

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: P474762

Luminaire Tested: **22CZ2-24-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474762  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2368.0 lumens  
Efficiency: N/A  
Efficacy: 128.0 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

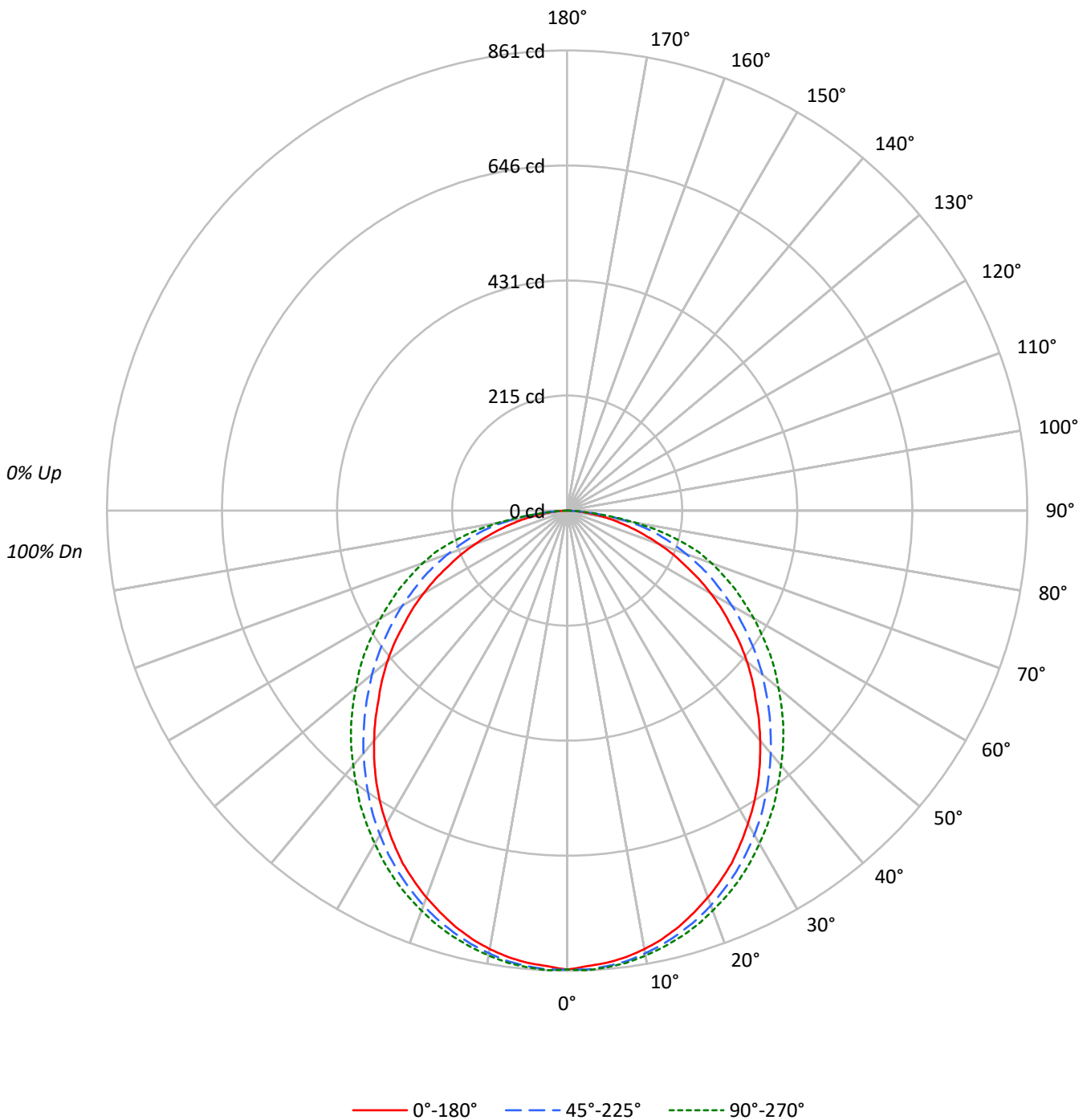
Input Watts (W): 18.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83
2	99	90	83	77	96	88	82	77	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	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°	2311	2311	2311
5°	2294	2312	2317
10°	2277	2299	2310
15°	2246	2278	2299
20°	2206	2251	2281
25°	2162	2217	2263
30°	2102	2177	2236
35°	2044	2131	2214
40°	1974	2083	2187
45°	1899	2036	2177
50°	1837	1994	2160
55°	1751	1951	2165
60°	1673	1918	2171
65°	1555	1893	2205
70°	1437	1866	2260
75°	1285	1858	2274
80°	1079	1760	1985
85°	834	1204	1127



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	81.1	3.4
10°-20°	230.3	9.7
20°-30°	343.4	14.5
30°-40°	405.4	17.1
40°-50°	413.2	17.4
50°-60°	372.6	15.7
60°-70°	292.9	12.4
70°-80°	183.4	7.7
80°-90°	45.7	1.9
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°	654.9	27.7
0°-40°	1060.3	44.8
0°-60°	1846.1	78.0
0°-90°	2368.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2368.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	859	859	859	859	859	
5°	849	851	856	858	858	81
15°	806	810	818	824	825	227
25°	728	734	747	758	762	335
35°	622	630	649	667	674	389
45°	499	510	535	561	572	386
55°	373	385	416	448	461	335
65°	244	259	297	330	346	243
75°	124	142	179	211	219	131
85°	27	34	39	39	36	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	858.8	858.8	858.8	858.8	858.8
2.5°	853.3	855.3	859.3	860.8	860.8
5°	849.3	851.3	855.8	857.8	857.8
7.5°	842.8	844.8	850.3	852.8	853.3
10°	833.2	835.7	841.2	845.3	845.3
12.5°	821.2	823.7	830.7	835.7	836.2
15°	806.2	809.7	817.7	823.7	825.2
17.5°	788.7	794.2	803.2	810.7	812.2
20°	770.2	775.7	786.2	794.7	796.7
22.5°	749.7	754.7	767.2	777.7	780.2
25°	728.1	733.7	746.7	758.2	762.2
27.5°	702.6	709.1	724.6	737.7	741.7
30°	676.6	684.6	700.6	715.1	719.6
32.5°	650.1	657.6	675.6	691.1	697.1
35°	622.1	630.1	648.6	666.6	674.1
37.5°	592.5	600.5	620.6	641.1	648.1
40°	562.0	571.5	593.0	615.0	622.6
42.5°	531.0	541.0	563.5	588.0	598.0
45°	498.9	510.0	535.0	561.0	572.0
47.5°	469.9	478.9	504.9	533.5	544.0
50°	438.9	447.4	476.4	504.9	516.0
52.5°	407.4	415.4	446.4	476.4	489.9
55°	373.3	384.8	415.9	447.9	461.4
57.5°	343.3	353.8	385.8	418.4	431.4
60°	310.8	321.8	356.3	389.3	403.4
62.5°	278.2	290.3	325.3	360.8	373.8
65°	244.2	259.2	297.3	330.3	346.3
67.5°	215.2	229.7	267.2	301.8	315.8
70°	182.7	199.7	237.2	272.2	287.3
72.5°	152.1	169.2	207.7	242.7	257.7
75°	123.6	142.1	178.7	210.7	218.7
77.5°	96.1	113.6	150.1	168.7	177.2
80°	69.6	86.6	113.6	126.1	128.1
82.5°	47.0	61.6	77.1	80.6	78.6
85°	27.0	34.5	39.0	39.0	36.5
87.5°	11.0	11.0	9.5	6.0	3.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)