

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-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 (P23767)
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-UNV-L840-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

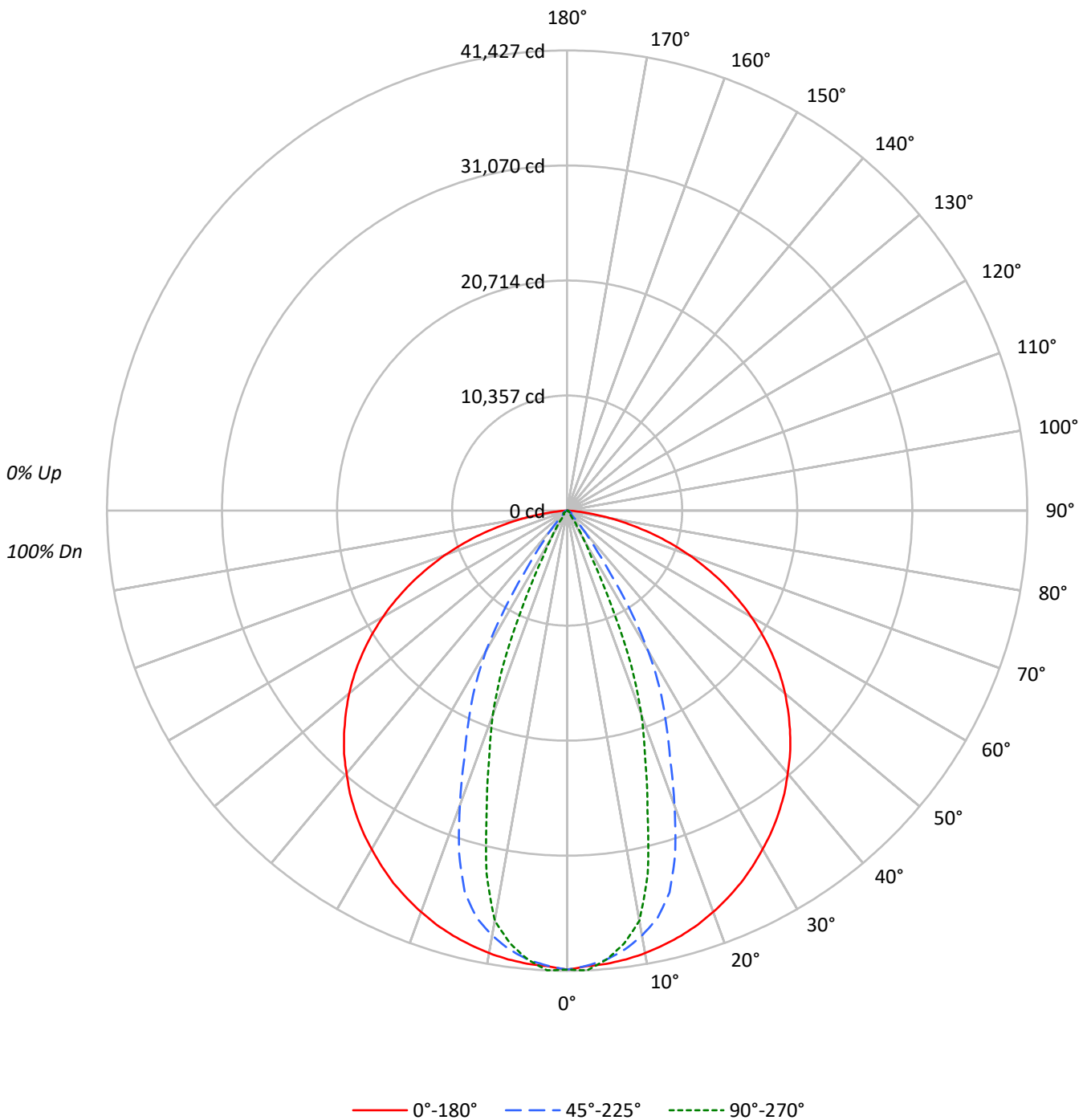
Lumens per Lamp: N/A
Luminaire Lumens: 43925.0 lumens
Efficiency: N/A
Efficacy: 153.5 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	55605	55605	55605
5°	55307	54819	54795
10°	55272	53062	51200
15°	55195	49572	38966
20°	55066	40412	28048
25°	54926	31247	13817
30°	54683	22710	4481
35°	54554	10075	1153
40°	54268	4092	777
45°	54026	1149	827
50°	53604	815	918
55°	52832	969	392
60°	51528	1079	238
65°	49409	689	282
70°	45901	611	348
75°	40155	460	480
80°	30024	563	686
85°	14871	729	911



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3835.2	8.7
10°-20°	9589.8	21.8
20°-30°	10387.3	23.6
30°-40°	7692.2	17.5
40°-50°	5540.4	12.6
50°-60°	3430.5	7.8
60°-70°	2109.8	4.8
70°-80°	1112.2	2.5
80°-90°	227.6	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°	23812.3	54.2
0°-40°	31504.5	71.7
0°-60°	40475.4	92.1
0°-90°	43925.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	43925.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	41327	41327	41327	41327	41327	
5°	40949	41100	40587	40617	40570	###
15°	39624	38704	35588	30264	27974	11186
25°	36998	33889	21048	13241	9307	17047
35°	33213	23415	6134	1443	702	20779
45°	28392	13192	604	436	434	21896
55°	22522	2717	413	374	167	20106
65°	15519	287	216	138	88	15312
75°	7724	67	88	116	92	8158
85°	963	26	47	71	59	###
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	41326.6	41326.6	41326.6	41326.6	41326.6
2.5°	41061.2	41322.7	41014.0	41244.1	41426.9
5°	40949.2	41100.5	40587.4	40616.9	40569.7
7.5°	40752.6	40717.2	39854.1	39476.7	39311.5
10°	40455.7	40221.8	38837.7	38049.4	37475.3
12.5°	40072.3	39549.4	37569.7	35063.1	33506.0
15°	39624.1	38704.0	35588.0	30264.1	27973.8
17.5°	39089.4	37785.9	32348.1	25364.9	23320.3
20°	38458.3	36761.7	28223.5	21580.4	19588.9
22.5°	37754.5	35515.2	24216.8	17935.5	15094.7
25°	36997.6	33889.4	21047.7	13240.8	9306.9
27.5°	36122.7	31799.5	18075.1	7799.0	4749.8
30°	35196.7	29283.1	14617.0	4195.4	2884.1
32.5°	34262.9	26430.5	10343.0	2620.6	1635.7
35°	33213.1	23414.7	6133.8	1443.0	701.9
37.5°	32118.0	20650.5	3625.2	656.6	450.2
40°	30897.2	18124.3	2329.7	436.4	442.3
42.5°	29717.6	15769.0	1311.3	430.5	438.4
45°	28392.5	13191.7	603.6	436.4	434.5
47.5°	27022.2	10519.9	391.2	440.4	440.4
50°	25608.7	7521.8	389.3	450.2	438.4
52.5°	24116.5	4692.8	405.0	448.2	359.8
55°	22522.1	2717.0	412.9	373.5	167.1
57.5°	20870.7	1602.3	416.8	214.3	94.4
60°	19148.5	886.7	401.1	159.2	88.5
62.5°	17373.3	422.7	316.5	149.4	86.5
65°	15519.4	287.0	216.3	137.6	88.5
67.5°	13594.7	222.2	171.0	129.8	90.4
70°	11668.0	165.1	155.3	129.8	88.5
72.5°	9709.9	112.1	129.8	131.7	88.5
75°	7724.3	66.8	88.5	116.0	92.4
77.5°	5756.4	41.3	68.8	119.9	112.1
80°	3874.9	35.4	72.7	112.1	88.5
82.5°	2274.6	31.5	70.8	86.5	70.8
85°	963.3	25.6	47.2	70.8	59.0
87.5°	180.9	21.6	37.4	57.0	51.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)