

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: P296429

Luminaire Tested: **22RLN-LD5-31-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296429  
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-6500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3287.0 lumens  
Efficiency: N/A  
Efficacy: 128.5 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

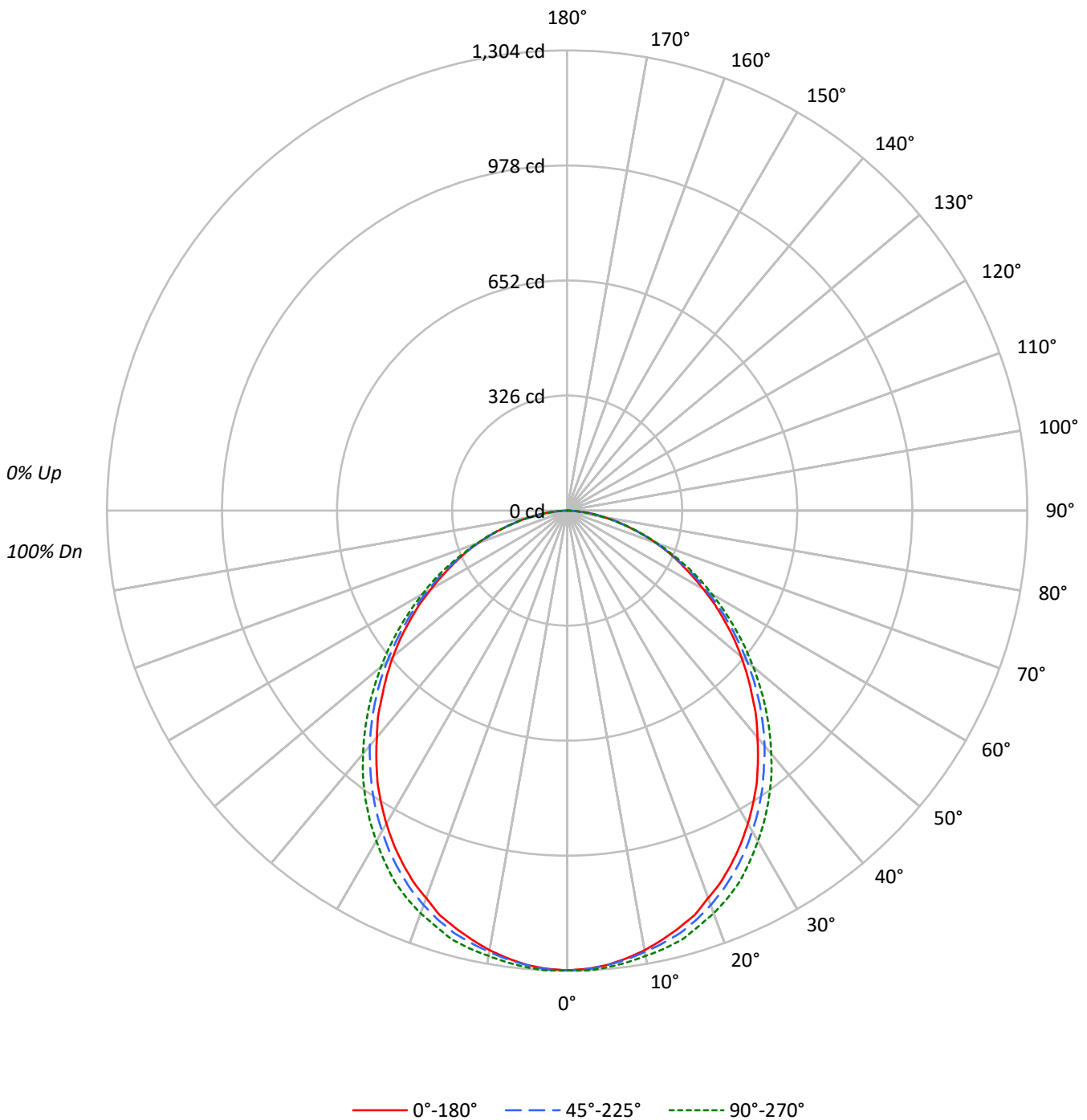
Input Watts (W): 25.575  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3506	3506	3506
5°	3493	3493	3511
10°	3457	3471	3502
15°	3411	3452	3506
20°	3346	3407	3478
25°	3275	3343	3440
30°	3183	3259	3361
35°	3079	3166	3273
40°	2948	3057	3160
45°	2819	2931	3031
50°	2696	2786	2882
55°	2553	2630	2722
60°	2399	2461	2549
65°	2254	2295	2369
70°	2102	2102	2141
75°	1875	1875	1875
80°	1650	1599	1599
85°	1315	1266	1164



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	122.9	3.7
10°-20°	349.3	10.6
20°-30°	518.9	15.8
30°-40°	602.3	18.3
40°-50°	593.0	18.0
50°-60°	501.9	15.3
60°-70°	357.9	10.9
70°-80°	192.3	5.9
80°-90°	48.5	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°	991.1	30.2
0°-40°	1593.4	48.5
0°-60°	2688.3	81.8
0°-90°	3287.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3287.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1303	1303	1303	1303	1303	
5°	1293	1293	1293	1298	1300	122
15°	1224	1228	1239	1250	1259	345
25°	1103	1106	1126	1147	1159	508
35°	937	939	964	987	996	585
45°	741	746	770	788	796	573
55°	544	546	560	575	580	487
65°	354	354	360	367	372	351
75°	180	179	180	180	180	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°	1302.9	1302.9	1302.9	1302.9	1302.9
2.5°	1299.6	1299.6	1301.3	1302.9	1304.5
5°	1293.1	1293.1	1293.1	1298.0	1299.6
7.5°	1280.0	1281.6	1283.2	1288.1	1291.4
10°	1265.2	1266.8	1270.1	1278.3	1281.6
12.5°	1245.5	1250.5	1255.4	1266.8	1271.8
15°	1224.2	1227.5	1239.0	1250.5	1258.6
17.5°	1201.3	1202.9	1216.0	1232.4	1235.7
20°	1168.5	1173.4	1189.8	1206.2	1214.4
22.5°	1139.0	1142.3	1160.3	1181.6	1188.2
25°	1103.0	1106.2	1125.9	1147.2	1158.7
27.5°	1065.3	1068.5	1089.8	1112.8	1121.0
30°	1024.3	1027.6	1048.9	1073.5	1081.6
32.5°	981.7	985.0	1007.9	1029.2	1040.7
35°	937.4	939.1	963.7	986.6	996.4
37.5°	888.3	893.2	916.1	939.1	950.5
40°	839.1	844.0	870.2	891.5	899.7
42.5°	793.2	799.8	821.1	840.7	848.9
45°	740.8	745.7	770.3	788.3	796.5
47.5°	693.2	698.2	719.5	737.5	742.4
50°	644.1	647.4	665.4	681.8	688.3
52.5°	594.9	596.5	612.9	629.3	634.2
55°	544.1	545.7	560.5	575.2	580.2
57.5°	496.6	496.6	509.7	521.2	526.1
60°	445.8	445.8	457.2	468.7	473.6
62.5°	398.2	398.2	409.7	417.9	424.5
65°	354.0	354.0	360.5	367.1	372.0
67.5°	311.4	306.5	313.0	321.2	319.6
70°	267.1	262.2	267.1	270.4	272.1
72.5°	222.9	219.6	222.9	224.5	227.8
75°	180.3	178.6	180.3	180.3	180.3
77.5°	144.2	139.3	142.6	140.9	139.3
80°	106.5	104.9	103.2	101.6	103.2
82.5°	73.7	72.1	72.1	68.8	68.8
85°	42.6	41.0	41.0	37.7	37.7
87.5°	16.4	16.4	14.7	14.7	14.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)