

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: P295653

Luminaire Tested: **14RLN-LD5-31-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295653  
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-L92765-W2A1-U-5700K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2941.0 lumens  
Efficiency: N/A  
Efficacy: 101.0 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

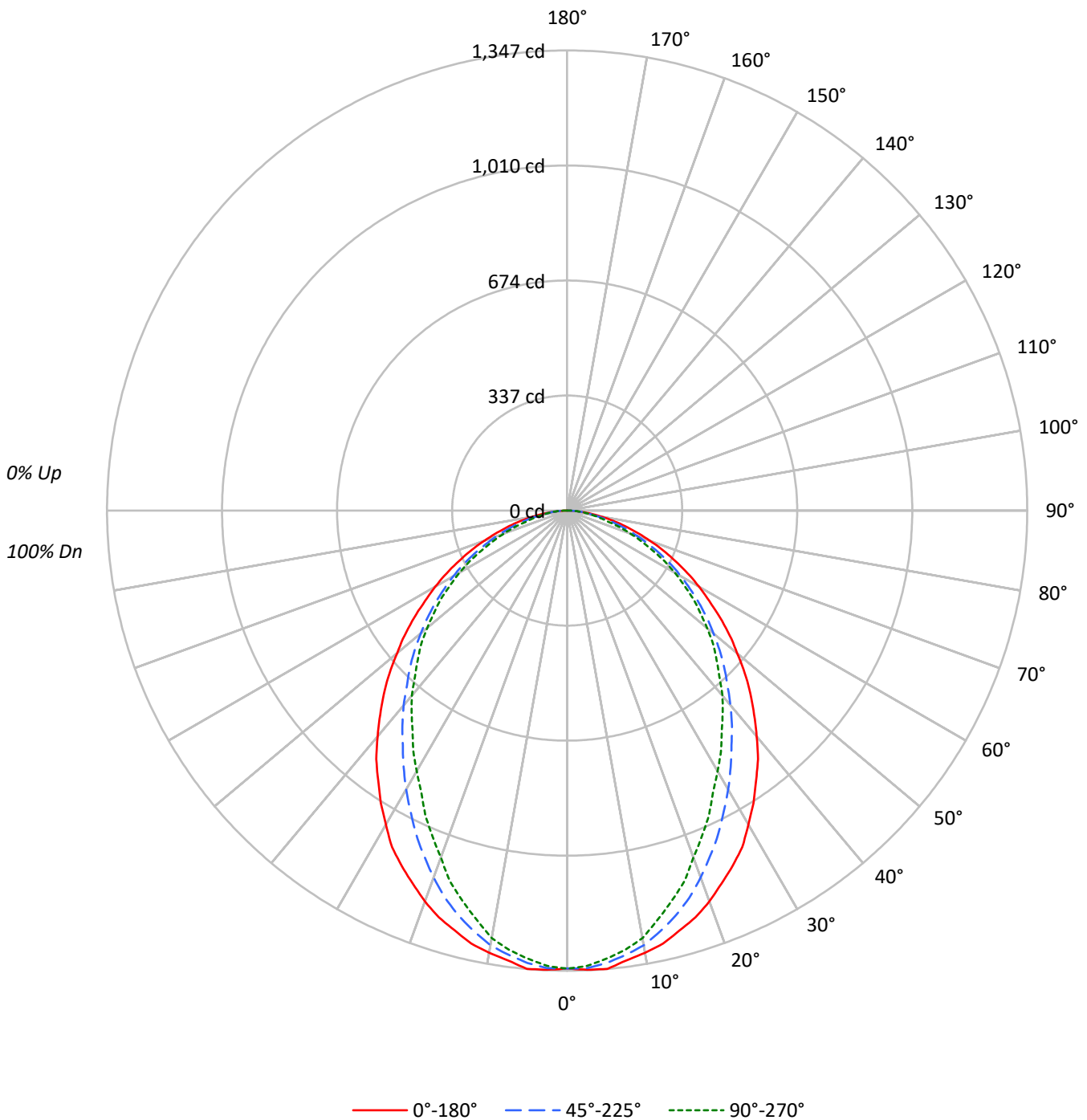
Input Watts (W): 29.109  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3607	3607	3607
5°	3638	3591	3557
10°	3591	3530	3472
15°	3544	3419	3295
20°	3486	3273	3095
25°	3404	3106	2918
30°	3297	2930	2737
35°	3167	2755	2591
40°	3033	2614	2483
45°	2888	2477	2354
50°	2720	2340	2236
55°	2564	2209	2115
60°	2400	2073	1959
65°	2223	1914	1756
70°	2023	1720	1554
75°	1822	1537	1265
80°	1559	1251	1193
85°	1266	1189	1189



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.5	4.3
10°-20°	344.5	11.7
20°-30°	483.4	16.4
30°-40°	536.2	18.2
40°-50°	514.7	17.5
50°-60°	431.4	14.7
60°-70°	302.8	10.3
70°-80°	158.1	5.4
80°-90°	44.3	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°	953.4	32.4
0°-40°	1489.6	50.7
0°-60°	2435.8	82.8
0°-90°	2941.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2941.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1340	1340	1340	1340	1340	
5°	1347	1329	1329	1320	1317	127
15°	1272	1250	1227	1195	1183	359
25°	1147	1106	1046	995	983	528
35°	964	911	838	798	789	604
45°	759	701	651	626	619	585
55°	547	506	471	456	451	489
65°	349	326	301	282	276	347
75°	175	162	148	130	122	186
85°	41	38	38	38	38	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1340.4	1340.4	1340.4	1340.4	1340.4
2.5°	1345.4	1337.9	1340.4	1340.4	1334.2
5°	1346.6	1329.2	1329.2	1320.5	1316.8
7.5°	1328.0	1314.3	1311.8	1300.6	1296.9
10°	1314.3	1300.6	1291.9	1277.0	1270.8
12.5°	1298.2	1277.0	1260.9	1236.0	1226.1
15°	1272.1	1249.7	1227.3	1195.0	1182.6
17.5°	1248.5	1222.4	1188.8	1152.8	1139.1
20°	1217.4	1186.4	1142.9	1093.2	1080.8
22.5°	1181.4	1145.4	1094.4	1041.0	1031.1
25°	1146.6	1105.6	1046.0	995.0	982.6
27.5°	1110.6	1060.9	992.6	937.9	925.5
30°	1060.9	1010.0	942.9	889.5	880.8
32.5°	1014.9	964.0	890.7	847.2	837.3
35°	964.0	910.6	838.5	797.5	788.8
37.5°	918.0	855.9	792.6	752.8	747.8
40°	863.4	807.5	744.1	714.3	706.8
42.5°	809.9	754.0	694.4	668.3	659.6
45°	759.0	700.6	650.9	626.1	618.6
47.5°	705.6	652.2	605.0	585.1	580.1
50°	649.7	602.5	559.0	540.4	534.2
52.5°	600.0	551.6	515.5	498.1	490.7
55°	546.6	505.6	470.8	455.9	450.9
57.5°	493.2	459.6	426.1	412.4	405.0
60°	446.0	412.4	385.1	368.9	364.0
62.5°	397.5	368.9	342.9	328.0	321.7
65°	349.1	325.5	300.6	282.0	275.8
67.5°	304.4	278.3	258.4	242.2	236.0
70°	257.1	238.5	218.6	203.7	197.5
72.5°	213.7	200.0	182.6	166.5	160.3
75°	175.2	161.5	147.8	130.4	121.7
77.5°	136.6	128.0	114.3	99.4	99.4
80°	100.6	95.7	80.7	78.3	77.0
82.5°	69.6	67.1	58.4	57.1	57.1
85°	41.0	38.5	38.5	38.5	38.5
87.5°	17.4	18.6	19.9	19.9	21.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)