

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: P284709

Luminaire Tested: **4SNLED-LD5-52HL-SLW-UNV-L940-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P284709
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P#)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 4SNLED-LD5-52HL-SLW-UNV-L940-CD1-U
Description: 4FT LINEAR SNLED LED FIXTURE
SQUARE FROSTED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4472.0 lumens
Efficiency: N/A
Efficacy: 104.0 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

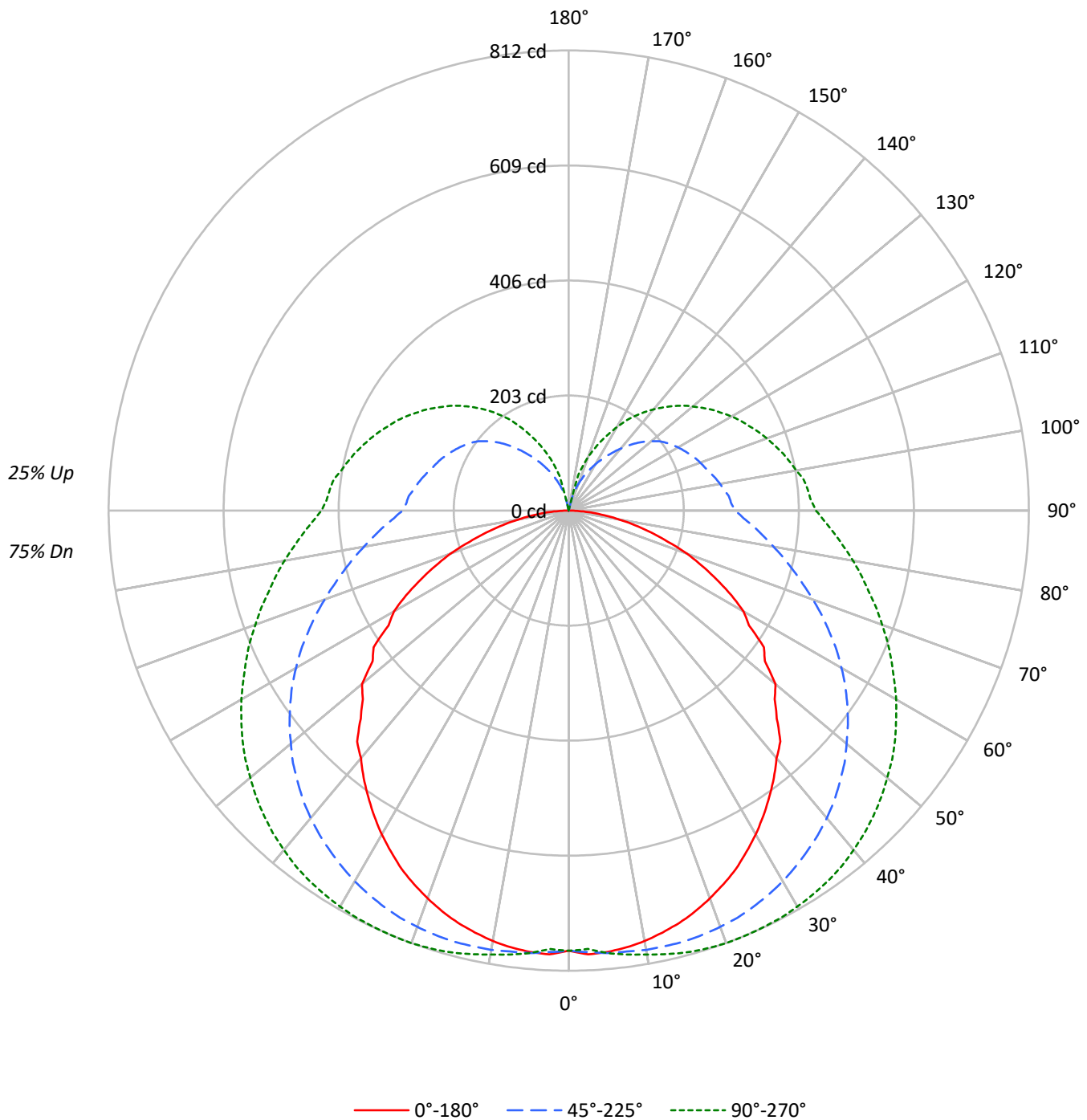
Input Watts (W): 43
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P284709

CATALOG NUMBER: 4SNLED-LD5-52HL-SLW-UNV-L940-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P284709

CATALOG NUMBER: 4SNLED-LD5-52HL-SLW-UNV-L940-CD1-U

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					0
RW	70	50	30	10	70	50	30	10	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	75		
1	100	94	89	84	95	89	84	80	80	76	73	72	69	66	64	62	60	56		
2	90	80	72	66	85	76	69	63	68	63	58	61	57	53	55	51	48	44		
3	81	69	60	53	76	66	58	51	59	53	47	53	48	43	47	43	39	36		
4	74	61	51	44	69	58	49	43	52	45	39	47	41	36	42	37	33	30		
5	67	54	44	37	63	51	43	36	46	39	33	42	35	31	37	32	28	25		
6	62	48	39	32	58	46	37	31	41	34	29	37	31	27	34	28	24	22		
7	57	43	34	28	54	41	33	27	37	30	25	34	28	23	30	25	21	19		
8	53	39	31	25	50	37	29	24	34	27	22	31	25	21	28	23	19	17		
9	49	36	27	22	47	34	26	21	31	24	20	28	23	18	26	21	17	15		
10	46	33	25	20	44	31	24	19	29	22	18	26	21	16	24	19	15	13		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6277	6277	6277
5°	6325	6202	6156
10°	6294	6148	6122
15°	6251	6115	6134
20°	6192	6086	6147
25°	6133	6064	6156
30°	6049	6045	6189
35°	5955	6024	6231
40°	5864	6020	6272
45°	5754	6006	6322
50°	5771	5993	6372
55°	5669	5993	6448
60°	5461	5997	6535
65°	5157	6004	6657
70°	4826	6049	6844
75°	4233	6189	7121
80°	3578	6487	7579
85°	2651	7091	8249



TEST NUMBER: P284709

CATALOG NUMBER: 4SNLED-LD5-52HL-SLW-UNV-L940-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	1.7
10°-20°	221.2	4.9
20°-30°	351.6	7.9
30°-40°	451.3	10.1
40°-50°	509.6	11.4
50°-60°	520.0	11.6
60°-70°	481.7	10.8
70°-80°	407.8	9.1
80°-90°	325.5	7.3
90°-100°	276.4	6.2
100°-110°	246.3	5.5
110°-120°	209.8	4.7
120°-130°	166.6	3.7
130°-140°	118.2	2.6
140°-150°	70.6	1.6
150°-160°	32.9	0.7
160°-170°	7.8	0.2
170°-180°	0.0	0.0
0°-30°	647.5	14.5
0°-40°	1098.7	24.6
0°-60°	2128.3	47.6
0°-90°	3343.4	74.8
90°-120°	732.5	16.4
90°-150°	1087.9	24.3
90°-180°	1129.0	25.2
0°-180°	4472.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	777	777	777	777	777	
5°	782	776	784	784	784	74
15°	753	760	787	802	807	213
25°	698	721	771	798	811	321
35°	617	662	734	779	798	386
45°	519	590	677	736	761	403
55°	420	491	600	674	703	369
65°	288	384	508	595	628	286
75°	151	268	411	512	548	161
85°	39	172	328	434	471	42
90°	2	141	293	399	436	3
95°	0	132	284	388	423	0
105°	0	122	259	356	391	0
115°	0	113	235	320	352	0
125°	0	98	209	283	310	0
135°	0	73	168	238	261	0
145°	0	47	118	179	204	0
155°	1	30	73	109	136	1
165°	1	16	33	45	64	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P284709

CATALOG NUMBER: 4SNLED-LD5-52HL-SLW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	776.7	776.7	776.7	776.7	776.7
2.5°	783.8	775.6	779.8	778.7	774.4
5°	781.8	775.6	783.8	783.8	783.8
7.5°	777.6	773.3	784.9	789.2	790.3
10°	771.3	771.3	787.2	793.4	795.4
12.5°	762.8	765.9	787.2	796.6	801.7
15°	753.4	759.7	787.2	801.7	807.0
17.5°	741.8	752.3	784.9	802.8	810.2
20°	728.2	744.1	781.8	802.8	812.4
22.5°	713.5	733.6	777.6	800.8	812.4
25°	697.9	720.8	771.3	798.5	811.3
27.5°	678.9	708.4	763.9	795.4	810.2
30°	659.9	693.6	755.4	791.2	807.0
32.5°	638.9	677.7	744.9	784.9	802.8
35°	616.8	662.1	733.6	778.7	797.7
37.5°	594.6	643.1	722.0	770.2	791.2
40°	570.5	624.1	708.4	759.7	781.8
42.5°	552.7	604.3	693.6	749.2	772.4
45°	519.2	589.5	676.6	735.6	760.8
47.5°	492.8	561.2	659.9	722.0	748.1
50°	476.1	537.9	640.0	706.1	733.6
52.5°	436.1	522.3	621.0	690.5	719.7
55°	420.3	490.9	600.0	673.5	703.0
57.5°	377.1	468.7	579.1	654.8	685.1
60°	356.2	438.1	555.8	635.8	667.2
62.5°	323.6	412.0	532.8	614.8	647.4
65°	287.8	383.7	507.6	594.6	628.4
67.5°	254.4	355.3	483.5	573.7	609.4
70°	221.8	325.8	458.3	552.7	588.4
72.5°	183.8	296.3	433.9	532.8	568.6
75°	151.4	268.0	410.9	511.8	547.6
77.5°	119.7	240.8	388.8	492.8	528.6
80°	90.5	214.4	366.7	473.0	509.6
82.5°	63.0	192.3	346.8	454.0	489.7
85°	38.8	172.4	327.8	433.9	470.7
87.5°	17.9	154.5	308.8	415.1	452.9
90°	2.0	140.9	293.2	399.3	436.1
92.5°	1.1	136.7	287.0	391.9	427.6
95°	0.0	132.4	283.9	387.6	423.4
97.5°	0.0	128.2	276.5	381.4	418.3
100°	0.0	126.2	271.1	372.0	407.8
102.5°	0.0	123.1	264.9	363.5	399.3
105°	0.0	121.9	258.6	356.2	391.0
107.5°	0.0	119.7	252.1	346.8	381.4
110°	0.0	117.7	247.0	338.3	372.0



TEST NUMBER: P284709

CATALOG NUMBER: 4SNLED-LD5-52HL-SLW-UNV-L940-CD1-U

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	115.7	241.6	330.1	362.4
115°	0.0	113.4	235.4	320.4	351.9
117.5°	0.0	110.3	229.1	311.1	342.6
120°	0.0	106.1	222.9	302.6	332.1
122.5°	0.0	101.8	216.4	292.1	320.4
125°	0.0	97.8	209.0	282.7	309.9
127.5°	0.0	91.3	200.8	272.2	297.5
130°	0.0	85.1	190.3	261.7	285.8
132.5°	1.1	78.8	179.8	250.1	274.2
135°	0.0	72.6	168.2	238.5	260.6
137.5°	0.0	67.2	155.4	226.0	247.0
140°	0.0	61.0	142.9	211.3	233.4
142.5°	0.0	53.6	130.4	195.4	218.6
145°	0.0	47.4	117.7	178.6	203.9
147.5°	1.1	42.0	106.1	160.8	188.0
150°	1.1	37.7	94.7	142.9	170.1
152.5°	1.1	33.7	83.1	126.2	152.3
155°	1.1	29.5	72.6	109.2	135.5
157.5°	1.1	25.2	61.0	92.4	117.7
160°	1.1	22.1	50.5	77.7	101.0
162.5°	1.1	19.0	41.1	61.0	83.1
165°	1.1	15.9	32.6	45.1	64.1
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)