

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: P295647

Luminaire Tested: **14RLN-LD5-31-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295647
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-3000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2542.0 lumens
Efficiency: N/A
Efficacy: 90.8 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

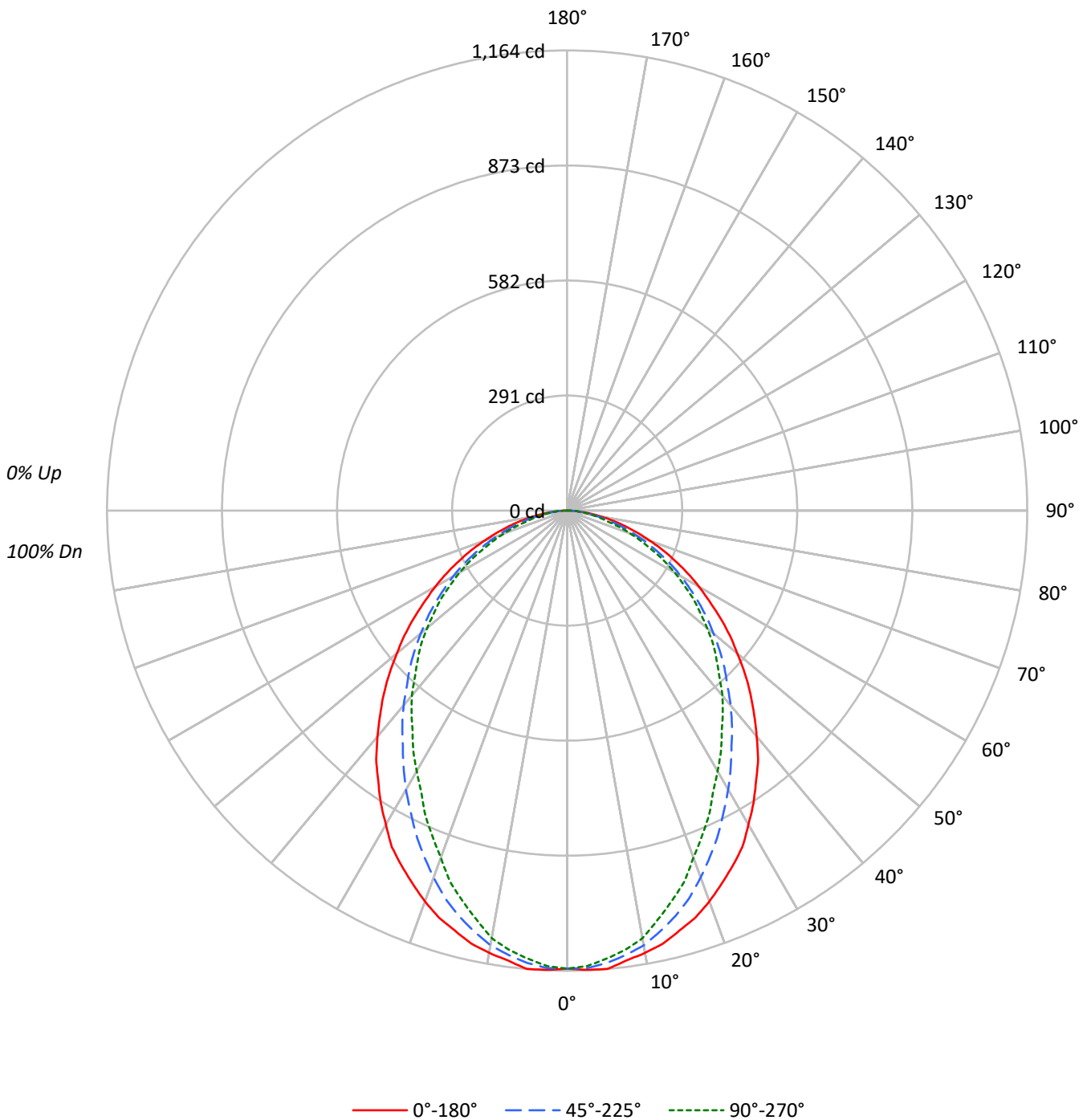
Input Watts (W): 27.993
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3117	3117	3117
5°	3144	3103	3074
10°	3104	3051	3001
15°	3063	2955	2848
20°	3013	2829	2675
25°	2942	2684	2522
30°	2849	2532	2366
35°	2737	2381	2240
40°	2621	2259	2146
45°	2496	2141	2035
50°	2351	2023	1933
55°	2216	1909	1829
60°	2075	1792	1693
65°	1921	1654	1518
70°	1749	1487	1343
75°	1574	1329	1094
80°	1348	1082	1032
85°	1093	1028	1028



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.5	4.3
10°-20°	297.7	11.7
20°-30°	417.9	16.4
30°-40°	463.5	18.2
40°-50°	444.9	17.5
50°-60°	372.9	14.7
60°-70°	261.7	10.3
70°-80°	136.7	5.4
80°-90°	38.3	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°	824.1	32.4
0°-40°	1287.5	50.6
0°-60°	2105.3	82.8
0°-90°	2542.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2542.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1158	1158	1158	1158	1158	
5°	1164	1149	1149	1141	1138	110
15°	1100	1080	1061	1033	1022	310
25°	991	956	904	860	849	456
35°	833	787	725	689	682	522
45°	656	606	563	541	535	505
55°	472	437	407	394	390	423
65°	302	281	260	244	238	300
75°	151	140	128	113	105	161
85°	35	33	33	33	33	42
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1158.5	1158.5	1158.5	1158.5	1158.5
2.5°	1162.8	1156.4	1158.5	1158.5	1153.2
5°	1163.9	1148.9	1148.9	1141.4	1138.1
7.5°	1147.8	1136.0	1133.8	1124.2	1121.0
10°	1136.0	1124.2	1116.7	1103.8	1098.4
12.5°	1122.0	1103.8	1089.8	1068.3	1059.8
15°	1099.5	1080.2	1060.8	1032.9	1022.2
17.5°	1079.1	1056.5	1027.5	996.4	984.6
20°	1052.2	1025.4	987.8	944.9	934.1
22.5°	1021.1	990.0	945.9	899.8	891.2
25°	991.0	955.6	904.1	860.0	849.3
27.5°	959.9	917.0	857.9	810.7	799.9
30°	917.0	872.9	815.0	768.8	761.3
32.5°	877.2	833.2	769.9	732.3	723.7
35°	833.2	787.0	724.8	689.3	681.8
37.5°	793.5	739.8	685.0	650.7	646.4
40°	746.2	697.9	643.2	617.4	610.9
42.5°	700.1	651.7	600.2	577.7	570.1
45°	656.0	605.6	562.6	541.2	534.7
47.5°	609.9	563.7	522.9	505.7	501.4
50°	561.6	520.8	483.2	467.1	461.7
52.5°	518.6	476.7	445.6	430.6	424.1
55°	472.4	437.0	406.9	394.1	389.8
57.5°	426.3	397.3	368.3	356.5	350.0
60°	385.5	356.5	332.9	318.9	314.6
62.5°	343.6	318.9	296.3	283.5	278.1
65°	301.7	281.3	259.8	243.7	238.4
67.5°	263.1	240.5	223.3	209.4	204.0
70°	222.3	206.2	189.0	176.1	170.7
72.5°	184.7	172.9	157.8	143.9	138.5
75°	151.4	139.6	127.8	112.7	105.2
77.5°	118.1	110.6	98.8	85.9	85.9
80°	87.0	82.7	69.8	67.6	66.6
82.5°	60.1	58.0	50.5	49.4	49.4
85°	35.4	33.3	33.3	33.3	33.3
87.5°	15.0	16.1	17.2	17.2	18.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)