

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-N-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 (P23767)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24SE-N-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

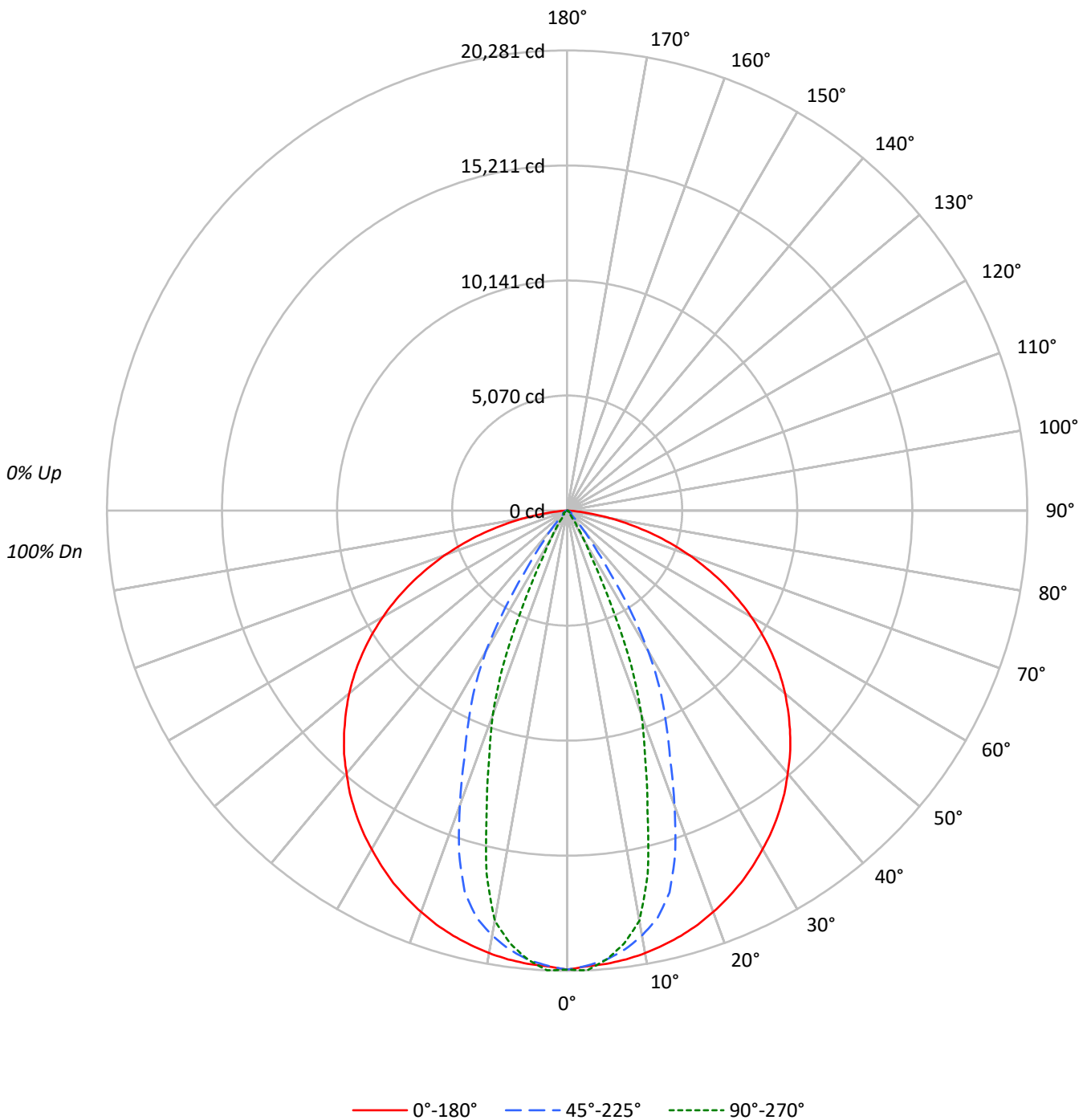
Lumens per Lamp: N/A
Luminaire Lumens: 21504.0 lumens
Efficiency: N/A
Efficacy: 139.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



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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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73					73			
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47					47			
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44					44			
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41					41			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	27222	27222	27222
5°	27076	26837	26825
10°	27059	25977	25066
15°	27021	24269	19076
20°	26958	19784	13731
25°	26890	15297	6764
30°	26771	11118	2194
35°	26708	4932	564
40°	26568	2003	380
45°	26449	562	405
50°	26243	399	449
55°	25865	474	192
60°	25226	528	117
65°	24189	337	138
70°	22471	299	170
75°	19658	225	235
80°	14699	276	336
85°	7280	357	446



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1877.6	8.7
10°-20°	4694.8	21.8
20°-30°	5085.2	23.6
30°-40°	3765.8	17.5
40°-50°	2712.4	12.6
50°-60°	1679.5	7.8
60°-70°	1032.9	4.8
70°-80°	544.5	2.5
80°-90°	111.4	0.5
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°	11657.6	54.2
0°-40°	15423.4	71.7
0°-60°	19815.2	92.1
0°-90°	21504.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21504.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	20232	20232	20232	20232	20232	
5°	20047	20121	19870	19884	19861	###
15°	19398	18948	17422	14816	13695	5476
25°	18113	16591	10304	6482	4556	8346
35°	16260	11463	3003	706	344	10172
45°	13900	6458	296	214	213	10720
55°	11026	1330	202	183	82	9843
65°	7598	140	106	67	43	7496
75°	3782	33	43	57	45	3994
85°	472	12	23	35	29	713
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	20231.9	20231.9	20231.9	20231.9	20231.9
2.5°	20102.0	20230.0	20078.9	20191.5	20281.0
5°	20047.1	20121.3	19870.1	19884.5	19861.4
7.5°	19950.9	19933.6	19511.1	19326.3	19245.4
10°	19805.6	19691.0	19013.5	18627.5	18346.5
12.5°	19617.9	19361.9	18392.7	17165.5	16403.3
15°	19398.4	18948.0	17422.5	14816.2	13694.9
17.5°	19136.7	18498.5	15836.4	12417.7	11416.7
20°	18827.7	17997.1	13817.1	10565.0	9590.0
22.5°	18483.1	17386.9	11855.6	8780.6	7389.8
25°	18112.6	16590.9	10304.1	6482.2	4556.3
27.5°	17684.3	15567.8	8848.9	3818.1	2325.3
30°	17231.0	14335.9	7155.9	2053.9	1411.9
32.5°	16773.8	12939.4	5063.5	1283.0	800.8
35°	16259.9	11462.9	3002.9	706.4	343.6
37.5°	15723.8	10109.7	1774.8	321.5	220.4
40°	15126.1	8872.9	1140.5	213.7	216.6
42.5°	14548.6	7719.9	642.0	210.8	214.6
45°	13899.9	6458.1	295.5	213.7	212.7
47.5°	13229.1	5150.1	191.5	215.6	215.6
50°	12537.0	3682.4	190.6	220.4	214.6
52.5°	11806.5	2297.4	198.3	219.4	176.1
55°	11026.0	1330.1	202.1	182.9	81.8
57.5°	10217.5	784.4	204.0	104.9	46.2
60°	9374.4	434.1	196.3	78.0	43.3
62.5°	8505.3	206.9	155.0	73.1	42.3
65°	7597.7	140.5	105.9	67.4	43.3
67.5°	6655.4	108.8	83.7	63.5	44.3
70°	5712.2	80.8	76.0	63.5	43.3
72.5°	4753.6	54.9	63.5	64.5	43.3
75°	3781.5	32.7	43.3	56.8	45.2
77.5°	2818.1	20.2	33.7	58.7	54.9
80°	1897.0	17.3	35.6	54.9	43.3
82.5°	1113.6	15.4	34.6	42.3	34.6
85°	471.6	12.5	23.1	34.6	28.9
87.5°	88.5	10.6	18.3	27.9	25.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)