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-WG-UNV-L840-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 (P33336)
Test Lab:	INNOVATION CENTER-P3
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	METALUX
Catalog Number:	HBLED-LD5-48SE-W-WG-UNV-L840-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:	43269.0 lumens
Efficiency:	N/A
Efficacy:	144.7 lumens/watt
Spacing Criteria (0/90/45):	1.29 / 1.31 / 1.41
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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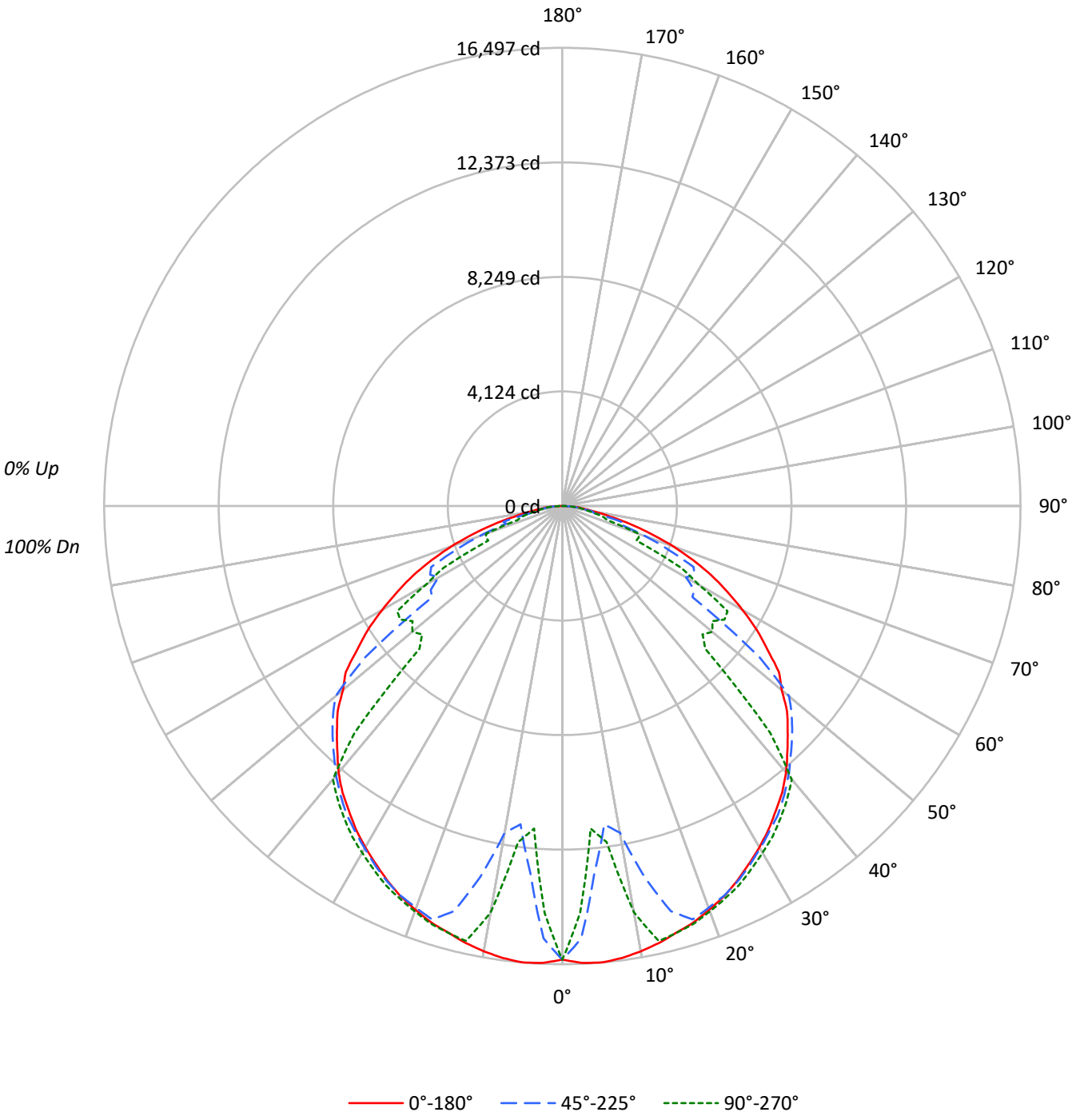
Luminous Intensity Polar Plot



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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	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	82	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	56	68	61	56	66	60	55	64	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	42	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	33	46	38	33	44	38	33	43	37	33	31
9	57	44	36	30	56	43	35	30	42	35	30	41	34	30	40	34	30	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	21975	21975	21975
5°	22281	17900	15742
10°	22242	16324	20303
15°	22144	21039	22163
20°	22144	22043	22239
25°	22105	22154	22357
30°	22040	22113	22398
35°	22006	22250	22509
40°	22008	22248	22567
45°	21836	22263	13835
50°	21589	22308	14745
55°	21133	13414	16712
60°	20160	13827	15304
65°	18889	16601	9364
70°	16680	12577	11478
75°	13290	11432	7960
80°	9155	8262	6839
85°	8773	7628	7236

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1306.0	3.0
10°-20°	4091.6	9.5
20°-30°	6731.6	15.6
30°-40°	8464.1	19.6
40°-50°	8301.2	19.2
50°-60°	6877.9	15.9
60°-70°	4851.2	11.2
70°-80°	2116.5	4.9
80°-90°	528.8	1.2
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°	12129.3	28.0
0°-40°	20593.4	47.6
0°-60°	35772.5	82.7
0°-90°	43269.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	43269.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	16333	16333	16333	16333	16333	
5°	16497	15354	13253	12017	11655	###
15°	15897	11040	15104	15960	15911	4495
25°	14889	13624	14923	15022	15059	6863
35°	13397	13390	13546	13636	13704	8394
45°	11476	11511	11700	10362	7271	8858
55°	9009	9304	5718	6501	7124	8061
65°	5933	6283	5214	4011	2941	5834
75°	2556	2506	2199	1437	1531	2741
85°	568	506	494	473	469	589
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	*16332.6*	16332.6	16332.6	16332.6	16332.6
2.5°	*16467.4*	16125.6	15582.7	14899.2	14657.0
5°	*16496.7*	*15354.2*	*13252.8*	*12016.6*	*11655.3*
7.5°	*16412.7*	13953.9	11553.7	11813.5	12196.3
10°	*16279.9*	12723.6	11948.2	14057.4	14860.1
12.5°	*16110.0*	11629.9	13688.3	15879.6	16039.7
15°	*15897.1*	11040.1	15104.2	15959.6	15910.8
17.5°	*15717.5*	11385.8	15612.0	15799.5	15764.3
20°	*15465.5*	12075.2	15395.2	15545.6	15531.9
22.5°	*15211.6*	12891.5	15190.2	15297.6	15297.6
25°	*14889.4*	13623.9	14922.6	15022.2	15059.3
27.5°	*14535.9*	14045.7	14588.6	14670.7	14737.1
30°	*14186.3*	14106.3	14233.2	14338.7	14416.8
32.5°	*13817.2*	13786.0	13885.6	13996.9	14096.5
35°	*13397.3*	13389.5	13545.8	13635.6	13704.0
37.5°	*13002.8*	12975.5	13120.0	13245.0	13297.7
40°	*12530.2*	12530.2	12666.9	12793.9	12848.6
42.5°	*11991.2*	12067.4	12172.8	12303.7	11081.1
45°	*11475.6*	11510.8	11700.2	10362.4	7270.9
47.5°	*10979.6*	11024.5	11204.2	6661.6	6843.2
50°	*10313.6*	10516.7	10657.3	6642.0	7044.3
52.5°	*9827.3*	9915.2	8946.5	6575.6	6802.2
55°	*9009.0*	9303.9	5718.3	6501.4	7124.4
57.5°	*8309.9*	8524.7	5622.6	6661.6	7048.2
60°	*7491.6*	7819.7	5138.2	6427.2	5687.0
62.5°	*6706.5*	7019.0	5364.8	5058.2	4816.0
65°	*5933.1*	6282.7	5214.4	4011.4	2941.2
67.5°	*5085.5*	4759.4	4159.8	2825.9	2974.4
70°	*4239.9*	3323.9	3197.0	3159.9	2917.7
72.5°	*3370.8*	2425.6	2122.9	2370.9	1697.1
75°	*2556.4*	2505.7	2199.0	1437.4	1531.1
77.5°	*1773.3*	1808.4	1177.6	1402.2	1164.0
80°	*1181.5*	1023.4	1066.3	894.5	882.7
82.5°	*818.3*	835.9	701.1	679.6	689.4
85°	*568.3*	505.8	494.1	472.6	468.7
87.5°	*189.4*	220.7	205.1	185.5	197.2
90°	*0.0*	0.0	0.0	0.0	0.0

(END OF REPORT)