

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: P234481

Luminaire Tested: **2WSNLED-LD4-28SL-F-UNV-L835-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P234481  
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-L835-CD1-U  
Description: 2FT WSNLED WRAPAROUND  
Light Source: (112) 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

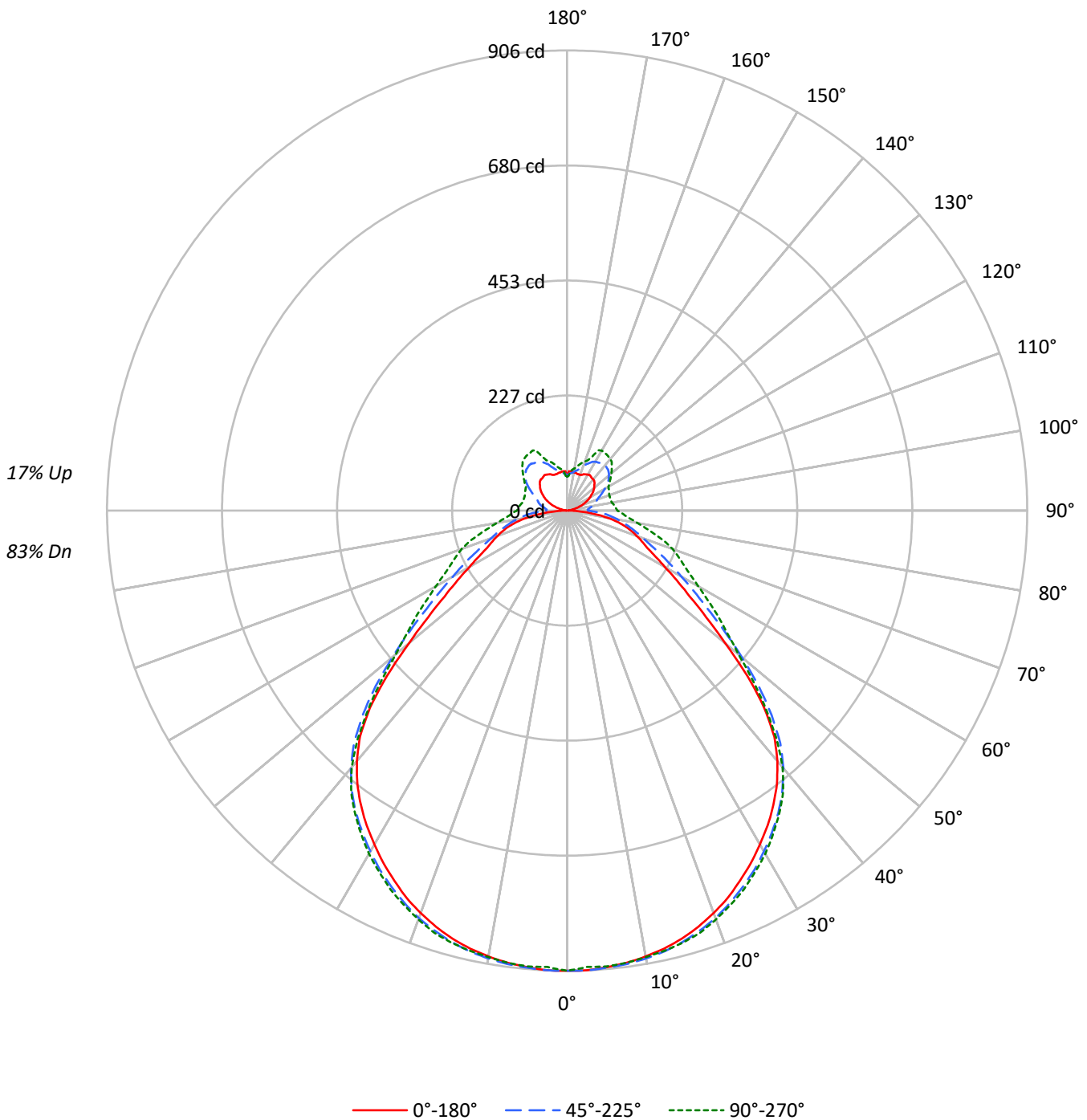
Lumens per Lamp: N/A  
Luminaire Lumens: 2815.0 lumens  
Efficiency: N/A  
Efficacy: 102.0 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 2' x H: 0.12')  
CIE Type: Semi-Direct

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°	4877	4877	4877
5°	4847	4825	4813
10°	4818	4782	4773
15°	4782	4731	4748
20°	4722	4665	4693
25°	4642	4574	4619
30°	4552	4473	4523
35°	4457	4361	4399
40°	4298	4189	4195
45°	3931	3822	3749
50°	3160	3242	3209
55°	2536	2661	2888
60°	2158	2272	2641
65°	1954	2004	2541
70°	1959	1837	2586
75°	1986	1788	2524
80°	1837	1799	2548
85°	1253	1807	2926



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.9	3.1
10°-20°	247.8	8.8
20°-30°	375.9	13.4
30°-40°	450.6	16.0
40°-50°	430.0	15.3
50°-60°	303.7	10.8
60°-70°	206.3	7.3
70°-80°	140.8	5.0
80°-90°	81.5	2.9
90°-100°	52.3	1.9
100°-110°	58.4	2.1
110°-120°	70.3	2.5
120°-130°	80.5	2.9
130°-140°	82.4	2.9
140°-150°	70.1	2.5
150°-160°	47.2	1.7
160°-170°	24.2	0.9
170°-180°	7.2	0.3
0°-30°	709.6	25.2
0°-40°	1160.2	41.2
0°-60°	1893.9	67.3
0°-90°	2322.5	82.5
90°-120°	181.0	6.4
90°-150°	414.0	14.7
90°-180°	493.0	17.5
0°-180°	2815.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	902	903	903	902	901	86
15°	873	875	879	881	881	246
25°	804	810	818	822	823	371
35°	708	715	725	728	728	442
45°	549	566	569	572	554	415
55°	294	323	337	347	363	270
65°	174	190	202	217	253	176
75°	118	99	128	154	178	122
85°	35	47	74	104	115	38
90°	1	20	42	79	99	3
95°	3	20	43	79	95	4
105°	19	28	58	80	88	20
115°	42	60	74	84	91	41
125°	62	78	99	102	103	55
135°	76	91	114	124	124	58
145°	82	94	114	131	135	51
155°	79	86	103	119	118	36
165°	75	78	83	92	94	21
175°	78	79	74	70	78	7
180°	67	67	67	67	67	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	906.1	906.1	906.1	906.1	906.1
2.5°	906.1	906.1	906.1	903.4	899.4
5°	902.1	903.4	903.4	902.1	900.7
7.5°	898.1	899.4	900.7	899.4	898.1
10°	891.4	894.0	895.4	895.4	892.7
12.5°	883.3	886.0	888.7	888.7	887.4
15°	872.6	875.3	879.3	880.7	880.7
17.5°	859.2	861.9	867.3	871.3	871.3
20°	843.2	847.2	853.9	856.6	856.6
22.5°	825.8	829.8	836.5	839.2	840.5
25°	804.4	809.7	817.8	821.8	823.1
27.5°	783.0	789.7	797.7	801.7	801.7
30°	758.9	766.9	774.9	778.9	780.3
32.5°	734.8	741.5	750.8	754.9	754.9
35°	708.0	714.7	725.4	728.1	728.1
37.5°	678.6	686.6	696.0	700.0	698.6
40°	643.8	653.1	662.5	665.2	659.8
42.5°	603.6	614.3	621.0	623.7	610.3
45°	548.7	566.1	568.8	571.5	554.1
47.5°	480.5	503.2	511.3	509.9	496.5
50°	405.5	437.7	448.4	449.7	440.3
52.5°	345.3	377.4	390.8	396.2	397.5
55°	294.4	322.6	337.3	346.6	362.7
57.5°	255.6	281.1	295.8	306.5	327.9
60°	222.2	246.3	259.6	271.7	298.5
62.5°	195.4	216.8	228.9	240.9	273.0
65°	174.0	190.1	202.1	216.8	253.0
67.5°	159.3	166.0	178.0	198.1	236.9
70°	145.9	141.9	159.3	180.7	220.8
72.5°	132.5	120.5	143.2	166.0	200.8
75°	117.8	99.0	128.5	153.9	178.0
77.5°	100.4	84.3	115.1	140.5	157.9
80°	80.3	70.9	101.7	128.5	140.5
82.5°	57.6	58.9	87.0	116.4	125.8
85°	34.8	46.8	73.6	104.4	115.1
87.5°	16.1	33.5	56.2	89.7	107.1
90°	1.3	20.1	41.5	79.0	99.0
92.5°	1.3	20.1	40.2	79.0	96.4
95°	2.7	20.1	42.8	79.0	95.0
97.5°	5.4	20.1	45.5	79.0	92.3
100°	9.4	20.1	50.9	79.0	89.7
102.5°	13.4	22.8	54.9	80.3	88.3
105°	18.7	28.1	57.6	80.3	88.3
107.5°	24.1	34.8	60.2	80.3	88.3
110°	30.8	44.2	62.9	81.6	88.3



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	36.1	53.5	66.9	83.0	89.7
115°	41.5	60.2	73.6	84.3	91.0
117.5°	46.8	64.2	79.0	87.0	92.3
120°	52.2	69.6	85.7	91.0	93.7
122.5°	56.2	73.6	92.3	96.4	99.0
125°	61.6	77.6	99.0	101.7	103.1
127.5°	65.6	81.6	103.1	108.4	108.4
130°	69.6	84.3	107.1	113.8	113.8
132.5°	72.3	88.3	111.1	119.1	119.1
135°	76.3	91.0	113.8	124.5	124.5
137.5°	79.0	93.7	115.1	127.1	129.8
140°	80.3	93.7	116.4	129.8	132.5
142.5°	80.3	95.0	116.4	131.2	133.8
145°	81.6	93.7	113.8	131.2	135.2
147.5°	83.0	92.3	112.4	131.2	135.2
150°	81.6	91.0	111.1	127.1	136.5
152.5°	80.3	88.3	108.4	121.8	133.8
155°	79.0	85.7	103.1	119.1	117.8
157.5°	76.3	83.0	99.0	112.4	107.1
160°	74.9	80.3	92.3	107.1	103.1
162.5°	74.9	77.6	87.0	100.4	99.0
165°	74.9	77.6	83.0	92.3	93.7
167.5°	76.3	77.6	80.3	83.0	88.3
170°	76.3	77.6	77.6	77.6	84.3
172.5°	77.6	79.0	74.9	72.3	81.6
175°	77.6	79.0	73.6	69.6	77.6
177.5°	77.6	77.6	72.3	66.9	68.3
180°	66.9	66.9	66.9	66.9	66.9

(END OF REPORT)