

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: P271915

Luminaire Tested: **14CZ2-44-UNV-L940-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: P271915  
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-L940-CD1-U  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 90CRI  
Light Source: (112) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

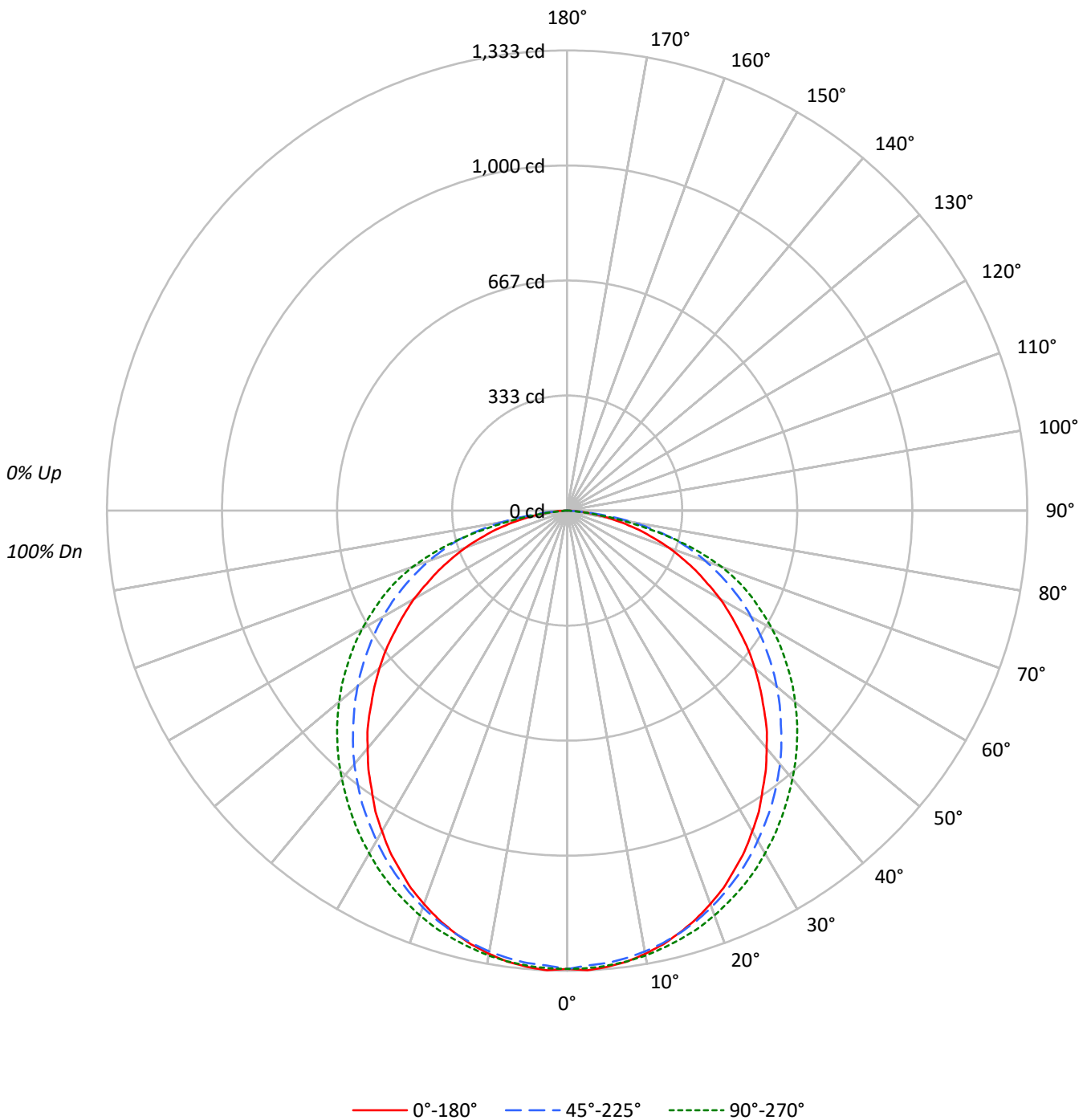
Lumens per Lamp: N/A  
Luminaire Lumens: 3854.0 lumens  
Efficiency: N/A  
Efficacy: 100.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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	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					100			
1	109	104	99	95	106	101	97	94	97	94	91	93	90	88	90	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	79	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	51	42	35	63	50	41	35	48	41	35	47	40	35	45	39	34	32					32			
8	60	46	37	32	58	45	37	31	44	37	31	43	36	31	42	35	31	29					29			
9	56	42	34	28	54	42	34	28	41	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	26	51	39	31	26	37	30	26	37	30	25	36	30	25	24					24			

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

	0°	45°	90°
0°	3573	3573	3573
5°	3584	3554	3575
10°	3562	3543	3576
15°	3524	3526	3574
20°	3472	3502	3573
25°	3406	3468	3570
30°	3333	3431	3562
35°	3244	3402	3560
40°	3158	3369	3565
45°	3061	3333	3585
50°	2972	3317	3608
55°	2859	3306	3641
60°	2757	3312	3691
65°	2616	3321	3748
70°	2454	3347	3746
75°	2225	3377	3386
80°	1824	2916	2410
85°	1352	1380	556



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	125.6	3.3
10°-20°	358.9	9.3
20°-30°	540.6	14.0
30°-40°	648.8	16.8
40°-50°	676.2	17.5
50°-60°	626.0	16.2
60°-70°	505.8	13.1
70°-80°	308.4	8.0
80°-90°	63.7	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°	1025.2	26.6
0°-40°	1673.9	43.4
0°-60°	2976.2	77.2
0°-90°	3854.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3854.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1328	1328	1328	1328	1328	
5°	1327	1323	1316	1325	1323	126
15°	1265	1266	1266	1283	1283	357
25°	1147	1154	1168	1197	1202	529
35°	987	1003	1036	1073	1084	619
45°	804	828	876	925	942	622
55°	609	641	705	760	776	546
65°	411	451	522	574	589	406
75°	214	261	325	330	326	225
85°	44	65	45	25	18	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1327.7	1327.7	1327.7	1327.7	1327.7
2.5°	1332.9	1328.6	1319.1	1328.6	1326.9
5°	1326.9	1323.4	1315.7	1325.1	1323.4
7.5°	1318.3	1314.8	1308.0	1319.1	1317.4
10°	1303.7	1301.9	1296.8	1309.7	1308.8
12.5°	1286.5	1285.6	1283.0	1297.6	1296.8
15°	1265.0	1265.8	1265.8	1283.0	1283.0
17.5°	1240.9	1242.6	1246.1	1265.0	1267.6
20°	1212.6	1216.0	1222.9	1244.4	1247.8
22.5°	1183.3	1185.9	1196.2	1222.0	1225.5
25°	1147.2	1154.1	1167.9	1197.1	1202.2
27.5°	1112.9	1118.9	1137.8	1167.9	1176.5
30°	1072.5	1081.9	1104.3	1136.9	1146.4
32.5°	1033.8	1044.1	1069.9	1107.7	1116.3
35°	987.4	1002.9	1035.5	1073.3	1083.7
37.5°	945.3	959.9	996.9	1038.1	1050.1
40°	898.9	916.9	959.0	1002.9	1014.9
42.5°	855.9	873.1	918.7	963.3	979.7
45°	804.4	828.4	875.7	924.7	941.9
47.5°	757.1	781.2	835.3	887.7	903.2
50°	709.8	735.6	792.3	846.5	861.9
52.5°	660.9	688.3	749.4	803.5	821.6
55°	609.3	641.1	704.7	759.7	776.0
57.5°	560.3	593.0	660.9	716.7	733.0
60°	512.2	545.7	615.3	668.6	685.8
62.5°	458.9	498.4	570.6	623.0	635.9
65°	410.8	451.2	521.6	574.1	588.7
67.5°	360.1	403.9	474.4	522.5	536.2
70°	311.9	357.5	425.4	470.1	476.1
72.5°	260.4	306.8	375.5	403.9	403.9
75°	214.0	261.2	324.8	330.0	325.7
77.5°	163.3	215.7	256.9	246.6	236.3
80°	117.7	169.3	188.2	169.3	155.5
82.5°	79.1	122.9	113.4	90.2	79.9
85°	43.8	65.3	44.7	24.9	18.0
87.5°	16.3	14.6	4.3	4.3	4.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)