

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: P271916

Luminaire Tested: **14CZ2-44-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: P271916  
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-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**

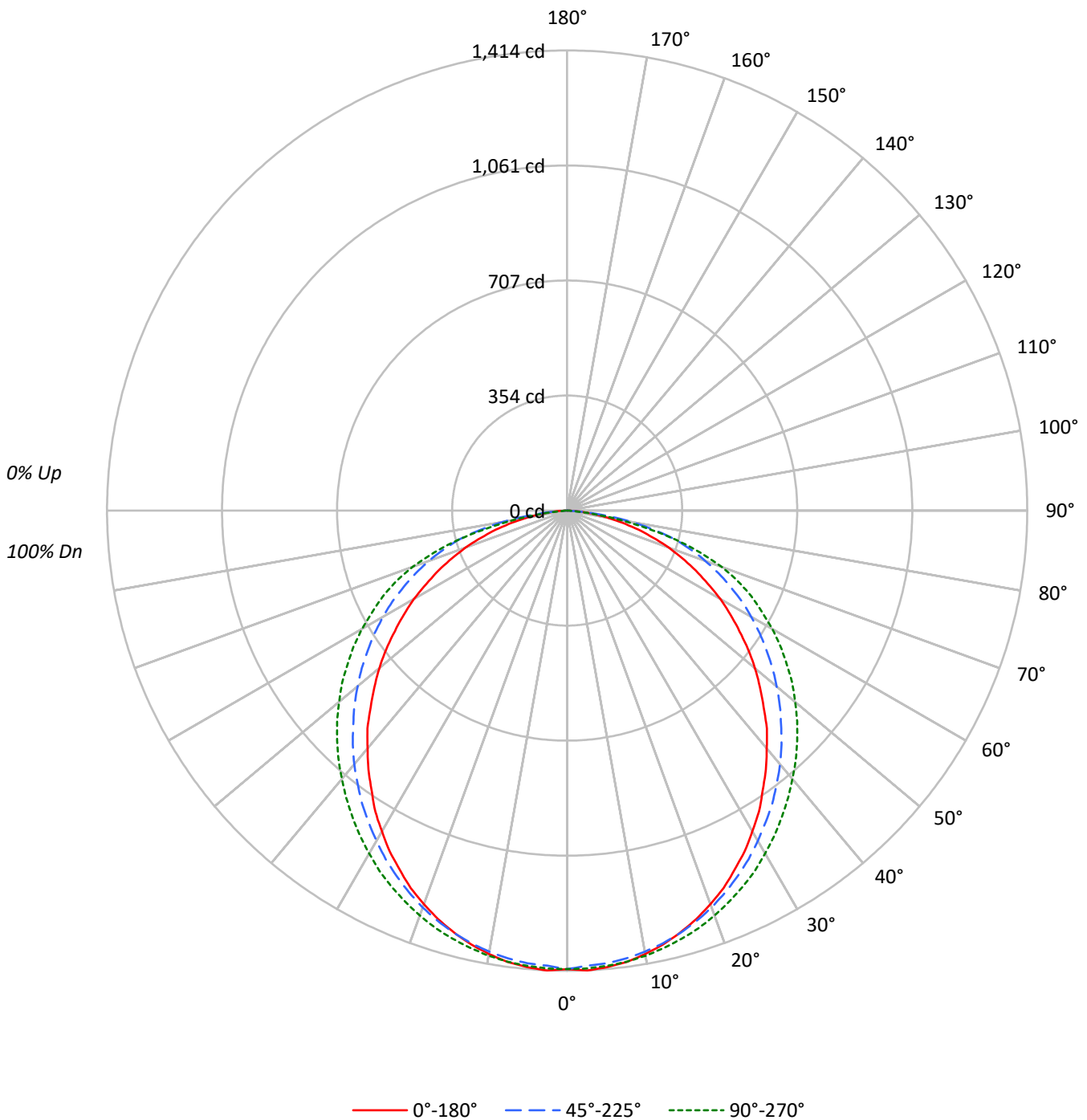
Lumens per Lamp: N/A  
Luminaire Lumens: 4090.0 lumens  
Efficiency: N/A  
Efficacy: 106.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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°	3792	3792	3792
5°	3804	3772	3794
10°	3780	3760	3795
15°	3740	3743	3793
20°	3685	3716	3792
25°	3615	3680	3788
30°	3537	3641	3780
35°	3442	3610	3778
40°	3351	3575	3784
45°	3248	3537	3804
50°	3154	3520	3829
55°	3034	3508	3864
60°	2925	3514	3917
65°	2776	3525	3978
70°	2605	3552	3975
75°	2361	3584	3593
80°	1936	3095	2559
85°	1436	1463	593



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	133.3	3.3
10°-20°	380.9	9.3
20°-30°	573.7	14.0
30°-40°	688.5	16.8
40°-50°	717.6	17.5
50°-60°	664.3	16.2
60°-70°	536.8	13.1
70°-80°	327.3	8.0
80°-90°	67.6	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°	1088.0	26.6
0°-40°	1776.5	43.4
0°-60°	3158.4	77.2
0°-90°	4090.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4090.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1409	1409	1409	1409	1409	
5°	1408	1404	1396	1406	1404	134
15°	1342	1343	1343	1362	1362	378
25°	1218	1225	1239	1270	1276	561
35°	1048	1064	1099	1139	1150	656
45°	854	879	929	981	1000	660
55°	647	680	748	806	824	579
65°	436	479	554	609	625	431
75°	227	277	345	350	346	238
85°	46	69	47	26	19	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1409.0	1409.0	1409.0	1409.0	1409.0
2.5°	1414.5	1409.9	1399.9	1409.9	1408.1
5°	1408.1	1404.5	1396.3	1406.3	1404.5
7.5°	1399.0	1395.3	1388.0	1399.9	1398.1
10°	1383.5	1381.7	1376.2	1389.9	1389.0
12.5°	1365.2	1364.3	1361.6	1377.1	1376.2
15°	1342.4	1343.4	1343.4	1361.6	1361.6
17.5°	1316.9	1318.7	1322.4	1342.4	1345.2
20°	1286.8	1290.5	1297.8	1320.6	1324.2
22.5°	1255.8	1258.5	1269.5	1296.8	1300.5
25°	1217.5	1224.8	1239.4	1270.4	1275.9
27.5°	1181.0	1187.4	1207.5	1239.4	1248.5
30°	1138.2	1148.2	1171.9	1206.6	1216.6
32.5°	1097.1	1108.1	1135.4	1175.5	1184.7
35°	1047.9	1064.3	1098.9	1139.1	1150.0
37.5°	1003.2	1018.7	1057.9	1101.7	1114.4
40°	953.9	973.1	1017.8	1064.3	1077.1
42.5°	908.3	926.6	974.9	1022.3	1039.7
45°	853.6	879.2	929.3	981.3	999.5
47.5°	803.5	829.0	886.5	942.1	958.5
50°	753.3	780.7	840.9	898.3	914.7
52.5°	701.3	730.5	795.3	852.7	871.9
55°	646.6	680.3	747.8	806.2	823.5
57.5°	594.6	629.3	701.3	760.6	777.9
60°	543.5	579.1	653.0	709.5	727.8
62.5°	487.0	529.0	605.6	661.2	674.9
65°	435.9	478.8	553.6	609.2	624.7
67.5°	382.1	428.6	503.4	554.5	569.1
70°	331.1	379.4	451.4	498.9	505.2
72.5°	276.3	325.6	398.5	428.6	428.6
75°	227.1	277.2	344.7	350.2	345.6
77.5°	173.3	228.9	272.7	261.7	250.8
80°	124.9	179.7	199.7	179.7	165.1
82.5°	83.9	130.4	120.4	95.8	84.8
85°	46.5	69.3	47.4	26.4	19.2
87.5°	17.3	15.5	4.6	4.6	4.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)