

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: P271896

Luminaire Tested: **14CZ2-20-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: P271896
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: 14CZ2-20-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

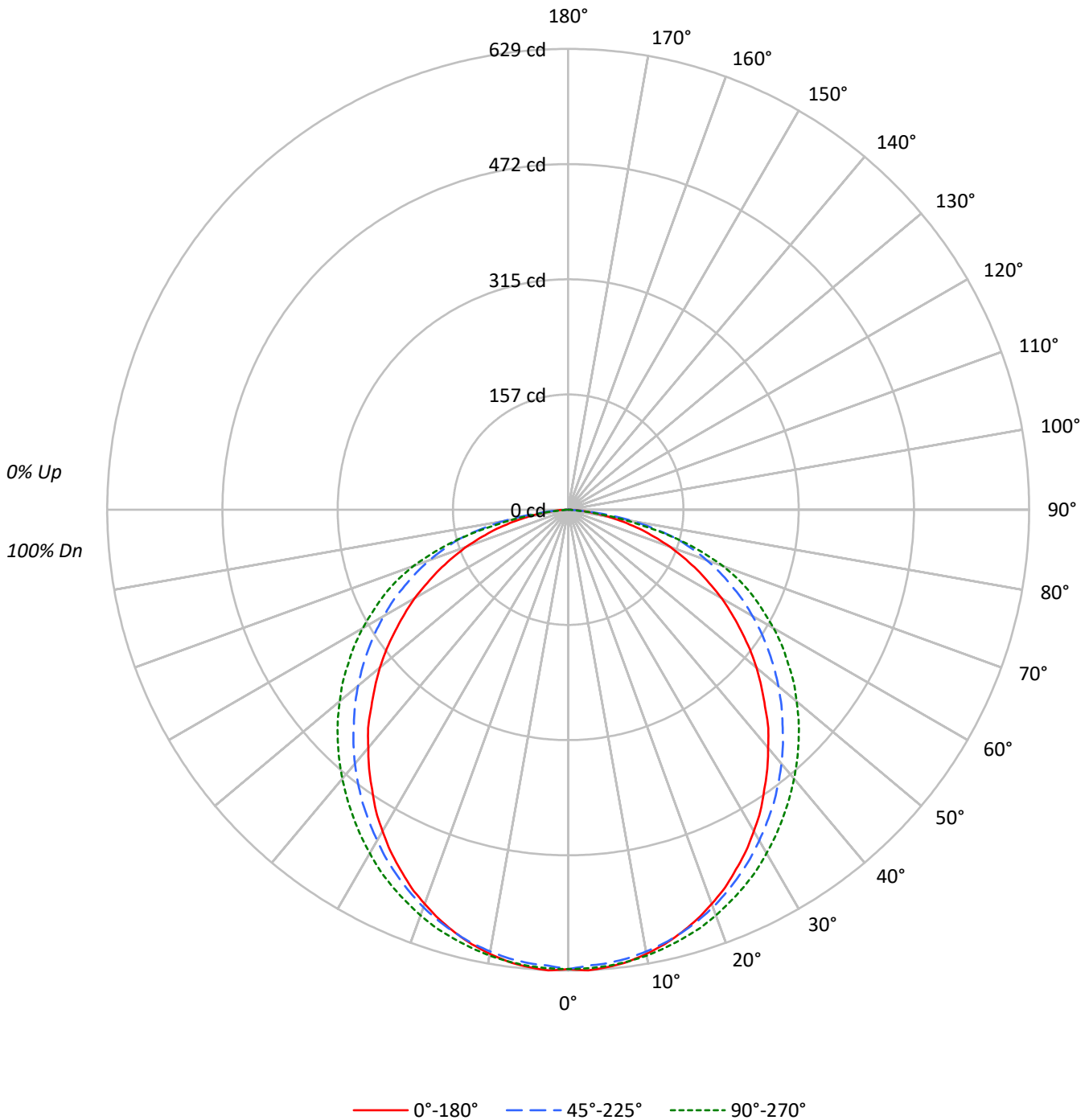
Lumens per Lamp: N/A
Luminaire Lumens: 1820.0 lumens
Efficiency: N/A
Efficacy: 111.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.28 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	1687	1687	1687
5°	1693	1678	1688
10°	1682	1673	1689
15°	1664	1665	1688
20°	1640	1654	1688
25°	1609	1637	1686
30°	1574	1620	1682
35°	1532	1606	1681
40°	1491	1591	1684
45°	1445	1574	1693
50°	1403	1567	1704
55°	1350	1561	1719
60°	1302	1564	1743
65°	1235	1568	1770
70°	1159	1581	1769
75°	1050	1595	1599
80°	862	1378	1139
85°	639	651	262



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.3	3.3
10°-20°	169.5	9.3
20°-30°	255.3	14.0
30°-40°	306.4	16.8
40°-50°	319.3	17.5
50°-60°	295.6	16.2
60°-70°	238.8	13.1
70°-80°	145.6	8.0
80°-90°	30.1	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°	484.1	26.6
0°-40°	790.5	43.4
0°-60°	1405.4	77.2
0°-90°	1820.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1820.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	627	627	627	627	627	
5°	627	625	621	626	625	59
15°	597	598	598	606	606	168
25°	542	545	552	565	568	250
35°	466	474	489	507	512	292
45°	380	391	414	437	445	294
55°	288	303	333	359	366	258
65°	194	213	246	271	278	192
75°	101	123	153	156	154	106
85°	21	31	21	12	8	25
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	627.0	627.0	627.0	627.0	627.0
2.5°	629.4	627.4	622.9	627.4	626.6
5°	626.6	625.0	621.3	625.8	625.0
7.5°	622.5	620.9	617.7	622.9	622.1
10°	615.6	614.8	612.4	618.5	618.1
12.5°	607.5	607.1	605.9	612.8	612.4
15°	597.4	597.8	597.8	605.9	605.9
17.5°	586.0	586.8	588.4	597.4	598.6
20°	572.6	574.2	577.5	587.6	589.3
22.5°	558.8	560.0	564.9	577.1	578.7
25°	541.8	545.0	551.5	565.3	567.7
27.5°	525.5	528.4	537.3	551.5	555.6
30°	506.5	510.9	521.5	536.9	541.4
32.5°	488.2	493.1	505.2	523.1	527.2
35°	466.3	473.6	489.0	506.9	511.7
37.5°	446.4	453.3	470.8	490.2	495.9
40°	424.5	433.0	452.9	473.6	479.3
42.5°	404.2	412.3	433.8	454.9	462.6
45°	379.8	391.2	413.5	436.7	444.8
47.5°	357.5	368.9	394.5	419.2	426.5
50°	335.2	347.4	374.2	399.7	407.0
52.5°	312.1	325.1	353.9	379.4	388.0
55°	287.7	302.7	332.8	358.7	366.5
57.5°	264.6	280.0	312.1	338.5	346.2
60°	241.9	257.7	290.6	315.7	323.8
62.5°	216.7	235.4	269.5	294.2	300.3
65°	194.0	213.1	246.3	271.1	278.0
67.5°	170.0	190.7	224.0	246.7	253.2
70°	147.3	168.8	200.9	222.0	224.8
72.5°	123.0	144.9	177.3	190.7	190.7
75°	101.0	123.4	153.4	155.8	153.8
77.5°	77.1	101.9	121.3	116.5	111.6
80°	55.6	79.9	88.9	79.9	73.5
82.5°	37.3	58.0	53.6	42.6	37.7
85°	20.7	30.8	21.1	11.8	8.5
87.5°	7.7	6.9	2.0	2.0	2.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)