

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: P475342

Luminaire Tested: **14CZ2-25-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475342  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-25-UNV-L830-CD1-U  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

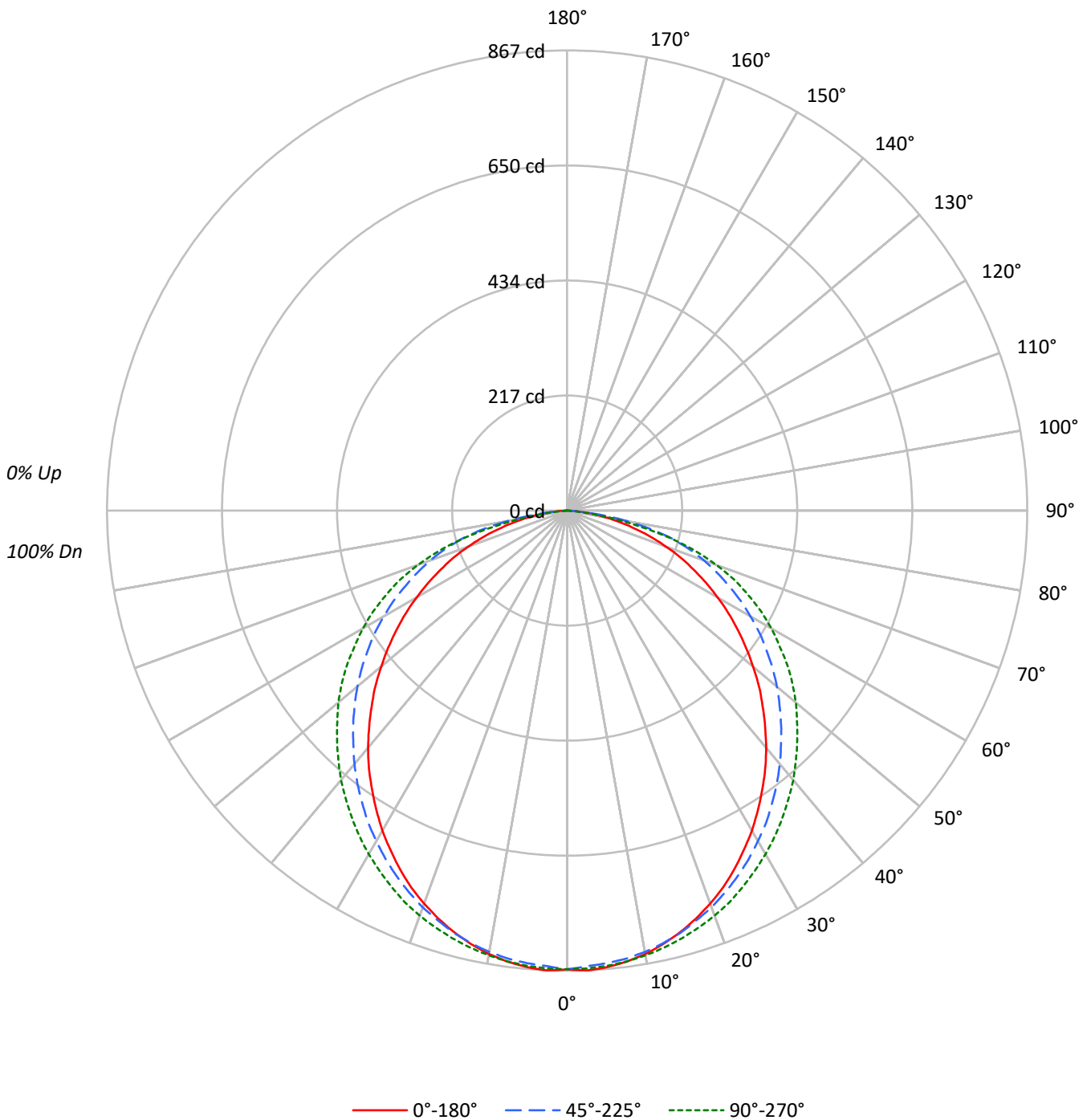
Lumens per Lamp: N/A  
Luminaire Lumens: 2491.6 lumens  
Efficiency: N/A  
Efficacy: 131.1 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 19  
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°	2326	2326	2326
5°	2333	2312	2326
10°	2319	2307	2325
15°	2292	2295	2324
20°	2257	2278	2326
25°	2213	2257	2323
30°	2163	2234	2323
35°	2106	2212	2323
40°	2050	2190	2328
45°	1982	2170	2333
50°	1915	2160	2355
55°	1842	2150	2375
60°	1761	2147	2392
65°	1671	2142	2397
70°	1556	2154	2351
75°	1380	2126	2109
80°	1158	1779	1437
85°	812	695	167



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.8	3.3
10°-20°	233.4	9.4
20°-30°	351.7	14.1
30°-40°	422.1	16.9
40°-50°	439.5	17.6
50°-60°	406.1	16.3
60°-70°	325.3	13.1
70°-80°	194.6	7.8
80°-90°	37.1	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°	666.9	26.8
0°-40°	1089.0	43.7
0°-60°	1934.6	77.6
0°-90°	2491.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2491.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	861	856	862	861	82
15°	823	823	824	834	834	232
25°	745	750	760	779	782	343
35°	641	651	673	700	707	401
45°	521	536	570	604	613	402
55°	393	414	458	494	506	351
65°	262	290	336	369	376	260
75°	133	166	204	207	203	142
85°	26	38	22	9	5	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	864.3	864.3	864.3	864.3	864.3
2.5°	867.3	864.8	859.3	864.8	863.5
5°	863.5	861.4	856.0	862.3	861.0
7.5°	857.3	855.6	851.4	858.1	856.8
10°	848.5	847.2	844.3	851.8	851.0
12.5°	836.4	836.8	835.1	844.3	843.5
15°	822.6	822.6	823.9	834.3	834.3
17.5°	806.3	807.2	809.7	823.4	823.9
20°	788.0	790.1	795.5	809.7	812.2
22.5°	768.4	770.9	778.4	795.1	798.8
25°	745.4	749.6	760.0	779.2	782.5
27.5°	721.2	727.5	740.4	761.3	765.4
30°	696.2	702.8	719.1	741.6	747.5
32.5°	669.0	677.8	697.4	721.2	727.9
35°	641.1	650.7	673.2	699.9	707.0
37.5°	613.1	623.5	649.0	677.8	684.9
40°	583.5	595.6	623.5	653.2	662.8
42.5°	552.2	565.5	596.4	629.0	638.1
45°	520.9	536.3	570.1	603.9	613.1
47.5°	490.4	506.3	543.0	578.0	587.6
50°	457.4	475.8	515.9	550.5	562.6
52.5°	425.3	445.7	487.9	523.0	535.1
55°	392.7	414.0	458.3	493.7	506.3
57.5°	361.0	383.6	430.3	465.4	474.1
60°	327.2	351.8	399.0	434.5	444.5
62.5°	295.5	320.9	368.5	402.8	412.4
65°	262.5	289.6	336.4	369.4	376.5
67.5°	231.6	258.8	305.9	334.3	341.4
70°	197.8	227.9	273.8	298.0	298.8
72.5°	165.7	196.2	240.8	256.3	254.2
75°	132.7	166.1	204.5	207.4	202.8
77.5°	103.1	136.5	162.8	153.6	144.4
80°	74.7	107.3	114.8	100.6	92.7
82.5°	49.2	75.1	69.3	49.7	42.6
85°	26.3	38.4	22.5	9.2	5.4
87.5°	10.0	6.7	2.5	2.1	1.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)