

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: P474903

Luminaire Tested: **22CZ2-100VHE-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474903
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-S-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

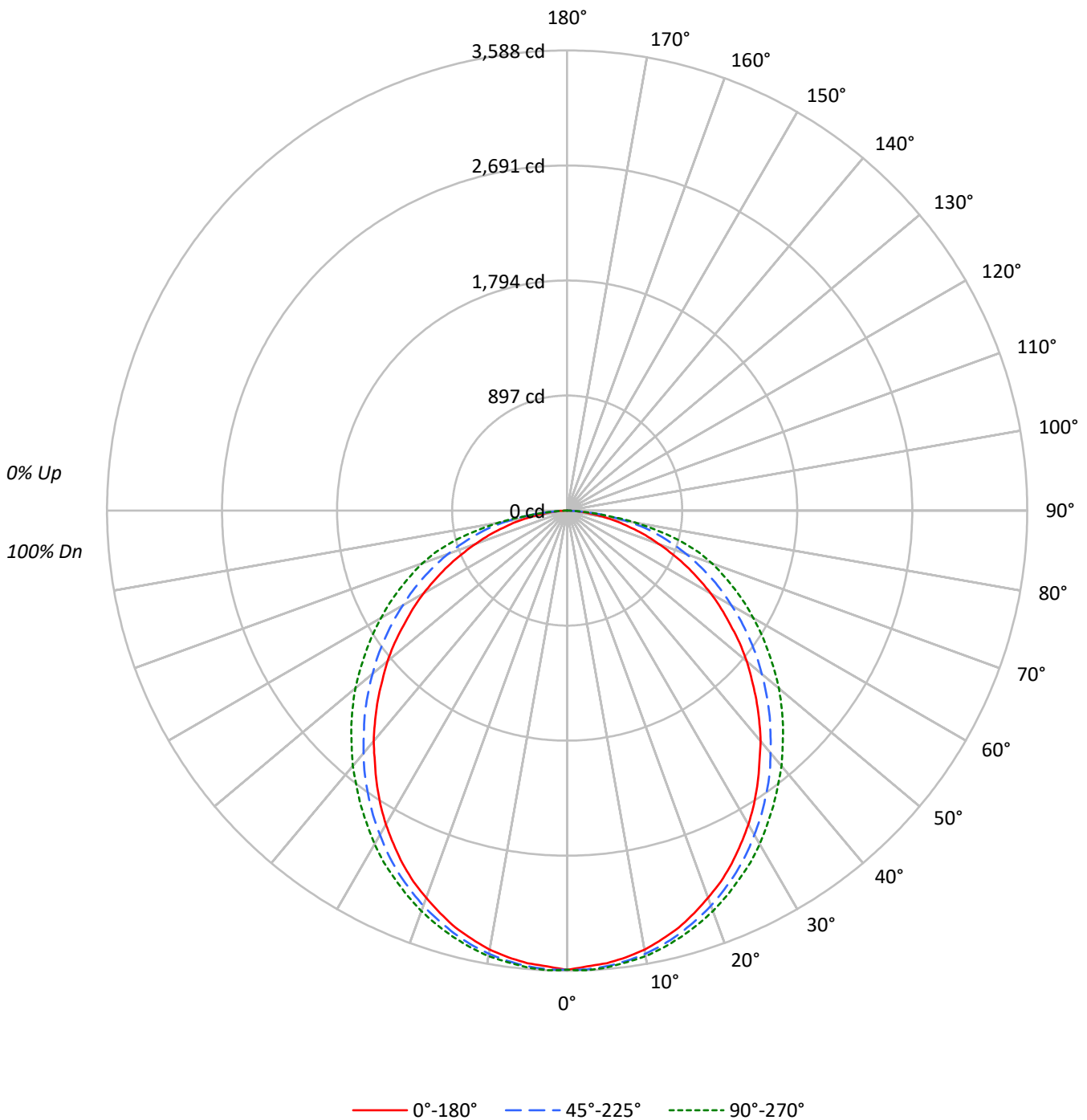
Lumens per Lamp: N/A
Luminaire Lumens: 9864.2 lumens
Efficiency: N/A
Efficacy: 130.1 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')
CIE Type: Direct

Input Watts (W): 75.8
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	88	86	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	74	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	32	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9636	9636	9636
5°	9569	9634	9659
10°	9497	9589	9641
15°	9377	9503	9583
20°	9201	9393	9516
25°	9016	9250	9420
30°	8782	9072	9331
35°	8508	8885	9214
40°	8243	8671	9132
45°	7940	8485	9057
50°	7655	8295	9024
55°	7291	8131	8982
60°	6963	7965	9019
65°	6536	7873	9151
70°	5973	7776	9447
75°	5361	7719	9456
80°	4513	7288	8398
85°	3390	4937	4570



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.2	3.4
10°-20°	960.5	9.7
20°-30°	1432.0	14.5
30°-40°	1689.8	17.1
40°-50°	1721.6	17.5
50°-60°	1552.6	15.7
60°-70°	1219.3	12.4
70°-80°	762.3	7.7
80°-90°	187.9	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°	2730.7	27.7
0°-40°	4420.5	44.8
0°-60°	7694.7	78.0
0°-90°	9864.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9864.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3581	3581	3581	3581	3581	
5°	3542	3550	3566	3574	3576	336
15°	3366	3378	3411	3435	3440	948
25°	3036	3053	3115	3161	3172	1397
35°	2590	2626	2705	2779	2805	1620
45°	2086	2122	2230	2337	2380	1610
55°	1554	1604	1733	1867	1914	1394
65°	1026	1081	1236	1375	1437	1014
75°	516	587	742	869	910	551
85°	110	141	160	158	148	134
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3580.7	3580.7	3580.7	3580.7	3580.7
2.5°	3556.8	3564.0	3580.7	3587.9	3587.9
5°	3542.5	3549.7	3566.4	3573.6	3575.9
7.5°	3513.9	3523.4	3542.5	3552.1	3552.1
10°	3475.7	3487.6	3509.1	3523.4	3528.2
12.5°	3423.2	3437.5	3466.1	3482.8	3487.6
15°	3365.9	3377.8	3411.2	3435.1	3439.9
17.5°	3291.9	3311.0	3346.8	3377.8	3385.0
20°	3213.1	3234.6	3279.9	3315.7	3322.9
22.5°	3131.9	3148.6	3198.8	3241.7	3251.3
25°	3036.4	3053.2	3115.2	3160.6	3172.5
27.5°	2931.4	2960.1	3022.1	3074.6	3093.7
30°	2826.4	2855.0	2919.5	2981.5	3003.0
32.5°	2711.8	2742.8	2816.8	2881.3	2902.8
35°	2590.0	2625.9	2704.6	2778.6	2804.9
37.5°	2463.5	2504.1	2592.4	2671.2	2699.9
40°	2346.6	2375.2	2468.3	2559.0	2599.6
42.5°	2215.3	2253.5	2346.6	2449.2	2487.4
45°	2086.4	2122.2	2229.6	2337.0	2380.0
47.5°	1952.7	1998.0	2105.5	2224.8	2267.8
50°	1828.6	1866.7	1981.3	2107.8	2155.6
52.5°	1694.9	1735.5	1859.6	1990.9	2033.8
55°	1554.0	1604.2	1733.1	1866.7	1914.5
57.5°	1425.1	1472.9	1608.9	1747.4	1797.5
60°	1293.8	1341.6	1480.0	1620.9	1675.8
62.5°	1155.4	1210.3	1360.7	1496.7	1558.8
65°	1026.5	1081.4	1236.5	1375.0	1437.1
67.5°	890.4	954.9	1110.0	1255.6	1317.7
70°	759.1	835.5	988.3	1131.5	1200.7
72.5°	642.1	704.2	864.1	1014.5	1071.8
75°	515.6	587.2	742.4	868.9	909.5
77.5°	408.2	470.3	618.3	701.8	728.1
80°	291.2	360.5	470.3	520.4	541.9
82.5°	193.4	250.6	319.9	329.4	324.7
85°	109.8	140.8	159.9	157.6	148.0
87.5°	43.0	47.7	35.8	21.5	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)