

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-LD5-5-W-FLUPL-UNV-L850-CD1-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-LD5-5-W-FLUPL-UNV-L850-CD1-U
Description: Metalux 4' ILED WITH FROST LENS WITH UPL DISTRIBUTION

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

Summary

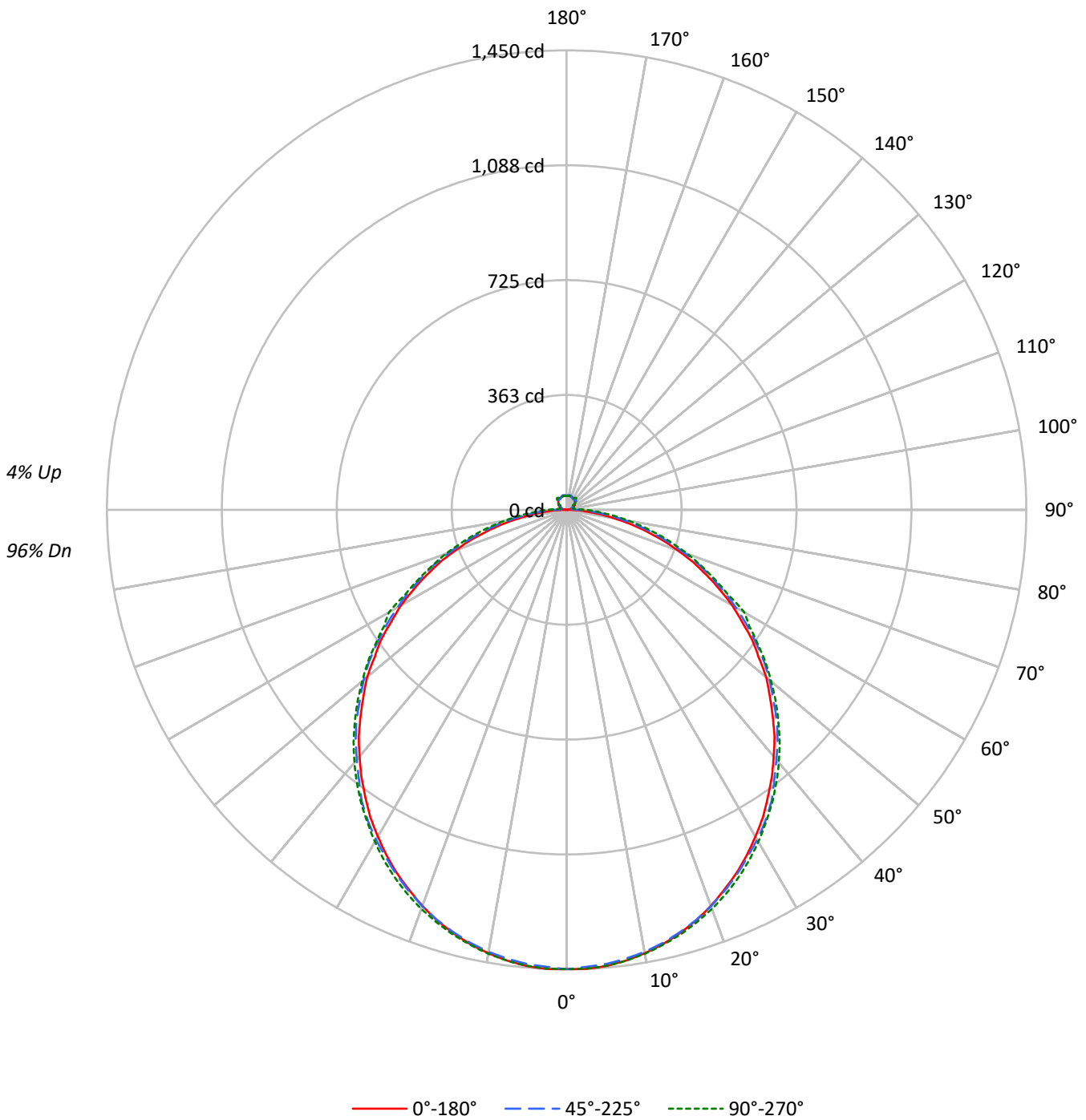
Lumens per Lamp: N/A
Luminaire Lumens: 4278.1 lumens
Efficiency: N/A
Efficacy: 127.7 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 33.5
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	71	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°	4255	4255	4255
5°	4249	4203	4215
10°	4217	4153	4160
15°	4174	4089	4096
20°	4118	4019	4026
25°	4052	3940	3949
30°	3978	3862	3856
35°	3898	3782	3762
40°	3813	3654	3656
45°	3719	3550	3535
50°	3643	3426	3402
55°	3529	3280	3256
60°	3395	3106	3197
65°	3210	2901	2888
70°	2983	2662	2671
75°	2678	2363	2395
80°	2255	1988	2085
85°	1711	1552	1731



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	137.0	3.2
10°-20°	390.3	9.1
20°-30°	586.4	13.7
30°-40°	701.6	16.4
40°-50°	721.3	16.9
50°-60°	649.6	15.2
60°-70°	499.3	11.7
70°-80°	297.2	6.9
80°-90°	107.7	2.5
90°-100°	23.2	0.5
100°-110°	19.3	0.5
110°-120°	22.8	0.5
120°-130°	28.2	0.7
130°-140°	30.7	0.7
140°-150°	26.4	0.6
150°-160°	19.9	0.5
160°-170°	12.9	0.3
170°-180°	4.3	0.1
0°-30°	1113.7	26.0
0°-40°	1815.3	42.4
0°-60°	3186.2	74.5
0°-90°	4090.4	95.6
90°-120°	65.3	1.5
90°-150°	150.6	3.5
90°-180°	188.0	4.4
0°-180°	4278.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1449	1449	1449	1449	1449	
5°	1445	1444	1438	1443	1444	137
15°	1383	1383	1380	1386	1387	390
25°	1266	1268	1270	1279	1281	583
35°	1107	1120	1125	1128	1130	693
45°	918	928	936	945	944	710
55°	714	717	728	734	735	636
65°	487	491	503	512	513	483
75°	258	266	282	298	297	274
85°	65	78	96	110	116	72
90°	2	20	39	53	58	5
95°	5	13	19	27	30	5
105°	16	14	17	28	25	16
115°	25	28	20	20	20	24
125°	32	32	36	29	26	28
135°	37	36	41	44	43	29
145°	40	41	40	44	46	25
155°	43	46	43	41	41	20
165°	44	46	47	46	44	13
175°	45	45	46	45	44	4
180°	44	44	44	44	44	



TEST NUMBER: P#

CATALOG NUMBER: 4ILED-LD5-5-W-FLUPL-UNV-L850-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1449.4	1449.4	1449.4	1449.4	1449.4
2.5°	1450.1	1449.4	1443.4	1447.9	1448.6
5°	1444.9	1444.1	1438.1	1443.4	1444.1
7.5°	1434.4	1434.4	1428.4	1434.4	1435.1
10°	1420.9	1420.9	1416.4	1421.6	1422.4
12.5°	1403.6	1404.4	1399.9	1405.9	1405.9
15°	1382.6	1383.4	1379.6	1385.6	1387.1
17.5°	1358.6	1358.6	1357.1	1363.9	1364.6
20°	1330.1	1333.9	1330.9	1338.4	1339.9
22.5°	1297.9	1301.6	1301.6	1309.9	1312.1
25°	1265.6	1267.8	1270.1	1279.1	1281.3
27.5°	1229.6	1234.1	1234.8	1244.6	1246.8
30°	1190.6	1198.1	1201.8	1207.8	1209.3
32.5°	1151.6	1161.3	1165.8	1168.8	1169.6
35°	1106.6	1120.1	1125.3	1127.6	1129.8
37.5°	1063.0	1074.3	1075.8	1084.0	1086.3
40°	1015.8	1029.3	1029.3	1039.0	1041.3
42.5°	970.8	973.8	985.0	991.8	994.8
45°	918.3	928.0	936.3	945.3	944.5
47.5°	868.7	881.5	883.7	892.0	894.2
50°	821.5	830.5	835.0	841.7	841.7
52.5°	763.0	775.0	784.7	788.5	790.7
55°	714.2	717.2	727.7	733.7	735.2
57.5°	654.9	662.4	672.2	679.7	683.4
60°	603.2	607.7	615.9	626.4	647.4
62.5°	544.6	549.9	560.4	591.9	570.2
65°	486.9	491.4	502.6	512.4	513.1
67.5°	432.1	436.6	452.4	455.4	457.6
70°	371.4	377.4	390.9	400.6	404.4
72.5°	315.8	321.1	334.6	345.8	349.6
75°	258.1	265.6	282.1	297.8	297.1
77.5°	203.3	216.8	230.3	243.1	246.8
80°	152.3	162.8	180.8	194.3	199.6
82.5°	106.5	118.5	136.5	150.0	155.3
85°	65.3	78.0	96.0	110.3	115.5
87.5°	31.5	44.3	63.8	78.0	84.0
90°	1.5	19.5	39.0	53.3	57.8
92.5°	3.0	11.3	25.5	36.8	40.5
95°	5.3	12.8	18.8	27.0	30.0
97.5°	7.5	11.3	16.5	21.8	24.0
100°	10.5	11.3	18.8	19.5	21.0
102.5°	12.8	12.0	18.0	19.5	19.5
105°	15.8	13.5	17.3	27.8	24.8
107.5°	18.0	18.8	16.5	19.5	21.0
110°	20.3	21.8	18.0	21.0	21.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	22.5	24.8	19.5	19.5	21.0
115°	24.8	27.8	19.5	20.3	20.3
117.5°	27.0	28.5	23.3	21.8	21.8
120°	28.5	29.3	29.3	21.8	23.3
122.5°	30.0	30.8	33.0	24.0	23.3
125°	31.5	31.5	36.0	29.3	25.5
127.5°	33.0	33.0	38.3	34.5	30.8
130°	34.5	33.0	40.5	37.5	36.0
132.5°	36.0	34.5	41.3	40.5	39.0
135°	36.8	36.0	41.3	43.5	42.8
137.5°	38.3	37.5	39.8	45.8	45.0
140°	39.0	39.0	39.8	45.8	47.3
142.5°	39.8	39.8	39.8	45.0	47.3
145°	40.5	41.3	39.8	43.5	46.5
147.5°	41.3	42.8	39.8	42.8	44.3
150°	42.0	43.5	39.8	42.0	42.8
152.5°	42.8	45.0	41.3	41.3	42.0
155°	42.8	45.8	42.8	41.3	41.3
157.5°	43.5	45.8	43.5	41.3	41.3
160°	43.5	46.5	45.0	42.8	42.0
162.5°	44.3	46.5	46.5	44.3	43.5
165°	44.3	45.8	47.3	45.8	44.3
167.5°	45.0	45.8	47.3	46.5	45.0
170°	45.0	45.8	46.5	46.5	45.0
172.5°	45.0	45.8	46.5	45.8	45.0
175°	45.0	45.0	45.8	45.0	43.5
177.5°	45.0	45.0	45.0	44.3	43.5
180°	44.3	44.3	44.3	44.3	44.3

(END OF REPORT)