

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: P295576

Luminaire Tested: **14RLN-LD5-31-UNV-L82765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295576  
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-2700K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2863.0 lumens  
Efficiency: N/A  
Efficacy: 101.3 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

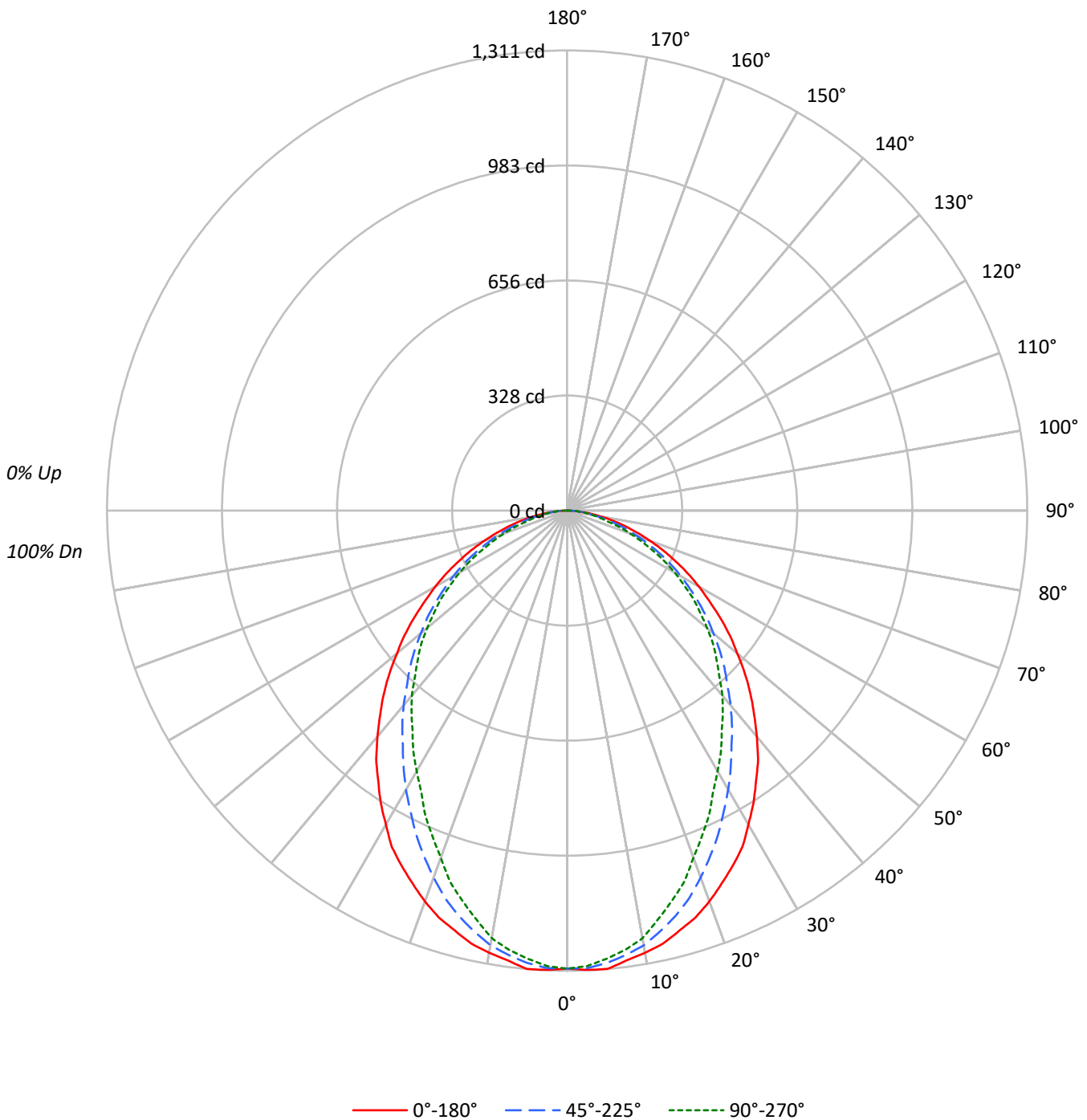
Input Watts (W): 28.272  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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				
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°	3511	3511	3511
5°	3541	3495	3463
10°	3496	3437	3380
15°	3450	3329	3207
20°	3394	3186	3013
25°	3314	3023	2840
30°	3209	2852	2664
35°	3083	2682	2523
40°	2953	2545	2417
45°	2812	2412	2292
50°	2648	2278	2177
55°	2496	2150	2060
60°	2336	2018	1907
65°	2164	1864	1710
70°	1969	1674	1513
75°	1773	1496	1232
80°	1519	1218	1162
85°	1232	1158	1158



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.2	4.3
10°-20°	335.3	11.7
20°-30°	470.6	16.4
30°-40°	522.0	18.2
40°-50°	501.1	17.5
50°-60°	420.0	14.7
60°-70°	294.8	10.3
70°-80°	153.9	5.4
80°-90°	43.1	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°	928.1	32.4
0°-40°	1450.1	50.7
0°-60°	2371.2	82.8
0°-90°	2863.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2863.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1311	1294	1294	1286	1282	124
15°	1238	1217	1195	1163	1151	349
25°	1116	1076	1018	969	957	514
35°	938	886	816	776	768	588
45°	739	682	634	610	602	569
55°	532	492	458	444	439	476
65°	340	317	293	274	268	338
75°	170	157	144	127	118	181
85°	40	38	38	38	38	47
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1304.8	1304.8	1304.8	1304.8	1304.8
2.5°	1309.7	1302.4	1304.8	1304.8	1298.8
5°	1310.9	1294.0	1294.0	1285.5	1281.9
7.5°	1292.7	1279.4	1277.0	1266.1	1262.5
10°	1279.4	1266.1	1257.7	1243.2	1237.1
12.5°	1263.7	1243.2	1227.4	1203.3	1193.6
15°	1238.3	1216.6	1194.8	1163.4	1151.3
17.5°	1215.4	1190.0	1157.3	1122.2	1108.9
20°	1185.1	1154.9	1112.6	1064.2	1052.1
22.5°	1150.0	1115.0	1065.4	1013.4	1003.7
25°	1116.2	1076.3	1018.2	968.7	956.6
27.5°	1081.1	1032.7	966.2	913.0	900.9
30°	1032.7	983.2	917.9	865.9	857.4
32.5°	988.0	938.4	867.1	824.7	815.1
35°	938.4	886.4	816.3	776.4	767.9
37.5°	893.7	833.2	771.5	732.8	728.0
40°	840.5	786.0	724.4	695.4	688.1
42.5°	788.5	734.0	676.0	650.6	642.1
45°	738.9	682.0	633.7	609.5	602.2
47.5°	686.9	634.9	588.9	569.6	564.7
50°	632.5	586.5	544.2	526.0	520.0
52.5°	584.1	536.9	501.9	484.9	477.7
55°	532.1	492.2	458.3	443.8	439.0
57.5°	480.1	447.4	414.8	401.5	394.2
60°	434.1	401.5	374.9	359.2	354.3
62.5°	387.0	359.2	333.8	319.3	313.2
65°	339.8	316.8	292.7	274.5	268.5
67.5°	296.3	270.9	251.5	235.8	229.8
70°	250.3	232.2	212.8	198.3	192.3
72.5°	208.0	194.7	177.8	162.0	156.0
75°	170.5	157.2	143.9	127.0	118.5
77.5°	133.0	124.6	111.3	96.7	96.7
80°	98.0	93.1	78.6	76.2	75.0
82.5°	67.7	65.3	56.8	55.6	55.6
85°	39.9	37.5	37.5	37.5	37.5
87.5°	16.9	18.1	19.3	19.3	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)