

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: P295607

Luminaire Tested: **14RLN-LD5-23-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295607  
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-5000K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2211.0 lumens  
Efficiency: N/A  
Efficacy: 102.9 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

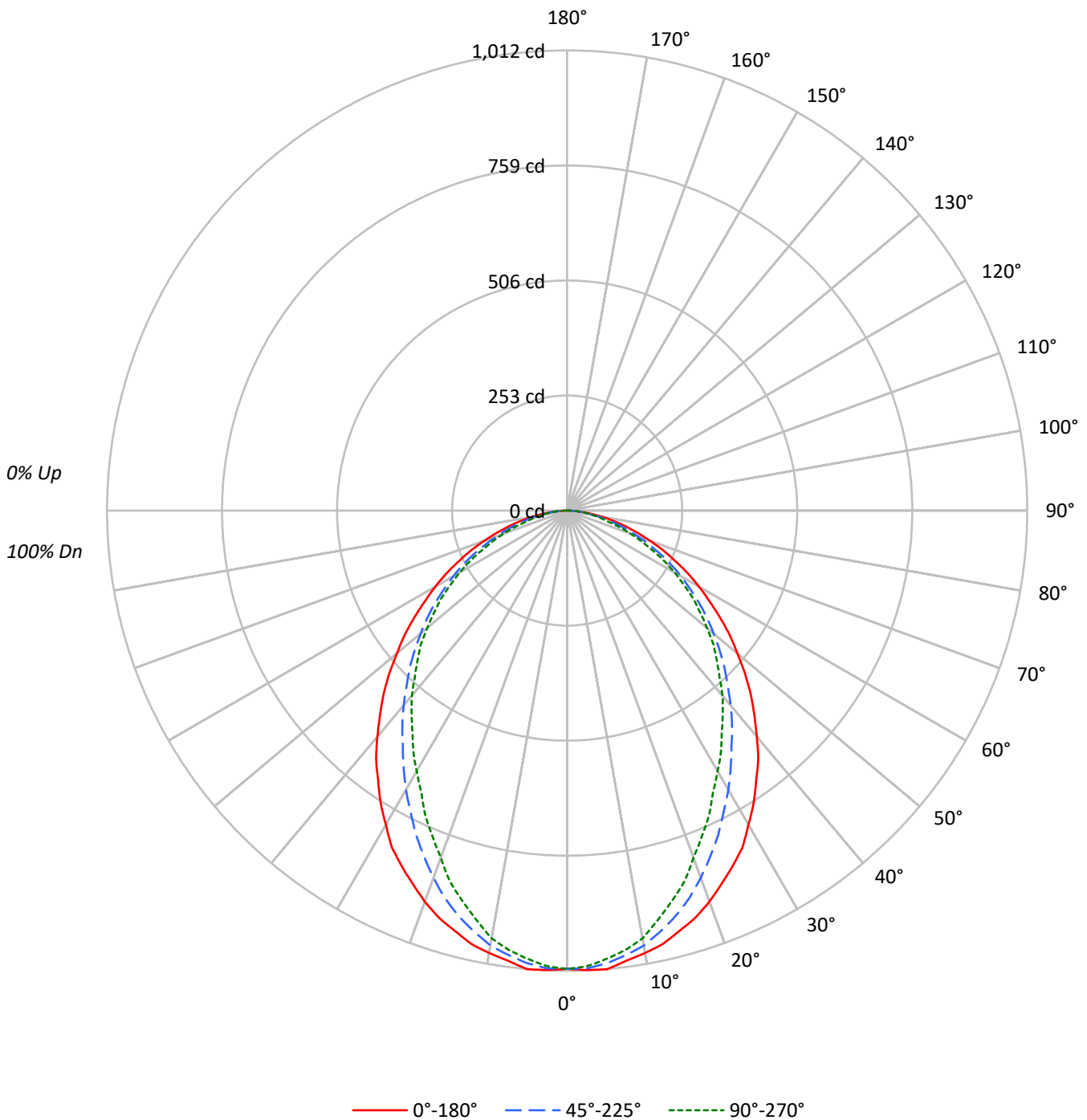
Input Watts (W): 21.483  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43	41
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28

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

	0°	45°	90°
0°	2712	2712	2712
5°	2735	2699	2674
10°	2700	2654	2611
15°	2664	2571	2477
20°	2621	2460	2327
25°	2559	2335	2193
30°	2478	2202	2057
35°	2381	2071	1948
40°	2280	1965	1867
45°	2171	1862	1770
50°	2045	1760	1681
55°	1928	1661	1590
60°	1805	1558	1473
65°	1671	1439	1320
70°	1521	1293	1168
75°	1369	1155	951
80°	1172	941	897
85°	951	895	895



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	94.4	4.3
10°-20°	259.0	11.7
20°-30°	363.4	16.4
30°-40°	403.1	18.2
40°-50°	387.0	17.5
50°-60°	324.3	14.7
60°-70°	227.7	10.3
70°-80°	118.9	5.4
80°-90°	33.3	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°	716.8	32.4
0°-40°	1119.9	50.6
0°-60°	1831.2	82.8
0°-90°	2211.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2211.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1008	1008	1008	1008	1008	
5°	1012	999	999	993	990	96
15°	956	940	923	898	889	270
25°	862	831	786	748	739	397
35°	725	685	630	600	593	454
45°	571	527	489	471	465	440
55°	411	380	354	343	339	368
65°	262	245	226	212	207	261
75°	132	121	111	98	92	140
85°	31	29	29	29	29	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1007.7	1007.7	1007.7	1007.7	1007.7
2.5°	1011.4	1005.8	1007.7	1007.7	1003.0
5°	1012.4	999.3	999.3	992.7	989.9
7.5°	998.3	988.1	986.2	977.8	975.0
10°	988.1	977.8	971.3	960.1	955.4
12.5°	975.9	960.1	947.9	929.2	921.8
15°	956.3	939.5	922.7	898.4	889.1
17.5°	938.6	919.0	893.7	866.7	856.4
20°	915.2	891.9	859.2	821.8	812.5
22.5°	888.1	861.1	822.8	782.6	775.1
25°	862.0	831.2	786.3	748.1	738.7
27.5°	834.9	797.6	746.2	705.1	695.8
30°	797.6	759.3	708.8	668.7	662.1
32.5°	763.0	724.7	669.6	636.9	629.5
35°	724.7	684.6	630.4	599.6	593.0
37.5°	690.2	643.5	595.8	565.9	562.2
40°	649.1	607.0	559.4	537.0	531.4
42.5°	608.9	566.9	522.1	502.4	495.9
45°	570.6	526.7	489.4	470.7	465.1
47.5°	530.5	490.3	454.8	439.9	436.1
50°	488.4	452.9	420.3	406.2	401.6
52.5°	451.1	414.7	387.6	374.5	368.9
55°	410.9	380.1	354.0	342.7	339.0
57.5°	370.8	345.5	320.3	310.1	304.5
60°	335.3	310.1	289.5	277.4	273.6
62.5°	298.9	277.4	257.8	246.6	241.9
65°	262.4	244.7	226.0	212.0	207.3
67.5°	228.8	209.2	194.3	182.1	177.4
70°	193.3	179.3	164.4	153.2	148.5
72.5°	160.6	150.4	137.3	125.1	120.5
75°	131.7	121.4	111.1	98.1	91.5
77.5°	102.7	96.2	85.9	74.7	74.7
80°	75.6	71.9	60.7	58.8	57.9
82.5°	52.3	50.4	43.9	43.0	43.0
85°	30.8	29.0	29.0	29.0	29.0
87.5°	13.1	14.0	14.9	14.9	15.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)