Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

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-LD5-18SE-N-CL-UNV-L840-ED1-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.

Report Generated By E9911574 / USPTCWHP6081592

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Scaled Data Report

Test Information

Test Method:	LM-79-08
Report Number:	P#
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23768)
Test Lab:	INNOVATION CENTER P2
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	METALUX
Catalog Number:	HBLED-LD5-18SE-N-CL-UNV-L840-ED1-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:	15814.0 lumens
Efficiency:	N/A
Efficacy:	129.9 lumens/watt
Spacing Criteria (0/90/45):	1.27 / 0.63 / 0.78
Luminous Opening:	Rectangular (W 2' x L: 4' x H: 0')
CIE Type:	Direct

Input Watts (W):	121.76
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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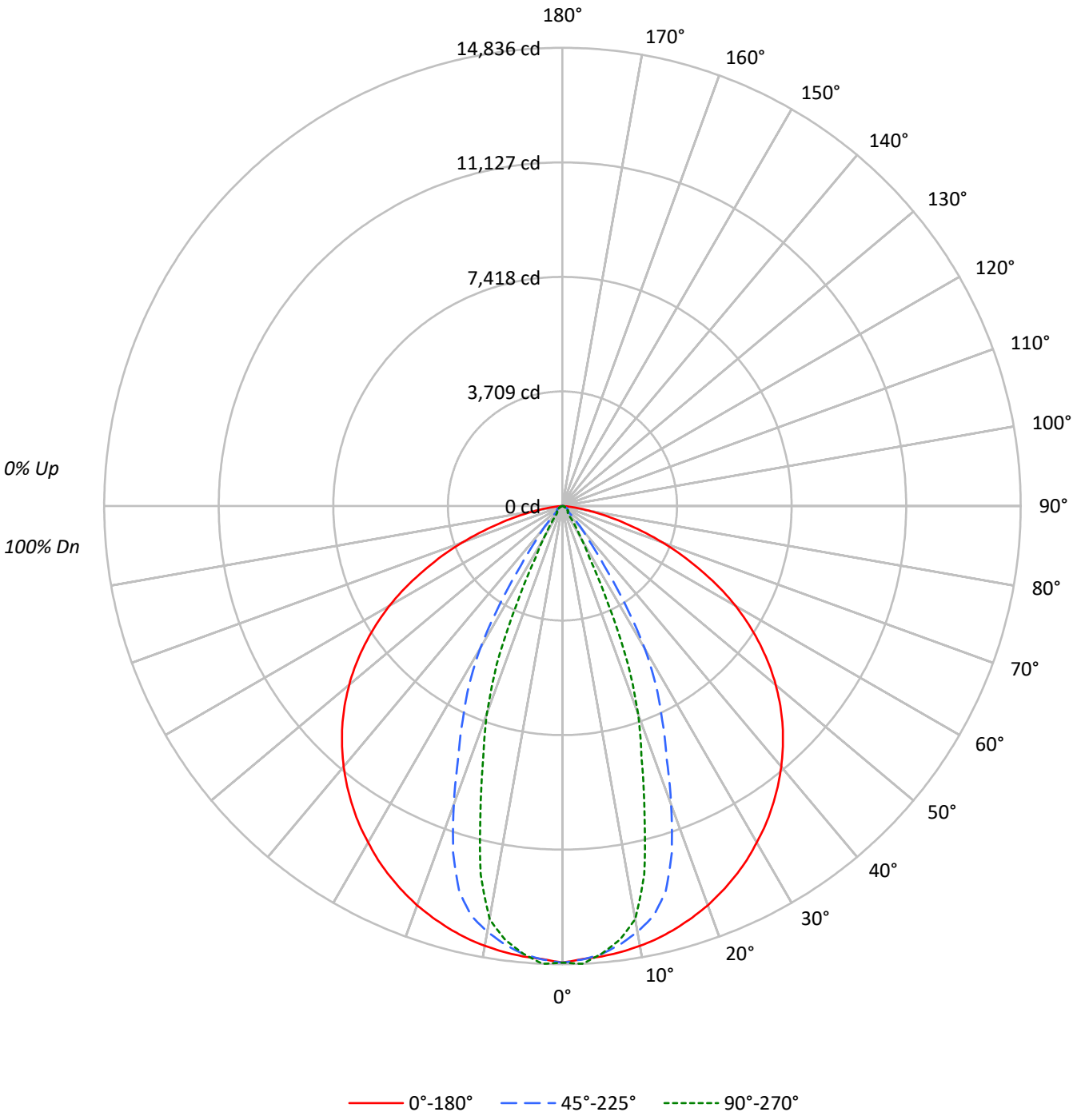
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57	55
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51
8	72	61	55	50	71	61	54	50	60	54	49	59	53	49	58	53	49	47
9	69	58	51	46	67	57	51	46	56	50	46	55	50	46	54	49	46	44
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	19895	19895	19895
5°	19773	19670	19655
10°	19760	19126	18561
15°	19737	17985	14272
20°	19699	14718	10237
25°	19637	11340	5202
30°	19544	8276	1893
35°	19474	3801	659
40°	19354	1725	455
45°	19182	644	461
50°	18876	467	485
55°	18318	492	369
60°	17407	525	326
65°	15786	400	265
70°	13535	289	244
75°	10345	256	232
80°	6472	240	252
85°	2044	281	338

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1376.6	8.7
10°-20°	3467.8	21.9
20°-30°	3776.6	23.9
30°-40°	2825.1	17.9
40°-50°	2031.3	12.8
50°-60°	1247.5	7.9
60°-70°	717.9	4.5
70°-80°	320.4	2.0
80°-90°	50.8	0.3
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°	8621.0	54.5
0°-40°	11446.1	72.4
0°-60°	14724.9	93.1
0°-90°	15814.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15814.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	14786	14786	14786	14786	14786	
5°	14640	14709	14563	14577	14553	###
15°	14169	13897	12912	11089	10246	4000
25°	13227	12278	7638	4901	3504	6097
35°	11856	8503	2314	680	401	7416
45°	10081	4778	338	250	242	7766
55°	7809	993	210	203	157	6962
65°	4958	109	126	104	83	4908
75°	1990	66	49	51	45	2159
85°	132	13	18	24	22	264
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	14786.5	14786.5	14786.5	14786.5	*14786.5*
2.5°	*14683.6*	*14779.7*	*14698.7*	*14771.4*	*14835.7*
5°	14639.7	14708.6	14563.3	14576.9	*14552.7*
7.5°	14564.1	14580.7	14318.1	14216.7	*14167.6*
10°	14462.7	14418.0	13998.8	13757.5	*13585.7*
12.5°	14334.8	14187.2	13601.6	12739.8	*12226.0*
15°	14169.1	13897.4	12911.5	11088.7	*10245.8*
17.5°	13971.6	13594.8	11769.0	9241.8	*8512.3*
20°	13757.5	13260.3	10279.1	7857.8	*7149.6*
22.5°	13504.7	12832.8	8809.7	6535.2	*5562.9*
25°	13227.0	12278.2	7638.4	4900.8	*3504.1*
27.5°	12927.4	11546.5	6554.1	3005.4	*1894.7*
30°	12579.4	10655.9	5326.8	1686.6	*1218.2*
32.5°	12239.6	9617.8	3805.2	1123.6	*778.6*
35°	11856.0	8503.3	2313.8	680.2	*401.0*
37.5°	11449.7	7490.1	1448.2	370.0	*276.9*
40°	11019.1	6529.2	982.1	262.6	*258.8*
42.5°	10559.1	5659.8	615.2	249.7	*258.0*
45°	10080.9	4777.5	338.2	250.5	*242.1*
47.5°	9561.8	3819.6	236.1	236.8	*236.1*
50°	9017.8	2739.8	223.2	233.8	*231.5*
52.5°	8431.4	1701.0	224.0	228.5	*205.1*
55°	7808.7	992.7	209.6	202.8	*157.4*
57.5°	7154.2	618.9	205.1	167.2	*141.5*
60°	6468.6	326.9	195.2	150.6	*121.1*
62.5°	5738.5	161.2	156.6	128.6	*99.1*
65°	4958.3	109.0	125.6	104.4	*83.2*
67.5°	4204.7	98.4	94.6	85.5	*72.6*
70°	3440.5	90.0	73.4	74.9	*62.0*
72.5°	2690.7	81.7	59.0	64.3	*52.2*
75°	1990.0	65.8	49.2	50.7	*44.6*
77.5°	1384.7	51.5	38.6	43.1	*41.6*
80°	835.3	32.5	31.0	35.6	*32.5*
82.5°	404.8	21.2	24.2	28.0	*25.7*
85°	132.4	12.9	18.2	23.5	*21.9*
87.5°	16.6	7.6	15.1	20.4	*18.9*
90°	0.0	0.0	0.0	0.0	*0.0*

(END OF REPORT)