

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-L740-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-L740-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

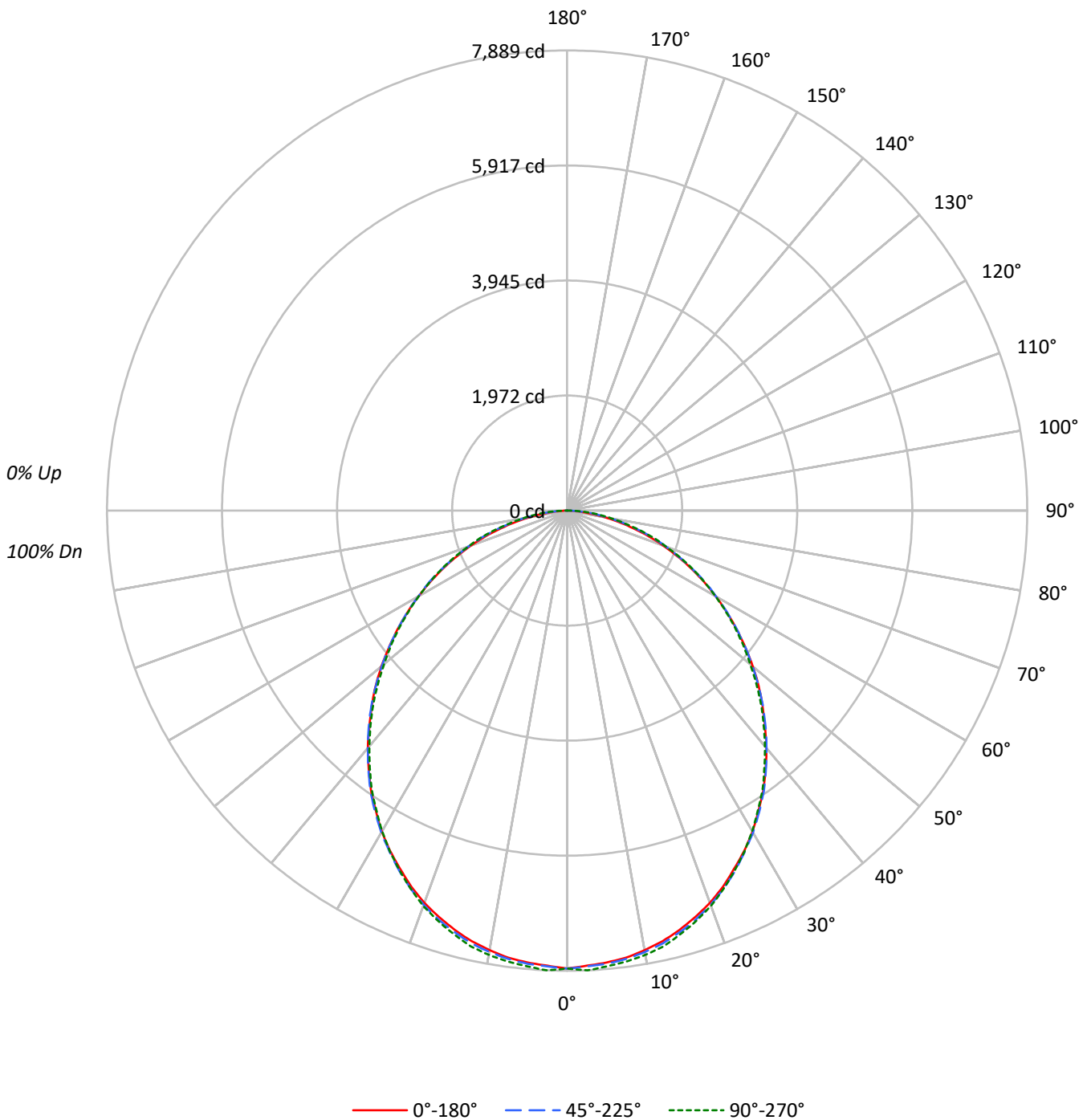
Lumens per Lamp: N/A
Luminaire Lumens: 20509.0 lumens
Efficiency: N/A
Efficacy: 133.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	10564	10564	10564
5°	10504	10534	10594
10°	10456	10499	10567
15°	10364	10421	10471
20°	10247	10296	10326
25°	10057	10114	10099
30°	9872	9898	9858
35°	9627	9652	9590
40°	9338	9338	9266
45°	9011	9036	8944
50°	8702	8687	8578
55°	8325	8326	8251
60°	7922	7931	7900
65°	7466	7541	7560
70°	6896	7085	7093
75°	6094	6489	6590
80°	4998	5683	6004
85°	3469	4772	5395



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	742.5	3.6
10°-20°	2112.4	10.3
20°-30°	3139.2	15.3
30°-40°	3670.5	17.9
40°-50°	3659.6	17.8
50°-60°	3175.2	15.5
60°-70°	2345.2	11.4
70°-80°	1313.1	6.4
80°-90°	350.4	1.7
90°-100°	1.1	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°	5994.1	29.2
0°-40°	9664.6	47.1
0°-60°	16499.3	80.4
0°-90°	20507.9	100.0
90°-120°	1.1	0.0
90°-150°	1.1	0.0
90°-180°	1.0	0.0
0°-180°	20509.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7851	7851	7851	7851	7851	
5°	7777	7826	7799	7833	7843	739
15°	7440	7492	7481	7517	7517	2098
25°	6774	6829	6813	6828	6803	3123
35°	5861	5913	5876	5875	5839	3661
45°	4736	4786	4749	4729	4700	3656
55°	3549	3574	3550	3544	3518	3174
65°	2345	2368	2369	2381	2375	2319
75°	1172	1207	1248	1257	1268	1249
85°	225	272	309	336	350	273
90°	0	5	6	14	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



TEST NUMBER: P#

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7851.4	7851.4	7851.4	7851.4	7851.4
2.5°	7808.5	7854.9	7822.5	7853.4	7889.4
5°	7777.0	7826.0	7799.0	7833.4	7843.4
7.5°	7731.1	7778.5	7752.6	7787.0	7797.5
10°	7653.2	7704.6	7684.2	7723.1	7734.1
12.5°	7562.3	7610.8	7597.3	7642.7	7650.2
15°	7440.5	7492.4	7480.9	7516.9	7517.4
17.5°	7305.7	7354.6	7346.1	7374.1	7373.1
20°	7156.4	7208.8	7190.9	7221.3	7211.8
22.5°	6979.7	7035.6	7013.1	7038.6	7014.6
25°	6774.4	6828.9	6812.9	6827.9	6802.9
27.5°	6575.7	6625.7	6592.7	6610.7	6584.2
30°	6354.0	6396.5	6371.0	6377.0	6345.0
32.5°	6104.9	6155.3	6124.4	6123.4	6089.4
35°	5861.2	5912.7	5876.2	5875.2	5838.8
37.5°	5591.6	5639.5	5596.6	5599.1	5556.7
40°	5316.5	5357.9	5316.5	5314.5	5275.6
42.5°	5017.9	5072.8	5034.9	5039.4	4987.5
45°	4735.8	4786.2	4748.8	4729.3	4700.4
47.5°	4454.7	4476.7	4445.7	4440.7	4399.8
50°	4157.1	4173.6	4150.1	4144.2	4098.2
52.5°	3849.6	3878.0	3848.1	3840.1	3809.6
55°	3549.0	3573.5	3549.5	3543.5	3517.5
57.5°	3246.4	3278.4	3253.9	3247.9	3226.9
60°	2943.8	2953.3	2947.3	2956.3	2935.9
62.5°	2643.3	2665.2	2672.2	2669.7	2653.8
65°	2345.2	2368.2	2368.7	2380.6	2374.7
67.5°	2040.1	2070.1	2078.6	2091.1	2096.5
70°	1753.0	1776.0	1801.0	1808.4	1803.0
72.5°	1463.9	1500.9	1528.8	1535.3	1558.8
75°	1172.3	1207.3	1248.2	1257.2	1267.7
77.5°	901.7	948.2	985.1	997.1	1010.1
80°	645.1	696.5	733.5	749.9	774.9
82.5°	423.4	475.8	513.3	529.8	560.2
85°	224.7	271.6	309.1	336.5	349.5
87.5°	66.4	106.3	127.8	135.8	147.3
90°	0.0	5.0	6.0	13.5	12.5
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)