

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: P284472

Luminaire Tested: **4SNLED-LD5-70SL-SLW-UNV-L830-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: P284472
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-LD5-70SL-SLW-UNV-L830-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: 6914.0 lumens
Efficiency: N/A
Efficacy: 81.3 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

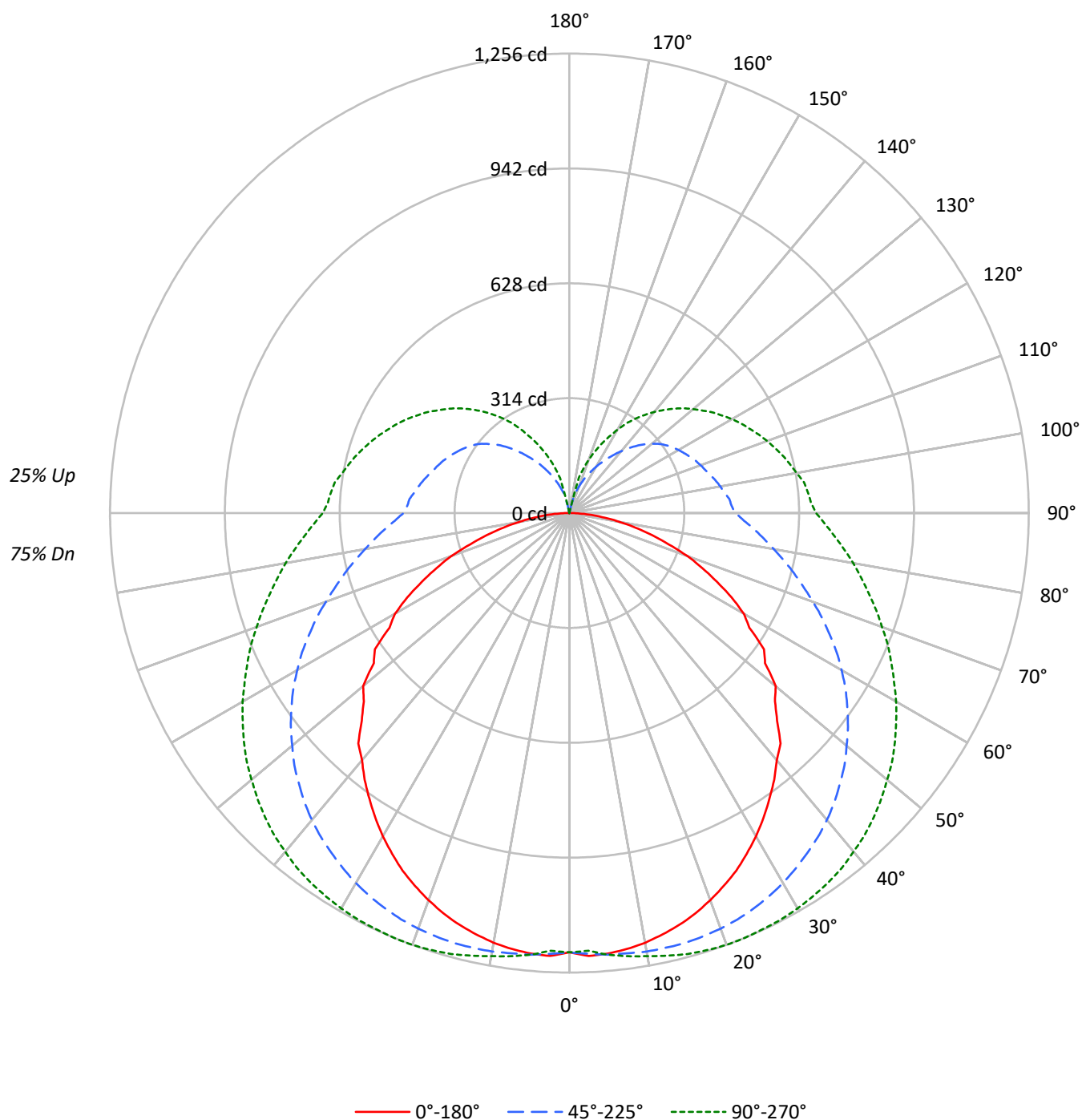
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	9704	9704	9704
5°	9778	9589	9517
10°	9732	9505	9465
15°	9665	9454	9484
20°	9573	9410	9504
25°	9483	9376	9518
30°	9351	9346	9569
35°	9206	9314	9634
40°	9068	9308	9696
45°	8895	9285	9774
50°	8922	9265	9852
55°	8762	9265	9968
60°	8443	9271	10104
65°	7975	9283	10292
70°	7459	9352	10581
75°	6546	9568	11010
80°	5530	10029	11717
85°	4106	10962	12755



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.4	1.7
10°-20°	342.0	4.9
20°-30°	543.6	7.9
30°-40°	697.7	10.1
40°-50°	787.9	11.4
50°-60°	803.9	11.6
60°-70°	744.8	10.8
70°-80°	630.5	9.1
80°-90°	503.3	7.3
90°-100°	427.4	6.2
100°-110°	380.8	5.5
110°-120°	324.3	4.7
120°-130°	257.6	3.7
130°-140°	182.8	2.6
140°-150°	109.1	1.6
150°-160°	50.9	0.7
160°-170°	12.1	0.2
170°-180°	0.0	0.0
0°-30°	1001.0	14.5
0°-40°	1698.7	24.6
0°-60°	3290.5	47.6
0°-90°	5169.1	74.8
90°-120°	1132.5	16.4
90°-150°	1682.0	24.3
90°-180°	1745.0	25.2
0°-180°	6914.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1201	1201	1201	1201	1201	
5°	1209	1199	1212	1212	1212	115
15°	1165	1174	1217	1239	1248	329
25°	1079	1114	1192	1235	1254	497
35°	954	1024	1134	1204	1233	597
45°	803	912	1046	1137	1176	623
55°	650	759	928	1041	1087	570
65°	445	593	785	919	972	442
75°	234	414	635	791	847	249
85°	60	267	507	671	728	66
90°	3	218	453	617	674	5
95°	0	205	439	599	655	0
105°	0	188	400	551	605	0
115°	0	175	364	495	544	0
125°	0	151	323	437	479	0
135°	0	112	260	369	403	0
145°	0	73	182	276	315	1
155°	2	46	112	169	210	1
165°	2	25	50	70	99	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°	1200.8	1200.8	1200.8	1200.8	1200.8
2.5°	1211.8	1199.1	1205.7	1203.9	1197.3
5°	1208.7	1199.1	1211.8	1211.8	1211.8
7.5°	1202.1	1195.6	1213.5	1220.1	1221.9
10°	1192.5	1192.5	1217.1	1226.7	1229.8
12.5°	1179.3	1184.2	1217.1	1231.5	1239.4
15°	1164.9	1174.5	1217.1	1239.4	1247.7
17.5°	1146.9	1163.1	1213.5	1241.2	1252.6
20°	1125.9	1150.4	1208.7	1241.2	1256.1
22.5°	1103.1	1134.2	1202.1	1238.1	1256.1
25°	1079.0	1114.5	1192.5	1234.6	1254.3
27.5°	1049.6	1095.2	1181.1	1229.8	1252.6
30°	1020.2	1072.4	1167.9	1223.2	1247.7
32.5°	987.8	1047.8	1151.7	1213.5	1241.2
35°	953.6	1023.7	1134.2	1203.9	1233.3
37.5°	919.4	994.3	1116.2	1190.7	1223.2
40°	882.1	965.0	1095.2	1174.5	1208.7
42.5°	854.5	934.3	1072.4	1158.3	1194.3
45°	802.7	911.5	1046.1	1137.3	1176.3
47.5°	762.0	867.6	1020.2	1116.2	1156.6
50°	736.1	831.7	989.5	1091.7	1134.2
52.5°	674.3	807.6	960.1	1067.6	1112.7
55°	649.7	758.9	927.7	1041.2	1086.8
57.5°	583.1	724.7	895.3	1012.3	1059.2
60°	550.7	677.4	859.3	982.9	1031.6
62.5°	500.2	637.0	823.8	950.5	1000.9
65°	445.0	593.2	784.8	919.4	971.5
67.5°	393.3	549.3	747.5	886.9	942.2
70°	342.8	503.7	708.5	854.5	909.7
72.5°	284.1	458.1	670.8	823.8	879.0
75°	234.1	414.3	635.3	791.3	846.6
77.5°	185.0	372.2	601.1	762.0	817.2
80°	139.9	331.4	566.9	731.3	787.8
82.5°	97.3	297.2	536.2	701.9	757.2
85°	60.1	266.6	506.8	670.8	727.8
87.5°	27.6	238.9	477.4	641.8	700.2
90°	3.1	217.9	453.3	617.3	674.3
92.5°	1.8	211.3	443.7	605.9	661.1
95°	0.0	204.7	438.9	599.3	654.6
97.5°	0.0	198.2	427.5	589.7	646.7
100°	0.0	195.1	419.1	575.2	630.4
102.5°	0.0	190.3	409.5	562.1	617.3
105°	0.0	188.5	399.8	550.7	604.6
107.5°	0.0	185.0	389.8	536.2	589.7
110°	0.0	181.9	381.9	523.0	575.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	178.9	373.5	510.3	560.3
115°	0.0	175.4	363.9	495.4	544.1
117.5°	0.0	170.5	354.2	480.9	529.6
120°	0.0	164.0	344.6	467.8	513.4
122.5°	0.0	157.4	334.5	451.6	495.4
125°	0.0	151.3	323.1	437.1	479.2
127.5°	0.0	141.2	310.4	420.9	459.9
130°	0.0	131.5	294.2	404.7	441.9
132.5°	1.8	121.9	278.0	386.7	424.0
135°	0.0	112.2	260.0	368.7	402.9
137.5°	0.0	103.9	240.3	349.4	381.9
140°	0.0	94.3	221.0	326.6	360.8
142.5°	0.0	82.9	201.7	302.1	338.0
145°	0.0	73.2	181.9	276.2	315.2
147.5°	1.8	64.9	164.0	248.6	290.7
150°	1.8	58.3	146.4	221.0	263.1
152.5°	1.8	52.2	128.5	195.1	235.4
155°	1.8	45.6	112.2	168.8	209.6
157.5°	1.8	39.0	94.3	142.9	181.9
160°	1.8	34.2	78.0	120.1	156.1
162.5°	1.8	29.4	63.6	94.3	128.5
165°	1.8	24.6	50.4	69.7	99.1
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)