

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: P284672

Luminaire Tested: **4SNLED-LD5-69HL-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: P284672
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-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: 5764.0 lumens
Efficiency: N/A
Efficacy: 93.0 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

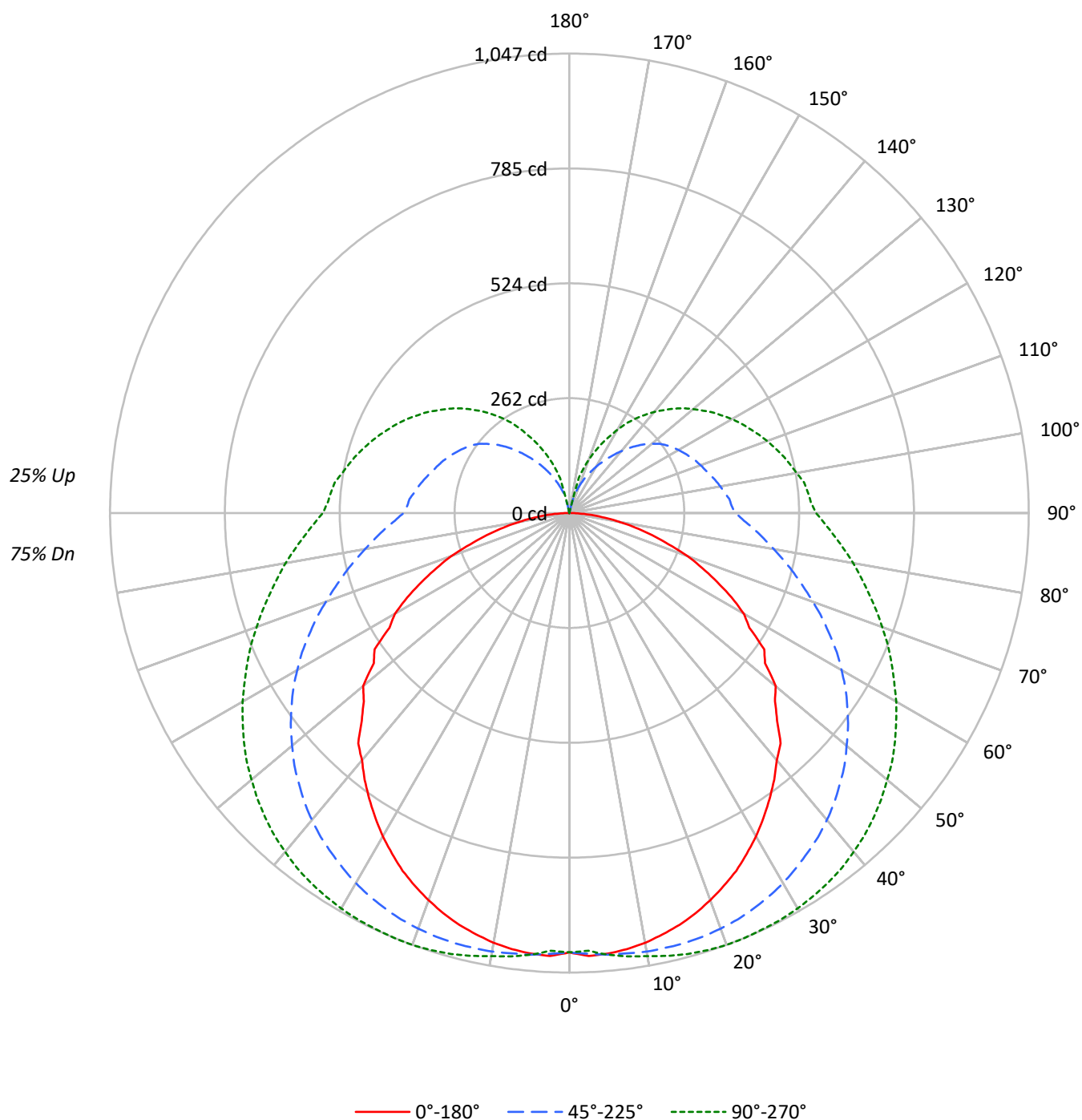
Input Watts (W): 62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P284672

CATALOG NUMBER: 4SNLED-LD5-69HL-SLW-UNV-L935-CD1-U

Luminous Intensity Polar Plot



TEST NUMBER: P284672

CATALOG NUMBER: 4SNLED-LD5-69HL-SLW-UNV-L935-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0			
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°	8090	8090	8090
5°	8152	7994	7934
10°	8113	7924	7890
15°	8057	7881	7907
20°	7981	7845	7923
25°	7905	7817	7935
30°	7795	7792	7977
35°	7675	7764	8031
40°	7560	7759	8084
45°	7416	7741	8148
50°	7438	7724	8213
55°	7306	7724	8311
60°	7039	7729	8423
65°	6648	7738	8580
70°	6219	7796	8821
75°	5458	7976	9179
80°	4609	8360	9769
85°	3423	9139	10633



TEST NUMBER: P284672

CATALOG NUMBER: 4SNLED-LD5-69HL-SLW-UNV-L935-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	96.2	1.7
10°-20°	285.1	4.9
20°-30°	453.2	7.9
30°-40°	581.6	10.1
40°-50°	656.8	11.4
50°-60°	670.2	11.6
60°-70°	620.9	10.8
70°-80°	525.7	9.1
80°-90°	419.6	7.3
90°-100°	356.3	6.2
100°-110°	317.4	5.5
110°-120°	270.4	4.7
120°-130°	214.7	3.7
130°-140°	152.3	2.6
140°-150°	91.0	1.6
150°-160°	42.4	0.7
160°-170°	10.1	0.2
170°-180°	0.0	0.0
0°-30°	834.5	14.5
0°-40°	1416.2	24.6
0°-60°	2743.2	47.6
0°-90°	4309.3	74.8
90°-120°	944.1	16.4
90°-150°	1402.2	24.3
90°-180°	1455.0	25.2
0°-180°	5764.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1001	1001	1001	1001	1001	
5°	1008	1000	1010	1010	1010	96
15°	971	979	1015	1033	1040	274
25°	900	929	994	1029	1046	414
35°	795	853	946	1004	1028	498
45°	669	760	872	948	981	520
55°	542	633	773	868	906	476
65°	371	494	654	766	810	368
75°	195	345	530	660	706	208
85°	50	222	422	559	607	55
90°	3	182	378	515	562	4
95°	0	171	366	500	546	0
105°	0	157	333	459	504	0
115°	0	146	303	413	454	0
125°	0	126	269	364	400	0
135°	0	94	217	307	336	0
145°	0	61	152	230	263	1
155°	2	38	94	141	175	1
165°	2	20	42	58	83	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P284672

CATALOG NUMBER: 4SNLED-LD5-69HL-SLW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1001.1	1001.1	1001.1	1001.1	1001.1
2.5°	1010.2	999.6	1005.1	1003.7	998.2
5°	1007.7	999.6	1010.2	1010.2	1010.2
7.5°	1002.2	996.7	1011.7	1017.2	1018.6
10°	994.2	994.2	1014.6	1022.7	1025.2
12.5°	983.2	987.2	1014.6	1026.7	1033.3
15°	971.1	979.2	1014.6	1033.3	1040.2
17.5°	956.1	969.7	1011.7	1034.7	1044.2
20°	938.6	959.1	1007.7	1034.7	1047.2
22.5°	919.6	945.5	1002.2	1032.2	1047.2
25°	899.5	929.1	994.2	1029.2	1045.7
27.5°	875.0	913.0	984.7	1025.2	1044.2
30°	850.5	894.0	973.7	1019.7	1040.2
32.5°	823.5	873.5	960.2	1011.7	1034.7
35°	795.0	853.4	945.5	1003.7	1028.1
37.5°	766.4	828.9	930.6	992.7	1019.7
40°	735.4	804.5	913.0	979.2	1007.7
42.5°	712.4	778.9	894.0	965.6	995.6
45°	669.2	759.9	872.1	948.1	980.6
47.5°	635.2	723.3	850.5	930.6	964.2
50°	613.7	693.3	824.9	910.1	945.5
52.5°	562.1	673.2	800.4	890.0	927.6
55°	541.7	632.7	773.4	868.1	906.1
57.5°	486.1	604.2	746.3	843.9	883.0
60°	459.1	564.7	716.4	819.4	860.0
62.5°	417.0	531.1	686.8	792.4	834.4
65°	371.0	494.5	654.2	766.4	809.9
67.5°	327.9	458.0	623.2	739.4	785.5
70°	285.8	420.0	590.6	712.4	758.4
72.5°	236.8	381.9	559.2	686.8	732.8
75°	195.2	345.4	529.6	659.7	705.8
77.5°	154.2	310.3	501.1	635.2	681.3
80°	116.6	276.3	472.6	609.7	656.8
82.5°	81.1	247.8	447.0	585.2	631.2
85°	50.1	222.2	422.5	559.2	606.7
87.5°	23.0	199.2	398.0	535.1	583.7
90°	2.6	181.7	377.9	514.6	562.1
92.5°	1.5	176.2	369.9	505.1	551.2
95°	0.0	170.7	365.9	499.6	545.7
97.5°	0.0	165.2	356.4	491.6	539.1
100°	0.0	162.6	349.4	479.5	525.6
102.5°	0.0	158.6	341.4	468.6	514.6
105°	0.0	157.2	333.3	459.1	504.0
107.5°	0.0	154.2	324.9	447.0	491.6
110°	0.0	151.7	318.3	436.0	479.5



TEST NUMBER: P284672

CATALOG NUMBER: 4SNLED-LD5-69HL-SLW-UNV-L935-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	149.1	311.4	425.4	467.1
115°	0.0	146.2	303.4	413.0	453.6
117.5°	0.0	142.2	295.3	401.0	441.5
120°	0.0	136.7	287.3	390.0	428.0
122.5°	0.0	131.2	278.9	376.5	413.0
125°	0.0	126.1	269.4	364.4	399.5
127.5°	0.0	117.7	258.8	350.9	383.4
130°	0.0	109.6	245.2	337.4	368.4
132.5°	1.5	101.6	231.7	322.4	353.4
135°	0.0	93.6	216.7	307.4	335.9
137.5°	0.0	86.6	200.3	291.3	318.3
140°	0.0	78.6	184.2	272.3	300.8
142.5°	0.0	69.1	168.1	251.8	281.8
145°	0.0	61.0	151.7	230.3	262.8
147.5°	1.5	54.1	136.7	207.2	242.3
150°	1.5	48.6	122.1	184.2	219.3
152.5°	1.5	43.5	107.1	162.6	196.3
155°	1.5	38.0	93.6	140.7	174.7
157.5°	1.5	32.5	78.6	119.2	151.7
160°	1.5	28.5	65.1	100.1	130.1
162.5°	1.5	24.5	53.0	78.6	107.1
165°	1.5	20.5	42.0	58.1	82.6
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)