

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-LD5-24HE-N-CLI-UNV-L735-ED2-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-LD5-24HE-N-CLI-UNV-L735-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

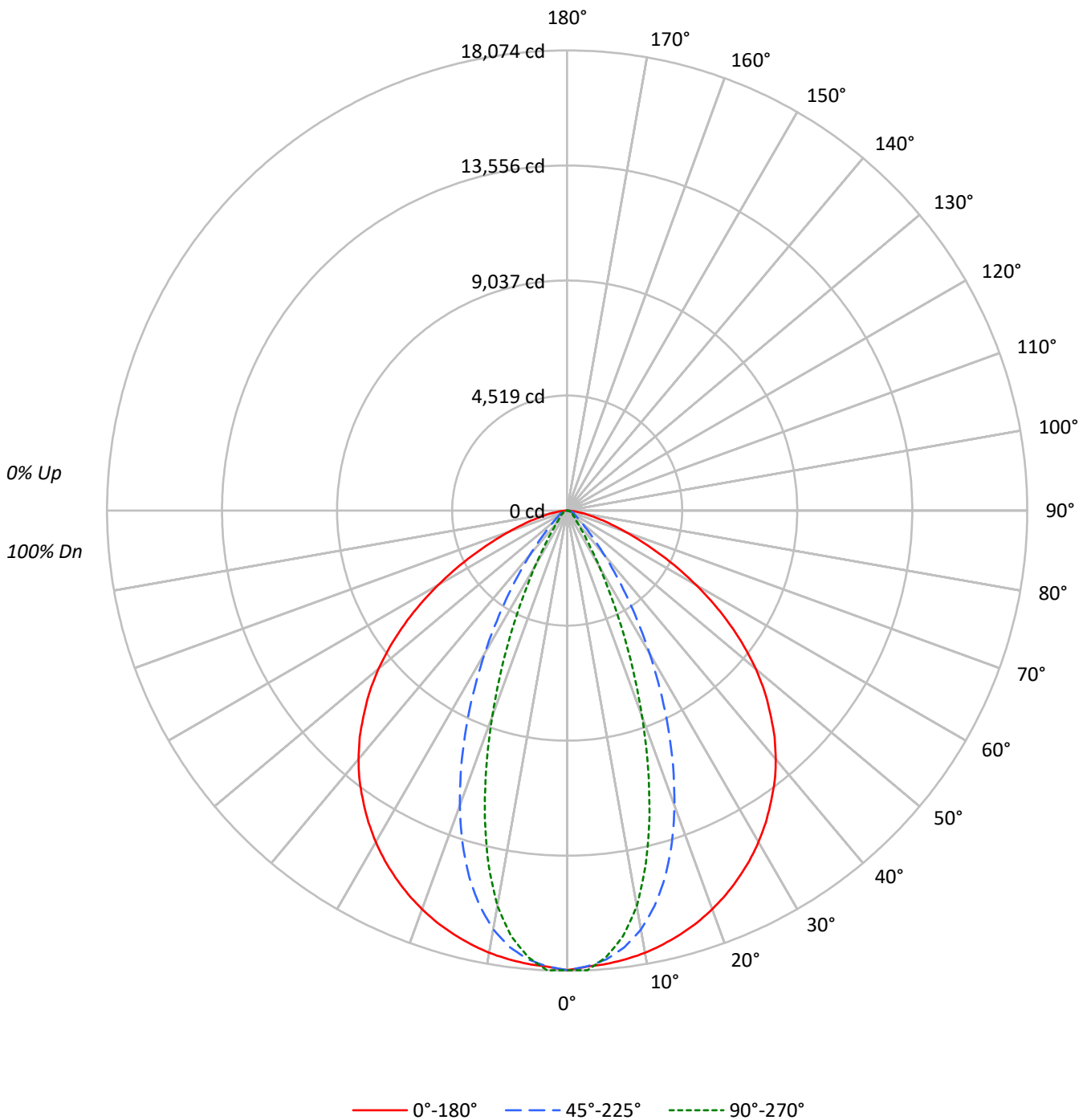
Lumens per Lamp: N/A  
Luminaire Lumens: 19760.0 lumens  
Efficiency: N/A  
Efficacy: 135.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 146.3  
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°	24285	24285	24285
5°	24139	23899	23773
10°	24099	22817	21531
15°	24002	20740	17389
20°	23858	17648	12324
25°	23644	13916	7446
30°	23357	10043	3827
35°	22935	6566	1911
40°	22391	3944	1115
45°	21461	2355	834
50°	20242	1540	700
55°	18320	1168	611
60°	15743	995	558
65°	12663	908	527
70°	9540	972	524
75°	7018	924	539
80°	5134	921	590
85°	3846	1116	763



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1662.2	8.4
10°-20°	4135.3	20.9
20°-30°	4580.5	23.2
30°-40°	3669.8	18.6
40°-50°	2619.7	13.3
50°-60°	1682.7	8.5
60°-70°	911.9	4.6
70°-80°	389.8	2.0
80°-90°	108.1	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°	10378.0	52.5
0°-40°	14047.8	71.1
0°-60°	18350.2	92.9
0°-90°	19760.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19760.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	18049	18049	18049	18049	18049	
5°	17872	17939	17695	17639	17602	###
15°	17231	16692	14889	13158	12483	4862
25°	15926	14043	9374	6107	5016	7337
35°	13963	10100	3998	1612	1164	8731
45°	11279	5830	1238	527	438	8693
55°	7810	2607	498	306	260	6960
65°	3978	1070	285	197	165	3983
75°	1350	392	178	124	104	1500
85°	249	104	72	60	49	304
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	18049.3	18049.3	18049.3	18049.3	18049.3
2.5°	17930.5	18042.7	17921.9	17997.0	18074.0
5°	17872.5	17939.1	17694.7	17638.6	17601.6
7.5°	17771.7	17752.7	17293.6	16996.0	16852.4
10°	17638.6	17484.6	16700.3	16046.3	15759.2
12.5°	17448.5	17131.0	15897.0	14748.6	14261.9
15°	17230.8	16691.8	14889.3	13158.2	12483.2
17.5°	16970.3	16178.4	13684.8	11452.7	10561.9
20°	16662.3	15558.6	12325.4	9640.7	8607.3
22.5°	16318.2	14843.7	10869.9	7834.4	6726.0
25°	15926.5	14043.2	9373.6	6107.1	5015.7
27.5°	15503.5	13154.4	7885.8	4563.2	3567.8
30°	15033.8	12192.3	6464.5	3290.3	2463.2
32.5°	14521.4	11169.4	5144.1	2313.9	1684.6
35°	13963.4	10099.9	3997.5	1612.3	1163.6
37.5°	13392.0	9008.5	3019.3	1139.8	834.7
40°	12748.4	7920.9	2245.5	834.7	635.0
42.5°	12057.3	6854.3	1661.8	642.6	514.3
45°	11278.7	5830.4	1237.8	526.7	438.3
47.5°	10523.9	4876.0	940.2	448.7	381.2
50°	9670.2	4014.7	735.8	391.7	334.6
52.5°	8764.2	3257.0	597.0	345.1	294.7
55°	7809.7	2606.7	498.1	306.1	260.5
57.5°	6842.9	2064.8	425.9	272.8	232.0
60°	5850.4	1651.3	369.8	244.3	207.2
62.5°	4881.7	1320.5	323.2	219.6	185.4
65°	3977.6	1070.4	285.2	196.8	165.4
67.5°	3141.9	846.1	266.2	176.8	149.3
70°	2425.1	658.8	247.2	157.8	133.1
72.5°	1837.6	505.8	218.7	140.7	117.9
75°	1349.9	391.7	177.8	123.6	103.6
77.5°	965.9	301.4	144.5	107.4	89.4
80°	662.6	224.4	118.8	92.2	76.1
82.5°	430.7	158.8	96.0	76.1	62.7
85°	249.1	103.6	72.3	59.9	49.4
87.5°	107.4	57.0	49.4	44.7	38.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)