

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: P295720

Luminaire Tested: **14RLN-LD5-31-RDP-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295720  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36061-R2)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-31-RDP-UNV-L82765-W2A1-U-4500K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2689.0 lumens  
Efficiency: N/A  
Efficacy: 93.3 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.35 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

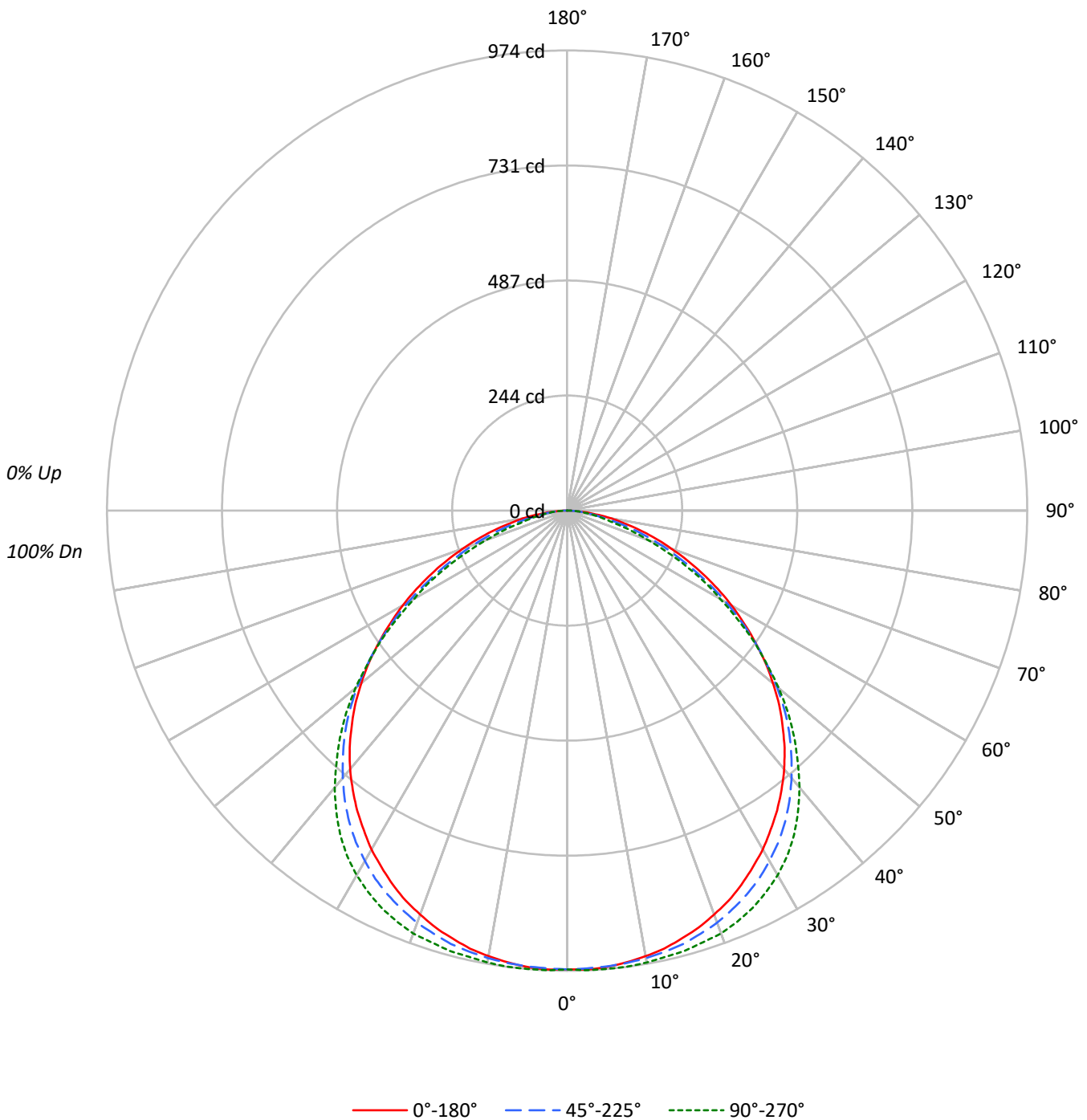
Input Watts (W): 28.83  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	30	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	31	27	25

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2613	2613	2613
5°	2620	2616	2630
10°	2617	2628	2654
15°	2612	2646	2687
20°	2605	2659	2727
25°	2594	2665	2757
30°	2573	2660	2769
35°	2545	2642	2751
40°	2510	2595	2689
45°	2455	2531	2587
50°	2382	2427	2449
55°	2281	2275	2262
60°	2164	2092	2013
65°	2016	1871	1769
70°	1840	1640	1430
75°	1653	1361	1070
80°	1469	993	931
85°	1155	824	824



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	92.4	3.4
10°-20°	268.7	10.0
20°-30°	414.6	15.4
30°-40°	502.9	18.7
40°-50°	510.5	19.0
50°-60°	431.9	16.1
60°-70°	292.2	10.9
70°-80°	141.3	5.3
80°-90°	34.5	1.3
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°	775.7	28.8
0°-40°	1278.6	47.5
0°-60°	2221.0	82.6
0°-90°	2689.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2689.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	971	971	971	971	971	
5°	970	970	968	972	974	92
15°	938	943	950	960	964	265
25°	874	880	898	920	928	402
35°	775	783	804	830	838	484
45°	645	646	665	679	680	497
55°	486	482	485	485	482	435
65°	317	303	294	282	278	314
75°	159	147	131	114	103	169
85°	37	29	27	27	27	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	971.1	971.1	971.1	971.1	971.1
2.5°	972.4	972.4	969.8	972.4	973.8
5°	969.8	969.8	968.4	972.4	973.8
7.5°	964.4	965.8	965.8	971.1	973.8
10°	957.7	960.4	961.7	969.8	971.1
12.5°	949.7	952.4	956.4	965.8	967.1
15°	937.7	943.0	949.7	960.4	964.4
17.5°	925.7	931.0	939.0	953.7	957.7
20°	909.7	916.3	928.4	945.7	952.4
22.5°	893.6	899.0	913.7	935.0	941.7
25°	873.6	880.3	897.6	920.3	928.4
27.5°	850.9	860.2	878.9	903.0	911.0
30°	828.2	836.2	856.2	882.9	891.0
32.5°	801.5	809.5	832.2	857.6	866.9
35°	774.7	782.8	804.1	829.5	837.5
37.5°	745.4	750.7	773.4	794.8	802.8
40°	714.6	718.6	738.7	760.0	765.4
42.5°	681.2	683.9	702.6	721.3	722.6
45°	645.2	646.5	665.2	678.6	679.9
47.5°	609.1	607.8	623.8	633.1	634.5
50°	569.0	569.0	579.7	585.1	585.1
52.5°	529.0	526.3	531.6	535.6	531.6
55°	486.2	482.2	484.9	484.9	482.2
57.5°	443.5	435.5	436.8	434.1	427.4
60°	402.1	392.7	388.7	379.4	374.0
62.5°	359.3	348.6	340.6	329.9	328.6
65°	316.6	303.2	293.9	281.8	277.8
67.5°	275.2	263.1	249.8	236.4	228.4
70°	233.8	220.4	208.4	191.0	181.7
72.5°	196.4	184.3	169.6	149.6	142.9
75°	159.0	146.9	130.9	113.5	102.9
77.5°	122.9	113.5	96.2	81.5	80.1
80°	94.8	84.2	64.1	60.1	60.1
82.5°	61.4	54.8	45.4	42.7	42.7
85°	37.4	29.4	26.7	26.7	26.7
87.5°	14.7	13.4	13.4	13.4	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)