

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: P258592

Luminaire Tested: **14CZ-LD5-44-UNV-L93050-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P258592  
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-LD5-44-UNV-L93050-W2A1-U-3500K  
Description: CRUZE 1x4 TUNABLE WHITE LED TROFFER WITH RIBBED LENS  
Light Source: (168) 90 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3707.0 lumens  
Efficiency: N/A  
Efficacy: 102.2 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

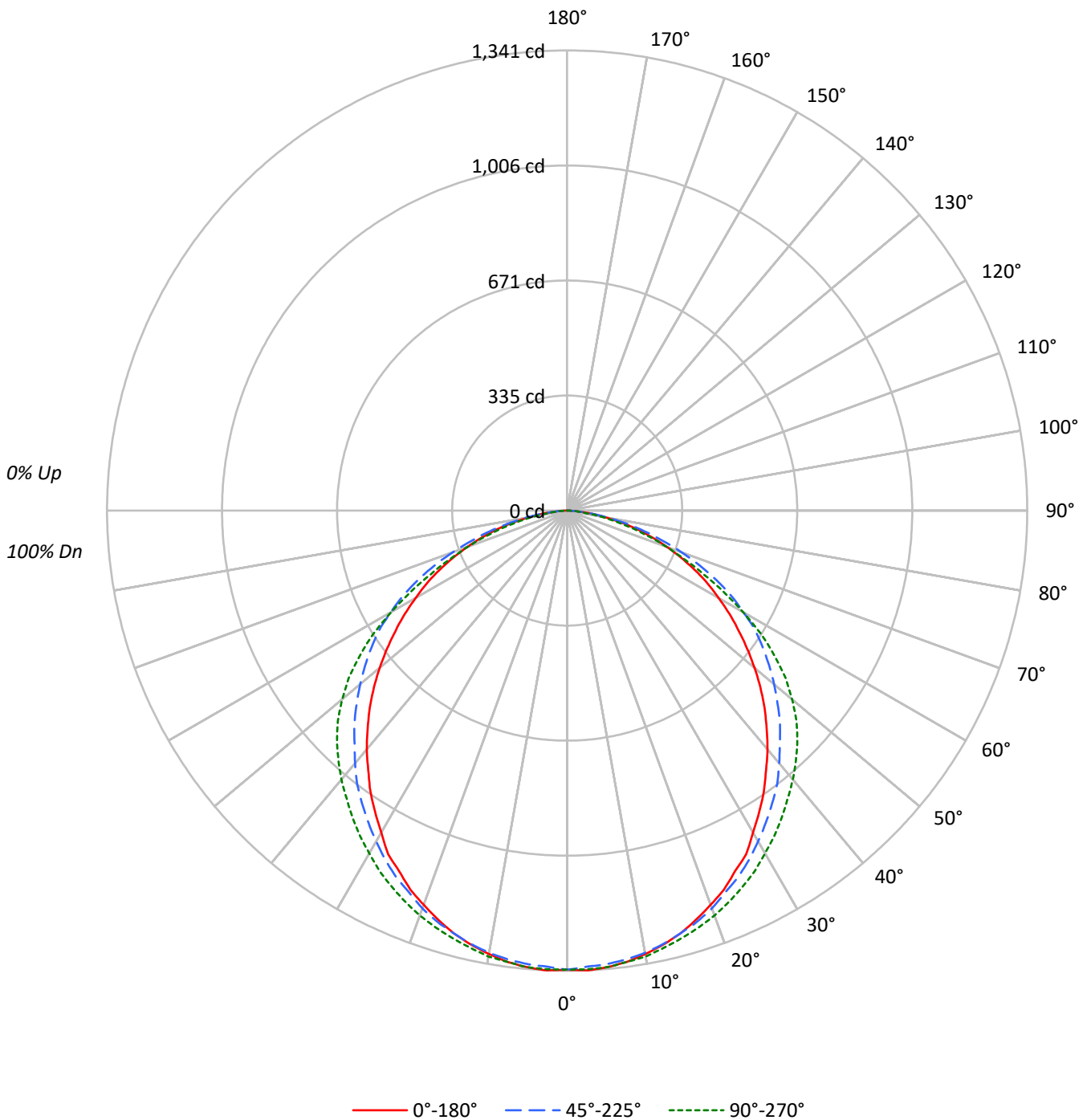
Input Watts (W): 36.27  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	84	79	97	89	83	78	86	80	76	82	78	74	79	76	73	70					70			
3	90	80	72	66	88	78	71	65	75	69	64	73	67	63	70	66	62	59					59			
4	83	71	62	56	81	70	61	55	67	60	54	65	59	54	63	57	53	51					51			
5	76	63	54	48	74	62	54	48	60	53	47	58	52	46	56	51	46	44					44			
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38					38			
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	47	40	36	34					34			
8	61	47	39	33	59	46	38	33	45	38	33	44	37	32	43	37	32	30					30			
9	57	43	35	30	55	43	35	29	42	34	29	40	34	29	39	33	29	27					27			
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25					25			

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

	0°	45°	90°
0°	3600	3600	3600
5°	3609	3584	3609
10°	3586	3575	3606
15°	3554	3554	3594
20°	3501	3533	3595
25°	3440	3500	3592
30°	3367	3458	3583
35°	3284	3422	3584
40°	3191	3377	3595
45°	3095	3338	3610
50°	2984	3298	3581
55°	2864	3267	3464
60°	2744	3196	3187
65°	2618	3060	2793
70°	2430	2789	2415
75°	2204	2432	1995
80°	1756	1926	1472
85°	1241	1071	846



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.6	3.4
10°-20°	361.6	9.8
20°-30°	545.2	14.7
30°-40°	653.5	17.6
40°-50°	678.2	18.3
50°-60°	611.7	16.5
60°-70°	446.2	12.0
70°-80°	234.1	6.3
80°-90°	49.9	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°	1033.4	27.9
0°-40°	1686.9	45.5
0°-60°	2976.8	80.3
0°-90°	3707.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3707.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1338	1338	1338	1338	1338	
5°	1336	1332	1327	1336	1336	127
15°	1276	1276	1276	1290	1290	359
25°	1159	1164	1179	1204	1210	535
35°	1000	1011	1042	1080	1091	624
45°	813	830	877	930	948	627
55°	610	632	696	742	738	547
65°	411	435	481	462	439	406
75°	212	241	234	203	192	222
85°	40	49	35	29	27	51
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1337.8	1337.8	1337.8	1337.8	1337.8
2.5°	1341.4	1337.8	1330.4	1337.8	1337.8
5°	1335.9	1332.3	1326.8	1335.9	1335.9
7.5°	1326.8	1323.1	1319.5	1328.6	1326.8
10°	1312.2	1310.3	1308.5	1319.5	1319.5
12.5°	1295.7	1295.7	1293.9	1306.7	1304.9
15°	1275.6	1275.6	1275.6	1290.2	1290.2
17.5°	1250.0	1253.7	1257.3	1273.8	1273.8
20°	1222.6	1226.3	1233.6	1253.7	1255.5
22.5°	1195.2	1197.0	1204.3	1228.1	1233.6
25°	1158.7	1164.1	1178.8	1204.3	1209.8
27.5°	1129.4	1131.2	1147.7	1176.9	1184.2
30°	1083.7	1096.5	1113.0	1145.9	1153.2
32.5°	1041.7	1052.7	1078.2	1113.0	1123.9
35°	999.7	1010.6	1041.7	1080.1	1091.0
37.5°	952.1	968.6	1005.1	1043.5	1056.3
40°	908.3	922.9	961.3	1008.8	1023.4
42.5°	860.8	875.4	917.4	970.4	986.9
45°	813.3	829.7	877.2	930.2	948.5
47.5°	763.9	782.2	831.5	890.0	906.5
50°	712.7	732.8	787.7	848.0	855.3
52.5°	661.6	683.5	742.0	795.0	802.3
55°	610.4	632.3	696.3	742.0	738.3
57.5°	561.1	584.8	650.6	674.4	670.7
60°	509.9	535.5	593.9	604.9	592.1
62.5°	462.4	486.1	540.9	531.8	515.4
65°	411.2	435.0	480.6	462.4	438.6
67.5°	360.0	389.3	418.5	387.4	369.2
70°	308.9	341.7	354.5	323.5	307.0
72.5°	259.5	294.2	290.6	259.5	248.5
75°	212.0	241.2	233.9	202.9	191.9
77.5°	160.8	193.7	177.3	151.7	142.5
80°	113.3	142.5	124.3	102.3	95.0
82.5°	74.9	95.0	76.8	60.3	54.8
85°	40.2	49.3	34.7	29.2	27.4
87.5°	16.4	14.6	12.8	12.8	11.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)