

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-LD5-36SE-W-WG-UNV-L840-ED3-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 (P33336)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-36SE-W-WG-UNV-L840-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

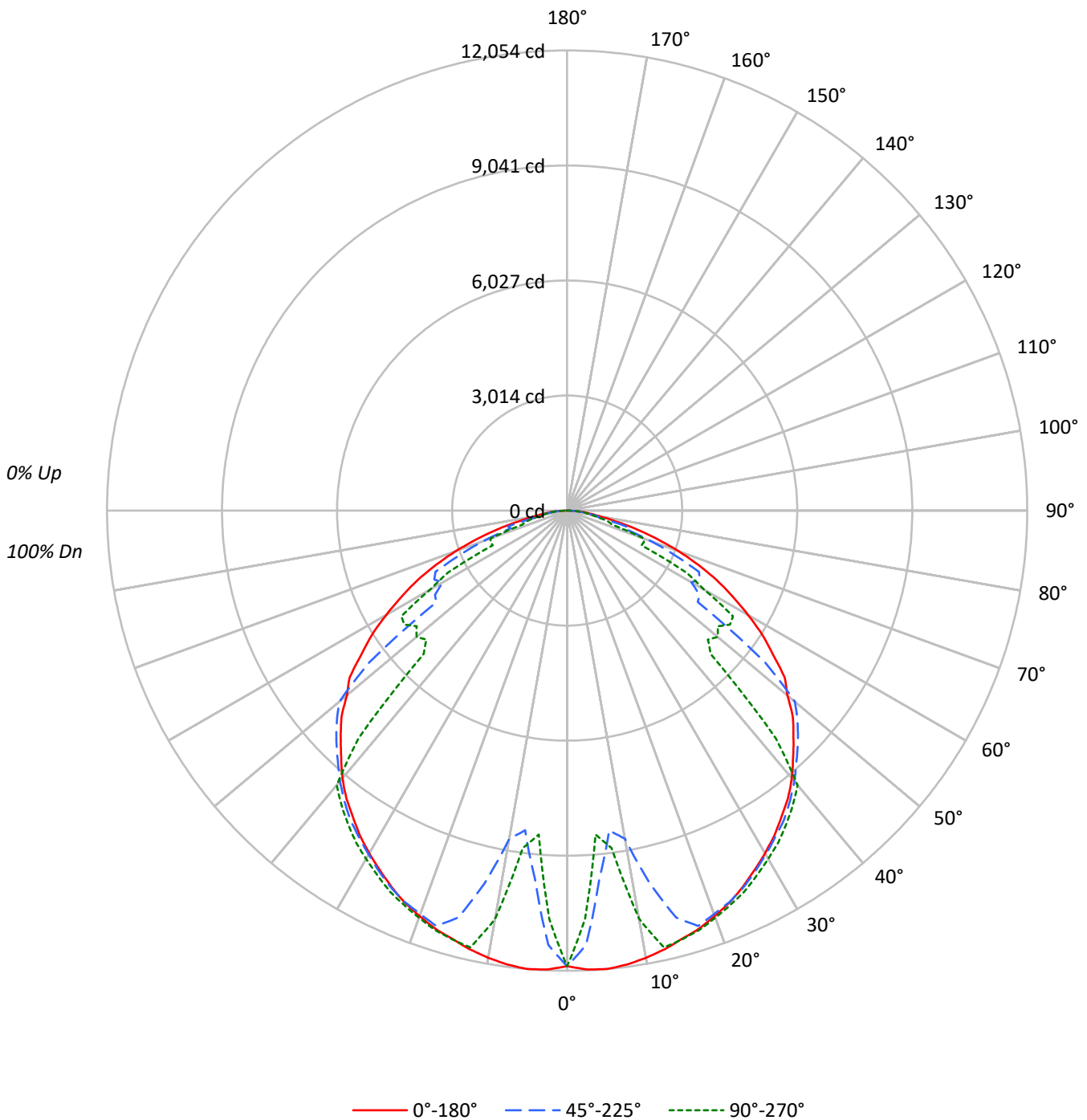
Lumens per Lamp: N/A  
Luminaire Lumens: 31617.0 lumens  
Efficiency: N/A  
Efficacy: 136.3 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.31 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 232  
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				
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74					72				
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63					61				
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54					52				
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47					45				
6	71	58	49	43	69	57	49	42	55	48	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	33	46	38	33	44	38	33	43	37	33					31				
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30					28				
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27					25				

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

	0°	45°	90°
0°	16058	16058	16058
5°	16281	13079	11503
10°	16253	11928	14835
15°	16181	15374	16195
20°	16181	16107	16250
25°	16152	16188	16336
30°	16105	16158	16367
35°	16080	16258	16448
40°	16082	16257	16490
45°	15956	16268	10109
50°	15775	16301	10775
55°	15442	9802	12212
60°	14731	10104	11183
65°	13803	12131	6842
70°	12188	9190	8387
75°	9711	8354	5816
80°	6690	6038	4998
85°	6411	5573	5287



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	954.3	3.0
10°-20°	2989.8	9.5
20°-30°	4918.8	15.6
30°-40°	6184.8	19.6
40°-50°	6065.8	19.2
50°-60°	5025.8	15.9
60°-70°	3544.8	11.2
70°-80°	1546.6	4.9
80°-90°	386.4	1.2
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°	8863.0	28.0
0°-40°	15047.8	47.6
0°-60°	26139.3	82.7
0°-90°	31617.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	31617.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11934	11934	11934	11934	11934	
5°	12054	11219	9684	8781	8517	###
15°	11616	8067	11037	11662	11626	3285
25°	10880	9955	10904	10977	11004	5015
35°	9790	9784	9898	9964	10014	6134
45°	8385	8411	8549	7572	5313	6473
55°	6583	6798	4178	4751	5206	5890
65°	4335	4591	3810	2931	2149	4263
75°	1868	1831	1607	1050	1119	2003
85°	415	370	361	345	342	431
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11934.4	11934.4	11934.4	11934.4	11934.4
2.5°	12032.9	11783.1	11386.4	10886.9	10710.0
5°	12054.3	11219.4	9683.9	8780.6	8516.6
7.5°	11992.9	10196.2	8442.4	8632.2	8911.9
10°	11895.9	9297.2	8730.7	10271.9	10858.4
12.5°	11771.7	8498.1	10002.2	11603.3	11720.3
15°	11616.2	8067.1	11036.8	11661.8	11626.1
17.5°	11484.9	8319.7	11407.8	11544.8	11519.1
20°	11300.8	8823.4	11249.4	11359.3	11349.3
22.5°	11115.3	9419.9	11099.6	11178.1	11178.1
25°	10879.8	9955.1	10904.1	10976.8	11004.0
27.5°	10621.5	10263.3	10660.0	10720.0	10768.5
30°	10366.1	10307.6	10400.3	10477.4	10534.5
32.5°	10096.4	10073.5	10146.3	10227.6	10300.4
35°	9789.5	9783.8	9898.0	9963.6	10013.6
37.5°	9501.3	9481.3	9586.9	9678.2	9716.8
40°	9155.9	9155.9	9255.8	9348.6	9388.5
42.5°	8762.1	8817.7	8894.8	8990.4	8097.1
45°	8385.3	8411.0	8549.4	7571.9	5312.9
47.5°	8022.9	8055.7	8187.0	4867.7	5000.4
50°	7536.2	7684.6	7787.4	4853.4	5147.4
52.5°	7180.9	7245.1	6537.3	4804.9	4970.4
55°	6583.0	6798.4	4178.4	4750.6	5205.9
57.5°	6072.1	6229.1	4108.5	4867.7	5150.2
60°	5474.2	5713.9	3754.6	4696.4	4155.6
62.5°	4900.5	5128.8	3920.1	3696.1	3519.1
65°	4335.4	4590.8	3810.2	2931.2	2149.1
67.5°	3716.0	3477.7	3039.6	2064.9	2173.4
70°	3098.1	2428.8	2336.1	2309.0	2132.0
72.5°	2463.1	1772.4	1551.2	1732.4	1240.1
75°	1868.0	1830.9	1606.9	1050.3	1118.8
77.5°	1295.8	1321.4	860.5	1024.6	850.5
80°	863.4	747.8	779.2	653.6	645.0
82.5°	597.9	610.8	512.3	496.6	503.7
85°	415.3	369.6	361.0	345.3	342.5
87.5°	138.4	161.3	149.8	135.6	144.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)