

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: P295765

Luminaire Tested: **14RLN-LD5-40-RDP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295765  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36061-R2)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-40-RDP-UNV-L93050-W2A1-U-4000K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3159.0 lumens  
Efficiency: N/A  
Efficacy: 78.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.35 / 1.39  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

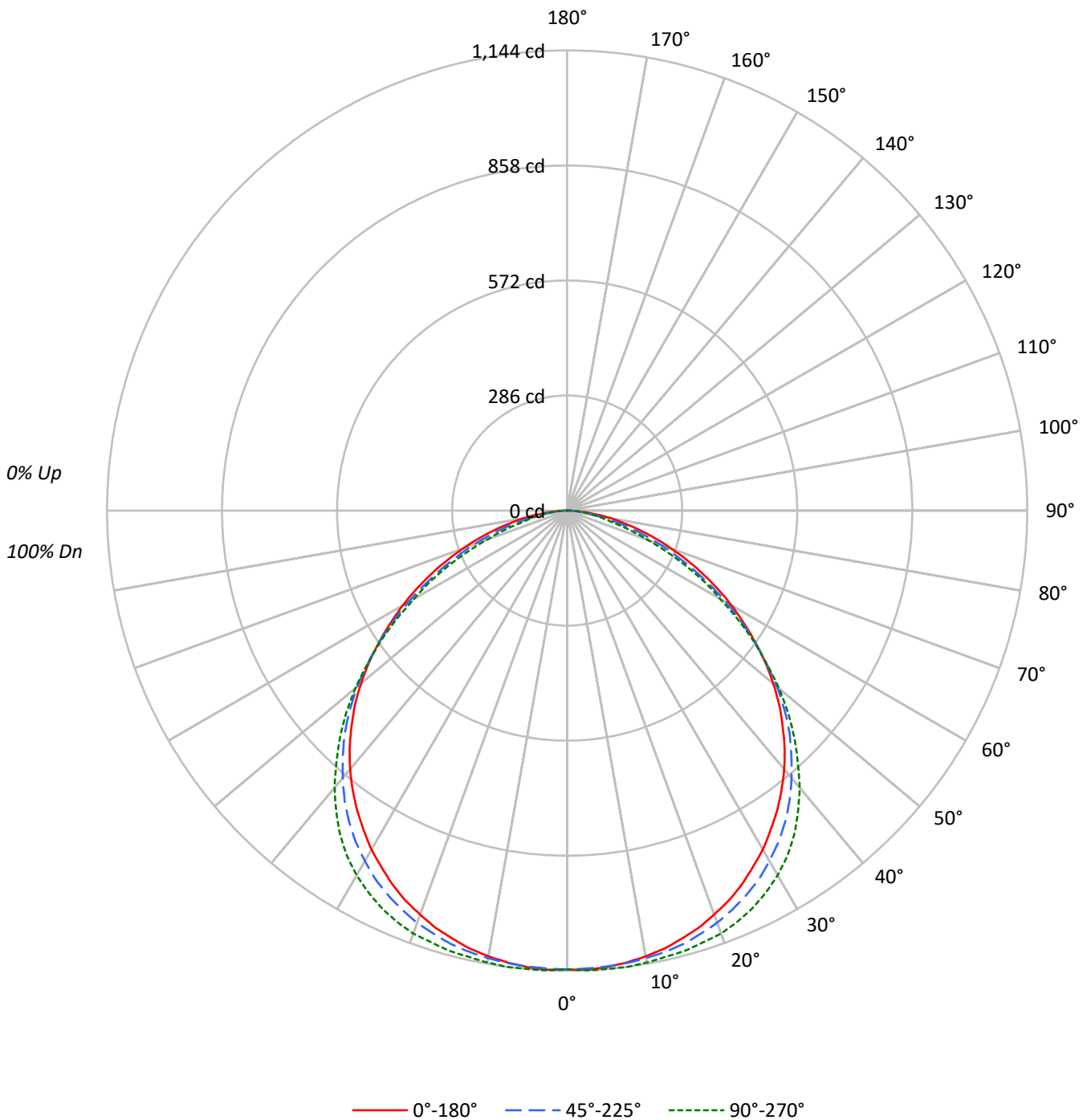
Input Watts (W): 40.455  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P295765

CATALOG NUMBER: 14RLN-LD5-40-RDP-UNV-L93050-W2A1-U-4000K

### Luminous Intensity Polar Plot





TEST NUMBER: P295765

CATALOG NUMBER: 14RLN-LD5-40-RDP-UNV-L93050-W2A1-U-4000K

**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	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	87	81	77	83	79	75	80	77	74	72
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	63	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	64	56	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	34	45	38	33	44	38	33	31
9	57	44	36	30	56	44	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	53	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	3070	3070	3070
5°	3078	3073	3090
10°	3074	3087	3117
15°	3069	3108	3156
20°	3060	3123	3204
25°	3047	3131	3238
30°	3023	3126	3252
35°	2990	3103	3232
40°	2949	3048	3159
45°	2884	2974	3040
50°	2799	2851	2877
55°	2680	2672	2658
60°	2542	2457	2365
65°	2368	2198	2078
70°	2161	1926	1679
75°	1941	1599	1256
80°	1726	1167	1094
85°	1355	969	969



TEST NUMBER: P295765

CATALOG NUMBER: 14RLN-LD5-40-RDP-UNV-L93050-W2A1-U-4000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.6	3.4
10°-20°	315.6	10.0
20°-30°	487.1	15.4
30°-40°	590.8	18.7
40°-50°	599.8	19.0
50°-60°	507.4	16.1
60°-70°	343.3	10.9
70°-80°	166.0	5.3
80°-90°	40.5	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°	911.3	28.8
0°-40°	1502.1	47.5
0°-60°	2609.2	82.6
0°-90°	3159.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3159.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1141	1141	1141	1141	1141	
5°	1139	1139	1138	1142	1144	108
15°	1102	1108	1116	1128	1133	311
25°	1026	1034	1054	1081	1091	473
35°	910	920	945	974	984	569
45°	758	760	782	797	799	584
55°	571	566	570	570	566	511
65°	372	356	345	331	326	369
75°	187	173	154	133	121	199
85°	44	34	31	31	31	51
90°	0	0	0	0	0	



TEST NUMBER: P295765

CATALOG NUMBER: 14RLN-LD5-40-RDP-UNV-L93050-W2A1-U-4000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1140.8	1140.8	1140.8	1140.8	1140.8
2.5°	1142.4	1142.4	1139.3	1142.4	1144.0
5°	1139.3	1139.3	1137.7	1142.4	1144.0
7.5°	1133.0	1134.6	1134.6	1140.8	1144.0
10°	1125.1	1128.3	1129.8	1139.3	1140.8
12.5°	1115.7	1118.9	1123.6	1134.6	1136.1
15°	1101.6	1107.9	1115.7	1128.3	1133.0
17.5°	1087.5	1093.8	1103.2	1120.4	1125.1
20°	1068.6	1076.5	1090.6	1111.0	1118.9
22.5°	1049.8	1056.1	1073.4	1098.5	1106.3
25°	1026.3	1034.1	1054.5	1081.2	1090.6
27.5°	999.6	1010.6	1032.6	1060.8	1070.2
30°	972.9	982.3	1005.9	1037.3	1046.7
32.5°	941.5	951.0	977.6	1007.4	1018.4
35°	910.2	919.6	944.7	974.5	983.9
37.5°	875.6	881.9	908.6	933.7	943.1
40°	839.5	844.2	867.8	892.9	899.2
42.5°	800.3	803.4	825.4	847.4	849.0
45°	757.9	759.5	781.5	797.2	798.7
47.5°	715.6	714.0	732.8	743.8	745.4
50°	668.5	668.5	681.0	687.3	687.3
52.5°	621.4	618.3	624.6	629.3	624.6
55°	571.2	566.5	569.6	569.6	566.5
57.5°	521.0	511.6	513.1	510.0	502.2
60°	472.3	461.4	456.6	445.7	439.4
62.5°	422.1	409.6	400.2	387.6	386.0
65°	371.9	356.2	345.2	331.1	326.4
67.5°	323.3	309.1	293.4	277.8	268.3
70°	274.6	258.9	244.8	224.4	213.4
72.5°	230.7	216.6	199.3	175.8	167.9
75°	186.7	172.6	153.8	133.4	120.8
77.5°	144.4	133.4	113.0	95.7	94.2
80°	111.4	98.9	75.3	70.6	70.6
82.5°	72.2	64.3	53.4	50.2	50.2
85°	43.9	34.5	31.4	31.4	31.4
87.5°	17.3	15.7	15.7	15.7	15.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)