

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: P#

Luminaire Tested: **4ILED-LD5-14-W-FLUPL-UNV-L850-CD2-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P34183)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4ILED-LD5-14-W-FLUPL-UNV-L850-CD2-U
Description: Metalux 4' ILED WITH FROST LENS WITH UPL DISTRIBUTION

Light Source: (1) 5000 CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

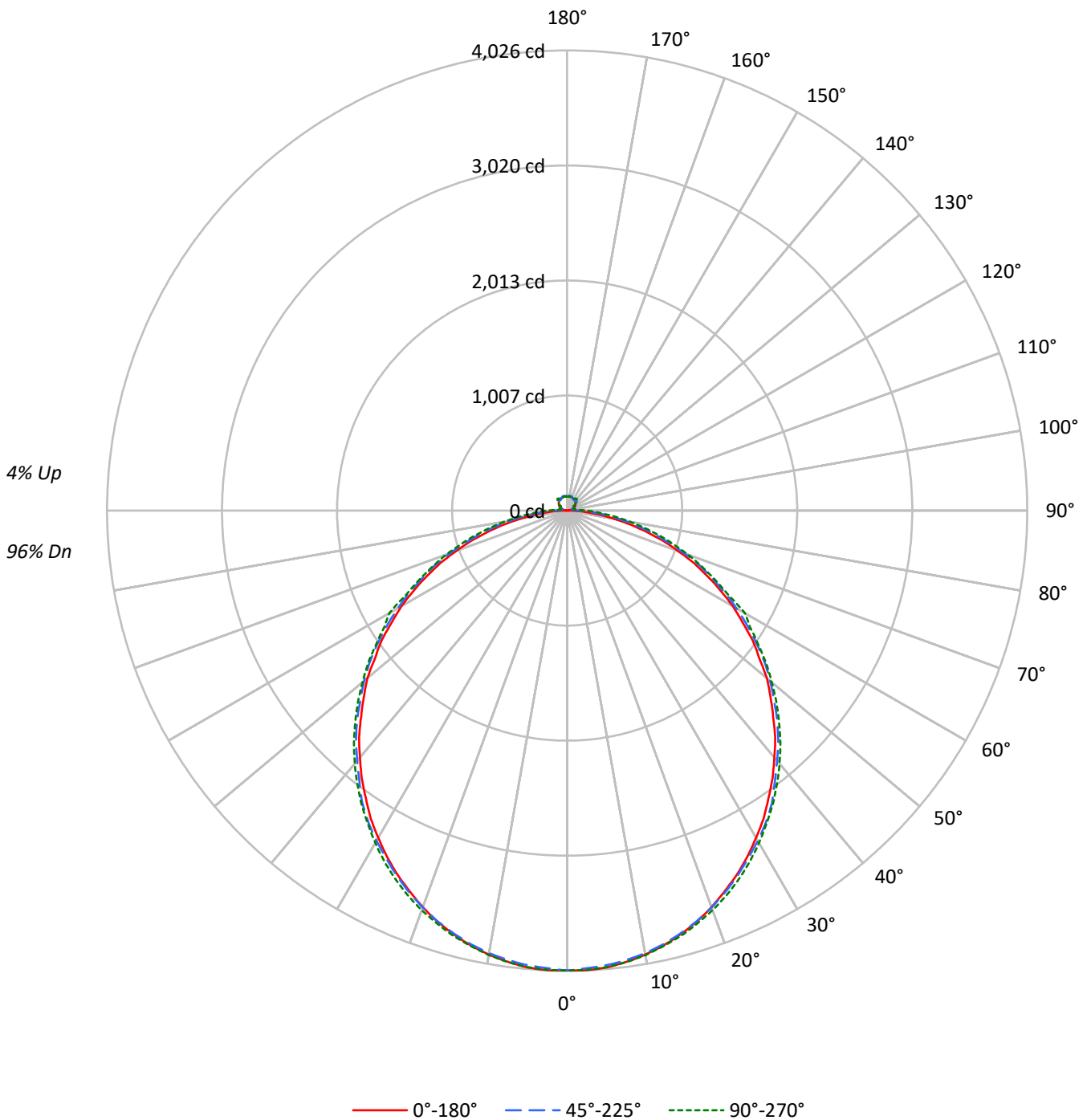
Lumens per Lamp: N/A
Luminaire Lumens: 11877.0 lumens
Efficiency: N/A
Efficacy: 116.4 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 102
Input Voltage (V):
Input Current (A_{in}): 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	50	30	10	0	
RCR																						
0	118	118	118	118	115	115	115	115	109	109	109	103	103	103	98	98	98	96				
1	107	103	98	94	104	100	96	92	95	91	89	90	87	85	86	84	82	79				
2	98	89	82	76	95	87	81	75	83	77	73	79	74	70	75	72	68	66				
3	89	78	70	63	86	76	69	63	73	66	61	69	64	59	66	62	58	55				
4	81	69	60	54	79	68	59	53	65	58	52	62	56	51	59	54	50	47				
5	75	62	53	46	72	60	52	46	58	50	45	55	49	44	53	48	43	41				
6	69	56	47	40	67	55	46	40	52	45	39	50	44	39	48	42	38	36				
7	64	50	42	36	62	49	41	35	48	40	35	46	39	34	44	38	34	32				
8	60	46	38	32	58	45	37	31	43	36	31	42	35	31	40	35	30	28				
9	56	42	34	28	54	41	34	28	40	33	28	39	32	28	37	31	27	25				
10	52	39	31	26	51	38	31	26	37	30	25	36	29	25	35	29	25	23				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11813	11813	11813
5°	11795	11669	11703
10°	11707	11529	11549
15°	11589	11353	11372
20°	11432	11158	11177
25°	11250	10938	10965
30°	11045	10723	10707
35°	10820	10499	10443
40°	10585	10144	10149
45°	10325	9857	9815
50°	10115	9512	9445
55°	9798	9107	9038
60°	9424	8624	8876
65°	8911	8056	8019
70°	8280	7389	7413
75°	7433	6561	6648
80°	6260	5519	5786
85°	4747	4309	4807



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	380.3	3.2
10°-20°	1083.5	9.1
20°-30°	1628.1	13.7
30°-40°	1947.9	16.4
40°-50°	2002.6	16.9
50°-60°	1803.6	15.2
60°-70°	1386.1	11.7
70°-80°	825.2	6.9
80°-90°	299.0	2.5
90°-100°	64.4	0.5
100°-110°	53.6	0.5
110°-120°	63.1	0.5
120°-130°	78.1	0.7
130°-140°	85.3	0.7
140°-150°	73.2	0.6
150°-160°	55.1	0.5
160°-170°	35.8	0.3
170°-180°	12.0	0.1
0°-30°	3091.9	26.0
0°-40°	5039.8	42.4
0°-60°	8845.9	74.5
0°-90°	11356.2	95.6
90°-120°	181.1	1.5
90°-150°	417.8	3.5
90°-180°	521.0	4.4
0°-180°	11877.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4024	4024	4024	4024	4024	
5°	4012	4009	3993	4007	4009	381
15°	3839	3841	3830	3847	3851	1082
25°	3514	3520	3526	3551	3557	1618
35°	3072	3110	3124	3130	3137	1923
45°	2549	2576	2599	2624	2622	1970
55°	1983	1991	2020	2037	2041	1766
65°	1352	1364	1396	1422	1425	1340
75°	716	737	783	827	825	761
85°	181	217	267	306	321	199
90°	4	54	108	148	160	14
95°	15	35	52	75	83	15
105°	44	38	48	77	69	45
115°	69	77	54	56	56	68
125°	88	88	100	81	71	78
135°	102	100	115	121	119	79
145°	112	115	110	121	129	71
155°	119	127	119	115	115	55
165°	123	127	131	127	123	35
175°	125	125	127	125	121	12
180°	123	123	123	123	123	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4024.0	4024.0	4024.0	4024.0	4024.0
2.5°	4026.0	4024.0	4007.3	4019.8	4021.9
5°	4011.5	4009.4	3992.7	4007.3	4009.4
7.5°	3982.3	3982.3	3965.6	3982.3	3984.4
10°	3944.8	3944.8	3932.3	3946.9	3949.0
12.5°	3896.9	3899.0	3886.5	3903.1	3903.1
15°	3838.6	3840.7	3830.3	3846.9	3851.1
17.5°	3771.9	3771.9	3767.8	3786.5	3788.6
20°	3692.8	3703.2	3694.9	3715.7	3719.9
22.5°	3603.2	3613.6	3613.6	3636.6	3642.8
25°	3513.7	3519.9	3526.2	3551.2	3557.4
27.5°	3413.7	3426.2	3428.3	3455.3	3461.6
30°	3305.4	3326.2	3336.6	3353.3	3357.5
32.5°	3197.1	3224.2	3236.7	3245.0	3247.1
35°	3072.1	3109.6	3124.2	3130.4	3136.7
37.5°	2951.3	2982.6	2986.7	3009.6	3015.9
40°	2820.1	2857.6	2857.6	2884.7	2890.9
42.5°	2695.1	2703.5	2734.7	2753.4	2761.8
45°	2549.3	2576.4	2599.3	2624.3	2622.2
47.5°	2411.9	2447.3	2453.5	2476.4	2482.7
50°	2280.7	2305.6	2318.1	2336.9	2336.9
52.5°	2118.2	2151.5	2178.6	2189.0	2195.3
55°	1982.8	1991.1	2020.3	2037.0	2041.1
57.5°	1818.3	1839.1	1866.2	1887.0	1897.4
60°	1674.6	1687.1	1710.0	1739.1	1797.4
62.5°	1512.1	1526.7	1555.8	1643.3	1582.9
65°	1351.7	1364.2	1395.5	1422.5	1424.6
67.5°	1199.7	1212.2	1255.9	1264.3	1270.5
70°	1031.0	1047.6	1085.1	1112.2	1122.6
72.5°	876.9	891.4	928.9	960.2	970.6
75°	716.5	737.3	783.1	826.9	824.8
77.5°	564.4	601.9	639.4	674.8	685.2
80°	422.8	452.0	502.0	539.4	554.0
82.5°	295.8	329.1	379.1	416.6	431.1
85°	181.2	216.6	266.6	306.2	320.7
87.5°	87.5	122.9	177.0	216.6	233.3
90°	4.2	54.2	108.3	147.9	160.4
92.5°	8.3	31.2	70.8	102.1	112.5
95°	14.6	35.4	52.1	75.0	83.3
97.5°	20.8	31.2	45.8	60.4	66.6
100°	29.2	31.2	52.1	54.2	58.3
102.5°	35.4	33.3	50.0	54.2	54.2
105°	43.7	37.5	47.9	77.1	68.7
107.5°	50.0	52.1	45.8	54.2	58.3
110°	56.2	60.4	50.0	58.3	58.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	62.5	68.7	54.2	54.2	58.3
115°	68.7	77.1	54.2	56.2	56.2
117.5°	75.0	79.1	64.6	60.4	60.4
120°	79.1	81.2	81.2	60.4	64.6
122.5°	83.3	85.4	91.6	66.6	64.6
125°	87.5	87.5	100.0	81.2	70.8
127.5°	91.6	91.6	106.2	95.8	85.4
130°	95.8	91.6	112.5	104.1	100.0
132.5°	100.0	95.8	114.6	112.5	108.3
135°	102.1	100.0	114.6	120.8	118.7
137.5°	106.2	104.1	110.4	127.1	125.0
140°	108.3	108.3	110.4	127.1	131.2
142.5°	110.4	110.4	110.4	125.0	131.2
145°	112.5	114.6	110.4	120.8	129.1
147.5°	114.6	118.7	110.4	118.7	122.9
150°	116.6	120.8	110.4	116.6	118.7
152.5°	118.7	125.0	114.6	114.6	116.6
155°	118.7	127.1	118.7	114.6	114.6
157.5°	120.8	127.1	120.8	114.6	114.6
160°	120.8	129.1	125.0	118.7	116.6
162.5°	122.9	129.1	129.1	122.9	120.8
165°	122.9	127.1	131.2	127.1	122.9
167.5°	125.0	127.1	131.2	129.1	125.0
170°	125.0	127.1	129.1	129.1	125.0
172.5°	125.0	127.1	129.1	127.1	125.0
175°	125.0	125.0	127.1	125.0	120.8
177.5°	125.0	125.0	125.0	122.9	120.8
180°	122.9	122.9	122.9	122.9	122.9

(END OF REPORT)