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-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-LD5-18SE-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:	15468.0 lumens
Efficiency:	N/A
Efficacy:	127.0 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):	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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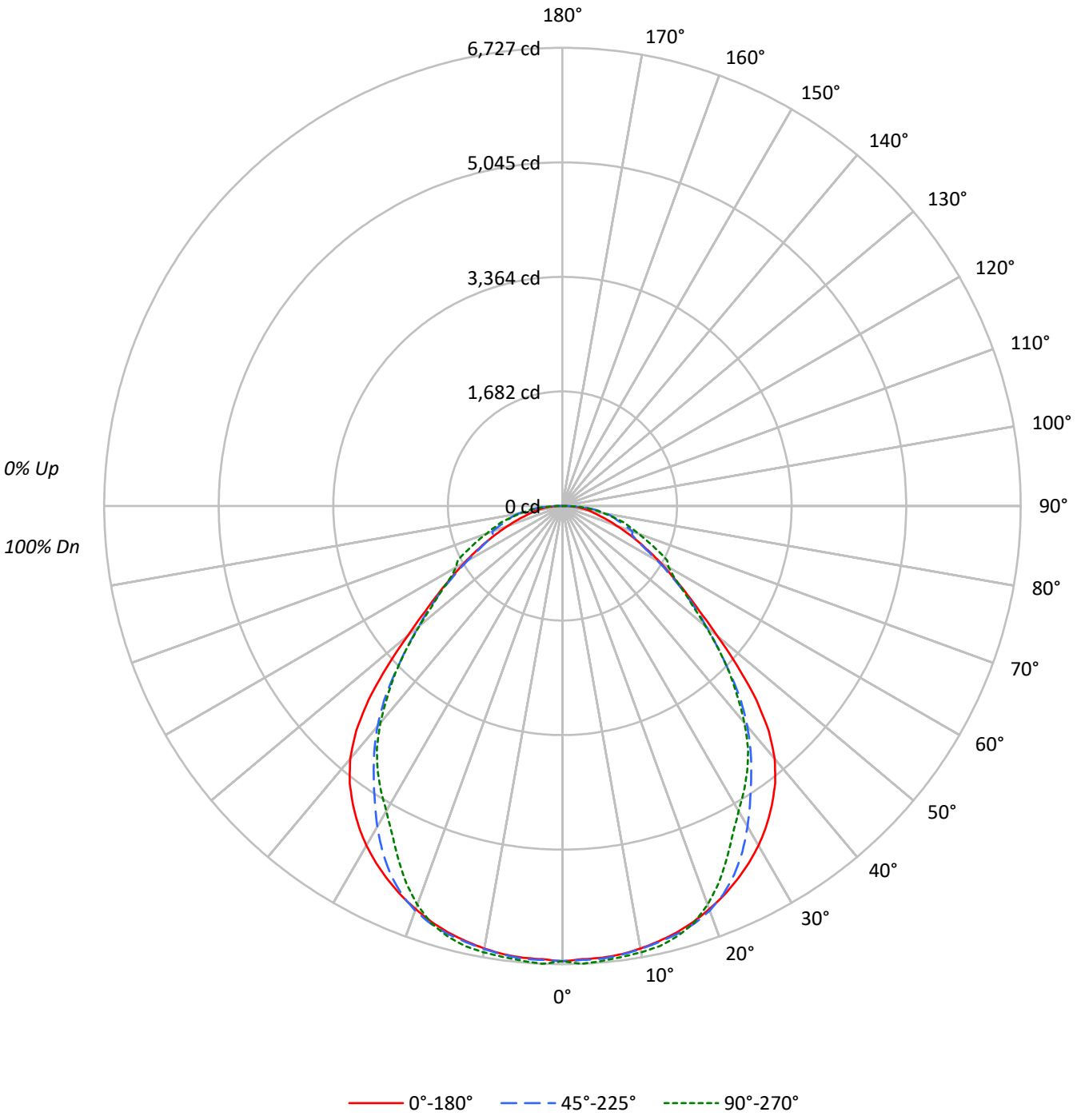
Luminous Intensity Polar Plot



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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	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°	8992	8992	8992
5°	8991	9010	9054
10°	9013	9025	9091
15°	9027	9061	9105
20°	9018	9052	8917
25°	8995	8860	8475
30°	8942	8443	8031
35°	8808	7935	7770
40°	8513	7419	7297
45°	7652	6625	6600
50°	6206	5771	5731
55°	5153	5057	5056
60°	4462	4331	4842
65°	3867	3843	4881
70°	3334	4310	4653
75°	2990	4418	4850
80°	3108	5201	4867
85°	3528	5993	5561

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	636.3	4.1
10°-20°	1837.6	11.9
20°-30°	2729.2	17.6
30°-40°	3098.5	20.0
40°-50°	2769.9	17.9
50°-60°	1915.1	12.4
60°-70°	1263.7	8.2
70°-80°	852.6	5.5
80°-90°	365.1	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°	5203.1	33.6
0°-40°	8301.6	53.7
0°-60°	12986.6	84.0
0°-90°	15468.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	15468.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6683	6683	6683	6683	6683	
5°	6657	6698	6671	6698	6704	634
15°	6481	6512	6505	6541	6537	1829
25°	6059	6117	5968	5790	5709	2792
35°	5362	5249	4831	4761	4730	3344
45°	4021	3681	3482	3508	3469	3058
55°	2197	2005	2156	2126	2155	1995
65°	1214	1078	1207	1411	1533	1212
75°	575	723	850	908	933	628
85°	228	318	388	390	360	238
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6682.7	6682.7	6682.7	6682.7	*6682.7*
2.5°	*6660.0*	*6701.6*	*6670.5*	*6699.3*	*6727.3*
5°	6656.9	6697.8	6671.3	6698.5	*6703.8*
7.5°	6638.0	6675.8	6644.8	6671.3	*6677.4*
10°	6597.1	6641.8	6605.5	6646.3	*6653.9*
12.5°	6544.2	6589.6	6557.8	6613.8	*6616.8*
15°	6480.6	6511.6	6504.8	6541.1	*6536.6*
17.5°	6400.4	6436.0	6430.7	6439.7	*6418.6*
20°	6298.2	6338.3	6321.7	6280.1	*6227.9*
22.5°	6188.5	6236.9	6171.1	6065.9	*5992.5*
25°	6059.1	6116.6	5968.3	5790.5	*5708.7*
27.5°	5916.1	5967.5	5720.9	5502.9	*5418.2*
30°	5755.7	5777.6	5434.1	5226.7	*5169.2*
32.5°	5570.3	5538.5	5127.6	4990.6	*4957.3*
35°	5362.2	5249.4	4830.9	4760.6	*4730.3*
37.5°	5127.6	4921.0	4538.1	4505.6	*4473.8*
40°	4846.8	4541.9	4224.0	4202.9	*4154.4*
42.5°	4484.4	4129.5	3875.2	3850.2	*3807.1*
45°	4021.2	3680.7	3481.7	3508.2	*3468.8*
47.5°	3488.5	3230.5	3104.1	3176.7	*3104.1*
50°	2964.9	2791.6	2756.8	2822.6	*2737.8*
52.5°	2535.8	2379.9	2451.8	2463.1	*2412.4*
55°	2196.8	2005.3	2155.9	2125.6	*2155.2*
57.5°	1901.7	1687.5	1872.9	1838.1	*1939.5*
60°	1658.0	1417.3	1609.6	1602.0	*1799.5*
62.5°	1418.9	1226.7	1381.0	1492.3	*1735.2*
65°	1214.5	1078.3	1207.0	1411.3	*1533.1*
67.5°	1018.6	967.1	1104.1	1217.6	*1350.8*
70°	847.5	874.0	1095.7	1074.6	*1182.8*
72.5°	703.8	793.8	967.1	970.9	*1047.3*
75°	575.1	723.4	849.8	908.1	*933.0*
77.5°	478.3	656.1	767.3	787.8	*763.5*
80°	401.1	578.1	671.2	662.1	*628.1*
82.5°	323.9	438.1	529.0	537.3	*497.2*
85°	228.5	317.8	388.2	390.5	*360.2*
87.5°	122.6	196.0	235.3	242.2	*224.0*
90°	0.0	0.0	0.0	0.0	*0.0*

(END OF REPORT)