

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: P236358

Luminaire Tested: **4SWLED-72HL-LW-UNV-L835-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P236358
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1709-316-27)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SWLED-72HL-LW-UNV-L835-CD1-U
Description: METALUX SWLED LINEAR LUMINAIRE
4FT FIXTURE WITH 2 ROW LED, WIDE LENS
Light Source: (224) 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

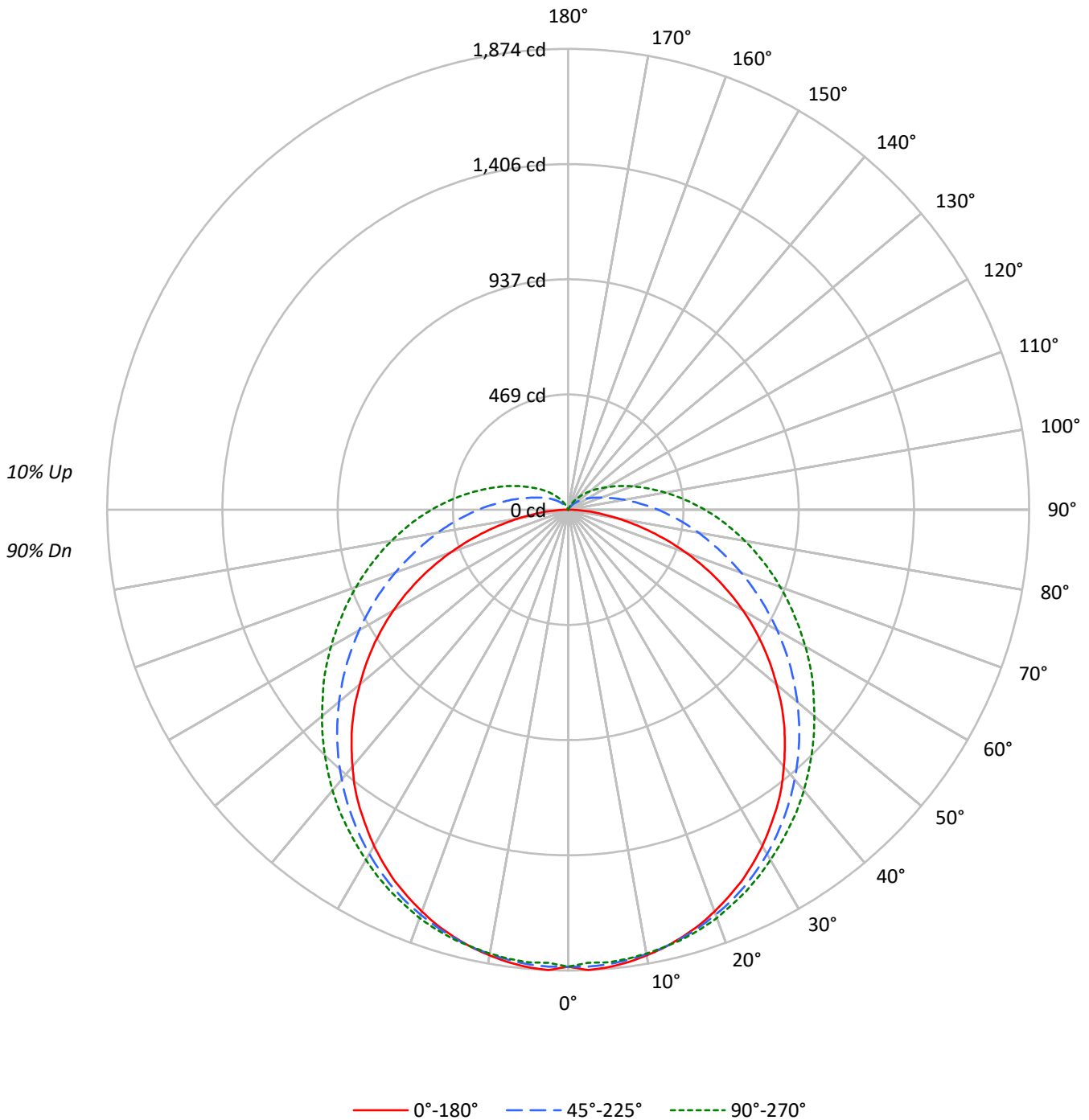
Lumens per Lamp: N/A
Luminaire Lumens: 7060.0 lumens
Efficiency: N/A
Efficacy: 98.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.32 / 1.42
Luminous Opening: Rectangular w/ Sides (W: 0.38' x L: 4' x H: 0.15')
CIE Type: Direct

Input Watts (W): 71.5
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				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	117	117	117	117	113	113	113	113	106	106	106	99	99	99	93	93	93	93	93	93	90
1	104	98	93	88	100	95	90	86	89	85	82	83	80	77	78	75	73	78	75	73	70
2	94	84	77	70	90	82	75	69	76	71	66	72	67	63	67	63	60	67	63	60	57
3	85	73	65	57	82	71	63	56	67	60	54	62	57	52	59	54	50	59	54	50	47
4	78	65	55	48	74	63	54	47	59	51	45	55	49	44	52	47	42	52	47	42	40
5	71	58	48	41	68	56	47	40	52	45	39	49	43	38	47	41	36	47	41	36	34
6	65	52	42	36	63	50	41	35	47	40	34	45	38	33	42	36	32	42	36	32	29
7	61	47	38	31	58	45	37	31	43	35	30	41	34	29	38	32	28	38	32	28	26
8	56	42	34	28	54	41	33	27	39	32	27	37	31	26	35	29	25	35	29	25	23
9	53	39	30	25	51	38	30	24	36	29	24	34	28	23	32	27	22	32	27	22	21
10	49	36	28	22	47	35	27	22	33	26	21	32	25	21	30	24	20	30	24	20	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13333	13333	13333
5°	13410	13029	12870
10°	13325	12699	12497
15°	13231	12388	12159
20°	13105	12065	11820
25°	12978	11752	11472
30°	12811	11417	11127
35°	12631	11068	10815
40°	12397	10713	10524
45°	12163	10361	10235
50°	11828	9992	9963
55°	11511	9629	9752
60°	11092	9258	9548
65°	10512	8907	9383
70°	9690	8584	9303
75°	8552	8330	9294
80°	7051	8215	9396
85°	5196	8290	9684



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.2	2.5
10°-20°	507.7	7.2
20°-30°	777.1	11.0
30°-40°	952.6	13.5
40°-50°	1019.5	14.4
50°-60°	977.9	13.9
60°-70°	843.4	11.9
70°-80°	649.8	9.2
80°-90°	450.5	6.4
90°-100°	293.3	4.2
100°-110°	186.4	2.6
110°-120°	113.8	1.6
120°-130°	65.1	0.9
130°-140°	32.1	0.5
140°-150°	12.1	0.2
150°-160°	2.3	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1461.0	20.7
0°-40°	2413.6	34.2
0°-60°	4411.1	62.5
0°-90°	6354.9	90.0
90°-120°	593.5	8.4
90°-150°	702.8	10.0
90°-180°	705.0	10.0
0°-180°	7060.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1858	1858	1858	1858	1858	
5°	1868	1850	1856	1848	1848	177
15°	1798	1786	1802	1804	1807	507
25°	1667	1660	1692	1700	1712	768
35°	1479	1480	1530	1552	1571	924
45°	1242	1261	1328	1374	1401	957
55°	968	1009	1100	1175	1212	864
65°	668	732	863	967	1014	660
75°	350	460	638	770	822	372
85°	89	244	447	588	640	97
90°	2	166	365	505	555	6
95°	0	111	292	426	474	0
105°	0	55	181	294	335	0
115°	0	31	116	194	227	0
125°	1	15	72	126	148	1
135°	1	4	38	75	89	1
145°	1	1	15	36	45	1
155°	1	1	1	9	13	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°	1858.0	1858.0	1858.0	1858.0	1858.0
2.5°	1873.8	1855.4	1859.8	1852.7	1844.0
5°	1867.6	1850.1	1856.3	1847.5	1847.5
7.5°	1856.3	1840.5	1846.6	1841.4	1842.2
10°	1840.5	1824.7	1835.2	1830.8	1832.6
12.5°	1822.1	1806.3	1821.2	1817.7	1820.3
15°	1798.4	1786.2	1801.9	1803.7	1807.2
17.5°	1771.3	1760.8	1778.3	1783.5	1788.8
20°	1738.9	1731.0	1752.9	1758.1	1766.9
22.5°	1703.8	1696.8	1724.9	1729.2	1738.9
25°	1667.0	1660.0	1692.4	1700.3	1711.7
27.5°	1624.1	1621.5	1656.5	1667.9	1679.3
30°	1578.6	1576.8	1617.1	1630.2	1644.3
32.5°	1528.6	1530.4	1574.2	1591.7	1608.3
35°	1478.7	1480.4	1529.5	1552.3	1570.7
37.5°	1424.4	1429.6	1482.2	1509.4	1533.0
40°	1363.9	1376.2	1432.3	1465.6	1490.1
42.5°	1303.5	1320.1	1381.5	1420.0	1445.4
45°	1242.2	1260.6	1328.0	1373.6	1400.7
47.5°	1176.5	1200.1	1272.8	1324.5	1354.3
50°	1105.5	1137.9	1215.9	1276.3	1306.1
52.5°	1037.2	1074.0	1158.1	1226.4	1257.9
55°	968.0	1009.2	1100.3	1174.7	1212.4
57.5°	895.3	940.0	1040.7	1122.2	1163.3
60°	821.7	872.5	981.1	1071.4	1113.4
62.5°	745.5	803.3	921.6	1018.8	1063.5
65°	667.5	732.3	862.9	967.1	1013.5
67.5°	588.7	662.3	805.0	918.1	965.4
70°	508.1	593.1	747.2	868.1	917.2
72.5°	429.2	525.6	691.2	817.3	869.0
75°	350.4	459.9	637.7	770.0	821.7
77.5°	275.1	397.7	585.2	723.6	775.3
80°	205.9	340.8	537.9	677.2	728.8
82.5°	141.9	290.0	491.4	632.5	683.3
85°	89.4	243.5	446.8	587.8	640.4
87.5°	42.9	202.4	403.8	545.8	597.4
90°	1.8	165.6	365.3	504.6	555.4
92.5°	0.0	135.8	327.6	464.3	514.2
95°	0.0	111.3	291.7	425.7	473.9
97.5°	0.0	92.0	260.2	389.8	436.3
100°	0.0	75.3	232.1	355.7	400.3
102.5°	0.0	63.9	205.9	323.2	366.2
105°	0.0	55.2	181.3	293.5	334.6
107.5°	0.0	47.3	162.1	266.3	304.8
110°	0.0	40.3	144.5	240.0	277.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	35.0	128.8	217.2	251.4
115°	0.0	30.7	115.6	193.6	226.9
117.5°	0.0	25.4	103.4	174.3	204.1
120°	0.0	21.9	92.0	156.8	183.1
122.5°	0.9	18.4	81.5	141.0	164.7
125°	0.9	14.9	71.8	126.1	148.0
127.5°	0.9	11.4	63.1	112.1	132.3
130°	0.9	8.8	54.3	99.0	116.5
132.5°	0.9	6.1	46.4	86.7	103.4
135°	0.9	3.5	38.5	75.3	89.4
137.5°	0.9	1.8	31.5	63.9	77.1
140°	0.9	0.9	25.4	54.3	65.7
142.5°	0.9	0.0	19.3	45.6	54.3
145°	0.9	0.9	14.9	35.9	44.7
147.5°	0.9	0.9	10.5	28.0	35.9
150°	0.9	0.9	6.1	20.1	27.2
152.5°	0.9	0.9	2.6	14.0	20.1
155°	0.9	0.9	0.9	8.8	13.1
157.5°	0.9	0.9	0.0	3.5	7.0
160°	1.8	0.9	0.0	0.0	1.8
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)