

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: P475256

Luminaire Tested: **22CZ2-32-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475256  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-32-SQR-UNV-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, SQUARE LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

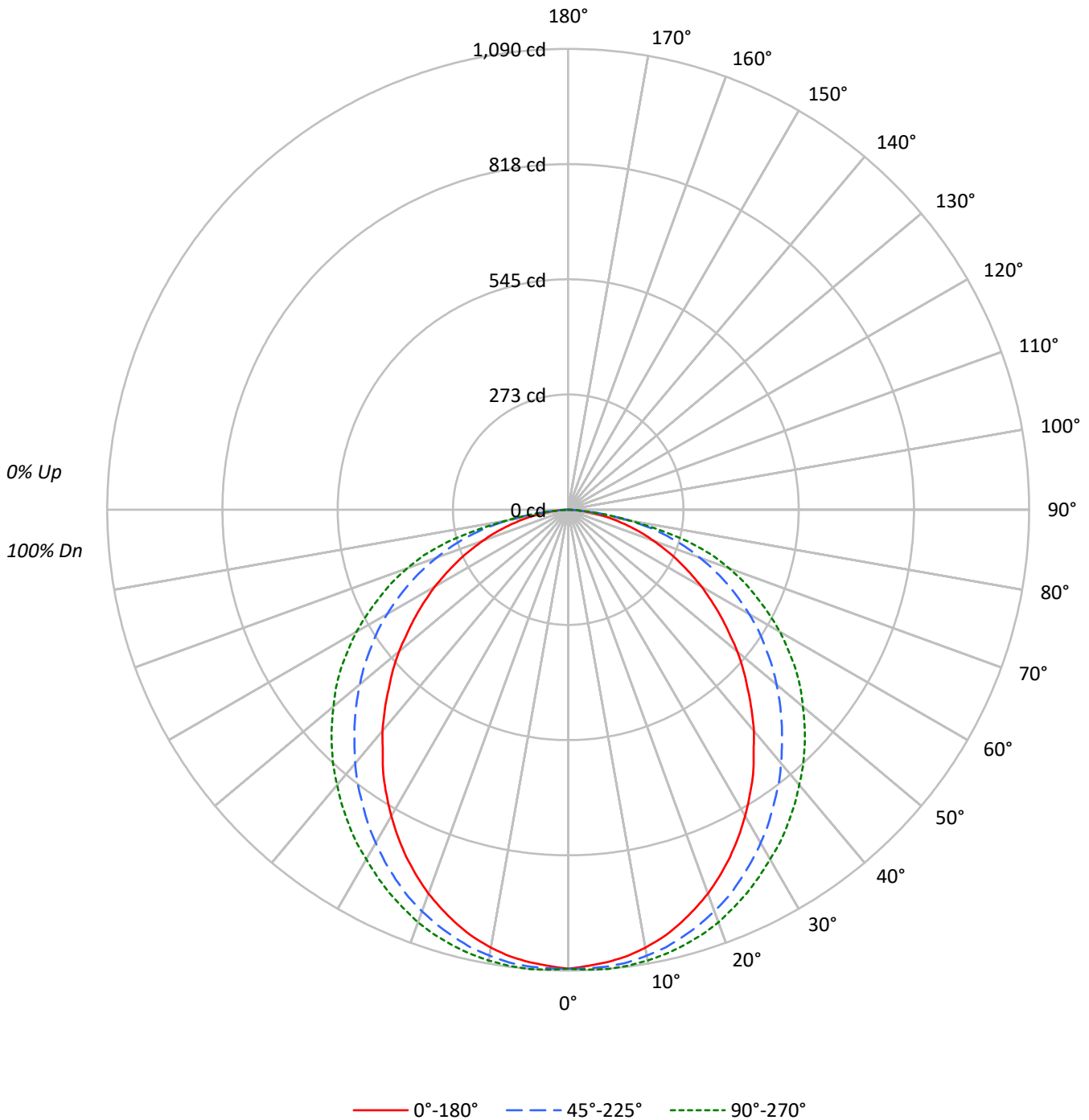
Lumens per Lamp: N/A  
Luminaire Lumens: 3108.5 lumens  
Efficiency: N/A  
Efficacy: 128.5 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

Input Watts (W): 24.2  
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°	2922	2922	2922
5°	2901	2929	2945
10°	2875	2927	2959
15°	2828	2914	2968
20°	2767	2894	2974
25°	2690	2865	2970
30°	2599	2829	2966
35°	2506	2787	2976
40°	2400	2752	2986
45°	2285	2718	3009
50°	2187	2693	3033
55°	2069	2671	3080
60°	1961	2660	3113
65°	1832	2639	3137
70°	1683	2600	3180
75°	1519	2531	3067
80°	1303	2241	2311
85°	1050	1321	1050



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.9	3.3
10°-20°	294.3	9.5
20°-30°	442.1	14.2
30°-40°	527.2	17.0
40°-50°	545.1	17.5
50°-60°	501.1	16.1
60°-70°	399.0	12.8
70°-80°	243.8	7.8
80°-90°	53.0	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°	839.3	27.0
0°-40°	1366.6	44.0
0°-60°	2412.8	77.6
0°-90°	3108.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3108.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1086	1086	1086	1086	1086	
5°	1074	1077	1084	1089	1090	102
15°	1015	1027	1046	1061	1065	286
25°	906	928	965	992	1000	417
35°	763	795	848	893	906	476
45°	600	643	714	772	791	464
55°	441	490	569	634	657	395
65°	288	336	414	472	493	285
75°	146	189	243	286	295	156
85°	34	41	43	37	34	39
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1085.8	1085.8	1085.8	1085.8	1085.8
2.5°	1079.9	1081.4	1085.8	1088.9	1088.9
5°	1074.1	1077.0	1084.3	1088.9	1090.4
7.5°	1065.2	1069.7	1079.9	1085.8	1087.5
10°	1052.0	1057.9	1071.1	1079.9	1082.9
12.5°	1035.7	1044.5	1060.8	1072.6	1075.5
15°	1015.1	1026.9	1046.0	1060.8	1065.2
17.5°	991.5	1006.1	1029.8	1047.6	1053.5
20°	966.3	981.2	1010.7	1031.3	1038.6
22.5°	936.9	956.0	990.0	1013.7	1019.5
25°	905.9	927.9	964.8	991.5	1000.3
27.5°	872.0	898.6	938.4	970.9	978.2
30°	836.5	864.6	910.3	945.7	954.6
32.5°	799.6	832.1	880.8	920.6	932.5
35°	762.7	795.2	848.3	892.7	905.9
37.5°	720.0	758.3	817.4	863.1	879.3
40°	683.1	720.0	783.5	833.6	849.9
42.5°	641.8	681.6	748.0	802.6	821.8
45°	600.5	643.2	714.1	771.7	790.8
47.5°	562.1	604.9	678.7	739.2	758.3
50°	522.3	566.5	643.2	705.3	724.4
52.5°	479.5	528.1	607.8	669.8	692.0
55°	441.1	489.8	569.4	634.4	656.6
57.5°	401.3	451.4	534.2	596.0	616.8
60°	364.4	413.0	494.3	554.7	578.4
62.5°	324.6	374.7	454.3	513.4	535.6
65°	287.7	336.5	414.5	472.1	492.7
67.5°	250.8	299.6	373.2	427.9	451.4
70°	213.9	262.7	330.4	383.7	404.2
72.5°	181.5	224.3	289.1	337.9	357.0
75°	146.1	188.9	243.4	286.2	295.0
77.5°	113.6	152.0	197.7	216.8	219.9
80°	84.1	113.6	144.6	149.1	149.1
82.5°	56.0	78.2	90.0	91.4	90.0
85°	34.0	41.3	42.8	36.9	34.0
87.5°	11.8	11.8	7.3	4.4	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)