

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: P295753

Luminaire Tested: **14RLN-LD5-31-RDP-UNV-L93050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295753
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-3000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH RDP LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2059.0 lumens
Efficiency: N/A
Efficacy: 71.2 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

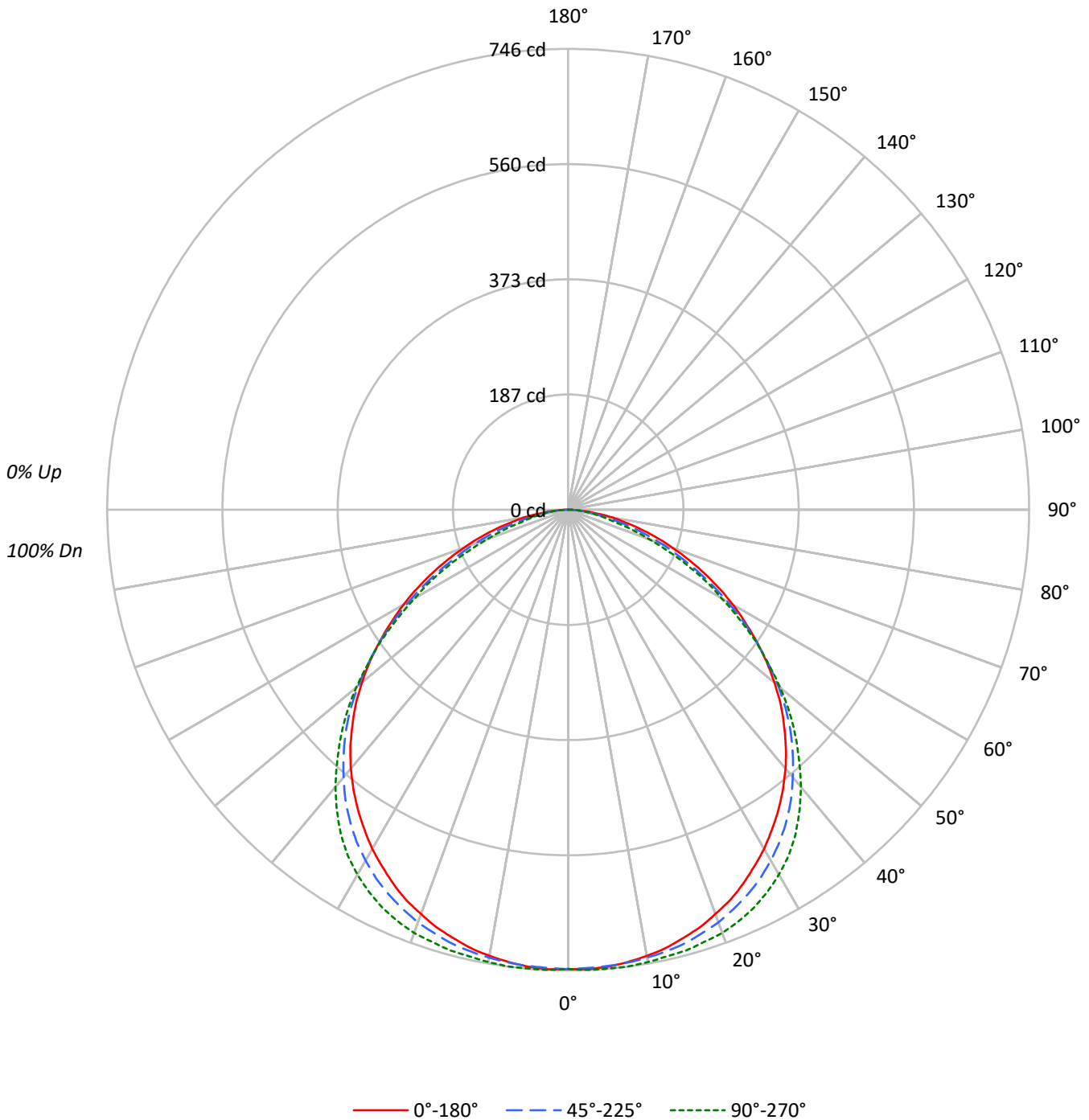
Input Watts (W): 28.923
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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°	2001	2001	2001
5°	2006	2003	2014
10°	2004	2012	2032
15°	2000	2026	2057
20°	1995	2036	2088
25°	1986	2041	2111
30°	1970	2037	2120
35°	1949	2023	2107
40°	1922	1987	2059
45°	1880	1939	1981
50°	1824	1858	1876
55°	1747	1742	1732
60°	1657	1602	1541
65°	1543	1433	1354
70°	1408	1256	1094
75°	1265	1042	819
80°	1125	761	713
85°	883	633	633



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	70.8	3.4
10°-20°	205.7	10.0
20°-30°	317.5	15.4
30°-40°	385.0	18.7
40°-50°	390.9	19.0
50°-60°	330.7	16.1
60°-70°	223.8	10.9
70°-80°	108.2	5.3
80°-90°	26.4	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°	594.0	28.8
0°-40°	979.0	47.5
0°-60°	1700.7	82.6
0°-90°	2059.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2059.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	743	743	742	745	746	71
15°	718	722	727	735	738	203
25°	669	674	687	705	711	308
35°	593	599	616	635	641	371
45°	494	495	509	520	521	381
55°	372	369	371	371	369	333
65°	242	232	225	216	213	240
75°	122	112	100	87	79	130
85°	29	22	20	20	20	34
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	743.6	743.6	743.6	743.6	743.6
2.5°	744.6	744.6	742.6	744.6	745.6
5°	742.6	742.6	741.5	744.6	745.6
7.5°	738.5	739.5	739.5	743.6	745.6
10°	733.4	735.4	736.4	742.6	743.6
12.5°	727.2	729.3	732.3	739.5	740.5
15°	718.0	722.1	727.2	735.4	738.5
17.5°	708.8	712.9	719.0	730.3	733.4
20°	696.5	701.6	710.9	724.1	729.3
22.5°	684.3	688.3	699.6	716.0	721.1
25°	668.9	674.0	687.3	704.7	710.9
27.5°	651.5	658.7	673.0	691.4	697.6
30°	634.1	640.3	655.6	676.1	682.2
32.5°	613.7	619.8	637.2	656.6	663.8
35°	593.2	599.4	615.7	635.2	641.3
37.5°	570.7	574.8	592.2	608.6	614.7
40°	547.2	550.3	565.6	582.0	586.1
42.5°	521.6	523.7	538.0	552.3	553.3
45°	494.0	495.0	509.4	519.6	520.6
47.5°	466.4	465.4	477.7	484.8	485.8
50°	435.7	435.7	443.9	448.0	448.0
52.5°	405.0	403.0	407.1	410.1	407.1
55°	372.3	369.2	371.3	371.3	369.2
57.5°	339.6	333.4	334.5	332.4	327.3
60°	307.9	300.7	297.6	290.5	286.4
62.5°	275.1	267.0	260.8	252.6	251.6
65°	242.4	232.2	225.0	215.8	212.7
67.5°	210.7	201.5	191.3	181.0	174.9
70°	179.0	168.8	159.6	146.3	139.1
72.5°	150.4	141.1	129.9	114.6	109.4
75°	121.7	112.5	100.2	86.9	78.8
77.5°	94.1	86.9	73.6	62.4	61.4
80°	72.6	64.4	49.1	46.0	46.0
82.5°	47.0	41.9	34.8	32.7	32.7
85°	28.6	22.5	20.5	20.5	20.5
87.5°	11.3	10.2	10.2	10.2	10.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)