

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: P229537

Luminaire Tested: **14RLN-LD5-23-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229537  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36064)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-23-UNV-L940-CD1-SVPD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR  
Light Source: (112)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2042.0 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.14 / 1.26  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

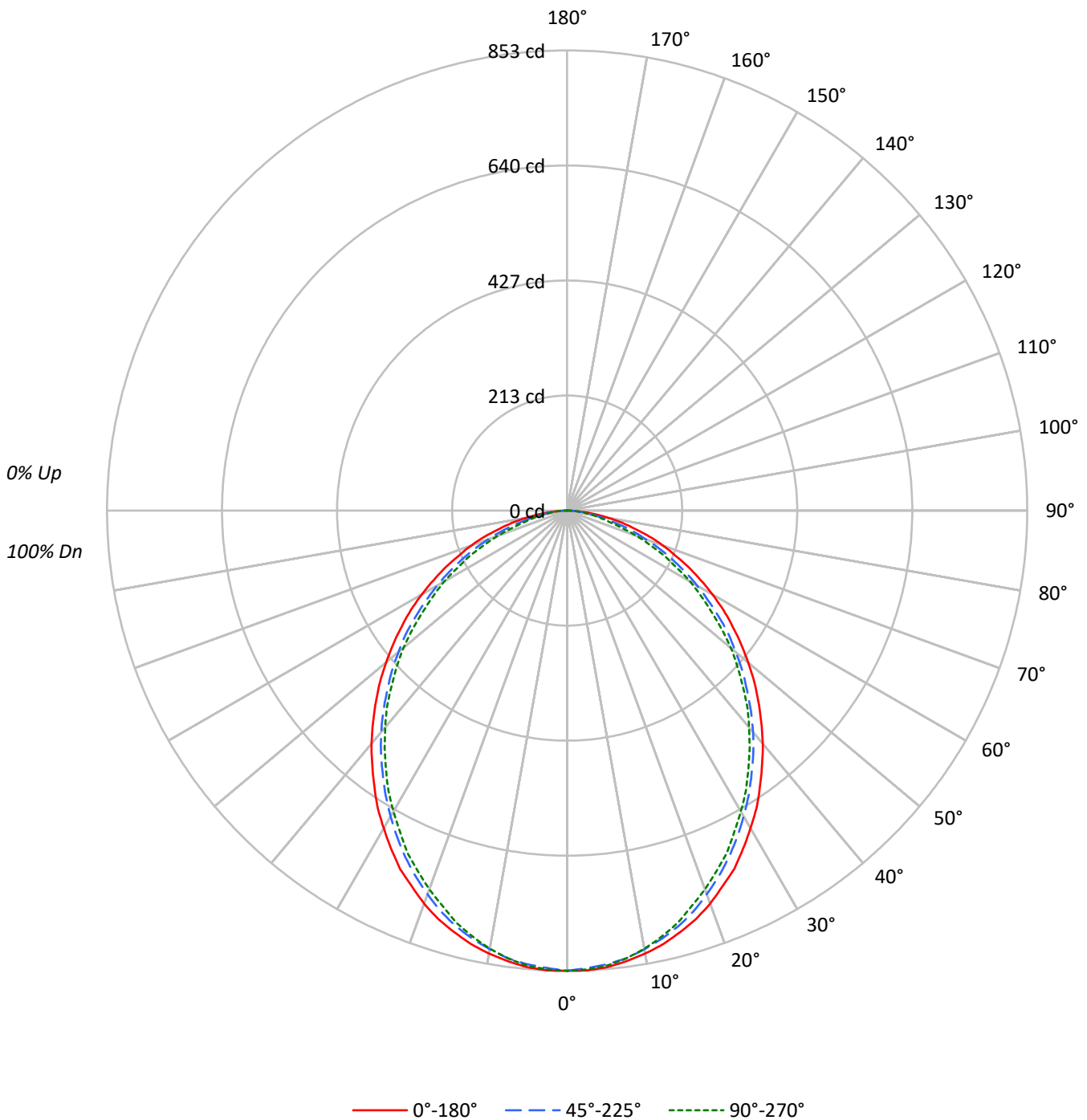
Input Watts (W): 21.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

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

	0°	45°	90°
0°	2875	2875	2875
5°	2874	2856	2865
10°	2853	2825	2822
15°	2822	2782	2760
20°	2780	2714	2679
25°	2725	2637	2604
30°	2646	2546	2505
35°	2565	2452	2408
40°	2482	2358	2308
45°	2390	2247	2193
50°	2296	2139	2079
55°	2199	2018	1915
60°	2095	1875	1774
65°	1979	1718	1591
70°	1862	1522	1349
75°	1678	1299	1047
80°	1490	1028	926
85°	1229	820	854



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.2	3.9
10°-20°	225.0	11.0
20°-30°	328.0	16.1
30°-40°	376.0	18.4
40°-50°	367.6	18.0
50°-60°	310.1	15.2
60°-70°	216.8	10.6
70°-80°	110.5	5.4
80°-90°	27.9	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	633.2	31.0
0°-40°	1009.2	49.4
0°-60°	1686.8	82.6
0°-90°	2042.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2042.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	853	853	853	853	853	
5°	850	848	844	847	847	81
15°	809	806	798	795	791	228
25°	733	724	709	702	700	337
35°	624	615	596	590	586	390
45°	502	488	472	465	460	387
55°	374	360	344	334	326	335
65°	248	233	216	203	200	246
75°	129	118	100	87	80	139
85°	32	24	21	22	22	37
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	853.1	853.1	853.1	853.1	853.1
2.5°	853.1	851.3	848.7	852.2	851.3
5°	849.6	847.8	844.3	846.9	846.9
7.5°	842.5	840.7	837.2	839.0	837.2
10°	833.7	831.9	825.7	826.6	824.8
12.5°	823.1	819.5	812.5	811.6	809.0
15°	809.0	806.3	797.5	794.8	791.3
17.5°	793.9	788.6	778.9	773.6	768.3
20°	775.4	768.3	756.8	750.7	747.1
22.5°	753.3	748.0	733.9	726.8	723.3
25°	733.0	724.2	709.2	702.1	700.3
27.5°	706.5	699.4	682.7	676.5	671.2
30°	680.0	672.1	654.4	648.2	643.8
32.5°	653.5	644.7	626.1	619.1	616.4
35°	623.5	614.7	596.1	589.9	585.5
37.5°	593.5	582.9	567.0	559.9	555.5
40°	564.3	552.0	536.1	528.1	524.6
42.5°	532.5	519.3	504.3	496.3	494.6
45°	501.6	488.4	471.6	465.4	460.1
47.5°	470.7	455.7	440.7	431.9	428.3
50°	438.0	423.9	408.0	399.2	396.5
52.5°	406.2	392.1	377.1	367.4	361.2
55°	374.4	360.3	343.5	333.8	325.9
57.5°	343.5	326.8	310.0	298.5	294.1
60°	310.9	295.9	278.2	266.7	263.2
62.5°	279.1	265.8	247.3	234.0	227.8
65°	248.2	233.1	215.5	203.1	199.6
67.5°	216.4	203.1	185.5	171.3	165.1
70°	189.0	172.2	154.5	142.2	136.9
72.5°	159.8	144.8	128.1	113.9	106.0
75°	128.9	118.3	99.8	87.4	80.4
77.5°	104.2	91.8	75.1	65.4	63.6
80°	76.8	67.1	53.0	48.6	47.7
82.5°	53.9	44.2	36.2	34.4	33.6
85°	31.8	23.8	21.2	22.1	22.1
87.5°	13.2	9.7	9.7	10.6	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)