

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: P474249

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

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P474249  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-125VHE-RDP-UNV-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, VERY HIGH EFFICIENCY,SMOOTH LENS W/ RDP  
INSERT  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8336.2 lumens  
Efficiency: N/A  
Efficacy: 94.9 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

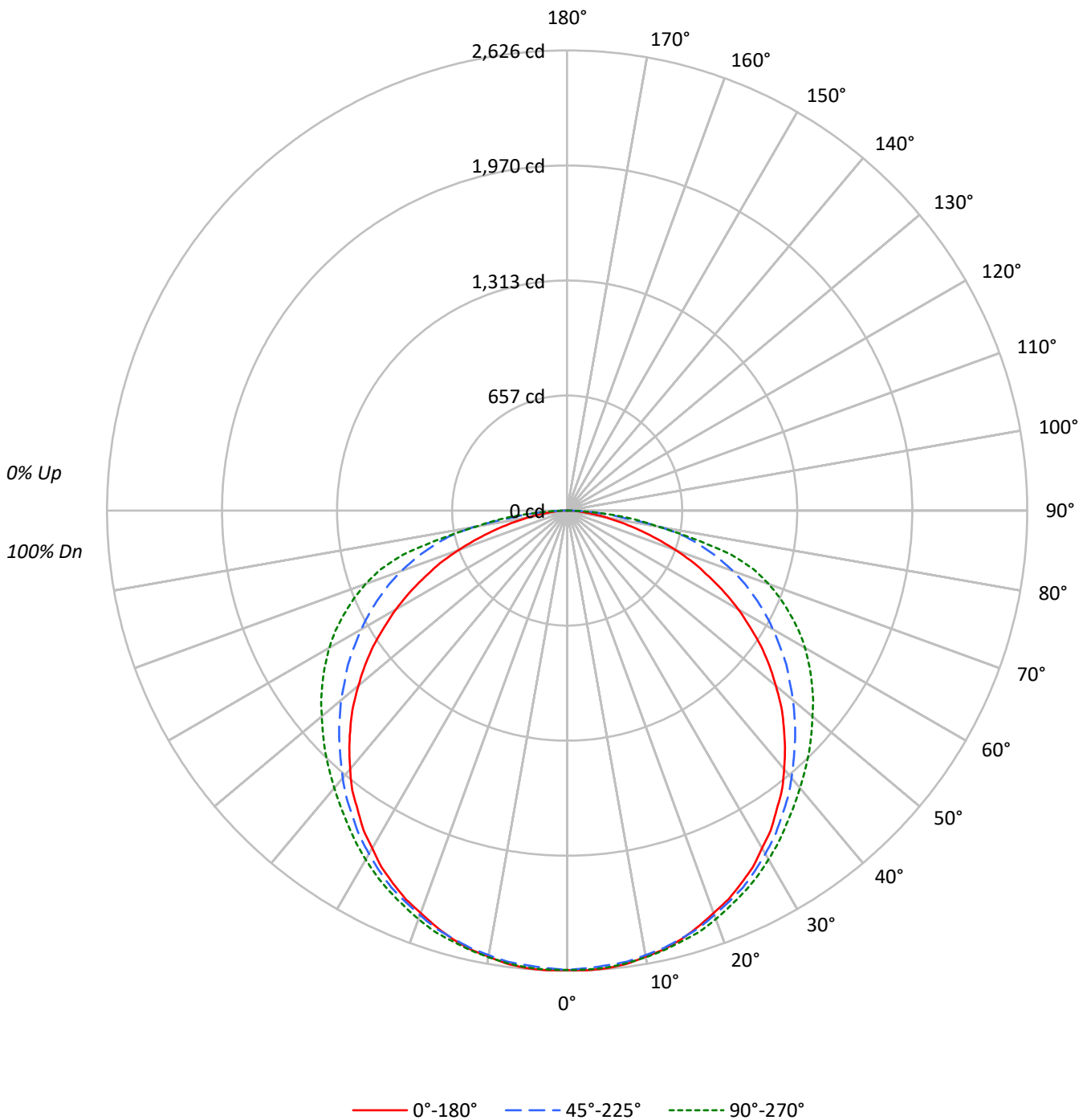
Input Watts (W): 87.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P474249

CATALOG NUMBER: 24CZ2-125VHE-RDP-UNV-L835-CD1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P474249

CATALOG NUMBER: 24CZ2-125VHE-RDP-UNV-L835-CD1-U

**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	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3527	3527	3527
5°	3541	3519	3535
10°	3531	3520	3537
15°	3525	3519	3542
20°	3499	3517	3552
25°	3487	3524	3560
30°	3456	3514	3572
35°	3423	3504	3586
40°	3385	3500	3631
45°	3328	3502	3713
50°	3254	3523	3826
55°	3172	3579	3996
60°	3038	3649	4217
65°	2844	3777	4476
70°	2586	3953	4814
75°	2192	4170	5031
80°	1731	4196	4068
85°	1277	3194	3577



TEST NUMBER: P474249

CATALOG NUMBER: 24CZ2-125VHE-RDP-UNV-L835-CD1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	248.7	3.0
10°-20°	715.7	8.6
20°-30°	1094.4	13.1
30°-40°	1337.8	16.0
40°-50°	1426.0	17.1
50°-60°	1363.4	16.4
60°-70°	1154.9	13.9
70°-80°	776.2	9.3
80°-90°	219.0	2.6
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°	2058.8	24.7
0°-40°	3396.7	40.7
0°-60°	6186.0	74.2
0°-90°	8336.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8336.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2622	2622	2622	2622	2622	
5°	2622	2618	2605	2618	2618	249
15°	2531	2531	2526	2547	2543	714
25°	2349	2357	2373	2394	2398	1082
35°	2084	2100	2134	2175	2183	1305
45°	1749	1778	1840	1919	1951	1349
55°	1352	1402	1526	1646	1704	1204
65°	893	984	1186	1344	1406	887
75°	422	575	802	939	968	452
85°	83	170	207	223	232	102
90°	0	0	0	0	0	



TEST NUMBER: P474249

CATALOG NUMBER: 24CZ2-125VHE-RDP-UNV-L835-CD1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2621.6	2621.6	2621.6	2621.6	2621.6
2.5°	2625.8	2625.8	2613.4	2621.6	2621.6
5°	2621.6	2617.5	2605.1	2617.5	2617.5
7.5°	2609.2	2605.1	2596.8	2609.2	2605.1
10°	2584.4	2584.4	2576.1	2588.5	2588.5
12.5°	2563.7	2559.6	2555.5	2572.0	2567.9
15°	2530.6	2530.6	2526.5	2547.2	2543.0
17.5°	2489.3	2493.4	2497.5	2514.1	2518.2
20°	2443.8	2452.0	2456.2	2481.0	2481.0
22.5°	2402.4	2406.5	2414.8	2439.6	2439.6
25°	2348.6	2356.9	2373.4	2394.1	2398.2
27.5°	2294.8	2299.0	2319.6	2348.6	2352.7
30°	2224.5	2236.9	2261.7	2294.8	2299.0
32.5°	2162.4	2174.8	2203.8	2236.9	2245.2
35°	2083.8	2100.4	2133.5	2174.8	2183.1
37.5°	2013.5	2025.9	2067.3	2112.8	2125.2
40°	1927.0	1951.4	1992.8	2046.6	2067.3
42.5°	1840.2	1865.0	1914.6	1984.5	2009.4
45°	1749.1	1778.1	1840.2	1918.8	1951.4
47.5°	1658.1	1691.2	1761.6	1852.6	1889.8
50°	1554.7	1596.1	1682.9	1786.4	1827.7
52.5°	1455.4	1505.1	1600.2	1716.0	1769.8
55°	1352.0	1401.6	1525.7	1645.7	1703.6
57.5°	1236.1	1302.3	1438.9	1575.4	1637.4
60°	1129.0	1190.6	1356.1	1505.1	1567.1
62.5°	1013.2	1095.9	1273.4	1430.6	1492.6
65°	893.2	984.2	1186.5	1343.7	1405.8
67.5°	785.6	884.9	1100.0	1256.8	1318.9
70°	657.4	781.5	1004.9	1161.7	1223.7
72.5°	537.4	673.9	905.6	1058.7	1116.6
75°	421.6	574.6	802.2	938.7	967.7
77.5°	314.4	475.3	694.6	752.5	731.8
80°	223.4	380.6	541.5	512.6	525.0
82.5°	144.8	289.6	335.1	380.6	392.6
85°	82.7	169.6	206.9	223.4	231.7
87.5°	37.2	62.1	82.7	82.7	78.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)