

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: P296010

Luminaire Tested: **24RLN-LD5-31-UNV-L92765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296010  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1901-085-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-31-UNV-L92765-W2A1-U-5700K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER WITH STANDARD LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2922.0 lumens  
Efficiency: N/A  
Efficacy: 133.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.19 / 1.29  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

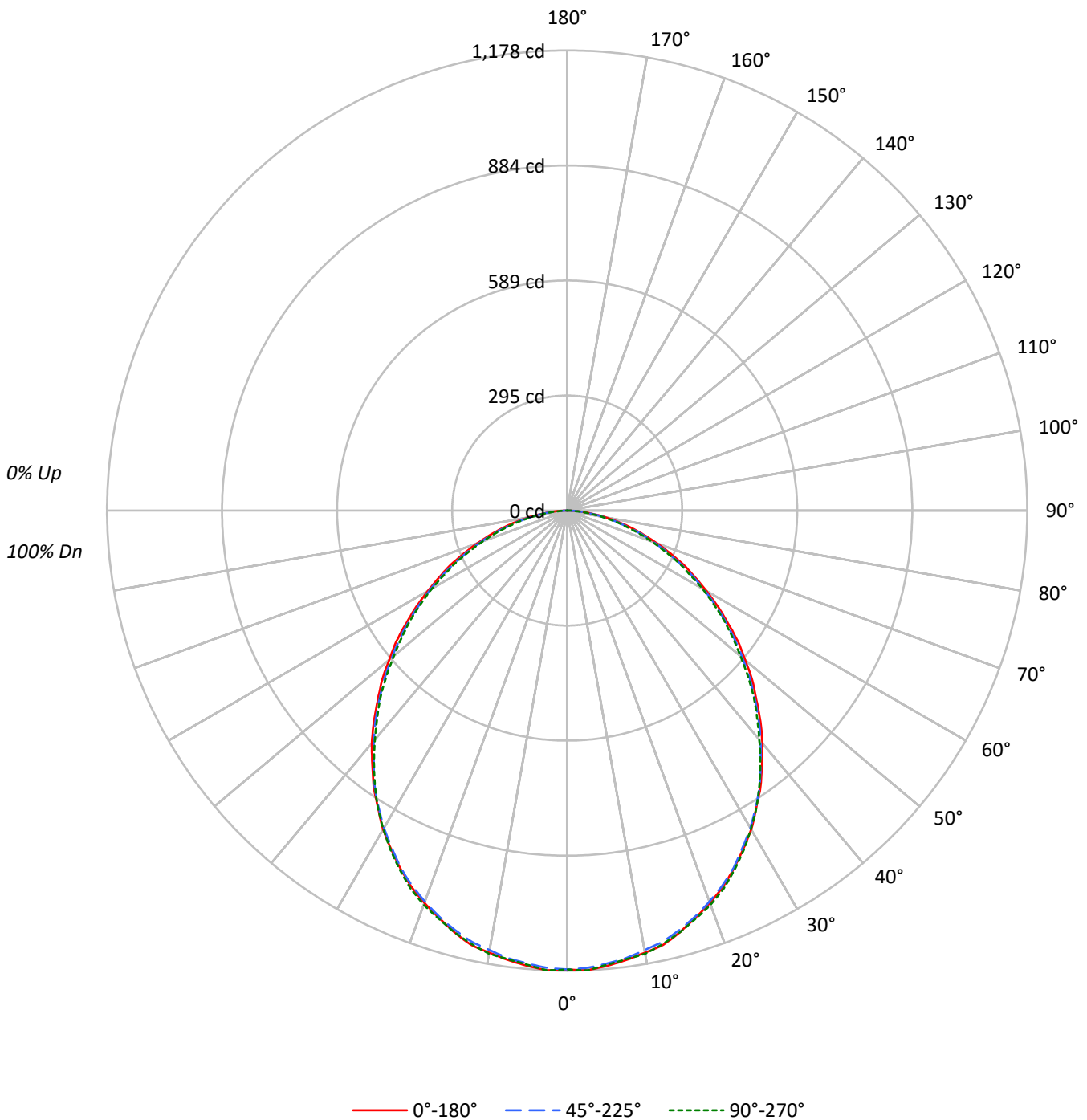
Input Watts (W): 21.855  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	72					72			
3	91	81	73	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61					61			
4	84	72	64	57	82	71	63	57	68	62	56	66	60	55	64	59	55	52					52			
5	77	65	56	50	75	64	55	49	62	54	49	60	53	48	58	52	48	46					46			
6	72	59	50	44	70	58	49	43	56	48	43	54	48	43	53	47	42	40					40			
7	66	53	45	39	65	52	44	39	51	44	38	49	43	38	48	42	38	36					36			
8	62	49	40	35	60	48	40	35	47	39	34	45	39	34	44	38	34	32					32			
9	58	45	37	31	57	44	36	31	43	36	31	42	36	31	41	35	31	29					29			
10	54	41	34	28	53	41	33	28	40	33	28	39	33	28	38	32	28	26					26			

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

	0°	45°	90°
0°	1580	1580	1580
5°	1580	1572	1576
10°	1570	1561	1574
15°	1556	1548	1556
20°	1531	1525	1537
25°	1500	1497	1506
30°	1465	1457	1462
35°	1418	1412	1409
40°	1366	1353	1344
45°	1304	1291	1286
50°	1245	1225	1212
55°	1179	1161	1150
60°	1108	1088	1076
65°	1047	1008	999
70°	961	923	905
75°	882	828	794
80°	774	723	680
85°	625	582	496



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.8	3.8
10°-20°	314.2	10.8
20°-30°	464.7	15.9
30°-40°	536.4	18.4
40°-50°	523.9	17.9
50°-60°	442.4	15.1
60°-70°	315.1	10.8
70°-80°	170.6	5.8
80°-90°	44.0	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°	889.7	30.4
0°-40°	1426.1	48.8
0°-60°	2392.3	81.9
0°-90°	2922.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2922.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1175	1175	1175	1175	1175	
5°	1170	1170	1164	1167	1167	111
15°	1117	1112	1111	1116	1117	315
25°	1010	1005	1009	1012	1014	465
35°	864	857	860	857	858	539
45°	685	680	679	676	676	530
55°	502	496	495	490	490	450
65°	329	322	317	313	314	324
75°	170	164	159	156	153	180
85°	40	40	38	33	32	48
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1174.6	1174.6	1174.6	1174.6	1174.6
2.5°	1178.3	1173.6	1171.7	1172.7	1178.3
5°	1169.8	1169.8	1164.2	1167.0	1167.0
7.5°	1160.4	1161.4	1155.7	1160.4	1158.5
10°	1149.1	1146.3	1142.5	1150.1	1151.9
12.5°	1138.7	1132.1	1130.3	1135.0	1135.9
15°	1117.1	1112.3	1111.4	1116.1	1117.1
17.5°	1092.5	1093.5	1089.7	1096.3	1095.4
20°	1069.0	1067.1	1065.2	1072.8	1073.7
22.5°	1042.6	1036.9	1038.8	1045.4	1047.3
25°	1010.5	1004.9	1008.7	1012.4	1014.3
27.5°	976.6	973.8	972.8	977.5	979.4
30°	942.7	938.0	938.0	943.6	940.8
32.5°	901.2	897.4	899.3	901.2	902.1
35°	863.5	856.9	859.7	856.9	857.8
37.5°	819.2	814.5	813.5	812.6	812.6
40°	777.7	773.9	770.2	770.2	765.4
42.5°	732.5	727.7	725.9	723.0	720.2
45°	685.3	679.7	678.7	675.9	675.9
47.5°	642.9	634.4	633.5	627.8	627.8
50°	594.8	589.2	585.4	581.6	578.8
52.5°	551.5	545.8	540.1	536.4	533.5
55°	502.4	495.8	494.9	490.2	490.2
57.5°	458.1	452.5	448.7	443.1	444.0
60°	411.9	406.3	404.4	399.7	399.7
62.5°	368.6	363.9	361.0	356.3	352.6
65°	329.0	322.4	316.7	313.0	313.9
67.5°	285.6	278.1	275.3	271.5	268.7
70°	244.2	239.4	234.7	230.0	230.0
72.5°	205.5	200.8	198.0	192.3	190.4
75°	169.7	164.0	159.3	155.5	152.7
77.5°	133.9	128.2	125.4	120.7	120.7
80°	99.9	96.2	93.3	91.4	87.7
82.5°	68.8	66.9	64.1	61.3	58.4
85°	40.5	39.6	37.7	33.0	32.1
87.5°	16.0	16.0	14.1	13.2	12.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)