

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: P258915

Luminaire Tested: **14CZ-LD5-29-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258915  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35909)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-29-RDP-UNV-L93050-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1840.9 lumens  
Efficiency: N/A  
Efficacy: 79.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.28 / 1.4  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

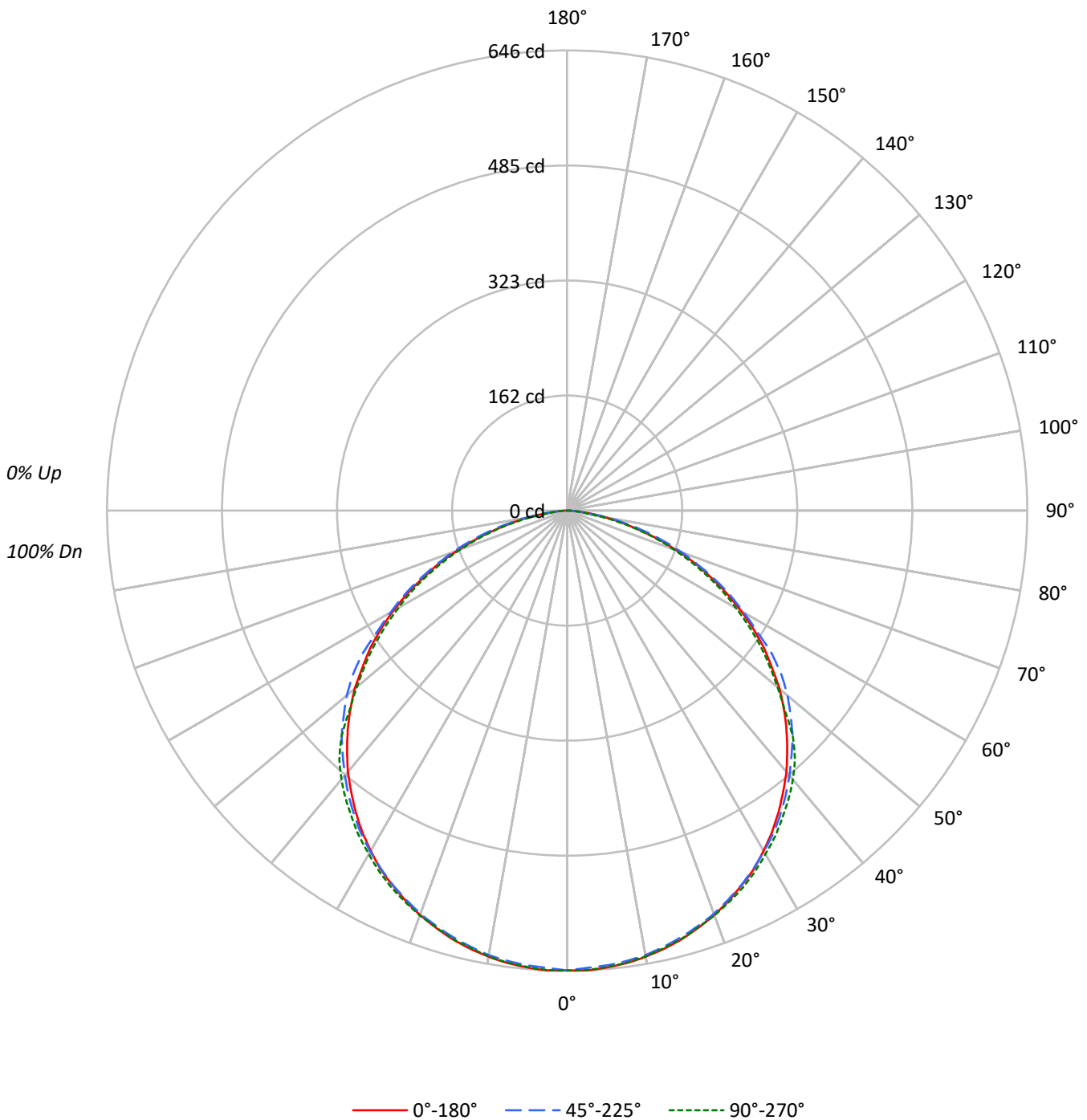
Input Watts (W): 23.064  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	95	98	95	92	94	91	89	90	88	86	84
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70
3	90	80	72	65	88	78	71	65	75	69	64	73	67	63	70	65	61	59
4	83	71	62	55	80	69	61	55	67	60	54	65	58	53	62	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	51	46	56	50	46	44
6	70	57	48	42	68	56	47	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	36	49	42	36	48	41	36	46	40	36	34
8	61	47	38	33	59	46	38	33	45	38	32	44	37	32	43	36	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	1737	1737	1737
5°	1739	1731	1737
10°	1738	1731	1736
15°	1735	1727	1733
20°	1730	1725	1732
25°	1723	1721	1733
30°	1713	1717	1730
35°	1699	1713	1731
40°	1682	1705	1733
45°	1658	1703	1706
50°	1630	1690	1613
55°	1585	1647	1554
60°	1518	1540	1473
65°	1421	1459	1383
70°	1293	1345	1251
75°	1079	1179	1061
80°	855	902	735
85°	556	482	426



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	61.1	3.3
10°-20°	175.5	9.5
20°-30°	268.0	14.6
30°-40°	326.7	17.7
40°-50°	342.1	18.6
50°-60°	304.3	16.5
60°-70°	224.5	12.2
70°-80°	116.0	6.3
80°-90°	22.5	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°	504.6	27.4
0°-40°	831.3	45.2
0°-60°	1477.8	80.3
0°-90°	1840.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1840.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	646	646	646	646	646	
5°	644	643	641	643	643	61
15°	623	622	620	622	622	176
25°	580	580	580	584	584	268
35°	517	518	521	527	527	323
45°	436	439	448	452	448	336
55°	338	345	351	336	331	301
65°	223	239	229	221	217	221
75°	104	115	113	104	102	112
85°	18	20	16	14	14	23
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	645.6	645.6	645.6	645.6	645.6
2.5°	646.2	645.6	642.6	645.6	645.6
5°	643.8	643.2	640.8	643.2	643.2
7.5°	640.8	640.2	637.8	640.2	640.2
10°	636.0	635.4	633.6	636.0	635.4
12.5°	630.0	630.0	627.0	630.0	628.8
15°	622.8	622.2	619.8	622.2	622.2
17.5°	613.8	613.2	611.4	614.4	613.2
20°	604.2	603.6	602.4	605.4	604.8
22.5°	592.8	592.8	591.0	594.6	594.6
25°	580.2	580.2	579.6	583.8	583.8
27.5°	567.6	566.4	566.4	570.6	571.2
30°	551.4	551.4	552.6	557.4	556.8
32.5°	535.2	535.8	538.2	542.4	543.0
35°	517.2	517.8	521.4	527.4	526.8
37.5°	498.0	499.8	504.0	510.6	510.6
40°	478.8	480.0	485.4	492.6	493.2
42.5°	457.2	460.2	466.2	474.6	473.4
45°	435.6	438.6	447.6	451.8	448.2
47.5°	412.8	416.4	425.4	426.0	414.0
50°	389.4	393.6	403.8	391.8	385.2
52.5°	362.4	370.2	379.2	362.4	358.2
55°	337.8	345.0	351.0	336.0	331.2
57.5°	310.2	319.8	315.6	308.4	302.4
60°	282.0	292.2	286.2	279.0	273.6
62.5°	253.2	264.6	258.6	251.4	246.6
65°	223.2	238.8	229.2	221.4	217.2
67.5°	195.0	210.0	198.6	192.6	188.4
70°	164.4	177.0	171.0	163.2	159.0
72.5°	134.4	144.0	142.2	133.8	130.8
75°	103.8	114.6	113.4	104.4	102.0
77.5°	78.0	88.2	84.6	77.4	74.4
80°	55.2	61.8	58.2	49.8	47.4
82.5°	33.6	39.0	33.0	28.2	25.8
85°	18.0	19.8	15.6	14.4	13.8
87.5°	6.6	6.6	6.6	6.0	6.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)