

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-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-LD5-60SE-W-AI-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

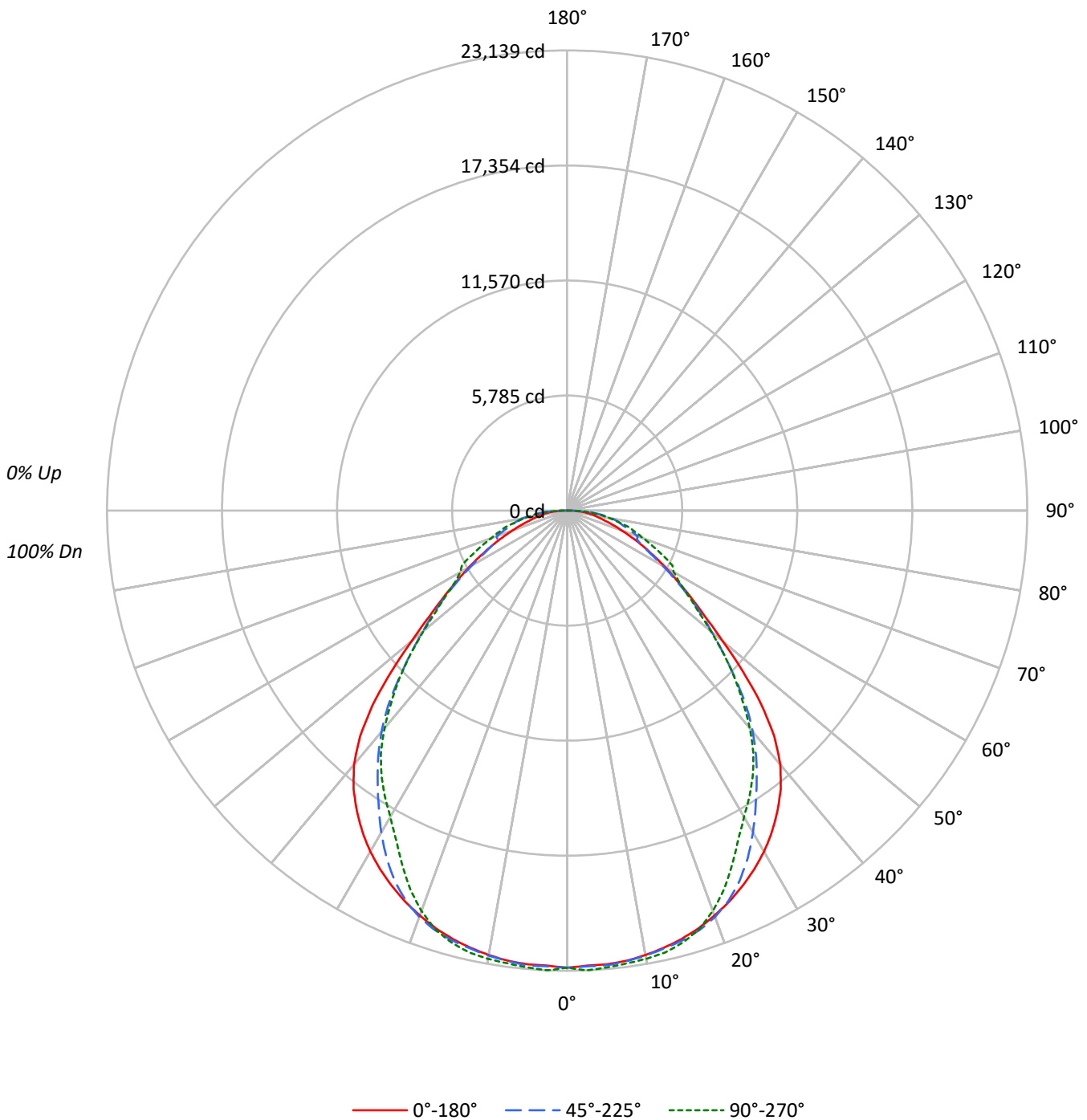
Lumens per Lamp: N/A
Luminaire Lumens: 53203.0 lumens
Efficiency: N/A
Efficacy: 137.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	30926	30926	30926
5°	30925	30992	31143
10°	31002	31041	31268
15°	31049	31166	31318
20°	31018	31134	30672
25°	30940	30476	29151
30°	30757	29039	27623
35°	30294	27293	26724
40°	29281	25519	25098
45°	26318	22787	22703
50°	21346	19848	19712
55°	17725	17395	17389
60°	15346	14898	16656
65°	13300	13217	16789
70°	11468	14827	16004
75°	10283	15195	16684
80°	10689	17889	16739
85°	12134	20612	19126



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2188.5	4.1
10°-20°	6320.6	11.9
20°-30°	9387.4	17.6
30°-40°	10657.3	20.0
40°-50°	9527.2	17.9
50°-60°	6587.1	12.4
60°-70°	4346.6	8.2
70°-80°	2932.4	5.5
80°-90°	1255.9	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°	17896.5	33.6
0°-40°	28553.8	53.7
0°-60°	44668.1	84.0
0°-90°	53203.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	53203.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	22985	22985	22985	22985	22985	
5°	22897	23037	22946	23040	23058	###
15°	22290	22397	22374	22499	22483	6292
25°	20841	21038	20528	19917	19636	9603
35°	18444	18056	16616	16374	16270	11501
45°	13831	12660	11976	12067	11931	10518
55°	7556	6897	7415	7311	7413	6863
65°	4178	3709	4152	4854	5273	4169
75°	1978	2488	2923	3123	3209	2160
85°	786	1093	1335	1343	1239	820
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	22985.3	22985.3	22985.3	22985.3	22985.3
2.5°	22907.3	23050.4	22943.7	23042.6	23138.9
5°	22896.8	23037.4	22946.3	23040.0	23058.2
7.5°	22831.8	22961.9	22855.2	22946.3	22967.1
10°	22691.2	22844.8	22719.9	22860.4	22886.4
12.5°	22509.0	22665.2	22555.9	22748.5	22758.9
15°	22290.4	22397.1	22373.7	22498.6	22483.0
17.5°	22014.5	22136.8	22118.6	22149.8	22077.0
20°	21663.1	21801.1	21743.8	21600.7	21421.1
22.5°	21285.7	21452.3	21225.8	20864.1	20611.6
25°	20840.6	21038.4	20528.3	19916.6	19635.5
27.5°	20348.7	20525.7	19677.2	18927.6	18636.1
30°	19796.9	19872.4	18690.7	17977.6	17779.7
32.5°	19159.2	19049.9	17636.6	17165.5	17051.0
35°	18443.5	18055.6	16616.3	16374.2	16270.1
37.5°	17636.6	16926.0	15609.0	15497.1	15387.8
40°	16670.9	15622.0	14528.8	14456.0	14289.4
42.5°	15424.2	14203.5	13328.9	13243.1	13094.7
45°	13831.3	12660.0	11975.5	12066.6	11931.2
47.5°	11998.9	11111.4	10676.7	10926.6	10676.7
50°	10197.8	9601.7	9482.0	9708.5	9416.9
52.5°	8722.0	8185.8	8433.1	8472.1	8297.7
55°	7555.9	6897.4	7415.4	7311.3	7412.8
57.5°	6540.8	5804.2	6441.9	6322.2	6671.0
60°	5702.7	4875.0	5536.2	5510.1	6189.5
62.5°	4880.3	4219.1	4750.1	5132.7	5968.2
65°	4177.5	3709.0	4151.5	4854.2	5273.3
67.5°	3503.4	3326.4	3797.5	4187.9	4646.0
70°	2915.1	3006.2	3768.9	3696.0	4068.2
72.5°	2420.6	2730.3	3326.4	3339.4	3602.3
75°	1978.1	2488.3	2922.9	3123.4	3209.3
77.5°	1645.0	2256.6	2639.2	2709.5	2626.2
80°	1379.5	1988.5	2308.7	2277.5	2160.3
82.5°	1114.0	1507.0	1819.4	1848.0	1710.0
85°	786.0	1093.2	1335.2	1343.0	1238.9
87.5°	421.7	674.1	809.5	832.9	770.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)