

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: P881118

Luminaire Tested: **22CZ2-39VHE-SQR-UNV-B50**

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: P881118
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-B50
Description: 2X2 3900 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SQR LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

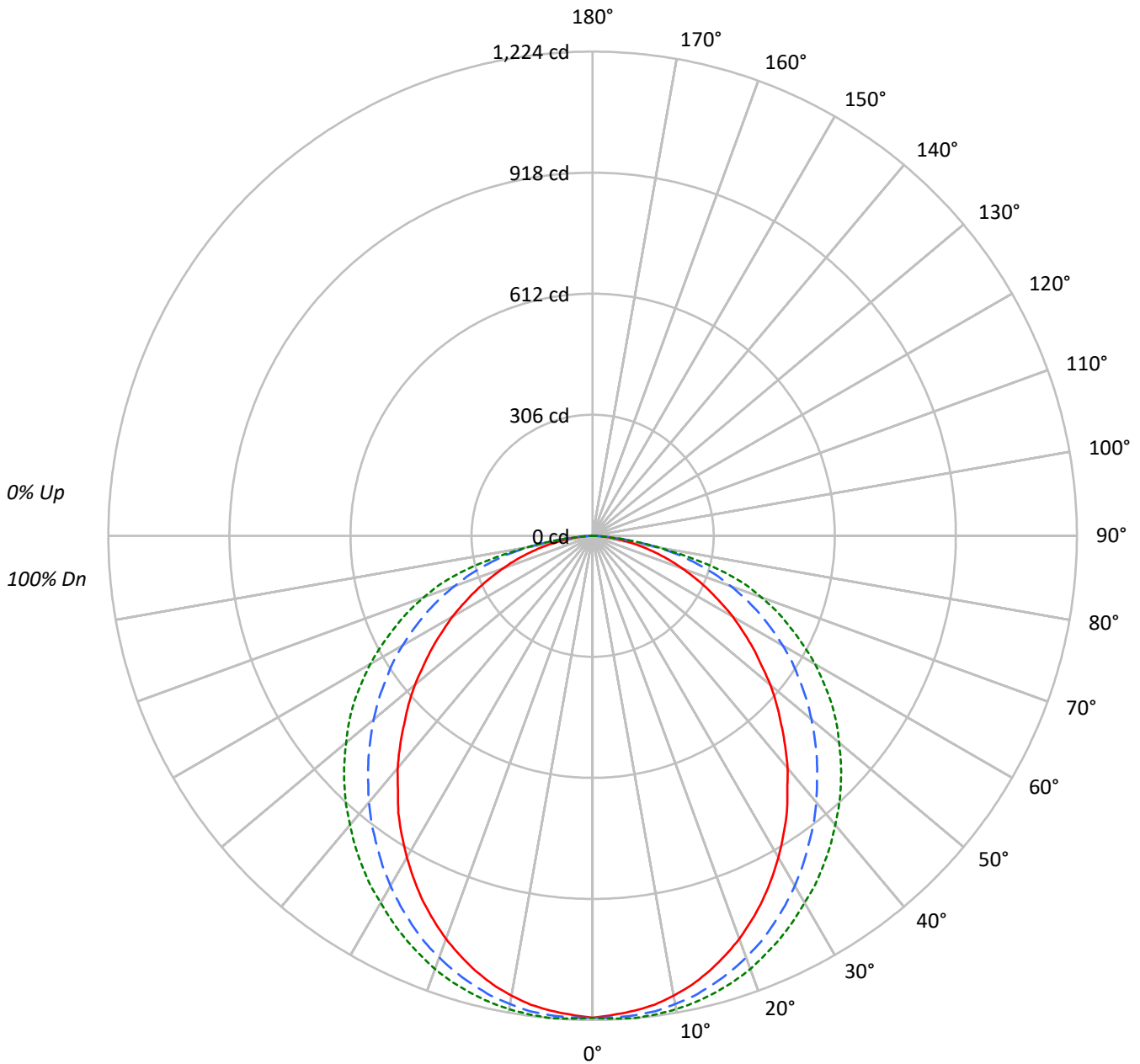
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3489.0 lumens
Efficiency: N/A
Efficacy: 109.0 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: P881118
CATALOG NUMBER: 22CZ2-39VHE-SQR-UNV-B50

Luminous Intensity Polar Plot





TEST NUMBER: P881118

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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°	3458	3458	3458
5°	3434	3467	3486
10°	3402	3464	3502
15°	3347	3449	3513
20°	3275	3425	3520
25°	3184	3391	3515
30°	3076	3348	3510
35°	2965	3298	3523
40°	2840	3257	3533
45°	2705	3216	3562
50°	2588	3187	3589
55°	2449	3162	3646
60°	2322	3149	3684
65°	2167	3124	3713
70°	1991	3076	3764
75°	1798	2994	3630
80°	1541	2654	2732
85°	1240	1563	1240



TEST NUMBER: P881118

CATALOG NUMBER: 22CZ2-39VHE-SQR-UNV-B50

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.5	3.3
10°-20°	330.4	9.5
20°-30°	496.2	14.2
30°-40°	591.8	17.0
40°-50°	611.8	17.5
50°-60°	562.5	16.1
60°-70°	447.8	12.8
70°-80°	273.6	7.8
80°-90°	59.4	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°	942.1	27.0
0°-40°	1533.9	44.0
0°-60°	2708.2	77.6
0°-90°	3489.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3489.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1219	1219	1219	1219	1219	
5°	1206	1209	1217	1222	1224	114
15°	1140	1153	1174	1191	1196	321
25°	1017	1042	1083	1113	1123	468
35°	856	893	952	1002	1017	534
45°	674	722	802	866	888	521
55°	495	550	639	712	737	443
65°	323	378	465	530	553	320
75°	164	212	273	321	331	175
85°	38	46	48	41	38	44
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1218.8	1218.8	1218.8	1218.8	<i>1218.8</i>
2.5°	1212.2	1213.7	1218.8	1222.1	<i>1222.1</i>
5°	<i>1205.5</i>	<i>1208.8</i>	<i>1217.1</i>	<i>1222.1</i>	<i>1223.8</i>
7.5°	1195.7	1200.6	1212.2	1218.8	<i>1220.6</i>
10°	1180.7	1187.5	1202.3	1212.2	<i>1215.4</i>
12.5°	1162.5	1172.5	1190.6	1204.0	<i>1207.1</i>
15°	1139.5	1152.6	1174.0	1190.6	<i>1195.7</i>
17.5°	1112.8	1129.3	1156.0	1175.8	<i>1182.4</i>
20°	1084.5	1101.2	1134.4	1157.5	<i>1165.7</i>
22.5°	1051.5	1073.1	1111.2	1137.8	<i>1144.3</i>
25°	1016.9	1041.6	1083.0	1112.8	<i>1122.8</i>
27.5°	978.6	1008.6	1053.2	1089.8	<i>1098.0</i>
30°	938.9	970.4	1021.7	1061.5	<i>1071.4</i>
32.5°	897.4	934.0	988.5	1033.4	<i>1046.7</i>
35°	856.0	892.6	952.2	1002.0	<i>1016.9</i>
37.5°	808.0	851.1	917.5	968.9	<i>986.9</i>
40°	766.8	808.0	879.4	935.7	<i>953.9</i>
42.5°	720.3	765.1	839.7	900.8	<i>922.4</i>
45°	674.0	722.0	801.5	866.1	<i>887.7</i>
47.5°	630.8	678.8	761.7	829.8	<i>851.1</i>
50°	586.2	635.9	722.0	791.5	<i>813.1</i>
52.5°	538.2	592.8	682.2	751.8	<i>776.7</i>
55°	495.1	549.7	639.1	712.0	<i>737.0</i>
57.5°	450.3	506.7	599.5	669.1	<i>692.3</i>
60°	409.1	463.6	554.9	622.6	<i>649.2</i>
62.5°	364.3	420.5	509.9	576.3	<i>601.2</i>
65°	322.8	377.6	465.3	530.0	<i>553.0</i>
67.5°	281.4	336.3	418.8	480.3	<i>506.7</i>
70°	240.0	294.9	370.8	430.6	<i>453.7</i>
72.5°	203.8	251.8	324.5	379.3	<i>400.8</i>
75°	164.0	212.0	273.1	321.1	<i>331.1</i>
77.5°	127.5	170.6	222.0	243.3	<i>246.9</i>
80°	94.3	127.5	162.4	167.2	<i>167.2</i>
82.5°	62.8	87.7	101.0	102.5	<i>101.0</i>
85°	38.1	46.3	48.0	41.4	<i>38.1</i>
87.5°	13.1	13.1	8.2	4.9	<i>1.7</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>



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







(END OF REPORT)