

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-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-LD5-48SE-W-FLI-UNV-L735-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

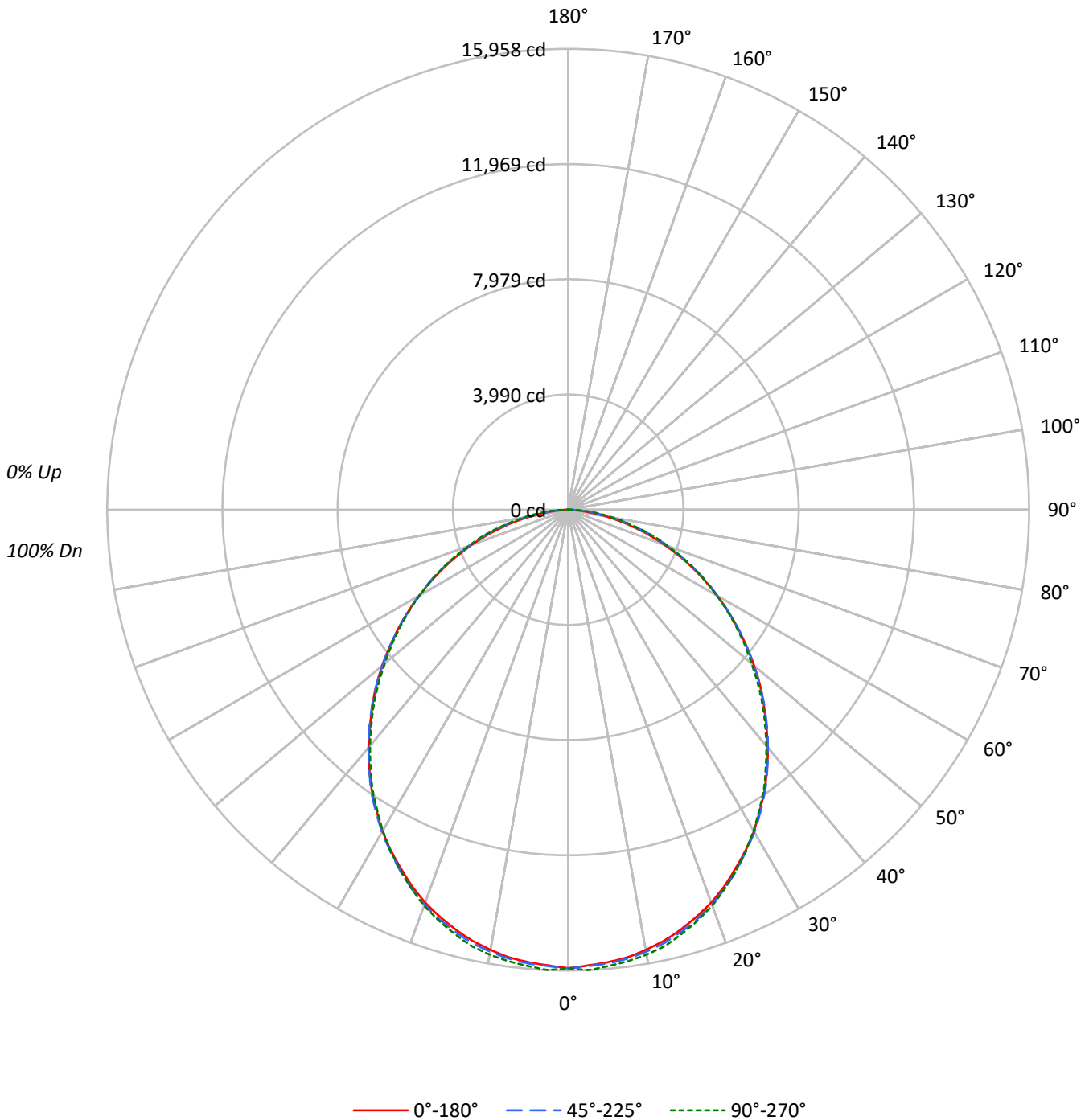
Lumens per Lamp: N/A
Luminaire Lumens: 41485.0 lumens
Efficiency: N/A
Efficacy: 138.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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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°	21369	21369	21369
5°	21247	21307	21428
10°	21150	21236	21374
15°	20965	21078	21181
20°	20727	20827	20888
25°	20343	20459	20429
30°	19969	20022	19940
35°	19474	19524	19399
40°	18889	18889	18743
45°	18228	18278	18092
50°	17602	17572	17352
55°	16840	16842	16691
60°	16024	16043	15981
65°	15103	15254	15293
70°	13950	14331	14347
75°	12328	13126	13331
80°	10111	11495	12146
85°	7016	9652	10914



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1502.0	3.6
10°-20°	4272.9	10.3
20°-30°	6349.8	15.3
30°-40°	7424.6	17.9
40°-50°	7402.5	17.8
50°-60°	6422.6	15.5
60°-70°	4743.9	11.4
70°-80°	2656.0	6.4
80°-90°	708.7	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°	12124.7	29.2
0°-40°	19549.2	47.1
0°-60°	33374.3	80.4
0°-90°	41482.9	100.0
90°-120°	2.1	0.0
90°-150°	2.1	0.0
90°-180°	2.0	0.0
0°-180°	41485.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15882	15882	15882	15882	15882	
5°	15731	15830	15776	15845	15866	###
15°	15050	15156	15132	15205	15206	4245
25°	13703	13813	13781	13811	13761	6318
35°	11856	11960	11886	11884	11810	7406
45°	9580	9682	9606	9566	9508	7395
55°	7179	7228	7180	7168	7115	6419
65°	4744	4790	4791	4816	4803	4692
75°	2371	2442	2525	2543	2564	2526
85°	454	549	625	681	707	552
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-LD5-48SE-W-FLI-UNV-L735-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15881.6	15881.6	15881.6	15881.6	15881.6
2.5°	15794.8	15888.7	15823.1	15885.7	15958.4
5°	15731.1	15830.1	15775.6	15845.3	15865.5
7.5°	15638.2	15734.2	15681.7	15751.3	15772.6
10°	15480.7	15584.7	15543.3	15622.1	15644.3
12.5°	15296.9	15394.8	15367.6	15459.5	15474.6
15°	15050.4	15155.5	15132.2	15205.0	15206.0
17.5°	14777.7	14876.7	14859.5	14916.1	14914.1
20°	14475.8	14581.8	14545.5	14607.1	14587.9
22.5°	14118.2	14231.4	14185.9	14237.4	14188.9
25°	13703.1	13813.2	13780.9	13811.2	13760.7
27.5°	13301.2	13402.2	13335.5	13371.9	13318.4
30°	12852.8	12938.6	12887.1	12899.2	12834.6
32.5°	12348.8	12450.8	12388.2	12386.2	12317.5
35°	11855.9	11960.0	11886.2	11884.2	11810.5
37.5°	11310.5	11407.5	11320.6	11325.7	11239.9
40°	10754.1	10837.9	10754.1	10750.0	10671.2
42.5°	10150.1	10261.2	10184.4	10193.5	10088.5
45°	9579.5	9681.5	9605.7	9566.3	9507.8
47.5°	9010.9	9055.3	8992.7	8982.6	8899.8
50°	8408.9	8442.3	8394.8	8382.7	8289.8
52.5°	7786.8	7844.4	7783.8	7767.6	7706.0
55°	7178.8	7228.3	7179.8	7167.7	7115.2
57.5°	6566.8	6631.4	6581.9	6569.8	6527.4
60°	5954.7	5973.9	5961.8	5980.0	5938.6
62.5°	5346.7	5391.2	5405.3	5400.3	5367.9
65°	4743.8	4790.2	4791.3	4815.5	4803.4
67.5°	4126.7	4187.3	4204.5	4229.7	4240.8
70°	3546.0	3592.4	3642.9	3658.1	3647.0
72.5°	2961.2	3035.9	3092.5	3105.6	3153.1
75°	2371.4	2442.1	2524.9	2543.1	2564.3
77.5°	1824.0	1917.9	1992.7	2016.9	2043.2
80°	1304.9	1408.9	1483.6	1517.0	1567.5
82.5°	856.4	962.5	1038.2	1071.6	1133.2
85°	454.5	549.4	625.2	680.7	707.0
87.5°	134.3	215.1	258.5	274.7	297.9
90°	0.0	10.1	12.1	27.3	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)