

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-CLWG-UNV-L840-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 (P33385)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24HE-W-CLWG-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
WIDE DISTRIBUTION WITH CLEAR LENS, WIREGUARD & DOORFRAME
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

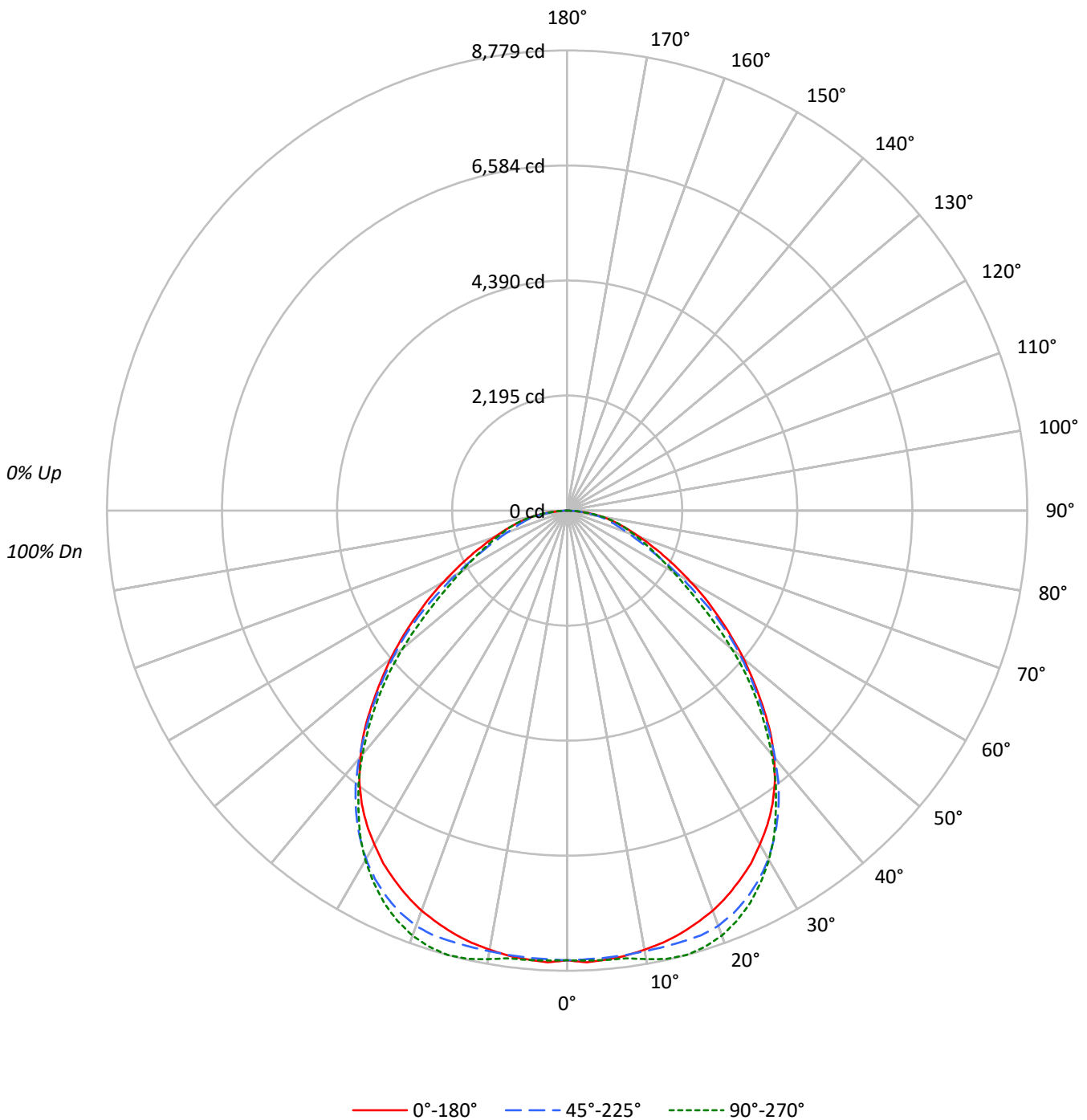
Lumens per Lamp: N/A
Luminaire Lumens: 21398.0 lumens
Efficiency: N/A
Efficacy: 146.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.3 / 1.33
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 146.3
Input Voltage (V): NR
Input Current (A_{in}): 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



TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-24HE-W-CLWG-UNV-L840-ED2-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-W-CLWG-UNV-L840-ED2-U

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	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	92	83	75	69	90	81	74	68	78	72	67	76	70	66	73	69	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	67	58	52	77	65	57	52	63	56	51	61	55	50	60	54	50	48
6	73	60	52	46	71	59	51	45	58	50	45	56	50	45	54	49	44	42
7	68	55	46	41	66	54	46	40	53	45	40	51	45	40	50	44	40	38
8	63	50	42	36	62	50	42	36	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	43	37	33	42	37	32	31
10	56	43	35	30	54	42	35	30	41	34	30	40	34	30	39	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11544	11544	11544
5°	11612	11564	11621
10°	11623	11662	11870
15°	11637	11856	12229
20°	11629	12073	12355
25°	11558	12084	12261
30°	11425	11924	11962
35°	11221	11538	11399
40°	10779	10845	10674
45°	10043	9938	9736
50°	9195	9047	8584
55°	8260	7953	7257
60°	7325	6581	6265
65°	6454	5467	5686
70°	5772	4745	5415
75°	5407	4613	5476
80°	5264	4664	5213
85°	4202	3690	3827



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-W-CLWG-UNV-L840-ED2-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	817.3	3.8
10°-20°	2407.5	11.3
20°-30°	3703.7	17.3
30°-40°	4322.4	20.2
40°-50°	4016.6	18.8
50°-60°	2977.3	13.9
60°-70°	1820.1	8.5
70°-80°	1036.7	4.8
80°-90°	296.5	1.4
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°	6928.5	32.4
0°-40°	11250.9	52.6
0°-60°	18244.8	85.3
0°-90°	21398.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21398.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8580	8580	8580	8580	8580	
5°	8598	8558	8562	8556	8604	818
15°	8354	8350	8511	8680	8779	2358
25°	7786	7845	8140	8208	8259	3586
35°	6832	6885	7024	6967	6940	4257
45°	5278	5309	5223	5141	5117	4067
55°	3521	3432	3390	3149	3094	3160
65°	2027	1841	1717	1764	1786	2029
75°	1040	976	887	1011	1053	1113
85°	272	266	239	248	248	314
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-W-CLWG-UNV-L840-ED2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8580.0	8580.0	8580.0	8580.0	8580.0
2.5°	8626.5	8577.8	8568.9	8549.0	8593.3
5°	8597.7	8557.9	8562.3	8555.6	8604.3
7.5°	8564.5	8535.7	8553.4	8551.2	8615.4
10°	8507.0	8491.5	8535.7	8584.4	8688.4
12.5°	8442.8	8427.3	8524.7	8648.6	8761.5
15°	8354.3	8349.8	8511.4	8679.6	8779.2
17.5°	8243.6	8250.2	8495.9	8639.7	8728.3
20°	8121.9	8132.9	8431.7	8549.0	8628.7
22.5°	7964.8	8002.4	8307.8	8405.2	8467.1
25°	7785.5	7845.2	8139.6	8208.2	8259.1
27.5°	7593.0	7652.7	7931.6	7967.0	7995.7
30°	7354.0	7438.0	7674.8	7679.3	7699.2
32.5°	7110.5	7185.8	7367.2	7347.3	7351.7
35°	6831.7	6884.8	7024.2	6966.7	6940.1
37.5°	6510.8	6539.6	6628.1	6541.8	6537.3
40°	6136.8	6174.4	6174.4	6054.9	6077.0
42.5°	5738.4	5751.7	5696.4	5583.5	5601.2
45°	5278.1	5309.1	5222.8	5140.9	5116.6
47.5°	4822.2	4853.2	4762.5	4667.3	4625.3
50°	4392.9	4377.4	4322.1	4160.5	4100.8
52.5°	3948.1	3899.4	3877.3	3640.5	3571.9
55°	3521.0	3432.4	3390.4	3149.2	3093.8
57.5°	3124.8	2965.5	2885.8	2697.7	2675.6
60°	2722.0	2542.8	2445.4	2323.7	2328.1
62.5°	2356.9	2168.8	2051.5	2016.1	2031.6
65°	2027.2	1841.3	1717.3	1763.8	1785.9
67.5°	1728.4	1575.7	1436.3	1544.7	1566.8
70°	1467.2	1345.5	1206.1	1365.4	1376.5
72.5°	1250.4	1150.8	1033.5	1184.0	1208.3
75°	1040.1	976.0	887.4	1011.4	1053.4
77.5°	856.4	805.5	754.6	829.9	876.4
80°	679.4	628.5	601.9	641.8	672.8
82.5°	480.2	447.0	420.5	449.2	464.7
85°	272.2	265.6	239.0	247.9	247.9
87.5°	62.0	70.8	79.7	73.0	62.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)