

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: P843093

Luminaire Tested: **24CZ2-45HE-S-UNV-B50**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843093  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P272125)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-45HE-S-UNV-B50  
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 5000K CCT AND SMOOTH LENS  
  
Light Source: -  
Ballast/Driver: -

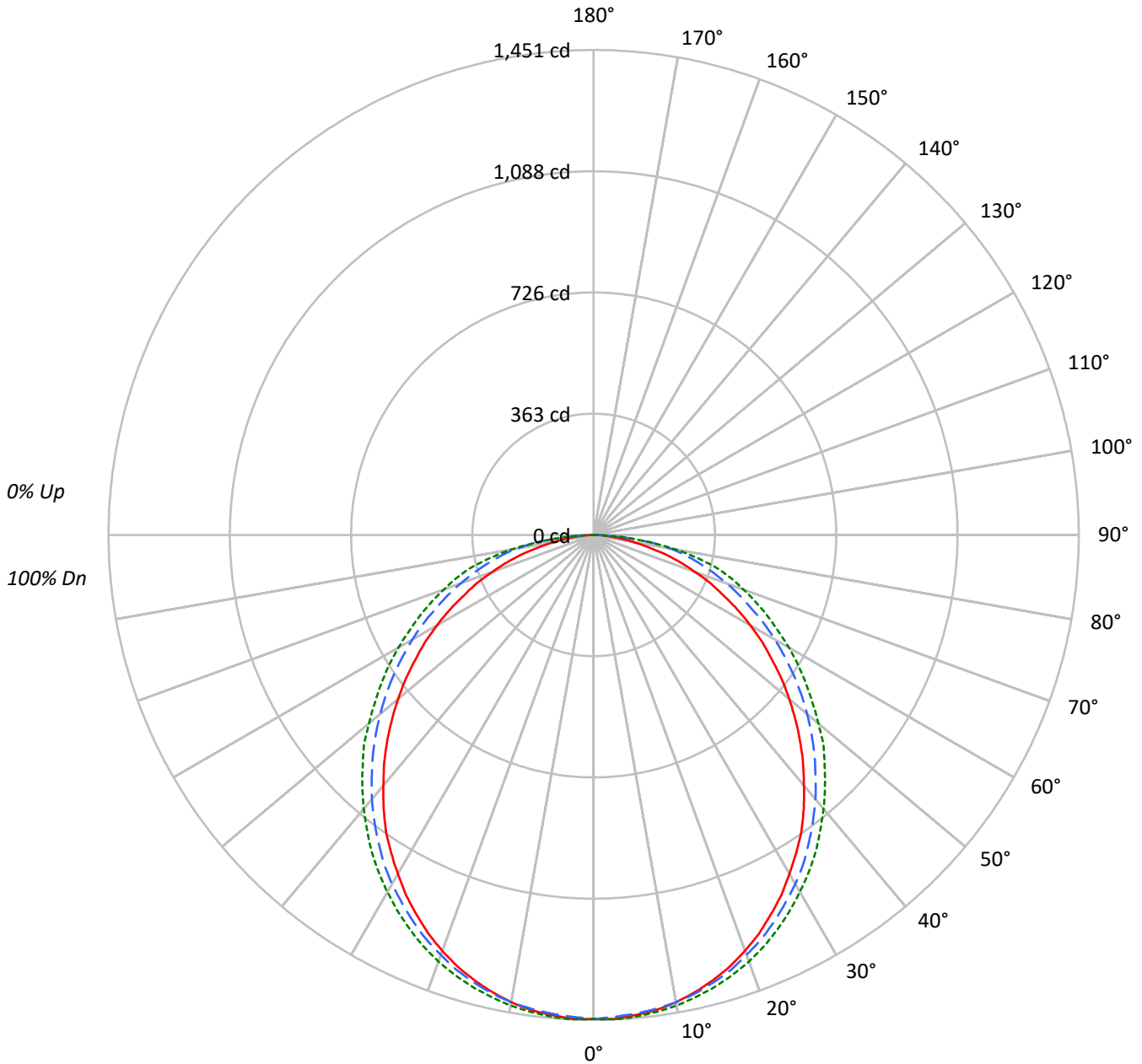
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4123.0 lumens  
Efficiency: N/A  
Efficacy: 124.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 33  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	99	95	106	101	97	93	97	93	90	93	90	88	89	87	85	83																			
2	98	90	83	77	96	88	81	76	84	79	74	81	76	72	78	74	71	69																			
3	89	79	70	64	87	77	69	63	74	67	62	71	66	61	69	64	60	58																			
4	82	70	61	54	80	68	60	54	66	59	53	63	57	52	61	56	51	49																			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42																			
6	70	56	47	40	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°	2044	2044	2044
5°	2043	2037	2050
10°	2034	2034	2049
15°	2015	2024	2046
20°	1989	2008	2040
25°	1952	1988	2027
30°	1908	1966	2010
35°	1866	1934	1995
40°	1802	1901	1971
45°	1743	1864	1950
50°	1676	1829	1927
55°	1602	1795	1908
60°	1527	1767	1904
65°	1430	1736	1916
70°	1324	1746	1967
75°	1185	1779	2078
80°	958	1884	2033
85°	721	1653	1613



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.1	3.3
10°-20°	391.8	9.5
20°-30°	589.0	14.3
30°-40°	701.6	17.0
40°-50°	718.0	17.4
50°-60°	646.5	15.7
60°-70°	507.7	12.3
70°-80°	329.5	8.0
80°-90°	101.9	2.5
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°	1117.9	27.1
0°-40°	1819.5	44.1
0°-60°	3184.0	77.2
0°-90°	4123.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4123.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1448	1448	1448	1448	1448	
5°	1442	1445	1438	1446	1447	137
15°	1379	1383	1386	1397	1400	389
25°	1253	1264	1277	1298	1302	577
35°	1083	1096	1122	1150	1158	676
45°	874	894	934	969	977	673
55°	651	680	730	768	775	584
65°	428	461	520	563	574	426
75°	217	259	326	371	381	230
85°	44	82	102	100	100	54
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1448.5	1448.5	1448.5	1448.5	1448.5
2.5°	1449.8	1449.8	1443.1	1449.8	1451.0
5°	1441.9	1444.6	1437.9	1445.8	1447.1
7.5°	1434.0	1434.0	1430.0	1437.9	1439.4
10°	1419.6	1420.9	1419.6	1428.8	1430.0
12.5°	1401.3	1403.8	1405.3	1414.4	1415.7
15°	1379.1	1383.0	1385.5	1397.4	1400.1
17.5°	1354.1	1358.1	1364.6	1377.7	1380.3
20°	1324.0	1329.2	1337.1	1354.1	1358.1
22.5°	1291.3	1296.6	1309.6	1325.3	1331.9
25°	1253.3	1263.7	1276.8	1297.8	1301.8
27.5°	1215.3	1224.4	1241.5	1263.7	1269.1
30°	1170.8	1185.2	1206.1	1228.4	1233.6
32.5°	1127.6	1141.9	1166.9	1190.5	1197.0
35°	1083.1	1096.2	1122.4	1149.8	1157.7
37.5°	1031.9	1049.0	1077.9	1105.3	1113.2
40°	978.3	999.3	1031.9	1060.8	1070.0
42.5°	927.2	949.4	982.2	1013.6	1024.1
45°	873.5	894.5	933.8	969.1	977.0
47.5°	818.5	842.1	883.9	919.3	932.4
50°	763.5	788.5	833.0	869.6	877.5
52.5°	708.5	734.7	781.8	821.1	825.1
55°	650.9	679.8	729.5	767.5	775.4
57.5°	598.5	623.4	677.1	716.4	725.5
60°	540.9	568.4	625.9	662.7	674.4
62.5°	485.8	514.7	575.0	611.6	622.0
65°	428.2	461.1	519.9	563.1	573.6
67.5°	378.5	409.9	472.7	514.7	525.1
70°	320.8	356.3	423.0	466.3	476.7
72.5°	271.1	307.7	374.6	416.4	432.2
75°	217.4	259.2	326.2	370.6	381.1
77.5°	165.0	213.5	281.5	315.6	315.6
80°	117.9	169.0	231.8	247.6	250.1
82.5°	77.3	127.0	171.5	170.3	170.3
85°	44.5	82.5	102.1	99.6	99.6
87.5°	17.0	34.1	36.6	36.6	35.3
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)