

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: P474049

Luminaire Tested: **24CZ2-125VHE-S-UNV-L835-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474049  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-125VHE-S-UNV-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

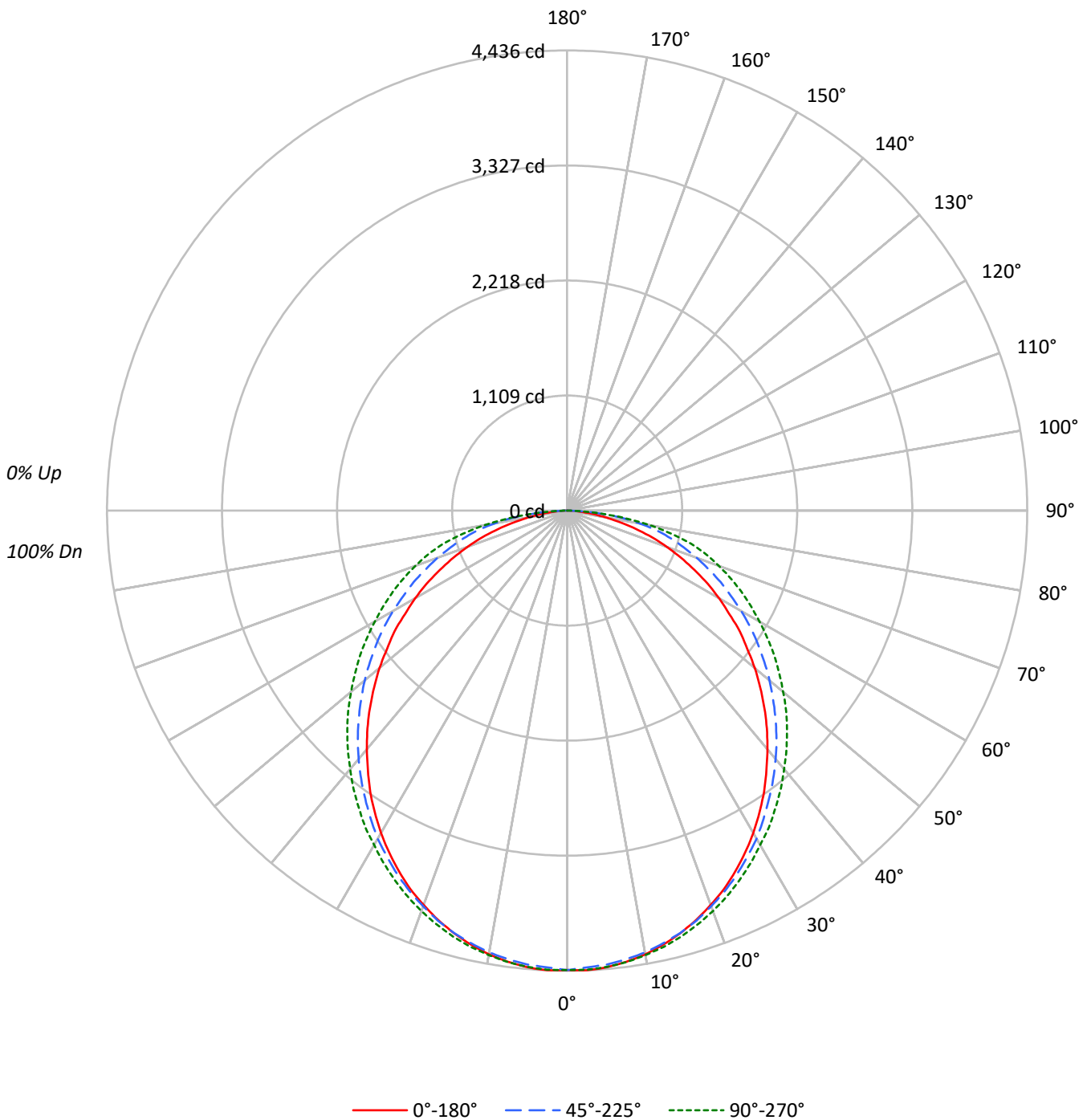
Lumens per Lamp: N/A  
Luminaire Lumens: 12691.0 lumens  
Efficiency: N/A  
Efficacy: 144.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.25 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct  
  
Input Watts (W): 87.8  
Input Voltage (V): 120  
Input Current (Ain): 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	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°	5960	5960	5960
5°	5969	5932	5963
10°	5935	5910	5944
15°	5874	5871	5921
20°	5793	5811	5883
25°	5697	5747	5837
30°	5577	5674	5781
35°	5437	5574	5749
40°	5276	5492	5715
45°	5117	5406	5704
50°	4944	5332	5690
55°	4768	5267	5721
60°	4549	5217	5761
65°	4307	5196	5900
70°	4018	5224	6109
75°	3576	5375	6437
80°	2923	5492	6283
85°	2059	4795	4892



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	418.8	3.3
10°-20°	1192.8	9.4
20°-30°	1787.9	14.1
30°-40°	2129.5	16.8
40°-50°	2195.7	17.3
50°-60°	2003.6	15.8
60°-70°	1602.1	12.6
70°-80°	1046.5	8.2
80°-90°	314.2	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°	3399.5	26.8
0°-40°	5528.9	43.6
0°-60°	9728.1	76.7
0°-90°	12691.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12691.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4430	4430	4430	4430	4430	
5°	4419	4411	4392	4419	4415	419
15°	4217	4219	4215	4250	4250	1189
25°	3838	3844	3871	3927	3932	1767
35°	3310	3333	3394	3479	3500	2068
45°	2689	2737	2841	2960	2998	2074
55°	2032	2091	2245	2393	2439	1810
65°	1353	1445	1632	1793	1853	1341
75°	688	803	1034	1201	1238	731
85°	133	240	311	317	317	169
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4429.7	4429.7	4429.7	4429.7	4429.7
2.5°	4436.0	4429.7	4406.8	4433.9	4429.7
5°	4419.3	4410.9	4392.2	4419.3	4415.1
7.5°	4385.9	4381.8	4363.0	4394.3	4390.1
10°	4344.2	4340.1	4325.5	4356.7	4350.5
12.5°	4285.9	4283.8	4273.4	4310.9	4306.7
15°	4217.1	4219.2	4215.0	4250.4	4250.4
17.5°	4137.9	4135.8	4144.1	4187.9	4183.7
20°	4046.1	4048.2	4058.7	4108.7	4108.7
22.5°	3950.3	3948.2	3971.1	4021.1	4025.3
25°	3837.7	3843.9	3871.0	3927.3	3931.5
27.5°	3716.8	3727.2	3760.6	3825.2	3831.4
30°	3589.6	3602.1	3652.2	3712.6	3721.0
32.5°	3450.0	3477.1	3522.9	3600.0	3620.9
35°	3310.3	3333.2	3393.7	3479.1	3500.0
37.5°	3156.0	3193.6	3262.3	3356.2	3383.3
40°	3003.9	3041.4	3126.8	3224.8	3254.0
42.5°	2849.6	2889.2	2987.2	3097.7	3128.9
45°	2689.1	2737.0	2841.3	2960.1	2997.6
47.5°	2524.4	2580.7	2693.3	2822.5	2864.2
50°	2361.8	2418.1	2547.3	2680.8	2718.3
52.5°	2186.7	2257.6	2395.2	2539.0	2576.5
55°	2032.5	2090.8	2245.1	2393.1	2438.9
57.5°	1851.1	1930.3	2095.0	2245.1	2288.9
60°	1690.6	1763.5	1938.6	2090.8	2140.8
62.5°	1528.0	1603.0	1778.1	1951.2	1997.0
65°	1352.9	1444.6	1632.2	1792.7	1853.2
67.5°	1186.1	1282.0	1473.8	1644.7	1707.3
70°	1021.4	1119.4	1327.9	1503.0	1553.0
72.5°	858.8	961.0	1177.8	1348.7	1407.1
75°	687.9	802.6	1033.9	1200.7	1238.2
77.5°	527.4	654.6	888.0	1000.6	1027.7
80°	377.3	517.0	708.8	790.1	810.9
82.5°	248.1	383.6	529.5	573.3	567.0
85°	133.4	239.7	310.6	316.9	316.9
87.5°	52.1	95.9	98.0	75.0	70.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)