

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: P881072

Luminaire Tested: **22CZ2-24VHE-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: P881072  
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: 22CZ2-24VHE-SQR-UNV-B40  
Description: 2X2 2400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND SQR LENS  
  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

**Summary**

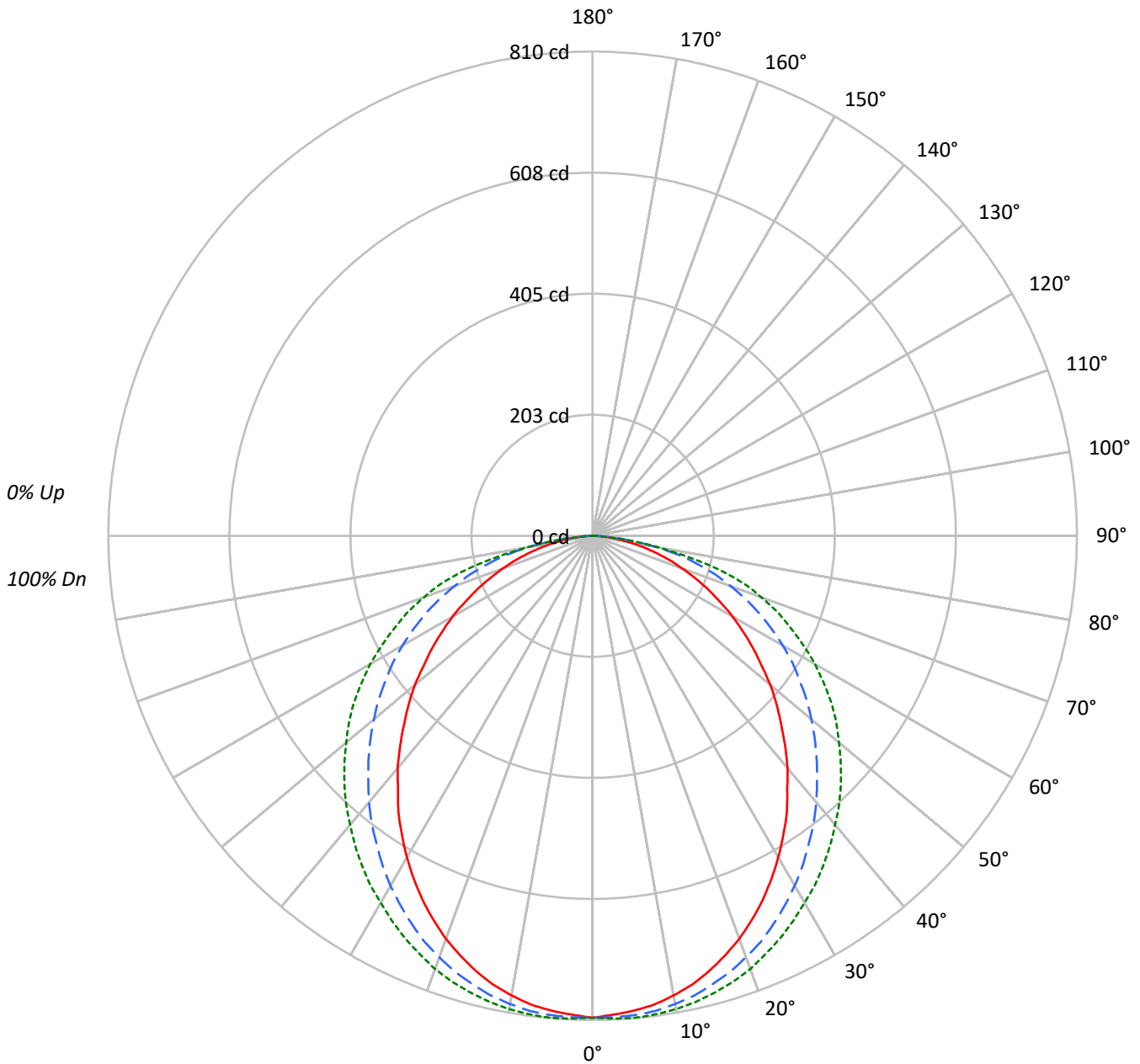
Lumens per Lamp: N/A  
Luminaire Lumens: 2308.0 lumens  
Efficiency: N/A  
Efficacy: 115.4 lumens/watt  
Spacing Criteria (0/90/45): 1.16 / 1.31 / 1.37  
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 20  
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									
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°	2288	2288	2288
5°	2271	2293	2306
10°	2250	2292	2317
15°	2214	2281	2324
20°	2166	2266	2328
25°	2106	2243	2325
30°	2035	2215	2322
35°	1962	2182	2330
40°	1879	2155	2337
45°	1789	2128	2356
50°	1712	2108	2375
55°	1620	2092	2412
60°	1536	2083	2437
65°	1434	2067	2456
70°	1317	2035	2490
75°	1190	1981	2401
80°	1020	1755	1807
85°	820	1032	820



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	76.4	3.3
10°-20°	218.5	9.5
20°-30°	328.2	14.2
30°-40°	391.5	17.0
40°-50°	404.7	17.5
50°-60°	372.1	16.1
60°-70°	296.2	12.8
70°-80°	181.0	7.8
80°-90°	39.3	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°	623.2	27.0
0°-40°	1014.7	44.0
0°-60°	1791.5	77.6
0°-90°	2308.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2308.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	806	806	806	806	806	
5°	797	800	805	808	810	76
15°	754	762	777	788	791	212
25°	673	689	716	736	743	309
35°	566	590	630	663	673	353
45°	446	478	530	573	587	345
55°	328	364	423	471	488	293
65°	214	250	308	351	366	212
75°	108	140	181	212	219	116
85°	25	31	32	27	25	29
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	806.2	806.2	806.2	806.2	806.2
2.5°	801.9	802.9	806.2	808.5	808.5
5°	797.4	799.7	805.1	808.5	809.6
7.5°	791.0	794.2	801.9	806.2	807.5
10°	781.0	785.5	795.3	801.9	804.0
12.5°	769.0	775.6	787.6	796.4	798.5
15°	753.8	762.4	776.6	787.6	791.0
17.5°	736.2	747.1	764.7	777.8	782.2
20°	717.4	728.5	750.4	765.7	771.1
22.5°	695.6	709.9	735.0	752.6	757.0
25°	672.7	689.0	716.4	736.2	742.7
27.5°	647.4	667.2	696.7	720.9	726.4
30°	621.1	641.9	675.9	702.2	708.7
32.5°	593.7	617.8	653.9	683.6	692.4
35°	566.3	590.4	629.9	662.9	672.7
37.5°	534.5	563.0	606.9	640.9	652.8
40°	507.2	534.5	581.8	619.0	631.0
42.5°	476.5	506.1	555.5	595.9	610.2
45°	445.8	477.6	530.2	573.0	587.2
47.5°	417.3	449.1	503.9	548.9	563.0
50°	387.8	420.7	477.6	523.6	537.9
52.5°	356.0	392.1	451.3	497.3	513.8
55°	327.5	363.6	422.8	471.0	487.5
57.5°	297.9	335.2	396.6	442.6	458.0
60°	270.6	306.7	367.1	411.9	429.5
62.5°	241.0	278.2	337.3	381.2	397.7
65°	213.6	249.8	307.8	350.6	365.8
67.5°	186.1	222.5	277.1	317.7	335.2
70°	158.7	195.1	245.3	284.9	300.1
72.5°	134.8	166.6	214.7	250.9	265.1
75°	108.5	140.3	180.7	212.4	219.0
77.5°	84.3	112.9	146.8	161.0	163.3
80°	62.4	84.3	107.4	110.6	110.6
82.5°	41.5	58.0	66.8	67.8	66.8
85°	25.2	30.6	31.7	27.4	25.2
87.5°	8.7	8.7	5.5	3.2	1.1
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)