

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: P263770

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P263770  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P25696)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ-LD5-50SE-RDP-UNV-L82765-W2A1-U-3500K  
Description: CRUZE 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED AT 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3395.0 lumens  
Efficiency: N/A  
Efficacy: 85.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.3 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

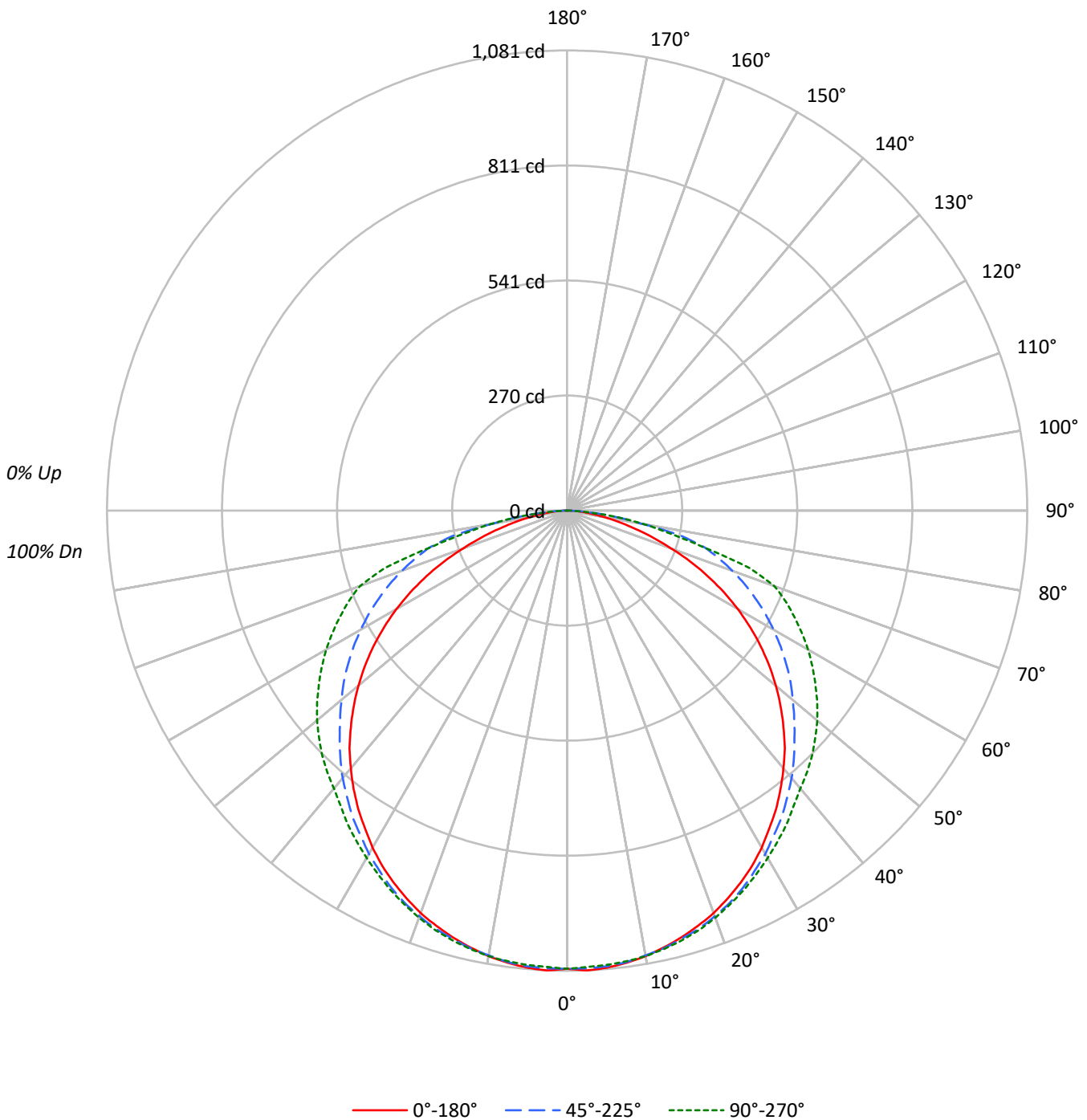
Input Watts (W): 39.897  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P263770

CATALOG NUMBER: 24CZ-LD5-50SE-RDP-UNV-L82765-W2A1-U-3500K

### Luminous Intensity Polar Plot





TEST NUMBER: P263770

CATALOG NUMBER: 24CZ-LD5-50SE-RDP-UNV-L82765-W2A1-U-3500K

**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	98	94	105	101	97	93	96	93	90	92	90	87	89	87	84	82
2	98	89	82	76	95	87	80	75	83	78	73	80	75	71	77	73	70	67
3	89	78	69	62	86	76	68	62	73	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	52	64	57	51	62	56	50	60	54	50	47
5	74	61	51	45	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	61	48	40	34	47	39	34	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	42	35	30	40	34	29	27
9	55	41	33	27	53	41	32	27	39	32	27	38	32	27	37	31	27	25
10	51	38	30	24	50	37	30	24	36	29	24	35	29	24	35	28	24	22

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

	0°	45°	90°
0°	1448	1448	1448
5°	1456	1451	1447
10°	1452	1450	1452
15°	1446	1450	1455
20°	1441	1452	1457
25°	1432	1451	1459
30°	1420	1446	1464
35°	1405	1444	1477
40°	1388	1441	1497
45°	1367	1437	1549
50°	1340	1448	1606
55°	1301	1474	1670
60°	1246	1506	1758
65°	1160	1554	1873
70°	1026	1624	2038
75°	860	1737	1711
80°	687	1372	1424
85°	542	929	851



TEST NUMBER: P263770

CATALOG NUMBER: 24CZ-LD5-50SE-RDP-UNV-L82765-W2A1-U-3500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	102.1	3.0
10°-20°	293.8	8.7
20°-30°	448.7	13.2
30°-40°	548.6	16.2
40°-50°	587.2	17.3
50°-60°	563.2	16.6
60°-70°	475.6	14.0
70°-80°	303.9	9.0
80°-90°	71.9	2.1
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°	844.6	24.9
0°-40°	1393.2	41.0
0°-60°	2543.6	74.9
0°-90°	3395.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3395.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1076	1076	1076	1076	1076	
5°	1078	1071	1075	1073	1071	102
15°	1038	1034	1041	1044	1044	293
25°	964	963	978	981	983	444
35°	856	862	879	891	899	535
45°	719	730	755	790	814	554
55°	555	573	628	685	712	495
65°	364	399	488	556	588	359
75°	165	236	334	341	329	178
85°	35	58	60	58	55	42
90°	0	0	0	0	0	



TEST NUMBER: P263770

CATALOG NUMBER: 24CZ-LD5-50SE-RDP-UNV-L82765-W2A1-U-3500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1076.2	1076.2	1076.2	1076.2	1076.2
2.5°	1081.3	1074.6	1076.2	1076.2	1072.9
5°	1077.9	1071.2	1074.6	1072.9	1071.2
7.5°	1071.2	1066.2	1069.6	1069.6	1067.9
10°	1062.9	1057.9	1061.2	1062.9	1062.9
12.5°	1051.2	1047.8	1052.8	1052.8	1054.5
15°	1037.8	1034.5	1041.1	1044.5	1044.5
17.5°	1022.8	1021.1	1029.5	1031.1	1032.8
20°	1006.1	1004.4	1014.4	1014.4	1017.8
22.5°	986.0	984.3	997.7	997.7	1001.0
25°	964.3	962.6	977.6	981.0	982.7
27.5°	940.9	939.2	954.2	959.3	962.6
30°	914.1	914.1	930.9	937.5	942.5
32.5°	884.1	889.1	904.1	914.1	920.8
35°	855.6	862.3	879.0	890.7	899.1
37.5°	823.9	830.6	849.0	864.0	874.0
40°	790.5	798.8	820.6	837.3	852.3
42.5°	757.0	765.4	788.8	813.9	833.9
45°	718.6	730.3	755.4	790.5	813.9
47.5°	680.2	691.9	723.6	767.1	790.5
50°	640.1	653.4	691.9	742.0	767.1
52.5°	598.3	613.3	661.8	715.3	740.3
55°	554.8	573.2	628.4	685.2	711.9
57.5°	509.7	529.8	594.9	655.1	683.5
60°	462.9	488.0	559.8	623.4	653.4
62.5°	414.5	444.5	524.8	589.9	621.7
65°	364.3	399.4	488.0	556.5	588.3
67.5°	312.5	359.3	451.2	523.1	554.8
70°	260.7	315.9	412.8	486.3	518.1
72.5°	212.2	275.7	374.3	442.9	449.5
75°	165.4	235.6	334.2	340.9	329.2
77.5°	123.7	195.5	275.7	245.7	244.0
80°	88.6	157.1	177.1	182.2	183.8
82.5°	58.5	118.7	115.3	118.7	117.0
85°	35.1	58.5	60.2	58.5	55.1
87.5°	16.7	21.7	16.7	15.0	13.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)