

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-UNV-L835-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-LD5-48HE-W-UNV-L835-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

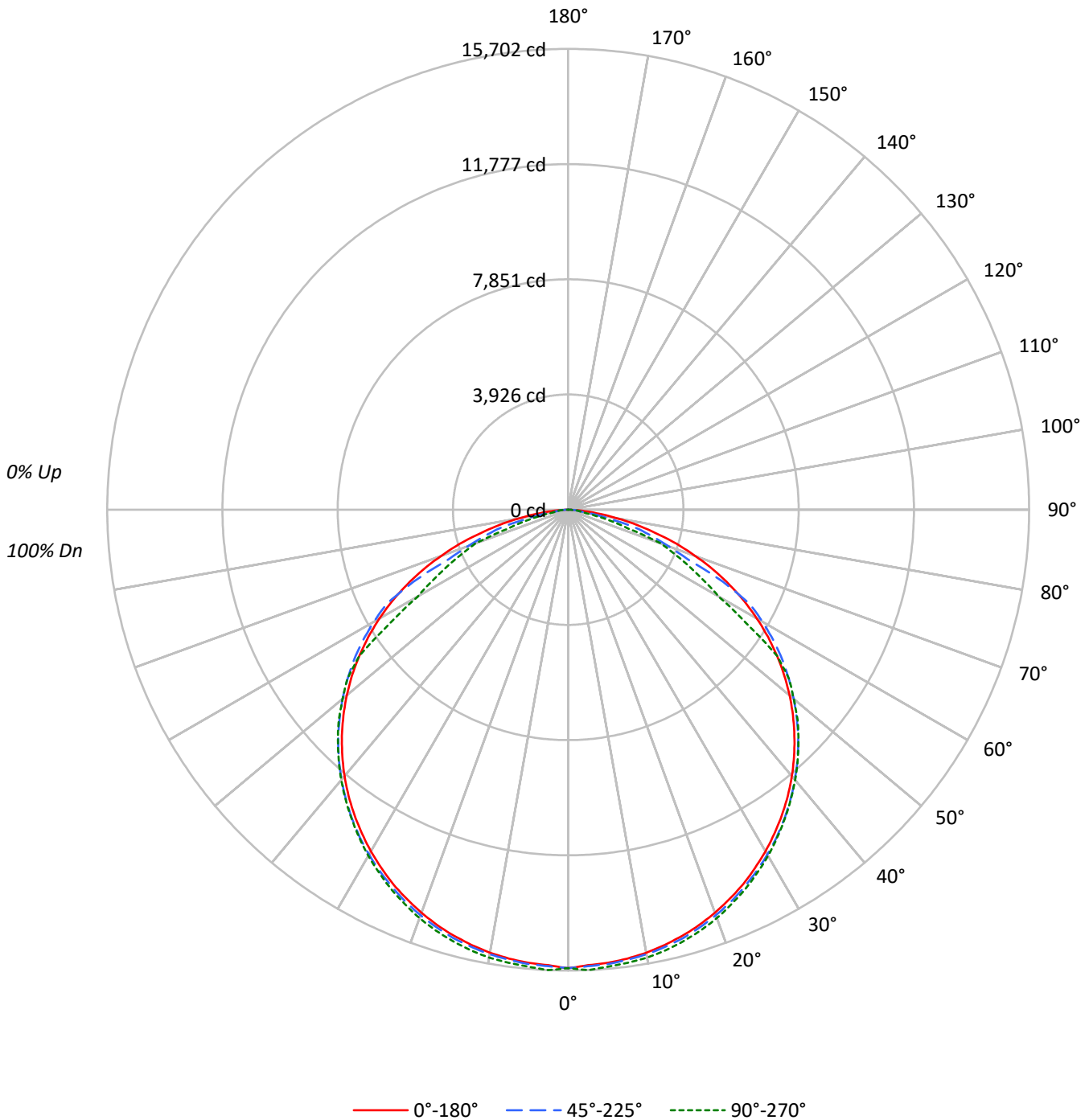
Lumens per Lamp: N/A
Luminaire Lumens: 45091.0 lumens
Efficiency: N/A
Efficacy: 157.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	21015	21015	21015
5°	20929	20987	21106
10°	20940	21015	21173
15°	20935	21047	21193
20°	20924	21058	21206
25°	20917	21067	21184
30°	20880	21084	21162
35°	20854	21094	21121
40°	20816	21092	21125
45°	20738	21083	21108
50°	20614	20994	20990
55°	20373	20883	20364
60°	19995	20574	15934
65°	19328	18517	14356
70°	18107	14247	13230
75°	16033	12421	8245
80°	13203	7313	3685
85°	8701	4480	4827



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1482.2	3.3
10°-20°	4276.2	9.5
20°-30°	6556.0	14.5
30°-40°	8040.2	17.8
40°-50°	8537.4	18.9
50°-60°	7797.8	17.3
60°-70°	5430.4	12.0
70°-80°	2532.8	5.6
80°-90°	438.1	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°	12314.3	27.3
0°-40°	20354.5	45.1
0°-60°	36689.7	81.4
0°-90°	45091.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	45091.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15619	15619	15619	15619	15619	
5°	15496	15604	15539	15614	15627	###
15°	15029	15134	15110	15202	15215	4244
25°	14089	14213	14190	14295	14269	6493
35°	12696	12842	12842	12928	12859	7945
45°	10898	11063	11080	11151	11093	8405
55°	8685	8859	8902	8917	8681	7756
65°	6071	6258	5816	4625	4509	5990
75°	3084	3279	2389	1655	1586	3297
85°	564	371	290	311	313	728
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15619.1	15619.1	15619.1	15619.1	15619.1
2.5°	15536.7	15636.0	15570.4	15641.6	15701.5
5°	15495.5	15604.1	15538.6	15613.5	15626.6
7.5°	15428.1	15531.1	15471.2	15553.6	15574.2
10°	15327.0	15428.1	15381.3	15478.7	15497.4
12.5°	15190.3	15293.3	15257.7	15364.4	15377.6
15°	15029.3	15134.1	15109.8	15201.5	15214.6
17.5°	14840.1	14948.7	14920.6	15018.0	15027.4
20°	14613.5	14731.5	14707.2	14821.4	14810.2
22.5°	14358.9	14484.3	14465.6	14579.8	14546.1
25°	14089.2	14212.8	14190.3	14295.2	14269.0
27.5°	13772.8	13909.5	13888.9	13990.0	13948.8
30°	13439.4	13578.0	13570.5	13662.3	13621.1
32.5°	13079.9	13227.8	13220.3	13310.2	13246.6
35°	12696.0	12842.1	12842.1	12928.2	12858.9
37.5°	12289.7	12437.6	12439.5	12521.9	12456.3
40°	11851.5	11999.4	12008.8	12087.4	12027.5
42.5°	11390.8	11551.9	11559.4	11630.5	11574.4
45°	10898.4	11063.1	11080.0	11151.2	11093.1
47.5°	10383.4	10550.1	10565.0	10641.8	10600.6
50°	9847.8	10008.9	10029.5	10093.2	10027.6
52.5°	9282.3	9447.1	9475.2	9514.5	9484.6
55°	8685.0	8859.1	8902.2	8917.2	8681.2
57.5°	8067.0	8244.9	8286.1	7941.6	7183.2
60°	7430.4	7606.4	7645.7	6460.4	5921.1
62.5°	6767.5	6939.7	6982.8	5353.7	5181.4
65°	6070.9	6258.1	5816.2	4625.2	4509.2
67.5°	5355.6	5548.4	4398.7	3964.2	3894.9
70°	4602.8	4797.5	3621.6	3380.0	3363.1
72.5°	3880.0	4024.2	2971.8	2561.7	2157.2
75°	3084.1	3278.9	2389.4	1655.4	1586.1
77.5°	2391.3	2067.3	1441.9	1213.4	956.9
80°	1704.0	1382.0	943.8	503.7	475.6
82.5°	1080.5	902.6	370.8	380.1	397.0
85°	563.6	370.8	290.2	310.8	312.7
87.5°	181.6	159.2	174.1	172.3	170.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)