

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: **8ILED-LD5-22-W-FLUPL-UNV-L840-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: 8ILED-LD5-22-W-FLUPL-UNV-L840-CD2-U  
Description: Metalux 8' ILED WITH FROST LENS WITH UPL DISTRIBUTION

Light Source: (1) 4000 CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

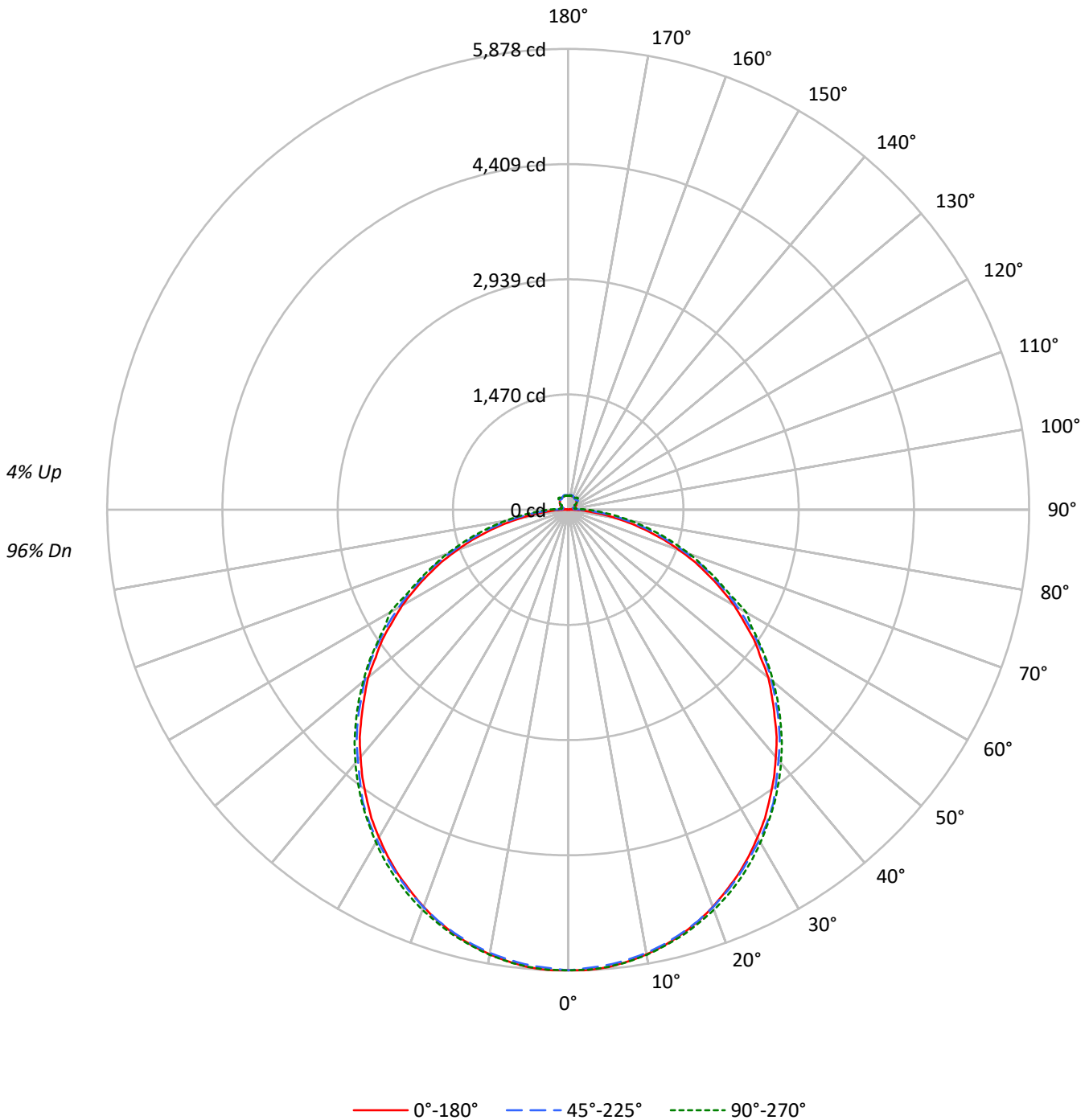
Lumens per Lamp: N/A  
Luminaire Lumens: 17341.0 lumens  
Efficiency: N/A  
Efficacy: 103.4 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 8' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 167.7  
Input Voltage (V):  
Input Current (A<sub>in</sub>): 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	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°	8624	8624	8624
5°	8620	8525	8544
10°	8566	8429	8431
15°	8488	8307	8302
20°	8384	8171	8160
25°	8260	8017	8005
30°	8121	7866	7816
35°	7967	7709	7624
40°	7808	7456	7409
45°	7631	7254	7166
50°	7492	7010	6895
55°	7278	6723	6598
60°	7025	6379	6480
65°	6676	5975	5854
70°	6246	5500	5412
75°	5668	4909	4853
80°	4872	4164	4224
85°	3899	3306	3510



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	555.2	3.2
10°-20°	1582.0	9.1
20°-30°	2377.1	13.7
30°-40°	2844.0	16.4
40°-50°	2923.9	16.9
50°-60°	2633.3	15.2
60°-70°	2023.8	11.7
70°-80°	1204.9	6.9
80°-90°	436.6	2.5
90°-100°	94.1	0.5
100°-110°	78.2	0.5
110°-120°	92.2	0.5
120°-130°	114.1	0.7
130°-140°	124.6	0.7
140°-150°	106.9	0.6
150°-160°	80.5	0.5
160°-170°	52.3	0.3
170°-180°	17.6	0.1
0°-30°	4514.3	26.0
0°-40°	7358.3	42.4
0°-60°	12915.5	74.5
0°-90°	16580.7	95.6
90°-120°	264.5	1.5
90°-150°	610.1	3.5
90°-180°	760.0	4.4
0°-180°	17341.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5875	5875	5875	5875	5875	
5°	5857	5854	5830	5851	5854	556
15°	5604	5608	5592	5617	5623	1580
25°	5130	5139	5148	5185	5194	2363
35°	4485	4540	4562	4571	4580	2808
45°	3722	3762	3795	3832	3829	2877
55°	2895	2907	2950	2974	2980	2578
65°	1974	1992	2038	2077	2080	1957
75°	1046	1076	1143	1207	1204	1110
85°	265	316	389	447	468	291
90°	6	79	158	216	234	21
95°	21	52	76	110	122	22
105°	64	55	70	112	100	66
115°	100	112	79	82	82	99
125°	128	128	146	119	103	114
135°	149	146	167	176	173	116
145°	164	167	161	176	188	103
155°	173	186	173	167	167	80
165°	179	186	192	186	179	51
175°	182	182	186	182	176	17
180°	179	179	179	179	179	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5875.2	5875.2	5875.2	5875.2	5875.2
2.5°	5878.2	5875.2	5850.8	5869.1	5872.1
5°	5856.9	5853.9	5829.6	5850.8	5853.9
7.5°	5814.3	5814.3	5790.0	5814.3	5817.4
10°	5759.6	5759.6	5741.4	5762.6	5765.7
12.5°	5689.7	5692.7	5674.5	5698.8	5698.8
15°	5604.5	5607.6	5592.4	5616.7	5622.8
17.5°	5507.2	5507.2	5501.1	5528.5	5531.5
20°	5391.7	5406.9	5394.7	5425.1	5431.2
22.5°	5260.9	5276.1	5276.1	5309.5	5318.7
25°	5130.1	5139.2	5148.4	5184.9	5194.0
27.5°	4984.2	5002.4	5005.4	5045.0	5054.1
30°	4826.0	4856.4	4871.6	4896.0	4902.1
32.5°	4667.9	4707.4	4725.7	4737.8	4740.9
35°	4485.4	4540.2	4561.5	4570.6	4579.7
37.5°	4309.1	4354.7	4360.8	4394.2	4403.3
40°	4117.5	4172.2	4172.2	4211.8	4220.9
42.5°	3935.0	3947.2	3992.8	4020.2	4032.3
45°	3722.2	3761.7	3795.1	3831.6	3828.6
47.5°	3521.4	3573.1	3582.3	3615.7	3624.8
50°	3329.9	3366.4	3384.6	3412.0	3412.0
52.5°	3092.7	3141.3	3180.9	3196.1	3205.2
55°	2895.0	2907.2	2949.7	2974.1	2980.2
57.5°	2654.8	2685.2	2724.7	2755.1	2770.3
60°	2444.9	2463.2	2496.6	2539.2	2624.4
62.5°	2207.7	2229.0	2271.6	2399.3	2311.1
65°	1973.6	1991.8	2037.5	2077.0	2080.0
67.5°	1751.6	1769.8	1833.7	1845.9	1855.0
70°	1505.3	1529.6	1584.3	1623.9	1639.1
72.5°	1280.3	1301.5	1356.3	1401.9	1417.1
75°	1046.1	1076.5	1143.4	1207.3	1204.2
77.5°	824.1	878.8	933.6	985.3	1000.5
80°	617.3	659.9	732.9	787.6	808.9
82.5°	431.8	480.5	553.5	608.2	629.5
85°	264.6	316.3	389.2	447.0	468.3
87.5°	127.7	179.4	258.5	316.3	340.6
90°	6.1	79.1	158.1	215.9	234.2
92.5°	12.2	45.6	103.4	149.0	164.2
95°	21.3	51.7	76.0	109.5	121.6
97.5°	30.4	45.6	66.9	88.2	97.3
100°	42.6	45.6	76.0	79.1	85.1
102.5°	51.7	48.7	73.0	79.1	79.1
105°	63.9	54.7	69.9	112.5	100.4
107.5°	73.0	76.0	66.9	79.1	85.1
110°	82.1	88.2	73.0	85.1	85.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	91.2	100.4	79.1	79.1	85.1
115°	100.4	112.5	79.1	82.1	82.1
117.5°	109.5	115.6	94.3	88.2	88.2
120°	115.6	118.6	118.6	88.2	94.3
122.5°	121.6	124.7	133.8	97.3	94.3
125°	127.7	127.7	146.0	118.6	103.4
127.5°	133.8	133.8	155.1	139.9	124.7
130°	139.9	133.8	164.2	152.0	146.0
132.5°	146.0	139.9	167.3	164.2	158.1
135°	149.0	146.0	167.3	176.4	173.3
137.5°	155.1	152.0	161.2	185.5	182.5
140°	158.1	158.1	161.2	185.5	191.6
142.5°	161.2	161.2	161.2	182.5	191.6
145°	164.2	167.3	161.2	176.4	188.5
147.5°	167.3	173.3	161.2	173.3	179.4
150°	170.3	176.4	161.2	170.3	173.3
152.5°	173.3	182.5	167.3	167.3	170.3
155°	173.3	185.5	173.3	167.3	167.3
157.5°	176.4	185.5	176.4	167.3	167.3
160°	176.4	188.5	182.5	173.3	170.3
162.5°	179.4	188.5	188.5	179.4	176.4
165°	179.4	185.5	191.6	185.5	179.4
167.5°	182.5	185.5	191.6	188.5	182.5
170°	182.5	185.5	188.5	188.5	182.5
172.5°	182.5	185.5	188.5	185.5	182.5
175°	182.5	182.5	185.5	182.5	176.4
177.5°	182.5	182.5	182.5	179.4	176.4
180°	179.4	179.4	179.4	179.4	179.4

(END OF REPORT)