

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: P284468

Luminaire Tested: **4SNLED-LD5-48SL-SLW-UNV-L830-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: P284468
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-LD5-48SL-SLW-UNV-L830-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: 4730.0 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

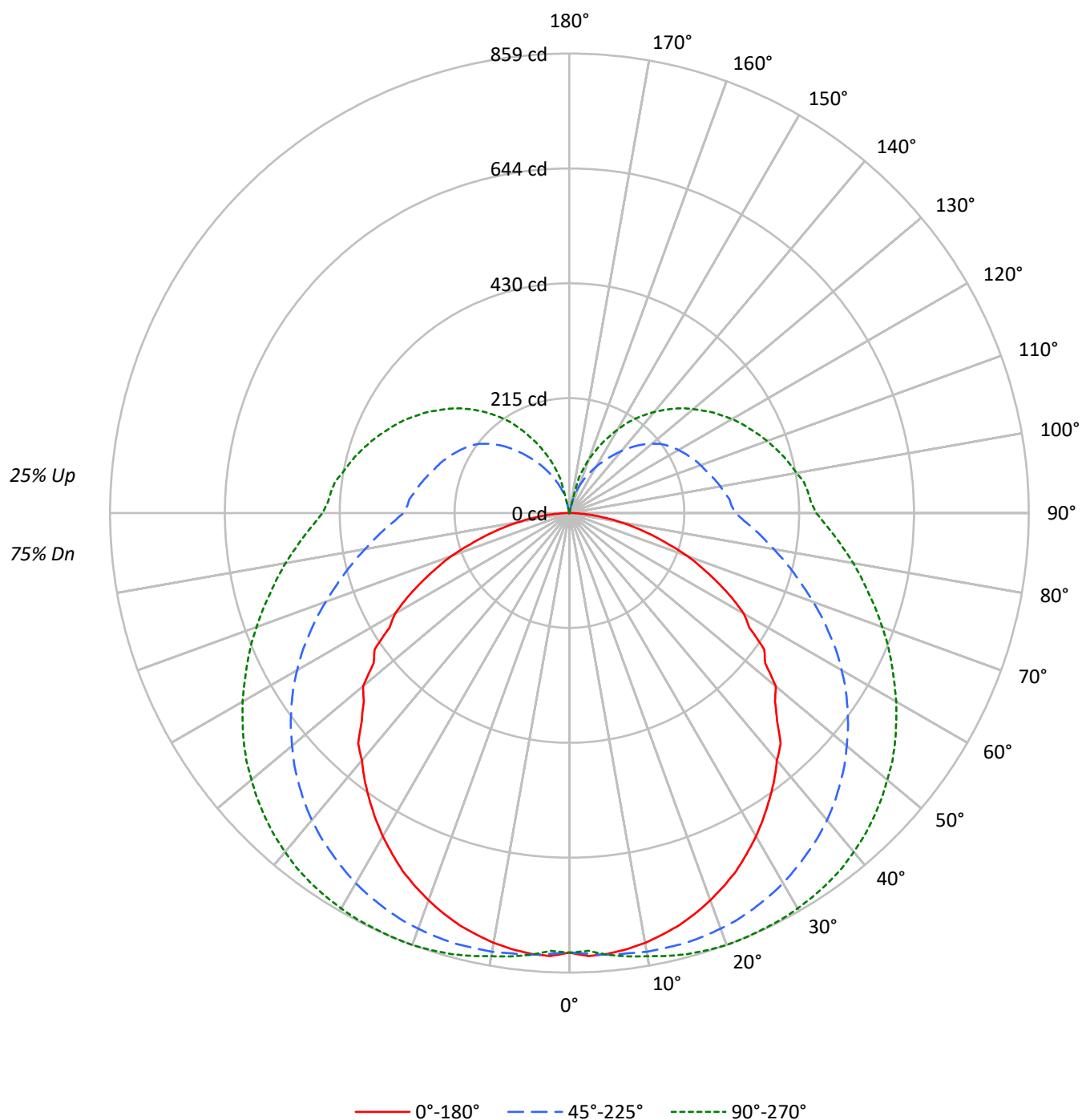
Input Watts (W): 46
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6639	6639	6639
5°	6689	6560	6511
10°	6658	6502	6475
15°	6612	6467	6489
20°	6549	6437	6501
25°	6487	6414	6511
30°	6397	6394	6546
35°	6298	6372	6591
40°	6204	6367	6634
45°	6086	6352	6686
50°	6104	6338	6740
55°	5995	6339	6819
60°	5776	6343	6912
65°	5455	6350	7040
70°	5103	6398	7239
75°	4479	6546	7532
80°	3783	6860	8017
85°	2808	7499	8726



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.9	1.7
10°-20°	234.0	4.9
20°-30°	371.9	7.9
30°-40°	477.3	10.1
40°-50°	539.0	11.4
50°-60°	550.0	11.6
60°-70°	509.5	10.8
70°-80°	431.4	9.1
80°-90°	344.3	7.3
90°-100°	292.4	6.2
100°-110°	260.5	5.5
110°-120°	221.9	4.7
120°-130°	176.2	3.7
130°-140°	125.0	2.6
140°-150°	74.7	1.6
150°-160°	34.8	0.7
160°-170°	8.3	0.2
170°-180°	0.0	0.0
0°-30°	684.8	14.5
0°-40°	1162.1	24.6
0°-60°	2251.0	47.6
0°-90°	3536.3	74.8
90°-120°	774.7	16.4
90°-150°	1150.6	24.3
90°-180°	1194.0	25.2
0°-180°	4730.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	822	822	822	822	822	
5°	827	820	829	829	829	79
15°	797	804	833	848	854	225
25°	738	762	816	845	858	340
35°	652	700	776	824	844	408
45°	549	624	716	778	805	426
55°	444	519	635	712	744	390
65°	304	406	537	629	665	302
75°	160	283	435	541	579	170
85°	41	182	347	459	498	45
90°	2	149	310	422	461	3
95°	0	140	300	410	448	0
105°	0	129	274	377	414	0
115°	0	120	249	339	372	0
125°	0	104	221	299	328	0
135°	0	77	178	252	276	0
145°	0	50	124	189	216	0
155°	1	31	77	116	143	1
165°	1	17	34	48	68	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°	821.5	821.5	821.5	821.5	821.5
2.5°	829.0	820.3	824.8	823.6	819.1
5°	826.9	820.3	829.0	829.0	829.0
7.5°	822.4	817.9	830.2	834.7	835.9
10°	815.8	815.8	832.6	839.2	841.3
12.5°	806.8	810.1	832.6	842.5	847.9
15°	796.9	803.5	832.6	847.9	853.6
17.5°	784.6	795.7	830.2	849.1	856.9
20°	770.2	787.0	826.9	849.1	859.3
22.5°	754.6	775.9	822.4	847.0	859.3
25°	738.1	762.4	815.8	844.6	858.1
27.5°	718.0	749.2	808.0	841.3	856.9
30°	697.9	733.6	799.0	836.8	853.6
32.5°	675.7	716.8	787.9	830.2	849.1
35°	652.4	700.3	775.9	823.6	843.7
37.5°	629.0	680.2	763.6	814.6	836.8
40°	603.5	660.1	749.2	803.5	826.9
42.5°	584.6	639.2	733.6	792.4	817.0
45°	549.2	623.6	715.6	778.0	804.7
47.5°	521.3	593.6	697.9	763.6	791.2
50°	503.6	569.0	676.9	746.8	775.9
52.5°	461.3	552.5	656.8	730.3	761.2
55°	444.5	519.2	634.7	712.3	743.5
57.5°	398.9	495.8	612.5	692.5	724.6
60°	376.7	463.4	587.9	672.4	705.7
62.5°	342.2	435.8	563.6	650.3	684.7
65°	304.4	405.8	536.9	629.0	664.6
67.5°	269.0	375.8	511.4	606.8	644.6
70°	234.5	344.6	484.7	584.6	622.4
72.5°	194.4	313.4	458.9	563.6	601.4
75°	160.2	283.4	434.6	541.4	579.2
77.5°	126.6	254.6	411.2	521.3	559.1
80°	95.7	226.7	387.8	500.3	539.0
82.5°	66.6	203.4	366.8	480.2	518.0
85°	41.1	182.4	346.7	458.9	497.9
87.5°	18.9	163.5	326.6	439.1	479.0
90°	2.1	149.1	310.1	422.3	461.3
92.5°	1.2	144.6	303.5	414.5	452.3
95°	0.0	140.1	300.2	410.0	447.8
97.5°	0.0	135.6	292.4	403.4	442.4
100°	0.0	133.5	286.7	393.5	431.3
102.5°	0.0	130.2	280.1	384.5	422.3
105°	0.0	129.0	273.5	376.7	413.6
107.5°	0.0	126.6	266.6	366.8	403.4
110°	0.0	124.5	261.2	357.8	393.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	122.4	255.5	349.1	383.3
115°	0.0	120.0	248.9	338.9	372.2
117.5°	0.0	116.7	242.3	329.0	362.3
120°	0.0	112.2	235.7	320.0	351.2
122.5°	0.0	107.7	228.8	308.9	338.9
125°	0.0	103.5	221.0	299.0	327.8
127.5°	0.0	96.6	212.4	287.9	314.6
130°	0.0	90.0	201.3	276.8	302.3
132.5°	1.2	83.4	190.2	264.5	290.0
135°	0.0	76.8	177.9	252.2	275.6
137.5°	0.0	71.1	164.4	239.0	261.2
140°	0.0	64.5	151.2	223.4	246.8
142.5°	0.0	56.7	138.0	206.7	231.2
145°	0.0	50.1	124.5	189.0	215.7
147.5°	1.2	44.4	112.2	170.1	198.9
150°	1.2	39.9	100.2	151.2	180.0
152.5°	1.2	35.7	87.9	133.5	161.1
155°	1.2	31.2	76.8	115.5	143.4
157.5°	1.2	26.7	64.5	97.8	124.5
160°	1.2	23.4	53.4	82.2	106.8
162.5°	1.2	20.1	43.5	64.5	87.9
165°	1.2	16.8	34.5	47.7	67.8
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)