

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-LD5-48HE-N-CLI-UNV-L835-ED4-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-LD5-48HE-N-CLI-UNV-L835-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

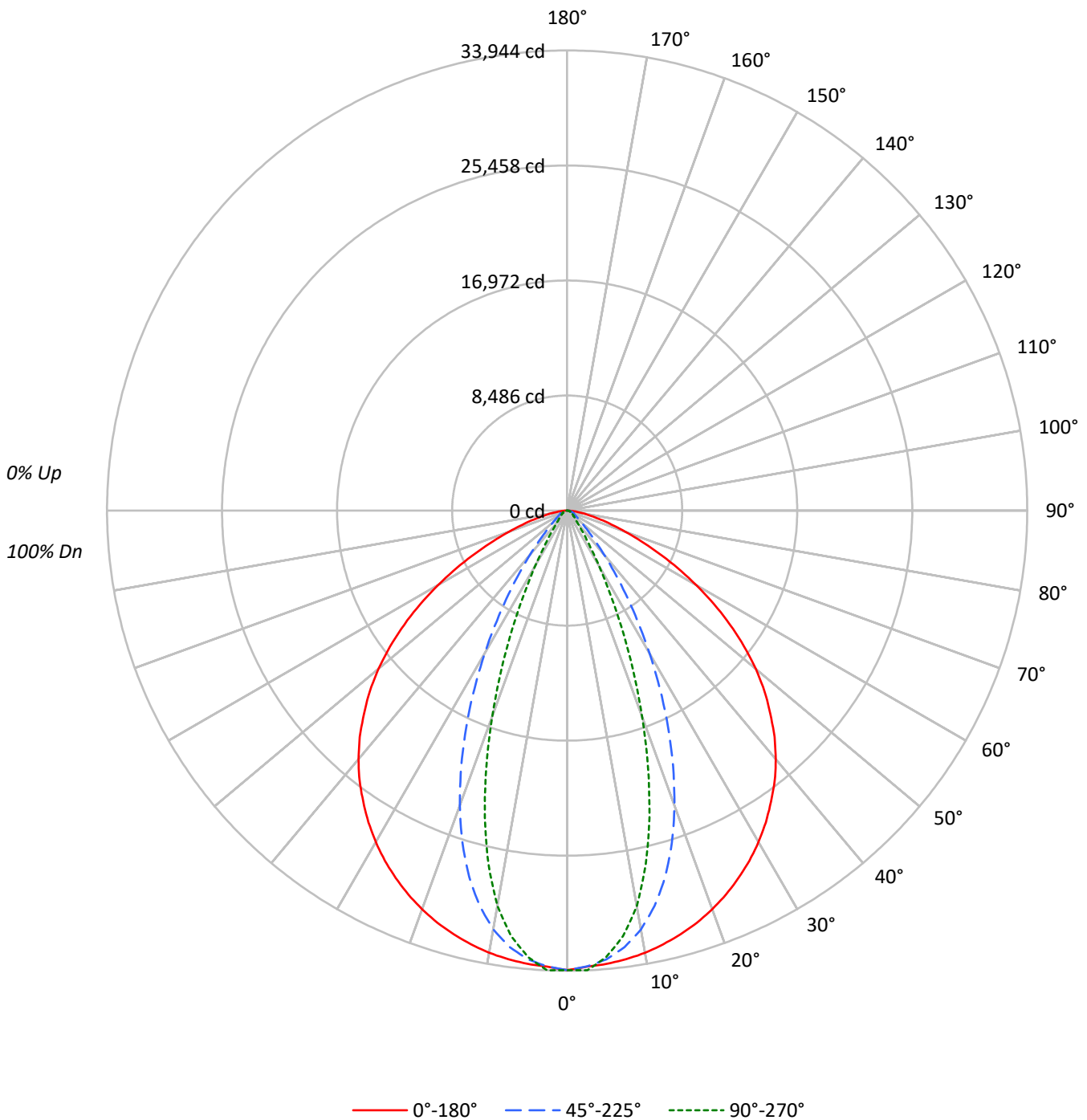
Lumens per Lamp: N/A  
Luminaire Lumens: 37110.0 lumens  
Efficiency: N/A  
Efficacy: 129.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 286.2  
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°	45608	45608	45608
5°	45334	44883	44647
10°	45258	42851	40436
15°	45076	38951	32656
20°	44806	33144	23146
25°	44405	26134	13984
30°	43866	18862	7187
35°	43073	12331	3589
40°	42052	7407	2095
45°	40305	4423	1566
50°	38015	2893	1316
55°	34405	2194	1148
60°	29567	1869	1047
65°	23782	1705	989
70°	17917	1826	983
75°	13179	1736	1012
80°	9642	1729	1106
85°	7222	2095	1433



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3121.7	8.4
10°-20°	7766.3	20.9
20°-30°	8602.3	23.2
30°-40°	6892.0	18.6
40°-50°	4920.0	13.3
50°-60°	3160.2	8.5
60°-70°	1712.6	4.6
70°-80°	732.0	2.0
80°-90°	203.0	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°	19490.3	52.5
0°-40°	26382.3	71.1
0°-60°	34462.4	92.9
0°-90°	37110.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	37110.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	33897	33897	33897	33897	33897	
5°	33565	33690	33231	33126	33056	###
15°	32360	31348	27963	24712	23444	9130
25°	29910	26374	17604	11469	9420	13779
35°	26224	18968	7508	3028	2185	16396
45°	21182	10950	2325	989	823	16327
55°	14667	4896	936	575	489	13071
65°	7470	2010	536	370	311	7480
75°	2535	736	334	232	195	2817
85°	468	195	136	112	93	571
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	33897.3	33897.3	33897.3	33897.3	33897.3
2.5°	33674.1	33884.8	33658.1	33799.1	33943.7
5°	33565.2	33690.2	33231.4	33126.0	33056.4
7.5°	33376.0	33340.3	32477.9	31919.1	31649.5
10°	33126.0	32836.8	31363.8	30135.5	29596.3
12.5°	32768.9	32172.6	29855.2	27698.4	26784.3
15°	32360.1	31347.8	27962.7	24711.5	23443.9
17.5°	31870.9	30383.7	25700.6	21508.5	19835.6
20°	31292.4	29219.6	23147.5	18105.6	16164.9
22.5°	30646.1	27877.0	20414.1	14713.4	12631.6
25°	29910.5	26373.7	17603.9	11469.3	9419.7
27.5°	29116.0	24704.4	14809.8	8569.8	6700.5
30°	28234.1	22897.6	12140.6	6179.2	4625.9
32.5°	27271.7	20976.5	9660.7	4345.6	3163.7
35°	26223.7	18967.9	7507.5	3028.0	2185.3
37.5°	25150.7	16918.3	5670.4	2140.7	1567.6
40°	23942.0	14875.8	4217.1	1567.6	1192.6
42.5°	22644.0	12872.6	3120.9	1206.9	965.9
45°	21181.8	10949.8	2324.6	989.1	823.1
47.5°	19764.2	9157.2	1765.7	842.7	715.9
50°	18160.9	7539.7	1381.9	735.6	628.5
52.5°	16459.5	6116.7	1121.2	648.1	553.5
55°	14666.9	4895.5	935.5	574.9	489.2
57.5°	12851.2	3877.9	799.9	512.4	435.6
60°	10987.3	3101.2	694.5	458.8	389.2
62.5°	9167.9	2479.9	607.0	412.4	348.1
65°	7470.0	2010.3	535.6	369.6	310.7
67.5°	5900.7	1589.0	499.9	332.1	280.3
70°	4554.5	1237.3	464.2	296.4	250.0
72.5°	3451.1	949.8	410.6	264.2	221.4
75°	2535.2	735.6	333.9	232.1	194.6
77.5°	1814.0	566.0	271.4	201.7	167.8
80°	1244.4	421.4	223.2	173.2	142.8
82.5°	808.8	298.2	180.3	142.8	117.8
85°	467.8	194.6	135.7	112.5	92.8
87.5°	201.7	107.1	92.8	83.9	71.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)