

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: P284630

Luminaire Tested: **4SNLED-LD5-48HL-SLW-UNV-L930-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: P284630
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-L930-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: 3778.0 lumens
Efficiency: N/A
Efficacy: 96.9 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

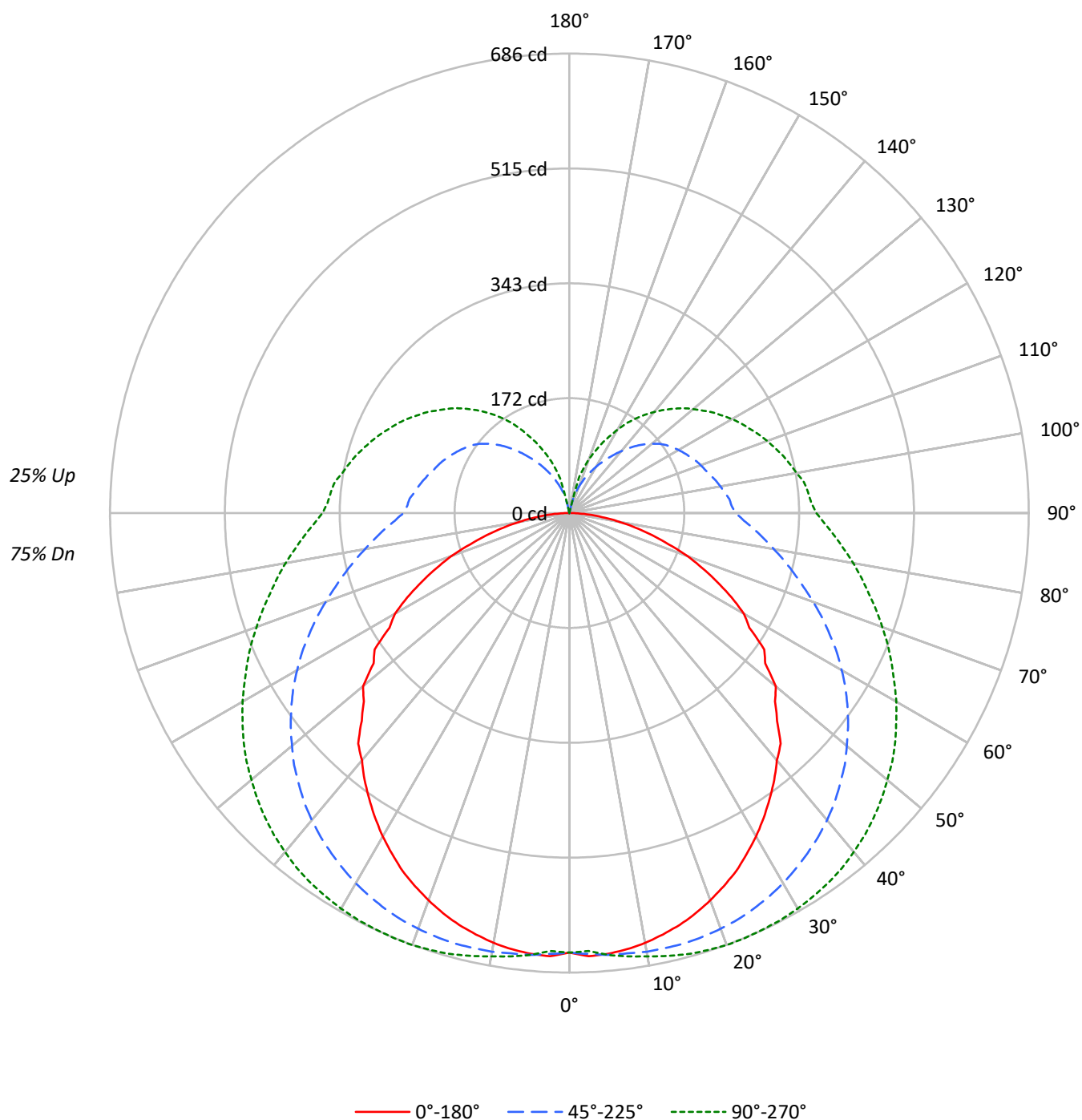
Input Watts (W): 39
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P284630

CATALOG NUMBER: 4SNLED-LD5-48HL-SLW-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P284630

CATALOG NUMBER: 4SNLED-LD5-48HL-SLW-UNV-L930-CD1-U

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5303	5303	5303
5°	5343	5240	5201
10°	5318	5193	5172
15°	5281	5165	5183
20°	5231	5142	5193
25°	5182	5123	5201
30°	5110	5107	5229
35°	5031	5090	5264
40°	4955	5086	5299
45°	4861	5074	5341
50°	4875	5063	5384
55°	4788	5063	5447
60°	4613	5065	5521
65°	4358	5072	5624
70°	4075	5110	5782
75°	3576	5228	6016
80°	3020	5480	6403
85°	2241	5990	6970



TEST NUMBER: P284630

CATALOG NUMBER: 4SNLED-LD5-48HL-SLW-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.1	1.7
10°-20°	186.9	4.9
20°-30°	297.0	7.9
30°-40°	381.2	10.1
40°-50°	430.5	11.4
50°-60°	439.3	11.6
60°-70°	407.0	10.8
70°-80°	344.5	9.1
80°-90°	275.0	7.3
90°-100°	233.6	6.2
100°-110°	208.1	5.5
110°-120°	177.2	4.7
120°-130°	140.7	3.7
130°-140°	99.9	2.6
140°-150°	59.6	1.6
150°-160°	27.8	0.7
160°-170°	6.6	0.2
170°-180°	0.0	0.0
0°-30°	547.0	14.5
0°-40°	928.2	24.6
0°-60°	1798.0	47.6
0°-90°	2824.5	74.8
90°-120°	618.8	16.4
90°-150°	919.1	24.3
90°-180°	953.0	25.2
0°-180°	3778.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	656	656	656	656	656	
5°	660	655	662	662	662	63
15°	636	642	665	677	682	180
25°	590	609	652	675	685	271
35°	521	559	620	658	674	326
45°	439	498	572	621	643	341
55°	355	415	507	569	594	312
65°	243	324	429	502	531	241
75°	128	226	347	432	463	136
85°	33	146	277	366	398	36
90°	2	119	248	337	368	3
95°	0	112	240	328	358	0
105°	0	103	218	301	330	0
115°	0	96	199	271	297	0
125°	0	83	177	239	262	0
135°	0	61	142	202	220	0
145°	0	40	99	151	172	0
155°	1	25	61	92	114	0
165°	1	13	28	38	54	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P284630

CATALOG NUMBER: 4SNLED-LD5-48HL-SLW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	656.2	656.2	656.2	656.2	656.2
2.5°	662.2	655.2	658.8	657.8	654.3
5°	660.5	655.2	662.2	662.2	662.2
7.5°	656.9	653.3	663.1	666.7	667.7
10°	651.6	651.6	665.0	670.3	672.0
12.5°	644.4	647.1	665.0	672.9	677.2
15°	636.5	641.8	665.0	677.2	681.8
17.5°	626.7	635.6	663.1	678.2	684.4
20°	615.2	628.6	660.5	678.2	686.4
22.5°	602.7	619.8	656.9	676.5	686.4
25°	589.6	609.0	651.6	674.6	685.4
27.5°	573.5	598.4	645.4	672.0	684.4
30°	557.5	586.0	638.2	668.4	681.8
32.5°	539.7	572.6	629.3	663.1	678.2
35°	521.1	559.4	619.8	657.8	673.9
37.5°	502.4	543.3	609.9	650.7	668.4
40°	482.0	527.3	598.4	641.8	660.5
42.5°	466.9	510.5	586.0	632.9	652.6
45°	438.6	498.1	571.6	621.4	642.8
47.5°	416.4	474.1	557.5	609.9	632.0
50°	402.2	454.5	540.7	596.5	619.8
52.5°	368.5	441.3	524.6	583.3	608.0
55°	355.0	414.7	506.9	569.0	593.9
57.5°	318.6	396.0	489.2	553.2	578.8
60°	300.9	370.1	469.5	537.1	563.7
62.5°	273.3	348.1	450.1	519.4	546.9
65°	243.2	324.1	428.8	502.4	530.9
67.5°	214.9	300.2	408.5	484.6	514.8
70°	187.3	275.3	387.1	466.9	497.1
72.5°	155.2	250.3	366.5	450.1	480.3
75°	127.9	226.4	347.1	432.4	462.6
77.5°	101.1	203.4	328.4	416.4	446.5
80°	76.4	181.1	309.8	399.6	430.5
82.5°	53.2	162.4	293.0	383.5	413.7
85°	32.8	145.7	276.9	366.5	397.7
87.5°	15.1	130.6	260.9	350.7	382.6
90°	1.7	119.1	247.7	337.3	368.5
92.5°	1.0	115.5	242.4	331.1	361.3
95°	0.0	111.9	239.8	327.5	357.7
97.5°	0.0	108.3	233.6	322.2	353.4
100°	0.0	106.6	229.0	314.3	344.5
102.5°	0.0	104.0	223.8	307.1	337.3
105°	0.0	103.0	218.5	300.9	330.4
107.5°	0.0	101.1	213.0	293.0	322.2
110°	0.0	99.4	208.7	285.8	314.3



TEST NUMBER: P284630

CATALOG NUMBER: 4SNLED-LD5-48HL-SLW-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	97.7	204.1	278.9	306.2
115°	0.0	95.8	198.8	270.7	297.3
117.5°	0.0	93.2	193.6	262.8	289.4
120°	0.0	89.6	188.3	255.6	280.5
122.5°	0.0	86.0	182.8	246.8	270.7
125°	0.0	82.6	176.6	238.8	261.8
127.5°	0.0	77.1	169.6	230.0	251.3
130°	0.0	71.9	160.7	221.1	241.5
132.5°	1.0	66.6	151.9	211.3	231.7
135°	0.0	61.3	142.1	201.5	220.2
137.5°	0.0	56.8	131.3	190.9	208.7
140°	0.0	51.5	120.7	178.5	197.2
142.5°	0.0	45.3	110.2	165.1	184.7
145°	0.0	40.0	99.4	150.9	172.2
147.5°	1.0	35.5	89.6	135.8	158.8
150°	1.0	31.9	80.0	120.7	143.7
152.5°	1.0	28.5	70.2	106.6	128.6
155°	1.0	24.9	61.3	92.2	114.5
157.5°	1.0	21.3	51.5	78.1	99.4
160°	1.0	18.7	42.6	65.6	85.3
162.5°	1.0	16.1	34.7	51.5	70.2
165°	1.0	13.4	27.5	38.1	54.1
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)