

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: P284555

Luminaire Tested: **4SNLED-LD5-69HL-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: P284555
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-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: 6978.0 lumens
Efficiency: N/A
Efficacy: 112.5 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

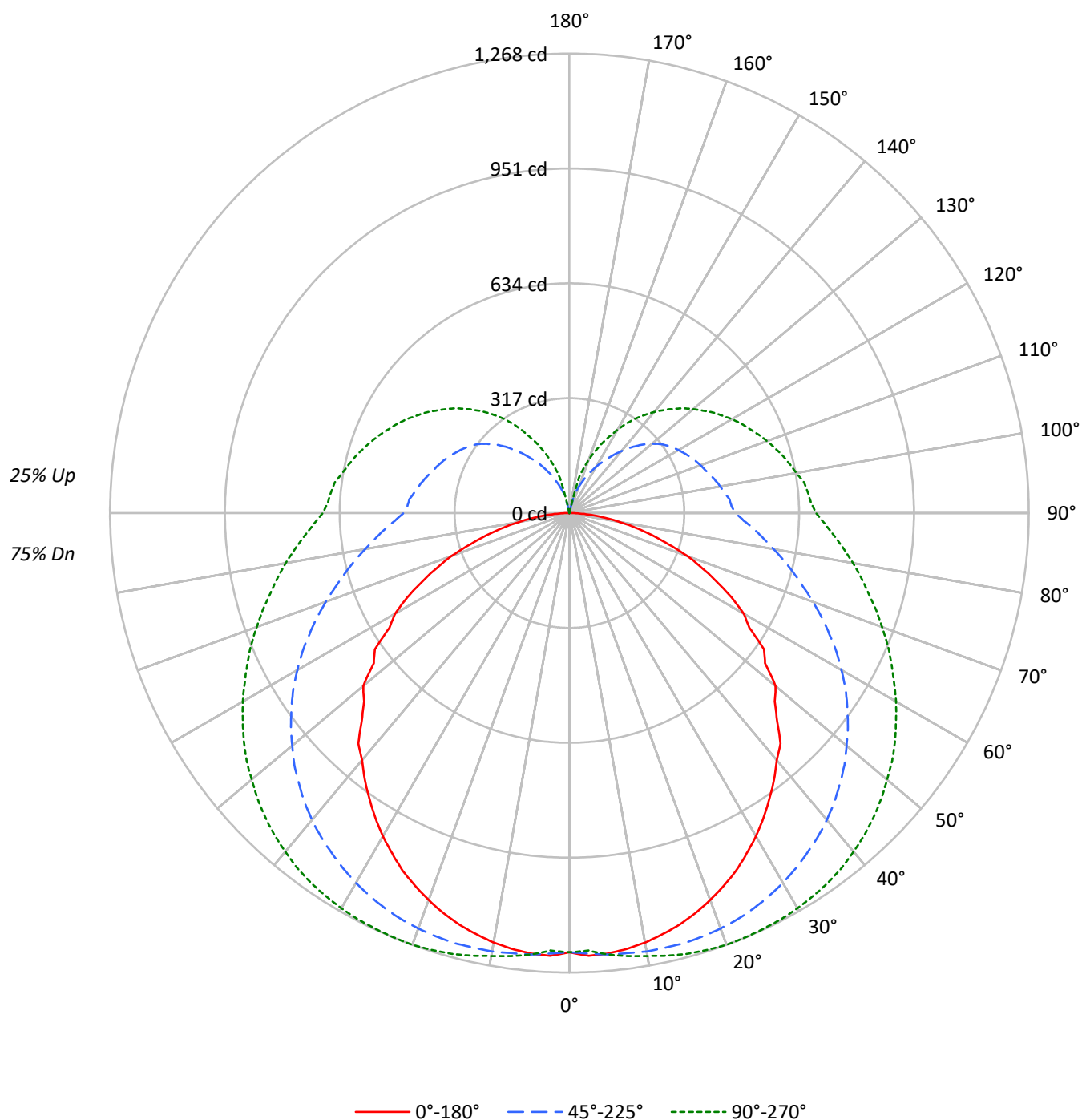
Input Watts (W): 62
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9793	9793	9793
5°	9869	9677	9605
10°	9821	9593	9553
15°	9754	9541	9573
20°	9662	9497	9591
25°	9570	9462	9606
30°	9437	9434	9658
35°	9291	9400	9723
40°	9152	9394	9786
45°	8979	9371	9865
50°	9004	9351	9943
55°	8845	9351	10061
60°	8522	9357	10198
65°	8048	9368	10387
70°	7529	9438	10679
75°	6607	9657	11111
80°	5582	10121	11826
85°	4140	11064	12872



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.5	1.7
10°-20°	345.2	4.9
20°-30°	548.6	7.9
30°-40°	704.1	10.1
40°-50°	795.1	11.4
50°-60°	811.3	11.6
60°-70°	751.7	10.8
70°-80°	636.4	9.1
80°-90°	508.0	7.3
90°-100°	431.4	6.2
100°-110°	384.3	5.5
110°-120°	327.3	4.7
120°-130°	260.0	3.7
130°-140°	184.4	2.6
140°-150°	110.1	1.6
150°-160°	51.3	0.7
160°-170°	12.2	0.2
170°-180°	0.0	0.0
0°-30°	1010.3	14.5
0°-40°	1714.4	24.6
0°-60°	3320.9	47.6
0°-90°	5217.0	74.8
90°-120°	1143.0	16.4
90°-150°	1697.5	24.3
90°-180°	1761.0	25.2
0°-180°	6978.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1212	1212	1212	1212	1212	
5°	1220	1210	1223	1223	1223	116
15°	1176	1185	1228	1251	1259	332
25°	1089	1125	1204	1246	1266	501
35°	962	1033	1145	1215	1245	602
45°	810	920	1056	1148	1187	629
55°	656	766	936	1051	1097	576
65°	449	599	792	928	980	446
75°	236	418	641	799	854	251
85°	61	269	512	677	734	66
90°	3	220	458	623	680	5
95°	0	207	443	605	661	0
105°	0	190	404	556	610	0
115°	0	177	367	500	549	0
125°	0	153	326	441	484	0
135°	0	113	262	372	407	0
145°	0	74	184	279	318	1
155°	2	46	113	170	212	1
165°	2	25	51	70	100	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°	1211.9	1211.9	1211.9	1211.9	1211.9
2.5°	1223.0	1210.2	1216.8	1215.0	1208.4
5°	1219.9	1210.2	1223.0	1223.0	1223.0
7.5°	1213.3	1206.6	1224.8	1231.4	1233.2
10°	1203.5	1203.5	1228.3	1238.1	1241.2
12.5°	1190.3	1195.1	1228.3	1242.9	1250.9
15°	1175.7	1185.4	1228.3	1250.9	1259.3
17.5°	1157.5	1173.9	1224.8	1252.7	1264.2
20°	1136.3	1161.1	1219.9	1252.7	1267.7
22.5°	1113.3	1144.7	1213.3	1249.6	1267.7
25°	1088.9	1124.8	1203.5	1246.0	1265.9
27.5°	1059.3	1105.3	1192.0	1241.2	1264.2
30°	1029.6	1082.3	1178.8	1234.5	1259.3
32.5°	996.9	1057.5	1162.4	1224.8	1252.7
35°	962.4	1033.2	1144.7	1215.0	1244.7
37.5°	927.9	1003.5	1126.5	1201.8	1234.5
40°	890.3	973.9	1105.3	1185.4	1219.9
42.5°	862.4	942.9	1082.3	1169.0	1205.3
45°	810.2	919.9	1055.8	1147.8	1187.2
47.5°	769.0	875.7	1029.6	1126.5	1167.3
50°	742.9	839.4	998.7	1101.8	1144.7
52.5°	680.5	815.0	969.0	1077.4	1123.0
55°	655.8	765.9	936.3	1050.9	1096.9
57.5°	588.5	731.4	903.5	1021.7	1069.0
60°	555.8	683.6	867.3	992.0	1041.2
62.5°	504.9	642.9	831.4	959.3	1010.2
65°	449.1	598.7	792.0	927.9	980.5
67.5°	396.9	554.4	754.4	895.1	950.9
70°	346.0	508.4	715.0	862.4	918.1
72.5°	286.7	462.4	677.0	831.4	887.2
75°	236.3	418.1	641.2	798.7	854.4
77.5°	186.7	375.7	606.6	769.0	824.8
80°	141.2	334.5	572.1	738.1	795.1
82.5°	98.2	300.0	541.2	708.4	764.2
85°	60.6	269.0	511.5	677.0	734.5
87.5°	27.9	241.2	481.9	647.8	706.6
90°	3.1	219.9	457.5	623.0	680.5
92.5°	1.8	213.3	447.8	611.5	667.3
95°	0.0	206.6	442.9	604.9	660.6
97.5°	0.0	200.0	431.4	595.1	652.7
100°	0.0	196.9	423.0	580.5	636.3
102.5°	0.0	192.0	413.3	567.3	623.0
105°	0.0	190.3	403.5	555.8	610.2
107.5°	0.0	186.7	393.4	541.2	595.1
110°	0.0	183.6	385.4	527.9	580.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	180.5	377.0	515.0	565.5
115°	0.0	177.0	367.3	500.0	549.1
117.5°	0.0	172.1	357.5	485.4	534.5
120°	0.0	165.5	347.8	472.1	518.1
122.5°	0.0	158.8	337.6	455.8	500.0
125°	0.0	152.7	326.1	441.2	483.6
127.5°	0.0	142.5	313.3	424.8	464.2
130°	0.0	132.7	296.9	408.4	446.0
132.5°	1.8	123.0	280.5	390.3	427.9
135°	0.0	113.3	262.4	372.1	406.6
137.5°	0.0	104.9	242.5	352.7	385.4
140°	0.0	95.1	223.0	329.6	364.2
142.5°	0.0	83.6	203.5	304.9	341.2
145°	0.0	73.9	183.6	278.8	318.1
147.5°	1.8	65.5	165.5	250.9	293.4
150°	1.8	58.8	147.8	223.0	265.5
152.5°	1.8	52.7	129.6	196.9	237.6
155°	1.8	46.0	113.3	170.4	211.5
157.5°	1.8	39.4	95.1	144.2	183.6
160°	1.8	34.5	78.8	121.2	157.5
162.5°	1.8	29.6	64.2	95.1	129.6
165°	1.8	24.8	50.9	70.4	100.0
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)