

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: P475345

Luminaire Tested: **14CZ2-39-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475345  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39-UNV-L830-CD1-U  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

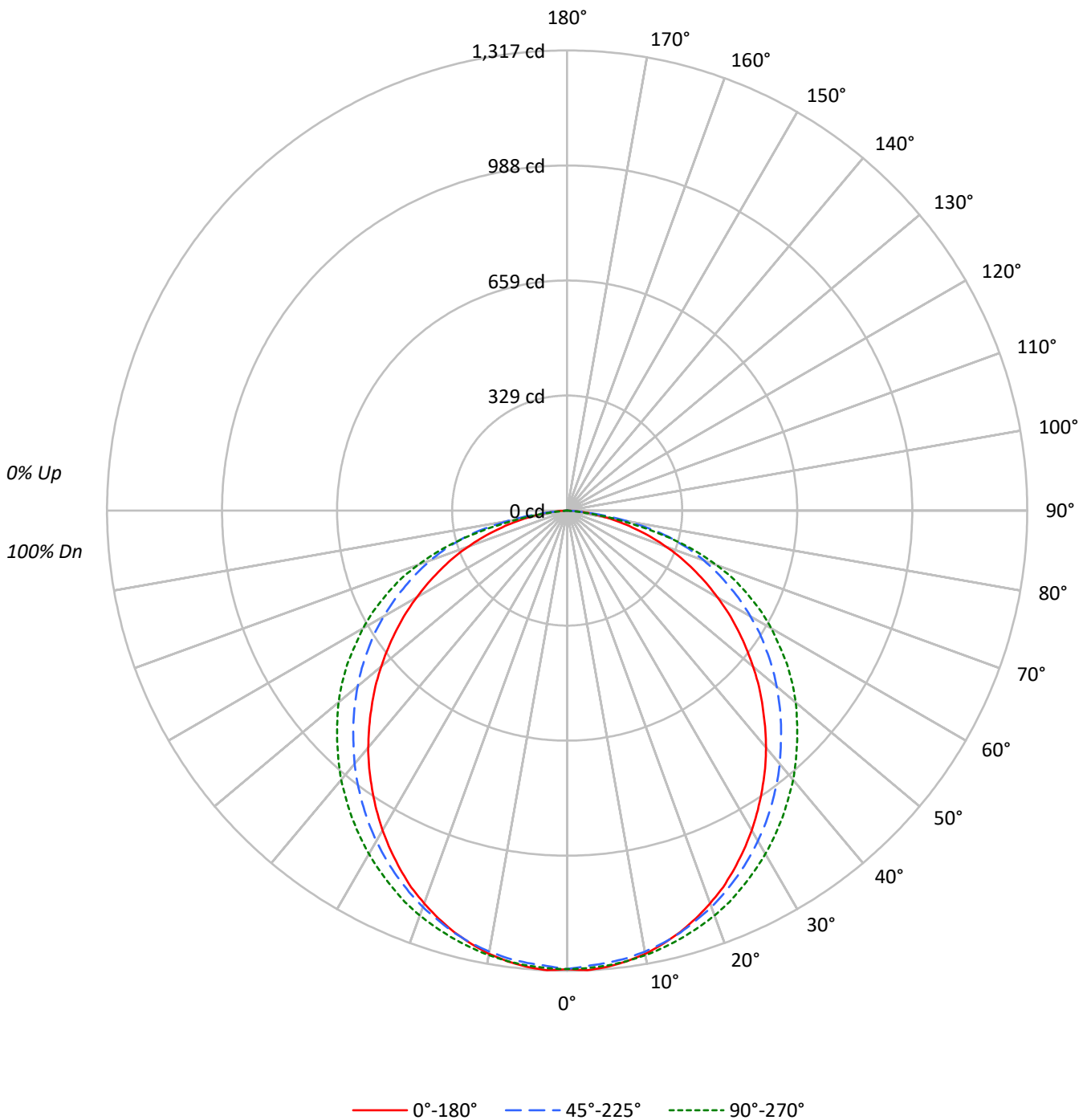
Lumens per Lamp: N/A  
Luminaire Lumens: 3782.7 lumens  
Efficiency: N/A  
Efficacy: 126.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.8  
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	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

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

	0°	45°	90°
0°	3531	3531	3531
5°	3541	3511	3531
10°	3520	3503	3530
15°	3479	3485	3529
20°	3426	3458	3531
25°	3360	3426	3528
30°	3284	3393	3526
35°	3197	3358	3526
40°	3112	3326	3535
45°	3009	3294	3542
50°	2907	3279	3576
55°	2798	3264	3606
60°	2674	3260	3632
65°	2538	3252	3639
70°	2363	3271	3570
75°	2095	3228	3201
80°	1757	2700	2180
85°	1232	1056	253



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.1	3.3
10°-20°	354.4	9.4
20°-30°	533.9	14.1
30°-40°	640.9	16.9
40°-50°	667.2	17.6
50°-60°	616.5	16.3
60°-70°	493.8	13.1
70°-80°	295.5	7.8
80°-90°	56.3	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°	1012.4	26.8
0°-40°	1653.3	43.7
0°-60°	2937.1	77.6
0°-90°	3782.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3782.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1312	1312	1312	1312	1312	
5°	1311	1308	1300	1309	1307	124
15°	1249	1249	1251	1267	1267	352
25°	1132	1138	1154	1183	1188	521
35°	973	988	1022	1063	1073	609
45°	791	814	866	917	931	611
55°	596	629	696	750	769	533
65°	399	440	511	561	572	395
75°	202	252	310	315	308	215
85°	40	58	34	14	8	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1312.3	1312.3	1312.3	1312.3	1312.3
2.5°	1316.7	1312.9	1304.7	1312.9	1311.0
5°	1311.0	1307.8	1299.6	1309.1	1307.2
7.5°	1301.5	1299.0	1292.6	1302.8	1300.9
10°	1288.2	1286.3	1281.8	1293.2	1292.0
12.5°	1269.8	1270.4	1267.9	1281.8	1280.6
15°	1248.9	1248.9	1250.8	1266.6	1266.6
17.5°	1224.2	1225.4	1229.3	1250.2	1250.8
20°	1196.3	1199.5	1207.7	1229.3	1233.1
22.5°	1166.5	1170.3	1181.7	1207.1	1212.8
25°	1131.7	1138.0	1153.8	1183.0	1188.1
27.5°	1094.9	1104.4	1124.1	1155.7	1162.1
30°	1056.9	1067.0	1091.8	1126.0	1134.8
32.5°	1015.7	1029.0	1058.8	1094.9	1105.1
35°	973.3	987.8	1022.1	1062.6	1073.4
37.5°	930.8	946.7	985.3	1029.0	1039.8
40°	885.8	904.2	946.7	991.6	1006.2
42.5°	838.3	858.6	905.5	954.9	968.8
45°	790.8	814.2	865.5	916.9	930.8
47.5°	744.5	768.6	824.4	877.6	892.2
50°	694.5	722.3	783.2	835.8	854.1
52.5°	645.7	676.7	740.7	793.9	812.3
55°	596.3	628.6	695.7	749.6	768.6
57.5°	548.1	582.3	653.3	706.5	719.8
60°	496.8	534.2	605.8	659.6	674.8
62.5°	448.6	487.3	559.5	611.5	626.0
65°	398.6	439.7	510.7	560.8	571.5
67.5°	351.7	392.9	464.5	507.5	518.3
70°	300.3	346.0	415.7	452.4	453.7
72.5°	251.6	297.8	365.6	389.1	385.9
75°	201.5	252.2	310.5	314.9	307.9
77.5°	156.5	207.2	247.1	233.2	219.2
80°	113.4	162.8	174.2	152.7	140.7
82.5°	74.8	114.1	105.2	75.4	64.6
85°	39.9	58.3	34.2	13.9	8.2
87.5°	15.2	10.1	3.8	3.2	2.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)