

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: P473799

Luminaire Tested: **24CZ2-125VHE-UNV-L830-CD1-U**

Issue Date: 01/28/2021

Test Information

Test Method: LM-79-08
Report Number: P473799
Test Lab: INNOVATION CENTER(G3)
Issue Date: 01/28/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-125VHE-UNV-L830-CD1-U
Description: 2'X4' 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: 12006.3 lumens
Efficiency: N/A
Efficacy: 136.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

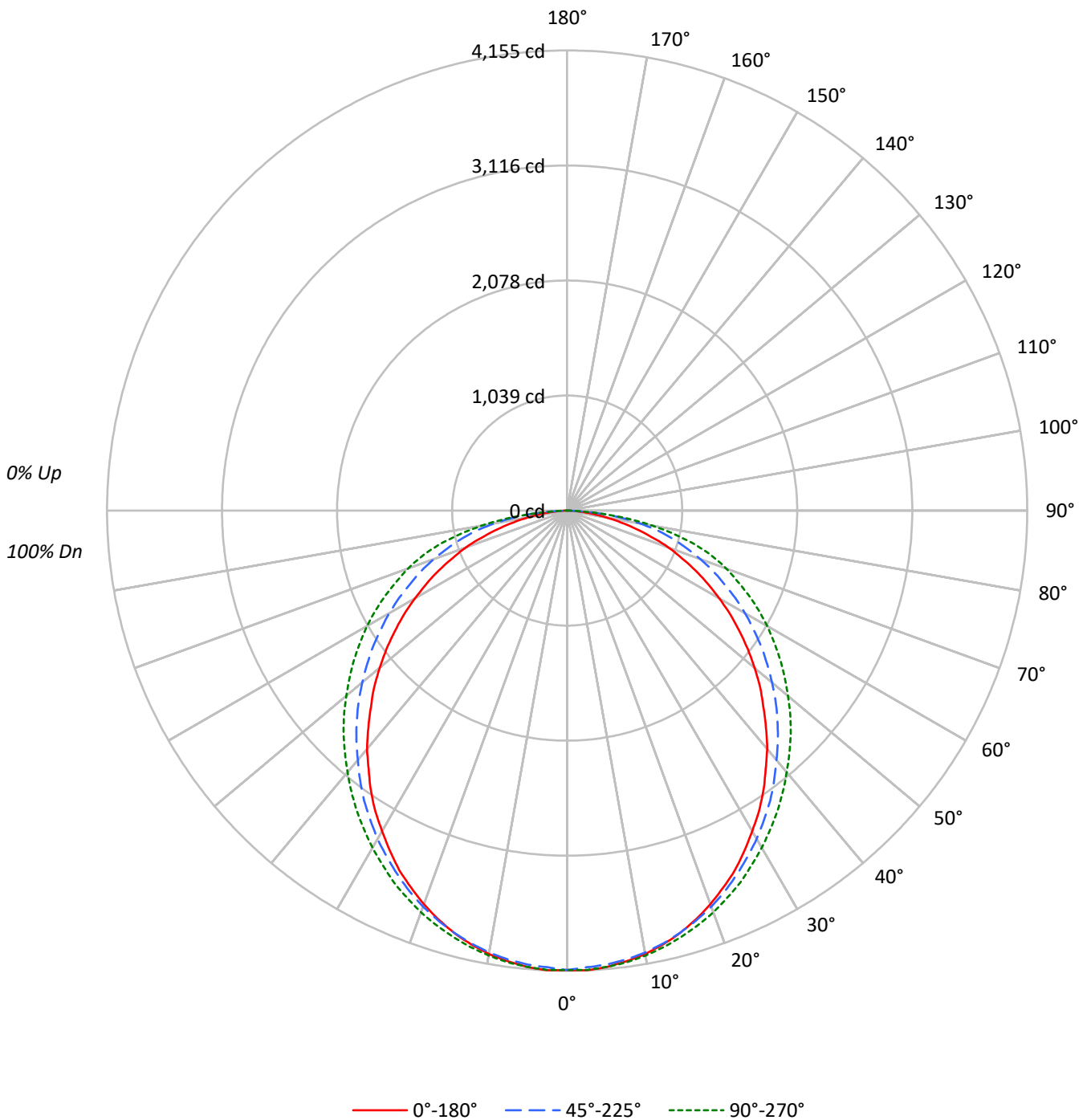
Input Watts (W): 87.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	108	103	99	95	105	101	97	93	97	93	90	93	90	87	89	87	85	83
2	98	89	82	76	95	88	81	75	84	78	74	81	76	72	78	74	70	68
3	89	78	70	63	87	77	69	63	74	67	61	71	65	60	68	63	59	57
4	82	69	60	53	79	68	59	53	65	58	52	63	57	51	61	55	51	48
5	75	62	53	46	73	61	52	46	58	51	45	56	50	44	55	49	44	42
6	69	56	46	40	67	55	46	40	53	45	39	51	44	39	49	43	39	37
7	64	50	41	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	38	31	26	37	30	25	36	30	25	36	30	25	23

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5582	5582	5582
5°	5585	5556	5585
10°	5554	5536	5573
15°	5498	5496	5550
20°	5416	5449	5527
25°	5321	5382	5500
30°	5192	5319	5461
35°	5075	5251	5438
40°	4937	5165	5417
45°	4768	5112	5433
50°	4625	5055	5449
55°	4454	5019	5510
60°	4270	4995	5611
65°	4069	4977	5755
70°	3830	5028	6021
75°	3368	5133	6262
80°	2810	5170	6041
85°	2007	4432	4491



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	392.2	3.3
10°-20°	1117.2	9.3
20°-30°	1675.9	14.0
30°-40°	2000.9	16.7
40°-50°	2072.6	17.3
50°-60°	1908.0	15.9
60°-70°	1539.1	12.8
70°-80°	1005.6	8.4
80°-90°	294.8	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°	3185.3	26.5
0°-40°	5186.2	43.2
0°-60°	9166.8	76.3
0°-90°	12006.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12006.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4149	4149	4149	4149	4149	
5°	4135	4132	4114	4137	4135	392
15°	3947	3947	3945	3984	3984	1112
25°	3584	3592	3625	3691	3705	1648
35°	3090	3117	3197	3284	3311	1930
45°	2506	2568	2686	2807	2855	1937
55°	1899	1980	2140	2297	2349	1699
65°	1278	1366	1563	1742	1808	1264
75°	648	770	987	1158	1204	691
85°	130	225	287	304	291	161
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4148.9	4148.9	4148.9	4148.9	4148.9
2.5°	4154.8	4148.9	4127.6	4152.8	4150.9
5°	4135.4	4131.5	4114.0	4137.3	4135.4
7.5°	4104.3	4102.4	4088.8	4114.0	4114.0
10°	4065.5	4061.7	4052.0	4081.1	4079.1
12.5°	4011.2	4009.3	4003.5	4038.4	4036.4
15°	3947.2	3947.2	3945.3	3984.1	3984.1
17.5°	3869.6	3871.6	3879.3	3923.9	3925.9
20°	3782.3	3790.1	3805.6	3856.1	3859.9
22.5°	3683.4	3698.9	3720.3	3776.5	3782.3
25°	3584.5	3592.3	3625.2	3691.2	3704.8
27.5°	3464.2	3483.6	3526.3	3594.2	3607.8
30°	3342.0	3369.2	3423.5	3493.3	3514.7
32.5°	3221.8	3245.1	3309.1	3388.6	3413.8
35°	3089.9	3117.0	3196.6	3283.9	3311.0
37.5°	2944.4	2987.1	3070.5	3171.4	3200.4
40°	2810.6	2849.4	2940.5	3053.0	3084.1
42.5°	2657.3	2705.8	2816.4	2930.8	2969.6
45°	2506.0	2568.1	2686.4	2806.7	2855.2
47.5°	2364.5	2414.9	2554.5	2690.3	2733.0
50°	2209.3	2267.5	2414.9	2558.4	2603.0
52.5°	2056.0	2125.9	2275.2	2426.5	2475.0
55°	1898.9	1980.4	2139.5	2296.6	2348.9
57.5°	1747.6	1829.1	1994.0	2160.8	2215.1
60°	1586.6	1673.9	1856.3	2017.3	2085.1
62.5°	1431.5	1518.8	1710.8	1885.4	1949.4
65°	1278.2	1365.5	1563.4	1741.8	1807.8
67.5°	1119.2	1214.2	1425.7	1598.3	1662.3
70°	973.7	1064.9	1278.2	1462.5	1530.4
72.5°	806.9	915.5	1132.8	1315.1	1379.1
75°	647.8	770.0	987.3	1158.0	1204.5
77.5°	500.4	622.6	839.9	967.9	997.0
80°	362.7	486.9	667.2	756.5	779.7
82.5°	234.7	362.7	483.0	543.1	550.9
85°	130.0	225.0	287.1	304.5	290.9
87.5°	46.6	85.3	83.4	67.9	54.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)