

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: P261250

Luminaire Tested: **24CZ-LD5-50SE-S-UNV-L82765-W2A1-U-3500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261250  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25694)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50SE-S-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH SMOOTH LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4983.0 lumens  
Efficiency: N/A  
Efficacy: 124.9 lumens/watt  
Spacing Criteria (0/90/45): 1.19 / 1.23 / 1.33  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

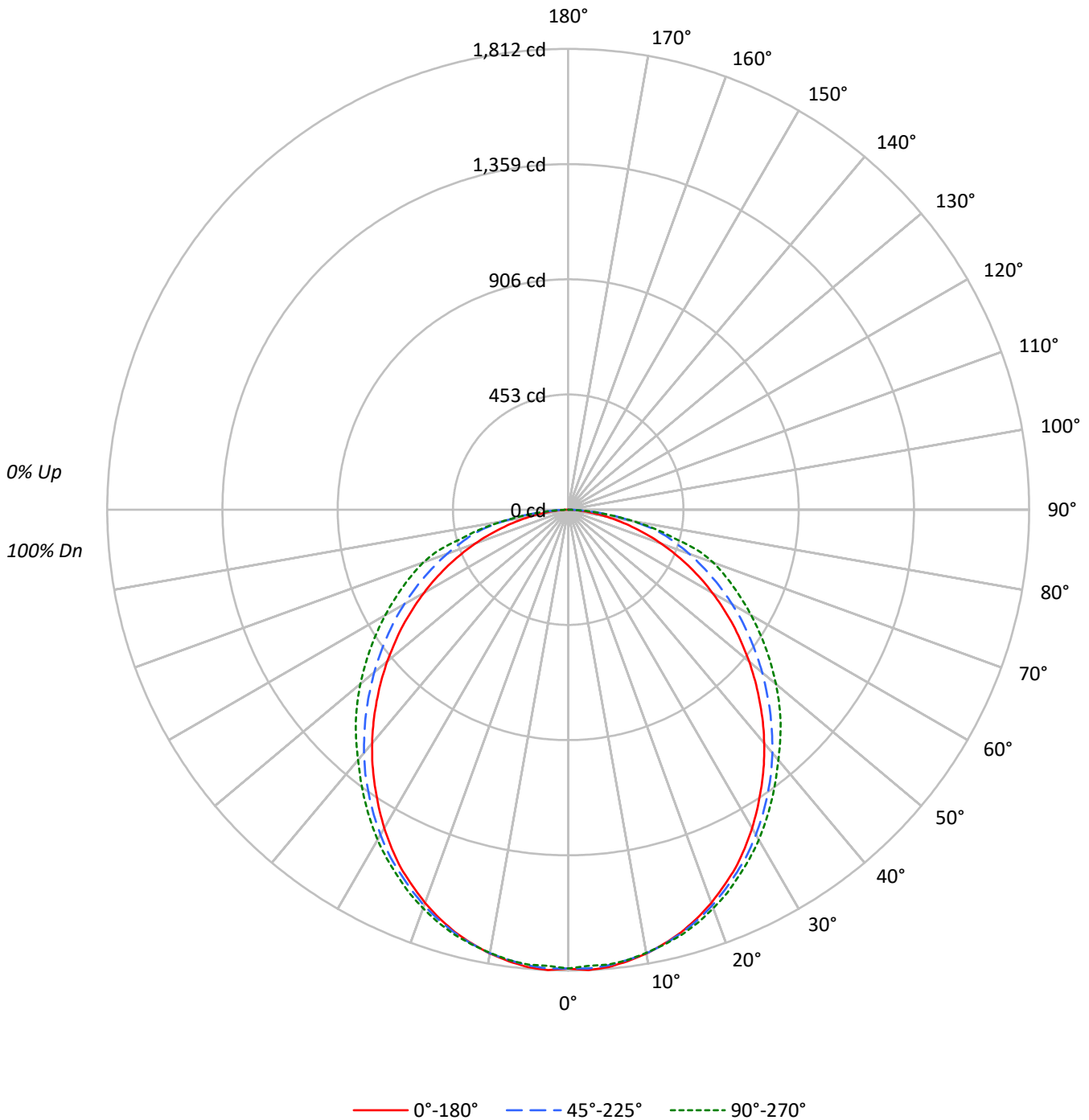
Input Watts (W): 39.897  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**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	104	99	95	106	101	97	94	97	94	91	93	90	88	89	87	85	83
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69
3	90	79	71	64	87	77	70	64	74	68	62	72	66	61	69	64	60	58
4	82	70	61	54	80	69	60	54	66	59	53	64	58	52	62	56	52	50
5	76	63	53	47	73	61	53	47	59	52	46	57	51	45	55	50	45	43
6	70	56	47	41	68	55	47	41	54	46	40	52	45	40	50	44	40	38
7	65	51	42	36	63	50	42	36	49	41	36	47	41	35	46	40	35	33
8	60	47	38	32	59	46	38	32	45	37	32	43	37	32	42	36	32	30
9	56	43	35	29	55	42	34	29	41	34	29	40	33	29	39	33	29	27
10	53	40	32	26	52	39	31	26	38	31	26	37	31	26	36	30	26	24

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

	0°	45°	90°
0°	2427	2427	2427
5°	2439	2430	2425
10°	2422	2419	2417
15°	2395	2400	2409
20°	2355	2372	2388
25°	2309	2333	2358
30°	2246	2293	2329
35°	2176	2244	2290
40°	2106	2193	2257
45°	2026	2136	2246
50°	1944	2082	2232
55°	1859	2038	2225
60°	1762	2003	2235
65°	1657	1980	2280
70°	1526	1989	2387
75°	1353	2060	2224
80°	1130	1953	2005
85°	844	1561	1433



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.6	3.4
10°-20°	485.1	9.7
20°-30°	722.9	14.5
30°-40°	850.9	17.1
40°-50°	864.7	17.4
50°-60°	777.5	15.6
60°-70°	614.2	12.3
70°-80°	389.7	7.8
80°-90°	107.5	2.2
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°	1378.5	27.7
0°-40°	2229.4	44.7
0°-60°	3871.6	77.7
0°-90°	4983.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4983.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1804	1804	1804	1804	1804	
5°	1806	1791	1799	1796	1796	171
15°	1719	1711	1723	1728	1729	484
25°	1555	1554	1572	1582	1588	715
35°	1325	1333	1366	1381	1394	829
45°	1064	1079	1122	1156	1180	821
55°	792	812	869	925	948	708
65°	521	547	622	690	716	516
75°	260	305	396	431	428	277
85°	55	94	101	93	93	67
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1803.9	1803.9	1803.9	1803.9	1803.9
2.5°	1812.2	1799.0	1805.6	1802.3	1795.6
5°	1805.6	1790.7	1799.0	1795.6	1795.6
7.5°	1790.7	1779.1	1785.7	1784.0	1785.7
10°	1772.4	1760.8	1770.8	1770.8	1769.1
12.5°	1747.6	1737.6	1749.2	1749.2	1750.9
15°	1719.4	1711.1	1722.7	1727.7	1729.3
17.5°	1684.6	1676.3	1691.2	1696.2	1701.1
20°	1644.8	1641.5	1656.4	1661.3	1668.0
22.5°	1600.0	1600.0	1614.9	1621.6	1631.5
25°	1555.2	1553.6	1571.8	1581.8	1588.4
27.5°	1502.2	1503.8	1527.0	1537.0	1545.3
30°	1445.8	1449.1	1475.6	1487.3	1498.9
32.5°	1386.1	1392.7	1422.6	1435.9	1447.5
35°	1324.8	1333.1	1366.2	1381.1	1394.4
37.5°	1263.4	1275.0	1309.8	1324.8	1339.7
40°	1198.8	1208.7	1248.5	1266.7	1285.0
42.5°	1132.4	1145.7	1185.5	1212.0	1233.6
45°	1064.5	1079.4	1122.5	1155.6	1180.5
47.5°	996.5	1016.4	1057.8	1102.6	1124.1
50°	928.5	948.4	994.8	1044.6	1066.1
52.5°	858.9	878.8	931.8	983.2	1006.4
55°	792.5	812.4	868.8	925.2	948.4
57.5°	722.9	744.5	807.5	865.5	888.7
60°	654.9	676.5	744.5	805.8	830.7
62.5°	588.6	611.8	683.1	747.8	772.6
65°	520.6	547.2	621.8	689.7	716.3
67.5°	454.3	484.1	562.1	633.4	661.6
70°	388.0	422.8	505.7	578.7	606.8
72.5°	323.3	361.5	449.3	522.3	537.2
75°	260.3	305.1	396.3	431.1	427.8
77.5°	200.6	250.4	336.6	343.2	353.2
80°	145.9	200.6	252.0	265.3	258.7
82.5°	96.2	150.9	180.7	174.1	172.4
85°	54.7	94.5	101.1	92.8	92.8
87.5°	23.2	38.1	33.2	24.9	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)