

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: P295629

Luminaire Tested: **14RLN-LD5-23-UNV-L92765-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295629  
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-L92765-W2A1-U-3000K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1929.0 lumens  
Efficiency: N/A  
Efficacy: 94.3 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

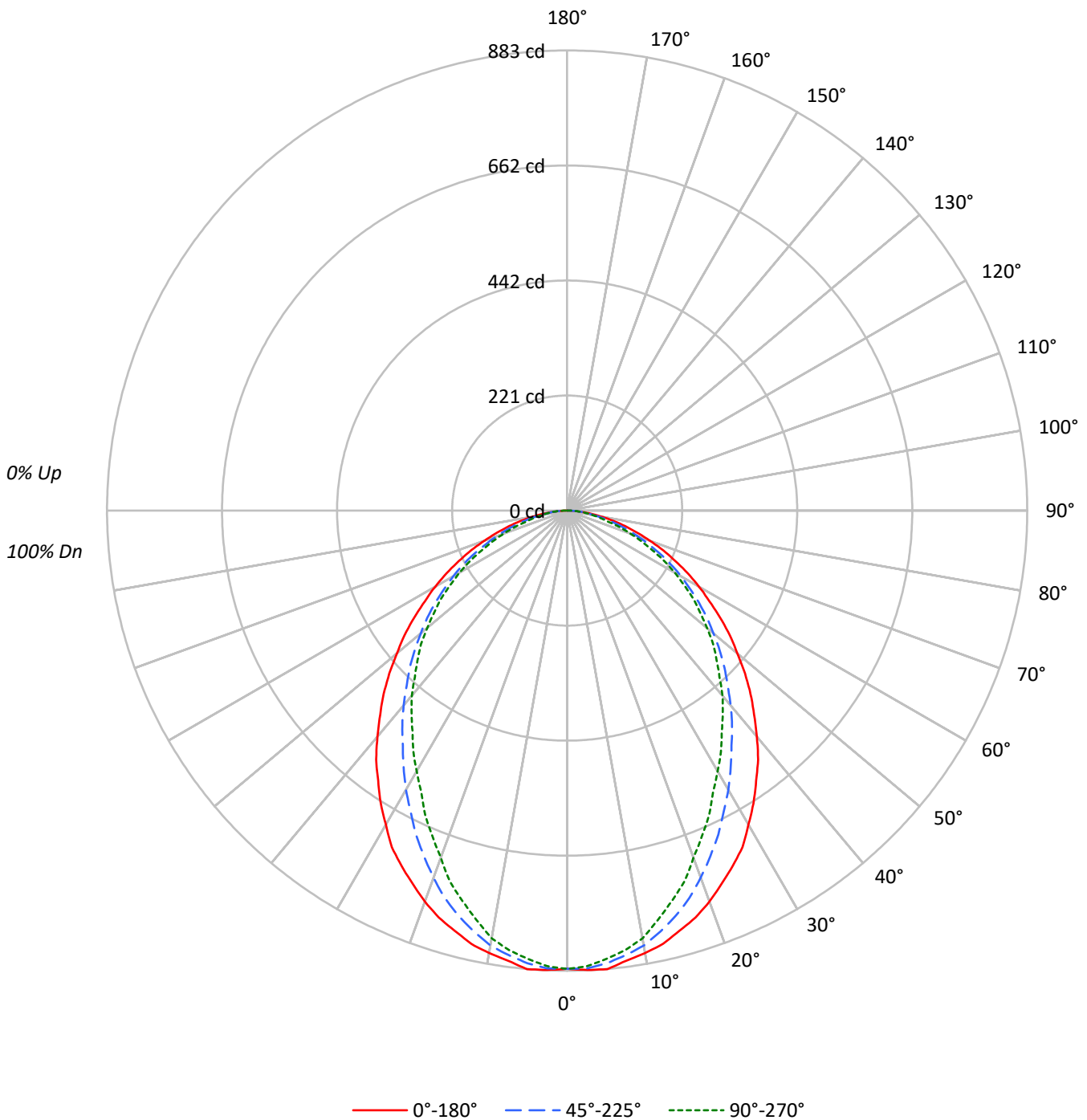
Input Watts (W): 20.46  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2366	2366	2366
5°	2386	2355	2333
10°	2356	2316	2278
15°	2324	2243	2161
20°	2287	2147	2030
25°	2233	2037	1914
30°	2162	1922	1795
35°	2077	1807	1700
40°	1989	1715	1629
45°	1894	1625	1544
50°	1784	1535	1467
55°	1682	1449	1388
60°	1574	1359	1285
65°	1458	1256	1152
70°	1327	1128	1020
75°	1195	1009	830
80°	1023	821	783
85°	831	781	781



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.3	4.3
10°-20°	225.9	11.7
20°-30°	317.1	16.4
30°-40°	351.7	18.2
40°-50°	337.6	17.5
50°-60°	283.0	14.7
60°-70°	198.6	10.3
70°-80°	103.7	5.4
80°-90°	29.0	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°	625.3	32.4
0°-40°	977.0	50.6
0°-60°	1597.6	82.8
0°-90°	1929.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1929.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	879	879	879	879	879	
5°	883	872	872	866	864	83
15°	834	820	805	784	776	235
25°	752	725	686	653	644	346
35°	632	597	550	523	517	396
45°	498	460	427	411	406	383
55°	358	332	309	299	296	321
65°	229	214	197	185	181	227
75°	115	106	97	86	80	122
85°	27	25	25	25	25	32
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	879.2	879.2	879.2	879.2	879.2
2.5°	882.4	877.5	879.2	879.2	875.1
5°	883.2	871.8	871.8	866.1	863.7
7.5°	871.0	862.1	860.4	853.1	850.6
10°	862.1	853.1	847.4	837.6	833.5
12.5°	851.5	837.6	827.0	810.7	804.2
15°	834.3	819.7	805.0	783.8	775.7
17.5°	818.9	801.8	779.8	756.1	747.2
20°	798.5	778.1	749.6	717.0	708.9
22.5°	774.9	751.2	717.8	682.8	676.3
25°	752.1	725.2	686.1	652.6	644.5
27.5°	728.4	695.8	651.0	615.2	607.0
30°	695.8	662.4	618.4	583.4	577.7
32.5°	665.7	632.3	584.2	555.7	549.2
35°	632.3	597.2	550.0	523.1	517.4
37.5°	602.1	561.4	519.8	493.8	490.5
40°	566.3	529.6	488.1	468.5	463.6
42.5°	531.2	494.6	455.5	438.4	432.7
45°	497.8	459.5	427.0	410.7	405.8
47.5°	462.8	427.8	396.8	383.8	380.5
50°	426.1	395.2	366.7	354.4	350.4
52.5°	393.5	361.8	338.1	326.7	321.8
55°	358.5	331.6	308.8	299.0	295.8
57.5°	323.5	301.5	279.5	270.5	265.6
60°	292.5	270.5	252.6	242.0	238.7
62.5°	260.7	242.0	224.9	215.1	211.0
65°	229.0	213.5	197.2	185.0	180.9
67.5°	199.6	182.5	169.5	158.9	154.8
70°	168.7	156.4	143.4	133.6	129.6
72.5°	140.1	131.2	119.8	109.2	105.1
75°	114.9	105.9	97.0	85.6	79.8
77.5°	89.6	83.9	75.0	65.2	65.2
80°	66.0	62.7	53.0	51.3	50.5
82.5°	45.6	44.0	38.3	37.5	37.5
85°	26.9	25.3	25.3	25.3	25.3
87.5°	11.4	12.2	13.0	13.0	13.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)