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-A-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 (P23761)
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-A-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:	9938.0 lumens
Efficiency:	N/A
Efficacy:	129.7 lumens/watt
Spacing Criteria (0/90/45):	1.23 / 1.2 / 1.27
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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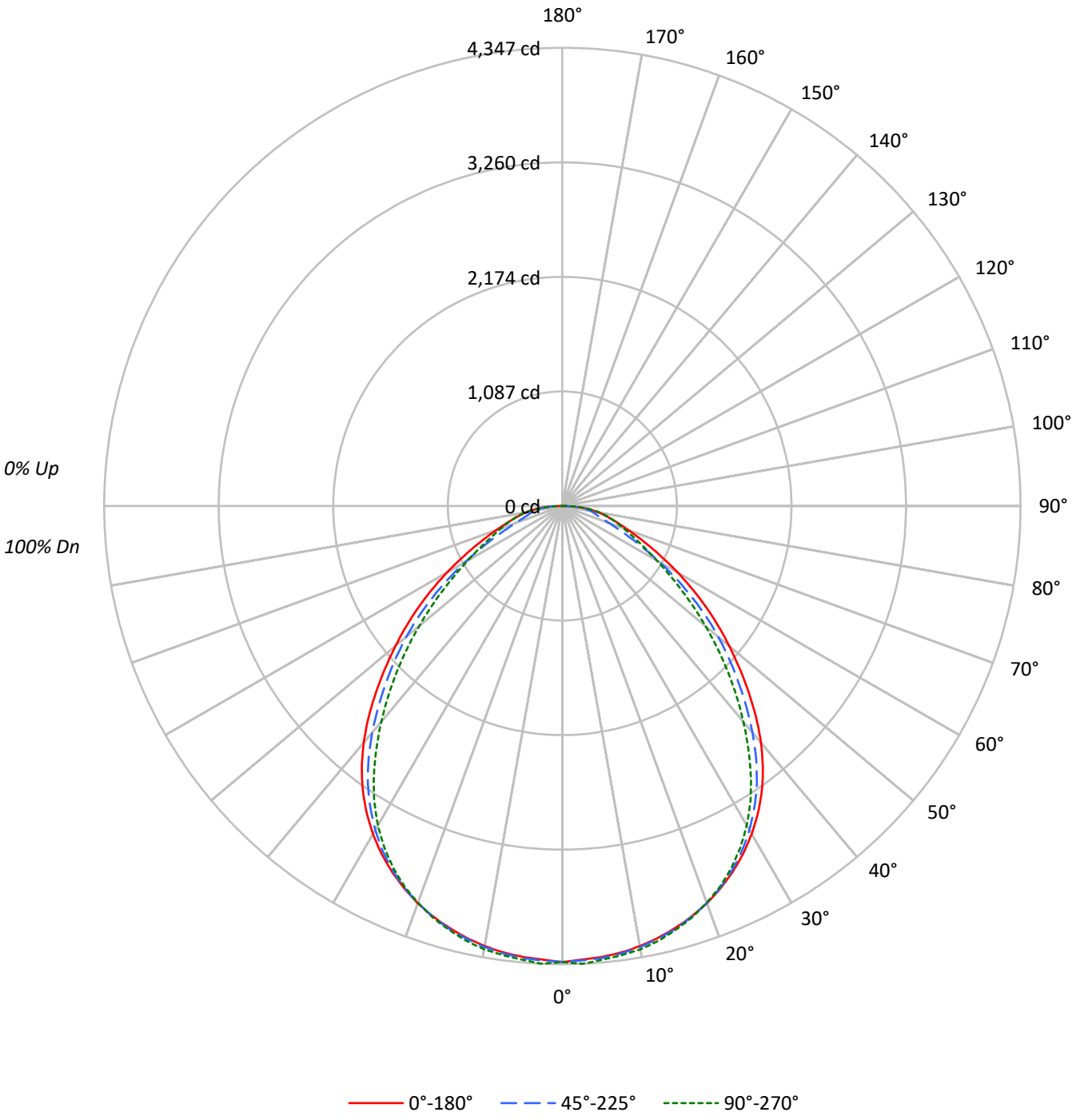
Luminous Intensity Polar Plot



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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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	52	46	72	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5821	5821	5821
5°	5800	5813	5837
10°	5792	5805	5835
15°	5773	5784	5798
20°	5742	5738	5734
25°	5680	5661	5629
30°	5582	5514	5434
35°	5420	5284	5121
40°	5150	4929	4693
45°	4758	4492	4220
50°	4325	4045	3712
55°	3889	3502	3209
60°	3403	2862	2785
65°	2934	2251	2513
70°	2616	1837	2422
75°	2506	1793	2531
80°	2710	2121	2820
85°	3043	2553	3074

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	410.0	4.1
10°-20°	1173.4	11.8
20°-30°	1755.3	17.7
30°-40°	2002.7	20.2
40°-50°	1823.0	18.3
50°-60°	1338.6	13.5
60°-70°	790.4	8.0
70°-80°	452.9	4.6
80°-90°	191.5	1.9
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°	3338.8	33.6
0°-40°	5341.5	53.7
0°-60°	8503.1	85.6
0°-90°	9938.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9938.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4326	4326	4326	4326	4326	
5°	4294	4321	4304	4321	4322	408
15°	4144	4167	4152	4167	4162	1169
25°	3826	3840	3813	3811	3791	1761
35°	3300	3284	3217	3162	3118	2056
45°	2500	2486	2361	2255	2218	1927
55°	1658	1581	1493	1385	1368	1483
65°	922	804	707	756	789	927
75°	482	413	345	450	487	520
85°	197	182	165	195	199	206
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4326.2	4326.2	4326.2	4326.2	*4326.2*
2.5°	*4306.2*	*4331.1*	*4315.4*	*4332.5*	*4347.2*
5°	4294.5	4321.3	4304.2	4321.3	*4321.8*
7.5°	4273.0	4297.9	4281.3	4299.8	*4297.9*
10°	4239.3	4264.2	4249.1	4269.1	*4270.6*
12.5°	4196.4	4220.3	4204.7	4227.6	*4223.7*
15°	4144.2	4167.1	4152.5	4167.1	*4162.2*
17.5°	4082.7	4103.7	4084.7	4100.8	*4092.5*
20°	4010.5	4028.1	4007.6	4022.7	*4004.7*
22.5°	3924.2	3939.8	3918.3	3926.6	*3908.1*
25°	3826.1	3839.7	3812.9	3811.4	*3791.4*
27.5°	3716.8	3724.1	3690.0	3678.3	*3655.3*
30°	3592.9	3594.8	3549.4	3527.5	*3497.7*
32.5°	3453.8	3448.9	3390.9	3358.2	*3321.6*
35°	3299.6	3283.5	3216.7	3161.6	*3117.7*
37.5°	3125.5	3100.1	3020.1	2938.6	*2896.6*
40°	2932.3	2902.5	2806.4	2705.4	*2671.7*
42.5°	2722.0	2696.6	2583.4	2478.0	*2444.8*
45°	2500.5	2485.8	2360.9	2255.1	*2218.0*
47.5°	2279.0	2268.2	2146.3	2038.4	*1993.5*
50°	2066.2	2042.8	1932.6	1814.5	*1773.5*
52.5°	1859.9	1812.0	1715.0	1594.0	*1563.7*
55°	1657.9	1581.3	1493.0	1384.7	*1368.1*
57.5°	1457.8	1358.8	1272.9	1191.9	*1191.4*
60°	1264.6	1151.4	1063.6	1021.2	*1034.8*
62.5°	1083.6	967.5	872.4	875.3	*900.2*
65°	921.6	804.5	707.0	756.2	*789.4*
67.5°	782.6	670.9	571.8	663.5	*695.3*
70°	665.0	564.0	466.9	581.6	*615.7*
72.5°	566.0	481.1	393.7	513.3	*547.9*
75°	482.0	413.2	344.9	449.8	*486.9*
77.5°	413.7	352.7	309.3	389.3	*427.9*
80°	349.8	296.2	273.7	330.8	*364.0*
82.5°	277.1	240.0	226.9	268.8	*285.9*
85°	197.1	182.0	165.4	195.2	*199.1*
87.5°	108.3	112.2	92.7	112.2	*112.7*
90°	0.0	0.0	0.0	0.0	*0.0*

(END OF REPORT)