

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: P229519

Luminaire Tested: **14RLN-LD5-31-UNV-L835-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229519  
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-LD5-31-UNV-L835-CD1-SVPD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR  
Light Source: (112)3500K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3079.0 lumens  
Efficiency: N/A  
Efficacy: 100.6 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.14 / 1.26  
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')  
CIE Type: Direct

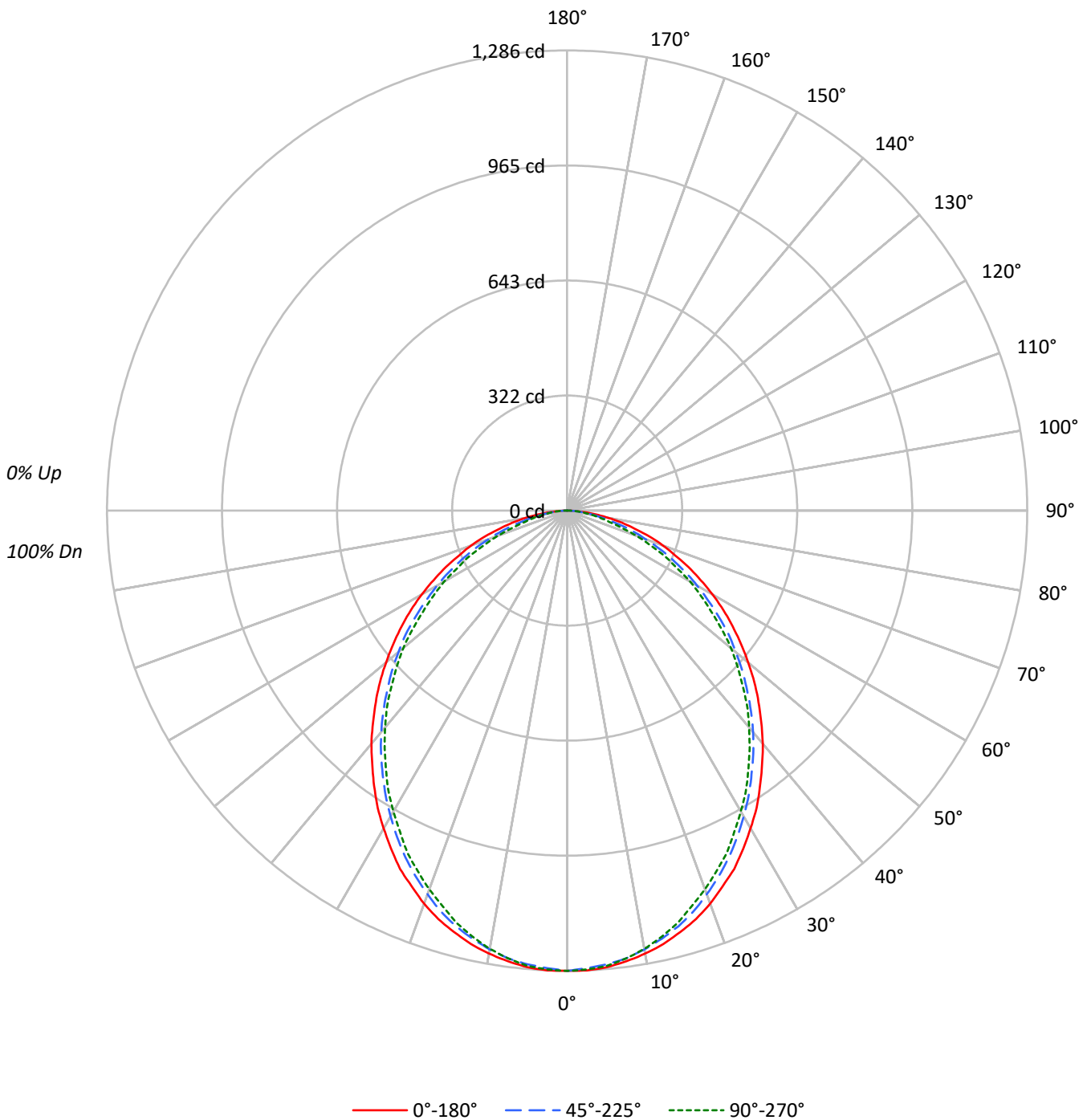
Input Watts (W): 30.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4334	4334	4334
5°	4333	4306	4319
10°	4301	4260	4255
15°	4255	4195	4162
20°	4193	4092	4040
25°	4109	3976	3926
30°	3989	3839	3777
35°	3867	3697	3632
40°	3743	3555	3479
45°	3604	3389	3306
50°	3462	3225	3134
55°	3317	3043	2887
60°	3159	2827	2674
65°	2984	2590	2399
70°	2808	2296	2033
75°	2531	1959	1578
80°	2249	1550	1395
85°	1852	1237	1287



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.0	3.9
10°-20°	339.3	11.0
20°-30°	494.5	16.1
30°-40°	566.9	18.4
40°-50°	554.2	18.0
50°-60°	467.6	15.2
60°-70°	326.8	10.6
70°-80°	166.7	5.4
80°-90°	42.0	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°	954.8	31.0
0°-40°	1521.7	49.4
0°-60°	2543.5	82.6
0°-90°	3079.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3079.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1286	1286	1286	1286	1286	
5°	1281	1278	1273	1277	1277	121
15°	1220	1216	1202	1198	1193	344
25°	1105	1092	1069	1059	1056	508
35°	940	927	899	890	883	588
45°	756	736	711	702	694	584
55°	565	543	518	503	491	505
65°	374	352	325	306	301	371
75°	194	178	150	132	121	209
85°	48	36	32	33	33	56
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1286.3	1286.3	1286.3	1286.3	1286.3
2.5°	1286.3	1283.7	1279.7	1285.0	1283.7
5°	1281.0	1278.4	1273.0	1277.0	1277.0
7.5°	1270.4	1267.7	1262.4	1265.0	1262.4
10°	1257.1	1254.4	1245.1	1246.4	1243.7
12.5°	1241.1	1235.7	1225.1	1223.8	1219.8
15°	1219.8	1215.8	1202.5	1198.5	1193.1
17.5°	1197.1	1189.1	1174.5	1166.5	1158.5
20°	1169.2	1158.5	1141.2	1131.9	1126.6
22.5°	1135.9	1127.9	1106.6	1095.9	1090.6
25°	1105.2	1091.9	1069.3	1058.6	1056.0
27.5°	1065.3	1054.6	1029.3	1020.0	1012.0
30°	1025.3	1013.4	986.7	977.4	970.8
32.5°	985.4	972.1	944.1	933.5	929.5
35°	940.1	926.8	898.8	889.5	882.9
37.5°	894.8	878.9	854.9	844.2	837.6
40°	850.9	832.3	808.3	796.3	791.0
42.5°	803.0	783.0	760.4	748.4	745.7
45°	756.4	736.4	711.1	701.8	693.8
47.5°	709.8	687.1	664.5	651.2	645.8
50°	660.5	639.2	615.2	601.9	597.9
52.5°	612.5	591.2	568.6	554.0	544.6
55°	564.6	543.3	518.0	503.4	491.4
57.5°	518.0	492.7	467.4	450.1	443.4
60°	468.7	446.1	419.5	402.1	396.8
62.5°	420.8	400.8	372.9	352.9	343.6
65°	374.2	351.5	324.9	306.3	300.9
67.5°	326.2	306.3	279.6	258.3	249.0
70°	285.0	259.7	233.0	214.4	206.4
72.5°	241.0	218.4	193.1	171.8	159.8
75°	194.4	178.4	150.5	131.8	121.2
77.5°	157.1	138.5	113.2	98.5	95.9
80°	115.9	101.2	79.9	73.2	71.9
82.5°	81.2	66.6	54.6	51.9	50.6
85°	47.9	36.0	32.0	33.3	33.3
87.5°	20.0	14.6	14.6	16.0	16.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)