

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: P230904

Luminaire Tested: **14CZ-LD5-44-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230904  
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-L930-CD1-U  
Description: CRUZE 1x4 LED TROFFER  
WITH RIBBED LENS  
Light Source: (84) 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3642.0 lumens  
Efficiency: N/A  
Efficacy: 88.6 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

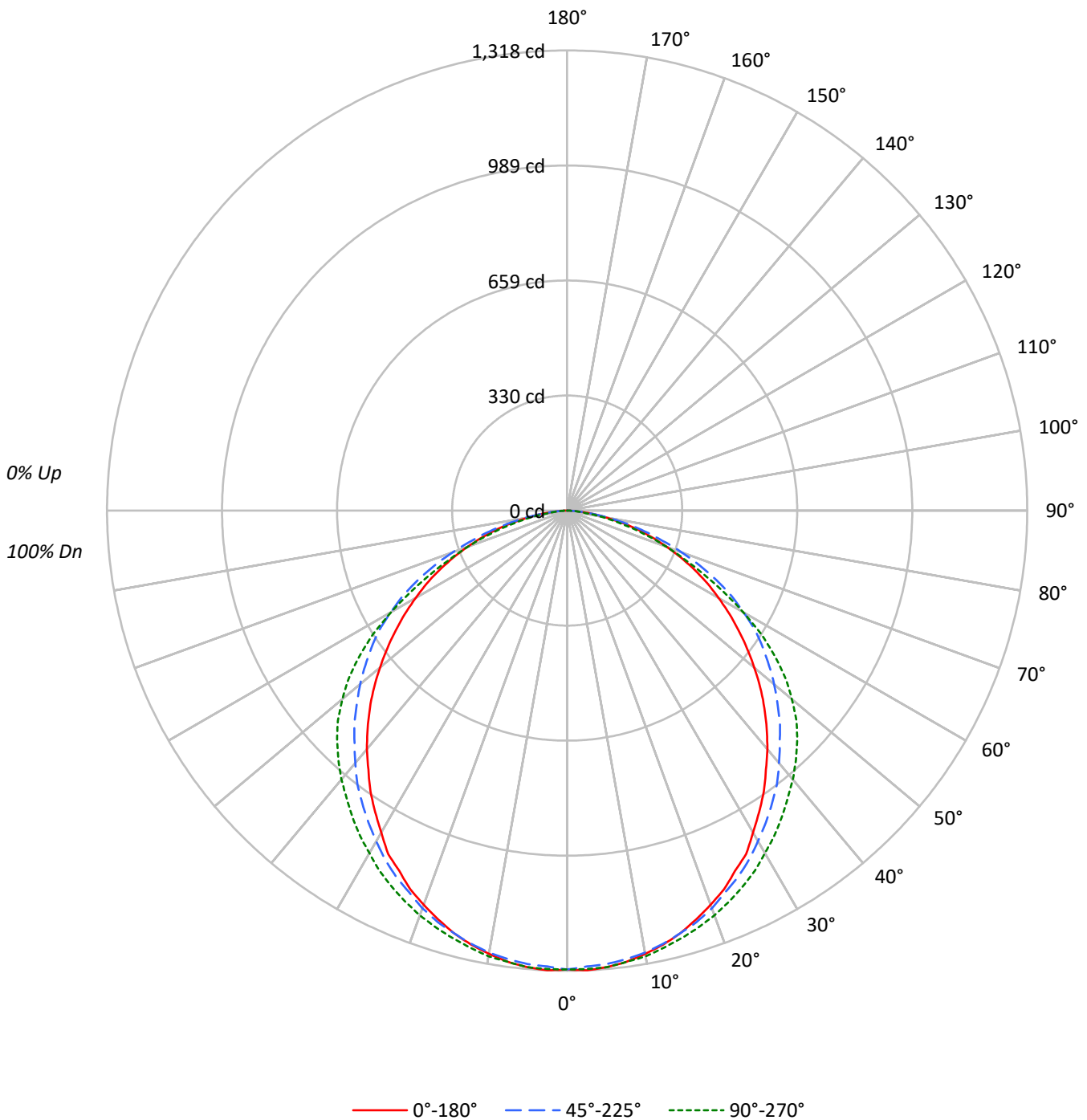
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	3537	3537	3537
5°	3545	3521	3545
10°	3523	3513	3542
15°	3491	3491	3531
20°	3440	3471	3532
25°	3380	3439	3529
30°	3308	3398	3521
35°	3226	3362	3521
40°	3135	3318	3532
45°	3041	3280	3546
50°	2931	3240	3518
55°	2814	3210	3403
60°	2696	3140	3131
65°	2572	3007	2744
70°	2387	2740	2373
75°	2166	2389	1960
80°	1725	1892	1447
85°	1220	1053	831



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	124.4	3.4
10°-20°	355.3	9.8
20°-30°	535.6	14.7
30°-40°	642.0	17.6
40°-50°	666.3	18.3
50°-60°	601.0	16.5
60°-70°	438.4	12.0
70°-80°	230.0	6.3
80°-90°	49.1	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°	1015.3	27.9
0°-40°	1657.3	45.5
0°-60°	2924.6	80.3
0°-90°	3642.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3642.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1314	1314	1314	1314	1314	
5°	1312	1309	1304	1312	1312	125
15°	1253	1253	1253	1268	1268	353
25°	1138	1144	1158	1183	1189	525
35°	982	993	1023	1061	1072	613
45°	799	815	862	914	932	616
55°	600	621	684	729	725	537
65°	404	427	472	454	431	399
75°	208	237	230	199	188	218
85°	40	48	34	29	27	50
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1314.3	1314.3	1314.3	1314.3	1314.3
2.5°	1317.9	1314.3	1307.1	1314.3	1314.3
5°	1312.5	1308.9	1303.5	1312.5	1312.5
7.5°	1303.5	1299.9	1296.3	1305.3	1303.5
10°	1289.2	1287.4	1285.6	1296.3	1296.3
12.5°	1273.0	1273.0	1271.2	1283.8	1282.0
15°	1253.2	1253.2	1253.2	1267.6	1267.6
17.5°	1228.1	1231.7	1235.3	1251.5	1251.5
20°	1201.2	1204.8	1212.0	1231.7	1233.5
22.5°	1174.2	1176.0	1183.2	1206.6	1212.0
25°	1138.3	1143.7	1158.1	1183.2	1188.6
27.5°	1109.6	1111.4	1127.6	1156.3	1163.5
30°	1064.7	1077.3	1093.5	1125.8	1133.0
32.5°	1023.4	1034.2	1059.3	1093.5	1104.2
35°	982.1	992.9	1023.4	1061.1	1071.9
37.5°	935.4	951.6	987.5	1025.2	1037.8
40°	892.4	906.7	944.4	991.1	1005.5
42.5°	845.7	860.0	901.3	953.4	969.6
45°	799.0	815.2	861.8	913.9	931.9
47.5°	750.5	768.5	816.9	874.4	890.6
50°	700.2	720.0	773.9	833.1	840.3
52.5°	650.0	671.5	729.0	781.0	788.2
55°	599.7	621.2	684.1	729.0	725.4
57.5°	551.2	574.6	639.2	662.5	658.9
60°	500.9	526.1	583.5	594.3	581.7
62.5°	454.3	477.6	531.5	522.5	506.3
65°	404.0	427.3	472.2	454.3	430.9
67.5°	353.7	382.4	411.2	380.6	362.7
70°	303.4	335.8	348.3	317.8	301.6
72.5°	255.0	289.1	285.5	255.0	244.2
75°	208.3	237.0	229.8	199.3	188.5
77.5°	158.0	190.3	174.2	149.0	140.0
80°	111.3	140.0	122.1	100.5	93.4
82.5°	73.6	93.4	75.4	59.3	53.9
85°	39.5	48.5	34.1	28.7	26.9
87.5°	16.2	14.4	12.6	12.6	10.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)