

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-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-LD5-16-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

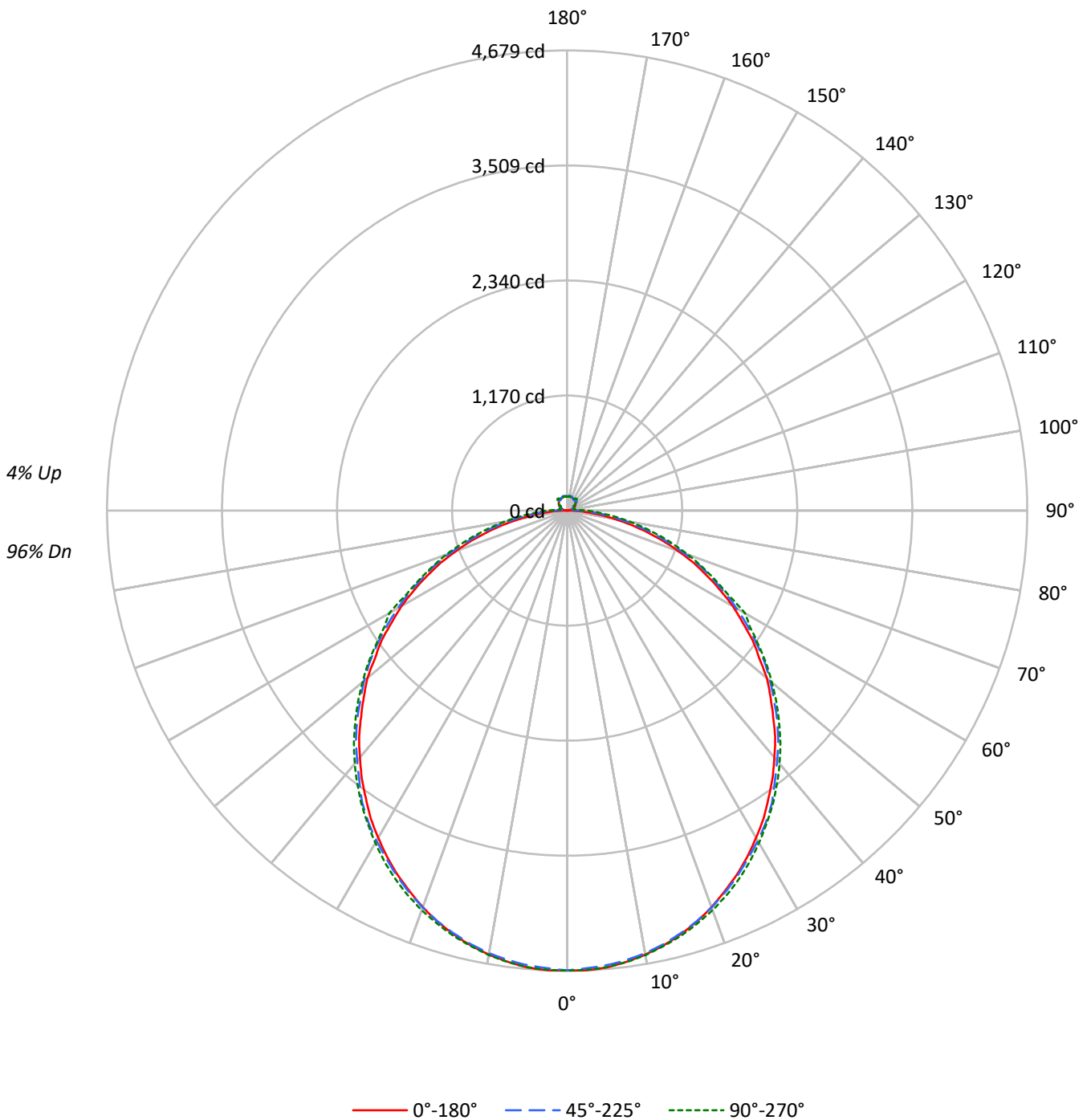
Lumens per Lamp: N/A
Luminaire Lumens: 13803.0 lumens
Efficiency: N/A
Efficacy: 109.0 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 126.6
Input Voltage (V):
Input Current (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	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°	13728	13728	13728
5°	13708	13561	13601
10°	13606	13399	13422
15°	13468	13193	13216
20°	13286	12967	12990
25°	13074	12712	12743
30°	12836	12462	12443
35°	12575	12202	12137
40°	12301	11789	11795
45°	12000	11455	11407
50°	11755	11055	10976
55°	11388	10584	10504
60°	10952	10022	10315
65°	10357	9362	9320
70°	9623	8587	8616
75°	8639	7625	7726
80°	7276	6414	6725
85°	5517	5008	5588



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	441.9	3.2
10°-20°	1259.2	9.1
20°-30°	1892.1	13.7
30°-40°	2263.8	16.4
40°-50°	2327.3	16.9
50°-60°	2096.0	15.2
60°-70°	1610.9	11.7
70°-80°	959.1	6.9
80°-90°	347.5	2.5
90°-100°	74.9	0.5
100°-110°	62.2	0.5
110°-120°	73.4	0.5
120°-130°	90.8	0.7
130°-140°	99.1	0.7
140°-150°	85.1	0.6
150°-160°	64.0	0.5
160°-170°	41.6	0.3
170°-180°	14.0	0.1
0°-30°	3593.3	26.0
0°-40°	5857.0	42.4
0°-60°	10280.4	74.5
0°-90°	13197.8	95.6
90°-120°	210.5	1.5
90°-150°	485.6	3.5
90°-180°	605.0	4.4
0°-180°	13803.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4676	4676	4676	4676	4676	
5°	4662	4660	4640	4657	4660	442
15°	4461	4464	4451	4471	4476	1258
25°	4084	4091	4098	4127	4134	1881
35°	3570	3614	3631	3638	3645	2235
45°	2963	2994	3021	3050	3048	2290
55°	2304	2314	2348	2367	2372	2052
65°	1571	1586	1622	1653	1656	1557
75°	833	857	910	961	958	884
85°	211	252	310	356	373	231
90°	5	63	126	172	186	17
95°	17	41	60	87	97	17
105°	51	44	56	90	80	53
115°	80	90	63	65	65	79
125°	102	102	116	94	82	91
135°	119	116	133	140	138	92
145°	131	133	128	140	150	82
155°	138	148	138	133	133	64
165°	143	148	152	148	143	41
175°	145	145	148	145	140	14
180°	143	143	143	143	143	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4676.5	4676.5	4676.5	4676.5	4676.5
2.5°	4678.9	4676.5	4657.1	4671.6	4674.1
5°	4662.0	4659.5	4640.2	4657.1	4659.5
7.5°	4628.1	4628.1	4608.7	4628.1	4630.5
10°	4584.5	4584.5	4570.0	4586.9	4589.3
12.5°	4528.8	4531.3	4516.7	4536.1	4536.1
15°	4461.1	4463.5	4451.4	4470.7	4475.6
17.5°	4383.6	4383.6	4378.8	4400.5	4403.0
20°	4291.6	4303.7	4294.0	4318.2	4323.1
22.5°	4187.5	4199.6	4199.6	4226.3	4233.5
25°	4083.5	4090.7	4098.0	4127.0	4134.3
27.5°	3967.3	3981.8	3984.2	4015.7	4022.9
30°	3841.4	3865.6	3877.7	3897.1	3901.9
32.5°	3715.5	3747.0	3761.5	3771.2	3773.6
35°	3570.3	3613.9	3630.8	3638.1	3645.3
37.5°	3429.9	3466.2	3471.1	3497.7	3504.9
40°	3277.4	3321.0	3321.0	3352.4	3359.7
42.5°	3132.2	3141.9	3178.2	3200.0	3209.6
45°	2962.7	2994.2	3020.8	3049.9	3047.5
47.5°	2803.0	2844.1	2851.4	2878.0	2885.3
50°	2650.5	2679.5	2694.1	2715.8	2715.8
52.5°	2461.7	2500.4	2531.9	2544.0	2551.2
55°	2304.4	2314.0	2347.9	2367.3	2372.1
57.5°	2113.1	2137.3	2168.8	2193.0	2205.1
60°	1946.1	1960.6	1987.3	2021.2	2088.9
62.5°	1757.3	1774.3	1808.1	1909.8	1839.6
65°	1570.9	1585.5	1621.8	1653.2	1655.6
67.5°	1394.2	1408.8	1459.6	1469.3	1476.5
70°	1198.2	1217.5	1261.1	1292.6	1304.7
72.5°	1019.0	1036.0	1079.6	1115.9	1128.0
75°	832.7	856.9	910.1	961.0	958.5
77.5°	656.0	699.5	743.1	784.3	796.4
80°	491.4	525.3	583.4	626.9	643.9
82.5°	343.7	382.4	440.5	484.1	501.1
85°	210.6	251.7	309.8	355.8	372.8
87.5°	101.7	142.8	205.7	251.7	271.1
90°	4.8	62.9	125.9	171.9	186.4
92.5°	9.7	36.3	82.3	118.6	130.7
95°	16.9	41.1	60.5	87.1	96.8
97.5°	24.2	36.3	53.3	70.2	77.5
100°	33.9	36.3	60.5	62.9	67.8
102.5°	41.1	38.7	58.1	62.9	62.9
105°	50.8	43.6	55.7	89.6	79.9
107.5°	58.1	60.5	53.3	62.9	67.8
110°	65.4	70.2	58.1	67.8	67.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	72.6	79.9	62.9	62.9	67.8
115°	79.9	89.6	62.9	65.4	65.4
117.5°	87.1	92.0	75.0	70.2	70.2
120°	92.0	94.4	94.4	70.2	75.0
122.5°	96.8	99.2	106.5	77.5	75.0
125°	101.7	101.7	116.2	94.4	82.3
127.5°	106.5	106.5	123.4	111.3	99.2
130°	111.3	106.5	130.7	121.0	116.2
132.5°	116.2	111.3	133.1	130.7	125.9
135°	118.6	116.2	133.1	140.4	138.0
137.5°	123.4	121.0	128.3	147.7	145.2
140°	125.9	125.9	128.3	147.7	152.5
142.5°	128.3	128.3	128.3	145.2	152.5
145°	130.7	133.1	128.3	140.4	150.1
147.5°	133.1	138.0	128.3	138.0	142.8
150°	135.6	140.4	128.3	135.6	138.0
152.5°	138.0	145.2	133.1	133.1	135.6
155°	138.0	147.7	138.0	133.1	133.1
157.5°	140.4	147.7	140.4	133.1	133.1
160°	140.4	150.1	145.2	138.0	135.6
162.5°	142.8	150.1	150.1	142.8	140.4
165°	142.8	147.7	152.5	147.7	142.8
167.5°	145.2	147.7	152.5	150.1	145.2
170°	145.2	147.7	150.1	150.1	145.2
172.5°	145.2	147.7	150.1	147.7	145.2
175°	145.2	145.2	147.7	145.2	140.4
177.5°	145.2	145.2	145.2	142.8	140.4
180°	142.8	142.8	142.8	142.8	142.8

(END OF REPORT)