

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-W-AI-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 (P23765)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-36HE-W-AI-UNV-L850-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

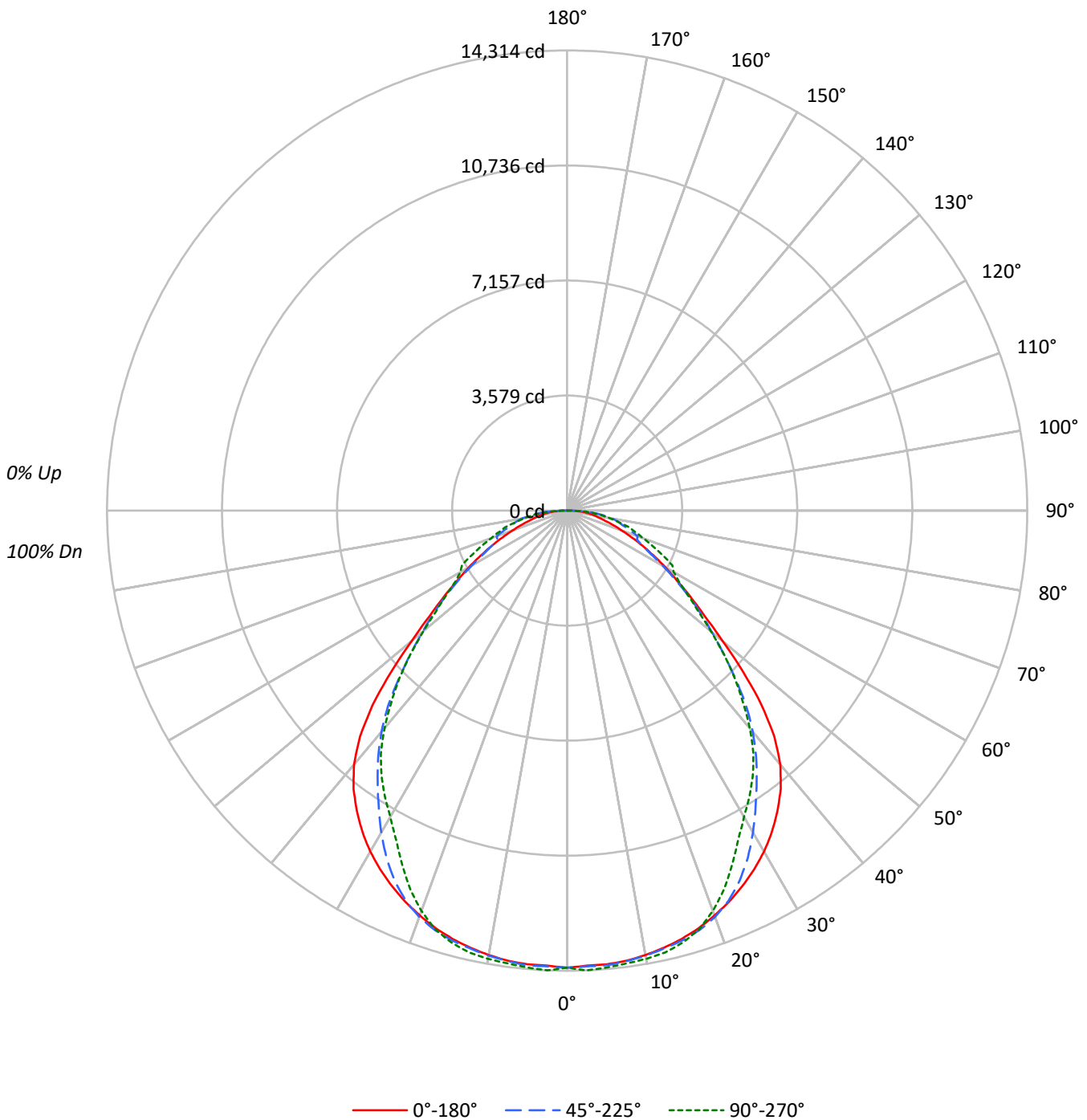
Lumens per Lamp: N/A  
Luminaire Lumens: 32912.0 lumens  
Efficiency: N/A  
Efficacy: 155.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	48	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

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

	0°	45°	90°
0°	19132	19132	19132
5°	19131	19172	19266
10°	19178	19202	19343
15°	19208	19279	19373
20°	19188	19260	18974
25°	19140	18853	18033
30°	19027	17964	17088
35°	18740	16884	16532
40°	18114	15786	15526
45°	16281	14096	14044
50°	13205	12278	12194
55°	10965	10761	10757
60°	9493	9216	10303
65°	8227	8176	10386
70°	7094	9172	9900
75°	6361	9400	10321
80°	6612	11066	10355
85°	7507	12752	11831



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1353.8	4.1
10°-20°	3910.0	11.9
20°-30°	5807.2	17.6
30°-40°	6592.7	20.0
40°-50°	5893.6	17.9
50°-60°	4074.9	12.4
60°-70°	2688.8	8.2
70°-80°	1814.0	5.5
80°-90°	776.9	2.4
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°	11071.0	33.6
0°-40°	17663.7	53.7
0°-60°	27632.2	84.0
0°-90°	32912.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	32912.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	14219	14219	14219	14219	14219	
5°	14164	14251	14195	14253	14264	###
15°	13789	13855	13841	13918	13908	3892
25°	12892	13015	12699	12321	12147	5940
35°	11409	11169	10279	10129	10065	7115
45°	8556	7832	7408	7464	7381	6507
55°	4674	4267	4587	4523	4586	4246
65°	2584	2294	2568	3003	3262	2579
75°	1224	1539	1808	1932	1985	1336
85°	486	676	826	831	766	507
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	14219.0	14219.0	14219.0	14219.0	14219.0
2.5°	14170.7	14259.3	14193.2	14254.4	14314.0
5°	14164.3	14251.2	14194.8	14252.8	14264.1
7.5°	14124.0	14204.5	14138.5	14194.8	14207.7
10°	14037.1	14132.1	14054.8	14141.7	14157.8
12.5°	13924.3	14021.0	13953.3	14072.5	14078.9
15°	13789.1	13855.1	13840.6	13917.9	13908.2
17.5°	13618.4	13694.1	13682.8	13702.2	13657.1
20°	13401.1	13486.4	13451.0	13362.4	13251.3
22.5°	13167.6	13270.6	13130.6	12906.8	12750.6
25°	12892.3	13014.6	12699.0	12320.7	12146.8
27.5°	12587.9	12697.4	12172.5	11708.8	11528.5
30°	12246.6	12293.3	11562.3	11121.1	10998.8
32.5°	11852.1	11784.5	10910.2	10618.8	10547.9
35°	11409.3	11169.4	10279.0	10129.3	10064.9
37.5°	10910.2	10470.6	9655.9	9586.7	9519.1
40°	10312.8	9664.0	8987.7	8942.6	8839.6
42.5°	9541.6	8786.4	8245.4	8192.3	8100.5
45°	8556.2	7831.6	7408.2	7464.5	7380.8
47.5°	7422.7	6873.6	6604.7	6759.3	6604.7
50°	6308.5	5939.7	5865.7	6005.8	5825.4
52.5°	5395.5	5063.8	5216.8	5241.0	5133.1
55°	4674.2	4266.8	4587.2	4522.8	4585.6
57.5°	4046.2	3590.6	3985.1	3911.0	4126.7
60°	3527.8	3015.8	3424.7	3408.6	3828.9
62.5°	3019.0	2610.0	2938.5	3175.2	3692.0
65°	2584.2	2294.4	2568.1	3002.9	3262.1
67.5°	2167.2	2057.7	2349.2	2590.7	2874.1
70°	1803.3	1859.7	2331.5	2286.4	2516.6
72.5°	1497.4	1689.0	2057.7	2065.8	2228.4
75°	1223.7	1539.3	1808.2	1932.1	1985.3
77.5°	1017.6	1396.0	1632.7	1676.1	1624.6
80°	853.4	1230.1	1428.2	1408.9	1336.4
82.5°	689.1	932.3	1125.5	1143.2	1057.9
85°	486.3	676.3	826.0	830.8	766.4
87.5°	260.8	417.0	500.7	515.2	476.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)