

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-LD5-24SE-W-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 (P23760)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24SE-W-UNV-L835-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

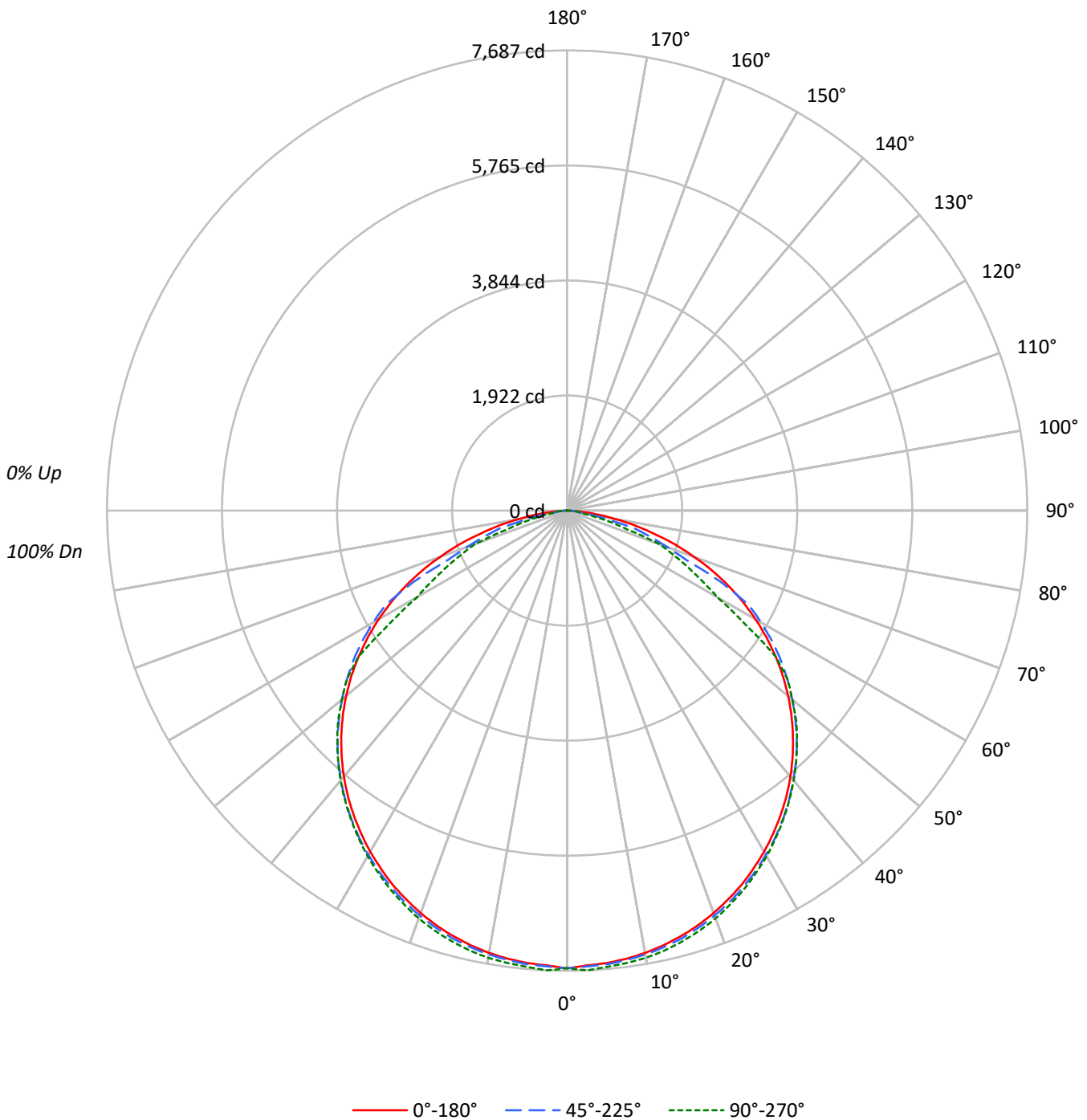
Lumens per Lamp: N/A
Luminaire Lumens: 22074.0 lumens
Efficiency: N/A
Efficacy: 143.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 154
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-LD5-24SE-W-UNV-L835-ED2-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24SE-W-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10288	10288	10288
5°	10245	10274	10332
10°	10251	10288	10365
15°	10249	10304	10375
20°	10243	10309	10381
25°	10240	10313	10370
30°	10222	10321	10360
35°	10209	10326	10340
40°	10190	10326	10342
45°	10152	10321	10333
50°	10091	10277	10276
55°	9974	10223	9969
60°	9788	10072	7800
65°	9462	9065	7028
70°	8864	6974	6477
75°	7849	6081	4036
80°	6464	3580	1804
85°	4259	2194	2364



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24SE-W-UNV-L835-ED2-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	725.6	3.3
10°-20°	2093.4	9.5
20°-30°	3209.4	14.5
30°-40°	3936.0	17.8
40°-50°	4179.4	18.9
50°-60°	3817.4	17.3
60°-70°	2658.4	12.0
70°-80°	1239.9	5.6
80°-90°	214.5	1.0
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°	6028.4	27.3
0°-40°	9964.4	45.1
0°-60°	17961.2	81.4
0°-90°	22074.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22074.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7646	7646	7646	7646	7646	
5°	7586	7639	7607	7644	7650	722
15°	7358	7409	7397	7442	7448	2078
25°	6897	6958	6947	6998	6985	3179
35°	6215	6287	6287	6329	6295	3889
45°	5335	5416	5424	5459	5431	4115
55°	4252	4337	4358	4365	4250	3797
65°	2972	3064	2847	2264	2207	2932
75°	1510	1605	1170	810	776	1614
85°	276	182	142	152	153	356
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24SE-W-UNV-L835-ED2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7646.2	7646.2	7646.2	7646.2	7646.2
2.5°	7605.9	7654.5	7622.4	7657.2	7686.6
5°	7585.7	7638.9	7606.8	7643.5	7649.9
7.5°	7552.7	7603.1	7573.8	7614.1	7624.2
10°	7503.2	7552.7	7529.8	7577.5	7586.6
12.5°	7436.3	7486.7	7469.3	7521.6	7528.0
15°	7357.5	7408.8	7396.9	7441.8	7448.2
17.5°	7264.9	7318.1	7304.3	7352.0	7356.6
20°	7154.0	7211.7	7199.8	7255.7	7250.2
22.5°	7029.3	7090.7	7081.5	7137.5	7121.0
25°	6897.3	6957.8	6946.8	6998.1	6985.3
27.5°	6742.4	6809.3	6799.2	6848.7	6828.5
30°	6579.2	6647.0	6643.4	6688.3	6668.1
32.5°	6403.2	6475.6	6471.9	6515.9	6484.8
35°	6215.3	6286.8	6286.8	6328.9	6295.0
37.5°	6016.3	6088.8	6089.7	6130.0	6097.9
40°	5801.8	5874.2	5878.8	5917.3	5888.0
42.5°	5576.3	5655.2	5658.8	5693.7	5666.2
45°	5335.2	5415.9	5424.1	5459.0	5430.6
47.5°	5083.1	5164.7	5172.0	5209.6	5189.5
50°	4820.9	4899.8	4909.9	4941.0	4909.0
52.5°	4544.1	4624.8	4638.5	4657.8	4643.1
55°	4251.7	4336.9	4358.0	4365.3	4249.8
57.5°	3949.2	4036.3	4056.4	3887.7	3516.5
60°	3637.5	3723.7	3742.9	3162.6	2898.6
62.5°	3313.0	3397.3	3418.4	2620.9	2536.5
65°	2972.0	3063.6	2847.3	2264.3	2207.4
67.5°	2621.8	2716.2	2153.3	1940.7	1906.7
70°	2253.3	2348.6	1772.9	1654.7	1646.4
72.5°	1899.4	1970.0	1454.8	1254.1	1056.0
75°	1509.8	1605.1	1169.7	810.4	776.4
77.5°	1170.6	1012.0	705.9	594.0	468.4
80°	834.2	676.5	462.0	246.6	232.8
82.5°	528.9	441.9	181.5	186.1	194.3
85°	275.9	181.5	142.1	152.2	153.1
87.5°	88.9	77.9	85.3	84.3	83.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)