

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: P258636

Luminaire Tested: **14CZ-LD5-39-UNV-L82765-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258636  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35573)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-39-UNV-L82765-W2A1-U-4500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3963.0 lumens  
Efficiency: N/A  
Efficacy: 125.7 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.28 / 1.37  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

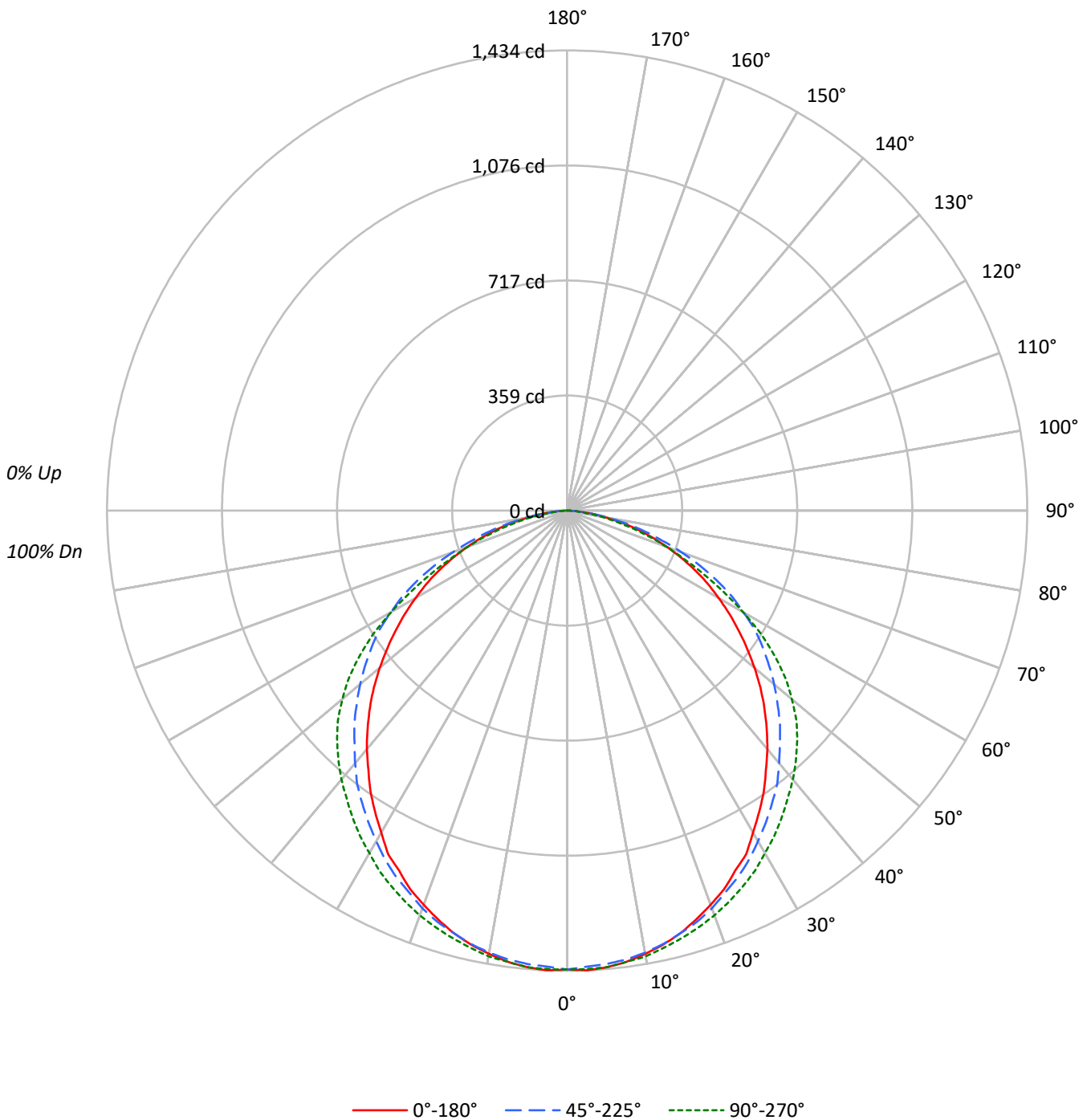
Input Watts (W): 31.527  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59																												
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51																												
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44																												
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38																												
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34																												
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30																												
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27																												
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25																												

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

	0°	45°	90°
0°	3848	3848	3848
5°	3858	3831	3858
10°	3833	3822	3854
15°	3799	3799	3843
20°	3743	3777	3844
25°	3678	3742	3840
30°	3600	3697	3831
35°	3511	3658	3832
40°	3411	3610	3843
45°	3309	3569	3859
50°	3190	3525	3828
55°	3061	3492	3703
60°	2934	3418	3407
65°	2799	3272	2986
70°	2598	2982	2582
75°	2356	2600	2132
80°	1877	2060	1574
85°	1328	1145	905



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.3	3.4
10°-20°	386.6	9.8
20°-30°	582.8	14.7
30°-40°	698.6	17.6
40°-50°	725.0	18.3
50°-60°	653.9	16.5
60°-70°	477.0	12.0
70°-80°	250.3	6.3
80°-90°	53.4	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°	1104.7	27.9
0°-40°	1803.4	45.5
0°-60°	3182.3	80.3
0°-90°	3963.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3963.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1430	1430	1430	1430	1430	
5°	1428	1424	1418	1428	1428	136
15°	1364	1364	1364	1379	1379	384
25°	1239	1244	1260	1288	1293	572
35°	1069	1080	1114	1155	1166	668
45°	869	887	938	994	1014	670
55°	652	676	744	793	789	584
65°	440	465	514	494	469	435
75°	227	258	250	217	205	238
85°	43	53	37	31	29	55
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1430.1	1430.1	1430.1	1430.1	1430.1
2.5°	1434.0	1430.1	1422.3	1430.1	1430.1
5°	1428.2	1424.3	1418.4	1428.2	1428.2
7.5°	1418.4	1414.5	1410.6	1420.4	1418.4
10°	1402.8	1400.8	1398.9	1410.6	1410.6
12.5°	1385.2	1385.2	1383.2	1396.9	1395.0
15°	1363.7	1363.7	1363.7	1379.3	1379.3
17.5°	1336.4	1340.3	1344.2	1361.8	1361.8
20°	1307.0	1311.0	1318.8	1340.3	1342.2
22.5°	1277.7	1279.7	1287.5	1312.9	1318.8
25°	1238.7	1244.5	1260.2	1287.5	1293.4
27.5°	1207.4	1209.4	1226.9	1258.2	1266.0
30°	1158.6	1172.2	1189.8	1225.0	1232.8
32.5°	1113.6	1125.4	1152.7	1189.8	1201.5
35°	1068.7	1080.4	1113.6	1154.7	1166.4
37.5°	1017.9	1035.5	1074.6	1115.6	1129.3
40°	971.0	986.6	1027.7	1078.5	1094.1
42.5°	920.2	935.8	980.8	1037.4	1055.0
45°	869.4	887.0	937.8	994.5	1014.0
47.5°	816.7	836.2	888.9	951.5	969.1
50°	762.0	783.4	842.1	906.5	914.3
52.5°	707.3	730.7	793.2	849.9	857.7
55°	652.5	676.0	744.4	793.2	789.3
57.5°	599.8	625.2	695.5	720.9	717.0
60°	545.1	572.4	635.0	646.7	633.0
62.5°	494.3	519.7	578.3	568.5	551.0
65°	439.6	465.0	513.8	494.3	468.9
67.5°	384.9	416.1	447.4	414.2	394.7
70°	330.2	365.3	379.0	345.8	328.2
72.5°	277.4	314.6	310.6	277.4	265.7
75°	226.6	257.9	250.1	216.9	205.1
77.5°	171.9	207.1	189.5	162.2	152.4
80°	121.1	152.4	132.9	109.4	101.6
82.5°	80.1	101.6	82.1	64.5	58.6
85°	43.0	52.8	37.1	31.3	29.3
87.5°	17.6	15.6	13.7	13.7	11.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)