

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-LD5-36HE-N-CL-UNV-L850-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 (P23768)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-36HE-N-CL-UNV-L850-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

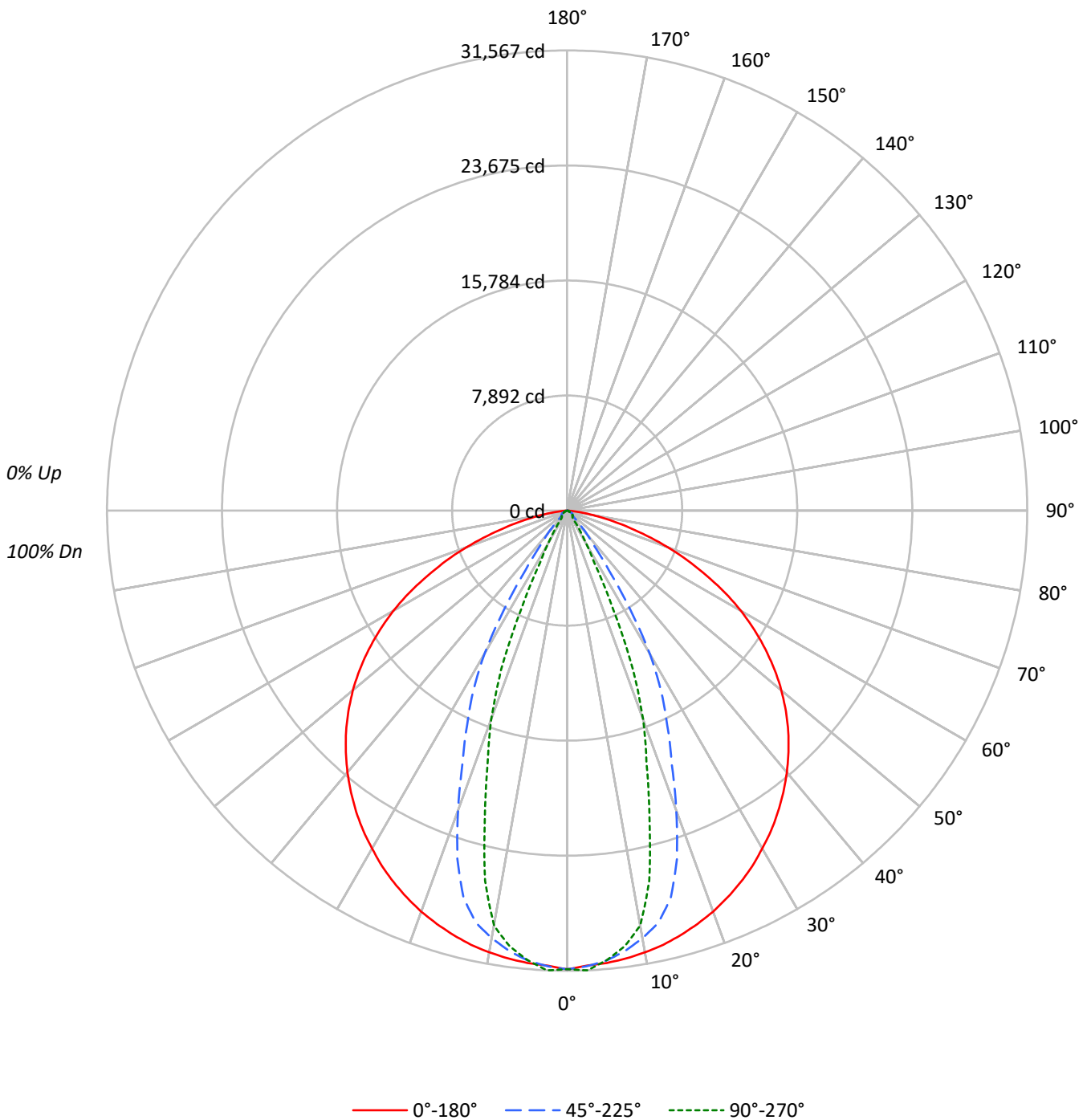
Lumens per Lamp: N/A  
Luminaire Lumens: 33649.0 lumens  
Efficiency: N/A  
Efficacy: 159.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 211.3  
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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90				90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				73
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66				66
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60				60
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57	55				55
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51				51
8	72	61	55	50	71	61	54	50	60	54	49	59	53	49	58	53	49	47				47
9	69	58	51	46	67	57	51	46	56	50	46	55	50	46	54	49	46	44				44
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41				41

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

	0°	45°	90°
0°	42333	42333	42333
5°	42073	41853	41822
10°	42044	40696	39495
15°	41996	38269	30368
20°	41914	31317	21782
25°	41783	24129	11069
30°	41585	17610	4027
35°	41437	8087	1402
40°	41182	3671	967
45°	40815	1369	980
50°	40165	994	1031
55°	38976	1046	786
60°	37038	1118	693
65°	33589	851	564
70°	28799	614	519
75°	22012	544	494
80°	13772	511	536
85°	4350	596	721



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2929.1	8.7
10°-20°	7378.8	21.9
20°-30°	8035.8	23.9
30°-40°	6011.2	17.9
40°-50°	4322.2	12.8
50°-60°	2654.5	7.9
60°-70°	1527.5	4.5
70°-80°	681.8	2.0
80°-90°	108.1	0.3
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°	18343.8	54.5
0°-40°	24355.0	72.4
0°-60°	31331.7	93.1
0°-90°	33649.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	33649.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	31463	31463	31463	31463	31463	
5°	31150	31297	30988	31017	30965	###
15°	30149	29571	27473	23595	21801	8511
25°	28144	26126	16253	10428	7456	12974
35°	25227	18093	4923	1447	853	15780
45°	21450	10166	720	533	515	16524
55°	16615	2112	446	432	335	14814
65°	10550	232	267	222	177	10444
75°	4234	140	105	108	95	4595
85°	282	27	39	50	47	561
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	31462.7	31462.7	31462.7	31462.7	31462.7
2.5°	31243.7	31448.2	31275.9	31430.5	31567.4
5°	31150.4	31296.9	30987.8	31016.7	30965.2
7.5°	30989.4	31024.8	30466.1	30250.4	30145.7
10°	30773.6	30678.6	29786.7	29273.1	28907.6
12.5°	30501.5	30187.6	28941.4	27107.6	26014.5
15°	30148.9	29571.0	27473.1	23594.6	21801.1
17.5°	29728.7	28926.9	25042.0	19664.6	18112.5
20°	29273.1	28215.3	21871.9	16719.9	15212.9
22.5°	28735.4	27305.7	18745.3	13905.6	11836.8
25°	28144.5	26125.5	16253.0	10428.0	7455.9
27.5°	27506.9	24568.7	13945.9	6394.9	4031.5
30°	26766.3	22673.7	11334.4	3588.7	2592.1
32.5°	26043.4	20464.8	8096.7	2390.9	1656.7
35°	25227.2	18093.2	4923.4	1447.4	853.3
37.5°	24362.6	15937.4	3081.5	787.3	589.3
40°	23446.5	13892.7	2089.8	558.7	550.6
42.5°	22467.6	12042.8	1308.9	531.3	549.0
45°	21450.1	10165.6	719.7	532.9	515.2
47.5°	20345.6	8127.3	502.3	503.9	502.3
50°	19188.0	5829.8	475.0	497.5	492.7
52.5°	17940.3	3619.3	476.6	486.2	436.3
55°	16615.2	2112.3	446.0	431.5	334.9
57.5°	15222.6	1317.0	436.3	355.8	301.1
60°	13763.9	695.5	415.4	320.4	257.6
62.5°	12210.3	342.9	333.3	273.7	210.9
65°	10550.4	231.8	267.3	222.2	177.1
67.5°	8946.8	209.3	201.3	181.9	154.6
70°	7320.7	191.6	156.2	159.4	132.0
72.5°	5725.2	173.9	125.6	136.9	111.1
75°	4234.3	140.1	104.7	107.9	95.0
77.5°	2946.3	109.5	82.1	91.8	88.6
80°	1777.4	69.2	66.0	75.7	69.2
82.5°	861.4	45.1	51.5	59.6	54.7
85°	281.8	27.4	38.6	49.9	46.7
87.5°	35.4	16.1	32.2	43.5	40.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)