

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: P276594

Luminaire Tested: **24CZ2-50-S-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276594  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1805-783-1)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-50-S-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5169.8 lumens  
Efficiency: N/A  
Efficacy: 126.6 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.26 / 1.35  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

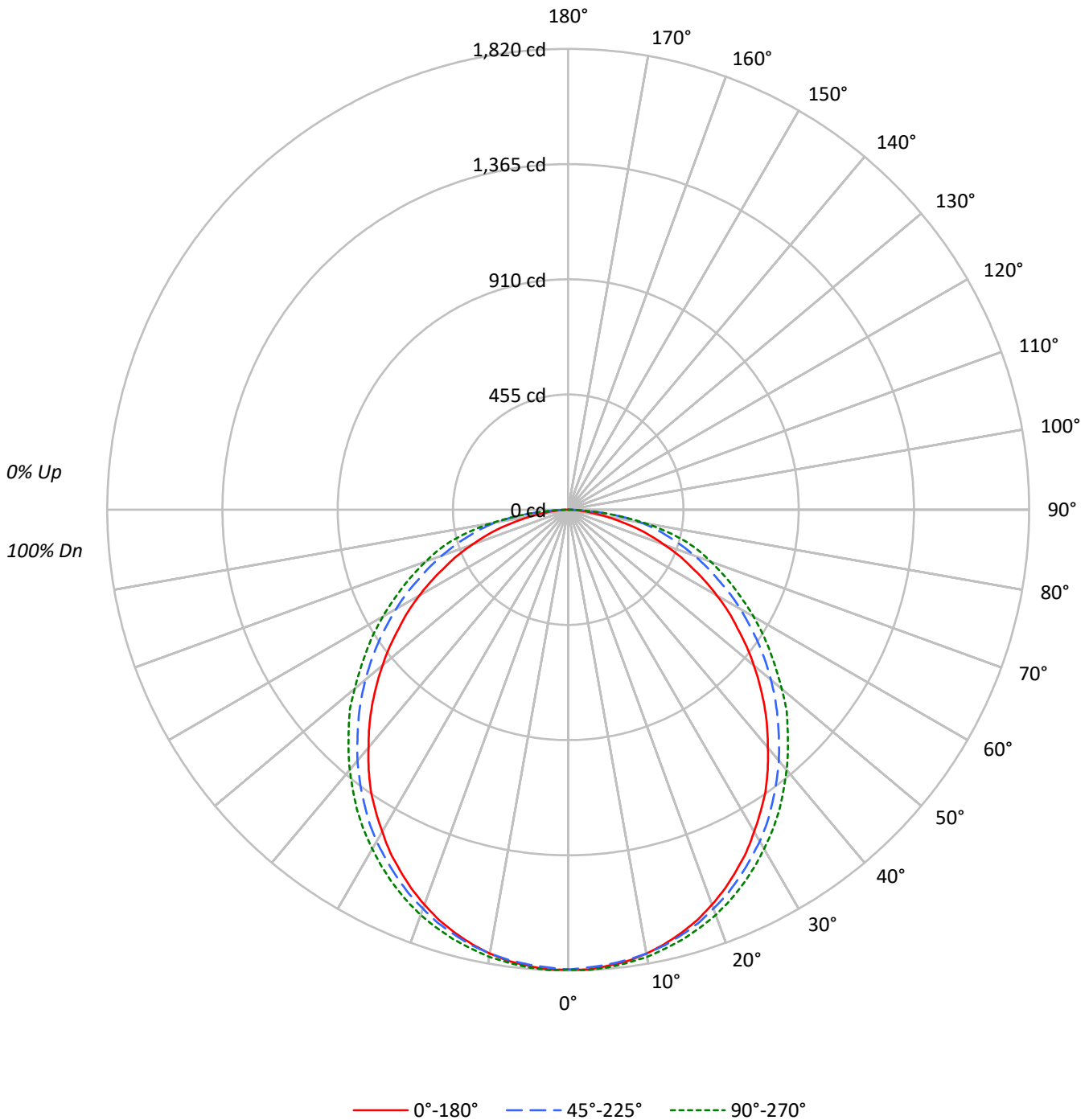
Input Watts (W): 40.827  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P276594

CATALOG NUMBER: 24CZ2-50-S-UNV-L82765-W2A1-U-5500K

### Luminous Intensity Polar Plot





TEST NUMBER: P276594

CATALOG NUMBER: 24CZ2-50-S-UNV-L82765-W2A1-U-5500K

**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	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°	2444	2444	2444
5°	2442	2435	2451
10°	2432	2432	2450
15°	2409	2420	2445
20°	2377	2401	2438
25°	2333	2377	2423
30°	2281	2350	2403
35°	2231	2312	2384
40°	2155	2273	2356
45°	2084	2228	2331
50°	2004	2186	2303
55°	1914	2146	2280
60°	1825	2112	2276
65°	1710	2075	2290
70°	1583	2087	2351
75°	1417	2126	2484
80°	1145	2252	2430
85°	861	1978	1927



TEST NUMBER: P276594

CATALOG NUMBER: 24CZ2-50-S-UNV-L82765-W2A1-U-5500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	171.9	3.3
10°-20°	491.3	9.5
20°-30°	738.5	14.3
30°-40°	879.7	17.0
40°-50°	900.3	17.4
50°-60°	810.6	15.7
60°-70°	636.5	12.3
70°-80°	413.1	8.0
80°-90°	127.8	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°	1401.7	27.1
0°-40°	2281.4	44.1
0°-60°	3992.3	77.2
0°-90°	5169.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5169.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1816	1816	1816	1816	1816	
5°	1808	1811	1803	1813	1814	172
15°	1729	1734	1737	1752	1755	488
25°	1572	1585	1601	1627	1632	724
35°	1358	1374	1407	1442	1452	847
45°	1095	1122	1171	1215	1225	844
55°	816	852	915	962	972	732
65°	537	578	652	706	719	535
75°	273	325	409	465	478	288
85°	56	104	128	125	125	67
90°	0	0	0	0	0	



TEST NUMBER: P276594

CATALOG NUMBER: 24CZ2-50-S-UNV-L82765-W2A1-U-5500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1816.2	1816.2	1816.2	1816.2	1816.2
2.5°	1817.8	1817.8	1809.6	1817.8	1819.5
5°	1808.0	1811.2	1803.0	1812.9	1814.5
7.5°	1798.1	1798.1	1793.2	1803.0	1804.7
10°	1780.0	1781.7	1780.0	1791.5	1793.2
12.5°	1757.1	1760.3	1762.0	1773.5	1775.1
15°	1729.1	1734.1	1737.4	1752.1	1755.4
17.5°	1697.9	1702.9	1711.1	1727.5	1730.8
20°	1660.2	1666.7	1676.6	1697.9	1702.9
22.5°	1619.1	1625.7	1642.1	1661.8	1670.0
25°	1571.5	1584.6	1601.1	1627.3	1632.3
27.5°	1523.9	1535.4	1556.7	1584.6	1591.2
30°	1468.0	1486.1	1512.4	1540.3	1546.9
32.5°	1413.9	1431.9	1463.1	1492.7	1500.9
35°	1358.0	1374.4	1407.3	1441.8	1451.6
37.5°	1294.0	1315.3	1351.5	1385.9	1395.8
40°	1226.7	1252.9	1294.0	1330.1	1341.6
42.5°	1162.6	1190.5	1231.6	1271.0	1284.1
45°	1095.3	1121.6	1170.8	1215.2	1225.0
47.5°	1026.3	1055.9	1108.4	1152.8	1169.2
50°	957.3	988.5	1044.4	1090.4	1100.2
52.5°	888.4	921.2	980.3	1029.6	1034.5
55°	816.1	852.3	914.7	962.3	972.1
57.5°	750.4	781.6	849.0	898.2	909.7
60°	678.2	712.7	784.9	830.9	845.7
62.5°	609.2	645.3	720.9	766.9	780.0
65°	537.0	578.0	651.9	706.1	719.2
67.5°	474.6	514.0	592.8	645.3	658.5
70°	402.3	446.7	530.4	584.6	597.7
72.5°	339.9	385.9	469.6	522.2	541.9
75°	272.6	325.1	408.9	464.7	477.9
77.5°	206.9	267.7	353.1	395.7	395.7
80°	147.8	211.8	290.7	310.4	313.6
82.5°	96.9	159.3	215.1	213.5	213.5
85°	55.8	103.5	128.1	124.8	124.8
87.5°	21.3	42.7	46.0	46.0	44.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)