

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: P389205

Luminaire Tested: **22CZ2-34VHE-S-UNV-L930-CD1-SDWPD1-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: P389205  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-23)  
Test Lab: INNOVATIONS CENTER(G3)  
Issue Date: 2/28/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 22CZ2-34VHE-S-UNV-L930-CD1-SDWPD1-U  
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND SMOOTH LENS  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3043.4 lumens  
Efficiency: N/A  
Efficacy: 121.3 lumens/watt  
Spacing Criteria (0/90/45): 1.18 / 1.26 / 1.34  
Luminous Opening: Rectangular (W 2' x L: 2' x H: 0')  
CIE Type: Direct

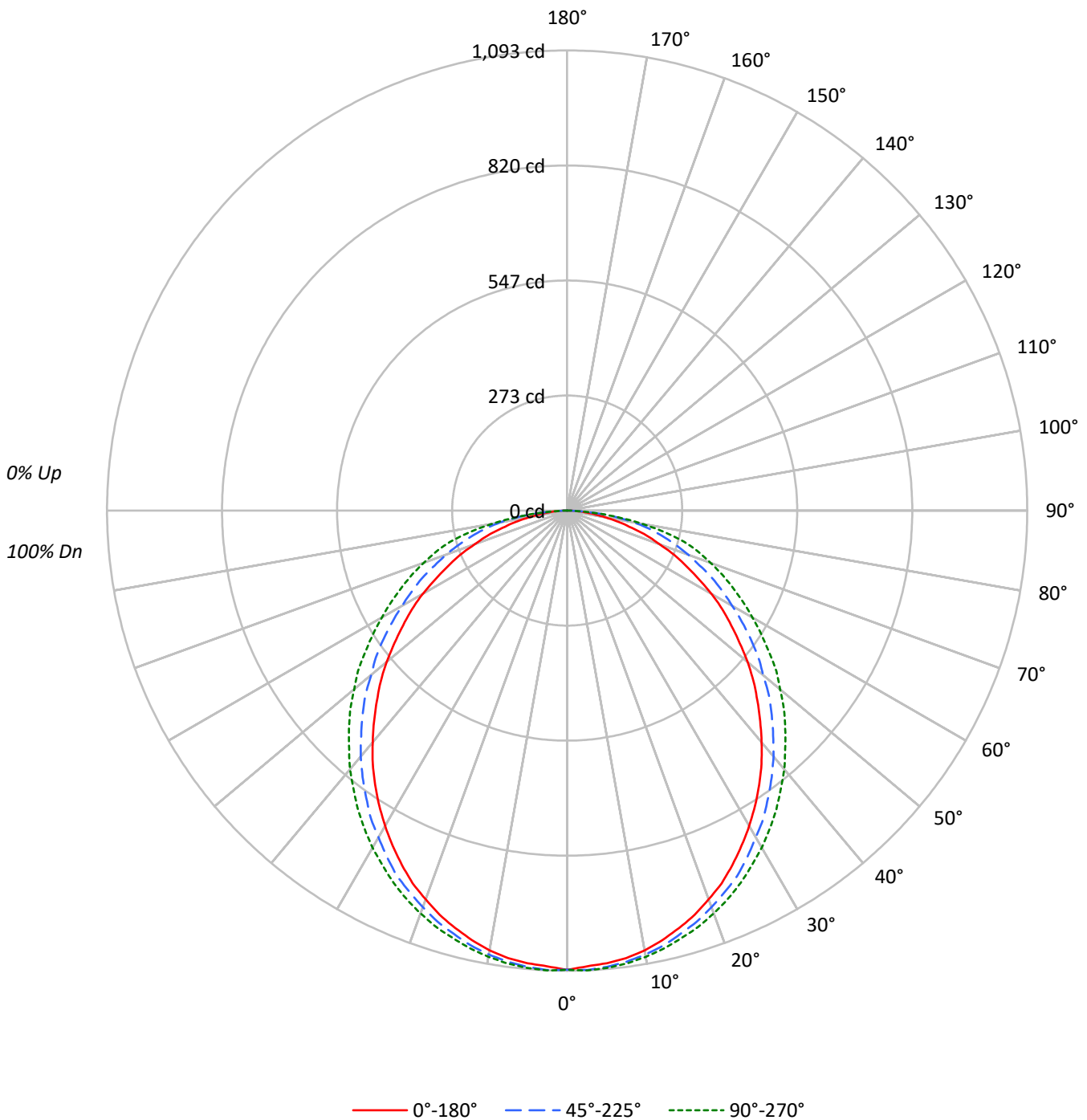
Input Watts (W): 25.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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					100			
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83					83			
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49					49			
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43					43			
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37					37			
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33					33			
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30					30			
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27					27			
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24					24			

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

	0°	45°	90°
0°	2935	2935	2935
5°	2915	2938	2946
10°	2898	2926	2941
15°	2860	2900	2927
20°	2814	2871	2916
25°	2757	2842	2896
30°	2687	2784	2872
35°	2612	2734	2846
40°	2524	2679	2818
45°	2432	2616	2788
50°	2342	2545	2764
55°	2232	2498	2745
60°	2132	2438	2736
65°	1989	2423	2767
70°	1832	2402	2849
75°	1653	2436	2997
80°	1430	2509	2817
85°	1183	2106	2106



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	103.1	3.4
10°-20°	293.5	9.6
20°-30°	439.1	14.4
30°-40°	520.0	17.1
40°-50°	530.0	17.4
50°-60°	475.0	15.6
60°-70°	371.9	12.2
70°-80°	239.8	7.9
80°-90°	70.8	2.3
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°	835.8	27.5
0°-40°	1355.8	44.5
0°-60°	2360.8	77.6
0°-90°	3043.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3043.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1090	1090	1090	1090	1090	
5°	1079	1082	1088	1089	1090	102
15°	1027	1032	1041	1049	1051	289
25°	929	937	957	970	976	427
35°	795	805	832	858	866	497
45°	639	653	687	723	733	493
55°	476	491	532	569	585	427
65°	312	331	381	418	434	310
75°	159	183	234	274	288	171
85°	38	52	68	68	68	45
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1090.5	1090.5	1090.5	1090.5	1090.5
2.5°	1083.4	1086.3	1092.0	1093.4	1093.4
5°	1079.2	1082.0	1087.7	1089.1	1090.5
7.5°	1072.1	1073.5	1080.6	1083.4	1084.9
10°	1060.7	1063.6	1070.7	1074.9	1076.3
12.5°	1045.1	1049.4	1057.9	1063.6	1065.0
15°	1026.6	1032.3	1040.8	1049.4	1050.8
17.5°	1006.8	1012.4	1023.8	1033.7	1036.6
20°	982.6	989.7	1002.5	1013.9	1018.1
22.5°	958.5	964.2	979.8	994.0	998.2
25°	928.7	937.2	957.1	969.8	975.5
27.5°	897.4	907.4	927.2	944.3	950.0
30°	864.8	874.7	896.0	917.3	924.4
32.5°	830.7	842.0	867.6	888.9	896.0
35°	795.2	805.1	832.1	857.7	866.2
37.5°	758.3	766.8	798.0	825.0	833.5
40°	718.5	729.9	762.5	793.8	802.3
42.5°	678.8	691.5	724.2	758.3	766.8
45°	639.0	653.2	687.3	722.8	732.7
47.5°	600.7	612.0	650.4	684.4	698.6
50°	559.5	570.8	607.8	646.1	660.3
52.5°	516.9	532.5	572.3	609.2	626.2
55°	475.7	491.3	532.5	569.4	585.0
57.5°	437.4	450.1	492.7	531.1	546.7
60°	396.2	407.5	453.0	494.2	508.4
62.5°	352.2	369.2	416.1	454.4	471.4
65°	312.4	330.9	380.6	417.5	434.5
67.5°	275.5	292.5	340.8	380.6	399.0
70°	232.9	255.6	305.3	345.1	362.1
72.5°	198.8	218.7	269.8	309.6	328.0
75°	159.0	183.2	234.3	274.1	288.3
77.5°	126.4	150.5	198.8	230.0	237.1
80°	92.3	116.4	161.9	177.5	181.8
82.5°	62.5	85.2	116.4	120.7	122.1
85°	38.3	52.5	68.2	68.2	68.2
87.5°	18.5	21.3	24.1	22.7	22.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)