

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: P276979

Luminaire Tested: **24CZ2-30-RDP-UNV-L82765-W2A1-U-5700K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276979  
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: 24CZ2-30-RDP-UNV-L82765-W2A1-U-5700K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 80 CRI LEDS TUNED TO 5700K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2011.8 lumens  
Efficiency: N/A  
Efficacy: 89.8 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

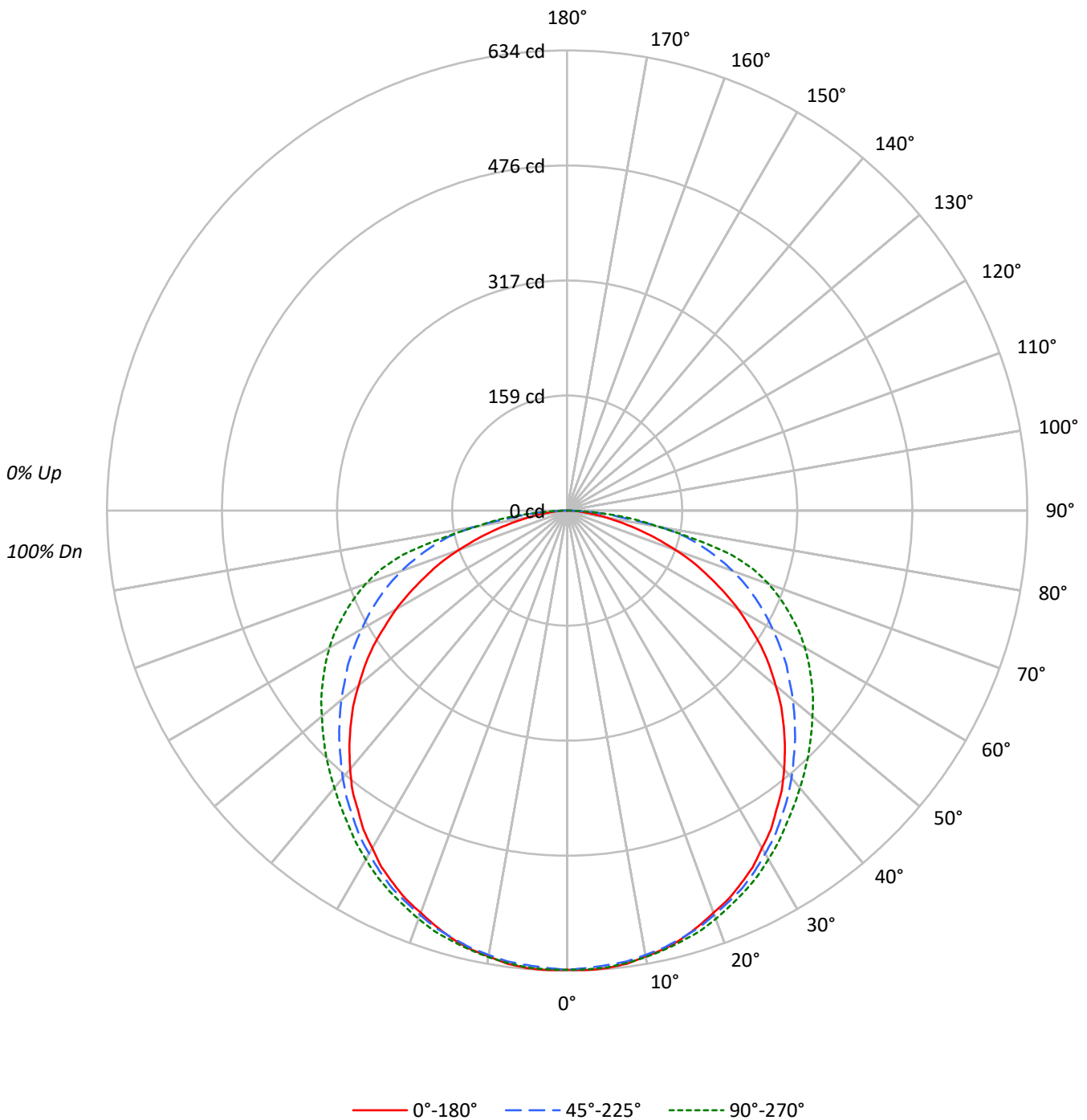
Input Watts (W): 22.413  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



TEST NUMBER: P276979

CATALOG NUMBER: 24CZ2-30-RDP-UNV-L82765-W2A1-U-5700K

### Luminous Intensity Polar Plot





TEST NUMBER: P276979

CATALOG NUMBER: 24CZ2-30-RDP-UNV-L82765-W2A1-U-5700K

**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°	851	851	851
5°	855	849	853
10°	852	849	853
15°	851	849	855
20°	844	849	857
25°	841	850	859
30°	834	848	862
35°	826	846	865
40°	817	845	876
45°	803	845	896
50°	785	850	923
55°	765	864	964
60°	733	881	1018
65°	686	912	1080
70°	624	954	1162
75°	529	1006	1214
80°	418	1013	982
85°	309	770	863



TEST NUMBER: P276979

CATALOG NUMBER: 24CZ2-30-RDP-UNV-L82765-W2A1-U-5700K

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	60.0	3.0
10°-20°	172.7	8.6
20°-30°	264.1	13.1
30°-40°	322.9	16.0
40°-50°	344.1	17.1
50°-60°	329.0	16.4
60°-70°	278.7	13.9
70°-80°	187.3	9.3
80°-90°	52.9	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°	496.9	24.7
0°-40°	819.7	40.7
0°-60°	1492.9	74.2
0°-90°	2011.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2011.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	633	633	633	633	633	
5°	633	632	629	632	632	60
15°	611	611	610	615	614	172
25°	567	569	573	578	579	261
35°	503	507	515	525	527	315
45°	422	429	444	463	471	326
55°	326	338	368	397	411	291
65°	216	238	286	324	339	214
75°	102	139	194	226	234	109
85°	20	41	50	54	56	25
90°	0	0	0	0	0	



TEST NUMBER: P276979

CATALOG NUMBER: 24CZ2-30-RDP-UNV-L82765-W2A1-U-5700K

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	632.7	632.7	632.7	632.7	632.7
2.5°	633.7	633.7	630.7	632.7	632.7
5°	632.7	631.7	628.7	631.7	631.7
7.5°	629.7	628.7	626.7	629.7	628.7
10°	623.7	623.7	621.7	624.7	624.7
12.5°	618.7	617.7	616.7	620.7	619.7
15°	610.7	610.7	609.7	614.7	613.7
17.5°	600.7	601.7	602.7	606.7	607.7
20°	589.7	591.7	592.7	598.7	598.7
22.5°	579.8	580.8	582.8	588.7	588.7
25°	566.8	568.8	572.8	577.8	578.8
27.5°	553.8	554.8	559.8	566.8	567.8
30°	536.9	539.9	545.8	553.8	554.8
32.5°	521.9	524.9	531.9	539.9	541.8
35°	502.9	506.9	514.9	524.9	526.9
37.5°	486.0	489.0	498.9	509.9	512.9
40°	465.0	471.0	481.0	494.0	498.9
42.5°	444.1	450.0	462.0	479.0	485.0
45°	422.1	429.1	444.1	463.0	471.0
47.5°	400.1	408.1	425.1	447.0	456.0
50°	375.2	385.2	406.1	431.1	441.1
52.5°	351.3	363.2	386.2	414.1	427.1
55°	326.3	338.3	368.2	397.2	411.1
57.5°	298.4	314.3	347.3	380.2	395.2
60°	272.4	287.4	327.3	363.2	378.2
62.5°	244.5	264.4	307.3	345.3	360.2
65°	215.5	237.5	286.4	324.3	339.3
67.5°	189.6	213.5	265.4	303.4	318.3
70°	158.7	188.6	242.5	280.4	295.4
72.5°	129.7	162.7	218.5	255.5	269.4
75°	101.8	138.7	193.6	226.5	233.5
77.5°	75.8	114.8	167.6	181.6	176.6
80°	53.9	91.8	130.7	123.7	126.7
82.5°	34.9	69.9	80.8	91.8	94.8
85°	20.0	40.9	49.9	53.9	55.9
87.5°	9.0	15.0	20.0	20.0	19.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)