

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: P#

Luminaire Tested: **4SNLED-LD5-60HL-SLN-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P27402)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-60HL-SLN-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

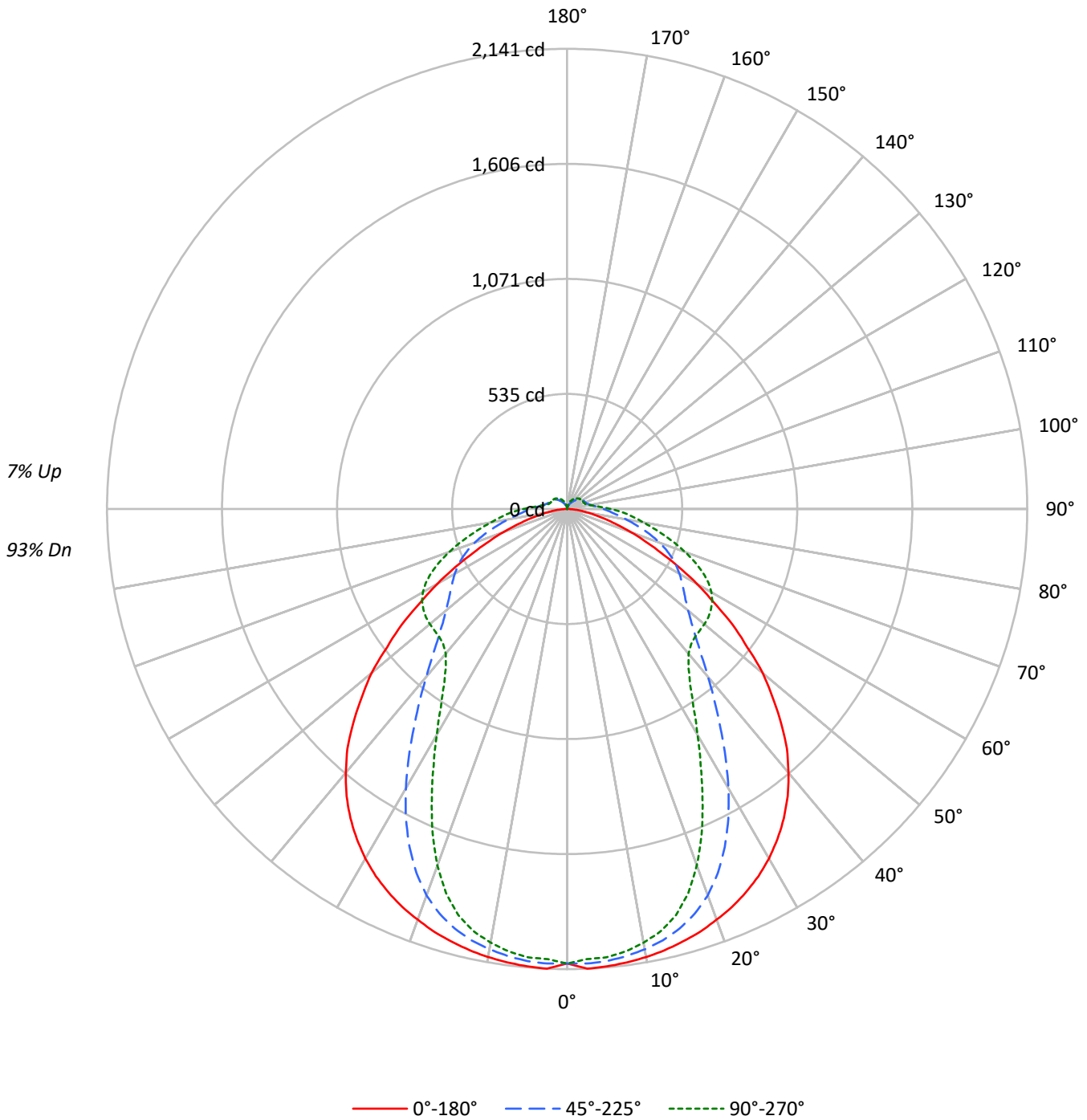
Lumens per Lamp: N/A
Luminaire Lumens: 5316.9 lumens
Efficiency: N/A
Efficacy: 123.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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: 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				10	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	117	117	117	117	114	114	114	114	107	107	107	101	101	101	95	95	95	93
1	107	102	97	93	103	99	94	91	93	90	87	88	85	83	83	81	79	76
2	97	89	82	76	94	86	80	75	81	76	72	77	73	69	73	70	66	64
3	89	78	70	64	86	76	69	63	72	66	61	68	63	59	65	61	57	54
4	82	70	61	55	79	68	60	54	65	58	52	61	55	51	58	53	49	47
5	75	63	54	47	73	61	53	47	58	51	46	55	49	44	53	48	43	41
6	70	57	48	42	67	55	47	41	53	46	40	51	44	39	48	43	39	36
7	65	52	43	37	63	51	42	37	48	41	36	46	40	35	44	39	35	32
8	61	47	39	33	59	46	39	33	44	37	32	43	36	32	41	35	31	29
9	57	44	36	30	55	43	35	30	41	34	29	40	33	29	38	33	28	27
10	53	40	33	28	52	40	32	27	38	32	27	37	31	27	35	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17086	17086	17086
5°	17282	16708	16446
10°	17276	16247	15770
15°	17282	15702	14870
20°	17290	14893	13355
25°	17297	13647	11309
30°	17214	12008	9302
35°	16969	10216	7795
40°	16473	8652	7047
45°	15600	7520	6994
50°	14411	6875	7239
55°	12690	6608	7492
60°	10706	6513	7595
65°	8613	6368	7358
70°	6917	6040	6787
75°	5215	5466	6022
80°	3850	4909	5357
85°	2576	4631	4928



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	200.0	3.8
10°-20°	565.4	10.6
20°-30°	790.3	14.9
30°-40°	819.8	15.4
40°-50°	757.3	14.2
50°-60°	676.2	12.7
60°-70°	548.0	10.3
70°-80°	364.5	6.9
80°-90°	208.7	3.9
90°-100°	115.5	2.2
100°-110°	78.2	1.5
110°-120°	65.1	1.2
120°-130°	52.9	1.0
130°-140°	38.2	0.7
140°-150°	23.0	0.4
150°-160°	11.1	0.2
160°-170°	2.9	0.1
170°-180°	0.0	0.0
0°-30°	1555.7	29.3
0°-40°	2375.5	44.7
0°-60°	3809.0	71.6
0°-90°	4930.2	92.7
90°-120°	258.7	4.9
90°-150°	372.9	7.0
90°-180°	387.0	7.3
0°-180°	5316.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2114	2114	2114	2114	2114	
5°	2136	2100	2112	2097	2094	203
15°	2083	2039	2021	1976	1956	589
25°	1968	1881	1736	1554	1490	907
35°	1758	1565	1244	1045	998	1097
45°	1408	1116	847	817	842	1082
55°	941	711	662	769	817	837
65°	481	430	538	660	695	486
75°	186	233	363	445	463	204
85°	38	108	214	274	281	43
90°	2	76	169	204	202	3
95°	2	64	134	143	139	1
105°	1	56	96	94	89	1
115°	1	50	86	84	82	1
125°	1	43	75	79	77	1
135°	2	32	60	70	70	1
145°	2	20	41	54	58	1
155°	2	13	26	34	41	1
165°	2	7	13	16	22	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-60HL-SLN-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2114.3	2114.3	2114.3	2114.3	2114.3
2.5°	2140.9	2106.0	2117.0	2107.8	2095.9
5°	2136.3	2100.5	2111.5	2096.8	2094.0
7.5°	2128.0	2092.2	2098.6	2081.2	2076.6
10°	2117.0	2079.3	2080.3	2055.4	2049.0
12.5°	2102.3	2061.0	2055.4	2021.4	2012.3
15°	2083.0	2038.9	2021.4	1975.5	1956.2
17.5°	2061.9	2010.4	1974.6	1903.8	1873.5
20°	2033.4	1975.5	1913.0	1805.5	1765.1
22.5°	2004.9	1933.2	1833.1	1689.7	1635.5
25°	1968.2	1880.9	1735.7	1553.8	1490.4
27.5°	1926.8	1819.3	1623.6	1414.1	1346.1
30°	1878.1	1744.9	1500.5	1277.2	1212.9
32.5°	1821.1	1661.3	1370.9	1154.1	1094.3
35°	1757.7	1564.8	1244.1	1044.7	997.9
37.5°	1685.2	1459.1	1126.5	956.5	926.2
40°	1602.5	1344.3	1018.1	888.5	878.4
42.5°	1513.3	1232.2	925.3	844.4	853.6
45°	1407.7	1115.5	847.2	816.8	841.7
47.5°	1296.5	1001.5	783.8	801.2	837.1
50°	1189.0	895.9	734.2	791.1	833.4
52.5°	1055.7	801.2	694.6	781.9	827.9
55°	940.9	711.2	661.6	769.1	816.8
57.5°	808.6	630.3	632.2	752.5	800.3
60°	698.3	556.8	603.7	729.6	775.5
62.5°	586.2	490.7	572.4	699.2	740.6
65°	480.6	430.0	538.4	659.7	694.6
67.5°	392.3	374.9	499.8	611.9	641.4
70°	317.9	324.4	457.6	558.7	583.5
72.5°	244.4	277.5	411.6	501.7	522.8
75°	186.5	233.4	362.9	444.7	463.1
77.5°	137.8	194.8	318.8	393.3	408.9
80°	97.4	160.8	277.5	348.2	360.2
82.5°	65.2	132.3	243.5	307.8	318.8
85°	37.7	108.4	214.1	273.8	281.2
87.5°	15.6	90.0	190.2	238.9	242.6
90°	1.8	76.3	169.1	204.0	202.1
92.5°	1.8	68.9	150.7	170.9	166.3
95°	1.8	64.3	134.2	143.3	138.7
97.5°	1.8	61.6	119.4	123.1	118.5
100°	0.9	59.7	109.3	109.3	104.7
102.5°	0.9	57.9	102.0	99.2	95.6
105°	0.9	56.0	96.5	93.7	89.1
107.5°	0.9	55.1	92.8	90.0	85.5
110°	0.9	53.3	90.0	87.3	83.6



TEST NUMBER: P#

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	52.4	88.2	86.4	81.8
115°	0.9	50.5	85.5	84.5	81.8
117.5°	0.9	48.7	83.6	83.6	80.9
120°	0.9	46.9	80.9	82.7	79.9
122.5°	0.9	45.0	78.1	80.9	78.1
125°	0.9	43.2	75.3	79.0	77.2
127.5°	1.8	40.4	71.7	77.2	75.3
130°	0.9	37.7	68.0	75.3	74.4
132.5°	1.8	34.9	64.3	72.6	72.6
135°	1.8	32.2	59.7	69.8	69.8
137.5°	1.8	28.5	55.1	66.2	67.1
140°	1.8	25.7	50.5	62.5	64.3
142.5°	1.8	23.0	45.9	58.8	61.6
145°	1.8	20.2	41.3	54.2	57.9
147.5°	1.8	18.4	36.8	48.7	54.2
150°	1.8	15.6	33.1	44.1	49.6
152.5°	1.8	13.8	29.4	39.5	45.9
155°	1.8	12.9	25.7	34.0	41.3
157.5°	1.8	11.0	22.1	29.4	36.8
160°	1.8	9.2	18.4	25.7	31.2
162.5°	1.8	8.3	15.6	21.1	27.6
165°	1.8	7.4	12.9	16.5	22.1
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)