

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: P259141

Luminaire Tested: **14CZ-LD5-39-SQP-UNV-L82765-W2A1-U-5000K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P259141  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35908)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-39-SQP-UNV-L82765-W2A1-U-5000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH SQP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 5000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2591.0 lumens  
Efficiency: N/A  
Efficacy: 81.7 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

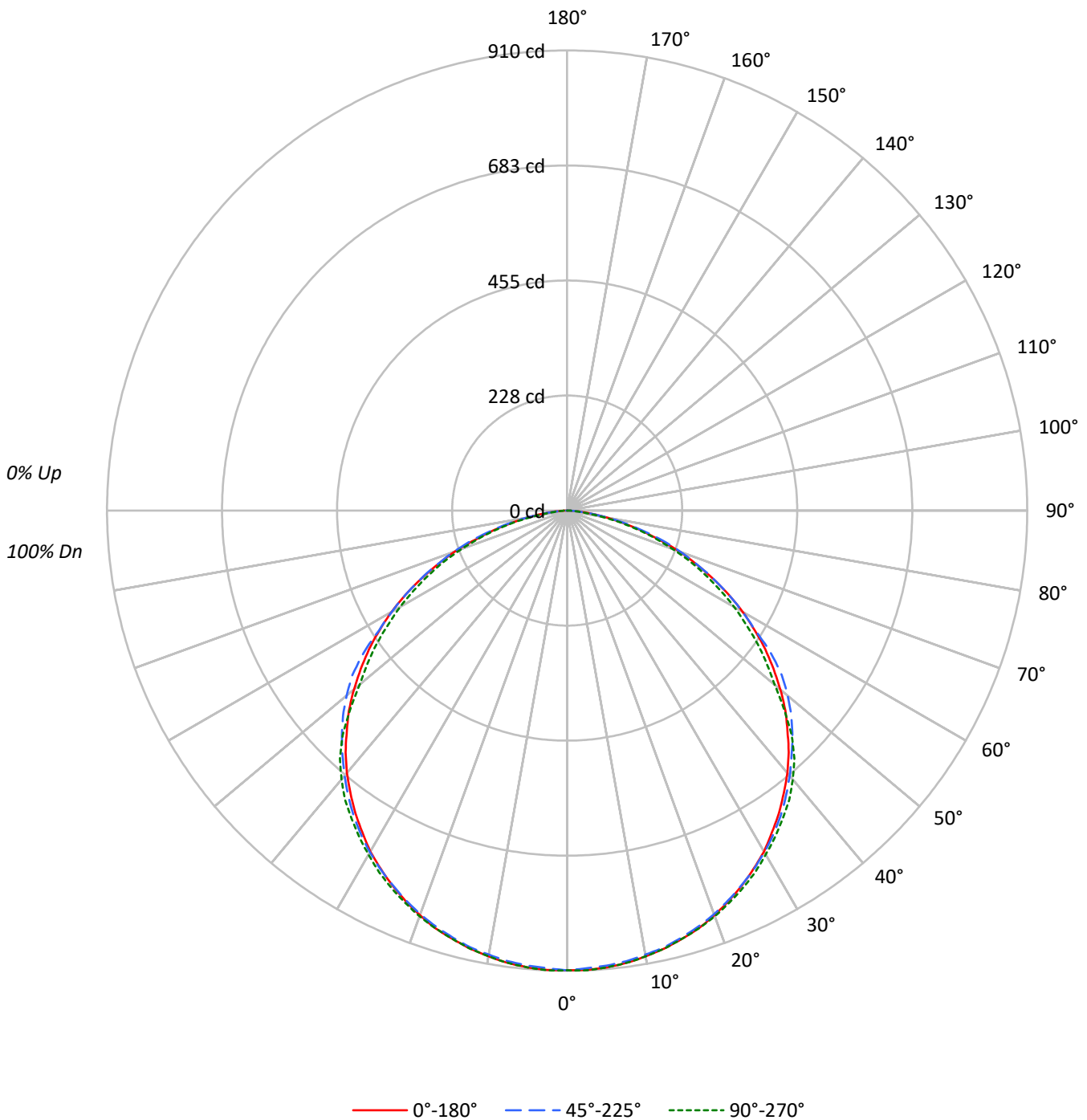
Input Watts (W): 31.713  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	62	59
4	83	71	62	55	81	70	61	55	67	60	54	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	47	60	53	47	58	52	46	56	50	46	44
6	70	57	48	42	68	56	48	41	54	47	41	52	46	41	51	45	40	38
7	65	52	43	37	63	51	42	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	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	27	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2447	2447	2447
5°	2449	2440	2449
10°	2446	2437	2446
15°	2443	2435	2443
20°	2438	2433	2445
25°	2429	2426	2444
30°	2419	2424	2441
35°	2399	2419	2442
40°	2380	2405	2439
45°	2345	2398	2388
50°	2304	2385	2241
55°	2244	2310	2158
60°	2159	2154	2055
65°	2023	2034	1922
70°	1858	1878	1740
75°	1561	1633	1488
80°	1238	1265	1048
85°	812	704	596



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.1	3.3
10°-20°	247.5	9.6
20°-30°	377.9	14.6
30°-40°	461.1	17.8
40°-50°	482.1	18.6
50°-60°	426.8	16.5
60°-70°	314.3	12.1
70°-80°	162.7	6.3
80°-90°	32.4	1.3
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°	711.5	27.5
0°-40°	1172.5	45.3
0°-60°	2081.5	80.3
0°-90°	2591.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2591.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	909	909	909	909	909	
5°	907	907	903	907	907	86
15°	877	877	874	878	877	248
25°	818	818	817	822	823	377
35°	730	732	736	743	743	457
45°	616	621	630	635	628	476
55°	478	488	492	467	460	427
65°	318	337	320	307	302	315
75°	150	161	157	147	143	160
85°	26	28	23	20	19	34
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	909.2	909.2	909.2	909.2	909.2
2.5°	909.2	909.2	905.7	909.2	910.1
5°	906.6	906.6	903.1	906.6	906.6
7.5°	902.2	901.3	898.7	902.2	902.2
10°	895.2	895.2	891.7	896.1	895.2
12.5°	887.3	886.4	884.7	888.2	887.3
15°	876.8	876.8	874.1	877.6	876.8
17.5°	866.2	865.3	862.7	866.2	866.2
20°	851.3	850.4	849.5	853.1	853.9
22.5°	835.5	834.6	833.8	839.0	839.0
25°	818.0	818.0	817.1	822.3	823.2
27.5°	798.6	798.6	799.5	806.5	805.7
30°	778.5	778.5	780.2	785.5	785.5
32.5°	753.9	755.6	759.2	765.3	765.3
35°	730.2	731.9	736.3	743.4	743.4
37.5°	703.9	706.5	710.9	719.7	721.4
40°	677.5	679.3	684.6	694.2	694.2
42.5°	648.6	650.3	657.3	667.0	665.2
45°	616.1	621.4	630.1	635.4	627.5
47.5°	585.4	588.9	601.2	595.0	581.9
50°	550.3	557.3	569.6	547.6	535.4
52.5°	514.3	522.2	535.4	504.6	497.6
55°	478.3	488.0	492.4	466.9	459.9
57.5°	439.7	450.2	441.4	426.5	419.5
60°	401.1	413.4	400.2	386.2	381.8
62.5°	360.7	374.7	359.8	347.5	341.4
65°	317.7	337.0	319.5	307.2	301.9
67.5°	275.6	295.8	277.3	266.8	263.3
70°	236.1	247.5	238.7	228.2	221.2
72.5°	188.7	200.1	198.3	186.9	182.5
75°	150.1	160.6	157.1	147.4	143.1
77.5°	111.5	122.9	119.4	107.9	106.2
80°	79.9	87.8	81.6	71.1	67.6
82.5°	50.0	56.2	48.3	40.4	38.6
85°	26.3	28.1	22.8	20.2	19.3
87.5°	8.8	9.7	9.7	8.8	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)