

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: P274697

Luminaire Tested: **14CZ2-20-RDP-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: P274697  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-43)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ2-20-RDP-UNV-L940-CD1-U  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI  
Light Source: (84) 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

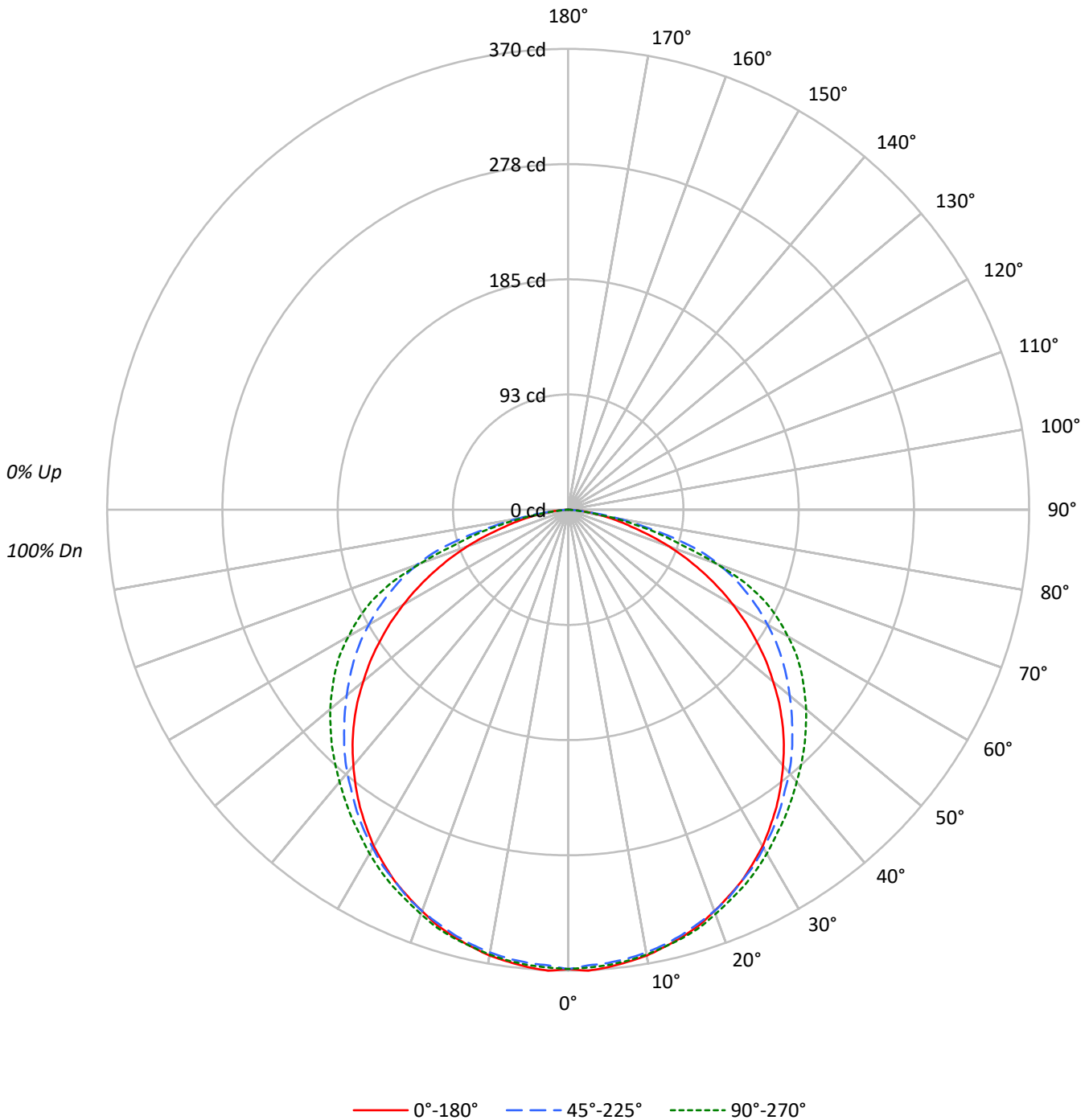
Lumens per Lamp: N/A  
Luminaire Lumens: 1101.0 lumens  
Efficiency: N/A  
Efficacy: 67.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 16.3  
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	100	96	106	102	98	94	97	94	91		93	91	88		90	88	86	84
2	99	90	83	77	96	88	82	76	85	79	75		81	77	73		78	75	71	69
3	90	79	71	64	87	77	70	63	74	68	62		71	66	61		69	64	60	58
4	82	70	61	54	80	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	50	42	35	62	50	41	35	48	40	35		47	40	35		45	39	34	32
8	60	46	37	31	58	45	37	31	44	36	31		43	36	31		41	35	31	29
9	56	42	34	28	54	42	34	28	40	33	28		39	33	28		38	32	28	26
10	52	39	31	25	51	38	31	25	37	30	25		36	30	25		35	29	25	23

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

	0°	45°	90°
0°	992	992	992
5°	996	987	991
10°	994	986	991
15°	989	984	992
20°	982	982	989
25°	977	977	990
30°	969	975	991
35°	957	971	994
40°	942	969	1003
45°	926	968	1021
50°	900	972	1044
55°	867	984	1072
60°	823	995	1096
65°	761	1007	1111
70°	677	1014	995
75°	545	912	795
80°	426	640	519
85°	293	185	133



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	34.9	3.2
10°-20°	100.1	9.1
20°-30°	152.5	13.8
30°-40°	185.7	16.9
40°-50°	197.0	17.9
50°-60°	186.0	16.9
60°-70°	150.1	13.6
70°-80°	81.5	7.4
80°-90°	13.2	1.2
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°	287.5	26.1
0°-40°	473.2	43.0
0°-60°	856.2	77.8
0°-90°	1101.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1101.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	369	369	369	369	369	
5°	369	368	365	368	367	35
15°	355	354	353	356	356	100
25°	329	328	329	333	334	152
35°	291	293	296	302	303	182
45°	243	247	254	264	268	187
55°	185	192	210	224	229	165
65°	120	134	158	171	174	118
75°	52	76	88	79	76	57
85°	10	10	6	5	4	12
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	368.8	368.8	368.8	368.8	368.8
2.5°	370.5	368.8	366.2	368.8	367.9
5°	368.8	367.9	365.3	367.9	367.0
7.5°	366.2	366.2	363.6	365.3	365.3
10°	363.6	362.7	361.0	363.6	362.7
12.5°	359.3	358.4	357.6	360.2	359.3
15°	355.0	354.1	353.3	355.9	355.9
17.5°	349.8	349.0	348.1	351.6	351.6
20°	343.0	343.0	343.0	346.4	345.5
22.5°	336.1	336.1	336.9	340.4	339.5
25°	329.2	328.4	329.2	332.7	333.5
27.5°	320.6	321.5	322.3	325.8	326.6
30°	312.0	312.9	313.7	318.0	318.9
32.5°	301.7	303.4	305.1	310.3	310.3
35°	291.4	293.1	295.7	301.7	302.6
37.5°	280.2	281.9	285.4	292.3	294.0
40°	268.2	270.8	275.9	282.8	285.4
42.5°	256.2	259.6	265.6	273.3	276.8
45°	243.3	246.7	254.4	263.9	268.2
47.5°	229.5	233.8	243.3	255.3	258.7
50°	214.9	220.9	232.1	245.0	249.3
52.5°	200.3	207.2	220.9	234.7	239.0
55°	184.8	192.5	209.7	223.5	228.6
57.5°	169.3	177.9	197.7	212.3	217.5
60°	153.0	163.3	184.8	199.4	203.7
62.5°	136.7	148.7	171.9	186.5	190.0
65°	119.5	134.1	158.2	171.1	174.5
67.5°	103.1	120.3	144.4	153.9	153.9
70°	86.0	104.9	128.9	131.5	126.4
72.5°	68.8	90.3	111.7	102.3	98.0
75°	52.4	76.5	87.7	79.1	76.5
77.5°	39.5	61.9	61.9	56.7	55.0
80°	27.5	47.3	41.3	36.1	33.5
82.5°	18.1	26.6	21.5	17.2	14.6
85°	9.5	10.3	6.0	5.2	4.3
87.5°	3.4	1.7	0.9	1.7	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)