

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: P229826

Luminaire Tested: **24RLN-LD5-31-RDP-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229826
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-L940-CD1-U
Description: METALUX 2X4 RLN LED TROFFER WITH RDP LENS
Light Source: (252)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2329.0 lumens
Efficiency: N/A
Efficacy: 101.7 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

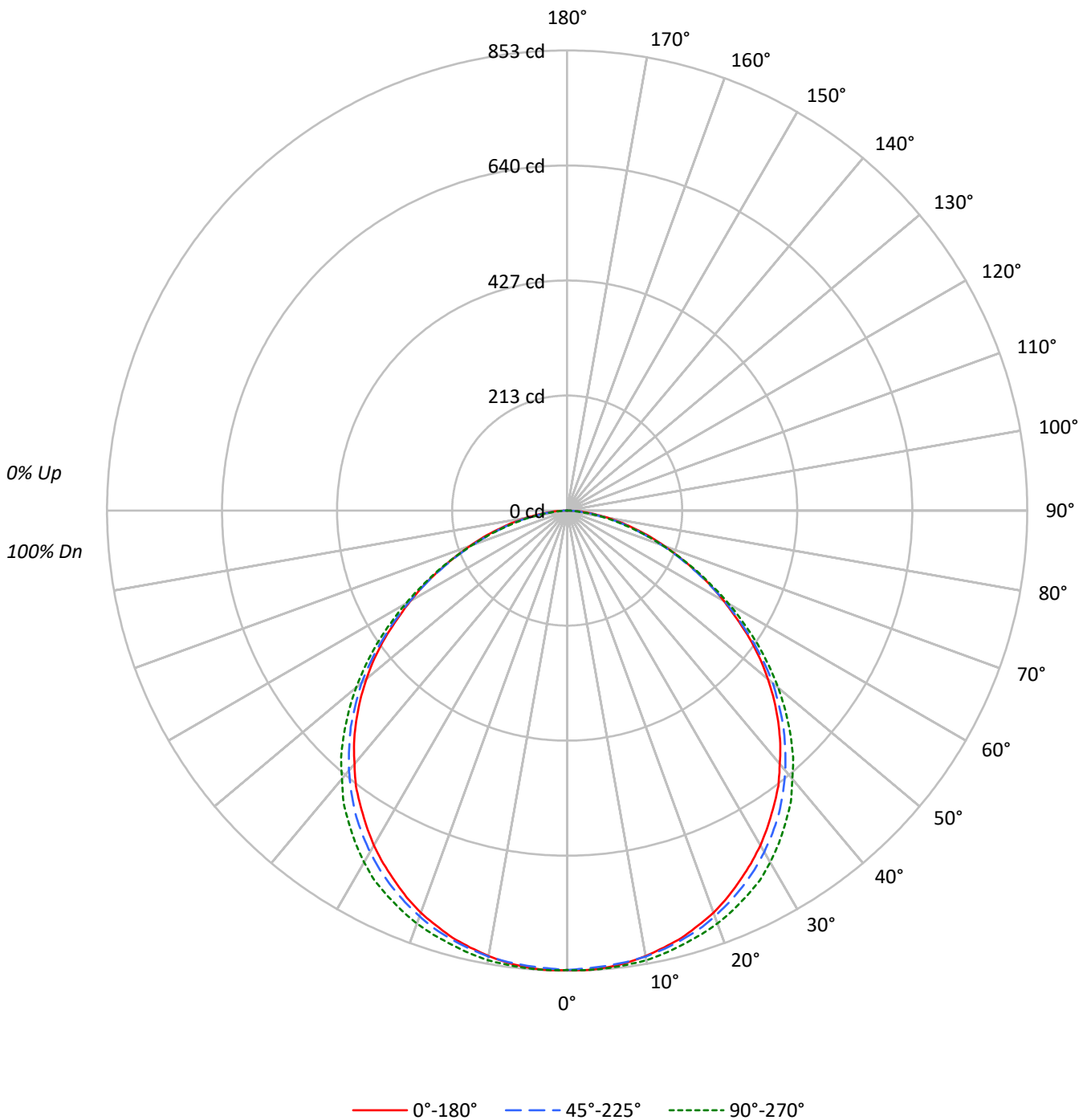
Input Watts (W): 22.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1305	1305	1305
5°	1307	1303	1310
10°	1304	1306	1316
15°	1300	1306	1320
20°	1293	1305	1328
25°	1280	1301	1332
30°	1267	1292	1331
35°	1249	1280	1320
40°	1226	1258	1298
45°	1198	1229	1267
50°	1158	1185	1217
55°	1102	1116	1149
60°	1028	1034	1061
65°	944	938	961
70°	858	835	839
75°	763	721	716
80°	662	592	577
85°	543	420	327



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	80.8	3.5
10°-20°	232.9	10.0
20°-30°	355.4	15.3
30°-40°	428.5	18.4
40°-50°	437.0	18.8
50°-60°	374.0	16.1
60°-70°	257.6	11.1
70°-80°	132.1	5.7
80°-90°	30.7	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°	669.1	28.7
0°-40°	1097.6	47.1
0°-60°	1908.6	81.9
0°-90°	2329.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2329.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	852	852	852	852	852	
5°	850	848	847	850	852	81
15°	820	819	824	830	832	231
25°	757	760	770	783	788	349
35°	668	671	685	700	706	418
45°	553	554	567	581	585	426
55°	413	410	418	427	430	368
65°	261	254	259	261	265	259
75°	129	124	122	122	121	139
85°	31	27	24	21	19	36
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	851.7	851.7	851.7	851.7	851.7
2.5°	852.6	850.8	849.1	850.8	852.6
5°	850.0	848.2	847.3	850.0	851.7
7.5°	845.5	843.8	843.8	847.3	849.1
10°	838.5	837.6	839.4	842.9	846.4
12.5°	829.6	829.6	832.3	836.7	840.2
15°	819.9	819.0	823.5	829.6	832.3
17.5°	806.7	807.5	813.7	820.8	824.3
20°	793.4	794.3	800.5	810.2	814.6
22.5°	776.6	778.4	785.5	797.8	802.2
25°	757.2	759.8	769.6	782.8	788.1
27.5°	737.7	740.4	751.0	766.0	773.1
30°	716.5	720.1	730.7	746.6	752.8
32.5°	692.7	695.3	708.6	724.5	730.7
35°	667.9	670.6	684.7	699.8	705.9
37.5°	643.2	643.2	657.3	675.0	681.2
40°	613.2	614.1	629.1	645.9	649.4
42.5°	584.9	584.9	598.2	614.1	620.2
45°	553.1	554.0	567.2	581.4	584.9
47.5°	520.4	520.4	531.9	545.1	548.7
50°	485.9	484.2	497.4	508.0	510.7
52.5°	450.6	448.0	458.6	467.4	470.9
55°	412.6	410.0	417.9	426.7	430.3
57.5°	372.9	369.3	378.2	386.1	387.9
60°	335.7	330.4	337.5	341.9	346.3
62.5°	298.6	292.4	297.8	300.4	303.9
65°	260.6	254.5	258.9	260.6	265.1
67.5°	224.4	220.0	220.9	223.5	225.3
70°	191.7	186.4	186.4	186.4	187.3
72.5°	161.7	153.7	152.9	153.7	153.7
75°	129.0	123.7	121.9	121.9	121.0
77.5°	103.4	96.3	95.4	93.7	91.9
80°	75.1	68.9	67.1	66.3	65.4
82.5°	52.1	46.8	45.1	43.3	40.6
85°	30.9	27.4	23.9	21.2	18.6
87.5°	11.5	10.6	8.8	8.0	8.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)