

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: P284670

Luminaire Tested: **4SNLED-LD5-52HL-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: P284670
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-LD5-52HL-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: 4369.0 lumens
Efficiency: N/A
Efficacy: 101.6 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

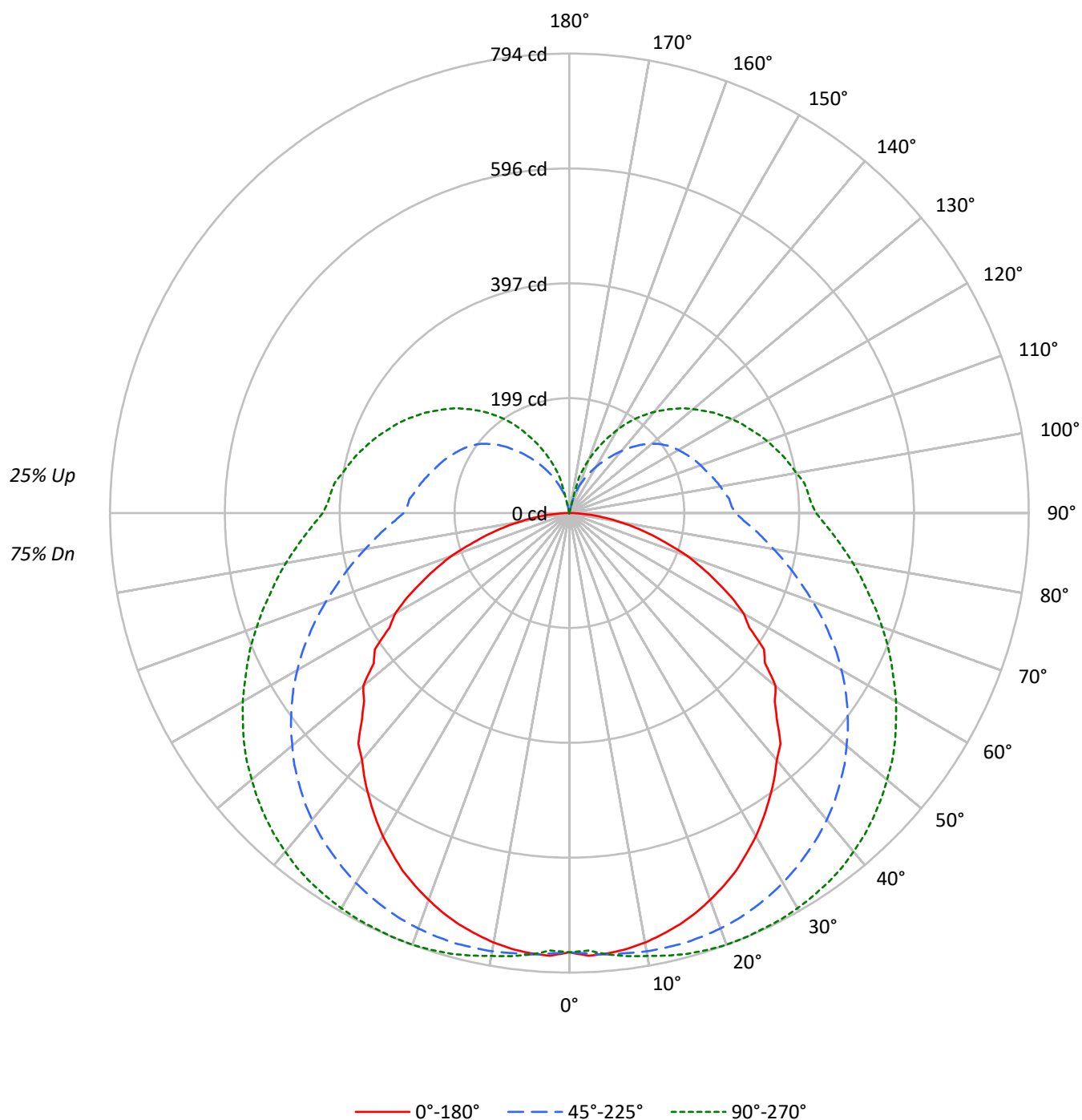
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	6132	6132	6132
5°	6179	6059	6014
10°	6149	6006	5981
15°	6107	5974	5994
20°	6049	5946	6005
25°	5992	5924	6014
30°	5909	5906	6047
35°	5817	5885	6088
40°	5730	5881	6127
45°	5622	5867	6176
50°	5638	5855	6225
55°	5538	5855	6299
60°	5336	5858	6385
65°	5039	5866	6503
70°	4713	5910	6687
75°	4136	6046	6957
80°	3495	6337	7404
85°	2596	6928	8060



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	72.9	1.7
10°-20°	216.1	4.9
20°-30°	343.5	7.9
30°-40°	440.9	10.1
40°-50°	497.8	11.4
50°-60°	508.0	11.6
60°-70°	470.6	10.8
70°-80°	398.4	9.1
80°-90°	318.0	7.3
90°-100°	270.1	6.2
100°-110°	240.6	5.5
110°-120°	204.9	4.7
120°-130°	162.8	3.7
130°-140°	115.5	2.6
140°-150°	68.9	1.6
150°-160°	32.1	0.7
160°-170°	7.6	0.2
170°-180°	0.0	0.0
0°-30°	632.6	14.5
0°-40°	1073.4	24.6
0°-60°	2079.3	47.6
0°-90°	3266.4	74.8
90°-120°	715.6	16.4
90°-150°	1062.8	24.3
90°-180°	1103.0	25.2
0°-180°	4369.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	759	759	759	759	759	
5°	764	758	766	766	766	73
15°	736	742	769	783	788	208
25°	682	704	754	780	793	314
35°	603	647	717	761	779	377
45°	507	576	661	719	743	394
55°	411	480	586	658	687	361
65°	281	375	496	581	614	279
75°	148	262	401	500	535	157
85°	38	168	320	424	460	41
90°	2	138	286	390	426	3
95°	0	129	277	379	414	0
105°	0	119	253	348	382	0
115°	0	111	230	313	344	0
125°	0	96	204	276	303	0
135°	0	71	164	233	255	0
145°	0	46	115	174	199	0
155°	1	29	71	107	132	1
165°	1	16	32	44	63	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°	758.8	758.8	758.8	758.8	758.8
2.5°	765.7	757.7	761.9	760.8	756.6
5°	763.8	757.7	765.7	765.7	765.7
7.5°	759.6	755.5	766.8	771.0	772.1
10°	753.5	753.5	769.1	775.2	777.1
12.5°	745.2	748.3	769.1	778.2	783.2
15°	736.1	742.2	769.1	783.2	788.5
17.5°	724.7	735.0	766.8	784.3	791.5
20°	711.4	727.0	763.8	784.3	793.7
22.5°	697.0	716.7	759.6	782.4	793.7
25°	681.8	704.2	753.5	780.1	792.6
27.5°	663.2	692.0	746.3	777.1	791.5
30°	644.7	677.6	738.0	772.9	788.5
32.5°	624.2	662.1	727.8	766.8	784.3
35°	602.6	646.9	716.7	760.8	779.3
37.5°	581.0	628.3	705.3	752.4	772.9
40°	557.4	609.8	692.0	742.2	763.8
42.5°	540.0	590.4	677.6	731.9	754.7
45°	507.3	576.0	661.0	718.6	743.3
47.5°	481.5	548.3	644.7	705.3	730.8
50°	465.2	525.5	625.3	689.8	716.7
52.5°	426.1	510.3	606.7	674.6	703.1
55°	410.6	479.6	586.2	658.0	686.8
57.5°	368.5	457.9	565.7	639.7	669.3
60°	348.0	428.0	543.0	621.1	651.9
62.5°	316.1	402.5	520.6	600.6	632.5
65°	281.2	374.8	495.9	581.0	613.9
67.5°	248.5	347.1	472.4	560.5	595.4
70°	216.6	318.3	447.7	540.0	574.9
72.5°	179.5	289.5	423.9	520.6	555.5
75°	147.9	261.8	401.4	500.1	535.0
77.5°	116.9	235.2	379.8	481.5	516.4
80°	88.4	209.4	358.2	462.1	497.8
82.5°	61.5	187.8	338.8	443.5	478.4
85°	38.0	168.4	320.3	423.9	459.9
87.5°	17.5	151.0	301.7	405.6	442.4
90°	1.9	137.7	286.5	390.1	426.1
92.5°	1.1	133.5	280.4	382.9	417.8
95°	0.0	129.4	277.3	378.7	413.6
97.5°	0.0	125.2	270.1	372.6	408.6
100°	0.0	123.3	264.9	363.5	398.4
102.5°	0.0	120.2	258.8	355.2	390.1
105°	0.0	119.1	252.7	348.0	382.0
107.5°	0.0	116.9	246.3	338.8	372.6
110°	0.0	115.0	241.3	330.5	363.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	113.0	236.0	322.5	354.1
115°	0.0	110.8	229.9	313.1	343.8
117.5°	0.0	107.8	223.8	303.9	334.7
120°	0.0	103.6	217.8	295.6	324.4
122.5°	0.0	99.5	211.4	285.4	313.1
125°	0.0	95.6	204.2	276.2	302.8
127.5°	0.0	89.2	196.1	266.0	290.6
130°	0.0	83.1	185.9	255.7	279.3
132.5°	1.1	77.0	175.6	244.3	267.9
135°	0.0	70.9	164.3	233.0	254.6
137.5°	0.0	65.7	151.8	220.8	241.3
140°	0.0	59.6	139.6	206.4	228.0
142.5°	0.0	52.4	127.4	190.9	213.6
145°	0.0	46.3	115.0	174.5	199.2
147.5°	1.1	41.0	103.6	157.1	183.7
150°	1.1	36.8	92.5	139.6	166.2
152.5°	1.1	33.0	81.2	123.3	148.8
155°	1.1	28.8	70.9	106.7	132.4
157.5°	1.1	24.7	59.6	90.3	115.0
160°	1.1	21.6	49.3	75.9	98.6
162.5°	1.1	18.6	40.2	59.6	81.2
165°	1.1	15.5	31.9	44.0	62.6
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)