

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-LD5-15HE-N-CLI-UNV-L850-ED1-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-LD5-15HE-N-CLI-UNV-L850-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

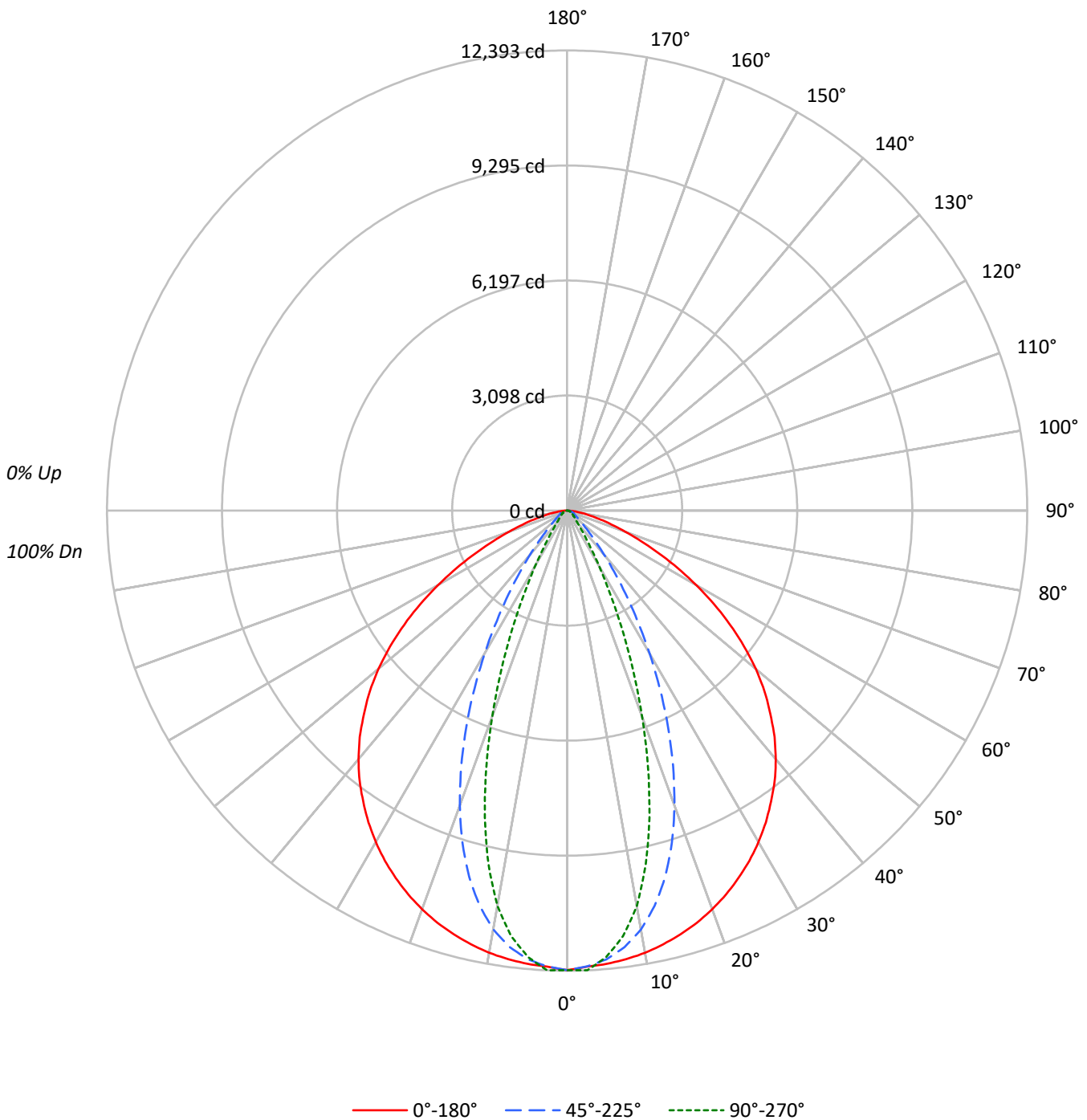
Lumens per Lamp: N/A  
Luminaire Lumens: 13549.0 lumens  
Efficiency: N/A  
Efficacy: 147.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 91.8  
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°	16652	16652	16652
5°	16552	16387	16301
10°	16524	15645	14763
15°	16457	14221	11923
20°	16359	12101	8451
25°	16212	9542	5106
30°	16016	6887	2624
35°	15726	4502	1311
40°	15353	2704	765
45°	14716	1615	572
50°	13879	1056	480
55°	12562	801	419
60°	10795	682	382
65°	8683	623	361
70°	6542	667	359
75°	4812	634	370
80°	3520	631	404
85°	2637	764	523



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1139.8	8.4
10°-20°	2835.5	20.9
20°-30°	3140.7	23.2
30°-40°	2516.3	18.6
40°-50°	1796.3	13.3
50°-60°	1153.8	8.5
60°-70°	625.3	4.6
70°-80°	267.3	2.0
80°-90°	74.1	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°	7116.0	52.5
0°-40°	9632.3	71.1
0°-60°	12582.4	92.9
0°-90°	13549.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13549.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12376	12376	12376	12376	12376	
5°	12255	12300	12133	12094	12069	###
15°	11815	11445	10209	9022	8559	3334
25°	10920	9629	6427	4188	3439	5031
35°	9574	6925	2741	1106	798	5986
45°	7734	3998	849	361	300	5961
55°	5355	1787	342	210	179	4772
65°	2727	734	196	135	113	2731
75°	926	269	122	85	71	1028
85°	171	71	50	41	34	209
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	12376.0	12376.0	12376.0	12376.0	12376.0
2.5°	12294.6	12371.5	12288.7	12340.2	12393.0
5°	12254.8	12300.4	12132.9	12094.4	12069.0
7.5°	12185.7	12172.7	11857.8	11653.8	11555.4
10°	12094.4	11988.8	11451.1	11002.6	10805.7
12.5°	11964.1	11746.3	10900.2	10112.8	9779.1
15°	11814.8	11445.2	10209.3	9022.3	8559.4
17.5°	11636.2	11093.2	9383.4	7852.8	7242.1
20°	11425.0	10668.2	8451.2	6610.4	5901.9
22.5°	11189.0	10178.0	7453.3	5371.9	4611.8
25°	10920.5	9629.1	6427.2	4187.5	3439.2
27.5°	10630.4	9019.7	5407.1	3128.9	2446.4
30°	10308.4	8360.0	4432.6	2256.1	1688.9
32.5°	9957.0	7658.6	3527.2	1586.6	1155.1
35°	9574.4	6925.3	2741.0	1105.5	797.9
37.5°	9182.6	6176.9	2070.3	781.6	572.3
40°	8741.3	5431.2	1539.7	572.3	435.4
42.5°	8267.4	4699.8	1139.4	440.7	352.7
45°	7733.6	3997.8	848.7	361.1	300.5
47.5°	7216.0	3343.3	644.7	307.7	261.4
50°	6630.6	2752.8	504.5	268.6	229.5
52.5°	6009.4	2233.2	409.4	236.6	202.1
55°	5355.0	1787.4	341.6	209.9	178.6
57.5°	4692.0	1415.8	292.0	187.1	159.1
60°	4011.5	1132.3	253.6	167.5	142.1
62.5°	3347.3	905.4	221.6	150.6	127.1
65°	2727.3	734.0	195.6	134.9	113.4
67.5°	2154.4	580.1	182.5	121.2	102.3
70°	1662.9	451.7	169.5	108.2	91.3
72.5°	1260.0	346.8	149.9	96.5	80.8
75°	925.6	268.6	121.9	84.7	71.1
77.5°	662.3	206.6	99.1	73.7	61.3
80°	454.3	153.8	81.5	63.2	52.1
82.5°	295.3	108.9	65.8	52.1	43.0
85°	170.8	71.1	49.5	41.1	33.9
87.5°	73.7	39.1	33.9	30.6	26.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)