

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: P295754

Luminaire Tested: **14RLN-LD5-31-RDP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295754
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-LD5-31-RDP-UNV-L93050-W2A1-U-3500K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2250.0 lumens
Efficiency: N/A
Efficacy: 78.0 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

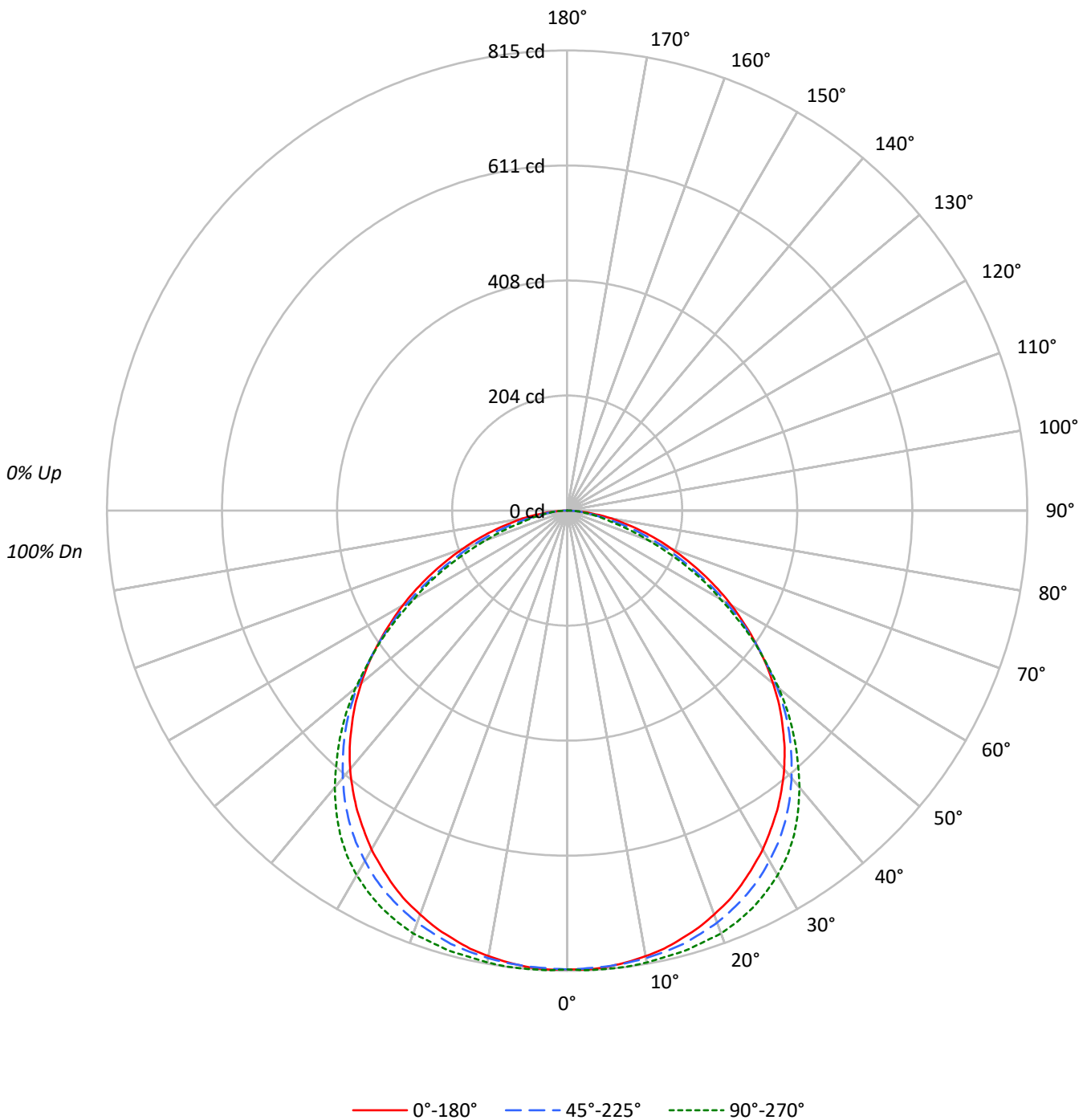
Input Watts (W): 28.83
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P295754

CATALOG NUMBER: 14RLN-LD5-31-RDP-UNV-L93050-W2A1-U-3500K

Luminous Intensity Polar Plot





TEST NUMBER: P295754

CATALOG NUMBER: 14RLN-LD5-31-RDP-UNV-L93050-W2A1-U-3500K

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°	2187	2187	2187
5°	2192	2189	2201
10°	2190	2199	2220
15°	2186	2214	2248
20°	2180	2225	2282
25°	2170	2230	2306
30°	2153	2226	2316
35°	2130	2210	2302
40°	2101	2171	2250
45°	2054	2118	2165
50°	1993	2031	2049
55°	1909	1903	1893
60°	1810	1750	1685
65°	1687	1566	1480
70°	1539	1372	1196
75°	1383	1138	895
80°	1230	831	779
85°	966	692	692



TEST NUMBER: P295754

CATALOG NUMBER: 14RLN-LD5-31-RDP-UNV-L93050-W2A1-U-3500K

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	3.4
10°-20°	224.8	10.0
20°-30°	346.9	15.4
30°-40°	420.8	18.7
40°-50°	427.2	19.0
50°-60°	361.4	16.1
60°-70°	244.5	10.9
70°-80°	118.2	5.3
80°-90°	28.9	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°	649.1	28.8
0°-40°	1069.8	47.5
0°-60°	1858.4	82.6
0°-90°	2250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2250.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	813	813	813	813	813	
5°	811	811	810	814	815	77
15°	785	789	795	804	807	222
25°	731	737	751	770	777	337
35°	648	655	673	694	701	405
45°	540	541	557	568	569	416
55°	407	404	406	406	404	364
65°	265	254	246	236	232	263
75°	133	123	110	95	86	142
85°	31	25	22	22	22	37
90°	0	0	0	0	0	



TEST NUMBER: P295754

CATALOG NUMBER: 14RLN-LD5-31-RDP-UNV-L93050-W2A1-U-3500K

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	812.6	812.6	812.6	812.6	812.6
2.5°	813.7	813.7	811.4	813.7	814.8
5°	811.4	811.4	810.3	813.7	814.8
7.5°	807.0	808.1	808.1	812.6	814.8
10°	801.4	803.6	804.7	811.4	812.6
12.5°	794.7	796.9	800.3	808.1	809.2
15°	784.6	789.1	794.7	803.6	807.0
17.5°	774.6	779.0	785.7	798.0	801.4
20°	761.1	766.7	776.8	791.3	796.9
22.5°	747.7	752.2	764.5	782.4	788.0
25°	731.0	736.6	751.1	770.1	776.8
27.5°	712.0	719.8	735.4	755.6	762.3
30°	693.0	699.7	716.4	738.8	745.5
32.5°	670.6	677.3	696.3	717.6	725.4
35°	648.3	655.0	672.8	694.1	700.8
37.5°	623.7	628.1	647.1	665.0	671.7
40°	598.0	601.3	618.1	636.0	640.4
42.5°	570.0	572.3	587.9	603.6	604.7
45°	539.8	541.0	556.6	567.8	568.9
47.5°	509.7	508.5	522.0	529.8	530.9
50°	476.1	476.1	485.1	489.5	489.5
52.5°	442.6	440.4	444.8	448.2	444.8
55°	406.8	403.5	405.7	405.7	403.5
57.5°	371.1	364.4	365.5	363.2	357.7
60°	336.4	328.6	325.2	317.4	313.0
62.5°	300.7	291.7	285.0	276.1	275.0
65°	264.9	253.7	245.9	235.8	232.5
67.5°	230.2	220.2	209.0	197.8	191.1
70°	195.6	184.4	174.4	159.8	152.0
72.5°	164.3	154.2	141.9	125.2	119.6
75°	133.0	122.9	109.5	95.0	86.1
77.5°	102.8	95.0	80.5	68.2	67.1
80°	79.4	70.4	53.6	50.3	50.3
82.5°	51.4	45.8	38.0	35.8	35.8
85°	31.3	24.6	22.4	22.4	22.4
87.5°	12.3	11.2	11.2	11.2	11.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)