

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: P295604

Luminaire Tested: **14RLN-LD5-23-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295604  
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-LD5-23-UNV-L93050-W2A1-U-3500K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2012.0 lumens  
Efficiency: N/A  
Efficacy: 95.7 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

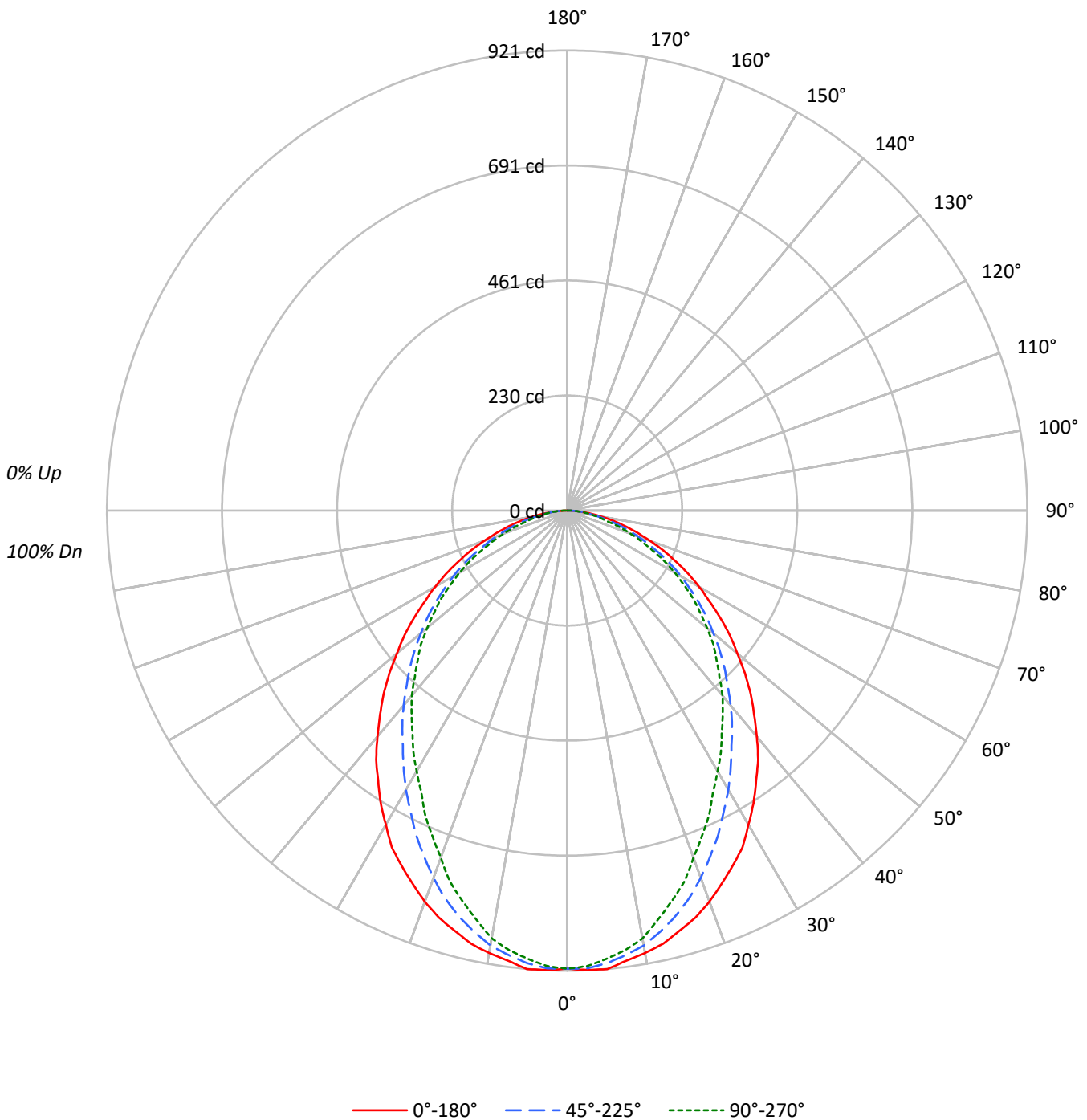
Input Watts (W): 21.018  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2468	2468	2468
5°	2488	2456	2433
10°	2457	2415	2376
15°	2424	2339	2254
20°	2385	2239	2117
25°	2329	2125	1996
30°	2255	2004	1872
35°	2167	1884	1773
40°	2075	1788	1699
45°	1976	1695	1611
50°	1861	1601	1530
55°	1754	1511	1447
60°	1642	1418	1340
65°	1521	1310	1202
70°	1384	1177	1063
75°	1246	1051	866
80°	1066	855	817
85°	865	812	812



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.9	4.3
10°-20°	235.7	11.7
20°-30°	330.7	16.4
30°-40°	366.8	18.2
40°-50°	352.2	17.5
50°-60°	295.1	14.7
60°-70°	207.2	10.3
70°-80°	108.2	5.4
80°-90°	30.3	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°	652.2	32.4
0°-40°	1019.1	50.6
0°-60°	1666.4	82.8
0°-90°	2012.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2012.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	917	917	917	917	917	
5°	921	909	909	903	901	87
15°	870	855	840	818	809	246
25°	784	756	716	681	672	361
35°	660	623	574	546	540	413
45°	519	479	445	428	423	400
55°	374	346	322	312	308	334
65°	239	223	206	193	189	237
75°	120	110	101	89	83	127
85°	28	26	26	26	26	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	917.0	917.0	917.0	917.0	917.0
2.5°	920.4	915.3	917.0	917.0	912.7
5°	921.2	909.3	909.3	903.4	900.8
7.5°	908.5	899.1	897.4	889.8	887.2
10°	899.1	889.8	883.8	873.6	869.4
12.5°	888.1	873.6	862.6	845.6	838.8
15°	870.2	854.9	839.7	817.6	809.1
17.5°	854.1	836.3	813.3	788.7	779.3
20°	832.9	811.6	781.9	747.9	739.4
22.5°	808.2	783.6	748.7	712.2	705.4
25°	784.4	756.4	715.6	680.7	672.2
27.5°	759.8	725.8	679.0	641.6	633.1
30°	725.8	690.9	645.0	608.5	602.5
32.5°	694.3	659.5	609.3	579.6	572.8
35°	659.5	622.9	573.6	545.6	539.7
37.5°	628.0	585.5	542.2	515.0	511.6
40°	590.6	552.4	509.1	488.7	483.6
42.5°	554.1	515.9	475.1	457.2	451.3
45°	519.3	479.3	445.3	428.3	423.2
47.5°	482.7	446.2	413.9	400.3	396.9
50°	444.5	412.2	382.4	369.7	365.4
52.5°	410.5	377.3	352.7	340.8	335.7
55°	373.9	345.9	322.1	311.9	308.5
57.5°	337.4	314.4	291.5	282.2	277.1
60°	305.1	282.2	263.5	252.4	249.0
62.5°	272.0	252.4	234.6	224.4	220.1
65°	238.8	222.7	205.7	192.9	188.7
67.5°	208.2	190.4	176.8	165.7	161.5
70°	175.9	163.2	149.6	139.4	135.1
72.5°	146.2	136.8	124.9	113.9	109.6
75°	119.8	110.5	101.1	89.2	83.3
77.5°	93.5	87.5	78.2	68.0	68.0
80°	68.8	65.4	55.2	53.5	52.7
82.5°	47.6	45.9	39.9	39.1	39.1
85°	28.0	26.3	26.3	26.3	26.3
87.5°	11.9	12.7	13.6	13.6	14.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)