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-LD5-12SE-W-AI-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 (P23765)
Test Lab:	INNOVATION CENTER P2
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	METALUX
Catalog Number:	HBLED-LD5-12SE-W-AI-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:	9974.0 lumens
Efficiency:	N/A
Efficacy:	130.2 lumens/watt
Spacing Criteria (0/90/45):	1.27 / 1.16 / 1.26
Luminous Opening:	Rectangular (W 2' x L: 4' x H: 0')
CIE Type:	Direct

Input Watts (W):	76.6
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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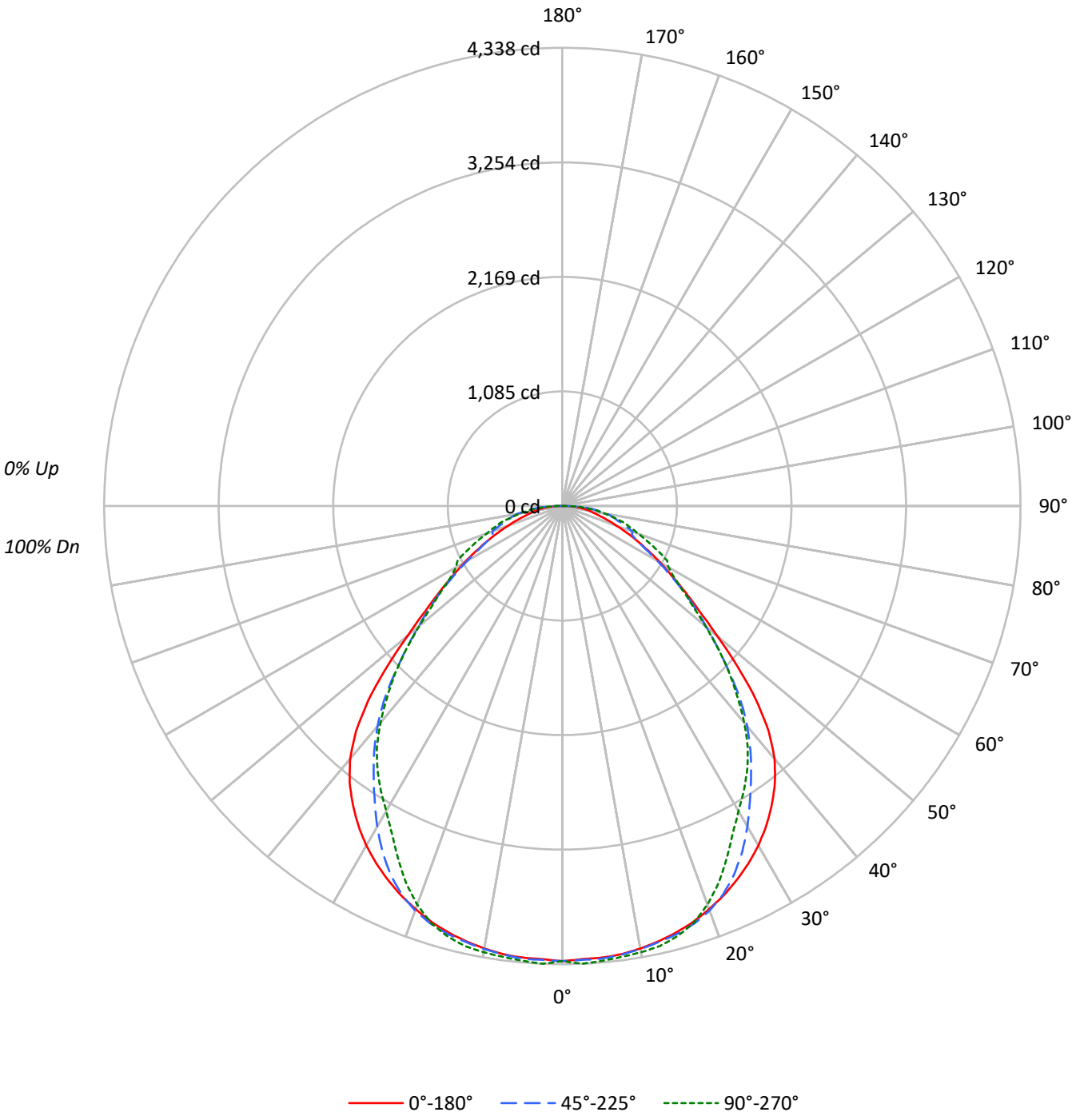
Luminous Intensity Polar Plot



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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	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	36	46	41	36	34
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5798	5798	5798
5°	5798	5810	5838
10°	5812	5819	5862
15°	5821	5843	5871
20°	5815	5837	5750
25°	5800	5713	5465
30°	5766	5444	5179
35°	5679	5117	5010
40°	5489	4784	4705
45°	4934	4272	4256
50°	4002	3721	3695
55°	3323	3261	3260
60°	2877	2793	3122
65°	2493	2478	3147
70°	2150	2779	3000
75°	1928	2849	3127
80°	2004	3353	3138
85°	2276	3864	3586

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	410.3	4.1
10°-20°	1184.9	11.9
20°-30°	1759.9	17.6
30°-40°	1997.9	20.0
40°-50°	1786.1	17.9
50°-60°	1234.9	12.4
60°-70°	814.9	8.2
70°-80°	549.7	5.5
80°-90°	235.4	2.4
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°	3355.1	33.6
0°-40°	5353.0	53.7
0°-60°	8374.0	84.0
0°-90°	9974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9974.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4309	4309	4309	4309	4309	
5°	4292	4319	4302	4319	4323	409
15°	4179	4199	4194	4218	4215	1180
25°	3907	3944	3848	3734	3681	1800
35°	3458	3385	3115	3070	3050	2156
45°	2593	2373	2245	2262	2237	1972
55°	1416	1293	1390	1371	1390	1287
65°	783	695	778	910	989	782
75°	371	466	548	586	602	405
85°	147	205	250	252	232	154
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4309.1	4309.1	4309.1	4309.1	*4309.1*
2.5°	*4294.4*	*4321.3*	*4301.3*	*4319.8*	*4337.9*
5°	4292.5	4318.8	4301.8	4319.3	*4322.7*
7.5°	4280.3	4304.7	4284.7	4301.8	*4305.7*
10°	4253.9	4282.7	4259.3	4285.7	*4290.5*
12.5°	4219.8	4249.1	4228.6	4264.7	*4266.6*
15°	4178.8	4198.8	4194.4	4217.8	*4214.9*
17.5°	4127.1	4150.0	4146.6	4152.4	*4138.8*
20°	4061.2	4087.1	4076.3	4049.5	*4015.8*
22.5°	3990.4	4021.7	3979.2	3911.4	*3864.1*
25°	3907.0	3944.1	3848.5	3733.8	*3681.1*
27.5°	3814.8	3848.0	3688.9	3548.4	*3493.7*
30°	3711.3	3725.5	3504.0	3370.3	*3333.2*
32.5°	3591.8	3571.3	3306.3	3218.0	*3196.6*
35°	3457.6	3384.9	3115.1	3069.7	*3050.2*
37.5°	3306.3	3173.1	2926.2	2905.2	*2884.8*
40°	3125.3	2928.7	2723.7	2710.1	*2678.8*
42.5°	2891.6	2662.7	2498.8	2482.7	*2454.9*
45°	2593.0	2373.4	2245.1	2262.1	*2236.8*
47.5°	2249.4	2083.1	2001.6	2048.4	*2001.6*
50°	1911.8	1800.0	1777.6	1820.0	*1765.4*
52.5°	1635.1	1534.6	1581.0	1588.3	*1555.6*
55°	1416.5	1293.1	1390.2	1370.6	*1389.7*
57.5°	1226.2	1088.1	1207.7	1185.2	*1250.6*
60°	1069.1	913.9	1037.9	1033.0	*1160.3*
62.5°	914.9	791.0	890.5	962.2	*1118.9*
65°	783.2	695.3	778.3	910.0	*988.6*
67.5°	656.8	623.6	711.9	785.1	*871.0*
70°	546.5	563.6	706.5	692.9	*762.7*
72.5°	453.8	511.9	623.6	626.0	*675.3*
75°	370.8	466.5	548.0	585.5	*601.6*
77.5°	308.4	423.1	494.8	508.0	*492.3*
80°	258.6	372.8	432.8	427.0	*405.0*
82.5°	208.8	282.5	341.1	346.4	*320.6*
85°	147.4	204.9	250.3	251.8	*232.3*
87.5°	79.0	126.4	151.8	156.1	*144.4*
90°	0.0	0.0	0.0	0.0	*0.0*

(END OF REPORT)