

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: P389207

Luminaire Tested: **22CZ2-34VHE-S-UNV-L930-CD1-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: P389207  
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-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: 3119.2 lumens  
Efficiency: N/A  
Efficacy: 124.3 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

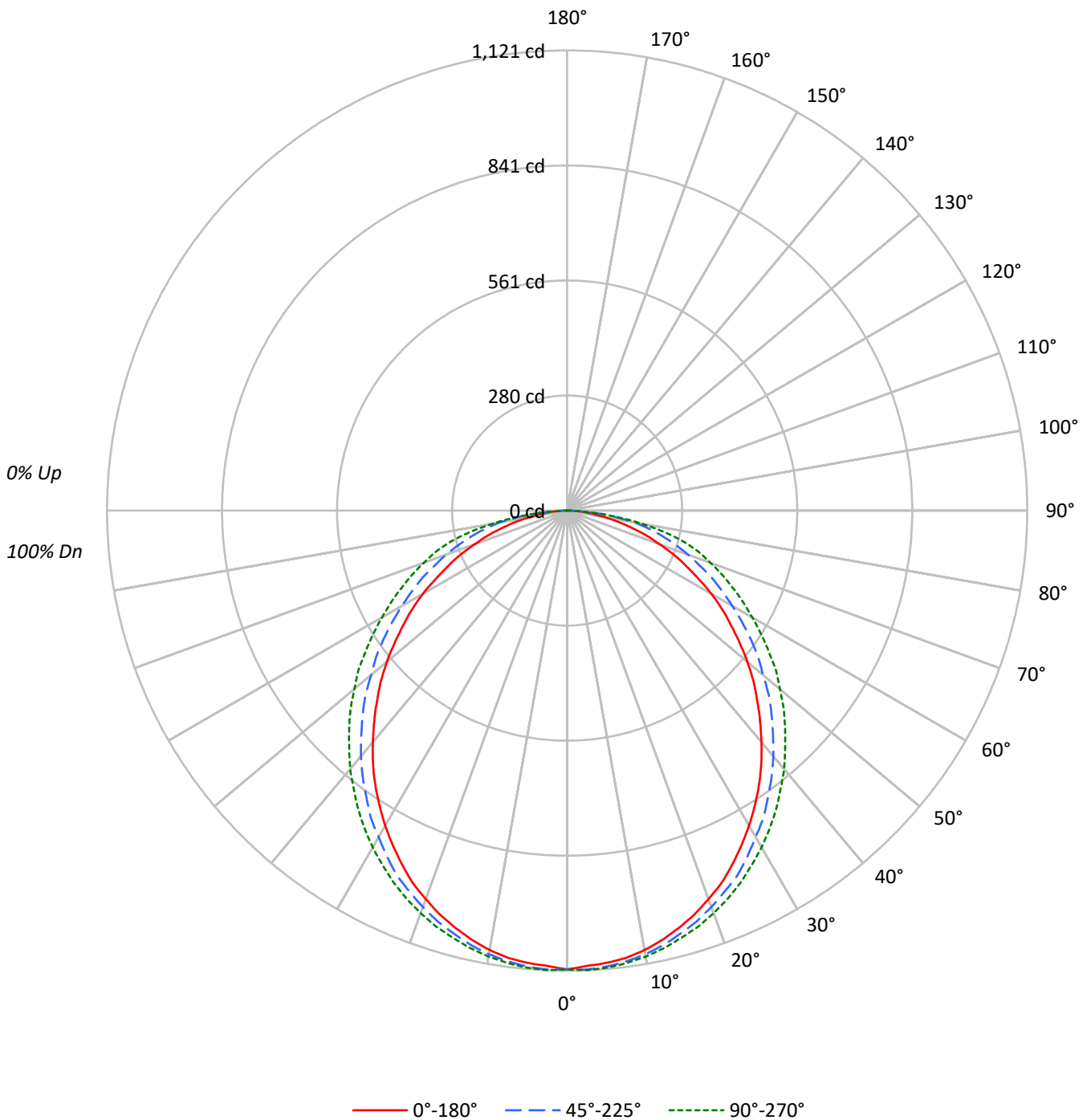
Input Watts (W): 25.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	108	103	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	98	90	83	77	96	88	82	76	84	79	74	81	77	73	78	74	71	69
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	57	52	61	56	52	49
5	75	62	53	47	73	61	53	46	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	53	46	40	52	45	40	50	44	39	37
7	65	51	42	36	63	50	42	36	49	41	36	47	40	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	31	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	28	27
10	53	40	32	26	51	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	3008	3008	3008
5°	2988	3011	3019
10°	2970	2998	3014
15°	2931	2972	3000
20°	2884	2942	2988
25°	2826	2912	2969
30°	2754	2853	2944
35°	2677	2802	2916
40°	2587	2745	2889
45°	2492	2681	2858
50°	2400	2608	2833
55°	2287	2561	2813
60°	2185	2499	2804
65°	2039	2483	2835
70°	1878	2462	2920
75°	1695	2496	3071
80°	1466	2571	2887
85°	1213	2158	2158



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.7	3.4
10°-20°	300.8	9.6
20°-30°	450.1	14.4
30°-40°	533.0	17.1
40°-50°	543.2	17.4
50°-60°	486.9	15.6
60°-70°	381.2	12.2
70°-80°	245.8	7.9
80°-90°	72.6	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°	856.6	27.5
0°-40°	1389.6	44.5
0°-60°	2419.6	77.6
0°-90°	3119.2	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3119.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1106	1109	1115	1116	1118	105
15°	1052	1058	1067	1076	1077	297
25°	952	960	981	994	1000	438
35°	815	825	853	879	888	509
45°	655	670	704	741	751	506
55°	488	504	546	584	600	437
65°	320	339	390	428	445	318
75°	163	188	240	281	295	175
85°	39	54	70	70	70	46
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1117.7	1117.7	1117.7	1117.7	1117.7
2.5°	1110.4	1113.3	1119.2	1120.6	1120.6
5°	1106.1	1109.0	1114.8	1116.3	1117.7
7.5°	1098.8	1100.2	1107.5	1110.4	1111.9
10°	1087.1	1090.1	1097.3	1101.7	1103.2
12.5°	1071.1	1075.5	1084.2	1090.1	1091.5
15°	1052.2	1058.0	1066.8	1075.5	1077.0
17.5°	1031.8	1037.7	1049.3	1059.5	1062.4
20°	1007.1	1014.4	1027.5	1039.1	1043.5
22.5°	982.4	988.2	1004.2	1018.7	1023.1
25°	951.8	960.5	980.9	994.0	999.8
27.5°	919.8	930.0	950.3	967.8	973.6
30°	886.3	896.5	918.3	940.2	947.4
32.5°	851.4	863.0	889.2	911.0	918.3
35°	815.0	825.2	852.8	879.0	887.8
37.5°	777.2	785.9	817.9	845.6	854.3
40°	736.4	748.0	781.5	813.5	822.3
42.5°	695.7	708.8	742.2	777.2	785.9
45°	654.9	669.5	704.4	740.8	751.0
47.5°	615.6	627.3	666.5	701.5	716.0
50°	573.4	585.0	622.9	662.2	676.7
52.5°	529.7	545.8	586.5	624.3	641.8
55°	487.5	503.6	545.8	583.6	599.6
57.5°	448.2	461.3	505.0	544.3	560.3
60°	406.0	417.7	464.3	506.5	521.0
62.5°	360.9	378.4	426.4	465.7	483.2
65°	320.2	339.1	390.0	427.9	445.3
67.5°	282.3	299.8	349.3	390.0	409.0
70°	238.7	262.0	312.9	353.6	371.1
72.5°	203.7	224.1	276.5	317.3	336.2
75°	163.0	187.7	240.1	280.9	295.4
77.5°	129.5	154.3	203.7	235.8	243.0
80°	94.6	119.3	165.9	181.9	186.3
82.5°	64.0	87.3	119.3	123.7	125.2
85°	39.3	53.8	69.9	69.9	69.9
87.5°	18.9	21.8	24.7	23.3	23.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)