

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: P295583

Luminaire Tested: **14RLN-LD5-31-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295583
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-5700K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3253.0 lumens
Efficiency: N/A
Efficacy: 111.8 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

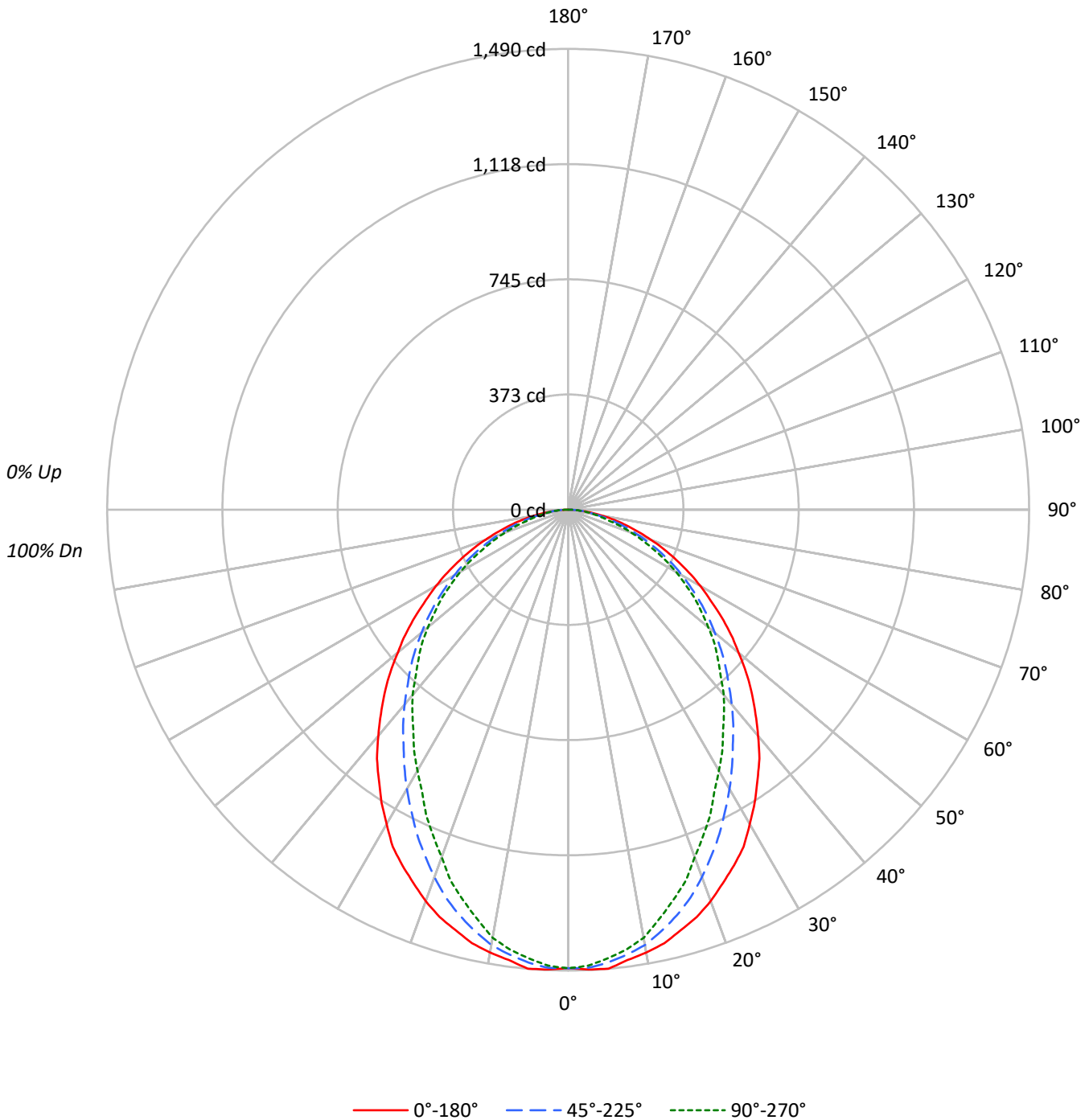
Input Watts (W): 29.109
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P295583

CATALOG NUMBER: 14RLN-LD5-31-UNV-L82765-W2A1-U-5700K

Luminous Intensity Polar Plot





TEST NUMBER: P295583

CATALOG NUMBER: 14RLN-LD5-31-UNV-L82765-W2A1-U-5700K

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°	3990	3990	3990
5°	4024	3971	3934
10°	3972	3905	3841
15°	3920	3782	3644
20°	3856	3620	3423
25°	3765	3435	3227
30°	3646	3241	3027
35°	3503	3047	2866
40°	3355	2891	2746
45°	3195	2740	2604
50°	3008	2588	2473
55°	2837	2443	2340
60°	2655	2293	2167
65°	2458	2117	1942
70°	2238	1902	1719
75°	2014	1700	1400
80°	1725	1384	1320
85°	1399	1315	1315



TEST NUMBER: P295583

CATALOG NUMBER: 14RLN-LD5-31-UNV-L82765-W2A1-U-5700K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.8	4.3
10°-20°	381.0	11.7
20°-30°	534.7	16.4
30°-40°	593.1	18.2
40°-50°	569.4	17.5
50°-60°	477.2	14.7
60°-70°	334.9	10.3
70°-80°	174.9	5.4
80°-90°	49.0	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°	1054.5	32.4
0°-40°	1647.6	50.7
0°-60°	2694.2	82.8
0°-90°	3253.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3253.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1483	1483	1483	1483	1483	
5°	1490	1470	1470	1461	1456	141
15°	1407	1382	1358	1322	1308	397
25°	1268	1223	1157	1101	1087	584
35°	1066	1007	928	882	872	668
45°	840	775	720	692	684	647
55°	605	559	521	504	499	541
65°	386	360	332	312	305	384
75°	194	179	164	144	135	205
85°	45	43	43	43	43	54
90°	0	0	0	0	0	



TEST NUMBER: P295583

CATALOG NUMBER: 14RLN-LD5-31-UNV-L82765-W2A1-U-5700K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1482.6	1482.6	1482.6	1482.6	1482.6
2.5°	1488.1	1479.8	1482.6	1482.6	1475.7
5°	1489.5	1470.2	1470.2	1460.6	1456.5
7.5°	1468.8	1453.7	1451.0	1438.6	1434.5
10°	1453.7	1438.6	1429.0	1412.5	1405.6
12.5°	1435.9	1412.5	1394.6	1367.2	1356.2
15°	1407.0	1382.3	1357.5	1321.8	1308.1
17.5°	1380.9	1352.1	1315.0	1275.1	1260.0
20°	1346.6	1312.2	1264.1	1209.2	1195.4
22.5°	1306.7	1266.9	1210.5	1151.4	1140.5
25°	1268.2	1222.9	1156.9	1100.6	1086.9
27.5°	1228.4	1173.4	1097.9	1037.4	1023.7
30°	1173.4	1117.1	1042.9	983.8	974.2
32.5°	1122.6	1066.3	985.2	937.1	926.1
35°	1066.3	1007.2	927.5	882.1	872.5
37.5°	1015.4	946.7	876.6	832.7	827.2
40°	955.0	893.1	823.0	790.1	781.8
42.5°	895.9	834.0	768.1	739.2	729.6
45°	839.5	775.0	720.0	692.5	684.3
47.5°	780.5	721.4	669.2	647.2	641.7
50°	718.6	666.4	618.3	597.7	590.8
52.5°	663.7	610.1	570.2	551.0	542.7
55°	604.6	559.2	520.8	504.3	498.8
57.5°	545.5	508.4	471.3	456.2	447.9
60°	493.3	456.2	426.0	408.1	402.6
62.5°	439.7	408.1	379.2	362.7	355.9
65°	386.1	360.0	332.5	311.9	305.0
67.5°	336.6	307.8	285.8	267.9	261.1
70°	284.4	263.8	241.8	225.3	218.5
72.5°	236.3	221.2	202.0	184.1	177.3
75°	193.7	178.6	163.5	144.3	134.7
77.5°	151.1	141.5	126.4	109.9	109.9
80°	111.3	105.8	89.3	86.6	85.2
82.5°	76.9	74.2	64.6	63.2	63.2
85°	45.3	42.6	42.6	42.6	42.6
87.5°	19.2	20.6	22.0	22.0	23.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)