

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-CL-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 (P23762)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-36SE-W-CL-UNV-L840-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

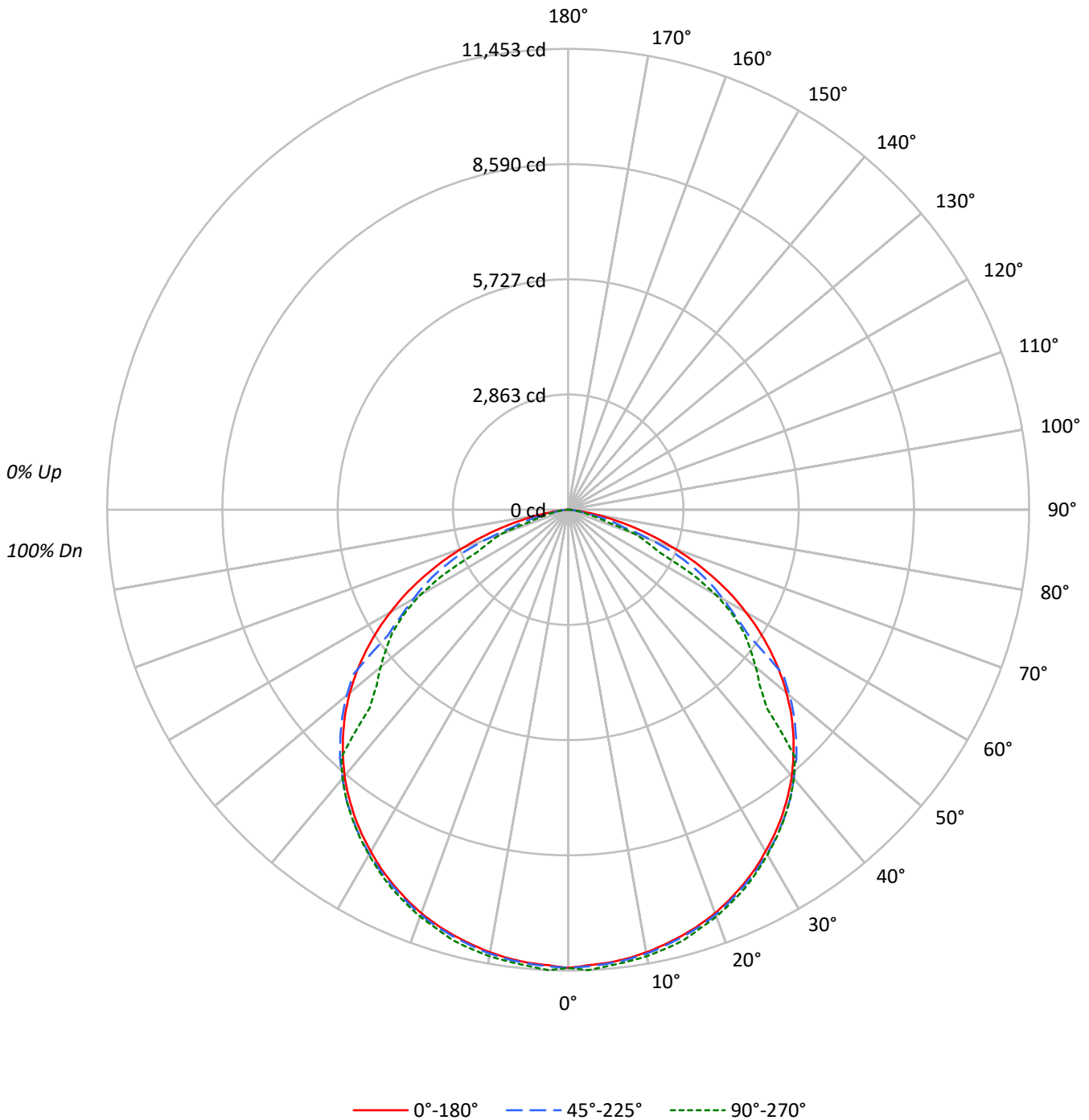
Lumens per Lamp: N/A  
Luminaire Lumens: 30782.0 lumens  
Efficiency: N/A  
Efficacy: 132.7 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94		95	93	91		92	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78		84	80	76		81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66		75	69	65		72	68	64	62
4	84	73	64	58	82	71	64	57	69	62	57		67	61	56		64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	54	49		58	53	48	46
6	72	59	50	44	70	58	49	43	56	49	43		54	48	43		53	47	42	40
7	66	53	45	39	65	52	44	38	51	43	38		49	43	38		48	42	38	36
8	62	48	40	34	60	48	40	34	46	39	34		45	39	34		44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31		42	35	31		41	35	30	29
10	54	41	33	28	53	40	33	28	40	33	28		39	32	28		38	32	28	26

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

	0°	45°	90°
0°	15320	15320	15320
5°	15264	15298	15373
10°	15263	15306	15395
15°	15262	15308	15432
20°	15281	15338	15410
25°	15263	15321	15414
30°	15235	15347	15381
35°	15227	15366	15378
40°	15180	15314	15314
45°	15050	15232	13272
50°	14817	15041	12734
55°	14397	12875	12508
60°	13721	11968	11427
65°	12690	11110	7914
70°	11050	8644	7052
75°	8728	5802	3791
80°	5618	2772	2363
85°	2311	1690	1862



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1080.1	3.5
10°-20°	3113.2	10.1
20°-30°	4772.9	15.5
30°-40°	5850.0	19.0
40°-50°	6014.2	19.5
50°-60°	5132.9	16.7
60°-70°	3393.4	11.0
70°-80°	1257.2	4.1
80°-90°	168.1	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°	8966.2	29.1
0°-40°	14816.1	48.1
0°-60°	25963.2	84.3
0°-90°	30782.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	30782.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11386	11386	11386	11386	11386	
5°	11302	11381	11326	11371	11382	###
15°	10956	11023	10990	11073	11078	3095
25°	10281	10335	10320	10413	10382	4740
35°	9271	9334	9355	9413	9362	5799
45°	7909	7988	8005	7992	6975	6095
55°	6137	6250	5489	5329	5332	5476
65°	3986	4019	3490	2870	2486	3930
75°	1679	1471	1116	750	729	1801
85°	150	107	110	119	121	248
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11386.1	11386.1	11386.1	11386.1	<i>11386.1</i>
2.5°	<i>11330.7</i>	<i>11401.4</i>	<i>11359.8</i>	<i>11412.5</i>	<i>11452.7</i>
5°	11301.6	11380.6	11326.5	11370.9	<i>11382.0</i>
7.5°	11251.7	11325.1	11275.2	11333.5	<i>11325.1</i>
10°	11171.3	11237.8	11203.1	11264.1	<i>11268.3</i>
12.5°	11068.7	11135.2	11103.3	11178.2	<i>11176.8</i>
15°	10956.4	11022.9	10989.6	11072.8	<i>11078.4</i>
17.5°	10824.7	10885.7	10860.7	10937.0	<i>10906.5</i>
20°	10672.2	10724.9	10712.4	10784.5	<i>10762.3</i>
22.5°	10485.0	10539.1	10526.6	10609.8	<i>10576.5</i>
25°	10281.2	10335.3	10320.0	10412.9	<i>10382.4</i>
27.5°	10060.8	10112.1	10110.7	10198.0	<i>10150.9</i>
30°	9805.7	9873.6	9877.8	9955.4	<i>9900.0</i>
32.5°	9553.4	9617.2	9635.2	9692.0	<i>9644.9</i>
35°	9270.6	9334.3	9355.1	9413.4	<i>9362.1</i>
37.5°	8965.6	9019.6	9057.1	9100.0	<i>9059.8</i>
40°	8642.5	8691.1	8718.8	8771.5	<i>8718.8</i>
42.5°	8282.1	8351.4	8390.2	8427.7	<i>8341.7</i>
45°	7909.2	7988.2	8004.8	7992.3	<i>6974.8</i>
47.5°	7514.1	7600.0	7609.7	6636.5	<i>6449.3</i>
50°	7078.7	7186.9	7185.5	6133.2	<i>6083.3</i>
52.5°	6625.4	6729.4	6725.2	5739.5	<i>5706.2</i>
55°	6137.4	6249.7	5488.6	5329.2	<i>5331.9</i>
57.5°	5639.7	5720.1	4924.3	4931.3	<i>4839.8</i>
60°	5099.0	5175.3	4447.4	4404.5	<i>4246.4</i>
62.5°	4557.0	4588.8	3985.8	3776.4	<i>3475.6</i>
65°	3985.8	4019.0	3489.5	2869.8	<i>2485.7</i>
67.5°	3399.3	3432.6	2896.1	2135.0	<i>2105.9</i>
70°	2808.8	2537.0	2197.4	1778.7	<i>1792.6</i>
72.5°	2226.5	1949.2	1436.3	1378.0	<i>995.4</i>
75°	1678.9	1470.9	1116.0	750.0	<i>729.2</i>
77.5°	1168.7	1013.4	597.5	511.6	<i>478.3</i>
80°	725.1	508.8	357.7	317.5	<i>305.0</i>
82.5°	367.4	292.5	194.1	194.1	<i>194.1</i>
85°	149.7	106.7	109.5	119.2	<i>120.6</i>
87.5°	31.9	43.0	52.7	54.1	<i>52.7</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)