

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-N-UNV-L735-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 (P23767)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-48SE-N-UNV-L735-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

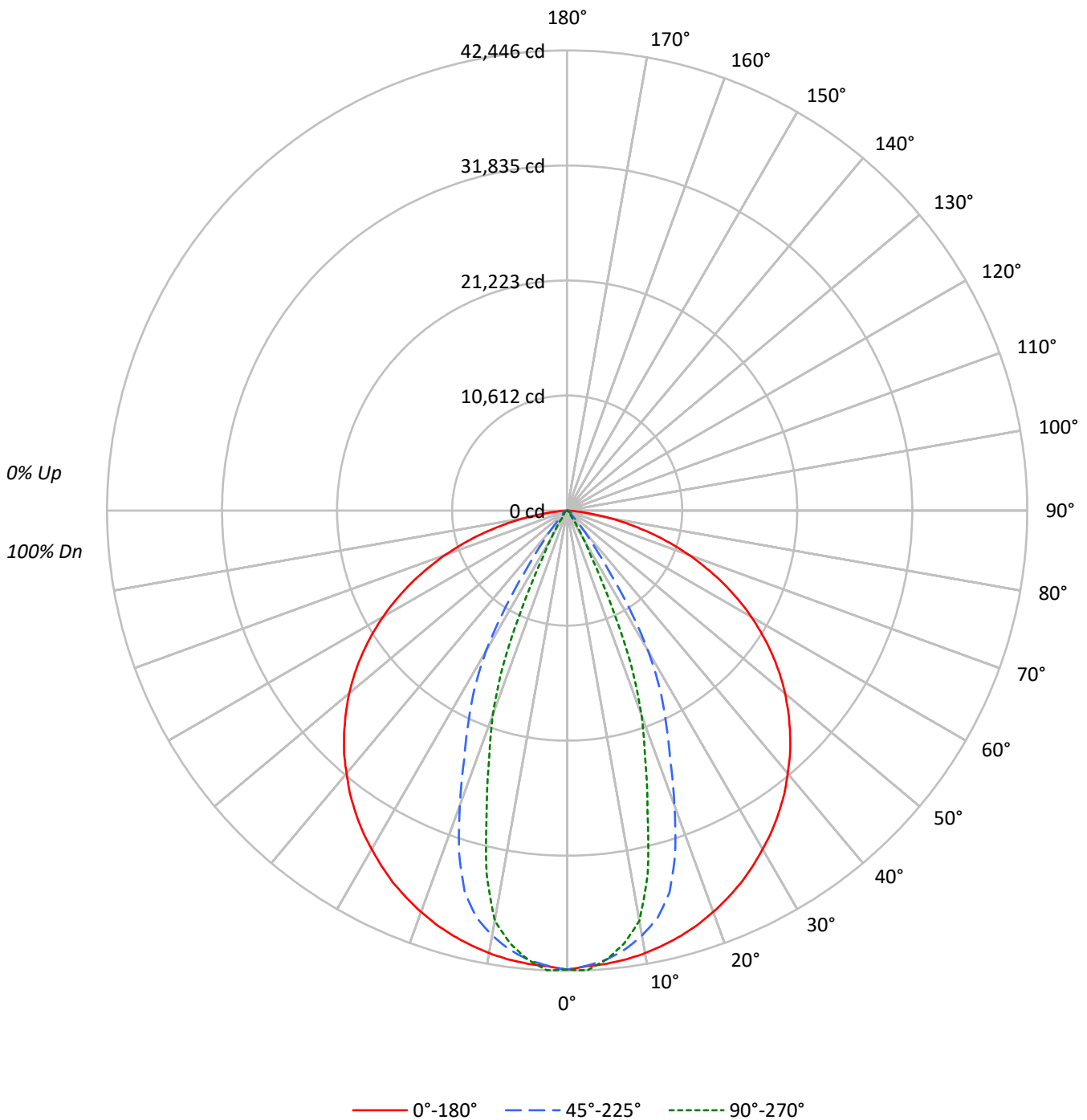
Lumens per Lamp: N/A  
Luminaire Lumens: 45005.0 lumens  
Efficiency: N/A  
Efficacy: 150.5 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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-N-UNV-L735-ED4-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48SE-N-UNV-L735-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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90				90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81				81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73				73
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66				66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60				60
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55				55
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51				51
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47				47
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44				44
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41				41

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

	0°	45°	90°
0°	56972	56972	56972
5°	56667	56166	56142
10°	56631	54366	52459
15°	56552	50791	39924
20°	56420	41405	28738
25°	56276	32015	14157
30°	56027	23268	4591
35°	55895	10323	1181
40°	55602	4193	796
45°	55354	1177	847
50°	54922	835	940
55°	54131	992	402
60°	52795	1106	244
65°	50624	706	288
70°	47030	626	356
75°	41143	471	492
80°	30763	577	702
85°	15237	746	932



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48SE-N-UNV-L735-ED4-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3929.5	8.7
10°-20°	9825.6	21.8
20°-30°	10642.7	23.6
30°-40°	7881.3	17.5
40°-50°	5676.6	12.6
50°-60°	3514.9	7.8
60°-70°	2161.6	4.8
70°-80°	1139.5	2.5
80°-90°	233.2	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°	24397.7	54.2
0°-40°	32279.1	71.7
0°-60°	41470.6	92.1
0°-90°	45005.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	45005.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	42343	42343	42343	42343	42343	
5°	41956	42111	41585	41616	41567	###
15°	40598	39656	36463	31008	28662	11461
25°	37907	34723	21565	13566	9536	17467
35°	34030	23990	6285	1478	719	21290
45°	29091	13516	618	447	445	22435
55°	23076	2784	423	383	171	20600
65°	15901	294	222	141	91	15689
75°	7914	68	91	119	95	8359
85°	987	26	48	72	60	###
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48SE-N-UNV-L735-ED4-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	42342.7	42342.7	42342.7	42342.7	42342.7
2.5°	42070.8	42338.7	42022.5	42258.1	42445.5
5°	41956.0	42111.1	41585.4	41615.6	41567.2
7.5°	41754.6	41718.3	40834.0	40447.3	40278.1
10°	41450.4	41210.7	39792.6	38984.9	38396.7
12.5°	41057.6	40521.8	38493.4	35925.2	34329.8
15°	40598.4	39655.7	36463.0	31008.2	28661.6
17.5°	40050.5	38715.0	33143.4	25988.6	23893.7
20°	39403.9	37665.5	28917.4	22111.0	20070.6
22.5°	38682.8	36388.5	24812.2	18376.5	15465.8
25°	37907.2	34722.6	21565.2	13566.4	9535.7
27.5°	37010.9	32581.4	18519.5	7990.8	4866.6
30°	36062.1	30003.1	14976.4	4298.5	2955.0
32.5°	35105.3	27080.3	10597.3	2685.1	1675.9
35°	34029.7	23990.4	6284.6	1478.5	719.1
37.5°	32907.7	21158.3	3714.4	672.8	461.3
40°	31656.8	18569.9	2387.0	447.2	453.2
42.5°	30448.3	16156.8	1343.5	441.1	449.2
45°	29090.6	13516.0	618.4	447.2	445.2
47.5°	27686.7	10778.6	400.8	451.2	451.2
50°	26238.4	7706.7	398.8	461.3	449.2
52.5°	24709.5	4808.2	414.9	459.3	368.6
55°	23075.9	2783.8	423.0	382.7	171.2
57.5°	21383.9	1641.7	427.0	219.6	96.7
60°	19619.4	908.5	410.9	163.2	90.6
62.5°	17800.4	433.1	324.3	153.1	88.6
65°	15900.9	294.1	221.6	141.0	90.6
67.5°	13928.9	227.6	175.2	132.9	92.7
70°	11954.9	169.2	159.1	132.9	90.6
72.5°	9948.7	114.8	132.9	135.0	90.6
75°	7914.2	68.5	90.6	118.8	94.7
77.5°	5897.9	42.3	70.5	122.9	114.8
80°	3970.2	36.3	74.5	114.8	90.6
82.5°	2330.6	32.2	72.5	88.6	72.5
85°	987.0	26.2	48.3	72.5	60.4
87.5°	185.3	22.2	38.3	58.4	52.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)