

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: P229776

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L830-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229776
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24RLN-LD5-31-RDP-UNV-L830-CD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS
Light Source: (252)3000K CCT, 80 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2531.0 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38
Luminous Opening: Rectangular (W 1.83' x L: 3.83' x H: 0')
CIE Type: Direct

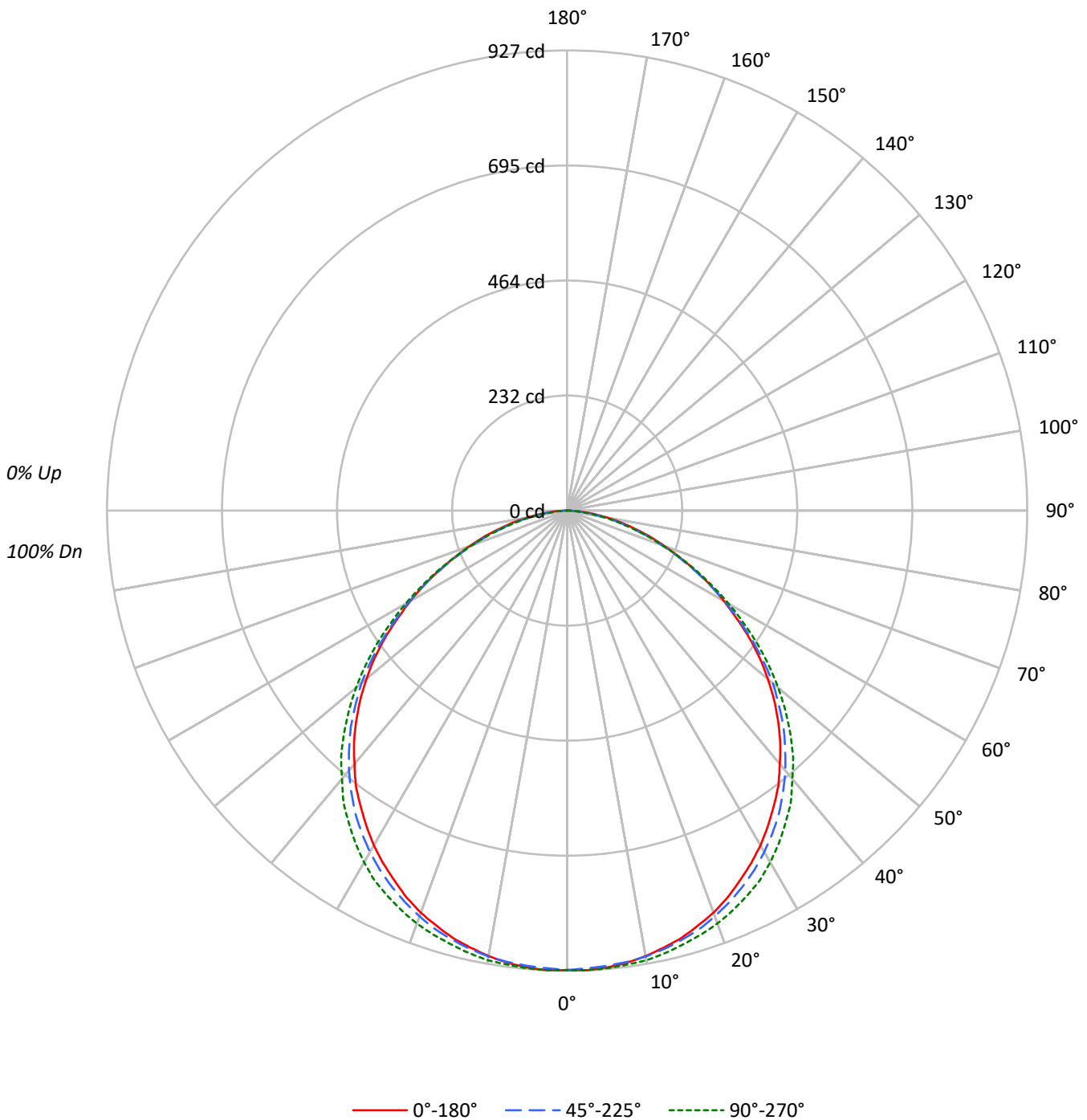
Input Watts (W): 22.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	99	95	98	95	92		94	92	90		91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77		83	79	75		80	77	73	71
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55		66	60	55		63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48		59	53	48		57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42		53	47	42		52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37		49	42	37		47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33		45	38	33		43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30		41	35	30		40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27		38	32	27		37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1418	1418	1418
5°	1420	1416	1423
10°	1417	1419	1431
15°	1413	1419	1434
20°	1405	1418	1443
25°	1391	1413	1447
30°	1377	1404	1447
35°	1357	1391	1435
40°	1332	1367	1411
45°	1302	1335	1377
50°	1258	1288	1322
55°	1197	1213	1249
60°	1118	1124	1153
65°	1026	1019	1044
70°	933	907	912
75°	830	784	778
80°	720	644	627
85°	590	455	355



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	87.8	3.5
10°-20°	253.1	10.0
20°-30°	386.3	15.3
30°-40°	465.7	18.4
40°-50°	474.9	18.8
50°-60°	406.4	16.1
60°-70°	280.0	11.1
70°-80°	143.5	5.7
80°-90°	33.4	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°	727.1	28.7
0°-40°	1192.8	47.1
0°-60°	2074.1	81.9
0°-90°	2531.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2531.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	926	926	926	926	926	
5°	924	922	921	924	926	88
15°	891	890	895	902	904	251
25°	823	826	836	851	856	379
35°	726	729	744	760	767	454
45°	601	602	616	632	636	463
55°	448	446	454	464	468	400
65°	283	276	281	283	288	281
75°	140	134	132	132	132	151
85°	34	30	26	23	20	39
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	925.6	925.6	925.6	925.6	925.6
2.5°	926.6	924.6	922.7	924.6	926.6
5°	923.7	921.8	920.8	923.7	925.6
7.5°	918.9	917.0	917.0	920.8	922.7
10°	911.2	910.2	912.2	916.0	919.8
12.5°	901.6	901.6	904.5	909.3	913.1
15°	891.0	890.1	894.9	901.6	904.5
17.5°	876.6	877.6	884.3	892.0	895.8
20°	862.2	863.2	869.9	880.5	885.3
22.5°	844.0	845.9	853.6	867.0	871.8
25°	822.9	825.7	836.3	850.7	856.5
27.5°	801.7	804.6	816.1	832.5	840.1
30°	778.7	782.5	794.1	811.3	818.1
32.5°	752.8	755.6	770.1	787.3	794.1
35°	725.9	728.8	744.1	760.4	767.2
37.5°	699.0	699.0	714.4	733.6	740.3
40°	666.4	667.3	683.6	701.9	705.7
42.5°	635.6	635.6	650.0	667.3	674.0
45°	601.1	602.0	616.4	631.8	635.6
47.5°	565.5	565.5	578.0	592.4	596.3
50°	528.1	526.2	540.6	552.1	555.0
52.5°	489.7	486.8	498.3	507.9	511.8
55°	448.4	445.5	454.2	463.8	467.6
57.5°	405.2	401.3	410.9	419.6	421.5
60°	364.9	359.1	366.8	371.6	376.4
62.5°	324.5	317.8	323.6	326.5	330.3
65°	283.2	276.5	281.3	283.2	288.0
67.5°	243.9	239.1	240.0	242.9	244.8
70°	208.4	202.6	202.6	202.6	203.6
72.5°	175.7	167.1	166.1	167.1	167.1
75°	140.2	134.4	132.5	132.5	131.5
77.5°	112.3	104.7	103.7	101.8	99.9
80°	81.6	74.9	73.0	72.0	71.1
82.5°	56.6	50.9	49.0	47.0	44.2
85°	33.6	29.8	25.9	23.0	20.2
87.5°	12.5	11.5	9.6	8.6	8.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)