

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: P475357

Luminaire Tested: **14CZ2-48HE-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475357  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-48HE-UNV-L835-CD1-U  
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4879.8 lumens  
Efficiency: N/A  
Efficacy: 136.7 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

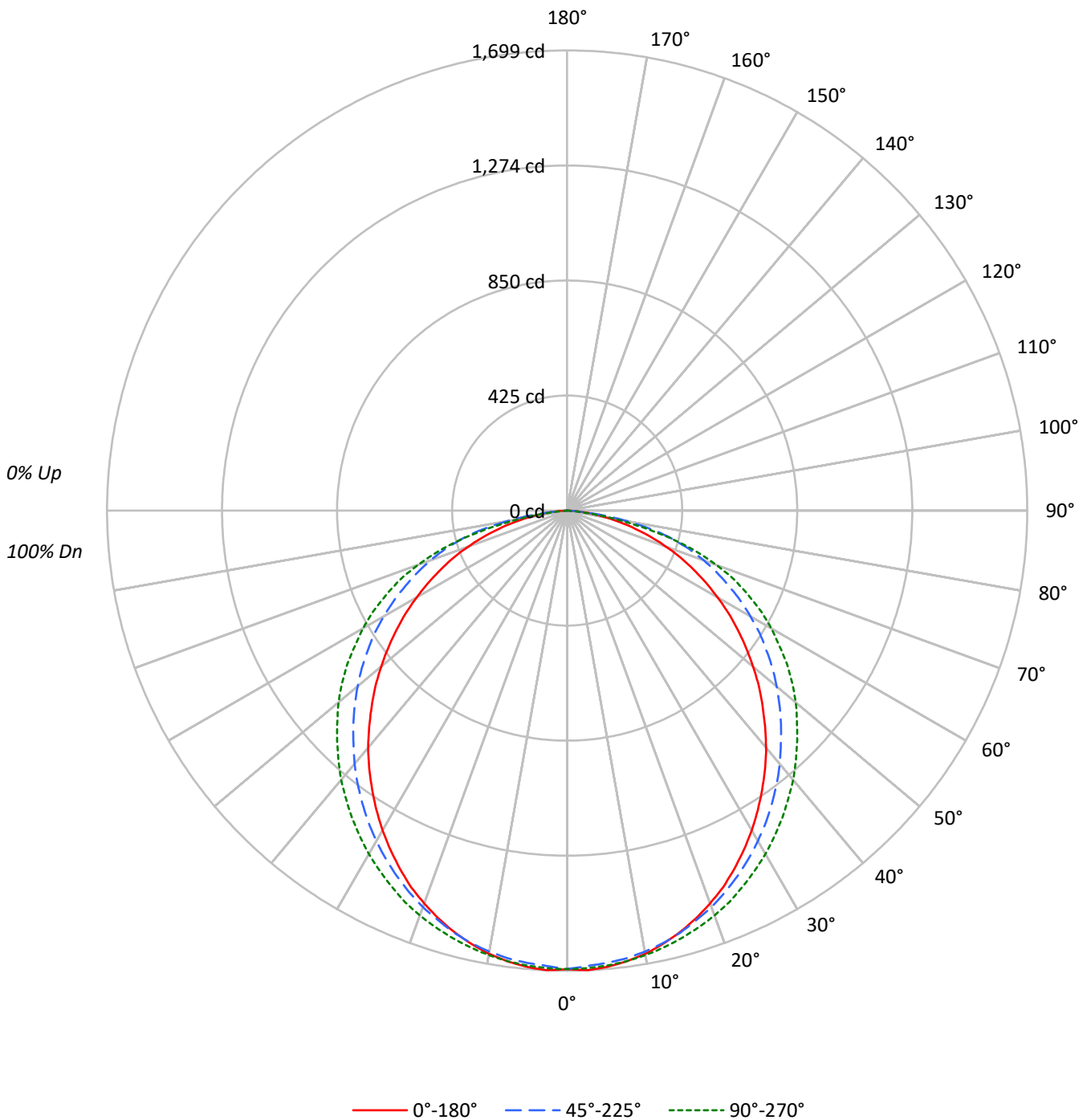
Input Watts (W): 35.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	46	39	35	33
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24

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

	0°	45°	90°
0°	4556	4556	4556
5°	4568	4529	4555
10°	4541	4518	4554
15°	4488	4495	4552
20°	4420	4462	4555
25°	4335	4420	4551
30°	4237	4376	4549
35°	4125	4331	4549
40°	4014	4290	4560
45°	3882	4249	4570
50°	3751	4230	4613
55°	3609	4211	4652
60°	3449	4206	4686
65°	3274	4195	4695
70°	3049	4219	4605
75°	2702	4164	4131
80°	2267	3484	2813
85°	1590	1362	327



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	160.1	3.3
10°-20°	457.1	9.4
20°-30°	688.8	14.1
30°-40°	826.8	16.9
40°-50°	860.7	17.6
50°-60°	795.4	16.3
60°-70°	637.0	13.1
70°-80°	381.2	7.8
80°-90°	72.7	1.5
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°	1306.1	26.8
0°-40°	2132.9	43.7
0°-60°	3789.0	77.6
0°-90°	4879.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4879.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1693	1693	1693	1693	1693	
5°	1691	1687	1676	1689	1686	160
15°	1611	1611	1614	1634	1634	454
25°	1460	1468	1488	1526	1533	672
35°	1256	1274	1318	1371	1385	786
45°	1020	1050	1117	1183	1201	788
55°	769	811	898	967	992	688
65°	514	567	659	723	737	510
75°	260	325	400	406	397	278
85°	52	75	44	18	11	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1692.9	1692.9	1692.9	1692.9	1692.9
2.5°	1698.6	1693.7	1683.1	1693.7	1691.2
5°	1691.2	1687.2	1676.5	1688.8	1686.3
7.5°	1679.0	1675.7	1667.5	1680.6	1678.2
10°	1661.8	1659.4	1653.6	1668.4	1666.7
12.5°	1638.1	1638.9	1635.7	1653.6	1652.0
15°	1611.1	1611.1	1613.6	1634.0	1634.0
17.5°	1579.3	1580.9	1585.8	1612.8	1613.6
20°	1543.3	1547.4	1558.0	1585.8	1590.7
22.5°	1504.9	1509.8	1524.5	1557.2	1564.5
25°	1459.9	1468.1	1488.5	1526.1	1532.7
27.5°	1412.5	1424.8	1450.1	1491.0	1499.1
30°	1363.5	1376.5	1408.4	1452.6	1464.0
32.5°	1310.3	1327.5	1365.9	1412.5	1425.6
35°	1255.6	1274.4	1318.5	1370.8	1384.7
37.5°	1200.8	1221.2	1271.1	1327.5	1341.4
40°	1142.8	1166.5	1221.2	1279.3	1298.1
42.5°	1081.4	1107.6	1168.1	1231.9	1249.8
45°	1020.1	1050.4	1116.6	1182.8	1200.8
47.5°	960.5	991.5	1063.5	1132.1	1150.9
50°	895.9	931.9	1010.3	1078.2	1101.9
52.5°	833.0	873.0	955.6	1024.2	1047.9
55°	769.2	810.9	897.5	967.0	991.5
57.5°	707.1	751.2	842.8	911.4	928.6
60°	640.9	689.1	781.5	850.9	870.6
62.5°	578.7	628.6	721.8	788.8	807.6
65°	514.2	567.3	658.8	723.4	737.3
67.5°	453.7	506.8	599.2	654.8	668.6
70°	387.5	446.3	536.2	583.6	585.3
72.5°	324.5	384.2	471.7	501.9	497.8
75°	259.9	325.3	400.5	406.3	397.3
77.5°	201.9	267.3	318.8	300.8	282.8
80°	146.3	210.1	224.8	197.0	181.5
82.5°	96.5	147.1	135.7	97.3	83.4
85°	51.5	75.2	44.1	18.0	10.6
87.5°	19.6	13.1	4.9	4.1	3.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)