

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: P296447

Luminaire Tested: **22RLN-LD5-40-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P296447  
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-6500K  
Description: RLN LED 2x2 TUNABLE WHITE TROFFER  
WITH STANDARD LENS  
Light Source: (252) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4185.0 lumens  
Efficiency: N/A  
Efficacy: 125.0 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

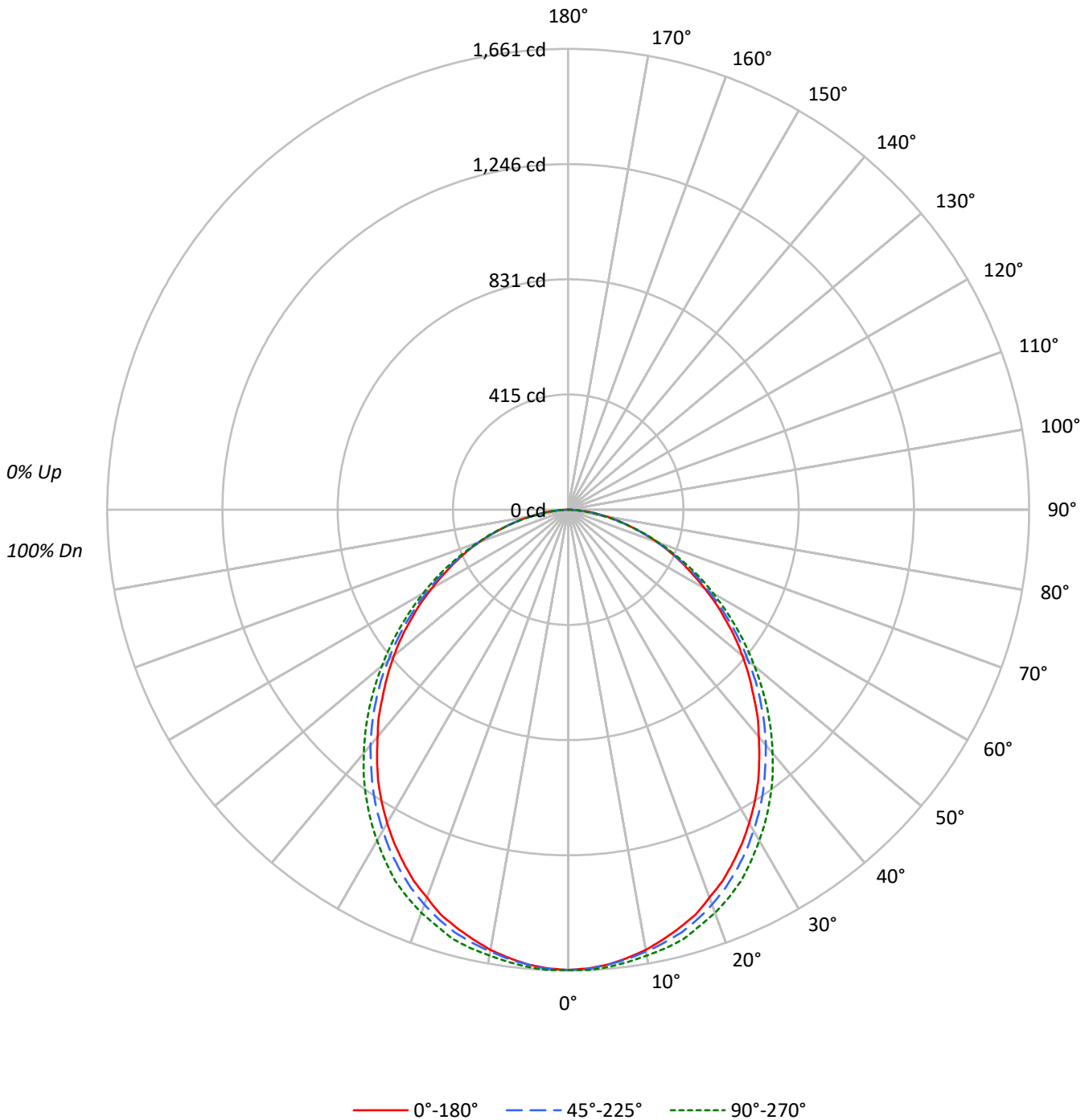
Input Watts (W): 33.48  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	4464	4464	4464
5°	4447	4447	4470
10°	4402	4419	4459
15°	4342	4395	4464
20°	4260	4338	4428
25°	4170	4256	4380
30°	4052	4149	4279
35°	3921	4030	4167
40°	3753	3892	4024
45°	3589	3732	3859
50°	3433	3547	3669
55°	3250	3348	3466
60°	3055	3133	3245
65°	2870	2923	3016
70°	2676	2676	2725
75°	2386	2386	2386
80°	2101	2038	2038
85°	1677	1612	1482



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.4	3.7
10°-20°	444.8	10.6
20°-30°	660.7	15.8
30°-40°	766.8	18.3
40°-50°	755.0	18.0
50°-60°	639.0	15.3
60°-70°	455.7	10.9
70°-80°	244.9	5.9
80°-90°	61.7	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°	1261.9	30.2
0°-40°	2028.7	48.5
0°-60°	3422.7	81.8
0°-90°	4185.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4185.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1659	1659	1659	1659	1659	
5°	1646	1646	1646	1653	1655	156
15°	1559	1563	1578	1592	1602	439
25°	1404	1408	1434	1461	1475	646
35°	1194	1196	1227	1256	1269	745
45°	943	949	981	1004	1014	729
55°	693	695	714	732	739	620
65°	451	451	459	467	474	447
75°	230	227	230	230	230	246
85°	54	52	52	48	48	64
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1658.8	1658.8	1658.8	1658.8	1658.8
2.5°	1654.7	1654.7	1656.8	1658.8	1660.9
5°	1646.3	1646.3	1646.3	1652.6	1654.7
7.5°	1629.6	1631.7	1633.8	1640.1	1644.2
10°	1610.9	1612.9	1617.1	1627.5	1631.7
12.5°	1585.8	1592.1	1598.3	1612.9	1619.2
15°	1558.7	1562.9	1577.5	1592.1	1602.5
17.5°	1529.5	1531.6	1548.3	1569.1	1573.3
20°	1487.7	1494.0	1514.9	1535.7	1546.2
22.5°	1450.2	1454.4	1477.3	1504.4	1512.8
25°	1404.3	1408.5	1433.5	1460.6	1475.2
27.5°	1356.3	1360.5	1387.6	1416.8	1427.2
30°	1304.1	1308.3	1335.4	1366.7	1377.2
32.5°	1249.9	1254.0	1283.3	1310.4	1325.0
35°	1193.5	1195.6	1226.9	1256.1	1268.6
37.5°	1130.9	1137.2	1166.4	1195.6	1210.2
40°	1068.3	1074.6	1108.0	1135.1	1145.5
42.5°	1009.9	1018.3	1045.4	1070.4	1080.9
45°	943.1	949.4	980.7	1003.7	1014.1
47.5°	882.6	888.9	916.0	939.0	945.2
50°	820.0	824.2	847.2	868.0	876.4
52.5°	757.4	759.5	780.4	801.3	807.5
55°	692.7	694.8	713.6	732.4	738.7
57.5°	632.2	632.2	648.9	663.5	669.8
60°	567.6	567.6	582.2	596.8	603.0
62.5°	507.0	507.0	521.6	532.1	540.4
65°	450.7	450.7	459.1	467.4	473.7
67.5°	396.5	390.2	398.5	409.0	406.9
70°	340.1	333.9	340.1	344.3	346.4
72.5°	283.8	279.6	283.8	285.9	290.0
75°	229.5	227.4	229.5	229.5	229.5
77.5°	183.6	177.4	181.5	179.4	177.4
80°	135.6	133.5	131.5	129.4	131.5
82.5°	93.9	91.8	91.8	87.6	87.6
85°	54.3	52.2	52.2	48.0	48.0
87.5°	20.9	20.9	18.8	18.8	18.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)