

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: P295622

Luminaire Tested: **14RLN-LD5-35-UNV-L93050-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295622  
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-5000K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3330.0 lumens  
Efficiency: N/A  
Efficacy: 95.2 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

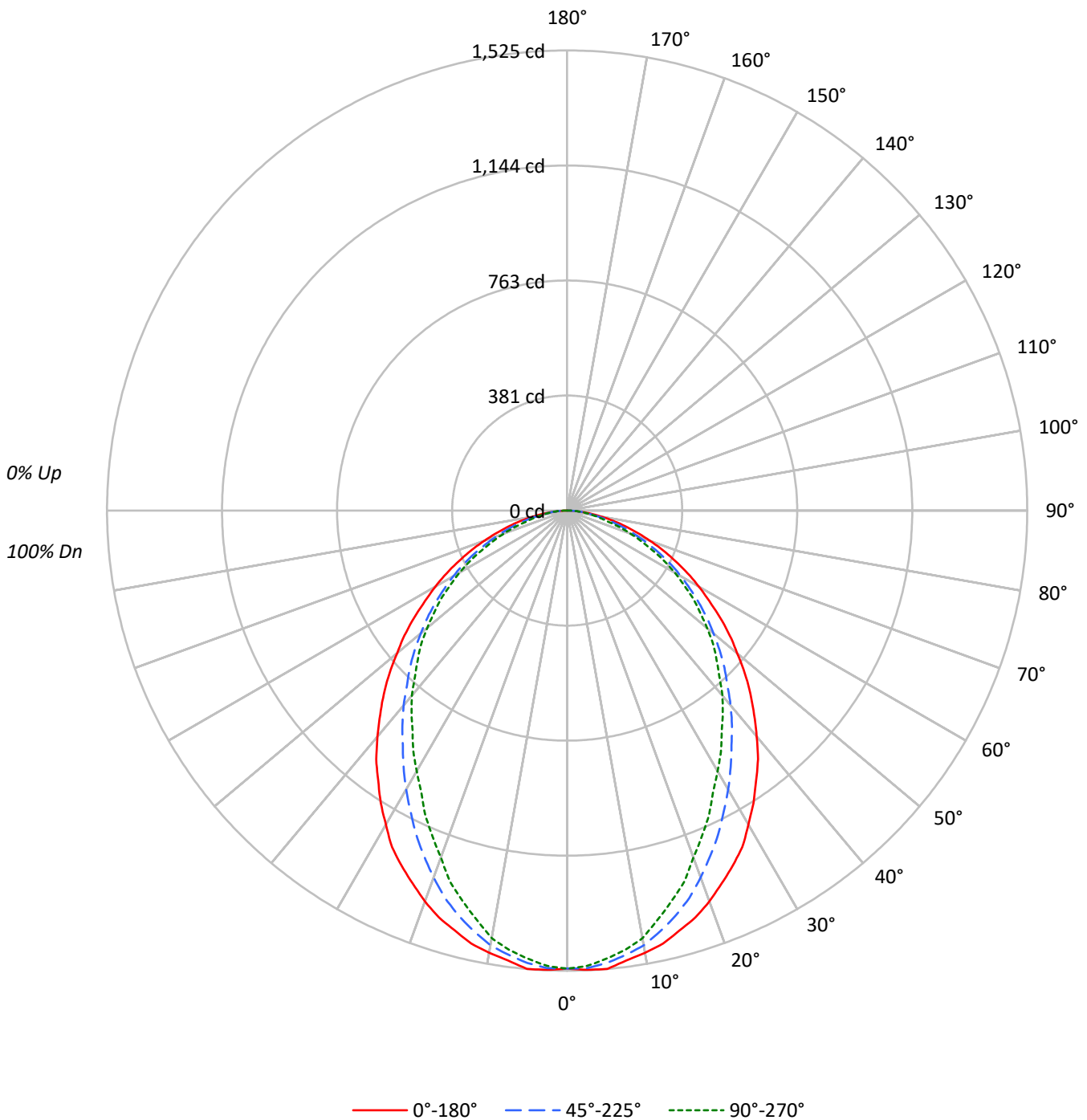
Input Watts (W): 34.968  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P295622

CATALOG NUMBER: 14RLN-LD5-35-UNV-L93050-W2A1-U-5000K

### Luminous Intensity Polar Plot





TEST NUMBER: P295622

CATALOG NUMBER: 14RLN-LD5-35-UNV-L93050-W2A1-U-5000K

**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°	4084	4084	4084
5°	4119	4065	4028
10°	4066	3997	3932
15°	4013	3872	3730
20°	3947	3706	3504
25°	3855	3516	3303
30°	3732	3317	3099
35°	3586	3119	2934
40°	3434	2960	2811
45°	3271	2805	2666
50°	3080	2650	2532
55°	2904	2501	2396
60°	2718	2347	2218
65°	2516	2167	1989
70°	2291	1948	1759
75°	2062	1740	1433
80°	1765	1416	1351
85°	1433	1346	1346



TEST NUMBER: P295622

CATALOG NUMBER: 14RLN-LD5-35-UNV-L93050-W2A1-U-5000K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	142.1	4.3
10°-20°	390.0	11.7
20°-30°	547.4	16.4
30°-40°	607.1	18.2
40°-50°	582.8	17.5
50°-60°	488.5	14.7
60°-70°	342.9	10.3
70°-80°	179.1	5.4
80°-90°	50.1	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°	1079.5	32.4
0°-40°	1686.6	50.6
0°-60°	2758.0	82.8
0°-90°	3330.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3330.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1518	1518	1518	1518	1518	
5°	1525	1505	1505	1495	1491	144
15°	1440	1415	1390	1353	1339	406
25°	1298	1252	1184	1127	1113	597
35°	1092	1031	949	903	893	684
45°	859	793	737	709	700	662
55°	619	572	533	516	511	554
65°	395	368	340	319	312	393
75°	198	183	167	148	138	210
85°	46	44	44	44	44	55
90°	0	0	0	0	0	



TEST NUMBER: P295622

CATALOG NUMBER: 14RLN-LD5-35-UNV-L93050-W2A1-U-5000K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1517.7	1517.7	1517.7	1517.7	1517.7
2.5°	1523.3	1514.9	1517.7	1517.7	1510.6
5°	1524.7	1505.0	1505.0	1495.2	1491.0
7.5°	1503.6	1488.1	1485.3	1472.7	1468.5
10°	1488.1	1472.7	1462.8	1445.9	1438.9
12.5°	1469.9	1445.9	1427.7	1399.5	1388.3
15°	1440.3	1415.0	1389.7	1353.1	1339.0
17.5°	1413.6	1384.1	1346.1	1305.3	1289.8
20°	1378.4	1343.3	1294.0	1237.8	1223.7
22.5°	1337.6	1296.9	1239.2	1178.7	1167.4
25°	1298.3	1251.8	1184.3	1126.7	1112.6
27.5°	1257.5	1201.2	1123.8	1062.0	1047.9
30°	1201.2	1143.5	1067.6	1007.1	997.3
32.5°	1149.2	1091.5	1008.5	959.3	948.0
35°	1091.5	1031.0	949.4	903.0	893.2
37.5°	1039.4	969.1	897.4	852.4	846.8
40°	977.6	914.3	842.5	808.8	800.3
42.5°	917.1	853.8	786.3	756.7	746.9
45°	859.4	793.3	737.0	708.9	700.5
47.5°	798.9	738.4	685.0	662.5	656.9
50°	735.6	682.2	633.0	611.9	604.8
52.5°	679.4	624.5	583.7	564.0	555.6
55°	618.9	572.5	533.1	516.2	510.6
57.5°	558.4	520.4	482.5	467.0	458.5
60°	505.0	467.0	436.0	417.7	412.1
62.5°	450.1	417.7	388.2	371.3	364.3
65°	395.2	368.5	340.4	319.3	312.3
67.5°	344.6	315.1	292.6	274.3	267.2
70°	291.2	270.1	247.6	230.7	223.6
72.5°	241.9	226.5	206.8	188.5	181.4
75°	198.3	182.9	167.4	147.7	137.8
77.5°	154.7	144.9	129.4	112.5	112.5
80°	113.9	108.3	91.4	88.6	87.2
82.5°	78.8	76.0	66.1	64.7	64.7
85°	46.4	43.6	43.6	43.6	43.6
87.5°	19.7	21.1	22.5	22.5	23.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)