

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: P474850

Luminaire Tested: **22CZ2-32-UNV-L850-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474850
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-32-UNV-L850-CD1-U
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS
Light Source: 5000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3334.0 lumens
Efficiency: N/A
Efficacy: 137.8 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

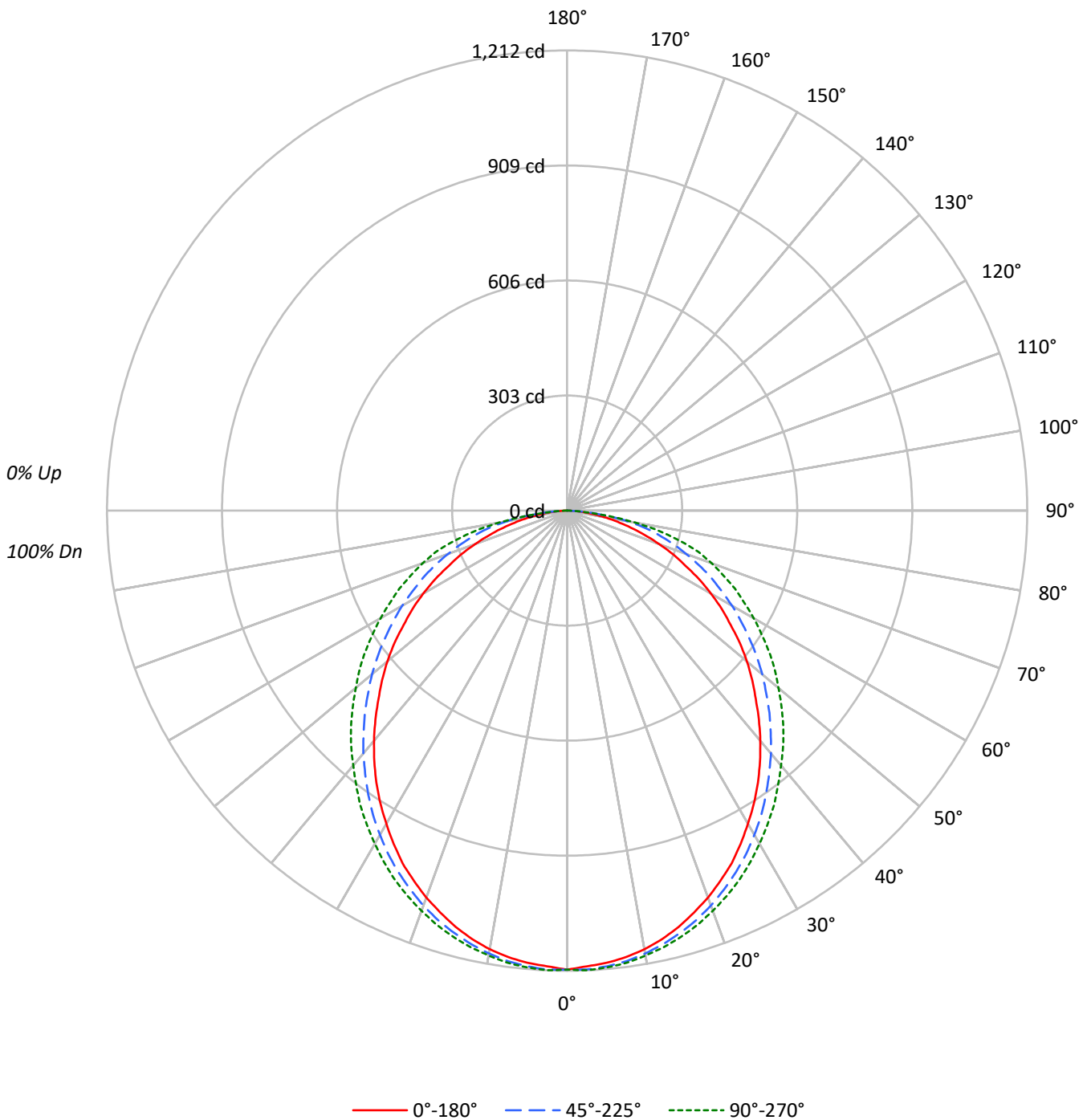
Input Watts (W): 24.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	3254	3254	3254
5°	3230	3255	3262
10°	3206	3236	3252
15°	3162	3207	3237
20°	3105	3170	3212
25°	3044	3121	3186
30°	2960	3065	3148
35°	2877	3000	3118
40°	2780	2933	3079
45°	2673	2866	3065
50°	2587	2808	3041
55°	2466	2747	3048
60°	2355	2700	3056
65°	2189	2665	3105
70°	2024	2628	3182
75°	1809	2615	3201
80°	1517	2478	2796
85°	1173	1698	1587



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	114.2	3.4
10°-20°	324.3	9.7
20°-30°	483.5	14.5
30°-40°	570.8	17.1
40°-50°	581.7	17.4
50°-60°	524.6	15.7
60°-70°	412.3	12.4
70°-80°	258.2	7.7
80°-90°	64.4	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°	922.0	27.7
0°-40°	1492.8	44.8
0°-60°	2599.2	78.0
0°-90°	3334.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3334.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1209	1209	1209	1209	1209	
5°	1196	1198	1205	1208	1208	113
15°	1135	1140	1151	1160	1162	320
25°	1025	1033	1051	1068	1073	471
35°	876	887	913	938	949	547
45°	702	718	753	790	805	543
55°	526	542	586	631	650	472
65°	344	365	418	465	488	343
75°	174	200	252	297	308	185
85°	38	49	55	55	51	46
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1209.1	1209.1	1209.1	1209.1	1209.1
2.5°	1201.3	1204.2	1209.8	1211.9	1211.9
5°	1195.7	1198.5	1204.9	1207.7	1207.7
7.5°	1186.5	1189.4	1197.1	1200.6	1201.3
10°	1173.2	1176.7	1184.4	1190.1	1190.1
12.5°	1156.2	1159.8	1169.6	1176.7	1177.4
15°	1135.1	1140.0	1151.3	1159.8	1161.9
17.5°	1110.4	1118.2	1130.9	1141.5	1143.6
20°	1084.4	1092.1	1106.9	1118.9	1121.7
22.5°	1055.5	1062.5	1080.2	1094.9	1098.5
25°	1025.2	1032.9	1051.3	1067.5	1073.1
27.5°	989.3	998.4	1020.3	1038.6	1044.2
30°	952.6	963.9	986.4	1006.9	1013.2
32.5°	915.3	925.8	951.2	973.1	981.5
35°	875.8	887.1	913.2	938.5	949.1
37.5°	834.2	845.5	873.7	902.6	912.5
40°	791.3	804.7	835.0	866.0	876.5
42.5°	747.6	761.7	793.4	827.9	842.0
45°	702.5	718.0	753.2	789.9	805.4
47.5°	661.6	674.3	710.9	751.1	765.9
50°	617.9	629.9	670.8	710.9	726.4
52.5°	573.5	584.8	628.5	670.8	689.8
55°	525.6	541.8	585.5	630.6	649.6
57.5°	483.4	498.2	543.2	589.0	607.4
60°	437.6	453.1	501.7	548.2	567.9
62.5°	391.8	408.7	458.0	508.0	526.3
65°	343.8	365.0	418.5	465.0	487.6
67.5°	303.0	323.4	376.3	424.9	444.6
70°	257.2	281.1	334.0	383.3	404.4
72.5°	214.2	238.2	292.4	341.7	362.9
75°	174.0	200.1	251.5	296.6	307.9
77.5°	135.3	159.9	211.4	237.5	249.4
80°	97.9	121.9	159.9	177.6	180.4
82.5°	66.2	86.7	108.5	113.4	110.6
85°	38.0	48.6	55.0	55.0	51.4
87.5°	15.5	15.5	13.4	8.5	4.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)