

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-LD5-48SE-N-CLI-UNV-L735-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-LD5-48SE-N-CLI-UNV-L735-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

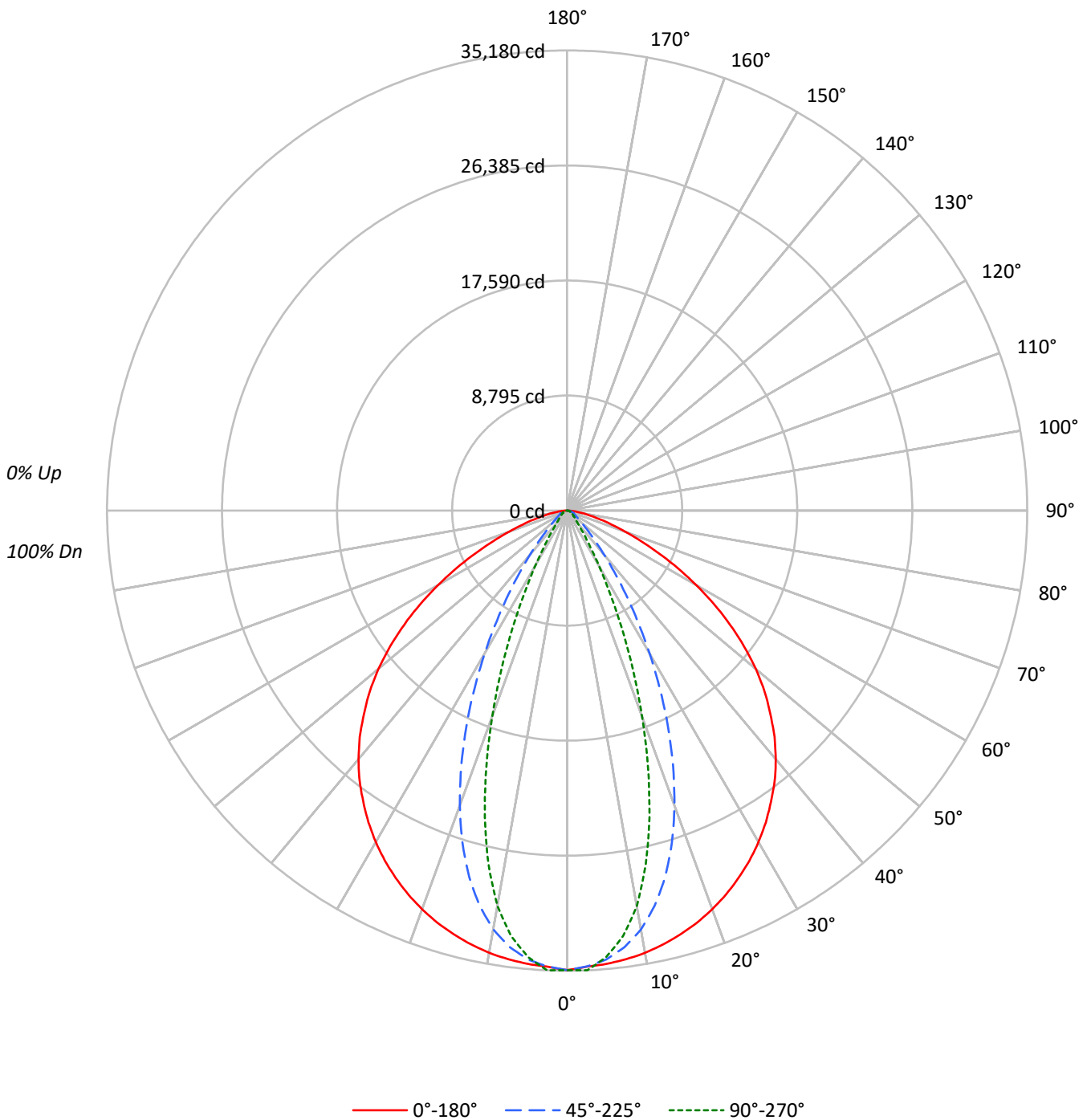
Lumens per Lamp: N/A  
Luminaire Lumens: 38462.0 lumens  
Efficiency: N/A  
Efficacy: 128.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 299.1  
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°	47270	47270	47270
5°	46986	46518	46273
10°	46907	44412	41909
15°	46718	40370	33846
20°	46438	34351	23989
25°	46022	27087	14494
30°	45464	19549	7449
35°	44643	12781	3720
40°	43584	7677	2171
45°	41773	4584	1623
50°	39400	2998	1364
55°	35659	2274	1189
60°	30644	1937	1086
65°	24649	1767	1025
70°	18570	1893	1019
75°	13660	1799	1049
80°	9993	1792	1147
85°	7484	2171	1485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3235.5	8.4
10°-20°	8049.2	20.9
20°-30°	8915.7	23.2
30°-40°	7143.1	18.6
40°-50°	5099.2	13.3
50°-60°	3275.3	8.5
60°-70°	1775.0	4.6
70°-80°	758.7	2.0
80°-90°	210.4	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°	20200.4	52.5
0°-40°	27343.4	71.1
0°-60°	35718.0	92.9
0°-90°	38462.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	38462.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	35132	35132	35132	35132	35132	
5°	34788	34918	34442	34333	34261	###
15°	33539	32490	28981	25612	24298	9463
25°	31000	27334	18245	11887	9763	14281
35°	27179	19659	7781	3138	2265	16994
45°	21954	11349	2409	1025	853	16921
55°	15201	5074	970	596	507	13547
65°	7742	2084	555	383	322	7753
75°	2628	762	346	241	202	2920
85°	485	202	141	117	96	592
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	35132.3	35132.3	35132.3	35132.3	35132.3
2.5°	34901.0	35119.3	34884.3	35030.5	35180.4
5°	34788.1	34917.6	34442.0	34332.9	34260.7
7.5°	34591.9	34554.9	33661.2	33082.0	32802.6
10°	34332.9	34033.1	32506.5	31233.4	30674.6
12.5°	33962.8	33344.7	30942.9	28707.6	27760.1
15°	33539.0	32489.8	28981.4	25611.8	24298.0
17.5°	33032.0	31490.6	26636.9	22292.1	20558.3
20°	32432.5	30284.1	23990.8	18765.2	16753.8
22.5°	31762.6	28892.6	21157.8	15249.4	13091.8
25°	31000.2	27334.5	18245.2	11887.2	9762.9
27.5°	30176.8	25604.4	15349.3	8882.1	6944.7
30°	29262.7	23731.8	12582.9	6404.3	4794.5
32.5°	28265.3	21740.7	10012.7	4503.9	3279.0
35°	27179.1	19659.0	7781.1	3138.3	2264.9
37.5°	26067.0	17534.7	5877.0	2218.7	1624.7
40°	24814.3	15417.8	4370.7	1624.7	1236.1
42.5°	23469.0	13341.6	3234.6	1250.9	1001.1
45°	21953.5	11348.7	2409.3	1025.1	853.0
47.5°	20484.3	9490.9	1830.1	873.4	742.0
50°	18822.6	7814.4	1432.2	762.4	651.4
52.5°	17059.1	6339.6	1162.1	671.7	573.6
55°	15201.3	5073.9	969.6	595.8	507.0
57.5°	13319.4	4019.1	829.0	531.1	451.5
60°	11387.5	3214.2	719.8	475.6	403.4
62.5°	9502.0	2570.2	629.1	427.4	360.8
65°	7742.2	2083.6	555.1	383.0	322.0
67.5°	6115.7	1646.9	518.1	344.2	290.5
70°	4720.4	1282.3	481.1	307.2	259.1
72.5°	3576.9	984.4	425.6	273.9	229.5
75°	2627.6	762.4	346.0	240.6	201.7
77.5°	1880.0	586.6	281.3	209.1	173.9
80°	1289.7	436.7	231.3	179.5	148.0
82.5°	838.2	309.0	186.9	148.0	122.1
85°	484.8	201.7	140.6	116.6	96.2
87.5°	209.1	111.0	96.2	87.0	74.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)