

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-LD5-48SE-W-FLI-UNV-L740-ED4-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 (P26703)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-48SE-W-FLI-UNV-L740-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

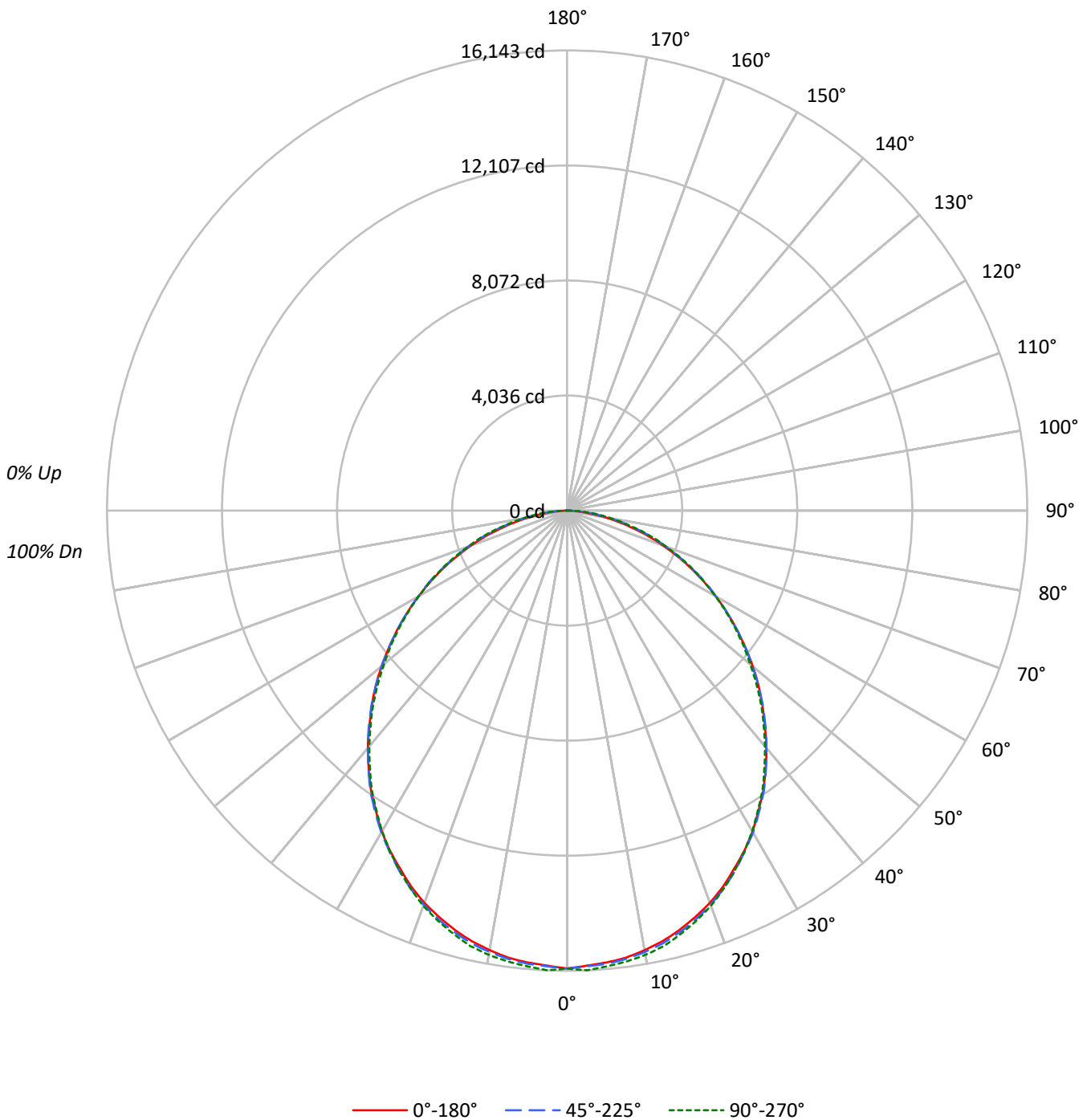
Lumens per Lamp: N/A  
Luminaire Lumens: 41965.0 lumens  
Efficiency: N/A  
Efficacy: 140.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 299.1  
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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	21616	21616	21616
5°	21493	21553	21676
10°	21395	21482	21621
15°	21207	21322	21426
20°	20967	21068	21129
25°	20579	20696	20665
30°	20200	20254	20171
35°	19699	19750	19624
40°	19107	19107	18960
45°	18439	18489	18301
50°	17805	17775	17553
55°	17035	17037	16884
60°	16209	16229	16166
65°	15278	15430	15469
70°	14111	14497	14513
75°	12470	13278	13485
80°	10228	11629	12286
85°	7097	9763	11041



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1519.4	3.6
10°-20°	4322.3	10.3
20°-30°	6423.2	15.3
30°-40°	7510.5	17.9
40°-50°	7488.1	17.8
50°-60°	6496.9	15.5
60°-70°	4798.7	11.4
70°-80°	2686.8	6.4
80°-90°	716.9	1.7
90°-100°	2.2	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°	12264.9	29.2
0°-40°	19775.4	47.1
0°-60°	33760.4	80.4
0°-90°	41962.8	100.0
90°-120°	2.2	0.0
90°-150°	2.2	0.0
90°-180°	2.0	0.0
0°-180°	41965.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	16065	16065	16065	16065	16065	
5°	15913	16013	15958	16029	16049	###
15°	15225	15331	15307	15381	15382	4294
25°	13862	13973	13940	13971	13920	6391
35°	11993	12098	12024	12022	11947	7492
45°	9690	9794	9717	9677	9618	7481
55°	7262	7312	7263	7251	7198	6494
65°	4799	4846	4847	4871	4859	4746
75°	2399	2470	2554	2572	2594	2555
85°	460	556	632	689	715	558
90°	0	10	12	28	26	19
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48SE-W-FLI-UNV-L740-ED4-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	16065.4	16065.4	16065.4	16065.4	16065.4
2.5°	15977.5	16072.5	16006.1	16069.5	16143.0
5°	15913.2	16013.3	15958.1	16028.6	16049.0
7.5°	15819.2	15916.2	15863.1	15933.6	15955.0
10°	15659.8	15765.0	15723.1	15802.8	15825.3
12.5°	15473.9	15573.0	15545.4	15638.3	15653.7
15°	15224.6	15330.8	15307.3	15380.9	15381.9
17.5°	14948.7	15048.8	15031.5	15088.7	15086.7
20°	14643.3	14750.5	14713.7	14776.1	14756.7
22.5°	14281.6	14396.0	14350.0	14402.1	14353.1
25°	13861.7	13973.1	13940.4	13971.0	13919.9
27.5°	13455.1	13557.2	13489.8	13526.6	13472.4
30°	13001.5	13088.3	13036.2	13048.5	12983.1
32.5°	12491.7	12594.9	12531.5	12529.5	12460.0
35°	11993.1	12098.3	12023.8	12021.7	11947.1
37.5°	11441.4	11539.5	11451.6	11456.7	11369.9
40°	10878.5	10963.3	10878.5	10874.4	10794.7
42.5°	10267.5	10379.9	10302.3	10311.5	10205.2
45°	9690.3	9793.5	9716.9	9677.0	9617.8
47.5°	9115.1	9160.1	9096.7	9086.5	9002.7
50°	8506.2	8539.9	8491.9	8479.7	8385.7
52.5°	7876.9	7935.1	7873.8	7857.5	7795.2
55°	7261.9	7311.9	7262.9	7250.6	7197.5
57.5°	6642.7	6708.1	6658.1	6645.8	6602.9
60°	6023.6	6043.0	6030.8	6049.2	6007.3
62.5°	5408.6	5453.5	5467.9	5462.7	5430.0
65°	4798.7	4845.7	4846.7	4871.2	4858.9
67.5°	4174.4	4235.7	4253.1	4278.7	4289.9
70°	3587.0	3634.0	3685.1	3700.4	3689.2
72.5°	2995.5	3071.1	3128.3	3141.6	3189.6
75°	2398.8	2470.3	2554.1	2572.5	2594.0
77.5°	1845.1	1940.1	2015.7	2040.2	2066.8
80°	1320.0	1425.2	1500.8	1534.5	1585.6
82.5°	866.4	973.6	1050.3	1084.0	1146.3
85°	459.7	555.8	632.4	688.6	715.2
87.5°	135.9	217.6	261.5	277.9	301.4
90°	0.0	10.2	12.3	27.6	25.5
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)