

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-A-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 (P23761)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24HE-W-A-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

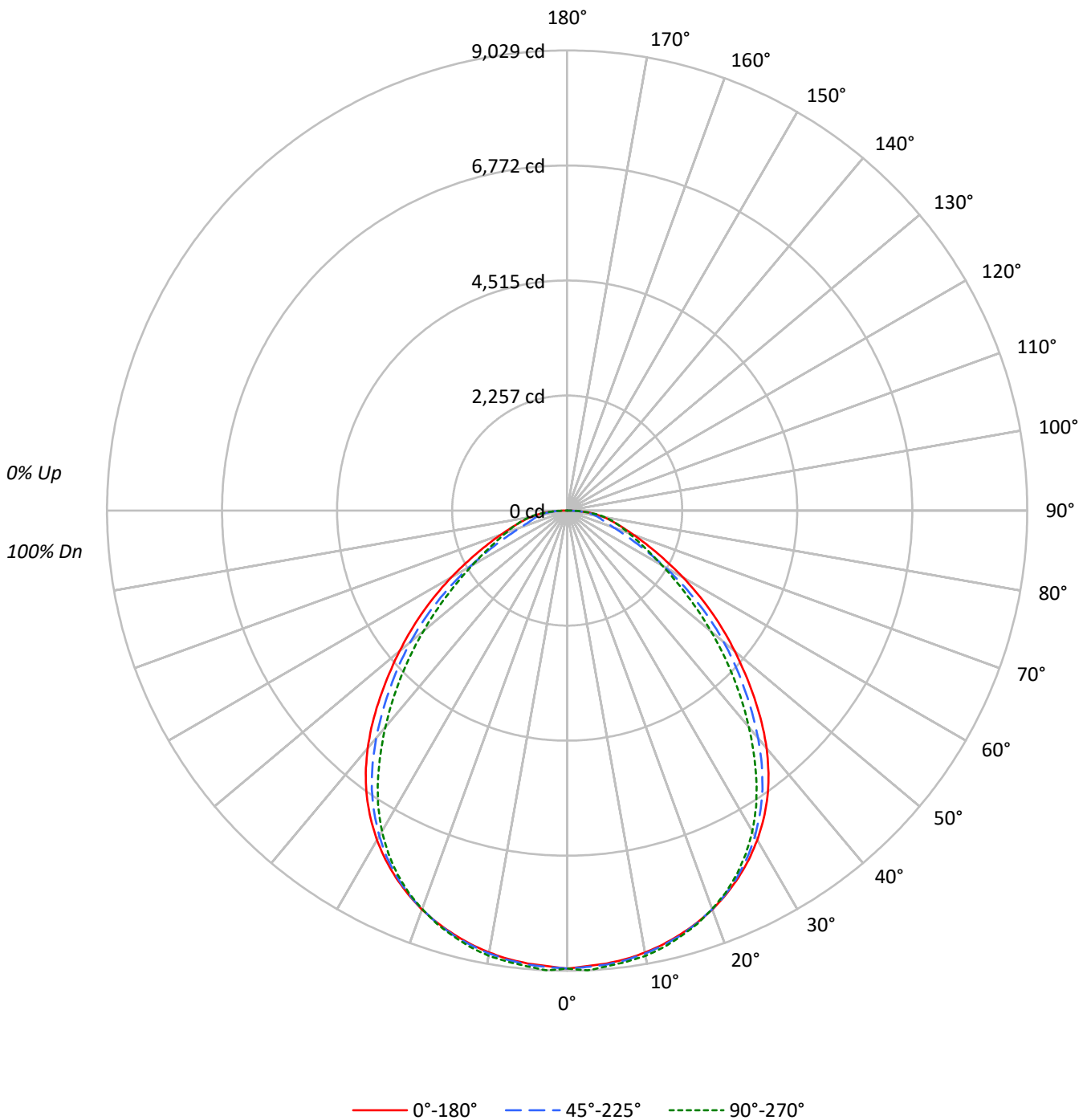
Lumens per Lamp: N/A
Luminaire Lumens: 20642.0 lumens
Efficiency: N/A
Efficacy: 141.1 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



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Luminous Intensity Polar Plot





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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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86					86			
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73					73			
3	93	83	75	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63					63			
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55					55			
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49					49			
6	73	61	52	46	72	60	52	46	58	51	46	56	50	45	55	49	45	43					43			
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35					35			
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12090	12090	12090
5°	12047	12075	12124
10°	12030	12058	12119
15°	11990	12014	12042
20°	11927	11919	11910
25°	11798	11757	11691
30°	11594	11454	11287
35°	11257	10974	10636
40°	10697	10238	9747
45°	9883	9331	8766
50°	8983	8402	7711
55°	8078	7274	6666
60°	7068	5945	5784
65°	6095	4675	5220
70°	5434	3815	5031
75°	5205	3725	5258
80°	5630	4405	5858
85°	6320	5303	6384



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	851.6	4.1
10°-20°	2437.3	11.8
20°-30°	3646.0	17.7
30°-40°	4159.8	20.2
40°-50°	3786.5	18.3
50°-60°	2780.4	13.5
60°-70°	1641.7	8.0
70°-80°	940.8	4.6
80°-90°	397.8	1.9
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°	6934.9	33.6
0°-40°	11094.7	53.7
0°-60°	17661.6	85.6
0°-90°	20642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20642.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8986	8986	8986	8986	8986	
5°	8920	8976	8940	8976	8977	848
15°	8608	8655	8625	8655	8645	2429
25°	7947	7976	7920	7917	7875	3658
35°	6854	6820	6681	6567	6476	4270
45°	5194	5163	4904	4684	4607	4003
55°	3444	3284	3101	2876	2842	3080
65°	1914	1671	1468	1571	1640	1926
75°	1001	858	716	934	1011	1079
85°	409	378	344	405	414	428
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8985.8	8985.8	8985.8	8985.8	8985.8
2.5°	8944.3	8995.9	8963.5	8999.0	9029.4
5°	8919.9	8975.7	8940.2	8975.7	8976.7
7.5°	8875.4	8927.0	8892.6	8931.1	8927.0
10°	8805.4	8857.1	8825.7	8867.2	8870.3
12.5°	8716.2	8765.9	8733.5	8781.1	8773.0
15°	8607.8	8655.4	8625.0	8655.4	8645.3
17.5°	8480.1	8523.7	8484.2	8517.6	8500.4
20°	8330.1	8366.6	8324.1	8355.5	8318.0
22.5°	8150.8	8183.2	8138.6	8155.8	8117.3
25°	7947.1	7975.5	7919.7	7916.7	7875.1
27.5°	7720.1	7735.3	7664.3	7640.0	7592.4
30°	7462.7	7466.7	7372.5	7326.9	7265.1
32.5°	7173.9	7163.7	7043.1	6975.2	6899.2
35°	6853.6	6820.2	6681.3	6566.8	6475.6
37.5°	6491.8	6439.1	6272.9	6103.7	6016.6
40°	6090.5	6028.7	5829.1	5619.3	5549.4
42.5°	5653.8	5601.1	5365.9	5147.1	5078.1
45°	5193.7	5163.3	4903.8	4683.9	4606.9
47.5°	4733.6	4711.3	4457.9	4234.0	4140.7
50°	4291.7	4243.1	4014.1	3768.8	3683.7
52.5°	3863.1	3763.8	3562.1	3310.8	3247.9
55°	3443.5	3284.4	3101.0	2876.0	2841.6
57.5°	3028.0	2822.3	2644.0	2475.7	2474.7
60°	2626.7	2391.6	2209.2	2121.0	2149.4
62.5°	2250.8	2009.6	1812.0	1818.0	1869.7
65°	1914.3	1671.1	1468.4	1570.8	1639.7
67.5°	1625.5	1393.4	1187.7	1378.2	1444.1
70°	1381.3	1171.5	969.8	1208.0	1278.9
72.5°	1175.5	999.2	817.8	1066.1	1138.0
75°	1001.2	858.3	716.5	934.4	1011.4
77.5°	859.4	732.7	642.5	808.7	888.8
80°	726.6	615.1	568.5	687.1	756.0
82.5°	575.6	498.6	471.2	558.4	593.9
85°	409.4	378.0	343.5	405.4	413.5
87.5°	225.0	233.1	192.5	233.1	234.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)