

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: P473816

Luminaire Tested: **24CZ2-55-UNV-L835-CD1-U**

Issue Date: 01/28/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P473816  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 01/28/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-55-UNV-L835-CD1-U  
Description: 2'X4' TROFFER LED MODULE, RIBBED LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5453.9 lumens  
Efficiency: N/A  
Efficacy: 126.8 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

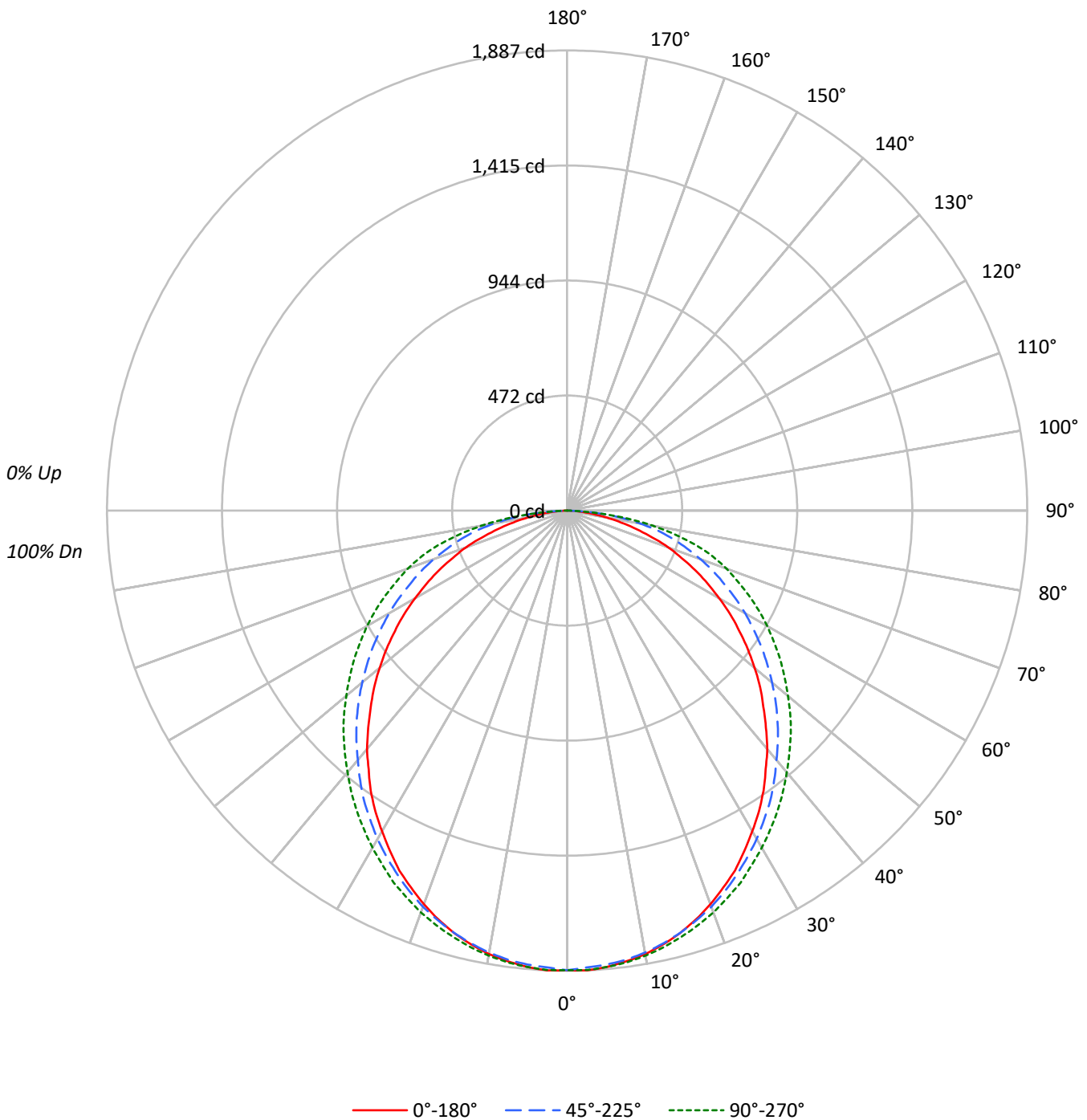
Input Watts (W): 43  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2536	2536	2536
5°	2537	2524	2537
10°	2523	2515	2532
15°	2498	2496	2521
20°	2460	2475	2511
25°	2417	2445	2498
30°	2359	2416	2481
35°	2305	2385	2470
40°	2242	2346	2461
45°	2166	2322	2468
50°	2101	2296	2475
55°	2023	2280	2503
60°	1939	2269	2549
65°	1848	2261	2614
70°	1740	2284	2735
75°	1530	2332	2845
80°	1277	2349	2744
85°	911	2013	2041



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	178.2	3.3
10°-20°	507.5	9.3
20°-30°	761.3	14.0
30°-40°	908.9	16.7
40°-50°	941.5	17.3
50°-60°	866.7	15.9
60°-70°	699.1	12.8
70°-80°	456.8	8.4
80°-90°	133.9	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°	1446.9	26.5
0°-40°	2355.8	43.2
0°-60°	4164.0	76.3
0°-90°	5453.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5453.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1885	1885	1885	1885	1885	
5°	1878	1877	1869	1879	1878	178
15°	1793	1793	1792	1810	1810	505
25°	1628	1632	1647	1677	1683	749
35°	1404	1416	1452	1492	1504	877
45°	1138	1167	1220	1275	1297	880
55°	863	900	972	1043	1067	772
65°	581	620	710	791	821	574
75°	294	350	448	526	547	314
85°	59	102	130	138	132	73
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1884.7	1884.7	1884.7	1884.7	1884.7
2.5°	1887.3	1884.7	1875.0	1886.4	1885.6
5°	1878.5	1876.7	1868.8	1879.4	1878.5
7.5°	1864.4	1863.5	1857.4	1868.8	1868.8
10°	1846.8	1845.0	1840.6	1853.8	1853.0
12.5°	1822.1	1821.2	1818.6	1834.4	1833.6
15°	1793.0	1793.0	1792.2	1809.8	1809.8
17.5°	1757.8	1758.7	1762.2	1782.5	1783.3
20°	1718.1	1721.7	1728.7	1751.6	1753.4
22.5°	1673.2	1680.3	1689.9	1715.5	1718.1
25°	1628.3	1631.8	1646.8	1676.7	1682.9
27.5°	1573.6	1582.5	1601.8	1632.7	1638.8
30°	1518.1	1530.5	1555.1	1586.9	1596.6
32.5°	1463.5	1474.1	1503.2	1539.3	1550.7
35°	1403.6	1415.9	1452.1	1491.7	1504.0
37.5°	1337.5	1356.9	1394.8	1440.6	1453.8
40°	1276.7	1294.3	1335.7	1386.8	1400.9
42.5°	1207.1	1229.1	1279.4	1331.3	1349.0
45°	1138.4	1166.6	1220.3	1274.9	1297.0
47.5°	1074.1	1097.0	1160.4	1222.1	1241.5
50°	1003.6	1030.0	1097.0	1162.2	1182.4
52.5°	934.0	965.7	1033.5	1102.3	1124.3
55°	862.6	899.6	971.9	1043.2	1067.0
57.5°	793.9	830.9	905.8	981.5	1006.2
60°	720.7	760.4	843.2	916.3	947.2
62.5°	650.3	689.9	777.1	856.4	885.5
65°	580.6	620.3	710.2	791.2	821.2
67.5°	508.4	551.6	647.6	726.0	755.1
70°	442.3	483.7	580.6	664.3	695.2
72.5°	366.5	415.9	514.6	597.4	626.5
75°	294.3	349.8	448.5	526.0	547.2
77.5°	227.3	282.8	381.5	439.7	452.9
80°	164.8	221.2	303.1	343.6	354.2
82.5°	106.6	164.8	219.4	246.7	250.2
85°	59.0	102.2	130.4	138.3	132.2
87.5°	21.1	38.8	37.9	30.8	24.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)