

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: P295581

Luminaire Tested: **14RLN-LD5-31-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295581  
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-5000K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3213.0 lumens  
Efficiency: N/A  
Efficacy: 111.1 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

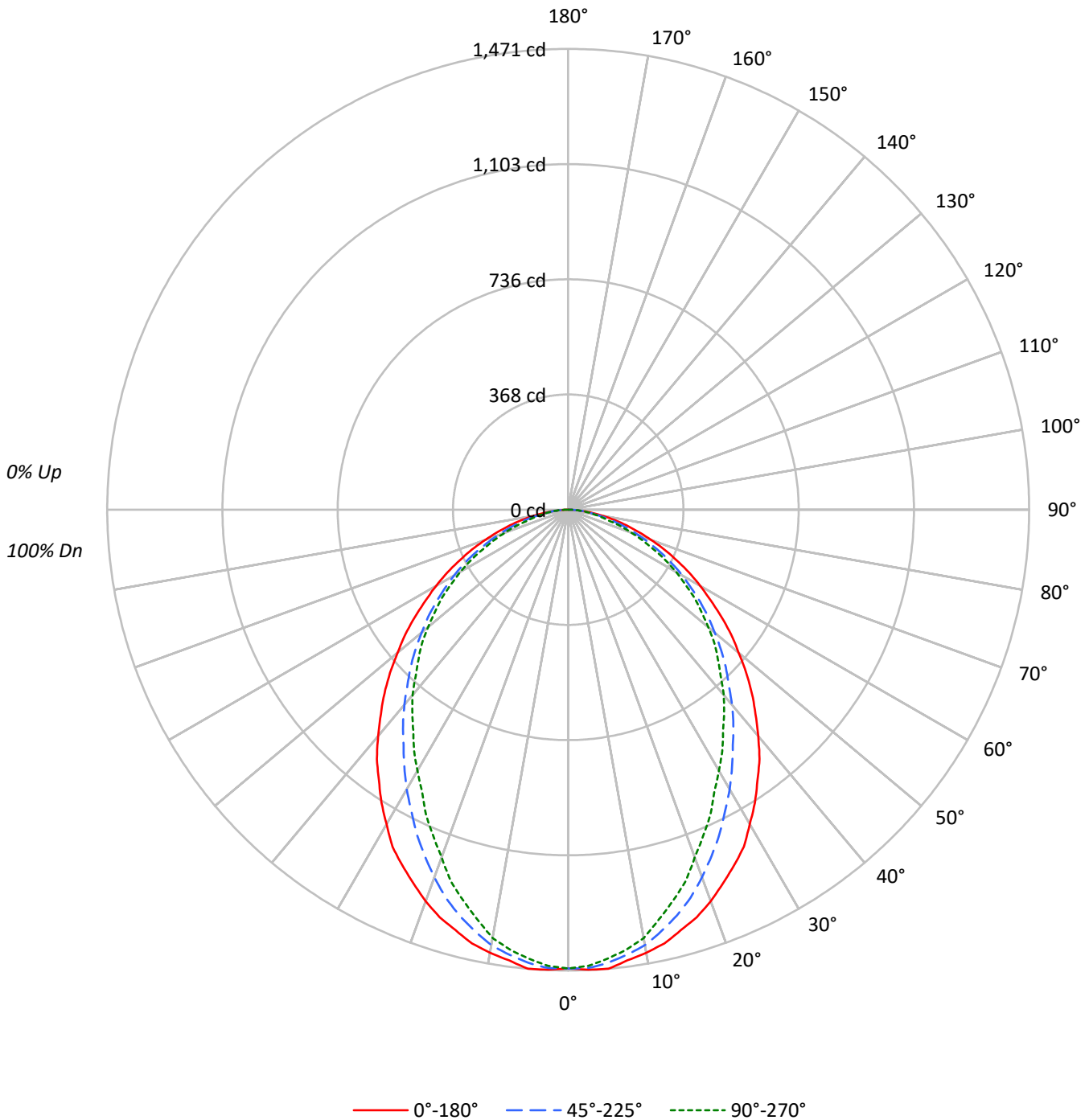
Input Watts (W): 28.923  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3941	3941	3941
5°	3974	3922	3886
10°	3924	3857	3794
15°	3872	3736	3599
20°	3809	3576	3381
25°	3719	3393	3187
30°	3601	3201	2990
35°	3460	3009	2831
40°	3313	2856	2713
45°	3156	2706	2572
50°	2972	2557	2443
55°	2801	2413	2311
60°	2622	2264	2140
65°	2429	2091	1918
70°	2210	1880	1698
75°	1990	1679	1383
80°	1703	1367	1303
85°	1383	1300	1300



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.1	4.3
10°-20°	376.3	11.7
20°-30°	528.2	16.4
30°-40°	585.8	18.2
40°-50°	562.4	17.5
50°-60°	471.3	14.7
60°-70°	330.8	10.3
70°-80°	172.8	5.4
80°-90°	48.4	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°	1041.6	32.4
0°-40°	1627.4	50.6
0°-60°	2661.1	82.8
0°-90°	3213.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3213.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1464	1464	1464	1464	1464	
5°	1471	1452	1452	1443	1439	139
15°	1390	1365	1341	1306	1292	392
25°	1253	1208	1143	1087	1074	576
35°	1053	995	916	871	862	659
45°	829	765	711	684	676	639
55°	597	552	514	498	493	534
65°	381	356	328	308	301	379
75°	191	176	162	142	133	203
85°	45	42	42	42	42	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1464.4	1464.4	1464.4	1464.4	1464.4
2.5°	1469.8	1461.6	1464.4	1464.4	1457.6
5°	1471.1	1452.1	1452.1	1442.6	1438.6
7.5°	1450.8	1435.9	1433.1	1420.9	1416.9
10°	1435.9	1420.9	1411.4	1395.1	1388.4
12.5°	1418.2	1395.1	1377.5	1350.4	1339.5
15°	1389.7	1365.3	1340.9	1305.6	1292.0
17.5°	1363.9	1335.4	1298.8	1259.4	1244.5
20°	1330.0	1296.1	1248.6	1194.3	1180.7
22.5°	1290.6	1251.3	1195.6	1137.3	1126.4
25°	1252.6	1207.9	1142.7	1087.1	1073.5
27.5°	1213.3	1159.0	1084.4	1024.6	1011.1
30°	1159.0	1103.4	1030.1	971.7	962.2
32.5°	1108.8	1053.1	973.1	925.6	914.7
35°	1053.1	994.8	916.1	871.3	861.8
37.5°	1002.9	935.1	865.9	822.4	817.0
40°	943.2	882.1	812.9	780.4	772.2
42.5°	884.9	823.8	758.6	730.1	720.6
45°	829.2	765.4	711.1	684.0	675.9
47.5°	770.9	712.5	660.9	639.2	633.8
50°	709.8	658.2	610.7	590.4	583.6
52.5°	655.5	602.6	563.2	544.2	536.1
55°	597.1	552.4	514.4	498.1	492.6
57.5°	538.8	502.1	465.5	450.6	442.4
60°	487.2	450.6	420.7	403.1	397.6
62.5°	434.3	403.1	374.6	358.3	351.5
65°	381.4	355.6	328.4	308.1	301.3
67.5°	332.5	304.0	282.3	264.6	257.9
70°	280.9	260.6	238.9	222.6	215.8
72.5°	233.4	218.5	199.5	181.9	175.1
75°	191.4	176.4	161.5	142.5	133.0
77.5°	149.3	139.8	124.9	108.6	108.6
80°	109.9	104.5	88.2	85.5	84.1
82.5°	76.0	73.3	63.8	62.4	62.4
85°	44.8	42.1	42.1	42.1	42.1
87.5°	19.0	20.4	21.7	21.7	23.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)