

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-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 (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-L735-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

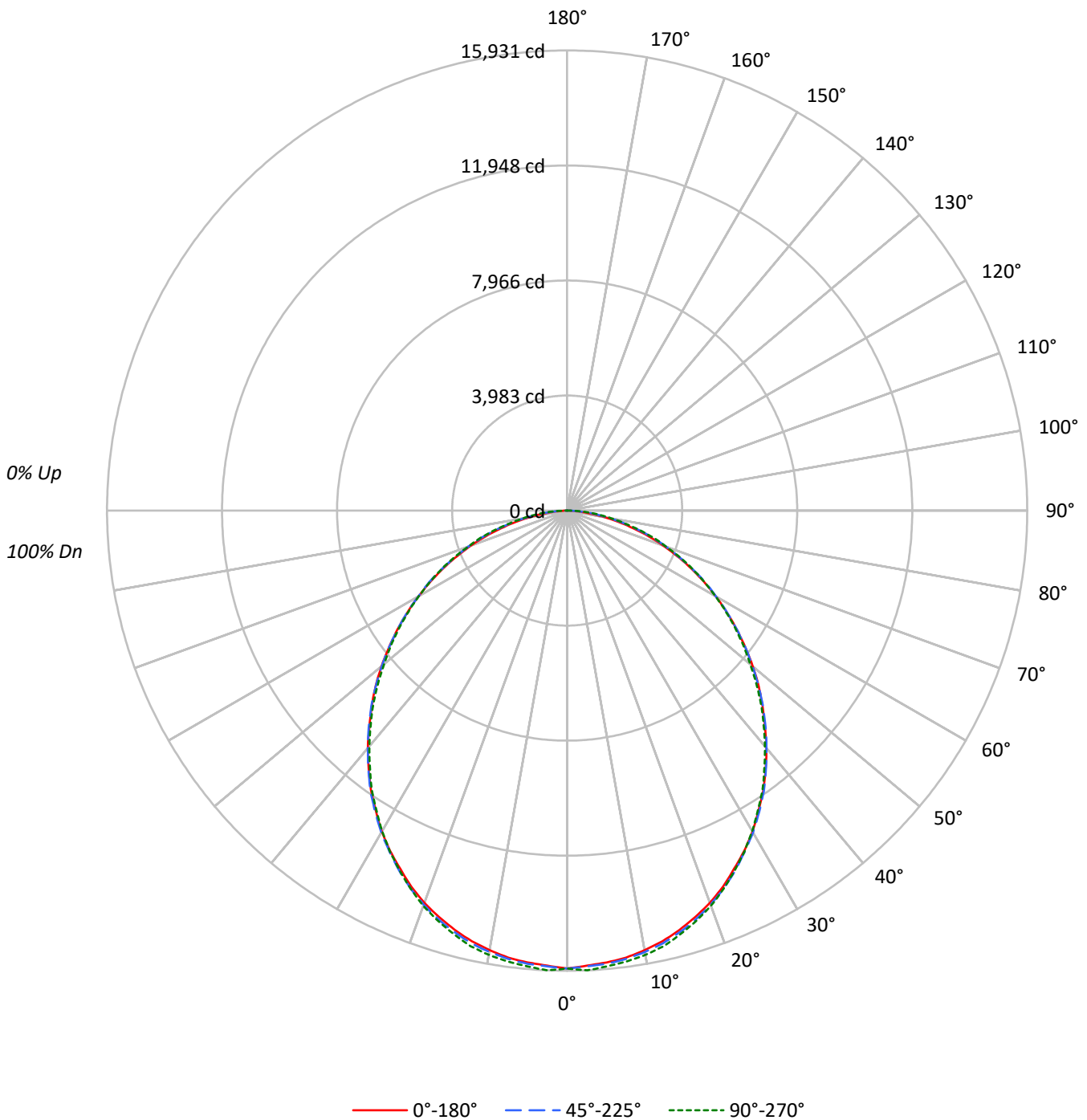
Lumens per Lamp: N/A
Luminaire Lumens: 41414.0 lumens
Efficiency: N/A
Efficacy: 144.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	21332	21332	21332
5°	21211	21271	21392
10°	21114	21200	21337
15°	20929	21042	21145
20°	20692	20791	20852
25°	20309	20424	20394
30°	19934	19988	19906
35°	19440	19490	19366
40°	18856	18856	18711
45°	18197	18247	18061
50°	17571	17542	17323
55°	16811	16813	16662
60°	15997	16016	15953
65°	15077	15228	15266
70°	13926	14307	14322
75°	12307	13104	13308
80°	10093	11476	12125
85°	7004	9635	10896



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1499.4	3.6
10°-20°	4265.6	10.3
20°-30°	6338.9	15.3
30°-40°	7411.9	17.9
40°-50°	7389.8	17.8
50°-60°	6411.6	15.5
60°-70°	4735.7	11.4
70°-80°	2651.5	6.4
80°-90°	707.5	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°	12103.9	29.2
0°-40°	19515.8	47.1
0°-60°	33317.2	80.4
0°-90°	41411.9	100.0
90°-120°	2.1	0.0
90°-150°	2.1	0.0
90°-180°	2.0	0.0
0°-180°	41414.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15854	15854	15854	15854	15854	
5°	15704	15803	15749	15818	15838	###
15°	15025	15130	15106	15179	15180	4237
25°	13680	13790	13757	13788	13737	6307
35°	11836	11940	11866	11864	11790	7393
45°	9563	9665	9589	9550	9492	7382
55°	7166	7216	7168	7155	7103	6408
65°	4736	4782	4783	4807	4795	4684
75°	2367	2438	2521	2539	2560	2521
85°	454	548	624	680	706	551
90°	0	10	12	27	25	18
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-L735-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15854.4	15854.4	15854.4	15854.4	15854.4
2.5°	15767.7	15861.5	15796.0	15858.5	15931.1
5°	15704.2	15803.0	15748.6	15818.2	15838.3
7.5°	15611.5	15707.2	15654.8	15724.4	15745.6
10°	15454.2	15558.0	15516.7	15595.3	15617.5
12.5°	15270.7	15368.5	15341.3	15433.0	15448.1
15°	15024.7	15129.5	15106.3	15178.9	15179.9
17.5°	14752.5	14851.3	14834.1	14890.6	14888.6
20°	14451.0	14556.9	14520.6	14582.1	14562.9
22.5°	14094.1	14207.0	14161.6	14213.0	14164.7
25°	13679.7	13789.6	13757.3	13787.6	13737.2
27.5°	13278.4	13379.2	13312.7	13349.0	13295.6
30°	12830.8	12916.5	12865.0	12877.1	12812.6
32.5°	12327.7	12429.5	12367.0	12365.0	12296.4
35°	11835.6	11939.5	11865.9	11863.9	11790.3
37.5°	11291.2	11388.0	11301.3	11306.3	11220.6
40°	10735.7	10819.3	10735.7	10731.6	10653.0
42.5°	10132.7	10243.6	10167.0	10176.1	10071.2
45°	9563.1	9664.9	9589.3	9550.0	9491.5
47.5°	8995.4	9039.8	8977.3	8967.2	8884.5
50°	8394.5	8427.8	8380.4	8368.3	8275.6
52.5°	7773.5	7830.9	7770.4	7754.3	7692.8
55°	7166.5	7215.9	7167.5	7155.4	7103.0
57.5°	6555.5	6620.1	6570.6	6558.5	6516.2
60°	5944.5	5963.7	5951.6	5969.7	5928.4
62.5°	5337.6	5381.9	5396.1	5391.0	5358.8
65°	4735.7	4782.0	4783.1	4807.3	4795.2
67.5°	4119.6	4180.1	4197.3	4222.5	4233.6
70°	3539.9	3586.3	3636.7	3651.8	3640.7
72.5°	2956.1	3030.7	3087.2	3100.3	3147.7
75°	2367.3	2437.9	2520.6	2538.7	2559.9
77.5°	1820.9	1914.6	1989.2	2013.4	2039.7
80°	1302.6	1406.5	1481.1	1514.4	1564.8
82.5°	855.0	960.8	1036.5	1069.7	1131.2
85°	453.7	548.5	624.1	679.5	705.8
87.5°	134.1	214.8	258.1	274.2	297.4
90°	0.0	10.1	12.1	27.2	25.2
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)