

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: P284673

Luminaire Tested: **4SNLED-LD5-81HL-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: P284673
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-LD5-81HL-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: 6838.0 lumens
Efficiency: N/A
Efficacy: 86.6 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

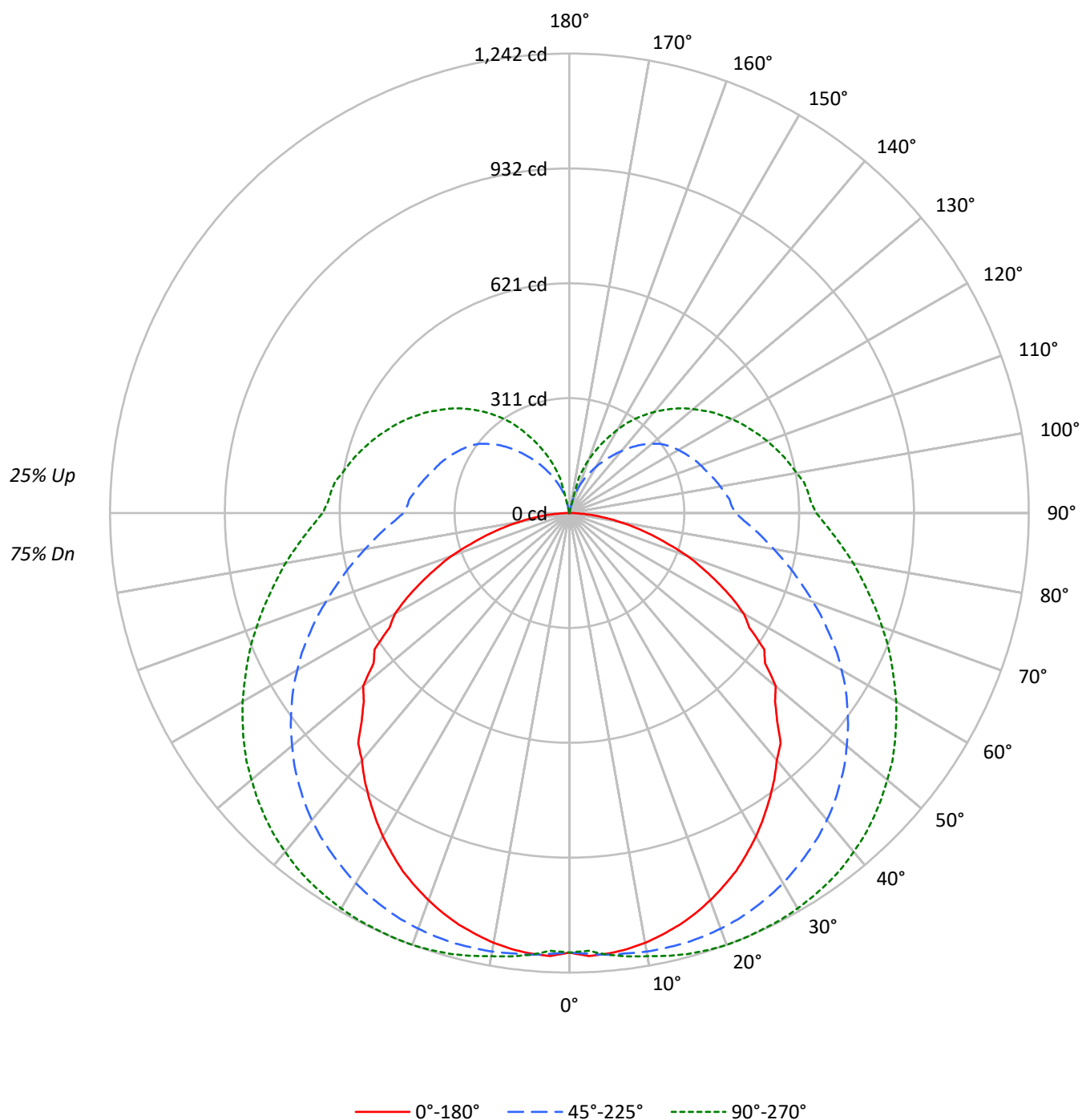
Input Watts (W): 79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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					0
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°	9597	9597	9597
5°	9671	9484	9413
10°	9625	9401	9360
15°	9559	9350	9380
20°	9468	9306	9399
25°	9378	9273	9413
30°	9248	9244	9464
35°	9105	9211	9528
40°	8968	9205	9590
45°	8798	9183	9666
50°	8824	9163	9743
55°	8667	9164	9859
60°	8350	9170	9993
65°	7887	9180	10179
70°	7379	9249	10465
75°	6473	9463	10889
80°	5467	9917	11589
85°	4058	10841	12615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.1	1.7
10°-20°	338.3	4.9
20°-30°	537.6	7.9
30°-40°	690.0	10.1
40°-50°	779.2	11.4
50°-60°	795.1	11.6
60°-70°	736.6	10.8
70°-80°	623.6	9.1
80°-90°	497.8	7.3
90°-100°	422.7	6.2
100°-110°	376.6	5.5
110°-120°	320.7	4.7
120°-130°	254.8	3.7
130°-140°	180.7	2.6
140°-150°	107.9	1.6
150°-160°	50.3	0.7
160°-170°	12.0	0.2
170°-180°	0.0	0.0
0°-30°	990.0	14.5
0°-40°	1680.0	24.6
0°-60°	3254.3	47.6
0°-90°	5112.3	74.8
90°-120°	1120.0	16.4
90°-150°	1663.5	24.3
90°-180°	1726.0	25.2
0°-180°	6838.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1188	1188	1188	1188	1188	
5°	1195	1186	1198	1198	1198	114
15°	1152	1162	1204	1226	1234	325
25°	1067	1102	1179	1221	1240	491
35°	943	1012	1122	1191	1220	590
45°	794	902	1035	1125	1163	616
55°	643	751	918	1030	1075	564
65°	440	587	776	909	961	437
75°	232	410	628	783	837	246
85°	59	264	501	663	720	65
90°	3	216	448	610	667	5
95°	0	202	434	593	647	0
105°	0	186	395	545	598	0
115°	0	173	360	490	538	0
125°	0	150	320	432	474	0
135°	0	111	257	365	398	0
145°	0	72	180	273	312	1
155°	2	45	111	167	207	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°	1187.6	1187.6	1187.6	1187.6	1187.6
2.5°	1198.5	1185.9	1192.4	1190.7	1184.2
5°	1195.4	1185.9	1198.5	1198.5	1198.5
7.5°	1188.9	1182.4	1200.2	1206.7	1208.4
10°	1179.4	1179.4	1203.7	1213.2	1216.2
12.5°	1166.4	1171.2	1203.7	1218.0	1225.8
15°	1152.1	1161.6	1203.7	1225.8	1234.0
17.5°	1134.3	1150.3	1200.2	1227.5	1238.8
20°	1113.5	1137.8	1195.4	1227.5	1242.3
22.5°	1090.9	1121.7	1188.9	1224.5	1242.3
25°	1067.1	1102.2	1179.4	1221.0	1240.5
27.5°	1038.0	1083.1	1168.1	1216.2	1238.8
30°	1009.0	1060.6	1155.1	1209.7	1234.0
32.5°	976.9	1036.3	1139.1	1200.2	1227.5
35°	943.1	1012.5	1121.7	1190.7	1219.7
37.5°	909.3	983.4	1103.9	1177.7	1209.7
40°	872.4	954.4	1083.1	1161.6	1195.4
42.5°	845.1	924.0	1060.6	1145.6	1181.1
45°	793.9	901.5	1034.6	1124.8	1163.3
47.5°	753.6	858.1	1009.0	1103.9	1143.8
50°	728.0	822.5	978.6	1079.7	1121.7
52.5°	666.9	798.7	949.6	1055.8	1100.5
55°	642.6	750.6	917.5	1029.8	1074.9
57.5°	576.7	716.7	885.4	1001.2	1047.6
60°	544.6	669.9	849.9	972.1	1020.3
62.5°	494.7	630.0	814.7	940.0	989.9
65°	440.1	586.7	776.1	909.3	960.9
67.5°	388.9	543.3	739.3	877.2	931.8
70°	339.1	498.2	700.7	845.1	899.7
72.5°	281.0	453.1	663.4	814.7	869.4
75°	231.5	409.8	628.3	782.6	837.3
77.5°	183.0	368.1	594.5	753.6	808.2
80°	138.3	327.8	560.6	723.2	779.2
82.5°	96.3	294.0	530.3	694.2	748.8
85°	59.4	263.6	501.2	663.4	719.8
87.5°	27.3	236.3	472.2	634.8	692.5
90°	3.0	215.5	448.3	610.5	666.9
92.5°	1.7	209.0	438.8	599.2	653.9
95°	0.0	202.5	434.0	592.7	647.4
97.5°	0.0	196.0	422.8	583.2	639.6
100°	0.0	193.0	414.5	568.9	623.5
102.5°	0.0	188.2	405.0	555.9	610.5
105°	0.0	186.4	395.4	544.6	597.9
107.5°	0.0	183.0	385.5	530.3	583.2
110°	0.0	179.9	377.7	517.3	568.9



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	176.9	369.4	504.7	554.1
115°	0.0	173.4	359.9	490.0	538.1
117.5°	0.0	168.7	350.3	475.7	523.8
120°	0.0	162.2	340.8	462.7	507.7
122.5°	0.0	155.7	330.8	446.6	490.0
125°	0.0	149.6	319.6	432.3	473.9
127.5°	0.0	139.6	307.0	416.3	454.8
130°	0.0	130.1	290.9	400.2	437.1
132.5°	1.7	120.5	274.9	382.4	419.3
135°	0.0	111.0	257.1	364.7	398.5
137.5°	0.0	102.8	237.6	345.6	377.7
140°	0.0	93.2	218.5	323.0	356.9
142.5°	0.0	82.0	199.5	298.8	334.3
145°	0.0	72.4	179.9	273.2	311.8
147.5°	1.7	64.2	162.2	245.9	287.5
150°	1.7	57.7	144.8	218.5	260.2
152.5°	1.7	51.6	127.0	193.0	232.8
155°	1.7	45.1	111.0	166.9	207.3
157.5°	1.7	38.6	93.2	141.4	179.9
160°	1.7	33.8	77.2	118.8	154.4
162.5°	1.7	29.1	62.9	93.2	127.0
165°	1.7	24.3	49.9	68.9	98.0
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)