

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: P276860

Luminaire Tested: **24CZ2-30-RDP-UNV-L93050-W2A1-U-4500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P276860  
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-L93050-W2A1-U-4500K  
Description: CRUZE 2.0 2x4 TUNABLE WHITE LED TROFFER  
WITH RDP LENS  
Light Source: (168) 90 CRI LEDS TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1802.4 lumens  
Efficiency: N/A  
Efficacy: 79.5 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

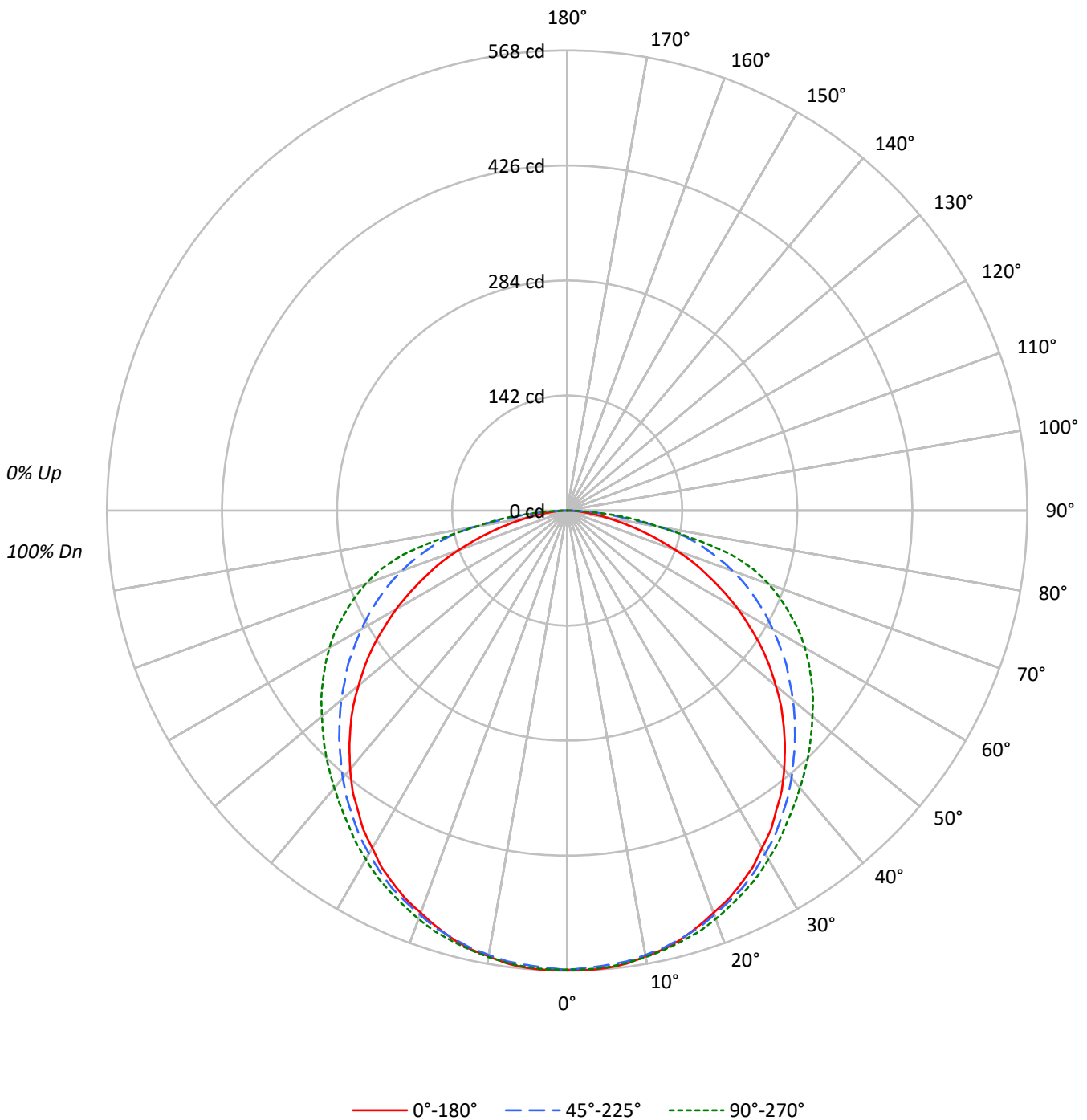
Input Watts (W): 22.676004  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	763	763	763
5°	766	761	764
10°	763	761	765
15°	762	761	766
20°	757	760	768
25°	754	762	770
30°	747	760	772
35°	740	758	775
40°	732	757	785
45°	720	757	803
50°	704	762	827
55°	686	774	864
60°	657	789	912
65°	615	817	968
70°	559	854	1041
75°	474	901	1088
80°	374	907	879
85°	276	690	773



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	53.8	3.0
10°-20°	154.7	8.6
20°-30°	236.6	13.1
30°-40°	289.3	16.0
40°-50°	308.3	17.1
50°-60°	294.8	16.4
60°-70°	249.7	13.9
70°-80°	167.8	9.3
80°-90°	47.3	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°	445.1	24.7
0°-40°	734.4	40.7
0°-60°	1337.5	74.2
0°-90°	1802.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1802.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	567	566	563	566	566	54
15°	547	547	546	551	550	154
25°	508	510	513	518	518	234
35°	451	454	461	470	472	282
45°	378	384	398	415	422	292
55°	292	303	330	356	368	260
65°	193	213	257	290	304	192
75°	91	124	173	203	209	98
85°	18	37	45	48	50	22
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	566.8	566.8	566.8	566.8	566.8
2.5°	567.7	567.7	565.0	566.8	566.8
5°	566.8	565.9	563.2	565.9	565.9
7.5°	564.1	563.2	561.4	564.1	563.2
10°	558.7	558.7	557.0	559.6	559.6
12.5°	554.3	553.4	552.5	556.1	555.2
15°	547.1	547.1	546.2	550.7	549.8
17.5°	538.2	539.1	540.0	543.5	544.4
20°	528.4	530.1	531.0	536.4	536.4
22.5°	519.4	520.3	522.1	527.5	527.5
25°	507.8	509.6	513.2	517.6	518.5
27.5°	496.2	497.1	501.5	507.8	508.7
30°	481.0	483.7	489.0	496.2	497.1
32.5°	467.6	470.2	476.5	483.7	485.4
35°	450.6	454.1	461.3	470.2	472.0
37.5°	435.4	438.1	447.0	456.8	459.5
40°	416.6	422.0	430.9	442.5	447.0
42.5°	397.8	403.2	413.9	429.1	434.5
45°	378.2	384.4	397.8	414.8	422.0
47.5°	358.5	365.6	380.8	400.5	408.6
50°	336.1	345.1	363.9	386.2	395.1
52.5°	314.7	325.4	346.0	371.0	382.6
55°	292.3	303.1	329.9	355.8	368.3
57.5°	267.3	281.6	311.1	340.6	354.0
60°	244.1	257.5	293.2	325.4	338.8
62.5°	219.0	236.9	275.4	309.3	322.7
65°	193.1	212.8	256.6	290.5	304.0
67.5°	169.9	191.3	237.8	271.8	285.2
70°	142.1	169.0	217.2	251.2	264.6
72.5°	116.2	145.7	195.8	228.9	241.4
75°	91.2	124.3	173.4	202.9	209.2
77.5°	67.9	102.8	150.2	162.7	158.2
80°	48.3	82.2	117.1	110.9	113.5
82.5°	31.3	62.6	72.4	82.2	84.9
85°	17.9	36.7	44.7	48.3	50.1
87.5°	8.0	13.4	17.9	17.9	17.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)