

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: P234482

Luminaire Tested: **2WSNLED-LD4-28SL-F-UNV-L840-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P234482  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1707-169-7)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 2WSNLED-LD4-28SL-F-UNV-L840-CD1-U  
Description: 2FT WSNLED WRAPAROUND  
Light Source: (112) 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

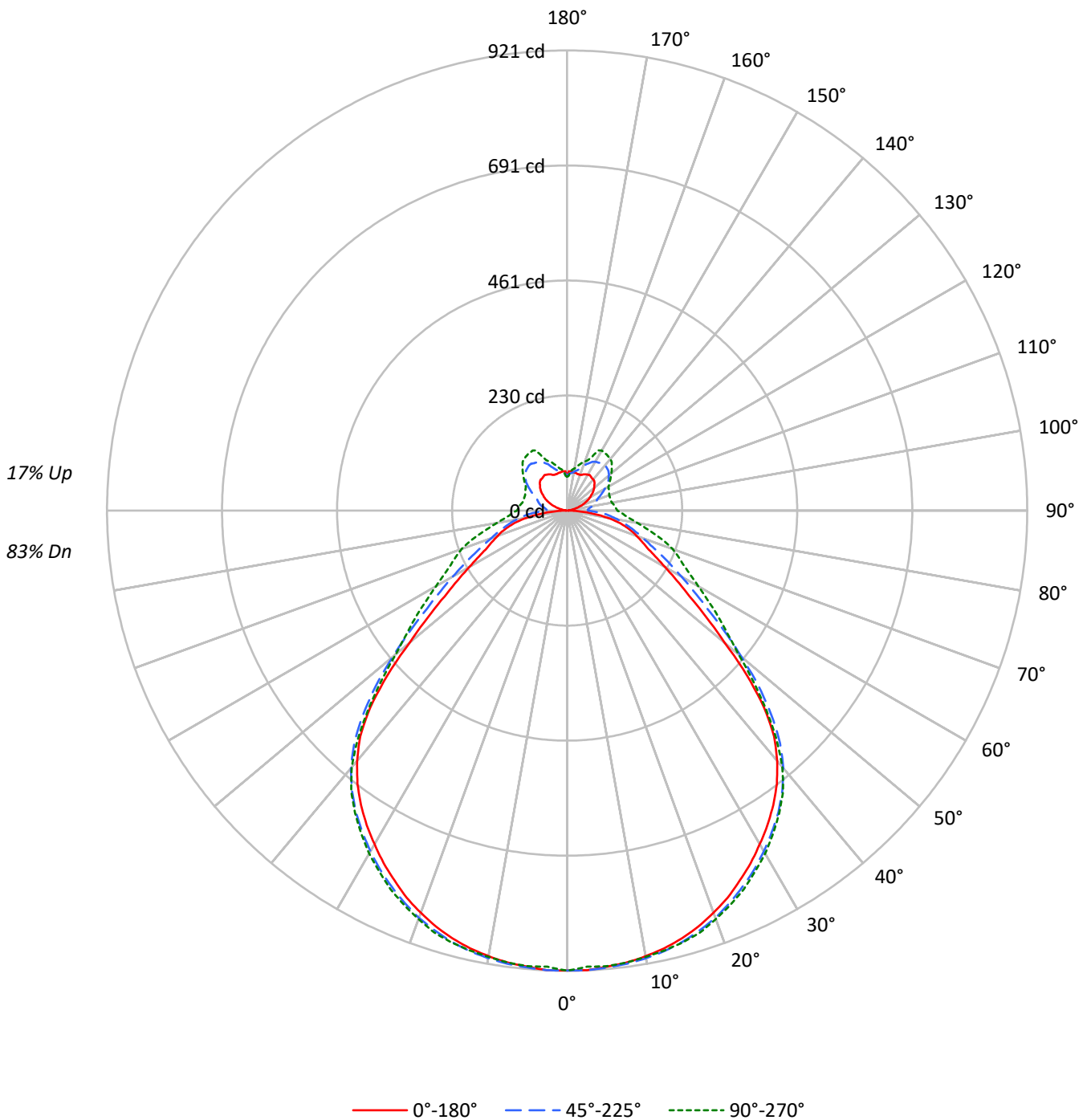
Lumens per Lamp: N/A  
Luminaire Lumens: 2860.0 lumens  
Efficiency: N/A  
Efficacy: 103.6 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 2' x H: 0.12')  
CIE Type: Semi-Direct

Input Watts (W): 27.6  
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	92	89	89	86	83	82	80	78	76	74	72	69
2	96	88	81	76	92	85	79	74	78	74	69	72	69	65	67	64	61	58
3	88	78	70	64	84	75	68	62	70	64	59	64	60	56	60	56	53	50
4	81	69	61	55	77	67	59	53	62	56	51	58	53	48	54	49	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	47	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	37	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°	4955	4955	4955
5°	4924	4902	4890
10°	4895	4858	4850
15°	4859	4807	4824
20°	4797	4740	4768
25°	4715	4646	4693
30°	4625	4545	4595
35°	4528	4431	4469
40°	4366	4256	4263
45°	3994	3884	3809
50°	3210	3293	3260
55°	2577	2704	2934
60°	2192	2309	2683
65°	1985	2036	2581
70°	1990	1866	2628
75°	2018	1815	2565
80°	1867	1828	2590
85°	1275	1836	2972



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	87.3	3.1
10°-20°	251.7	8.8
20°-30°	381.9	13.4
30°-40°	457.8	16.0
40°-50°	436.9	15.3
50°-60°	308.6	10.8
60°-70°	209.6	7.3
70°-80°	143.0	5.0
80°-90°	82.8	2.9
90°-100°	53.1	1.9
100°-110°	59.3	2.1
110°-120°	71.4	2.5
120°-130°	81.8	2.9
130°-140°	83.8	2.9
140°-150°	71.2	2.5
150°-160°	47.9	1.7
160°-170°	24.6	0.9
170°-180°	7.3	0.3
0°-30°	720.9	25.2
0°-40°	1178.7	41.2
0°-60°	1924.2	67.3
0°-90°	2359.6	82.5
90°-120°	183.9	6.4
90°-150°	420.6	14.7
90°-180°	500.0	17.5
0°-180°	2860.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	921	921	921	921	921	
5°	916	918	918	916	915	87
15°	887	889	893	895	895	250
25°	817	823	831	835	836	377
35°	719	726	737	740	740	449
45°	558	575	578	581	563	422
55°	299	328	343	352	368	274
65°	177	193	205	220	257	179
75°	120	101	130	156	181	124
85°	35	48	75	106	117	39
90°	1	20	42	80	101	3
95°	3	20	44	80	96	4
105°	19	29	58	82	90	20
115°	42	61	75	86	92	42
125°	63	79	101	103	105	56
135°	78	92	116	126	126	59
145°	83	95	116	133	137	52
155°	80	87	105	121	120	37
165°	76	79	84	94	95	22
175°	79	80	75	71	79	7
180°	68	68	68	68	68	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	920.6	920.6	920.6	920.6	920.6
2.5°	920.6	920.6	920.6	917.9	913.8
5°	916.5	917.9	917.9	916.5	915.1
7.5°	912.4	913.8	915.1	913.8	912.4
10°	905.6	908.3	909.7	909.7	907.0
12.5°	897.5	900.2	902.9	902.9	901.5
15°	886.6	889.3	893.4	894.7	894.7
17.5°	873.0	875.7	881.1	885.2	885.2
20°	856.7	860.7	867.5	870.3	870.3
22.5°	839.0	843.1	849.9	852.6	853.9
25°	817.2	822.7	830.8	834.9	836.3
27.5°	795.5	802.3	810.4	814.5	814.5
30°	771.0	779.2	787.3	791.4	792.8
32.5°	746.5	753.3	762.8	766.9	766.9
35°	719.3	726.1	737.0	739.7	739.7
37.5°	689.4	697.6	707.1	711.2	709.8
40°	654.1	663.6	673.1	675.8	670.4
42.5°	613.3	624.1	630.9	633.7	620.1
45°	557.5	575.2	577.9	580.6	563.0
47.5°	488.2	511.3	519.4	518.1	504.5
50°	412.0	444.6	455.5	456.9	447.4
52.5°	350.8	383.5	397.1	402.5	403.9
55°	299.2	327.7	342.7	352.2	368.5
57.5°	259.7	285.6	300.5	311.4	333.1
60°	225.7	250.2	263.8	276.0	303.2
62.5°	198.5	220.3	232.5	244.8	277.4
65°	176.8	193.1	205.3	220.3	257.0
67.5°	161.8	168.6	180.9	201.2	240.7
70°	148.2	144.1	161.8	183.6	224.4
72.5°	134.6	122.4	145.5	168.6	204.0
75°	119.7	100.6	130.5	156.4	180.9
77.5°	102.0	85.7	116.9	142.8	160.5
80°	81.6	72.1	103.3	130.5	142.8
82.5°	58.5	59.8	88.4	118.3	127.8
85°	35.4	47.6	74.8	106.1	116.9
87.5°	16.3	34.0	57.1	91.1	108.8
90°	1.4	20.4	42.2	80.2	100.6
92.5°	1.4	20.4	40.8	80.2	97.9
95°	2.7	20.4	43.5	80.2	96.5
97.5°	5.4	20.4	46.2	80.2	93.8
100°	9.5	20.4	51.7	80.2	91.1
102.5°	13.6	23.1	55.8	81.6	89.7
105°	19.0	28.6	58.5	81.6	89.7
107.5°	24.5	35.4	61.2	81.6	89.7
110°	31.3	44.9	63.9	82.9	89.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	36.7	54.4	68.0	84.3	91.1
115°	42.2	61.2	74.8	85.7	92.5
117.5°	47.6	65.3	80.2	88.4	93.8
120°	53.0	70.7	87.0	92.5	95.2
122.5°	57.1	74.8	93.8	97.9	100.6
125°	62.6	78.9	100.6	103.3	104.7
127.5°	66.6	82.9	104.7	110.1	110.1
130°	70.7	85.7	108.8	115.6	115.6
132.5°	73.4	89.7	112.9	121.0	121.0
135°	77.5	92.5	115.6	126.5	126.5
137.5°	80.2	95.2	116.9	129.2	131.9
140°	81.6	95.2	118.3	131.9	134.6
142.5°	81.6	96.5	118.3	133.3	136.0
145°	82.9	95.2	115.6	133.3	137.3
147.5°	84.3	93.8	114.2	133.3	137.3
150°	82.9	92.5	112.9	129.2	138.7
152.5°	81.6	89.7	110.1	123.7	136.0
155°	80.2	87.0	104.7	121.0	119.7
157.5°	77.5	84.3	100.6	114.2	108.8
160°	76.1	81.6	93.8	108.8	104.7
162.5°	76.1	78.9	88.4	102.0	100.6
165°	76.1	78.9	84.3	93.8	95.2
167.5°	77.5	78.9	81.6	84.3	89.7
170°	77.5	78.9	78.9	78.9	85.7
172.5°	78.9	80.2	76.1	73.4	82.9
175°	78.9	80.2	74.8	70.7	78.9
177.5°	78.9	78.9	73.4	68.0	69.3
180°	68.0	68.0	68.0	68.0	68.0

(END OF REPORT)