

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: P229481

Luminaire Tested: **14RLN-LD5-40-UNV-L940-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229481
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-LD5-40-UNV-L940-CD1-U
Description: METALUX 1X4 RLN LED TROFFER
Light Source: (112)4000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3595.0 lumens
Efficiency: N/A
Efficacy: 85.8 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

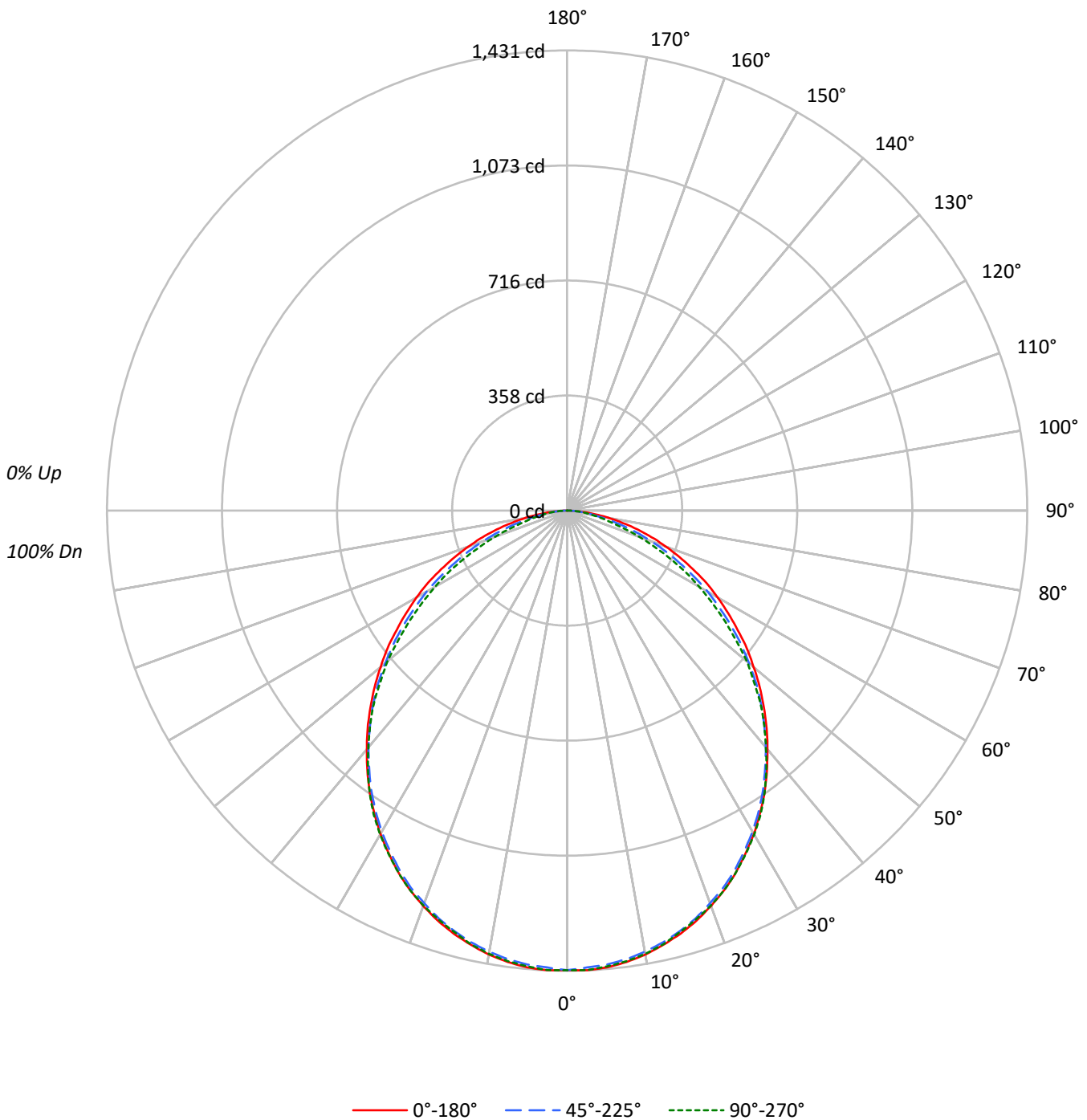
Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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					100			
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	92	86	80	97	90	84	79	87	82	77	84	79	76	81	77	74	72					72			
3	91	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61					61			
4	84	72	64	57	82	71	63	57	69	62	56	66	60	56	64	59	55	53					53			
5	77	65	56	50	75	64	56	50	62	55	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	50	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	40	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4816	4816	4816
5°	4822	4793	4814
10°	4797	4767	4787
15°	4752	4724	4733
20°	4691	4659	4685
25°	4618	4585	4618
30°	4520	4485	4527
35°	4404	4368	4404
40°	4263	4228	4232
45°	4121	4066	4054
50°	3968	3867	3825
55°	3804	3648	3513
60°	3643	3405	3197
65°	3444	3078	2817
70°	3212	2733	2367
75°	2944	2289	1829
80°	2536	1713	1578
85°	2049	1434	1469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.0	3.8
10°-20°	383.1	10.7
20°-30°	570.2	15.9
30°-40°	666.5	18.5
40°-50°	658.7	18.3
50°-60°	556.2	15.5
60°-70°	385.3	10.7
70°-80°	192.3	5.3
80°-90°	47.8	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°	1088.3	30.3
0°-40°	1754.8	48.8
0°-60°	2969.7	82.6
0°-90°	3595.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3595.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1429	1429	1429	1429	1429	
5°	1426	1423	1417	1424	1423	135
15°	1362	1360	1354	1360	1357	384
25°	1242	1238	1233	1241	1242	571
35°	1071	1065	1062	1070	1071	669
45°	865	855	853	852	851	668
55°	648	636	621	608	598	580
65°	432	412	386	366	353	428
75°	226	206	176	152	140	239
85°	53	41	37	37	38	62
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1429.3	1429.3	1429.3	1429.3	1429.3
2.5°	1431.0	1428.4	1422.2	1429.3	1430.2
5°	1425.7	1423.1	1416.9	1424.0	1423.1
7.5°	1416.0	1412.5	1407.2	1413.4	1413.4
10°	1401.9	1399.2	1393.1	1400.1	1399.2
12.5°	1383.3	1381.6	1375.4	1382.5	1381.6
15°	1362.1	1360.4	1354.2	1360.4	1356.8
17.5°	1337.4	1336.5	1329.5	1333.9	1333.0
20°	1308.3	1306.5	1299.4	1308.3	1306.5
22.5°	1277.3	1273.8	1269.4	1276.5	1277.3
25°	1242.0	1238.5	1233.2	1241.1	1242.0
27.5°	1201.4	1198.7	1193.4	1204.9	1203.1
30°	1161.6	1159.0	1152.8	1162.5	1163.4
32.5°	1115.7	1113.0	1108.6	1118.3	1120.1
35°	1070.6	1065.3	1061.8	1069.8	1070.6
37.5°	1020.3	1015.0	1011.5	1019.4	1017.6
40°	969.1	962.9	961.1	967.3	962.0
42.5°	918.7	910.7	907.2	910.7	907.2
45°	864.8	855.1	853.3	851.6	850.7
47.5°	812.7	802.1	797.7	791.5	787.1
50°	757.0	745.6	737.6	731.4	729.7
52.5°	704.9	691.7	680.2	674.9	660.8
55°	647.5	636.0	621.0	607.8	598.0
57.5°	593.6	578.6	560.9	546.8	534.4
60°	540.6	521.2	505.3	483.2	474.4
62.5°	488.5	466.4	444.3	420.5	416.1
65°	432.0	411.6	386.0	365.7	353.3
67.5°	378.1	356.9	332.1	303.9	292.4
70°	326.0	303.0	277.4	250.0	240.3
72.5°	275.6	252.6	226.1	197.0	185.5
75°	226.1	205.8	175.8	151.9	140.5
77.5°	175.8	159.0	129.9	110.4	108.7
80°	130.7	115.7	88.3	83.9	81.3
82.5°	90.1	76.0	62.7	60.1	58.3
85°	53.0	40.6	37.1	37.1	38.0
87.5°	20.3	17.7	17.7	17.7	18.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)