

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: P229525

Luminaire Tested: **14RLN-LD5-35-UNV-L840-CD1-SVPD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P229525  
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-LD5-35-UNV-L840-CD1-SVPD1-U  
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR  
Light Source: (112)4000K CCT, 80 CRI LEDs  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3493.0 lumens  
Efficiency: N/A  
Efficacy: 98.1 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

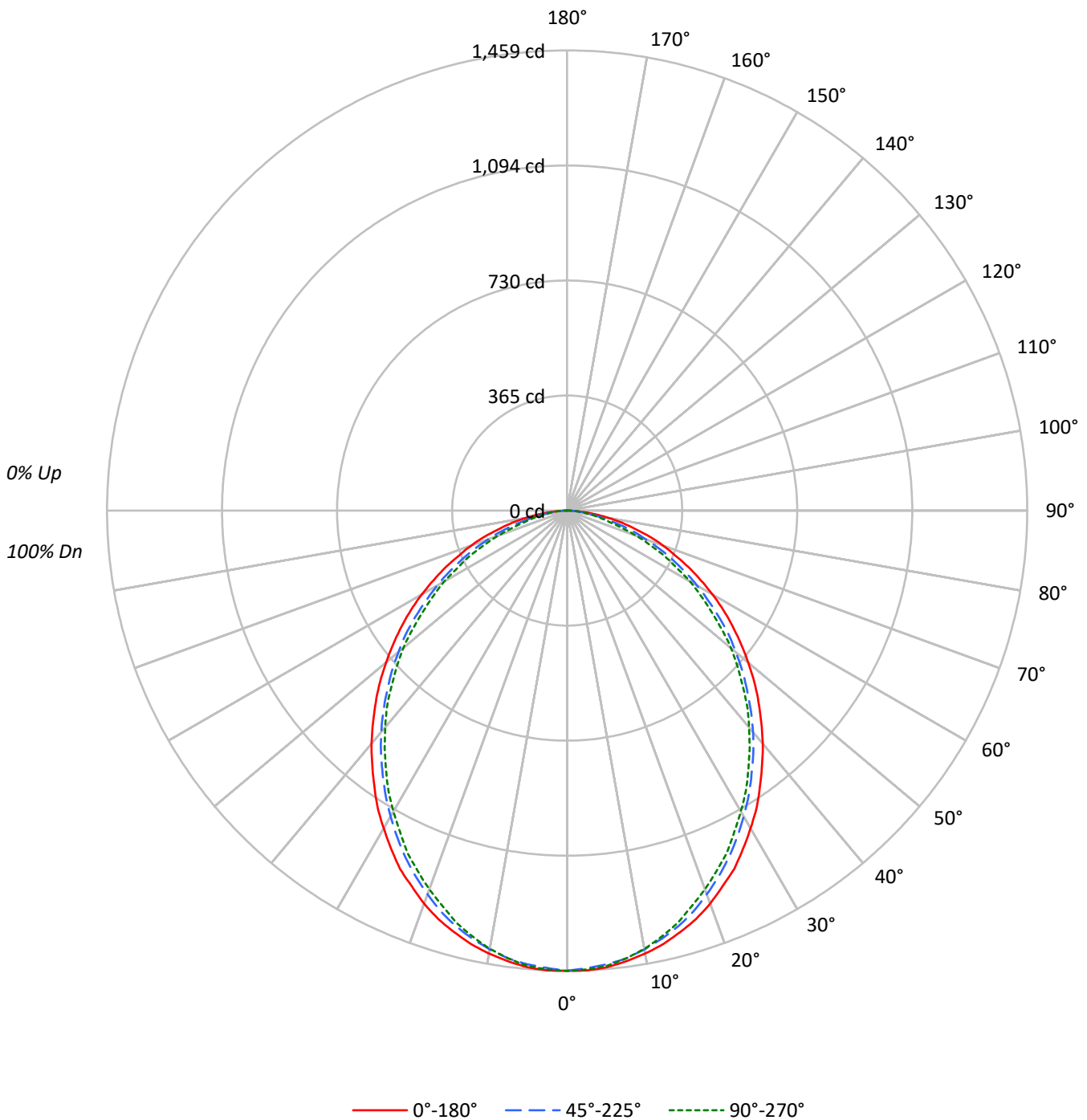
Input Watts (W): 35.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	78	84	79	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	74	69	65	72	67	64	61					61			
4	84	73	64	58	82	71	63	57	69	62	57	67	61	56	64	59	55	53					53			
5	78	65	57	50	76	64	56	50	62	55	49	60	54	49	58	53	48	46					46			
6	72	59	50	44	70	58	50	44	56	49	43	55	48	43	53	47	43	41					41			
7	67	54	45	39	65	53	45	39	51	44	39	50	43	38	49	43	38	36					36			
8	62	49	41	35	61	48	40	35	47	40	35	46	39	35	45	39	34	32					32			
9	58	45	37	32	57	45	37	32	43	36	31	42	36	31	41	35	31	29					29			
10	55	42	34	29	53	41	34	29	40	33	29	39	33	29	38	33	28	27					27			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4917	4917	4917
5°	4916	4885	4900
10°	4880	4833	4828
15°	4827	4759	4722
20°	4756	4642	4583
25°	4662	4510	4454
30°	4526	4355	4285
35°	4387	4195	4120
40°	4246	4034	3947
45°	4089	3844	3751
50°	3928	3658	3556
55°	3763	3453	3275
60°	3584	3207	3034
65°	3385	2939	2722
70°	3185	2605	2307
75°	2872	2222	1790
80°	2550	1758	1583
85°	2103	1403	1461



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.3	3.9
10°-20°	384.9	11.0
20°-30°	561.0	16.1
30°-40°	643.1	18.4
40°-50°	628.8	18.0
50°-60°	530.4	15.2
60°-70°	370.8	10.6
70°-80°	189.1	5.4
80°-90°	47.7	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°	1083.1	31.0
0°-40°	1726.3	49.4
0°-60°	2885.4	82.6
0°-90°	3493.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3493.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1459	1459	1459	1459	1459	
5°	1453	1450	1444	1449	1449	138
15°	1384	1379	1364	1360	1354	390
25°	1254	1239	1213	1201	1198	576
35°	1066	1051	1020	1009	1002	667
45°	858	835	807	796	787	662
55°	640	616	588	571	557	573
65°	424	399	369	348	341	420
75°	221	202	171	150	138	237
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°	1459.3	1459.3	1459.3	1459.3	1459.3
2.5°	1459.3	1456.3	1451.8	1457.8	1456.3
5°	1453.3	1450.2	1444.2	1448.7	1448.7
7.5°	1441.2	1438.2	1432.1	1435.1	1432.1
10°	1426.1	1423.1	1412.5	1414.0	1411.0
12.5°	1407.9	1401.9	1389.8	1388.3	1383.8
15°	1383.8	1379.2	1364.1	1359.6	1353.6
17.5°	1358.1	1349.0	1332.4	1323.3	1314.3
20°	1326.4	1314.3	1294.6	1284.1	1278.0
22.5°	1288.6	1279.5	1255.4	1243.3	1237.2
25°	1253.9	1238.7	1213.1	1201.0	1198.0
27.5°	1208.5	1196.5	1167.7	1157.2	1148.1
30°	1163.2	1149.6	1119.4	1108.8	1101.3
32.5°	1117.9	1102.8	1071.1	1059.0	1054.4
35°	1066.5	1051.4	1019.7	1009.1	1001.6
37.5°	1015.2	997.0	969.9	957.8	950.2
40°	965.3	944.2	917.0	903.4	897.3
42.5°	910.9	888.3	862.6	849.0	846.0
45°	858.1	835.4	806.7	796.1	787.1
47.5°	805.2	779.5	753.8	738.7	732.7
50°	749.3	725.1	697.9	682.8	678.3
52.5°	694.9	670.7	645.1	628.4	617.9
55°	640.5	616.4	587.7	571.0	557.4
57.5°	587.7	558.9	530.2	510.6	503.1
60°	531.8	506.1	475.9	456.2	450.2
62.5°	477.4	454.7	423.0	400.3	389.8
65°	424.5	398.8	368.6	347.5	341.4
67.5°	370.1	347.5	317.2	293.1	282.5
70°	323.3	294.6	264.4	243.2	234.2
72.5°	273.4	247.7	219.0	194.9	181.3
75°	220.6	202.4	170.7	149.6	137.5
77.5°	178.3	157.1	128.4	111.8	108.8
80°	131.4	114.8	90.6	83.1	81.6
82.5°	92.2	75.5	61.9	58.9	57.4
85°	54.4	40.8	36.3	37.8	37.8
87.5°	22.7	16.6	16.6	18.1	18.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)