

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-LD5-60SE-N-CLI-UNV-L840-ED4-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 (P23769)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-60SE-N-CLI-UNV-L840-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

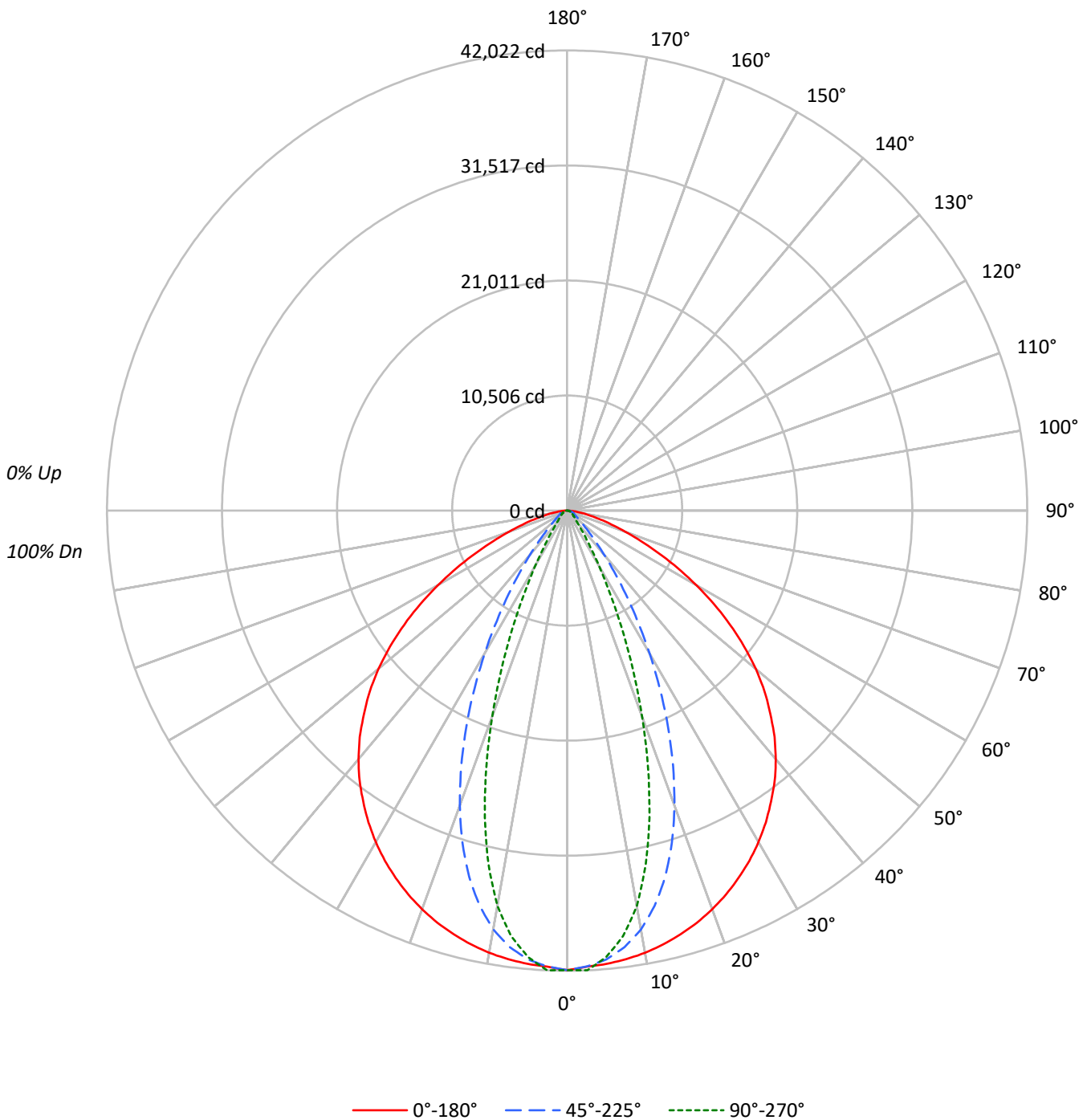
Lumens per Lamp: N/A
Luminaire Lumens: 45942.0 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 386
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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60
6	81	70	63	58	79	69	62	57	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	56463	56463	56463
5°	56123	55565	55273
10°	56029	53049	50059
15°	55804	48221	40428
20°	55469	41032	28654
25°	54973	32354	17312
30°	54305	23351	8898
35°	53325	15266	4444
40°	52060	9170	2593
45°	49897	5476	1939
50°	47062	3581	1629
55°	42594	2717	1421
60°	36603	2314	1297
65°	29443	2111	1224
70°	22182	2261	1217
75°	16316	2149	1252
80°	11937	2141	1370
85°	8940	2594	1774



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3864.7	8.4
10°-20°	9614.6	20.9
20°-30°	10649.6	23.2
30°-40°	8532.2	18.6
40°-50°	6090.9	13.3
50°-60°	3912.3	8.5
60°-70°	2120.2	4.6
70°-80°	906.2	2.0
80°-90°	251.3	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°	24128.9	52.5
0°-40°	32661.1	71.1
0°-60°	42664.3	92.9
0°-90°	45942.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	45942.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	41965	41965	41965	41965	41965	
5°	41554	41708	41140	41010	40924	###
15°	40062	38808	34618	30593	29023	11303
25°	37029	32650	21794	14199	11662	17059
35°	32465	23482	9294	3749	2705	20298
45°	26223	13556	2878	1224	1019	20212
55°	18158	6061	1158	712	606	16182
65°	9248	2489	663	458	385	9261
75°	3139	911	413	287	241	3487
85°	579	241	168	139	115	707
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	41964.7	41964.7	41964.7	41964.7	41964.7
2.5°	41688.4	41949.2	41668.5	41843.1	42022.2
5°	41553.6	41708.3	41140.3	41009.8	40923.6
7.5°	41319.3	41275.1	40207.5	39515.7	39181.9
10°	41009.8	40651.8	38828.3	37307.6	36640.1
12.5°	40567.8	39829.6	36960.6	34290.5	33158.9
15°	40061.6	38808.4	34617.7	30592.7	29023.4
17.5°	39456.0	37614.8	31817.2	26627.4	24556.4
20°	38739.9	36173.7	28656.5	22414.6	20012.0
22.5°	37939.7	34511.6	25272.5	18215.1	15637.9
25°	37029.1	32650.5	21793.5	14198.9	11661.5
27.5°	36045.5	30583.9	18334.4	10609.4	8295.2
30°	34953.6	28347.1	15030.0	7649.8	5726.9
32.5°	33762.3	25968.8	11959.9	5379.9	3916.6
35°	32464.8	23482.2	9294.3	3748.7	2705.4
37.5°	31136.5	20944.8	7019.9	2650.1	1940.6
40°	29640.1	18416.2	5220.7	1940.6	1476.5
42.5°	28033.2	15936.2	3863.6	1494.2	1195.8
45°	26223.0	13555.8	2877.8	1224.5	1018.9
47.5°	24468.0	11336.6	2186.0	1043.3	886.3
50°	22483.1	9334.1	1710.8	910.6	778.0
52.5°	20376.7	7572.5	1388.1	802.3	685.2
55°	18157.6	6060.6	1158.2	711.7	605.6
57.5°	15909.7	4800.8	990.2	634.4	539.3
60°	13602.2	3839.3	859.8	568.0	481.8
62.5°	11349.9	3070.1	751.5	510.6	431.0
65°	9247.9	2488.8	663.1	457.5	384.6
67.5°	7305.0	1967.2	618.9	411.1	347.0
70°	5638.5	1531.7	574.7	366.9	309.4
72.5°	4272.5	1175.9	508.4	327.1	274.1
75°	3138.6	910.6	413.3	287.3	240.9
77.5°	2245.7	700.7	336.0	249.8	207.8
80°	1540.6	521.6	276.3	214.4	176.8
82.5°	1001.3	369.1	223.2	176.8	145.9
85°	579.1	240.9	168.0	139.2	114.9
87.5°	249.8	132.6	114.9	103.9	88.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)