

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-L840-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-L840-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

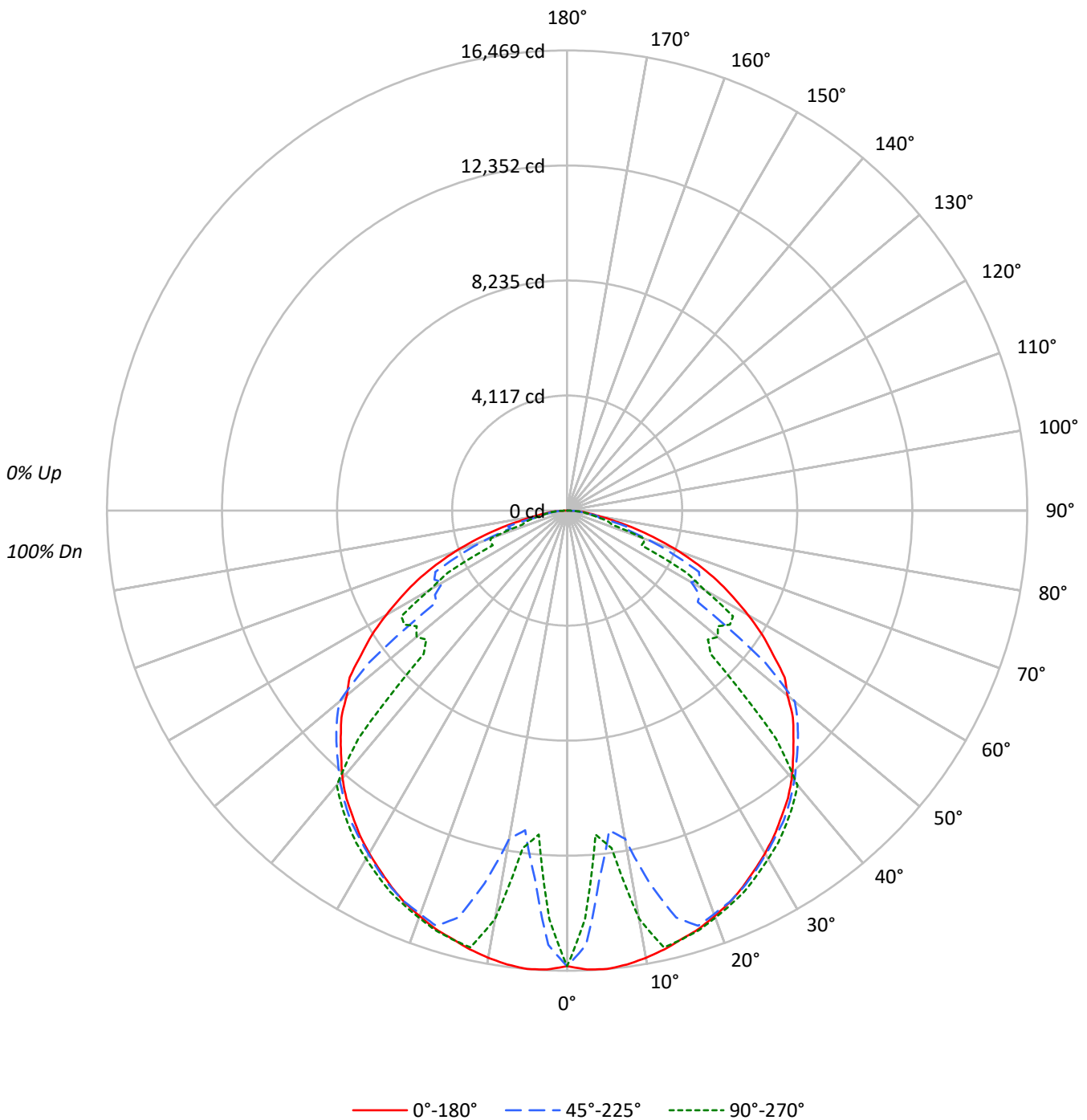
Lumens per Lamp: N/A
Luminaire Lumens: 43196.0 lumens
Efficiency: N/A
Efficacy: 150.9 lumens/watt
Spacing Criteria (0/90/45): 1.29 / 1.31 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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-L840-ED4-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48HE-W-WG-UNV-L840-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21938	21938	21938
5°	22243	17869	15715
10°	22205	16297	20268
15°	22107	21004	22126
20°	22107	22006	22202
25°	22067	22116	22319
30°	22003	22076	22361
35°	21968	22212	22471
40°	21971	22211	22529
45°	21799	22226	13812
50°	21552	22270	14720
55°	21098	13391	16684
60°	20126	13804	15278
65°	18857	16573	9348
70°	16651	12556	11459
75°	13267	11412	7946
80°	9140	8248	6829
85°	8759	7615	7223



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48HE-W-WG-UNV-L840-ED4-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1303.8	3.0
10°-20°	4084.7	9.5
20°-30°	6720.3	15.6
30°-40°	8449.8	19.6
40°-50°	8287.2	19.2
50°-60°	6866.3	15.9
60°-70°	4843.0	11.2
70°-80°	2112.9	4.9
80°-90°	527.9	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°	12108.8	28.0
0°-40°	20558.7	47.6
0°-60°	35712.2	82.7
0°-90°	43196.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	43196.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16305	16305	16305	16305	16305	
5°	16469	15328	13230	11996	11636	###
15°	15870	11022	15079	15933	15884	4488
25°	14864	13601	14897	14997	15034	6852
35°	13375	13367	13523	13613	13681	8380
45°	11456	11491	11680	10345	7259	8843
55°	8994	9288	5709	6490	7112	8047
65°	5923	6272	5206	4005	2936	5824
75°	2552	2501	2195	1435	1528	2737
85°	567	505	493	472	468	588
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48HE-W-WG-UNV-L840-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	16305.1	16305.1	16305.1	16305.1	16305.1
2.5°	16439.6	16098.4	15556.4	14874.0	14632.3
5°	16468.9	15328.3	13230.5	11996.3	11635.6
7.5°	16385.0	13930.4	11534.2	11793.6	12175.7
10°	16252.4	12702.1	11928.1	14033.7	14835.0
12.5°	16082.8	11610.3	13665.2	15852.8	16012.6
15°	15870.3	11021.5	15078.7	15932.7	15884.0
17.5°	15690.9	11366.6	15585.7	15772.8	15737.7
20°	15439.4	12054.8	15369.2	15519.4	15505.7
22.5°	15186.0	12869.8	15164.5	15271.8	15271.8
25°	14864.3	13600.9	14897.4	14996.9	15033.9
27.5°	14511.4	14022.0	14564.0	14645.9	14712.2
30°	14162.4	14082.5	14209.2	14314.5	14392.5
32.5°	13793.9	13762.7	13862.1	13973.3	14072.7
35°	13374.7	13366.9	13522.9	13612.6	13680.8
37.5°	12980.9	12953.6	13097.9	13222.7	13275.3
40°	12509.1	12509.1	12645.6	12772.3	12826.9
42.5°	11971.0	12047.0	12152.3	12282.9	11062.4
45°	11456.3	11491.4	11680.5	10344.9	7258.6
47.5°	10961.0	11005.9	11185.3	6650.3	6831.6
50°	10296.2	10499.0	10639.3	6630.8	7032.5
52.5°	9810.7	9898.5	8931.4	6564.5	6790.7
55°	8993.8	9288.2	5708.6	6490.4	7112.4
57.5°	8295.8	8510.3	5613.1	6650.3	7036.4
60°	7478.9	7806.5	5129.6	6416.4	5677.4
62.5°	6695.2	7007.1	5355.7	5049.6	4807.9
65°	5923.1	6272.1	5205.6	4004.6	2936.2
67.5°	5076.9	4751.3	4152.8	2821.2	2969.3
70°	4232.7	3318.3	3191.6	3154.6	2912.8
72.5°	3365.1	2421.5	2119.3	2366.9	1694.3
75°	2552.1	2501.4	2195.3	1435.0	1528.5
77.5°	1770.3	1805.4	1175.7	1399.9	1162.0
80°	1179.6	1021.6	1064.5	892.9	881.3
82.5°	816.9	834.5	699.9	678.5	688.2
85°	567.4	505.0	493.3	471.8	467.9
87.5°	189.1	220.3	204.7	185.2	196.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)