

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: P229531

Luminaire Tested: **14RLN-LD5-40-UNV-L930-CD1-SVPD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229531
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-L930-CD1-SVPD1-U
Description: METALUX 1X4 RLN LED TROFFER WITH SENSOR
Light Source: (112)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3291.0 lumens
Efficiency: N/A
Efficacy: 78.5 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

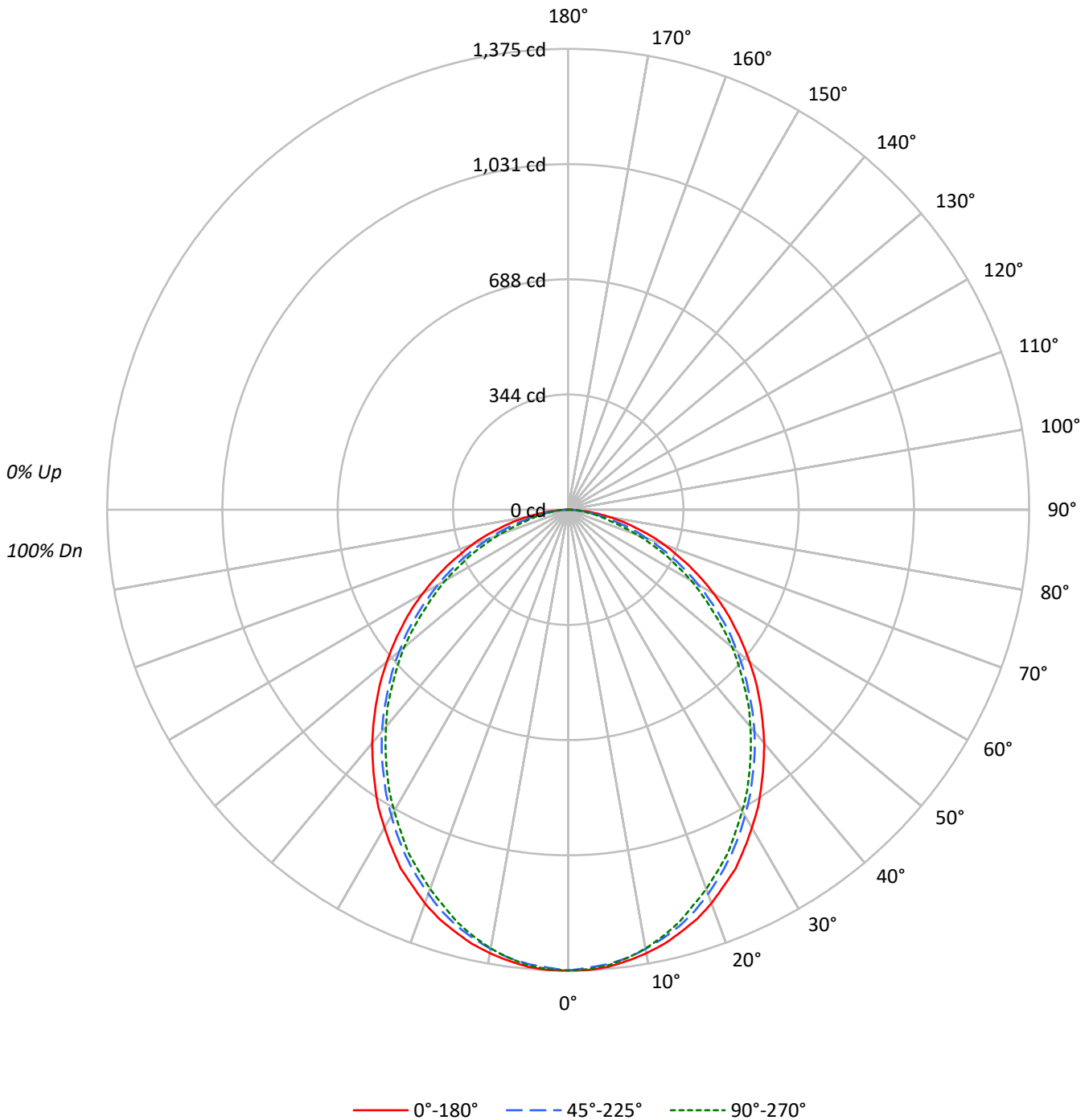
Input Watts (W): 41.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P229531

CATALOG NUMBER: 14RLN-LD5-40-UNV-L930-CD1-SVPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P229531

CATALOG NUMBER: 14RLN-LD5-40-UNV-L930-CD1-SVPD1-U

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°	4633	4633	4633
5°	4631	4603	4617
10°	4597	4553	4549
15°	4548	4483	4449
20°	4481	4374	4318
25°	4392	4249	4196
30°	4264	4104	4037
35°	4134	3952	3882
40°	4001	3800	3719
45°	3852	3622	3533
50°	3701	3447	3350
55°	3545	3253	3085
60°	3376	3021	2858
65°	3188	2769	2565
70°	3001	2454	2173
75°	2705	2093	1686
80°	2402	1657	1492
85°	1979	1322	1376



TEST NUMBER: P229531

CATALOG NUMBER: 14RLN-LD5-40-UNV-L930-CD1-SVPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	129.3	3.9
10°-20°	362.6	11.0
20°-30°	528.6	16.1
30°-40°	605.9	18.4
40°-50°	592.4	18.0
50°-60°	499.8	15.2
60°-70°	349.4	10.6
70°-80°	178.1	5.4
80°-90°	44.9	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°	1020.5	31.0
0°-40°	1626.4	49.4
0°-60°	2718.6	82.6
0°-90°	3291.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3291.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1375	1375	1375	1375	1375	
5°	1369	1366	1361	1365	1365	130
15°	1304	1300	1285	1281	1275	368
25°	1181	1167	1143	1132	1129	543
35°	1005	991	961	951	944	629
45°	808	787	760	750	742	624
55°	604	581	554	538	525	540
65°	400	376	347	327	322	396
75°	208	191	161	141	130	223
85°	51	38	34	36	36	60
90°	0	0	0	0	0	



TEST NUMBER: P229531

CATALOG NUMBER: 14RLN-LD5-40-UNV-L930-CD1-SVPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1374.9	1374.9	1374.9	1374.9	1374.9
2.5°	1374.9	1372.1	1367.8	1373.5	1372.1
5°	1369.2	1366.4	1360.7	1365.0	1365.0
7.5°	1357.8	1355.0	1349.3	1352.1	1349.3
10°	1343.6	1340.8	1330.8	1332.2	1329.4
12.5°	1326.5	1320.8	1309.4	1308.0	1303.8
15°	1303.8	1299.5	1285.2	1281.0	1275.3
17.5°	1279.6	1271.0	1255.4	1246.8	1238.3
20°	1249.7	1238.3	1219.8	1209.8	1204.1
22.5°	1214.1	1205.5	1182.8	1171.4	1165.7
25°	1181.3	1167.1	1142.9	1131.5	1128.7
27.5°	1138.6	1127.3	1100.2	1090.3	1081.7
30°	1095.9	1083.1	1054.7	1044.7	1037.6
32.5°	1053.2	1039.0	1009.1	997.7	993.5
35°	1004.9	990.6	960.7	950.8	943.7
37.5°	956.5	939.4	913.8	902.4	895.3
40°	909.5	889.6	863.9	851.1	845.4
42.5°	858.3	836.9	812.7	799.9	797.1
45°	808.4	787.1	760.0	750.1	741.5
47.5°	758.6	734.4	710.2	696.0	690.3
50°	706.0	683.2	657.6	643.3	639.1
52.5°	654.7	631.9	607.8	592.1	582.1
55°	603.5	580.7	553.7	538.0	525.2
57.5°	553.7	526.6	499.6	481.1	474.0
60°	501.0	476.8	448.3	429.8	424.1
62.5°	449.8	428.4	398.5	377.2	367.2
65°	399.9	375.8	347.3	327.4	321.7
67.5°	348.7	327.4	298.9	276.1	266.2
70°	304.6	277.5	249.1	229.2	220.6
72.5°	257.6	233.4	206.4	183.6	170.8
75°	207.8	190.7	160.8	140.9	129.5
77.5°	168.0	148.0	121.0	105.3	102.5
80°	123.8	108.2	85.4	78.3	76.9
82.5°	86.8	71.2	58.4	55.5	54.1
85°	51.2	38.4	34.2	35.6	35.6
87.5°	21.3	15.7	15.7	17.1	17.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)