

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: P229541

Luminaire Tested: **14RLN-LD5-40-UNV-L940-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229541  
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-LD5-40-UNV-L940-CD1-SVPD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR  
Light Source: (112)4000K CCT, 90 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3503.0 lumens  
Efficiency: N/A  
Efficacy: 83.6 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

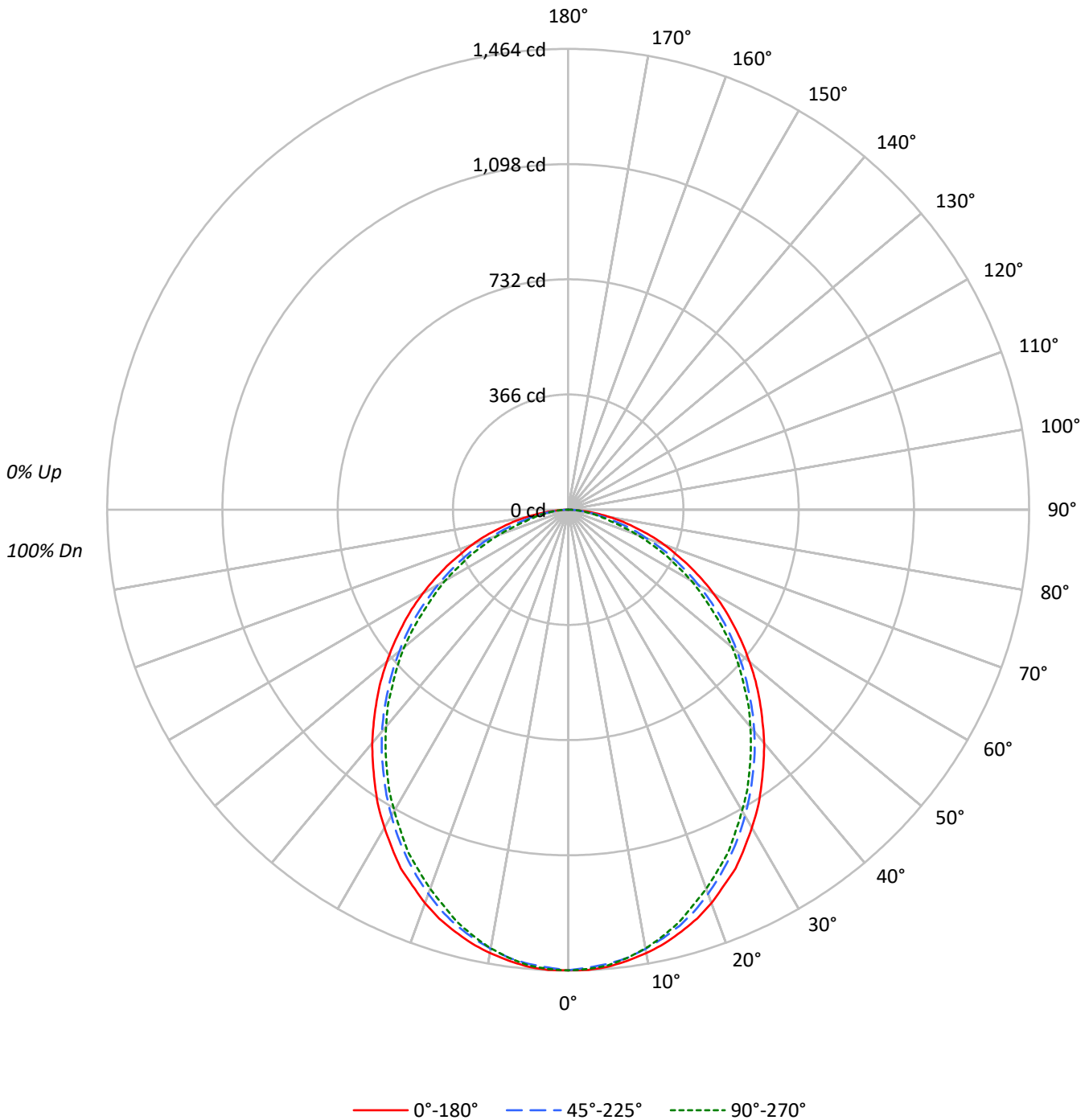
Input Watts (W): 41.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	4931	4931	4931
5°	4930	4899	4914
10°	4894	4847	4842
15°	4841	4772	4735
20°	4770	4656	4596
25°	4675	4523	4467
30°	4539	4368	4297
35°	4400	4206	4132
40°	4258	4045	3958
45°	4101	3855	3761
50°	3939	3669	3566
55°	3774	3462	3284
60°	3594	3216	3043
65°	3394	2948	2730
70°	3194	2612	2313
75°	2880	2229	1795
80°	2558	1764	1587
85°	2107	1407	1465



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.7	3.9
10°-20°	386.0	11.0
20°-30°	562.6	16.1
30°-40°	644.9	18.4
40°-50°	630.6	18.0
50°-60°	532.0	15.2
60°-70°	371.8	10.6
70°-80°	189.6	5.4
80°-90°	47.8	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°	1086.2	31.0
0°-40°	1731.2	49.4
0°-60°	2893.7	82.6
0°-90°	3503.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3503.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1464	1464	1464	1464	1464	
5°	1457	1454	1448	1453	1453	138
15°	1388	1383	1368	1364	1357	391
25°	1257	1242	1216	1204	1201	578
35°	1070	1054	1023	1012	1004	669
45°	860	838	809	798	789	664
55°	642	618	589	573	559	575
65°	426	400	370	348	342	422
75°	221	203	171	150	138	238
85°	54	41	36	38	38	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1463.5	1463.5	1463.5	1463.5	1463.5
2.5°	1463.5	1460.5	1455.9	1462.0	1460.5
5°	1457.4	1454.4	1448.3	1452.9	1452.9
7.5°	1445.3	1442.3	1436.2	1439.2	1436.2
10°	1430.2	1427.1	1416.5	1418.0	1415.0
12.5°	1412.0	1405.9	1393.8	1392.3	1387.7
15°	1387.7	1383.2	1368.0	1363.5	1357.4
17.5°	1362.0	1352.9	1336.2	1327.1	1318.0
20°	1330.2	1318.0	1298.4	1287.7	1281.7
22.5°	1292.3	1283.2	1259.0	1246.8	1240.8
25°	1257.4	1242.3	1216.5	1204.4	1201.4
27.5°	1212.0	1199.9	1171.1	1160.5	1151.4
30°	1166.5	1152.9	1122.6	1112.0	1104.4
32.5°	1121.1	1105.9	1074.1	1062.0	1057.5
35°	1069.6	1054.4	1022.6	1012.0	1004.4
37.5°	1018.1	999.9	972.6	960.5	952.9
40°	968.1	946.9	919.6	906.0	899.9
42.5°	913.5	890.8	865.1	851.4	848.4
45°	860.5	837.8	809.0	798.4	789.3
47.5°	807.5	781.7	756.0	740.8	734.8
50°	751.4	727.2	699.9	684.8	680.2
52.5°	696.9	672.7	646.9	630.2	619.6
55°	642.4	618.1	589.3	572.7	559.0
57.5°	589.3	560.5	531.8	512.1	504.5
60°	533.3	507.5	477.2	457.5	451.5
62.5°	478.7	456.0	424.2	401.5	390.9
65°	425.7	400.0	369.7	348.4	342.4
67.5°	371.2	348.4	318.1	293.9	283.3
70°	324.2	295.4	265.1	243.9	234.8
72.5°	274.2	248.5	219.7	195.4	181.8
75°	221.2	203.0	171.2	150.0	137.9
77.5°	178.8	157.6	128.8	112.1	109.1
80°	131.8	115.1	90.9	83.3	81.8
82.5°	92.4	75.7	62.1	59.1	57.6
85°	54.5	40.9	36.4	37.9	37.9
87.5°	22.7	16.7	16.7	18.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)