

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: P295815

Luminaire Tested: **24RLN-LD5-31-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P295815  
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-L83050-W2A1-U-4000K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (504) 80 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3255.0 lumens  
Efficiency: N/A  
Efficacy: 150.2 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

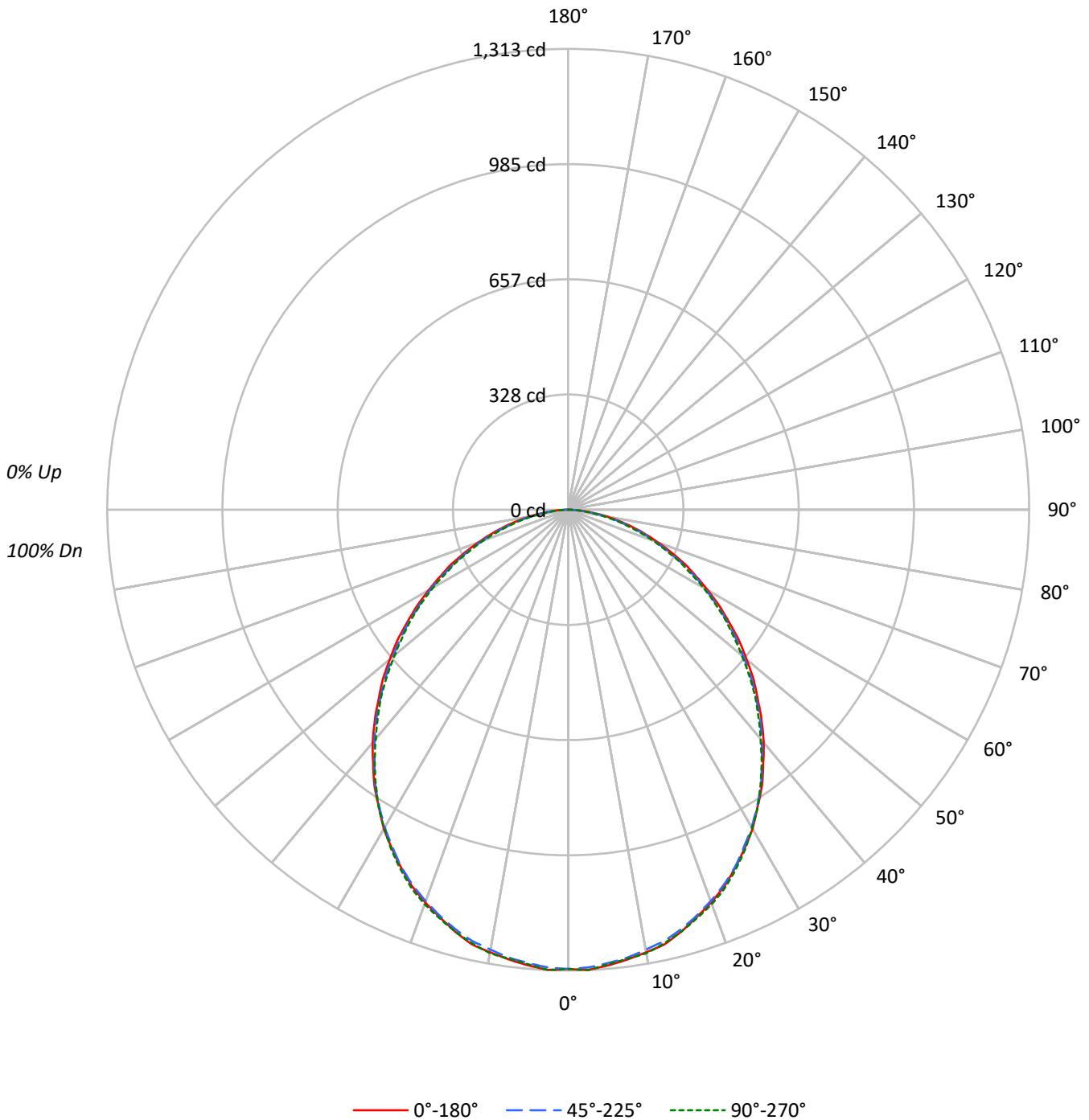
Input Watts (W): 21.669  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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

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

	0°	45°	90°
0°	1760	1760	1760
5°	1760	1752	1756
10°	1749	1739	1753
15°	1733	1725	1733
20°	1705	1699	1713
25°	1671	1668	1677
30°	1631	1623	1628
35°	1580	1573	1570
40°	1522	1507	1498
45°	1453	1439	1433
50°	1387	1365	1350
55°	1313	1293	1281
60°	1235	1212	1198
65°	1167	1123	1113
70°	1070	1029	1008
75°	983	923	884
80°	862	806	757
85°	698	648	551



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.5	3.8
10°-20°	350.0	10.8
20°-30°	517.7	15.9
30°-40°	597.5	18.4
40°-50°	583.6	17.9
50°-60°	492.8	15.1
60°-70°	351.0	10.8
70°-80°	190.0	5.8
80°-90°	49.1	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	30.4
0°-40°	1588.6	48.8
0°-60°	2664.9	81.9
0°-90°	3255.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3255.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1308	1308	1308	1308	1308	
5°	1303	1303	1297	1300	1300	124
15°	1244	1239	1238	1243	1244	351
25°	1126	1119	1124	1128	1130	518
35°	962	954	958	954	956	600
45°	763	757	756	753	753	590
55°	560	552	551	546	546	502
65°	366	359	353	349	350	361
75°	189	183	178	173	170	200
85°	45	44	42	37	36	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1308.4	1308.4	1308.4	1308.4	1308.4
2.5°	1312.6	1307.4	1305.3	1306.3	1312.6
5°	1303.2	1303.2	1296.9	1300.0	1300.0
7.5°	1292.7	1293.7	1287.4	1292.7	1290.6
10°	1280.1	1276.9	1272.7	1281.1	1283.2
12.5°	1268.5	1261.2	1259.1	1264.3	1265.4
15°	1244.4	1239.1	1238.1	1243.3	1244.4
17.5°	1217.1	1218.1	1213.9	1221.3	1220.2
20°	1190.8	1188.7	1186.6	1195.0	1196.1
22.5°	1161.4	1155.1	1157.2	1164.6	1166.7
25°	1125.7	1119.4	1123.6	1127.8	1129.9
27.5°	1087.9	1084.7	1083.7	1088.9	1091.0
30°	1050.1	1044.8	1044.8	1051.1	1048.0
32.5°	1003.9	999.7	1001.8	1003.9	1004.9
35°	961.9	954.5	957.7	954.5	955.6
37.5°	912.5	907.3	906.2	905.2	905.2
40°	866.3	862.1	857.9	857.9	852.7
42.5°	815.9	810.7	808.6	805.4	802.3
45°	763.4	757.1	756.1	752.9	752.9
47.5°	716.2	706.7	705.7	699.4	699.4
50°	662.6	656.3	652.1	647.9	644.8
52.5°	614.3	608.0	601.7	597.5	594.4
55°	559.7	552.3	551.3	546.0	546.0
57.5°	510.3	504.0	499.8	493.5	494.6
60°	458.9	452.6	450.5	445.2	445.2
62.5°	410.6	405.3	402.2	396.9	392.7
65°	366.5	359.1	352.8	348.6	349.7
67.5°	318.2	309.8	306.6	302.4	299.3
70°	272.0	266.7	261.5	256.2	256.2
72.5°	228.9	223.7	220.5	214.2	212.1
75°	189.0	182.7	177.5	173.3	170.1
77.5°	149.1	142.8	139.7	134.4	134.4
80°	111.3	107.1	104.0	101.9	97.7
82.5°	76.7	74.6	71.4	68.3	65.1
85°	45.2	44.1	42.0	36.8	35.7
87.5°	17.9	17.9	15.8	14.7	13.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)