

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: P295534

Luminaire Tested: **14RLN-LD5-23-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295534  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1901-085-1)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-23-UNV-L83050-W2A1-U-3500K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2367.0 lumens  
Efficiency: N/A  
Efficacy: 114.6 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.01 / 1.18  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

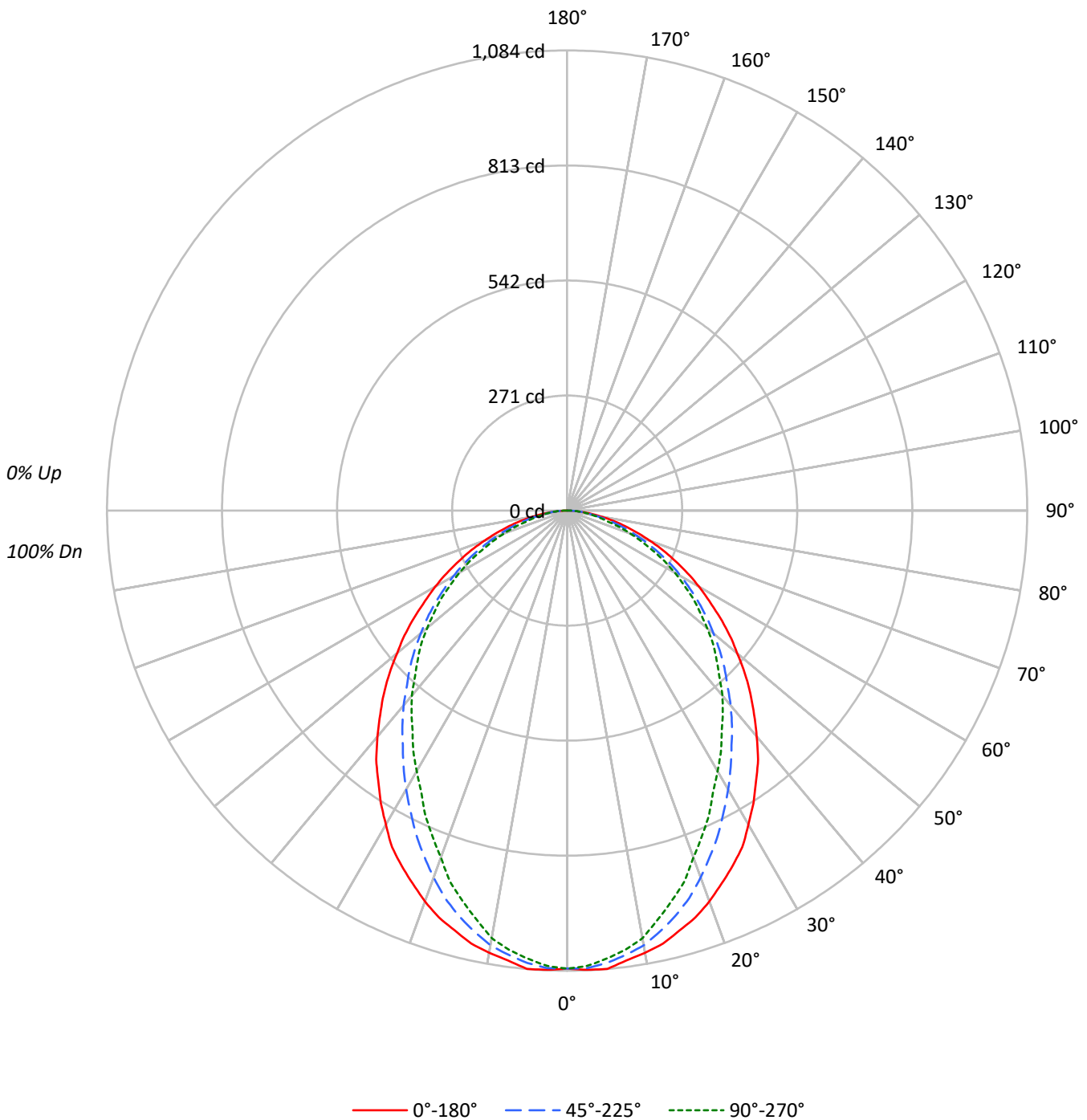
Input Watts (W): 20.646  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85																												
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72																												
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62																												
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54																												
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47																												
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43	41																												
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37																												
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33																												
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30																												
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28																												

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

	0°	45°	90°
0°	2903	2903	2903
5°	2928	2890	2863
10°	2890	2841	2795
15°	2852	2752	2652
20°	2806	2634	2491
25°	2740	2499	2348
30°	2653	2358	2203
35°	2549	2217	2086
40°	2441	2104	1998
45°	2325	1994	1895
50°	2189	1883	1800
55°	2064	1778	1703
60°	1932	1668	1576
65°	1789	1541	1414
70°	1629	1385	1251
75°	1466	1237	1019
80°	1255	1007	961
85°	1019	957	957



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.0	4.3
10°-20°	277.2	11.7
20°-30°	389.1	16.4
30°-40°	431.6	18.2
40°-50°	414.3	17.5
50°-60°	347.2	14.7
60°-70°	243.7	10.3
70°-80°	127.3	5.4
80°-90°	35.6	1.5
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°	767.3	32.4
0°-40°	1198.9	50.6
0°-60°	1960.4	82.8
0°-90°	2367.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2367.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1079	1079	1079	1079	1079	
5°	1084	1070	1070	1063	1060	102
15°	1024	1006	988	962	952	289
25°	923	890	842	801	791	425
35°	776	733	675	642	635	486
45°	611	564	524	504	498	471
55°	440	407	379	367	363	393
65°	281	262	242	227	222	279
75°	141	130	119	105	98	149
85°	33	31	31	31	31	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1078.8	1078.8	1078.8	1078.8	1078.8
2.5°	1082.8	1076.8	1078.8	1078.8	1073.8
5°	1083.8	1069.8	1069.8	1062.8	1059.8
7.5°	1068.8	1057.8	1055.8	1046.8	1043.8
10°	1057.8	1046.8	1039.8	1027.8	1022.8
12.5°	1044.8	1027.8	1014.8	994.8	986.8
15°	1023.8	1005.8	987.8	961.8	951.8
17.5°	1004.8	983.8	956.8	927.8	916.8
20°	979.8	954.8	919.8	879.8	869.8
22.5°	950.8	921.8	880.8	837.8	829.8
25°	922.8	889.8	841.8	800.8	790.8
27.5°	893.8	853.8	798.8	754.8	744.9
30°	853.8	812.8	758.8	715.9	708.9
32.5°	816.8	775.8	716.9	681.9	673.9
35°	775.8	732.9	674.9	641.9	634.9
37.5°	738.9	688.9	637.9	605.9	601.9
40°	694.9	649.9	598.9	574.9	568.9
42.5°	651.9	606.9	558.9	537.9	530.9
45°	610.9	563.9	523.9	503.9	497.9
47.5°	567.9	524.9	486.9	470.9	466.9
50°	522.9	484.9	449.9	434.9	429.9
52.5°	482.9	443.9	414.9	400.9	394.9
55°	439.9	406.9	378.9	366.9	362.9
57.5°	396.9	369.9	342.9	331.9	325.9
60°	358.9	331.9	309.9	296.9	292.9
62.5°	319.9	296.9	275.9	263.9	258.9
65°	280.9	261.9	242.0	227.0	222.0
67.5°	245.0	224.0	208.0	195.0	190.0
70°	207.0	192.0	176.0	164.0	159.0
72.5°	172.0	161.0	147.0	134.0	129.0
75°	141.0	130.0	119.0	105.0	98.0
77.5°	110.0	103.0	92.0	80.0	80.0
80°	81.0	77.0	65.0	63.0	62.0
82.5°	56.0	54.0	47.0	46.0	46.0
85°	33.0	31.0	31.0	31.0	31.0
87.5°	14.0	15.0	16.0	16.0	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)