

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: P276996

Luminaire Tested: **24CZ2-40-RDP-UNV-L82765-W2A1-U-5500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276996  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1808-918-19)  
Test Lab: INNOVATION CENTER(G3)  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24CZ2-40-RDP-UNV-L82765-W2A1-U-5500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2678.0 lumens  
Efficiency: N/A  
Efficacy: 85.7 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

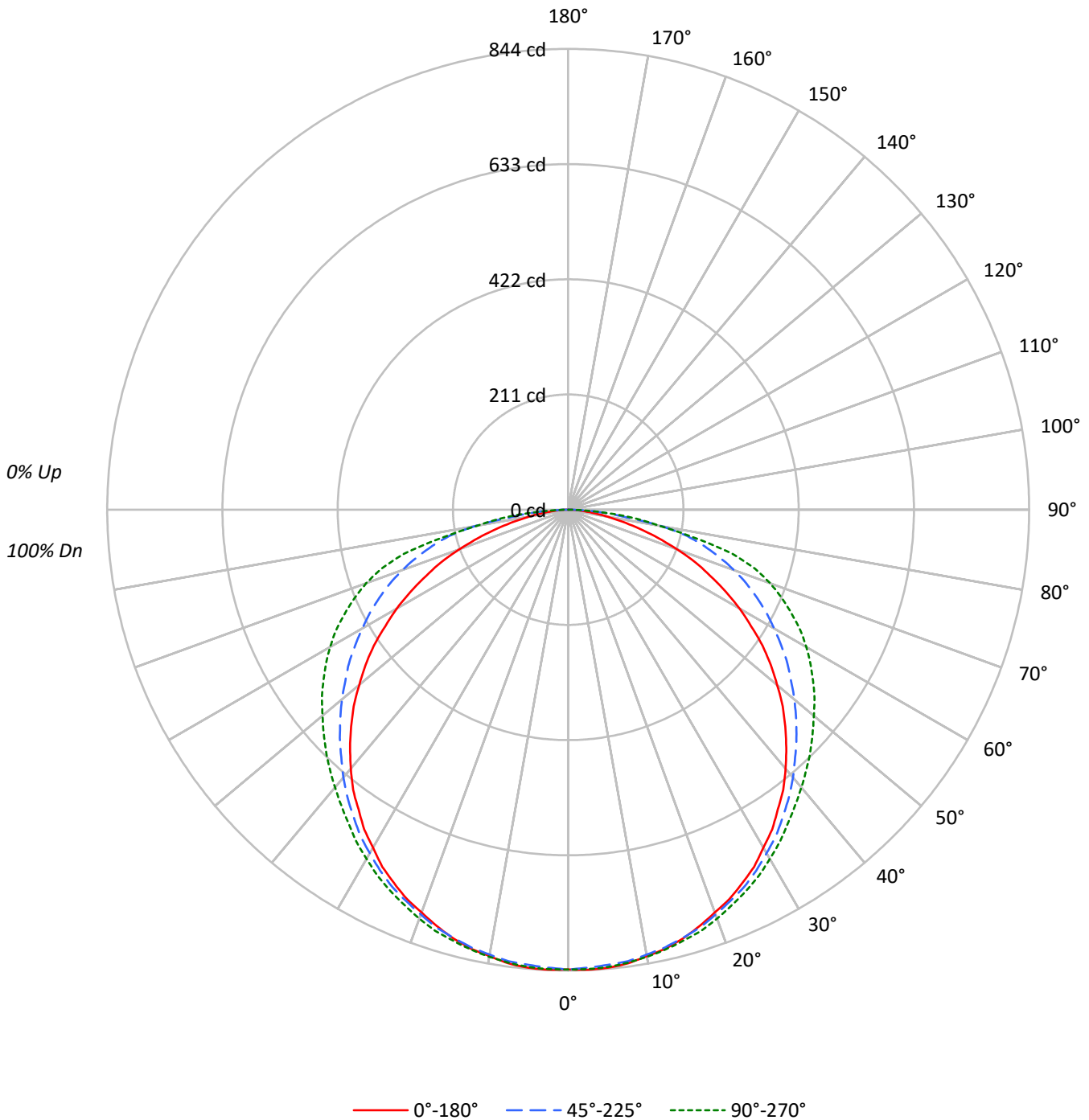
Input Watts (W): 31.248  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	98	94	105	100	96	92	96	93	89	92	89	87	88	86	84	82
2	97	89	81	75	95	87	80	74	83	77	72	80	75	71	77	73	69	67
3	88	77	68	62	86	76	67	61	72	66	60	70	64	59	67	62	58	56
4	81	68	59	52	78	67	58	51	64	57	51	62	55	50	59	54	49	47
5	74	60	51	44	72	59	51	44	57	49	43	55	48	43	53	47	42	40
6	68	54	45	38	66	53	45	38	51	44	38	50	43	37	48	42	37	35
7	63	49	40	34	61	48	40	34	47	39	33	45	38	33	44	38	33	31
8	59	45	36	30	57	44	36	30	43	35	30	41	34	29	40	34	29	27
9	55	41	33	27	53	40	32	27	39	32	27	38	31	26	37	31	26	24
10	51	38	30	24	50	37	29	24	36	29	24	35	29	24	34	28	24	22

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

	0°	45°	90°
0°	1133	1133	1133
5°	1137	1130	1136
10°	1134	1131	1136
15°	1132	1131	1138
20°	1124	1130	1141
25°	1120	1132	1144
30°	1110	1129	1147
35°	1100	1126	1152
40°	1087	1124	1166
45°	1069	1125	1193
50°	1045	1132	1229
55°	1019	1150	1284
60°	976	1172	1355
65°	913	1214	1438
70°	831	1270	1547
75°	704	1340	1616
80°	556	1348	1307
85°	411	1025	1149



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	79.9	3.0
10°-20°	229.9	8.6
20°-30°	351.6	13.1
30°-40°	429.8	16.0
40°-50°	458.1	17.1
50°-60°	438.0	16.4
60°-70°	371.0	13.9
70°-80°	249.4	9.3
80°-90°	70.3	2.6
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°	661.4	24.7
0°-40°	1091.2	40.7
0°-60°	1987.2	74.2
0°-90°	2678.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2678.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	842	842	842	842	842	
5°	842	841	837	841	841	80
15°	813	813	812	818	817	229
25°	754	757	762	769	770	348
35°	670	675	685	699	701	419
45°	562	571	591	616	627	433
55°	434	450	490	529	547	387
65°	287	316	381	432	452	285
75°	136	185	258	302	311	145
85°	27	54	66	72	74	33
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	842.1	842.1	842.1	842.1	842.1
2.5°	843.5	843.5	839.5	842.1	842.1
5°	842.1	840.8	836.8	840.8	840.8
7.5°	838.2	836.8	834.2	838.2	836.8
10°	830.2	830.2	827.5	831.5	831.5
12.5°	823.5	822.2	820.9	826.2	824.9
15°	812.9	812.9	811.6	818.2	816.9
17.5°	799.6	801.0	802.3	807.6	808.9
20°	785.0	787.7	789.0	797.0	797.0
22.5°	771.7	773.1	775.7	783.7	783.7
25°	754.5	757.1	762.4	769.1	770.4
27.5°	737.2	738.5	745.2	754.5	755.8
30°	714.6	718.6	726.6	737.2	738.5
32.5°	694.7	698.7	708.0	718.6	721.3
35°	669.5	674.8	685.4	698.7	701.3
37.5°	646.9	650.9	664.1	678.8	682.7
40°	619.0	627.0	640.2	657.5	664.1
42.5°	591.1	599.1	615.0	637.6	645.6
45°	561.9	571.2	591.1	616.3	627.0
47.5°	532.6	543.3	565.9	595.1	607.0
50°	499.4	512.7	540.6	573.8	587.1
52.5°	467.6	483.5	514.1	551.2	568.5
55°	434.4	450.3	490.1	528.7	547.3
57.5°	397.2	418.4	462.2	506.1	526.0
60°	362.6	382.5	435.7	483.5	503.4
62.5°	325.4	352.0	409.1	459.6	479.5
65°	286.9	316.1	381.2	431.7	451.6
67.5°	252.4	284.3	353.3	403.8	423.7
70°	211.2	251.0	322.8	373.3	393.2
72.5°	172.7	216.5	290.9	340.0	358.6
75°	135.5	184.6	257.7	301.5	310.8
77.5°	101.0	152.8	223.2	241.7	235.1
80°	71.7	122.2	174.0	164.7	168.7
82.5°	46.5	93.0	107.6	122.2	126.2
85°	26.6	54.5	66.4	71.7	74.4
87.5°	12.0	19.9	26.6	26.6	25.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)