

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: P295615

Luminaire Tested: **14RLN-LD5-31-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295615
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-4000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2864.0 lumens
Efficiency: N/A
Efficacy: 98.7 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

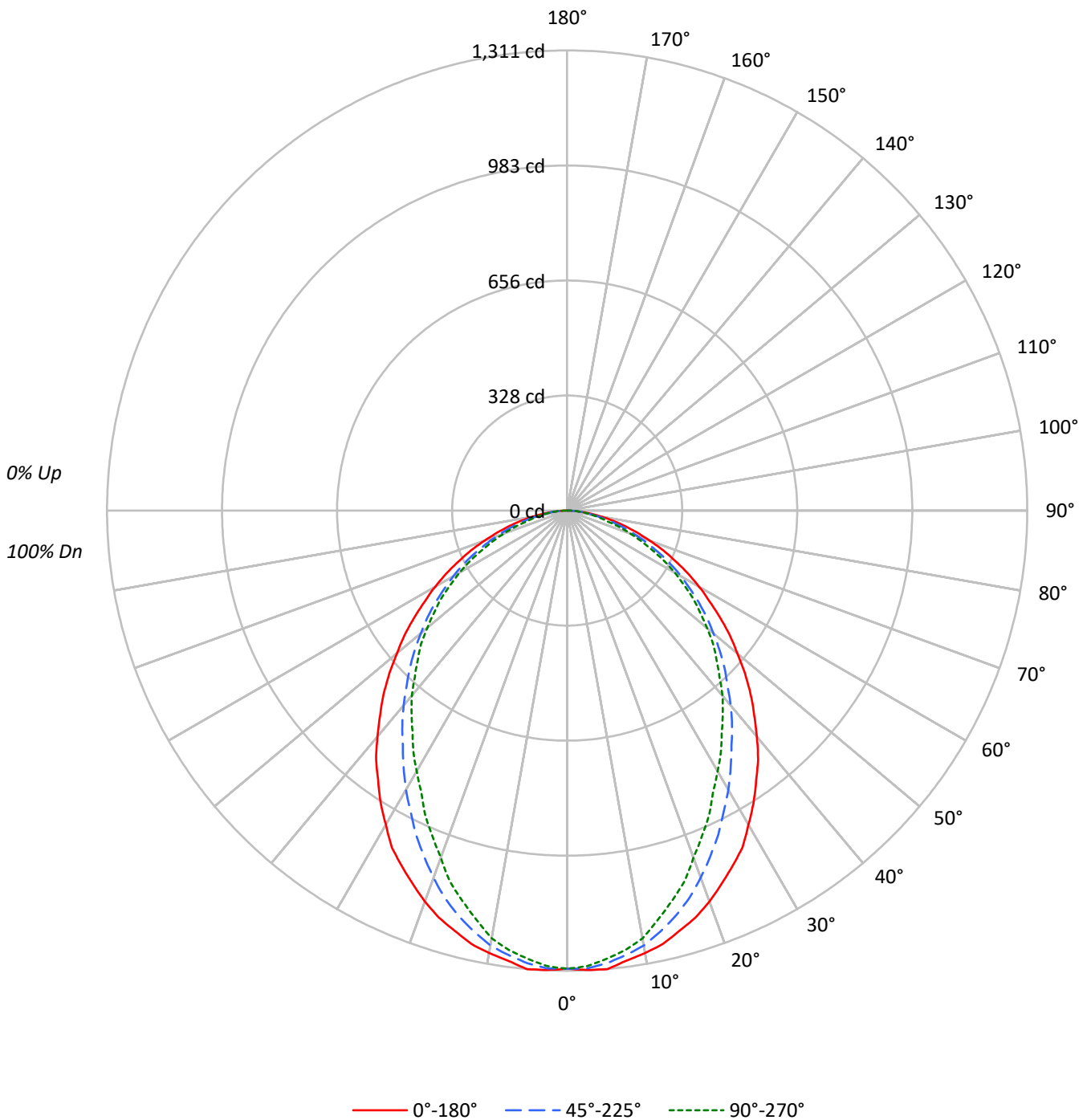
Input Watts (W): 29.016
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3513	3513	3513
5°	3542	3497	3464
10°	3497	3438	3382
15°	3451	3330	3209
20°	3395	3187	3014
25°	3315	3024	2841
30°	3210	2853	2665
35°	3084	2683	2524
40°	2954	2545	2418
45°	2813	2412	2293
50°	2649	2279	2178
55°	2497	2151	2060
60°	2337	2018	1908
65°	2164	1864	1710
70°	1970	1675	1513
75°	1774	1497	1233
80°	1519	1218	1162
85°	1232	1158	1158



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	122.2	4.3
10°-20°	335.4	11.7
20°-30°	470.8	16.4
30°-40°	522.2	18.2
40°-50°	501.3	17.5
50°-60°	420.1	14.7
60°-70°	294.9	10.3
70°-80°	154.0	5.4
80°-90°	43.1	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°	928.4	32.4
0°-40°	1450.6	50.7
0°-60°	2372.0	82.8
0°-90°	2864.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2864.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1305	1305	1305	1305	1305	
5°	1311	1294	1294	1286	1282	124
15°	1239	1217	1195	1164	1152	350
25°	1117	1077	1019	969	957	514
35°	939	887	817	777	768	588
45°	739	682	634	610	602	569
55°	532	492	458	444	439	476
65°	340	317	293	275	269	338
75°	171	157	144	127	119	181
85°	40	38	38	38	38	47
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1305.3	1305.3	1305.3	1305.3	1305.3
2.5°	1310.1	1302.9	1305.3	1305.3	1299.2
5°	1311.3	1294.4	1294.4	1285.9	1282.3
7.5°	1293.2	1279.9	1277.5	1266.6	1263.0
10°	1279.9	1266.6	1258.1	1243.6	1237.6
12.5°	1264.2	1243.6	1227.9	1203.7	1194.0
15°	1238.8	1217.0	1195.2	1163.8	1151.7
17.5°	1215.8	1190.4	1157.7	1122.6	1109.3
20°	1185.5	1155.3	1112.9	1064.6	1052.5
22.5°	1150.5	1115.4	1065.8	1013.8	1004.1
25°	1116.6	1076.7	1018.6	969.0	956.9
27.5°	1081.5	1033.1	966.6	913.3	901.2
30°	1033.1	983.5	918.2	866.2	857.7
32.5°	988.3	938.7	867.4	825.0	815.4
35°	938.7	886.7	816.6	776.6	768.2
37.5°	894.0	833.5	771.8	733.1	728.3
40°	840.8	786.3	724.6	695.6	688.3
42.5°	788.7	734.3	676.2	650.8	642.4
45°	739.1	682.3	633.9	609.7	602.4
47.5°	687.1	635.1	589.1	569.8	564.9
50°	632.7	586.7	544.4	526.2	520.2
52.5°	584.3	537.1	502.0	485.1	477.8
55°	532.3	492.4	458.5	444.0	439.1
57.5°	480.3	447.6	414.9	401.6	394.4
60°	434.3	401.6	375.0	359.3	354.5
62.5°	387.1	359.3	333.9	319.4	313.3
65°	339.9	316.9	292.8	274.6	268.6
67.5°	296.4	271.0	251.6	235.9	229.8
70°	250.4	232.3	212.9	198.4	192.3
72.5°	208.1	194.8	177.8	162.1	156.1
75°	170.6	157.3	144.0	127.0	118.6
77.5°	133.1	124.6	111.3	96.8	96.8
80°	98.0	93.1	78.6	76.2	75.0
82.5°	67.7	65.3	56.9	55.6	55.6
85°	39.9	37.5	37.5	37.5	37.5
87.5°	16.9	18.1	19.4	19.4	20.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)