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-LD5-48SE-W-CLI-UNV-L850-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.

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 (P23766)
Test Lab:	INNOVATION CENTER P2
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	METALUX
Catalog Number:	HBLED-LD5-48SE-W-CLI-UNV-L850-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:	45843.0 lumens
Efficiency:	N/A
Efficacy:	153.3 lumens/watt
Spacing Criteria (0/90/45):	1.28 / 1.27 / 1.37
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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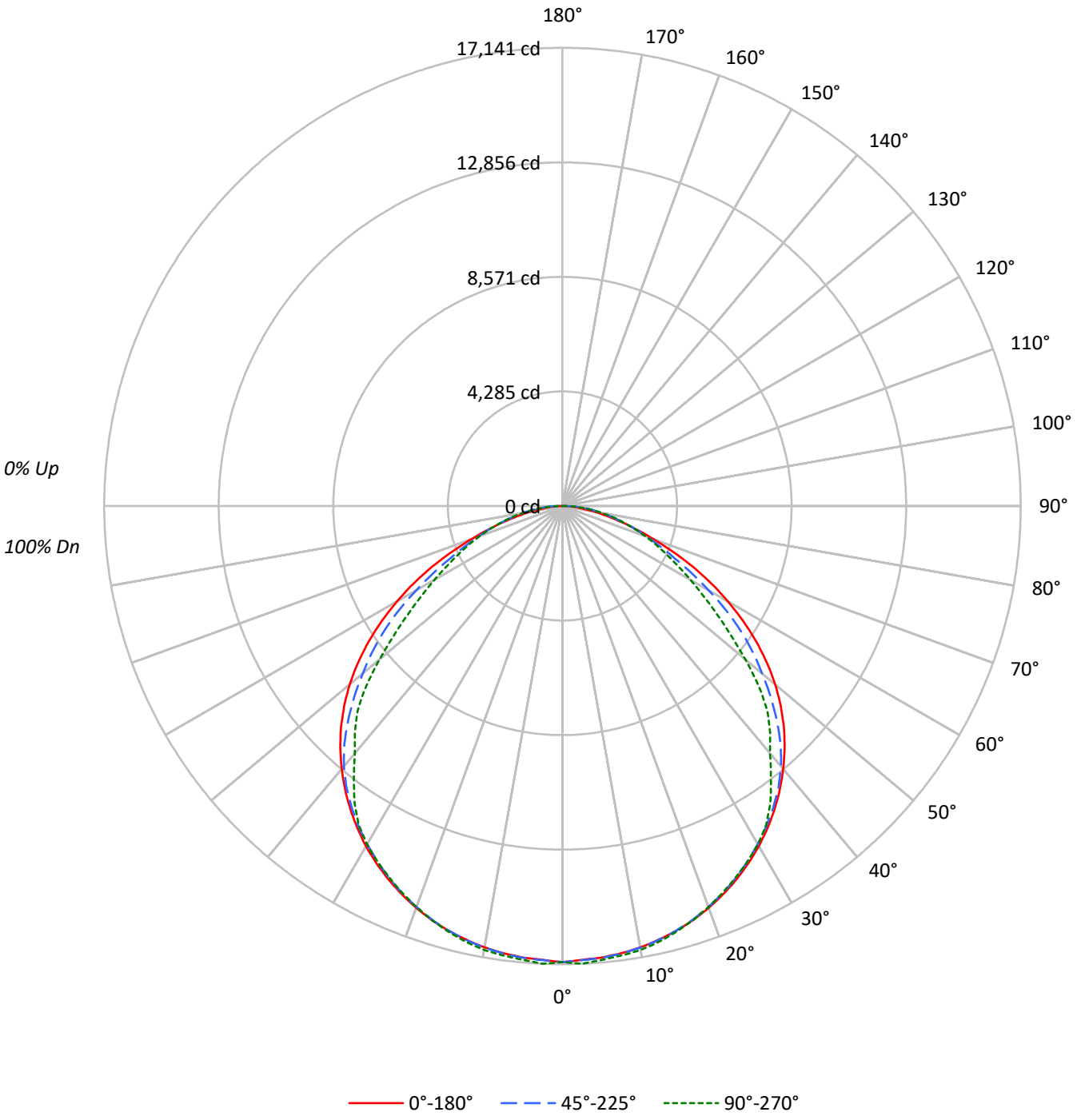
Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20			20			20			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	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	58	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	35	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	22958	22958	22958
5°	22896	22913	23015
10°	22909	22921	23041
15°	22912	22909	22963
20°	22906	22854	22859
25°	22871	22786	22759
30°	22834	22697	22710
35°	22727	22586	22267
40°	22565	22335	21209
45°	22279	21566	20623
50°	21743	20418	18677
55°	20753	19095	16515
60°	19259	17038	14894
65°	17119	14751	13695
70°	14207	13183	12909
75°	11490	12065	12214
80°	9126	11539	11491
85°	7146	12397	11827

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1618.2	3.5
10°-20°	4654.5	10.2
20°-30°	7097.3	15.5
30°-40°	8586.7	18.7
40°-50°	8697.6	19.0
50°-60°	7188.8	15.7
60°-70°	4748.0	10.4
70°-80°	2475.8	5.4
80°-90°	776.2	1.7
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°	13370.0	29.2
0°-40°	21956.7	47.9
0°-60°	37843.0	82.5
0°-90°	45843.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	45843.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17063	17063	17063	17063	17063	
5°	16952	17055	16965	17038	17040	###
15°	16448	16532	16446	16498	16485	4645
25°	15406	15467	15348	15387	15330	7104
35°	13837	13855	13751	13732	13556	8655
45°	11709	11678	11334	10981	10838	9016
55°	8847	8716	8140	7350	7040	7885
65°	5377	5221	4633	4332	4302	5311
75°	2210	2249	2321	2352	2350	2408
85°	463	596	803	797	766	562
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17063.0	17063.0	17063.0	17063.0	*17063.0*
2.5°	*16991.3*	*17091.7*	*17007.7*	*17081.5*	*17140.9*
5°	16952.4	17054.8	16964.7	17038.4	*17040.5*
7.5°	16876.6	16979.0	16886.9	16960.6	*16958.6*
10°	16768.1	16864.3	16776.3	16864.3	*16864.3*
12.5°	16620.6	16714.8	16628.8	16710.7	*16698.4*
15°	16448.5	16532.5	16446.5	16497.7	*16485.4*
17.5°	16245.7	16321.5	16225.2	16268.3	*16243.7*
20°	15997.9	16067.5	15961.0	16016.3	*15965.1*
22.5°	15719.3	15784.8	15676.3	15717.2	*15659.9*
25°	15405.9	15467.3	15348.5	15387.4	*15330.1*
27.5°	15067.9	15123.2	14990.1	15037.2	*14992.1*
30°	14697.1	14723.8	14609.1	14670.5	*14617.3*
32.5°	14283.4	14299.8	14199.4	14254.7	*14164.6*
35°	13836.8	13855.3	13750.8	13732.4	*13556.2*
37.5°	13359.5	13367.7	13269.4	13103.5	*12812.6*
40°	12847.5	12843.4	12716.4	12333.3	*12075.2*
42.5°	12300.5	12298.5	12075.2	11638.9	*11491.4*
45°	11708.6	11677.8	11333.7	10981.4	*10838.0*
47.5°	11073.6	11040.8	10559.4	10278.8	*9953.1*
50°	10387.3	10330.0	9754.4	9371.3	*8922.8*
52.5°	9647.9	9559.8	8974.0	8355.4	*7931.3*
55°	8847.0	8715.9	8140.3	7349.6	*7040.3*
57.5°	8013.3	7818.7	7259.5	6489.3	*6237.3*
60°	7157.0	6939.9	6331.5	5698.6	*5534.7*
62.5°	6276.2	6061.2	5440.5	4963.2	*4873.1*
65°	5377.0	5221.3	4633.4	4332.3	*4301.6*
67.5°	4455.2	4399.9	3951.3	3797.7	*3785.4*
70°	3611.3	3601.1	3351.2	3273.3	*3281.5*
72.5°	2886.2	2873.9	2837.0	2798.1	*2800.1*
75°	2210.2	2249.1	2320.8	2351.5	*2349.5*
77.5°	1648.9	1728.8	1880.4	1941.9	*1931.6*
80°	1177.8	1296.6	1489.2	1546.5	*1483.0*
82.5°	784.5	909.5	1136.9	1145.0	*1093.8*
85°	462.9	596.1	803.0	796.8	*766.1*
87.5°	229.4	358.5	481.4	460.9	*440.4*
90°	0.0	0.0	0.0	0.0	*0.0*

(END OF REPORT)