

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-L835-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-L835-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

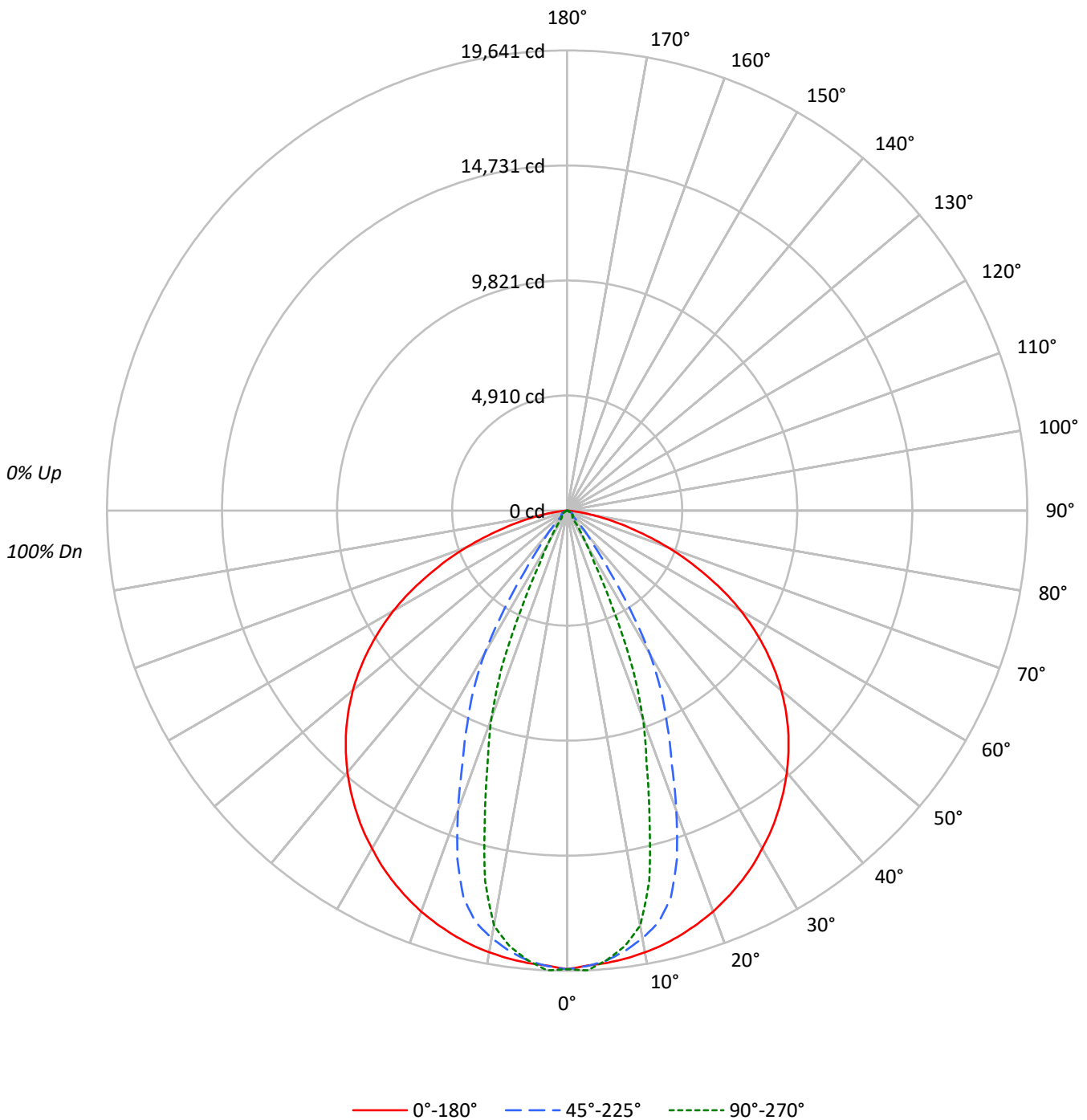
Lumens per Lamp: N/A
Luminaire Lumens: 20936.0 lumens
Efficiency: N/A
Efficacy: 143.1 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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-L835-ED2-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-N-CL-UNV-L835-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	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°	26339	26339	26339
5°	26177	26040	26021
10°	26160	25320	24573
15°	26129	23810	18895
20°	26079	19485	13553
25°	25997	15013	6887
30°	25874	10956	2506
35°	25781	5032	872
40°	25623	2284	602
45°	25395	852	610
50°	24990	619	642
55°	24250	651	489
60°	23045	695	431
65°	20899	529	351
70°	17918	382	323
75°	13696	338	307
80°	8569	318	334
85°	2706	371	449



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-N-CL-UNV-L835-ED2-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1822.5	8.7
10°-20°	4591.0	21.9
20°-30°	4999.8	23.9
30°-40°	3740.1	17.9
40°-50°	2689.2	12.8
50°-60°	1651.6	7.9
60°-70°	950.4	4.5
70°-80°	424.2	2.0
80°-90°	67.3	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°	11413.3	54.5
0°-40°	15153.4	72.4
0°-60°	19494.2	93.1
0°-90°	20936.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20936.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19576	19576	19576	19576	19576	
5°	19381	19472	19280	19298	19266	###
15°	18758	18399	17093	14680	13564	5295
25°	17511	16255	10112	6488	4639	8072
35°	15696	11257	3063	901	531	9818
45°	13346	6325	448	332	321	10281
55°	10338	1314	278	268	208	9217
65°	6564	144	166	138	110	6498
75°	2634	87	65	67	59	2859
85°	175	17	24	31	29	349
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-N-CL-UNV-L835-ED2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19575.7	19575.7	19575.7	19575.7	19575.7
2.5°	19439.5	19566.7	19459.5	19555.7	19640.8
5°	19381.4	19472.5	19280.2	19298.2	19266.2
7.5°	19281.2	19303.2	18955.6	18821.4	18756.3
10°	19147.0	19087.9	18532.9	18213.4	17986.0
12.5°	18977.7	18782.3	18007.0	16866.0	16185.9
15°	18758.3	18398.7	17093.4	14680.3	13564.4
17.5°	18496.9	17998.0	15580.8	12235.1	11269.4
20°	18213.4	17555.2	13608.4	10402.9	9465.3
22.5°	17878.8	16989.3	11663.1	8651.9	7364.7
25°	17511.2	16255.0	10112.4	6488.2	4639.0
27.5°	17114.5	15286.3	8676.9	3978.9	2508.3
30°	16653.7	14107.3	7052.1	2232.8	1612.8
32.5°	16203.9	12732.9	5037.7	1487.6	1030.8
35°	15696.0	11257.4	3063.3	900.6	530.9
37.5°	15158.1	9916.1	1917.3	489.8	366.6
40°	14588.1	8643.9	1300.2	347.6	342.6
42.5°	13979.1	7492.9	814.4	330.6	341.6
45°	13346.0	6324.9	447.8	331.6	320.6
47.5°	12658.8	5056.7	312.5	313.5	312.5
50°	11938.6	3627.2	295.5	309.5	306.5
52.5°	11162.2	2251.9	296.5	302.5	271.5
55°	10337.8	1314.3	277.5	268.5	208.4
57.5°	9471.3	819.4	271.5	221.4	187.3
60°	8563.7	432.7	258.4	199.3	160.3
62.5°	7597.1	213.4	207.4	170.3	131.2
65°	6564.3	144.2	166.3	138.2	110.2
67.5°	5566.6	130.2	125.2	113.2	96.2
70°	4554.8	119.2	97.2	99.2	82.1
72.5°	3562.1	108.2	78.1	85.1	69.1
75°	2634.5	87.2	65.1	67.1	59.1
77.5°	1833.2	68.1	51.1	57.1	55.1
80°	1105.9	43.1	41.1	47.1	43.1
82.5°	535.9	28.0	32.1	37.1	34.1
85°	175.3	17.0	24.0	31.1	29.1
87.5°	22.0	10.0	20.0	27.0	25.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)