

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: P474960

Luminaire Tested: **22CZ2-95VHE-S-UNV-L840-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474960
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-95VHE-S-UNV-L840-CD1-U
Description: 2'X2' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 9876.7 lumens
Efficiency: N/A
Efficacy: 138.7 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

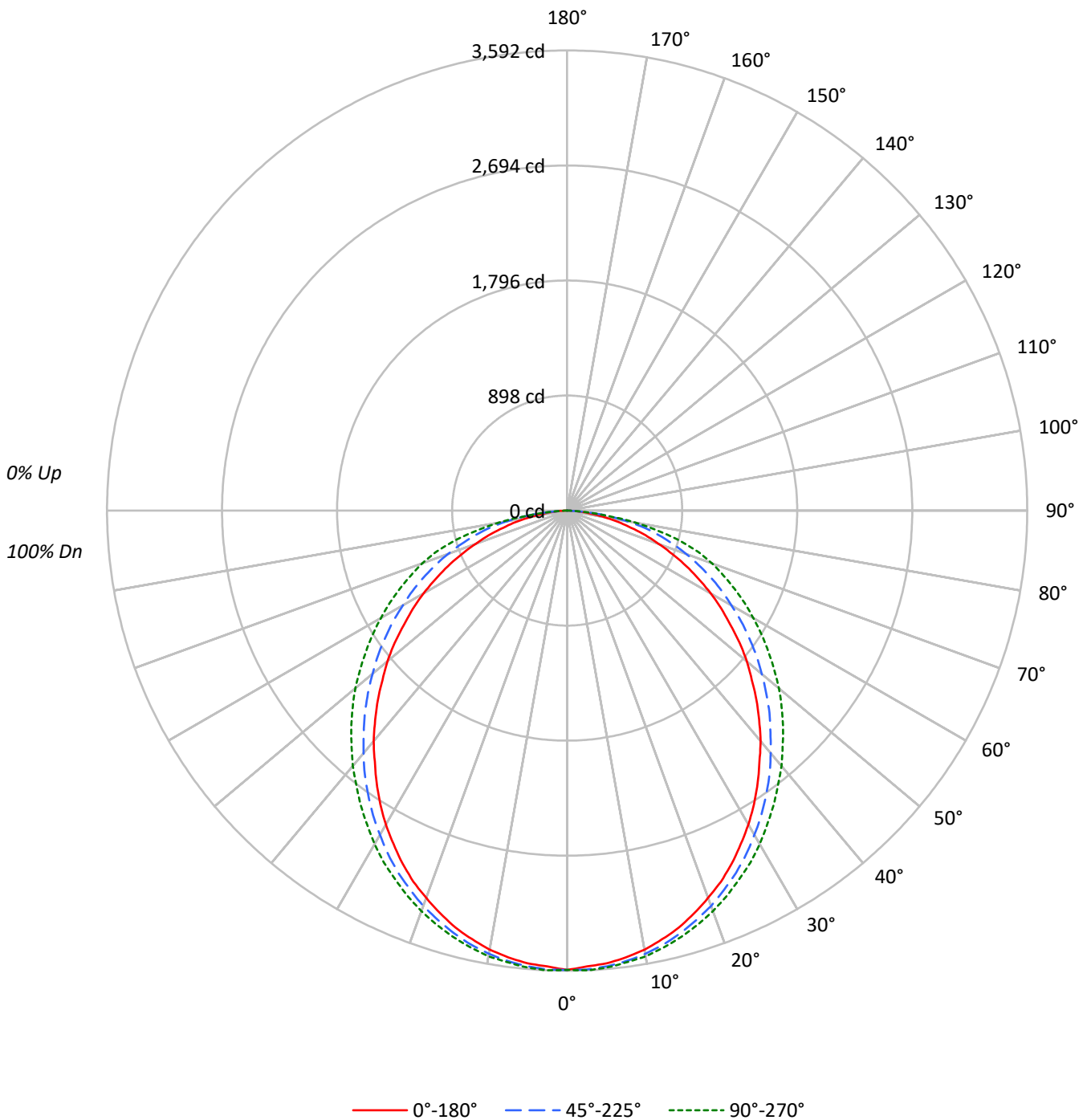
Input Watts (W): 71.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	9648	9648	9648
5°	9581	9646	9672
10°	9509	9601	9653
15°	9389	9516	9595
20°	9213	9405	9528
25°	9027	9261	9432
30°	8794	9083	9343
35°	8519	8896	9226
40°	8253	8682	9144
45°	7950	8496	9069
50°	7665	8305	9036
55°	7300	8141	8993
60°	6972	7976	9030
65°	6544	7883	9162
70°	5980	7785	9460
75°	5368	7728	9469
80°	4519	7297	8409
85°	3393	4943	4576



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	338.6	3.4
10°-20°	961.7	9.7
20°-30°	1433.8	14.5
30°-40°	1691.9	17.1
40°-50°	1723.8	17.5
50°-60°	1554.6	15.7
60°-70°	1220.9	12.4
70°-80°	763.3	7.7
80°-90°	188.2	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°	2734.2	27.7
0°-40°	4426.1	44.8
0°-60°	7704.4	78.0
0°-90°	9876.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9876.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3585	3585	3585	3585	3585	
5°	3547	3554	3571	3578	3580	336
15°	3370	3382	3416	3440	3444	949
25°	3040	3057	3119	3165	3176	1399
35°	2593	2629	2708	2782	2808	1622
45°	2089	2125	2232	2340	2383	1612
55°	1556	1606	1735	1869	1917	1396
65°	1028	1083	1238	1377	1439	1015
75°	516	588	743	870	911	552
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°	3585.3	3585.3	3585.3	3585.3	3585.3
2.5°	3561.4	3568.5	3585.3	3592.4	3592.4
5°	3547.0	3554.2	3570.9	3578.1	3580.5
7.5°	3518.3	3527.9	3547.0	3556.6	3556.6
10°	3480.1	3492.0	3513.6	3527.9	3532.7
12.5°	3427.5	3441.8	3470.5	3487.3	3492.0
15°	3370.1	3382.1	3415.6	3439.5	3444.2
17.5°	3296.0	3315.2	3351.0	3382.1	3389.3
20°	3217.2	3238.7	3284.1	3319.9	3327.1
22.5°	3135.9	3152.6	3202.8	3245.9	3255.4
25°	3040.3	3057.0	3119.2	3164.6	3176.5
27.5°	2935.1	2963.8	3026.0	3078.5	3097.7
30°	2830.0	2858.6	2923.2	2985.3	3006.8
32.5°	2715.2	2746.3	2820.4	2884.9	2906.4
35°	2593.3	2629.2	2708.1	2782.2	2808.5
37.5°	2466.7	2507.3	2595.7	2674.6	2703.3
40°	2349.5	2378.2	2471.4	2562.3	2602.9
42.5°	2218.1	2256.3	2349.5	2452.3	2490.6
45°	2089.0	2124.9	2232.4	2340.0	2383.0
47.5°	1955.2	2000.6	2108.1	2227.6	2270.7
50°	1830.9	1869.1	1983.8	2110.5	2158.3
52.5°	1697.0	1737.7	1861.9	1993.4	2036.4
55°	1556.0	1606.2	1735.3	1869.1	1916.9
57.5°	1426.9	1474.7	1611.0	1749.6	1799.8
60°	1295.5	1343.3	1481.9	1622.9	1677.9
62.5°	1156.8	1211.8	1362.4	1498.6	1560.8
65°	1027.8	1082.7	1238.1	1376.7	1438.9
67.5°	891.5	956.1	1111.4	1257.2	1319.4
70°	760.1	836.6	989.5	1132.9	1202.3
72.5°	643.0	705.1	865.2	1015.8	1073.2
75°	516.3	588.0	743.3	870.0	910.7
77.5°	408.7	470.9	619.1	702.7	729.0
80°	291.6	360.9	470.9	521.1	542.6
82.5°	193.6	251.0	320.3	329.8	325.1
85°	109.9	141.0	160.1	157.8	148.2
87.5°	43.0	47.8	35.9	21.5	16.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)