

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: P236308

Luminaire Tested: **4SWLED-44HL-LN-UNV-L840-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236308
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-44HL-LN-UNV-L840-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, NARROW LENS
Light Source: (224) 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

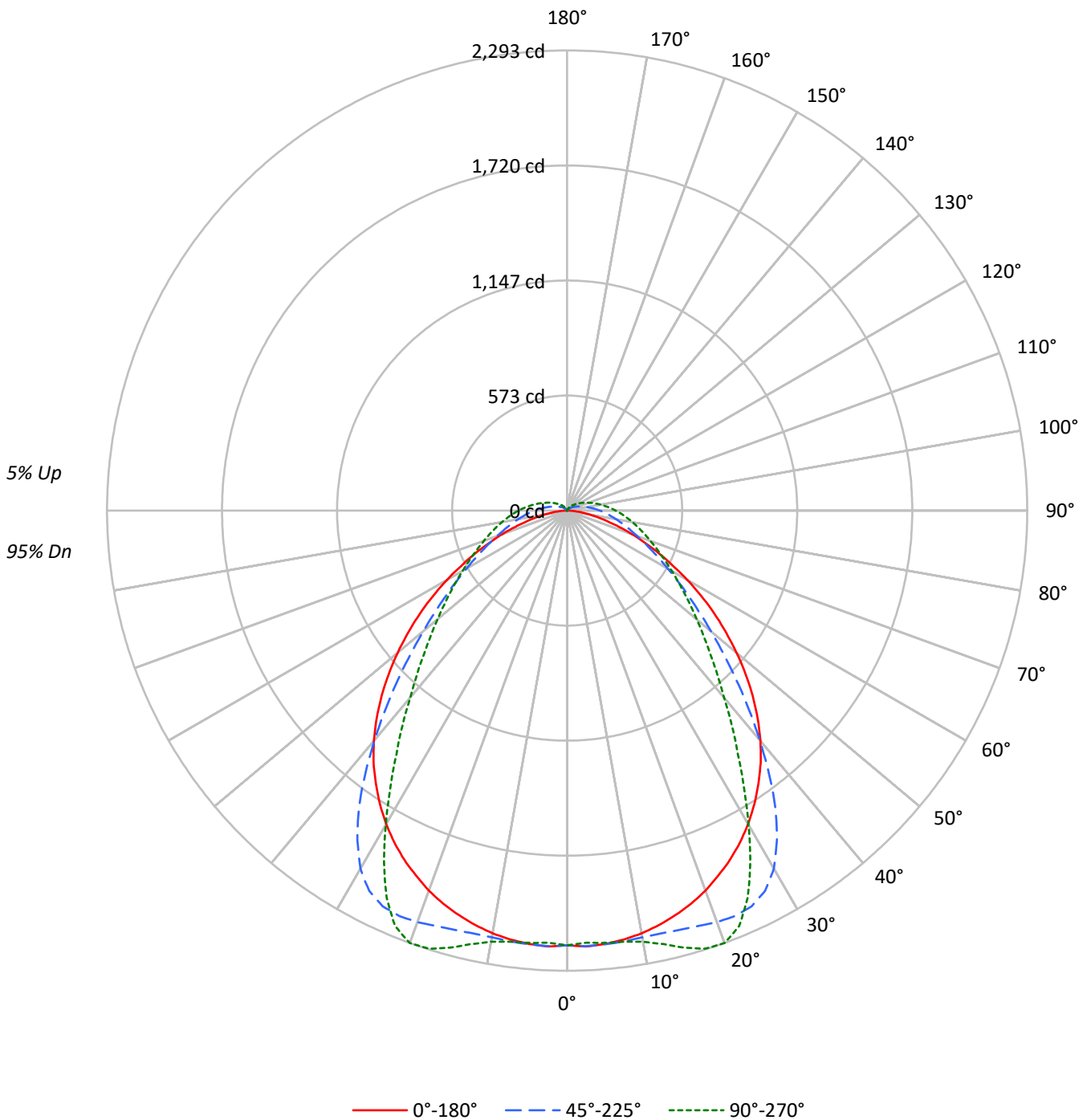
Lumens per Lamp: N/A
Luminaire Lumens: 5789.0 lumens
Efficiency: N/A
Efficacy: 145.8 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.21 / 1.28
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 39.7
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	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°	15544	15544	15544
5°	15565	15226	15063
10°	15487	14939	14872
15°	15353	14869	15170
20°	15188	15019	15341
25°	14949	15106	14267
30°	14635	14550	12230
35°	14192	13098	10216
40°	13616	11159	8582
45°	12808	9295	7367
50°	11799	7679	6427
55°	10661	6425	5710
60°	9354	5463	5163
65°	7964	4772	4749
70°	6570	4268	4477
75°	5145	3954	4314
80°	3846	3782	4257
85°	2528	3748	4294



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	206.1	3.6
10°-20°	612.5	10.6
20°-30°	954.3	16.5
30°-40°	1052.3	18.2
40°-50°	931.8	16.1
50°-60°	713.4	12.3
60°-70°	494.5	8.5
70°-80°	322.9	5.6
80°-90°	203.8	3.5
90°-100°	127.5	2.2
100°-110°	78.0	1.3
110°-120°	46.1	0.8
120°-130°	26.0	0.4
130°-140°	13.2	0.2
140°-150°	5.3	0.1
150°-160°	1.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1772.9	30.6
0°-40°	2825.2	48.8
0°-60°	4470.4	77.2
0°-90°	5491.6	94.9
90°-120°	251.6	4.3
90°-150°	296.1	5.1
90°-180°	297.0	5.1
0°-180°	5789.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2166	2166	2166	2166	2166	
5°	2168	2153	2169	2162	2162	206
15°	2087	2088	2163	2225	2255	589
25°	1920	1983	2175	2167	2129	884
35°	1661	1818	1810	1551	1484	1038
45°	1308	1452	1191	1025	1008	1006
55°	896	938	734	698	710	800
65°	506	513	462	494	513	504
75°	211	247	303	362	381	230
85°	44	108	202	265	284	50
90°	1	72	163	224	242	3
95°	0	47	128	186	204	0
105°	0	22	77	123	140	0
115°	0	12	46	79	92	0
125°	0	6	29	50	59	0
135°	1	2	16	30	36	0
145°	1	1	7	15	19	0
155°	1	1	1	4	7	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°	2166.1	2166.1	2166.1	2166.1	2166.1
2.5°	2174.3	2157.8	2172.7	2164.4	2155.1
5°	2167.7	2152.9	2169.4	2161.7	2162.2
7.5°	2156.2	2142.9	2165.0	2162.2	2167.2
10°	2139.1	2127.5	2158.9	2172.1	2180.9
12.5°	2115.4	2108.3	2158.4	2190.3	2212.8
15°	2086.8	2088.5	2162.8	2224.9	2254.7
17.5°	2053.8	2064.2	2171.0	2255.8	2288.8
20°	2015.3	2040.0	2182.0	2269.0	2293.2
22.5°	1968.5	2012.5	2186.4	2244.2	2240.9
25°	1920.1	1983.4	2175.4	2167.2	2128.6
27.5°	1865.0	1950.9	2136.3	2041.1	1976.7
30°	1803.4	1914.0	2060.9	1883.2	1807.3
32.5°	1735.7	1870.0	1945.9	1714.8	1640.0
35°	1661.4	1817.7	1810.0	1551.4	1483.7
37.5°	1584.4	1745.1	1652.6	1398.4	1347.7
40°	1498.0	1663.1	1491.9	1259.1	1215.1
42.5°	1405.0	1567.3	1337.3	1134.8	1107.2
45°	1308.1	1452.3	1191.4	1025.2	1008.2
47.5°	1206.3	1324.6	1056.1	927.3	920.7
50°	1102.8	1196.4	934.4	841.4	842.5
52.5°	997.7	1061.6	827.7	766.0	772.6
55°	896.5	938.3	734.1	697.8	709.9
57.5°	791.9	818.9	652.1	637.8	653.2
60°	692.9	707.7	578.9	584.4	602.0
62.5°	592.7	604.8	517.3	536.0	554.7
65°	505.7	513.4	462.3	493.6	512.9
67.5°	421.0	434.2	413.8	455.7	475.5
70°	344.5	362.7	371.5	422.1	441.4
72.5°	272.4	299.9	335.1	391.3	410.5
75°	210.8	247.1	302.7	362.1	381.4
77.5°	159.6	202.0	273.5	336.2	355.0
80°	112.3	164.5	247.6	311.5	330.2
82.5°	73.2	134.3	223.4	287.3	305.4
85°	43.5	108.4	202.0	264.7	284.0
87.5°	19.8	88.1	181.6	244.3	262.5
90°	0.6	72.1	162.9	224.0	241.6
92.5°	0.0	58.3	145.3	204.7	222.3
95°	0.0	46.8	128.2	185.5	203.6
97.5°	0.0	38.0	112.8	168.4	186.0
100°	0.0	31.4	99.6	152.4	170.0
102.5°	0.0	25.9	87.5	137.6	154.6
105°	0.0	21.5	77.0	122.7	140.3
107.5°	0.0	18.2	67.7	110.1	126.6
110°	0.0	15.4	59.4	98.5	113.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	13.8	52.3	88.6	102.9
115°	0.0	11.6	46.2	79.2	92.5
117.5°	0.0	10.5	40.7	71.0	83.1
120°	0.0	8.8	36.3	63.3	74.3
122.5°	0.0	7.7	31.9	56.1	66.0
125°	0.0	6.1	28.6	50.1	58.9
127.5°	0.0	5.0	25.3	44.6	52.3
130°	0.6	3.9	22.6	39.1	46.2
132.5°	0.6	2.8	19.3	34.7	40.2
135°	0.6	2.2	16.5	30.3	35.8
137.5°	0.6	1.1	13.8	26.4	30.8
140°	0.6	0.6	11.0	22.6	26.4
142.5°	0.6	0.6	8.8	19.3	22.6
145°	0.6	0.6	7.2	15.4	18.7
147.5°	0.6	0.6	5.0	12.1	15.4
150°	1.1	0.6	3.3	9.4	12.1
152.5°	1.1	0.6	2.2	6.6	9.4
155°	1.1	0.6	1.1	4.4	6.6
157.5°	1.1	1.1	0.6	2.8	3.9
160°	1.1	1.1	0.6	1.1	2.2
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)