

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: P881243

Luminaire Tested: **24CZ2-60VHE-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: P881243
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: 24CZ2-60VHE-HRP-UNV-B40
Description: 2X4 6000 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 4000K CCT AND HRP LENS

Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

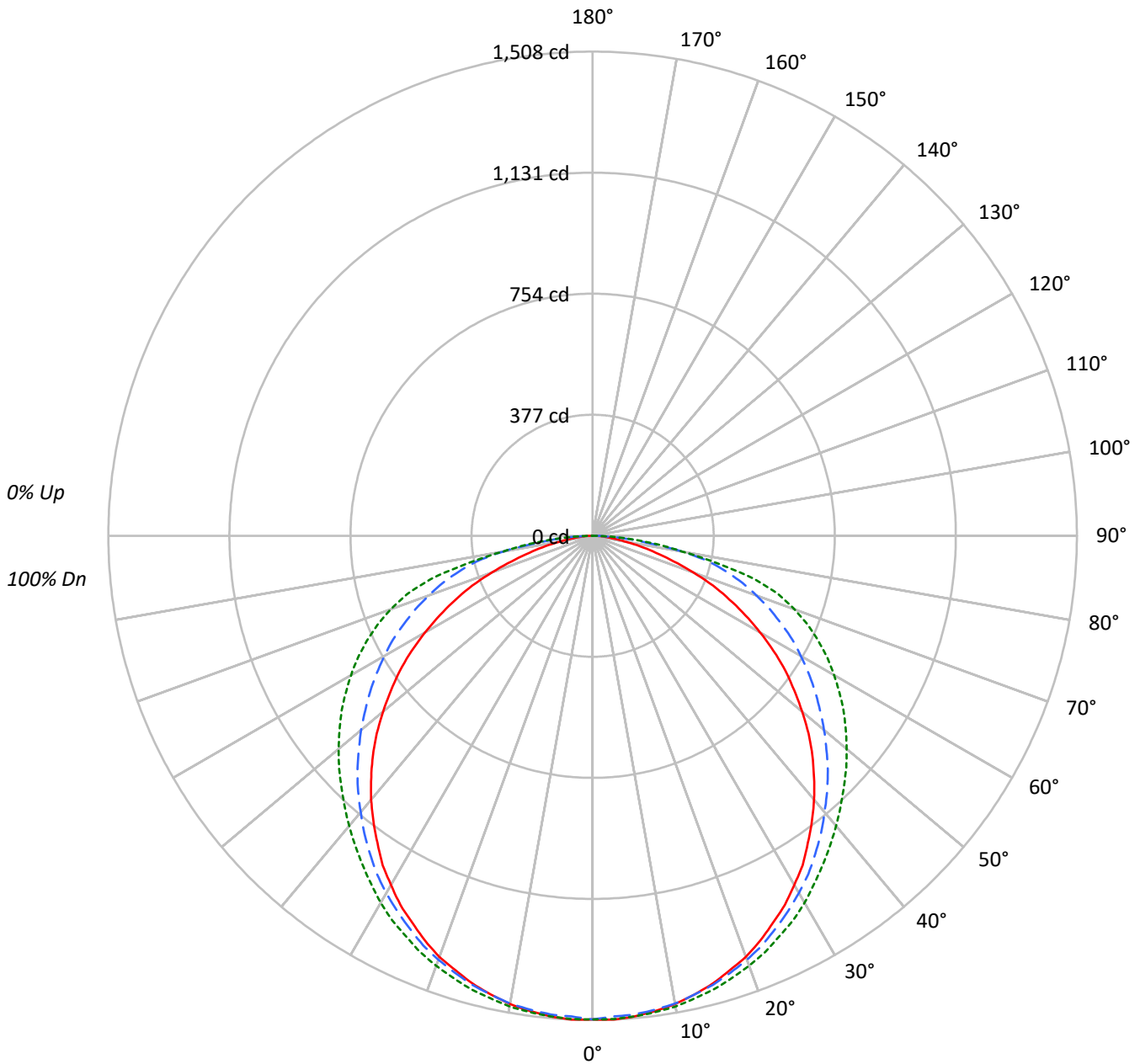
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4643.0 lumens
Efficiency: N/A
Efficacy: 98.8 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): 47
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: P881243
CATALOG NUMBER: 24CZ2-60VHE-HRP-UNV-B40

Luminous Intensity Polar Plot





TEST NUMBER: P881243

CATALOG NUMBER: 24CZ2-60VHE-HRP-UNV-B40

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°	2126	2126	2126
5°	2129	2120	2129
10°	2123	2120	2134
15°	2110	2116	2136
20°	2096	2111	2140
25°	2070	2101	2143
30°	2046	2094	2151
35°	2013	2083	2153
40°	1977	2070	2174
45°	1932	2068	2208
50°	1869	2066	2267
55°	1803	2080	2349
60°	1701	2112	2452
65°	1571	2162	2590
70°	1372	2237	2759
75°	1112	2352	2851
80°	823	2307	2307
85°	630	1700	1921



TEST NUMBER: P881243

CATALOG NUMBER: 24CZ2-60VHE-HRP-UNV-B40

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	142.7	3.1
10°-20°	409.8	8.8
20°-30°	623.9	13.4
30°-40°	757.5	16.3
40°-50°	800.3	17.2
50°-60°	755.2	16.3
60°-70°	627.9	13.5
70°-80°	413.1	8.9
80°-90°	112.6	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°	1176.4	25.3
0°-40°	1933.9	41.7
0°-60°	3489.4	75.2
0°-90°	4643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4643.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1506	1506	1506	1506	1506	
5°	1503	1503	1497	1503	1503	143
15°	1444	1446	1448	1462	1462	407
25°	1329	1337	1349	1372	1376	613
35°	1168	1182	1209	1240	1250	731
45°	968	987	1036	1086	1106	745
55°	733	764	846	925	954	653
65°	470	525	647	743	776	465
75°	204	298	431	511	523	220
85°	39	86	105	117	119	48
90°	0	0	0	0	0	



TEST NUMBER: P881243

CATALOG NUMBER: 24CZ2-60VHE-HRP-UNV-B40

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1506.4	1506.4	1506.4	1506.4	1506.4
2.5°	1508.3	1506.4	1498.6	1506.4	1506.4
5°	1502.6	1502.6	1496.6	1502.6	1502.6
7.5°	1492.8	1492.8	1488.8	1496.6	1496.6
10°	1481.1	1481.1	1479.2	1488.8	1488.8
12.5°	1463.7	1465.4	1463.7	1475.2	1475.2
15°	1444.2	1446.1	1448.2	1461.8	1461.8
17.5°	1419.1	1422.9	1426.7	1442.2	1444.2
20°	1395.7	1397.4	1405.3	1422.9	1424.8
22.5°	1364.6	1370.4	1380.2	1397.4	1403.5
25°	1329.4	1337.3	1348.9	1372.3	1376.1
27.5°	1296.4	1302.4	1317.9	1343.2	1351.0
30°	1255.6	1265.4	1284.8	1310.0	1319.8
32.5°	1216.7	1226.5	1249.9	1276.9	1284.8
35°	1168.3	1181.9	1208.9	1240.1	1249.9
37.5°	1121.5	1135.1	1168.3	1203.1	1215.0
40°	1072.9	1088.4	1123.6	1164.3	1179.8
42.5°	1020.4	1041.8	1080.7	1125.4	1143.0
45°	967.9	987.4	1035.9	1086.5	1106.0
47.5°	911.7	935.1	987.4	1047.8	1071.1
50°	851.4	880.5	940.9	1006.8	1032.3
52.5°	791.2	824.2	892.2	966.0	993.4
55°	732.8	763.8	845.5	925.3	954.5
57.5°	668.6	707.7	797.0	882.4	911.7
60°	602.5	645.4	748.3	837.6	868.8
62.5°	536.4	585.1	701.6	791.2	824.2
65°	470.3	524.9	647.4	742.6	775.7
67.5°	406.2	466.5	596.8	692.0	725.0
70°	332.4	408.3	542.2	635.7	668.6
72.5°	264.4	351.9	489.7	577.4	606.6
75°	204.0	297.5	431.4	511.1	522.8
77.5°	149.6	242.9	371.3	398.3	400.4
80°	101.2	194.3	283.9	279.9	283.9
82.5°	66.1	145.8	178.7	200.2	202.1
85°	38.9	85.6	105.0	116.7	118.6
87.5°	19.3	29.1	37.0	38.9	42.7
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)