

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: P274698

Luminaire Tested: **14CZ2-20-RDP-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: P274698  
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-L950-CD1-U  
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS WITH INSERT, 90CRI  
Light Source: (84) 5000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

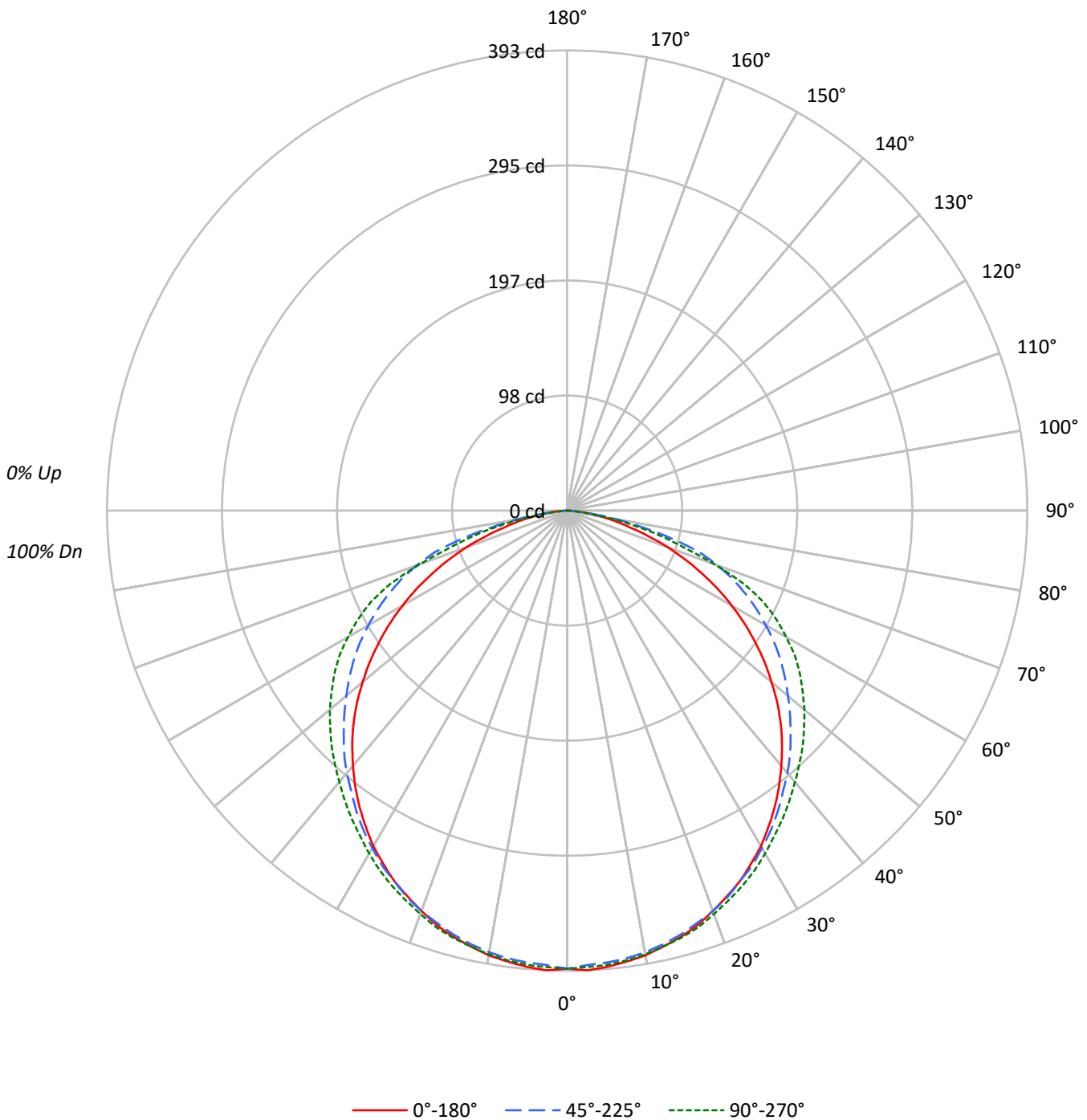
Lumens per Lamp: N/A  
Luminaire Lumens: 1168.0 lumens  
Efficiency: N/A  
Efficacy: 71.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.29 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

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°	1053	1053	1053
5°	1057	1047	1052
10°	1054	1047	1051
15°	1049	1044	1052
20°	1042	1042	1050
25°	1037	1037	1050
30°	1029	1034	1051
35°	1015	1031	1055
40°	999	1028	1063
45°	982	1027	1083
50°	955	1031	1107
55°	920	1044	1138
60°	873	1055	1163
65°	807	1068	1179
70°	718	1076	1054
75°	578	967	844
80°	453	679	552
85°	309	198	142



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	37.0	3.2
10°-20°	106.2	9.1
20°-30°	161.8	13.8
30°-40°	197.0	16.9
40°-50°	209.0	17.9
50°-60°	197.3	16.9
60°-70°	159.3	13.6
70°-80°	86.4	7.4
80°-90°	14.0	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°	305.0	26.1
0°-40°	502.0	43.0
0°-60°	908.3	77.8
0°-90°	1168.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1168.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	391	391	391	391	391	
5°	391	390	388	390	389	37
15°	377	376	375	378	378	106
25°	349	348	349	353	354	161
35°	309	311	314	320	321	193
45°	258	262	270	280	284	199
55°	196	204	222	237	243	175
65°	127	142	168	182	185	126
75°	56	81	93	84	81	61
85°	10	11	6	6	5	13
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	391.2	391.2	391.2	391.2	391.2
2.5°	393.0	391.2	388.5	391.2	390.3
5°	391.2	390.3	387.5	390.3	389.4
7.5°	388.5	388.5	385.7	387.5	387.5
10°	385.7	384.8	383.0	385.7	384.8
12.5°	381.2	380.3	379.3	382.1	381.2
15°	376.6	375.7	374.8	377.5	377.5
17.5°	371.1	370.2	369.3	373.0	373.0
20°	363.8	363.8	363.8	367.5	366.6
22.5°	356.5	356.5	357.5	361.1	360.2
25°	349.2	348.3	349.2	352.9	353.8
27.5°	340.1	341.0	342.0	345.6	346.5
30°	331.0	331.9	332.8	337.4	338.3
32.5°	320.1	321.9	323.7	329.2	329.2
35°	309.1	310.9	313.7	320.1	321.0
37.5°	297.3	299.1	302.7	310.0	311.9
40°	284.5	287.2	292.7	300.0	302.7
42.5°	271.7	275.4	281.8	290.0	293.6
45°	258.1	261.7	269.9	279.9	284.5
47.5°	243.5	248.0	258.1	270.8	274.5
50°	228.0	234.4	246.2	259.9	264.4
52.5°	212.5	219.8	234.4	248.9	253.5
55°	196.1	204.3	222.5	237.1	242.6
57.5°	179.6	188.8	209.7	225.2	230.7
60°	162.3	173.3	196.1	211.6	216.1
62.5°	145.0	157.8	182.4	197.9	201.5
65°	126.8	142.3	167.8	181.5	185.1
67.5°	109.4	127.7	153.2	163.2	163.2
70°	91.2	111.2	136.8	139.5	134.0
72.5°	72.9	95.7	118.5	108.5	104.0
75°	55.6	81.2	93.0	83.9	81.2
77.5°	41.9	65.7	65.7	60.2	58.4
80°	29.2	50.2	43.8	38.3	35.6
82.5°	19.1	28.3	22.8	18.2	15.5
85°	10.0	10.9	6.4	5.5	4.6
87.5°	3.6	1.8	0.9	1.8	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)