

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: P284751

Luminaire Tested: **4SNLED-LD5-81HL-SLW-UNV-L950-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: P284751
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-L950-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: 7461.9 lumens
Efficiency: N/A
Efficacy: 94.5 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

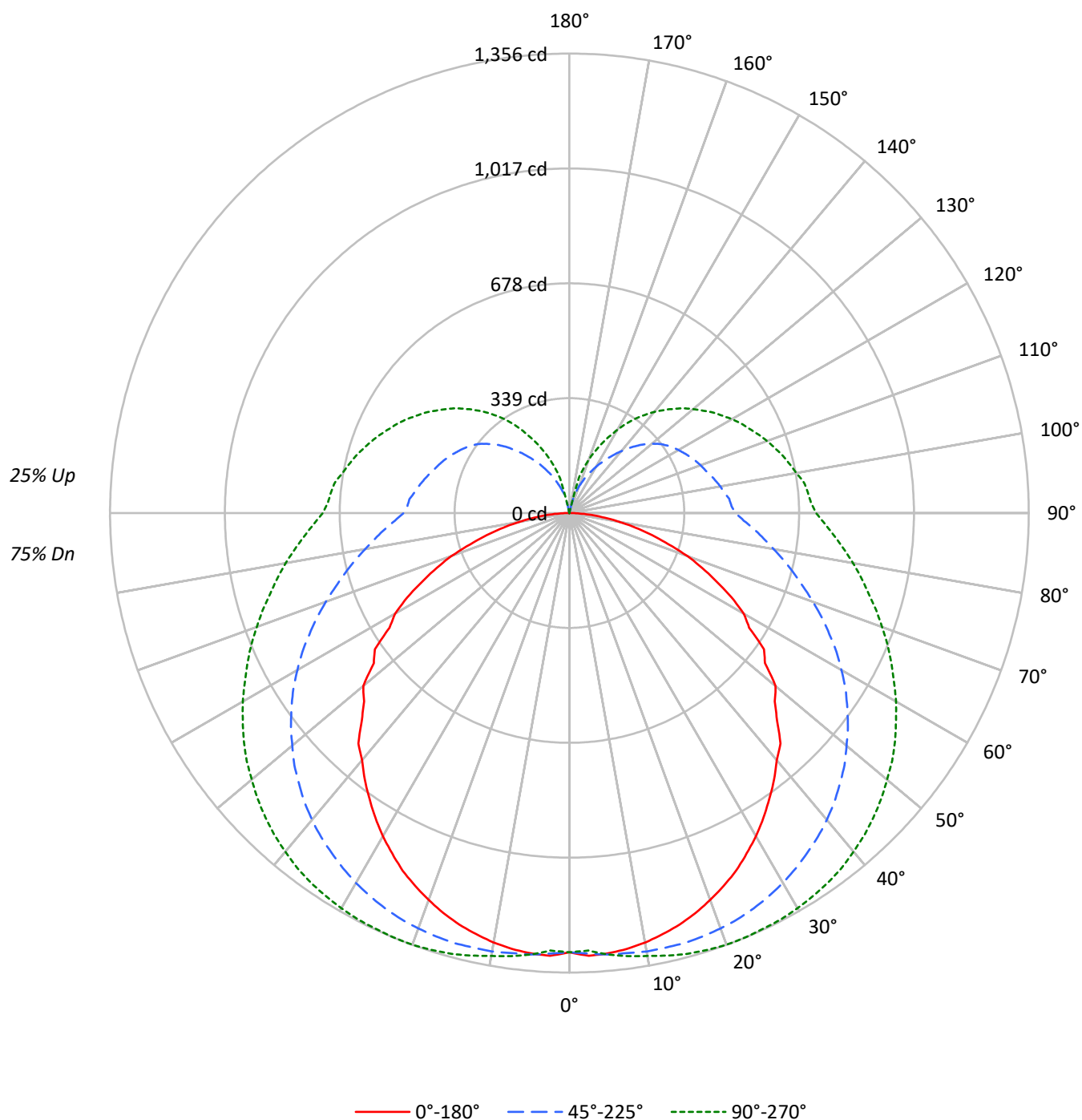
Input Watts (W): 79
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P284751

CATALOG NUMBER: 4SNLED-LD5-81HL-SLW-UNV-L950-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P284751

CATALOG NUMBER: 4SNLED-LD5-81HL-SLW-UNV-L950-CD1-U

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°	10473	10473	10473
5°	10553	10348	10271
10°	10503	10258	10214
15°	10431	10203	10236
20°	10332	10155	10256
25°	10234	10119	10272
30°	10092	10087	10327
35°	9935	10052	10398
40°	9786	10045	10465
45°	9601	10021	10549
50°	9628	9999	10633
55°	9457	10000	10759
60°	9112	10006	10905
65°	8607	10018	11107
70°	8051	10093	11420
75°	7066	10326	11882
80°	5965	10823	12647
85°	4427	11832	13766



TEST NUMBER: P284751

CATALOG NUMBER: 4SNLED-LD5-81HL-SLW-UNV-L950-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	124.5	1.7
10°-20°	369.1	4.9
20°-30°	586.7	7.9
30°-40°	753.0	10.1
40°-50°	850.3	11.4
50°-60°	867.6	11.6
60°-70°	803.8	10.8
70°-80°	680.5	9.1
80°-90°	543.2	7.3
90°-100°	461.3	6.2
100°-110°	411.0	5.5
110°-120°	350.0	4.7
120°-130°	278.0	3.7
130°-140°	197.2	2.6
140°-150°	117.8	1.6
150°-160°	54.9	0.7
160°-170°	13.0	0.2
170°-180°	0.0	0.0
0°-30°	1080.4	14.5
0°-40°	1833.3	24.6
0°-60°	3551.2	47.6
0°-90°	5578.8	74.8
90°-120°	1222.3	16.4
90°-150°	1815.2	24.3
90°-180°	1883.0	25.2
0°-180°	7461.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1296	1296	1296	1296	1296	
5°	1304	1294	1308	1308	1308	124
15°	1257	1268	1314	1338	1347	355
25°	1164	1203	1287	1332	1354	536
35°	1029	1105	1224	1299	1331	644
45°	866	984	1129	1227	1270	673
55°	701	819	1001	1124	1173	616
65°	480	640	847	992	1048	477
75°	253	447	686	854	914	269
85°	65	288	547	724	786	71
90°	3	235	489	666	728	5
95°	0	221	474	647	706	0
105°	0	204	432	594	652	0
115°	0	189	393	535	587	0
125°	0	163	349	472	517	0
135°	0	121	281	398	435	0
145°	0	79	196	298	340	1
155°	2	49	121	182	226	1
165°	2	26	54	75	107	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P284751

CATALOG NUMBER: 4SNLED-LD5-81HL-SLW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1296.0	1296.0	1296.0	1296.0	1296.0
2.5°	1307.8	1294.1	1301.2	1299.3	1292.2
5°	1304.5	1294.1	1307.8	1307.8	1307.8
7.5°	1297.4	1290.3	1309.7	1316.8	1318.7
10°	1287.0	1287.0	1313.5	1323.9	1327.2
12.5°	1272.8	1278.0	1313.5	1329.1	1337.6
15°	1257.2	1267.6	1313.5	1337.6	1346.6
17.5°	1237.8	1255.3	1309.7	1339.5	1351.8
20°	1215.1	1241.6	1304.5	1339.5	1355.6
22.5°	1190.5	1224.1	1297.4	1336.2	1355.6
25°	1164.5	1202.8	1287.0	1332.4	1353.7
27.5°	1132.8	1182.0	1274.7	1327.2	1351.8
30°	1101.1	1157.4	1260.5	1320.1	1346.6
32.5°	1066.0	1130.9	1243.0	1309.7	1339.5
35°	1029.1	1104.8	1224.1	1299.3	1331.0
37.5°	992.2	1073.1	1204.7	1285.1	1320.1
40°	952.0	1041.4	1182.0	1267.6	1304.5
42.5°	922.2	1008.3	1157.4	1250.1	1288.9
45°	866.4	983.7	1129.0	1227.4	1269.5
47.5°	822.4	936.4	1101.1	1204.7	1248.2
50°	794.4	897.6	1067.9	1178.2	1224.1
52.5°	727.7	871.6	1036.2	1152.2	1200.9
55°	701.2	819.1	1001.2	1123.8	1173.0
57.5°	629.3	782.1	966.2	1092.5	1143.2
60°	594.3	731.0	927.4	1060.8	1113.4
62.5°	539.9	687.5	889.1	1025.8	1080.2
65°	480.3	640.2	847.0	992.2	1048.5
67.5°	424.4	592.9	806.8	957.2	1016.8
70°	370.0	543.7	764.6	922.2	981.8
72.5°	306.6	494.5	723.9	889.1	948.7
75°	252.7	447.1	685.6	854.1	913.7
77.5°	199.7	401.7	648.7	822.4	882.0
80°	150.9	357.7	611.8	789.2	850.3
82.5°	105.0	320.8	578.7	757.5	817.2
85°	64.8	287.7	547.0	723.9	785.5
87.5°	29.8	257.9	515.3	692.7	755.7
90°	3.3	235.2	489.3	666.2	727.7
92.5°	1.9	228.1	478.8	653.9	713.5
95°	0.0	221.0	473.6	646.8	706.4
97.5°	0.0	213.9	461.3	636.4	697.9
100°	0.0	210.6	452.3	620.8	680.4
102.5°	0.0	205.4	441.9	606.6	666.2
105°	0.0	203.5	431.5	594.3	652.5
107.5°	0.0	199.7	420.6	578.7	636.4
110°	0.0	196.4	412.1	564.5	620.8



TEST NUMBER: P284751

CATALOG NUMBER: 4SNLED-LD5-81HL-SLW-UNV-L950-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	193.1	403.1	550.8	604.7
115°	0.0	189.3	392.7	534.7	587.2
117.5°	0.0	184.1	382.3	519.1	571.6
120°	0.0	177.0	371.9	504.9	554.1
122.5°	0.0	169.9	361.0	487.4	534.7
125°	0.0	163.2	348.7	471.7	517.2
127.5°	0.0	152.4	335.0	454.2	496.4
130°	0.0	142.0	317.5	436.7	477.0
132.5°	1.9	131.5	300.0	417.3	457.6
135°	0.0	121.1	280.6	397.9	434.8
137.5°	0.0	112.1	259.3	377.1	412.1
140°	0.0	101.7	238.5	352.5	389.4
142.5°	0.0	89.4	217.7	326.0	364.8
145°	0.0	79.0	196.4	298.1	340.2
147.5°	1.9	70.0	177.0	268.3	313.7
150°	1.9	62.9	158.0	238.5	283.9
152.5°	1.9	56.3	138.6	210.6	254.1
155°	1.9	49.2	121.1	182.2	226.2
157.5°	1.9	42.1	101.7	154.3	196.4
160°	1.9	36.9	84.2	129.6	168.4
162.5°	1.9	31.7	68.6	101.7	138.6
165°	1.9	26.5	54.4	75.2	106.9
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)