

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-LD5-63HL-SLN-UNV-L840-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-LD5-63HL-SLN-UNV-L840-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE NARROW LENS
Light Source: -
Ballast/Driver: -

Summary

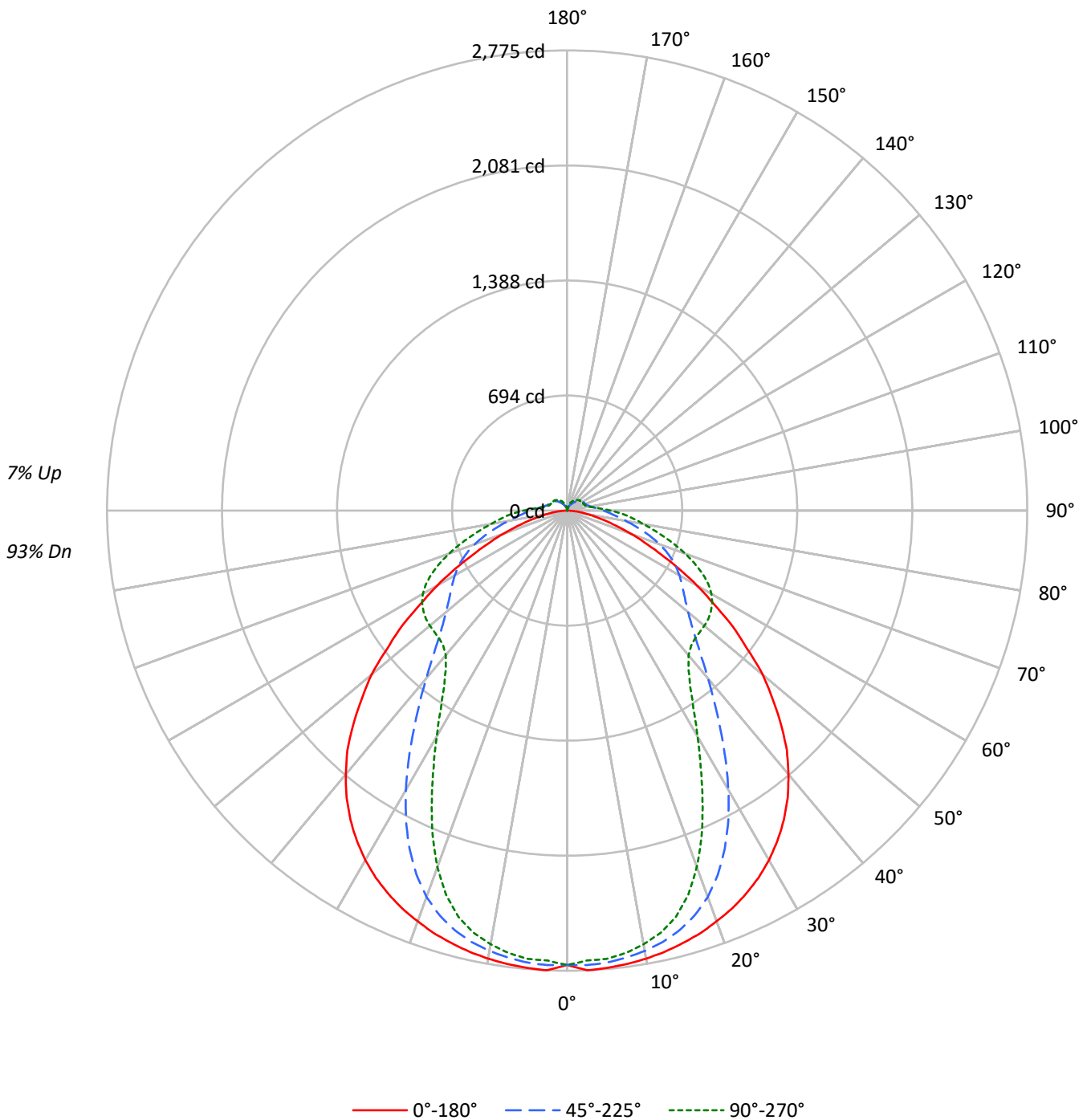
Lumens per Lamp: N/A
Luminaire Lumens: 6891.0 lumens
Efficiency: N/A
Efficacy: 143.6 lumens/watt
Spacing Criteria (0/90/45): 1.31 / 0.96 / 1.11
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.12')
CIE Type: Direct

Input Watts (W): 48
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°	22143	22143	22143
5°	22398	21654	21315
10°	22391	21056	20438
15°	22398	20350	19272
20°	22408	19301	17308
25°	22417	17686	14657
30°	22310	15563	12055
35°	21992	13241	10103
40°	21348	11214	9132
45°	20218	9746	9064
50°	18678	8909	9382
55°	16446	8563	9710
60°	13876	8441	9844
65°	11161	8254	9537
70°	8965	7827	8796
75°	6758	7085	7805
80°	4989	6361	6943
85°	3334	6003	6386



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	259.2	3.8
10°-20°	732.7	10.6
20°-30°	1024.3	14.9
30°-40°	1062.5	15.4
40°-50°	981.5	14.2
50°-60°	876.3	12.7
60°-70°	710.2	10.3
70°-80°	472.4	6.9
80°-90°	270.5	3.9
90°-100°	149.7	2.2
100°-110°	101.3	1.5
110°-120°	84.4	1.2
120°-130°	68.6	1.0
130°-140°	49.5	0.7
140°-150°	29.8	0.4
150°-160°	14.3	0.2
160°-170°	3.7	0.1
170°-180°	0.0	0.0
0°-30°	2016.3	29.3
0°-40°	3078.7	44.7
0°-60°	4936.6	71.6
0°-90°	6389.7	92.7
90°-120°	335.4	4.9
90°-150°	483.3	7.0
90°-180°	501.0	7.3
0°-180°	6891.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2740	2740	2740	2740	2740	
5°	2769	2722	2737	2718	2714	263
15°	2700	2642	2620	2560	2535	763
25°	2551	2438	2250	2014	1932	1175
35°	2278	2028	1612	1354	1293	1421
45°	1824	1446	1098	1059	1091	1403
55°	1219	922	857	997	1059	1084
65°	623	557	698	855	900	630
75°	242	302	470	576	600	265
85°	49	140	278	355	364	56
90°	2	99	219	264	262	4
95°	2	83	174	186	180	2
105°	1	73	125	122	116	1
115°	1	66	111	110	106	1
125°	1	56	98	102	100	1
135°	2	42	77	90	90	2
145°	2	26	54	70	75	2
155°	2	17	33	44	54	1
165°	2	10	17	21	29	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°	2740.1	2740.1	2740.1	2740.1	2740.1
2.5°	2774.7	2729.4	2743.7	2731.8	2716.3
5°	2768.7	2722.3	2736.6	2717.5	2713.9
7.5°	2758.0	2711.6	2719.9	2697.3	2691.3
10°	2743.7	2694.9	2696.1	2663.9	2655.6
12.5°	2724.7	2671.1	2663.9	2619.9	2608.0
15°	2699.6	2642.5	2619.9	2560.3	2535.3
17.5°	2672.3	2605.6	2559.1	2467.4	2428.1
20°	2635.3	2560.3	2479.3	2340.0	2287.6
22.5°	2598.4	2505.5	2375.7	2190.0	2119.7
25°	2550.8	2437.7	2249.5	2013.7	1931.6
27.5°	2497.2	2357.9	2104.2	1832.7	1744.6
30°	2434.1	2261.4	1944.7	1655.3	1571.9
32.5°	2360.3	2153.1	1776.7	1495.7	1418.3
35°	2278.1	2028.0	1612.4	1354.0	1293.3
37.5°	2184.0	1891.1	1460.0	1239.7	1200.4
40°	2076.8	1742.2	1319.5	1151.5	1138.4
42.5°	1961.3	1596.9	1199.2	1094.4	1106.3
45°	1824.4	1445.7	1098.0	1058.7	1090.8
47.5°	1680.3	1298.0	1015.8	1038.4	1084.9
50°	1541.0	1161.1	951.5	1025.3	1080.1
52.5°	1368.3	1038.4	900.3	1013.4	1073.0
55°	1219.4	921.7	857.4	996.7	1058.7
57.5°	1047.9	816.9	819.3	975.3	1037.2
60°	905.0	721.7	782.4	945.5	1005.1
62.5°	759.8	635.9	741.9	906.2	959.8
65°	622.8	557.3	697.8	855.0	900.3
67.5°	508.5	485.9	647.8	793.1	831.2
70°	412.0	420.4	593.0	724.0	756.2
72.5°	316.8	359.6	533.5	650.2	677.6
75°	241.7	302.5	470.4	576.4	600.2
77.5°	178.6	252.5	413.2	509.7	529.9
80°	126.2	208.4	359.6	451.3	466.8
82.5°	84.6	171.5	315.6	398.9	413.2
85°	48.8	140.5	277.5	354.9	364.4
87.5°	20.2	116.7	246.5	309.6	314.4
90°	2.4	98.8	219.1	264.4	262.0
92.5°	2.4	89.3	195.3	221.5	215.5
95°	2.4	83.4	173.9	185.8	179.8
97.5°	2.4	79.8	154.8	159.6	153.6
100°	1.2	77.4	141.7	141.7	135.8
102.5°	1.2	75.0	132.2	128.6	123.8
105°	1.2	72.6	125.0	121.5	115.5
107.5°	1.2	71.5	120.3	116.7	110.7
110°	1.2	69.1	116.7	113.1	108.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	1.2	67.9	114.3	111.9	106.0
115°	1.2	65.5	110.7	109.6	106.0
117.5°	1.2	63.1	108.4	108.4	104.8
120°	1.2	60.7	104.8	107.2	103.6
122.5°	1.2	58.4	101.2	104.8	101.2
125°	1.2	56.0	97.6	102.4	100.0
127.5°	2.4	52.4	92.9	100.0	97.6
130°	1.2	48.8	88.1	97.6	96.5
132.5°	2.4	45.3	83.4	94.1	94.1
135°	2.4	41.7	77.4	90.5	90.5
137.5°	2.4	36.9	71.5	85.7	86.9
140°	2.4	33.3	65.5	81.0	83.4
142.5°	2.4	29.8	59.5	76.2	79.8
145°	2.4	26.2	53.6	70.3	75.0
147.5°	2.4	23.8	47.6	63.1	70.3
150°	2.4	20.2	42.9	57.2	64.3
152.5°	2.4	17.9	38.1	51.2	59.5
155°	2.4	16.7	33.3	44.1	53.6
157.5°	2.4	14.3	28.6	38.1	47.6
160°	2.4	11.9	23.8	33.3	40.5
162.5°	2.4	10.7	20.2	27.4	35.7
165°	2.4	9.5	16.7	21.4	28.6
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)