

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: P236233

Luminaire Tested: **4SWLED-32SL-LC-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236233
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-32SL-LC-UNV-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 1 ROW LED, CLEAR LENS
Light Source: (112) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

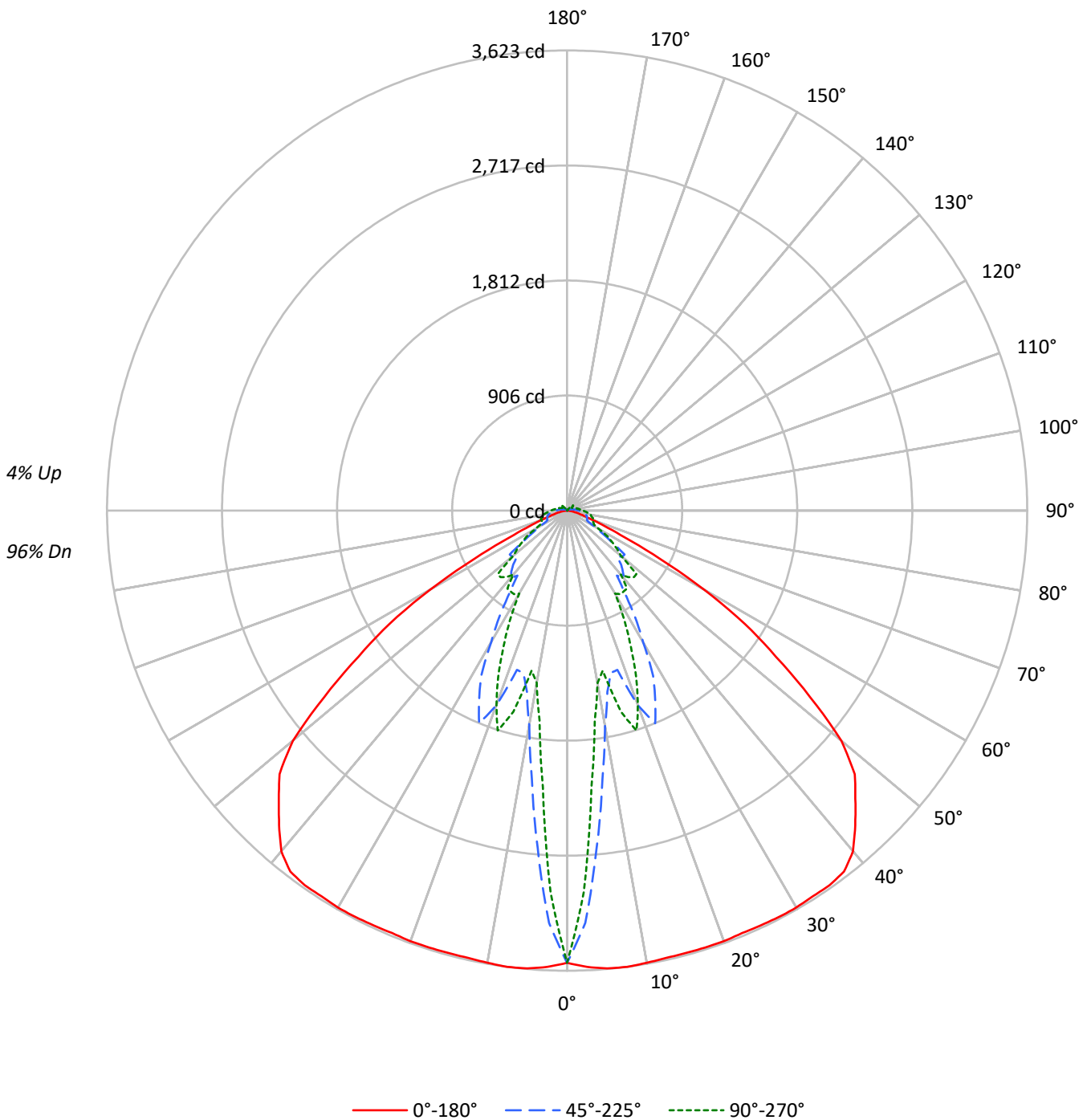
Lumens per Lamp: N/A
Luminaire Lumens: 4351.0 lumens
Efficiency: N/A
Efficacy: 152.1 lumens/watt
Spacing Criteria (0/90/45): 1.54 / 0.24 / 0.77
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 28.6
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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	99	96	
1	109	105	101	97	106	102	99	95	97	94	92	93	90	88	89	87	85	89	87	85	83	
2	100	93	87	82	98	91	85	81	87	82	78	83	79	76	80	77	74	80	77	74	72	
3	93	83	76	70	90	82	75	69	78	72	68	75	70	66	72	68	65	72	68	65	62	
4	86	75	67	61	83	73	66	61	71	64	59	68	63	58	65	61	57	65	61	57	55	
5	80	68	60	54	77	67	59	53	64	58	52	62	56	52	60	55	51	60	55	51	49	
6	74	62	54	48	72	61	53	47	59	52	47	57	51	46	55	50	45	55	50	45	44	
7	69	57	49	43	67	56	48	43	54	47	42	52	46	42	51	45	41	51	45	41	39	
8	65	52	44	39	63	51	44	39	50	43	38	48	42	38	47	41	37	47	41	37	36	
9	61	48	41	35	59	47	40	35	46	39	35	45	39	34	44	38	34	44	38	34	32	
10	57	45	37	32	56	44	37	32	43	36	32	42	36	32	41	35	31	41	35	31	30	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25551	25551	25551
5°	25982	18727	15233
10°	26174	11898	9386
15°	26532	9105	11029
20°	27191	11250	10886
25°	28058	11383	7958
30°	29285	8445	5108
35°	30765	5665	5346
40°	31826	5196	4646
45°	31427	4676	5421
50°	30166	4642	4199
55°	23858	3667	3468
60°	16819	2231	2439
65°	7849	1770	2144
70°	3942	1915	2170
75°	2406	2072	2302
80°	1565	2153	2438
85°	790	2230	2362



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.4	5.6
10°-20°	533.2	12.3
20°-30°	761.2	17.5
30°-40°	812.9	18.7
40°-50°	756.1	17.4
50°-60°	556.0	12.8
60°-70°	247.3	5.7
70°-80°	162.9	3.7
80°-90°	112.8	2.6
90°-100°	66.6	1.5
100°-110°	38.5	0.9
110°-120°	23.5	0.5
120°-130°	16.9	0.4
130°-140°	14.3	0.3
140°-150°	4.1	0.1
150°-160°	1.2	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	1537.8	35.3
0°-40°	2350.7	54.0
0°-60°	3662.8	84.2
0°-90°	4185.8	96.2
90°-120°	128.6	3.0
90°-150°	163.8	3.8
90°-180°	165.0	3.8
0°-180°	4351.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3561	3561	3561	3561	3561	
5°	3618	3227	2668	2321	2187	345
15°	3606	1955	1324	1463	1639	1023
25°	3604	1260	1639	1290	1187	1669
35°	3602	1518	783	795	776	2251
45°	3210	652	599	666	742	2471
55°	2006	389	419	424	431	1806
65°	498	151	172	217	232	580
75°	99	97	159	210	204	114
85°	14	57	120	151	156	18
90°	0	42	93	119	126	1
95°	0	30	68	89	103	0
105°	0	17	38	53	71	0
115°	1	10	24	36	46	0
125°	1	4	14	29	48	1
135°	1	2	13	39	48	1
145°	2	2	6	10	10	1
155°	2	2	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°	3560.7	3560.7	3560.7	3560.7	3560.7
2.5°	3596.7	3440.5	3249.8	3081.5	3009.4
5°	3618.4	3227.4	2668.1	2321.2	2186.6
7.5°	3623.2	2928.5	2127.3	1745.1	1665.8
10°	3615.2	2577.6	1719.4	1419.0	1376.5
12.5°	3607.1	2251.5	1459.8	1310.8	1290.8
15°	3606.3	1955.0	1324.4	1463.0	1639.3
17.5°	3607.9	1668.2	1314.8	1820.4	1816.4
20°	3607.9	1457.4	1634.5	1737.9	1627.3
22.5°	3600.7	1308.4	1812.4	1541.6	1419.8
25°	3603.9	1260.3	1639.3	1290.0	1187.4
27.5°	3607.9	1325.2	1466.3	1079.3	978.3
30°	3608.7	1508.7	1196.2	873.3	754.8
32.5°	3599.9	1603.3	995.1	695.5	779.6
35°	3601.5	1518.3	782.8	794.8	776.4
37.5°	3581.5	1324.4	644.2	737.9	774.0
40°	3501.4	1067.2	694.7	692.3	657.8
42.5°	3357.2	828.5	649.8	630.6	710.7
45°	3209.7	652.2	599.3	665.8	741.9
47.5°	3071.9	525.6	532.8	730.7	740.3
50°	2819.5	493.6	564.9	618.6	550.4
52.5°	2411.7	449.5	569.7	483.9	492.8
55°	2006.3	388.6	419.0	423.9	431.1
57.5°	1659.4	367.8	316.5	383.0	372.6
60°	1245.9	320.5	236.4	301.3	284.4
62.5°	823.7	201.9	181.9	233.2	235.6
65°	498.4	150.6	171.5	217.1	231.6
67.5°	314.1	133.0	169.1	219.5	216.3
70°	206.7	120.2	166.7	219.5	213.9
72.5°	139.4	109.0	163.5	217.1	217.9
75°	98.6	96.9	158.6	209.9	203.5
77.5°	68.9	86.5	152.2	196.3	190.7
80°	45.7	76.1	141.0	181.9	189.1
82.5°	27.2	65.7	131.4	166.7	173.9
85°	13.6	56.9	120.2	150.6	156.2
87.5°	5.6	49.7	106.6	133.8	138.6
90°	0.0	42.5	92.9	118.6	125.8
92.5°	0.0	36.1	80.1	103.4	114.6
95°	0.0	30.4	68.1	88.9	103.4
97.5°	0.0	26.4	58.5	77.7	93.7
100°	0.0	22.4	50.5	67.3	85.7
102.5°	0.0	20.0	43.3	59.3	78.5
105°	0.0	16.8	38.5	52.9	71.3
107.5°	0.0	14.4	33.7	47.3	64.1
110°	0.0	12.8	29.6	43.3	57.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	11.2	27.2	39.3	51.3
115°	0.8	9.6	24.0	36.1	46.5
117.5°	0.8	8.0	21.6	32.9	43.3
120°	0.8	6.4	19.2	30.4	42.5
122.5°	0.8	4.8	16.8	28.8	44.1
125°	0.8	4.0	14.4	28.8	48.1
127.5°	0.8	3.2	12.0	32.0	55.3
130°	0.8	2.4	12.0	38.5	62.5
132.5°	0.8	1.6	12.0	42.5	60.1
135°	0.8	1.6	12.8	39.3	48.1
137.5°	0.8	1.6	12.8	30.4	34.5
140°	0.8	1.6	10.4	21.6	24.0
142.5°	0.8	1.6	7.2	15.2	16.0
145°	1.6	1.6	5.6	10.4	10.4
147.5°	1.6	1.6	4.0	7.2	7.2
150°	1.6	1.6	3.2	5.6	5.6
152.5°	1.6	1.6	2.4	4.8	4.0
155°	1.6	1.6	2.4	4.0	3.2
157.5°	1.6	1.6	1.6	3.2	2.4
160°	1.6	2.4	2.4	3.2	2.4
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)