

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: P881161

Luminaire Tested: **24CZ2-30VHE-SQR-UNV-B35**

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: P881161  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474669)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 10/2/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-30VHE-SQR-UNV-B35  
Description: 2X4 3000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SQR LENS

Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.   Condition   Description

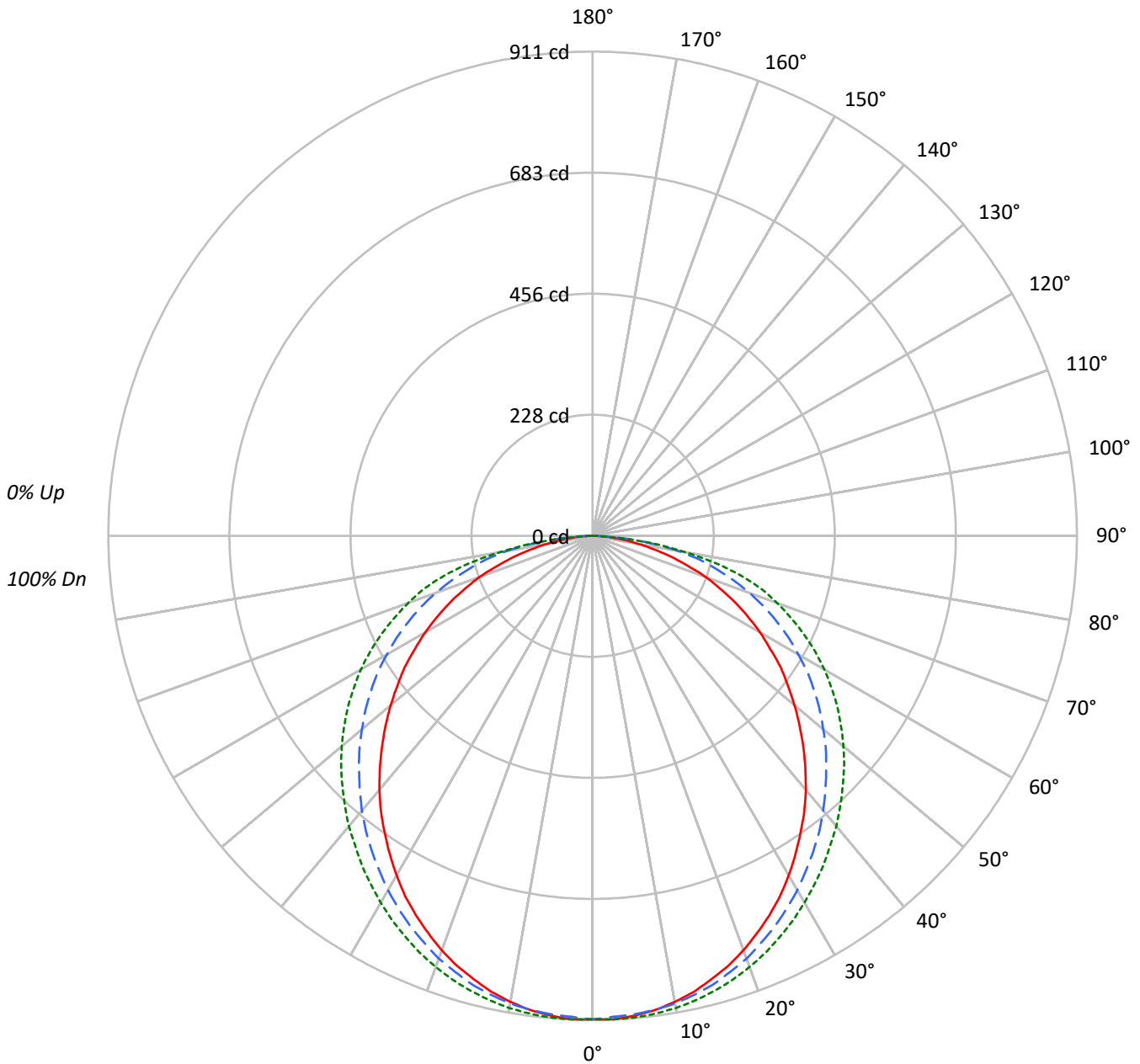
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2770.0 lumens  
Efficiency: N/A  
Efficacy: 120.4 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.3 / 1.39  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 23  
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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	87	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	62	86	76	68	62	73	66	61	70	64	60	68	63	59	56								
4	81	69	59	53	79	67	59	52	65	57	51	62	56	51	60	55	50	48								
5	74	61	52	45	72	60	51	45	58	50	44	56	49	44	54	48	43	41								
6	69	55	46	39	67	54	45	39	52	44	39	50	43	38	49	43	38	36								
7	64	50	41	34	62	49	40	34	47	40	34	46	39	34	44	38	33	31								
8	59	45	37	31	58	45	36	31	43	36	30	42	35	30	41	35	30	28								
9	55	42	33	28	54	41	33	27	40	32	27	39	32	27	38	31	27	25								
10	52	38	30	25	50	38	30	25	37	30	25	36	29	25	35	29	24	23								

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	1284	1284	1284
5°	1284	1280	1289
10°	1276	1280	1293
15°	1262	1278	1295
20°	1246	1272	1297
25°	1226	1263	1297
30°	1202	1255	1299
35°	1175	1247	1304
40°	1149	1243	1314
45°	1118	1240	1328
50°	1088	1244	1353
55°	1063	1252	1383
60°	1027	1262	1422
65°	986	1277	1464
70°	935	1294	1523
75°	838	1313	1573
80°	705	1317	1427
85°	523	996	939



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.2	3.1
10°-20°	247.1	8.9
20°-30°	374.1	13.5
30°-40°	452.5	16.3
40°-50°	477.7	17.2
50°-60°	450.5	16.3
60°-70°	371.4	13.4
70°-80°	243.6	8.8
80°-90°	67.0	2.4
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°	707.4	25.5
0°-40°	1159.9	41.9
0°-60°	2088.0	75.4
0°-90°	2770.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2770.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	910	910	910	910	910	
5°	906	906	904	910	910	86
15°	864	869	874	885	886	244
25°	787	797	811	828	833	363
35°	682	700	724	749	757	427
45°	560	585	621	654	666	432
55°	432	462	509	547	562	385
65°	295	331	382	423	438	291
75°	154	193	241	279	288	162
85°	32	56	62	60	58	40
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	909.9	909.9	909.9	909.9	909.9
2.5°	910.7	909.9	905.9	911.2	910.7
5°	906.3	906.3	903.7	909.9	909.9
7.5°	900.1	900.6	899.6	906.7	906.7
10°	890.4	892.2	893.4	901.5	902.3
12.5°	878.9	882.0	884.6	894.4	895.3
15°	863.8	868.7	874.4	884.6	886.4
17.5°	848.3	854.1	860.3	873.6	875.8
20°	829.8	836.4	846.6	859.9	863.4
22.5°	809.0	818.2	828.8	844.8	849.2
25°	787.3	797.0	810.8	827.5	832.8
27.5°	763.9	775.3	790.8	810.3	816.0
30°	737.7	750.9	770.0	790.8	797.0
32.5°	710.2	725.7	747.0	770.0	777.1
35°	682.0	699.6	724.0	748.8	756.8
37.5°	654.0	671.7	700.5	726.7	734.1
40°	623.9	643.4	674.9	702.8	713.4
42.5°	592.1	615.2	648.3	679.3	689.5
45°	560.3	585.4	621.4	654.5	665.6
47.5°	527.9	555.8	595.2	628.8	641.7
50°	495.6	525.3	566.4	602.7	616.0
52.5°	462.9	493.9	538.6	577.1	589.0
55°	432.0	462.4	508.9	547.0	562.0
57.5°	396.1	430.6	479.7	518.3	532.8
60°	363.7	397.4	447.0	487.7	503.6
62.5°	328.8	363.3	415.5	456.2	471.7
65°	295.2	330.6	382.4	423.1	438.5
67.5°	258.9	296.1	349.2	388.6	403.6
70°	226.6	261.6	313.7	354.1	369.1
72.5°	187.2	227.1	277.0	316.9	333.2
75°	153.6	192.9	240.7	278.8	288.5
77.5°	118.1	157.6	204.9	229.6	236.3
80°	86.8	123.9	162.0	175.3	175.6
82.5°	58.4	91.2	112.9	119.5	118.6
85°	32.3	55.7	61.5	59.7	58.0
87.5°	13.3	18.6	15.0	10.6	8.4
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)