

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: P295582

Luminaire Tested: **14RLN-LD5-31-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295582
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-5500K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3244.0 lumens
Efficiency: N/A
Efficacy: 111.4 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

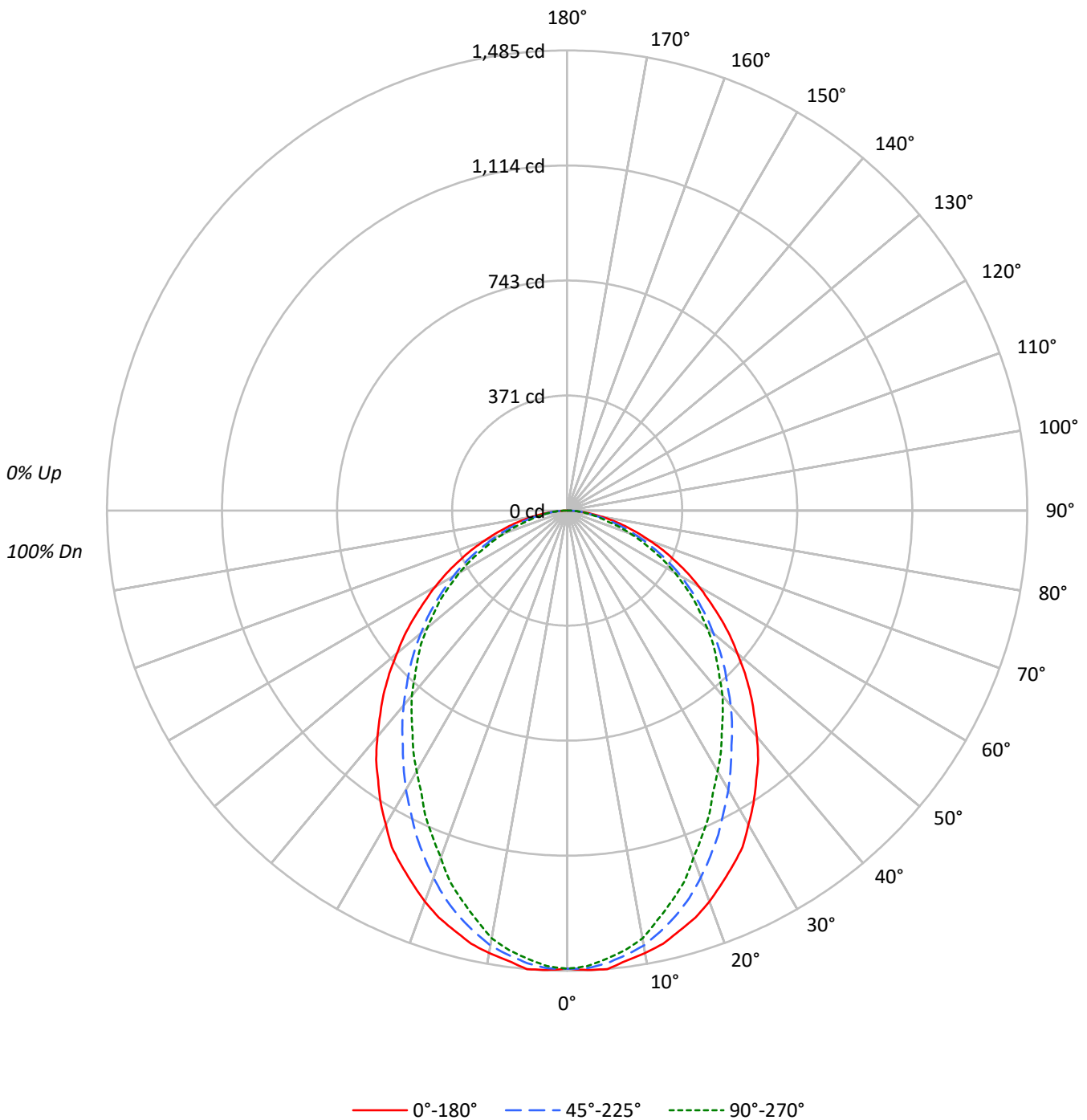
Input Watts (W): 29.109
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3979	3979	3979
5°	4012	3961	3924
10°	3961	3894	3830
15°	3909	3772	3634
20°	3845	3610	3414
25°	3755	3426	3218
30°	3636	3232	3019
35°	3493	3038	2858
40°	3345	2883	2739
45°	3186	2732	2597
50°	3000	2581	2467
55°	2829	2436	2334
60°	2647	2286	2161
65°	2451	2111	1937
70°	2231	1898	1714
75°	2009	1696	1396
80°	1720	1381	1317
85°	1396	1312	1312



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	138.4	4.3
10°-20°	379.9	11.7
20°-30°	533.3	16.4
30°-40°	591.5	18.2
40°-50°	567.8	17.5
50°-60°	475.9	14.7
60°-70°	334.0	10.3
70°-80°	174.4	5.4
80°-90°	48.8	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°	1051.6	32.4
0°-40°	1643.1	50.6
0°-60°	2686.7	82.8
0°-90°	3244.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3244.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1478	1478	1478	1478	1478	
5°	1485	1466	1466	1457	1452	140
15°	1403	1378	1354	1318	1304	396
25°	1265	1220	1154	1098	1084	582
35°	1063	1004	925	880	870	666
45°	837	773	718	691	682	645
55°	603	558	519	503	497	539
65°	385	359	332	311	304	383
75°	193	178	163	144	134	205
85°	45	42	42	42	42	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1478.5	1478.5	1478.5	1478.5	1478.5
2.5°	1484.0	1475.7	1478.5	1478.5	1471.6
5°	1485.3	1466.2	1466.2	1456.6	1452.5
7.5°	1464.8	1449.7	1447.0	1434.6	1430.5
10°	1449.7	1434.6	1425.0	1408.6	1401.8
12.5°	1431.9	1408.6	1390.8	1363.4	1352.4
15°	1403.1	1378.5	1353.8	1318.2	1304.5
17.5°	1377.1	1348.3	1311.3	1271.6	1256.5
20°	1342.8	1308.6	1260.6	1205.8	1192.1
22.5°	1303.1	1263.4	1207.2	1148.3	1137.3
25°	1264.7	1219.5	1153.7	1097.6	1083.9
27.5°	1225.0	1170.2	1094.8	1034.5	1020.8
30°	1170.2	1114.0	1040.0	981.1	971.5
32.5°	1119.5	1063.3	982.5	934.5	923.5
35°	1063.3	1004.4	924.9	879.7	870.1
37.5°	1012.6	944.1	874.2	830.4	824.9
40°	952.3	890.7	820.8	787.9	779.7
42.5°	893.4	831.7	766.0	737.2	727.6
45°	837.2	772.8	718.0	690.6	682.4
47.5°	778.3	719.4	667.3	645.4	639.9
50°	716.6	664.6	616.6	596.1	589.2
52.5°	661.8	608.4	568.6	549.5	541.2
55°	602.9	557.7	519.3	502.9	497.4
57.5°	544.0	507.0	470.0	454.9	446.7
60°	491.9	454.9	424.8	407.0	401.5
62.5°	438.5	407.0	378.2	361.7	354.9
65°	385.0	359.0	331.6	311.0	304.2
67.5°	335.7	306.9	285.0	267.2	260.3
70°	283.6	263.1	241.2	224.7	217.9
72.5°	235.7	220.6	201.4	183.6	176.8
75°	193.2	178.1	163.1	143.9	134.3
77.5°	150.7	141.1	126.1	109.6	109.6
80°	111.0	105.5	89.1	86.3	85.0
82.5°	76.7	74.0	64.4	63.0	63.0
85°	45.2	42.5	42.5	42.5	42.5
87.5°	19.2	20.6	21.9	21.9	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)