

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: P284669

Luminaire Tested: **4SNLED-LD5-48HL-SLW-UNV-L935-CD1-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.

Test Information

Test Method: LM-79-08
Report Number: P284669
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-48HL-SLW-UNV-L935-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE FROSTED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4010.0 lumens
Efficiency: N/A
Efficacy: 102.8 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.56 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

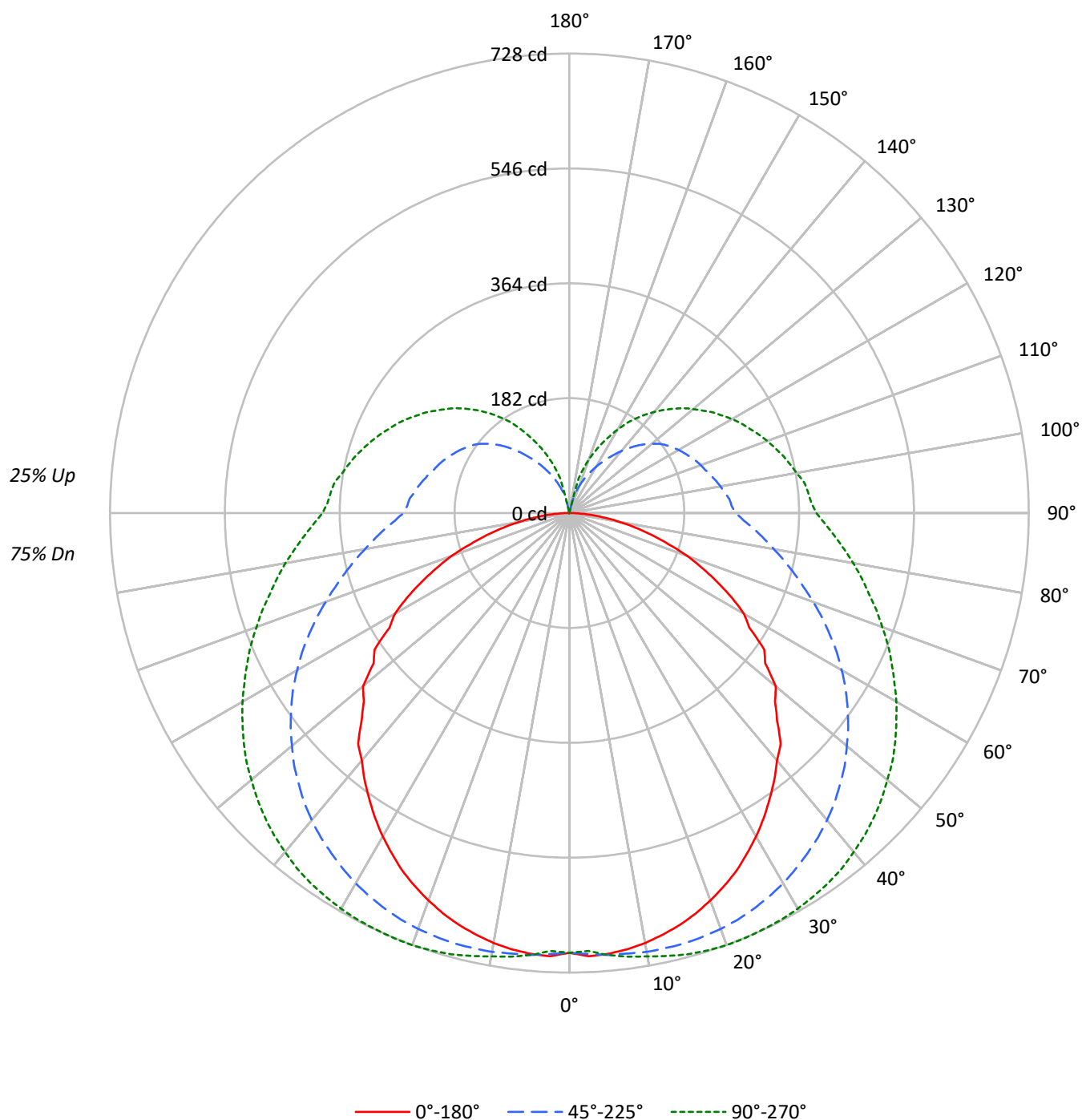
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79	75		
1	100	94	89	84	95	89	84	80	80	76	73	72	69	66	64	62	60	56		
2	90	80	72	66	85	76	69	63	68	63	58	61	57	53	55	51	48	44		
3	81	69	60	53	76	66	58	51	59	53	47	53	48	43	47	43	39	36		
4	74	61	51	44	69	58	49	43	52	45	39	47	41	36	42	37	33	30		
5	67	54	44	37	63	51	43	36	46	39	33	42	35	31	37	32	28	25		
6	62	48	39	32	58	46	37	31	41	34	29	37	31	27	34	28	24	22		
7	57	43	34	28	54	41	33	27	37	30	25	34	28	23	30	25	21	19		
8	53	39	31	25	50	37	29	24	34	27	22	31	25	21	28	23	19	17		
9	49	36	27	22	47	34	26	21	31	24	20	28	23	18	26	21	17	15		
10	46	33	25	20	44	31	24	19	29	22	18	26	21	16	24	19	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5628	5628	5628
5°	5671	5561	5520
10°	5644	5513	5489
15°	5605	5483	5501
20°	5552	5457	5512
25°	5500	5438	5520
30°	5423	5421	5550
35°	5339	5402	5588
40°	5259	5398	5624
45°	5160	5385	5669
50°	5174	5374	5714
55°	5082	5373	5781
60°	4897	5377	5860
65°	4625	5384	5969
70°	4326	5424	6137
75°	3797	5549	6385
80°	3206	5817	6796
85°	2377	6357	7397



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.9	1.7
10°-20°	198.4	4.9
20°-30°	315.3	7.9
30°-40°	404.6	10.1
40°-50°	456.9	11.4
50°-60°	466.3	11.6
60°-70°	432.0	10.8
70°-80°	365.7	9.1
80°-90°	291.9	7.3
90°-100°	247.9	6.2
100°-110°	220.9	5.5
110°-120°	188.1	4.7
120°-130°	149.4	3.7
130°-140°	106.0	2.6
140°-150°	63.3	1.6
150°-160°	29.5	0.7
160°-170°	7.0	0.2
170°-180°	0.0	0.0
0°-30°	580.6	14.5
0°-40°	985.2	24.6
0°-60°	1908.4	47.6
0°-90°	2998.0	74.8
90°-120°	656.8	16.4
90°-150°	975.5	24.3
90°-180°	1012.0	25.2
0°-180°	4010.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	696	696	696	696	696	
5°	701	695	703	703	703	67
15°	676	681	706	719	724	191
25°	626	646	692	716	728	288
35°	553	594	658	698	715	346
45°	466	529	607	660	682	362
55°	377	440	538	604	630	331
65°	258	344	455	533	564	256
75°	136	240	368	459	491	144
85°	35	155	294	389	422	38
90°	2	126	263	358	391	3
95°	0	119	254	348	380	0
105°	0	109	232	319	351	0
115°	0	102	211	287	316	0
125°	0	88	187	254	278	0
135°	0	65	151	214	234	0
145°	0	42	106	160	183	0
155°	1	26	65	98	122	0
165°	1	14	29	40	58	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	696.5	696.5	696.5	696.5	696.5
2.5°	702.8	695.4	699.3	698.2	694.4
5°	701.0	695.4	702.8	702.8	702.8
7.5°	697.2	693.4	703.8	707.6	708.7
10°	691.6	691.6	705.9	711.5	713.2
12.5°	684.0	686.8	705.9	714.3	718.8
15°	675.6	681.2	705.9	718.8	723.7
17.5°	665.2	674.6	703.8	719.9	726.5
20°	653.0	667.2	701.0	719.9	728.5
22.5°	639.8	657.8	697.2	718.1	728.5
25°	625.8	646.4	691.6	716.0	727.5
27.5°	608.7	635.2	685.0	713.2	726.5
30°	591.7	622.0	677.4	709.4	723.7
32.5°	572.9	607.7	668.0	703.8	719.9
35°	553.0	593.7	657.8	698.2	715.3
37.5°	533.2	576.7	647.4	690.6	709.4
40°	511.6	559.7	635.2	681.2	701.0
42.5°	495.6	541.9	622.0	671.8	692.6
45°	465.6	528.6	606.7	659.6	682.2
47.5°	441.9	503.2	591.7	647.4	670.8
50°	426.9	482.4	573.9	633.1	657.8
52.5°	391.1	468.4	556.9	619.2	645.4
55°	376.8	440.2	538.0	603.9	630.3
57.5°	338.2	420.3	519.2	587.1	614.3
60°	319.4	392.9	498.4	570.1	598.3
62.5°	290.1	369.5	477.8	551.3	580.5
65°	258.1	344.0	455.2	533.2	563.5
67.5°	228.1	318.6	433.5	514.4	546.4
70°	198.8	292.2	410.9	495.6	527.6
72.5°	164.8	265.7	389.0	477.8	509.8
75°	135.8	240.3	368.4	459.0	491.0
77.5°	107.3	215.9	348.6	441.9	474.0
80°	81.1	192.2	328.8	424.1	456.9
82.5°	56.4	172.4	311.0	407.1	439.1
85°	34.8	154.6	293.9	389.0	422.1
87.5°	16.0	138.6	276.9	372.3	406.1
90°	1.8	126.4	262.9	358.0	391.1
92.5°	1.0	122.6	257.3	351.4	383.4
95°	0.0	118.7	254.5	347.6	379.6
97.5°	0.0	114.9	247.9	342.0	375.1
100°	0.0	113.2	243.1	333.6	365.6
102.5°	0.0	110.4	237.5	326.0	358.0
105°	0.0	109.3	231.9	319.4	350.6
107.5°	0.0	107.3	226.1	311.0	342.0
110°	0.0	105.5	221.5	303.4	333.6



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	103.7	216.6	296.0	325.0
115°	0.0	101.7	211.0	287.3	315.6
117.5°	0.0	98.9	205.5	278.9	307.2
120°	0.0	95.1	199.9	271.3	297.8
122.5°	0.0	91.3	194.0	261.9	287.3
125°	0.0	87.7	187.4	253.5	277.9
127.5°	0.0	81.9	180.0	244.1	266.7
130°	0.0	76.3	170.6	234.7	256.3
132.5°	1.0	70.7	161.2	224.3	245.9
135°	0.0	65.1	150.8	213.8	233.7
137.5°	0.0	60.3	139.3	202.7	221.5
140°	0.0	54.7	128.2	189.4	209.3
142.5°	0.0	48.1	117.0	175.2	196.0
145°	0.0	42.5	105.5	160.2	182.8
147.5°	1.0	37.6	95.1	144.2	168.6
150°	1.0	33.8	84.9	128.2	152.6
152.5°	1.0	30.3	74.5	113.2	136.5
155°	1.0	26.4	65.1	97.9	121.5
157.5°	1.0	22.6	54.7	82.9	105.5
160°	1.0	19.8	45.3	69.7	90.5
162.5°	1.0	17.0	36.9	54.7	74.5
165°	1.0	14.2	29.2	40.4	57.5
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)