

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: P284633

Luminaire Tested: **4SNLED-LD5-69HL-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: P284633
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-LD5-69HL-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: 5430.0 lumens
Efficiency: N/A
Efficacy: 87.6 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

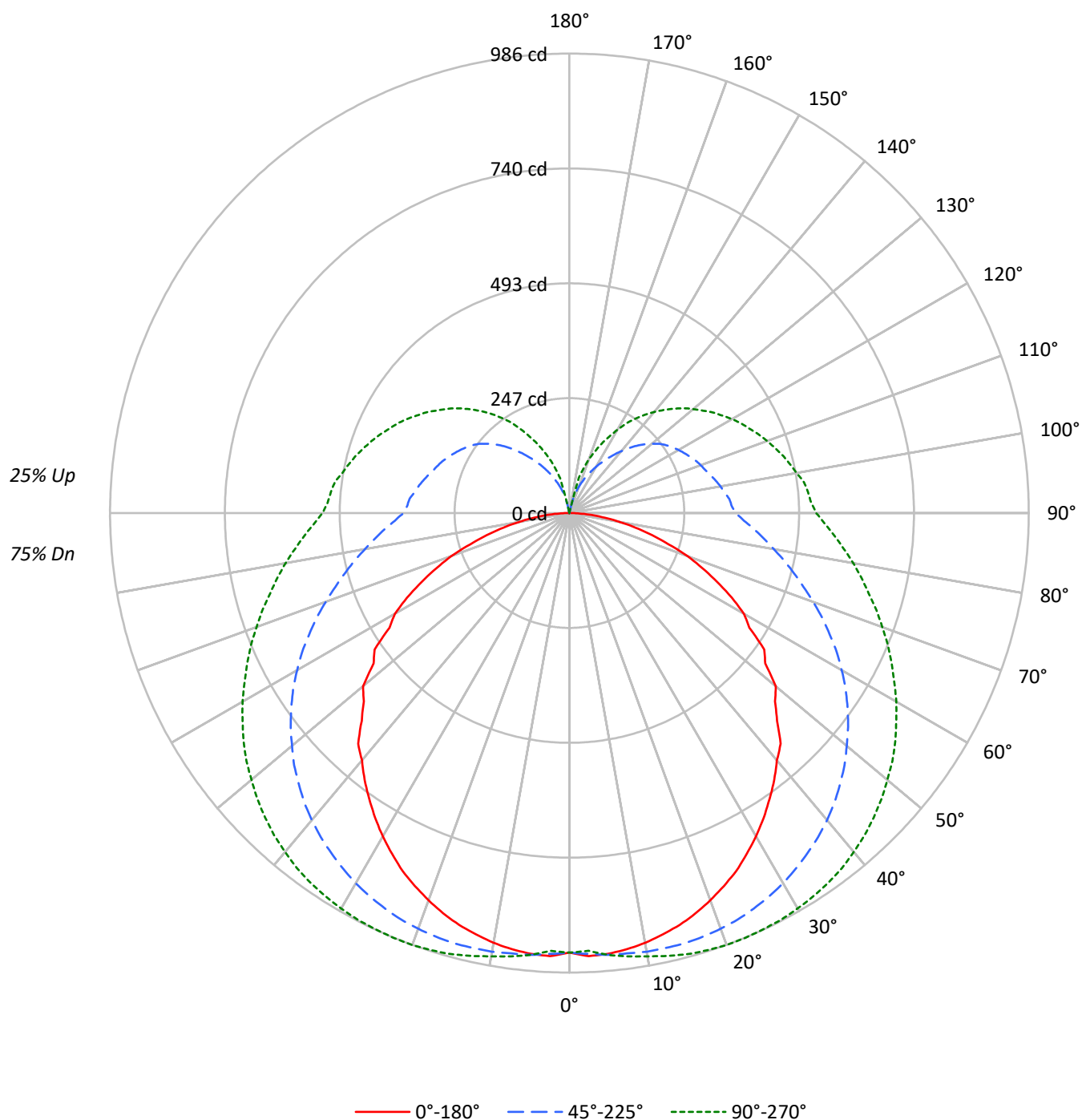
Input Watts (W): 62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	7621	7621	7621
5°	7680	7531	7475
10°	7643	7465	7433
15°	7591	7424	7449
20°	7518	7390	7464
25°	7447	7363	7475
30°	7344	7341	7515
35°	7230	7315	7567
40°	7122	7310	7615
45°	6986	7292	7676
50°	7007	7276	7738
55°	6882	7277	7829
60°	6631	7281	7935
65°	6263	7290	8083
70°	5860	7344	8311
75°	5142	7514	8647
80°	4340	7876	9202
85°	3225	8609	10018



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.7
10°-20°	268.6	4.9
20°-30°	426.9	7.9
30°-40°	547.9	10.1
40°-50°	618.7	11.4
50°-60°	631.4	11.6
60°-70°	584.9	10.8
70°-80°	495.2	9.1
80°-90°	395.3	7.3
90°-100°	335.7	6.2
100°-110°	299.1	5.5
110°-120°	254.7	4.7
120°-130°	202.3	3.7
130°-140°	143.5	2.6
140°-150°	85.7	1.6
150°-160°	40.0	0.7
160°-170°	9.5	0.2
170°-180°	0.0	0.0
0°-30°	786.2	14.5
0°-40°	1334.1	24.6
0°-60°	2584.2	47.6
0°-90°	4059.6	74.8
90°-120°	889.4	16.4
90°-150°	1320.9	24.3
90°-180°	1370.0	25.2
0°-180°	5430.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	943	943	943	943	943	
5°	949	942	952	952	952	90
15°	915	922	956	973	980	258
25°	847	875	936	970	985	390
35°	749	804	891	946	969	469
45°	630	716	822	893	924	490
55°	510	596	729	818	854	448
65°	350	466	616	722	763	347
75°	184	325	499	622	665	196
85°	47	209	398	527	572	51
90°	2	171	356	485	530	4
95°	0	161	345	471	514	0
105°	0	148	314	432	475	0
115°	0	138	286	389	427	0
125°	0	119	254	343	376	0
135°	0	88	204	290	316	0
145°	0	58	143	217	248	1
155°	1	36	88	133	165	1
165°	1	19	40	55	78	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°	943.1	943.1	943.1	943.1	943.1
2.5°	951.7	941.7	946.9	945.5	940.3
5°	949.3	941.7	951.7	951.7	951.7
7.5°	944.1	939.0	953.1	958.2	959.6
10°	936.5	936.5	955.8	963.4	965.8
12.5°	926.2	930.0	955.8	967.2	973.4
15°	914.9	922.4	955.8	973.4	979.9
17.5°	900.7	913.5	953.1	974.8	983.7
20°	884.2	903.5	949.3	974.8	986.5
22.5°	866.3	890.8	944.1	972.4	986.5
25°	847.4	875.3	936.5	969.6	985.1
27.5°	824.3	860.1	927.6	965.8	983.7
30°	801.2	842.2	917.3	960.6	979.9
32.5°	775.7	822.9	904.5	953.1	974.8
35°	748.9	804.0	890.8	945.5	968.6
37.5°	722.0	780.9	876.6	935.2	960.6
40°	692.8	757.8	860.1	922.4	949.3
42.5°	671.1	733.7	842.2	909.7	937.9
45°	630.4	715.8	821.5	893.2	923.8
47.5°	598.4	681.4	801.2	876.6	908.3
50°	578.1	653.2	777.1	857.4	890.8
52.5°	529.6	634.2	754.1	838.4	873.9
55°	510.3	596.0	728.6	817.8	853.6
57.5°	457.9	569.2	703.1	795.0	831.9
60°	432.5	532.0	674.9	772.0	810.2
62.5°	392.9	500.3	647.0	746.5	786.1
65°	349.5	465.9	616.3	722.0	763.0
67.5°	308.9	431.4	587.1	696.6	739.9
70°	269.3	395.6	556.4	671.1	714.5
72.5°	223.1	359.8	526.8	647.0	690.4
75°	183.9	325.4	498.9	621.5	664.9
77.5°	145.3	292.3	472.1	598.4	641.8
80°	109.8	260.3	445.2	574.3	618.7
82.5°	76.4	233.4	421.1	551.3	594.6
85°	47.2	209.3	398.0	526.8	571.6
87.5°	21.7	187.7	375.0	504.1	549.9
90°	2.4	171.1	356.0	484.8	529.6
92.5°	1.4	166.0	348.5	475.8	519.2
95°	0.0	160.8	344.7	470.7	514.1
97.5°	0.0	155.6	335.7	463.1	507.9
100°	0.0	153.2	329.2	451.7	495.1
102.5°	0.0	149.4	321.6	441.4	484.8
105°	0.0	148.1	314.0	432.5	474.8
107.5°	0.0	145.3	306.1	421.1	463.1
110°	0.0	142.9	299.9	410.8	451.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	140.5	293.4	400.8	440.0
115°	0.0	137.7	285.8	389.1	427.3
117.5°	0.0	133.9	278.2	377.7	415.9
120°	0.0	128.8	270.6	367.4	403.2
122.5°	0.0	123.6	262.7	354.6	389.1
125°	0.0	118.8	253.8	343.3	376.3
127.5°	0.0	110.9	243.8	330.5	361.2
130°	0.0	103.3	231.0	317.8	347.1
132.5°	1.4	95.7	218.3	303.7	333.0
135°	0.0	88.1	204.2	289.6	316.4
137.5°	0.0	81.6	188.7	274.4	299.9
140°	0.0	74.0	173.5	256.5	283.4
142.5°	0.0	65.1	158.4	237.2	265.5
145°	0.0	57.5	142.9	216.9	247.6
147.5°	1.4	51.0	128.8	195.2	228.3
150°	1.4	45.8	115.0	173.5	206.6
152.5°	1.4	41.0	100.9	153.2	184.9
155°	1.4	35.8	88.1	132.6	164.6
157.5°	1.4	30.6	74.0	112.2	142.9
160°	1.4	26.9	61.3	94.3	122.6
162.5°	1.4	23.1	49.9	74.0	100.9
165°	1.4	19.3	39.6	54.7	77.8
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)