

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: P271930

Luminaire Tested: **14CZ2-20-S-UNV-L935-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: P271930
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-40)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-20-S-UNV-L935-CD1-U
Description: 1'X4' TROFFER LED MODULE,SMOOTH LENS, 90CRI
Light Source: (84) 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER
Luminaire Equipment: Sample No. Condition Description

Summary

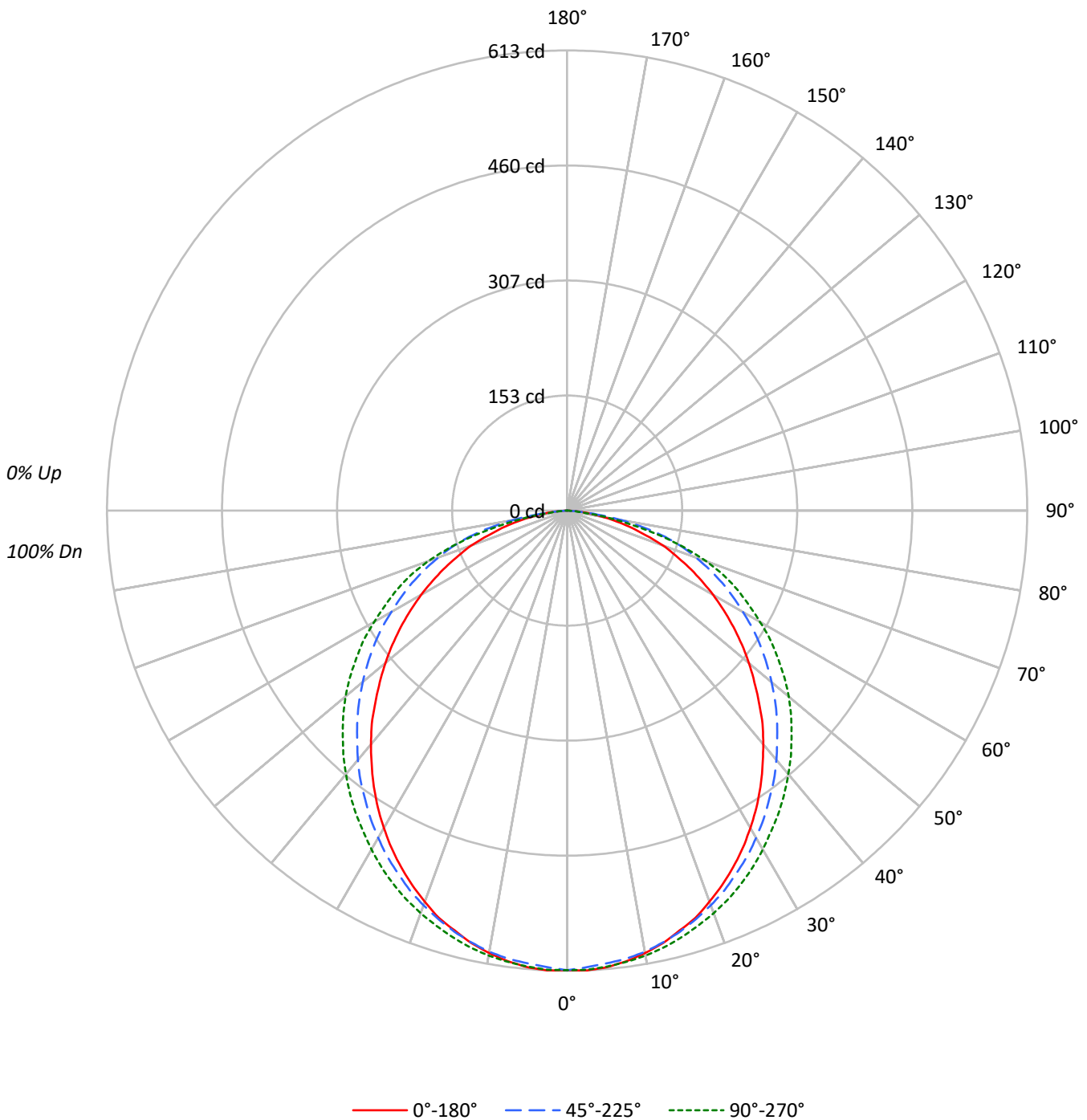
Lumens per Lamp: N/A
Luminaire Lumens: 1715.0 lumens
Efficiency: N/A
Efficacy: 105.2 lumens/watt
Spacing Criteria (0/90/45): 1.19 / 1.26 / 1.36
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

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	94	91	89	90	88	86	84
2	99	90	84	78	96	89	82	77	85	80	75	82	77	73	79	75	72	70
3	90	79	71	65	87	78	70	64	75	68	63	72	66	62	69	65	61	58
4	82	70	61	55	80	69	61	54	66	59	53	64	58	53	62	56	52	50
5	76	63	54	47	74	62	53	47	59	52	46	57	51	46	56	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1647	1647	1647
5°	1649	1635	1647
10°	1636	1631	1645
15°	1613	1618	1639
20°	1588	1602	1634
25°	1555	1583	1629
30°	1517	1564	1620
35°	1475	1542	1615
40°	1428	1524	1610
45°	1375	1505	1608
50°	1324	1488	1613
55°	1269	1476	1608
60°	1208	1455	1597
65°	1137	1451	1597
70°	1071	1438	1552
75°	928	1406	1326
80°	752	1133	883
85°	500	395	262



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	3.4
10°-20°	164.5	9.6
20°-30°	246.8	14.4
30°-40°	294.4	17.2
40°-50°	304.3	17.7
50°-60°	277.8	16.2
60°-70°	218.7	12.7
70°-80°	127.3	7.4
80°-90°	23.5	1.4
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°	469.1	27.4
0°-40°	763.5	44.5
0°-60°	1345.6	78.5
0°-90°	1715.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1715.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	612	612	612	612	612	
5°	610	609	605	610	610	58
15°	579	580	581	588	588	163
25°	524	526	533	546	548	241
35°	449	455	469	487	492	281
45°	361	373	395	418	423	279
55°	270	285	315	338	343	242
65°	179	197	228	246	251	177
75°	89	110	135	133	128	95
85°	16	23	13	10	8	21
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	612.2	612.2	612.2	612.2	612.2
2.5°	613.1	611.4	608.8	613.1	612.2
5°	610.5	608.8	605.4	610.5	609.7
7.5°	605.4	603.7	602.0	607.1	606.3
10°	598.6	597.8	596.9	602.9	602.0
12.5°	590.1	590.1	589.3	596.1	596.1
15°	579.1	579.9	580.8	588.4	588.4
17.5°	568.9	568.0	570.6	579.1	579.9
20°	554.4	556.1	559.5	569.7	570.6
22.5°	539.9	541.7	547.6	557.8	560.4
25°	523.8	526.3	533.1	545.9	548.5
27.5°	506.8	510.2	519.5	533.1	535.7
30°	488.1	493.2	503.4	518.7	521.2
32.5°	469.4	474.5	487.2	502.5	505.9
35°	449.0	454.9	469.4	487.2	491.5
37.5°	427.7	435.4	452.4	470.2	475.3
40°	406.5	415.0	433.7	452.4	458.3
42.5°	385.2	393.7	414.1	435.4	441.3
45°	361.4	373.3	395.4	417.5	422.6
47.5°	338.4	351.2	375.8	397.9	404.7
50°	316.3	329.1	355.4	378.4	385.2
52.5°	293.4	307.0	335.0	358.8	364.8
55°	270.4	284.9	314.6	337.6	342.7
57.5°	247.4	262.7	293.4	315.5	321.4
60°	224.5	240.6	270.4	292.5	296.8
62.5°	201.5	218.5	249.1	268.7	273.0
65°	178.6	197.3	227.9	245.7	250.8
67.5°	156.5	175.2	204.9	221.9	226.2
70°	136.1	153.1	182.8	195.6	197.3
72.5°	110.5	131.8	160.7	167.5	163.3
75°	89.3	110.5	135.2	132.6	127.5
77.5°	68.0	89.3	105.4	96.9	90.1
80°	48.5	69.7	73.1	60.4	57.0
82.5°	31.5	48.5	40.8	31.5	25.5
85°	16.2	23.0	12.8	10.2	8.5
87.5°	5.1	3.4	1.7	1.7	0.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)