

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-FLI-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 (P26703)
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-FLI-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

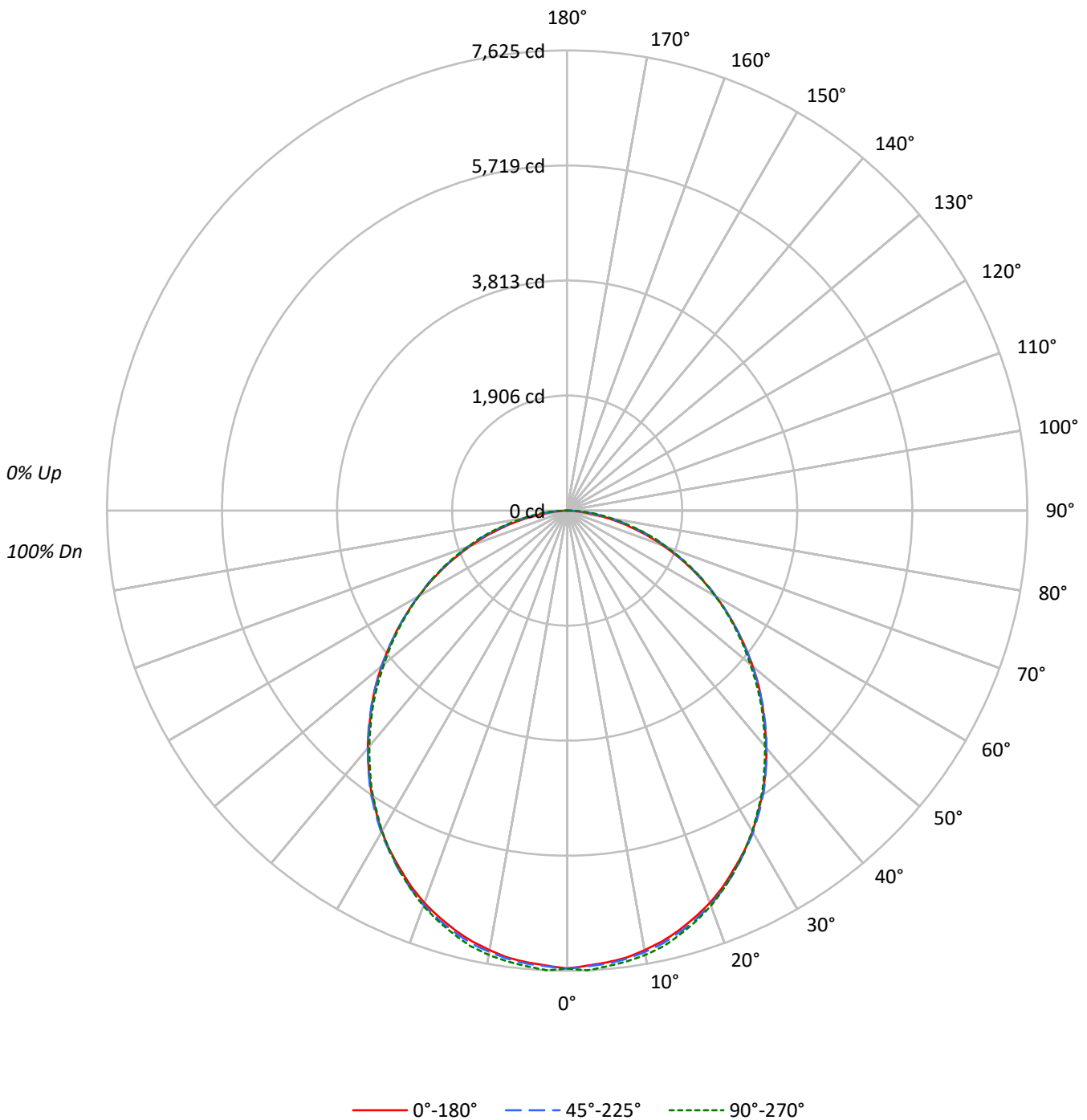
Lumens per Lamp: N/A
Luminaire Lumens: 19822.0 lumens
Efficiency: N/A
Efficacy: 128.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10210	10210	10210
5°	10152	10181	10239
10°	10106	10147	10213
15°	10017	10072	10121
20°	9904	9951	9980
25°	9720	9776	9761
30°	9541	9567	9528
35°	9305	9329	9269
40°	9025	9025	8956
45°	8710	8733	8644
50°	8410	8396	8291
55°	8046	8047	7975
60°	7656	7666	7636
65°	7216	7288	7307
70°	6665	6847	6855
75°	5891	6272	6369
80°	4831	5493	5803
85°	3353	4611	5215



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	717.7	3.6
10°-20°	2041.6	10.3
20°-30°	3034.0	15.3
30°-40°	3547.5	17.9
40°-50°	3537.0	17.8
50°-60°	3068.8	15.5
60°-70°	2266.7	11.4
70°-80°	1269.1	6.4
80°-90°	338.6	1.7
90°-100°	1.0	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°	5793.3	29.2
0°-40°	9340.8	47.1
0°-60°	15946.6	80.4
0°-90°	19821.0	100.0
90°-120°	1.0	0.0
90°-150°	1.0	0.0
90°-180°	1.0	0.0
0°-180°	19822.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7588	7588	7588	7588	7588	
5°	7516	7564	7538	7571	7581	714
15°	7191	7242	7230	7265	7266	2028
25°	6548	6600	6585	6599	6575	3019
35°	5665	5715	5679	5678	5643	3539
45°	4577	4626	4590	4571	4543	3533
55°	3430	3454	3431	3425	3400	3067
65°	2267	2289	2289	2301	2295	2242
75°	1133	1167	1206	1215	1225	1207
85°	217	262	299	325	338	264
90°	0	5	6	13	12	9
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7588.4	7588.4	7588.4	7588.4	7588.4
2.5°	7546.9	7591.8	7560.4	7590.4	7625.1
5°	7516.5	7563.8	7537.8	7571.0	7580.7
7.5°	7472.1	7518.0	7492.9	7526.2	7536.3
10°	7396.8	7446.5	7426.8	7464.4	7475.0
12.5°	7309.0	7355.8	7342.8	7386.7	7393.9
15°	7191.3	7241.5	7230.4	7265.1	7265.6
17.5°	7061.0	7108.3	7100.1	7127.1	7126.1
20°	6916.7	6967.4	6950.0	6979.4	6970.2
22.5°	6745.9	6799.9	6778.2	6802.8	6779.6
25°	6547.5	6600.1	6584.7	6599.2	6575.0
27.5°	6355.5	6403.7	6371.9	6389.2	6363.7
30°	6141.2	6182.2	6157.6	6163.4	6132.5
32.5°	5900.4	5949.1	5919.2	5918.2	5885.4
35°	5664.9	5714.6	5679.4	5678.4	5643.2
37.5°	5404.3	5450.6	5409.1	5411.5	5370.5
40°	5138.4	5178.5	5138.4	5136.5	5098.8
42.5°	4849.8	4902.9	4866.2	4870.6	4820.4
45°	4577.2	4625.9	4589.7	4570.9	4542.9
47.5°	4305.5	4326.7	4296.8	4292.0	4252.4
50°	4017.9	4033.8	4011.1	4005.3	3960.9
52.5°	3720.6	3748.1	3719.2	3711.4	3682.0
55°	3430.1	3453.8	3430.6	3424.8	3399.7
57.5°	3137.7	3168.6	3144.9	3139.1	3118.9
60°	2845.2	2854.4	2848.6	2857.3	2837.5
62.5°	2554.7	2576.0	2582.7	2580.3	2564.9
65°	2266.6	2288.8	2289.3	2300.9	2295.1
67.5°	1971.8	2000.7	2008.9	2021.0	2026.3
70°	1694.3	1716.5	1740.6	1747.9	1742.6
72.5°	1414.9	1450.6	1477.6	1483.9	1506.6
75°	1133.1	1166.9	1206.4	1215.1	1225.2
77.5°	871.5	916.4	952.1	963.7	976.2
80°	623.5	673.2	708.9	724.8	748.9
82.5°	409.2	459.9	496.1	512.0	541.4
85°	217.2	262.5	298.7	325.3	337.8
87.5°	64.2	102.8	123.5	131.3	142.4
90°	0.0	4.8	5.8	13.0	12.1
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)