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-LD5-15SE-N-CL-UNV-L835-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

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

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-LD5-15SE-N-CL-UNV-L835-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:	13043.0 lumens
Efficiency:	N/A
Efficacy:	137.0 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

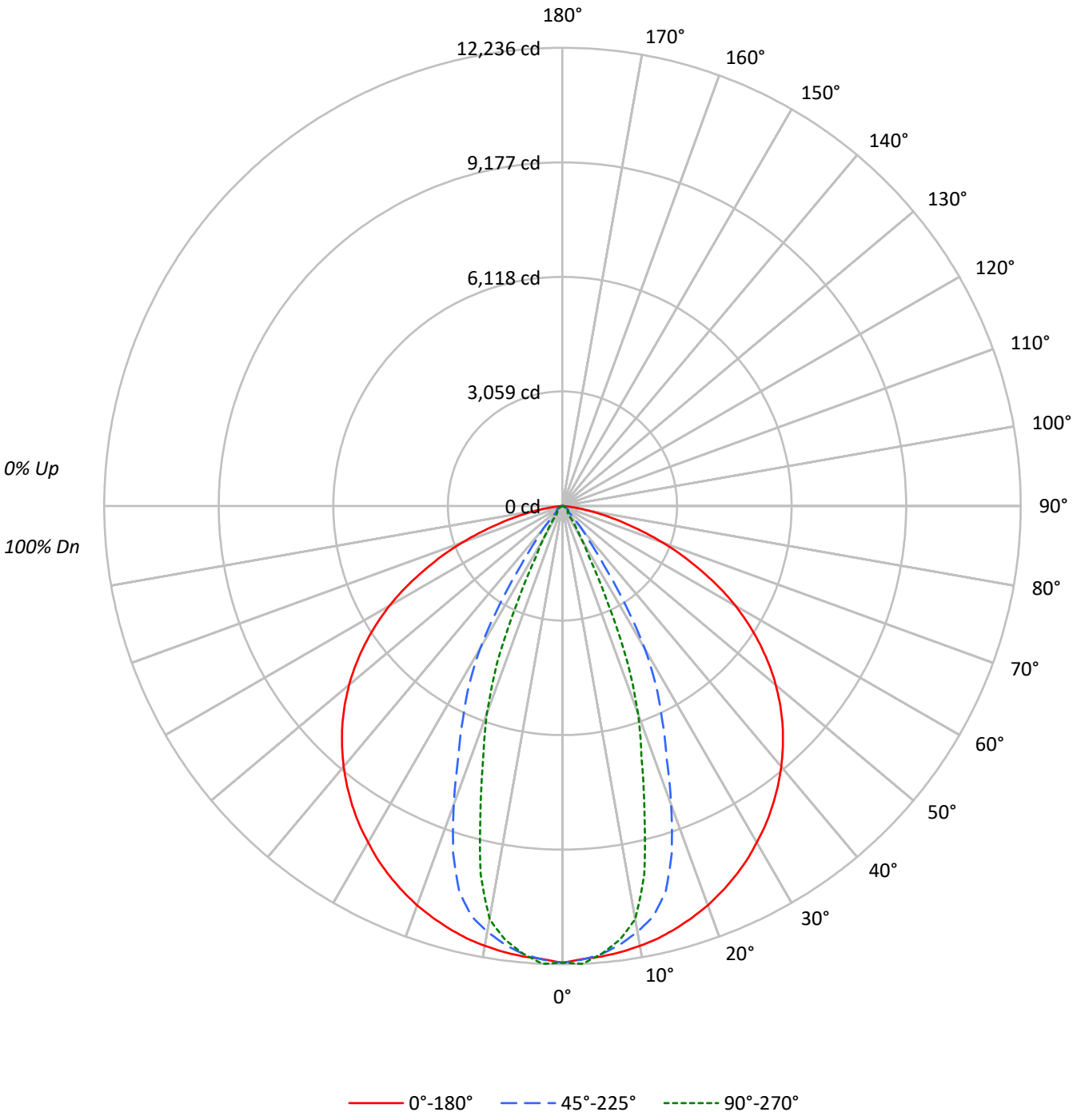
Input Watts (W):	95.2
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	25 FT

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

Scaled Data Report

TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-15SE-N-CL-UNV-L835-ED1-U

Luminous Intensity Polar Plot



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

Scaled Data Report

TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-15SE-N-CL-UNV-L835-ED1-U

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°	16409	16409	16409
5°	16308	16223	16211
10°	16297	15775	15309
15°	16278	14834	11771
20°	16247	12139	8443
25°	16196	9353	4291
30°	16119	6826	1561
35°	16062	3135	543
40°	15963	1423	375
45°	15821	531	380
50°	15569	385	400
55°	15108	406	304
60°	14357	433	269
65°	13020	330	218
70°	11163	238	201
75°	8532	211	191
80°	5339	198	208
85°	1686	232	279

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

Scaled Data Report

TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-15SE-N-CL-UNV-L835-ED1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1135.4	8.7
10°-20°	2860.2	21.9
20°-30°	3114.8	23.9
30°-40°	2330.1	17.9
40°-50°	1675.4	12.8
50°-60°	1028.9	7.9
60°-70°	592.1	4.5
70°-80°	264.3	2.0
80°-90°	41.9	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°	7110.4	54.5
0°-40°	9440.5	72.4
0°-60°	12144.8	93.1
0°-90°	13043.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13043.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12196	12196	12196	12196	12196	
5°	12074	12131	12012	12023	12003	###
15°	11686	11462	10649	9146	8450	3299
25°	10909	10127	6300	4042	2890	5029
35°	9778	7013	1908	561	331	6117
45°	8314	3940	279	207	200	6405
55°	6440	819	173	167	130	5742
65°	4090	90	104	86	69	4048
75°	1641	54	41	42	37	1781
85°	109	11	15	19	18	218
90°	0	0	0	0	0	

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

Scaled Data Report

TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-15SE-N-CL-UNV-L835-ED1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12195.6	12195.6	12195.6	12195.6	*12195.6*
2.5°	*12110.7*	*12189.9*	*12123.2*	*12183.1*	*12236.1*
5°	12074.5	12131.3	12011.5	12022.7	*12002.7*
7.5°	12012.1	12025.8	11809.3	11725.6	*11685.1*
10°	11928.4	11891.6	11545.9	11346.8	*11205.2*
12.5°	11823.0	11701.3	11218.3	10507.4	*10083.7*
15°	11686.3	11462.3	10649.1	9145.7	*8450.5*
17.5°	11523.4	11212.6	9706.8	7622.4	*7020.8*
20°	11346.8	10936.8	8478.0	6481.0	*5896.8*
22.5°	11138.4	10584.2	7266.0	5390.1	*4588.2*
25°	10909.3	10126.8	6300.0	4042.1	*2890.1*
27.5°	10662.2	9523.3	5405.7	2478.8	*1562.7*
30°	10375.1	8788.8	4393.4	1391.0	*1004.8*
32.5°	10094.9	7932.5	3138.4	926.7	*642.2*
35°	9778.5	7013.3	1908.4	561.0	*330.8*
37.5°	9443.4	6177.7	1194.5	305.2	*228.4*
40°	9088.3	5385.1	810.0	216.6	*213.4*
42.5°	8708.9	4668.0	507.4	205.9	*212.8*
45°	8314.5	3940.4	279.0	206.6	*199.7*
47.5°	7886.4	3150.3	194.7	195.3	*194.7*
50°	7437.7	2259.8	184.1	192.8	*191.0*
52.5°	6954.0	1402.9	184.7	188.5	*169.1*
55°	6440.4	818.8	172.9	167.3	*129.8*
57.5°	5900.6	510.5	169.1	137.9	*116.7*
60°	5335.2	269.6	161.0	124.2	*99.9*
62.5°	4732.9	132.9	129.2	106.1	*81.8*
65°	4089.5	89.9	103.6	86.1	*68.6*
67.5°	3467.9	81.1	78.0	70.5	*59.9*
70°	2837.6	74.3	60.5	61.8	*51.2*
72.5°	2219.2	67.4	48.7	53.0	*43.1*
75°	1641.3	54.3	40.6	41.8	*36.8*
77.5°	1142.0	42.4	31.8	35.6	*34.3*
80°	689.0	26.8	25.6	29.3	*26.8*
82.5°	333.9	17.5	20.0	23.1	*21.2*
85°	109.2	10.6	15.0	19.3	*18.1*
87.5°	13.7	6.2	12.5	16.8	*15.6*
90°	0.0	0.0	0.0	0.0	*0.0*

(END OF REPORT)