

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: P284469

Luminaire Tested: **4SNLED-LD5-52SL-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: P284469
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-LD5-52SL-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: 5114.9 lumens
Efficiency: N/A
Efficacy: 98.4 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

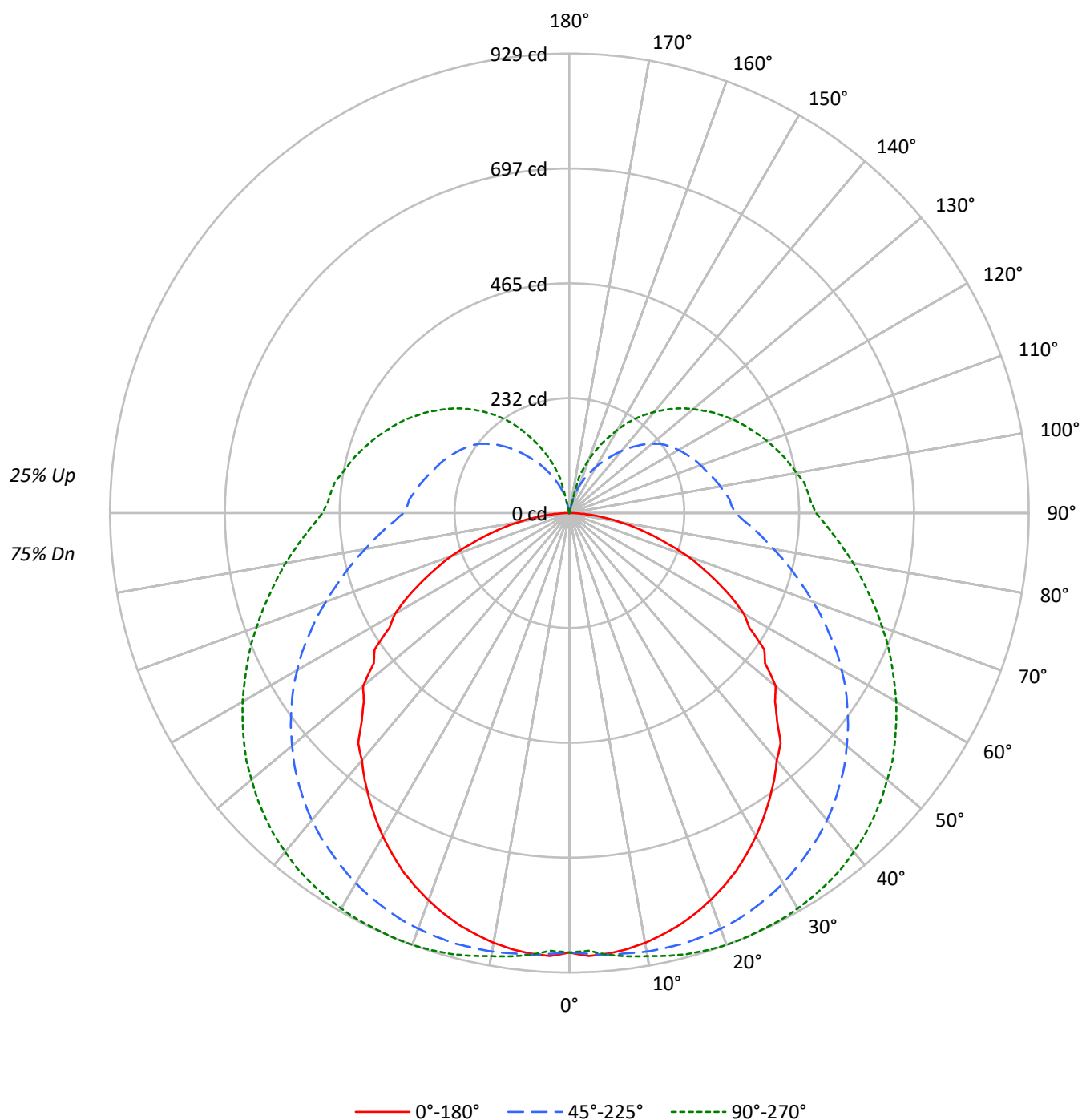
Input Watts (W): 52
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P284469

CATALOG NUMBER: 4SNLED-LD5-52SL-SLW-UNV-L830-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P284469

CATALOG NUMBER: 4SNLED-LD5-52SL-SLW-UNV-L830-CD1-U

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°	7179	7179	7179
5°	7234	7094	7041
10°	7199	7032	7002
15°	7150	6994	7017
20°	7082	6961	7030
25°	7015	6936	7041
30°	6917	6915	7079
35°	6810	6891	7128
40°	6708	6886	7173
45°	6582	6869	7231
50°	6601	6854	7288
55°	6483	6854	7374
60°	6246	6859	7475
65°	5899	6867	7614
70°	5518	6918	7828
75°	4843	7079	8145
80°	4091	7419	8668
85°	3033	8109	9436



TEST NUMBER: P284469

CATALOG NUMBER: 4SNLED-LD5-52SL-SLW-UNV-L830-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.4	1.7
10°-20°	253.0	4.9
20°-30°	402.2	7.9
30°-40°	516.1	10.1
40°-50°	582.8	11.4
50°-60°	594.7	11.6
60°-70°	551.0	10.8
70°-80°	466.5	9.1
80°-90°	372.3	7.3
90°-100°	316.2	6.2
100°-110°	281.7	5.5
110°-120°	239.9	4.7
120°-130°	190.6	3.7
130°-140°	135.2	2.6
140°-150°	80.7	1.6
150°-160°	37.6	0.7
160°-170°	8.9	0.2
170°-180°	0.0	0.0
0°-30°	740.6	14.5
0°-40°	1256.7	24.6
0°-60°	2434.3	47.6
0°-90°	3824.1	74.8
90°-120°	837.8	16.4
90°-150°	1244.3	24.3
90°-180°	1291.0	25.2
0°-180°	5114.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	888	888	888	888	888	
5°	894	887	896	896	896	85
15°	862	869	900	917	923	243
25°	798	824	882	913	928	367
35°	705	757	839	891	912	442
45°	594	674	774	841	870	461
55°	481	561	686	770	804	422
65°	329	439	581	680	719	327
75°	173	306	470	585	626	184
85°	44	197	375	496	538	48
90°	2	161	335	457	499	4
95°	0	152	325	443	484	0
105°	0	140	296	407	447	0
115°	0	130	269	366	402	0
125°	0	112	239	323	354	0
135°	0	83	192	273	298	0
145°	0	54	135	204	233	1
155°	1	34	83	125	155	1
165°	1	18	37	52	73	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P284469

CATALOG NUMBER: 4SNLED-LD5-52SL-SLW-UNV-L830-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	888.4	888.4	888.4	888.4	888.4
2.5°	896.5	887.1	891.9	890.6	885.8
5°	894.2	887.1	896.5	896.5	896.5
7.5°	889.4	884.5	897.8	902.7	903.9
10°	882.2	882.2	900.4	907.5	909.8
12.5°	872.5	876.1	900.4	911.1	916.9
15°	861.8	868.9	900.4	916.9	923.1
17.5°	848.5	860.5	897.8	918.2	926.7
20°	832.9	851.1	894.2	918.2	929.2
22.5°	816.1	839.1	889.4	915.9	929.2
25°	798.2	824.5	882.2	913.4	927.9
27.5°	776.5	810.2	873.8	909.8	926.7
30°	754.7	793.3	864.1	904.9	923.1
32.5°	730.7	775.2	852.1	897.8	918.2
35°	705.4	757.3	839.1	890.6	912.4
37.5°	680.1	735.6	825.8	880.9	904.9
40°	652.6	713.9	810.2	868.9	894.2
42.5°	632.1	691.2	793.3	856.9	883.5
45°	593.9	674.3	773.9	841.3	870.2
47.5°	563.7	641.9	754.7	825.8	855.6
50°	544.6	615.3	732.0	807.6	839.1
52.5°	498.8	597.4	710.3	789.8	823.2
55°	480.7	561.4	686.3	770.3	804.0
57.5°	431.4	536.1	662.3	748.9	783.6
60°	407.4	501.1	635.7	727.2	763.2
62.5°	370.1	471.3	609.4	703.2	740.5
65°	329.2	438.8	580.6	680.1	718.7
67.5°	290.9	406.4	553.0	656.1	697.0
70°	253.6	372.7	524.1	632.1	673.0
72.5°	210.2	338.9	496.2	609.4	650.3
75°	173.2	306.5	470.0	585.4	626.3
77.5°	136.9	275.4	444.7	563.7	604.6
80°	103.5	245.2	419.4	541.0	582.8
82.5°	72.0	219.9	396.7	519.3	560.1
85°	44.4	197.2	374.9	496.2	538.4
87.5°	20.4	176.8	353.2	474.8	518.0
90°	2.3	161.2	335.4	456.7	498.8
92.5°	1.3	156.3	328.2	448.2	489.1
95°	0.0	151.5	324.7	443.4	484.2
97.5°	0.0	146.6	316.2	436.2	478.4
100°	0.0	144.3	310.1	425.5	466.4
102.5°	0.0	140.8	302.9	415.8	456.7
105°	0.0	139.5	295.8	407.4	447.3
107.5°	0.0	136.9	288.3	396.7	436.2
110°	0.0	134.6	282.5	386.9	425.5



TEST NUMBER: P284469

CATALOG NUMBER: 4SNLED-LD5-52SL-SLW-UNV-L830-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	132.3	276.3	377.5	414.5
115°	0.0	129.7	269.2	366.5	402.5
117.5°	0.0	126.2	262.1	355.8	391.8
120°	0.0	121.3	254.9	346.1	379.8
122.5°	0.0	116.4	247.5	334.1	366.5
125°	0.0	111.9	239.0	323.4	354.5
127.5°	0.0	104.4	229.6	311.4	340.2
130°	0.0	97.3	217.6	299.4	326.9
132.5°	1.3	90.2	205.6	286.1	313.6
135°	0.0	83.0	192.3	272.8	298.1
137.5°	0.0	76.9	177.7	258.5	282.5
140°	0.0	69.7	163.5	241.6	266.9
142.5°	0.0	61.3	149.2	223.5	250.1
145°	0.0	54.2	134.6	204.3	233.2
147.5°	1.3	48.0	121.3	183.9	215.0
150°	1.3	43.1	108.3	163.5	194.6
152.5°	1.3	38.6	95.0	144.3	174.2
155°	1.3	33.7	83.0	124.9	155.0
157.5°	1.3	28.9	69.7	105.7	134.6
160°	1.3	25.3	57.7	88.9	115.5
162.5°	1.3	21.7	47.0	69.7	95.0
165°	1.3	18.2	37.3	51.6	73.3
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)