

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: P295577

Luminaire Tested: **14RLN-LD5-31-UNV-L82765-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295577
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-3000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2946.0 lumens
Efficiency: N/A
Efficacy: 104.9 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

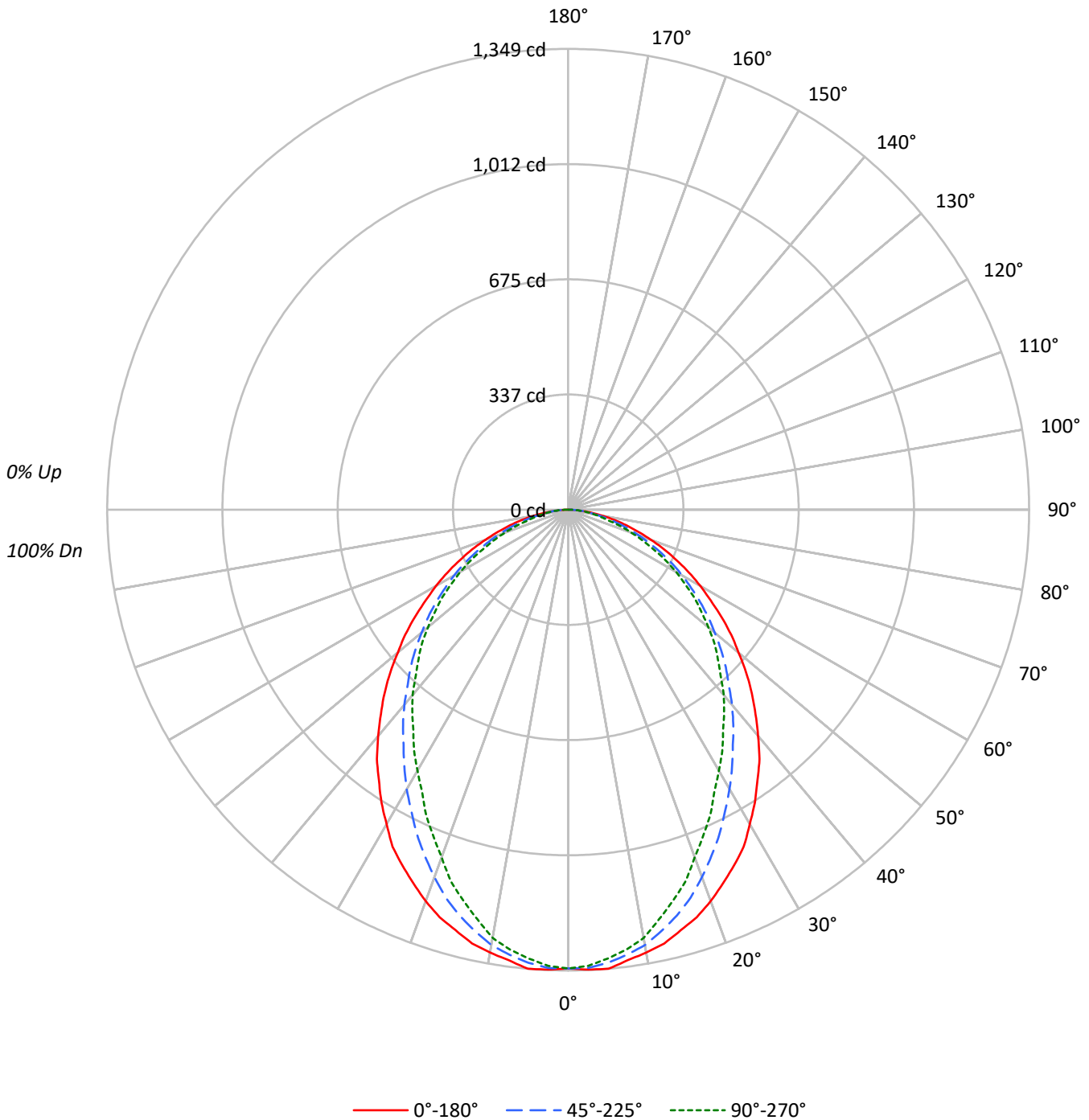
Input Watts (W): 28.086
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3613	3613	3613
5°	3644	3597	3563
10°	3597	3536	3478
15°	3550	3425	3300
20°	3492	3278	3100
25°	3410	3111	2923
30°	3302	2935	2742
35°	3172	2759	2596
40°	3038	2618	2487
45°	2893	2481	2358
50°	2725	2344	2240
55°	2569	2213	2119
60°	2404	2076	1962
65°	2227	1917	1759
70°	2027	1723	1557
75°	1825	1540	1267
80°	1562	1254	1196
85°	1269	1192	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.7	4.3
10°-20°	345.0	11.7
20°-30°	484.3	16.4
30°-40°	537.1	18.2
40°-50°	515.6	17.5
50°-60°	432.1	14.7
60°-70°	303.3	10.3
70°-80°	158.4	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°	955.0	32.4
0°-40°	1492.1	50.6
0°-60°	2439.9	82.8
0°-90°	2946.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2946.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1343	1343	1343	1343	1343	
5°	1349	1332	1332	1323	1319	127
15°	1274	1252	1229	1197	1185	360
25°	1148	1108	1048	997	984	529
35°	966	912	840	799	790	605
45°	760	702	652	627	620	586
55°	548	506	472	457	452	490
65°	350	326	301	282	276	347
75°	176	162	148	131	122	186
85°	41	39	39	39	39	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1342.7	1342.7	1342.7	1342.7	1342.7
2.5°	1347.6	1340.2	1342.7	1342.7	1336.4
5°	1348.9	1331.5	1331.5	1322.8	1319.0
7.5°	1330.2	1316.5	1314.0	1302.8	1299.1
10°	1316.5	1302.8	1294.1	1279.2	1273.0
12.5°	1300.4	1279.2	1263.0	1238.1	1228.2
15°	1274.2	1251.8	1229.4	1197.1	1184.6
17.5°	1250.6	1224.5	1190.9	1154.8	1141.1
20°	1219.5	1188.4	1144.8	1095.0	1082.6
22.5°	1183.4	1147.3	1096.3	1042.8	1032.8
25°	1148.5	1107.5	1047.8	996.7	984.3
27.5°	1112.5	1062.7	994.2	939.5	927.1
30°	1062.7	1011.7	944.5	891.0	882.3
32.5°	1016.6	965.6	892.2	848.7	838.7
35°	965.6	912.1	839.9	798.9	790.2
37.5°	919.6	857.4	793.9	754.1	749.1
40°	864.8	808.8	745.4	715.5	708.0
42.5°	811.3	755.3	695.6	669.5	660.8
45°	760.3	701.8	652.0	627.2	619.7
47.5°	706.8	653.3	606.0	586.1	581.1
50°	650.8	603.5	560.0	541.3	535.1
52.5°	601.0	552.5	516.4	499.0	491.5
55°	547.5	506.5	471.6	456.7	451.7
57.5°	494.0	460.4	426.8	413.1	405.7
60°	446.7	413.1	385.8	369.6	364.6
62.5°	398.2	369.6	343.4	328.5	322.3
65°	349.7	326.0	301.1	282.5	276.2
67.5°	304.9	278.7	258.8	242.7	236.4
70°	257.6	238.9	219.0	204.1	197.9
72.5°	214.0	200.3	182.9	166.7	160.5
75°	175.5	161.8	148.1	130.7	121.9
77.5°	136.9	128.2	114.5	99.5	99.5
80°	100.8	95.8	80.9	78.4	77.2
82.5°	69.7	67.2	58.5	57.2	57.2
85°	41.1	38.6	38.6	38.6	38.6
87.5°	17.4	18.7	19.9	19.9	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)