

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: **HBLED-LD5-12HE-W-CLI-UNV-L840-ED1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P#  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23766)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-12HE-W-CLI-UNV-L840-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

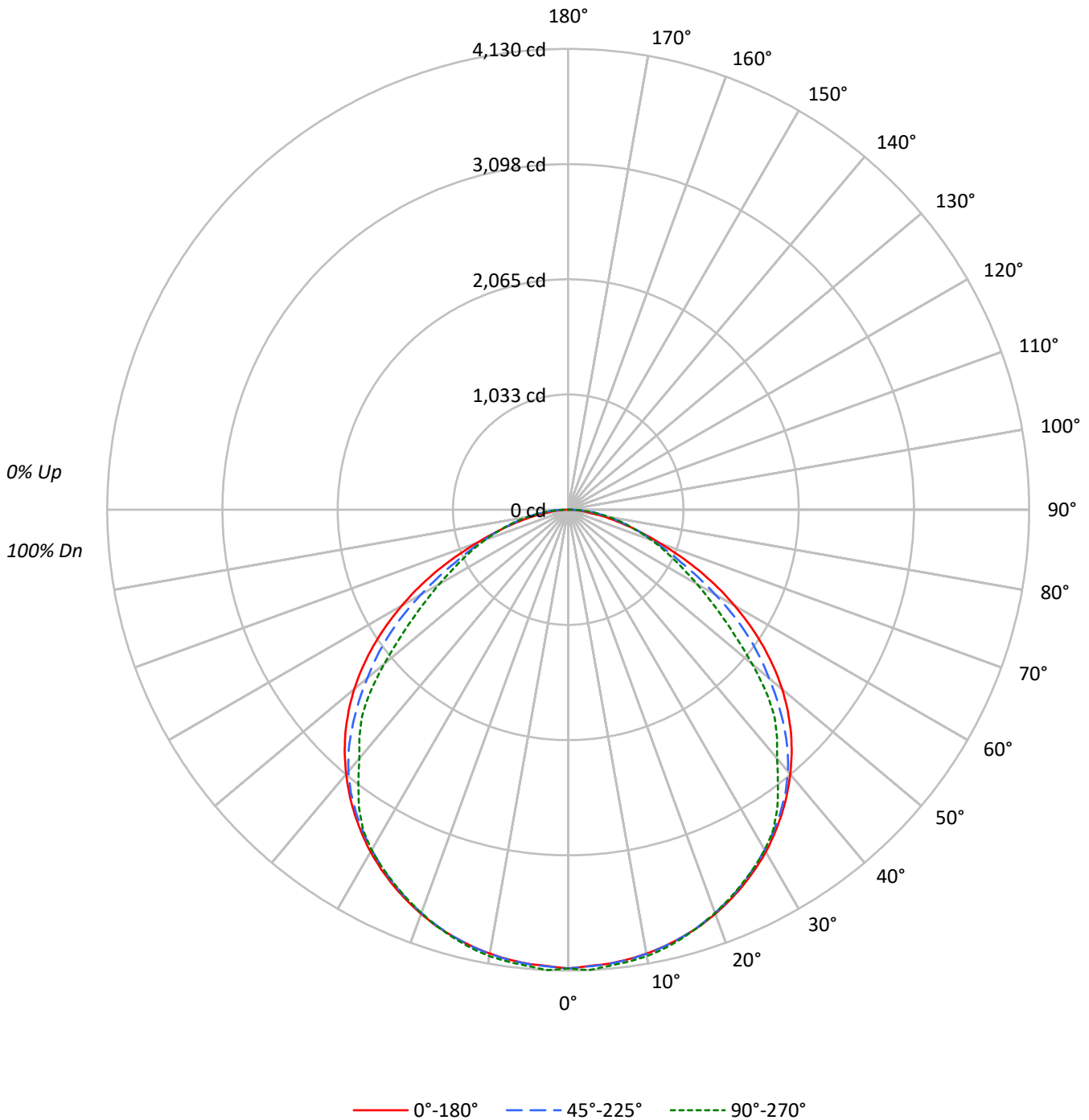
Lumens per Lamp: N/A  
Luminaire Lumens: 11046.0 lumens  
Efficiency: N/A  
Efficacy: 152.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 72.6  
Input Voltage (V): NR  
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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92		94	92	90		91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80	77	74	71
3	91	81	73	67	89	79	72	66	77	70	65		74	68	64		71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56		66	60	55		64	59	54	52
5	77	65	56	49	75	63	55	49	61	54	48		59	53	48		58	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43		54	47	42		52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38		49	42	37		48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34		45	38	34		44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	30		41	35	30		40	35	30	28
10	54	41	33	28	53	40	33	28	39	32	28		38	32	28		38	32	27	26

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

	0°	45°	90°
0°	5532	5532	5532
5°	5517	5521	5546
10°	5520	5523	5552
15°	5521	5520	5533
20°	5519	5507	5508
25°	5511	5490	5484
30°	5502	5469	5472
35°	5476	5442	5365
40°	5437	5382	5110
45°	5368	5196	4969
50°	5239	4920	4500
55°	5001	4601	3979
60°	4641	4105	3589
65°	4125	3554	3300
70°	3423	3177	3111
75°	2769	2907	2943
80°	2199	2780	2768
85°	1721	2987	2850



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	389.9	3.5
10°-20°	1121.5	10.2
20°-30°	1710.1	15.5
30°-40°	2069.0	18.7
40°-50°	2095.7	19.0
50°-60°	1732.1	15.7
60°-70°	1144.1	10.4
70°-80°	596.6	5.4
80°-90°	187.0	1.7
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°	3221.5	29.2
0°-40°	5290.5	47.9
0°-60°	9118.4	82.5
0°-90°	11046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11046.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4111	4111	4111	4111	4111	
5°	4085	4109	4088	4106	4106	389
15°	3963	3984	3963	3975	3972	1119
25°	3712	3727	3698	3708	3694	1712
35°	3334	3338	3313	3309	3266	2085
45°	2821	2814	2731	2646	2611	2172
55°	2132	2100	1961	1771	1696	1900
65°	1296	1258	1116	1044	1036	1280
75°	533	542	559	567	566	580
85°	112	144	194	192	185	135
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4111.4	4111.4	4111.4	4111.4	4111.4
2.5°	4094.1	4118.3	4098.1	4115.8	4130.1
5°	4084.7	4109.4	4087.7	4105.5	4106.0
7.5°	4066.5	4091.1	4068.9	4086.7	4086.2
10°	4040.3	4063.5	4042.3	4063.5	4063.5
12.5°	4004.8	4027.5	4006.7	4026.5	4023.5
15°	3963.3	3983.6	3962.8	3975.2	3972.2
17.5°	3914.5	3932.7	3909.5	3919.9	3914.0
20°	3854.7	3871.5	3845.8	3859.2	3846.8
22.5°	3787.6	3803.4	3777.2	3787.1	3773.3
25°	3712.1	3726.9	3698.3	3707.6	3693.8
27.5°	3630.7	3644.0	3611.9	3623.2	3612.4
30°	3541.3	3547.7	3520.1	3534.9	3522.1
32.5°	3441.6	3445.6	3421.4	3434.7	3413.0
35°	3334.0	3338.5	3313.3	3308.8	3266.4
37.5°	3219.0	3221.0	3197.3	3157.3	3087.2
40°	3095.6	3094.6	3064.0	2971.7	2909.6
42.5°	2963.8	2963.4	2909.6	2804.4	2768.9
45°	2821.2	2813.8	2730.9	2646.0	2611.4
47.5°	2668.2	2660.3	2544.3	2476.7	2398.2
50°	2502.9	2489.0	2350.3	2258.1	2150.0
52.5°	2324.7	2303.5	2162.3	2013.2	1911.1
55°	2131.7	2100.1	1961.4	1770.9	1696.4
57.5°	1930.8	1883.9	1749.2	1563.6	1502.9
60°	1724.5	1672.2	1525.6	1373.1	1333.6
62.5°	1512.3	1460.5	1310.9	1195.9	1174.2
65°	1295.6	1258.1	1116.4	1043.9	1036.5
67.5°	1073.5	1060.2	952.1	915.1	912.1
70°	870.2	867.7	807.5	788.7	790.7
72.5°	695.4	692.5	683.6	674.2	674.7
75°	532.6	541.9	559.2	566.6	566.1
77.5°	397.3	416.6	453.1	467.9	465.4
80°	283.8	312.4	358.8	372.6	357.3
82.5°	189.0	219.1	273.9	275.9	263.6
85°	111.5	143.6	193.5	192.0	184.6
87.5°	55.3	86.4	116.0	111.1	106.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)