

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-CLI-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 (P23769)  
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-CLI-UNV-L850-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

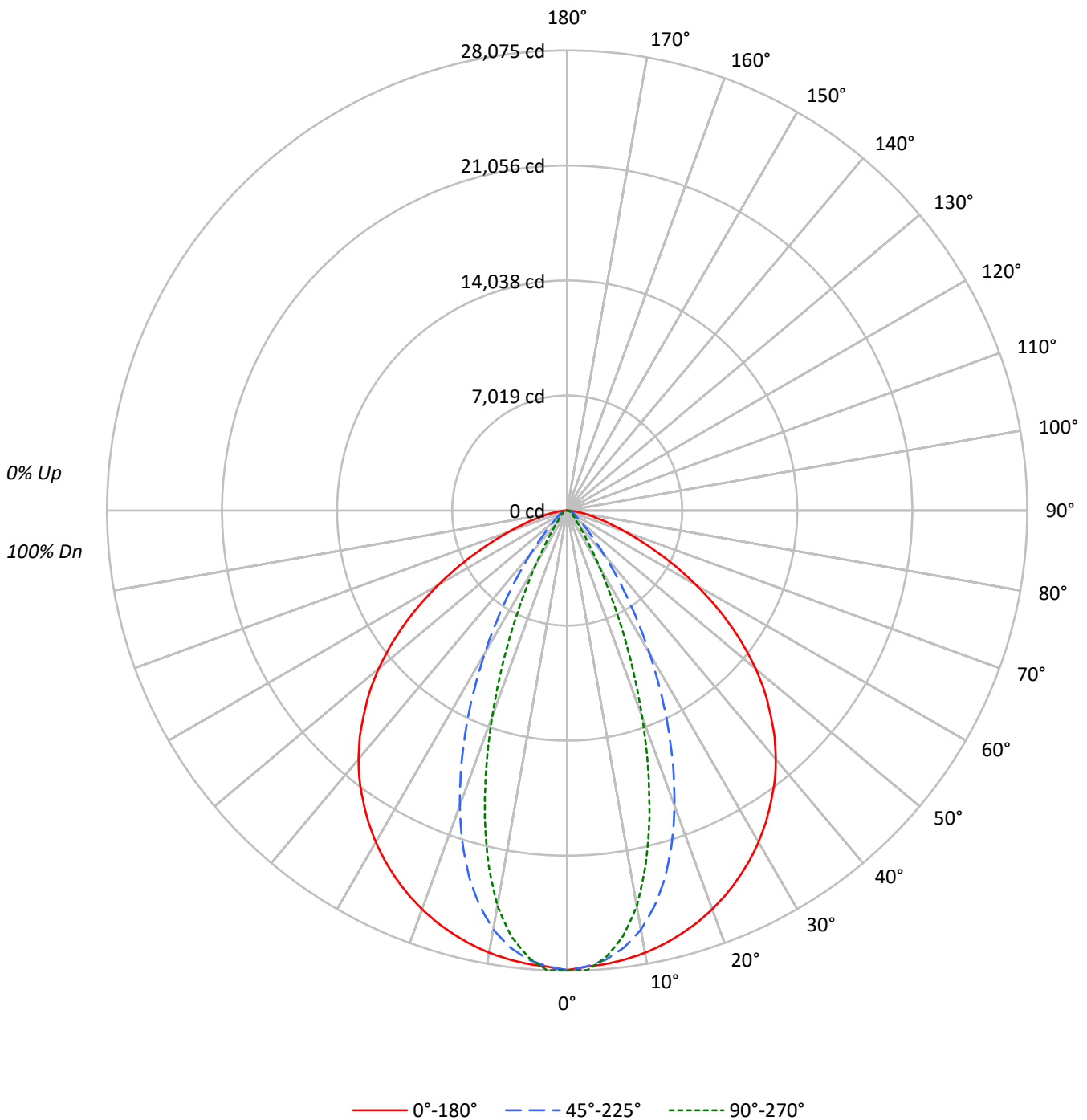
Lumens per Lamp: N/A  
Luminaire Lumens: 30694.0 lumens  
Efficiency: N/A  
Efficacy: 145.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65					65			
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60					60			
6	81	70	63	58	79	69	62	57	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50					50			
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46					46			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43					43			
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40					40			

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

	0°	45°	90°
0°	37723	37723	37723
5°	37496	37123	36928
10°	37433	35442	33445
15°	37283	32216	27010
20°	37059	27413	19144
25°	36728	21616	11567
30°	36281	15601	5944
35°	35627	10200	2969
40°	34782	6126	1733
45°	33336	3659	1295
50°	31442	2393	1088
55°	28457	1815	949
60°	24455	1546	866
65°	19670	1410	818
70°	14820	1510	813
75°	10901	1435	837
80°	7975	1430	915
85°	5973	1732	1186



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2582.0	8.4
10°-20°	6423.5	20.9
20°-30°	7115.0	23.2
30°-40°	5700.4	18.6
40°-50°	4069.3	13.3
50°-60°	2613.8	8.5
60°-70°	1416.5	4.6
70°-80°	605.4	2.0
80°-90°	167.9	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°	16120.6	52.5
0°-40°	21821.0	71.1
0°-60°	28504.2	92.9
0°-90°	30694.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	30694.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	28037	28037	28037	28037	28037	
5°	27762	27866	27486	27399	27341	###
15°	26765	25928	23128	20439	19391	7552
25°	24739	21814	14560	9486	7791	11397
35°	21690	15688	6210	2504	1808	13561
45°	17520	9057	1923	818	681	13504
55°	12131	4049	774	476	405	10811
65°	6178	1663	443	306	257	6187
75°	2097	608	276	192	161	2330
85°	387	161	112	93	77	473
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	28036.8	28036.8	28036.8	28036.8	28036.8
2.5°	27852.2	28026.4	27838.9	27955.5	28075.1
5°	27762.1	27865.5	27485.9	27398.8	27341.2
7.5°	27605.6	27576.0	26862.8	26400.6	26177.6
10°	27398.8	27159.6	25941.3	24925.3	24479.4
12.5°	27103.5	26610.3	24693.5	22909.6	22153.6
15°	26765.3	25928.0	23128.2	20439.1	19390.6
17.5°	26360.7	25130.6	21257.2	17789.9	16406.2
20°	25882.2	24167.8	19145.5	14975.3	13370.1
22.5°	25347.7	23057.3	16884.7	12169.5	10447.7
25°	24739.3	21813.9	14560.3	9486.4	7791.1
27.5°	24082.1	20433.2	12249.3	7088.2	5542.1
30°	23352.6	18938.8	10041.6	5110.9	3826.1
32.5°	22556.7	17349.8	7990.5	3594.3	2616.7
35°	21689.9	15688.5	6209.6	2504.5	1807.5
37.5°	20802.4	13993.3	4690.0	1770.6	1296.5
40°	19802.6	12303.9	3488.0	1296.5	986.4
42.5°	18729.1	10647.1	2581.3	998.3	798.9
45°	17519.6	9056.6	1922.7	818.1	680.8
47.5°	16347.1	7574.0	1460.5	697.0	592.2
50°	15021.1	6236.1	1143.0	608.4	519.8
52.5°	13613.8	5059.2	927.4	536.0	457.8
55°	12131.1	4049.1	773.8	475.5	404.6
57.5°	10629.3	3207.4	661.6	423.8	360.3
60°	9087.7	2565.0	574.4	379.5	321.9
62.5°	7582.9	2051.1	502.1	341.1	288.0
65°	6178.5	1662.8	443.0	305.7	256.9
67.5°	4880.5	1314.3	413.5	274.7	231.8
70°	3767.1	1023.4	383.9	245.1	206.7
72.5°	2854.5	785.6	339.6	218.6	183.1
75°	2096.9	608.4	276.1	192.0	161.0
77.5°	1500.3	468.1	224.5	166.9	138.8
80°	1029.3	348.5	184.6	143.2	118.1
82.5°	668.9	246.6	149.1	118.1	97.5
85°	386.9	161.0	112.2	93.0	76.8
87.5°	166.9	88.6	76.8	69.4	59.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)