

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: P258894

Luminaire Tested: **14CZ-LD5-39-RDP-UNV-L83050-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258894  
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-LD5-39-RDP-UNV-L83050-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2747.0 lumens  
Efficiency: N/A  
Efficacy: 86.6 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

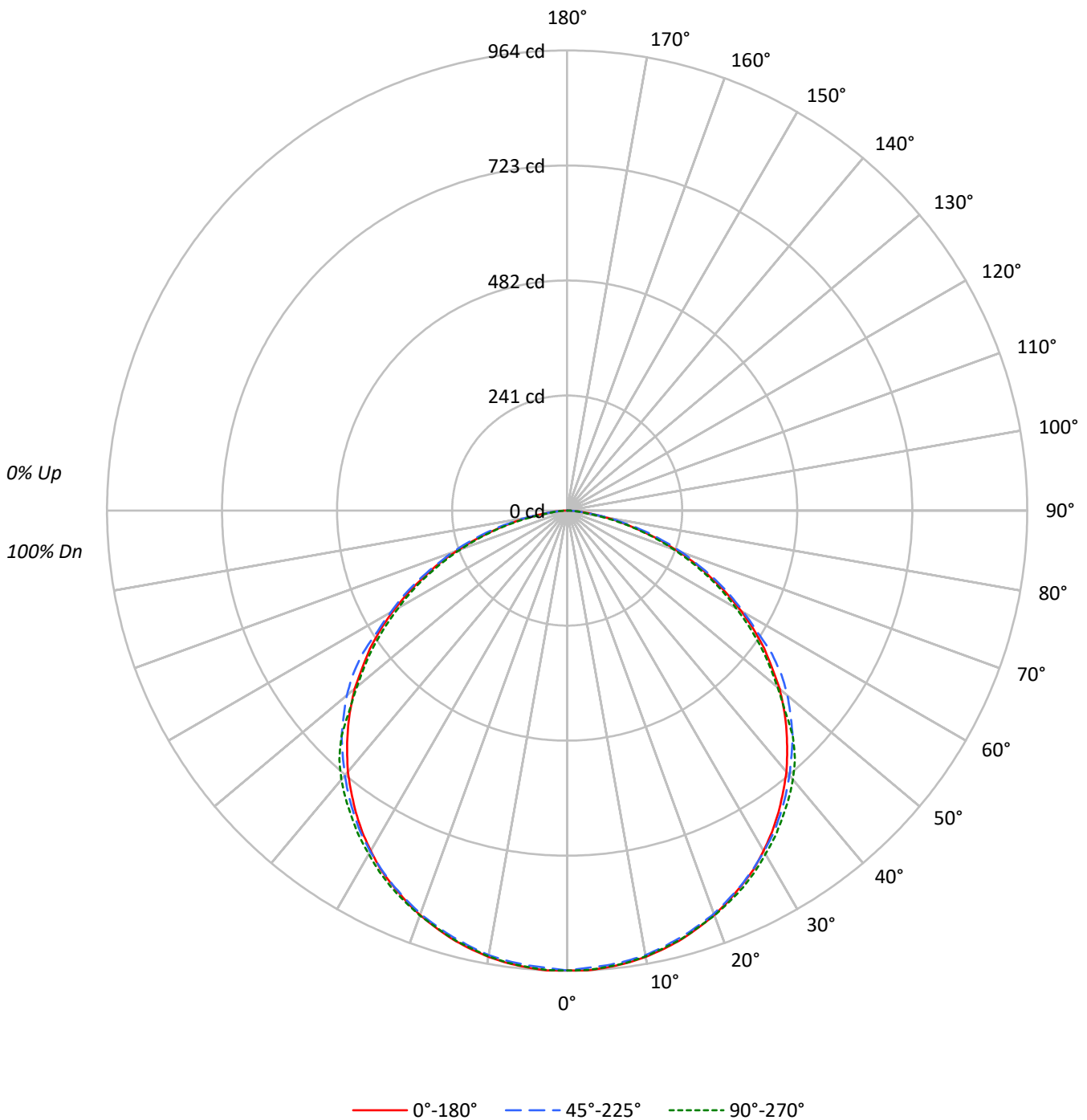
Input Watts (W): 31.713  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2592	2592	2592
5°	2595	2583	2593
10°	2593	2584	2591
15°	2589	2577	2587
20°	2582	2574	2584
25°	2571	2568	2587
30°	2557	2562	2582
35°	2535	2556	2582
40°	2510	2544	2585
45°	2474	2542	2545
50°	2433	2523	2406
55°	2365	2457	2319
60°	2265	2299	2197
65°	2121	2178	2064
70°	1930	2008	1867
75°	1611	1759	1582
80°	1277	1345	1096
85°	831	719	636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	91.2	3.3
10°-20°	261.9	9.5
20°-30°	399.9	14.6
30°-40°	487.5	17.7
40°-50°	510.5	18.6
50°-60°	454.2	16.5
60°-70°	335.1	12.2
70°-80°	173.1	6.3
80°-90°	33.6	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°	753.0	27.4
0°-40°	1240.6	45.2
0°-60°	2205.2	80.3
0°-90°	2747.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2747.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	963	963	963	963	963	
5°	961	960	956	960	960	91
15°	929	928	925	928	928	262
25°	866	866	865	871	871	399
35°	772	773	778	787	786	483
45°	650	654	668	674	669	501
55°	504	515	524	501	494	449
65°	333	356	342	330	324	330
75°	155	171	169	156	152	168
85°	27	30	23	22	21	35
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	963.4	963.4	963.4	963.4	963.4
2.5°	964.3	963.4	958.9	963.4	963.4
5°	960.7	959.8	956.2	959.8	959.8
7.5°	956.2	955.3	951.7	955.3	955.3
10°	949.1	948.2	945.5	949.1	948.2
12.5°	940.1	940.1	935.6	940.1	938.3
15°	929.4	928.5	924.9	928.5	928.5
17.5°	915.9	915.0	912.3	916.8	915.0
20°	901.6	900.7	898.9	903.4	902.5
22.5°	884.6	884.6	881.9	887.3	887.3
25°	865.8	865.8	864.9	871.2	871.2
27.5°	847.0	845.2	845.2	851.5	852.4
30°	822.8	822.8	824.6	831.8	830.9
32.5°	798.6	799.5	803.1	809.4	810.3
35°	771.8	772.7	778.0	787.0	786.1
37.5°	743.1	745.8	752.1	761.9	761.9
40°	714.5	716.3	724.3	735.1	736.0
42.5°	682.2	686.7	695.7	708.2	706.4
45°	650.0	654.5	667.9	674.2	668.8
47.5°	616.0	621.4	634.8	635.7	617.8
50°	581.1	587.3	602.6	584.7	574.8
52.5°	540.8	552.4	565.9	540.8	534.5
55°	504.1	514.8	523.8	501.4	494.2
57.5°	462.9	477.2	470.9	460.2	451.3
60°	420.8	436.0	427.1	416.3	408.3
62.5°	377.8	394.8	385.9	375.1	368.0
65°	333.1	356.3	342.0	330.4	324.1
67.5°	291.0	313.4	296.4	287.4	281.1
70°	245.3	264.1	255.2	243.5	237.3
72.5°	200.6	214.9	212.2	199.7	195.2
75°	154.9	171.0	169.2	155.8	152.2
77.5°	116.4	131.6	126.2	115.5	111.0
80°	82.4	92.2	86.8	74.3	70.7
82.5°	50.1	58.2	49.2	42.1	38.5
85°	26.9	29.5	23.3	21.5	20.6
87.5°	9.8	9.8	9.8	9.0	9.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)