

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: P295580

Luminaire Tested: **14RLN-LD5-31-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295580
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-L82765-W2A1-U-4500K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 4500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3169.0 lumens
Efficiency: N/A
Efficacy: 109.9 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

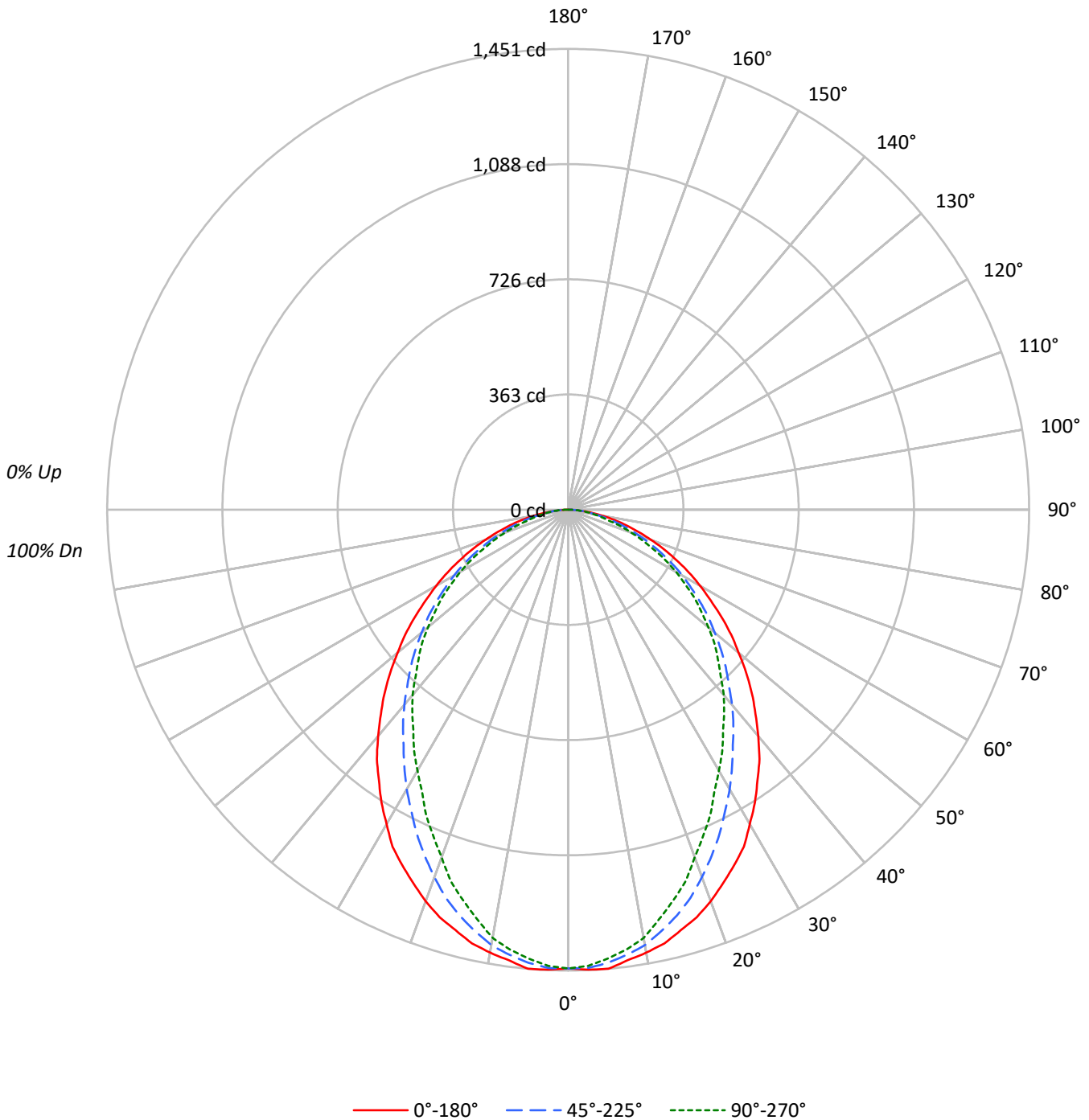
Input Watts (W): 28.83
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3887	3887	3887
5°	3920	3869	3833
10°	3870	3804	3742
15°	3819	3684	3550
20°	3757	3527	3335
25°	3668	3347	3144
30°	3552	3157	2949
35°	3412	2968	2792
40°	3268	2817	2675
45°	3113	2669	2537
50°	2931	2522	2410
55°	2763	2380	2280
60°	2586	2234	2111
65°	2395	2062	1892
70°	2180	1854	1674
75°	1962	1656	1364
80°	1680	1348	1286
85°	1365	1281	1281



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	135.2	4.3
10°-20°	371.2	11.7
20°-30°	520.9	16.4
30°-40°	577.8	18.2
40°-50°	554.7	17.5
50°-60°	464.9	14.7
60°-70°	326.3	10.3
70°-80°	170.4	5.4
80°-90°	47.7	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°	1027.3	32.4
0°-40°	1605.1	50.6
0°-60°	2624.6	82.8
0°-90°	3169.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3169.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1444	1444	1444	1444	1444	
5°	1451	1432	1432	1423	1419	137
15°	1371	1347	1322	1288	1274	387
25°	1236	1191	1127	1072	1059	569
35°	1039	981	904	859	850	650
45°	818	755	701	675	667	630
55°	589	545	507	491	486	527
65°	376	351	324	304	297	374
75°	189	174	159	140	131	200
85°	44	42	42	42	42	52
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1444.3	1444.3	1444.3	1444.3	1444.3
2.5°	1449.7	1441.6	1444.3	1444.3	1437.6
5°	1451.0	1432.3	1432.3	1422.9	1418.9
7.5°	1430.9	1416.2	1413.5	1401.5	1397.5
10°	1416.2	1401.5	1392.1	1376.0	1369.3
12.5°	1398.8	1376.0	1358.6	1331.9	1321.2
15°	1370.7	1346.6	1322.5	1287.7	1274.3
17.5°	1345.3	1317.1	1281.0	1242.2	1227.5
20°	1311.8	1278.3	1231.5	1177.9	1164.5
22.5°	1273.0	1234.1	1179.3	1121.7	1111.0
25°	1235.5	1191.3	1127.1	1072.2	1058.8
27.5°	1196.7	1143.1	1069.5	1010.6	997.2
30°	1143.1	1088.2	1016.0	958.4	949.0
32.5°	1093.6	1038.7	959.7	912.9	902.2
35°	1038.7	981.2	903.5	859.4	850.0
37.5°	989.2	922.3	854.0	811.2	805.8
40°	930.3	870.1	801.8	769.7	761.6
42.5°	872.7	812.5	748.3	720.1	710.8
45°	817.9	754.9	701.4	674.6	666.6
47.5°	760.3	702.7	651.9	630.5	625.1
50°	700.1	649.2	602.4	582.3	575.6
52.5°	646.5	594.3	555.5	536.8	528.7
55°	589.0	544.8	507.3	491.3	485.9
57.5°	531.4	495.3	459.1	444.4	436.4
60°	480.5	444.4	415.0	397.6	392.2
62.5°	428.3	397.6	369.4	353.4	346.7
65°	376.1	350.7	323.9	303.9	297.2
67.5°	327.9	299.8	278.4	261.0	254.3
70°	277.1	257.0	235.6	219.5	212.8
72.5°	230.2	215.5	196.8	179.4	172.7
75°	188.7	174.0	159.3	140.5	131.2
77.5°	147.2	137.9	123.1	107.1	107.1
80°	108.4	103.1	87.0	84.3	83.0
82.5°	75.0	72.3	62.9	61.6	61.6
85°	44.2	41.5	41.5	41.5	41.5
87.5°	18.7	20.1	21.4	21.4	22.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)