

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: P236223

Luminaire Tested: **4SWLED-16SL-LC-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236223
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-16SL-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

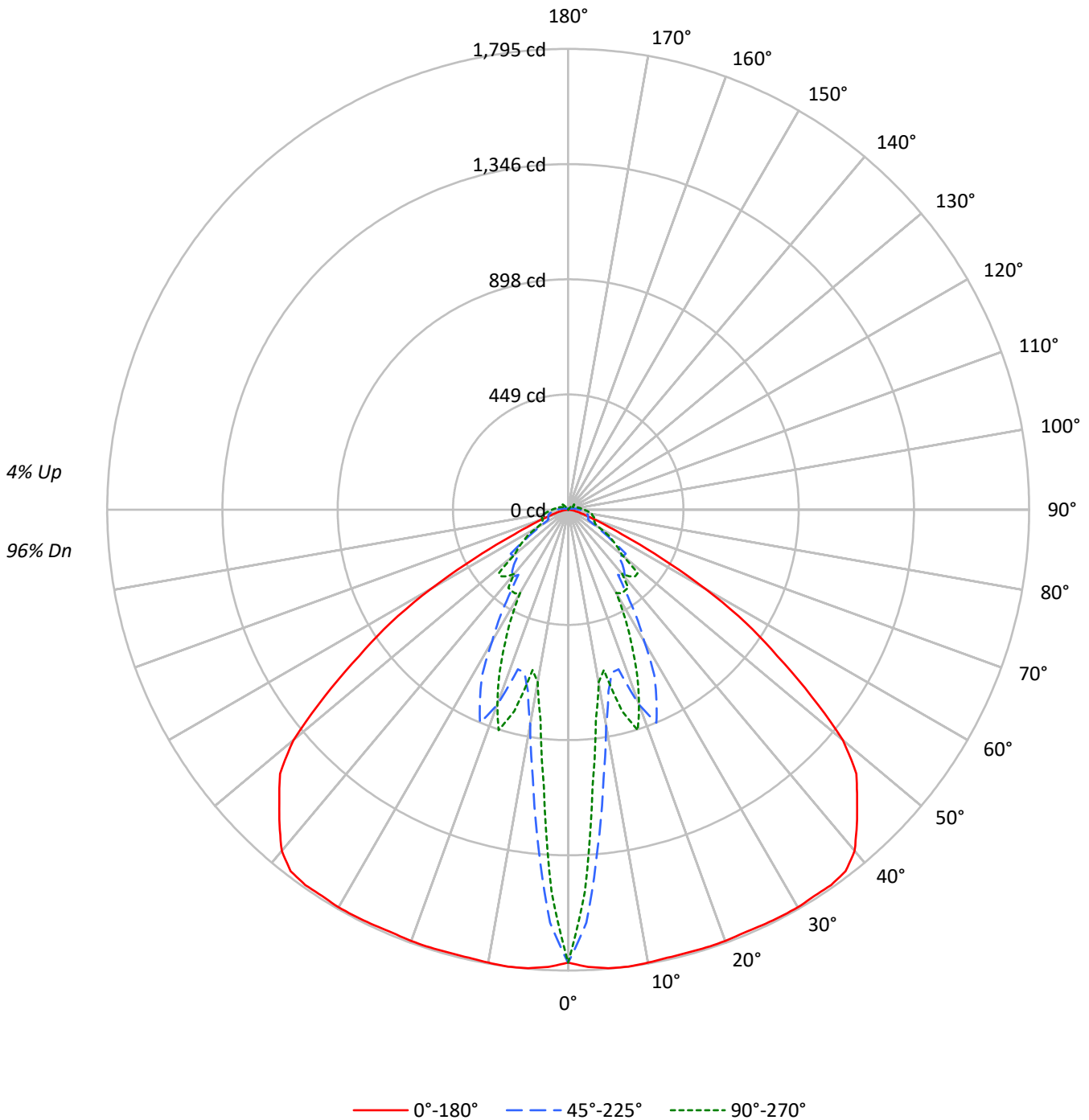
Lumens per Lamp: N/A
Luminaire Lumens: 2156.0 lumens
Efficiency: N/A
Efficacy: 150.8 lumens/watt
Spacing Criteria (0/90/45): 1.54 / 0.24 / 0.77
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 14.3
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°	12661	12661	12661
5°	12875	9279	7548
10°	12970	5896	4651
15°	13147	4512	5465
20°	13474	5575	5394
25°	13903	5641	3944
30°	14512	4185	2531
35°	15244	2807	2649
40°	15770	2575	2302
45°	15573	2317	2686
50°	14947	2300	2081
55°	11823	1817	1718
60°	8335	1105	1208
65°	3888	877	1062
70°	1953	949	1075
75°	1191	1027	1140
80°	774	1068	1208
85°	389	1106	1170



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	120.6	5.6
10°-20°	264.2	12.3
20°-30°	377.2	17.5
30°-40°	402.8	18.7
40°-50°	374.7	17.4
50°-60°	275.5	12.8
60°-70°	122.5	5.7
70°-80°	80.7	3.7
80°-90°	55.9	2.6
90°-100°	33.0	1.5
100°-110°	19.1	0.9
110°-120°	11.6	0.5
120°-130°	8.4	0.4
130°-140°	7.1	0.3
140°-150°	2.1	0.1
150°-160°	0.6	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	762.0	35.3
0°-40°	1164.8	54.0
0°-60°	1815.0	84.2
0°-90°	2074.1	96.2
90°-120°	63.7	3.0
90°-150°	81.2	3.8
90°-180°	82.0	3.8
0°-180°	2156.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1764	1764	1764	1764	1764	
5°	1793	1599	1322	1150	1084	171
15°	1787	969	656	725	812	507
25°	1786	624	812	639	588	827
35°	1785	752	388	394	385	1115
45°	1590	323	297	330	368	1225
55°	994	193	208	210	214	895
65°	247	75	85	108	115	287
75°	49	48	79	104	101	56
85°	7	28	60	75	77	9
90°	0	21	46	59	62	0
95°	0	15	34	44	51	0
105°	0	8	19	26	35	0
115°	0	5	12	18	23	0
125°	0	2	7	14	24	0
135°	0	1	6	20	24	0
145°	1	1	3	5	5	0
155°	1	1	1	2	2	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°	1764.4	1764.4	1764.4	1764.4	1764.4
2.5°	1782.2	1704.8	1610.3	1527.0	1491.2
5°	1793.0	1599.2	1322.1	1150.2	1083.5
7.5°	1795.3	1451.1	1054.1	864.7	825.4
10°	1791.4	1277.2	852.0	703.1	682.1
12.5°	1787.4	1115.6	723.4	649.5	639.6
15°	1787.0	968.7	656.3	725.0	812.3
17.5°	1787.8	826.6	651.5	902.0	900.1
20°	1787.8	722.2	809.9	861.1	806.4
22.5°	1784.2	648.3	898.1	763.9	703.5
25°	1785.8	624.5	812.3	639.2	588.4
27.5°	1787.8	656.7	726.6	534.8	484.8
30°	1788.2	747.6	592.8	432.8	374.0
32.5°	1783.8	794.4	493.1	344.6	386.3
35°	1784.6	752.4	387.9	393.8	384.7
37.5°	1774.7	656.3	319.2	365.7	383.5
40°	1735.0	528.8	344.2	343.0	326.0
42.5°	1663.5	410.5	322.0	312.5	352.2
45°	1590.5	323.2	297.0	329.9	367.6
47.5°	1522.2	260.4	264.0	362.1	366.9
50°	1397.1	244.6	279.9	306.5	272.8
52.5°	1195.0	222.7	282.3	239.8	244.2
55°	994.2	192.6	207.6	210.0	213.6
57.5°	822.2	182.2	156.8	189.8	184.6
60°	617.4	158.8	117.1	149.3	140.9
62.5°	408.1	100.1	90.1	115.5	116.7
65°	246.9	74.6	85.0	107.6	114.7
67.5°	155.6	65.9	83.8	108.8	107.2
70°	102.4	59.6	82.6	108.8	106.0
72.5°	69.1	54.0	81.0	107.6	108.0
75°	48.8	48.0	78.6	104.0	100.8
77.5°	34.1	42.9	75.4	97.3	94.5
80°	22.6	37.7	69.9	90.1	93.7
82.5°	13.5	32.6	65.1	82.6	86.2
85°	6.7	28.2	59.6	74.6	77.4
87.5°	2.8	24.6	52.8	66.3	68.7
90°	0.0	21.0	46.1	58.8	62.3
92.5°	0.0	17.9	39.7	51.2	56.8
95°	0.0	15.1	33.7	44.1	51.2
97.5°	0.0	13.1	29.0	38.5	46.5
100°	0.0	11.1	25.0	33.4	42.5
102.5°	0.0	9.9	21.4	29.4	38.9
105°	0.0	8.3	19.1	26.2	35.3
107.5°	0.0	7.1	16.7	23.4	31.8
110°	0.0	6.4	14.7	21.4	28.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	5.6	13.5	19.5	25.4
115°	0.4	4.8	11.9	17.9	23.0
117.5°	0.4	4.0	10.7	16.3	21.4
120°	0.4	3.2	9.5	15.1	21.0
122.5°	0.4	2.4	8.3	14.3	21.8
125°	0.4	2.0	7.1	14.3	23.8
127.5°	0.4	1.6	6.0	15.9	27.4
130°	0.4	1.2	6.0	19.1	31.0
132.5°	0.4	0.8	6.0	21.0	29.8
135°	0.4	0.8	6.4	19.5	23.8
137.5°	0.4	0.8	6.4	15.1	17.1
140°	0.4	0.8	5.2	10.7	11.9
142.5°	0.4	0.8	3.6	7.5	7.9
145°	0.8	0.8	2.8	5.2	5.2
147.5°	0.8	0.8	2.0	3.6	3.6
150°	0.8	0.8	1.6	2.8	2.8
152.5°	0.8	0.8	1.2	2.4	2.0
155°	0.8	0.8	1.2	2.0	1.6
157.5°	0.8	0.8	0.8	1.6	1.2
160°	0.8	1.2	1.2	1.6	1.2
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)