

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-LD5-16-N-TWBWG-UNV-L840-CD2-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 (P34186)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 4ILED-LD5-16-N-TWBWG-UNV-L840-CD2-U  
Description: Metalux 4' ILED WITH NARROW WITH THIN WHITE BAFFLE AND WIREGUARD DISTRIBUTION  
  
Light Source: (1) 4000 CCT, 80 CRI LEDS  
Ballast/Driver: -

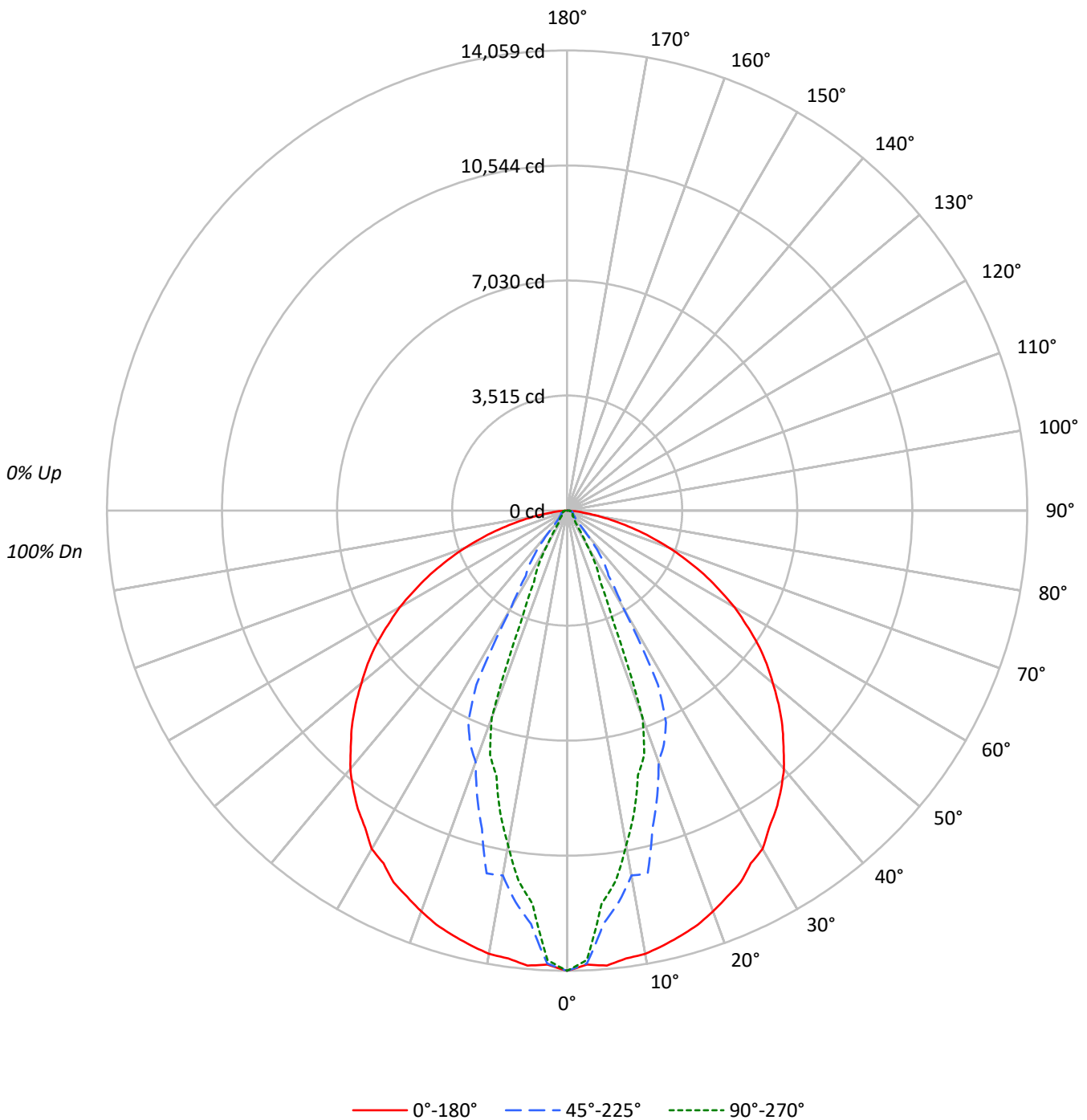
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13958.0 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 0.6 / 0.75  
Luminous Opening: Rectangular w/ Sides (W: 0.92' x L: 4' x H: 0.1')  
CIE Type: Direct  
  
Input Watts (W): 126.6  
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	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	108	104	102	109	106	103	100	101	99	97	98	96	94	94	93	91	89					89			
2	104	98	92	88	102	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	83	77	95	87	82	77	85	80	76	82	78	74	80	76	73	71					71			
4	91	81	74	69	89	80	74	69	78	72	68	76	71	67	74	70	66	64					64			
5	85	75	68	62	83	74	67	62	72	66	62	70	65	61	69	64	60	59					59			
6	80	69	62	57	79	69	62	57	67	61	56	65	60	56	64	59	55	54					54			
7	76	64	57	52	74	64	57	52	62	56	52	61	56	51	60	55	51	49					49			
8	71	60	53	48	70	60	53	48	58	52	48	57	52	48	56	51	47	46					46			
9	68	56	49	45	66	56	49	45	55	49	45	54	48	44	53	48	44	43					43			
10	64	53	46	42	63	52	46	42	52	46	42	51	45	41	50	45	41	40					40			

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

	0°	45°	90°
0°	41272	41272	41272
5°	41026	37059	35226
10°	40806	33195	30397
15°	40582	29833	24702
20°	40335	24677	20237
25°	40140	22167	7361
30°	39893	11038	3837
35°	39234	6675	1461
40°	38682	3337	1273
45°	37663	1445	943
50°	36384	1222	859
55°	35131	1020	900
60°	33235	1060	878
65°	30393	1146	897
70°	26526	1195	930
75°	21206	1316	1024
80°	14294	1549	1134
85°	7623	1830	1420



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1200.9	8.6
10°-20°	2911.3	20.9
20°-30°	3171.5	22.7
30°-40°	2439.7	17.5
40°-50°	1802.6	12.9
50°-60°	1134.2	8.1
60°-70°	742.7	5.3
70°-80°	415.8	3.0
80°-90°	139.2	1.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	7283.7	52.2
0°-40°	9723.4	69.7
0°-60°	12660.3	90.7
0°-90°	13958.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13958.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	14059	14059	14059	14059	14059	
5°	13953	13844	12680	11932	12068	###
15°	13442	11687	10066	8738	8366	3796
25°	12537	9368	7146	3183	2388	5764
35°	11140	6904	1986	633	439	6966
45°	9299	3677	381	321	252	7161
55°	7109	942	226	238	203	6333
65°	4610	233	199	178	159	4547
75°	2044	176	157	141	127	2193
85°	291	111	113	109	95	371
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	14059.0	14059.0	14059.0	14059.0	14059.0
2.5°	13885.7	13890.4	13855.7	13786.4	13742.5
5°	13952.7	13844.2	12680.1	11931.8	12068.0
7.5°	13800.3	13239.0	12068.0	11509.1	11400.5
10°	13749.5	12310.6	11322.0	11132.6	10393.5
12.5°	13604.0	11747.0	11356.7	10162.6	9453.5
15°	13442.3	11686.9	10065.6	8737.5	8365.6
17.5°	13266.8	11160.3	9146.3	8007.6	7829.8
20°	13028.9	10823.1	8171.6	7360.9	6735.0
22.5°	12772.5	10661.4	7730.5	4797.2	3718.6
25°	12536.9	9368.0	7146.1	3182.7	2388.2
27.5°	12148.9	9264.1	6002.8	2330.5	1970.2
30°	11938.7	8303.3	3434.5	1753.0	1203.3
32.5°	11483.7	7550.3	2351.2	1064.8	718.3
35°	11139.5	6903.6	1986.3	632.9	438.8
37.5°	10735.4	6476.3	1485.1	434.2	381.1
40°	10305.8	5972.8	940.0	388.0	362.6
42.5°	9783.8	5379.2	556.6	364.9	311.8
45°	9298.7	3677.0	381.1	321.0	251.8
47.5°	8762.9	2508.3	325.7	272.5	217.1
50°	8204.0	1639.9	297.9	242.5	212.5
52.5°	7679.7	1344.2	258.7	242.5	212.5
55°	7109.2	942.3	226.3	237.9	203.3
57.5°	6483.2	586.7	212.5	231.0	196.3
60°	5905.8	346.5	210.2	224.0	177.8
62.5°	5231.4	263.3	205.6	198.6	168.6
65°	4610.1	233.3	198.6	177.8	159.4
67.5°	3942.6	210.2	184.8	170.9	154.7
70°	3302.8	189.4	175.5	159.4	140.9
72.5°	2660.7	182.5	166.3	150.1	134.0
75°	2044.1	175.5	157.1	140.9	127.0
77.5°	1487.4	164.0	147.8	136.3	120.1
80°	965.4	150.1	140.9	127.0	108.6
82.5°	538.2	136.3	129.3	117.8	103.9
85°	291.0	110.9	113.2	108.6	94.7
87.5°	53.1	78.5	97.0	94.7	83.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)