

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: P271912

Luminaire Tested: **14CZ2-39-UNV-L950-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: P271912  
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: 14CZ2-39-UNV-L950-CD1-U  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 90CRI  
Light Source: (112) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

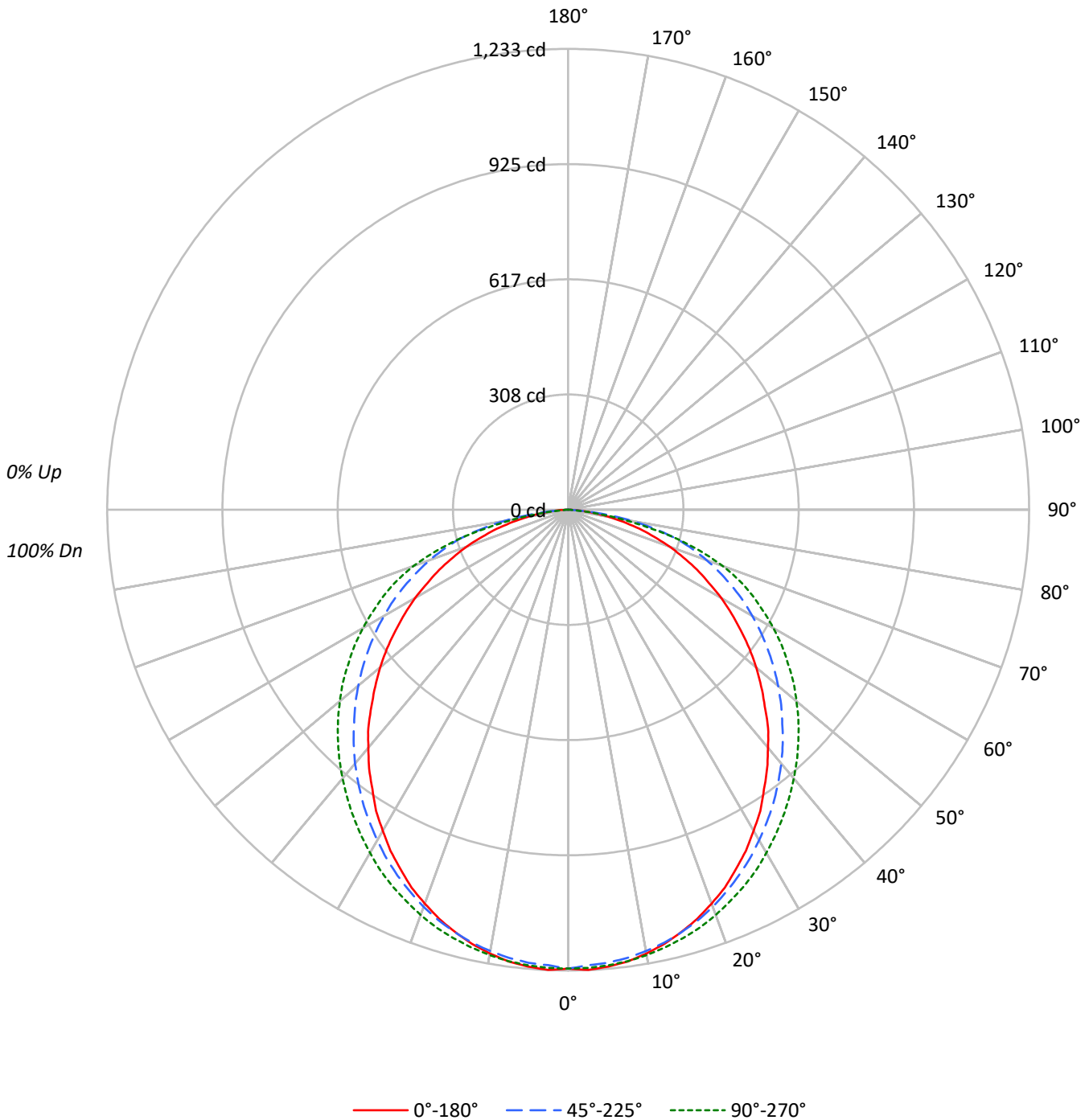
Lumens per Lamp: N/A  
Luminaire Lumens: 3564.0 lumens  
Efficiency: N/A  
Efficacy: 110.3 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 32.3  
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°	3304	3304	3304
5°	3314	3287	3306
10°	3294	3277	3307
15°	3259	3261	3305
20°	3211	3239	3304
25°	3150	3207	3301
30°	3082	3173	3294
35°	3000	3146	3292
40°	2920	3116	3297
45°	2831	3082	3315
50°	2748	3067	3337
55°	2643	3058	3367
60°	2549	3062	3413
65°	2419	3072	3466
70°	2270	3095	3464
75°	2058	3123	3132
80°	1688	2696	2228
85°	1250	1275	516



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	116.2	3.3
10°-20°	331.9	9.3
20°-30°	500.0	14.0
30°-40°	600.0	16.8
40°-50°	625.3	17.5
50°-60°	578.9	16.2
60°-70°	467.7	13.1
70°-80°	285.2	8.0
80°-90°	58.9	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°	948.0	26.6
0°-40°	1548.0	43.4
0°-60°	2752.2	77.2
0°-90°	3564.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3564.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1228	1228	1228	1228	1228	
5°	1227	1224	1217	1225	1224	116
15°	1170	1171	1171	1186	1186	330
25°	1061	1067	1080	1107	1112	489
35°	913	927	958	993	1002	572
45°	744	766	810	855	871	575
55°	563	593	652	702	718	505
65°	380	417	482	531	544	376
75°	198	242	300	305	301	208
85°	40	60	41	23	17	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1227.8	1227.8	1227.8	1227.8	1227.8
2.5°	1232.6	1228.6	1219.9	1228.6	1227.0
5°	1227.0	1223.8	1216.7	1225.4	1223.8
7.5°	1219.1	1215.9	1209.5	1219.9	1218.3
10°	1205.6	1204.0	1199.2	1211.1	1210.3
12.5°	1189.7	1188.9	1186.5	1200.0	1199.2
15°	1169.8	1170.6	1170.6	1186.5	1186.5
17.5°	1147.5	1149.1	1152.3	1169.8	1172.2
20°	1121.3	1124.5	1130.9	1150.7	1153.9
22.5°	1094.3	1096.7	1106.2	1130.1	1133.2
25°	1060.9	1067.3	1080.0	1107.0	1111.8
27.5°	1029.1	1034.7	1052.2	1080.0	1087.9
30°	991.8	1000.5	1021.2	1051.4	1060.1
32.5°	956.0	965.6	989.4	1024.4	1032.3
35°	913.1	927.4	957.6	992.6	1002.1
37.5°	874.2	887.7	921.9	960.0	971.1
40°	831.3	847.9	886.9	927.4	938.5
42.5°	791.5	807.4	849.5	890.9	906.0
45°	743.8	766.1	809.8	855.1	871.0
47.5°	700.1	722.4	772.4	820.9	835.2
50°	656.4	680.3	732.7	782.8	797.1
52.5°	611.1	636.6	693.0	743.0	759.7
55°	563.4	592.8	651.7	702.5	717.6
57.5°	518.1	548.3	611.1	662.8	677.9
60°	473.6	504.6	569.0	618.3	634.2
62.5°	424.4	460.9	527.7	576.2	588.1
65°	379.9	417.2	482.4	530.9	544.4
67.5°	333.0	373.5	438.7	483.2	495.9
70°	288.5	330.6	393.4	434.7	440.3
72.5°	240.8	283.7	347.3	373.5	373.5
75°	197.9	241.6	300.4	305.2	301.2
77.5°	151.0	199.5	237.6	228.1	218.5
80°	108.9	156.6	174.0	156.6	143.8
82.5°	73.1	113.6	104.9	83.4	73.9
85°	40.5	60.4	41.3	23.0	16.7
87.5°	15.1	13.5	4.0	4.0	4.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)