

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: P881105

Luminaire Tested: **22CZ2-34VHE-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: P881105
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474795)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 22CZ2-34VHE-UNV-B40
Description: 2X2 3400 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND RIBBED LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

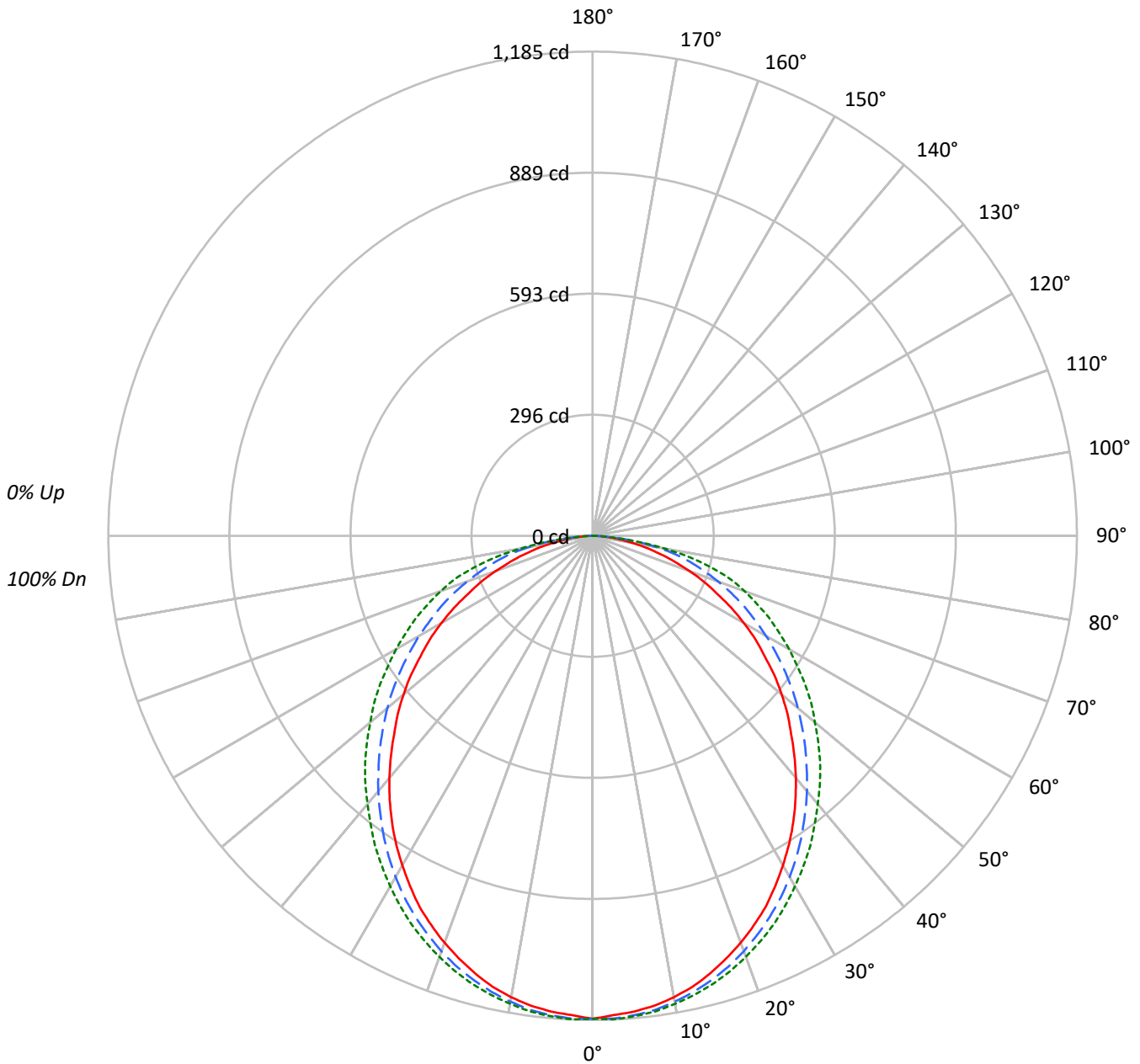
Lumens per Lamp: N/A
Luminaire Lumens: 3259.0 lumens
Efficiency: N/A
Efficacy: 120.7 lumens/watt
Spacing Criteria (0/90/45): 1.18 / 1.25 / 1.33
Luminous Opening: Rectangular (W 1.92' x L: 1.98' x H: 0')
CIE Type: Direct

Input Watts (W): 27
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	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	77	85	79	75	81	77	73	78	75	71	69								
3	90	79	71	64	87	78	70	64	75	68	63	72	66	61	69	64	60	58								
4	82	70	61	54	80	69	60	54	66	59	53	64	58	53	62	56	52	50								
5	76	63	54	47	73	62	53	47	59	52	46	57	51	46	56	50	45	43								
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38								
7	65	51	42	36	63	50	42	36	49	41	36	47	41	36	46	40	35	33								
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30								
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27								
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24								

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3354	3354	3354
5°	3329	3355	3363
10°	3304	3336	3352
15°	3259	3306	3336
20°	3201	3267	3311
25°	3137	3218	3284
30°	3051	3160	3245
35°	2965	3092	3214
40°	2865	3023	3174
45°	2756	2955	3159
50°	2666	2895	3135
55°	2542	2832	3141
60°	2427	2782	3151
65°	2256	2747	3201
70°	2086	2708	3280
75°	1866	2697	3300
80°	1564	2556	2881
85°	1211	1752	1638



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.7	3.4
10°-20°	317.0	9.7
20°-30°	472.6	14.5
30°-40°	557.9	17.1
40°-50°	568.6	17.4
50°-60°	512.8	15.7
60°-70°	403.0	12.4
70°-80°	252.4	7.7
80°-90°	62.9	1.9
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°	901.3	27.7
0°-40°	1459.2	44.8
0°-60°	2540.6	78.0
0°-90°	3259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3259.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1182	1182	1182	1182	1182	
5°	1169	1172	1178	1180	1180	111
15°	1110	1114	1125	1134	1136	313
25°	1002	1010	1028	1043	1049	461
35°	856	867	893	917	928	535
45°	687	702	736	772	787	531
55°	514	530	572	616	635	461
65°	336	357	409	454	477	335
75°	170	196	246	290	301	181
85°	37	48	54	54	50	45
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1182.0	1182.0	1182.0	<i>1182.0</i>	1182.0
2.5°	<i>1174.2</i>	<i>1177.1</i>	<i>1182.6</i>	<i>1184.7</i>	<i>1184.7</i>
5°	1168.8	1171.5	1177.8	<i>1180.5</i>	1180.5
7.5°	1159.8	1162.5	1170.2	<i>1173.6</i>	1174.2
10°	1146.8	1150.2	1157.7	<i>1163.3</i>	1163.3
12.5°	1130.3	1133.6	1143.3	<i>1150.2</i>	1150.8
15°	1109.5	1114.4	1125.4	<i>1133.6</i>	1135.7
17.5°	1085.5	1093.0	1105.4	<i>1115.8</i>	1117.9
20°	1059.9	1067.5	1081.9	<i>1093.7</i>	1096.5
22.5°	1031.7	1038.6	1055.8	<i>1070.4</i>	1073.7
25°	1002.1	1009.7	1027.7	<i>1043.4</i>	1049.0
27.5°	967.0	976.0	997.3	<i>1015.1</i>	1020.8
30°	931.2	942.3	964.3	<i>984.2</i>	990.4
32.5°	894.7	905.0	929.7	<i>951.1</i>	959.4
35°	856.0	867.1	892.6	<i>917.4</i>	927.8
37.5°	815.4	826.5	854.1	<i>882.2</i>	891.8
40°	773.5	786.5	816.2	<i>846.4</i>	856.8
42.5°	730.8	744.5	775.4	<i>809.3</i>	823.0
45°	686.7	701.8	736.3	<i>772.1</i>	787.2
47.5°	646.7	659.1	695.0	<i>734.2</i>	748.6
50°	604.0	615.7	655.7	<i>695.0</i>	710.1
52.5°	560.6	571.7	614.4	<i>655.7</i>	674.3
55°	513.8	529.6	572.4	<i>616.3</i>	635.0
57.5°	472.5	486.9	531.1	<i>575.7</i>	593.7
60°	427.7	442.8	490.3	<i>535.9</i>	555.2
62.5°	382.9	399.4	447.6	<i>496.6</i>	514.6
65°	336.0	356.7	409.1	<i>454.5</i>	476.7
67.5°	296.2	316.1	367.8	<i>415.3</i>	434.6
70°	251.4	274.9	326.4	<i>374.7</i>	395.3
72.5°	209.4	232.8	285.8	<i>334.1</i>	354.7
75°	170.2	195.5	246.0	<i>290.0</i>	301.0
77.5°	132.3	156.4	206.6	<i>232.2</i>	243.9
80°	95.7	119.1	156.4	<i>173.6</i>	176.3
82.5°	64.7	84.8	106.1	<i>110.9</i>	108.2
85°	37.2	47.5	53.8	<i>53.8</i>	50.3
87.5°	15.1	15.1	13.2	<i>8.2</i>	4.8
90°	0.0	0.0	0.0	<i>0.0</i>	0.0



Report Generated By 670246072 / DESKTOP-50001EG





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







(END OF REPORT)