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-AWG-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 (P23764)
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-AWG-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:	9833.0 lumens
Efficiency:	N/A
Efficacy:	128.4 lumens/watt
Spacing Criteria (0/90/45):	1.26 / 1.28 / 1.32
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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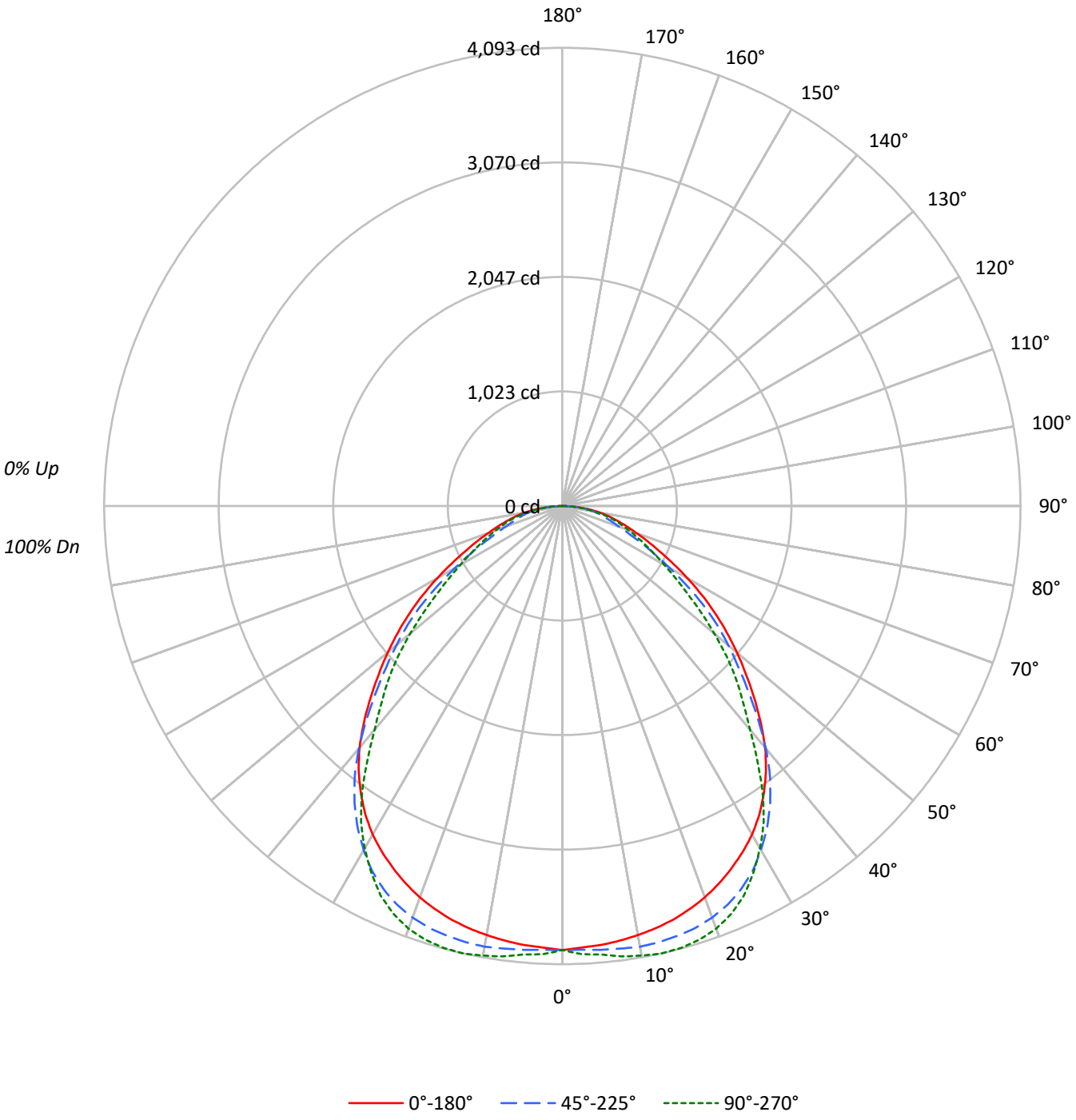
Luminous Intensity Polar Plot



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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	85	81	88	83	79	85	81	77	82	78	75	73
3	92	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	54	49	44	42
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5337	5337	5337
5°	5316	5376	5430
10°	5318	5462	5572
15°	5328	5538	5694
20°	5327	5601	5752
25°	5304	5609	5699
30°	5265	5515	5486
35°	5153	5316	5122
40°	4951	4966	4579
45°	4609	4477	4186
50°	4260	4048	3709
55°	3900	3588	3201
60°	3477	2978	2827
65°	3050	2450	2597
70°	2753	2111	2473
75°	2632	2069	2466
80°	2653	2190	2406
85°	2350	2007	2100

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	381.0	3.9
10°-20°	1122.9	11.4
20°-30°	1722.3	17.5
30°-40°	1980.9	20.1
40°-50°	1806.8	18.4
50°-60°	1354.2	13.8
60°-70°	833.0	8.5
70°-80°	477.4	4.9
80°-90°	154.5	1.6
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°	3226.2	32.8
0°-40°	5207.2	53.0
0°-60°	8368.1	85.1
0°-90°	9833.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9833.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3967	3967	3967	3967	3967	
5°	3936	3976	3980	4013	4021	374
15°	3825	3910	3976	4061	4087	1080
25°	3573	3675	3778	3836	3839	1646
35°	3137	3198	3236	3183	3118	1956
45°	2422	2475	2353	2231	2200	1869
55°	1662	1601	1529	1394	1364	1485
65°	958	857	770	794	816	963
75°	506	454	398	456	474	541
85°	152	144	130	137	136	170
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3966.6	3966.6	3966.6	3966.6	*3966.6*
2.5°	3947.8	3976.2	3967.1	3990.3	*4007.5*
5°	3936.2	3976.2	3980.2	4013.1	*4020.7*
7.5°	3916.5	3968.6	3986.8	4044.9	*4058.1*
10°	3892.2	3954.9	3997.9	4060.6	*4078.3*
12.5°	*3862.9*	*3935.7*	*3990.3*	*4067.7*	*4093.0*
15°	3824.9	3909.9	3975.7	4060.6	*4087.4*
17.5°	3776.9	3875.5	3952.4	4035.8	*4063.7*
20°	3720.3	3824.4	3911.9	3997.4	*4017.1*
22.5°	3652.0	3756.7	3856.3	3933.2	*3943.8*
25°	3572.6	3675.2	3777.9	3836.1	*3839.1*
27.5°	3486.1	3581.7	3677.8	3709.1	*3695.5*
30°	3388.5	3474.0	3549.8	3556.4	*3531.1*
32.5°	3272.7	3349.5	3403.7	3389.5	*3347.0*
35°	3137.1	3198.3	3236.3	3183.2	*3118.4*
37.5°	2988.4	3034.5	3047.1	2931.8	*2858.0*
40°	2819.0	2858.5	2827.1	2666.8	*2607.1*
42.5°	2623.8	2669.3	2588.9	2430.6	*2394.2*
45°	2422.0	2474.6	2352.7	2231.3	*2200.0*
47.5°	2224.3	2272.3	2134.2	2036.6	*1990.1*
50°	2035.1	2055.9	1934.0	1823.7	*1772.1*
52.5°	1849.0	1828.3	1741.8	1604.7	*1559.2*
55°	1662.4	1600.7	1529.4	1394.3	*1364.5*
57.5°	1475.3	1389.3	1311.4	1207.7	*1196.1*
60°	1292.2	1186.5	1106.6	1044.9	*1050.4*
62.5°	1117.7	1010.0	924.5	904.8	*926.0*
65°	957.9	856.7	769.7	793.5	*815.8*
67.5°	824.9	727.8	639.3	699.9	*717.7*
70°	699.9	621.6	536.6	615.0	*628.6*
72.5°	600.3	533.6	459.7	536.1	*547.7*
75°	506.2	453.7	398.0	455.7	*474.4*
77.5°	424.3	380.8	342.9	376.8	*397.0*
80°	342.4	305.5	282.7	297.9	*310.5*
82.5°	250.8	227.1	210.4	217.0	*219.0*
85°	152.2	143.6	130.0	137.1	*136.0*
87.5°	50.1	57.1	60.2	54.1	*51.1*
90°	0.0	0.0	0.0	0.0	*0.0*

(END OF REPORT)