

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: P474787

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

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474787
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-100VHE-UNV-L830-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9669.9 lumens
Efficiency: N/A
Efficacy: 127.6 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

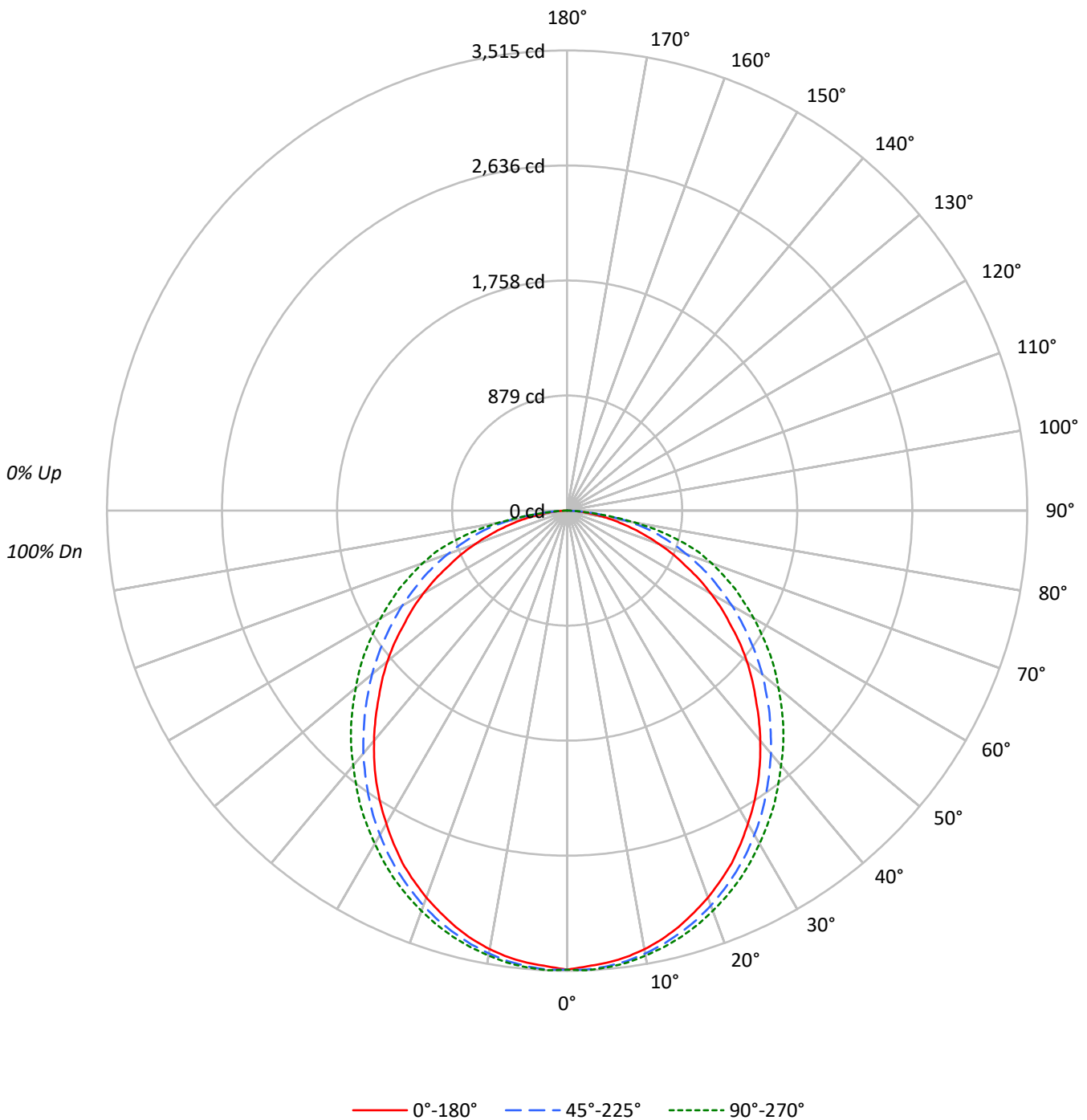
Input Watts (W): 75.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	9437	9437	9437
5°	9368	9440	9462
10°	9298	9387	9431
15°	9172	9303	9388
20°	9007	9194	9317
25°	8829	9053	9241
30°	8585	8890	9131
35°	8345	8701	9043
40°	8062	8507	8930
45°	7754	8314	8889
50°	7503	8145	8820
55°	7152	7967	8840
60°	6830	7831	8865
65°	6350	7729	9005
70°	5869	7622	9229
75°	5248	7586	9285
80°	4403	7189	8108
85°	3409	4922	4607



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	331.3	3.4
10°-20°	940.5	9.7
20°-30°	1402.4	14.5
30°-40°	1655.5	17.1
40°-50°	1687.3	17.4
50°-60°	1521.6	15.7
60°-70°	1195.9	12.4
70°-80°	748.8	7.7
80°-90°	186.7	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°	2674.2	27.7
0°-40°	4329.7	44.8
0°-60°	7538.5	78.0
0°-90°	9669.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9669.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3507	3507	3507	3507	3507	
5°	3468	3476	3494	3503	3503	329
15°	3292	3306	3339	3364	3370	927
25°	2973	2996	3049	3096	3112	1367
35°	2540	2573	2648	2722	2753	1587
45°	2038	2082	2185	2291	2336	1576
55°	1524	1572	1698	1829	1884	1368
65°	997	1059	1214	1349	1414	994
75°	505	580	730	860	893	536
85°	110	141	159	159	149	133
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3506.8	3506.8	3506.8	3506.8	3506.8
2.5°	3484.3	3492.5	3508.8	3515.0	3515.0
5°	3468.0	3476.1	3494.5	3502.7	3502.7
7.5°	3441.4	3449.6	3472.1	3482.3	3484.3
10°	3402.6	3412.8	3435.3	3451.6	3451.6
12.5°	3353.5	3363.7	3392.4	3412.8	3414.8
15°	3292.2	3306.5	3339.2	3363.7	3369.9
17.5°	3220.7	3243.2	3280.0	3310.6	3316.7
20°	3145.1	3167.6	3210.5	3245.2	3253.4
22.5°	3061.3	3081.7	3132.8	3175.7	3186.0
25°	2973.4	2995.9	3049.0	3096.0	3112.4
27.5°	2869.2	2895.8	2959.1	3012.3	3028.6
30°	2762.9	2795.6	2861.0	2920.3	2938.7
32.5°	2654.6	2685.3	2758.8	2822.2	2846.7
35°	2540.2	2572.9	2648.5	2722.1	2752.7
37.5°	2419.6	2452.3	2534.1	2617.8	2646.4
40°	2295.0	2333.8	2421.7	2511.6	2542.2
42.5°	2168.2	2209.1	2301.1	2401.2	2442.1
45°	2037.5	2082.4	2184.6	2290.9	2335.8
47.5°	1918.9	1955.7	2062.0	2178.5	2221.4
50°	1792.2	1827.0	1945.5	2062.0	2106.9
52.5°	1663.5	1696.2	1822.9	1945.5	2000.7
55°	1524.5	1571.5	1698.2	1829.0	1884.2
57.5°	1401.9	1444.8	1575.6	1708.4	1761.6
60°	1269.1	1314.0	1455.0	1589.9	1647.1
62.5°	1136.2	1185.3	1328.3	1473.4	1526.6
65°	997.3	1058.6	1213.9	1348.8	1414.2
67.5°	878.7	938.0	1091.3	1232.3	1289.5
70°	745.9	815.4	968.7	1111.7	1173.0
72.5°	621.3	690.7	848.1	991.1	1052.4
75°	504.8	580.4	729.6	860.4	893.0
77.5°	392.4	463.9	613.1	688.7	723.4
80°	284.1	353.5	463.9	515.0	523.2
82.5°	192.1	251.4	314.7	329.0	320.8
85°	110.4	141.0	159.4	159.4	149.2
87.5°	45.0	45.0	38.8	24.5	14.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)