

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: METALUX

Report Number: P1213884

Luminaire Tested: 4SNLED-LD5-78HL-SLW-UNV-L940-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213884
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27403)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/29/2018
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: METALUX
Catalog Number: 4SNLED-LD5-78HL-SLW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

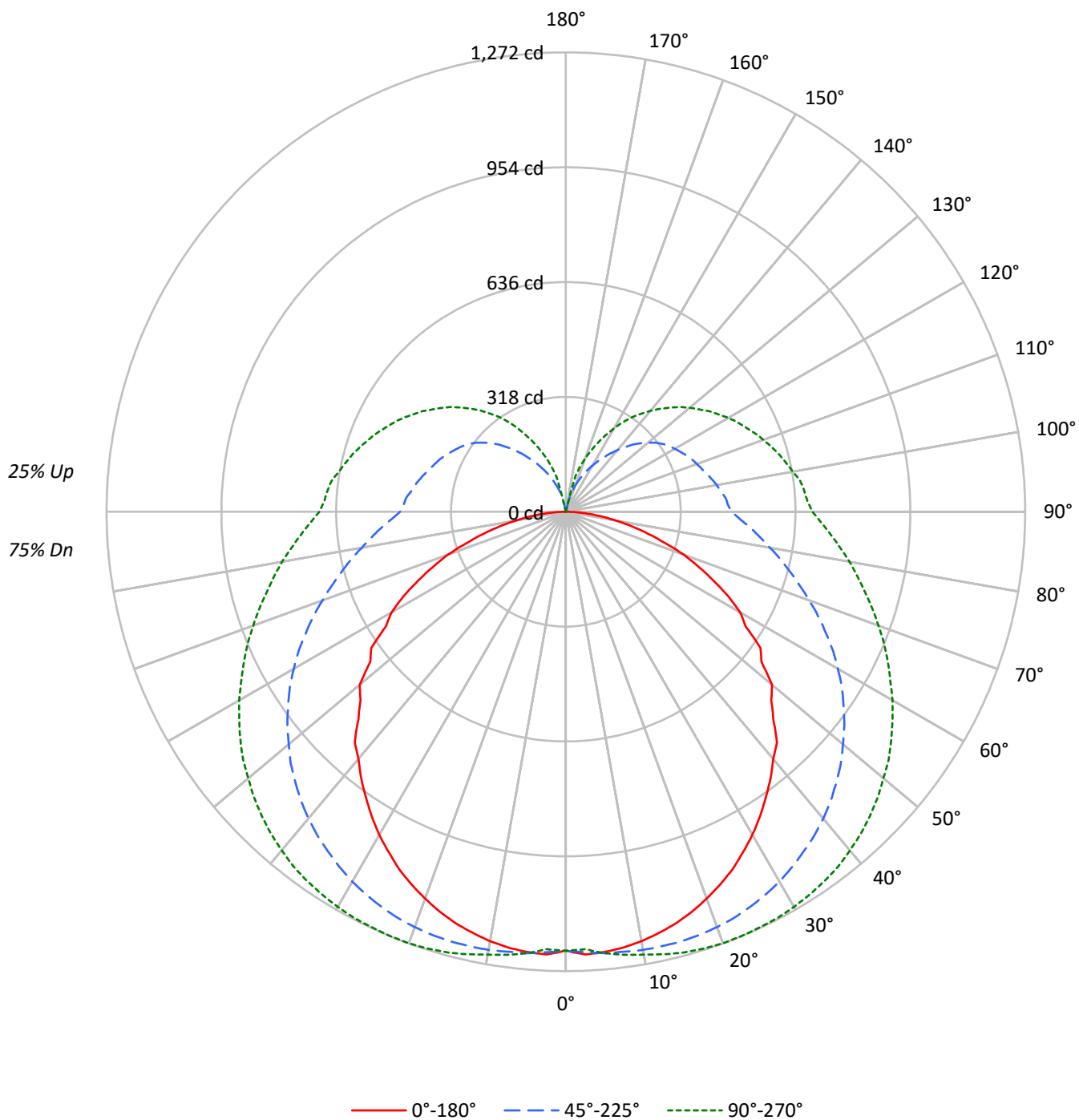
Lumens per Lamp: N/A
Luminaire Lumens: 7000.0 lumens
Efficiency: N/A
Efficacy: 88.6 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.56 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

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: 24 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
RCR																	
0	113	113	113	113	107	107	107	107	97	97	97	88	88	88	79	79	79
1	100	94	89	84	95	89	84	80	80	76	73	72	69	66	64	62	60
2	90	80	72	66	85	76	69	63	68	63	58	61	57	53	55	51	48
3	81	69	60	53	76	66	58	51	59	53	47	53	48	43	47	43	39
4	74	61	51	44	69	58	49	43	52	45	39	47	41	36	42	37	33
5	67	54	44	37	63	51	43	36	46	39	33	42	35	31	37	32	28
6	62	48	39	32	58	46	37	31	41	34	29	37	31	27	34	28	24
7	57	43	34	28	54	41	33	27	37	30	25	34	28	23	30	25	21
8	53	39	31	25	50	37	29	24	34	27	22	31	25	21	28	23	19
9	49	36	27	22	47	34	26	21	31	24	20	28	23	18	26	21	17
10	46	33	25	20	44	31	24	19	29	22	18	26	21	16	24	19	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9823	9823	9823
5°	9900	9710	9638
10°	9852	9622	9583
15°	9785	9570	9603
20°	9692	9527	9620
25°	9599	9492	9636
30°	9468	9465	9688
35°	9321	9428	9753
40°	9182	9422	9818
45°	9005	9403	9895
50°	9031	9379	9972
55°	8874	9380	10093
60°	8549	9387	10230
65°	8077	9397	10420
70°	7553	9467	10714
75°	6624	9687	11145
80°	5594	10156	11866
85°	4161	11101	12914

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 90°

Luminance: 14695 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	116.8	1.7
10°-20°	346.3	4.9
20°-30°	550.4	7.9
30°-40°	706.4	10.1
40°-50°	797.7	11.4
50°-60°	813.9	11.6
60°-70°	754.0	10.8
70°-80°	638.4	9.1
80°-90°	509.6	7.3
90°-100°	432.7	6.2
100°-110°	385.5	5.5
110°-120°	328.4	4.7
120°-130°	260.8	3.7
130°-140°	185.0	2.6
140°-150°	110.5	1.6
150°-160°	51.5	0.7
160°-170°	12.2	0.2
170°-180°	0.0	0.0
0°-30°	1013.5	14.5
0°-40°	1719.9	24.6
0°-60°	3331.5	47.6
0°-90°	5233.5	74.8
90°-120°	1146.6	16.4
90°-150°	1702.8	24.3
90°-180°	1767.0	25.2
0°-180°	7000.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1224	1214	1227	1227	1227	116
15°	1179	1189	1232	1255	1263	333
25°	1092	1128	1207	1250	1270	503
35°	966	1036	1148	1219	1248	604
45°	813	923	1059	1151	1191	631
55°	658	768	939	1054	1100	578
65°	451	600	794	931	984	447
75°	237	419	643	801	857	252
85°	61	270	513	679	737	66
90°	3	220	459	625	683	5
95°	0	207	444	607	663	0
105°	0	191	405	558	612	0
115°	0	178	368	502	551	0
125°	0	153	327	442	485	0
135°	0	114	263	373	408	0
145°	0	74	184	280	319	1
155°	2	46	114	171	212	1
165°	2	25	51	71	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°	1215.6	1215.6	1215.6	1215.6	1215.6
2.5°	1227.1	1213.9	1220.5	1218.9	1212.3
5°	1223.8	1213.9	1227.1	1227.1	1227.1
7.5°	1217.2	1210.6	1228.7	1235.3	1237.0
10°	1207.3	1207.3	1232.0	1241.9	1245.2
12.5°	1194.2	1199.1	1232.0	1246.8	1255.0
15°	1179.4	1189.3	1232.0	1255.0	1263.3
17.5°	1161.3	1177.7	1228.7	1256.7	1268.2
20°	1139.9	1164.6	1223.8	1256.7	1271.5
22.5°	1116.9	1148.1	1217.2	1253.4	1271.5
25°	1092.2	1128.4	1207.3	1250.1	1269.9
27.5°	1062.6	1108.7	1195.8	1245.2	1268.2
30°	1033.0	1085.6	1182.7	1238.6	1263.3
32.5°	1000.1	1061.0	1166.2	1228.7	1256.7
35°	965.5	1036.3	1148.1	1218.9	1248.5
37.5°	931.0	1006.7	1130.0	1205.7	1238.6
40°	893.2	977.1	1108.7	1189.3	1223.8
42.5°	865.2	945.8	1085.6	1172.8	1209.0
45°	812.6	922.8	1059.3	1151.4	1190.9
47.5°	771.5	878.4	1033.0	1130.0	1171.2
50°	745.1	842.2	1001.7	1105.4	1148.1
52.5°	682.6	817.5	972.1	1080.7	1126.7
55°	658.0	768.2	939.2	1054.4	1100.4
57.5°	590.5	733.6	906.3	1024.8	1072.5
60°	557.6	685.9	870.1	995.2	1044.5
62.5°	506.6	644.8	834.0	962.3	1013.2
65°	450.7	600.4	794.5	931.0	983.6
67.5°	398.1	556.0	756.6	898.1	954.0
70°	347.1	509.9	717.2	865.2	921.1
72.5°	287.9	463.9	679.3	834.0	889.9
75°	236.9	419.4	643.2	801.1	857.0
77.5°	187.5	376.7	608.6	771.5	827.4
80°	141.5	335.6	574.1	740.2	797.8
82.5°	98.7	301.0	542.8	710.6	766.5
85°	60.9	269.8	513.2	679.3	736.9
87.5°	28.0	241.8	483.6	649.7	708.9
90°	3.3	220.4	458.9	625.1	682.6
92.5°	1.6	213.8	449.1	613.5	669.5
95°	0.0	207.3	444.1	607.0	662.9
97.5°	0.0	200.7	432.6	597.1	654.7
100°	0.0	197.4	424.4	582.3	638.2
102.5°	0.0	192.5	414.5	569.1	625.1
105°	0.0	190.8	404.6	557.6	611.9
107.5°	0.0	187.5	394.8	542.8	597.1
110°	0.0	184.2	386.5	529.7	582.3

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	180.9	378.3	516.5	567.5
115°	0.0	177.6	368.5	501.7	551.0
117.5°	0.0	172.7	358.6	486.9	536.2
120°	0.0	166.1	348.7	473.7	519.8
122.5°	0.0	159.6	338.8	457.3	501.7
125°	0.0	153.0	327.3	442.5	485.2
127.5°	0.0	143.1	314.2	426.0	465.5
130°	0.0	133.2	297.7	409.6	447.4
132.5°	1.6	123.4	281.3	391.5	429.3
135°	0.0	113.5	263.2	373.4	407.9
137.5°	0.0	105.3	243.4	353.7	386.5
140°	0.0	95.4	223.7	330.6	365.2
142.5°	0.0	83.9	204.0	305.9	342.1
145°	0.0	74.0	184.2	279.6	319.1
147.5°	1.6	65.8	166.1	251.7	294.4
150°	1.6	59.2	148.0	223.7	266.5
152.5°	1.6	52.6	129.9	197.4	238.5
155°	1.6	46.1	113.5	171.1	212.2
157.5°	1.6	39.5	95.4	144.7	184.2
160°	1.6	34.5	79.0	121.7	157.9
162.5°	1.6	29.6	64.2	95.4	129.9
165°	1.6	24.7	51.0	70.7	100.3
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)