

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: P284708

Luminaire Tested: **4SNLED-LD5-48HL-SLW-UNV-L940-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: P284708
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-L940-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: 4105.0 lumens
Efficiency: N/A
Efficacy: 105.3 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

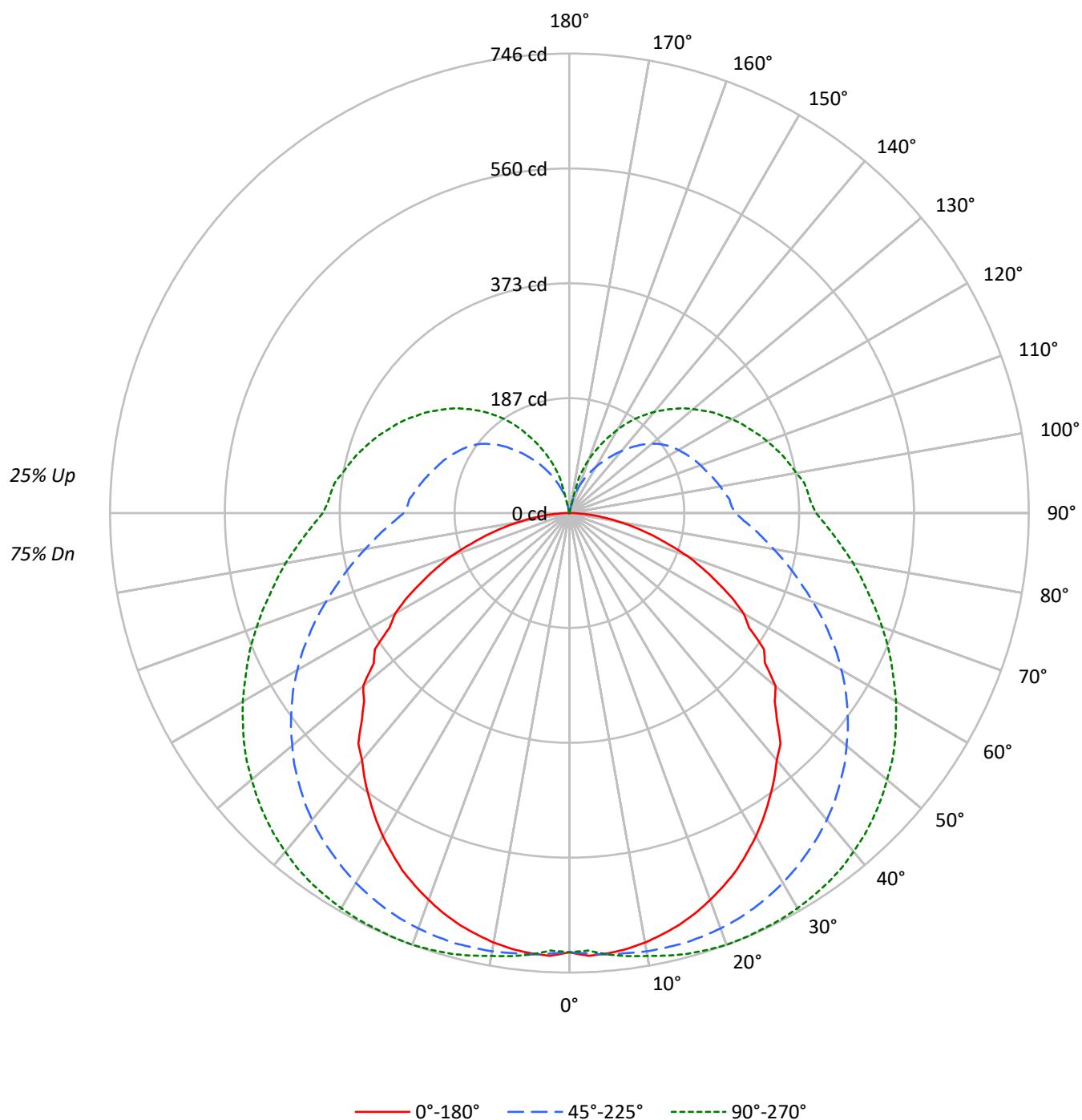
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					10
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°	5762	5762	5762
5°	5805	5693	5651
10°	5778	5643	5619
15°	5738	5613	5631
20°	5683	5586	5643
25°	5630	5566	5651
30°	5552	5549	5681
35°	5466	5530	5720
40°	5383	5526	5757
45°	5282	5513	5803
50°	5297	5501	5849
55°	5203	5501	5919
60°	5012	5505	5999
65°	4735	5511	6110
70°	4430	5552	6282
75°	3887	5681	6536
80°	3281	5955	6958
85°	2439	6509	7573



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.5	1.7
10°-20°	203.1	4.9
20°-30°	322.7	7.9
30°-40°	414.2	10.1
40°-50°	467.8	11.4
50°-60°	477.3	11.6
60°-70°	442.2	10.8
70°-80°	374.4	9.1
80°-90°	298.8	7.3
90°-100°	253.8	6.2
100°-110°	226.1	5.5
110°-120°	192.5	4.7
120°-130°	152.9	3.7
130°-140°	108.5	2.6
140°-150°	64.8	1.6
150°-160°	30.2	0.7
160°-170°	7.2	0.2
170°-180°	0.0	0.0
0°-30°	594.3	14.5
0°-40°	1008.6	24.6
0°-60°	1953.6	47.6
0°-90°	3069.0	74.8
90°-120°	672.4	16.4
90°-150°	998.6	24.3
90°-180°	1036.0	25.2
0°-180°	4105.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	713	713	713	713	713	
5°	718	712	720	720	720	68
15°	692	697	723	736	741	195
25°	641	662	708	733	745	295
35°	566	608	673	715	732	354
45°	477	541	621	675	698	370
55°	386	451	551	618	645	339
65°	264	352	466	546	577	262
75°	139	246	377	470	503	148
85°	36	158	301	398	432	39
90°	2	129	269	366	400	3
95°	0	122	261	356	389	0
105°	0	112	237	327	359	0
115°	0	104	216	294	323	0
125°	0	90	192	260	284	0
135°	0	67	154	219	239	0
145°	0	44	108	164	187	0
155°	1	27	67	100	124	0
165°	1	15	30	41	59	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°	713.0	713.0	713.0	713.0	713.0
2.5°	719.5	711.9	715.8	714.8	710.9
5°	717.6	711.9	719.5	719.5	719.5
7.5°	713.7	709.8	720.5	724.4	725.5
10°	708.0	708.0	722.6	728.3	730.1
12.5°	700.2	703.1	722.6	731.2	735.9
15°	691.6	697.3	722.6	735.9	740.8
17.5°	680.9	690.6	720.5	736.9	743.7
20°	668.4	683.0	717.6	736.9	745.8
22.5°	654.9	673.4	713.7	735.1	745.8
25°	640.6	661.7	708.0	733.0	744.7
27.5°	623.2	650.2	701.2	730.1	743.7
30°	605.7	636.7	693.4	726.2	740.8
32.5°	586.5	622.1	683.8	720.5	736.9
35°	566.2	607.8	673.4	714.8	732.2
37.5°	545.8	590.4	662.7	707.0	726.2
40°	523.7	572.9	650.2	697.3	717.6
42.5°	507.3	554.7	636.7	687.7	709.1
45°	476.6	541.2	621.1	675.2	698.4
47.5°	452.4	515.1	605.7	662.7	686.7
50°	437.0	493.8	587.5	648.1	673.4
52.5°	400.3	479.5	570.1	633.8	660.6
55°	385.8	450.6	550.8	618.2	645.3
57.5°	346.2	430.3	531.5	601.0	628.9
60°	326.9	402.2	510.2	583.6	612.5
62.5°	297.0	378.2	489.1	564.3	594.3
65°	264.2	352.2	465.9	545.8	576.8
67.5°	233.5	326.2	443.8	526.6	559.4
70°	203.6	299.1	420.6	507.3	540.1
72.5°	168.7	272.0	398.3	489.1	521.9
75°	139.0	246.0	377.2	469.8	502.6
77.5°	109.8	221.0	356.9	452.4	485.2
80°	83.0	196.8	336.6	434.2	467.8
82.5°	57.8	176.5	318.3	416.7	449.5
85°	35.7	158.3	300.9	398.3	432.1
87.5°	16.4	141.9	283.5	381.1	415.7
90°	1.8	129.4	269.1	366.5	400.3
92.5°	1.0	125.5	263.4	359.7	392.5
95°	0.0	121.6	260.6	355.8	388.6
97.5°	0.0	117.7	253.8	350.1	383.9
100°	0.0	115.8	248.8	341.5	374.3
102.5°	0.0	113.0	243.1	333.7	366.5
105°	0.0	111.9	237.4	326.9	359.0
107.5°	0.0	109.8	231.4	318.3	350.1
110°	0.0	108.0	226.7	310.5	341.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	106.2	221.8	303.0	332.7
115°	0.0	104.1	216.0	294.1	323.0
117.5°	0.0	101.3	210.3	285.5	314.4
120°	0.0	97.4	204.6	277.7	304.8
122.5°	0.0	93.4	198.6	268.1	294.1
125°	0.0	89.8	191.8	259.5	284.5
127.5°	0.0	83.8	184.3	249.9	273.1
130°	0.0	78.1	174.7	240.3	262.4
132.5°	1.0	72.4	165.0	229.6	251.7
135°	0.0	66.6	154.4	218.9	239.2
137.5°	0.0	61.7	142.6	207.5	226.7
140°	0.0	56.0	131.2	193.9	214.2
142.5°	0.0	49.2	119.7	179.3	200.7
145°	0.0	43.5	108.0	164.0	187.2
147.5°	1.0	38.5	97.4	147.6	172.6
150°	1.0	34.6	86.9	131.2	156.2
152.5°	1.0	31.0	76.3	115.8	139.8
155°	1.0	27.1	66.6	100.2	124.4
157.5°	1.0	23.2	56.0	84.9	108.0
160°	1.0	20.3	46.3	71.3	92.7
162.5°	1.0	17.4	37.7	56.0	76.3
165°	1.0	14.6	29.9	41.4	58.8
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)