

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: P1213010

Luminaire Tested: 4SNLED-LD5-16SL-SLW-UNV-L930-CD1-U

Issue Date: 3/29/2018

Test Information

Test Method: LM-79-2019
Report Number: P1213010
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-LD5-16SL-SLW-UNV-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE FROSTED LENS
Light Source: -
Ballast/Driver: -

Summary

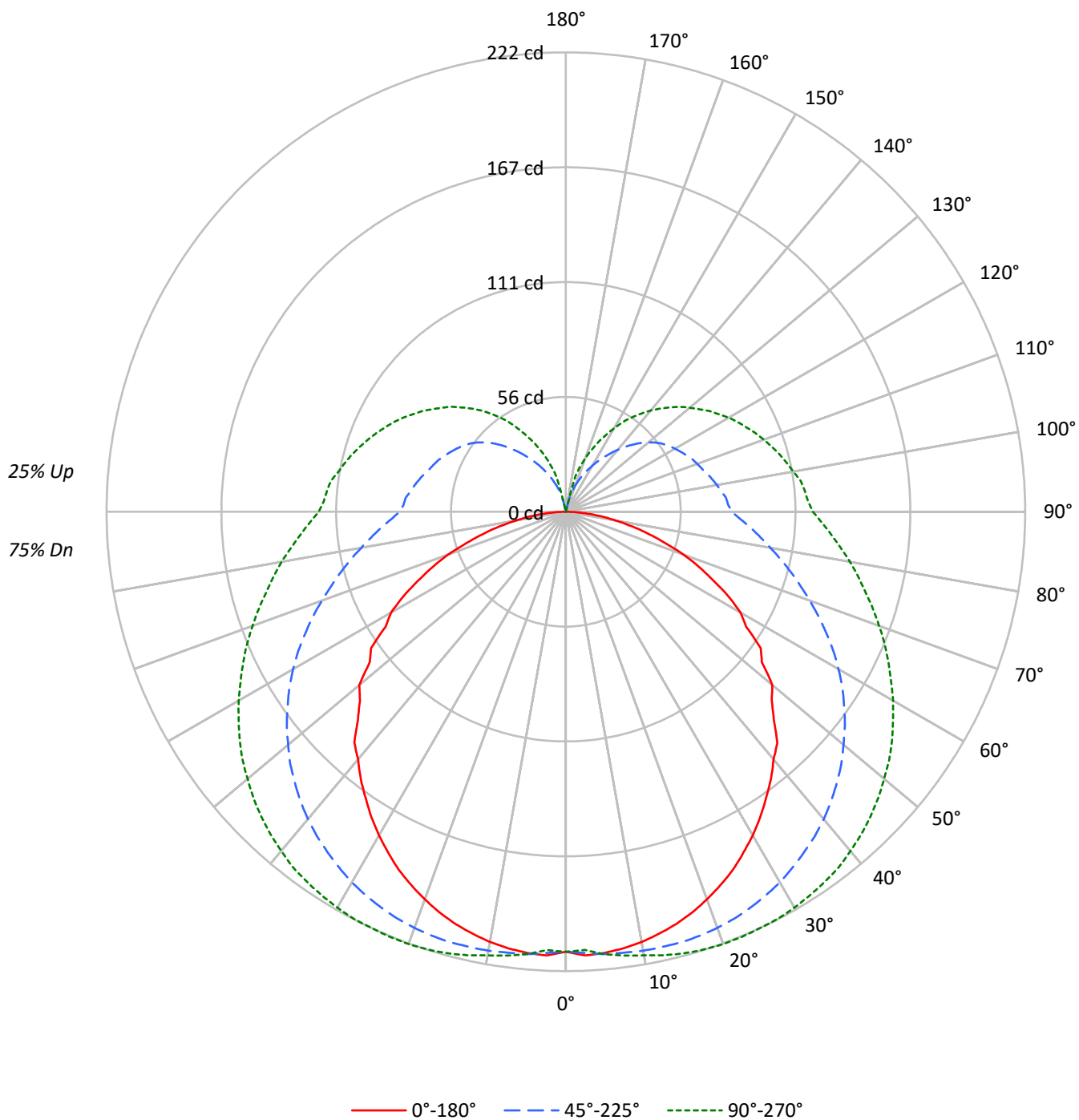
Lumens per Lamp: N/A
Luminaire Lumens: 1224.0 lumens
Efficiency: N/A
Efficacy: 94.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.56 / 1.59
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Semi-Direct

Input Watts (W): 13
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°	1718	1718	1718
5°	1731	1698	1685
10°	1723	1682	1675
15°	1711	1673	1679
20°	1695	1666	1682
25°	1679	1660	1685
30°	1655	1655	1694
35°	1630	1649	1705
40°	1606	1648	1717
45°	1575	1644	1730
50°	1579	1640	1744
55°	1551	1640	1765
60°	1495	1642	1788
65°	1412	1643	1822
70°	1321	1655	1874
75°	1158	1694	1949
80°	976	1776	2075
85°	724	1940	2259

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 90°

Luminance: 2570 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	20.4	1.7
10°-20°	60.6	4.9
20°-30°	96.2	7.9
30°-40°	123.5	10.1
40°-50°	139.5	11.4
50°-60°	142.3	11.6
60°-70°	131.8	10.8
70°-80°	111.6	9.1
80°-90°	89.1	7.3
90°-100°	75.7	6.2
100°-110°	67.4	5.5
110°-120°	57.4	4.7
120°-130°	45.6	3.7
130°-140°	32.4	2.6
140°-150°	19.3	1.6
150°-160°	9.0	0.7
160°-170°	2.1	0.2
170°-180°	0.0	0.0
0°-30°	177.2	14.5
0°-40°	300.7	24.6
0°-60°	582.5	47.6
0°-90°	915.1	74.8
90°-120°	200.5	16.4
90°-150°	297.7	24.3
90°-180°	309.0	25.2
0°-180°	1224.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	213	213	213	213	213	
5°	214	212	215	215	215	20
15°	206	208	215	220	221	58
25°	191	197	211	219	222	88
35°	169	181	201	213	218	106
45°	142	161	185	201	208	110
55°	115	134	164	184	192	101
65°	79	105	139	163	172	78
75°	41	73	112	140	150	44
85°	11	47	90	119	129	12
90°	1	38	80	109	119	1
95°	0	36	78	106	116	0
105°	0	33	71	98	107	0
115°	0	31	64	88	96	0
125°	0	27	57	77	85	0
135°	0	20	46	65	71	0
145°	0	13	32	49	56	0
155°	0	8	20	30	37	0
165°	0	4	9	12	18	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°	212.6	212.6	212.6	212.6	212.6
2.5°	214.6	212.3	213.4	213.1	212.0
5°	214.0	212.3	214.6	214.6	214.6
7.5°	212.8	211.7	214.9	216.0	216.3
10°	211.1	211.1	215.4	217.2	217.7
12.5°	208.8	209.7	215.4	218.0	219.5
15°	206.2	207.9	215.4	219.5	220.9
17.5°	203.1	205.9	214.9	219.7	221.8
20°	199.3	203.6	214.0	219.7	222.3
22.5°	195.3	200.8	212.8	219.2	222.3
25°	191.0	197.3	211.1	218.6	222.0
27.5°	185.8	193.9	209.1	217.7	221.8
30°	180.6	189.8	206.8	216.6	220.9
32.5°	174.9	185.5	203.9	214.9	219.7
35°	168.8	181.2	200.8	213.1	218.3
37.5°	162.8	176.0	197.6	210.8	216.6
40°	156.2	170.8	193.9	207.9	214.0
42.5°	151.3	165.4	189.8	205.1	211.4
45°	142.1	161.4	185.2	201.3	208.2
47.5°	134.9	153.6	180.6	197.6	204.8
50°	130.3	147.3	175.2	193.3	200.8
52.5°	119.4	142.9	170.0	189.0	197.0
55°	115.0	134.3	164.2	184.4	192.4
57.5°	103.3	128.3	158.5	179.2	187.5
60°	97.5	119.9	152.2	174.0	182.6
62.5°	88.6	112.7	145.8	168.3	177.2
65°	78.8	105.0	138.9	162.8	172.0
67.5°	69.6	97.2	132.3	157.0	166.8
70°	60.7	89.2	125.4	151.3	161.1
72.5°	50.3	81.1	118.8	145.8	155.6
75°	41.4	73.3	112.5	140.1	149.9
77.5°	32.8	65.9	106.4	134.9	144.7
80°	24.7	58.7	100.4	129.4	139.5
82.5°	17.3	52.6	94.9	124.3	134.0
85°	10.6	47.2	89.7	118.8	128.9
87.5°	4.9	42.3	84.6	113.6	124.0
90°	0.6	38.5	80.2	109.3	119.4
92.5°	0.3	37.4	78.5	107.3	117.1
95°	0.0	36.2	77.7	106.1	115.9
97.5°	0.0	35.1	75.6	104.4	114.5
100°	0.0	34.5	74.2	101.8	111.6
102.5°	0.0	33.7	72.5	99.5	109.3
105°	0.0	33.4	70.8	97.5	107.0
107.5°	0.0	32.8	69.0	94.9	104.4
110°	0.0	32.2	67.6	92.6	101.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	31.6	66.2	90.3	99.2
115°	0.0	31.1	64.4	87.7	96.4
117.5°	0.0	30.2	62.7	85.1	93.8
120°	0.0	29.0	61.0	82.8	90.9
122.5°	0.0	27.9	59.2	80.0	87.7
125°	0.0	26.7	57.2	77.4	84.8
127.5°	0.0	25.0	54.9	74.5	81.4
130°	0.0	23.3	52.1	71.6	78.2
132.5°	0.3	21.6	49.2	68.5	75.1
135°	0.0	19.8	46.0	65.3	71.3
137.5°	0.0	18.4	42.6	61.8	67.6
140°	0.0	16.7	39.1	57.8	63.9
142.5°	0.0	14.7	35.7	53.5	59.8
145°	0.0	12.9	32.2	48.9	55.8
147.5°	0.3	11.5	29.0	44.0	51.5
150°	0.3	10.4	25.9	39.1	46.6
152.5°	0.3	9.2	22.7	34.5	41.7
155°	0.3	8.1	19.8	29.9	37.1
157.5°	0.3	6.9	16.7	25.3	32.2
160°	0.3	6.0	13.8	21.3	27.6
162.5°	0.3	5.2	11.2	16.7	22.7
165°	0.3	4.3	8.9	12.4	17.5
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)