

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: P276702

Luminaire Tested: **24CZ2-35-S-UNV-L92765-W2A1-U-5500K**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

**Test Information**

Test Method: LM-79-08  
Report Number: P276702  
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: 24CZ2-35-S-UNV-L92765-W2A1-U-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH SMOOTH LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER  
Luminaire Equipment: Sample No.   Condition   Description

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3318.9 lumens  
Efficiency: N/A  
Efficacy: 123.9 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

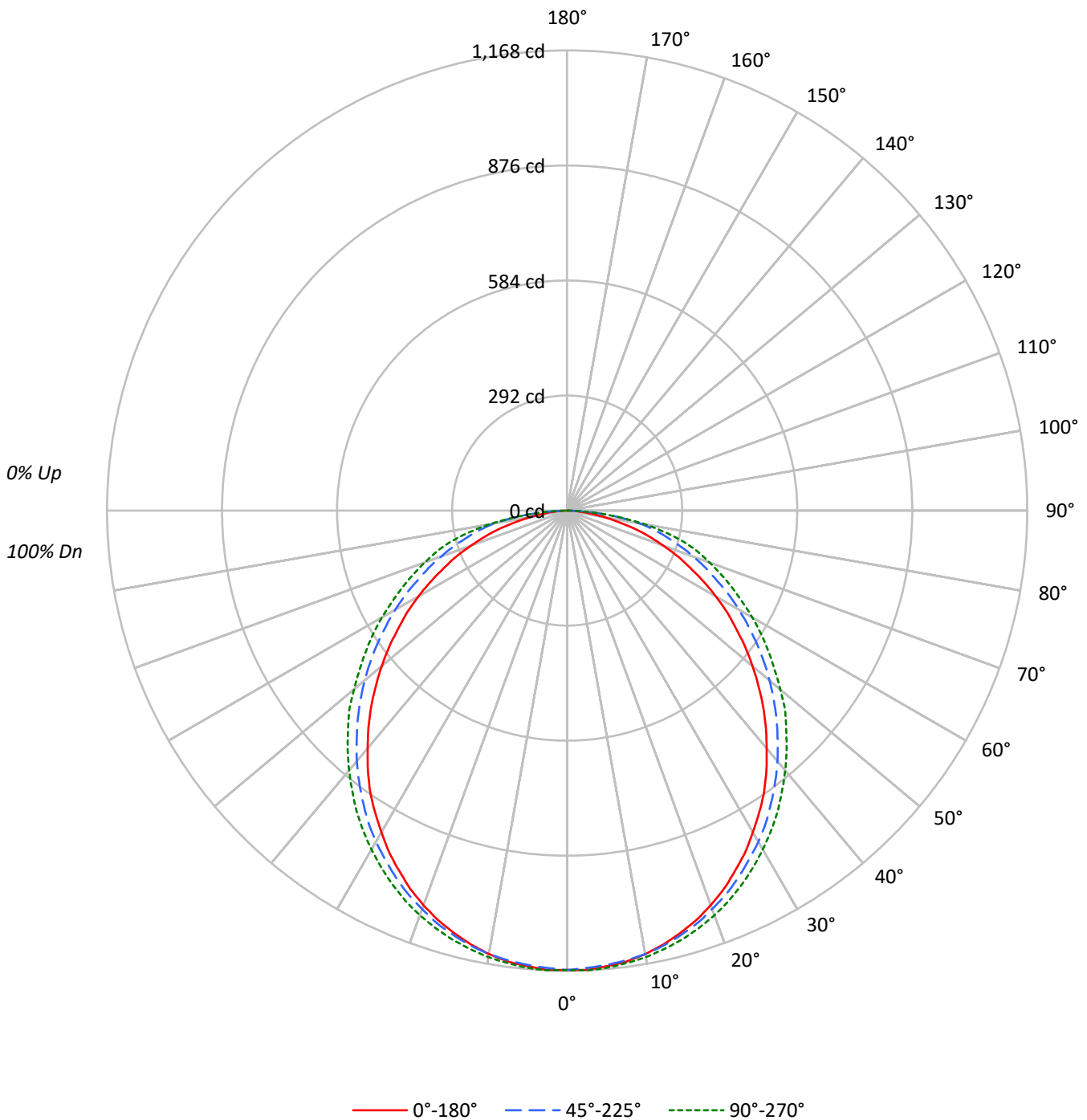
Input Watts (W): 26.784  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P276702

CATALOG NUMBER: 24CZ2-35-S-UNV-L92765-W2A1-U-5500K

### Luminous Intensity Polar Plot





TEST NUMBER: P276702

CATALOG NUMBER: 24CZ2-35-S-UNV-L92765-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°	1569	1569	1569
5°	1568	1563	1573
10°	1561	1561	1573
15°	1546	1554	1570
20°	1526	1541	1565
25°	1498	1526	1556
30°	1464	1508	1543
35°	1432	1484	1531
40°	1383	1459	1513
45°	1338	1430	1496
50°	1286	1403	1478
55°	1229	1377	1464
60°	1172	1356	1461
65°	1097	1332	1470
70°	1016	1340	1509
75°	910	1365	1595
80°	735	1446	1561
85°	553	1269	1237



TEST NUMBER: P276702

CATALOG NUMBER: 24CZ2-35-S-UNV-L92765-W2A1-U-5500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	110.4	3.3
10°-20°	315.4	9.5
20°-30°	474.1	14.3
30°-40°	564.8	17.0
40°-50°	578.0	17.4
50°-60°	520.4	15.7
60°-70°	408.6	12.3
70°-80°	265.2	8.0
80°-90°	82.0	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°	899.9	27.1
0°-40°	1464.7	44.1
0°-60°	2563.0	77.2
0°-90°	3318.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3318.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1166	1166	1166	1166	1166	
5°	1161	1163	1158	1164	1165	110
15°	1110	1113	1115	1125	1127	313
25°	1009	1017	1028	1045	1048	465
35°	872	882	904	926	932	544
45°	703	720	752	780	786	542
55°	524	547	587	618	624	470
65°	345	371	418	453	462	343
75°	175	209	262	298	307	185
85°	36	66	82	80	80	43
90°	0	0	0	0	0	



TEST NUMBER: P276702

CATALOG NUMBER: 24CZ2-35-S-UNV-L92765-W2A1-U-5500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1166.0	1166.0	1166.0	1166.0	1166.0
2.5°	1167.0	1167.0	1161.8	1167.0	1168.1
5°	1160.7	1162.8	1157.5	1163.9	1164.9
7.5°	1154.4	1154.4	1151.2	1157.5	1158.6
10°	1142.8	1143.8	1142.8	1150.2	1151.2
12.5°	1128.0	1130.1	1131.2	1138.6	1139.6
15°	1110.1	1113.3	1115.4	1124.9	1127.0
17.5°	1090.1	1093.2	1098.5	1109.0	1111.1
20°	1065.8	1070.0	1076.4	1090.1	1093.2
22.5°	1039.5	1043.7	1054.2	1066.9	1072.1
25°	1008.9	1017.3	1027.9	1044.7	1047.9
27.5°	978.3	985.7	999.4	1017.3	1021.5
30°	942.5	954.1	970.9	988.9	993.1
32.5°	907.7	919.3	939.3	958.3	963.6
35°	871.8	882.4	903.5	925.6	931.9
37.5°	830.7	844.4	867.6	889.8	896.1
40°	787.5	804.4	830.7	853.9	861.3
42.5°	746.4	764.3	790.7	816.0	824.4
45°	703.2	720.0	751.7	780.1	786.4
47.5°	658.9	677.9	711.6	740.1	750.6
50°	614.6	634.6	670.5	700.0	706.3
52.5°	570.3	591.4	629.4	661.0	664.2
55°	523.9	547.1	587.2	617.8	624.1
57.5°	481.8	501.8	545.0	576.7	584.0
60°	435.4	457.5	503.9	533.4	542.9
62.5°	391.1	414.3	462.8	492.3	500.8
65°	344.7	371.1	418.5	453.3	461.7
67.5°	304.7	330.0	380.6	414.3	422.7
70°	258.3	286.7	340.5	375.3	383.7
72.5°	218.2	247.7	301.5	335.2	347.9
75°	175.0	208.7	262.5	298.3	306.8
77.5°	132.8	171.8	226.7	254.1	254.1
80°	94.9	136.0	186.6	199.2	201.4
82.5°	62.2	102.3	138.1	137.0	137.0
85°	35.8	66.4	82.2	80.1	80.1
87.5°	13.7	27.4	29.5	29.5	28.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)