

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-LD5-24HE-W-FLI-UNV-L735-ED2-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-LD5-24HE-W-FLI-UNV-L735-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

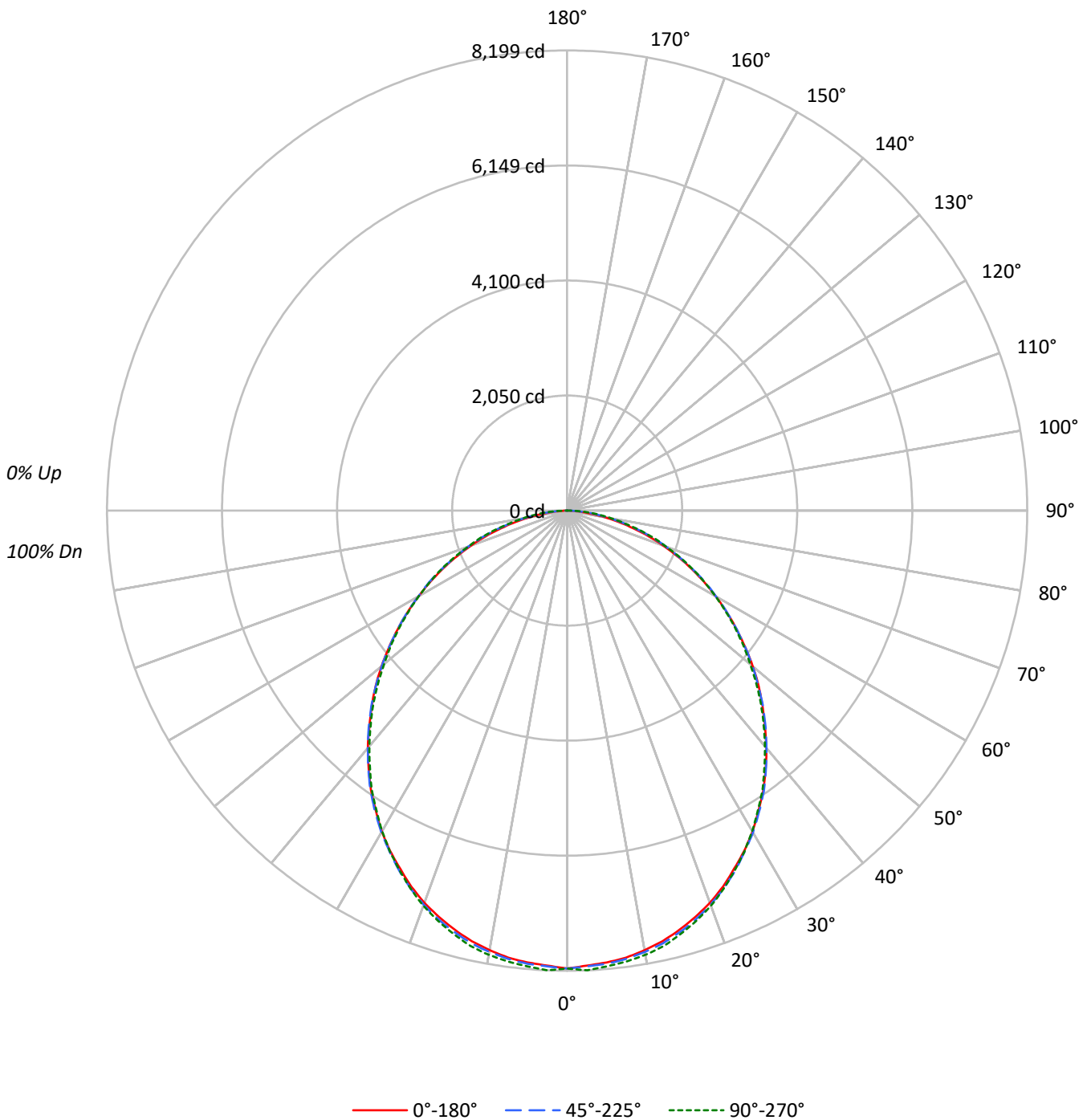
Lumens per Lamp: N/A
Luminaire Lumens: 21313.0 lumens
Efficiency: N/A
Efficacy: 145.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 146.3
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°	10978	10978	10978
5°	10916	10946	11009
10°	10866	10910	10981
15°	10771	10829	10882
20°	10649	10700	10731
25°	10451	10511	10495
30°	10259	10286	10244
35°	10005	10030	9966
40°	9704	9704	9629
45°	9365	9390	9294
50°	9043	9028	8915
55°	8652	8653	8575
60°	8233	8242	8210
65°	7759	7837	7856
70°	7166	7363	7371
75°	6333	6744	6849
80°	5195	5906	6240
85°	3605	4959	5607



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	771.7	3.6
10°-20°	2195.2	10.3
20°-30°	3262.2	15.3
30°-40°	3814.4	17.9
40°-50°	3803.0	17.8
50°-60°	3299.6	15.5
60°-70°	2437.2	11.4
70°-80°	1364.5	6.4
80°-90°	364.1	1.7
90°-100°	1.1	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°	6229.1	29.2
0°-40°	10043.4	47.1
0°-60°	17146.1	80.4
0°-90°	21311.9	100.0
90°-120°	1.1	0.0
90°-150°	1.1	0.0
90°-180°	1.0	0.0
0°-180°	21313.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8159	8159	8159	8159	8159	
5°	8082	8133	8105	8140	8151	768
15°	7732	7786	7774	7812	7812	2181
25°	7040	7097	7080	7096	7070	3246
35°	6091	6144	6107	6106	6068	3805
45°	4922	4974	4935	4915	4885	3799
55°	3688	3714	3689	3682	3655	3298
65°	2437	2461	2462	2474	2468	2410
75°	1218	1255	1297	1306	1317	1297
85°	234	282	321	350	363	284
90°	0	5	6	14	13	9
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-LD5-24HE-W-FLI-UNV-L735-ED2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8159.2	8159.2	8159.2	8159.2	8159.2
2.5°	8114.6	8162.9	8129.1	8161.3	8198.7
5°	8081.9	8132.8	8104.7	8140.5	8150.9
7.5°	8034.2	8083.5	8056.5	8092.3	8103.2
10°	7953.2	8006.7	7985.4	8025.9	8037.3
12.5°	7858.8	7909.1	7895.1	7942.3	7950.1
15°	7732.2	7786.2	7774.2	7811.6	7812.1
17.5°	7592.1	7642.9	7634.1	7663.2	7662.1
20°	7437.0	7491.4	7472.8	7504.4	7494.5
22.5°	7253.3	7311.4	7288.0	7314.5	7289.6
25°	7040.0	7096.6	7080.0	7095.5	7069.6
27.5°	6833.5	6885.4	6851.1	6869.8	6842.3
30°	6603.1	6647.2	6620.8	6627.0	6593.8
32.5°	6344.2	6396.6	6364.4	6363.4	6328.1
35°	6091.0	6144.4	6106.6	6105.5	6067.7
37.5°	5810.8	5860.6	5816.0	5818.6	5774.5
40°	5524.9	5568.0	5524.9	5522.8	5482.4
42.5°	5214.6	5271.7	5232.3	5236.9	5183.0
45°	4921.5	4973.9	4935.0	4914.7	4884.6
47.5°	4629.4	4652.2	4620.0	4614.8	4572.3
50°	4320.1	4337.2	4312.8	4306.6	4258.9
52.5°	4000.5	4030.1	3998.9	3990.6	3959.0
55°	3688.1	3713.5	3688.6	3682.4	3655.4
57.5°	3373.7	3406.9	3381.5	3375.2	3353.5
60°	3059.3	3069.1	3062.9	3072.2	3051.0
62.5°	2746.9	2769.7	2777.0	2774.4	2757.8
65°	2437.1	2461.0	2461.5	2474.0	2467.7
67.5°	2120.1	2151.2	2160.1	2173.0	2178.7
70°	1821.7	1845.6	1871.6	1879.3	1873.6
72.5°	1521.3	1559.7	1588.8	1595.5	1619.9
75°	1218.3	1254.6	1297.2	1306.5	1317.4
77.5°	937.1	985.3	1023.7	1036.2	1049.7
80°	670.4	723.8	762.2	779.3	805.3
82.5°	440.0	494.5	533.4	550.5	582.2
85°	233.5	282.3	321.2	349.7	363.2
87.5°	69.0	110.5	132.8	141.1	153.1
90°	0.0	5.2	6.2	14.0	13.0
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)