

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-N-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 (P33344)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24HE-N-CLWG-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
NARROW DISTRIBUTION WITH CLEAR LENS, WIREGUARD & DOORFRAME
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

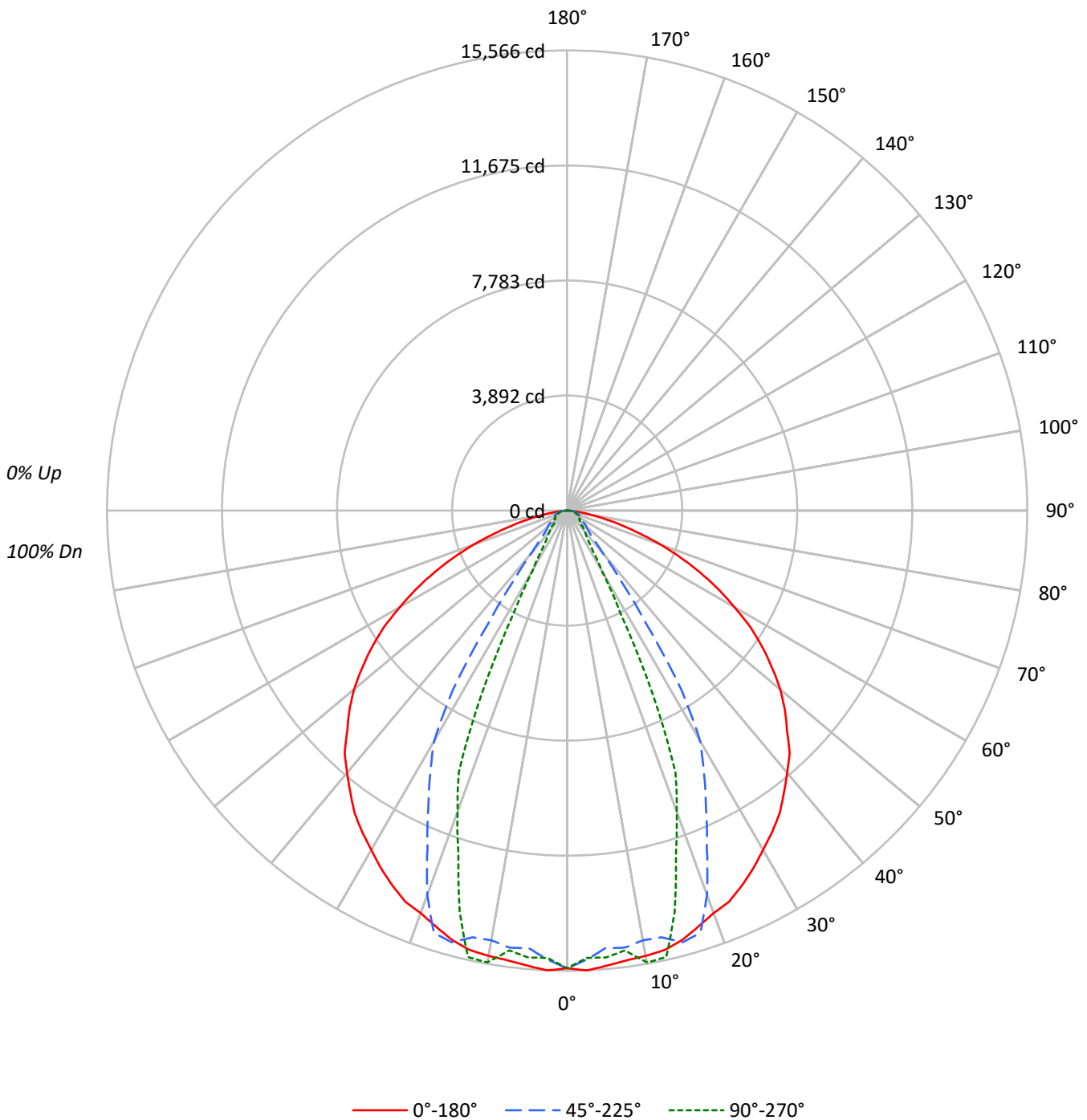
Lumens per Lamp: N/A
Luminaire Lumens: 20813.0 lumens
Efficiency: N/A
Efficacy: 142.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.81 / 0.91
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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-N-CLWG-UNV-L840-ED2-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-N-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	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	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89					89			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71					71			
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	58					58			
6	79	68	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	52	46	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	48	43	40	38					38			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	20831	20831	20831
5°	20865	20070	20493
10°	20895	20167	21202
15°	20942	21051	19566
20°	20744	19799	15530
25°	20773	16506	10144
30°	20587	13983	3644
35°	20566	7575	2050
40°	20333	3302	1605
45°	20019	2041	1259
50°	19707	1778	1188
55°	18932	1542	1163
60°	17565	1381	1249
65°	15789	1561	1365
70°	13242	1679	1408
75°	9899	1915	1524
80°	6217	2223	1738
85°	4140	2787	2546



TEST NUMBER: P#

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1434.9	6.9
10°-20°	4052.0	19.5
20°-30°	4961.7	23.8
30°-40°	3896.5	18.7
40°-50°	2889.5	13.9
50°-60°	1759.0	8.5
60°-70°	1053.7	5.1
70°-80°	578.1	2.8
80°-90°	187.5	0.9
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°	10448.7	50.2
0°-40°	14345.1	68.9
0°-60°	18993.7	91.3
0°-90°	20813.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20813.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	15482	15482	15482	15482	15482	
5°	15448	15028	14860	15024	15173	###
15°	15034	14622	15112	14502	14046	4233
25°	13993	14037	11118	8721	6833	6441
35°	12521	11390	4612	1543	1248	7813
45°	10520	7554	1073	813	662	8135
55°	8071	2082	657	556	496	7182
65°	4959	614	490	461	429	4900
75°	1904	387	368	320	293	2062
85°	268	211	180	166	165	327
90°	0	0	0	0	0	



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	15481.8	15481.8	15481.8	15481.8	15481.8
2.5°	15566.3	15356.5	15195.9	15106.1	15142.7
5°	15448.4	15027.9	14859.9	15023.7	15172.9
7.5°	15346.1	14721.1	14911.0	14925.6	15003.9
10°	15293.9	14691.9	14760.8	15085.3	15518.3
12.5°	15225.1	14759.7	14783.7	15226.1	15470.3
15°	15034.1	14622.0	15112.4	14502.0	14046.1
17.5°	14755.6	14300.6	14974.7	12847.2	12227.4
20°	14487.4	13951.1	13828.0	11443.9	10846.0
22.5°	14314.2	13897.9	12352.6	10197.0	9579.3
25°	13992.8	14036.7	11118.3	8720.6	6833.1
27.5°	13639.1	13710.1	10026.9	5815.8	3914.8
30°	13251.0	13332.4	9000.2	3436.9	2345.5
32.5°	12899.4	12440.3	7187.9	2144.2	1630.8
35°	12520.6	11389.6	4611.8	1543.2	1247.9
37.5°	12043.8	10285.7	2919.4	1220.8	1047.6
40°	11576.4	9294.5	1880.2	1042.3	914.0
42.5°	11139.2	8477.5	1367.9	910.9	825.3
45°	10520.5	7554.1	1072.6	812.8	661.5
47.5°	9985.2	6471.1	938.0	687.6	570.7
50°	9414.5	4947.7	849.3	611.4	567.6
52.5°	8737.3	3236.6	784.6	585.3	530.0
55°	8070.6	2081.6	657.3	556.1	495.6
57.5°	7350.6	1319.9	580.1	539.4	517.5
60°	6527.4	890.0	513.3	511.3	464.3
62.5°	5765.7	731.4	495.6	490.4	439.3
65°	4959.2	613.5	490.4	461.2	428.8
67.5°	4153.7	525.9	443.4	421.5	393.4
70°	3366.0	481.0	426.7	417.4	357.9
72.5°	2556.3	396.5	378.7	353.7	297.4
75°	1904.2	387.1	368.3	320.3	293.2
77.5°	1288.6	356.8	334.9	286.9	265.0
80°	802.4	327.6	286.9	251.5	224.3
82.5°	476.8	273.4	235.8	207.6	189.9
85°	268.2	210.8	180.5	165.9	164.9
87.5°	57.4	76.2	60.5	57.4	40.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)