

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: P230892

Luminaire Tested: **14CZ-LD5-29-UNV-L930-CD1-U**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P230892  
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-LD5-29-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: 2417.0 lumens  
Efficiency: N/A  
Efficacy: 98.7 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

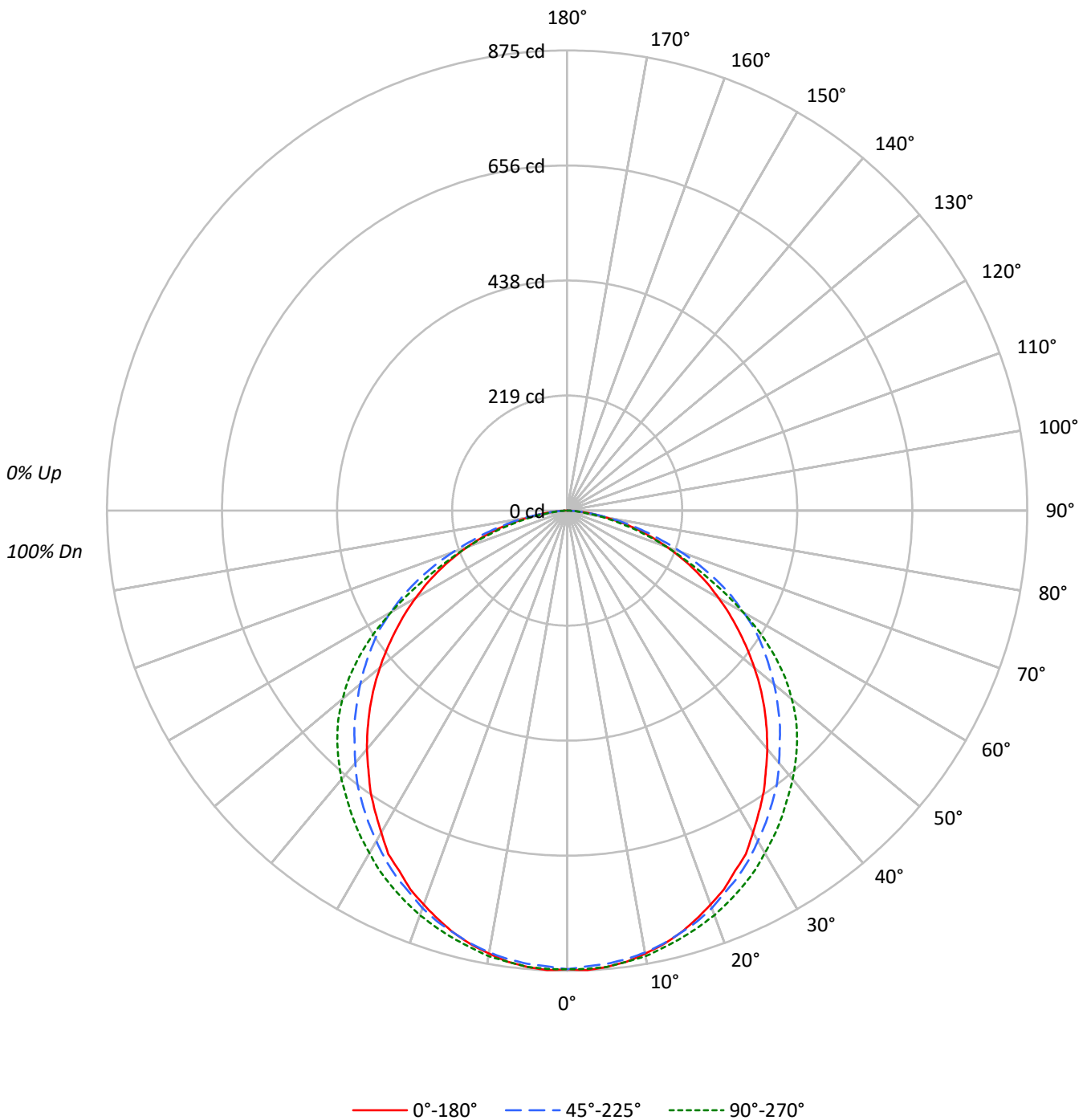
Input Watts (W): 24.5  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2347	2347	2347
5°	2353	2337	2353
10°	2338	2331	2351
15°	2317	2317	2344
20°	2283	2303	2344
25°	2243	2282	2342
30°	2196	2255	2336
35°	2141	2231	2337
40°	2080	2202	2344
45°	2018	2177	2353
50°	1945	2150	2335
55°	1867	2130	2259
60°	1789	2084	2078
65°	1707	1996	1821
70°	1585	1819	1575
75°	1437	1586	1301
80°	1145	1255	961
85°	809	698	553



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	82.5	3.4
10°-20°	235.8	9.8
20°-30°	355.5	14.7
30°-40°	426.1	17.6
40°-50°	442.2	18.3
50°-60°	398.8	16.5
60°-70°	290.9	12.0
70°-80°	152.6	6.3
80°-90°	32.5	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°	673.8	27.9
0°-40°	1099.8	45.5
0°-60°	1940.9	80.3
0°-90°	2417.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2417.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	872	872	872	872	872	
5°	871	869	865	871	871	83
15°	832	832	832	841	841	234
25°	756	759	769	785	789	349
35°	652	659	679	704	711	407
45°	530	541	572	606	618	409
55°	398	412	454	484	481	356
65°	268	284	313	302	286	265
75°	138	157	152	132	125	145
85°	26	32	23	19	18	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	872.2	872.2	872.2	872.2	872.2
2.5°	874.6	872.2	867.5	872.2	872.2
5°	871.0	868.7	865.1	871.0	871.0
7.5°	865.1	862.7	860.3	866.3	865.1
10°	855.5	854.4	853.2	860.3	860.3
12.5°	844.8	844.8	843.6	852.0	850.8
15°	831.7	831.7	831.7	841.2	841.2
17.5°	815.0	817.4	819.8	830.5	830.5
20°	797.2	799.5	804.3	817.4	818.6
22.5°	779.3	780.5	785.2	800.7	804.3
25°	755.5	759.0	768.6	785.2	788.8
27.5°	736.4	737.6	748.3	767.4	772.1
30°	706.6	714.9	725.7	747.1	751.9
32.5°	679.2	686.3	703.0	725.7	732.8
35°	651.8	658.9	679.2	704.2	711.4
37.5°	620.8	631.5	655.4	680.4	688.7
40°	592.2	601.7	626.8	657.7	667.3
42.5°	561.2	570.8	598.2	632.7	643.4
45°	530.2	541.0	572.0	606.5	618.4
47.5°	498.1	510.0	542.2	580.3	591.0
50°	464.7	477.8	513.6	552.9	557.7
52.5°	431.3	445.6	483.8	518.3	523.1
55°	398.0	412.3	454.0	483.8	481.4
57.5°	365.8	381.3	424.2	439.7	437.3
60°	332.4	349.1	387.3	394.4	386.1
62.5°	301.5	317.0	352.7	346.7	336.0
65°	268.1	283.6	313.4	301.5	286.0
67.5°	234.7	253.8	272.9	252.6	240.7
70°	201.4	222.8	231.2	210.9	200.2
72.5°	169.2	191.8	189.5	169.2	162.1
75°	138.2	157.3	152.5	132.3	125.1
77.5°	104.9	126.3	115.6	98.9	92.9
80°	73.9	92.9	81.0	66.7	62.0
82.5°	48.9	62.0	50.0	39.3	35.7
85°	26.2	32.2	22.6	19.1	17.9
87.5°	10.7	9.5	8.3	8.3	7.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)