

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-L930-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-L930-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

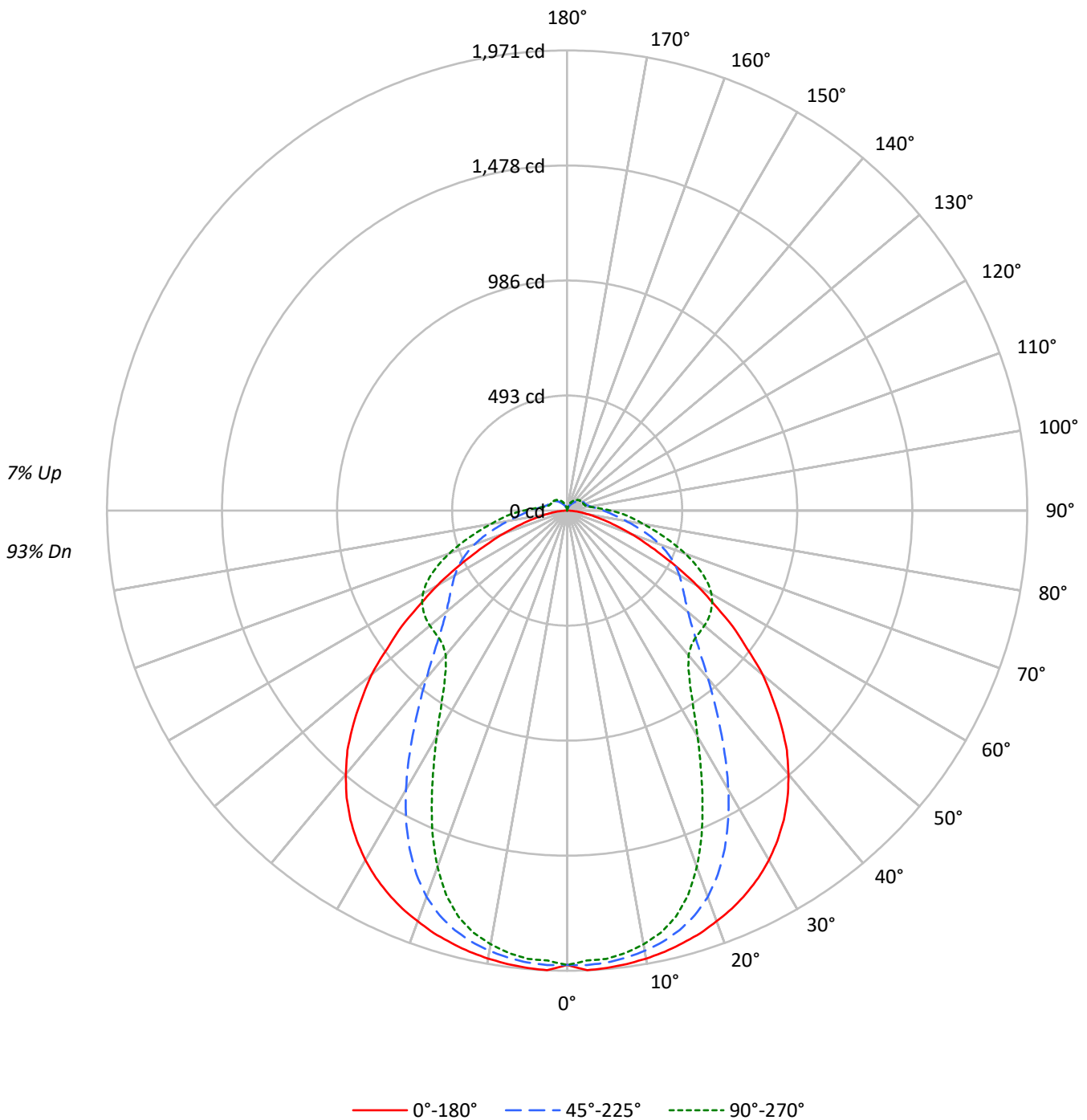
Lumens per Lamp: N/A
Luminaire Lumens: 4894.0 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

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



TEST NUMBER: P#
CATALOG NUMBER: 4SNLED-LD5-60HL-SLN-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-60HL-SLN-UNV-L930-CD1-U

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°	15726	15726	15726
5°	15907	15379	15138
10°	15902	14954	14515
15°	15907	14452	13687
20°	15914	13708	12292
25°	15921	12561	10409
30°	15845	11052	8562
35°	15619	9403	7175
40°	15162	7964	6486
45°	14359	6922	6437
50°	13265	6327	6663
55°	11680	6081	6896
60°	9856	5995	6991
65°	7926	5862	6774
70°	6367	5560	6246
75°	4801	5032	5544
80°	3542	4518	4931
85°	2371	4263	4536



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-60HL-SLN-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	184.1	3.8
10°-20°	520.4	10.6
20°-30°	727.5	14.9
30°-40°	754.6	15.4
40°-50°	697.1	14.2
50°-60°	622.4	12.7
60°-70°	504.4	10.3
70°-80°	335.5	6.9
80°-90°	192.1	3.9
90°-100°	106.3	2.2
100°-110°	72.0	1.5
110°-120°	59.9	1.2
120°-130°	48.7	1.0
130°-140°	35.1	0.7
140°-150°	21.2	0.4
150°-160°	10.2	0.2
160°-170°	2.6	0.1
170°-180°	0.0	0.0
0°-30°	1432.0	29.3
0°-40°	2186.5	44.7
0°-60°	3506.0	71.6
0°-90°	4538.0	92.7
90°-120°	238.2	4.9
90°-150°	343.2	7.0
90°-180°	356.0	7.3
0°-180°	4894.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1946	1946	1946	1946	1946	
5°	1966	1933	1944	1930	1927	187
15°	1917	1877	1861	1818	1801	542
25°	1812	1731	1598	1430	1372	835
35°	1618	1440	1145	962	918	1009
45°	1296	1027	780	752	775	996
55°	866	655	609	708	752	770
65°	442	396	496	607	639	447
75°	172	215	334	409	426	188
85°	35	100	197	252	259	40
90°	2	70	156	188	186	3
95°	2	59	124	132	128	1
105°	1	52	89	86	82	1
115°	1	46	79	78	75	1
125°	1	40	69	73	71	1
135°	2	30	55	64	64	1
145°	2	19	38	50	53	1
155°	2	12	24	31	38	1
165°	2	7	12	15	20	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-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1946.1	1946.1	1946.1	1946.1	1946.1
2.5°	1970.6	1938.4	1948.6	1940.1	1929.1
5°	1966.3	1933.4	1943.5	1930.0	1927.4
7.5°	1958.7	1925.8	1931.7	1915.6	1911.4
10°	1948.6	1913.9	1914.8	1891.9	1886.0
12.5°	1935.1	1897.0	1891.9	1860.6	1852.2
15°	1917.3	1876.7	1860.6	1818.3	1800.6
17.5°	1897.8	1850.5	1817.5	1752.4	1724.5
20°	1871.6	1818.3	1760.8	1661.9	1624.7
22.5°	1845.4	1779.4	1687.3	1555.3	1505.4
25°	1811.6	1731.2	1597.6	1430.1	1371.8
27.5°	1773.5	1674.6	1494.4	1301.6	1239.0
30°	1728.7	1606.1	1381.1	1175.6	1116.4
32.5°	1676.3	1529.1	1261.8	1062.3	1007.3
35°	1617.9	1440.3	1145.1	961.6	918.5
37.5°	1551.1	1343.0	1036.9	880.4	852.5
40°	1475.0	1237.3	937.1	817.8	808.5
42.5°	1392.9	1134.1	851.7	777.2	785.7
45°	1295.7	1026.7	779.8	751.9	774.7
47.5°	1193.3	921.9	721.4	737.5	770.5
50°	1094.4	824.6	675.7	728.2	767.1
52.5°	971.8	737.5	639.4	719.7	762.0
55°	866.0	654.6	608.9	707.9	751.9
57.5°	744.3	580.2	581.9	692.7	736.6
60°	642.8	512.5	555.7	671.5	713.8
62.5°	539.6	451.6	526.9	643.6	681.7
65°	442.3	395.8	495.6	607.2	639.4
67.5°	361.1	345.1	460.1	563.3	590.3
70°	292.6	298.5	421.2	514.2	537.0
72.5°	225.0	255.4	378.9	461.8	481.2
75°	171.7	214.8	334.1	409.3	426.3
77.5°	126.9	179.3	293.5	362.0	376.4
80°	89.6	148.0	255.4	320.5	331.5
82.5°	60.0	121.8	224.1	283.3	293.5
85°	34.7	99.8	197.1	252.0	258.8
87.5°	14.4	82.9	175.1	219.9	223.3
90°	1.7	70.2	155.6	187.8	186.1
92.5°	1.7	63.4	138.7	157.3	153.1
95°	1.7	59.2	123.5	131.9	127.7
97.5°	1.7	56.7	109.9	113.3	109.1
100°	0.8	55.0	100.6	100.6	96.4
102.5°	0.8	53.3	93.9	91.3	88.0
105°	0.8	51.6	88.8	86.3	82.0
107.5°	0.8	50.7	85.4	82.9	78.7
110°	0.8	49.1	82.9	80.3	77.0



TEST NUMBER: P#

CATALOG NUMBER: 4SNLED-LD5-60HL-SLN-UNV-L930-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	48.2	81.2	79.5	75.3
115°	0.8	46.5	78.7	77.8	75.3
117.5°	0.8	44.8	77.0	77.0	74.4
120°	0.8	43.1	74.4	76.1	73.6
122.5°	0.8	41.4	71.9	74.4	71.9
125°	0.8	39.7	69.4	72.7	71.0
127.5°	1.7	37.2	66.0	71.0	69.4
130°	0.8	34.7	62.6	69.4	68.5
132.5°	1.7	32.1	59.2	66.8	66.8
135°	1.7	29.6	55.0	64.3	64.3
137.5°	1.7	26.2	50.7	60.9	61.7
140°	1.7	23.7	46.5	57.5	59.2
142.5°	1.7	21.1	42.3	54.1	56.7
145°	1.7	18.6	38.1	49.9	53.3
147.5°	1.7	16.9	33.8	44.8	49.9
150°	1.7	14.4	30.4	40.6	45.7
152.5°	1.7	12.7	27.1	36.4	42.3
155°	1.7	11.8	23.7	31.3	38.1
157.5°	1.7	10.1	20.3	27.1	33.8
160°	1.7	8.5	16.9	23.7	28.8
162.5°	1.7	7.6	14.4	19.5	25.4
165°	1.7	6.8	11.8	15.2	20.3
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)