

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: P229512

Luminaire Tested: **14RLN-LD5-23-UNV-L830-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229512
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36064)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14RLN-LD5-23-UNV-L830-CD1-SVPD1-U
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR
Light Source: (112)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2220.0 lumens
Efficiency: N/A
Efficacy: 101.4 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.13 / 1.26
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

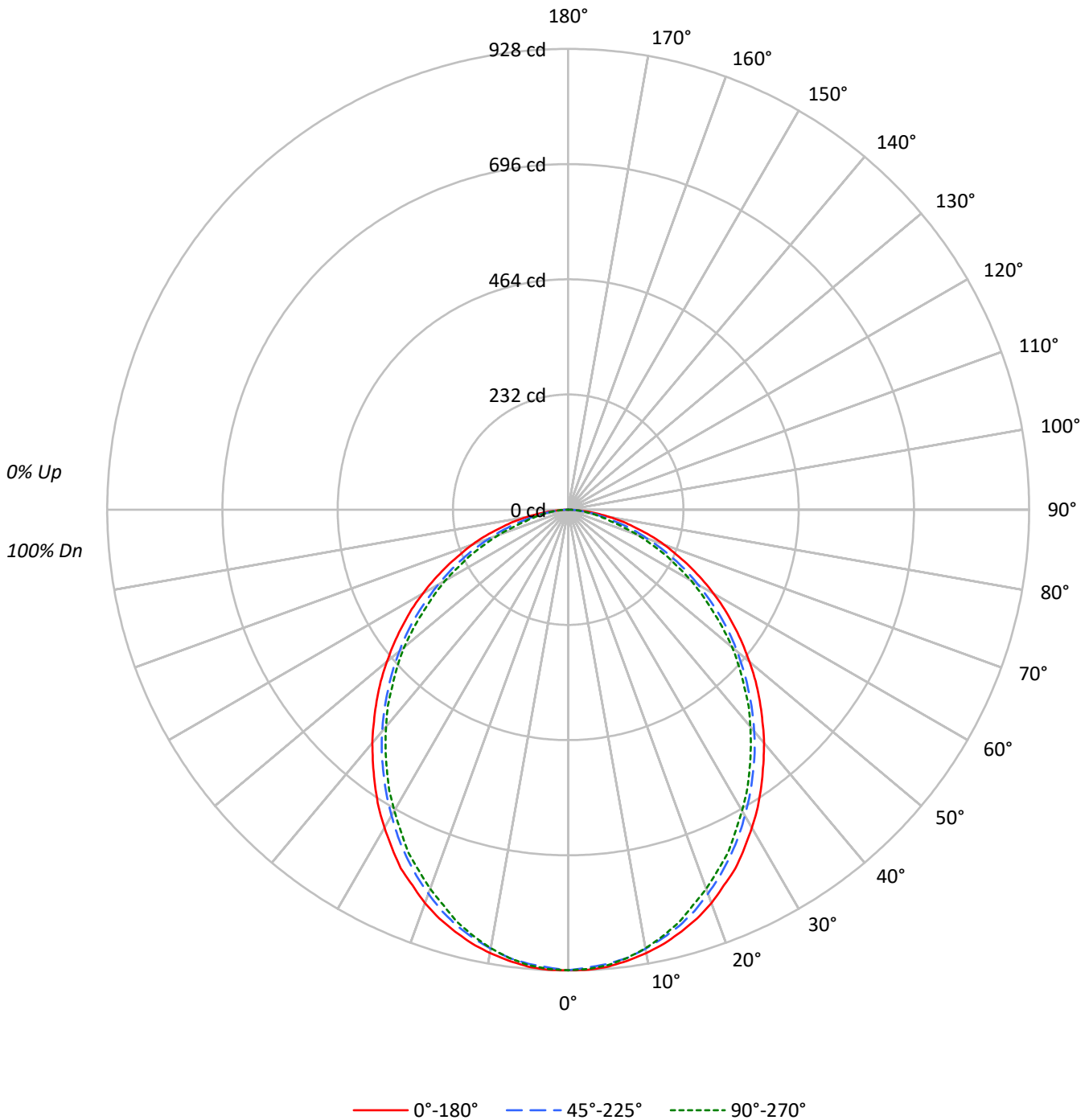
Input Watts (W): 21.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	92	86	80	97	90	84	79	87	82	78	84	79	76	81	77	74	72
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3125	3125	3125
5°	3124	3105	3115
10°	3101	3072	3068
15°	3068	3024	3001
20°	3023	2950	2913
25°	2963	2867	2831
30°	2877	2768	2723
35°	2788	2666	2619
40°	2699	2564	2509
45°	2599	2443	2384
50°	2496	2325	2260
55°	2392	2194	2081
60°	2278	2038	1928
65°	2151	1868	1730
70°	2025	1655	1466
75°	1825	1413	1138
80°	1620	1118	1005
85°	1338	889	928



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.2	3.9
10°-20°	244.6	11.0
20°-30°	356.5	16.1
30°-40°	408.7	18.4
40°-50°	399.6	18.0
50°-60°	337.1	15.2
60°-70°	235.7	10.6
70°-80°	120.2	5.4
80°-90°	30.3	1.4
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°	688.4	31.0
0°-40°	1097.1	49.4
0°-60°	1833.9	82.6
0°-90°	2220.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2220.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	928	928	928	928	928	
5°	924	922	918	921	921	88
15°	880	877	867	864	860	248
25°	797	787	771	763	761	366
35°	678	668	648	641	637	424
45°	545	531	513	506	500	421
55°	407	392	374	363	354	364
65°	270	254	234	221	217	267
75°	140	129	108	95	87	151
85°	35	26	23	24	24	41
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	927.5	927.5	927.5	927.5	927.5
2.5°	927.5	925.6	922.7	926.5	925.6
5°	923.6	921.7	917.9	920.8	920.8
7.5°	916.0	914.0	910.2	912.1	910.2
10°	906.4	904.4	897.7	898.7	896.7
12.5°	894.8	891.0	883.3	882.3	879.5
15°	879.5	876.6	867.0	864.1	860.3
17.5°	863.1	857.4	846.8	841.1	835.3
20°	843.0	835.3	822.8	816.1	812.3
22.5°	819.0	813.2	797.9	790.2	786.3
25°	796.9	787.3	771.0	763.3	761.4
27.5°	768.1	760.4	742.2	735.4	729.7
30°	739.3	730.6	711.4	704.7	699.9
32.5°	710.5	700.9	680.7	673.0	670.2
35°	677.8	668.2	648.1	641.4	636.6
37.5°	645.2	633.7	616.4	608.7	603.9
40°	613.5	600.1	582.8	574.1	570.3
42.5°	579.0	564.5	548.2	539.6	537.7
45°	545.3	530.9	512.7	506.0	500.2
47.5°	511.7	495.4	479.1	469.5	465.7
50°	476.2	460.9	443.6	434.0	431.1
52.5°	441.7	426.3	410.0	399.4	392.7
55°	407.1	391.7	373.5	362.9	354.3
57.5°	373.5	355.2	337.0	324.5	319.7
60°	338.0	321.6	302.4	290.0	286.1
62.5°	303.4	289.0	268.8	254.4	247.7
65°	269.8	253.5	234.3	220.8	217.0
67.5°	235.2	220.8	201.6	186.3	179.5
70°	205.5	187.2	168.0	154.6	148.8
72.5°	173.8	157.5	139.2	123.9	115.2
75°	140.2	128.7	108.5	95.1	87.4
77.5°	113.3	99.9	81.6	71.0	69.1
80°	83.5	73.0	57.6	52.8	51.8
82.5°	58.6	48.0	39.4	37.4	36.5
85°	34.6	25.9	23.0	24.0	24.0
87.5°	14.4	10.6	10.6	11.5	11.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)