

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: P474769

Luminaire Tested: **22CZ2-34HE-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474769  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-34HE-UNV-L830-CD1-U  
Description: 2'X2' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3306.0 lumens  
Efficiency: N/A  
Efficacy: 136.0 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

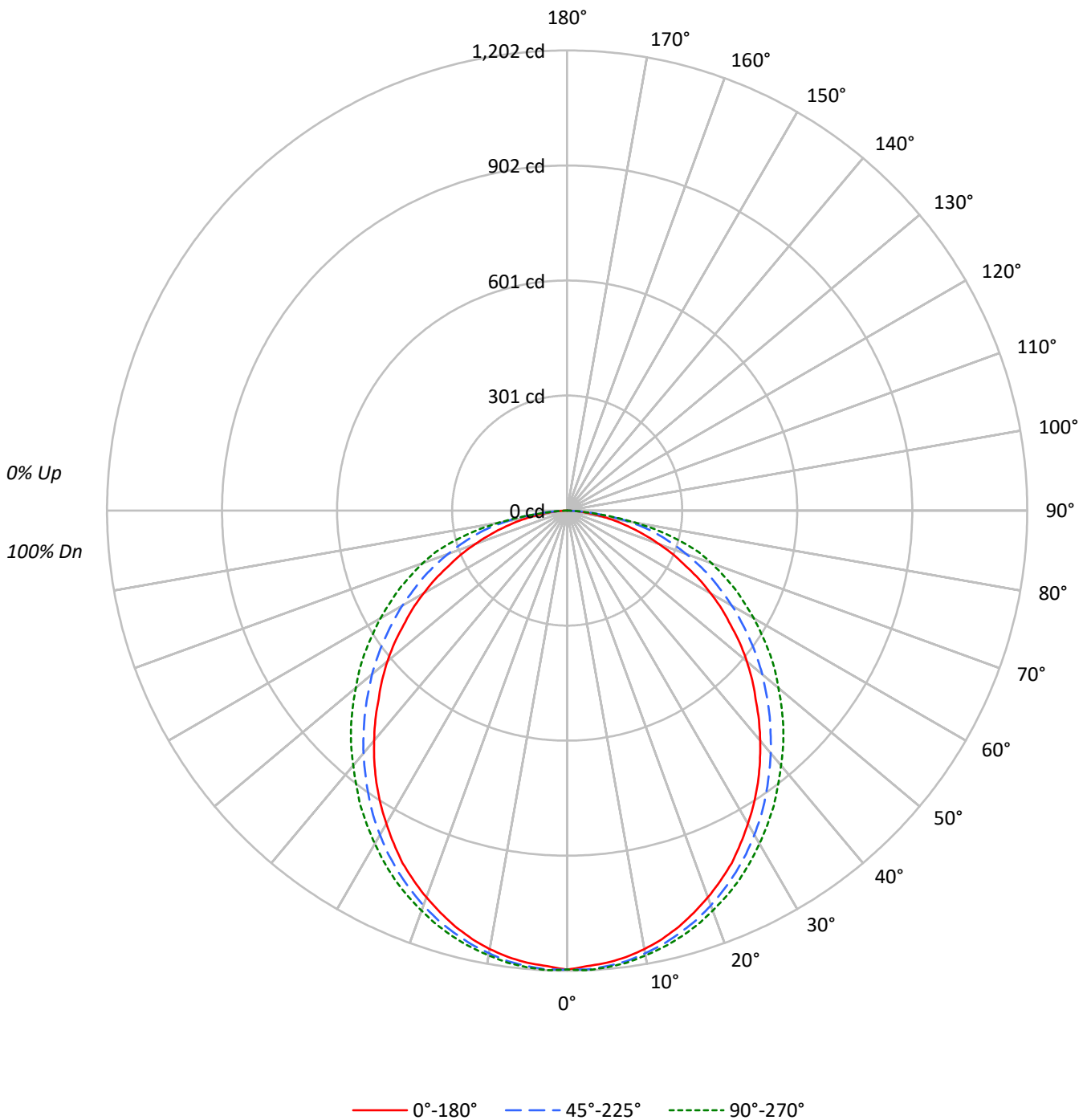
Input Watts (W): 24.3  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P474769

CATALOG NUMBER: 22CZ2-34HE-UNV-L830-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P474769

CATALOG NUMBER: 22CZ2-34HE-UNV-L830-CD1-U

**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°	3226	3226	3226
5°	3203	3227	3235
10°	3179	3209	3224
15°	3136	3180	3210
20°	3079	3143	3185
25°	3018	3095	3159
30°	2935	3039	3122
35°	2853	2975	3092
40°	2756	2908	3053
45°	2651	2842	3039
50°	2565	2784	3015
55°	2445	2724	3022
60°	2335	2678	3031
65°	2171	2642	3079
70°	2006	2606	3155
75°	1795	2593	3174
80°	1505	2458	2772
85°	1164	1683	1575



TEST NUMBER: P474769

CATALOG NUMBER: 22CZ2-34HE-UNV-L830-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	113.3	3.4
10°-20°	321.5	9.7
20°-30°	479.4	14.5
30°-40°	566.0	17.1
40°-50°	576.8	17.4
50°-60°	520.2	15.7
60°-70°	408.9	12.4
70°-80°	256.0	7.7
80°-90°	63.8	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°	914.3	27.7
0°-40°	1480.2	44.8
0°-60°	2577.3	78.0
0°-90°	3306.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3306.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1199	1199	1199	1199	1199	
5°	1186	1188	1195	1198	1198	112
15°	1126	1130	1142	1150	1152	317
25°	1017	1024	1042	1058	1064	467
35°	868	880	906	931	941	543
45°	697	712	747	783	799	539
55°	521	537	581	625	644	468
65°	341	362	415	461	484	340
75°	173	198	249	294	305	183
85°	38	48	54	54	51	46
90°	0	0	0	0	0	



TEST NUMBER: P474769

CATALOG NUMBER: 22CZ2-34HE-UNV-L830-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1198.9	1198.9	1198.9	1198.9	1198.9
2.5°	1191.2	1194.0	1199.6	1201.7	1201.7
5°	1185.6	1188.4	1194.7	1197.5	1197.5
7.5°	1176.6	1179.3	1187.0	1190.5	1191.2
10°	1163.3	1166.8	1174.5	1180.0	1180.0
12.5°	1146.5	1150.0	1159.8	1166.8	1167.5
15°	1125.6	1130.4	1141.6	1150.0	1152.1
17.5°	1101.1	1108.8	1121.4	1131.8	1133.9
20°	1075.2	1082.9	1097.6	1109.5	1112.3
22.5°	1046.6	1053.6	1071.1	1085.7	1089.2
25°	1016.6	1024.2	1042.4	1058.5	1064.1
27.5°	980.9	990.0	1011.7	1029.8	1035.4
30°	944.6	955.8	978.1	998.4	1004.7
32.5°	907.6	918.0	943.2	964.9	973.2
35°	868.4	879.6	905.5	930.6	941.1
37.5°	827.2	838.4	866.3	895.0	904.8
40°	784.6	797.9	827.9	858.7	869.1
42.5°	741.3	755.3	786.7	820.9	834.9
45°	696.6	711.9	746.9	783.2	798.6
47.5°	656.0	668.6	705.0	744.8	759.5
50°	612.7	624.6	665.1	705.0	720.3
52.5°	568.7	579.9	623.2	665.1	684.0
55°	521.2	537.3	580.6	625.3	644.2
57.5°	479.3	494.0	538.7	584.1	602.3
60°	433.9	449.2	497.5	543.6	563.1
62.5°	388.5	405.2	454.1	503.7	521.9
65°	340.9	361.9	415.0	461.1	483.5
67.5°	300.4	320.7	373.1	421.3	440.9
70°	255.0	278.8	331.2	380.1	401.0
72.5°	212.4	236.1	289.9	338.9	359.8
75°	172.6	198.4	249.4	294.1	305.3
77.5°	134.1	158.6	209.6	235.5	247.3
80°	97.1	120.9	158.6	176.1	178.9
82.5°	65.7	85.9	107.6	112.5	109.7
85°	37.7	48.2	54.5	54.5	51.0
87.5°	15.4	15.4	13.3	8.4	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)