

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: P229470

Luminaire Tested: **14RLN-LD5-35-UNV-L930-CD1-U**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P229470
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-LD5-35-UNV-L930-CD1-U
Description: METALUX 1X4 RLN LED TROFFER
Light Source: (112)3000K CCT, 90 CRI LEDs
Ballast/Driver: ELECTRONIC DRIVER

Summary

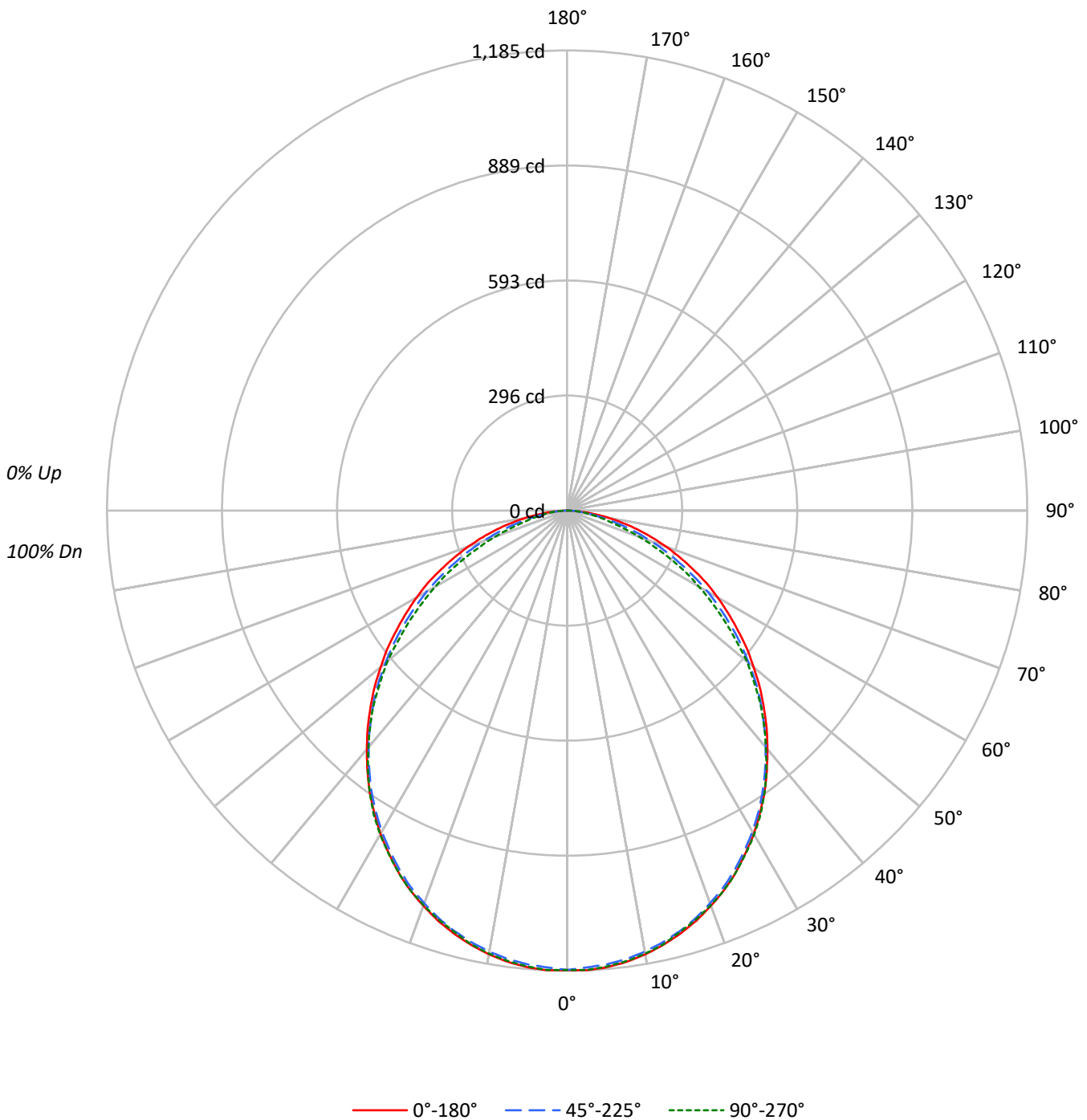
Lumens per Lamp: N/A
Luminaire Lumens: 2976.0 lumens
Efficiency: N/A
Efficacy: 83.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.31
Luminous Opening: Rectangular (W 0.83' x L: 3.83' x H: 0')
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P229470
CATALOG NUMBER: 14RLN-LD5-35-UNV-L930-CD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P229470

CATALOG NUMBER: 14RLN-LD5-35-UNV-L930-CD1-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	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°	3987	3987	3987
5°	3992	3967	3985
10°	3971	3946	3963
15°	3934	3911	3918
20°	3883	3857	3878
25°	3823	3795	3823
30°	3741	3713	3747
35°	3646	3616	3646
40°	3529	3500	3503
45°	3411	3366	3356
50°	3285	3201	3166
55°	3149	3020	2909
60°	3016	2819	2646
65°	2851	2548	2332
70°	2658	2262	1960
75°	2437	1894	1514
80°	2100	1418	1306
85°	1697	1187	1214



TEST NUMBER: P229470

CATALOG NUMBER: 14RLN-LD5-35-UNV-L930-CD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.7	3.8
10°-20°	317.1	10.7
20°-30°	472.0	15.9
30°-40°	551.8	18.5
40°-50°	545.3	18.3
50°-60°	460.4	15.5
60°-70°	318.9	10.7
70°-80°	159.2	5.3
80°-90°	39.5	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°	900.9	30.3
0°-40°	1452.7	48.8
0°-60°	2458.4	82.6
0°-90°	2976.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2976.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1183	1183	1183	1183	1183	
5°	1180	1178	1173	1179	1178	112
15°	1128	1126	1121	1126	1123	318
25°	1028	1025	1021	1027	1028	473
35°	886	882	879	886	886	553
45°	716	708	706	705	704	553
55°	536	526	514	503	495	480
65°	358	341	320	303	292	355
75°	187	170	146	126	116	198
85°	44	34	31	31	31	52
90°	0	0	0	0	0	



TEST NUMBER: P229470

CATALOG NUMBER: 14RLN-LD5-35-UNV-L930-CD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1183.2	1183.2	1183.2	1183.2	1183.2
2.5°	1184.6	1182.5	1177.3	1183.2	1183.9
5°	1180.3	1178.1	1172.9	1178.8	1178.1
7.5°	1172.2	1169.3	1164.9	1170.0	1170.0
10°	1160.5	1158.3	1153.2	1159.1	1158.3
12.5°	1145.2	1143.7	1138.6	1144.4	1143.7
15°	1127.6	1126.1	1121.0	1126.1	1123.2
17.5°	1107.1	1106.4	1100.6	1104.2	1103.5
20°	1083.0	1081.5	1075.7	1083.0	1081.5
22.5°	1057.4	1054.5	1050.8	1056.7	1057.4
25°	1028.2	1025.2	1020.8	1027.4	1028.2
27.5°	994.5	992.3	987.9	997.4	996.0
30°	961.6	959.4	954.3	962.3	963.1
32.5°	923.6	921.4	917.7	925.8	927.2
35°	886.3	881.9	879.0	885.6	886.3
37.5°	844.6	840.2	837.3	843.9	842.4
40°	802.2	797.1	795.6	800.7	796.3
42.5°	760.5	753.9	751.0	753.9	751.0
45°	715.9	707.9	706.4	704.9	704.2
47.5°	672.8	664.0	660.3	655.2	651.6
50°	626.7	617.2	610.6	605.5	604.0
52.5°	583.5	572.6	563.1	558.7	547.0
55°	536.0	526.5	514.1	503.1	495.1
57.5°	491.4	479.0	464.4	452.7	442.4
60°	447.5	431.4	418.3	400.0	392.7
62.5°	404.4	386.1	367.8	348.1	344.4
65°	357.6	340.8	319.6	302.7	292.5
67.5°	313.0	295.4	275.0	251.6	242.0
70°	269.8	250.8	229.6	206.9	198.9
72.5°	228.2	209.1	187.2	163.1	153.6
75°	187.2	170.4	145.5	125.8	116.3
77.5°	145.5	131.6	107.5	91.4	89.9
80°	108.2	95.8	73.1	69.5	67.3
82.5°	74.6	62.9	51.9	49.7	48.3
85°	43.9	33.6	30.7	30.7	31.4
87.5°	16.8	14.6	14.6	14.6	15.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)