

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: P475226

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

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475226  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-24-SQR-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, SQUARE LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

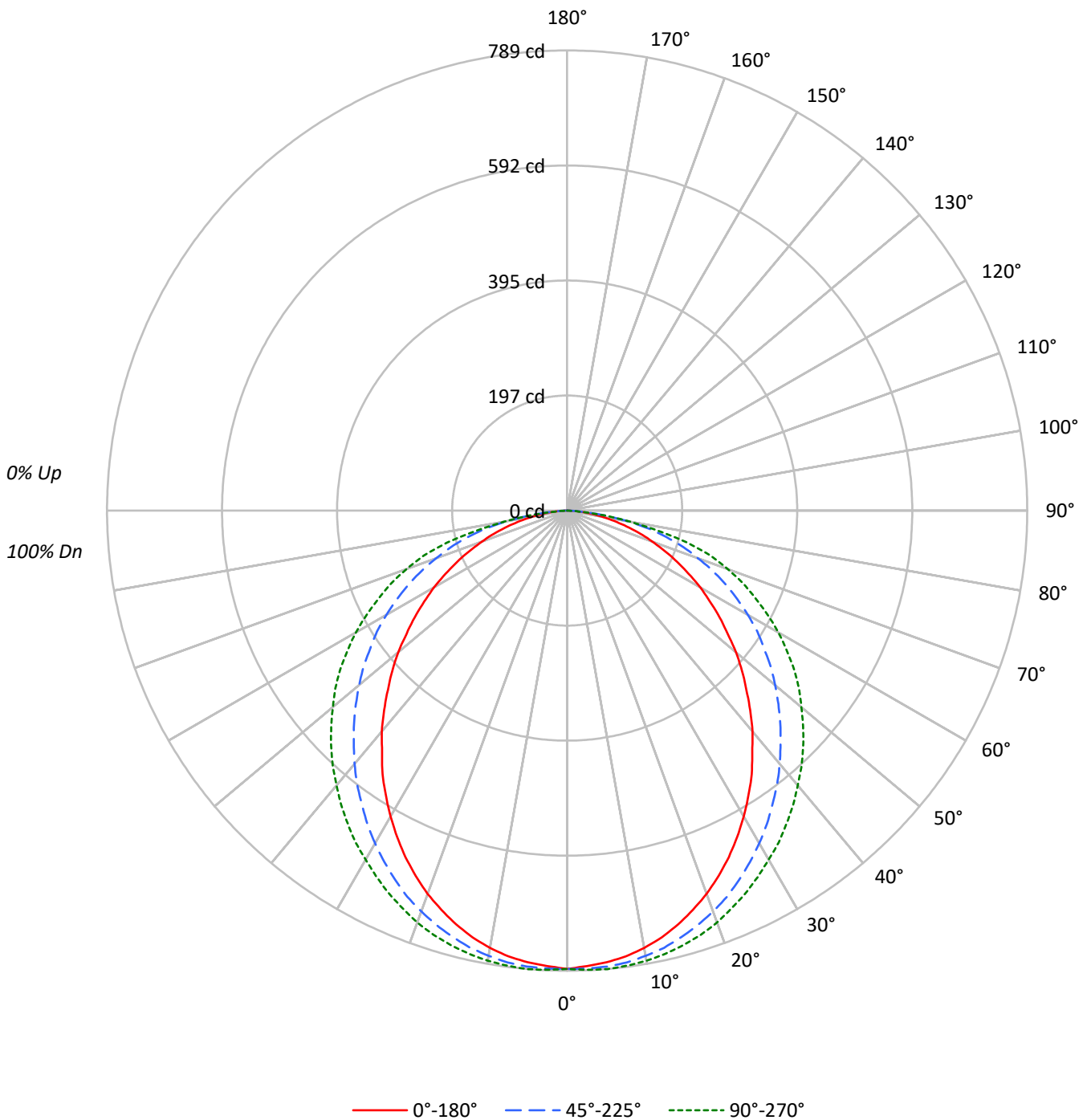
Lumens per Lamp: N/A  
Luminaire Lumens: 2249.8 lumens  
Efficiency: N/A  
Efficacy: 121.6 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

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	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	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24

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

	0°	45°	90°
0°	2115	2115	2115
5°	2100	2120	2132
10°	2081	2118	2141
15°	2047	2109	2148
20°	2003	2095	2153
25°	1947	2073	2149
30°	1881	2047	2147
35°	1813	2017	2154
40°	1737	1992	2161
45°	1654	1967	2178
50°	1582	1949	2195
55°	1498	1933	2229
60°	1419	1926	2253
65°	1326	1910	2271
70°	1218	1881	2302
75°	1100	1832	2220
80°	944	1623	1672
85°	760	957	760



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	74.5	3.3
10°-20°	213.0	9.5
20°-30°	319.9	14.2
30°-40°	381.6	17.0
40°-50°	394.5	17.5
50°-60°	362.7	16.1
60°-70°	288.7	12.8
70°-80°	176.4	7.8
80°-90°	38.3	1.7
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°	607.5	27.0
0°-40°	989.1	44.0
0°-60°	1746.3	77.6
0°-90°	2249.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2249.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	786	786	786	786	786	
5°	777	780	785	788	789	74
15°	735	743	757	768	771	207
25°	656	672	698	718	724	302
35°	552	576	614	646	656	344
45°	435	466	517	558	572	336
55°	319	354	412	459	475	286
65°	208	244	300	342	357	206
75°	106	137	176	207	214	113
85°	25	30	31	27	25	28
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	785.9	785.9	785.9	785.9	785.9
2.5°	781.6	782.7	785.9	788.1	788.1
5°	777.4	779.5	784.8	788.1	789.2
7.5°	771.0	774.2	781.6	785.9	787.0
10°	761.4	765.7	775.2	781.6	783.7
12.5°	749.6	756.0	767.8	776.3	778.4
15°	734.7	743.2	757.0	767.8	771.0
17.5°	717.6	728.2	745.3	758.2	762.5
20°	699.4	710.1	731.5	746.4	751.7
22.5°	678.1	691.9	716.5	733.6	737.9
25°	655.7	671.6	698.3	717.6	723.9
27.5°	631.1	650.3	679.2	702.7	708.0
30°	605.4	625.8	658.8	684.5	690.9
32.5°	578.7	602.2	637.5	666.3	674.9
35°	552.0	575.5	613.9	646.1	655.7
37.5°	521.1	548.8	591.6	624.7	636.4
40°	494.4	521.1	567.0	603.3	615.1
42.5°	464.5	493.3	541.4	580.9	594.8
45°	434.6	465.5	516.8	558.5	572.4
47.5°	406.8	437.8	491.2	535.0	548.8
50°	378.0	410.0	465.5	510.4	524.3
52.5°	347.0	382.2	439.9	484.8	500.9
55°	319.3	354.5	412.1	459.2	475.2
57.5°	290.4	326.7	386.6	431.4	446.4
60°	263.7	298.9	357.8	401.5	418.6
62.5°	234.9	271.2	328.8	371.6	387.7
65°	208.2	243.5	300.0	341.7	356.6
67.5°	181.5	216.8	270.1	309.7	326.7
70°	154.8	190.1	239.1	277.7	292.6
72.5°	131.4	162.3	209.3	244.6	258.4
75°	105.8	136.7	176.2	207.1	213.5
77.5°	82.2	110.0	143.1	156.9	159.2
80°	60.9	82.2	104.7	107.9	107.9
82.5°	40.5	56.6	65.1	66.2	65.1
85°	24.6	29.9	31.0	26.7	24.6
87.5°	8.5	8.5	5.3	3.2	1.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)