

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: P236263

Luminaire Tested: **4SWLED-20SL-LW-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236263
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-20SL-LW-UNV-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 1 ROW LED, WIDE LENS
Light Source: (112) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

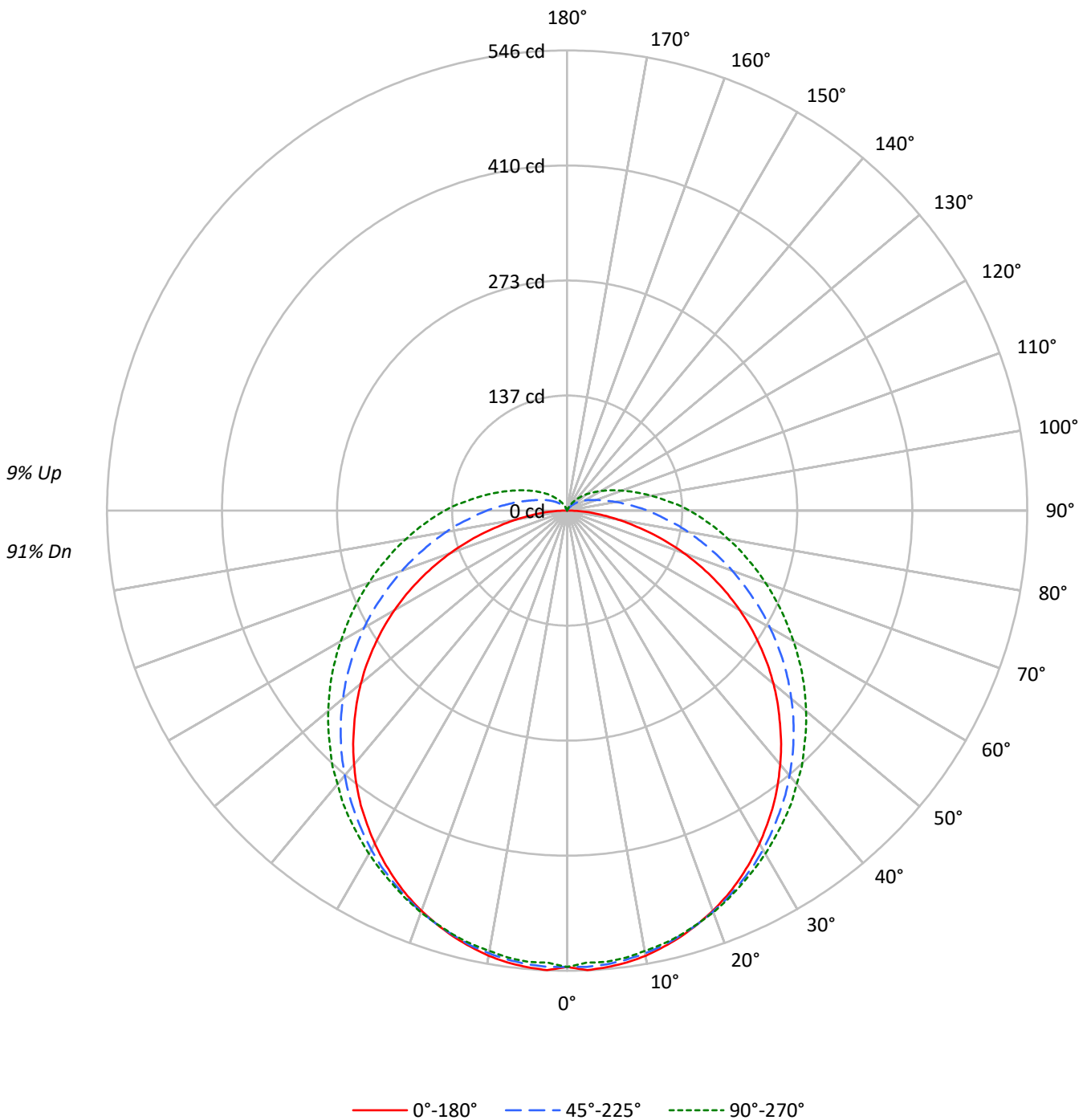
Lumens per Lamp: N/A
Luminaire Lumens: 1983.0 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.41
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 17.6
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	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°	3885	3885	3885
5°	3905	3793	3744
10°	3884	3692	3618
15°	3849	3586	3506
20°	3808	3485	3394
25°	3761	3382	3281
30°	3704	3282	3182
35°	3646	3174	3088
40°	3574	3070	2993
45°	3496	2964	2905
50°	3419	2854	2822
55°	3319	2741	2741
60°	3194	2624	2660
65°	3025	2503	2593
70°	2807	2394	2540
75°	2484	2291	2503
80°	2099	2225	2502
85°	1639	2182	2546



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.2	2.6
10°-20°	146.9	7.4
20°-30°	223.7	11.3
30°-40°	273.3	13.8
40°-50°	291.7	14.7
50°-60°	278.3	14.0
60°-70°	237.4	12.0
70°-80°	179.3	9.0
80°-90°	120.3	6.1
90°-100°	75.5	3.8
100°-110°	47.0	2.4
110°-120°	28.8	1.5
120°-130°	16.8	0.8
130°-140°	8.6	0.4
140°-150°	3.4	0.2
150°-160°	0.8	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	421.9	21.3
0°-40°	695.2	35.1
0°-60°	1265.1	63.8
0°-90°	1802.1	90.9
90°-120°	151.3	7.6
90°-150°	180.1	9.1
90°-180°	181.0	9.1
0°-180°	1983.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	541	541	541	541	541	
5°	544	538	540	538	537	52
15°	523	518	522	521	521	148
25°	483	480	487	488	490	223
35°	427	426	439	443	448	267
45°	357	363	380	391	398	276
55°	279	290	313	331	341	249
65°	192	210	242	269	280	190
75°	102	130	175	210	221	108
85°	28	66	118	156	168	30
90°	0	44	95	132	145	2
95°	0	29	75	109	121	0
105°	0	14	46	74	84	0
115°	0	8	30	49	57	0
125°	0	4	19	32	38	0
135°	0	2	10	20	23	0
145°	0	0	4	10	12	0
155°	0	0	1	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°	541.4	541.4	541.4	541.4	541.4
2.5°	545.8	539.4	541.9	539.9	536.9
5°	543.8	537.9	540.4	537.9	537.4
7.5°	540.9	535.0	537.4	535.4	535.0
10°	536.4	530.0	533.5	531.0	530.5
12.5°	530.0	524.6	528.5	526.1	526.6
15°	523.1	517.7	521.6	520.6	521.1
17.5°	514.7	509.8	514.7	513.7	514.2
20°	505.3	500.9	506.3	505.8	507.3
22.5°	494.9	490.5	497.4	496.4	498.9
25°	483.1	479.6	487.0	487.5	489.5
27.5°	470.2	467.8	476.7	477.2	480.1
30°	456.4	454.4	464.8	466.8	470.2
32.5°	441.6	441.1	452.0	455.4	459.4
35°	426.8	426.3	438.6	443.1	448.5
37.5°	410.5	411.5	425.3	431.2	437.2
40°	393.2	394.7	410.5	417.9	423.8
42.5°	375.9	379.9	395.7	405.0	412.0
45°	357.1	363.1	379.9	390.7	397.6
47.5°	338.9	345.8	364.0	376.4	384.3
50°	319.6	327.5	347.3	361.6	370.0
52.5°	299.8	308.7	330.5	346.8	355.6
55°	279.1	290.0	313.2	330.9	340.8
57.5°	258.3	270.7	295.4	316.1	325.5
60°	236.6	250.4	278.1	299.8	310.2
62.5°	214.9	230.7	260.8	285.0	294.9
65°	192.1	209.9	242.5	268.7	280.1
67.5°	169.9	190.2	225.2	253.4	265.3
70°	147.2	169.4	208.4	238.6	250.4
72.5°	124.5	149.7	191.7	224.3	236.1
75°	101.8	130.4	175.4	209.9	221.3
77.5°	80.5	111.1	160.0	195.1	208.0
80°	61.3	94.3	145.7	181.8	194.1
82.5°	43.5	79.5	131.9	168.4	181.3
85°	28.2	65.7	117.6	155.6	168.4
87.5°	13.8	53.8	106.2	143.7	156.6
90°	0.5	44.5	95.3	132.4	145.2
92.5°	0.0	35.6	84.5	120.0	133.9
95°	0.0	28.6	74.6	108.7	121.0
97.5°	0.0	23.7	66.2	99.3	111.1
100°	0.0	19.3	58.8	89.9	101.3
102.5°	0.0	16.3	51.9	81.5	92.4
105°	0.0	13.8	45.9	73.6	84.0
107.5°	0.0	12.3	41.0	66.7	76.1
110°	0.0	10.9	36.6	60.3	69.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	9.4	32.6	54.3	62.7
115°	0.0	7.9	29.6	48.9	56.8
117.5°	0.0	6.9	26.7	44.0	51.4
120°	0.0	5.9	23.7	40.0	46.4
122.5°	0.0	4.9	21.2	36.1	42.0
125°	0.0	4.4	18.8	32.1	37.5
127.5°	0.0	3.5	16.8	28.6	34.1
130°	0.0	3.0	14.3	25.7	30.1
132.5°	0.0	2.0	12.3	22.7	26.7
135°	0.0	1.5	10.4	19.8	23.2
137.5°	0.0	1.0	8.9	17.3	20.3
140°	0.0	1.0	6.9	14.8	17.3
142.5°	0.0	0.5	5.4	12.3	14.8
145°	0.0	0.5	4.4	9.9	12.3
147.5°	0.5	0.0	3.0	7.9	9.9
150°	0.5	0.0	2.5	5.9	7.9
152.5°	0.5	0.0	1.5	4.4	5.9
155°	0.5	0.0	1.0	3.0	4.0
157.5°	0.5	0.5	0.5	1.5	2.5
160°	0.5	0.0	0.0	1.0	1.5
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)