

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: P261293

Luminaire Tested: **24CZ-LD5-50-S-UNV-L92765-W2A1-U-2700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P261293  
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-LD5-50-S-UNV-L92765-W2A1-U-2700K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (336) 90 CRI LEDS TUNED AT 2700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4017.0 lumens  
Efficiency: N/A  
Efficacy: 112.8 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

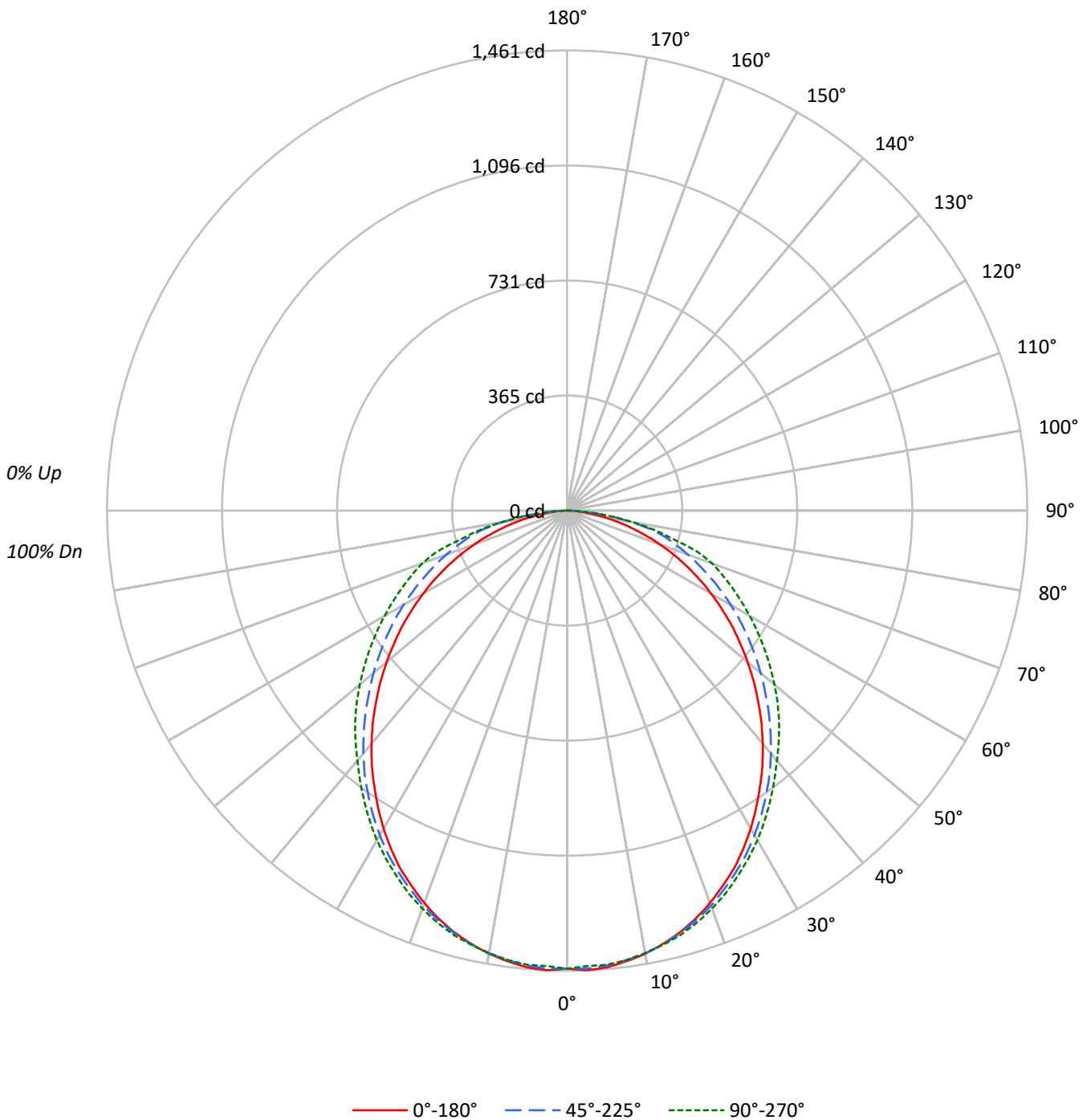
Input Watts (W): 35.619  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P261293

CATALOG NUMBER: 24CZ-LD5-50-S-UNV-L92765-W2A1-U-2700K

### Luminous Intensity Polar Plot





TEST NUMBER: P261293

CATALOG NUMBER: 24CZ-LD5-50-S-UNV-L92765-W2A1-U-2700K

**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°	1957	1957	1957
5°	1966	1959	1955
10°	1952	1950	1949
15°	1931	1934	1942
20°	1898	1912	1925
25°	1861	1881	1901
30°	1811	1848	1877
35°	1754	1809	1846
40°	1697	1768	1819
45°	1633	1722	1811
50°	1567	1679	1799
55°	1499	1643	1793
60°	1421	1615	1802
65°	1336	1596	1838
70°	1231	1604	1924
75°	1091	1660	1792
80°	911	1574	1616
85°	681	1258	1155



TEST NUMBER: P261293

CATALOG NUMBER: 24CZ-LD5-50-S-UNV-L92765-W2A1-U-2700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	137.5	3.4
10°-20°	391.0	9.7
20°-30°	582.7	14.5
30°-40°	686.0	17.1
40°-50°	697.1	17.4
50°-60°	626.7	15.6
60°-70°	495.1	12.3
70°-80°	314.1	7.8
80°-90°	86.7	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°	1111.2	27.7
0°-40°	1797.2	44.7
0°-60°	3121.0	77.7
0°-90°	4017.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4017.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1454	1454	1454	1454	1454	
5°	1456	1444	1450	1448	1448	138
15°	1386	1379	1389	1393	1394	390
25°	1254	1252	1267	1275	1280	576
35°	1068	1075	1101	1113	1124	668
45°	858	870	905	932	952	662
55°	639	655	700	746	764	571
65°	420	441	501	556	577	416
75°	210	246	319	348	345	223
85°	44	76	82	75	75	54
90°	0	0	0	0	0	



TEST NUMBER: P261293

CATALOG NUMBER: 24CZ-LD5-50-S-UNV-L92765-W2A1-U-2700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1454.2	1454.2	1454.2	1454.2	1454.2
2.5°	1460.9	1450.2	1455.6	1452.9	1447.5
5°	1455.6	1443.5	1450.2	1447.5	1447.5
7.5°	1443.5	1434.2	1439.5	1438.2	1439.5
10°	1428.8	1419.5	1427.5	1427.5	1426.2
12.5°	1408.8	1400.8	1410.1	1410.1	1411.5
15°	1386.1	1379.4	1388.7	1392.7	1394.1
17.5°	1358.0	1351.3	1363.3	1367.3	1371.4
20°	1325.9	1323.2	1335.3	1339.3	1344.6
22.5°	1289.8	1289.8	1301.9	1307.2	1315.2
25°	1253.7	1252.4	1267.1	1275.1	1280.5
27.5°	1211.0	1212.3	1231.0	1239.0	1245.7
30°	1165.5	1168.2	1189.6	1198.9	1208.3
32.5°	1117.4	1122.7	1146.8	1157.5	1166.9
35°	1067.9	1074.6	1101.4	1113.4	1124.1
37.5°	1018.5	1027.9	1055.9	1067.9	1080.0
40°	966.4	974.4	1006.5	1021.2	1035.9
42.5°	912.9	923.6	955.7	977.1	994.4
45°	858.1	870.1	904.9	931.6	951.7
47.5°	803.3	819.3	852.8	888.8	906.2
50°	748.5	764.5	802.0	842.1	859.4
52.5°	692.4	708.4	751.2	792.6	811.3
55°	638.9	654.9	700.4	745.8	764.5
57.5°	582.8	600.1	650.9	697.7	716.4
60°	528.0	545.3	600.1	649.6	669.6
62.5°	474.5	493.2	550.7	602.8	622.9
65°	419.7	441.1	501.2	556.0	577.4
67.5°	366.2	390.3	453.1	510.6	533.3
70°	312.8	340.8	407.7	466.5	489.2
72.5°	260.6	291.4	362.2	421.0	433.1
75°	209.8	245.9	319.4	347.5	344.8
77.5°	161.7	201.8	271.3	276.7	284.7
80°	117.6	161.7	203.2	213.9	208.5
82.5°	77.5	121.6	145.7	140.3	139.0
85°	44.1	76.2	81.5	74.8	74.8
87.5°	18.7	30.7	26.7	20.0	18.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)