

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-LD5-48HE-W-WG-UNV-L850-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 (P33336)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-48HE-W-WG-UNV-L850-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

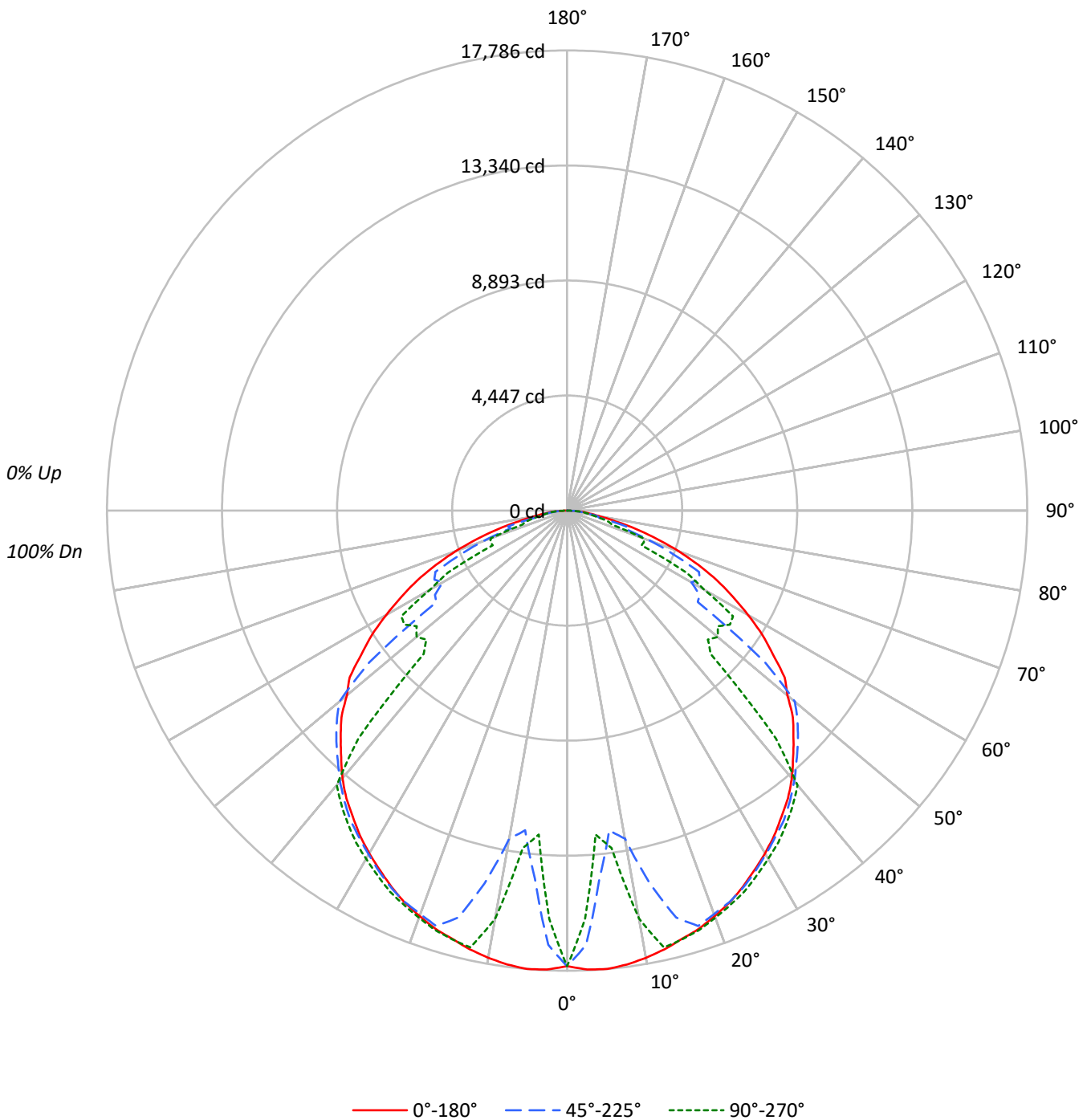
Lumens per Lamp: N/A  
Luminaire Lumens: 46651.0 lumens  
Efficiency: N/A  
Efficacy: 163.0 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.31 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 286.2  
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	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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72					72			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61					61			
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

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

	0°	45°	90°
0°	23693	23693	23693
5°	24022	19299	16972
10°	23981	17600	21889
15°	23875	22684	23895
20°	23875	23766	23977
25°	23832	23885	24104
30°	23763	23842	24149
35°	23726	23988	24269
40°	23728	23987	24331
45°	23543	24003	14917
50°	23276	24052	15898
55°	22785	14462	18019
60°	21735	14908	16500
65°	20366	17899	10096
70°	17983	13560	12375
75°	14328	12325	8582
80°	9871	8908	7374
85°	9459	8224	7801



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1408.1	3.0
10°-20°	4411.4	9.5
20°-30°	7257.8	15.6
30°-40°	9125.7	19.6
40°-50°	8950.0	19.2
50°-60°	7415.5	15.9
60°-70°	5230.3	11.2
70°-80°	2281.9	4.9
80°-90°	570.1	1.2
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°	13077.3	28.0
0°-40°	22203.0	47.6
0°-60°	38568.6	82.7
0°-90°	46651.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	46651.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	17609	17609	17609	17609	17609	
5°	17786	16554	14289	12956	12566	###
15°	17140	11903	16285	17207	17154	4847
25°	16053	14689	16089	16196	16236	7400
35°	14444	14436	14604	14701	14775	9050
45°	12373	12410	12615	11172	7839	9550
55°	9713	10031	6165	7010	7681	8691
65°	6397	6774	5622	4325	3171	6290
75°	2756	2702	2371	1550	1651	2956
85°	613	545	533	510	505	636
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	17609.2	17609.2	17609.2	17609.2	17609.2
2.5°	17754.5	17386.0	16800.7	16063.7	15802.6
5°	17786.1	16554.3	14288.7	12955.8	12566.3
7.5°	17695.6	15044.6	12456.8	12736.8	13149.5
10°	17552.4	13718.1	12882.1	15156.2	16021.6
12.5°	17369.2	12538.9	14758.2	17120.7	17293.4
15°	17139.7	11903.0	16284.8	17207.1	17154.4
17.5°	16946.0	12275.7	16832.3	17034.4	16996.5
20°	16674.3	13019.0	16598.5	16760.7	16745.9
22.5°	16400.6	13899.1	16377.5	16493.3	16493.3
25°	16053.2	14688.8	16089.0	16196.4	16236.4
27.5°	15672.1	15143.6	15728.9	15817.4	15889.0
30°	15295.2	15208.8	15345.7	15459.4	15543.6
32.5°	14897.2	14863.5	14970.9	15090.9	15198.3
35°	14444.5	14436.1	14604.5	14701.4	14775.1
37.5°	14019.2	13989.7	14145.5	14280.3	14337.1
40°	13509.6	13509.6	13657.0	13793.9	13852.8
42.5°	12928.5	13010.6	13124.3	13265.4	11947.2
45°	12372.6	12410.5	12614.7	11172.4	7839.2
47.5°	11837.8	11886.2	12079.9	7182.2	7378.1
50°	11119.7	11338.7	11490.3	7161.2	7594.9
52.5°	10595.4	10690.2	9645.8	7089.6	7333.8
55°	9713.2	10031.1	6165.2	7009.6	7681.3
57.5°	8959.4	9191.0	6062.1	7182.2	7599.2
60°	8077.1	8430.9	5539.9	6929.6	6131.5
62.5°	7230.7	7567.6	5784.1	5453.5	5192.4
65°	6396.9	6773.8	5622.0	4324.9	3171.1
67.5°	5483.0	5131.4	4485.0	3046.8	3206.8
70°	4571.3	3583.8	3446.9	3406.9	3145.8
72.5°	3634.3	2615.2	2288.8	2556.2	1829.8
75°	2756.2	2701.5	2370.9	1549.7	1650.8
77.5°	1911.9	1949.8	1269.7	1511.8	1254.9
80°	1273.9	1103.3	1149.7	964.4	951.7
82.5°	882.3	901.2	755.9	732.8	743.3
85°	612.7	545.4	532.7	509.6	505.3
87.5°	204.2	237.9	221.1	200.0	212.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)