

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-LD5-60HE-W-AI-UNV-L850-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 (P23765)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-60HE-W-AI-UNV-L850-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

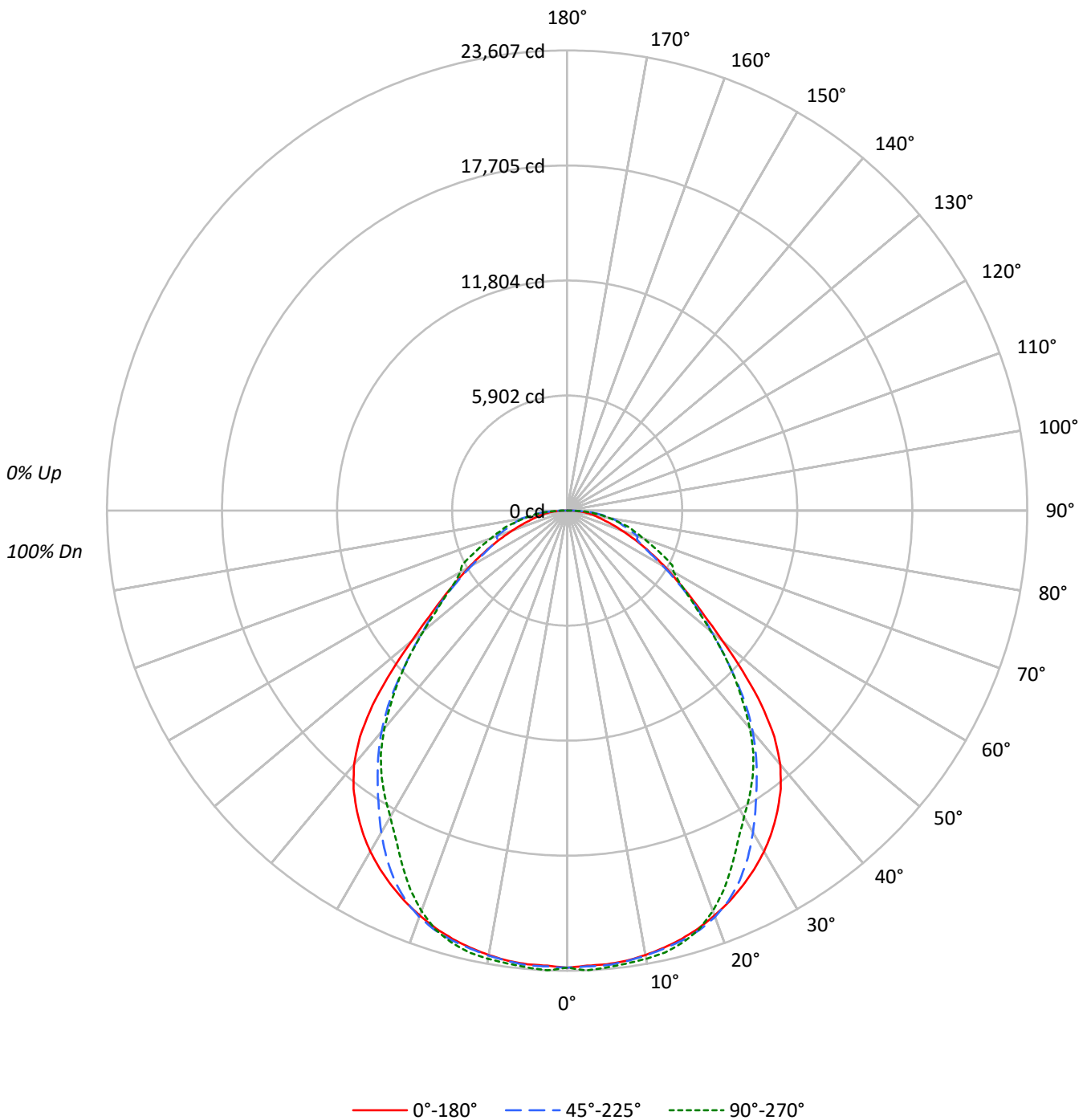
Lumens per Lamp: N/A  
Luminaire Lumens: 54280.0 lumens  
Efficiency: N/A  
Efficacy: 147.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 369  
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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	48	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	31553	31553	31553
5°	31551	31619	31774
10°	31629	31669	31901
15°	31678	31796	31952
20°	31646	31764	31292
25°	31566	31093	29741
30°	31380	29626	28183
35°	30907	27845	27265
40°	29874	26035	25606
45°	26851	23248	23163
50°	21778	20250	20111
55°	18083	17747	17741
60°	15657	15199	16993
65°	13569	13485	17128
70°	11700	15127	16328
75°	10492	15503	17021
80°	10905	18250	17078
85°	12381	21031	19513



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2232.8	4.1
10°-20°	6448.5	11.9
20°-30°	9577.4	17.6
30°-40°	10873.1	20.0
40°-50°	9720.1	17.9
50°-60°	6720.5	12.4
60°-70°	4434.6	8.2
70°-80°	2991.8	5.5
80°-90°	1281.4	2.4
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°	18258.8	33.6
0°-40°	29131.8	53.7
0°-60°	45572.3	84.0
0°-90°	54280.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	54280.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	23451	23451	23451	23451	23451	
5°	23360	23504	23411	23506	23525	###
15°	22742	22850	22827	22954	22938	6419
25°	21262	21464	20944	20320	20033	9797
35°	18817	18421	16953	16706	16600	11734
45°	14111	12916	12218	12311	12173	10731
55°	7709	7037	7566	7459	7563	7002
65°	4262	3784	4236	4952	5380	4253
75°	2018	2539	2982	3187	3274	2204
85°	802	1115	1362	1370	1264	836
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	23450.6	23450.6	23450.6	23450.6	23450.6
2.5°	23371.0	23517.0	23408.2	23509.1	23607.3
5°	23360.4	23503.7	23410.8	23506.4	23525.0
7.5°	23294.0	23426.7	23317.9	23410.8	23432.1
10°	23150.6	23307.2	23179.8	23323.2	23349.7
12.5°	22964.7	23124.0	23012.5	23209.0	23219.6
15°	22741.6	22850.5	22826.6	22954.1	22938.1
17.5°	22460.1	22584.9	22566.4	22598.2	22523.9
20°	22101.6	22242.4	22184.0	22037.9	21854.7
22.5°	21716.6	21886.6	21655.5	21286.4	21028.8
25°	21262.5	21464.3	20943.9	20319.8	20033.0
27.5°	20760.6	20941.2	20075.5	19310.7	19013.3
30°	20197.7	20274.7	19069.1	18341.5	18139.7
32.5°	19547.1	19435.5	17993.6	17513.0	17396.1
35°	18816.8	18421.1	16952.7	16705.7	16599.5
37.5°	17993.6	17268.7	15925.0	15810.8	15699.3
40°	17008.4	15938.3	14822.9	14748.6	14578.6
42.5°	15736.4	14491.0	13598.8	13511.1	13359.8
45°	14111.3	12916.3	12217.9	12310.9	12172.8
47.5°	12241.8	11336.3	10892.8	11147.8	10892.8
50°	10404.2	9796.1	9674.0	9905.0	9607.6
52.5°	8898.5	8351.5	8603.8	8643.6	8465.7
55°	7708.9	7037.1	7565.5	7459.3	7562.8
57.5°	6673.2	5921.7	6572.3	6450.2	6806.0
60°	5818.2	4973.7	5648.2	5621.7	6314.8
62.5°	4979.0	4304.6	4846.3	5236.6	6089.0
65°	4262.1	3784.1	4235.5	4952.5	5380.0
67.5°	3574.3	3393.7	3874.4	4272.7	4740.1
70°	2974.1	3067.1	3845.2	3770.8	4150.5
72.5°	2469.6	2785.6	3393.7	3407.0	3675.2
75°	2018.2	2538.6	2982.1	3186.6	3274.2
77.5°	1678.3	2302.3	2692.7	2764.4	2679.4
80°	1407.4	2028.8	2355.4	2323.6	2204.1
82.5°	1136.6	1537.5	1856.2	1885.4	1744.7
85°	802.0	1115.3	1362.3	1370.2	1264.0
87.5°	430.2	687.8	825.9	849.8	786.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)