

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-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-LD5-48HE-W-FLI-UNV-L740-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

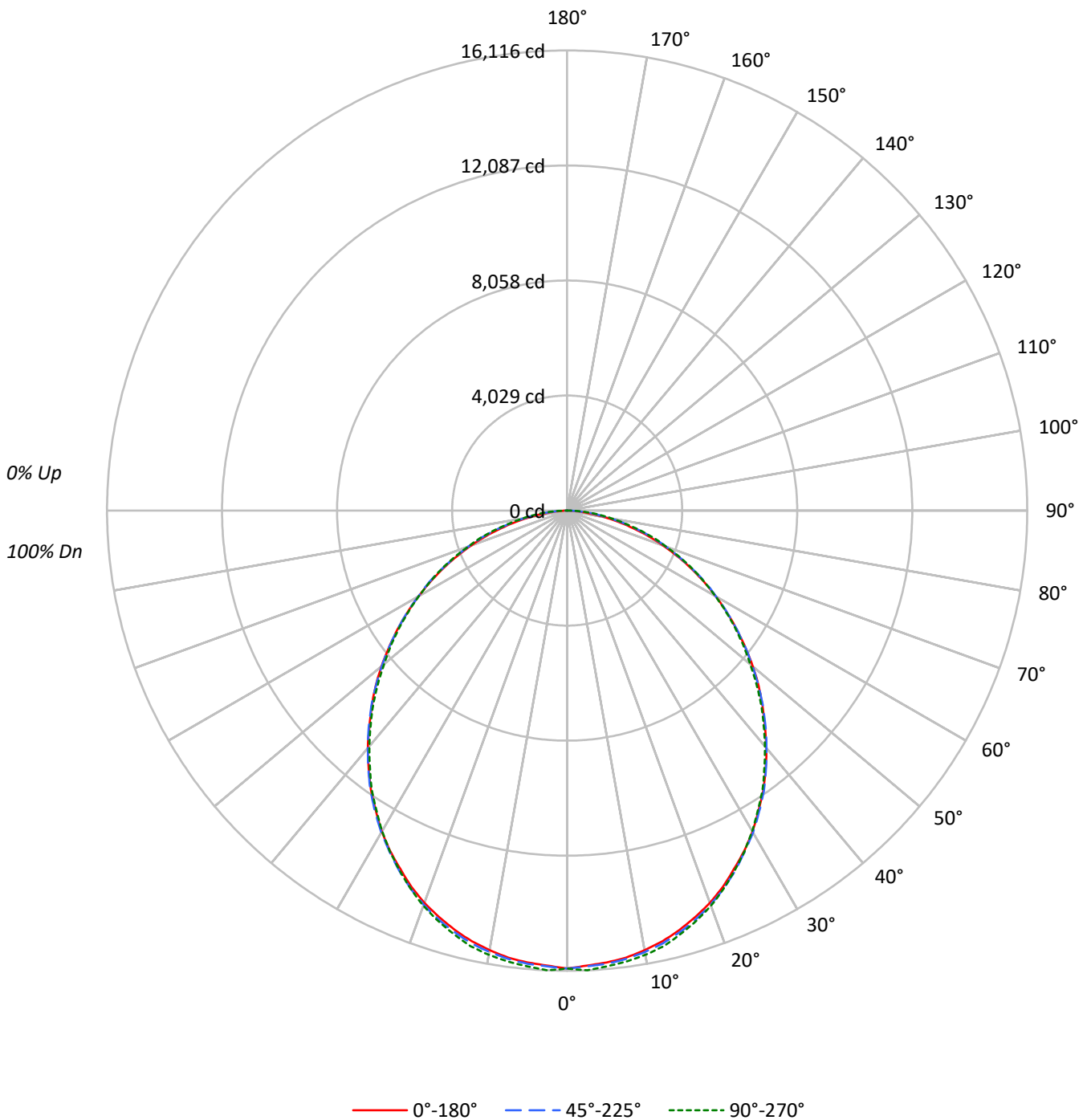
Lumens per Lamp: N/A
Luminaire Lumens: 41894.0 lumens
Efficiency: N/A
Efficacy: 146.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	21579	21579	21579
5°	21456	21517	21640
10°	21359	21445	21585
15°	21171	21286	21390
20°	20931	21032	21093
25°	20544	20661	20630
30°	20165	20219	20137
35°	19666	19716	19590
40°	19075	19075	18928
45°	18408	18458	18270
50°	17775	17745	17523
55°	17006	17008	16855
60°	16182	16201	16138
65°	15252	15404	15443
70°	14087	14472	14488
75°	12450	13255	13462
80°	10210	11609	12265
85°	7086	9746	11021



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1516.8	3.6
10°-20°	4315.0	10.3
20°-30°	6412.4	15.3
30°-40°	7497.8	17.9
40°-50°	7475.4	17.8
50°-60°	6485.9	15.5
60°-70°	4790.6	11.4
70°-80°	2682.2	6.4
80°-90°	715.7	1.7
90°-100°	2.1	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°	12244.2	29.2
0°-40°	19742.0	47.1
0°-60°	33703.4	80.4
0°-90°	41891.9	100.0
90°-120°	2.1	0.0
90°-150°	2.1	0.0
90°-180°	2.0	0.0
0°-180°	41894.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16038	16038	16038	16038	16038	
5°	15886	15986	15931	16002	16022	###
15°	15199	15305	15281	15355	15356	4286
25°	13838	13949	13917	13947	13896	6380
35°	11973	12078	12003	12001	11927	7479
45°	9674	9777	9700	9661	9602	7468
55°	7250	7300	7251	7238	7185	6483
65°	4791	4838	4838	4863	4851	4738
75°	2395	2466	2550	2568	2590	2550
85°	459	555	631	687	714	557
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-LD5-48HE-W-FLI-UNV-L740-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	16038.2	16038.2	16038.2	16038.2	16038.2
2.5°	15950.5	16045.3	15979.1	16042.3	16115.7
5°	15886.2	15986.2	15931.1	16001.5	16021.9
7.5°	15792.4	15889.3	15836.3	15906.6	15928.1
10°	15633.3	15738.4	15696.5	15776.1	15798.5
12.5°	15447.7	15546.6	15519.1	15611.9	15627.2
15°	15198.8	15304.9	15281.4	15354.9	15355.9
17.5°	14923.4	15023.4	15006.0	15063.2	15061.1
20°	14618.5	14725.6	14688.9	14751.1	14731.7
22.5°	14257.4	14371.7	14325.8	14377.8	14328.8
25°	13838.2	13949.4	13916.8	13947.4	13896.4
27.5°	13432.3	13534.3	13467.0	13503.7	13449.7
30°	12979.5	13066.2	13014.2	13026.4	12961.1
32.5°	12470.5	12573.5	12510.3	12508.3	12438.9
35°	11972.8	12077.9	12003.4	12001.4	11926.9
37.5°	11422.1	11520.0	11432.3	11437.4	11350.7
40°	10860.1	10944.7	10860.1	10856.0	10776.5
42.5°	10250.2	10362.4	10284.9	10294.0	10188.0
45°	9673.9	9776.9	9700.4	9660.7	9601.5
47.5°	9099.7	9144.6	9081.3	9071.1	8987.5
50°	8491.8	8525.5	8477.6	8465.3	8371.5
52.5°	7863.6	7921.7	7860.5	7844.2	7782.0
55°	7249.6	7299.6	7250.6	7238.4	7185.3
57.5°	6631.5	6696.8	6646.8	6634.6	6591.7
60°	6013.4	6032.8	6020.6	6038.9	5997.1
62.5°	5399.4	5444.3	5458.6	5453.5	5420.9
65°	4790.6	4837.5	4838.5	4863.0	4850.7
67.5°	4167.4	4228.6	4245.9	4271.4	4282.6
70°	3580.9	3627.8	3678.8	3694.1	3682.9
72.5°	2990.4	3065.9	3123.0	3136.2	3184.2
75°	2394.8	2466.2	2549.8	2568.2	2589.6
77.5°	1842.0	1936.8	2012.3	2036.8	2063.3
80°	1317.7	1422.8	1498.3	1531.9	1582.9
82.5°	864.9	972.0	1048.5	1082.1	1144.3
85°	459.0	554.8	631.3	687.4	713.9
87.5°	135.6	217.2	261.1	277.4	300.9
90°	0.0	10.2	12.2	27.5	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)