

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: P295676

Luminaire Tested: **14RLN-LD5-23-RDP-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295676  
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-LD5-23-RDP-UNV-L83050-W2A1-U-4500K  
Description: RLN LED 1x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2128.0 lumens  
Efficiency: N/A  
Efficacy: 98.2 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

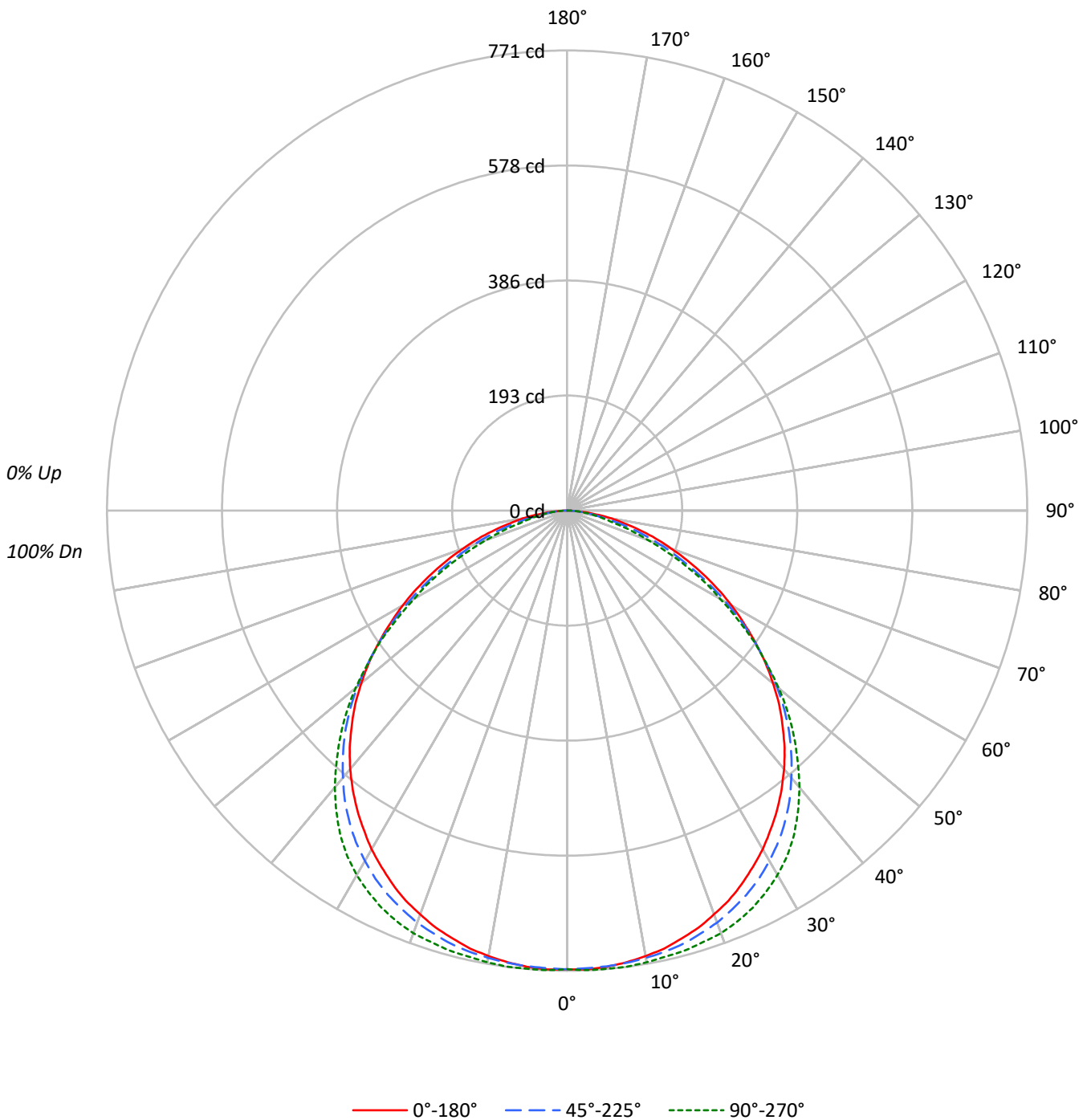
Input Watts (W): 21.669  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P295676

CATALOG NUMBER: 14RLN-LD5-23-RDP-UNV-L83050-W2A1-U-4500K

### Luminous Intensity Polar Plot





TEST NUMBER: P295676

CATALOG NUMBER: 14RLN-LD5-23-RDP-UNV-L83050-W2A1-U-4500K

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

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

	0°	45°	90°
0°	2068	2068	2068
5°	2073	2070	2082
10°	2071	2080	2100
15°	2067	2094	2126
20°	2062	2104	2158
25°	2053	2109	2181
30°	2037	2105	2191
35°	2014	2091	2177
40°	1987	2054	2128
45°	1943	2003	2048
50°	1885	1921	1938
55°	1805	1800	1790
60°	1713	1655	1593
65°	1595	1481	1400
70°	1456	1297	1131
75°	1308	1077	846
80°	1164	786	738
85°	914	651	651



TEST NUMBER: P295676

CATALOG NUMBER: 14RLN-LD5-23-RDP-UNV-L83050-W2A1-U-4500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	73.2	3.4
10°-20°	212.6	10.0
20°-30°	328.1	15.4
30°-40°	398.0	18.7
40°-50°	404.0	19.0
50°-60°	341.8	16.1
60°-70°	231.3	10.9
70°-80°	111.8	5.3
80°-90°	27.3	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°	613.9	28.8
0°-40°	1011.8	47.5
0°-60°	1757.7	82.6
0°-90°	2128.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2128.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	768	768	768	768	768	
5°	767	767	766	770	771	73
15°	742	746	752	760	763	210
25°	691	697	710	728	735	318
35°	613	620	636	656	663	383
45°	511	512	526	537	538	394
55°	385	382	384	384	382	344
65°	250	240	233	223	220	248
75°	126	116	104	90	81	134
85°	30	23	21	21	21	35
90°	0	0	0	0	0	



TEST NUMBER: P295676

CATALOG NUMBER: 14RLN-LD5-23-RDP-UNV-L83050-W2A1-U-4500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	768.5	768.5	768.5	768.5	768.5
2.5°	769.6	769.6	767.4	769.6	770.6
5°	767.4	767.4	766.4	769.6	770.6
7.5°	763.2	764.3	764.3	768.5	770.6
10°	757.9	760.0	761.1	767.4	768.5
12.5°	751.6	753.7	756.9	764.3	765.3
15°	742.1	746.3	751.6	760.0	763.2
17.5°	732.6	736.8	743.1	754.8	757.9
20°	719.9	725.2	734.7	748.4	753.7
22.5°	707.2	711.4	723.0	740.0	745.2
25°	691.3	696.6	710.4	728.3	734.7
27.5°	673.4	680.8	695.6	714.6	720.9
30°	655.4	661.7	677.6	698.7	705.1
32.5°	634.2	640.6	658.6	678.6	686.0
35°	613.1	619.5	636.4	656.4	662.8
37.5°	589.9	594.1	612.1	629.0	635.3
40°	565.5	568.7	584.6	601.5	605.7
42.5°	539.1	541.2	556.0	570.8	571.9
45°	510.6	511.6	526.4	537.0	538.1
47.5°	482.0	481.0	493.7	501.1	502.1
50°	450.3	450.3	458.8	463.0	463.0
52.5°	418.6	416.5	420.7	423.9	420.7
55°	384.8	381.6	383.7	383.7	381.6
57.5°	351.0	344.6	345.7	343.6	338.3
60°	318.2	310.8	307.6	300.2	296.0
62.5°	284.4	275.9	269.6	261.1	260.0
65°	250.5	240.0	232.6	223.0	219.9
67.5°	217.8	208.2	197.7	187.1	180.8
70°	185.0	174.4	164.9	151.2	143.8
72.5°	155.4	145.9	134.2	118.4	113.1
75°	125.8	116.3	103.6	89.9	81.4
77.5°	97.3	89.9	76.1	64.5	63.4
80°	75.1	66.6	50.7	47.6	47.6
82.5°	48.6	43.3	35.9	33.8	33.8
85°	29.6	23.3	21.1	21.1	21.1
87.5°	11.6	10.6	10.6	10.6	10.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)