

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-LD5-7-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-LD5-7-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

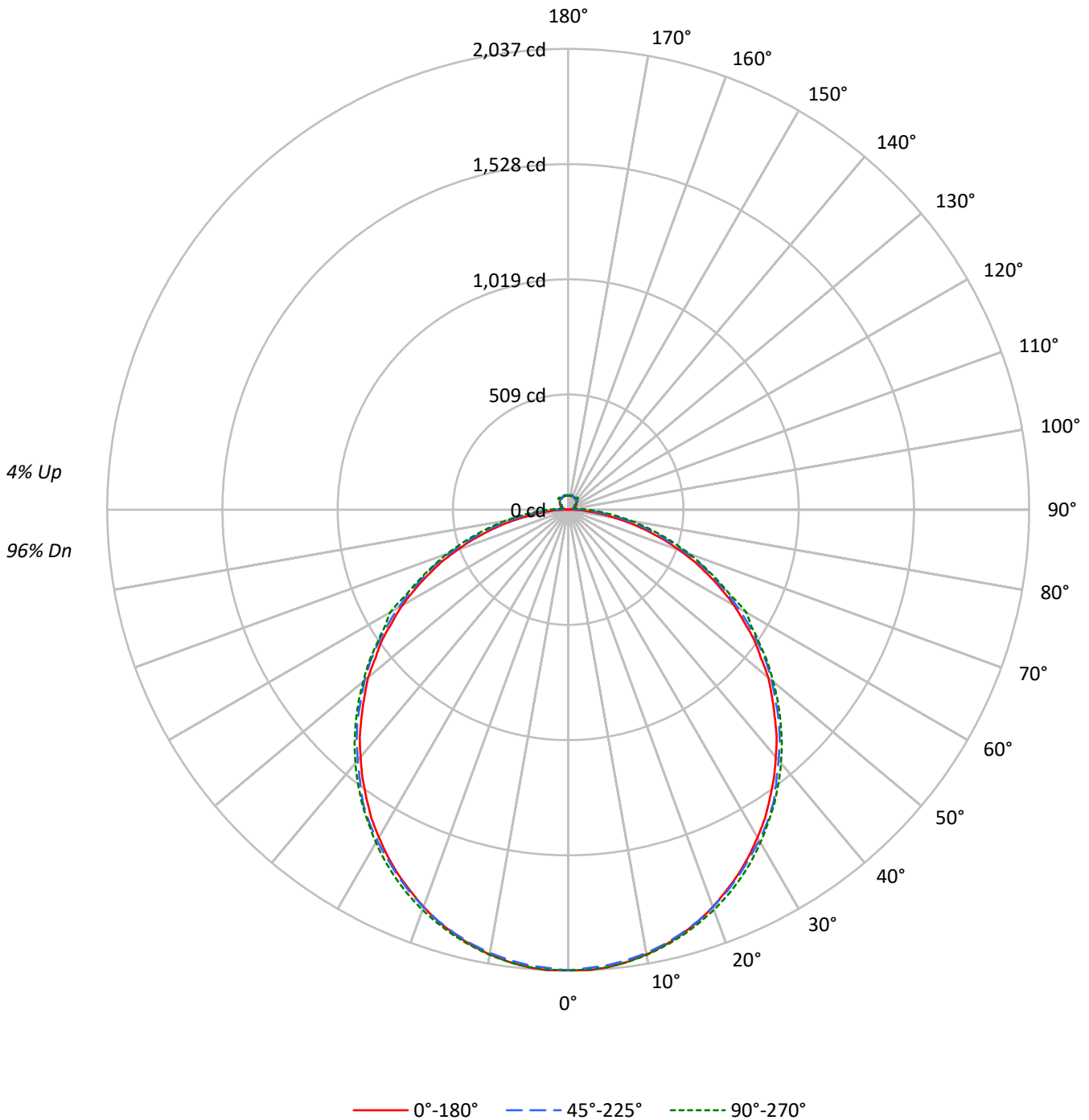
Lumens per Lamp: N/A
Luminaire Lumens: 6010.0 lumens
Efficiency: N/A
Efficacy: 119.2 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 50.4
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	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°	5977	5977	5977
5°	5969	5905	5922
10°	5924	5834	5844
15°	5864	5745	5754
20°	5785	5646	5656
25°	5693	5535	5548
30°	5589	5426	5418
35°	5475	5313	5284
40°	5356	5133	5136
45°	5225	4988	4967
50°	5118	4813	4779
55°	4958	4608	4574
60°	4769	4364	4491
65°	4509	4076	4058
70°	4190	3739	3752
75°	3762	3320	3364
80°	3167	2792	2927
85°	2402	2181	2433



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	192.4	3.2
10°-20°	548.3	9.1
20°-30°	823.8	13.7
30°-40°	985.7	16.4
40°-50°	1013.4	16.9
50°-60°	912.6	15.2
60°-70°	701.4	11.7
70°-80°	417.6	6.9
80°-90°	151.3	2.5
90°-100°	32.6	0.5
100°-110°	27.1	0.5
110°-120°	32.0	0.5
120°-130°	39.6	0.7
130°-140°	43.2	0.7
140°-150°	37.1	0.6
150°-160°	27.9	0.5
160°-170°	18.1	0.3
170°-180°	6.1	0.1
0°-30°	1564.6	26.0
0°-40°	2550.2	42.4
0°-60°	4476.2	74.5
0°-90°	5746.5	95.6
90°-120°	91.7	1.5
90°-150°	211.4	3.5
90°-180°	264.0	4.4
0°-180°	6010.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2036	2036	2036	2036	2036	
5°	2030	2029	2020	2028	2029	193
15°	1942	1944	1938	1947	1949	548
25°	1778	1781	1784	1797	1800	819
35°	1555	1574	1581	1584	1587	973
45°	1290	1304	1315	1328	1327	997
55°	1003	1008	1022	1031	1033	894
65°	684	690	706	720	721	678
75°	363	373	396	418	417	385
85°	92	110	135	155	162	101
90°	2	27	55	75	81	7
95°	7	18	26	38	42	7
105°	22	19	24	39	35	23
115°	35	39	27	28	28	34
125°	44	44	51	41	36	40
135°	52	51	58	61	60	40
145°	57	58	56	61	65	36
155°	60	64	60	58	58	28
165°	62	64	66	64	62	18
175°	63	63	64	63	61	6
180°	62	62	62	62	62	



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2036.2	2036.2	2036.2	2036.2	2036.2
2.5°	2037.3	2036.2	2027.8	2034.1	2035.1
5°	2029.9	2028.8	2020.4	2027.8	2028.8
7.5°	2015.1	2015.1	2006.7	2015.1	2016.2
10°	1996.2	1996.2	1989.8	1997.2	1998.3
12.5°	1971.9	1973.0	1966.6	1975.1	1975.1
15°	1942.4	1943.5	1938.2	1946.6	1948.7
17.5°	1908.7	1908.7	1906.6	1916.1	1917.1
20°	1868.6	1873.9	1869.7	1880.2	1882.3
22.5°	1823.3	1828.6	1828.6	1840.2	1843.3
25°	1778.0	1781.1	1784.3	1797.0	1800.1
27.5°	1727.4	1733.7	1734.8	1748.5	1751.6
30°	1672.6	1683.1	1688.4	1696.8	1698.9
32.5°	1617.8	1631.5	1637.8	1642.0	1643.1
35°	1554.6	1573.5	1580.9	1584.1	1587.2
37.5°	1493.4	1509.2	1511.3	1522.9	1526.1
40°	1427.0	1446.0	1446.0	1459.7	1462.9
42.5°	1363.8	1368.0	1383.8	1393.3	1397.5
45°	1290.0	1303.7	1315.3	1328.0	1326.9
47.5°	1220.5	1238.4	1241.5	1253.1	1256.3
50°	1154.1	1166.7	1173.0	1182.5	1182.5
52.5°	1071.9	1088.7	1102.4	1107.7	1110.8
55°	1003.3	1007.6	1022.3	1030.7	1032.9
57.5°	920.1	930.6	944.3	954.9	960.1
60°	847.4	853.7	865.3	880.0	909.5
62.5°	765.2	772.5	787.3	831.6	801.0
65°	684.0	690.3	706.1	719.8	720.9
67.5°	607.1	613.4	635.5	639.7	642.9
70°	521.7	530.1	549.1	562.8	568.1
72.5°	443.7	451.1	470.1	485.9	491.1
75°	362.6	373.1	396.3	418.4	417.4
77.5°	285.6	304.6	323.6	341.5	346.7
80°	213.9	228.7	254.0	273.0	280.3
82.5°	149.7	166.5	191.8	210.8	218.2
85°	91.7	109.6	134.9	154.9	162.3
87.5°	44.3	62.2	89.6	109.6	118.0
90°	2.1	27.4	54.8	74.8	81.2
92.5°	4.2	15.8	35.8	51.6	56.9
95°	7.4	17.9	26.3	37.9	42.2
97.5°	10.5	15.8	23.2	30.6	33.7
100°	14.8	15.8	26.3	27.4	29.5
102.5°	17.9	16.9	25.3	27.4	27.4
105°	22.1	19.0	24.2	39.0	34.8
107.5°	25.3	26.3	23.2	27.4	29.5
110°	28.5	30.6	25.3	29.5	29.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	31.6	34.8	27.4	27.4	29.5
115°	34.8	39.0	27.4	28.5	28.5
117.5°	37.9	40.0	32.7	30.6	30.6
120°	40.0	41.1	41.1	30.6	32.7
122.5°	42.2	43.2	46.4	33.7	32.7
125°	44.3	44.3	50.6	41.1	35.8
127.5°	46.4	46.4	53.8	48.5	43.2
130°	48.5	46.4	56.9	52.7	50.6
132.5°	50.6	48.5	58.0	56.9	54.8
135°	51.6	50.6	58.0	61.1	60.1
137.5°	53.8	52.7	55.9	64.3	63.2
140°	54.8	54.8	55.9	64.3	66.4
142.5°	55.9	55.9	55.9	63.2	66.4
145°	56.9	58.0	55.9	61.1	65.3
147.5°	58.0	60.1	55.9	60.1	62.2
150°	59.0	61.1	55.9	59.0	60.1
152.5°	60.1	63.2	58.0	58.0	59.0
155°	60.1	64.3	60.1	58.0	58.0
157.5°	61.1	64.3	61.1	58.0	58.0
160°	61.1	65.3	63.2	60.1	59.0
162.5°	62.2	65.3	65.3	62.2	61.1
165°	62.2	64.3	66.4	64.3	62.2
167.5°	63.2	64.3	66.4	65.3	63.2
170°	63.2	64.3	65.3	65.3	63.2
172.5°	63.2	64.3	65.3	64.3	63.2
175°	63.2	63.2	64.3	63.2	61.1
177.5°	63.2	63.2	63.2	62.2	61.1
180°	62.2	62.2	62.2	62.2	62.2

(END OF REPORT)