

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: P388293

Luminaire Tested: **22CZ2-39VHE-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: P388293
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: 22CZ2-39VHE-UNV-L930-CD1-SDWPD1-U
Description: 2x2 CRUZE LED TROFFER WITH 3000K, 90 LEDS, AND RIBBED LENS
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3282.8 lumens
Efficiency: N/A
Efficacy: 114.8 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

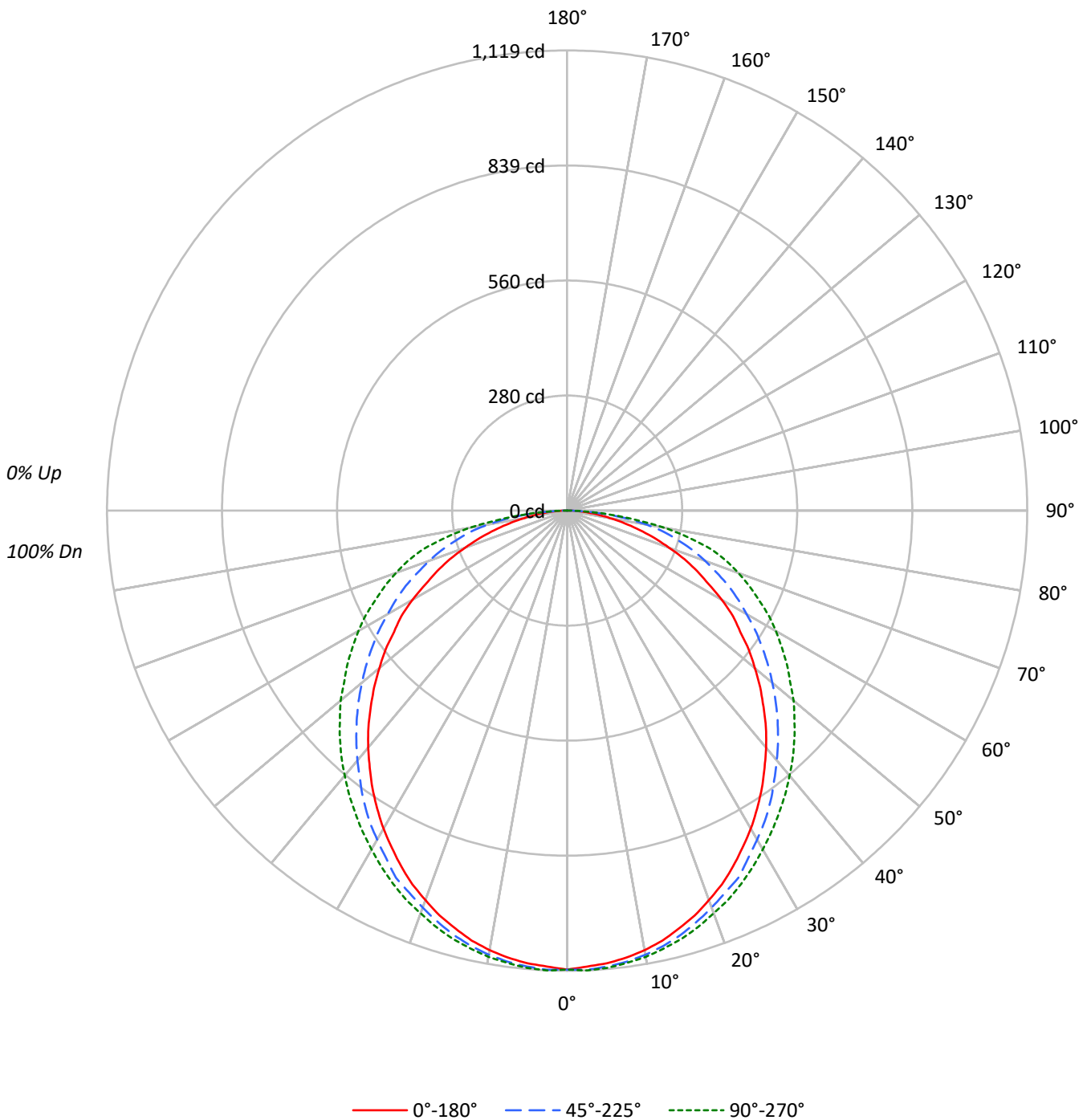
Input Watts (W): 28.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P388293

CATALOG NUMBER: 22CZ2-39VHE-UNV-L930-CD1-SDWPD1-U

Luminous Intensity Polar Plot





TEST NUMBER: P388293

CATALOG NUMBER: 22CZ2-39VHE-UNV-L930-CD1-SDWPD1-U

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°	3004	3004	3004
5°	2985	3007	3015
10°	2966	2997	3010
15°	2930	2975	3002
20°	2887	2942	2984
25°	2835	2926	2974
30°	2776	2871	2956
35°	2712	2834	2950
40°	2644	2786	2956
45°	2570	2754	2975
50°	2496	2725	3009
55°	2410	2713	3062
60°	2338	2713	3156
65°	2222	2756	3271
70°	2072	2809	3482
75°	1897	2906	3762
80°	1652	3030	3705
85°	1445	2692	2942



TEST NUMBER: P388293

CATALOG NUMBER: 22CZ2-39VHE-UNV-L930-CD1-SDWPD1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	105.6	3.2
10°-20°	300.7	9.2
20°-30°	451.4	13.7
30°-40°	539.4	16.4
40°-50°	560.8	17.1
50°-60°	519.8	15.8
60°-70°	426.4	13.0
70°-80°	288.2	8.8
80°-90°	90.6	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°	857.6	26.1
0°-40°	1397.0	42.6
0°-60°	2477.6	75.5
0°-90°	3282.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3282.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1116	1116	1116	1116	1116	
5°	1105	1106	1113	1115	1116	105
15°	1052	1056	1068	1074	1077	297
25°	955	963	985	997	1002	440
35°	825	837	863	888	898	516
45°	675	688	724	766	782	521
55°	514	530	578	630	653	462
65°	349	368	433	490	514	345
75°	182	213	280	336	362	194
85°	47	65	87	97	95	53
90°	0	0	0	0	0	



TEST NUMBER: P388293

CATALOG NUMBER: 22CZ2-39VHE-UNV-L930-CD1-SDWPD1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1116.2	1116.2	1116.2	1116.2	1116.2
2.5°	1109.8	1113.0	1117.8	1119.4	1119.4
5°	1104.9	1106.5	1113.0	1114.6	1116.2
7.5°	1096.8	1100.1	1106.5	1108.1	1109.8
10°	1085.5	1088.8	1096.8	1100.1	1101.7
12.5°	1071.0	1074.2	1083.9	1088.8	1090.4
15°	1051.6	1056.4	1067.8	1074.2	1077.4
17.5°	1032.2	1037.1	1048.4	1058.1	1061.3
20°	1008.0	1019.3	1027.4	1040.3	1041.9
22.5°	983.8	990.2	1004.8	1017.7	1024.1
25°	954.7	962.8	985.4	996.7	1001.5
27.5°	924.0	935.3	953.1	970.8	977.3
30°	893.3	901.4	924.0	945.0	951.4
32.5°	859.4	870.7	894.9	915.9	925.6
35°	825.4	836.8	862.6	888.4	898.1
37.5°	788.3	801.2	827.1	857.8	870.7
40°	752.8	762.4	793.1	830.3	841.6
42.5°	715.6	726.9	759.2	799.6	812.5
45°	675.2	688.1	723.7	765.7	781.8
47.5°	636.5	649.4	688.1	730.1	749.5
50°	596.1	612.2	651.0	699.5	718.8
52.5°	557.3	571.8	615.5	665.5	683.3
55°	513.7	529.8	578.3	630.0	652.6
57.5°	478.1	489.5	542.8	596.1	618.7
60°	434.5	449.1	504.0	560.5	586.4
62.5°	387.7	411.9	468.5	526.6	552.5
65°	348.9	368.3	432.9	489.5	513.7
67.5°	308.5	329.5	392.5	452.3	479.8
70°	263.3	290.8	357.0	416.8	442.6
72.5°	222.9	252.0	319.8	378.0	405.5
75°	182.5	213.2	279.5	336.0	361.8
77.5°	143.8	177.7	242.3	285.9	302.1
80°	106.6	138.9	195.5	226.2	239.1
82.5°	74.3	101.8	143.8	159.9	163.2
85°	46.8	64.6	87.2	96.9	95.3
87.5°	21.0	25.8	32.3	35.5	33.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)