

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: P881183

Luminaire Tested: **24CZ2-40VHE-HRP-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: P881183
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P474369)
Test Lab: INNOVATION CENTER(G3)
Issue Date: 10/2/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 24CZ2-40VHE-HRP-UNV-B40
Description: 2X4 4000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

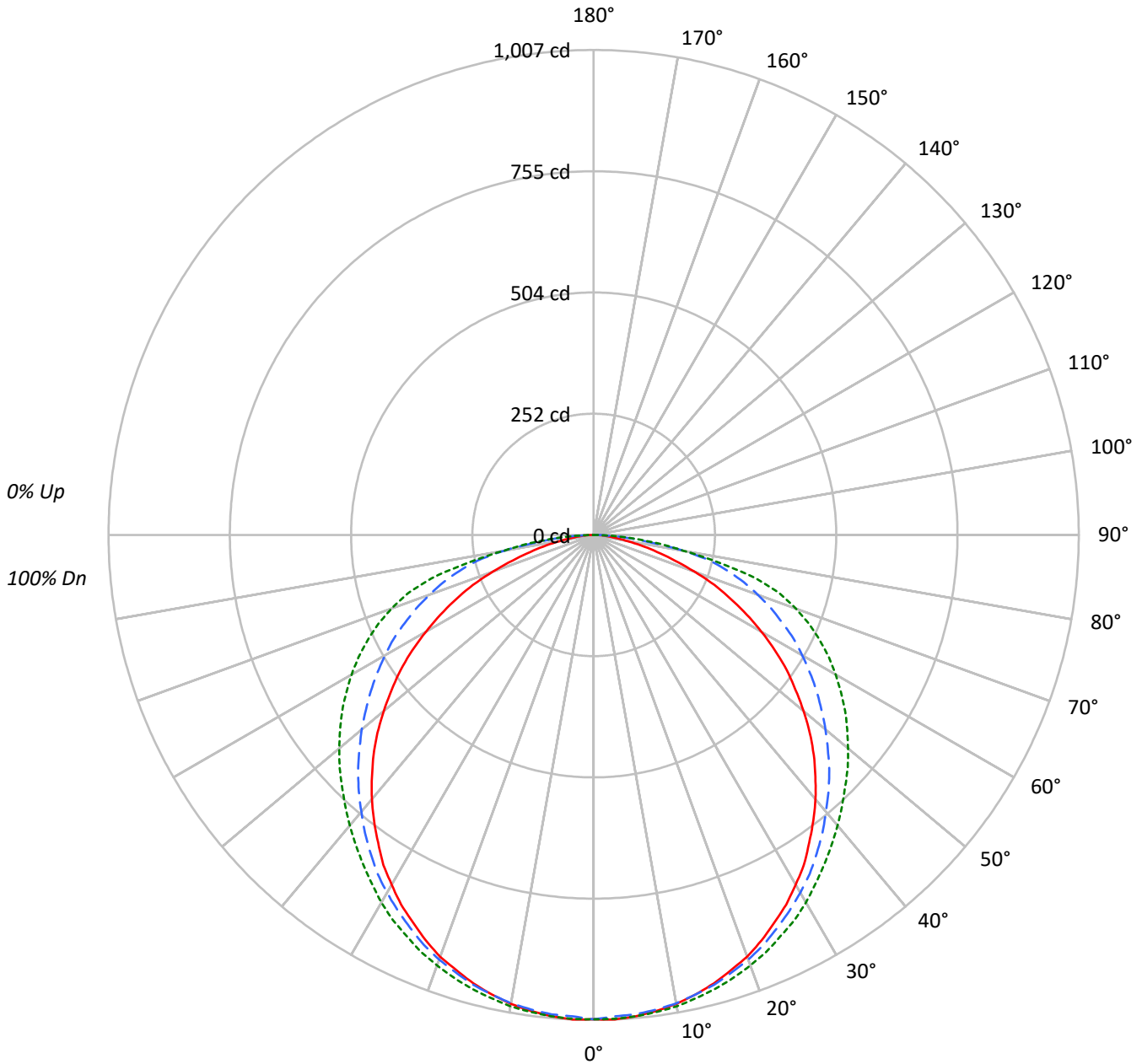
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3100.0 lumens
Efficiency: N/A
Efficacy: 103.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.3 / 1.4
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')
CIE Type: Direct

Input Watts (W): 30
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	108	103	98	94	105	101	96	93	96	93	90	92	90	87	89	86	84	82																			
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67																			
3	89	78	69	62	86	76	68	62	73	66	61	70	64	59	68	63	58	56																			
4	81	68	59	52	79	67	59	52	65	57	51	62	56	50	60	54	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	38	50	43	38	49	42	38	36																			
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31																			
8	59	45	36	30	57	44	36	30	43	36	30	42	35	30	41	34	30	28																			
9	55	41	33	27	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	24	35	29	24	23																			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1420	1420	1420
5°	1421	1416	1421
10°	1417	1415	1425
15°	1409	1413	1426
20°	1400	1409	1429
25°	1382	1402	1431
30°	1366	1398	1436
35°	1344	1391	1438
40°	1320	1382	1451
45°	1290	1380	1474
50°	1248	1379	1513
55°	1204	1389	1568
60°	1136	1410	1637
65°	1049	1443	1730
70°	916	1494	1842
75°	743	1571	1904
80°	549	1541	1541
85°	421	1135	1283



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.3	3.1
10°-20°	273.6	8.8
20°-30°	416.5	13.4
30°-40°	505.8	16.3
40°-50°	534.4	17.2
50°-60°	504.2	16.3
60°-70°	419.2	13.5
70°-80°	275.8	8.9
80°-90°	75.2	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°	785.4	25.3
0°-40°	1291.2	41.7
0°-60°	2329.7	75.2
0°-90°	3100.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3100.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1006	1006	1006	1006	1006	
5°	1003	1003	999	1003	1003	95
15°	964	966	967	976	976	272
25°	888	893	901	916	919	409
35°	780	789	807	828	834	488
45°	646	659	692	725	738	498
55°	489	510	564	618	637	436
65°	314	350	432	496	518	310
75°	136	199	288	341	349	147
85°	26	57	70	78	79	32
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1005.8	1005.8	1005.8	1005.8	1005.8
2.5°	1007.1	1005.8	1000.5	1005.8	1005.8
5°	1003.2	1003.2	999.3	1003.2	1003.2
7.5°	996.7	996.7	994.0	999.3	999.3
10°	988.9	988.9	987.6	994.0	994.0
12.5°	977.3	978.4	977.3	984.9	984.9
15°	964.2	965.5	966.9	976.0	976.0
17.5°	947.5	950.0	952.6	962.9	964.2
20°	931.9	933.0	938.3	950.0	951.3
22.5°	911.1	915.0	921.5	933.0	937.1
25°	887.6	892.8	900.6	916.3	918.8
27.5°	865.6	869.6	879.9	896.8	902.1
30°	838.4	844.9	857.8	874.7	881.2
32.5°	812.4	818.9	834.5	852.6	857.8
35°	780.0	789.1	807.1	828.0	834.5
37.5°	748.8	757.9	780.0	803.3	811.2
40°	716.3	726.7	750.2	777.3	787.7
42.5°	681.3	695.6	721.6	751.4	763.1
45°	646.2	659.3	691.6	725.4	738.5
47.5°	608.7	624.4	659.3	699.6	715.2
50°	568.5	587.9	628.2	672.2	689.2
52.5°	528.3	550.3	595.7	644.9	663.2
55°	489.3	510.0	564.5	617.8	637.3
57.5°	446.4	472.5	532.1	589.2	608.7
60°	402.3	430.9	499.6	559.2	580.1
62.5°	358.2	390.7	468.4	528.3	550.3
65°	314.0	350.5	432.2	495.8	517.9
67.5°	271.2	311.5	398.5	462.0	484.0
70°	221.9	272.6	362.0	424.4	446.4
72.5°	176.5	235.0	327.0	385.5	405.0
75°	136.2	198.7	288.1	341.3	349.1
77.5°	99.9	162.2	247.9	265.9	267.3
80°	67.5	129.7	189.6	186.9	189.6
82.5°	44.1	97.3	119.3	133.7	135.0
85°	26.0	57.2	70.1	77.9	79.2
87.5°	12.9	19.4	24.7	26.0	28.5
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)