

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: P475400

Luminaire Tested: **14CZ2-44-S-UNV-L840-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475400  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-44-S-UNV-L840-CD1-U  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

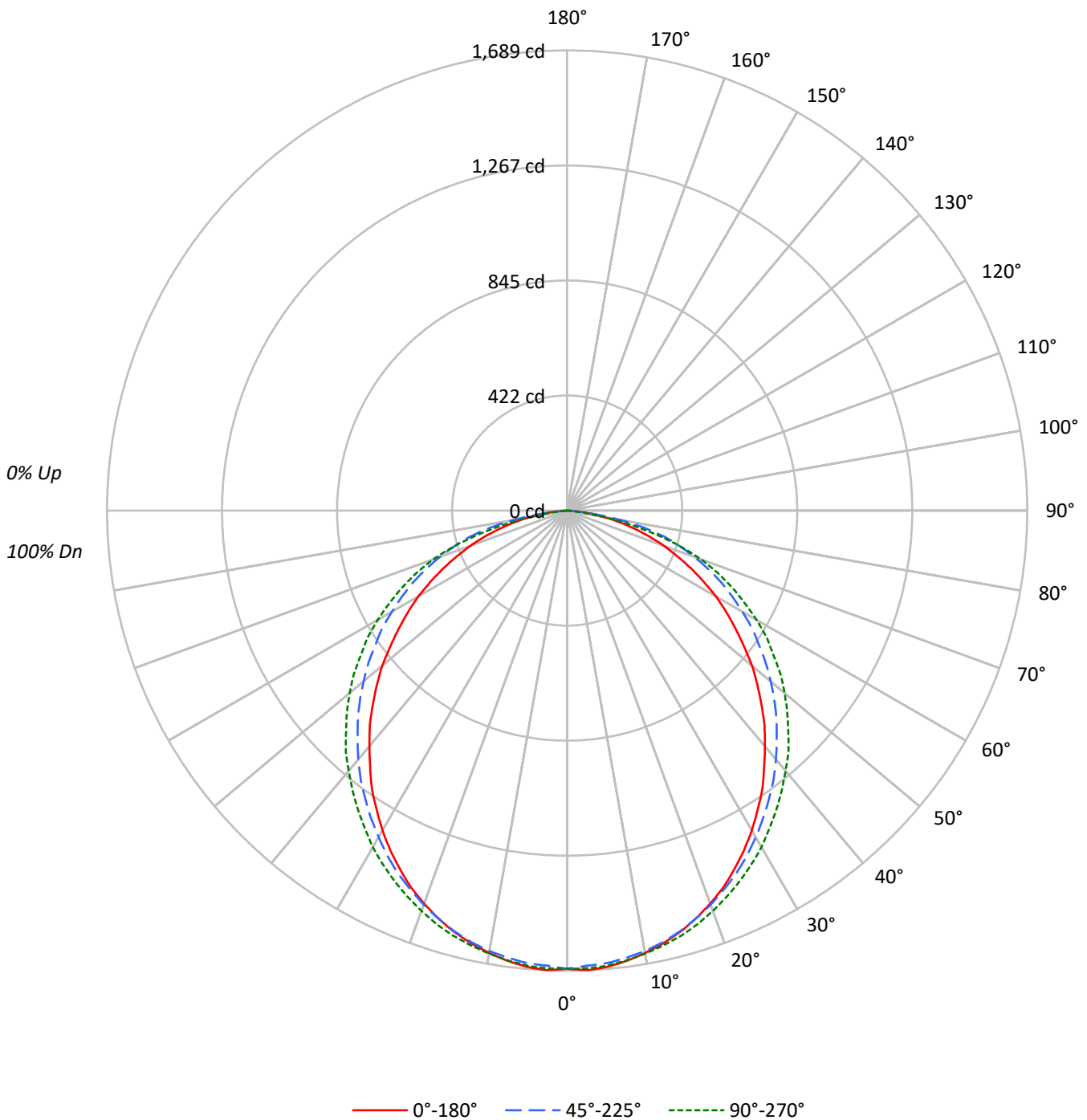
Lumens per Lamp: N/A  
Luminaire Lumens: 4700.6 lumens  
Efficiency: N/A  
Efficacy: 135.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 34.6  
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	104	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	4525	4525	4525
5°	4542	4504	4530
10°	4505	4485	4511
15°	4461	4455	4501
20°	4396	4410	4477
25°	4313	4362	4453
30°	4213	4300	4433
35°	4104	4244	4399
40°	3966	4190	4381
45°	3838	4134	4368
50°	3708	4083	4361
55°	3535	4033	4333
60°	3394	3991	4322
65°	3188	3970	4256
70°	2973	3902	4107
75°	2627	3830	3462
80°	2123	3112	2050
85°	1531	874	219



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	159.0	3.4
10°-20°	452.8	9.6
20°-30°	679.3	14.5
30°-40°	809.8	17.2
40°-50°	836.2	17.8
50°-60°	761.6	16.2
60°-70°	596.7	12.7
70°-80°	345.2	7.3
80°-90°	60.0	1.3
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°	1291.2	27.5
0°-40°	2100.9	44.7
0°-60°	3698.7	78.7
0°-90°	4700.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4700.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1682	1682	1682	1682	1682	
5°	1682	1677	1668	1679	1677	159
15°	1601	1599	1599	1616	1616	451
25°	1452	1457	1469	1497	1500	669
35°	1249	1261	1292	1332	1339	780
45°	1008	1034	1086	1136	1148	779
55°	753	791	860	914	924	675
65°	501	546	624	664	668	496
75°	253	307	368	357	333	270
85°	50	66	28	9	7	61
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1681.6	1681.6	1681.6	1681.6	1681.6
2.5°	1688.7	1681.6	1672.2	1681.6	1681.6
5°	1681.6	1676.9	1667.5	1679.3	1676.9
7.5°	1667.5	1662.7	1655.7	1667.5	1665.1
10°	1648.6	1646.2	1641.5	1655.7	1650.9
12.5°	1627.3	1625.0	1622.6	1636.8	1634.4
15°	1601.3	1599.0	1599.0	1615.5	1615.5
17.5°	1570.6	1570.6	1570.6	1591.9	1591.9
20°	1535.2	1535.2	1539.9	1563.5	1563.5
22.5°	1497.4	1497.4	1504.5	1530.5	1532.8
25°	1452.5	1457.3	1469.1	1497.4	1499.8
27.5°	1405.3	1412.4	1428.9	1459.6	1464.3
30°	1355.7	1362.8	1384.0	1419.5	1426.6
32.5°	1301.4	1313.2	1339.2	1374.6	1381.7
35°	1249.4	1261.2	1291.9	1332.1	1339.2
37.5°	1188.0	1206.9	1244.7	1282.5	1294.3
40°	1129.0	1150.2	1192.7	1237.6	1247.1
42.5°	1072.3	1091.2	1138.4	1188.0	1202.2
45°	1008.5	1034.5	1086.4	1136.0	1147.9
47.5°	947.1	973.1	1032.1	1084.1	1095.9
50°	885.7	911.7	975.4	1027.4	1041.6
52.5°	817.2	855.0	918.8	970.7	987.3
55°	753.4	791.2	859.7	914.0	923.5
57.5°	692.0	729.8	805.4	855.0	869.2
60°	630.6	668.4	741.6	791.2	803.0
62.5°	564.5	607.0	682.6	725.1	734.5
65°	500.7	545.6	623.5	663.7	668.4
67.5°	436.9	484.2	559.8	592.8	597.5
70°	377.9	425.1	496.0	526.7	522.0
72.5°	316.5	363.7	432.2	448.8	434.6
75°	252.7	307.0	368.4	356.6	333.0
77.5°	196.0	248.0	288.1	252.7	233.8
80°	137.0	191.3	200.8	155.9	132.3
82.5°	89.8	134.6	108.6	66.1	59.0
85°	49.6	66.1	28.3	9.4	7.1
87.5°	16.5	9.4	4.7	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)