

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: P236316

Luminaire Tested: **4SWLED-56HL-LN-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236316
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-29)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-56HL-LN-UNV-L835-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, NARROW LENS
Light Source: (224) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

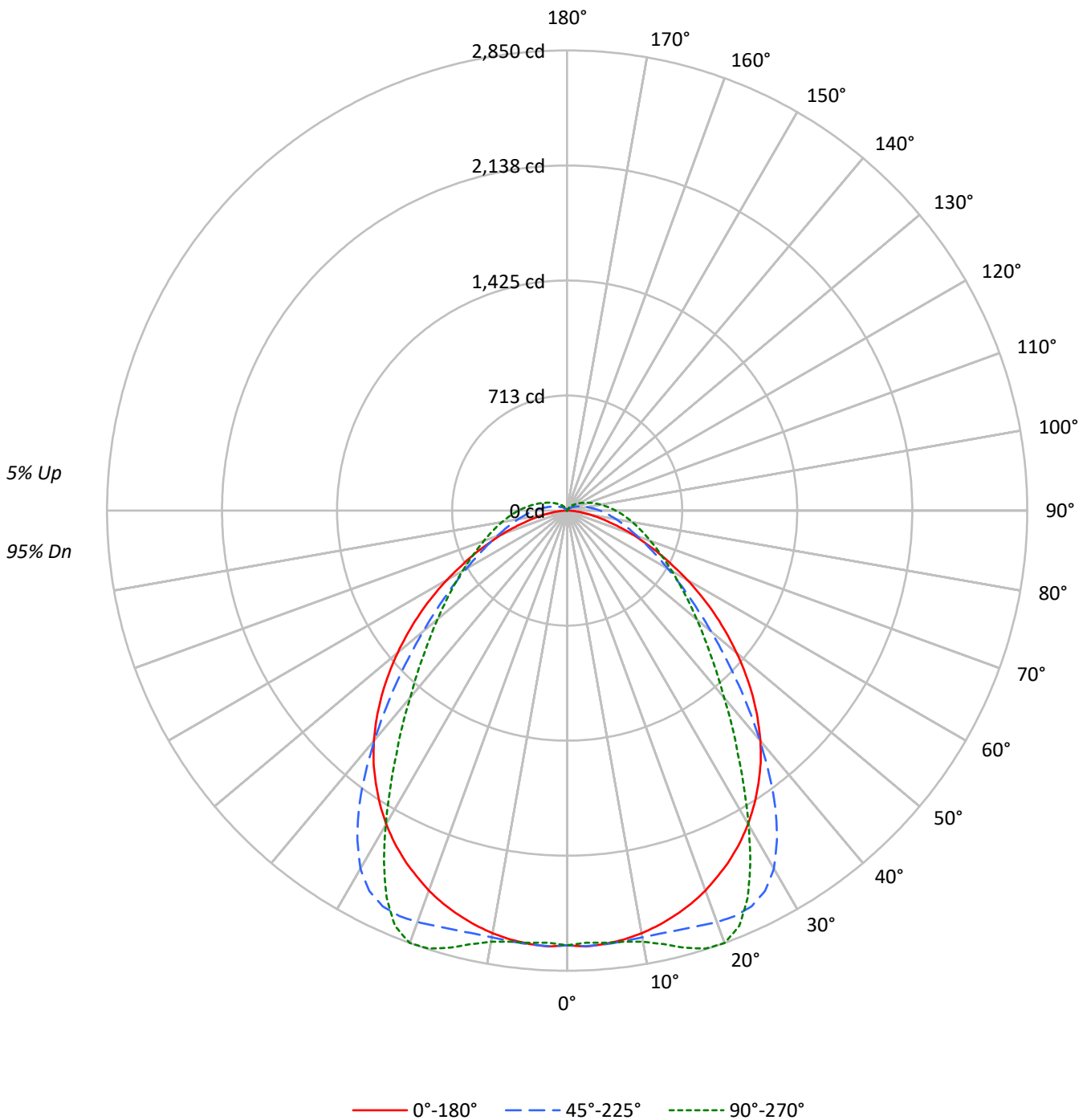
Lumens per Lamp: N/A
Luminaire Lumens: 7195.0 lumens
Efficiency: N/A
Efficacy: 136.0 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 52.9
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	114	114	114	114	108	108	108	103	103	103	97	97	97	95				
1	108	103	99	95	104	100	96	93	95	92	89	90	88	85	86	84	82	79				
2	98	90	84	78	95	88	82	77	84	79	74	80	76	72	76	73	70	67				
3	90	80	72	66	87	78	71	65	75	68	63	71	66	62	68	64	60	58				
4	83	72	63	57	80	70	62	56	67	60	55	64	58	54	61	56	52	50				
5	77	64	56	50	74	63	55	49	60	53	48	58	52	47	56	50	46	44				
6	71	58	50	44	69	57	49	43	55	48	43	53	47	42	51	45	41	39				
7	66	53	45	39	64	52	44	39	50	43	38	48	42	37	47	41	37	35				
8	62	49	41	35	60	48	40	35	46	39	34	44	38	34	43	37	33	31				
9	58	45	37	32	56	44	37	31	43	36	31	41	35	31	40	34	30	28				
10	54	41	34	29	53	41	33	29	39	33	28	38	32	28	37	32	28	26				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19318	19318	19318
5°	19346	18924	18721
10°	19249	18567	18484
15°	19082	18480	18854
20°	18877	18667	19066
25°	18579	18775	17732
30°	18190	18084	15199
35°	17639	16279	12697
40°	16923	13870	10666
45°	15919	11553	9155
50°	14665	9545	7988
55°	13250	7985	7097
60°	11624	6789	6417
65°	9899	5930	5902
70°	8166	5304	5565
75°	6394	4914	5361
80°	4777	4701	5291
85°	3138	4657	5336



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	256.2	3.6
10°-20°	761.3	10.6
20°-30°	1186.0	16.5
30°-40°	1307.9	18.2
40°-50°	1158.2	16.1
50°-60°	886.7	12.3
60°-70°	614.7	8.5
70°-80°	401.3	5.6
80°-90°	253.3	3.5
90°-100°	158.4	2.2
100°-110°	97.0	1.3
110°-120°	57.3	0.8
120°-130°	32.3	0.4
130°-140°	16.3	0.2
140°-150°	6.6	0.1
150°-160°	1.6	0.0
160°-170°	0.1	0.0
170°-180°	0.0	0.0
0°-30°	2203.5	30.6
0°-40°	3511.3	48.8
0°-60°	5556.2	77.2
0°-90°	6825.4	94.9
90°-120°	312.7	4.3
90°-150°	367.9	5.1
90°-180°	370.0	5.1
0°-180°	7195.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2692	2692	2692	2692	2692	
5°	2694	2676	2696	2687	2687	256
15°	2594	2596	2688	2765	2802	732
25°	2386	2465	2704	2694	2646	1099
35°	2065	2259	2250	1928	1844	1290
45°	1626	1805	1481	1274	1253	1251
55°	1114	1166	912	867	882	995
65°	629	638	574	614	638	626
75°	262	307	376	450	474	285
85°	54	135	251	329	353	62
90°	1	90	202	278	300	4
95°	0	58	159	230	253	0
105°	0	27	96	152	174	0
115°	0	14	58	98	115	0
125°	0	8	36	62	73	0
135°	1	3	20	38	44	1
145°	1	1	9	19	23	0
155°	1	1	1	6	8	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°	2692.1	2692.1	2692.1	2692.1	2692.1
2.5°	2702.4	2681.9	2700.3	2690.1	2678.5
5°	2694.2	2675.7	2696.2	2686.7	2687.4
7.5°	2679.8	2663.4	2690.8	2687.4	2693.5
10°	2658.6	2644.3	2683.2	2699.7	2710.6
12.5°	2629.2	2620.3	2682.6	2722.2	2750.3
15°	2593.6	2595.7	2688.0	2765.3	2802.3
17.5°	2552.6	2565.6	2698.3	2803.6	2844.7
20°	2504.7	2535.5	2712.0	2820.0	2850.1
22.5°	2446.6	2501.3	2717.4	2789.3	2785.2
25°	2386.4	2465.1	2703.8	2693.5	2645.6
27.5°	2318.0	2424.7	2655.2	2536.9	2456.9
30°	2241.4	2378.9	2561.5	2340.6	2246.2
32.5°	2157.3	2324.2	2418.5	2131.3	2038.3
35°	2064.9	2259.2	2249.6	1928.1	1844.0
37.5°	1969.2	2168.9	2054.0	1738.0	1675.1
40°	1861.8	2067.0	1854.3	1564.9	1510.2
42.5°	1746.2	1948.0	1662.1	1410.4	1376.2
45°	1625.8	1805.0	1480.8	1274.3	1253.0
47.5°	1499.3	1646.3	1312.6	1152.5	1144.3
50°	1370.7	1487.0	1161.4	1045.8	1047.2
52.5°	1240.1	1319.4	1028.7	952.1	960.3
55°	1114.2	1166.2	912.4	867.3	882.3
57.5°	984.2	1017.8	810.5	792.7	811.9
60°	861.1	879.6	719.5	726.4	748.3
62.5°	736.6	751.7	642.9	666.2	689.5
65°	628.6	638.2	574.5	613.5	637.5
67.5°	523.2	539.7	514.4	566.3	591.0
70°	428.2	450.7	461.7	524.6	548.6
72.5°	338.6	372.8	416.5	486.3	510.2
75°	262.0	307.1	376.2	450.1	474.0
77.5°	198.4	251.0	339.9	417.9	441.2
80°	139.5	204.5	307.8	387.1	410.4
82.5°	91.0	166.9	277.7	357.0	379.6
85°	54.0	134.7	251.0	329.0	352.9
87.5°	24.6	109.4	225.7	303.7	326.3
90°	0.7	89.6	202.5	278.4	300.3
92.5°	0.0	72.5	180.6	254.4	276.3
95°	0.0	58.1	159.4	230.5	253.1
97.5°	0.0	47.2	140.2	209.3	231.2
100°	0.0	39.0	123.8	189.5	211.3
102.5°	0.0	32.1	108.8	171.0	192.2
105°	0.0	26.7	95.8	152.5	174.4
107.5°	0.0	22.6	84.1	136.8	157.3
110°	0.0	19.2	73.9	122.4	141.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	17.1	65.0	110.1	127.9
115°	0.0	14.4	57.5	98.5	114.9
117.5°	0.0	13.0	50.6	88.2	103.3
120°	0.0	10.9	45.1	78.7	92.3
122.5°	0.0	9.6	39.7	69.8	82.1
125°	0.0	7.5	35.6	62.2	73.2
127.5°	0.0	6.2	31.5	55.4	65.0
130°	0.7	4.8	28.0	48.6	57.5
132.5°	0.7	3.4	23.9	43.1	49.9
135°	0.7	2.7	20.5	37.6	44.5
137.5°	0.7	1.4	17.1	32.8	38.3
140°	0.7	0.7	13.7	28.0	32.8
142.5°	0.7	0.7	10.9	23.9	28.0
145°	0.7	0.7	8.9	19.2	23.3
147.5°	0.7	0.7	6.2	15.0	19.2
150°	1.4	0.7	4.1	11.6	15.0
152.5°	1.4	0.7	2.7	8.2	11.6
155°	1.4	0.7	1.4	5.5	8.2
157.5°	1.4	1.4	0.7	3.4	4.8
160°	1.4	1.4	0.7	1.4	2.7
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)