

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: P295648

Luminaire Tested: **14RLN-LD5-31-UNV-L92765-W2A1-U-3500K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295648
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-L92765-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: 2669.0 lumens
Efficiency: N/A
Efficacy: 94.1 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

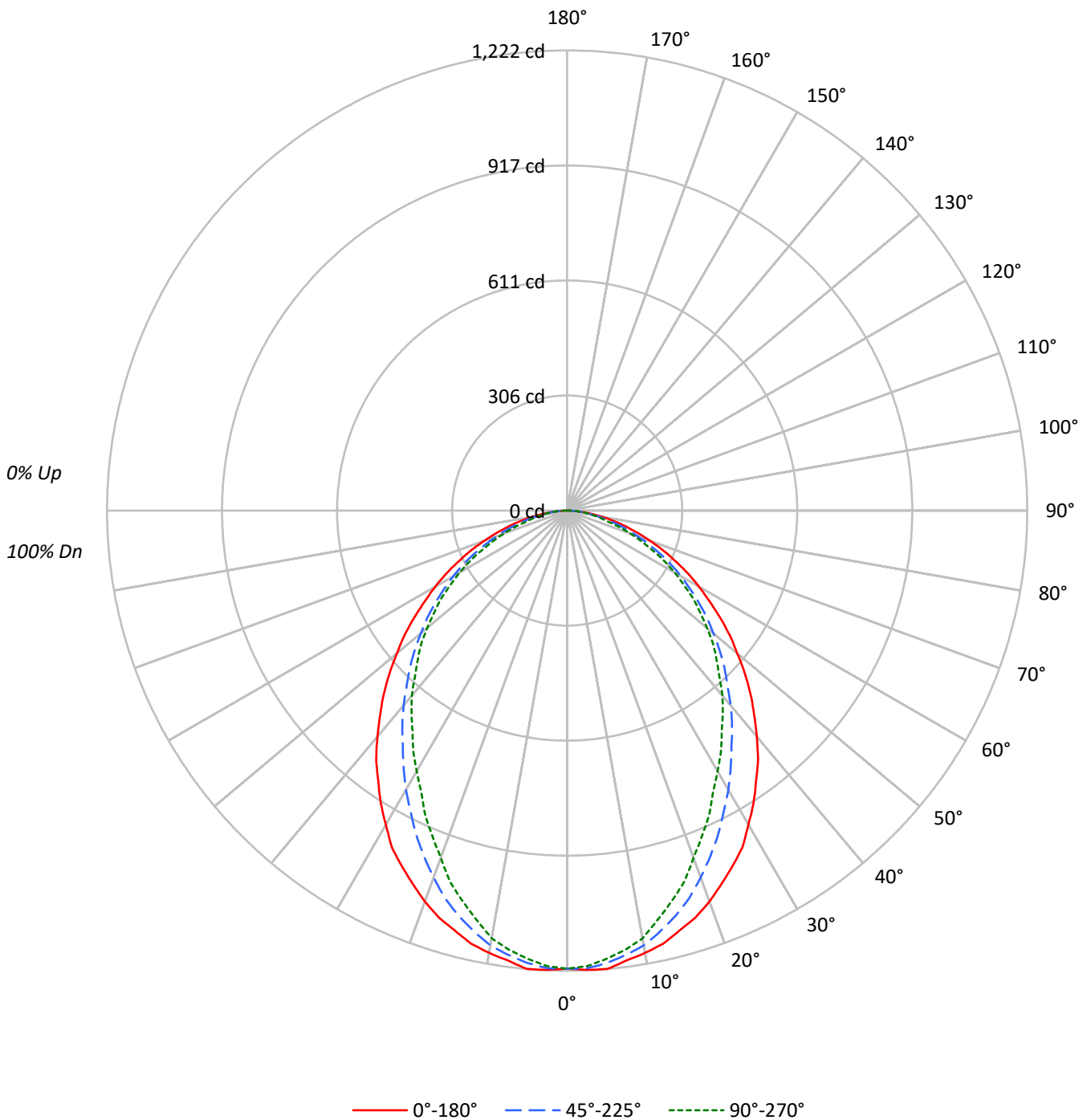
Input Watts (W): 28.365
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	3273	3273	3273
5°	3301	3259	3228
10°	3259	3204	3151
15°	3216	3103	2990
20°	3164	2970	2809
25°	3090	2818	2648
30°	2992	2659	2484
35°	2874	2500	2352
40°	2752	2372	2253
45°	2621	2248	2136
50°	2468	2124	2030
55°	2327	2005	1920
60°	2178	1881	1778
65°	2017	1737	1594
70°	1836	1561	1411
75°	1653	1395	1149
80°	1415	1136	1083
85°	1149	1078	1078



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	113.9	4.3
10°-20°	312.6	11.7
20°-30°	438.7	16.4
30°-40°	486.6	18.2
40°-50°	467.1	17.5
50°-60°	391.5	14.7
60°-70°	274.8	10.3
70°-80°	143.5	5.4
80°-90°	40.2	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°	865.2	32.4
0°-40°	1351.9	50.7
0°-60°	2210.5	82.8
0°-90°	2669.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2669.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1216	1216	1216	1216	1216	
5°	1222	1206	1206	1198	1195	115
15°	1154	1134	1114	1084	1073	326
25°	1041	1003	949	903	892	479
35°	875	826	761	724	716	548
45°	689	636	591	568	561	531
55°	496	459	427	414	409	444
65°	317	295	273	256	250	315
75°	159	147	134	118	110	169
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°	1216.4	1216.4	1216.4	1216.4	1216.4
2.5°	1220.9	1214.2	1216.4	1216.4	1210.8
5°	1222.1	1206.3	1206.3	1198.4	1195.0
7.5°	1205.1	1192.7	1190.5	1180.3	1177.0
10°	1192.7	1180.3	1172.5	1158.9	1153.3
12.5°	1178.1	1158.9	1144.3	1121.7	1112.7
15°	1154.4	1134.1	1113.8	1084.5	1073.2
17.5°	1133.0	1109.3	1078.9	1046.2	1033.8
20°	1104.8	1076.6	1037.2	992.1	980.8
22.5°	1072.1	1039.4	993.2	944.7	935.7
25°	1040.6	1003.4	949.2	903.0	891.7
27.5°	1007.9	962.8	900.8	851.2	839.9
30°	962.8	916.5	855.7	807.2	799.3
32.5°	921.1	874.8	808.3	768.9	759.8
35°	874.8	826.4	761.0	723.8	715.9
37.5°	833.1	776.8	719.3	683.2	678.7
40°	783.5	732.8	675.3	648.2	641.5
42.5°	735.0	684.3	630.2	606.5	598.6
45°	688.8	635.8	590.7	568.2	561.4
47.5°	640.3	591.9	549.0	531.0	526.5
50°	589.6	546.8	507.3	490.4	484.8
52.5°	544.5	500.5	467.9	452.1	445.3
55°	496.0	458.8	427.3	413.7	409.2
57.5°	447.6	417.1	386.7	374.3	367.5
60°	404.7	374.3	349.5	334.8	330.3
62.5°	360.8	334.8	311.2	297.6	292.0
65°	316.8	295.4	272.8	255.9	250.3
67.5°	276.2	252.5	234.5	219.8	214.2
70°	233.4	216.5	198.4	184.9	179.3
72.5°	193.9	181.5	165.7	151.1	145.4
75°	159.0	146.6	134.2	118.4	110.5
77.5°	124.0	116.1	103.7	90.2	90.2
80°	91.3	86.8	73.3	71.0	69.9
82.5°	63.1	60.9	53.0	51.9	51.9
85°	37.2	34.9	34.9	34.9	34.9
87.5°	15.8	16.9	18.0	18.0	19.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)