

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: P295545

Luminaire Tested: **14RLN-LD5-31-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295545
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-LD5-31-UNV-L83050-W2A1-U-4000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3276.0 lumens
Efficiency: N/A
Efficacy: 113.3 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

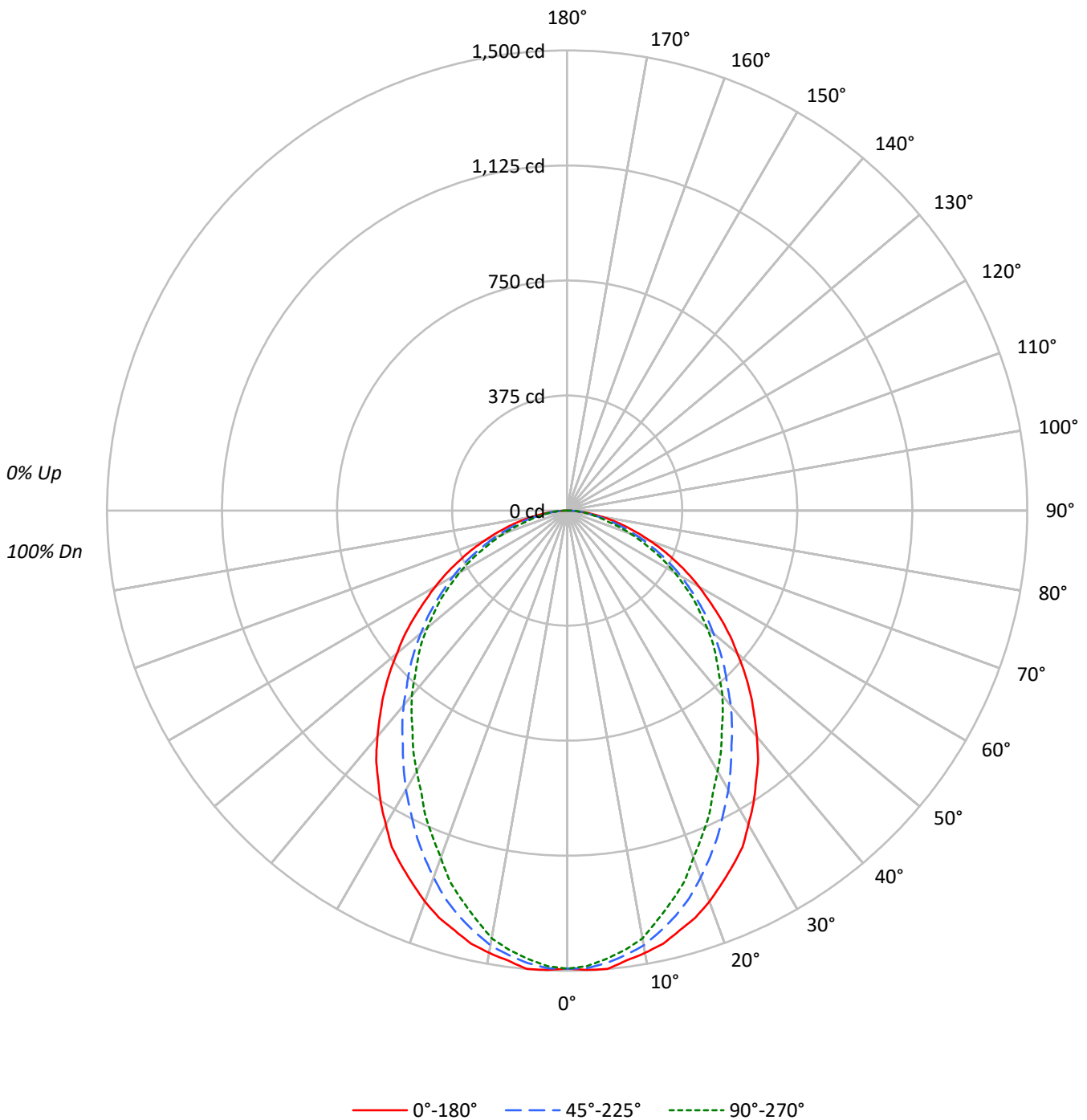
Input Watts (W): 28.923
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	4018	4018	4018
5°	4052	3999	3962
10°	4000	3932	3868
15°	3948	3809	3670
20°	3883	3646	3448
25°	3792	3459	3250
30°	3672	3264	3049
35°	3528	3068	2887
40°	3378	2912	2766
45°	3218	2759	2622
50°	3030	2607	2491
55°	2857	2460	2357
60°	2674	2309	2182
65°	2476	2132	1956
70°	2253	1916	1731
75°	2028	1712	1410
80°	1737	1393	1330
85°	1411	1325	1325



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	139.8	4.3
10°-20°	383.7	11.7
20°-30°	538.5	16.4
30°-40°	597.3	18.2
40°-50°	573.4	17.5
50°-60°	480.6	14.7
60°-70°	337.3	10.3
70°-80°	176.1	5.4
80°-90°	49.3	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°	1062.0	32.4
0°-40°	1659.3	50.7
0°-60°	2713.2	82.8
0°-90°	3276.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3276.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1493	1493	1493	1493	1493	
5°	1500	1481	1481	1471	1467	142
15°	1417	1392	1367	1331	1317	400
25°	1277	1232	1165	1108	1094	588
35°	1074	1014	934	888	879	672
45°	846	780	725	697	689	651
55°	609	563	524	508	502	545
65°	389	362	335	314	307	386
75°	195	180	165	145	136	207
85°	46	43	43	43	43	54
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1493.1	1493.1	1493.1	1493.1	1493.1
2.5°	1498.6	1490.3	1493.1	1493.1	1486.2
5°	1500.0	1480.6	1480.6	1470.9	1466.8
7.5°	1479.2	1464.0	1461.2	1448.8	1444.6
10°	1464.0	1448.8	1439.1	1422.5	1415.6
12.5°	1446.0	1422.5	1404.5	1376.8	1365.8
15°	1417.0	1392.1	1367.1	1331.2	1317.3
17.5°	1390.7	1361.6	1324.3	1284.1	1268.9
20°	1356.1	1321.5	1273.1	1217.7	1203.9
22.5°	1315.9	1275.8	1219.1	1159.6	1148.5
25°	1277.2	1231.5	1165.1	1108.4	1094.5
27.5°	1237.1	1181.7	1105.6	1044.7	1030.9
30°	1181.7	1125.0	1050.3	990.8	981.1
32.5°	1130.5	1073.8	992.2	943.7	932.6
35°	1073.8	1014.3	934.0	888.4	878.7
37.5°	1022.6	953.4	882.8	838.6	833.0
40°	961.7	899.4	828.9	795.7	787.4
42.5°	902.2	839.9	773.5	744.5	734.8
45°	845.5	780.4	725.1	697.4	689.1
47.5°	786.0	726.5	673.9	651.7	646.2
50°	723.7	671.1	622.7	601.9	595.0
52.5°	668.4	614.4	574.3	554.9	546.6
55°	608.9	563.2	524.4	507.8	502.3
57.5°	549.4	512.0	474.6	459.4	451.1
60°	496.8	459.4	429.0	411.0	405.4
62.5°	442.8	411.0	381.9	365.3	358.4
65°	388.8	362.5	334.9	314.1	307.2
67.5°	339.0	310.0	287.8	269.8	262.9
70°	286.4	265.7	243.5	226.9	220.0
72.5°	238.0	222.8	203.4	185.4	178.5
75°	195.1	179.9	164.7	145.3	135.6
77.5°	152.2	142.5	127.3	110.7	110.7
80°	112.1	106.5	89.9	87.2	85.8
82.5°	77.5	74.7	65.0	63.7	63.7
85°	45.7	42.9	42.9	42.9	42.9
87.5°	19.4	20.8	22.1	22.1	23.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)