0	0.0	1.4	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)