

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: P296428

Luminaire Tested: **22RLN-LD5-31-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296428  
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-L82765-W2A1-U-5700K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3279.0 lumens  
Efficiency: N/A  
Efficacy: 130.6 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

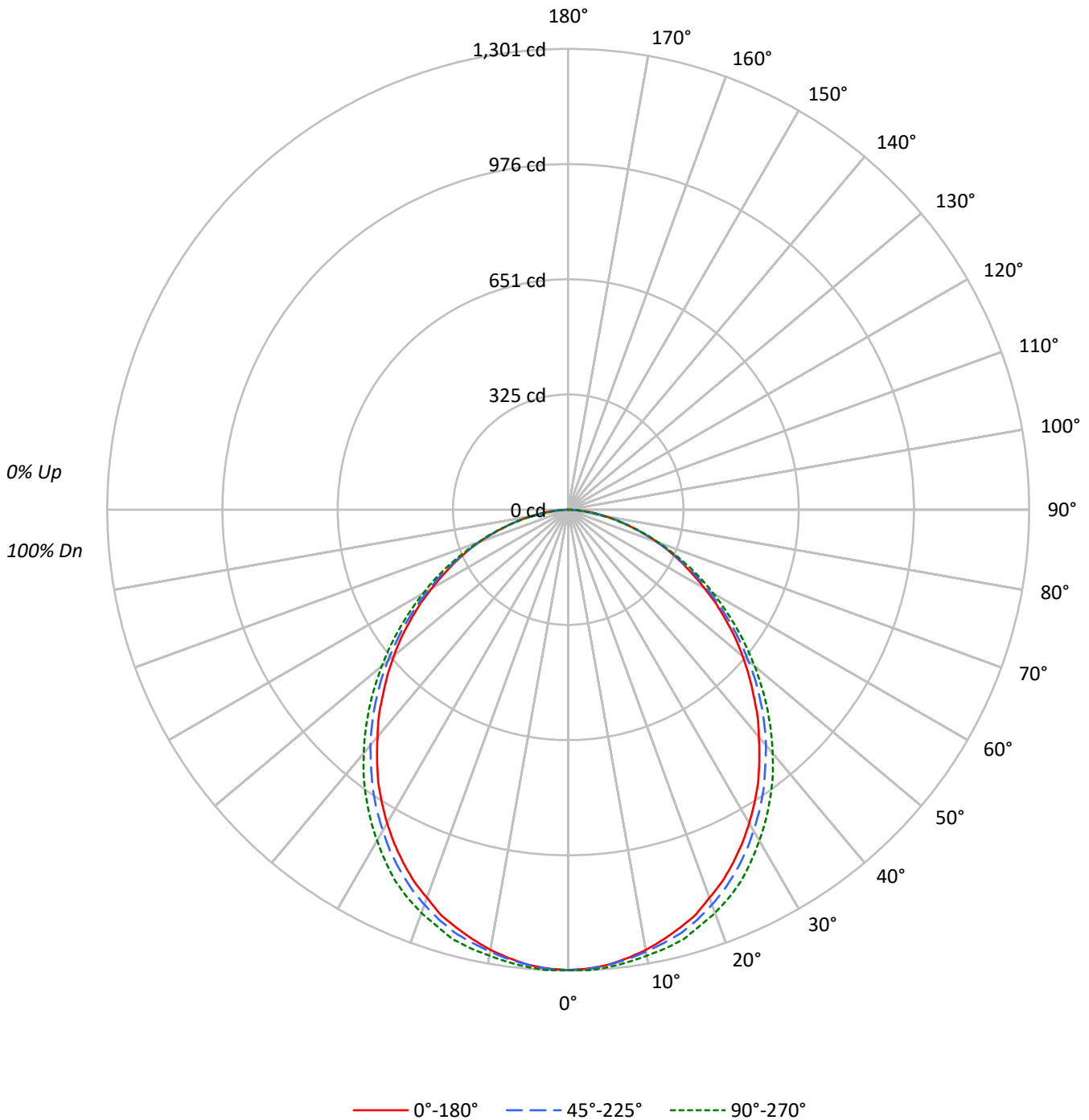
Input Watts (W): 25.11  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	46
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	38	36
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

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

	0°	45°	90°
0°	3497	3497	3497
5°	3484	3484	3502
10°	3449	3462	3493
15°	3402	3443	3498
20°	3338	3399	3469
25°	3267	3335	3432
30°	3175	3251	3353
35°	3072	3158	3265
40°	2941	3049	3153
45°	2812	2924	3024
50°	2690	2779	2874
55°	2547	2623	2715
60°	2393	2455	2543
65°	2248	2290	2363
70°	2097	2097	2135
75°	1869	1869	1869
80°	1647	1596	1596
85°	1312	1263	1161



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.6	3.7
10°-20°	348.5	10.6
20°-30°	517.7	15.8
30°-40°	600.8	18.3
40°-50°	591.6	18.0
50°-60°	500.6	15.3
60°-70°	357.0	10.9
70°-80°	191.9	5.9
80°-90°	48.4	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°	988.7	30.2
0°-40°	1589.5	48.5
0°-60°	2681.8	81.8
0°-90°	3279.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3279.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1300	1300	1300	1300	1300	
5°	1290	1290	1290	1295	1296	122
15°	1221	1224	1236	1247	1256	344
25°	1100	1104	1123	1144	1156	506
35°	935	937	961	984	994	584
45°	739	744	768	786	794	571
55°	543	544	559	574	579	486
65°	353	353	360	366	371	350
75°	180	178	180	180	180	193
85°	42	41	41	38	38	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1299.7	1299.7	1299.7	1299.7	1299.7
2.5°	1296.5	1296.5	1298.1	1299.7	1301.4
5°	1289.9	1289.9	1289.9	1294.8	1296.5
7.5°	1276.8	1278.5	1280.1	1285.0	1288.3
10°	1262.1	1263.8	1267.0	1275.2	1278.5
12.5°	1242.5	1247.4	1252.3	1263.8	1268.7
15°	1221.3	1224.5	1236.0	1247.4	1255.6
17.5°	1198.4	1200.0	1213.1	1229.4	1232.7
20°	1165.7	1170.6	1186.9	1203.3	1211.4
22.5°	1136.2	1139.5	1157.5	1178.7	1185.3
25°	1100.3	1103.5	1123.2	1144.4	1155.9
27.5°	1062.7	1065.9	1087.2	1110.1	1118.3
30°	1021.8	1025.1	1046.3	1070.8	1079.0
32.5°	979.3	982.6	1005.4	1026.7	1038.1
35°	935.1	936.8	961.3	984.2	994.0
37.5°	886.1	891.0	913.9	936.8	948.2
40°	837.1	842.0	868.1	889.4	897.5
42.5°	791.3	797.8	819.1	838.7	846.9
45°	739.0	743.9	768.4	786.4	794.5
47.5°	691.6	696.5	717.7	735.7	740.6
50°	642.5	645.8	663.8	680.1	686.6
52.5°	593.5	595.1	611.4	627.8	632.7
55°	542.8	544.4	559.1	573.8	578.7
57.5°	495.4	495.4	508.4	519.9	524.8
60°	444.7	444.7	456.1	467.6	472.5
62.5°	397.3	397.3	408.7	416.9	423.4
65°	353.1	353.1	359.7	366.2	371.1
67.5°	310.6	305.7	312.3	320.4	318.8
70°	266.5	261.6	266.5	269.8	271.4
72.5°	222.3	219.1	222.3	224.0	227.2
75°	179.8	178.2	179.8	179.8	179.8
77.5°	143.9	139.0	142.2	140.6	139.0
80°	106.3	104.6	103.0	101.4	103.0
82.5°	73.6	71.9	71.9	68.7	68.7
85°	42.5	40.9	40.9	37.6	37.6
87.5°	16.3	16.3	14.7	14.7	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)