

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-FLI-UNV-L835-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 (P26703)
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-FLI-UNV-L835-ED3-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

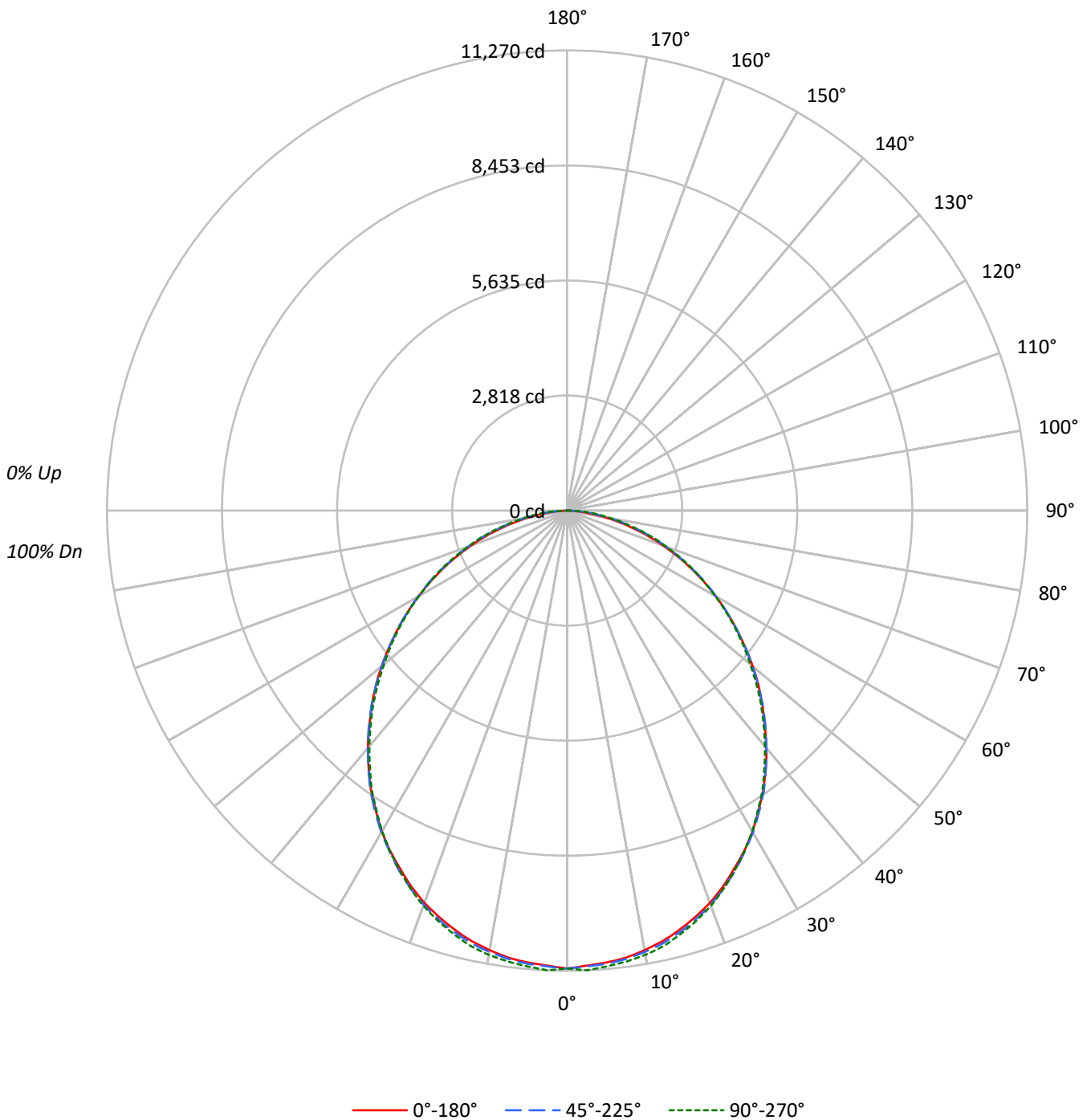
Lumens per Lamp: N/A
Luminaire Lumens: 29296.0 lumens
Efficiency: N/A
Efficacy: 126.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	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	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	15090	15090	15090
5°	15004	15047	15132
10°	14936	14996	15094
15°	14805	14885	14958
20°	14637	14708	14750
25°	14366	14448	14427
30°	14101	14139	14082
35°	13752	13787	13699
40°	13339	13339	13236
45°	12872	12908	12776
50°	12430	12409	12254
55°	11892	11894	11787
60°	11316	11329	11285
65°	10665	10772	10799
70°	9851	10120	10131
75°	8706	9269	9414
80°	7140	8118	8577
85°	4954	6816	7708



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1060.7	3.6
10°-20°	3017.4	10.3
20°-30°	4484.1	15.3
30°-40°	5243.1	17.9
40°-50°	5227.5	17.8
50°-60°	4535.5	15.5
60°-70°	3350.0	11.4
70°-80°	1875.6	6.4
80°-90°	500.5	1.7
90°-100°	1.5	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°	8562.2	29.2
0°-40°	13805.3	47.1
0°-60°	23568.4	80.4
0°-90°	29294.5	100.0
90°-120°	1.5	0.0
90°-150°	1.5	0.0
90°-180°	2.0	0.0
0°-180°	29296.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	11215	11215	11215	11215	11215	
5°	11109	11179	11140	11190	11204	###
15°	10628	10702	10686	10738	10738	2997
25°	9677	9755	9732	9753	9718	4461
35°	8372	8446	8394	8392	8340	5230
45°	6765	6837	6783	6756	6714	5222
55°	5070	5104	5070	5062	5025	4533
65°	3350	3383	3384	3401	3392	3313
75°	1675	1725	1783	1796	1811	1783
85°	321	388	442	481	499	390
90°	0	7	9	19	18	13
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-36SE-W-FLI-UNV-L835-ED3-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	11215.3	11215.3	11215.3	11215.3	<i>11215.3</i>
2.5°	<i>11154.0</i>	<i>11220.3</i>	<i>11174.0</i>	<i>11218.2</i>	<i>11269.5</i>
5°	11109.1	11179.0	11140.4	11189.7	<i>11203.9</i>
7.5°	11043.5	11111.2	11074.1	11123.3	<i>11138.3</i>
10°	10932.2	11005.7	10976.4	11032.0	<i>11047.7</i>
12.5°	10802.4	10871.6	10852.3	10917.2	<i>10927.9</i>
15°	10628.4	10702.5	10686.1	10737.5	<i>10738.2</i>
17.5°	10435.8	10505.7	10493.6	10533.5	<i>10532.1</i>
20°	10222.5	10297.4	10271.8	10315.3	<i>10301.7</i>
22.5°	9970.1	10049.9	10017.8	10054.2	<i>10020.0</i>
25°	9676.9	9754.7	9731.8	9753.2	<i>9717.6</i>
27.5°	9393.1	9464.4	9417.3	9443.0	<i>9405.2</i>
30°	9076.4	9137.0	9100.6	9109.2	<i>9063.6</i>
32.5°	8720.5	8792.5	8748.3	8746.9	<i>8698.4</i>
35°	8372.5	8445.9	8393.9	8392.4	<i>8340.4</i>
37.5°	7987.3	8055.8	7994.4	7998.0	<i>7937.4</i>
40°	7594.3	7653.5	7594.3	7591.5	<i>7535.9</i>
42.5°	7167.8	7246.3	7192.1	7198.5	<i>7124.3</i>
45°	6764.9	6836.9	6783.4	6755.6	<i>6714.2</i>
47.5°	6363.3	6394.7	6350.5	6343.4	<i>6284.9</i>
50°	5938.2	5961.8	5928.3	5919.7	<i>5854.1</i>
52.5°	5498.9	5539.6	5496.8	5485.4	<i>5441.8</i>
55°	5069.5	5104.5	5070.3	5061.7	<i>5024.6</i>
57.5°	4637.3	4683.0	4648.0	4639.5	<i>4609.5</i>
60°	4205.1	4218.7	4210.1	4223.0	<i>4193.7</i>
62.5°	3775.8	3807.2	3817.1	3813.6	<i>3790.7</i>
65°	3350.0	3382.8	3383.5	3400.6	<i>3392.1</i>
67.5°	2914.2	2957.0	2969.1	2987.0	<i>2994.8</i>
70°	2504.1	2536.9	2572.6	2583.3	<i>2575.4</i>
72.5°	2091.2	2143.9	2183.9	2193.1	<i>2226.7</i>
75°	1674.6	1724.6	1783.0	1795.9	<i>1810.9</i>
77.5°	1288.1	1354.4	1407.2	1424.3	<i>1442.8</i>
80°	921.5	994.9	1047.7	1071.3	<i>1106.9</i>
82.5°	604.8	679.7	733.2	756.7	<i>800.2</i>
85°	320.9	388.0	441.5	480.7	<i>499.3</i>
87.5°	94.9	151.9	182.6	194.0	<i>210.4</i>
90°	0.0	7.1	8.6	19.3	<i>17.8</i>
92.5°	0.0	0.0	0.0	0.0	<i>0.0</i>
95°	0.0	0.0	0.0	0.0	<i>0.0</i>
97.5°	0.0	0.0	0.0	0.0	<i>0.0</i>
100°	0.0	0.0	0.0	0.0	<i>0.0</i>
102.5°	0.0	0.0	0.0	0.0	<i>0.0</i>
105°	0.0	0.0	0.0	0.0	<i>0.0</i>
107.5°	0.0	0.0	0.0	0.0	<i>0.0</i>
110°	0.0	0.0	0.0	0.0	<i>0.0</i>



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)