

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

Luminaire Equipment: Sample No. Condition Description

Summary

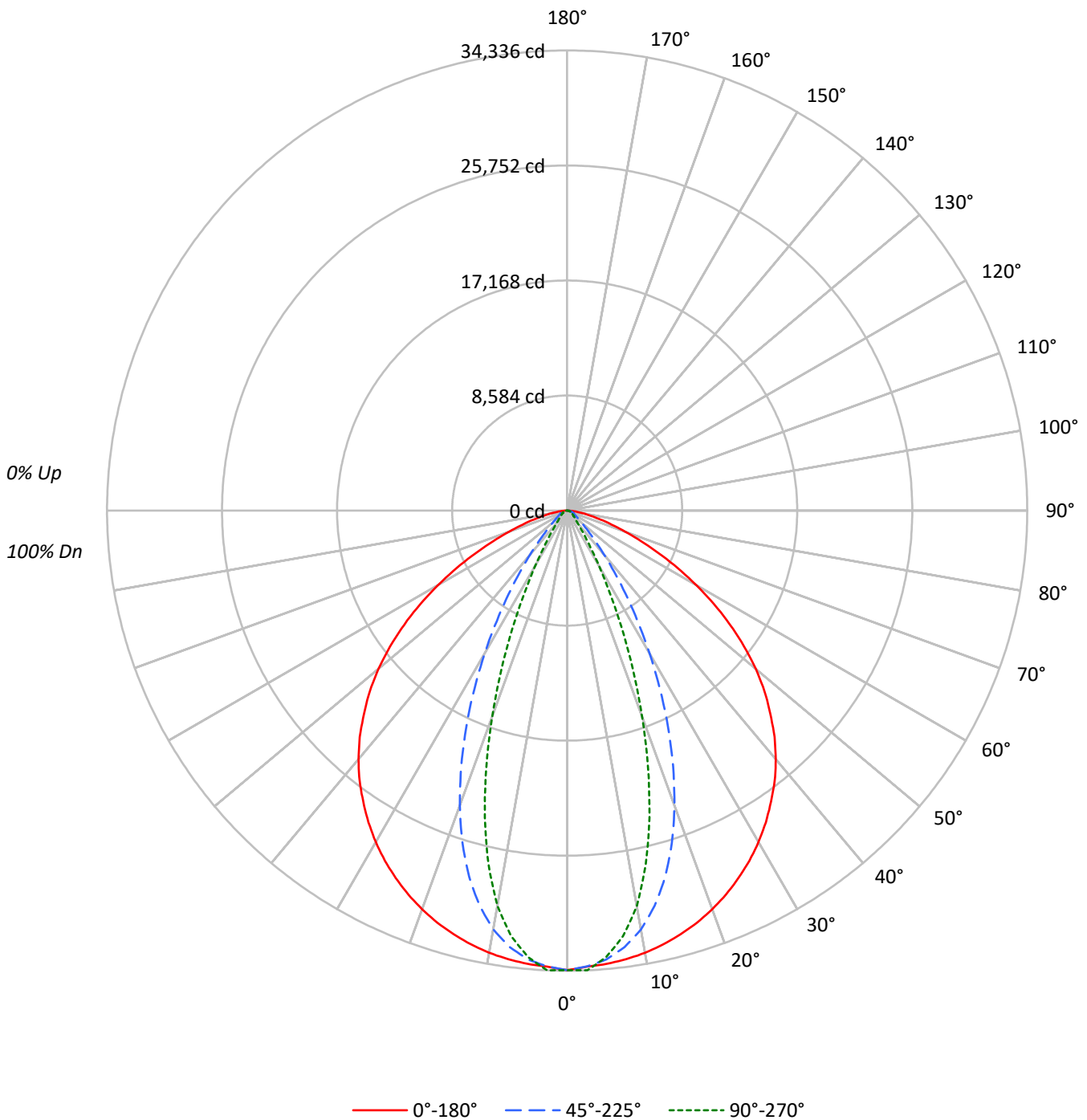
Lumens per Lamp: N/A
Luminaire Lumens: 37539.0 lumens
Efficiency: N/A
Efficacy: 131.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	46136	46136	46136
5°	45858	45402	45163
10°	45782	43346	40903
15°	45597	39401	33034
20°	45324	33527	23413
25°	44918	26437	14146
30°	44373	19080	7270
35°	43571	12474	3631
40°	42538	7493	2119
45°	40771	4474	1584
50°	38454	2926	1331
55°	34803	2220	1161
60°	29908	1890	1059
65°	24057	1725	1000
70°	18124	1847	995
75°	13332	1756	1024
80°	9754	1750	1120
85°	7305	2120	1450



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3157.8	8.4
10°-20°	7856.0	20.9
20°-30°	8701.7	23.2
30°-40°	6971.6	18.6
40°-50°	4976.8	13.3
50°-60°	3196.7	8.5
60°-70°	1732.4	4.6
70°-80°	740.5	2.0
80°-90°	205.4	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°	19715.6	52.5
0°-40°	26687.3	71.1
0°-60°	34860.8	92.9
0°-90°	37539.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	37539.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	34289	34289	34289	34289	34289	
5°	33953	34080	33616	33509	33438	###
15°	32734	31710	28286	24997	23715	9236
25°	30256	26679	17807	11602	9529	13939
35°	26527	19187	7594	3063	2211	16586
45°	21427	11076	2351	1000	833	16515
55°	14836	4952	946	582	495	13222
65°	7556	2034	542	374	314	7567
75°	2565	744	338	235	197	2850
85°	473	197	137	114	94	578
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	34289.2	34289.2	34289.2	34289.2	34289.2
2.5°	34063.4	34276.5	34047.2	34189.8	34336.1
5°	33953.2	34079.7	33615.5	33509.0	33438.5
7.5°	33761.8	33725.7	32853.4	32288.1	32015.4
10°	33509.0	33216.4	31726.4	30483.9	29938.5
12.5°	33147.8	32544.5	30200.3	28018.7	27094.0
15°	32734.2	31710.2	28285.9	24997.2	23714.9
17.5°	32239.3	30734.9	25997.7	21757.2	20064.9
20°	31654.2	29557.4	23415.1	18314.9	16351.7
22.5°	31000.4	28199.3	20650.1	14883.4	12777.6
25°	30256.3	26678.6	17807.4	11601.9	9528.6
27.5°	29452.6	24989.9	14981.0	8668.9	6778.0
30°	28560.5	23162.3	12281.0	6250.6	4679.4
32.5°	27587.0	21219.0	9772.4	4395.9	3200.3
35°	26526.9	19187.2	7594.3	3063.0	2210.6
37.5°	25441.5	17113.9	5735.9	2165.4	1585.7
40°	24218.8	15047.8	4265.8	1585.7	1206.4
42.5°	22905.8	13021.4	3156.9	1220.9	977.1
45°	21426.7	11076.3	2351.4	1000.5	832.6
47.5°	19992.7	9263.1	1786.2	852.4	724.2
50°	18370.9	7626.8	1397.9	744.1	635.7
52.5°	16649.7	6187.4	1134.2	655.6	559.9
55°	14836.5	4952.1	946.4	581.5	494.9
57.5°	12999.8	3922.7	809.1	518.3	440.7
60°	11114.3	3137.1	702.5	464.1	393.7
62.5°	9273.9	2508.6	614.0	417.2	352.2
65°	7556.4	2033.6	541.8	373.8	314.2
67.5°	5968.9	1607.4	505.7	335.9	283.5
70°	4607.2	1251.6	469.6	299.8	252.8
72.5°	3491.0	960.8	415.4	267.3	223.9
75°	2564.6	744.1	337.7	234.8	196.9
77.5°	1834.9	572.5	274.5	204.1	169.8
80°	1258.8	426.2	225.8	175.2	144.5
82.5°	818.1	301.6	182.4	144.5	119.2
85°	473.2	196.9	137.3	113.8	93.9
87.5°	204.1	108.4	93.9	84.9	72.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)