

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: P271904

Luminaire Tested: **14CZ2-29-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: P271904  
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: 14CZ2-29-UNV-L950-CD1-U  
Description: 1'X4' TROFFER LED MODULE, RIBBED LENS, 90CRI  
Light Source: (84) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

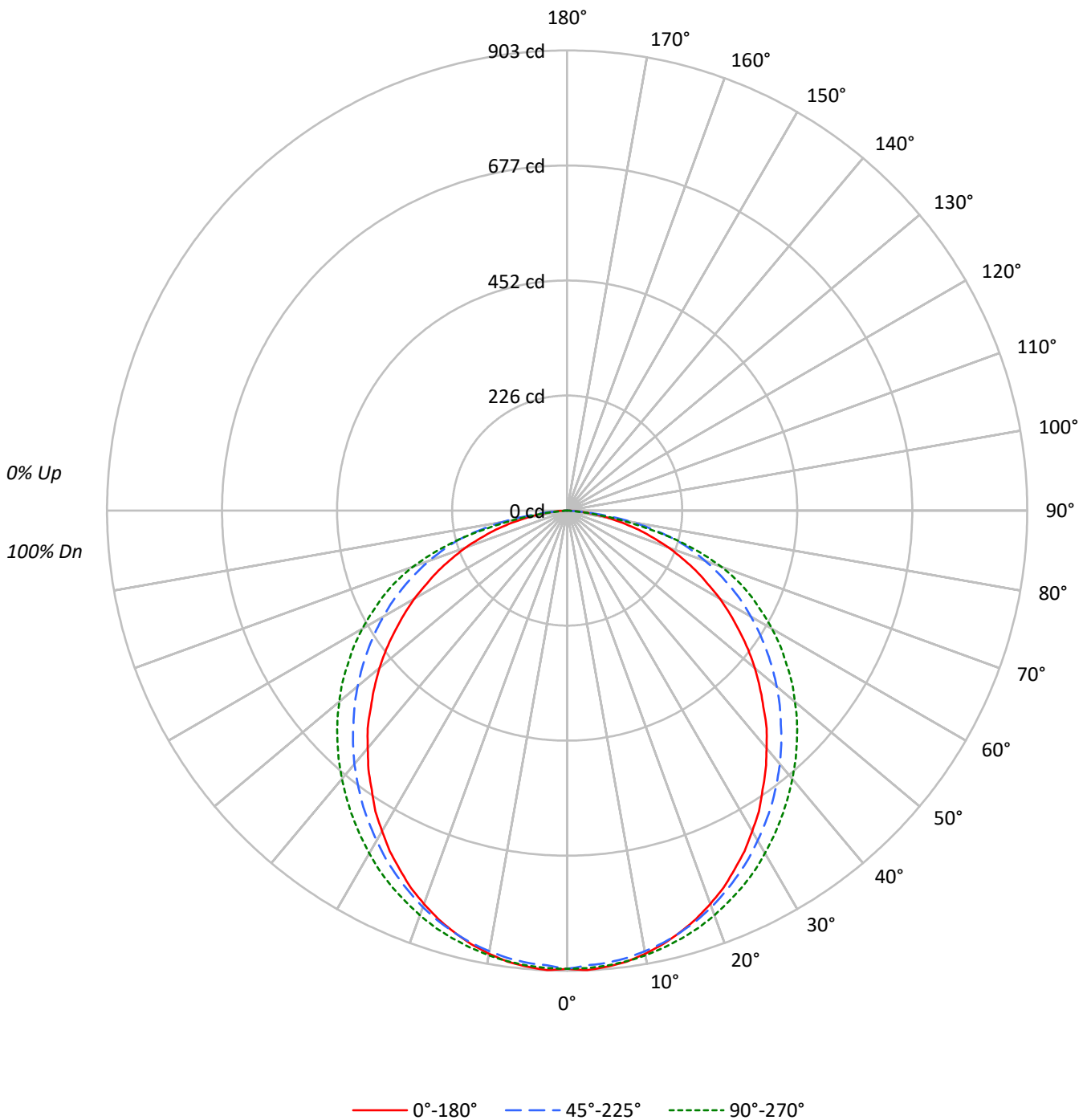
Lumens per Lamp: N/A  
Luminaire Lumens: 2610.0 lumens  
Efficiency: N/A  
Efficacy: 107.4 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 24.3  
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°	2420	2420	2420
5°	2427	2407	2421
10°	2413	2400	2422
15°	2387	2388	2421
20°	2352	2372	2420
25°	2307	2348	2417
30°	2257	2324	2412
35°	2197	2304	2411
40°	2138	2282	2414
45°	2073	2257	2427
50°	2012	2246	2444
55°	1936	2239	2465
60°	1867	2243	2499
65°	1771	2250	2539
70°	1662	2267	2537
75°	1507	2287	2294
80°	1235	1976	1632
85°	917	936	377



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	85.1	3.3
10°-20°	243.1	9.3
20°-30°	366.1	14.0
30°-40°	439.4	16.8
40°-50°	457.9	17.5
50°-60°	423.9	16.2
60°-70°	342.5	13.1
70°-80°	208.8	8.0
80°-90°	43.1	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°	694.3	26.6
0°-40°	1133.6	43.4
0°-60°	2015.5	77.2
0°-90°	2610.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2610.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	899	899	899	899	899	
5°	899	896	891	897	896	85
15°	857	857	857	869	869	241
25°	777	782	791	811	814	358
35°	669	679	701	727	734	419
45°	545	561	593	626	638	421
55°	413	434	477	514	526	370
65°	278	306	353	389	399	275
75°	145	177	220	224	221	152
85°	30	44	30	17	12	36
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	899.2	899.2	899.2	899.2	899.2
2.5°	902.6	899.7	893.3	899.7	898.6
5°	898.6	896.2	891.0	897.4	896.2
7.5°	892.8	890.4	885.8	893.3	892.2
10°	882.9	881.7	878.2	886.9	886.4
12.5°	871.2	870.6	868.9	878.8	878.2
15°	856.7	857.3	857.3	868.9	868.9
17.5°	840.4	841.5	843.9	856.7	858.4
20°	821.2	823.5	828.2	842.7	845.0
22.5°	801.4	803.1	810.1	827.6	829.9
25°	776.9	781.6	790.9	810.7	814.2
27.5°	753.7	757.7	770.5	790.9	796.7
30°	726.3	732.7	747.8	770.0	776.4
32.5°	700.1	707.1	724.6	750.2	756.0
35°	668.7	679.2	701.3	726.9	733.9
37.5°	640.2	650.1	675.1	703.0	711.2
40°	608.7	621.0	649.5	679.2	687.3
42.5°	579.6	591.3	622.1	652.4	663.5
45°	544.7	561.0	593.0	626.2	637.8
47.5°	512.7	529.0	565.7	601.2	611.7
50°	480.7	498.2	536.6	573.2	583.7
52.5°	447.5	466.2	507.5	544.1	556.4
55°	412.6	434.2	477.2	514.5	525.5
57.5°	379.4	401.6	447.5	485.4	496.4
60°	346.9	369.6	416.7	452.8	464.4
62.5°	310.8	337.5	386.4	421.9	430.7
65°	278.2	305.5	353.3	388.8	398.7
67.5°	243.8	273.5	321.3	353.8	363.2
70°	211.3	242.1	288.1	318.3	322.4
72.5°	176.3	207.8	254.3	273.5	273.5
75°	144.9	176.9	220.0	223.5	220.6
77.5°	110.6	146.1	174.0	167.0	160.0
80°	79.7	114.6	127.5	114.6	105.3
82.5°	53.5	83.2	76.8	61.1	54.1
85°	29.7	44.2	30.3	16.9	12.2
87.5°	11.1	9.9	2.9	2.9	2.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)