

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: P473899

Luminaire Tested: **24CZ2-125VHE-UNV-L840-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P473899  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-125VHE-UNV-L840-CD1-U  
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,RIBBED LENS  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12678.2 lumens  
Efficiency: N/A  
Efficacy: 144.4 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

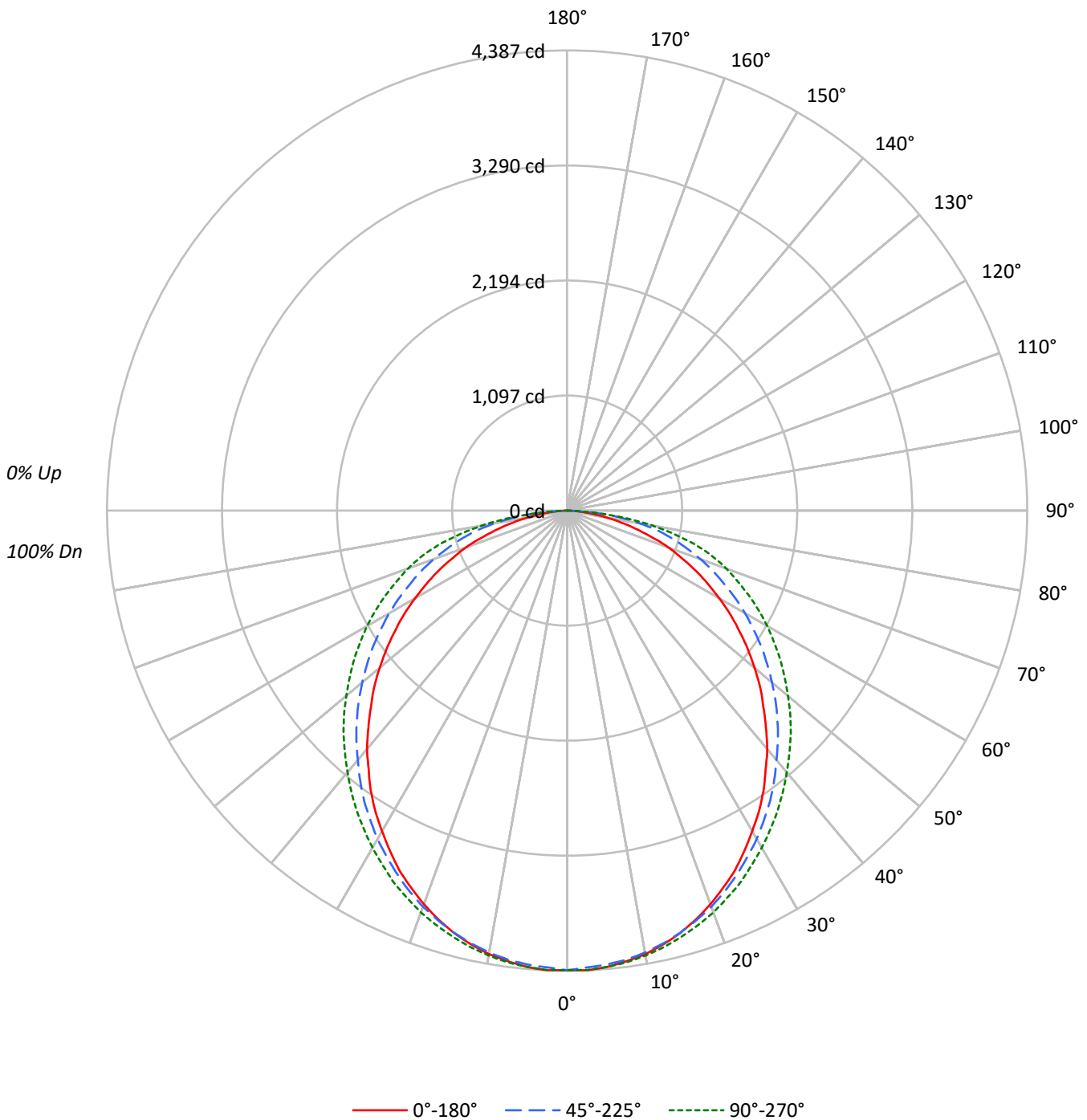
Input Watts (W): 87.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	5895	5895	5895
5°	5898	5867	5898
10°	5865	5846	5885
15°	5806	5803	5860
20°	5719	5754	5836
25°	5619	5683	5808
30°	5483	5617	5766
35°	5359	5544	5743
40°	5213	5454	5720
45°	5035	5398	5737
50°	4883	5338	5754
55°	4704	5300	5818
60°	4508	5275	5925
65°	4297	5256	6077
70°	4045	5310	6357
75°	3556	5420	6612
80°	2968	5459	6380
85°	2118	4679	4742



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	414.1	3.3
10°-20°	1179.7	9.3
20°-30°	1769.7	14.0
30°-40°	2112.9	16.7
40°-50°	2188.5	17.3
50°-60°	2014.8	15.9
60°-70°	1625.2	12.8
70°-80°	1061.9	8.4
80°-90°	311.3	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°	3363.5	26.5
0°-40°	5476.4	43.2
0°-60°	9679.7	76.3
0°-90°	12678.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12678.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4381	4381	4381	4381	4381	
5°	4367	4363	4344	4369	4367	414
15°	4168	4168	4166	4207	4207	1174
25°	3785	3793	3828	3898	3912	1740
35°	3263	3292	3375	3468	3496	2038
45°	2646	2712	2837	2964	3015	2046
55°	2005	2091	2259	2425	2480	1795
65°	1350	1442	1651	1839	1909	1335
75°	684	813	1042	1223	1272	730
85°	137	238	303	322	307	170
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4381.1	4381.1	4381.1	4381.1	4381.1
2.5°	4387.3	4381.1	4358.6	4385.2	4383.2
5°	4366.8	4362.7	4344.2	4368.8	4366.8
7.5°	4334.0	4332.0	4317.6	4344.2	4344.2
10°	4293.0	4288.9	4278.7	4309.4	4307.4
12.5°	4235.7	4233.6	4227.5	4264.4	4262.3
15°	4168.1	4168.1	4166.1	4207.0	4207.0
17.5°	4086.2	4088.2	4096.4	4143.5	4145.6
20°	3994.0	4002.2	4018.6	4071.8	4075.9
22.5°	3889.5	3905.9	3928.5	3987.9	3994.0
25°	3785.1	3793.3	3828.1	3897.7	3912.1
27.5°	3658.1	3678.6	3723.6	3795.3	3809.7
30°	3529.1	3557.7	3615.1	3688.8	3711.4
32.5°	3402.1	3426.6	3494.2	3578.2	3604.8
35°	3262.8	3291.5	3375.4	3467.6	3496.3
37.5°	3109.2	3154.2	3242.3	3348.8	3379.5
40°	2967.9	3008.8	3105.1	3223.9	3256.6
42.5°	2806.0	2857.2	2974.0	3094.8	3135.8
45°	2646.3	2711.8	2836.8	2963.8	3015.0
47.5°	2496.8	2550.0	2697.5	2840.9	2885.9
50°	2332.9	2394.4	2550.0	2701.6	2748.7
52.5°	2171.1	2244.8	2402.5	2562.3	2613.5
55°	2005.2	2091.2	2259.2	2425.1	2480.4
57.5°	1845.4	1931.5	2105.6	2281.7	2339.1
60°	1675.4	1767.6	1960.1	2130.1	2201.8
62.5°	1511.6	1603.7	1806.5	1990.9	2058.4
65°	1349.8	1441.9	1650.9	1839.3	1908.9
67.5°	1181.8	1282.2	1505.4	1687.7	1755.3
70°	1028.2	1124.5	1349.8	1544.3	1616.0
72.5°	852.1	966.8	1196.2	1388.7	1456.3
75°	684.1	813.1	1042.5	1222.8	1271.9
77.5°	528.4	657.5	886.9	1022.1	1052.8
80°	383.0	514.1	704.6	798.8	823.4
82.5°	247.8	383.0	510.0	573.5	581.7
85°	137.2	237.6	303.1	321.6	307.2
87.5°	49.2	90.1	88.1	71.7	57.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)