

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: P284553

Luminaire Tested: **4SNLED-LD5-52HL-SLW-UNV-L840-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: P284553
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-L840-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: 5289.0 lumens
Efficiency: N/A
Efficacy: 123.0 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

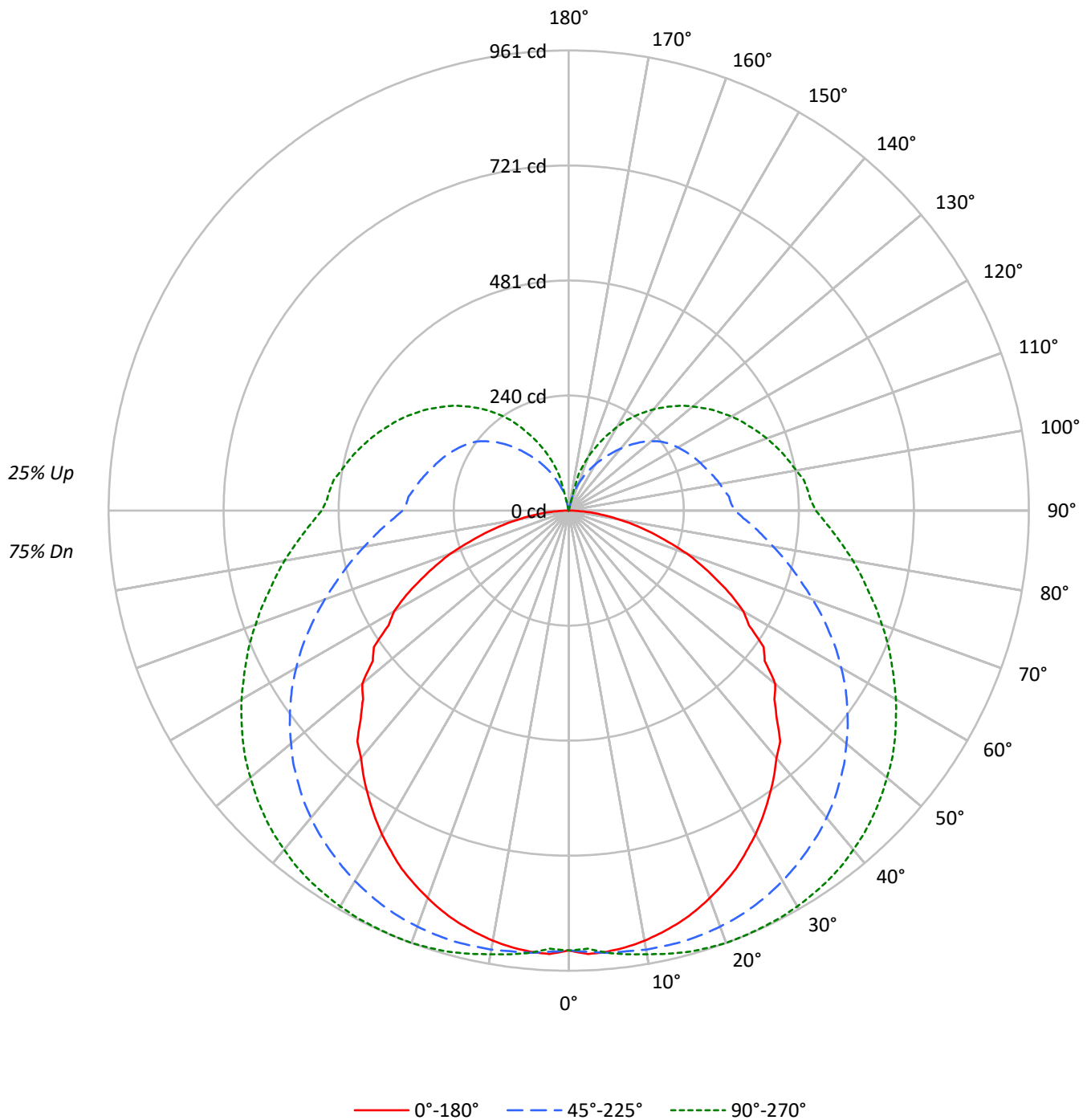
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7423	7423	7423
5°	7480	7335	7281
10°	7444	7271	7240
15°	7393	7232	7256
20°	7323	7198	7270
25°	7254	7172	7281
30°	7153	7150	7320
35°	7042	7125	7370
40°	6937	7120	7417
45°	6805	7103	7477
50°	6825	7087	7536
55°	6703	7088	7625
60°	6458	7092	7729
65°	6100	7100	7873
70°	5707	7154	8094
75°	5008	7320	8422
80°	4230	7670	8964
85°	3136	8386	9756



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	88.3	1.7
10°-20°	261.6	4.9
20°-30°	415.8	7.9
30°-40°	533.7	10.1
40°-50°	602.7	11.4
50°-60°	615.0	11.6
60°-70°	569.7	10.8
70°-80°	482.3	9.1
80°-90°	385.0	7.3
90°-100°	326.9	6.2
100°-110°	291.3	5.5
110°-120°	248.1	4.7
120°-130°	197.0	3.7
130°-140°	139.8	2.6
140°-150°	83.5	1.6
150°-160°	38.9	0.7
160°-170°	9.2	0.2
170°-180°	0.0	0.0
0°-30°	765.8	14.5
0°-40°	1299.5	24.6
0°-60°	2517.1	47.6
0°-90°	3954.2	74.8
90°-120°	866.3	16.4
90°-150°	1286.6	24.3
90°-180°	1335.0	25.2
0°-180°	5289.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	919	919	919	919	919	
5°	925	917	927	927	927	88
15°	891	898	931	948	954	251
25°	825	852	912	944	960	380
35°	729	783	868	921	943	457
45°	614	697	800	870	900	477
55°	497	580	710	796	831	436
65°	340	454	600	703	743	338
75°	179	317	486	605	648	191
85°	46	204	388	513	557	50
90°	2	167	347	472	516	4
95°	0	157	336	458	501	0
105°	0	144	306	421	462	0
115°	0	134	278	379	416	0
125°	0	116	247	334	367	0
135°	0	86	199	282	308	0
145°	0	56	139	211	241	1
155°	1	35	86	129	160	1
165°	1	19	39	53	76	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°	918.6	918.6	918.6	918.6	918.6
2.5°	927.0	917.3	922.3	920.9	915.9
5°	924.6	917.3	927.0	927.0	927.0
7.5°	919.6	914.6	928.3	933.4	934.7
10°	912.2	912.2	931.0	938.4	940.7
12.5°	902.2	905.9	931.0	942.1	948.1
15°	891.1	898.5	931.0	948.1	954.5
17.5°	877.3	889.8	928.3	949.5	958.2
20°	861.2	880.0	924.6	949.5	960.9
22.5°	843.8	867.6	919.6	947.1	960.9
25°	825.4	852.5	912.2	944.4	959.5
27.5°	802.9	837.8	903.5	940.7	958.2
30°	780.4	820.3	893.4	935.7	954.5
32.5°	755.6	801.6	881.0	928.3	949.5
35°	729.4	783.1	867.6	920.9	943.4
37.5°	703.3	760.6	853.9	910.9	935.7
40°	674.8	738.2	837.8	898.5	924.6
42.5°	653.7	714.7	820.3	886.1	913.6
45°	614.1	697.3	800.2	870.0	899.8
47.5°	582.9	663.7	780.4	853.9	884.7
50°	563.1	636.2	756.9	835.1	867.6
52.5°	515.8	617.8	734.5	816.6	851.2
55°	497.0	580.5	709.7	796.5	831.4
57.5°	446.1	554.4	684.8	774.4	810.3
60°	421.2	518.2	657.3	751.9	789.1
62.5°	382.7	487.3	630.2	727.1	765.7
65°	340.4	453.8	600.3	703.3	743.2
67.5°	300.8	420.2	571.8	678.5	720.7
70°	262.3	385.3	542.0	653.7	695.9
72.5°	217.3	350.5	513.1	630.2	672.4
75°	179.1	316.9	486.0	605.4	647.6
77.5°	141.5	284.7	459.8	582.9	625.1
80°	107.0	253.5	433.6	559.4	602.7
82.5°	74.5	227.4	410.2	536.9	579.2
85°	45.9	203.9	387.7	513.1	556.7
87.5°	21.1	182.8	365.2	491.0	535.6
90°	2.3	166.7	346.8	472.2	515.8
92.5°	1.3	161.7	339.4	463.5	505.7
95°	0.0	156.6	335.7	458.5	500.7
97.5°	0.0	151.6	327.0	451.1	494.7
100°	0.0	149.2	320.6	440.0	482.3
102.5°	0.0	145.6	313.2	430.0	472.2
105°	0.0	144.2	305.9	421.2	462.5
107.5°	0.0	141.5	298.2	410.2	451.1
110°	0.0	139.2	292.1	400.1	440.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	136.8	285.7	390.4	428.6
115°	0.0	134.2	278.4	379.0	416.2
117.5°	0.0	130.5	271.0	367.9	405.1
120°	0.0	125.4	263.6	357.8	392.7
122.5°	0.0	120.4	255.9	345.4	379.0
125°	0.0	115.7	247.2	334.4	366.6
127.5°	0.0	108.0	237.4	322.0	351.8
130°	0.0	100.6	225.0	309.6	338.1
132.5°	1.3	93.2	212.6	295.8	324.3
135°	0.0	85.9	198.9	282.1	308.2
137.5°	0.0	79.5	183.8	267.3	292.1
140°	0.0	72.1	169.0	249.9	276.0
142.5°	0.0	63.4	154.3	231.1	258.6
145°	0.0	56.0	139.2	211.3	241.1
147.5°	1.3	49.6	125.4	190.2	222.4
150°	1.3	44.6	112.0	169.0	201.2
152.5°	1.3	39.9	98.3	149.2	180.1
155°	1.3	34.9	85.9	129.1	160.3
157.5°	1.3	29.8	72.1	109.3	139.2
160°	1.3	26.2	59.7	91.9	119.4
162.5°	1.3	22.5	48.6	72.1	98.3
165°	1.3	18.8	38.6	53.3	75.8
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)