

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: P295578

Luminaire Tested: **14RLN-LD5-31-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295578  
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-LD5-31-UNV-L82765-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: 3047.0 lumens  
Efficiency: N/A  
Efficacy: 107.4 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

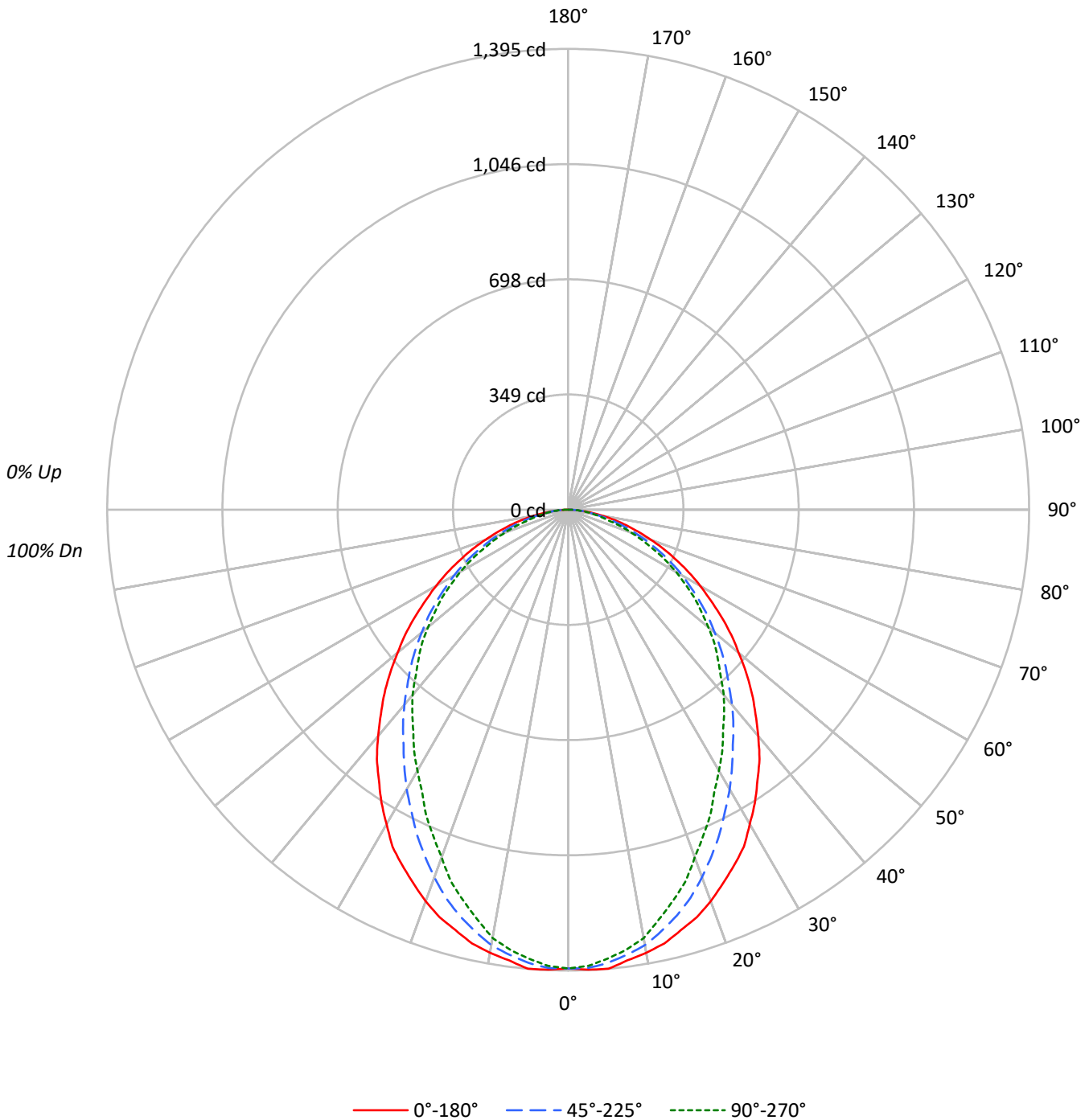
Input Watts (W): 28.365  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47					47			
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43	41					41			
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33					33			
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30					30			
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28					28			

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

	0°	45°	90°
0°	3737	3737	3737
5°	3769	3720	3685
10°	3721	3657	3598
15°	3672	3543	3413
20°	3612	3391	3206
25°	3527	3218	3023
30°	3415	3035	2835
35°	3281	2854	2685
40°	3142	2708	2572
45°	2993	2567	2439
50°	2818	2425	2317
55°	2657	2289	2192
60°	2486	2147	2030
65°	2303	1983	1819
70°	2096	1782	1610
75°	1887	1593	1311
80°	1615	1297	1237
85°	1312	1232	1232



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.0	4.3
10°-20°	356.9	11.7
20°-30°	500.9	16.4
30°-40°	555.5	18.2
40°-50°	533.3	17.5
50°-60°	447.0	14.7
60°-70°	313.7	10.3
70°-80°	163.8	5.4
80°-90°	45.9	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°	987.8	32.4
0°-40°	1543.3	50.6
0°-60°	2523.6	82.8
0°-90°	3047.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3047.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1389	1389	1389	1389	1389	
5°	1395	1377	1377	1368	1364	132
15°	1318	1295	1272	1238	1225	372
25°	1188	1146	1084	1031	1018	547
35°	999	943	869	826	817	625
45°	786	726	674	649	641	606
55°	566	524	488	472	467	506
65°	362	337	312	292	286	359
75°	182	167	153	135	126	192
85°	42	40	40	40	40	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1388.7	1388.7	1388.7	1388.7	1388.7
2.5°	1393.8	1386.1	1388.7	1388.7	1382.3
5°	1395.1	1377.1	1377.1	1368.1	1364.2
7.5°	1375.8	1361.7	1359.1	1347.5	1343.7
10°	1361.7	1347.5	1338.5	1323.1	1316.6
12.5°	1344.9	1323.1	1306.3	1280.6	1270.3
15°	1317.9	1294.7	1271.6	1238.1	1225.2
17.5°	1293.5	1266.4	1231.7	1194.4	1180.2
20°	1261.3	1229.1	1184.1	1132.6	1119.7
22.5°	1224.0	1186.6	1133.9	1078.5	1068.2
25°	1187.9	1145.5	1083.7	1030.9	1018.0
27.5°	1150.6	1099.1	1028.3	971.7	958.8
30°	1099.1	1046.4	976.9	921.5	912.5
32.5°	1051.5	998.7	922.8	877.8	867.5
35°	998.7	943.4	868.7	826.3	817.3
37.5°	951.1	886.8	821.1	779.9	774.8
40°	894.5	836.6	770.9	740.0	732.3
42.5°	839.1	781.2	719.4	692.4	683.4
45°	786.4	725.9	674.4	648.7	640.9
47.5°	731.0	675.7	626.8	606.2	601.0
50°	673.1	624.2	579.2	559.9	553.4
52.5°	621.6	571.4	534.1	516.1	508.4
55°	566.3	523.8	487.8	472.3	467.2
57.5°	510.9	476.2	441.4	427.3	419.6
60°	462.0	427.3	399.0	382.2	377.1
62.5°	411.8	382.2	355.2	339.8	333.3
65°	361.7	337.2	311.5	292.2	285.7
67.5°	315.3	288.3	267.7	251.0	244.5
70°	266.4	247.1	226.5	211.1	204.6
72.5°	221.4	207.2	189.2	172.5	166.0
75°	181.5	167.3	153.2	135.1	126.1
77.5°	141.6	132.6	118.4	103.0	103.0
80°	104.2	99.1	83.7	81.1	79.8
82.5°	72.1	69.5	60.5	59.2	59.2
85°	42.5	39.9	39.9	39.9	39.9
87.5°	18.0	19.3	20.6	20.6	21.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)