

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: P475262

Luminaire Tested: **22CZ2-34HE-SQR-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475262  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-34HE-SQR-UNV-L835-CD1-U  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,SQUARE LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3254.8 lumens  
Efficiency: N/A  
Efficacy: 133.9 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

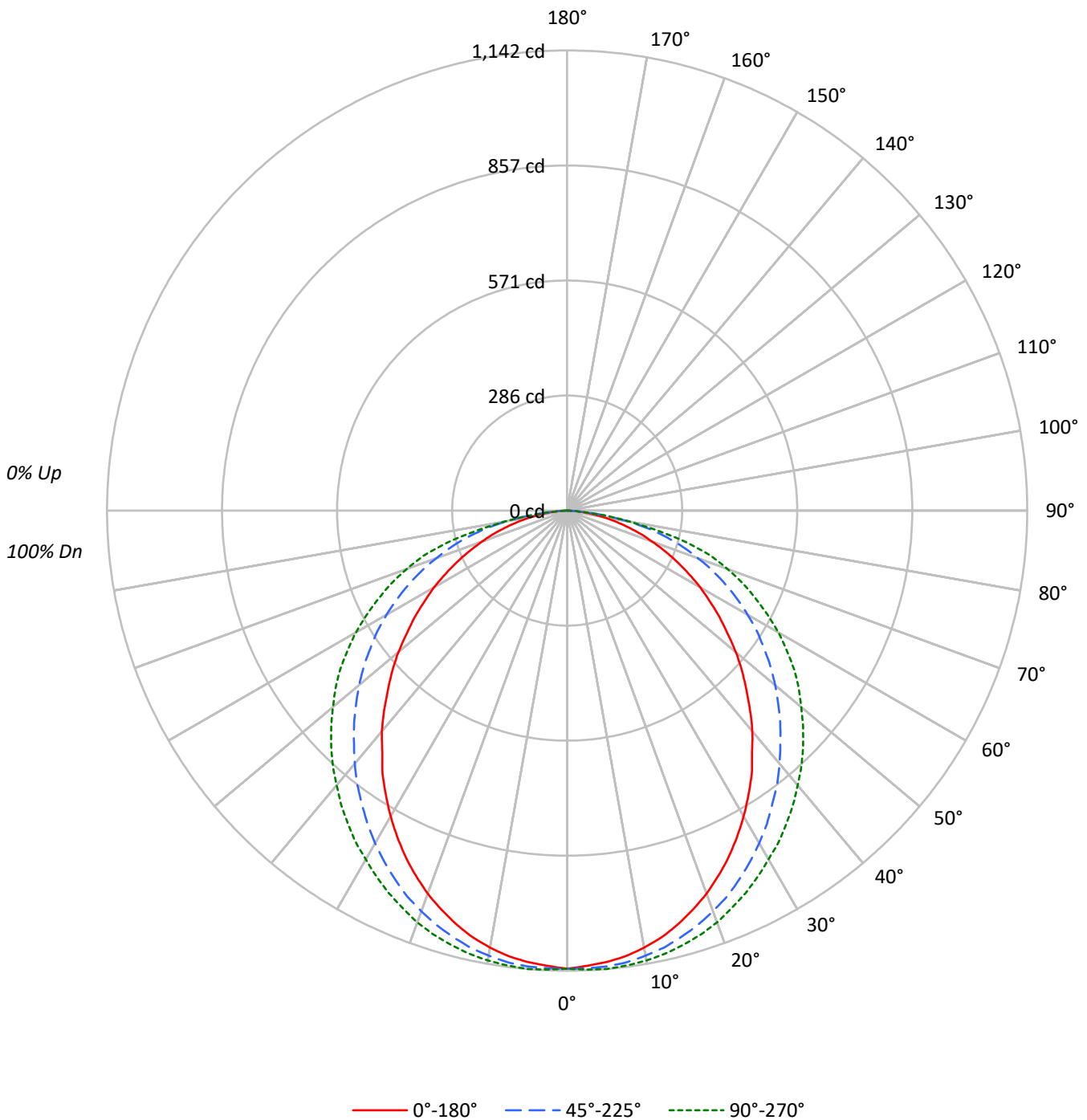
Input Watts (W): 24.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20			20				20			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	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83	83	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69	69	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58	58	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49	49	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43	43	43
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37	37	37
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33	33	33
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29	29	29
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26	26	26
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24	24	24

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

	0°	45°	90°
0°	3059	3059	3059
5°	3038	3067	3084
10°	3010	3064	3098
15°	2961	3051	3107
20°	2897	3031	3114
25°	2816	3000	3110
30°	2722	2962	3106
35°	2623	2918	3116
40°	2512	2882	3126
45°	2393	2845	3151
50°	2289	2820	3175
55°	2167	2797	3225
60°	2053	2786	3259
65°	1918	2763	3285
70°	1762	2722	3330
75°	1591	2650	3212
80°	1364	2348	2419
85°	1099	1383	1099



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.8	3.3
10°-20°	308.2	9.5
20°-30°	462.9	14.2
30°-40°	552.0	17.0
40°-50°	570.7	17.5
50°-60°	524.7	16.1
60°-70°	417.7	12.8
70°-80°	255.2	7.8
80°-90°	55.5	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°	878.9	27.0
0°-40°	1430.9	44.0
0°-60°	2526.4	77.6
0°-90°	3254.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3254.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1137	1137	1137	1137	1137	
5°	1125	1128	1135	1140	1142	107
15°	1063	1075	1095	1111	1115	299
25°	948	972	1010	1038	1047	436
35°	799	833	888	935	948	498
45°	629	674	748	808	828	486
55°	462	513	596	664	688	413
65°	301	352	434	494	516	298
75°	153	198	255	300	309	163
85°	36	43	45	39	36	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1136.9	1136.9	1136.9	1136.9	1136.9
2.5°	1130.8	1132.3	1136.9	1140.2	1140.2
5°	1124.6	1127.7	1135.4	1140.2	1141.7
7.5°	1115.4	1120.0	1130.8	1136.9	1138.6
10°	1101.5	1107.7	1121.5	1130.8	1133.8
12.5°	1084.4	1093.7	1110.8	1123.1	1126.2
15°	1062.9	1075.2	1095.2	1110.8	1115.4
17.5°	1038.1	1053.5	1078.3	1096.9	1103.1
20°	1011.8	1027.4	1058.3	1079.8	1087.5
22.5°	981.0	1001.0	1036.6	1061.4	1067.5
25°	948.5	971.6	1010.3	1038.1	1047.4
27.5°	913.0	940.9	982.6	1016.6	1024.3
30°	875.9	905.3	953.2	990.3	999.5
32.5°	837.3	871.3	922.2	963.9	976.4
35°	798.6	832.6	888.2	934.7	948.5
37.5°	753.8	794.0	855.9	903.8	920.7
40°	715.2	753.8	820.3	872.8	889.9
42.5°	672.0	713.7	783.2	840.3	860.5
45°	628.7	673.5	747.7	808.0	828.0
47.5°	588.5	633.3	710.6	774.0	794.0
50°	546.8	593.2	673.5	738.5	758.5
52.5°	502.1	553.0	636.4	701.4	724.6
55°	461.9	512.8	596.2	664.3	687.5
57.5°	420.2	472.6	559.3	624.1	645.8
60°	381.5	432.5	517.6	580.9	605.6
62.5°	339.8	392.3	475.7	537.6	560.9
65°	301.2	352.3	434.0	494.4	515.9
67.5°	262.6	313.7	390.8	448.0	472.6
70°	223.9	275.0	346.0	401.7	423.2
72.5°	190.1	234.9	302.7	353.8	373.8
75°	153.0	197.8	254.9	299.7	308.9
77.5°	119.0	159.1	207.0	227.0	230.3
80°	88.0	119.0	151.5	156.1	156.1
82.5°	58.6	81.9	94.2	95.7	94.2
85°	35.6	43.2	44.8	38.6	35.6
87.5°	12.3	12.3	7.7	4.6	1.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)