

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: P229482

Luminaire Tested: **14RLN-LD5-23-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229482  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36061)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-23-RDP-UNV-L830-CD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH RDP LENS  
Light Source: (112)3000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1932.0 lumens  
Efficiency: N/A  
Efficacy: 88.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.35 / 1.39  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

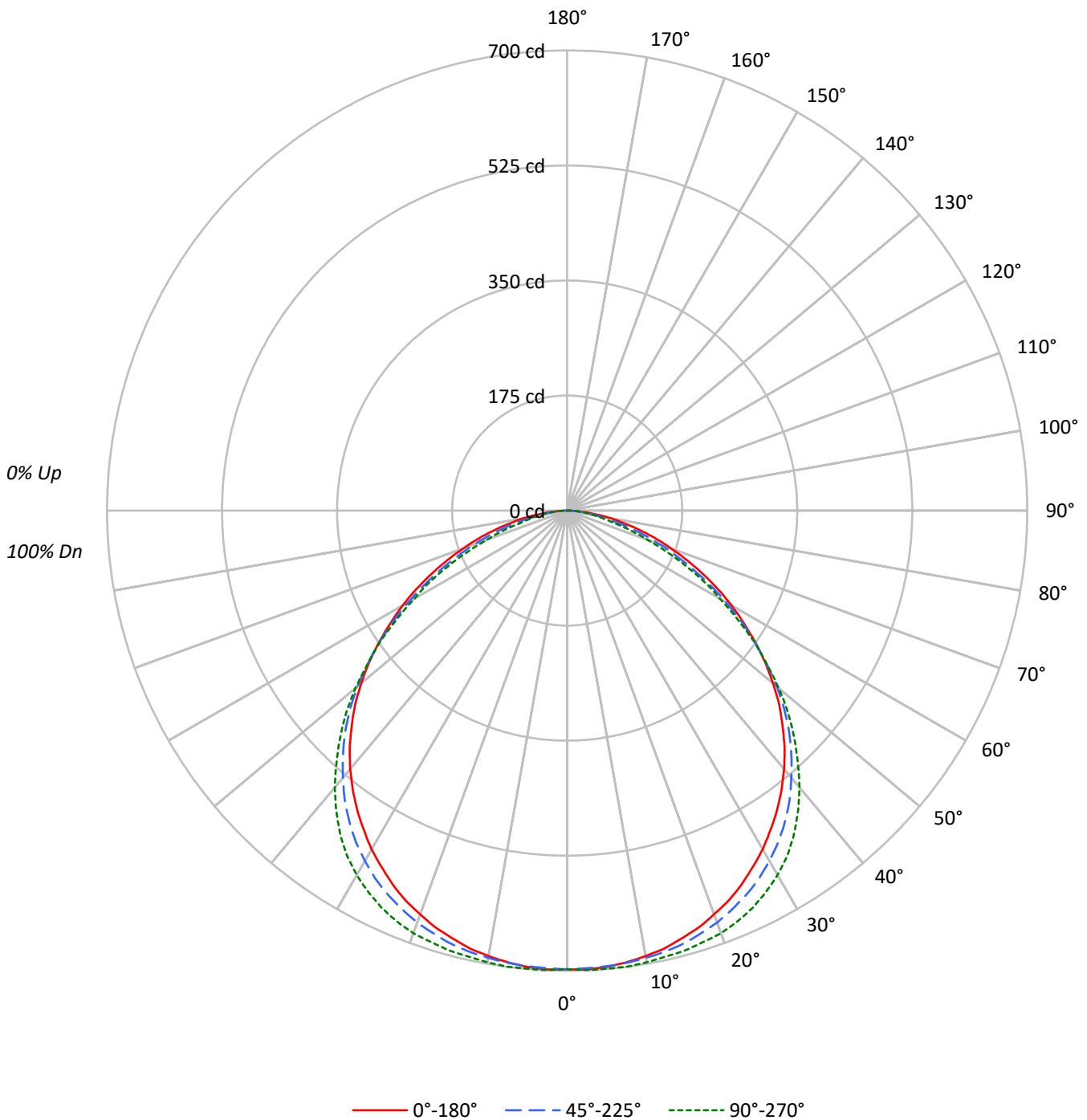
Input Watts (W): 21.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	105	101	97	107	103	99	96	98	95	93	94	92	90	91	89	87
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	64	59	54
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33
9	57	44	36	30	56	44	36	30	42	35	30	41	35	30	40	34	30
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	31	27

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

	0°	45°	90°
0°	2351	2351	2351
5°	2357	2354	2366
10°	2354	2364	2387
15°	2350	2381	2417
20°	2344	2392	2454
25°	2334	2398	2480
30°	2315	2394	2491
35°	2290	2377	2475
40°	2258	2334	2419
45°	2209	2277	2328
50°	2143	2183	2204
55°	2052	2047	2036
60°	1947	1882	1811
65°	1814	1683	1591
70°	1655	1475	1286
75°	1487	1225	962
80°	1321	895	838
85°	1040	742	742



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.4	3.4
10°-20°	193.0	10.0
20°-30°	297.9	15.4
30°-40°	361.3	18.7
40°-50°	366.8	19.0
50°-60°	310.3	16.1
60°-70°	210.0	10.9
70°-80°	101.5	5.3
80°-90°	24.8	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°	557.3	28.8
0°-40°	918.6	47.5
0°-60°	1595.8	82.6
0°-90°	1932.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1932.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	698	698	698	698	698	
5°	697	697	696	699	700	66
15°	674	678	682	690	693	190
25°	628	632	645	661	667	289
35°	557	562	578	596	602	348
45°	464	464	478	488	488	357
55°	349	346	348	348	346	312
65°	228	218	211	202	200	226
75°	114	106	94	82	74	122
85°	27	21	19	19	19	31
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	697.7	697.7	697.7	697.7	697.7
2.5°	698.7	698.7	696.8	698.7	699.6
5°	696.8	696.8	695.8	698.7	699.6
7.5°	692.9	693.9	693.9	697.7	699.6
10°	688.1	690.0	691.0	696.8	697.7
12.5°	682.4	684.3	687.2	693.9	694.8
15°	673.7	677.6	682.4	690.0	692.9
17.5°	665.1	668.9	674.7	685.2	688.1
20°	653.6	658.4	667.0	679.5	684.3
22.5°	642.1	645.9	656.4	671.8	676.6
25°	627.7	632.5	644.9	661.2	667.0
27.5°	611.3	618.1	631.5	648.8	654.5
30°	595.0	600.8	615.2	634.4	640.1
32.5°	575.8	581.6	597.9	616.1	622.9
35°	556.6	562.4	577.8	596.0	601.7
37.5°	535.5	539.4	555.7	571.0	576.8
40°	513.4	516.3	530.7	546.1	549.9
42.5°	489.5	491.4	504.8	518.2	519.2
45°	463.5	464.5	477.9	487.5	488.5
47.5°	437.6	436.7	448.2	454.9	455.9
50°	408.8	408.8	416.5	420.4	420.4
52.5°	380.0	378.1	382.0	384.8	382.0
55°	349.3	346.5	348.4	348.4	346.5
57.5°	318.6	312.9	313.8	311.9	307.1
60°	288.9	282.2	279.3	272.6	268.7
62.5°	258.2	250.5	244.7	237.1	236.1
65°	227.5	217.9	211.1	202.5	199.6
67.5°	197.7	189.1	179.5	169.9	164.1
70°	168.0	158.4	149.7	137.2	130.5
72.5°	141.1	132.4	121.9	107.5	102.7
75°	114.2	105.6	94.1	81.6	73.9
77.5°	88.3	81.6	69.1	58.5	57.6
80°	68.1	60.5	46.1	43.2	43.2
82.5°	44.1	39.3	32.6	30.7	30.7
85°	26.9	21.1	19.2	19.2	19.2
87.5°	10.6	9.6	9.6	9.6	9.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)