

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: P229452

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229452
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36058)
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-U
Description: METALUX 1X4 RLN LED TROFFER
Light Source: (112)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2278.0 lumens
Efficiency: N/A
Efficacy: 104.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.31
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

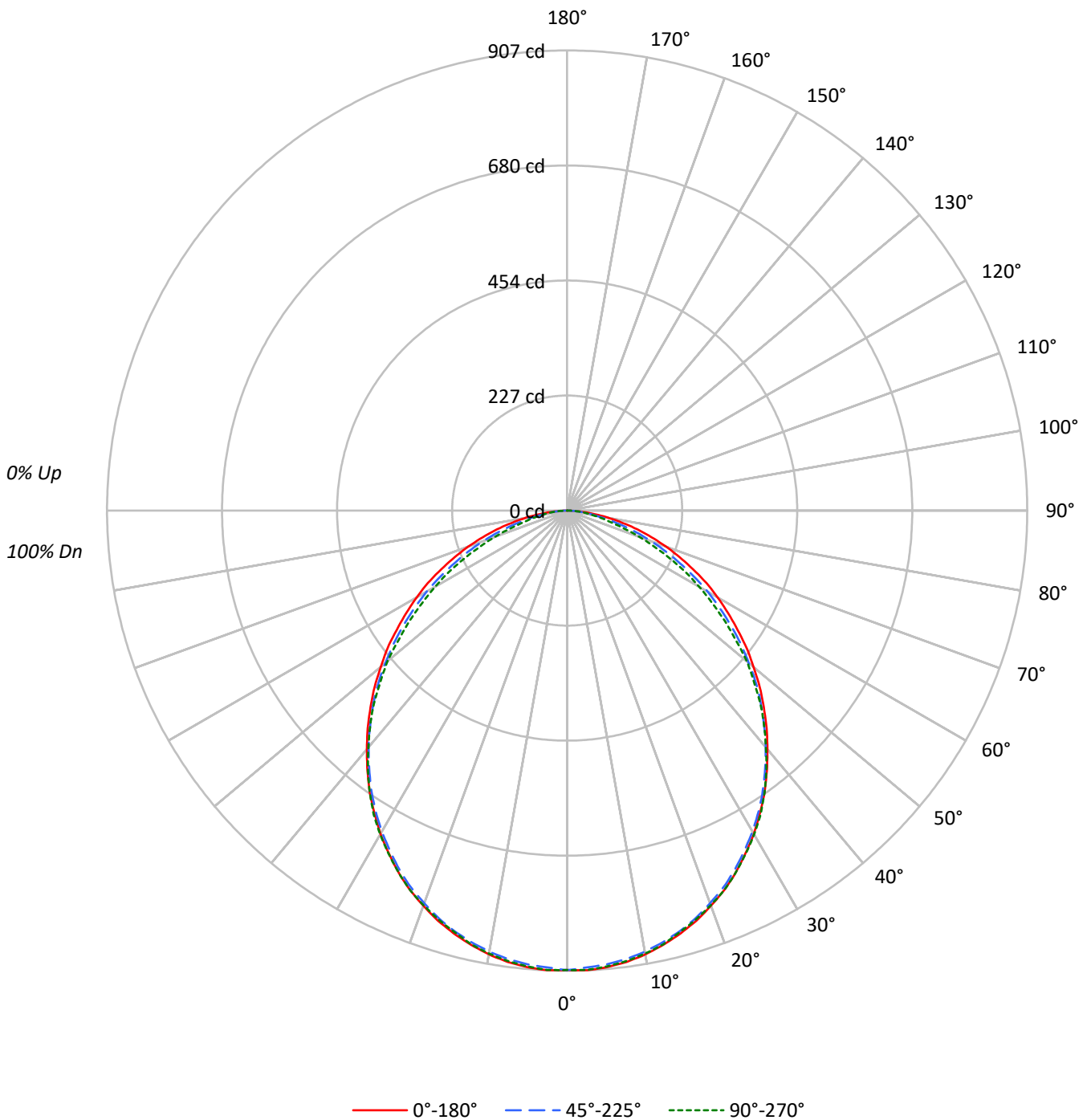
Input Watts (W): 21.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	77		84	79	76		81	77	74	72
3	91	81	74	67	89	80	73	67	77	71	66		74	69	64		72	67	63	61
4	84	72	64	57	82	71	63	57	69	62	56		66	60	56		64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49		60	53	48		58	52	48	46
6	72	59	50	44	70	58	49	43	56	49	43		54	48	43		53	47	42	40
7	66	53	45	39	65	52	44	39	51	44	38		50	43	38		48	42	38	36
8	62	49	40	35	60	48	40	35	47	40	34		45	39	34		44	38	34	32
9	58	45	37	31	57	44	36	31	43	36	31		42	36	31		41	35	31	29
10	54	41	34	28	53	41	33	28	40	33	28		39	33	28		38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3052	3052	3052
5°	3056	3037	3050
10°	3039	3020	3034
15°	3011	2993	2999
20°	2973	2953	2969
25°	2926	2905	2926
30°	2864	2842	2868
35°	2791	2768	2791
40°	2701	2679	2681
45°	2611	2577	2569
50°	2515	2450	2424
55°	2410	2312	2227
60°	2309	2158	2026
65°	2182	1950	1785
70°	2034	1732	1500
75°	1866	1450	1159
80°	1607	1087	999
85°	1299	909	932



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.5	3.8
10°-20°	242.7	10.7
20°-30°	361.3	15.9
30°-40°	422.3	18.5
40°-50°	417.4	18.3
50°-60°	352.4	15.5
60°-70°	244.1	10.7
70°-80°	121.8	5.3
80°-90°	30.3	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°	689.6	30.3
0°-40°	1112.0	48.8
0°-60°	1881.8	82.6
0°-90°	2278.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2278.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	906	906	906	906	906	
5°	903	902	898	902	902	86
15°	863	862	858	862	860	243
25°	787	785	781	786	787	362
35°	678	675	673	678	678	424
45°	548	542	541	540	539	423
55°	410	403	394	385	379	368
65°	274	261	245	232	224	271
75°	143	130	111	96	89	151
85°	34	26	24	24	24	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	905.7	905.7	905.7	905.7	905.7
2.5°	906.8	905.1	901.2	905.7	906.2
5°	903.4	901.8	897.8	902.3	901.8
7.5°	897.3	895.0	891.7	895.6	895.6
10°	888.3	886.6	882.7	887.2	886.6
12.5°	876.6	875.4	871.5	876.0	875.4
15°	863.1	862.0	858.1	862.0	859.8
17.5°	847.5	846.9	842.4	845.2	844.7
20°	829.0	827.9	823.4	829.0	827.9
22.5°	809.4	807.2	804.4	808.8	809.4
25°	787.0	784.8	781.4	786.4	787.0
27.5°	761.3	759.6	756.2	763.5	762.4
30°	736.1	734.4	730.5	736.6	737.2
32.5°	707.0	705.3	702.5	708.6	709.8
35°	678.4	675.1	672.8	677.9	678.4
37.5°	646.5	643.2	640.9	646.0	644.8
40°	614.0	610.1	609.0	612.9	609.6
42.5°	582.1	577.1	574.9	577.1	574.9
45°	548.0	541.8	540.7	539.6	539.0
47.5°	515.0	508.3	505.5	501.5	498.7
50°	479.7	472.4	467.4	463.5	462.4
52.5°	446.7	438.3	431.0	427.6	418.7
55°	410.3	403.0	393.5	385.1	379.0
57.5°	376.2	366.6	355.4	346.5	338.6
60°	342.6	330.3	320.2	306.2	300.6
62.5°	309.5	295.5	281.6	266.4	263.6
65°	273.7	260.8	244.6	231.7	223.9
67.5°	239.6	226.1	210.5	192.6	185.3
70°	206.5	192.0	175.8	158.4	152.3
72.5°	174.6	160.1	143.3	124.8	117.5
75°	143.3	130.4	111.4	96.3	89.0
77.5°	111.4	100.8	82.3	70.0	68.8
80°	82.8	73.3	56.0	53.2	51.5
82.5°	57.1	48.1	39.7	38.1	36.9
85°	33.6	25.7	23.5	23.5	24.1
87.5°	12.9	11.2	11.2	11.2	11.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)