

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: P295535

Luminaire Tested: **14RLN-LD5-23-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295535  
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-L83050-W2A1-U-4000K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2485.0 lumens  
Efficiency: N/A  
Efficacy: 117.7 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

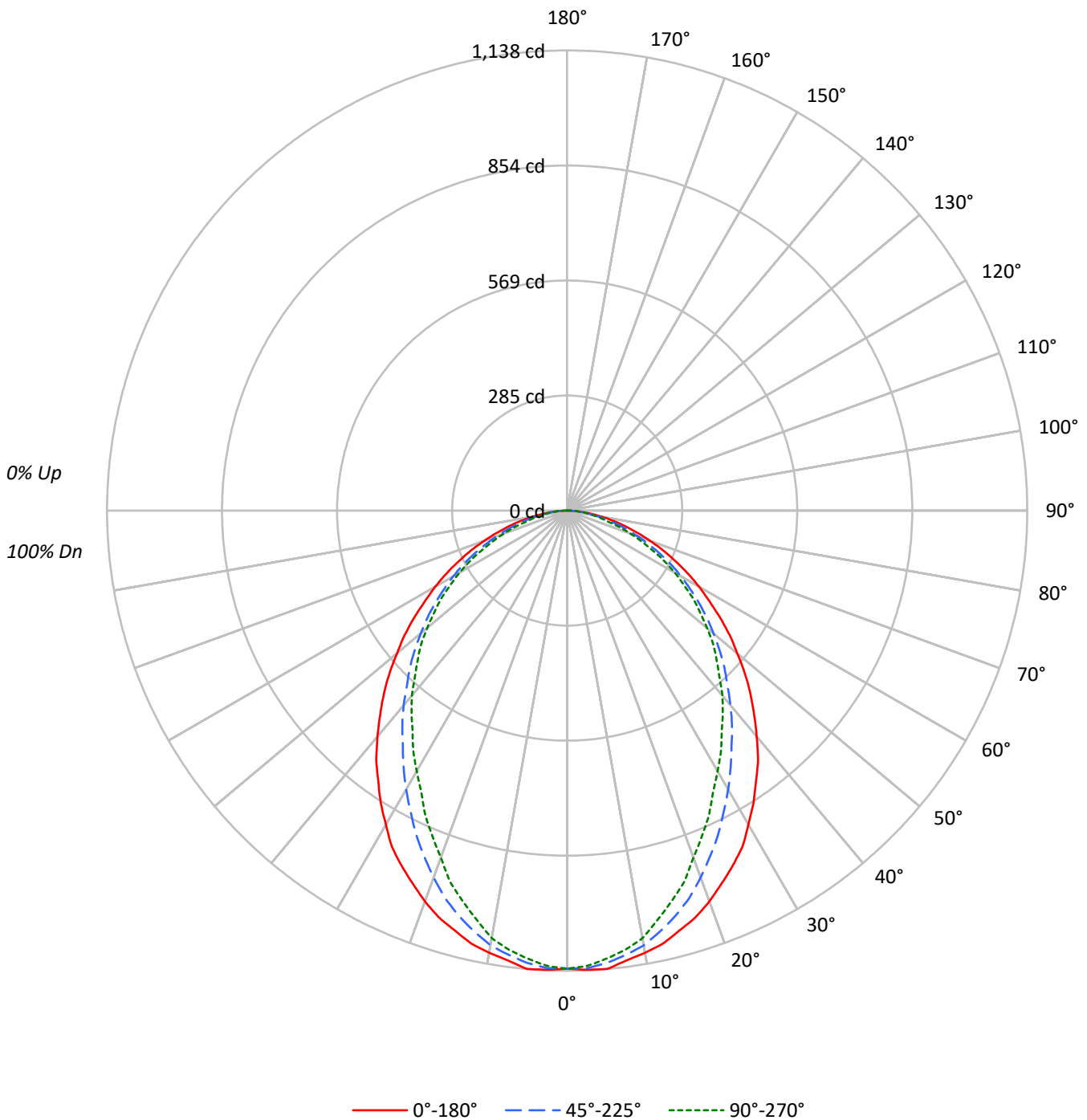
Input Watts (W): 21.111  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3048	3048	3048
5°	3073	3034	3005
10°	3034	2983	2934
15°	2994	2889	2784
20°	2946	2765	2615
25°	2877	2624	2465
30°	2785	2476	2312
35°	2676	2327	2190
40°	2563	2209	2098
45°	2441	2093	1989
50°	2298	1977	1889
55°	2167	1866	1787
60°	2028	1751	1655
65°	1878	1617	1484
70°	1710	1453	1313
75°	1539	1299	1070
80°	1317	1057	1009
85°	1068	1003	1003



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	106.0	4.3
10°-20°	291.1	11.7
20°-30°	408.5	16.4
30°-40°	453.1	18.2
40°-50°	434.9	17.5
50°-60°	364.5	14.7
60°-70°	255.9	10.3
70°-80°	133.6	5.4
80°-90°	37.4	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°	805.6	32.4
0°-40°	1258.7	50.7
0°-60°	2058.1	82.8
0°-90°	2485.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2485.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1133	1133	1133	1133	1133	
5°	1138	1123	1123	1116	1113	107
15°	1075	1056	1037	1010	999	303
25°	969	934	884	841	830	446
35°	814	769	708	674	666	510
45°	641	592	550	529	523	494
55°	462	427	398	385	381	413
65°	295	275	254	238	233	293
75°	148	136	125	110	103	157
85°	35	32	32	32	32	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1132.6	1132.6	1132.6	1132.6	1132.6
2.5°	1136.8	1130.5	1132.6	1132.6	1127.3
5°	1137.8	1123.1	1123.1	1115.8	1112.6
7.5°	1122.1	1110.5	1108.4	1099.0	1095.8
10°	1110.5	1099.0	1091.6	1079.0	1073.8
12.5°	1096.9	1079.0	1065.4	1044.4	1036.0
15°	1074.8	1055.9	1037.0	1009.8	999.3
17.5°	1054.9	1032.8	1004.5	974.1	962.5
20°	1028.6	1002.4	965.7	923.7	913.2
22.5°	998.2	967.8	924.7	879.6	871.2
25°	968.8	934.2	883.8	840.8	830.3
27.5°	938.4	896.4	838.7	792.5	782.0
30°	896.4	853.4	796.7	751.5	744.2
32.5°	857.6	814.5	752.6	715.9	707.5
35°	814.5	769.4	708.5	673.9	666.5
37.5°	775.7	723.2	669.7	636.1	631.9
40°	729.5	682.3	628.7	603.5	597.2
42.5°	684.4	637.1	586.7	564.7	557.4
45°	641.3	592.0	550.0	529.0	522.7
47.5°	596.2	551.1	511.2	494.4	490.2
50°	549.0	509.1	472.3	456.6	451.3
52.5°	507.0	466.0	435.6	420.9	414.6
55°	461.8	427.2	397.8	385.2	381.0
57.5°	416.7	388.4	360.0	348.5	342.2
60°	376.8	348.5	325.4	311.7	307.5
62.5°	335.9	311.7	289.7	277.1	271.9
65°	294.9	275.0	254.0	238.3	233.0
67.5°	257.2	235.1	218.3	204.7	199.4
70°	217.3	201.5	184.7	172.1	166.9
72.5°	180.5	169.0	154.3	140.7	135.4
75°	148.0	136.5	124.9	110.2	102.9
77.5°	115.5	108.1	96.6	84.0	84.0
80°	85.0	80.8	68.2	66.1	65.1
82.5°	58.8	56.7	49.3	48.3	48.3
85°	34.6	32.5	32.5	32.5	32.5
87.5°	14.7	15.7	16.8	16.8	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)