

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: P474786

Luminaire Tested: **22CZ2-95VHE-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P474786
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-95VHE-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: 9169.1 lumens
Efficiency: N/A
Efficacy: 128.8 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

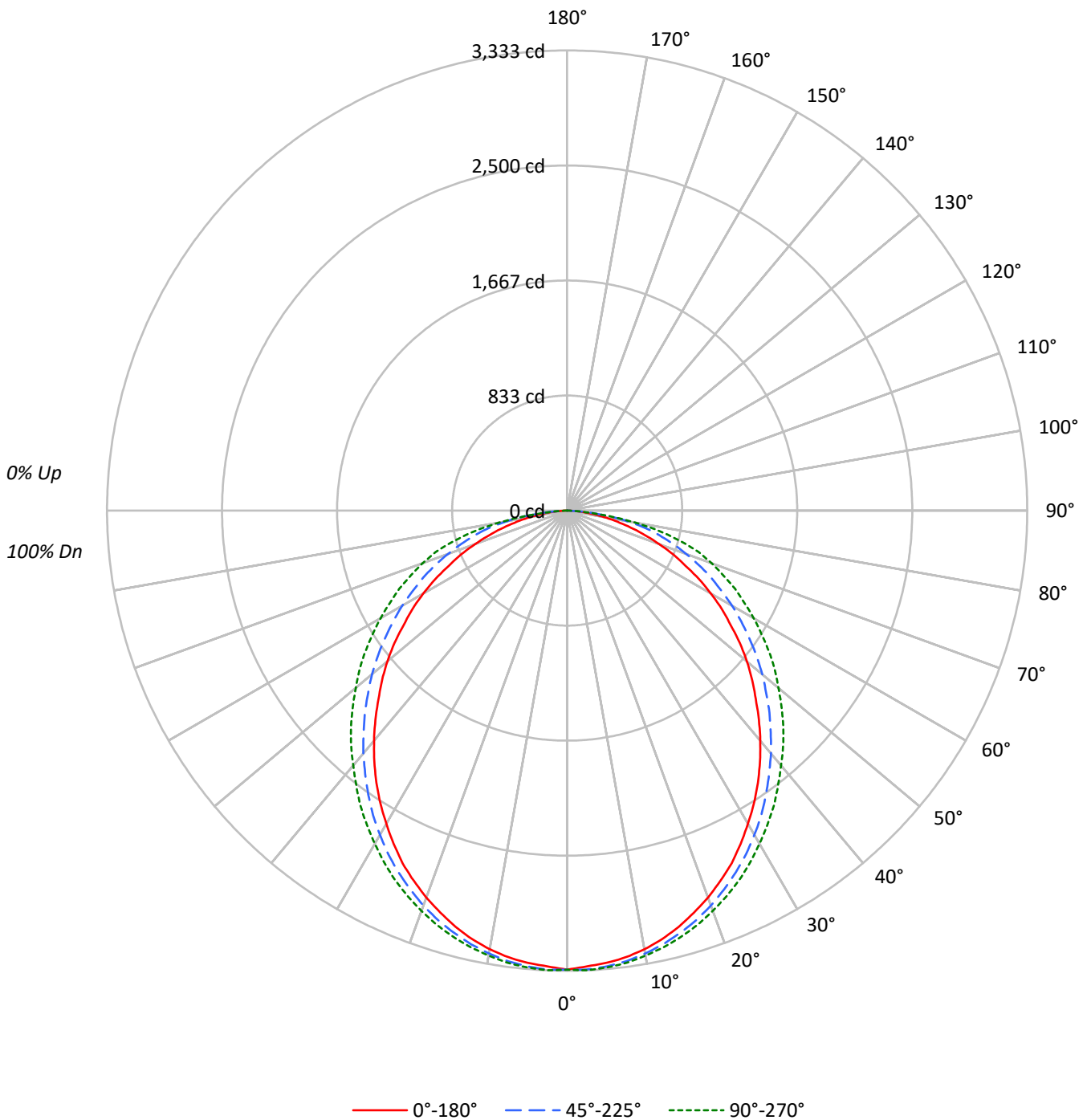
Input Watts (W): 71.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	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°	8948	8948	8948
5°	8883	8951	8972
10°	8816	8901	8943
15°	8697	8821	8902
20°	8540	8718	8834
25°	8371	8584	8763
30°	8140	8429	8658
35°	7912	8250	8574
40°	7644	8066	8468
45°	7352	7883	8429
50°	7114	7723	8364
55°	6782	7555	8382
60°	6476	7425	8406
65°	6021	7329	8538
70°	5565	7227	8751
75°	4976	7193	8804
80°	4173	6817	7688
85°	3230	4665	4369



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.1	3.4
10°-20°	891.8	9.7
20°-30°	1329.7	14.5
30°-40°	1569.7	17.1
40°-50°	1599.9	17.4
50°-60°	1442.8	15.7
60°-70°	1134.0	12.4
70°-80°	710.0	7.7
80°-90°	177.0	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°	2535.7	27.7
0°-40°	4105.4	44.8
0°-60°	7148.0	78.0
0°-90°	9169.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9169.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3325	3325	3325	3325	3325	
5°	3288	3296	3314	3321	3321	312
15°	3122	3135	3166	3190	3195	879
25°	2819	2841	2891	2936	2951	1296
35°	2409	2440	2511	2581	2610	1505
45°	1932	1975	2072	2172	2215	1495
55°	1446	1490	1610	1734	1787	1297
65°	946	1004	1151	1279	1341	943
75°	479	550	692	816	847	508
85°	105	134	151	151	142	126
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3325.2	3325.2	3325.2	3325.2	3325.2
2.5°	3303.9	3311.6	3327.1	3332.9	3332.9
5°	3288.4	3296.1	3313.6	3321.3	3321.3
7.5°	3263.2	3270.9	3292.2	3301.9	3303.9
10°	3226.4	3236.0	3257.4	3272.9	3272.9
12.5°	3179.8	3189.5	3216.7	3236.0	3238.0
15°	3121.7	3135.3	3166.3	3189.5	3195.3
17.5°	3053.9	3075.2	3110.1	3139.2	3145.0
20°	2982.2	3003.5	3044.2	3077.1	3084.9
22.5°	2902.7	2922.1	2970.6	3011.3	3021.0
25°	2819.4	2840.7	2891.1	2935.7	2951.2
27.5°	2720.6	2745.8	2805.9	2856.2	2871.7
30°	2619.8	2650.8	2712.8	2769.0	2786.5
32.5°	2517.1	2546.2	2616.0	2676.0	2699.3
35°	2408.6	2439.6	2511.3	2581.1	2610.1
37.5°	2294.3	2325.3	2402.8	2482.3	2509.4
40°	2176.1	2212.9	2296.2	2381.5	2410.6
42.5°	2056.0	2094.7	2181.9	2276.9	2315.6
45°	1931.9	1974.6	2071.5	2172.2	2214.8
47.5°	1819.5	1854.4	1955.2	2065.6	2106.3
50°	1699.4	1732.3	1844.7	1955.2	1997.8
52.5°	1577.3	1608.3	1728.5	1844.7	1897.1
55°	1445.6	1490.1	1610.3	1734.3	1786.6
57.5°	1329.3	1370.0	1494.0	1620.0	1670.3
60°	1203.3	1246.0	1379.7	1507.6	1561.8
62.5°	1077.4	1123.9	1259.5	1397.1	1447.5
65°	945.6	1003.8	1151.0	1278.9	1340.9
67.5°	833.2	889.4	1034.8	1168.5	1222.7
70°	707.3	773.2	918.5	1054.1	1112.3
72.5°	589.1	655.0	804.2	939.8	997.9
75°	478.6	550.3	691.8	815.8	846.8
77.5°	372.0	439.9	581.3	653.0	686.0
80°	269.3	335.2	439.9	488.3	496.1
82.5°	182.1	238.3	298.4	312.0	304.2
85°	104.6	133.7	151.1	151.1	141.5
87.5°	42.6	42.6	36.8	23.3	13.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)