

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: P275776

Luminaire Tested: **14CZ2-39-RDP-UNV-L93050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P275776  
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: 14CZ2-39-RDP-UNV-L93050-W2A1-U-4000K  
Description: CRUZE 2.0 1x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2266.0 lumens  
Efficiency: N/A  
Efficacy: 71.2 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

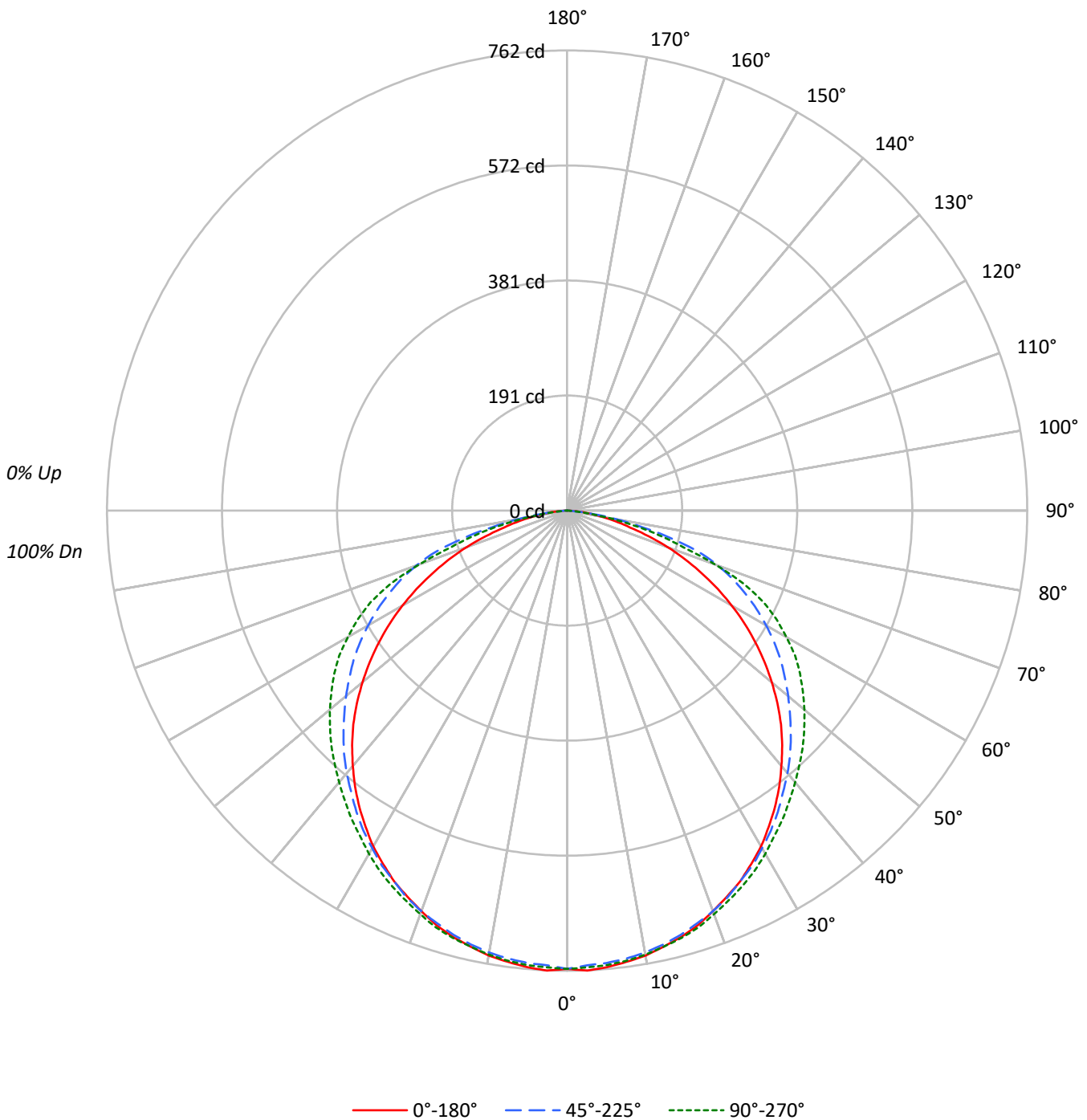
Input Watts (W): 31.806  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2042	2042	2042
5°	2050	2031	2041
10°	2045	2030	2040
15°	2035	2026	2040
20°	2021	2021	2037
25°	2012	2012	2038
30°	1995	2006	2039
35°	1970	1999	2046
40°	1939	1995	2063
45°	1905	1993	2101
50°	1852	2000	2148
55°	1785	2025	2208
60°	1695	2047	2257
65°	1566	2073	2287
70°	1392	2088	2046
75°	1122	1876	1637
80°	877	1316	1069
85°	602	383	272



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	71.8	3.2
10°-20°	206.1	9.1
20°-30°	313.8	13.8
30°-40°	382.2	16.9
40°-50°	405.5	17.9
50°-60°	382.7	16.9
60°-70°	309.0	13.6
70°-80°	167.6	7.4
80°-90°	27.1	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°	591.8	26.1
0°-40°	974.0	43.0
0°-60°	1762.3	77.8
0°-90°	2266.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2266.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	759	759	759	759	759	
5°	759	757	752	757	755	72
15°	731	729	727	732	732	206
25°	678	676	678	685	686	312
35°	600	603	609	621	623	375
45°	501	508	524	543	552	386
55°	380	396	432	460	471	340
65°	246	276	326	352	359	244
75°	108	157	180	163	157	118
85°	20	21	12	11	9	25
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	758.9	758.9	758.9	758.9	758.9
2.5°	762.5	758.9	753.6	758.9	757.2
5°	758.9	757.2	751.9	757.2	755.4
7.5°	753.6	753.6	748.3	751.9	751.9
10°	748.3	746.6	743.0	748.3	746.6
12.5°	739.5	737.7	735.9	741.3	739.5
15°	730.6	728.9	727.1	732.4	732.4
17.5°	720.0	718.3	716.5	723.6	723.6
20°	705.9	705.9	705.9	712.9	711.2
22.5°	691.7	691.7	693.5	700.6	698.8
25°	677.6	675.8	677.6	684.6	686.4
27.5°	659.9	661.6	663.4	670.5	672.3
30°	642.2	644.0	645.7	654.6	656.3
32.5°	621.0	624.5	628.0	638.6	638.6
35°	599.7	603.3	608.6	621.0	622.7
37.5°	576.7	580.3	587.3	601.5	605.0
40°	552.0	557.3	567.9	582.0	587.3
42.5°	527.2	534.3	546.7	562.6	569.6
45°	500.7	507.7	523.7	543.1	552.0
47.5°	472.3	481.2	500.7	525.4	532.5
50°	442.3	454.7	477.7	504.2	513.0
52.5°	412.2	426.4	454.7	483.0	491.8
55°	380.4	396.3	431.7	460.0	470.6
57.5°	348.5	366.2	406.9	437.0	447.6
60°	314.9	336.1	380.4	410.4	419.3
62.5°	281.3	306.1	353.8	383.9	391.0
65°	245.9	276.0	325.5	352.0	359.1
67.5°	212.3	247.7	297.2	316.7	316.7
70°	176.9	215.8	265.4	270.7	260.1
72.5°	141.5	185.8	230.0	210.5	201.7
75°	107.9	157.4	180.4	162.8	157.4
77.5°	81.4	127.4	127.4	116.8	113.2
80°	56.6	97.3	84.9	74.3	69.0
82.5°	37.2	54.8	44.2	35.4	30.1
85°	19.5	21.2	12.4	10.6	8.8
87.5°	7.1	3.5	1.8	3.5	1.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)