

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: P296396

Luminaire Tested: **22RLN-LD5-40-UNV-L83050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296396  
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-L83050-W2A1-U-4500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4244.0 lumens  
Efficiency: N/A  
Efficacy: 126.1 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

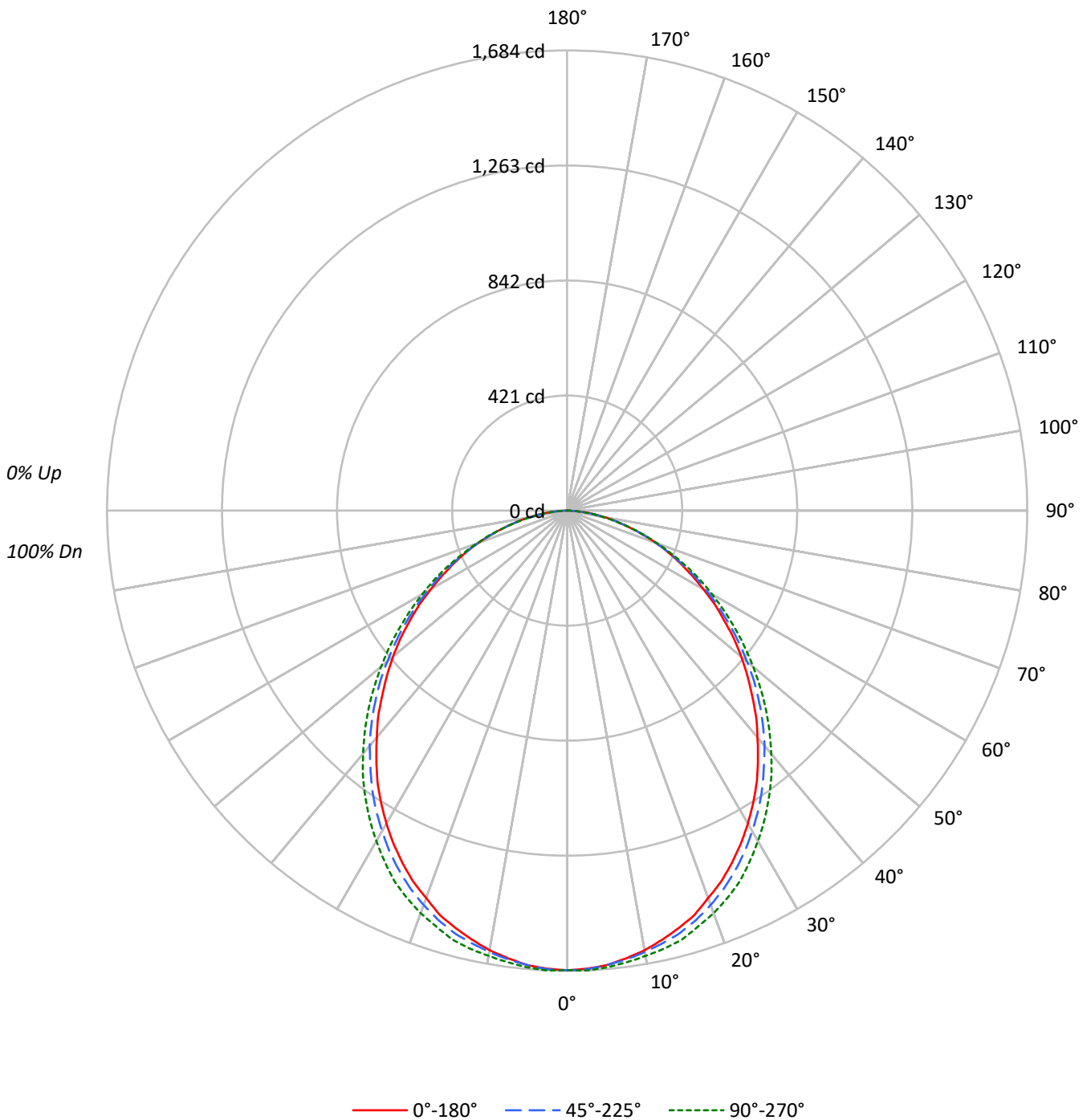
Input Watts (W): 33.666  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4527	4527	4527
5°	4510	4510	4533
10°	4464	4481	4521
15°	4404	4457	4527
20°	4320	4399	4490
25°	4228	4316	4442
30°	4109	4208	4340
35°	3976	4087	4226
40°	3806	3947	4081
45°	3640	3785	3914
50°	3481	3597	3720
55°	3296	3395	3514
60°	3098	3178	3291
65°	2911	2964	3058
70°	2714	2714	2764
75°	2420	2420	2420
80°	2131	2066	2066
85°	1698	1633	1504



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	158.6	3.7
10°-20°	451.0	10.6
20°-30°	670.0	15.8
30°-40°	777.6	18.3
40°-50°	765.7	18.0
50°-60°	648.0	15.3
60°-70°	462.1	10.9
70°-80°	248.3	5.9
80°-90°	62.6	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°	1279.7	30.2
0°-40°	2057.3	48.5
0°-60°	3471.0	81.8
0°-90°	4244.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4244.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1670	1670	1670	1676	1678	158
15°	1581	1585	1600	1614	1625	446
25°	1424	1428	1454	1481	1496	655
35°	1210	1212	1244	1274	1286	755
45°	956	963	994	1018	1028	739
55°	702	705	724	743	749	629
65°	457	457	466	474	480	454
75°	233	231	233	233	233	250
85°	55	53	53	49	49	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1682.2	1682.2	1682.2	1682.2	1682.2
2.5°	1678.0	1678.0	1680.1	1682.2	1684.3
5°	1669.5	1669.5	1669.5	1675.9	1678.0
7.5°	1652.6	1654.7	1656.8	1663.2	1667.4
10°	1633.6	1635.7	1639.9	1650.5	1654.7
12.5°	1608.2	1614.5	1620.9	1635.7	1642.0
15°	1580.7	1584.9	1599.7	1614.5	1625.1
17.5°	1551.0	1553.2	1570.1	1591.2	1595.5
20°	1508.7	1515.1	1536.2	1557.4	1568.0
22.5°	1470.6	1474.9	1498.1	1525.6	1534.1
25°	1424.1	1428.3	1453.7	1481.2	1496.0
27.5°	1375.4	1379.6	1407.1	1436.8	1447.4
30°	1322.5	1326.7	1354.2	1386.0	1396.6
32.5°	1267.5	1271.7	1301.3	1328.9	1343.7
35°	1210.4	1212.5	1244.2	1273.8	1286.5
37.5°	1146.9	1153.2	1182.9	1212.5	1227.3
40°	1083.4	1089.7	1123.6	1151.1	1161.7
42.5°	1024.1	1032.6	1060.1	1085.5	1096.1
45°	956.4	962.8	994.5	1017.8	1028.4
47.5°	895.1	901.4	928.9	952.2	958.6
50°	831.6	835.8	859.1	880.3	888.7
52.5°	768.1	770.2	791.4	812.5	818.9
55°	702.5	704.6	723.7	742.7	749.1
57.5°	641.2	641.2	658.1	672.9	679.2
60°	575.6	575.6	590.4	605.2	611.5
62.5°	514.2	514.2	529.0	539.6	548.0
65°	457.1	457.1	465.5	474.0	480.3
67.5°	402.0	395.7	404.2	414.7	412.6
70°	344.9	338.6	344.9	349.1	351.3
72.5°	287.8	283.5	287.8	289.9	294.1
75°	232.8	230.6	232.8	232.8	232.8
77.5°	186.2	179.9	184.1	182.0	179.9
80°	137.5	135.4	133.3	131.2	133.3
82.5°	95.2	93.1	93.1	88.9	88.9
85°	55.0	52.9	52.9	48.7	48.7
87.5°	21.2	21.2	19.0	19.0	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)