

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: P843079

Luminaire Tested: **24CZ2-45-SQR-UNV-B35**

Issue Date: 1/5/2024



**Test Information**

Test Method: LM-79-08  
Report Number: P843079  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P388488)  
Test Lab: INNOVATION CENTER (G2)  
Issue Date: 1/5/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-45-SQR-UNV-B35  
Description: 2X4 4500 LUMEN CRUZE TROFFER WITH BIO UP LEDS AT 3500K CCT AND SQR LENS  
  
Light Source: -  
Ballast/Driver: -

**Summary**

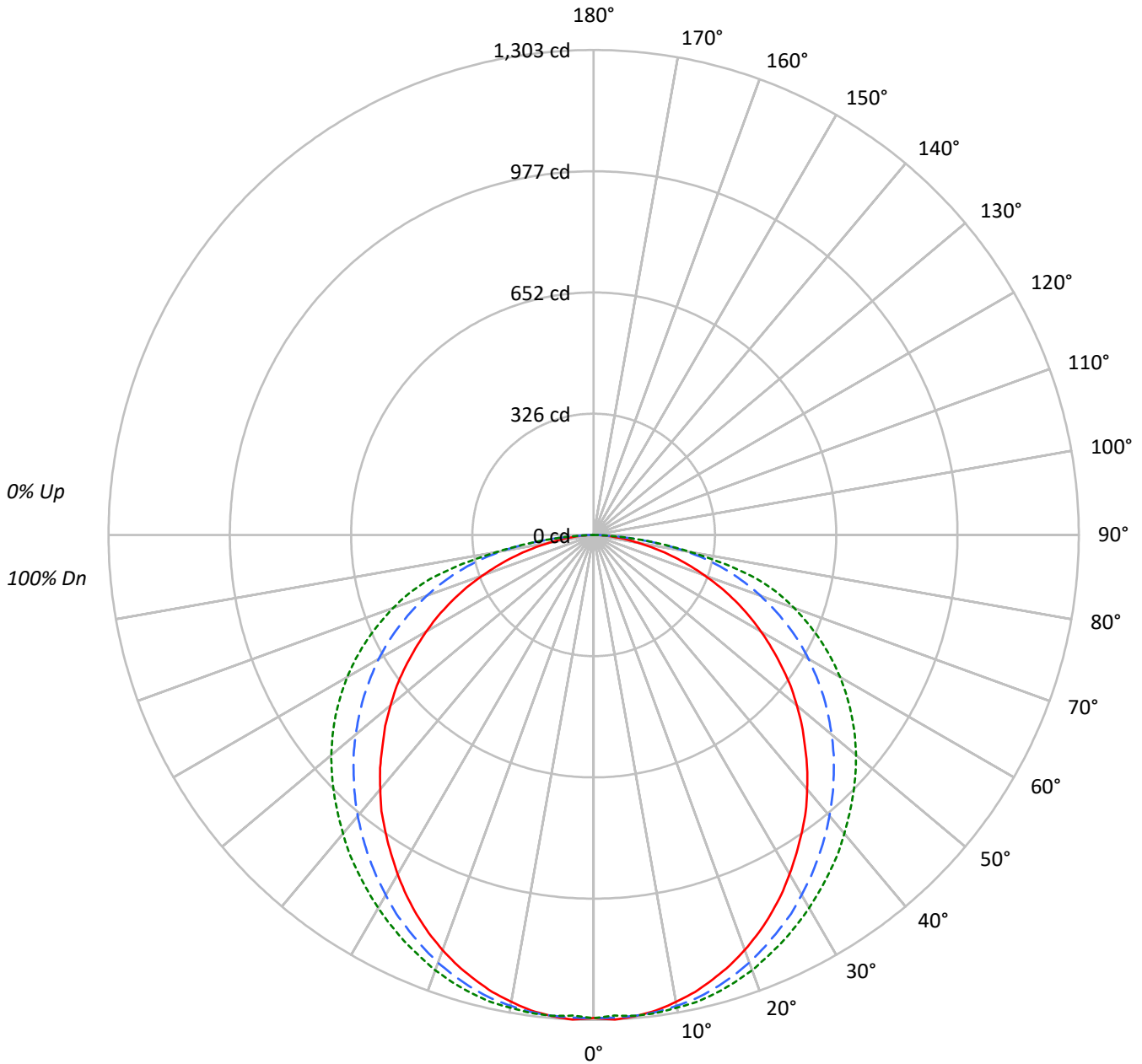
Lumens per Lamp: N/A  
Luminaire Lumens: 4061.0 lumens  
Efficiency: N/A  
Efficacy: 112.8 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.33 / 1.41  
Luminous Opening: Rectangular (W 1.92' x L: 3.98' x H: 0')  
CIE Type: Direct

Input Watts (W): 36  
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	98	94	105	100	96	92	96	93	89	92	89	87	89	86	84	82																			
2	98	89	81	75	95	87	80	74	83	78	73	80	75	71	77	73	69	67																			
3	89	77	69	62	86	76	68	61	73	66	60	70	64	59	67	62	58	56																			
4	81	68	59	52	78	67	58	52	64	57	51	62	55	50	60	54	49	47																			
5	74	61	51	44	72	60	51	44	57	50	44	55	49	43	54	48	43	41																			
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35																			
7	63	49	40	34	62	49	40	34	47	39	34	45	39	33	44	38	33	31																			
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	30	28																			
9	55	41	33	27	54	41	33	27	39	32	27	38	32	27	37	31	27	25																			
10	52	38	30	25	50	37	30	24	36	29	24	36	29	24	35	29	24	22																			

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

	0°	45°	90°
0°	1832	1832	1832
5°	1839	1837	1837
10°	1826	1841	1849
15°	1806	1842	1861
20°	1782	1837	1869
25°	1752	1827	1875
30°	1715	1821	1886
35°	1680	1816	1904
40°	1643	1816	1930
45°	1601	1820	1967
50°	1564	1831	2020
55°	1518	1851	2082
60°	1465	1881	2158
65°	1402	1917	2248
70°	1300	1965	2363
75°	1177	2033	2472
80°	992	2038	2125
85°	759	1542	1542



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	123.2	3.0
10°-20°	354.5	8.7
20°-30°	538.5	13.3
30°-40°	655.0	16.1
40°-50°	697.4	17.2
50°-60°	664.2	16.4
60°-70°	555.4	13.7
70°-80°	370.3	9.1
80°-90°	102.4	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°	1016.2	25.0
0°-40°	1671.2	41.2
0°-60°	3032.8	74.7
0°-90°	4061.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4061.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1298	1298	1298	1298	1298	
5°	1298	1290	1297	1297	1297	123
15°	1236	1239	1261	1270	1274	349
25°	1125	1140	1173	1194	1204	518
35°	975	1003	1054	1089	1105	610
45°	802	845	912	963	986	620
55°	617	670	752	818	846	551
65°	420	481	574	645	673	415
75°	216	284	373	436	453	229
85°	47	87	95	94	95	57
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1298.0	1298.0	1298.0	1298.0	1298.0
2.5°	1303.4	1294.0	1298.0	1298.0	1292.8
5°	1298.0	1290.0	1296.8	1296.8	1296.8
7.5°	1288.8	1282.0	1292.8	1295.4	1295.4
10°	1274.0	1271.4	1284.8	1288.8	1290.0
12.5°	1257.9	1256.5	1275.4	1280.6	1284.8
15°	1236.3	1239.1	1260.6	1270.0	1274.0
17.5°	1213.7	1218.9	1243.1	1256.5	1260.6
20°	1186.8	1194.8	1223.1	1236.3	1244.5
22.5°	1157.4	1169.4	1198.9	1214.9	1224.3
25°	1125.1	1139.8	1173.4	1193.5	1204.3
27.5°	1090.3	1109.1	1148.0	1170.6	1181.4
30°	1052.6	1074.1	1117.1	1144.0	1157.4
32.5°	1013.8	1039.2	1086.3	1115.7	1131.8
35°	974.9	1003.1	1054.0	1088.9	1104.9
37.5°	936.0	964.1	1020.6	1058.0	1078.3
40°	891.8	925.2	985.7	1027.2	1047.4
42.5°	848.9	885.0	949.5	995.0	1016.6
45°	801.9	844.9	911.8	962.9	985.7
47.5°	759.0	801.9	874.4	928.0	953.5
50°	712.1	757.6	834.1	893.2	920.0
52.5°	666.4	713.5	793.8	856.9	883.8
55°	616.9	670.4	752.4	818.1	846.1
57.5°	567.3	625.0	709.3	777.8	806.0
60°	519.0	577.9	666.4	734.9	764.4
62.5°	470.7	529.6	622.2	691.9	720.1
65°	419.7	481.4	573.9	645.0	673.2
67.5°	368.8	433.1	525.6	596.7	623.6
70°	315.1	383.6	476.1	545.8	572.7
72.5°	265.6	333.9	425.1	493.6	519.0
75°	215.9	284.2	372.8	435.9	453.3
77.5°	167.7	236.0	315.1	356.7	360.8
80°	122.0	186.5	250.8	262.8	261.4
82.5°	81.7	139.4	173.1	174.3	178.3
85°	46.9	87.1	95.2	93.9	95.2
87.5°	18.8	30.8	26.8	20.0	20.0
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)