

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: P295543

Luminaire Tested: **14RLN-LD5-31-UNV-L83050-W2A1-U-3000K**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P295543
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-3000K
Description: RLN LED 1x4 TUNABLE WHITE TROFFER
WITH STANDARD LENS
Light Source: (168) 80 CRI LEDS TUNED TO 3000K CCT
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2948.0 lumens
Efficiency: N/A
Efficacy: 104.6 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

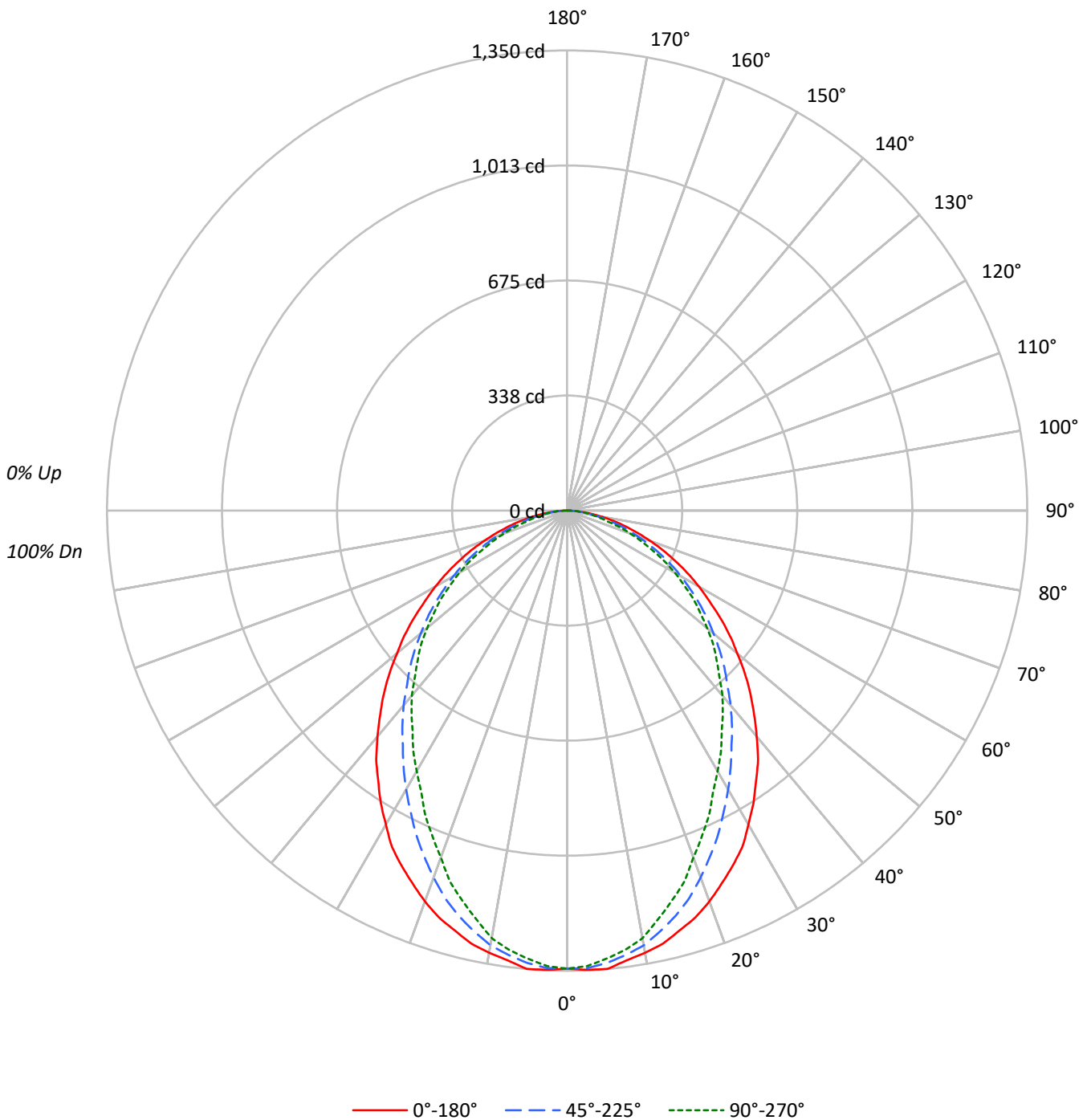
Input Watts (W): 28.179
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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				
2	100	92	86	81	98	91	85	80	87	82	78	84	80	76	81	77	74					72				
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64					62				
4	85	73	65	58	82	72	64	58	69	63	57	67	61	56	65	60	56					54				
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49					47				
6	72	60	51	45	70	59	50	45	57	50	44	55	49	44	54	48	43					41				
7	67	54	46	40	66	53	45	40	52	45	39	51	44	39	49	43	39					37				
8	63	50	42	36	61	49	41	36	48	41	36	47	40	35	45	40	35					33				
9	59	46	38	33	57	45	38	32	44	37	32	43	37	32	42	36	32					30				
10	55	42	35	30	54	42	35	30	41	34	29	40	34	29	39	33	29					28				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3616	3616	3616
5°	3646	3599	3565
10°	3600	3539	3481
15°	3552	3428	3302
20°	3495	3281	3102
25°	3412	3113	2925
30°	3304	2937	2743
35°	3174	2761	2598
40°	3040	2620	2489
45°	2895	2483	2360
50°	2726	2346	2241
55°	2571	2214	2121
60°	2406	2077	1963
65°	2228	1918	1760
70°	2028	1725	1558
75°	1826	1541	1268
80°	1564	1254	1196
85°	1269	1192	1192



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	125.8	4.3
10°-20°	345.3	11.7
20°-30°	484.6	16.4
30°-40°	537.5	18.2
40°-50°	516.0	17.5
50°-60°	432.4	14.7
60°-70°	303.5	10.3
70°-80°	158.5	5.4
80°-90°	44.4	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°	955.7	32.4
0°-40°	1493.2	50.7
0°-60°	2441.6	82.8
0°-90°	2948.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2948.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1344	1344	1344	1344	1344	
5°	1350	1332	1332	1324	1320	127
15°	1275	1253	1230	1198	1185	360
25°	1149	1108	1048	997	985	529
35°	966	913	840	799	791	605
45°	761	702	652	628	620	586
55°	548	507	472	457	452	490
65°	350	326	301	283	276	348
75°	176	162	148	131	122	186
85°	41	39	39	39	39	49
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1343.6	1343.6	1343.6	1343.6	1343.6
2.5°	1348.6	1341.1	1343.6	1343.6	1337.4
5°	1349.8	1332.4	1332.4	1323.7	1319.9
7.5°	1331.1	1317.4	1314.9	1303.7	1300.0
10°	1317.4	1303.7	1295.0	1280.1	1273.8
12.5°	1301.2	1280.1	1263.9	1239.0	1229.0
15°	1275.1	1252.7	1230.3	1197.9	1185.4
17.5°	1251.4	1225.3	1191.7	1155.6	1141.9
20°	1220.3	1189.2	1145.6	1095.8	1083.3
22.5°	1184.2	1148.1	1097.0	1043.5	1033.5
25°	1149.3	1108.2	1048.5	997.4	985.0
27.5°	1113.2	1063.4	994.9	940.1	927.7
30°	1063.4	1012.4	945.1	891.6	882.9
32.5°	1017.3	966.3	892.8	849.2	839.3
35°	966.3	912.7	840.5	799.4	790.7
37.5°	920.2	857.9	794.4	754.6	749.6
40°	865.4	809.4	745.9	716.0	708.5
42.5°	811.9	755.8	696.1	669.9	661.2
45°	760.8	702.3	652.5	627.6	620.1
47.5°	707.3	653.7	606.4	586.5	581.5
50°	651.2	603.9	560.3	541.7	535.4
52.5°	601.4	552.9	516.8	499.3	491.9
55°	547.9	506.8	471.9	457.0	452.0
57.5°	494.3	460.7	427.1	413.4	405.9
60°	447.0	413.4	386.0	369.8	364.8
62.5°	398.5	369.8	343.7	328.7	322.5
65°	349.9	326.2	301.3	282.7	276.4
67.5°	305.1	278.9	259.0	242.8	236.6
70°	257.8	239.1	219.2	204.2	198.0
72.5°	214.2	200.5	183.0	166.9	160.6
75°	175.6	161.9	148.2	130.7	122.0
77.5°	137.0	128.3	114.6	99.6	99.6
80°	100.9	95.9	80.9	78.4	77.2
82.5°	69.7	67.2	58.5	57.3	57.3
85°	41.1	38.6	38.6	38.6	38.6
87.5°	17.4	18.7	19.9	19.9	21.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)