

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: P474265

Luminaire Tested: **24CZ2-50-RDP-UNV-L840-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474265  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50-RDP-UNV-L840-CD1-U  
Description: 2'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

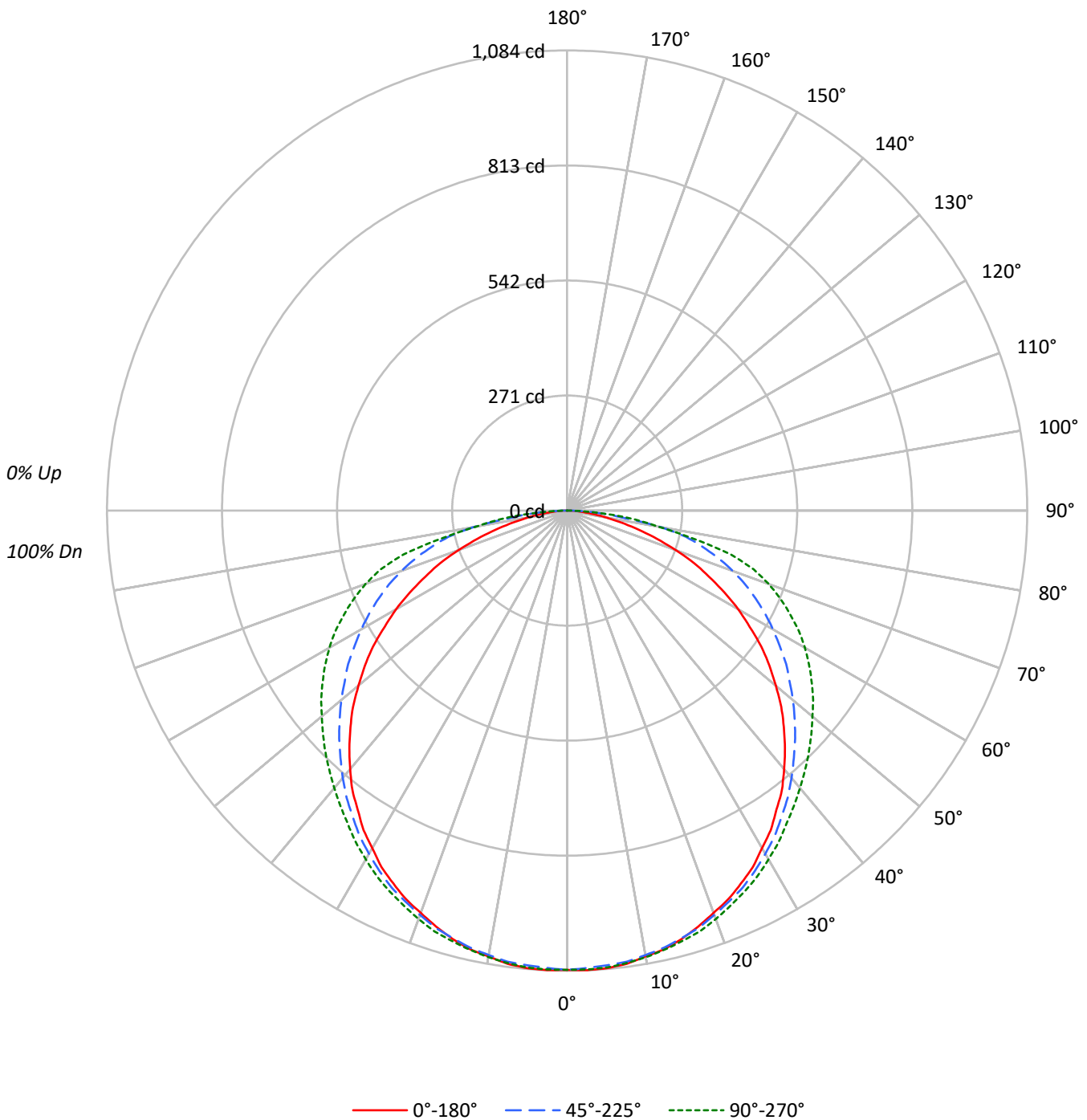
Lumens per Lamp: N/A  
Luminaire Lumens: 3440.3 lumens  
Efficiency: N/A  
Efficacy: 86.4 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 39.8  
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	108	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1456	1456	1456
5°	1461	1452	1459
10°	1457	1453	1460
15°	1455	1452	1462
20°	1444	1451	1466
25°	1439	1454	1469
30°	1426	1450	1474
35°	1413	1446	1480
40°	1397	1444	1499
45°	1374	1445	1532
50°	1343	1454	1579
55°	1309	1477	1649
60°	1254	1506	1740
65°	1174	1559	1847
70°	1067	1631	1987
75°	905	1721	2076
80°	714	1732	1679
85°	526	1318	1476



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.6	3.0
10°-20°	295.4	8.6
20°-30°	451.7	13.1
30°-40°	552.1	16.0
40°-50°	588.5	17.1
50°-60°	562.7	16.4
60°-70°	476.6	13.9
70°-80°	320.3	9.3
80°-90°	90.4	2.6
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°	849.7	24.7
0°-40°	1401.8	40.7
0°-60°	2553.0	74.2
0°-90°	3440.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3440.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1082	1082	1082	1082	1082	
5°	1082	1080	1075	1080	1080	103
15°	1044	1044	1043	1051	1050	294
25°	969	973	980	988	990	447
35°	860	867	880	898	901	539
45°	722	734	759	792	805	557
55°	558	578	630	679	703	497
65°	369	406	490	554	580	366
75°	174	237	331	387	399	186
85°	34	70	85	92	96	42
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1081.9	1081.9	1081.9	1081.9	1081.9
2.5°	1083.6	1083.6	1078.5	1081.9	1081.9
5°	1081.9	1080.2	1075.1	1080.2	1080.2
7.5°	1076.8	1075.1	1071.7	1076.8	1075.1
10°	1066.6	1066.6	1063.2	1068.3	1068.3
12.5°	1058.0	1056.3	1054.6	1061.4	1059.7
15°	1044.4	1044.4	1042.7	1051.2	1049.5
17.5°	1027.3	1029.0	1030.7	1037.5	1039.3
20°	1008.5	1011.9	1013.6	1023.9	1023.9
22.5°	991.4	993.2	996.6	1006.8	1006.8
25°	969.3	972.7	979.5	988.0	989.7
27.5°	947.1	948.8	957.3	969.3	971.0
30°	918.0	923.2	933.4	947.1	948.8
32.5°	892.4	897.5	909.5	923.2	926.6
35°	860.0	866.8	880.5	897.5	901.0
37.5°	831.0	836.1	853.2	871.9	877.1
40°	795.3	805.3	822.4	844.6	853.2
42.5°	759.4	769.7	790.2	819.0	829.3
45°	721.9	733.8	759.4	791.9	805.3
47.5°	684.3	698.0	727.0	764.5	779.9
50°	641.6	658.7	694.5	737.2	754.3
52.5°	600.6	621.1	660.4	708.2	730.4
55°	558.0	578.4	629.7	679.2	703.1
57.5°	510.2	537.5	593.8	650.2	675.8
60°	465.9	491.4	559.7	621.1	646.7
62.5°	418.1	452.3	525.5	590.4	616.0
65°	368.6	406.2	489.7	554.5	580.2
67.5°	324.2	365.2	454.0	518.7	544.3
70°	271.3	322.5	414.7	479.4	505.0
72.5°	221.8	278.1	373.7	436.9	460.8
75°	174.0	237.1	331.1	387.4	399.3
77.5°	129.8	196.2	286.7	310.6	302.0
80°	92.2	157.1	223.5	211.5	216.7
82.5°	59.8	119.5	138.3	157.1	162.0
85°	34.1	70.0	85.4	92.2	95.6
87.5°	15.4	25.6	34.1	34.1	32.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)