

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: P296385

Luminaire Tested: **22RLN-LD5-31-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296385  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-11)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22RLN-LD5-31-UNV-L83050-W2A1-U-4000K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3302.0 lumens  
Efficiency: N/A  
Efficacy: 132.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.23 / 1.3  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

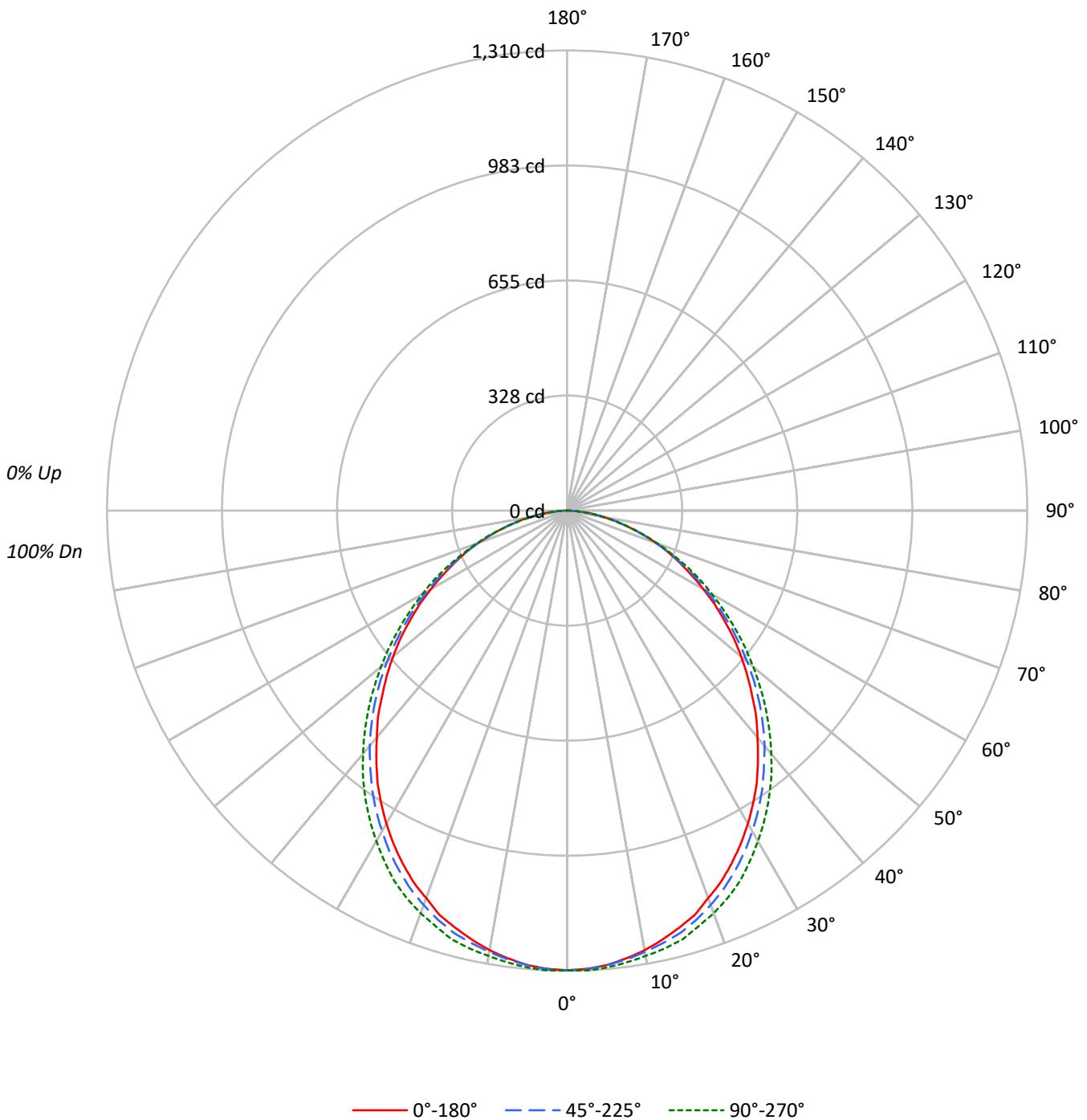
Input Watts (W): 25.017  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85					85			
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71					71			
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61					61			
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52					52			
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	46					46			
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40					40			
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	38	36					36			
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29					29			
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26					26			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3522	3522	3522
5°	3509	3509	3526
10°	3473	3486	3518
15°	3426	3467	3522
20°	3361	3423	3493
25°	3290	3358	3456
30°	3197	3274	3376
35°	3094	3180	3288
40°	2961	3071	3175
45°	2832	2945	3045
50°	2709	2798	2895
55°	2564	2641	2734
60°	2410	2472	2561
65°	2264	2306	2379
70°	2112	2112	2150
75°	1883	1883	1883
80°	1658	1607	1607
85°	1321	1272	1170



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.4	3.7
10°-20°	350.9	10.6
20°-30°	521.3	15.8
30°-40°	605.0	18.3
40°-50°	595.7	18.0
50°-60°	504.1	15.3
60°-70°	359.5	10.9
70°-80°	193.2	5.9
80°-90°	48.7	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°	995.7	30.2
0°-40°	1600.7	48.5
0°-60°	2700.6	81.8
0°-90°	3302.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3302.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1309	1309	1309	1309	1309	
5°	1299	1299	1299	1304	1306	123
15°	1230	1233	1245	1256	1264	347
25°	1108	1111	1131	1152	1164	510
35°	942	943	968	991	1001	588
45°	744	749	774	792	800	575
55°	547	548	563	578	583	490
65°	356	356	362	369	374	353
75°	181	180	181	181	181	194
85°	43	41	41	38	38	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1308.8	1308.8	1308.8	1308.8	1308.8
2.5°	1305.5	1305.5	1307.2	1308.8	1310.5
5°	1299.0	1299.0	1299.0	1303.9	1305.5
7.5°	1285.8	1287.4	1289.1	1294.0	1297.3
10°	1271.0	1272.6	1275.9	1284.1	1287.4
12.5°	1251.2	1256.2	1261.1	1272.6	1277.6
15°	1229.8	1233.1	1244.6	1256.2	1264.4
17.5°	1206.8	1208.4	1221.6	1238.0	1241.3
20°	1173.8	1178.8	1195.2	1211.7	1219.9
22.5°	1144.2	1147.5	1165.6	1187.0	1193.6
25°	1108.0	1111.3	1131.0	1152.4	1164.0
27.5°	1070.1	1073.4	1094.8	1117.9	1126.1
30°	1029.0	1032.3	1053.7	1078.4	1086.6
32.5°	986.2	989.5	1012.5	1033.9	1045.4
35°	941.7	943.4	968.0	991.1	1001.0
37.5°	892.3	897.3	920.3	943.4	954.9
40°	842.9	847.9	874.2	895.6	903.8
42.5°	796.8	803.4	824.8	844.6	852.8
45°	744.1	749.1	773.8	791.9	800.1
47.5°	696.4	701.3	722.7	740.9	745.8
50°	647.0	650.3	668.4	684.9	691.5
52.5°	597.6	599.3	615.7	632.2	637.1
55°	546.6	548.2	563.0	577.9	582.8
57.5°	498.8	498.8	512.0	523.5	528.5
60°	447.8	447.8	459.3	470.9	475.8
62.5°	400.1	400.1	411.6	419.8	426.4
65°	355.6	355.6	362.2	368.8	373.7
67.5°	312.8	307.9	314.5	322.7	321.0
70°	268.4	263.4	268.4	271.6	273.3
72.5°	223.9	220.6	223.9	225.5	228.8
75°	181.1	179.5	181.1	181.1	181.1
77.5°	144.9	139.9	143.2	141.6	139.9
80°	107.0	105.4	103.7	102.1	103.7
82.5°	74.1	72.4	72.4	69.1	69.1
85°	42.8	41.2	41.2	37.9	37.9
87.5°	16.5	16.5	14.8	14.8	14.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)