

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: P855656

Luminaire Tested: **12SFS-L3C4-UNV-LOW-3500K**

Issue Date: 7/17/2024

**Test Information**

Test Method: LM-79-08  
Report Number: P855656  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA ( BL231218002-9)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/17/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 12SFS-L3C4-UNV-LOW-3500K  
Description: 1x2 Surround Frame Selectable - Architectural Slim LED Frame with,  
LOW Lumen and 3500K CCT Settings  
Light Source: -  
Ballast/Driver: -

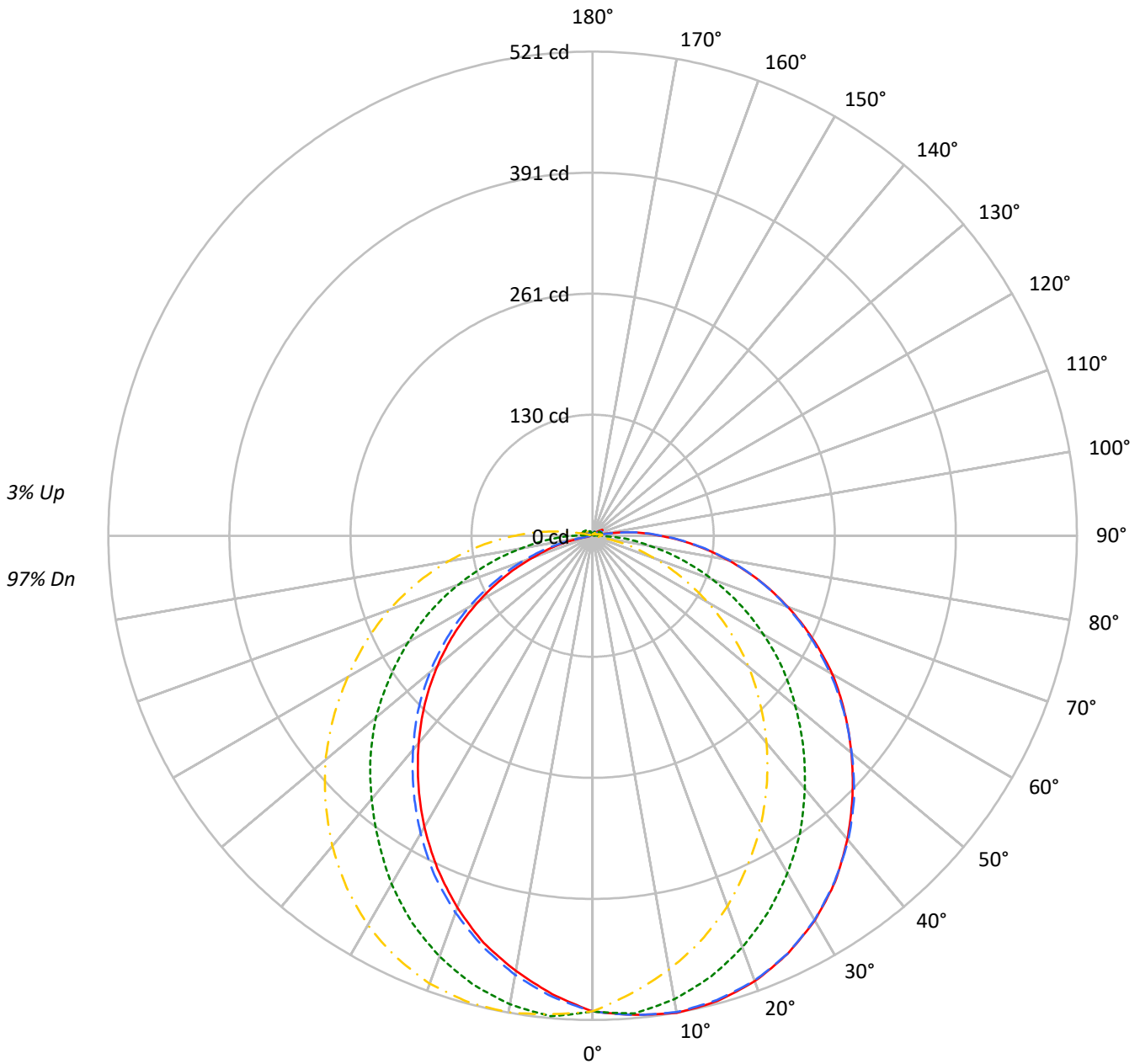
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1539.0 lumens  
Efficiency: N/A  
Efficacy: 128.2 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.92' x L: 1.9' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 12  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0																
RCR																																					
0	118	118	118	118	115	115	115	115	109	109	109	104	104	104	99	99	99	99	99	97																	
1	107	102	97	93	104	99	95	91	94	91	88	90	87	84	86	83	81	81	81	79																	
2	97	88	81	75	94	86	80	74	82	76	72	78	74	70	75	71	68	68	68	65																	
3	88	77	69	62	85	76	68	61	72	65	60	69	63	58	66	61	57	57	57	55																	
4	81	68	59	53	78	67	58	52	64	57	51	61	55	50	59	53	49	49	49	46																	
5	74	61	52	45	72	60	51	45	57	50	44	55	48	43	53	47	42	42	42	40																	
6	69	55	46	39	66	54	45	39	52	44	38	50	43	38	48	42	37	37	37	35																	
7	64	50	41	35	62	49	40	34	47	39	34	45	39	34	44	38	33	33	33	31																	
8	59	45	37	31	57	45	36	31	43	36	30	41	35	30	40	34	30	30	30	28																	
9	55	42	33	28	54	41	33	28	40	32	27	38	32	27	37	31	27	27	27	25																	
10	52	38	31	25	50	38	30	25	37	30	25	35	29	25	34	28	24	24	24	22																	

**AVERAGE LUMINANCE (cd/sqm):**

	0°	90°	180°	270°
0°	3151	3151	3151	3151
5°	3198	3189	3061	3207
10°	3259	3166	2972	3201
15°	3305	3131	2890	3184
20°	3343	3086	2788	3156
25°	3372	3036	2684	3122
30°	3399	2980	2573	3076
35°	3418	2926	2457	3017
40°	3427	2854	2339	2973
45°	3443	2789	2221	2943
50°	3481	2725	2087	2915
55°	3552	2684	1935	2860
60°	3669	2613	1750	2821
65°	3798	2548	1523	2808
70°	4020	2463	1226	2762
75°	4409	2353	909	2734
80°	5198	2234	167	2752
85°	7701	2473	254	3314



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	48.4	3.1
10°-20°	137.8	9.0
20°-30°	206.8	13.4
30°-40°	246.7	16.0
40°-50°	254.3	16.5
50°-60°	231.6	15.0
60°-70°	183.6	11.9
70°-80°	119.3	7.7
80°-90°	59.3	3.9
90°-100°	23.2	1.5
100°-110°	7.5	0.5
110°-120°	7.0	0.5
120°-130°	5.6	0.4
130°-140°	3.6	0.2
140°-150°	2.2	0.1
150°-160°	1.3	0.1
160°-170°	0.6	0.0
170°-180°	0.2	0.0
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0°-30°	393.0	25.5
0°-40°	639.7	41.6
0°-60°	1125.6	73.1
0°-90°	1487.7	96.7
90°-120°	37.7	2.5
90°-150°	49.1	3.2
90°-180°	51.0	3.3
0°-180°	1539.0	100.0

**CANDELA DISTRIBUTION:**

	0°	90°	180°	270°	360°	Flux
0°	512	512	512	512	512	
5°	517	516	495	519	517	49
15°	518	491	453	500	518	146
25°	496	447	395	460	496	229
35°	455	389	327	401	455	284
45°	395	320	255	338	395	305
55°	331	250	180	266	331	296
65°	261	175	104	193	261	258
75°	185	99	38	115	185	196
85°	109	35	4	47	109	97
90°	72	2	3	20	72	41
95°	43	1	11	6	43	26
105°	2	10	12	10	2	3
115°	8	9	3	11	8	8
125°	10	8	1	9	10	9
135°	3	6	1	9	3	3
145°	1	5	1	6	1	1
155°	1	4	1	5	1	1
165°	1	2	2	2	1	0
175°	1	2	1	2	1	0
180°	2	2	2	2	2	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°	112.5°	135°	157.5°	180°	202.5°	225°
0°	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8	511.8
5°	517.4	516.1	517.6	518.6	515.9	514.5	493.6	494.5	495.2	495.1	498.0
10°	521.3	519.0	520.4	521.0	506.3	505.6	474.0	475.9	475.4	477.1	479.8
15°	518.4	515.9	517.1	517.3	491.2	491.1	450.9	452.7	453.4	455.0	457.3
20°	510.1	508.2	509.3	508.4	471.0	471.7	424.2	425.2	425.5	428.1	431.5
25°	496.3	494.8	496.0	494.5	446.9	447.9	392.9	395.0	395.0	399.0	402.8
30°	478.0	476.2	477.3	476.3	419.1	421.2	361.2	361.6	361.9	366.4	369.9
35°	454.7	454.0	453.9	453.0	389.2	390.6	326.6	326.6	326.8	332.0	335.8
40°	426.3	427.4	427.8	425.4	355.0	357.5	291.1	291.4	291.0	296.2	300.4
45°	395.4	397.1	397.8	394.5	320.3	322.9	254.6	256.0	255.1	259.0	265.3
50°	363.4	364.4	363.9	362.1	284.5	288.4	218.9	219.0	217.9	223.4	228.3
55°	330.9	330.8	329.9	327.2	250.0	251.5	181.0	180.7	180.2	186.1	190.7
60°	297.9	295.1	294.9	290.6	212.2	214.8	142.6	143.8	142.1	147.7	153.7
65°	260.7	259.3	258.6	257.4	174.9	178.2	105.8	105.4	104.5	110.8	115.3
70°	223.3	221.9	222.4	220.2	136.8	139.6	70.1	68.9	68.1	74.6	80.0
75°	185.3	184.9	185.0	181.9	98.9	101.9	39.8	39.9	38.2	43.5	46.5
80°	146.6	147.5	148.1	143.1	63.0	67.6	4.2	4.8	4.7	6.0	8.7
85°	109.0	110.0	110.4	106.6	35.0	38.4	2.5	3.5	3.6	3.5	3.0
90°	72.5	73.9	74.2	70.4	2.5	3.2	8.3	3.5	3.3	3.3	6.0
95°	42.6	44.4	43.5	40.9	0.9	3.6	10.4	10.8	11.4	10.7	11.2
100°	6.2	3.3	3.0	2.9	7.6	7.8	8.7	10.5	12.7	11.8	11.0
105°	2.0	2.3	2.2	3.9	10.0	8.7	6.2	9.4	11.5	11.0	8.3
110°	1.7	2.0	7.5	7.9	9.4	7.7	4.2	6.5	7.4	7.3	6.2
115°	8.4	9.7	10.3	8.1	8.7	7.0	3.9	3.2	2.9	3.6	6.0
120°	12.4	10.0	8.1	7.1	8.1	6.7	3.7	2.9	1.1	3.3	5.6
125°	9.5	7.7	5.1	6.4	7.7	6.1	3.3	2.9	1.1	3.2	5.0
130°	6.9	5.9	3.7	6.1	6.9	4.7	3.8	2.6	1.2	3.1	4.2
135°	3.3	3.9	3.8	6.0	6.0	4.7	3.9	2.5	1.2	2.8	3.8
140°	1.2	3.8	3.9	5.4	5.6	4.7	3.7	2.3	1.1	2.5	3.4
145°	1.2	3.5	3.3	4.8	4.9	3.3	2.9	2.1	1.3	2.4	3.2
150°	1.2	3.2	4.5	4.0	4.9	2.7	2.3	1.7	1.3	2.1	2.5
155°	1.2	2.9	4.8	4.2	4.4	1.6	1.6	1.5	1.3	1.8	2.3
160°	1.4	2.6	4.2	4.5	2.5	1.8	1.4	1.3	1.3	1.5	1.9
165°	1.4	2.3	3.3	3.8	2.1	1.5	1.5	1.5	1.6	1.6	1.6
170°	1.3	1.9	2.5	2.9	2.1	1.5	1.5	1.5	1.4	1.5	1.4
175°	1.2	1.6	1.8	1.6	1.6	1.6	1.5	1.3	1.3	1.3	1.4
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5



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**CANDELA DISTRIBUTION (continued):**

	247.5°	270°	292.5°	315°	337.5°	360°
0°	511.8	511.8	511.8	511.8	511.8	511.8
5°	498.8	518.9	517.1	516.8	517.3	517.4
10°	481.1	511.9	510.8	520.8	521.3	521.3
15°	459.6	499.5	498.7	519.2	518.7	518.4
20°	433.0	481.6	481.6	512.7	511.6	510.1
25°	402.8	459.5	459.7	500.4	498.5	496.3
30°	371.0	432.6	435.0	483.8	481.3	478.0
35°	336.7	401.4	405.7	461.7	459.8	454.7
40°	301.6	369.9	373.4	435.6	433.4	426.3
45°	265.2	338.0	339.1	406.3	403.2	395.4
50°	229.5	304.3	304.7	375.0	371.4	363.4
55°	191.6	266.4	267.8	340.2	336.8	330.9
60°	153.2	229.1	231.6	304.0	301.2	297.9
65°	115.3	192.7	193.2	268.9	265.2	260.7
70°	79.4	153.4	156.5	232.5	228.5	223.3
75°	46.6	114.9	119.1	195.3	191.4	185.3
80°	11.8	77.6	82.1	157.2	153.2	146.6
85°	4.2	46.9	49.7	120.4	115.3	109.0
90°	4.7	20.0	21.0	83.3	78.3	72.5
95°	9.0	6.1	4.2	50.6	47.0	42.6
100°	9.9	2.6	5.8	17.2	14.0	6.2
105°	9.6	10.2	9.2	2.6	2.2	2.0
110°	9.1	10.9	8.5	2.9	1.7	1.7
115°	8.7	10.6	8.8	9.1	8.9	8.4
120°	8.3	9.6	8.4	9.6	10.7	12.4
125°	7.3	9.4	7.9	8.9	9.1	9.5
130°	5.7	9.1	7.5	6.3	7.5	6.9
135°	5.1	8.8	6.5	6.3	3.9	3.3
140°	4.7	6.9	5.6	6.0	3.0	1.2
145°	3.4	6.1	4.8	4.9	2.9	1.2
150°	2.9	5.2	5.6	4.3	2.7	1.2
155°	2.5	4.9	4.7	4.4	2.5	1.2
160°	2.3	2.5	4.3	4.0	2.4	1.4
165°	1.6	2.1	3.6	3.2	2.2	1.4
170°	1.4	2.3	2.9	2.7	2.0	1.3
175°	1.6	1.8	2.4	2.3	1.7	1.2
180°	1.5	1.5	1.5	1.5	1.5	1.5



Report Generated By 670246072 / DESKTOP-50001EG







— 0°-180°    - - 45°-225°    - - - - 90°-270°    - · - · 135°-315°









(END OF REPORT)