

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: P295618

Luminaire Tested: **14RLN-LD5-35-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295618  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1901-085-1)  
Test Lab: INNOVATION CENTER(G2)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14RLN-LD5-35-UNV-L93050-W2A1-U-3000K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2774.0 lumens  
Efficiency: N/A  
Efficacy: 80.8 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.01 / 1.18  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

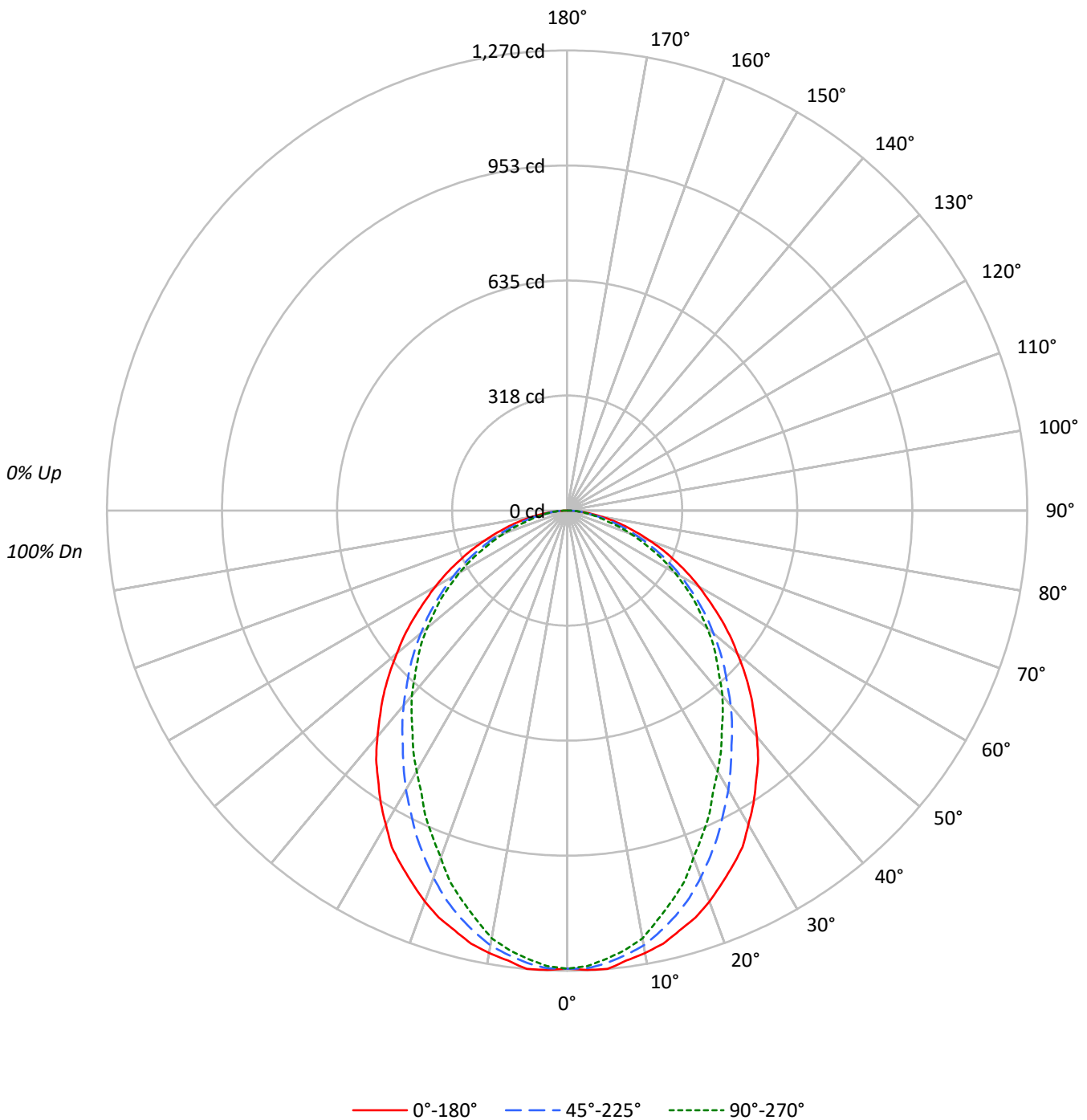
Input Watts (W): 34.317  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P295618

CATALOG NUMBER: 14RLN-LD5-35-UNV-L93050-W2A1-U-3000K

### Luminous Intensity Polar Plot





TEST NUMBER: P295618

CATALOG NUMBER: 14RLN-LD5-35-UNV-L93050-W2A1-U-3000K

**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	110	105	101	97	107	103	99	96	99	96	93	95	92	90	91	89	87	85					85			
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74	72					72			
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62					62			
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56	54					54			
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47					47			
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43	41					41			
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39	37					37			
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35	33					33			
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32	30					30			
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29	28					28			

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

	0°	45°	90°
0°	3402	3402	3402
5°	3431	3387	3355
10°	3387	3330	3275
15°	3343	3225	3108
20°	3288	3087	2919
25°	3211	2929	2752
30°	3109	2763	2581
35°	2987	2598	2444
40°	2860	2466	2342
45°	2724	2337	2221
50°	2565	2207	2109
55°	2419	2084	1995
60°	2264	1955	1848
65°	2097	1806	1656
70°	1908	1622	1466
75°	1718	1449	1194
80°	1471	1181	1125
85°	1195	1121	1121



TEST NUMBER: P295618

CATALOG NUMBER: 14RLN-LD5-35-UNV-L93050-W2A1-U-3000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	118.4	4.3
10°-20°	324.9	11.7
20°-30°	456.0	16.4
30°-40°	505.8	18.2
40°-50°	485.5	17.5
50°-60°	406.9	14.7
60°-70°	285.6	10.3
70°-80°	149.1	5.4
80°-90°	41.7	1.5
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°	899.3	32.4
0°-40°	1405.0	50.7
0°-60°	2297.5	82.8
0°-90°	2774.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2774.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1264	1264	1264	1264	1264	
5°	1270	1254	1254	1246	1242	120
15°	1200	1179	1158	1127	1116	339
25°	1082	1043	987	938	927	498
35°	909	859	791	752	744	569
45°	716	661	614	590	584	551
55°	516	477	444	430	425	461
65°	329	307	284	266	260	327
75°	165	152	139	123	115	175
85°	39	36	36	36	36	46
90°	0	0	0	0	0	



TEST NUMBER: P295618

CATALOG NUMBER: 14RLN-LD5-35-UNV-L93050-W2A1-U-3000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1264.3	1264.3	1264.3	1264.3	1264.3
2.5°	1269.0	1261.9	1264.3	1264.3	1258.4
5°	1270.1	1253.7	1253.7	1245.5	1242.0
7.5°	1252.6	1239.7	1237.3	1226.8	1223.3
10°	1239.7	1226.8	1218.6	1204.5	1198.7
12.5°	1224.4	1204.5	1189.3	1165.9	1156.5
15°	1199.8	1178.7	1157.7	1127.2	1115.5
17.5°	1177.6	1153.0	1121.3	1087.3	1074.5
20°	1148.3	1119.0	1078.0	1031.1	1019.4
22.5°	1114.3	1080.3	1032.3	981.9	972.5
25°	1081.5	1042.8	986.6	938.5	926.8
27.5°	1047.5	1000.6	936.2	884.6	872.9
30°	1000.6	952.6	889.3	838.9	830.7
32.5°	957.3	909.2	840.1	799.1	789.7
35°	909.2	858.9	790.9	752.2	744.0
37.5°	865.9	807.3	747.6	710.1	705.4
40°	814.3	761.6	701.9	673.7	666.7
42.5°	764.0	711.2	655.0	630.4	622.2
45°	715.9	660.8	614.0	590.5	583.5
47.5°	665.5	615.1	570.6	551.9	547.2
50°	612.8	568.3	527.3	509.7	503.8
52.5°	565.9	520.2	486.3	469.9	462.8
55°	515.6	476.9	444.1	430.0	425.3
57.5°	465.2	433.5	401.9	389.0	382.0
60°	420.6	389.0	363.2	348.0	343.3
62.5°	374.9	348.0	323.4	309.3	303.5
65°	329.3	307.0	283.6	266.0	260.1
67.5°	287.1	262.5	243.7	228.5	222.6
70°	242.5	225.0	206.2	192.2	186.3
72.5°	201.5	188.6	172.2	157.0	151.2
75°	165.2	152.3	139.4	123.0	114.8
77.5°	128.9	120.7	107.8	93.7	93.7
80°	94.9	90.2	76.2	73.8	72.6
82.5°	65.6	63.3	55.1	53.9	53.9
85°	38.7	36.3	36.3	36.3	36.3
87.5°	16.4	17.6	18.7	18.7	19.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)