

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: P473989

Luminaire Tested: **24CZ2-75VHE-S-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473989
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-75VHE-S-UNV-L830-CD1-U
Description: 2'X4' 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: 7371.5 lumens
Efficiency: N/A
Efficacy: 143.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

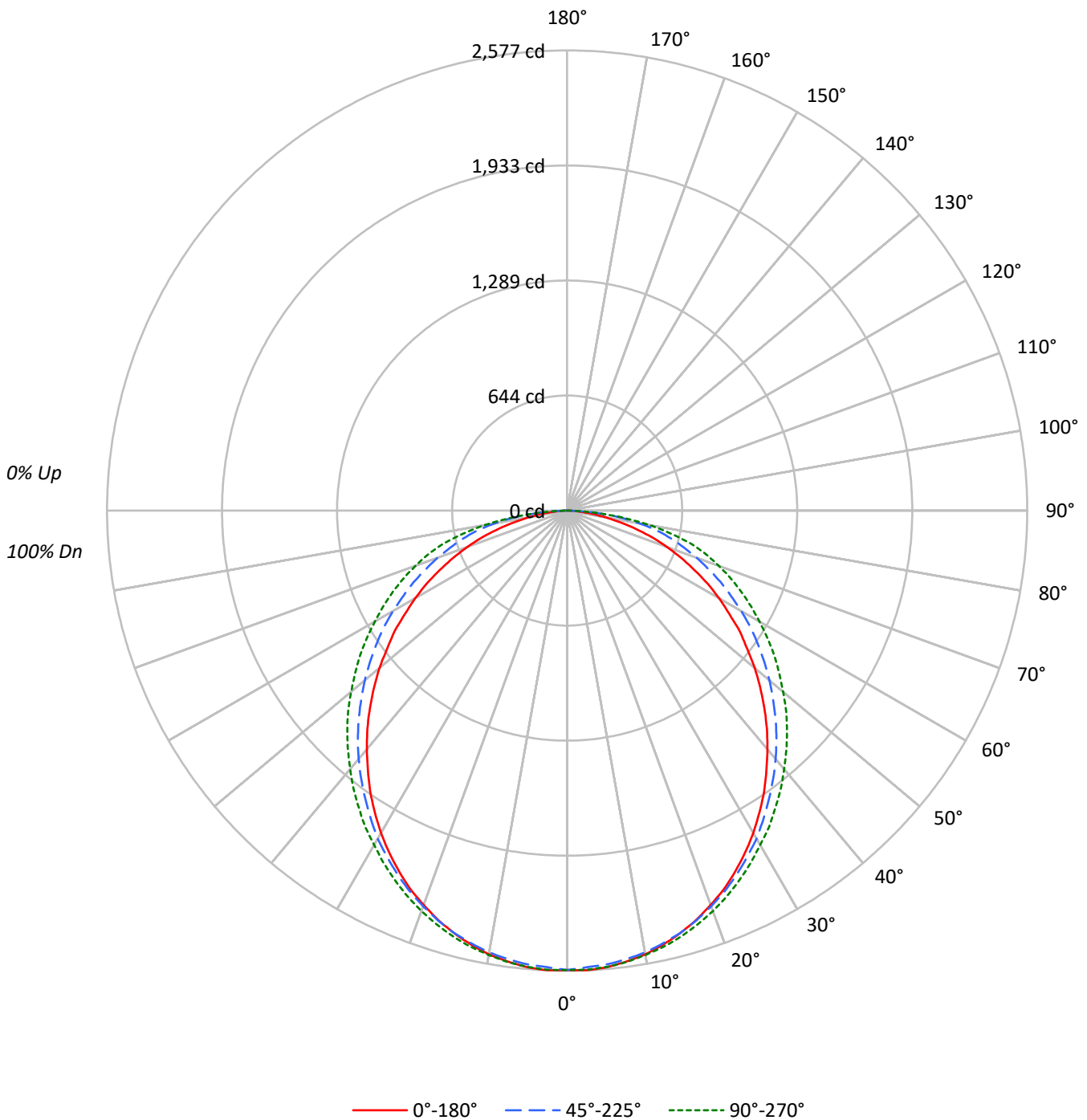
Input Watts (W): 51.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	90	83	77	95	88	81	76	84	79	74	81	76	72	78	74	71	68
3	89	78	70	63	87	77	69	63	74	67	62	71	65	61	68	64	59	57
4	82	69	60	54	79	68	60	53	66	58	52	63	57	52	61	55	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	38	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	38	30	26	37	30	25	36	30	25	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3462	3462	3462
5°	3467	3446	3464
10°	3447	3433	3453
15°	3412	3410	3439
20°	3365	3376	3417
25°	3309	3338	3390
30°	3239	3296	3358
35°	3158	3238	3339
40°	3065	3190	3320
45°	2972	3140	3313
50°	2871	3097	3305
55°	2769	3059	3323
60°	2643	3030	3346
65°	2502	3018	3427
70°	2334	3034	3549
75°	2077	3122	3739
80°	1698	3190	3649
85°	1196	2785	2841



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	243.2	3.3
10°-20°	692.8	9.4
20°-30°	1038.5	14.1
30°-40°	1236.9	16.8
40°-50°	1275.3	17.3
50°-60°	1163.7	15.8
60°-70°	930.6	12.6
70°-80°	607.8	8.2
80°-90°	182.5	2.5
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°	1974.6	26.8
0°-40°	3211.5	43.6
0°-60°	5650.5	76.7
0°-90°	7371.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7371.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2573	2573	2573	2573	2573	
5°	2567	2562	2551	2567	2564	244
15°	2450	2451	2448	2469	2469	691
25°	2229	2233	2248	2281	2284	1026
35°	1923	1936	1971	2021	2033	1201
45°	1562	1590	1650	1719	1741	1205
55°	1180	1214	1304	1390	1417	1051
65°	786	839	948	1041	1076	779
75°	400	466	601	697	719	425
85°	78	139	180	184	184	98
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2573.0	2573.0	2573.0	2573.0	2573.0
2.5°	2576.6	2573.0	2559.7	2575.4	2573.0
5°	2566.9	2562.1	2551.2	2566.9	2564.5
7.5°	2547.5	2545.1	2534.2	2552.4	2550.0
10°	2523.3	2520.9	2512.4	2530.6	2527.0
12.5°	2489.4	2488.2	2482.2	2504.0	2501.5
15°	2449.5	2450.7	2448.3	2468.8	2468.8
17.5°	2403.5	2402.3	2407.1	2432.5	2430.1
20°	2350.2	2351.4	2357.5	2386.5	2386.5
22.5°	2294.5	2293.3	2306.6	2335.7	2338.1
25°	2229.1	2232.7	2248.5	2281.2	2283.6
27.5°	2158.9	2164.9	2184.3	2221.8	2225.5
30°	2085.0	2092.3	2121.3	2156.5	2161.3
32.5°	2003.9	2019.6	2046.3	2091.1	2103.2
35°	1922.8	1936.1	1971.2	2020.8	2033.0
37.5°	1833.2	1855.0	1894.9	1949.4	1965.1
40°	1744.8	1766.6	1816.2	1873.1	1890.1
42.5°	1655.2	1678.2	1735.1	1799.3	1817.4
45°	1561.9	1589.8	1650.3	1719.4	1741.1
47.5°	1466.3	1499.0	1564.4	1639.4	1663.7
50°	1371.8	1404.5	1479.6	1557.1	1578.9
52.5°	1270.1	1311.3	1391.2	1474.8	1496.6
55°	1180.5	1214.4	1304.0	1390.0	1416.6
57.5°	1075.2	1121.2	1216.9	1304.0	1329.5
60°	982.0	1024.3	1126.1	1214.4	1243.5
62.5°	887.5	931.1	1032.8	1133.3	1160.0
65°	785.8	839.1	948.1	1041.3	1076.4
67.5°	689.0	744.6	856.0	955.3	991.7
70°	593.3	650.2	771.3	873.0	902.1
72.5°	498.9	558.2	684.1	783.4	817.3
75°	399.6	466.2	600.6	697.4	719.2
77.5°	306.3	380.2	515.8	581.2	596.9
80°	219.2	300.3	411.7	458.9	471.0
82.5°	144.1	222.8	307.5	333.0	329.3
85°	77.5	139.2	180.4	184.0	184.0
87.5°	30.3	55.7	56.9	43.6	41.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)