

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-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 (P23760)  
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-UNV-L740-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

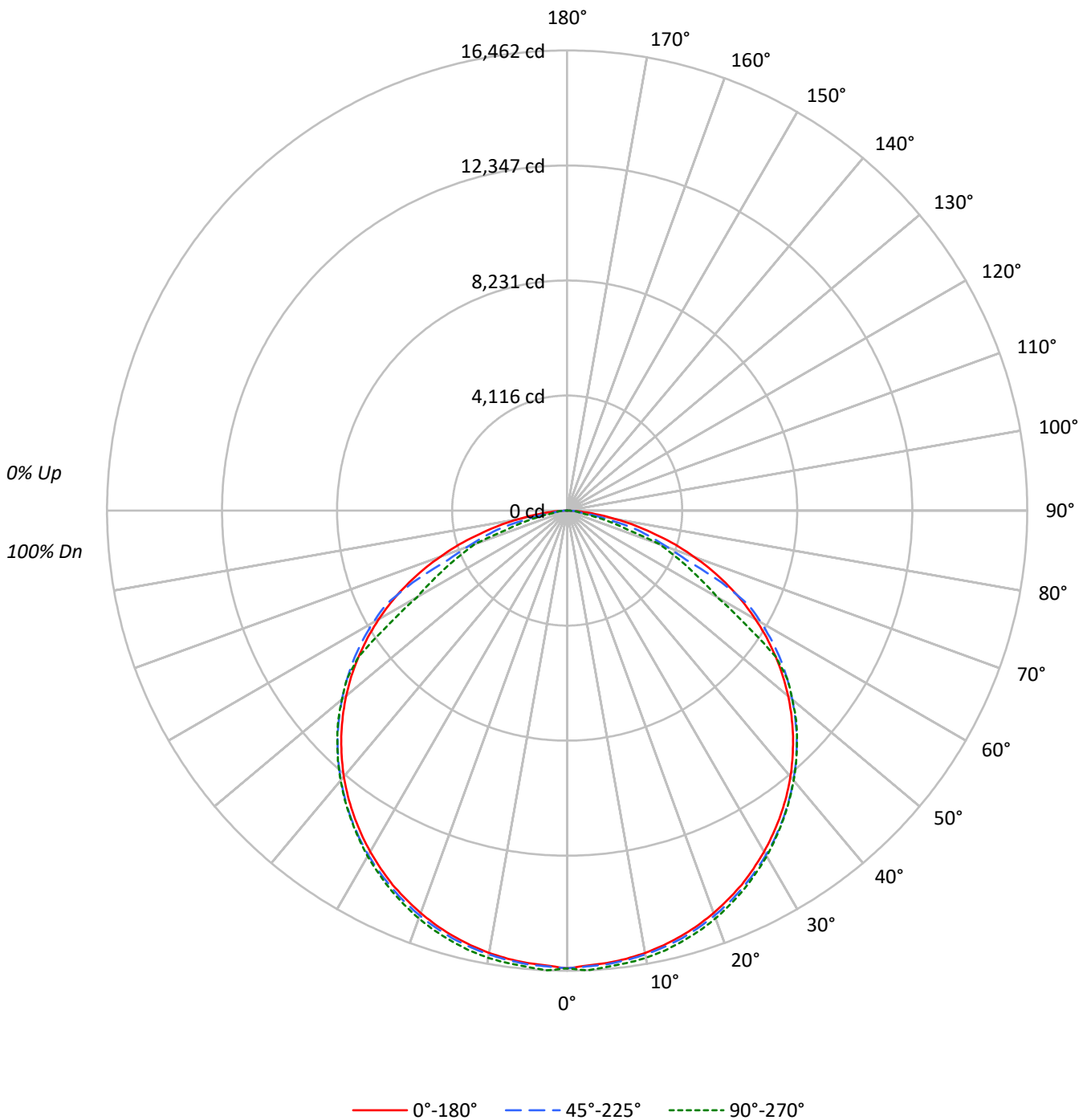
Lumens per Lamp: N/A  
Luminaire Lumens: 47276.0 lumens  
Efficiency: N/A  
Efficacy: 158.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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



TEST NUMBER: P#  
CATALOG NUMBER: HBLED-LD5-48SE-W-UNV-L740-ED4-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

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

**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	89		91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47		58	52	47		56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36		48	41	36		46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32		44	37	32		43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29		40	34	29		39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26		37	31	26		36	30	26	24

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

	0°	45°	90°
0°	22034	22034	22034
5°	21943	22004	22128
10°	21955	22033	22199
15°	21949	22067	22220
20°	21938	22079	22233
25°	21930	22088	22210
30°	21892	22105	22188
35°	21864	22116	22145
40°	21825	22114	22149
45°	21742	22105	22131
50°	21613	22011	22007
55°	21360	21895	21351
60°	20964	21571	16706
65°	20265	19414	15052
70°	18984	14937	13871
75°	16810	13023	8645
80°	13843	7667	3864
85°	9124	4698	5062



TEST NUMBER: P#

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1554.0	3.3
10°-20°	4483.4	9.5
20°-30°	6873.6	14.5
30°-40°	8429.8	17.8
40°-50°	8951.1	18.9
50°-60°	8175.7	17.3
60°-70°	5693.5	12.0
70°-80°	2655.5	5.6
80°-90°	459.4	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°	12911.0	27.3
0°-40°	21340.8	45.1
0°-60°	38467.6	81.4
0°-90°	47276.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	47276.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	16376	16376	16376	16376	16376	
5°	16246	16360	16292	16370	16384	###
15°	15758	15868	15842	15938	15952	4450
25°	14772	14902	14878	14988	14960	6807
35°	13311	13464	13464	13555	13482	8330
45°	11426	11599	11617	11692	11631	8813
55°	9106	9288	9334	9349	9102	8132
65°	6365	6561	6098	4849	4728	6280
75°	3234	3438	2505	1736	1663	3457
85°	591	389	304	326	328	763
90°	0	0	0	0	0	



TEST NUMBER: P#

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	16376.0	16376.0	16376.0	16376.0	16376.0
2.5°	16289.6	16393.6	16324.9	16399.5	16462.4
5°	16246.4	16360.3	16291.6	16370.1	16383.8
7.5°	16175.7	16283.7	16220.9	16307.3	16328.9
10°	16069.7	16175.7	16126.6	16228.7	16248.4
12.5°	15926.4	16034.4	15997.1	16109.0	16122.7
15°	15757.5	15867.5	15842.0	15938.2	15951.9
17.5°	15559.2	15673.1	15643.7	15745.8	15755.6
20°	15321.7	15445.4	15419.8	15539.6	15527.8
22.5°	15054.7	15186.2	15166.6	15286.3	15251.0
25°	14772.0	14901.5	14878.0	14987.9	14960.4
27.5°	14440.2	14583.5	14561.9	14667.9	14624.7
30°	14090.7	14236.0	14228.1	14324.3	14281.1
32.5°	13713.7	13868.8	13861.0	13955.2	13888.5
35°	13311.2	13464.4	13464.4	13554.7	13482.1
37.5°	12885.2	13040.3	13042.3	13128.7	13059.9
40°	12425.8	12580.9	12590.7	12673.2	12610.3
42.5°	11942.8	12111.7	12119.5	12194.1	12135.2
45°	11426.5	11599.2	11616.9	11691.5	11630.7
47.5°	10886.6	11061.3	11077.0	11157.5	11114.3
50°	10325.1	10493.9	10515.5	10582.2	10513.5
52.5°	9732.1	9904.9	9934.4	9975.6	9944.2
55°	9105.8	9288.4	9333.6	9349.3	9101.9
57.5°	8457.9	8644.5	8687.7	8326.4	7531.3
60°	7790.4	7975.0	8016.2	6773.4	6208.0
62.5°	7095.4	7276.0	7321.2	5613.1	5432.5
65°	6365.1	6561.4	6098.0	4849.4	4727.7
67.5°	5615.1	5817.3	4611.8	4156.3	4083.7
70°	4825.8	5030.0	3797.0	3543.8	3526.1
72.5°	4068.0	4219.2	3115.8	2685.8	2261.7
75°	3233.6	3437.8	2505.2	1735.6	1662.9
77.5°	2507.1	2167.5	1511.7	1272.2	1003.3
80°	1786.6	1448.9	989.5	528.1	498.7
82.5°	1132.8	946.3	388.7	398.6	416.2
85°	591.0	388.7	304.3	325.9	327.9
87.5°	190.4	166.9	182.6	180.6	178.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)