

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: P230896

Luminaire Tested: **14CZ-LD5-35-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230896  
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-LD5-35-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: 2974.0 lumens  
Efficiency: N/A  
Efficacy: 94.4 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

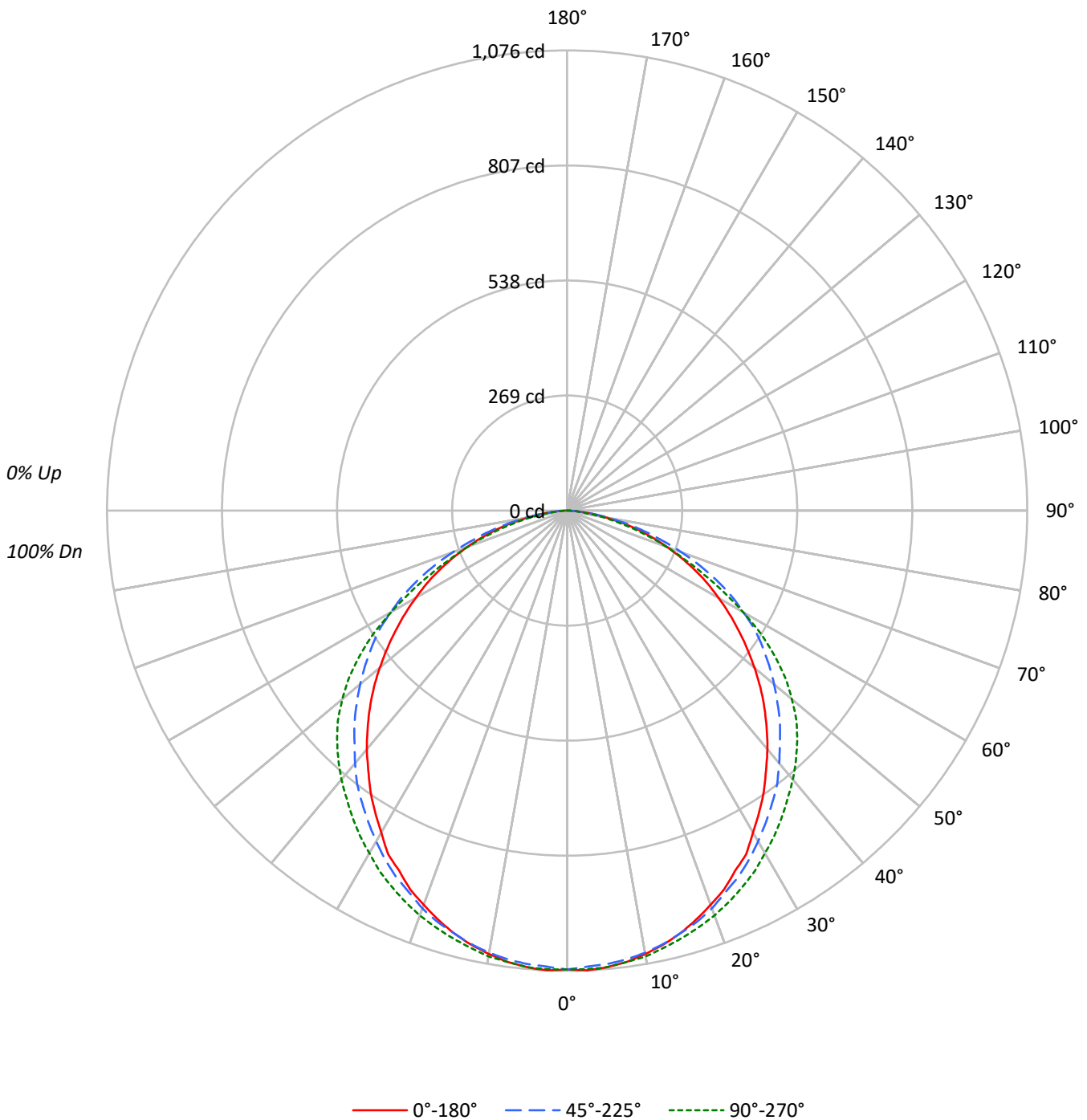
Input Watts (W): 31.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2888	2888	2888
5°	2895	2875	2895
10°	2876	2869	2893
15°	2851	2851	2884
20°	2809	2834	2885
25°	2760	2808	2882
30°	2701	2774	2875
35°	2635	2745	2875
40°	2560	2709	2884
45°	2483	2678	2896
50°	2394	2645	2873
55°	2297	2621	2779
60°	2202	2565	2556
65°	2101	2455	2241
70°	1950	2238	1938
75°	1769	1952	1600
80°	1409	1545	1181
85°	997	861	679



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	101.6	3.4
10°-20°	290.1	9.8
20°-30°	437.4	14.7
30°-40°	524.3	17.6
40°-50°	544.1	18.3
50°-60°	490.7	16.5
60°-70°	358.0	12.0
70°-80°	187.8	6.3
80°-90°	40.1	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°	829.0	27.9
0°-40°	1353.3	45.5
0°-60°	2388.1	80.3
0°-90°	2974.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2974.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1073	1073	1073	1073	1073	
5°	1072	1069	1064	1072	1072	102
15°	1023	1023	1023	1035	1035	288
25°	930	934	946	966	971	429
35°	802	811	836	866	875	501
45°	652	666	704	746	761	503
55°	490	507	559	595	592	438
65°	330	349	386	371	352	326
75°	170	194	188	163	154	178
85°	32	40	28	24	22	41
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1073.2	1073.2	1073.2	1073.2	1073.2
2.5°	1076.2	1073.2	1067.4	1073.2	1073.2
5°	1071.8	1068.8	1064.4	1071.8	1071.8
7.5°	1064.4	1061.5	1058.6	1065.9	1064.4
10°	1052.7	1051.2	1049.8	1058.6	1058.6
12.5°	1039.5	1039.5	1038.0	1048.3	1046.8
15°	1023.4	1023.4	1023.4	1035.1	1035.1
17.5°	1002.9	1005.8	1008.7	1021.9	1021.9
20°	980.9	983.8	989.7	1005.8	1007.3
22.5°	958.9	960.3	966.2	985.3	989.7
25°	929.5	933.9	945.7	966.2	970.6
27.5°	906.1	907.6	920.8	944.2	950.1
30°	869.4	879.7	892.9	919.3	925.1
32.5°	835.7	844.5	865.0	892.9	901.7
35°	802.0	810.8	835.7	866.5	875.3
37.5°	763.9	777.1	806.4	837.2	847.4
40°	728.7	740.4	771.2	809.3	821.1
42.5°	690.6	702.3	736.0	778.5	791.7
45°	652.4	665.6	703.8	746.3	760.9
47.5°	612.9	627.5	667.1	714.0	727.2
50°	571.8	587.9	631.9	680.3	686.2
52.5°	530.8	548.3	595.3	637.8	643.6
55°	489.7	507.3	558.6	595.3	592.3
57.5°	450.1	469.2	522.0	541.0	538.1
60°	409.1	429.6	476.5	485.3	475.0
62.5°	370.9	390.0	434.0	426.7	413.5
65°	329.9	348.9	385.6	370.9	351.9
67.5°	288.8	312.3	335.8	310.8	296.2
70°	247.8	274.2	284.4	259.5	246.3
72.5°	208.2	236.1	233.1	208.2	199.4
75°	170.1	193.5	187.7	162.7	153.9
77.5°	129.0	155.4	142.2	121.7	114.4
80°	90.9	114.4	99.7	82.1	76.2
82.5°	60.1	76.2	61.6	48.4	44.0
85°	32.3	39.6	27.9	23.5	22.0
87.5°	13.2	11.7	10.3	10.3	8.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)