

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: P235486

Luminaire Tested: **4WSNLED-LD4-40SL-F-UNV-L830-CD1-U**

Issue Date: 3/3/2020



**Test Information**

Test Method: LM-79-08  
Report Number: P235486  
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-LD4-40SL-F-UNV-L830-CD1-U  
Description: 4FT WSNLED WRAPAROUND  
Light Source: (224) 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

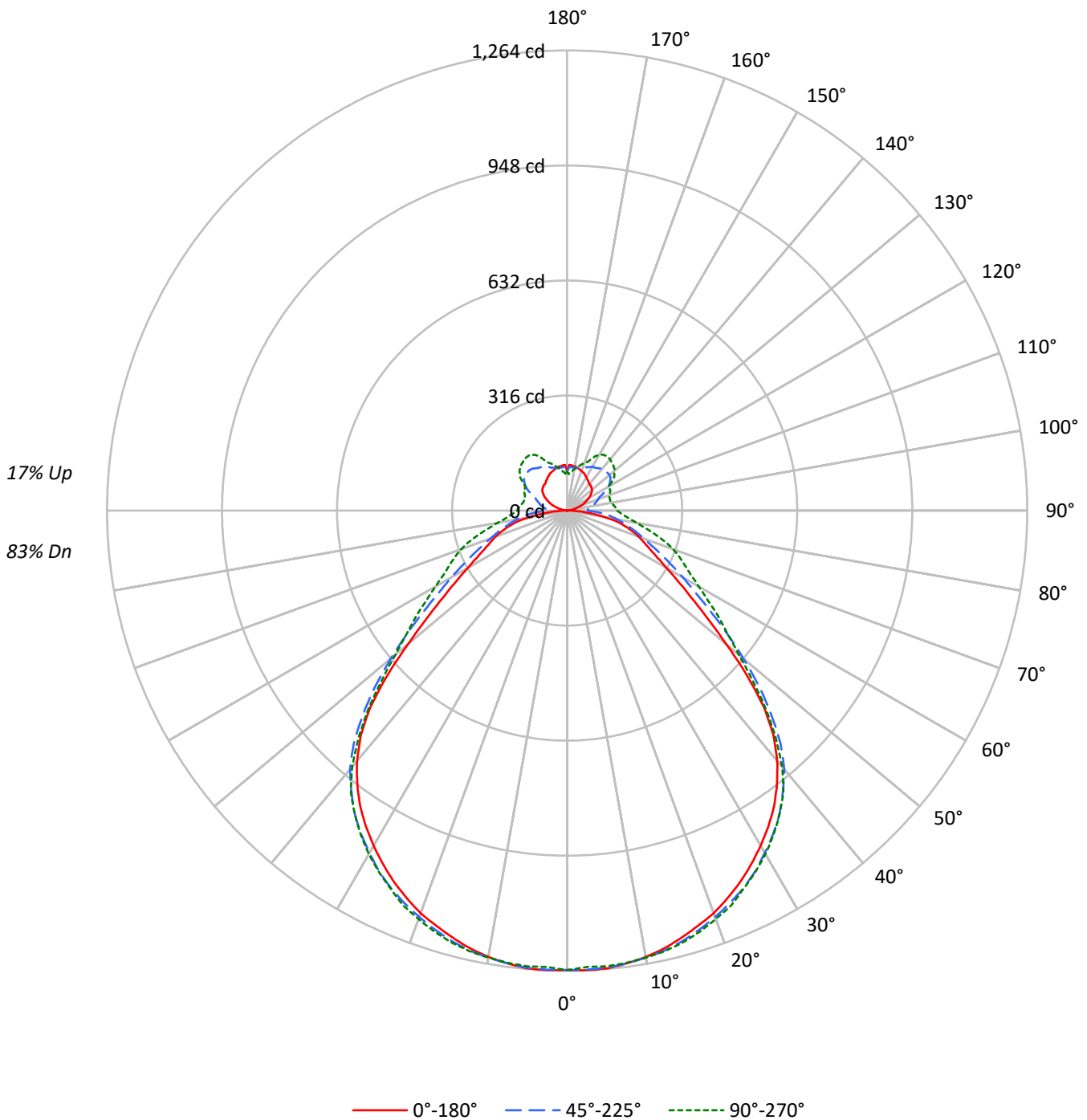
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3920.0 lumens  
Efficiency: N/A  
Efficacy: 109.2 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): 35.9  
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°	3397	3397	3397
5°	3400	3372	3357
10°	3384	3342	3334
15°	3356	3312	3310
20°	3332	3271	3270
25°	3294	3232	3216
30°	3244	3171	3158
35°	3185	3102	3073
40°	3073	2984	2921
45°	2823	2719	2613
50°	2298	2338	2241
55°	1867	1938	2018
60°	1609	1655	1848
65°	1495	1466	1792
70°	1513	1352	1812
75°	1537	1313	1763
80°	1424	1339	1756
85°	1037	1399	2002



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	119.7	3.1
10°-20°	344.8	8.8
20°-30°	524.6	13.4
30°-40°	629.1	16.0
40°-50°	598.9	15.3
50°-60°	426.5	10.9
60°-70°	289.9	7.4
70°-80°	195.6	5.0
80°-90°	112.2	2.9
90°-100°	72.4	1.8
100°-110°	81.5	2.1
110°-120°	101.3	2.6
120°-130°	116.2	3.0
130°-140°	110.5	2.8
140°-150°	89.4	2.3
150°-160°	61.6	1.6
160°-170°	34.7	0.9
170°-180°	11.1	0.3
0°-30°	989.1	25.2
0°-40°	1618.2	41.3
0°-60°	2643.6	67.4
0°-90°	3241.3	82.7
90°-120°	255.3	6.5
90°-150°	571.4	14.6
90°-180°	679.0	17.3
0°-180°	3920.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1262	1262	1262	1262	1262	
5°	1262	1255	1260	1258	1256	120
15°	1215	1213	1224	1230	1228	343
25°	1126	1127	1144	1148	1146	518
35°	991	996	1017	1017	1017	618
45°	765	784	793	793	772	579
55°	416	457	478	482	507	380
65°	250	268	285	302	357	252
75°	165	139	178	213	249	172
85°	46	64	102	142	158	51
90°	0	28	57	108	137	3
95°	4	27	59	110	131	5
105°	27	40	80	110	122	28
115°	55	87	108	122	131	55
125°	80	106	144	156	158	72
135°	93	112	152	175	178	72
145°	101	112	142	175	184	63
155°	112	114	131	152	156	51
165°	120	120	122	123	127	34
175°	125	125	120	104	106	12
180°	106	106	106	106	106	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1262.2	1262.2	1262.2	1262.2	1262.2
2.5°	1264.1	1258.4	1262.2	1262.2	1254.6
5°	1262.2	1254.6	1260.3	1258.4	1256.5
7.5°	1254.6	1248.9	1254.6	1256.5	1252.7
10°	1245.1	1239.4	1247.0	1248.9	1247.0
12.5°	1231.8	1228.0	1237.5	1241.3	1239.4
15°	1214.7	1212.8	1224.2	1229.9	1228.0
17.5°	1195.7	1193.8	1207.1	1214.7	1212.8
20°	1176.8	1174.9	1188.2	1193.8	1193.8
22.5°	1152.1	1152.1	1167.3	1173.0	1174.9
25°	1125.5	1127.4	1144.5	1148.3	1146.4
27.5°	1095.1	1097.0	1117.9	1119.8	1119.8
30°	1062.9	1066.7	1085.7	1087.6	1089.5
32.5°	1028.7	1032.5	1053.4	1053.4	1055.3
35°	990.8	996.5	1017.3	1017.3	1017.3
37.5°	947.1	954.7	973.7	973.7	975.6
40°	897.8	909.1	928.1	926.2	918.6
42.5°	838.9	854.1	867.4	865.5	848.4
45°	764.9	783.9	793.4	793.4	772.5
47.5°	670.0	698.5	715.5	708.0	690.9
50°	569.4	611.2	632.0	628.2	615.0
52.5°	484.0	531.4	552.3	550.4	554.2
55°	415.7	457.4	478.3	482.1	506.8
57.5°	360.6	398.6	415.7	427.1	457.4
60°	315.1	349.2	366.3	377.7	417.6
62.5°	279.0	305.6	322.7	335.9	383.4
65°	250.5	267.6	284.7	301.8	356.8
67.5°	227.8	231.6	250.5	275.2	334.0
70°	208.8	195.5	224.0	252.4	309.4
72.5°	187.9	165.1	201.2	229.7	280.9
75°	165.1	138.6	178.4	212.6	248.6
77.5°	140.5	115.8	159.4	193.6	218.3
80°	108.2	98.7	140.5	176.5	193.6
82.5°	75.9	81.6	121.5	161.3	172.7
85°	45.6	64.5	102.5	142.4	157.5
87.5°	20.9	47.5	77.8	123.4	146.1
90°	0.0	28.5	56.9	108.2	136.7
92.5°	1.9	28.5	56.9	110.1	134.8
95°	3.8	26.6	58.8	110.1	131.0
97.5°	7.6	26.6	64.5	108.2	127.2
100°	13.3	28.5	70.2	108.2	123.4
102.5°	19.0	30.4	75.9	110.1	121.5
105°	26.6	39.9	79.7	110.1	121.5
107.5°	34.2	53.1	85.4	112.0	121.5
110°	41.8	68.3	91.1	113.9	123.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	49.3	79.7	94.9	119.6	127.2
115°	55.0	87.3	108.2	121.5	131.0
117.5°	62.6	93.0	121.5	123.4	131.0
120°	68.3	98.7	131.0	131.0	132.9
122.5°	75.9	102.5	138.6	146.1	144.2
125°	79.7	106.3	144.2	155.6	157.5
127.5°	85.4	108.2	149.9	161.3	163.2
130°	89.2	110.1	151.8	167.0	170.8
132.5°	91.1	110.1	151.8	170.8	174.6
135°	93.0	112.0	151.8	174.6	178.4
137.5°	94.9	110.1	151.8	176.5	180.3
140°	94.9	110.1	149.9	176.5	184.1
142.5°	96.8	110.1	146.1	176.5	184.1
145°	100.6	112.0	142.4	174.6	184.1
147.5°	102.5	112.0	140.5	170.8	182.2
150°	106.3	112.0	138.6	165.1	176.5
152.5°	108.2	112.0	134.8	159.4	168.9
155°	112.0	113.9	131.0	151.8	155.6
157.5°	113.9	113.9	129.1	144.2	144.2
160°	115.8	115.8	125.3	136.7	138.6
162.5°	117.7	117.7	123.4	129.1	132.9
165°	119.6	119.6	121.5	123.4	127.2
167.5°	121.5	121.5	119.6	115.8	121.5
170°	123.4	123.4	119.6	110.1	115.8
172.5°	123.4	125.3	119.6	106.3	110.1
175°	125.3	125.3	119.6	104.4	106.3
177.5°	125.3	125.3	119.6	100.6	100.6
180°	106.3	106.3	106.3	106.3	106.3

(END OF REPORT)