

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: P475415

Luminaire Tested: **14CZ2-29-RDP-UNV-L830-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475415
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-29-RDP-UNV-L830-CD1-U
Description: 1'X4' TROFFER LED MODULE, SMOOTH LENS W/ RDP INSERT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

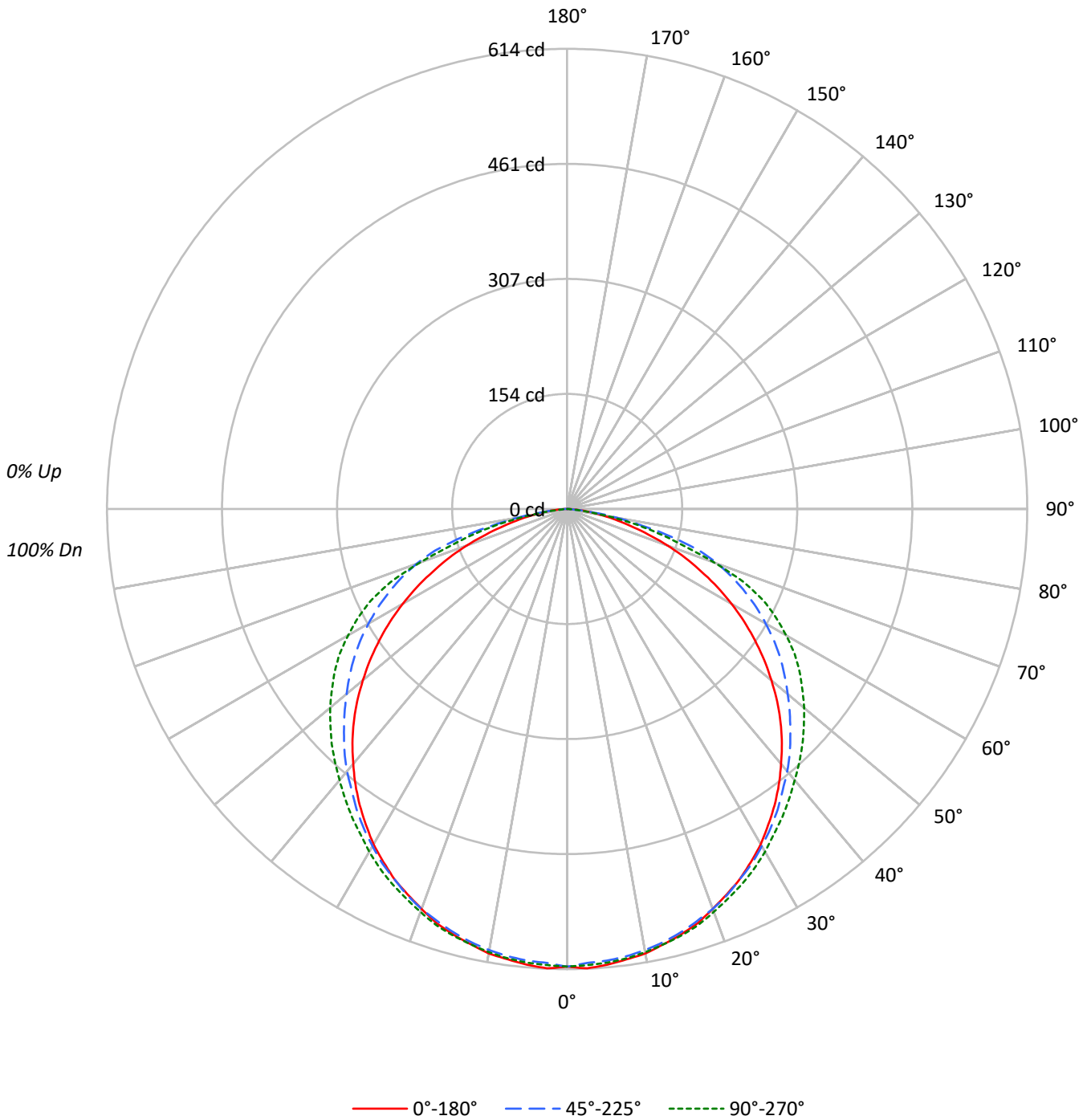
Lumens per Lamp: N/A
Luminaire Lumens: 1823.1 lumens
Efficiency: N/A
Efficacy: 85.2 lumens/watt
Spacing Criteria (0/90/45): 1.25 / 1.28 / 1.4
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 21.4
Input Voltage (V): 120
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	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					100			
1	109	104	100	96	106	102	98	94	97	94	91	93	91	88	90	88	86	84					84			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	71	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	53	66	58	53	63	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	52	46	59	51	45	57	50	45	55	49	44	42					42			
6	69	56	47	40	67	55	46	40	53	45	40	51	44	39	50	44	39	37					37			
7	64	50	42	35	62	50	41	35	48	40	35	47	40	35	45	39	34	32					32			
8	60	46	37	31	58	45	37	31	44	36	31	43	36	31	41	35	31	29					29			
9	56	42	34	28	54	42	34	28	40	33	28	39	33	28	38	32	28	26					26			
10	52	39	31	25	51	38	31	25	37	30	25	36	30	25	35	29	25	23					23			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1643	1643	1643
5°	1649	1634	1642
10°	1645	1633	1641
15°	1638	1630	1642
20°	1626	1626	1639
25°	1618	1618	1640
30°	1606	1614	1641
35°	1585	1608	1646
40°	1560	1605	1660
45°	1533	1603	1690
50°	1490	1609	1728
55°	1436	1629	1776
60°	1364	1647	1815
65°	1259	1668	1840
70°	1120	1680	1646
75°	902	1510	1317
80°	705	1058	860
85°	485	309	219



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.8	3.2
10°-20°	165.8	9.1
20°-30°	252.5	13.8
30°-40°	307.5	16.9
40°-50°	326.3	17.9
50°-60°	307.9	16.9
60°-70°	248.6	13.6
70°-80°	134.9	7.4
80°-90°	21.8	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°	476.1	26.1
0°-40°	783.6	43.0
0°-60°	1417.8	77.8
0°-90°	1823.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1823.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	611	611	611	611	611	
5°	611	609	605	609	608	58
15°	588	586	585	589	589	166
25°	545	544	545	551	552	251
35°	482	485	490	500	501	302
45°	403	408	421	437	444	310
55°	306	319	347	370	379	273
65°	198	222	262	283	289	196
75°	87	127	145	131	127	95
85°	16	17	10	8	7	20
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	610.6	610.6	610.6	610.6	610.6
2.5°	613.5	610.6	606.3	610.6	609.2
5°	610.6	609.2	604.9	609.2	607.8
7.5°	606.3	606.3	602.1	604.9	604.9
10°	602.1	600.6	597.8	602.1	600.6
12.5°	594.9	593.5	592.1	596.4	594.9
15°	587.8	586.4	585.0	589.3	589.3
17.5°	579.3	577.9	576.4	582.1	582.1
20°	567.9	567.9	567.9	573.6	572.2
22.5°	556.5	556.5	557.9	563.6	562.2
25°	545.1	543.7	545.1	550.8	552.2
27.5°	530.9	532.3	533.7	539.4	540.9
30°	516.7	518.1	519.5	526.6	528.1
32.5°	499.6	502.4	505.3	513.8	513.8
35°	482.5	485.4	489.6	499.6	501.0
37.5°	464.0	466.8	472.5	483.9	486.8
40°	444.1	448.3	456.9	468.3	472.5
42.5°	424.1	429.8	439.8	452.6	458.3
45°	402.8	408.5	421.3	437.0	444.1
47.5°	380.0	387.1	402.8	422.7	428.4
50°	355.8	365.8	384.3	405.6	412.8
52.5°	331.6	343.0	365.8	388.6	395.7
55°	306.0	318.8	347.3	370.1	378.6
57.5°	280.4	294.6	327.4	351.6	360.1
60°	253.4	270.4	306.0	330.2	337.3
62.5°	226.3	246.2	284.7	308.9	314.6
65°	197.8	222.0	261.9	283.2	288.9
67.5°	170.8	199.3	239.1	254.8	254.8
70°	142.3	173.6	213.5	217.8	209.2
72.5°	113.9	149.4	185.0	169.4	162.3
75°	86.8	126.7	145.2	130.9	126.7
77.5°	65.5	102.5	102.5	93.9	91.1
80°	45.5	78.3	68.3	59.8	55.5
82.5°	29.9	44.1	35.6	28.5	24.2
85°	15.7	17.1	10.0	8.5	7.1
87.5°	5.7	2.8	1.4	2.8	1.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)