

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-CL-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 (P23768)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24HE-N-CL-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

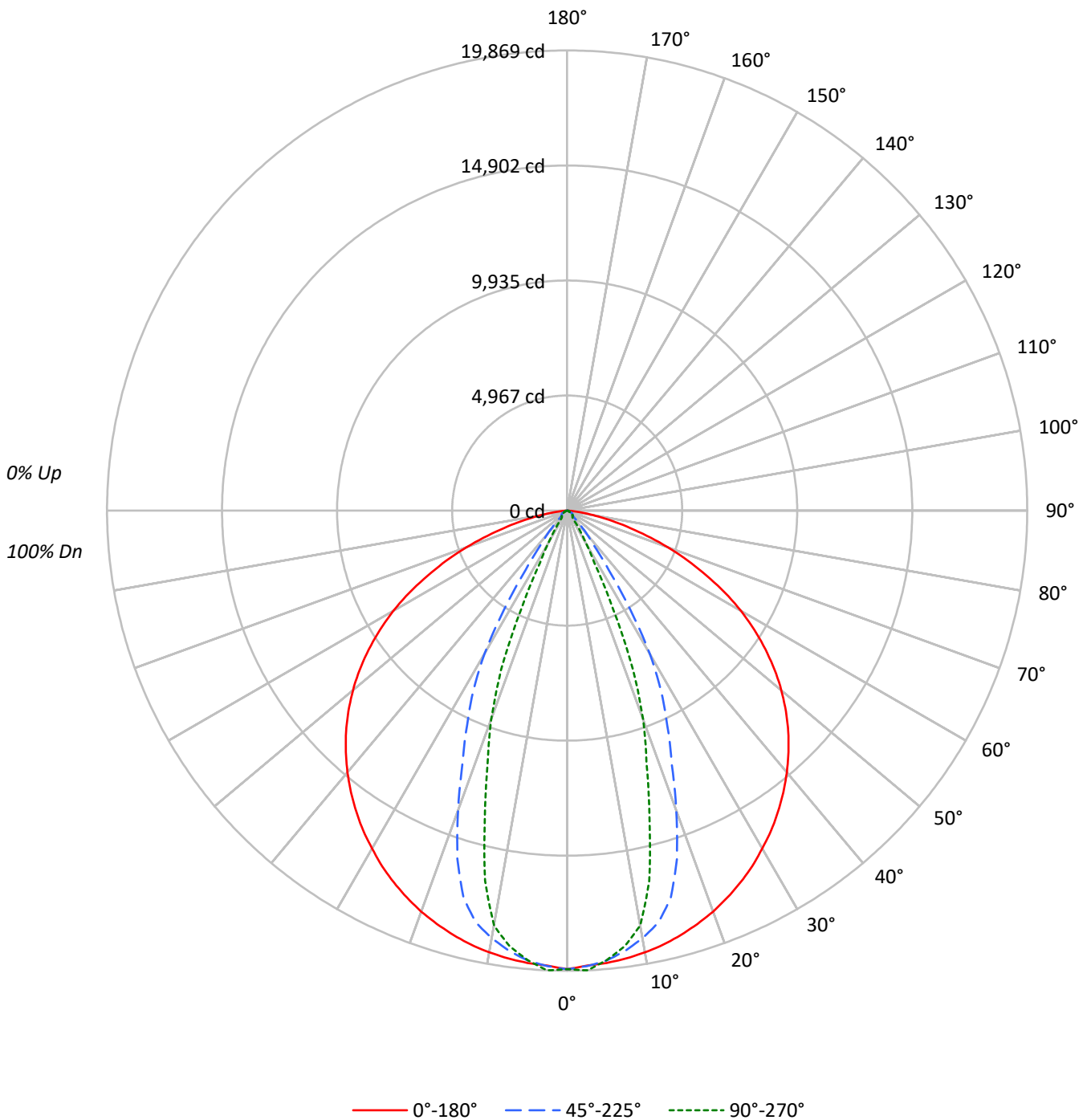
Lumens per Lamp: N/A
Luminaire Lumens: 21179.0 lumens
Efficiency: N/A
Efficacy: 144.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-24HE-N-CL-UNV-L840-ED2-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-N-CL-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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90				90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				73
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66				66
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60				60
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57	55				55
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51				51
8	72	61	55	50	71	61	54	50	60	54	49	59	53	49	58	53	49	47				47
9	69	58	51	46	67	57	51	46	56	50	46	55	50	46	54	49	46	44				44
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41				41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26645	26645	26645
5°	26481	26343	26323
10°	26463	25614	24858
15°	26433	24087	19114
20°	26381	19711	13710
25°	26299	15187	6967
30°	26174	11084	2535
35°	26081	5090	882
40°	25920	2310	609
45°	25690	862	617
50°	25280	626	649
55°	24532	658	494
60°	23312	703	436
65°	21141	535	355
70°	18126	387	327
75°	13855	343	311
80°	8668	322	338
85°	2737	375	454



TEST NUMBER: P#

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1843.6	8.7
10°-20°	4644.3	21.9
20°-30°	5057.8	23.9
30°-40°	3783.5	17.9
40°-50°	2720.4	12.8
50°-60°	1670.8	7.9
60°-70°	961.4	4.5
70°-80°	429.1	2.0
80°-90°	68.1	0.3
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°	11545.8	54.5
0°-40°	15329.3	72.4
0°-60°	19720.5	93.1
0°-90°	21179.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21179.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19803	19803	19803	19803	19803	
5°	19606	19699	19504	19522	19490	###
15°	18976	18612	17292	14851	13722	5357
25°	17714	16444	10230	6564	4693	8166
35°	15878	11388	3099	911	537	9932
45°	13501	6398	453	335	324	10401
55°	10458	1330	281	272	211	9324
65°	6640	146	168	140	112	6573
75°	2665	88	66	68	60	2892
85°	177	17	24	31	29	353
90°	0	0	0	0	0	



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19802.9	19802.9	19802.9	19802.9	19802.9
2.5°	19665.1	19793.8	19685.4	19782.7	19868.8
5°	19606.3	19698.6	19504.0	19522.2	19489.8
7.5°	19505.0	19527.3	19175.7	19039.9	18974.0
10°	19369.2	19309.4	18748.0	18424.8	18194.7
12.5°	19198.0	19000.4	18216.0	17061.8	16373.7
15°	18976.0	18612.2	17291.8	14850.7	13721.8
17.5°	18711.5	18206.9	15761.7	12377.1	11400.2
20°	18424.8	17759.0	13766.4	10523.7	9575.2
22.5°	18086.3	17186.5	11798.5	8752.3	7450.2
25°	17714.4	16443.7	10229.8	6563.5	4692.8
27.5°	17313.1	15463.8	8777.7	4025.0	2537.4
30°	16847.0	14271.0	7134.0	2258.8	1631.5
32.5°	16392.0	12880.7	5096.1	1504.8	1042.7
35°	15878.2	11388.1	3098.8	911.0	537.1
37.5°	15334.0	10031.2	1939.6	495.5	370.9
40°	14757.4	8744.2	1315.3	351.6	346.6
42.5°	14141.3	7579.9	823.9	334.4	345.6
45°	13500.9	6398.3	453.0	335.4	324.3
47.5°	12805.7	5115.4	316.2	317.2	316.2
50°	12077.1	3669.3	298.9	313.1	310.1
52.5°	11291.8	2278.0	300.0	306.0	274.6
55°	10457.8	1329.5	280.7	271.6	210.8
57.5°	9581.2	828.9	274.6	224.0	189.5
60°	8663.1	437.8	261.4	201.7	162.1
62.5°	7685.3	215.8	209.8	172.3	132.7
65°	6640.5	145.9	168.2	139.8	111.5
67.5°	5631.2	131.7	126.7	114.5	97.3
70°	4607.7	120.6	98.3	100.3	83.1
72.5°	3603.5	109.4	79.0	86.1	69.9
75°	2665.1	88.2	65.9	67.9	59.8
77.5°	1854.4	68.9	51.7	57.8	55.7
80°	1118.7	43.6	41.5	47.6	43.6
82.5°	542.1	28.4	32.4	37.5	34.5
85°	177.3	17.2	24.3	31.4	29.4
87.5°	22.3	10.1	20.3	27.4	25.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)