

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: P258558

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258558  
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-L83050-W2A1-U-4000K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4096.0 lumens  
Efficiency: N/A  
Efficacy: 129.2 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

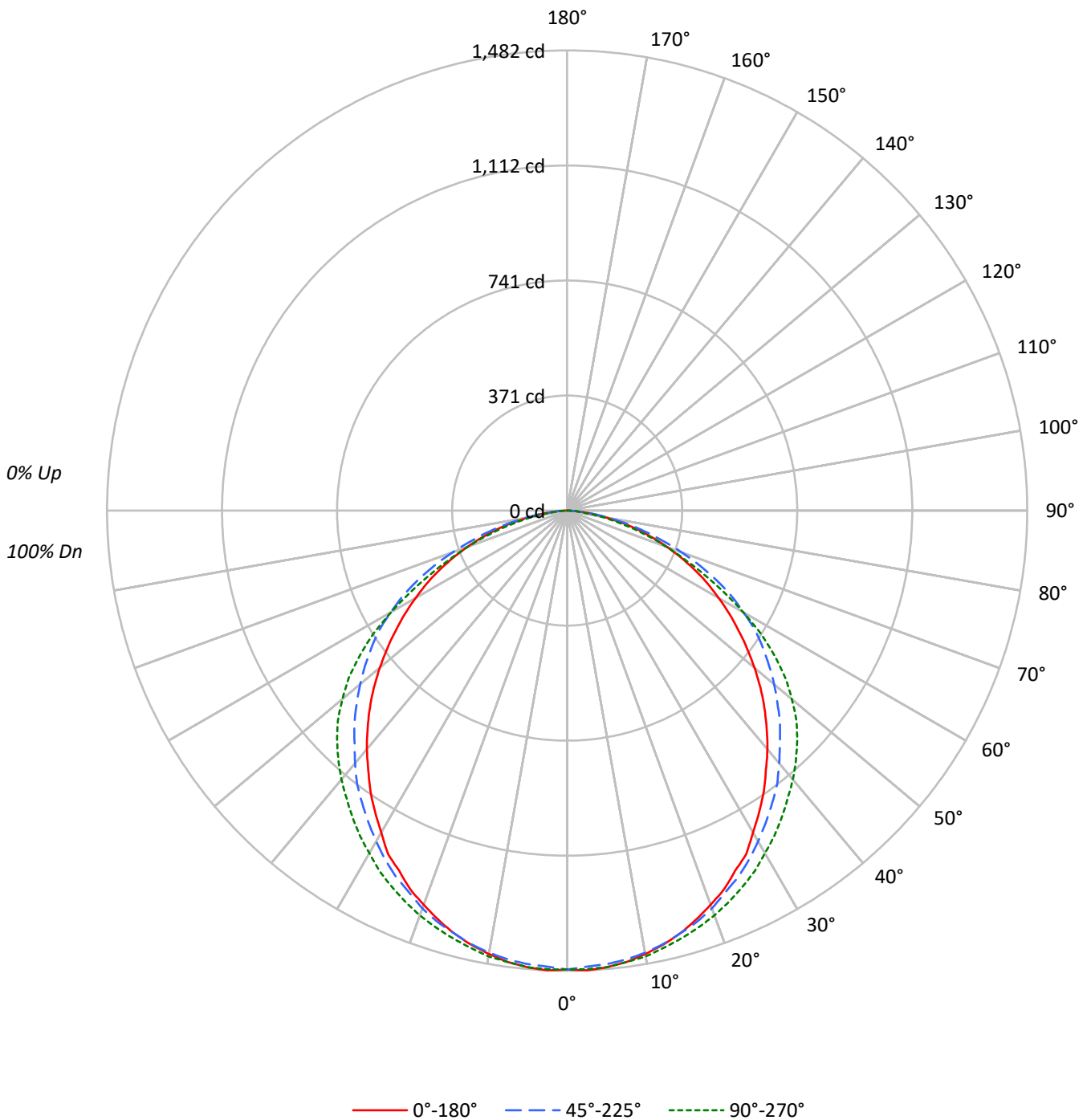
Input Watts (W): 31.713  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	3978	3978	3978
5°	3987	3960	3987
10°	3962	3951	3984
15°	3927	3927	3972
20°	3869	3903	3973
25°	3801	3867	3969
30°	3721	3821	3959
35°	3629	3781	3960
40°	3525	3731	3972
45°	3420	3689	3988
50°	3297	3643	3956
55°	3164	3610	3827
60°	3032	3532	3521
65°	2893	3382	3086
70°	2685	3082	2669
75°	2435	2688	2204
80°	1940	2128	1627
85°	1371	1186	936



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	139.9	3.4
10°-20°	399.5	9.8
20°-30°	602.4	14.7
30°-40°	722.1	17.6
40°-50°	749.4	18.3
50°-60°	675.9	16.5
60°-70°	493.0	12.0
70°-80°	258.7	6.3
80°-90°	55.2	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°	1141.8	27.9
0°-40°	1863.9	45.5
0°-60°	3289.2	80.3
0°-90°	4096.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4096.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1478	1478	1478	1478	1478	
5°	1476	1472	1466	1476	1476	140
15°	1410	1410	1410	1426	1426	397
25°	1280	1286	1302	1331	1337	591
35°	1105	1117	1151	1193	1206	690
45°	899	917	969	1028	1048	693
55°	674	699	769	820	816	604
65°	454	481	531	511	485	449
75°	234	267	258	224	212	246
85°	44	54	38	32	30	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1478.1	1478.1	1478.1	1478.1	1478.1
2.5°	1482.2	1478.1	1470.1	1478.1	1478.1
5°	1476.1	1472.1	1466.0	1476.1	1476.1
7.5°	1466.0	1462.0	1458.0	1468.1	1466.0
10°	1449.9	1447.9	1445.8	1458.0	1458.0
12.5°	1431.7	1431.7	1429.7	1443.8	1441.8
15°	1409.5	1409.5	1409.5	1425.6	1425.6
17.5°	1381.2	1385.3	1389.3	1407.5	1407.5
20°	1350.9	1355.0	1363.0	1385.3	1387.3
22.5°	1320.6	1322.7	1330.7	1357.0	1363.0
25°	1280.3	1286.3	1302.5	1330.7	1336.8
27.5°	1247.9	1250.0	1268.1	1300.4	1308.5
30°	1197.5	1211.6	1229.8	1266.1	1274.2
32.5°	1151.0	1163.1	1191.4	1229.8	1241.9
35°	1104.6	1116.7	1151.0	1193.4	1205.5
37.5°	1052.1	1070.2	1110.6	1153.0	1167.2
40°	1003.6	1019.8	1062.2	1114.7	1130.8
42.5°	951.1	967.3	1013.7	1072.3	1090.4
45°	898.6	916.8	969.3	1027.8	1048.0
47.5°	844.1	864.3	918.8	983.4	1001.6
50°	787.5	809.8	870.3	937.0	945.0
52.5°	731.0	755.2	819.8	878.4	886.5
55°	674.5	698.7	769.4	819.8	815.8
57.5°	619.9	646.2	718.9	745.1	741.1
60°	563.4	591.7	656.3	668.4	654.3
62.5°	510.9	537.1	597.7	587.6	569.5
65°	454.3	480.6	531.1	510.9	484.6
67.5°	397.8	430.1	462.4	428.1	407.9
70°	341.3	377.6	391.7	357.4	339.2
72.5°	286.7	325.1	321.1	286.7	274.6
75°	234.2	266.6	258.5	224.1	212.0
77.5°	177.7	214.0	195.9	167.6	157.5
80°	125.2	157.5	137.3	113.1	105.0
82.5°	82.8	105.0	84.8	66.6	60.6
85°	44.4	54.5	38.4	32.3	30.3
87.5°	18.2	16.2	14.1	14.1	12.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)