

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: P388273

Luminaire Tested: **22CZ2-34VHE-UNV-L935-CD1-SWPD1-U**

Issue Date: 2/28/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P388273  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-27)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-34VHE-UNV-L935-CD1-SWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3500K, 90 LEDS, AND RIBBED LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3004.3 lumens  
Efficiency: N/A  
Efficacy: 119.7 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.27 / 1.36  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

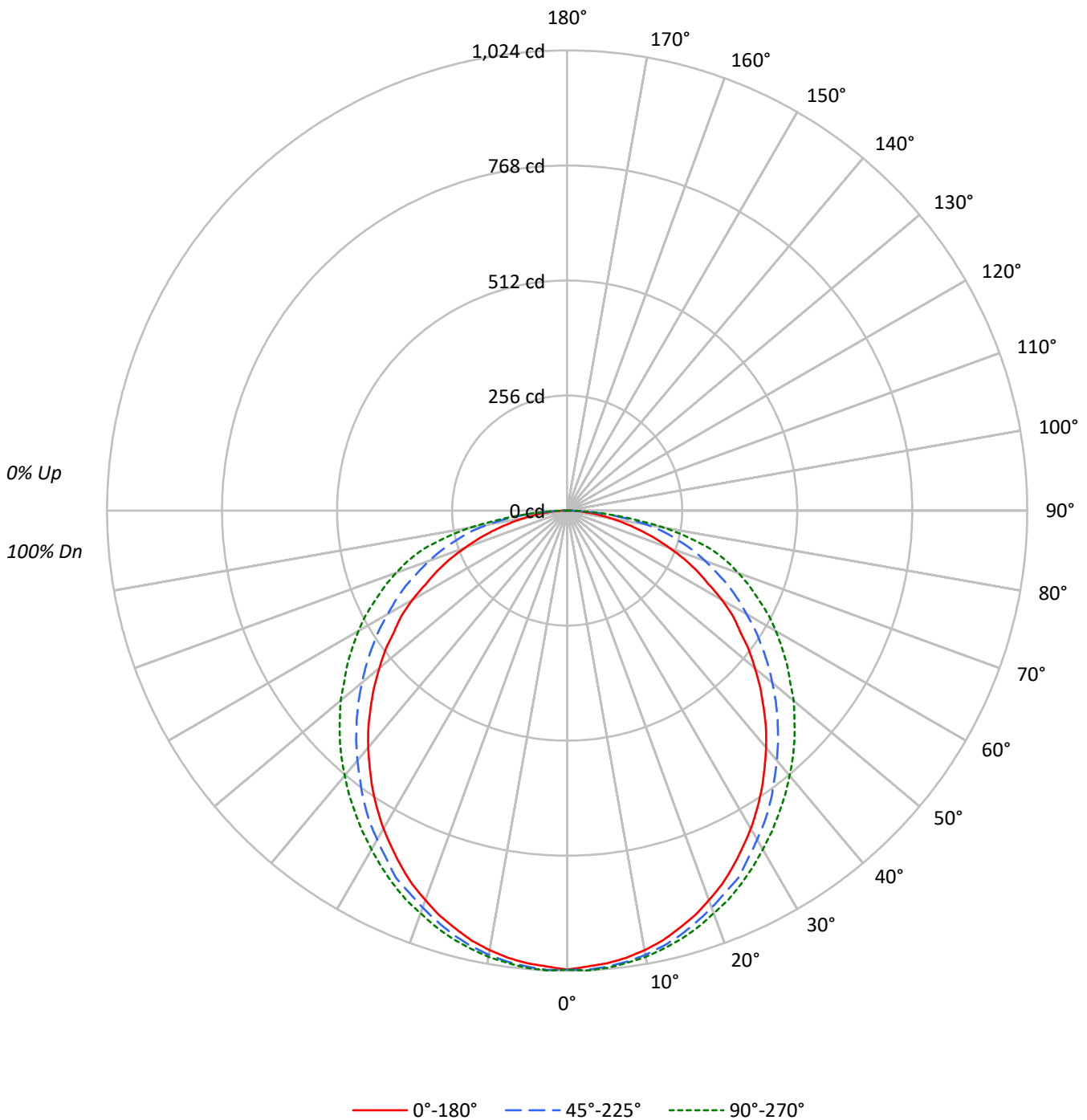
Input Watts (W): 25.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82
2	98	89	82	76	95	87	81	75	84	78	73	80	76	71	77	73	70	68
3	89	78	69	63	86	76	68	62	73	66	61	70	65	60	68	63	59	56
4	81	69	60	53	79	67	59	52	65	57	52	63	56	51	60	55	50	48
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	44	41
6	69	55	46	39	67	54	46	39	52	45	39	51	44	39	49	43	38	36
7	64	50	41	35	62	49	41	35	48	40	34	46	39	34	45	39	34	32
8	59	46	37	31	58	45	37	31	44	36	31	42	35	30	41	35	30	28
9	56	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27	25
10	52	39	31	25	51	38	30	25	37	30	25	36	30	25	35	29	25	23

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

	0°	45°	90°
0°	2749	2749	2749
5°	2732	2752	2759
10°	2714	2743	2755
15°	2681	2722	2747
20°	2642	2692	2731
25°	2594	2678	2722
30°	2540	2628	2706
35°	2482	2593	2700
40°	2420	2550	2706
45°	2351	2520	2723
50°	2284	2494	2754
55°	2206	2483	2802
60°	2140	2482	2888
65°	2033	2523	2993
70°	1896	2570	3187
75°	1736	2659	3442
80°	1512	2772	3391
85°	1325	2464	2692



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	96.6	3.2
10°-20°	275.2	9.2
20°-30°	413.1	13.7
30°-40°	493.6	16.4
40°-50°	513.3	17.1
50°-60°	475.7	15.8
60°-70°	390.2	13.0
70°-80°	263.8	8.8
80°-90°	82.9	2.8
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°	784.9	26.1
0°-40°	1278.4	42.6
0°-60°	2267.4	75.5
0°-90°	3004.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3004.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1022	1022	1022	1022	1022	
5°	1011	1013	1019	1020	1022	96
15°	962	967	977	983	986	271
25°	874	881	902	912	917	402
35°	755	766	789	813	822	472
45°	618	630	662	701	716	477
55°	470	485	529	576	597	422
65°	319	337	396	448	470	316
75°	167	195	256	308	331	177
85°	43	59	80	89	87	49
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1021.5	1021.5	1021.5	1021.5	1021.5
2.5°	1015.6	1018.6	1023.0	1024.5	1024.5
5°	1011.2	1012.6	1018.6	1020.0	1021.5
7.5°	1003.8	1006.7	1012.6	1014.1	1015.6
10°	993.4	996.4	1003.8	1006.7	1008.2
12.5°	980.1	983.1	992.0	996.4	997.9
15°	962.4	966.8	977.2	983.1	986.0
17.5°	944.6	949.1	959.4	968.3	971.3
20°	922.5	932.8	940.2	952.0	953.5
22.5°	900.3	906.2	919.5	931.3	937.3
25°	873.7	881.1	901.8	912.1	916.6
27.5°	845.6	855.9	872.2	888.5	894.4
30°	817.5	824.9	845.6	864.8	870.7
32.5°	786.5	796.8	819.0	838.2	847.1
35°	755.4	765.8	789.4	813.1	821.9
37.5°	721.4	733.2	756.9	785.0	796.8
40°	688.9	697.8	725.9	759.9	770.2
42.5°	654.9	665.2	694.8	731.8	743.6
45°	617.9	629.8	662.3	700.7	715.5
47.5°	582.5	594.3	629.8	668.2	685.9
50°	545.5	560.3	595.8	640.1	657.9
52.5°	510.0	523.3	563.2	609.1	625.3
55°	470.1	484.9	529.2	576.5	597.2
57.5°	437.6	447.9	496.7	545.5	566.2
60°	397.7	411.0	461.2	513.0	536.6
62.5°	354.8	377.0	428.7	481.9	505.6
65°	319.3	337.1	396.2	447.9	470.1
67.5°	282.4	301.6	359.2	413.9	439.1
70°	241.0	266.1	326.7	381.4	405.1
72.5°	204.0	230.6	292.7	345.9	371.1
75°	167.0	195.1	255.7	307.5	331.1
77.5°	131.6	162.6	221.7	261.7	276.4
80°	97.6	127.1	178.9	207.0	218.8
82.5°	68.0	93.1	131.6	146.4	149.3
85°	42.9	59.1	79.8	88.7	87.2
87.5°	19.2	23.7	29.6	32.5	31.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)