

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: P271913

Luminaire Tested: **14CZ2-44-UNV-L930-CD1-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P271913  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-49)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-44-UNV-L930-CD1-U  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 90CRI  
Light Source: (112) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

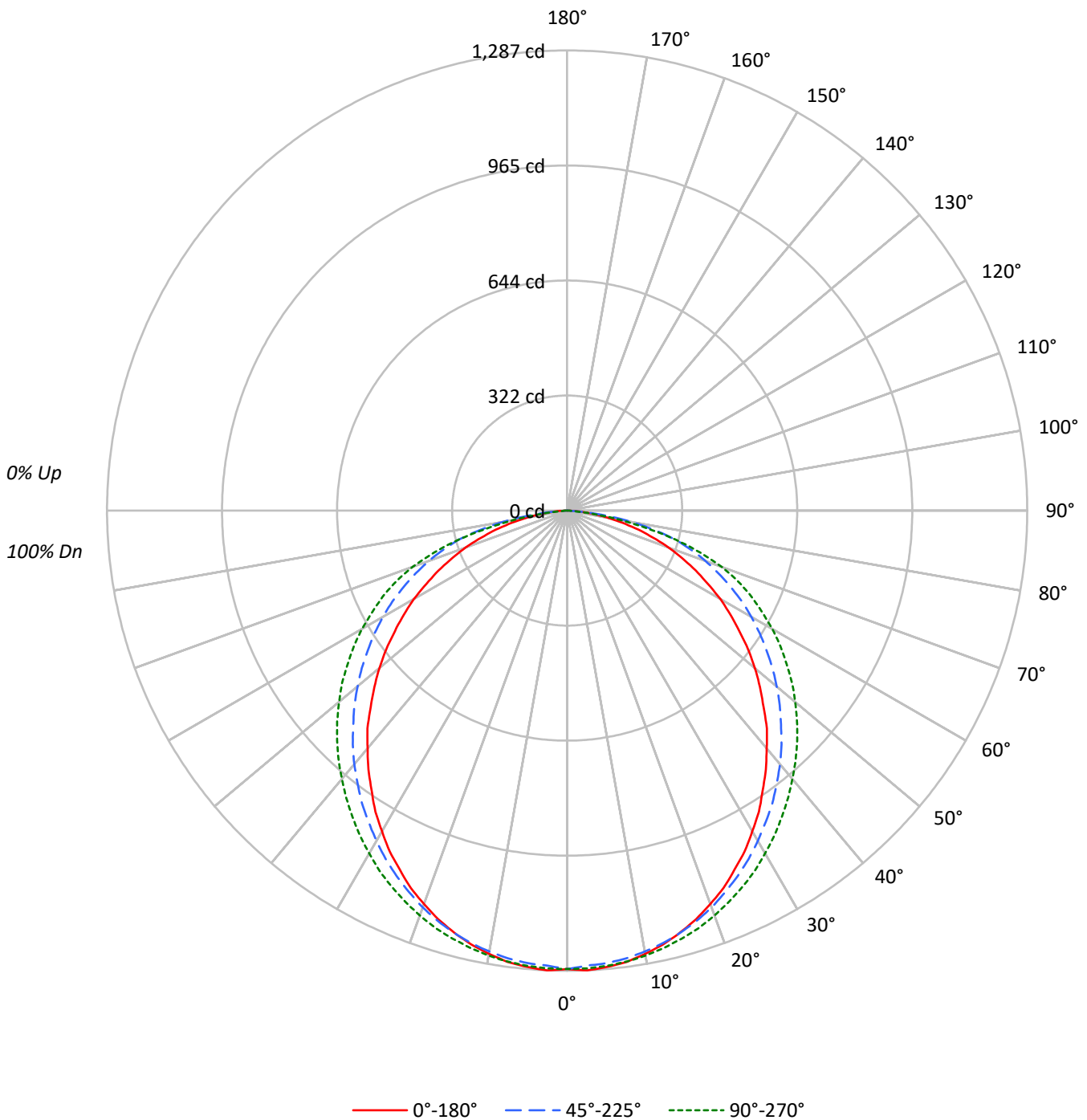
Lumens per Lamp: N/A  
Luminaire Lumens: 3722.0 lumens  
Efficiency: N/A  
Efficacy: 97.2 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 38.3  
Input Voltage (V): NR  
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	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24

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

	0°	45°	90°
0°	3450	3450	3450
5°	3461	3432	3452
10°	3440	3422	3454
15°	3404	3406	3452
20°	3353	3382	3451
25°	3290	3349	3447
30°	3219	3314	3440
35°	3133	3285	3438
40°	3049	3254	3443
45°	2956	3218	3462
50°	2870	3203	3485
55°	2761	3193	3516
60°	2662	3198	3564
65°	2526	3208	3620
70°	2371	3232	3618
75°	2149	3262	3270
80°	1762	2817	2328
85°	1306	1334	537



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	121.3	3.3
10°-20°	346.6	9.3
20°-30°	522.1	14.0
30°-40°	626.6	16.8
40°-50°	653.0	17.5
50°-60°	604.6	16.2
60°-70°	488.5	13.1
70°-80°	297.8	8.0
80°-90°	61.5	1.7
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°	990.1	26.6
0°-40°	1616.6	43.4
0°-60°	2874.2	77.2
0°-90°	3722.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3722.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1282	1282	1282	1282	1282	
5°	1281	1278	1271	1280	1278	122
15°	1222	1222	1222	1239	1239	344
25°	1108	1115	1128	1156	1161	511
35°	954	968	1000	1037	1046	597
45°	777	800	846	893	910	600
55°	588	619	680	734	749	527
65°	397	436	504	554	568	392
75°	207	252	314	319	314	217
85°	42	63	43	24	17	52
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1282.2	1282.2	1282.2	1282.2	1282.2
2.5°	1287.2	1283.1	1273.9	1283.1	1281.4
5°	1281.4	1278.1	1270.6	1279.8	1278.1
7.5°	1273.1	1269.8	1263.2	1273.9	1272.3
10°	1259.0	1257.3	1252.4	1264.8	1264.0
12.5°	1242.4	1241.6	1239.1	1253.2	1252.4
15°	1221.7	1222.5	1222.5	1239.1	1239.1
17.5°	1198.4	1200.1	1203.4	1221.7	1224.1
20°	1171.0	1174.4	1181.0	1201.7	1205.1
22.5°	1142.8	1145.3	1155.3	1180.2	1183.5
25°	1108.0	1114.6	1127.9	1156.1	1161.1
27.5°	1074.8	1080.6	1098.8	1127.9	1136.2
30°	1035.8	1044.9	1066.5	1098.0	1107.1
32.5°	998.4	1008.4	1033.3	1069.8	1078.1
35°	953.6	968.5	1000.1	1036.6	1046.5
37.5°	912.9	927.0	962.7	1002.6	1014.2
40°	868.1	885.5	926.2	968.5	980.1
42.5°	826.6	843.2	887.2	930.4	946.1
45°	776.8	800.1	845.7	893.0	909.6
47.5°	731.2	754.4	806.7	857.3	872.3
50°	685.5	710.4	765.2	817.5	832.4
52.5°	638.2	664.8	723.7	776.0	793.4
55°	588.4	619.1	680.5	733.7	749.4
57.5°	541.1	572.7	638.2	692.2	707.9
60°	494.6	527.0	594.2	645.7	662.3
62.5°	443.2	481.4	551.1	601.7	614.1
65°	396.7	435.7	503.8	554.4	568.5
67.5°	347.7	390.1	458.1	504.6	517.9
70°	301.3	345.3	410.8	454.0	459.8
72.5°	251.5	296.3	362.7	390.1	390.1
75°	206.7	252.3	313.7	318.7	314.5
77.5°	157.7	208.3	248.1	238.2	228.2
80°	113.7	163.5	181.8	163.5	150.2
82.5°	76.4	118.7	109.6	87.1	77.2
85°	42.3	63.1	43.2	24.1	17.4
87.5°	15.8	14.1	4.1	4.1	4.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)