

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: P295544

Luminaire Tested: **14RLN-LD5-31-UNV-L83050-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295544
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-3500K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3500K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3120.0 lumens
Efficiency: N/A
Efficacy: 110.4 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

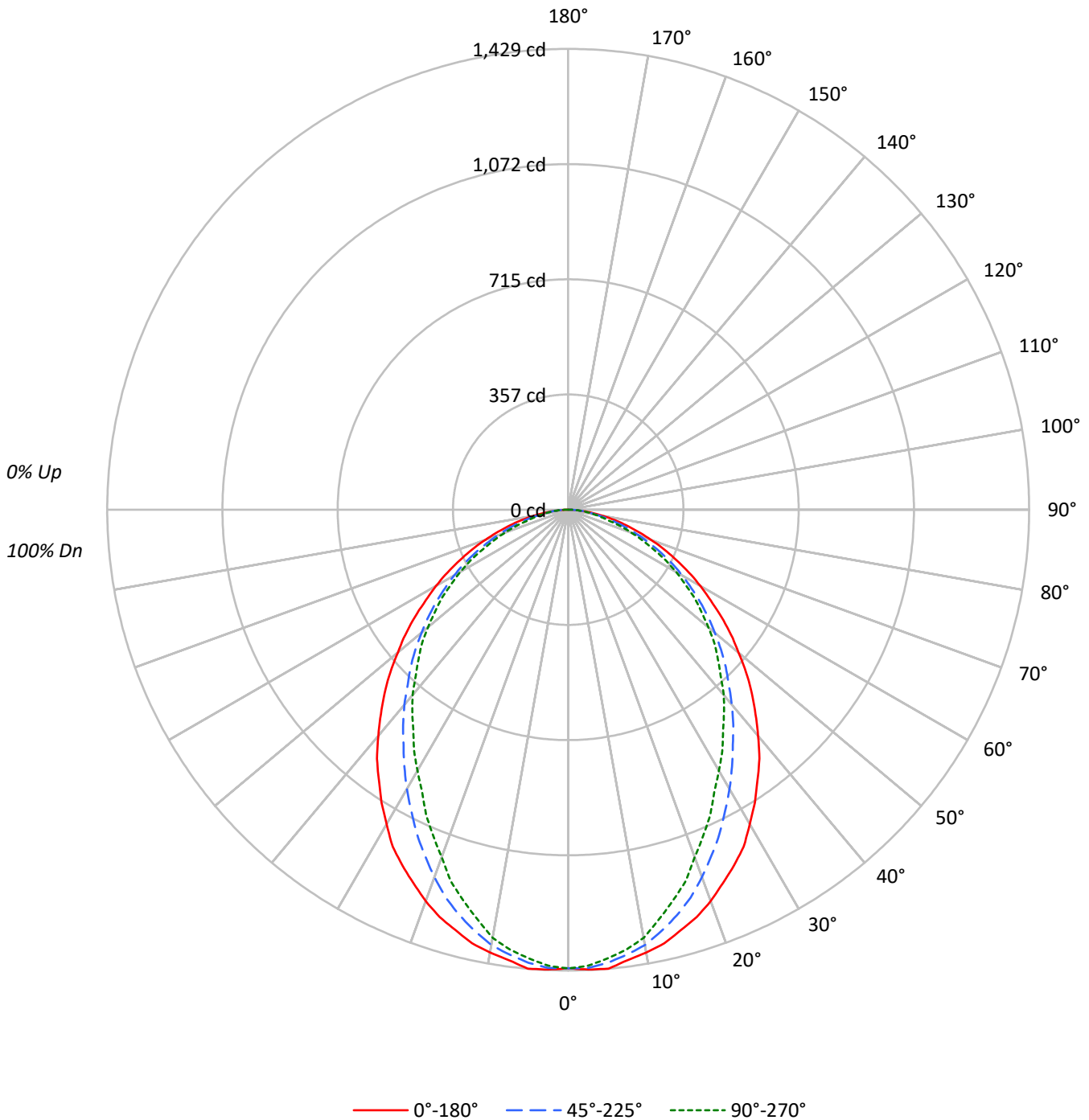
Input Watts (W): 28.272
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3827	3827	3827
5°	3859	3809	3773
10°	3810	3745	3684
15°	3760	3627	3495
20°	3698	3472	3283
25°	3612	3295	3095
30°	3497	3108	2903
35°	3360	2922	2749
40°	3217	2773	2634
45°	3064	2628	2498
50°	2885	2483	2372
55°	2721	2343	2244
60°	2546	2199	2078
65°	2358	2031	1863
70°	2146	1825	1648
75°	1932	1630	1343
80°	1654	1328	1266
85°	1343	1263	1263



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	133.1	4.3
10°-20°	365.4	11.7
20°-30°	512.9	16.4
30°-40°	568.9	18.2
40°-50°	546.1	17.5
50°-60°	457.7	14.7
60°-70°	321.3	10.3
70°-80°	167.8	5.4
80°-90°	47.0	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°	1011.4	32.4
0°-40°	1580.3	50.7
0°-60°	2584.0	82.8
0°-90°	3120.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3120.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1422	1422	1422	1422	1422	
5°	1429	1410	1410	1401	1397	135
15°	1350	1326	1302	1268	1255	381
25°	1216	1173	1110	1056	1042	560
35°	1023	966	890	846	837	640
45°	805	743	691	664	656	620
55°	580	536	500	484	478	519
65°	370	345	319	299	293	368
75°	186	171	157	138	129	197
85°	44	41	41	41	41	51
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1422.0	1422.0	1422.0	1422.0	1422.0
2.5°	1427.2	1419.3	1422.0	1422.0	1415.4
5°	1428.6	1410.1	1410.1	1400.9	1396.9
7.5°	1408.8	1394.3	1391.7	1379.8	1375.8
10°	1394.3	1379.8	1370.6	1354.8	1348.2
12.5°	1377.2	1354.8	1337.6	1311.3	1300.7
15°	1349.5	1325.8	1302.0	1267.8	1254.6
17.5°	1324.4	1296.8	1261.2	1223.0	1208.5
20°	1291.5	1258.6	1212.4	1159.7	1146.5
22.5°	1253.3	1215.1	1161.0	1104.4	1093.8
25°	1216.4	1172.9	1109.6	1055.6	1042.4
27.5°	1178.2	1125.5	1053.0	995.0	981.8
30°	1125.5	1071.4	1000.3	943.6	934.4
32.5°	1076.7	1022.7	944.9	898.8	888.2
35°	1022.7	966.0	889.6	846.1	836.8
37.5°	973.9	908.0	840.8	798.6	793.4
40°	915.9	856.6	789.4	757.8	749.9
42.5°	859.2	799.9	736.7	709.0	699.8
45°	805.2	743.3	690.6	664.2	656.3
47.5°	748.5	691.9	641.8	620.7	615.4
50°	689.2	639.2	593.0	573.3	566.7
52.5°	636.5	585.1	546.9	528.5	520.6
55°	579.9	536.4	499.5	483.7	478.4
57.5°	523.2	487.6	452.0	437.5	429.6
60°	473.1	437.5	408.5	391.4	386.1
62.5°	421.7	391.4	363.7	347.9	341.3
65°	370.3	345.3	318.9	299.2	292.6
67.5°	322.9	295.2	274.1	257.0	250.4
70°	272.8	253.0	231.9	216.1	209.5
72.5°	226.7	212.2	193.7	176.6	170.0
75°	185.8	171.3	156.8	138.4	129.2
77.5°	145.0	135.7	121.2	105.4	105.4
80°	106.7	101.5	85.7	83.0	81.7
82.5°	73.8	71.2	61.9	60.6	60.6
85°	43.5	40.9	40.9	40.9	40.9
87.5°	18.5	19.8	21.1	21.1	22.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)