

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: P284516

Luminaire Tested: **4SNLED-LD5-69HL-SLW-UNV-L835-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: P284516
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-L835-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: 6862.0 lumens
Efficiency: N/A
Efficacy: 110.7 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

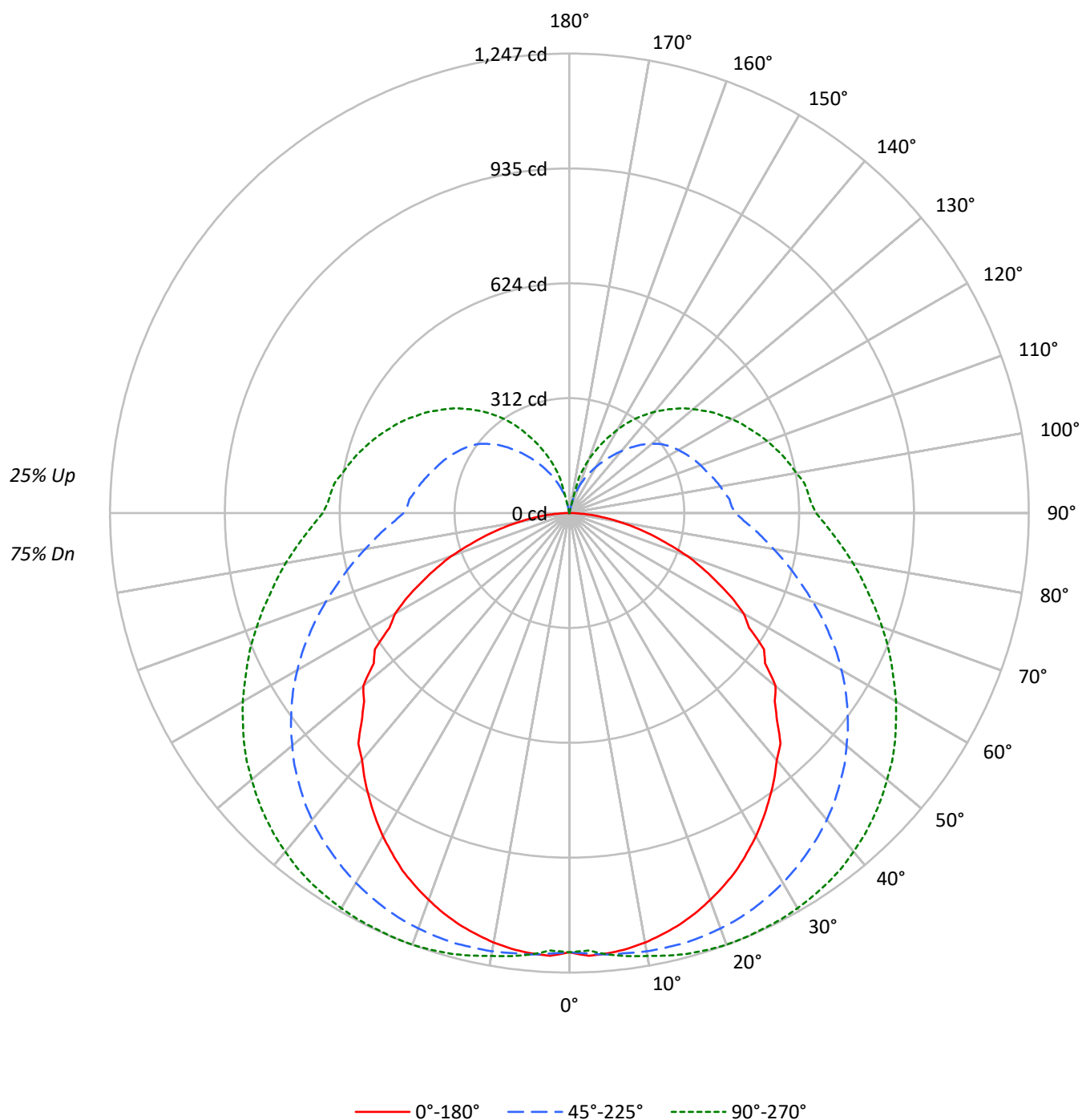
Input Watts (W): 62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9631	9631	9631
5°	9704	9517	9446
10°	9658	9433	9393
15°	9592	9383	9414
20°	9501	9339	9432
25°	9411	9305	9447
30°	9280	9277	9497
35°	9136	9244	9562
40°	9000	9237	9623
45°	8829	9215	9700
50°	8855	9196	9778
55°	8698	9196	9894
60°	8379	9201	10027
65°	7914	9213	10214
70°	7405	9282	10502
75°	6498	9496	10926
80°	5487	9953	11629
85°	4072	10880	12659



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.5	1.7
10°-20°	339.5	4.9
20°-30°	539.5	7.9
30°-40°	692.4	10.1
40°-50°	781.9	11.4
50°-60°	797.9	11.6
60°-70°	739.2	10.8
70°-80°	625.8	9.1
80°-90°	499.5	7.3
90°-100°	424.2	6.2
100°-110°	377.9	5.5
110°-120°	321.9	4.7
120°-130°	255.6	3.7
130°-140°	181.4	2.6
140°-150°	108.3	1.6
150°-160°	50.5	0.7
160°-170°	12.0	0.2
170°-180°	0.0	0.0
0°-30°	993.5	14.5
0°-40°	1685.9	24.6
0°-60°	3265.7	47.6
0°-90°	5130.2	74.8
90°-120°	1124.0	16.4
90°-150°	1669.3	24.3
90°-180°	1732.0	25.2
0°-180°	6862.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1192	1192	1192	1192	1192	
5°	1200	1190	1203	1203	1203	114
15°	1156	1166	1208	1230	1238	326
25°	1071	1106	1184	1225	1245	493
35°	946	1016	1126	1195	1224	592
45°	797	905	1038	1129	1167	619
55°	645	753	921	1033	1079	566
65°	442	589	779	912	964	438
75°	232	411	630	785	840	247
85°	60	265	503	666	722	65
90°	3	216	450	613	669	5
95°	0	203	436	595	650	0
105°	0	187	397	546	600	0
115°	0	174	361	492	540	0
125°	0	150	321	434	476	0
135°	0	111	258	366	400	0
145°	0	73	181	274	313	1
155°	2	45	111	168	208	1
165°	2	24	50	69	98	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°	1191.8	1191.8	1191.8	1191.8	1191.8
2.5°	1202.7	1190.1	1196.6	1194.8	1188.3
5°	1199.6	1190.1	1202.7	1202.7	1202.7
7.5°	1193.1	1186.6	1204.4	1210.9	1212.7
10°	1183.5	1183.5	1207.9	1217.5	1220.5
12.5°	1170.5	1175.3	1207.9	1222.3	1230.1
15°	1156.1	1165.7	1207.9	1230.1	1238.4
17.5°	1138.3	1154.4	1204.4	1231.8	1243.1
20°	1117.4	1141.8	1199.6	1231.8	1246.6
22.5°	1094.8	1125.7	1193.1	1228.8	1246.6
25°	1070.8	1106.1	1183.5	1225.3	1244.9
27.5°	1041.7	1086.9	1172.2	1220.5	1243.1
30°	1012.5	1064.3	1159.2	1214.0	1238.4
32.5°	980.3	1039.9	1143.1	1204.4	1231.8
35°	946.4	1016.0	1125.7	1194.8	1224.0
37.5°	912.5	986.9	1107.8	1181.8	1214.0
40°	875.5	957.7	1086.9	1165.7	1199.6
42.5°	848.1	927.2	1064.3	1149.6	1185.3
45°	796.7	904.6	1038.2	1128.7	1167.4
47.5°	756.2	861.1	1012.5	1107.8	1147.9
50°	730.6	825.4	982.1	1083.5	1125.7
52.5°	669.2	801.5	952.9	1059.5	1104.3
55°	644.9	753.2	920.7	1033.4	1078.7
57.5°	578.7	719.3	888.5	1004.7	1051.3
60°	546.5	672.3	852.8	975.5	1023.8
62.5°	496.5	632.2	817.6	943.3	993.4
65°	441.6	588.7	778.9	912.5	964.2
67.5°	390.3	545.2	741.9	880.3	935.1
70°	340.3	500.0	703.2	848.1	902.9
72.5°	282.0	454.7	665.7	817.6	872.4
75°	232.4	411.2	630.5	785.4	840.2
77.5°	183.6	369.4	596.6	756.2	811.1
80°	138.8	329.0	562.6	725.8	781.9
82.5°	96.6	295.0	532.2	696.6	751.5
85°	59.6	264.6	503.0	665.7	722.3
87.5°	27.4	237.1	473.8	637.0	694.9
90°	3.0	216.3	449.9	612.7	669.2
92.5°	1.7	209.7	440.3	601.3	656.2
95°	0.0	203.2	435.6	594.8	649.6
97.5°	0.0	196.7	424.2	585.2	641.8
100°	0.0	193.6	416.0	570.9	625.7
102.5°	0.0	188.8	406.4	557.8	612.7
105°	0.0	187.1	396.8	546.5	600.0
107.5°	0.0	183.6	386.8	532.2	585.2
110°	0.0	180.6	379.0	519.1	570.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	177.5	370.7	506.5	556.1
115°	0.0	174.0	361.2	491.7	540.0
117.5°	0.0	169.3	351.6	477.3	525.6
120°	0.0	162.7	342.0	464.3	509.5
122.5°	0.0	156.2	332.0	448.2	491.7
125°	0.0	150.1	320.7	433.8	475.6
127.5°	0.0	140.1	308.1	417.7	456.4
130°	0.0	130.5	292.0	401.6	438.6
132.5°	1.7	121.0	275.9	383.8	420.8
135°	0.0	111.4	258.0	365.9	399.9
137.5°	0.0	103.1	238.4	346.8	379.0
140°	0.0	93.6	219.3	324.2	358.1
142.5°	0.0	82.2	200.2	299.8	335.5
145°	0.0	72.7	180.6	274.1	312.9
147.5°	1.7	64.4	162.7	246.7	288.5
150°	1.7	57.9	145.3	219.3	261.1
152.5°	1.7	51.8	127.5	193.6	233.7
155°	1.7	45.3	111.4	167.5	208.0
157.5°	1.7	38.7	93.6	141.8	180.6
160°	1.7	33.9	77.5	119.2	154.9
162.5°	1.7	29.2	63.1	93.6	127.5
165°	1.7	24.4	50.0	69.2	98.3
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)