

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: P276998

Luminaire Tested: **24CZ2-40-RDP-UNV-L82765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276998  
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-6500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2691.9 lumens  
Efficiency: N/A  
Efficacy: 84.6 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

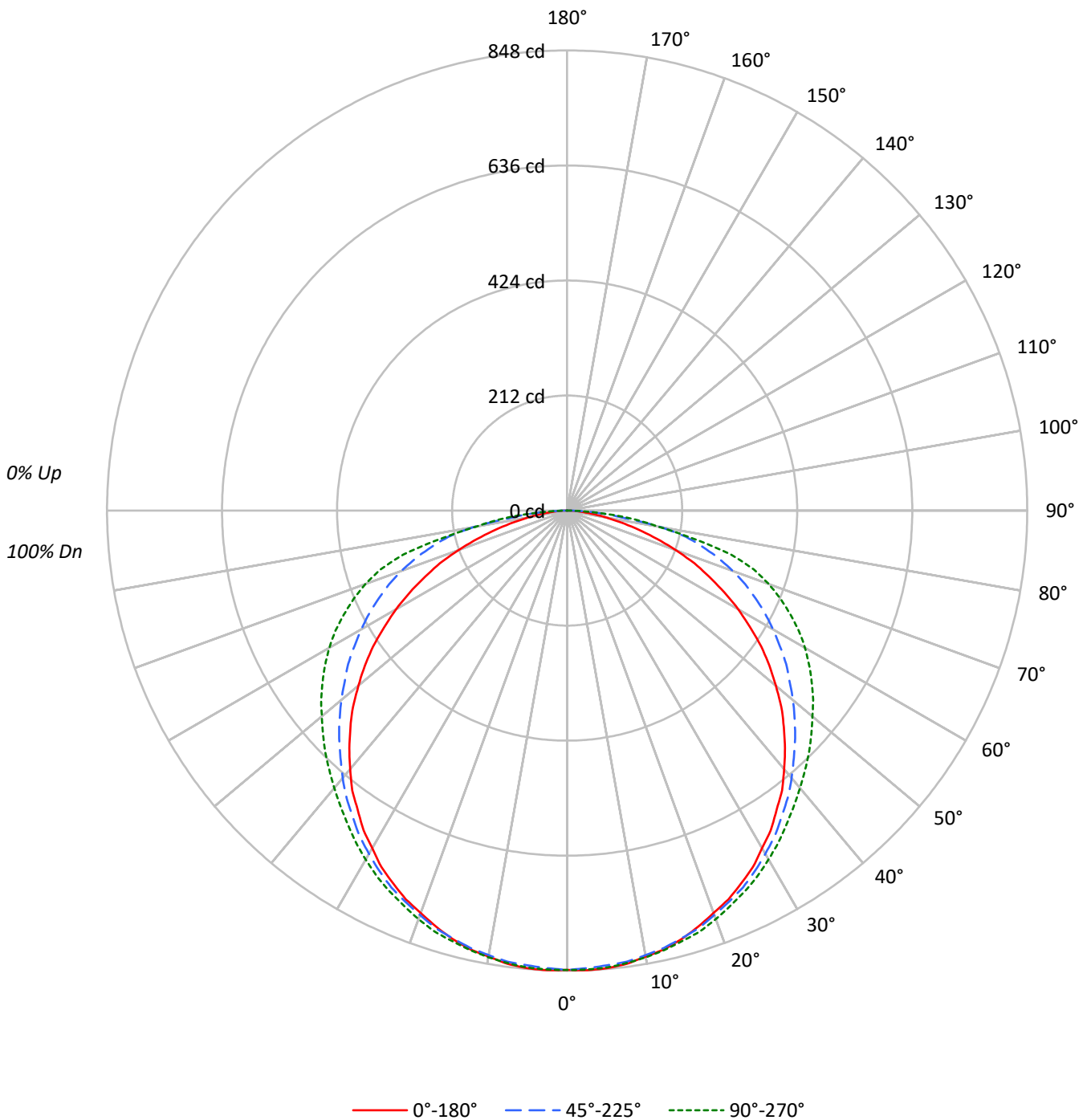
Input Watts (W): 31.806  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P276998

CATALOG NUMBER: 24CZ2-40-RDP-UNV-L82765-W2A1-U-6500K

### Luminous Intensity Polar Plot





TEST NUMBER: P276998

CATALOG NUMBER: 24CZ2-40-RDP-UNV-L82765-W2A1-U-6500K

**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	68	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°	1139	1139	1139
5°	1143	1136	1142
10°	1140	1137	1142
15°	1138	1136	1144
20°	1130	1136	1147
25°	1126	1138	1150
30°	1116	1135	1153
35°	1105	1132	1158
40°	1093	1130	1173
45°	1075	1131	1199
50°	1051	1137	1235
55°	1024	1156	1290
60°	981	1179	1362
65°	918	1220	1445
70°	835	1277	1555
75°	708	1346	1624
80°	559	1355	1314
85°	412	1031	1155



TEST NUMBER: P276998

CATALOG NUMBER: 24CZ2-40-RDP-UNV-L82765-W2A1-U-6500K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	80.3	3.0
10°-20°	231.1	8.6
20°-30°	353.4	13.1
30°-40°	432.0	16.0
40°-50°	460.5	17.1
50°-60°	440.3	16.4
60°-70°	373.0	13.9
70°-80°	250.7	9.3
80°-90°	70.7	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°	664.8	24.7
0°-40°	1096.9	40.7
0°-60°	1997.6	74.2
0°-90°	2691.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2691.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	846	846	846	846	846	
5°	846	845	841	845	845	80
15°	817	817	816	822	821	230
25°	758	761	766	773	774	350
35°	673	678	689	702	705	422
45°	565	574	594	620	630	436
55°	437	453	493	531	550	389
65°	288	318	383	434	454	286
75°	136	186	259	303	312	146
85°	27	55	67	72	75	33
90°	0	0	0	0	0	



TEST NUMBER: P276998

CATALOG NUMBER: 24CZ2-40-RDP-UNV-L82765-W2A1-U-6500K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	846.5	846.5	846.5	846.5	846.5
2.5°	847.9	847.9	843.9	846.5	846.5
5°	846.5	845.2	841.2	845.2	845.2
7.5°	842.5	841.2	838.5	842.5	841.2
10°	834.5	834.5	831.9	835.9	835.9
12.5°	827.8	826.5	825.2	830.5	829.2
15°	817.2	817.2	815.8	822.5	821.2
17.5°	803.8	805.1	806.5	811.8	813.2
20°	789.1	791.8	793.1	801.1	801.1
22.5°	775.8	777.1	779.8	787.8	787.8
25°	758.4	761.1	766.4	773.1	774.4
27.5°	741.1	742.4	749.1	758.4	759.8
30°	718.4	722.4	730.4	741.1	742.4
32.5°	698.3	702.3	711.7	722.4	725.0
35°	673.0	678.3	689.0	702.3	705.0
37.5°	650.3	654.3	667.6	682.3	686.3
40°	622.2	630.2	643.6	660.9	667.6
42.5°	594.2	602.2	618.2	640.9	648.9
45°	564.8	574.2	594.2	619.6	630.2
47.5°	535.4	546.1	568.8	598.2	610.2
50°	502.0	515.4	543.4	576.8	590.2
52.5°	470.0	486.0	516.7	554.1	571.5
55°	436.6	452.6	492.7	531.4	550.1
57.5°	399.2	420.6	464.7	508.7	528.8
60°	364.5	384.5	438.0	486.0	506.1
62.5°	327.1	353.8	411.3	462.0	482.0
65°	288.4	317.8	383.2	434.0	454.0
67.5°	253.7	285.7	355.2	405.9	425.9
70°	212.3	252.4	324.5	375.2	395.2
72.5°	173.6	217.6	292.4	341.8	360.5
75°	136.2	185.6	259.0	303.1	312.4
77.5°	101.5	153.6	224.3	243.0	236.3
80°	72.1	122.8	174.9	165.6	169.6
82.5°	46.7	93.5	108.2	122.8	126.8
85°	26.7	54.7	66.8	72.1	74.8
87.5°	12.0	20.0	26.7	26.7	25.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)