

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: P295614

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295614
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-L93050-W2A1-U-3500K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER WITH STANDARD LENS
Light Source: (168) 90 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2652.0 lumens
Efficiency: N/A
Efficacy: 92.0 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

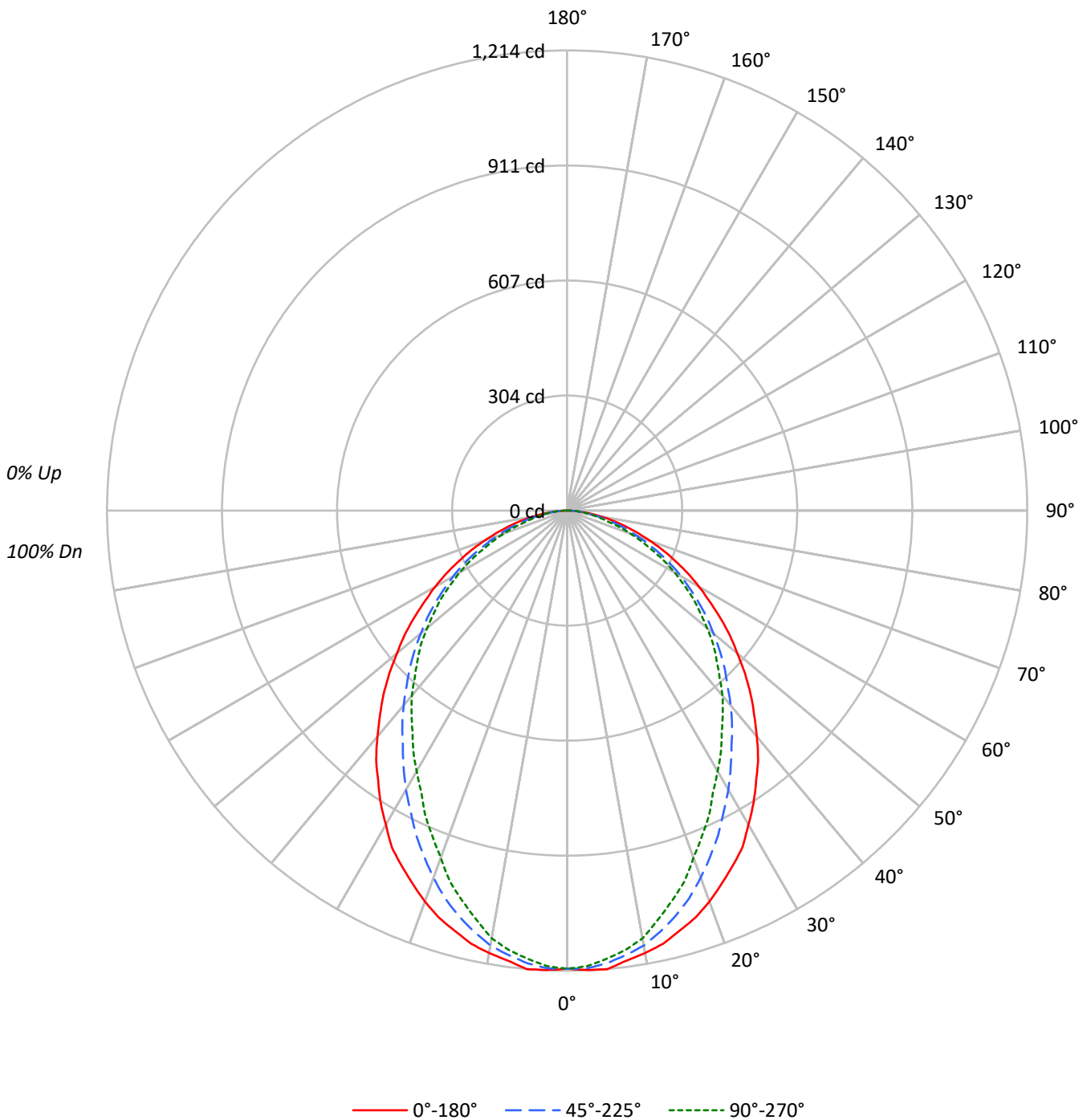
Input Watts (W): 28.83
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3253	3253	3253
5°	3280	3238	3207
10°	3239	3183	3131
15°	3196	3083	2971
20°	3144	2951	2791
25°	3070	2801	2631
30°	2972	2642	2468
35°	2856	2484	2337
40°	2735	2357	2239
45°	2605	2234	2123
50°	2453	2110	2017
55°	2312	1992	1908
60°	2164	1869	1766
65°	2004	1726	1584
70°	1825	1552	1401
75°	1642	1386	1142
80°	1406	1128	1077
85°	1142	1071	1071



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.2	4.3
10°-20°	310.6	11.7
20°-30°	435.9	16.4
30°-40°	483.5	18.2
40°-50°	464.2	17.5
50°-60°	389.0	14.7
60°-70°	273.1	10.3
70°-80°	142.6	5.4
80°-90°	39.9	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°	859.7	32.4
0°-40°	1343.2	50.6
0°-60°	2196.4	82.8
0°-90°	2652.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2652.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1214	1199	1199	1191	1187	115
15°	1147	1127	1107	1078	1066	324
25°	1034	997	943	897	886	476
35°	869	821	756	719	711	544
45°	684	632	587	565	558	527
55°	493	456	424	411	407	441
65°	315	294	271	254	249	313
75°	158	146	133	118	110	167
85°	37	35	35	35	35	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1208.7	1208.7	1208.7	1208.7	1208.7
2.5°	1213.2	1206.4	1208.7	1208.7	1203.1
5°	1214.3	1198.6	1198.6	1190.8	1187.4
7.5°	1197.5	1185.2	1182.9	1172.8	1169.5
10°	1185.2	1172.8	1165.0	1151.5	1145.9
12.5°	1170.6	1151.5	1137.0	1114.6	1105.6
15°	1147.1	1126.9	1106.7	1077.6	1066.4
17.5°	1125.8	1102.3	1072.0	1039.5	1027.2
20°	1097.8	1069.8	1030.6	985.8	974.6
22.5°	1065.3	1032.8	986.9	938.7	929.8
25°	1033.9	997.0	943.2	897.3	886.1
27.5°	1001.4	956.6	895.0	845.7	834.5
30°	956.6	910.7	850.2	802.0	794.2
32.5°	915.2	869.3	803.2	764.0	755.0
35°	869.3	821.1	756.1	719.2	711.3
37.5°	827.8	771.8	714.7	678.8	674.3
40°	778.5	728.1	671.0	644.1	637.4
42.5°	730.4	679.9	626.2	602.7	594.8
45°	684.4	631.8	587.0	564.6	557.9
47.5°	636.3	588.1	545.5	527.6	523.1
50°	585.9	543.3	504.1	487.3	481.7
52.5°	541.0	497.4	464.9	449.2	442.5
55°	492.9	455.9	424.5	411.1	406.6
57.5°	444.7	414.5	384.2	371.9	365.2
60°	402.1	371.9	347.3	332.7	328.2
62.5°	358.5	332.7	309.2	295.7	290.1
65°	314.8	293.5	271.1	254.3	248.7
67.5°	274.4	250.9	233.0	218.4	212.8
70°	231.9	215.1	197.2	183.7	178.1
72.5°	192.7	180.3	164.7	150.1	144.5
75°	157.9	145.6	133.3	117.6	109.8
77.5°	123.2	115.4	103.1	89.6	89.6
80°	90.7	86.3	72.8	70.6	69.5
82.5°	62.7	60.5	52.6	51.5	51.5
85°	37.0	34.7	34.7	34.7	34.7
87.5°	15.7	16.8	17.9	17.9	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)