

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-ASYWG-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 (P34184)  
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-ASYWG-UNV-L840-CD1-U  
Description: Metalux 4' ILED WITH ASYMMETRIC DIRECTIONAL LOUVER-HEAVY DUTY WIREGUARD DISTRIBUTION

Light Source: (1) 4000 CCT, 80 CRI LEDS  
Ballast/Driver: -

**Summary**

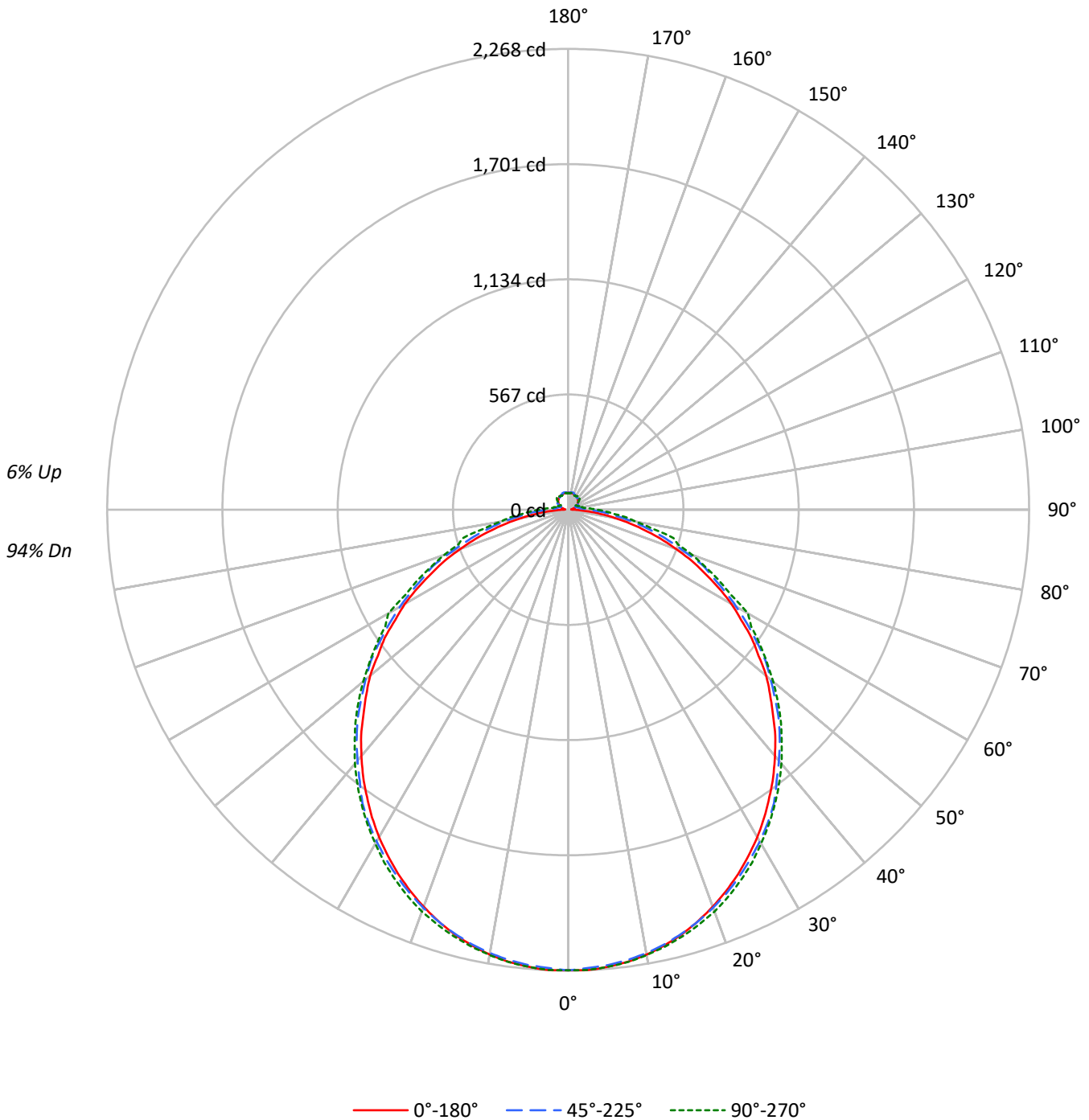
Lumens per Lamp: N/A  
Luminaire Lumens: 6831.0 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct

Input Watts (W): 65.7  
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	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	114	114	114	114	108	108	108	102	102	102	97	97	97	94
1	107	102	98	94	104	99	95	91	94	91	87	89	86	84	84	82	80	78
2	97	89	82	76	94	86	80	75	82	76	72	78	73	69	74	70	67	65
3	88	78	70	63	85	76	68	62	72	66	60	68	63	58	65	61	57	54
4	81	69	60	53	78	67	59	53	64	57	51	61	55	50	58	53	49	46
5	74	62	52	46	72	60	52	45	57	50	44	55	48	43	52	47	42	40
6	69	55	46	40	66	54	46	40	52	44	39	49	43	38	47	42	37	35
7	64	50	41	35	62	49	41	35	47	40	34	45	39	34	43	37	33	31
8	59	46	37	31	57	45	37	31	43	36	31	41	35	30	40	34	30	28
9	55	42	34	28	54	41	33	28	40	33	28	38	32	27	37	31	27	25
10	52	39	31	26	50	38	30	25	37	30	25	35	29	25	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6655	6655	6655
5°	6640	6574	6592
10°	6598	6496	6509
15°	6531	6400	6417
20°	6438	6295	6323
25°	6334	6179	6198
30°	6218	6057	6053
35°	6079	5930	5900
40°	5938	5723	5730
45°	5770	5559	5539
50°	5642	5338	5318
55°	5447	5098	5091
60°	5225	4815	5042
65°	4894	4523	4580
70°	4527	4187	4275
75°	4045	3800	4321
80°	3441	3407	3537
85°	2717	3071	3316



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	214.3	3.1
10°-20°	611.0	8.9
20°-30°	919.2	13.5
30°-40°	1098.6	16.1
40°-50°	1127.1	16.5
50°-60°	1011.4	14.8
60°-70°	777.1	11.4
70°-80°	475.5	7.0
80°-90°	201.6	3.0
90°-100°	71.0	1.0
100°-110°	49.6	0.7
110°-120°	46.3	0.7
120°-130°	53.9	0.8
130°-140°	57.1	0.8
140°-150°	48.3	0.7
150°-160°	36.9	0.5
160°-170°	23.9	0.4
170°-180°	8.0	0.1
0°-30°	1744.5	25.5
0°-40°	2843.1	41.6
0°-60°	4981.6	72.9
0°-90°	6435.9	94.2
90°-120°	166.9	2.4
90°-150°	326.3	4.8
90°-180°	395.0	5.8
0°-180°	6831.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2267	2267	2267	2267	2267	
5°	2258	2258	2250	2258	2258	214
15°	2163	2164	2160	2171	2173	610
25°	1978	1982	1992	2010	2011	911
35°	1726	1748	1765	1768	1772	1080
45°	1425	1450	1466	1477	1480	1102
55°	1102	1112	1131	1147	1150	982
65°	742	756	784	809	814	738
75°	390	411	454	480	536	415
85°	104	141	190	215	221	111
90°	20	56	108	136	142	15
95°	16	39	66	89	92	15
105°	31	30	45	71	66	33
115°	46	51	39	45	48	46
125°	59	59	70	60	50	53
135°	69	68	74	82	80	53
145°	75	78	74	78	81	47
155°	80	85	80	76	76	37
165°	82	85	88	85	82	23
175°	84	84	84	84	81	8
180°	82	82	82	82	82	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2267.0	2267.0	2267.0	2267.0	2267.0
2.5°	2268.2	2267.0	2257.0	2264.5	2267.0
5°	2258.2	2258.2	2249.5	2258.2	2258.2
7.5°	2244.5	2243.2	2235.7	2243.2	2245.7
10°	2223.2	2223.2	2215.7	2224.5	2225.7
12.5°	2195.7	2197.0	2190.7	2199.5	2202.0
15°	2163.3	2164.5	2159.5	2170.7	2173.2
17.5°	2123.3	2125.8	2124.5	2137.0	2140.8
20°	2079.5	2087.0	2084.5	2100.8	2104.5
22.5°	2030.8	2035.8	2040.8	2058.3	2060.8
25°	1978.3	1982.0	1992.0	2009.5	2010.8
27.5°	1920.8	1930.8	1939.6	1953.3	1958.3
30°	1860.8	1874.6	1884.6	1897.1	1898.3
32.5°	1795.8	1814.6	1827.1	1833.3	1837.1
35°	1725.9	1748.3	1764.6	1768.3	1772.1
37.5°	1657.1	1680.9	1684.6	1702.1	1703.4
40°	1582.1	1609.6	1612.1	1628.4	1632.1
42.5°	1508.4	1523.4	1540.9	1555.9	1554.6
45°	1424.7	1449.7	1465.9	1477.2	1479.7
47.5°	1347.2	1375.9	1380.9	1394.7	1399.7
50°	1272.2	1294.7	1300.9	1318.4	1315.9
52.5°	1181.0	1206.0	1224.7	1231.0	1231.0
55°	1102.2	1112.2	1131.0	1147.2	1149.7
57.5°	1008.5	1024.8	1042.3	1064.8	1067.3
60°	928.5	941.0	954.8	992.3	1021.0
62.5°	834.8	847.3	867.3	898.5	898.5
65°	742.3	756.1	783.6	808.6	813.6
67.5°	658.6	671.1	717.3	723.6	727.3
70°	563.6	579.9	614.9	638.6	647.4
72.5°	477.4	492.4	529.9	559.9	564.9
75°	389.9	411.2	453.6	479.9	536.1
77.5°	309.9	336.2	376.2	407.4	418.7
80°	232.4	261.2	309.9	333.7	338.7
82.5°	161.2	198.7	241.2	276.2	284.9
85°	103.7	141.2	190.0	215.0	221.2
87.5°	55.0	95.0	142.5	172.5	180.0
90°	20.0	56.2	107.5	136.2	142.5
92.5°	17.5	40.0	81.2	106.2	112.5
95°	16.2	38.7	66.2	88.7	92.5
97.5°	18.7	33.7	58.7	70.0	73.7
100°	22.5	30.0	56.2	67.5	71.2
102.5°	26.2	27.5	51.2	61.2	61.2
105°	31.2	30.0	45.0	71.2	66.2
107.5°	35.0	40.0	43.7	52.5	57.5
110°	40.0	43.7	38.7	50.0	51.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	43.7	48.7	38.7	48.7	48.7
115°	46.2	51.2	38.7	45.0	47.5
117.5°	50.0	52.5	48.7	43.7	43.7
120°	53.7	53.7	60.0	42.5	42.5
122.5°	56.2	56.2	63.7	47.5	42.5
125°	58.7	58.7	70.0	60.0	50.0
127.5°	61.2	61.2	72.5	68.7	62.5
130°	63.7	62.5	75.0	73.7	70.0
132.5°	66.2	65.0	75.0	77.5	75.0
135°	68.7	67.5	73.7	82.5	80.0
137.5°	70.0	70.0	72.5	83.7	83.7
140°	72.5	72.5	72.5	82.5	86.2
142.5°	73.7	75.0	73.7	80.0	83.7
145°	75.0	77.5	73.7	77.5	81.2
147.5°	76.2	80.0	73.7	77.5	77.5
150°	78.7	81.2	75.0	76.2	77.5
152.5°	78.7	83.7	77.5	76.2	76.2
155°	80.0	85.0	80.0	76.2	76.2
157.5°	81.2	85.0	81.2	77.5	76.2
160°	81.2	86.2	83.7	80.0	77.5
162.5°	82.5	86.2	86.2	82.5	80.0
165°	82.5	85.0	87.5	85.0	82.5
167.5°	82.5	85.0	87.5	86.2	83.7
170°	83.7	85.0	86.2	86.2	83.7
172.5°	83.7	83.7	85.0	85.0	83.7
175°	83.7	83.7	83.7	83.7	81.2
177.5°	83.7	83.7	83.7	82.5	80.0
180°	82.5	82.5	82.5	82.5	82.5

(END OF REPORT)