

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: P258971

Luminaire Tested: **14CZ-LD5-39-RDP-UNV-L82765-W2A1-U-4000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258971  
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-L82765-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: 2611.0 lumens  
Efficiency: N/A  
Efficacy: 83.3 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

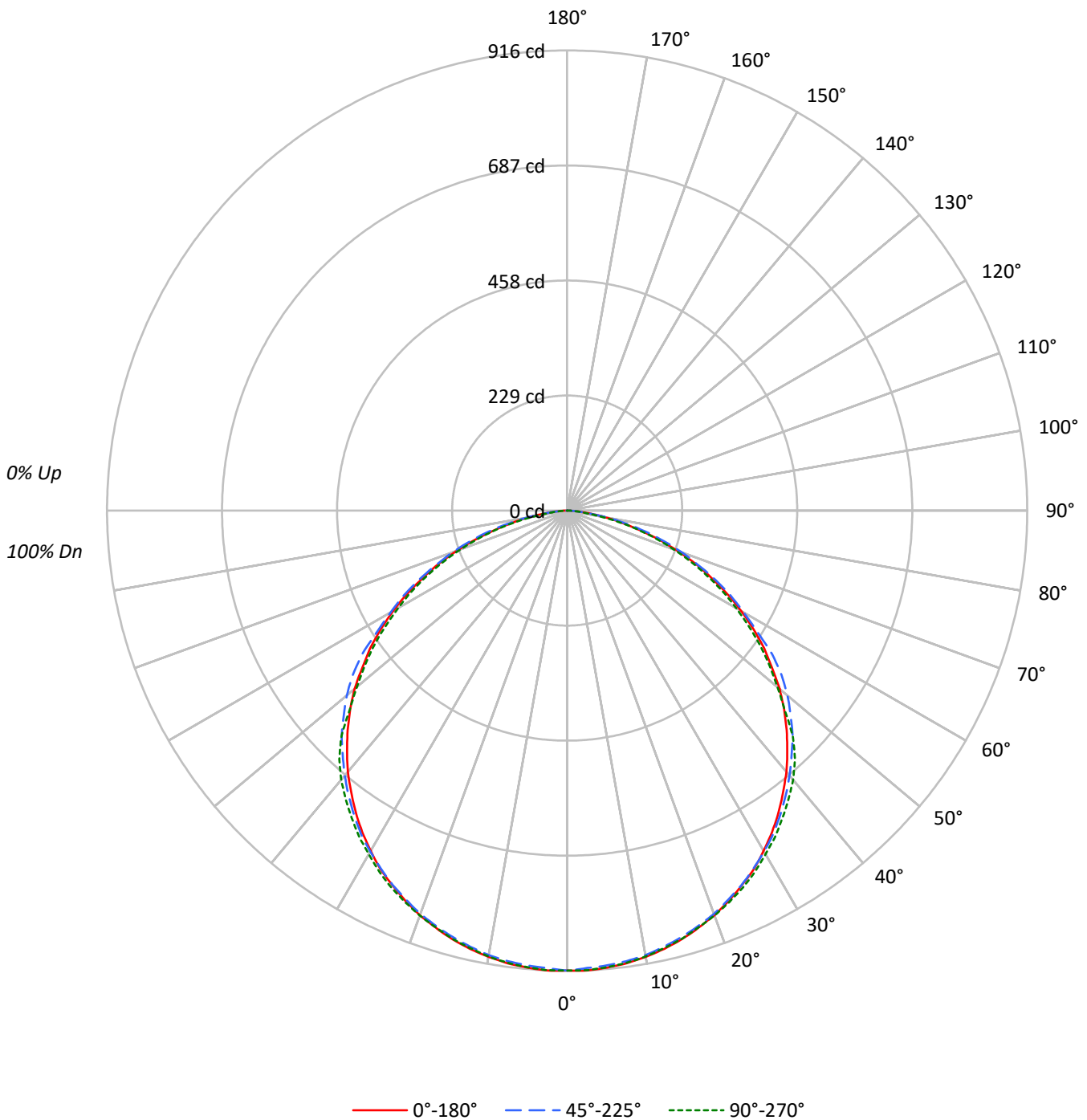
Input Watts (W): 31.341  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2464	2464	2464
5°	2467	2455	2464
10°	2465	2456	2463
15°	2461	2449	2459
20°	2454	2447	2456
25°	2443	2441	2458
30°	2430	2435	2454
35°	2410	2429	2455
40°	2386	2419	2457
45°	2351	2416	2419
50°	2312	2398	2287
55°	2248	2335	2204
60°	2153	2185	2089
65°	2016	2070	1962
70°	1835	1908	1774
75°	1530	1672	1504
80°	1213	1278	1041
85°	787	682	605



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.7	3.3
10°-20°	249.0	9.5
20°-30°	380.1	14.6
30°-40°	463.4	17.7
40°-50°	485.2	18.6
50°-60°	431.7	16.5
60°-70°	318.5	12.2
70°-80°	164.5	6.3
80°-90°	32.0	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°	715.7	27.4
0°-40°	1179.1	45.2
0°-60°	2096.0	80.3
0°-90°	2611.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2611.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	916	916	916	916	916	
5°	913	912	909	912	912	87
15°	883	882	879	882	882	249
25°	823	823	822	828	828	380
35°	734	734	740	748	747	459
45°	618	622	635	641	636	476
55°	479	489	498	477	470	427
65°	317	339	325	314	308	314
75°	147	162	161	148	145	159
85°	26	28	22	20	20	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	915.7	915.7	915.7	915.7	915.7
2.5°	916.5	915.7	911.4	915.7	915.7
5°	913.1	912.3	908.9	912.3	912.3
7.5°	908.9	908.0	904.6	908.0	908.0
10°	902.1	901.2	898.7	902.1	901.2
12.5°	893.6	893.6	889.3	893.6	891.9
15°	883.3	882.5	879.1	882.5	882.5
17.5°	870.6	869.7	867.2	871.4	869.7
20°	857.0	856.1	854.4	858.7	857.8
22.5°	840.8	840.8	838.2	843.4	843.4
25°	822.9	822.9	822.1	828.0	828.0
27.5°	805.1	803.4	803.4	809.3	810.2
30°	782.1	782.1	783.8	790.6	789.7
32.5°	759.1	760.0	763.4	769.3	770.2
35°	733.6	734.4	739.5	748.0	747.2
37.5°	706.3	708.9	714.8	724.2	724.2
40°	679.1	680.8	688.5	698.7	699.5
42.5°	648.5	652.7	661.2	673.1	671.4
45°	617.8	622.1	634.9	640.8	635.7
47.5°	585.5	590.6	603.4	604.2	587.2
50°	552.3	558.3	572.7	555.7	546.3
52.5°	514.0	525.1	537.8	514.0	508.1
55°	479.1	489.3	497.8	476.6	469.8
57.5°	440.0	453.6	447.6	437.4	428.9
60°	400.0	414.4	405.9	395.7	388.1
62.5°	359.1	375.3	366.8	356.6	349.8
65°	316.6	338.7	325.1	314.0	308.1
67.5°	276.6	297.9	281.7	273.2	267.2
70°	233.2	251.0	242.5	231.5	225.5
72.5°	190.6	204.2	201.7	189.8	185.5
75°	147.2	162.5	160.8	148.1	144.7
77.5°	110.6	125.1	120.0	109.8	105.5
80°	78.3	87.7	82.5	70.6	67.2
82.5°	47.7	55.3	46.8	40.0	36.6
85°	25.5	28.1	22.1	20.4	19.6
87.5°	9.4	9.4	9.4	8.5	8.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)