

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: P295686

Luminaire Tested: **14RLN-LD5-31-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295686  
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-L83050-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: 2805.0 lumens  
Efficiency: N/A  
Efficacy: 94.5 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

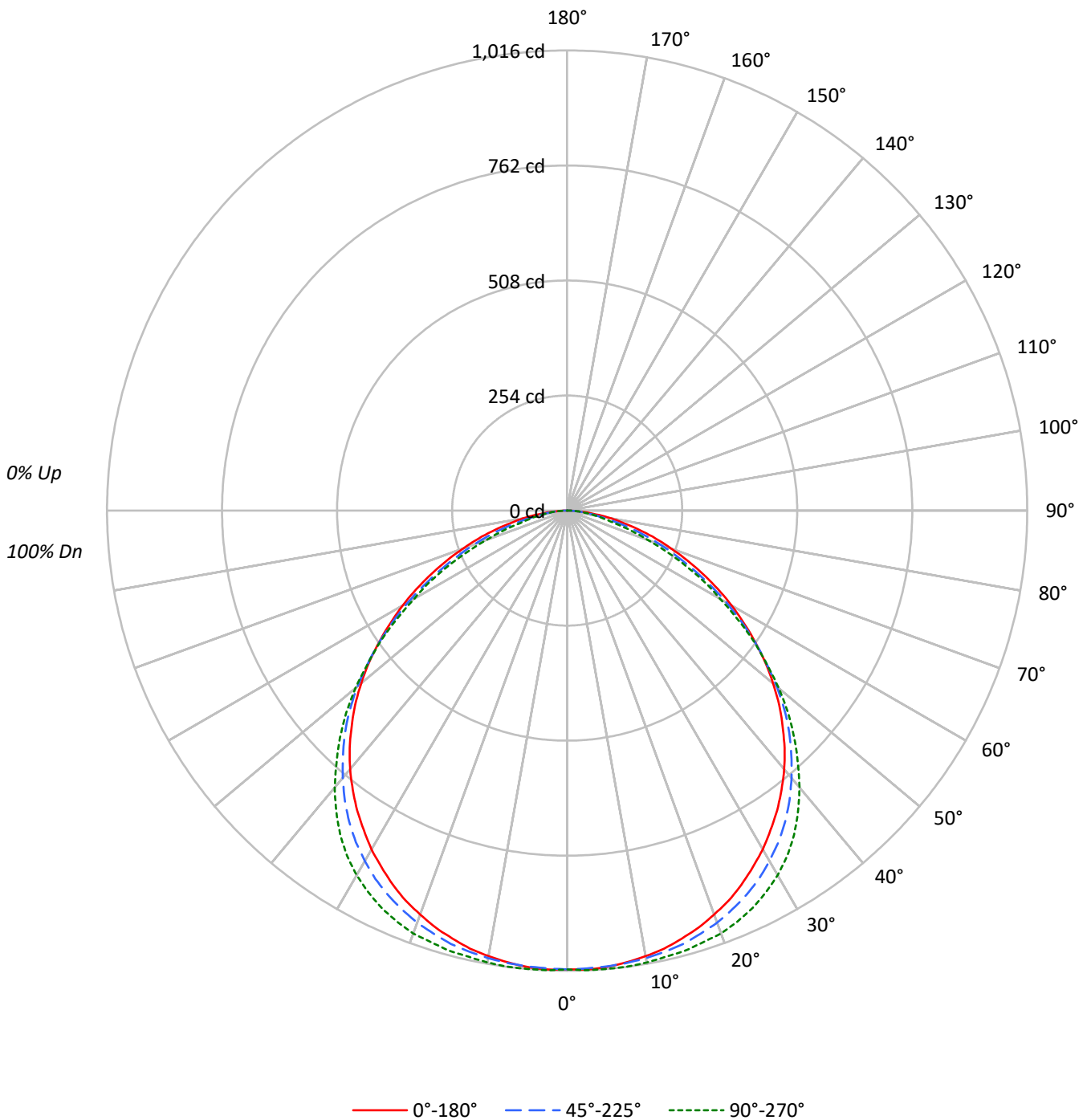
Input Watts (W): 29.667  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2726	2726	2726
5°	2733	2729	2744
10°	2730	2741	2768
15°	2725	2760	2803
20°	2717	2773	2845
25°	2706	2780	2875
30°	2684	2775	2888
35°	2655	2756	2870
40°	2619	2707	2805
45°	2561	2641	2699
50°	2485	2532	2555
55°	2380	2373	2360
60°	2257	2182	2100
65°	2103	1952	1845
70°	1918	1710	1491
75°	1724	1420	1116
80°	1533	1037	972
85°	1204	861	861



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.4	3.4
10°-20°	280.2	10.0
20°-30°	432.5	15.4
30°-40°	524.6	18.7
40°-50°	532.6	19.0
50°-60°	450.5	16.1
60°-70°	304.8	10.9
70°-80°	147.4	5.3
80°-90°	36.0	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°	809.2	28.8
0°-40°	1333.7	47.5
0°-60°	2316.8	82.6
0°-90°	2805.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2805.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1013	1013	1013	1013	1013	
5°	1012	1012	1010	1014	1016	96
15°	978	984	991	1002	1006	276
25°	911	918	936	960	968	420
35°	808	816	839	865	874	505
45°	673	674	694	708	709	519
55°	507	503	506	506	503	453
65°	330	316	306	294	290	327
75°	166	153	137	118	107	177
85°	39	31	28	28	28	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1013.0	1013.0	1013.0	1013.0	1013.0
2.5°	1014.4	1014.4	1011.6	1014.4	1015.8
5°	1011.6	1011.6	1010.2	1014.4	1015.8
7.5°	1006.0	1007.4	1007.4	1013.0	1015.8
10°	999.1	1001.8	1003.2	1011.6	1013.0
12.5°	990.7	993.5	997.7	1007.4	1008.8
15°	978.2	983.7	990.7	1001.8	1006.0
17.5°	965.6	971.2	979.5	994.9	999.1
20°	948.9	955.9	968.4	986.5	993.5
22.5°	932.2	937.7	953.1	975.4	982.3
25°	911.3	918.2	936.4	960.0	968.4
27.5°	887.6	897.3	916.8	941.9	950.3
30°	863.9	872.3	893.2	921.0	929.4
32.5°	836.0	844.4	868.1	894.6	904.3
35°	808.2	816.5	838.8	865.3	873.6
37.5°	777.5	783.1	806.8	829.1	837.4
40°	745.5	749.6	770.5	792.8	798.4
42.5°	710.6	713.4	732.9	752.4	753.8
45°	673.0	674.4	693.9	707.8	709.2
47.5°	635.4	634.0	650.7	660.5	661.9
50°	593.6	593.6	604.7	610.3	610.3
52.5°	551.8	549.0	554.6	558.7	554.6
55°	507.2	503.0	505.8	505.8	503.0
57.5°	462.6	454.2	455.6	452.8	445.9
60°	419.4	409.7	405.5	395.7	390.1
62.5°	374.8	363.7	355.3	344.2	342.8
65°	330.2	316.3	306.5	294.0	289.8
67.5°	287.0	274.5	260.6	246.6	238.3
70°	243.8	229.9	217.4	199.3	189.5
72.5°	204.8	192.3	177.0	156.1	149.1
75°	165.8	153.3	136.6	118.4	107.3
77.5°	128.2	118.4	100.3	85.0	83.6
80°	98.9	87.8	66.9	62.7	62.7
82.5°	64.1	57.1	47.4	44.6	44.6
85°	39.0	30.7	27.9	27.9	27.9
87.5°	15.3	13.9	13.9	13.9	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)