

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: P1213114

Luminaire Tested: 4SNLED-LD5-54HL-SLW-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213114
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-LD5-54HL-SLW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

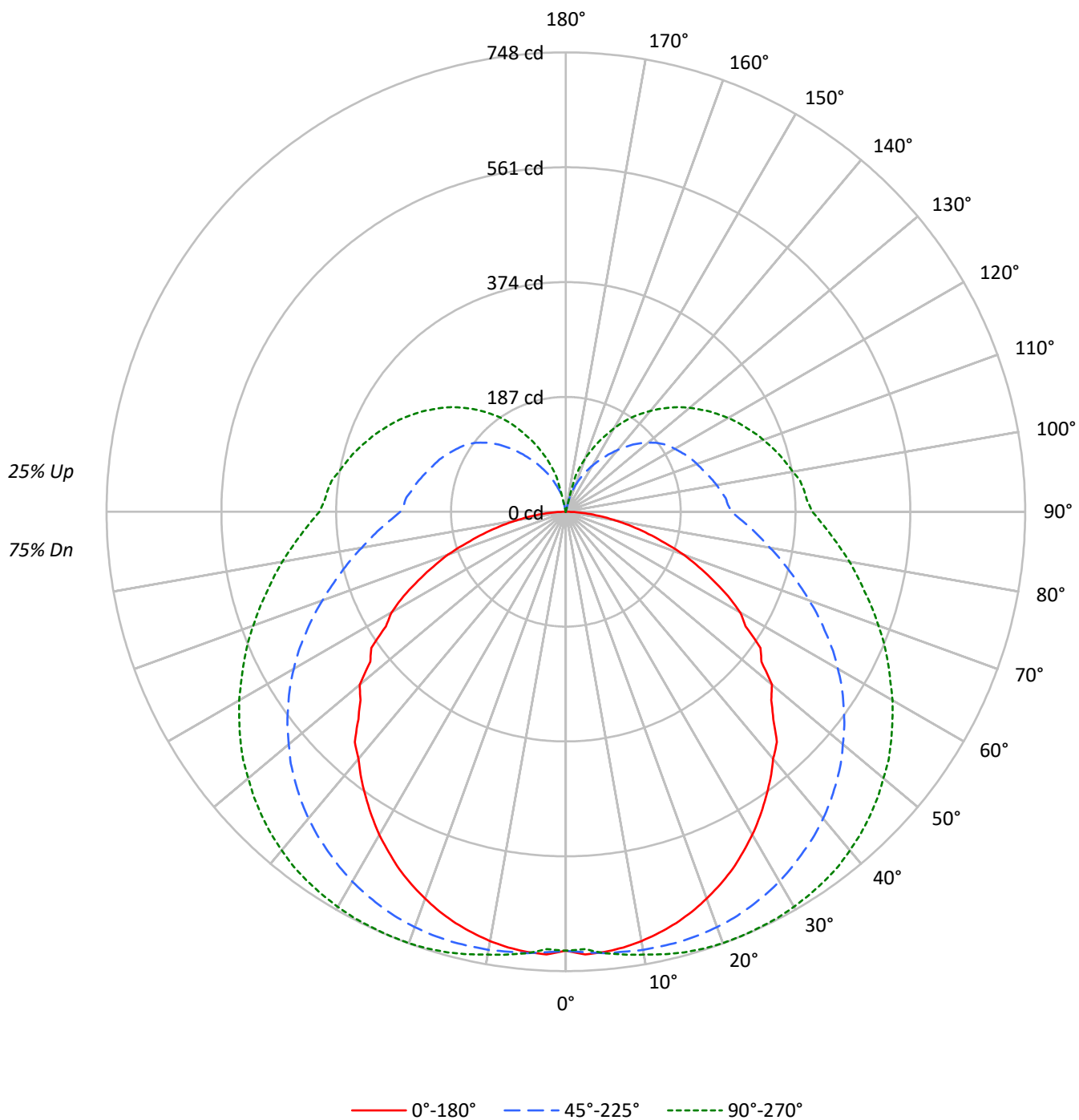
Lumens per Lamp: N/A
Luminaire Lumens: 4116.0 lumens
Efficiency: N/A
Efficacy: 95.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.56 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 43
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°	5776	5776	5776
5°	5821	5709	5667
10°	5793	5657	5635
15°	5754	5627	5646
20°	5700	5602	5656
25°	5644	5581	5666
30°	5567	5565	5697
35°	5480	5544	5735
40°	5399	5540	5773
45°	5295	5529	5818
50°	5310	5515	5864
55°	5218	5516	5935
60°	5027	5520	6016
65°	4749	5526	6127
70°	4441	5566	6300
75°	3895	5696	6553
80°	3289	5972	6977
85°	2446	6528	7594

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 90°

Luminance: 8641 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	68.7	1.7
10°-20°	203.6	4.9
20°-30°	323.6	7.9
30°-40°	415.3	10.1
40°-50°	469.0	11.4
50°-60°	478.6	11.6
60°-70°	443.4	10.8
70°-80°	375.4	9.1
80°-90°	299.6	7.3
90°-100°	254.4	6.2
100°-110°	226.7	5.5
110°-120°	193.1	4.7
120°-130°	153.3	3.7
130°-140°	108.8	2.6
140°-150°	64.9	1.6
150°-160°	30.3	0.7
160°-170°	7.2	0.2
170°-180°	0.0	0.0
0°-30°	595.9	14.5
0°-40°	1011.3	24.6
0°-60°	1958.9	47.6
0°-90°	3077.3	74.8
90°-120°	674.2	16.4
90°-150°	1001.3	24.3
90°-180°	1039.0	25.2
0°-180°	4116.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	715	715	715	715	715	
5°	720	714	722	722	722	68
15°	694	699	724	738	743	196
25°	642	664	710	735	747	296
35°	568	609	675	717	734	355
45°	478	543	623	677	700	371
55°	387	452	552	620	647	340
65°	265	353	467	547	578	263
75°	139	247	378	471	504	148
85°	36	159	302	400	433	39
90°	2	130	270	368	401	3
95°	0	122	261	357	390	0
105°	0	112	238	328	360	0
115°	0	104	217	295	324	0
125°	0	90	192	260	285	0
135°	0	67	155	220	240	0
145°	0	44	108	164	188	0
155°	1	27	67	101	125	0
165°	1	14	30	42	59	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°	714.8	714.8	714.8	714.8	714.8
2.5°	721.5	713.8	717.7	716.7	712.8
5°	719.6	713.8	721.5	721.5	721.5
7.5°	715.7	711.9	722.5	726.4	727.3
10°	709.9	709.9	724.4	730.2	732.2
12.5°	702.2	705.1	724.4	733.1	738.0
15°	693.5	699.3	724.4	738.0	742.8
17.5°	682.8	692.5	722.5	738.9	745.7
20°	670.3	684.8	719.6	738.9	747.6
22.5°	656.7	675.1	715.7	737.0	747.6
25°	642.2	663.5	709.9	735.1	746.7
27.5°	624.8	651.9	703.1	732.2	745.7
30°	607.4	638.3	695.4	728.3	742.8
32.5°	588.1	623.8	685.7	722.5	738.9
35°	567.7	609.3	675.1	716.7	734.1
37.5°	547.4	591.9	664.5	709.0	728.3
40°	525.2	574.5	651.9	699.3	719.6
42.5°	508.7	556.1	638.3	689.6	710.9
45°	477.8	542.6	622.9	677.0	700.2
47.5°	453.6	516.5	607.4	664.5	688.6
50°	438.1	495.2	589.0	650.0	675.1
52.5°	401.4	480.7	571.6	635.4	662.5
55°	386.9	451.7	552.3	620.0	647.1
57.5°	347.2	431.4	532.9	602.6	630.6
60°	327.9	403.3	511.6	585.2	614.2
62.5°	297.9	379.1	490.4	565.8	595.8
65°	265.0	353.0	467.2	547.4	578.4
67.5°	234.1	326.9	444.9	528.1	561.0
70°	204.1	299.8	421.7	508.7	541.6
72.5°	169.3	272.7	399.5	490.4	523.3
75°	139.3	246.6	378.2	471.0	503.9
77.5°	110.3	221.5	357.9	453.6	486.5
80°	83.2	197.3	337.6	435.2	469.1
82.5°	58.0	177.0	319.2	417.8	450.7
85°	35.8	158.6	301.8	399.5	433.3
87.5°	16.4	142.2	284.4	382.0	416.9
90°	1.9	129.6	269.8	367.5	401.4
92.5°	1.0	125.7	264.0	360.8	393.6
95°	0.0	121.9	261.1	356.9	389.8
97.5°	0.0	118.0	254.4	351.1	384.9
100°	0.0	116.1	249.5	342.4	375.3
102.5°	0.0	113.2	243.7	334.6	367.5
105°	0.0	112.2	237.9	327.9	359.8
107.5°	0.0	110.3	232.1	319.2	351.1
110°	0.0	108.3	227.3	311.4	342.4

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	106.4	222.5	303.7	333.7
115°	0.0	104.5	216.7	295.0	324.0
117.5°	0.0	101.6	210.8	286.3	315.3
120°	0.0	97.7	205.0	278.6	305.6
122.5°	0.0	93.8	199.2	268.9	295.0
125°	0.0	89.9	192.5	260.2	285.3
127.5°	0.0	84.1	184.7	250.5	273.7
130°	0.0	78.3	175.1	240.8	263.1
132.5°	1.0	72.5	165.4	230.2	252.4
135°	0.0	66.7	154.8	219.6	239.9
137.5°	0.0	61.9	143.1	207.9	227.3
140°	0.0	56.1	131.5	194.4	214.7
142.5°	0.0	49.3	119.9	179.9	201.2
145°	0.0	43.5	108.3	164.4	187.6
147.5°	1.0	38.7	97.7	148.0	173.1
150°	1.0	34.8	87.0	131.5	156.7
152.5°	1.0	31.0	76.4	116.1	140.2
155°	1.0	27.1	66.7	100.6	124.8
157.5°	1.0	23.2	56.1	85.1	108.3
160°	1.0	20.3	46.4	71.6	92.9
162.5°	1.0	17.4	37.7	56.1	76.4
165°	1.0	14.5	30.0	41.6	59.0
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)