

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-LD5-30SE-N-CLI-UNV-L835-ED3-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-LD5-30SE-N-CLI-UNV-L835-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

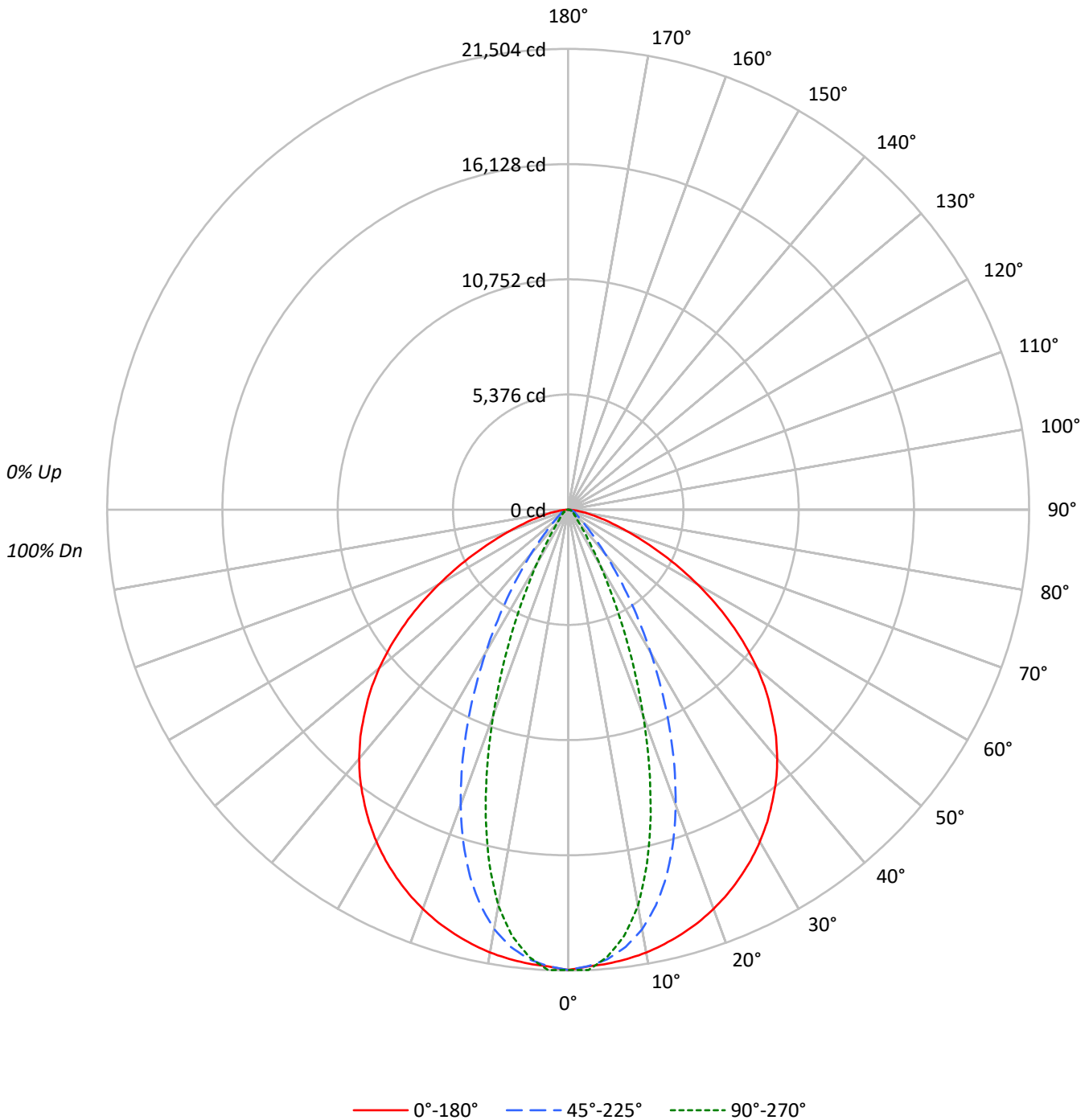
Lumens per Lamp: N/A  
Luminaire Lumens: 23510.0 lumens  
Efficiency: N/A  
Efficacy: 121.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 193  
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°	28894	28894	28894
5°	28720	28435	28285
10°	28672	27147	25617
15°	28557	24676	20688
20°	28385	20997	14663
25°	28131	16557	8859
30°	27790	11949	4553
35°	27288	7812	2274
40°	26641	4692	1327
45°	25534	2802	992
50°	24083	1833	833
55°	21797	1390	727
60°	18731	1184	664
65°	15067	1080	627
70°	11351	1157	623
75°	8349	1099	641
80°	6109	1096	701
85°	4574	1328	908



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1977.7	8.4
10°-20°	4920.1	20.9
20°-30°	5449.7	23.2
30°-40°	4366.2	18.6
40°-50°	3116.9	13.3
50°-60°	2002.0	8.5
60°-70°	1085.0	4.6
70°-80°	463.7	2.0
80°-90°	128.6	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°	12347.5	52.5
0°-40°	16713.8	71.1
0°-60°	21832.7	92.9
0°-90°	23510.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23510.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	21475	21475	21475	21475	21475	
5°	21264	21344	21053	20986	20942	###
15°	20501	19860	17715	15655	14852	5784
25°	18949	16708	11152	7266	5968	8729
35°	16613	12017	4756	1918	1384	10387
45°	13419	6937	1473	627	521	10343
55°	9292	3101	593	364	310	8281
65°	4732	1274	339	234	197	4739
75°	1606	466	212	147	123	1785
85°	296	123	86	71	59	362
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	21474.7	21474.7	21474.7	21474.7	21474.7
2.5°	21333.3	21466.8	21323.1	21412.5	21504.1
5°	21264.3	21343.5	21052.8	20986.1	20941.9
7.5°	21144.4	21121.8	20575.5	20221.4	20050.7
10°	20986.1	20802.8	19869.7	19091.5	18749.9
12.5°	20759.8	20382.1	18913.9	17547.6	16968.5
15°	20500.8	19859.5	17715.0	15655.3	14852.2
17.5°	20190.9	19248.7	16281.9	13626.1	12566.3
20°	19824.4	18511.3	14664.5	11470.3	10240.8
22.5°	19415.0	17660.7	12932.8	9321.2	8002.4
25°	18949.0	16708.3	11152.4	7266.1	5967.6
27.5°	18445.7	15650.8	9382.3	5429.2	4244.9
30°	17886.9	14506.1	7691.3	3914.7	2930.6
32.5°	17277.2	13289.1	6120.3	2753.0	2004.3
35°	16613.3	12016.6	4756.2	1918.3	1384.4
37.5°	15933.5	10718.1	3592.3	1356.2	993.1
40°	15167.8	9424.2	2671.6	993.1	755.6
42.5°	14345.5	8155.1	1977.1	764.6	611.9
45°	13419.1	6936.9	1472.7	626.6	521.4
47.5°	12521.1	5801.3	1118.6	533.9	453.6
50°	11505.3	4776.6	875.5	466.0	398.1
52.5°	10427.4	3875.1	710.3	410.6	350.6
55°	9291.8	3101.4	592.7	364.2	309.9
57.5°	8141.5	2456.7	506.7	324.6	276.0
60°	6960.7	1964.7	440.0	290.7	246.6
62.5°	5808.1	1571.1	384.6	261.3	220.6
65°	4732.4	1273.6	339.3	234.1	196.8
67.5°	3738.2	1006.7	316.7	210.4	177.6
70°	2885.4	783.8	294.1	187.8	158.4
72.5°	2186.4	601.7	260.1	167.4	140.3
75°	1606.1	466.0	211.5	147.0	123.3
77.5°	1149.2	358.6	171.9	127.8	106.3
80°	788.4	266.9	141.4	109.7	90.5
82.5°	512.4	188.9	114.2	90.5	74.7
85°	296.3	123.3	86.0	71.3	58.8
87.5°	127.8	67.9	58.8	53.2	45.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)