

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: P296244

Luminaire Tested: **24RLN-LD5-42-RDP-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296244  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P36059-R2)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24RLN-LD5-42-RDP-UNV-L93050-W2A1-U-3500K  
Description: RLN LED 2x4 TUNABLE WHITE TROFFER  
WITH RDP LENS  
Light Source: (504) 90 CRI LEDS TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2970.0 lumens  
Efficiency: N/A  
Efficacy: 100.1 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.3 / 1.38  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

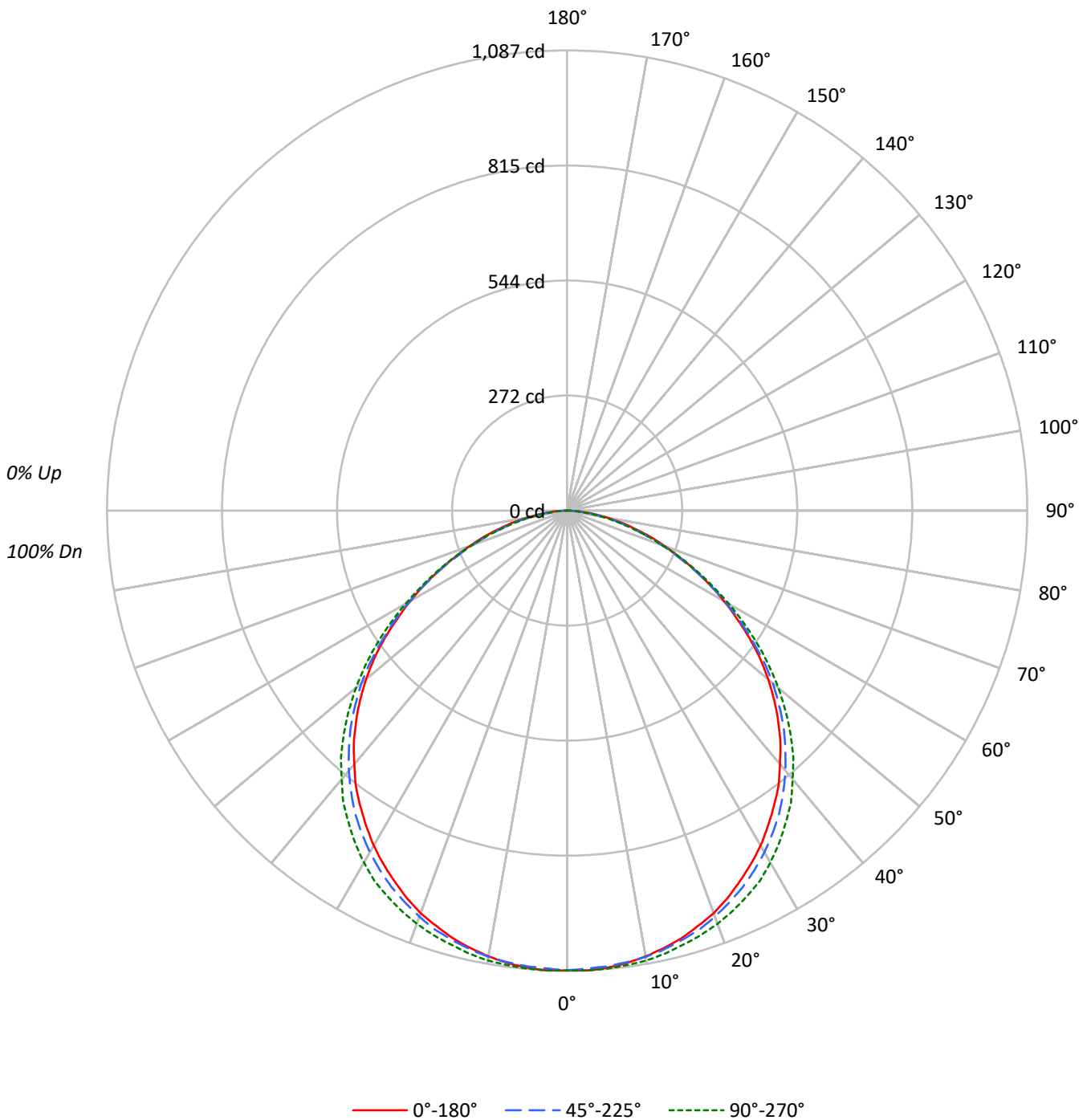
Input Watts (W): 29.667  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	73	71
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	66	63	60
4	83	72	63	57	81	70	62	56	68	61	55	66	60	55	63	58	54	52
5	77	64	55	49	75	63	55	49	61	54	48	59	53	48	57	52	47	45
6	71	58	49	43	69	57	49	43	55	48	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	27	52	40	33	27	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	1461	1461	1461
5°	1464	1459	1467
10°	1461	1462	1475
15°	1456	1463	1478
20°	1449	1462	1487
25°	1434	1457	1492
30°	1420	1448	1491
35°	1399	1434	1479
40°	1373	1409	1454
45°	1342	1376	1419
50°	1297	1328	1363
55°	1234	1250	1287
60°	1152	1158	1189
65°	1058	1051	1076
70°	962	935	940
75°	855	808	803
80°	742	663	646
85°	608	469	366



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.0	3.5
10°-20°	297.0	10.0
20°-30°	453.3	15.3
30°-40°	546.5	18.4
40°-50°	557.3	18.8
50°-60°	476.9	16.1
60°-70°	328.5	11.1
70°-80°	168.4	5.7
80°-90°	39.2	1.3
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°	853.3	28.7
0°-40°	1399.7	47.1
0°-60°	2433.9	81.9
0°-90°	2970.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2970.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1086	1086	1086	1086	1086	
5°	1084	1082	1080	1084	1086	103
15°	1046	1044	1050	1058	1061	295
25°	966	969	981	998	1005	445
35°	852	855	873	892	900	533
45°	705	706	723	741	746	543
55°	526	523	533	544	549	469
65°	332	324	330	332	338	330
75°	164	158	156	156	154	177
85°	39	35	30	27	24	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1086.1	1086.1	1086.1	1086.1	1086.1
2.5°	1087.3	1085.0	1082.8	1085.0	1087.3
5°	1083.9	1081.6	1080.5	1083.9	1086.1
7.5°	1078.3	1076.0	1076.0	1080.5	1082.8
10°	1069.2	1068.1	1070.4	1074.9	1079.4
12.5°	1058.0	1058.0	1061.4	1067.0	1071.5
15°	1045.6	1044.5	1050.1	1058.0	1061.4
17.5°	1028.7	1029.8	1037.7	1046.7	1051.2
20°	1011.8	1012.9	1020.8	1033.2	1038.8
22.5°	990.4	992.6	1001.6	1017.4	1023.0
25°	965.6	969.0	981.4	998.3	1005.0
27.5°	940.8	944.2	957.7	976.9	985.9
30°	913.8	918.3	931.8	952.1	959.9
32.5°	883.3	886.7	903.6	923.9	931.8
35°	851.8	855.2	873.2	892.3	900.2
37.5°	820.2	820.2	838.3	860.8	868.7
40°	781.9	783.1	802.2	823.6	828.1
42.5°	745.9	745.9	762.8	783.1	790.9
45°	705.3	706.4	723.3	741.4	745.9
47.5°	663.6	663.6	678.3	695.2	699.7
50°	619.7	617.4	634.3	647.9	651.2
52.5°	574.6	571.2	584.8	596.0	600.5
55°	526.2	522.8	532.9	544.2	548.7
57.5°	475.5	471.0	482.2	492.4	494.6
60°	428.1	421.4	430.4	436.0	441.7
62.5°	380.8	372.9	379.7	383.1	387.6
65°	332.4	324.5	330.1	332.4	338.0
67.5°	286.2	280.5	281.7	285.1	287.3
70°	244.5	237.7	237.7	237.7	238.9
72.5°	206.2	196.0	194.9	196.0	196.0
75°	164.5	157.7	155.5	155.5	154.4
77.5°	131.8	122.8	121.7	119.4	117.2
80°	95.8	87.9	85.6	84.5	83.4
82.5°	66.5	59.7	57.5	55.2	51.8
85°	39.4	34.9	30.4	27.0	23.7
87.5°	14.6	13.5	11.3	10.1	10.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)