

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-L750-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-L750-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

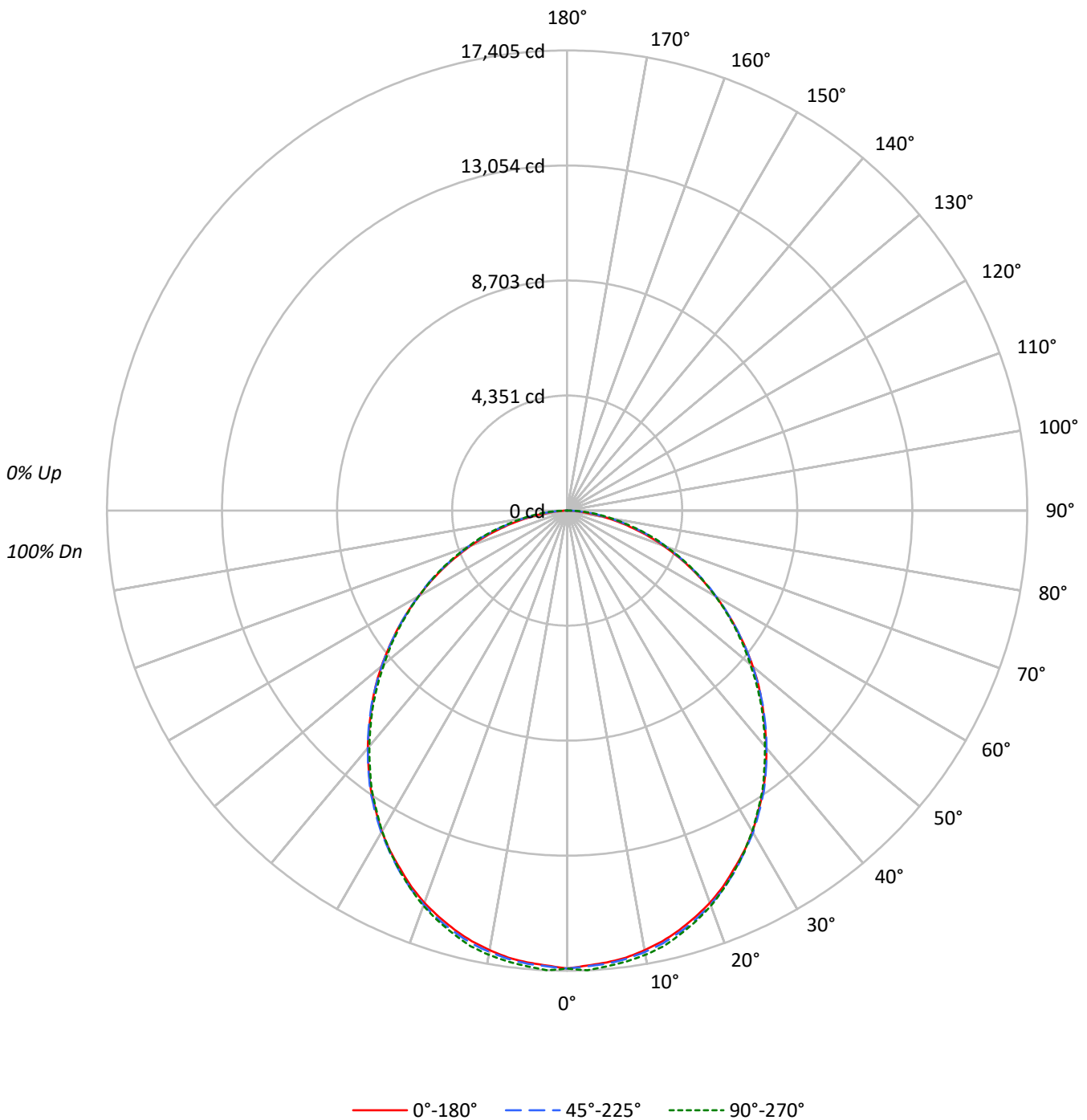
Lumens per Lamp: N/A
Luminaire Lumens: 45245.0 lumens
Efficiency: N/A
Efficacy: 158.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60					60			
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51					51			
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45					45			
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25					25			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23305	23305	23305
5°	23173	23238	23370
10°	23067	23161	23311
15°	22865	22989	23101
20°	22606	22714	22781
25°	22187	22313	22280
30°	21778	21837	21748
35°	21239	21293	21157
40°	20601	20601	20442
45°	19880	19935	19731
50°	19197	19165	18925
55°	18366	18369	18204
60°	17476	17497	17429
65°	16472	16636	16678
70°	15214	15630	15647
75°	13445	14315	14539
80°	11027	12538	13246
85°	7652	10525	11903



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1638.1	3.6
10°-20°	4660.1	10.3
20°-30°	6925.3	15.3
30°-40°	8097.5	17.9
40°-50°	8073.4	17.8
50°-60°	7004.7	15.5
60°-70°	5173.8	11.4
70°-80°	2896.8	6.4
80°-90°	772.9	1.7
90°-100°	2.3	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°	13223.6	29.2
0°-40°	21321.1	47.1
0°-60°	36399.2	80.4
0°-90°	45242.6	100.0
90°-120°	2.3	0.0
90°-150°	2.3	0.0
90°-180°	2.0	0.0
0°-180°	45245.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17321	17321	17321	17321	17321	
5°	17157	17265	17205	17281	17303	###
15°	16414	16529	16504	16583	16584	4629
25°	14945	15065	15030	15063	15008	6890
35°	12930	13044	12964	12961	12881	8077
45°	10448	10559	10476	10433	10370	8065
55°	7830	7883	7831	7817	7760	7001
65°	5174	5224	5226	5252	5239	5117
75°	2586	2663	2754	2774	2797	2754
85°	496	599	682	742	771	602
90°	0	11	13	30	28	20
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-L750-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17321.1	17321.1	17321.1	17321.1	17321.1
2.5°	17226.3	17328.8	17257.2	17325.5	17404.8
5°	17156.9	17264.9	17205.4	17281.4	17303.4
7.5°	17055.6	17160.2	17103.0	17179.0	17202.1
10°	16883.8	16997.2	16952.1	17038.0	17062.2
12.5°	16683.3	16790.1	16760.4	16860.6	16877.2
15°	16414.5	16529.1	16503.8	16583.1	16584.2
17.5°	16117.1	16225.1	16206.3	16268.0	16265.8
20°	15787.8	15903.4	15863.8	15931.0	15910.0
22.5°	15397.8	15521.2	15471.6	15527.8	15475.0
25°	14945.1	15065.2	15029.9	15063.0	15007.9
27.5°	14506.7	14616.9	14544.2	14583.8	14525.5
30°	14017.7	14111.3	14055.1	14068.3	13997.8
32.5°	13468.0	13579.3	13511.0	13508.8	13433.9
35°	12930.5	13043.9	12963.5	12961.3	12880.9
37.5°	12335.7	12441.4	12346.7	12352.2	12258.6
40°	11728.8	11820.2	11728.8	11724.4	11638.4
42.5°	11070.1	11191.2	11107.5	11117.4	11002.9
45°	10447.7	10559.0	10476.4	10433.4	10369.5
47.5°	9827.6	9876.0	9807.7	9796.7	9706.4
50°	9171.1	9207.4	9155.7	9142.4	9041.1
52.5°	8492.6	8555.3	8489.2	8471.6	8404.4
55°	7829.5	7883.4	7830.6	7817.3	7760.1
57.5°	7161.9	7232.4	7178.5	7165.2	7119.0
60°	6494.4	6515.4	6502.1	6522.0	6476.8
62.5°	5831.3	5879.8	5895.2	5889.7	5854.5
65°	5173.7	5224.4	5225.5	5251.9	5238.7
67.5°	4500.7	4566.8	4585.5	4613.1	4625.2
70°	3867.4	3918.0	3973.1	3989.6	3977.5
72.5°	3229.6	3311.1	3372.8	3387.1	3438.9
75°	2586.3	2663.4	2753.7	2773.6	2796.7
77.5°	1989.3	2091.7	2173.3	2199.7	2228.3
80°	1423.1	1536.6	1618.1	1654.5	1709.5
82.5°	934.1	1049.7	1132.3	1168.7	1235.9
85°	495.7	599.2	681.8	742.4	771.0
87.5°	146.5	234.6	282.0	299.6	324.9
90°	0.0	11.0	13.2	29.7	27.5
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)