

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-N-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 (P23767)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-12HE-N-UNV-L840-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

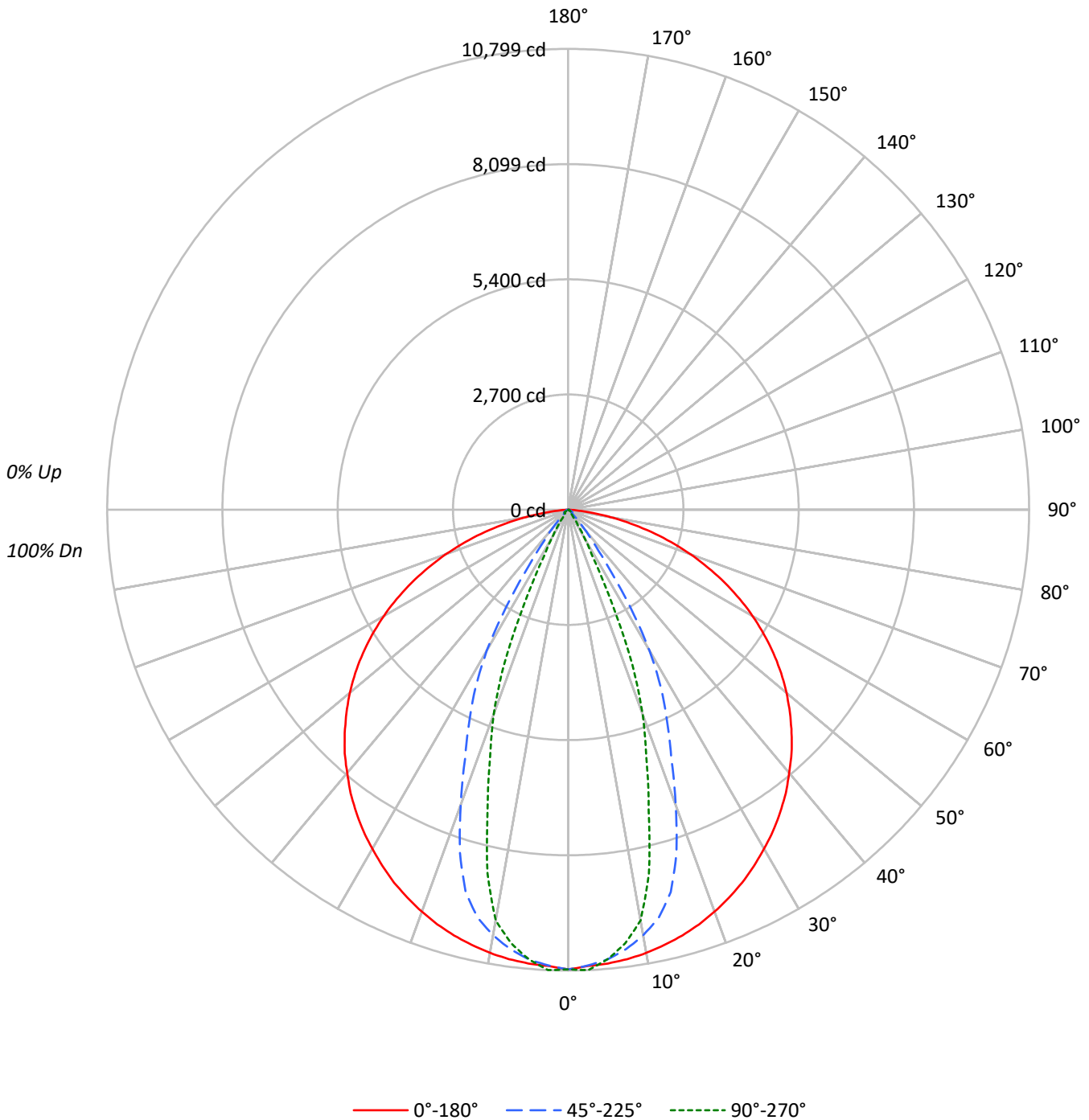
Lumens per Lamp: N/A  
Luminaire Lumens: 11450.0 lumens  
Efficiency: N/A  
Efficacy: 157.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41

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

	0°	45°	90°
0°	14495	14495	14495
5°	14417	14290	14283
10°	14408	13832	13346
15°	14388	12922	10157
20°	14354	10534	7311
25°	14318	8145	3602
30°	14254	5920	1168
35°	14221	2626	301
40°	14146	1067	203
45°	14083	299	216
50°	13973	212	239
55°	13772	252	102
60°	13432	281	62
65°	12880	180	74
70°	11965	159	91
75°	10467	120	125
80°	7827	147	179
85°	3876	190	238



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	999.7	8.7
10°-20°	2499.8	21.8
20°-30°	2707.7	23.6
30°-40°	2005.1	17.5
40°-50°	1444.2	12.6
50°-60°	894.2	7.8
60°-70°	550.0	4.8
70°-80°	289.9	2.5
80°-90°	59.3	0.5
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°	6207.2	54.2
0°-40°	8212.3	71.7
0°-60°	10550.8	92.1
0°-90°	11450.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	11450.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10773	10773	10773	10773	10773	
5°	10674	10714	10580	10588	10575	###
15°	10329	10089	9277	7889	7292	2916
25°	9644	8834	5486	3452	2426	4444
35°	8658	6104	1599	376	183	5416
45°	7401	3439	157	114	113	5708
55°	5871	708	108	97	44	5241
65°	4046	75	56	36	23	3991
75°	2014	17	23	30	24	2127
85°	251	7	12	18	15	379
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10772.7	10772.7	10772.7	10772.7	10772.7
2.5°	10703.5	10771.7	10691.2	10751.2	10798.8
5°	10674.3	10713.7	10580.0	10587.7	10575.4
7.5°	10623.0	10613.8	10388.8	10290.4	10247.4
10°	10545.7	10484.7	10123.9	9918.4	9768.7
12.5°	10445.7	10309.4	9793.3	9139.9	8734.1
15°	10328.9	10089.0	9276.8	7889.0	7292.0
17.5°	10189.5	9849.7	8432.2	6611.9	6078.9
20°	10025.0	9582.7	7357.1	5625.4	5106.3
22.5°	9841.5	9257.8	6312.6	4675.3	3934.8
25°	9644.2	8834.0	5486.5	3451.5	2426.0
27.5°	9416.2	8289.2	4711.7	2033.0	1238.1
30°	9174.8	7633.3	3810.2	1093.6	751.8
32.5°	8931.4	6889.7	2696.1	683.1	426.4
35°	8657.7	6103.5	1598.9	376.2	183.0
37.5°	8372.3	5383.0	945.0	171.2	117.4
40°	8054.0	4724.5	607.3	113.8	115.3
42.5°	7746.5	4110.5	341.8	112.2	114.3
45°	7401.1	3438.7	157.3	113.8	113.3
47.5°	7043.9	2742.2	102.0	114.8	114.8
50°	6675.5	1960.7	101.5	117.4	114.3
52.5°	6286.5	1223.3	105.6	116.8	93.8
55°	5870.9	708.2	107.6	97.4	43.6
57.5°	5440.4	417.7	108.6	55.9	24.6
60°	4991.5	231.1	104.5	41.5	23.1
62.5°	4528.7	110.2	82.5	38.9	22.5
65°	4045.5	74.8	56.4	35.9	23.1
67.5°	3543.7	57.9	44.6	33.8	23.6
70°	3041.5	43.0	40.5	33.8	23.1
72.5°	2531.1	29.2	33.8	34.3	23.1
75°	2013.5	17.4	23.1	30.2	24.1
77.5°	1500.5	10.8	17.9	31.3	29.2
80°	1010.1	9.2	19.0	29.2	23.1
82.5°	592.9	8.2	18.4	22.5	18.4
85°	251.1	6.7	12.3	18.4	15.4
87.5°	47.1	5.6	9.7	14.9	13.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)