

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: P475354

Luminaire Tested: **14CZ2-39-UNV-L835-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475354  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39-UNV-L835-CD1-U  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS  
Light Source: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

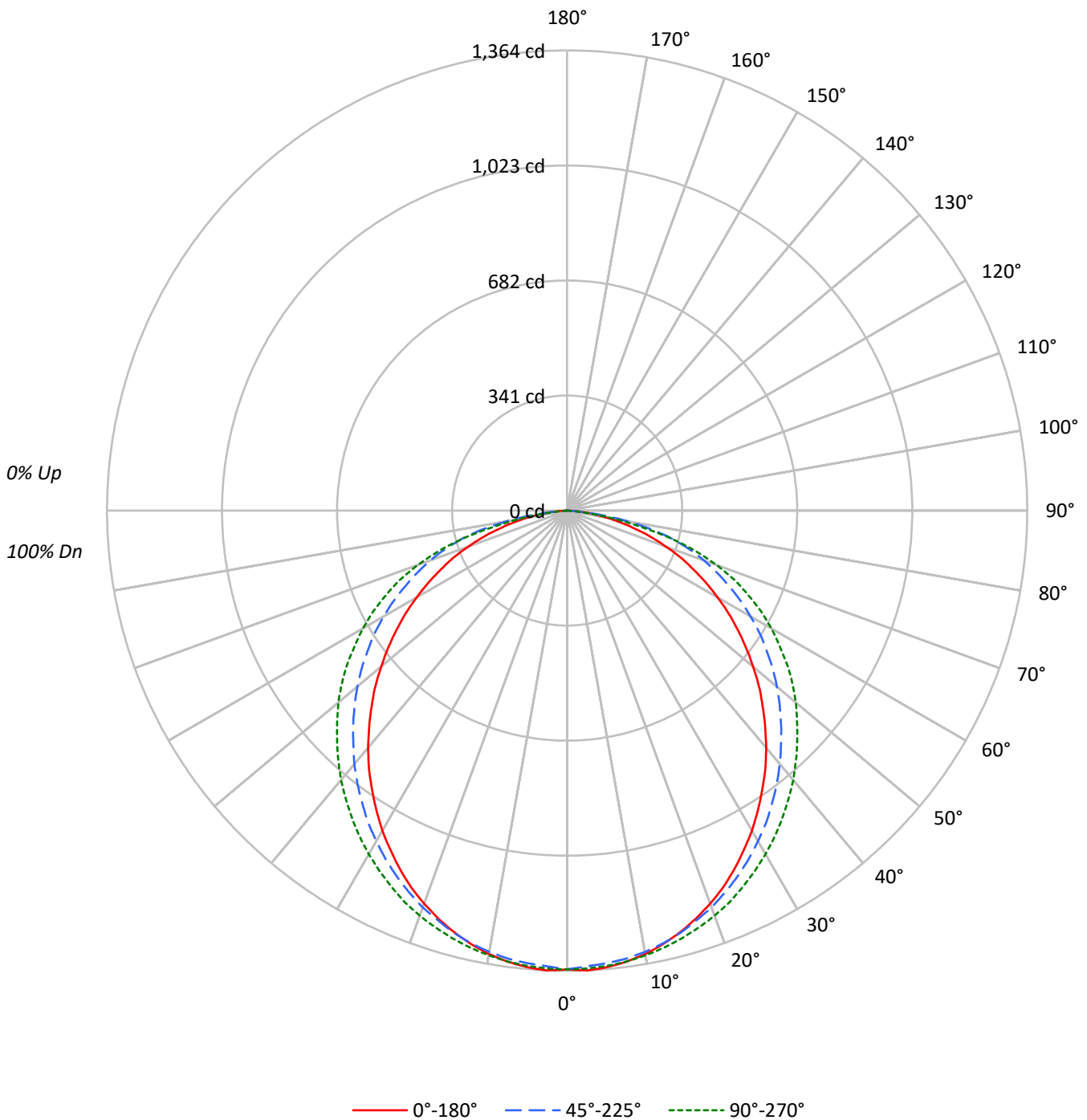
Lumens per Lamp: N/A  
Luminaire Lumens: 3919.8 lumens  
Efficiency: N/A  
Efficacy: 131.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 29.8  
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	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°	3659	3659	3659
5°	3670	3638	3659
10°	3648	3630	3658
15°	3606	3611	3657
20°	3550	3584	3659
25°	3482	3550	3656
30°	3403	3516	3654
35°	3313	3479	3654
40°	3224	3446	3663
45°	3119	3413	3671
50°	3013	3398	3705
55°	2899	3383	3737
60°	2771	3378	3764
65°	2630	3370	3771
70°	2448	3389	3699
75°	2171	3345	3318
80°	1821	2799	2259
85°	1278	1096	262



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.6	3.3
10°-20°	367.2	9.4
20°-30°	553.3	14.1
30°-40°	664.1	16.9
40°-50°	691.4	17.6
50°-60°	638.9	16.3
60°-70°	511.7	13.1
70°-80°	306.2	7.8
80°-90°	58.4	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°	1049.1	26.8
0°-40°	1713.3	43.7
0°-60°	3043.6	77.6
0°-90°	3919.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3919.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1360	1360	1360	1360	1360	
5°	1358	1355	1347	1357	1355	129
15°	1294	1294	1296	1313	1313	365
25°	1173	1179	1196	1226	1231	540
35°	1009	1024	1059	1101	1112	631
45°	820	844	897	950	965	633
55°	618	651	721	777	796	553
65°	413	456	529	581	592	409
75°	209	261	322	326	319	223
85°	41	60	36	14	8	53
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1359.9	1359.9	1359.9	1359.9	1359.9
2.5°	1364.4	1360.5	1352.0	1360.5	1358.5
5°	1358.5	1355.3	1346.7	1356.6	1354.6
7.5°	1348.7	1346.1	1339.5	1350.0	1348.0
10°	1334.9	1332.9	1328.3	1340.2	1338.8
12.5°	1315.9	1316.5	1313.9	1328.3	1327.0
15°	1294.2	1294.2	1296.2	1312.6	1312.6
17.5°	1268.6	1269.9	1273.8	1295.5	1296.2
20°	1239.7	1243.0	1251.5	1273.8	1277.8
22.5°	1208.8	1212.8	1224.6	1250.9	1256.8
25°	1172.7	1179.3	1195.7	1225.9	1231.2
27.5°	1134.6	1144.5	1164.8	1197.7	1204.2
30°	1095.2	1105.7	1131.4	1166.8	1176.0
32.5°	1052.6	1066.3	1097.2	1134.6	1145.1
35°	1008.6	1023.7	1059.1	1101.1	1112.3
37.5°	964.6	981.0	1021.0	1066.3	1077.5
40°	917.9	937.0	981.0	1027.6	1042.7
42.5°	868.7	889.7	938.3	989.5	1004.0
45°	819.5	843.8	896.9	950.1	964.6
47.5°	771.5	796.5	854.3	909.4	924.5
50°	719.7	748.5	811.6	866.1	885.1
52.5°	669.1	701.3	767.6	822.7	841.8
55°	617.9	651.4	721.0	776.8	796.5
57.5°	568.0	603.4	677.0	732.1	745.9
60°	514.8	553.5	627.7	683.5	699.3
62.5°	464.9	504.9	579.8	633.6	648.7
65°	413.0	455.7	529.2	581.1	592.3
67.5°	364.4	407.1	481.3	525.9	537.1
70°	311.2	358.5	430.7	468.8	470.1
72.5°	260.7	308.6	378.9	403.2	399.9
75°	208.8	261.3	321.7	326.3	319.1
77.5°	162.2	214.7	256.1	241.6	227.2
80°	117.5	168.8	180.6	158.2	145.8
82.5°	77.5	118.2	109.0	78.1	67.0
85°	41.4	60.4	35.5	14.4	8.5
87.5°	15.8	10.5	3.9	3.3	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)