

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-LD5-16-W-FLUPL-UNV-L835-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-LD5-16-W-FLUPL-UNV-L835-CD2-U
Description: Metalux 4' ILED WITH FROST LENS WITH UPL DISTRIBUTION

Light Source: (1) 3500 CCT, 80 CRI LEDS
Ballast/Driver: -

Summary

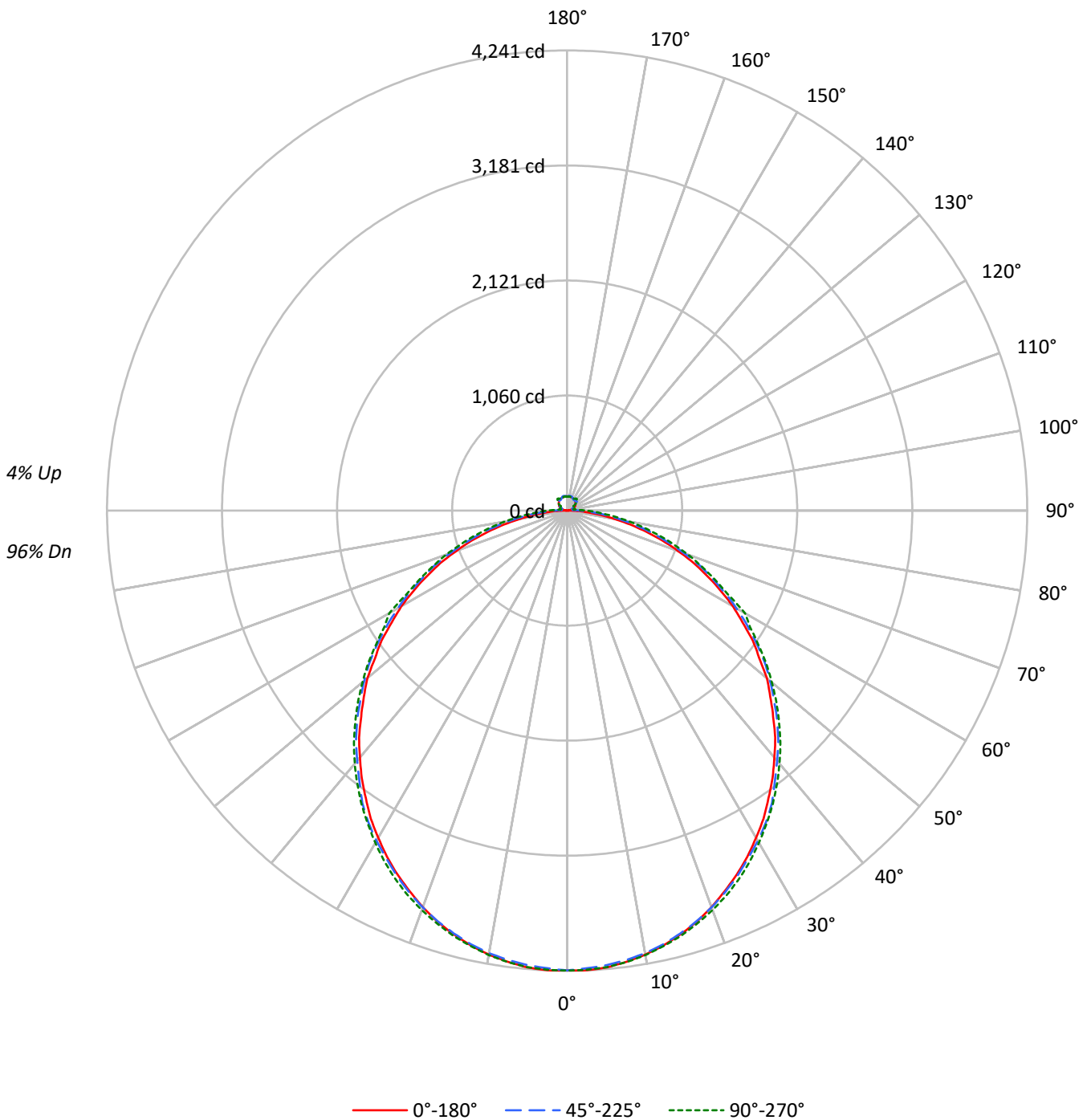
Lumens per Lamp: N/A
Luminaire Lumens: 12510.0 lumens
Efficiency: N/A
Efficacy: 98.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 126.6
Input Voltage (V):
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	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°	12442	12442	12442
5°	12424	12291	12327
10°	12331	12144	12165
15°	12206	11957	11978
20°	12042	11752	11773
25°	11849	11521	11549
30°	11634	11295	11277
35°	11397	11059	11000
40°	11149	10684	10690
45°	10876	10382	10339
50°	10653	10019	9948
55°	10321	9592	9520
60°	9926	9083	9349
65°	9387	8484	8447
70°	8721	7783	7809
75°	7830	6911	7002
80°	6593	5812	6094
85°	5001	4539	5064



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	400.5	3.2
10°-20°	1141.3	9.1
20°-30°	1714.8	13.7
30°-40°	2051.7	16.4
40°-50°	2109.3	16.9
50°-60°	1899.7	15.2
60°-70°	1460.0	11.7
70°-80°	869.2	6.9
80°-90°	315.0	2.5
90°-100°	67.9	0.5
100°-110°	56.4	0.5
110°-120°	66.5	0.5
120°-130°	82.3	0.7
130°-140°	89.9	0.7
140°-150°	77.1	0.6
150°-160°	58.0	0.5
160°-170°	37.7	0.3
170°-180°	12.7	0.1
0°-30°	3256.7	26.0
0°-40°	5308.4	42.4
0°-60°	9317.4	74.5
0°-90°	11961.5	95.6
90°-120°	190.8	1.5
90°-150°	440.1	3.5
90°-180°	548.0	4.4
0°-180°	12510.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4238	4238	4238	4238	4238	
5°	4225	4223	4206	4221	4223	401
15°	4043	4045	4034	4052	4056	1140
25°	3701	3708	3714	3740	3747	1705
35°	3236	3275	3291	3297	3304	2026
45°	2685	2714	2738	2764	2762	2075
55°	2088	2097	2128	2146	2150	1860
65°	1424	1437	1470	1498	1501	1411
75°	755	777	825	871	869	801
85°	191	228	281	322	338	210
90°	4	57	114	156	169	15
95°	15	37	55	79	88	16
105°	46	40	50	81	72	48
115°	72	81	57	59	59	71
125°	92	92	105	86	75	83
135°	108	105	121	127	125	84
145°	118	121	116	127	136	74
155°	125	134	125	121	121	58
165°	129	134	138	134	129	37
175°	132	132	134	132	127	13
180°	129	129	129	129	129	



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-16-W-FLUPL-UNV-L835-CD2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4238.4	4238.4	4238.4	4238.4	4238.4
2.5°	4240.6	4238.4	4220.9	4234.0	4236.2
5°	4225.3	4223.1	4205.5	4220.9	4223.1
7.5°	4194.5	4194.5	4177.0	4194.5	4196.7
10°	4155.0	4155.0	4141.9	4157.2	4159.4
12.5°	4104.6	4106.8	4093.6	4111.2	4111.2
15°	4043.2	4045.4	4034.4	4051.9	4056.3
17.5°	3973.0	3973.0	3968.6	3988.3	3990.5
20°	3889.6	3900.6	3891.8	3913.7	3918.1
22.5°	3795.3	3806.2	3806.2	3830.4	3836.9
25°	3700.9	3707.5	3714.1	3740.4	3747.0
27.5°	3595.6	3608.8	3611.0	3639.5	3646.1
30°	3481.6	3503.5	3514.5	3532.0	3536.4
32.5°	3367.5	3396.0	3409.2	3417.9	3420.1
35°	3235.8	3275.3	3290.7	3297.3	3303.9
37.5°	3108.6	3141.5	3145.9	3170.0	3176.6
40°	2970.4	3009.9	3009.9	3038.4	3045.0
42.5°	2838.8	2847.5	2880.5	2900.2	2909.0
45°	2685.2	2713.7	2737.9	2764.2	2762.0
47.5°	2540.4	2577.7	2584.3	2608.4	2615.0
50°	2402.2	2428.5	2441.7	2461.4	2461.4
52.5°	2231.1	2266.2	2294.7	2305.7	2312.3
55°	2088.5	2097.3	2128.0	2145.5	2149.9
57.5°	1915.2	1937.1	1965.6	1987.6	1998.5
60°	1763.8	1777.0	1801.1	1831.8	1893.2
62.5°	1592.7	1608.1	1638.8	1730.9	1667.3
65°	1423.8	1436.9	1469.8	1498.4	1500.6
67.5°	1263.6	1276.8	1322.9	1331.6	1338.2
70°	1085.9	1103.5	1143.0	1171.5	1182.5
72.5°	923.6	938.9	978.4	1011.3	1022.3
75°	754.7	776.6	824.9	870.9	868.7
77.5°	594.5	634.0	673.5	710.8	721.8
80°	445.3	476.1	528.7	568.2	583.5
82.5°	311.5	346.6	399.3	438.8	454.1
85°	190.9	228.2	280.8	322.5	337.8
87.5°	92.1	129.4	186.5	228.2	245.7
90°	4.4	57.0	114.1	155.8	168.9
92.5°	8.8	32.9	74.6	107.5	118.5
95°	15.4	37.3	54.8	79.0	87.8
97.5°	21.9	32.9	48.3	63.6	70.2
100°	30.7	32.9	54.8	57.0	61.4
102.5°	37.3	35.1	52.7	57.0	57.0
105°	46.1	39.5	50.5	81.2	72.4
107.5°	52.7	54.8	48.3	57.0	61.4
110°	59.2	63.6	52.7	61.4	61.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	65.8	72.4	57.0	57.0	61.4
115°	72.4	81.2	57.0	59.2	59.2
117.5°	79.0	83.4	68.0	63.6	63.6
120°	83.4	85.6	85.6	63.6	68.0
122.5°	87.8	89.9	96.5	70.2	68.0
125°	92.1	92.1	105.3	85.6	74.6
127.5°	96.5	96.5	111.9	100.9	89.9
130°	100.9	96.5	118.5	109.7	105.3
132.5°	105.3	100.9	120.7	118.5	114.1
135°	107.5	105.3	120.7	127.2	125.0
137.5°	111.9	109.7	116.3	133.8	131.6
140°	114.1	114.1	116.3	133.8	138.2
142.5°	116.3	116.3	116.3	131.6	138.2
145°	118.5	120.7	116.3	127.2	136.0
147.5°	120.7	125.0	116.3	125.0	129.4
150°	122.9	127.2	116.3	122.9	125.0
152.5°	125.0	131.6	120.7	120.7	122.9
155°	125.0	133.8	125.0	120.7	120.7
157.5°	127.2	133.8	127.2	120.7	120.7
160°	127.2	136.0	131.6	125.0	122.9
162.5°	129.4	136.0	136.0	129.4	127.2
165°	129.4	133.8	138.2	133.8	129.4
167.5°	131.6	133.8	138.2	136.0	131.6
170°	131.6	133.8	136.0	136.0	131.6
172.5°	131.6	133.8	136.0	133.8	131.6
175°	131.6	131.6	133.8	131.6	127.2
177.5°	131.6	131.6	131.6	129.4	127.2
180°	129.4	129.4	129.4	129.4	129.4

(END OF REPORT)