

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: P284710

Luminaire Tested: **4SNLED-LD5-57HL-SLW-UNV-L940-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: P284710
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-LD5-57HL-SLW-UNV-L940-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: 4900.0 lumens
Efficiency: N/A
Efficacy: 102.1 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

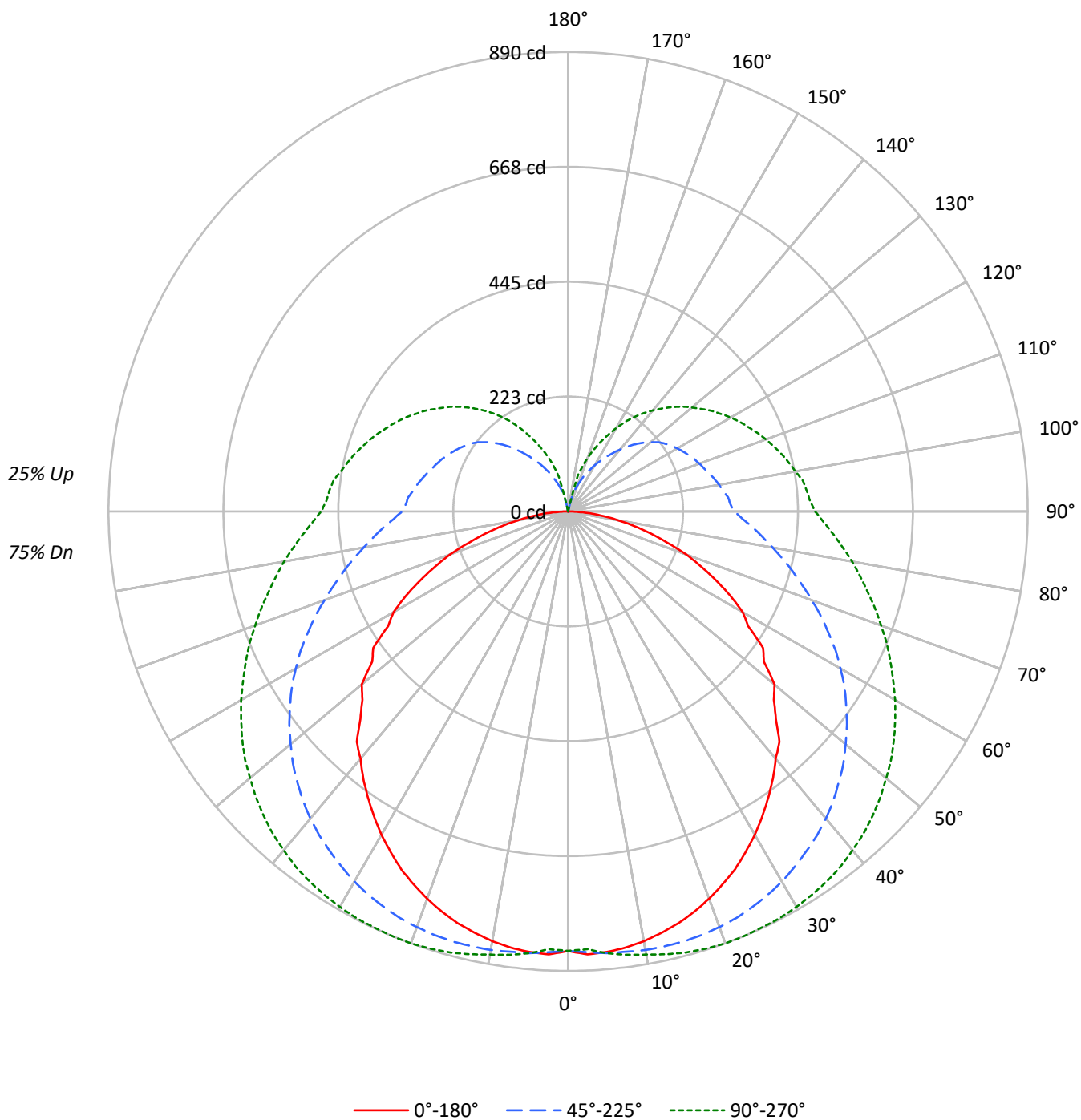
Input Watts (W): 48
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					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°	6877	6877	6877
5°	6930	6796	6745
10°	6897	6736	6707
15°	6850	6700	6722
20°	6784	6669	6735
25°	6720	6644	6745
30°	6627	6624	6782
35°	6524	6601	6828
40°	6427	6597	6872
45°	6305	6581	6927
50°	6323	6567	6982
55°	6211	6567	7065
60°	5984	6570	7161
65°	5652	6579	7294
70°	5287	6628	7499
75°	4639	6781	7803
80°	3918	7106	8304
85°	2910	7770	9040



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.8	1.7
10°-20°	242.4	4.9
20°-30°	385.3	7.9
30°-40°	494.4	10.1
40°-50°	558.4	11.4
50°-60°	569.7	11.6
60°-70°	527.8	10.8
70°-80°	446.9	9.1
80°-90°	356.7	7.3
90°-100°	302.9	6.2
100°-110°	269.9	5.5
110°-120°	229.8	4.7
120°-130°	182.5	3.7
130°-140°	129.5	2.6
140°-150°	77.3	1.6
150°-160°	36.0	0.7
160°-170°	8.6	0.2
170°-180°	0.0	0.0
0°-30°	709.4	14.5
0°-40°	1203.9	24.6
0°-60°	2332.0	47.6
0°-90°	3663.4	74.8
90°-120°	802.6	16.4
90°-150°	1192.0	24.3
90°-180°	1237.0	25.2
0°-180°	4900.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	851	851	851	851	851	
5°	857	850	859	859	859	81
15°	826	832	862	878	884	233
25°	765	790	845	875	889	352
35°	676	726	804	853	874	423
45°	569	646	741	806	834	442
55°	460	538	658	738	770	404
65°	315	420	556	652	688	313
75°	166	294	450	561	600	176
85°	43	189	359	475	516	46
90°	2	154	321	438	478	3
95°	0	145	311	425	464	0
105°	0	134	283	390	428	0
115°	0	124	258	351	386	0
125°	0	107	229	310	340	0
135°	0	80	184	261	286	0
145°	0	52	129	196	223	0
155°	1	32	80	120	148	1
165°	1	17	36	49	70	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°	851.0	851.0	851.0	851.0	851.0
2.5°	858.8	849.8	854.5	853.2	848.6
5°	856.6	849.8	858.8	858.8	858.8
7.5°	852.0	847.3	860.0	864.7	866.0
10°	845.1	845.1	862.5	869.4	871.5
12.5°	835.8	839.2	862.5	872.8	878.4
15°	825.6	832.4	862.5	878.4	884.3
17.5°	812.8	824.3	860.0	879.6	887.7
20°	797.9	815.3	856.6	879.6	890.2
22.5°	781.7	803.8	852.0	877.4	890.2
25°	764.7	789.8	845.1	875.0	888.9
27.5°	743.8	776.2	837.1	871.5	887.7
30°	723.0	760.0	827.7	866.9	884.3
32.5°	700.0	742.6	816.2	860.0	879.6
35°	675.8	725.5	803.8	853.2	874.0
37.5°	651.6	704.7	791.1	843.9	866.9
40°	625.2	683.9	776.2	832.4	856.6
42.5°	605.6	662.1	760.0	820.9	846.4
45°	568.9	646.0	741.4	806.0	833.6
47.5°	540.0	614.9	723.0	791.1	819.7
50°	521.7	589.4	701.3	773.7	803.8
52.5°	477.9	572.3	680.5	756.6	788.6
55°	460.5	537.8	657.5	737.9	770.3
57.5°	413.2	513.6	634.5	717.4	750.7
60°	390.3	480.0	609.0	696.6	731.1
62.5°	354.5	451.5	583.8	673.6	709.4
65°	315.4	420.4	556.2	651.6	688.5
67.5°	278.7	389.3	529.8	628.6	667.7
70°	243.0	357.0	502.1	605.6	644.7
72.5°	201.3	324.7	475.4	583.8	623.0
75°	165.9	293.6	450.2	560.8	600.0
77.5°	131.1	263.8	426.0	540.0	579.2
80°	99.1	234.9	401.7	518.3	558.3
82.5°	69.0	210.7	380.0	497.4	536.6
85°	42.6	188.9	359.2	475.4	515.8
87.5°	19.6	169.3	338.4	454.9	496.2
90°	2.2	154.4	321.3	437.5	477.9
92.5°	1.2	149.8	314.4	429.4	468.6
95°	0.0	145.1	311.0	424.7	463.9
97.5°	0.0	140.4	302.9	417.9	458.3
100°	0.0	138.3	297.0	407.7	446.8
102.5°	0.0	134.8	290.2	398.3	437.5
105°	0.0	133.6	283.4	390.3	428.5
107.5°	0.0	131.1	276.2	380.0	417.9
110°	0.0	128.9	270.6	370.7	407.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	126.8	264.7	361.7	397.1
115°	0.0	124.3	257.9	351.1	385.6
117.5°	0.0	120.9	251.1	340.8	375.3
120°	0.0	116.2	244.2	331.5	363.8
122.5°	0.0	111.5	237.1	320.0	351.1
125°	0.0	107.2	229.0	309.8	339.6
127.5°	0.0	100.0	220.0	298.3	325.9
130°	0.0	93.2	208.5	286.8	313.2
132.5°	1.2	86.4	197.0	274.0	300.5
135°	0.0	79.5	184.3	261.3	285.5
137.5°	0.0	73.6	170.3	247.6	270.6
140°	0.0	66.8	156.6	231.5	255.7
142.5°	0.0	58.7	142.9	214.1	239.6
145°	0.0	51.9	128.9	195.7	223.4
147.5°	1.2	46.0	116.2	176.2	206.0
150°	1.2	41.3	103.8	156.6	186.4
152.5°	1.2	37.0	91.0	138.3	166.9
155°	1.2	32.3	79.5	119.6	148.5
157.5°	1.2	27.7	66.8	101.3	128.9
160°	1.2	24.2	55.3	85.1	110.6
162.5°	1.2	20.8	45.1	66.8	91.0
165°	1.2	17.4	35.7	49.4	70.2
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)