

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: P296480

Luminaire Tested: **22RLN-LD5-40-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296480  
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-LD5-40-UNV-L93050-W2A1-U-4500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3740.0 lumens  
Efficiency: N/A  
Efficacy: 112.0 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

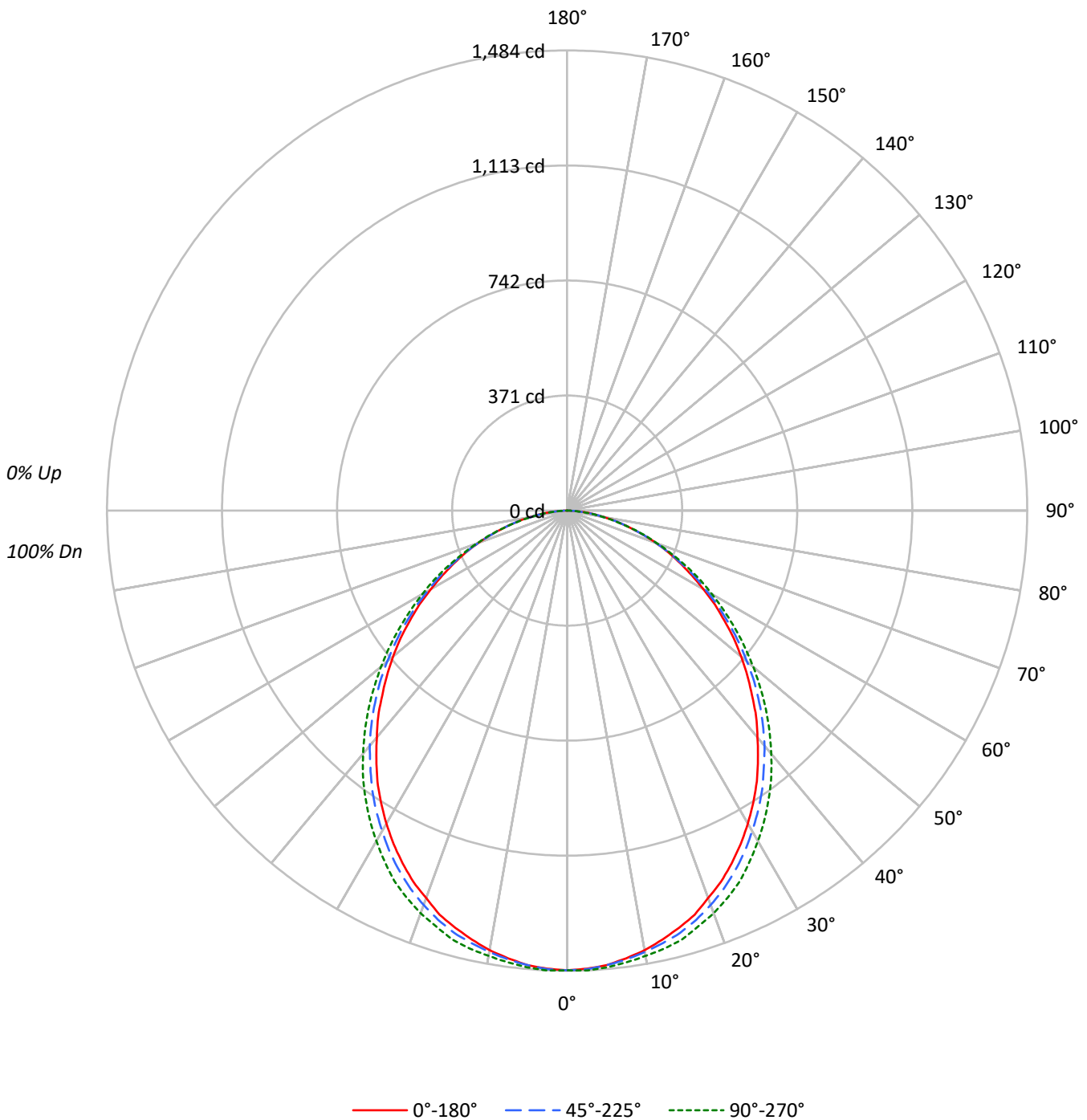
Input Watts (W): 33.387  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	71
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	64	55	49	61	54	49	59	53	48	58	52	48	46
6	71	58	50	43	70	57	49	43	56	48	43	54	47	42	52	47	42	40
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	38	36
8	62	49	40	34	60	48	40	34	47	39	34	45	39	34	44	38	34	32
9	58	45	37	31	56	44	36	31	43	36	31	42	35	31	41	35	31	29
10	54	41	33	28	53	41	33	28	40	33	28	39	32	28	38	32	28	26

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

	0°	45°	90°
0°	3989	3989	3989
5°	3974	3974	3994
10°	3934	3949	3985
15°	3880	3927	3990
20°	3807	3877	3957
25°	3726	3804	3915
30°	3622	3708	3824
35°	3504	3602	3725
40°	3354	3478	3596
45°	3208	3335	3449
50°	3068	3170	3279
55°	2905	2992	3097
60°	2730	2800	2900
65°	2565	2612	2695
70°	2391	2391	2435
75°	2132	2132	2132
80°	1878	1821	1821
85°	1497	1439	1325



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.8	3.7
10°-20°	397.5	10.6
20°-30°	590.5	15.8
30°-40°	685.3	18.3
40°-50°	674.7	18.0
50°-60°	571.0	15.3
60°-70°	407.2	10.9
70°-80°	218.8	5.9
80°-90°	55.1	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°	1127.7	30.2
0°-40°	1813.0	48.5
0°-60°	3058.8	81.8
0°-90°	3740.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3740.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1482	1482	1482	1482	1482	
5°	1471	1471	1471	1477	1479	139
15°	1393	1397	1410	1423	1432	393
25°	1255	1259	1281	1305	1318	578
35°	1067	1068	1096	1123	1134	666
45°	843	848	876	897	906	652
55°	619	621	638	654	660	555
65°	403	403	410	418	423	400
75°	205	203	205	205	205	220
85°	48	47	47	43	43	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1482.5	1482.5	1482.5	1482.5	1482.5
2.5°	1478.7	1478.7	1480.6	1482.5	1484.3
5°	1471.3	1471.3	1471.3	1476.9	1478.7
7.5°	1456.3	1458.2	1460.1	1465.7	1469.4
10°	1439.6	1441.4	1445.2	1454.5	1458.2
12.5°	1417.2	1422.8	1428.4	1441.4	1447.0
15°	1392.9	1396.7	1409.7	1422.8	1432.1
17.5°	1366.8	1368.7	1383.6	1402.3	1406.0
20°	1329.5	1335.1	1353.8	1372.4	1381.8
22.5°	1296.0	1299.7	1320.2	1344.5	1351.9
25°	1255.0	1258.7	1281.1	1305.3	1318.4
27.5°	1212.1	1215.8	1240.0	1266.1	1275.5
30°	1165.5	1169.2	1193.4	1221.4	1230.7
32.5°	1117.0	1120.7	1146.8	1171.0	1184.1
35°	1066.6	1068.5	1096.5	1122.6	1133.8
37.5°	1010.7	1016.3	1042.4	1068.5	1081.5
40°	954.7	960.3	990.2	1014.4	1023.7
42.5°	902.5	910.0	934.2	956.6	965.9
45°	842.9	848.4	876.4	896.9	906.3
47.5°	788.8	794.4	818.6	839.1	844.7
50°	732.8	736.6	757.1	775.7	783.2
52.5°	676.9	678.8	697.4	716.1	721.6
55°	619.1	621.0	637.7	654.5	660.1
57.5°	565.0	565.0	579.9	593.0	598.6
60°	507.2	507.2	520.3	533.3	538.9
62.5°	453.1	453.1	466.2	475.5	483.0
65°	402.8	402.8	410.2	417.7	423.3
67.5°	354.3	348.7	356.2	365.5	363.6
70°	303.9	298.4	303.9	307.7	309.5
72.5°	253.6	249.9	253.6	255.5	259.2
75°	205.1	203.3	205.1	205.1	205.1
77.5°	164.1	158.5	162.2	160.4	158.5
80°	121.2	119.3	117.5	115.6	117.5
82.5°	83.9	82.0	82.0	78.3	78.3
85°	48.5	46.6	46.6	42.9	42.9
87.5°	18.6	18.6	16.8	16.8	16.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)