

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: P230929

Luminaire Tested: **14CZ-LD5-44-S-UNV-L935-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230929  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P35112)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 14CZ-LD5-44-S-UNV-L935-CD1-U  
Description: CRUZE 1x4 LED TROFFER  
WITH SMOOTH LENS  
Light Source: (84) 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3862.0 lumens  
Efficiency: N/A  
Efficacy: 94.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')  
CIE Type: Direct

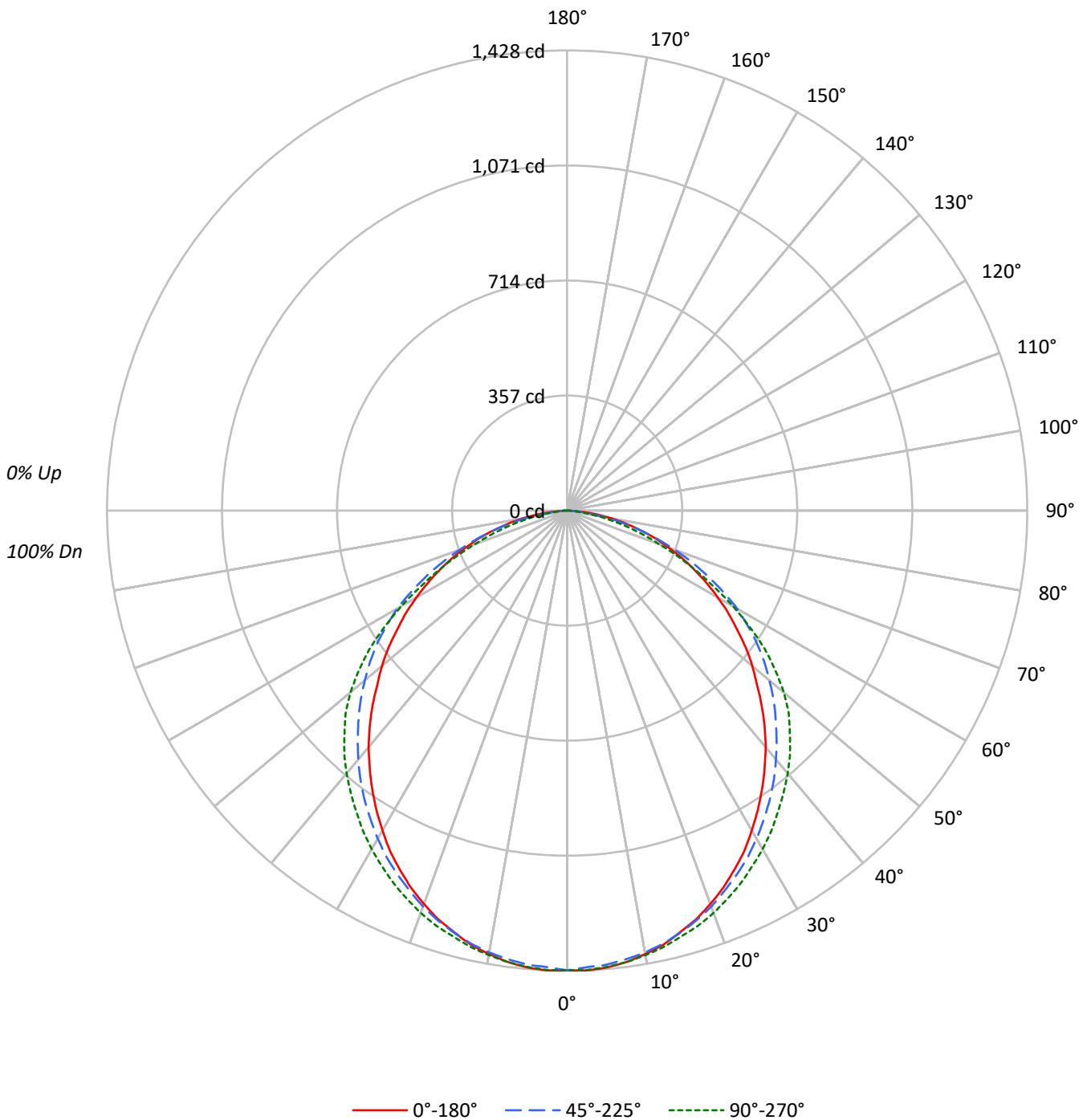
Input Watts (W): 41.1  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	105	100	97	106	102	98	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	89	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51
5	76	64	55	48	74	63	54	48	60	53	47	58	52	47	57	51	46	44
6	71	57	48	42	69	56	48	42	55	47	42	53	46	41	51	45	41	39
7	65	52	43	37	64	51	43	37	50	42	37	48	42	37	47	41	36	34
8	61	47	39	33	59	47	39	33	45	38	33	44	38	33	43	37	32	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28
10	53	40	32	27	52	40	32	27	39	32	27	38	31	27	37	31	27	25

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

	0°	45°	90°
0°	3839	3839	3839
5°	3844	3821	3840
10°	3818	3804	3828
15°	3773	3778	3811
20°	3721	3745	3804
25°	3648	3699	3786
30°	3561	3652	3770
35°	3465	3601	3748
40°	3367	3542	3742
45°	3248	3484	3720
50°	3141	3429	3674
55°	3019	3375	3512
60°	2908	3279	3204
65°	2783	3068	2816
70°	2627	2789	2383
75°	2452	2415	1968
80°	2160	1867	1440
85°	1701	905	797



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	134.8	3.5
10°-20°	384.0	9.9
20°-30°	576.3	14.9
30°-40°	687.1	17.8
40°-50°	707.7	18.3
50°-60°	630.7	16.3
60°-70°	454.5	11.8
70°-80°	237.7	6.2
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°	1095.2	28.4
0°-40°	1782.2	46.1
0°-60°	3120.7	80.8
0°-90°	3862.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3862.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1427	1427	1427	1427	1427	
5°	1423	1420	1415	1423	1422	135
15°	1354	1356	1356	1370	1368	382
25°	1229	1236	1246	1270	1275	566
35°	1055	1069	1096	1132	1141	660
45°	854	872	916	967	978	659
55°	644	664	719	752	749	577
65°	437	453	482	460	442	433
75°	236	248	232	201	189	250
85°	55	48	29	26	26	65
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1426.6	1426.6	1426.6	1426.6	1426.6
2.5°	1428.3	1424.9	1418.0	1426.6	1426.6
5°	1423.2	1419.7	1414.6	1423.2	1421.5
7.5°	1412.9	1409.4	1404.3	1414.6	1412.9
10°	1397.4	1395.6	1392.2	1402.5	1400.8
12.5°	1380.2	1378.4	1376.7	1387.0	1387.0
15°	1354.3	1356.1	1356.1	1369.8	1368.1
17.5°	1330.3	1332.0	1333.7	1350.9	1350.9
20°	1299.3	1301.0	1307.9	1326.8	1328.5
22.5°	1266.6	1268.3	1276.9	1299.3	1302.7
25°	1228.7	1235.6	1245.9	1270.0	1275.2
27.5°	1190.9	1196.0	1213.2	1240.8	1244.2
30°	1146.1	1156.4	1175.4	1206.3	1213.2
32.5°	1101.4	1113.4	1135.8	1170.2	1178.8
35°	1054.9	1068.7	1096.2	1132.4	1141.0
37.5°	1006.7	1018.8	1053.2	1091.0	1103.1
40°	958.5	970.6	1008.4	1051.5	1065.2
42.5°	906.9	924.1	962.0	1010.2	1023.9
45°	853.6	872.5	915.5	967.1	977.5
47.5°	798.5	819.1	869.1	920.7	932.7
50°	750.3	769.2	819.1	869.1	877.7
52.5°	698.7	715.9	771.0	812.3	814.0
55°	643.6	664.3	719.3	752.0	748.6
57.5°	593.7	610.9	664.3	681.5	671.2
60°	540.4	555.8	609.2	610.9	595.4
62.5°	488.7	504.2	545.5	533.5	514.5
65°	437.1	452.6	481.9	459.5	442.3
67.5°	387.2	401.0	418.2	388.9	371.7
70°	333.9	352.8	354.5	320.1	302.9
72.5°	287.4	297.7	294.3	261.6	246.1
75°	235.8	247.8	232.3	201.3	189.3
77.5°	187.6	196.2	175.5	146.3	137.7
80°	139.4	144.6	120.5	98.1	92.9
82.5°	94.6	94.6	68.8	53.3	48.2
85°	55.1	48.2	29.3	25.8	25.8
87.5°	18.9	12.0	12.0	12.0	12.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)