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-N-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

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 (P23767)
Test Lab:	INNOVATION CENTER P2
Issue Date:	3/3/2020
Manufacturer:	COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line:	METALUX
Catalog Number:	HBLED-LD5-12SE-N-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:	10884.0 lumens
Efficiency:	N/A
Efficacy:	142.1 lumens/watt
Spacing Criteria (0/90/45):	1.27 / 0.62 / 0.77
Luminous Opening:	Rectangular (W 2' x L: 4' x H: 0')
CIE Type:	Direct

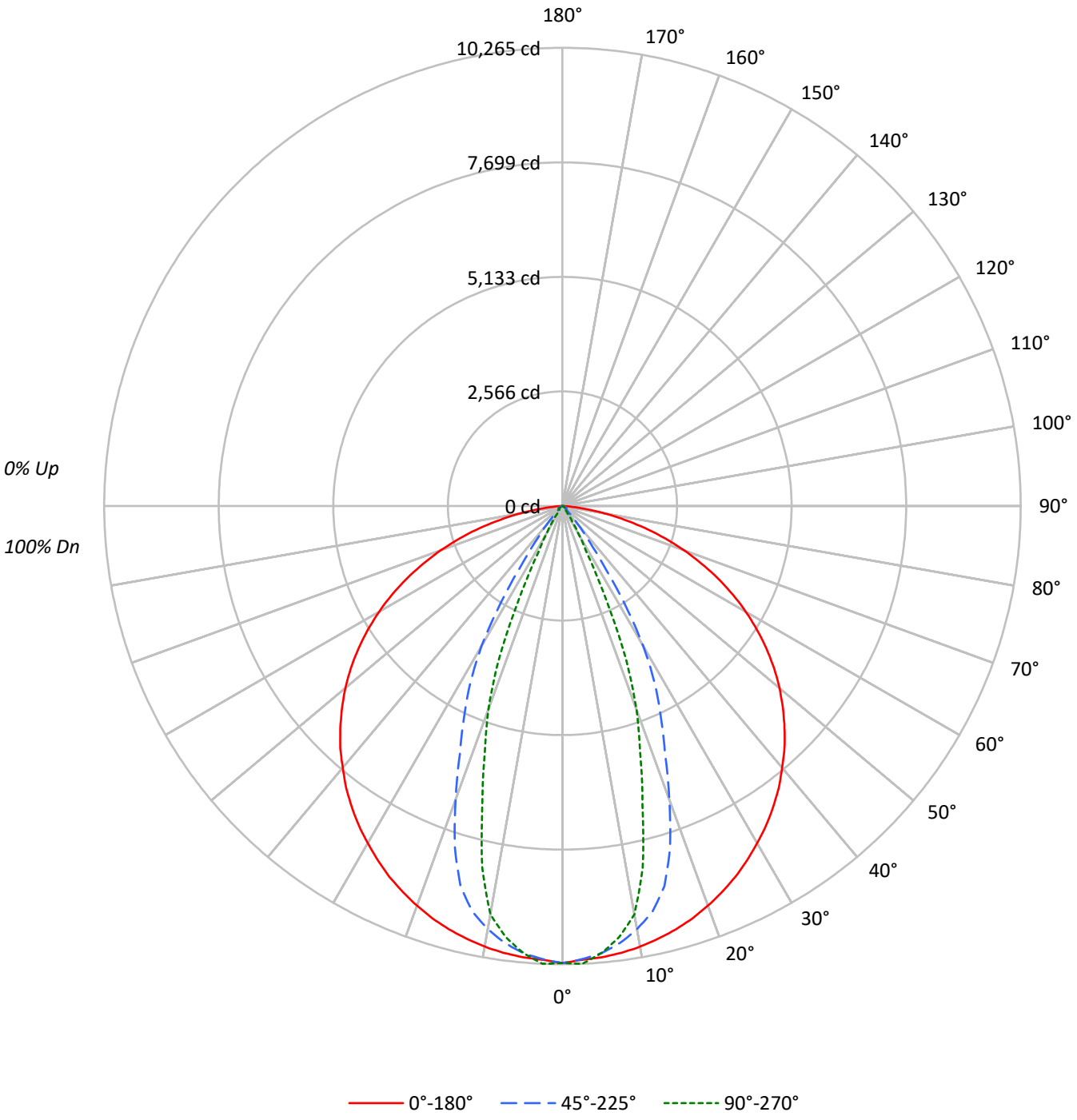
Input Watts (W):	76.6
Input Voltage (V):	NR
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	60
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	25 FT

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

Scaled Data Report

TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-12SE-N-UNV-L840-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-LD5-12SE-N-UNV-L840-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	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13778	13778	13778
5°	13704	13583	13577
10°	13696	13148	12687
15°	13676	12283	9655
20°	13645	10013	6950
25°	13610	7743	3424
30°	13550	5627	1110
35°	13518	2496	286
40°	13447	1014	193
45°	13387	285	205
50°	13282	202	227
55°	13091	240	97
60°	12768	267	59
65°	12243	171	70
70°	11374	151	86
75°	9950	114	119
80°	7440	139	170
85°	3685	181	225

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

Scaled Data Report

TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-12SE-N-UNV-L840-ED1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	950.3	8.7
10°-20°	2376.2	21.8
20°-30°	2573.8	23.6
30°-40°	1906.0	17.5
40°-50°	1372.8	12.6
50°-60°	850.0	7.8
60°-70°	522.8	4.8
70°-80°	275.6	2.5
80°-90°	56.4	0.5
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°	5900.3	54.2
0°-40°	7806.4	71.7
0°-60°	10029.3	92.1
0°-90°	10884.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10884.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10240	10240	10240	10240	10240	
5°	10147	10184	10057	10064	10053	965
15°	9818	9590	8818	7499	6932	2772
25°	9168	8397	5215	3281	2306	4224
35°	8230	5802	1520	358	174	5149
45°	7035	3269	150	108	108	5426
55°	5581	673	102	93	41	4982
65°	3846	71	54	34	22	3794
75°	1914	17	22	29	23	2022
85°	239	6	12	18	15	361
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-LD5-12SE-N-UNV-L840-ED1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10240.2	10240.2	10240.2	10240.2	*10240.2*
2.5°	*10174.4*	*10239.2*	*10162.7*	*10219.7*	*10265.0*
5°	10146.6	10184.1	10057.0	10064.3	*10052.6*
7.5°	10097.9	10089.1	9875.3	9781.8	*9740.8*
10°	10024.4	9966.4	9623.4	9428.1	*9285.9*
12.5°	9929.4	9799.8	9309.2	8688.1	*8302.3*
15°	9818.3	9590.3	8818.2	7499.0	*6931.5*
17.5°	9685.8	9362.8	8015.4	6285.1	*5778.4*
20°	9529.4	9109.0	6993.4	5347.3	*4853.9*
22.5°	9355.0	8800.2	6000.6	4444.2	*3740.3*
25°	9167.5	8397.3	5215.3	3280.9	*2306.1*
27.5°	8950.7	7879.5	4478.8	1932.5	*1176.9*
30°	8721.3	7255.9	3621.9	1039.6	*714.6*
32.5°	8489.9	6549.1	2562.8	649.4	*405.3*
35°	8229.7	5801.8	1519.9	357.6	*173.9*
37.5°	7958.4	5116.9	898.3	162.7	*111.6*
40°	7655.9	4490.9	577.3	108.1	*109.6*
42.5°	7363.6	3907.3	324.9	106.7	*108.6*
45°	7035.3	3268.7	149.6	108.1	*107.7*
47.5°	6695.7	2606.7	96.9	109.1	*109.1*
50°	6345.5	1863.8	96.5	111.6	*108.6*
52.5°	5975.7	1162.8	100.4	111.1	*89.1*
55°	5580.7	673.2	102.3	92.6	*41.4*
57.5°	5171.5	397.0	103.3	53.1	*23.4*
60°	4744.7	219.7	99.4	39.5	*21.9*
62.5°	4304.9	104.7	78.4	37.0	*21.4*
65°	3845.5	71.1	53.6	34.1	*21.9*
67.5°	3368.6	55.0	42.4	32.2	*22.4*
70°	2891.2	40.9	38.5	32.2	*21.9*
72.5°	2406.0	27.8	32.2	32.6	*21.9*
75°	1914.0	16.6	21.9	28.7	*22.9*
77.5°	1426.3	10.2	17.0	29.7	*27.8*
80°	960.2	8.8	18.0	27.8	*21.9*
82.5°	563.6	7.8	17.5	21.4	*17.5*
85°	238.7	6.3	11.7	17.5	*14.6*
87.5°	44.8	5.4	9.3	14.1	*12.7*
90°	0.0	0.0	0.0	0.0	*0.0*

(END OF REPORT)