

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-LD5-9-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-LD5-9-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

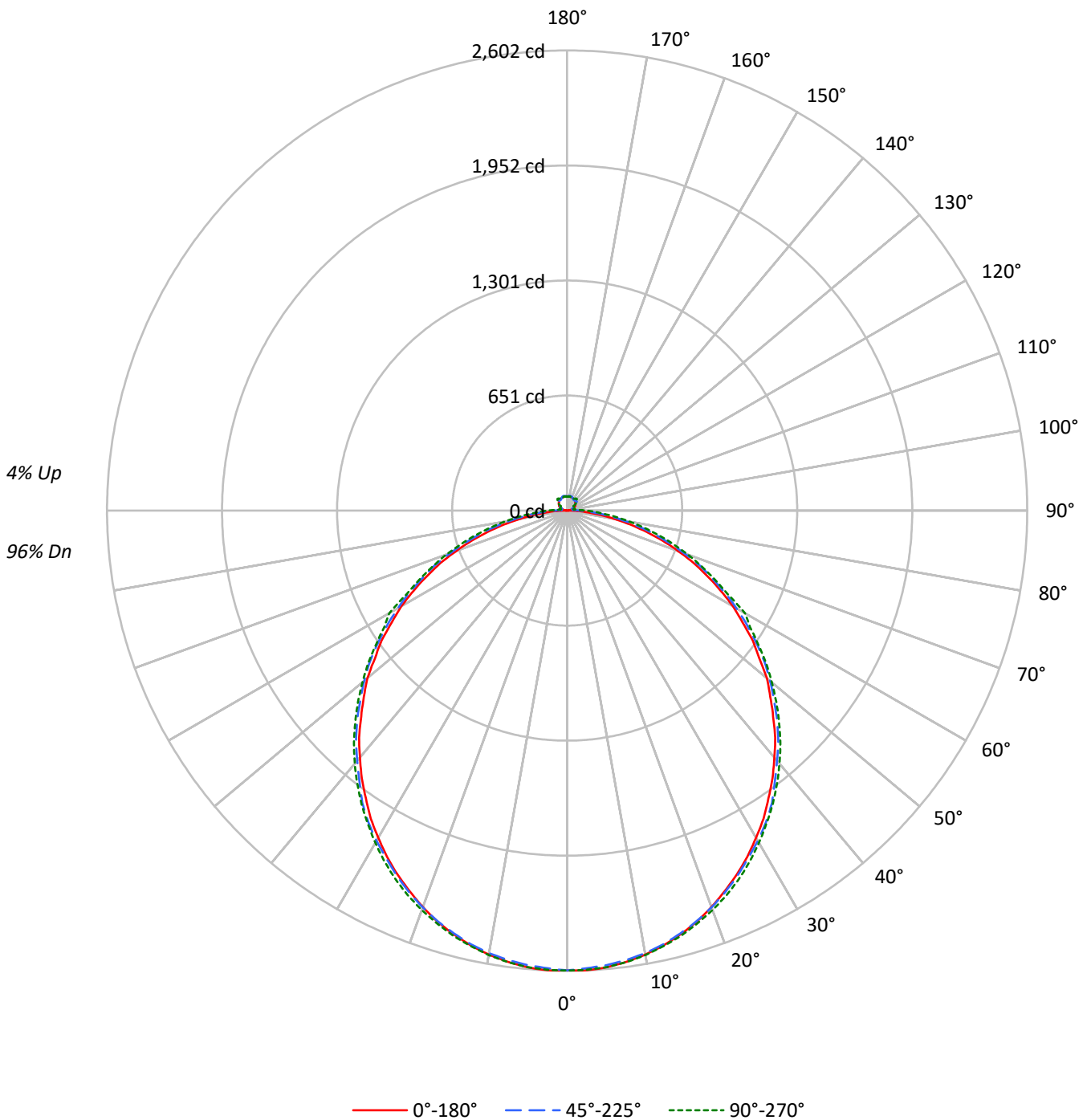
Lumens per Lamp: N/A
Luminaire Lumens: 7675.0 lumens
Efficiency: N/A
Efficacy: 116.8 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')
CIE Type: Direct

Input Watts (W): 65.7
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°	7633	7633	7633
5°	7622	7541	7563
10°	7566	7450	7463
15°	7488	7336	7348
20°	7388	7210	7223
25°	7270	7068	7086
30°	7137	6930	6919
35°	6992	6785	6748
40°	6840	6555	6559
45°	6673	6369	6343
50°	6536	6147	6103
55°	6332	5885	5841
60°	6090	5573	5736
65°	5759	5206	5182
70°	5351	4775	4790
75°	4803	4240	4296
80°	4045	3566	3739
85°	3068	2785	3108



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.7	3.2
10°-20°	700.2	9.1
20°-30°	1052.1	13.7
30°-40°	1258.7	16.4
40°-50°	1294.1	16.9
50°-60°	1165.5	15.2
60°-70°	895.7	11.7
70°-80°	533.3	6.9
80°-90°	193.2	2.5
90°-100°	41.6	0.5
100°-110°	34.6	0.5
110°-120°	40.8	0.5
120°-130°	50.5	0.7
130°-140°	55.1	0.7
140°-150°	47.3	0.6
150°-160°	35.6	0.5
160°-170°	23.1	0.3
170°-180°	7.8	0.1
0°-30°	1998.0	26.0
0°-40°	3256.7	42.4
0°-60°	5716.3	74.5
0°-90°	7338.5	95.6
90°-120°	117.0	1.5
90°-150°	270.0	3.5
90°-180°	336.0	4.4
0°-180°	7675.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2600	2600	2600	2600	2600	
5°	2592	2591	2580	2590	2591	246
15°	2480	2482	2475	2486	2489	700
25°	2271	2275	2279	2295	2299	1046
35°	1985	2009	2019	2023	2027	1243
45°	1647	1665	1680	1696	1694	1273
55°	1281	1287	1306	1316	1319	1141
65°	874	882	902	919	921	866
75°	463	476	506	534	533	491
85°	117	140	172	198	207	129
90°	3	35	70	96	104	9
95°	9	23	34	48	54	10
105°	28	24	31	50	44	29
115°	44	50	35	36	36	44
125°	56	56	65	52	46	51
135°	66	65	74	78	77	51
145°	73	74	71	78	83	46
155°	77	82	77	74	74	36
165°	79	82	85	82	79	23
175°	81	81	82	81	78	8
180°	79	79	79	79	79	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2600.3	2600.3	2600.3	2600.3	2600.3
2.5°	2601.7	2600.3	2589.5	2597.6	2599.0
5°	2592.2	2590.9	2580.1	2589.5	2590.9
7.5°	2573.4	2573.4	2562.6	2573.4	2574.7
10°	2549.2	2549.2	2541.1	2550.5	2551.9
12.5°	2518.2	2519.6	2511.5	2522.2	2522.2
15°	2480.5	2481.9	2475.1	2485.9	2488.6
17.5°	2437.4	2437.4	2434.8	2446.9	2448.2
20°	2386.3	2393.0	2387.7	2401.1	2403.8
22.5°	2328.4	2335.2	2335.2	2350.0	2354.0
25°	2270.6	2274.6	2278.6	2294.8	2298.8
27.5°	2206.0	2214.0	2215.4	2232.9	2236.9
30°	2136.0	2149.4	2156.2	2166.9	2169.6
32.5°	2066.0	2083.5	2091.5	2096.9	2098.3
35°	1985.2	2009.4	2018.9	2022.9	2026.9
37.5°	1907.2	1927.3	1930.0	1944.8	1948.9
40°	1822.4	1846.6	1846.6	1864.1	1868.1
42.5°	1741.6	1747.0	1767.2	1779.3	1784.7
45°	1647.4	1664.9	1679.7	1695.9	1694.5
47.5°	1558.6	1581.4	1585.5	1600.3	1604.3
50°	1473.8	1489.9	1498.0	1510.1	1510.1
52.5°	1368.8	1390.3	1407.8	1414.6	1418.6
55°	1281.3	1286.7	1305.5	1316.3	1319.0
57.5°	1175.0	1188.4	1205.9	1219.4	1226.1
60°	1082.1	1090.2	1105.0	1123.8	1161.5
62.5°	977.1	986.6	1005.4	1061.9	1022.9
65°	873.5	881.6	901.8	919.3	920.6
67.5°	775.2	783.3	811.6	817.0	821.0
70°	666.2	677.0	701.2	718.7	725.4
72.5°	566.6	576.1	600.3	620.5	627.2
75°	463.0	476.5	506.1	534.3	533.0
77.5°	364.7	389.0	413.2	436.1	442.8
80°	273.2	292.1	324.4	348.6	358.0
82.5°	191.1	212.7	245.0	269.2	278.6
85°	117.1	140.0	172.3	197.8	207.3
87.5°	56.5	79.4	114.4	140.0	150.7
90°	2.7	35.0	70.0	95.6	103.6
92.5°	5.4	20.2	45.8	65.9	72.7
95°	9.4	22.9	33.6	48.5	53.8
97.5°	13.5	20.2	29.6	39.0	43.1
100°	18.8	20.2	33.6	35.0	37.7
102.5°	22.9	21.5	32.3	35.0	35.0
105°	28.3	24.2	31.0	49.8	44.4
107.5°	32.3	33.6	29.6	35.0	37.7
110°	36.3	39.0	32.3	37.7	37.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	40.4	44.4	35.0	35.0	37.7
115°	44.4	49.8	35.0	36.3	36.3
117.5°	48.5	51.1	41.7	39.0	39.0
120°	51.1	52.5	52.5	39.0	41.7
122.5°	53.8	55.2	59.2	43.1	41.7
125°	56.5	56.5	64.6	52.5	45.8
127.5°	59.2	59.2	68.6	61.9	55.2
130°	61.9	59.2	72.7	67.3	64.6
132.5°	64.6	61.9	74.0	72.7	70.0
135°	65.9	64.6	74.0	78.1	76.7
137.5°	68.6	67.3	71.3	82.1	80.8
140°	70.0	70.0	71.3	82.1	84.8
142.5°	71.3	71.3	71.3	80.8	84.8
145°	72.7	74.0	71.3	78.1	83.4
147.5°	74.0	76.7	71.3	76.7	79.4
150°	75.4	78.1	71.3	75.4	76.7
152.5°	76.7	80.8	74.0	74.0	75.4
155°	76.7	82.1	76.7	74.0	74.0
157.5°	78.1	82.1	78.1	74.0	74.0
160°	78.1	83.4	80.8	76.7	75.4
162.5°	79.4	83.4	83.4	79.4	78.1
165°	79.4	82.1	84.8	82.1	79.4
167.5°	80.8	82.1	84.8	83.4	80.8
170°	80.8	82.1	83.4	83.4	80.8
172.5°	80.8	82.1	83.4	82.1	80.8
175°	80.8	80.8	82.1	80.8	78.1
177.5°	80.8	80.8	80.8	79.4	78.1
180°	79.4	79.4	79.4	79.4	79.4

(END OF REPORT)