

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: P475381

Luminaire Tested: **14CZ2-39-S-UNV-L830-CD1-U**

Issue Date: 02/10/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P475381  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 02/10/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-39-S-UNV-L830-CD1-U  
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

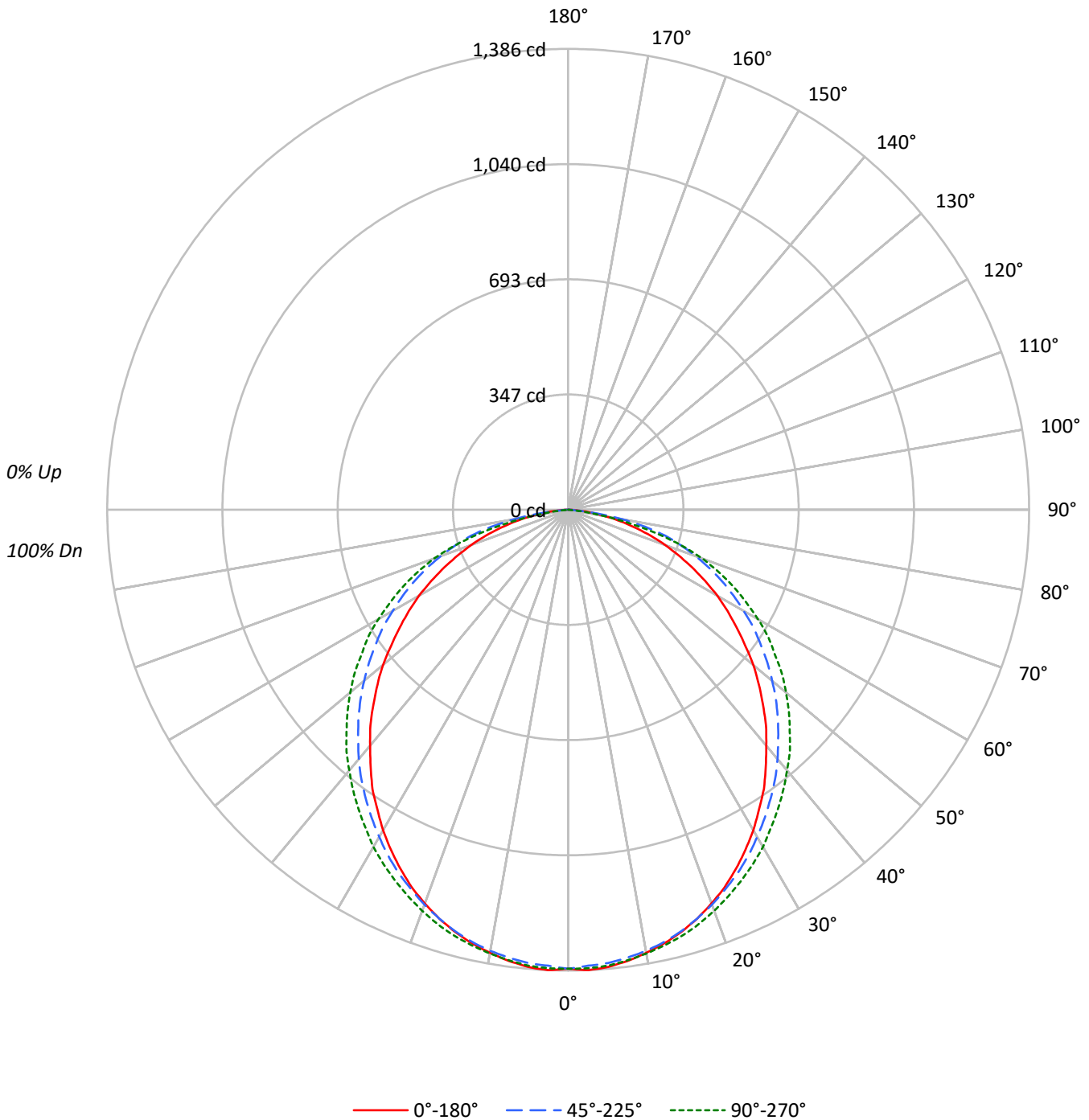
Lumens per Lamp: N/A  
Luminaire Lumens: 3858.9 lumens  
Efficiency: N/A  
Efficacy: 129.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.36  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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	100	96	106	102	98	94	98	94	91	94	91	89	90	88	86	84
2	99	91	84	78	96	89	82	77	85	80	75	82	77	74	79	75	72	70
3	90	79	71	65	88	78	70	64	75	68	63	72	67	62	70	65	61	59
4	82	70	61	55	80	69	61	54	66	59	54	64	58	53	62	57	52	50
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43
6	70	57	48	41	68	56	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3715	3715	3715
5°	3729	3698	3719
10°	3698	3682	3703
15°	3662	3657	3695
20°	3609	3620	3676
25°	3540	3581	3656
30°	3458	3530	3639
35°	3370	3484	3612
40°	3256	3440	3596
45°	3151	3394	3586
50°	3044	3352	3580
55°	2902	3311	3557
60°	2786	3277	3548
65°	2618	3259	3494
70°	2441	3204	3371
75°	2157	3145	2843
80°	1743	2554	1683
85°	1257	719	179



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	130.5	3.4
10°-20°	371.7	9.6
20°-30°	557.7	14.5
30°-40°	664.8	17.2
40°-50°	686.5	17.8
50°-60°	625.2	16.2
60°-70°	489.8	12.7
70°-80°	283.4	7.3
80°-90°	49.3	1.3
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°	1060.0	27.5
0°-40°	1724.7	44.7
0°-60°	3036.4	78.7
0°-90°	3858.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3858.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1380	1380	1380	1380	1380	
5°	1380	1377	1369	1379	1377	131
15°	1315	1313	1313	1326	1326	370
25°	1192	1196	1206	1229	1231	549
35°	1026	1035	1061	1094	1099	640
45°	828	849	892	933	942	639
55°	618	650	706	750	758	554
65°	411	448	512	545	549	407
75°	208	252	302	293	273	221
85°	41	54	23	8	6	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1380.5	1380.5	1380.5	1380.5	1380.5
2.5°	1386.3	1380.5	1372.8	1380.5	1380.5
5°	1380.5	1376.6	1368.9	1378.6	1376.6
7.5°	1368.9	1365.0	1359.2	1368.9	1366.9
10°	1353.4	1351.4	1347.6	1359.2	1355.3
12.5°	1335.9	1334.0	1332.0	1343.7	1341.7
15°	1314.6	1312.7	1312.7	1326.2	1326.2
17.5°	1289.4	1289.4	1289.4	1306.8	1306.8
20°	1260.3	1260.3	1264.2	1283.6	1283.6
22.5°	1229.3	1229.3	1235.1	1256.4	1258.4
25°	1192.4	1196.3	1206.0	1229.3	1231.2
27.5°	1153.7	1159.5	1173.0	1198.3	1202.1
30°	1112.9	1118.8	1136.2	1165.3	1171.1
32.5°	1068.3	1078.0	1099.4	1128.5	1134.3
35°	1025.7	1035.4	1060.6	1093.6	1099.4
37.5°	975.3	990.8	1021.8	1052.8	1062.5
40°	926.8	944.3	979.2	1016.0	1023.8
42.5°	880.3	895.8	934.6	975.3	986.9
45°	827.9	849.2	891.9	932.6	942.3
47.5°	777.5	798.8	847.3	890.0	899.7
50°	727.1	748.4	800.8	843.4	855.1
52.5°	670.9	701.9	754.2	796.9	810.5
55°	618.5	649.5	705.8	750.4	758.1
57.5°	568.1	599.1	661.2	701.9	713.5
60°	517.7	548.7	608.8	649.5	659.2
62.5°	463.4	498.3	560.3	595.2	603.0
65°	411.1	447.9	511.9	544.8	548.7
67.5°	358.7	397.5	459.5	486.7	490.5
70°	310.2	349.0	407.2	432.4	428.5
72.5°	259.8	298.6	354.8	368.4	356.8
75°	207.5	252.1	302.5	292.8	273.4
77.5°	160.9	203.6	236.5	207.5	192.0
80°	112.5	157.1	164.8	128.0	108.6
82.5°	73.7	110.5	89.2	54.3	48.5
85°	40.7	54.3	23.3	7.8	5.8
87.5°	13.6	7.8	3.9	1.9	1.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)