

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: P296426

Luminaire Tested: **22RLN-LD5-31-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296426  
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-5000K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3238.0 lumens  
Efficiency: N/A  
Efficacy: 129.4 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

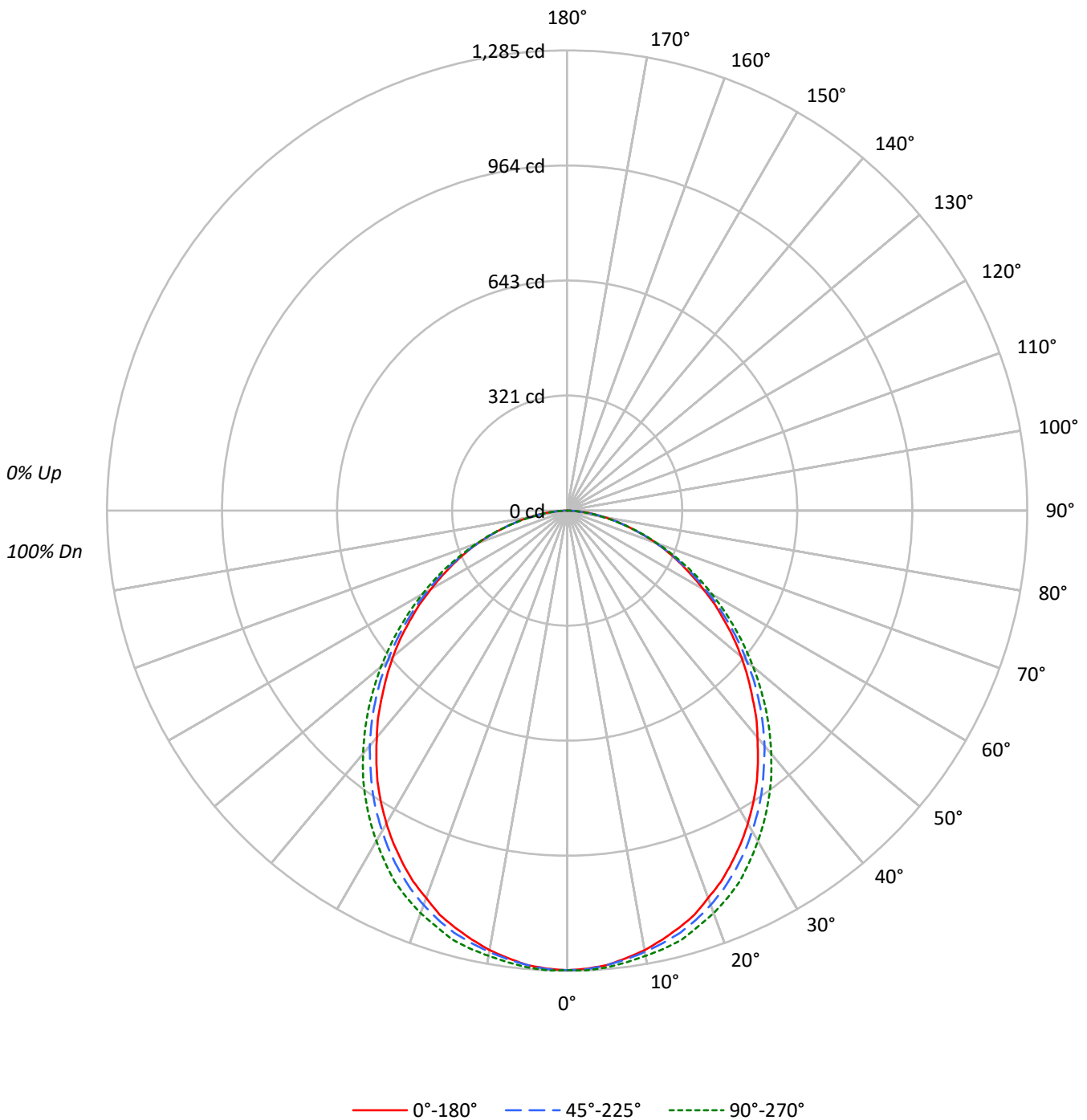
Input Watts (W): 25.017  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3454	3454	3454
5°	3441	3441	3458
10°	3406	3419	3450
15°	3360	3400	3454
20°	3296	3357	3426
25°	3226	3293	3389
30°	3135	3210	3311
35°	3034	3119	3225
40°	2904	3012	3113
45°	2777	2888	2986
50°	2656	2744	2839
55°	2515	2590	2681
60°	2363	2424	2511
65°	2220	2262	2334
70°	2071	2071	2109
75°	1847	1847	1847
80°	1626	1576	1576
85°	1297	1247	1145



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.0	3.7
10°-20°	344.1	10.6
20°-30°	511.2	15.8
30°-40°	593.3	18.3
40°-50°	584.2	18.0
50°-60°	494.4	15.3
60°-70°	352.6	10.9
70°-80°	189.5	5.9
80°-90°	47.7	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°	976.4	30.2
0°-40°	1569.7	48.5
0°-60°	2648.2	81.8
0°-90°	3238.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3238.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1284	1284	1284	1284	1284	
5°	1274	1274	1274	1279	1280	121
15°	1206	1209	1220	1232	1240	340
25°	1086	1090	1109	1130	1141	500
35°	924	925	949	972	982	576
45°	730	735	759	776	785	564
55°	536	538	552	567	572	480
65°	349	349	355	362	366	346
75°	178	176	178	178	178	191
85°	42	40	40	37	37	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1283.5	1283.5	1283.5	1283.5	1283.5
2.5°	1280.2	1280.2	1281.9	1283.5	1285.1
5°	1273.8	1273.8	1273.8	1278.6	1280.2
7.5°	1260.9	1262.5	1264.1	1268.9	1272.2
10°	1246.3	1248.0	1251.2	1259.3	1262.5
12.5°	1227.0	1231.8	1236.7	1248.0	1252.8
15°	1206.0	1209.2	1220.5	1231.8	1239.9
17.5°	1183.4	1185.0	1197.9	1214.1	1217.3
20°	1151.1	1155.9	1172.1	1188.2	1196.3
22.5°	1122.0	1125.3	1143.0	1164.0	1170.5
25°	1086.5	1089.7	1109.1	1130.1	1141.4
27.5°	1049.4	1052.6	1073.6	1096.2	1104.3
30°	1009.0	1012.2	1033.2	1057.5	1065.5
32.5°	967.0	970.3	992.9	1013.9	1025.2
35°	923.5	925.1	949.3	971.9	981.6
37.5°	875.0	879.9	902.5	925.1	936.4
40°	826.6	831.4	857.3	878.3	886.3
42.5°	781.4	787.8	808.8	828.2	836.3
45°	729.7	734.6	758.8	776.5	784.6
47.5°	682.9	687.7	708.7	726.5	731.3
50°	634.5	637.7	655.5	671.6	678.1
52.5°	586.0	587.7	603.8	619.9	624.8
55°	536.0	537.6	552.1	566.7	571.5
57.5°	489.2	489.2	502.1	513.4	518.2
60°	439.1	439.1	450.4	461.7	466.6
62.5°	392.3	392.3	403.6	411.7	418.1
65°	348.7	348.7	355.2	361.6	366.5
67.5°	306.7	301.9	308.4	316.4	314.8
70°	263.2	258.3	263.2	266.4	268.0
72.5°	219.6	216.3	219.6	221.2	224.4
75°	177.6	176.0	177.6	177.6	177.6
77.5°	142.1	137.2	140.5	138.8	137.2
80°	104.9	103.3	101.7	100.1	101.7
82.5°	72.6	71.0	71.0	67.8	67.8
85°	42.0	40.4	40.4	37.1	37.1
87.5°	16.1	16.1	14.5	14.5	14.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)