

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: P474763

Luminaire Tested: **22CZ2-32-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474763
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-32-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, RIBBED LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

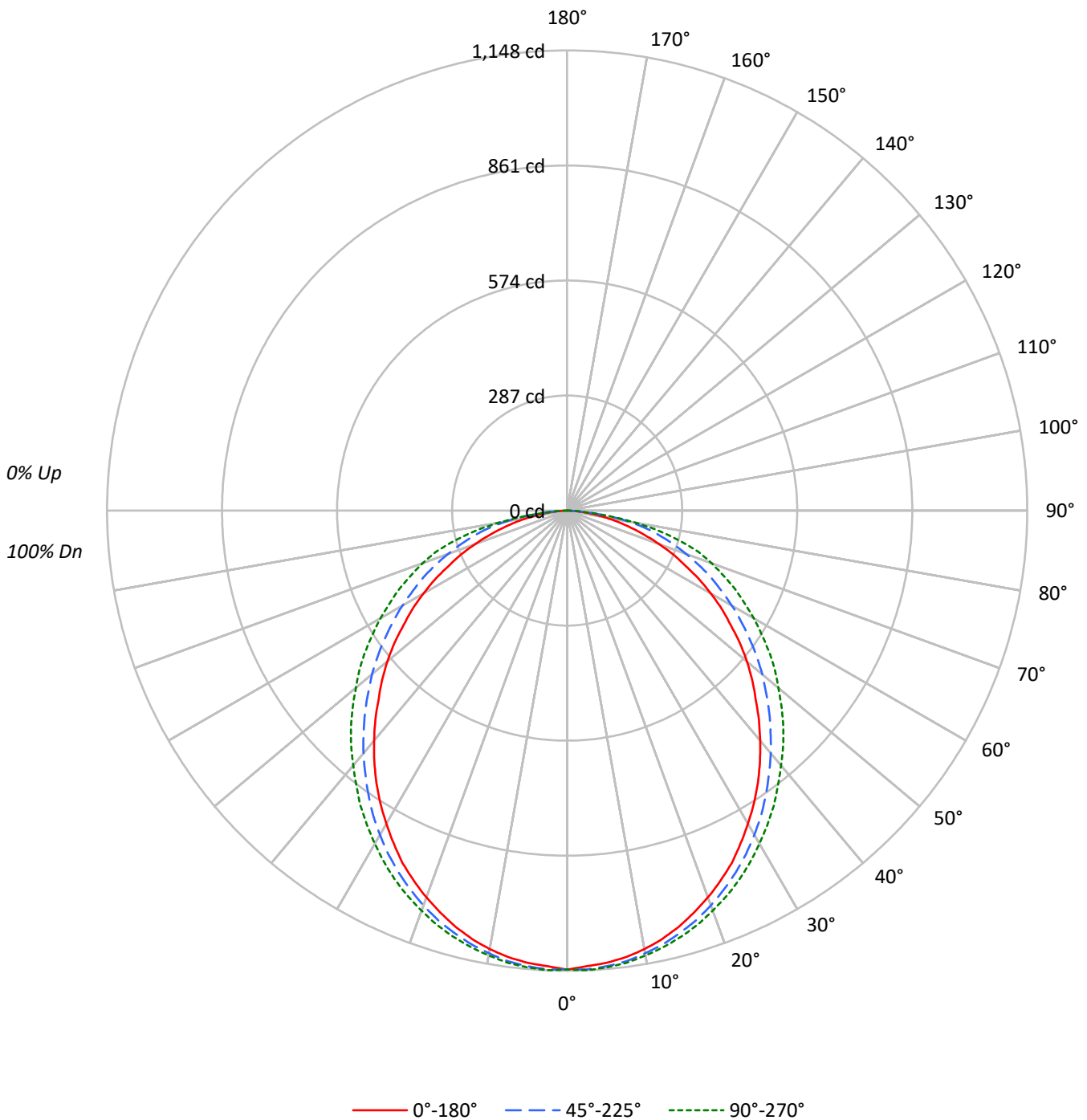
Lumens per Lamp: N/A
Luminaire Lumens: 3157.3 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

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°	3081	3081	3081
5°	3059	3082	3089
10°	3036	3065	3080
15°	2995	3037	3065
20°	2941	3002	3042
25°	2883	2956	3017
30°	2803	2903	2981
35°	2725	2841	2953
40°	2632	2778	2916
45°	2532	2715	2903
50°	2450	2659	2880
55°	2335	2601	2886
60°	2230	2557	2894
65°	2073	2524	2940
70°	1917	2489	3013
75°	1713	2477	3032
80°	1437	2348	2647
85°	1112	1606	1504



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	108.2	3.4
10°-20°	307.1	9.7
20°-30°	457.9	14.5
30°-40°	540.5	17.1
40°-50°	550.9	17.4
50°-60°	496.8	15.7
60°-70°	390.5	12.4
70°-80°	244.5	7.7
80°-90°	61.0	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°	873.2	27.7
0°-40°	1413.7	44.8
0°-60°	2461.4	78.0
0°-90°	3157.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3157.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1145	1145	1145	1145	1145	
5°	1132	1135	1141	1144	1144	107
15°	1075	1080	1090	1098	1100	303
25°	971	978	996	1011	1016	446
35°	829	840	865	889	899	518
45°	665	680	713	748	763	515
55°	498	513	554	597	615	447
65°	326	346	396	440	462	325
75°	165	190	238	281	292	175
85°	36	46	52	52	49	43
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1145.0	1145.0	1145.0	1145.0	1145.0
2.5°	1137.7	1140.3	1145.7	1147.7	1147.7
5°	1132.3	1135.0	1141.0	1143.7	1143.7
7.5°	1123.7	1126.3	1133.7	1137.0	1137.7
10°	1111.0	1114.3	1121.7	1127.0	1127.0
12.5°	1095.0	1098.3	1107.7	1114.3	1115.0
15°	1075.0	1079.6	1090.3	1098.3	1100.3
17.5°	1051.6	1058.9	1071.0	1081.0	1083.0
20°	1026.9	1034.3	1048.3	1059.6	1062.3
22.5°	999.6	1006.2	1022.9	1036.9	1040.3
25°	970.9	978.2	995.6	1010.9	1016.2
27.5°	936.8	945.5	966.2	983.5	988.9
30°	902.1	912.8	934.2	953.5	959.5
32.5°	866.8	876.8	900.8	921.5	929.5
35°	829.4	840.1	864.8	888.8	898.8
37.5°	790.0	800.7	827.4	854.8	864.1
40°	749.3	762.0	790.7	820.1	830.1
42.5°	708.0	721.3	751.3	784.0	797.4
45°	665.3	679.9	713.3	748.0	762.7
47.5°	626.6	638.6	673.3	711.3	725.3
50°	585.2	596.5	635.2	673.3	687.9
52.5°	543.2	553.8	595.2	635.2	653.2
55°	497.8	513.1	554.5	597.2	615.2
57.5°	457.7	471.8	514.5	557.8	575.2
60°	414.4	429.0	475.1	519.1	537.8
62.5°	371.0	387.0	433.7	481.1	498.4
65°	325.6	345.6	396.4	440.4	461.7
67.5°	286.9	306.3	356.3	402.4	421.0
70°	243.6	266.2	316.3	363.0	383.0
72.5°	202.8	225.5	276.9	323.6	343.6
75°	164.8	189.5	238.2	280.9	291.6
77.5°	128.1	151.5	200.2	224.9	236.2
80°	92.7	115.4	151.5	168.1	170.8
82.5°	62.7	82.1	102.8	107.4	104.8
85°	36.0	46.0	52.0	52.0	48.7
87.5°	14.7	14.7	12.7	8.0	4.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)