

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-L840-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-L840-CD1-U
Description: Metalux 4' 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: 3954.9 lumens
Efficiency: N/A
Efficacy: 118.1 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

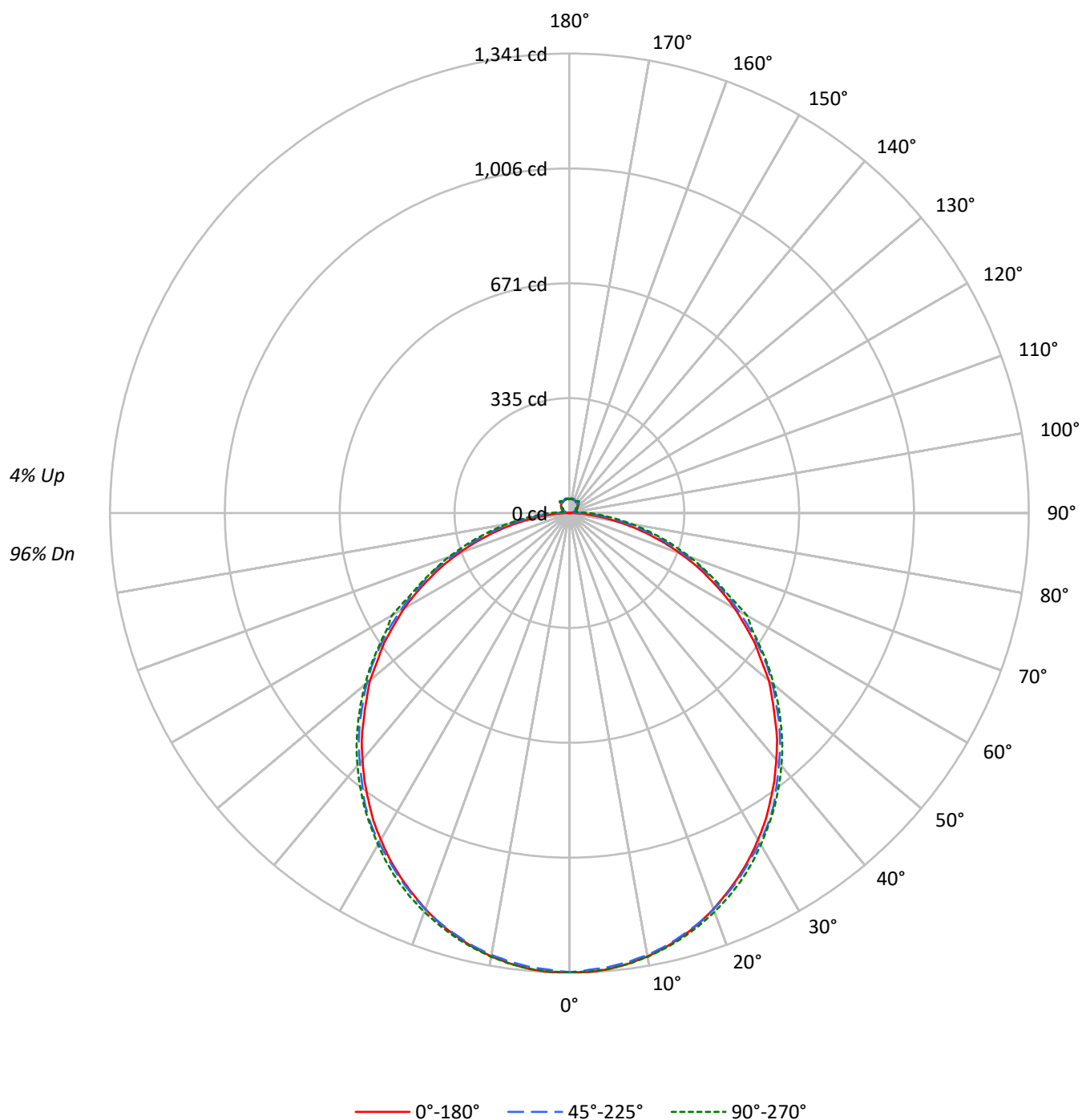
Input Watts (W): 33.5
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3934	3934	3934
5°	3928	3886	3897
10°	3899	3839	3846
15°	3859	3780	3787
20°	3807	3716	3722
25°	3746	3642	3651
30°	3678	3571	3565
35°	3603	3496	3478
40°	3525	3378	3380
45°	3438	3282	3269
50°	3368	3167	3145
55°	3263	3033	3010
60°	3138	2871	2955
65°	2967	2682	2671
70°	2757	2460	2469
75°	2475	2185	2214
80°	2085	1837	1927
85°	1580	1435	1601



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	126.6	3.2
10°-20°	360.8	9.1
20°-30°	542.1	13.7
30°-40°	648.6	16.4
40°-50°	666.9	16.9
50°-60°	600.6	15.2
60°-70°	461.6	11.7
70°-80°	274.8	6.9
80°-90°	99.6	2.5
90°-100°	21.5	0.5
100°-110°	17.8	0.5
110°-120°	21.0	0.5
120°-130°	26.0	0.7
130°-140°	28.4	0.7
140°-150°	24.4	0.6
150°-160°	18.3	0.5
160°-170°	11.9	0.3
170°-180°	4.0	0.1
0°-30°	1029.6	26.0
0°-40°	1678.2	42.4
0°-60°	2945.6	74.5
0°-90°	3781.6	95.6
90°-120°	60.3	1.5
90°-150°	139.1	3.5
90°-180°	173.0	4.4
0°-180°	3954.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1336	1335	1330	1334	1335	127
15°	1278	1279	1276	1281	1282	360
25°	1170	1172	1174	1182	1185	539
35°	1023	1036	1040	1042	1044	640
45°	849	858	866	874	873	656
55°	660	663	673	678	680	588
65°	450	454	465	474	474	446
75°	239	246	261	275	275	253
85°	60	72	89	102	107	66
90°	1	18	36	49	53	5
95°	5	12	17	25	28	5
105°	15	12	16	26	23	15
115°	23	26	18	19	19	23
125°	29	29	33	27	24	26
135°	34	33	38	40	40	26
145°	38	38	37	40	43	24
155°	40	42	40	38	38	18
165°	41	42	44	42	41	12
175°	42	42	42	42	40	4
180°	41	41	41	41	41	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1340.0	1340.0	1340.0	1340.0	1340.0
2.5°	1340.7	1340.0	1334.4	1338.6	1339.3
5°	1335.8	1335.1	1329.6	1334.4	1335.1
7.5°	1326.1	1326.1	1320.5	1326.1	1326.8
10°	1313.6	1313.6	1309.4	1314.3	1315.0
12.5°	1297.7	1298.3	1294.2	1299.7	1299.7
15°	1278.2	1278.9	1275.5	1281.0	1282.4
17.5°	1256.0	1256.0	1254.7	1260.9	1261.6
20°	1229.7	1233.2	1230.4	1237.3	1238.7
22.5°	1199.9	1203.3	1203.3	1211.0	1213.0
25°	1170.0	1172.1	1174.2	1182.5	1184.6
27.5°	1136.7	1140.9	1141.6	1150.6	1152.7
30°	1100.7	1107.6	1111.1	1116.6	1118.0
32.5°	1064.6	1073.6	1077.8	1080.6	1081.3
35°	1023.0	1035.5	1040.3	1042.4	1044.5
37.5°	982.8	993.2	994.6	1002.2	1004.3
40°	939.1	951.6	951.6	960.6	962.7
42.5°	897.5	900.2	910.6	916.9	919.7
45°	848.9	857.9	865.6	873.9	873.2
47.5°	803.1	814.9	817.0	824.6	826.7
50°	759.5	767.8	771.9	778.2	778.2
52.5°	705.4	716.4	725.5	728.9	731.0
55°	660.3	663.0	672.8	678.3	679.7
57.5°	605.5	612.4	621.4	628.4	631.8
60°	557.6	561.8	569.4	579.1	598.5
62.5°	503.5	508.4	518.1	547.2	527.1
65°	450.1	454.3	464.7	473.7	474.4
67.5°	399.5	403.7	418.2	421.0	423.1
70°	343.3	348.9	361.3	370.4	373.8
72.5°	292.0	296.8	309.3	319.7	323.2
75°	238.6	245.5	260.8	275.3	274.7
77.5°	188.0	200.4	212.9	224.7	228.2
80°	140.8	150.5	167.1	179.6	184.5
82.5°	98.5	109.6	126.2	138.7	143.6
85°	60.3	72.1	88.8	102.0	106.8
87.5°	29.1	40.9	59.0	72.1	77.7
90°	1.4	18.0	36.1	49.2	53.4
92.5°	2.8	10.4	23.6	34.0	37.5
95°	4.9	11.8	17.3	25.0	27.7
97.5°	6.9	10.4	15.3	20.1	22.2
100°	9.7	10.4	17.3	18.0	19.4
102.5°	11.8	11.1	16.6	18.0	18.0
105°	14.6	12.5	16.0	25.7	22.9
107.5°	16.6	17.3	15.3	18.0	19.4
110°	18.7	20.1	16.6	19.4	19.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	20.8	22.9	18.0	18.0	19.4
115°	22.9	25.7	18.0	18.7	18.7
117.5°	25.0	26.4	21.5	20.1	20.1
120°	26.4	27.0	27.0	20.1	21.5
122.5°	27.7	28.4	30.5	22.2	21.5
125°	29.1	29.1	33.3	27.0	23.6
127.5°	30.5	30.5	35.4	31.9	28.4
130°	31.9	30.5	37.5	34.7	33.3
132.5°	33.3	31.9	38.1	37.5	36.1
135°	34.0	33.3	38.1	40.2	39.5
137.5°	35.4	34.7	36.8	42.3	41.6
140°	36.1	36.1	36.8	42.3	43.7
142.5°	36.8	36.8	36.8	41.6	43.7
145°	37.5	38.1	36.8	40.2	43.0
147.5°	38.1	39.5	36.8	39.5	40.9
150°	38.8	40.2	36.8	38.8	39.5
152.5°	39.5	41.6	38.1	38.1	38.8
155°	39.5	42.3	39.5	38.1	38.1
157.5°	40.2	42.3	40.2	38.1	38.1
160°	40.2	43.0	41.6	39.5	38.8
162.5°	40.9	43.0	43.0	40.9	40.2
165°	40.9	42.3	43.7	42.3	40.9
167.5°	41.6	42.3	43.7	43.0	41.6
170°	41.6	42.3	43.0	43.0	41.6
172.5°	41.6	42.3	43.0	42.3	41.6
175°	41.6	41.6	42.3	41.6	40.2
177.5°	41.6	41.6	41.6	40.9	40.2
180°	40.9	40.9	40.9	40.9	40.9

(END OF REPORT)