

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: P475382

Luminaire Tested: **14CZ2-44-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475382  
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-L830-CD1-U  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

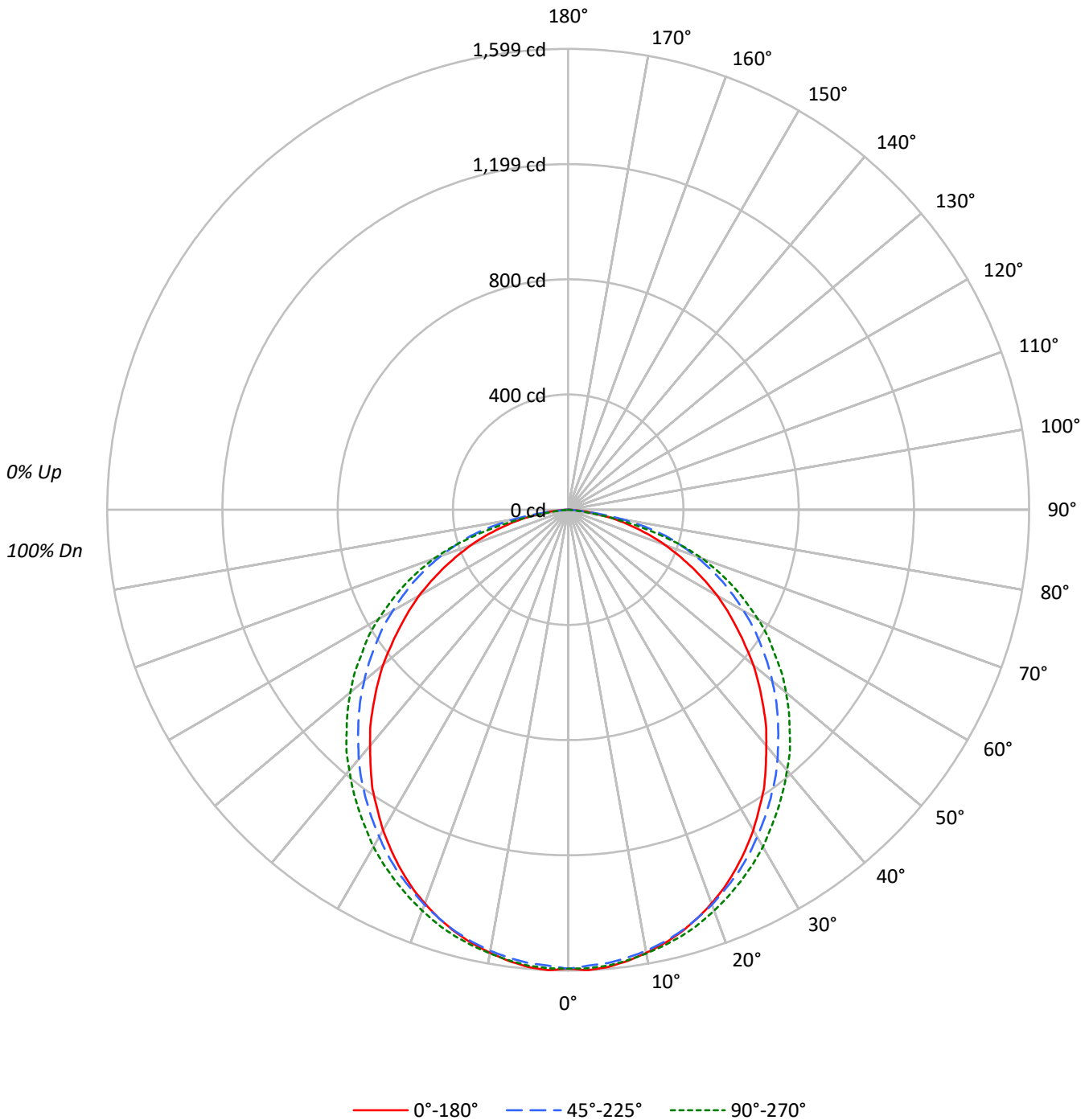
Lumens per Lamp: N/A  
Luminaire Lumens: 4451.5 lumens  
Efficiency: N/A  
Efficacy: 128.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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

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

	0°	45°	90°
0°	4285	4285	4285
5°	4302	4266	4290
10°	4266	4248	4272
15°	4225	4218	4262
20°	4163	4176	4240
25°	4084	4131	4217
30°	3989	4073	4198
35°	3887	4019	4166
40°	3756	3968	4149
45°	3635	3916	4137
50°	3512	3867	4129
55°	3347	3820	4103
60°	3214	3780	4093
65°	3019	3760	4031
70°	2816	3696	3889
75°	2488	3628	3279
80°	2010	2946	1942
85°	1451	827	207



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	150.6	3.4
10°-20°	428.8	9.6
20°-30°	643.3	14.5
30°-40°	766.9	17.2
40°-50°	791.9	17.8
50°-60°	721.3	16.2
60°-70°	565.0	12.7
70°-80°	326.9	7.3
80°-90°	56.8	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°	1222.7	27.5
0°-40°	1989.6	44.7
0°-60°	3502.7	78.7
0°-90°	4451.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4451.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1592	1592	1592	1592	1592	
5°	1592	1588	1579	1590	1588	151
15°	1516	1514	1514	1530	1530	427
25°	1376	1380	1391	1418	1420	633
35°	1183	1194	1224	1262	1268	738
45°	955	980	1029	1076	1087	737
55°	714	749	814	866	874	640
65°	474	517	590	628	633	470
75°	239	291	349	338	315	255
85°	47	63	27	9	7	58
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1592.5	1592.5	1592.5	1592.5	1592.5
2.5°	1599.2	1592.5	1583.6	1592.5	1592.5
5°	1592.5	1588.0	1579.1	1590.3	1588.0
7.5°	1579.1	1574.6	1567.9	1579.1	1576.9
10°	1561.2	1559.0	1554.5	1567.9	1563.4
12.5°	1541.1	1538.8	1536.6	1550.0	1547.8
15°	1516.5	1514.2	1514.2	1529.9	1529.9
17.5°	1487.4	1487.4	1487.4	1507.5	1507.5
20°	1453.8	1453.8	1458.3	1480.7	1480.7
22.5°	1418.1	1418.1	1424.8	1449.4	1451.6
25°	1375.6	1380.0	1391.2	1418.1	1420.3
27.5°	1330.8	1337.5	1353.2	1382.3	1386.7
30°	1283.9	1290.6	1310.7	1344.2	1351.0
32.5°	1232.4	1243.6	1268.2	1301.8	1308.5
35°	1183.2	1194.4	1223.5	1261.5	1268.2
37.5°	1125.1	1142.9	1178.7	1214.5	1225.7
40°	1069.1	1089.3	1129.5	1172.0	1181.0
42.5°	1015.5	1033.3	1078.1	1125.1	1138.5
45°	955.1	979.7	1028.9	1075.8	1087.0
47.5°	896.9	921.5	977.4	1026.6	1037.8
50°	838.8	863.4	923.8	973.0	986.4
52.5°	773.9	809.7	870.1	919.3	934.9
55°	713.5	749.3	814.2	865.6	874.5
57.5°	655.3	691.1	762.7	809.7	823.1
60°	597.2	633.0	702.3	749.3	760.5
62.5°	534.6	574.8	646.4	686.7	695.6
65°	474.2	516.7	590.5	628.5	633.0
67.5°	413.8	458.5	530.1	561.4	565.9
70°	357.9	402.6	469.7	498.8	494.3
72.5°	299.7	344.4	409.3	425.0	411.6
75°	239.3	290.8	348.9	337.7	315.4
77.5°	185.6	234.9	272.9	239.3	221.4
80°	129.7	181.2	190.1	147.6	125.3
82.5°	85.0	127.5	102.9	62.6	55.9
85°	47.0	62.6	26.8	8.9	6.7
87.5°	15.7	8.9	4.5	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)