

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: P881117

Luminaire Tested: **22CZ2-39VHE-SQR-UNV-B40**

Issue Date: 10/2/2024

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: P881117
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P475230)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-39VHE-SQR-UNV-B40
Description: 2X2 3900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

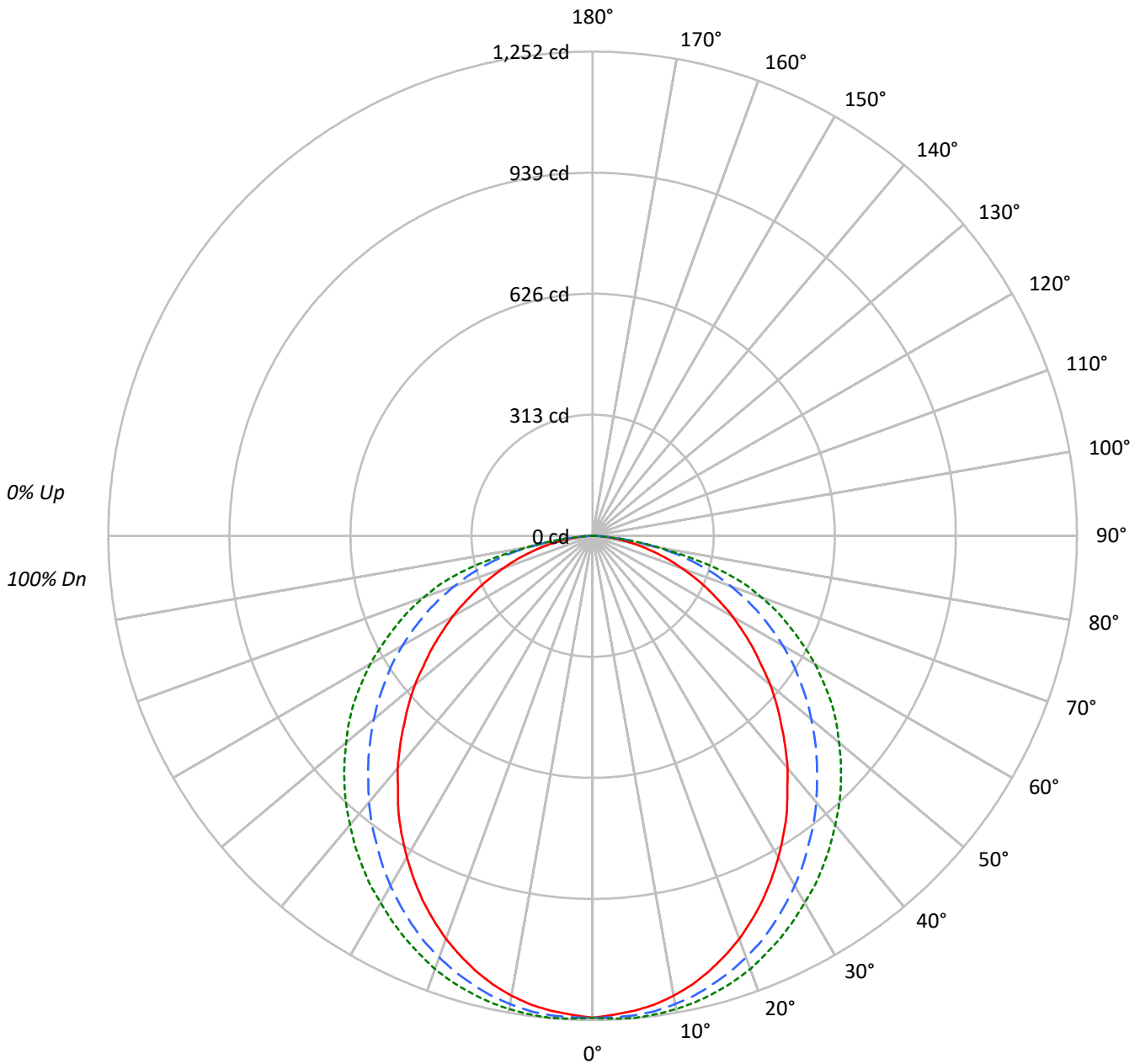
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3568.0 lumens
Efficiency: N/A
Efficacy: 111.5 lumens/watt
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 32
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: P881117
CATALOG NUMBER: 22CZ2-39VHE-SQR-UNV-B40

Luminous Intensity Polar Plot





TEST NUMBER: P881117

CATALOG NUMBER: 22CZ2-39VHE-SQR-UNV-B40

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	109	104	99	95	106	101	97	94	97	94	91	93	91	88	90	87	85	83																			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	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	68	60	54	66	59	53	64	57	52	61	56	51	49																			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	43																			
6	70	56	47	41	68	55	47	40	53	46	40	52	45	40	50	44	39	37																			
7	64	51	42	36	63	50	42	36	48	41	35	47	40	35	46	39	35	33																			
8	60	46	38	32	58	46	37	32	44	37	32	43	36	31	42	36	31	29																			
9	56	43	34	29	55	42	34	29	41	34	28	40	33	28	39	33	28	26																			
10	53	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	26	24																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3537	3537	3537
5°	3511	3545	3565
10°	3479	3543	3581
15°	3423	3527	3592
20°	3349	3503	3600
25°	3256	3468	3595
30°	3146	3424	3590
35°	3032	3373	3602
40°	2904	3332	3613
45°	2766	3289	3643
50°	2646	3259	3671
55°	2505	3233	3728
60°	2374	3221	3768
65°	2216	3195	3798
70°	2036	3146	3850
75°	1840	3062	3712
80°	1575	2713	2794
85°	1266	1599	1266



TEST NUMBER: P881117

CATALOG NUMBER: 22CZ2-39VHE-SQR-UNV-B40

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	118.2	3.3
10°-20°	337.8	9.5
20°-30°	507.4	14.2
30°-40°	605.2	17.0
40°-50°	625.7	17.5
50°-60°	575.2	16.1
60°-70°	457.9	12.8
70°-80°	279.8	7.8
80°-90°	60.8	1.7
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°	963.4	27.0
0°-40°	1568.6	44.0
0°-60°	2769.5	77.6
0°-90°	3568.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3568.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1246	1246	1246	1246	1246	
5°	1233	1236	1245	1250	1252	117
15°	1165	1179	1200	1218	1223	328
25°	1040	1065	1108	1138	1148	478
35°	875	913	974	1025	1040	546
45°	689	738	820	886	908	533
55°	506	562	654	728	754	453
65°	330	386	476	542	566	327
75°	168	217	279	328	339	179
85°	39	47	49	42	39	45
90°	0	0	0	0	0	



TEST NUMBER: P881117

CATALOG NUMBER: 22CZ2-39VHE-SQR-UNV-B40

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1246.4	1246.4	1246.4	1246.4	1246.4
2.5°	1239.7	1241.2	1246.4	1249.8	1249.8
5°	1232.8	1236.2	1244.6	1249.8	1251.5
7.5°	1222.8	1227.8	1239.7	1246.4	1248.3
10°	1207.4	1214.3	1229.5	1239.7	1242.9
12.5°	1188.8	1199.0	1217.6	1231.2	1234.5
15°	1165.3	1178.7	1200.5	1217.6	1222.8
17.5°	1138.0	1154.9	1182.1	1202.5	1209.2
20°	1109.1	1126.2	1160.1	1183.7	1192.1
22.5°	1075.3	1097.4	1136.3	1163.5	1170.3
25°	1039.9	1065.2	1107.6	1138.0	1148.2
27.5°	1000.8	1031.4	1077.1	1114.5	1122.9
30°	960.1	992.3	1044.9	1085.5	1095.7
32.5°	917.8	955.1	1010.9	1056.8	1070.4
35°	875.4	912.8	973.7	1024.7	1039.9
37.5°	826.3	870.4	938.3	990.8	1009.2
40°	784.1	826.3	899.4	956.9	975.5
42.5°	736.6	782.4	858.7	921.2	943.3
45°	689.2	738.3	819.6	885.7	907.8
47.5°	645.1	694.2	779.0	848.5	870.4
50°	599.5	650.3	738.3	809.4	831.5
52.5°	550.4	606.2	697.7	768.8	794.3
55°	506.3	562.1	653.6	728.1	753.6
57.5°	460.5	518.2	613.1	684.2	708.0
60°	418.3	474.1	567.5	636.7	663.9
62.5°	372.5	430.0	521.5	589.3	614.8
65°	330.1	386.1	475.8	542.0	565.6
67.5°	287.8	343.9	428.3	491.2	518.2
70°	245.4	301.6	379.2	440.4	464.0
72.5°	208.4	257.5	331.9	387.8	409.9
75°	167.8	216.8	279.3	328.4	338.6
77.5°	130.4	174.5	227.0	248.9	252.5
80°	96.4	130.4	166.0	171.0	171.0
82.5°	64.2	89.7	103.3	104.9	103.3
85°	38.9	47.4	49.1	42.4	38.9
87.5°	13.4	13.4	8.4	5.0	1.7
90°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-50001EG





— 0°-180° - - 45°-225° - - - - 90°-270°







(END OF REPORT)