

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-W-WG-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 (P33336)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-48HE-W-WG-UNV-L835-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

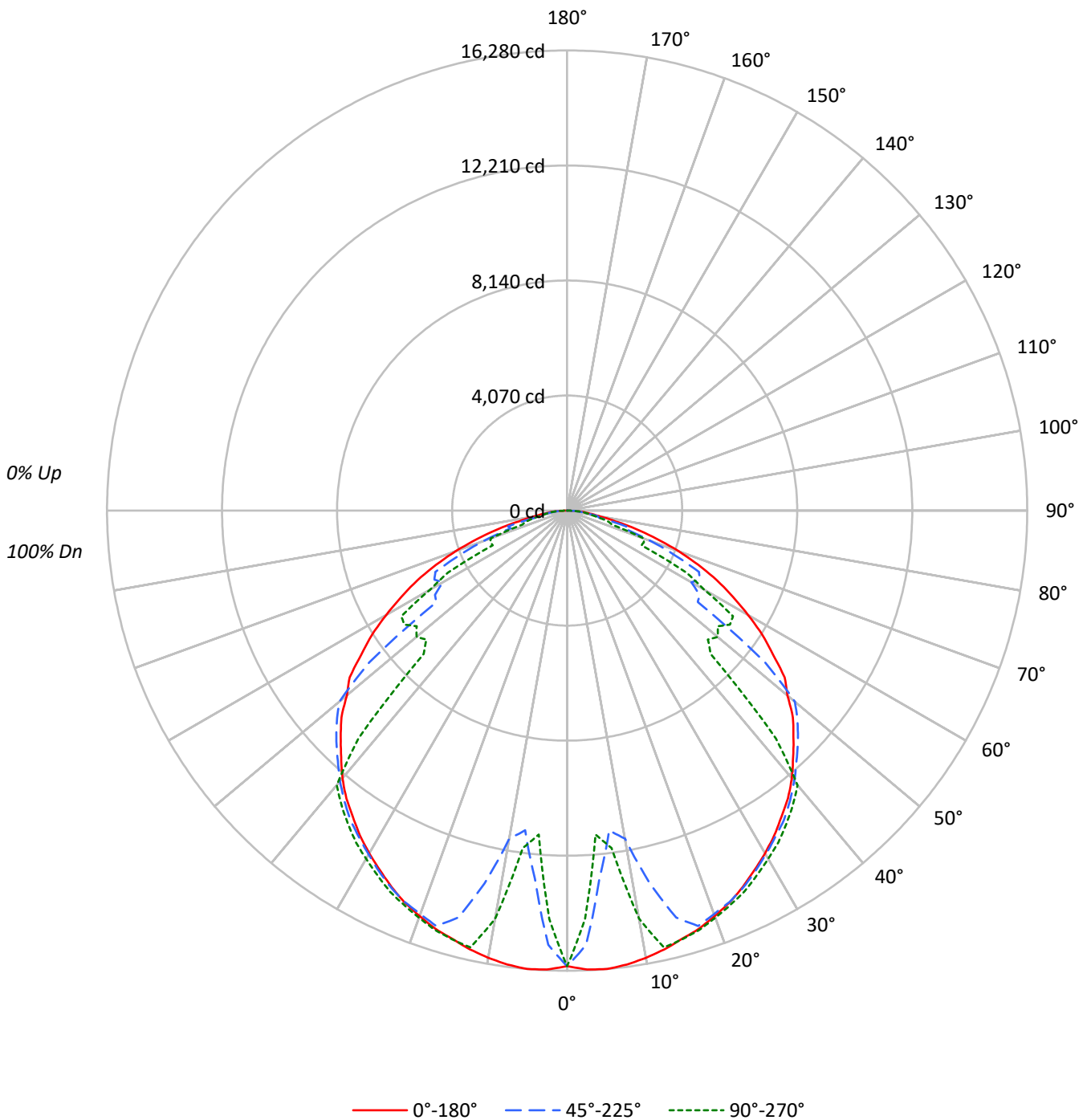
Lumens per Lamp: N/A  
Luminaire Lumens: 42701.0 lumens  
Efficiency: N/A  
Efficacy: 149.2 lumens/watt  
Spacing Criteria (0/90/45): 1.29 / 1.31 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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



TEST NUMBER: P#  
CATALOG NUMBER: HBLED-LD5-48HE-W-WG-UNV-L835-ED4-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48HE-W-WG-UNV-L835-ED4-U

**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	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72					72			
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61					61			
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52					52			
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45					45			
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	33	46	38	33	44	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28					28			
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25					25			

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

	0°	45°	90°
0°	21687	21687	21687
5°	21988	17665	15535
10°	21950	16110	20036
15°	21853	20763	21872
20°	21853	21754	21947
25°	21814	21863	22063
30°	21751	21823	22104
35°	21717	21957	22214
40°	21719	21956	22271
45°	21549	21971	13653
50°	21305	22015	14552
55°	20856	13238	16493
60°	19895	13645	15103
65°	18641	16383	9241
70°	16460	12412	11327
75°	13115	11282	7855
80°	9035	8154	6750
85°	8659	7527	7142



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48HE-W-WG-UNV-L835-ED4-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1288.9	3.0
10°-20°	4037.9	9.5
20°-30°	6643.2	15.6
30°-40°	8353.0	19.6
40°-50°	8192.2	19.2
50°-60°	6787.7	15.9
60°-70°	4787.5	11.2
70°-80°	2088.7	4.9
80°-90°	521.9	1.2
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°	11970.1	28.0
0°-40°	20323.1	47.6
0°-60°	35302.9	82.7
0°-90°	42701.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	42701.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	16118	16118	16118	16118	16118	
5°	16280	15153	13079	11859	11502	###
15°	15688	10895	14906	15750	15702	4436
25°	14694	13445	14727	14825	14862	6773
35°	13222	13214	13368	13457	13524	8284
45°	11325	11360	11547	10226	7175	8742
55°	8891	9182	5643	6416	7031	7955
65°	5855	6200	5146	3959	2903	5757
75°	2523	2473	2170	1418	1511	2705
85°	561	499	488	466	463	582
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48HE-W-WG-UNV-L835-ED4-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	16118.2	16118.2	16118.2	16118.2	16118.2
2.5°	16251.2	15913.9	15378.1	14703.6	14464.6
5°	16280.1	15152.6	13078.8	11858.8	11502.3
7.5°	16197.3	13770.8	11402.1	11658.4	12036.2
10°	16066.2	12556.5	11791.4	13872.9	14665.0
12.5°	15898.5	11477.2	13508.6	15671.1	15829.1
15°	15688.4	10895.2	14906.0	15750.1	15701.9
17.5°	15511.1	11236.3	15407.1	15592.1	15557.4
20°	15262.5	11916.7	15193.1	15341.5	15328.0
22.5°	15012.0	12722.3	14990.8	15096.8	15096.8
25°	14693.9	13445.0	14726.7	14825.0	14861.6
27.5°	14345.1	13861.3	14397.1	14478.1	14543.6
30°	14000.1	13921.1	14046.4	14150.4	14227.5
32.5°	13635.8	13605.0	13703.3	13813.2	13911.4
35°	13221.5	13213.8	13367.9	13456.6	13524.1
37.5°	12832.1	12805.2	12947.8	13071.1	13123.2
40°	12365.7	12365.7	12500.6	12625.9	12679.9
42.5°	11833.8	11909.0	12013.0	12142.2	10935.7
45°	11325.0	11359.7	11546.6	10226.4	7175.4
47.5°	10835.4	10879.8	11057.1	6574.1	6753.4
50°	10178.2	10378.7	10517.4	6554.8	6951.9
52.5°	9698.3	9785.0	8829.1	6489.3	6712.9
55°	8890.8	9181.8	5643.2	6416.1	7030.9
57.5°	8200.8	8412.8	5548.8	6574.1	6955.7
60°	7393.2	7717.0	5070.8	6342.8	5612.4
62.5°	6618.4	6926.8	5294.4	4991.8	4752.8
65°	5855.2	6200.2	5146.0	3958.7	2902.6
67.5°	5018.8	4696.9	4105.2	2788.8	2935.3
70°	4184.2	3280.3	3155.0	3118.4	2879.4
72.5°	3326.6	2393.7	2095.0	2339.8	1674.8
75°	2522.9	2472.8	2170.2	1418.5	1511.0
77.5°	1750.0	1784.7	1162.2	1383.8	1148.7
80°	1166.0	1009.9	1052.3	882.7	871.2
82.5°	807.6	824.9	691.9	670.7	680.3
85°	560.9	499.2	487.6	466.4	462.6
87.5°	187.0	217.8	202.4	183.1	194.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)