

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: P235482

Luminaire Tested: **4WSNLED-LD4-24SL-F-UNV-L830-CD1-U**

Issue Date: 3/3/2020



Test Information

Test Method: LM-79-08
Report Number: P235482
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-169-11)
Test Lab: INNOVATION CENTER(G2)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4WSNLED-LD4-24SL-F-UNV-L830-CD1-U
Description: 4FT WSNLED WRAPAROUND
Light Source: (224) 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

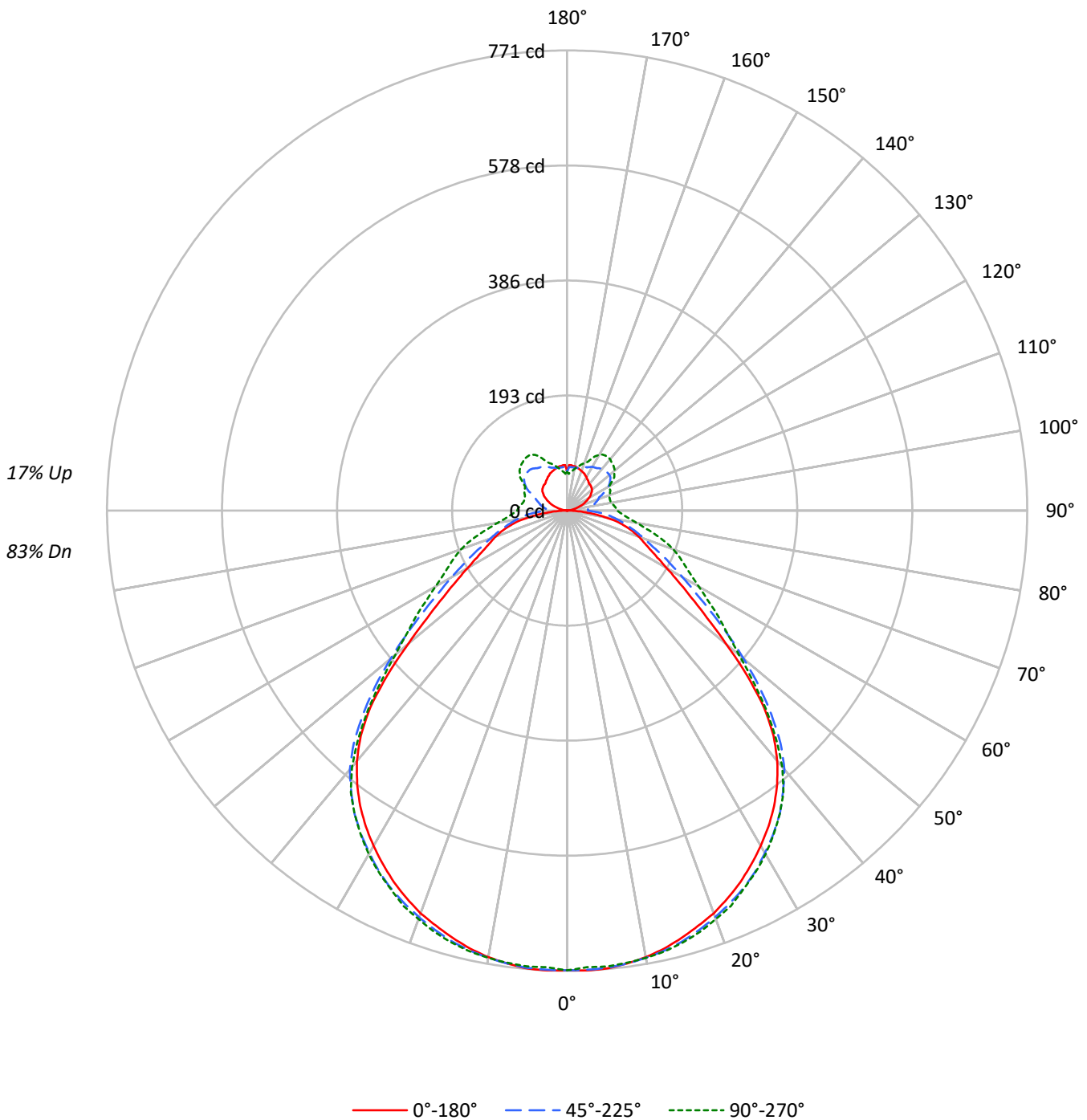
Lumens per Lamp: N/A
Luminaire Lumens: 2392.0 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 21.3
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	0
RCR																		
0	115	115	115	115	110	110	110	110	101	101	101	93	93	93	86	86	86	83
1	105	100	96	92	100	96	93	89	89	86	83	82	80	78	76	74	72	69
2	96	88	82	76	92	85	79	74	78	74	70	73	69	65	67	64	62	59
3	88	78	70	64	84	75	68	62	70	64	59	65	60	56	60	56	53	50
4	81	69	61	55	77	67	59	53	62	56	51	58	53	48	54	50	46	43
5	74	62	54	47	71	60	52	46	56	49	44	52	47	42	49	44	40	38
6	69	56	48	42	66	54	46	41	51	44	39	48	42	37	44	40	36	33
7	64	51	43	37	61	49	42	36	46	40	35	43	38	33	41	36	32	30
8	59	47	38	33	57	45	38	32	42	36	31	40	34	30	38	32	29	27
9	56	43	35	30	53	41	34	29	39	33	28	37	31	27	35	30	26	24
10	52	39	32	27	50	38	31	26	36	30	25	34	29	25	32	27	24	22

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2073	2073	2073
5°	2075	2057	2049
10°	2065	2039	2034
15°	2048	2021	2020
20°	2033	1996	1995
25°	2010	1972	1963
30°	1980	1935	1927
35°	1944	1893	1875
40°	1875	1821	1782
45°	1722	1659	1595
50°	1403	1427	1367
55°	1139	1183	1231
60°	982	1010	1127
65°	912	894	1093
70°	923	825	1106
75°	939	802	1076
80°	869	816	1071
85°	632	853	1222



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.0	3.1
10°-20°	210.4	8.8
20°-30°	320.1	13.4
30°-40°	383.9	16.0
40°-50°	365.4	15.3
50°-60°	260.2	10.9
60°-70°	176.9	7.4
70°-80°	119.4	5.0
80°-90°	68.4	2.9
90°-100°	44.2	1.8
100°-110°	49.7	2.1
110°-120°	61.8	2.6
120°-130°	70.9	3.0
130°-140°	67.4	2.8
140°-150°	54.6	2.3
150°-160°	37.6	1.6
160°-170°	21.2	0.9
170°-180°	6.8	0.3
0°-30°	603.6	25.2
0°-40°	987.5	41.3
0°-60°	1613.1	67.4
0°-90°	1977.8	82.7
90°-120°	155.7	6.5
90°-150°	348.6	14.6
90°-180°	414.0	17.3
0°-180°	2392.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	770	770	770	770	770	
5°	770	766	769	768	767	73
15°	741	740	747	750	749	209
25°	687	688	698	701	700	316
35°	605	608	621	621	621	377
45°	467	478	484	484	471	353
55°	254	279	292	294	309	232
65°	153	163	174	184	218	154
75°	101	84	109	130	152	105
85°	28	39	62	87	96	31
90°	0	17	35	66	83	2
95°	2	16	36	67	80	3
105°	16	24	49	67	74	17
115°	34	53	66	74	80	34
125°	49	65	88	95	96	44
135°	57	68	93	107	109	44
145°	61	68	87	107	112	38
155°	68	70	80	93	95	31
165°	73	73	74	75	78	21
175°	76	76	73	64	65	7
180°	65	65	65	65	65	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	770.2	770.2	770.2	770.2	770.2
2.5°	771.3	767.9	770.2	770.2	765.6
5°	770.2	765.6	769.0	767.9	766.7
7.5°	765.6	762.1	765.6	766.7	764.4
10°	759.8	756.3	760.9	762.1	760.9
12.5°	751.7	749.3	755.1	757.4	756.3
15°	741.2	740.1	747.0	750.5	749.3
17.5°	729.6	728.5	736.6	741.2	740.1
20°	718.1	716.9	725.0	728.5	728.5
22.5°	703.0	703.0	712.3	715.7	716.9
25°	686.8	688.0	698.4	700.7	699.5
27.5°	668.3	669.4	682.2	683.3	683.3
30°	648.6	650.9	662.5	663.6	664.8
32.5°	627.7	630.0	642.8	642.8	643.9
35°	604.6	608.0	620.8	620.8	620.8
37.5°	577.9	582.6	594.1	594.1	595.3
40°	547.8	554.8	566.3	565.2	560.6
42.5°	511.9	521.2	529.3	528.1	517.7
45°	466.7	478.3	484.1	484.1	471.4
47.5°	408.8	426.2	436.6	432.0	421.6
50°	347.5	372.9	385.7	383.4	375.2
52.5°	295.3	324.3	337.0	335.9	338.2
55°	253.6	279.1	291.9	294.2	309.2
57.5°	220.1	243.2	253.6	260.6	279.1
60°	192.3	213.1	223.5	230.5	254.8
62.5°	170.3	186.5	196.9	205.0	234.0
65°	152.9	163.3	173.7	184.1	217.7
67.5°	139.0	141.3	152.9	167.9	203.8
70°	127.4	119.3	136.7	154.0	188.8
72.5°	114.7	100.8	122.8	140.1	171.4
75°	100.8	84.5	108.9	129.7	151.7
77.5°	85.7	70.6	97.3	118.1	133.2
80°	66.0	60.2	85.7	107.7	118.1
82.5°	46.3	49.8	74.1	98.4	105.4
85°	27.8	39.4	62.5	86.9	96.1
87.5°	12.7	29.0	47.5	75.3	89.2
90°	0.0	17.4	34.7	66.0	83.4
92.5°	1.2	17.4	34.7	67.2	82.2
95°	2.3	16.2	35.9	67.2	79.9
97.5°	4.6	16.2	39.4	66.0	77.6
100°	8.1	17.4	42.9	66.0	75.3
102.5°	11.6	18.5	46.3	67.2	74.1
105°	16.2	24.3	48.6	67.2	74.1
107.5°	20.8	32.4	52.1	68.3	74.1
110°	25.5	41.7	55.6	69.5	75.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	30.1	48.6	57.9	73.0	77.6
115°	33.6	53.3	66.0	74.1	79.9
117.5°	38.2	56.8	74.1	75.3	79.9
120°	41.7	60.2	79.9	79.9	81.1
122.5°	46.3	62.5	84.5	89.2	88.0
125°	48.6	64.9	88.0	95.0	96.1
127.5°	52.1	66.0	91.5	98.4	99.6
130°	54.4	67.2	92.7	101.9	104.2
132.5°	55.6	67.2	92.7	104.2	106.6
135°	56.8	68.3	92.7	106.6	108.9
137.5°	57.9	67.2	92.7	107.7	110.0
140°	57.9	67.2	91.5	107.7	112.3
142.5°	59.1	67.2	89.2	107.7	112.3
145°	61.4	68.3	86.9	106.6	112.3
147.5°	62.5	68.3	85.7	104.2	111.2
150°	64.9	68.3	84.5	100.8	107.7
152.5°	66.0	68.3	82.2	97.3	103.1
155°	68.3	69.5	79.9	92.7	95.0
157.5°	69.5	69.5	78.8	88.0	88.0
160°	70.6	70.6	76.4	83.4	84.5
162.5°	71.8	71.8	75.3	78.8	81.1
165°	73.0	73.0	74.1	75.3	77.6
167.5°	74.1	74.1	73.0	70.6	74.1
170°	75.3	75.3	73.0	67.2	70.6
172.5°	75.3	76.4	73.0	64.9	67.2
175°	76.4	76.4	73.0	63.7	64.9
177.5°	76.4	76.4	73.0	61.4	61.4
180°	64.9	64.9	64.9	64.9	64.9

(END OF REPORT)