

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: P296443

Luminaire Tested: **22RLN-LD5-40-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296443  
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-L82765-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: 4067.0 lumens  
Efficiency: N/A  
Efficacy: 124.6 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

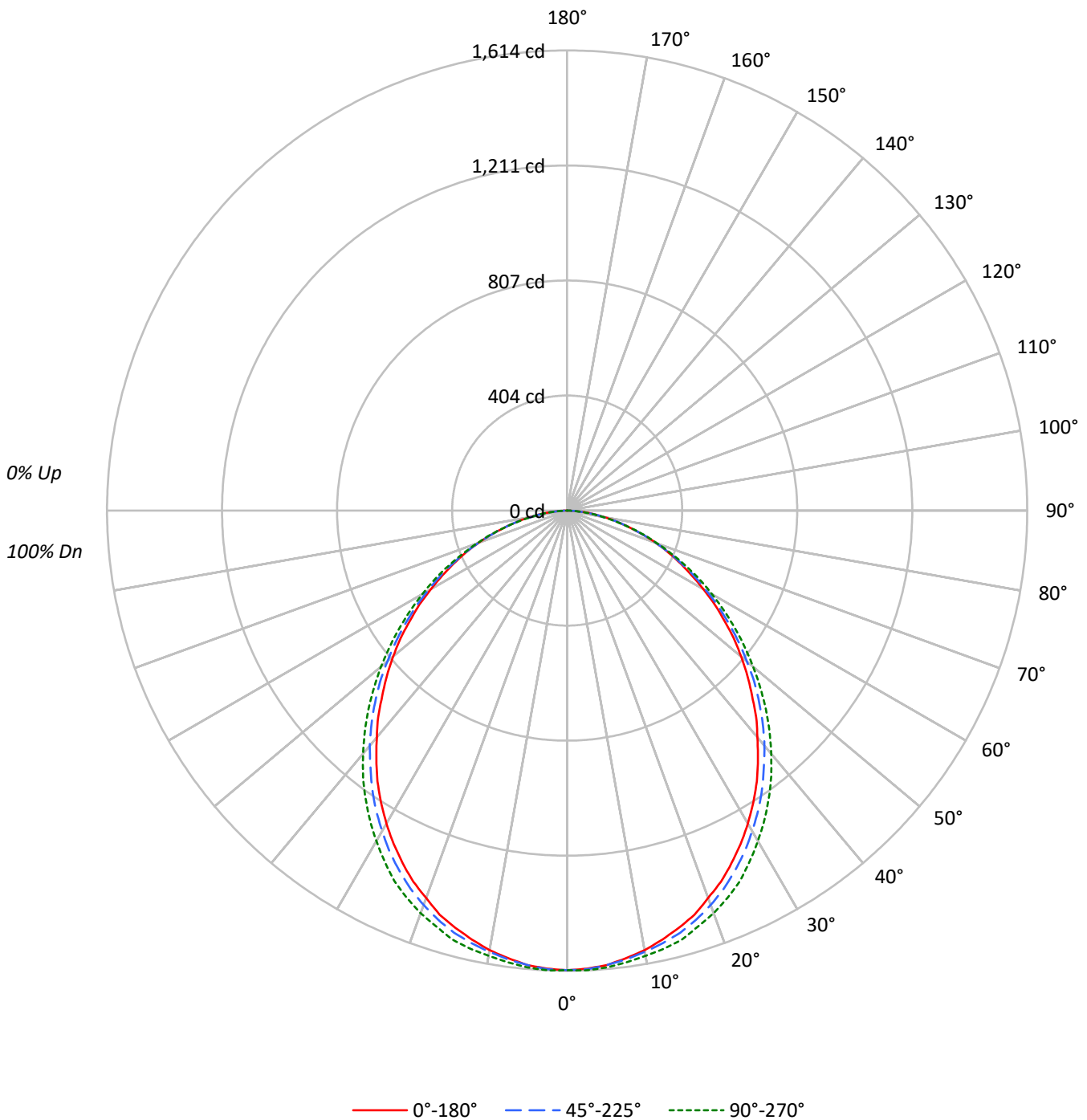
Input Watts (W): 32.643  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4338	4338	4338
5°	4322	4322	4344
10°	4277	4294	4333
15°	4220	4271	4338
20°	4140	4216	4303
25°	4052	4136	4257
30°	3938	4033	4158
35°	3810	3917	4050
40°	3647	3782	3910
45°	3488	3627	3750
50°	3336	3447	3566
55°	3158	3254	3368
60°	2969	3045	3154
65°	2789	2840	2931
70°	2600	2600	2648
75°	2320	2320	2320
80°	2042	1979	1979
85°	1627	1565	1439



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.0	3.7
10°-20°	432.2	10.6
20°-30°	642.1	15.8
30°-40°	745.2	18.3
40°-50°	733.7	18.0
50°-60°	620.9	15.3
60°-70°	442.8	10.9
70°-80°	238.0	5.9
80°-90°	60.0	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°	1226.4	30.2
0°-40°	1971.5	48.5
0°-60°	3326.2	81.8
0°-90°	4067.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4067.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1612	1612	1612	1612	1612	
5°	1600	1600	1600	1606	1608	152
15°	1515	1519	1533	1547	1557	427
25°	1365	1369	1393	1419	1434	628
35°	1160	1162	1192	1221	1233	724
45°	916	923	953	975	986	709
55°	673	675	694	712	718	603
65°	438	438	446	454	460	435
75°	223	221	223	223	223	240
85°	53	51	51	47	47	63
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1612.1	1612.1	1612.1	1612.1	1612.1
2.5°	1608.0	1608.0	1610.0	1612.1	1614.1
5°	1599.9	1599.9	1599.9	1606.0	1608.0
7.5°	1583.7	1585.7	1587.7	1593.8	1597.9
10°	1565.4	1567.5	1571.5	1581.7	1585.7
12.5°	1541.1	1547.2	1553.3	1567.5	1573.5
15°	1514.7	1518.8	1533.0	1547.2	1557.3
17.5°	1486.3	1488.4	1504.6	1524.9	1528.9
20°	1445.8	1451.9	1472.2	1492.4	1502.6
22.5°	1409.3	1413.3	1435.7	1462.0	1470.1
25°	1364.7	1368.7	1393.1	1419.4	1433.6
27.5°	1318.0	1322.1	1348.5	1376.8	1387.0
30°	1267.4	1271.4	1297.8	1328.2	1338.3
32.5°	1214.6	1218.7	1247.1	1273.4	1287.6
35°	1159.9	1161.9	1192.3	1220.7	1232.9
37.5°	1099.0	1105.1	1133.5	1161.9	1176.1
40°	1038.2	1044.3	1076.7	1103.1	1113.2
42.5°	981.4	989.5	1015.9	1040.2	1050.4
45°	916.5	922.6	953.0	975.4	985.5
47.5°	857.7	863.8	890.2	912.5	918.6
50°	796.9	801.0	823.3	843.5	851.7
52.5°	736.1	738.1	758.4	778.7	784.7
55°	673.2	675.2	693.5	711.7	717.8
57.5°	614.4	614.4	630.6	644.8	650.9
60°	551.6	551.6	565.7	579.9	586.0
62.5°	492.7	492.7	506.9	517.1	525.2
65°	438.0	438.0	446.1	454.2	460.3
67.5°	385.3	379.2	387.3	397.4	395.4
70°	330.5	324.4	330.5	334.6	336.6
72.5°	275.8	271.7	275.8	277.8	281.9
75°	223.1	221.0	223.1	223.1	223.1
77.5°	178.4	172.4	176.4	174.4	172.4
80°	131.8	129.8	127.7	125.7	127.7
82.5°	91.2	89.2	89.2	85.2	85.2
85°	52.7	50.7	50.7	46.6	46.6
87.5°	20.3	20.3	18.2	18.2	18.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)